

# Laboratory Test Report

Date: 5-Jun-06

Test Report No. PA-30035

Page 1 of 1

## ANSI S3.19-1974 Testing – Model 30035 Earmuffs

**Performed For:** Power Aisle Inc.  
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 Huntington Station, New York 11746  
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- 1.0 **Test Articles** – Ten Model 30035 Hearing Protectors.
- 2.0 **Applicable Specifications** – ANSI S3.19-1974 (R1990), Physical Method.
- 3.0 **Test Results** – The results of the hearing protector acoustical tests and the Noise Reduction Rating (NRR) calculations are presented in Table 3.1. In accordance with 40CFR PART 211 – Product Noise Labeling, “Spectral uncertainty. Possible variation in exposure to the noise spectra in the workplace. (To avoid the under protection that would result from these variations relative to the assumed “Pink Noise” used to determine the NRR, an extra three decibel reduction is included when computing the NRR.)” The NRR rating in accordance with 40CFR211 is shown in Table 3.1.

**Table 3.1: Model 30035 Earmuff NRR Calculation Worksheet**

1/3 octave centerband frequency	Measured 1/3-octave Data			Exterior to Earmuff		A-weighted Sound Levels in Earmuff
	Sound levels exterior to Earmuff	Average Earmuff Attenuation	Standard Deviation of Attenuation	C-weighted Sound Levels	A-weighted Sound Levels	
125	85.3	0.6	1.3	85.1	69.2	69.9
160	84.4	2.8	1.6	84.3	71.0	69.8
200	81.2	10.8	2.0	81.2	70.3	61.5
250	84.3	23.3	2.7	84.3	75.7	55.1
315	88.9	28.6	3.4	88.9	82.3	57.1
400	92.6	31.0	4.7	92.6	87.8	61.5
500	93.7	25.5	4.9	93.7	90.5	69.8
630	92.8	23.1	2.8	92.8	90.9	70.6
800	93.9	29.5	5.2	93.9	93.1	68.8
1000	94.6	32.5	7.4	94.6	94.6	69.4
1250	92.8	37.9	4.8	92.8	93.4	60.3
1600	100.5	42.8	4.2	100.4	101.5	62.9
2000	105.9	45.6	4.7	105.7	107.1	66.2
2500	105.9	44.9	6.5	105.6	107.2	68.8
3150	101.6	40.8	7.7	101.1	102.8	69.7
4000	94.4	37.3	4.3	93.6	95.4	62.4
5000	90.7	36.1	6.2	89.4	91.2	61.3
6300	75.6	40.7	6.8	73.6	75.5	41.6
8000	72.7	43.2	4.4	69.7	71.6	32.8

**Overall C Weighted Level =** 110.6  
**Overall A Weighted Level =** 79.4  
**Ear Muff NRR Value =** 31  
**OSHA Adjusted NRR =** 28

**Table 3.2: 30035 Ear Muff Mean Attenuation Levels**

Frequency	125	250	500	1000	2000	3150	4000	6300	8000
Mean Attenuation	2	19	25	32	45	43	40	36	41
Standard Deviation	1.3	2.7	4.9	7.4	4.7	7.7	4.3	6.8	4.4