

LOADED SOUND TEST SUMMARY SHEET

NAME OF DEVICE UNDER TEST (DUT)	Miter Saw
TOOL OPERATOR	Edward Zechmann
COMPUTER OPERATOR	Automated Mode, Xiandong Zhu
TEST DATE	6/7/2006
TEST DESCRIPTION	Sound Power Level Measurement
TEST LOCATION	UC anechoic lab
MANUFACTURER	Delta
MODEL	MS250
SERIAL NUMBER	838565Q
MODE OF OPERATION	Normal
RUN NUMBER	3
YEAR MADE	
DIMENSIONS (inches)	LENGTH 18, WIDTH 14, HEIGHT 20
WEIGHT (lbs.)	28 lbs. 40 teeth, No. 899867
TECHNICAL SPECIFICATIONS	10 inch saw blade
MOUNTING CONDITIONS	Clamped to oak board on a steel table on rubber feet
LOADING CONDITIONS	FULL SPEED, LOADED WITH OAK BOARD 1" x 12"
K1 (dBA)	0
K2 (dBA)	1.35
TEMPERATURE (CELSIUS)	23 C
HUMIDITY %	39
BAROMETRIC PRESSURE ("Hg)	29.93 "Hg
TEST ENVIRONMENT	SEMI ANECHOIC, SEMI HEMISPHERICAL
TOOL TESTING STANDARD	ANSI S12.15-1992
MEASUREMENT STANDARD	ISO 3744:1994-05-01
MICROPHONE SET-UP	10-MICROPHONES
SURFACE RADIUS	2.00 meters
RATED POWER (WATTS)	1560
ACTUAL INPUT POWER (WATTS)	NA
VOLTAGE (VOLTS)	NA
CURRENT (AMPS)	NA
RATED RPM	5200
ACTUAL RPM	NA
SOUND POWER LEVEL (dBA)	104.2
SOUND POWER (WATTS) A-weighted	0.02611
SWLA - k2 (dBA)	102.8
SWLA - k2 (WATTS) A-weighted	0.01914
SOUND PRESSURE LEVEL (dBA) @ 2 meters	90.2
AT THE NOMINAL HEARING ZONE OF OPERATOR	
SOUND PRESSURE LEVEL (dBA)	99.6

Average Directivity Study

TEST DATE 6/7/2006
DUT Miter Saw
Manufacturer Delta
Model Number MS250
Serial Number 838565Q
Mode Normal
Run Number 3

A-weighted Sound Pressure Level

	Position1	Position2
Mic #	dBA	dBA
0	89.5	89.9
1	82.6	86.5
2	91.9	89.0
3	91.8	90.7
4	89.4	92.1
5	90.9	91.9
6	87.5	82.8
7	93.1	90.8
8	87.1	88.8
9	90.9	91.7
10	97.8	99.6
dB difference	10.6	9.3

A-weighted Directivity Index

Mic #	dBA	dBA
0	0.0	0.5
1	-6.9	-3.0
2	2.5	-0.4
3	2.3	1.3
4	0.0	2.7
5	1.4	2.5
6	-2.0	-6.6
7	3.7	1.4
8	-2.4	-0.6
9	1.4	2.3

SOUND DATA SHEET

PRODUCT INFORMATION

TEST DATE 6/7/2006
 DUT Miter Saw
 Manufacturer Delta
 Model Number MS250
 Serial Number 838565Q
 Mode of Operation Normal
 Run Number 3

TEST CONDITIONS

Actual Power (watt) NA
 Voltage (Volts) NA
 Current (Amps) NA
 Actual RPM NA
 Temperature (Deg. F) 23 C
 Humidity (%) 39
 Baro. Press. (inch of Hg) 29.93 "Hg

Measurement Data

Linear (unweighted) Position 1

Sound Power (dB)	103.82	103.88	103.78	105.31	105.04	104.63	105.00	105.32	104.78	105.85
Sound Power (Watts)	0.02409	0.02446	0.02390	0.03393	0.03189	0.02906	0.03165	0.03407	0.03007	0.03850
Sound Pressure (dB)	89.82	89.88	89.78	91.30	91.03	90.63	91.00	91.32	90.78	91.85

Linear (unweighted) Position 2

Sound Power (dB)	104.61	104.70	104.56	104.22	104.28	104.71	104.69	104.86	105.23	104.28
Sound Power (Watts)	0.02892	0.02950	0.02858	0.02642	0.02679	0.02956	0.02945	0.03059	0.03336	0.02677
Sound Pressure (dB)	90.61	90.70	90.56	90.22	90.28	90.70	90.69	90.85	91.23	90.27

A-weighted Position 1

Sound Power (dBA)	103.30	103.46	103.28	104.72	104.56	104.12	104.45	104.70	104.19	105.24
Sound Power (Watts)	0.02138	0.02220	0.02126	0.02964	0.02858	0.02585	0.02788	0.02952	0.02624	0.03344
Sound Pressure (dBA)	89.30	89.46	89.27	90.72	90.56	90.12	90.45	90.70	90.19	91.24

A-weighted Position 2

Sound Power (dBA)	104.07	104.30	104.05	103.72	103.73	104.24	104.08	104.28	104.66	103.60
Sound Power (Watts)	0.02555	0.02691	0.02543	0.02355	0.02358	0.02652	0.02560	0.02679	0.02928	0.02291
Sound Pressure (dBA)	90.07	90.30	90.05	89.72	89.72	90.23	90.08	90.28	90.66	89.60

Calculations

Average A-weighted Sound Data

Sound Power (dBA) 104.17
 Sound Power (Watts) 0.0261
 Sound Pressure (dBA) 90.16

Std. Deviation SWLA 0.5148
 95 % Confidence Level 0.1986
 Mean SPLA-k2 88.81