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FIRE PROTECTION ENGINEERS
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Project #: rpsa Test Project 3

Name: F18

Home

Location

Capitla, Fredonia

Date: 2016 01 04

Test #: 000

Measurement Location: Sim

Data Filename: 000.txt

Broadband Results, dB

L_{ZFmax} L_{AFmax} L_{AFmin} L_{Aeq}
 90.8 75.1 31.3 65.5

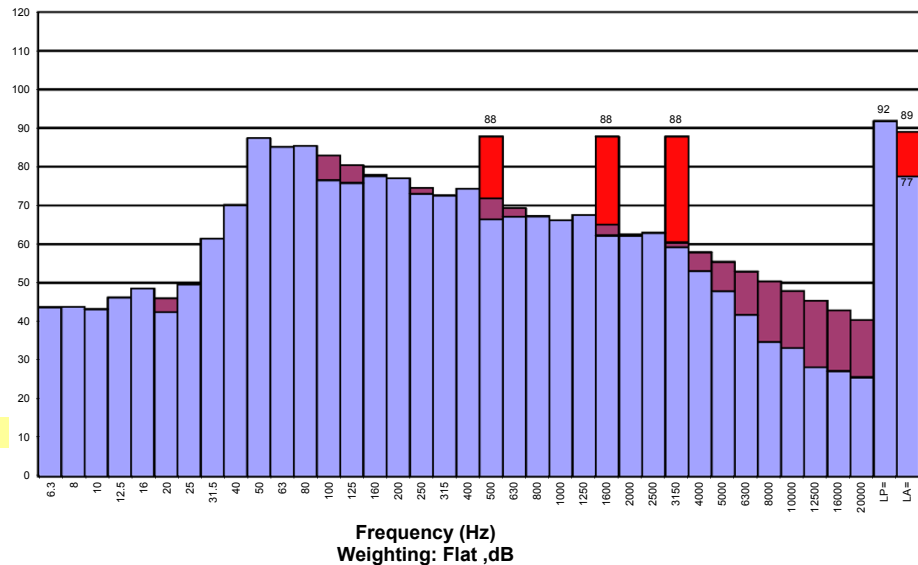
Narrowband Results, L_{ZFmax}

Freq. Hz	Noise, dB	Masked dB	Alarm dB
6.3	44	44	
8	44	44	
10	43	43	
12.5	46	46	
16	49	49	
20	42	46	
25	50	50	
31.5	61	61	
40	70	70	
50	87	87	
63	85	85	
80	85	85	
100	77	83	
125	76	80	
160	78	78	
200	77	77	
250	73	75	
315	73	73	
400	74	74	
500	66	72	88
630	67	69	
800	67	67	
1000	66	66	
1250	68	68	
1600	62	65	88
2000	62	63	
2500	63	63	
3150	59	60	88
4000	53	58	
5000	48	55	
6300	42	53	
8000	35	50	
10000	33	48	
12500	28	45	
16000	27	43	
20000	26	40	
L_p	92		

Time Weighting: Fast Slow Eq $t_c = 125$ ms
 Imp. Peak

Parameter: Max. Min. $\Delta t = 0:00:25$

1/3 Octave Band Analysis



LEGEND:
 NOISE DATA
 NOISE - EFFECTIVE MASKED THRESHOLD
 (Calculated per NFPA 72 and ISO 7731.)
 ALARM SIGNAL

L_p = the un-weighted (flat), total broadband SPL from 6.3 Hz - 20,000 Hz.
 L_A = the A-weighted, total broadband SPL from 6.3 Hz - 20,000 Hz.

For this measurement location:

Required Alarm SPL: 85 dB
 Factor of Safety: 3 dB
 Alarm Signal Design SPL: 88 dB

Notes:

Code-required Alarm Signal must be 13 dB greater than Masked Threshold in at least one 1/3 octave band. Analysis includes calculation of the 13 dB signal-to-noise ratio for each of the three recommended one-third octave bands. An additional 3 dB factor of safety is added and the results plotted. Proposed alert signal : Modification of the international telephone Special Information Tone (SIT), Vacant Code (VC) defined in ANSI T1.209 and modified as listed below.

1st Segment		2nd Segment		3rd segment	
Freq. (Hz)	Time (ms)	Freq. (Hz)	Time (ms)	Freq. (Hz)	Time (ms)
1600	380	3150	274	500	380