

AFMG Reflex Report



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

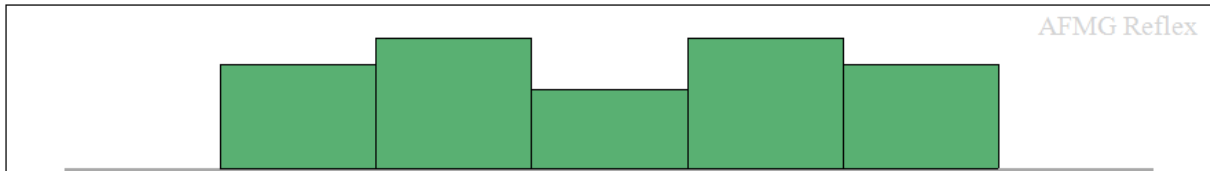
1. Models

1.1 New Model1

1.1.1 Description

Diffuser Module A1-LF

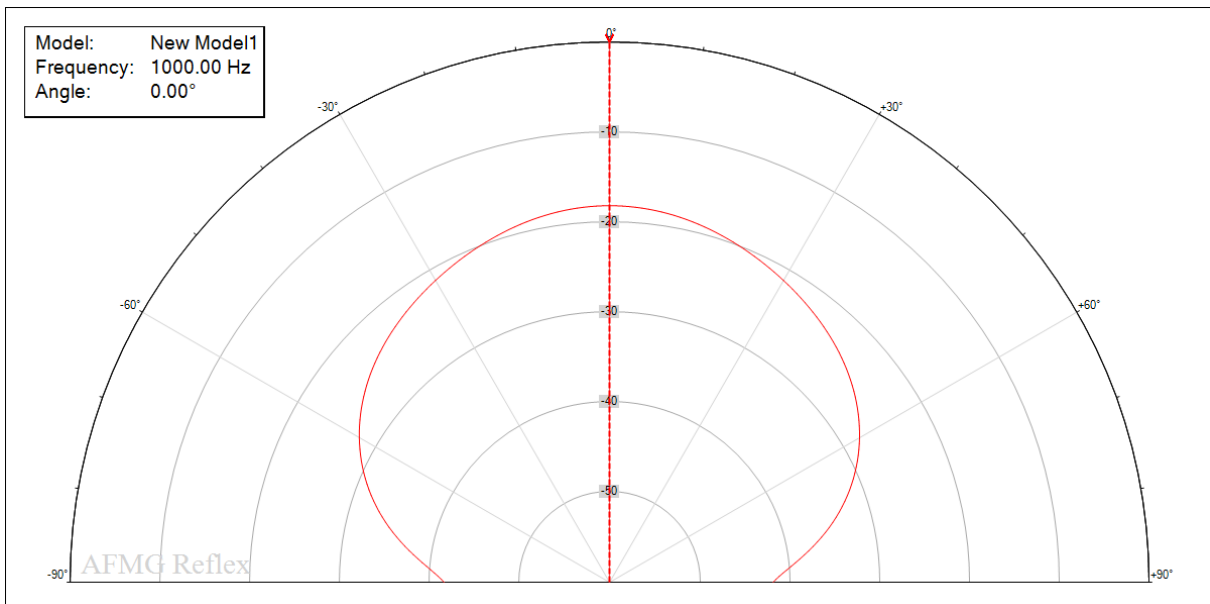
1.1.2 Model Outline



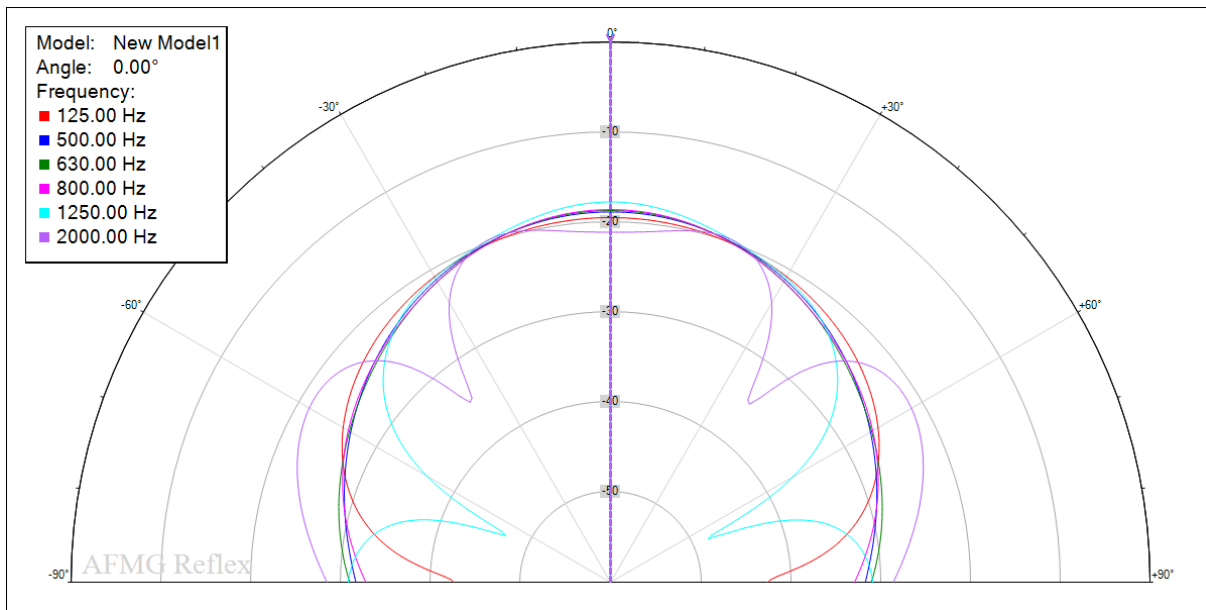
Model Outline

| 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 | 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 |

1.1.3 Spatial Response Plots



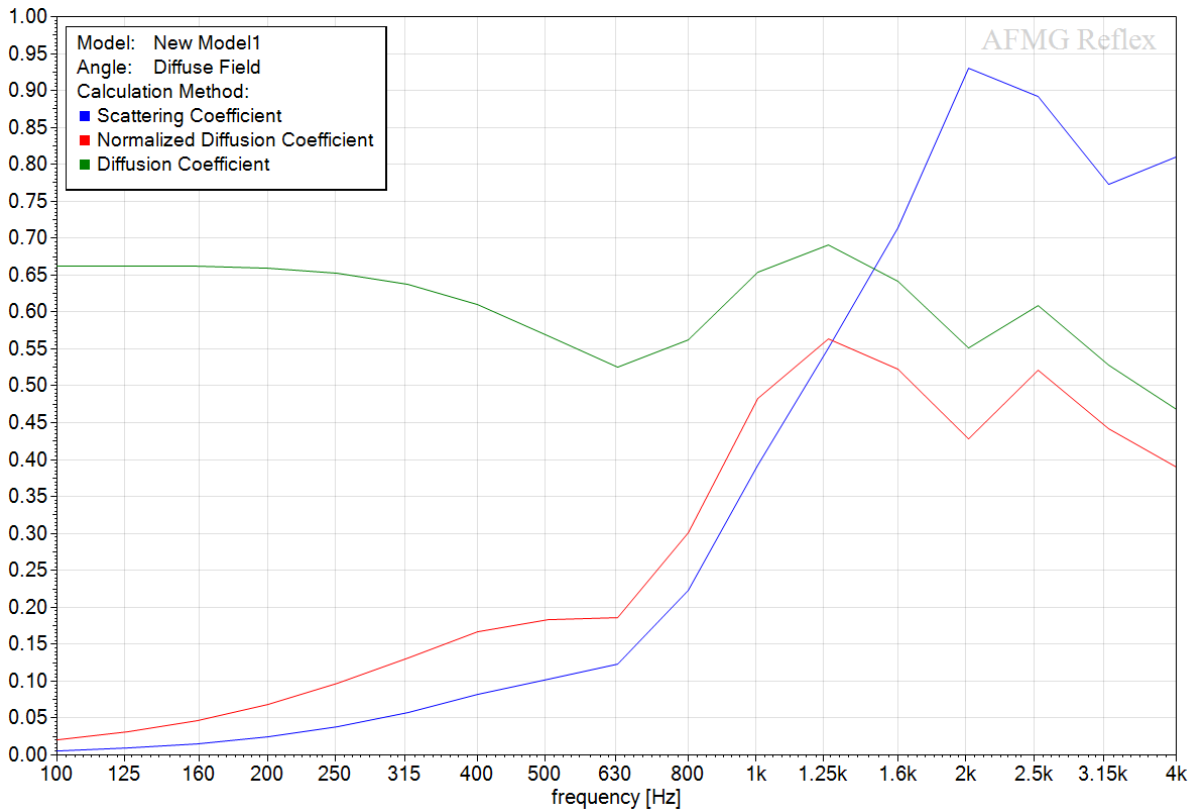
Spatial Response



Spatial Response

1.1.4 Coefficients Plots

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

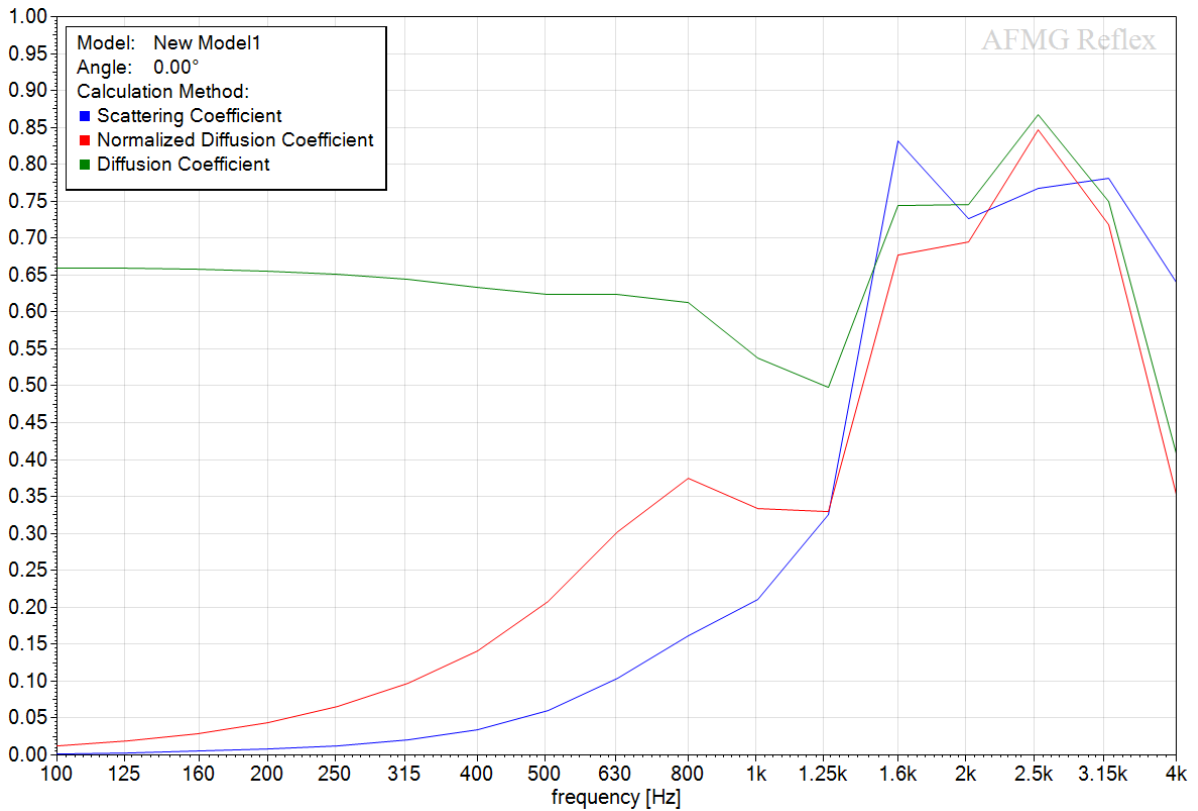


Coefficients

| Frequency [Hz] | Scattering Coefficient | Normalized Diffusion Coefficient | Diffusion Coefficient |
|----------------|------------------------|----------------------------------|-----------------------|
| 100 | 0.006 | 0.020 | 0.662 |
| 125 | 0.009 | 0.031 | 0.662 |
| 160 | 0.015 | 0.046 | 0.662 |

| | | | |
|-------------|--------------|--------------|--------------|
| 200 | 0.024 | 0.068 | 0.659 |
| 250 | 0.038 | 0.097 | 0.652 |
| 315 | 0.058 | 0.131 | 0.637 |
| 400 | 0.082 | 0.166 | 0.610 |
| 500 | 0.102 | 0.183 | 0.568 |
| 630 | 0.123 | 0.186 | 0.525 |
| 800 | 0.223 | 0.301 | 0.562 |
| 1000 | 0.393 | 0.483 | 0.654 |
| 1250 | 0.552 | 0.564 | 0.690 |
| 1600 | 0.714 | 0.522 | 0.642 |
| 2000 | 0.931 | 0.428 | 0.551 |
| 2500 | 0.892 | 0.521 | 0.609 |
| 3150 | 0.772 | 0.443 | 0.528 |
| 4000 | 0.811 | 0.389 | 0.467 |

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



Coefficients

| Frequency [Hz] | Scattering Coefficient | Normalized Diffusion Coefficient | Diffusion Coefficient |
|----------------|------------------------|----------------------------------|-----------------------|
| 100 | 0.002 | 0.012 | 0.660 |
| 125 | 0.003 | 0.019 | 0.659 |
| 160 | 0.005 | 0.029 | 0.657 |
| 200 | 0.008 | 0.044 | 0.655 |

| | | | |
|-------------|--------------|--------------|--------------|
| 250 | 0.013 | 0.066 | 0.651 |
| 315 | 0.021 | 0.097 | 0.644 |
| 400 | 0.034 | 0.141 | 0.634 |
| 500 | 0.060 | 0.207 | 0.624 |
| 630 | 0.104 | 0.303 | 0.623 |
| 800 | 0.161 | 0.376 | 0.613 |
| 1000 | 0.211 | 0.333 | 0.538 |
| 1250 | 0.326 | 0.330 | 0.499 |
| 1600 | 0.832 | 0.677 | 0.744 |
| 2000 | 0.727 | 0.695 | 0.746 |
| 2500 | 0.768 | 0.846 | 0.867 |
| 3150 | 0.781 | 0.719 | 0.749 |
| 4000 | 0.636 | 0.341 | 0.398 |