AFMG Reflex Report

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

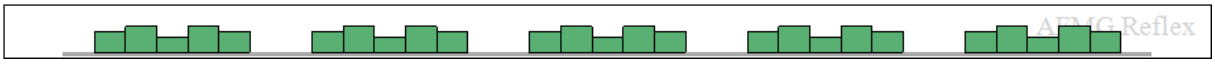
1. Models

1.1 New Model1

1.1.1 Description

Optimized Stepped Diffuser A1-LF (array of 5 modules)

1.1.2 Model Outline

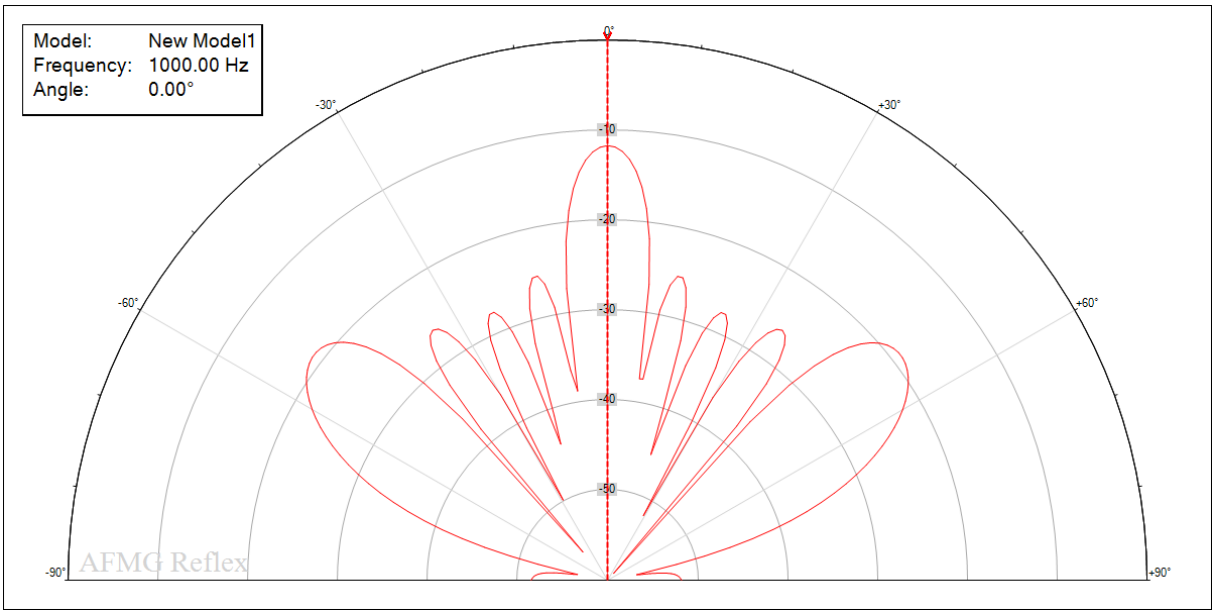


Model Outline

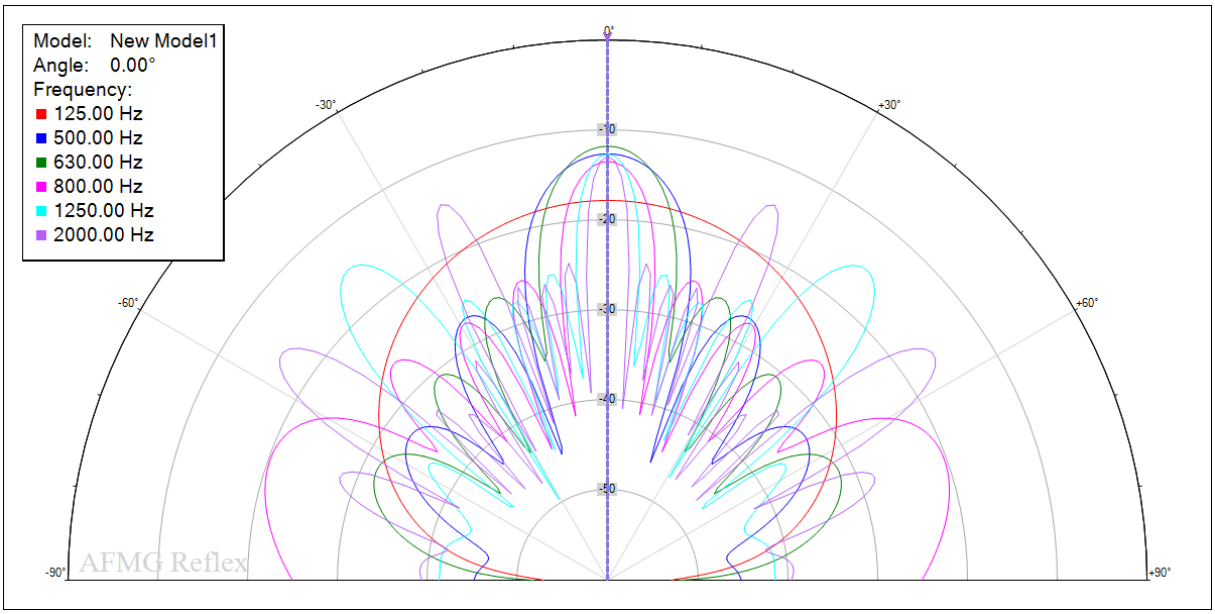
Element no.	Type	Width[cm]	Depth Base[cm]	Depth Top[cm]
1	Rectangle	6.0	0.0	0.0
2	Rectangle	6.0	4.0	0.0
3	Rectangle	6.0	5.0	0.0
4	Rectangle	6.0	3.0	0.0
5	Rectangle	6.0	5.0	0.0
6	Rectangle	6.0	4.0	0.0
7	Rectangle	6.0	0.0	0.0
8	Rectangle	6.0	0.0	0.0
9	Rectangle	6.0	4.0	0.0
10	Rectangle	6.0	5.0	0.0
11	Rectangle	6.0	3.0	0.0
12	Rectangle	6.0	5.0	0.0
13	Rectangle	6.0	4.0	0.0
14	Rectangle	6.0	0.0	0.0
15	Rectangle	6.0	0.0	0.0
16	Rectangle	6.0	4.0	0.0
17	Rectangle	6.0	5.0	0.0
18	Rectangle	6.0	3.0	0.0
19	Rectangle	6.0	5.0	0.0
20	Rectangle	6.0	4.0	0.0
21	Rectangle	6.0	0.0	0.0
22	Rectangle	6.0	0.0	0.0
23	Rectangle	6.0	4.0	0.0
24	Rectangle	6.0	5.0	0.0
25	Rectangle	6.0	3.0	0.0
26	Rectangle	6.0	5.0	0.0
27	Rectangle	6.0	4.0	0.0
28	Rectangle	6.0	0.0	0.0

29	**Rectangle**	**6.0**	**0.0**	**0.0**
30	**Rectangle**	**6.0**	**4.0**	**0.0**
31	**Rectangle**	**6.0**	**5.0**	**0.0**
32	**Rectangle**	**6.0**	**3.0**	**0.0**
33	**Rectangle**	**6.0**	**5.0**	**0.0**
34	**Rectangle**	**6.0**	**4.0**	**0.0**
35	**Rectangle**	**6.0**	**0.0**	**0.0**

1.1.3 Spatial Response Plots



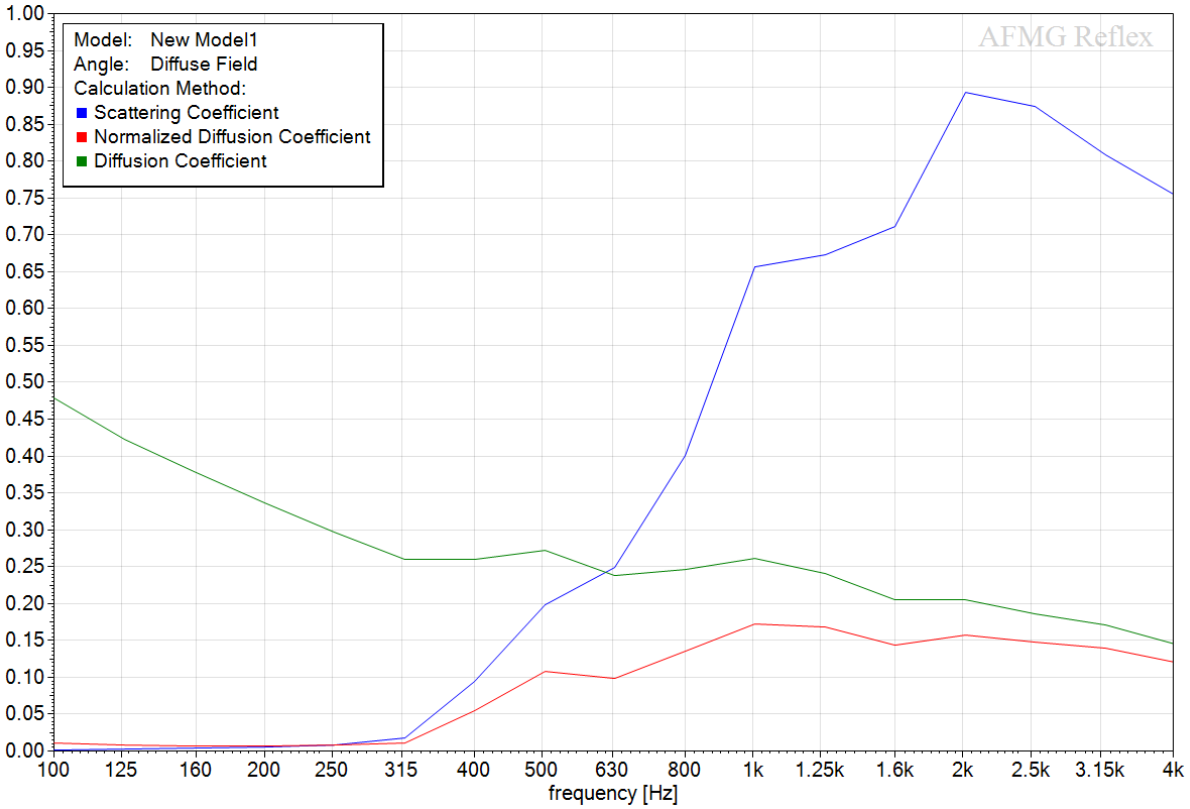
Spatial Response



Spatial Response

1.1.4 Coefficients Plots

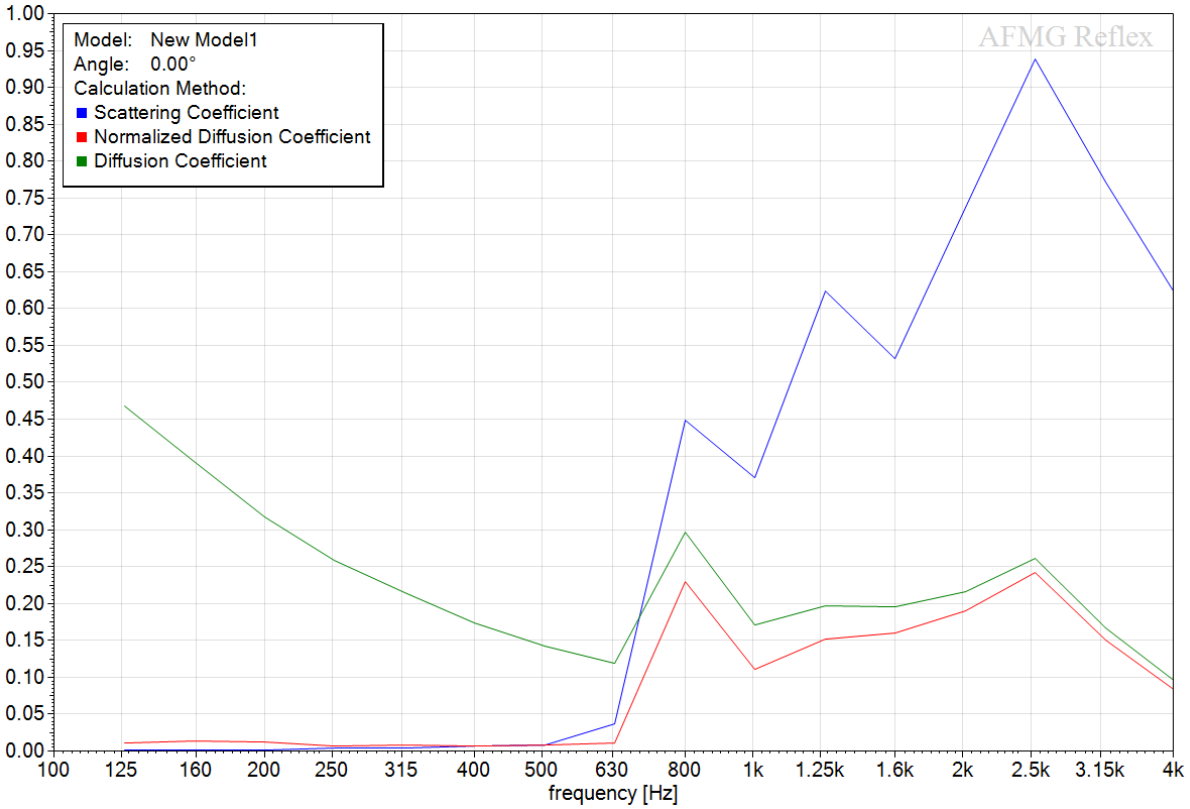
Angle: Random Incidence, Frequency Range: [100 Hz, 4000 Hz]



Coefficients

Frequency [Hz]	Scattering Coefficient	Normalized Diffusion Coefficient	Diffusion Coefficient
100	0.001	0.011	0.478
125	0.003	0.008	0.422
160	0.004	0.007	0.379
200	0.005	0.007	0.336
250	0.008	0.008	0.296
315	0.018	0.010	0.260
400	0.095	0.055	0.259
500	0.198	0.109	0.272
630	0.250	0.099	0.238
800	0.401	0.136	0.247
1000	0.657	0.173	0.261
1250	0.673	0.168	0.241
1600	0.712	0.144	0.205
2000	0.894	0.158	0.206
2500	0.874	0.148	0.187
3150	0.808	0.140	0.170
4000	0.753	0.121	0.145

Angle: 0°, Frequency Range: [100 Hz, 4000 Hz]



Coefficients

Frequency [Hz]	Scattering Coefficient	Normalized Diffusion Coefficient	Diffusion Coefficient
125	0.001	0.011	0.468
160	0.001	0.013	0.392
200	0.002	0.012	0.318
250	0.004	0.007	0.259
315	0.003	0.008	0.215
400	0.007	0.007	0.174
500	0.009	0.008	0.142
630	0.037	0.012	0.119
800	0.449	0.230	0.296
1000	0.370	0.110	0.171
1250	0.623	0.152	0.197
1600	0.532	0.160	0.195
2000	0.738	0.190	0.217
2500	0.938	0.243	0.261
3150	0.771	0.151	0.167
4000	0.620	0.082	0.094