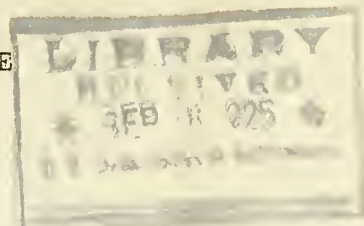


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UNITED STATES DEPARTMENT OF AGRICULTURE
OFFICE OF THE SECRETARY



Amendment No. 9 to Circular No. 70, Revised.

By virtue of the authority vested in the Secretary of Agriculture by the United States grain standards Act of August 11, 1916 (39 United States Statutes at Large, p. 432), I, W. M. Jardine, Secretary of Agriculture, do make, prescribe, publish, and give public notice of the following amendment to the regulations of the Secretary of Agriculture, dated July 30, 1920, as revised, under said Act, said amendment to be effective September 1, 1925.

In Regulation 2, Section 23, amend Paragraph (m) to read as follows:

(m) unless issued for an export shipment, a statement of the factor or factors which determined the grade, except in the case of grade No. 1, to which may be added any other factor, or the complete analysis, and for inspections of wheat, oats, feed oats, mixed feed oats, and rye shall include the test weight per bushel, whether such factor determined the grade or not, as follows: In the case of oats, feed oats, and mixed feed oats the test weight shall be given in terms of whole and half pounds, for which purpose a fraction of a pound when equal to or greater than a half shall be treated as a half, and when less than a half shall be disregarded; in the case of wheat and rye, the test weight shall be given in whole pounds and tenths of a pound;

In testimony whereof I have hereunto set my hand and the official seal of the Department of Agriculture, in the City of Washington, this 14th day of August, 1925.

W. M. Jardine

Secretary.

The following table shows the results of the experiment. The first column gives the value of the angle θ in degrees, and the second column gives the corresponding value of the function $f(\theta)$. The values of $f(\theta)$ are calculated from the equation $f(\theta) = \frac{1}{2} \sin^2 \theta$.

θ (degrees)	$f(\theta)$
0	0.000
10	0.004
20	0.016
30	0.038
40	0.064
50	0.094
60	0.126
70	0.161
80	0.198
90	0.238
100	0.280
110	0.324
120	0.370
130	0.418
140	0.468
150	0.520
160	0.574
170	0.630
180	0.688

The values of $f(\theta)$ are plotted against θ in the figure. The curve shows that $f(\theta)$ increases as θ increases, and that the rate of increase is greatest for small values of θ .

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