

AFMG Reflex Report



Creation date: 26/08/2012
AFMG Reflex Version: 1.0.6

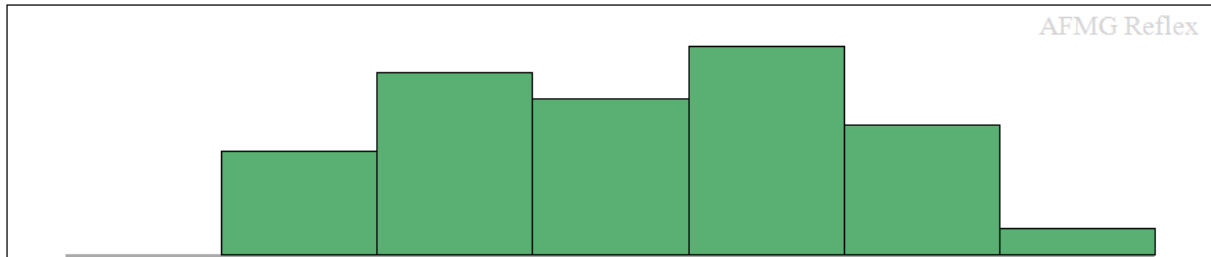
1. Models

1.1 New Model7

1.1.1 Description

Optimized Stepped Diffuser Module B2-LF

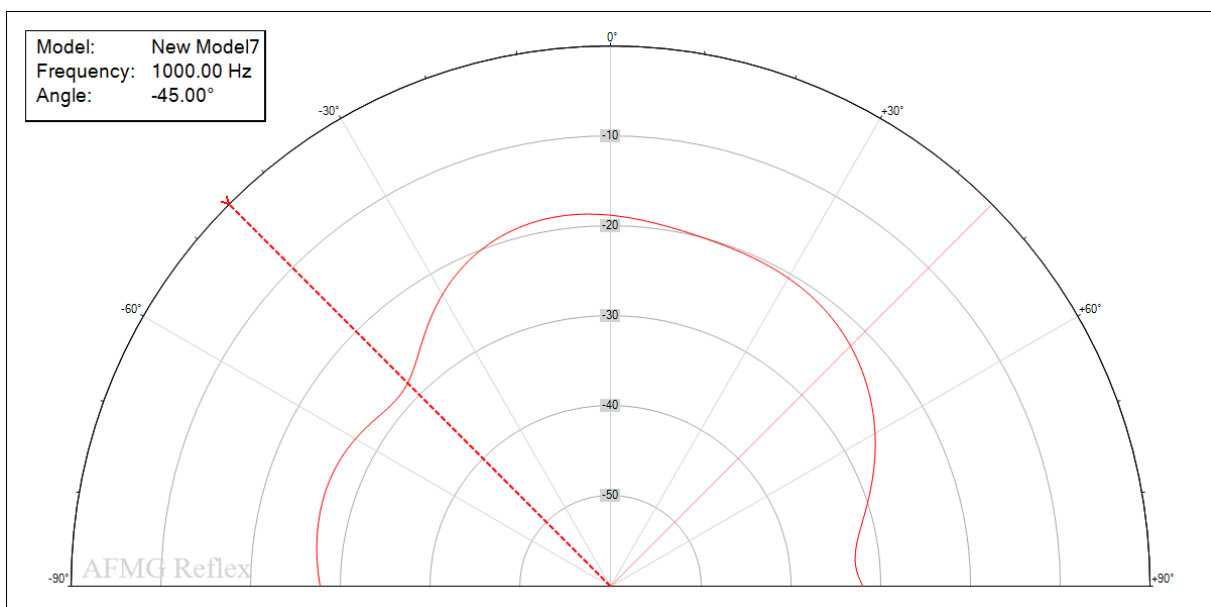
1.1.2 Model Outline



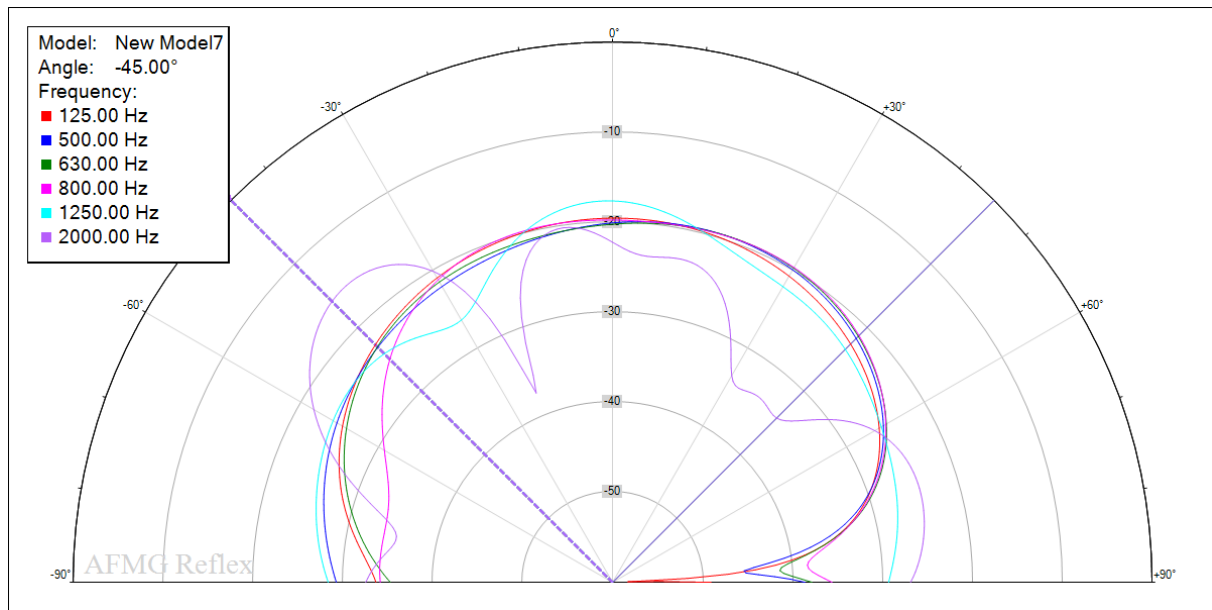
Model Outline

Element no.	Type	Width[cm]	Depth Base[cm]	Depth Top[cm]
1	Rectangle	6.0	0.0	0.0
2	Rectangle	6.0	4.0	0.0
3	Rectangle	6.0	7.0	0.0
4	Rectangle	6.0	6.0	0.0
5	Rectangle	6.0	8.0	0.0
6	Rectangle	6.0	5.0	0.0
7	Rectangle	6.0	1.0	0.0

1.1.3 Spatial Response Plots



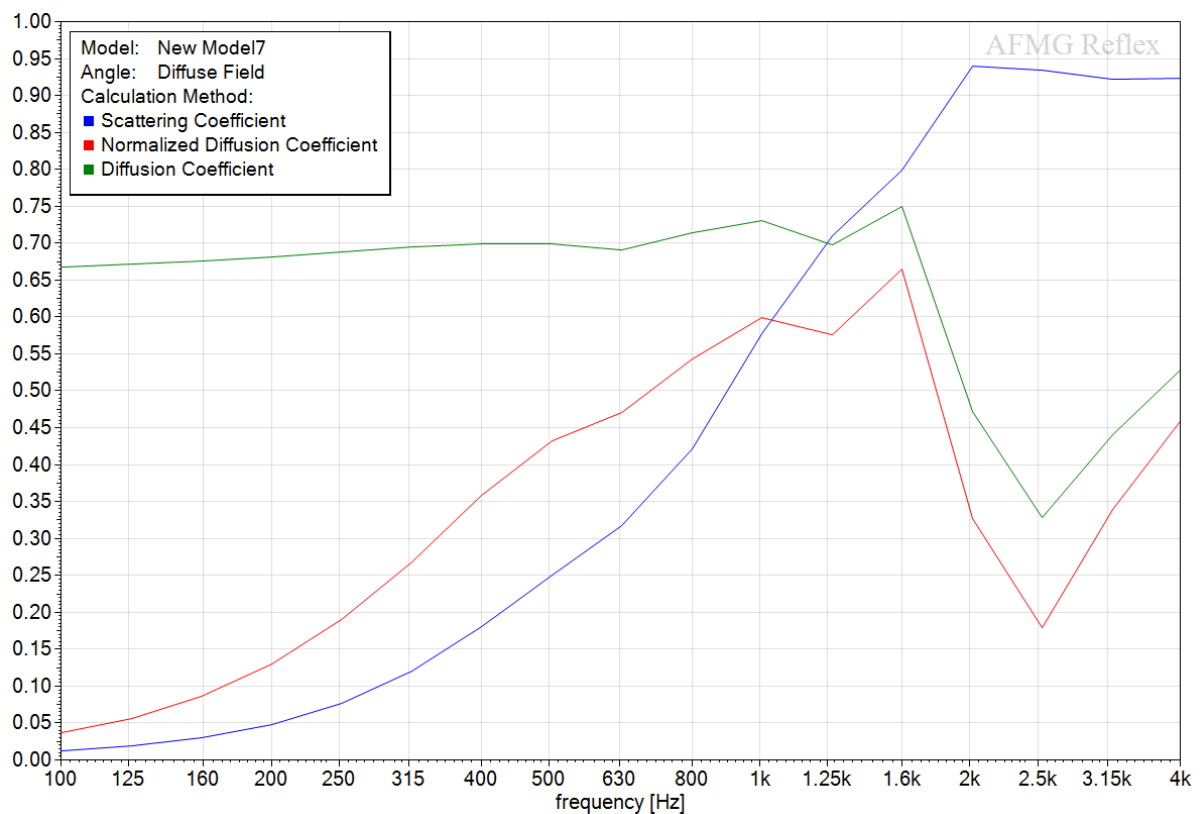
Spatial Response



Spatial Response

1.1.4 Coefficients Plots

Angle: Random Incidence, Frequency Range: [100 Hz, 4000 Hz]

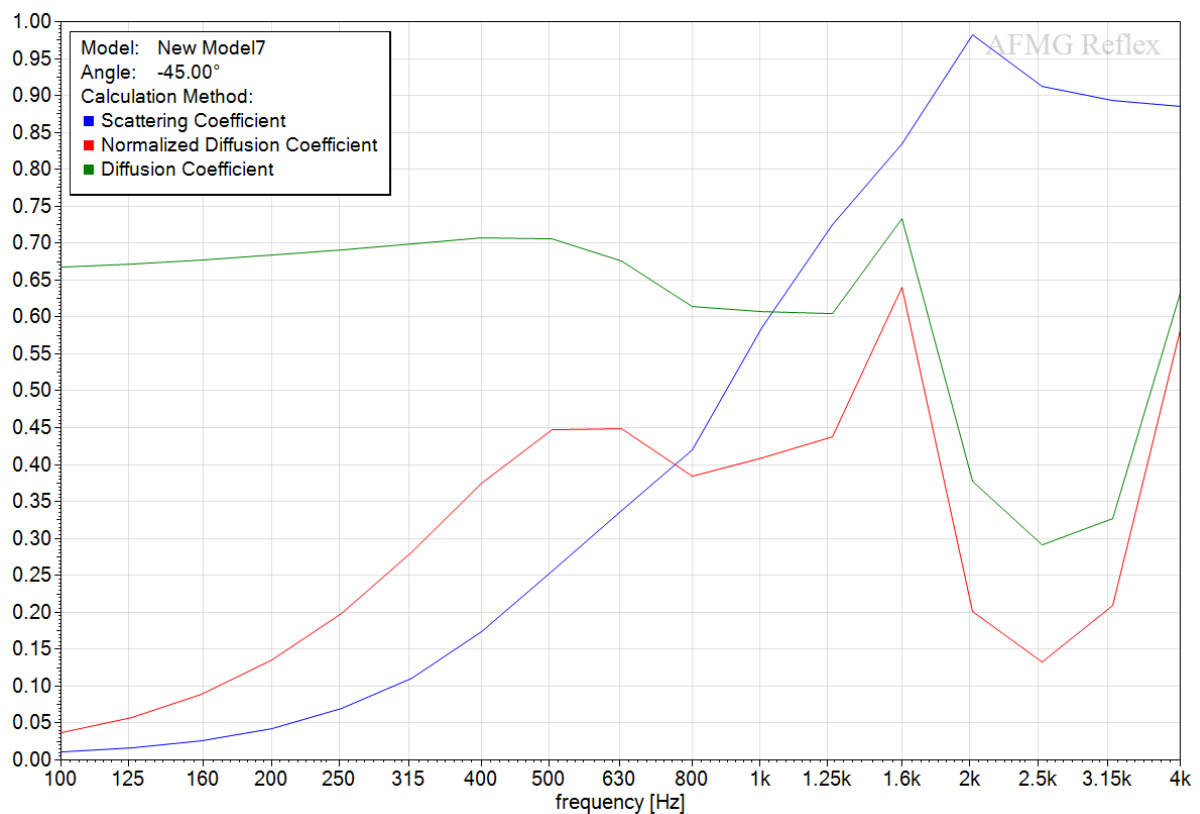


Coefficients

Frequency [Hz]	Scattering Coefficient	Normalized Diffusion Coefficient	Diffusion Coefficient
100	0.012	0.036	0.668
125	0.019	0.056	0.671
160	0.030	0.087	0.676

200	0.048	0.130	0.682
250	0.076	0.190	0.688
315	0.120	0.269	0.694
400	0.181	0.358	0.700
500	0.250	0.432	0.699
630	0.317	0.471	0.691
800	0.421	0.543	0.714
1000	0.577	0.599	0.731
1250	0.709	0.575	0.698
1600	0.799	0.665	0.749
2000	0.940	0.328	0.472
2500	0.934	0.179	0.329
3150	0.923	0.339	0.440
4000	0.923	0.463	0.531

Angle: -45°, Frequency Range: [100 Hz, 4000 Hz]



Coefficients

Frequency [Hz]	Scattering Coefficient	Normalized Diffusion Coefficient	Diffusion Coefficient
100	0.011	0.037	0.668
125	0.017	0.058	0.672
160	0.026	0.089	0.677
200	0.043	0.135	0.684

250	0.069	0.199	0.691
315	0.111	0.281	0.700
400	0.174	0.375	0.707
500	0.256	0.448	0.706
630	0.338	0.448	0.675
800	0.420	0.384	0.614
1000	0.586	0.409	0.607
1250	0.725	0.438	0.605
1600	0.834	0.641	0.733
2000	0.982	0.202	0.378
2500	0.912	0.133	0.291
3150	0.894	0.210	0.327
4000	0.885	0.594	0.642