

鐵道曲線表

404026

李儼編譯

商務印書館發行

91355

說明書

鐵道曲線表

第一章 緒論 鐵道單曲線之記錄,可分爲四種,計:

第一種 360° 制,單位弦 100 英尺,以度數表曲線銳鈍。

第二種 360° 制,單位弦 20 公尺,以度數表曲線銳鈍。

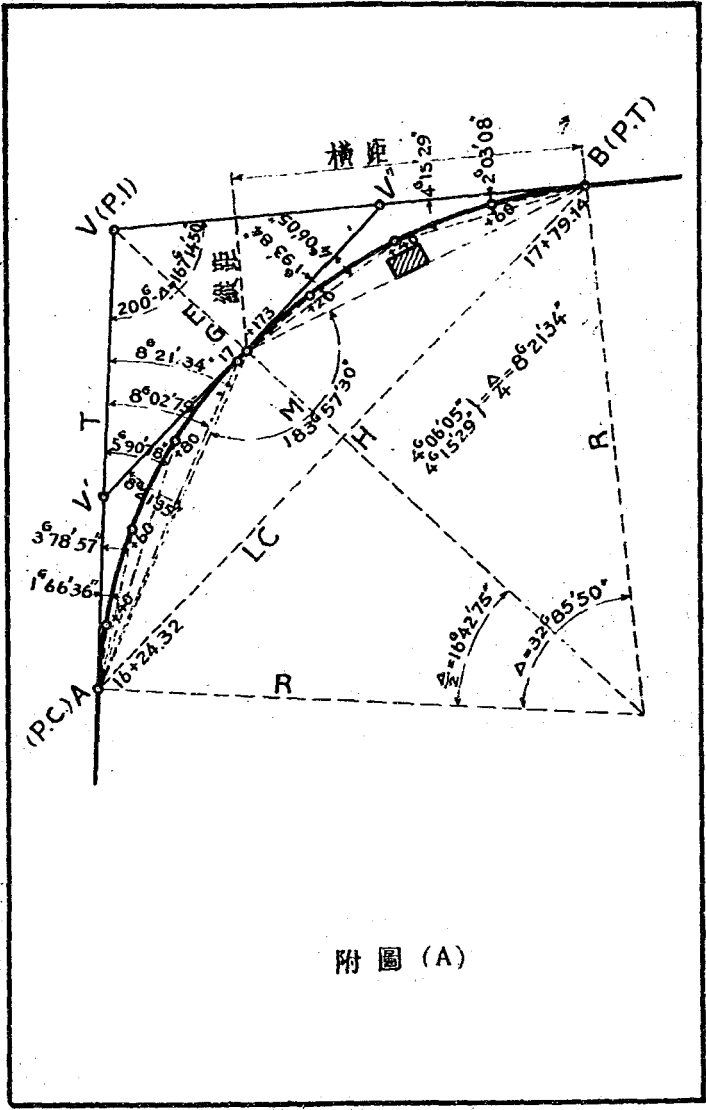
第三種 360° 制,以半徑表曲線銳鈍。

第四種 400° 制,以半徑表曲線銳鈍。

本表翻自德文 Tafeln zum Kurven Abstecken in neuer Teilung von J. Gysin 一書,共有四表,專備第四種曲線應用,其用法逐節說明之。

第二章 曲線函數表用法說明

本書第一表爲曲線函數表,係就單曲線已知頂角或中心角 Δ ,及半徑 R 求其切線 T ,曲線 D ,及頂距 B 之值,例如中心角 $\Delta = 32^\circ 85' 50''$, $R = 300^m$, 求 T , D 及 B 。如附圖 (A) 及附表第 13 頁,因:



附圖 (A)

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | | |
|-----|------|--------|------|--------|------|-------|------|------|
| 30 | 00 | 24,008 | | 47,124 | | 2,842 | | |
| | 10 | 091 | 83 | 281 | 157 | 861 | 19 | |
| | 20 | 174 | 83 | 388 | 157 | 880 | 19 | |
| | 30 | 257 | 83 | 506 | 157 | 900 | 20 | |
| | 40 | 340 | 83 | 752 | 157 | 920 | 20 | |
| | 50 | | 84 | | 157 | | 20 | |
| | 60 | 24,424 | | 47,909 | | 2,940 | | |
| | 70 | 507 | 83 | 48,066 | 157 | 959 | 19 | |
| | 80 | 590 | 83 | 223 | 157 | 979 | 20 | |
| | 90 | 673 | 83 | 381 | 158 | 999 | 20 | |
| 31 | 00 | 757 | 84 | 538 | 157 | 3,019 | 20 | |
| | 10 | | 83 | | 157 | | 20 | |
| | 20 | 24,840 | | 48,695 | | 3,039 | | |
| | 30 | 924 | 84 | 852 | 157 | 059 | 20 | |
| | 40 | 25,007 | | 49,009 | | 079 | 20 | |
| | 50 | 090 | 83 | 166 | 157 | 100 | 21 | |
| | 60 | 174 | 84 | 323 | 157 | 120 | 20 | |
| | 70 | | 83 | | 157 | | 20 | |
| | 80 | 25,257 | | 49,480 | | 3,140 | | |
| | 90 | 341 | 84 | 637 | 157 | 161 | 21 | |
| 32 | 00 | 425 | 84 | 794 | 157 | 181 | 20 | |
| | 10 | | 83 | | 157 | | 21 | |
| | 20 | 508 | 83 | 951 | 157 | 202 | 21 | |
| | 30 | 592 | 84 | 50,108 | 157 | 223 | 21 | |
| | 40 | | 84 | | 157 | | 20 | |
| | 50 | 25,676 | | 50,265 | | 3,243 | | |
| | 60 | 759 | 83 | 423 | 158 | 264 | 21 | |
| | 70 | 843 | 84 | 580 | 157 | 285 | 21 | |
| | 80 | 927 | 84 | 737 | 157 | 306 | 21 | |
| | 90 | 26,011 | | 894 | 157 | 327 | 21 | |
| 33 | 00 | | 84 | | 157 | | 22 | |
| | 10 | 26,095 | | 51,051 | | 3,349 | | |
| | 20 | 179 | 84 | 208 | 157 | 370 | 21 | |
| | 30 | 262 | 83 | 365 | 157 | 391 | 21 | |
| | 40 | 346 | 84 | 522 | 157 | 412 | 21 | |
| | 50 | 430 | 84 | 679 | 157 | 434 | 22 | |
| | 60 | | 85 | | 157 | | 21 | |
| | 70 | 26,515 | | 51,836 | | 3,455 | | |
| | 80 | | | | | | | |
| | 90 | | | | | | | |
| 分數 | 83 | 84 | 85 | 158 | 19 | 20 | 21 | 22 |
| 0,5 | 4,1 | 4,2 | 4,2 | 7,9 | 0,9 | 1,0 | 1,0 | 1,1 |
| 1 | 8,3 | 8,4 | 8,5 | 15,8 | 1,9 | 2,0 | 2,1 | 2,2 |
| 2 | 16,6 | 16,8 | 17,0 | 31,6 | 3,8 | 4,0 | 4,2 | 4,4 |
| 3 | 24,9 | 25,2 | 25,5 | 47,4 | 5,7 | 6,0 | 6,3 | 6,6 |
| 4 | 33,2 | 33,6 | 34,0 | 63,2 | 7,6 | 8,0 | 8,4 | 8,8 |
| 5 | 41,5 | 42,0 | 42,5 | 79,0 | 9,5 | 10,0 | 10,5 | 11,0 |
| 6 | 49,8 | 50,4 | 51,0 | 94,8 | 11,4 | 12,0 | 12,6 | 13,2 |
| 7 | 58,1 | 58,8 | 59,5 | 110,6 | 13,3 | 14,0 | 14,7 | 15,4 |
| 8 | 66,4 | 67,2 | 68,0 | 126,4 | 15,2 | 16,0 | 16,8 | 17,6 |
| 9 | 74,7 | 75,6 | 76,5 | 142,2 | 17,1 | 18,0 | 18,9 | 19,8 |

$$\text{中心角 } \Delta = 200^\circ - 167^\circ 14' 50'' = 32^\circ 85' 50''$$

檢表第 18 頁。

$$\begin{array}{r} (1) \ 32^\circ 80' \quad \text{之切線} = 26^m.846, \text{而差數} = 84 \\ \quad \quad \quad 5' \quad \text{之值} \quad \quad \quad 42. \\ \quad \quad \quad \underline{50'' \text{之值}} \quad \quad \quad \underline{4_2} \end{array}$$

即半徑 = 100^m 時, $32^\circ 85' 50''$ 之切線 = 26.892

$$\text{半徑} = 300^m \text{時}, 32^\circ 85' 50'' \text{之切線} = 3 \times 26.892 = \underline{79^m.18}$$

$$\begin{array}{r} (2) \ 32^\circ 80' \quad \text{之曲線長} = 51^m.522, \text{而差數} = 157 \\ \quad \quad \quad 5' \quad \text{之值} \quad \quad \quad 78. \\ \quad \quad \quad \underline{50'' \text{之值}} \quad \quad \quad \underline{7_2} \end{array}$$

即半徑 = 100^m 時, $32^\circ 85' 50''$ 之曲線長 = 51^m.608

$$\text{半徑} = 300^m \text{時}, 32^\circ 85' 50'' \text{之曲線長} = 3 \times 51.608 = \underline{154^m.82}$$

$$\begin{array}{r} (3) \ 32^\circ 80' \quad \text{之頂距} = 3^m.412, \text{而差數} = 22 \\ \quad \quad \quad 5' \quad \text{之值} \quad \quad \quad 11. \\ \quad \quad \quad \underline{50'' \text{之值}} \quad \quad \quad \underline{1_1} \end{array}$$

即半徑 = 100^m 時, $32^\circ 85' 50''$ 之頂距 = 3^m.424

$$\text{半徑} = 300^m \text{時}, 32^\circ 85' 50'' \text{之頂距} = 3 \times 3.424 = \underline{10^m.27}$$

如嫌切線過長,則可將全段曲線分為兩段,而將中心角均分為兩,如 $\frac{\Delta}{2} = 16^\circ 42' 75''$,以之入算

第三章 曲線偏角表用法說明

本書第二表為曲線偏角表如附表第 67 頁所示,為 1-99 各尺數之偏角數值。該表此頁雖為 R

R. = 290

R. = 300

5

R. = 290 (R = 29 及 2900 兩用)

| Regu- lage | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---------------|----|-------|----------|----------|----------|----------|----------|----------|----------|----------|
| 00 | 0 | 10 98 | 0 21 95 | 0 32 93 | 0 43 90 | 0 54 88 | 0 65 86 | 0 76 83 | 0 87 81 | 0 98 79 |
| 10 | 1 | 20 74 | 1 31 71 | 1 42 69 | 1 53 66 | 1 64 64 | 1 75 62 | 1 86 59 | 1 97 57 | 2 08 55 |
| 20 | 2 | 30 50 | 2 41 47 | 2 52 45 | 2 63 42 | 2 74 40 | 2 85 38 | 2 96 36 | 3 07 33 | 3 18 31 |
| 30 | 3 | 40 26 | 3 51 23 | 3 62 21 | 3 73 18 | 3 84 16 | 3 95 14 | 4 06 11 | 4 17 09 | 4 28 07 |
| 40 | 4 | 50 02 | 4 60 99 | 4 71 97 | 4 82 94 | 4 93 92 | 5 04 90 | 5 15 87 | 5 26 85 | 5 37 83 |
| 50 | 5 | 59 79 | 5 70 76 | 5 81 74 | 5 92 71 | 6 03 69 | 6 14 67 | 6 25 64 | 6 36 62 | 6 47 60 |
| 60 | 6 | 69 55 | 6 80 52 | 6 91 50 | 7 02 47 | 7 13 45 | 7 24 43 | 7 35 40 | 7 46 38 | 7 57 36 |
| 70 | 7 | 79 31 | 7 90 28 | 8 01 26 | 8 12 23 | 8 23 21 | 8 34 19 | 8 45 16 | 8 56 14 | 9 07 12 |
| 80 | 8 | 89 07 | 8 00 04 | 9 11 02 | 9 21 99 | 9 32 97 | 9 43 95 | 9 54 92 | 9 65 90 | 9 76 88 |
| 90 | 9 | 98 83 | 10 09 80 | 10 20 78 | 10 31 75 | 10 42 73 | 10 53 71 | 10 64 68 | 10 75 66 | 10 86 64 |
| 100 | 10 | 08 60 | 11 19 57 | 11 30 55 | 11 41 52 | 11 52 50 | 11 63 48 | 11 74 45 | 11 85 43 | 11 96 41 |

R. = 300 (R = 30 及 3000 兩用)

| Regu- lage | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---------------|----|-------|----------|----------|----------|----------|----------|----------|----------|----------|
| 00 | 0 | 10 61 | 0 21 22 | 0 31 83 | 0 42 44 | 0 53 05 | 0 63 66 | 0 74 27 | 0 84 88 | 0 96 49 |
| 10 | 1 | 16 71 | 1 27 92 | 1 37 93 | 1 48 54 | 1 59 15 | 1 69 76 | 1 80 37 | 1 90 98 | 2 01 59 |
| 20 | 2 | 22 82 | 2 38 43 | 2 44 04 | 2 54 65 | 2 65 26 | 2 75 87 | 2 86 48 | 2 97 09 | 3 07 70 |
| 30 | 3 | 28 92 | 3 39 53 | 3 50 14 | 3 60 75 | 3 71 36 | 3 81 97 | 3 92 58 | 4 03 19 | 4 13 80 |
| 40 | 4 | 35 02 | 4 45 63 | 4 56 24 | 4 66 85 | 4 77 46 | 4 88 07 | 4 98 68 | 5 09 29 | 5 19 90 |
| 50 | 5 | 41 13 | 5 51 74 | 5 62 35 | 5 72 96 | 5 83 57 | 5 94 18 | 6 04 79 | 6 15 40 | 6 26 01 |
| 60 | 6 | 47 23 | 6 57 84 | 6 68 45 | 6 79 06 | 6 89 67 | 7 00 28 | 7 10 89 | 7 21 50 | 7 32 11 |
| 70 | 7 | 53 33 | 7 63 94 | 7 74 55 | 7 85 16 | 7 95 77 | 8 06 38 | 8 16 99 | 8 27 60 | 8 38 21 |
| 80 | 8 | 59 43 | 8 70 04 | 8 80 65 | 8 91 26 | 9 01 87 | 9 12 48 | 9 23 09 | 9 33 70 | 9 44 31 |
| 90 | 9 | 65 53 | 9 76 14 | 9 86 75 | 9 97 36 | 10 07 97 | 10 18 58 | 10 29 19 | 10 39 80 | 10 50 41 |
| 100 | 10 | 71 64 | 10 82 25 | 10 92 86 | 11 03 47 | 11 14 08 | 11 24 69 | 11 35 30 | 11 45 91 | 11 56 52 |

R. = 290

R. = 300

$= 290^m$, $R = 300^m$ 偏角表, 但在 $R = 300^m$ 表內, $R = 30^m$,
 $R = 3000^m$ 亦可換用, 因於表內 $R = 300^m$ 各弧偏角,
 分別乘 10, 即為 $R = 30^m$ 之偏角數值, 又於半徑
 $R = 300^m$ 各弧偏角, 分別除 10, 即為 $R = 3000^m$ 之偏
 角數值, 又表內記 1-99 各尺數之偏角數值, 如求
 0.01-0.99 各尺數之偏角數值, 祇將小數移左二
 位可矣。

如前例單曲線之半徑 $R = 300$ 公尺, 曲線起
 點在 $16 + 24.32$, 即距原點為 1624.32 公尺, 則

此單曲線起點之公尺程 $= 16 + 24.32$

單曲線中點之公尺程 $= 17 + 1.73$

單曲線終點之公尺程 $= 17 + 79.14$

如欲於此單曲線上每 20 公尺, 即 $+40, +60, +80$ 等
 處各樹一樁概, 并於中點處, 驗其地位是否相符,
 法先置經緯儀於單曲線起點 A 處, 前已算得此
 單曲線半弧長 $\frac{1}{2}D = 77.41$, 而其中心角之四分一,
 應與此半弧長 $\frac{1}{2}D = 77.41$, 之偏角相等。

檢表知

$R = 300^m$ 時, 曲線 77^m 之偏角為 $8^{\circ}16'99''$

又 0.41 之偏角為 $4'35''$

則曲線 $7^m.41$ 之偏角爲 $8^{\circ}21'34'' = \frac{1}{4} \times 32^{\circ}85'50'' = \frac{\Delta}{4}$,
 適相符合,認爲無誤。

次求 $+40$ 處之偏角,則因 $+40$ 處距曲線起點
 A 處曲線長爲 $15^m.68$, 則:

$$\begin{array}{r}
 15^m \quad \text{之偏角} = 1^{\circ}59'15'' \\
 \underline{68^m \quad \text{之偏角} = \quad 7'21''} \\
 \therefore 16+40 \text{ 處之偏角} = 1^{\circ}66'36'' \qquad 1^{\circ}66'36'' \\
 \\
 \text{又} \quad 20^m \text{ 之偏角} = 2^{\circ}12'21'' \\
 \therefore 16+60 \text{ 處之偏角} = 3^{\circ}78'57'' \qquad 3^{\circ}78'57'' \\
 \\
 \text{又} \quad 20^m \text{ 之偏角} = 2^{\circ}12'21'' \\
 \therefore 16+80 \text{ 處之偏角} = 5^{\circ}90'78'' \qquad 5^{\circ}90'78'' \\
 \\
 \text{又} \quad 20^m \text{ 之偏角} = 2^{\circ}12'21'' \\
 \therefore 17+00 \text{ 處之偏角} = 8^{\circ} 2'99'' \qquad 8^{\circ} 2'99''
 \end{array}$$

但 $17+00$ 距此單曲線中點,尚有 $1^m.73$, 加入此曲線
 長之偏角必爲 $8^{\circ}21'35''$ 方合,檢表知

$$\begin{array}{r}
 1^m \text{ 之偏角} = 10'61'' \\
 \underline{73^m \quad ,, \quad = \quad 7'75''} \\
 \text{總共} \qquad \qquad = 8^{\circ}21'35''
 \end{array}$$

相差 1 秒,認爲符合,至此曲線起點至中點各樁地位
 已全部確定,同理進求曲線中點至終點各樁位,如

前例置經緯儀於中點，因該點之樁位爲 $1^m.73$ ，而
 $+20$ 處距該中點之曲線長爲 $18^m.27$ 如法求得：

$$17+20 \text{ 處之偏角} = 1^{\circ}93'84''$$

$$+40 \text{ 處之偏角} = 4^{\circ}06'05''$$

如該處有一房屋障礙，無法續測偏角，乃將經緯
 儀移於曲線終點B樁上，因該點之樁位爲 $79^m.14$ ，
 而 $+60$ 處距該點之曲線長爲 $17^m.14$ ，如法求得：

$$17+60 \text{ 處之偏角} = 2^{\circ}03'08''$$

$$+40 \text{ 處之偏角} = 4^{\circ}15'29''$$

在 $17+40$ 處由曲線起點及終點所視之偏角和數
 應爲 $\frac{\Delta}{4}$ ，今驗得

$$\left. \begin{array}{l} 4^{\circ}06'05'' \\ 4^{\circ}15'29'' \end{array} \right\} = \frac{\Delta}{4} = 8^{\circ}21'34''$$

適相恰合，認爲無誤。

原表後附 360° 及 400° 各度分秒換算表，故
 第一表，第二表不獨在第四種曲線定線上甚便
 應用，即第一，二，三各種曲線亦可活用。

第四章 切線支距表用法說明

本書第三表爲切線支距表如附表第112頁，第113頁，

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|--------------------------------|--------|-----|-------|----|-----|--------|-----|-------|----|
| R. = 290 (或 2900) | | | | | | | | | |
| 116 | 112,98 | | 22,88 | | 126 | 122,08 | | 26,95 | |
| 118 | 114,77 | 184 | 23,67 | 79 | 128 | 123,89 | 181 | 27,79 | 84 |
| 120 | 116,60 | 183 | 24,47 | 80 | 130 | 125,69 | 180 | 28,65 | 86 |
| 122 | 118,43 | 183 | 25,28 | 81 | 132 | 127,49 | 180 | 29,52 | 87 |
| 124 | 120,26 | 183 | 26,11 | 83 | 134 | 129,28 | 179 | 30,41 | 89 |
| 126 | 122,08 | 182 | 26,95 | 84 | | | | | |
| R. = 300 (或 3000 及 30) | | | | | | | | | |
| 1 | 1,000 | | 0,002 | 5 | 46 | 45,82 | 168 | 8,52 | 37 |
| 2 | 2,000 | | 0,007 | 8 | 48 | 47,80 | 197 | 8,83 | 38 |
| 3 | 3,000 | | 0,015 | 12 | 50 | 49,77 | 197 | 4,16 | 34 |
| 4 | 4,000 | | 0,027 | 15 | 52 | 51,74 | 197 | 4,50 | 35 |
| 5 | 5,000 | | 0,042 | 18 | 54 | 53,71 | 197 | 4,85 | 36 |
| 6 | 6,000 | | 0,060 | 22 | 56 | 55,68 | 196 | 5,21 | 38 |
| 7 | 6,999 | | 0,082 | 25 | 58 | 57,64 | 196 | 5,59 | 39 |
| 8 | 7,999 | | 0,107 | 28 | 60 | 59,60 | 196 | 5,98 | 40 |
| 9 | 8,999 | | 0,135 | 32 | 62 | 61,56 | 196 | 6,38 | 41 |
| 10 | 9,998 | | 0,167 | 35 | 64 | 63,52 | 195 | 6,79 | 43 |
| 11 | 10,998 | | 0,202 | 38 | 66 | 65,47 | 195 | 7,22 | 45 |
| 12 | 11,997 | | 0,240 | 42 | 68 | 67,42 | 195 | 7,67 | 46 |
| 13 | 12,996 | | 0,282 | 45 | 70 | 69,37 | 194 | 8,13 | 47 |
| 14 | 13,995 | | 0,327 | 48 | 72 | 71,31 | 194 | 8,60 | 48 |
| 15 | 14,994 | | 0,375 | 52 | 74 | 73,25 | 194 | 9,08 | 49 |
| 16 | 15,993 | | 0,427 | 55 | 76 | 75,19 | 194 | 9,57 | 51 |
| 17 | 16,991 | | 0,482 | 58 | 78 | 77,13 | 193 | 10,08 | 52 |
| 18 | 17,989 | | 0,540 | 62 | 80 | 79,06 | 193 | 10,60 | 53 |
| 19 | 18,987 | | 0,602 | 65 | 82 | 80,99 | 192 | 11,13 | 55 |
| 20 | 19,985 | | 0,667 | 84 | 84 | 82,91 | 192 | 11,68 | 56 |
| | | 200 | | 88 | 86 | 84,83 | 192 | 12,24 | 57 |
| 22 | 21,98 | 200 | 0,81 | 14 | 88 | 86,75 | 192 | 12,81 | 59 |
| 24 | 23,98 | 199 | 0,96 | 15 | 90 | 88,66 | 191 | 13,40 | 60 |
| 26 | 25,97 | 199 | 1,13 | 17 | 92 | 90,57 | 191 | 14,00 | 61 |
| 28 | 27,96 | 199 | 1,31 | 18 | 94 | 92,47 | 190 | 14,61 | 62 |
| 30 | 29,95 | 199 | 1,50 | 19 | 96 | 94,37 | 190 | 15,23 | 63 |
| 32 | 31,94 | 199 | 1,71 | 21 | 98 | 96,27 | 190 | 15,86 | 65 |
| 34 | 33,93 | 199 | 1,93 | 22 | 100 | 98,16 | 189 | 16,51 | 66 |
| 36 | 35,92 | 199 | 2,16 | 23 | 102 | 100,05 | 188 | 17,17 | 67 |
| 38 | 37,90 | 198 | 2,40 | 24 | 104 | 101,93 | 188 | 17,84 | 69 |
| 40 | 39,88 | 198 | 2,66 | 26 | 106 | 103,81 | 187 | 18,53 | 70 |
| 42 | 41,86 | 198 | 2,93 | 27 | 108 | 105,68 | 187 | 19,23 | 71 |
| 44 | 43,84 | 198 | 3,22 | 29 | 110 | 107,55 | 186 | 19,94 | 72 |
| 46 | 45,82 | 198 | 3,52 | 30 | 112 | 109,41 | | 20,66 | |

R. = 290 及 300

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|-------------------------------|--------|-----|-------|----|-----|--------|-----|-------|----|
| R. = 300 (或 3000 及 30) | | | | | | | | | |
| 112 | 109,41 | 186 | 20,66 | 73 | 18 | 16,94 | 82 | 5,25 | 57 |
| 114 | 111,27 | 186 | 21,39 | 75 | 19 | 17,76 | 80 | 5,82 | 60 |
| 116 | 113,13 | 185 | 22,14 | 76 | 20 | 18,56 | 77 | 6,42 | 63 |
| 118 | 114,98 | 185 | 22,90 | 78 | 21 | 19,33 | 75 | 7,05 | 66 |
| 120 | 116,83 | 184 | 23,68 | 79 | 22 | 20,08 | 73 | 7,71 | 68 |
| 122 | 118,67 | 183 | 24,47 | 80 | 23 | 20,81 | 71 | 8,39 | 71 |
| 124 | 120,50 | 183 | 25,27 | 81 | 24 | 21,52 | 69 | 9,10 | 73 |
| 126 | 122,33 | 182 | 26,08 | 82 | 25 | 22,21 | 66 | 9,83 | 75 |
| 128 | 124,15 | 182 | 26,90 | 83 | 26 | 22,87 | 63 | 10,58 | 77 |
| 130 | 125,97 | 181 | 27,73 | 85 | 27 | 23,50 | 61 | 11,35 | 80 |
| 132 | 127,78 | 181 | 28,58 | 86 | 28 | 24,11 | 58 | 12,15 | 82 |
| 134 | 129,59 | 180 | 29,44 | 87 | 29 | 24,69 | 55 | 12,97 | 85 |
| 136 | 131,39 | | 30,31 | | 30 | 25,24 | 53 | 13,80 | 88 |
| | | | | | 31 | 25,77 | 50 | 14,64 | 87 |
| | | | | | 32 | 26,27 | 47 | 15,51 | 88 |
| | | | | | 33 | 26,74 | 43 | 16,39 | 90 |
| | | | | | 34 | 27,17 | 41 | 17,29 | 91 |
| | | | | | 35 | 27,58 | 38 | 18,20 | 93 |
| 13 | 12,60 | 90 | 2,77 | 43 | 36 | 27,96 | 35 | 19,13 | 94 |
| 14 | 13,50 | 88 | 3,20 | 47 | 37 | 28,31 | 32 | 20,07 | 95 |
| 15 | 14,38 | 87 | 3,67 | 50 | 38 | 28,63 | 28 | 21,02 | 96 |
| 16 | 15,25 | 85 | 4,17 | 53 | 39 | 28,91 | 25 | 21,98 | 96 |
| 17 | 16,10 | 84 | 4,70 | 55 | 40 | 29,16 | | 22,94 | 96 |
| 18 | 16,94 | | 5,25 | | | | | | |
| R = 30 補充值 | | | | | | | | | |
| 13 | 12,60 | 90 | 2,77 | 43 | 35 | 27,58 | 38 | 18,20 | 91 |
| 14 | 13,50 | 88 | 3,20 | 47 | 36 | 27,96 | 35 | 19,13 | 94 |
| 15 | 14,38 | 87 | 3,67 | 50 | 37 | 28,31 | 32 | 20,07 | 95 |
| 16 | 15,25 | 85 | 4,17 | 53 | 38 | 28,63 | 28 | 21,02 | 96 |
| 17 | 16,10 | 84 | 4,70 | 55 | 39 | 28,91 | 25 | 21,98 | 96 |
| 18 | 16,94 | | 5,25 | | 40 | 29,16 | | 22,94 | 96 |
| R. = 320 (或 3200 及 32) | | | | | | | | | |
| 1 | 1,000 | | 0,002 | 4 | 17 | 16,993 | | 0,452 | 54 |
| 2 | 2,000 | | 0,006 | 8 | 18 | 17,991 | | 0,506 | 58 |
| 3 | 3,000 | | 0,014 | 11 | 19 | 18,989 | | 0,564 | 61 |
| 4 | 4,000 | | 0,025 | 14 | 20 | 19,987 | | 0,625 | |
| 5 | 5,000 | | 0,039 | 17 | | | 200 | | 13 |
| 6 | 6,000 | | 0,056 | 21 | 22 | 21,99 | 199 | 0,75 | 15 |
| 7 | 6,999 | | 0,077 | 23 | 24 | 23,98 | 199 | 0,90 | 16 |
| 8 | 7,999 | | 0,100 | 27 | 26 | 25,97 | 200 | 1,06 | 17 |
| 9 | 8,999 | | 0,127 | 29 | 28 | 27,97 | 199 | 1,23 | 18 |
| 10 | 9,998 | | 0,156 | 33 | 30 | 29,96 | 199 | 1,41 | 19 |
| 11 | 10,998 | | 0,189 | 36 | 32 | 31,95 | 199 | 1,60 | 20 |
| 12 | 11,998 | | 0,225 | 39 | 34 | 33,94 | 199 | 1,80 | 22 |
| 13 | 12,997 | | 0,264 | 42 | 36 | 35,93 | 199 | 2,02 | 23 |
| 14 | 13,996 | | 0,306 | 46 | 38 | 37,92 | 198 | 2,25 | 25 |
| 15 | 14,995 | | 0,352 | 48 | 40 | 39,90 | 198 | 2,50 | 25 |
| 16 | 15,994 | | 0,400 | 52 | 42 | 41,88 | 198 | 2,75 | 27 |
| 17 | 16,993 | | 0,452 | | 44 | 43,86 | 198 | 3,02 | 28 |
| | | | | | 46 | 45,84 | 198 | 3,30 | |

R. = 300 及 320

所示,如已知其單曲線之半徑及其曲線長,即可按表求得切線橫距及縱距之數,表中切線橫距最多算至 200,切線縱距最多算至 30,半徑在 100 及 950 間各切線縱橫距可直接檢得,曲線長在 0 至 20 間者小數算至三位,其餘算至二位,此表亦如第二表之例可前後換用,如:

| R=300 ^m | | | 則 R=30 ^m 時 | | | R=3000 ^m 時 | | |
|--------------------|----|-------|-----------------------|-----|--------|-----------------------|-----|------|
| 曲長線 | 橫距 | 縱距 | 曲長線 | 橫距 | 縱距 | 曲長線 | 橫距 | 縱距 |
| 1 | 1 | 0.002 | 0.1 | 0.1 | 0.0002 | 10 | 10 | 0.02 |
| 2 | 2 | 0.007 | 0.2 | 0.2 | 0.0007 | 20 | 20 | 0.07 |
| 3 | 3 | 0.015 | 0.3 | 0.3 | 0.0015 | 30 | 30 | 0.15 |
| 4 | 4 | 0.027 | 0.4 | 0.4 | 0.0027 | 40 | 40 | 0.27 |
| 5 | 5 | 0.042 | 0.5 | 0.5 | 0.0042 | 50 | 50 | 0.42 |
| 6 | 6 | 0.060 | 0.6 | 0.6 | 0.0060 | 60 | 60 | 0.60 |
| 7 | 7 | 0.082 | 0.7 | 0.7 | 0.0082 | 70 | 70 | 0.82 |
| 8 | 8 | 0.107 | 0.8 | 0.8 | 0.0107 | 80 | 80 | 1.07 |
| 9 | 9 | 0.135 | 0.9 | 0.9 | 0.0135 | 90 | 90 | 1.35 |
| 10 | 10 | 0.167 | 1.0 | 1.0 | 0.0167 | 100 | 100 | 1.67 |

例如求半徑 45,曲線長 8 之切線縱距及橫距
檢表知半徑 450 曲線長 80 之切線橫距 = 79^m.58,

切線縱距 = 7.09 各以 10 除之即得：半徑 45^m，曲線長 8 之切線橫距 = 7^m.96，切線縱距 = 0^m.71。又求半徑 4500^m 曲線長 150^m 之切線縱距及橫距，檢表知半徑 450^m 曲線長 15^m 之切線橫距 = 14^m.997，切線縱距 = 0^m.250，各以 10 乘之即得：半徑 4500^m，曲線長 150^m 之切線橫距 = 149^m.97，切線縱距 = 2^m.50。

此項換用有不敷用之處，則另具補充值，如： $R = 300^m$ 表內有曲線長 13^m 至 18^m 之 $R = 30^m$ 之補充值是也。

如已知半徑為某數時，曲線長各縱橫距之值，則可求得任意半徑曲線長各縱橫距之值，如附圖(B)，已知半徑 300^m，曲線長之切線縱距及橫距，求半徑 270^m 曲線長 42^m 之切線縱距及橫距。

$$\text{則因 } \frac{TM}{a} = \frac{R}{r} \dots\dots\dots (1)$$

$$\frac{x}{PM} = \frac{r}{R}, \quad \frac{y}{TP} = \frac{r}{R} \dots\dots\dots (2)$$

$$\text{二式中因 } TM = \frac{42 \times 300}{270} = 46^m.67$$

檢表 110 頁，知 $R = 300^m$ 時，

| 曲線長 | 橫距 | 差 | 縱距 | 差 |
|-----------------|-------|-----|------|----|
| 46 ^m | 45.82 | | 3.52 | |
| | | 198 | | 31 |
| 48 ^m | 47.80 | | 3.83 | |

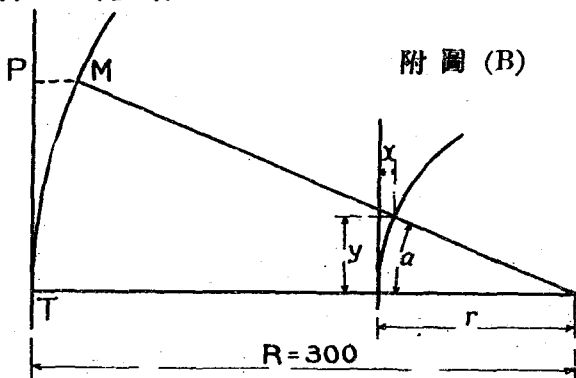
$$\text{則 } PM = 3.52 + \frac{31}{2} \times 0.67 \times \frac{1}{100} = 3.6238$$

由比例得 $x = 3.6238 \times \frac{270}{300} = 3^m.26$

又 $TP = 45.82 + \frac{198}{2} \times 0.67 \times \frac{1}{100} = 46.48$

$$y = 46.48 \times \frac{270}{300} = 41^m.83$$

檢表 107 頁正合



如求單曲線半徑 = 300, 曲線 = 154.82 之縱橫距, 即求圖 (A) A-G 間 16+40, +60, +80.17+00, 及 G 各樁號之切線縱橫距。

則 16+40 處曲線長 = 15.68, 切線橫距

= 15.67

$$\text{切線縱距} = 0.88 + \frac{5 \times 0.68}{100} = 0.88 + 0.03 = 0.41$$

$$+60 \text{ 處曲線長} = 35.68, \text{切線橫距} = 33.93 + \frac{199 \times 1.68}{200} = 33.93 + 1.67 = 35.60$$

$$\text{切線縱距} = 1.93 + \frac{23 \times 1.68}{200} = 1.93 + 0.19 = 2.12$$

$$+80 \text{ 處曲線長} = 55.68, \text{切線橫距} = 53.71 + \frac{197 \times 1.68}{200} = 53.71 + 1.65 = 55.36$$

$$\text{切線縱距} = 4.85 + \frac{36 \times 1.68}{200} = 4.85 + 0.30 = 5.15$$

$$17+00 \text{ 處曲線長} = 75.68, \text{切線橫距} = 73.25 + \frac{194 \times 1.68}{200} = 73.25 + 1.63 = 74.88$$

$$\text{切線縱距} = 9.08 + \frac{49 \times 1.68}{200} = 9.08 + 0.41 = 9.49$$

$$G \text{ 處曲線長} = 77.41, \text{切線橫距} = 75.19 + \frac{194 \times 1.41}{200} = 75.19 + 1.37 = 76.56$$

$$\text{切線縱距} = 9.57 + \frac{51 \times 1.41}{200} = 9.57 + 0.36 = 9.93$$

最後所算得之切線縱距值 9.93, 適與此單曲線矢長相合。

其單曲線 G-B 間之支距可改用「弦線支距法」求之。法先算出弦線 AB 之中點 H, 所有橫距縱距, 並沿弦線量度之, 稱為弦線橫距, 及弦線縱距。

則 17+20 處曲線長 = 18.27, 弦線橫距 = 18.28

$$\text{弦線縱距} = 9.93 - \left(0.64 + \frac{6 \times 0.27}{100} \right) = 9.93 - 0.66 = 9.87$$

$$+40 \text{ 處曲線長} = 38.27, \text{弦線橫距} = 37.90 + \frac{188 \times 0.27}{200} = 37.90 + 0.27 = 38.17$$

$$\text{弦線縱距} = 9.93 - \left(2.40 + \frac{28 \times 0.27}{200} \right) = 9.93 - 2.44 = 7.49$$

$$+60 \text{ 處曲線長} = 58.27, \text{弦線橫距} = 57.64 + \frac{196 \times 0.27}{200} = 57.64 + 0.26 = 57.90$$

$$\text{弦線縱距} = 9.93 - \left(5.69 + \frac{30 \times 0.27}{200} \right) = 9.93 - 5.64 = 4.28$$

上述縱橫支距雖可用插入法求之, 但為精密起見, 則應用「招差法」求之。如 R = 30, 24-30 間之縱橫距之第一差第二差如下表:

| | 橫距 | Δ_1 | Δ_2 | Δ_3 | 縱距 | Δ_1 | Δ_2 | Δ_3 |
|----|-------|------------|------------|------------|-------|------------|------------|------------|
| 24 | 21.52 | | | | 9.10 | | | |
| | | 1.35 | | | | 1.48 | | |
| 26 | 22.87 | | 0.11 | | 10.58 | | 0.09 | |
| | | 1.24 | | 0 | | 1.57 | | 0 |
| 28 | 24.11 | | 0.12 | | 12.15 | | 0.08 | |
| | | 1.12 | | | | 1.65 | | |
| 30 | 25.24 | | | | 13.80 | | | |

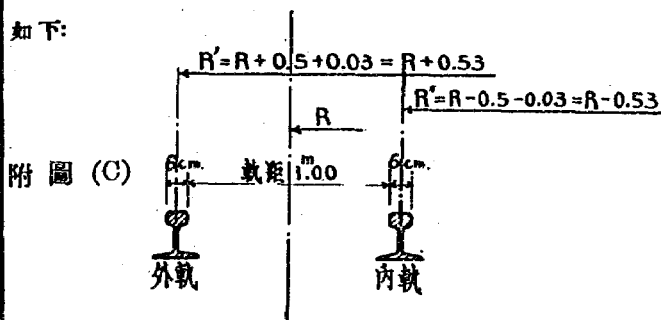
則25之切線橫距 = $21.52 + 0.5 \times 1.85 + 0.125 \times 0.11 = 22.21$ 檢表正合,

25之切線縱距 = $9.10 + 0.5 \times 1.48 + (-0.125) \times 0.09 = 9.83$, 檢表正合

$$\text{而 } t = \frac{1}{2} = 0.5 \quad \frac{t(t-1)}{1.2} = -0.125$$

第五章 內外軌長度表用法說明

本書第四表為各不同軌距之內外軌長度表如附圖 (C)。并假定 R 為某數時, 曲線長為 100m , 內外軌長度計算如下:



若 R 係 300m , 軌距 $1\text{m}.00$

$$\text{外軌長度} = \frac{300.53}{300} \times 100 = 100\text{m}.177$$

$$\text{內軌長度} = \frac{299.47}{300} \times 100 = 99\text{m}.823$$

若 R 係 550m , 軌距 $1\text{m}.00$

$$\text{外軌長度} = \frac{R'}{R} \times 100 = \frac{550.53}{550} \times 100 = 100\text{m}.096$$

$$\text{內軌長度} = \frac{R''}{R} \times 100 = \frac{549.47}{550} \times 100 = 99\text{m}.904$$

檢表正合

第一表
曲線函數表

0°-3°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 |
|-----|------|-------|-------|-------|-------|-----|
| 0 | 00 | 0,000 | 0,000 | | 0,000 | |
| | 10 | 079 | 157 | 157 | 000 | — |
| | 20 | 157 | 314 | 157 | 000 | — |
| | 30 | 236 | 471 | 157 | 000 | — |
| | 40 | 314 | 628 | 157 | 001 | 1 |
| | | | | 157 | | — |
| | 50 | 0,393 | 0,785 | 0,785 | 0,001 | — |
| | 60 | 471 | 942 | 157 | 001 | — |
| | 70 | 550 | 1,100 | 158 | 001 | — |
| | 80 | 628 | 257 | 157 | 002 | 1 |
| | 90 | 707 | 414 | 157 | 002 | — |
| | | | | 157 | | 1 |
| 1 | 00 | 0,785 | 1,571 | 1,571 | 0,003 | — |
| | 10 | 864 | 728 | 157 | 004 | 1 |
| | 20 | 943 | 885 | 157 | 004 | — |
| | 30 | 1,021 | 2,042 | 157 | 005 | 1 |
| | 40 | 100 | 199 | 157 | 006 | 1 |
| | | | | 157 | | 1 |
| | 50 | 1,178 | 2,356 | 2,356 | 0,007 | — |
| | 60 | 257 | 513 | 157 | 008 | 1 |
| | 70 | 335 | 670 | 157 | 009 | 1 |
| | 80 | 414 | 827 | 157 | 010 | 1 |
| | 90 | 492 | 985 | 158 | 011 | 1 |
| | | | | 157 | | 1 |
| 2 | 00 | 1,571 | 3,142 | 3,142 | 0,012 | — |
| | 10 | 649 | 299 | 157 | 014 | 2 |
| | 20 | 728 | 456 | 157 | 015 | 1 |
| | 30 | 807 | 613 | 157 | 016 | 1 |
| | 40 | 885 | 770 | 157 | 018 | 2 |
| | | | | 157 | | 1 |
| | 50 | 1,964 | 3,927 | 3,927 | 0,019 | — |
| | 60 | 2,042 | 4,084 | 157 | 021 | 2 |
| | 70 | 121 | 241 | 157 | 023 | 2 |
| | 80 | 199 | 398 | 157 | 024 | 1 |
| | 90 | 278 | 555 | 157 | 026 | 2 |
| | | | | 157 | | 2 |
| 3 | 00 | 2,357 | 4,712 | 4,712 | 0,028 | — |
| 分數 | 78 | 79 | | 157 | | 2 |
| 0,5 | 3,9 | 3,9 | | 7,8 | | 0,1 |
| 1 | 7,8 | 7,9 | | 15,7 | | 0,2 |
| 2 | 15,6 | 15,8 | | 31,4 | | 0,4 |
| 3 | 23,4 | 23,7 | | 47,1 | | 0,6 |
| 4 | 31,2 | 31,6 | | 62,8 | | 0,8 |
| 5 | 39,0 | 39,5 | | 78,5 | | 1,0 |
| 6 | 46,8 | 47,4 | | 94,2 | | 1,2 |
| 7 | 54,6 | 55,3 | | 109,9 | | 1,4 |
| 8 | 62,4 | 63,2 | | 125,6 | | 1,6 |
| 9 | 70,2 | 71,1 | | 141,3 | | 1,8 |

0°-3°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | | |
|------|-------|------|-------|-------|-------|-----|-----|-----|
| 3 00 | 2,357 | 78 | 4,712 | 157 | 0,028 | 2 | | |
| 10 | 435 | 79 | 889 | 158 | 030 | 2 | | |
| 20 | 514 | 78 | 5,027 | 157 | 032 | 2 | | |
| 30 | 592 | 79 | 184 | 157 | 034 | 2 | | |
| 40 | 671 | 79 | 341 | 157 | 036 | 2 | | |
| 50 | 2,750 | 78 | 5,498 | 157 | 0,038 | 2 | | |
| 60 | 828 | 79 | 655 | 157 | 040 | 2 | | |
| 70 | 907 | 78 | 812 | 157 | 042 | 3 | | |
| 80 | 985 | 79 | 969 | 157 | 045 | 2 | | |
| 90 | 3,064 | 79 | 6,126 | 157 | 047 | 2 | | |
| 4 00 | 3,143 | 78 | 6,283 | 157 | 0,049 | 3 | | |
| 10 | 221 | 79 | 440 | 157 | 052 | 3 | | |
| 20 | 300 | 79 | 597 | 157 | 055 | 3 | | |
| 30 | 379 | 78 | 754 | 157 | 057 | 2 | | |
| 40 | 457 | 78 | 912 | 158 | 060 | 3 | | |
| 50 | 3,536 | 79 | 7,069 | 157 | 0,063 | 3 | | |
| 60 | 614 | 78 | 226 | 157 | 065 | 2 | | |
| 70 | 693 | 79 | 383 | 157 | 068 | 3 | | |
| 80 | 772 | 79 | 540 | 157 | 071 | 3 | | |
| 90 | 850 | 78 | 697 | 157 | 074 | 3 | | |
| 5 00 | 3,929 | 79 | 7,854 | 157 | 0,077 | 3 | | |
| 10 | 4,008 | 78 | 8,011 | 157 | 080 | 3 | | |
| 20 | 086 | 79 | 168 | 157 | 083 | 3 | | |
| 30 | 165 | 79 | 325 | 157 | 087 | 4 | | |
| 40 | 244 | 79 | 482 | 157 | 090 | 3 | | |
| 50 | 4,322 | 78 | 8,639 | 157 | 0,093 | 3 | | |
| 60 | 401 | 79 | 796 | 157 | 097 | 4 | | |
| 70 | 480 | 79 | 954 | 158 | 100 | 3 | | |
| 80 | 558 | 78 | 9,111 | 157 | 104 | 4 | | |
| 90 | 637 | 79 | 288 | 157 | 107 | 3 | | |
| 6 00 | 4,716 | 79 | 9,425 | 167 | 0,111 | 4 | | |
| 分數 | 78 | 79 | | 157 | | 2 | 3 | 4 |
| 0,5 | 3,9 | 3,9 | | 7,8 | | 0,1 | 0,1 | 0,2 |
| 1 | 7,8 | 7,9 | | 15,7 | | 0,2 | 0,3 | 0,4 |
| 2 | 15,6 | 15,8 | | 31,4 | | 0,4 | 0,6 | 0,8 |
| 3 | 23,4 | 23,7 | | 47,1 | | 0,6 | 0,9 | 1,2 |
| 4 | 31,2 | 31,6 | | 62,8 | | 0,8 | 1,2 | 1,6 |
| 5 | 39,0 | 39,5 | | 78,5 | | 1,0 | 1,5 | 2,0 |
| 6 | 46,8 | 47,4 | | 94,2 | | 1,2 | 1,8 | 2,4 |
| 7 | 54,6 | 55,3 | | 109,9 | | 1,4 | 2,1 | 2,8 |
| 8 | 62,4 | 63,2 | | 125,6 | | 1,6 | 2,4 | 3,2 |
| 9 | 70,2 | 71,1 | | 141,3 | | 1,8 | 2,7 | 3,6 |

6°-9°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | |
|-----|-------|-------|--------|--------|-------|-------|---|
| 6 | 00 | 4,716 | 9,425 | | 0,111 | | |
| | 10 | 795 | 582 | 157 | 115 | 4 | |
| | 20 | 873 | 78 | 739 | 157 | 4 | |
| | 30 | 952 | 79 | 896 | 157 | 4 | |
| | 40 | 5,031 | 79 | 10,053 | 157 | 3 | |
| | | | 79 | | 157 | 4 | |
| | 50 | 5,110 | | 10,210 | | 0,180 | |
| | 60 | 188 | 78 | 367 | 157 | 134 | 4 |
| | 70 | 267 | 79 | 524 | 157 | 139 | 5 |
| | 80 | 346 | 79 | 681 | 157 | 143 | 4 |
| 7 | 90 | 425 | 79 | 838 | 157 | 147 | 4 |
| | | | 78 | | 158 | | 4 |
| | 00 | 5,503 | | 10,996 | | 0,151 | |
| | 10 | 582 | 79 | 11,153 | 157 | 155 | 4 |
| | 20 | 661 | 79 | 310 | 157 | 160 | 5 |
| | 30 | 740 | 79 | 467 | 157 | 165 | 5 |
| | 40 | 819 | 79 | 624 | 157 | 169 | 4 |
| | | | 78 | | 157 | | 5 |
| | 50 | 5,897 | | 11,781 | | 0,174 | |
| | 60 | 976 | 79 | 938 | 157 | 178 | 4 |
| 8 | 70 | 6,055 | 79 | 12,095 | 157 | 183 | 5 |
| | 80 | 134 | 79 | 252 | 157 | 188 | 5 |
| | 90 | 213 | 79 | 409 | 157 | 193 | 5 |
| | | | 78 | | 157 | | 5 |
| | 00 | 6,291 | | 12,566 | | 0,198 | |
| | 10 | 370 | 79 | 723 | 157 | 203 | 5 |
| | 20 | 449 | 79 | 881 | 158 | 208 | 5 |
| | 30 | 528 | 79 | 13,038 | 157 | 213 | 5 |
| | 40 | 607 | 79 | 195 | 157 | 218 | 5 |
| | | | 79 | | 157 | | 5 |
| 50 | 6,686 | | 13,352 | | 0,223 | | |
| 60 | 765 | 79 | 509 | 157 | 229 | 6 | |
| 70 | 844 | 79 | 666 | 157 | 234 | 5 | |
| 80 | 923 | 79 | 823 | 157 | 239 | 5 | |
| 90 | 7,001 | 78 | 980 | 157 | 245 | 6 | |
| | | 79 | | 157 | | 5 | |
| 9 | 00 | 7,080 | 14,137 | | 0,250 | | |

| 分數 | 78 | 79 | | | 158 | 3 | 4 | 5 | 6 |
|-----|------|------|--|--|-------|-----|-----|-----|-----|
| 0,5 | 3,9 | 3,9 | | | 7,9 | 0,1 | 0,2 | 0,2 | 0,3 |
| 1 | 7,8 | 7,9 | | | 15,8 | 0,3 | 0,4 | 0,5 | 0,6 |
| 2 | 15,6 | 15,8 | | | 31,6 | 0,6 | 0,8 | 1,0 | 1,2 |
| 3 | 23,4 | 23,7 | | | 47,4 | 0,9 | 1,2 | 1,5 | 1,8 |
| 4 | 31,2 | 31,6 | | | 63,2 | 1,2 | 1,6 | 2,0 | 2,4 |
| 5 | 39,0 | 39,5 | | | 79,0 | 1,5 | 2,0 | 2,5 | 3,0 |
| 6 | 46,8 | 47,4 | | | 94,8 | 1,8 | 2,4 | 3,0 | 3,6 |
| 7 | 54,6 | 55,3 | | | 110,6 | 2,1 | 2,8 | 3,5 | 4,2 |
| 8 | 62,4 | 63,2 | | | 126,4 | 2,4 | 3,2 | 4,0 | 4,8 |
| 9 | 70,2 | 71,1 | | | 142,2 | 2,7 | 3,6 | 4,5 | 5,4 |

6°-9°

9°-12°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | | |
|-------|-------|------|--------|-------|-------|-----|-----|-----|
| 9 00 | 7,080 | | 14,137 | | 0,250 | | | |
| 10 | 159 | 79 | 294 | 157 | 256 | 6 | | |
| 20 | 238 | 79 | 451 | 157 | 261 | 5 | | |
| 30 | 317 | 79 | 608 | 157 | 287 | 6 | | |
| 40 | 396 | 79 | 765 | 157 | 278 | 6 | | |
| 50 | 7,475 | 79 | 14,923 | 158 | 0,279 | 6 | | |
| 60 | 554 | 79 | 15,080 | 157 | 285 | 6 | | |
| 70 | 633 | 79 | 237 | 157 | 291 | 6 | | |
| 80 | 712 | 79 | 394 | 157 | 297 | 6 | | |
| 90 | 791 | 79 | 551 | 157 | 303 | 6 | | |
| 10 00 | 7,870 | 79 | 15,708 | 157 | 0,309 | 6 | | |
| 10 | 949 | 79 | 865 | 157 | 315 | 6 | | |
| 20 | 8,028 | 79 | 16,022 | 157 | 322 | 7 | | |
| 30 | 107 | 79 | 179 | 157 | 328 | 6 | | |
| 40 | 186 | 79 | 336 | 157 | 334 | 6 | | |
| 50 | 8,265 | 79 | 16,493 | 157 | 0,341 | 7 | | |
| 60 | 345 | 80 | 650 | 157 | 348 | 7 | | |
| 70 | 424 | 79 | 808 | 158 | 354 | 6 | | |
| 80 | 503 | 79 | 965 | 157 | 361 | 7 | | |
| 90 | 582 | 79 | 17,122 | 157 | 368 | 7 | | |
| 11 00 | 8,661 | 79 | 17,279 | 157 | 0,374 | 6 | | |
| 10 | 740 | 79 | 436 | 157 | 381 | 7 | | |
| 20 | 819 | 79 | 593 | 157 | 388 | 7 | | |
| 30 | 898 | 79 | 750 | 157 | 395 | 7 | | |
| 40 | 978 | 80 | 907 | 157 | 402 | 7 | | |
| 50 | 9,057 | 79 | 18,064 | 157 | 0,409 | 7 | | |
| 60 | 136 | 79 | 221 | 157 | 416 | 7 | | |
| 70 | 215 | 79 | 378 | 157 | 423 | 7 | | |
| 80 | 294 | 79 | 535 | 157 | 431 | 8 | | |
| 90 | 374 | 80 | 692 | 157 | 438 | 7 | | |
| 12 00 | 9,453 | 79 | 18,850 | 158 | 0,446 | 8 | | |
| 分數 | 79 | 80 | | 157 | 5 | 6 | 7 | 8 |
| 0,5 | 3,9 | 4,0 | | 7,8 | 0,2 | 0,3 | 0,3 | 0,4 |
| 1 | 7,9 | 8,0 | | 15,7 | 0,5 | 0,6 | 0,7 | 0,8 |
| 2 | 15,8 | 16,0 | | 31,4 | 1,0 | 1,2 | 1,4 | 1,6 |
| 3 | 23,7 | 24,0 | | 47,1 | 1,5 | 1,8 | 2,1 | 2,4 |
| 4 | 31,6 | 32,0 | | 62,8 | 2,0 | 2,4 | 2,8 | 3,2 |
| 5 | 39,5 | 40,0 | | 78,5 | 2,5 | 3,0 | 3,5 | 4,0 |
| 6 | 47,4 | 48,0 | | 94,2 | 3,0 | 3,6 | 4,2 | 4,8 |
| 7 | 55,3 | 56,0 | | 109,9 | 3,5 | 4,2 | 4,9 | 5,6 |
| 8 | 63,2 | 64,0 | | 125,6 | 4,0 | 4,8 | 5,6 | 6,4 |
| 9 | 71,1 | 72,0 | | 141,3 | 4,5 | 5,4 | 6,3 | 7,2 |

9°-12°

12°-15°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | | |
|-----|------|--------|-----|--------|-----|-------|-----|-----|
| 12 | 00 | 9,453 | 79 | 18,850 | 157 | 0,446 | 7 | |
| | 10 | 532 | 79 | 19,007 | 157 | 453 | 8 | |
| | 20 | 611 | 80 | 164 | 157 | 461 | 8 | |
| | 30 | 691 | 79 | 321 | 157 | 469 | 7 | |
| | 40 | 770 | 79 | 478 | 157 | 476 | 8 | |
| | 50 | 9,849 | 79 | 19,635 | 157 | 0,484 | 8 | |
| | 60 | 928 | 80 | 792 | 157 | 492 | 8 | |
| | 70 | 10,008 | 79 | 949 | 157 | 500 | 8 | |
| | 80 | 087 | 79 | 20,106 | 157 | 508 | 8 | |
| | 90 | 166 | 80 | 263 | 157 | 516 | 8 | |
| 13 | 00 | 10,246 | 79 | 20,420 | 157 | 0,524 | 8 | |
| | 10 | 325 | 80 | 577 | 158 | 532 | 8 | |
| | 20 | 405 | 79 | 735 | 157 | 540 | 8 | |
| | 30 | 484 | 79 | 892 | 157 | 548 | 8 | |
| | 40 | 563 | 80 | 21,049 | 157 | 556 | 9 | |
| | 50 | 10,643 | 79 | 21,206 | 157 | 0,565 | 8 | |
| | 60 | 722 | 80 | 363 | 157 | 573 | 9 | |
| | 70 | 802 | 79 | 520 | 157 | 582 | 9 | |
| | 80 | 881 | 80 | 677 | 157 | 590 | 9 | |
| | 90 | 961 | 79 | 834 | 157 | 599 | 9 | |
| 14 | 00 | 11,040 | 80 | 21,991 | 157 | 0,608 | 8 | |
| | 10 | 120 | 79 | 22,148 | 157 | 616 | 9 | |
| | 20 | 199 | 80 | 305 | 157 | 625 | 9 | |
| | 30 | 279 | 79 | 462 | 157 | 634 | 9 | |
| | 40 | 358 | 80 | 619 | 158 | 643 | 9 | |
| | 50 | 11,438 | 79 | 22,777 | 157 | 0,652 | 9 | |
| | 60 | 517 | 80 | 934 | 157 | 661 | 9 | |
| | 70 | 597 | 80 | 23,091 | 157 | 670 | 9 | |
| | 80 | 677 | 79 | 248 | 157 | 679 | 9 | |
| | 90 | 756 | 80 | 405 | 157 | 688 | 10 | |
| 15 | 00 | 11,836 | | 23,562 | | 0,698 | | |
| 分數 | 79 | 80 | | 158 | 7 | 8 | 9 | 10 |
| 0.5 | 3,9 | 4,0 | | 7,9 | 0,8 | 0,4 | 0,4 | 0,5 |
| 1 | 7,9 | 8,0 | | 15,8 | 0,7 | 0,8 | 0,9 | 1,0 |
| 2 | 15,8 | 16,0 | | 31,6 | 1,4 | 1,6 | 1,8 | 2,0 |
| 3 | 23,7 | 24,0 | | 47,4 | 2,1 | 2,4 | 2,7 | 3,0 |
| 4 | 31,6 | 32,0 | | 63,2 | 2,8 | 3,2 | 3,6 | 4,0 |
| 5 | 39,5 | 40,0 | | 79,0 | 3,5 | 4,0 | 4,5 | 5,0 |
| 6 | 47,4 | 48,0 | | 94,8 | 4,2 | 4,8 | 5,4 | 6,0 |
| 7 | 55,3 | 56,0 | | 110,6 | 4,9 | 5,6 | 6,3 | 7,0 |
| 8 | 63,2 | 64,0 | | 126,4 | 5,6 | 6,4 | 7,2 | 8,0 |
| 9 | 71,1 | 72,0 | | 142,2 | 6,3 | 7,2 | 8,1 | 9,0 |

12°-15°

15°-18°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | | |
|-----|------|--------|-----|--------|-----|-------|-----|------|
| 15 | 00 | 11,836 | 79 | 23,562 | 157 | 0,698 | 9 | |
| | 10 | 915 | 80 | 719 | 157 | 707 | 10 | |
| | 20 | 995 | 80 | 876 | 157 | 717 | 9 | |
| | 30 | 12,075 | 79 | 24,033 | 157 | 726 | 10 | |
| | 40 | 154 | 80 | 190 | 157 | 736 | 10 | |
| | 50 | 12,234 | 80 | 24,347 | 157 | 0,746 | 9 | |
| | 60 | 314 | 80 | 504 | 158 | 755 | 10 | |
| | 70 | 391 | 79 | 662 | 157 | 765 | 10 | |
| | 80 | 473 | 80 | 819 | 157 | 775 | 10 | |
| | 90 | 553 | 80 | 976 | 157 | 785 | 10 | |
| 16 | 00 | 12,633 | 80 | 25,133 | 157 | 0,795 | 10 | |
| | 10 | 713 | 80 | 290 | 157 | 805 | 10 | |
| | 20 | 793 | 79 | 447 | 157 | 815 | 10 | |
| | 30 | 872 | 80 | 604 | 157 | 825 | 10 | |
| | 40 | 952 | 80 | 761 | 157 | 835 | 11 | |
| | 50 | 13,032 | 80 | 25,918 | 157 | 0,846 | 10 | |
| | 60 | 112 | 80 | 26,075 | 157 | 856 | 10 | |
| | 70 | 192 | 80 | 232 | 157 | 866 | 11 | |
| | 80 | 272 | 80 | 389 | 157 | 877 | 10 | |
| | 90 | 352 | 80 | 546 | 158 | 887 | 11 | |
| 17 | 00 | 13,432 | 80 | 26,704 | 157 | 0,898 | 11 | |
| | 10 | 512 | 80 | 861 | 157 | 909 | 10 | |
| | 20 | 592 | 80 | 27,018 | 157 | 919 | 11 | |
| | 30 | 672 | 80 | 175 | 157 | 930 | 11 | |
| | 40 | 752 | 80 | 332 | 157 | 941 | 11 | |
| | 50 | 13,832 | 80 | 27,489 | 157 | 0,952 | 11 | |
| | 60 | 912 | 80 | 646 | 157 | 963 | 11 | |
| | 70 | 992 | 80 | 803 | 157 | 974 | 11 | |
| | 80 | 14,072 | 80 | 960 | 157 | 985 | 11 | |
| | 90 | 152 | 80 | 28,117 | 157 | 996 | 12 | |
| 18 | 00 | 14,232 | | 28,274 | | 1,008 | | |
| 分數 | .79 | 80 | | 157 | 9 | 10 | 11 | 12 |
| 05 | 3,9 | 4,0 | | 7,8 | 0,4 | 0,5 | 0,5 | 0,6 |
| 1 | 7,9 | 8,0 | | 15,7 | 0,9 | 1,0 | 1,1 | 1,2 |
| 2 | 15,8 | 16,0 | | 31,4 | 1,8 | 2,0 | 2,2 | 2,4 |
| 3 | 23,7 | 24,0 | | 47,1 | 2,7 | 3,0 | 3,3 | 3,6 |
| 4 | 31,6 | 32,0 | | 62,8 | 3,6 | 4,0 | 4,4 | 4,8 |
| 5 | 39,5 | 40,0 | | 78,5 | 4,5 | 5,0 | 5,5 | 6,0 |
| 6 | 47,4 | 48,0 | | 94,2 | 5,4 | 6,0 | 6,6 | 7,2 |
| 7 | 55,3 | 56,0 | | 109,9 | 6,3 | 7,0 | 7,7 | 8,4 |
| 8 | 63,2 | 64,0 | | 125,6 | 7,2 | 8,0 | 8,8 | 9,6 |
| 9 | 71,1 | 72,0 | | 141,3 | 8,1 | 9,0 | 9,9 | 10,8 |

18°-21°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | | |
|-----|------|--------|--------|--------|--------|-------|-------|------|
| 18 | 00 | 14,232 | 80 | 28,274 | 157 | 1,008 | 11 | |
| | 10 | 312 | 80 | 431 | 157 | 019 | 11 | |
| | 20 | 892 | 81 | 588 | 158 | 030 | 12 | |
| | 30 | 473 | 80 | 746 | 157 | 042 | 11 | |
| | 40 | 553 | 80 | 903 | 157 | 053 | 12 | |
| | 50 | 14,633 | 80 | 29,060 | 157 | 1,065 | 12 | |
| | 60 | 713 | 80 | 217 | 157 | 077 | 11 | |
| | 70 | 793 | 81 | 374 | 157 | 088 | 12 | |
| | 80 | 874 | 80 | 531 | 157 | 100 | 12 | |
| | 90 | 954 | 80 | 688 | 157 | 112 | 12 | |
| | 19 | 00 | 15,034 | 81 | 29,845 | 157 | 1,124 | 12 |
| | | 10 | 115 | 80 | 30,002 | 157 | 136 | 12 |
| 20 | | 195 | 80 | 159 | 157 | 148 | 12 | |
| 30 | | 275 | 81 | 316 | 157 | 160 | 12 | |
| 40 | | 356 | 80 | 473 | 157 | 172 | 12 | |
| 50 | | 15,436 | 81 | 30,630 | 158 | 1,184 | 13 | |
| 60 | | 517 | 80 | 788 | 157 | 197 | 12 | |
| 70 | | 597 | 80 | 945 | 157 | 209 | 13 | |
| 80 | | 677 | 81 | 31,102 | 157 | 221 | 12 | |
| 90 | | 758 | 80 | 259 | 157 | 234 | 13 | |
| 20 | | 00 | 15,838 | 81 | 31,416 | 157 | 1,247 | 12 |
| | | 10 | 919 | 81 | 573 | 157 | 259 | 13 |
| | 20 | 16,000 | 80 | 730 | 157 | 272 | 12 | |
| | 30 | 080 | 81 | 887 | 157 | 284 | 13 | |
| | 40 | 161 | 80 | 32,044 | 157 | 297 | 13 | |
| | 50 | 16,241 | 81 | 32,201 | 157 | 1,310 | 13 | |
| | 60 | 322 | 80 | 358 | 157 | 323 | 13 | |
| | 70 | 402 | 81 | 515 | 158 | 336 | 13 | |
| | 80 | 483 | 81 | 673 | 157 | 349 | 13 | |
| | 90 | 564 | 81 | 830 | 157 | 362 | 14 | |
| | 21 | 00 | 16,645 | | 32,987 | | 1,376 | |
| | 分數 | 80 | 81 | | 158 | 11 | 12 | 13 |
| 0,5 | 4,0 | 4,0 | | 7,9 | 0,5 | 0,6 | 0,6 | 0,7 |
| 1 | 8,0 | 8,1 | | 15,8 | 1,1 | 1,2 | 1,3 | 1,4 |
| 2 | 16,0 | 16,2 | | 31,6 | 2,2 | 2,4 | 2,6 | 2,8 |
| 3 | 24,0 | 24,8 | | 47,4 | 3,3 | 3,6 | 3,9 | 4,2 |
| 4 | 32,0 | 32,4 | | 63,2 | 4,4 | 4,8 | 5,2 | 5,6 |
| 5 | 40,0 | 40,5 | | 79,0 | 5,5 | 6,0 | 6,5 | 7,0 |
| 6 | 48,0 | 48,6 | | 94,8 | 6,6 | 7,2 | 7,8 | 8,4 |
| 7 | 56,0 | 56,7 | | 110,6 | 7,7 | 8,4 | 9,1 | 9,8 |
| 8 | 64,0 | 64,8 | | 126,4 | 8,8 | 9,6 | 10,4 | 11,2 |
| 9 | 72,0 | 72,9 | | 142,2 | 9,9 | 10,8 | 11,7 | 12,6 |

21°-24°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | |
|-----|------|--------|------|--------|------|-------|------|
| 21 | 00 | 16,645 | 80 | 32,987 | 157 | 1,376 | 13 |
| | 10 | 725 | 81 | 33,144 | 157 | 389 | 13 |
| | 20 | 806 | 81 | 301 | 157 | 402 | 14 |
| | 30 | 887 | 81 | 458 | 157 | 416 | 13 |
| | 40 | 968 | 80 | 615 | 157 | 429 | 14 |
| | 50 | 17,048 | 81 | 33,772 | 157 | 1,443 | 14 |
| | 60 | 129 | 81 | 929 | 157 | 457 | 13 |
| | 70 | 210 | 81 | 34,086 | 157 | 470 | 14 |
| | 80 | 291 | 81 | 243 | 157 | 484 | 14 |
| | 90 | 372 | 81 | 400 | 158 | 498 | 14 |
| 22 | 00 | 17,453 | 81 | 34,558 | 157 | 1,521 | 14 |
| | 10 | 534 | 81 | 715 | 157 | 526 | 14 |
| | 20 | 615 | 81 | 872 | 157 | 540 | 14 |
| | 30 | 696 | 81 | 35,029 | 157 | 554 | 14 |
| | 40 | 777 | 81 | 186 | 157 | 568 | 14 |
| | 50 | 17,858 | 81 | 35,343 | 157 | 1,582 | 14 |
| | 60 | 939 | 81 | 500 | 157 | 596 | 15 |
| | 70 | 18,020 | 81 | 657 | 157 | 611 | 14 |
| | 80 | 101 | 81 | 814 | 157 | 625 | 14 |
| | 90 | 182 | 81 | 971 | 157 | 639 | 15 |
| 23 | 00 | 18,263 | 81 | 36,128 | 157 | 1,654 | 15 |
| | 10 | 344 | 82 | 285 | 157 | 669 | 14 |
| | 20 | 426 | 81 | 442 | 158 | 683 | 15 |
| | 30 | 507 | 81 | 600 | 157 | 698 | 15 |
| | 40 | 588 | 81 | 757 | 157 | 713 | 15 |
| | 50 | 18,669 | 82 | 36,914 | 157 | 1,728 | 15 |
| | 60 | 751 | 81 | 37,071 | 157 | 743 | 15 |
| | 70 | 832 | 81 | 228 | 157 | 758 | 15 |
| | 80 | 913 | 82 | 385 | 157 | 773 | 15 |
| | 90 | 995 | 81 | 542 | 157 | 788 | 15 |
| 24 | 00 | 19,076 | | 37,699 | | 1,803 | |
| 分數 | 80 | 81 | 82 | 157 | 13 | 14 | 15 |
| 0,5 | 4,0 | 4,0 | 4,1 | 7,8 | 0,6 | 0,7 | 0,7 |
| 1 | 8,0 | 8,1 | 8,2 | 15,7 | 1,3 | 1,4 | 1,5 |
| 2 | 16,0 | 16,2 | 16,4 | 31,4 | 2,6 | 2,8 | 3,0 |
| 3 | 24,0 | 24,3 | 24,6 | 47,1 | 3,9 | 4,2 | 4,5 |
| 4 | 32,0 | 32,4 | 32,8 | 62,8 | 5,2 | 5,6 | 6,0 |
| 5 | 40,0 | 40,5 | 41,0 | 78,5 | 6,5 | 7,0 | 7,5 |
| 6 | 48,0 | 48,6 | 49,2 | 94,2 | 7,8 | 8,4 | 9,0 |
| 7 | 56,0 | 56,7 | 57,4 | 109,9 | 9,1 | 9,8 | 10,5 |
| 8 | 64,0 | 64,8 | 65,6 | 125,6 | 10,4 | 11,2 | 12,0 |
| 9 | 72,0 | 72,9 | 73,8 | 141,3 | 11,7 | 12,6 | 13,5 |

24°-27°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂 距 | 差數 | | |
|-----|------|--------|-----|--------|-----|-------|------|------|
| 24 | 00 | 19 076 | 81 | 37,699 | 157 | 1,803 | 15 | |
| | 10 | 157 | 82 | 856 | 157 | 818 | 16 | |
| | 20 | 239 | 81 | 38,013 | 157 | 834 | 16 | |
| | 30 | 320 | 82 | 170 | 157 | 849 | 15 | |
| | 40 | 402 | 81 | 327 | 158 | 865 | 15 | |
| | 50 | 19,483 | 82 | 38,485 | 157 | 1,880 | 16 | |
| | 60 | 565 | 81 | 642 | 157 | 896 | 15 | |
| | 70 | 646 | 82 | 799 | 157 | 911 | 16 | |
| | 80 | 728 | 82 | 956 | 157 | 927 | 16 | |
| | 90 | 810 | 81 | 39,113 | 157 | 943 | 16 | |
| 25 | 00 | 19,891 | 82 | 39,270 | 1 7 | 1,959 | 16 | |
| | 10 | 973 | 82 | 427 | 157 | 975 | 16 | |
| | 20 | 20,055 | 81 | 584 | 157 | 991 | 16 | |
| | 30 | 136 | 82 | 741 | 157 | 2,007 | 16 | |
| | 40 | 218 | 82 | 898 | 157 | 023 | 17 | |
| | 50 | 20,300 | 82 | 40,055 | 157 | 2,040 | 16 | |
| | 60 | 382 | 81 | 212 | 157 | 056 | 16 | |
| | 70 | 463 | 82 | 369 | 158 | 072 | 17 | |
| | 80 | 545 | 82 | 527 | 157 | 089 | 16 | |
| | 90 | 627 | 82 | 684 | 157 | 105 | 17 | |
| 26 | 00 | 20,709 | 82 | 40,841 | 157 | 2,122 | 16 | |
| | 10 | 791 | 82 | 998 | 157 | 138 | 17 | |
| | 20 | 873 | 82 | 41,155 | 157 | 155 | 17 | |
| | 30 | 955 | 82 | 312 | 157 | 172 | 17 | |
| | 40 | 21,037 | 82 | 469 | 157 | 189 | 17 | |
| | 50 | 21,119 | 82 | 41,626 | 157 | 2,206 | 17 | |
| | 60 | 201 | 82 | 783 | 157 | 223 | 17 | |
| | 70 | 283 | 82 | 940 | 157 | 240 | 17 | |
| | 80 | 365 | 82 | 42,097 | 157 | 257 | 17 | |
| | 90 | 447 | 82 | 254 | 158 | 274 | 17 | |
| 27 | 00 | 21,529 | | 42,412 | | 2,291 | | |
| 分數 | 81 | 82 | | 158 | | 15 | 16 | 17 |
| 0,5 | 4,0 | 4,1 | | 7,9 | | 0,7 | 0,8 | 0,8 |
| 1 | 8,1 | 8,2 | | 15,8 | | 1,5 | 1,6 | 1,7 |
| 2 | 16,2 | 16,4 | | 31,6 | | 3,0 | 3,2 | 3,4 |
| 3 | 24,3 | 24,6 | | 47,4 | | 4,5 | 4,8 | 5,1 |
| 4 | 32,4 | 32,8 | | 63,2 | | 6,0 | 6,4 | 6,8 |
| 5 | 40,5 | 41,0 | | 79,0 | | 7,5 | 8,0 | 8,5 |
| 6 | 48,6 | 49,2 | | 94,8 | | 9,0 | 9,6 | 10,2 |
| 7 | 56,7 | 57,4 | | 110,6 | | 10,5 | 11,2 | 11,9 |
| 8 | 64,8 | 65,6 | | 126,4 | | 12,0 | 12,8 | 13,6 |
| 9 | 72,9 | 73,8 | | 142,2 | | 13,5 | 14,4 | 15,3 |

27°-30°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | |
|-----|-----|--------|-----|--------|-----|-------|----|
| 27 | 00 | 21,529 | | 42,412 | | 2,291 | |
| | 10 | 612 | 83 | 569 | 157 | 300 | 18 |
| | 20 | 694 | 82 | 726 | 157 | 326 | 17 |
| | 30 | 776 | 82 | 883 | 157 | 343 | 17 |
| | 40 | 858 | 82 | 43,040 | 157 | 801 | 18 |
| | 50 | 21,941 | 83 | 43,197 | 157 | 2,579 | 18 |
| | 60 | 22,023 | 82 | 354 | 157 | 396 | 17 |
| | 70 | 106 | 82 | 511 | 157 | 414 | 18 |
| | 80 | 188 | 83 | 668 | 157 | 432 | 18 |
| | 90 | 270 | 82 | 825 | 157 | 450 | 18 |
| 28 | 00 | 22,353 | | 43,932 | | 2,463 | |
| | 10 | 435 | 82 | 44,139 | 157 | 486 | 18 |
| | 20 | 518 | 83 | 296 | 157 | 504 | 18 |
| | 30 | 600 | 82 | 454 | 158 | 522 | 18 |
| | 40 | 683 | 83 | 611 | 157 | 540 | 18 |
| | 50 | 22,765 | 82 | 44,768 | 157 | 2,558 | 19 |
| | 60 | 848 | 83 | 925 | 157 | 577 | 18 |
| | 70 | 931 | 83 | 45,032 | 157 | 595 | 18 |
| | 80 | 23,013 | 82 | 239 | 157 | 614 | 19 |
| | 90 | 096 | 83 | 396 | 157 | 632 | 18 |
| 29 | 00 | 23,179 | | 45,553 | | 2,651 | |
| | 10 | 262 | 83 | 710 | 157 | 670 | 19 |
| | 20 | 344 | 82 | 867 | 157 | 689 | 19 |
| | 30 | 427 | 83 | 46,024 | 157 | 707 | 18 |
| | 40 | 510 | 83 | 181 | 157 | 726 | 19 |
| | 50 | 23,593 | 33 | 46,338 | 157 | 2,745 | 19 |
| | 60 | 676 | 83 | 496 | 158 | 764 | 19 |
| | 70 | 759 | 83 | 653 | 157 | 784 | 20 |
| | 80 | 842 | 83 | 810 | 157 | 803 | 19 |
| | 90 | 925 | 83 | 967 | 157 | 822 | 19 |
| 30 | 00 | 24,008 | | 47,124 | | 2,842 | |

| 分數 | 82 | 83 | | | 157 | 17 | 18 | 19 | 20 |
|-----|------|------|--|--|-------|------|------|------|------|
| 0.5 | 4.1 | 4.1 | | | 7.8 | 0.8 | 0.9 | 0.9 | 1.0 |
| 1 | 8.2 | 8.3 | | | 15.7 | 1.7 | 1.8 | 1.9 | 2.0 |
| 2 | 16.4 | 16.6 | | | 31.4 | 3.4 | 3.6 | 3.8 | 4.0 |
| 3 | 24.6 | 24.9 | | | 47.1 | 5.1 | 5.4 | 5.7 | 6.0 |
| 4 | 32.8 | 33.2 | | | 62.8 | 6.8 | 7.2 | 7.6 | 8.0 |
| 5 | 41.0 | 41.5 | | | 78.5 | 8.5 | 9.0 | 9.5 | 10.0 |
| 6 | 49.2 | 49.8 | | | 94.2 | 10.2 | 10.8 | 11.4 | 12.0 |
| 7 | 57.4 | 58.1 | | | 109.9 | 11.9 | 12.6 | 13.3 | 14.0 |
| 8 | 65.6 | 66.4 | | | 125.6 | 13.6 | 14.4 | 15.2 | 16.0 |
| 9 | 73.8 | 74.7 | | | 141.3 | 15.3 | 16.2 | 17.1 | 18.0 |

30°-33°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | | | |
|-----|------|--------|------|--------|------|-------|------|------|-----|
| 30 | 00 | 24,008 | | 47,124 | | 2,842 | | | |
| | 10 | 091 | 83 | 281 | 157 | 861 | 19 | | |
| | 20 | 174 | 83 | 38 | 157 | 880 | 19 | | |
| | 30 | 257 | 83 | 595 | 157 | 900 | 20 | | |
| | 40 | 340 | 83 | 752 | 157 | 920 | 20 | | |
| | | | 84 | | 157 | | 20 | | |
| | 50 | 24,424 | | 47,909 | | 2,940 | | | |
| | 60 | 507 | 83 | 48,066 | 157 | 959 | 19 | | |
| | 70 | 590 | 83 | 223 | 157 | 979 | 20 | | |
| | 80 | 673 | 83 | 381 | 158 | 999 | 20 | | |
| 31 | 90 | 757 | 84 | 538 | 157 | 3,019 | 20 | | |
| | | | 83 | | 157 | | 20 | | |
| | 00 | 24,840 | | 48,695 | | 3,039 | | | |
| | 10 | 924 | 84 | 852 | 157 | 059 | 20 | | |
| | 20 | 25,007 | 83 | 49,009 | 157 | 079 | 20 | | |
| | 30 | 090 | 83 | 166 | 157 | 100 | 21 | | |
| | 40 | 174 | 84 | 323 | 157 | 120 | 20 | | |
| | | | 83 | | 157 | | 20 | | |
| | 50 | 25,257 | | 49,480 | | 3,140 | | | |
| | 60 | 341 | 84 | 637 | 157 | 161 | 21 | | |
| 32 | 70 | 425 | 84 | 794 | 157 | 181 | 20 | | |
| | 80 | 508 | 83 | 951 | 157 | 202 | 21 | | |
| | 90 | 592 | 84 | 50,108 | 157 | 223 | 21 | | |
| | | | 84 | | 157 | | 20 | | |
| | 00 | 25,676 | | 50,265 | | 3,243 | | | |
| | 10 | 759 | 83 | 423 | 158 | 264 | 21 | | |
| | 20 | 843 | 84 | 580 | 157 | 285 | 21 | | |
| | 30 | 927 | 84 | 737 | 157 | 306 | 21 | | |
| | 40 | 26,011 | 84 | 894 | 157 | 327 | 21 | | |
| | | | 84 | | 157 | | 22 | | |
| 33 | 50 | 26,095 | | 51,051 | | 3,349 | | | |
| | 60 | 179 | 84 | 208 | 157 | 370 | 21 | | |
| | 70 | 262 | 83 | 365 | 157 | 391 | 21 | | |
| | 80 | 346 | 84 | 522 | 157 | 412 | 21 | | |
| | 90 | 430 | 84 | 679 | 157 | 434 | 22 | | |
| | | | 85 | | 157 | | 21 | | |
| | 00 | 26,515 | | 51,836 | | 3,455 | | | |
| | 分數 | 83 | 84 | 85 | 158 | 19 | 20 | 21 | 22 |
| | 0.5 | 4.1 | 4.2 | 4.2 | 7.9 | 0.9 | 1.0 | 1.0 | 1.1 |
| | 1 | 8.3 | 8.4 | 8.5 | 15.8 | 1.9 | 2.0 | 2.1 | 2.2 |
| 2 | 16.6 | 16.8 | 17.0 | 31.6 | 3.8 | 4.0 | 4.2 | 4.4 | |
| 3 | 24.9 | 25.2 | 25.5 | 47.4 | 5.7 | 6.0 | 6.3 | 6.6 | |
| 4 | 33.2 | 33.6 | 34.0 | 63.2 | 7.6 | 8.0 | 8.4 | 8.8 | |
| 5 | 41.5 | 42.0 | 42.5 | 79.0 | 9.5 | 10.0 | 10.5 | 11.0 | |
| 6 | 49.8 | 50.4 | 51.0 | 94.8 | 11.4 | 12.0 | 12.6 | 13.2 | |
| 7 | 58.1 | 58.8 | 59.5 | 110.6 | 13.3 | 14.0 | 14.7 | 15.4 | |
| 8 | 66.4 | 67.2 | 68.0 | 126.4 | 15.2 | 16.0 | 16.8 | 17.6 | |
| 9 | 74.7 | 75.6 | 76.5 | 142.2 | 17.1 | 18.0 | 18.9 | 19.8 | |

33°-36°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂 距 | 差數 | | | |
|-----|------|--------|------|--------|------|-------|------|------|-----|
| 33 | 00 | 26,515 | 84 | 51,836 | 157 | 3,455 | 22 | | |
| | 10 | 599 | 84 | 993 | 157 | 477 | 22 | | |
| | 20 | 683 | 84 | 52,150 | 157 | 499 | 22 | | |
| | 30 | 767 | 84 | 308 | 158 | 520 | 21 | | |
| | 40 | 851 | 84 | 465 | 157 | 542 | 22 | | |
| | 50 | 26,935 | 84 | 52,622 | 157 | 3,564 | 22 | | |
| | 60 | 27,020 | 85 | 779 | 157 | 586 | 22 | | |
| | 70 | 104 | 84 | 936 | 157 | 608 | 22 | | |
| | 80 | 188 | 84 | 53,093 | 157 | 630 | 22 | | |
| 34 | 90 | 273 | 85 | 250 | 157 | 652 | 22 | | |
| | 00 | 27,357 | 84 | 53,407 | 157 | 3,674 | 23 | | |
| | 10 | 441 | 84 | 584 | 157 | 697 | 23 | | |
| | 20 | 526 | 85 | 721 | 157 | 719 | 22 | | |
| | 30 | 610 | 84 | 878 | 157 | 742 | 23 | | |
| | 40 | 695 | 85 | 54,035 | 157 | 764 | 22 | | |
| | 50 | 27,779 | 84 | 54,192 | 157 | 3,787 | 23 | | |
| | 60 | 864 | 85 | 350 | 158 | 809 | 22 | | |
| | 70 | 949 | 85 | 507 | 157 | 832 | 23 | | |
| 35 | 80 | 28,033 | 84 | 664 | 157 | 855 | 23 | | |
| | 90 | 118 | 85 | 821 | 157 | 878 | 23 | | |
| | 00 | 28,203 | 85 | 54,978 | 157 | 3,901 | 23 | | |
| | 10 | 288 | 85 | 55,135 | 157 | 924 | 23 | | |
| | 20 | 373 | 85 | 292 | 157 | 947 | 23 | | |
| | 30 | 457 | 84 | 449 | 157 | 970 | 23 | | |
| | 40 | 542 | 85 | 606 | 157 | 994 | 24 | | |
| | 50 | 28,627 | 85 | 55,763 | 157 | 4,017 | 23 | | |
| | 60 | 712 | 85 | 920 | 157 | 040 | 23 | | |
| 36 | 70 | 797 | 85 | 56,077 | 157 | 064 | 24 | | |
| | 80 | 882 | 85 | 234 | 157 | 087 | 23 | | |
| | 90 | 968 | 86 | 392 | 158 | 111 | 24 | | |
| | 00 | 29,053 | 85 | 56,549 | 157 | 4,135 | 24 | | |
| | 分數 | 84 | 85 | 86 | 157 | 21 | 22 | 23 | 24 |
| | 0.5 | 4.2 | 4.2 | 4.3 | 7.8 | 1.0 | 1.1 | 1.1 | 1.2 |
| | 1 | 8.4 | 8.5 | 8.6 | 15.7 | 2.1 | 2.2 | 2.3 | 2.4 |
| | 2 | 16.8 | 17.0 | 17.2 | 31.4 | 4.2 | 4.4 | 4.6 | 4.8 |
| | 3 | 25.2 | 25.5 | 25.8 | 47.1 | 6.3 | 6.6 | 6.9 | 7.2 |
| 4 | 33.6 | 34.0 | 34.4 | 62.8 | 8.4 | 8.8 | 9.2 | 9.6 | |
| 5 | 42.0 | 42.5 | 43.0 | 78.5 | 10.5 | 11.0 | 11.5 | 12.0 | |
| 6 | 50.4 | 51.0 | 51.6 | 94.2 | 12.6 | 13.2 | 13.8 | 14.4 | |
| 7 | 58.8 | 59.5 | 60.2 | 109.9 | 14.7 | 15.4 | 16.1 | 16.8 | |
| 8 | 67.2 | 68.0 | 68.8 | 125.6 | 16.8 | 17.6 | 18.4 | 19.2 | |
| 9 | 75.6 | 76.5 | 77.4 | 141.3 | 18.9 | 19.8 | 20.7 | 21.6 | |

36°-39°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | | |
|-------|--------|------|--------|-------|-------|------|------|------|
| 36 00 | 29,053 | 85 | 56,549 | 157 | 4,135 | 24 | | |
| 10 | 138 | 85 | 706 | 157 | 159 | 23 | | |
| 20 | 223 | 85 | 863 | 157 | 182 | 24 | | |
| 30 | 308 | 86 | 57,020 | 157 | 206 | 24 | | |
| 40 | 394 | 86 | 177 | 157 | 230 | 24 | | |
| 50 | 29,479 | 85 | 57,334 | 157 | 4,254 | 24 | | |
| 60 | 564 | 85 | 491 | 157 | 279 | 25 | | |
| 70 | 650 | 86 | 648 | 157 | 303 | 24 | | |
| 80 | 735 | 85 | 805 | 157 | 327 | 24 | | |
| 90 | 821 | 86 | 962 | 157 | 352 | 25 | | |
| 37 00 | 29,906 | 85 | 58,119 | 157 | 4,376 | 24 | | |
| 10 | 992 | 86 | 277 | 158 | 401 | 25 | | |
| 20 | 30,078 | 86 | 434 | 157 | 425 | 24 | | |
| 30 | 163 | 85 | 591 | 157 | 450 | 25 | | |
| 40 | 249 | 86 | 748 | 157 | 475 | 25 | | |
| 50 | 30,335 | 86 | 58,905 | 157 | 4,500 | 25 | | |
| 60 | 420 | 85 | 59,062 | 157 | 525 | 25 | | |
| 70 | 506 | 86 | 219 | 157 | 550 | 25 | | |
| 80 | 592 | 86 | 376 | 157 | 575 | 25 | | |
| 90 | 678 | 86 | 533 | 157 | 600 | 25 | | |
| 38 00 | 30,764 | 86 | 59,690 | 157 | 4,625 | 25 | | |
| 10 | 850 | 86 | 847 | 157 | 650 | 25 | | |
| 20 | 936 | 86 | 60,004 | 157 | 676 | 26 | | |
| 30 | 31,022 | 86 | 162 | 158 | 701 | 25 | | |
| 40 | 108 | 86 | 319 | 157 | 727 | 26 | | |
| 50 | 31,194 | 86 | 60,476 | 157 | 4,752 | 25 | | |
| 60 | 281 | 87 | 633 | 157 | 778 | 26 | | |
| 70 | 367 | 86 | 790 | 157 | 804 | 26 | | |
| 80 | 453 | 86 | 947 | 157 | 830 | 26 | | |
| 90 | 539 | 86 | 61,104 | 157 | 856 | 26 | | |
| 39 00 | 31,626 | 87 | 61,261 | 157 | 4,882 | 26 | | |
| 分數 | 85 | 86 | 87 | 158 | 23 | 24 | 25 | 26 |
| 0,5 | 4,2 | 4,3 | 4,3 | 7,9 | 1,1 | 1,2 | 1,2 | 1,3 |
| 1 | 8,5 | 8,6 | 8,7 | 15,8 | 2,3 | 2,4 | 2,5 | 2,6 |
| 2 | 17,0 | 17,2 | 17,4 | 31,6 | 4,6 | 4,8 | 5,0 | 5,2 |
| 3 | 25,5 | 25,8 | 26,1 | 47,4 | 6,9 | 7,2 | 7,5 | 7,8 |
| 4 | 34,0 | 34,4 | 34,8 | 63,2 | 9,2 | 9,6 | 10,0 | 10,4 |
| 5 | 42,5 | 43,0 | 43,5 | 79,0 | 11,5 | 12,0 | 12,5 | 13,0 |
| 6 | 51,0 | 51,6 | 52,2 | 94,8 | 13,8 | 14,4 | 15,0 | 15,6 |
| 7 | 59,5 | 60,2 | 60,9 | 110,0 | 16,1 | 16,8 | 17,5 | 18,2 |
| 8 | 68,0 | 68,8 | 69,6 | 126,4 | 18,4 | 19,2 | 20,0 | 20,8 |
| 9 | 76,5 | 77,4 | 78,3 | 142,2 | 20,7 | 21,6 | 22,5 | 23,4 |

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | | |
|-----|------|--------|------|--------|------|-------|------|------|
| 39 | 00 | 31,626 | 86 | 61,261 | 157 | 4,882 | 26 | |
| | 10 | 712 | 87 | 418 | 157 | 908 | 26 | |
| | 20 | 799 | 86 | 575 | 157 | 934 | 26 | |
| | 30 | 885 | 87 | 732 | 157 | 960 | 27 | |
| | 40 | 972 | 86 | 889 | 157 | 987 | 26 | |
| | 50 | 32,058 | 87 | 62,046 | 158 | 5,013 | 26 | |
| | 60 | 145 | 87 | 204 | 157 | 039 | 27 | |
| | 70 | 232 | 86 | 361 | 157 | 066 | 27 | |
| | 80 | 318 | 87 | 518 | 157 | 093 | 26 | |
| | 90 | 405 | 87 | 675 | 157 | 119 | 27 | |
| 40 | 00 | 32,492 | 87 | 62,832 | 157 | 5,146 | 27 | |
| | 10 | 579 | 87 | 989 | 157 | 173 | 27 | |
| | 20 | 666 | 87 | 63,146 | 157 | 200 | 27 | |
| | 30 | 753 | 87 | 303 | 157 | 227 | 27 | |
| | 40 | 840 | 87 | 460 | 157 | 254 | 27 | |
| | 50 | 32,927 | 87 | 63,617 | 157 | 5,281 | 28 | |
| | 60 | 33,014 | 87 | 774 | 157 | 309 | 27 | |
| | 70 | 101 | 87 | 931 | 158 | 336 | 27 | |
| | 80 | 188 | 87 | 64,059 | 157 | 363 | 28 | |
| | 90 | 275 | 88 | 246 | 157 | 391 | 27 | |
| 41 | 00 | 33,363 | 87 | 64,403 | 157 | 5,418 | 28 | |
| | 10 | 450 | 87 | 560 | 157 | 446 | 28 | |
| | 20 | 537 | 88 | 717 | 157 | 474 | 28 | |
| | 30 | 625 | 87 | 874 | 157 | 502 | 28 | |
| | 40 | 712 | 87 | 65,031 | 157 | 530 | 28 | |
| | 50 | 33,799 | 88 | 65,188 | 157 | 5,558 | 28 | |
| | 60 | 887 | 88 | 345 | 157 | 586 | 28 | |
| | 70 | 975 | 87 | 502 | 157 | 614 | 28 | |
| | 80 | 34,062 | 88 | 659 | 157 | 642 | 28 | |
| | 90 | 150 | 88 | 816 | 157 | 670 | 29 | |
| 42 | 00 | 34,238 | | 65,973 | | 5,699 | | |
| 分數 | 86 | 87 | 88 | 157 | 26 | 27 | 28 | 29 |
| 0,5 | 4,3 | 4,3 | 4,4 | 7,8 | 1,3 | 1,3 | 1,4 | 1,4 |
| 1 | 8,6 | 8,7 | 8,8 | 15,7 | 2,6 | 2,7 | 2,8 | 2,9 |
| 2 | 17,2 | 17,4 | 17,6 | 31,4 | 5,2 | 5,4 | 5,6 | 5,8 |
| 3 | 25,8 | 26,1 | 26,4 | 47,1 | 7,8 | 8,1 | 8,4 | 8,7 |
| 4 | 34,4 | 34,8 | 35,2 | 62,8 | 10,4 | 10,8 | 11,2 | 11,6 |
| 5 | 43,0 | 43,5 | 44,0 | 78,5 | 13,0 | 13,5 | 14,0 | 14,5 |
| 6 | 51,6 | 52,2 | 52,8 | 94,2 | 15,6 | 16,2 | 16,8 | 17,4 |
| 7 | 60,2 | 60,9 | 61,6 | 109,9 | 18,2 | 18,9 | 19,6 | 20,3 |
| 8 | 68,8 | 69,6 | 70,4 | 125,6 | 20,8 | 21,6 | 22,4 | 23,2 |
| 9 | 77,4 | 78,3 | 79,2 | 141,3 | 23,4 | 24,3 | 25,2 | 26,1 |

42°-45°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | | | |
|-----|------|--------|------|--------|-------|-------|------|------|------|
| 42 | 00 | 34,238 | | 65,973 | | 5,699 | | | |
| | 10 | 325 | 87 | 66,131 | 153 | 727 | | | |
| | 20 | 413 | 88 | 238 | 157 | 756 | | | |
| | 30 | 501 | 88 | 445 | 157 | 784 | | | |
| | 40 | 589 | 88 | 602 | 157 | 813 | | | |
| | 50 | 34,877 | 88 | 66,759 | 157 | 5,842 | | | |
| | 60 | 765 | 88 | 916 | 157 | 871 | | | |
| | 70 | 853 | 88 | 67,973 | 157 | 900 | | | |
| | 80 | 941 | 88 | 230 | 157 | 929 | | | |
| | 90 | 35,029 | 88 | 387 | 157 | 958 | | | |
| 43 | 00 | 35,118 | | 67,544 | | 5,987 | | | |
| | 10 | 206 | 88 | 701 | 157 | 6,016 | | | |
| | 20 | 294 | 88 | 858 | 157 | 046 | | | |
| | 30 | 382 | 88 | 68,015 | 157 | 075 | | | |
| | 40 | 471 | 89 | 173 | 158 | 104 | | | |
| | 50 | 35,559 | 88 | 68,330 | 157 | 6,134 | | | |
| | 60 | 648 | 89 | 487 | 157 | 164 | | | |
| | 70 | 736 | 88 | 644 | 157 | 194 | | | |
| | 80 | 825 | 89 | 801 | 157 | 223 | | | |
| | 90 | 914 | 89 | 958 | 157 | 253 | | | |
| 44 | 00 | 36,002 | | 69,115 | | 6,283 | | | |
| | 10 | 091 | 89 | 272 | 157 | 313 | | | |
| | 20 | 180 | 89 | 429 | 157 | 344 | | | |
| | 30 | 269 | 89 | 586 | 157 | 374 | | | |
| | 40 | 357 | 88 | 743 | 157 | 404 | | | |
| | 50 | 36,446 | 89 | 69,900 | 157 | 6,435 | | | |
| | 60 | 635 | 89 | 70,058 | 158 | 465 | | | |
| | 70 | 625 | 90 | 215 | 157 | 496 | | | |
| | 80 | 714 | 89 | 372 | 157 | 526 | | | |
| | 90 | 803 | 89 | 529 | 157 | 557 | | | |
| 45 | 00 | 36,892 | | 70,686 | | 6,588 | | | |
| | 10 | | | | | | | | |
| | 20 | | | | | | | | |
| | 30 | | | | | | | | |
| | 40 | | | | | | | | |
| | 50 | | | | | | | | |
| | 60 | | | | | | | | |
| | 70 | | | | | | | | |
| | 80 | | | | | | | | |
| | 90 | | | | | | | | |
| 分數 | 87 | 88 | 89 | 90 | 158 | 28 | 29 | 30 | 31 |
| 0,5 | 4,3 | 4,4 | 4,4 | 4,5 | 7,9 | 1,4 | 1,4 | 1,5 | 1,5 |
| 1 | 8,7 | 8,8 | 8,9 | 9,0 | 15,8 | 2,8 | 2,9 | 3,0 | 3,1 |
| 2 | 17,4 | 17,6 | 17,8 | 18,0 | 31,6 | 5,6 | 5,8 | 6,0 | 6,2 |
| 3 | 26,1 | 26,4 | 26,7 | 27,0 | 47,4 | 8,4 | 8,7 | 9,0 | 9,3 |
| 4 | 34,8 | 35,2 | 35,6 | 36,0 | 63,2 | 11,2 | 11,6 | 12,0 | 12,4 |
| 5 | 43,5 | 44,0 | 44,5 | 45,0 | 79,0 | 14,0 | 14,5 | 15,0 | 15,5 |
| 6 | 52,2 | 52,8 | 53,4 | 54,0 | 94,8 | 16,8 | 17,4 | 18,0 | 18,6 |
| 7 | 60,9 | 61,6 | 62,3 | 63,0 | 110,6 | 19,6 | 20,3 | 21,0 | 21,7 |
| 8 | 69,6 | 70,4 | 71,2 | 72,0 | 126,4 | 22,4 | 23,2 | 24,0 | 24,8 |
| 9 | 78,3 | 79,2 | 80,1 | 81,0 | 142,2 | 25,2 | 26,1 | 27,0 | 27,9 |

42°-45°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | | |
|-------|--------|------|--------|-------|-------|------|------|------|
| 45 00 | 36,892 | 89 | 70,686 | | 6,588 | | | |
| 10 | 981 | 90 | 843 | 157 | 619 | 31 | | |
| 20 | 37,071 | 89 | 71,000 | 157 | 650 | 31 | | |
| 30 | 160 | 89 | 157 | 157 | 681 | 31 | | |
| 40 | 249 | 90 | 314 | 157 | 712 | 31 | | |
| 50 | 37,339 | 89 | 71,471 | 157 | 6,743 | 32 | | |
| 60 | 428 | 90 | 628 | 157 | 775 | 31 | | |
| 70 | 518 | 89 | 785 | 157 | 806 | 32 | | |
| 80 | 607 | 90 | 942 | 158 | 838 | 31 | | |
| 90 | 697 | 90 | 72,100 | 157 | 869 | 32 | | |
| 46 00 | 37,787 | 90 | 72,257 | 157 | 6,901 | 32 | | |
| 10 | 877 | 89 | 414 | 157 | 933 | 32 | | |
| 20 | 966 | 90 | 571 | 157 | 965 | 32 | | |
| 30 | 38,056 | 90 | 728 | 157 | 997 | 32 | | |
| 40 | 146 | 90 | 885 | 157 | 7,029 | 32 | | |
| 50 | 38,236 | 90 | 73,042 | 157 | 7,061 | 32 | | |
| 60 | 326 | 90 | 199 | 157 | 093 | 32 | | |
| 70 | 416 | 91 | 356 | 157 | 125 | 33 | | |
| 80 | 507 | 90 | 513 | 157 | 158 | 32 | | |
| 90 | 597 | 90 | 670 | 157 | 190 | 32 | | |
| 47 00 | 38,687 | 90 | 73,827 | 158 | 7,222 | 33 | | |
| 10 | 777 | 91 | 985 | 157 | 255 | 33 | | |
| 20 | 868 | 90 | 74,142 | 157 | 288 | 33 | | |
| 30 | 958 | 91 | 299 | 157 | 321 | 33 | | |
| 40 | 39,049 | 90 | 456 | 157 | 354 | 33 | | |
| 50 | 39,139 | 91 | 74,613 | 157 | 7,387 | 33 | | |
| 60 | 230 | 90 | 770 | 157 | 420 | 33 | | |
| 70 | 320 | 91 | 927 | 157 | 453 | 33 | | |
| 80 | 411 | 91 | 75,084 | 157 | 486 | 33 | | |
| 90 | 502 | 91 | 241 | 157 | 519 | 34 | | |
| 48 00 | 39,593 | | 75,398 | | 7,553 | | | |
| 分數 | 89 | 90 | 91 | 157 | 31 | 32 | 33 | 34 |
| 0,5 | 4,4 | 4,5 | 4,5 | 7,8 | 1,5 | 1,6 | 1,6 | 1,7 |
| 1 | 8,9 | 9,0 | 9,1 | 15,7 | 3,1 | 3,2 | 3,3 | 3,4 |
| 2 | 17,8 | 18,0 | 18,2 | 31,4 | 6,2 | 6,4 | 6,6 | 6,8 |
| 3 | 26,7 | 27,0 | 27,3 | 47,1 | 9,3 | 9,6 | 9,9 | 10,2 |
| 4 | 35,6 | 36,0 | 36,4 | 62,8 | 12,4 | 12,8 | 13,2 | 13,6 |
| 5 | 44,5 | 45,0 | 45,5 | 78,5 | 15,5 | 16,0 | 16,5 | 17,0 |
| 6 | 53,4 | 54,0 | 54,6 | 94,2 | 18,6 | 19,2 | 19,8 | 20,4 |
| 7 | 62,3 | 63,0 | 63,7 | 109,9 | 21,7 | 22,4 | 23,1 | 23,8 |
| 8 | 71,2 | 72,0 | 72,8 | 125,6 | 24,8 | 25,6 | 26,4 | 27,2 |
| 9 | 80,1 | 81,0 | 81,9 | 141,3 | 27,9 | 28,8 | 29,7 | 30,6 |

48°-51°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | | |
|-----|------|--------|--------|-------|-------|------|------|------|
| 48 | 00 | 39,593 | 75,398 | | 7,553 | | | |
| | 10 | 684 | 555 | 157 | 586 | 33 | | |
| | 20 | 775 | 712 | 157 | 620 | 34 | | |
| | 30 | 868 | 869 | 157 | 653 | 33 | | |
| | 40 | 957 | 76,027 | 158 | 687 | 34 | | |
| | | | | 157 | | 34 | | |
| | 50 | 40,048 | 76,184 | | 7,721 | | | |
| | 60 | 189 | 341 | 157 | 755 | 34 | | |
| | 70 | 230 | 498 | 157 | 789 | 34 | | |
| | 80 | 321 | 655 | 157 | 823 | 34 | | |
| | 90 | 413 | 812 | 157 | 857 | 34 | | |
| | | | | 157 | | 34 | | |
| 49 | 00 | 40,504 | 76,969 | | 7,891 | | | |
| | 10 | 596 | 77,128 | 157 | 926 | 35 | | |
| | 20 | 687 | 233 | 157 | 960 | 34 | | |
| | 30 | 779 | 440 | 157 | 995 | 35 | | |
| | 40 | 870 | 597 | 157 | 8,030 | 35 | | |
| | | | | 157 | | 34 | | |
| | 50 | 40,962 | 77,754 | | 8,064 | | | |
| | 60 | 41,054 | 911 | 157 | 099 | 35 | | |
| | 70 | 146 | 78,069 | 158 | 134 | 35 | | |
| | 80 | 237 | 226 | 157 | 169 | 35 | | |
| | 90 | 329 | 383 | 157 | 204 | 35 | | |
| | | | | 157 | | 35 | | |
| 50 | 00 | 41,421 | 78,540 | | 8,239 | | | |
| | 10 | 513 | 697 | 157 | 274 | 35 | | |
| | 20 | 606 | 854 | 157 | 310 | 36 | | |
| | 30 | 698 | 79,011 | 157 | 345 | 35 | | |
| | 40 | 790 | 168 | 157 | 381 | 36 | | |
| | | | | 157 | | 35 | | |
| | 50 | 41,882 | 79,325 | | 8,416 | | | |
| | 60 | 975 | 482 | 157 | 452 | 36 | | |
| | 70 | 42,067 | 639 | 157 | 488 | 36 | | |
| | 80 | 159 | 796 | 157 | 524 | 36 | | |
| | 90 | 252 | 954 | 158 | 560 | 36 | | |
| | | | | 157 | | 36 | | |
| 51 | 00 | 42,344 | 80,111 | | 8,596 | | | |
| 分數 | 91 | 92 | 93 | 158 | 33 | 34 | 35 | 36 |
| 0,5 | 4,5 | 4,6 | 4,6 | 7,9 | 1,6 | 1,7 | 1,7 | 1,8 |
| 1 | 9,1 | 9,2 | 9,3 | 15,8 | 3,3 | 3,4 | 3,5 | 3,6 |
| 2 | 18,2 | 18,4 | 18,6 | 31,6 | 6,6 | 6,8 | 7,0 | 7,2 |
| 3 | 27,3 | 27,6 | 27,9 | 47,4 | 9,9 | 10,2 | 10,5 | 10,8 |
| 4 | 36,4 | 36,8 | 37,2 | 63,2 | 13,2 | 13,6 | 14,0 | 14,4 |
| 5 | 45,5 | 46,0 | 46,5 | 79,0 | 16,5 | 17,0 | 17,5 | 18,0 |
| 6 | 54,6 | 55,2 | 55,8 | 94,8 | 19,8 | 20,4 | 21,0 | 21,6 |
| 7 | 63,7 | 64,4 | 65,1 | 110,6 | 23,1 | 23,8 | 24,5 | 25,2 |
| 8 | 72,8 | 73,6 | 74,4 | 126,4 | 26,4 | 27,2 | 28,0 | 28,8 |
| 9 | 81,9 | 82,8 | 83,7 | 142,2 | 29,7 | 30,6 | 31,5 | 32,4 |

48°-51°

51°-54°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | |
|-----|-----|--------|-----|--------|-----|-------|----|
| 51 | 00 | 42,344 | 93 | 80,111 | 157 | 8,596 | 86 |
| | 10 | 437 | 93 | 268 | 157 | 632 | 86 |
| | 20 | 530 | 93 | 425 | 157 | 668 | 87 |
| | 30 | 623 | 93 | 582 | 157 | 705 | 86 |
| | 40 | 716 | 92 | 739 | 157 | 741 | 87 |
| | 50 | 42,808 | 93 | 80,896 | 157 | 8,778 | 86 |
| | 60 | 901 | 93 | 81,053 | 157 | 814 | 87 |
| | 70 | 994 | 93 | 210 | 157 | 851 | 87 |
| | 80 | 43,087 | 94 | 367 | 157 | 888 | 87 |
| | 90 | 181 | 93 | 524 | 157 | 925 | 87 |
| 52 | 00 | 43,274 | 93 | 81,681 | 157 | 8,962 | 87 |
| | 10 | 367 | 94 | 838 | 158 | 999 | 87 |
| | 20 | 461 | 93 | 996 | 157 | 9,036 | 87 |
| | 30 | 554 | 93 | 82,153 | 157 | 073 | 87 |
| | 40 | 647 | 94 | 310 | 157 | 110 | 88 |
| | 50 | 43,741 | 93 | 82,467 | 157 | 9,148 | 87 |
| | 60 | 834 | 94 | 624 | 157 | 185 | 88 |
| | 70 | 928 | 94 | 781 | 157 | 223 | 88 |
| | 80 | 44,022 | 94 | 938 | 157 | 261 | 88 |
| | 90 | 116 | 94 | 83,095 | 157 | 299 | 88 |
| 53 | 00 | 44,210 | 93 | 83,252 | 157 | 9,337 | 88 |
| | 10 | 303 | 94 | 409 | 157 | 375 | 88 |
| | 20 | 397 | 94 | 566 | 157 | 413 | 88 |
| | 30 | 491 | 95 | 723 | 158 | 451 | 88 |
| | 40 | 586 | 94 | 881 | 157 | 489 | 89 |
| | 50 | 44,680 | 94 | 84,038 | 157 | 9,528 | 88 |
| | 60 | 774 | 94 | 195 | 157 | 566 | 89 |
| | 70 | 868 | 95 | 352 | 157 | 605 | 88 |
| | 80 | 963 | 94 | 509 | 157 | 643 | 89 |
| | 90 | 45,057 | 95 | 666 | 157 | 682 | 89 |
| 54 | 00 | 45,152 | | 84,823 | | 9,721 | |

| 分數 | 92 | 93 | 94 | 95 | 157 | 36 | 37 | 38 | 39 |
|-----|------|------|------|------|-------|------|------|------|------|
| 0,5 | 4,6 | 4,6 | 4,7 | 4,7 | 7,8 | 1,8 | 1,8 | 1,9 | 1,9 |
| 1 | 9,2 | 9,3 | 9,4 | 9,5 | 15,7 | 3,6 | 3,7 | 3,8 | 3,9 |
| 2 | 18,4 | 18,6 | 18,8 | 19,0 | 31,4 | 7,2 | 7,4 | 7,6 | 7,8 |
| 3 | 27,6 | 27,9 | 28,2 | 28,5 | 47,1 | 10,8 | 11,1 | 11,4 | 11,7 |
| 4 | 36,8 | 37,2 | 37,6 | 38,0 | 62,8 | 14,4 | 14,8 | 15,2 | 15,6 |
| 5 | 46,0 | 46,5 | 47,0 | 47,5 | 78,5 | 18,0 | 18,5 | 19,0 | 19,5 |
| 6 | 55,2 | 55,8 | 56,4 | 57,0 | 94,2 | 21,6 | 22,2 | 22,8 | 23,4 |
| 7 | 64,4 | 65,1 | 65,8 | 66,5 | 109,9 | 25,2 | 25,9 | 26,6 | 27,3 |
| 8 | 73,6 | 74,4 | 75,2 | 76,0 | 125,6 | 28,8 | 29,6 | 30,4 | 31,2 |
| 9 | 82,8 | 83,7 | 84,6 | 85,5 | 141,3 | 32,4 | 33,3 | 34,2 | 35,1 |

54°-57°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | |
|-----|--------|--------|-----|--------|-----|--------|----|
| 54 | 00 | 45,152 | 94 | 84,823 | 157 | 9,721 | 39 |
| | 10 | 246 | 95 | 980 | 157 | 760 | 39 |
| | 20 | 341 | 95 | 85,137 | 157 | 799 | 39 |
| | 30 | 436 | 94 | 294 | 157 | 838 | 39 |
| | 40 | 530 | 95 | 451 | 157 | 877 | 40 |
| | 50 | 45,625 | 95 | 85,608 | 157 | 9,917 | 39 |
| | 60 | 720 | 95 | 765 | 158 | 956 | 39 |
| | 70 | 815 | 95 | 923 | 157 | 996 | 40 |
| | 80 | 910 | 95 | 86,080 | 157 | 10,035 | 40 |
| 90 | 46,005 | 96 | 237 | 157 | 075 | 40 | |
| 55 | 00 | 46,101 | 95 | 86,394 | 17 | 10,115 | 40 |
| | 10 | 196 | 95 | 551 | 157 | 155 | 40 |
| | 20 | 291 | 96 | 708 | 157 | 195 | 40 |
| | 30 | 387 | 95 | 865 | 157 | 235 | 40 |
| | 40 | 482 | 96 | 87,022 | 157 | 275 | 40 |
| | 50 | 46,578 | 95 | 87,179 | 157 | 10,315 | 41 |
| | 60 | 673 | 96 | 336 | 157 | 356 | 40 |
| | 70 | 769 | 96 | 493 | 157 | 396 | 41 |
| | 80 | 865 | 96 | 650 | 158 | 437 | 41 |
| 90 | 961 | 95 | 808 | 157 | 478 | 40 | |
| 56 | 00 | 47,056 | 96 | 87,965 | 157 | 10,518 | 41 |
| | 10 | 152 | 96 | 88,122 | 157 | 559 | 41 |
| | 20 | 248 | 97 | 279 | 157 | 600 | 41 |
| | 30 | 345 | 96 | 436 | 157 | 641 | 41 |
| | 40 | 441 | 96 | 593 | 157 | 683 | 41 |
| | 50 | 47,537 | 96 | 88,750 | 157 | 10,724 | 41 |
| | 60 | 633 | 97 | 907 | 157 | 765 | 42 |
| | 70 | 730 | 96 | 89,064 | 157 | 807 | 41 |
| | 80 | 826 | 97 | 221 | 157 | 848 | 42 |
| 90 | 923 | 97 | 378 | 157 | 890 | 42 | |
| 57 | 00 | 48,020 | | 89,535 | | 10,932 | |

| 分數 | 94 | 95 | 96 | 97 | 158 | 39 | 40 | 41 | 42 |
|-----|------|------|------|------|-------|------|------|------|------|
| 0.5 | 4.7 | 4.7 | 4.8 | 4.8 | 7.9 | 1.9 | 2.0 | 2.0 | 2.1 |
| 1 | 9.4 | 9.5 | 9.6 | 9.7 | 15.8 | 3.9 | 4.0 | 4.1 | 4.2 |
| 2 | 18.8 | 19.0 | 19.2 | 19.4 | 31.6 | 7.8 | 8.0 | 8.2 | 8.4 |
| 3 | 28.2 | 28.5 | 28.8 | 29.1 | 47.4 | 11.7 | 12.0 | 12.3 | 12.6 |
| 4 | 37.6 | 38.0 | 38.4 | 38.8 | 63.2 | 15.6 | 16.0 | 16.4 | 16.8 |
| 5 | 47.0 | 47.5 | 48.0 | 48.5 | 79.0 | 19.5 | 20.0 | 20.5 | 21.0 |
| 6 | 56.4 | 57.0 | 57.6 | 58.2 | 94.8 | 23.4 | 24.0 | 24.6 | 25.2 |
| 7 | 65.8 | 66.5 | 67.2 | 67.9 | 110.6 | 27.3 | 28.0 | 28.7 | 29.4 |
| 8 | 75.2 | 76.0 | 76.8 | 77.6 | 126.4 | 31.2 | 32.0 | 32.8 | 33.6 |
| 9 | 84.6 | 85.5 | 86.4 | 87.3 | 142.2 | 35.1 | 36.0 | 36.9 | 37.8 |

54°-57°

57°-60°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | | | |
|-----|------|--------|------|--------|-------|--------|------|------|------|
| 57 | 00 | 48,020 | | 89,535 | | 10,932 | | | |
| | 10 | 116 | 96 | 692 | 157 | 974 | 42 | | |
| | 20 | 213 | 97 | 850 | 158 | 11,016 | 42 | | |
| | 30 | 310 | 97 | 90,007 | 157 | 058 | 42 | | |
| | 40 | 407 | 97 | 164 | 157 | 100 | 42 | | |
| | 50 | 48,504 | | 90,321 | | 11,142 | | | |
| | 60 | 601 | 97 | 478 | 157 | 185 | 43 | | |
| | 70 | 698 | 97 | 635 | 157 | 227 | 42 | | |
| | 80 | 795 | 97 | 792 | 157 | 270 | 43 | | |
| | 90 | 892 | 97 | 949 | 157 | 312 | 42 | | |
| 58 | 00 | 48,989 | | 91,106 | | 11,355 | | | |
| | 10 | 49,087 | 98 | 263 | 157 | 398 | 43 | | |
| | 20 | 184 | 97 | 420 | 157 | 441 | 43 | | |
| | 30 | 282 | 98 | 577 | 157 | 484 | 43 | | |
| | 40 | 380 | 97 | 734 | 158 | 527 | 43 | | |
| | 50 | 49,477 | | 91,892 | | 11,571 | | | |
| | 60 | 575 | 98 | 92,049 | 157 | 614 | 43 | | |
| | 70 | 673 | 98 | 206 | 157 | 658 | 44 | | |
| | 80 | 771 | 98 | 363 | 157 | 701 | 43 | | |
| | 90 | 869 | 98 | 520 | 157 | 745 | 44 | | |
| 59 | 00 | 49,967 | | 92,677 | | 11,789 | | | |
| | 10 | 50,065 | 98 | 834 | 157 | 833 | 44 | | |
| | 20 | 164 | 99 | 991 | 157 | 877 | 44 | | |
| | 30 | 262 | 98 | 93,148 | 157 | 921 | 44 | | |
| | 40 | 360 | 98 | 305 | 157 | 965 | 44 | | |
| | 50 | 50,459 | | 93,462 | | 12,009 | | | |
| | 60 | 557 | 98 | 619 | 157 | 054 | 45 | | |
| | 70 | 656 | 99 | 777 | 158 | 098 | 44 | | |
| | 80 | 755 | 99 | 934 | 157 | 143 | 45 | | |
| | 90 | 854 | 99 | 94,091 | 157 | 188 | 45 | | |
| 60 | 00 | 50,953 | | 94,248 | | 12,233 | | | |
| 分數 | 96 | 97 | 98 | 99 | 157 | 42 | 43 | 44 | 45 |
| 0,5 | 4,8 | 4,8 | 4,9 | 4,9 | 7,8 | 2,1 | 2,1 | 2,2 | 2,2 |
| 1 | 9,6 | 9,7 | 9,8 | 9,9 | 15,7 | 4,2 | 4,3 | 4,4 | 4,5 |
| 2 | 19,2 | 19,4 | 19,6 | 19,8 | 31,4 | 8,4 | 8,6 | 8,8 | 9,0 |
| 3 | 28,8 | 29,1 | 29,4 | 29,7 | 47,1 | 12,6 | 12,9 | 13,2 | 13,5 |
| 4 | 38,4 | 38,8 | 39,2 | 39,6 | 62,8 | 16,8 | 17,2 | 17,6 | 18,0 |
| 5 | 48,0 | 48,5 | 49,0 | 49,5 | 78,5 | 21,0 | 21,5 | 22,0 | 22,5 |
| 6 | 57,6 | 58,2 | 58,8 | 59,4 | 94,2 | 25,2 | 25,8 | 26,4 | 27,0 |
| 7 | 67,2 | 67,9 | 68,6 | 69,3 | 109,9 | 29,4 | 30,1 | 30,8 | 31,5 |
| 8 | 76,8 | 77,6 | 78,4 | 79,2 | 125,6 | 33,6 | 34,4 | 35,2 | 36,0 |
| 9 | 86,4 | 87,3 | 88,2 | 89,1 | 141,3 | 37,8 | 38,7 | 39,6 | 40,5 |

60°-63°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂 距 | 差數 | |
|-----|-----|--------|-----|--------|-----|--------|----|
| 60 | 00 | 50,953 | 99 | 94,248 | 157 | 12,233 | 45 |
| | 10 | 51,052 | 99 | 405 | 157 | 278 | 45 |
| | 20 | 151 | 99 | 562 | 157 | 323 | 45 |
| | 30 | 250 | 99 | 719 | 157 | 368 | 45 |
| | 40 | 349 | 99 | 876 | 157 | 413 | 45 |
| | | | 99 | | 157 | | 45 |
| | 50 | 51,448 | 100 | 95,033 | 157 | 12,458 | 46 |
| | 60 | 548 | 99 | 190 | 157 | 504 | 46 |
| | 70 | 647 | 99 | 347 | 157 | 550 | 46 |
| | 80 | 746 | 99 | 504 | 157 | 595 | 45 |
| 61 | 90 | 846 | 100 | 661 | 157 | 641 | 46 |
| | | | 100 | | 158 | | 46 |
| | 00 | 51,946 | 100 | 95,819 | 157 | 12,687 | 46 |
| | 10 | 52,046 | 100 | 976 | 157 | 733 | 46 |
| | 20 | 146 | 100 | 96,133 | 157 | 779 | 46 |
| | 30 | 245 | 99 | 290 | 157 | 825 | 46 |
| | 40 | 345 | 100 | 447 | 157 | 872 | 47 |
| | | | 100 | | 157 | | 46 |
| | 50 | 52,445 | 101 | 96,604 | 157 | 12,918 | 47 |
| | 60 | 546 | 100 | 761 | 157 | 965 | 47 |
| 62 | 70 | 646 | 100 | 918 | 157 | 13,011 | 46 |
| | 80 | 746 | 100 | 97,075 | 157 | 058 | 47 |
| | 90 | 847 | 101 | 232 | 157 | 105 | 47 |
| | | | 100 | | 157 | | 47 |
| | 00 | 52,947 | 101 | 97,889 | 157 | 13,152 | 47 |
| | 10 | 53,048 | 101 | 546 | 157 | 199 | 47 |
| | 20 | 149 | 101 | 704 | 158 | 246 | 47 |
| | 30 | 249 | 100 | 861 | 157 | 294 | 48 |
| | 40 | 350 | 101 | 98,018 | 157 | 341 | 47 |
| | | | 101 | | 157 | | 48 |
| 63 | 50 | 53,451 | 101 | 98,175 | 157 | 13,389 | 47 |
| | 60 | 552 | 101 | 332 | 157 | 436 | 47 |
| | 70 | 653 | 101 | 489 | 157 | 484 | 48 |
| | 80 | 754 | 101 | 646 | 157 | 532 | 48 |
| | 90 | 856 | 102 | 803 | 157 | 580 | 48 |
| | | | 101 | | 157 | | 48 |
| | 00 | 53,957 | 101 | 98,960 | 157 | 13,628 | 48 |

| 分數 | 99 | 100 | 101 | 102 | 158 | 45 | 46 | 47 | 48 |
|-----|------|------|------|------|-------|------|------|------|------|
| 0.5 | 4.9 | 5.0 | 5.0 | 5.1 | 7.9 | 2.2 | 2.3 | 2.3 | 2.4 |
| 1 | 9.9 | 10.0 | 10.1 | 10.2 | 15.8 | 4.5 | 4.6 | 4.7 | 4.8 |
| 2 | 19.8 | 20.0 | 20.2 | 20.4 | 31.6 | 9.0 | 9.2 | 9.4 | 9.6 |
| 3 | 29.7 | 30.0 | 30.3 | 30.6 | 47.4 | 13.5 | 13.8 | 14.1 | 14.4 |
| 4 | 39.6 | 40.0 | 40.4 | 40.8 | 63.2 | 18.0 | 18.4 | 18.8 | 19.2 |
| 5 | 49.5 | 50.0 | 50.5 | 51.0 | 79.0 | 22.5 | 23.0 | 23.5 | 24.0 |
| 6 | 59.4 | 60.0 | 60.6 | 61.2 | 94.8 | 27.0 | 27.6 | 28.2 | 28.8 |
| 7 | 69.3 | 70.0 | 70.7 | 71.4 | 110.6 | 31.5 | 32.2 | 32.9 | 33.6 |
| 8 | 79.2 | 80.0 | 80.8 | 81.6 | 126.4 | 36.0 | 36.8 | 37.6 | 38.4 |
| 9 | 89.1 | 90.0 | 90.9 | 91.8 | 142.2 | 40.5 | 41.4 | 42.3 | 43.2 |

60°-63°

63°—66°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | |
|-----|-----|--------|-----|---------|-----|--------|----|
| 63 | 00 | 53,957 | 101 | 98,960 | 157 | 13,628 | 48 |
| | 10 | 54,058 | 102 | 99,117 | 157 | 676 | 48 |
| | 20 | 160 | 102 | 274 | 157 | 724 | 49 |
| | 30 | 262 | 102 | 431 | 157 | 773 | 49 |
| | 40 | 363 | 101 | 588 | 157 | 822 | 49 |
| | | | 102 | | 158 | | 48 |
| | 50 | 54,465 | 102 | 99,746 | 157 | 13,870 | 49 |
| | 60 | 567 | 102 | 903 | 157 | 919 | 49 |
| | 70 | 669 | 102 | 100,060 | 157 | 968 | 49 |
| | 80 | 771 | 102 | 217 | 157 | 14,017 | 49 |
| 64 | 90 | 873 | 102 | 374 | 157 | 066 | 49 |
| | | | 102 | | 157 | | 49 |
| | 00 | 54,975 | 103 | 100,531 | 157 | 14,115 | 50 |
| | 10 | 55,078 | 102 | 688 | 157 | 165 | 49 |
| | 20 | 180 | 103 | 845 | 157 | 214 | 49 |
| | 30 | 283 | 103 | 101,002 | 157 | 264 | 50 |
| | 40 | 385 | 102 | 169 | 157 | 313 | 49 |
| | | | 103 | | 157 | | 50 |
| | 50 | 55,488 | 103 | 101,316 | 157 | 14,363 | 50 |
| | 60 | 591 | 103 | 473 | 157 | 413 | 50 |
| 65 | 70 | 694 | 103 | 631 | 158 | 463 | 50 |
| | 80 | 767 | 103 | 788 | 157 | 513 | 50 |
| | 90 | 900 | 103 | 945 | 157 | 563 | 50 |
| | | | 103 | | 157 | | 51 |
| | 00 | 56,003 | 103 | 102,102 | 157 | 14,614 | 50 |
| | 10 | 108 | 103 | 259 | 157 | 664 | 50 |
| | 20 | 209 | 103 | 416 | 157 | 715 | 51 |
| | 30 | 313 | 104 | 573 | 157 | 765 | 50 |
| | 40 | 416 | 103 | 730 | 157 | 816 | 51 |
| | | | 104 | | 157 | | 51 |
| 66 | 50 | 56,520 | 103 | 102,887 | 157 | 14,867 | 51 |
| | 60 | 623 | 104 | 103,044 | 157 | 918 | 51 |
| | 70 | 727 | 104 | 201 | 157 | 969 | 51 |
| | 80 | 831 | 104 | 358 | 157 | 15,021 | 52 |
| | 90 | 935 | 104 | 515 | 157 | 072 | 51 |
| | | | 104 | | 158 | | 52 |
| | 00 | 57,039 | | 103,673 | | 15,124 | |

| 分數 | 101 | 102 | 103 | 104 | 157 | 48 | 49 | 50 | 51 |
|-----|------|------|------|------|-------|------|------|------|------|
| 0.5 | 5.0 | 5.1 | 5.1 | 5.2 | 7.8 | 2.4 | 2.4 | 2.5 | 2.5 |
| 1 | 10.1 | 10.2 | 10.3 | 10.4 | 15.7 | 4.8 | 4.9 | 5.0 | 5.1 |
| 2 | 20.2 | 20.4 | 20.6 | 20.8 | 31.4 | 9.6 | 9.8 | 10.0 | 10.2 |
| 3 | 30.3 | 30.6 | 30.9 | 31.2 | 47.1 | 14.4 | 14.7 | 15.0 | 15.3 |
| 4 | 40.4 | 40.8 | 41.2 | 41.6 | 62.8 | 19.2 | 19.6 | 20.0 | 20.4 |
| 5 | 50.5 | 51.0 | 51.5 | 52.0 | 78.5 | 24.0 | 24.5 | 25.0 | 25.5 |
| 6 | 60.6 | 61.2 | 61.8 | 62.4 | 94.2 | 28.8 | 29.4 | 30.0 | 30.6 |
| 7 | 70.7 | 71.4 | 72.1 | 72.8 | 109.9 | 33.6 | 34.3 | 35.0 | 35.7 |
| 8 | 80.8 | 81.6 | 82.4 | 83.2 | 125.6 | 38.4 | 39.2 | 40.0 | 40.8 |
| 9 | 90.9 | 91.8 | 92.7 | 93.6 | 141.3 | 43.2 | 44.1 | 45.0 | 45.9 |

63°—66°

66°-69°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | | | |
|-----|------|--------|------|---------|-------|--------|------|------|------|
| 66 | 00 | 57,039 | 104 | 103,673 | 157 | 15,124 | 51 | | |
| | 10 | 143 | 104 | 830 | 157 | 175 | 52 | | |
| | 20 | 247 | 105 | 937 | 157 | 227 | 52 | | |
| | 30 | 352 | 104 | 104,144 | 157 | 279 | 52 | | |
| | 40 | 456 | 105 | 301 | 157 | 331 | 52 | | |
| | 50 | 57,561 | 104 | 104,458 | 157 | 15,383 | 52 | | |
| | 60 | 665 | 105 | 615 | 157 | 435 | 52 | | |
| | 70 | 770 | 105 | 772 | 157 | 487 | 53 | | |
| | 80 | 875 | 105 | 929 | 157 | 540 | 53 | | |
| | 90 | 980 | 105 | 105,086 | 157 | 593 | 52 | | |
| 67 | 00 | 58,085 | 105 | 105,243 | 157 | 15,645 | 53 | | |
| | 10 | 190 | 105 | 400 | 158 | 698 | 53 | | |
| | 20 | 295 | 105 | 558 | 157 | 751 | 53 | | |
| | 30 | 400 | 106 | 715 | 157 | 804 | 53 | | |
| | 40 | 506 | 105 | 872 | 157 | 857 | 53 | | |
| | 50 | 58,611 | 106 | 106,029 | 157 | 15,910 | 54 | | |
| | 60 | 717 | 105 | 186 | 157 | 964 | 53 | | |
| | 70 | 822 | 106 | 343 | 157 | 16,017 | 54 | | |
| | 80 | 928 | 106 | 500 | 157 | 071 | 54 | | |
| | 90 | 59,034 | 106 | 657 | 157 | 125 | 54 | | |
| 68 | 00 | 59,140 | 106 | 106,814 | 157 | 16,179 | 54 | | |
| | 10 | 246 | 106 | 971 | 157 | 233 | 54 | | |
| | 20 | 352 | 106 | 107,128 | 157 | 287 | 54 | | |
| | 30 | 458 | 107 | 285 | 157 | 341 | 55 | | |
| | 40 | 565 | 106 | 442 | 158 | 396 | 54 | | |
| | 50 | 59,671 | 107 | 107,600 | 157 | 16,450 | 55 | | |
| | 60 | 778 | 106 | 757 | 157 | 505 | 55 | | |
| | 70 | 884 | 107 | 914 | 157 | 560 | 55 | | |
| | 80 | 991 | 107 | 108,071 | 157 | 614 | 54 | | |
| | 90 | 60,093 | 107 | 228 | 157 | 669 | 55 | | |
| 69 | 00 | 60,205 | | 108,385 | | 16,724 | | | |
| 分數 | 104 | 105 | 106 | 107 | 158 | 52 | 53 | 54 | 55 |
| 0,5 | 5,2 | 5,2 | 5,3 | 5,3 | 7,9 | 2,6 | 2,6 | 2,7 | 2,7 |
| 1 | 10,4 | 10,5 | 10,6 | 10,7 | 15,8 | 5,2 | 5,3 | 5,4 | 5,5 |
| 2 | 20,8 | 21,0 | 21,2 | 21,4 | 31,6 | 10,4 | 10,6 | 10,8 | 11,0 |
| 3 | 31,2 | 31,5 | 31,8 | 32,1 | 47,4 | 15,6 | 15,9 | 16,2 | 16,5 |
| 4 | 41,6 | 42,0 | 42,4 | 42,8 | 63,2 | 20,8 | 21,2 | 21,6 | 22,0 |
| 5 | 52,0 | 52,5 | 53,0 | 53,5 | 79,0 | 26,0 | 26,5 | 27,0 | 27,5 |
| 6 | 62,4 | 63,0 | 63,6 | 64,2 | 94,8 | 31,2 | 31,8 | 32,4 | 33,0 |
| 7 | 72,8 | 73,5 | 74,2 | 74,9 | 110,6 | 36,4 | 37,1 | 37,8 | 38,5 |
| 8 | 83,2 | 84,0 | 84,8 | 85,6 | 126,4 | 41,6 | 42,4 | 43,2 | 44,0 |
| 9 | 93,6 | 94,5 | 95,4 | 96,3 | 142,2 | 46,8 | 47,7 | 48,6 | 49,5 |

66°-69°

69°-72°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | | | |
|-----|------|--------|---------|------|--------|------|------|------|------|
| 69 | 00 | 60,205 | 108,385 | | 16,724 | | | | |
| | 10 | 312 | 542 | 157 | 780 | 56 | | | |
| | 20 | 419 | 690 | 157 | 835 | 55 | | | |
| | 30 | 526 | 856 | 157 | 891 | 56 | | | |
| | 40 | 634 | 109,018 | 157 | 946 | 55 | | | |
| | | | 107 | 157 | | 56 | | | |
| | 50 | 60,741 | 109,170 | | 17,002 | | | | |
| | 60 | 849 | 327 | 157 | 058 | 56 | | | |
| | 70 | 956 | 484 | 157 | 114 | 56 | | | |
| | 80 | 61,064 | 642 | 158 | 170 | 56 | | | |
| 90 | 172 | 799 | 157 | 228 | 56 | | | | |
| 70 | 00 | 61,280 | 109,956 | | 17,283 | | | | |
| | 10 | 388 | 110,113 | 157 | 339 | 56 | | | |
| | 20 | 496 | 270 | 157 | 396 | 57 | | | |
| | 30 | 605 | 427 | 157 | 453 | 57 | | | |
| | 40 | 713 | 584 | 157 | 510 | 57 | | | |
| | | | 109 | 157 | | 57 | | | |
| | 50 | 61,822 | 110,741 | | 17,567 | | | | |
| | 60 | 930 | 898 | 157 | 624 | 57 | | | |
| | 70 | 62,039 | 111,055 | 157 | 681 | 57 | | | |
| | 80 | 148 | 212 | 157 | 738 | 57 | | | |
| 90 | 257 | 369 | 157 | 796 | 58 | | | | |
| 71 | 00 | 62,366 | 111,526 | | 17,854 | | | | |
| | 10 | 475 | 684 | 158 | 911 | 57 | | | |
| | 20 | 584 | 841 | 157 | 969 | 58 | | | |
| | 30 | 693 | 998 | 157 | 1027 | 58 | | | |
| | 40 | 803 | 112,155 | 157 | 085 | 58 | | | |
| | | | 109 | 157 | | 59 | | | |
| | 50 | 62,912 | 112,312 | | 18,144 | | | | |
| | 60 | 63,022 | 469 | 157 | 202 | 58 | | | |
| | 70 | 132 | 626 | 157 | 261 | 59 | | | |
| | 80 | 242 | 783 | 157 | 320 | 59 | | | |
| 90 | 352 | 940 | 157 | 378 | 58 | | | | |
| 72 | 00 | 63,462 | 113,097 | 157 | 18,437 | 59 | | | |
| 分數 | 107 | 108 | 109 | 110 | 157 | 55 | 56 | 57 | 58 |
| 0.5 | 5.3 | 5.4 | 5.4 | 5.5 | 7.8 | 2.7 | 2.8 | 2.8 | 2.9 |
| 1 | 10.7 | 10.8 | 10.9 | 11.0 | 15.7 | 5.5 | 5.6 | 5.7 | 5.8 |
| 2 | 21.4 | 21.6 | 21.8 | 22.0 | 31.4 | 11.0 | 11.2 | 11.4 | 11.6 |
| 3 | 32.1 | 32.4 | 32.7 | 33.0 | 47.1 | 16.5 | 16.8 | 17.1 | 17.4 |
| 4 | 42.8 | 43.2 | 43.6 | 44.0 | 62.8 | 22.0 | 22.4 | 22.8 | 23.2 |
| 5 | 53.5 | 54.0 | 54.5 | 55.0 | 78.5 | 27.5 | 28.0 | 28.5 | 29.0 |
| 6 | 64.2 | 64.8 | 65.4 | 66.0 | 94.2 | 33.0 | 33.6 | 34.2 | 34.8 |
| 7 | 74.9 | 75.6 | 76.3 | 77.0 | 109.9 | 38.5 | 39.2 | 39.9 | 40.6 |
| 8 | 85.6 | 86.4 | 87.2 | 88.0 | 125.6 | 44.0 | 44.8 | 45.6 | 46.4 |
| 9 | 96.3 | 97.2 | 98.1 | 99.0 | 141.3 | 49.5 | 50.4 | 51.3 | 52.2 |

72°—75°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | | | |
|-----|------|--------|---------|---------|-------|--------|------|------|------|
| 72 | 00 | 63,462 | | 113,097 | | 18,437 | | | |
| | 10 | 572 | 110 | 254 | 157 | 496 | 59 | | |
| | 20 | 682 | 110 | 411 | 157 | 556 | 60 | | |
| | 30 | 793 | 111 | 569 | 158 | 615 | 59 | | |
| | 40 | 904 | 111 | 726 | 157 | 675 | 60 | | |
| | | | 110 | | 157 | | 59 | | |
| | 50 | 64,014 | | 113,883 | | 18,734 | | | |
| | 60 | 125 | 111 | 114,040 | 157 | 794 | 60 | | |
| | 70 | 236 | 111 | 197 | 157 | 854 | 60 | | |
| | 80 | 347 | 111 | 354 | 157 | 914 | 60 | | |
| 90 | 458 | 111 | 511 | 157 | 974 | 60 | | | |
| 73 | 00 | 64,569 | | 114,668 | | 19,034 | | | |
| | 10 | 681 | 112 | 325 | 157 | 095 | 61 | | |
| | 20 | 792 | 111 | 982 | 157 | 155 | 60 | | |
| | 30 | 903 | 111 | 115,139 | 157 | 216 | 61 | | |
| | 40 | 65,015 | | 296 | 157 | 277 | 61 | | |
| | | | 112 | | 158 | | 61 | | |
| | 50 | 65,127 | | 115,454 | | 19,338 | | | |
| | 60 | 239 | 112 | 611 | 157 | 399 | 61 | | |
| | 70 | 351 | 112 | 768 | 157 | 460 | 61 | | |
| | 80 | 463 | 112 | 925 | 157 | 522 | 62 | | |
| 90 | 575 | 112 | 116,032 | 157 | 583 | 61 | | | |
| 74 | 00 | 65,688 | | 116,239 | | 19,645 | | | |
| | 10 | 800 | 112 | 396 | 157 | 707 | 62 | | |
| | 20 | 913 | 113 | 553 | 157 | 768 | 61 | | |
| | 30 | 66,028 | | 710 | 157 | 830 | 62 | | |
| | 40 | 138 | 112 | 867 | 157 | 893 | 63 | | |
| | | | 113 | | 157 | | 62 | | |
| | 50 | 66,251 | | 117,024 | | 19,955 | | | |
| | 60 | 364 | 113 | 181 | 157 | 20,018 | 63 | | |
| | 70 | 478 | 114 | 338 | 157 | 080 | 62 | | |
| | 80 | 591 | 113 | 496 | 158 | 143 | 63 | | |
| 90 | 704 | 113 | 653 | 157 | 206 | 63 | | | |
| 75 | 00 | 66,818 | | 117,810 | | 20,269 | | | |
| 分數 | 111 | 112 | 113 | 114 | 158 | 59 | 60 | 62 | 63 |
| 0,5 | 5,5 | 5,6 | 5,6 | 5,7 | 7,9 | 2,9 | 3,0 | 3,1 | 3,1 |
| 1 | 11,1 | 11,2 | 11,3 | 11,4 | 15,8 | 5,9 | 6,0 | 6,2 | 6,3 |
| 2 | 22,2 | 22,4 | 22,6 | 22,8 | 31,6 | 11,8 | 12,0 | 12,4 | 12,6 |
| 3 | 33,3 | 33,6 | 33,9 | 34,2 | 47,4 | 17,7 | 18,0 | 18,6 | 18,9 |
| 4 | 44,4 | 44,8 | 45,2 | 45,6 | 63,2 | 23,6 | 24,0 | 24,8 | 25,2 |
| 5 | 55,5 | 56,0 | 56,5 | 57,0 | 79,0 | 29,5 | 30,0 | 31,0 | 31,5 |
| 6 | 66,6 | 67,2 | 67,8 | 68,4 | 94,8 | 35,4 | 36,0 | 37,2 | 37,8 |
| 7 | 77,7 | 78,4 | 79,1 | 79,8 | 110,6 | 41,3 | 42,0 | 43,4 | 44,1 |
| 8 | 88,8 | 89,6 | 90,4 | 91,2 | 126,4 | 47,2 | 48,0 | 49,6 | 50,4 |
| 9 | 99,9 | 100,8 | 101,7 | 102,6 | 142,2 | 53,1 | 54,0 | 55,8 | 56,7 |

72°—75°

75°-78°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | | | |
|-----|-------|--------|-------|---------|-------|--------|------|------|------|
| 75 | 00 | 66,818 | | 117,810 | | 20,269 | | | |
| | 10 | 932 | 114 | 967 | 157 | 332 | 63 | | |
| | 20 | 67,045 | 113 | 118,124 | 157 | 395 | 63 | | |
| | 30 | 159 | 114 | 281 | 157 | 459 | 64 | | |
| | 40 | 273 | 114 | 438 | 157 | 523 | 64 | | |
| | 50 | 67,387 | 115 | 118,595 | 157 | 20,586 | 64 | | |
| | 60 | 502 | 114 | 752 | 157 | 650 | 64 | | |
| | 70 | 616 | 115 | 909 | 157 | 714 | 64 | | |
| | 80 | 781 | 114 | 119,066 | 157 | 778 | 64 | | |
| | 90 | 845 | 115 | 223 | 158 | 843 | 65 | | |
| 76 | 00 | 67,960 | | 119,381 | | 20,907 | | | |
| | 10 | 68,075 | 115 | 538 | 157 | 972 | 65 | | |
| | 20 | 190 | 115 | 695 | 157 | 21,036 | 64 | | |
| | 30 | 305 | 115 | 852 | 157 | 101 | 65 | | |
| | 40 | 420 | 116 | 120,009 | 157 | 166 | 65 | | |
| | 50 | 68,536 | 115 | 120,166 | 157 | 21,232 | 66 | | |
| | 60 | 651 | 116 | 323 | 157 | 297 | 65 | | |
| | 70 | 767 | 116 | 480 | 157 | 362 | 65 | | |
| | 80 | 882 | 115 | 637 | 157 | 428 | 66 | | |
| | 90 | 998 | 116 | 794 | 157 | 494 | 66 | | |
| 77 | 00 | 69,114 | | 120,951 | | 21,560 | | | |
| | 10 | 230 | 116 | 121,108 | 157 | 626 | 66 | | |
| | 20 | 347 | 117 | 265 | 157 | 692 | 66 | | |
| | 30 | 463 | 116 | 423 | 158 | 758 | 66 | | |
| | 40 | 579 | 116 | 580 | 157 | 825 | 67 | | |
| | 50 | 69,696 | 117 | 121,737 | 157 | 21,891 | 66 | | |
| | 60 | 813 | 117 | 894 | 157 | 958 | 67 | | |
| | 70 | 930 | 117 | 122,051 | 157 | 22,025 | 67 | | |
| | 80 | 70,047 | 117 | 208 | 157 | 092 | 68 | | |
| | 90 | 164 | 117 | 365 | 157 | 160 | 67 | | |
| 78 | 00 | 70,281 | | 122,522 | | 22,227 | | | |
| 分數 | 113 | 114 | 115 | 116 | 157 | 63 | 64 | 66 | 67 |
| 0,5 | 5,6 | 5,7 | 5,7 | 5,8 | 7,8 | 3,1 | 3,2 | 3,3 | 3,3 |
| 1 | 11,3 | 11,4 | 11,5 | 11,6 | 15,7 | 6,3 | 6,4 | 6,6 | 6,7 |
| 2 | 22,6 | 22,8 | 23,0 | 23,2 | 31,4 | 12,6 | 12,8 | 13,2 | 13,4 |
| 3 | 33,9 | 34,2 | 34,5 | 34,8 | 47,1 | 18,9 | 19,2 | 19,8 | 20,1 |
| 4 | 45,2 | 45,6 | 46,0 | 46,4 | 62,8 | 25,2 | 25,6 | 26,4 | 26,8 |
| 5 | 56,5 | 57,0 | 57,5 | 58,0 | 78,5 | 31,5 | 32,0 | 33,0 | 33,5 |
| 6 | 67,8 | 68,4 | 69,0 | 69,6 | 94,2 | 37,8 | 38,4 | 39,6 | 40,2 |
| 7 | 79,1 | 79,8 | 80,5 | 81,2 | 109,9 | 44,1 | 44,8 | 46,2 | 46,9 |
| 8 | 90,4 | 91,2 | 92,0 | 92,8 | 125,6 | 50,4 | 51,2 | 52,8 | 53,6 |
| 9 | 101,7 | 102,6 | 103,5 | 104,4 | 141,3 | 56,7 | 57,6 | 59,4 | 60,3 |

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | | | |
|-------|--------|-------|---------|-------|--------|------|------|------|------|
| 78 00 | 70,281 | 118 | 122,522 | 157 | 22,227 | 67 | | | |
| 10 | 399 | 117 | 679 | 157 | 294 | 68 | | | |
| 20 | 516 | 118 | 836 | 157 | 362 | 68 | | | |
| 30 | 634 | 117 | 993 | 157 | 430 | 68 | | | |
| 40 | 751 | 118 | 123,150 | 158 | 498 | 68 | | | |
| 50 | 70,869 | 118 | 123,308 | 157 | 22,566 | 68 | | | |
| 60 | 987 | 119 | 465 | 157 | 634 | 69 | | | |
| 70 | 71,106 | 118 | 622 | 157 | 703 | 69 | | | |
| 80 | 224 | 118 | 779 | 157 | 772 | 68 | | | |
| 90 | 342 | 119 | 936 | 157 | 840 | 69 | | | |
| 79 00 | 71,461 | 119 | 124,093 | 157 | 22,909 | 69 | | | |
| 10 | 580 | 119 | 250 | 157 | 978 | 69 | | | |
| 20 | 699 | 119 | 407 | 157 | 23,047 | 70 | | | |
| 30 | 818 | 119 | 564 | 157 | 117 | 69 | | | |
| 40 | 937 | 119 | 721 | 157 | 186 | 70 | | | |
| 50 | 72,056 | 119 | 124,878 | 157 | 23,256 | 70 | | | |
| 60 | 175 | 120 | 125,035 | 157 | 828 | 70 | | | |
| 70 | 295 | 120 | 192 | 158 | 396 | 70 | | | |
| 80 | 415 | 119 | 350 | 157 | 466 | 70 | | | |
| 90 | 534 | 120 | 507 | 157 | 536 | 71 | | | |
| 80 00 | 72,654 | 120 | 125,664 | 157 | 23,607 | 70 | | | |
| 10 | 774 | 121 | 821 | 157 | 677 | 71 | | | |
| 20 | 895 | 120 | 978 | 157 | 748 | 71 | | | |
| 30 | 73,015 | 120 | 126,185 | 157 | 819 | 71 | | | |
| 40 | 135 | 121 | 292 | 157 | 890 | 71 | | | |
| 50 | 73,256 | 121 | 126,449 | 157 | 23,961 | 72 | | | |
| 60 | 377 | 121 | 606 | 157 | 24,033 | 71 | | | |
| 70 | 498 | 121 | 763 | 157 | 104 | 72 | | | |
| 80 | 619 | 121 | 920 | 157 | 176 | 72 | | | |
| 90 | 740 | 121 | 127,077 | 158 | 248 | 72 | | | |
| 81 00 | 73,861 | | 127,235 | | 24,820 | | | | |
| 分數 | 117 | 118 | 120 | 121 | 158 | 68 | 70 | 71 | 72 |
| 0,5 | 5,8 | 5,9 | 6,0 | 6,0 | 7,9 | 3,4 | 8,5 | 3,5 | 8,6 |
| 1 | 11,7 | 11,8 | 12,0 | 12,1 | 15,8 | 6,8 | 7,0 | 7,1 | 7,2 |
| 2 | 23,4 | 23,6 | 24,0 | 24,2 | 31,6 | 13,6 | 14,0 | 14,2 | 14,4 |
| 3 | 35,1 | 35,4 | 36,0 | 36,3 | 47,4 | 20,4 | 21,0 | 21,3 | 21,6 |
| 4 | 46,8 | 47,2 | 48,0 | 48,4 | 63,2 | 27,2 | 28,0 | 28,4 | 28,8 |
| 5 | 58,5 | 59,0 | 60,0 | 60,5 | 79,0 | 34,0 | 35,0 | 35,5 | 36,0 |
| 6 | 70,2 | 70,8 | 72,0 | 72,6 | 94,8 | 40,8 | 42,0 | 42,6 | 43,2 |
| 7 | 81,9 | 82,6 | 84,0 | 84,7 | 110,6 | 47,6 | 49,0 | 49,7 | 50,4 |
| 8 | 93,6 | 94,4 | 96,0 | 96,8 | 126,4 | 54,4 | 56,0 | 56,8 | 57,6 |
| 9 | 105,3 | 106,2 | 108,0 | 108,9 | 142,2 | 61,2 | 63,0 | 63,9 | 64,8 |

81°—84°

| 中心角 | 切線長 | | 差數 | 曲線長 | | 差數 | 頂距 | | 差數 |
|-----|-----|--------|-----|---------|-----|--------|----|----|----|
| 81 | 00 | 73,861 | 122 | 127,235 | 157 | 24,320 | | 72 | |
| | 10 | 983 | 121 | 392 | 157 | 392 | | 72 | |
| | 20 | 74,104 | 122 | 549 | 157 | 464 | | 73 | |
| | 30 | 226 | 122 | 706 | 157 | 537 | | 73 | |
| | 40 | 348 | 122 | 863 | 157 | 610 | | 73 | |
| | 50 | 74,470 | 122 | 128,020 | 157 | 24,683 | | 73 | |
| | 60 | 592 | 122 | 177 | 157 | 756 | | 73 | |
| | 70 | 714 | 123 | 334 | 157 | 829 | | 73 | |
| | 80 | 837 | 122 | 491 | 157 | 902 | | 74 | |
| | 90 | 959 | 123 | 648 | 157 | 976 | | 73 | |
| 82 | 00 | 75,082 | 123 | 128,805 | 157 | 25,049 | | 74 | |
| | 10 | 205 | 123 | 962 | 157 | 123 | | 74 | |
| | 20 | 328 | 123 | 129,119 | 158 | 197 | | 74 | |
| | 30 | 451 | 124 | 277 | 157 | 271 | | 74 | |
| | 40 | 575 | 123 | 434 | 157 | 345 | | 75 | |
| | 50 | 75,698 | 124 | 129,591 | 157 | 25,420 | | 75 | |
| | 60 | 822 | 123 | 748 | 157 | 495 | | 74 | |
| | 70 | 945 | 124 | 905 | 157 | 569 | | 75 | |
| | 80 | 76,069 | 124 | 130,062 | 157 | 644 | | 76 | |
| | 90 | 193 | 125 | 219 | 157 | 720 | | 75 | |
| 83 | 00 | 76,318 | 124 | 130,376 | 157 | 25,795 | | 75 | |
| | 10 | 442 | 125 | 533 | 157 | 870 | | 76 | |
| | 20 | 567 | 124 | 690 | 157 | 946 | | 76 | |
| | 30 | 691 | 125 | 847 | 157 | 26,022 | | 76 | |
| | 40 | 816 | 125 | 131,004 | 158 | 098 | | 76 | |
| | 50 | 76,941 | 125 | 131,162 | 157 | 26,174 | | 76 | |
| | 60 | 77,066 | 125 | 319 | 157 | 250 | | 76 | |
| | 70 | 191 | 126 | 476 | 157 | 327 | | 77 | |
| | 80 | 317 | 125 | 633 | 157 | 404 | | 76 | |
| | 90 | 442 | 126 | 790 | 157 | 480 | | 77 | |
| 84 | 00 | 77,568 | | 131,947 | | 26,557 | | | |

| 分數 | 121 | 122 | 124 | 125 | 157 | 72 | 74 | 76 | 77 |
|-----|-------|-------|-------|-------|-------|------|------|------|------|
| 0,5 | 6,0 | 6,1 | 6,2 | 6,2 | 7,8 | 3,6 | 3,7 | 3,8 | 3,8 |
| 1 | 12,1 | 12,2 | 12,4 | 12,5 | 15,7 | 7,2 | 7,4 | 7,6 | 7,7 |
| 2 | 24,2 | 24,4 | 24,8 | 25,0 | 31,4 | 14,4 | 14,8 | 15,2 | 15,4 |
| 3 | 36,3 | 36,6 | 37,2 | 37,5 | 47,1 | 21,6 | 22,2 | 22,8 | 23,1 |
| 4 | 48,4 | 48,8 | 49,6 | 50,0 | 62,8 | 28,8 | 29,6 | 30,4 | 30,8 |
| 5 | 60,5 | 61,0 | 62,0 | 62,5 | 78,5 | 36,0 | 37,0 | 38,0 | 38,5 |
| 6 | 72,6 | 73,2 | 74,4 | 75,0 | 94,2 | 43,2 | 44,4 | 45,6 | 46,2 |
| 7 | 84,7 | 85,4 | 86,8 | 87,5 | 109,9 | 50,4 | 51,8 | 53,2 | 53,9 |
| 8 | 96,8 | 97,6 | 99,2 | 100,0 | 125,6 | 57,6 | 59,2 | 60,8 | 61,6 |
| 9 | 108,9 | 109,8 | 111,6 | 112,5 | 141,3 | 64,8 | 66,6 | 68,4 | 69,3 |

84°-87°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | |
|-----|-----|--------|-----|---------|-----|--------|----|
| 84 | 00 | 77,568 | | 131,947 | | 28,557 | |
| | 10 | 694 | 126 | 132,104 | 157 | 635 | 78 |
| | 20 | 820 | 126 | 281 | 157 | 712 | 77 |
| | 30 | 946 | 126 | 418 | 157 | 789 | 77 |
| | 40 | 78,072 | 126 | 575 | 157 | 867 | 78 |
| | 50 | 78,199 | 127 | | 157 | | 78 |
| | 60 | 825 | 126 | 132,732 | 157 | 26,945 | 78 |
| | 70 | 452 | 127 | 889 | 157 | 27,023 | 78 |
| | 80 | 579 | 127 | 133,046 | 157 | 101 | 79 |
| | 90 | 706 | 128 | 204 | 157 | 180 | 78 |
| 85 | 00 | 78,834 | | 133,518 | | 27,337 | |
| | 10 | 961 | 127 | 675 | 157 | 416 | 79 |
| | 20 | 79,089 | 128 | 832 | 157 | 495 | 79 |
| | 30 | 216 | 127 | 989 | 157 | 574 | 80 |
| | 40 | 344 | 128 | 134,146 | 157 | 654 | 80 |
| | 50 | 79,472 | 128 | | 157 | | 80 |
| | 60 | 601 | 129 | 134,303 | 157 | 27,734 | 79 |
| | 70 | 729 | 128 | 480 | 157 | 813 | 80 |
| | 80 | 858 | 129 | 617 | 157 | 893 | 81 |
| | 90 | 986 | 128 | 774 | 157 | 974 | 80 |
| 86 | 00 | 80,115 | | 135,089 | | 28,134 | |
| | 10 | 244 | 129 | 246 | 157 | 215 | 81 |
| | 20 | 373 | 129 | 403 | 157 | 296 | 81 |
| | 30 | 503 | 130 | 560 | 157 | 377 | 81 |
| | 40 | 632 | 129 | 717 | 157 | 458 | 81 |
| | 50 | 80,762 | 130 | | 157 | | 82 |
| | 60 | 892 | 130 | 135,874 | 157 | 28,540 | 81 |
| | 70 | 81,022 | 130 | 136,031 | 157 | 621 | 82 |
| | 80 | 152 | 130 | 188 | 157 | 703 | 82 |
| | 90 | 282 | 130 | 345 | 157 | 785 | 82 |
| 87 | 00 | 81,418 | | 136,659 | | 28,950 | |
| | | | 131 | 502 | 157 | 867 | 83 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| 分數 | 126 | 128 | 130 | 131 | 158 | 78 | 80 | 82 | 83 |
|-----|-------|-------|-------|-------|-------|------|------|------|------|
| 0,5 | 6,3 | 6,4 | 6,5 | 6,5 | 7,9 | 8,9 | 4,0 | 4,1 | 4,1 |
| 1 | 12,6 | 12,8 | 13,0 | 13,1 | 15,8 | 7,8 | 8,0 | 8,2 | 8,3 |
| 2 | 25,2 | 25,6 | 26,0 | 26,2 | 31,6 | 15,6 | 16,0 | 16,4 | 16,6 |
| 3 | 37,8 | 38,4 | 39,0 | 39,3 | 47,4 | 23,4 | 24,0 | 24,6 | 24,9 |
| 4 | 50,4 | 51,2 | 52,0 | 52,4 | 63,2 | 31,2 | 32,0 | 32,8 | 33,2 |
| 5 | 63,0 | 64,0 | 65,0 | 65,5 | 79,0 | 39,0 | 40,0 | 41,0 | 41,5 |
| 6 | 75,6 | 76,8 | 78,0 | 78,6 | 94,8 | 46,8 | 48,0 | 49,2 | 49,8 |
| 7 | 88,2 | 89,6 | 91,0 | 91,7 | 110,6 | 54,6 | 56,0 | 57,4 | 58,1 |
| 8 | 100,8 | 102,4 | 104,0 | 104,8 | 126,4 | 62,4 | 64,0 | 65,6 | 66,4 |
| 9 | 113,4 | 115,2 | 117,0 | 117,9 | 142,2 | 70,2 | 72,0 | 73,8 | 74,7 |

87°-90°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | | | |
|-----|-------|--------|-------|---------|-------|--------|------|------|------|
| 87 | 00 | 81,413 | 130 | 130,659 | 157 | 28,950 | 82 | | |
| | 10 | 543 | 131 | 816 | 157 | 29,032 | 83 | | |
| | 20 | 674 | 131 | 973 | 158 | 115 | 83 | | |
| | 30 | 805 | 132 | 137,131 | 157 | 198 | 83 | | |
| | 40 | 937 | 131 | 288 | 157 | 281 | 83 | | |
| | 50 | 82,068 | 131 | 137,445 | 157 | 29,364 | 84 | | |
| | 60 | 199 | 132 | 602 | 157 | 448 | 83 | | |
| | 70 | 331 | 132 | 759 | 157 | 531 | 84 | | |
| | 80 | 463 | 132 | 916 | 157 | 615 | 84 | | |
| | 90 | 595 | 132 | 138,073 | 157 | 699 | 85 | | |
| 88 | 00 | 82,727 | 133 | 138,230 | 157 | 29,784 | 84 | | |
| | 10 | 860 | 132 | 387 | 157 | 868 | 85 | | |
| | 20 | 992 | 133 | 544 | 157 | 953 | 84 | | |
| | 30 | 83,125 | 133 | 701 | 157 | 30,037 | 85 | | |
| | 40 | 258 | 133 | 858 | 157 | 122 | 86 | | |
| | 50 | 83,391 | 133 | 139,015 | 158 | 30,208 | 85 | | |
| | 60 | 524 | 134 | 173 | 157 | 293 | 86 | | |
| | 70 | 658 | 133 | 330 | 157 | 379 | 85 | | |
| | 80 | 791 | 134 | 487 | 157 | 464 | 86 | | |
| | 90 | 925 | 134 | 644 | 157 | 550 | 86 | | |
| 89 | 00 | 84,059 | 134 | 139,801 | 157 | 30,636 | 87 | | |
| | 10 | 193 | 134 | 958 | 157 | 723 | 86 | | |
| | 20 | 327 | 135 | 140,115 | 157 | 809 | 87 | | |
| | 30 | 462 | 134 | 272 | 157 | 896 | 87 | | |
| | 40 | 596 | 135 | 429 | 157 | 983 | 87 | | |
| | 50 | 84,731 | 135 | 140,586 | 157 | 31,070 | 87 | | |
| | 60 | 866 | 135 | 743 | 157 | 157 | 88 | | |
| | 70 | 85,001 | 136 | 900 | 157 | 245 | 88 | | |
| | 80 | 137 | 136 | 141,057 | 158 | 333 | 88 | | |
| | 90 | 272 | 136 | 215 | 157 | 421 | 88 | | |
| 90 | 00 | 85,408 | | 141,372 | | 31,509 | | | |
| 分數 | 130 | 132 | 134 | 136 | 157 | 82 | 84 | 86 | 88 |
| 0,5 | 6,5 | 6,6 | 6,7 | 6,8 | 7,8 | 4,1 | 4,2 | 4,3 | 4,4 |
| 1 | 13,0 | 13,2 | 13,4 | 13,6 | 15,7 | 8,2 | 8,4 | 8,6 | 8,8 |
| 2 | 26,0 | 26,4 | 26,8 | 27,2 | 31,4 | 16,4 | 16,8 | 17,2 | 17,6 |
| 3 | 39,0 | 39,6 | 40,2 | 40,8 | 47,1 | 24,6 | 25,2 | 25,8 | 26,4 |
| 4 | 52,0 | 52,8 | 53,6 | 54,4 | 62,8 | 32,8 | 33,6 | 34,4 | 35,2 |
| 5 | 65,0 | 66,0 | 67,0 | 68,0 | 78,5 | 41,0 | 42,0 | 43,0 | 44,0 |
| 6 | 78,0 | 79,2 | 80,4 | 81,6 | 94,2 | 49,2 | 50,4 | 51,6 | 52,8 |
| 7 | 91,0 | 92,4 | 93,8 | 95,2 | 109,9 | 57,4 | 58,8 | 60,2 | 61,6 |
| 8 | 104,0 | 105,6 | 107,2 | 108,8 | 125,6 | 65,6 | 67,2 | 68,8 | 70,4 |
| 9 | 117,0 | 118,8 | 120,6 | 122,4 | 141,3 | 73,8 | 75,6 | 77,4 | 79,2 |

90°-93°

| 中心角 | 切線長 | 差數 | 割線長 | 差數 | 頂距 | 差數 | |
|-----|-----|--------|-----|---------|-----|--------|----|
| 90 | 00 | 85,408 | 186 | 141,372 | 157 | 81,509 | 88 |
| | 10 | 544 | 186 | 529 | 157 | 597 | 89 |
| | 20 | 680 | 186 | 686 | 157 | 686 | 88 |
| | 30 | 816 | 187 | 843 | 157 | 774 | 89 |
| | 40 | 953 | 186 | 142,000 | 157 | 863 | 89 |
| | 50 | 86,089 | 187 | 142,157 | 157 | 81,962 | 90 |
| | 60 | 226 | 187 | 814 | 157 | 82,042 | 89 |
| | 70 | 363 | 188 | 471 | 157 | 181 | 90 |
| | 80 | 501 | 187 | 628 | 157 | 221 | 90 |
| | 90 | 638 | 188 | 785 | 157 | 311 | 90 |
| 91 | 00 | 86,776 | 187 | 142,942 | 158 | 82,401 | 90 |
| | 10 | 913 | 188 | 143,100 | 157 | 491 | 91 |
| | 20 | 87,051 | 188 | 257 | 157 | 582 | 91 |
| | 30 | 189 | 189 | 414 | 157 | 673 | 91 |
| | 40 | 328 | 188 | 571 | 157 | 764 | 91 |
| | 50 | 87,466 | 189 | 143,723 | 157 | 82,855 | 91 |
| | 60 | 605 | 189 | 885 | 157 | 946 | 92 |
| | 70 | 744 | 189 | 144,042 | 157 | 33,038 | 91 |
| | 80 | 883 | 189 | 199 | 157 | 129 | 92 |
| | 90 | 88,022 | 140 | 356 | 157 | 221 | 93 |
| 92 | 00 | 88,162 | 140 | 144,513 | 157 | 83,314 | 92 |
| | 10 | 302 | 139 | 670 | 157 | 406 | 93 |
| | 20 | 441 | 140 | 827 | 157 | 499 | 93 |
| | 30 | 581 | 141 | 984 | 158 | 592 | 93 |
| | 40 | 722 | 140 | 145,142 | 157 | 685 | 93 |
| | 50 | 88,862 | 141 | 145,299 | 157 | 83,778 | 93 |
| | 60 | 89,003 | 141 | 456 | 157 | 871 | 94 |
| | 70 | 144 | 141 | 613 | 157 | 965 | 94 |
| | 80 | 285 | 141 | 770 | 157 | 34,059 | 94 |
| | 90 | 426 | 141 | 927 | 157 | 153 | 94 |
| 93 | 00 | 89,567 | | 146,084 | | 84,247 | |

| 分數 | 137 | 138 | 140 | 141 | 158 | 89 | 90 | 92 | 94 |
|-----|-------|-------|-------|-------|-------|------|------|------|-------|
| 0,5 | 6,8 | 6,9 | 7,0 | 7,0 | 7,9 | 4,4 | 4,5 | 4,6 | 4,7 |
| 1 | 13,7 | 13,8 | 14,0 | 14,1 | 15,8 | 8,9 | 9,0 | 9,2 | 9,4 |
| 2 | 27,4 | 27,6 | 28,0 | 28,2 | 31,6 | 17,8 | 18,0 | 18,4 | -18,8 |
| 3 | 41,1 | 41,4 | 42,0 | 42,3 | 47,4 | 26,7 | 27,0 | 27,6 | 28,2 |
| 4 | 54,8 | 55,2 | 56,0 | 56,4 | 63,2 | 35,6 | 36,0 | 36,8 | 37,6 |
| 5 | 68,5 | 69,0 | 70,0 | 70,5 | 79,0 | 44,5 | 45,0 | 46,0 | 47,0 |
| 6 | 82,2 | 82,8 | 84,0 | 84,6 | 94,8 | 53,4 | 54,0 | 55,2 | 56,4 |
| 7 | 95,9 | 96,6 | 98,0 | 98,7 | 110,6 | 62,3 | 63,0 | 64,4 | 65,8 |
| 8 | 109,6 | 110,4 | 112,0 | 112,8 | 126,4 | 71,2 | 72,0 | 73,6 | 75,2 |
| 9 | 123,3 | 124,2 | 126,0 | 126,9 | 142,2 | 80,1 | 81,0 | 82,8 | 84,6 |

93°-96°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | | | |
|-------|--------|-------|---------|-------|--------|------|------|------|------|
| 93 00 | 89,567 | 142 | 146,084 | 157 | 34,247 | 95 | | | |
| 10 | 709 | 142 | 241 | 157 | 342 | 95 | | | |
| 20 | 851 | 142 | 398 | 157 | 437 | 95 | | | |
| 30 | 993 | 142 | 555 | 157 | 532 | 95 | | | |
| 40 | 90,135 | 143 | 712 | 157 | 627 | 95 | | | |
| 50 | 90,278 | 142 | 146,869 | 158 | 34,723 | 96 | | | |
| 60 | 420 | 143 | 147,027 | 157 | 818 | 96 | | | |
| 70 | 563 | 143 | 184 | 157 | 914 | 96 | | | |
| 80 | 706 | 144 | 341 | 157 | 35,010 | 96 | | | |
| 90 | 850 | 143 | 498 | 157 | 106 | 96 | | | |
| 94 00 | 90,993 | 144 | 147,655 | 157 | 35,203 | 96 | | | |
| 10 | 91,137 | 144 | 812 | 157 | 299 | 97 | | | |
| 20 | 281 | 144 | 969 | 157 | 396 | 97 | | | |
| 30 | 425 | 144 | 148,126 | 157 | 493 | 97 | | | |
| 40 | 569 | 144 | 283 | 157 | 591 | 98 | | | |
| 50 | 91,713 | 145 | 148,440 | 157 | 35,688 | 98 | | | |
| 60 | 858 | 145 | 597 | 157 | 786 | 98 | | | |
| 70 | 92,003 | 145 | 754 | 157 | 884 | 98 | | | |
| 80 | 148 | 145 | 911 | 157 | 983 | 99 | | | |
| 90 | 293 | 145 | 149,069 | 158 | 36,031 | 98 | | | |
| 95 00 | 92,439 | 146 | 149,226 | 157 | 36,180 | 99 | | | |
| 10 | 585 | 146 | 383 | 157 | 279 | 99 | | | |
| 20 | 731 | 146 | 540 | 157 | 378 | 99 | | | |
| 30 | 877 | 146 | 697 | 157 | 478 | 100 | | | |
| 40 | 93,023 | 147 | 854 | 157 | 577 | 99 | | | |
| 50 | 93,170 | 147 | 150,011 | 157 | 36,677 | 100 | | | |
| 60 | 317 | 147 | 188 | 157 | 777 | 100 | | | |
| 70 | 464 | 147 | 325 | 157 | 878 | 101 | | | |
| 80 | 611 | 147 | 482 | 157 | 978 | 100 | | | |
| 90 | 759 | 148 | 639 | 157 | 37,079 | 101 | | | |
| 96 00 | 93,906 | 147 | 150,796 | 157 | 37,180 | 101 | | | |
| 分數 | 142 | 144 | 146 | 147 | 157 | 95 | 96 | 98 | 100 |
| 0.5 | 7.1 | 7.2 | 7.3 | 7.3 | 7.8 | 4.7 | 4.8 | 4.9 | 5.0 |
| 1 | 14.2 | 14.4 | 14.6 | 14.7 | 15.7 | 9.5 | 9.6 | 9.8 | 10.0 |
| 2 | 28.4 | 28.8 | 29.2 | 29.4 | 31.4 | 19.0 | 19.2 | 19.6 | 20.0 |
| 3 | 42.6 | 43.2 | 43.8 | 44.1 | 47.1 | 28.5 | 28.8 | 29.4 | 30.0 |
| 4 | 56.8 | 57.6 | 58.4 | 58.8 | 62.8 | 38.0 | 38.4 | 39.2 | 40.0 |
| 5 | 71.0 | 72.0 | 73.0 | 73.5 | 78.5 | 47.5 | 48.0 | 49.0 | 50.0 |
| 6 | 85.2 | 86.4 | 87.6 | 88.2 | 94.2 | 57.0 | 57.6 | 58.8 | 60.0 |
| 7 | 99.4 | 100.8 | 102.2 | 102.9 | 109.9 | 66.5 | 67.2 | 68.6 | 70.0 |
| 8 | 113.6 | 115.2 | 116.8 | 117.6 | 125.6 | 76.0 | 76.8 | 78.4 | 80.0 |
| 9 | 127.8 | 129.6 | 131.4 | 132.3 | 141.3 | 85.5 | 86.4 | 88.2 | 90.0 |

96°—99°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | | | |
|-----|-------|--------|---------|-------|--------|------|------|------|------|
| 96 | 00 | 93,908 | 150,796 | | 37,180 | | | | |
| | 10 | 94,054 | 151,111 | 158 | 281 | 101 | | | |
| | 20 | 202 | 151,111 | 157 | 883 | 102 | | | |
| | 30 | 851 | 268 | 157 | 485 | 102 | | | |
| | 40 | 499 | 425 | 157 | 587 | 102 | | | |
| | 50 | 94,648 | 151,582 | 157 | 37,689 | 102 | | | |
| | 60 | 797 | 739 | 157 | 791 | 103 | | | |
| | 70 | 946 | 896 | 157 | 894 | 103 | | | |
| | 80 | 95,086 | 152,053 | 157 | 997 | 103 | | | |
| | 90 | 245 | 210 | 157 | 38,100 | 103 | | | |
| 97 | 00 | 95,395 | 152,367 | | 38,204 | | | | |
| | 10 | 545 | 524 | 157 | 307 | 103 | | | |
| | 20 | 696 | 681 | 157 | 411 | 104 | | | |
| | 30 | 846 | 838 | 157 | 515 | 104 | | | |
| | 40 | 997 | 996 | 158 | 620 | 105 | | | |
| | 50 | 96,148 | 153,153 | 157 | 38,724 | 104 | | | |
| | 60 | 299 | 310 | 157 | 829 | 105 | | | |
| | 70 | 451 | 467 | 157 | 934 | 105 | | | |
| | 80 | 603 | 624 | 157 | 39,040 | 106 | | | |
| | 90 | 755 | 781 | 157 | 145 | 105 | | | |
| 98 | 00 | 96,907 | 153,938 | | 39,251 | | | | |
| | 10 | 97,059 | 154,095 | 157 | 357 | 106 | | | |
| | 20 | 212 | 252 | 157 | 464 | 107 | | | |
| | 30 | 365 | 409 | 157 | 570 | 106 | | | |
| | 40 | 518 | 566 | 157 | 677 | 107 | | | |
| | 50 | 97,671 | 154,723 | 157 | 39,784 | 107 | | | |
| | 60 | 825 | 880 | 157 | 892 | 108 | | | |
| | 70 | 979 | 155,038 | 158 | 999 | 107 | | | |
| | 80 | 98,133 | 195 | 157 | 40,107 | 108 | | | |
| | 90 | 287 | 352 | 157 | 215 | 108 | | | |
| 99 | 00 | 98,441 | 155,509 | | 40,324 | | | | |
| | | | | 157 | | 109 | | | |
| 分數 | 148 | 150 | 152 | 154 | 158 | 102 | 104 | 106 | 108 |
| 0,5 | 7,4 | 7,5 | 7,6 | 7,7 | 7,9 | 5,1 | 5,2 | 5,3 | 5,4 |
| 1 | 14,8 | 15,0 | 15,2 | 15,4 | 15,8 | 10,2 | 10,4 | 10,6 | 10,8 |
| 2 | 29,6 | 30,0 | 30,4 | 30,8 | 31,6 | 20,4 | 20,8 | 21,2 | 21,6 |
| 3 | 44,4 | 45,0 | 45,6 | 46,2 | 47,4 | 30,6 | 31,2 | 31,8 | 32,4 |
| 4 | 59,2 | 60,0 | 60,8 | 61,6 | 63,2 | 40,8 | 41,6 | 42,4 | 43,2 |
| 5 | 74,0 | 75,0 | 76,0 | 77,0 | 79,0 | 51,0 | 52,0 | 53,0 | 54,0 |
| 6 | 88,8 | 90,0 | 91,2 | 92,4 | 94,8 | 61,2 | 62,4 | 63,6 | 64,8 |
| 7 | 103,6 | 105,0 | 106,4 | 107,8 | 110,6 | 71,4 | 72,8 | 74,2 | 75,6 |
| 8 | 118,4 | 120,0 | 121,6 | 123,2 | 126,4 | 81,6 | 83,2 | 84,8 | 86,4 |
| 9 | 133,2 | 135,0 | 136,8 | 138,6 | 142,2 | 91,8 | 93,6 | 95,4 | 97,2 |

99°-102°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | | | |
|-----|---------|---------|---------|---------|--------|--------|-------|-------|-------|
| 99 | 00 | 98,441 | | 155,509 | | 40,324 | | | |
| | 10 | 596 | 155 | 666 | 157 | 432 | 108 | | |
| | 20 | 751 | 155 | 823 | 157 | 541 | 109 | | |
| | 30 | 907 | 156 | 980 | 157 | 650 | 109 | | |
| | 40 | 99,062 | 155 | 156,137 | 157 | 760 | 110 | | |
| | | | 156 | | 157 | | 109 | | |
| | 50 | 99,218 | | 156,294 | | 40,869 | | | |
| | 60 | 374 | 156 | 451 | 157 | 979 | 110 | | |
| | 70 | 530 | 156 | 608 | 157 | 41,089 | 110 | | |
| | 80 | 686 | 156 | 765 | 157 | 200 | 111 | | |
| 100 | 90 | 843 | 157 | 923 | 158 | 310 | 110 | | |
| | | | 157 | | 157 | | 111 | | |
| | 00 | 100,000 | | 157,080 | | 41,421 | | | |
| | 10 | 157 | 157 | 237 | 157 | 533 | 112 | | |
| | 20 | 315 | 158 | 394 | 157 | 644 | 111 | | |
| | 30 | 472 | 157 | 551 | 157 | 756 | 112 | | |
| | 40 | 630 | 158 | 708 | 157 | 868 | 112 | | |
| | | | 159 | | 157 | | 112 | | |
| | 50 | 100,789 | | 157,865 | | 41,980 | | | |
| | 60 | 947 | 158 | 158,022 | 157 | 42,093 | 113 | | |
| 101 | 70 | 101,106 | 159 | 179 | 157 | 205 | 112 | | |
| | 80 | 265 | 159 | 336 | 157 | 318 | 113 | | |
| | 90 | 424 | 159 | 493 | 157 | 432 | 114 | | |
| | | | 159 | | 157 | | 113 | | |
| | 00 | 101,583 | | 158,650 | | 42,545 | | | |
| | 10 | 743 | 160 | 808 | 158 | 659 | 114 | | |
| | 20 | 903 | 160 | 965 | 157 | 773 | 114 | | |
| | 30 | 102,063 | 160 | 159,122 | 157 | 888 | 115 | | |
| | 40 | 224 | 161 | 279 | 157 | 43,002 | 114 | | |
| | | | 160 | | 157 | | 115 | | |
| 50 | 102,334 | | 159,436 | | 43,117 | | | | |
| 60 | 545 | 161 | 593 | 157 | 233 | 116 | | | |
| 70 | 707 | 162 | 750 | 157 | 348 | 115 | | | |
| 80 | 868 | 161 | 907 | 157 | 464 | 116 | | | |
| 102 | 90 | 103,030 | 162 | 160,064 | 157 | 580 | 116 | | |
| | 00 | 103,192 | 162 | 160,221 | 157 | 43,696 | 116 | | |
| 分數 | 156 | 158 | 160 | 162 | 157 | 110 | 112 | 114 | 116 |
| 0.5 | 7.8 | 7.9 | 8.0 | 8.1 | 7.8 | 5.5 | 5.6 | 5.7 | 5.8 |
| 1 | 15.6 | 15.8 | 16.0 | 16.2 | 15.7 | 11.0 | 11.2 | 11.4 | 11.6 |
| 2 | 31.2 | 31.6 | 32.0 | 32.4 | 31.4 | 22.0 | 22.4 | 22.8 | 23.2 |
| 3 | 46.8 | 47.4 | 48.0 | 48.6 | 47.1 | 33.0 | 33.6 | 34.2 | 34.8 |
| 4 | 62.4 | 63.2 | 64.0 | 64.8 | 62.8 | 44.0 | 44.8 | 45.6 | 46.4 |
| 5 | 78.0 | 79.0 | 80.0 | 81.0 | 78.5 | 55.0 | 56.0 | 57.0 | 58.0 |
| 6 | 93.6 | 94.8 | 96.0 | 97.2 | 94.2 | 66.0 | 67.2 | 68.4 | 69.6 |
| 7 | 109.2 | 110.6 | 112.0 | 113.4 | 109.9 | 77.0 | 78.4 | 79.8 | 81.2 |
| 8 | 124.8 | 126.4 | 128.0 | 129.6 | 125.6 | 88.0 | 89.6 | 91.2 | 92.8 |
| 9 | 140.4 | 142.2 | 144.0 | 145.8 | 141.3 | 99.0 | 100.8 | 102.6 | 104.4 |

102°-105°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | |
|-----|--------|--------|--------|--------|-------|-------|------|
| 102 | 00 | 103,19 | 160,22 | | 43,70 | | |
| | 10 | 35 | 16 | 88 | 16 | 81 | 11 |
| | 20 | 52 | 17 | 54 | 16 | 98 | 12 |
| | 30 | 68 | 16 | 69 | 15 | 44,05 | 12 |
| | 40 | 84 | 16 | 85 | 16 | 16 | 11 |
| | | | 17 | | 16 | | 12 |
| | 50 | 104,01 | 16 | 161,01 | 15 | 44,28 | 12 |
| | 60 | 17 | 16 | 16 | 16 | 40 | 12 |
| | 70 | 33 | 16 | 32 | 16 | 52 | 12 |
| | 80 | 50 | 17 | 48 | 16 | 64 | 12 |
| 90 | 66 | 16 | 64 | 16 | 76 | 12 | |
| 103 | 00 | 104,83 | 161,79 | | 44,87 | | |
| | 10 | 99 | 16 | 95 | 16 | 99 | 12 |
| | 20 | 105,16 | 17 | 162,11 | 16 | 45,11 | 12 |
| | 30 | 32 | 16 | 28 | 15 | 23 | 12 |
| | 40 | 49 | 17 | 42 | 16 | 35 | 12 |
| | | | 16 | | 16 | | 12 |
| | 50 | 105,65 | 16 | 162,58 | 15 | 45,47 | 13 |
| | 60 | 32 | 17 | 73 | 16 | 60 | 12 |
| | 70 | 99 | 17 | 89 | 16 | 72 | 12 |
| | 80 | 106,16 | 17 | 163,05 | 16 | 84 | 12 |
| 90 | 33 | 17 | 21 | 16 | 96 | 12 | |
| 104 | 00 | 106,49 | 163,36 | | 46,08 | | |
| | 10 | 66 | 17 | 52 | 16 | 20 | 12 |
| | 20 | 82 | 16 | 68 | 16 | 33 | 13 |
| | 30 | 99 | 17 | 83 | 15 | 45 | 12 |
| | 40 | 107,16 | 17 | 99 | 16 | 57 | 12 |
| | | | 17 | | 16 | | 18 |
| | 50 | 107,33 | 17 | 164,15 | 15 | 46,70 | 12 |
| | 60 | 50 | 17 | 30 | 15 | 82 | 12 |
| | 70 | 67 | 17 | 46 | 16 | 94 | 12 |
| | 80 | 84 | 17 | 62 | 16 | 47,07 | 13 |
| 90 | 108,01 | 17 | 78 | 16 | 19 | 12 | |
| 105 | 00 | 108,18 | 164,93 | | 47,32 | | |
| | | | | | | | 13 |
| 分數 | 17 | | 16 | | 11 | 12 | 13 |
| 0,5 | 0,8 | | 0,8 | | 0,5 | 0,6 | 0,6 |
| 1 | 1,7 | | 1,6 | | 1,1 | 1,2 | 1,3 |
| 2 | 3,4 | | 3,2 | | 2,2 | 2,4 | 2,6 |
| 3 | 5,1 | | 4,8 | | 3,3 | 3,6 | 3,9 |
| 4 | 6,8 | | 6,4 | | 4,4 | 4,8 | 5,2 |
| 5 | 8,5 | | 8,0 | | 5,5 | 6,0 | 6,5 |
| 6 | 10,2 | | 9,6 | | 6,6 | 7,2 | 7,8 |
| 7 | 11,9 | | 11,2 | | 7,7 | 8,4 | 9,1 |
| 8 | 13,6 | | 12,8 | | 8,8 | 9,6 | 10,4 |
| 9 | 15,3 | | 14,4 | | 9,9 | 10,8 | 11,7 |

105°-108°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | | |
|-----|------|--------|--------|------|-------|------|------|------|
| 105 | 00 | 108,18 | 164,93 | 16 | 47,82 | 12 | | |
| | 10 | 35 | 165,09 | 16 | 44 | 13 | | |
| | 20 | 52 | 25 | 15 | 57 | 13 | | |
| | 30 | 69 | 40 | 16 | 70 | 12 | | |
| | 40 | 86 | 56 | 16 | 82 | 13 | | |
| | 50 | 109,03 | 165,72 | 16 | 47,95 | 12 | | |
| | 60 | 21 | 88 | 15 | 48,07 | 13 | | |
| | 70 | 38 | 166,03 | 16 | 20 | 13 | | |
| | 80 | 55 | 19 | 16 | 83 | 13 | | |
| | 90 | 72 | 35 | 15 | 46 | 13 | | |
| 106 | 00 | 109,90 | 166,50 | 16 | 48,59 | 12 | | |
| | 10 | 110,07 | 66 | 16 | 71 | 13 | | |
| | 20 | 25 | 82 | 16 | 84 | 13 | | |
| | 30 | 42 | 98 | 15 | 97 | 13 | | |
| | 40 | 59 | 167,13 | 16 | 49,10 | 13 | | |
| | 50 | 110,77 | 167,29 | 16 | 49,23 | 13 | | |
| | 60 | 94 | 45 | 15 | 86 | 13 | | |
| | 70 | 111,12 | 60 | 16 | 49 | 13 | | |
| | 80 | 29 | 76 | 16 | 62 | 13 | | |
| | 90 | 47 | 92 | 15 | 75 | 13 | | |
| 107 | 00 | 111,65 | 168,07 | 16 | 49,88 | 14 | | |
| | 10 | 82 | 23 | 16 | 50,02 | 13 | | |
| | 20 | 112,00 | 39 | 16 | 15 | 13 | | |
| | 30 | 18 | 55 | 15 | 28 | 13 | | |
| | 40 | 36 | 70 | 10 | 41 | 13 | | |
| | 50 | 112,53 | 168,86 | 16 | 50,54 | 14 | | |
| | 60 | 71 | 169,02 | 15 | 68 | 13 | | |
| | 70 | 89 | 17 | 16 | 81 | 14 | | |
| | 80 | 113,07 | 83 | 16 | 95 | 13 | | |
| | 90 | 25 | 49 | 16 | 51,08 | 13 | | |
| 108 | 00 | 113,43 | 169,65 | | 51,21 | | | |
| 分數 | 17 | 18 | | 15 | | 12 | 13 | 14 |
| 0,5 | 0,8 | 0,9 | | 0,7 | | 0,6 | 0,6 | 0,7 |
| 1 | 1,7 | 1,8 | | 1,5 | | 1,2 | 1,3 | 1,4 |
| 2 | 3,4 | 3,6 | | 3,0 | | 2,4 | 2,6 | 2,8 |
| 3 | 5,1 | 5,4 | | 4,5 | | 3,6 | 3,9 | 4,2 |
| 4 | 6,8 | 7,2 | | 6,0 | | 4,8 | 5,2 | 5,6 |
| 5 | 8,5 | 9,0 | | 7,5 | | 6,0 | 6,5 | 7,0 |
| 6 | 10,2 | 10,8 | | 9,0 | | 7,2 | 7,8 | 8,4 |
| 7 | 11,9 | 12,6 | | 10,5 | | 8,4 | 9,1 | 9,8 |
| 8 | 13,6 | 14,4 | | 12,0 | | 9,6 | 10,4 | 11,2 |
| 9 | 15,3 | 16,2 | | 13,5 | | 10,8 | 11,7 | 12,6 |

108°-111°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | | |
|--------|--------|------|--------|------|-------|------|------|------|
| 108 00 | 113,43 | | 169,65 | | 51,21 | | | |
| 10 10 | 61 | 18 | 80 | 15 | 35 | 14 | | |
| 20 20 | 79 | 18 | 96 | 16 | 48 | 13 | | |
| 30 30 | 97 | 18 | 170,12 | 16 | 62 | 14 | | |
| 40 40 | 114,15 | 18 | 27 | 15 | 76 | 14 | | |
| 50 50 | | 18 | | 16 | | 13 | | |
| 60 50 | 114,33 | | 170,43 | | 51,89 | | | |
| 60 60 | 51 | 18 | 59 | 16 | 52,08 | 14 | | |
| 70 70 | 69 | 18 | 75 | 16 | 17 | 14 | | |
| 80 80 | 87 | 18 | 90 | 15 | 30 | 13 | | |
| 90 90 | 115,06 | 19 | 171,06 | 16 | 44 | 14 | | |
| 109 00 | | 18 | | 16 | | 14 | | |
| 10 00 | 115,24 | | 171,22 | | 52,58 | | | |
| 10 10 | 42 | 18 | 37 | 15 | 72 | 14 | | |
| 20 20 | 61 | 19 | 53 | 16 | 85 | 13 | | |
| 30 30 | 79 | 18 | 69 | 16 | 99 | 14 | | |
| 40 40 | 97 | 18 | 84 | 15 | 53,13 | 14 | | |
| 50 50 | | 19 | | 16 | | 14 | | |
| 60 50 | 116,16 | | 172,00 | | 53,27 | | | |
| 60 60 | 34 | 18 | 16 | 16 | 41 | 14 | | |
| 70 70 | 53 | 19 | 32 | 16 | 55 | 14 | | |
| 80 80 | 71 | 18 | 47 | 15 | 69 | 14 | | |
| 90 90 | 90 | 19 | 63 | 16 | 83 | 14 | | |
| 110 00 | | 18 | | 16 | | 15 | | |
| 10 00 | 117,08 | | 172,79 | | 53,98 | | | |
| 10 10 | 27 | 19 | 94 | 15 | 54,12 | 14 | | |
| 20 20 | 46 | 19 | 173,10 | 16 | 28 | 14 | | |
| 30 30 | 64 | 18 | 26 | 16 | 40 | 14 | | |
| 40 40 | 83 | 19 | 42 | 16 | 55 | 15 | | |
| 50 50 | | 19 | | 15 | | 14 | | |
| 60 50 | 118,02 | | 173,57 | | 54,69 | | | |
| 60 60 | 21 | 19 | 73 | 16 | 83 | 14 | | |
| 70 70 | 40 | 19 | 89 | 16 | 98 | 15 | | |
| 80 80 | 59 | 19 | 174,04 | 15 | 55,12 | 14 | | |
| 90 90 | 77 | 18 | 20 | 16 | 27 | 15 | | |
| 111 00 | | 19 | | 16 | | 14 | | |
| 00 00 | 118,96 | | 174,36 | | 55,41 | | | |
| 分數 | 18 | 19 | | 16 | | 13 | 14 | 15 |
| 0,5 | 0,9 | 0,9 | | 0,8 | | 0,6 | 0,7 | 0,7 |
| 1 | 1,8 | 1,9 | | 1,6 | | 1,3 | 1,4 | 1,5 |
| 2 | 3,6 | 3,8 | | 3,2 | | 2,6 | 2,8 | 3,0 |
| 3 | 5,4 | 5,7 | | 4,8 | | 3,9 | 4,2 | 4,5 |
| 4 | 7,2 | 7,6 | | 6,4 | | 5,2 | 5,6 | 6,0 |
| 5 | 9,0 | 9,5 | | 8,0 | | 6,5 | 7,0 | 7,5 |
| 6 | 10,8 | 11,4 | | 9,6 | | 7,8 | 8,4 | 9,0 |
| 7 | 12,6 | 13,3 | | 11,2 | | 9,1 | 9,8 | 10,5 |
| 8 | 14,4 | 15,2 | | 12,8 | | 10,4 | 11,2 | 12,0 |
| 9 | 16,2 | 17,1 | | 14,4 | | 11,7 | 12,6 | 13,5 |

111°-114°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | | |
|-----|------|--------|-----|--------|-----|-------|------|-----|
| 111 | 00 | 118,96 | | 174,36 | | 55,41 | | |
| | 10 | 119,15 | 19 | 51 | 15 | 58 | 15 | |
| | 20 | 34 | 19 | 67 | 16 | 70 | 14 | |
| | 30 | 53 | 19 | 83 | 16 | 85 | 15 | |
| | 40 | 78 | 20 | 99 | 16 | 58,00 | 15 | |
| | | | 19 | | 15 | | 14 | |
| | 50 | 119,92 | | 175,14 | | 56,14 | | |
| | 60 | 120,11 | 19 | 30 | 16 | 29 | 15 | |
| | 70 | 30 | 19 | 46 | 16 | 44 | 15 | |
| | 80 | 49 | 19 | 61 | 15 | 58 | 14 | |
| 112 | 90 | 69 | 20 | 77 | 16 | 78 | 15 | |
| | | | 19 | | 16 | | 15 | |
| | 00 | 120,88 | | 175,93 | | 56,88 | | |
| | 10 | 121,07 | 19 | 176,09 | 16 | 57,03 | 15 | |
| | 20 | 27 | 20 | 24 | 15 | 18 | 15 | |
| | 30 | 46 | 19 | 40 | 16 | 33 | 15 | |
| | 40 | 65 | 19 | 56 | 16 | 48 | 15 | |
| | | | 20 | | 15 | | 16 | |
| | 50 | 121,85 | | 176,71 | | 57,63 | | |
| | 60 | 122,05 | 20 | 87 | 16 | 78 | 15 | |
| 113 | 70 | 24 | 19 | 177,03 | 16 | 93 | 15 | |
| | 80 | 44 | 20 | 19 | 16 | 58,08 | 15 | |
| | 90 | 63 | 19 | 34 | 15 | 24 | 16 | |
| | | | 20 | | 16 | | 15 | |
| | 00 | 122,83 | | 177,50 | | 58,39 | | |
| | 10 | 123,03 | 20 | 66 | 16 | 54 | 15 | |
| | 20 | 23 | 20 | 81 | 15 | 70 | 16 | |
| | 30 | 42 | 19 | 97 | 16 | 85 | 15 | |
| | 40 | 62 | 20 | 178,13 | 16 | 59,00 | 15 | |
| | | | 20 | | 15 | | 16 | |
| 114 | 50 | 123,82 | | 178,28 | | 59,16 | | |
| | 60 | 124,02 | 20 | 44 | 16 | 31 | 15 | |
| | 70 | 22 | 20 | 60 | 16 | 47 | 16 | |
| | 80 | 42 | 20 | 76 | 16 | 62 | 15 | |
| | 90 | 62 | 20 | 91 | 15 | 78 | 16 | |
| | | | 20 | | 16 | | 16 | |
| | 00 | 124,82 | | 179,07 | | 59,94 | | |
| | 分數 | | | | | | | |
| | | 19 | 20 | | 15 | | 14 | 16 |
| | 0,5 | 0,9 | 1,0 | | 0,7 | | 0,7 | 0,8 |
| 1 | 1,9 | 2,0 | | 1,5 | | 1,4 | 1,6 | |
| 2 | 3,8 | 4,0 | | 3,0 | | 2,8 | 3,2 | |
| 3 | 5,7 | 6,0 | | 4,5 | | 4,2 | 4,8 | |
| 4 | 7,6 | 8,0 | | 6,0 | | 5,6 | 6,4 | |
| 5 | 9,5 | 10,0 | | 7,5 | | 7,0 | 8,0 | |
| 6 | 11,4 | 12,0 | | 9,0 | | 8,4 | 9,6 | |
| 7 | 13,3 | 14,0 | | 10,5 | | 9,8 | 11,2 | |
| 8 | 15,2 | 16,0 | | 12,0 | | 11,2 | 12,8 | |
| 9 | 17,1 | 18,0 | | 13,5 | | 12,6 | 14,4 | |

114°-117°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | |
|-----|------|--------|------|--------|------|-------|----|
| 114 | 00 | 124,82 | 20 | 179,07 | 16 | 59,94 | 15 |
| | 10 | 125,02 | 20 | 23 | 15 | 60,09 | 16 |
| | 20 | 22 | 20 | 88 | 16 | 25 | 16 |
| | 30 | 42 | 21 | 54 | 16 | 41 | 16 |
| | 40 | 63 | 20 | 70 | 16 | 57 | 16 |
| | 50 | 125,83 | 20 | 179,86 | 15 | 60,73 | 16 |
| | 60 | 126,03 | 21 | 180,01 | 16 | 89 | 15 |
| | 70 | 24 | 20 | 17 | 16 | 61,04 | 16 |
| | 80 | 44 | 20 | 33 | 15 | 20 | 17 |
| | 90 | 64 | 21 | 48 | 16 | 37 | 16 |
| 115 | 00 | 126,85 | 20 | 180,64 | 16 | 61,53 | 16 |
| | 10 | 127,05 | 21 | 80 | 16 | 69 | 16 |
| | 20 | 26 | 21 | 96 | 15 | 85 | 16 |
| | 30 | 47 | 20 | 181,11 | 16 | 62,01 | 16 |
| | 40 | 67 | 21 | 27 | 16 | 17 | 17 |
| | 50 | 127,88 | 21 | 181,43 | 15 | 62,34 | 16 |
| | 60 | 128,09 | 20 | 58 | 16 | 50 | 16 |
| | 70 | 29 | 21 | 74 | 16 | 66 | 17 |
| | 80 | 50 | 21 | 90 | 15 | 83 | 16 |
| | 90 | 71 | 21 | 182,05 | 16 | 99 | 17 |
| 116 | 00 | 128,92 | 21 | 182,21 | 16 | 63,16 | 16 |
| | 10 | 129,13 | 21 | 37 | 16 | 32 | 17 |
| | 20 | 34 | 21 | 53 | 15 | 49 | 16 |
| | 30 | 55 | 21 | 68 | 16 | 65 | 17 |
| | 40 | 76 | 21 | 84 | 16 | 82 | 17 |
| | 50 | 129,97 | 21 | 183,00 | 15 | 63,99 | 17 |
| | 60 | 130,18 | 21 | 15 | 16 | 64,16 | 16 |
| | 70 | 39 | 22 | 31 | 16 | 32 | 17 |
| | 80 | 61 | 21 | 47 | 16 | 49 | 17 |
| | 90 | 82 | 21 | 63 | 15 | 66 | 17 |
| 117 | 00 | 131,03 | | 183,78 | | 64,83 | |
| 分數 | 20 | 21 | 22 | 16 | 15 | 17 | |
| 0,5 | 1,0 | 1,0 | 1,1 | 0,8 | 0,7 | 0,8 | |
| 1 | 2,0 | 2,1 | 2,2 | 1,6 | 1,5 | 1,7 | |
| 2 | 4,0 | 4,2 | 4,4 | 3,2 | 3,0 | 3,4 | |
| 3 | 6,0 | 6,3 | 6,6 | 4,8 | 4,5 | 5,1 | |
| 4 | 8,0 | 8,4 | 8,8 | 6,4 | 6,0 | 6,8 | |
| 5 | 10,0 | 10,5 | 11,0 | 8,0 | 7,5 | 8,5 | |
| 6 | 12,0 | 12,6 | 13,2 | 9,6 | 9,0 | 10,2 | |
| 7 | 14,0 | 14,7 | 15,4 | 11,2 | 10,5 | 11,9 | |
| 8 | 16,0 | 16,8 | 17,6 | 12,8 | 12,0 | 13,6 | |
| 9 | 18,0 | 18,9 | 19,8 | 14,4 | 13,5 | 15,3 | |

117°-120°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂 距 | 差數 | |
|-----|--------|--------|--------|--------|-------|-------|------|
| 117 | 00 | 181,03 | | 183,78 | | 64,83 | |
| | 10 | 24 | 21 | 94 | 18 | 65,00 | |
| | 20 | 48 | 22 | 184,10 | 16 | 17 | |
| | 30 | 67 | 21 | 25 | 15 | 84 | |
| | 40 | 89 | 22 | 41 | 16 | 51 | |
| | | | 21 | | 16 | | |
| | 50 | 182,10 | | 184,57 | | 65,68 | |
| | 60 | 32 | 22 | 73 | 16 | 86 | |
| | 70 | 54 | 22 | 88 | 15 | 66,03 | |
| 118 | 80 | 75 | 21 | 185,04 | 16 | 20 | |
| | 90 | 97 | 22 | 20 | 16 | 38 | |
| | | | 22 | | 15 | | |
| | 00 | 183,19 | | 185,35 | | 66,55 | |
| | 10 | 41 | 22 | 51 | 16 | 72 | |
| | 20 | 62 | 21 | 67 | 16 | 90 | |
| | 30 | 84 | 22 | 82 | 15 | 67,07 | |
| | 40 | 134,06 | | 98 | 16 | 25 | |
| | | | 22 | | 16 | | |
| 119 | 50 | 184,28 | | 186,14 | | 67,43 | |
| | 60 | 50 | 22 | 30 | 16 | 60 | |
| | 70 | 72 | 22 | 45 | 15 | 78 | |
| | 80 | 94 | 22 | 61 | 16 | 96 | |
| | 90 | 135,17 | | 77 | 16 | 68,14 | |
| | | | 22 | | 15 | | |
| | 00 | 185,39 | | 186,92 | | 68,32 | |
| | 10 | 61 | 22 | 87 | 16 | 49 | |
| | 20 | 83 | 22 | 187,08 | 16 | 67 | |
| 120 | 30 | 136,06 | | 24 | 16 | 85 | |
| | 40 | 28 | 22 | 40 | 16 | 69,04 | |
| | | | 22 | 55 | 15 | | |
| | 50 | 186,51 | | 187,71 | | 69,22 | |
| | 60 | 73 | 22 | 87 | 16 | 40 | |
| | 70 | 96 | 23 | 188,02 | 15 | 58 | |
| | 80 | 137,18 | | 18 | 16 | 76 | |
| | 90 | 41 | 23 | 34 | 16 | 95 | |
| | | | 23 | | 16 | | |
| 00 | 187,64 | | 188,50 | | 70,13 | | |
| 分數 | 21 | 22 | 23 | 15 | 17 | 18 | 19 |
| 0,5 | 1,0 | 1,1 | 1,1 | 0,7 | 0,8 | 0,9 | 0,9 |
| 1 | 2,1 | 2,2 | 2,3 | 1,5 | 1,7 | 1,8 | 1,9 |
| 2 | 4,2 | 4,4 | 4,6 | 3,0 | 3,4 | 3,6 | 3,8 |
| 3 | 6,3 | 6,6 | 6,9 | 4,5 | 5,1 | 5,4 | 5,7 |
| 4 | 8,4 | 8,8 | 9,2 | 6,0 | 6,8 | 7,2 | 7,6 |
| 5 | 10,5 | 11,0 | 11,5 | 7,5 | 8,5 | 9,0 | 9,5 |
| 6 | 12,6 | 13,2 | 13,8 | 9,0 | 10,2 | 10,8 | 11,4 |
| 7 | 14,7 | 15,4 | 16,1 | 10,5 | 11,9 | 12,6 | 13,3 |
| 8 | 16,8 | 17,6 | 18,4 | 12,0 | 13,6 | 14,4 | 15,2 |
| 9 | 18,9 | 19,8 | 20,7 | 13,5 | 15,3 | 16,2 | 17,1 |

120°-123°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 |
|-----|-----|--------|--------|----|-------|----|
| 120 | 00 | 187,64 | 188,50 | | 70,13 | 18 |
| | 10 | 87 | 65 | 15 | 31 | 19 |
| | 20 | 188,09 | 81 | 16 | 50 | 18 |
| | 30 | 32 | 97 | 16 | 68 | 19 |
| | 40 | 55 | 189,12 | 15 | 87 | 19 |
| | | 23 | | 16 | | |
| | 50 | 188,78 | 189,28 | 16 | 71,06 | 18 |
| | 60 | 189,01 | 44 | 15 | 24 | 19 |
| | 70 | 24 | 59 | 16 | 43 | 19 |
| | 80 | 47 | 75 | 16 | 62 | 19 |
| | 90 | 70 | 91 | 16 | 81 | 18 |
| 121 | 00 | 189,94 | 190,07 | 15 | 71,99 | 19 |
| | 10 | 140,17 | 22 | 16 | 72,18 | 19 |
| | 20 | 40 | 38 | 16 | 37 | 19 |
| | 30 | 64 | 54 | 16 | 56 | 19 |
| | 40 | 87 | 69 | 15 | 75 | 20 |
| | | 23 | | 16 | | |
| | 50 | 141,10 | 190,85 | 16 | 72,95 | 19 |
| | 60 | 34 | 191,01 | 16 | 73,14 | 19 |
| | 70 | 58 | 17 | 15 | 33 | 19 |
| | 80 | 81 | 32 | 16 | 52 | 20 |
| | 90 | 142,05 | 48 | 16 | 72 | 19 |
| | | 23 | | 16 | | |
| 122 | 00 | 142,28 | 191,64 | 15 | 73,91 | 20 |
| | 10 | 52 | 79 | 16 | 74,11 | 19 |
| | 20 | 76 | 96 | 16 | 30 | 20 |
| | 30 | 143,00 | 192,11 | 15 | 50 | 19 |
| | 40 | 24 | 26 | 16 | 69 | 20 |
| | | 24 | | 16 | | |
| | 50 | 143,48 | 192,42 | 16 | 74,89 | 20 |
| | 60 | 72 | 58 | 16 | 75,09 | 19 |
| | 70 | 96 | 74 | 16 | 23 | 20 |
| | 80 | 144,20 | 89 | 15 | 48 | 20 |
| | 90 | 44 | 193,05 | 16 | 68 | 20 |
| | | 25 | | 16 | | |
| 123 | 00 | 144,69 | 193,21 | | 75,88 | |

| 分數 | 22 | 23 | 24 | 25 | 16 | 18 | 19 | 20 |
|-----|------|------|------|------|------|------|------|------|
| 0,5 | 1,1 | 1,1 | 1,2 | 1,2 | 0,8 | 0,9 | 0,9 | 1,0 |
| 1 | 2,2 | 2,3 | 2,4 | 2,5 | 1,6 | 1,8 | 1,9 | 2,0 |
| 2 | 4,4 | 4,6 | 4,8 | 5,0 | 3,2 | 3,6 | 3,8 | 4,0 |
| 3 | 6,6 | 6,9 | 7,2 | 7,5 | 4,8 | 5,4 | 5,7 | 6,0 |
| 4 | 8,8 | 9,2 | 9,6 | 10,0 | 6,4 | 7,2 | 7,6 | 8,0 |
| 5 | 11,0 | 11,5 | 12,0 | 12,5 | 8,0 | 9,0 | 9,5 | 10,0 |
| 6 | 13,2 | 13,8 | 14,4 | 15,0 | 9,6 | 10,8 | 11,4 | 12,0 |
| 7 | 15,4 | 16,1 | 16,8 | 17,5 | 11,2 | 12,6 | 13,3 | 14,0 |
| 8 | 17,6 | 18,4 | 19,2 | 20,0 | 12,8 | 14,4 | 15,2 | 16,0 |
| 9 | 19,8 | 20,7 | 21,6 | 22,5 | 14,4 | 16,2 | 17,1 | 18,0 |

123°-126°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 |
|-----|--------|--------|--------|--------|-------|-------|
| 123 | 00 | 144,69 | | 193,21 | | 76,88 |
| | 10 | 88 | 24 | 86 | 15 | 76,08 |
| | 20 | 145,17 | 24 | 52 | 16 | 28 |
| | 30 | 42 | 25 | 68 | 16 | 48 |
| | 40 | 66 | 24 | 84 | 16 | 69 |
| | | | 25 | | 15 | |
| | 50 | 145,91 | | 193,99 | | 76,89 |
| | 60 | 146,16 | 25 | 194,15 | 16 | 77,09 |
| | 70 | 40 | 24 | 81 | 16 | 29 |
| | 80 | 65 | 25 | 46 | 15 | 50 |
| 124 | 90 | 90 | 25 | 62 | 16 | 70 |
| | | | 24 | | 16 | |
| | 00 | 147,14 | | 194,78 | | 77,91 |
| | 10 | 39 | 25 | 94 | 16 | 78,11 |
| | 20 | 64 | 25 | 195,09 | 15 | 32 |
| | 30 | 89 | 25 | 25 | 16 | 53 |
| | 40 | 148,14 | 25 | 41 | 16 | 74 |
| | | | 26 | | 15 | |
| | 50 | 148,40 | | 195,56 | | 78,94 |
| | 60 | 65 | 25 | 72 | 16 | 79,15 |
| 125 | 70 | 90 | 25 | 88 | 16 | 36 |
| | 80 | 149,15 | 25 | 196,03 | 15 | 57 |
| | 90 | 41 | 26 | 19 | 16 | 78 |
| | | | 25 | | 16 | |
| | 00 | 149,66 | | 196,35 | | 79,99 |
| | 10 | 91 | 25 | 51 | 16 | 80,21 |
| | 20 | 150,17 | 26 | 66 | 15 | 42 |
| | 30 | 43 | 26 | 82 | 16 | 63 |
| | 40 | 68 | 25 | 98 | 16 | 85 |
| | | | 26 | | 15 | |
| 50 | 150,94 | | 197,13 | | 81,06 | |
| 126 | 60 | 151,20 | 26 | 29 | 16 | 23 |
| | 70 | 46 | 26 | 45 | 16 | 49 |
| | 80 | 72 | 26 | 61 | 16 | 71 |
| | 90 | 97 | 25 | 76 | 15 | 92 |
| | | | 26 | | 16 | |
| | 00 | 152,23 | | 197,92 | | 82,14 |

| 分數 | 24 | 25 | 26 | 15 | 20 | 21 | 22 |
|-----|------|------|------|------|------|------|------|
| 0,5 | 1,2 | 1,2 | 1,3 | 0,7 | 1,0 | 1,0 | 1,1 |
| 1 | 2,4 | 2,5 | 2,6 | 1,5 | 2,0 | 2,1 | 2,2 |
| 2 | 4,8 | 5,0 | 5,2 | 3,0 | 4,0 | 4,2 | 4,4 |
| 3 | 7,2 | 7,5 | 7,8 | 4,5 | 6,0 | 6,3 | 6,6 |
| 4 | 9,6 | 10,0 | 10,4 | 6,0 | 8,0 | 8,4 | 8,8 |
| 5 | 12,0 | 12,5 | 13,0 | 7,5 | 10,0 | 10,5 | 11,0 |
| 6 | 14,4 | 15,0 | 15,6 | 9,0 | 12,0 | 12,6 | 13,2 |
| 7 | 16,8 | 17,5 | 18,2 | 10,5 | 14,0 | 14,7 | 15,4 |
| 8 | 19,2 | 20,0 | 20,8 | 12,0 | 16,0 | 16,8 | 17,6 |
| 9 | 21,6 | 22,5 | 23,4 | 13,5 | 18,0 | 18,9 | 19,8 |

126°-129°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | |
|-----|------|--------|------|--------|------|-------|------|
| 126 | 00 | 152,23 | | 197,92 | | 82,14 | |
| | 10 | 50 | 27 | 198,08 | 16 | 36 | 22 |
| | 20 | 76 | 26 | 23 | 15 | 53 | 22 |
| | 30 | 153,02 | 26 | 69 | 16 | 80 | 22 |
| | 40 | 28 | 26 | 55 | 16 | 83,02 | 22 |
| | 50 | 153,55 | 27 | | 16 | | 22 |
| | 60 | 81 | 26 | 198,71 | 15 | 83,24 | 22 |
| | 70 | 154,07 | 26 | 86 | 16 | 46 | 22 |
| | 80 | 84 | 27 | 199,02 | 16 | 68 | 22 |
| | 90 | 61 | 27 | 18 | 15 | 90 | 25 |
| 127 | 00 | | 26 | 83 | 16 | 84,18 | 22 |
| | 10 | 154,87 | 27 | 199,49 | 16 | 84,35 | 23 |
| | 20 | 155,14 | 27 | 65 | 15 | 58 | 22 |
| | 30 | 41 | 27 | 80 | 16 | 80 | 23 |
| | 40 | 68 | 27 | 96 | 16 | 85,03 | 22 |
| | 50 | 95 | 27 | 200,12 | 16 | 25 | 23 |
| | 60 | 156,22 | 27 | 200,28 | 15 | 85,48 | 23 |
| | 70 | 49 | 27 | 43 | 16 | 71 | 23 |
| | 80 | 157,03 | 27 | 59 | 16 | 94 | 23 |
| | 90 | 30 | 27 | 75 | 15 | 86,17 | 23 |
| 128 | 00 | | 27 | 90 | 16 | 40 | 23 |
| | 10 | 157,57 | 28 | 201,06 | 16 | 86,63 | 23 |
| | 20 | 85 | 27 | 22 | 16 | 86 | 23 |
| | 30 | 158,12 | 28 | 38 | 15 | 87,09 | 23 |
| | 40 | 40 | 28 | 53 | 16 | 32 | 24 |
| | 50 | 67 | 28 | 69 | 16 | 56 | 23 |
| | 60 | 158,95 | 28 | 201,85 | 15 | 87,79 | 24 |
| | 70 | 159,23 | 28 | 202,00 | 16 | 88,03 | 23 |
| | 80 | 51 | 28 | 16 | 16 | 26 | 24 |
| | 90 | 78 | 27 | 32 | 16 | 50 | 23 |
| 129 | 00 | 160,06 | 28 | 48 | 16 | 73 | 24 |
| | 00 | 160,34 | 28 | 202,63 | 15 | 88,97 | |
| 分數 | 26 | 27 | 28 | 16 | 22 | 23 | 24 |
| 0,5 | 1,3 | 1,3 | 1,4 | 0,8 | 1,1 | 1,1 | 1,2 |
| 1 | 2,6 | 2,7 | 2,8 | 1,6 | 2,2 | 2,3 | 2,4 |
| 2 | 5,2 | 5,4 | 5,6 | 3,2 | 4,4 | 4,6 | 4,8 |
| 3 | 7,8 | 8,1 | 8,4 | 4,8 | 6,6 | 6,9 | 7,2 |
| 4 | 10,4 | 10,8 | 11,2 | 6,4 | 8,8 | 9,2 | 9,6 |
| 5 | 13,0 | 13,5 | 14,0 | 8,0 | 11,0 | 11,5 | 12,0 |
| 6 | 15,6 | 16,2 | 16,8 | 9,6 | 13,2 | 13,8 | 14,4 |
| 7 | 18,2 | 18,9 | 19,6 | 11,2 | 15,4 | 16,1 | 16,8 |
| 8 | 20,8 | 21,6 | 22,4 | 12,8 | 17,6 | 18,4 | 19,2 |
| 9 | 23,4 | 24,3 | 25,2 | 14,4 | 19,8 | 20,7 | 21,6 |

126°-129°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | | |
|-----|------|--------|------|--------|------|-------|------|------|
| 129 | 00 | 160,84 | | 202,63 | | 88,07 | | |
| | 10 | 62 | 28 | 79 | 16 | 89,21 | 24 | |
| | 20 | 91 | 29 | 95 | 16 | 45 | 24 | |
| | 30 | 161,19 | 28 | 203,10 | 15 | 69 | 24 | |
| | 40 | 47 | 28 | 26 | 16 | 93 | 24 | |
| | 50 | 161,76 | 29 | 203,42 | 16 | 90,17 | 24 | |
| | 60 | 162,04 | 28 | 57 | 15 | 41 | 25 | |
| | 70 | 82 | 28 | 78 | 16 | 66 | 24 | |
| | 80 | 61 | 29 | 89 | 16 | 90 | 24 | |
| | 90 | 90 | 29 | 204,05 | 15 | 91,14 | 25 | |
| 130 | 00 | 163,18 | | 204,20 | | 91,39 | | |
| | 10 | 47 | 29 | 36 | 16 | 63 | 24 | |
| | 20 | 76 | 29 | 52 | 16 | 88 | 25 | |
| | 30 | 164,05 | 29 | 67 | 15 | 92,13 | 25 | |
| | 40 | 34 | 29 | 83 | 16 | 87 | 24 | |
| | 50 | 164,63 | 29 | 204,99 | 16 | 92,62 | 25 | |
| | 60 | 92 | 30 | 205,15 | 15 | 87 | 25 | |
| | 70 | 165,22 | 29 | 30 | 16 | 93,12 | 25 | |
| | 80 | 51 | 29 | 46 | 16 | 87 | 25 | |
| | 90 | 80 | 30 | 62 | 15 | 63 | 26 | |
| 131 | 00 | 166,10 | | 205,77 | | 93,88 | | |
| | 10 | 39 | 29 | 93 | 16 | 94,13 | 25 | |
| | 20 | 69 | 30 | 206,09 | 16 | 39 | 26 | |
| | 30 | 99 | 30 | 25 | 16 | 64 | 25 | |
| | 40 | 167,29 | 30 | 40 | 15 | 90 | 26 | |
| | 50 | 167,58 | 29 | 206,56 | 16 | 95,15 | 25 | |
| | 60 | 88 | 30 | 72 | 16 | 41 | 26 | |
| | 70 | 168,18 | 30 | 87 | 15 | 67 | 26 | |
| | 80 | 49 | 31 | 207,03 | 16 | 93 | 26 | |
| | 90 | 79 | 30 | 19 | 16 | 96,19 | 26 | |
| 132 | 00 | 169,09 | | 207,84 | | 96,45 | | |
| 分數 | 28 | 29 | 30 | 31 | 15 | 24 | 25 | 26 |
| 0,5 | 1,4 | 1,4 | 1,5 | 1,5 | 0,7 | 1,2 | 1,2 | 1,3 |
| 1 | 2,8 | 2,9 | 3,0 | 3,1 | 1,5 | 2,4 | 2,5 | 2,6 |
| 2 | 5,6 | 5,8 | 6,0 | 6,2 | 3,0 | 4,8 | 5,0 | 5,2 |
| 3 | 8,4 | 8,7 | 9,0 | 9,3 | 4,5 | 7,2 | 7,5 | 7,8 |
| 4 | 11,2 | 11,6 | 12,0 | 12,4 | 6,0 | 9,6 | 10,0 | 10,4 |
| 5 | 14,0 | 14,5 | 15,0 | 15,5 | 7,5 | 12,0 | 12,5 | 13,0 |
| 6 | 16,8 | 17,4 | 18,0 | 18,6 | 9,0 | 14,4 | 15,0 | 15,6 |
| 7 | 19,6 | 20,3 | 21,0 | 21,7 | 10,5 | 16,8 | 17,5 | 18,2 |
| 8 | 22,4 | 23,2 | 24,0 | 24,8 | 12,0 | 19,2 | 20,0 | 20,8 |
| 9 | 25,2 | 26,1 | 27,0 | 27,9 | 13,5 | 21,6 | 22,5 | 23,4 |

132°-135°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 |
|--------|--------|----|--------|----|--------|----|
| 132 00 | 169,09 | | 207,34 | | 96,45 | |
| 10 | 39 | 30 | 50 | 16 | 71 | 26 |
| 20 | 70 | 31 | 66 | 16 | 97 | 26 |
| 30 | 170,00 | 30 | 82 | 16 | 97,23 | 26 |
| 40 | 31 | 31 | 97 | 15 | 50 | 27 |
| 50 | 170,62 | 31 | 208,18 | 16 | 97,76 | 26 |
| 60 | 92 | 30 | 29 | 16 | 98,03 | 27 |
| 70 | 171,23 | 31 | 44 | 15 | 29 | 26 |
| 80 | 54 | 31 | 60 | 16 | 56 | 27 |
| 90 | 85 | 31 | 76 | 16 | 83 | 27 |
| 133 00 | 172,16 | | 208,92 | | 99,10 | |
| 10 | 47 | 31 | 209,07 | 15 | 37 | 27 |
| 20 | 79 | 32 | 23 | 16 | 64 | 27 |
| 30 | 173,10 | 31 | 39 | 16 | 91 | 27 |
| 40 | 41 | 31 | 54 | 15 | 100,18 | 27 |
| 50 | 173,73 | 32 | 209,70 | 16 | 100,45 | 28 |
| 60 | 174,05 | 32 | 86 | 16 | 73 | 27 |
| 70 | 33 | 31 | 210,01 | 15 | 101,00 | 27 |
| 80 | 68 | 32 | 17 | 16 | 28 | 28 |
| 90 | 175,00 | 32 | 33 | 16 | 56 | 28 |
| 134 00 | 175,32 | | 210,49 | | 101,83 | |
| 10 | 64 | 32 | 64 | 15 | 102,11 | 28 |
| 20 | 96 | 32 | 80 | 16 | 39 | 28 |
| 30 | 176,28 | 32 | 96 | 16 | 67 | 28 |
| 40 | 61 | 33 | 211,11 | 15 | 95 | 28 |
| 50 | 176,93 | 32 | 211,27 | 16 | 103,23 | 28 |
| 60 | 177,25 | 32 | 43 | 16 | 52 | 29 |
| 70 | 58 | 33 | 59 | 16 | 80 | 28 |
| 80 | 91 | 33 | 74 | 15 | 104,08 | 28 |
| 90 | 178,23 | 32 | 90 | 16 | 37 | 29 |
| 135 00 | 178,56 | | 212,06 | | 104,66 | |

| 分數 | 30 | 31 | 32 | 33 | 16 | 26 | 27 | 28 | 20 |
|-----|------|------|------|------|------|------|------|------|------|
| 0,5 | 1,5 | 1,5 | 1,6 | 1,6 | 0,8 | 1,3 | 1,3 | 1,4 | 1,4 |
| 1 | 3,0 | 3,1 | 3,2 | 3,3 | 1,6 | 2,6 | 2,7 | 2,8 | 2,9 |
| 2 | 6,0 | 6,2 | 6,4 | 6,6 | 3,2 | 5,2 | 5,4 | 5,6 | 5,8 |
| 3 | 9,0 | 9,3 | 9,6 | 9,9 | 4,8 | 7,8 | 8,1 | 8,4 | 8,7 |
| 4 | 12,0 | 12,4 | 12,8 | 13,2 | 6,4 | 10,4 | 10,8 | 11,2 | 11,6 |
| 5 | 15,0 | 15,5 | 16,0 | 16,5 | 8,0 | 13,0 | 13,5 | 14,0 | 14,5 |
| 6 | 18,0 | 18,6 | 19,2 | 19,8 | 9,6 | 15,6 | 16,2 | 16,8 | 17,4 |
| 7 | 21,0 | 21,7 | 22,4 | 23,1 | 11,2 | 18,2 | 18,9 | 19,6 | 20,3 |
| 8 | 24,0 | 24,8 | 25,6 | 26,4 | 12,8 | 20,8 | 21,6 | 22,4 | 23,2 |
| 9 | 27,0 | 27,9 | 28,8 | 29,7 | 14,4 | 23,4 | 24,3 | 25,2 | 26,1 |

135°-136°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | | | |
|--------|--------|------|--------|------|--------|------|------|------|------|
| 135 00 | 178,56 | 33 | 212,06 | 15 | 104,66 | 28 | | | |
| 10 | 89 | 33 | 21 | 16 | 94 | 29 | | | |
| 20 | 179,22 | 33 | 87 | 16 | 105,23 | 29 | | | |
| 30 | 55 | 34 | 53 | 16 | 52 | 29 | | | |
| 40 | 89 | 33 | 69 | 15 | 81 | 29 | | | |
| 50 | 180,22 | 33 | 212,84 | 16 | 106,10 | 30 | | | |
| 60 | 55 | 34 | 213,00 | 16 | 40 | 29 | | | |
| 70 | 89 | 33 | 16 | 15 | 69 | 29 | | | |
| 80 | 181,22 | 34 | 31 | 16 | 98 | 30 | | | |
| 90 | 56 | 34 | 47 | 16 | 107,23 | 29 | | | |
| 136 00 | 181,90 | 34 | 213,63 | 15 | 107,57 | 30 | | | |
| 10 | 182,24 | 34 | 78 | 16 | 87 | 30 | | | |
| 20 | 58 | 34 | 94 | 16 | 108,17 | 30 | | | |
| 30 | 92 | 34 | 214,10 | 16 | 47 | 30 | | | |
| 40 | 183,26 | 34 | 28 | 16 | 77 | 30 | | | |
| 50 | 183,60 | 35 | 214,41 | 16 | 109,07 | 30 | | | |
| 60 | 95 | 34 | 57 | 16 | 37 | 30 | | | |
| 70 | 184,29 | 35 | 73 | 15 | 67 | 31 | | | |
| 80 | 64 | 34 | 88 | 16 | 98 | 30 | | | |
| 90 | 98 | 35 | 215,04 | 16 | 110,28 | 31 | | | |
| 137 00 | 185,33 | 35 | 215,20 | 16 | 110,59 | 31 | | | |
| 10 | 68 | 35 | 38 | 15 | 90 | 30 | | | |
| 20 | 186,03 | 35 | 51 | 16 | 111,20 | 31 | | | |
| 30 | 38 | 35 | 67 | 16 | 51 | 31 | | | |
| 40 | 73 | 36 | 83 | 15 | 82 | 31 | | | |
| 50 | 187,09 | 35 | 215,93 | 16 | 112,13 | 32 | | | |
| 60 | 44 | 36 | 216,14 | 16 | 45 | 31 | | | |
| 70 | 80 | 35 | 30 | 16 | 76 | 31 | | | |
| 80 | 188,15 | 36 | 46 | 15 | 113,07 | 32 | | | |
| 90 | 51 | 36 | 61 | 16 | 39 | 32 | | | |
| 138 00 | 188,87 | 36 | 216,77 | 16 | 113,71 | 32 | | | |
| 分數 | 33 | 34 | 35 | 36 | 15 | 28 | 29 | 30 | 31 |
| 0,5 | 1,6 | 1,7 | 1,7 | 1,8 | 0,7 | 1,4 | 1,4 | 1,5 | 1,5 |
| 1 | 3,3 | 3,4 | 3,5 | 3,6 | 1,5 | 2,8 | 2,9 | 3,0 | 3,1 |
| 2 | 6,6 | 6,8 | 7,0 | 7,2 | 3,0 | 5,6 | 5,8 | 6,0 | 6,2 |
| 3 | 9,9 | 10,2 | 10,5 | 10,8 | 4,5 | 8,4 | 8,7 | 9,0 | 9,3 |
| 4 | 13,2 | 13,6 | 14,0 | 14,4 | 6,0 | 11,2 | 11,6 | 12,0 | 12,4 |
| 5 | 16,5 | 17,0 | 17,5 | 18,0 | 7,5 | 14,0 | 14,5 | 15,0 | 15,5 |
| 6 | 19,8 | 20,4 | 21,0 | 21,6 | 9,0 | 16,8 | 17,4 | 18,0 | 18,6 |
| 7 | 23,1 | 23,8 | 24,5 | 25,2 | 10,5 | 19,6 | 20,3 | 21,0 | 21,7 |
| 8 | 26,4 | 27,2 | 28,0 | 28,8 | 12,0 | 22,4 | 23,2 | 24,0 | 24,8 |
| 9 | 29,7 | 30,6 | 31,5 | 32,4 | 13,5 | 25,2 | 26,1 | 27,0 | 27,9 |

138°-141°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 |
|--------|--------|----|--------|----|--------|----|
| 138 00 | 188,87 | | 216,77 | | 113,71 | |
| 10 | 189,23 | 36 | 93 | 16 | 114,02 | 31 |
| 20 | 59 | 36 | 16 | 15 | 34 | 32 |
| 30 | 95 | 36 | 217,08 | 16 | 68 | 32 |
| 40 | 190,31 | 36 | 24 | 16 | 98 | 32 |
| | | 36 | 40 | 15 | | 33 |
| 50 | 190,67 | | 217,55 | | 115,31 | |
| 60 | 191,04 | 37 | 71 | 16 | 63 | 32 |
| 70 | 40 | 36 | 87 | 16 | 95 | 32 |
| 80 | 77 | 37 | 218,03 | 16 | 116,28 | 33 |
| 90 | 192,14 | 37 | 18 | 15 | 60 | 32 |
| | | 37 | | 16 | | 33 |
| 139 00 | 192,51 | | 218,34 | | 116,93 | |
| 10 | 88 | 37 | 50 | 16 | 117,26 | 33 |
| 20 | 193,25 | 37 | 65 | 15 | 59 | 33 |
| 30 | 62 | 37 | 81 | 16 | 92 | 33 |
| 40 | 194,00 | 37 | 97 | 16 | 118,25 | 33 |
| | | 37 | | 16 | | 34 |
| 50 | 194,37 | | 219,13 | | 118,59 | |
| 60 | 75 | 38 | 28 | 15 | 92 | 33 |
| 70 | 195,12 | 37 | 44 | 16 | 119,26 | 34 |
| 80 | 50 | 38 | 60 | 16 | 59 | 33 |
| 90 | 88 | 38 | 75 | 15 | 93 | 34 |
| | | 38 | | 16 | | 34 |
| 140 00 | 196,26 | | 219,91 | | 120,27 | |
| 10 | 64 | 38 | 220,07 | 16 | 61 | 34 |
| 20 | 197,03 | 39 | 23 | 16 | 95 | 34 |
| 30 | 41 | 38 | 38 | 15 | 121,29 | 34 |
| 40 | 80 | 39 | 54 | 16 | 64 | 35 |
| | | 38 | | 16 | | 34 |
| 50 | 198,18 | | 220,70 | | 121,98 | |
| 60 | 57 | 39 | 85 | 15 | 122,33 | 35 |
| 70 | 98 | 39 | 16 | 16 | 67 | 34 |
| 80 | 199,35 | 39 | 221,01 | 16 | 123,02 | 35 |
| 90 | 74 | 39 | 17 | 15 | 37 | 35 |
| | | 39 | 32 | 16 | | 35 |
| 141 00 | 200,13 | | 221,48 | | 123,72 | |

| 分數 | 36 | 37 | 38 | 39 | 16 | 32 | 33 | 34 | 35 |
|-----|------|------|------|------|------|------|------|------|------|
| 0,5 | 1,8 | 1,8 | 1,9 | 1,9 | 0,8 | 1,6 | 1,6 | 1,7 | 1,7 |
| 1 | 3,6 | 3,7 | 3,8 | 3,9 | 1,6 | 3,2 | 3,3 | 3,4 | 3,5 |
| 2 | 7,2 | 7,4 | 7,6 | 7,8 | 3,2 | 6,4 | 6,6 | 6,8 | 7,0 |
| 3 | 10,8 | 11,1 | 11,4 | 11,7 | 4,8 | 9,6 | 9,9 | 10,2 | 10,5 |
| 4 | 14,4 | 14,8 | 15,2 | 15,6 | 6,4 | 12,8 | 13,2 | 13,6 | 14,0 |
| 5 | 18,0 | 18,5 | 19,0 | 19,5 | 8,0 | 16,0 | 16,5 | 17,0 | 17,5 |
| 6 | 21,6 | 22,2 | 22,8 | 23,4 | 9,6 | 19,2 | 19,8 | 20,4 | 21,0 |
| 7 | 25,2 | 25,9 | 26,6 | 27,3 | 11,2 | 22,4 | 23,1 | 23,8 | 24,5 |
| 8 | 28,8 | 29,6 | 30,4 | 31,2 | 12,8 | 25,6 | 26,4 | 27,2 | 28,0 |
| 9 | 32,4 | 33,3 | 34,2 | 35,1 | 14,4 | 28,8 | 29,7 | 30,6 | 31,5 |

141°-144°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | | | |
|-----|------|--------|------|--------|------|--------|------|------|------|
| 141 | 00 | 200,18 | | 221,48 | 16 | 123,72 | 36 | | |
| | 10 | 52 | 39 | 64 | 16 | 124,08 | 35 | | |
| | 20 | 92 | 40 | 80 | 15 | 43 | 35 | | |
| | 30 | 201,32 | 39 | 95 | 16 | 78 | 36 | | |
| | 40 | 71 | 40 | 222,11 | 16 | 125,14 | 36 | | |
| | 50 | 202,11 | 40 | 222,27 | 15 | 125,50 | 36 | | |
| | 60 | 51 | 40 | 42 | 16 | 86 | 36 | | |
| | 70 | 91 | 41 | 58 | 16 | 126,22 | 36 | | |
| | 80 | 203,32 | 40 | 74 | 16 | 58 | 36 | | |
| | 90 | 72 | 40 | 90 | 15 | 94 | 36 | | |
| 142 | 00 | 204,12 | 41 | 223,05 | 16 | 127,30 | 37 | | |
| | 10 | 53 | 41 | 21 | 16 | 67 | 37 | | |
| | 20 | 94 | 41 | 37 | 15 | 128,04 | 36 | | |
| | 30 | 205,35 | 41 | 52 | 16 | 40 | 37 | | |
| | 40 | 76 | 41 | 68 | 16 | 77 | 37 | | |
| | 50 | 206,17 | 41 | 223,84 | 16 | 129,14 | 37 | | |
| | 60 | 58 | 42 | 224,00 | 15 | 51 | 38 | | |
| | 70 | 207,00 | 41 | 15 | 16 | 89 | 37 | | |
| | 80 | 41 | 42 | 31 | 16 | 130,26 | 38 | | |
| | 90 | 83 | 42 | 47 | 15 | 64 | 37 | | |
| 143 | 00 | 208,25 | 42 | 224,62 | 16 | 131,01 | 38 | | |
| | 10 | 67 | 42 | 78 | 16 | 39 | 38 | | |
| | 20 | 209,09 | 42 | 94 | 15 | 77 | 38 | | |
| | 30 | 51 | 43 | 225,09 | 16 | 132,15 | 39 | | |
| | 40 | 94 | 42 | 25 | 16 | 54 | 38 | | |
| | 50 | 210,36 | 43 | 225,41 | 16 | 132,92 | 39 | | |
| | 60 | 79 | 43 | 57 | 15 | 133,31 | 38 | | |
| | 70 | 211,22 | 43 | 72 | 16 | 69 | 39 | | |
| | 80 | 65 | 43 | 88 | 16 | 134,08 | 39 | | |
| | 90 | 212,08 | 43 | 226,04 | 15 | 47 | 39 | | |
| 144 | 00 | 212,51 | | 226,19 | | 134,86 | | | |
| 分數 | 39 | 40 | 41 | 42 | 43 | 35 | 36 | 37 | 38 |
| 0,5 | 1,9 | 2,0 | 2,0 | 2,1 | 0,7 | 1,7 | 1,8 | 1,8 | 1,9 |
| 1 | 3,9 | 4,0 | 4,1 | 4,2 | 1,5 | 3,5 | 3,6 | 3,7 | 3,8 |
| 2 | 7,8 | 8,0 | 8,2 | 8,4 | 3,0 | 7,0 | 7,2 | 7,4 | 7,6 |
| 3 | 11,7 | 12,0 | 12,3 | 12,6 | 4,5 | 10,5 | 10,8 | 11,1 | 11,4 |
| 4 | 15,6 | 16,0 | 16,4 | 16,8 | 6,0 | 14,0 | 14,4 | 14,8 | 15,2 |
| 5 | 19,5 | 20,0 | 20,5 | 21,0 | 7,5 | 17,5 | 18,0 | 18,5 | 19,0 |
| 6 | 23,4 | 24,0 | 24,6 | 25,2 | 9,0 | 21,0 | 21,6 | 22,2 | 22,8 |
| 7 | 27,3 | 28,0 | 28,7 | 29,4 | 10,5 | 24,5 | 25,2 | 25,9 | 26,6 |
| 8 | 31,2 | 32,0 | 32,8 | 33,6 | 12,0 | 28,0 | 28,8 | 29,6 | 30,4 |
| 9 | 35,1 | 36,0 | 36,9 | 37,8 | 13,5 | 31,5 | 32,4 | 33,3 | 34,2 |

141°-144°

144°-147°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 | | | |
|--------|--------|------|--------|------|--------|------|------|------|------|
| 144 00 | 212,51 | 43 | 226,19 | 16 | 184,86 | 40 | | | |
| 10 | 94 | 44 | 35 | 16 | 185,28 | 39 | | | |
| 20 | 213,88 | 44 | 51 | 16 | 65 | 40 | | | |
| 30 | 82 | 43 | 67 | 15 | 136,05 | 39 | | | |
| 40 | 214,25 | 44 | 82 | 16 | 44 | 40 | | | |
| 50 | 214,69 | 45 | 226,98 | 16 | 186,84 | 40 | | | |
| 60 | 215,14 | 44 | 227,14 | 15 | 187,24 | 40 | | | |
| 70 | 58 | 44 | 29 | 16 | 64 | 41 | | | |
| 80 | 216,02 | 45 | 45 | 16 | 188,05 | 40 | | | |
| 90 | 47 | 45 | 61 | 15 | 45 | 41 | | | |
| 145 00 | 216,92 | 45 | 227,76 | 16 | 188,86 | 40 | | | |
| 10 | 217,37 | 45 | 92 | 16 | 189,26 | 41 | | | |
| 20 | 82 | 45 | 228,08 | 16 | 67 | 41 | | | |
| 30 | 218,27 | 45 | 24 | 15 | 140,08 | 42 | | | |
| 40 | 72 | 46 | 39 | 16 | 50 | 41 | | | |
| 50 | 219,18 | 45 | 228,55 | 16 | 140,91 | 42 | | | |
| 60 | 63 | 46 | 71 | 15 | 141,33 | 41 | | | |
| 70 | 220,09 | 46 | 86 | 16 | 74 | 42 | | | |
| 80 | 55 | 46 | 229,02 | 16 | 142,16 | 42 | | | |
| 90 | 221,01 | 46 | 18 | 16 | 58 | 42 | | | |
| 146 00 | 221,47 | 47 | 229,34 | 15 | 143,00 | 43 | | | |
| 10 | 94 | 47 | 49 | 16 | 43 | 42 | | | |
| 20 | 222,41 | 46 | 65 | 16 | 85 | 43 | | | |
| 30 | 87 | 47 | 81 | 15 | 144,28 | 43 | | | |
| 40 | 223,34 | 47 | 96 | 16 | 71 | 43 | | | |
| 50 | 223,81 | 48 | 230,12 | 16 | 145,14 | 43 | | | |
| 60 | 224,29 | 47 | 28 | 16 | 57 | 43 | | | |
| 70 | 76 | 47 | 44 | 15 | 146,00 | 44 | | | |
| 80 | 225,24 | 48 | 59 | 16 | 44 | 44 | | | |
| 90 | 72 | 48 | 75 | 16 | 88 | 43 | | | |
| 147 00 | 226,20 | | 230,91 | | 147,31 | | | | |
| 分數 | 45 | 46 | 47 | 48 | 16 | 41 | 42 | 43 | 44 |
| 0,5 | 2,2 | 2,3 | 2,3 | 2,4 | 0,8 | 2,0 | 2,1 | 2,1 | 2,2 |
| 1 | 4,5 | 4,6 | 4,7 | 4,8 | 1,6 | 4,1 | 4,2 | 4,3 | 4,4 |
| 2 | 9,0 | 9,2 | 9,4 | 9,6 | 3,2 | 8,2 | 8,4 | 8,6 | 8,8 |
| 3 | 13,5 | 13,8 | 14,1 | 14,4 | 4,8 | 12,3 | 12,6 | 12,9 | 13,2 |
| 4 | 18,0 | 18,4 | 18,8 | 19,2 | 6,4 | 16,4 | 16,8 | 17,2 | 17,6 |
| 5 | 22,5 | 23,0 | 23,5 | 24,0 | 8,0 | 20,5 | 21,0 | 21,5 | 22,0 |
| 6 | 27,0 | 27,6 | 28,2 | 28,8 | 9,6 | 24,6 | 25,2 | 25,8 | 26,4 |
| 7 | 31,5 | 32,2 | 32,9 | 33,6 | 11,2 | 28,7 | 29,4 | 30,1 | 30,8 |
| 8 | 36,0 | 36,8 | 37,6 | 38,4 | 12,8 | 32,8 | 33,6 | 34,4 | 35,2 |
| 9 | 40,5 | 41,4 | 42,3 | 43,2 | 14,4 | 36,9 | 37,8 | 38,7 | 39,6 |

144°-147°

147°-150°

| 中心角 | 切線長 | 差數 | 曲線長 | 差數 | 頂距 | 差數 |
|--------|--------|----|--------|----|--------|----|
| 147 00 | 228,20 | | 230,91 | | 147,31 | |
| 10 | 68 | 48 | 231,06 | 15 | 75 | 44 |
| 20 | 227,16 | 48 | 22 | 16 | 148,20 | 45 |
| 30 | 64 | 48 | 38 | 16 | 64 | 44 |
| 40 | 228,18 | 49 | 53 | 15 | 149,09 | 45 |
| | | 49 | | 16 | | 44 |
| 50 | 228,62 | | 231,69 | | 149,53 | |
| 60 | 229,11 | 49 | 85 | 16 | 98 | 45 |
| 70 | 60 | 49 | 232,01 | 16 | 150,43 | 45 |
| 80 | 230,09 | 49 | 16 | 15 | 88 | 45 |
| 90 | 59 | 50 | 32 | 16 | 151,34 | 46 |
| | | 50 | | 16 | | 45 |
| 148 00 | 231,09 | | 232,48 | | 151,79 | |
| 10 | 59 | 50 | 68 | 15 | 152,25 | 46 |
| 20 | 232,09 | 50 | 79 | 16 | 71 | 46 |
| 30 | 59 | 50 | 95 | 16 | 153,17 | 46 |
| 40 | 233,09 | 50 | 233,11 | 16 | 64 | 47 |
| | | 51 | | 15 | | 46 |
| 50 | 233,60 | | 233,26 | | 154,10 | |
| 60 | 234,11 | 51 | 42 | 16 | 57 | 47 |
| 70 | 62 | 51 | 58 | 16 | 155,04 | 47 |
| 80 | 235,13 | 51 | 73 | 15 | 51 | 47 |
| 90 | 64 | 51 | 89 | 16 | 98 | 47 |
| | | 52 | | 16 | | 48 |
| 149 00 | 236,16 | | 234,05 | | 156,46 | |
| 10 | 68 | 52 | 21 | 16 | 93 | 47 |
| 20 | 237,20 | 52 | 36 | 15 | 157,41 | 48 |
| 30 | 72 | 52 | 52 | 16 | 89 | 48 |
| 40 | 238,24 | 52 | 68 | 16 | 158,38 | 49 |
| | | 52 | | 15 | | 48 |
| 50 | 238,76 | | 234,83 | | 158,86 | |
| 60 | 239,29 | 53 | 99 | 16 | 159,35 | 49 |
| 70 | 82 | 53 | 235,15 | 16 | 84 | 49 |
| 80 | 240,35 | 53 | 30 | 15 | 160,33 | 49 |
| 90 | 89 | 54 | 46 | 16 | 82 | 49 |
| | | 53 | | 16 | | 49 |
| 150 00 | 241,42 | | 235,62 | | 161,31 | |

| 分數 | 49 | 50 | 52 | 54 | 15 | 44 | 46 | 47 | 48 |
|-----|------|------|------|------|------|------|------|------|------|
| 0,5 | 2,4 | 2,5 | 2,6 | 2,7 | 0,7 | 2,2 | 2,3 | 2,3 | 2,4 |
| 1 | 4,9 | 5,0 | 5,2 | 5,4 | 1,5 | 4,4 | 4,6 | 4,7 | 4,8 |
| 2 | 9,8 | 10,0 | 10,4 | 10,8 | 3,0 | 8,8 | 9,2 | 9,4 | 9,6 |
| 3 | 14,7 | 15,0 | 15,6 | 16,2 | 4,5 | 13,2 | 13,8 | 14,1 | 14,4 |
| 4 | 19,6 | 20,0 | 20,8 | 21,6 | 6,0 | 17,6 | 18,4 | 18,8 | 19,2 |
| 5 | 24,5 | 25,0 | 26,0 | 27,0 | 7,5 | 22,0 | 23,0 | 23,5 | 24,0 |
| 6 | 29,4 | 30,0 | 31,2 | 32,4 | 9,0 | 26,4 | 27,6 | 28,2 | 28,8 |
| 7 | 34,3 | 35,0 | 36,4 | 37,8 | 10,5 | 30,8 | 32,2 | 32,9 | 33,6 |
| 8 | 39,2 | 40,0 | 41,6 | 43,2 | 12,0 | 35,2 | 36,8 | 37,6 | 38,4 |
| 9 | 44,1 | 45,0 | 46,8 | 48,6 | 13,5 | 39,6 | 41,4 | 42,3 | 43,2 |

第 二 表
曲 線 偏 角 表

R. = 100

R. = 105

R. = 100 (R = 10, 1000 及 10000 通用)

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-----|----|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 00 | 0 | 31 88 | 63 86 | 95 49 | 27 32 | 59 15 | 90 99 | 22 82 | 54 66 | 86 48 |
| 10 | 3 | 50 14 | 81 97 | 13 80 | 45 63 | 77 46 | 09 30 | 41 13 | 72 96 | 04 79 |
| 20 | 6 | 36 62 | 68 45 | 32 11 | 63 94 | 96 77 | 27 61 | 59 44 | 91 27 | 23 10 |
| 30 | 9 | 54 93 | 98 76 | 50 42 | 82 25 | 14 03 | 45 82 | 77 75 | 09 58 | 41 41 |
| 40 | 12 | 73 24 | 13 05 | 68 73 | 00 56 | 32 39 | 64 23 | 96 06 | 27 89 | 59 72 |
| 50 | 15 | 91 55 | 16 23 | 87 04 | 18 87 | 50 70 | 82 54 | 14 37 | 46 20 | 78 03 |
| 60 | 19 | 09 86 | 19 41 | 05 35 | 37 18 | 69 01 | 21 00 | 32 68 | 64 51 | 96 34 |
| 70 | 22 | 28 17 | 22 60 | 23 86 | 55 49 | 87 32 | 19 16 | 50 99 | 82 82 | 25 14 |
| 80 | 25 | 46 48 | 25 78 | 41 97 | 73 80 | 06 63 | 27 37 | 69 30 | 01 13 | 32 96 |
| 90 | 28 | 64 79 | 28 96 | 60 28 | 92 11 | 30 23 | 94 30 | 87 61 | 19 44 | 51 27 |
| 100 | 31 | 83 10 | 32 14 | 78 59 | 42 33 | 42 25 | 74 09 | 05 92 | 37 75 | 69 58 |

R. = 105 (R = 10.5 及 1050 通用)

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-----|----|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 00 | 0 | 30 32 | 60 63 | 90 96 | 21 26 | 51 58 | 81 89 | 12 21 | 42 52 | 72 84 |
| 10 | 3 | 33 47 | 63 78 | 94 10 | 24 41 | 54 73 | 85 04 | 15 36 | 45 67 | 75 99 |
| 20 | 6 | 36 62 | 66 93 | 97 25 | 27 56 | 57 88 | 88 19 | 18 51 | 48 82 | 79 14 |
| 30 | 9 | 39 77 | 70 08 | 00 40 | 30 71 | 61 03 | 91 34 | 21 66 | 51 97 | 82 29 |
| 40 | 12 | 42 92 | 73 23 | 03 55 | 33 86 | 64 18 | 94 49 | 24 81 | 55 12 | 85 44 |
| 50 | 15 | 45 08 | 76 39 | 06 71 | 37 02 | 67 34 | 97 65 | 27 97 | 58 28 | 88 60 |
| 60 | 18 | 48 28 | 79 54 | 09 86 | 40 17 | 70 49 | 00 80 | 31 12 | 61 43 | 91 75 |
| 70 | 21 | 52 33 | 82 69 | 13 01 | 43 32 | 73 64 | 23 03 | 34 27 | 64 58 | 94 90 |
| 80 | 24 | 55 51 | 85 84 | 16 16 | 46 47 | 76 79 | 26 07 | 42 26 | 67 73 | 98 06 |
| 90 | 27 | 58 68 | 88 99 | 19 31 | 49 62 | 79 94 | 29 10 | 40 29 | 70 88 | 01 20 |
| 100 | 30 | 61 84 | 92 15 | 22 47 | 52 78 | 83 10 | 32 13 | 43 32 | 84 04 | 33 33 |

R. = 100

R. = 105

R. = 110

R. = 115

R. = 110 (R = 11 及 1100 兩用)

| Boega- linge | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-----------------|---|----------|---|----------|---|----------|---|----------|---|----------|
| 00 | 0 | 28 94 | 0 | 86 81 | 0 | 1 44 69 | 0 | 2 02 56 | 0 | 2 60 48 |
| 10 | 0 | 3 18 31 | 0 | 3 76 18 | 0 | 4 84 08 | 0 | 4 91 93 | 0 | 5 49 80 |
| 20 | 0 | 6 07 68 | 0 | 6 65 55 | 0 | 7 23 43 | 0 | 7 81 30 | 0 | 8 89 17 |
| 30 | 0 | 8 97 06 | 0 | 9 54 92 | 0 | 10 12 80 | 0 | 10 70 67 | 0 | 11 28 54 |
| 40 | 0 | 11 86 42 | 0 | 12 44 29 | 0 | 13 02 17 | 0 | 13 60 04 | 0 | 14 17 91 |
| 50 | 0 | 14 46 86 | 0 | 15 83 67 | 0 | 15 91 55 | 0 | 16 49 42 | 0 | 17 07 29 |
| 60 | 0 | 17 36 24 | 0 | 18 23 05 | 0 | 18 80 93 | 0 | 19 38 80 | 0 | 19 96 67 |
| 70 | 0 | 20 26 61 | 0 | 21 12 42 | 0 | 21 70 30 | 0 | 22 28 17 | 0 | 22 86 04 |
| 80 | 0 | 23 14 88 | 0 | 24 01 79 | 0 | 24 59 67 | 0 | 25 17 54 | 0 | 25 75 41 |
| 90 | 0 | 26 04 35 | 0 | 26 81 16 | 0 | 27 49 04 | 0 | 28 06 91 | 0 | 28 64 78 |
| 100 | 0 | 28 93 73 | 0 | 29 80 54 | 0 | 30 38 42 | 0 | 30 96 29 | 0 | 31 54 16 |

R. = 115 (R = 11,5 及 1150 兩用)

| Boega- linge | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-----------------|---|----------|---|----------|---|----------|---|----------|---|----------|
| 00 | 0 | 27 68 | 0 | 83 04 | 0 | 1 38 40 | 0 | 1 98 75 | 0 | 2 49 11 |
| 10 | 0 | 3 04 47 | 0 | 3 59 83 | 0 | 4 15 19 | 0 | 4 70 54 | 0 | 5 25 90 |
| 20 | 0 | 5 81 58 | 0 | 6 36 62 | 0 | 6 91 98 | 0 | 7 47 33 | 0 | 8 02 69 |
| 30 | 0 | 8 58 05 | 0 | 9 13 41 | 0 | 9 68 77 | 0 | 10 24 12 | 0 | 10 79 48 |
| 40 | 0 | 11 34 84 | 0 | 11 90 20 | 0 | 12 45 56 | 0 | 13 00 91 | 0 | 13 56 27 |
| 50 | 0 | 14 11 63 | 0 | 14 66 99 | 0 | 15 22 35 | 0 | 15 77 70 | 0 | 16 33 06 |
| 60 | 0 | 16 88 42 | 0 | 17 45 78 | 0 | 17 99 14 | 0 | 18 54 49 | 0 | 19 09 85 |
| 70 | 0 | 19 65 21 | 0 | 20 20 57 | 0 | 20 75 93 | 0 | 21 31 28 | 0 | 21 86 64 |
| 80 | 0 | 22 42 00 | 0 | 22 97 36 | 0 | 23 52 72 | 0 | 24 08 07 | 0 | 24 63 43 |
| 90 | 0 | 25 18 79 | 0 | 26 01 83 | 0 | 26 29 51 | 0 | 26 84 86 | 0 | 27 40 22 |
| 100 | 0 | 27 95 59 | 0 | 28 78 63 | 0 | 29 06 31 | 0 | 29 61 66 | 0 | 30 17 02 |

R. = 110

R. = 115

R. = 120

R. = 125

R. = 120 (R = 12 及 1200 兩用)

| Begin-Range | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------------|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 00 | 0 | 26 53 | 53 05 | 79 58 | 1 06 10 | 1 32 68 | 1 59 16 | 1 85 68 | 2 12 21 | 2 38 73 |
| 10 | 0 | 5 18 31 | 3 18 31 | 3 44 84 | 8 71 36 | 3 97 89 | 4 24 42 | 4 50 94 | 4 77 47 | 5 03 99 |
| 20 | 0 | 5 30 52 | 5 83 57 | 6 10 10 | 6 26 62 | 6 63 15 | 6 89 68 | 7 16 20 | 7 42 73 | 7 69 25 |
| 30 | 0 | 7 95 77 | 8 48 82 | 8 76 35 | 9 01 87 | 9 28 40 | 9 54 93 | 9 81 45 | 10 07 98 | 10 34 50 |
| 40 | 0 | 10 61 03 | 11 14 08 | 11 40 61 | 11 67 13 | 11 93 66 | 12 20 19 | 12 46 71 | 12 73 24 | 12 99 76 |
| 50 | 0 | 13 26 29 | 13 79 34 | 14 05 87 | 14 32 39 | 14 58 92 | 14 85 45 | 15 11 97 | 15 38 50 | 15 65 02 |
| 60 | 0 | 15 91 55 | 16 44 60 | 16 71 13 | 16 97 65 | 17 24 18 | 17 50 71 | 17 77 23 | 18 03 76 | 18 30 28 |
| 70 | 0 | 18 56 81 | 19 09 86 | 19 36 39 | 19 62 91 | 19 89 44 | 20 15 97 | 20 42 49 | 20 69 02 | 20 95 54 |
| 80 | 0 | 21 22 07 | 21 45 60 | 22 01 65 | 22 28 17 | 22 54 70 | 22 81 23 | 23 07 75 | 23 34 28 | 23 60 80 |
| 90 | 0 | 23 87 33 | 24 13 86 | 24 66 91 | 24 93 43 | 25 19 96 | 25 46 49 | 25 73 01 | 25 99 54 | 26 26 06 |
| 100 | 0 | 26 52 58 | 26 79 11 | 27 32 16 | 27 58 68 | 27 85 21 | 28 11 74 | 28 38 26 | 28 64 79 | 28 91 31 |

R. = 125 (R = 12.5 及 1250 兩用)

| Begin-Range | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------------|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 00 | 0 | 25 46 | 50 93 | 76 39 | 1 01 86 | 1 27 32 | 1 52 79 | 1 78 25 | 2 03 72 | 2 29 18 |
| 10 | 0 | 2 80 11 | 3 05 58 | 3 31 04 | 3 56 51 | 3 81 97 | 4 07 44 | 4 32 90 | 4 58 37 | 4 83 83 |
| 20 | 0 | 5 34 76 | 5 60 23 | 5 85 69 | 6 11 16 | 6 36 62 | 6 62 09 | 6 87 55 | 7 13 02 | 7 38 48 |
| 30 | 0 | 7 63 94 | 8 14 87 | 8 40 33 | 8 65 80 | 8 91 26 | 9 16 73 | 9 42 19 | 9 67 66 | 9 93 12 |
| 40 | 0 | 10 18 59 | 10 69 52 | 10 94 98 | 11 20 45 | 11 45 91 | 11 71 38 | 11 96 84 | 12 22 31 | 12 47 77 |
| 50 | 0 | 12 73 24 | 13 24 17 | 13 49 63 | 13 75 10 | 14 00 56 | 14 26 03 | 14 51 49 | 14 76 96 | 15 02 42 |
| 60 | 0 | 15 27 89 | 15 78 82 | 16 04 28 | 16 29 75 | 16 55 21 | 16 80 68 | 17 06 14 | 17 31 61 | 17 57 07 |
| 70 | 0 | 17 82 54 | 18 33 47 | 18 58 93 | 18 84 40 | 19 09 86 | 19 35 33 | 19 60 79 | 19 86 26 | 20 11 72 |
| 80 | 0 | 20 37 18 | 20 88 11 | 21 13 57 | 21 39 04 | 21 64 50 | 21 89 97 | 22 15 43 | 22 40 90 | 22 66 36 |
| 90 | 0 | 22 91 83 | 23 42 76 | 23 68 22 | 23 93 69 | 24 19 15 | 24 44 62 | 24 70 08 | 24 95 55 | 25 21 01 |
| 100 | 0 | 25 46 48 | 25 97 41 | 26 22 87 | 26 48 34 | 26 73 80 | 26 99 27 | 27 24 73 | 27 50 20 | 27 75 66 |

R. = 120

R. = 125

R. = 130 (R = 13 及 1300 兩用)

| Boys- Age | 1 | | 2 | | 3 | | 4 | | 5 | | 6 | | 7 | | 8 | | 9 | |
|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | ° | ' | ° | ' | ° | ' | ° | ' | ° | ' | ° | ' | ° | ' | ° | ' | ° | ' |
| 00 | — | 24 49 | — | 48 97 | — | 78 46 | — | 97 94 | — | 1 22 43 | — | 1 46 91 | — | 1 71 40 | — | 1 95 88 | — | 2 20 37 |
| 10 | 2 44 85 | 2 69 34 | 2 93 82 | 3 18 31 | 3 42 79 | 3 67 28 | 3 81 76 | 3 95 73 | 3 67 28 | 3 67 28 | 3 91 76 | 3 96 62 | 4 16 25 | 4 16 25 | 4 40 73 | 4 40 73 | 4 65 22 | 4 65 22 |
| 20 | 4 39 71 | 5 14 20 | 5 38 68 | 5 63 17 | 5 87 65 | 6 12 14 | 6 36 62 | 6 61 11 | 6 12 14 | 6 12 14 | 6 31 47 | 6 56 99 | 6 81 47 | 6 61 11 | 6 85 59 | 6 85 59 | 7 10 08 | 7 10 08 |
| 30 | 7 34 56 | 7 59 05 | 7 83 53 | 8 08 02 | 8 32 50 | 8 57 36 | 8 81 47 | 8 52 50 | 8 56 99 | 8 56 99 | 8 81 47 | 9 05 96 | 9 05 96 | 9 05 96 | 9 30 44 | 9 30 44 | 9 54 93 | 9 54 93 |
| 40 | 9 79 41 | 10 28 38 | 10 52 87 | 10 77 36 | 11 01 84 | 11 26 32 | 11 50 81 | 11 75 29 | 11 01 84 | 11 01 84 | 11 26 32 | 11 50 81 | 11 50 81 | 11 50 81 | 11 75 29 | 11 75 29 | 11 99 78 | 11 99 78 |
| 50 | 12 24 27 | 12 48 76 | 12 73 24 | 12 97 73 | 13 22 21 | 13 46 70 | 13 71 18 | 13 95 67 | 13 46 70 | 13 46 70 | 13 71 18 | 13 95 67 | 13 95 67 | 13 95 67 | 14 20 16 | 14 20 16 | 14 44 64 | 14 44 64 |
| 60 | 14 69 12 | 14 93 61 | 15 18 09 | 15 42 58 | 15 67 06 | 15 91 55 | 16 16 08 | 16 40 52 | 15 91 55 | 15 91 55 | 16 16 08 | 16 40 52 | 16 40 52 | 16 40 52 | 16 65 00 | 16 65 00 | 16 89 49 | 16 89 49 |
| 70 | 17 13 98 | 17 38 47 | 17 62 95 | 17 87 44 | 18 11 32 | 18 36 41 | 18 60 89 | 18 85 38 | 18 36 41 | 18 36 41 | 18 60 89 | 18 85 38 | 18 85 38 | 18 85 38 | 19 09 86 | 19 09 86 | 19 34 36 | 19 34 36 |
| 80 | 19 58 88 | 19 83 32 | 20 07 80 | 20 32 29 | 20 56 77 | 20 81 26 | 21 05 74 | 21 30 23 | 20 81 26 | 20 81 26 | 21 05 74 | 21 30 23 | 21 30 23 | 21 30 23 | 21 54 71 | 21 54 71 | 21 79 20 | 21 79 20 |
| 90 | 22 03 68 | 22 28 17 | 22 52 65 | 22 77 14 | 23 01 62 | 23 26 11 | 23 50 59 | 23 75 08 | 23 26 11 | 23 26 11 | 23 50 59 | 23 75 08 | 23 75 08 | 23 75 08 | 23 99 56 | 23 99 56 | 24 24 06 | 24 24 06 |
| 100 | 24 48 54 | 24 73 03 | 24 97 51 | 25 22 00 | 25 46 48 | 25 70 97 | 25 95 45 | 26 19 94 | 25 70 97 | 25 70 97 | 25 95 45 | 26 19 94 | 26 19 94 | 26 19 94 | 26 44 42 | 26 44 42 | 26 68 91 | 26 68 91 |

R. = 130

R. = 135

| Boys- Age | 1 | | 2 | | 3 | | 4 | | 5 | | 6 | | 7 | | 8 | | 9 | |
|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | ° | ' | ° | ' | ° | ' | ° | ' | ° | ' | ° | ' | ° | ' | ° | ' | ° | ' |
| 00 | — | 23 58 | — | 47 16 | — | 70 74 | — | 94 31 | — | 1 17 89 | — | 1 41 47 | — | 1 65 05 | — | 1 88 68 | — | 2 12 21 |
| 10 | 2 35 78 | 2 59 36 | 2 82 94 | 2 82 94 | 3 06 52 | 3 31 09 | 3 30 09 | 3 55 88 | 3 53 67 | 3 53 67 | 3 77 25 | 3 77 25 | 4 00 83 | 4 00 83 | 4 24 41 | 4 24 41 | 4 47 99 | 4 47 99 |
| 20 | 4 71 57 | 4 95 15 | 5 18 78 | 5 42 31 | 5 65 88 | 5 89 46 | 5 65 88 | 6 01 66 | 5 89 46 | 5 89 46 | 6 13 04 | 6 13 04 | 6 36 62 | 6 36 62 | 6 60 20 | 6 60 20 | 6 83 78 | 6 83 78 |
| 30 | 7 07 35 | 7 30 93 | 7 54 51 | 7 78 09 | 8 01 66 | 8 25 24 | 8 01 66 | 8 25 24 | 8 25 24 | 8 25 24 | 8 48 82 | 8 48 82 | 8 72 40 | 8 72 40 | 8 96 98 | 8 96 98 | 9 19 56 | 9 19 56 |
| 40 | 9 43 14 | 9 66 72 | 9 90 30 | 10 13 88 | 10 37 45 | 10 61 03 | 10 37 45 | 10 61 03 | 10 61 03 | 10 61 03 | 10 84 61 | 10 84 61 | 11 08 19 | 11 08 19 | 11 31 77 | 11 31 77 | 11 55 35 | 11 55 35 |
| 50 | 11 78 93 | 12 02 51 | 12 26 09 | 12 49 67 | 12 73 24 | 12 96 82 | 12 73 24 | 12 96 82 | 12 96 82 | 12 96 82 | 13 20 40 | 13 20 40 | 13 43 98 | 13 43 98 | 13 67 56 | 13 67 56 | 13 91 14 | 13 91 14 |
| 60 | 14 14 71 | 14 38 29 | 14 61 87 | 14 85 45 | 15 09 02 | 15 32 60 | 15 09 02 | 15 32 60 | 15 32 60 | 15 32 60 | 15 56 18 | 15 56 18 | 15 79 76 | 15 79 76 | 16 03 34 | 16 03 34 | 16 26 92 | 16 26 92 |
| 70 | 16 50 50 | 16 74 08 | 16 97 66 | 17 21 24 | 17 44 81 | 17 68 39 | 17 44 81 | 17 68 39 | 17 68 39 | 17 68 39 | 17 91 97 | 17 91 97 | 18 15 55 | 18 15 55 | 18 39 13 | 18 39 13 | 18 62 71 | 18 62 71 |
| 80 | 18 36 28 | 19 09 86 | 19 33 44 | 19 57 02 | 19 80 59 | 20 04 17 | 19 80 59 | 20 04 17 | 20 04 17 | 20 04 17 | 20 27 75 | 20 27 75 | 20 51 33 | 20 51 33 | 20 74 91 | 20 74 91 | 20 98 49 | 20 98 49 |
| 90 | 21 22 06 | 21 45 64 | 21 69 22 | 21 92 80 | 22 16 37 | 22 39 95 | 22 16 37 | 22 39 95 | 22 39 95 | 22 39 95 | 22 63 53 | 22 63 53 | 22 87 11 | 22 87 11 | 23 10 69 | 23 10 69 | 23 34 27 | 23 34 27 |
| 100 | 23 57 85 | 23 81 43 | 24 05 01 | 24 28 59 | 24 52 16 | 24 75 74 | 24 52 16 | 24 75 74 | 24 75 74 | 24 75 74 | 24 99 32 | 24 99 32 | 25 22 90 | 25 22 90 | 25 46 48 | 25 46 48 | 25 70 06 | 25 70 06 |

R. = 135

R. = 140

R. = 145

R. = 140 (R. = 14 及 140 兩用)

| Bogen- länge | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-----------------|---|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 00 | 0 | ° 22 74 | ° 45 47 | ° 68 21 | ° 90 95 | ° 1 13 08 | ° 1 36 42 | ° 1 59 16 | ° 1 81 89 | ° 2 04 63 |
| 10 | 0 | ° 2 50 10 | ° 2 72 83 | ° 2 95 57 | ° 3 18 31 | ° 3 41 04 | ° 3 63 78 | ° 3 86 52 | ° 4 09 25 | ° 4 31 98 |
| 20 | 0 | ° 4 77 47 | ° 5 00 20 | ° 5 22 94 | ° 5 45 68 | ° 5 68 41 | ° 5 91 15 | ° 6 13 89 | ° 6 36 62 | ° 6 59 36 |
| 30 | 0 | ° 7 04 83 | ° 7 27 56 | ° 7 50 30 | ° 7 73 04 | ° 7 95 77 | ° 8 18 51 | ° 8 41 25 | ° 8 63 98 | ° 8 86 72 |
| 40 | 0 | ° 9 32 19 | ° 9 54 92 | ° 9 77 66 | ° 10 00 40 | ° 10 23 13 | ° 10 45 87 | ° 10 68 61 | ° 10 91 34 | ° 11 14 08 |
| 50 | 0 | ° 11 59 56 | ° 11 82 29 | ° 12 05 03 | ° 12 27 77 | ° 12 50 50 | ° 12 73 24 | ° 12 95 98 | ° 13 18 71 | ° 13 41 45 |
| 60 | 0 | ° 13 86 92 | ° 14 09 65 | ° 14 32 39 | ° 14 55 13 | ° 14 77 86 | ° 15 00 60 | ° 15 23 34 | ° 15 46 07 | ° 15 68 81 |
| 70 | 0 | ° 16 14 29 | ° 16 37 02 | ° 16 59 76 | ° 17 22 50 | ° 17 45 23 | ° 17 67 97 | ° 17 50 71 | ° 17 73 44 | ° 17 96 18 |
| 80 | 0 | ° 18 41 65 | ° 18 64 38 | ° 18 87 12 | ° 19 09 86 | ° 19 32 59 | ° 19 55 33 | ° 19 78 07 | ° 20 00 80 | ° 20 23 54 |
| 90 | 0 | ° 20 69 01 | ° 20 91 74 | ° 21 14 48 | ° 21 37 22 | ° 21 59 95 | ° 21 82 69 | ° 22 05 43 | ° 22 28 16 | ° 22 50 90 |
| 100 | 0 | ° 22 96 38 | ° 23 19 11 | ° 23 41 85 | ° 23 64 59 | ° 23 87 32 | ° 24 10 06 | ° 24 32 80 | ° 24 55 53 | ° 24 78 27 |

R. = 140

R. = 145 (R. = 14.5 及 1450 兩用)

| Bogen- länge | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-----------------|---|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 00 | 0 | ° 21 95 | ° 43 91 | ° 65 86 | ° 87 81 | ° 1 09 76 | ° 1 31 71 | ° 1 53 67 | ° 1 75 62 | ° 1 97 57 |
| 10 | 0 | ° 2 41 47 | ° 2 63 43 | ° 2 85 38 | ° 3 07 33 | ° 3 29 28 | ° 3 51 23 | ° 3 73 19 | ° 3 95 14 | ° 4 17 09 |
| 20 | 0 | ° 4 61 00 | ° 4 82 96 | ° 5 04 91 | ° 5 26 86 | ° 5 48 81 | ° 5 70 76 | ° 5 92 72 | ° 6 14 67 | ° 6 36 62 |
| 30 | 0 | ° 6 80 52 | ° 7 02 48 | ° 7 24 43 | ° 7 46 38 | ° 7 68 33 | ° 7 90 28 | ° 8 12 24 | ° 8 34 19 | ° 8 56 14 |
| 40 | 0 | ° 9 00 04 | ° 9 22 00 | ° 9 43 95 | ° 9 65 90 | ° 9 87 85 | ° 10 09 80 | ° 10 31 76 | ° 10 53 71 | ° 10 75 66 |
| 50 | 0 | ° 11 19 57 | ° 11 41 53 | ° 11 63 48 | ° 11 85 43 | ° 12 07 38 | ° 12 29 33 | ° 12 51 29 | ° 12 73 24 | ° 12 95 19 |
| 60 | 0 | ° 13 39 09 | ° 13 61 05 | ° 13 83 00 | ° 14 04 95 | ° 14 26 90 | ° 14 48 85 | ° 14 70 81 | ° 14 92 76 | ° 15 14 71 |
| 70 | 0 | ° 15 58 62 | ° 16 20 58 | ° 16 42 53 | ° 16 64 48 | ° 16 86 43 | ° 17 08 38 | ° 17 30 34 | ° 17 52 29 | ° 18 14 24 |
| 80 | 0 | ° 17 78 14 | ° 18 00 10 | ° 18 22 05 | ° 18 44 00 | ° 18 65 95 | ° 18 87 90 | ° 19 09 86 | ° 19 31 81 | ° 19 53 76 |
| 90 | 0 | ° 19 97 06 | ° 20 19 02 | ° 20 41 57 | ° 20 63 52 | ° 20 85 47 | ° 21 07 42 | ° 21 29 38 | ° 21 51 33 | ° 21 73 28 |
| 100 | 0 | ° 22 17 19 | ° 22 39 15 | ° 22 61 10 | ° 22 83 05 | ° 23 05 00 | ° 23 26 95 | ° 23 48 91 | ° 23 70 86 | ° 23 92 81 |

R. = 145

R. = 150

R. = 160

R. = 150 (R = 15 及 1500 兩用)

| Page- Line | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 00 | ° | " | ° | ° | ° | ° | ° | ° | ° | ° |
| 10 | 2 12 21 | 2 33 43 | 4 42 44 | 2 75 87 | 84 88 | 1 06 10 | 1 27 32 | 1 48 55 | 1 69 77 | 1 90 98 |
| 20 | 4 24 41 | 4 46 63 | 4 66 85 | 4 88 07 | 5 09 29 | 3 18 31 | 3 39 53 | 3 60 76 | 3 81 98 | 4 03 20 |
| 30 | 6 36 62 | 6 57 84 | 6 79 06 | 7 00 28 | 7 21 50 | 5 30 51 | 5 51 73 | 5 72 96 | 5 94 18 | 6 15 40 |
| 40 | 8 48 83 | 8 70 05 | 8 91 27 | 9 12 49 | 9 33 71 | 7 42 72 | 7 63 94 | 7 85 17 | 8 06 39 | 8 27 61 |
| 50 | 10 61 03 | 10 82 25 | 11 03 47 | 11 24 69 | 11 45 91 | 11 67 13 | 11 88 35 | 12 09 58 | 12 30 80 | 12 52 02 |
| 60 | 12 73 24 | 12 94 46 | 13 15 68 | 13 36 90 | 13 58 12 | 13 79 34 | 14 00 56 | 14 21 79 | 14 43 01 | 14 64 23 |
| 70 | 14 85 45 | 15 06 67 | 15 27 89 | 15 49 11 | 15 70 33 | 15 91 55 | 16 12 77 | 16 34 00 | 16 55 22 | 16 76 44 |
| 80 | 16 97 66 | 17 18 88 | 17 40 10 | 17 61 32 | 17 82 54 | 18 03 76 | 18 24 98 | 18 46 21 | 18 67 43 | 18 88 65 |
| 90 | 19 09 87 | 19 31 09 | 19 52 31 | 19 73 53 | 19 94 75 | 20 15 97 | 20 37 19 | 20 58 42 | 20 79 64 | 21 00 86 |
| 100 | 21 22 07 | 21 43 29 | 21 64 51 | 21 85 73 | 22 06 95 | 22 28 17 | 22 49 39 | 22 70 62 | 22 91 84 | 23 13 06 |

R. = 160 (R = 16 及 1600 兩用)

| Page- Line | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 00 | ° | " | ° | ° | ° | ° | ° | ° | ° | ° |
| 10 | 1 98 94 | 2 18 83 | 3 39 79 | 4 59 68 | 79 58 | 1 19 37 | 1 39 26 | 1 59 16 | 1 79 06 | 1 99 05 |
| 20 | 3 97 89 | 4 17 78 | 4 37 68 | 4 57 57 | 2 78 52 | 2 98 41 | 3 18 31 | 3 38 20 | 3 58 10 | 3 77 99 |
| 30 | 5 96 83 | 6 16 72 | 6 36 62 | 6 56 51 | 4 76 47 | 4 97 36 | 5 17 26 | 5 37 15 | 5 57 05 | 5 76 94 |
| 40 | 7 95 77 | 8 15 66 | 8 35 56 | 8 55 45 | 6 76 41 | 6 96 30 | 7 16 20 | 7 36 09 | 7 55 99 | 7 75 88 |
| 50 | 9 94 72 | 10 14 61 | 10 34 51 | 10 54 40 | 8 75 35 | 8 96 24 | 9 16 14 | 9 36 03 | 9 54 93 | 9 74 82 |
| 60 | 11 93 66 | 12 13 55 | 12 33 45 | 12 53 34 | 10 74 30 | 10 94 19 | 11 14 09 | 11 33 98 | 11 53 88 | 11 73 77 |
| 70 | 13 92 61 | 14 12 50 | 14 32 40 | 14 52 29 | 12 73 24 | 12 93 13 | 13 13 03 | 13 32 92 | 13 52 82 | 13 72 71 |
| 80 | 15 91 55 | 16 11 44 | 16 31 34 | 16 51 23 | 14 72 19 | 14 92 08 | 15 11 98 | 15 31 87 | 15 51 77 | 15 71 66 |
| 90 | 17 90 49 | 18 10 38 | 18 30 28 | 18 50 17 | 16 71 13 | 16 91 02 | 17 10 92 | 17 30 81 | 17 50 71 | 17 70 60 |
| 100 | 19 89 44 | 20 09 33 | 20 29 23 | 20 49 12 | 18 70 07 | 18 89 96 | 19 09 86 | 19 29 75 | 19 49 65 | 19 69 54 |
| | | | | | 20 69 02 | 20 88 91 | 21 08 81 | 21 28 70 | 21 48 60 | 21 68 49 |

R. = 150

R. = 160

R. = 170

R. = 180

R. = 170 (R = 17 及 1700 兩用)

| loga- base | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---------------|---|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|
| 00 | 0 | 18 72 | 0 37 45 | 0 56 17 | 0 74 30 | 0 98 02 | 0 12 35 | 0 1 31 07 | 0 1 49 79 | 0 1 68 52 |
| 10 | 0 | 2 05 96 | 2 24 69 | 2 43 41 | 2 62 14 | 2 80 86 | 2 99 59 | 3 18 31 | 3 37 03 | 3 55 76 |
| 20 | 0 | 3 93 20 | 4 11 93 | 4 30 65 | 4 49 38 | 4 68 10 | 4 86 83 | 5 05 55 | 5 24 27 | 5 43 00 |
| 30 | 0 | 5 80 44 | 5 99 17 | 6 17 89 | 6 36 62 | 6 55 34 | 6 74 07 | 6 92 79 | 7 11 51 | 7 30 24 |
| 40 | 0 | 7 67 63 | 7 86 41 | 8 05 13 | 8 23 86 | 8 42 58 | 8 61 31 | 8 80 03 | 8 98 75 | 9 17 48 |
| 50 | 0 | 9 54 93 | 9 73 66 | 9 92 38 | 10 11 11 | 10 29 83 | 10 48 56 | 10 67 28 | 10 86 00 | 11 04 73 |
| 60 | 0 | 11 23 45 | 11 60 90 | 11 79 62 | 11 98 35 | 12 17 07 | 12 35 80 | 12 54 52 | 12 73 24 | 12 91 97 |
| 70 | 0 | 13 10 69 | 13 48 14 | 13 66 86 | 13 85 59 | 14 04 31 | 14 23 04 | 14 41 76 | 14 60 48 | 14 79 21 |
| 80 | 0 | 14 97 93 | 15 35 38 | 15 54 10 | 15 72 83 | 15 91 55 | 16 10 28 | 16 29 00 | 16 47 72 | 16 66 45 |
| 90 | 0 | 16 85 17 | 17 22 62 | 17 41 34 | 17 60 07 | 17 78 79 | 17 97 52 | 18 16 24 | 18 34 96 | 18 53 69 |
| 100 | 0 | 18 72 41 | 19 09 86 | 19 28 58 | 19 47 31 | 19 66 03 | 19 84 76 | 20 03 48 | 20 22 20 | 20 40 93 |

R. = 180 (R = 18 及 1800 兩用)

| loga- base | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---------------|---|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|
| 00 | 0 | 17 68 | 0 35 37 | 0 53 05 | 0 70 74 | 0 88 42 | 0 1 06 10 | 0 1 23 79 | 0 1 41 47 | 0 1 59 16 |
| 10 | 0 | 1 94 52 | 2 12 21 | 2 29 89 | 2 47 58 | 2 65 26 | 2 82 94 | 3 00 63 | 3 18 31 | 3 36 00 |
| 20 | 0 | 3 71 36 | 3 89 05 | 4 06 73 | 4 24 42 | 4 42 10 | 4 59 78 | 4 77 47 | 4 95 15 | 5 12 84 |
| 30 | 0 | 5 48 20 | 5 65 89 | 5 83 57 | 6 01 26 | 6 18 94 | 6 36 62 | 6 54 31 | 6 71 99 | 6 89 68 |
| 40 | 0 | 7 25 04 | 7 42 73 | 7 60 41 | 7 78 10 | 7 95 78 | 8 13 46 | 8 31 15 | 8 48 83 | 8 66 52 |
| 50 | 0 | 9 01 87 | 9 19 56 | 9 37 24 | 9 54 93 | 9 72 61 | 9 90 29 | 10 07 98 | 10 25 66 | 10 43 35 |
| 60 | 0 | 10 78 71 | 10 96 40 | 11 14 08 | 11 31 77 | 11 49 45 | 11 67 13 | 11 84 82 | 12 02 50 | 12 20 19 |
| 70 | 0 | 12 55 55 | 12 73 24 | 12 90 92 | 13 08 61 | 13 26 29 | 13 43 97 | 13 61 66 | 13 79 34 | 13 97 03 |
| 80 | 0 | 14 32 39 | 14 50 08 | 14 67 76 | 14 85 45 | 15 03 13 | 15 20 81 | 15 38 50 | 15 56 18 | 16 13 87 |
| 90 | 0 | 16 09 23 | 16 26 92 | 16 44 60 | 16 62 29 | 16 79 97 | 16 97 65 | 17 15 34 | 17 33 02 | 17 50 71 |
| 100 | 0 | 17 86 07 | 18 03 76 | 18 21 44 | 18 39 13 | 18 56 81 | 18 74 49 | 18 92 18 | 19 09 86 | 19 27 55 |

R. = 170

R. = 180

R. = 190

R. = 200

R. = 190 (R = 19 及 1900 兩用)

| Bogen- länge | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-----------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 00 | — | 16 75 | 33 51 | 50 26 | 67 01 | 83 77 | 1 09 52 | 1 17 27 | 1 34 02 | 1 50 78 |
| 10 | 1 67 53 | 1 84 28 | 2 01 04 | 2 17 79 | 2 34 54 | 2 51 30 | 2 68 05 | 2 84 80 | 3 01 55 | 3 18 31 |
| 20 | 3 35 06 | 3 51 31 | 4 08 57 | 4 25 32 | 4 42 07 | 4 58 33 | 4 35 58 | 4 52 33 | 4 69 08 | 4 85 84 |
| 30 | 5 02 59 | 5 19 34 | 5 36 10 | 5 52 35 | 6 09 10 | 6 25 36 | 6 03 11 | 6 19 36 | 6 36 11 | 6 53 37 |
| 40 | 6 70 12 | 6 86 37 | 7 03 13 | 7 20 38 | 7 37 13 | 7 53 39 | 7 70 64 | 7 87 39 | 8 04 14 | 8 20 90 |
| 50 | 8 37 66 | 8 54 41 | 9 11 17 | 9 27 42 | 9 44 17 | 9 60 42 | 9 33 18 | 9 54 93 | 9 71 68 | 9 88 44 |
| 60 | 10 05 19 | 10 21 94 | 10 38 70 | 10 55 45 | 11 12 20 | 11 28 95 | 11 05 71 | 11 22 46 | 11 39 21 | 11 55 97 |
| 70 | 11 72 72 | 11 89 47 | 12 06 23 | 12 22 98 | 12 39 73 | 12 56 49 | 12 73 24 | 12 89 99 | 13 06 74 | 13 23 50 |
| 80 | 13 40 25 | 13 57 00 | 14 13 76 | 14 30 51 | 14 47 26 | 15 04 01 | 14 40 77 | 14 57 52 | 15 14 27 | 15 31 03 |
| 90 | 15 07 78 | 15 24 53 | 15 41 29 | 15 58 04 | 16 14 79 | 16 31 54 | 16 08 30 | 16 25 05 | 16 41 80 | 16 58 56 |
| 100 | 16 75 31 | 16 92 06 | 17 08 82 | 17 25 57 | 17 42 32 | 17 59 08 | 17 75 83 | 17 92 58 | 18 09 33 | 18 26 09 |

R. = 190

R. = 200 (R = 20 及 2000 兩用)

| Bogen- länge | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-----------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 00 | — | 15 92 | 31 83 | 47 75 | 63 66 | 79 53 | 95 49 | 1 11 41 | 1 27 32 | 1 43 24 |
| 10 | 1 59 16 | 1 75 08 | 1 90 99 | 2 06 91 | 2 22 82 | 2 38 74 | 2 54 65 | 2 70 57 | 2 86 48 | 3 02 40 |
| 20 | 3 18 31 | 3 34 23 | 3 50 14 | 4 06 06 | 4 21 97 | 4 37 89 | 4 53 80 | 5 09 72 | 5 25 63 | 5 41 55 |
| 30 | 4 77 47 | 4 93 39 | 5 09 30 | 5 25 22 | 5 41 13 | 5 57 05 | 6 12 96 | 6 28 88 | 6 44 79 | 6 60 71 |
| 40 | 6 36 62 | 6 52 54 | 7 08 46 | 7 24 37 | 7 40 28 | 7 56 20 | 8 12 11 | 8 28 03 | 8 43 94 | 8 59 86 |
| 50 | 7 95 78 | 8 11 70 | 8 27 61 | 8 43 53 | 8 59 44 | 9 15 36 | 9 31 27 | 9 47 19 | 9 63 10 | 9 79 02 |
| 60 | 9 54 93 | 9 70 85 | 9 86 76 | 10 02 68 | 10 18 59 | 10 34 51 | 10 50 42 | 10 66 34 | 10 82 25 | 10 98 17 |
| 70 | 11 14 09 | 11 30 01 | 11 45 92 | 11 61 84 | 11 77 75 | 11 93 67 | 12 09 58 | 12 25 50 | 12 41 41 | 12 57 33 |
| 80 | 12 73 24 | 12 89 16 | 13 05 07 | 13 20 99 | 13 36 90 | 13 52 82 | 14 08 73 | 14 24 65 | 14 40 56 | 14 56 48 |
| 90 | 14 32 40 | 14 48 32 | 14 64 23 | 14 80 15 | 14 96 06 | 15 11 98 | 15 27 90 | 15 43 81 | 15 59 72 | 16 15 64 |
| 100 | 15 91 55 | 16 07 47 | 16 23 38 | 16 39 30 | 16 55 21 | 17 11 13 | 17 27 04 | 17 42 96 | 17 58 87 | 18 14 79 |

R. = 200

R. = 210

R. = 220

R. = 210 (R = 21 及 2100 兩用)

| Bogus- line | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 00 | 1 51 58 | 15 16 | 30 32 | 45 47 | 60 63 | 75 79 | 90 95 | 1 06 10 | 1 21 26 | 1 36 42 |
| 10 | 3 03 15 | 1 66 74 | 1 81 90 | 1 97 05 | 2 12 21 | 2 27 37 | 2 42 53 | 2 57 68 | 2 72 84 | 2 88 00 |
| 20 | 4 54 73 | 3 18 31 | 3 33 47 | 3 48 62 | 3 63 78 | 3 78 94 | 3 94 10 | 4 09 25 | 4 24 41 | 4 39 57 |
| 30 | 6 06 31 | 4 69 89 | 4 85 05 | 5 00 20 | 5 15 36 | 5 30 52 | 5 45 68 | 5 60 83 | 5 75 99 | 5 91 15 |
| 40 | 7 57 88 | 6 21 47 | 6 36 63 | 6 51 78 | 6 66 94 | 6 82 10 | 6 97 26 | 7 12 41 | 7 27 57 | 7 42 73 |
| 50 | 9 09 46 | 7 73 04 | 7 88 20 | 8 03 35 | 8 18 51 | 8 33 67 | 8 48 83 | 8 63 98 | 8 79 14 | 8 94 30 |
| 60 | 10 61 03 | 9 24 62 | 9 39 78 | 9 54 93 | 9 70 09 | 9 85 25 | 10 00 41 | 10 15 56 | 10 30 72 | 10 45 88 |
| 70 | 12 12 61 | 10 76 19 | 10 91 35 | 11 06 50 | 11 21 66 | 11 36 82 | 11 51 98 | 11 67 13 | 11 82 29 | 11 97 45 |
| 80 | 13 64 19 | 12 27 77 | 12 42 93 | 12 58 08 | 12 73 24 | 12 88 40 | 13 03 56 | 13 18 71 | 13 33 87 | 13 49 03 |
| 90 | 15 15 76 | 13 79 35 | 13 94 51 | 14 09 66 | 14 24 82 | 14 39 98 | 14 55 14 | 14 70 29 | 14 85 45 | 15 00 61 |
| 100 | | 15 30 82 | 15 46 08 | 15 61 23 | 15 76 39 | 15 91 55 | 16 06 71 | 16 21 86 | 16 37 02 | 16 52 18 |

R. = 220 (R = 22 及 2200 兩用)

| Bogus- line | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 00 | 1 44 69 | 14 47 | 28 94 | 43 41 | 57 88 | 72 84 | 86 81 | 1 01 28 | 1 16 75 | 1 30 22 |
| 10 | 2 89 37 | 1 59 16 | 1 73 63 | 1 84 10 | 2 02 57 | 2 17 03 | 2 31 50 | 2 45 97 | 2 60 44 | 2 74 91 |
| 20 | 4 34 06 | 3 03 84 | 3 18 31 | 3 32 78 | 3 47 25 | 3 61 71 | 3 76 18 | 3 90 65 | 4 05 12 | 4 19 59 |
| 30 | 5 78 75 | 4 48 53 | 4 63 00 | 4 77 47 | 4 91 94 | 5 06 40 | 5 20 87 | 5 35 34 | 5 49 81 | 5 64 28 |
| 40 | 7 23 43 | 5 93 22 | 6 07 69 | 6 22 16 | 6 36 63 | 6 51 09 | 6 65 56 | 6 80 03 | 6 94 50 | 7 08 97 |
| 50 | 8 68 12 | 7 37 90 | 7 52 37 | 7 66 84 | 7 81 31 | 7 95 77 | 8 10 24 | 8 24 71 | 8 39 18 | 8 53 65 |
| 60 | 10 12 80 | 8 82 59 | 8 97 06 | 9 11 53 | 9 26 00 | 9 40 46 | 9 54 93 | 9 69 40 | 9 83 87 | 9 98 34 |
| 70 | 11 57 49 | 10 27 27 | 10 41 74 | 10 56 21 | 10 70 68 | 10 85 14 | 10 99 61 | 11 14 08 | 11 28 55 | 11 43 02 |
| 80 | 13 02 18 | 11 71 96 | 11 86 43 | 12 00 90 | 12 15 37 | 12 29 83 | 12 44 30 | 12 58 77 | 12 73 24 | 12 87 71 |
| 90 | 14 46 86 | 13 16 65 | 13 31 12 | 13 45 59 | 13 60 06 | 13 74 52 | 13 88 99 | 14 03 46 | 14 17 93 | 14 32 40 |
| 100 | | 14 61 33 | 14 75 80 | 14 90 27 | 15 04 74 | 15 19 20 | 15 33 67 | 15 48 14 | 15 62 61 | 15 77 08 |

R. = 210

R. = 220

R. = 230

R. = 240

R. = 230 (R = 23 及 2300 兩用)

| Digit | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|
| 00 | 0 | 13 84 | 0 27 68 | 0 41 52 | 0 55 36 | 0 69 20 | 0 83 04 | 0 96 88 | 0 1 10 72 | 0 1 24 56 |
| 10 | 1 38 40 | 1 52 24 | 1 66 08 | 1 79 92 | 1 93 76 | 2 07 60 | 2 21 44 | 2 35 28 | 2 49 12 | 2 62 96 |
| 20 | 2 76 79 | 2 90 63 | 3 04 47 | 3 18 31 | 3 32 15 | 3 45 99 | 3 59 83 | 3 73 67 | 3 87 51 | 4 01 35 |
| 30 | 4 15 19 | 4 29 08 | 4 42 87 | 4 56 71 | 4 70 55 | 4 84 39 | 4 98 23 | 5 12 07 | 5 25 91 | 5 39 75 |
| 40 | 5 53 59 | 5 67 43 | 5 81 27 | 5 95 11 | 6 08 95 | 6 22 79 | 6 36 63 | 6 50 47 | 6 64 31 | 6 78 15 |
| 50 | 6 91 98 | 7 05 82 | 7 19 66 | 7 33 50 | 7 47 34 | 7 61 18 | 7 75 02 | 7 88 86 | 8 02 70 | 8 16 54 |
| 60 | 8 30 38 | 8 44 22 | 8 58 06 | 8 71 90 | 8 85 74 | 8 99 58 | 9 13 42 | 9 27 26 | 9 41 10 | 9 54 94 |
| 70 | 9 68 77 | 9 82 61 | 9 96 45 | 10 10 29 | 10 24 13 | 10 37 97 | 10 51 81 | 10 65 65 | 10 79 49 | 10 93 33 |
| 80 | 11 07 17 | 11 21 01 | 11 34 85 | 11 48 69 | 11 62 53 | 11 76 37 | 11 90 21 | 12 04 05 | 12 17 89 | 12 31 73 |
| 90 | 12 45 57 | 12 59 41 | 12 73 25 | 12 87 09 | 13 00 93 | 13 14 77 | 13 28 61 | 13 42 45 | 13 56 29 | 13 70 13 |
| 100 | 13 83 96 | 13 97 80 | 14 11 64 | 14 25 48 | 14 39 32 | 14 53 16 | 14 67 00 | 14 80 84 | 14 94 68 | 15 08 52 |

R. = 240 (R = 24 及 2400 兩用)

| Digit | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|
| 00 | 0 | 13 26 | 0 26 53 | 0 39 79 | 0 53 05 | 0 66 31 | 0 79 58 | 0 92 84 | 0 1 06 10 | 0 1 19 37 |
| 10 | 1 32 63 | 1 45 89 | 1 59 16 | 1 72 42 | 1 85 68 | 1 98 94 | 2 12 21 | 2 25 47 | 2 38 73 | 2 52 00 |
| 20 | 2 65 26 | 2 78 52 | 2 91 79 | 3 05 05 | 3 18 31 | 3 31 57 | 3 44 84 | 3 58 10 | 3 71 36 | 3 84 63 |
| 30 | 3 97 89 | 4 11 15 | 4 24 42 | 4 37 68 | 4 50 94 | 4 64 20 | 4 77 47 | 4 90 73 | 5 03 99 | 5 17 26 |
| 40 | 5 30 52 | 5 43 78 | 5 57 05 | 5 70 31 | 5 83 57 | 5 96 83 | 6 10 10 | 6 23 36 | 6 36 62 | 6 49 89 |
| 50 | 6 63 15 | 6 76 41 | 6 89 68 | 7 02 94 | 7 16 20 | 7 29 46 | 7 42 73 | 7 55 99 | 7 69 25 | 7 82 52 |
| 60 | 7 95 78 | 8 09 04 | 8 22 31 | 8 35 57 | 8 48 83 | 8 62 09 | 8 75 36 | 8 88 62 | 9 01 88 | 9 15 15 |
| 70 | 9 28 41 | 9 41 67 | 9 54 94 | 9 68 20 | 9 81 46 | 9 94 72 | 10 07 99 | 10 21 25 | 10 34 51 | 10 47 78 |
| 80 | 10 61 04 | 10 74 30 | 10 87 57 | 11 00 83 | 11 14 09 | 11 27 35 | 11 40 62 | 11 53 88 | 11 67 14 | 11 80 41 |
| 90 | 11 93 07 | 12 06 33 | 12 19 59 | 12 33 46 | 12 46 72 | 12 59 98 | 12 73 25 | 12 86 51 | 12 99 77 | 13 13 04 |
| 100 | 13 26 29 | 13 39 55 | 13 52 82 | 13 66 08 | 13 79 34 | 13 92 60 | 14 05 87 | 14 19 13 | 14 32 39 | 14 45 66 |

R. = 230

R. = 240

R. = 250

R. = 260

R. = 250 (R = 25 及 2500 兩用)

| Bogen- lage | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----------------|----|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 00 | 0 | 12 73 | 25 46 | 38 20 | 50 93 | 63 66 | 76 39 | 89 13 | 101 86 | 114 59 |
| 10 | 1 | 27 32 | 40 05 | 52 78 | 65 52 | 78 25 | 91 01 | 103 45 | 116 18 | 129 11 |
| 20 | 2 | 54 65 | 67 38 | 80 11 | 92 85 | 105 58 | 118 31 | 131 04 | 143 78 | 156 51 |
| 30 | 3 | 81 97 | 94 70 | 107 43 | 120 17 | 132 90 | 145 63 | 158 36 | 171 10 | 183 83 |
| 40 | 4 | 09 29 | 22 02 | 34 75 | 47 49 | 60 22 | 72 95 | 85 68 | 98 42 | 111 15 |
| 50 | 5 | 36 62 | 49 35 | 62 08 | 74 82 | 87 55 | 100 28 | 113 01 | 125 75 | 138 48 |
| 60 | 6 | 63 94 | 76 67 | 89 40 | 102 14 | 114 87 | 127 60 | 140 33 | 153 07 | 165 80 |
| 70 | 7 | 91 27 | 104 00 | 116 73 | 129 47 | 142 20 | 154 93 | 167 66 | 180 40 | 193 13 |
| 80 | 8 | 18 59 | 31 32 | 44 05 | 56 79 | 69 52 | 82 25 | 94 98 | 107 72 | 120 45 |
| 90 | 9 | 45 91 | 58 64 | 71 37 | 84 11 | 96 84 | 109 57 | 122 30 | 135 04 | 147 77 |
| 100 | 10 | 73 24 | 85 97 | 98 70 | 111 44 | 124 17 | 136 90 | 149 63 | 162 37 | 175 10 |

R. = 260 (R = 26 及 2600 兩用)

| Bogen- lage | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----------------|----|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 00 | 0 | 12 24 | 24 48 | 36 73 | 48 97 | 61 21 | 73 46 | 85 70 | 97 94 | 110 19 |
| 10 | 1 | 34 67 | 46 91 | 59 16 | 71 40 | 83 64 | 95 89 | 108 13 | 120 37 | 132 62 |
| 20 | 2 | 67 03 | 79 33 | 91 58 | 103 82 | 115 06 | 126 31 | 137 55 | 149 19 | 160 44 |
| 30 | 3 | 99 52 | 111 76 | 123 01 | 134 25 | 145 49 | 156 74 | 167 98 | 179 22 | 190 47 |
| 40 | 4 | 01 95 | 13 19 | 24 44 | 35 68 | 46 92 | 58 17 | 69 41 | 80 65 | 91 90 |
| 50 | 5 | 34 37 | 45 61 | 56 86 | 68 10 | 79 34 | 90 59 | 101 83 | 113 07 | 124 32 |
| 60 | 6 | 67 80 | 79 04 | 90 28 | 101 53 | 112 77 | 124 02 | 135 26 | 146 50 | 157 75 |
| 70 | 7 | 99 23 | 110 47 | 121 72 | 132 96 | 144 20 | 155 45 | 166 69 | 177 93 | 189 18 |
| 80 | 8 | 31 86 | 43 10 | 54 35 | 65 59 | 76 83 | 88 08 | 99 32 | 110 57 | 121 81 |
| 90 | 9 | 64 09 | 75 33 | 86 58 | 97 82 | 109 06 | 120 30 | 131 55 | 143 19 | 154 44 |
| 100 | 10 | 96 51 | 107 75 | 118 00 | 129 24 | 140 48 | 151 73 | 162 97 | 174 21 | 185 46 |

R. = 250

R. = 260 6

R. = 270

R. = 280

R. = 270 (R = 27 及 2700 兩用)

| Age | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 00 | 11 79 | 23 58 | 35 37 | 47 16 | 58 95 | 70 74 | 82 53 | 94 31 | 1 06 10 |
| 10 | 1 29 68 | 1 41 47 | 1 53 26 | 1 65 05 | 1 76 84 | 1 88 63 | 2 00 42 | 2 12 20 | 2 23 99 |
| 20 | 2 47 57 | 2 59 36 | 2 71 15 | 2 82 94 | 2 94 73 | 3 06 52 | 3 18 31 | 3 30 09 | 3 41 88 |
| 30 | 3 65 46 | 3 77 25 | 3 89 04 | 4 00 83 | 4 12 62 | 4 24 41 | 4 36 20 | 4 47 98 | 4 59 77 |
| 40 | 4 83 35 | 4 95 14 | 5 06 93 | 5 18 72 | 5 30 51 | 5 42 30 | 5 54 09 | 6 05 87 | 6 17 66 |
| 50 | 6 01 25 | 6 13 04 | 6 24 83 | 6 36 62 | 6 48 41 | 6 60 20 | 6 71 99 | 6 83 77 | 6 95 56 |
| 60 | 7 19 14 | 7 30 93 | 7 42 72 | 7 54 51 | 7 66 30 | 7 78 09 | 7 89 88 | 8 01 66 | 8 13 45 |
| 70 | 8 37 04 | 8 48 83 | 8 60 62 | 8 72 41 | 8 84 20 | 8 95 99 | 9 07 78 | 9 19 56 | 9 31 36 |
| 80 | 9 54 83 | 9 66 72 | 9 78 51 | 9 90 30 | 10 02 09 | 10 13 88 | 10 25 67 | 10 37 45 | 10 49 24 |
| 90 | 10 72 82 | 10 84 61 | 10 96 40 | 11 08 19 | 11 19 98 | 11 31 77 | 11 43 56 | 11 55 34 | 11 67 13 |
| 100 | 11 90 72 | 12 02 51 | 12 14 30 | 12 26 09 | 12 37 88 | 12 49 67 | 12 61 46 | 12 73 24 | 12 85 03 |

R. = 280 (R = 28 及 2800 兩用)

| Age | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 00 | 11 87 | 22 74 | 34 10 | 45 47 | 56 84 | 68 21 | 79 58 | 90 94 | 1 02 31 |
| 10 | 1 25 05 | 1 36 42 | 1 47 78 | 1 59 15 | 1 70 52 | 1 81 89 | 1 93 26 | 2 04 62 | 2 15 99 |
| 20 | 2 38 73 | 2 50 10 | 2 61 46 | 2 72 83 | 2 84 20 | 2 95 57 | 3 06 94 | 3 18 30 | 3 29 67 |
| 30 | 3 52 41 | 3 63 78 | 3 75 14 | 3 86 51 | 3 97 88 | 4 09 25 | 4 20 62 | 4 31 98 | 4 43 35 |
| 40 | 4 86 09 | 4 97 46 | 4 88 82 | 5 00 19 | 5 11 56 | 5 22 93 | 5 34 30 | 5 45 66 | 5 57 03 |
| 50 | 5 79 78 | 5 91 15 | 6 02 51 | 6 13 88 | 6 25 25 | 6 36 62 | 6 47 99 | 6 59 35 | 6 70 72 |
| 60 | 6 93 46 | 7 04 83 | 7 16 19 | 7 27 56 | 7 38 93 | 7 50 30 | 7 61 67 | 7 73 03 | 7 84 40 |
| 70 | 8 07 14 | 8 18 51 | 8 29 87 | 8 41 24 | 8 52 61 | 9 03 98 | 9 15 35 | 9 26 71 | 9 38 08 |
| 80 | 9 20 82 | 9 32 19 | 9 43 55 | 9 54 92 | 10 06 29 | 10 17 66 | 10 29 03 | 10 40 39 | 10 51 76 |
| 90 | 10 34 50 | 10 45 87 | 10 57 23 | 10 68 60 | 10 79 97 | 10 91 34 | 11 02 71 | 11 14 07 | 11 25 44 |
| 100 | 11 48 19 | 11 59 56 | 11 70 92 | 11 82 29 | 11 93 66 | 12 05 03 | 12 16 40 | 12 27 76 | 12 39 13 |

R. = 290

R. = 300

R. = 290 (R = 29 及 2900 兩用)

| Bogen- länge | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-----------------|----|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 00 | 0 | 10 98 | 21 95 | 32 93 | 43 90 | 54 88 | 65 86 | 76 83 | 87 81 | 98 79 |
| 10 | 1 | 20 74 | 31 71 | 42 69 | 53 66 | 64 64 | 75 62 | 86 59 | 97 57 | 08 55 |
| 20 | 2 | 30 50 | 41 47 | 52 45 | 63 42 | 74 40 | 85 38 | 96 35 | 07 33 | 18 31 |
| 30 | 3 | 40 26 | 51 23 | 62 21 | 73 18 | 84 16 | 95 14 | 06 11 | 17 09 | 28 07 |
| 40 | 4 | 50 02 | 60 99 | 71 97 | 82 94 | 93 92 | 04 90 | 15 87 | 26 85 | 37 83 |
| 50 | 5 | 59 79 | 70 76 | 81 74 | 92 71 | 03 69 | 14 67 | 25 64 | 36 62 | 47 60 |
| 60 | 6 | 68 55 | 80 52 | 91 50 | 02 47 | 13 45 | 24 43 | 35 40 | 46 38 | 57 36 |
| 70 | 7 | 78 31 | 90 28 | 01 26 | 12 23 | 23 21 | 34 19 | 45 16 | 56 14 | 67 12 |
| 80 | 8 | 88 07 | 99 04 | 11 02 | 21 99 | 32 97 | 43 95 | 54 92 | 65 90 | 76 88 |
| 90 | 9 | 98 83 | 10 80 | 20 78 | 31 75 | 42 73 | 53 71 | 64 68 | 75 66 | 86 64 |
| 100 | 10 | 08 60 | 19 57 | 30 55 | 41 52 | 52 50 | 63 48 | 74 45 | 85 43 | 96 41 |

R. = 300 (R = 30 及 3000 兩用)

| Bogen- länge | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-----------------|----|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 00 | 0 | 10 61 | 21 22 | 31 83 | 42 44 | 53 05 | 63 66 | 74 27 | 84 88 | 96 49 |
| 10 | 1 | 16 71 | 27 52 | 37 93 | 48 54 | 59 15 | 69 76 | 80 37 | 90 98 | 01 59 |
| 20 | 2 | 22 82 | 33 43 | 44 04 | 54 65 | 65 26 | 75 87 | 86 48 | 97 09 | 07 70 |
| 30 | 3 | 28 92 | 39 53 | 50 14 | 60 75 | 71 36 | 81 97 | 92 58 | 03 19 | 13 80 |
| 40 | 4 | 35 02 | 45 63 | 56 24 | 66 85 | 77 46 | 88 07 | 98 68 | 09 29 | 19 90 |
| 50 | 5 | 41 13 | 51 74 | 62 35 | 72 96 | 83 57 | 94 18 | 04 79 | 15 40 | 26 01 |
| 60 | 6 | 46 23 | 57 84 | 68 45 | 79 06 | 89 67 | 00 28 | 10 89 | 21 50 | 32 11 |
| 70 | 7 | 52 33 | 63 94 | 74 55 | 85 16 | 95 77 | 06 38 | 16 99 | 27 60 | 38 21 |
| 80 | 8 | 58 43 | 70 04 | 80 65 | 91 26 | 01 87 | 12 48 | 23 09 | 33 70 | 44 31 |
| 90 | 9 | 65 53 | 77 14 | 88 75 | 99 36 | 10 07 | 20 68 | 31 29 | 42 90 | 53 51 |
| 100 | 10 | 71 64 | 82 25 | 92 86 | 10 08 | 11 14 | 24 08 | 35 30 | 45 91 | 56 52 |

R. = 290

R. = 300

R. = 320

R. = 340

R. = 320 (R. = 32 及 3200 兩用)

| Begin-Base | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|------------|----|-------|----|-------|----|-------|----|-------|----|
| 00 | 0 | 19 89 | 0 | 39 79 | 0 | 49 74 | 0 | 69 68 | 0 |
| 10 | 1 | 19 36 | 1 | 39 26 | 1 | 49 21 | 1 | 69 05 | 1 |
| 20 | 2 | 18 83 | 2 | 38 73 | 2 | 48 68 | 2 | 68 52 | 2 |
| 30 | 3 | 18 30 | 3 | 38 20 | 3 | 48 15 | 3 | 68 04 | 3 |
| 40 | 4 | 17 77 | 4 | 37 67 | 4 | 47 62 | 4 | 67 51 | 4 |
| 50 | 5 | 17 25 | 5 | 37 15 | 5 | 47 10 | 5 | 66 99 | 5 |
| 60 | 6 | 16 72 | 6 | 36 62 | 6 | 46 57 | 6 | 66 46 | 6 |
| 70 | 7 | 16 19 | 7 | 36 09 | 7 | 46 04 | 7 | 65 93 | 7 |
| 80 | 8 | 15 66 | 8 | 35 56 | 8 | 45 51 | 8 | 65 40 | 8 |
| 90 | 9 | 15 13 | 9 | 35 03 | 9 | 44 98 | 9 | 64 87 | 9 |
| 100 | 10 | 14 61 | 10 | 34 51 | 10 | 44 46 | 10 | 64 35 | 10 |

R. = 340 (R. = 34 及 3400 兩用)

| Begin-Base | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|------------|---|-------|---|-------|---|-------|----|-------|----|
| 00 | 0 | 9 36 | 0 | 28 09 | 0 | 46 81 | 0 | 65 58 | 0 |
| 10 | 1 | 02 98 | 1 | 21 71 | 1 | 40 43 | 1 | 65 17 | 1 |
| 20 | 2 | 06 60 | 2 | 15 33 | 2 | 34 05 | 2 | 64 41 | 2 |
| 30 | 3 | 09 22 | 3 | 08 95 | 3 | 27 67 | 3 | 63 89 | 3 |
| 40 | 3 | 83 84 | 4 | 02 57 | 4 | 21 29 | 4 | 63 01 | 4 |
| 50 | 4 | 77 46 | 4 | 05 55 | 5 | 14 91 | 5 | 63 63 | 5 |
| 60 | 5 | 71 08 | 5 | 09 17 | 6 | 08 53 | 6 | 62 25 | 6 |
| 70 | 6 | 64 70 | 6 | 03 43 | 7 | 02 15 | 7 | 62 87 | 7 |
| 80 | 7 | 58 32 | 7 | 07 05 | 8 | 05 77 | 8 | 62 16 | 8 |
| 90 | 8 | 51 94 | 8 | 00 33 | 9 | 08 39 | 9 | 61 74 | 9 |
| 100 | 9 | 45 57 | 9 | 03 66 | 9 | 01 02 | 10 | 61 48 | 10 |

R. = 320

R. = 340

R. = 350

R. = 360

R. = 350 (R = 35 及 3500 兩用)

| Begin- lage | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----------------|-----|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 00 | ° - | ° 9 09 | ° 18 19 | ° 27 28 | ° 36 38 | ° 45 47 | ° 54 57 | ° 63 66 | ° 72 76 | ° 81 85 |
| 10 | - | - 1 00 04 | - 1 09 14 | - 1 18 23 | - 1 27 33 | - 1 36 42 | - 1 45 52 | - 1 54 61 | - 1 63 71 | - 1 72 80 |
| 20 | 1 | 1 81 89 | 2 00 08 | 2 09 17 | 2 18 27 | 2 27 36 | 2 36 46 | 2 45 55 | 2 54 65 | 2 63 74 |
| 30 | 2 | 2 72 84 | 2 91 03 | 3 00 12 | 3 09 22 | 3 18 31 | 3 27 41 | 3 36 50 | 3 45 60 | 3 54 69 |
| 40 | 3 | 3 63 79 | 3 81 98 | 3 91 07 | 4 00 17 | 4 09 26 | 4 18 36 | 4 27 45 | 4 36 55 | 4 45 64 |
| 50 | 4 | 4 54 73 | 4 72 92 | 4 82 01 | 4 91 11 | 5 00 20 | 5 09 30 | 5 18 39 | 5 27 49 | 5 36 58 |
| 60 | 5 | 5 45 68 | 5 63 87 | 5 72 96 | 5 82 06 | 5 91 15 | 6 00 25 | 6 09 34 | 6 18 44 | 6 27 53 |
| 70 | 6 | 6 36 62 | 6 54 81 | 6 63 90 | 6 73 00 | 6 82 09 | 6 91 19 | 7 00 28 | 7 09 38 | 7 18 47 |
| 80 | 7 | 7 27 57 | 7 45 76 | 7 54 85 | 7 63 95 | 7 73 04 | 7 82 14 | 7 91 23 | 8 00 33 | 8 09 42 |
| 90 | 8 | 8 18 52 | 8 36 71 | 8 45 80 | 8 54 90 | 8 63 99 | 8 73 09 | 8 82 18 | 8 91 28 | 8 99 37 |
| 100 | 9 | 9 09 46 | 9 27 65 | 9 36 74 | 9 45 84 | 9 54 93 | 9 64 03 | 9 73 12 | 9 82 22 | 9 91 31 |

R. = 360 (R = 36 及 3600 兩用)

| Begin- lage | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----------------|-----|---------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 00 | ° - | ° 8 84 | ° 17 68 | ° 26 53 | ° 35 37 | ° 44 21 | ° 53 05 | ° 61 89 | ° 70 74 | ° 79 58 |
| 10 | - | - 97 26 | - 1 06 10 | - 1 14 95 | - 1 23 79 | - 1 32 63 | - 1 41 47 | - 1 50 31 | - 1 59 16 | - 1 68 00 |
| 20 | 1 | 1 85 68 | 1 94 52 | 2 03 37 | 2 12 21 | 2 21 05 | 2 29 89 | 2 38 73 | 2 47 58 | 2 56 42 |
| 30 | 2 | 2 74 10 | 2 82 94 | 2 91 79 | 3 00 63 | 3 09 47 | 3 18 31 | 3 27 15 | 3 36 00 | 3 44 84 |
| 40 | 3 | 3 62 52 | 3 71 36 | 3 80 21 | 3 89 05 | 3 97 89 | 4 06 73 | 4 15 57 | 4 24 42 | 4 33 26 |
| 50 | 4 | 4 50 94 | 4 59 78 | 4 68 63 | 4 77 47 | 4 86 31 | 4 95 15 | 5 03 99 | 5 12 84 | 5 21 68 |
| 60 | 5 | 5 39 36 | 5 48 20 | 5 57 05 | 5 65 89 | 5 74 73 | 5 83 57 | 5 92 41 | 6 01 26 | 6 10 10 |
| 70 | 6 | 6 27 78 | 6 36 62 | 6 45 47 | 6 54 31 | 6 63 15 | 6 71 99 | 6 80 83 | 6 89 68 | 6 98 52 |
| 80 | 7 | 7 16 20 | 7 25 04 | 7 33 89 | 7 42 73 | 7 51 57 | 7 60 41 | 7 69 25 | 7 78 10 | 7 86 94 |
| 90 | 8 | 8 04 62 | 8 13 46 | 8 22 31 | 8 31 15 | 8 39 99 | 8 48 83 | 8 57 67 | 8 66 52 | 8 75 36 |
| 100 | 9 | 8 93 03 | 9 01 87 | 9 10 72 | 9 19 56 | 9 28 40 | 9 37 24 | 9 46 08 | 9 54 93 | 9 63 77 |

R. = 350

R. = 360

R. = 380 (R = 38 及 3800 兩用)

| Page- No. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|--------------|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 00 | — | 8 38 | 16 75 | 25 13 | 33 51 | 41 88 | 50 26 | 58 64 | 67 01 | 75 39 |
| 10 | — | 92 15 | 1 00 52 | 1 08 90 | 1 17 28 | 1 25 65 | 1 34 13 | 1 42 41 | 1 50 78 | 1 59 16 |
| 20 | — | 1 75 91 | 1 84 28 | 1 92 66 | 2 01 04 | 2 09 41 | 2 17 79 | 2 26 17 | 2 34 54 | 2 42 92 |
| 30 | — | 2 59 68 | 2 68 05 | 2 76 43 | 2 84 81 | 2 93 18 | 3 01 56 | 3 09 94 | 3 18 31 | 3 26 69 |
| 40 | — | 3 43 45 | 3 51 82 | 3 60 20 | 3 68 58 | 3 76 95 | 3 85 33 | 3 93 71 | 4 02 08 | 4 10 46 |
| 50 | — | 4 18 83 | 4 35 58 | 4 43 96 | 4 52 34 | 4 60 71 | 4 69 09 | 4 77 47 | 4 85 84 | 4 94 22 |
| 60 | — | 5 02 60 | 5 19 35 | 5 27 73 | 5 36 11 | 5 44 48 | 5 52 86 | 5 61 24 | 5 69 61 | 5 77 98 |
| 70 | — | 5 86 36 | 6 03 11 | 6 11 49 | 6 19 87 | 6 28 24 | 6 36 62 | 6 45 00 | 6 53 37 | 6 61 75 |
| 80 | — | 6 70 13 | 6 86 88 | 6 95 26 | 7 03 64 | 7 12 01 | 7 20 39 | 7 28 77 | 7 37 14 | 7 45 52 |
| 90 | — | 7 53 90 | 7 70 65 | 7 79 03 | 7 87 41 | 7 95 78 | 8 04 16 | 8 12 54 | 8 20 91 | 8 29 29 |
| 100 | — | 8 37 66 | 8 54 41 | 8 62 79 | 8 71 17 | 8 79 54 | 8 87 92 | 8 96 30 | 9 04 67 | 9 13 05 |

R. = 380

R. = 400

| Page- No. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|--------------|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 00 | — | 7 96 | 15 92 | 23 87 | 31 83 | 39 79 | 47 75 | 55 28 | 63 66 | 71 62 |
| 10 | — | 87 54 | 95 50 | 1 03 45 | 1 11 41 | 1 19 37 | 1 27 33 | 1 35 28 | 1 43 24 | 1 51 20 |
| 20 | — | 1 67 12 | 1 75 08 | 1 83 03 | 1 90 99 | 1 98 95 | 2 06 91 | 2 14 86 | 2 22 82 | 2 30 78 |
| 30 | — | 2 46 70 | 2 54 66 | 2 62 61 | 2 70 57 | 2 78 53 | 2 86 49 | 2 94 44 | 3 02 40 | 3 10 36 |
| 40 | — | 3 26 28 | 3 34 24 | 3 42 19 | 3 50 15 | 3 58 11 | 3 66 07 | 3 74 02 | 3 81 98 | 3 89 94 |
| 50 | — | 4 05 85 | 4 13 81 | 4 21 76 | 4 29 72 | 4 37 68 | 4 45 64 | 4 53 59 | 4 61 55 | 4 69 51 |
| 60 | — | 4 77 47 | 4 85 43 | 4 93 39 | 5 01 34 | 5 09 30 | 5 17 26 | 5 25 22 | 5 33 17 | 5 41 13 |
| 70 | — | 5 65 00 | 5 72 96 | 5 80 91 | 5 88 87 | 5 96 83 | 6 04 79 | 6 12 74 | 6 20 70 | 6 28 66 |
| 80 | — | 6 36 62 | 6 44 58 | 6 52 54 | 6 60 49 | 6 68 45 | 6 76 41 | 6 84 37 | 6 92 32 | 7 00 28 |
| 90 | — | 7 16 20 | 7 24 16 | 7 32 12 | 7 40 07 | 7 48 03 | 7 56 99 | 7 64 95 | 7 72 90 | 7 80 86 |
| 100 | — | 7 95 77 | 8 03 73 | 8 11 69 | 8 19 64 | 8 27 60 | 8 35 56 | 8 43 52 | 8 51 47 | 8 59 43 |

R. = 400

R. = 400 (R = 40 及 4000 兩用)

R. = 420

R. = 440

R. = 420 (R = 42 及 4200 兩用)

| Bog- länge | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---------------|---|---------|---|---------|---|---------|---|---------|---|----------|
| 00 | 0 | 7 58 | 0 | 22 74 | 0 | 37 89 | 0 | 53 05 | 0 | 68 21 |
| 10 | 0 | 15 16 | 0 | 98 53 | 0 | 13 68 | 0 | 28 84 | 0 | 44 00 |
| 20 | 0 | 90 96 | 0 | 1 74 32 | 0 | 1 89 47 | 0 | 1 28 84 | 0 | 2 19 79 |
| 30 | 0 | 1 66 74 | 0 | 1 74 32 | 0 | 1 97 05 | 0 | 2 04 63 | 0 | 2 96 58 |
| 40 | 0 | 2 42 53 | 0 | 2 50 11 | 0 | 2 65 26 | 0 | 2 80 42 | 0 | 3 75 97 |
| 50 | 0 | 3 18 32 | 0 | 3 25 90 | 0 | 3 41 05 | 0 | 3 56 21 | 0 | 4 83 70 |
| 60 | 0 | 3 94 10 | 0 | 4 01 68 | 0 | 4 16 83 | 0 | 4 31 99 | 0 | 5 47 15 |
| 70 | 0 | 4 69 89 | 0 | 4 77 47 | 0 | 4 92 62 | 0 | 5 07 78 | 0 | 6 22 34 |
| 80 | 0 | 5 45 68 | 0 | 5 53 26 | 0 | 5 68 41 | 0 | 5 83 57 | 0 | 7 08 73 |
| 90 | 0 | 6 21 47 | 0 | 6 29 05 | 0 | 6 44 20 | 0 | 6 59 36 | 0 | 8 42 52 |
| 100 | 0 | 6 97 26 | 0 | 7 04 84 | 0 | 7 19 99 | 0 | 7 35 16 | 0 | 9 27 31 |
| | 0 | 7 73 04 | 0 | 7 80 62 | 0 | 7 95 77 | 0 | 8 10 93 | 0 | 10 15 09 |

R. = 440 (R = 44 及 4400 兩用)

| Bog- länge | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---------------|---|---------|---|---------|---|---------|---|---------|---|---------|
| 00 | 0 | 7 23 | 0 | 21 70 | 0 | 36 17 | 0 | 50 64 | 0 | 65 11 |
| 10 | 0 | 14 47 | 0 | 94 04 | 0 | 1 08 51 | 0 | 22 98 | 0 | 37 46 |
| 20 | 0 | 86 81 | 0 | 1 66 39 | 0 | 1 80 86 | 0 | 1 95 33 | 0 | 2 09 80 |
| 30 | 0 | 1 50 16 | 0 | 2 38 73 | 0 | 2 53 20 | 0 | 2 67 67 | 0 | 2 82 14 |
| 40 | 0 | 2 31 50 | 0 | 3 11 07 | 0 | 3 25 54 | 0 | 3 40 01 | 0 | 3 54 48 |
| 50 | 0 | 3 03 84 | 0 | 3 18 31 | 0 | 3 97 89 | 0 | 4 12 36 | 0 | 4 26 83 |
| 60 | 0 | 3 76 19 | 0 | 3 83 42 | 0 | 4 70 23 | 0 | 4 27 86 | 0 | 4 99 17 |
| 70 | 0 | 4 48 53 | 0 | 4 55 76 | 0 | 5 42 57 | 0 | 4 84 70 | 0 | 5 71 51 |
| 80 | 0 | 5 20 87 | 0 | 5 28 10 | 0 | 6 14 91 | 0 | 5 57 04 | 0 | 6 43 85 |
| 90 | 0 | 5 93 21 | 0 | 6 00 44 | 0 | 6 87 25 | 0 | 6 29 38 | 0 | 7 16 19 |
| 100 | 0 | 6 65 55 | 0 | 6 72 78 | 0 | 7 59 60 | 0 | 7 01 72 | 0 | 8 08 96 |
| | 0 | 7 37 90 | 0 | 7 45 13 | 0 | 8 52 37 | 0 | 7 74 07 | 0 | 9 27 81 |

R. = 420

R. = 440

R. = 450 (R = 45 及 4500 兩用)

| Begin- lage | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----------------|---|-------|---------|---------|---------|---------|---------|---------|---------|---------|
| 00 | 0 | 7 07 | 14 15 | 21 22 | 28 29 | 35 37 | 42 44 | 49 51 | 56 59 | 63 66 |
| 10 | 0 | 77 81 | 84 89 | 91 96 | 99 03 | 1 06 11 | 1 13 18 | 1 20 25 | 1 27 33 | 1 34 40 |
| 20 | 1 | 48 54 | 55 62 | 62 69 | 69 76 | 1 76 84 | 1 83 91 | 1 90 98 | 1 98 06 | 2 05 13 |
| 30 | 2 | 19 28 | 26 36 | 33 43 | 40 50 | 2 47 53 | 2 54 65 | 2 61 72 | 2 68 80 | 2 75 87 |
| 40 | 2 | 82 95 | 2 97 10 | 3 04 17 | 3 11 24 | 3 18 32 | 3 25 39 | 3 32 46 | 3 39 54 | 3 46 61 |
| 50 | 3 | 53 68 | 3 67 83 | 3 74 90 | 3 81 97 | 3 89 05 | 3 96 12 | 4 03 19 | 4 10 27 | 4 17 34 |
| 60 | 4 | 24 42 | 4 38 57 | 4 45 64 | 4 52 71 | 4 59 79 | 4 66 86 | 4 73 93 | 4 81 01 | 4 88 08 |
| 70 | 4 | 95 15 | 5 09 30 | 5 16 37 | 5 23 44 | 5 30 52 | 5 37 59 | 5 44 66 | 5 51 74 | 5 58 81 |
| 80 | 5 | 65 89 | 5 80 04 | 5 87 11 | 5 94 18 | 6 01 26 | 6 08 33 | 6 15 40 | 6 22 48 | 6 29 55 |
| 90 | 6 | 36 53 | 6 50 78 | 6 57 85 | 6 64 92 | 6 72 00 | 6 79 07 | 6 86 14 | 6 93 22 | 7 00 29 |
| 100 | 7 | 07 36 | 7 21 51 | 7 28 53 | 7 35 65 | 7 42 73 | 7 49 80 | 7 56 87 | 7 63 95 | 7 71 02 |

R. = 450

R. = 460

| Begin- lage | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----------------|---|-------|---------|---------|---------|---------|---------|---------|---------|---------|
| 00 | 0 | 6 92 | 13 84 | 20 76 | 27 68 | 34 60 | 41 52 | 48 44 | 55 36 | 62 28 |
| 10 | 0 | 76 12 | 83 04 | 89 98 | 96 88 | 1 03 80 | 1 10 72 | 1 17 64 | 1 24 56 | 1 31 48 |
| 20 | 1 | 45 32 | 1 52 24 | 1 59 16 | 1 66 08 | 1 73 00 | 1 79 92 | 1 86 84 | 1 93 76 | 2 00 68 |
| 30 | 2 | 14 52 | 2 21 44 | 2 28 36 | 2 35 28 | 2 42 20 | 2 49 12 | 2 56 04 | 2 62 96 | 2 69 88 |
| 40 | 2 | 83 72 | 2 90 64 | 2 97 56 | 3 04 48 | 3 11 40 | 3 18 32 | 3 25 24 | 3 32 16 | 3 39 08 |
| 50 | 3 | 52 91 | 3 59 83 | 3 66 75 | 3 73 67 | 3 80 59 | 3 87 51 | 3 94 43 | 4 01 35 | 4 08 27 |
| 60 | 4 | 22 11 | 4 29 03 | 4 36 95 | 4 42 87 | 4 49 79 | 4 56 71 | 4 63 63 | 4 70 55 | 4 77 47 |
| 70 | 4 | 91 31 | 4 98 23 | 5 05 15 | 5 12 07 | 5 18 99 | 5 25 91 | 5 32 83 | 5 39 75 | 5 46 67 |
| 80 | 5 | 60 51 | 5 67 43 | 5 74 35 | 5 81 27 | 5 88 19 | 5 95 11 | 6 02 03 | 6 08 95 | 6 15 87 |
| 90 | 6 | 29 71 | 6 36 63 | 6 43 55 | 6 50 47 | 6 57 39 | 6 64 31 | 6 71 23 | 6 78 15 | 6 85 07 |
| 100 | 6 | 98 90 | 7 05 82 | 7 12 74 | 7 19 66 | 7 26 58 | 7 33 50 | 7 40 42 | 7 47 34 | 7 54 26 |

R. = 460

R. = 460 (R = 46 及 4600 兩用)

R. = 480

R. = 500

R. = 480 (R = 48 及 4800兩用)

| Begin- Days | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----------------|-------|---------|----------|----------|----------|----------|-----------|-----------|------------|------------|
| 00 | 63 15 | 6 63 78 | 13 26 41 | 19 39 54 | 26 52 67 | 33 16 31 | 39 79 94 | 46 42 57 | 53 05 18 | 59 68 83 |
| 10 | 37 88 | 72 94 1 | 79 57 14 | 86 20 35 | 92 33 48 | 99 47 14 | 1 06 10 1 | 1 12 73 8 | 1 19 36 43 | 1 22 31 38 |
| 20 | 61 20 | 1 39 26 | 1 45 89 | 1 52 52 | 1 59 15 | 1 65 79 | 1 72 42 | 1 79 05 | 1 85 68 | 1 92 31 |
| 30 | 30 51 | 2 05 57 | 2 12 20 | 2 18 83 | 2 25 46 | 2 32 10 | 2 38 73 | 2 45 36 | 2 51 99 | 2 58 62 |
| 40 | 31 57 | 2 71 88 | 2 78 51 | 2 85 14 | 2 91 77 | 2 98 41 | 3 05 04 | 3 11 67 | 3 18 30 | 3 24 93 |
| 50 | 3 57 | 3 38 20 | 3 44 83 | 3 51 46 | 3 58 09 | 3 64 73 | 3 71 36 | 3 77 99 | 3 84 62 | 3 91 25 |
| 60 | 37 88 | 4 04 51 | 4 11 14 | 4 17 77 | 4 24 40 | 4 31 04 | 4 37 67 | 4 44 30 | 4 50 93 | 4 57 56 |
| 70 | 61 20 | 4 70 83 | 4 77 46 | 4 84 09 | 4 90 72 | 4 97 36 | 5 03 99 | 5 10 62 | 5 17 25 | 5 23 88 |
| 80 | 30 51 | 5 37 14 | 5 43 77 | 5 50 40 | 5 57 03 | 5 63 67 | 5 70 30 | 5 76 93 | 5 83 56 | 5 90 19 |
| 90 | 3 57 | 6 03 46 | 6 10 09 | 6 16 72 | 6 23 35 | 6 29 99 | 6 36 62 | 6 43 25 | 6 49 88 | 6 56 51 |
| 100 | 63 15 | 6 69 78 | 6 76 41 | 6 83 04 | 6 89 67 | 6 96 31 | 7 02 94 | 7 09 57 | 7 16 20 | 7 22 83 |

R. = 500 (R = 50 及 5000兩用)

| Begin- Days | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----------------|-------|---------|----------|----------|----------|----------|----------|----------|-----------|-----------|
| 00 | 63 62 | 6 37 82 | 12 73 88 | 19 10 25 | 25 47 62 | 31 83 98 | 38 20 53 | 44 56 71 | 50 93 108 | 57 30 123 |
| 10 | 31 87 | 70 03 1 | 76 89 16 | 82 76 91 | 89 13 28 | 95 49 64 | 1 01 86 | 1 08 22 | 1 14 59 | 1 20 96 |
| 20 | 66 66 | 1 33 69 | 1 40 05 | 1 46 42 | 1 52 79 | 1 59 15 | 1 65 52 | 1 71 88 | 1 78 25 | 1 84 62 |
| 30 | 27 32 | 1 97 36 | 2 03 72 | 2 10 09 | 2 16 46 | 2 22 82 | 2 29 19 | 2 35 55 | 2 41 92 | 2 48 29 |
| 40 | 54 65 | 2 61 02 | 2 67 38 | 2 73 75 | 2 80 12 | 2 86 48 | 2 92 85 | 2 99 21 | 3 05 58 | 3 11 95 |
| 50 | 18 31 | 3 24 68 | 3 31 04 | 3 37 41 | 3 43 78 | 3 50 14 | 3 56 51 | 3 62 87 | 3 69 24 | 3 75 61 |
| 60 | 81 97 | 3 88 34 | 3 94 70 | 4 01 07 | 4 07 44 | 4 13 80 | 4 20 17 | 4 26 53 | 4 32 90 | 4 39 27 |
| 70 | 45 64 | 4 52 01 | 4 58 37 | 4 64 74 | 4 71 11 | 4 77 47 | 4 83 84 | 4 90 20 | 4 96 57 | 5 02 94 |
| 80 | 09 30 | 5 15 67 | 5 22 03 | 5 28 40 | 5 34 77 | 5 41 13 | 5 47 50 | 5 53 86 | 5 60 23 | 5 66 60 |
| 90 | 72 96 | 5 79 33 | 5 85 69 | 5 92 06 | 5 98 43 | 6 04 79 | 6 11 16 | 6 17 52 | 6 23 89 | 6 30 26 |
| 100 | 36 62 | 6 42 89 | 6 49 35 | 6 55 72 | 6 62 09 | 6 68 45 | 6 74 82 | 6 81 18 | 6 87 55 | 6 93 92 |

R. = 480

R. = 500

R. = 520

R. = 550

R. = 520 (R = 52 及 5200 兩用)

| loga- länge | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----------------|---|-------|---------|---------|---------|---------|---------|---------|---------|---------|
| 00 | 0 | 6 12 | 12 24 | 18 36 | 24 49 | 30 61 | 36 73 | 42 85 | 48 97 | 55 09 |
| 10 | 0 | 67 33 | 73 45 | 79 57 | 85 70 | 91 82 | 97 94 | 1 04 06 | 1 10 18 | 1 16 30 |
| 20 | 1 | 28 55 | 34 67 | 40 79 | 46 92 | 53 04 | 59 16 | 1 65 28 | 1 71 40 | 1 77 52 |
| 30 | 1 | 83 64 | 1 34 67 | 2 02 00 | 2 08 13 | 2 14 25 | 2 20 37 | 2 26 49 | 2 32 61 | 2 38 73 |
| 40 | 2 | 44 85 | 2 57 09 | 2 63 21 | 2 69 34 | 2 75 46 | 2 81 58 | 2 87 70 | 2 93 82 | 2 99 94 |
| 50 | 3 | 06 07 | 3 18 31 | 3 24 43 | 3 30 56 | 3 36 68 | 3 42 80 | 3 48 92 | 3 55 04 | 3 61 16 |
| 60 | 3 | 67 28 | 3 79 52 | 3 85 64 | 3 91 77 | 3 97 89 | 4 04 01 | 4 10 13 | 4 16 25 | 4 22 37 |
| 70 | 4 | 28 50 | 4 40 74 | 4 46 86 | 4 52 99 | 4 59 11 | 4 65 23 | 4 71 35 | 4 77 47 | 4 83 59 |
| 80 | 4 | 89 71 | 5 01 95 | 5 08 07 | 5 14 20 | 5 20 32 | 5 26 44 | 5 32 56 | 5 38 68 | 5 44 80 |
| 90 | 5 | 50 92 | 5 63 16 | 5 69 28 | 5 75 41 | 5 81 53 | 5 87 65 | 5 93 77 | 5 99 89 | 6 06 01 |
| 100 | 6 | 12 13 | 6 24 37 | 6 30 49 | 6 36 62 | 6 42 74 | 6 48 86 | 6 54 98 | 6 61 10 | 6 67 22 |

R. = 550 (R = 55 及 5500 兩用)

| loga- länge | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----------------|---|-------|---------|---------|---------|---------|---------|---------|---------|---------|
| 00 | 0 | 5 79 | 11 57 | 17 36 | 23 15 | 28 94 | 34 72 | 40 51 | 46 30 | 52 09 |
| 10 | 0 | 63 66 | 69 44 | 75 23 | 81 02 | 86 81 | 92 59 | 98 38 | 1 04 17 | 1 09 96 |
| 20 | 1 | 21 54 | 27 32 | 33 11 | 38 90 | 44 69 | 50 47 | 56 26 | 1 62 05 | 1 67 84 |
| 30 | 1 | 73 62 | 1 27 19 | 1 33 98 | 1 39 77 | 1 46 56 | 2 03 34 | 2 10 13 | 2 16 92 | 2 23 71 |
| 40 | 2 | 31 50 | 2 43 07 | 2 48 86 | 2 54 65 | 2 60 44 | 2 66 22 | 2 72 01 | 2 77 80 | 2 83 59 |
| 50 | 2 | 89 37 | 3 00 94 | 3 06 73 | 3 12 52 | 3 18 31 | 3 24 09 | 3 29 88 | 3 35 67 | 3 41 46 |
| 60 | 3 | 47 25 | 3 58 82 | 3 64 61 | 3 70 40 | 3 76 19 | 3 81 97 | 3 87 76 | 3 93 55 | 3 99 34 |
| 70 | 4 | 05 12 | 4 16 69 | 4 22 48 | 4 28 27 | 4 34 06 | 4 39 84 | 4 45 63 | 4 51 42 | 4 57 21 |
| 80 | 4 | 63 00 | 4 74 57 | 4 80 36 | 4 86 15 | 4 91 94 | 4 97 72 | 5 03 51 | 5 09 30 | 5 15 09 |
| 90 | 5 | 20 87 | 5 32 44 | 5 38 23 | 5 44 02 | 5 49 81 | 5 55 59 | 5 61 38 | 5 67 17 | 5 72 96 |
| 100 | 5 | 78 74 | 5 90 31 | 5 96 10 | 6 01 89 | 6 07 68 | 6 13 46 | 6 19 25 | 6 25 04 | 6 30 83 |

R. = 580

R. = 600

R. = 580 (R. = 58 及 5800 兩用)

| Begin- ings | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 00 | 54 88 | 5 49 | 10 98 | 16 46 | 21 95 | 27 44 | 32 93 | 38 42 | 43 90 | 49 39 |
| 10 | 1 09 76 | 1 15 25 | 65 86 | 71 34 | 76 83 | 82 32 | 87 81 | 93 30 | 98 78 | 1 04 27 |
| 20 | 1 64 64 | 1 15 25 | 1 20 74 | 1 26 22 | 1 31 71 | 1 37 20 | 1 42 69 | 1 48 18 | 1 53 66 | 1 59 15 |
| 30 | 2 19 52 | 1 70 13 | 1 76 62 | 1 81 10 | 1 86 59 | 1 92 08 | 1 97 57 | 2 03 06 | 2 08 54 | 2 14 03 |
| 40 | 2 74 41 | 2 25 01 | 2 30 50 | 2 35 98 | 2 41 47 | 2 46 96 | 2 52 45 | 2 57 94 | 2 63 42 | 2 68 91 |
| 50 | 3 29 29 | 2 79 90 | 2 85 39 | 2 90 87 | 2 96 36 | 3 01 85 | 3 07 34 | 3 12 83 | 3 18 31 | 3 23 80 |
| 60 | 3 84 17 | 3 34 78 | 3 40 27 | 3 45 76 | 3 51 24 | 3 56 73 | 3 62 22 | 3 67 71 | 3 73 19 | 3 78 68 |
| 70 | 4 39 05 | 3 89 66 | 3 95 15 | 4 00 63 | 4 06 12 | 4 11 61 | 4 17 10 | 4 22 59 | 4 28 07 | 4 33 56 |
| 80 | 4 93 93 | 4 44 54 | 4 50 03 | 4 55 51 | 4 61 00 | 4 66 49 | 4 71 98 | 4 77 47 | 4 82 96 | 4 88 44 |
| 90 | 5 48 81 | 4 99 42 | 5 04 91 | 5 10 39 | 5 15 88 | 5 21 37 | 5 26 86 | 5 32 35 | 5 37 83 | 5 43 32 |
| 100 | | 5 54 80 | 5 59 79 | 5 65 27 | 5 70 76 | 5 76 25 | 5 81 74 | 5 87 23 | 5 92 71 | 5 98 20 |

R. = 600 (R. = 60 及 6000 兩用)

| Begin- ings | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 00 | 53 05 | 5 31 | 10 61 | 15 91 | 21 22 | 26 53 | 31 83 | 37 14 | 42 44 | 47 75 |
| 10 | 1 06 10 | 58 36 | 63 66 | 68 96 | 74 27 | 79 58 | 84 88 | 90 19 | 95 49 | 1 00 80 |
| 20 | 1 59 15 | 1 11 41 | 1 16 71 | 1 22 01 | 1 27 32 | 1 32 63 | 1 37 93 | 1 43 24 | 1 48 54 | 1 53 85 |
| 30 | 2 12 21 | 1 64 46 | 1 69 76 | 1 75 06 | 1 80 37 | 1 85 68 | 1 90 98 | 1 96 29 | 2 01 59 | 2 06 90 |
| 40 | 2 65 26 | 2 17 52 | 2 22 82 | 2 28 12 | 2 33 43 | 2 38 74 | 2 44 04 | 2 49 35 | 2 54 65 | 2 59 96 |
| 50 | 3 18 31 | 2 70 57 | 2 75 87 | 2 81 17 | 2 86 48 | 2 91 79 | 2 97 09 | 3 02 40 | 3 07 70 | 3 13 01 |
| 60 | 3 71 36 | 3 23 62 | 3 28 92 | 3 34 22 | 3 39 53 | 3 44 84 | 3 50 14 | 3 55 45 | 3 60 75 | 3 66 06 |
| 70 | 4 24 41 | 3 76 67 | 3 81 97 | 3 87 27 | 3 92 58 | 3 97 89 | 4 03 19 | 4 08 50 | 4 13 80 | 4 19 11 |
| 80 | 4 77 46 | 4 29 72 | 4 35 02 | 4 40 32 | 4 45 63 | 4 50 94 | 4 56 24 | 4 61 55 | 4 66 85 | 4 72 16 |
| 90 | 5 30 | 4 82 77 | 4 88 07 | 4 93 37 | 4 98 68 | 5 03 99 | 5 09 29 | 5 14 60 | 5 19 90 | 5 25 21 |
| 100 | | 5 35 83 | 5 41 13 | 5 46 43 | 5 51 74 | 5 57 05 | 5 62 35 | 5 67 66 | 5 72 96 | 5 78 27 |

R. = 580

R. = 600

R. = 650

R. = 700

R. = 650 (R = 65 及 6500 兩用)

| Bogen- länge | 0 | | 1 | | 2 | | 3 | | 4 | | 5 | | 6 | | 7 | | 8 | | 9 | |
|-----------------|---|---------|---|---------|---|---------|---|---------|---|---------|---|---------|---|---------|---|---------|---|---------|---|---------|
| | ° | ' | ° | ' | ° | ' | ° | ' | ° | ' | ° | ' | ° | ' | ° | ' | ° | ' | ° | ' |
| 00 | — | 48 97 | — | 4 90 | — | 9 79 | — | 14 69 | — | 19 59 | — | 24 48 | — | 29 38 | — | 34 28 | — | 39 18 | — | 44 07 |
| 10 | — | 97 94 | — | 53 87 | — | 58 76 | — | 63 66 | — | 68 56 | — | 73 45 | — | 78 35 | — | 83 25 | — | 88 15 | — | 93 04 |
| 20 | — | 1 46 91 | — | 1 02 84 | — | 1 07 73 | — | 1 12 63 | — | 1 17 53 | — | 1 22 42 | — | 1 27 32 | — | 1 32 22 | — | 1 37 12 | — | 1 42 01 |
| 30 | — | 1 95 88 | — | 1 51 81 | — | 1 56 70 | — | 1 61 60 | — | 1 66 50 | — | 1 71 39 | — | 1 76 29 | — | 1 81 19 | — | 1 86 09 | — | 1 90 98 |
| 40 | — | 2 44 85 | — | 2 00 78 | — | 2 05 67 | — | 2 10 57 | — | 2 15 47 | — | 2 20 36 | — | 2 25 26 | — | 2 30 16 | — | 2 35 06 | — | 2 39 95 |
| 50 | — | 2 93 82 | — | 2 49 75 | — | 2 54 64 | — | 2 59 54 | — | 2 64 44 | — | 2 69 33 | — | 2 74 23 | — | 2 79 13 | — | 2 84 03 | — | 2 88 92 |
| 60 | — | 3 42 79 | — | 2 98 72 | — | 3 03 61 | — | 3 08 51 | — | 3 13 41 | — | 3 18 30 | — | 3 23 20 | — | 3 28 10 | — | 3 33 00 | — | 3 37 89 |
| 70 | — | 3 91 77 | — | 3 47 69 | — | 3 52 58 | — | 3 57 48 | — | 3 62 38 | — | 3 67 27 | — | 3 72 17 | — | 3 77 07 | — | 3 81 97 | — | 3 86 86 |
| 80 | — | 4 40 74 | — | 3 96 67 | — | 4 01 56 | — | 4 06 46 | — | 4 11 36 | — | 4 16 25 | — | 4 21 15 | — | 4 26 05 | — | 4 30 95 | — | 4 35 84 |
| 90 | — | 4 89 71 | — | 4 45 64 | — | 4 50 53 | — | 4 55 43 | — | 4 60 33 | — | 4 65 22 | — | 4 70 12 | — | 4 75 02 | — | 4 79 92 | — | 4 84 81 |
| 100 | — | — | — | 4 94 61 | — | 4 99 50 | — | 5 04 40 | — | 5 09 30 | — | 5 14 19 | — | 5 19 09 | — | 5 23 99 | — | 5 28 89 | — | 5 33 78 |

R. = 700 (R = 70 及 7000 兩用)

| Bogen- länge | 0 | | 1 | | 2 | | 3 | | 4 | | 5 | | 6 | | 7 | | 8 | | 9 | |
|-----------------|---|---------|---|---------|---|---------|---|---------|---|---------|---|---------|---|---------|---|---------|---|---------|---|---------|
| | ° | ' | ° | ' | ° | ' | ° | ' | ° | ' | ° | ' | ° | ' | ° | ' | ° | ' | ° | ' |
| 00 | — | 45 47 | — | 4 55 | — | 9 08 | — | 13 64 | — | 18 19 | — | 22 74 | — | 27 28 | — | 31 83 | — | 36 38 | — | 40 93 |
| 10 | — | 90 95 | — | 50 02 | — | 54 56 | — | 59 11 | — | 63 66 | — | 68 21 | — | 72 75 | — | 77 30 | — | 81 85 | — | 86 40 |
| 20 | — | 1 36 42 | — | 1 40 97 | — | 1 00 04 | — | 1 04 59 | — | 1 09 14 | — | 1 13 59 | — | 1 18 25 | — | 1 22 78 | — | 1 27 33 | — | 1 31 88 |
| 30 | — | 1 81 39 | — | 1 86 44 | — | 1 45 51 | — | 1 50 06 | — | 1 54 61 | — | 1 59 16 | — | 1 63 70 | — | 1 68 25 | — | 1 72 80 | — | 1 77 35 |
| 40 | — | 2 27 36 | — | 1 86 44 | — | 1 90 98 | — | 1 95 53 | — | 2 00 08 | — | 2 04 63 | — | 2 09 17 | — | 2 13 72 | — | 2 18 27 | — | 2 22 82 |
| 50 | — | 2 72 84 | — | 2 31 91 | — | 2 36 45 | — | 2 41 00 | — | 2 45 55 | — | 2 50 10 | — | 2 54 64 | — | 2 59 19 | — | 2 63 74 | — | 2 68 29 |
| 60 | — | 3 18 31 | — | 2 77 39 | — | 2 81 93 | — | 2 86 48 | — | 2 91 03 | — | 2 95 58 | — | 3 00 12 | — | 3 04 67 | — | 3 09 22 | — | 3 13 77 |
| 70 | — | 3 63 78 | — | 3 22 86 | — | 3 27 40 | — | 3 31 95 | — | 3 36 50 | — | 3 41 05 | — | 3 45 59 | — | 3 50 14 | — | 3 54 69 | — | 3 59 24 |
| 80 | — | 4 09 26 | — | 3 68 33 | — | 3 72 87 | — | 3 77 42 | — | 3 81 97 | — | 3 86 52 | — | 3 91 06 | — | 3 95 61 | — | 4 00 16 | — | 4 04 71 |
| 90 | — | 4 54 73 | — | 4 13 81 | — | 4 18 35 | — | 4 22 90 | — | 4 27 45 | — | 4 32 00 | — | 4 36 54 | — | 4 41 09 | — | 4 45 64 | — | 4 50 19 |
| 100 | — | — | — | 4 59 28 | — | 4 63 82 | — | 4 68 37 | — | 4 72 92 | — | 4 77 47 | — | 4 82 01 | — | 4 86 56 | — | 4 91 11 | — | 4 95 66 |

R. = 650

R. = 700

R. = 750

R. = 800

R. = 750 (R = 75 及 7500 兩用)

| Regen- höhe | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----------------|----|----|----|----|-----|-----|-----|-----|-----|-----|
| 00 | 0 | 4 | 8 | 12 | 16 | 21 | 25 | 29 | 33 | 38 |
| 10 | 44 | 46 | 50 | 55 | 59 | 63 | 67 | 71 | 76 | 80 |
| 20 | 88 | 89 | 93 | 97 | 101 | 106 | 110 | 114 | 118 | 123 |
| 30 | 88 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 40 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 50 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 60 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 70 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 80 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 90 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 100 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |

R. = 750

R. = 800 (R = 80 及 8000 兩用)

| Regen- höhe | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----------------|----|----|----|----|----|----|-----|-----|-----|-----|
| 00 | 0 | 8 | 7 | 11 | 15 | 19 | 23 | 27 | 31 | 35 |
| 10 | 79 | 43 | 47 | 51 | 55 | 59 | 63 | 67 | 71 | 75 |
| 20 | 58 | 83 | 87 | 91 | 95 | 99 | 103 | 107 | 111 | 115 |
| 30 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 40 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 50 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 60 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 70 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 80 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 90 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 100 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |

R. = 800

R. = 850 (R = 85 及 8500兩用)

| Begin- ling | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 00 | 3 74 | 7 49 | 11 23 | 14 98 | 18 72 | 22 47 | 26 21 | 29 96 | 33 70 |
| 10 | 41 19 | 44 94 | 48 68 | 52 43 | 56 17 | 59 92 | 63 66 | 67 41 | 71 16 |
| 20 | 78 64 | 82 39 | 86 13 | 89 88 | 93 62 | 97 37 | 1 01 11 | 1 04 86 | 1 08 60 |
| 30 | 1 12 34 | 1 19 83 | 1 28 57 | 1 27 32 | 1 31 06 | 1 34 81 | 1 38 55 | 1 42 30 | 1 46 04 |
| 40 | 1 49 79 | 1 57 28 | 1 61 02 | 1 64 77 | 1 68 51 | 1 72 26 | 1 76 00 | 1 79 75 | 1 83 49 |
| 50 | 1 87 24 | 1 94 73 | 1 98 47 | 2 02 22 | 2 05 96 | 2 09 71 | 2 13 45 | 2 17 20 | 2 20 94 |
| 60 | 2 24 69 | 2 32 18 | 2 35 92 | 2 39 67 | 2 43 41 | 2 47 16 | 2 50 30 | 2 54 05 | 2 58 39 |
| 70 | 2 62 14 | 2 69 63 | 2 73 37 | 2 77 12 | 2 80 86 | 2 84 61 | 2 88 35 | 2 92 10 | 2 95 84 |
| 80 | 2 99 58 | 3 03 32 | 3 10 81 | 3 14 56 | 3 18 30 | 3 22 05 | 3 25 79 | 3 29 54 | 3 33 28 |
| 90 | 3 37 03 | 3 44 52 | 3 48 26 | 3 52 01 | 3 55 75 | 3 59 50 | 3 63 24 | 3 66 98 | 3 70 73 |
| 100 | 3 74 48 | 3 81 97 | 3 85 71 | 3 89 46 | 3 93 20 | 3 96 95 | 4 00 69 | 4 04 44 | 4 08 18 |

R. = 850

R. = 900

| Begin- ling | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 00 | 3 54 | 7 07 | 10 61 | 14 15 | 17 68 | 21 22 | 24 76 | 28 29 | 31 83 |
| 10 | 38 91 | 42 44 | 45 98 | 49 52 | 53 05 | 56 59 | 60 13 | 63 66 | 67 20 |
| 20 | 74 28 | 77 81 | 81 35 | 84 89 | 88 42 | 91 96 | 95 50 | 99 03 | 1 02 57 |
| 30 | 1 09 64 | 1 13 17 | 1 16 71 | 1 20 25 | 1 23 78 | 1 27 32 | 1 30 86 | 1 34 39 | 1 37 93 |
| 40 | 1 45 01 | 1 48 54 | 1 52 08 | 1 55 62 | 1 59 15 | 1 62 69 | 1 66 23 | 1 69 76 | 1 73 30 |
| 50 | 1 80 38 | 1 83 91 | 1 87 45 | 1 90 99 | 1 94 52 | 1 98 06 | 2 01 60 | 2 05 13 | 2 08 67 |
| 60 | 2 15 75 | 2 19 28 | 2 22 82 | 2 26 36 | 2 29 89 | 2 33 43 | 2 36 97 | 2 40 50 | 2 44 04 |
| 70 | 2 51 11 | 2 54 64 | 2 58 18 | 2 61 72 | 2 65 25 | 2 68 79 | 2 72 33 | 2 75 86 | 2 79 40 |
| 80 | 2 86 48 | 2 90 01 | 2 93 55 | 2 97 09 | 3 00 62 | 3 04 16 | 3 07 70 | 3 11 23 | 3 14 77 |
| 90 | 3 21 85 | 3 25 38 | 3 28 92 | 3 32 46 | 3 35 99 | 3 39 53 | 3 43 07 | 3 46 60 | 3 50 14 |
| 100 | 3 57 22 | 3 60 75 | 3 64 29 | 3 67 83 | 3 71 36 | 3 74 90 | 3 78 44 | 3 81 97 | 3 85 51 |

R. = 900

R. = 900 (R = 90 及 9000兩用)

R. = 950

R. = 950 (R = 95 及 9500 兩用)

| Begin- Size | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----------------|---|---|---|---|---|---|---|---|---|---|
| 00 | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 00 | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 10 | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 20 | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 30 | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 40 | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 50 | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 60 | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 70 | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 80 | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 90 | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 100 | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |

R. = 950

附 表

360° 制與 400° 制

度分秒互換表

360° 制與 400° 制對換表

(英制度 = 360°)

| 英制度 | 360° 制 | | | | | | | | | | 400° 制 | | | | | | | | | |
|-----|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 00 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 20 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| 30 | 33 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 |
| 40 | 44 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 |
| 50 | 55 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 |
| 60 | 66 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 |
| 70 | 77 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 |
| 80 | 88 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 | 101 | 102 | 103 | 104 | 105 | 106 |
| 90 | 100 | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 |
| 100 | 111 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 | 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 |
| 110 | 122 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 139 | 140 |
| 120 | 133 | 133 | 134 | 135 | 136 | 137 | 138 | 139 | 140 | 141 | 142 | 143 | 144 | 145 | 146 | 147 | 148 | 149 | 150 | 151 |
| 130 | 144 | 144 | 145 | 146 | 147 | 148 | 149 | 150 | 151 | 152 | 153 | 154 | 155 | 156 | 157 | 158 | 159 | 160 | 161 | 162 |
| 分 | 0' | 1' | 2' | 3' | 4' | 5' | 6' | 7' | 8' | 9' | 0' | 1' | 2' | 3' | 4' | 5' | 6' | 7' | 8' | 9' |
| 00 | 0 | 1 | 3 | 5 | 7 | 9 | 11 | 12 | 14 | 16 | 0 | 1 | 3 | 5 | 7 | 9 | 11 | 12 | 14 | 16 |
| 10 | 1 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 1 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 |
| 20 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 |
| 30 | 3 | 5 | 7 | 9 | 11 | 13 | 15 | 17 | 19 | 21 | 3 | 5 | 7 | 9 | 11 | 13 | 15 | 17 | 19 | 21 |
| 40 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 |
| 50 | 5 | 7 | 9 | 11 | 13 | 15 | 17 | 19 | 21 | 23 | 5 | 7 | 9 | 11 | 13 | 15 | 17 | 19 | 21 | 23 |

| | | | | | | | | | | | |
|----|----|-------|-------|-------|-------|---------|---------|---------|---------|---------|---------|
| 10 | 00 | 18 52 | 20 37 | 22 22 | 24 07 | 25 93 | 27 78 | 28 63 | 31 48 | 33 33 | 35 18 |
| | 10 | 18 83 | 20 68 | 22 53 | 24 38 | 26 24 | 28 09 | 29 94 | 31 79 | 33 64 | 35 49 |
| | 20 | 19 14 | 20 99 | 22 84 | 24 69 | 26 55 | 28 40 | 30 25 | 32 10 | 33 95 | 35 80 |
| | 30 | 19 45 | 21 30 | 23 15 | 25 00 | 26 86 | 28 71 | 30 56 | 32 41 | 34 26 | 36 11 |
| | 40 | 19 75 | 21 60 | 23 45 | 25 30 | 27 16 | 29 01 | 30 86 | 32 71 | 34 56 | 36 41 |
| | 50 | 20 06 | 21 91 | 23 76 | 25 61 | 27 47 | 29 32 | 31 17 | 33 02 | 34 87 | 36 72 |
| 20 | 00 | 37 04 | 38 89 | 40 74 | 42 59 | 44 44 | 46 30 | 48 15 | 50 00 | 51 85 | 53 70 |
| | 10 | 37 35 | 39 20 | 41 05 | 42 90 | 44 75 | 46 61 | 48 46 | 50 31 | 52 16 | 54 01 |
| | 20 | 37 66 | 39 51 | 41 36 | 43 21 | 45 06 | 46 92 | 48 77 | 50 62 | 52 47 | 54 32 |
| | 30 | 37 97 | 39 82 | 41 67 | 43 52 | 45 37 | 47 23 | 49 08 | 50 93 | 52 78 | 54 63 |
| | 40 | 38 27 | 40 12 | 41 97 | 43 82 | 45 67 | 47 53 | 49 38 | 51 23 | 53 08 | 54 93 |
| | 50 | 38 58 | 40 43 | 42 28 | 44 13 | 45 98 | 47 84 | 49 69 | 51 54 | 53 39 | 55 24 |
| 30 | 00 | 55 56 | 57 41 | 59 26 | 61 11 | 62 96 | 64 81 | 66 67 | 68 52 | 70 37 | 72 22 |
| | 10 | 56 87 | 57 72 | 59 57 | 61 42 | 63 27 | 65 12 | 66 98 | 68 83 | 70 68 | 72 53 |
| | 20 | 56 18 | 58 03 | 59 88 | 61 73 | 63 58 | 65 43 | 67 29 | 69 14 | 70 99 | 72 84 |
| | 30 | 56 49 | 58 34 | 60 19 | 62 04 | 63 89 | 65 74 | 67 60 | 69 45 | 71 30 | 73 15 |
| | 40 | 56 79 | 58 64 | 60 49 | 62 34 | 64 19 | 66 04 | 67 90 | 69 75 | 71 60 | 73 45 |
| | 50 | 57 10 | 58 95 | 60 80 | 62 65 | 64 50 | 66 35 | 68 21 | 70 06 | 71 91 | 73 76 |
| 40 | 00 | 74 07 | 75 93 | 77 78 | 79 63 | 81 48 | 83 33 | 85 18 | 87 04 | 88 89 | 90 74 |
| | 10 | 74 38 | 76 24 | 78 09 | 79 94 | 81 79 | 83 64 | 85 49 | 87 35 | 89 20 | 91 05 |
| | 20 | 74 69 | 76 55 | 78 40 | 80 25 | 82 10 | 83 95 | 85 80 | 87 66 | 89 51 | 91 36 |
| | 30 | 75 00 | 76 86 | 78 71 | 80 56 | 82 41 | 84 26 | 86 11 | 87 97 | 89 82 | 91 67 |
| | 40 | 75 30 | 77 16 | 79 01 | 80 86 | 82 71 | 84 56 | 86 41 | 88 27 | 90 12 | 91 97 |
| | 50 | 75 61 | 77 47 | 79 32 | 81 17 | 83 02 | 84 87 | 86 72 | 88 58 | 90 43 | 92 28 |
| 50 | 00 | 92 59 | 94 44 | 96 30 | 98 15 | 1 00 00 | 1 01 85 | 1 03 70 | 1 05 56 | 1 07 41 | 1 09 26 |
| | 10 | 92 90 | 94 75 | 96 61 | 98 46 | 1 00 31 | 1 02 16 | 1 04 02 | 1 05 87 | 1 07 73 | 1 09 57 |
| | 20 | 93 21 | 95 06 | 96 92 | 98 77 | 1 00 62 | 1 02 47 | 1 04 32 | 1 06 18 | 1 08 03 | 1 09 88 |
| | 30 | 93 52 | 95 37 | 97 23 | 99 08 | 1 00 93 | 1 02 78 | 1 04 63 | 1 06 49 | 1 08 34 | 1 10 19 |
| | 40 | 93 82 | 95 67 | 97 53 | 99 38 | 1 01 23 | 1 03 08 | 1 04 93 | 1 06 79 | 1 08 64 | 1 10 49 |
| | 50 | 94 13 | 95 98 | 97 84 | 99 69 | 1 01 54 | 1 03 39 | 1 05 24 | 1 07 10 | 1 08 95 | 1 10 80 |

400° 制與 360° 制對換表

(英制度 = 360°)

| 法制度 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-----|-----|----|--------|--------|--------|--------|--------|--------|--------|--------|
| 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10 | 9 | 54 | 1 48 | 2 42 | 3 36 | 4 30 | 5 24 | 6 18 | 7 12 | 8 06 |
| 20 | 18 | 54 | 10 48 | 11 42 | 12 36 | 13 30 | 14 24 | 15 18 | 16 12 | 17 06 |
| 30 | 27 | 54 | 19 48 | 20 42 | 21 36 | 22 30 | 23 24 | 24 18 | 25 12 | 26 06 |
| 40 | 36 | 54 | 28 48 | 29 42 | 30 36 | 31 30 | 32 24 | 33 18 | 34 12 | 35 06 |
| 50 | 45 | 54 | 37 48 | 38 42 | 39 36 | 40 30 | 41 24 | 42 18 | 43 12 | 44 06 |
| 60 | 54 | 54 | 46 48 | 47 42 | 48 36 | 49 30 | 50 24 | 51 18 | 52 12 | 53 06 |
| 70 | 63 | 54 | 55 48 | 56 42 | 57 36 | 58 30 | 59 24 | 60 18 | 61 12 | 62 06 |
| 80 | 72 | 54 | 64 48 | 65 42 | 66 36 | 67 30 | 68 24 | 69 18 | 70 12 | 71 06 |
| 90 | 81 | 54 | 73 48 | 74 42 | 75 36 | 76 30 | 77 24 | 78 18 | 79 12 | 80 06 |
| 100 | 90 | 54 | 82 48 | 83 42 | 84 36 | 85 30 | 86 24 | 87 18 | 88 12 | 89 06 |
| 110 | 99 | 54 | 91 48 | 92 42 | 93 36 | 94 30 | 95 24 | 96 18 | 97 12 | 98 06 |
| 120 | 108 | 54 | 100 48 | 101 42 | 102 36 | 103 30 | 104 24 | 105 18 | 106 12 | 107 06 |
| 130 | 117 | 54 | 109 48 | 110 42 | 111 36 | 112 30 | 113 24 | 114 18 | 115 12 | 116 06 |
| 140 | 126 | 54 | 118 48 | 119 42 | 120 36 | 121 30 | 122 24 | 123 18 | 124 12 | 125 06 |
| | | | 127 48 | 128 42 | 129 36 | 130 30 | 131 24 | 132 18 | 133 12 | 134 06 |

| 分秒 | 0' | 1' | 2' | 3' | 4' | 5' | 6' | 7' | 8' | 9' |
|----|------|------|------|------|------|------|------|------|-------|-------|
| 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 00 | 0 | 32 | 1 05 | 1 37 | 2 10 | 2 42 | 3 14 | 3 47 | 4 19 | 4 52 |
| 25 | 8 | 40 | 1 13 | 1 45 | 2 18 | 2 50 | 3 22 | 3 55 | 4 27 | 5 00 |
| 50 | 16 | 48 | 1 21 | 1 53 | 2 26 | 2 58 | 3 30 | 4 03 | 4 35 | 5 08 |
| 75 | 24 | 56 | 1 29 | 2 01 | 2 34 | 3 06 | 3 38 | 4 11 | 4 43 | 5 16 |
| 10 | 5 24 | 5 56 | 6 29 | 7 01 | 7 24 | 8 06 | 8 38 | 9 11 | 9 43 | 10 16 |
| 25 | 5 32 | 6 04 | 6 37 | 7 09 | 7 42 | 8 14 | 8 46 | 9 19 | 9 51 | 10 24 |
| 50 | 5 40 | 6 12 | 6 45 | 7 17 | 7 50 | 8 22 | 8 54 | 9 27 | 9 59 | 10 32 |
| 75 | 5 48 | 6 20 | 6 53 | 7 25 | 7 58 | 8 30 | 9 02 | 9 35 | 10 07 | 10 40 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----|----|---|----|----|---|----|----|---|----|----|---|----|----|---|----|----|---|----|----|---|----|----|---|----|----|---|----|----|---|----|----|
| 20 | 00 | — | 10 | 48 | — | 11 | 20 | — | 11 | 53 | — | 12 | 25 | — | 12 | 58 | — | 13 | 30 | — | 14 | 02 | — | 14 | 35 | — | 15 | 07 | — | 15 | 40 |
| | 25 | — | 10 | 56 | — | 12 | 01 | — | 12 | 01 | — | 12 | 33 | — | 13 | 06 | — | 13 | 38 | — | 14 | 10 | — | 14 | 43 | — | 15 | 15 | — | 15 | 48 |
| | 50 | — | 11 | 04 | — | 12 | 09 | — | 12 | 09 | — | 12 | 41 | — | 13 | 14 | — | 13 | 46 | — | 14 | 18 | — | 14 | 51 | — | 15 | 23 | — | 15 | 56 |
| | 75 | — | 11 | 12 | — | 12 | 17 | — | 12 | 17 | — | 12 | 49 | — | 13 | 22 | — | 13 | 54 | — | 14 | 26 | — | 14 | 59 | — | 15 | 31 | — | 16 | 04 |
| 30 | 00 | — | 16 | 44 | — | 17 | 17 | — | 17 | 17 | — | 17 | 49 | — | 18 | 54 | — | 18 | 54 | — | 19 | 26 | — | 19 | 59 | — | 20 | 31 | — | 20 | 04 |
| | 25 | — | 16 | 52 | — | 17 | 25 | — | 17 | 25 | — | 17 | 57 | — | 18 | 30 | — | 19 | 02 | — | 19 | 34 | — | 20 | 07 | — | 20 | 39 | — | 21 | 12 |
| | 50 | — | 17 | 00 | — | 17 | 33 | — | 18 | 06 | — | 18 | 06 | — | 18 | 38 | — | 19 | 10 | — | 19 | 42 | — | 20 | 15 | — | 20 | 47 | — | 21 | 20 |
| | 75 | — | 17 | 08 | — | 17 | 41 | — | 18 | 13 | — | 18 | 13 | — | 18 | 46 | — | 19 | 18 | — | 19 | 50 | — | 20 | 23 | — | 20 | 55 | — | 21 | 28 |
| 40 | 00 | — | 22 | 08 | — | 22 | 41 | — | 23 | 13 | — | 23 | 13 | — | 23 | 46 | — | 24 | 18 | — | 24 | 50 | — | 25 | 23 | — | 25 | 55 | — | 26 | 28 |
| | 25 | — | 22 | 16 | — | 22 | 49 | — | 23 | 21 | — | 23 | 21 | — | 23 | 54 | — | 24 | 26 | — | 24 | 58 | — | 25 | 31 | — | 26 | 03 | — | 26 | 36 |
| | 50 | — | 22 | 24 | — | 22 | 57 | — | 23 | 29 | — | 23 | 29 | — | 24 | 02 | — | 24 | 34 | — | 25 | 06 | — | 25 | 39 | — | 26 | 11 | — | 26 | 44 |
| | 75 | — | 22 | 32 | — | 23 | 06 | — | 23 | 37 | — | 24 | 10 | — | 24 | 10 | — | 24 | 42 | — | 25 | 14 | — | 25 | 47 | — | 26 | 19 | — | 26 | 52 |
| 50 | 00 | — | 27 | 32 | — | 28 | 06 | — | 28 | 37 | — | 28 | 37 | — | 29 | 10 | — | 29 | 42 | — | 30 | 14 | — | 30 | 47 | — | 31 | 19 | — | 31 | 52 |
| | 25 | — | 27 | 40 | — | 28 | 13 | — | 28 | 45 | — | 29 | 18 | — | 29 | 18 | — | 29 | 50 | — | 30 | 22 | — | 30 | 55 | — | 31 | 27 | — | 32 | 00 |
| | 50 | — | 27 | 48 | — | 28 | 21 | — | 28 | 53 | — | 29 | 26 | — | 29 | 26 | — | 29 | 58 | — | 30 | 30 | — | 30 | 63 | — | 31 | 35 | — | 32 | 08 |
| | 75 | — | 27 | 56 | — | 28 | 29 | — | 29 | 01 | — | 29 | 34 | — | 29 | 34 | — | 30 | 06 | — | 30 | 38 | — | 31 | 11 | — | 31 | 43 | — | 32 | 16 |
| 60 | 00 | — | 32 | 56 | — | 33 | 29 | — | 34 | 01 | — | 34 | 01 | — | 34 | 34 | — | 35 | 06 | — | 35 | 38 | — | 36 | 11 | — | 36 | 43 | — | 37 | 16 |
| | 25 | — | 33 | 04 | — | 33 | 37 | — | 34 | 09 | — | 34 | 09 | — | 34 | 42 | — | 35 | 14 | — | 35 | 46 | — | 36 | 19 | — | 36 | 51 | — | 37 | 24 |
| | 50 | — | 33 | 12 | — | 33 | 45 | — | 34 | 17 | — | 34 | 17 | — | 34 | 50 | — | 35 | 22 | — | 35 | 54 | — | 36 | 27 | — | 36 | 59 | — | 37 | 32 |
| | 75 | — | 33 | 20 | — | 33 | 53 | — | 34 | 25 | — | 34 | 25 | — | 34 | 58 | — | 35 | 30 | — | 36 | 02 | — | 36 | 35 | — | 37 | 07 | — | 37 | 40 |
| 70 | 00 | — | 38 | 20 | — | 38 | 53 | — | 39 | 25 | — | 39 | 25 | — | 39 | 58 | — | 40 | 30 | — | 41 | 02 | — | 41 | 35 | — | 42 | 07 | — | 42 | 40 |
| | 25 | — | 38 | 28 | — | 39 | 01 | — | 39 | 33 | — | 40 | 06 | — | 40 | 06 | — | 40 | 38 | — | 41 | 10 | — | 41 | 43 | — | 42 | 15 | — | 42 | 48 |
| | 50 | — | 38 | 36 | — | 39 | 09 | — | 39 | 41 | — | 40 | 14 | — | 40 | 14 | — | 40 | 46 | — | 41 | 18 | — | 41 | 51 | — | 42 | 23 | — | 42 | 56 |
| | 75 | — | 38 | 44 | — | 39 | 17 | — | 39 | 49 | — | 40 | 22 | — | 40 | 22 | — | 40 | 54 | — | 41 | 26 | — | 41 | 59 | — | 42 | 31 | — | 43 | 04 |
| 80 | 00 | — | 43 | 44 | — | 44 | 17 | — | 44 | 49 | — | 45 | 22 | — | 45 | 22 | — | 45 | 54 | — | 46 | 26 | — | 46 | 59 | — | 47 | 31 | — | 48 | 04 |
| | 25 | — | 43 | 52 | — | 44 | 25 | — | 44 | 57 | — | 45 | 30 | — | 45 | 30 | — | 46 | 02 | — | 46 | 34 | — | 47 | 07 | — | 47 | 39 | — | 48 | 12 |
| | 50 | — | 44 | 00 | — | 44 | 33 | — | 45 | 05 | — | 45 | 38 | — | 45 | 38 | — | 46 | 10 | — | 46 | 42 | — | 47 | 15 | — | 47 | 47 | — | 48 | 20 |
| | 75 | — | 44 | 08 | — | 44 | 41 | — | 45 | 13 | — | 45 | 46 | — | 45 | 46 | — | 46 | 18 | — | 46 | 50 | — | 47 | 23 | — | 47 | 55 | — | 48 | 28 |
| 90 | 00 | — | 49 | 08 | — | 49 | 41 | — | 50 | 13 | — | 50 | 46 | — | 50 | 46 | — | 51 | 18 | — | 51 | 50 | — | 52 | 23 | — | 52 | 55 | — | 53 | 28 |
| | 25 | — | 49 | 16 | — | 49 | 49 | — | 50 | 21 | — | 50 | 54 | — | 50 | 54 | — | 51 | 26 | — | 51 | 58 | — | 52 | 28 | — | 53 | 03 | — | 53 | 36 |
| | 50 | — | 49 | 24 | — | 49 | 57 | — | 50 | 29 | — | 51 | 02 | — | 51 | 02 | — | 51 | 34 | — | 52 | 06 | — | 52 | 30 | — | 53 | 11 | — | 53 | 44 |
| | 75 | — | 49 | 32 | — | 50 | 05 | — | 50 | 37 | — | 51 | 10 | — | 51 | 10 | — | 51 | 42 | — | 52 | 14 | — | 52 | 47 | — | 53 | 19 | — | 53 | 52 |

第 三 表
切線支距表

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|-------------------------------|--------|-----|-------|-----|-----|--------|-----|-------|-----|
| R. = 100 (或 1000 及 10) | | | | | | | | | |
| 1 | 1,000 | | 0,005 | 15 | 40 | 38,94 | 184 | 7,89 | 80 |
| 2 | 2,000 | | 0,020 | 25 | 42 | 40,78 | 182 | 8,69 | 88 |
| 3 | 3,000 | | 0,045 | 35 | 44 | 42,60 | 180 | 9,52 | 87 |
| 4 | 3,999 | | 0,080 | 45 | 46 | 44,40 | 178 | 10,39 | 91 |
| 5 | 4,998 | | 0,125 | 55 | 48 | 46,18 | 176 | 11,30 | 94 |
| 6 | 5,997 | | 0,180 | 65 | 50 | 47,94 | 175 | 12,24 | 97 |
| 7 | 6,995 | | 0,245 | 75 | 52 | 49,69 | 173 | 13,21 | 101 |
| 8 | 7,992 | | 0,320 | 85 | 54 | 51,42 | 170 | 14,22 | 106 |
| 9 | 8,988 | | 0,405 | 95 | 56 | 53,12 | 168 | 15,27 | 108 |
| 10 | 9,983 | | 0,500 | 104 | 58 | 54,80 | 166 | 16,35 | 112 |
| 11 | 10,977 | | 0,604 | 115 | 60 | 56,46 | 164 | 17,47 | 115 |
| 12 | 11,970 | | 0,719 | 125 | 62 | 58,10 | 162 | 18,62 | 117 |
| 18 | 12,962 | | 0,844 | 134 | 64 | 59,72 | 159 | 19,79 | 121 |
| 14 | 13,958 | | 0,978 | 145 | 66 | 61,31 | 157 | 21,00 | 124 |
| 15 | 14,944 | | 1,123 | 154 | 68 | 62,88 | 154 | 22,24 | 128 |
| 16 | 15,933 | | 1,277 | 164 | 70 | 64,42 | 152 | 23,52 | 130 |
| 17 | 16,919 | | 1,441 | 174 | 72 | 65,94 | 149 | 24,82 | 133 |
| 18 | 17,904 | | 1,615 | 184 | 74 | 67,43 | 146 | 26,15 | 136 |
| 19 | 18,887 | | 1,799 | 194 | 76 | 68,89 | 144 | 27,51 | 139 |
| 20 | 19,867 | | 1,978 | 41 | 80 | 70,33 | 141 | 28,90 | 143 |
| | | 195 | | 46 | | 71,74 | | 30,33 | |
| 22 | 21,82 | 195 | 2,40 | 50 | | | | | |
| 24 | 23,77 | 194 | 2,86 | 54 | | | | | |
| 26 | 25,71 | 193 | 3,36 | 57 | 8 | 7,17 | 66 | 3,03 | 75 |
| 28 | 27,64 | 191 | 3,90 | 61 | 9 | 7,83 | 58 | 3,78 | 81 |
| 30 | 29,55 | 191 | 4,47 | 64 | 10 | 8,41 | 50 | 4,59 | 87 |
| 32 | 31,46 | 189 | 5,08 | 68 | 11 | 8,91 | 41 | 5,46 | 92 |
| 34 | 33,35 | 188 | 5,72 | 72 | 12 | 9,32 | 31 | 6,38 | 95 |
| 36 | 35,23 | 186 | 6,40 | 77 | 13 | 9,63 | 22 | 7,33 | 97 |
| 38 | 37,09 | 185 | 7,12 | | 14 | 9,85 | 12 | 8,30 | 99 |
| 40 | 38,94 | | 7,89 | | 15 | 9,97 | | 9,29 | |
| R = 10 補充值 | | | | | | | | | |
| R. = 105 (或 1050) | | | | | | | | | |
| 1 | 1,000 | | 0,005 | 14 | 10 | 9,985 | | 0,478 | 100 |
| 2 | 2,000 | | 0,019 | 24 | 11 | 10,980 | | 0,576 | 109 |
| 3 | 3,000 | | 0,043 | 33 | 12 | 11,974 | | 0,685 | 119 |
| 4 | 3,999 | | 0,076 | 43 | 13 | 12,967 | | 0,804 | 128 |
| 5 | 4,998 | | 0,119 | 52 | 14 | 13,959 | | 0,932 | 138 |
| 6 | 5,997 | | 0,171 | 62 | 15 | 14,949 | | 1,070 | 147 |
| 7 | 6,995 | | 0,233 | 71 | 16 | 15,938 | | 1,217 | 156 |
| 8 | 7,992 | | 0,304 | 81 | 17 | 16,926 | | 1,378 | 166 |
| 9 | 8,989 | | 0,385 | 91 | 18 | 17,912 | | 1,539 | 175 |
| 10 | 9,985 | | 0,476 | | 19 | 18,896 | | 1,714 | 185 |
| | | | | | 20 | 19,879 | | 1,899 | |
| R. = 100 及 105 | | | | | | | | | |

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|---------------------------|--------|-----|-------|-----|-----|-------|-----|-------|-----|
| R. = 105 (或 1050) | | | | | | | | | |
| 20 | 19,88 | 196 | 1,90 | 40 | 50 | 48,18 | 177 | 11,68 | 53 |
| 22 | 21,84 | 195 | 2,30 | 43 | 52 | 49,90 | 175 | 12,61 | 97 |
| 24 | 23,79 | 194 | 2,73 | 47 | 54 | 51,65 | 173 | 13,58 | 100 |
| 26 | 25,73 | 193 | 3,20 | 51 | 56 | 53,38 | 171 | 14,58 | 103 |
| 28 | 27,66 | 193 | 3,71 | 55 | 58 | 55,09 | 170 | 15,61 | 107 |
| 30 | 29,59 | 192 | 4,26 | 58 | 60 | 56,79 | 168 | 16,68 | 110 |
| 32 | 31,51 | 190 | 4,84 | 62 | 62 | 58,47 | 165 | 17,78 | 112 |
| 34 | 33,41 | 189 | 5,46 | 65 | 64 | 60,12 | 163 | 18,90 | 116 |
| 36 | 35,30 | 188 | 6,11 | 69 | 66 | 61,75 | 160 | 20,06 | 120 |
| 38 | 37,18 | 188 | 6,80 | 73 | 68 | 63,35 | 158 | 21,26 | 122 |
| 40 | 39,04 | 186 | 7,53 | 76 | 70 | 64,93 | 156 | 22,48 | 125 |
| 42 | 40,89 | 185 | 8,29 | 80 | 72 | 66,49 | 153 | 23,73 | 128 |
| 44 | 42,72 | 183 | 9,09 | 83 | 74 | 68,02 | 151 | 25,01 | 131 |
| 46 | 44,54 | 182 | 9,92 | 86 | 76 | 69,53 | 149 | 26,32 | 134 |
| 48 | 46,34 | 180 | 10,78 | 90 | 78 | 71,02 | 146 | 27,66 | 137 |
| 50 | 48,13 | 179 | 11,68 | | 80 | 72,48 | 144 | 29,03 | 139 |
| | | | | | 82 | 73,92 | | 30,42 | |
| R. = 110 (或 1100) | | | | | | | | | |
| 1 | 1,000 | | 0,005 | 13 | 20 | 19,89 | 196 | 1,81 | 88 |
| 2 | 2,000 | | 0,018 | 23 | 22 | 21,85 | 196 | 2,19 | 42 |
| 3 | 3,000 | | 0,041 | 32 | 24 | 23,81 | 195 | 2,61 | 45 |
| 4 | 3,999 | | 0,073 | 41 | 26 | 25,76 | 194 | 3,06 | 49 |
| 5 | 4,998 | | 0,114 | 50 | 28 | 27,70 | 193 | 3,55 | 52 |
| 6 | 5,997 | | 0,164 | 59 | 30 | 29,63 | 192 | 4,07 | 55 |
| 7 | 6,995 | | 0,223 | 68 | 32 | 31,55 | 191 | 4,62 | 59 |
| 8 | 7,993 | | 0,291 | 77 | 34 | 33,46 | 190 | 5,21 | 62 |
| 9 | 8,990 | | 0,368 | 86 | 36 | 35,36 | 189 | 5,83 | 66 |
| 10 | 9,986 | | 0,454 | 96 | 38 | 37,25 | 187 | 6,49 | 70 |
| 11 | 10,981 | | 0,550 | 104 | 40 | 39,12 | 186 | 7,19 | 73 |
| 12 | 11,975 | | 0,654 | 113 | 42 | 40,98 | 186 | 7,92 | 76 |
| 13 | 12,969 | | 0,767 | 123 | 44 | 42,84 | 184 | 8,68 | 80 |
| 14 | 13,962 | | 0,890 | 131 | 46 | 44,68 | 182 | 9,48 | 83 |
| 15 | 14,954 | | 1,021 | 141 | 48 | 46,50 | 180 | 10,31 | 86 |
| 16 | 15,944 | | 1,162 | 150 | 50 | 48,30 | 179 | 11,17 | 89 |
| 17 | 16,933 | | 1,312 | 158 | 52 | 50,09 | 177 | 12,06 | 93 |
| 18 | 17,920 | | 1,470 | 167 | 54 | 51,86 | 175 | 12,99 | 96 |
| 19 | 18,906 | | 1,637 | 176 | 56 | 53,61 | 174 | 13,95 | 99 |
| 20 | 19,890 | | 1,813 | | 58 | 55,35 | 172 | 14,94 | 102 |
| | | | | | 60 | 57,07 | | 15,96 | |
| R. = 105 及 110 | | | | | | | | | |

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|---------------------------|--------|-----|-------|-----|-----|-------|-----|-------|-----|
| R. = 110 (或 1100) | | | | | | | | | |
| 60 | 57,07 | | 15,96 | | 72 | 66,97 | | 22,73 | |
| 62 | 58,77 | 170 | 17,01 | 106 | 74 | 68,54 | 157 | 23,96 | 123 |
| 64 | 60,45 | 168 | 18,09 | 108 | 76 | 70,09 | 155 | 25,22 | 126 |
| 66 | 62,11 | 166 | 19,20 | 111 | 78 | 71,62 | 153 | 26,51 | 129 |
| 68 | 63,75 | 164 | 20,35 | 115 | 80 | 73,13 | 151 | 27,83 | 132 |
| 70 | 65,37 | 162 | 21,53 | 118 | 82 | 74,61 | 148 | 29,17 | 134 |
| 72 | 66,97 | 160 | 22,73 | 120 | 84 | 76,07 | 146 | 30,54 | 137 |
| R. = 115 (或 1150) | | | | | | | | | |
| 1 | 1,000 | | 0,004 | | 34 | 33,51 | | 4,99 | |
| 2 | 2,000 | | 0,017 | 18 | 36 | 35,42 | 191 | 5,59 | 60 |
| 3 | 3,000 | | 0,039 | 22 | 38 | 37,32 | 190 | 6,22 | 63 |
| 4 | 3,999 | | 0,070 | 31 | 40 | 39,20 | 188 | 6,89 | 67 |
| 5 | 4,998 | | 0,109 | 39 | 42 | 41,07 | 187 | 7,59 | 70 |
| 6 | 5,997 | | 0,157 | 48 | 44 | 42,93 | 186 | 8,31 | 72 |
| 7 | 6,996 | | 0,213 | 56 | 46 | 44,78 | 185 | 9,07 | 76 |
| 8 | 7,994 | | 0,278 | 65 | 48 | 46,62 | 184 | 9,87 | 80 |
| 9 | 8,991 | | 0,352 | 74 | 50 | 48,44 | 182 | 10,70 | 83 |
| 10 | 9,987 | | 0,435 | 83 | 52 | 50,25 | 181 | 11,56 | 86 |
| 11 | 10,983 | | 0,526 | 91 | 54 | 52,04 | 179 | 12,44 | 88 |
| 12 | 11,978 | | 0,626 | 100 | 56 | 53,81 | 177 | 13,36 | 92 |
| 13 | 12,972 | | 0,734 | 108 | 58 | 55,57 | 176 | 14,32 | 96 |
| 14 | 13,965 | | 0,851 | 117 | 60 | 57,31 | 174 | 15,30 | 98 |
| 15 | 14,957 | | 0,977 | 126 | 62 | 59,04 | 173 | 16,31 | 101 |
| 16 | 15,948 | | 1,111 | 134 | 64 | 60,75 | 171 | 17,35 | 104 |
| 17 | 16,938 | | 1,254 | 143 | 66 | 62,44 | 169 | 18,42 | 107 |
| 18 | 17,928 | | 1,406 | 152 | 68 | 64,11 | 167 | 19,52 | 110 |
| 19 | 18,918 | | 1,566 | 160 | 70 | 65,76 | 165 | 20,65 | 113 |
| 20 | 19,899 | | 1,735 | 169 | 72 | 67,39 | 163 | 21,81 | 116 |
| | | | | | 74 | 69,00 | 161 | 23,00 | 119 |
| 22 | 21,87 | 197 | 2,10 | 87 | 76 | 70,59 | 159 | 24,21 | 121 |
| 24 | 23,83 | 196 | 2,50 | 40 | 78 | 72,16 | 157 | 25,45 | 124 |
| 26 | 25,78 | 195 | 2,93 | 43 | 80 | 73,70 | 154 | 26,72 | 127 |
| 28 | 27,72 | 194 | 3,39 | 46 | 82 | 75,22 | 152 | 28,02 | 130 |
| 30 | 29,66 | 194 | 3,89 | 50 | 84 | 76,72 | 150 | 29,34 | 132 |
| 32 | 31,59 | 193 | 4,42 | 53 | 86 | 78,21 | 149 | 30,69 | 135 |
| 34 | 33,51 | 192 | 4,99 | 57 | | | | | |

R. = 110 及 115

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|---------------------------------|--------|-----|-------|-----|-----|-------|-----|-------|-----|
| R. = 120 (或 1200 及 12) | | | | | | | | | |
| 1 | 1,000 | | 0,004 | 13 | 48 | 46,73 | 184 | 9,47 | 80 |
| 2 | 2,000 | | 0,017 | 21 | 50 | 48,57 | 182 | 10,27 | 88 |
| 3 | 3,000 | | 0,038 | 29 | 52 | 50,39 | 181 | 11,10 | 86 |
| 4 | 3,999 | | 0,067 | 37 | 54 | 52,20 | 179 | 11,96 | 88 |
| 5 | 4,999 | | 0,104 | 46 | 56 | 53,99 | 178 | 12,83 | 92 |
| 6 | 5,998 | | 0,150 | 54 | 58 | 55,77 | 176 | 13,75 | 94 |
| 7 | 6,996 | | 0,204 | 63 | 60 | 57,53 | 175 | 14,69 | 97 |
| 8 | 7,994 | | 0,267 | 70 | 62 | 59,28 | 173 | 15,66 | 100 |
| 9 | 8,991 | | 0,337 | 79 | 64 | 61,01 | 171 | 16,66 | 103 |
| 10 | 9,988 | | 0,416 | 88 | 66 | 62,72 | 170 | 17,69 | 106 |
| 11 | 10,984 | | 0,504 | 96 | 68 | 64,42 | 168 | 18,75 | 109 |
| 12 | 11,979 | | 0,600 | 104 | 70 | 66,10 | 166 | 19,84 | 112 |
| 13 | 12,974 | | 0,704 | 112 | 72 | 67,76 | 164 | 20,96 | 114 |
| 14 | 13,968 | | 0,816 | 120 | 74 | 69,40 | 162 | 22,10 | 117 |
| 15 | 14,961 | | 0,936 | 129 | 76 | 71,02 | 160 | 23,27 | 120 |
| 16 | 15,953 | | 1,065 | 137 | 78 | 72,62 | 158 | 24,47 | 122 |
| 17 | 16,944 | | 1,202 | 145 | 80 | 74,20 | 157 | 25,69 | 125 |
| 18 | 17,933 | | 1,347 | 154 | 82 | 75,77 | 154 | 26,94 | 128 |
| 19 | 18,921 | | 1,501 | 162 | 84 | 77,31 | 152 | 28,22 | 130 |
| 20 | 19,908 | | 1,663 | 88 | 86 | 78,83 | 150 | 29,52 | 133 |
| | | 197 | | 85 | 88 | 80,33 | | 30,85 | |
| 22 | 21,88 | 196 | 2,01 | 88 | | | | | |
| 24 | 23,84 | 196 | 2,39 | 41 | | | | | |
| 26 | 25,80 | 195 | 2,80 | 45 | | | | | |
| 28 | 27,75 | 194 | 3,25 | 48 | 8 | 7,42 | 76 | 2,57 | 65 |
| 30 | 29,69 | 193 | 3,73 | 51 | 9 | 8,18 | 70 | 3,22 | 71 |
| 32 | 31,62 | 193 | 4,24 | 54 | 10 | 8,88 | 64 | 3,93 | 77 |
| 34 | 33,55 | 193 | 4,78 | 57 | 11 | 9,52 | 58 | 4,70 | 82 |
| 36 | 35,46 | 191 | 5,35 | 61 | 12 | 10,10 | 50 | 5,52 | 86 |
| 38 | 37,37 | 189 | 5,96 | 64 | 13 | 10,60 | 43 | 6,38 | 90 |
| 40 | 39,26 | 189 | 6,60 | 67 | 14 | 11,03 | 36 | 7,28 | 94 |
| 42 | 41,15 | 187 | 7,27 | 71 | 15 | 11,39 | 28 | 8,22 | 96 |
| 44 | 43,02 | 188 | 7,98 | 73 | 16 | 11,67 | 19 | 9,18 | 98 |
| 46 | 44,88 | 185 | 8,71 | 76 | 17 | 11,86 | 11 | 10,16 | 99 |
| 48 | 46,73 | | 9,47 | | 18 | 11,97 | | 11,15 | |
| R = 12 補充值 | | | | | | | | | |
| R. = 125 (或 1250) | | | | | | | | | |
| 1 | 1,000 | | 0,004 | 12 | 5 | 4,999 | | 0,100 | 44 |
| 2 | 2,000 | | 0,016 | 20 | 6 | 5,998 | | 0,144 | 52 |
| 3 | 3,000 | | 0,036 | 28 | 7 | 6,997 | | 0,196 | 60 |
| 4 | 3,999 | | 0,064 | 36 | 8 | 7,995 | | 0,256 | 68 |
| 5 | 4,999 | | 0,100 | | 9 | 8,992 | | 0,324 | 76 |
| | | | | | 10 | 9,989 | | 0,400 | |
| R. = 120 及 125 | | | | | | | | | |

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|---------------------------|--------|-----|-------|-----|-----|--------|-----|-------|-----|
| R. = 125 (或 1250) | | | | | | | | | |
| 10 | 9,989 | | 0,400 | 84 | 44 | 43,10 | 187 | 7,66 | 70 |
| 11 | 10,985 | | 0,484 | 92 | 46 | 44,97 | 186 | 8,36 | 74 |
| 12 | 11,981 | | 0,576 | 100 | 48 | 46,83 | 185 | 9,10 | 77 |
| 13 | 12,976 | | 0,676 | 108 | 50 | 48,68 | 183 | 9,87 | 79 |
| 14 | 13,970 | | 0,784 | 115 | 52 | 50,51 | 182 | 10,66 | 82 |
| 15 | 14,964 | | 0,899 | 123 | 54 | 52,33 | 181 | 11,48 | 85 |
| 16 | 15,957 | | 1,022 | 131 | 56 | 54,14 | 180 | 12,33 | 88 |
| 17 | 16,949 | | 1,153 | 140 | 58 | 55,94 | 178 | 13,21 | 92 |
| 18 | 17,939 | | 1,293 | 148 | 60 | 57,72 | 177 | 14,13 | 94 |
| 19 | 18,928 | | 1,441 | 156 | 62 | 59,49 | 175 | 15,07 | 96 |
| 20 | 19,915 | | 1,597 | | 64 | 61,24 | 174 | 16,03 | 99 |
| | | 197 | | 33 | 66 | 62,98 | 172 | 17,02 | 102 |
| 22 | 21,89 | 196 | 1,93 | 36 | 68 | 64,70 | 170 | 18,04 | 105 |
| 24 | 23,85 | 196 | 2,29 | 40 | 70 | 66,40 | 169 | 19,09 | 107 |
| 26 | 25,81 | 195 | 2,69 | 43 | 72 | 68,09 | 167 | 20,16 | 110 |
| 28 | 27,76 | 195 | 3,12 | 46 | 74 | 69,76 | 165 | 21,26 | 113 |
| 30 | 29,71 | 194 | 3,58 | 49 | 76 | 71,41 | 163 | 22,39 | 116 |
| 32 | 31,65 | 193 | 4,07 | 52 | 78 | 73,04 | 161 | 23,55 | 119 |
| 34 | 33,58 | 192 | 4,59 | 55 | 80 | 74,65 | 160 | 24,74 | 121 |
| 36 | 35,50 | 191 | 5,14 | 59 | 82 | 76,25 | 158 | 25,95 | 123 |
| 38 | 37,41 | 191 | 5,73 | 62 | 84 | 77,83 | 155 | 27,18 | 126 |
| 40 | 39,32 | 190 | 6,35 | 64 | 86 | 79,38 | 153 | 28,44 | 128 |
| 42 | 41,22 | 188 | 6,99 | 67 | 88 | 80,91 | 151 | 29,72 | 130 |
| 44 | 43,10 | | 7,66 | | 90 | 82,42 | | 31,02 | |
| R. = 130 (或 1300) | | | | | | | | | |
| 1 | 1,000 | | 0,004 | 11 | 16 | 15,960 | | 0,983 | 127 |
| 2 | 2,000 | | 0,015 | 20 | 17 | 16,952 | | 1,110 | 134 |
| 3 | 3,000 | | 0,035 | 27 | 18 | 17,943 | | 1,244 | 142 |
| 4 | 3,999 | | 0,062 | 34 | 19 | 18,933 | | 1,386 | 149 |
| 5 | 4,999 | | 0,096 | 42 | 20 | 19,921 | | 1,535 | |
| 6 | 5,998 | | 0,138 | 50 | | | 197 | | 83 |
| 7 | 6,997 | | 0,188 | 58 | 22 | 21,89 | 197 | 1,86 | 85 |
| 8 | 7,995 | | 0,246 | 65 | 24 | 23,86 | 196 | 2,21 | 88 |
| 9 | 8,993 | | 0,311 | 73 | 26 | 25,82 | 196 | 2,59 | 91 |
| 10 | 9,990 | | 0,384 | 81 | 28 | 27,78 | 195 | 3,00 | 94 |
| 11 | 10,987 | | 0,465 | 89 | 30 | 29,73 | 194 | 3,45 | 97 |
| 12 | 11,983 | | 0,554 | 96 | 32 | 31,67 | 194 | 3,92 | 100 |
| 13 | 12,978 | | 0,650 | 103 | 34 | 33,61 | 193 | 4,42 | 103 |
| 14 | 13,973 | | 0,753 | 111 | 36 | 35,54 | 192 | 4,95 | 106 |
| 15 | 14,967 | | 0,864 | 119 | 38 | 37,46 | 191 | 5,51 | 109 |
| 16 | 15,960 | | 0,983 | | 40 | 39,37 | | 6,11 | |

R. = 125 及 130

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|---------------------------|--------|-----|-------|-----|-------|-----|-------|-------|----|
| R. = 130 (或 1300) | | | | | | | | | |
| 40 | 39,37 | | 6,11 | 64 | 61,44 | | 176 | 15,43 | 96 |
| 42 | 41,28 | 191 | 6,73 | 62 | 63,20 | 174 | 16,89 | 99 | |
| 44 | 43,17 | 189 | 7,37 | 64 | 64,94 | 173 | 17,38 | 102 | |
| 46 | 45,06 | 188 | 8,05 | 68 | 66,67 | 171 | 18,40 | 104 | |
| 48 | 46,92 | 187 | 8,76 | 71 | 68,38 | 169 | 19,44 | 106 | |
| 50 | 48,78 | 186 | 9,50 | 74 | 70,07 | 168 | 20,50 | 109 | |
| 52 | 50,63 | 185 | 10,26 | 76 | 71,75 | 166 | 21,59 | 112 | |
| 54 | 52,48 | 183 | 11,05 | 79 | 73,41 | 164 | 22,71 | 114 | |
| 56 | 54,28 | 182 | 11,87 | 82 | 75,05 | 162 | 23,85 | 116 | |
| 58 | 56,09 | 181 | 12,72 | 85 | 76,67 | 160 | 25,01 | 119 | |
| 60 | 57,89 | 180 | 13,60 | 88 | 78,27 | 159 | 26,20 | 122 | |
| 62 | 59,67 | 178 | 14,50 | 90 | 79,86 | 157 | 27,42 | 124 | |
| 64 | 61,44 | 177 | 15,43 | 93 | 81,43 | 155 | 28,66 | 127 | |
| | | | | 90 | 82,98 | | 29,93 | | |
| R. = 135 (或 1350) | | | | | | | | | |
| 1 | 1,000 | | 0,004 | 11 | 35,57 | 193 | 4,76 | 54 | |
| 2 | 2,000 | | 0,015 | 18 | 37,50 | 192 | 5,30 | 53 | |
| 3 | 3,000 | | 0,033 | 26 | 39,42 | 191 | 5,88 | 60 | |
| 4 | 3,999 | | 0,059 | 34 | 41,33 | 190 | 6,48 | 63 | |
| 5 | 4,999 | | 0,093 | 40 | 43,23 | 189 | 7,11 | 65 | |
| 6 | 5,998 | | 0,138 | 48 | 45,12 | 188 | 7,76 | 68 | |
| 7 | 6,997 | | 0,181 | 48 | 47,00 | 186 | 8,44 | 71 | |
| 8 | 7,995 | | 0,237 | 56 | 48,86 | 186 | 9,15 | 74 | |
| 9 | 8,993 | | 0,300 | 63 | 50,72 | 186 | 9,89 | 77 | |
| 10 | 9,991 | | 0,370 | 70 | 52,57 | 185 | 10,66 | 79 | |
| 11 | 10,988 | | 0,448 | 78 | 54,41 | 184 | 11,45 | 82 | |
| 12 | 11,984 | | 0,533 | 85 | 56,23 | 182 | 12,27 | 85 | |
| 13 | 12,980 | | 0,626 | 93 | 58,04 | 181 | 13,12 | 87 | |
| 14 | 13,975 | | 0,728 | 100 | 59,84 | 180 | 13,99 | 90 | |
| 15 | 14,969 | | 0,833 | 107 | 61,63 | 179 | 14,89 | 92 | |
| 16 | 15,962 | | 0,947 | 114 | 63,40 | 177 | 15,81 | 95 | |
| 17 | 16,954 | | 1,069 | 122 | 65,16 | 176 | 16,76 | 98 | |
| 18 | 17,945 | | 1,198 | 129 | 66,90 | 174 | 17,74 | 100 | |
| 19 | 18,936 | | 1,335 | 137 | 68,63 | 173 | 18,74 | 103 | |
| 20 | 19,926 | | 1,479 | 144 | 70,35 | 172 | 19,77 | 106 | |
| | | | | 74 | 72,05 | 170 | 20,83 | 108 | |
| | | 193 | 1,79 | 31 | 73,73 | 168 | 21,91 | 111 | |
| 22 | 21,91 | 197 | 2,13 | 34 | 75,40 | 167 | 23,02 | 113 | |
| 24 | 23,88 | 196 | 2,50 | 37 | 77,05 | 165 | 24,15 | 115 | |
| 26 | 25,84 | 196 | 2,90 | 40 | 78,68 | 163 | 25,30 | 118 | |
| 28 | 27,80 | 195 | 3,32 | 42 | 80,30 | 162 | 26,48 | 120 | |
| 30 | 29,75 | 195 | 3,77 | 45 | 81,90 | 160 | 27,68 | 122 | |
| 32 | 31,70 | 194 | 4,25 | 48 | 83,48 | 158 | 28,90 | 125 | |
| 34 | 33,64 | 193 | 4,76 | 51 | 85,04 | 156 | 30,15 | | |
| 36 | 35,57 | | | | | | | | |

R. = 130 及 135

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|--------------------------------|--------|-----|-------|-----|-----|-------|-----|-------|-----|
| R. = 140 (或 1400 及 14) | | | | | | | | | |
| 1 | 1,000 | | 0,004 | 10 | 56 | 54,52 | 184 | 11,05 | 79 |
| 2 | 2,000 | | 0,014 | 18 | 58 | 56,36 | 182 | 11,84 | 82 |
| 3 | 3,000 | | 0,032 | 25 | 60 | 58,18 | 181 | 12,66 | 84 |
| 4 | 3,999 | | 0,057 | 32 | 62 | 59,99 | 180 | 13,50 | 87 |
| 5 | 4,999 | | 0,089 | 40 | 64 | 61,79 | 179 | 14,37 | 90 |
| 6 | 5,998 | | 0,129 | 46 | 66 | 63,58 | 178 | 15,27 | 92 |
| 7 | 6,997 | | 0,175 | 54 | 68 | 65,36 | 176 | 16,19 | 95 |
| 8 | 7,996 | | 0,229 | 60 | 70 | 67,12 | 175 | 17,14 | 97 |
| 9 | 8,994 | | 0,289 | 68 | 72 | 68,87 | 173 | 18,11 | 99 |
| 10 | 9,992 | | 0,357 | 75 | 74 | 70,60 | 172 | 19,10 | 102 |
| 11 | 10,989 | | 0,432 | 82 | 76 | 72,32 | 171 | 20,12 | 105 |
| 12 | 11,986 | | 0,514 | 89 | 78 | 74,03 | 169 | 21,17 | 107 |
| 13 | 12,982 | | 0,603 | 96 | 80 | 75,72 | 167 | 22,24 | 109 |
| 14 | 13,977 | | 0,699 | 104 | 82 | 77,39 | 166 | 23,33 | 112 |
| 15 | 14,971 | | 0,803 | 111 | 84 | 79,05 | 164 | 24,45 | 114 |
| 16 | 15,965 | | 0,914 | 118 | 86 | 80,69 | 163 | 25,59 | 117 |
| 17 | 16,958 | | 1,032 | 125 | 88 | 82,32 | 161 | 26,76 | 119 |
| 18 | 17,950 | | 1,157 | 131 | 90 | 83,93 | 159 | 27,95 | 121 |
| 19 | 18,941 | | 1,288 | 138 | 92 | 85,52 | 157 | 29,16 | 123 |
| 20 | 19,932 | | 1,426 | | 94 | 87,09 | | 30,39 | |
| 22 | 21,91 | 198 | 1,73 | 30 | | | | | |
| 24 | 23,88 | 197 | 2,06 | 33 | | | | | |
| 26 | 25,85 | 197 | 2,41 | 35 | | | | | |
| 28 | 27,81 | 196 | 2,79 | 38 | | | | | |
| 30 | 29,77 | 196 | 3,20 | 41 | 9 | 8,39 | 78 | 2,79 | 63 |
| 32 | 31,72 | 195 | 3,64 | 44 | 10 | 9,17 | 73 | 3,42 | 68 |
| 34 | 33,67 | 195 | 4,10 | 46 | 11 | 9,90 | 68 | 4,10 | 73 |
| 36 | 35,61 | 194 | 4,60 | 50 | 12 | 10,58 | 63 | 4,83 | 78 |
| 38 | 37,54 | 193 | 5,13 | 53 | 13 | 11,21 | 57 | 5,61 | 83 |
| 40 | 39,46 | 192 | 5,68 | 56 | 14 | 11,78 | 51 | 6,44 | 86 |
| 42 | 41,37 | 191 | 6,26 | 58 | 15 | 12,29 | 45 | 7,30 | 89 |
| 44 | 43,28 | 191 | 6,86 | 60 | 16 | 12,74 | 38 | 8,19 | 92 |
| 46 | 45,18 | 190 | 7,49 | 63 | 17 | 13,12 | 31 | 9,11 | 95 |
| 48 | 47,07 | 189 | 8,14 | 65 | 18 | 13,43 | 25 | 10,06 | 97 |
| 50 | 48,94 | 187 | 8,83 | 69 | 19 | 13,68 | 18 | 11,03 | 99 |
| 52 | 50,81 | 187 | 9,54 | 71 | 20 | 13,86 | | 12,02 | |
| 54 | 52,67 | 186 | 10,28 | 74 | | | | | |
| 56 | 54,52 | 185 | 11,05 | 77 | | | | | |
| R=14 補充值 | | | | | | | | | |

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|--------------------------------|--------|-----|-------|-----|-----|--------|-----|-------|-----|
| R. = 145 (或 1450) | | | | | | | | | |
| 1 | 1,000 | | 0,003 | 11 | 38 | 87,56 | 193 | 4,95 | 53 |
| 2 | 2,000 | | 0,014 | 17 | 40 | 39,49 | 192 | 5,48 | 56 |
| 3 | 3,000 | | 0,031 | 24 | 42 | 41,41 | 191 | 6,04 | 58 |
| 4 | 3,999 | | 0,055 | 31 | 44 | 43,32 | 191 | 6,62 | 61 |
| 5 | 4,999 | | 0,086 | 38 | 46 | 45,23 | 190 | 7,23 | 64 |
| 6 | 5,998 | | 0,124 | 45 | 48 | 47,13 | 189 | 7,87 | 67 |
| 7 | 6,997 | | 0,169 | 52 | 50 | 49,02 | 188 | 8,54 | 69 |
| 8 | 7,996 | | 0,221 | 58 | 52 | 50,90 | 188 | 9,23 | 71 |
| 9 | 8,994 | | 0,279 | 66 | 54 | 52,76 | 186 | 9,94 | 74 |
| 10 | 9,992 | | 0,345 | 72 | 56 | 54,62 | 185 | 10,68 | 77 |
| 11 | 10,990 | | 0,417 | 80 | 58 | 56,47 | 183 | 11,45 | 79 |
| 12 | 11,987 | | 0,497 | 86 | 60 | 58,30 | 183 | 12,24 | 81 |
| 13 | 12,983 | | 0,583 | 92 | 62 | 60,13 | 182 | 13,05 | 84 |
| 14 | 13,978 | | 0,675 | 100 | 64 | 61,95 | 180 | 13,89 | 87 |
| 15 | 14,973 | | 0,775 | 107 | 66 | 63,75 | 179 | 14,76 | 89 |
| 16 | 15,967 | | 0,882 | 113 | 68 | 65,54 | 177 | 15,65 | 92 |
| 17 | 16,961 | | 0,995 | 120 | 70 | 67,31 | 176 | 16,57 | 94 |
| 18 | 17,954 | | 1,115 | 127 | 72 | 69,07 | 176 | 17,51 | 96 |
| 19 | 18,946 | | 1,242 | 135 | 74 | 70,83 | 174 | 18,47 | 99 |
| 20 | 19,937 | | 1,377 | 29 | 76 | 72,57 | 172 | 19,46 | 102 |
| | | 198 | | 31 | 78 | 74,29 | 171 | 20,48 | 104 |
| 22 | 21,92 | 198 | 1,67 | 34 | 80 | 76,00 | 169 | 21,52 | 106 |
| 24 | 23,90 | 197 | 1,98 | 37 | 82 | 77,69 | 168 | 22,58 | 108 |
| 26 | 25,87 | 196 | 2,32 | 40 | 84 | 79,37 | 167 | 23,66 | 111 |
| 28 | 27,83 | 196 | 2,69 | 42 | 86 | 81,04 | 165 | 24,77 | 113 |
| 30 | 29,79 | 195 | 3,09 | 45 | 88 | 82,69 | 164 | 25,90 | 115 |
| 32 | 31,74 | 195 | 3,51 | 48 | 90 | 84,33 | 162 | 27,05 | 117 |
| 34 | 33,69 | 194 | 3,96 | 51 | 92 | 85,95 | 160 | 28,22 | 119 |
| 36 | 35,63 | 193 | 4,44 | | 94 | 87,55 | 159 | 29,41 | 122 |
| 38 | 37,56 | | 4,95 | | 96 | 89,14 | | 30,63 | |
| R. = 150 (或 1500 及 15) | | | | | | | | | |
| 1 | 1,000 | | 0,003 | 10 | 10 | 9,993 | | 0,333 | 70 |
| 2 | 2,000 | | 0,013 | 17 | 11 | 10,991 | | 0,403 | 77 |
| 3 | 3,000 | | 0,030 | 23 | 12 | 11,988 | | 0,480 | 83 |
| 4 | 4,000 | | 0,053 | 30 | 13 | 12,984 | | 0,563 | 89 |
| 5 | 4,999 | | 0,083 | 37 | 14 | 13,980 | | 0,653 | 96 |
| 6 | 5,998 | | 0,120 | 43 | 15 | 14,975 | | 0,749 | 103 |
| 7 | 6,997 | | 0,163 | 50 | 16 | 15,969 | | 0,852 | 110 |
| 8 | 7,996 | | 0,213 | 57 | 17 | 16,963 | | 0,962 | 116 |
| 9 | 8,995 | | 0,270 | 63 | 18 | 17,956 | | 1,078 | 123 |
| 10 | 9,993 | | 0,333 | | 19 | 18,949 | | 1,201 | 130 |
| | | | | | 20 | 19,941 | | 1,331 | |

R. = 145 及 150

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|--------------------------------|-------|-----|-------|----|-----|--------|-----|-------|-----|
| R. = 150 (或 1500 及 15) | | | | | | | | | |
| 20 | 19,94 | 198 | 1,33 | 28 | 76 | 72,79 | 174 | 18,84 | 98 |
| 22 | 21,92 | 198 | 1,61 | 30 | 78 | 74,53 | 173 | 19,82 | 101 |
| 24 | 23,90 | 197 | 1,91 | 33 | 80 | 76,26 | 172 | 20,83 | 103 |
| 26 | 25,87 | 197 | 2,24 | 36 | 82 | 77,98 | 170 | 21,86 | 105 |
| 28 | 27,84 | 196 | 2,60 | 39 | 84 | 79,68 | 169 | 22,91 | 107 |
| 30 | 29,80 | 196 | 2,99 | 41 | 86 | 81,37 | 167 | 23,98 | 110 |
| 32 | 31,76 | 195 | 3,40 | 43 | 88 | 83,04 | 166 | 25,08 | 112 |
| 34 | 33,71 | 195 | 3,83 | 46 | 90 | 84,70 | 164 | 26,20 | 114 |
| 36 | 35,66 | 194 | 4,29 | 49 | 92 | 86,34 | 163 | 27,34 | 116 |
| 38 | 37,60 | 193 | 4,78 | 52 | 94 | 87,97 | 161 | 28,50 | 118 |
| 40 | 39,53 | 193 | 5,30 | 54 | 96 | 89,58 | 160 | 29,68 | 121 |
| 42 | 41,46 | 192 | 5,84 | 57 | 98 | 91,18 | | 30,89 | |
| 44 | 43,38 | 191 | 6,41 | 59 | | | | | |
| 46 | 45,29 | 190 | 7,00 | 62 | | | | | |
| 48 | 47,19 | 189 | 7,62 | 64 | | | | | |
| 50 | 49,08 | 189 | 8,26 | 66 | | | | | |
| 52 | 50,97 | 187 | 8,92 | 69 | 9 | 8,47 | 81 | 2,62 | 59 |
| 54 | 52,84 | 187 | 9,61 | 72 | 10 | 9,28 | 76 | 3,21 | 64 |
| 56 | 54,71 | 185 | 10,33 | 74 | 11 | 10,04 | 72 | 3,85 | 70 |
| 58 | 56,56 | 185 | 11,07 | 77 | 12 | 10,76 | 67 | 4,55 | 74 |
| 60 | 58,41 | 184 | 11,84 | 79 | 13 | 11,43 | 62 | 5,29 | 78 |
| 62 | 60,25 | 183 | 12,63 | 81 | 14 | 12,05 | 57 | 6,07 | 83 |
| 64 | 62,08 | 182 | 13,44 | 84 | 15 | 12,62 | 51 | 6,90 | 88 |
| 66 | 63,90 | 180 | 14,28 | 87 | 16 | 13,13 | 45 | 7,76 | 89 |
| 68 | 65,70 | 179 | 15,16 | 89 | 17 | 13,58 | 40 | 8,65 | 91 |
| 70 | 67,49 | 178 | 16,04 | 91 | 18 | 13,98 | 33 | 9,56 | 94 |
| 72 | 69,27 | 177 | 16,95 | 93 | 19 | 14,31 | 27 | 10,50 | 96 |
| 74 | 71,04 | 175 | 17,88 | 96 | 20 | 14,58 | 20 | 11,46 | 99 |
| 76 | 72,79 | | 18,84 | | 21 | 14,78 | | 12,45 | |
| R=15 補充值 | | | | | | | | | |
| R. = 160 (或 1600 及 16) | | | | | | | | | |
| 1 | 1,000 | | 0,003 | 9 | 10 | 9,994 | | 0,312 | 66 |
| 2 | 2,000 | | 0,012 | 16 | 11 | 10,992 | | 0,378 | 72 |
| 3 | 3,000 | | 0,028 | 22 | 12 | 11,989 | | 0,450 | 78 |
| 4 | 4,000 | | 0,050 | 28 | 13 | 12,986 | | 0,528 | 84 |
| 5 | 4,999 | | 0,078 | 34 | 14 | 13,982 | | 0,612 | 90 |
| 6 | 5,999 | | 0,112 | 41 | 15 | 14,978 | | 0,702 | 97 |
| 7 | 6,998 | | 0,153 | 47 | 16 | 15,973 | | 0,799 | 103 |
| 8 | 7,997 | | 0,200 | 53 | 17 | 16,968 | | 0,902 | 109 |
| 9 | 8,996 | | 0,253 | 59 | 18 | 17,962 | | 1,011 | 116 |
| 10 | 9,994 | | 0,312 | | 19 | 18,955 | | 1,127 | 121 |
| | | | | | 20 | 19,948 | | 1,248 | |

R. = 150 及 160

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|---------------------------------|-------|-----|-------|----|-----|--------|-----|-------|-----|
| R. = 160 (或 1600 及 16) | | | | | | | | | |
| 20 | 19,96 | 198 | 1,25 | 26 | 76 | 73,17 | 177 | 17,71 | 93 |
| 22 | 21,93 | 198 | 1,51 | 29 | 78 | 74,94 | 177 | 18,64 | 95 |
| 24 | 23,91 | 197 | 1,80 | 31 | 80 | 76,71 | 175 | 19,59 | 97 |
| 26 | 25,88 | 197 | 2,11 | 33 | 82 | 78,46 | 174 | 20,56 | 99 |
| 28 | 27,85 | 197 | 2,44 | 36 | 84 | 80,20 | 172 | 21,55 | 101 |
| 30 | 29,82 | 196 | 2,80 | 38 | 86 | 81,92 | 171 | 22,56 | 103 |
| 32 | 31,78 | 196 | 3,18 | 41 | 88 | 83,63 | 170 | 23,59 | 105 |
| 34 | 33,74 | 195 | 3,59 | 43 | 90 | 85,33 | 169 | 24,64 | 108 |
| 36 | 35,69 | 195 | 4,02 | 46 | 92 | 87,02 | 167 | 25,72 | 110 |
| 38 | 37,64 | 194 | 4,48 | 49 | 94 | 88,69 | 166 | 26,82 | 112 |
| 40 | 39,58 | 194 | 4,97 | 51 | 96 | 90,35 | 164 | 27,94 | 115 |
| 42 | 41,52 | 193 | 5,48 | 53 | 98 | 91,99 | 163 | 29,09 | 116 |
| 44 | 43,45 | 192 | 6,01 | 56 | 100 | 93,62 | | 30,25 | |
| 46 | 45,37 | 191 | 6,57 | 58 | | | | | |
| 48 | 47,28 | 191 | 7,15 | 60 | | | | | |
| 50 | 49,19 | 191 | 7,75 | 63 | | | | | |
| 52 | 51,09 | 189 | 8,38 | 65 | 10 | 9,36 | 79 | 3,02 | 61 |
| 54 | 52,98 | 188 | 9,03 | 67 | 11 | 10,15 | 75 | 3,63 | 66 |
| 56 | 54,86 | 187 | 9,70 | 70 | 12 | 10,90 | 72 | 4,29 | 71 |
| 58 | 56,73 | 187 | 10,40 | 72 | 18 | 11,62 | 67 | 5,00 | 75 |
| 60 | 58,60 | 186 | 11,12 | 74 | 14 | 12,29 | 61 | 5,75 | 79 |
| 62 | 60,46 | 185 | 11,86 | 77 | 15 | 12,90 | 56 | 6,54 | 82 |
| 64 | 62,31 | 184 | 12,63 | 79 | 16 | 13,46 | 51 | 7,36 | 85 |
| 66 | 64,15 | 183 | 13,42 | 81 | 17 | 13,97 | 46 | 8,21 | 89 |
| 68 | 65,98 | 181 | 14,23 | 84 | 18 | 14,43 | 40 | 9,10 | 92 |
| 70 | 67,79 | 180 | 15,07 | 86 | 19 | 14,83 | 35 | 10,02 | 94 |
| 72 | 69,59 | 180 | 15,93 | 88 | 20 | 15,18 | 29 | 10,96 | 96 |
| 74 | 71,39 | 178 | 16,81 | 90 | 21 | 15,47 | 22 | 11,92 | 97 |
| 76 | 73,17 | | 17,71 | | 22 | 15,69 | | 12,89 | |
| R = 16 補充值 | | | | | | | | | |
| R. = 170 (或 1700) | | | | | | | | | |
| 1 | 1,000 | | 0,003 | 9 | 10 | 8,994 | | 0,294 | 62 |
| 2 | 2,000 | | 0,012 | 14 | 11 | 10,992 | | 0,356 | 67 |
| 3 | 3,000 | | 0,026 | 21 | 12 | 11,990 | | 0,423 | 73 |
| 4 | 4,000 | | 0,047 | 27 | 13 | 12,987 | | 0,496 | 79 |
| 5 | 4,999 | | 0,074 | 32 | 14 | 13,984 | | 0,575 | 86 |
| 6 | 5,999 | | 0,106 | 38 | 15 | 14,981 | | 0,661 | 91 |
| 7 | 6,998 | | 0,144 | 44 | 16 | 15,977 | | 0,752 | 97 |
| 8 | 7,997 | | 0,188 | 50 | 17 | 16,972 | | 0,849 | 103 |
| 9 | 8,996 | | 0,238 | 56 | 18 | 17,967 | | 0,952 | 109 |
| 10 | 9,994 | | 0,294 | | 19 | 18,961 | | 1,061 | 114 |
| | | | | | 20 | 19,954 | | 1,175 | |
| R. = 160 及 170 | | | | | | | | | |

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|--------------------------------|--------|-----|-------|-----|-----|-------|-----|-------|-----|
| R. = 170 (或 1700) | | | | | | | | | |
| 20 | 19,95 | | 1,18 | | 62 | 60,63 | | 11,18 | 72 |
| 22 | 21,94 | 199 | 1,42 | 24 | 64 | 62,50 | 187 | 11,90 | 75 |
| 24 | 23,92 | 198 | 1,69 | 27 | 66 | 64,36 | 186 | 12,65 | 77 |
| 26 | 25,90 | 198 | 1,98 | 29 | 68 | 66,20 | 184 | 13,42 | 79 |
| 28 | 27,87 | 197 | 2,30 | 32 | 70 | 68,04 | 184 | 14,21 | 81 |
| 30 | 29,84 | 197 | 2,64 | 34 | 72 | 69,87 | 183 | 15,02 | 83 |
| 32 | 31,81 | 197 | 3,00 | 36 | 74 | 71,69 | 182 | 15,85 | 85 |
| 34 | 33,77 | 196 | 3,38 | 38 | 76 | 73,50 | 181 | 16,70 | 88 |
| 36 | 35,73 | 196 | 3,79 | 41 | 78 | 75,30 | 180 | 17,58 | 90 |
| 38 | 37,68 | 195 | 4,22 | 43 | 80 | 77,08 | 178 | 18,48 | 92 |
| 40 | 39,63 | 195 | 4,68 | 46 | 82 | 78,86 | 178 | 19,40 | 93 |
| 42 | 41,57 | 194 | 5,16 | 48 | 84 | 80,62 | 176 | 20,33 | 96 |
| 44 | 43,51 | 194 | 5,66 | 50 | 86 | 82,37 | 175 | 21,29 | 98 |
| 46 | 45,44 | 193 | 6,18 | 52 | 88 | 84,12 | 175 | 22,27 | 100 |
| 48 | 47,36 | 192 | 6,73 | 55 | 90 | 85,85 | 173 | 23,27 | 102 |
| 50 | 49,28 | 192 | 7,30 | 57 | 92 | 87,57 | 172 | 24,29 | 104 |
| 52 | 51,19 | 191 | 7,89 | 59 | 94 | 89,28 | 171 | 25,33 | 106 |
| 54 | 53,10 | 191 | 8,50 | 61 | 96 | 90,98 | 170 | 26,39 | 108 |
| 56 | 55,00 | 190 | 9,14 | 64 | 98 | 92,66 | 168 | 27,47 | 110 |
| 58 | 56,88 | 188 | 9,80 | 66 | 100 | 94,33 | 167 | 28,57 | 112 |
| 60 | 58,76 | 188 | 10,48 | 68 | 102 | 95,99 | 166 | 29,69 | 114 |
| 62 | 60,63 | 187 | 11,18 | 70 | 104 | 97,64 | 165 | 30,83 | |
| R. = 180 (或 1800 及 18) | | | | | | | | | |
| 1 | 1,000 | | 0,003 | | 20 | 19,96 | | 1,11 | 23 |
| 2 | 2,000 | | 0,011 | 8 | 22 | 21,95 | 199 | 1,34 | 25 |
| 3 | 3,000 | | 0,025 | 14 | 24 | 23,93 | 198 | 1,59 | 28 |
| 4 | 4,000 | | 0,044 | 19 | 26 | 25,91 | 198 | 1,87 | 30 |
| 5 | 4,999 | | 0,069 | 25 | 28 | 27,89 | 198 | 2,17 | 32 |
| 6 | 5,999 | | 0,100 | 31 | 30 | 29,86 | 197 | 2,49 | 34 |
| 7 | 6,998 | | 0,136 | 36 | 32 | 31,83 | 197 | 2,83 | 36 |
| 8 | 7,997 | | 0,178 | 42 | 34 | 33,80 | 197 | 3,19 | 39 |
| 9 | 8,996 | | 0,225 | 47 | 36 | 35,76 | 196 | 3,58 | 41 |
| 10 | 9,995 | | 0,278 | 53 | 38 | 37,72 | 196 | 3,99 | 44 |
| 11 | 10,993 | | 0,336 | 58 | 40 | 39,67 | 195 | 4,43 | 46 |
| 12 | 11,991 | | 0,400 | 64 | 42 | 41,62 | 195 | 4,89 | 47 |
| 13 | 12,989 | | 0,469 | 69 | 44 | 43,56 | 194 | 5,36 | 49 |
| 14 | 13,986 | | 0,544 | 75 | 46 | 45,50 | 194 | 5,85 | 51 |
| 15 | 14,983 | | 0,625 | 81 | 48 | 47,43 | 193 | 6,36 | 54 |
| 16 | 15,979 | | 0,711 | 86 | 50 | 49,36 | 193 | 6,90 | 56 |
| 17 | 16,975 | | 0,802 | 91 | 52 | 51,28 | 192 | 7,46 | 58 |
| 18 | 17,970 | | 0,899 | 97 | 54 | 53,20 | 192 | 8,04 | 60 |
| 19 | 18,965 | | 1,002 | 103 | 56 | 55,11 | 191 | 8,64 | 62 |
| 20 | 19,959 | | 1,110 | 108 | 58 | 57,01 | 190 | 9,26 | |

R. = 170 及 180

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|--------------------------------|--------|-----|-------|-----|-----|--------|-----|-------|-----|
| R. = 180 (或 1800 及 18) | | | | | | | | | |
| 58 | 57,01 | | 9,26 | | 102 | 96,62 | | 28,14 | |
| 60 | 58,90 | 189 | 9,91 | 65 | 104 | 98,31 | 169 | 29,22 | 108 |
| 62 | 60,78 | 188 | 10,58 | 67 | 106 | 99,98 | 167 | 30,32 | 110 |
| 64 | 62,66 | 188 | 11,26 | 68 | | | | | |
| 66 | 64,53 | 187 | 11,97 | 71 | | | | | |
| 68 | 66,39 | 186 | 12,70 | 73 | | | | | |
| 70 | 68,25 | 186 | 13,44 | 74 | | | | | |
| 72 | 70,10 | 185 | 14,20 | 76 | | | | | |
| 74 | 71,94 | 184 | 14,99 | 77 | 10 | 9,49 | 84 | 2,71 | 55 |
| 76 | 73,77 | 183 | 15,80 | 81 | 11 | 10,33 | 80 | 3,26 | 59 |
| 78 | 75,59 | 182 | 16,63 | 83 | 12 | 11,13 | 77 | 3,85 | 64 |
| 80 | 77,39 | 180 | 17,49 | 86 | 13 | 11,90 | 73 | 4,49 | 69 |
| 82 | 79,19 | 180 | 18,37 | 88 | 14 | 12,63 | 69 | 5,18 | 72 |
| 84 | 80,98 | 179 | 19,26 | 89 | 15 | 13,32 | 65 | 5,90 | 76 |
| 86 | 82,76 | 178 | 20,17 | 91 | 16 | 13,97 | 61 | 6,66 | 79 |
| 88 | 84,53 | 177 | 21,10 | 93 | 17 | 14,58 | 56 | 7,45 | 82 |
| 90 | 86,30 | 177 | 22,04 | 94 | 18 | 15,14 | 52 | 8,27 | 86 |
| 92 | 88,05 | 175 | 23,00 | 96 | 19 | 15,66 | 47 | 9,13 | 88 |
| 94 | 89,79 | 174 | 23,98 | 98 | 20 | 16,13 | 42 | 10,01 | 91 |
| 96 | 91,52 | 173 | 24,99 | 101 | 21 | 16,55 | 37 | 10,92 | 93 |
| 98 | 93,23 | 171 | 26,02 | 103 | 22 | 16,92 | 31 | 11,85 | 95 |
| 100 | 94,93 | 170 | 27,07 | 105 | 23 | 17,23 | 26 | 12,80 | 96 |
| 102 | 96,62 | 169 | 28,14 | 107 | 24 | 17,49 | 21 | 13,76 | 98 |
| | | | | | 25 | 17,70 | | 14,74 | |
| R=18 補充值 | | | | | | | | | |
| R. = 190 (或 1900) | | | | | | | | | |
| 1 | 1,000 | | 0,003 | 8 | 17 | 16,977 | | 0,760 | 92 |
| 2 | 2,000 | | 0,011 | 18 | 18 | 17,973 | | 0,852 | 97 |
| 3 | 3,000 | | 0,024 | 18 | 19 | 18,968 | | 0,949 | 103 |
| 4 | 4,000 | | 0,042 | 24 | 20 | 19,963 | | 1,052 | |
| 5 | 4,999 | | 0,066 | 29 | | | 199 | | 22 |
| 6 | 5,999 | | 0,095 | 34 | 22 | 21,95 | 199 | 1,27 | 24 |
| 7 | 6,998 | | 0,129 | 39 | 24 | 23,94 | 199 | 1,51 | 26 |
| 8 | 7,997 | | 0,168 | 45 | 26 | 25,92 | 198 | 1,77 | 28 |
| 9 | 8,996 | | 0,213 | 50 | 28 | 27,90 | 198 | 2,05 | 31 |
| 10 | 9,995 | | 0,263 | 55 | 30 | 29,88 | 198 | 2,36 | 33 |
| 11 | 10,994 | | 0,318 | 61 | 32 | 31,85 | 197 | 2,69 | 34 |
| 12 | 11,992 | | 0,379 | 66 | 34 | 33,82 | 197 | 3,03 | 37 |
| 13 | 12,990 | | 0,445 | 71 | 36 | 35,79 | 196 | 3,40 | 39 |
| 14 | 13,987 | | 0,516 | 76 | 38 | 37,75 | 196 | 3,79 | 41 |
| 15 | 14,984 | | 0,592 | 81 | 40 | 39,71 | 195 | 4,20 | 42 |
| 16 | 15,981 | | 0,673 | 87 | 42 | 41,66 | 195 | 4,62 | 45 |
| 17 | 16,977 | | 0,760 | | 44 | 43,61 | 195 | 5,07 | |

R. = 180 及 190

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|--------------------------------|--------|-----|-------|----|-----|--------|-----|-------|-----|
| R. = 190 (或 1900) | | | | | | | | | |
| 44 | 43,61 | | 5,07 | | 78 | 75,83 | | 15,78 | |
| 46 | 45,55 | 194 | 5,54 | 47 | 80 | 77,66 | 183 | 16,59 | 81 |
| 48 | 47,49 | 194 | 6,03 | 49 | 82 | 79,48 | 182 | 17,42 | 83 |
| 50 | 49,42 | 193 | 6,54 | 51 | 84 | 81,29 | 181 | 18,27 | 85 |
| 52 | 51,35 | 193 | 7,07 | 53 | 86 | 83,09 | 180 | 19,14 | 87 |
| 54 | 53,27 | 192 | 7,62 | 55 | 88 | 84,89 | 180 | 20,02 | 88 |
| 56 | 55,19 | 192 | 8,19 | 57 | 90 | 86,67 | 178 | 20,92 | 90 |
| 58 | 57,10 | 191 | 8,78 | 59 | 92 | 88,44 | 177 | 21,84 | 92 |
| 60 | 59,01 | 191 | 9,40 | 62 | 94 | 90,21 | 177 | 22,78 | 94 |
| 62 | 60,91 | 190 | 10,03 | 63 | 96 | 91,97 | 176 | 23,74 | 96 |
| 64 | 62,80 | 189 | 10,68 | 65 | 98 | 93,71 | 174 | 24,72 | 98 |
| 66 | 64,68 | 188 | 11,35 | 67 | 100 | 95,45 | 174 | 25,71 | 99 |
| 68 | 66,56 | 188 | 12,04 | 69 | 102 | 97,17 | 172 | 26,72 | 101 |
| 70 | 68,43 | 187 | 12,75 | 71 | 104 | 98,89 | 172 | 27,75 | 103 |
| 72 | 70,29 | 186 | 13,48 | 73 | 106 | 100,59 | 170 | 28,80 | 105 |
| 74 | 72,14 | 185 | 14,22 | 74 | 108 | 102,28 | 169 | 29,87 | 107 |
| 76 | 73,99 | 185 | 14,99 | 77 | 110 | 103,96 | 168 | 30,96 | 109 |
| 78 | 75,83 | 184 | 15,78 | 79 | | | | | |
| R. = 200 (或 2000 及 20) | | | | | | | | | |
| 1 | 1,000 | | 0,002 | 8 | 20 | 19,97 | 199 | 1,00 | 21 |
| 2 | 2,000 | | 0,010 | 12 | 22 | 21,96 | 199 | 1,21 | 23 |
| 3 | 3,000 | | 0,022 | 18 | 24 | 23,95 | 198 | 1,44 | 25 |
| 4 | 4,000 | | 0,040 | 23 | 26 | 25,93 | 198 | 1,69 | 27 |
| 5 | 5,000 | | 0,063 | 27 | 28 | 27,91 | 198 | 1,96 | 29 |
| 6 | 5,999 | | 0,090 | 33 | 30 | 29,89 | 198 | 2,25 | 30 |
| 7 | 6,999 | | 0,123 | 37 | 32 | 31,87 | 197 | 2,55 | 33 |
| 8 | 7,998 | | 0,160 | 43 | 34 | 33,84 | 197 | 2,88 | 35 |
| 9 | 8,997 | | 0,203 | 47 | 36 | 35,81 | 196 | 3,23 | 37 |
| 10 | 9,996 | | 0,250 | 53 | 38 | 37,77 | 196 | 3,60 | 39 |
| 11 | 10,995 | | 0,303 | 57 | 40 | 39,73 | 196 | 3,99 | 40 |
| 12 | 11,993 | | 0,360 | 63 | 42 | 41,69 | 195 | 4,39 | 42 |
| 13 | 12,991 | | 0,423 | 67 | 44 | 43,64 | 195 | 4,81 | 45 |
| 14 | 13,989 | | 0,490 | 73 | 46 | 45,59 | 195 | 5,26 | 47 |
| 15 | 14,986 | | 0,563 | 77 | 48 | 47,54 | 194 | 5,73 | 49 |
| 16 | 15,983 | | 0,640 | 82 | 50 | 49,48 | 194 | 6,22 | 51 |
| 17 | 16,980 | | 0,722 | 87 | 52 | 51,42 | 193 | 6,73 | 52 |
| 18 | 17,976 | | 0,809 | 93 | 54 | 53,35 | 192 | 7,25 | 54 |
| 19 | 18,972 | | 0,902 | 97 | 56 | 55,27 | 192 | 7,79 | 54 |
| 20 | 19,967 | | 0,999 | | 58 | 57,19 | | 8,36 | 56 |

R. = 190 及 200

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|--------------------------------|--------|-----|-------|----|-----------------|--------|-----|-------|-----|
| R. = 200 (或 2000 及 20) | | | | | | | | | |
| 58 | 57,19 | | 8,35 | | 104 | 99,38 | | 26,44 | |
| 60 | 59,10 | 191 | 8,93 | 58 | 106 | 101,11 | 173 | 27,44 | 100 |
| 62 | 61,01 | 191 | 9,53 | 60 | 108 | 102,83 | 172 | 28,46 | 102 |
| 64 | 62,91 | 190 | 10,15 | 62 | 110 | 104,54 | 171 | 29,50 | 104 |
| 66 | 64,81 | 190 | 10,79 | 64 | 112 | 106,24 | 170 | 30,56 | 106 |
| 68 | 66,70 | 189 | 11,45 | 66 | | | | | |
| 70 | 68,58 | 188 | 12,13 | 68 | R=20 補充值 | | | | |
| 72 | 70,45 | 187 | 12,83 | 70 | | | | | |
| 74 | 72,32 | 187 | 13,54 | 71 | 11 | 10,45 | | 2,95 | |
| 76 | 74,18 | 186 | 14,27 | 73 | 12 | 11,29 | 84 | 3,49 | 54 |
| 78 | 76,03 | 185 | 15,02 | 75 | 13 | 12,10 | 81 | 4,07 | 58 |
| 80 | 77,88 | 185 | 15,79 | 77 | 14 | 12,88 | 78 | 4,70 | 63 |
| 82 | 79,72 | 184 | 16,58 | 79 | 15 | 13,63 | 75 | 5,37 | 67 |
| 84 | 81,55 | 183 | 17,38 | 80 | 16 | 14,35 | 72 | 6,07 | 70 |
| 86 | 83,37 | 182 | 18,20 | 82 | 17 | 15,03 | 68 | 6,80 | 73 |
| 88 | 85,19 | 182 | 19,04 | 84 | 18 | 15,67 | 64 | 7,56 | 76 |
| 90 | 86,99 | 180 | 19,91 | 87 | 19 | 16,27 | 60 | 8,36 | 80 |
| 92 | 88,79 | 180 | 20,79 | 88 | 20 | 16,83 | 56 | 9,19 | 83 |
| 94 | 90,58 | 179 | 21,69 | 90 | 21 | 17,35 | 52 | 10,04 | 85 |
| 96 | 92,36 | 178 | 22,60 | 91 | 22 | 17,83 | 48 | 10,92 | 88 |
| 98 | 94,13 | 177 | 23,53 | 93 | 23 | 18,26 | 43 | 11,83 | 91 |
| 100 | 95,89 | 176 | 24,48 | 95 | 24 | 18,64 | 38 | 12,75 | 92 |
| 102 | 97,64 | 175 | 25,45 | 97 | 25 | 18,98 | 34 | 13,69 | 94 |
| 104 | 99,38 | 174 | 26,44 | 99 | 26 | 19,27 | 29 | 14,65 | 96 |
| R. = 210 (或 2100) | | | | | | | | | |
| 1 | 1,000 | | 0,002 | 7 | 16 | 15,985 | | 0,610 | 78 |
| 2 | 2,000 | | 0,009 | 12 | 17 | 16,982 | | 0,688 | 83 |
| 3 | 3,000 | | 0,021 | 17 | 18 | 17,979 | | 0,771 | 88 |
| 4 | 4,000 | | 0,038 | 22 | 19 | 18,975 | | 0,859 | 92 |
| 5 | 5,000 | | 0,060 | 26 | 20 | 19,970 | | 0,951 | |
| 6 | 5,999 | | 0,086 | 31 | | | 199 | | 20 |
| 7 | 6,999 | | 0,117 | 36 | 22 | 21,96 | 199 | 1,15 | 22 |
| 8 | 7,998 | | 0,153 | 40 | 24 | 23,95 | 199 | 1,37 | 24 |
| 9 | 8,997 | | 0,193 | 45 | 26 | 25,94 | 199 | 1,61 | 26 |
| 10 | 9,996 | | 0,238 | 50 | 28 | 27,92 | 198 | 1,87 | 27 |
| 11 | 10,995 | | 0,288 | 55 | 30 | 29,90 | 198 | 2,14 | 29 |
| 12 | 11,993 | | 0,343 | 59 | 32 | 31,88 | 198 | 2,43 | 31 |
| 13 | 12,991 | | 0,402 | 65 | 34 | 33,86 | 197 | 2,74 | 33 |
| 14 | 13,989 | | 0,467 | 69 | 36 | 35,83 | 197 | 3,07 | 35 |
| 15 | 14,987 | | 0,536 | 74 | 38 | 37,80 | 196 | 3,42 | 38 |
| 16 | 15,985 | | 0,610 | | 40 | 39,76 | | 3,80 | |

R. = 200 及 210

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|---------------------------|-------|-----|-------|----|-----|--------|-----|-------|-----|
| R. = 210 (或 2100) | | | | | | | | | |
| 40 | 39.76 | 196 | 3.80 | 39 | 78 | 76.22 | 186 | 14.32 | 73 |
| 42 | 41.72 | 196 | 4.19 | 40 | 80 | 78.08 | 185 | 15.05 | 75 |
| 44 | 43.68 | 195 | 4.59 | 42 | 82 | 79.93 | 185 | 15.80 | 77 |
| 46 | 45.63 | 195 | 5.01 | 44 | 84 | 81.78 | 184 | 16.57 | 79 |
| 48 | 47.58 | 195 | 5.45 | 47 | 86 | 83.62 | 183 | 17.36 | 81 |
| 50 | 49.53 | 194 | 5.92 | 48 | 88 | 85.45 | 182 | 18.17 | 82 |
| 52 | 51.47 | 194 | 6.40 | 50 | 90 | 87.27 | 181 | 18.99 | 84 |
| 54 | 53.41 | 193 | 6.90 | 52 | 92 | 89.08 | 181 | 19.83 | 86 |
| 56 | 55.34 | 193 | 7.42 | 54 | 94 | 90.89 | 180 | 20.69 | 87 |
| 58 | 57.27 | 192 | 7.96 | 55 | 96 | 92.69 | 179 | 21.56 | 89 |
| 60 | 59.19 | 192 | 8.51 | 57 | 98 | 94.48 | 178 | 22.45 | 91 |
| 62 | 61.11 | 191 | 9.08 | 59 | 100 | 96.26 | 177 | 23.36 | 93 |
| 64 | 63.02 | 190 | 9.67 | 61 | 102 | 98.03 | 177 | 24.29 | 94 |
| 66 | 64.92 | 190 | 10.28 | 63 | 104 | 99.80 | 176 | 25.23 | 96 |
| 68 | 66.82 | 189 | 10.91 | 65 | 106 | 101.56 | 174 | 26.19 | 98 |
| 70 | 68.71 | 189 | 11.56 | 66 | 108 | 103.30 | 174 | 27.17 | 99 |
| 72 | 70.60 | 188 | 12.22 | 68 | 110 | 105.04 | 173 | 28.16 | 101 |
| 74 | 72.48 | 187 | 12.90 | 70 | 112 | 106.77 | 172 | 29.17 | 102 |
| 76 | 74.35 | 187 | 13.60 | 72 | 114 | 108.49 | | 30.19 | |
| 78 | 76.22 | | 14.32 | | | | | | |

| | | | | | | | | | |
|--------------------------------|--------|--|-------|----|----|-------|-----|------|----|
| R. = 220 (或 2200 及 22) | | | | | | | | | |
| 1 | 1,000 | | 0,002 | 7 | 20 | 19.97 | 199 | 0,91 | 19 |
| 2 | 2,000 | | 0,009 | 11 | 22 | 21.96 | 199 | 1,10 | 21 |
| 3 | 3,000 | | 0,020 | 16 | 24 | 23.95 | 199 | 1,31 | 23 |
| 4 | 4,000 | | 0,036 | 21 | 26 | 25.94 | 199 | 1,54 | 24 |
| 5 | 5,000 | | 0,057 | 25 | 28 | 27.93 | 198 | 1,78 | 26 |
| 6 | 5,999 | | 0,082 | 29 | 30 | 29.91 | 198 | 2,04 | 28 |
| 7 | 6,999 | | 0,111 | 34 | 32 | 31.89 | 198 | 2,32 | 30 |
| 8 | 7,999 | | 0,145 | 39 | 34 | 33.87 | 197 | 2,62 | 32 |
| 9 | 8,998 | | 0,184 | 43 | 36 | 35.84 | 197 | 2,94 | 34 |
| 10 | 9,997 | | 0,227 | 48 | 38 | 37.81 | 197 | 3,28 | 35 |
| 11 | 10,996 | | 0,275 | 52 | 40 | 39.78 | 196 | 3,63 | 37 |
| 12 | 11,994 | | 0,327 | 57 | 42 | 41.74 | 197 | 4,00 | 39 |
| 13 | 12,992 | | 0,384 | 61 | 44 | 43.71 | 196 | 4,39 | 41 |
| 14 | 13,990 | | 0,445 | 66 | 46 | 45.67 | 195 | 4,80 | 42 |
| 15 | 14,988 | | 0,511 | 71 | 48 | 47.62 | 195 | 5,22 | 44 |
| 16 | 15,986 | | 0,582 | 75 | 50 | 49.57 | 195 | 5,66 | 46 |
| 17 | 16,983 | | 0,657 | 79 | 52 | 51.52 | 194 | 6,12 | 48 |
| 18 | 17,980 | | 0,736 | 84 | 54 | 53.46 | 194 | 6,60 | 49 |
| 19 | 18,976 | | 0,820 | 88 | 56 | 55.40 | 193 | 7,09 | 51 |
| 20 | 19,972 | | 0,908 | | 58 | 57.33 | | 7,60 | |

R. = 210 及 220

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|---------------------------------|--------|-----|-------|----|-----|--------|-----|-------|-----|
| R. = 220 (或 2200 及 22) | | | | | | | | | |
| 58 | 57,33 | 193 | 7,60 | 53 | 110 | 105,47 | | 26,93 | 97 |
| 60 | 59,26 | 192 | 8,13 | 55 | 112 | 107,22 | 175 | 27,90 | 98 |
| 62 | 61,18 | 192 | 8,68 | 56 | 114 | 108,96 | 174 | 28,88 | 100 |
| 64 | 63,10 | 191 | 9,24 | 58 | 116 | 110,69 | 173 | 29,88 | 101 |
| 66 | 65,01 | 191 | 9,82 | 60 | 118 | 112,42 | 173 | 30,89 | |
| 68 | 66,92 | 190 | 10,42 | 62 | | | | | |
| 70 | 68,82 | 190 | 11,04 | 63 | | | | | |
| 72 | 70,72 | 189 | 11,67 | 65 | | | | | |
| 74 | 72,61 | 189 | 12,32 | 67 | | | | | |
| 76 | 74,50 | 189 | 12,99 | 69 | | | | | |
| 78 | 76,38 | 189 | 13,68 | 71 | 11 | 10,55 | 86 | 2,69 | 50 |
| 80 | 78,25 | 187 | 14,39 | 72 | 12 | 11,41 | 84 | 3,19 | 54 |
| 82 | 80,12 | 187 | 15,11 | 73 | 13 | 12,25 | 82 | 3,73 | 58 |
| 84 | 81,98 | 186 | 15,84 | 74 | 14 | 13,07 | 79 | 4,31 | 61 |
| 86 | 83,83 | 185 | 16,59 | 75 | 15 | 13,86 | 76 | 4,92 | 65 |
| 88 | 85,67 | 184 | 17,36 | 77 | 16 | 14,62 | 74 | 5,57 | 68 |
| 90 | 87,51 | 184 | 18,15 | 79 | 17 | 15,36 | 70 | 6,25 | 71 |
| 92 | 89,34 | 183 | 18,95 | 80 | 18 | 16,06 | 67 | 6,96 | 74 |
| 94 | 91,16 | 182 | 19,77 | 82 | 19 | 16,73 | 63 | 7,70 | 78 |
| 96 | 92,98 | 182 | 20,61 | 84 | 20 | 17,36 | 59 | 8,48 | 80 |
| 98 | 94,79 | 181 | 21,47 | 86 | 21 | 17,95 | 56 | 9,28 | 83 |
| 100 | 96,59 | 180 | 22,34 | 87 | 22 | 18,51 | 52 | 10,11 | 86 |
| 102 | 98,38 | 179 | 23,22 | 88 | 23 | 19,03 | 49 | 10,97 | 87 |
| 104 | 100,17 | 179 | 24,12 | 90 | 24 | 19,52 | 44 | 11,84 | 90 |
| 106 | 101,95 | 178 | 25,04 | 92 | 25 | 19,96 | 40 | 12,74 | 91 |
| 108 | 103,71 | 176 | 25,98 | 94 | 26 | 20,36 | 35 | 13,65 | 94 |
| 110 | 105,47 | 176 | 26,93 | 95 | 27 | 20,71 | 32 | 14,59 | 95 |
| | | | | | 28 | 21,03 | | 15,54 | |
| R = 22 補充值 | | | | | | | | | |
| R. = 230 (或 2300) | | | | | | | | | |
| 1 | 1,000 | | 0,002 | 7 | 11 | 10,996 | | 0,263 | 50 |
| 2 | 2,000 | | 0,009 | 11 | 12 | 11,995 | | 0,313 | 54 |
| 3 | 3,000 | | 0,020 | 15 | 13 | 12,993 | | 0,367 | 59 |
| 4 | 4,000 | | 0,035 | 19 | 14 | 13,991 | | 0,426 | 63 |
| 5 | 5,000 | | 0,054 | 24 | 15 | 14,989 | | 0,489 | 68 |
| 6 | 5,999 | | 0,078 | 29 | 16 | 15,987 | | 0,557 | 71 |
| 7 | 6,999 | | 0,107 | 32 | 17 | 16,985 | | 0,628 | 76 |
| 8 | 7,999 | | 0,139 | 37 | 18 | 17,982 | | 0,704 | 81 |
| 9 | 8,998 | | 0,176 | 41 | 19 | 18,979 | | 0,785 | 84 |
| 10 | 9,997 | | 0,217 | 46 | 20 | 19,975 | | 0,869 | |
| 11 | 10,996 | | 0,263 | | | | | | |

R. = 220 及 230

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|---------------------------|--------|-----|-------|-----|--------|--------|-----|-------|----|
| R. = 230 (或 2300) | | | | | | | | | |
| 20 | 19,97 | 199 | 0,87 | 18 | 70 | 68,92 | 191 | 10,57 | 61 |
| 22 | 21,96 | 199 | 1,05 | 20 | 72 | 70,83 | 190 | 11,18 | 62 |
| 24 | 23,95 | 199 | 1,25 | 22 | 74 | 72,73 | 190 | 11,80 | 64 |
| 26 | 25,94 | 199 | 1,47 | 23 | 76 | 74,63 | 189 | 12,44 | 66 |
| 28 | 27,93 | 198 | 1,70 | 25 | 78 | 76,52 | 188 | 13,10 | 67 |
| 30 | 29,91 | 198 | 1,95 | 27 | 80 | 78,40 | 188 | 13,77 | 69 |
| 32 | 31,89 | 198 | 2,22 | 29 | 82 | 80,28 | 187 | 14,46 | 71 |
| 34 | 33,87 | 198 | 2,51 | 30 | 84 | 82,15 | 186 | 15,17 | 72 |
| 36 | 35,85 | 198 | 2,81 | 32 | 86 | 84,01 | 186 | 15,89 | 74 |
| 38 | 37,83 | 197 | 3,13 | 34 | 88 | 85,87 | 185 | 16,63 | 76 |
| 40 | 39,80 | 197 | 3,47 | 35 | 90 | 87,72 | 185 | 17,39 | 77 |
| 42 | 41,77 | 196 | 3,82 | 37 | 92 | 89,57 | 184 | 18,16 | 78 |
| 44 | 43,73 | 196 | 4,19 | 39 | 94 | 91,41 | 183 | 18,94 | 80 |
| 46 | 45,69 | 196 | 4,58 | 41 | 96 | 93,24 | 182 | 19,74 | 82 |
| 48 | 47,65 | 196 | 4,99 | 42 | 98 | 95,06 | 182 | 20,56 | 84 |
| 50 | 49,61 | 195 | 5,41 | 44 | 100 | 96,88 | 181 | 21,40 | 85 |
| 52 | 51,56 | 195 | 5,85 | 46 | 102 | 98,69 | 181 | 22,25 | 86 |
| 54 | 53,51 | 194 | 6,31 | 47 | 104 | 100,50 | 180 | 23,11 | 88 |
| 56 | 55,45 | 194 | 6,78 | 49 | 106 | 102,30 | 179 | 23,99 | 90 |
| 58 | 57,39 | 193 | 7,27 | 51 | 108 | 104,09 | 177 | 24,89 | 92 |
| 60 | 59,32 | 193 | 7,78 | 52 | 110 | 105,86 | 177 | 25,81 | 93 |
| 62 | 61,25 | 193 | 8,30 | 54 | 112 | 107,63 | 176 | 26,74 | 94 |
| 64 | 63,18 | 192 | 8,84 | 56 | 114 | 109,39 | 175 | 27,68 | 96 |
| 66 | 65,10 | 191 | 9,40 | 58 | 116 | 111,14 | 175 | 28,64 | 97 |
| 68 | 67,01 | 191 | 9,98 | 59 | 117 | 112,89 | 174 | 29,61 | 99 |
| 70 | 68,92 | 191 | 10,57 | 120 | 118,63 | 114,63 | 174 | 30,60 | |
| R. = 240 (或 2400) | | | | | | | | | |
| 1 | 1,000 | | 0,002 | 6 | 14 | 13,992 | | 0,408 | 61 |
| 2 | 2,000 | | 0,008 | 11 | 15 | 14,990 | | 0,469 | 64 |
| 3 | 3,000 | | 0,019 | 14 | 16 | 15,988 | | 0,533 | 69 |
| 4 | 4,000 | | 0,033 | 19 | 17 | 16,986 | | 0,602 | 73 |
| 5 | 5,000 | | 0,052 | 23 | 18 | 17,983 | | 0,675 | 77 |
| 6 | 5,999 | | 0,075 | 27 | 19 | 18,980 | | 0,752 | 81 |
| 7 | 6,999 | | 0,102 | 31 | 20 | 19,977 | | 0,833 | |
| 8 | 7,999 | | 0,133 | 36 | | | 199 | | 17 |
| 9 | 8,998 | | 0,169 | 39 | 22 | 21,97 | 199 | 1,00 | 19 |
| 10 | 9,997 | | 0,208 | 44 | 24 | 23,96 | 199 | 1,19 | 21 |
| 11 | 10,996 | | 0,252 | 48 | 26 | 25,95 | 199 | 1,40 | 23 |
| 12 | 11,995 | | 0,300 | 52 | 28 | 27,94 | 199 | 1,63 | 24 |
| 13 | 12,994 | | 0,352 | 56 | 30 | 29,92 | 198 | 1,87 | |
| 14 | 13,992 | | 0,408 | | | | | | |

R. = 230 及 240

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|-------------------------------|--------|-----|-------|----|-----|--------|-----|-------|----|
| R. = 240 (或 2400) | | | | | | | | | |
| 30 | 29,92 | 199 | 1,87 | 26 | 76 | 74,73 | 190 | 11,93 | 63 |
| 32 | 31,91 | 198 | 2,13 | 28 | 78 | 76,63 | 190 | 12,56 | 65 |
| 34 | 33,89 | 198 | 2,41 | 29 | 80 | 78,53 | 188 | 13,21 | 66 |
| 36 | 35,87 | 198 | 2,70 | 31 | 82 | 80,41 | 188 | 13,87 | 68 |
| 38 | 37,85 | 197 | 3,01 | 32 | 84 | 82,29 | 188 | 14,55 | 69 |
| 40 | 39,82 | 197 | 3,33 | 34 | 86 | 84,17 | 187 | 15,24 | 71 |
| 42 | 41,79 | 197 | 3,67 | 36 | 88 | 86,04 | 187 | 15,95 | 73 |
| 44 | 43,76 | 196 | 4,03 | 37 | 90 | 87,91 | 186 | 16,68 | 74 |
| 46 | 45,72 | 196 | 4,40 | 39 | 92 | 89,77 | 185 | 17,42 | 76 |
| 48 | 47,68 | 196 | 4,79 | 40 | 94 | 91,62 | 184 | 18,18 | 77 |
| 50 | 49,64 | 195 | 5,19 | 42 | 96 | 93,46 | 184 | 18,95 | 78 |
| 52 | 51,59 | 195 | 5,61 | 44 | 98 | 95,30 | 183 | 19,73 | 80 |
| 54 | 53,54 | 195 | 6,05 | 45 | 100 | 97,15 | 182 | 20,53 | 82 |
| 56 | 55,49 | 195 | 6,50 | 47 | 102 | 98,95 | 182 | 21,35 | 83 |
| 58 | 57,44 | 194 | 6,97 | 49 | 104 | 100,77 | 181 | 22,18 | 85 |
| 60 | 59,38 | 194 | 7,46 | 50 | 106 | 102,58 | 181 | 23,03 | 86 |
| 62 | 61,32 | 193 | 7,96 | 52 | 108 | 104,39 | 180 | 23,89 | 88 |
| 64 | 63,25 | 193 | 8,48 | 54 | 110 | 106,19 | 179 | 24,77 | 89 |
| 66 | 65,18 | 192 | 9,02 | 55 | 112 | 107,98 | 178 | 25,66 | 91 |
| 68 | 67,10 | 191 | 9,57 | 57 | 114 | 109,76 | 177 | 26,57 | 92 |
| 70 | 69,01 | 191 | 10,14 | 58 | 116 | 111,53 | 177 | 27,49 | 94 |
| 72 | 70,92 | 191 | 10,72 | 60 | 118 | 113,30 | 176 | 28,43 | 95 |
| 74 | 72,83 | 190 | 11,32 | 61 | 120 | 115,06 | 175 | 29,38 | 96 |
| 76 | 74,73 | 190 | 11,93 | | 122 | 116,81 | | 30,34 | |
| R = 250 (或 2500 及 25) | | | | | | | | | |
| 1 | 1,000 | | 0,002 | 6 | 16 | 15,989 | | 0,512 | 66 |
| 2 | 2,000 | | 0,008 | 10 | 17 | 16,987 | | 0,578 | 70 |
| 3 | 3,000 | | 0,018 | 14 | 18 | 17,985 | | 0,648 | 74 |
| 4 | 4,000 | | 0,032 | 18 | 19 | 18,982 | | 0,722 | 78 |
| 5 | 5,000 | | 0,050 | 22 | 20 | 19,979 | | 0,800 | |
| 6 | 6,000 | | 0,072 | 26 | | | 200 | | 17 |
| 7 | 6,999 | | 0,098 | 30 | 22 | 21,98 | 199 | 0,97 | 18 |
| 8 | 7,999 | | 0,128 | 34 | 24 | 23,97 | 199 | 1,15 | 20 |
| 9 | 8,998 | | 0,162 | 38 | 26 | 25,96 | 199 | 1,35 | 22 |
| 10 | 9,997 | | 0,200 | 42 | 28 | 27,95 | 198 | 1,57 | 23 |
| 11 | 10,996 | | 0,242 | 46 | 30 | 29,93 | 199 | 1,80 | 25 |
| 12 | 11,995 | | 0,288 | 50 | 32 | 31,92 | 198 | 2,05 | 26 |
| 13 | 12,994 | | 0,338 | 54 | 34 | 33,90 | 198 | 2,31 | 28 |
| 14 | 13,993 | | 0,392 | 58 | 36 | 35,88 | 198 | 2,59 | 29 |
| 15 | 14,991 | | 0,450 | 62 | 38 | 37,86 | | 2,88 | |
| 16 | 15,989 | | 0,512 | | | | | | |

R. 240 及 250

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|--------------------------------|--------|-----|-------|----|-----|--------|-----|-------|----|
| R. = 250 (或 2500 及 25) | | | | | | | | | |
| 38 | 37,86 | 197 | 2,88 | 31 | 106 | 102,85 | 182 | 22,14 | 83 |
| 40 | 39,83 | 198 | 3,19 | 33 | 108 | 104,67 | 181 | 22,97 | 84 |
| 42 | 41,81 | 197 | 3,52 | 34 | 110 | 106,48 | 181 | 23,81 | 86 |
| 44 | 43,78 | 197 | 3,86 | 36 | 112 | 108,29 | 180 | 24,67 | 87 |
| 46 | 45,75 | 196 | 4,22 | 37 | 114 | 110,09 | 179 | 25,54 | 89 |
| 48 | 47,71 | 196 | 4,59 | 39 | 116 | 111,88 | 178 | 26,43 | 90 |
| 50 | 49,67 | 196 | 4,98 | 41 | 118 | 113,66 | 178 | 27,33 | 92 |
| 52 | 51,63 | 195 | 5,39 | 42 | 120 | 115,44 | 177 | 28,25 | 93 |
| 54 | 53,58 | 195 | 5,81 | 44 | 122 | 117,21 | 177 | 29,18 | 94 |
| 56 | 55,53 | 195 | 6,25 | 45 | 124 | 118,98 | | 30,12 | |
| 58 | 57,48 | 195 | 6,70 | 47 | | | | | |
| 60 | 59,43 | 194 | 7,17 | 48 | | | | | |
| 62 | 61,37 | 194 | 7,65 | 50 | | | | | |
| 64 | 63,31 | 193 | 8,15 | 51 | 12 | 11,54 | 88 | 2,83 | 48 |
| 66 | 65,24 | 193 | 8,66 | 53 | 13 | 12,42 | 86 | 3,31 | 51 |
| 68 | 67,17 | 192 | 9,19 | 55 | 14 | 13,28 | 84 | 3,82 | 55 |
| 70 | 69,09 | 192 | 9,74 | 56 | 15 | 14,12 | 81 | 4,37 | 58 |
| 72 | 71,01 | 191 | 10,30 | 58 | 16 | 14,93 | 79 | 4,95 | 61 |
| 74 | 72,92 | 191 | 10,88 | 59 | 17 | 15,72 | 76 | 5,56 | 64 |
| 76 | 74,83 | 191 | 11,47 | 60 | 18 | 16,48 | 74 | 6,20 | 67 |
| 78 | 76,74 | 190 | 12,07 | 62 | 19 | 17,22 | 71 | 6,87 | 70 |
| 80 | 78,64 | 190 | 12,69 | 64 | 20 | 17,93 | 69 | 7,57 | 74 |
| 82 | 80,54 | 189 | 13,33 | 65 | 21 | 18,62 | 66 | 8,31 | 76 |
| 84 | 82,43 | 189 | 13,98 | 67 | 22 | 19,28 | 62 | 9,07 | 78 |
| 86 | 84,32 | 188 | 14,65 | 68 | 23 | 19,90 | 58 | 9,85 | 81 |
| 88 | 86,20 | 187 | 15,33 | 70 | 24 | 20,48 | 56 | 10,66 | 83 |
| 90 | 88,07 | 187 | 16,03 | 71 | 25 | 21,04 | 52 | 11,49 | 85 |
| 92 | 89,94 | 186 | 16,74 | 72 | 26 | 21,56 | 49 | 12,34 | 88 |
| 94 | 91,80 | 186 | 17,46 | 74 | 27 | 22,05 | 45 | 13,22 | 89 |
| 96 | 93,66 | 185 | 18,20 | 76 | 28 | 22,50 | 42 | 14,11 | 91 |
| 98 | 95,51 | 184 | 18,96 | 77 | 29 | 22,92 | 38 | 15,02 | 92 |
| 100 | 97,35 | 184 | 19,73 | 79 | 30 | 23,30 | 34 | 15,94 | 94 |
| 102 | 99,19 | 183 | 20,52 | 80 | 31 | 23,64 | 31 | 16,88 | 95 |
| 104 | 101,02 | 183 | 21,32 | 82 | 32 | 23,95 | 27 | 17,83 | 97 |
| 106 | 102,85 | | 22,14 | 83 | 33 | 24,22 | | 18,80 | |
| R=25 補充值 | | | | | | | | | |
| | | | | | 12 | 11,54 | 88 | 2,83 | |
| | | | | | 13 | 12,42 | 86 | 3,31 | |
| | | | | | 14 | 13,28 | 84 | 3,82 | |
| | | | | | 15 | 14,12 | 81 | 4,37 | |
| | | | | | 16 | 14,93 | 79 | 4,95 | |
| | | | | | 17 | 15,72 | 76 | 5,56 | |
| | | | | | 18 | 16,48 | 74 | 6,20 | |
| | | | | | 19 | 17,22 | 71 | 6,87 | |
| | | | | | 20 | 17,93 | 69 | 7,57 | |
| | | | | | 21 | 18,62 | 66 | 8,31 | |
| | | | | | 22 | 19,28 | 62 | 9,07 | |
| | | | | | 23 | 19,90 | 58 | 9,85 | |
| | | | | | 24 | 20,48 | 56 | 10,66 | |
| | | | | | 25 | 21,04 | 52 | 11,49 | |
| | | | | | 26 | 21,56 | 49 | 12,34 | |
| | | | | | 27 | 22,05 | 45 | 13,22 | |
| | | | | | 28 | 22,50 | 42 | 14,11 | |
| | | | | | 29 | 22,92 | 38 | 15,02 | |
| | | | | | 30 | 23,30 | 34 | 15,94 | |
| | | | | | 31 | 23,64 | 31 | 16,88 | |
| | | | | | 32 | 23,95 | 27 | 17,83 | |
| | | | | | 33 | 24,22 | | 18,80 | |
| R. = 260 (或 2600) | | | | | | | | | |
| 1 | 1,000 | | 0,002 | 6 | 5 | 5,000 | | 0,048 | 21 |
| 2 | 2,000 | | 0,008 | 9 | 6 | 6,000 | | 0,069 | 25 |
| 3 | 3,000 | | 0,017 | 14 | 7 | 6,999 | | 0,094 | 20 |
| 4 | 4,000 | | 0,031 | 17 | 8 | 7,999 | | 0,123 | |
| 5 | 5,000 | | 0,048 | | | | | | |
| R. = 250 及 260 | | | | | | | | | |

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|---------------------------|--------|-----|-------|----|-----|--------|-----|-------|----|
| R. = 260 (或 2600) | | | | | | | | | |
| 8 | 7,999 | | 0,123 | | 62 | 61,41 | | 7,35 | |
| 9 | 8,999 | | 0,156 | 33 | 64 | 63,35 | 194 | 7,83 | 48 |
| 10 | 9,998 | | 0,192 | 36 | 66 | 65,29 | 194 | 8,33 | 50 |
| 11 | 10,997 | | 0,233 | 41 | 68 | 67,23 | 194 | 8,84 | 51 |
| 12 | 11,996 | | 0,277 | 44 | 70 | 69,16 | 193 | 9,37 | 53 |
| 13 | 12,995 | | 0,325 | 48 | 72 | 71,08 | 192 | 9,91 | 54 |
| 14 | 13,994 | | 0,377 | 52 | 74 | 73,00 | 192 | 10,46 | 55 |
| 15 | 14,992 | | 0,433 | 56 | 76 | 74,92 | 192 | 11,03 | 57 |
| 16 | 15,990 | | 0,492 | 59 | 78 | 76,83 | 191 | 11,61 | 58 |
| 17 | 16,988 | | 0,556 | 64 | 80 | 78,74 | 191 | 12,21 | 60 |
| 18 | 17,986 | | 0,623 | 67 | 82 | 80,65 | 191 | 12,82 | 61 |
| 19 | 18,983 | | 0,694 | 71 | 84 | 82,55 | 190 | 13,45 | 63 |
| 20 | 19,980 | | 0,769 | 75 | 86 | 84,44 | 189 | 14,09 | 64 |
| | | 200 | | 88 | 88 | 86,33 | 189 | 14,75 | 66 |
| 22 | 21,98 | 199 | 0,93 | 16 | 90 | 88,21 | 188 | 15,42 | 67 |
| 24 | 23,97 | 199 | 1,11 | 18 | 92 | 90,09 | 188 | 16,11 | 69 |
| 26 | 25,96 | 199 | 1,30 | 19 | 94 | 91,97 | 188 | 16,81 | 70 |
| 28 | 27,95 | 199 | 1,51 | 21 | 96 | 93,84 | 187 | 17,52 | 71 |
| 30 | 29,93 | 198 | 1,73 | 22 | 98 | 95,70 | 186 | 18,25 | 73 |
| 32 | 31,92 | 199 | 1,96 | 23 | 100 | 97,55 | 185 | 18,99 | 74 |
| 34 | 33,90 | 198 | 2,21 | 25 | 102 | 99,40 | 185 | 19,75 | 76 |
| 36 | 35,88 | 198 | 2,48 | 27 | 104 | 101,25 | 185 | 20,52 | 77 |
| 38 | 37,86 | 198 | 2,77 | 29 | 106 | 103,09 | 184 | 21,31 | 79 |
| 40 | 39,84 | 198 | 3,07 | 30 | 108 | 104,92 | 183 | 22,11 | 80 |
| 42 | 41,82 | 198 | 3,39 | 32 | 110 | 106,75 | 183 | 22,92 | 81 |
| 44 | 43,79 | 197 | 3,72 | 33 | 112 | 108,57 | 182 | 23,75 | 83 |
| 46 | 45,76 | 197 | 4,06 | 34 | 114 | 110,38 | 181 | 24,59 | 84 |
| 48 | 47,73 | 197 | 4,42 | 36 | 116 | 112,19 | 181 | 25,45 | 86 |
| 50 | 49,69 | 196 | 4,79 | 37 | 118 | 113,99 | 180 | 26,32 | 87 |
| 52 | 51,65 | 196 | 5,18 | 39 | 120 | 115,78 | 179 | 27,20 | 88 |
| 54 | 53,61 | 196 | 5,59 | 41 | 122 | 117,57 | 179 | 28,10 | 90 |
| 56 | 55,57 | 196 | 6,01 | 42 | 124 | 119,35 | 178 | 29,01 | 91 |
| 58 | 57,52 | 195 | 6,44 | 43 | 126 | 121,12 | 177 | 29,94 | 93 |
| 60 | 59,47 | 195 | 6,89 | 45 | 128 | 122,89 | 177 | 30,88 | 94 |
| 62 | 61,41 | 194 | 7,35 | 46 | | | | | |
| R. = 270 (或 2700) | | | | | | | | | |
| 1 | 1,000 | | 0,002 | 5 | 6 | 6,000 | | 0,067 | 24 |
| 2 | 2,000 | | 0,007 | 10 | 7 | 6,999 | | 0,091 | 28 |
| 3 | 3,000 | | 0,017 | 13 | 8 | 7,999 | | 0,119 | 31 |
| 4 | 4,000 | | 0,030 | 16 | 9 | 8,999 | | 0,160 | 35 |
| 5 | 5,000 | | 0,046 | 21 | 10 | 9,998 | | 0,185 | |
| 6 | 6,000 | | 0,067 | | | | | | |

R. = 260 及 270

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|--------------------------------|--------|-----|-------|----|-----|--------|-----|-------|----|
| R. = 270 (或 2700) | | | | | | | | | |
| 10 | 9,998 | | 0,185 | 39 | 64 | 63,40 | 194 | 7,55 | 48 |
| 11 | 10,997 | | 0,224 | 43 | 66 | 65,34 | 194 | 8,03 | 49 |
| 12 | 11,996 | | 0,267 | 46 | 68 | 67,28 | 194 | 8,52 | 50 |
| 13 | 12,995 | | 0,313 | 50 | 70 | 69,22 | 193 | 9,02 | 52 |
| 14 | 13,994 | | 0,363 | 54 | 72 | 71,15 | 193 | 9,54 | 54 |
| 15 | 14,992 | | 0,417 | 57 | 74 | 73,08 | 192 | 10,08 | 55 |
| 16 | 15,991 | | 0,474 | 61 | 76 | 75,00 | 192 | 10,63 | 56 |
| 17 | 16,989 | | 0,535 | 65 | 78 | 76,92 | 191 | 11,19 | 58 |
| 18 | 17,987 | | 0,600 | 69 | 80 | 78,83 | 191 | 11,77 | 59 |
| 19 | 18,985 | | 0,669 | 72 | 82 | 80,74 | 191 | 12,36 | 60 |
| 20 | 19,982 | | 0,741 | | 84 | 82,65 | 190 | 12,96 | 62 |
| | | 200 | | 16 | 86 | 84,55 | 190 | 13,58 | 63 |
| 22 | 21,98 | 199 | 0,90 | 17 | 88 | 86,45 | 189 | 14,21 | 65 |
| 24 | 23,97 | 199 | 1,07 | 18 | 90 | 88,34 | 189 | 14,86 | 66 |
| 26 | 25,96 | 199 | 1,25 | 20 | 92 | 90,23 | 188 | 15,52 | 68 |
| 28 | 27,95 | 199 | 1,45 | 21 | 94 | 92,11 | 188 | 16,20 | 69 |
| 30 | 29,94 | 199 | 1,66 | 21 | 96 | 93,99 | 187 | 16,89 | 70 |
| 32 | 31,93 | 198 | 1,89 | 23 | 98 | 95,86 | 187 | 17,59 | 72 |
| 34 | 33,91 | 198 | 2,14 | 25 | 100 | 97,73 | 186 | 18,31 | 73 |
| 36 | 35,89 | 198 | 2,40 | 26 | 102 | 99,59 | 185 | 19,04 | 74 |
| 38 | 37,87 | 198 | 2,67 | 27 | 104 | 101,44 | 185 | 19,78 | 76 |
| 40 | 39,85 | 198 | 2,96 | 29 | 106 | 103,29 | 185 | 20,54 | 77 |
| 42 | 41,83 | 197 | 3,26 | 30 | 108 | 105,14 | 184 | 21,31 | 79 |
| 44 | 43,80 | 197 | 3,58 | 32 | 110 | 106,98 | 183 | 22,10 | 80 |
| 46 | 45,77 | 197 | 3,91 | 33 | 112 | 108,81 | 183 | 22,90 | 81 |
| 48 | 47,74 | 197 | 4,26 | 35 | 114 | 110,64 | 182 | 23,71 | 83 |
| 50 | 49,71 | 197 | 4,62 | 36 | 116 | 112,46 | 182 | 24,54 | 84 |
| 52 | 51,68 | 196 | 4,99 | 37 | 118 | 114,28 | 181 | 25,38 | 85 |
| 54 | 53,64 | 196 | 5,38 | 39 | 120 | 116,09 | 180 | 26,23 | 87 |
| 56 | 55,60 | 196 | 5,78 | 40 | 122 | 117,89 | 179 | 27,10 | 88 |
| 58 | 57,56 | 195 | 6,20 | 42 | 124 | 119,68 | 179 | 27,98 | 89 |
| 60 | 59,51 | 195 | 6,64 | 44 | 126 | 121,47 | 178 | 28,87 | 91 |
| 62 | 61,46 | 195 | 7,09 | 45 | 128 | 123,25 | 178 | 29,78 | 92 |
| 64 | 63,40 | 194 | 7,55 | 46 | 130 | 125,03 | | 30,70 | |
| R. = 280 (或 2800 及 28) | | | | | | | | | |
| 1 | 1,000 | | 0,002 | 5 | 6 | 6,000 | | 0,064 | 23 |
| 2 | 2,000 | | 0,007 | 9 | 7 | 6,999 | | 0,087 | 27 |
| 3 | 3,000 | | 0,016 | 13 | 8 | 7,999 | | 0,114 | 31 |
| 4 | 4,000 | | 0,029 | 16 | 9 | 8,999 | | 0,145 | 34 |
| 5 | 5,000 | | 0,045 | 19 | 10 | 9,998 | | 0,179 | |
| 6 | 6,000 | | 0,064 | | | | | | |

R. = 270 及 280

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|--------------------------------|--------|-----|-------|----|-----|--------|-----|-------|----|
| R. = 280 (或 2800 及 28) | | | | | | | | | |
| 10 | 9,998 | | 0,179 | 37 | 82 | 80,84 | 191 | 11,92 | 58 |
| 11 | 10,997 | | 0,216 | 41 | 84 | 82,75 | 191 | 12,50 | 60 |
| 12 | 11,996 | | 0,257 | 45 | 86 | 84,66 | 190 | 13,10 | 61 |
| 13 | 12,995 | | 0,302 | 48 | 88 | 86,56 | 190 | 13,71 | 63 |
| 14 | 13,994 | | 0,350 | 52 | 90 | 88,46 | 190 | 14,34 | 64 |
| 15 | 14,993 | | 0,402 | 55 | 92 | 90,36 | 189 | 14,98 | 65 |
| 16 | 15,992 | | 0,457 | 59 | 94 | 92,25 | 189 | 15,63 | 67 |
| 17 | 16,990 | | 0,516 | 63 | 96 | 94,14 | 188 | 16,30 | 68 |
| 18 | 17,988 | | 0,579 | 66 | 98 | 96,02 | 187 | 16,98 | 69 |
| 19 | 18,986 | | 0,645 | 69 | 100 | 97,89 | 187 | 17,67 | 70 |
| 20 | 19,983 | | 0,714 | | 102 | 99,76 | 187 | 18,37 | 72 |
| | | 200 | | 15 | 104 | 101,63 | 186 | 19,09 | 73 |
| 22 | 21,98 | 190 | 0,86 | 17 | 106 | 103,49 | 185 | 19,82 | 75 |
| 24 | 23,97 | 199 | 1,03 | 18 | 108 | 105,34 | 185 | 20,57 | 76 |
| 26 | 25,96 | 199 | 1,21 | 19 | 110 | 107,19 | 185 | 21,33 | 77 |
| 28 | 27,95 | 199 | 1,40 | 21 | 112 | 109,04 | 184 | 22,10 | 79 |
| 30 | 29,94 | 199 | 1,61 | 22 | 114 | 110,88 | 183 | 22,89 | 80 |
| 32 | 31,93 | 199 | 1,83 | 23 | 116 | 112,71 | 183 | 23,69 | 81 |
| 34 | 33,92 | 198 | 2,06 | 25 | 118 | 114,54 | 182 | 24,50 | 82 |
| 36 | 35,90 | 198 | 2,31 | 26 | 120 | 116,36 | 182 | 25,32 | 84 |
| 38 | 37,88 | 198 | 2,57 | 28 | 122 | 118,18 | 181 | 26,16 | 85 |
| 40 | 39,86 | 198 | 2,85 | 29 | 124 | 119,99 | 180 | 27,01 | 86 |
| 42 | 41,84 | 198 | 3,14 | 31 | 126 | 121,79 | 180 | 27,87 | 88 |
| 44 | 43,82 | 197 | 3,45 | 32 | 128 | 123,59 | 179 | 28,75 | 89 |
| 46 | 45,79 | 197 | 3,77 | 33 | 130 | 125,38 | 179 | 29,64 | 90 |
| 48 | 47,76 | 197 | 4,10 | 35 | 132 | 127,17 | | 30,54 | |
| 50 | 49,73 | 197 | 4,45 | 36 | | | | | |
| 52 | 51,70 | 197 | 4,81 | 38 | | | | | |
| 54 | 53,67 | 196 | 5,19 | 39 | 13 | 12,54 | 88 | 2,96 | 46 |
| 56 | 55,63 | 196 | 5,58 | 40 | 14 | 13,42 | 87 | 3,42 | 50 |
| 58 | 57,59 | 195 | 5,98 | 42 | 15 | 14,29 | 85 | 3,92 | 53 |
| 60 | 59,54 | 195 | 6,40 | 43 | 16 | 15,14 | 83 | 4,45 | 56 |
| 62 | 61,49 | 195 | 6,83 | 44 | 17 | 15,97 | 81 | 5,01 | 58 |
| 64 | 63,44 | 195 | 7,27 | 46 | 18 | 16,78 | 80 | 5,59 | 61 |
| 66 | 65,39 | 194 | 7,73 | 48 | 19 | 17,58 | 77 | 6,20 | 64 |
| 68 | 67,33 | 194 | 8,21 | 49 | 20 | 18,35 | 74 | 6,84 | 67 |
| 70 | 69,27 | 194 | 8,70 | 50 | 21 | 19,09 | 72 | 7,51 | 70 |
| 72 | 71,21 | 193 | 9,20 | 52 | 22 | 19,81 | 69 | 8,21 | 72 |
| 74 | 73,14 | 193 | 9,72 | 53 | 23 | 20,50 | 67 | 8,93 | 74 |
| 76 | 75,07 | 193 | 10,25 | 54 | 24 | 21,17 | 64 | 9,67 | 77 |
| 78 | 77,00 | 192 | 10,79 | 56 | 25 | 21,81 | 61 | 10,44 | 79 |
| 80 | 78,92 | 192 | 11,35 | 57 | 26 | 22,42 | 58 | 11,23 | 81 |
| 82 | 80,84 | 192 | 11,92 | | 27 | 23,00 | | 12,04 | |
| R = 28 補充值 | | | | | | | | | |

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|--------------------|--------|-----|-------|----|-----|--------|-----|-------|----|
| R=28 補充值 | | | | | | | | | |
| 27 | 23,00 | 56 | 12,04 | 83 | 31 | 25,04 | 43 | 15,48 | 90 |
| 28 | 23,56 | 53 | 12,87 | 85 | 32 | 25,47 | 40 | 16,38 | 92 |
| 29 | 24,09 | 49 | 13,72 | 87 | 33 | 25,87 | 37 | 17,30 | 93 |
| 30 | 24,58 | 46 | 14,59 | 89 | 34 | 26,24 | 33 | 18,23 | 94 |
| 31 | 25,04 | | 15,48 | | 35 | 26,57 | | 19,17 | |
| R. = 290 (或 2900) | | | | | | | | | |
| 1 | 1,000 | | 0,002 | 5 | 48 | 47,78 | 197 | 3,96 | 34 |
| 2 | 2,000 | | 0,007 | 9 | 50 | 49,75 | 197 | 4,30 | 35 |
| 3 | 3,000 | | 0,016 | 12 | 52 | 51,72 | 196 | 4,65 | 36 |
| 4 | 4,000 | | 0,028 | 15 | 54 | 53,68 | 196 | 5,01 | 38 |
| 5 | 5,000 | | 0,043 | 19 | 56 | 55,64 | 197 | 5,39 | 39 |
| 6 | 6,000 | | 0,062 | 22 | 58 | 57,61 | 196 | 5,78 | 40 |
| 7 | 6,999 | | 0,084 | 26 | 60 | 59,57 | 196 | 6,18 | 42 |
| 8 | 7,999 | | 0,110 | 30 | 62 | 61,53 | 195 | 6,60 | 43 |
| 9 | 8,999 | | 0,140 | 32 | 64 | 63,48 | 195 | 7,03 | 45 |
| 10 | 9,998 | | 0,172 | 36 | 66 | 65,43 | 195 | 7,48 | 46 |
| 11 | 10,997 | | 0,208 | 40 | 68 | 67,38 | 194 | 7,94 | 47 |
| 12 | 11,996 | | 0,248 | 43 | 70 | 69,32 | 194 | 8,41 | 48 |
| 13 | 12,995 | | 0,291 | 47 | 72 | 71,26 | 194 | 8,89 | 50 |
| 14 | 13,994 | | 0,338 | 50 | 74 | 73,20 | 193 | 9,39 | 51 |
| 15 | 14,993 | | 0,388 | 53 | 76 | 75,13 | 193 | 9,90 | 52 |
| 16 | 15,992 | | 0,441 | 57 | 78 | 77,06 | 193 | 10,42 | 54 |
| 17 | 16,990 | | 0,498 | 61 | 80 | 78,99 | 192 | 10,96 | 55 |
| 18 | 17,988 | | 0,559 | 63 | 82 | 80,91 | 192 | 11,51 | 57 |
| 19 | 18,986 | | 0,622 | 67 | 84 | 82,83 | 191 | 12,08 | 58 |
| 20 | 19,984 | | 0,689 | | 86 | 84,74 | 191 | 12,66 | 59 |
| | | 200 | | 14 | 88 | 86,65 | 191 | 13,25 | 60 |
| 22 | 21,98 | 200 | 0,83 | 16 | 90 | 88,56 | 190 | 13,85 | 62 |
| 24 | 23,98 | 199 | 0,99 | 17 | 92 | 90,46 | 190 | 14,47 | 63 |
| 26 | 25,97 | 199 | 1,16 | 19 | 94 | 92,36 | 189 | 15,10 | 64 |
| 28 | 27,96 | 199 | 1,35 | 20 | 96 | 94,25 | 189 | 15,74 | 66 |
| 30 | 29,95 | 199 | 1,55 | 21 | 98 | 96,14 | 189 | 16,40 | 67 |
| 32 | 31,94 | 199 | 1,76 | 23 | 100 | 98,03 | 188 | 17,07 | 68 |
| 34 | 33,93 | 198 | 1,99 | 24 | 102 | 99,91 | 188 | 17,75 | 70 |
| 36 | 35,91 | 198 | 2,23 | 25 | 104 | 101,79 | 187 | 18,45 | 71 |
| 38 | 37,89 | 198 | 2,48 | 27 | 106 | 103,66 | 186 | 19,16 | 72 |
| 40 | 39,87 | 198 | 2,75 | 28 | 108 | 105,52 | 186 | 19,88 | 73 |
| 42 | 41,85 | 198 | 3,03 | 30 | 110 | 107,38 | 185 | 20,61 | 74 |
| 44 | 43,83 | 198 | 3,33 | 31 | 112 | 109,24 | 185 | 21,35 | 76 |
| 46 | 45,81 | 197 | 3,64 | 32 | 114 | 111,09 | 184 | 22,11 | 77 |
| 48 | 47,78 | | 3,96 | | 116 | 112,93 | | 22,88 | |

R. = 290

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|--------------------------------|--------|-----|-------|----|-----|--------|-----|-------|----|
| R. = 290 (或 2900) | | | | | | | | | |
| 116 | 112,93 | | 22,88 | | 126 | 122,08 | | 26,95 | |
| 118 | 114,77 | 184 | 23,67 | 79 | 128 | 123,89 | 181 | 27,79 | 84 |
| 120 | 116,60 | 183 | 24,47 | 80 | 130 | 125,69 | 180 | 28,65 | 86 |
| 122 | 118,43 | 183 | 25,28 | 81 | 132 | 127,49 | 180 | 29,52 | 87 |
| 124 | 120,26 | 183 | 26,11 | 83 | 134 | 129,28 | 179 | 30,41 | 89 |
| 126 | 122,08 | 182 | 26,95 | 84 | | | | | |
| R. = 300 (或 3000 及 30) | | | | | | | | | |
| 1 | 1,000 | | 0,002 | 5 | 46 | 45,82 | 198 | 3,52 | 31 |
| 2 | 2,000 | | 0,007 | 8 | 48 | 47,80 | 197 | 3,83 | 33 |
| 3 | 3,000 | | 0,015 | 12 | 50 | 49,77 | 197 | 4,16 | 34 |
| 4 | 4,000 | | 0,027 | 15 | 52 | 51,74 | 197 | 4,50 | 35 |
| 5 | 5,000 | | 0,042 | 18 | 54 | 53,71 | 197 | 4,85 | 36 |
| 6 | 6,000 | | 0,060 | 22 | 56 | 55,68 | 196 | 5,21 | 38 |
| 7 | 6,999 | | 0,082 | 25 | 58 | 57,64 | 196 | 5,59 | 39 |
| 8 | 7,999 | | 0,107 | 28 | 60 | 59,60 | 196 | 5,98 | 40 |
| 9 | 8,999 | | 0,135 | 32 | 62 | 61,56 | 196 | 6,38 | 41 |
| 10 | 9,998 | | 0,167 | 35 | 64 | 63,52 | 195 | 6,79 | 43 |
| 11 | 10,998 | | 0,202 | 38 | 66 | 65,47 | 195 | 7,22 | 45 |
| 12 | 11,997 | | 0,240 | 42 | 68 | 67,42 | 195 | 7,67 | 46 |
| 13 | 12,996 | | 0,282 | 45 | 70 | 69,37 | 194 | 8,13 | 47 |
| 14 | 13,995 | | 0,327 | 48 | 72 | 71,31 | 194 | 8,60 | 48 |
| 15 | 14,994 | | 0,375 | 52 | 74 | 73,25 | 194 | 9,08 | 49 |
| 16 | 15,993 | | 0,427 | 55 | 76 | 75,19 | 194 | 9,57 | 51 |
| 17 | 16,991 | | 0,482 | 58 | 78 | 77,13 | 193 | 10,08 | 52 |
| 18 | 17,989 | | 0,540 | 62 | 80 | 79,06 | 193 | 10,60 | 53 |
| 19 | 18,987 | | 0,602 | 65 | 82 | 80,99 | 192 | 11,13 | 55 |
| 20 | 19,985 | | 0,667 | | 84 | 82,91 | 192 | 11,68 | 56 |
| | | 200 | | 14 | 86 | 84,83 | 192 | 12,24 | 57 |
| 22 | 21,98 | 200 | 0,81 | 15 | 88 | 86,75 | 191 | 12,81 | 59 |
| 24 | 23,98 | 199 | 0,96 | 17 | 90 | 88,66 | 191 | 13,40 | 60 |
| 26 | 25,97 | 199 | 1,13 | 18 | 92 | 90,57 | 190 | 14,00 | 61 |
| 28 | 27,96 | 199 | 1,31 | 19 | 94 | 92,47 | 190 | 14,61 | 62 |
| 30 | 29,95 | 199 | 1,50 | 21 | 96 | 94,37 | 190 | 15,23 | 63 |
| 32 | 31,94 | 199 | 1,71 | 22 | 98 | 96,27 | 189 | 15,86 | 65 |
| 34 | 33,93 | 199 | 1,93 | 23 | 100 | 98,16 | 189 | 16,51 | 66 |
| 36 | 35,92 | 198 | 2,16 | 24 | 102 | 100,05 | 188 | 17,17 | 67 |
| 38 | 37,90 | 198 | 2,40 | 26 | 104 | 101,93 | 188 | 17,84 | 69 |
| 40 | 39,88 | 198 | 2,66 | 27 | 106 | 103,81 | 187 | 18,53 | 70 |
| 42 | 41,86 | 198 | 2,93 | 29 | 108 | 105,68 | 187 | 19,23 | 71 |
| 44 | 43,84 | 198 | 3,22 | 30 | 110 | 107,55 | 186 | 19,94 | 72 |
| 46 | 45,82 | 198 | 3,52 | | 112 | 109,41 | | 20,66 | |

R. = 290 及 300

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|--------------------------------|--------|-----|-------|----|-----|--------|-----|-------|----|
| R. = 300 (或 3000 及 30) | | | | | | | | | |
| 112 | 109,41 | | 20,66 | | 18 | 16,94 | | 5,25 | |
| 114 | 111,27 | 186 | 21,39 | 73 | 19 | 17,76 | 82 | 5,82 | 57 |
| 116 | 113,13 | 186 | 22,14 | 75 | 20 | 18,56 | 80 | 6,42 | 60 |
| 118 | 114,98 | 185 | 22,90 | 76 | 21 | 19,33 | 77 | 7,05 | 63 |
| 120 | 116,83 | 185 | 23,68 | 78 | 22 | 20,08 | 75 | 7,71 | 66 |
| 122 | 118,67 | 184 | 24,47 | 79 | 23 | 20,81 | 73 | 8,39 | 68 |
| 124 | 120,50 | 183 | 25,27 | 80 | 24 | 21,52 | 71 | 9,10 | 71 |
| 126 | 122,33 | 183 | 26,08 | 81 | 25 | 22,21 | 69 | 9,83 | 73 |
| 128 | 124,15 | 182 | 26,90 | 82 | 26 | 22,87 | 66 | 10,58 | 75 |
| 130 | 125,97 | 182 | 27,73 | 83 | 27 | 23,50 | 63 | 11,35 | 77 |
| 132 | 127,78 | 181 | 28,58 | 85 | 28 | 24,11 | 61 | 12,15 | 80 |
| 134 | 129,59 | 181 | 29,44 | 86 | 29 | 24,69 | 58 | 12,97 | 82 |
| 136 | 131,39 | 180 | 30,31 | 87 | 30 | 25,24 | 55 | 13,80 | 83 |
| | | | | | 31 | 25,77 | 53 | 14,64 | 84 |
| | | | | | 32 | 26,27 | 50 | 15,51 | 87 |
| | | | | | 33 | 26,74 | 47 | 16,39 | 88 |
| | | | | | 34 | 27,17 | 43 | 17,29 | 90 |
| | | | | | 35 | 27,58 | 41 | 18,20 | 91 |
| 13 | 12,60 | 90 | 2,77 | 43 | 36 | 27,96 | 38 | 19,13 | 93 |
| 14 | 13,50 | 88 | 3,20 | 47 | 37 | 28,31 | 35 | 20,07 | 94 |
| 15 | 14,38 | 87 | 3,67 | 50 | 38 | 28,63 | 32 | 21,02 | 95 |
| 16 | 15,25 | 85 | 4,17 | 53 | 39 | 28,91 | 28 | 21,98 | 96 |
| 17 | 16,10 | 84 | 4,70 | 55 | 40 | 29,16 | 25 | 22,94 | 96 |
| 18 | 16,94 | | 5,25 | | | | | | |
| R. = 320 (或 3200 及 32) | | | | | | | | | |
| 1 | 1,000 | | 0,002 | 4 | 17 | 16,993 | | 0,452 | 54 |
| 2 | 2,000 | | 0,006 | 8 | 18 | 17,991 | | 0,506 | 58 |
| 3 | 3,000 | | 0,014 | 11 | 19 | 18,989 | | 0,564 | 61 |
| 4 | 4,000 | | 0,025 | 14 | 20 | 19,987 | | 0,625 | |
| 5 | 5,000 | | 0,039 | 17 | | | 200 | | 13 |
| 6 | 6,000 | | 0,056 | 21 | 22 | 21,99 | 199 | 0,75 | 15 |
| 7 | 6,999 | | 0,077 | 23 | 24 | 23,98 | 199 | 0,90 | 16 |
| 8 | 7,999 | | 0,100 | 27 | 26 | 25,97 | 200 | 1,06 | 17 |
| 9 | 8,999 | | 0,127 | 29 | 28 | 27,97 | 199 | 1,23 | 18 |
| 10 | 9,998 | | 0,156 | 33 | 30 | 29,96 | 199 | 1,41 | 19 |
| 11 | 10,998 | | 0,189 | 36 | 32 | 31,95 | 199 | 1,60 | 20 |
| 12 | 11,998 | | 0,225 | 39 | 34 | 33,94 | 199 | 1,80 | 22 |
| 13 | 12,997 | | 0,264 | 42 | 36 | 35,93 | 199 | 2,02 | 23 |
| 14 | 13,996 | | 0,306 | 46 | 38 | 37,92 | 198 | 2,25 | 25 |
| 15 | 14,995 | | 0,352 | 48 | 40 | 39,90 | 198 | 2,50 | 25 |
| 16 | 15,994 | | 0,400 | 52 | 42 | 41,88 | 198 | 2,75 | 27 |
| 17 | 16,993 | | 0,452 | 46 | 44 | 43,86 | 198 | 3,02 | 28 |
| | | | | | 46 | 45,84 | | 3,30 | |

R. = 300 及 320

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|--------------------------------|--------|-----|-------|----|-----|--------|-----|-------|----|
| R. = 320 (或 3200 及 32) | | | | | | | | | |
| 46 | 45.84 | 198 | 3.30 | 29 | 128 | 124.61 | 184 | 25.26 | 79 |
| 48 | 47.82 | 198 | 3.59 | 31 | 130 | 126.45 | 183 | 26.05 | 80 |
| 50 | 49.80 | 197 | 3.90 | 32 | 132 | 128.28 | 183 | 26.85 | 80 |
| 52 | 51.77 | 197 | 4.22 | 33 | 134 | 130.11 | 183 | 27.65 | 82 |
| 54 | 53.74 | 197 | 4.55 | 34 | 136 | 131.94 | 182 | 28.47 | 83 |
| 56 | 55.71 | 197 | 4.89 | 35 | 138 | 133.76 | 182 | 29.30 | 84 |
| 58 | 57.68 | 197 | 5.24 | 37 | 140 | 135.58 | | 30.14 | |
| 60 | 59.65 | 196 | 5.61 | 38 | | | | | |
| 62 | 61.61 | 196 | 5.99 | 39 | | | | | |
| 64 | 63.57 | 196 | 6.38 | 40 | | | | | |
| 66 | 65.53 | 196 | 6.78 | 42 | 14 | 13.56 | 90 | 3.01 | 44 |
| 68 | 67.49 | 195 | 7.20 | 43 | 15 | 14.46 | 88 | 3.45 | 47 |
| 70 | 69.44 | 195 | 7.63 | 44 | 16 | 15.34 | 87 | 3.92 | 49 |
| 72 | 71.39 | 195 | 8.07 | 45 | 17 | 16.21 | 85 | 4.41 | 52 |
| 74 | 73.34 | 195 | 8.52 | 46 | 18 | 17.06 | 84 | 4.93 | 55 |
| 76 | 75.29 | 194 | 8.98 | 48 | 19 | 17.90 | 82 | 5.48 | 57 |
| 78 | 77.23 | 194 | 9.46 | 49 | 20 | 18.72 | 80 | 6.05 | 60 |
| 80 | 79.17 | 194 | 9.95 | 50 | 21 | 19.52 | 78 | 6.65 | 62 |
| 82 | 81.11 | 193 | 10.45 | 51 | 22 | 20.30 | 77 | 7.27 | 65 |
| 84 | 83.04 | 193 | 10.96 | 52 | 23 | 21.07 | 75 | 7.92 | 67 |
| 86 | 84.97 | 193 | 11.48 | 54 | 24 | 21.82 | 72 | 8.59 | 69 |
| 88 | 86.90 | 192 | 12.02 | 55 | 25 | 22.54 | 70 | 9.28 | 71 |
| 90 | 88.82 | 192 | 12.57 | 56 | 26 | 23.24 | 67 | 9.99 | 73 |
| 92 | 90.74 | 192 | 13.13 | 57 | 27 | 23.91 | 65 | 10.72 | 76 |
| 94 | 92.66 | 192 | 13.70 | 59 | 28 | 24.56 | 63 | 11.48 | 78 |
| 96 | 94.57 | 191 | 14.29 | 60 | 29 | 25.19 | 61 | 12.26 | 80 |
| 98 | 96.48 | 190 | 14.89 | 61 | 30 | 25.80 | 58 | 13.06 | 82 |
| 100 | 98.38 | 190 | 15.50 | 62 | 31 | 26.38 | 55 | 13.88 | 84 |
| 102 | 100.28 | 190 | 16.12 | 63 | 32 | 26.93 | 53 | 14.72 | 85 |
| 104 | 102.18 | 189 | 16.75 | 64 | 33 | 27.46 | 50 | 15.57 | 86 |
| 106 | 104.07 | 189 | 17.39 | 66 | 34 | 27.96 | 47 | 16.43 | 88 |
| 108 | 105.96 | 189 | 18.05 | 67 | 35 | 28.43 | 44 | 17.31 | 89 |
| 110 | 107.85 | 188 | 18.72 | 68 | 36 | 28.87 | 41 | 18.20 | 90 |
| 112 | 109.73 | 188 | 19.40 | 69 | 37 | 29.28 | 39 | 19.10 | 92 |
| 114 | 111.61 | 187 | 20.09 | 70 | 38 | 29.67 | 36 | 20.02 | 94 |
| 116 | 113.48 | 187 | 20.79 | 72 | 39 | 30.03 | 34 | 20.96 | 95 |
| 118 | 115.35 | 186 | 21.51 | 73 | 40 | 30.37 | 30 | 21.91 | 96 |
| 120 | 117.21 | 186 | 22.24 | 74 | 41 | 30.67 | 27 | 22.87 | 96 |
| 122 | 119.07 | 185 | 22.98 | 74 | 42 | 30.94 | 24 | 23.83 | 97 |
| 124 | 120.92 | 185 | 23.72 | 76 | 43 | 31.18 | 21 | 24.80 | 98 |
| 126 | 122.77 | 184 | 24.48 | 78 | 44 | 31.39 | 18 | 25.78 | 98 |
| 128 | 124.61 | | 25.26 | | 45 | 31.57 | | 26.76 | |
| R=32 補充值 | | | | | | | | | |
| | | | | | 14 | 13.56 | 90 | 3.01 | 44 |
| | | | | | 15 | 14.46 | 88 | 3.45 | 47 |
| | | | | | 16 | 15.34 | 87 | 3.92 | 49 |
| | | | | | 17 | 16.21 | 85 | 4.41 | 52 |
| | | | | | 18 | 17.06 | 84 | 4.93 | 55 |
| | | | | | 19 | 17.90 | 82 | 5.48 | 57 |
| | | | | | 20 | 18.72 | 80 | 6.05 | 60 |
| | | | | | 21 | 19.52 | 78 | 6.65 | 62 |
| | | | | | 22 | 20.30 | 77 | 7.27 | 65 |
| | | | | | 23 | 21.07 | 75 | 7.92 | 67 |
| | | | | | 24 | 21.82 | 72 | 8.59 | 69 |
| | | | | | 25 | 22.54 | 70 | 9.28 | 71 |
| | | | | | 26 | 23.24 | 67 | 9.99 | 73 |
| | | | | | 27 | 23.91 | 65 | 10.72 | 76 |
| | | | | | 28 | 24.56 | 63 | 11.48 | 78 |
| | | | | | 29 | 25.19 | 61 | 12.26 | 80 |
| | | | | | 30 | 25.80 | 58 | 13.06 | 82 |
| | | | | | 31 | 26.38 | 55 | 13.88 | 84 |
| | | | | | 32 | 26.93 | 53 | 14.72 | 85 |
| | | | | | 33 | 27.46 | 50 | 15.57 | 86 |
| | | | | | 34 | 27.96 | 47 | 16.43 | 88 |
| | | | | | 35 | 28.43 | 44 | 17.31 | 89 |
| | | | | | 36 | 28.87 | 41 | 18.20 | 90 |
| | | | | | 37 | 29.28 | 39 | 19.10 | 92 |
| | | | | | 38 | 29.67 | 36 | 20.02 | 94 |
| | | | | | 39 | 30.03 | 34 | 20.96 | 95 |
| | | | | | 40 | 30.37 | 30 | 21.91 | 96 |
| | | | | | 41 | 30.67 | 27 | 22.87 | 96 |
| | | | | | 42 | 30.94 | 24 | 23.83 | 97 |
| | | | | | 43 | 31.18 | 21 | 24.80 | 98 |
| | | | | | 44 | 31.39 | 18 | 25.78 | 98 |
| | | | | | 45 | 31.57 | | 26.76 | |

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|---------------------------|--------|-----|-------|----|-----|--------|-------|-------|------|
| R. = 340 (或 3400) | | | | | | | | | |
| 1 | 1,000 | | 0,001 | | 5 | 62 | 61,66 | 197 | 5,64 |
| 2 | 2,000 | | 0,006 | 5 | 64 | 63,63 | 196 | 6,01 | 38 |
| 3 | 3,000 | | 0,013 | 7 | 66 | 65,59 | 196 | 6,39 | 39 |
| 4 | 4,000 | | 0,024 | 11 | 68 | 67,55 | 196 | 6,78 | 40 |
| 5 | 5,000 | | 0,037 | 13 | 70 | 69,51 | 196 | 7,18 | 41 |
| 6 | 6,000 | | 0,053 | 16 | 72 | 71,47 | 195 | 7,59 | 43 |
| 7 | 7,000 | | 0,072 | 19 | 74 | 73,42 | 195 | 8,02 | 44 |
| 8 | 7,999 | | 0,094 | 22 | 76 | 75,37 | 195 | 8,46 | 45 |
| 9 | 8,999 | | 0,119 | 25 | 78 | 77,32 | 194 | 8,91 | 46 |
| 10 | 9,999 | | 0,147 | 28 | 80 | 79,26 | 195 | 9,37 | 47 |
| 11 | 10,999 | | 0,178 | 31 | 82 | 81,21 | 194 | 9,84 | 48 |
| 12 | 11,998 | | 0,212 | 34 | 84 | 83,15 | 194 | 10,32 | 49 |
| 13 | 12,997 | | 0,248 | 36 | 86 | 85,09 | 193 | 10,81 | 51 |
| 14 | 13,996 | | 0,288 | 40 | 88 | 87,02 | 193 | 11,32 | 52 |
| 15 | 14,995 | | 0,331 | 43 | 90 | 88,95 | 193 | 11,84 | 53 |
| 16 | 15,994 | | 0,376 | 45 | 92 | 90,88 | 193 | 12,37 | 54 |
| 17 | 16,993 | | 0,425 | 49 | 94 | 92,81 | 192 | 12,91 | 55 |
| 18 | 17,992 | | 0,476 | 51 | 96 | 94,73 | 192 | 13,46 | 56 |
| 19 | 18,990 | | 0,531 | 55 | 98 | 96,65 | 191 | 14,02 | 58 |
| 20 | 19,988 | | 0,588 | 57 | 100 | 98,56 | 191 | 14,60 | 59 |
| | | 200 | | 12 | 102 | 100,47 | 191 | 15,19 | 59 |
| 22 | 21,99 | 200 | 0,71 | 13 | 104 | 102,38 | 191 | 15,78 | 61 |
| 24 | 23,99 | 199 | 0,84 | 15 | 106 | 104,29 | 190 | 16,39 | 62 |
| 26 | 25,98 | 199 | 0,99 | 16 | 108 | 106,19 | 190 | 17,01 | 63 |
| 28 | 27,97 | 199 | 1,15 | 17 | 110 | 108,09 | 189 | 17,64 | 64 |
| 30 | 29,96 | 199 | 1,32 | 18 | 112 | 109,98 | 189 | 18,28 | 65 |
| 32 | 31,95 | 199 | 1,50 | 19 | 114 | 111,87 | 189 | 18,93 | 66 |
| 34 | 33,94 | 199 | 1,69 | 21 | 116 | 113,76 | 188 | 19,59 | 68 |
| 36 | 35,93 | 199 | 1,90 | 22 | 118 | 115,64 | 188 | 20,27 | 69 |
| 38 | 37,92 | 199 | 2,12 | 23 | 120 | 117,52 | 188 | 20,96 | 70 |
| 40 | 39,91 | 199 | 2,35 | 24 | 122 | 119,40 | 187 | 21,66 | 70 |
| 42 | 41,90 | 198 | 2,59 | 25 | 124 | 121,27 | 187 | 22,36 | 72 |
| 44 | 43,88 | 198 | 2,84 | 26 | 126 | 123,14 | 186 | 23,08 | 73 |
| 46 | 45,86 | 198 | 3,10 | 28 | 128 | 125,00 | 186 | 23,81 | 74 |
| 48 | 47,84 | 198 | 3,38 | 29 | 130 | 126,86 | 185 | 24,55 | 75 |
| 50 | 49,82 | 198 | 3,67 | 30 | 132 | 128,71 | 185 | 25,30 | 76 |
| 52 | 51,80 | 198 | 3,97 | 31 | 134 | 130,56 | 184 | 26,06 | 77 |
| 54 | 53,78 | 197 | 4,28 | 32 | 136 | 132,40 | 184 | 26,83 | 79 |
| 56 | 55,75 | 197 | 4,60 | 33 | 138 | 134,24 | 184 | 27,62 | 80 |
| 58 | 57,72 | 197 | 4,93 | 35 | 140 | 136,08 | 183 | 28,42 | 81 |
| 60 | 59,69 | 197 | 5,28 | 36 | 142 | 137,91 | 183 | 29,23 | 82 |
| 62 | 61,66 | 197 | 5,64 | 36 | 144 | 139,74 | | 30,05 | |

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|---------------------------------|--------|-----|-------|----|-----|--------|-----|-------|----|
| R. = 350 (或 3500 及 35) | | | | | | | | | |
| 1 | 1,000 | | 0,001 | 5 | 64 | 63,65 | 196 | 5,84 | 37 |
| 2 | 2,000 | | 0,006 | 7 | 66 | 65,61 | 196 | 6,21 | 38 |
| 3 | 3,000 | | 0,013 | 10 | 68 | 67,57 | 196 | 6,59 | 39 |
| 4 | 4,000 | | 0,023 | 13 | 70 | 69,53 | 196 | 6,98 | 40 |
| 5 | 5,000 | | 0,036 | 15 | 72 | 71,49 | 196 | 7,38 | 41 |
| 6 | 6,000 | | 0,051 | 19 | 74 | 73,45 | 196 | 7,79 | 42 |
| 7 | 7,000 | | 0,070 | 21 | 76 | 75,41 | 195 | 8,21 | 44 |
| 8 | 7,999 | | 0,091 | 25 | 78 | 77,36 | 195 | 8,65 | 45 |
| 9 | 8,999 | | 0,116 | 27 | 80 | 79,31 | 195 | 9,10 | 46 |
| 10 | 9,999 | | 0,143 | 30 | 82 | 81,26 | 194 | 9,56 | 47 |
| 11 | 10,999 | | 0,173 | 33 | 84 | 83,20 | 194 | 10,03 | 48 |
| 12 | 11,998 | | 0,206 | 35 | 86 | 85,14 | 194 | 10,51 | 49 |
| 13 | 12,997 | | 0,241 | 39 | 88 | 87,08 | 193 | 11,00 | 51 |
| 14 | 13,996 | | 0,280 | 41 | 90 | 89,01 | 193 | 11,51 | 52 |
| 15 | 14,995 | | 0,321 | 44 | 92 | 90,94 | 193 | 12,03 | 52 |
| 16 | 15,994 | | 0,365 | 48 | 94 | 92,87 | 193 | 12,55 | 54 |
| 17 | 16,993 | | 0,413 | 50 | 96 | 94,80 | 193 | 13,09 | 54 |
| 18 | 17,992 | | 0,463 | 53 | 98 | 96,73 | 192 | 13,63 | 56 |
| 19 | 18,991 | | 0,516 | 55 | 100 | 98,65 | 192 | 14,19 | 57 |
| 20 | 19,989 | | 0,571 | | 102 | 100,57 | 191 | 14,76 | 57 |
| | | 200 | | 12 | 104 | 102,48 | 191 | 15,34 | 58 |
| 22 | 21,99 | 200 | 0,69 | 13 | 106 | 104,39 | 191 | 15,93 | 59 |
| 24 | 23,99 | 199 | 0,82 | 14 | 108 | 106,30 | 191 | 16,53 | 60 |
| 26 | 25,98 | 199 | 0,96 | 16 | 110 | 108,20 | 190 | 17,14 | 61 |
| 28 | 27,97 | 199 | 1,12 | 17 | 112 | 110,10 | 190 | 17,76 | 62 |
| 30 | 29,96 | 199 | 1,29 | 18 | 114 | 112,00 | 189 | 18,39 | 63 |
| 32 | 31,95 | 199 | 1,47 | 18 | 116 | 113,89 | 189 | 19,04 | 65 |
| 34 | 33,94 | 199 | 1,65 | 20 | 118 | 115,78 | 188 | 19,70 | 66 |
| 36 | 35,93 | 199 | 1,85 | 21 | 120 | 117,66 | 188 | 20,37 | 67 |
| 38 | 37,92 | 199 | 2,06 | 22 | 122 | 119,54 | 188 | 21,05 | 68 |
| 40 | 39,91 | 199 | 2,28 | 23 | 124 | 121,42 | 187 | 21,74 | 69 |
| 42 | 41,90 | 199 | 2,51 | 25 | 126 | 123,29 | 187 | 22,44 | 70 |
| 44 | 43,89 | 198 | 2,76 | 26 | 128 | 125,16 | 187 | 23,15 | 71 |
| 46 | 45,87 | 198 | 3,02 | 27 | 130 | 127,03 | 186 | 23,87 | 72 |
| 48 | 47,85 | 198 | 3,29 | 28 | 132 | 128,89 | 186 | 24,60 | 73 |
| 50 | 49,83 | 198 | 3,57 | 29 | 134 | 130,75 | 185 | 25,34 | 74 |
| 52 | 51,81 | 197 | 3,86 | 30 | 136 | 132,60 | 185 | 26,09 | 75 |
| 54 | 53,78 | 198 | 4,16 | 31 | 138 | 134,45 | 185 | 26,85 | 76 |
| 56 | 55,76 | 198 | 4,47 | 32 | 140 | 136,30 | 184 | 27,63 | 77 |
| 58 | 57,74 | 197 | 4,79 | 34 | 142 | 138,14 | 183 | 28,41 | 78 |
| 60 | 59,71 | 197 | 5,13 | 35 | 144 | 139,97 | 183 | 29,21 | 80 |
| 62 | 61,68 | 197 | 5,48 | 36 | 146 | 141,80 | | 30,01 | 80 |
| 64 | 63,65 | | 5,84 | | | | | | |

R. = 350

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|-------------------------|--------|----|-------|----|-----|-------|-----|-------|----|
| R=35 補充值 | | | | | | | | | |
| 14 | 18,63 | 92 | 2,76 | 40 | 32 | 27,72 | 60 | 13,64 | 80 |
| 15 | 14,55 | 90 | 3,16 | 43 | 33 | 28,32 | 58 | 14,44 | 82 |
| 16 | 15,45 | 89 | 3,59 | 46 | 34 | 28,90 | 55 | 15,26 | 83 |
| 17 | 16,34 | 88 | 4,05 | 48 | 35 | 29,45 | 53 | 16,09 | 84 |
| 18 | 17,22 | 86 | 4,53 | 50 | 36 | 29,98 | 50 | 16,93 | 86 |
| 19 | 18,08 | 85 | 5,03 | 53 | 37 | 30,48 | 48 | 17,79 | 88 |
| 20 | 18,93 | 83 | 5,56 | 55 | 38 | 30,96 | 45 | 18,67 | 89 |
| 21 | 19,76 | 82 | 6,11 | 58 | 39 | 31,41 | 43 | 19,56 | 91 |
| 22 | 20,58 | 80 | 6,69 | 60 | 40 | 31,84 | 40 | 20,47 | 92 |
| 23 | 21,38 | 78 | 7,29 | 62 | 41 | 32,24 | 37 | 21,39 | 93 |
| 24 | 22,16 | 76 | 7,91 | 64 | 42 | 32,61 | 35 | 22,32 | 94 |
| 25 | 22,92 | 75 | 8,55 | 67 | 43 | 32,96 | 33 | 23,26 | 95 |
| 26 | 23,67 | 73 | 9,22 | 69 | 44 | 33,29 | 30 | 24,21 | 95 |
| 27 | 24,40 | 71 | 9,91 | 71 | 45 | 33,59 | 27 | 25,16 | 96 |
| 28 | 25,11 | 68 | 10,62 | 72 | 46 | 33,86 | 24 | 26,12 | 97 |
| 29 | 25,79 | 66 | 11,34 | 74 | 47 | 34,10 | 21 | 27,09 | 98 |
| 30 | 26,45 | 64 | 12,08 | 77 | 48 | 34,31 | 18 | 28,07 | 98 |
| 31 | 27,09 | 63 | 12,85 | 79 | 49 | 34,49 | 15 | 29,05 | 99 |
| 32 | 27,72 | | 13,64 | | 50 | 34,64 | | 30,04 | |
| R.=360 (或 3600) | | | | | | | | | |
| 1 | 1,000 | | 0,001 | 5 | 20 | 19,99 | 200 | 0,55 | 12 |
| 2 | 2,000 | | 0,006 | 7 | 22 | 21,99 | 199 | 0,67 | 13 |
| 3 | 3,000 | | 0,013 | 9 | 24 | 23,98 | 200 | 0,80 | 14 |
| 4 | 4,000 | | 0,022 | 13 | 26 | 25,98 | 200 | 0,94 | 15 |
| 5 | 5,000 | | 0,035 | 15 | 28 | 27,98 | 199 | 1,09 | 16 |
| 6 | 6,000 | | 0,050 | 18 | 30 | 29,97 | 199 | 1,25 | 17 |
| 7 | 7,000 | | 0,068 | 21 | 32 | 31,96 | 199 | 1,42 | 18 |
| 8 | 7,999 | | 0,089 | 24 | 34 | 33,95 | 199 | 1,60 | 19 |
| 9 | 8,999 | | 0,113 | 26 | 36 | 35,94 | 199 | 1,79 | 21 |
| 10 | 9,999 | | 0,139 | 29 | 38 | 37,93 | 199 | 2,00 | 22 |
| 11 | 10,999 | | 0,168 | 32 | 40 | 39,92 | 199 | 2,22 | 23 |
| 12 | 11,999 | | 0,200 | 35 | 42 | 41,91 | 198 | 2,45 | 24 |
| 13 | 12,998 | | 0,235 | 37 | 44 | 43,89 | 198 | 2,69 | 25 |
| 14 | 13,997 | | 0,272 | 40 | 46 | 45,87 | 199 | 2,94 | 26 |
| 15 | 14,996 | | 0,312 | 43 | 48 | 47,86 | 198 | 3,20 | 27 |
| 16 | 15,995 | | 0,355 | 46 | 50 | 49,84 | 198 | 3,47 | 28 |
| 17 | 16,994 | | 0,401 | 49 | 52 | 51,82 | 198 | 3,75 | 29 |
| 18 | 17,993 | | 0,450 | 51 | 54 | 53,80 | 198 | 4,04 | 30 |
| 19 | 18,992 | | 0,501 | 54 | 56 | 55,78 | 197 | 4,34 | 32 |
| 20 | 19,990 | | 0,555 | | 58 | 57,75 | | 4,66 | |

R.=360

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|--------------------------------|--------|-----|-------|----|-----|--------|-----|-------|----|
| R. = 360 (或 3600) | | | | | | | | | |
| 58 | 57,75 | 197 | 4,86 | 33 | 104 | 102,56 | 192 | 14,92 | 58 |
| 60 | 59,72 | 197 | 4,99 | 34 | 106 | 104,48 | 191 | 15,50 | 59 |
| 62 | 61,69 | 197 | 5,33 | 34 | 108 | 106,39 | 191 | 16,09 | 59 |
| 64 | 63,66 | 197 | 5,67 | 36 | 110 | 108,30 | 190 | 16,68 | 60 |
| 66 | 65,63 | 197 | 6,03 | 37 | 112 | 110,20 | 190 | 17,28 | 62 |
| 68 | 67,60 | 196 | 6,40 | 38 | 114 | 112,10 | 190 | 17,90 | 62 |
| 70 | 69,56 | 196 | 6,78 | 39 | 116 | 114,00 | 190 | 18,53 | 63 |
| 72 | 71,52 | 196 | 7,17 | 41 | 118 | 115,90 | 189 | 19,17 | 64 |
| 74 | 73,48 | 196 | 7,58 | 41 | 120 | 117,79 | 189 | 19,82 | 65 |
| 76 | 75,44 | 195 | 7,99 | 42 | 122 | 119,68 | 188 | 20,48 | 66 |
| 78 | 77,39 | 195 | 8,41 | 44 | 124 | 121,56 | 188 | 21,14 | 66 |
| 80 | 79,34 | 195 | 8,85 | 45 | 126 | 123,44 | 188 | 21,82 | 68 |
| 82 | 81,29 | 195 | 9,30 | 46 | 128 | 125,32 | 187 | 22,51 | 69 |
| 84 | 83,24 | 195 | 9,76 | 47 | 130 | 127,19 | 187 | 23,22 | 71 |
| 86 | 85,19 | 195 | 10,23 | 47 | 132 | 129,06 | 187 | 23,93 | 71 |
| 88 | 87,13 | 194 | 10,71 | 48 | 134 | 130,93 | 186 | 24,65 | 72 |
| 90 | 89,07 | 194 | 11,19 | 48 | 136 | 132,79 | 186 | 25,38 | 73 |
| 92 | 91,01 | 194 | 11,69 | 50 | 138 | 134,65 | 186 | 26,12 | 74 |
| 94 | 92,94 | 193 | 12,20 | 51 | 140 | 136,50 | 185 | 26,88 | 76 |
| 96 | 94,87 | 193 | 12,72 | 52 | 142 | 138,35 | 185 | 27,65 | 77 |
| 98 | 96,80 | 193 | 13,25 | 53 | 144 | 140,19 | 184 | 28,42 | 77 |
| 100 | 98,72 | 192 | 13,80 | 55 | 146 | 142,03 | 184 | 29,20 | 78 |
| 102 | 100,64 | 192 | 14,36 | 56 | 148 | 143,87 | 184 | 30,00 | 80 |
| 104 | 102,56 | 192 | 14,92 | 56 | 150 | 145,70 | 183 | 30,80 | 80 |
| R. = 380 (或 3800 及 38) | | | | | | | | | |
| 1 | 1,000 | | 0,001 | 4 | 16 | 15,995 | | 0,337 | 43 |
| 2 | 2,000 | | 0,005 | 7 | 17 | 16,994 | | 0,380 | 46 |
| 3 | 3,000 | | 0,012 | 9 | 18 | 17,993 | | 0,426 | 49 |
| 4 | 4,000 | | 0,021 | 12 | 19 | 18,992 | | 0,475 | 51 |
| 5 | 5,000 | | 0,033 | 14 | 20 | 19,991 | | 0,526 | |
| 6 | 6,000 | | 0,047 | 17 | | | 200 | | 11 |
| 7 | 7,000 | | 0,064 | 20 | 22 | 21,99 | 199 | 0,64 | 12 |
| 8 | 8,000 | | 0,084 | 23 | 24 | 23,98 | 200 | 0,76 | 13 |
| 9 | 8,999 | | 0,107 | 25 | 26 | 25,98 | 200 | 0,89 | 14 |
| 10 | 9,999 | | 0,132 | 27 | 28 | 27,98 | 200 | 1,03 | 15 |
| 11 | 10,999 | | 0,159 | 30 | 30 | 29,97 | 199 | 1,18 | 16 |
| 12 | 11,999 | | 0,189 | 33 | 32 | 31,97 | 200 | 1,34 | 16 |
| 13 | 12,998 | | 0,222 | 36 | 34 | 33,96 | 199 | 1,52 | 18 |
| 14 | 13,997 | | 0,258 | 38 | 36 | 35,95 | 199 | 1,70 | 18 |
| 15 | 14,996 | | 0,296 | 41 | 38 | 37,94 | 199 | 1,89 | 19 |
| 16 | 15,995 | | 0,337 | 40 | 40 | 39,93 | 199 | 2,10 | 21 |

R. 360 及 380

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|-------------------------------|--------|-----|-------|----|-----|--------|-----|-------|----|
| R. = 380 (或 3800 及 38) | | | | | | | | | |
| 40 | 39,93 | 199 | 2,10 | 21 | 124 | 121,81 | 189 | 20,05 | 65 |
| 42 | 41,92 | 198 | 2,31 | 23 | 126 | 123,70 | 189 | 20,70 | 66 |
| 44 | 43,90 | 199 | 2,54 | 24 | 128 | 125,69 | 189 | 21,36 | 66 |
| 46 | 45,89 | 199 | 2,78 | 25 | 130 | 127,48 | 188 | 22,02 | 67 |
| 48 | 47,88 | 198 | 3,03 | 25 | 132 | 129,86 | 188 | 22,69 | 69 |
| 50 | 49,86 | 198 | 3,28 | 27 | 134 | 131,24 | 187 | 23,38 | 70 |
| 52 | 51,84 | 198 | 3,55 | 28 | 136 | 133,11 | 187 | 24,08 | 71 |
| 54 | 53,82 | 198 | 3,83 | 29 | 138 | 134,98 | 187 | 24,79 | 71 |
| 56 | 55,80 | 198 | 4,12 | 30 | 140 | 136,85 | 187 | 25,50 | 73 |
| 58 | 57,78 | 197 | 4,42 | 31 | 142 | 138,72 | 186 | 26,23 | 73 |
| 60 | 59,75 | 197 | 4,73 | 32 | 144 | 140,58 | 186 | 26,96 | 74 |
| 62 | 61,72 | 197 | 5,05 | 33 | 146 | 142,44 | 185 | 27,70 | 75 |
| 64 | 63,69 | 197 | 5,38 | 34 | 148 | 144,29 | 184 | 28,45 | 77 |
| 66 | 65,66 | 197 | 5,72 | 35 | 150 | 146,13 | 184 | 29,22 | 77 |
| 68 | 67,63 | 197 | 6,07 | 36 | 152 | 147,97 | 184 | 29,99 | 77 |
| 70 | 69,60 | 197 | 6,43 | 37 | | | | | |
| 72 | 71,57 | 196 | 6,80 | 38 | | | | | |
| 74 | 73,53 | 196 | 7,18 | 39 | | | | | |
| 76 | 75,49 | 196 | 7,57 | 40 | 15 | 14,61 | 92 | 2,92 | 89 |
| 78 | 77,45 | 196 | 7,97 | 42 | 16 | 15,53 | 91 | 3,31 | 42 |
| 80 | 79,41 | 195 | 8,39 | 43 | 17 | 16,44 | 89 | 3,73 | 45 |
| 82 | 81,36 | 195 | 8,82 | 43 | 18 | 17,33 | 88 | 4,18 | 47 |
| 84 | 83,31 | 195 | 9,25 | 44 | 19 | 18,21 | 87 | 4,65 | 49 |
| 86 | 85,26 | 195 | 9,69 | 46 | 20 | 19,08 | 87 | 5,14 | 52 |
| 88 | 87,21 | 195 | 10,15 | 46 | 21 | 19,95 | 85 | 5,66 | 54 |
| 90 | 89,16 | 194 | 10,61 | 47 | 22 | 20,80 | 83 | 6,20 | 56 |
| 92 | 91,10 | 194 | 11,08 | 48 | 23 | 21,63 | 81 | 6,76 | 57 |
| 94 | 93,04 | 194 | 11,56 | 49 | 24 | 22,44 | 80 | 7,33 | 60 |
| 96 | 94,98 | 194 | 12,05 | 51 | 25 | 23,24 | 78 | 7,93 | 62 |
| 98 | 96,92 | 193 | 12,56 | 52 | 26 | 24,02 | 77 | 8,55 | 64 |
| 100 | 98,85 | 193 | 13,08 | 53 | 27 | 24,79 | 75 | 9,19 | 66 |
| 102 | 100,78 | 193 | 13,61 | 53 | 28 | 25,54 | 73 | 9,85 | 68 |
| 104 | 102,71 | 192 | 14,14 | 55 | 29 | 26,27 | 71 | 10,35 | 71 |
| 106 | 104,63 | 192 | 14,69 | 56 | 30 | 26,98 | 69 | 11,24 | 72 |
| 108 | 106,55 | 192 | 15,25 | 56 | 31 | 27,67 | 67 | 11,96 | 74 |
| 110 | 108,47 | 192 | 15,81 | 57 | 32 | 28,34 | 66 | 12,70 | 75 |
| 112 | 110,39 | 191 | 16,38 | 59 | 33 | 29,00 | 64 | 13,45 | 77 |
| 114 | 112,30 | 191 | 16,97 | 60 | 34 | 29,64 | 62 | 14,22 | 79 |
| 116 | 114,21 | 191 | 17,57 | 61 | 35 | 30,26 | 60 | 15,01 | 80 |
| 118 | 116,12 | 190 | 18,18 | 61 | 36 | 30,86 | 57 | 15,81 | 82 |
| 120 | 118,02 | 190 | 18,79 | 62 | 37 | 31,43 | 55 | 16,63 | 83 |
| 122 | 119,92 | 189 | 19,41 | 64 | 38 | 31,98 | 53 | 17,46 | 85 |
| 124 | 121,81 | | 20,05 | | 39 | 32,51 | | 18,31 | |
| R. = 38 補充值 | | | | | | | | | |
| | | | | | 15 | 14,61 | 92 | 2,92 | 89 |
| | | | | | 16 | 15,53 | 91 | 3,31 | 42 |
| | | | | | 17 | 16,44 | 89 | 3,73 | 45 |
| | | | | | 18 | 17,33 | 88 | 4,18 | 47 |
| | | | | | 19 | 18,21 | 87 | 4,65 | 49 |
| | | | | | 20 | 19,08 | 87 | 5,14 | 52 |
| | | | | | 21 | 19,95 | 85 | 5,66 | 54 |
| | | | | | 22 | 20,80 | 83 | 6,20 | 56 |
| | | | | | 23 | 21,63 | 81 | 6,76 | 57 |
| | | | | | 24 | 22,44 | 80 | 7,33 | 60 |
| | | | | | 25 | 23,24 | 78 | 7,93 | 62 |
| | | | | | 26 | 24,02 | 77 | 8,55 | 64 |
| | | | | | 27 | 24,79 | 75 | 9,19 | 66 |
| | | | | | 28 | 25,54 | 73 | 9,85 | 68 |
| | | | | | 29 | 26,27 | 71 | 10,35 | 71 |
| | | | | | 30 | 26,98 | 69 | 11,24 | 72 |
| | | | | | 31 | 27,67 | 67 | 11,96 | 74 |
| | | | | | 32 | 28,34 | 66 | 12,70 | 75 |
| | | | | | 33 | 29,00 | 64 | 13,45 | 77 |
| | | | | | 34 | 29,64 | 62 | 14,22 | 79 |
| | | | | | 35 | 30,26 | 60 | 15,01 | 80 |
| | | | | | 36 | 30,86 | 57 | 15,81 | 82 |
| | | | | | 37 | 31,43 | 55 | 16,63 | 83 |
| | | | | | 38 | 31,98 | 53 | 17,46 | 85 |
| | | | | | 39 | 32,51 | | 18,31 | |

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 | |
|-----------------|-------|----|-------|-------|-----|-------|-------|-------|-------|----|
| R=38 補充值 | | | | | | | | | | |
| 89 | 32,51 | 50 | 18,31 | 87 | 46 | 35,57 | 34 | 24,59 | 94 | |
| 40 | 33,01 | | 19,18 | 88 | 47 | 35,91 | 31 | 25,53 | 95 | |
| 41 | 33,49 | | 48 | 20,06 | 89 | 48 | 36,22 | 29 | 26,48 | 96 |
| 42 | 33,95 | | 46 | 20,95 | 90 | 49 | 36,51 | 26 | 27,44 | 97 |
| 43 | 34,39 | | 44 | 21,85 | 91 | 50 | 36,77 | 24 | 28,41 | 97 |
| 44 | 34,81 | | 42 | 22,76 | 91 | 51 | 37,01 | 22 | 29,38 | 98 |
| 45 | 35,20 | | 39 | 23,67 | 92 | 52 | 37,23 | | 30,36 | |
| 46 | 35,57 | | 37 | 24,59 | | | | | | |

R. = 400 (或 4000 及 40)

| | | | | | | | | | |
|----|--------|-----|-------|----|-------|--------|-----|-------|----|
| 1 | 1,000 | | 0,001 | 4 | 42 | 41,92 | 199 | 2,20 | 22 |
| 2 | 2,000 | | 0,005 | 6 | 44 | 43,91 | 199 | 2,42 | 22 |
| 3 | 3,000 | | 0,011 | 9 | 46 | 45,90 | 199 | 2,64 | 23 |
| 4 | 4,000 | | 0,020 | 11 | 48 | 47,89 | 198 | 2,87 | 25 |
| 5 | 5,000 | | 0,031 | 14 | 50 | 49,87 | 199 | 3,12 | 26 |
| 6 | 6,000 | | 0,045 | 16 | 52 | 51,86 | 198 | 3,38 | 26 |
| 7 | 7,000 | | 0,061 | 19 | 54 | 53,84 | 193 | 3,64 | 27 |
| 8 | 8,000 | | 0,080 | 21 | 56 | 55,82 | 198 | 3,91 | 28 |
| 9 | 8,999 | | 0,101 | 24 | 58 | 57,80 | 198 | 4,19 | 30 |
| 10 | 9,999 | | 0,125 | 26 | 60 | 59,78 | 198 | 4,49 | 31 |
| 11 | 10,999 | | 0,151 | 28 | 62 | 61,76 | 197 | 4,80 | 31 |
| 12 | 11,999 | | 0,180 | 29 | 64 | 63,73 | 197 | 5,11 | 32 |
| 13 | 12,999 | | 0,211 | 31 | 66 | 65,70 | 197 | 5,43 | 33 |
| 14 | 13,998 | | 0,245 | 34 | 68 | 67,67 | 197 | 5,76 | 35 |
| 15 | 14,997 | | 0,281 | 36 | 70 | 69,64 | 197 | 6,11 | 36 |
| 16 | 15,996 | | 0,320 | 39 | 72 | 71,61 | 197 | 6,47 | 36 |
| 17 | 16,995 | | 0,361 | 41 | 74 | 73,58 | 197 | 6,83 | 37 |
| 18 | 17,994 | | 0,405 | 44 | 76 | 75,55 | 196 | 7,20 | 38 |
| 19 | 18,993 | | 0,451 | 46 | 78 | 77,51 | 196 | 7,58 | 39 |
| 20 | 19,992 | | 0,500 | 49 | 80 | 79,47 | 196 | 7,97 | 40 |
| | | 200 | | 82 | 81,43 | 81,43 | 196 | 8,37 | 42 |
| 22 | 21,99 | 199 | 0,61 | 11 | 84 | 83,39 | 195 | 8,79 | 42 |
| 24 | 23,98 | 200 | 0,72 | 11 | 86 | 85,34 | 195 | 9,21 | 43 |
| 26 | 25,98 | 200 | 0,84 | 12 | 88 | 87,29 | 195 | 9,64 | 44 |
| 28 | 27,98 | 200 | 0,97 | 13 | 90 | 89,24 | 195 | 10,08 | 44 |
| 30 | 29,97 | 199 | 1,12 | 15 | 92 | 91,19 | 195 | 10,53 | 45 |
| 32 | 31,97 | 200 | 1,28 | 16 | 94 | 93,14 | 195 | 10,99 | 46 |
| 34 | 33,96 | 199 | 1,44 | 16 | 96 | 95,08 | 194 | 11,46 | 47 |
| 36 | 35,95 | 199 | 1,62 | 18 | 98 | 97,02 | 194 | 11,94 | 48 |
| 38 | 37,94 | 199 | 1,81 | 19 | 100 | 98,96 | 194 | 12,43 | 49 |
| 40 | 39,93 | 199 | 2,00 | 19 | 102 | 100,90 | 194 | 12,93 | 50 |
| 42 | 41,92 | 199 | 2,20 | 20 | 104 | 102,83 | 193 | 13,44 | 51 |

R. = 400

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|--------------------------------|--------|-----|-------|----|-----|-------|----|-------|----|
| R. = 400 (或 4000 及 40) | | | | | | | | | |
| 104 | 102,83 | 193 | 13,44 | 52 | 19 | 18,30 | 88 | 4,43 | 47 |
| 106 | 104,76 | 193 | 13,96 | 53 | 20 | 19,18 | 87 | 4,90 | 49 |
| 108 | 106,69 | 193 | 14,49 | 54 | 21 | 20,05 | 86 | 5,39 | 51 |
| 110 | 108,62 | 192 | 15,03 | 55 | 22 | 20,91 | 85 | 5,90 | 53 |
| 112 | 110,54 | 192 | 15,58 | 56 | 23 | 21,76 | 83 | 6,43 | 56 |
| 114 | 112,46 | 192 | 16,14 | 57 | 24 | 22,59 | 82 | 6,99 | 58 |
| 116 | 114,38 | 192 | 16,71 | 58 | 25 | 23,41 | 80 | 7,57 | 59 |
| 118 | 116,30 | 191 | 17,29 | 58 | 26 | 24,21 | 79 | 8,16 | 61 |
| 120 | 118,21 | 191 | 17,87 | 59 | 27 | 25,00 | 77 | 8,77 | 63 |
| 122 | 120,12 | 190 | 18,46 | 60 | 28 | 25,77 | 76 | 9,40 | 65 |
| 124 | 122,02 | 190 | 19,06 | 61 | 29 | 26,53 | 74 | 10,05 | 68 |
| 126 | 123,92 | 190 | 19,67 | 63 | 30 | 27,27 | 72 | 10,73 | 70 |
| 128 | 125,82 | 190 | 20,30 | 64 | 31 | 27,99 | 70 | 11,43 | 71 |
| 130 | 127,72 | 189 | 20,94 | 65 | 32 | 28,69 | 69 | 12,14 | 72 |
| 132 | 129,61 | 189 | 21,59 | 65 | 33 | 29,38 | 67 | 12,86 | 74 |
| 134 | 131,50 | 189 | 22,24 | 66 | 34 | 30,05 | 65 | 13,60 | 76 |
| 136 | 133,39 | 189 | 22,90 | 67 | 35 | 30,70 | 63 | 14,36 | 78 |
| 138 | 135,28 | 188 | 23,57 | 68 | 36 | 31,33 | 61 | 15,14 | 79 |
| 140 | 137,16 | 188 | 24,25 | 69 | 37 | 31,94 | 59 | 15,93 | 80 |
| 142 | 139,04 | 187 | 24,94 | 70 | 38 | 32,53 | 58 | 16,73 | 82 |
| 144 | 140,91 | 187 | 25,64 | 71 | 39 | 33,11 | 55 | 17,55 | 84 |
| 146 | 142,78 | 187 | 26,35 | 72 | 40 | 33,66 | 53 | 18,39 | 85 |
| 148 | 144,65 | 186 | 27,07 | 73 | 41 | 34,19 | 51 | 19,24 | 86 |
| 150 | 146,51 | 186 | 27,80 | 74 | 42 | 34,70 | 49 | 20,10 | 87 |
| 152 | 148,37 | 186 | 28,54 | 74 | 43 | 35,19 | 46 | 20,97 | 88 |
| 154 | 150,23 | 184 | 29,28 | 76 | 44 | 35,65 | 44 | 21,85 | 90 |
| 156 | 152,07 | | 30,04 | 46 | 45 | 36,09 | 42 | 22,75 | 91 |
| | | | | 46 | 46 | 36,51 | 40 | 23,66 | 92 |
| | | | | 47 | 47 | 36,91 | 37 | 24,58 | 93 |
| | | | | 48 | 48 | 37,28 | 35 | 25,51 | 94 |
| | | | | 49 | 49 | 37,63 | 33 | 26,45 | 94 |
| 15 | 14,65 | 92 | 2,78 | 38 | 50 | 37,96 | 30 | 27,39 | 95 |
| 16 | 15,57 | 92 | 3,16 | 40 | 51 | 38,26 | 28 | 28,34 | 96 |
| 17 | 16,49 | 91 | 3,56 | 42 | 52 | 38,54 | 26 | 29,30 | 97 |
| 18 | 17,40 | 90 | 3,98 | 45 | 53 | 38,80 | | 30,27 | |
| 19 | 18,30 | | 4,43 | | | | | | |
| R. = 420 (或 4200) | | | | | | | | | |
| 1 | 1,000 | | 0,001 | 4 | 5 | 5,000 | | 0,030 | 13 |
| 2 | 2,000 | | 0,005 | 6 | 6 | 6,000 | | 0,043 | 15 |
| 3 | 3,000 | | 0,011 | 8 | 7 | 7,000 | | 0,058 | 18 |
| 4 | 4,000 | | 0,019 | 11 | 8 | 8,000 | | 0,076 | 20 |
| 5 | 5,000 | | 0,030 | | 9 | 8,999 | | 0,096 | |

R. = 400 及 420

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|---------------------------|--------|-----|-------|----|-----|--------|-----|-------|----|
| R. = 420 (或 4200) | | | | | | | | | |
| 9 | 8,999 | | 0,096 | | 78 | 77,56 | | 7,22 | |
| 10 | 9,999 | | 0,119 | 23 | 80 | 79,52 | 196 | 7,60 | 38 |
| 11 | 10,999 | | 0,144 | 25 | 82 | 81,48 | 196 | 7,98 | 38 |
| 12 | 11,999 | | 0,171 | 27 | 84 | 83,44 | 196 | 8,37 | 39 |
| 13 | 12,999 | | 0,201 | 30 | 86 | 85,40 | 196 | 8,77 | 40 |
| 14 | 13,998 | | 0,233 | 32 | 88 | 87,36 | 196 | 9,19 | 42 |
| 15 | 14,997 | | 0,268 | 35 | 90 | 89,31 | 195 | 9,61 | 42 |
| 16 | 15,996 | | 0,305 | 37 | 92 | 91,26 | 195 | 10,04 | 43 |
| 17 | 16,995 | | 0,344 | 39 | 94 | 93,21 | 195 | 10,48 | 44 |
| 18 | 17,994 | | 0,386 | 42 | 96 | 95,16 | 195 | 10,93 | 45 |
| 19 | 18,993 | | 0,430 | 44 | 98 | 97,11 | 195 | 11,39 | 46 |
| 20 | 19,992 | | 0,477 | 47 | 100 | 99,06 | 195 | 11,85 | 46 |
| | | | | | 102 | 101,00 | 194 | 12,33 | 48 |
| 22 | 21,99 | 200 | 0,57 | 9 | 104 | 102,94 | 194 | 12,81 | 48 |
| 24 | 23,99 | 200 | 0,68 | 11 | 106 | 104,88 | 194 | 13,30 | 49 |
| 26 | 25,99 | 200 | 0,80 | 12 | 108 | 106,82 | 194 | 13,80 | 50 |
| 28 | 27,98 | 199 | 0,93 | 13 | 110 | 108,75 | 193 | 14,32 | 52 |
| 30 | 29,97 | 199 | 1,07 | 14 | 112 | 110,68 | 193 | 14,85 | 52 |
| 32 | 31,97 | 200 | 1,22 | 15 | 114 | 112,61 | 193 | 15,38 | 53 |
| 34 | 33,97 | 200 | 1,37 | 15 | 116 | 114,53 | 192 | 15,92 | 54 |
| 36 | 35,96 | 199 | 1,54 | 17 | 118 | 116,45 | 192 | 16,47 | 55 |
| 38 | 37,95 | 199 | 1,71 | 17 | 120 | 118,37 | 192 | 17,03 | 56 |
| 40 | 39,94 | 199 | 1,90 | 19 | 122 | 120,29 | 192 | 17,60 | 57 |
| 42 | 41,93 | 199 | 2,10 | 20 | 124 | 122,20 | 191 | 18,17 | 57 |
| 44 | 43,92 | 199 | 2,30 | 20 | 126 | 124,11 | 191 | 18,76 | 59 |
| 46 | 45,91 | 199 | 2,52 | 22 | 128 | 126,02 | 191 | 19,36 | 60 |
| 48 | 47,90 | 199 | 2,75 | 23 | 130 | 127,93 | 191 | 19,96 | 60 |
| 50 | 49,88 | 198 | 2,98 | 23 | 132 | 129,84 | 191 | 20,57 | 61 |
| 52 | 51,87 | 199 | 3,22 | 24 | 134 | 131,74 | 190 | 21,19 | 62 |
| 54 | 53,85 | 198 | 3,47 | 25 | 136 | 133,64 | 190 | 21,82 | 63 |
| 56 | 55,83 | 198 | 3,73 | 26 | 138 | 135,53 | 189 | 22,46 | 64 |
| 58 | 57,82 | 199 | 4,00 | 27 | 140 | 137,42 | 189 | 23,12 | 66 |
| 60 | 59,80 | 198 | 4,28 | 28 | 142 | 139,31 | 189 | 23,78 | 66 |
| 62 | 61,78 | 198 | 4,57 | 29 | 144 | 141,20 | 189 | 24,44 | 66 |
| 64 | 63,75 | 197 | 4,87 | 30 | 146 | 143,08 | 188 | 25,12 | 68 |
| 66 | 65,73 | 198 | 5,18 | 31 | 148 | 144,96 | 188 | 25,81 | 69 |
| 68 | 67,71 | 198 | 5,50 | 32 | 150 | 146,83 | 187 | 26,50 | 69 |
| 70 | 69,68 | 197 | 5,82 | 32 | 152 | 148,70 | 187 | 27,21 | 71 |
| 72 | 71,65 | 197 | 6,15 | 33 | 154 | 150,57 | 187 | 27,92 | 71 |
| 74 | 73,62 | 197 | 6,50 | 35 | 156 | 152,44 | 187 | 28,64 | 72 |
| 76 | 75,59 | 197 | 6,86 | 36 | 158 | 154,30 | 186 | 29,37 | 73 |
| 78 | 77,56 | 197 | 7,22 | 36 | 160 | 156,16 | 186 | 30,11 | 74 |

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|---------------------------|--------|-----|-------|----|-----|--------|-----|-------|----|
| R. = 440 (或 4400) | | | | | | | | | |
| 1 | 1,000 | | 0,001 | 4 | 64 | 63,77 | 198 | 4,64 | 30 |
| 2 | 2,000 | | 0,005 | 5 | 66 | 65,75 | 198 | 4,94 | 31 |
| 3 | 3,000 | | 0,010 | 8 | 68 | 67,73 | 198 | 5,25 | 31 |
| 4 | 4,000 | | 0,018 | 10 | 70 | 69,71 | 197 | 5,56 | 32 |
| 5 | 5,000 | | 0,028 | 13 | 72 | 71,68 | 197 | 5,88 | 33 |
| 6 | 6,000 | | 0,041 | 15 | 74 | 73,65 | 197 | 6,21 | 34 |
| 7 | 7,000 | | 0,056 | 17 | 76 | 75,62 | 197 | 6,55 | 35 |
| 8 | 8,000 | | 0,073 | 19 | 78 | 77,59 | 197 | 6,90 | 35 |
| 9 | 8,999 | | 0,092 | 22 | 80 | 79,56 | 197 | 7,25 | 36 |
| 10 | 9,999 | | 0,114 | 24 | 82 | 81,53 | 196 | 7,61 | 38 |
| 11 | 10,999 | | 0,138 | 26 | 84 | 83,49 | 196 | 7,99 | 38 |
| 12 | 11,999 | | 0,164 | 28 | 86 | 85,45 | 196 | 8,37 | 39 |
| 13 | 12,999 | | 0,192 | 31 | 88 | 87,41 | 196 | 8,76 | 41 |
| 14 | 13,998 | | 0,223 | 33 | 90 | 89,37 | 196 | 9,17 | 41 |
| 15 | 14,997 | | 0,256 | 35 | 92 | 91,33 | 196 | 9,58 | 42 |
| 16 | 15,997 | | 0,291 | 37 | 94 | 93,29 | 195 | 10,00 | 43 |
| 17 | 16,996 | | 0,328 | 40 | 96 | 95,24 | 195 | 10,43 | 44 |
| 18 | 17,995 | | 0,368 | 42 | 98 | 97,19 | 195 | 10,87 | 45 |
| 19 | 18,994 | | 0,410 | 44 | 100 | 99,14 | 195 | 11,32 | 46 |
| 20 | 19,993 | | 0,454 | 10 | 102 | 101,09 | 195 | 11,78 | 46 |
| | | 200 | | 10 | 104 | 103,04 | 194 | 12,24 | 47 |
| 22 | 21,99 | 200 | 0,55 | 10 | 106 | 104,98 | 194 | 12,71 | 48 |
| 24 | 23,99 | 200 | 0,65 | 11 | 108 | 106,92 | 194 | 13,19 | 49 |
| 26 | 25,99 | 200 | 0,76 | 13 | 110 | 108,86 | 194 | 13,68 | 50 |
| 28 | 27,99 | 200 | 0,89 | 13 | 112 | 110,80 | 194 | 14,18 | 50 |
| 30 | 29,98 | 199 | 1,02 | 14 | 114 | 112,73 | 193 | 14,68 | 52 |
| 32 | 31,98 | 200 | 1,16 | 14 | 116 | 114,66 | 193 | 15,20 | 53 |
| 34 | 33,97 | 199 | 1,31 | 15 | 118 | 116,59 | 193 | 15,73 | 53 |
| 36 | 35,96 | 199 | 1,47 | 16 | 120 | 118,52 | 193 | 16,26 | 54 |
| 38 | 37,95 | 199 | 1,64 | 17 | 122 | 120,45 | 193 | 16,80 | 56 |
| 40 | 39,94 | 199 | 1,82 | 18 | 124 | 122,37 | 192 | 17,36 | 56 |
| 42 | 41,93 | 199 | 2,01 | 19 | 126 | 124,29 | 192 | 17,92 | 57 |
| 44 | 43,92 | 199 | 2,20 | 19 | 128 | 126,21 | 192 | 18,49 | 57 |
| 46 | 45,91 | 199 | 2,40 | 20 | 130 | 128,12 | 191 | 19,06 | 58 |
| 48 | 47,90 | 199 | 2,62 | 22 | 132 | 130,03 | 191 | 19,64 | 60 |
| 50 | 49,89 | 199 | 2,84 | 22 | 134 | 131,94 | 191 | 20,24 | 61 |
| 52 | 51,88 | 199 | 3,07 | 23 | 136 | 133,85 | 191 | 20,85 | 62 |
| 54 | 53,87 | 199 | 3,31 | 24 | 138 | 135,75 | 190 | 21,47 | 62 |
| 56 | 55,85 | 198 | 3,56 | 25 | 140 | 137,65 | 190 | 22,09 | 63 |
| 58 | 57,83 | 198 | 3,82 | 26 | 142 | 139,55 | 190 | 22,72 | 63 |
| 60 | 59,81 | 198 | 4,08 | 26 | 144 | 141,44 | 189 | 23,35 | 65 |
| 62 | 61,79 | 198 | 4,35 | 27 | 146 | 143,33 | 189 | 24,00 | 66 |
| 64 | 63,77 | 198 | 4,64 | 29 | 148 | 145,22 | 189 | 24,66 | 66 |

R. = 440

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|--------------------------------|--------|-----|-------|----|-----|--------|-----|-------|----|
| R. = 440 (或 4400) | | | | | | | | | |
| 148 | 145,22 | 189 | 24,66 | 66 | 156 | 152,75 | 188 | 27,86 | 70 |
| 150 | 147,11 | 188 | 25,32 | 67 | 158 | 154,63 | 187 | 28,06 | 71 |
| 152 | 148,99 | 188 | 25,99 | 68 | 160 | 156,50 | 187 | 28,77 | 72 |
| 154 | 150,87 | 188 | 26,67 | 69 | 162 | 158,37 | 186 | 29,49 | 73 |
| 156 | 152,75 | 188 | 27,36 | | 164 | 160,23 | | 30,22 | |
| R. = 450 (或 4500 及 45) | | | | | | | | | |
| 1 | 1,000 | | 0,001 | 3 | 48 | 47,91 | 199 | 2,56 | 22 |
| 2 | 2,000 | | 0,004 | 6 | 50 | 49,90 | 199 | 2,73 | 23 |
| 3 | 3,000 | | 0,010 | 8 | 52 | 51,89 | 198 | 3,01 | 23 |
| 4 | 4,000 | | 0,018 | 8 | 54 | 53,87 | 198 | 3,24 | 24 |
| 5 | 5,000 | | 0,028 | 10 | 56 | 55,85 | 199 | 3,48 | 25 |
| 6 | 6,000 | | 0,040 | 12 | 58 | 57,84 | 198 | 3,73 | 26 |
| 7 | 7,000 | | 0,054 | 14 | 60 | 59,82 | 198 | 3,99 | 27 |
| 8 | 8,000 | | 0,071 | 17 | 62 | 61,80 | 198 | 4,26 | 28 |
| 9 | 9,000 | | 0,090 | 19 | 64 | 63,78 | 198 | 4,54 | 29 |
| 10 | 9,999 | | 0,111 | 21 | 66 | 65,76 | 198 | 4,83 | 30 |
| 11 | 10,999 | | 0,134 | 23 | 68 | 67,74 | 198 | 5,13 | 30 |
| 12 | 11,999 | | 0,160 | 26 | 70 | 69,72 | 198 | 5,43 | 31 |
| 13 | 12,999 | | 0,188 | 28 | 72 | 71,70 | 197 | 5,74 | 33 |
| 14 | 13,998 | | 0,218 | 30 | 74 | 73,67 | 197 | 6,07 | 33 |
| 15 | 14,997 | | 0,250 | 32 | 76 | 75,64 | 197 | 6,40 | 34 |
| 16 | 15,997 | | 0,284 | 34 | 78 | 77,61 | 197 | 6,74 | 35 |
| 17 | 16,996 | | 0,321 | 37 | 80 | 79,58 | 197 | 7,09 | 36 |
| 18 | 17,995 | | 0,360 | 39 | 82 | 81,55 | 197 | 7,45 | 36 |
| 19 | 18,994 | | 0,401 | 41 | 84 | 83,52 | 196 | 7,81 | 38 |
| 20 | 19,993 | | 0,445 | 44 | 86 | 85,48 | 196 | 8,19 | 39 |
| | | 200 | | 9 | 88 | 87,44 | 196 | 8,58 | 39 |
| 22 | 21,99 | 200 | 0,54 | 10 | 90 | 89,40 | 196 | 8,97 | 40 |
| 24 | 23,99 | 200 | 0,64 | 11 | 92 | 91,36 | 196 | 9,37 | 41 |
| 26 | 25,99 | 200 | 0,75 | 12 | 94 | 93,32 | 196 | 9,78 | 42 |
| 28 | 27,99 | 200 | 0,87 | 13 | 96 | 95,28 | 196 | 10,20 | 43 |
| 30 | 29,98 | 199 | 1,00 | 13 | 98 | 97,23 | 195 | 10,63 | 44 |
| 32 | 31,97 | 199 | 1,14 | 14 | 100 | 99,18 | 195 | 11,07 | 45 |
| 34 | 33,97 | 200 | 1,28 | 14 | 102 | 101,13 | 195 | 11,52 | 45 |
| 36 | 35,97 | 200 | 1,44 | 16 | 104 | 103,08 | 195 | 11,97 | 46 |
| 38 | 37,96 | 199 | 1,61 | 17 | 106 | 105,03 | 194 | 12,43 | 47 |
| 40 | 39,95 | 199 | 1,78 | 17 | 108 | 106,97 | 194 | 12,90 | 48 |
| 42 | 41,94 | 199 | 1,96 | 18 | 110 | 108,91 | 194 | 13,38 | 48 |
| 44 | 43,93 | 199 | 2,15 | 19 | 112 | 110,85 | 194 | 13,86 | 50 |
| 46 | 45,92 | 199 | 2,35 | 20 | 114 | 112,79 | 193 | 14,36 | 50 |
| 48 | 47,91 | 199 | 2,56 | 21 | 116 | 114,72 | 193 | 14,86 | |

R. = 440 及 450

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|-----|----|---|----|---|-----|----|---|----|---|
|-----|----|---|----|---|-----|----|---|----|---|

R. = 450 (或 4500 及 45)

| | | | | | | | | | |
|-----|--------|-----|-------|----|----|-------|----|-------|----|
| 116 | 114,72 | 193 | 14,86 | 51 | 22 | 21,13 | 87 | 5,27 | 48 |
| 118 | 116,65 | 193 | 15,37 | 53 | 23 | 22,00 | 87 | 5,75 | 50 |
| 120 | 118,58 | 193 | 15,90 | 53 | 24 | 22,87 | 86 | 6,25 | 52 |
| 122 | 120,51 | 193 | 16,43 | 53 | 25 | 23,73 | 85 | 6,77 | 54 |
| 124 | 122,44 | 193 | 16,97 | 54 | 26 | 24,58 | 83 | 7,31 | 55 |
| 126 | 124,36 | 192 | 17,52 | 55 | 27 | 25,41 | 82 | 7,86 | 57 |
| 128 | 126,28 | 192 | 18,08 | 56 | 28 | 26,23 | 81 | 8,43 | 59 |
| 130 | 128,20 | 192 | 18,65 | 57 | 29 | 27,04 | 79 | 9,02 | 61 |
| 132 | 130,12 | 191 | 19,22 | 58 | 30 | 27,83 | 78 | 9,63 | 63 |
| 134 | 132,03 | 191 | 19,80 | 59 | 31 | 28,61 | 77 | 10,26 | 65 |
| 136 | 133,94 | 191 | 20,39 | 60 | 32 | 29,38 | 75 | 10,91 | 66 |
| 138 | 135,85 | 190 | 20,99 | 61 | 33 | 30,13 | 73 | 11,57 | 67 |
| 140 | 137,75 | 190 | 21,60 | 62 | 34 | 30,86 | 72 | 12,24 | 69 |
| 142 | 139,65 | 190 | 22,22 | 63 | 35 | 31,58 | 70 | 12,93 | 71 |
| 144 | 141,55 | 190 | 22,85 | 63 | 36 | 32,28 | 69 | 13,64 | 73 |
| 146 | 143,45 | 190 | 23,48 | 64 | 37 | 32,97 | 67 | 14,37 | 74 |
| 148 | 145,35 | 189 | 24,12 | 65 | 38 | 33,64 | 66 | 15,11 | 76 |
| 150 | 147,24 | 189 | 24,77 | 66 | 39 | 34,30 | 64 | 15,87 | 77 |
| 152 | 149,13 | 188 | 25,43 | 66 | 40 | 34,94 | 62 | 16,64 | 78 |
| 154 | 151,01 | 188 | 26,09 | 68 | 41 | 35,56 | 60 | 17,42 | 80 |
| 156 | 152,89 | 188 | 26,77 | 69 | 42 | 36,16 | 59 | 18,22 | 81 |
| 158 | 154,77 | 188 | 27,46 | 69 | 43 | 36,75 | 57 | 19,03 | 82 |
| 160 | 156,65 | 187 | 28,15 | 70 | 44 | 37,32 | 55 | 19,85 | 84 |
| 162 | 158,52 | 187 | 28,85 | 70 | 45 | 37,87 | 53 | 20,69 | 84 |
| 164 | 160,39 | 187 | 29,55 | 72 | 46 | 38,40 | 51 | 21,53 | 86 |
| 166 | 162,26 | 187 | 30,27 | 47 | 47 | 38,91 | 49 | 22,39 | 87 |
| | | | | 48 | 48 | 39,40 | 47 | 23,26 | 88 |
| | | | | 49 | 49 | 39,87 | 46 | 24,14 | 89 |
| | | | | 50 | 50 | 40,33 | 44 | 25,03 | 90 |
| | | | | 51 | 51 | 40,77 | 42 | 25,93 | 91 |
| | | | | 52 | 52 | 41,19 | 39 | 26,84 | 92 |
| | | | | 53 | 53 | 41,58 | 37 | 27,76 | 93 |
| | | | | 54 | 54 | 41,95 | 34 | 28,69 | 94 |
| | | | | 55 | 55 | 42,29 | 33 | 29,63 | 94 |
| | | | | 56 | 56 | 42,62 | | 30,57 | |

R=45 補充值

| | | | | | | | | | |
|----|-------|----|------|----|----|-------|----|-------|----|
| 16 | 15,66 | 93 | 2,81 | 36 | 51 | 40,77 | 42 | 25,93 | 91 |
| 17 | 16,59 | 93 | 3,17 | 38 | 52 | 41,19 | 39 | 26,84 | 92 |
| 18 | 17,52 | 92 | 3,55 | 40 | 53 | 41,58 | 37 | 27,76 | 93 |
| 19 | 18,44 | 91 | 3,95 | 42 | 54 | 41,95 | 34 | 28,69 | 94 |
| 20 | 19,35 | 90 | 4,37 | 44 | 55 | 42,29 | 33 | 29,63 | 94 |
| 21 | 20,25 | 88 | 4,81 | 46 | 56 | 42,62 | | 30,57 | |
| 22 | 21,13 | | 5,27 | | | | | | |

R. = 460 (或 4600)

| | | | | | | | | | |
|---|-------|--|-------|---|---|-------|--|-------|----|
| 1 | 1,000 | | 0,001 | 3 | 4 | 4,000 | | 0,017 | 10 |
| 2 | 2,000 | | 0,004 | 6 | 5 | 5,000 | | 0,027 | 12 |
| 3 | 3,000 | | 0,010 | 7 | 6 | 6,000 | | 0,039 | 14 |
| 4 | 4,000 | | 0,017 | | 7 | 7,000 | | 0,053 | |

R. = 450 及 460

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|----------------------------|--------|-----|-------|----|-----|--------|-----|-------|----|
| R. = 460 (或 4600) | | | | | | | | | |
| 7 | 7,000 | | 0,053 | 17 | 80 | 79,60 | 197 | 6,94 | 35 |
| 8 | 8,000 | | 0,070 | 18 | 82 | 81,57 | 196 | 7,29 | 36 |
| 9 | 9,000 | | 0,088 | 21 | 84 | 83,53 | 197 | 7,65 | 37 |
| 10 | 9,999 | | 0,109 | 23 | 86 | 85,50 | 197 | 8,02 | 38 |
| 11 | 10,999 | | 0,132 | 25 | 88 | 87,47 | 196 | 8,40 | 38 |
| 12 | 11,999 | | 0,157 | 27 | 90 | 89,43 | 196 | 8,78 | 39 |
| 13 | 12,999 | | 0,184 | 29 | 92 | 91,39 | 196 | 9,17 | 40 |
| 14 | 13,998 | | 0,213 | 32 | 94 | 93,35 | 196 | 9,57 | 41 |
| 15 | 14,997 | | 0,245 | 33 | 96 | 95,31 | 195 | 9,98 | 42 |
| 16 | 15,997 | | 0,278 | 36 | 98 | 97,28 | 195 | 10,40 | 43 |
| 17 | 16,996 | | 0,314 | 38 | 100 | 99,21 | 195 | 10,83 | 44 |
| 18 | 17,995 | | 0,352 | 40 | 102 | 101,16 | 195 | 11,27 | 44 |
| 19 | 18,995 | | 0,392 | 42 | 104 | 103,11 | 195 | 11,71 | 45 |
| 20 | 19,994 | | 0,434 | 42 | 106 | 105,06 | 195 | 12,16 | 46 |
| | | 200 | | 9 | 103 | 107,01 | 194 | 12,62 | 47 |
| 22 | 21,99 | 200 | 0,52 | 10 | 110 | 108,95 | 195 | 13,09 | 48 |
| 24 | 23,99 | 200 | 0,62 | 11 | 112 | 110,90 | 194 | 13,57 | 48 |
| 26 | 25,99 | 200 | 0,73 | 12 | 114 | 112,84 | 194 | 14,05 | 49 |
| 28 | 27,99 | 199 | 0,85 | 13 | 116 | 114,78 | 193 | 14,54 | 50 |
| 30 | 29,98 | 200 | 0,98 | 14 | 118 | 116,71 | 193 | 15,04 | 52 |
| 32 | 31,98 | 199 | 1,12 | 14 | 120 | 118,64 | 193 | 15,56 | 52 |
| 34 | 33,97 | 199 | 1,26 | 15 | 122 | 120,57 | 193 | 16,08 | 53 |
| 36 | 35,96 | 200 | 1,41 | 16 | 124 | 122,50 | 193 | 16,61 | 54 |
| 38 | 37,96 | 199 | 1,57 | 17 | 126 | 124,43 | 193 | 17,15 | 55 |
| 40 | 39,95 | 199 | 1,74 | 18 | 128 | 126,36 | 192 | 17,70 | 55 |
| 42 | 41,94 | 199 | 1,92 | 18 | 130 | 128,28 | 192 | 18,25 | 56 |
| 44 | 43,93 | 199 | 2,10 | 19 | 132 | 130,20 | 192 | 18,81 | 57 |
| 46 | 45,92 | 199 | 2,29 | 20 | 134 | 132,12 | 191 | 19,38 | 58 |
| 48 | 47,91 | 199 | 2,49 | 22 | 136 | 134,03 | 191 | 19,96 | 59 |
| 50 | 49,90 | 199 | 2,71 | 22 | 138 | 135,94 | 191 | 20,55 | 59 |
| 52 | 51,89 | 199 | 2,93 | 23 | 140 | 137,85 | 191 | 21,14 | 60 |
| 54 | 53,88 | 199 | 3,16 | 24 | 142 | 139,76 | 190 | 21,74 | 61 |
| 56 | 55,87 | 198 | 3,40 | 25 | 144 | 141,66 | 190 | 22,35 | 62 |
| 58 | 57,85 | 198 | 3,65 | 26 | 146 | 143,56 | 190 | 22,97 | 63 |
| 60 | 59,83 | 198 | 3,91 | 27 | 148 | 145,46 | 190 | 23,60 | 64 |
| 62 | 61,81 | 198 | 4,18 | 27 | 150 | 147,36 | 189 | 24,24 | 65 |
| 64 | 63,79 | 198 | 4,45 | 28 | 152 | 149,25 | 189 | 24,89 | 65 |
| 66 | 65,77 | 198 | 4,73 | 29 | 154 | 151,14 | 189 | 25,54 | 66 |
| 68 | 67,75 | 198 | 5,02 | 30 | 156 | 153,03 | 188 | 26,20 | 67 |
| 70 | 69,73 | 198 | 5,32 | 31 | 158 | 154,91 | 188 | 26,87 | 68 |
| 72 | 71,71 | 198 | 5,63 | 31 | 160 | 156,79 | 188 | 27,55 | 69 |
| 74 | 73,69 | 197 | 5,94 | 32 | 162 | 158,67 | 188 | 28,24 | 69 |
| 76 | 75,66 | 197 | 6,26 | 33 | 164 | 160,55 | 187 | 28,93 | 70 |
| 78 | 77,63 | 197 | 6,59 | 33 | 166 | 162,42 | 187 | 29,63 | 71 |
| 80 | 79,60 | 197 | 6,94 | 35 | 168 | 164,29 | 187 | 30,34 | |

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|---------------------------|--------|-----|-------|----|-----|--------|-----|-------|----|
| R. = 480 (或 4800) | | | | | | | | | |
| 1 | 1,000 | | 0,001 | 3 | 64 | 63,81 | 198 | 4,26 | 27 |
| 2 | 2,000 | | 0,004 | 5 | 66 | 65,79 | 198 | 4,53 | 28 |
| 3 | 3,000 | | 0,009 | 8 | 68 | 67,77 | 198 | 4,81 | 29 |
| 4 | 4,000 | | 0,017 | 9 | 70 | 69,75 | 198 | 5,10 | 29 |
| 5 | 5,000 | | 0,026 | 12 | 72 | 71,73 | 198 | 5,39 | 30 |
| 6 | 6,000 | | 0,038 | 13 | 74 | 73,71 | 198 | 5,69 | 31 |
| 7 | 7,000 | | 0,051 | 16 | 76 | 75,69 | 197 | 6,00 | 32 |
| 8 | 8,000 | | 0,067 | 17 | 78 | 77,66 | 197 | 6,32 | 33 |
| 9 | 9,000 | | 0,084 | 20 | 80 | 79,63 | 197 | 6,65 | 34 |
| 10 | 9,999 | | 0,104 | 22 | 82 | 81,60 | 197 | 6,99 | 34 |
| 11 | 10,999 | | 0,126 | 24 | 84 | 83,57 | 197 | 7,33 | 35 |
| 12 | 11,999 | | 0,150 | 26 | 86 | 85,54 | 197 | 7,68 | 36 |
| 13 | 12,999 | | 0,176 | 28 | 88 | 87,51 | 196 | 8,04 | 37 |
| 14 | 13,999 | | 0,204 | 30 | 90 | 89,47 | 197 | 8,41 | 38 |
| 15 | 14,998 | | 0,234 | 33 | 92 | 91,44 | 196 | 8,79 | 39 |
| 16 | 15,998 | | 0,267 | 34 | 94 | 93,40 | 196 | 9,18 | 39 |
| 17 | 16,997 | | 0,301 | 36 | 96 | 95,36 | 196 | 9,57 | 40 |
| 18 | 17,996 | | 0,337 | 39 | 98 | 97,32 | 196 | 9,97 | 41 |
| 19 | 18,995 | | 0,376 | 41 | 100 | 99,28 | 196 | 10,38 | 42 |
| 20 | 19,994 | | 0,417 | | 102 | 101,24 | 195 | 10,80 | 43 |
| | | 200 | | 8 | 104 | 103,19 | 195 | 11,23 | 43 |
| 22 | 21,99 | 200 | 0,50 | 10 | 106 | 105,14 | 195 | 11,66 | 44 |
| 24 | 23,99 | 200 | 0,60 | 10 | 108 | 107,09 | 195 | 12,10 | 45 |
| 26 | 25,99 | 200 | 0,70 | 11 | 110 | 109,04 | 195 | 12,55 | 46 |
| 28 | 27,99 | 199 | 0,81 | 13 | 112 | 110,99 | 194 | 13,01 | 47 |
| 30 | 29,98 | 200 | 0,94 | 13 | 114 | 112,93 | 194 | 13,48 | 47 |
| 32 | 31,98 | 199 | 1,07 | 13 | 116 | 114,87 | 194 | 13,95 | 48 |
| 34 | 33,97 | 199 | 1,20 | 15 | 118 | 116,81 | 194 | 14,43 | 49 |
| 36 | 35,96 | 200 | 1,35 | 15 | 120 | 118,75 | 194 | 14,92 | 50 |
| 38 | 37,96 | 199 | 1,50 | 17 | 122 | 120,69 | 194 | 15,42 | 50 |
| 40 | 39,95 | 200 | 1,67 | 17 | 124 | 122,63 | 193 | 15,92 | 52 |
| 42 | 41,95 | 199 | 1,84 | 17 | 126 | 124,56 | 193 | 16,44 | 53 |
| 44 | 43,94 | 199 | 2,01 | 19 | 128 | 126,49 | 193 | 16,97 | 53 |
| 46 | 45,93 | 199 | 2,20 | 20 | 130 | 128,42 | 192 | 17,50 | 54 |
| 48 | 47,92 | 199 | 2,40 | 20 | 132 | 130,34 | 193 | 18,04 | 55 |
| 50 | 49,91 | 199 | 2,60 | 21 | 134 | 132,27 | 192 | 18,59 | 55 |
| 52 | 51,90 | 199 | 2,81 | 22 | 136 | 134,19 | 192 | 19,14 | 56 |
| 54 | 53,89 | 199 | 3,03 | 23 | 138 | 136,11 | 191 | 19,70 | 57 |
| 56 | 55,88 | 198 | 3,26 | 24 | 140 | 138,02 | 191 | 20,27 | 58 |
| 58 | 57,86 | 198 | 3,50 | 25 | 142 | 139,93 | 192 | 20,85 | 58 |
| 60 | 59,84 | 199 | 3,75 | 25 | 144 | 141,85 | 191 | 21,43 | 60 |
| 62 | 61,83 | 198 | 4,00 | 26 | 146 | 143,76 | 191 | 22,03 | 61 |
| 64 | 63,81 | 198 | 4,26 | | 148 | 145,67 | | 22,64 | |

R. = 480

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|--------------------------------|--------|-----|-------|----|-----|--------|-----|-------|----|
| R. = 480 (或 4800) | | | | | | | | | |
| 148 | 145,67 | 190 | 22,64 | 61 | 160 | 157,05 | 189 | 28,42 | 66 |
| 150 | 147,57 | 190 | 23,25 | 62 | 162 | 158,94 | 189 | 27,08 | 67 |
| 152 | 149,47 | 190 | 23,87 | 63 | 164 | 160,83 | 188 | 27,75 | 67 |
| 154 | 151,37 | 190 | 24,50 | 63 | 166 | 162,71 | 188 | 28,42 | 68 |
| 156 | 153,27 | 189 | 25,13 | 64 | 168 | 164,59 | 188 | 29,10 | 69 |
| 158 | 155,16 | 189 | 25,77 | 65 | 170 | 166,47 | 187 | 29,79 | 70 |
| 160 | 157,05 | | 26,42 | | 172 | 168,34 | | 30,49 | |
| R. = 500 (或 5000 及 50) | | | | | | | | | |
| 1 | 1,000 | | 0,001 | 3 | 44 | 43,95 | 199 | 1,93 | 18 |
| 2 | 2,000 | | 0,004 | 5 | 46 | 45,94 | 199 | 2,11 | 19 |
| 3 | 3,000 | | 0,009 | 7 | 48 | 47,93 | 199 | 2,30 | 20 |
| 4 | 4,000 | | 0,016 | 9 | 50 | 49,92 | 199 | 2,50 | 20 |
| 5 | 5,000 | | 0,025 | 11 | 52 | 51,91 | 199 | 2,70 | 21 |
| 6 | 6,000 | | 0,036 | 13 | 54 | 53,90 | 199 | 2,91 | 22 |
| 7 | 7,000 | | 0,049 | 15 | 56 | 55,89 | 199 | 3,13 | 23 |
| 8 | 8,000 | | 0,064 | 17 | 58 | 57,88 | 198 | 3,36 | 24 |
| 9 | 9,000 | | 0,081 | 19 | 60 | 59,86 | 199 | 3,60 | 24 |
| 10 | 9,999 | | 0,100 | 21 | 62 | 61,85 | 198 | 3,84 | 25 |
| 11 | 10,999 | | 0,121 | 23 | 64 | 63,83 | 198 | 4,09 | 26 |
| 12 | 11,999 | | 0,144 | 25 | 66 | 65,81 | 198 | 4,35 | 27 |
| 13 | 12,999 | | 0,169 | 27 | 68 | 67,79 | 198 | 4,62 | 27 |
| 14 | 13,999 | | 0,196 | 29 | 70 | 69,77 | 198 | 4,89 | 28 |
| 15 | 14,998 | | 0,225 | 31 | 72 | 71,75 | 198 | 5,17 | 29 |
| 16 | 15,998 | | 0,256 | 33 | 74 | 73,73 | 198 | 5,46 | 30 |
| 17 | 16,998 | | 0,289 | 35 | 76 | 75,71 | 198 | 5,76 | 31 |
| 18 | 17,997 | | 0,324 | 37 | 78 | 77,69 | 197 | 6,07 | 32 |
| 19 | 18,996 | | 0,361 | 39 | 80 | 79,66 | 197 | 6,39 | 32 |
| 20 | 19,995 | | 0,400 | | 82 | 81,63 | 197 | 6,71 | 33 |
| | | 200 | | 8 | 84 | 83,60 | 197 | 7,04 | 34 |
| 22 | 21,99 | 200 | 0,48 | 9 | 86 | 85,57 | 197 | 7,38 | 35 |
| 24 | 23,99 | 200 | 0,57 | 10 | 88 | 87,54 | 197 | 7,73 | 35 |
| 26 | 25,99 | 200 | 0,67 | 11 | 90 | 89,51 | 197 | 8,08 | 36 |
| 28 | 27,99 | 199 | 0,78 | 12 | 92 | 91,48 | 197 | 8,44 | 37 |
| 30 | 29,98 | 200 | 0,90 | 12 | 94 | 93,45 | 196 | 8,81 | 38 |
| 32 | 31,98 | 199 | 1,02 | 13 | 96 | 95,41 | 196 | 9,19 | 39 |
| 34 | 33,97 | 200 | 1,15 | 14 | 98 | 97,37 | 196 | 9,58 | 39 |
| 36 | 35,97 | 200 | 1,29 | 15 | 100 | 99,33 | 196 | 9,97 | 40 |
| 38 | 37,97 | 199 | 1,44 | 16 | 102 | 101,29 | 196 | 10,37 | 41 |
| 40 | 39,96 | 200 | 1,60 | 16 | 104 | 103,25 | 196 | 10,78 | 42 |
| 42 | 41,96 | 199 | 1,76 | 17 | 106 | 105,21 | 195 | 11,20 | 42 |
| 44 | 43,95 | | 1,93 | | 108 | 107,16 | | 11,62 | |

R. = 480 及 500

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|-----|----|---|----|---|-----|----|---|----|---|
|-----|----|---|----|---|-----|----|---|----|---|

R. = 500 (或 5000 及 50)

| | | | | | | | | | |
|-----|--------|-----|-------|----|-----|--------|-----|-------|-----|
| 108 | 107,16 | 195 | 11,82 | 43 | 168 | 164,85 | 189 | 27,96 | 66 |
| 110 | 109,11 | 195 | 12,05 | 44 | 170 | 166,74 | 189 | 28,62 | 67 |
| 112 | 111,06 | 195 | 12,49 | 45 | 172 | 168,63 | 188 | 29,29 | 68 |
| 114 | 113,01 | 195 | 12,94 | 46 | 174 | 170,51 | 188 | 29,97 | 69 |
| 116 | 114,96 | 195 | 13,40 | 46 | 176 | 172,39 | | 30,66 | |
| 118 | 116,91 | 194 | 13,86 | 47 | | | | | |
| 120 | 118,85 | 194 | 14,33 | 47 | | | | | |
| 122 | 120,79 | 194 | 14,81 | 48 | | | | | |
| 124 | 122,73 | 194 | 15,30 | 49 | | | | | |
| 126 | 124,67 | 194 | 15,80 | 50 | | | | | |
| 128 | 126,61 | 193 | 16,30 | 50 | 16 | 15,73 | 188 | 2,54 | 67 |
| 130 | 128,54 | 193 | 16,81 | 51 | 18 | 17,61 | 186 | 3,21 | 74 |
| 132 | 130,47 | 193 | 17,33 | 52 | 20 | 19,47 | 183 | 3,95 | 81 |
| 134 | 132,40 | 193 | 17,85 | 52 | 22 | 21,30 | 179 | 4,76 | 88 |
| 136 | 134,33 | 193 | 18,38 | 53 | 24 | 23,09 | 175 | 5,64 | 96 |
| 138 | 136,26 | 192 | 18,92 | 54 | 26 | 24,84 | 172 | 6,60 | 103 |
| 140 | 138,18 | 192 | 19,47 | 55 | 28 | 26,56 | 167 | 7,63 | 110 |
| 142 | 140,10 | 192 | 20,03 | 56 | 30 | 28,23 | 163 | 8,73 | 116 |
| 144 | 142,02 | 192 | 20,60 | 57 | 32 | 29,86 | 158 | 9,89 | 123 |
| 146 | 143,94 | 192 | 21,17 | 57 | 34 | 31,44 | 153 | 11,12 | 129 |
| 148 | 145,85 | 191 | 21,75 | 58 | 36 | 32,97 | 148 | 12,41 | 135 |
| 150 | 147,76 | 191 | 22,33 | 58 | 38 | 34,45 | 142 | 13,76 | 140 |
| 152 | 149,67 | 191 | 22,92 | 59 | 40 | 35,87 | 137 | 15,16 | 146 |
| 154 | 151,58 | 191 | 23,52 | 60 | 42 | 37,24 | 131 | 16,62 | 152 |
| 156 | 153,48 | 190 | 24,13 | 61 | 44 | 38,55 | 124 | 18,14 | 156 |
| 158 | 155,38 | 190 | 24,75 | 62 | 46 | 39,79 | 117 | 19,70 | 161 |
| 160 | 157,28 | 190 | 25,38 | 63 | 48 | 40,96 | 111 | 21,31 | 167 |
| 162 | 159,18 | 190 | 26,02 | 64 | 50 | 42,07 | 105 | 22,98 | 171 |
| 164 | 161,07 | 189 | 26,66 | 64 | 52 | 43,12 | 98 | 24,69 | 174 |
| 166 | 162,96 | 189 | 27,31 | 65 | 54 | 44,10 | 91 | 26,43 | 178 |
| 168 | 164,85 | 189 | 27,96 | 65 | 56 | 45,01 | 83 | 28,21 | 182 |
| | | | | | 58 | 45,84 | | 30,03 | |

R=50 補充值

R. = 520 (或 5200)

| | | | | | | | |
|---|-------|-------|----|----|--------|-------|----|
| 1 | 1,000 | 0,001 | 3 | 9 | 9,000 | 0,078 | 18 |
| 2 | 2,000 | 0,004 | 5 | 10 | 9,999 | 0,096 | 20 |
| 3 | 3,000 | 0,009 | 6 | 11 | 10,999 | 0,116 | 22 |
| 4 | 4,000 | 0,015 | 9 | 12 | 11,999 | 0,138 | 24 |
| 5 | 5,000 | 0,024 | 11 | 13 | 12,999 | 0,162 | 26 |
| 6 | 6,000 | 0,035 | 12 | 14 | 13,999 | 0,188 | 28 |
| 7 | 7,000 | 0,047 | 15 | 15 | 14,998 | 0,216 | 30 |
| 8 | 8,000 | 0,062 | 16 | 16 | 15,998 | 0,246 | 32 |
| 9 | 9,000 | 0,078 | 17 | 17 | 16,998 | 0,278 | |

R. = 500 及 520

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|---------------------------|--------|-----|-------|----|-----|--------|-----|-------|----|
| R. = 520 (或 5200) | | | | | | | | | |
| 17 | 18,998 | | 0,278 | | 96 | 95,46 | | 8,83 | |
| 18 | 17,997 | | 0,311 | 33 | 98 | 97,42 | 196 | 9,21 | 38 |
| 19 | 18,996 | | 0,347 | 36 | 100 | 99,38 | 196 | 9,59 | 38 |
| 20 | 19,995 | | 0,385 | 38 | 102 | 101,34 | 196 | 9,98 | 39 |
| | | | | | 104 | 103,31 | 197 | 10,87 | 39 |
| 22 | 21,99 | 200 | 0,46 | 8 | 106 | 105,27 | 196 | 10,77 | 40 |
| 24 | 23,99 | 200 | 0,55 | 9 | 108 | 107,22 | 195 | 11,18 | 41 |
| 26 | 25,99 | 200 | 0,65 | 10 | 110 | 109,18 | 196 | 11,59 | 41 |
| 28 | 27,99 | 199 | 0,75 | 10 | 112 | 111,13 | 195 | 12,01 | 42 |
| 30 | 29,98 | 199 | 0,86 | 11 | 114 | 113,08 | 195 | 12,44 | 43 |
| 32 | 31,98 | 200 | 0,98 | 12 | 116 | 115,03 | 195 | 12,88 | 44 |
| 34 | 33,97 | 199 | 1,11 | 13 | 118 | 116,98 | 195 | 13,33 | 45 |
| 36 | 35,97 | 200 | 1,25 | 14 | 120 | 118,93 | 195 | 13,78 | 45 |
| 38 | 37,97 | 200 | 1,39 | 14 | 122 | 120,88 | 195 | 14,24 | 46 |
| 40 | 39,96 | 199 | 1,54 | 15 | 124 | 122,83 | 195 | 14,71 | 47 |
| 42 | 41,96 | 200 | 1,70 | 16 | 126 | 124,77 | 194 | 15,19 | 48 |
| 44 | 43,95 | 199 | 1,86 | 16 | 128 | 126,71 | 194 | 15,68 | 49 |
| 46 | 45,94 | 199 | 2,03 | 17 | 130 | 128,65 | 194 | 16,17 | 49 |
| 48 | 47,93 | 199 | 2,21 | 18 | 132 | 130,59 | 194 | 16,67 | 50 |
| 50 | 49,92 | 199 | 2,40 | 19 | 134 | 132,52 | 193 | 17,18 | 51 |
| 52 | 51,91 | 199 | 2,60 | 20 | 136 | 134,45 | 193 | 17,69 | 51 |
| 54 | 53,90 | 199 | 2,80 | 20 | 138 | 136,38 | 193 | 18,21 | 52 |
| 56 | 55,89 | 199 | 3,01 | 21 | 140 | 138,31 | 193 | 18,73 | 52 |
| 58 | 57,88 | 199 | 3,23 | 22 | 142 | 140,24 | 193 | 19,26 | 53 |
| 60 | 59,87 | 199 | 3,46 | 23 | 144 | 142,17 | 193 | 19,80 | 54 |
| 62 | 61,86 | 199 | 3,69 | 23 | 146 | 144,09 | 192 | 20,35 | 55 |
| 64 | 63,84 | 198 | 3,93 | 24 | 148 | 146,01 | 192 | 20,91 | 56 |
| 66 | 65,82 | 198 | 4,18 | 25 | 150 | 147,93 | 192 | 21,48 | 57 |
| 68 | 67,81 | 199 | 4,44 | 26 | 152 | 149,85 | 192 | 22,05 | 57 |
| 70 | 69,79 | 198 | 4,70 | 26 | 154 | 151,76 | 191 | 22,63 | 58 |
| 72 | 71,77 | 198 | 4,97 | 27 | 156 | 153,67 | 191 | 23,22 | 59 |
| 74 | 73,75 | 198 | 5,25 | 28 | 158 | 155,58 | 191 | 23,82 | 60 |
| 76 | 75,73 | 198 | 5,54 | 29 | 160 | 157,49 | 191 | 24,42 | 60 |
| 78 | 77,71 | 198 | 5,84 | 30 | 162 | 159,39 | 190 | 25,03 | 61 |
| 80 | 79,69 | 198 | 6,14 | 30 | 164 | 161,29 | 190 | 25,65 | 62 |
| 82 | 81,67 | 198 | 6,45 | 31 | 166 | 163,19 | 190 | 26,27 | 62 |
| 84 | 83,64 | 197 | 6,77 | 32 | 168 | 165,09 | 190 | 26,90 | 63 |
| 86 | 85,61 | 197 | 7,10 | 33 | 170 | 166,99 | 190 | 27,54 | 64 |
| 88 | 87,58 | 197 | 7,43 | 33 | 172 | 168,88 | 189 | 28,19 | 65 |
| 90 | 89,55 | 197 | 7,77 | 34 | 174 | 170,77 | 189 | 28,84 | 65 |
| 92 | 91,52 | 197 | 8,12 | 35 | 176 | 172,66 | 189 | 29,50 | 66 |
| 94 | 93,49 | 197 | 8,47 | 35 | 178 | 174,55 | 189 | 30,17 | 67 |
| 96 | 95,46 | 197 | 8,83 | 36 | 180 | 176,43 | 188 | 30,84 | 67 |

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|--------------------------------|--------|-----|-------|----|-----|--------|-----|-------|----|
| R. = 550 (或 5500 及 55) | | | | | | | | | |
| 1 | 1,000 | | 0,001 | 3 | 64 | 63,86 | 199 | 3,72 | 24 |
| 2 | 2,000 | | 0,004 | 4 | 66 | 65,85 | 198 | 3,96 | 24 |
| 3 | 3,000 | | 0,008 | 7 | 68 | 67,83 | 198 | 4,20 | 25 |
| 4 | 4,000 | | 0,015 | 8 | 70 | 69,81 | 199 | 4,45 | 26 |
| 5 | 5,000 | | 0,023 | 10 | 72 | 71,80 | 198 | 4,71 | 26 |
| 6 | 6,000 | | 0,033 | 12 | 74 | 73,78 | 198 | 4,97 | 27 |
| 7 | 7,000 | | 0,045 | 13 | 76 | 75,76 | 198 | 5,24 | 28 |
| 8 | 8,000 | | 0,058 | 16 | 78 | 77,74 | 198 | 5,52 | 29 |
| 9 | 9,000 | | 0,074 | 17 | 80 | 79,72 | 198 | 5,81 | 29 |
| 10 | 9,999 | | 0,091 | 19 | 82 | 81,70 | 197 | 6,10 | 30 |
| 11 | 10,999 | | 0,110 | 21 | 84 | 83,67 | 198 | 6,40 | 31 |
| 12 | 11,999 | | 0,131 | 23 | 86 | 85,65 | 198 | 6,71 | 32 |
| 13 | 12,999 | | 0,154 | 24 | 88 | 87,63 | 197 | 7,03 | 32 |
| 14 | 13,999 | | 0,178 | 27 | 90 | 89,60 | 197 | 7,35 | 33 |
| 15 | 14,998 | | 0,205 | 28 | 92 | 91,57 | 197 | 7,68 | 33 |
| 16 | 15,998 | | 0,233 | 30 | 94 | 93,54 | 197 | 8,01 | 34 |
| 17 | 16,998 | | 0,263 | 32 | 96 | 95,51 | 197 | 8,35 | 35 |
| 18 | 17,997 | | 0,295 | 33 | 98 | 97,48 | 197 | 8,70 | 36 |
| 19 | 18,996 | | 0,328 | 36 | 100 | 99,45 | 197 | 9,06 | 37 |
| 20 | 19,995 | | 0,364 | | 102 | 101,42 | 196 | 9,43 | 37 |
| | | 200 | | 8 | 104 | 103,38 | 196 | 9,80 | 38 |
| 22 | 21,99 | 200 | 0,44 | 8 | 106 | 105,34 | 197 | 10,18 | 39 |
| 24 | 23,99 | 200 | 0,52 | 9 | 108 | 107,31 | 196 | 10,57 | 39 |
| 26 | 25,99 | 200 | 0,61 | 10 | 110 | 109,27 | 196 | 10,96 | 40 |
| 28 | 27,99 | 200 | 0,71 | 11 | 112 | 111,23 | 195 | 11,36 | 41 |
| 30 | 29,99 | 200 | 0,82 | 11 | 114 | 113,18 | 196 | 11,77 | 42 |
| 32 | 31,99 | 199 | 0,93 | 12 | 116 | 115,14 | 196 | 12,19 | 42 |
| 34 | 33,98 | 200 | 1,05 | 13 | 118 | 117,10 | 195 | 12,61 | 43 |
| 36 | 35,98 | 200 | 1,18 | 13 | 120 | 119,05 | 195 | 13,04 | 44 |
| 38 | 37,98 | 199 | 1,31 | 14 | 122 | 121,00 | 195 | 13,48 | 44 |
| 40 | 39,97 | 200 | 1,45 | 15 | 124 | 122,95 | 195 | 13,92 | 45 |
| 42 | 41,97 | 199 | 1,60 | 16 | 126 | 124,90 | 195 | 14,37 | 46 |
| 44 | 43,96 | 199 | 1,76 | 16 | 128 | 126,85 | 194 | 14,83 | 46 |
| 46 | 45,95 | 199 | 1,92 | 17 | 130 | 128,79 | 194 | 15,29 | 47 |
| 48 | 47,94 | 199 | 2,09 | 18 | 132 | 130,73 | 195 | 15,76 | 48 |
| 50 | 49,93 | 199 | 2,27 | 19 | 134 | 132,68 | 194 | 16,24 | 49 |
| 52 | 51,92 | 199 | 2,46 | 19 | 136 | 134,62 | 194 | 16,73 | 49 |
| 54 | 53,91 | 199 | 2,65 | 20 | 138 | 136,56 | 193 | 17,22 | 50 |
| 56 | 55,90 | 199 | 2,85 | 21 | 140 | 138,49 | 194 | 17,72 | 51 |
| 58 | 57,89 | 199 | 3,06 | 21 | 142 | 140,43 | 193 | 18,23 | 51 |
| 60 | 59,88 | 199 | 3,27 | 22 | 144 | 142,36 | 193 | 18,74 | 52 |
| 62 | 61,87 | 199 | 3,49 | 23 | 146 | 144,29 | 193 | 19,26 | 52 |
| 64 | 63,86 | 199 | 3,72 | | 148 | 146,22 | | 19,79 | 53 |

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|--------------------------------|--------|-------|-------|----|--------|-------|------|-------|-----|
| R. = 550 (或 5500 及 55) | | | | | | | | | |
| 148 | 146,22 | 193 | 19,79 | 54 | 18 | 17,68 | 188 | 2,92 | 68 |
| 150 | 148,15 | 193 | 20,33 | 54 | 20 | 19,56 | 186 | 3,60 | 74 |
| 152 | 150,08 | 192 | 20,87 | 55 | 22 | 21,42 | 183 | 4,34 | 81 |
| 154 | 152,00 | 192 | 21,42 | 56 | 24 | 23,25 | 179 | 5,15 | 88 |
| 156 | 153,92 | 192 | 21,98 | 56 | 26 | 25,04 | 176 | 6,03 | 94 |
| 158 | 155,84 | 191 | 22,54 | 57 | 28 | 26,80 | 173 | 6,97 | 101 |
| 160 | 157,75 | 192 | 23,11 | 57 | 30 | 28,53 | 169 | 7,98 | 106 |
| 162 | 159,67 | 191 | 23,68 | 58 | 32 | 30,22 | 166 | 9,04 | 113 |
| 164 | 161,58 | 191 | 24,26 | 59 | 34 | 31,88 | 161 | 10,17 | 119 |
| 166 | 163,49 | 191 | 24,85 | 60 | 36 | 33,49 | 156 | 11,36 | 125 |
| 168 | 165,40 | 191 | 25,45 | 61 | 38 | 35,05 | 152 | 12,61 | 131 |
| 170 | 167,31 | 190 | 26,06 | 61 | 40 | 36,57 | 147 | 13,92 | 136 |
| 172 | 169,21 | 190 | 26,67 | 62 | 42 | 38,04 | 142 | 15,28 | 140 |
| 174 | 171,11 | 190 | 27,29 | 63 | 44 | 39,46 | 136 | 16,68 | 146 |
| 176 | 173,01 | 190 | 27,92 | 63 | 46 | 40,82 | 131 | 18,14 | 151 |
| 178 | 174,91 | 189 | 28,55 | 64 | 48 | 42,13 | 126 | 19,65 | 155 |
| 180 | 176,80 | 189 | 29,19 | 65 | 50 | 43,39 | 120 | 21,20 | 160 |
| 182 | 178,69 | 189 | 29,84 | 65 | 52 | 44,59 | 115 | 22,80 | 164 |
| 184 | 180,58 | 189 | 30,49 | 65 | 54 | 45,74 | 108 | 24,44 | 168 |
| | | | | | 56 | 46,82 | 102 | 26,12 | 173 |
| | | | | | 58 | 47,84 | 95 | 27,85 | 176 |
| | | | | | 60 | 48,79 | 89 | 29,61 | 179 |
| | | | | | 62 | 49,68 | | 31,40 | |
| R. = 580 (或 5800) | | | | | | | | | |
| 1 | 1,000 | 0,001 | 2 | 14 | 13,999 | 0,169 | 25 | | |
| 2 | 2,000 | 0,003 | 5 | 15 | 14,998 | 0,194 | 27 | | |
| 3 | 3,000 | 0,008 | 6 | 16 | 15,998 | 0,221 | 28 | | |
| 4 | 4,000 | 0,014 | 7 | 17 | 16,998 | 0,249 | 30 | | |
| 5 | 5,000 | 0,021 | 10 | 18 | 17,998 | 0,279 | 32 | | |
| 6 | 6,000 | 0,031 | 11 | 19 | 18,997 | 0,311 | 34 | | |
| 7 | 7,000 | 0,042 | 13 | 20 | 19,996 | 0,345 | | | |
| 8 | 8,000 | 0,055 | 15 | | | | 7 | | |
| 9 | 9,000 | 0,070 | 16 | 22 | 21,99 | 199 | 0,41 | | |
| 10 | 10,000 | 0,086 | 18 | 24 | 23,99 | 200 | 0,49 | | |
| 11 | 10,999 | 0,104 | 20 | 26 | 25,99 | 200 | 0,58 | | |
| 12 | 11,999 | 0,124 | 22 | 28 | 27,99 | 200 | 0,68 | | |
| 18 | 12,999 | 0,146 | 23 | 30 | 29,99 | 200 | 0,78 | | |
| 14 | 13,999 | 0,169 | | 32 | 31,99 | 200 | 0,89 | | |

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|---------------------------|--------|-----|-------|----|-----|--------|-----|-------|----|
| R. = 580 (或 5800) | | | | | | | | | |
| 32 | 31,99 | 199 | 0,89 | 11 | 110 | 109,34 | 197 | 10,40 | 38 |
| 34 | 33,98 | 200 | 1,00 | 12 | 112 | 111,31 | 196 | 10,78 | 39 |
| 36 | 35,98 | 200 | 1,12 | 13 | 114 | 113,27 | 196 | 11,17 | 39 |
| 38 | 37,98 | 199 | 1,25 | 13 | 116 | 115,23 | 196 | 11,56 | 40 |
| 40 | 39,97 | 200 | 1,38 | 14 | 118 | 117,19 | 196 | 11,96 | 41 |
| 42 | 41,97 | 199 | 1,52 | 15 | 120 | 119,15 | 196 | 12,37 | 42 |
| 44 | 43,96 | 199 | 1,67 | 15 | 122 | 121,11 | 195 | 12,79 | 42 |
| 46 | 45,95 | 200 | 1,82 | 16 | 124 | 123,06 | 195 | 13,21 | 43 |
| 48 | 47,95 | 199 | 1,98 | 17 | 126 | 125,01 | 195 | 13,64 | 43 |
| 50 | 49,94 | 199 | 2,15 | 18 | 128 | 126,96 | 195 | 14,07 | 44 |
| 52 | 51,93 | 199 | 2,33 | 18 | 130 | 128,91 | 195 | 14,51 | 45 |
| 54 | 53,92 | 199 | 2,51 | 19 | 132 | 130,86 | 195 | 14,96 | 45 |
| 56 | 55,91 | 199 | 2,70 | 20 | 134 | 132,81 | 195 | 15,41 | 46 |
| 58 | 57,90 | 199 | 2,90 | 20 | 136 | 134,76 | 194 | 15,87 | 47 |
| 60 | 59,89 | 199 | 3,10 | 21 | 138 | 136,70 | 194 | 16,34 | 47 |
| 62 | 61,88 | 199 | 3,31 | 22 | 140 | 138,64 | 194 | 16,81 | 48 |
| 64 | 63,87 | 199 | 3,53 | 22 | 142 | 140,58 | 194 | 17,29 | 49 |
| 66 | 65,86 | 199 | 3,75 | 23 | 144 | 142,52 | 194 | 17,78 | 50 |
| 68 | 67,85 | 199 | 3,98 | 23 | 146 | 144,46 | 194 | 18,28 | 50 |
| 70 | 69,83 | 198 | 4,22 | 24 | 148 | 146,40 | 193 | 18,78 | 51 |
| 72 | 71,82 | 198 | 4,46 | 24 | 150 | 148,33 | 193 | 19,29 | 51 |
| 74 | 73,80 | 198 | 4,71 | 25 | 152 | 150,26 | 193 | 19,80 | 52 |
| 76 | 75,78 | 199 | 4,97 | 26 | 154 | 152,19 | 193 | 20,32 | 53 |
| 78 | 77,77 | 198 | 5,24 | 27 | 156 | 154,12 | 193 | 20,85 | 54 |
| 80 | 79,75 | 198 | 5,51 | 27 | 158 | 156,05 | 193 | 21,39 | 54 |
| 82 | 81,73 | 197 | 5,79 | 28 | 160 | 157,98 | 192 | 21,93 | 55 |
| 84 | 83,70 | 198 | 6,08 | 29 | 162 | 159,90 | 192 | 22,48 | 55 |
| 86 | 85,68 | 198 | 6,37 | 29 | 164 | 161,82 | 192 | 23,03 | 56 |
| 88 | 87,66 | 198 | 6,67 | 30 | 166 | 163,74 | 192 | 23,59 | 57 |
| 90 | 89,64 | 198 | 6,97 | 30 | 168 | 165,66 | 192 | 24,16 | 58 |
| 92 | 91,62 | 197 | 7,28 | 31 | 170 | 167,58 | 191 | 24,74 | 58 |
| 94 | 93,59 | 197 | 7,60 | 32 | 172 | 169,49 | 191 | 25,32 | 59 |
| 96 | 95,56 | 197 | 7,93 | 33 | 174 | 171,40 | 191 | 25,91 | 59 |
| 98 | 97,53 | 197 | 8,26 | 33 | 176 | 173,31 | 191 | 26,50 | 60 |
| 100 | 99,50 | 197 | 8,60 | 34 | 178 | 175,22 | 190 | 27,10 | 61 |
| 102 | 101,47 | 197 | 8,95 | 35 | 180 | 177,12 | 191 | 27,71 | 61 |
| 104 | 103,44 | 197 | 9,30 | 35 | 182 | 179,03 | 190 | 28,32 | 62 |
| 106 | 105,41 | 197 | 9,66 | 36 | 184 | 180,93 | 190 | 28,94 | 63 |
| 108 | 107,38 | 196 | 10,03 | 37 | 186 | 182,83 | 189 | 29,57 | 63 |
| 110 | 109,34 | 196 | 10,40 | 37 | 188 | 184,72 | 189 | 30,20 | 63 |

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|--------------------------------|--------|-----|-------|----|-----|--------|-----|-------|----|
| R. = 600 (或 6000 及 60) | | | | | | | | | |
| 1 | 1,000 | | 0,001 | 2 | 64 | 63,88 | 199 | 3,41 | 22 |
| 2 | 2,000 | | 0,003 | 4 | 66 | 65,87 | 199 | 3,63 | 22 |
| 3 | 3,000 | | 0,007 | 6 | 68 | 67,86 | 198 | 3,85 | 23 |
| 4 | 4,000 | | 0,013 | 8 | 70 | 69,84 | 199 | 4,08 | 24 |
| 5 | 5,000 | | 0,021 | 9 | 72 | 71,83 | 198 | 4,32 | 24 |
| 6 | 6,000 | | 0,030 | 11 | 74 | 73,81 | 198 | 4,56 | 25 |
| 7 | 7,000 | | 0,041 | 12 | 76 | 75,79 | 199 | 4,81 | 26 |
| 8 | 8,000 | | 0,053 | 14 | 78 | 77,78 | 198 | 5,07 | 26 |
| 9 | 9,000 | | 0,067 | 16 | 80 | 79,76 | 198 | 5,33 | 27 |
| 10 | 10,000 | | 0,083 | 18 | 82 | 81,74 | 199 | 5,60 | 27 |
| 11 | 10,999 | | 0,101 | 19 | 84 | 83,73 | 198 | 5,87 | 28 |
| 12 | 11,999 | | 0,120 | 21 | 86 | 85,71 | 198 | 6,15 | 29 |
| 13 | 12,999 | | 0,141 | 22 | 88 | 87,69 | 197 | 6,44 | 30 |
| 14 | 13,999 | | 0,163 | 24 | 90 | 89,66 | 198 | 6,74 | 30 |
| 15 | 14,998 | | 0,187 | 26 | 92 | 91,64 | 197 | 7,04 | 31 |
| 16 | 15,998 | | 0,213 | 28 | 94 | 93,61 | 198 | 7,35 | 31 |
| 17 | 16,998 | | 0,241 | 29 | 96 | 95,59 | 198 | 7,66 | 32 |
| 18 | 17,998 | | 0,270 | 31 | 98 | 97,57 | 197 | 7,98 | 33 |
| 19 | 18,997 | | 0,301 | 32 | 100 | 99,54 | 197 | 8,31 | 34 |
| 20 | 19,996 | | 0,333 | | 102 | 101,51 | 197 | 8,65 | 34 |
| | | 199 | | 7 | 104 | 103,48 | 197 | 8,99 | 35 |
| 22 | 21,99 | 200 | 0,40 | 8 | 106 | 105,45 | 197 | 9,34 | 36 |
| 24 | 23,99 | 200 | 0,48 | 8 | 108 | 107,42 | 197 | 9,70 | 36 |
| 26 | 25,99 | 200 | 0,56 | 9 | 110 | 109,39 | 197 | 10,06 | 37 |
| 28 | 27,99 | 200 | 0,65 | 10 | 112 | 111,36 | 196 | 10,43 | 37 |
| 30 | 29,99 | 200 | 0,75 | 10 | 114 | 113,32 | 196 | 10,80 | 38 |
| 32 | 31,99 | 199 | 0,85 | 11 | 116 | 115,28 | 196 | 11,18 | 38 |
| 34 | 33,98 | 200 | 0,96 | 11 | 118 | 117,24 | 196 | 11,57 | 39 |
| 36 | 35,98 | 200 | 1,08 | 12 | 120 | 119,20 | 196 | 11,96 | 40 |
| 38 | 37,98 | 199 | 1,20 | 12 | 122 | 121,16 | 196 | 12,36 | 41 |
| 40 | 39,97 | 200 | 1,33 | 13 | 124 | 123,12 | 196 | 12,77 | 41 |
| 42 | 41,97 | 199 | 1,47 | 14 | 126 | 125,08 | 196 | 13,18 | 42 |
| 44 | 43,96 | 199 | 1,61 | 14 | 128 | 127,04 | 195 | 13,60 | 43 |
| 46 | 45,95 | 200 | 1,76 | 15 | 130 | 128,99 | 195 | 14,03 | 43 |
| 48 | 47,95 | 199 | 1,92 | 16 | 132 | 130,94 | 195 | 14,46 | 44 |
| 50 | 49,94 | 200 | 2,08 | 16 | 134 | 132,89 | 195 | 14,90 | 45 |
| 52 | 51,94 | 199 | 2,25 | 17 | 136 | 134,84 | 195 | 15,35 | 45 |
| 54 | 53,93 | 199 | 2,43 | 18 | 138 | 136,79 | 194 | 15,80 | 46 |
| 56 | 55,92 | 199 | 2,61 | 18 | 140 | 138,73 | 195 | 16,26 | 47 |
| 58 | 57,91 | 199 | 2,80 | 19 | 142 | 140,68 | 194 | 16,73 | 47 |
| 60 | 59,90 | 199 | 3,00 | 20 | 144 | 142,62 | 194 | 17,20 | 48 |
| 62 | 61,89 | 199 | 3,20 | 20 | 146 | 144,56 | 194 | 17,68 | 48 |
| 64 | 63,88 | 199 | 3,41 | 21 | 148 | 146,50 | 194 | 18,16 | 48 |

R. = 600

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|--------------------------------|--------|-----|-------|----|----------|--------|-----|-------|-----|
| R. = 600 (或 6000 及 60) | | | | | | | | | |
| 148 | 146,50 | 194 | 18,16 | 49 | R=60 補充值 | | | | |
| 150 | 148,44 | 194 | 18,65 | 50 | 18 | 17,73 | 190 | 2,68 | 62 |
| 152 | 150,38 | 194 | 19,15 | 51 | 20 | 19,63 | 188 | 3,30 | 69 |
| 154 | 152,32 | 193 | 19,66 | 51 | 22 | 21,51 | 185 | 3,99 | 75 |
| 156 | 154,25 | 193 | 20,17 | 52 | 24 | 23,36 | 183 | 4,74 | 81 |
| 158 | 156,18 | 193 | 20,69 | 52 | 26 | 25,19 | 180 | 5,55 | 87 |
| 160 | 158,11 | 193 | 21,21 | 53 | 28 | 26,99 | 178 | 6,42 | 93 |
| 162 | 160,04 | 193 | 21,74 | 54 | 30 | 28,77 | 174 | 7,35 | 98 |
| 164 | 161,97 | 192 | 22,28 | 54 | 32 | 30,51 | 171 | 8,33 | 104 |
| 166 | 163,89 | 192 | 22,82 | 55 | 34 | 32,22 | 167 | 9,37 | 110 |
| 168 | 165,81 | 192 | 23,37 | 55 | 36 | 33,89 | 163 | 10,47 | 116 |
| 170 | 167,73 | 192 | 23,92 | 56 | 38 | 35,52 | 158 | 11,63 | 122 |
| 172 | 169,65 | 192 | 24,48 | 57 | 40 | 37,10 | 155 | 12,85 | 126 |
| 174 | 171,57 | 192 | 25,05 | 58 | 42 | 38,65 | 151 | 14,11 | 131 |
| 176 | 173,49 | 192 | 25,63 | 58 | 44 | 40,16 | 146 | 15,42 | 136 |
| 178 | 175,40 | 191 | 26,21 | 59 | 46 | 41,62 | 142 | 16,78 | 142 |
| 180 | 177,31 | 191 | 26,80 | 59 | 48 | 43,04 | 137 | 18,20 | 146 |
| 182 | 179,22 | 191 | 27,39 | 60 | 50 | 44,41 | 132 | 19,66 | 150 |
| 184 | 181,13 | 191 | 27,99 | 61 | 52 | 45,73 | 127 | 21,16 | 154 |
| 186 | 183,04 | 190 | 28,60 | 61 | 54 | 47,00 | 122 | 22,70 | 158 |
| 188 | 184,94 | 190 | 29,21 | 62 | 56 | 48,22 | 117 | 24,28 | 163 |
| 190 | 186,84 | 190 | 29,83 | 63 | 58 | 49,39 | 110 | 25,91 | 167 |
| 192 | 188,74 | 190 | 30,46 | 60 | 60 | 50,49 | 105 | 27,58 | 170 |
| | | | | 62 | 62 | 51,54 | 100 | 29,28 | 174 |
| | | | | 64 | 64 | 52,54 | | 31,02 | |
| R. = 650 (或 6500 及 65) | | | | | | | | | |
| 1 | 1,000 | | 0,001 | 2 | 13 | 12,999 | | 0,130 | 21 |
| 2 | 2,000 | | 0,003 | 4 | 14 | 13,999 | | 0,151 | 22 |
| 3 | 3,000 | | 0,007 | 5 | 15 | 14,999 | | 0,173 | 24 |
| 4 | 4,000 | | 0,012 | 7 | 16 | 15,998 | | 0,197 | 25 |
| 5 | 5,000 | | 0,019 | 9 | 17 | 16,998 | | 0,222 | 27 |
| 6 | 6,000 | | 0,028 | 10 | 18 | 17,998 | | 0,249 | 29 |
| 7 | 7,000 | | 0,038 | 11 | 19 | 18,998 | | 0,278 | 30 |
| 8 | 8,000 | | 0,049 | 13 | 20 | 19,997 | | 0,308 | |
| 9 | 9,000 | | 0,062 | 15 | | | 200 | | 6 |
| 10 | 10,000 | | 0,077 | 16 | 22 | 22,00 | 199 | 0,37 | 7 |
| 11 | 11,000 | | 0,093 | 18 | 24 | 23,99 | 200 | 0,44 | 8 |
| 12 | 11,999 | | 0,111 | 18 | 26 | 25,99 | 200 | 0,52 | |
| 13 | 12,999 | | 0,130 | 19 | 28 | 27,99 | 200 | 0,60 | |

R. = 600 及 650

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|-----|--------|-----|------|----|-----|--------|-----|-------|----|
| 28 | 27,99 | 200 | 0,60 | 9 | 114 | 113,42 | 197 | 9,97 | 35 |
| 30 | 29,99 | 200 | 0,69 | 9 | 116 | 115,39 | 197 | 10,32 | 36 |
| 32 | 31,99 | 199 | 0,78 | 10 | 118 | 117,36 | 196 | 10,68 | 37 |
| 34 | 33,98 | 200 | 0,88 | 11 | 120 | 119,32 | 197 | 11,05 | 37 |
| 36 | 35,98 | 200 | 0,99 | 12 | 122 | 121,29 | 196 | 11,42 | 37 |
| 38 | 37,98 | 199 | 1,11 | 12 | 124 | 123,25 | 196 | 11,79 | 38 |
| 40 | 39,97 | 200 | 1,23 | 13 | 126 | 125,21 | 197 | 12,17 | 39 |
| 42 | 41,97 | 199 | 1,36 | 13 | 128 | 127,18 | 196 | 12,56 | 40 |
| 44 | 43,96 | 200 | 1,49 | 14 | 130 | 129,14 | 196 | 12,96 | 40 |
| 46 | 45,96 | 200 | 1,63 | 14 | 132 | 131,10 | 195 | 13,36 | 41 |
| 48 | 47,96 | 199 | 1,77 | 15 | 134 | 133,05 | 196 | 13,77 | 41 |
| 50 | 49,95 | 200 | 1,92 | 16 | 136 | 135,01 | 196 | 14,18 | 42 |
| 52 | 51,95 | 199 | 2,08 | 16 | 138 | 136,97 | 195 | 14,60 | 42 |
| 54 | 53,94 | 199 | 2,24 | 17 | 140 | 138,92 | 195 | 15,02 | 43 |
| 56 | 55,93 | 199 | 2,41 | 18 | 142 | 140,87 | 195 | 15,45 | 44 |
| 58 | 57,92 | 199 | 2,59 | 18 | 144 | 142,82 | 195 | 15,89 | 44 |
| 60 | 59,91 | 199 | 2,77 | 19 | 146 | 144,77 | 195 | 16,33 | 45 |
| 62 | 61,90 | 199 | 2,96 | 19 | 148 | 146,72 | 195 | 16,78 | 45 |
| 64 | 63,89 | 199 | 3,15 | 20 | 150 | 148,67 | 195 | 17,23 | 46 |
| 66 | 65,88 | 199 | 3,35 | 21 | 152 | 150,62 | 195 | 17,69 | 47 |
| 68 | 67,87 | 199 | 3,56 | 21 | 154 | 152,57 | 194 | 18,16 | 47 |
| 70 | 69,86 | 199 | 3,77 | 22 | 156 | 154,51 | 194 | 18,63 | 48 |
| 72 | 71,85 | 199 | 3,99 | 22 | 158 | 156,45 | 194 | 19,11 | 48 |
| 74 | 73,84 | 199 | 4,21 | 23 | 160 | 158,39 | 194 | 19,59 | 49 |
| 76 | 75,83 | 199 | 4,44 | 24 | 162 | 160,33 | 193 | 20,08 | 50 |
| 78 | 77,82 | 198 | 4,68 | 24 | 164 | 162,26 | 194 | 20,58 | 50 |
| 80 | 79,80 | 198 | 4,92 | 24 | 166 | 164,20 | 194 | 21,08 | 51 |
| 82 | 81,78 | 198 | 5,16 | 25 | 168 | 166,14 | 193 | 21,59 | 51 |
| 84 | 83,76 | 198 | 5,41 | 26 | 170 | 168,07 | 193 | 22,10 | 53 |
| 86 | 85,74 | 199 | 5,67 | 27 | 172 | 170,00 | 193 | 22,63 | 53 |
| 88 | 87,73 | 198 | 5,94 | 28 | 174 | 171,93 | 193 | 23,16 | 53 |
| 90 | 89,71 | 198 | 6,22 | 28 | 176 | 173,86 | 193 | 23,69 | 53 |
| 92 | 91,69 | 198 | 6,50 | 29 | 178 | 175,79 | 192 | 24,22 | 54 |
| 94 | 93,67 | 198 | 6,79 | 29 | 180 | 177,71 | 192 | 24,76 | 55 |
| 96 | 95,65 | 198 | 7,08 | 30 | 182 | 179,63 | 192 | 25,31 | 56 |
| 98 | 97,63 | 198 | 7,38 | 30 | 184 | 181,55 | 192 | 25,87 | 56 |
| 100 | 99,61 | 198 | 7,68 | 31 | 186 | 183,47 | 192 | 26,43 | 57 |
| 102 | 101,59 | 197 | 7,99 | 31 | 188 | 185,39 | 192 | 27,00 | 57 |
| 104 | 103,56 | 197 | 8,30 | 32 | 190 | 187,31 | 191 | 27,57 | 58 |
| 106 | 105,53 | 198 | 8,62 | 33 | 192 | 189,22 | 191 | 28,15 | 59 |
| 108 | 107,51 | 197 | 8,95 | 34 | 194 | 191,13 | 191 | 28,74 | 59 |
| 110 | 109,48 | 197 | 9,29 | 34 | 196 | 193,04 | 191 | 29,33 | 60 |
| 112 | 111,45 | 197 | 9,63 | 34 | 198 | 194,95 | 191 | 29,93 | 60 |
| 114 | 113,42 | 197 | 9,97 | 34 | 200 | 196,86 | 191 | 30,53 | 60 |

R. = 650

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|----------|-------|-----|-------|-----|-----|-------|-----|-------|-----|
| R=65 補充值 | | | | | | | | | |
| 20 | 19,69 | 190 | 3,05 | 64 | 44 | 40,72 | 154 | 14,32 | 128 |
| 22 | 21,59 | 187 | 3,69 | 69 | 46 | 42,26 | 149 | 15,60 | 133 |
| 24 | 23,46 | 185 | 4,33 | 75 | 48 | 43,75 | 146 | 16,93 | 137 |
| 26 | 25,31 | 183 | 5,18 | 81 | 50 | 45,21 | 142 | 18,30 | 141 |
| 28 | 27,14 | 181 | 5,94 | 86 | 52 | 46,63 | 138 | 19,71 | 145 |
| 30 | 28,95 | 178 | 6,80 | 92 | 54 | 48,01 | 132 | 21,16 | 150 |
| 32 | 30,73 | 175 | 7,72 | 97 | 56 | 49,33 | 127 | 22,66 | 154 |
| 34 | 32,48 | 171 | 8,69 | 102 | 58 | 50,60 | 123 | 24,20 | 158 |
| 36 | 34,19 | 168 | 9,71 | 108 | 60 | 51,83 | 118 | 25,78 | 161 |
| 38 | 35,87 | 165 | 10,79 | 113 | 62 | 53,01 | 114 | 27,39 | 165 |
| 40 | 37,52 | 162 | 11,92 | 118 | 64 | 54,15 | 108 | 29,04 | 168 |
| 42 | 39,14 | 158 | 13,10 | 122 | 66 | 55,23 | | 30,72 | |
| 44 | 40,72 | | 14,32 | | | | | | |

R. = 700 (或 7000 及 70)

| | | | | | | | | | |
|----|--------|-----|-------|----|----|-------|-----|------|----|
| 1 | 1,000 | | 0,001 | 2 | 32 | 31,99 | | 0,73 | 9 |
| 2 | 2,000 | | 0,003 | 3 | 34 | 33,99 | 200 | 0,82 | 10 |
| 3 | 3,000 | | 0,006 | 5 | 36 | 35,99 | 200 | 0,92 | 11 |
| 4 | 4,000 | | 0,011 | 7 | 38 | 37,99 | 199 | 1,03 | 11 |
| 5 | 5,000 | | 0,018 | 8 | 40 | 39,98 | 200 | 1,14 | 12 |
| 6 | 6,000 | | 0,026 | 9 | 42 | 41,98 | 199 | 1,26 | 12 |
| 7 | 7,000 | | 0,035 | 11 | 44 | 43,97 | 200 | 1,38 | 13 |
| 8 | 8,000 | | 0,046 | 12 | 46 | 45,97 | 200 | 1,51 | 14 |
| 9 | 9,000 | | 0,058 | 13 | 48 | 47,97 | 199 | 1,65 | 14 |
| 10 | 10,000 | | 0,071 | 15 | 50 | 49,96 | 200 | 1,79 | 14 |
| 11 | 11,000 | | 0,086 | 17 | 52 | 51,96 | 199 | 1,93 | 15 |
| 12 | 12,000 | | 0,103 | 18 | 54 | 53,95 | 199 | 2,08 | 16 |
| 14 | 12,999 | | 0,121 | 19 | 56 | 55,94 | 200 | 2,24 | 16 |
| 15 | 13,999 | | 0,140 | 21 | 58 | 57,94 | 199 | 2,40 | 17 |
| 16 | 14,999 | | 0,161 | 22 | 60 | 59,93 | 199 | 2,57 | 17 |
| 17 | 15,999 | | 0,183 | 23 | 62 | 61,92 | 199 | 2,74 | 18 |
| 18 | 16,999 | | 0,206 | 25 | 64 | 63,91 | 199 | 2,92 | 19 |
| 18 | 17,999 | | 0,231 | 27 | 66 | 65,90 | 199 | 3,11 | 19 |
| 19 | 18,998 | | 0,258 | 27 | 68 | 67,89 | 199 | 3,30 | 20 |
| 20 | 19,997 | | 0,286 | 28 | 70 | 69,88 | 199 | 3,50 | 20 |
| | | | | | 72 | 71,87 | 199 | 3,70 | 21 |
| 22 | 22,00 | 200 | 0,35 | 6 | 74 | 73,86 | 199 | 3,91 | 21 |
| 24 | 24,00 | 200 | 0,41 | 6 | 76 | 75,85 | 199 | 4,12 | 22 |
| 26 | 26,00 | 200 | 0,48 | 7 | 78 | 77,84 | 199 | 4,34 | 23 |
| 28 | 28,00 | 200 | 0,56 | 8 | 80 | 79,83 | 199 | 4,57 | 23 |
| 30 | 29,99 | 199 | 0,64 | 8 | 82 | 81,82 | 199 | 4,80 | 23 |
| 32 | 31,99 | 200 | 0,73 | 9 | 84 | 83,80 | 198 | 5,04 | 24 |

R. = 700

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|--------------------------------|--------|-----|-------|----|-----|--------|-----|-------|-----|
| R. = 700 (或 7000 及 70) | | | | | | | | | |
| 84 | 83,80 | 198 | 5,04 | 24 | 170 | 168,33 | 194 | 20,54 | 48 |
| 86 | 85,78 | 199 | 5,28 | 25 | 172 | 170,27 | 194 | 21,02 | 49 |
| 88 | 87,77 | 198 | 5,53 | 25 | 174 | 172,21 | 194 | 21,51 | 50 |
| 90 | 89,75 | 199 | 5,78 | 26 | 176 | 174,15 | 194 | 22,01 | 50 |
| 92 | 91,74 | 198 | 6,04 | 26 | 178 | 176,09 | 193 | 22,51 | 51 |
| 94 | 93,72 | 198 | 6,30 | 27 | 180 | 178,02 | 194 | 23,02 | 51 |
| 96 | 95,70 | 198 | 6,57 | 28 | 182 | 179,96 | 193 | 23,53 | 51 |
| 98 | 97,68 | 198 | 6,85 | 28 | 184 | 181,89 | 193 | 24,04 | 52 |
| 100 | 99,66 | 198 | 7,13 | 29 | 186 | 183,82 | 193 | 24,56 | 53 |
| 102 | 101,64 | 197 | 7,42 | 29 | 188 | 185,75 | 193 | 25,09 | 53 |
| 104 | 103,61 | 198 | 7,71 | 30 | 190 | 187,68 | 192 | 25,63 | 54 |
| 106 | 105,59 | 198 | 8,01 | 31 | 192 | 189,60 | 192 | 26,17 | 54 |
| 108 | 107,57 | 198 | 8,32 | 31 | 194 | 191,52 | 192 | 26,72 | 55 |
| 110 | 109,55 | 198 | 8,63 | 31 | 196 | 193,44 | 193 | 27,27 | 55 |
| 112 | 111,53 | 197 | 8,94 | 32 | 198 | 195,37 | 192 | 27,82 | 55 |
| 114 | 113,50 | 197 | 9,26 | 33 | 200 | 197,29 | 192 | 28,38 | 56 |
| 116 | 115,47 | 197 | 9,59 | 33 | | | | | |
| 118 | 117,44 | 197 | 9,92 | 34 | | | | | |
| 120 | 119,41 | 197 | 10,26 | 34 | | | | | |
| 122 | 121,38 | 197 | 10,60 | 35 | 20 | 19,73 | 191 | 2,84 | 59 |
| 124 | 123,35 | 197 | 10,95 | 36 | 22 | 21,64 | 189 | 3,43 | 64 |
| 126 | 125,32 | 197 | 11,31 | 36 | 24 | 23,53 | 187 | 4,07 | 70 |
| 128 | 127,29 | 196 | 11,67 | 37 | 26 | 25,40 | 186 | 4,77 | 75 |
| 130 | 129,25 | 197 | 12,04 | 37 | 28 | 27,26 | 183 | 5,52 | 81 |
| 132 | 131,22 | 196 | 12,41 | 38 | 30 | 29,09 | 181 | 6,33 | 86 |
| 134 | 133,18 | 196 | 12,79 | 38 | 32 | 30,90 | 178 | 7,19 | 90 |
| 136 | 135,14 | 197 | 13,17 | 39 | 34 | 32,68 | 175 | 8,09 | 96 |
| 138 | 137,11 | 196 | 13,56 | 39 | 36 | 34,43 | 173 | 9,05 | 101 |
| 140 | 139,07 | 196 | 13,95 | 40 | 38 | 36,16 | 170 | 10,06 | 106 |
| 142 | 141,03 | 195 | 14,35 | 41 | 40 | 37,86 | 167 | 11,12 | 110 |
| 144 | 142,98 | 196 | 14,76 | 41 | 42 | 39,53 | 163 | 12,22 | 115 |
| 146 | 144,94 | 196 | 15,17 | 42 | 44 | 41,16 | 160 | 13,37 | 120 |
| 148 | 146,90 | 196 | 15,59 | 42 | 46 | 42,76 | 157 | 14,57 | 125 |
| 150 | 148,86 | 195 | 16,01 | 43 | 48 | 44,33 | 153 | 15,82 | 129 |
| 152 | 150,81 | 195 | 16,44 | 43 | 50 | 45,86 | 149 | 17,11 | 133 |
| 154 | 152,76 | 195 | 16,87 | 44 | 52 | 47,35 | 146 | 18,44 | 137 |
| 156 | 154,71 | 195 | 17,31 | 45 | 54 | 48,81 | 141 | 19,81 | 141 |
| 158 | 156,66 | 195 | 17,76 | 45 | 56 | 50,22 | 137 | 21,22 | 146 |
| 160 | 158,61 | 195 | 18,21 | 46 | 58 | 51,59 | 133 | 22,68 | 150 |
| 162 | 160,56 | 194 | 18,67 | 46 | 60 | 52,92 | 129 | 24,18 | 153 |
| 164 | 162,50 | 194 | 19,13 | 47 | 62 | 54,21 | 124 | 25,71 | 156 |
| 166 | 164,44 | 195 | 19,60 | 47 | 64 | 55,45 | 120 | 27,27 | 160 |
| 168 | 166,39 | 194 | 20,07 | 47 | 66 | 56,65 | 115 | 28,87 | 164 |
| 170 | 168,33 | 194 | 20,54 | 47 | 68 | 57,80 | | 30,51 | |
| R=70 補充值 | | | | | | | | | |
| | | | | | 20 | 19,73 | 191 | 2,84 | 59 |
| | | | | | 22 | 21,64 | 189 | 3,43 | 64 |
| | | | | | 24 | 23,53 | 187 | 4,07 | 70 |
| | | | | | 26 | 25,40 | 186 | 4,77 | 75 |
| | | | | | 28 | 27,26 | 183 | 5,52 | 81 |
| | | | | | 30 | 29,09 | 181 | 6,33 | 86 |
| | | | | | 32 | 30,90 | 178 | 7,19 | 90 |
| | | | | | 34 | 32,68 | 175 | 8,09 | 96 |
| | | | | | 36 | 34,43 | 173 | 9,05 | 101 |
| | | | | | 38 | 36,16 | 170 | 10,06 | 106 |
| | | | | | 40 | 37,86 | 167 | 11,12 | 110 |
| | | | | | 42 | 39,53 | 163 | 12,22 | 115 |
| | | | | | 44 | 41,16 | 160 | 13,37 | 120 |
| | | | | | 46 | 42,76 | 157 | 14,57 | 125 |
| | | | | | 48 | 44,33 | 153 | 15,82 | 129 |
| | | | | | 50 | 45,86 | 149 | 17,11 | 133 |
| | | | | | 52 | 47,35 | 146 | 18,44 | 137 |
| | | | | | 54 | 48,81 | 141 | 19,81 | 141 |
| | | | | | 56 | 50,22 | 137 | 21,22 | 146 |
| | | | | | 58 | 51,59 | 133 | 22,68 | 150 |
| | | | | | 60 | 52,92 | 129 | 24,18 | 153 |
| | | | | | 62 | 54,21 | 124 | 25,71 | 156 |
| | | | | | 64 | 55,45 | 120 | 27,27 | 160 |
| | | | | | 66 | 56,65 | 115 | 28,87 | 164 |
| | | | | | 68 | 57,80 | | 30,51 | |

R. = 700

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|--------------------------------|--------|-----|-------|----|-----|--------|-------|-------|------|
| R. = 750 (或 7500 及 75) | | | | | | | | | |
| 1 | 1,000 | | 0,001 | | 2 | 64 | 63,93 | 199 | 2,73 |
| 2 | 2,000 | | 0,003 | | 3 | 66 | 65,92 | 199 | 2,90 |
| 3 | 3,000 | | 0,006 | | 4 | 68 | 67,91 | 199 | 3,08 |
| 4 | 4,000 | | 0,011 | | 5 | 70 | 69,90 | 199 | 3,26 |
| 5 | 5,000 | | 0,017 | | 6 | 72 | 71,89 | 199 | 3,45 |
| 6 | 6,000 | | 0,024 | | 7 | 74 | 73,88 | 199 | 3,65 |
| 7 | 7,000 | | 0,033 | | 8 | 76 | 75,87 | 199 | 3,85 |
| 8 | 8,000 | | 0,043 | 10 | 78 | 77,86 | 199 | 4,05 | |
| 9 | 9,000 | | 0,054 | 11 | 80 | 79,85 | 199 | 4,26 | |
| 10 | 10,000 | | 0,067 | 13 | 82 | 81,84 | 199 | 4,48 | |
| 11 | 11,000 | | 0,071 | 14 | 84 | 83,83 | 199 | 4,70 | |
| 12 | 12,000 | | 0,096 | 15 | 86 | 85,82 | 199 | 4,93 | |
| 13 | 12,999 | | 0,113 | 17 | 88 | 87,80 | 198 | 5,16 | |
| 14 | 13,999 | | 0,131 | 18 | 90 | 89,78 | 198 | 5,39 | |
| 15 | 14,999 | | 0,150 | 19 | 92 | 91,77 | 199 | 5,63 | |
| 16 | 15,999 | | 0,171 | 21 | 94 | 93,76 | 199 | 5,88 | |
| 17 | 16,999 | | 0,193 | 22 | 96 | 95,74 | 198 | 6,13 | |
| 18 | 17,999 | | 0,216 | 23 | 98 | 97,72 | 198 | 6,39 | |
| 19 | 18,999 | | 0,241 | 25 | 100 | 99,70 | 198 | 6,66 | |
| 20 | 19,998 | | 0,267 | 26 | 102 | 101,69 | 199 | 6,93 | |
| | | 200 | | 5 | 104 | 103,67 | 198 | 7,20 | |
| 22 | 22,00 | 200 | 0,32 | 6 | 106 | 105,65 | 198 | 7,48 | |
| 24 | 24,00 | 200 | 0,38 | 7 | 108 | 107,63 | 198 | 7,76 | |
| 26 | 26,00 | 200 | 0,45 | 7 | 110 | 109,61 | 198 | 8,05 | |
| 28 | 28,00 | 200 | 0,52 | 7 | 112 | 111,59 | 198 | 8,34 | |
| 30 | 29,99 | 199 | 0,60 | 8 | 114 | 113,56 | 197 | 8,64 | |
| 32 | 31,99 | 200 | 0,68 | 8 | 116 | 115,54 | 198 | 8,95 | |
| 34 | 33,99 | 200 | 0,77 | 9 | 118 | 117,52 | 198 | 9,26 | |
| 36 | 35,99 | 200 | 0,86 | 9 | 120 | 119,49 | 197 | 9,58 | |
| 38 | 37,99 | 200 | 0,96 | 10 | 122 | 121,47 | 198 | 9,90 | |
| 40 | 39,98 | 199 | 1,07 | 11 | 124 | 123,44 | 197 | 10,23 | |
| 42 | 41,98 | 200 | 1,18 | 11 | 126 | 125,41 | 197 | 10,56 | |
| 44 | 43,97 | 199 | 1,29 | 11 | 128 | 127,38 | 197 | 10,90 | |
| 46 | 45,97 | 200 | 1,41 | 12 | 130 | 129,35 | 197 | 11,24 | |
| 48 | 47,97 | 200 | 1,54 | 13 | 132 | 131,32 | 197 | 11,59 | |
| 50 | 49,96 | 199 | 1,67 | 13 | 134 | 133,29 | 197 | 11,94 | |
| 52 | 51,96 | 200 | 1,80 | 13 | 136 | 135,26 | 197 | 12,30 | |
| 54 | 53,95 | 199 | 1,94 | 14 | 138 | 137,23 | 197 | 12,66 | |
| 56 | 55,95 | 200 | 2,09 | 15 | 140 | 139,19 | 196 | 13,03 | |
| 58 | 57,95 | 200 | 2,24 | 15 | 142 | 141,16 | 197 | 13,40 | |
| 60 | 59,94 | 199 | 2,40 | 16 | 144 | 143,12 | 196 | 13,78 | |
| 62 | 61,94 | 200 | 2,56 | 16 | 146 | 145,08 | 196 | 14,16 | |
| 64 | 63,93 | 199 | 2,73 | 17 | 148 | 147,04 | 196 | 14,55 | |

R. = 750

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|--------------------------------|--------|-----|-------|----|-----|--------|-----|-------|-----|
| R. = 750 (或 7500 及 75) | | | | | | | | | |
| R=75 補充值 | | | | | | | | | |
| 148 | 147,04 | 196 | 14,55 | 40 | 20 | 19,76 | 192 | 2,65 | 55 |
| 150 | 149,00 | 196 | 14,95 | 40 | 22 | 21,68 | 191 | 3,20 | 60 |
| 152 | 150,96 | 196 | 15,35 | 41 | 24 | 23,59 | 189 | 3,80 | 65 |
| 154 | 152,92 | 196 | 15,76 | 41 | 26 | 25,48 | 187 | 4,45 | 71 |
| 156 | 154,88 | 196 | 16,17 | 41 | 28 | 27,35 | 186 | 5,16 | 76 |
| 158 | 156,84 | 195 | 16,58 | 42 | 30 | 29,21 | 183 | 5,92 | 80 |
| 160 | 158,79 | 196 | 17,00 | 43 | 32 | 31,04 | 181 | 6,72 | 85 |
| 162 | 160,75 | 195 | 17,43 | 43 | 34 | 32,85 | 178 | 7,57 | 90 |
| 164 | 162,70 | 195 | 17,86 | 44 | 36 | 34,63 | 176 | 8,47 | 95 |
| 166 | 164,65 | 195 | 18,30 | 44 | 38 | 36,39 | 174 | 9,42 | 100 |
| 168 | 166,60 | 195 | 18,74 | 45 | 40 | 38,13 | 171 | 10,42 | 104 |
| 170 | 168,55 | 195 | 19,19 | 45 | 42 | 39,84 | 168 | 11,46 | 108 |
| 172 | 170,50 | 195 | 19,64 | 45 | 44 | 41,52 | 165 | 12,54 | 113 |
| 174 | 172,45 | 195 | 20,09 | 46 | 46 | 43,17 | 162 | 13,67 | 117 |
| 176 | 174,40 | 194 | 20,55 | 47 | 48 | 44,79 | 159 | 14,84 | 122 |
| 178 | 176,34 | 194 | 21,02 | 48 | 50 | 46,38 | 156 | 16,06 | 126 |
| 180 | 178,28 | 194 | 21,50 | 48 | 52 | 47,94 | 152 | 17,32 | 129 |
| 182 | 180,22 | 194 | 21,98 | 48 | 54 | 49,46 | 148 | 18,61 | 134 |
| 184 | 182,16 | 194 | 22,46 | 49 | 56 | 50,94 | 145 | 19,95 | 138 |
| 186 | 184,10 | 194 | 22,95 | 49 | 58 | 52,39 | 141 | 21,33 | 142 |
| 188 | 186,04 | 193 | 23,44 | 50 | 60 | 53,80 | 138 | 22,75 | 145 |
| 190 | 187,97 | 194 | 23,94 | 50 | 62 | 55,18 | 133 | 24,20 | 149 |
| 192 | 189,91 | 194 | 24,44 | 51 | 64 | 56,51 | 129 | 25,69 | 152 |
| 194 | 191,85 | 193 | 24,95 | 51 | 66 | 57,80 | 125 | 27,21 | 156 |
| 196 | 193,78 | 193 | 25,46 | 52 | 68 | 59,05 | 122 | 28,77 | 159 |
| 198 | 195,71 | 193 | 25,98 | 53 | 70 | 60,27 | | 30,36 | |
| 200 | 197,64 | 193 | 26,51 | | | | | | |
| R. = 800 (或 8000 及 80) | | | | | | | | | |
| 1 | 1,000 | | 0,001 | 2 | 11 | 11,000 | | 0,076 | 14 |
| 2 | 2,000 | | 0,003 | 3 | 12 | 12,000 | | 0,090 | 16 |
| 3 | 3,000 | | 0,006 | 4 | 13 | 13,000 | | 0,106 | 17 |
| 4 | 4,000 | | 0,010 | 5 | 14 | 13,999 | | 0,123 | 18 |
| 5 | 5,000 | | 0,016 | 6 | 15 | 14,999 | | 0,141 | 19 |
| 6 | 6,000 | | 0,023 | 7 | 16 | 15,999 | | 0,160 | 21 |
| 7 | 7,000 | | 0,031 | 8 | 17 | 16,999 | | 0,181 | 22 |
| 8 | 8,000 | | 0,040 | 9 | 18 | 17,999 | | 0,203 | 23 |
| 9 | 9,000 | | 0,051 | 11 | 19 | 18,999 | | 0,226 | 24 |
| 10 | 10,000 | | 0,063 | 12 | 20 | 19,998 | | 0,250 | |
| 11 | 11,000 | | 0,076 | 13 | | | | | |

R. = 750 及 800

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|---------------------------------|--------|-----|------|----|-----|--------|-----|-------|----|
| R. = 800 (或 8000 及 80) | | | | | | | | | |
| 20 | 20,00 | 200 | 0,25 | 5 | 104 | 103,71 | 198 | 6,75 | 26 |
| 22 | 22,00 | 200 | 0,30 | 6 | 106 | 105,69 | 198 | 7,01 | 27 |
| 24 | 24,00 | 200 | 0,36 | 6 | 108 | 107,67 | 198 | 7,28 | 27 |
| 28 | 26,00 | 200 | 0,42 | 7 | 110 | 109,65 | 198 | 7,55 | 28 |
| 28 | 28,00 | 200 | 0,49 | 7 | 112 | 111,63 | 198 | 7,83 | 28 |
| 30 | 29,99 | 199 | 0,56 | 8 | 114 | 113,61 | 198 | 8,11 | 29 |
| 32 | 31,99 | 200 | 0,64 | 8 | 116 | 115,59 | 198 | 8,40 | 29 |
| 34 | 33,99 | 200 | 0,72 | 8 | 118 | 117,57 | 198 | 8,69 | 29 |
| 36 | 35,99 | 200 | 0,81 | 9 | 120 | 119,55 | 198 | 8,98 | 30 |
| 38 | 37,99 | 200 | 0,90 | 9 | 122 | 121,53 | 198 | 9,28 | 30 |
| 40 | 39,98 | 199 | 1,00 | 10 | 124 | 123,50 | 197 | 9,59 | 31 |
| 42 | 41,98 | 200 | 1,10 | 10 | 126 | 125,48 | 198 | 9,90 | 31 |
| 44 | 43,97 | 199 | 1,21 | 11 | 128 | 127,46 | 198 | 10,22 | 32 |
| 46 | 45,97 | 200 | 1,32 | 11 | 130 | 129,43 | 197 | 10,54 | 32 |
| 48 | 47,97 | 200 | 1,44 | 12 | 132 | 131,41 | 198 | 10,86 | 32 |
| 50 | 49,97 | 200 | 1,56 | 12 | 134 | 133,38 | 197 | 11,19 | 33 |
| 52 | 51,97 | 200 | 1,69 | 13 | 136 | 135,35 | 197 | 11,53 | 34 |
| 54 | 53,96 | 199 | 1,82 | 13 | 138 | 137,32 | 197 | 11,87 | 34 |
| 56 | 55,95 | 199 | 1,96 | 14 | 140 | 139,29 | 197 | 12,22 | 35 |
| 58 | 57,95 | 200 | 2,10 | 14 | 142 | 141,26 | 197 | 12,57 | 35 |
| 60 | 59,94 | 199 | 2,25 | 15 | 144 | 143,23 | 197 | 12,92 | 35 |
| 62 | 61,94 | 200 | 2,40 | 15 | 146 | 145,20 | 197 | 13,28 | 36 |
| 64 | 63,93 | 199 | 2,56 | 16 | 148 | 147,16 | 196 | 13,65 | 37 |
| 66 | 65,92 | 199 | 2,72 | 16 | 150 | 149,12 | 196 | 14,02 | 37 |
| 68 | 67,92 | 200 | 2,89 | 17 | 152 | 151,09 | 197 | 14,40 | 38 |
| 70 | 69,91 | 199 | 3,06 | 17 | 154 | 153,05 | 196 | 14,78 | 38 |
| 72 | 71,91 | 200 | 3,24 | 18 | 156 | 155,01 | 196 | 15,17 | 39 |
| 74 | 73,90 | 199 | 3,42 | 18 | 158 | 156,98 | 197 | 15,56 | 39 |
| 76 | 75,89 | 199 | 3,61 | 19 | 160 | 158,94 | 196 | 15,95 | 39 |
| 78 | 77,88 | 199 | 3,80 | 19 | 162 | 160,90 | 196 | 16,35 | 40 |
| 80 | 79,87 | 199 | 4,00 | 20 | 164 | 162,85 | 195 | 16,75 | 40 |
| 82 | 81,86 | 199 | 4,20 | 20 | 166 | 164,81 | 196 | 17,16 | 41 |
| 84 | 83,85 | 199 | 4,41 | 21 | 168 | 166,77 | 196 | 17,58 | 42 |
| 86 | 85,84 | 199 | 4,62 | 21 | 170 | 168,72 | 195 | 18,00 | 42 |
| 88 | 87,83 | 199 | 4,84 | 22 | 172 | 170,68 | 196 | 18,42 | 42 |
| 90 | 89,81 | 198 | 5,06 | 22 | 174 | 172,64 | 196 | 18,85 | 43 |
| 92 | 91,80 | 199 | 5,28 | 22 | 176 | 174,59 | 195 | 19,29 | 44 |
| 94 | 93,78 | 198 | 5,51 | 23 | 178 | 176,54 | 195 | 19,73 | 44 |
| 96 | 95,77 | 199 | 5,75 | 24 | 180 | 178,49 | 195 | 20,17 | 44 |
| 98 | 97,76 | 198 | 5,99 | 24 | 182 | 180,44 | 194 | 20,61 | 44 |
| 100 | 99,74 | 198 | 6,24 | 25 | 184 | 182,38 | 194 | 21,06 | 45 |
| 102 | 101,73 | 199 | 6,49 | 25 | 186 | 184,33 | 195 | 21,52 | 46 |
| 104 | 103,71 | 198 | 6,75 | 26 | 188 | 186,28 | 195 | 21,99 | 47 |

R. = 800

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|--------------------------------|--------|-----|-------|----|-----|-------|-----|-------|-----|
| R. = 800 (或 8000 及 80) | | | | | | | | | |
| 188 | 186,28 | 194 | 21,99 | 47 | 36 | 34,80 | 178 | 7,96 | 89 |
| 190 | 188,22 | 194 | 22,46 | 47 | 38 | 36,58 | 177 | 8,85 | 94 |
| 192 | 190,16 | 194 | 22,93 | 48 | 40 | 38,35 | 175 | 9,79 | 98 |
| 194 | 192,10 | 194 | 23,41 | 48 | 42 | 40,10 | 172 | 10,77 | 102 |
| 196 | 194,04 | 194 | 23,89 | 49 | 44 | 41,82 | 169 | 11,79 | 107 |
| 198 | 195,98 | 194 | 24,38 | 49 | 46 | 43,51 | 166 | 12,86 | 111 |
| 200 | 197,92 | | 24,87 | | 48 | 45,17 | 164 | 13,97 | 115 |
| | | | | | 50 | 46,81 | 161 | 15,12 | 119 |
| | | | | | 52 | 48,42 | 158 | 16,31 | 123 |
| | | | | | 54 | 50,00 | 154 | 17,54 | 127 |
| | | | | | 56 | 51,54 | 151 | 18,81 | 131 |
| | | | | | 58 | 53,05 | 148 | 20,12 | 134 |
| | | | | | 60 | 54,53 | 145 | 21,46 | 138 |
| | | | | | 62 | 55,98 | 141 | 22,84 | 142 |
| | | | | | 64 | 57,39 | 137 | 24,26 | 145 |
| | | | | | 66 | 58,76 | 134 | 25,71 | 149 |
| | | | | | 68 | 60,10 | 130 | 27,20 | 152 |
| | | | | | 70 | 61,40 | 127 | 28,72 | 155 |
| | | | | | 72 | 62,67 | | 30,27 | |
| R=80 補充值 | | | | | | | | | |
| 20 | 19,79 | 193 | 2,49 | 52 | 56 | 51,54 | 151 | 18,81 | 131 |
| 22 | 21,72 | 192 | 3,01 | 56 | 58 | 53,05 | 148 | 20,12 | 134 |
| 24 | 23,64 | 190 | 3,57 | 61 | 60 | 54,53 | 145 | 21,46 | 138 |
| 26 | 25,54 | 189 | 4,18 | 67 | 62 | 55,98 | 141 | 22,84 | 142 |
| 28 | 27,43 | 187 | 4,85 | 71 | 64 | 57,39 | 137 | 24,26 | 145 |
| 30 | 29,30 | 185 | 5,56 | 75 | 66 | 58,76 | 134 | 25,71 | 149 |
| 32 | 31,15 | 184 | 6,31 | 80 | 68 | 60,10 | 130 | 27,20 | 152 |
| 34 | 32,99 | 181 | 7,11 | 85 | 70 | 61,40 | 127 | 28,72 | 155 |
| 36 | 34,80 | | 7,96 | | 72 | 62,67 | | 30,27 | |
| R. = 850 (或 8500 及 85) | | | | | | | | | |
| 1 | 1,000 | | 0,001 | 1 | 20 | 20,00 | 200 | 0,24 | 5 |
| 2 | 2,000 | | 0,002 | 3 | 22 | 22,00 | 200 | 0,29 | 5 |
| 3 | 3,000 | | 0,005 | 4 | 24 | 24,00 | 200 | 0,34 | 6 |
| 4 | 4,000 | | 0,009 | 6 | 26 | 26,00 | 200 | 0,40 | 6 |
| 5 | 5,000 | | 0,015 | 6 | 28 | 28,00 | 200 | 0,46 | 6 |
| 6 | 6,000 | | 0,021 | 6 | 30 | 29,99 | 199 | 0,53 | 7 |
| 7 | 7,000 | | 0,029 | 8 | 32 | 31,99 | 200 | 0,60 | 7 |
| 8 | 8,000 | | 0,038 | 9 | 34 | 33,99 | 200 | 0,68 | 8 |
| 9 | 9,000 | | 0,048 | 10 | 36 | 35,99 | 200 | 0,76 | 8 |
| 10 | 10,000 | | 0,059 | 11 | 38 | 37,99 | 200 | 0,85 | 9 |
| 11 | 11,000 | | 0,071 | 12 | 40 | 39,99 | 200 | 0,94 | 9 |
| 12 | 12,000 | | 0,085 | 14 | 42 | 41,99 | 200 | 1,04 | 10 |
| 13 | 13,000 | | 0,099 | 14 | 44 | 43,98 | 199 | 1,14 | 10 |
| 14 | 14,000 | | 0,115 | 16 | 46 | 45,98 | 200 | 1,25 | 11 |
| 15 | 14,999 | | 0,132 | 17 | 48 | 47,98 | 200 | 1,36 | 11 |
| 16 | 15,999 | | 0,151 | 19 | 50 | 49,97 | 199 | 1,47 | 11 |
| 17 | 16,999 | | 0,170 | 19 | 52 | 51,97 | 200 | 1,59 | 12 |
| 18 | 17,999 | | 0,191 | 21 | 54 | 53,97 | 200 | 1,71 | 12 |
| 19 | 18,999 | | 0,212 | 21 | 56 | 55,97 | 200 | 1,84 | 13 |
| 20 | 19,998 | | 0,235 | 23 | 58 | 57,96 | 199 | 1,98 | 14 |

R. = 800 及 850

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|--------------------------------|--------|-----|-------|----|-----|--------|-----|-------|----|
| R. = 850 (或 8500 及 85) | | | | | | | | | |
| 58 | 57,96 | 199 | 1,98 | 14 | 142 | 141,34 | 197 | 11,83 | 34 |
| 60 | 59,95 | 200 | 2,12 | 14 | 144 | 143,31 | 197 | 12,17 | 34 |
| 62 | 61,95 | 200 | 2,26 | 15 | 146 | 145,28 | 197 | 12,51 | 34 |
| 64 | 63,95 | 199 | 2,41 | 15 | 148 | 147,25 | 197 | 12,85 | 35 |
| 66 | 65,94 | 199 | 2,56 | 16 | 150 | 149,22 | 197 | 13,20 | 35 |
| 68 | 67,93 | 199 | 2,72 | 16 | 152 | 151,19 | 197 | 13,55 | 36 |
| 70 | 69,92 | 200 | 2,88 | 17 | 154 | 153,16 | 197 | 13,91 | 36 |
| 72 | 71,92 | 199 | 3,05 | 17 | 156 | 155,13 | 197 | 14,27 | 37 |
| 74 | 73,91 | 199 | 3,22 | 18 | 158 | 157,10 | 196 | 14,64 | 37 |
| 76 | 75,90 | 199 | 3,40 | 18 | 160 | 159,06 | 196 | 15,01 | 38 |
| 78 | 77,89 | 199 | 3,58 | 18 | 162 | 161,02 | 196 | 15,39 | 38 |
| 80 | 79,88 | 199 | 3,76 | 19 | 164 | 162,98 | 196 | 15,77 | 39 |
| 82 | 81,87 | 199 | 3,95 | 20 | 166 | 164,94 | 197 | 16,16 | 39 |
| 84 | 83,86 | 199 | 4,15 | 20 | 168 | 166,91 | 196 | 16,55 | 39 |
| 86 | 85,85 | 199 | 4,35 | 20 | 170 | 168,87 | 196 | 16,94 | 40 |
| 88 | 87,84 | 199 | 4,55 | 21 | 172 | 170,83 | 196 | 17,34 | 41 |
| 90 | 89,83 | 199 | 4,76 | 21 | 174 | 172,79 | 196 | 17,75 | 41 |
| 92 | 91,82 | 199 | 4,97 | 22 | 176 | 174,75 | 196 | 18,16 | 41 |
| 94 | 93,81 | 199 | 5,19 | 22 | 178 | 176,71 | 195 | 18,57 | 42 |
| 96 | 95,80 | 199 | 5,41 | 23 | 180 | 178,66 | 196 | 18,99 | 42 |
| 98 | 97,79 | 198 | 5,64 | 24 | 182 | 180,62 | 195 | 19,41 | 43 |
| 100 | 99,77 | 199 | 5,88 | 24 | 184 | 182,57 | 195 | 19,84 | 43 |
| 102 | 101,76 | 198 | 6,12 | 24 | 186 | 184,52 | 195 | 20,27 | 44 |
| 104 | 103,74 | 198 | 6,36 | 24 | 188 | 186,47 | 195 | 20,71 | 44 |
| 106 | 105,72 | 199 | 6,60 | 25 | 190 | 188,42 | 195 | 21,15 | 44 |
| 108 | 107,71 | 198 | 6,85 | 26 | 192 | 190,37 | 195 | 21,59 | 45 |
| 110 | 109,69 | 199 | 7,11 | 26 | 194 | 192,32 | 195 | 22,04 | 45 |
| 112 | 111,68 | 198 | 7,37 | 27 | 196 | 194,27 | 195 | 22,49 | 46 |
| 114 | 113,66 | 198 | 7,64 | 27 | 198 | 196,22 | 194 | 22,95 | 46 |
| 116 | 115,64 | 198 | 7,91 | 27 | 200 | 198,16 | | 23,42 | 47 |
| 118 | 117,62 | 198 | 8,18 | 28 | | | | | |
| 120 | 119,60 | 198 | 8,46 | 28 | | | | | |
| 122 | 121,58 | 198 | 8,74 | 29 | | | | | |
| 124 | 123,56 | 198 | 9,03 | 29 | 20 | 19,82 | 194 | 2,34 | 49 |
| 126 | 125,54 | 198 | 9,32 | 30 | 22 | 21,76 | 193 | 2,83 | 53 |
| 128 | 127,52 | 197 | 9,62 | 30 | 24 | 23,69 | 191 | 3,36 | 58 |
| 130 | 129,49 | 198 | 9,92 | 31 | 26 | 25,60 | 190 | 3,94 | 63 |
| 132 | 131,47 | 197 | 10,23 | 31 | 28 | 27,50 | 188 | 4,57 | 67 |
| 134 | 133,44 | 198 | 10,54 | 32 | 30 | 29,38 | 187 | 5,24 | 71 |
| 136 | 135,42 | 198 | 10,86 | 32 | 32 | 31,25 | 185 | 5,95 | 76 |
| 138 | 137,40 | 197 | 11,18 | 32 | 34 | 33,10 | 183 | 6,71 | 80 |
| 140 | 139,37 | 197 | 11,50 | 33 | 36 | 34,93 | 181 | 7,51 | 84 |
| 142 | 141,34 | 197 | 11,83 | 33 | 38 | 36,74 | | 8,35 | |
| R=85 補充值 | | | | | | | | | |

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|--------------------------------|--------|-----|-------|-----|-----|-------|-----|-------|-----|
| R=85 補充值 | | | | | | | | | |
| 38 | 36,74 | 180 | 8,35 | 89 | 56 | 52,03 | 157 | 17,78 | 125 |
| 40 | 38,54 | 178 | 9,24 | 94 | 58 | 53,60 | 154 | 19,03 | 128 |
| 42 | 40,32 | 175 | 10,18 | 97 | 60 | 55,14 | 151 | 20,31 | 131 |
| 44 | 42,07 | 173 | 11,15 | 101 | 62 | 56,65 | 148 | 21,62 | 135 |
| 46 | 43,80 | 170 | 12,16 | 104 | 64 | 58,13 | 144 | 22,97 | 138 |
| 48 | 45,50 | 167 | 13,20 | 109 | 66 | 59,57 | 141 | 24,35 | 142 |
| 50 | 47,17 | 165 | 14,29 | 113 | 68 | 60,98 | 137 | 25,77 | 146 |
| 52 | 48,82 | 162 | 15,42 | 116 | 70 | 62,35 | 134 | 27,23 | 148 |
| 54 | 50,44 | 159 | 16,58 | 120 | 72 | 63,69 | 131 | 28,71 | 152 |
| 56 | 52,03 | | 17,78 | | 74 | 65,00 | | 30,23 | |
| R. = 900 (或 9000 及 90) | | | | | | | | | |
| 1 | 1,000 | | 0,001 | 1 | 38 | 37,99 | 200 | 0,80 | 9 |
| 2 | 2,000 | | 0,002 | 3 | 40 | 39,99 | 200 | 0,89 | 9 |
| 3 | 3,000 | | 0,005 | 4 | 42 | 41,99 | 199 | 0,98 | 10 |
| 4 | 4,000 | | 0,009 | 5 | 44 | 43,98 | 200 | 1,08 | 10 |
| 5 | 5,000 | | 0,014 | 6 | 46 | 45,98 | 200 | 1,18 | 10 |
| 6 | 6,000 | | 0,020 | 7 | 48 | 47,98 | 199 | 1,28 | 11 |
| 7 | 7,000 | | 0,027 | 9 | 50 | 49,97 | 200 | 1,39 | 11 |
| 8 | 8,000 | | 0,036 | 9 | 52 | 51,97 | 200 | 1,50 | 12 |
| 9 | 9,000 | | 0,045 | 11 | 54 | 53,97 | 200 | 1,62 | 12 |
| 10 | 10,000 | | 0,056 | 11 | 56 | 55,97 | 200 | 1,74 | 13 |
| 11 | 11,000 | | 0,067 | 13 | 58 | 57,97 | 199 | 1,87 | 13 |
| 12 | 12,000 | | 0,080 | 14 | 60 | 59,96 | 200 | 2,00 | 14 |
| 13 | 13,000 | | 0,094 | 15 | 62 | 61,96 | 200 | 2,14 | 14 |
| 14 | 14,000 | | 0,109 | 16 | 64 | 63,96 | 199 | 2,28 | 14 |
| 15 | 15,000 | | 0,125 | 17 | 66 | 65,95 | 199 | 2,42 | 15 |
| 16 | 15,999 | | 0,142 | 19 | 68 | 67,94 | 199 | 2,57 | 15 |
| 17 | 16,999 | | 0,161 | 19 | 70 | 69,93 | 200 | 2,72 | 16 |
| 18 | 17,999 | | 0,180 | 21 | 72 | 71,93 | 199 | 2,88 | 16 |
| 19 | 18,999 | | 0,201 | 21 | 74 | 73,92 | 199 | 3,04 | 17 |
| 20 | 18,998 | | 0,222 | 5 | 76 | 75,91 | 200 | 3,21 | 17 |
| | | 200 | | 5 | 78 | 77,91 | 199 | 3,38 | 17 |
| 22 | 22,00 | 200 | 0,27 | 5 | 80 | 79,90 | 199 | 3,55 | 18 |
| 24 | 24,00 | 200 | 0,32 | 6 | 82 | 81,89 | 199 | 3,73 | 19 |
| 26 | 26,00 | 200 | 0,38 | 6 | 84 | 83,88 | 199 | 3,92 | 19 |
| 28 | 28,00 | 200 | 0,44 | 6 | 86 | 85,87 | 199 | 4,11 | 19 |
| 30 | 29,99 | 200 | 0,50 | 7 | 88 | 87,86 | 199 | 4,30 | 20 |
| 32 | 31,99 | 200 | 0,57 | 7 | 90 | 89,85 | 199 | 4,50 | 20 |
| 34 | 33,99 | 200 | 0,64 | 8 | 92 | 91,84 | 199 | 4,70 | 21 |
| 36 | 35,99 | 200 | 0,72 | 8 | 94 | 93,83 | 199 | 4,91 | 21 |
| 38 | 37,99 | 200 | 0,80 | 8 | 96 | 95,82 | 199 | 5,12 | 21 |

R. = 900

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|--------------------------------|--------|-----|-------|----|-----|--------|-----|-------|-----|
| R. = 900 (或 9000 及 90) | | | | | | | | | |
| 96 | 95,82 | 199 | 5,12 | 21 | 180 | 178,80 | 196 | 17,94 | 40 |
| 98 | 97,81 | 198 | 5,33 | 22 | 182 | 180,76 | 196 | 18,34 | 40 |
| 100 | 99,79 | 199 | 5,55 | 22 | 184 | 182,72 | 196 | 18,74 | 41 |
| 102 | 101,78 | 199 | 5,77 | 23 | 186 | 184,68 | 196 | 19,15 | 41 |
| 104 | 103,77 | 199 | 6,00 | 23 | 188 | 186,64 | 195 | 19,56 | 42 |
| 106 | 105,76 | 199 | 6,23 | 24 | 190 | 188,59 | 196 | 19,98 | 42 |
| 108 | 107,75 | 198 | 6,47 | 24 | 192 | 190,55 | 196 | 20,40 | 43 |
| 110 | 109,73 | 199 | 6,71 | 25 | 194 | 192,51 | 195 | 20,83 | 43 |
| 112 | 111,72 | 198 | 6,96 | 25 | 196 | 194,46 | 195 | 21,26 | 43 |
| 114 | 113,70 | 198 | 7,21 | 26 | 198 | 196,41 | 195 | 21,69 | 43 |
| 116 | 115,68 | 198 | 7,47 | 26 | 200 | 198,36 | 195 | 22,13 | 44 |
| 118 | 117,66 | 198 | 7,73 | 26 | | | | | |
| 120 | 119,64 | 199 | 7,99 | 27 | | | | | |
| 122 | 121,63 | 198 | 8,26 | 27 | | | | | |
| 124 | 123,61 | 198 | 8,53 | 28 | 20 | 19,84 | 195 | 2,21 | 46 |
| 126 | 125,59 | 198 | 8,81 | 28 | 22 | 21,79 | 193 | 2,67 | 50 |
| 128 | 127,57 | 198 | 9,09 | 28 | 24 | 23,72 | 192 | 3,17 | 55 |
| 130 | 129,55 | 198 | 9,37 | 29 | 26 | 25,64 | 191 | 3,72 | 59 |
| 132 | 131,53 | 198 | 9,66 | 30 | 28 | 27,55 | 190 | 4,31 | 64 |
| 134 | 133,51 | 198 | 9,96 | 30 | 30 | 29,45 | 188 | 4,95 | 67 |
| 136 | 135,49 | 198 | 10,26 | 30 | 32 | 31,33 | 187 | 5,62 | 72 |
| 138 | 137,47 | 197 | 10,56 | 31 | 34 | 33,20 | 185 | 6,34 | 76 |
| 140 | 139,44 | 198 | 10,87 | 31 | 36 | 35,05 | 183 | 7,10 | 80 |
| 142 | 141,42 | 198 | 11,18 | 31 | 38 | 36,88 | 182 | 7,90 | 84 |
| 144 | 143,40 | 197 | 11,49 | 32 | 40 | 38,70 | 180 | 8,74 | 88 |
| 146 | 145,37 | 197 | 11,81 | 33 | 42 | 40,50 | 177 | 9,62 | 92 |
| 148 | 147,34 | 197 | 12,14 | 33 | 44 | 42,27 | 175 | 10,54 | 96 |
| 150 | 149,31 | 197 | 12,47 | 33 | 46 | 44,02 | 174 | 11,50 | 100 |
| 152 | 151,28 | 197 | 12,80 | 34 | 48 | 45,76 | 171 | 12,50 | 104 |
| 154 | 153,25 | 197 | 13,14 | 35 | 50 | 47,47 | 169 | 13,54 | 107 |
| 156 | 155,22 | 197 | 13,49 | 35 | 52 | 49,16 | 166 | 14,61 | 111 |
| 158 | 157,19 | 197 | 13,84 | 35 | 54 | 50,82 | 164 | 15,72 | 115 |
| 160 | 159,16 | 197 | 14,19 | 35 | 56 | 52,46 | 161 | 16,87 | 118 |
| 162 | 161,13 | 197 | 14,54 | 36 | 58 | 54,07 | 158 | 18,05 | 122 |
| 164 | 163,10 | 197 | 14,90 | 36 | 60 | 55,65 | 156 | 19,27 | 126 |
| 166 | 165,07 | 196 | 15,26 | 37 | 62 | 57,21 | 153 | 20,53 | 128 |
| 168 | 167,03 | 196 | 15,63 | 38 | 64 | 58,74 | 150 | 21,81 | 132 |
| 170 | 168,99 | 197 | 16,01 | 38 | 66 | 60,24 | 147 | 23,13 | 136 |
| 172 | 170,96 | 196 | 16,39 | 38 | 68 | 61,71 | 144 | 24,49 | 139 |
| 174 | 172,92 | 196 | 16,77 | 39 | 70 | 63,15 | 141 | 25,88 | 142 |
| 176 | 174,88 | 196 | 17,16 | 39 | 72 | 64,56 | 138 | 27,30 | 145 |
| 178 | 176,84 | 196 | 17,55 | 39 | 74 | 65,94 | 134 | 28,75 | 148 |
| 180 | 178,80 | 196 | 17,94 | 39 | 76 | 67,28 | | 30,23 | |
| R = 90 補充值 | | | | | | | | | |

R. = 900

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|--------------------------------|--------|-----|-------|----|-----|--------|-----|-------|----|
| R. = 950 (或 9500 及 95) | | | | | | | | | |
| 1 | 1,000 | | 0,001 | | 64 | 63,95 | | 2,15 | |
| 2 | 2,000 | | 0,002 | 1 | 66 | 65,95 | 200 | 2,29 | 14 |
| 3 | 3,000 | | 0,005 | 3 | 68 | 67,95 | 200 | 2,43 | 14 |
| 4 | 4,000 | | 0,008 | 3 | 70 | 69,94 | 199 | 2,58 | 15 |
| 5 | 5,000 | | 0,013 | 5 | 72 | 71,94 | 200 | 2,73 | 15 |
| 6 | 6,000 | | 0,019 | 6 | 74 | 73,93 | 199 | 2,88 | 15 |
| 7 | 7,000 | | 0,026 | 7 | 76 | 75,92 | 199 | 3,04 | 16 |
| 8 | 8,000 | | 0,034 | 8 | 78 | 77,92 | 200 | 3,20 | 16 |
| 9 | 9,000 | | 0,043 | 9 | 80 | 79,91 | 199 | 3,37 | 17 |
| 10 | 10,000 | | 0,053 | 10 | 82 | 81,91 | 200 | 3,54 | 17 |
| 11 | 11,000 | | 0,064 | 11 | 84 | 83,90 | 199 | 3,71 | 17 |
| 12 | 12,000 | | 0,076 | 12 | 86 | 85,89 | 199 | 3,89 | 18 |
| 13 | 13,000 | | 0,089 | 13 | 88 | 87,88 | 199 | 4,07 | 18 |
| 14 | 14,000 | | 0,103 | 14 | 90 | 89,87 | 199 | 4,26 | 19 |
| 15 | 15,000 | | 0,118 | 15 | 92 | 91,86 | 199 | 4,45 | 19 |
| 16 | 16,000 | | 0,135 | 17 | 94 | 93,85 | 199 | 4,65 | 20 |
| 17 | 16,999 | | 0,152 | 17 | 96 | 95,84 | 199 | 4,85 | 20 |
| 18 | 17,999 | | 0,171 | 19 | 98 | 97,83 | 199 | 5,05 | 20 |
| 19 | 18,999 | | 0,190 | 19 | 100 | 99,82 | 199 | 5,26 | 21 |
| 20 | 19,999 | | 0,211 | 21 | 102 | 101,81 | 199 | 5,47 | 21 |
| | | 200 | | | 104 | 103,80 | 199 | 5,69 | 22 |
| 22 | 22,00 | 200 | 0,25 | 4 | 106 | 105,79 | 199 | 5,91 | 22 |
| 24 | 24,00 | 200 | 0,30 | 5 | 108 | 107,77 | 198 | 6,13 | 22 |
| 26 | 26,00 | 200 | 0,35 | 5 | 110 | 109,75 | 198 | 6,36 | 23 |
| 28 | 28,00 | 200 | 0,41 | 6 | 112 | 111,74 | 199 | 6,59 | 23 |
| 30 | 30,00 | 200 | 0,47 | 6 | 114 | 113,73 | 199 | 6,83 | 24 |
| 32 | 32,00 | 200 | 0,54 | 7 | 116 | 115,72 | 199 | 7,07 | 24 |
| 34 | 34,00 | 200 | 0,61 | 7 | 118 | 117,70 | 198 | 7,32 | 25 |
| 36 | 36,00 | 200 | 0,68 | 7 | 120 | 119,68 | 198 | 7,57 | 25 |
| 38 | 38,00 | 199 | 0,76 | 8 | 122 | 121,67 | 199 | 7,82 | 25 |
| 40 | 39,99 | 200 | 0,84 | 8 | 124 | 123,65 | 198 | 8,08 | 26 |
| 42 | 41,99 | 200 | 0,93 | 9 | 126 | 125,63 | 198 | 8,34 | 26 |
| 44 | 43,99 | 200 | 1,02 | 9 | 128 | 127,62 | 199 | 8,61 | 27 |
| 46 | 45,99 | 200 | 1,12 | 10 | 130 | 129,60 | 198 | 8,88 | 27 |
| 48 | 47,99 | 199 | 1,22 | 10 | 132 | 131,58 | 198 | 9,16 | 28 |
| 50 | 49,98 | 200 | 1,32 | 10 | 134 | 133,55 | 197 | 9,44 | 28 |
| 52 | 51,98 | 199 | 1,43 | 11 | 136 | 135,53 | 198 | 9,72 | 28 |
| 54 | 53,97 | 200 | 1,54 | 11 | 138 | 137,51 | 198 | 10,01 | 29 |
| 56 | 55,97 | 200 | 1,65 | 11 | 140 | 139,49 | 198 | 10,30 | 29 |
| 58 | 57,97 | 199 | 1,77 | 12 | 142 | 141,47 | 198 | 10,59 | 29 |
| 60 | 59,96 | 200 | 1,89 | 12 | 144 | 143,45 | 198 | 10,89 | 30 |
| 62 | 61,96 | 199 | 2,02 | 13 | 146 | 145,43 | 198 | 11,19 | 30 |
| 64 | 63,95 | 199 | 2,15 | 13 | 148 | 147,41 | 198 | 11,50 | 31 |

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|--------------------------------|--------|-----|-------|----|----------|-------|-----|-------|-----|
| R. = 950 (或 9500 及 95) | | | | | | | | | |
| 148 | 147,41 | 197 | 11,50 | 82 | R=95 補充值 | | | | |
| 150 | 149,38 | 198 | 11,82 | 82 | 20 | 19,85 | 195 | 2,10 | 44 |
| 152 | 151,36 | 197 | 12,14 | 82 | 22 | 21,80 | 194 | 2,54 | 47 |
| 154 | 153,33 | 197 | 12,46 | 82 | 24 | 23,74 | 193 | 3,01 | 52 |
| 156 | 155,30 | 197 | 12,78 | 83 | 26 | 25,67 | 192 | 3,53 | 56 |
| 158 | 157,27 | 197 | 13,11 | 83 | 28 | 27,59 | 191 | 4,09 | 61 |
| 160 | 159,24 | 197 | 13,44 | 34 | 30 | 29,50 | 189 | 4,70 | 64 |
| 162 | 161,21 | 197 | 13,78 | 34 | 32 | 31,39 | 188 | 5,34 | 68 |
| 164 | 163,18 | 197 | 14,12 | 35 | 34 | 33,27 | 187 | 6,02 | 72 |
| 166 | 165,15 | 197 | 14,47 | 35 | 36 | 35,14 | 185 | 6,74 | 76 |
| 168 | 167,12 | 197 | 14,82 | 35 | 38 | 36,99 | 184 | 7,50 | 80 |
| 170 | 169,09 | 197 | 15,17 | 36 | 40 | 38,83 | 182 | 8,30 | 84 |
| 172 | 171,06 | 197 | 15,53 | 36 | 42 | 40,66 | 180 | 9,14 | 87 |
| 174 | 173,03 | 197 | 15,89 | 37 | 44 | 42,45 | 178 | 10,01 | 91 |
| 176 | 175,00 | 196 | 16,26 | 37 | 46 | 44,23 | 176 | 10,92 | 95 |
| 178 | 176,96 | 197 | 16,63 | 37 | 48 | 45,99 | 173 | 11,87 | 99 |
| 180 | 178,93 | 196 | 17,00 | 38 | 50 | 47,72 | 172 | 12,86 | 102 |
| 182 | 180,89 | 196 | 17,38 | 38 | 52 | 49,44 | 170 | 13,88 | 106 |
| 184 | 182,85 | 196 | 17,76 | 39 | 54 | 51,14 | 167 | 14,94 | 109 |
| 186 | 184,81 | 197 | 18,15 | 39 | 56 | 52,81 | 165 | 16,03 | 113 |
| 188 | 186,78 | 196 | 18,54 | 40 | 58 | 54,46 | 163 | 17,16 | 117 |
| 190 | 188,74 | 196 | 18,94 | 40 | 60 | 56,09 | 161 | 18,33 | 120 |
| 192 | 190,70 | 196 | 19,34 | 40 | 62 | 57,70 | 158 | 19,53 | 122 |
| 194 | 192,66 | 196 | 19,74 | 41 | 64 | 59,28 | 155 | 20,75 | 126 |
| 196 | 194,62 | 196 | 20,15 | 41 | 66 | 60,83 | 152 | 22,01 | 130 |
| 198 | 196,58 | 196 | 20,56 | 42 | 68 | 62,35 | 149 | 23,31 | 133 |
| 200 | 198,53 | 195 | 20,98 | 70 | 70 | 63,84 | 147 | 24,64 | 136 |
| | | | | 72 | 72 | 65,31 | 144 | 26,00 | 139 |
| | | | | 74 | 74 | 66,76 | 141 | 27,39 | 142 |
| | | | | 76 | 76 | 68,16 | 137 | 28,81 | 145 |
| | | | | 78 | 78 | 69,53 | 134 | 30,26 | 148 |
| | | | | 80 | 80 | 70,87 | | 31,74 | |

| 曲線長 | 橫距 | 差 | 縱距 | 差 | 曲線長 | 橫距 | 差 | 縱距 | 差 |
|-----------------------------------|--------|-----|-------|----|-----|--------|-----|-------|----|
| R. = 1000 (或 10000 及 100) | | | | | | | | | |
| 1 | 1,000 | | 0,001 | 1 | 64 | 63,96 | | 2,05 | 13 |
| 2 | 2,000 | | 0,002 | 1 | 66 | 65,95 | 199 | 2,18 | 13 |
| 3 | 3,000 | | 0,005 | 3 | 68 | 67,95 | 200 | 2,31 | 14 |
| 4 | 4,000 | | 0,008 | 4 | 70 | 69,95 | 199 | 2,45 | 14 |
| 5 | 5,000 | | 0,012 | 6 | 72 | 71,94 | 199 | 2,59 | 15 |
| 6 | 6,000 | | 0,018 | 6 | 74 | 73,93 | 199 | 2,74 | 15 |
| 7 | 7,000 | | 0,025 | 7 | 76 | 75,93 | 199 | 2,89 | 15 |
| 8 | 8,000 | | 0,032 | 9 | 78 | 77,92 | 200 | 3,04 | 16 |
| 9 | 9,000 | | 0,041 | 9 | 80 | 79,92 | 199 | 3,20 | 16 |
| 10 | 10,000 | | 0,050 | 9 | 82 | 81,91 | 199 | 3,36 | 17 |
| 11 | 11,000 | | 0,061 | 11 | 84 | 83,90 | 199 | 3,53 | 17 |
| 12 | 12,000 | | 0,072 | 11 | 86 | 85,89 | 200 | 3,70 | 17 |
| 13 | 13,000 | | 0,084 | 14 | 88 | 87,89 | 199 | 3,87 | 18 |
| 14 | 14,000 | | 0,098 | 15 | 90 | 89,88 | 199 | 4,05 | 18 |
| 15 | 14,999 | | 0,113 | 15 | 92 | 91,87 | 199 | 4,23 | 19 |
| 16 | 15,999 | | 0,128 | 17 | 94 | 93,86 | 199 | 4,42 | 18 |
| 17 | 16,999 | | 0,145 | 17 | 96 | 95,85 | 199 | 4,60 | 20 |
| 18 | 17,999 | | 0,162 | 17 | 98 | 97,84 | 199 | 4,80 | 20 |
| 19 | 18,999 | | 0,181 | 19 | 100 | 99,83 | 199 | 5,00 | 20 |
| 20 | 19,999 | | 0,200 | 19 | 102 | 101,82 | 199 | 5,20 | 20 |
| | | | | | 104 | 103,81 | 199 | 5,40 | 21 |
| 22 | 22,00 | 200 | 0,24 | 4 | 106 | 105,80 | 199 | 5,61 | 22 |
| 24 | 24,00 | 200 | 0,29 | 5 | 108 | 107,79 | 198 | 5,83 | 21 |
| 26 | 26,00 | 200 | 0,34 | 5 | 110 | 109,77 | 200 | 6,04 | 23 |
| 28 | 28,00 | 200 | 0,39 | 5 | 112 | 111,77 | 198 | 6,27 | 22 |
| 30 | 30,00 | 200 | 0,45 | 6 | 114 | 113,75 | 199 | 6,49 | 23 |
| 32 | 32,00 | 199 | 0,51 | 6 | 116 | 115,74 | 199 | 6,72 | 23 |
| 34 | 33,99 | 200 | 0,58 | 7 | 118 | 117,73 | 199 | 6,95 | 24 |
| 36 | 35,99 | 200 | 0,65 | 7 | 120 | 119,70 | 200 | 7,19 | 24 |
| 38 | 37,99 | 200 | 0,72 | 7 | 122 | 121,70 | 198 | 7,43 | 25 |
| 40 | 39,99 | 200 | 0,80 | 8 | 124 | 123,68 | 199 | 7,68 | 25 |
| 42 | 41,99 | 200 | 0,88 | 8 | 126 | 125,67 | 199 | 7,93 | 25 |
| 44 | 43,99 | 200 | 0,97 | 9 | 128 | 127,65 | 198 | 8,18 | 26 |
| 46 | 45,98 | 199 | 1,06 | 9 | 130 | 129,62 | 197 | 8,44 | 26 |
| 48 | 47,98 | 200 | 1,15 | 9 | 132 | 131,62 | 200 | 8,70 | 26 |
| 50 | 49,98 | 200 | 1,25 | 10 | 134 | 133,60 | 198 | 8,96 | 26 |
| 52 | 51,98 | 200 | 1,35 | 10 | 136 | 135,58 | 198 | 9,23 | 27 |
| 54 | 53,97 | 199 | 1,46 | 11 | 138 | 137,56 | 198 | 9,51 | 28 |
| 56 | 55,97 | 200 | 1,57 | 11 | 140 | 139,53 | 197 | 9,78 | 27 |
| 58 | 57,97 | 200 | 1,68 | 11 | 142 | 141,52 | 199 | 10,07 | 29 |
| 60 | 59,97 | 199 | 1,80 | 12 | 144 | 143,50 | 198 | 10,36 | 28 |
| 62 | 61,96 | 200 | 1,92 | 12 | 146 | 145,48 | 198 | 10,64 | 29 |
| 64 | 63,96 | 200 | 2,05 | 13 | 148 | 147,46 | 198 | 10,93 | 29 |

R. = 1000

第 四 表
內 外 軌 長 度 表

R = 100-290 曲線長 100

| 曲線半徑 | 標準軌距 = 1.44m. | | | 英軌軌距 = 1.00m. | | | 英軌軌距 = 0.75m. | | |
|------|---------------|------------|----------|---------------|------------|----------|---------------|------------|----------|
| | 外軌長度 m | 內軌長度 in | 差數 mm | 外軌長度 m | 內軌長度 in | 差數 mm | 外軌長度 m | 內軌長度 in | 差數 mm |
| 100 | 100,760 | 99,250 | 1500 | 100,530 | 99,470 | 1060 | 100,400 | 99,600 | 800 |
| 105 | 714 | 286 | 1428 | 505 | 495 | 1010 | 381 | 619 | 762 |
| 110 | 682 | 318 | 1364 | 482 | 518 | 964 | 364 | 636 | 728 |
| 115 | 652 | 348 | 1304 | 461 | 539 | 922 | 348 | 652 | 696 |
| 120 | 625 | 375 | 1250 | 442 | 568 | 884 | 333 | 667 | 666 |
| 125 | 600 | 400 | 1200 | 424 | 576 | 848 | 320 | 680 | 640 |
| 130 | 577 | 423 | 1154 | 408 | 592 | 816 | 308 | 692 | 616 |
| 135 | 556 | 444 | 1112 | 393 | 607 | 786 | 298 | 704 | 592 |
| 140 | 536 | 464 | 1072 | 379 | 621 | 758 | 286 | 714 | 572 |
| 145 | 517 | 483 | 1034 | 366 | 634 | 732 | 276 | 724 | 552 |
| 150 | 500 | 500 | 1000 | 353 | 647 | 706 | 267 | 733 | 534 |
| 160 | 469 | 531 | 968 | 331 | 669 | 662 | 250 | 760 | 500 |
| 170 | 441 | 559 | 882 | 312 | 688 | 624 | 235 | 765 | 470 |
| 180 | 417 | 583 | 834 | 295 | 705 | 590 | 222 | 773 | 444 |
| 190 | 395 | 605 | 790 | 279 | 721 | 558 | 211 | 789 | 422 |
| 200 | 375 | 625 | 750 | 265 | 735 | 530 | 200 | 800 | 400 |
| 210 | 357 | 643 | 714 | 252 | 748 | 504 | 190 | 810 | 380 |
| 220 | 341 | 659 | 682 | 241 | 759 | 482 | 182 | 818 | 364 |
| 230 | 326 | 674 | 652 | 230 | 770 | 460 | 174 | 826 | 348 |
| 240 | 312 | 688 | 624 | 221 | 779 | 442 | 167 | 833 | 334 |
| 250 | 300 | 700 | 600 | 212 | 788 | 424 | 160 | 840 | 320 |
| 260 | 289 | 711 | 578 | 204 | 796 | 408 | 154 | 846 | 308 |
| 270 | 278 | 722 | 556 | 196 | 804 | 392 | 148 | 852 | 296 |
| 280 | 268 | 732 | 536 | 189 | 811 | 378 | 143 | 857 | 286 |
| 280 | 100,259 | 99,741 | 518 | 100,183 | 99,817 | 366 | 100,138 | 99,862 | 276 |

R. = 300—950 曲線長 100

| 曲線半徑 | 標準軌距 = 1.44m. | | | 裝軌軌距 = 1.00m. | | | 裝軌軌距 = 0.75m. | | |
|------|---------------|--------|-----|---------------|--------|-----|---------------|--------|-----|
| | 外軌長度 | 內軌長度 | 差數 | 外軌長度 | 內軌長度 | 差數 | 外軌長度 | 內軌長度 | 差數 |
| 300 | 100,250 | 99,750 | 500 | 100,177 | 99,823 | 354 | 100,134 | 99,886 | 248 |
| 320 | 285 | 765 | 470 | 166 | 834 | 332 | 125 | 875 | 250 |
| 340 | 221 | 779 | 442 | 156 | 844 | 312 | 118 | 882 | 238 |
| 350 | 214 | 786 | 428 | 151 | 849 | 302 | 114 | 886 | 228 |
| 360 | 208 | 792 | 416 | 147 | 853 | 294 | 111 | 889 | 222 |
| 380 | 197 | 803 | 394 | 139 | 861 | 278 | 105 | 895 | 210 |
| 400 | 187 | 813 | 374 | 132 | 868 | 264 | 100 | 900 | 200 |
| 420 | 178 | 822 | 356 | 126 | 874 | 252 | 095 | 905 | 190 |
| 440 | 170 | 830 | 340 | 120 | 880 | 240 | 091 | 909 | 182 |
| 450 | 163 | 834 | 332 | 117 | 883 | 234 | 089 | 911 | 178 |
| 460 | 163 | 837 | 326 | 115 | 885 | 230 | 087 | 913 | 174 |
| 480 | 156 | 844 | 312 | 110 | 890 | 220 | 083 | 917 | 166 |
| 500 | 150 | 850 | 300 | 106 | 894 | 212 | 080 | 920 | 160 |
| 520 | 144 | 856 | 288 | 102 | 898 | 204 | 077 | 923 | 154 |
| 550 | 136 | 864 | 272 | 096 | 904 | 192 | 073 | 927 | 146 |
| 580 | 130 | 870 | 260 | 092 | 908 | 184 | 069 | 931 | 138 |
| 600 | 125 | 875 | 250 | 088 | 912 | 176 | 066 | 934 | 132 |
| 650 | 116 | 884 | 232 | 082 | 918 | 164 | 061 | 939 | 122 |
| 700 | 108 | 892 | 216 | 076 | 924 | 152 | 057 | 943 | 114 |
| 750 | 100 | 900 | 200 | 071 | 929 | 142 | 053 | 947 | 106 |
| 800 | 094 | 906 | 188 | 067 | 933 | 134 | 050 | 950 | 100 |
| 850 | 089 | 911 | 178 | 063 | 937 | 126 | 047 | 953 | 94 |
| 900 | 084 | 916 | 168 | 059 | 941 | 118 | 045 | 955 | 90 |
| 950 | 100,079 | 99,921 | 158 | 100,056 | 99,944 | 112 | 100,043 | 99,957 | 86 |

附錄(一)
視距簡表

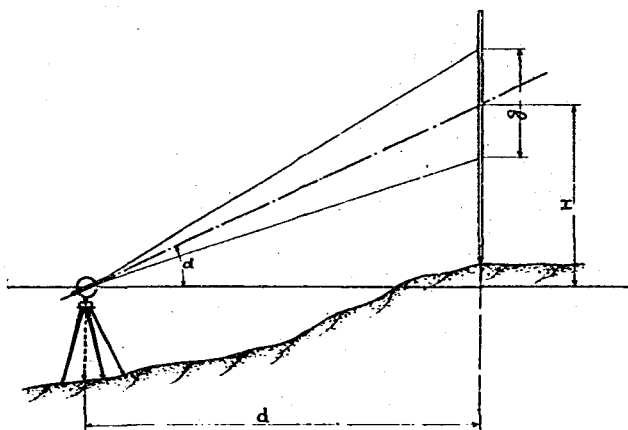
視距簡表

$$d = 100g \times \text{水平係數 (D)}$$

$$= 100g \times \cos^2 \alpha \dots \dots \dots (1)$$

$$H = 100g \times \text{高低係數 (h)}$$

$$= 100g \times \frac{\sin 2\alpha}{2} \dots \dots \dots (2)$$



例如: $\alpha = 105^{\circ}02'$

$$d = 100g \times \text{水平係數 (D)}$$

$$= 100g \times \cos^2 \alpha$$

$$= 100g (0.99689)^2$$

$$= 100g (0.9938) \dots \dots \dots (1)$$

$$H = 100g \times \text{高低係數 (h)}$$

$$= 100g \times \frac{\sin 2\alpha}{2}$$

$$= 100g \times \left(\frac{0.15705}{2} \right)$$

$$= 100g \times 0.0785 \dots \dots \dots (2)$$

| 分 | 100 ^G | | 101 ^G | | 102 ^G | | 103 ^G | | 104 ^G | | |
|----|------------------|-------|------------------|-------|------------------|-------|------------------|-------|------------------|-------|----|
| | D | h | D | h | D | h | D | h | D | h | |
| 01 | 1.0000 | .0002 | .9998 | .0159 | .9990 | .0316 | .9978 | .0472 | .9961 | .0628 | 99 |
| 02 | 1.0000 | .0003 | .9998 | .0160 | .9990 | .0317 | .9978 | .0474 | .9961 | .0629 | 98 |
| 03 | 1.0000 | .0005 | .9998 | .0162 | .9990 | .0319 | .9978 | .0475 | .9961 | .0631 | 97 |
| 04 | 1.0000 | .0006 | .9998 | .0163 | .9990 | .0321 | .9978 | .0477 | .9961 | .0632 | 96 |
| 05 | 1.0000 | .0008 | .9998 | .0165 | .9990 | .0322 | .9977 | .0478 | .9960 | .0634 | 95 |
| 06 | 1.0000 | .0009 | .9998 | .0167 | .9990 | .0324 | .9977 | .0480 | .9960 | .0636 | 94 |
| 07 | 1.0000 | .0011 | .9998 | .0168 | .9990 | .0325 | .9977 | .0481 | .9960 | .0637 | 93 |
| 08 | 1.0000 | .0013 | .9998 | .0170 | .9990 | .0327 | .9977 | .0483 | .9960 | .0639 | 92 |
| 09 | 1.0000 | .0014 | .9998 | .0171 | .9990 | .0328 | .9977 | .0485 | .9960 | .0640 | 91 |
| 10 | 1.0000 | .0016 | .9997 | .0173 | .9989 | .0330 | .9976 | .0486 | .9959 | .0642 | 90 |
| 11 | 1.0000 | .0017 | .9997 | .0174 | .9989 | .0332 | .9976 | .0488 | .9959 | .0643 | 89 |
| 12 | 1.0000 | .0019 | .9997 | .0176 | .9989 | .0333 | .9976 | .0489 | .9959 | .0645 | 88 |
| 13 | 1.0000 | .0020 | .9997 | .0178 | .9989 | .0335 | .9976 | .0491 | .9959 | .0647 | 87 |
| 14 | 1.0000 | .0022 | .9997 | .0179 | .9989 | .0336 | .9976 | .0492 | .9959 | .0648 | 86 |
| 15 | 1.0000 | .0024 | .9997 | .0181 | .9989 | .0338 | .9976 | .0494 | .9958 | .0650 | 85 |
| 16 | 1.0000 | .0025 | .9997 | .0182 | .9989 | .0339 | .9976 | .0496 | .9958 | .0651 | 84 |
| 17 | 1.0000 | .0027 | .9997 | .0184 | .9989 | .0341 | .9976 | .0497 | .9958 | .0653 | 83 |
| 18 | 1.0000 | .0028 | .9997 | .0185 | .9989 | .0343 | .9976 | .0499 | .9958 | .0655 | 82 |
| 19 | 1.0000 | .0030 | .9997 | .0187 | .9989 | .0344 | .9976 | .0501 | .9958 | .0656 | 81 |
| 20 | 1.0000 | .0031 | .9996 | .0189 | .9988 | .0346 | .9975 | .0502 | .9957 | .0658 | 80 |
| 21 | .9999 | .0033 | .9996 | .0190 | .9988 | .0347 | .9975 | .0504 | .9957 | .0659 | 79 |
| 22 | .9999 | .0035 | .9996 | .0192 | .9988 | .0349 | .9975 | .0505 | .9957 | .0661 | 78 |
| 23 | .9999 | .0036 | .9996 | .0193 | .9988 | .0350 | .9975 | .0507 | .9957 | .0662 | 77 |
| 24 | .9999 | .0038 | .9996 | .0195 | .9988 | .0352 | .9975 | .0508 | .9956 | .0664 | 76 |
| 25 | .9999 | .0039 | .9996 | .0196 | .9988 | .0354 | .9974 | .0510 | .9956 | .0666 | 75 |
| 26 | .9999 | .0041 | .9996 | .0198 | .9988 | .0355 | .9974 | .0512 | .9956 | .0667 | 74 |
| 27 | .9999 | .0042 | .9996 | .0200 | .9988 | .0357 | .9974 | .0513 | .9955 | .0669 | 73 |
| 28 | .9999 | .0044 | .9996 | .0201 | .9988 | .0358 | .9974 | .0515 | .9955 | .0670 | 72 |
| 29 | .9999 | .0046 | .9996 | .0203 | .9988 | .0360 | .9974 | .0516 | .9955 | .0672 | 71 |
| 30 | .9999 | .0047 | .9996 | .0204 | .9987 | .0361 | .9973 | .0518 | .9954 | .0673 | 70 |
| 31 | .9999 | .0049 | .9996 | .0206 | .9987 | .0363 | .9973 | .0519 | .9954 | .0675 | 69 |
| 32 | .9999 | .0050 | .9996 | .0207 | .9987 | .0365 | .9973 | .0521 | .9954 | .0677 | 68 |
| 33 | .9999 | .0052 | .9996 | .0209 | .9987 | .0366 | .9973 | .0523 | .9954 | .0678 | 67 |
| 34 | .9999 | .0053 | .9996 | .0211 | .9987 | .0368 | .9973 | .0524 | .9954 | .0680 | 66 |
| 35 | .9999 | .0055 | .9996 | .0212 | .9987 | .0369 | .9972 | .0526 | .9953 | .0681 | 65 |
| 36 | .9999 | .0057 | .9996 | .0214 | .9987 | .0371 | .9972 | .0527 | .9953 | .0683 | 64 |
| 37 | .9999 | .0058 | .9996 | .0215 | .9987 | .0372 | .9972 | .0529 | .9953 | .0685 | 63 |
| 38 | .9999 | .0060 | .9996 | .0217 | .9987 | .0374 | .9972 | .0530 | .9953 | .0686 | 62 |
| 39 | .9999 | .0061 | .9996 | .0218 | .9987 | .0376 | .9972 | .0532 | .9953 | .0688 | 61 |
| 40 | .9999 | .0063 | .9995 | .0220 | .9986 | .0377 | .9971 | .0533 | .9952 | .0689 | 60 |
| 41 | .9999 | .0064 | .9995 | .0222 | .9986 | .0378 | .9971 | .0534 | .9952 | .0691 | 59 |
| 42 | .9999 | .0066 | .9995 | .0223 | .9986 | .0379 | .9971 | .0536 | .9952 | .0692 | 58 |
| 43 | .9999 | .0068 | .9995 | .0225 | .9986 | .0381 | .9971 | .0537 | .9952 | .0694 | 57 |
| 44 | .9999 | .0069 | .9995 | .0226 | .9986 | .0382 | .9971 | .0539 | .9952 | .0696 | 56 |
| 45 | .9999 | .0071 | .9995 | .0228 | .9986 | .0384 | .9971 | .0540 | .9951 | .0697 | 55 |
| 46 | .9999 | .0072 | .9995 | .0229 | .9986 | .0386 | .9971 | .0542 | .9951 | .0699 | 54 |
| 47 | .9999 | .0074 | .9995 | .0231 | .9986 | .0387 | .9971 | .0544 | .9951 | .0700 | 53 |
| 48 | .9999 | .0075 | .9995 | .0233 | .9986 | .0389 | .9971 | .0545 | .9951 | .0702 | 52 |
| 49 | .9999 | .0077 | .9995 | .0234 | .9986 | .0390 | .9971 | .0547 | .9951 | .0703 | 51 |
| 50 | .9999 | .0079 | .9994 | .0236 | .9985 | .0392 | .9970 | .0548 | .9950 | .0704 | 50 |
| | D | h | D | h | D | h | D | h | D | h | 分 |
| | 99 ^G | | 98 ^G | | 97 ^G | | 96 ^G | | 95 ^G | | |

| 分 | 100 ^G | | 101 ^G | | 102 ^G | | 103 ^G | | 104 ^G | | |
|-----|------------------|-------|------------------|-------|------------------|-------|------------------|-------|------------------|-------|----|
| | D | h | D | h | D | h | D | h | D | h | |
| 51 | .9999 | .0080 | .9994 | .0237 | .9985 | .0393 | .9970 | .0550 | .9950 | .0706 | 49 |
| 52 | .9999 | .0082 | .9994 | .0239 | .9985 | .0395 | .9970 | .0551 | .9950 | .0707 | 48 |
| 53 | .9999 | .0083 | .9994 | .0240 | .9985 | .0396 | .9970 | .0553 | .9950 | .0709 | 47 |
| 54 | .9999 | .0085 | .9994 | .0242 | .9985 | .0398 | .9970 | .0555 | .9950 | .0710 | 46 |
| 55 | .9999 | .0086 | .9994 | .0244 | .9984 | .0400 | .9969 | .0556 | .9949 | .0712 | 45 |
| 56 | .9999 | .0088 | .9994 | .0245 | .9984 | .0401 | .9969 | .0558 | .9949 | .0714 | 44 |
| 57 | .9999 | .0090 | .9994 | .0247 | .9984 | .0403 | .9969 | .0559 | .9949 | .0715 | 43 |
| 58 | .9999 | .0091 | .9994 | .0248 | .9984 | .0404 | .9969 | .0561 | .9949 | .0717 | 42 |
| 59 | .9999 | .0093 | .9994 | .0250 | .9984 | .0406 | .9969 | .0563 | .9949 | .0718 | 41 |
| 60 | .9999 | .0094 | .9994 | .0251 | .9983 | .0408 | .9968 | .0564 | .9948 | .0720 | 40 |
| 61 | .9999 | .0096 | .9994 | .0253 | .9983 | .0409 | .9968 | .0566 | .9948 | .0721 | 39 |
| 62 | .9999 | .0097 | .9994 | .0255 | .9983 | .0411 | .9968 | .0567 | .9948 | .0723 | 38 |
| 63 | .9999 | .0099 | .9994 | .0256 | .9983 | .0412 | .9968 | .0569 | .9948 | .0725 | 37 |
| 64 | .9999 | .0101 | .9994 | .0258 | .9983 | .0414 | .9968 | .0570 | .9948 | .0726 | 36 |
| 65 | .9999 | .0102 | .9994 | .0259 | .9983 | .0416 | .9967 | .0572 | .9947 | .0728 | 35 |
| 66 | .9999 | .0104 | .9994 | .0261 | .9983 | .0417 | .9967 | .0574 | .9947 | .0729 | 34 |
| 67 | .9999 | .0105 | .9994 | .0262 | .9983 | .0419 | .9967 | .0575 | .9947 | .0731 | 33 |
| 68 | .9999 | .0107 | .9994 | .0264 | .9983 | .0420 | .9967 | .0577 | .9947 | .0732 | 32 |
| 68 | .9999 | .0107 | .9994 | .0264 | .9983 | .0420 | .9967 | .0577 | .9947 | .0732 | 32 |
| 69 | .9999 | .0108 | .9994 | .0265 | .9983 | .0422 | .9967 | .0578 | .9947 | .0734 | 31 |
| 70 | .9999 | .0110 | .9993 | .0267 | .9982 | .0423 | .9966 | .0580 | .9946 | .0736 | 30 |
| 71 | .9999 | .0112 | .9993 | .0269 | .9982 | .0425 | .9966 | .0581 | .9946 | .0737 | 29 |
| 72 | .9999 | .0113 | .9993 | .0270 | .9982 | .0427 | .9966 | .0583 | .9946 | .0739 | 28 |
| 73 | .9999 | .0115 | .9993 | .0272 | .9982 | .0428 | .9966 | .0585 | .9946 | .0740 | 27 |
| 74 | .9999 | .0116 | .9993 | .0273 | .9982 | .0430 | .9966 | .0586 | .9945 | .0742 | 26 |
| 75 | .9999 | .0118 | .9993 | .0275 | .9982 | .0431 | .9965 | .0588 | .9945 | .0744 | 25 |
| 76 | .9999 | .0119 | .9993 | .0277 | .9982 | .0433 | .9965 | .0589 | .9945 | .0745 | 24 |
| 77 | .9999 | .0121 | .9993 | .0278 | .9982 | .0434 | .9965 | .0591 | .9944 | .0747 | 23 |
| 78 | .9999 | .0123 | .9993 | .0280 | .9982 | .0436 | .9965 | .0592 | .9844 | .0748 | 22 |
| 79 | .9999 | .0124 | .9993 | .0281 | .9982 | .0438 | .9965 | .0594 | .9944 | .0750 | 21 |
| 80 | .9999 | .0126 | .9992 | .0283 | .9981 | .0439 | .9964 | .0596 | .9943 | .0751 | 20 |
| 81 | .9999 | .0127 | .9992 | .0284 | .9981 | .0441 | .9964 | .0597 | .9943 | .0753 | 19 |
| 82 | .9999 | .0129 | .9992 | .0286 | .9981 | .0442 | .9964 | .0599 | .9943 | .0755 | 18 |
| 83 | .9999 | .0130 | .9992 | .0288 | .9981 | .0444 | .9964 | .0600 | .9943 | .0756 | 17 |
| 84 | .9999 | .0132 | .9992 | .0289 | .9981 | .0445 | .9964 | .0602 | .9943 | .0758 | 16 |
| 85 | .9999 | .0134 | .9992 | .0291 | .9980 | .0447 | .9964 | .0603 | .9942 | .0759 | 15 |
| 86 | .9999 | .0135 | .9992 | .0292 | .9980 | .0449 | .9964 | .0605 | .9942 | .0761 | 14 |
| 87 | .9999 | .0137 | .9992 | .0294 | .9980 | .0450 | .9964 | .0607 | .9942 | .0762 | 13 |
| 88 | .9999 | .0138 | .9992 | .0295 | .9980 | .0452 | .9964 | .0608 | .9942 | .0763 | 12 |
| 89 | .9999 | .0140 | .9992 | .0297 | .9980 | .0453 | .9964 | .0610 | .9942 | .0765 | 11 |
| 90 | .9998 | .0141 | .9991 | .0299 | .9979 | .0455 | .9963 | .0611 | .9941 | .0766 | 10 |
| 91 | .9998 | .0143 | .9991 | .0300 | .9979 | .0456 | .9963 | .0613 | .9941 | .0768 | 09 |
| 92 | .9998 | .0145 | .9991 | .0302 | .9979 | .0458 | .9963 | .0615 | .9941 | .0769 | 08 |
| 93 | .9998 | .0146 | .9991 | .0303 | .9979 | .0460 | .9963 | .0616 | .9941 | .0771 | 03 |
| 94 | .9998 | .0148 | .9991 | .0305 | .9979 | .0461 | .9963 | .0618 | .9940 | .0773 | 06 |
| 95 | .9998 | .0149 | .9991 | .0306 | .9979 | .0463 | .9962 | .0619 | .9940 | .0774 | 05 |
| 96 | .9998 | .0151 | .9991 | .0308 | .9979 | .0464 | .9962 | .0621 | .9940 | .0776 | 04 |
| 97 | .9998 | .0152 | .9991 | .0310 | .9979 | .0466 | .9962 | .0622 | .9939 | .0777 | 03 |
| 98 | .9998 | .0154 | .9991 | .0312 | .9979 | .0467 | .0962 | .0624 | .9939 | .0779 | 02 |
| 99 | .9998 | .0156 | .9991 | .0313 | .9979 | .0469 | .9962 | .0626 | .9939 | .0780 | 01 |
| 100 | .9998 | .0157 | .9990 | .0314 | .9978 | .0471 | .9961 | .0627 | .9938 | .0782 | 00 |
| | D | h | D | h | D | h | D | h | D | h | 分 |
| | 89 ^G | | 88 ^G | | 87 ^G | | 86 ^G | | 85 ^G | | |

| 分 | 106 ^G | | 106 ^G | | 107 ^G | | 108 ^G | | 109 ^G | | 分 |
|----|------------------|-------|------------------|-------|------------------|-------|------------------|-------|------------------|-------|----|
| | D | h | D | h | D | h | D | h | D | h | |
| 01 | .9938 | .0784 | .9910 | .0939 | .9680 | .1093 | .9843 | .1245 | .9801 | .1397 | 99 |
| 02 | .9938 | .0785 | .9910 | .0940 | .9680 | .1094 | .9843 | .1246 | .9801 | .1398 | 98 |
| 03 | .9938 | .0787 | .9909 | .0942 | .9679 | .1096 | .9843 | .1248 | .9800 | .1399 | 97 |
| 04 | .9938 | .0788 | .9908 | .0943 | .9679 | .1097 | .9842 | .1250 | .9800 | .1401 | 96 |
| 05 | .9937 | .0790 | .9908 | .0944 | .9679 | .1098 | .9842 | .1251 | .9800 | .1402 | 95 |
| 06 | .9937 | .0792 | .9908 | .0946 | .9678 | .1100 | .9842 | .1253 | .9799 | .1404 | 94 |
| 07 | .9937 | .0793 | .9908 | .0947 | .9678 | .1101 | .9841 | .1254 | .9799 | .1405 | 93 |
| 08 | .9937 | .0795 | .9908 | .0949 | .9677 | .1103 | .9841 | .1256 | .9798 | .1407 | 92 |
| 09 | .9937 | .0796 | .9908 | .0951 | .9677 | .1104 | .9840 | .1257 | .9798 | .1409 | 91 |
| 10 | .9936 | .0798 | .9908 | .0952 | .9676 | .1106 | .9839 | .1258 | .9797 | .1410 | 90 |
| 11 | .9936 | .0799 | .9908 | .0954 | .9676 | .1108 | .9839 | .1260 | .9797 | .1412 | 89 |
| 12 | .9936 | .0801 | .9908 | .0955 | .9676 | .1109 | .9839 | .1261 | .9797 | .1413 | 88 |
| 13 | .9936 | .0803 | .9908 | .0957 | .9676 | .1111 | .9838 | .1263 | .9796 | .1415 | 87 |
| 14 | .9935 | .0804 | .9908 | .0958 | .9675 | .1112 | .9838 | .1265 | .9796 | .1416 | 86 |
| 15 | .9935 | .0806 | .9907 | .0960 | .9675 | .1114 | .9838 | .1266 | .9796 | .1417 | 85 |
| 16 | .9935 | .0807 | .9907 | .0962 | .9675 | .1115 | .9837 | .1268 | .9795 | .1419 | 84 |
| 17 | .9934 | .0809 | .9907 | .0963 | .9674 | .1117 | .9837 | .1269 | .9795 | .1420 | 83 |
| 18 | .9934 | .0810 | .9906 | .0965 | .9674 | .1119 | .9836 | .1271 | .9794 | .1422 | 82 |
| 19 | .9934 | .0812 | .9906 | .0966 | .9674 | .1120 | .9836 | .1273 | .9794 | .1424 | 81 |
| 20 | .9933 | .0814 | .9905 | .0968 | .9673 | .1122 | .9835 | .1274 | .9793 | .1425 | 80 |
| 21 | .9933 | .0815 | .9905 | .0970 | .9673 | .1123 | .9835 | .1276 | .9793 | .1427 | 79 |
| 22 | .9933 | .0816 | .9905 | .0971 | .9673 | .1124 | .9835 | .1277 | .9792 | .1428 | 78 |
| 23 | .9933 | .0817 | .9905 | .0973 | .9673 | .1126 | .9834 | .1278 | .9792 | .1429 | 77 |
| 24 | .9933 | .0819 | .9905 | .0974 | .9672 | .1127 | .9834 | .1280 | .9791 | .1431 | 76 |
| 25 | .9932 | .0821 | .9904 | .0976 | .9672 | .1129 | .9834 | .1281 | .9791 | .1432 | 75 |
| 26 | .9932 | .0822 | .9904 | .0977 | .9671 | .1130 | .9833 | .1283 | .9790 | .1434 | 74 |
| 27 | .9932 | .0824 | .9904 | .0978 | .9671 | .1132 | .9833 | .1284 | .9790 | .1436 | 73 |
| 28 | .9932 | .0825 | .9903 | .0980 | .9670 | .1134 | .9832 | .1286 | .9789 | .1437 | 72 |
| 29 | .9932 | .0827 | .9903 | .0981 | .9670 | .1135 | .9832 | .1288 | .9789 | .1439 | 71 |
| 30 | .9931 | .0828 | .9902 | .0983 | .9669 | .1137 | .9831 | .1289 | .9788 | .1440 | 70 |
| 31 | .9931 | .0830 | .9902 | .0984 | .9669 | .1138 | .9831 | .1291 | .9788 | .1442 | 69 |
| 32 | .9931 | .0832 | .9902 | .0986 | .9669 | .1140 | .9831 | .1292 | .9788 | .1444 | 68 |
| 33 | .9931 | .0833 | .9902 | .0988 | .9669 | .1142 | .9830 | .1294 | .9787 | .1445 | 67 |
| 34 | .9930 | .0835 | .9902 | .0989 | .9668 | .1143 | .9830 | .1295 | .9787 | .1446 | 66 |
| 35 | .9930 | .0836 | .9901 | .0990 | .9668 | .1145 | .9830 | .1296 | .9787 | .1447 | 65 |
| 36 | .9930 | .0838 | .9901 | .0992 | .9667 | .1146 | .9829 | .1298 | .9786 | .1449 | 64 |
| 37 | .9929 | .0840 | .9901 | .0994 | .9667 | .1148 | .9829 | .1299 | .9786 | .1451 | 63 |
| 38 | .9929 | .0841 | .9900 | .0996 | .9666 | .1149 | .9828 | .1301 | .9785 | .1452 | 62 |
| 39 | .9929 | .0843 | .9900 | .0997 | .9666 | .1150 | .9828 | .1303 | .9785 | .1454 | 61 |
| 40 | .9928 | .0844 | .9899 | .0999 | .9665 | .1152 | .9827 | .1304 | .9784 | .1455 | 60 |
| 41 | .9928 | .0846 | .9899 | .1000 | .9665 | .1153 | .9827 | .1306 | .9784 | .1457 | 59 |
| 42 | .9928 | .0847 | .9899 | .1002 | .9665 | .1155 | .9827 | .1307 | .9783 | .1459 | 58 |
| 43 | .9928 | .0849 | .9899 | .1003 | .9665 | .1156 | .9826 | .1309 | .9783 | .1460 | 57 |
| 44 | .9928 | .0851 | .9899 | .1005 | .9665 | .1158 | .9826 | .1311 | .9782 | .1461 | 56 |
| 45 | .9927 | .0852 | .9898 | .1007 | .9664 | .1160 | .9826 | .1312 | .9782 | .1462 | 55 |
| 46 | .9927 | .0854 | .9898 | .1008 | .9664 | .1161 | .9825 | .1313 | .9781 | .1464 | 54 |
| 47 | .9927 | .0855 | .9898 | .1009 | .9664 | .1163 | .9825 | .1314 | .9781 | .1466 | 53 |
| 48 | .9927 | .0857 | .9897 | .1010 | .9663 | .1164 | .9824 | .1316 | .9780 | .1467 | 52 |
| 49 | .9927 | .0859 | .9897 | .1012 | .9663 | .1166 | .9824 | .1318 | .9780 | .1469 | 51 |
| 50 | .9926 | .0860 | .9896 | .1014 | .9662 | .1168 | .9823 | .1319 | .9779 | .1470 | 50 |
| | D | h | D | h | D | h | D | h | D | h | 分 |
| | 84 ^G | | 83 ^G | | 82 ^G | | 81 ^G | | 80 ^G | | |

| 分 | 105 ^G | | 106 ^G | | 107 ^G | | 108 ^G | | 109 ^G | | 分 |
|-----|------------------|-------|------------------|-------|------------------|-------|------------------|-------|------------------|-------|----|
| | D | h | D | h | D | h | D | h | D | h | |
| 51 | .9926 | .0861 | .9896 | .1015 | .9862 | .1169 | .9823 | .1321 | .9779 | .1472 | 49 |
| 52 | .9926 | .0862 | .9896 | .1017 | .9862 | .1171 | .9823 | .1322 | .9779 | .1474 | 48 |
| 53 | .9926 | .0863 | .9896 | .1018 | .9862 | .1172 | .9822 | .1324 | .9778 | .1475 | 47 |
| 54 | .9925 | .0865 | .9896 | .1020 | .9861 | .1173 | .9822 | .1326 | .9777 | .1476 | 46 |
| 55 | .9925 | .0867 | .9895 | .1022 | .9861 | .1175 | .9822 | .1327 | .9777 | .1477 | 45 |
| 56 | .9925 | .0869 | .9895 | .1023 | .9860 | .1176 | .9821 | .1329 | .9776 | .1479 | 44 |
| 57 | .9924 | .0870 | .9895 | .1025 | .9860 | .1178 | .9821 | .1330 | .9776 | .1481 | 43 |
| 58 | .9924 | .0872 | .9894 | .1026 | .9859 | .1179 | .9820 | .1331 | .9775 | .1482 | 42 |
| 59 | .9924 | .0873 | .9894 | .1028 | .9859 | .1181 | .9820 | .1333 | .9775 | .1484 | 41 |
| 60 | .9923 | .0875 | .9893 | .1029 | .9858 | .1183 | .9819 | .1334 | .9774 | .1486 | 40 |
| 61 | .9923 | .0877 | .9893 | .1031 | .9858 | .1184 | .9819 | .1336 | .9774 | .1487 | 39 |
| 62 | .9923 | .0878 | .9893 | .1033 | .9858 | .1186 | .9818 | .1337 | .9773 | .1488 | 38 |
| 63 | .9923 | .0880 | .9893 | .1034 | .9858 | .1187 | .9818 | .1339 | .9773 | .1489 | 37 |
| 64 | .9922 | .0881 | .9893 | .1036 | .9857 | .1189 | .9817 | .1341 | .9772 | .1491 | 36 |
| 65 | .9922 | .0883 | .9892 | .1037 | .9857 | .1190 | .9817 | .1342 | .9772 | .1493 | 35 |
| 66 | .9922 | .0884 | .9892 | .1039 | .9856 | .1192 | .9816 | .1344 | .9771 | .1494 | 34 |
| 67 | .9921 | .0886 | .9892 | .1041 | .9856 | .1194 | .9816 | .1345 | .9771 | .1496 | 33 |
| 68 | .9921 | .0888 | .9891 | .1042 | .9855 | .1195 | .9815 | .1347 | .9770 | .1497 | 32 |
| 69 | .9921 | .0889 | .9891 | .1043 | .9855 | .1196 | .9815 | .1349 | .9770 | .1499 | 31 |
| 70 | .9920 | .0891 | .9890 | .1044 | .9854 | .1197 | .9814 | .1350 | .9769 | .1501 | 30 |
| 71 | .9920 | .0892 | .9890 | .1046 | .9854 | .1199 | .9814 | .1351 | .9769 | .1502 | 29 |
| 72 | .9920 | .0894 | .9890 | .1048 | .9854 | .1201 | .9814 | .1352 | .9769 | .1503 | 28 |
| 73 | .9920 | .0896 | .9889 | .1049 | .9854 | .1202 | .9813 | .1354 | .9768 | .1504 | 27 |
| 74 | .9919 | .0897 | .9889 | .1051 | .9854 | .1204 | .9813 | .1356 | .9768 | .1506 | 26 |
| 75 | .9919 | .0899 | .9889 | .1052 | .9853 | .1205 | .9813 | .1357 | .9768 | .1508 | 25 |
| 76 | .9919 | .0900 | .9888 | .1054 | .9853 | .1207 | .9812 | .1359 | .9767 | .1509 | 24 |
| 77 | .9918 | .0902 | .9888 | .1055 | .9852 | .1209 | .9812 | .1360 | .9767 | .1511 | 23 |
| 78 | .9918 | .0903 | .9887 | .1057 | .9852 | .1210 | .9811 | .1362 | .9766 | .1512 | 22 |
| 79 | .9918 | .0905 | .9887 | .1059 | .9852 | .1212 | .9811 | .1364 | .9766 | .1514 | 21 |
| 80 | .9917 | .0906 | .9886 | .1060 | .9851 | .1213 | .9810 | .1365 | .9765 | .1516 | 20 |
| 81 | .9917 | .0907 | .9886 | .1062 | .9851 | .1215 | .9810 | .1367 | .9765 | .1517 | 19 |
| 82 | .9917 | .0909 | .9886 | .1063 | .9851 | .1216 | .9810 | .1368 | .9764 | .1518 | 18 |
| 83 | .9917 | .0910 | .9886 | .1065 | .9851 | .1217 | .9809 | .1369 | .9764 | .1519 | 17 |
| 84 | .9916 | .0912 | .9886 | .1067 | .9850 | .1219 | .9809 | .1371 | .9763 | .1521 | 16 |
| 85 | .9916 | .0914 | .9885 | .1068 | .9850 | .1220 | .9809 | .1372 | .9763 | .1523 | 15 |
| 86 | .9916 | .0915 | .9885 | .1069 | .9849 | .1222 | .9808 | .1374 | .9762 | .1524 | 14 |
| 87 | .9915 | .0917 | .9885 | .1070 | .9849 | .1224 | .9808 | .1375 | .9762 | .1526 | 13 |
| 88 | .9915 | .0918 | .9884 | .1072 | .9848 | .1225 | .9807 | .1377 | .9761 | .1528 | 12 |
| 89 | .9915 | .0920 | .9884 | .1074 | .9848 | .1227 | .9807 | .1379 | .9761 | .1529 | 11 |
| 90 | .9914 | .0921 | .9883 | .1075 | .9847 | .1228 | .9806 | .1380 | .9760 | .1530 | 10 |
| 91 | .9914 | .0923 | .9883 | .1077 | .9847 | .1230 | .9806 | .1382 | .9760 | .1531 | 09 |
| 92 | .9914 | .0925 | .9883 | .1078 | .9847 | .1232 | .9805 | .1383 | .9759 | .1533 | 08 |
| 93 | .9914 | .0926 | .9883 | .1080 | .9847 | .1233 | .9805 | .1384 | .9759 | .1535 | 07 |
| 94 | .9913 | .0928 | .9883 | .1081 | .9846 | .1235 | .9804 | .1386 | .9758 | .1536 | 06 |
| 95 | .9913 | .0929 | .9882 | .1083 | .9846 | .1236 | .9804 | .1387 | .9758 | .1538 | 05 |
| 96 | .9913 | .0931 | .9882 | .1085 | .9845 | .1237 | .9803 | .1389 | .9757 | .1539 | 04 |
| 97 | .9912 | .0933 | .9882 | .1086 | .9845 | .1239 | .9803 | .1390 | .9757 | .1541 | 03 |
| 98 | .9912 | .0934 | .9881 | .1088 | .9844 | .1240 | .9802 | .1392 | .9756 | .1542 | 02 |
| 99 | .9912 | .0936 | .9881 | .1089 | .9844 | .1242 | .9802 | .1394 | .9756 | .1543 | 01 |
| 100 | .9911 | .0937 | .9880 | .1091 | .9843 | .1243 | .9801 | .1395 | .9755 | .1545 | 00 |
| | D | h | D | h | D | h | D | h | D | h | 分 |
| | 84 ^G | | 83 ^G | | 82 ^G | | 81 ^G | | 80 ^G | | |

| 分 | 110 ^G | | 111 ^G | | 112 ^G | | 113 ^G | | 114 ^G | | |
|----|------------------|-------|------------------|-------|------------------|-------|------------------|-------|------------------|-------|----|
| | D | h | D | h | D | h | D | h | D | h | |
| 01 | .9755 | .1546 | .9706 | .1695 | .9649 | .1842 | .9589 | .1988 | .9524 | .2130 | 99 |
| 02 | .9754 | .1548 | .9704 | .1697 | .9648 | .1844 | .9588 | .1989 | .9523 | .2132 | 98 |
| 03 | .9754 | .1550 | .9704 | .1698 | .9648 | .1845 | .9588 | .1990 | .9523 | .2133 | 97 |
| 04 | .9753 | .1551 | .9703 | .1700 | .9647 | .1846 | .9587 | .1991 | .9522 | .2135 | 96 |
| 05 | .9753 | .1553 | .9703 | .1701 | .9647 | .1848 | .9587 | .1993 | .9521 | .2137 | 95 |
| 06 | .9752 | .1554 | .9702 | .1703 | .9646 | .1849 | .9586 | .1995 | .9520 | .2138 | 94 |
| 07 | .9752 | .1555 | .9702 | .1704 | .9646 | .1851 | .9586 | .1996 | .9519 | .2139 | 93 |
| 08 | .9751 | .1557 | .9701 | .1705 | .9645 | .1853 | .9585 | .1997 | .9518 | .2140 | 92 |
| 09 | .9751 | .1558 | .9701 | .1707 | .9644 | .1854 | .9584 | .1999 | .9518 | .2142 | 91 |
| 10 | .9750 | .1560 | .9700 | .1708 | .9643 | .1855 | .9583 | .2000 | .9517 | .2143 | 90 |
| 11 | .9750 | .1562 | .9700 | .1710 | .9643 | .1857 | .9583 | .2002 | .9517 | .2144 | 89 |
| 12 | .9749 | .1563 | .9699 | .1712 | .9642 | .1858 | .9582 | .2003 | .9516 | .2146 | 88 |
| 13 | .9749 | .1565 | .9699 | .1713 | .9642 | .1860 | .9582 | .2004 | .9516 | .2147 | 87 |
| 14 | .9748 | .1566 | .9698 | .1714 | .9641 | .1861 | .9581 | .2006 | .9515 | .2148 | 86 |
| 15 | .9748 | .1567 | .9698 | .1716 | .9640 | .1862 | .9581 | .2008 | .9515 | .2150 | 85 |
| 16 | .9747 | .1569 | .9697 | .1717 | .9639 | .1864 | .9580 | .2009 | .9514 | .2152 | 84 |
| 17 | .9747 | .1570 | .9697 | .1719 | .9638 | .1865 | .9579 | .2010 | .9514 | .2153 | 83 |
| 18 | .9746 | .1572 | .9696 | .1720 | .9637 | .1867 | .9578 | .2011 | .9513 | .2154 | 82 |
| 19 | .9746 | .1573 | .9695 | .1722 | .9636 | .1869 | .9577 | .2013 | .9512 | .2156 | 81 |
| 20 | .9745 | .1575 | .9694 | .1724 | .9635 | .1870 | .9576 | .2015 | .9511 | .2157 | 80 |
| 21 | .9745 | .1576 | .9694 | .1725 | .9635 | .1872 | .9576 | .2016 | .9511 | .2159 | 79 |
| 22 | .9744 | .1578 | .9693 | .1726 | .9634 | .1873 | .9575 | .2017 | .9510 | .2160 | 78 |
| 23 | .9744 | .1580 | .9693 | .1728 | .9634 | .1874 | .9575 | .2019 | .9510 | .2161 | 77 |
| 24 | .9743 | .1581 | .9692 | .1729 | .9633 | .1876 | .9574 | .2020 | .9509 | .2163 | 76 |
| 25 | .9743 | .1582 | .9692 | .1731 | .9633 | .1877 | .9574 | .2022 | .9509 | .2165 | 75 |
| 26 | .9742 | .1584 | .9691 | .1732 | .9632 | .1879 | .9573 | .2024 | .9508 | .2166 | 74 |
| 27 | .9742 | .1585 | .9691 | .1734 | .9632 | .1880 | .9573 | .2025 | .9507 | .2167 | 73 |
| 28 | .9741 | .1587 | .9690 | .1735 | .9631 | .1881 | .9572 | .2026 | .9506 | .2168 | 72 |
| 29 | .9741 | .1589 | .9689 | .1736 | .9631 | .1883 | .9571 | .2028 | .9505 | .2170 | 71 |
| 30 | .9740 | .1590 | .9688 | .1738 | .9630 | .1884 | .9570 | .2029 | .9504 | .2172 | 70 |
| 31 | .9740 | .1592 | .9688 | .1740 | .9630 | .1886 | .9570 | .2031 | .9504 | .2173 | 69 |
| 32 | .9739 | .1593 | .9687 | .1741 | .9629 | .1887 | .9569 | .2032 | .9503 | .2174 | 68 |
| 33 | .9739 | .1594 | .9687 | .1743 | .9629 | .1888 | .9569 | .2033 | .9503 | .2176 | 67 |
| 34 | .9738 | .1596 | .9686 | .1744 | .9628 | .1890 | .9568 | .2035 | .9502 | .2177 | 66 |
| 35 | .9738 | .1597 | .9686 | .1745 | .9628 | .1892 | .9568 | .2036 | .9502 | .2178 | 65 |
| 36 | .9737 | .1599 | .9685 | .1747 | .9627 | .1893 | .9567 | .2038 | .9501 | .2180 | 64 |
| 37 | .9737 | .1600 | .9685 | .1748 | .9627 | .1895 | .9566 | .2039 | .9500 | .2181 | 63 |
| 38 | .9736 | .1602 | .9684 | .1750 | .9626 | .1897 | .9565 | .2040 | .9499 | .2183 | 62 |
| 39 | .9736 | .1604 | .9684 | .1751 | .9626 | .1898 | .9564 | .2042 | .9498 | .2185 | 61 |
| 40 | .9735 | .1605 | .9683 | .1753 | .9625 | .1899 | .9563 | .2044 | .9497 | .2186 | 60 |
| 41 | .9735 | .1606 | .9683 | .1754 | .9625 | .1900 | .9563 | .2045 | .9497 | .2187 | 59 |
| 42 | .9734 | .1608 | .9682 | .1755 | .9624 | .1902 | .9562 | .2046 | .9496 | .2189 | 58 |
| 43 | .9734 | .1609 | .9682 | .1757 | .9624 | .1904 | .9562 | .2047 | .9496 | .2190 | 57 |
| 44 | .9733 | .1611 | .9681 | .1759 | .9623 | .1905 | .9561 | .2049 | .9495 | .2191 | 56 |
| 45 | .9733 | .1612 | .9681 | .1760 | .9623 | .1906 | .9561 | .2051 | .9495 | .2193 | 55 |
| 46 | .9732 | .1614 | .9680 | .1762 | .9622 | .1908 | .9560 | .2052 | .9494 | .2194 | 54 |
| 47 | .9732 | .1615 | .9680 | .1763 | .9622 | .1909 | .9560 | .2053 | .9493 | .2195 | 53 |
| 48 | .9731 | .1616 | .9679 | .1764 | .9621 | .1911 | .9559 | .2055 | .9492 | .2197 | 52 |
| 49 | .9731 | .1618 | .9678 | .1766 | .9620 | .1912 | .9558 | .2056 | .9491 | .2198 | 51 |
| 50 | .9730 | .1619 | .9677 | .1767 | .9619 | .1913 | .9557 | .2058 | .9490 | .2200 | 50 |

| D | h | D | h | D | h | D | h | D | h | 分 |
|-----------------|---|-----------------|---|-----------------|---|-----------------|---|-----------------|---|---|
| 89 ^G | | 88 ^G | | 87 ^G | | 86 ^G | | 85 ^G | | |

| 分 | 110 ^G | | 111 ^G | | 112 ^G | | 113 ^G | | 114 ^G | | |
|-----|------------------|-------|------------------|-------|------------------|-------|------------------|-------|------------------|-------|----|
| | D | h | D | h | D | h | D | h | D | h | |
| 51 | .9730 | .1621 | .9677 | .1769 | .9619 | .1915 | .9557 | .2059 | .9490 | .2201 | 49 |
| 52 | .9729 | .1623 | .9676 | .1771 | .9618 | .1916 | .9556 | .2060 | .9489 | .2202 | 48 |
| 53 | .9729 | .1624 | .9676 | .1772 | .9618 | .1918 | .9556 | .2062 | .9489 | .2204 | 47 |
| 54 | .9728 | .1626 | .9675 | .1773 | .9617 | .1920 | .9555 | .2064 | .9488 | .2205 | 46 |
| 55 | .9728 | .1627 | .9675 | .1774 | .9617 | .1921 | .9555 | .2065 | .9488 | .2207 | 45 |
| 56 | .9727 | .1628 | .9674 | .1776 | .9616 | .1922 | .9554 | .2066 | .9487 | .2208 | 44 |
| 57 | .9727 | .1630 | .9674 | .1778 | .9616 | .1924 | .9554 | .2067 | .9486 | .2209 | 43 |
| 58 | .9726 | .1631 | .9673 | .1779 | .9615 | .1925 | .9553 | .2069 | .9485 | .2211 | 42 |
| 59 | .9726 | .1633 | .9673 | .1781 | .9614 | .1927 | .9552 | .2071 | .9484 | .2213 | 41 |
| 60 | .9725 | .1635 | .9672 | .1783 | .9613 | .1928 | .9551 | .2072 | .9483 | .2214 | 40 |
| 61 | .9725 | .1636 | .9672 | .1784 | .9613 | .1929 | .9551 | .2073 | .9483 | .2215 | 39 |
| 62 | .9724 | .1638 | .9671 | .1785 | .9612 | .1931 | .9550 | .2075 | .9482 | .2217 | 38 |
| 63 | .9724 | .1639 | .9671 | .1786 | .9612 | .1932 | .9550 | .2076 | .9482 | .2218 | 37 |
| 64 | .9723 | .1640 | .9670 | .1788 | .9611 | .1934 | .9549 | .2078 | .9481 | .2219 | 36 |
| 65 | .9723 | .1642 | .9670 | .1790 | .9611 | .1935 | .9549 | .2079 | .9481 | .2221 | 35 |
| 66 | .9722 | .1643 | .9669 | .1791 | .9610 | .1936 | .9548 | .2080 | .9480 | .2222 | 34 |
| 67 | .9722 | .1645 | .9668 | .1792 | .9610 | .1938 | .9547 | .2082 | .9479 | .2224 | 33 |
| 68 | .9721 | .1647 | .9668 | .1794 | .9609 | .1940 | .9546 | .2084 | .9478 | .2225 | 32 |
| 69 | .9721 | .1648 | .9667 | .1795 | .9608 | .1941 | .9545 | .2085 | .9477 | .2226 | 31 |
| 70 | .9720 | .1649 | .9666 | .1797 | .9607 | .1943 | .9544 | .2086 | .9476 | .2228 | 30 |
| 71 | .9720 | .1650 | .9666 | .1798 | .9607 | .1944 | .9544 | .2087 | .9476 | .2230 | 29 |
| 72 | .9719 | .1652 | .9665 | .1800 | .9606 | .1945 | .9543 | .2089 | .9475 | .2231 | 28 |
| 73 | .9719 | .1654 | .9665 | .1801 | .9606 | .1947 | .9543 | .2091 | .9475 | .2232 | 27 |
| 74 | .9718 | .1655 | .9664 | .1802 | .9605 | .1948 | .9542 | .2092 | .9474 | .2234 | 26 |
| 75 | .9718 | .1657 | .9664 | .1804 | .9605 | .1950 | .9542 | .2093 | .9474 | .2235 | 25 |
| 76 | .9717 | .1658 | .9663 | .1806 | .9604 | .1952 | .9541 | .2095 | .9473 | .2236 | 24 |
| 77 | .9717 | .1660 | .9663 | .1807 | .9604 | .1953 | .9540 | .2096 | .9472 | .2238 | 23 |
| 78 | .9716 | .1661 | .9662 | .1809 | .9603 | .1954 | .9539 | .2098 | .9471 | .2239 | 22 |
| 79 | .9716 | .1662 | .9661 | .1810 | .9602 | .1956 | .9538 | .2099 | .9470 | .2241 | 21 |
| 80 | .9715 | .1664 | .9660 | .1811 | .9601 | .1957 | .9537 | .2100 | .9469 | .2242 | 20 |
| 81 | .9715 | .1666 | .9660 | .1813 | .9601 | .1959 | .9537 | .2102 | .9469 | .2243 | 19 |
| 82 | .9714 | .1667 | .9659 | .1814 | .9600 | .1960 | .9536 | .2104 | .9468 | .2245 | 18 |
| 83 | .9714 | .1669 | .9659 | .1816 | .9600 | .1961 | .9536 | .2105 | .9468 | .2247 | 17 |
| 84 | .9713 | .1670 | .9658 | .1818 | .9599 | .1963 | .9535 | .2106 | .9467 | .2248 | 16 |
| 85 | .9713 | .1672 | .9658 | .1819 | .9599 | .1964 | .9535 | .2108 | .9467 | .2249 | 15 |
| 86 | .9712 | .1673 | .9657 | .1820 | .9598 | .1965 | .9534 | .2109 | .9466 | .2251 | 14 |
| 87 | .9712 | .1674 | .9657 | .1821 | .9598 | .1967 | .9534 | .2111 | .9465 | .2252 | 13 |
| 88 | .9711 | .1676 | .9656 | .1823 | .9597 | .1968 | .9533 | .2112 | .9464 | .2253 | 12 |
| 89 | .9711 | .1677 | .9656 | .1825 | .9596 | .1970 | .9532 | .2113 | .9463 | .2255 | 11 |
| 90 | .9710 | .1679 | .9655 | .1826 | .9595 | .1972 | .9531 | .2115 | .9462 | .2256 | 10 |
| 91 | .9710 | .1681 | .9655 | .1828 | .9595 | .1973 | .9531 | .2116 | .9462 | .2257 | 09 |
| 92 | .9709 | .1682 | .9654 | .1829 | .9594 | .1974 | .9530 | .2117 | .9461 | .2259 | 08 |
| 93 | .9709 | .1684 | .9654 | .1830 | .9594 | .1975 | .9530 | .2119 | .9461 | .2260 | 07 |
| 94 | .9708 | .1685 | .9653 | .1832 | .9593 | .1977 | .9529 | .2120 | .9460 | .2262 | 06 |
| 95 | .9708 | .1686 | .9653 | .1833 | .9593 | .1979 | .9529 | .2122 | .9460 | .2263 | 05 |
| 96 | .9707 | .1688 | .9652 | .1835 | .9592 | .1980 | .9528 | .2124 | .9459 | .2264 | 04 |
| 97 | .9707 | .1690 | .9652 | .1837 | .9592 | .1982 | .9527 | .2125 | .9458 | .2266 | 03 |
| 98 | .9706 | .1691 | .9651 | .1838 | .9591 | .1983 | .9526 | .2126 | .9457 | .2267 | 02 |
| 99 | .9706 | .1693 | .9650 | .1839 | .9590 | .1984 | .9525 | .2128 | .9456 | .2268 | 01 |
| 100 | .9705 | .1694 | .9649 | .1841 | .9589 | .1986 | .9524 | .2129 | .9455 | .2270 | 00 |
| | D | h | D | h | D | h | D | h | D | h | 分 |
| | 89 ^G | | 88 ^G | | 87 ^G | | 86 ^G | | 85 ^G | | |

| 分 | 115 ^G | | 115 ^G | | 117 ^G | | 118 ^G | | 119 ^G | | 分 |
|----|------------------|-------|------------------|-------|------------------|-------|------------------|-------|------------------|-------|----|
| | D | h | D | h | D | h | D | h | D | h | |
| 01 | .9455 | .2271 | .9382 | .2410 | .9304 | .2547 | .9222 | .2681 | .9135 | .2812 | 99 |
| 02 | .9454 | .2273 | .9381 | .2412 | .9303 | .2548 | .9221 | .2682 | .9134 | .2813 | 98 |
| 03 | .9454 | .2274 | .9381 | .2413 | .9303 | .2549 | .9220 | .2683 | .9134 | .2814 | 97 |
| 04 | .9453 | .2275 | .9380 | .2414 | .9302 | .2550 | .9219 | .2684 | .9133 | .2815 | 96 |
| 05 | .9453 | .2277 | .9379 | .2416 | .9301 | .2552 | .9218 | .2686 | .9132 | .2817 | 95 |
| 06 | .9452 | .2279 | .9378 | .2417 | .9300 | .2554 | .9217 | .2687 | .9131 | .2818 | 94 |
| 07 | .9451 | .2279 | .9377 | .2418 | .9299 | .2555 | .9216 | .2688 | .9130 | .2819 | 93 |
| 08 | .9450 | .2281 | .9376 | .2420 | .9298 | .2556 | .9215 | .2690 | .9129 | .2821 | 92 |
| 09 | .9449 | .2283 | .9375 | .2421 | .9297 | .2558 | .9214 | .2691 | .9128 | .2822 | 91 |
| 10 | .9448 | .2284 | .9374 | .2422 | .9296 | .2559 | .9213 | .2692 | .9127 | .2824 | 90 |
| 11 | .9448 | .2285 | .9374 | .2424 | .9296 | .2560 | .9213 | .2694 | .9127 | .2825 | 89 |
| 12 | .9447 | .2287 | .9373 | .2425 | .9295 | .2561 | .9212 | .2695 | .9126 | .2826 | 88 |
| 13 | .9447 | .2288 | .9373 | .2426 | .9295 | .2563 | .9212 | .2696 | .9125 | .2827 | 87 |
| 14 | .9446 | .2289 | .9372 | .2428 | .9294 | .2564 | .9211 | .2698 | .9124 | .2828 | 86 |
| 15 | .9446 | .2291 | .9371 | .2430 | .9293 | .2566 | .9210 | .2699 | .9123 | .2830 | 85 |
| 16 | .9445 | .2292 | .9370 | .2431 | .9292 | .2567 | .9209 | .2701 | .9122 | .2831 | 84 |
| 17 | .9444 | .2294 | .9369 | .2432 | .9291 | .2568 | .9208 | .2702 | .9121 | .2832 | 83 |
| 18 | .9443 | .2295 | .9368 | .2433 | .9290 | .2569 | .9207 | .2703 | .9120 | .2833 | 82 |
| 19 | .9442 | .2296 | .9367 | .2434 | .9289 | .2571 | .9206 | .2705 | .9119 | .2835 | 81 |
| 20 | .9441 | .2298 | .9366 | .2436 | .9288 | .2572 | .9205 | .2706 | .9118 | .2837 | 80 |
| 21 | .9441 | .2300 | .9366 | .2438 | .9288 | .2573 | .9205 | .2707 | .9118 | .2838 | 79 |
| 22 | .9440 | .2301 | .9365 | .2439 | .9287 | .2575 | .9204 | .2708 | .9117 | .2839 | 78 |
| 23 | .9440 | .2302 | .9365 | .2440 | .9287 | .2577 | .9203 | .2709 | .9116 | .2840 | 77 |
| 24 | .9439 | .2304 | .9364 | .2442 | .9286 | .2578 | .9202 | .2711 | .9115 | .2842 | 76 |
| 25 | .9438 | .2305 | .9364 | .2443 | .9285 | .2579 | .9201 | .2712 | .9114 | .2843 | 75 |
| 26 | .9437 | .2306 | .9363 | .2444 | .9284 | .2581 | .9200 | .2714 | .9113 | .2844 | 74 |
| 27 | .9436 | .2308 | .9362 | .2446 | .9283 | .2582 | .9199 | .2715 | .9112 | .2845 | 73 |
| 28 | .9435 | .2309 | .9361 | .2447 | .9282 | .2583 | .9198 | .2716 | .9111 | .2847 | 72 |
| 29 | .9434 | .2310 | .9360 | .2448 | .9281 | .2584 | .9197 | .2718 | .9110 | .2848 | 71 |
| 30 | .9433 | .2312 | .9359 | .2450 | .9280 | .2585 | .9196 | .2719 | .9109 | .2849 | 70 |
| 31 | .9433 | .2313 | .9359 | .2451 | .9280 | .2587 | .9196 | .2720 | .9109 | .2851 | 69 |
| 32 | .9432 | .2315 | .9358 | .2452 | .9279 | .2589 | .9195 | .2721 | .9108 | .2852 | 68 |
| 33 | .9431 | .2316 | .9358 | .2454 | .9278 | .2590 | .9195 | .2723 | .9107 | .2853 | 67 |
| 34 | .9431 | .2317 | .9357 | .2456 | .9277 | .2591 | .9194 | .2724 | .9106 | .2854 | 66 |
| 35 | .9430 | .2319 | .9356 | .2457 | .9276 | .2592 | .9193 | .2725 | .9105 | .2856 | 65 |
| 36 | .9430 | .2320 | .9355 | .2458 | .9275 | .2594 | .9192 | .2727 | .9104 | .2857 | 64 |
| 37 | .9429 | .2321 | .9354 | .2460 | .9274 | .2595 | .9191 | .2728 | .9103 | .2858 | 63 |
| 38 | .9428 | .2323 | .9353 | .2461 | .9273 | .2596 | .9190 | .2729 | .9102 | .2860 | 62 |
| 39 | .9427 | .2324 | .9352 | .2462 | .9272 | .2598 | .9189 | .2731 | .9101 | .2861 | 61 |
| 40 | .9426 | .2325 | .9351 | .2464 | .9271 | .2599 | .9188 | .2732 | .9100 | .2862 | 60 |
| 41 | .9426 | .2327 | .9351 | .2465 | .9271 | .2601 | .9188 | .2733 | .9100 | .2863 | 59 |
| 42 | .9425 | .2329 | .9350 | .2466 | .9270 | .2602 | .9187 | .2735 | .9099 | .2865 | 58 |
| 43 | .9425 | .2330 | .9350 | .2468 | .9270 | .2603 | .9186 | .2736 | .9098 | .2866 | 57 |
| 44 | .9424 | .2331 | .9349 | .2469 | .9269 | .2604 | .9185 | .2737 | .9097 | .2867 | 56 |
| 45 | .9424 | .2333 | .9348 | .2470 | .9268 | .2606 | .9184 | .2738 | .9096 | .2869 | 55 |
| 46 | .9423 | .2334 | .9347 | .2472 | .9267 | .2607 | .9183 | .2740 | .9095 | .2870 | 54 |
| 47 | .9422 | .2335 | .9346 | .2473 | .9266 | .2608 | .9182 | .2742 | .9094 | .2871 | 53 |
| 48 | .9421 | .2337 | .9345 | .2475 | .9265 | .2610 | .9181 | .2743 | .9093 | .2872 | 52 |
| 49 | .9420 | .2338 | .9344 | .2476 | .9264 | .2612 | .9180 | .2744 | .9092 | .2874 | 51 |
| 50 | .9419 | .2340 | .9343 | .2477 | .9263 | .2613 | .9179 | .2745 | .9091 | .2875 | 50 |
| | D | h | D | h | D | h | D | h | D | h | |
| | 84 ^G | | 83 ^G | | 82 ^G | | 81 ^G | | 80 ^G | | 分 |

| 分 | 115 ^G | | 116 ^G | | 117 ^G | | 118 ^G | | 119 ^G | | 分 |
|-----|------------------|-------|------------------|-------|------------------|-------|------------------|-------|------------------|-------|----|
| | D | h | D | h | D | h | D | h | D | h | |
| 51 | .9419 | .2341 | .9343 | .2478 | .9263 | .2614 | .9179 | .2746 | .9091 | .2876 | 49 |
| 52 | .9418 | .2342 | .9342 | .2480 | .9262 | .2616 | .9178 | .2748 | .9090 | .2878 | 48 |
| 53 | .9418 | .2344 | .9342 | .2481 | .9262 | .2617 | .9177 | .2749 | .9089 | .2879 | 47 |
| 54 | .9417 | .2345 | .9341 | .2483 | .9261 | .2618 | .9176 | .2750 | .9088 | .2880 | 46 |
| 55 | .9416 | .2347 | .9340 | .2484 | .9260 | .2619 | .9175 | .2752 | .9087 | .2881 | 45 |
| 56 | .9415 | .2348 | .9339 | .2486 | .9259 | .2620 | .9174 | .2753 | .9086 | .2883 | 44 |
| 57 | .9414 | .2349 | .9338 | .2487 | .9258 | .2622 | .9173 | .2755 | .9085 | .2884 | 43 |
| 58 | .9413 | .2350 | .9337 | .2488 | .9257 | .2623 | .9172 | .2756 | .9084 | .2885 | 42 |
| 59 | .9412 | .2352 | .9336 | .2490 | .9256 | .2625 | .9171 | .2757 | .9083 | .2887 | 41 |
| 60 | .9411 | .2354 | .9335 | .2491 | .9255 | .2626 | .9170 | .2758 | .9082 | .2888 | 40 |
| 61 | .9411 | .2355 | .9335 | .2492 | .9255 | .2627 | .9170 | .2759 | .9082 | .2890 | 39 |
| 62 | .9410 | .2356 | .9334 | .2494 | .9254 | .2629 | .9169 | .2761 | .9081 | .2891 | 38 |
| 63 | .9410 | .2358 | .9334 | .2495 | .9254 | .2630 | .9169 | .2762 | .9080 | .2892 | 37 |
| 64 | .9409 | .2359 | .9333 | .2496 | .9253 | .2631 | .9168 | .2764 | .9079 | .2893 | 36 |
| 65 | .9409 | .2360 | .9332 | .2498 | .9252 | .2633 | .9167 | .2765 | .9078 | .2894 | 35 |
| 66 | .9408 | .2362 | .9331 | .2499 | .9251 | .2634 | .9166 | .2766 | .9077 | .2895 | 34 |
| 67 | .9407 | .2363 | .9330 | .2500 | .9250 | .2635 | .9165 | .2767 | .9076 | .2897 | 33 |
| 68 | .9406 | .2365 | .9329 | .2502 | .9249 | .2637 | .9164 | .2768 | .9075 | .2898 | 32 |
| 69 | .9405 | .2366 | .9328 | .2503 | .9248 | .2638 | .9163 | .2770 | .9074 | .2899 | 31 |
| 70 | .9404 | .2367 | .9327 | .2504 | .9247 | .2639 | .9162 | .2772 | .9073 | .2900 | 30 |
| 71 | .9404 | .2369 | .9327 | .2506 | .9247 | .2641 | .9162 | .2773 | .9072 | .2902 | 29 |
| 72 | .9403 | .2370 | .9326 | .2507 | .9246 | .2642 | .9161 | .2774 | .9071 | .2904 | 28 |
| 73 | .9403 | .2371 | .9326 | .2508 | .9245 | .2643 | .9160 | .2775 | .9070 | .2905 | 27 |
| 74 | .9402 | .2373 | .9325 | .2510 | .9244 | .2644 | .9159 | .2776 | .9069 | .2906 | 26 |
| 75 | .9402 | .2374 | .9325 | .2512 | .9243 | .2646 | .9158 | .2777 | .9068 | .2907 | 25 |
| 76 | .9401 | .2375 | .9324 | .2513 | .9242 | .2648 | .9157 | .2779 | .9067 | .2908 | 24 |
| 77 | .9400 | .2377 | .9323 | .2514 | .9241 | .2649 | .9156 | .2781 | .9066 | .2909 | 23 |
| 78 | .9399 | .2378 | .9322 | .2515 | .9240 | .2650 | .9155 | .2782 | .9065 | .2911 | 22 |
| 79 | .9398 | .2379 | .9321 | .2516 | .9239 | .2652 | .9154 | .2783 | .9064 | .2912 | 21 |
| 80 | .9397 | .2381 | .9320 | .2518 | .9238 | .2653 | .9153 | .2784 | .9063 | .2913 | 20 |
| 81 | .9397 | .2383 | .9320 | .2520 | .9238 | .2654 | .9153 | .2786 | .9063 | .2915 | 19 |
| 82 | .9396 | .2384 | .9319 | .2521 | .9237 | .2656 | .9152 | .2787 | .9062 | .2916 | 18 |
| 83 | .9396 | .2385 | .9319 | .2522 | .9237 | .2657 | .9151 | .2788 | .9061 | .2918 | 17 |
| 84 | .9395 | .2387 | .9318 | .2524 | .9236 | .2658 | .9150 | .2790 | .9060 | .2919 | 16 |
| 85 | .9394 | .2388 | .9317 | .2525 | .9235 | .2659 | .9149 | .2791 | .9059 | .2920 | 15 |
| 86 | .9393 | .2389 | .9316 | .2526 | .9234 | .2660 | .9148 | .2792 | .9058 | .2921 | 14 |
| 87 | .9392 | .2391 | .9315 | .2527 | .9233 | .2662 | .9147 | .2793 | .9057 | .2923 | 13 |
| 88 | .9391 | .2392 | .9314 | .2528 | .9232 | .2663 | .9146 | .2795 | .9056 | .2924 | 12 |
| 89 | .9390 | .2394 | .9313 | .2530 | .9231 | .2665 | .9145 | .2796 | .9055 | .2925 | 11 |
| 90 | .9389 | .2395 | .9312 | .2532 | .9230 | .2666 | .9144 | .2797 | .9054 | .2926 | 10 |
| 91 | .9389 | .2396 | .9312 | .2534 | .9230 | .2667 | .9144 | .2799 | .9054 | .2927 | 09 |
| 92 | .9388 | .2398 | .9311 | .2535 | .9229 | .2669 | .9143 | .2800 | .9053 | .2928 | 08 |
| 93 | .9388 | .2399 | .9311 | .2536 | .9229 | .2670 | .9142 | .2801 | .9052 | .2930 | 07 |
| 94 | .9387 | .2401 | .9310 | .2538 | .9228 | .2671 | .9141 | .2803 | .9051 | .2932 | 06 |
| 95 | .9387 | .2402 | .9309 | .2539 | .9227 | .2673 | .9140 | .2804 | .9050 | .2933 | 05 |
| 96 | .9386 | .2403 | .9308 | .2540 | .9226 | .2674 | .9139 | .2806 | .9049 | .2934 | 04 |
| 97 | .9385 | .2405 | .9307 | .2541 | .9225 | .2675 | .9138 | .2807 | .9048 | .2935 | 03 |
| 98 | .9384 | .2406 | .9306 | .2542 | .9224 | .2677 | .9137 | .2808 | .9047 | .2937 | 02 |
| 99 | .9383 | .2407 | .9305 | .2544 | .9223 | .2678 | .9136 | .2809 | .9046 | .2938 | 01 |
| 100 | .9382 | .2409 | .9304 | .2546 | .9222 | .2679 | .9135 | .2810 | .9045 | .2939 | 00 |
| | D | h | D | h | D | h | D | h | D | h | 分 |
| | 84 ^G | | 83 ^G | | 82 ^G | | 81 ^G | | 80 ^G | | |

| 分 | 120 ^G | | 121 ^G | | 122 ^G | | 123 ^G | | 124 ^G | | |
|----|------------------|-------|------------------|-------|------------------|-------|------------------|-------|------------------|-------|----|
| | D | h | D | h | D | h | D | h | D | h | |
| 01 | .9044 | .2940 | .8950 | .3066 | .8852 | .3188 | .8750 | .3308 | .8644 | .3424 | 99 |
| 02 | .9043 | .2941 | .8949 | .3067 | .8851 | .3190 | .8749 | .3309 | .8643 | .3425 | 98 |
| 03 | .9042 | .2942 | .8948 | .3068 | .8850 | .3191 | .8748 | .3310 | .8642 | .3426 | 97 |
| 04 | .9041 | .2944 | .8947 | .3069 | .8849 | .3192 | .8747 | .3311 | .8641 | .3427 | 96 |
| 05 | .9040 | .2945 | .8946 | .3071 | .8848 | .3193 | .8746 | .3313 | .8640 | .3428 | 95 |
| 06 | .9039 | .2947 | .8945 | .3072 | .8847 | .3195 | .8745 | .3314 | .8639 | .3429 | 94 |
| 07 | .9038 | .2948 | .8944 | .3073 | .8846 | .3196 | .8744 | .3315 | .8638 | .3431 | 93 |
| 08 | .9037 | .2949 | .8943 | .3075 | .8845 | .3197 | .8743 | .3316 | .8637 | .3432 | 92 |
| 09 | .9036 | .2951 | .8942 | .3076 | .8844 | .3198 | .8742 | .3317 | .8636 | .3433 | 91 |
| 10 | .9035 | .2952 | .8941 | .3077 | .8843 | .3199 | .8740 | .3318 | .8634 | .3434 | 90 |
| 11 | .9034 | .2953 | .8940 | .3078 | .8842 | .3201 | .8739 | .3319 | .8633 | .3435 | 89 |
| 12 | .9033 | .2954 | .8939 | .3079 | .8841 | .3202 | .8738 | .3320 | .8632 | .3436 | 88 |
| 13 | .9032 | .2956 | .8938 | .3081 | .8840 | .3203 | .8737 | .3322 | .8631 | .3438 | 87 |
| 14 | .9031 | .2957 | .8937 | .3082 | .8839 | .3204 | .8736 | .3323 | .8630 | .3439 | 86 |
| 15 | .9030 | .2958 | .8936 | .3083 | .8838 | .3206 | .8735 | .3324 | .8629 | .3440 | 85 |
| 16 | .9029 | .2959 | .8935 | .3084 | .8837 | .3207 | .8734 | .3325 | .8628 | .3441 | 84 |
| 17 | .9028 | .2961 | .8934 | .3086 | .8836 | .3208 | .8733 | .3326 | .8627 | .3442 | 83 |
| 18 | .9027 | .2962 | .8933 | .3087 | .8835 | .3209 | .8732 | .3328 | .8626 | .3443 | 82 |
| 19 | .9026 | .2963 | .8932 | .3088 | .8834 | .3210 | .8731 | .3329 | .8625 | .3444 | 81 |
| 20 | .9026 | .2964 | .8931 | .3089 | .8832 | .3211 | .8730 | .3330 | .8623 | .3446 | 80 |
| 21 | .9025 | .2966 | .8930 | .3091 | .8831 | .3213 | .8729 | .3331 | .8622 | .3447 | 79 |
| 22 | .9025 | .2967 | .8929 | .3092 | .8830 | .3214 | .8728 | .3332 | .8621 | .3448 | 78 |
| 23 | .9024 | .2968 | .8928 | .3093 | .8829 | .3215 | .8727 | .3334 | .8620 | .3449 | 77 |
| 24 | .9024 | .2969 | .8927 | .3094 | .8828 | .3216 | .8726 | .3335 | .8619 | .3450 | 76 |
| 25 | .9023 | .2970 | .8926 | .3096 | .8827 | .3217 | .8725 | .3326 | .8618 | .3452 | 75 |
| 26 | .9022 | .2971 | .8925 | .3097 | .8826 | .3218 | .8724 | .3337 | .8617 | .3453 | 74 |
| 27 | .9021 | .2972 | .8924 | .3098 | .8825 | .3219 | .8723 | .3338 | .8616 | .3454 | 73 |
| 28 | .9020 | .2973 | .8923 | .3099 | .8824 | .3221 | .8722 | .3339 | .8615 | .3455 | 72 |
| 29 | .9019 | .2975 | .8922 | .3101 | .8823 | .3222 | .8721 | .3341 | .8614 | .3456 | 71 |
| 30 | .9018 | .2977 | .8921 | .3102 | .8822 | .3223 | .8719 | .3342 | .8612 | .3457 | 70 |
| 31 | .9017 | .2978 | .8920 | .3103 | .8821 | .3224 | .8718 | .3343 | .8611 | .3458 | 69 |
| 32 | .9016 | .2979 | .8919 | .3104 | .8820 | .3225 | .8717 | .3344 | .8610 | .3459 | 68 |
| 33 | .9015 | .2981 | .8918 | .3106 | .8819 | .3227 | .8716 | .3345 | .8609 | .3460 | 67 |
| 34 | .9014 | .2982 | .8917 | .3107 | .8818 | .3228 | .8715 | .3347 | .8608 | .3461 | 66 |
| 35 | .9013 | .2983 | .8916 | .3108 | .8817 | .3229 | .8714 | .3348 | .8607 | .3463 | 65 |
| 36 | .9012 | .2984 | .8915 | .3109 | .8816 | .3230 | .8713 | .3349 | .8606 | .3464 | 64 |
| 37 | .9011 | .2985 | .8914 | .3110 | .8815 | .3232 | .8712 | .3350 | .8605 | .3465 | 63 |
| 38 | .9010 | .2986 | .8913 | .3112 | .8814 | .3233 | .8711 | .3351 | .8604 | .3466 | 62 |
| 39 | .9009 | .2987 | .8913 | .3113 | .8813 | .3234 | .8710 | .3352 | .8603 | .3467 | 61 |
| 40 | .9008 | .2988 | .8912 | .3114 | .8812 | .3235 | .8709 | .3354 | .8602 | .3468 | 60 |
| 41 | .9007 | .2991 | .8911 | .3115 | .8811 | .3236 | .8708 | .3355 | .8601 | .3469 | 59 |
| 42 | .9006 | .2992 | .8910 | .3117 | .8810 | .3238 | .8707 | .3356 | .8600 | .3471 | 58 |
| 43 | .9005 | .2993 | .8909 | .3118 | .8809 | .3239 | .8706 | .3357 | .8599 | .3472 | 57 |
| 44 | .9004 | .2995 | .8908 | .3119 | .8808 | .3240 | .8705 | .3358 | .8598 | .3473 | 56 |
| 45 | .9003 | .2996 | .8907 | .3120 | .8807 | .3241 | .8704 | .3359 | .8597 | .3474 | 55 |
| 46 | .9002 | .2997 | .8906 | .3122 | .8806 | .3242 | .8703 | .3360 | .8596 | .3475 | 54 |
| 47 | .9001 | .2998 | .8905 | .3123 | .8805 | .3244 | .8702 | .3361 | .8595 | .3476 | 53 |
| 48 | .9000 | .3000 | .8904 | .3124 | .8804 | .3245 | .8701 | .3363 | .8594 | .3478 | 52 |
| 49 | .8999 | .3001 | .8903 | .3125 | .8803 | .3246 | .8700 | .3364 | .8593 | .3479 | 51 |
| 50 | .8998 | .3002 | .8902 | .3126 | .8802 | .3247 | .8698 | .3365 | .8591 | .3480 | 50 |
| | D | h | D | h | D | h | D | h | D | h | 分 |
| | 79 ^G | | 79 ^G | | 77 ^G | | 76 ^G | | 75 ^G | | |

| 分 | 120 ^G | | 121 ^G | | 122 ^G | | 123 ^G | | 124 ^G | | 分 |
|-----|------------------|------|------------------|------|------------------|------|------------------|------|------------------|------|----|
| | D | h | D | h | D | h | D | h | D | h | |
| 51 | .8998 | 3003 | .8901 | 3128 | .8801 | 3248 | .8697 | 3366 | .8590 | 3481 | 49 |
| 52 | .8997 | 3005 | .8900 | 3129 | .8800 | 3250 | .8696 | 3367 | .8589 | 3482 | 48 |
| 53 | .8996 | 3006 | .8899 | 3130 | .8799 | 3251 | .8695 | 3368 | .8588 | 3483 | 47 |
| 54 | .8995 | 3007 | .8898 | 3131 | .8798 | 3252 | .8694 | 3370 | .8587 | 3484 | 46 |
| 55 | .8994 | 3008 | .8897 | 3133 | .8797 | 3253 | .8693 | 3371 | .8586 | 3485 | 45 |
| 56 | .8993 | 3010 | .8896 | 3134 | .8796 | 3255 | .8692 | 3372 | .8585 | 3486 | 44 |
| 57 | .8992 | 3011 | .8895 | 3135 | .8795 | 3256 | .8691 | 3373 | .8584 | 3487 | 43 |
| 58 | .8991 | 3012 | .8894 | 3136 | .8794 | 3257 | .8690 | 3374 | .8583 | 3489 | 42 |
| 59 | .8990 | 3013 | .8893 | 3137 | .8793 | 3258 | .8689 | 3376 | .8582 | 3490 | 41 |
| 60 | .8989 | 3015 | .8892 | 3138 | .8792 | 3259 | .8688 | 3377 | .8580 | 3491 | 40 |
| 61 | .8988 | 3016 | .8891 | 3139 | .8791 | 3261 | .8687 | 3378 | .8579 | 3492 | 39 |
| 62 | .8987 | 3017 | .8890 | 3141 | .8790 | 3262 | .8686 | 3379 | .8578 | 3493 | 38 |
| 63 | .8986 | 3018 | .8889 | 3143 | .8789 | 3263 | .8685 | 3380 | .8577 | 3494 | 37 |
| 64 | .8985 | 3020 | .8888 | 3143 | .8788 | 3264 | .8684 | 3381 | .8576 | 3495 | 36 |
| 65 | .8984 | 3021 | .8887 | 3144 | .8787 | 3265 | .8683 | 3383 | .8575 | 3496 | 35 |
| 66 | .8983 | 3022 | .8886 | 3146 | .8786 | 3267 | .8682 | 3384 | .8574 | 3498 | 34 |
| 67 | .8982 | 3023 | .8885 | 3147 | .8785 | 3268 | .8681 | 3385 | .8573 | 3499 | 33 |
| 68 | .8981 | 3025 | .8884 | 3148 | .8784 | 3269 | .8680 | 3386 | .8572 | 3500 | 32 |
| 69 | .8980 | 3026 | .8883 | 3149 | .8783 | 3270 | .8679 | 3387 | .8571 | 3501 | 31 |
| 70 | .8979 | 3027 | .8882 | 3150 | .8781 | 3271 | .8677 | 3388 | .8569 | 3502 | 30 |
| 71 | .8979 | 3029 | .8881 | 3152 | .8780 | 3273 | .8676 | 3389 | .8568 | 3503 | 29 |
| 72 | .8978 | 3030 | .8880 | 3153 | .8779 | 3274 | .8675 | 3390 | .8567 | 3504 | 28 |
| 73 | .8977 | 3031 | .8879 | 3154 | .8778 | 3275 | .8674 | 3392 | .8566 | 3505 | 27 |
| 74 | .8976 | 3032 | .8878 | 3155 | .8777 | 3276 | .8673 | 3393 | .8565 | 3506 | 26 |
| 75 | .8975 | 3034 | .8877 | 3157 | .8776 | 3277 | .8672 | 3394 | .8564 | 3507 | 25 |
| 76 | .8974 | 3035 | .8876 | 3158 | .8775 | 3278 | .8671 | 3396 | .8563 | 3509 | 24 |
| 77 | .8973 | 3036 | .8875 | 3159 | .8774 | 3279 | .8670 | 3397 | .8562 | 3510 | 23 |
| 78 | .8972 | 3037 | .8874 | 3160 | .8773 | 3280 | .8669 | 3398 | .8561 | 3511 | 22 |
| 79 | .8971 | 3038 | .8873 | 3162 | .8772 | 3281 | .8668 | 3399 | .8560 | 3512 | 21 |
| 80 | .8970 | 3040 | .8872 | 3163 | .8771 | 3283 | .8666 | 3400 | .8558 | 3513 | 20 |
| 81 | .8969 | 3041 | .8872 | 3165 | .8770 | 3284 | .8665 | 3401 | .8557 | 3514 | 19 |
| 82 | .8968 | 3042 | .8871 | 3166 | .8769 | 3285 | .8664 | 3402 | .8556 | 3515 | 18 |
| 83 | .8967 | 3043 | .8870 | 3167 | .8768 | 3286 | .8663 | 3403 | .8555 | 3517 | 17 |
| 84 | .8966 | 3045 | .8869 | 3168 | .8767 | 3288 | .8662 | 3404 | .8554 | 3518 | 16 |
| 85 | .8965 | 3046 | .8868 | 3169 | .8766 | 3289 | .8661 | 3406 | .8553 | 3519 | 15 |
| 86 | .8964 | 3047 | .8867 | 3170 | .8765 | 3290 | .8660 | 3407 | .8552 | 3520 | 14 |
| 87 | .8963 | 3048 | .8866 | 3171 | .8764 | 3291 | .8659 | 3408 | .8551 | 3521 | 13 |
| 88 | .8962 | 3050 | .8865 | 3173 | .8763 | 3292 | .8658 | 3409 | .8550 | 3522 | 12 |
| 89 | .8961 | 3051 | .8864 | 3174 | .8762 | 3294 | .8657 | 3410 | .8549 | 3523 | 11 |
| 90 | .8960 | 3052 | .8863 | 3175 | .8761 | 3295 | .8656 | 3411 | .8547 | 3525 | 10 |
| 91 | .8960 | 3054 | .8862 | 3176 | .8760 | 3296 | .8655 | 3413 | .8546 | 3526 | 09 |
| 92 | .8959 | 3055 | .8861 | 3178 | .8759 | 3297 | .8654 | 3414 | .8545 | 3526 | 08 |
| 93 | .8958 | 3056 | .8860 | 3179 | .8758 | 3298 | .8653 | 3415 | .8544 | 3527 | 07 |
| 94 | .8957 | 3057 | .8859 | 3180 | .8757 | 3300 | .8652 | 3416 | .8543 | 3529 | 06 |
| 95 | .8956 | 3058 | .8858 | 3181 | .8756 | 3301 | .8651 | 3417 | .8542 | 3530 | 05 |
| 96 | .8955 | 3060 | .8857 | 3182 | .8755 | 3302 | .8650 | 3418 | .8541 | 3531 | 04 |
| 97 | .8954 | 3061 | .8856 | 3184 | .8754 | 3303 | .8649 | 3419 | .8540 | 3532 | 03 |
| 98 | .8953 | 3062 | .8855 | 3185 | .8753 | 3304 | .8648 | 3421 | .8539 | 3533 | 02 |
| 99 | .8952 | 3063 | .8854 | 3186 | .8752 | 3306 | .8647 | 3422 | .8538 | 3534 | 01 |
| 100 | .8951 | 3065 | .8853 | 3187 | .8751 | 3307 | .8645 | 3423 | .8536 | 3536 | 00 |
| | D | h | D | h | D | h | D | h | D | h | 分 |
| | 70 ^G | | 70 ^G | | 77 ^G | | 70 ^G | | 70 ^G | | |

| 分 | 125 ^G | | 126 ^G | | 127 ^G | | 128 ^G | | 129 ^G | | |
|----|------------------|-------|------------------|-------|------------------|-------|------------------|-------|------------------|-------|----|
| | D | h | D | h | D | h | D | h | D | h | |
| 01 | .8535 | .3536 | .8422 | .3646 | .8306 | .3751 | .8186 | .3854 | .8064 | .3952 | 99 |
| 02 | .8534 | .3538 | .8421 | .3647 | .8305 | .3753 | .8185 | .3854 | .8063 | .3953 | 98 |
| 03 | .8533 | .3539 | .8420 | .3648 | .8304 | .3754 | .8184 | .3855 | .8062 | .3954 | 97 |
| 04 | .8532 | .3540 | .8419 | .3649 | .8303 | .3755 | .8183 | .3856 | .8061 | .3955 | 96 |
| 05 | .8531 | .3541 | .8418 | .3650 | .8302 | .3756 | .8182 | .3857 | .8060 | .3956 | 95 |
| 06 | .8530 | .3542 | .8417 | .3651 | .8301 | .3757 | .8181 | .3859 | .8059 | .3957 | 94 |
| 07 | .8829 | .3543 | .8416 | .3652 | .8300 | .3758 | .8180 | .3860 | .8058 | .3958 | 93 |
| 08 | .8528 | .3544 | .8415 | .3653 | .8299 | .3759 | .8179 | .3861 | .8056 | .3959 | 92 |
| 09 | .8526 | .3546 | .8413 | .3654 | .8297 | .3760 | .8177 | .3862 | .8054 | .3959 | 91 |
| 10 | .8524 | .3547 | .8411 | .3655 | .8295 | .3761 | .8175 | .3863 | .8052 | .3960 | 90 |
| 11 | .8523 | .3548 | .8410 | .3657 | .8294 | .3762 | .8174 | .3864 | .8051 | .3961 | 89 |
| 12 | .8522 | .3549 | .8409 | .3658 | .8293 | .3763 | .8173 | .3865 | .8050 | .3962 | 98 |
| 13 | .8521 | .3550 | .8408 | .3659 | .8292 | .3764 | .8172 | .3866 | .8049 | .3963 | 87 |
| 14 | .8520 | .3551 | .8407 | .3660 | .8291 | .3765 | .8171 | .3867 | .8048 | .3964 | 86 |
| 15 | .8519 | .3552 | .8406 | .3661 | .8290 | .3766 | .8170 | .3867 | .8047 | .3965 | 85 |
| 16 | .8518 | .3553 | .8405 | .3662 | .8289 | .3767 | .8169 | .3868 | .8046 | .3966 | 84 |
| 17 | .8517 | .3554 | .8404 | .3663 | .8288 | .3768 | .8168 | .3869 | .8045 | .3967 | 83 |
| 18 | .8516 | .3555 | .8403 | .3664 | .8287 | .3769 | .8167 | .3870 | .8044 | .3968 | 82 |
| 19 | .8515 | .3556 | .8402 | .3665 | .8285 | .3770 | .8165 | .3871 | .8042 | .3969 | 81 |
| 20 | .8513 | .3558 | .8400 | .3667 | .8283 | .3771 | .8163 | .3873 | .8040 | .3970 | 80 |
| 21 | .8512 | .3559 | .8399 | .3668 | .8282 | .3772 | .8162 | .3874 | .8039 | .3971 | 79 |
| 22 | .8511 | .3560 | .8398 | .3668 | .8281 | .3774 | .8161 | .3875 | .8038 | .3972 | 78 |
| 23 | .8510 | .3561 | .8397 | .3669 | .8280 | .3775 | .8160 | .3876 | .8037 | .3973 | 77 |
| 24 | .8509 | .3562 | .8396 | .3670 | .8279 | .3776 | .8159 | .3877 | .8036 | .3974 | 76 |
| 25 | .8508 | .3563 | .8395 | .3672 | .8278 | .3777 | .8158 | .3878 | .8035 | .3975 | 75 |
| 26 | .8507 | .3564 | .8394 | .3673 | .8277 | .3777 | .8157 | .3879 | .8034 | .3976 | 74 |
| 27 | .8506 | .3565 | .8393 | .3674 | .8276 | .3778 | .8156 | .3880 | .8033 | .3977 | 73 |
| 28 | .8505 | .3567 | .8392 | .3675 | .8275 | .3779 | .8155 | .3880 | .8031 | .3978 | 72 |
| 29 | .8504 | .3568 | .8391 | .3676 | .8273 | .3780 | .8153 | .3881 | .8029 | .3979 | 71 |
| 30 | .8502 | .3569 | .8390 | .3677 | .8271 | .3781 | .8151 | .3882 | .8027 | .3980 | 70 |
| 31 | .8501 | .3570 | .8389 | .3678 | .8270 | .3783 | .8150 | .3883 | .8026 | .3980 | 69 |
| 32 | .8500 | .3571 | .8388 | .3679 | .8269 | .3784 | .8149 | .3884 | .8025 | .3981 | 68 |
| 33 | .8499 | .3572 | .8387 | .3680 | .8268 | .3785 | .8148 | .3885 | .8024 | .3982 | 67 |
| 34 | .8498 | .3573 | .8386 | .3681 | .8267 | .3786 | .8147 | .3886 | .8023 | .3983 | 66 |
| 35 | .8497 | .3574 | .8385 | .3682 | .8266 | .3787 | .8146 | .3887 | .8022 | .3984 | 65 |
| 36 | .8496 | .3575 | .8384 | .3684 | .8265 | .3788 | .8145 | .3888 | .8021 | .3985 | 64 |
| 37 | .8495 | .3576 | .8383 | .3685 | .8264 | .3789 | .8144 | .3889 | .8020 | .3986 | 63 |
| 38 | .8494 | .3577 | .8381 | .3685 | .8263 | .3790 | .8142 | .3891 | .8019 | .3987 | 62 |
| 39 | .8493 | .3579 | .8379 | .3686 | .8261 | .3791 | .8140 | .3892 | .8017 | .3988 | 61 |
| 40 | .8491 | .3580 | .8377 | .3688 | .8259 | .3792 | .8138 | .3892 | .8015 | .3989 | 60 |
| 41 | .8490 | .3581 | .8376 | .3689 | .8258 | .3793 | .8137 | .3893 | .8014 | .3990 | 59 |
| 42 | .8489 | .3582 | .8375 | .3690 | .8257 | .3794 | .8136 | .3894 | .8013 | .3991 | 58 |
| 43 | .8488 | .3583 | .8374 | .3691 | .8256 | .3795 | .8135 | .3895 | .8012 | .3992 | 57 |
| 44 | .8487 | .3584 | .8373 | .3692 | .8255 | .3796 | .8134 | .3896 | .8011 | .3993 | 56 |
| 45 | .8486 | .3585 | .8372 | .3693 | .8254 | .3797 | .8133 | .3897 | .8010 | .3994 | 55 |
| 46 | .8485 | .3586 | .8370 | .3694 | .8253 | .3798 | .8132 | .3898 | .8009 | .3995 | 54 |
| 47 | .8484 | .3587 | .8369 | .3696 | .8252 | .3799 | .8131 | .3899 | .8008 | .3996 | 53 |
| 48 | .8483 | .3589 | .8367 | .3696 | .8251 | .3800 | .8130 | .3900 | .8006 | .3996 | 52 |
| 49 | .8482 | .3590 | .8366 | .3697 | .8250 | .3801 | .8128 | .3901 | .8004 | .3997 | 51 |
| 50 | .8480 | .3590 | .8365 | .3698 | .8248 | .3802 | .8126 | .3902 | .8002 | .3999 | 50 |
| | D | h | D | h | D | h | D | h | D | h | 分 |
| | 74 ^G | | 73 ^G | | 72 ^G | | 71 ^G | | 70 ^G | | |

| 分 | 125 ^G | | 126 ^G | | 127 ^G | | 128 ^G | | 129 ^G | | 分 |
|-----|------------------|-------|------------------|-------|------------------|-------|------------------|-------|------------------|-------|----|
| | D | h | D | h | D | h | D | h | D | h | |
| 51 | .8479 | .3591 | .8364 | .3699 | .8247 | .2803 | .8125 | .3903 | .8001 | .4000 | 49 |
| 52 | .8478 | .3593 | .8363 | .3700 | .8246 | .2804 | .8124 | .3904 | .8000 | .4000 | 48 |
| 53 | .8477 | .3594 | .8362 | .3701 | .8245 | .2805 | .8123 | .3905 | .7999 | .4001 | 47 |
| 54 | .8476 | .3595 | .8361 | .3702 | .8244 | .2806 | .8122 | .3906 | .7998 | .4002 | 46 |
| 55 | .8475 | .3596 | .8360 | .3702 | .8243 | .2807 | .8121 | .3907 | .7997 | .4004 | 45 |
| 56 | .8474 | .3597 | .8359 | .3703 | .8242 | .2808 | .8120 | .3908 | .7996 | .4005 | 44 |
| 57 | .8473 | .3598 | .8358 | .3704 | .8241 | .2809 | .8119 | .3909 | .7995 | .4005 | 43 |
| 58 | .8472 | .3599 | .8357 | .3705 | .8239 | .2810 | .8118 | .3910 | .7994 | .4006 | 42 |
| 59 | .8470 | .3600 | .8355 | .3707 | .8237 | .2811 | .8116 | .3911 | .7992 | .4007 | 41 |
| 60 | .8468 | .3601 | .8353 | .3708 | .8235 | .2812 | .8114 | .3912 | .7990 | .4008 | 40 |
| 61 | .8467 | .3603 | .8352 | .3709 | .8234 | .2813 | .8113 | .3913 | .7989 | .4008 | 39 |
| 62 | .8466 | .3604 | .8351 | .3710 | .8233 | .2814 | .8112 | .3914 | .7988 | .4009 | 38 |
| 63 | .8465 | .3605 | .8350 | .3712 | .8232 | .2815 | .8111 | .3915 | .7987 | .4010 | 27 |
| 64 | .8464 | .3606 | .8349 | .3713 | .8231 | .2816 | .8110 | .3916 | .7986 | .4011 | 36 |
| 65 | .8463 | .3607 | .8348 | .3714 | .8230 | .2817 | .8109 | .3917 | .7985 | .4012 | 35 |
| 66 | .8462 | .3608 | .8347 | .3715 | .8229 | .2818 | .8108 | .3918 | .7984 | .4013 | 34 |
| 67 | .8461 | .3609 | .8346 | .3716 | .8228 | .2819 | .8107 | .3919 | .7983 | .4014 | 33 |
| 68 | .8460 | .3611 | .8345 | .3717 | .8227 | .2820 | .8106 | .3920 | .7981 | .4015 | 32 |
| 69 | .8459 | .3612 | .8344 | .3718 | .8225 | .2821 | .8104 | .3921 | .7979 | .4016 | 31 |
| 70 | .8457 | .3613 | .8342 | .3720 | .8223 | .2822 | .8102 | .3922 | .7977 | .4017 | 30 |
| 71 | .8456 | .3614 | .8341 | .3720 | .8222 | .2823 | .8101 | .3923 | .7976 | .4018 | 29 |
| 72 | .8455 | .3615 | .8340 | .3721 | .8221 | .2824 | .8100 | .3924 | .7975 | .4019 | 28 |
| 73 | .8454 | .3616 | .8339 | .3722 | .8220 | .2825 | .8099 | .3924 | .7974 | .4020 | 27 |
| 74 | .8453 | .3617 | .8338 | .3723 | .8219 | .2826 | .8098 | .3925 | .7973 | .4021 | 26 |
| 75 | .8452 | .3618 | .8337 | .3725 | .8218 | .2827 | .8097 | .3926 | .7972 | .4022 | 25 |
| 76 | .8451 | .3619 | .8336 | .3726 | .8217 | .2829 | .8096 | .3927 | .7971 | .4023 | 24 |
| 77 | .8450 | .3620 | .8335 | .3727 | .8216 | .2830 | .8095 | .3928 | .7970 | .4024 | 23 |
| 78 | .8449 | .3621 | .8334 | .3728 | .8215 | .2830 | .8093 | .3929 | .7968 | .4025 | 22 |
| 79 | .8448 | .3622 | .8332 | .3729 | .8213 | .2831 | .8091 | .3930 | .7966 | .4026 | 21 |
| 80 | .8446 | .3623 | .8330 | .3730 | .8211 | .2832 | .8089 | .3931 | .7964 | .4027 | 20 |
| 81 | .8445 | .3624 | .8329 | .3731 | .8210 | .2833 | .8088 | .3932 | .7963 | .4028 | 19 |
| 82 | .8444 | .3625 | .8328 | .3732 | .8209 | .2834 | .8087 | .3934 | .7962 | .4029 | 18 |
| 83 | .8443 | .3627 | .8327 | .3733 | .8208 | .2835 | .8086 | .3935 | .7961 | .4030 | 17 |
| 84 | .8442 | .3628 | .8326 | .3734 | .8207 | .2836 | .8085 | .3935 | .7960 | .4031 | 16 |
| 85 | .8441 | .3629 | .8325 | .3735 | .8206 | .2837 | .8084 | .3936 | .7959 | .4032 | 15 |
| 86 | .8440 | .3630 | .8324 | .3736 | .8205 | .2839 | .8083 | .3938 | .7958 | .4033 | 14 |
| 87 | .8439 | .3631 | .8323 | .3737 | .8204 | .2840 | .8082 | .3939 | .7957 | .4033 | 13 |
| 88 | .8438 | .3632 | .8322 | .3738 | .8203 | .2841 | .8081 | .3939 | .7956 | .4034 | 12 |
| 89 | .8436 | .3633 | .8320 | .3739 | .8201 | .2842 | .8079 | .3940 | .7954 | .4035 | 11 |
| 90 | .8434 | .3634 | .8318 | .3740 | .8199 | .2842 | .8077 | .3941 | .7952 | .4036 | 10 |
| 91 | .8433 | .3635 | .8317 | .3741 | .8198 | .2843 | .8076 | .3942 | .7951 | .4036 | 09 |
| 92 | .8432 | .3636 | .8316 | .3742 | .8197 | .2844 | .8075 | .3943 | .7950 | .4037 | 08 |
| 93 | .8431 | .3637 | .8315 | .3743 | .8196 | .2845 | .8074 | .3944 | .7949 | .4038 | 07 |
| 94 | .8430 | .3638 | .8314 | .3744 | .8195 | .2846 | .8073 | .3945 | .7948 | .4039 | 06 |
| 95 | .8429 | .3639 | .8313 | .3745 | .8194 | .2847 | .8072 | .3946 | .7947 | .4040 | 05 |
| 96 | .8428 | .3640 | .8312 | .3746 | .8193 | .2849 | .8071 | .3947 | .7946 | .4041 | 04 |
| 97 | .8427 | .3642 | .8311 | .3747 | .8192 | .2850 | .8070 | .3948 | .7945 | .4042 | 03 |
| 98 | .8426 | .3643 | .8310 | .3748 | .8191 | .2851 | .8069 | .3949 | .7943 | .4043 | 02 |
| 99 | .8425 | .3644 | .8309 | .3749 | .8189 | .2852 | .8067 | .3950 | .7941 | .4044 | 01 |
| 100 | .8423 | .3645 | .8307 | .3750 | .8187 | .2853 | .8065 | .3951 | .7939 | .4045 | 00 |
| | D | h | D | h | D | h | D | h | D | h | |
| | 74 ^G | | 73 ^G | | 72 ^G | | 71 ^G | | 70 ^G | | 分 |

| 分 | 180 ^G | | 191 ^G | | 192 ^G | | 193 ^G | | 194 ^G | | |
|----|------------------|-------|------------------|-------|------------------|-------|------------------|-------|------------------|-------|----|
| | D | h | D | h | D | h | D | h | D | h | |
| 01 | .7938 | .4046 | .7809 | .4126 | .7678 | .4223 | .7544 | .4304 | .7408 | .4383 | 99 |
| 02 | .7937 | .4047 | .7808 | .4137 | .7677 | .4224 | .7543 | .4305 | .7407 | .4383 | 98 |
| 03 | .7936 | .4048 | .7807 | .4138 | .7676 | .4225 | .7542 | .4306 | .7406 | .4384 | 97 |
| 04 | .7935 | .4049 | .7806 | .4139 | .7674 | .4225 | .7540 | .4307 | .7404 | .4385 | 96 |
| 05 | .7933 | .4050 | .7804 | .4140 | .7672 | .4226 | .7538 | .4308 | .7402 | .4386 | 95 |
| 06 | .7932 | .4051 | .7803 | .4141 | .7671 | .4227 | .7537 | .4309 | .7401 | .4386 | 94 |
| 07 | .7931 | .4052 | .7802 | .4142 | .7670 | .4228 | .7536 | .4310 | .7400 | .4387 | 93 |
| 08 | .7930 | .4053 | .7801 | .4143 | .7669 | .4229 | .7535 | .4311 | .7399 | .4388 | 92 |
| 09 | .7928 | .4054 | .7799 | .4143 | .7668 | .4230 | .7534 | .4312 | .7397 | .4389 | 91 |
| 10 | .7926 | .4054 | .7797 | .4144 | .7666 | .4230 | .7532 | .4312 | .7395 | .4389 | 90 |
| 11 | .7925 | .4055 | .7796 | .4145 | .7665 | .4231 | .7531 | .4313 | .7394 | .4390 | 89 |
| 12 | .7924 | .4056 | .7795 | .4146 | .7664 | .4232 | .7530 | .4314 | .7393 | .4391 | 88 |
| 13 | .7923 | .4057 | .7794 | .4147 | .7663 | .4233 | .7529 | .4315 | .7392 | .4392 | 87 |
| 14 | .7922 | .4058 | .7793 | .4148 | .7661 | .4234 | .7527 | .4315 | .7390 | .4393 | 86 |
| 15 | .7920 | .4059 | .7791 | .4149 | .7659 | .4234 | .7525 | .4316 | .7388 | .4393 | 85 |
| 16 | .7919 | .4060 | .7790 | .4150 | .7658 | .4235 | .7524 | .4316 | .7387 | .4394 | 84 |
| 17 | .7918 | .4061 | .7789 | .4151 | .7657 | .4236 | .7523 | .4317 | .7386 | .4395 | 83 |
| 18 | .7917 | .4062 | .7788 | .4152 | .7656 | .4237 | .7522 | .4318 | .7385 | .4395 | 82 |
| 19 | .7916 | .4063 | .7786 | .4152 | .7654 | .4238 | .7520 | .4319 | .7383 | .4396 | 81 |
| 20 | .7914 | .4064 | .7784 | .4153 | .7652 | .4239 | .7518 | .4320 | .7381 | .4397 | 80 |
| 21 | .7913 | .4065 | .7783 | .4154 | .7651 | .4240 | .7517 | .4321 | .7380 | .4398 | 79 |
| 22 | .7912 | .4066 | .7782 | .4155 | .7650 | .4240 | .7516 | .4322 | .7379 | .4399 | 78 |
| 23 | .7911 | .4067 | .7781 | .4156 | .7649 | .4241 | .7515 | .4323 | .7378 | .4399 | 77 |
| 24 | .7909 | .4068 | .7780 | .4157 | .7648 | .4242 | .7513 | .4323 | .7376 | .4400 | 76 |
| 25 | .7907 | .4068 | .7778 | .4158 | .7646 | .4243 | .7511 | .4324 | .7374 | .4400 | 75 |
| 26 | .7906 | .4069 | .7777 | .4159 | .7645 | .4244 | .7510 | .4325 | .7373 | .4401 | 74 |
| 27 | .7905 | .4070 | .7776 | .4160 | .7644 | .4245 | .7509 | .4325 | .7372 | .4402 | 73 |
| 28 | .7904 | .4071 | .7775 | .4160 | .7643 | .4246 | .7508 | .4326 | .7370 | .4403 | 72 |
| 29 | .7903 | .4072 | .7773 | .4161 | .7641 | .4246 | .7506 | .4327 | .7369 | .4404 | 71 |
| 30 | .7901 | .4073 | .7771 | .4161 | .7639 | .4247 | .7504 | .4328 | .7367 | .4404 | 70 |
| 31 | .7900 | .4074 | .7770 | .4162 | .7638 | .4248 | .7503 | .4329 | .7366 | .4405 | 69 |
| 32 | .7899 | .4075 | .7769 | .4163 | .7636 | .4248 | .7502 | .4330 | .7365 | .4406 | 68 |
| 33 | .7898 | .4076 | .7768 | .4164 | .7635 | .4249 | .7501 | .4330 | .7364 | .4406 | 67 |
| 34 | .7896 | .4077 | .7767 | .4165 | .7634 | .4250 | .7500 | .4331 | .7362 | .4407 | 66 |
| 35 | .7894 | .4077 | .7765 | .4166 | .7632 | .4251 | .7498 | .4332 | .7360 | .4408 | 65 |
| 36 | .7893 | .4078 | .7764 | .4167 | .7631 | .4252 | .7497 | .4333 | .7359 | .4409 | 64 |
| 37 | .7892 | .4079 | .7763 | .4168 | .7630 | .4253 | .7496 | .4334 | .7358 | .4410 | 63 |
| 38 | .7891 | .4080 | .7762 | .4169 | .7629 | .4254 | .7495 | .4334 | .7357 | .4410 | 62 |
| 39 | .7890 | .4081 | .7760 | .4170 | .7628 | .4255 | .7493 | .4335 | .7355 | .4411 | 61 |
| 40 | .7888 | .4082 | .7758 | .4171 | .7626 | .4255 | .7491 | .4336 | .7353 | .4411 | 60 |
| 41 | .7887 | .4083 | .7757 | .4172 | .7625 | .4256 | .7490 | .4337 | .7352 | .4412 | 59 |
| 42 | .7886 | .4084 | .7756 | .4173 | .7624 | .4257 | .7489 | .4337 | .7351 | .4413 | 58 |
| 43 | .7885 | .4085 | .7755 | .4174 | .7623 | .4258 | .7488 | .4338 | .7350 | .4414 | 57 |
| 44 | .7883 | .4086 | .7754 | .4175 | .7621 | .4259 | .7486 | .4339 | .7349 | .4415 | 56 |
| 45 | .7881 | .4086 | .7752 | .4175 | .7619 | .4259 | .7484 | .4339 | .7347 | .4415 | 55 |
| 46 | .7880 | .4087 | .7751 | .4176 | .7618 | .4260 | .7483 | .4340 | .7346 | .4416 | 54 |
| 47 | .7879 | .4088 | .7750 | .4177 | .7617 | .4261 | .7482 | .4341 | .7345 | .4417 | 53 |
| 48 | .7878 | .4089 | .7749 | .4178 | .7616 | .4262 | .7481 | .4342 | .7344 | .4418 | 52 |
| 49 | .7877 | .4090 | .7747 | .4179 | .7614 | .4262 | .7479 | .4342 | .7342 | .4418 | 51 |
| 50 | .7875 | .4091 | .7745 | .4179 | .7612 | .4263 | .7477 | .4343 | .7340 | .4419 | 50 |
| | D | h | D | h | D | h | D | h | D | h | 分 |
| | 68 ^G | | 68 ^G | | 67 ^G | | 68 ^G | | 65 ^G | | |

| 分 | 130 ^G | | 131 ^G | | 132 ^G | | 133 ^G | | 134 ^G | | 分 |
|-----|------------------|-------|------------------|-------|------------------|-------|------------------|-------|------------------|-------|----|
| | D | h | D | h | D | h | D | h | D | h | |
| 51 | .7874 | .4092 | .7744 | .4180 | .7611 | .4264 | .7476 | .4344 | .7339 | .4420 | 49 |
| 52 | .7873 | .4093 | .7743 | .4181 | .7610 | .4265 | .7475 | .4345 | .7338 | .4421 | 48 |
| 53 | .7872 | .4094 | .7742 | .4182 | .7609 | .4266 | .7474 | .4346 | .7337 | .4422 | 47 |
| 54 | .7871 | .4095 | .7740 | .4183 | .7608 | .4267 | .7472 | .4346 | .7335 | .4422 | 46 |
| 55 | .7869 | .4096 | .7738 | .4184 | .7606 | .4268 | .7470 | .4347 | .7333 | .4423 | 45 |
| 56 | .7868 | .4097 | .7737 | .4184 | .7605 | .4269 | .7469 | .4348 | .7332 | .4424 | 44 |
| 57 | .7867 | .4098 | .7736 | .4185 | .7604 | .4269 | .7468 | .4349 | .7331 | .4425 | 43 |
| 58 | .7866 | .4099 | .7735 | .4186 | .7603 | .4270 | .7467 | .4350 | .7330 | .4426 | 42 |
| 59 | .7864 | .4100 | .7734 | .4187 | .7601 | .4271 | .7466 | .4351 | .7328 | .4426 | 41 |
| 60 | .7862 | .4100 | .7732 | .4188 | .7599 | .4272 | .7464 | .4352 | .7326 | .4427 | 40 |
| 61 | .7861 | .4101 | .7731 | .4189 | .7598 | .4272 | .7463 | .4353 | .7325 | .4427 | 39 |
| 62 | .7860 | .4102 | .7730 | .4190 | .7597 | .4273 | .7462 | .4354 | .7324 | .4428 | 38 |
| 63 | .7859 | .4103 | .7729 | .4191 | .7596 | .4274 | .7461 | .4354 | .7323 | .4429 | 37 |
| 64 | .7858 | .4104 | .7727 | .4191 | .7594 | .4274 | .7459 | .4355 | .7321 | .4430 | 36 |
| 65 | .7856 | .4105 | .7725 | .4192 | .7592 | .4275 | .7457 | .4355 | .7319 | .4430 | 35 |
| 66 | .7855 | .4106 | .7724 | .4193 | .7590 | .4276 | .7456 | .4356 | .7318 | .4431 | 34 |
| 67 | .7854 | .4107 | .7723 | .4194 | .7589 | .4277 | .7455 | .4357 | .7317 | .4432 | 33 |
| 68 | .7853 | .4108 | .7722 | .4195 | .7588 | .4278 | .7454 | .4358 | .7316 | .4433 | 32 |
| 69 | .7851 | .4108 | .7721 | .4196 | .7587 | .4279 | .7452 | .4358 | .7314 | .4433 | 31 |
| 70 | .7849 | .4109 | .7719 | .4196 | .7586 | .4280 | .7450 | .4359 | .7312 | .4434 | 30 |
| 71 | .7848 | .4110 | .7718 | .4197 | .7585 | .4281 | .7449 | .4360 | .7311 | .4435 | 29 |
| 72 | .7847 | .4111 | .7717 | .4198 | .7584 | .4282 | .7448 | .4361 | .7310 | .4436 | 28 |
| 73 | .7846 | .4112 | .7716 | .4199 | .7583 | .4283 | .7447 | .4362 | .7309 | .4437 | 27 |
| 74 | .7845 | .4113 | .7714 | .4200 | .7581 | .4283 | .7445 | .4362 | .7307 | .4437 | 26 |
| 75 | .7843 | .4114 | .7712 | .4201 | .7579 | .4284 | .7443 | .4363 | .7305 | .4437 | 25 |
| 76 | .7842 | .4115 | .7711 | .4202 | .7578 | .4285 | .7442 | .4363 | .7304 | .4438 | 24 |
| 77 | .7841 | .4116 | .7710 | .4203 | .7576 | .4285 | .7441 | .4364 | .7303 | .4439 | 23 |
| 78 | .7840 | .4117 | .7709 | .4204 | .7575 | .4286 | .7440 | .4365 | .7302 | .4440 | 22 |
| 79 | .7838 | .4117 | .7708 | .4205 | .7574 | .4287 | .7438 | .4366 | .7300 | .4440 | 21 |
| 80 | .7836 | .4118 | .7706 | .4206 | .7572 | .4288 | .7436 | .4366 | .7298 | .4441 | 20 |
| 81 | .7835 | .4119 | .7705 | .4206 | .7571 | .4289 | .7435 | .4367 | .7297 | .4442 | 19 |
| 82 | .7834 | .4120 | .7704 | .4207 | .7570 | .4290 | .7434 | .4368 | .7296 | .4443 | 18 |
| 83 | .7833 | .4121 | .7703 | .4208 | .7569 | .4291 | .7433 | .4369 | .7295 | .4443 | 17 |
| 84 | .7832 | .4122 | .7701 | .4209 | .7567 | .4291 | .7431 | .4369 | .7293 | .4444 | 16 |
| 85 | .7830 | .4123 | .7699 | .4209 | .7565 | .4292 | .7429 | .4370 | .7291 | .4444 | 15 |
| 86 | .7829 | .4123 | .7698 | .4210 | .7564 | .4293 | .7428 | .4371 | .7290 | .4445 | 14 |
| 87 | .7828 | .4124 | .7697 | .4211 | .7563 | .4293 | .7427 | .4372 | .7289 | .4446 | 13 |
| 88 | .7827 | .4125 | .7696 | .4212 | .7562 | .4294 | .7426 | .4373 | .7288 | .4447 | 12 |
| 89 | .7825 | .4126 | .7694 | .4213 | .7561 | .4295 | .7424 | .4374 | .7286 | .4447 | 11 |
| 90 | .7823 | .4127 | .7692 | .4213 | .7559 | .4296 | .7422 | .4374 | .7284 | .4448 | 10 |
| 91 | .7822 | .4128 | .7691 | .4214 | .7558 | .4297 | .7421 | .4375 | .7283 | .4449 | 09 |
| 92 | .7821 | .4129 | .7690 | .4215 | .7557 | .4298 | .7420 | .4375 | .7282 | .4450 | 08 |
| 93 | .7820 | .4130 | .7689 | .4216 | .7556 | .4298 | .7419 | .4376 | .7281 | .4451 | 07 |
| 94 | .7819 | .4131 | .7688 | .4217 | .7554 | .4299 | .7418 | .4377 | .7279 | .4451 | 06 |
| 95 | .7817 | .4132 | .7686 | .4218 | .7552 | .4300 | .7416 | .4378 | .7277 | .4452 | 05 |
| 96 | .7816 | .4132 | .7685 | .4219 | .7551 | .4301 | .7415 | .4379 | .7276 | .4452 | 04 |
| 97 | .7815 | .4133 | .7684 | .4220 | .7550 | .4302 | .7414 | .4380 | .7275 | .4453 | 03 |
| 98 | .7814 | .4134 | .7683 | .4221 | .7549 | .4303 | .7412 | .4381 | .7274 | .4454 | 02 |
| 99 | .7812 | .4135 | .7681 | .4222 | .7547 | .4303 | .7411 | .4381 | .7272 | .4455 | 01 |
| 100 | .7810 | .4135 | .7679 | .4222 | .7545 | .4304 | .7409 | .4382 | .7270 | .4455 | 00 |
| | D | h | D | h | D | h | D | h | D | h | 分 |
| | 66 ^G | | 66 ^G | | 67 ^G | | 66 ^G | | 65 ^G | | |

| 分 | 135 ^G | | 136 ^G | | 137 ^G | | 138 ^G | | 139 ^G | | |
|----|------------------|-------|------------------|-------|------------------|-------|------------------|-------|------------------|-------|----|
| | D | h | D | h | D | h | D | h | D | h | |
| 01 | .7269 | .4456 | .7128 | .4525 | .6985 | .4590 | .6840 | .4650 | .6693 | .4706 | 99 |
| 02 | .7268 | .4457 | .7127 | .4526 | .6984 | .4590 | .6839 | .4650 | .6692 | .4706 | 98 |
| 03 | .7267 | .4458 | .7126 | .4527 | .6982 | .4591 | .6837 | .4651 | .6690 | .4706 | 97 |
| 04 | .7265 | .4458 | .7124 | .4527 | .6980 | .4591 | .6835 | .4651 | .6688 | .4707 | 96 |
| 05 | .7263 | .4459 | .7122 | .4528 | .6978 | .4592 | .6833 | .4652 | .6686 | .4707 | 95 |
| 06 | .7262 | .4460 | .7121 | .4528 | .6977 | .4593 | .6832 | .4653 | .6685 | .4708 | 94 |
| 07 | .7261 | .4460 | .7120 | .4529 | .6976 | .4594 | .6831 | .4653 | .6684 | .4708 | 93 |
| 08 | .7260 | .4461 | .7119 | .4530 | .6975 | .4594 | .6830 | .4654 | .6683 | .4709 | 92 |
| 09 | .7258 | .4462 | .7117 | .4531 | .6973 | .4595 | .6828 | .4655 | .6681 | .4709 | 91 |
| 10 | .7266 | .4462 | .7115 | .4531 | .6971 | .4595 | .6826 | .4655 | .6679 | .4710 | 90 |
| 11 | .7255 | .4463 | .7114 | .4532 | .6970 | .4596 | .6825 | .4656 | .6678 | .4711 | 89 |
| 12 | .7254 | .4464 | .7113 | .4533 | .6969 | .4597 | .6824 | .4656 | .6677 | .4711 | 88 |
| 13 | .7253 | .4465 | .7112 | .4534 | .6968 | .4597 | .6823 | .4657 | .6675 | .4712 | 87 |
| 14 | .7251 | .4465 | .7110 | .4534 | .6966 | .4598 | .6821 | .4657 | .6673 | .4712 | 86 |
| 15 | .7249 | .4466 | .7108 | .4535 | .6964 | .4599 | .6819 | .4658 | .6671 | .4712 | 85 |
| 16 | .7248 | .4467 | .7107 | .4535 | .6963 | .4599 | .6818 | .4659 | .6670 | .4713 | 84 |
| 17 | .7247 | .4468 | .7106 | .4536 | .6962 | .4600 | .6817 | .4659 | .6669 | .4714 | 83 |
| 18 | .7246 | .4468 | .7104 | .4537 | .6961 | .4600 | .6815 | .4660 | .6668 | .4715 | 82 |
| 19 | .7244 | .4469 | .7102 | .4537 | .6959 | .4601 | .6813 | .4660 | .6666 | .4715 | 81 |
| 20 | .7242 | .4469 | .7100 | .4538 | .6957 | .4601 | .6811 | .4661 | .6665 | .4716 | 80 |
| 21 | .7241 | .4470 | .7099 | .4538 | .6956 | .4602 | .6810 | .4661 | .6663 | .4716 | 79 |
| 22 | .7240 | .4471 | .7098 | .4539 | .6955 | .4603 | .6809 | .4662 | .6662 | .4717 | 78 |
| 23 | .7239 | .4472 | .7097 | .4540 | .6954 | .4604 | .6808 | .4663 | .6661 | .4717 | 77 |
| 24 | .7237 | .4472 | .7095 | .4540 | .6952 | .4604 | .6806 | .4663 | .6659 | .4718 | 76 |
| 25 | .7235 | .4473 | .7093 | .4541 | .6950 | .4605 | .6804 | .4664 | .6657 | .4718 | 75 |
| 26 | .7234 | .4474 | .7092 | .4542 | .6949 | .4605 | .6803 | .4664 | .6656 | .4719 | 74 |
| 27 | .7233 | .4475 | .7091 | .4542 | .6948 | .4606 | .6802 | .4665 | .6655 | .4720 | 73 |
| 28 | .7232 | .4476 | .7090 | .4543 | .6946 | .4606 | .6801 | .4666 | .6653 | .4720 | 72 |
| 29 | .7230 | .4476 | .7088 | .4543 | .6944 | .4607 | .6799 | .4666 | .6651 | .4720 | 71 |
| 30 | .7228 | .4477 | .7086 | .4544 | .6942 | .4607 | .6797 | .4667 | .6649 | .4720 | 70 |
| 31 | .7227 | .4477 | .7085 | .4545 | .6941 | .4608 | .6796 | .4667 | .6648 | .4721 | 69 |
| 32 | .7226 | .4478 | .7084 | .4546 | .6940 | .4609 | .6795 | .4668 | .6647 | .4722 | 68 |
| 33 | .7225 | .4479 | .7083 | .4546 | .6939 | .4609 | .6793 | .4668 | .6646 | .4723 | 67 |
| 34 | .7223 | .4480 | .7081 | .4547 | .6937 | .4610 | .6791 | .4668 | .6644 | .4723 | 66 |
| 35 | .7221 | .4480 | .7079 | .4547 | .6935 | .4611 | .6789 | .4669 | .6642 | .4723 | 65 |
| 36 | .7220 | .4481 | .7078 | .4548 | .6934 | .4611 | .6788 | .4669 | .6641 | .4724 | 64 |
| 37 | .7219 | .4482 | .7077 | .4549 | .6933 | .4612 | .6787 | .4670 | .6640 | .4724 | 63 |
| 38 | .7218 | .4482 | .7076 | .4550 | .6932 | .4612 | .6786 | .4671 | .6638 | .4724 | 62 |
| 39 | .7216 | .4483 | .7074 | .4551 | .6930 | .4613 | .6784 | .4672 | .6636 | .4725 | 61 |
| 40 | .7214 | .4484 | .7072 | .4551 | .6928 | .4613 | .6782 | .4672 | .6634 | .4725 | 60 |
| 41 | .7213 | .4484 | .7071 | .4552 | .6927 | .4614 | .6781 | .4673 | .6633 | .4726 | 59 |
| 42 | .7212 | .4485 | .7070 | .4552 | .6926 | .4615 | .6780 | .4673 | .6632 | .4727 | 58 |
| 43 | .7211 | .4486 | .7069 | .4553 | .6925 | .4616 | .6779 | .4674 | .6631 | .4728 | 57 |
| 44 | .7209 | .4487 | .7067 | .4554 | .6923 | .4616 | .6777 | .4675 | .6629 | .4728 | 56 |
| 45 | .7207 | .4487 | .7065 | .4554 | .6921 | .4617 | .6775 | .4675 | .6627 | .4728 | 55 |
| 46 | .7206 | .4488 | .7064 | .4555 | .6920 | .4617 | .6774 | .4676 | .6626 | .4729 | 54 |
| 47 | .7205 | .4489 | .7063 | .4556 | .6919 | .4618 | .6773 | .4676 | .6625 | .4730 | 53 |
| 48 | .7204 | .4489 | .7062 | .4557 | .6917 | .4618 | .6771 | .4677 | .6624 | .4730 | 52 |
| 49 | .7202 | .4490 | .7060 | .4557 | .6915 | .4619 | .6769 | .4677 | .6622 | .4731 | 51 |
| 50 | .7200 | .4491 | .7058 | .4558 | .6913 | .4619 | .6767 | .4677 | .6620 | .4731 | 50 |
| | D | h | D | h | D | h | D | h | D | h | 分 |
| | 84 ^G | | 83 ^G | | 82 ^G | | 81 ^G | | 80 ^G | | |

| 分 | 135 ^G | | 136 ^G | | 137 ^G | | 138 ^G | | 139 ^G | | 分 |
|-----|------------------|-------|------------------|-------|------------------|-------|------------------|-------|------------------|-------|----|
| | D | h | D | h | D | h | D | h | D | h | |
| 51 | .7199 | .4491 | .7057 | .4558 | .6912 | .4620 | .6766 | .4678 | .6619 | .4732 | 49 |
| 52 | .7198 | .4492 | .7056 | .4559 | .6911 | .4621 | .6765 | .4679 | .6618 | .4732 | 48 |
| 53 | .7197 | .4493 | .7054 | .4559 | .6910 | .4622 | .6764 | .4679 | .6616 | .4733 | 47 |
| 54 | .7195 | .4493 | .7052 | .4560 | .6908 | .4622 | .6762 | .4680 | .6614 | .4733 | 46 |
| 55 | .7193 | .4494 | .7050 | .4560 | .6906 | .4623 | .6760 | .4680 | .6612 | .4733 | 45 |
| 56 | .7192 | .4495 | .7049 | .4561 | .6905 | .4623 | .6759 | .4681 | .6611 | .4733 | 44 |
| 57 | .7191 | .4496 | .7048 | .4562 | .6904 | .4624 | .6757 | .4681 | .6610 | .4734 | 43 |
| 58 | .7190 | .4496 | .7047 | .4563 | .6903 | .4625 | .6755 | .4682 | .6609 | .4735 | 42 |
| 59 | .7188 | .4497 | .7045 | .4563 | .6901 | .4625 | .6753 | .4682 | .6607 | .4736 | 41 |
| 60 | .7186 | .4497 | .7043 | .4564 | .6899 | .4626 | .6752 | .4683 | .6605 | .4736 | 40 |
| 61 | .7185 | .4498 | .7042 | .4564 | .6898 | .4626 | .6751 | .4683 | .6604 | .4737 | 39 |
| 62 | .7184 | .4499 | .7041 | .4565 | .6897 | .4627 | .6750 | .4684 | .6603 | .4737 | 38 |
| 63 | .7182 | .4499 | .7040 | .4566 | .6896 | .4628 | .6749 | .4684 | .6601 | .4737 | 37 |
| 64 | .7180 | .4500 | .7038 | .4566 | .6894 | .4629 | .6748 | .4685 | .6599 | .4738 | 36 |
| 65 | .7178 | .4500 | .7036 | .4567 | .6892 | .4629 | .6746 | .4686 | .6597 | .4738 | 35 |
| 66 | .7177 | .4501 | .7035 | .4567 | .6891 | .4630 | .6745 | .4687 | .6596 | .4739 | 34 |
| 67 | .7176 | .4502 | .7034 | .4568 | .6890 | .4630 | .6744 | .4688 | .6595 | .4740 | 33 |
| 68 | .7175 | .4503 | .7033 | .4569 | .6888 | .4631 | .6742 | .4688 | .6594 | .4740 | 32 |
| 69 | .7173 | .4503 | .7031 | .4569 | .6886 | .4631 | .6740 | .4689 | .6592 | .4740 | 31 |
| 70 | .7171 | .4504 | .7029 | .4570 | .6884 | .4632 | .6738 | .4689 | .6590 | .4741 | 30 |
| 71 | .7170 | .4505 | .7028 | .4571 | .6883 | .4633 | .6737 | .4689 | .6589 | .4741 | 29 |
| 72 | .7169 | .4506 | .7027 | .4572 | .6882 | .4633 | .6736 | .4690 | .6588 | .4742 | 28 |
| 73 | .7168 | .4506 | .7026 | .4572 | .6881 | .4634 | .6735 | .4691 | .6586 | .4742 | 27 |
| 74 | .7166 | .4507 | .7024 | .4573 | .6879 | .4634 | .6733 | .4691 | .6584 | .4742 | 26 |
| 75 | .7164 | .4507 | .7022 | .4573 | .6877 | .4635 | .6731 | .4692 | .6582 | .4743 | 25 |
| 76 | .7163 | .4508 | .7021 | .4574 | .6875 | .4635 | .6730 | .4692 | .6581 | .4744 | 24 |
| 77 | .7162 | .4509 | .7020 | .4575 | .6874 | .4636 | .6729 | .4693 | .6580 | .4744 | 23 |
| 78 | .7161 | .4510 | .7018 | .4575 | .6873 | .4637 | .6727 | .4693 | .6579 | .4745 | 22 |
| 79 | .7159 | .4510 | .7016 | .4576 | .6872 | .4637 | .6725 | .4693 | .6577 | .4745 | 21 |
| 80 | .7157 | .4511 | .7014 | .4576 | .6870 | .4638 | .6723 | .4694 | .6575 | .4746 | 20 |
| 81 | .7156 | .4511 | .7013 | .4577 | .6869 | .4638 | .6732 | .4694 | .6574 | .4746 | 19 |
| 82 | .7155 | .4512 | .7012 | .4578 | .6868 | .4639 | .6721 | .4695 | .6573 | .4747 | 18 |
| 83 | .7154 | .4513 | .7011 | .4579 | .6866 | .4639 | .6720 | .4696 | .6571 | .4747 | 17 |
| 84 | .7152 | .4513 | .7009 | .4579 | .6864 | .4640 | .6718 | .4696 | .6569 | .4747 | 16 |
| 85 | .7150 | .4514 | .7007 | .4580 | .6862 | .4640 | .6716 | .4697 | .6567 | .4748 | 15 |
| 86 | .7149 | .4515 | .7006 | .4580 | .6861 | .4641 | .6715 | .4697 | .6566 | .4748 | 14 |
| 87 | .7148 | .4516 | .7005 | .4581 | .6860 | .4642 | .6714 | .4698 | .6565 | .4749 | 13 |
| 88 | .7147 | .4517 | .7004 | .4582 | .6859 | .4642 | .6712 | .4698 | .6564 | .4750 | 12 |
| 89 | .7145 | .4517 | .7002 | .4582 | .6857 | .4643 | .6710 | .4698 | .6562 | .4750 | 11 |
| 90 | .7143 | .4518 | .7000 | .4583 | .6855 | .4643 | .6708 | .4699 | .6560 | .4751 | 10 |
| 91 | .7142 | .4518 | .6999 | .4584 | .6854 | .4644 | .6707 | .4700 | .6559 | .4751 | 09 |
| 92 | .7141 | .4519 | .6998 | .4584 | .6853 | .4645 | .6706 | .4700 | .6558 | .4752 | 08 |
| 93 | .7140 | .4520 | .6997 | .4585 | .6852 | .4646 | .6705 | .4701 | .6556 | .4752 | 07 |
| 94 | .7138 | .4520 | .6995 | .4585 | .6850 | .4646 | .6703 | .4701 | .6554 | .4753 | 06 |
| 95 | .7136 | .4521 | .6993 | .4586 | .6848 | .4646 | .6701 | .4702 | .6552 | .4753 | 05 |
| 96 | .7135 | .4521 | .6992 | .4587 | .6847 | .4647 | .6700 | .4703 | .6551 | .4754 | 04 |
| 97 | .7134 | .4522 | .6991 | .4587 | .6846 | .4648 | .6699 | .4704 | .6550 | .4754 | 03 |
| 98 | .7133 | .4523 | .6990 | .4588 | .6845 | .4648 | .6698 | .4704 | .6549 | .4755 | 02 |
| 99 | .7131 | .4524 | .6988 | .4589 | .6843 | .4649 | .6696 | .4705 | .6547 | .4755 | 01 |
| 100 | .7129 | .4524 | .6986 | .4589 | .6841 | .4649 | .6694 | .4705 | .6545 | .4755 | 00 |
| | D | h | D | h | D | h | D | h | D | h | 分 |
| | 84 ^G | | 83 ^G | | 82 ^G | | 81 ^G | | 80 ^G | | |

| 分 | 140 ^G | | 141 ^G | | 142 ^G | | 143 ^G | | 144 ^G | | |
|----|------------------|-------|------------------|-------|------------------|-------|------------------|-------|------------------|-------|----|
| | D | h | D | h | D | h | D | h | D | h | |
| 01 | .6544 | .4756 | .6394 | .4802 | .6242 | .4843 | .6090 | .4880 | .5936 | .4912 | 99 |
| 02 | .6543 | .4757 | .6393 | .4803 | .6241 | .4844 | .6089 | .4881 | .5935 | .4913 | 98 |
| 03 | .6542 | .4758 | .6391 | .4803 | .6240 | .4845 | .6087 | .4881 | .5933 | .4913 | 97 |
| 04 | .6540 | .4758 | .6389 | .4803 | .6238 | .4845 | .6085 | .4881 | .5931 | .4913 | 96 |
| 05 | .6538 | .4758 | .6387 | .4804 | .6236 | .4845 | .6083 | .4881 | .5929 | .4913 | 95 |
| 06 | .6537 | .4759 | .6385 | .4804 | .6235 | .4846 | .6082 | .4882 | .5928 | .4913 | 94 |
| 07 | .6536 | .4759 | .6385 | .4805 | .6234 | .4846 | .6081 | .4883 | .5927 | .4914 | 93 |
| 08 | .6534 | .4760 | .6384 | .4806 | .6232 | .4846 | .6079 | .4883 | .5925 | .4914 | 92 |
| 09 | .6532 | .4760 | .6382 | .4806 | .6230 | .4846 | .6077 | .4883 | .5923 | .4914 | 91 |
| 10 | .6530 | .4760 | .6380 | .4806 | .6228 | .4847 | .6075 | .4883 | .5921 | .4914 | 90 |
| 11 | .6529 | .4761 | .6379 | .4807 | .6227 | .4847 | .6074 | .4884 | .5920 | .4915 | 89 |
| 12 | .6528 | .4762 | .6378 | .4807 | .6226 | .4848 | .6073 | .4884 | .5919 | .4915 | 88 |
| 13 | .6527 | .4763 | .6376 | .4808 | .6225 | .4849 | .6072 | .4885 | .5918 | .4916 | 87 |
| 14 | .6525 | .4763 | .6374 | .4809 | .6223 | .4849 | .6070 | .4885 | .5916 | .4916 | 86 |
| 15 | .6523 | .4763 | .6372 | .4809 | .6221 | .4849 | .6068 | .4885 | .5914 | .4916 | 85 |
| 16 | .6522 | .4764 | .6371 | .4809 | .6220 | .4850 | .6067 | .488 | .5913 | .4917 | 84 |
| 17 | .6521 | .4764 | .6370 | .4809 | .6219 | .4850 | .6066 | .4886 | .5912 | .4917 | 83 |
| 18 | .6519 | .4765 | .6368 | .4810 | .6217 | .4850 | .6064 | .4886 | .5910 | .4917 | 82 |
| 19 | .6517 | .4765 | .6367 | .4810 | .6215 | .4850 | .6062 | .4886 | .5908 | .4917 | 81 |
| 20 | .6515 | .4765 | .6365 | .4810 | .6213 | .4850 | .6060 | .4886 | .5906 | .4918 | 80 |
| 21 | .6514 | .4766 | .6364 | .4811 | .6212 | .4851 | .6059 | .4887 | .5905 | .4918 | 79 |
| 22 | .6513 | .4766 | .6363 | .4811 | .6211 | .4852 | .6058 | .4888 | .5904 | .4919 | 78 |
| 23 | .6512 | .4767 | .6361 | .4812 | .6209 | .4852 | .6056 | .4888 | .5902 | .4919 | 77 |
| 24 | .6510 | .4767 | .6359 | .4812 | .6207 | .4852 | .6054 | .4888 | .5900 | .4919 | 76 |
| 25 | .6508 | .4768 | .6357 | .4812 | .6205 | .4852 | .6052 | .4888 | .5898 | .4919 | 75 |
| 26 | .6507 | .4768 | .6356 | .4813 | .6204 | .4853 | .6051 | .4889 | .5897 | .4920 | 74 |
| 27 | .6506 | .4769 | .6355 | .4814 | .6203 | .4854 | .6050 | .4889 | .5896 | .4920 | 73 |
| 28 | .6504 | .4769 | .6354 | .4814 | .6202 | .4855 | .6049 | .4890 | .5895 | .4920 | 72 |
| 29 | .6502 | .4769 | .6352 | .4814 | .6200 | .4855 | .6047 | .4890 | .5893 | .4920 | 71 |
| 30 | .6500 | .4769 | .6350 | .4815 | .6198 | .4855 | .6045 | .4890 | .5891 | .4921 | 70 |
| 31 | .6499 | .4770 | .6349 | .4815 | .6197 | .4855 | .6044 | .4891 | .5890 | .4921 | 69 |
| 32 | .6498 | .4771 | .6348 | .4816 | .6196 | .4856 | .6043 | .4891 | .5889 | .4921 | 68 |
| 33 | .6497 | .4772 | .6346 | .4816 | .6195 | .4857 | .6041 | .4891 | .5887 | .4922 | 67 |
| 34 | .6495 | .4772 | .6344 | .4816 | .6193 | .4857 | .6039 | .4891 | .5885 | .4922 | 66 |
| 35 | .6493 | .4773 | .6342 | .4816 | .6191 | .4857 | .6037 | .4891 | .5883 | .4922 | 65 |
| 36 | .6492 | .4773 | .6340 | .4817 | .6190 | .4858 | .6036 | .4892 | .5882 | .4922 | 64 |
| 37 | .6491 | .4774 | .6339 | .4817 | .6188 | .4858 | .6035 | .4893 | .5881 | .4923 | 63 |
| 38 | .6489 | .4774 | .6338 | .4817 | .6186 | .4858 | .6033 | .4893 | .5879 | .4923 | 62 |
| 39 | .6487 | .4774 | .6336 | .4818 | .6184 | .4858 | .6031 | .4893 | .5877 | .4923 | 61 |
| 40 | .6485 | .4775 | .6334 | .4819 | .6182 | .4858 | .6029 | .4893 | .5875 | .4923 | 60 |
| 41 | .6484 | .4775 | .6333 | .4819 | .6181 | .4859 | .6028 | .4893 | .5874 | .4923 | 59 |
| 42 | .6483 | .4776 | .6332 | .4820 | .6180 | .4859 | .6027 | .4894 | .5873 | .4924 | 58 |
| 43 | .6482 | .4777 | .6331 | .4821 | .6179 | .4860 | .6026 | .4895 | .5871 | .4924 | 57 |
| 44 | .6480 | .4777 | .6329 | .4821 | .6177 | .4860 | .6024 | .4895 | .5869 | .4924 | 56 |
| 45 | .6478 | .4777 | .6327 | .4821 | .6175 | .4860 | .6022 | .4895 | .5867 | .4934 | 55 |
| 46 | .6477 | .4778 | .6326 | .4822 | .6174 | .4861 | .6021 | .4895 | .5866 | .4924 | 54 |
| 47 | .6476 | .4779 | .6325 | .4822 | .6173 | .4862 | .6020 | .4896 | .5865 | .4925 | 53 |
| 48 | .6474 | .4779 | .6323 | .4822 | .6171 | .4862 | .6018 | .4896 | .5864 | .4925 | 52 |
| 49 | .6472 | .4779 | .6321 | .4822 | .6169 | .4862 | .6016 | .4896 | .5862 | .4926 | 51 |
| 50 | .6470 | .4779 | .6319 | .4823 | .6167 | .4862 | .6014 | .4896 | .5860 | .4926 | 50 |
| | D | h | D | h | D | h | D | h | D | h | 分 |
| | 59 ^G | | 58 ^G | | 57 ^G | | 56 ^G | | 55 ^G | | |

| 分 | 140 ^G | | 141 ^G | | 142 ^G | | 143 ^G | | 144 ^G | | |
|-----|------------------|-------|------------------|-------|------------------|-------|------------------|-------|------------------|-------|----|
| | D | h | D | h | D | h | D | h | D | h | |
| 51 | .6469 | .4780 | .6318 | .4823 | .6166 | .4863 | .6013 | .4897 | .5859 | .4926 | 49 |
| 52 | .6468 | .4780 | .6317 | .4824 | .6165 | .4863 | .6012 | .4898 | .5858 | .4927 | 48 |
| 53 | .6467 | .4781 | .6316 | .4824 | .6164 | .4864 | .6010 | .4898 | .5856 | .4927 | 47 |
| 54 | .6465 | .4781 | .6314 | .4825 | .6162 | .4864 | .6008 | .4898 | .5854 | .4927 | 46 |
| 55 | .6463 | .4781 | .6312 | .4825 | .6160 | .4864 | .6006 | .4898 | .5852 | .4927 | 45 |
| 56 | .6462 | .4782 | .6311 | .4826 | .6159 | .4865 | .6005 | .4898 | .5851 | .4928 | 44 |
| 57 | .6461 | .4783 | .6310 | .4826 | .6158 | .4865 | .6004 | .4899 | .5850 | .4928 | 43 |
| 58 | .6459 | .4784 | .6308 | .4827 | .6156 | .4866 | .6002 | .4899 | .5848 | .4928 | 42 |
| 59 | .6457 | .4784 | .6306 | .4827 | .6154 | .4866 | .6000 | .4899 | .5846 | .4928 | 41 |
| 60 | .6455 | .4784 | .6304 | .4827 | .6152 | .4866 | .5998 | .4899 | .5844 | .4928 | 40 |
| 61 | .6454 | .4784 | .6303 | .4828 | .6151 | .4866 | .5997 | .4899 | .5842 | .4929 | 39 |
| 62 | .6453 | .4785 | .6302 | .4828 | .6150 | .4867 | .5996 | .4900 | .5841 | .4929 | 38 |
| 63 | .6452 | .4786 | .6301 | .4829 | .6148 | .4867 | .5995 | .4901 | .5840 | .4929 | 37 |
| 64 | .6450 | .4786 | .6299 | .4829 | .6146 | .4867 | .5993 | .4901 | .5838 | .4929 | 26 |
| 65 | .6448 | .4786 | .6297 | .4829 | .6144 | .4867 | .5991 | .4901 | .5836 | .4929 | 35 |
| 66 | .6447 | .4787 | .6296 | .4830 | .6143 | .4868 | .5990 | .4901 | .5835 | .4930 | 34 |
| 67 | .6446 | .4788 | .6295 | .4831 | .6142 | .4868 | .5989 | .4902 | .5834 | .4930 | 33 |
| 68 | .6444 | .4788 | .6293 | .4831 | .6141 | .4869 | .5987 | .4902 | .5833 | .4931 | 32 |
| 69 | .6442 | .4788 | .6291 | .4831 | .6139 | .4869 | .5985 | .4902 | .5831 | .4931 | 31 |
| 70 | .6440 | .4788 | .6289 | .4831 | .6137 | .4869 | .5983 | .4902 | .5829 | .4931 | 20 |
| 71 | .6439 | .4789 | .6288 | .4832 | .6136 | .4870 | .5982 | .4903 | .5828 | .4932 | 29 |
| 72 | .6438 | .4790 | .6287 | .4832 | .6135 | .4871 | .5981 | .4904 | .5826 | .4932 | 28 |
| 73 | .6437 | .4791 | .6285 | .4833 | .6133 | .4871 | .5979 | .4904 | .5824 | .4932 | 27 |
| 74 | .6435 | .4791 | .6283 | .4833 | .6131 | .4871 | .5977 | .4904 | .5822 | .4932 | 26 |
| 75 | .6433 | .4791 | .6281 | .4833 | .6129 | .4871 | .5975 | .4904 | .5820 | .4932 | 25 |
| 76 | .6432 | .4791 | .6280 | .4834 | .6128 | .4872 | .5974 | .4904 | .5819 | .4933 | 24 |
| 77 | .6431 | .4792 | .6279 | .4834 | .6127 | .4872 | .5973 | .4905 | .5818 | .4933 | 23 |
| 78 | .6429 | .4792 | .6278 | .4835 | .6125 | .4872 | .5972 | .4906 | .5817 | .4933 | 22 |
| 79 | .6427 | .4792 | .6276 | .4835 | .6123 | .4872 | .5970 | .4906 | .5815 | .4933 | 21 |
| 80 | .6425 | .4793 | .6274 | .4835 | .6121 | .4872 | .5968 | .4906 | .5813 | .4933 | 20 |
| 81 | .6424 | .4794 | .6273 | .4836 | .6120 | .4873 | .5967 | .4906 | .5812 | .4934 | 19 |
| 82 | .6423 | .4794 | .6272 | .4837 | .6119 | .4874 | .5966 | .4907 | .5811 | .4934 | 18 |
| 83 | .6422 | .4795 | .6270 | .4837 | .6118 | .4875 | .5964 | .4907 | .5809 | .4934 | 17 |
| 84 | .6420 | .4795 | .6268 | .4837 | .6116 | .4875 | .5962 | .4907 | .5807 | .4934 | 16 |
| 85 | .6418 | .4795 | .6266 | .4837 | .6114 | .4875 | .5960 | .4907 | .5805 | .4935 | 15 |
| 86 | .6417 | .4796 | .6265 | .4838 | .6113 | .4875 | .5959 | .4908 | .5804 | .4935 | 14 |
| 87 | .6416 | .4796 | .6264 | .4839 | .6112 | .4876 | .5958 | .4908 | .5803 | .4936 | 13 |
| 88 | .6414 | .4797 | .6263 | .4839 | .6110 | .4876 | .5956 | .4908 | .5802 | .4936 | 12 |
| 89 | .6412 | .4797 | .6261 | .4839 | .6108 | .4876 | .5954 | .4908 | .5800 | .4936 | 11 |
| 90 | .6410 | .4797 | .6259 | .4840 | .6106 | .4876 | .5952 | .4908 | .5798 | .4936 | 10 |
| 91 | .6409 | .4798 | .6258 | .4840 | .6105 | .4877 | .5951 | .4909 | .5797 | .4937 | 09 |
| 92 | .6408 | .4799 | .6257 | .4841 | .6104 | .4878 | .5950 | .4910 | .5796 | .4937 | 08 |
| 93 | .6406 | .4799 | .6255 | .4841 | .6102 | .4878 | .5949 | .4910 | .5794 | .4937 | 07 |
| 94 | .6404 | .4799 | .6253 | .4841 | .6100 | .4878 | .5947 | .4910 | .5792 | .4937 | 06 |
| 95 | .6402 | .4799 | .6251 | .4841 | .6098 | .4878 | .5945 | .4910 | .5790 | .4937 | 05 |
| 96 | .6401 | .4800 | .6250 | .4842 | .6097 | .4878 | .5944 | .4911 | .5789 | .4938 | 04 |
| 97 | .6400 | .4801 | .6249 | .4842 | .6096 | .4879 | .5943 | .4912 | .5788 | .4938 | 03 |
| 98 | .6399 | .4801 | .6247 | .4842 | .6095 | .4880 | .5941 | .4912 | .5786 | .4938 | 02 |
| 99 | .6397 | .4801 | .6245 | .4842 | .6093 | .4880 | .5939 | .4912 | .5784 | .4938 | 01 |
| 100 | .6395 | .4801 | .6243 | .4842 | .6091 | .4880 | .5937 | .4912 | .5782 | .4939 | 00 |
| | D | h | D | h | D | h | D | h | D | h | 分 |
| | 56 ^G | | 56 ^G | | 57 ^G | | 58 ^G | | 58 ^G | | |

| 分 | 145 ^G | | 146 ^G | | 147 ^G | | 148 ^G | | 149 ^G | | 分 |
|----|------------------|------|------------------|------|------------------|------|------------------|------|------------------|------|----|
| | D | h | D | h | D | h | D | h | D | h | |
| 01 | 5781 | 4939 | 5626 | 4961 | 5469 | 4979 | 5313 | 4991 | 5156 | 4998 | 99 |
| 02 | 5780 | 4939 | 5625 | 4962 | 5468 | 4979 | 5312 | 4991 | 5155 | 4998 | 98 |
| 03 | 5778 | 4940 | 5623 | 4962 | 5467 | 4979 | 5310 | 4991 | 5153 | 4998 | 97 |
| 04 | 5776 | 4940 | 5621 | 4962 | 5465 | 4979 | 5308 | 4991 | 5151 | 4998 | 96 |
| 05 | 5774 | 4940 | 5619 | 4962 | 5463 | 4979 | 5306 | 4991 | 5149 | 4998 | 95 |
| 06 | 5773 | 4940 | 5618 | 4962 | 5462 | 4979 | 5305 | 4991 | 5148 | 4998 | 94 |
| 07 | 5772 | 4941 | 5617 | 4963 | 5461 | 4980 | 5304 | 4991 | 5147 | 4998 | 93 |
| 08 | 5771 | 4941 | 5615 | 4963 | 5459 | 4980 | 5302 | 4992 | 5145 | 4998 | 92 |
| 09 | 5769 | 4941 | 5613 | 4963 | 5457 | 4980 | 5300 | 4992 | 5143 | 4998 | 91 |
| 10 | 5767 | 4941 | 5613 | 4963 | 5455 | 4980 | 5298 | 4992 | 5141 | 4998 | 90 |
| 11 | 5766 | 4942 | 5610 | 4963 | 5454 | 4980 | 5297 | 4992 | 5140 | 4998 | 89 |
| 12 | 5765 | 4942 | 5609 | 4964 | 5453 | 4980 | 5296 | 4992 | 5139 | 4998 | 88 |
| 13 | 5764 | 4943 | 5607 | 4964 | 5451 | 4980 | 5294 | 4992 | 5137 | 4998 | 87 |
| 14 | 5762 | 4943 | 5605 | 4964 | 5449 | 4980 | 5292 | 4992 | 5135 | 4998 | 86 |
| 15 | 5760 | 4943 | 5603 | 4964 | 5447 | 4981 | 5290 | 4992 | 5133 | 4998 | 85 |
| 16 | 5759 | 4943 | 5602 | 4964 | 5446 | 4981 | 5289 | 4992 | 5132 | 4998 | 84 |
| 17 | 5757 | 4944 | 5601 | 4965 | 5445 | 4981 | 5288 | 4992 | 5131 | 4999 | 83 |
| 18 | 5755 | 4944 | 5599 | 4965 | 5443 | 4981 | 5287 | 4992 | 5130 | 4999 | 82 |
| 19 | 5753 | 4944 | 5597 | 4965 | 5441 | 4981 | 5285 | 4992 | 5128 | 4999 | 81 |
| 20 | 5751 | 4944 | 5595 | 4965 | 5439 | 4981 | 5283 | 4993 | 5126 | 4999 | 80 |
| 21 | 5750 | 4944 | 5594 | 4965 | 5438 | 4981 | 5282 | 4993 | 5125 | 4999 | 79 |
| 22 | 5749 | 4945 | 5593 | 4966 | 5437 | 4981 | 5281 | 4993 | 5124 | 4999 | 78 |
| 23 | 5747 | 4945 | 5592 | 4966 | 5435 | 4982 | 5279 | 4993 | 5122 | 4999 | 77 |
| 24 | 5745 | 4945 | 5590 | 4966 | 5433 | 4982 | 5277 | 4993 | 5120 | 4999 | 76 |
| 25 | 5743 | 4945 | 5588 | 4966 | 5431 | 4982 | 5275 | 4993 | 5118 | 4999 | 75 |
| 26 | 5742 | 4945 | 5587 | 4966 | 5430 | 4982 | 5274 | 4993 | 5117 | 4999 | 74 |
| 27 | 5741 | 4946 | 5586 | 4967 | 5429 | 4982 | 5273 | 4993 | 5116 | 4999 | 73 |
| 28 | 5740 | 4946 | 5584 | 4967 | 5428 | 4982 | 5271 | 4993 | 5115 | 4999 | 72 |
| 29 | 5738 | 4946 | 5582 | 4967 | 5426 | 4982 | 5269 | 4993 | 5113 | 4999 | 71 |
| 30 | 5736 | 4946 | 5580 | 4967 | 5424 | 4982 | 5267 | 4993 | 5111 | 4999 | 70 |
| 31 | 5735 | 4947 | 5579 | 4967 | 5423 | 4983 | 5266 | 4993 | 5110 | 4999 | 69 |
| 32 | 5734 | 4947 | 5578 | 4968 | 5422 | 4983 | 5265 | 4994 | 5108 | 4999 | 68 |
| 33 | 5732 | 4947 | 5576 | 4968 | 5420 | 4983 | 5263 | 4994 | 5106 | 4999 | 67 |
| 34 | 5730 | 4947 | 5574 | 4968 | 5418 | 4983 | 5261 | 4994 | 5104 | 4999 | 66 |
| 35 | 5728 | 4948 | 5572 | 4968 | 5416 | 4983 | 5259 | 4994 | 5102 | 4999 | 65 |
| 36 | 5727 | 4948 | 5571 | 4968 | 5415 | 4983 | 5258 | 4994 | 5101 | 4999 | 64 |
| 37 | 5726 | 4948 | 5570 | 4968 | 5414 | 4983 | 5257 | 4994 | 5100 | 4999 | 63 |
| 38 | 5724 | 4948 | 5568 | 4968 | 5412 | 4983 | 5255 | 4994 | 5098 | 4999 | 62 |
| 39 | 5722 | 4948 | 5566 | 4969 | 5410 | 4984 | 5253 | 4994 | 5096 | 4999 | 61 |
| 40 | 5720 | 4948 | 5564 | 4969 | 5408 | 4984 | 5251 | 4994 | 5094 | 4999 | 60 |
| 41 | 5719 | 4949 | 5563 | 4969 | 5407 | 4984 | 5250 | 4994 | 5093 | 4999 | 59 |
| 42 | 5718 | 4949 | 5562 | 4969 | 5406 | 4984 | 5249 | 4994 | 5092 | 4999 | 58 |
| 43 | 5716 | 4949 | 5560 | 4969 | 5404 | 4984 | 5247 | 4994 | 5090 | 4999 | 57 |
| 44 | 5714 | 4949 | 5558 | 4969 | 5402 | 4984 | 5245 | 4995 | 5088 | 4999 | 56 |
| 45 | 5712 | 4949 | 5556 | 4969 | 5400 | 4984 | 5243 | 4995 | 5086 | 4999 | 55 |
| 46 | 5711 | 4949 | 5555 | 4970 | 5399 | 4984 | 5242 | 4995 | 5085 | 4999 | 54 |
| 47 | 5710 | 4950 | 5554 | 4970 | 5398 | 4985 | 5241 | 4995 | 5084 | 4999 | 53 |
| 48 | 5708 | 4950 | 5553 | 4970 | 5396 | 4985 | 5239 | 4995 | 5082 | 4999 | 52 |
| 49 | 5706 | 4950 | 5551 | 4970 | 5394 | 4985 | 5237 | 4995 | 5080 | 4999 | 51 |
| 50 | 5704 | 4950 | 5549 | 4970 | 5392 | 4985 | 5235 | 4995 | 5078 | 4999 | 50 |
| | D | h | D | h | D | h | D | h | D | h | 分 |
| | 54 ^G | | 53 ^G | | 52 ^G | | 51 ^G | | 50 ^G | | |

| 分 | 145 ^G | | 146 ^G | | 147 ^G | | 148 ^G | | 149 ^G | | |
|-----|------------------|-------|------------------|-------|------------------|-------|------------------|-------|------------------|-------|----|
| | D | h | D | h | D | h | D | h | D | h | |
| 51 | .5703 | .4950 | .5548 | .4970 | .5391 | .4985 | .5234 | .4995 | .5077 | .4999 | 49 |
| 52 | .5702 | .4951 | .5547 | .4970 | .5390 | .4985 | .5233 | .4995 | .5076 | .4999 | 48 |
| 53 | .5701 | .4951 | .5545 | .4970 | .5388 | .4985 | .5232 | .4995 | .5075 | .4999 | 47 |
| 54 | .5699 | .4951 | .5543 | .4971 | .5386 | .4985 | .5230 | .4995 | .5073 | .4999 | 46 |
| 55 | .5697 | .4951 | .5541 | .4971 | .5384 | .4986 | .5228 | .4995 | .5071 | .4999 | 45 |
| 56 | .5696 | .4952 | .5540 | .4971 | .5383 | .4986 | .5227 | .4995 | .5070 | .4999 | 44 |
| 57 | .5695 | .4952 | .5539 | .4971 | .5382 | .4986 | .5226 | .4995 | .5069 | .4999 | 43 |
| 58 | .5693 | .4952 | .5537 | .4971 | .5381 | .4986 | .5224 | .4996 | .5067 | .4999 | 42 |
| 59 | .5691 | .4952 | .5535 | .4971 | .5379 | .4986 | .5222 | .4996 | .5065 | .4999 | 41 |
| 60 | .5689 | .4953 | .5533 | .4972 | .5377 | .4986 | .5220 | .4996 | .5063 | .4999 | 40 |
| 61 | .5688 | .4953 | .5532 | .4972 | .5376 | .4986 | .5219 | .4996 | .5062 | .4999 | 39 |
| 62 | .5687 | .4953 | .5531 | .4972 | .5375 | .4986 | .5218 | .4996 | .5061 | .4999 | 38 |
| 63 | .5685 | .4953 | .5529 | .4972 | .5373 | .4987 | .5216 | .4996 | .5059 | .4999 | 37 |
| 64 | .5683 | .4953 | .5527 | .4972 | .5371 | .4987 | .5214 | .4996 | .5057 | .4999 | 36 |
| 65 | .5681 | .4954 | .5525 | .4972 | .5369 | .4987 | .5212 | .4996 | .5055 | .4999 | 35 |
| 66 | .5680 | .4954 | .5524 | .4972 | .5368 | .4987 | .5211 | .4996 | .5054 | .4999 | 34 |
| 67 | .5679 | .4954 | .5523 | .4973 | .5367 | .4987 | .5210 | .4996 | .5053 | .4999 | 33 |
| 68 | .5677 | .4954 | .5521 | .4973 | .5365 | .4987 | .5208 | .4996 | .5051 | .4999 | 32 |
| 69 | .5675 | .4954 | .5519 | .4973 | .5363 | .4987 | .5206 | .4996 | .5049 | .4999 | 31 |
| 70 | .5673 | .4955 | .5517 | .4973 | .5361 | .4987 | .5204 | .4996 | .5047 | .4999 | 30 |
| 71 | .5672 | .4955 | .5516 | .4973 | .5360 | .4988 | .5203 | .4996 | .5046 | .5000 | 29 |
| 72 | .5671 | .4955 | .5515 | .4974 | .5359 | .4988 | .5202 | .4996 | .5045 | .5000 | 28 |
| 73 | .5670 | .4956 | .5514 | .4974 | .5357 | .4988 | .5200 | .4996 | .5043 | .5000 | 27 |
| 74 | .5669 | .4956 | .5512 | .4974 | .5355 | .4988 | .5198 | .4997 | .5041 | .5000 | 26 |
| 75 | .5667 | .4956 | .5510 | .4974 | .5353 | .4988 | .5196 | .4997 | .5039 | .5000 | 25 |
| 76 | .5666 | .4956 | .5509 | .4975 | .5352 | .4988 | .5195 | .4997 | .5038 | .5000 | 24 |
| 77 | .5664 | .4957 | .5508 | .4975 | .5351 | .4988 | .5194 | .4997 | .5037 | .5000 | 23 |
| 78 | .5662 | .4957 | .5506 | .4975 | .5349 | .4988 | .5192 | .4997 | .5035 | .5000 | 22 |
| 79 | .5660 | .4957 | .5504 | .4975 | .5347 | .4989 | .5190 | .4997 | .5033 | .5000 | 21 |
| 80 | .5658 | .4957 | .5502 | .4975 | .5345 | .4989 | .5188 | .4997 | .5031 | .5000 | 20 |
| 81 | .5657 | .4957 | .5501 | .4976 | .5344 | .4989 | .5187 | .4997 | .5030 | .5000 | 19 |
| 82 | .5656 | .4958 | .5500 | .4976 | .5343 | .4989 | .5186 | .4997 | .5029 | .5000 | 18 |
| 83 | .5654 | .4958 | .5498 | .4976 | .5341 | .4989 | .5185 | .4997 | .5028 | .5000 | 17 |
| 84 | .5652 | .4958 | .5496 | .4976 | .5339 | .4989 | .5183 | .4997 | .5026 | .5000 | 16 |
| 85 | .5650 | .4958 | .5494 | .4976 | .5337 | .4989 | .5181 | .4997 | .5024 | .5000 | 15 |
| 86 | .5649 | .4958 | .5492 | .4976 | .5336 | .4989 | .5180 | .4997 | .5023 | .5000 | 14 |
| 87 | .5648 | .4959 | .5491 | .4976 | .5335 | .4989 | .5179 | .4997 | .5022 | .5000 | 13 |
| 88 | .5646 | .4959 | .5490 | .4977 | .5334 | .4990 | .5177 | .4997 | .5020 | .5000 | 12 |
| 89 | .5644 | .4959 | .5488 | .4977 | .5332 | .4990 | .5175 | .4997 | .5018 | .5000 | 11 |
| 90 | .5642 | .4959 | .5486 | .4977 | .5330 | .4990 | .5173 | .4997 | .5016 | .5000 | 10 |
| 91 | .5641 | .4959 | .5485 | .4977 | .5329 | .4990 | .5172 | .4997 | .5015 | .5000 | 09 |
| 92 | .5640 | .4960 | .5484 | .4977 | .5328 | .4990 | .5171 | .4998 | .5014 | .5000 | 08 |
| 93 | .5638 | .4960 | .5482 | .4977 | .5326 | .4990 | .5169 | .4998 | .5012 | .5000 | 07 |
| 94 | .5636 | .4960 | .5480 | .4977 | .5324 | .4990 | .5167 | .4998 | .5010 | .5000 | 06 |
| 95 | .5634 | .4960 | .5478 | .4978 | .5322 | .4990 | .5165 | .4998 | .5008 | .5000 | 05 |
| 96 | .5633 | .4960 | .5477 | .4978 | .5321 | .4990 | .5164 | .4998 | .5007 | .5000 | 04 |
| 97 | .5632 | .4960 | .5476 | .4978 | .5320 | .4990 | .5163 | .4998 | .5006 | .5000 | 03 |
| 98 | .5631 | .4961 | .5474 | .4978 | .5318 | .4991 | .5161 | .4998 | .5004 | .5000 | 02 |
| 99 | .5629 | .4961 | .5472 | .4978 | .5316 | .4991 | .5159 | .4998 | .5002 | .5000 | 01 |
| 100 | .5627 | .4961 | .5470 | .4978 | .5314 | .4991 | .5157 | .4998 | .5000 | .5000 | 00 |
| | D | h | D | h | D | h | D | h | D | h | 分 |
| | 54 ^G | | 53 ^G | | 52 ^G | | 51 ^G | | 50 ^G | | |

附錄(二)

正 弦 餘 弦 表

| 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 分 | 分 | 分 | 分 | 分 | 分 |
|----|---------|---------|-----|-----|---------|---------|----|----|---------|---------|-----|-----|---------|---------|----|----|---|---|
| 0 | 0,00000 | 1,00000 | 100 | 50 | 0,00785 | 0,99997 | 50 | 0 | 0,01571 | 0,99988 | 100 | 50 | 0,02356 | 0,99972 | 50 | 49 | | |
| 1 | 0,00016 | 1,00000 | 99 | 51 | 0,00801 | 0,99997 | 49 | 1 | 0,01586 | 0,99987 | 99 | 51 | 0,02372 | 0,99972 | 49 | 48 | | |
| 2 | 0,00031 | 1,00000 | 98 | 52 | 0,00817 | 0,99997 | 48 | 2 | 0,01602 | 0,99987 | 98 | 52 | 0,02387 | 0,99971 | 48 | 47 | | |
| 3 | 0,00047 | 1,00000 | 97 | 53 | 0,00832 | 0,99997 | 47 | 3 | 0,01618 | 0,99987 | 97 | 53 | 0,02403 | 0,99971 | 47 | 46 | | |
| 4 | 0,00063 | 1,00000 | 96 | 54 | 0,00848 | 0,99996 | 46 | 4 | 0,01634 | 0,99987 | 96 | 54 | 0,02419 | 0,99971 | 46 | 45 | | |
| 5 | 0,00079 | 1,00000 | 95 | 55 | 0,00864 | 0,99996 | 45 | 5 | 0,01649 | 0,99986 | 95 | 55 | 0,02434 | 0,99970 | 45 | 44 | | |
| 6 | 0,00094 | 1,00000 | 94 | 56 | 0,00880 | 0,99996 | 44 | 6 | 0,01665 | 0,99986 | 94 | 56 | 0,02450 | 0,99970 | 44 | 43 | | |
| 7 | 0,00110 | 1,00000 | 93 | 57 | 0,00895 | 0,99996 | 43 | 7 | 0,01681 | 0,99986 | 93 | 57 | 0,02466 | 0,99970 | 43 | 42 | | |
| 8 | 0,00126 | 1,00000 | 92 | 58 | 0,00911 | 0,99996 | 42 | 8 | 0,01696 | 0,99986 | 92 | 58 | 0,02482 | 0,99969 | 42 | 41 | | |
| 9 | 0,00141 | 1,00000 | 91 | 59 | 0,00927 | 0,99996 | 41 | 9 | 0,01712 | 0,99985 | 91 | 59 | 0,02497 | 0,99969 | 41 | 40 | | |
| 10 | 0,00157 | 1,00000 | 90 | 60 | 0,00942 | 0,99996 | 40 | 10 | 0,01728 | 0,99985 | 90 | 60 | 0,02513 | 0,99968 | 40 | 39 | | |
| 11 | 0,00173 | 1,00000 | 89 | 61 | 0,00958 | 0,99995 | 39 | 11 | 0,01743 | 0,99985 | 89 | 61 | 0,02529 | 0,99968 | 39 | 38 | | |
| 12 | 0,00188 | 1,00000 | 88 | 62 | 0,00974 | 0,99995 | 38 | 12 | 0,01759 | 0,99985 | 88 | 62 | 0,02544 | 0,99968 | 38 | 37 | | |
| 13 | 0,00204 | 1,00000 | 87 | 63 | 0,00990 | 0,99995 | 37 | 13 | 0,01775 | 0,99984 | 87 | 63 | 0,02560 | 0,99967 | 37 | 36 | | |
| 14 | 0,00220 | 1,00000 | 86 | 64 | 0,01005 | 0,99995 | 36 | 14 | 0,01791 | 0,99984 | 86 | 64 | 0,02576 | 0,99967 | 36 | 35 | | |
| 15 | 0,00236 | 1,00000 | 85 | 65 | 0,01021 | 0,99995 | 35 | 15 | 0,01806 | 0,99984 | 85 | 65 | 0,02592 | 0,99966 | 35 | 34 | | |
| 16 | 0,00251 | 1,00000 | 84 | 66 | 0,01037 | 0,99995 | 34 | 16 | 0,01822 | 0,99983 | 84 | 66 | 0,02607 | 0,99966 | 34 | 33 | | |
| 17 | 0,00267 | 1,00000 | 83 | 67 | 0,01052 | 0,99994 | 33 | 17 | 0,01838 | 0,99983 | 83 | 67 | 0,02623 | 0,99966 | 33 | 32 | | |
| 18 | 0,00283 | 1,00000 | 82 | 68 | 0,01067 | 0,99994 | 32 | 18 | 0,01853 | 0,99983 | 82 | 68 | 0,02639 | 0,99965 | 32 | 31 | | |
| 19 | 0,00298 | 1,00000 | 81 | 69 | 0,01083 | 0,99994 | 31 | 19 | 0,01869 | 0,99983 | 81 | 69 | 0,02654 | 0,99965 | 31 | 30 | | |
| 20 | 0,00314 | 1,00000 | 80 | 70 | 0,01100 | 0,99994 | 30 | 20 | 0,01885 | 0,99982 | 80 | 70 | 0,02670 | 0,99964 | 30 | 29 | | |
| 21 | 0,00330 | 0,99999 | 79 | 71 | 0,01115 | 0,99994 | 29 | 21 | 0,01901 | 0,99982 | 79 | 71 | 0,02686 | 0,99964 | 29 | 28 | | |
| 22 | 0,00346 | 0,99999 | 78 | 72 | 0,01132 | 0,99994 | 28 | 22 | 0,01916 | 0,99982 | 78 | 72 | 0,02701 | 0,99963 | 28 | 27 | | |
| 23 | 0,00361 | 0,99999 | 77 | 73 | 0,01148 | 0,99993 | 27 | 23 | 0,01932 | 0,99981 | 77 | 73 | 0,02717 | 0,99963 | 27 | 26 | | |
| 24 | 0,00377 | 0,99999 | 76 | 74 | 0,01164 | 0,99993 | 26 | 24 | 0,01948 | 0,99981 | 76 | 74 | 0,02733 | 0,99963 | 26 | 25 | | |
| 25 | 0,00393 | 0,99999 | 75 | 75 | 0,01178 | 0,99993 | 25 | 25 | 0,01963 | 0,99981 | 75 | 75 | 0,02749 | 0,99962 | 25 | 24 | | |
| 26 | 0,00408 | 0,99999 | 74 | 76 | 0,01194 | 0,99993 | 24 | 26 | 0,01979 | 0,99980 | 74 | 76 | 0,02764 | 0,99962 | 24 | 23 | | |
| 27 | 0,00424 | 0,99999 | 73 | 77 | 0,01209 | 0,99993 | 23 | 27 | 0,01995 | 0,99980 | 73 | 77 | 0,02780 | 0,99961 | 23 | 22 | | |
| 28 | 0,00440 | 0,99999 | 72 | 78 | 0,01225 | 0,99992 | 22 | 28 | 0,02010 | 0,99980 | 72 | 78 | 0,02796 | 0,99961 | 22 | 21 | | |
| 29 | 0,00455 | 0,99999 | 71 | 79 | 0,01240 | 0,99992 | 21 | 29 | 0,02026 | 0,99979 | 71 | 79 | 0,02811 | 0,99960 | 21 | 20 | | |
| 30 | 0,00471 | 0,99999 | 70 | 80 | 0,01257 | 0,99992 | 20 | 30 | 0,02042 | 0,99979 | 70 | 80 | 0,02827 | 0,99960 | 20 | 19 | | |
| 31 | 0,00487 | 0,99999 | 69 | 81 | 0,01272 | 0,99992 | 19 | 31 | 0,02058 | 0,99979 | 69 | 81 | 0,02843 | 0,99960 | 19 | 18 | | |
| 32 | 0,00503 | 0,99999 | 68 | 82 | 0,01288 | 0,99992 | 18 | 32 | 0,02073 | 0,99978 | 68 | 82 | 0,02858 | 0,99959 | 18 | 17 | | |
| 33 | 0,00518 | 0,99999 | 67 | 83 | 0,01304 | 0,99992 | 17 | 33 | 0,02089 | 0,99978 | 67 | 83 | 0,02874 | 0,99959 | 17 | 16 | | |
| 34 | 0,00534 | 0,99999 | 66 | 84 | 0,01319 | 0,99991 | 16 | 34 | 0,02105 | 0,99978 | 66 | 84 | 0,02890 | 0,99958 | 16 | 15 | | |
| 35 | 0,00550 | 0,99998 | 65 | 85 | 0,01335 | 0,99991 | 15 | 35 | 0,02120 | 0,99977 | 65 | 85 | 0,02906 | 0,99958 | 15 | 14 | | |
| 36 | 0,00566 | 0,99998 | 64 | 86 | 0,01351 | 0,99991 | 14 | 36 | 0,02136 | 0,99977 | 64 | 86 | 0,02921 | 0,99957 | 14 | 13 | | |
| 37 | 0,00581 | 0,99998 | 63 | 87 | 0,01367 | 0,99991 | 13 | 37 | 0,02152 | 0,99977 | 63 | 87 | 0,02937 | 0,99957 | 13 | 12 | | |
| 38 | 0,00597 | 0,99998 | 62 | 88 | 0,01382 | 0,99990 | 12 | 38 | 0,02168 | 0,99976 | 62 | 88 | 0,02953 | 0,99956 | 12 | 11 | | |
| 39 | 0,00613 | 0,99998 | 61 | 89 | 0,01394 | 0,99990 | 11 | 39 | 0,02183 | 0,99976 | 61 | 89 | 0,02968 | 0,99956 | 11 | 10 | | |
| 40 | 0,00628 | 0,99998 | 60 | 90 | 0,01414 | 0,99990 | 10 | 40 | 0,02199 | 0,99976 | 60 | 90 | 0,02984 | 0,99955 | 10 | 9 | | |
| 41 | 0,00644 | 0,99998 | 59 | 91 | 0,01429 | 0,99990 | 9 | 41 | 0,02215 | 0,99975 | 59 | 91 | 0,03000 | 0,99955 | 9 | 8 | | |
| 42 | 0,00660 | 0,99998 | 58 | 92 | 0,01445 | 0,99990 | 8 | 42 | 0,02230 | 0,99975 | 58 | 92 | 0,03015 | 0,99954 | 8 | 7 | | |
| 43 | 0,00675 | 0,99998 | 57 | 93 | 0,01461 | 0,99989 | 7 | 43 | 0,02246 | 0,99975 | 57 | 93 | 0,03031 | 0,99954 | 7 | 6 | | |
| 44 | 0,00692 | 0,99998 | 56 | 94 | 0,01476 | 0,99989 | 6 | 44 | 0,02262 | 0,99974 | 56 | 94 | 0,03047 | 0,99954 | 6 | 5 | | |
| 45 | 0,00707 | 0,99998 | 55 | 95 | 0,01492 | 0,99989 | 5 | 45 | 0,02277 | 0,99974 | 55 | 95 | 0,03063 | 0,99953 | 5 | 4 | | |
| 46 | 0,00723 | 0,99997 | 54 | 96 | 0,01508 | 0,99989 | 4 | 46 | 0,02293 | 0,99974 | 54 | 96 | 0,03078 | 0,99953 | 4 | 3 | | |
| 47 | 0,00738 | 0,99997 | 53 | 97 | 0,01524 | 0,99988 | 3 | 47 | 0,02309 | 0,99973 | 53 | 97 | 0,03094 | 0,99952 | 3 | 2 | | |
| 48 | 0,00754 | 0,99997 | 52 | 98 | 0,01539 | 0,99988 | 2 | 48 | 0,02325 | 0,99973 | 52 | 98 | 0,03119 | 0,99952 | 2 | 1 | | |
| 49 | 0,00770 | 0,99997 | 51 | 99 | 0,01555 | 0,99988 | 1 | 49 | 0,02340 | 0,99973 | 51 | 99 | 0,03125 | 0,99951 | 1 | 0 | | |
| 50 | 0,00785 | 0,99997 | 50 | 100 | 0,01571 | 0,99988 | 0 | 50 | 0,02356 | 0,99972 | 50 | 100 | 0,03141 | 0,99951 | 0 | 0 | | |
| 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 分 | 分 | 分 | 分 | 分 | 分 |

| 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 |
|----|---------|---------|-----|-----|---------|---------|----|----|---------|---------|-----|-----|---------|---------|----|
| 0 | 0.03141 | 0.99951 | 100 | 50 | 0.03926 | 0.99923 | 50 | 0 | 0.04711 | 0.99889 | 100 | 50 | 0.05495 | 0.99849 | 50 |
| 1 | 0.03157 | 0.99950 | 99 | 51 | 0.03942 | 0.99922 | 49 | 1 | 0.04726 | 0.99888 | 99 | 51 | 0.05510 | 0.99848 | 49 |
| 2 | 0.03172 | 0.99950 | 98 | 52 | 0.03957 | 0.99921 | 48 | 2 | 0.04742 | 0.99887 | 98 | 52 | 0.05526 | 0.99847 | 48 |
| 3 | 0.03188 | 0.99949 | 97 | 53 | 0.03973 | 0.99921 | 47 | 3 | 0.04758 | 0.99887 | 97 | 53 | 0.05542 | 0.99846 | 47 |
| 4 | 0.03204 | 0.99949 | 96 | 54 | 0.03989 | 0.99920 | 46 | 4 | 0.04773 | 0.99886 | 96 | 54 | 0.05558 | 0.99846 | 46 |
| 5 | 0.03220 | 0.99948 | 95 | 55 | 0.04004 | 0.99920 | 45 | 5 | 0.04789 | 0.99885 | 95 | 55 | 0.05573 | 0.99845 | 45 |
| 6 | 0.03235 | 0.99948 | 94 | 56 | 0.04020 | 0.99919 | 44 | 6 | 0.04805 | 0.99885 | 94 | 56 | 0.05589 | 0.99844 | 44 |
| 7 | 0.03251 | 0.99947 | 93 | 57 | 0.04036 | 0.99919 | 43 | 7 | 0.04820 | 0.99884 | 93 | 57 | 0.05605 | 0.99843 | 43 |
| 8 | 0.03267 | 0.99947 | 92 | 58 | 0.04052 | 0.99918 | 42 | 8 | 0.04836 | 0.99883 | 92 | 58 | 0.05621 | 0.99842 | 42 |
| 9 | 0.03282 | 0.99946 | 91 | 59 | 0.04067 | 0.99917 | 41 | 9 | 0.04852 | 0.99882 | 91 | 59 | 0.05636 | 0.99841 | 41 |
| 10 | 0.03298 | 0.99946 | 90 | 60 | 0.04083 | 0.99917 | 40 | 10 | 0.04868 | 0.99881 | 90 | 60 | 0.05652 | 0.99840 | 40 |
| 11 | 0.03314 | 0.99945 | 89 | 61 | 0.04099 | 0.99916 | 39 | 11 | 0.04883 | 0.99881 | 89 | 61 | 0.05667 | 0.99839 | 39 |
| 12 | 0.03329 | 0.99945 | 88 | 62 | 0.04114 | 0.99915 | 38 | 12 | 0.04899 | 0.99880 | 88 | 62 | 0.05683 | 0.99838 | 38 |
| 13 | 0.03345 | 0.99944 | 87 | 63 | 0.04130 | 0.99915 | 37 | 13 | 0.04915 | 0.99879 | 87 | 63 | 0.05699 | 0.99837 | 37 |
| 14 | 0.03361 | 0.99943 | 86 | 64 | 0.04146 | 0.99914 | 36 | 14 | 0.04930 | 0.99878 | 86 | 64 | 0.05715 | 0.99837 | 36 |
| 15 | 0.03377 | 0.99943 | 85 | 65 | 0.04161 | 0.99913 | 35 | 15 | 0.04946 | 0.99878 | 85 | 65 | 0.05730 | 0.99836 | 35 |
| 16 | 0.03392 | 0.99942 | 84 | 66 | 0.04177 | 0.99913 | 34 | 16 | 0.04962 | 0.99877 | 84 | 66 | 0.05746 | 0.99835 | 34 |
| 17 | 0.03408 | 0.99942 | 83 | 67 | 0.04193 | 0.99912 | 33 | 17 | 0.04977 | 0.99876 | 83 | 67 | 0.05762 | 0.99834 | 33 |
| 18 | 0.03424 | 0.99941 | 82 | 68 | 0.04209 | 0.99911 | 32 | 18 | 0.04993 | 0.99875 | 82 | 68 | 0.05777 | 0.99833 | 32 |
| 19 | 0.03440 | 0.99941 | 81 | 69 | 0.04224 | 0.99911 | 31 | 19 | 0.05009 | 0.99874 | 81 | 69 | 0.05793 | 0.99832 | 31 |
| 20 | 0.03455 | 0.99940 | 80 | 70 | 0.04240 | 0.99910 | 30 | 20 | 0.05024 | 0.99874 | 80 | 70 | 0.05809 | 0.99831 | 30 |
| 21 | 0.03471 | 0.99940 | 79 | 71 | 0.04256 | 0.99909 | 29 | 21 | 0.05040 | 0.99873 | 79 | 71 | 0.05824 | 0.99830 | 29 |
| 22 | 0.03487 | 0.99939 | 78 | 72 | 0.04271 | 0.99909 | 28 | 22 | 0.05056 | 0.99872 | 78 | 72 | 0.05840 | 0.99829 | 28 |
| 23 | 0.03502 | 0.99939 | 77 | 73 | 0.04287 | 0.99908 | 27 | 23 | 0.05072 | 0.99871 | 77 | 73 | 0.05856 | 0.99828 | 27 |
| 24 | 0.03518 | 0.99938 | 76 | 74 | 0.04303 | 0.99907 | 26 | 24 | 0.05087 | 0.99871 | 76 | 74 | 0.05871 | 0.99827 | 26 |
| 25 | 0.03534 | 0.99938 | 75 | 75 | 0.04318 | 0.99907 | 25 | 25 | 0.05103 | 0.99870 | 75 | 75 | 0.05887 | 0.99826 | 25 |
| 26 | 0.03549 | 0.99937 | 74 | 76 | 0.04334 | 0.99906 | 24 | 26 | 0.05119 | 0.99869 | 74 | 76 | 0.05903 | 0.99826 | 24 |
| 27 | 0.03565 | 0.99936 | 73 | 77 | 0.04350 | 0.99905 | 23 | 27 | 0.05134 | 0.99868 | 73 | 77 | 0.05918 | 0.99825 | 23 |
| 28 | 0.03581 | 0.99936 | 72 | 78 | 0.04366 | 0.99905 | 22 | 28 | 0.05150 | 0.99867 | 72 | 78 | 0.05934 | 0.99824 | 22 |
| 29 | 0.03596 | 0.99935 | 71 | 79 | 0.04381 | 0.99904 | 21 | 29 | 0.05166 | 0.99867 | 71 | 79 | 0.05950 | 0.99823 | 21 |
| 30 | 0.03612 | 0.99935 | 70 | 80 | 0.04397 | 0.99903 | 20 | 30 | 0.05181 | 0.99866 | 70 | 80 | 0.05966 | 0.99822 | 20 |
| 31 | 0.03628 | 0.99934 | 69 | 81 | 0.04413 | 0.99903 | 19 | 31 | 0.05197 | 0.99865 | 69 | 81 | 0.05981 | 0.99821 | 19 |
| 32 | 0.03643 | 0.99934 | 68 | 82 | 0.04428 | 0.99902 | 18 | 32 | 0.05213 | 0.99864 | 68 | 82 | 0.05997 | 0.99820 | 18 |
| 33 | 0.03659 | 0.99933 | 67 | 83 | 0.04444 | 0.99901 | 17 | 33 | 0.05228 | 0.99863 | 67 | 83 | 0.06013 | 0.99819 | 17 |
| 34 | 0.03675 | 0.99932 | 66 | 84 | 0.04460 | 0.99901 | 16 | 34 | 0.05244 | 0.99862 | 66 | 84 | 0.06028 | 0.99818 | 16 |
| 35 | 0.03691 | 0.99932 | 65 | 85 | 0.04475 | 0.99900 | 15 | 35 | 0.05260 | 0.99862 | 65 | 85 | 0.06044 | 0.99817 | 15 |
| 36 | 0.03706 | 0.99931 | 64 | 86 | 0.04491 | 0.99899 | 14 | 36 | 0.05275 | 0.99861 | 64 | 86 | 0.06060 | 0.99816 | 14 |
| 37 | 0.03722 | 0.99931 | 63 | 87 | 0.04507 | 0.99898 | 13 | 37 | 0.05291 | 0.99860 | 63 | 87 | 0.06075 | 0.99815 | 13 |
| 38 | 0.03738 | 0.99930 | 62 | 88 | 0.04522 | 0.99898 | 12 | 38 | 0.05307 | 0.99859 | 62 | 88 | 0.06091 | 0.99814 | 12 |
| 39 | 0.03753 | 0.99930 | 61 | 89 | 0.04538 | 0.99897 | 11 | 39 | 0.05323 | 0.99858 | 61 | 89 | 0.06107 | 0.99813 | 11 |
| 40 | 0.03769 | 0.99929 | 60 | 90 | 0.04554 | 0.99896 | 10 | 40 | 0.05338 | 0.99857 | 60 | 90 | 0.06122 | 0.99812 | 10 |
| 41 | 0.03785 | 0.99928 | 59 | 91 | 0.04569 | 0.99896 | 9 | 41 | 0.05354 | 0.99857 | 59 | 91 | 0.06138 | 0.99811 | 9 |
| 42 | 0.03800 | 0.99928 | 58 | 92 | 0.04585 | 0.99895 | 8 | 42 | 0.05369 | 0.99856 | 58 | 92 | 0.06154 | 0.99810 | 8 |
| 43 | 0.03816 | 0.99927 | 57 | 93 | 0.04601 | 0.99894 | 7 | 43 | 0.05385 | 0.99855 | 57 | 93 | 0.06169 | 0.99809 | 7 |
| 44 | 0.03832 | 0.99927 | 56 | 94 | 0.04617 | 0.99893 | 6 | 44 | 0.05401 | 0.99854 | 56 | 94 | 0.06185 | 0.99809 | 6 |
| 45 | 0.03848 | 0.99926 | 55 | 95 | 0.04632 | 0.99893 | 5 | 45 | 0.05417 | 0.99853 | 55 | 95 | 0.06201 | 0.99808 | 5 |
| 46 | 0.03863 | 0.99925 | 54 | 96 | 0.04648 | 0.99892 | 4 | 46 | 0.05432 | 0.99852 | 54 | 96 | 0.06216 | 0.99807 | 4 |
| 47 | 0.03879 | 0.99925 | 53 | 97 | 0.04664 | 0.99891 | 3 | 47 | 0.05448 | 0.99851 | 53 | 97 | 0.06232 | 0.99806 | 3 |
| 48 | 0.03895 | 0.99924 | 52 | 98 | 0.04679 | 0.99890 | 2 | 48 | 0.05464 | 0.99851 | 52 | 98 | 0.06248 | 0.99805 | 2 |
| 49 | 0.03911 | 0.99924 | 51 | 99 | 0.04695 | 0.99890 | 1 | 49 | 0.05479 | 0.99850 | 51 | 99 | 0.06263 | 0.99804 | 1 |
| 50 | 0.03926 | 0.99923 | 50 | 100 | 0.04711 | 0.99889 | 0 | 50 | 0.05495 | 0.99849 | 50 | 100 | 0.06279 | 0.99803 | 0 |
| 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 |

| 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 |
|----|---------|---------|-----|-----|---------|---------|----|----|---------|---------|-----|-----|---------|---------|----|
| 0 | 0,06279 | 0,99803 | 100 | 50 | 0,07063 | 0,99750 | 50 | 0 | 0,07846 | 0,99692 | 100 | 50 | 0,08629 | 0,99627 | 50 |
| 1 | 0,06295 | 0,99802 | 99 | 51 | 0,07078 | 0,99749 | 49 | 1 | 0,07862 | 0,99690 | 99 | 51 | 0,08644 | 0,99626 | 49 |
| 2 | 0,06310 | 0,99801 | 99 | 52 | 0,07094 | 0,99748 | 48 | 2 | 0,07877 | 0,99689 | 98 | 52 | 0,08659 | 0,99625 | 48 |
| 3 | 0,06326 | 0,99800 | 97 | 53 | 0,07110 | 0,99747 | 48 | 3 | 0,07893 | 0,99688 | 97 | 53 | 0,08674 | 0,99623 | 47 |
| 4 | 0,06342 | 0,99799 | 96 | 54 | 0,07125 | 0,99746 | 46 | 4 | 0,07908 | 0,99687 | 96 | 54 | 0,08689 | 0,99622 | 46 |
| 5 | 0,06357 | 0,99798 | 95 | 55 | 0,07141 | 0,99745 | 45 | 5 | 0,07924 | 0,99686 | 95 | 55 | 0,08705 | 0,99620 | 45 |
| 6 | 0,06373 | 0,99797 | 94 | 56 | 0,07157 | 0,99744 | 44 | 6 | 0,07940 | 0,99684 | 94 | 56 | 0,08721 | 0,99619 | 44 |
| 7 | 0,06388 | 0,99796 | 93 | 57 | 0,07172 | 0,99742 | 43 | 7 | 0,07955 | 0,99683 | 93 | 57 | 0,08738 | 0,99618 | 43 |
| 8 | 0,06404 | 0,99794 | 92 | 58 | 0,07188 | 0,99741 | 42 | 8 | 0,07971 | 0,99682 | 92 | 58 | 0,08754 | 0,99616 | 42 |
| 9 | 0,06420 | 0,99793 | 91 | 59 | 0,07204 | 0,99740 | 41 | 9 | 0,07987 | 0,99681 | 91 | 59 | 0,08769 | 0,99615 | 41 |
| 10 | 0,06436 | 0,99793 | 90 | 60 | 0,07219 | 0,99739 | 40 | 10 | 0,08002 | 0,99679 | 90 | 60 | 0,08784 | 0,99613 | 40 |
| 11 | 0,06451 | 0,99792 | 89 | 61 | 0,07235 | 0,99738 | 39 | 11 | 0,08018 | 0,99678 | 89 | 61 | 0,08800 | 0,99612 | 39 |
| 12 | 0,06467 | 0,99791 | 88 | 62 | 0,07251 | 0,99737 | 38 | 12 | 0,08034 | 0,99677 | 88 | 62 | 0,08816 | 0,99611 | 38 |
| 13 | 0,06483 | 0,99790 | 87 | 63 | 0,07266 | 0,99736 | 37 | 13 | 0,08049 | 0,99675 | 87 | 63 | 0,08832 | 0,99609 | 37 |
| 14 | 0,06498 | 0,99789 | 86 | 64 | 0,07282 | 0,99735 | 36 | 14 | 0,08065 | 0,99674 | 86 | 64 | 0,08848 | 0,99608 | 36 |
| 15 | 0,06514 | 0,99788 | 85 | 65 | 0,07298 | 0,99733 | 35 | 15 | 0,08081 | 0,99673 | 85 | 65 | 0,08863 | 0,99606 | 35 |
| 16 | 0,06530 | 0,99787 | 84 | 66 | 0,07313 | 0,99732 | 34 | 16 | 0,08096 | 0,99672 | 84 | 66 | 0,08879 | 0,99605 | 34 |
| 17 | 0,06545 | 0,99786 | 83 | 67 | 0,07329 | 0,99731 | 33 | 17 | 0,08112 | 0,99670 | 83 | 67 | 0,08895 | 0,99603 | 33 |
| 18 | 0,06561 | 0,99785 | 82 | 68 | 0,07345 | 0,99730 | 32 | 18 | 0,08128 | 0,99669 | 82 | 68 | 0,08910 | 0,99602 | 32 |
| 19 | 0,06577 | 0,99784 | 81 | 69 | 0,07360 | 0,99729 | 31 | 19 | 0,08143 | 0,99668 | 81 | 69 | 0,08926 | 0,99601 | 31 |
| 20 | 0,06593 | 0,99782 | 80 | 70 | 0,07376 | 0,99728 | 30 | 20 | 0,08159 | 0,99667 | 80 | 70 | 0,08942 | 0,99599 | 30 |
| 21 | 0,06608 | 0,99781 | 79 | 71 | 0,07392 | 0,99726 | 29 | 21 | 0,08175 | 0,99665 | 79 | 71 | 0,08957 | 0,99598 | 29 |
| 22 | 0,06624 | 0,99780 | 78 | 72 | 0,07407 | 0,99725 | 28 | 22 | 0,08190 | 0,99664 | 78 | 72 | 0,08973 | 0,99597 | 28 |
| 23 | 0,06640 | 0,99779 | 77 | 73 | 0,07423 | 0,99724 | 27 | 23 | 0,08206 | 0,99663 | 77 | 73 | 0,08989 | 0,99595 | 27 |
| 24 | 0,06655 | 0,99778 | 76 | 74 | 0,07439 | 0,99723 | 26 | 24 | 0,08222 | 0,99661 | 76 | 74 | 0,09004 | 0,99594 | 26 |
| 25 | 0,06671 | 0,99777 | 75 | 75 | 0,07454 | 0,99722 | 25 | 25 | 0,08237 | 0,99660 | 75 | 75 | 0,09020 | 0,99592 | 25 |
| 26 | 0,06687 | 0,99776 | 74 | 76 | 0,07470 | 0,99721 | 24 | 26 | 0,08253 | 0,99659 | 74 | 76 | 0,09035 | 0,99591 | 24 |
| 27 | 0,06702 | 0,99775 | 73 | 77 | 0,07486 | 0,99719 | 23 | 27 | 0,08269 | 0,99658 | 73 | 77 | 0,09051 | 0,99590 | 23 |
| 28 | 0,06718 | 0,99774 | 72 | 78 | 0,07501 | 0,99718 | 22 | 28 | 0,08284 | 0,99656 | 72 | 78 | 0,09067 | 0,99588 | 22 |
| 29 | 0,06734 | 0,99773 | 71 | 79 | 0,07517 | 0,99717 | 21 | 29 | 0,08300 | 0,99655 | 71 | 79 | 0,09082 | 0,99587 | 21 |
| 30 | 0,06749 | 0,99772 | 70 | 80 | 0,07533 | 0,99716 | 20 | 30 | 0,08316 | 0,99654 | 70 | 80 | 0,09098 | 0,99585 | 20 |
| 31 | 0,06765 | 0,99771 | 69 | 81 | 0,07548 | 0,99715 | 19 | 31 | 0,08331 | 0,99652 | 69 | 81 | 0,09114 | 0,99584 | 19 |
| 32 | 0,06781 | 0,99770 | 68 | 82 | 0,07564 | 0,99714 | 18 | 32 | 0,08347 | 0,99651 | 68 | 82 | 0,09129 | 0,99582 | 18 |
| 33 | 0,06796 | 0,99769 | 67 | 83 | 0,07580 | 0,99712 | 17 | 33 | 0,08363 | 0,99650 | 67 | 83 | 0,09145 | 0,99581 | 17 |
| 34 | 0,06812 | 0,99768 | 66 | 84 | 0,07595 | 0,99711 | 16 | 34 | 0,08378 | 0,99648 | 66 | 84 | 0,09161 | 0,99580 | 16 |
| 35 | 0,06828 | 0,99767 | 65 | 85 | 0,07611 | 0,99710 | 15 | 35 | 0,08394 | 0,99647 | 65 | 85 | 0,09176 | 0,99578 | 15 |
| 36 | 0,06843 | 0,99766 | 64 | 86 | 0,07627 | 0,99709 | 14 | 36 | 0,08410 | 0,99646 | 64 | 86 | 0,09192 | 0,99577 | 14 |
| 37 | 0,06859 | 0,99764 | 63 | 87 | 0,07642 | 0,99708 | 13 | 37 | 0,08425 | 0,99644 | 63 | 87 | 0,09208 | 0,99575 | 13 |
| 38 | 0,06875 | 0,99763 | 62 | 88 | 0,07658 | 0,99706 | 12 | 38 | 0,08441 | 0,99643 | 62 | 88 | 0,09223 | 0,99574 | 12 |
| 39 | 0,06890 | 0,99762 | 61 | 89 | 0,07674 | 0,99705 | 11 | 39 | 0,08456 | 0,99642 | 61 | 89 | 0,09239 | 0,99572 | 11 |
| 40 | 0,06906 | 0,99761 | 60 | 90 | 0,07689 | 0,99704 | 10 | 40 | 0,08472 | 0,99640 | 60 | 90 | 0,09254 | 0,99571 | 10 |
| 41 | 0,06922 | 0,99760 | 59 | 91 | 0,07705 | 0,99703 | 9 | 41 | 0,08488 | 0,99639 | 59 | 91 | 0,09270 | 0,99569 | 9 |
| 42 | 0,06937 | 0,99759 | 58 | 92 | 0,07721 | 0,99702 | 8 | 42 | 0,08503 | 0,99638 | 58 | 92 | 0,09286 | 0,99568 | 8 |
| 43 | 0,06953 | 0,99758 | 57 | 93 | 0,07736 | 0,99700 | 7 | 43 | 0,08519 | 0,99636 | 57 | 93 | 0,09301 | 0,99566 | 7 |
| 44 | 0,06969 | 0,99757 | 56 | 94 | 0,07752 | 0,99699 | 6 | 44 | 0,08535 | 0,99635 | 56 | 94 | 0,09317 | 0,99565 | 6 |
| 45 | 0,06984 | 0,99756 | 55 | 95 | 0,07768 | 0,99698 | 5 | 45 | 0,08550 | 0,99634 | 55 | 95 | 0,09333 | 0,99564 | 5 |
| 46 | 0,07000 | 0,99755 | 54 | 96 | 0,07783 | 0,99697 | 4 | 46 | 0,08566 | 0,99632 | 54 | 96 | 0,09348 | 0,99562 | 4 |
| 47 | 0,07016 | 0,99754 | 53 | 97 | 0,07799 | 0,99695 | 3 | 47 | 0,08582 | 0,99631 | 53 | 97 | 0,09364 | 0,99561 | 3 |
| 48 | 0,07031 | 0,99752 | 52 | 98 | 0,07815 | 0,99694 | 2 | 48 | 0,08597 | 0,99630 | 52 | 98 | 0,09380 | 0,99559 | 2 |
| 49 | 0,07047 | 0,99751 | 51 | 99 | 0,07830 | 0,99693 | 1 | 49 | 0,08613 | 0,99629 | 51 | 99 | 0,09395 | 0,99558 | 1 |
| 50 | 0,07063 | 0,99750 | 50 | 100 | 0,07846 | 0,99692 | 0 | 50 | 0,08629 | 0,99627 | 50 | 100 | 0,09411 | 0,99556 | 0 |
| 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 |

| 分 | 正弦 | 餘弦 | 分 | 正弦 | 餘弦 | 分 | 正弦 | 餘弦 | 分 | 正弦 | 餘弦 | 分 | 正弦 | 餘弦 | 分 |
|----|---------|---------|-----|-----|---------|---------|----|----|---------|---------|-----|-----|---------|---------|----|
| 0 | 0.09411 | 0.96556 | 100 | 50 | 0.10192 | 0.99479 | 50 | 0 | 0.10973 | 0.99396 | 100 | 50 | 0.11754 | 0.99307 | 50 |
| 1 | 0.09426 | 0.96555 | 94 | 51 | 0.10208 | 0.99478 | 49 | 1 | 0.10989 | 0.99394 | 99 | 51 | 0.11769 | 0.99305 | 49 |
| 2 | 0.09442 | 0.96553 | 98 | 52 | 0.10224 | 0.99476 | 48 | 2 | 0.11005 | 0.99393 | 98 | 52 | 0.11785 | 0.99303 | 48 |
| 3 | 0.09458 | 0.96552 | 97 | 53 | 0.10239 | 0.99474 | 47 | 3 | 0.11020 | 0.99391 | 97 | 53 | 0.11801 | 0.99301 | 47 |
| 4 | 0.09473 | 0.96550 | 96 | 54 | 0.10255 | 0.99473 | 46 | 4 | 0.11036 | 0.99389 | 96 | 54 | 0.11816 | 0.99299 | 46 |
| 5 | 0.09489 | 0.96549 | 95 | 55 | 0.10271 | 0.99471 | 45 | 5 | 0.11051 | 0.99387 | 95 | 55 | 0.11832 | 0.99298 | 45 |
| 6 | 0.09505 | 0.96547 | 94 | 56 | 0.10286 | 0.99470 | 44 | 6 | 0.11067 | 0.99386 | 94 | 56 | 0.11847 | 0.99296 | 44 |
| 7 | 0.09520 | 0.96546 | 93 | 57 | 0.10302 | 0.99468 | 43 | 7 | 0.11083 | 0.99384 | 93 | 57 | 0.11863 | 0.99294 | 43 |
| 8 | 0.09536 | 0.96544 | 92 | 58 | 0.10317 | 0.99466 | 42 | 8 | 0.11098 | 0.99382 | 92 | 58 | 0.11879 | 0.99292 | 42 |
| 9 | 0.09552 | 0.96543 | 91 | 59 | 0.10333 | 0.99465 | 41 | 9 | 0.11114 | 0.99380 | 91 | 59 | 0.11894 | 0.99290 | 41 |
| 10 | 0.09567 | 0.96541 | 90 | 60 | 0.10349 | 0.99463 | 40 | 10 | 0.11130 | 0.99379 | 90 | 60 | 0.11910 | 0.99288 | 40 |
| 11 | 0.09583 | 0.96540 | 89 | 61 | 0.10364 | 0.99461 | 39 | 11 | 0.11145 | 0.99377 | 89 | 61 | 0.11925 | 0.99286 | 39 |
| 12 | 0.09598 | 0.96538 | 88 | 62 | 0.10380 | 0.99460 | 38 | 12 | 0.11161 | 0.99375 | 88 | 62 | 0.11941 | 0.99285 | 38 |
| 13 | 0.09614 | 0.96537 | 87 | 63 | 0.10396 | 0.99458 | 37 | 13 | 0.11176 | 0.99373 | 87 | 63 | 0.11957 | 0.99283 | 37 |
| 14 | 0.09630 | 0.96535 | 86 | 64 | 0.10411 | 0.99457 | 36 | 14 | 0.11192 | 0.99372 | 86 | 64 | 0.11972 | 0.99281 | 36 |
| 15 | 0.09645 | 0.96534 | 85 | 65 | 0.10427 | 0.99455 | 35 | 15 | 0.11208 | 0.99370 | 85 | 65 | 0.11988 | 0.99279 | 35 |
| 16 | 0.09661 | 0.96532 | 84 | 66 | 0.10442 | 0.99453 | 34 | 16 | 0.11223 | 0.99368 | 84 | 66 | 0.12003 | 0.99277 | 34 |
| 17 | 0.09677 | 0.96531 | 83 | 67 | 0.10458 | 0.99452 | 33 | 17 | 0.11239 | 0.99366 | 83 | 67 | 0.12019 | 0.99275 | 33 |
| 18 | 0.09692 | 0.96529 | 82 | 68 | 0.10474 | 0.99450 | 32 | 18 | 0.11254 | 0.99365 | 82 | 68 | 0.12035 | 0.99273 | 32 |
| 19 | 0.09708 | 0.96528 | 81 | 69 | 0.10489 | 0.99448 | 31 | 19 | 0.11270 | 0.99363 | 81 | 69 | 0.12050 | 0.99271 | 31 |
| 20 | 0.09724 | 0.96526 | 80 | 70 | 0.10505 | 0.99447 | 30 | 20 | 0.11286 | 0.99361 | 80 | 70 | 0.12066 | 0.99269 | 30 |
| 21 | 0.09739 | 0.96525 | 79 | 71 | 0.10521 | 0.99445 | 29 | 21 | 0.11301 | 0.99359 | 79 | 71 | 0.12081 | 0.99268 | 29 |
| 22 | 0.09755 | 0.96523 | 78 | 72 | 0.10536 | 0.99443 | 28 | 22 | 0.11317 | 0.99358 | 78 | 72 | 0.12097 | 0.99266 | 28 |
| 23 | 0.09770 | 0.96522 | 77 | 73 | 0.10552 | 0.99442 | 27 | 23 | 0.11332 | 0.99356 | 77 | 73 | 0.12112 | 0.99264 | 27 |
| 24 | 0.09786 | 0.96520 | 76 | 74 | 0.10567 | 0.99440 | 26 | 24 | 0.11348 | 0.99354 | 76 | 74 | 0.12128 | 0.99262 | 26 |
| 25 | 0.09802 | 0.96518 | 75 | 75 | 0.10583 | 0.99438 | 25 | 25 | 0.11364 | 0.99352 | 75 | 75 | 0.12144 | 0.99260 | 25 |
| 26 | 0.09817 | 0.96517 | 74 | 76 | 0.10599 | 0.99437 | 24 | 26 | 0.11379 | 0.99350 | 74 | 76 | 0.12159 | 0.99258 | 24 |
| 27 | 0.09833 | 0.96515 | 73 | 77 | 0.10614 | 0.99435 | 23 | 27 | 0.11395 | 0.99349 | 73 | 77 | 0.12175 | 0.99256 | 23 |
| 28 | 0.09849 | 0.96514 | 72 | 78 | 0.10630 | 0.99433 | 22 | 28 | 0.11410 | 0.99347 | 72 | 78 | 0.12190 | 0.99254 | 22 |
| 29 | 0.09864 | 0.96512 | 71 | 79 | 0.10645 | 0.99432 | 21 | 29 | 0.11426 | 0.99345 | 71 | 79 | 0.12206 | 0.99252 | 21 |
| 30 | 0.09880 | 0.96511 | 70 | 80 | 0.10661 | 0.99430 | 20 | 30 | 0.11442 | 0.99343 | 70 | 80 | 0.12222 | 0.99250 | 20 |
| 31 | 0.09896 | 0.96510 | 69 | 81 | 0.10677 | 0.99428 | 19 | 31 | 0.11457 | 0.99341 | 69 | 81 | 0.12237 | 0.99248 | 19 |
| 32 | 0.09911 | 0.96508 | 68 | 82 | 0.10692 | 0.99427 | 18 | 32 | 0.11473 | 0.99340 | 68 | 82 | 0.12253 | 0.99247 | 18 |
| 33 | 0.09927 | 0.96506 | 67 | 83 | 0.10708 | 0.99425 | 17 | 33 | 0.11489 | 0.99338 | 67 | 83 | 0.12268 | 0.99245 | 17 |
| 34 | 0.09942 | 0.96505 | 66 | 84 | 0.10724 | 0.99423 | 16 | 34 | 0.11504 | 0.99336 | 66 | 84 | 0.12284 | 0.99243 | 16 |
| 35 | 0.09958 | 0.96503 | 65 | 85 | 0.10739 | 0.99422 | 15 | 35 | 0.11520 | 0.99334 | 65 | 85 | 0.12300 | 0.99241 | 15 |
| 36 | 0.09974 | 0.96501 | 64 | 86 | 0.10755 | 0.99420 | 14 | 36 | 0.11535 | 0.99332 | 64 | 86 | 0.12315 | 0.99239 | 14 |
| 37 | 0.09989 | 0.96500 | 63 | 87 | 0.10770 | 0.99418 | 13 | 37 | 0.11551 | 0.99331 | 63 | 87 | 0.12331 | 0.99237 | 13 |
| 38 | 0.10005 | 0.96498 | 62 | 88 | 0.10786 | 0.99417 | 12 | 38 | 0.11567 | 0.99329 | 62 | 88 | 0.12346 | 0.99235 | 12 |
| 39 | 0.10021 | 0.96497 | 61 | 89 | 0.10802 | 0.99415 | 11 | 39 | 0.11582 | 0.99327 | 61 | 89 | 0.12362 | 0.99233 | 11 |
| 40 | 0.10036 | 0.96495 | 60 | 90 | 0.10817 | 0.99413 | 10 | 40 | 0.11598 | 0.99325 | 60 | 90 | 0.12377 | 0.99231 | 10 |
| 41 | 0.10052 | 0.96494 | 59 | 91 | 0.10833 | 0.99412 | 9 | 41 | 0.11613 | 0.99323 | 59 | 91 | 0.12393 | 0.99229 | 9 |
| 42 | 0.10067 | 0.96492 | 58 | 92 | 0.10849 | 0.99410 | 8 | 42 | 0.11629 | 0.99322 | 58 | 92 | 0.12409 | 0.99227 | 8 |
| 43 | 0.10083 | 0.96490 | 57 | 93 | 0.10864 | 0.99408 | 7 | 43 | 0.11645 | 0.99320 | 57 | 93 | 0.12424 | 0.99225 | 7 |
| 44 | 0.10099 | 0.96487 | 56 | 94 | 0.10880 | 0.99406 | 6 | 44 | 0.11660 | 0.99319 | 56 | 94 | 0.12440 | 0.99223 | 6 |
| 45 | 0.10114 | 0.96487 | 55 | 95 | 0.10895 | 0.99405 | 5 | 45 | 0.11676 | 0.99318 | 55 | 95 | 0.12455 | 0.99221 | 5 |
| 46 | 0.10130 | 0.96486 | 54 | 96 | 0.10911 | 0.99403 | 4 | 46 | 0.11691 | 0.99314 | 54 | 96 | 0.12471 | 0.99219 | 4 |
| 47 | 0.10146 | 0.96484 | 53 | 97 | 0.10927 | 0.99401 | 3 | 47 | 0.11707 | 0.99312 | 53 | 97 | 0.12487 | 0.99217 | 3 |
| 48 | 0.10161 | 0.96482 | 52 | 98 | 0.10942 | 0.99400 | 2 | 48 | 0.11723 | 0.99311 | 52 | 98 | 0.12502 | 0.99215 | 2 |
| 49 | 0.10177 | 0.96481 | 51 | 99 | 0.10958 | 0.99398 | 1 | 49 | 0.11738 | 0.99309 | 51 | 99 | 0.12518 | 0.99213 | 1 |
| 50 | 0.10192 | 0.96479 | 50 | 100 | 0.10973 | 0.99396 | 0 | 50 | 0.11754 | 0.99307 | 50 | 100 | 0.12533 | 0.99211 | 0 |
| 分 | 餘弦 | 正弦 | 分 | 餘弦 | 正弦 | 分 | 餘弦 | 正弦 | 分 | 餘弦 | 正弦 | 分 | 餘弦 | 正弦 | 分 |

| 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 |
|----|---------|---------|-----|-----|---------|---------|----|----|---------|---------|-----|-----|---------|---------|----|
| 0 | 0.12533 | 0.99211 | 100 | 50 | 0.13312 | 0.99115 | 50 | 0 | 0.14090 | 0.99002 | 100 | 50 | 0.14867 | 0.98889 | 50 |
| 1 | 0.12549 | 0.99210 | 99 | 51 | 0.13320 | 0.99108 | 49 | 1 | 0.14116 | 0.99000 | 99 | 51 | 0.14883 | 0.98896 | 49 |
| 2 | 0.12565 | 0.99208 | 98 | 52 | 0.13343 | 0.99106 | 48 | 2 | 0.14121 | 0.98998 | 98 | 52 | 0.14898 | 0.98894 | 48 |
| 3 | 0.12580 | 0.99206 | 97 | 53 | 0.13359 | 0.99104 | 47 | 3 | 0.14137 | 0.98996 | 97 | 53 | 0.14914 | 0.98882 | 47 |
| 4 | 0.12596 | 0.99204 | 96 | 54 | 0.13374 | 0.99102 | 46 | 4 | 0.14152 | 0.98994 | 96 | 54 | 0.14929 | 0.98879 | 46 |
| 5 | 0.12611 | 0.99202 | 95 | 55 | 0.13390 | 0.99100 | 45 | 5 | 0.14168 | 0.98991 | 95 | 55 | 0.14945 | 0.98877 | 45 |
| 6 | 0.12627 | 0.99200 | 94 | 56 | 0.13406 | 0.99097 | 44 | 6 | 0.14183 | 0.98989 | 94 | 56 | 0.14960 | 0.98875 | 44 |
| 7 | 0.12642 | 0.99198 | 93 | 57 | 0.13421 | 0.99095 | 43 | 7 | 0.14199 | 0.98987 | 93 | 57 | 0.14976 | 0.98872 | 43 |
| 8 | 0.12658 | 0.99196 | 92 | 58 | 0.13437 | 0.99093 | 42 | 8 | 0.14215 | 0.98985 | 92 | 58 | 0.14992 | 0.98870 | 42 |
| 9 | 0.12674 | 0.99194 | 91 | 59 | 0.13452 | 0.99091 | 41 | 9 | 0.14230 | 0.98982 | 91 | 59 | 0.15007 | 0.98868 | 41 |
| 10 | 0.12689 | 0.99192 | 90 | 60 | 0.13468 | 0.99089 | 40 | 10 | 0.14246 | 0.98980 | 90 | 60 | 0.15023 | 0.98865 | 40 |
| 11 | 0.12705 | 0.99190 | 89 | 61 | 0.13483 | 0.99087 | 39 | 11 | 0.14261 | 0.98978 | 89 | 61 | 0.15038 | 0.98863 | 39 |
| 12 | 0.12720 | 0.99188 | 88 | 62 | 0.13499 | 0.99085 | 38 | 12 | 0.14277 | 0.98976 | 88 | 62 | 0.15054 | 0.98860 | 38 |
| 13 | 0.12736 | 0.99186 | 87 | 63 | 0.13514 | 0.99083 | 37 | 13 | 0.14292 | 0.98973 | 87 | 63 | 0.15069 | 0.98858 | 37 |
| 14 | 0.12751 | 0.99184 | 86 | 64 | 0.13530 | 0.99080 | 36 | 14 | 0.14308 | 0.98971 | 86 | 64 | 0.15085 | 0.98856 | 36 |
| 15 | 0.12767 | 0.99182 | 85 | 65 | 0.13546 | 0.99078 | 35 | 15 | 0.14323 | 0.98969 | 85 | 65 | 0.15100 | 0.98853 | 35 |
| 16 | 0.12783 | 0.99180 | 84 | 66 | 0.13561 | 0.99076 | 34 | 16 | 0.14339 | 0.98967 | 84 | 66 | 0.15116 | 0.98851 | 34 |
| 17 | 0.12798 | 0.99178 | 83 | 67 | 0.13577 | 0.99074 | 33 | 17 | 0.14354 | 0.98964 | 83 | 67 | 0.15131 | 0.98849 | 33 |
| 18 | 0.12814 | 0.99176 | 82 | 68 | 0.13592 | 0.99072 | 32 | 18 | 0.14370 | 0.98962 | 82 | 68 | 0.15147 | 0.98846 | 32 |
| 19 | 0.12829 | 0.99174 | 81 | 69 | 0.13608 | 0.99070 | 31 | 19 | 0.14386 | 0.98960 | 81 | 69 | 0.15162 | 0.98844 | 31 |
| 20 | 0.12845 | 0.99172 | 80 | 70 | 0.13623 | 0.99068 | 30 | 20 | 0.14401 | 0.98958 | 80 | 70 | 0.15178 | 0.98841 | 30 |
| 21 | 0.12861 | 0.99170 | 79 | 71 | 0.13639 | 0.99066 | 29 | 21 | 0.14417 | 0.98955 | 79 | 71 | 0.15193 | 0.98839 | 29 |
| 22 | 0.12876 | 0.99168 | 78 | 72 | 0.13655 | 0.99063 | 28 | 22 | 0.14432 | 0.98953 | 78 | 72 | 0.15209 | 0.98837 | 28 |
| 23 | 0.12892 | 0.99166 | 77 | 73 | 0.13670 | 0.99061 | 27 | 23 | 0.14448 | 0.98951 | 77 | 73 | 0.15224 | 0.98834 | 27 |
| 24 | 0.12907 | 0.99164 | 76 | 74 | 0.13686 | 0.99059 | 26 | 24 | 0.14463 | 0.98949 | 76 | 74 | 0.15240 | 0.98832 | 26 |
| 25 | 0.12923 | 0.99162 | 75 | 75 | 0.13701 | 0.99057 | 25 | 25 | 0.14479 | 0.98946 | 75 | 75 | 0.15255 | 0.98830 | 25 |
| 26 | 0.12938 | 0.99159 | 74 | 76 | 0.13717 | 0.99055 | 24 | 26 | 0.14494 | 0.98944 | 74 | 76 | 0.15271 | 0.98827 | 24 |
| 27 | 0.12954 | 0.99157 | 73 | 77 | 0.13732 | 0.99053 | 23 | 27 | 0.14510 | 0.98942 | 73 | 77 | 0.15286 | 0.98825 | 23 |
| 28 | 0.12970 | 0.99155 | 72 | 78 | 0.13748 | 0.99050 | 22 | 28 | 0.14525 | 0.98939 | 72 | 78 | 0.15302 | 0.98822 | 22 |
| 29 | 0.12985 | 0.99153 | 71 | 79 | 0.13763 | 0.99048 | 21 | 29 | 0.14541 | 0.98937 | 71 | 79 | 0.15318 | 0.98820 | 21 |
| 30 | 0.13001 | 0.99151 | 70 | 80 | 0.13779 | 0.99046 | 20 | 30 | 0.14557 | 0.98935 | 70 | 80 | 0.15333 | 0.98817 | 20 |
| 31 | 0.13016 | 0.99149 | 69 | 81 | 0.13795 | 0.99044 | 19 | 31 | 0.14572 | 0.98933 | 69 | 81 | 0.15349 | 0.98815 | 19 |
| 32 | 0.13032 | 0.99147 | 68 | 82 | 0.13810 | 0.99042 | 18 | 32 | 0.14588 | 0.98930 | 68 | 82 | 0.15364 | 0.98813 | 18 |
| 33 | 0.13047 | 0.99145 | 67 | 83 | 0.13826 | 0.99040 | 17 | 33 | 0.14603 | 0.98928 | 67 | 83 | 0.15380 | 0.98810 | 17 |
| 34 | 0.13063 | 0.99143 | 66 | 84 | 0.13841 | 0.99037 | 16 | 34 | 0.14619 | 0.98926 | 66 | 84 | 0.15395 | 0.98808 | 16 |
| 35 | 0.13079 | 0.99141 | 65 | 85 | 0.13857 | 0.99035 | 15 | 35 | 0.14634 | 0.98923 | 65 | 85 | 0.15411 | 0.98805 | 15 |
| 36 | 0.13094 | 0.99139 | 64 | 86 | 0.13872 | 0.99033 | 14 | 36 | 0.14650 | 0.98921 | 64 | 86 | 0.15426 | 0.98803 | 14 |
| 37 | 0.13110 | 0.99137 | 63 | 87 | 0.13888 | 0.99031 | 13 | 37 | 0.14665 | 0.98919 | 63 | 87 | 0.15442 | 0.98801 | 13 |
| 38 | 0.13125 | 0.99135 | 62 | 88 | 0.13903 | 0.99029 | 12 | 38 | 0.14681 | 0.98917 | 62 | 88 | 0.15457 | 0.98798 | 12 |
| 39 | 0.13141 | 0.99133 | 61 | 89 | 0.13919 | 0.99027 | 11 | 39 | 0.14696 | 0.98914 | 61 | 89 | 0.15473 | 0.98796 | 11 |
| 40 | 0.13156 | 0.99131 | 60 | 90 | 0.13935 | 0.99024 | 10 | 40 | 0.14712 | 0.98912 | 60 | 90 | 0.15488 | 0.98793 | 10 |
| 41 | 0.13172 | 0.99129 | 59 | 91 | 0.13950 | 0.99022 | 9 | 41 | 0.14727 | 0.98910 | 59 | 91 | 0.15504 | 0.98791 | 9 |
| 42 | 0.13188 | 0.99127 | 58 | 92 | 0.13966 | 0.99020 | 8 | 42 | 0.14743 | 0.98907 | 58 | 92 | 0.15519 | 0.98788 | 8 |
| 43 | 0.13203 | 0.99125 | 57 | 93 | 0.13981 | 0.99018 | 7 | 43 | 0.14759 | 0.98905 | 57 | 93 | 0.15535 | 0.98786 | 7 |
| 44 | 0.13219 | 0.99122 | 56 | 94 | 0.13997 | 0.99016 | 6 | 44 | 0.14774 | 0.98903 | 56 | 94 | 0.15550 | 0.98784 | 6 |
| 45 | 0.13234 | 0.99120 | 55 | 95 | 0.14012 | 0.99013 | 5 | 45 | 0.14790 | 0.98900 | 55 | 95 | 0.15566 | 0.98781 | 5 |
| 46 | 0.13250 | 0.99118 | 54 | 96 | 0.14028 | 0.99011 | 4 | 46 | 0.14805 | 0.98898 | 54 | 96 | 0.15581 | 0.98779 | 4 |
| 47 | 0.13265 | 0.99116 | 53 | 97 | 0.14043 | 0.99009 | 3 | 47 | 0.14821 | 0.98896 | 53 | 97 | 0.15597 | 0.98776 | 3 |
| 48 | 0.13281 | 0.99114 | 52 | 98 | 0.14059 | 0.99007 | 2 | 48 | 0.14836 | 0.98893 | 52 | 98 | 0.15612 | 0.98774 | 2 |
| 49 | 0.13297 | 0.99112 | 51 | 99 | 0.14075 | 0.99005 | 1 | 49 | 0.14852 | 0.98891 | 51 | 99 | 0.15628 | 0.98771 | 1 |
| 50 | 0.13312 | 0.99110 | 50 | 100 | 0.14090 | 0.99002 | 0 | 50 | 0.14867 | 0.98889 | 50 | 100 | 0.15643 | 0.98769 | 0 |
| 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 |

| 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 |
|----|---------|---------|-----|-----|---------|---------|----|----|---------|---------|-----|-----|---------|---------|----|
| 0 | 0.15643 | 0.98769 | 100 | 50 | 0.16419 | 0.98643 | 50 | 0 | 0.17193 | 0.98511 | 100 | 50 | 0.17966 | 0.98373 | 50 |
| 1 | 0.15659 | 0.98766 | 99 | 51 | 0.16434 | 0.98640 | 49 | 1 | 0.17208 | 0.98508 | 99 | 51 | 0.17982 | 0.98370 | 49 |
| 2 | 0.15674 | 0.98764 | 98 | 52 | 0.16450 | 0.98638 | 48 | 2 | 0.17224 | 0.98506 | 98 | 52 | 0.17997 | 0.98367 | 48 |
| 3 | 0.15690 | 0.98761 | 97 | 53 | 0.16465 | 0.98635 | 47 | 3 | 0.17239 | 0.98503 | 97 | 53 | 0.18012 | 0.98364 | 47 |
| 4 | 0.15705 | 0.98759 | 96 | 54 | 0.16481 | 0.98633 | 46 | 4 | 0.17255 | 0.98500 | 96 | 54 | 0.18028 | 0.98362 | 46 |
| 5 | 0.15721 | 0.98756 | 95 | 55 | 0.16496 | 0.98630 | 45 | 5 | 0.17270 | 0.98497 | 95 | 55 | 0.18043 | 0.98359 | 45 |
| 6 | 0.15737 | 0.98754 | 94 | 56 | 0.16512 | 0.98627 | 44 | 6 | 0.17286 | 0.98495 | 94 | 56 | 0.18059 | 0.98356 | 44 |
| 7 | 0.15752 | 0.98752 | 93 | 57 | 0.16527 | 0.98625 | 43 | 7 | 0.17301 | 0.98492 | 93 | 57 | 0.18074 | 0.98353 | 43 |
| 8 | 0.15768 | 0.98749 | 92 | 58 | 0.16543 | 0.98622 | 42 | 8 | 0.17317 | 0.98489 | 92 | 58 | 0.18090 | 0.98350 | 42 |
| 9 | 0.15783 | 0.98747 | 91 | 59 | 0.16558 | 0.98620 | 41 | 9 | 0.17332 | 0.98487 | 91 | 59 | 0.18105 | 0.98347 | 41 |
| 10 | 0.15799 | 0.98744 | 90 | 60 | 0.16574 | 0.98617 | 40 | 10 | 0.17348 | 0.98484 | 90 | 60 | 0.18121 | 0.98345 | 40 |
| 11 | 0.15814 | 0.98742 | 89 | 61 | 0.16589 | 0.98614 | 39 | 11 | 0.17363 | 0.98481 | 89 | 61 | 0.18136 | 0.98342 | 39 |
| 12 | 0.15830 | 0.98739 | 88 | 62 | 0.16605 | 0.98612 | 38 | 12 | 0.17379 | 0.98478 | 88 | 62 | 0.18151 | 0.98339 | 38 |
| 13 | 0.15845 | 0.98737 | 87 | 63 | 0.16620 | 0.98609 | 37 | 13 | 0.17394 | 0.98476 | 87 | 63 | 0.18167 | 0.98336 | 37 |
| 14 | 0.15861 | 0.98734 | 86 | 64 | 0.16636 | 0.98607 | 36 | 14 | 0.17410 | 0.98473 | 86 | 64 | 0.18182 | 0.98333 | 36 |
| 15 | 0.15876 | 0.98732 | 85 | 65 | 0.16651 | 0.98604 | 35 | 15 | 0.17425 | 0.98470 | 85 | 65 | 0.18198 | 0.98330 | 35 |
| 16 | 0.15892 | 0.98729 | 84 | 66 | 0.16667 | 0.98601 | 34 | 16 | 0.17440 | 0.98467 | 84 | 66 | 0.18213 | 0.98327 | 34 |
| 17 | 0.15907 | 0.98727 | 83 | 67 | 0.16682 | 0.98599 | 33 | 17 | 0.17456 | 0.98465 | 83 | 67 | 0.18229 | 0.98325 | 33 |
| 18 | 0.15923 | 0.98724 | 82 | 68 | 0.16698 | 0.98596 | 32 | 18 | 0.17471 | 0.98462 | 82 | 68 | 0.18244 | 0.98322 | 32 |
| 19 | 0.15938 | 0.98722 | 81 | 69 | 0.16713 | 0.98593 | 31 | 19 | 0.17487 | 0.98459 | 81 | 69 | 0.18260 | 0.98319 | 31 |
| 20 | 0.15954 | 0.98719 | 80 | 70 | 0.16728 | 0.98591 | 30 | 20 | 0.17502 | 0.98456 | 80 | 70 | 0.18275 | 0.98316 | 30 |
| 21 | 0.15969 | 0.98717 | 79 | 71 | 0.16744 | 0.98588 | 29 | 21 | 0.17518 | 0.98454 | 79 | 71 | 0.18290 | 0.98313 | 29 |
| 22 | 0.15985 | 0.98714 | 78 | 72 | 0.16759 | 0.98586 | 28 | 22 | 0.17533 | 0.98451 | 78 | 72 | 0.18306 | 0.98310 | 28 |
| 23 | 0.16000 | 0.98712 | 77 | 73 | 0.16775 | 0.98583 | 27 | 23 | 0.17549 | 0.98448 | 77 | 73 | 0.18321 | 0.98307 | 27 |
| 24 | 0.16016 | 0.98709 | 76 | 74 | 0.16790 | 0.98580 | 26 | 24 | 0.17564 | 0.98445 | 76 | 74 | 0.18337 | 0.98304 | 26 |
| 25 | 0.16031 | 0.98707 | 75 | 75 | 0.16806 | 0.98578 | 25 | 25 | 0.17580 | 0.98443 | 75 | 75 | 0.18352 | 0.98302 | 25 |
| 26 | 0.16047 | 0.98704 | 74 | 76 | 0.16821 | 0.98575 | 24 | 26 | 0.17595 | 0.98440 | 74 | 76 | 0.18368 | 0.98299 | 24 |
| 27 | 0.16062 | 0.98702 | 73 | 77 | 0.16837 | 0.98572 | 23 | 27 | 0.17611 | 0.98437 | 73 | 77 | 0.18383 | 0.98296 | 23 |
| 28 | 0.16078 | 0.98699 | 72 | 78 | 0.16852 | 0.98570 | 22 | 28 | 0.17626 | 0.98434 | 72 | 78 | 0.18399 | 0.98293 | 22 |
| 29 | 0.16093 | 0.98697 | 71 | 79 | 0.16868 | 0.98567 | 21 | 29 | 0.17641 | 0.98432 | 71 | 79 | 0.18414 | 0.98290 | 21 |
| 30 | 0.16109 | 0.98694 | 70 | 80 | 0.16883 | 0.98564 | 20 | 30 | 0.17657 | 0.98429 | 70 | 80 | 0.18429 | 0.98287 | 20 |
| 31 | 0.16124 | 0.98692 | 69 | 81 | 0.16899 | 0.98562 | 19 | 31 | 0.17672 | 0.98426 | 69 | 81 | 0.18445 | 0.98284 | 19 |
| 32 | 0.16140 | 0.98689 | 68 | 82 | 0.16914 | 0.98559 | 18 | 32 | 0.17688 | 0.98423 | 68 | 82 | 0.18460 | 0.98281 | 18 |
| 33 | 0.16155 | 0.98686 | 67 | 83 | 0.16930 | 0.98556 | 17 | 33 | 0.17703 | 0.98420 | 67 | 83 | 0.18476 | 0.98278 | 17 |
| 34 | 0.16171 | 0.98684 | 66 | 84 | 0.16945 | 0.98554 | 16 | 34 | 0.17719 | 0.98418 | 66 | 84 | 0.18491 | 0.98276 | 16 |
| 35 | 0.16186 | 0.98681 | 65 | 85 | 0.16961 | 0.98551 | 15 | 35 | 0.17734 | 0.98415 | 65 | 85 | 0.18507 | 0.98273 | 15 |
| 36 | 0.16202 | 0.98679 | 64 | 86 | 0.16976 | 0.98548 | 14 | 36 | 0.17750 | 0.98412 | 64 | 86 | 0.18522 | 0.98270 | 14 |
| 37 | 0.16217 | 0.98676 | 63 | 87 | 0.16992 | 0.98546 | 13 | 37 | 0.17765 | 0.98409 | 63 | 87 | 0.18538 | 0.98267 | 13 |
| 38 | 0.16233 | 0.98674 | 62 | 88 | 0.17007 | 0.98543 | 12 | 38 | 0.17781 | 0.98407 | 62 | 88 | 0.18553 | 0.98264 | 12 |
| 39 | 0.16248 | 0.98671 | 61 | 89 | 0.17023 | 0.98540 | 11 | 39 | 0.17796 | 0.98404 | 61 | 89 | 0.18568 | 0.98261 | 11 |
| 40 | 0.16263 | 0.98669 | 60 | 90 | 0.17038 | 0.98538 | 10 | 40 | 0.17812 | 0.98401 | 60 | 90 | 0.18584 | 0.98258 | 10 |
| 41 | 0.16279 | 0.98666 | 59 | 91 | 0.17054 | 0.98535 | 9 | 41 | 0.17827 | 0.98398 | 59 | 91 | 0.18599 | 0.98255 | 9 |
| 42 | 0.16295 | 0.98663 | 58 | 92 | 0.17069 | 0.98532 | 8 | 42 | 0.17842 | 0.98395 | 58 | 92 | 0.18615 | 0.98252 | 8 |
| 43 | 0.16310 | 0.98661 | 57 | 93 | 0.17085 | 0.98530 | 7 | 43 | 0.17858 | 0.98393 | 57 | 93 | 0.18630 | 0.98249 | 7 |
| 44 | 0.16326 | 0.98658 | 56 | 94 | 0.17100 | 0.98527 | 6 | 44 | 0.17873 | 0.98390 | 56 | 94 | 0.18646 | 0.98246 | 6 |
| 45 | 0.16341 | 0.98656 | 55 | 95 | 0.17116 | 0.98524 | 5 | 45 | 0.17889 | 0.98387 | 55 | 95 | 0.18661 | 0.98243 | 5 |
| 46 | 0.16357 | 0.98653 | 54 | 96 | 0.17131 | 0.98522 | 4 | 46 | 0.17904 | 0.98384 | 54 | 96 | 0.18676 | 0.98240 | 4 |
| 47 | 0.16372 | 0.98651 | 53 | 97 | 0.17147 | 0.98519 | 3 | 47 | 0.17920 | 0.98381 | 53 | 97 | 0.18692 | 0.98238 | 3 |
| 48 | 0.16388 | 0.98648 | 52 | 98 | 0.17162 | 0.98516 | 2 | 48 | 0.17935 | 0.98378 | 52 | 98 | 0.18707 | 0.98235 | 2 |
| 49 | 0.16403 | 0.98646 | 51 | 99 | 0.17177 | 0.98514 | 1 | 49 | 0.17951 | 0.98376 | 51 | 99 | 0.18723 | 0.98232 | 1 |
| 50 | 0.16419 | 0.98643 | 50 | 100 | 0.17193 | 0.98511 | 0 | 50 | 0.17966 | 0.98373 | 50 | 100 | 0.18738 | 0.98229 | 0 |
| 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 |

| 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 |
|----|---------|---------|-----|-----|---------|---------|----|----|---------|---------|-----|-----|---------|---------|----|
| 0 | 0.21814 | 0.97492 | 100 | 50 | 0.22580 | 0.97417 | 50 | 0 | 0.23345 | 0.97237 | 100 | 50 | 0.24108 | 0.97051 | 50 |
| 1 | 0.21830 | 0.97588 | 99 | 51 | 0.22595 | 0.97414 | 49 | 1 | 0.23360 | 0.97233 | 99 | 51 | 0.24123 | 0.97047 | 49 |
| 2 | 0.21845 | 0.97585 | 98 | 52 | 0.22611 | 0.97400 | 48 | 2 | 0.23375 | 0.97230 | 98 | 52 | 0.24138 | 0.97043 | 48 |
| 3 | 0.21860 | 0.97581 | 97 | 53 | 0.22626 | 0.97407 | 47 | 3 | 0.23390 | 0.97226 | 97 | 53 | 0.24153 | 0.97039 | 47 |
| 4 | 0.21876 | 0.97578 | 96 | 54 | 0.22641 | 0.97403 | 46 | 4 | 0.23406 | 0.97222 | 96 | 54 | 0.24168 | 0.97036 | 46 |
| 5 | 0.21891 | 0.97574 | 95 | 55 | 0.22657 | 0.97400 | 45 | 5 | 0.23421 | 0.97219 | 95 | 55 | 0.24184 | 0.97032 | 45 |
| 6 | 0.21906 | 0.97571 | 94 | 56 | 0.22672 | 0.97396 | 44 | 6 | 0.23436 | 0.97215 | 94 | 56 | 0.24199 | 0.97028 | 44 |
| 7 | 0.21922 | 0.97568 | 93 | 57 | 0.22687 | 0.97392 | 43 | 7 | 0.23451 | 0.97211 | 93 | 57 | 0.24214 | 0.97024 | 43 |
| 8 | 0.21937 | 0.97564 | 92 | 58 | 0.22703 | 0.97389 | 42 | 8 | 0.23467 | 0.97208 | 92 | 58 | 0.24229 | 0.97020 | 42 |
| 9 | 0.21952 | 0.97561 | 91 | 59 | 0.22718 | 0.97385 | 41 | 9 | 0.23482 | 0.97204 | 91 | 59 | 0.24245 | 0.97016 | 41 |
| 10 | 0.21968 | 0.97557 | 90 | 60 | 0.22733 | 0.97382 | 40 | 10 | 0.23497 | 0.97200 | 90 | 60 | 0.24260 | 0.97013 | 40 |
| 11 | 0.21983 | 0.97554 | 89 | 61 | 0.22748 | 0.97378 | 39 | 11 | 0.23513 | 0.97197 | 89 | 61 | 0.24275 | 0.97009 | 39 |
| 12 | 0.21998 | 0.97550 | 88 | 62 | 0.22764 | 0.97375 | 38 | 12 | 0.23528 | 0.97193 | 88 | 62 | 0.24290 | 0.97005 | 38 |
| 13 | 0.22014 | 0.97547 | 87 | 63 | 0.22779 | 0.97371 | 37 | 13 | 0.23543 | 0.97189 | 87 | 63 | 0.24306 | 0.97001 | 37 |
| 14 | 0.22029 | 0.97543 | 86 | 64 | 0.22794 | 0.97367 | 36 | 14 | 0.23558 | 0.97185 | 86 | 64 | 0.24321 | 0.96997 | 36 |
| 15 | 0.22044 | 0.97540 | 85 | 65 | 0.22810 | 0.97364 | 35 | 15 | 0.23574 | 0.97182 | 85 | 65 | 0.24336 | 0.96994 | 35 |
| 16 | 0.22060 | 0.97536 | 84 | 66 | 0.22825 | 0.97360 | 34 | 16 | 0.23589 | 0.97178 | 84 | 66 | 0.24351 | 0.96990 | 34 |
| 17 | 0.22075 | 0.97533 | 83 | 67 | 0.22840 | 0.97357 | 33 | 17 | 0.23604 | 0.97174 | 83 | 67 | 0.24367 | 0.96986 | 33 |
| 18 | 0.22090 | 0.97530 | 82 | 68 | 0.22856 | 0.97353 | 32 | 18 | 0.23619 | 0.97171 | 82 | 68 | 0.24382 | 0.96982 | 32 |
| 19 | 0.22105 | 0.97526 | 81 | 69 | 0.22871 | 0.97350 | 31 | 19 | 0.23635 | 0.97167 | 81 | 69 | 0.24397 | 0.96978 | 31 |
| 20 | 0.22121 | 0.97523 | 80 | 70 | 0.22886 | 0.97346 | 30 | 20 | 0.23650 | 0.97163 | 80 | 70 | 0.24412 | 0.96974 | 30 |
| 21 | 0.22136 | 0.97519 | 79 | 71 | 0.22901 | 0.97342 | 29 | 21 | 0.23665 | 0.97159 | 79 | 71 | 0.24428 | 0.96971 | 29 |
| 22 | 0.22151 | 0.97516 | 78 | 72 | 0.22917 | 0.97339 | 28 | 22 | 0.23680 | 0.97156 | 78 | 72 | 0.24443 | 0.96967 | 28 |
| 23 | 0.22167 | 0.97512 | 77 | 73 | 0.22932 | 0.97335 | 27 | 23 | 0.23696 | 0.97152 | 77 | 73 | 0.24458 | 0.96963 | 27 |
| 24 | 0.22182 | 0.97509 | 76 | 74 | 0.22947 | 0.97332 | 26 | 24 | 0.23711 | 0.97148 | 76 | 74 | 0.24473 | 0.96959 | 26 |
| 25 | 0.22197 | 0.97505 | 75 | 75 | 0.22963 | 0.97328 | 25 | 25 | 0.23726 | 0.97145 | 75 | 75 | 0.24488 | 0.96955 | 25 |
| 26 | 0.22213 | 0.97502 | 74 | 76 | 0.22978 | 0.97324 | 24 | 26 | 0.23741 | 0.97141 | 74 | 76 | 0.24504 | 0.96951 | 24 |
| 27 | 0.22228 | 0.97498 | 73 | 77 | 0.22993 | 0.97321 | 23 | 27 | 0.23757 | 0.97137 | 73 | 77 | 0.24519 | 0.96948 | 23 |
| 28 | 0.22243 | 0.97495 | 72 | 78 | 0.23008 | 0.97317 | 22 | 28 | 0.23772 | 0.97133 | 72 | 78 | 0.24534 | 0.96944 | 22 |
| 29 | 0.22259 | 0.97491 | 71 | 79 | 0.23024 | 0.97313 | 21 | 29 | 0.23787 | 0.97130 | 71 | 79 | 0.24549 | 0.96940 | 21 |
| 30 | 0.22274 | 0.97488 | 70 | 80 | 0.23039 | 0.97310 | 20 | 30 | 0.23802 | 0.97126 | 70 | 80 | 0.24565 | 0.96936 | 20 |
| 31 | 0.22289 | 0.97484 | 69 | 81 | 0.23054 | 0.97306 | 19 | 31 | 0.23818 | 0.97122 | 69 | 81 | 0.24580 | 0.96932 | 19 |
| 32 | 0.22305 | 0.97481 | 68 | 82 | 0.23070 | 0.97303 | 18 | 32 | 0.23833 | 0.97118 | 68 | 82 | 0.24595 | 0.96928 | 18 |
| 33 | 0.22320 | 0.97477 | 67 | 83 | 0.23085 | 0.97299 | 17 | 33 | 0.23848 | 0.97115 | 67 | 83 | 0.24610 | 0.96924 | 17 |
| 34 | 0.22335 | 0.97474 | 66 | 84 | 0.23100 | 0.97295 | 16 | 34 | 0.23864 | 0.97111 | 66 | 84 | 0.24625 | 0.96921 | 16 |
| 35 | 0.22351 | 0.97470 | 65 | 85 | 0.23115 | 0.97292 | 15 | 35 | 0.23879 | 0.97107 | 65 | 85 | 0.24641 | 0.96917 | 15 |
| 36 | 0.22366 | 0.97467 | 64 | 86 | 0.23131 | 0.97288 | 14 | 36 | 0.23894 | 0.97103 | 64 | 86 | 0.24656 | 0.96913 | 14 |
| 37 | 0.22381 | 0.97463 | 63 | 87 | 0.23146 | 0.97284 | 13 | 37 | 0.23909 | 0.97100 | 63 | 87 | 0.24671 | 0.96909 | 13 |
| 38 | 0.22396 | 0.97460 | 62 | 88 | 0.23161 | 0.97281 | 12 | 38 | 0.23925 | 0.97096 | 62 | 88 | 0.24686 | 0.96905 | 12 |
| 39 | 0.22412 | 0.97456 | 61 | 89 | 0.23176 | 0.97277 | 11 | 39 | 0.23940 | 0.97093 | 61 | 89 | 0.24702 | 0.96901 | 11 |
| 40 | 0.22427 | 0.97453 | 60 | 90 | 0.23192 | 0.97274 | 10 | 40 | 0.23955 | 0.97089 | 60 | 90 | 0.24717 | 0.96897 | 10 |
| 41 | 0.22442 | 0.97449 | 59 | 91 | 0.23207 | 0.97270 | 9 | 41 | 0.23970 | 0.97085 | 59 | 91 | 0.24732 | 0.96893 | 9 |
| 42 | 0.22458 | 0.97446 | 58 | 92 | 0.23222 | 0.97266 | 8 | 42 | 0.23986 | 0.97081 | 58 | 92 | 0.24747 | 0.96889 | 8 |
| 43 | 0.22473 | 0.97442 | 57 | 93 | 0.23238 | 0.97263 | 7 | 43 | 0.24001 | 0.97077 | 57 | 93 | 0.24762 | 0.96886 | 7 |
| 44 | 0.22488 | 0.97439 | 56 | 94 | 0.23253 | 0.97259 | 6 | 44 | 0.24016 | 0.97073 | 56 | 94 | 0.24777 | 0.96882 | 6 |
| 45 | 0.22504 | 0.97435 | 55 | 95 | 0.23268 | 0.97255 | 5 | 45 | 0.24031 | 0.97070 | 55 | 95 | 0.24793 | 0.96878 | 5 |
| 46 | 0.22519 | 0.97432 | 54 | 96 | 0.23283 | 0.97252 | 4 | 46 | 0.24047 | 0.97066 | 54 | 96 | 0.24808 | 0.96874 | 4 |
| 47 | 0.22534 | 0.97428 | 53 | 97 | 0.23299 | 0.97248 | 3 | 47 | 0.24062 | 0.97062 | 53 | 97 | 0.24823 | 0.96870 | 3 |
| 48 | 0.22550 | 0.97424 | 52 | 98 | 0.23314 | 0.97244 | 2 | 48 | 0.24077 | 0.97058 | 52 | 98 | 0.24839 | 0.96866 | 2 |
| 49 | 0.22565 | 0.97421 | 51 | 99 | 0.23329 | 0.97241 | 1 | 49 | 0.24092 | 0.97054 | 51 | 99 | 0.24854 | 0.96862 | 1 |
| 50 | 0.22580 | 0.97417 | 50 | 100 | 0.23345 | 0.97237 | 0 | 50 | 0.24108 | 0.97051 | 50 | 100 | 0.24869 | 0.96858 | 0 |
| 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 |

| 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 |
|----|---------|---------|-----|-----|---------|---------|----|----|---------|---------|-----|-----|---------|---------|----|
| 0 | 0.24869 | 0.96858 | 100 | 50 | 0.25629 | 0.96660 | 49 | 0 | 0.26387 | 0.96456 | 100 | 50 | 0.27144 | 0.96246 | 50 |
| 1 | 0.24884 | 0.96854 | 99 | 51 | 0.25644 | 0.96656 | 50 | 1 | 0.26402 | 0.96452 | 99 | 51 | 0.27159 | 0.96241 | 49 |
| 2 | 0.24899 | 0.96851 | 98 | 52 | 0.25659 | 0.96652 | 48 | 2 | 0.26418 | 0.96447 | 98 | 52 | 0.27174 | 0.96237 | 48 |
| 3 | 0.24915 | 0.96847 | 97 | 53 | 0.25674 | 0.96648 | 47 | 3 | 0.26433 | 0.96443 | 97 | 53 | 0.27189 | 0.96233 | 47 |
| 4 | 0.24930 | 0.96843 | 96 | 54 | 0.25690 | 0.96644 | 46 | 4 | 0.26448 | 0.96439 | 96 | 54 | 0.27205 | 0.96228 | 46 |
| 5 | 0.24945 | 0.96839 | 95 | 55 | 0.25705 | 0.96640 | 45 | 5 | 0.26463 | 0.96435 | 95 | 55 | 0.27220 | 0.96224 | 45 |
| 6 | 0.24960 | 0.96835 | 94 | 56 | 0.25720 | 0.96636 | 44 | 6 | 0.26478 | 0.96431 | 94 | 56 | 0.27235 | 0.96220 | 44 |
| 7 | 0.24975 | 0.96831 | 93 | 57 | 0.25735 | 0.96632 | 43 | 7 | 0.26493 | 0.96427 | 93 | 57 | 0.27250 | 0.96216 | 43 |
| 8 | 0.24991 | 0.96827 | 92 | 58 | 0.25750 | 0.96628 | 42 | 8 | 0.26509 | 0.96423 | 92 | 58 | 0.27265 | 0.96211 | 42 |
| 9 | 0.25006 | 0.96823 | 91 | 59 | 0.25766 | 0.96624 | 41 | 9 | 0.26524 | 0.96418 | 91 | 59 | 0.27280 | 0.96207 | 41 |
| 10 | 0.25021 | 0.96819 | 90 | 60 | 0.25781 | 0.96620 | 40 | 10 | 0.26539 | 0.96414 | 90 | 60 | 0.27295 | 0.96203 | 40 |
| 11 | 0.25036 | 0.96815 | 89 | 61 | 0.25796 | 0.96616 | 39 | 11 | 0.26554 | 0.96410 | 89 | 61 | 0.27310 | 0.96198 | 39 |
| 12 | 0.25052 | 0.96811 | 88 | 62 | 0.25811 | 0.96612 | 38 | 12 | 0.26569 | 0.96406 | 88 | 62 | 0.27325 | 0.96194 | 38 |
| 13 | 0.25067 | 0.96807 | 87 | 63 | 0.25826 | 0.96608 | 37 | 13 | 0.26584 | 0.96402 | 87 | 63 | 0.27341 | 0.96190 | 37 |
| 14 | 0.25082 | 0.96803 | 86 | 64 | 0.25841 | 0.96604 | 36 | 14 | 0.26599 | 0.96398 | 86 | 64 | 0.27356 | 0.96186 | 36 |
| 15 | 0.25097 | 0.96799 | 85 | 65 | 0.25857 | 0.96600 | 35 | 15 | 0.26614 | 0.96394 | 85 | 65 | 0.27371 | 0.96181 | 35 |
| 16 | 0.25112 | 0.96796 | 84 | 66 | 0.25872 | 0.96596 | 34 | 16 | 0.26630 | 0.96390 | 84 | 66 | 0.27386 | 0.96177 | 34 |
| 17 | 0.25128 | 0.96792 | 83 | 67 | 0.25887 | 0.96591 | 33 | 17 | 0.26645 | 0.96386 | 83 | 67 | 0.27401 | 0.96173 | 33 |
| 18 | 0.25143 | 0.96788 | 82 | 68 | 0.25902 | 0.96587 | 32 | 18 | 0.26660 | 0.96382 | 82 | 68 | 0.27416 | 0.96168 | 32 |
| 19 | 0.25158 | 0.96784 | 81 | 69 | 0.25917 | 0.96583 | 31 | 19 | 0.26675 | 0.96377 | 81 | 69 | 0.27431 | 0.96164 | 31 |
| 20 | 0.25173 | 0.96780 | 80 | 70 | 0.25932 | 0.96579 | 30 | 20 | 0.26690 | 0.96373 | 80 | 70 | 0.27446 | 0.96160 | 30 |
| 21 | 0.25188 | 0.96776 | 79 | 71 | 0.25948 | 0.96575 | 29 | 21 | 0.26705 | 0.96368 | 79 | 71 | 0.27461 | 0.96155 | 29 |
| 22 | 0.25204 | 0.96772 | 78 | 72 | 0.25963 | 0.96571 | 28 | 22 | 0.26720 | 0.96364 | 78 | 72 | 0.27477 | 0.96151 | 28 |
| 23 | 0.25219 | 0.96768 | 77 | 73 | 0.25978 | 0.96567 | 27 | 23 | 0.26736 | 0.96360 | 77 | 73 | 0.27491 | 0.96147 | 27 |
| 24 | 0.25234 | 0.96764 | 76 | 74 | 0.25993 | 0.96563 | 26 | 24 | 0.26751 | 0.96356 | 76 | 74 | 0.27507 | 0.96143 | 26 |
| 25 | 0.25249 | 0.96760 | 75 | 75 | 0.26008 | 0.96559 | 25 | 25 | 0.26766 | 0.96351 | 75 | 75 | 0.27522 | 0.96138 | 25 |
| 26 | 0.25264 | 0.96756 | 74 | 76 | 0.26023 | 0.96555 | 24 | 26 | 0.26781 | 0.96347 | 74 | 76 | 0.27537 | 0.96134 | 24 |
| 27 | 0.25280 | 0.96752 | 73 | 77 | 0.26039 | 0.96550 | 23 | 27 | 0.26796 | 0.96343 | 73 | 77 | 0.27552 | 0.96130 | 23 |
| 28 | 0.25295 | 0.96748 | 72 | 78 | 0.26054 | 0.96546 | 22 | 28 | 0.26811 | 0.96339 | 72 | 78 | 0.27567 | 0.96125 | 22 |
| 29 | 0.25310 | 0.96744 | 71 | 79 | 0.26069 | 0.96542 | 21 | 29 | 0.26826 | 0.96335 | 71 | 79 | 0.27582 | 0.96121 | 21 |
| 30 | 0.25325 | 0.96740 | 70 | 80 | 0.26084 | 0.96538 | 20 | 30 | 0.26842 | 0.96330 | 70 | 80 | 0.27597 | 0.96117 | 20 |
| 31 | 0.25340 | 0.96736 | 69 | 81 | 0.26099 | 0.96534 | 19 | 31 | 0.26857 | 0.96326 | 69 | 81 | 0.27612 | 0.96112 | 19 |
| 32 | 0.25355 | 0.96732 | 68 | 82 | 0.26114 | 0.96530 | 18 | 32 | 0.26872 | 0.96322 | 68 | 82 | 0.27627 | 0.96108 | 18 |
| 33 | 0.25371 | 0.96728 | 67 | 83 | 0.26130 | 0.96526 | 17 | 33 | 0.26887 | 0.96318 | 67 | 83 | 0.27643 | 0.96104 | 17 |
| 34 | 0.25386 | 0.96724 | 66 | 84 | 0.26145 | 0.96522 | 16 | 34 | 0.26902 | 0.96313 | 66 | 84 | 0.27658 | 0.96099 | 16 |
| 35 | 0.25401 | 0.96720 | 65 | 85 | 0.26160 | 0.96518 | 15 | 35 | 0.26917 | 0.96309 | 65 | 85 | 0.27673 | 0.96095 | 15 |
| 36 | 0.25416 | 0.96716 | 64 | 86 | 0.26175 | 0.96514 | 14 | 36 | 0.26932 | 0.96305 | 64 | 86 | 0.27688 | 0.96090 | 14 |
| 37 | 0.25431 | 0.96712 | 63 | 87 | 0.26190 | 0.96509 | 13 | 37 | 0.26947 | 0.96301 | 63 | 87 | 0.27703 | 0.96086 | 13 |
| 38 | 0.25447 | 0.96708 | 62 | 88 | 0.26205 | 0.96505 | 12 | 38 | 0.26963 | 0.96297 | 62 | 88 | 0.27718 | 0.96082 | 12 |
| 39 | 0.25462 | 0.96704 | 61 | 89 | 0.26221 | 0.96501 | 11 | 39 | 0.26978 | 0.96292 | 61 | 89 | 0.27733 | 0.96077 | 11 |
| 40 | 0.25477 | 0.96700 | 60 | 90 | 0.26236 | 0.96497 | 10 | 40 | 0.26993 | 0.96288 | 60 | 90 | 0.27748 | 0.96073 | 10 |
| 41 | 0.25492 | 0.96696 | 59 | 91 | 0.26251 | 0.96493 | 9 | 41 | 0.27008 | 0.96284 | 59 | 91 | 0.27763 | 0.96069 | 9 |
| 42 | 0.25507 | 0.96692 | 58 | 92 | 0.26266 | 0.96489 | 8 | 42 | 0.27023 | 0.96280 | 58 | 92 | 0.27779 | 0.96064 | 8 |
| 43 | 0.25523 | 0.96688 | 57 | 93 | 0.26281 | 0.96485 | 7 | 43 | 0.27038 | 0.96275 | 57 | 93 | 0.27794 | 0.96060 | 7 |
| 44 | 0.25538 | 0.96684 | 56 | 94 | 0.26296 | 0.96481 | 6 | 44 | 0.27053 | 0.96271 | 56 | 94 | 0.27809 | 0.96056 | 6 |
| 45 | 0.25553 | 0.96680 | 55 | 95 | 0.26312 | 0.96476 | 5 | 45 | 0.27068 | 0.96267 | 55 | 95 | 0.27824 | 0.96051 | 5 |
| 46 | 0.25568 | 0.96676 | 54 | 96 | 0.26327 | 0.96472 | 4 | 46 | 0.27084 | 0.96263 | 54 | 96 | 0.27839 | 0.96047 | 4 |
| 47 | 0.25583 | 0.96672 | 53 | 97 | 0.26342 | 0.96468 | 3 | 47 | 0.27099 | 0.96258 | 53 | 97 | 0.27854 | 0.96043 | 3 |
| 48 | 0.25599 | 0.96668 | 52 | 98 | 0.26357 | 0.96464 | 2 | 48 | 0.27114 | 0.96254 | 52 | 98 | 0.27869 | 0.96038 | 2 |
| 49 | 0.25614 | 0.96664 | 51 | 99 | 0.26372 | 0.96460 | 1 | 49 | 0.27129 | 0.96250 | 51 | 99 | 0.27884 | 0.96034 | 1 |
| 50 | 0.25629 | 0.96660 | 50 | 100 | 0.26387 | 0.96456 | 0 | 50 | 0.27144 | 0.96246 | 50 | 100 | 0.27899 | 0.96029 | 0 |
| 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 |

| 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 |
|----|---------|---------|-----|-----|---------|---------|----|----|---------|---------|-----|-----|---------|---------|----|
| 0 | 0.27899 | 0.96099 | 100 | 50 | 0.28652 | 0.95807 | 50 | 0 | 0.29404 | 0.95579 | 100 | 50 | 0.30154 | 0.95345 | 50 |
| 1 | 0.27914 | 0.96025 | 99 | 51 | 0.28668 | 0.95803 | 49 | 1 | 0.29419 | 0.95575 | 99 | 51 | 0.30169 | 0.95341 | 49 |
| 2 | 0.27929 | 0.96021 | 98 | 52 | 0.28683 | 0.95798 | 48 | 2 | 0.29434 | 0.95570 | 98 | 52 | 0.30184 | 0.95336 | 48 |
| 3 | 0.27944 | 0.96016 | 97 | 53 | 0.28698 | 0.95794 | 47 | 3 | 0.29449 | 0.95565 | 97 | 53 | 0.30199 | 0.95331 | 47 |
| 4 | 0.27959 | 0.96012 | 96 | 54 | 0.28713 | 0.95789 | 46 | 4 | 0.29464 | 0.95561 | 96 | 54 | 0.30214 | 0.95326 | 46 |
| 5 | 0.27975 | 0.96007 | 95 | 55 | 0.28728 | 0.95785 | 45 | 5 | 0.29479 | 0.95556 | 95 | 55 | 0.30229 | 0.95322 | 45 |
| 6 | 0.27990 | 0.96003 | 94 | 56 | 0.28743 | 0.95780 | 44 | 6 | 0.29494 | 0.95552 | 94 | 56 | 0.30244 | 0.95317 | 44 |
| 7 | 0.28005 | 0.95999 | 93 | 57 | 0.28758 | 0.95776 | 43 | 7 | 0.29509 | 0.95547 | 93 | 57 | 0.30259 | 0.95312 | 43 |
| 8 | 0.28020 | 0.95994 | 92 | 58 | 0.28773 | 0.95771 | 42 | 8 | 0.29524 | 0.95542 | 92 | 58 | 0.30274 | 0.95307 | 42 |
| 9 | 0.28035 | 0.95990 | 91 | 59 | 0.28788 | 0.95767 | 41 | 9 | 0.29539 | 0.95538 | 91 | 59 | 0.30289 | 0.95302 | 41 |
| 10 | 0.28050 | 0.95985 | 90 | 60 | 0.28803 | 0.95762 | 40 | 10 | 0.29554 | 0.95533 | 90 | 60 | 0.30304 | 0.95298 | 40 |
| 11 | 0.28065 | 0.95981 | 89 | 61 | 0.28818 | 0.95758 | 39 | 11 | 0.29569 | 0.95528 | 89 | 61 | 0.30318 | 0.95293 | 39 |
| 12 | 0.28080 | 0.95977 | 88 | 62 | 0.28833 | 0.95753 | 38 | 12 | 0.29584 | 0.95524 | 88 | 62 | 0.30333 | 0.95288 | 38 |
| 13 | 0.28095 | 0.95972 | 87 | 63 | 0.28848 | 0.95749 | 37 | 13 | 0.29599 | 0.95519 | 87 | 63 | 0.30348 | 0.95284 | 37 |
| 14 | 0.28110 | 0.95968 | 86 | 64 | 0.28863 | 0.95744 | 36 | 14 | 0.29614 | 0.95515 | 86 | 64 | 0.30363 | 0.95279 | 36 |
| 15 | 0.28125 | 0.95963 | 85 | 65 | 0.28878 | 0.95739 | 35 | 15 | 0.29629 | 0.95510 | 85 | 65 | 0.30378 | 0.95274 | 35 |
| 16 | 0.28140 | 0.95959 | 84 | 66 | 0.28893 | 0.95735 | 34 | 16 | 0.29644 | 0.95505 | 84 | 66 | 0.30393 | 0.95269 | 34 |
| 17 | 0.28155 | 0.95955 | 83 | 67 | 0.28908 | 0.95730 | 33 | 17 | 0.29659 | 0.95500 | 83 | 67 | 0.30408 | 0.95265 | 33 |
| 18 | 0.28171 | 0.95950 | 82 | 68 | 0.28923 | 0.95726 | 32 | 18 | 0.29674 | 0.95496 | 82 | 68 | 0.30423 | 0.95260 | 32 |
| 19 | 0.28186 | 0.95946 | 81 | 69 | 0.28938 | 0.95721 | 31 | 19 | 0.29689 | 0.95491 | 81 | 69 | 0.30438 | 0.95255 | 31 |
| 20 | 0.28201 | 0.95941 | 80 | 70 | 0.28953 | 0.95717 | 30 | 20 | 0.29704 | 0.95486 | 80 | 70 | 0.30453 | 0.95250 | 30 |
| 21 | 0.28216 | 0.95937 | 79 | 71 | 0.28968 | 0.95712 | 29 | 21 | 0.29719 | 0.95482 | 79 | 71 | 0.30468 | 0.95245 | 29 |
| 22 | 0.28231 | 0.95932 | 78 | 72 | 0.28983 | 0.95708 | 28 | 22 | 0.29734 | 0.95477 | 78 | 72 | 0.30483 | 0.95240 | 28 |
| 23 | 0.28245 | 0.95928 | 77 | 73 | 0.28998 | 0.95703 | 27 | 23 | 0.29749 | 0.95472 | 77 | 73 | 0.30498 | 0.95236 | 27 |
| 24 | 0.28261 | 0.95924 | 76 | 74 | 0.29013 | 0.95699 | 26 | 24 | 0.29764 | 0.95468 | 76 | 74 | 0.30513 | 0.95231 | 26 |
| 25 | 0.28276 | 0.95919 | 75 | 75 | 0.29028 | 0.95694 | 25 | 25 | 0.29779 | 0.95463 | 75 | 75 | 0.30528 | 0.95226 | 25 |
| 26 | 0.28291 | 0.95915 | 74 | 76 | 0.29043 | 0.95690 | 24 | 26 | 0.29794 | 0.95458 | 74 | 76 | 0.30543 | 0.95221 | 24 |
| 27 | 0.28306 | 0.95910 | 73 | 77 | 0.29059 | 0.95685 | 23 | 27 | 0.29809 | 0.95454 | 73 | 77 | 0.30558 | 0.95217 | 23 |
| 28 | 0.28321 | 0.95906 | 72 | 78 | 0.29074 | 0.95680 | 22 | 28 | 0.29824 | 0.95449 | 72 | 78 | 0.30573 | 0.95212 | 22 |
| 29 | 0.28336 | 0.95901 | 71 | 79 | 0.29089 | 0.95676 | 21 | 29 | 0.29839 | 0.95444 | 71 | 79 | 0.30588 | 0.95207 | 21 |
| 30 | 0.28351 | 0.95897 | 70 | 80 | 0.29104 | 0.95671 | 20 | 30 | 0.29854 | 0.95440 | 70 | 80 | 0.30603 | 0.95202 | 20 |
| 31 | 0.28366 | 0.95892 | 69 | 81 | 0.29119 | 0.95667 | 19 | 31 | 0.29869 | 0.95435 | 69 | 81 | 0.30618 | 0.95197 | 19 |
| 32 | 0.28381 | 0.95888 | 68 | 82 | 0.29134 | 0.95662 | 18 | 32 | 0.29884 | 0.95430 | 68 | 82 | 0.30633 | 0.95193 | 18 |
| 33 | 0.28397 | 0.95883 | 67 | 83 | 0.29149 | 0.95657 | 17 | 33 | 0.29899 | 0.95426 | 67 | 83 | 0.30648 | 0.95188 | 17 |
| 34 | 0.28412 | 0.95879 | 66 | 84 | 0.29164 | 0.95653 | 16 | 34 | 0.29914 | 0.95421 | 66 | 84 | 0.30663 | 0.95183 | 16 |
| 35 | 0.28427 | 0.95875 | 65 | 85 | 0.29179 | 0.95648 | 15 | 35 | 0.29929 | 0.95416 | 65 | 85 | 0.30678 | 0.95178 | 15 |
| 36 | 0.28442 | 0.95870 | 64 | 86 | 0.29194 | 0.95644 | 14 | 36 | 0.29944 | 0.95411 | 64 | 86 | 0.30692 | 0.95173 | 14 |
| 37 | 0.28457 | 0.95866 | 63 | 87 | 0.29209 | 0.95639 | 13 | 37 | 0.29959 | 0.95407 | 63 | 87 | 0.30707 | 0.95169 | 13 |
| 38 | 0.28472 | 0.95861 | 62 | 88 | 0.29224 | 0.95635 | 12 | 38 | 0.29974 | 0.95402 | 62 | 88 | 0.30722 | 0.95164 | 12 |
| 39 | 0.28487 | 0.95857 | 61 | 89 | 0.29239 | 0.95630 | 11 | 39 | 0.29989 | 0.95397 | 61 | 89 | 0.30737 | 0.95159 | 11 |
| 40 | 0.28502 | 0.95852 | 60 | 90 | 0.29254 | 0.95625 | 10 | 40 | 0.30004 | 0.95393 | 60 | 90 | 0.30752 | 0.95154 | 10 |
| 41 | 0.28517 | 0.95848 | 59 | 91 | 0.29269 | 0.95621 | 9 | 41 | 0.30019 | 0.95388 | 59 | 91 | 0.30767 | 0.95149 | 9 |
| 42 | 0.28532 | 0.95843 | 58 | 92 | 0.29284 | 0.95616 | 8 | 42 | 0.30034 | 0.95383 | 58 | 92 | 0.30782 | 0.95144 | 8 |
| 43 | 0.28547 | 0.95839 | 57 | 93 | 0.29299 | 0.95612 | 7 | 43 | 0.30049 | 0.95379 | 57 | 93 | 0.30797 | 0.95140 | 7 |
| 44 | 0.28562 | 0.95834 | 56 | 94 | 0.29314 | 0.95607 | 6 | 44 | 0.30064 | 0.95374 | 56 | 94 | 0.30812 | 0.95135 | 6 |
| 45 | 0.28577 | 0.95830 | 55 | 95 | 0.29329 | 0.95602 | 5 | 45 | 0.30079 | 0.95369 | 55 | 95 | 0.30827 | 0.95130 | 5 |
| 46 | 0.28592 | 0.95825 | 54 | 96 | 0.29344 | 0.95598 | 4 | 46 | 0.30094 | 0.95364 | 54 | 96 | 0.30842 | 0.95125 | 4 |
| 47 | 0.28607 | 0.95821 | 53 | 97 | 0.29359 | 0.95593 | 3 | 47 | 0.30109 | 0.95360 | 53 | 97 | 0.30857 | 0.95120 | 3 |
| 48 | 0.28622 | 0.95816 | 52 | 98 | 0.29374 | 0.95589 | 2 | 48 | 0.30124 | 0.95355 | 52 | 98 | 0.30872 | 0.95115 | 2 |
| 49 | 0.28637 | 0.95812 | 51 | 99 | 0.29389 | 0.95584 | 1 | 49 | 0.30139 | 0.95350 | 51 | 99 | 0.30887 | 0.95110 | 1 |
| 50 | 0.28652 | 0.95807 | 50 | 100 | 0.29404 | 0.95579 | 0 | 50 | 0.30154 | 0.95345 | 50 | 100 | 0.30902 | 0.95105 | 0 |
| 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 |

| 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 |
|----|---------|---------|-----|-----|---------|---------|----|----|---------|---------|-----|-----|---------|---------|----|
| 0 | 0.30902 | 0.95106 | 100 | 50 | 0.31648 | 0.94860 | 50 | 0 | 0.32392 | 0.94609 | 100 | 50 | 0.33134 | 0.94351 | 50 |
| 1 | 0.30917 | 0.95101 | 99 | 51 | 0.31663 | 0.94855 | 49 | 1 | 0.32407 | 0.94603 | 99 | 51 | 0.33149 | 0.94346 | 49 |
| 2 | 0.30932 | 0.95096 | 98 | 52 | 0.31677 | 0.94850 | 48 | 2 | 0.32421 | 0.94598 | 98 | 52 | 0.33163 | 0.94341 | 48 |
| 3 | 0.30947 | 0.95091 | 97 | 53 | 0.31692 | 0.94845 | 47 | 3 | 0.32436 | 0.94593 | 97 | 53 | 0.33178 | 0.94336 | 47 |
| 4 | 0.30961 | 0.95086 | 96 | 54 | 0.31707 | 0.94840 | 46 | 4 | 0.32451 | 0.94588 | 96 | 54 | 0.33193 | 0.94330 | 46 |
| 5 | 0.30976 | 0.95081 | 95 | 55 | 0.31722 | 0.94835 | 45 | 5 | 0.32466 | 0.94583 | 95 | 55 | 0.33208 | 0.94325 | 45 |
| 6 | 0.30991 | 0.95076 | 94 | 56 | 0.31737 | 0.94830 | 44 | 6 | 0.32481 | 0.94578 | 94 | 56 | 0.33223 | 0.94320 | 44 |
| 7 | 0.31006 | 0.95072 | 93 | 57 | 0.31752 | 0.94825 | 43 | 7 | 0.32496 | 0.94573 | 93 | 57 | 0.33238 | 0.94315 | 43 |
| 8 | 0.31021 | 0.95067 | 92 | 58 | 0.31767 | 0.94820 | 42 | 8 | 0.32511 | 0.94568 | 92 | 58 | 0.33253 | 0.94310 | 42 |
| 9 | 0.31036 | 0.95062 | 91 | 59 | 0.31782 | 0.94815 | 41 | 9 | 0.32525 | 0.94563 | 91 | 59 | 0.33267 | 0.94304 | 41 |
| 10 | 0.31051 | 0.95057 | 90 | 60 | 0.31797 | 0.94810 | 40 | 10 | 0.32540 | 0.94558 | 90 | 60 | 0.33282 | 0.94299 | 40 |
| 11 | 0.31066 | 0.95052 | 89 | 61 | 0.31812 | 0.94805 | 39 | 11 | 0.32555 | 0.94552 | 89 | 61 | 0.33297 | 0.94294 | 39 |
| 12 | 0.31081 | 0.95047 | 88 | 62 | 0.31826 | 0.94800 | 38 | 12 | 0.32570 | 0.94547 | 88 | 62 | 0.33312 | 0.94289 | 38 |
| 13 | 0.31096 | 0.95042 | 87 | 63 | 0.31841 | 0.94795 | 37 | 13 | 0.32585 | 0.94542 | 87 | 63 | 0.33326 | 0.94284 | 37 |
| 14 | 0.31111 | 0.95037 | 86 | 64 | 0.31856 | 0.94790 | 36 | 14 | 0.32600 | 0.94537 | 86 | 64 | 0.33341 | 0.94279 | 36 |
| 15 | 0.31126 | 0.95033 | 85 | 65 | 0.31871 | 0.94785 | 35 | 15 | 0.32615 | 0.94532 | 85 | 65 | 0.33356 | 0.94274 | 35 |
| 16 | 0.31141 | 0.95028 | 84 | 66 | 0.31886 | 0.94780 | 34 | 16 | 0.32629 | 0.94527 | 84 | 66 | 0.33371 | 0.94269 | 34 |
| 17 | 0.31156 | 0.95023 | 83 | 67 | 0.31901 | 0.94775 | 33 | 17 | 0.32644 | 0.94522 | 83 | 67 | 0.33386 | 0.94264 | 33 |
| 18 | 0.31170 | 0.95018 | 82 | 68 | 0.31916 | 0.94770 | 32 | 18 | 0.32659 | 0.94517 | 82 | 68 | 0.33400 | 0.94259 | 32 |
| 19 | 0.31185 | 0.95013 | 81 | 69 | 0.31931 | 0.94765 | 31 | 19 | 0.32674 | 0.94512 | 81 | 69 | 0.33415 | 0.94254 | 31 |
| 20 | 0.31200 | 0.95008 | 80 | 70 | 0.31946 | 0.94760 | 30 | 20 | 0.32689 | 0.94506 | 80 | 70 | 0.33430 | 0.94249 | 30 |
| 21 | 0.31215 | 0.95003 | 79 | 71 | 0.31960 | 0.94755 | 29 | 21 | 0.32704 | 0.94501 | 79 | 71 | 0.33445 | 0.94244 | 29 |
| 22 | 0.31230 | 0.94998 | 78 | 72 | 0.31975 | 0.94750 | 28 | 22 | 0.32718 | 0.94496 | 78 | 72 | 0.33460 | 0.94239 | 28 |
| 23 | 0.31245 | 0.94993 | 77 | 73 | 0.31990 | 0.94745 | 27 | 23 | 0.32733 | 0.94491 | 77 | 73 | 0.33474 | 0.94234 | 27 |
| 24 | 0.31260 | 0.94989 | 76 | 74 | 0.32005 | 0.94740 | 26 | 24 | 0.32748 | 0.94486 | 76 | 74 | 0.33489 | 0.94229 | 26 |
| 25 | 0.31275 | 0.94984 | 75 | 75 | 0.32020 | 0.94735 | 25 | 25 | 0.32763 | 0.94481 | 75 | 75 | 0.33504 | 0.94224 | 25 |
| 26 | 0.31290 | 0.94979 | 74 | 76 | 0.32035 | 0.94730 | 24 | 26 | 0.32778 | 0.94475 | 74 | 76 | 0.33519 | 0.94219 | 24 |
| 27 | 0.31305 | 0.94974 | 73 | 77 | 0.32050 | 0.94725 | 23 | 27 | 0.32793 | 0.94470 | 73 | 77 | 0.33534 | 0.94214 | 23 |
| 28 | 0.31320 | 0.94969 | 72 | 78 | 0.32065 | 0.94720 | 22 | 28 | 0.32808 | 0.94465 | 72 | 78 | 0.33549 | 0.94209 | 22 |
| 29 | 0.31335 | 0.94964 | 71 | 79 | 0.32079 | 0.94715 | 21 | 29 | 0.32822 | 0.94460 | 71 | 79 | 0.33563 | 0.94204 | 21 |
| 30 | 0.31350 | 0.94959 | 70 | 80 | 0.32094 | 0.94710 | 20 | 30 | 0.32837 | 0.94455 | 70 | 80 | 0.33578 | 0.94199 | 20 |
| 31 | 0.31364 | 0.94954 | 69 | 81 | 0.32109 | 0.94705 | 19 | 31 | 0.32852 | 0.94450 | 69 | 81 | 0.33593 | 0.94194 | 19 |
| 32 | 0.31379 | 0.94949 | 68 | 82 | 0.32124 | 0.94700 | 18 | 32 | 0.32867 | 0.94445 | 68 | 82 | 0.33608 | 0.94189 | 18 |
| 33 | 0.31394 | 0.94944 | 67 | 83 | 0.32139 | 0.94695 | 17 | 33 | 0.32882 | 0.94440 | 67 | 83 | 0.33622 | 0.94184 | 17 |
| 34 | 0.31409 | 0.94939 | 66 | 84 | 0.32154 | 0.94690 | 16 | 34 | 0.32897 | 0.94434 | 66 | 84 | 0.33637 | 0.94179 | 16 |
| 35 | 0.31424 | 0.94934 | 65 | 85 | 0.32169 | 0.94685 | 15 | 35 | 0.32911 | 0.94429 | 65 | 85 | 0.33652 | 0.94174 | 15 |
| 36 | 0.31439 | 0.94929 | 64 | 86 | 0.32184 | 0.94680 | 14 | 36 | 0.32926 | 0.94424 | 64 | 86 | 0.33667 | 0.94169 | 14 |
| 37 | 0.31454 | 0.94925 | 63 | 87 | 0.32198 | 0.94675 | 13 | 37 | 0.32941 | 0.94419 | 63 | 87 | 0.33682 | 0.94164 | 13 |
| 38 | 0.31469 | 0.94920 | 62 | 88 | 0.32213 | 0.94670 | 12 | 38 | 0.32956 | 0.94414 | 62 | 88 | 0.33696 | 0.94159 | 12 |
| 39 | 0.31484 | 0.94915 | 61 | 89 | 0.32228 | 0.94665 | 11 | 39 | 0.32971 | 0.94409 | 61 | 89 | 0.33711 | 0.94154 | 11 |
| 40 | 0.31499 | 0.94910 | 60 | 90 | 0.32243 | 0.94660 | 10 | 40 | 0.32986 | 0.94403 | 60 | 90 | 0.33726 | 0.94149 | 10 |
| 41 | 0.31514 | 0.94905 | 59 | 91 | 0.32258 | 0.94654 | 9 | 41 | 0.33000 | 0.94398 | 59 | 91 | 0.33741 | 0.94144 | 9 |
| 42 | 0.31528 | 0.94900 | 58 | 92 | 0.32273 | 0.94649 | 8 | 42 | 0.33015 | 0.94393 | 58 | 92 | 0.33756 | 0.94139 | 8 |
| 43 | 0.31543 | 0.94895 | 57 | 93 | 0.32288 | 0.94644 | 7 | 43 | 0.33030 | 0.94388 | 57 | 93 | 0.33770 | 0.94134 | 7 |
| 44 | 0.31558 | 0.94890 | 56 | 94 | 0.32303 | 0.94639 | 6 | 44 | 0.33045 | 0.94382 | 56 | 94 | 0.33785 | 0.94129 | 6 |
| 45 | 0.31573 | 0.94885 | 55 | 95 | 0.32317 | 0.94634 | 5 | 45 | 0.33060 | 0.94377 | 55 | 95 | 0.33800 | 0.94124 | 5 |
| 46 | 0.31588 | 0.94880 | 54 | 96 | 0.32332 | 0.94629 | 4 | 46 | 0.33075 | 0.94372 | 54 | 96 | 0.33815 | 0.94119 | 4 |
| 47 | 0.31603 | 0.94875 | 53 | 97 | 0.32347 | 0.94624 | 3 | 47 | 0.33089 | 0.94367 | 53 | 97 | 0.33829 | 0.94114 | 3 |
| 48 | 0.31618 | 0.94870 | 52 | 98 | 0.32362 | 0.94619 | 2 | 48 | 0.33104 | 0.94362 | 52 | 98 | 0.33844 | 0.94109 | 2 |
| 49 | 0.31633 | 0.94865 | 51 | 99 | 0.32377 | 0.94614 | 1 | 49 | 0.33119 | 0.94356 | 51 | 99 | 0.33859 | 0.94104 | 1 |
| 50 | 0.31648 | 0.94860 | 50 | 100 | 0.32392 | 0.94609 | 0 | 50 | 0.33134 | 0.94351 | 50 | 100 | 0.33874 | 0.94099 | 0 |
| 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 |

| 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 分 | 正弦 | 餘弦 | 分 |
|----|---------|---------|-----|-----|---------|---------|----|----|---------|---------|-----|-----|---------|---------|----|---|
| 0 | 0.33874 | 0.94088 | 100 | 50 | 0.34612 | 0.93819 | 50 | 0 | 0.35547 | 0.93544 | 100 | 50 | 0.36081 | 0.93264 | 50 | |
| 1 | 0.33889 | 0.94083 | 99 | 51 | 0.34626 | 0.93814 | 49 | 1 | 0.35562 | 0.93539 | 99 | 51 | 0.36096 | 0.93258 | 49 | |
| 2 | 0.33903 | 0.94077 | 98 | 52 | 0.34641 | 0.93808 | 48 | 2 | 0.35577 | 0.93533 | 98 | 52 | 0.36110 | 0.93253 | 48 | |
| 3 | 0.33918 | 0.94072 | 97 | 53 | 0.34656 | 0.93803 | 47 | 3 | 0.35592 | 0.93528 | 97 | 53 | 0.36125 | 0.93247 | 47 | |
| 4 | 0.33933 | 0.94067 | 96 | 54 | 0.34671 | 0.93797 | 46 | 4 | 0.35606 | 0.93522 | 96 | 54 | 0.36140 | 0.93241 | 46 | |
| 5 | 0.33948 | 0.94061 | 95 | 55 | 0.34685 | 0.93792 | 45 | 5 | 0.35621 | 0.93517 | 95 | 55 | 0.36154 | 0.93236 | 45 | |
| 6 | 0.33962 | 0.94056 | 94 | 56 | 0.34700 | 0.93786 | 44 | 6 | 0.35637 | 0.93511 | 94 | 56 | 0.36169 | 0.93230 | 44 | |
| 7 | 0.33977 | 0.94051 | 93 | 57 | 0.34715 | 0.93781 | 43 | 7 | 0.35650 | 0.93506 | 93 | 57 | 0.36184 | 0.93224 | 43 | |
| 8 | 0.33992 | 0.94045 | 92 | 58 | 0.34730 | 0.93776 | 42 | 8 | 0.35663 | 0.93500 | 92 | 58 | 0.36198 | 0.93218 | 42 | |
| 9 | 0.34007 | 0.94040 | 91 | 59 | 0.34744 | 0.93770 | 41 | 9 | 0.35677 | 0.93494 | 91 | 59 | 0.36213 | 0.93213 | 41 | |
| 10 | 0.34022 | 0.94035 | 90 | 60 | 0.34759 | 0.93765 | 40 | 10 | 0.35694 | 0.93489 | 90 | 60 | 0.36228 | 0.93207 | 40 | |
| 11 | 0.34036 | 0.94029 | 89 | 61 | 0.34774 | 0.93759 | 39 | 11 | 0.35509 | 0.93483 | 89 | 61 | 0.36242 | 0.93201 | 39 | |
| 12 | 0.34051 | 0.94024 | 88 | 62 | 0.34788 | 0.93754 | 38 | 12 | 0.35524 | 0.93478 | 88 | 62 | 0.36257 | 0.93196 | 38 | |
| 13 | 0.34066 | 0.94019 | 87 | 63 | 0.34803 | 0.93748 | 37 | 13 | 0.35538 | 0.93472 | 87 | 63 | 0.36271 | 0.93190 | 37 | |
| 14 | 0.34081 | 0.94013 | 86 | 64 | 0.34818 | 0.93743 | 36 | 14 | 0.35553 | 0.93466 | 86 | 64 | 0.36286 | 0.93184 | 36 | |
| 15 | 0.34095 | 0.94008 | 85 | 65 | 0.34833 | 0.93737 | 35 | 15 | 0.35568 | 0.93461 | 85 | 65 | 0.36301 | 0.93179 | 35 | |
| 16 | 0.34110 | 0.94003 | 84 | 66 | 0.34847 | 0.93732 | 34 | 16 | 0.35582 | 0.93455 | 84 | 66 | 0.36315 | 0.93173 | 34 | |
| 17 | 0.34125 | 0.93997 | 83 | 67 | 0.34862 | 0.93726 | 33 | 17 | 0.35597 | 0.93450 | 83 | 67 | 0.36330 | 0.93167 | 33 | |
| 18 | 0.34140 | 0.93992 | 82 | 68 | 0.34877 | 0.93721 | 32 | 18 | 0.35612 | 0.93444 | 82 | 68 | 0.36345 | 0.93162 | 32 | |
| 19 | 0.34154 | 0.93987 | 81 | 69 | 0.34892 | 0.93715 | 31 | 19 | 0.35626 | 0.93438 | 81 | 69 | 0.36359 | 0.93156 | 31 | |
| 20 | 0.34169 | 0.93981 | 80 | 70 | 0.34906 | 0.93710 | 30 | 20 | 0.35641 | 0.93433 | 80 | 70 | 0.36374 | 0.93150 | 30 | |
| 21 | 0.34184 | 0.93976 | 79 | 71 | 0.34921 | 0.93704 | 29 | 21 | 0.35656 | 0.93427 | 79 | 71 | 0.36389 | 0.93144 | 29 | |
| 22 | 0.34199 | 0.93970 | 78 | 72 | 0.34936 | 0.93699 | 28 | 22 | 0.35671 | 0.93422 | 78 | 72 | 0.36403 | 0.93139 | 28 | |
| 23 | 0.34213 | 0.93965 | 77 | 73 | 0.34950 | 0.93693 | 27 | 23 | 0.35685 | 0.93416 | 77 | 73 | 0.36418 | 0.93133 | 27 | |
| 24 | 0.34228 | 0.93960 | 76 | 74 | 0.34965 | 0.93688 | 26 | 24 | 0.35700 | 0.93410 | 76 | 74 | 0.36432 | 0.93127 | 26 | |
| 25 | 0.34243 | 0.93954 | 75 | 75 | 0.34980 | 0.93682 | 25 | 25 | 0.35715 | 0.93405 | 75 | 75 | 0.36447 | 0.93122 | 25 | |
| 26 | 0.34258 | 0.93949 | 74 | 76 | 0.34995 | 0.93677 | 24 | 26 | 0.35729 | 0.93399 | 74 | 76 | 0.36462 | 0.93116 | 24 | |
| 27 | 0.34273 | 0.93944 | 73 | 77 | 0.35009 | 0.93671 | 23 | 27 | 0.35744 | 0.93394 | 73 | 77 | 0.36476 | 0.93110 | 23 | |
| 28 | 0.34287 | 0.93938 | 72 | 78 | 0.35024 | 0.93666 | 22 | 28 | 0.35759 | 0.93388 | 72 | 78 | 0.36491 | 0.93104 | 22 | |
| 29 | 0.34302 | 0.93933 | 71 | 79 | 0.35039 | 0.93660 | 21 | 29 | 0.35773 | 0.93382 | 71 | 79 | 0.36506 | 0.93099 | 21 | |
| 30 | 0.34317 | 0.93927 | 70 | 80 | 0.35053 | 0.93655 | 20 | 30 | 0.35788 | 0.93377 | 70 | 80 | 0.36520 | 0.93093 | 20 | |
| 31 | 0.34332 | 0.93922 | 69 | 81 | 0.35068 | 0.93649 | 19 | 31 | 0.35803 | 0.93371 | 69 | 81 | 0.36535 | 0.93087 | 19 | |
| 32 | 0.34346 | 0.93917 | 68 | 82 | 0.35083 | 0.93644 | 18 | 32 | 0.35817 | 0.93366 | 68 | 82 | 0.36549 | 0.93081 | 18 | |
| 33 | 0.34361 | 0.93911 | 67 | 83 | 0.35098 | 0.93638 | 17 | 33 | 0.35832 | 0.93360 | 67 | 83 | 0.36564 | 0.93076 | 17 | |
| 34 | 0.34376 | 0.93906 | 66 | 84 | 0.35112 | 0.93633 | 16 | 34 | 0.35847 | 0.93354 | 66 | 84 | 0.36579 | 0.93070 | 16 | |
| 35 | 0.34391 | 0.93900 | 65 | 85 | 0.35127 | 0.93627 | 15 | 35 | 0.35861 | 0.93349 | 65 | 85 | 0.36593 | 0.93064 | 15 | |
| 36 | 0.34405 | 0.93895 | 64 | 86 | 0.35142 | 0.93622 | 14 | 36 | 0.35876 | 0.93343 | 64 | 86 | 0.36608 | 0.93058 | 14 | |
| 37 | 0.34420 | 0.93890 | 63 | 87 | 0.35156 | 0.93616 | 13 | 37 | 0.35891 | 0.93337 | 63 | 87 | 0.36623 | 0.93053 | 13 | |
| 38 | 0.34435 | 0.93884 | 62 | 88 | 0.35171 | 0.93611 | 12 | 38 | 0.35905 | 0.93332 | 62 | 88 | 0.36637 | 0.93047 | 12 | |
| 39 | 0.34450 | 0.93879 | 61 | 89 | 0.35186 | 0.93605 | 11 | 39 | 0.35920 | 0.93326 | 61 | 89 | 0.36652 | 0.93041 | 11 | |
| 40 | 0.34464 | 0.93873 | 60 | 90 | 0.35201 | 0.93600 | 10 | 40 | 0.35935 | 0.93320 | 60 | 90 | 0.36666 | 0.93035 | 10 | |
| 41 | 0.34479 | 0.93868 | 59 | 91 | 0.35215 | 0.93594 | 9 | 41 | 0.35949 | 0.93315 | 59 | 91 | 0.36681 | 0.93030 | 9 | |
| 42 | 0.34494 | 0.93863 | 58 | 92 | 0.35230 | 0.93589 | 8 | 42 | 0.35964 | 0.93309 | 58 | 92 | 0.36696 | 0.93024 | 8 | |
| 43 | 0.34509 | 0.93857 | 57 | 93 | 0.35245 | 0.93583 | 7 | 43 | 0.35979 | 0.93304 | 57 | 93 | 0.36710 | 0.93018 | 7 | |
| 44 | 0.34523 | 0.93852 | 56 | 94 | 0.35259 | 0.93578 | 6 | 44 | 0.35993 | 0.93298 | 56 | 94 | 0.36725 | 0.93012 | 6 | |
| 45 | 0.34538 | 0.93846 | 55 | 95 | 0.35274 | 0.93572 | 5 | 45 | 0.36008 | 0.93292 | 55 | 95 | 0.36739 | 0.93007 | 5 | |
| 46 | 0.34553 | 0.93841 | 54 | 96 | 0.35289 | 0.93567 | 4 | 46 | 0.36022 | 0.93287 | 54 | 96 | 0.36754 | 0.93001 | 4 | |
| 47 | 0.34567 | 0.93835 | 53 | 97 | 0.35303 | 0.93561 | 3 | 47 | 0.36037 | 0.93281 | 53 | 97 | 0.36769 | 0.92995 | 3 | |
| 48 | 0.34582 | 0.93830 | 52 | 98 | 0.35318 | 0.93556 | 2 | 48 | 0.36052 | 0.93275 | 52 | 98 | 0.36783 | 0.92989 | 2 | |
| 49 | 0.34597 | 0.93825 | 51 | 99 | 0.35333 | 0.93550 | 1 | 49 | 0.36066 | 0.93270 | 51 | 99 | 0.36798 | 0.92983 | 1 | |
| 50 | 0.34612 | 0.93819 | 50 | 100 | 0.35347 | 0.93544 | 0 | 50 | 0.36081 | 0.93264 | 50 | 100 | 0.36812 | 0.92978 | 0 | |
| 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 分 | 餘弦 | 正弦 | 分 |

| 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 |
|----|---------|---------|-----|-----|---------|---------|----|----|---------|---------|-----|-----|---------|---------|----|
| 0 | 0.36812 | 0.92978 | 100 | 50 | 0.37542 | 0.92686 | 50 | 0 | 0.38268 | 0.92388 | 100 | 50 | 0.38993 | 0.92085 | 50 |
| 1 | 0.36827 | 0.92972 | 99 | 51 | 0.37556 | 0.92680 | 49 | 1 | 0.38283 | 0.92382 | 99 | 51 | 0.39007 | 0.92078 | 49 |
| 2 | 0.36842 | 0.92966 | 98 | 52 | 0.37571 | 0.92674 | 48 | 2 | 0.38297 | 0.92376 | 98 | 52 | 0.39022 | 0.92072 | 48 |
| 3 | 0.36856 | 0.92960 | 97 | 53 | 0.37585 | 0.92668 | 47 | 3 | 0.38312 | 0.92370 | 97 | 53 | 0.39036 | 0.92066 | 47 |
| 4 | 0.36871 | 0.92954 | 96 | 54 | 0.37600 | 0.92662 | 46 | 4 | 0.38326 | 0.92364 | 96 | 54 | 0.39051 | 0.92060 | 46 |
| 5 | 0.36885 | 0.92949 | 95 | 55 | 0.37614 | 0.92656 | 45 | 5 | 0.38341 | 0.92358 | 95 | 55 | 0.39065 | 0.92054 | 45 |
| 6 | 0.36900 | 0.92943 | 94 | 56 | 0.37629 | 0.92650 | 44 | 6 | 0.38355 | 0.92352 | 94 | 56 | 0.39080 | 0.92048 | 44 |
| 7 | 0.36915 | 0.92937 | 93 | 57 | 0.37643 | 0.92644 | 43 | 7 | 0.38370 | 0.92346 | 93 | 57 | 0.39094 | 0.92042 | 43 |
| 8 | 0.36929 | 0.92931 | 92 | 58 | 0.37658 | 0.92638 | 42 | 8 | 0.38384 | 0.92340 | 92 | 58 | 0.39108 | 0.92036 | 42 |
| 9 | 0.36944 | 0.92925 | 91 | 59 | 0.37673 | 0.92633 | 41 | 9 | 0.38399 | 0.92334 | 91 | 59 | 0.39123 | 0.92030 | 41 |
| 10 | 0.36958 | 0.92920 | 90 | 60 | 0.37687 | 0.92627 | 40 | 10 | 0.38413 | 0.92328 | 90 | 60 | 0.39137 | 0.92024 | 40 |
| 11 | 0.36973 | 0.92914 | 89 | 61 | 0.37702 | 0.92621 | 39 | 11 | 0.38428 | 0.92322 | 89 | 61 | 0.39152 | 0.92017 | 39 |
| 12 | 0.36989 | 0.92908 | 88 | 62 | 0.37716 | 0.92615 | 38 | 12 | 0.38442 | 0.92316 | 88 | 62 | 0.39166 | 0.92011 | 38 |
| 13 | 0.37002 | 0.92902 | 87 | 63 | 0.37731 | 0.92609 | 37 | 13 | 0.38457 | 0.92310 | 87 | 63 | 0.39181 | 0.92005 | 37 |
| 14 | 0.37017 | 0.92896 | 86 | 64 | 0.37745 | 0.92603 | 36 | 14 | 0.38471 | 0.92304 | 86 | 64 | 0.39195 | 0.91999 | 36 |
| 15 | 0.37031 | 0.92891 | 85 | 65 | 0.37760 | 0.92597 | 35 | 15 | 0.38486 | 0.92298 | 85 | 65 | 0.39210 | 0.91992 | 35 |
| 16 | 0.37046 | 0.92885 | 84 | 66 | 0.37774 | 0.92591 | 34 | 16 | 0.38500 | 0.92292 | 84 | 66 | 0.39224 | 0.91986 | 34 |
| 17 | 0.37061 | 0.92879 | 83 | 67 | 0.37789 | 0.92585 | 33 | 17 | 0.38515 | 0.92286 | 83 | 67 | 0.39239 | 0.91980 | 33 |
| 18 | 0.37075 | 0.92873 | 82 | 68 | 0.37803 | 0.92579 | 32 | 18 | 0.38529 | 0.92279 | 82 | 68 | 0.39253 | 0.91974 | 32 |
| 19 | 0.37090 | 0.92867 | 81 | 69 | 0.37818 | 0.92573 | 31 | 19 | 0.38544 | 0.92273 | 81 | 69 | 0.39267 | 0.91968 | 31 |
| 20 | 0.37104 | 0.92862 | 80 | 70 | 0.37833 | 0.92567 | 30 | 20 | 0.38558 | 0.92267 | 80 | 70 | 0.39282 | 0.91962 | 30 |
| 21 | 0.37119 | 0.92856 | 79 | 71 | 0.37847 | 0.92561 | 29 | 21 | 0.38573 | 0.92261 | 79 | 71 | 0.39296 | 0.91855 | 29 |
| 22 | 0.37134 | 0.92850 | 78 | 72 | 0.37862 | 0.92555 | 28 | 22 | 0.38587 | 0.92255 | 78 | 72 | 0.39311 | 0.91849 | 28 |
| 23 | 0.37148 | 0.92844 | 77 | 73 | 0.37876 | 0.92549 | 27 | 23 | 0.38602 | 0.92249 | 77 | 73 | 0.39325 | 0.91843 | 27 |
| 24 | 0.37163 | 0.92838 | 76 | 74 | 0.37891 | 0.92543 | 26 | 24 | 0.38616 | 0.92243 | 76 | 74 | 0.39340 | 0.91837 | 26 |
| 25 | 0.37177 | 0.92832 | 75 | 75 | 0.37905 | 0.92538 | 25 | 25 | 0.38631 | 0.92237 | 75 | 75 | 0.39354 | 0.91831 | 25 |
| 26 | 0.37192 | 0.92827 | 74 | 76 | 0.37920 | 0.92532 | 24 | 26 | 0.38645 | 0.92231 | 74 | 76 | 0.39369 | 0.91825 | 24 |
| 27 | 0.37206 | 0.92821 | 73 | 77 | 0.37934 | 0.92526 | 23 | 27 | 0.38660 | 0.92225 | 73 | 77 | 0.39383 | 0.91819 | 23 |
| 28 | 0.37221 | 0.92815 | 72 | 78 | 0.37949 | 0.92520 | 22 | 28 | 0.38674 | 0.92219 | 72 | 78 | 0.39397 | 0.91813 | 22 |
| 29 | 0.37235 | 0.92809 | 71 | 79 | 0.37963 | 0.92514 | 21 | 29 | 0.38689 | 0.92213 | 71 | 79 | 0.39412 | 0.91806 | 21 |
| 30 | 0.37250 | 0.92803 | 70 | 80 | 0.37978 | 0.92508 | 20 | 30 | 0.38703 | 0.92207 | 70 | 80 | 0.39426 | 0.91800 | 20 |
| 31 | 0.37265 | 0.92797 | 69 | 81 | 0.37992 | 0.92502 | 19 | 31 | 0.38718 | 0.92201 | 69 | 81 | 0.39441 | 0.91894 | 19 |
| 32 | 0.37279 | 0.92791 | 68 | 82 | 0.38007 | 0.92496 | 18 | 32 | 0.38732 | 0.92194 | 68 | 82 | 0.39455 | 0.91887 | 18 |
| 33 | 0.37294 | 0.92786 | 67 | 83 | 0.38021 | 0.92490 | 17 | 33 | 0.38747 | 0.92188 | 67 | 83 | 0.39470 | 0.91881 | 17 |
| 34 | 0.37308 | 0.92780 | 66 | 84 | 0.38036 | 0.92484 | 16 | 34 | 0.38761 | 0.92182 | 66 | 84 | 0.39484 | 0.91875 | 16 |
| 35 | 0.37323 | 0.92774 | 65 | 85 | 0.38051 | 0.92478 | 15 | 35 | 0.38776 | 0.92176 | 65 | 85 | 0.39498 | 0.91869 | 15 |
| 36 | 0.37338 | 0.92768 | 64 | 86 | 0.38065 | 0.92472 | 14 | 36 | 0.38790 | 0.92170 | 64 | 86 | 0.39513 | 0.91863 | 14 |
| 37 | 0.37352 | 0.92762 | 63 | 87 | 0.38080 | 0.92466 | 13 | 37 | 0.38805 | 0.92164 | 63 | 87 | 0.39527 | 0.91856 | 13 |
| 38 | 0.37367 | 0.92756 | 62 | 88 | 0.38094 | 0.92460 | 12 | 38 | 0.38819 | 0.92158 | 62 | 88 | 0.39542 | 0.91850 | 12 |
| 39 | 0.37381 | 0.92750 | 61 | 89 | 0.38109 | 0.92454 | 11 | 39 | 0.38834 | 0.92152 | 61 | 89 | 0.39556 | 0.91844 | 11 |
| 40 | 0.37396 | 0.92745 | 60 | 90 | 0.38123 | 0.92448 | 10 | 40 | 0.38848 | 0.92146 | 60 | 90 | 0.39571 | 0.91838 | 10 |
| 41 | 0.37410 | 0.92739 | 59 | 91 | 0.38138 | 0.92442 | 9 | 41 | 0.38863 | 0.92140 | 59 | 91 | 0.39585 | 0.91832 | 9 |
| 42 | 0.37425 | 0.92733 | 58 | 92 | 0.38152 | 0.92436 | 8 | 42 | 0.38877 | 0.92133 | 58 | 92 | 0.39599 | 0.91825 | 8 |
| 43 | 0.37440 | 0.92727 | 57 | 93 | 0.38167 | 0.92430 | 7 | 43 | 0.38891 | 0.92127 | 57 | 93 | 0.39614 | 0.91819 | 7 |
| 44 | 0.37454 | 0.92721 | 56 | 94 | 0.38181 | 0.92424 | 6 | 44 | 0.38906 | 0.92121 | 56 | 94 | 0.39628 | 0.91813 | 6 |
| 45 | 0.37469 | 0.92715 | 55 | 95 | 0.38196 | 0.92418 | 5 | 45 | 0.38920 | 0.92115 | 55 | 95 | 0.39643 | 0.91807 | 5 |
| 46 | 0.37483 | 0.92709 | 54 | 96 | 0.38210 | 0.92412 | 4 | 46 | 0.38935 | 0.92109 | 54 | 96 | 0.39657 | 0.91800 | 4 |
| 47 | 0.37498 | 0.92703 | 53 | 97 | 0.38225 | 0.92406 | 3 | 47 | 0.38949 | 0.92103 | 53 | 97 | 0.39672 | 0.91794 | 3 |
| 48 | 0.37512 | 0.92697 | 52 | 98 | 0.38239 | 0.92400 | 2 | 48 | 0.38964 | 0.92097 | 52 | 98 | 0.39686 | 0.91788 | 2 |
| 49 | 0.37527 | 0.92692 | 51 | 99 | 0.38254 | 0.92394 | 1 | 49 | 0.38978 | 0.92091 | 51 | 99 | 0.39701 | 0.91782 | 1 |
| 50 | 0.37542 | 0.92686 | 50 | 100 | 0.38268 | 0.92388 | 0 | 50 | 0.38993 | 0.92085 | 50 | 100 | 0.39715 | 0.91775 | 0 |
| 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 |

| 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 |
|----|---------|---------|-----|-----|---------|---------|----|----|---------|---------|-----|-----|---------|---------|----|
| 0 | 0.39715 | 0.91775 | 100 | 50 | 0.40434 | 0.91461 | 50 | 0 | 0.41151 | 0.91140 | 100 | 50 | 0.41866 | 0.90814 | 50 |
| 1 | 0.49729 | 0.91769 | 99 | 51 | 0.40449 | 0.91454 | 49 | 1 | 0.41166 | 0.91134 | 99 | 51 | 0.41880 | 0.90808 | 49 |
| 2 | 0.59744 | 0.91763 | 98 | 52 | 0.40463 | 0.91448 | 48 | 2 | 0.41180 | 0.91127 | 98 | 52 | 0.41895 | 0.90801 | 48 |
| 3 | 0.59758 | 0.91757 | 97 | 53 | 0.40477 | 0.91443 | 47 | 3 | 0.41194 | 0.91121 | 97 | 53 | 0.41909 | 0.90795 | 47 |
| 4 | 0.59772 | 0.91751 | 96 | 54 | 0.40492 | 0.91437 | 46 | 4 | 0.41209 | 0.91114 | 96 | 54 | 0.41923 | 0.90788 | 46 |
| 5 | 0.59787 | 0.91744 | 95 | 55 | 0.40506 | 0.91429 | 45 | 5 | 0.41223 | 0.91108 | 95 | 55 | 0.41937 | 0.90781 | 45 |
| 6 | 0.59801 | 0.91738 | 94 | 56 | 0.40521 | 0.91423 | 44 | 6 | 0.41237 | 0.91102 | 94 | 56 | 0.41952 | 0.90775 | 44 |
| 7 | 0.59816 | 0.91732 | 93 | 57 | 0.40535 | 0.91416 | 43 | 7 | 0.41252 | 0.91095 | 93 | 57 | 0.41966 | 0.90768 | 43 |
| 8 | 0.59830 | 0.91726 | 92 | 58 | 0.40549 | 0.91410 | 42 | 8 | 0.41266 | 0.91089 | 92 | 58 | 0.41980 | 0.90762 | 42 |
| 9 | 0.59844 | 0.91719 | 91 | 59 | 0.40564 | 0.91403 | 41 | 9 | 0.41280 | 0.91082 | 91 | 59 | 0.41994 | 0.90755 | 41 |
| 10 | 0.59859 | 0.91713 | 90 | 60 | 0.40578 | 0.91397 | 40 | 10 | 0.41295 | 0.91076 | 90 | 60 | 0.42009 | 0.90748 | 40 |
| 11 | 0.59873 | 0.91707 | 89 | 61 | 0.40592 | 0.91391 | 39 | 11 | 0.41309 | 0.91070 | 89 | 61 | 0.42023 | 0.90742 | 39 |
| 12 | 0.59888 | 0.91700 | 88 | 62 | 0.40607 | 0.91384 | 38 | 12 | 0.41323 | 0.91063 | 88 | 62 | 0.42037 | 0.90735 | 38 |
| 13 | 0.59902 | 0.91694 | 87 | 63 | 0.40621 | 0.91378 | 37 | 13 | 0.41337 | 0.91056 | 87 | 63 | 0.42051 | 0.90729 | 37 |
| 14 | 0.59917 | 0.91688 | 86 | 64 | 0.40635 | 0.91372 | 36 | 14 | 0.41352 | 0.91050 | 86 | 64 | 0.42066 | 0.90722 | 36 |
| 15 | 0.59930 | 0.91682 | 85 | 65 | 0.40650 | 0.91365 | 35 | 15 | 0.41366 | 0.91043 | 85 | 65 | 0.42080 | 0.90715 | 35 |
| 16 | 0.59945 | 0.91675 | 84 | 66 | 0.40664 | 0.91359 | 34 | 16 | 0.41380 | 0.91037 | 84 | 66 | 0.42094 | 0.90709 | 34 |
| 17 | 0.59960 | 0.91669 | 83 | 67 | 0.40678 | 0.91352 | 33 | 17 | 0.41395 | 0.91030 | 83 | 67 | 0.42108 | 0.90702 | 33 |
| 18 | 0.59974 | 0.91663 | 82 | 68 | 0.40693 | 0.91346 | 32 | 18 | 0.41409 | 0.91024 | 82 | 68 | 0.42123 | 0.90696 | 32 |
| 19 | 0.59989 | 0.91657 | 81 | 69 | 0.40707 | 0.91340 | 31 | 19 | 0.41423 | 0.91017 | 81 | 69 | 0.42137 | 0.90689 | 31 |
| 20 | 0.40003 | 0.91650 | 80 | 70 | 0.40721 | 0.91333 | 30 | 20 | 0.41438 | 0.91011 | 80 | 70 | 0.42151 | 0.90682 | 30 |
| 21 | 0.40017 | 0.91644 | 79 | 71 | 0.40736 | 0.91327 | 29 | 21 | 0.41452 | 0.91004 | 79 | 71 | 0.42165 | 0.90676 | 29 |
| 22 | 0.40032 | 0.91638 | 78 | 72 | 0.40750 | 0.91320 | 28 | 22 | 0.41466 | 0.90998 | 78 | 72 | 0.42180 | 0.90669 | 28 |
| 23 | 0.40046 | 0.91631 | 77 | 73 | 0.40765 | 0.91314 | 27 | 23 | 0.41480 | 0.90991 | 77 | 73 | 0.42194 | 0.90662 | 27 |
| 24 | 0.40060 | 0.91625 | 76 | 74 | 0.40779 | 0.91308 | 26 | 24 | 0.41495 | 0.90985 | 76 | 74 | 0.42208 | 0.90656 | 26 |
| 25 | 0.40075 | 0.91619 | 75 | 75 | 0.40793 | 0.91301 | 25 | 25 | 0.41509 | 0.90978 | 75 | 75 | 0.42222 | 0.90649 | 25 |
| 26 | 0.40089 | 0.91613 | 74 | 76 | 0.40808 | 0.91295 | 24 | 26 | 0.41523 | 0.90972 | 74 | 76 | 0.42237 | 0.90643 | 24 |
| 27 | 0.40104 | 0.91606 | 73 | 77 | 0.40822 | 0.91288 | 23 | 27 | 0.41538 | 0.90966 | 73 | 77 | 0.42251 | 0.90636 | 23 |
| 28 | 0.40118 | 0.91600 | 72 | 78 | 0.40836 | 0.91282 | 22 | 28 | 0.41552 | 0.90960 | 72 | 78 | 0.42265 | 0.90629 | 22 |
| 29 | 0.40132 | 0.91594 | 71 | 79 | 0.40851 | 0.91276 | 21 | 29 | 0.41566 | 0.90954 | 71 | 79 | 0.42279 | 0.90623 | 21 |
| 30 | 0.40147 | 0.91587 | 70 | 80 | 0.40865 | 0.91269 | 20 | 30 | 0.41580 | 0.90948 | 70 | 80 | 0.42293 | 0.90616 | 20 |
| 31 | 0.40161 | 0.91581 | 69 | 81 | 0.40879 | 0.91263 | 19 | 31 | 0.41595 | 0.90942 | 69 | 81 | 0.42308 | 0.90609 | 19 |
| 32 | 0.40176 | 0.91575 | 68 | 82 | 0.40894 | 0.91256 | 18 | 32 | 0.41609 | 0.90936 | 68 | 82 | 0.42322 | 0.90603 | 18 |
| 33 | 0.40190 | 0.91568 | 67 | 83 | 0.40908 | 0.91250 | 17 | 33 | 0.41623 | 0.90930 | 67 | 83 | 0.42336 | 0.90596 | 17 |
| 34 | 0.40204 | 0.91562 | 66 | 84 | 0.40922 | 0.91243 | 16 | 34 | 0.41638 | 0.90924 | 66 | 84 | 0.42350 | 0.90589 | 16 |
| 35 | 0.40219 | 0.91556 | 65 | 85 | 0.40937 | 0.91237 | 15 | 35 | 0.41652 | 0.90918 | 65 | 85 | 0.42365 | 0.90583 | 15 |
| 36 | 0.40233 | 0.91549 | 64 | 86 | 0.40951 | 0.91231 | 14 | 36 | 0.41666 | 0.90912 | 64 | 86 | 0.42379 | 0.90576 | 14 |
| 37 | 0.40248 | 0.91543 | 63 | 87 | 0.40965 | 0.91224 | 13 | 37 | 0.41680 | 0.90906 | 63 | 87 | 0.42393 | 0.90569 | 13 |
| 38 | 0.40262 | 0.91537 | 62 | 88 | 0.40980 | 0.91218 | 12 | 38 | 0.41695 | 0.90900 | 62 | 88 | 0.42407 | 0.90562 | 12 |
| 39 | 0.40276 | 0.91530 | 61 | 89 | 0.40994 | 0.91211 | 11 | 39 | 0.41709 | 0.90894 | 61 | 89 | 0.42422 | 0.90556 | 11 |
| 40 | 0.40291 | 0.91524 | 60 | 90 | 0.41008 | 0.91205 | 10 | 40 | 0.41723 | 0.90888 | 60 | 90 | 0.42436 | 0.90549 | 10 |
| 41 | 0.40305 | 0.91518 | 59 | 91 | 0.41023 | 0.91198 | 9 | 41 | 0.41738 | 0.90882 | 59 | 91 | 0.42450 | 0.90543 | 9 |
| 42 | 0.40319 | 0.91511 | 58 | 92 | 0.41037 | 0.91192 | 8 | 42 | 0.41752 | 0.90876 | 58 | 92 | 0.42464 | 0.90536 | 8 |
| 43 | 0.40334 | 0.91505 | 57 | 93 | 0.41051 | 0.91186 | 7 | 43 | 0.41766 | 0.90870 | 57 | 93 | 0.42478 | 0.90529 | 7 |
| 44 | 0.40348 | 0.91499 | 56 | 94 | 0.41066 | 0.91179 | 6 | 44 | 0.41780 | 0.90864 | 56 | 94 | 0.42493 | 0.90523 | 6 |
| 45 | 0.40363 | 0.91492 | 55 | 95 | 0.41080 | 0.91173 | 5 | 45 | 0.41795 | 0.90858 | 55 | 95 | 0.42507 | 0.90516 | 5 |
| 46 | 0.40377 | 0.91486 | 54 | 96 | 0.41094 | 0.91166 | 4 | 46 | 0.41809 | 0.90852 | 54 | 96 | 0.42521 | 0.90509 | 4 |
| 47 | 0.40391 | 0.91480 | 53 | 97 | 0.41108 | 0.91160 | 3 | 47 | 0.41823 | 0.90846 | 53 | 97 | 0.42535 | 0.90503 | 3 |
| 48 | 0.40406 | 0.91473 | 52 | 98 | 0.41123 | 0.91153 | 2 | 48 | 0.41837 | 0.90840 | 52 | 98 | 0.42549 | 0.90496 | 2 |
| 49 | 0.40420 | 0.91467 | 51 | 99 | 0.41137 | 0.91147 | 1 | 49 | 0.41852 | 0.90834 | 51 | 99 | 0.42564 | 0.90489 | 1 |
| 50 | 0.40434 | 0.91461 | 50 | 100 | 0.41151 | 0.91140 | 0 | 50 | 0.41866 | 0.90828 | 50 | 100 | 0.42578 | 0.90483 | 0 |
| 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 |

| 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 |
|----|---------|---------|-----|-----|---------|---------|----|----|---------|---------|-----|-----|---------|---------|----|
| 0 | 0.42578 | 0.90483 | 100 | 50 | 0.43287 | 0.90146 | 50 | 0 | 0.43994 | 0.89803 | 100 | 50 | 0.44698 | 0.89454 | 50 |
| 1 | 0.42592 | 0.90476 | 99 | 51 | 0.43301 | 0.90139 | 49 | 1 | 0.44008 | 0.89796 | 99 | 51 | 0.44712 | 0.89447 | 49 |
| 2 | 0.42606 | 0.90469 | 98 | 52 | 0.43316 | 0.90132 | 48 | 2 | 0.44022 | 0.89789 | 98 | 52 | 0.44726 | 0.89440 | 48 |
| 3 | 0.42621 | 0.90463 | 97 | 53 | 0.43330 | 0.90125 | 47 | 3 | 0.44036 | 0.89782 | 97 | 53 | 0.44740 | 0.89433 | 47 |
| 4 | 0.42635 | 0.90456 | 96 | 54 | 0.43344 | 0.90118 | 46 | 4 | 0.44050 | 0.89775 | 96 | 54 | 0.44754 | 0.89426 | 46 |
| 5 | 0.42649 | 0.90449 | 95 | 55 | 0.43358 | 0.90111 | 45 | 5 | 0.44064 | 0.89768 | 95 | 55 | 0.44768 | 0.89419 | 45 |
| 6 | 0.42663 | 0.90443 | 94 | 56 | 0.43372 | 0.90105 | 44 | 6 | 0.44079 | 0.89761 | 94 | 56 | 0.44782 | 0.89412 | 44 |
| 7 | 0.42677 | 0.90436 | 93 | 57 | 0.43386 | 0.90098 | 43 | 7 | 0.44093 | 0.89754 | 93 | 57 | 0.44796 | 0.89405 | 43 |
| 8 | 0.42692 | 0.90429 | 92 | 58 | 0.43401 | 0.90091 | 42 | 8 | 0.44107 | 0.89747 | 92 | 58 | 0.44810 | 0.89398 | 42 |
| 9 | 0.42706 | 0.90422 | 91 | 59 | 0.43415 | 0.90084 | 41 | 9 | 0.44121 | 0.89740 | 91 | 59 | 0.44824 | 0.89391 | 41 |
| 10 | 0.42720 | 0.90416 | 90 | 60 | 0.43429 | 0.90077 | 40 | 10 | 0.44135 | 0.89734 | 90 | 60 | 0.44838 | 0.89384 | 40 |
| 11 | 0.42734 | 0.90409 | 89 | 61 | 0.43443 | 0.90071 | 39 | 11 | 0.44149 | 0.89727 | 89 | 61 | 0.44852 | 0.89377 | 39 |
| 12 | 0.42748 | 0.90402 | 88 | 62 | 0.43457 | 0.90064 | 38 | 12 | 0.44163 | 0.89720 | 88 | 62 | 0.44866 | 0.89370 | 38 |
| 13 | 0.42763 | 0.90396 | 87 | 63 | 0.43471 | 0.90057 | 37 | 13 | 0.44177 | 0.89713 | 87 | 63 | 0.44880 | 0.89363 | 37 |
| 14 | 0.42777 | 0.90389 | 86 | 64 | 0.43485 | 0.90050 | 36 | 14 | 0.44191 | 0.89706 | 86 | 64 | 0.44894 | 0.89356 | 36 |
| 15 | 0.42791 | 0.90382 | 85 | 65 | 0.43500 | 0.90043 | 35 | 15 | 0.44205 | 0.89699 | 85 | 65 | 0.44909 | 0.89349 | 35 |
| 16 | 0.42805 | 0.90375 | 84 | 66 | 0.43514 | 0.90036 | 34 | 16 | 0.44219 | 0.89692 | 84 | 66 | 0.44923 | 0.89342 | 34 |
| 17 | 0.42819 | 0.90369 | 83 | 67 | 0.43528 | 0.90030 | 33 | 17 | 0.44234 | 0.89685 | 83 | 67 | 0.44937 | 0.89335 | 33 |
| 18 | 0.42834 | 0.90362 | 82 | 68 | 0.43542 | 0.90023 | 32 | 18 | 0.44248 | 0.89678 | 82 | 68 | 0.44950 | 0.89328 | 32 |
| 19 | 0.42848 | 0.90355 | 81 | 69 | 0.43556 | 0.90016 | 31 | 19 | 0.44262 | 0.89671 | 81 | 69 | 0.44964 | 0.89321 | 31 |
| 20 | 0.42862 | 0.90348 | 80 | 70 | 0.43570 | 0.90009 | 30 | 20 | 0.44276 | 0.89664 | 80 | 70 | 0.44979 | 0.89314 | 30 |
| 21 | 0.42876 | 0.90342 | 79 | 71 | 0.43584 | 0.90002 | 29 | 21 | 0.44290 | 0.89657 | 79 | 71 | 0.44993 | 0.89307 | 29 |
| 22 | 0.42890 | 0.90335 | 78 | 72 | 0.43599 | 0.89995 | 28 | 22 | 0.44304 | 0.89650 | 78 | 72 | 0.45007 | 0.89299 | 28 |
| 23 | 0.42905 | 0.90328 | 77 | 73 | 0.43613 | 0.89989 | 27 | 23 | 0.44318 | 0.89643 | 77 | 73 | 0.45021 | 0.89292 | 27 |
| 24 | 0.42919 | 0.90322 | 76 | 74 | 0.43627 | 0.89982 | 26 | 24 | 0.44332 | 0.89636 | 76 | 74 | 0.45035 | 0.89285 | 26 |
| 25 | 0.42933 | 0.90315 | 75 | 75 | 0.43641 | 0.89975 | 25 | 25 | 0.44346 | 0.89629 | 75 | 75 | 0.45049 | 0.89278 | 25 |
| 26 | 0.42947 | 0.90308 | 74 | 76 | 0.43655 | 0.89968 | 24 | 26 | 0.44360 | 0.89622 | 74 | 76 | 0.45063 | 0.89271 | 24 |
| 27 | 0.42961 | 0.90301 | 73 | 77 | 0.43669 | 0.89961 | 23 | 27 | 0.44374 | 0.89615 | 73 | 77 | 0.45077 | 0.89264 | 23 |
| 28 | 0.42975 | 0.90295 | 72 | 78 | 0.43683 | 0.89954 | 22 | 28 | 0.44388 | 0.89608 | 72 | 78 | 0.45091 | 0.89257 | 22 |
| 29 | 0.42990 | 0.90288 | 71 | 79 | 0.43697 | 0.89947 | 21 | 29 | 0.44403 | 0.89601 | 71 | 79 | 0.45105 | 0.89250 | 21 |
| 30 | 0.43004 | 0.90281 | 70 | 80 | 0.43712 | 0.89941 | 20 | 30 | 0.44417 | 0.89594 | 70 | 80 | 0.45119 | 0.89243 | 20 |
| 31 | 0.43018 | 0.90274 | 69 | 81 | 0.43726 | 0.89934 | 19 | 31 | 0.44431 | 0.89587 | 69 | 81 | 0.45133 | 0.89236 | 19 |
| 32 | 0.43032 | 0.90268 | 68 | 82 | 0.43740 | 0.89927 | 18 | 32 | 0.44445 | 0.89580 | 68 | 82 | 0.45147 | 0.89229 | 18 |
| 33 | 0.43046 | 0.90261 | 67 | 83 | 0.43754 | 0.89920 | 17 | 33 | 0.44459 | 0.89574 | 67 | 83 | 0.45161 | 0.89222 | 17 |
| 34 | 0.43061 | 0.90254 | 66 | 84 | 0.43768 | 0.89913 | 16 | 34 | 0.44473 | 0.89566 | 66 | 84 | 0.45175 | 0.89214 | 16 |
| 35 | 0.43075 | 0.90247 | 65 | 85 | 0.43782 | 0.89906 | 15 | 35 | 0.44487 | 0.89559 | 65 | 85 | 0.45189 | 0.89207 | 15 |
| 36 | 0.43089 | 0.90240 | 64 | 86 | 0.43796 | 0.89899 | 14 | 36 | 0.44501 | 0.89553 | 64 | 86 | 0.45203 | 0.89200 | 14 |
| 37 | 0.43103 | 0.90234 | 63 | 87 | 0.43810 | 0.89892 | 13 | 37 | 0.44515 | 0.89546 | 63 | 87 | 0.45217 | 0.89193 | 13 |
| 38 | 0.43117 | 0.90227 | 62 | 88 | 0.43825 | 0.89886 | 12 | 38 | 0.44529 | 0.89539 | 62 | 88 | 0.45231 | 0.89186 | 12 |
| 39 | 0.43131 | 0.90220 | 61 | 89 | 0.43839 | 0.89879 | 11 | 39 | 0.44543 | 0.89532 | 61 | 89 | 0.45245 | 0.89179 | 11 |
| 40 | 0.43146 | 0.90213 | 60 | 90 | 0.43853 | 0.89872 | 10 | 40 | 0.44557 | 0.89525 | 60 | 90 | 0.45259 | 0.89172 | 10 |
| 41 | 0.43160 | 0.90207 | 59 | 91 | 0.43867 | 0.89865 | 9 | 41 | 0.44571 | 0.89518 | 59 | 91 | 0.45273 | 0.89165 | 9 |
| 42 | 0.43174 | 0.90200 | 58 | 92 | 0.43881 | 0.89858 | 8 | 42 | 0.44585 | 0.89511 | 58 | 92 | 0.45287 | 0.89158 | 8 |
| 43 | 0.43188 | 0.90193 | 57 | 93 | 0.43895 | 0.89851 | 7 | 43 | 0.44599 | 0.89504 | 57 | 93 | 0.45301 | 0.89151 | 7 |
| 44 | 0.43202 | 0.90186 | 56 | 94 | 0.43909 | 0.89844 | 6 | 44 | 0.44614 | 0.89497 | 56 | 94 | 0.45315 | 0.89144 | 6 |
| 45 | 0.43216 | 0.90179 | 55 | 95 | 0.43923 | 0.89837 | 5 | 45 | 0.44628 | 0.89490 | 55 | 95 | 0.45329 | 0.89136 | 5 |
| 46 | 0.43231 | 0.90173 | 54 | 96 | 0.43937 | 0.89830 | 4 | 46 | 0.44642 | 0.89483 | 54 | 96 | 0.45343 | 0.89129 | 4 |
| 47 | 0.43245 | 0.90166 | 53 | 97 | 0.43952 | 0.89823 | 3 | 47 | 0.44656 | 0.89476 | 53 | 97 | 0.45357 | 0.89122 | 3 |
| 48 | 0.43259 | 0.90159 | 52 | 98 | 0.43966 | 0.89816 | 2 | 48 | 0.44670 | 0.89469 | 52 | 98 | 0.45371 | 0.89115 | 2 |
| 49 | 0.43273 | 0.90152 | 51 | 99 | 0.43980 | 0.89810 | 1 | 49 | 0.44684 | 0.89462 | 51 | 99 | 0.45385 | 0.89108 | 1 |
| 50 | 0.43287 | 0.90146 | 50 | 100 | 0.43994 | 0.89803 | 0 | 50 | 0.44798 | 0.89454 | 50 | 100 | 0.45399 | 0.89101 | 0 |
| 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 |

| 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 |
|----|---------|---------|-----|-----|---------|---------|----|----|---------|---------|-----|-----|---------|---------|----|
| 0 | 0.45399 | 0.89101 | 100 | 50 | 0.46097 | 0.88741 | 50 | 0 | 0.46795 | 0.88377 | 100 | 50 | 0.47493 | 0.88016 | 50 |
| 1 | 0.45413 | 0.89084 | 99 | 51 | 0.46113 | 0.88734 | 49 | 1 | 0.46807 | 0.88369 | 99 | 51 | 0.47509 | 0.87999 | 49 |
| 2 | 0.45427 | 0.89066 | 98 | 52 | 0.46125 | 0.88727 | 48 | 2 | 0.46821 | 0.88362 | 98 | 52 | 0.47525 | 0.87981 | 48 |
| 3 | 0.45441 | 0.89049 | 97 | 53 | 0.46139 | 0.88720 | 47 | 3 | 0.46835 | 0.88355 | 97 | 53 | 0.47541 | 0.87964 | 47 |
| 4 | 0.45455 | 0.89032 | 96 | 54 | 0.46153 | 0.88713 | 46 | 4 | 0.46849 | 0.88347 | 96 | 54 | 0.47557 | 0.87947 | 46 |
| 5 | 0.45469 | 0.89015 | 95 | 55 | 0.46167 | 0.88705 | 45 | 5 | 0.46862 | 0.88340 | 95 | 55 | 0.47573 | 0.87930 | 45 |
| 6 | 0.45483 | 0.89000 | 94 | 56 | 0.46181 | 0.88698 | 44 | 6 | 0.46876 | 0.88332 | 94 | 56 | 0.47589 | 0.87913 | 44 |
| 7 | 0.45497 | 0.88985 | 93 | 57 | 0.46195 | 0.88691 | 43 | 7 | 0.46890 | 0.88325 | 93 | 57 | 0.47605 | 0.87896 | 43 |
| 8 | 0.45511 | 0.88974 | 92 | 58 | 0.46209 | 0.88683 | 42 | 8 | 0.46904 | 0.88318 | 92 | 58 | 0.47621 | 0.87879 | 42 |
| 9 | 0.45525 | 0.88962 | 91 | 59 | 0.46223 | 0.88676 | 41 | 9 | 0.46918 | 0.88310 | 91 | 59 | 0.47637 | 0.87862 | 41 |
| 10 | 0.45539 | 0.88950 | 90 | 60 | 0.46237 | 0.88669 | 40 | 10 | 0.46932 | 0.88303 | 90 | 60 | 0.47653 | 0.87845 | 40 |
| 11 | 0.45553 | 0.88932 | 89 | 61 | 0.46251 | 0.88662 | 39 | 11 | 0.46946 | 0.88296 | 89 | 61 | 0.47669 | 0.87828 | 39 |
| 12 | 0.45567 | 0.88915 | 88 | 62 | 0.46265 | 0.88654 | 38 | 12 | 0.46959 | 0.88288 | 88 | 62 | 0.47685 | 0.87811 | 38 |
| 13 | 0.45581 | 0.88900 | 87 | 63 | 0.46279 | 0.88647 | 37 | 13 | 0.46973 | 0.88281 | 87 | 63 | 0.47701 | 0.87794 | 37 |
| 14 | 0.45595 | 0.88885 | 86 | 64 | 0.46292 | 0.88640 | 36 | 14 | 0.46987 | 0.88273 | 86 | 64 | 0.47717 | 0.87777 | 36 |
| 15 | 0.45609 | 0.88869 | 85 | 65 | 0.46306 | 0.88632 | 35 | 15 | 0.47001 | 0.88266 | 85 | 65 | 0.47733 | 0.87760 | 35 |
| 16 | 0.45623 | 0.88856 | 84 | 66 | 0.46320 | 0.88625 | 34 | 16 | 0.47015 | 0.88259 | 84 | 66 | 0.47749 | 0.87743 | 34 |
| 17 | 0.45637 | 0.88843 | 83 | 67 | 0.46334 | 0.88618 | 33 | 17 | 0.47029 | 0.88251 | 83 | 67 | 0.47765 | 0.87726 | 33 |
| 18 | 0.45651 | 0.88827 | 82 | 68 | 0.46348 | 0.88611 | 32 | 18 | 0.47043 | 0.88244 | 82 | 68 | 0.47781 | 0.87709 | 32 |
| 19 | 0.45665 | 0.88816 | 81 | 69 | 0.46362 | 0.88603 | 31 | 19 | 0.47057 | 0.88237 | 81 | 69 | 0.47797 | 0.87692 | 31 |
| 20 | 0.45679 | 0.88805 | 80 | 70 | 0.46376 | 0.88596 | 30 | 20 | 0.47070 | 0.88229 | 80 | 70 | 0.47813 | 0.87675 | 30 |
| 21 | 0.45693 | 0.88790 | 79 | 71 | 0.46390 | 0.88589 | 29 | 21 | 0.47084 | 0.88222 | 79 | 71 | 0.47829 | 0.87658 | 29 |
| 22 | 0.45707 | 0.88774 | 78 | 72 | 0.46404 | 0.88582 | 28 | 22 | 0.47098 | 0.88214 | 78 | 72 | 0.47845 | 0.87641 | 28 |
| 23 | 0.45721 | 0.88759 | 77 | 73 | 0.46418 | 0.88574 | 27 | 23 | 0.47112 | 0.88207 | 77 | 73 | 0.47861 | 0.87624 | 27 |
| 24 | 0.45735 | 0.88749 | 76 | 74 | 0.46432 | 0.88567 | 26 | 24 | 0.47126 | 0.88200 | 76 | 74 | 0.47877 | 0.87607 | 26 |
| 25 | 0.45749 | 0.88732 | 75 | 75 | 0.46446 | 0.88560 | 25 | 25 | 0.47140 | 0.88192 | 75 | 75 | 0.47893 | 0.87590 | 25 |
| 26 | 0.45763 | 0.88714 | 74 | 76 | 0.46459 | 0.88552 | 24 | 26 | 0.47154 | 0.88185 | 74 | 76 | 0.47909 | 0.87573 | 24 |
| 27 | 0.45777 | 0.88697 | 73 | 77 | 0.46473 | 0.88545 | 23 | 27 | 0.47167 | 0.88177 | 73 | 77 | 0.47925 | 0.87556 | 23 |
| 28 | 0.45790 | 0.88680 | 72 | 78 | 0.46487 | 0.88538 | 22 | 28 | 0.47181 | 0.88170 | 72 | 78 | 0.47941 | 0.87539 | 22 |
| 29 | 0.45804 | 0.88663 | 71 | 79 | 0.46501 | 0.88530 | 21 | 29 | 0.47195 | 0.88162 | 71 | 79 | 0.47957 | 0.87522 | 21 |
| 30 | 0.45818 | 0.88646 | 70 | 80 | 0.46515 | 0.88523 | 20 | 30 | 0.47209 | 0.88155 | 70 | 80 | 0.47973 | 0.87505 | 20 |
| 31 | 0.45832 | 0.88629 | 69 | 81 | 0.46529 | 0.88516 | 19 | 31 | 0.47223 | 0.88148 | 69 | 81 | 0.47989 | 0.87488 | 19 |
| 32 | 0.45846 | 0.88612 | 68 | 82 | 0.46543 | 0.88509 | 18 | 32 | 0.47237 | 0.88140 | 68 | 82 | 0.47999 | 0.87471 | 18 |
| 33 | 0.45860 | 0.88596 | 67 | 83 | 0.46557 | 0.88501 | 17 | 33 | 0.47250 | 0.88133 | 67 | 83 | 0.48009 | 0.87454 | 17 |
| 34 | 0.45874 | 0.88581 | 66 | 84 | 0.46571 | 0.88494 | 16 | 34 | 0.47264 | 0.88125 | 66 | 84 | 0.48025 | 0.87437 | 16 |
| 35 | 0.45888 | 0.88565 | 65 | 85 | 0.46585 | 0.88487 | 15 | 35 | 0.47278 | 0.88118 | 65 | 85 | 0.48041 | 0.87420 | 15 |
| 36 | 0.45902 | 0.88549 | 64 | 86 | 0.46599 | 0.88479 | 14 | 36 | 0.47292 | 0.88111 | 64 | 86 | 0.48057 | 0.87403 | 14 |
| 37 | 0.45916 | 0.88533 | 63 | 87 | 0.46613 | 0.88472 | 13 | 37 | 0.47306 | 0.88103 | 63 | 87 | 0.48073 | 0.87386 | 13 |
| 38 | 0.45930 | 0.88518 | 62 | 88 | 0.46627 | 0.88465 | 12 | 38 | 0.47320 | 0.88096 | 62 | 88 | 0.48089 | 0.87369 | 12 |
| 39 | 0.45944 | 0.88502 | 61 | 89 | 0.46640 | 0.88457 | 11 | 39 | 0.47334 | 0.88088 | 61 | 89 | 0.48104 | 0.87352 | 11 |
| 40 | 0.45958 | 0.88486 | 60 | 90 | 0.46654 | 0.88450 | 10 | 40 | 0.47347 | 0.88081 | 60 | 90 | 0.48120 | 0.87335 | 10 |
| 41 | 0.45972 | 0.88470 | 59 | 91 | 0.46668 | 0.88443 | 9 | 41 | 0.47361 | 0.88073 | 59 | 91 | 0.48136 | 0.87318 | 9 |
| 42 | 0.45986 | 0.88454 | 58 | 92 | 0.46682 | 0.88435 | 8 | 42 | 0.47375 | 0.88066 | 58 | 92 | 0.48152 | 0.87301 | 8 |
| 43 | 0.46000 | 0.88438 | 57 | 93 | 0.46696 | 0.88428 | 7 | 43 | 0.47389 | 0.88058 | 57 | 93 | 0.48167 | 0.87284 | 7 |
| 44 | 0.46014 | 0.88422 | 56 | 94 | 0.46710 | 0.88421 | 6 | 44 | 0.47403 | 0.88051 | 56 | 94 | 0.48183 | 0.87267 | 6 |
| 45 | 0.46028 | 0.88406 | 55 | 95 | 0.46724 | 0.88413 | 5 | 45 | 0.47417 | 0.88044 | 55 | 95 | 0.48199 | 0.87250 | 5 |
| 46 | 0.46042 | 0.88390 | 54 | 96 | 0.46737 | 0.88406 | 4 | 46 | 0.47430 | 0.88036 | 54 | 96 | 0.48215 | 0.87233 | 4 |
| 47 | 0.46056 | 0.88373 | 53 | 97 | 0.46751 | 0.88399 | 3 | 47 | 0.47444 | 0.88029 | 53 | 97 | 0.48231 | 0.87216 | 3 |
| 48 | 0.46070 | 0.88357 | 52 | 98 | 0.46765 | 0.88391 | 2 | 48 | 0.47458 | 0.88021 | 52 | 98 | 0.48247 | 0.87199 | 2 |
| 49 | 0.46084 | 0.88341 | 51 | 99 | 0.46779 | 0.88384 | 1 | 49 | 0.47472 | 0.88014 | 51 | 99 | 0.48263 | 0.87182 | 1 |
| 50 | 0.46097 | 0.88325 | 50 | 100 | 0.46793 | 0.88377 | 0 | 50 | 0.47486 | 0.88006 | 50 | 100 | 0.48279 | 0.87165 | 0 |
| 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 |

| 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 |
|----|---------|---------|-----|-----|---------|---------|----|----|---------|---------|-----|-----|---------|----------|----|
| 0 | 0.48175 | 0.87631 | 100 | 50 | 0.48362 | 0.87250 | 50 | 0 | 0.49546 | 0.86863 | 100 | 50 | 0.50227 | 0.86471 | 50 |
| 1 | 0.48189 | 0.87623 | 99 | 51 | 0.48876 | 0.87242 | 49 | 1 | 0.49560 | 0.86855 | 99 | 51 | 0.50240 | 0.86463 | 49 |
| 2 | 0.48203 | 0.87616 | 98 | 52 | 0.48890 | 0.87234 | 48 | 2 | 0.49573 | 0.86848 | 98 | 52 | 0.50254 | 0.86456 | 48 |
| 3 | 0.48217 | 0.87609 | 97 | 53 | 0.48903 | 0.87227 | 47 | 3 | 0.49587 | 0.86840 | 97 | 53 | 0.50267 | 0.86448 | 47 |
| 4 | 0.48230 | 0.87600 | 96 | 54 | 0.48917 | 0.87219 | 46 | 4 | 0.49600 | 0.86832 | 96 | 54 | 0.50281 | 0.86440 | 46 |
| 5 | 0.48244 | 0.87593 | 95 | 55 | 0.48931 | 0.87211 | 45 | 5 | 0.49614 | 0.86824 | 95 | 55 | 0.50294 | 0.86432 | 45 |
| 6 | 0.48258 | 0.87585 | 94 | 56 | 0.48944 | 0.87204 | 44 | 6 | 0.49628 | 0.86816 | 94 | 56 | 0.50308 | 0.86424 | 44 |
| 7 | 0.48272 | 0.87578 | 93 | 57 | 0.48958 | 0.87196 | 43 | 7 | 0.49641 | 0.86809 | 93 | 57 | 0.50322 | 0.86416 | 43 |
| 8 | 0.48285 | 0.87570 | 92 | 58 | 0.48972 | 0.87188 | 42 | 8 | 0.49655 | 0.86801 | 92 | 58 | 0.50335 | 0.86408 | 42 |
| 9 | 0.48299 | 0.87562 | 91 | 59 | 0.48985 | 0.87180 | 41 | 9 | 0.49669 | 0.86793 | 91 | 59 | 0.50349 | 0.86400 | 41 |
| 10 | 0.48313 | 0.87555 | 90 | 60 | 0.48999 | 0.87173 | 40 | 10 | 0.49682 | 0.86785 | 90 | 60 | 0.50362 | 0.86392 | 40 |
| 11 | 0.48327 | 0.87547 | 89 | 61 | 0.49013 | 0.87165 | 39 | 11 | 0.49696 | 0.86777 | 89 | 61 | 0.50376 | 0.86384 | 39 |
| 12 | 0.48340 | 0.87540 | 88 | 62 | 0.49026 | 0.87157 | 38 | 12 | 0.49710 | 0.86770 | 88 | 62 | 0.50389 | 0.86377 | 38 |
| 13 | 0.48354 | 0.87532 | 87 | 63 | 0.49040 | 0.87150 | 37 | 13 | 0.49723 | 0.86762 | 87 | 63 | 0.50402 | 0.86369 | 37 |
| 14 | 0.48368 | 0.87525 | 86 | 64 | 0.49054 | 0.87142 | 36 | 14 | 0.49737 | 0.86754 | 86 | 64 | 0.50417 | 0.86361 | 36 |
| 15 | 0.48382 | 0.87517 | 85 | 65 | 0.49068 | 0.87134 | 35 | 15 | 0.49750 | 0.86746 | 85 | 65 | 0.50430 | 0.86353 | 35 |
| 16 | 0.48395 | 0.87509 | 84 | 66 | 0.49081 | 0.87127 | 34 | 16 | 0.49764 | 0.86738 | 84 | 66 | 0.50443 | 0.86345 | 34 |
| 17 | 0.48409 | 0.87502 | 83 | 67 | 0.49095 | 0.87119 | 33 | 17 | 0.49778 | 0.86730 | 83 | 67 | 0.50457 | 0.86337 | 33 |
| 18 | 0.48423 | 0.87494 | 82 | 68 | 0.49109 | 0.87111 | 32 | 18 | 0.49791 | 0.86722 | 82 | 68 | 0.50471 | 0.86329 | 32 |
| 19 | 0.48437 | 0.87487 | 81 | 69 | 0.49122 | 0.87103 | 31 | 19 | 0.49805 | 0.86715 | 81 | 69 | 0.50484 | 0.86321 | 31 |
| 20 | 0.48450 | 0.87479 | 80 | 70 | 0.49136 | 0.87096 | 30 | 20 | 0.49819 | 0.86707 | 80 | 70 | 0.50498 | 0.86313 | 30 |
| 21 | 0.48464 | 0.87471 | 79 | 71 | 0.49150 | 0.87088 | 29 | 21 | 0.49832 | 0.86699 | 79 | 71 | 0.50512 | 0.86305 | 29 |
| 22 | 0.48478 | 0.87464 | 78 | 72 | 0.49163 | 0.87080 | 28 | 22 | 0.49846 | 0.86691 | 78 | 72 | 0.50525 | 0.86297 | 28 |
| 23 | 0.48492 | 0.87456 | 77 | 73 | 0.49177 | 0.87072 | 27 | 23 | 0.49859 | 0.86684 | 77 | 73 | 0.50539 | 0.86289 | 27 |
| 24 | 0.48505 | 0.87448 | 76 | 74 | 0.49191 | 0.87065 | 26 | 24 | 0.49873 | 0.86676 | 76 | 74 | 0.50552 | 0.86281 | 26 |
| 25 | 0.48519 | 0.87441 | 75 | 75 | 0.49204 | 0.87057 | 25 | 25 | 0.49887 | 0.86668 | 75 | 75 | 0.50566 | 0.86273 | 25 |
| 26 | 0.48533 | 0.87433 | 74 | 76 | 0.49218 | 0.87049 | 24 | 26 | 0.49900 | 0.86660 | 74 | 76 | 0.50579 | 0.86266 | 24 |
| 27 | 0.48547 | 0.87426 | 73 | 77 | 0.49232 | 0.87042 | 23 | 27 | 0.49914 | 0.86652 | 73 | 77 | 0.50593 | 0.86258 | 23 |
| 28 | 0.48560 | 0.87418 | 72 | 78 | 0.49245 | 0.87034 | 22 | 28 | 0.49927 | 0.86644 | 72 | 78 | 0.50606 | 0.86250 | 22 |
| 29 | 0.48574 | 0.87410 | 71 | 79 | 0.49259 | 0.87026 | 21 | 29 | 0.49941 | 0.86637 | 71 | 79 | 0.50620 | 0.86242 | 21 |
| 30 | 0.48588 | 0.87403 | 70 | 80 | 0.49273 | 0.87018 | 20 | 30 | 0.49955 | 0.86629 | 70 | 80 | 0.50633 | 0.86234 | 20 |
| 31 | 0.48602 | 0.87395 | 69 | 81 | 0.49286 | 0.87011 | 19 | 31 | 0.49968 | 0.86621 | 69 | 81 | 0.50647 | 0.86226 | 19 |
| 32 | 0.48615 | 0.87387 | 68 | 82 | 0.49300 | 0.87003 | 18 | 32 | 0.49982 | 0.86613 | 68 | 82 | 0.50661 | 0.86218 | 18 |
| 33 | 0.48629 | 0.87380 | 67 | 83 | 0.49314 | 0.86995 | 17 | 33 | 0.49995 | 0.86605 | 67 | 83 | 0.50674 | 0.86210 | 17 |
| 34 | 0.48643 | 0.87372 | 66 | 84 | 0.49327 | 0.86987 | 16 | 34 | 0.50009 | 0.86597 | 66 | 84 | 0.50688 | 0.86202 | 16 |
| 35 | 0.48656 | 0.87364 | 65 | 85 | 0.49341 | 0.86980 | 15 | 35 | 0.50023 | 0.86589 | 65 | 85 | 0.50701 | 0.86194 | 15 |
| 36 | 0.48670 | 0.87357 | 64 | 86 | 0.49355 | 0.86972 | 14 | 36 | 0.50036 | 0.86582 | 64 | 86 | 0.50715 | 0.86186 | 14 |
| 37 | 0.48684 | 0.87349 | 63 | 87 | 0.49368 | 0.86964 | 13 | 37 | 0.50050 | 0.86574 | 63 | 87 | 0.50728 | 0.86178 | 13 |
| 38 | 0.48698 | 0.87342 | 62 | 88 | 0.49382 | 0.86956 | 12 | 38 | 0.50063 | 0.86566 | 62 | 88 | 0.50742 | 0.86170 | 12 |
| 39 | 0.48711 | 0.87334 | 61 | 89 | 0.49396 | 0.86949 | 11 | 39 | 0.50077 | 0.86558 | 61 | 89 | 0.50755 | 0.86162 | 11 |
| 40 | 0.48725 | 0.87326 | 60 | 90 | 0.49409 | 0.86941 | 10 | 40 | 0.50091 | 0.86550 | 60 | 90 | 0.50769 | 0.86154 | 10 |
| 41 | 0.48739 | 0.87319 | 59 | 91 | 0.49423 | 0.86933 | 9 | 41 | 0.50104 | 0.86542 | 59 | 91 | 0.50782 | 0.86146 | 9 |
| 42 | 0.48753 | 0.87311 | 58 | 92 | 0.49437 | 0.86925 | 8 | 42 | 0.50118 | 0.86534 | 58 | 92 | 0.50796 | 0.86138 | 8 |
| 43 | 0.48767 | 0.87303 | 57 | 93 | 0.49450 | 0.86918 | 7 | 43 | 0.50131 | 0.86527 | 57 | 93 | 0.50809 | 0.86130 | 7 |
| 44 | 0.48780 | 0.87296 | 56 | 94 | 0.49464 | 0.86910 | 6 | 44 | 0.50145 | 0.86519 | 56 | 94 | 0.50823 | 0.86122 | 6 |
| 45 | 0.48794 | 0.87288 | 55 | 95 | 0.49478 | 0.86902 | 5 | 45 | 0.50159 | 0.86511 | 55 | 95 | 0.50837 | 0.86114 | 5 |
| 46 | 0.48807 | 0.87280 | 54 | 96 | 0.49491 | 0.86894 | 4 | 46 | 0.40172 | 0.86503 | 54 | 96 | 0.50850 | 0.86106 | 4 |
| 47 | 0.48821 | 0.87273 | 53 | 97 | 0.49505 | 0.86887 | 3 | 47 | 0.50186 | 0.86495 | 53 | 97 | 0.50864 | 0.86098 | 3 |
| 48 | 0.48835 | 0.87265 | 52 | 98 | 0.49519 | 0.86879 | 2 | 48 | 0.50199 | 0.86487 | 52 | 98 | 0.50877 | 0.86090 | 2 |
| 49 | 0.48848 | 0.87257 | 51 | 99 | 0.49532 | 0.86871 | 1 | 49 | 0.50213 | 0.86479 | 51 | 99 | 0.50891 | 0.86082 | 1 |
| 50 | 0.48862 | 0.87250 | 50 | 100 | 0.49546 | 0.86863 | 0 | 50 | 0.50227 | 0.86471 | 50 | 100 | 0.50904 | 0.861074 | 0 |
| 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 |

| 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 |
|----|---------|---------|-----|-----|---------|---------|----|----|---------|---------|-----|-----|---------|---------|----|
| 0 | 0.50904 | 0.86074 | 100 | 50 | 0.51579 | 0.85672 | 50 | 0 | 0.52250 | 0.85264 | 100 | 50 | 0.52918 | 0.84851 | 50 |
| 1 | 0.50918 | 0.86066 | 99 | 51 | 0.51592 | 0.85664 | 49 | 1 | 0.52263 | 0.85256 | 99 | 51 | 0.52931 | 0.84843 | 49 |
| 2 | 0.50931 | 0.86058 | 98 | 52 | 0.51606 | 0.85656 | 48 | 2 | 0.52277 | 0.85248 | 98 | 52 | 0.52945 | 0.84835 | 48 |
| 3 | 0.50945 | 0.86050 | 97 | 53 | 0.51619 | 0.85647 | 47 | 3 | 0.52290 | 0.85239 | 97 | 53 | 0.52958 | 0.84826 | 47 |
| 4 | 0.50958 | 0.86042 | 96 | 54 | 0.51632 | 0.85639 | 46 | 4 | 0.52303 | 0.85231 | 96 | 54 | 0.52971 | 0.84818 | 46 |
| 5 | 0.50972 | 0.86034 | 95 | 55 | 0.51646 | 0.85631 | 45 | 5 | 0.52317 | 0.85223 | 95 | 55 | 0.52985 | 0.84809 | 45 |
| 6 | 0.50985 | 0.86026 | 94 | 56 | 0.51659 | 0.85623 | 44 | 6 | 0.52330 | 0.85215 | 94 | 56 | 0.52998 | 0.84801 | 44 |
| 7 | 0.50999 | 0.86018 | 93 | 57 | 0.51673 | 0.85615 | 43 | 7 | 0.52344 | 0.85207 | 93 | 57 | 0.53011 | 0.84793 | 43 |
| 8 | 0.51012 | 0.86010 | 92 | 58 | 0.51686 | 0.85607 | 42 | 8 | 0.52357 | 0.85198 | 92 | 58 | 0.53025 | 0.84784 | 42 |
| 9 | 0.51026 | 0.86002 | 91 | 59 | 0.51700 | 0.85599 | 41 | 9 | 0.52370 | 0.85190 | 91 | 59 | 0.53038 | 0.84776 | 41 |
| 10 | 0.51039 | 0.85994 | 90 | 60 | 0.51713 | 0.85591 | 40 | 10 | 0.52384 | 0.85182 | 90 | 60 | 0.53051 | 0.84768 | 40 |
| 11 | 0.51053 | 0.85986 | 89 | 61 | 0.51727 | 0.85583 | 39 | 11 | 0.52397 | 0.85174 | 89 | 61 | 0.53064 | 0.84759 | 39 |
| 12 | 0.51066 | 0.85978 | 88 | 62 | 0.51740 | 0.85574 | 38 | 12 | 0.52410 | 0.85165 | 88 | 62 | 0.53078 | 0.84751 | 38 |
| 13 | 0.51080 | 0.85970 | 87 | 63 | 0.51753 | 0.85566 | 37 | 13 | 0.52424 | 0.85157 | 87 | 63 | 0.53091 | 0.84743 | 37 |
| 14 | 0.51093 | 0.85962 | 86 | 64 | 0.51767 | 0.85558 | 36 | 14 | 0.52437 | 0.85149 | 86 | 64 | 0.53104 | 0.84734 | 36 |
| 15 | 0.51107 | 0.85954 | 85 | 65 | 0.51780 | 0.85550 | 35 | 15 | 0.52451 | 0.85141 | 85 | 65 | 0.53118 | 0.84726 | 35 |
| 16 | 0.51120 | 0.85946 | 84 | 66 | 0.51794 | 0.85542 | 34 | 16 | 0.52464 | 0.85132 | 84 | 66 | 0.53131 | 0.84718 | 34 |
| 17 | 0.51134 | 0.85938 | 83 | 67 | 0.51807 | 0.85534 | 33 | 17 | 0.52477 | 0.85124 | 83 | 67 | 0.53144 | 0.84710 | 33 |
| 18 | 0.51147 | 0.85930 | 82 | 68 | 0.51821 | 0.85526 | 32 | 18 | 0.52491 | 0.85116 | 82 | 68 | 0.53158 | 0.84702 | 32 |
| 19 | 0.51161 | 0.85922 | 81 | 69 | 0.51834 | 0.85517 | 31 | 19 | 0.52504 | 0.85108 | 81 | 69 | 0.53171 | 0.84693 | 31 |
| 20 | 0.51174 | 0.85914 | 80 | 70 | 0.51847 | 0.85509 | 30 | 20 | 0.52517 | 0.85099 | 80 | 70 | 0.53184 | 0.84684 | 30 |
| 21 | 0.51188 | 0.85906 | 79 | 71 | 0.51861 | 0.85501 | 29 | 21 | 0.52531 | 0.85091 | 79 | 71 | 0.53198 | 0.84676 | 29 |
| 22 | 0.51201 | 0.85898 | 78 | 72 | 0.51874 | 0.85493 | 28 | 22 | 0.52544 | 0.85083 | 78 | 72 | 0.53211 | 0.84668 | 28 |
| 23 | 0.51215 | 0.85890 | 77 | 73 | 0.51888 | 0.85485 | 27 | 23 | 0.52558 | 0.85075 | 77 | 73 | 0.53224 | 0.84659 | 27 |
| 24 | 0.51228 | 0.85882 | 76 | 74 | 0.51901 | 0.85477 | 26 | 24 | 0.52571 | 0.85066 | 76 | 74 | 0.53237 | 0.84651 | 26 |
| 25 | 0.51242 | 0.85874 | 75 | 75 | 0.51915 | 0.85469 | 25 | 25 | 0.52584 | 0.85058 | 75 | 75 | 0.53251 | 0.84643 | 25 |
| 26 | 0.51255 | 0.85866 | 74 | 76 | 0.51928 | 0.85460 | 24 | 26 | 0.52598 | 0.85050 | 74 | 76 | 0.53264 | 0.84634 | 24 |
| 27 | 0.51269 | 0.85858 | 73 | 77 | 0.51941 | 0.85452 | 23 | 27 | 0.52611 | 0.85042 | 73 | 77 | 0.53277 | 0.84626 | 23 |
| 28 | 0.51282 | 0.85850 | 72 | 78 | 0.51955 | 0.85444 | 22 | 28 | 0.52624 | 0.85034 | 72 | 78 | 0.53291 | 0.84617 | 22 |
| 29 | 0.51296 | 0.85841 | 71 | 79 | 0.51968 | 0.85436 | 21 | 29 | 0.52638 | 0.85025 | 71 | 79 | 0.53304 | 0.84609 | 21 |
| 30 | 0.51309 | 0.85833 | 70 | 80 | 0.51982 | 0.85428 | 20 | 30 | 0.52651 | 0.85017 | 70 | 80 | 0.53317 | 0.84601 | 20 |
| 31 | 0.51322 | 0.85825 | 69 | 81 | 0.51995 | 0.85420 | 19 | 31 | 0.52664 | 0.85009 | 69 | 81 | 0.53330 | 0.84592 | 19 |
| 32 | 0.51336 | 0.85817 | 68 | 82 | 0.52009 | 0.85411 | 18 | 32 | 0.52678 | 0.85000 | 68 | 82 | 0.53344 | 0.84584 | 18 |
| 33 | 0.51350 | 0.85809 | 67 | 83 | 0.52022 | 0.85403 | 17 | 33 | 0.52691 | 0.84992 | 67 | 83 | 0.53357 | 0.84576 | 17 |
| 34 | 0.51363 | 0.85801 | 66 | 84 | 0.52035 | 0.85395 | 16 | 34 | 0.52704 | 0.84984 | 66 | 84 | 0.53370 | 0.84567 | 16 |
| 35 | 0.51377 | 0.85793 | 65 | 85 | 0.52049 | 0.85387 | 15 | 35 | 0.52718 | 0.84975 | 65 | 85 | 0.53384 | 0.84559 | 15 |
| 36 | 0.51390 | 0.85785 | 64 | 86 | 0.52062 | 0.85379 | 14 | 36 | 0.52731 | 0.84967 | 64 | 86 | 0.53397 | 0.84550 | 14 |
| 37 | 0.51404 | 0.85777 | 63 | 87 | 0.52076 | 0.85371 | 13 | 37 | 0.52745 | 0.84959 | 63 | 87 | 0.53410 | 0.84542 | 13 |
| 38 | 0.51417 | 0.85769 | 62 | 88 | 0.52089 | 0.85362 | 12 | 38 | 0.52758 | 0.84951 | 62 | 88 | 0.53423 | 0.84534 | 12 |
| 39 | 0.51430 | 0.85761 | 61 | 89 | 0.52102 | 0.85354 | 11 | 39 | 0.52771 | 0.84942 | 61 | 89 | 0.53437 | 0.84525 | 11 |
| 40 | 0.51444 | 0.85753 | 60 | 90 | 0.52116 | 0.85346 | 10 | 40 | 0.52785 | 0.84934 | 60 | 90 | 0.53450 | 0.84517 | 10 |
| 41 | 0.51457 | 0.85745 | 59 | 91 | 0.52129 | 0.85338 | 9 | 41 | 0.52798 | 0.84926 | 59 | 91 | 0.53463 | 0.84508 | 9 |
| 42 | 0.51471 | 0.85737 | 58 | 92 | 0.52143 | 0.85330 | 8 | 42 | 0.52811 | 0.84917 | 58 | 92 | 0.53477 | 0.84500 | 8 |
| 43 | 0.51484 | 0.85728 | 57 | 93 | 0.52156 | 0.85321 | 7 | 43 | 0.52825 | 0.84909 | 57 | 93 | 0.53490 | 0.84492 | 7 |
| 44 | 0.51498 | 0.85720 | 56 | 94 | 0.52169 | 0.85313 | 6 | 44 | 0.52838 | 0.84901 | 56 | 94 | 0.53503 | 0.84483 | 6 |
| 45 | 0.51511 | 0.85712 | 55 | 95 | 0.52183 | 0.85305 | 5 | 45 | 0.52851 | 0.84893 | 55 | 95 | 0.53516 | 0.84475 | 5 |
| 46 | 0.51525 | 0.85704 | 54 | 96 | 0.52196 | 0.85297 | 4 | 46 | 0.52865 | 0.84884 | 54 | 96 | 0.53530 | 0.84466 | 4 |
| 47 | 0.51538 | 0.85696 | 53 | 97 | 0.52210 | 0.85289 | 3 | 47 | 0.52878 | 0.84876 | 53 | 97 | 0.53543 | 0.84458 | 3 |
| 48 | 0.51552 | 0.85688 | 52 | 98 | 0.52223 | 0.85280 | 2 | 48 | 0.52891 | 0.84868 | 52 | 98 | 0.53556 | 0.84450 | 2 |
| 49 | 0.51565 | 0.85680 | 51 | 99 | 0.52236 | 0.85272 | 1 | 49 | 0.52905 | 0.84859 | 51 | 99 | 0.53569 | 0.84441 | 1 |
| 50 | 0.51579 | 0.85672 | 50 | 100 | 0.52250 | 0.85264 | 0 | 50 | 0.52918 | 0.84851 | 50 | 100 | 0.53583 | 0.84433 | 0 |
| 分 | 餘弦 | 正法 | 分 | 分 | 餘弦 | 正法 | 分 | 分 | 餘弦 | 正法 | 分 | 分 | 餘弦 | 正法 | 分 |

| 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 |
|----|---------|---------|-----|-----|---------|---------|----|----|---------|---------|-----|-----|---------|---------|----|
| 0 | 0.53583 | 0.84433 | 100 | 50 | 0.54244 | 0.84009 | 50 | 0 | 0.54902 | 0.83581 | 100 | 50 | 0.55557 | 0.83147 | 50 |
| 1 | 0.53596 | 0.84424 | 99 | 51 | 0.54257 | 0.84001 | 49 | 1 | 0.54915 | 0.83572 | 99 | 51 | 0.55570 | 0.83138 | 49 |
| 2 | 0.53609 | 0.84416 | 98 | 52 | 0.54271 | 0.83992 | 48 | 2 | 0.54929 | 0.83563 | 98 | 52 | 0.55583 | 0.83129 | 48 |
| 3 | 0.53622 | 0.84408 | 97 | 53 | 0.54284 | 0.83984 | 47 | 3 | 0.54942 | 0.83555 | 97 | 53 | 0.55596 | 0.83121 | 47 |
| 4 | 0.53636 | 0.84399 | 96 | 54 | 0.54297 | 0.83975 | 46 | 4 | 0.54955 | 0.83546 | 96 | 54 | 0.55609 | 0.83112 | 46 |
| 5 | 0.53649 | 0.84391 | 95 | 55 | 0.54310 | 0.83967 | 45 | 5 | 0.54968 | 0.83538 | 95 | 55 | 0.55622 | 0.83103 | 45 |
| 6 | 0.53662 | 0.84382 | 94 | 56 | 0.54323 | 0.83958 | 44 | 6 | 0.54981 | 0.83529 | 94 | 56 | 0.55635 | 0.83095 | 44 |
| 7 | 0.53675 | 0.84374 | 93 | 57 | 0.54336 | 0.83950 | 43 | 7 | 0.54994 | 0.83520 | 93 | 57 | 0.55648 | 0.83086 | 43 |
| 8 | 0.53689 | 0.84365 | 92 | 58 | 0.54350 | 0.83941 | 42 | 8 | 0.55007 | 0.83512 | 92 | 58 | 0.55661 | 0.83077 | 42 |
| 9 | 0.53702 | 0.84357 | 91 | 59 | 0.54363 | 0.83933 | 41 | 9 | 0.55020 | 0.83503 | 91 | 59 | 0.55675 | 0.83068 | 41 |
| 10 | 0.53715 | 0.84349 | 90 | 60 | 0.54376 | 0.83924 | 40 | 10 | 0.55034 | 0.83494 | 90 | 60 | 0.55688 | 0.83060 | 40 |
| 11 | 0.53728 | 0.84340 | 89 | 61 | 0.54389 | 0.83916 | 39 | 11 | 0.55047 | 0.83486 | 89 | 61 | 0.55701 | 0.83051 | 39 |
| 12 | 0.53742 | 0.84332 | 88 | 62 | 0.54402 | 0.83907 | 38 | 12 | 0.55060 | 0.83477 | 88 | 62 | 0.55714 | 0.83042 | 38 |
| 13 | 0.53755 | 0.84323 | 87 | 63 | 0.54416 | 0.83898 | 37 | 13 | 0.55073 | 0.83468 | 87 | 63 | 0.55727 | 0.83033 | 37 |
| 14 | 0.53768 | 0.84315 | 86 | 64 | 0.54429 | 0.83890 | 36 | 14 | 0.55086 | 0.83460 | 86 | 64 | 0.55740 | 0.83025 | 36 |
| 15 | 0.53781 | 0.84306 | 85 | 65 | 0.54442 | 0.83881 | 35 | 15 | 0.55099 | 0.83451 | 85 | 65 | 0.55753 | 0.83016 | 35 |
| 16 | 0.53795 | 0.84298 | 84 | 66 | 0.54455 | 0.83873 | 34 | 16 | 0.55112 | 0.83442 | 84 | 66 | 0.55766 | 0.83007 | 34 |
| 17 | 0.53808 | 0.84289 | 83 | 67 | 0.54468 | 0.83864 | 33 | 17 | 0.55125 | 0.83434 | 83 | 67 | 0.55779 | 0.82998 | 33 |
| 18 | 0.53821 | 0.84281 | 82 | 68 | 0.54481 | 0.83856 | 32 | 18 | 0.55138 | 0.83425 | 82 | 68 | 0.55792 | 0.82990 | 32 |
| 19 | 0.53834 | 0.84273 | 81 | 69 | 0.54495 | 0.83847 | 31 | 19 | 0.55151 | 0.83416 | 81 | 69 | 0.55805 | 0.82981 | 31 |
| 20 | 0.53848 | 0.84264 | 80 | 70 | 0.54508 | 0.83839 | 30 | 20 | 0.55165 | 0.83408 | 80 | 70 | 0.55818 | 0.82972 | 30 |
| 21 | 0.53861 | 0.84256 | 79 | 71 | 0.54521 | 0.83830 | 29 | 21 | 0.55178 | 0.83399 | 79 | 71 | 0.55831 | 0.82963 | 29 |
| 22 | 0.53874 | 0.84247 | 78 | 72 | 0.54534 | 0.83821 | 28 | 22 | 0.55191 | 0.83390 | 78 | 72 | 0.55844 | 0.82954 | 28 |
| 23 | 0.53887 | 0.84239 | 77 | 73 | 0.54547 | 0.83813 | 27 | 23 | 0.55204 | 0.83382 | 77 | 73 | 0.55857 | 0.82946 | 27 |
| 24 | 0.53901 | 0.84230 | 76 | 74 | 0.54560 | 0.83804 | 26 | 24 | 0.55217 | 0.83373 | 76 | 74 | 0.55870 | 0.82937 | 26 |
| 25 | 0.53914 | 0.84222 | 75 | 75 | 0.54574 | 0.83796 | 25 | 25 | 0.55230 | 0.83364 | 75 | 75 | 0.55883 | 0.82928 | 25 |
| 26 | 0.53927 | 0.84213 | 74 | 76 | 0.54587 | 0.83787 | 24 | 26 | 0.55243 | 0.83356 | 74 | 76 | 0.55896 | 0.82919 | 24 |
| 27 | 0.53940 | 0.84205 | 73 | 77 | 0.54600 | 0.83779 | 23 | 27 | 0.55256 | 0.83347 | 73 | 77 | 0.55909 | 0.82910 | 23 |
| 28 | 0.53954 | 0.84196 | 72 | 78 | 0.54613 | 0.83770 | 22 | 28 | 0.55269 | 0.83338 | 72 | 78 | 0.55922 | 0.82902 | 22 |
| 29 | 0.53967 | 0.84188 | 71 | 79 | 0.54626 | 0.83761 | 21 | 29 | 0.55282 | 0.83330 | 71 | 79 | 0.55935 | 0.82893 | 21 |
| 30 | 0.53980 | 0.84179 | 70 | 80 | 0.54639 | 0.83753 | 20 | 30 | 0.55296 | 0.83321 | 70 | 80 | 0.55948 | 0.82884 | 20 |
| 31 | 0.53993 | 0.84171 | 69 | 81 | 0.54653 | 0.83744 | 19 | 31 | 0.55309 | 0.83312 | 69 | 81 | 0.55961 | 0.82875 | 19 |
| 32 | 0.54006 | 0.84162 | 68 | 82 | 0.54666 | 0.83736 | 18 | 32 | 0.55322 | 0.83304 | 68 | 82 | 0.55974 | 0.82867 | 18 |
| 33 | 0.54020 | 0.84154 | 67 | 83 | 0.54679 | 0.83727 | 17 | 33 | 0.55335 | 0.83295 | 67 | 83 | 0.55987 | 0.82858 | 17 |
| 34 | 0.54033 | 0.84145 | 66 | 84 | 0.54692 | 0.83718 | 16 | 34 | 0.55348 | 0.83286 | 66 | 84 | 0.56000 | 0.82849 | 16 |
| 35 | 0.54046 | 0.84137 | 65 | 85 | 0.54705 | 0.83710 | 15 | 35 | 0.55361 | 0.83278 | 65 | 85 | 0.56013 | 0.82840 | 15 |
| 36 | 0.54059 | 0.84128 | 64 | 86 | 0.54718 | 0.83701 | 14 | 36 | 0.55374 | 0.83269 | 64 | 86 | 0.56026 | 0.82831 | 14 |
| 37 | 0.54073 | 0.84120 | 63 | 87 | 0.54731 | 0.83693 | 13 | 37 | 0.55387 | 0.83260 | 63 | 87 | 0.56039 | 0.82822 | 13 |
| 38 | 0.54086 | 0.84111 | 62 | 88 | 0.54745 | 0.83684 | 12 | 38 | 0.55400 | 0.83252 | 62 | 88 | 0.56052 | 0.82814 | 12 |
| 39 | 0.54099 | 0.84103 | 61 | 89 | 0.54758 | 0.83675 | 11 | 39 | 0.55413 | 0.83243 | 61 | 89 | 0.56065 | 0.82805 | 11 |
| 40 | 0.54112 | 0.84094 | 60 | 90 | 0.54771 | 0.83667 | 10 | 40 | 0.55426 | 0.83234 | 60 | 90 | 0.56078 | 0.82796 | 10 |
| 41 | 0.54126 | 0.84086 | 59 | 91 | 0.54784 | 0.83658 | 9 | 41 | 0.55439 | 0.83225 | 59 | 91 | 0.56091 | 0.82787 | 9 |
| 42 | 0.54139 | 0.84077 | 58 | 92 | 0.54797 | 0.83650 | 8 | 42 | 0.55452 | 0.83217 | 58 | 92 | 0.56104 | 0.82778 | 8 |
| 43 | 0.54152 | 0.84069 | 57 | 93 | 0.54810 | 0.83641 | 7 | 43 | 0.55465 | 0.83208 | 57 | 93 | 0.56117 | 0.82770 | 7 |
| 44 | 0.54165 | 0.84060 | 56 | 94 | 0.54823 | 0.83632 | 6 | 44 | 0.55479 | 0.83199 | 56 | 94 | 0.56130 | 0.82761 | 6 |
| 45 | 0.54178 | 0.84052 | 55 | 95 | 0.54837 | 0.83624 | 5 | 45 | 0.55492 | 0.83191 | 55 | 95 | 0.56143 | 0.82752 | 5 |
| 46 | 0.54191 | 0.84043 | 54 | 96 | 0.54850 | 0.83615 | 4 | 46 | 0.55505 | 0.83182 | 54 | 96 | 0.56156 | 0.82743 | 4 |
| 47 | 0.54205 | 0.84035 | 53 | 97 | 0.54863 | 0.83607 | 3 | 47 | 0.55518 | 0.83173 | 53 | 97 | 0.56169 | 0.82735 | 3 |
| 48 | 0.54218 | 0.84026 | 52 | 98 | 0.54876 | 0.83598 | 2 | 48 | 0.55531 | 0.83164 | 52 | 98 | 0.56182 | 0.82726 | 2 |
| 49 | 0.54231 | 0.84018 | 51 | 99 | 0.54889 | 0.83589 | 1 | 49 | 0.55544 | 0.83156 | 51 | 99 | 0.56195 | 0.82717 | 1 |
| 50 | 0.54244 | 0.84009 | 50 | 100 | 0.54902 | 0.83581 | 0 | 50 | 0.55557 | 0.83147 | 50 | 100 | 0.56208 | 0.82708 | 0 |
| 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 |

| 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 |
|----|---------|---------|-----|-----|---------|---------|----|----|---------|---------|-----|-----|---------|---------|----|
| 0 | 0.56208 | 0.82708 | 100 | 50 | 0.56856 | 0.82264 | 50 | 0 | 0.57501 | 0.81815 | 100 | 50 | 0.58141 | 0.81361 | 50 |
| 1 | 0.56221 | 0.82699 | 99 | 51 | 0.56870 | 0.82255 | 49 | 1 | 0.57513 | 0.81806 | 99 | 51 | 0.58154 | 0.81357 | 49 |
| 2 | 0.56234 | 0.82690 | 98 | 52 | 0.56882 | 0.82246 | 48 | 2 | 0.57526 | 0.81797 | 98 | 52 | 0.58167 | 0.81353 | 48 |
| 3 | 0.56247 | 0.82682 | 97 | 53 | 0.56895 | 0.82237 | 47 | 3 | 0.57539 | 0.81788 | 97 | 53 | 0.58180 | 0.81353 | 47 |
| 4 | 0.56260 | 0.82673 | 96 | 54 | 0.56908 | 0.82228 | 46 | 4 | 0.57552 | 0.81779 | 96 | 54 | 0.58192 | 0.81324 | 46 |
| 5 | 0.56273 | 0.82664 | 95 | 55 | 0.56921 | 0.82219 | 45 | 5 | 0.57565 | 0.81770 | 95 | 55 | 0.58205 | 0.81315 | 45 |
| 6 | 0.56286 | 0.82655 | 94 | 56 | 0.56934 | 0.82210 | 44 | 6 | 0.57578 | 0.81761 | 94 | 56 | 0.58218 | 0.81306 | 44 |
| 7 | 0.56299 | 0.82646 | 93 | 57 | 0.56947 | 0.82201 | 43 | 7 | 0.57590 | 0.81752 | 93 | 57 | 0.58231 | 0.81297 | 43 |
| 8 | 0.56312 | 0.82637 | 92 | 58 | 0.56960 | 0.82193 | 42 | 8 | 0.57603 | 0.81743 | 92 | 58 | 0.58243 | 0.81288 | 42 |
| 9 | 0.56325 | 0.82629 | 91 | 59 | 0.56972 | 0.82184 | 41 | 9 | 0.57616 | 0.81734 | 91 | 59 | 0.58256 | 0.81279 | 41 |
| 10 | 0.56338 | 0.82620 | 90 | 60 | 0.56985 | 0.82175 | 40 | 10 | 0.57629 | 0.81725 | 90 | 60 | 0.58269 | 0.81269 | 40 |
| 11 | 0.56351 | 0.82611 | 89 | 61 | 0.56998 | 0.82166 | 39 | 11 | 0.57642 | 0.81715 | 89 | 61 | 0.58282 | 0.81260 | 39 |
| 12 | 0.56364 | 0.82602 | 88 | 62 | 0.57011 | 0.82157 | 38 | 12 | 0.57655 | 0.81706 | 88 | 62 | 0.58295 | 0.81251 | 38 |
| 13 | 0.56377 | 0.82593 | 87 | 63 | 0.57024 | 0.82148 | 37 | 13 | 0.57667 | 0.81697 | 87 | 63 | 0.58307 | 0.81242 | 37 |
| 14 | 0.56390 | 0.82584 | 86 | 64 | 0.57037 | 0.82139 | 36 | 14 | 0.57680 | 0.81688 | 86 | 64 | 0.58320 | 0.81233 | 36 |
| 15 | 0.56403 | 0.82575 | 85 | 65 | 0.57050 | 0.82130 | 35 | 15 | 0.57693 | 0.81679 | 85 | 65 | 0.58333 | 0.81224 | 35 |
| 16 | 0.56416 | 0.82567 | 84 | 66 | 0.57063 | 0.82121 | 34 | 16 | 0.57706 | 0.81670 | 84 | 66 | 0.58346 | 0.81214 | 34 |
| 17 | 0.56429 | 0.82558 | 83 | 67 | 0.57076 | 0.82112 | 33 | 17 | 0.57719 | 0.81661 | 83 | 67 | 0.58358 | 0.81205 | 33 |
| 18 | 0.56442 | 0.82549 | 82 | 68 | 0.57089 | 0.82103 | 32 | 18 | 0.57732 | 0.81652 | 82 | 68 | 0.58371 | 0.81196 | 32 |
| 19 | 0.56455 | 0.82540 | 81 | 69 | 0.57101 | 0.82094 | 31 | 19 | 0.57744 | 0.81643 | 81 | 69 | 0.58384 | 0.81187 | 31 |
| 20 | 0.56468 | 0.82531 | 80 | 70 | 0.57114 | 0.82085 | 30 | 20 | 0.57757 | 0.81634 | 80 | 70 | 0.58397 | 0.81178 | 30 |
| 21 | 0.56481 | 0.82522 | 79 | 71 | 0.57127 | 0.82076 | 29 | 21 | 0.57770 | 0.81625 | 79 | 71 | 0.58409 | 0.81169 | 29 |
| 22 | 0.56494 | 0.82513 | 78 | 72 | 0.57140 | 0.82067 | 28 | 22 | 0.57783 | 0.81616 | 78 | 72 | 0.58422 | 0.81159 | 28 |
| 23 | 0.56507 | 0.82504 | 77 | 73 | 0.57153 | 0.82058 | 27 | 23 | 0.57796 | 0.81607 | 77 | 73 | 0.58435 | 0.81150 | 27 |
| 24 | 0.56520 | 0.82496 | 76 | 74 | 0.57166 | 0.82049 | 26 | 24 | 0.57809 | 0.81598 | 76 | 74 | 0.58448 | 0.81141 | 26 |
| 25 | 0.56533 | 0.82487 | 75 | 75 | 0.57179 | 0.82040 | 25 | 25 | 0.57821 | 0.81589 | 75 | 75 | 0.58460 | 0.81132 | 25 |
| 26 | 0.56546 | 0.82478 | 74 | 76 | 0.57192 | 0.82031 | 24 | 26 | 0.57834 | 0.81579 | 74 | 76 | 0.58473 | 0.81123 | 24 |
| 27 | 0.56559 | 0.82469 | 73 | 77 | 0.57205 | 0.82022 | 23 | 27 | 0.57847 | 0.81570 | 73 | 77 | 0.58486 | 0.81114 | 23 |
| 28 | 0.56572 | 0.82460 | 72 | 78 | 0.57217 | 0.82013 | 22 | 28 | 0.57860 | 0.81561 | 72 | 78 | 0.58499 | 0.81104 | 22 |
| 29 | 0.56585 | 0.82451 | 71 | 79 | 0.57230 | 0.82004 | 21 | 29 | 0.57873 | 0.81552 | 71 | 79 | 0.58511 | 0.81095 | 21 |
| 30 | 0.56597 | 0.82442 | 70 | 80 | 0.57243 | 0.81995 | 20 | 30 | 0.57885 | 0.81543 | 70 | 80 | 0.58524 | 0.81086 | 20 |
| 31 | 0.56610 | 0.82433 | 69 | 81 | 0.57256 | 0.81986 | 19 | 31 | 0.57898 | 0.81534 | 69 | 81 | 0.58537 | 0.81077 | 19 |
| 32 | 0.56623 | 0.82424 | 68 | 82 | 0.57269 | 0.81977 | 18 | 32 | 0.57911 | 0.81525 | 68 | 82 | 0.58550 | 0.81068 | 18 |
| 33 | 0.56636 | 0.82416 | 67 | 83 | 0.57282 | 0.81968 | 17 | 33 | 0.57924 | 0.81516 | 67 | 83 | 0.58562 | 0.81058 | 17 |
| 34 | 0.56649 | 0.82407 | 66 | 84 | 0.57295 | 0.81959 | 16 | 34 | 0.57937 | 0.81507 | 66 | 84 | 0.58575 | 0.81049 | 16 |
| 35 | 0.56662 | 0.82398 | 65 | 85 | 0.57308 | 0.81950 | 15 | 35 | 0.57949 | 0.81498 | 65 | 85 | 0.58588 | 0.81040 | 15 |
| 36 | 0.56675 | 0.82389 | 64 | 86 | 0.57320 | 0.81941 | 14 | 36 | 0.57962 | 0.81489 | 64 | 86 | 0.58600 | 0.81031 | 14 |
| 37 | 0.56688 | 0.82380 | 63 | 87 | 0.57333 | 0.81932 | 13 | 37 | 0.57975 | 0.81479 | 63 | 87 | 0.58613 | 0.81022 | 13 |
| 38 | 0.56701 | 0.82371 | 62 | 88 | 0.57346 | 0.81923 | 12 | 38 | 0.57988 | 0.81470 | 62 | 88 | 0.58626 | 0.81012 | 12 |
| 39 | 0.56714 | 0.82362 | 61 | 89 | 0.57359 | 0.81914 | 11 | 39 | 0.58001 | 0.81461 | 61 | 89 | 0.58639 | 0.81003 | 11 |
| 40 | 0.56727 | 0.82353 | 60 | 90 | 0.57372 | 0.81905 | 10 | 40 | 0.58013 | 0.81452 | 60 | 90 | 0.58651 | 0.80994 | 10 |
| 41 | 0.56740 | 0.82344 | 59 | 91 | 0.57385 | 0.81896 | 9 | 41 | 0.58026 | 0.81443 | 59 | 91 | 0.58664 | 0.80985 | 9 |
| 42 | 0.56753 | 0.82335 | 58 | 92 | 0.57398 | 0.81887 | 8 | 42 | 0.58039 | 0.81434 | 58 | 92 | 0.58677 | 0.80975 | 8 |
| 43 | 0.56766 | 0.82327 | 57 | 93 | 0.57411 | 0.81878 | 7 | 43 | 0.58052 | 0.81425 | 57 | 93 | 0.58690 | 0.80966 | 7 |
| 44 | 0.56779 | 0.82318 | 56 | 94 | 0.57423 | 0.81869 | 6 | 44 | 0.58065 | 0.81416 | 56 | 94 | 0.58702 | 0.80957 | 6 |
| 45 | 0.56792 | 0.82309 | 55 | 95 | 0.57436 | 0.81860 | 5 | 45 | 0.58077 | 0.81407 | 55 | 95 | 0.58715 | 0.80948 | 5 |
| 46 | 0.56804 | 0.82300 | 54 | 96 | 0.57449 | 0.81851 | 4 | 46 | 0.58090 | 0.81397 | 54 | 96 | 0.58728 | 0.80939 | 4 |
| 47 | 0.56817 | 0.82291 | 53 | 97 | 0.57462 | 0.81842 | 3 | 47 | 0.58103 | 0.81388 | 53 | 97 | 0.58740 | 0.80929 | 3 |
| 48 | 0.56830 | 0.82282 | 52 | 98 | 0.57475 | 0.81833 | 2 | 48 | 0.58116 | 0.81379 | 52 | 98 | 0.58753 | 0.80920 | 2 |
| 49 | 0.56843 | 0.82273 | 51 | 99 | 0.57488 | 0.81824 | 1 | 49 | 0.58129 | 0.81370 | 51 | 99 | 0.58766 | 0.80911 | 1 |
| 50 | 0.56856 | 0.82264 | 50 | 100 | 0.57501 | 0.81815 | 0 | 50 | 0.58141 | 0.81361 | 50 | 100 | 0.58779 | 0.80902 | 0 |
| 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 |

| 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 |
|----|---------|---------|-----|-----|---------|---------|----|----|---------|---------|-----|-----|---------|---------|----|
| 0 | 0.58779 | 0.80902 | 100 | 50 | 0.59412 | 0.80433 | 50 | 0 | 0.60042 | 0.79968 | 100 | 50 | 0.60668 | 0.79494 | 50 |
| 1 | 0.58791 | 0.80892 | 98 | 51 | 0.59425 | 0.80423 | 49 | 1 | 0.60055 | 0.79959 | 99 | 51 | 0.60681 | 0.79485 | 49 |
| 2 | 0.58804 | 0.80883 | 97 | 52 | 0.59437 | 0.80419 | 48 | 2 | 0.60067 | 0.79950 | 98 | 52 | 0.60693 | 0.79475 | 48 |
| 3 | 0.58817 | 0.80874 | 97 | 53 | 0.59450 | 0.80410 | 47 | 3 | 0.60080 | 0.79940 | 97 | 53 | 0.60706 | 0.79466 | 47 |
| 4 | 0.58829 | 0.80865 | 96 | 54 | 0.59463 | 0.80400 | 46 | 4 | 0.60092 | 0.79931 | 96 | 54 | 0.60718 | 0.79456 | 46 |
| 5 | 0.58842 | 0.80855 | 95 | 55 | 0.59475 | 0.80391 | 45 | 5 | 0.60105 | 0.79921 | 95 | 55 | 0.60731 | 0.79447 | 45 |
| 6 | 0.58855 | 0.80846 | 94 | 56 | 0.59488 | 0.80382 | 44 | 6 | 0.60117 | 0.79912 | 94 | 56 | 0.60743 | 0.79437 | 44 |
| 7 | 0.58867 | 0.80837 | 93 | 57 | 0.59500 | 0.80372 | 43 | 7 | 0.60130 | 0.79902 | 93 | 57 | 0.60756 | 0.79428 | 43 |
| 8 | 0.58880 | 0.80828 | 92 | 58 | 0.59513 | 0.80363 | 42 | 8 | 0.60142 | 0.79893 | 92 | 58 | 0.60768 | 0.79418 | 42 |
| 9 | 0.58893 | 0.80819 | 91 | 59 | 0.59526 | 0.80353 | 41 | 9 | 0.60155 | 0.79883 | 91 | 59 | 0.60781 | 0.79409 | 41 |
| 10 | 0.58906 | 0.80809 | 90 | 60 | 0.59538 | 0.80344 | 40 | 10 | 0.60168 | 0.79874 | 90 | 60 | 0.60793 | 0.79399 | 40 |
| 11 | 0.58918 | 0.80800 | 89 | 61 | 0.59551 | 0.80335 | 39 | 11 | 0.60180 | 0.79865 | 89 | 61 | 0.60805 | 0.79389 | 39 |
| 12 | 0.58931 | 0.80791 | 88 | 62 | 0.59564 | 0.80325 | 38 | 12 | 0.60193 | 0.79855 | 88 | 62 | 0.60818 | 0.79380 | 38 |
| 13 | 0.58944 | 0.80781 | 87 | 63 | 0.59576 | 0.80316 | 37 | 13 | 0.60205 | 0.79846 | 87 | 63 | 0.60830 | 0.79370 | 37 |
| 14 | 0.58956 | 0.80772 | 86 | 64 | 0.59589 | 0.80307 | 36 | 14 | 0.60218 | 0.79836 | 86 | 64 | 0.60843 | 0.79361 | 36 |
| 15 | 0.58969 | 0.80763 | 85 | 65 | 0.59601 | 0.80297 | 35 | 15 | 0.60230 | 0.79827 | 85 | 65 | 0.60855 | 0.79351 | 35 |
| 16 | 0.58982 | 0.80754 | 84 | 66 | 0.59614 | 0.80288 | 34 | 16 | 0.60243 | 0.79817 | 84 | 66 | 0.60868 | 0.79342 | 34 |
| 17 | 0.58994 | 0.80744 | 83 | 67 | 0.59627 | 0.80279 | 33 | 17 | 0.60255 | 0.79808 | 83 | 67 | 0.60880 | 0.79332 | 33 |
| 18 | 0.59007 | 0.80735 | 82 | 68 | 0.59639 | 0.80269 | 32 | 18 | 0.60268 | 0.79798 | 82 | 68 | 0.60893 | 0.79323 | 32 |
| 19 | 0.59020 | 0.80726 | 81 | 69 | 0.59652 | 0.80260 | 31 | 19 | 0.60280 | 0.79789 | 81 | 69 | 0.60905 | 0.79313 | 31 |
| 20 | 0.59032 | 0.80717 | 80 | 70 | 0.59665 | 0.80251 | 30 | 20 | 0.60293 | 0.79779 | 80 | 70 | 0.60918 | 0.79303 | 30 |
| 21 | 0.59045 | 0.80707 | 79 | 71 | 0.59677 | 0.80241 | 29 | 21 | 0.60305 | 0.79770 | 79 | 71 | 0.60930 | 0.79294 | 29 |
| 22 | 0.59058 | 0.80698 | 78 | 72 | 0.59690 | 0.80232 | 28 | 22 | 0.60318 | 0.79760 | 78 | 72 | 0.60943 | 0.79284 | 28 |
| 23 | 0.59070 | 0.80689 | 77 | 73 | 0.59702 | 0.80222 | 27 | 23 | 0.60331 | 0.79751 | 77 | 73 | 0.60955 | 0.79275 | 27 |
| 24 | 0.59083 | 0.80680 | 76 | 74 | 0.59715 | 0.80213 | 26 | 24 | 0.60343 | 0.79742 | 76 | 74 | 0.60967 | 0.79265 | 26 |
| 25 | 0.59096 | 0.80670 | 75 | 75 | 0.59728 | 0.80204 | 25 | 25 | 0.60356 | 0.79732 | 75 | 75 | 0.60980 | 0.79256 | 25 |
| 26 | 0.59108 | 0.80661 | 74 | 76 | 0.59740 | 0.80194 | 24 | 26 | 0.60368 | 0.79723 | 74 | 76 | 0.60992 | 0.79246 | 24 |
| 27 | 0.59121 | 0.80652 | 73 | 77 | 0.59753 | 0.80185 | 23 | 27 | 0.60381 | 0.79713 | 73 | 77 | 0.61005 | 0.79236 | 23 |
| 28 | 0.59134 | 0.80642 | 72 | 78 | 0.59765 | 0.80175 | 22 | 28 | 0.60393 | 0.79704 | 72 | 78 | 0.61017 | 0.79227 | 22 |
| 29 | 0.59146 | 0.80633 | 71 | 79 | 0.59778 | 0.80166 | 21 | 29 | 0.60406 | 0.79694 | 71 | 79 | 0.61030 | 0.79217 | 21 |
| 30 | 0.59159 | 0.80624 | 70 | 80 | 0.59790 | 0.80157 | 20 | 30 | 0.60418 | 0.79685 | 70 | 80 | 0.61043 | 0.79208 | 20 |
| 31 | 0.59172 | 0.80615 | 69 | 81 | 0.59803 | 0.80147 | 19 | 31 | 0.60431 | 0.79675 | 69 | 81 | 0.61055 | 0.79198 | 19 |
| 32 | 0.59184 | 0.80605 | 68 | 82 | 0.59816 | 0.80138 | 18 | 32 | 0.60443 | 0.79666 | 68 | 82 | 0.61067 | 0.79188 | 18 |
| 33 | 0.59197 | 0.80596 | 67 | 83 | 0.59828 | 0.80128 | 17 | 33 | 0.60456 | 0.79656 | 67 | 83 | 0.61079 | 0.79179 | 17 |
| 34 | 0.59210 | 0.80587 | 66 | 84 | 0.59841 | 0.80119 | 16 | 34 | 0.60468 | 0.79647 | 66 | 84 | 0.61092 | 0.79169 | 16 |
| 35 | 0.59222 | 0.80577 | 65 | 85 | 0.59853 | 0.80110 | 15 | 35 | 0.60481 | 0.79637 | 65 | 85 | 0.61104 | 0.79160 | 15 |
| 36 | 0.59235 | 0.80568 | 64 | 86 | 0.59866 | 0.80100 | 14 | 36 | 0.60493 | 0.79628 | 64 | 86 | 0.61117 | 0.79150 | 14 |
| 37 | 0.59248 | 0.80559 | 63 | 87 | 0.59879 | 0.80091 | 13 | 37 | 0.60506 | 0.79618 | 63 | 87 | 0.61129 | 0.79140 | 13 |
| 38 | 0.59260 | 0.80549 | 62 | 88 | 0.59891 | 0.80081 | 12 | 38 | 0.60518 | 0.79609 | 62 | 88 | 0.61142 | 0.79131 | 12 |
| 39 | 0.59273 | 0.80540 | 61 | 89 | 0.59904 | 0.80072 | 11 | 39 | 0.60531 | 0.79599 | 61 | 89 | 0.61154 | 0.79121 | 11 |
| 40 | 0.59286 | 0.80531 | 60 | 90 | 0.59916 | 0.80063 | 10 | 40 | 0.60543 | 0.79590 | 60 | 90 | 0.61167 | 0.79112 | 10 |
| 41 | 0.59299 | 0.80521 | 59 | 91 | 0.59929 | 0.80053 | 9 | 41 | 0.60556 | 0.79580 | 59 | 91 | 0.61179 | 0.79102 | 9 |
| 42 | 0.59311 | 0.80512 | 58 | 92 | 0.59941 | 0.80044 | 8 | 42 | 0.60568 | 0.79571 | 58 | 92 | 0.61191 | 0.79092 | 8 |
| 43 | 0.59324 | 0.80503 | 57 | 93 | 0.59954 | 0.80034 | 7 | 43 | 0.60581 | 0.79561 | 57 | 93 | 0.61203 | 0.79083 | 7 |
| 44 | 0.59336 | 0.80493 | 56 | 94 | 0.59967 | 0.80025 | 6 | 44 | 0.60593 | 0.79552 | 56 | 94 | 0.61216 | 0.79073 | 6 |
| 45 | 0.59349 | 0.80484 | 55 | 95 | 0.59979 | 0.80016 | 5 | 45 | 0.60606 | 0.79542 | 55 | 95 | 0.61229 | 0.79064 | 5 |
| 46 | 0.59362 | 0.80475 | 54 | 96 | 0.59992 | 0.80006 | 4 | 46 | 0.60618 | 0.79533 | 54 | 96 | 0.61241 | 0.79054 | 4 |
| 47 | 0.59374 | 0.80466 | 53 | 97 | 0.60004 | 0.79997 | 3 | 47 | 0.60631 | 0.79523 | 53 | 97 | 0.61253 | 0.79044 | 3 |
| 48 | 0.59387 | 0.80456 | 52 | 98 | 0.60017 | 0.79987 | 2 | 48 | 0.60643 | 0.79513 | 52 | 98 | 0.61266 | 0.79033 | 2 |
| 49 | 0.59400 | 0.80447 | 51 | 99 | 0.60029 | 0.79978 | 1 | 49 | 0.60656 | 0.79504 | 51 | 99 | 0.61278 | 0.79023 | 1 |
| 50 | 0.59412 | 0.80438 | 50 | 100 | 0.60042 | 0.79968 | 0 | 50 | 0.60668 | 0.79494 | 50 | 100 | 0.61291 | 0.79016 | 0 |
| 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 |

| 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 |
|----|---------|---------|-----|-----|---------|---------|----|----|---------|---------|-----|-----|---------|---------|----|
| 0 | 0.61291 | 0.79016 | 100 | 50 | 0.61909 | 0.78532 | 50 | 0 | 0.62524 | 0.78043 | 100 | 50 | 0.63135 | 0.77550 | 50 |
| 1 | 0.61303 | 0.79006 | 99 | 51 | 0.61922 | 0.78522 | 49 | 1 | 0.62537 | 0.78033 | 99 | 51 | 0.63147 | 0.77540 | 49 |
| 2 | 0.61315 | 0.78996 | 98 | 52 | 0.61934 | 0.78512 | 48 | 2 | 0.62549 | 0.78023 | 98 | 52 | 0.63160 | 0.77530 | 48 |
| 3 | 0.61328 | 0.78987 | 97 | 53 | 0.61946 | 0.78503 | 47 | 3 | 0.62561 | 0.78014 | 97 | 53 | 0.63172 | 0.77520 | 47 |
| 4 | 0.61340 | 0.78977 | 96 | 54 | 0.61959 | 0.78493 | 46 | 4 | 0.62572 | 0.78004 | 96 | 54 | 0.63184 | 0.77510 | 46 |
| 5 | 0.61353 | 0.78967 | 95 | 55 | 0.61971 | 0.78483 | 45 | 5 | 0.62586 | 0.77994 | 95 | 55 | 0.63196 | 0.77500 | 45 |
| 6 | 0.61365 | 0.78958 | 94 | 56 | 0.61983 | 0.78473 | 44 | 6 | 0.62598 | 0.77984 | 94 | 56 | 0.63208 | 0.77490 | 44 |
| 7 | 0.61378 | 0.78948 | 93 | 57 | 0.61996 | 0.78464 | 43 | 7 | 0.62610 | 0.77974 | 93 | 57 | 0.63221 | 0.77480 | 43 |
| 8 | 0.61390 | 0.78938 | 92 | 58 | 0.62008 | 0.78454 | 42 | 8 | 0.62622 | 0.77964 | 92 | 58 | 0.63233 | 0.77470 | 42 |
| 9 | 0.61402 | 0.78929 | 91 | 59 | 0.62020 | 0.78444 | 41 | 9 | 0.62635 | 0.77955 | 91 | 59 | 0.63245 | 0.77460 | 41 |
| 10 | 0.61415 | 0.78919 | 90 | 60 | 0.62033 | 0.78434 | 40 | 10 | 0.62647 | 0.77945 | 90 | 60 | 0.63257 | 0.77450 | 40 |
| 11 | 0.61427 | 0.78909 | 89 | 61 | 0.62045 | 0.78425 | 39 | 11 | 0.62659 | 0.77935 | 89 | 61 | 0.63269 | 0.77440 | 39 |
| 12 | 0.61440 | 0.78900 | 88 | 62 | 0.62057 | 0.78415 | 38 | 12 | 0.62671 | 0.77925 | 88 | 62 | 0.63281 | 0.77430 | 38 |
| 13 | 0.61452 | 0.78890 | 87 | 63 | 0.62070 | 0.78405 | 37 | 13 | 0.62683 | 0.77915 | 87 | 63 | 0.63293 | 0.77420 | 37 |
| 14 | 0.61464 | 0.78881 | 86 | 64 | 0.62082 | 0.78395 | 36 | 14 | 0.62696 | 0.77905 | 86 | 64 | 0.63306 | 0.77411 | 36 |
| 15 | 0.61477 | 0.78871 | 85 | 65 | 0.62094 | 0.78386 | 35 | 15 | 0.62708 | 0.77895 | 85 | 65 | 0.63318 | 0.77401 | 35 |
| 16 | 0.61489 | 0.78861 | 84 | 66 | 0.62107 | 0.78376 | 34 | 16 | 0.62720 | 0.77886 | 84 | 66 | 0.63330 | 0.77391 | 34 |
| 17 | 0.61501 | 0.78852 | 83 | 67 | 0.62119 | 0.78366 | 33 | 17 | 0.62732 | 0.77876 | 83 | 67 | 0.63342 | 0.77381 | 33 |
| 18 | 0.61514 | 0.78842 | 82 | 68 | 0.62131 | 0.78356 | 32 | 18 | 0.62745 | 0.77866 | 82 | 68 | 0.63354 | 0.77371 | 32 |
| 19 | 0.61526 | 0.78832 | 81 | 69 | 0.62144 | 0.78347 | 31 | 19 | 0.62757 | 0.77856 | 81 | 69 | 0.63366 | 0.77361 | 31 |
| 20 | 0.61539 | 0.78823 | 80 | 70 | 0.62156 | 0.78337 | 30 | 20 | 0.62769 | 0.77846 | 80 | 70 | 0.63379 | 0.77351 | 30 |
| 21 | 0.61551 | 0.78813 | 79 | 71 | 0.62168 | 0.78327 | 29 | 21 | 0.62781 | 0.77836 | 79 | 71 | 0.63391 | 0.77341 | 29 |
| 22 | 0.61563 | 0.78803 | 78 | 72 | 0.62180 | 0.78317 | 28 | 22 | 0.62794 | 0.77826 | 78 | 72 | 0.63403 | 0.77331 | 28 |
| 23 | 0.61576 | 0.78794 | 77 | 73 | 0.62193 | 0.78308 | 27 | 23 | 0.62806 | 0.77817 | 77 | 73 | 0.63415 | 0.77321 | 27 |
| 24 | 0.61588 | 0.78784 | 76 | 74 | 0.62205 | 0.78298 | 26 | 24 | 0.62818 | 0.77807 | 76 | 74 | 0.63427 | 0.77311 | 26 |
| 25 | 0.61601 | 0.78774 | 75 | 75 | 0.62217 | 0.78288 | 25 | 25 | 0.62830 | 0.77797 | 75 | 75 | 0.63439 | 0.77301 | 25 |
| 26 | 0.61613 | 0.78765 | 74 | 76 | 0.62230 | 0.78278 | 24 | 26 | 0.62842 | 0.77787 | 74 | 76 | 0.63451 | 0.77291 | 24 |
| 27 | 0.61625 | 0.78755 | 73 | 77 | 0.62242 | 0.78268 | 23 | 27 | 0.62855 | 0.77777 | 73 | 77 | 0.63464 | 0.77281 | 23 |
| 28 | 0.61638 | 0.78745 | 72 | 78 | 0.62254 | 0.78259 | 22 | 28 | 0.62867 | 0.77767 | 72 | 78 | 0.63476 | 0.77271 | 22 |
| 29 | 0.61650 | 0.78735 | 71 | 79 | 0.62267 | 0.78249 | 21 | 29 | 0.62879 | 0.77757 | 71 | 79 | 0.63488 | 0.77261 | 21 |
| 30 | 0.61662 | 0.78726 | 70 | 80 | 0.62279 | 0.78239 | 20 | 30 | 0.62891 | 0.77748 | 70 | 80 | 0.63500 | 0.77251 | 20 |
| 31 | 0.61675 | 0.78716 | 69 | 81 | 0.62291 | 0.78229 | 19 | 31 | 0.62904 | 0.77738 | 69 | 81 | 0.63512 | 0.77241 | 19 |
| 32 | 0.61687 | 0.78706 | 68 | 82 | 0.62303 | 0.78220 | 18 | 32 | 0.62916 | 0.77728 | 68 | 82 | 0.63524 | 0.77231 | 18 |
| 33 | 0.61699 | 0.78697 | 67 | 83 | 0.62316 | 0.78210 | 17 | 33 | 0.62929 | 0.77718 | 67 | 83 | 0.63536 | 0.77221 | 17 |
| 34 | 0.61712 | 0.78687 | 66 | 84 | 0.62328 | 0.78200 | 16 | 34 | 0.62940 | 0.77708 | 66 | 84 | 0.63549 | 0.77211 | 16 |
| 35 | 0.61724 | 0.78677 | 65 | 85 | 0.62340 | 0.78190 | 15 | 35 | 0.62952 | 0.77698 | 65 | 85 | 0.63561 | 0.77201 | 15 |
| 36 | 0.61737 | 0.78668 | 64 | 86 | 0.62352 | 0.78180 | 14 | 36 | 0.62965 | 0.77688 | 64 | 86 | 0.63573 | 0.77191 | 14 |
| 37 | 0.61749 | 0.78658 | 63 | 87 | 0.62365 | 0.78171 | 13 | 37 | 0.62977 | 0.77678 | 63 | 87 | 0.63585 | 0.77181 | 13 |
| 38 | 0.61761 | 0.78648 | 62 | 88 | 0.62377 | 0.78161 | 12 | 38 | 0.62989 | 0.77668 | 62 | 88 | 0.63597 | 0.77171 | 12 |
| 39 | 0.61774 | 0.78639 | 61 | 89 | 0.62389 | 0.78151 | 11 | 39 | 0.63001 | 0.77659 | 61 | 89 | 0.63609 | 0.77161 | 11 |
| 40 | 0.61786 | 0.78629 | 60 | 90 | 0.62402 | 0.78141 | 10 | 40 | 0.63013 | 0.77649 | 60 | 90 | 0.63621 | 0.77151 | 10 |
| 41 | 0.61798 | 0.78619 | 59 | 91 | 0.62414 | 0.78131 | 9 | 41 | 0.63026 | 0.77639 | 59 | 91 | 0.63633 | 0.77141 | 9 |
| 42 | 0.61811 | 0.78609 | 58 | 92 | 0.62426 | 0.78122 | 8 | 42 | 0.63038 | 0.77629 | 58 | 92 | 0.63646 | 0.77131 | 8 |
| 43 | 0.61823 | 0.78600 | 57 | 93 | 0.62438 | 0.78112 | 7 | 43 | 0.63050 | 0.77619 | 57 | 93 | 0.63658 | 0.77121 | 7 |
| 44 | 0.61835 | 0.78590 | 56 | 94 | 0.62451 | 0.78102 | 6 | 44 | 0.63062 | 0.77609 | 56 | 94 | 0.63670 | 0.77111 | 6 |
| 45 | 0.61848 | 0.78580 | 55 | 95 | 0.62463 | 0.78092 | 5 | 45 | 0.63074 | 0.77599 | 55 | 95 | 0.63682 | 0.77101 | 5 |
| 46 | 0.61860 | 0.78571 | 54 | 96 | 0.62475 | 0.78082 | 4 | 46 | 0.63087 | 0.77589 | 54 | 96 | 0.63694 | 0.77091 | 4 |
| 47 | 0.61872 | 0.78561 | 53 | 97 | 0.62487 | 0.78073 | 3 | 47 | 0.63099 | 0.77579 | 53 | 97 | 0.63706 | 0.77081 | 3 |
| 48 | 0.61885 | 0.78551 | 52 | 98 | 0.62500 | 0.78063 | 2 | 48 | 0.63111 | 0.77569 | 52 | 98 | 0.63718 | 0.77071 | 2 |
| 49 | 0.61897 | 0.78541 | 51 | 99 | 0.62512 | 0.78053 | 1 | 49 | 0.63123 | 0.77559 | 51 | 99 | 0.63730 | 0.77061 | 1 |
| 50 | 0.61909 | 0.78532 | 50 | 100 | 0.62524 | 0.78043 | 0 | 50 | 0.63135 | 0.77550 | 50 | 100 | 0.63742 | 0.77051 | 0 |
| 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 |

| 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 |
|----|---------|---------|-----|-----|---------|---------|----|----|---------|---------|-----|-----|---------|---------|----|
| 0 | 0.63742 | 0.77051 | 100 | 50 | 0.64346 | 0.76548 | 50 | 0 | 0.64945 | 0.76041 | 100 | 50 | 0.65540 | 0.75528 | 50 |
| 1 | 0.63754 | 0.77041 | 99 | 51 | 0.64358 | 0.76538 | 49 | 1 | 0.64957 | 0.76030 | 99 | 51 | 0.65552 | 0.75518 | 49 |
| 2 | 0.63767 | 0.77031 | 98 | 52 | 0.64370 | 0.76528 | 48 | 2 | 0.64969 | 0.76020 | 98 | 52 | 0.65564 | 0.75508 | 48 |
| 3 | 0.63779 | 0.77021 | 97 | 53 | 0.64382 | 0.76518 | 47 | 3 | 0.64981 | 0.76010 | 97 | 53 | 0.65576 | 0.75497 | 47 |
| 4 | 0.63791 | 0.77011 | 96 | 54 | 0.64394 | 0.76508 | 46 | 4 | 0.64993 | 0.76000 | 96 | 54 | 0.65587 | 0.75487 | 46 |
| 5 | 0.63803 | 0.77001 | 95 | 55 | 0.64406 | 0.76498 | 45 | 5 | 0.65005 | 0.75990 | 95 | 55 | 0.65599 | 0.75477 | 45 |
| 6 | 0.63813 | 0.76991 | 94 | 56 | 0.64418 | 0.76488 | 44 | 6 | 0.65016 | 0.75979 | 94 | 56 | 0.65611 | 0.75466 | 44 |
| 7 | 0.63827 | 0.76981 | 93 | 57 | 0.64430 | 0.76478 | 43 | 7 | 0.65028 | 0.75969 | 93 | 57 | 0.65622 | 0.75456 | 43 |
| 8 | 0.63839 | 0.76971 | 92 | 58 | 0.64442 | 0.76467 | 42 | 8 | 0.65040 | 0.75959 | 92 | 58 | 0.65633 | 0.75446 | 42 |
| 9 | 0.63851 | 0.76961 | 91 | 59 | 0.64454 | 0.76457 | 41 | 9 | 0.65052 | 0.75949 | 91 | 59 | 0.65644 | 0.75435 | 41 |
| 10 | 0.63863 | 0.76951 | 90 | 60 | 0.64466 | 0.76447 | 40 | 10 | 0.65064 | 0.75938 | 90 | 60 | 0.65655 | 0.75425 | 40 |
| 11 | 0.63875 | 0.76941 | 89 | 61 | 0.64478 | 0.76437 | 39 | 11 | 0.65076 | 0.75928 | 89 | 61 | 0.65667 | 0.75415 | 39 |
| 12 | 0.63888 | 0.76931 | 88 | 62 | 0.64490 | 0.76427 | 38 | 12 | 0.65088 | 0.75918 | 88 | 62 | 0.65678 | 0.75405 | 38 |
| 13 | 0.63900 | 0.76921 | 87 | 63 | 0.64502 | 0.76417 | 37 | 13 | 0.65100 | 0.75908 | 87 | 63 | 0.65689 | 0.75394 | 37 |
| 14 | 0.63912 | 0.76911 | 86 | 64 | 0.64514 | 0.76407 | 36 | 14 | 0.65112 | 0.75898 | 86 | 64 | 0.65700 | 0.75384 | 36 |
| 15 | 0.63924 | 0.76901 | 85 | 65 | 0.64526 | 0.76396 | 35 | 15 | 0.65124 | 0.75887 | 85 | 65 | 0.65711 | 0.75374 | 35 |
| 16 | 0.63936 | 0.76891 | 84 | 66 | 0.64538 | 0.76386 | 34 | 16 | 0.65136 | 0.75877 | 84 | 66 | 0.65722 | 0.75363 | 34 |
| 17 | 0.63948 | 0.76881 | 83 | 67 | 0.64550 | 0.76376 | 33 | 17 | 0.65148 | 0.75867 | 83 | 67 | 0.65734 | 0.75353 | 33 |
| 18 | 0.63960 | 0.76871 | 82 | 68 | 0.64562 | 0.76366 | 32 | 18 | 0.65160 | 0.75857 | 82 | 68 | 0.65745 | 0.75343 | 32 |
| 19 | 0.63972 | 0.76861 | 81 | 69 | 0.64574 | 0.76356 | 31 | 19 | 0.65171 | 0.75846 | 81 | 69 | 0.65756 | 0.75332 | 31 |
| 20 | 0.63984 | 0.76851 | 80 | 70 | 0.64586 | 0.76346 | 30 | 20 | 0.65183 | 0.75836 | 80 | 70 | 0.65767 | 0.75322 | 30 |
| 21 | 0.63996 | 0.76841 | 79 | 71 | 0.64598 | 0.76336 | 29 | 21 | 0.65195 | 0.75826 | 79 | 71 | 0.65779 | 0.75312 | 29 |
| 22 | 0.64008 | 0.76831 | 78 | 72 | 0.64610 | 0.76326 | 28 | 22 | 0.65207 | 0.75816 | 78 | 72 | 0.65790 | 0.75301 | 28 |
| 23 | 0.64020 | 0.76821 | 77 | 73 | 0.64622 | 0.76316 | 27 | 23 | 0.65219 | 0.75806 | 77 | 73 | 0.65802 | 0.75291 | 27 |
| 24 | 0.64032 | 0.76810 | 76 | 74 | 0.64634 | 0.76306 | 26 | 24 | 0.65231 | 0.75795 | 76 | 74 | 0.65814 | 0.75281 | 26 |
| 25 | 0.64044 | 0.76800 | 75 | 75 | 0.64646 | 0.76295 | 25 | 25 | 0.65243 | 0.75785 | 75 | 75 | 0.65826 | 0.75271 | 25 |
| 26 | 0.64057 | 0.76790 | 74 | 76 | 0.64658 | 0.76285 | 24 | 26 | 0.65255 | 0.75775 | 74 | 76 | 0.65838 | 0.75260 | 24 |
| 27 | 0.64069 | 0.76780 | 73 | 77 | 0.64670 | 0.76275 | 23 | 27 | 0.65267 | 0.75765 | 73 | 77 | 0.65850 | 0.75250 | 23 |
| 28 | 0.64081 | 0.76770 | 72 | 78 | 0.64682 | 0.76265 | 22 | 28 | 0.65279 | 0.75754 | 72 | 78 | 0.65862 | 0.75239 | 22 |
| 29 | 0.64093 | 0.76760 | 71 | 79 | 0.64694 | 0.76254 | 21 | 29 | 0.65291 | 0.75744 | 71 | 79 | 0.65873 | 0.75229 | 21 |
| 30 | 0.64105 | 0.76750 | 70 | 80 | 0.64706 | 0.76244 | 20 | 30 | 0.65302 | 0.75734 | 70 | 80 | 0.65885 | 0.75218 | 20 |
| 31 | 0.64117 | 0.76740 | 69 | 81 | 0.64718 | 0.76234 | 19 | 31 | 0.65314 | 0.75723 | 69 | 81 | 0.65897 | 0.75208 | 19 |
| 32 | 0.64129 | 0.76730 | 68 | 82 | 0.64730 | 0.76224 | 18 | 32 | 0.65326 | 0.75713 | 68 | 82 | 0.65910 | 0.75198 | 18 |
| 33 | 0.64141 | 0.76720 | 67 | 83 | 0.64742 | 0.76214 | 17 | 33 | 0.65338 | 0.75703 | 67 | 83 | 0.65923 | 0.75187 | 17 |
| 34 | 0.64153 | 0.76710 | 66 | 84 | 0.64755 | 0.76204 | 16 | 34 | 0.65350 | 0.75693 | 66 | 84 | 0.65936 | 0.75177 | 16 |
| 35 | 0.64165 | 0.76700 | 65 | 85 | 0.64767 | 0.76193 | 15 | 35 | 0.65362 | 0.75683 | 65 | 85 | 0.65949 | 0.75167 | 15 |
| 36 | 0.64177 | 0.76690 | 64 | 86 | 0.64777 | 0.76183 | 14 | 36 | 0.65374 | 0.75672 | 64 | 86 | 0.65962 | 0.75156 | 14 |
| 37 | 0.64189 | 0.76680 | 63 | 87 | 0.64789 | 0.76173 | 13 | 37 | 0.65386 | 0.75662 | 63 | 87 | 0.65975 | 0.75146 | 13 |
| 38 | 0.64201 | 0.76670 | 62 | 88 | 0.64801 | 0.76163 | 12 | 38 | 0.65398 | 0.75652 | 62 | 88 | 0.65989 | 0.75136 | 12 |
| 39 | 0.64213 | 0.76660 | 61 | 89 | 0.64813 | 0.76153 | 11 | 39 | 0.65409 | 0.75641 | 61 | 89 | 0.66001 | 0.75125 | 11 |
| 40 | 0.64225 | 0.76650 | 60 | 90 | 0.64825 | 0.76143 | 10 | 40 | 0.65421 | 0.75631 | 60 | 90 | 0.66013 | 0.75115 | 10 |
| 41 | 0.64237 | 0.76639 | 59 | 91 | 0.64837 | 0.76132 | 9 | 41 | 0.65433 | 0.75621 | 59 | 91 | 0.66025 | 0.75105 | 9 |
| 42 | 0.64249 | 0.76629 | 58 | 92 | 0.64849 | 0.76122 | 8 | 42 | 0.65445 | 0.75610 | 58 | 92 | 0.66037 | 0.75094 | 8 |
| 43 | 0.64261 | 0.76619 | 57 | 93 | 0.64861 | 0.76112 | 7 | 43 | 0.65457 | 0.75600 | 57 | 93 | 0.66049 | 0.75084 | 7 |
| 44 | 0.64273 | 0.76609 | 56 | 94 | 0.64873 | 0.76102 | 6 | 44 | 0.65469 | 0.75590 | 56 | 94 | 0.66060 | 0.75073 | 6 |
| 45 | 0.64285 | 0.76599 | 55 | 95 | 0.64885 | 0.76092 | 5 | 45 | 0.65481 | 0.75580 | 55 | 95 | 0.66072 | 0.75063 | 5 |
| 46 | 0.64297 | 0.76589 | 54 | 96 | 0.64897 | 0.76081 | 4 | 46 | 0.65493 | 0.75569 | 54 | 96 | 0.66084 | 0.75053 | 4 |
| 47 | 0.64310 | 0.76579 | 53 | 97 | 0.64909 | 0.76071 | 3 | 47 | 0.65505 | 0.75559 | 53 | 97 | 0.66096 | 0.75043 | 3 |
| 48 | 0.64322 | 0.76569 | 52 | 98 | 0.64921 | 0.76061 | 2 | 48 | 0.65516 | 0.75549 | 52 | 98 | 0.66108 | 0.75032 | 2 |
| 49 | 0.64334 | 0.76558 | 51 | 99 | 0.64933 | 0.76051 | 1 | 49 | 0.65528 | 0.75538 | 51 | 99 | 0.66119 | 0.75021 | 1 |
| 50 | 0.64346 | 0.76548 | 50 | 100 | 0.64945 | 0.76041 | 0 | 50 | 0.65540 | 0.75528 | 50 | 100 | 0.66131 | 0.75011 | 0 |
| 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 |

| 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 |
|----|---------|---------|-----|-----|---------|---------|----|----|---------|---------|-----|-----|---------|---------|----|
| 0 | 0.66131 | 0.75011 | 100 | 50 | 0.66718 | 0.74489 | 50 | 0 | 0.67301 | 0.73963 | 100 | 50 | 0.67880 | 0.73442 | 50 |
| 1 | 0.66143 | 0.75001 | 99 | 51 | 0.66730 | 0.74479 | 49 | 1 | 0.67313 | 0.73953 | 99 | 51 | 0.67892 | 0.73421 | 49 |
| 2 | 0.66155 | 0.74990 | 98 | 52 | 0.66742 | 0.74468 | 48 | 2 | 0.67325 | 0.73943 | 98 | 52 | 0.67904 | 0.73401 | 48 |
| 3 | 0.66167 | 0.74980 | 97 | 53 | 0.66753 | 0.74458 | 47 | 3 | 0.67336 | 0.73933 | 97 | 53 | 0.67915 | 0.73380 | 47 |
| 4 | 0.66178 | 0.74970 | 96 | 54 | 0.66765 | 0.74447 | 46 | 4 | 0.67348 | 0.73922 | 96 | 54 | 0.67926 | 0.73360 | 46 |
| 5 | 0.66190 | 0.74959 | 95 | 55 | 0.66777 | 0.74437 | 45 | 5 | 0.67359 | 0.73910 | 95 | 55 | 0.67938 | 0.73349 | 45 |
| 6 | 0.66202 | 0.74949 | 94 | 56 | 0.66789 | 0.74426 | 44 | 6 | 0.67371 | 0.73899 | 94 | 56 | 0.67949 | 0.73338 | 44 |
| 7 | 0.66214 | 0.74938 | 93 | 57 | 0.66800 | 0.74416 | 43 | 7 | 0.67383 | 0.73889 | 93 | 57 | 0.67961 | 0.73328 | 43 |
| 8 | 0.66225 | 0.74928 | 92 | 58 | 0.66812 | 0.74405 | 42 | 8 | 0.67394 | 0.73878 | 92 | 58 | 0.67972 | 0.73317 | 42 |
| 9 | 0.66237 | 0.74918 | 91 | 59 | 0.66824 | 0.74395 | 41 | 9 | 0.67406 | 0.73868 | 91 | 59 | 0.67984 | 0.73307 | 41 |
| 10 | 0.66249 | 0.74907 | 90 | 60 | 0.66835 | 0.74385 | 40 | 10 | 0.67417 | 0.73857 | 90 | 60 | 0.67995 | 0.73296 | 40 |
| 11 | 0.66261 | 0.74897 | 89 | 61 | 0.66847 | 0.74374 | 39 | 11 | 0.67429 | 0.73847 | 89 | 61 | 0.68007 | 0.73285 | 39 |
| 12 | 0.66272 | 0.74886 | 88 | 62 | 0.66859 | 0.74364 | 38 | 12 | 0.67441 | 0.73836 | 88 | 62 | 0.68018 | 0.73274 | 38 |
| 13 | 0.66284 | 0.74876 | 87 | 63 | 0.66870 | 0.74353 | 37 | 13 | 0.67452 | 0.73826 | 87 | 63 | 0.68030 | 0.73263 | 37 |
| 14 | 0.66296 | 0.74866 | 86 | 64 | 0.66882 | 0.74343 | 36 | 14 | 0.67464 | 0.73815 | 86 | 64 | 0.68041 | 0.73252 | 36 |
| 15 | 0.66308 | 0.74855 | 85 | 65 | 0.66894 | 0.74332 | 35 | 15 | 0.67475 | 0.73804 | 85 | 65 | 0.68053 | 0.73241 | 35 |
| 16 | 0.66319 | 0.74845 | 84 | 66 | 0.66905 | 0.74321 | 34 | 16 | 0.67487 | 0.73794 | 84 | 66 | 0.68064 | 0.73231 | 34 |
| 17 | 0.66331 | 0.74834 | 83 | 67 | 0.66917 | 0.74311 | 33 | 17 | 0.67499 | 0.73783 | 83 | 67 | 0.68076 | 0.73220 | 33 |
| 18 | 0.66343 | 0.74824 | 82 | 68 | 0.66929 | 0.74300 | 32 | 18 | 0.67510 | 0.73773 | 82 | 68 | 0.68087 | 0.73210 | 32 |
| 19 | 0.66355 | 0.74813 | 81 | 69 | 0.66940 | 0.74290 | 31 | 19 | 0.67522 | 0.73762 | 81 | 69 | 0.68099 | 0.73200 | 31 |
| 20 | 0.66367 | 0.74803 | 80 | 70 | 0.66952 | 0.74279 | 30 | 20 | 0.67533 | 0.73751 | 80 | 70 | 0.68110 | 0.73190 | 30 |
| 21 | 0.66378 | 0.74793 | 79 | 71 | 0.66964 | 0.74269 | 29 | 21 | 0.67545 | 0.73741 | 79 | 71 | 0.68122 | 0.73180 | 29 |
| 22 | 0.66390 | 0.74782 | 78 | 72 | 0.66975 | 0.74258 | 28 | 22 | 0.67556 | 0.73730 | 78 | 72 | 0.68133 | 0.73170 | 28 |
| 23 | 0.66402 | 0.74772 | 77 | 73 | 0.66987 | 0.74248 | 27 | 23 | 0.67568 | 0.73719 | 77 | 73 | 0.68145 | 0.73160 | 27 |
| 24 | 0.66414 | 0.74761 | 76 | 74 | 0.66999 | 0.74237 | 26 | 24 | 0.67579 | 0.73709 | 76 | 74 | 0.68156 | 0.73150 | 26 |
| 25 | 0.66425 | 0.74751 | 75 | 75 | 0.67010 | 0.74227 | 25 | 25 | 0.67591 | 0.73698 | 75 | 75 | 0.68168 | 0.73140 | 25 |
| 26 | 0.66437 | 0.74740 | 74 | 76 | 0.67022 | 0.74216 | 24 | 26 | 0.67603 | 0.73688 | 74 | 76 | 0.68179 | 0.73130 | 24 |
| 27 | 0.66449 | 0.74730 | 73 | 77 | 0.67034 | 0.74206 | 23 | 27 | 0.67614 | 0.73677 | 73 | 77 | 0.68191 | 0.73120 | 23 |
| 28 | 0.66460 | 0.74720 | 72 | 78 | 0.67045 | 0.74195 | 22 | 28 | 0.67626 | 0.73666 | 72 | 78 | 0.68202 | 0.73110 | 22 |
| 29 | 0.66472 | 0.74709 | 71 | 79 | 0.67057 | 0.74185 | 21 | 29 | 0.67637 | 0.73656 | 71 | 79 | 0.68214 | 0.73100 | 21 |
| 30 | 0.66484 | 0.74699 | 70 | 80 | 0.67069 | 0.74174 | 20 | 30 | 0.67649 | 0.73645 | 70 | 80 | 0.68225 | 0.73090 | 20 |
| 31 | 0.66496 | 0.74688 | 69 | 81 | 0.67080 | 0.74164 | 19 | 31 | 0.67661 | 0.73635 | 69 | 81 | 0.68237 | 0.73080 | 19 |
| 32 | 0.66507 | 0.74678 | 68 | 82 | 0.67092 | 0.74153 | 18 | 32 | 0.67672 | 0.73624 | 68 | 82 | 0.68248 | 0.73070 | 18 |
| 33 | 0.66519 | 0.74667 | 67 | 83 | 0.67103 | 0.74143 | 17 | 33 | 0.67684 | 0.73613 | 67 | 83 | 0.68260 | 0.73060 | 17 |
| 34 | 0.66531 | 0.74657 | 66 | 84 | 0.67115 | 0.74132 | 16 | 34 | 0.67695 | 0.73603 | 66 | 84 | 0.68271 | 0.73050 | 16 |
| 35 | 0.66543 | 0.74646 | 65 | 85 | 0.67127 | 0.74121 | 15 | 35 | 0.67707 | 0.73592 | 65 | 85 | 0.68283 | 0.73040 | 15 |
| 36 | 0.66554 | 0.74636 | 64 | 86 | 0.67138 | 0.74111 | 14 | 36 | 0.67718 | 0.73581 | 64 | 86 | 0.68294 | 0.73030 | 14 |
| 37 | 0.66566 | 0.74625 | 63 | 87 | 0.67150 | 0.74100 | 13 | 37 | 0.67730 | 0.73571 | 63 | 87 | 0.68306 | 0.73020 | 13 |
| 38 | 0.66578 | 0.74615 | 62 | 88 | 0.67162 | 0.74090 | 12 | 38 | 0.67742 | 0.73560 | 62 | 88 | 0.68317 | 0.73010 | 12 |
| 39 | 0.66589 | 0.74605 | 61 | 89 | 0.67173 | 0.74079 | 11 | 39 | 0.67753 | 0.73550 | 61 | 89 | 0.68329 | 0.73000 | 11 |
| 40 | 0.66601 | 0.74594 | 60 | 90 | 0.67185 | 0.74069 | 10 | 40 | 0.67765 | 0.73539 | 60 | 90 | 0.68340 | 0.72990 | 10 |
| 41 | 0.66613 | 0.74584 | 59 | 91 | 0.67197 | 0.74058 | 9 | 41 | 0.67776 | 0.73528 | 59 | 91 | 0.68352 | 0.72980 | 9 |
| 42 | 0.66625 | 0.74573 | 58 | 92 | 0.67208 | 0.74048 | 8 | 42 | 0.67788 | 0.73517 | 58 | 92 | 0.68363 | 0.72970 | 8 |
| 43 | 0.66636 | 0.74563 | 57 | 93 | 0.67220 | 0.74037 | 7 | 43 | 0.67799 | 0.73507 | 57 | 93 | 0.68374 | 0.72960 | 7 |
| 44 | 0.66648 | 0.74552 | 56 | 94 | 0.67232 | 0.74027 | 6 | 44 | 0.67811 | 0.73496 | 56 | 94 | 0.68386 | 0.72950 | 6 |
| 45 | 0.66660 | 0.74542 | 55 | 95 | 0.67243 | 0.74016 | 5 | 45 | 0.67822 | 0.73486 | 55 | 95 | 0.68397 | 0.72940 | 5 |
| 46 | 0.66671 | 0.74531 | 54 | 96 | 0.67255 | 0.74005 | 4 | 46 | 0.67834 | 0.73475 | 54 | 96 | 0.68409 | 0.72930 | 4 |
| 47 | 0.66683 | 0.74521 | 53 | 97 | 0.67266 | 0.73995 | 3 | 47 | 0.67845 | 0.73464 | 53 | 97 | 0.68420 | 0.72920 | 3 |
| 48 | 0.66695 | 0.74510 | 52 | 98 | 0.67278 | 0.73984 | 2 | 48 | 0.67857 | 0.73454 | 52 | 98 | 0.68432 | 0.72910 | 2 |
| 49 | 0.66707 | 0.74500 | 51 | 99 | 0.67290 | 0.73974 | 1 | 49 | 0.67869 | 0.73443 | 51 | 99 | 0.68443 | 0.72900 | 1 |
| 50 | 0.66718 | 0.74489 | 50 | 100 | 0.67301 | 0.73963 | 0 | 50 | 0.67880 | 0.73432 | 50 | 100 | 0.68455 | 0.72890 | 0 |
| 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 |

| 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 | 分 | 正弦 | 餘弦 | 分 |
|----|---------|---------|-----|-----|---------|---------|----|----|---------|---------|-----|-----|---------|---------|----|
| 0 | 0.68455 | 0.72897 | 100 | 50 | 0.69025 | 0.72357 | 50 | 0 | 0.69591 | 0.71813 | 100 | 50 | 0.70153 | 0.71264 | 50 |
| 1 | 0.68466 | 0.72886 | 99 | 51 | 0.69037 | 0.72346 | 49 | 1 | 0.69603 | 0.71802 | 99 | 51 | 0.70164 | 0.71253 | 49 |
| 2 | 0.68478 | 0.72875 | 98 | 52 | 0.69048 | 0.72335 | 48 | 2 | 0.69614 | 0.71791 | 98 | 52 | 0.70176 | 0.71242 | 48 |
| 3 | 0.68489 | 0.72865 | 97 | 53 | 0.69059 | 0.72324 | 47 | 3 | 0.69625 | 0.71780 | 97 | 53 | 0.70187 | 0.71231 | 47 |
| 4 | 0.68500 | 0.72854 | 96 | 54 | 0.69071 | 0.72314 | 46 | 4 | 0.69636 | 0.71769 | 96 | 54 | 0.70198 | 0.71220 | 46 |
| 5 | 0.68512 | 0.72843 | 95 | 55 | 0.69082 | 0.72303 | 45 | 5 | 0.69648 | 0.71758 | 95 | 55 | 0.70209 | 0.71209 | 45 |
| 6 | 0.68523 | 0.72832 | 94 | 56 | 0.69093 | 0.72292 | 44 | 6 | 0.69659 | 0.71747 | 94 | 56 | 0.70220 | 0.71198 | 44 |
| 7 | 0.68535 | 0.72822 | 93 | 57 | 0.69105 | 0.72281 | 43 | 7 | 0.69670 | 0.71736 | 93 | 57 | 0.70231 | 0.71187 | 43 |
| 8 | 0.68546 | 0.72811 | 92 | 58 | 0.69116 | 0.72270 | 42 | 8 | 0.69681 | 0.71725 | 92 | 58 | 0.70243 | 0.71176 | 42 |
| 9 | 0.68558 | 0.72800 | 91 | 59 | 0.69127 | 0.72259 | 41 | 9 | 0.69693 | 0.71714 | 91 | 59 | 0.70254 | 0.71165 | 41 |
| 10 | 0.68569 | 0.72789 | 90 | 60 | 0.69139 | 0.72248 | 40 | 10 | 0.69704 | 0.71703 | 90 | 60 | 0.70265 | 0.71154 | 40 |
| 11 | 0.68581 | 0.72778 | 89 | 61 | 0.69150 | 0.72238 | 39 | 11 | 0.69715 | 0.71692 | 89 | 61 | 0.70276 | 0.71143 | 39 |
| 12 | 0.68592 | 0.72767 | 88 | 62 | 0.69161 | 0.72227 | 38 | 12 | 0.69727 | 0.71681 | 88 | 62 | 0.70287 | 0.71131 | 38 |
| 13 | 0.68603 | 0.72757 | 87 | 63 | 0.69173 | 0.72216 | 37 | 13 | 0.69738 | 0.71670 | 87 | 63 | 0.70299 | 0.71120 | 37 |
| 14 | 0.68615 | 0.72746 | 86 | 64 | 0.69184 | 0.72205 | 36 | 14 | 0.69749 | 0.71659 | 86 | 64 | 0.70310 | 0.71109 | 36 |
| 15 | 0.68626 | 0.72735 | 85 | 65 | 0.69195 | 0.72194 | 35 | 15 | 0.69760 | 0.71648 | 85 | 65 | 0.70321 | 0.71098 | 35 |
| 16 | 0.68638 | 0.72725 | 84 | 66 | 0.69207 | 0.72183 | 34 | 16 | 0.69772 | 0.71638 | 84 | 66 | 0.70332 | 0.71087 | 34 |
| 17 | 0.68649 | 0.72714 | 83 | 67 | 0.69218 | 0.72172 | 33 | 17 | 0.69783 | 0.71627 | 83 | 67 | 0.70343 | 0.71076 | 33 |
| 18 | 0.68661 | 0.72703 | 82 | 68 | 0.69229 | 0.72162 | 32 | 18 | 0.69794 | 0.71616 | 82 | 68 | 0.70354 | 0.71065 | 32 |
| 19 | 0.68672 | 0.72692 | 81 | 69 | 0.69241 | 0.72151 | 31 | 19 | 0.69805 | 0.71605 | 81 | 69 | 0.70365 | 0.71054 | 31 |
| 20 | 0.68683 | 0.72681 | 80 | 70 | 0.69252 | 0.72140 | 30 | 20 | 0.69817 | 0.71594 | 80 | 70 | 0.70377 | 0.71043 | 30 |
| 21 | 0.68695 | 0.72671 | 79 | 71 | 0.69263 | 0.72129 | 29 | 21 | 0.69828 | 0.71583 | 79 | 71 | 0.70388 | 0.71032 | 29 |
| 22 | 0.68706 | 0.72660 | 78 | 72 | 0.69275 | 0.72118 | 28 | 22 | 0.69839 | 0.71572 | 78 | 72 | 0.70399 | 0.71021 | 28 |
| 23 | 0.68718 | 0.72649 | 77 | 73 | 0.69286 | 0.72107 | 27 | 23 | 0.69850 | 0.71561 | 77 | 73 | 0.70410 | 0.71010 | 27 |
| 24 | 0.68729 | 0.72638 | 76 | 74 | 0.69297 | 0.72096 | 26 | 24 | 0.69861 | 0.71550 | 76 | 74 | 0.70421 | 0.70999 | 26 |
| 25 | 0.68740 | 0.72627 | 75 | 75 | 0.69309 | 0.72085 | 25 | 25 | 0.69873 | 0.71539 | 75 | 75 | 0.70432 | 0.70988 | 25 |
| 26 | 0.68752 | 0.72617 | 74 | 76 | 0.69320 | 0.72074 | 24 | 26 | 0.69884 | 0.71528 | 74 | 76 | 0.70444 | 0.70977 | 24 |
| 27 | 0.68763 | 0.72606 | 73 | 77 | 0.69331 | 0.72064 | 23 | 27 | 0.69895 | 0.71517 | 73 | 77 | 0.70455 | 0.70966 | 23 |
| 28 | 0.68775 | 0.72595 | 72 | 78 | 0.69343 | 0.72053 | 22 | 28 | 0.69906 | 0.71506 | 72 | 78 | 0.70466 | 0.70955 | 22 |
| 29 | 0.68786 | 0.72584 | 71 | 79 | 0.69354 | 0.72042 | 21 | 29 | 0.69918 | 0.71495 | 71 | 79 | 0.70477 | 0.70944 | 21 |
| 30 | 0.68797 | 0.72573 | 70 | 80 | 0.69365 | 0.72031 | 20 | 30 | 0.69929 | 0.71484 | 70 | 80 | 0.70488 | 0.70932 | 20 |
| 31 | 0.68809 | 0.72563 | 69 | 81 | 0.69377 | 0.72020 | 19 | 31 | 0.69940 | 0.71473 | 69 | 81 | 0.70499 | 0.70921 | 19 |
| 32 | 0.68820 | 0.72552 | 68 | 82 | 0.69388 | 0.72009 | 18 | 32 | 0.69951 | 0.71462 | 68 | 82 | 0.70510 | 0.70910 | 18 |
| 33 | 0.68832 | 0.72541 | 67 | 83 | 0.69399 | 0.71998 | 17 | 33 | 0.69963 | 0.71451 | 67 | 83 | 0.70522 | 0.70899 | 17 |
| 34 | 0.68843 | 0.72530 | 66 | 84 | 0.69411 | 0.71987 | 16 | 34 | 0.69974 | 0.71440 | 66 | 84 | 0.70533 | 0.70888 | 16 |
| 35 | 0.68854 | 0.72519 | 65 | 85 | 0.69422 | 0.71976 | 15 | 35 | 0.69985 | 0.71429 | 65 | 85 | 0.70544 | 0.70877 | 15 |
| 36 | 0.68866 | 0.72509 | 64 | 86 | 0.69433 | 0.71966 | 14 | 36 | 0.69996 | 0.71418 | 64 | 86 | 0.70555 | 0.70866 | 14 |
| 37 | 0.68877 | 0.72498 | 63 | 87 | 0.69444 | 0.71955 | 13 | 37 | 0.70007 | 0.71407 | 63 | 87 | 0.70566 | 0.70855 | 13 |
| 38 | 0.68889 | 0.72487 | 62 | 88 | 0.69456 | 0.71944 | 12 | 38 | 0.70019 | 0.71396 | 62 | 88 | 0.70577 | 0.70844 | 12 |
| 39 | 0.68900 | 0.72476 | 61 | 89 | 0.69467 | 0.71933 | 11 | 39 | 0.70030 | 0.71385 | 61 | 89 | 0.70588 | 0.70833 | 11 |
| 40 | 0.68911 | 0.72465 | 60 | 90 | 0.69478 | 0.71922 | 10 | 40 | 0.70041 | 0.71374 | 60 | 90 | 0.70599 | 0.70822 | 10 |
| 41 | 0.68923 | 0.72454 | 59 | 91 | 0.69490 | 0.71911 | 9 | 41 | 0.70052 | 0.71363 | 59 | 91 | 0.70611 | 0.70811 | 9 |
| 42 | 0.68934 | 0.72444 | 58 | 92 | 0.69501 | 0.71900 | 8 | 42 | 0.70064 | 0.71352 | 58 | 92 | 0.70622 | 0.70799 | 8 |
| 43 | 0.68946 | 0.72433 | 57 | 93 | 0.69512 | 0.71889 | 7 | 43 | 0.70075 | 0.71341 | 57 | 93 | 0.70633 | 0.70788 | 7 |
| 44 | 0.68957 | 0.72422 | 56 | 94 | 0.69524 | 0.71878 | 6 | 44 | 0.70086 | 0.71330 | 56 | 94 | 0.70644 | 0.70777 | 6 |
| 45 | 0.68968 | 0.72411 | 55 | 95 | 0.69535 | 0.71867 | 5 | 45 | 0.70097 | 0.71319 | 55 | 95 | 0.70655 | 0.70766 | 5 |
| 46 | 0.68980 | 0.72400 | 54 | 96 | 0.69546 | 0.71856 | 4 | 46 | 0.70108 | 0.71308 | 54 | 96 | 0.70666 | 0.70755 | 4 |
| 47 | 0.68991 | 0.72389 | 53 | 97 | 0.69557 | 0.71845 | 3 | 47 | 0.70120 | 0.71297 | 53 | 97 | 0.70677 | 0.70744 | 3 |
| 48 | 0.69002 | 0.72379 | 52 | 98 | 0.69569 | 0.71835 | 2 | 48 | 0.70131 | 0.71286 | 52 | 98 | 0.70688 | 0.70733 | 2 |
| 49 | 0.69014 | 0.72368 | 51 | 99 | 0.69580 | 0.71824 | 1 | 49 | 0.70142 | 0.71275 | 51 | 99 | 0.70700 | 0.70722 | 1 |
| 50 | 0.69025 | 0.72357 | 50 | 100 | 0.69591 | 0.71813 | 0 | 50 | 0.70153 | 0.71264 | 50 | 100 | 0.70711 | 0.70711 | 0 |
| 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 | 分 | 餘弦 | 正弦 | 分 |

中華民國二十九年十二月初版

◆(28815)◆

☆鐵道曲線表一冊

每冊實價國幣貳元

外埠酌加運費郵費

編譯者 李 儼

發行人 王 雲 五
長沙南正路

印刷所 商務印書館

發行所 商務印書館
各埠

