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	Global Machinery Company (GMC)
MODEL	MS1015AUL
SERIAL NUMBER	
MODE OF OPERATION	Normal
RUN NUMBER	3
YEAR MADE	2004
DIMENSIONS (inches)	LENGTH 18, WIDTH 19, HEIGHT 15
WEIGHT (lbs.)	27.6 lbs.
TECHNICAL SPECIFICATIONS	10 inch saw blade, No. MS105840TCT, 40 Teeth
MOUNTING CONDITIONS	Clamped to oak boad on a steel table on rubber feet
LOADING CONDITIONS	FULL SPEED, LOADED WITH OAK BOARD, NO GUIDE
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)	1800
ACTUAL INPUT POWER (WATTS)	NA
VOLTAGE (VOLTS)	NA
CURRENT (AMPS)	NA
RATED RPM	5200
ACTUAL RPM	NA
SOUND POWER LEVEL (dBA)	103.1
SOUND POWER (WATTS) A-weighted	0.13003
SWLA - k2 (dBA)	101.8
SWLA - k2 (WATTS) A-weighted	0.09528
SOUND PRESSURE LEVEL (dBA) @ 2 meters	97.1
AT THE NOMINAL HEARING ZONE OF OPERATOR	
SOUND PRESSURE LEVEL (dBA)	97.2

Average Directivity Study

TEST DATE	6/7/2006
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Model Number	MS1015AUL
Serial Number	
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A-weighted Sound Pressure Level

	Position1	Position2
Mic #	dBA	dBA
0	97.1	96.9
1	92.1	95.2
2	98.5	99.0
3	97.6	99.0
4	96.9	98.6
5	98.2	96.8
6	94.2	91.8
7	98.6	98.3
8	95.5	95.5
9	97.5	97.3
10	97.2	106.1
dB difference	6.5	7.2

A-weighted Directivity Index

Mic #	dBA	dBA
0	0.5	0.1
1	-4.5	-1.6
2	1.9	2.1
3	0.9	2.1
4	0.3	1.8
5	1.6	0.0
6	-2.4	-5.0
7	2.0	1.4
8	-1.1	-1.3
9	0.8	0.5

SOUND DATA SHEET

PRODUCT INFORMATION		TEST CONDITIONS	
TEST DATE	6/7/2006		
DUT	Miter Saw	Actual Power (watt)	NA
Manufacturer	Global Machinery Company (GMC)	Voltage (Volts)	NA
Model Number	MS1015AUL	Current (Amps)	NA
Serial Number		Actual RPM	NA
Mode of Operation	Normal	Temperature (Deg. F)	23 C
Run Number	3	Humidity (%)	39
		Baro. Press. (inch of Hg)	29.93 "Hg

Measurement Data

Linear (unweighted) Position 1										
Sound Power (dB)	109.36	10788 0	109.63	109.99	110.14	10788 5	111.01	112.24	110.93	10311 6
Sound Power (Watts)	0.08631	0.09558	0.09174	0.09970	0.10337	0.09654	0.12616	0.16756	0.12400	0.13058
Sound Pressure (dB)	95.36	95.80	95.62	95.98	96.14	95.84	97.01	98.24	96.93	97.16
Linear (unweighted) Position 2										
Sound Power (dB)	111.57	111.45	110.91	110.85	110.65	110.37	110.29	110.16	110.08	10788 5
Sound Power (Watts)	0.14371	0.13962	0.12332	0.12170	0.11625	0.10902	0.10698	0.10375	0.10179	0.09667
Sound Pressure (dB)	97.57	97.45	96.91	96.85	96.65	96.37	96.29	96.16	96.07	95.85
A-weighted Position 1										
Sound Power (dBA)	109.77	110.13	110.07	110.30	110.52	110.29	111.53	113.00	111.51	111.84
Sound Power (Watts)	0.09494	0.10294	0.10171	0.10723	0.11276	0.10688	0.14219	0.19965	0.14144	0.15282
Sound Pressure (dBA)	95.77	96.12	96.07	96.30	96.52	96.29	97.53	99.00	97.50	97.84
A-weighted Position 2										
Sound Power (dBA)	112.23	112.13	111.57	111.51	111.28	110.96	110.94	110.69	110.58	110.33
Sound Power (Watts)	0.16720	0.16328	0.14369	0.14144	0.13421	0.12462	0.12408	0.11734	0.11417	0.10791
Sound Pressure (dBA)	98.23	98.13	97.57	97.50	97.28	96.95	96.93	96.69	96.57	96.33

Calculations

Average A-weighted Sound Data	
Sound Power (dBA)	10311 4
Sound Power (Watts)	0.11300
Sound Pressure (dBA)	97.14
Std. Deviation SWLA	0.8496
95 % Confidence Level	0.3277
Mean SPLA-k2	95.79