

# AFMG Reflex Report



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

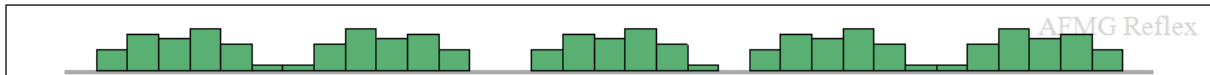
# 1. Models

## 1.1 New Model6

### 1.1.1 Description

Optimized Stepped Diffuser B2-LF (array of 5 modules)

### 1.1.2 Model Outline

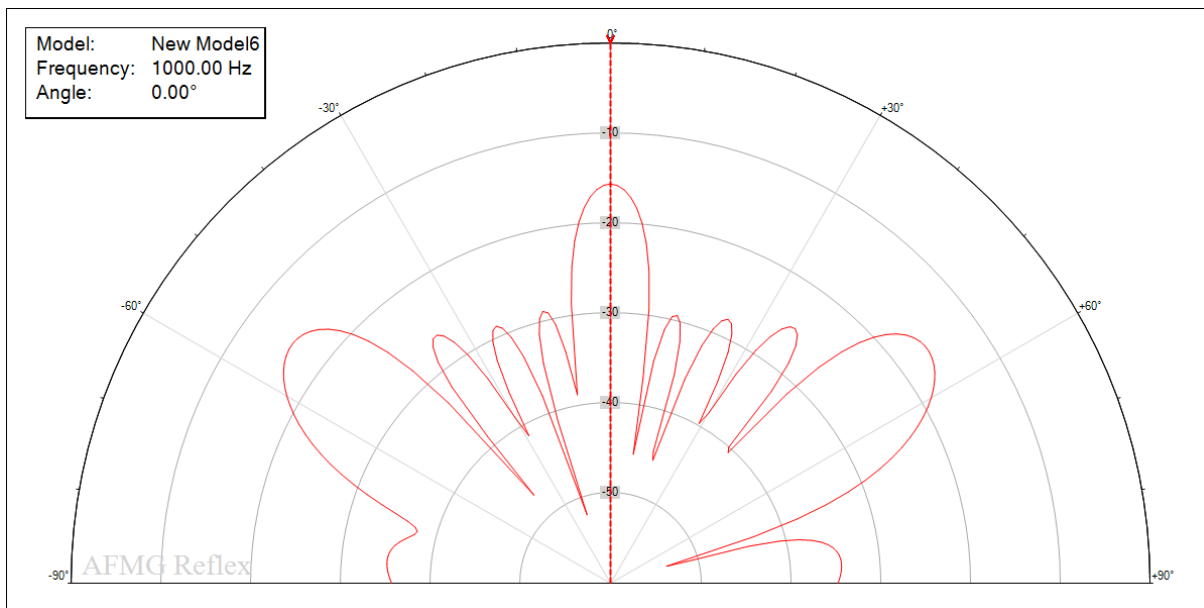


Model Outline

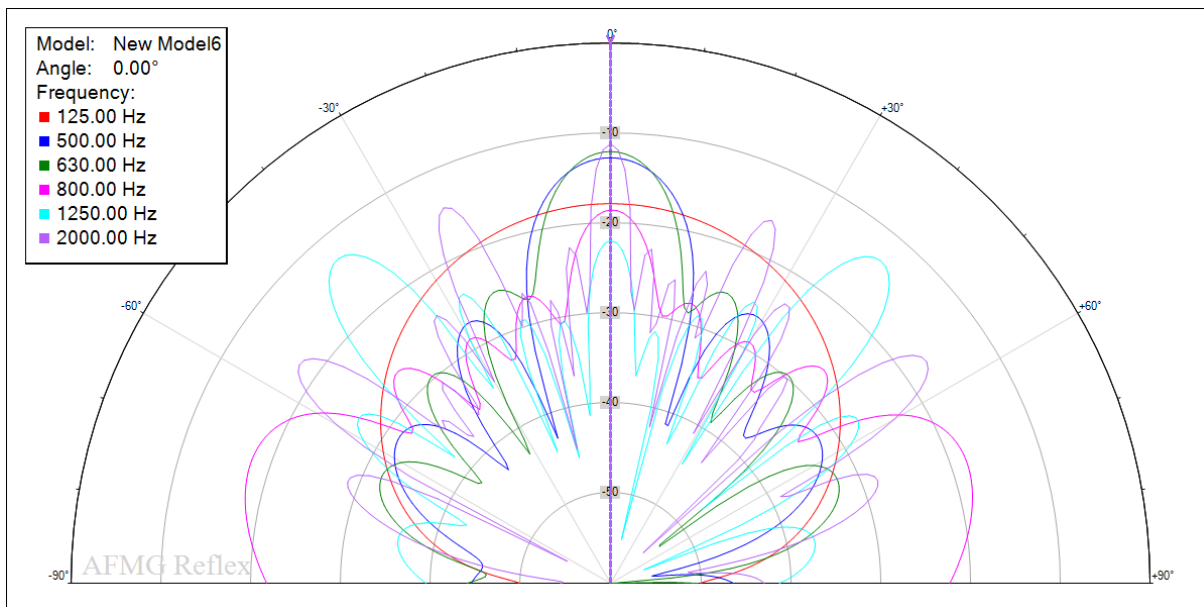
Element no.	Type	Width[cm]	Depth Base[cm]	Depth Top[cm]
1	Rectangle	6.0	0.0	0.0
2	Rectangle	6.0	4.0	0.0
3	Rectangle	6.0	7.0	0.0
4	Rectangle	6.0	6.0	0.0
5	Rectangle	6.0	8.0	0.0
6	Rectangle	6.0	5.0	0.0
7	Rectangle	6.0	1.0	0.0
8	Rectangle	6.0	1.0	0.0
9	Rectangle	6.0	5.0	0.0
10	Rectangle	6.0	8.0	0.0
11	Rectangle	6.0	6.0	0.0
12	Rectangle	6.0	7.0	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	7.0	0.0
18	Rectangle	6.0	6.0	0.0
19	Rectangle	6.0	8.0	0.0
20	Rectangle	6.0	5.0	0.0
21	Rectangle	6.0	1.0	0.0
22	Rectangle	6.0	0.0	0.0
23	Rectangle	6.0	4.0	0.0
24	Rectangle	6.0	7.0	0.0
25	Rectangle	6.0	6.0	0.0
26	Rectangle	6.0	8.0	0.0
27	Rectangle	6.0	5.0	0.0

28	Rectangle	6.0	1.0	0.0
29	Rectangle	6.0	1.0	0.0
30	Rectangle	6.0	5.0	0.0
31	Rectangle	6.0	8.0	0.0
32	Rectangle	6.0	6.0	0.0
33	Rectangle	6.0	7.0	0.0
34	Rectangle	6.0	4.0	0.0
35	Rectangle	6.0	0.0	0.0

### 1.1.3 Spatial Response Plots



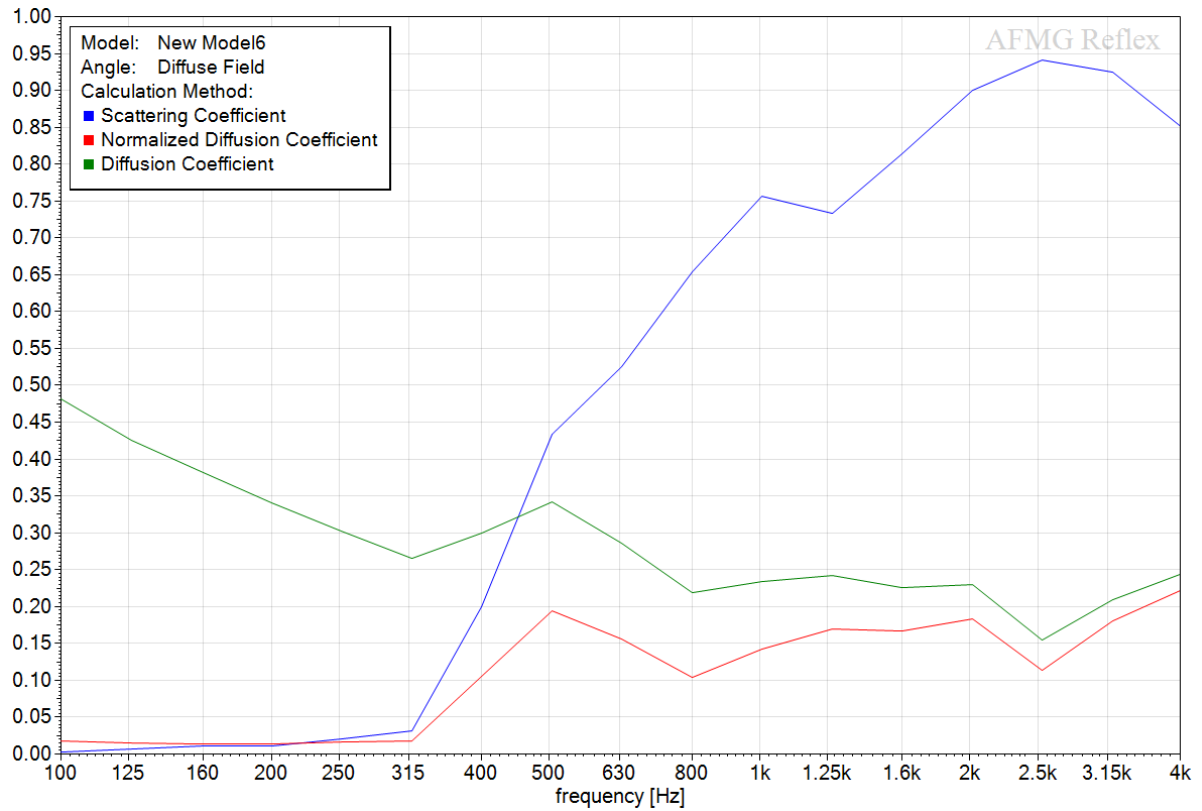
Spatial Response



Spatial Response

### 1.1.4 Coefficients Plots

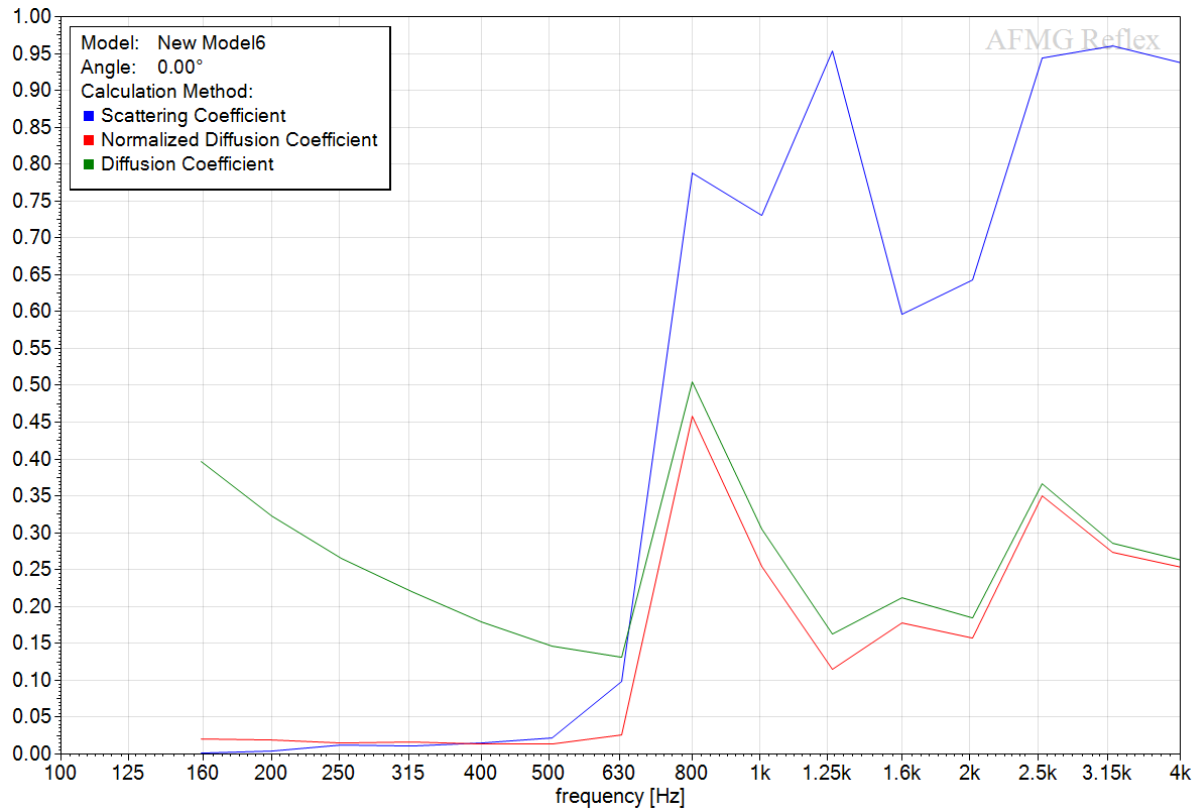
**Angle: Random Incidence, Frequency Range: [100 Hz, 4000 Hz]**



**Coefficients**

Frequency [Hz]	Scattering Coefficient	Normalized Diffusion Coefficient	Diffusion Coefficient
100	0.002	0.017	0.481
125	0.006	0.014	0.426
160	0.011	0.014	0.383
200	0.012	0.014	0.340
250	0.021	0.016	0.302
315	0.031	0.017	0.265
400	0.199	0.106	0.299
500	0.433	0.194	0.342
630	0.525	0.156	0.286
800	0.654	0.103	0.219
1000	0.757	0.142	0.233
1250	0.733	0.169	0.242
1600	0.814	0.167	0.226
2000	0.901	0.183	0.230
2500	0.942	0.114	0.154
3150	0.925	0.180	0.210
4000	0.850	0.223	0.245

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



**Coefficients**

Frequency [Hz]	Scattering Coefficient	Normalized Diffusion Coefficient	Diffusion Coefficient
160	0.002	0.021	0.397
200	0.004	0.019	0.323
250	0.012	0.015	0.265
315	0.011	0.016	0.221
400	0.016	0.013	0.179
500	0.022	0.013	0.147
630	0.099	0.025	0.131
800	0.787	0.458	0.504
1000	0.731	0.255	0.305
1250	0.954	0.115	0.162
1600	0.597	0.178	0.212
2000	0.642	0.157	0.184
2500	0.943	0.350	0.366
3150	0.961	0.273	0.287
4000	0.937	0.253	0.263