

# AFMG Reflex Report



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

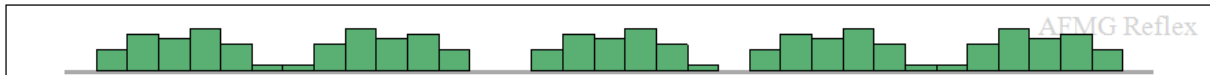
# 1. Models

## 1.1 New Model6

### 1.1.1 Description

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

### 1.1.2 Model Outline

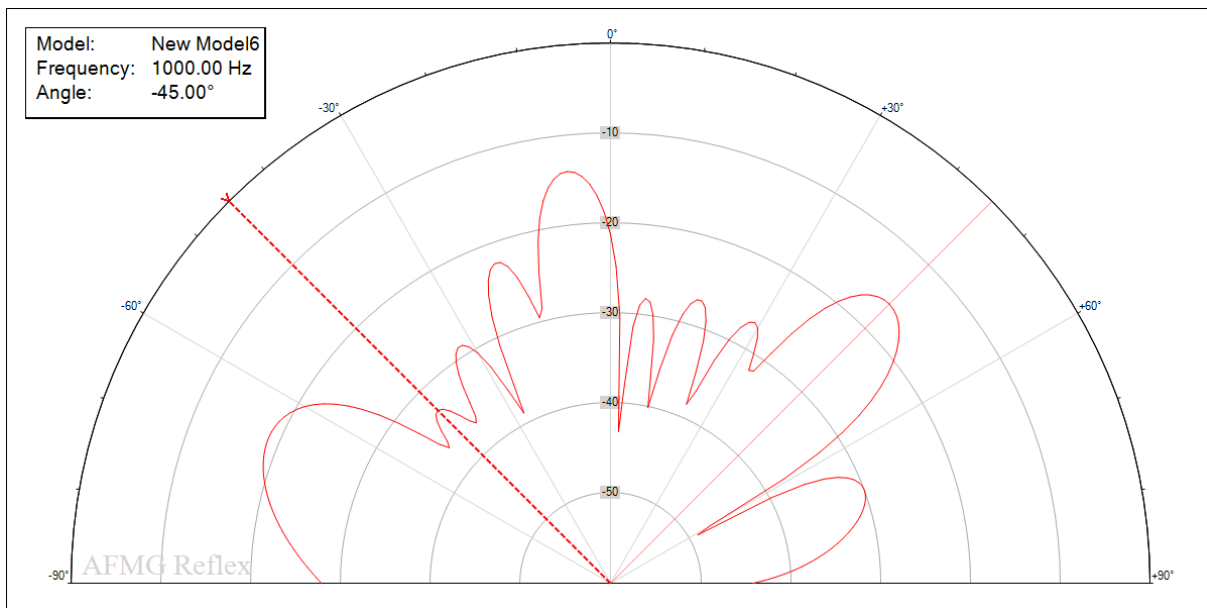


Model Outline

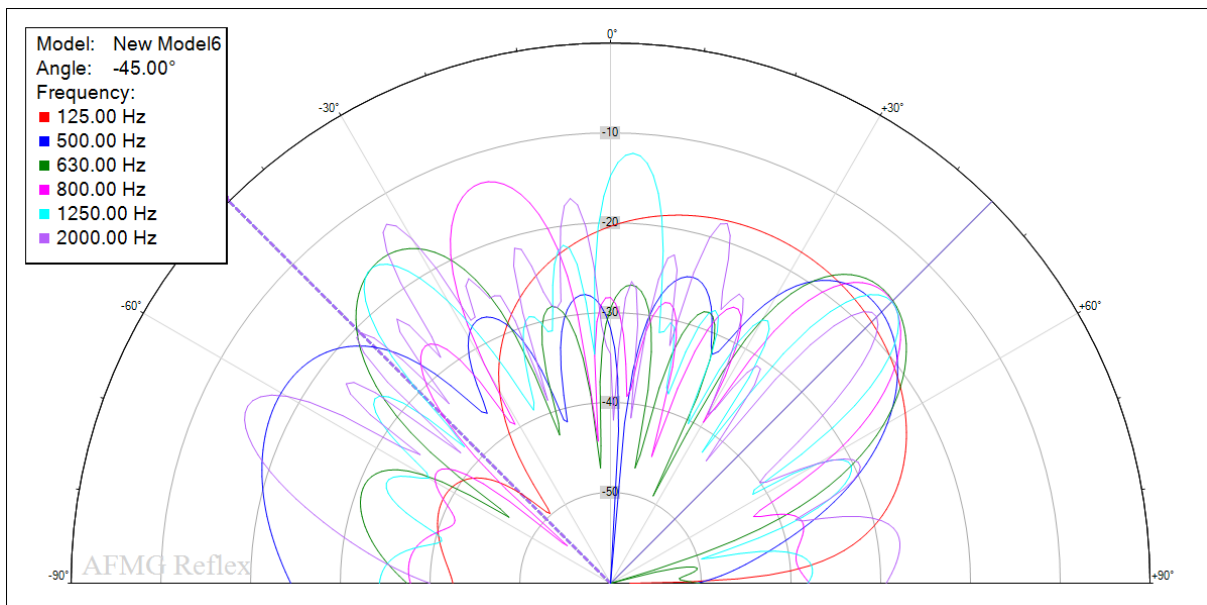
Element no.	Type	Width[cm]	Depth Base[cm]	Depth Top[cm]
1	Rectangle	6.0	0.0	0.0
2	Rectangle	6.0	4.0	0.0
3	Rectangle	6.0	7.0	0.0
4	Rectangle	6.0	6.0	0.0
5	Rectangle	6.0	8.0	0.0
6	Rectangle	6.0	5.0	0.0
7	Rectangle	6.0	1.0	0.0
8	Rectangle	6.0	1.0	0.0
9	Rectangle	6.0	5.0	0.0
10	Rectangle	6.0	8.0	0.0
11	Rectangle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



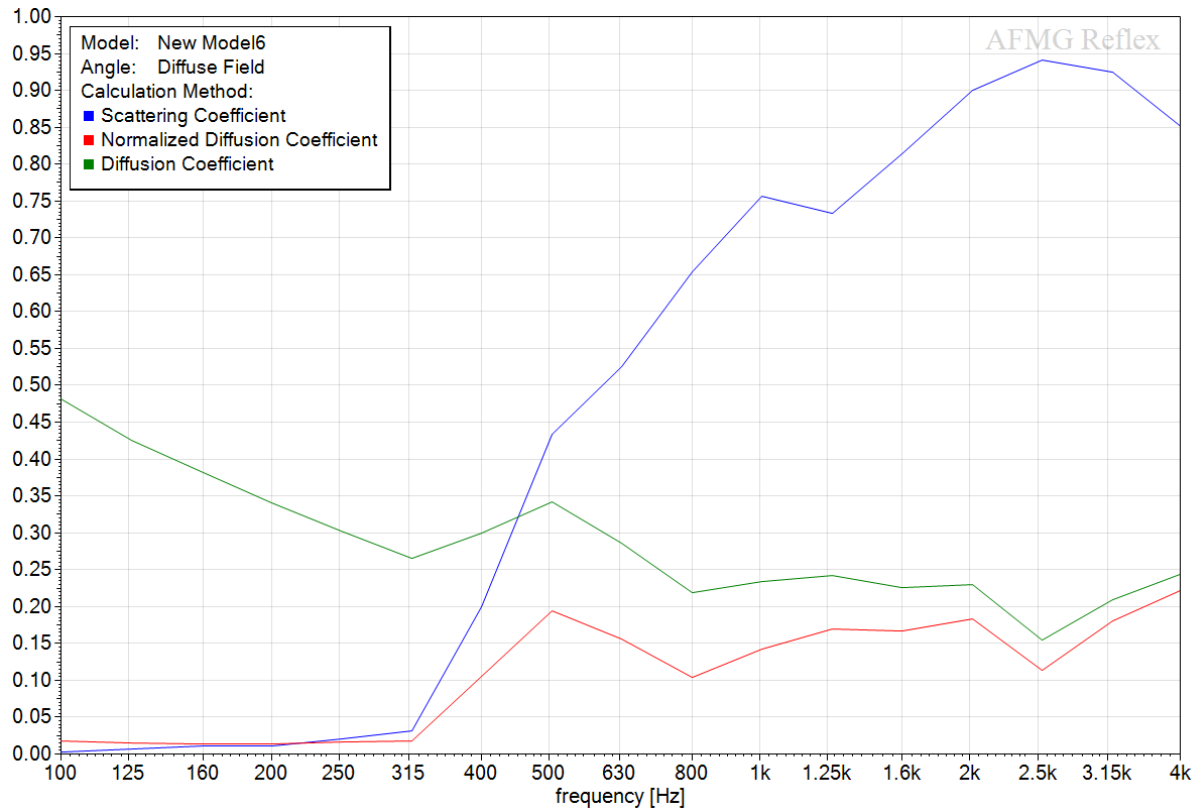
Spatial Response



Spatial Response

### 1.1.4 Coefficients Plots

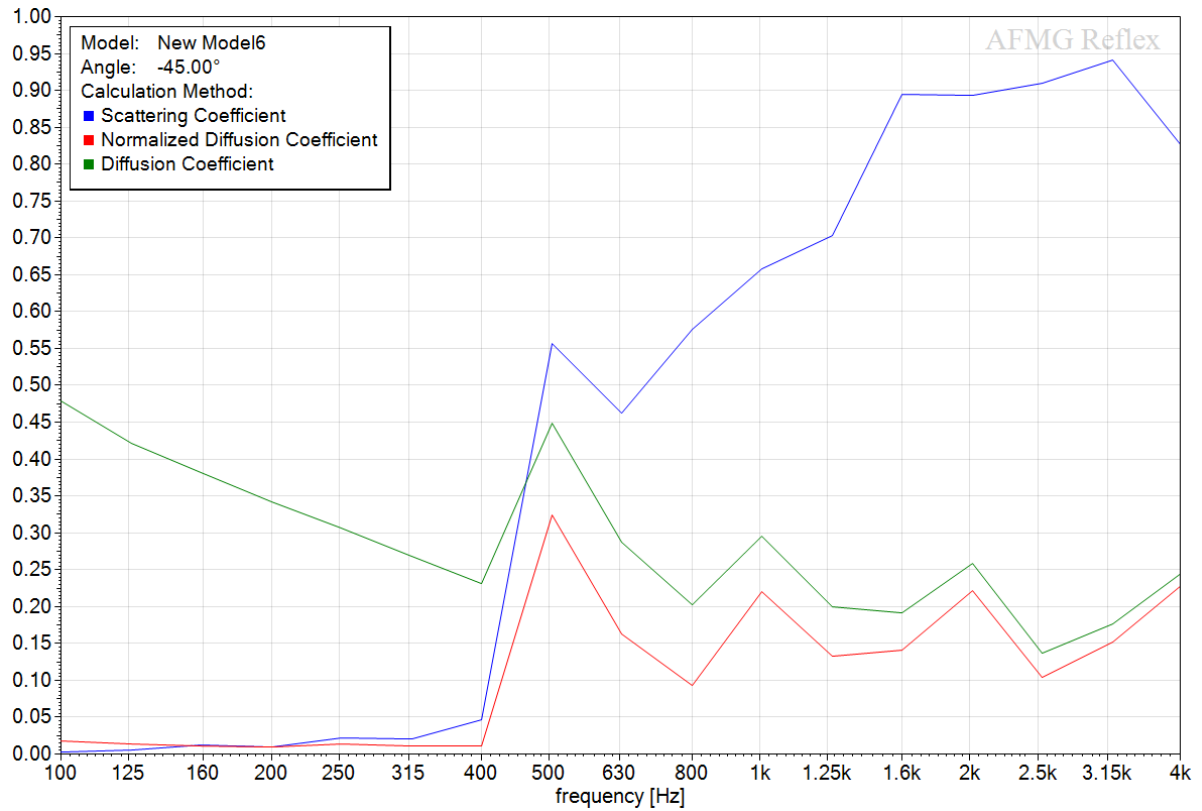
**Angle: Random Incidence, Frequency Range: [100 Hz, 4000 Hz]**



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



**Coefficients**

Frequency [Hz]	Scattering Coefficient	Normalized Diffusion Coefficient	Diffusion Coefficient
100	0.002	0.018	0.479
125	0.005	0.014	0.421
160	0.013	0.011	0.381
200	0.009	0.010	0.342
250	0.023	0.013	0.307
315	0.020	0.011	0.268
400	0.047	0.012	0.231
500	0.557	0.324	0.448
630	0.463	0.163	0.287
800	0.576	0.093	0.202
1000	0.658	0.220	0.295
1250	0.704	0.133	0.200
1600	0.894	0.140	0.192
2000	0.893	0.221	0.258
2500	0.909	0.104	0.137
3150	0.941	0.152	0.176
4000	0.824	0.229	0.246