

Appendix D: Noise and Vibration
D-1 24 Hour Existing Noise Measurements

24 Hour Noise Measurements

METROSONICS db-308 SN 3414 v3.0 4/88
REPORT PRINTED 11/08/05 @ 14:29:59

DOUBLING RATE: 3dB FILTER: A WGH
DOSE CRITERION: 90dB RESPONSE: SLOW
PRE-CALIBRATION TIME: 11/07/05 @ 9:14:22
PRE-CALIBRATION RANGE: 40.0dB TO 140.0dB

TEST BEGAN 11/07/05 @ 14:25:46
TEST LENGTH: 1DAYS 0:01:04
TEST ENDED 11/08/05 @ 14:26:50
TEST INTERRUPTIONS: 1

Lav = 67.8dB Lav (80)= 51.6dB
SEL =117.0dB Lav (90)= 45.9dB
Lmax = 94.9dB ON 11/07/05 @ 14:26:17
Lpk =127.2dB ON 11/07/05 @ 14:26:17
TIME OVER 115dB 0D 0:00:00.00

8 HR DOSE (80dB CUTOFF)= 0.04%
8 HR DOSE (90dB CUTOFF)= 0.01%

"TIME HISTORY REPORT

"# OF PERIODS: 145 MODE: CONTINUOUS
"PERIOD LENGTH: 0:10:00
"TIME HISTORY CUTOFF: NONE
"Ln(1): 10.0% Ln(2): 90.0%

"DATE: 11/07/05 TAG #: 0

"INT"	"TIME"	"Lav"	"Lmx"	"Lpk"	"L1"	"L2"
1	"14:25:46"	72.8	94.9	127.2	72	66
2	"14:35:46"	68.8	80.3	"UNR"	70	65
3	"14:45:46"	68.5	77.8	"UNR"	70	65
4	"14:55:46"	68.1	72.9	"UNR"	69	65
5	"15:05:46"	68.6	77.7	"UNR"	70	66
6	"15:15:46"	68.8	75.3	"UNR"	70	66
7	"15:25:46"	68.7	74.8	"UNR"	70	66
8	"15:35:46"	68.6	75.3	"UNR"	70	66
9	"15:45:46"	68.6	74.0	"UNR"	70	66
10	"15:55:46"	68.9	74.8	"UNR"	70	66
11	"16:05:46"	69.1	76.4	"UNR"	70	66
12	"16:15:46"	69.4	77.4	"UNR"	71	67
13	"16:25:46"	68.8	73.4	"UNR"	70	67
14	"16:35:46"	69.1	73.6	"UNR"	70	67
15	"16:45:46"	68.9	73.0	"UNR"	70	67
16	"16:55:46"	69.1	74.2	"UNR"	70	67
17	"17:05:46"	68.5	74.6	"UNR"	69	66
18	"17:15:46"	68.0	71.4	"UNR"	69	66
19	"17:25:46"	68.2	72.4	"UNR"	69	66
20	"17:35:46"	68.2	74.0	"UNR"	69	66
21	"17:45:46"	67.9	73.3	"UNR"	69	66
22	"17:55:46"	68.1	74.0	"UNR"	69	66
23	"18:05:46"	68.1	72.5	"UNR"	69	66
24	"18:15:46"	68.2	75.7	"UNR"	69	66
25	"18:25:46"	68.3	77.6	"UNR"	69	66
26	"18:35:46"	68.0	74.3	"UNR"	69	66
27	"18:45:46"	68.5	78.5	"UNR"	70	66
28	"18:55:46"	68.2	75.6	"UNR"	70	65
29	"19:05:46"	68.7	82.0	"UNR"	70	65
30	"19:15:46"	67.9	76.6	"UNR"	69	64
31	"19:25:46"	67.7	77.2	"UNR"	69	64
32	"19:35:46"	67.5	73.4	"UNR"	69	65

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33	"19:45:46"	67.8	76.0	"UNR"	70	64
34	"19:55:46"	67.2	72.2	"UNR"	69	64
35	"20:05:46"	66.6	75.7	"UNR"	68	63
36	"20:15:46"	66.6	78.2	"UNR"	68	63
37	"20:25:46"	66.2	72.0	"UNR"	68	62
38	"20:35:46"	66.3	74.4	"UNR"	68	62
39	"20:45:46"	65.9	72.2	"UNR"	68	61
40	"20:55:46"	66.7	82.2	"UNR"	68	61
41	"21:05:46"	66.3	73.9	"UNR"	69	62
42	"21:15:46"	66.0	73.7	"UNR"	68	62
43	"21:25:46"	66.4	74.8	"UNR"	68	62
44	"21:35:46"	66.0	77.2	"UNR"	68	62
45	"21:45:46"	66.1	73.9	"UNR"	69	61
46	"21:55:46"	65.4	72.4	"UNR"	67	61
47	"22:05:46"	65.8	73.7	"UNR"	68	61
48	"22:15:46"	66.0	78.1	"UNR"	68	61
49	"22:25:46"	65.0	70.9	"UNR"	67	60
50	"22:35:46"	66.3	74.3	"UNR"	69	61
51	"22:45:46"	65.2	73.1	"UNR"	68	59
52	"22:55:46"	65.4	73.9	"UNR"	68	60
53	"23:05:46"	64.4	71.4	"UNR"	67	59
54	"23:15:46"	63.7	70.7	"UNR"	66	58
55	"23:25:46"	65.3	78.5	"UNR"	69	57
56	"23:35:46"	64.8	75.7	"UNR"	67	58
57	"23:45:46"	64.2	78.7	"UNR"	66	56
58	"23:55:46"	63.8	73.2	"UNR"	67	56
59	" 0:05:46"	64.3	73.8	"UNR"	68	58
60	" 0:15:46"	62.6	71.3	"UNR"	66	54
61	" 0:25:46"	62.4	73.4	"UNR"	65	54
62	" 0:35:46"	64.0	75.9	"UNR"	67	56
63	" 0:45:46"	64.3	78.9	"UNR"	68	56
64	" 0:55:46"	64.3	79.7	"UNR"	67	55
65	" 1:05:46"	63.2	72.8	"UNR"	67	54
66	" 1:15:46"	64.1	77.0	"UNR"	68	53
67	" 1:25:46"	63.3	81.2	"UNR"	66	52
68	" 1:35:46"	62.5	74.8	"UNR"	66	52
69	" 1:45:46"	65.4	82.6	"UNR"	69	55
70	" 1:55:46"	64.3	73.2	"UNR"	68	53
71	" 2:05:46"	64.2	73.5	"UNR"	68	53
72	" 2:15:46"	64.1	78.0	"UNR"	68	50
73	" 2:25:46"	64.6	78.6	"UNR"	68	55
74	" 2:35:46"	63.3	75.1	"UNR"	68	50
75	" 2:45:46"	65.1	79.4	"UNR"	68	50
76	" 2:55:46"	62.1	71.6	"UNR"	67	49
77	" 3:05:46"	65.4	76.3	"UNR"	69	53
78	" 3:15:46"	65.1	82.4	"UNR"	68	53
79	" 3:25:46"	62.5	70.8	"UNR"	67	50
80	" 3:35:46"	64.8	77.7	"UNR"	68	55
81	" 3:45:46"	64.0	72.8	"UNR"	67	53
82	" 3:55:46"	65.2	74.2	"UNR"	69	54
83	" 4:05:46"	63.8	73.8	"UNR"	67	54
84	" 4:15:46"	64.0	73.1	"UNR"	68	55
85	" 4:25:46"	66.0	75.7	"UNR"	69	57
86	" 4:35:46"	66.0	73.9	"UNR"	69	58
87	" 4:45:46"	65.6	79.0	"UNR"	69	57
88	" 4:55:46"	66.3	74.0	"UNR"	70	59
89	" 5:05:46"	66.0	74.4	"UNR"	69	60
90	" 5:15:46"	67.2	74.8	"UNR"	70	62
91	" 5:25:46"	70.1	87.5	112.3	71	63
92	" 5:35:46"	69.1	81.6	"UNR"	71	63
93	" 5:45:46"	68.2	74.7	"UNR"	70	64
94	" 5:55:46"	69.6	81.0	"UNR"	71	65
95	" 6:05:46"	69.4	81.7	"UNR"	71	66

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96	" 6:15:46"	70.0	77.7	"UNR"	71	67
97	" 6:25:46"	70.4	77.8	"UNR"	71	68
98	" 6:35:46"	70.5	77.0	"UNR"	72	68
99	" 6:45:46"	70.0	78.3	"UNR"	71	68
100	" 6:55:46"	70.0	75.6	"UNR"	71	68
101	" 7:05:46"	69.9	82.6	"UNR"	71	68
102	" 7:15:46"	69.6	81.4	"UNR"	70	67
103	" 7:25:46"	68.2	73.0	"UNR"	70	64
104	" 7:35:46"	66.5	72.8	"UNR"	68	63
105	" 7:45:46"	66.9	73.0	"UNR"	68	64
106	" 7:55:46"	67.0	72.7	"UNR"	69	64
107	" 8:05:46"	69.6	77.5	"UNR"	71	67
108	" 8:15:46"	69.7	81.3	"UNR"	70	67
109	" 8:25:46"	69.8	77.6	"UNR"	71	67
110	" 8:35:46"	69.5	78.8	"UNR"	71	66
111	" 8:45:46"	70.0	82.6	"UNR"	71	67
112	" 8:55:46"	69.4	78.5	"UNR"	71	66
113	" 9:05:46"	69.1	74.3	"UNR"	71	66
114	" 9:15:46"	69.1	74.5	"UNR"	70	66
115	" 9:25:46"	69.1	79.2	"UNR"	70	66
116	" 9:35:46"	68.6	77.4	"UNR"	70	65
117	" 9:45:46"	68.5	77.0	"UNR"	70	65
118	" 9:55:46"	68.2	74.7	"UNR"	70	65
119	"10:05:46"	68.5	78.8	"UNR"	70	65
120	"10:15:46"	69.5	80.2	"UNR"	71	66
121	"10:25:46"	68.9	75.3	"UNR"	71	66
122	"10:35:46"	69.3	80.9	"UNR"	71	65
123	"10:45:46"	69.0	78.1	"UNR"	71	65
124	"10:55:46"	68.9	79.3	"UNR"	71	65
125	"11:05:46"	68.3	73.5	"UNR"	70	65
126	"11:15:46"	69.1	77.4	"UNR"	71	65
127	"11:25:46"	68.3	75.2	"UNR"	70	64
128	"11:35:46"	69.1	79.6	"UNR"	71	65
129	"11:45:46"	69.3	77.2	"UNR"	71	65
130	"11:55:46"	68.8	79.8	"UNR"	70	65
131	"12:05:46"	69.0	77.5	110.3	71	65
132	"12:15:46"	68.7	77.0	"UNR"	70	65
133	"12:25:46"	68.8	79.2	"UNR"	70	65
134	"12:35:46"	69.1	78.0	"UNR"	71	66
135	"12:45:46"	68.3	73.5	"UNR"	70	65
136	"12:55:46"	69.0	83.6	"UNR"	70	65
137	"13:05:46"	69.0	76.0	"UNR"	71	65
138	"13:15:46"	68.9	79.4	"UNR"	71	64
139	"13:25:46"	68.9	75.9	"UNR"	71	65
140	"13:35:46"	68.6	77.9	"UNR"	70	65
141	"13:45:46"	69.1	84.2	109.4	70	65
142	"13:55:46"	68.3	75.2	"UNR"	70	65
143	"14:05:46"	68.8	78.8	"UNR"	70	65
144	"14:15:46"	69.2	79.6	"UNR"	70	66
145	"14:25:46"	72.2	82.1	114.6	74	67

*** AMPLITUDE DISTRIBUTION REPORT ***

TOTAL SAMPLES = 1383434

dB	SAMPLES	% OF TOTAL
41	84 .	.01
42	116 .	.01
43	120 .	.01
44	213 .	.02
45	311 .	.02
46	561 .	.04
47	805 .	.06

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48	1550	+	.11
49	3239	+	.23
50	3910	+	.28
51	4855	+	.35
52	6335	+	.46
53	7781	*	.56
54	10022	*	.72
55	14554	*	1.05
56	14863	*	1.07
57	20013	*	1.45
58	22130	**	1.60
59	27242	**	1.97
60	32432	**	2.34
61	38925	***	2.81
62	48526	****	3.51
63	57435	****	4.15
64	74987	*****	5.42
65	98763	*****	7.14
66	147018	*****	10.63
67	192821	*****	13.94
68	207918	*****	15.03
69	169766	*****	12.27
70	94338	*****	6.82
71	42672	***	3.08
72	20275	*	1.47
73	8424	*	.61
74	3884	+	.28
75	2386	+	.17
76	1485	+	.11
77	937	.	.07
78	602	.	.04
79	375	.	.03
80	275	.	.02
81	194	.	.01
82	109	.	.01
83	40	.	.00
84	25	.	.00
85	15	.	.00
86	19	.	.00
87	31	.	.00
88	11	.	.00
89	12	.	.00
90	11	.	.00
91	5	.	.00
92	4	.	.00

dB	SAMPLES	% OF TOTAL
93	4	.00
94	6	.00

Ln(1.0) = 73dB
 Ln(10.0) = 70dB
 Ln(50.0) = 67dB
 Ln(90.0) = 59dB

	NO CUTOFF	80.0dB CUTOFF	90.0dB CUTOFF
Ldod	67.0dB	43.9dB	40.9dB
Losha	66.8dB	41.3dB	40.2dB
Leq(6)	66.6dB	40.6dB	40.1dB

