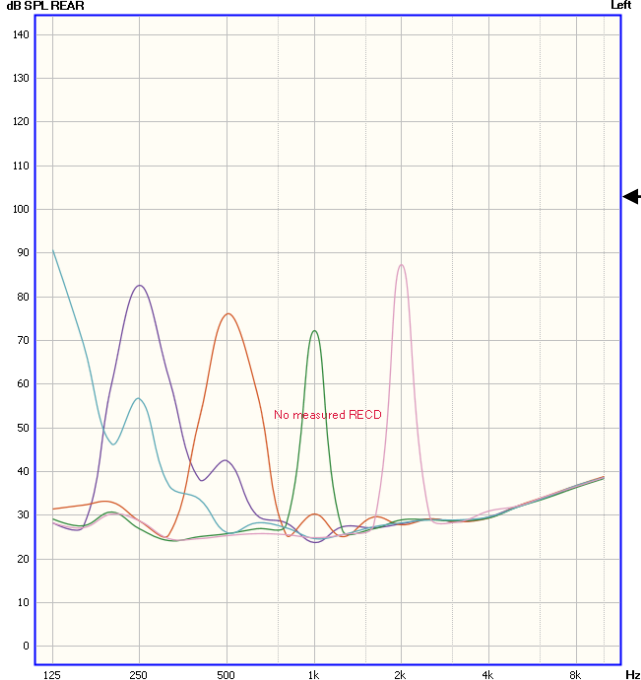


Supplemental Digital Content 2 - Figure

Real Ear Measurement of Low Frequency Stimuli Loss with Plastic Dome vs. Foam Tip

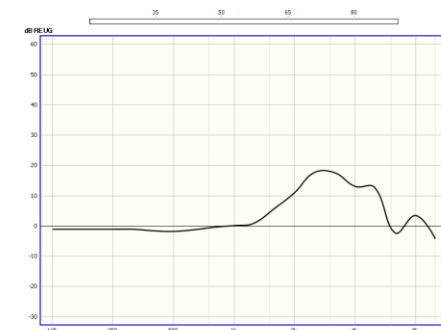
← REM of AIM device w Foam insert set to 80 dB HL



	Freq	Measured	HL Eq*	Dial Diff
Blue:	125 Hz:	90 dB SPL	= 66 dB HL	= -14 dB
Purple:	250 Hz:	82 dB SPL	= 68 dB HL	= -12 dB
Orange:	500 Hz:	76 dB SPL	= 70.5 dB HL	= -9.5 dB
Green:	1 kHz:	72 dB SPL	= 72 dB HL	= -8 dB
Pink:	2 kHz:	87 dB SPL	= 84 dB HL	= +4 dB

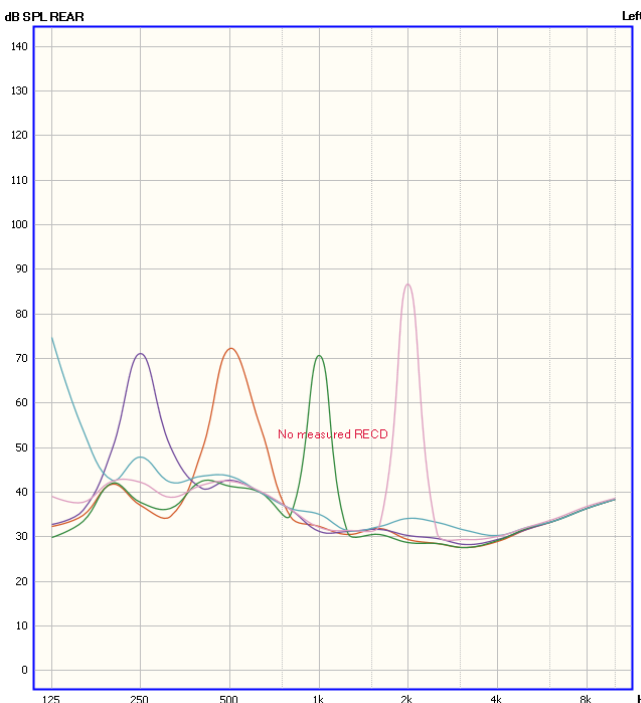
Testbox 2CC coupler measurement of AIM device w Dome Insert set to 80 dB HL (**90 dB HL for 1 kHz) – foam insert was identical in coupler

	Freq	Measured	HL Eq*	Dial Diff
	125 Hz:	90 dB SPL	= 66 dB HL	= -14 dB
	250 Hz:	81 dB SPL	= 67 dB HL	= -13 dB
	500 Hz:	73 dB SPL	= 67.5 dB HL	= -13.5 dB
	1 kHz:	83** dB SPL	= 83 dB HL	= -7 dB
	2 kHz:	75 dB SPL	= 72 dB HL	= -8 dB



Unoccluded Unaided REM

← REM of AIM device w Dome insert set to 80 dB HL



	Freq	Measured	HL Eq*	Dial Diff
Blue:	125 Hz:	75 dB SPL	= 49 dB HL	= -31 dB
Purple:	250 Hz:	71 dB SPL	= 57 dB HL	= -23 dB
Orange:	500 Hz:	72 dB SPL	= 66.5 dB HL	= -13.5 dB
Green:	1 kHz:	71 dB SPL	= 71 dB HL	= -9 dB
Pink:	2 kHz:	86 dB SPL	= 83 dB HL	= +3 dB

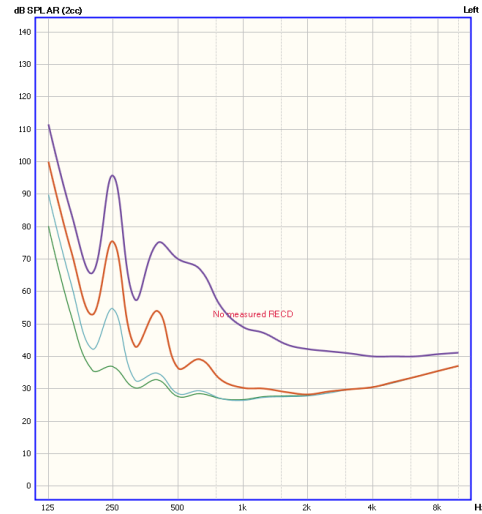
*Converted from SPL to HL using ANSI 3.6 1996 RETSPL values for Inserts

Supplemental Digital Content 2 - Figure

2cc coupler measurements using plastic dome & AIM tablet – Harmonic distortion

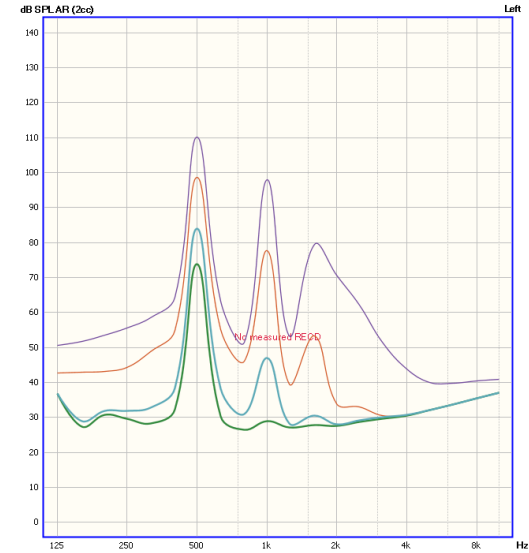
125 Hz

125 Hz stim levels
Purple: 100 dB HL
Orange: 90 dB HL
Blue: 80 dB HL
Green: 70 dB HL



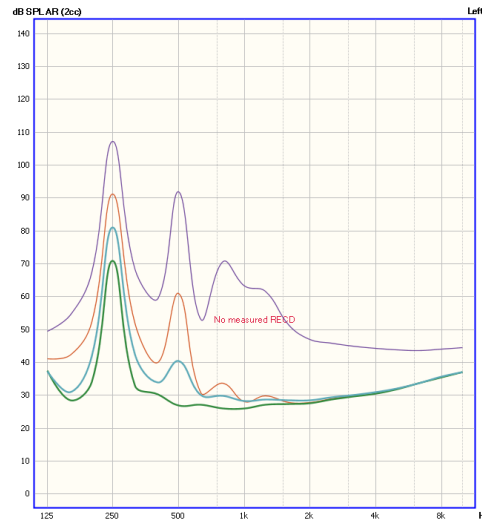
500 Hz

500 Hz stim levels
Purple: 115 dB HL
Orange: 105 dB HL
Blue: 95 dB HL
Green: 80 dB HL



250 Hz

250 Hz stim levels
Purple: 105 dB HL
Orange: 90 dB HL
Blue: 80 dB HL
Green: 70 dB HL



2 kHz

2 kHz stim levels
Purple: 110 dB HL
Orange: 105 dB HL
Blue: 95 dB HL
Green: 80 dB HL

