AcousticsFirst®

Aeolian® Sound Diffuser Data Supplement

Asymmetric
Organic Quadratic
sound diffuser with
Implied Symmetry.

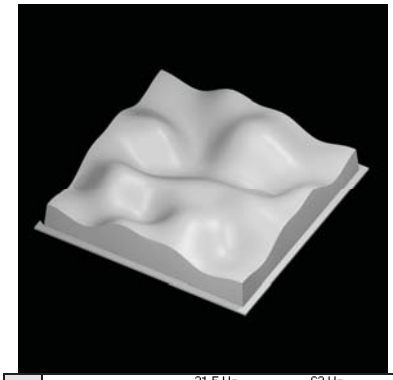
Diffusion - Diffraction - Scattering - Reflection

Toll-Free Number:

888-765-2900

Aeolian® Diffuser

Aeolian®



A patented, two dimensional, organic quadratic diffuser. Edge height variation is less than the flange width, creating an "implied edge" while maintaining a complete asymmetry which reduces acoustic lobing associated with some symmetrical designs.

Construction: Class A Thermoformed plastic with natural white finish.

Nominal Size: 2'x2'

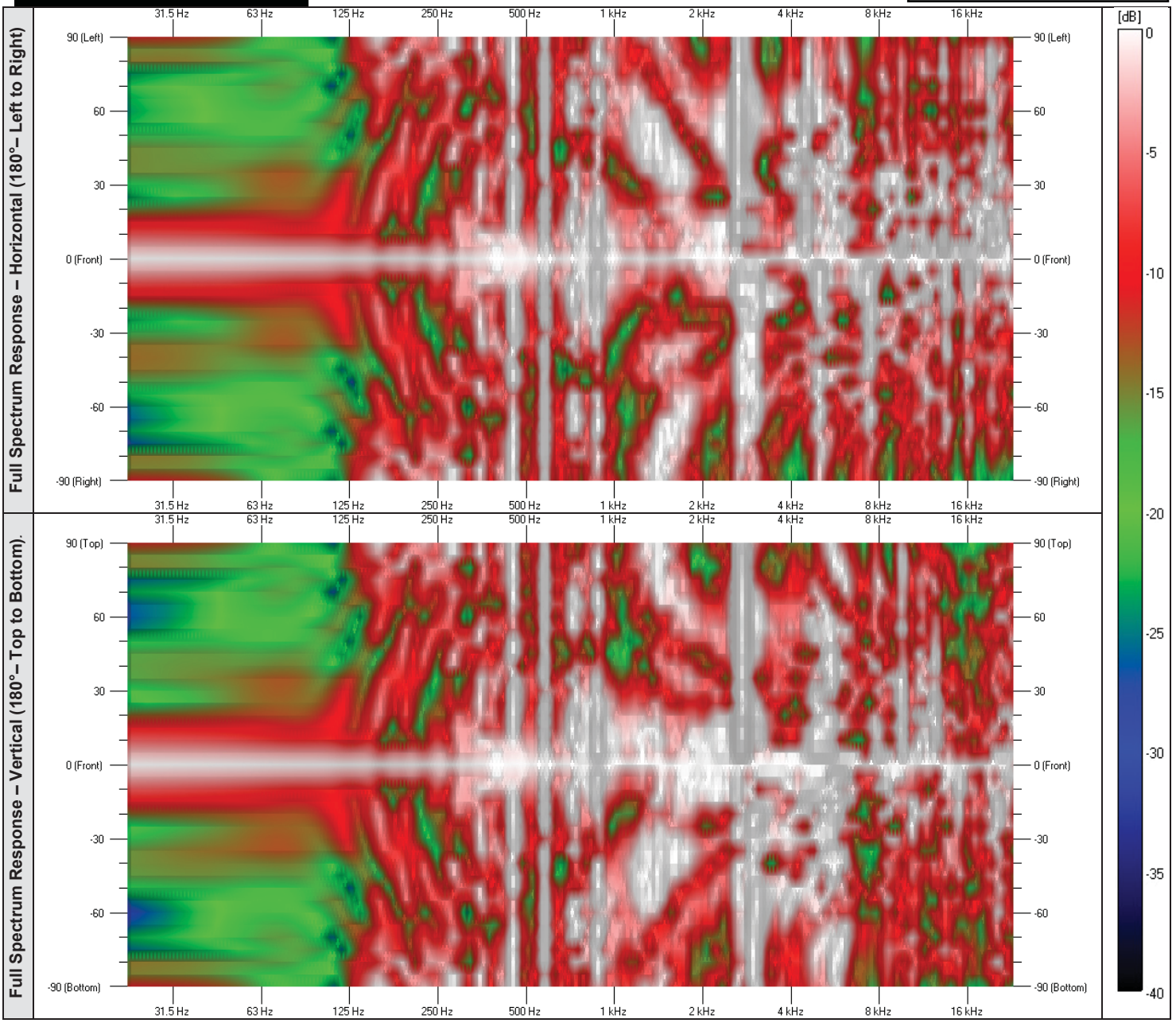
Depth: 5"

Mounting: Direct mount to wall/ceiling
– OR – Fit into standard T-bar grids.

Modified 2D Quadratic Diffuser
Asymmetric Organic Quadratic

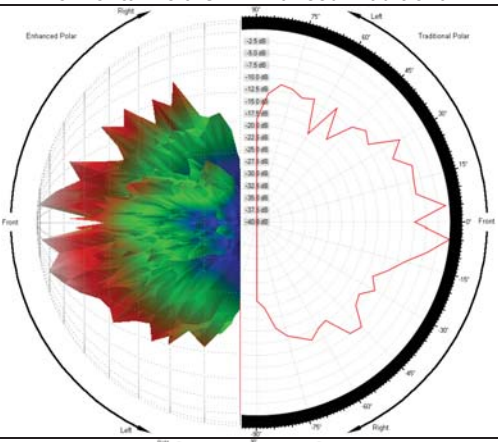
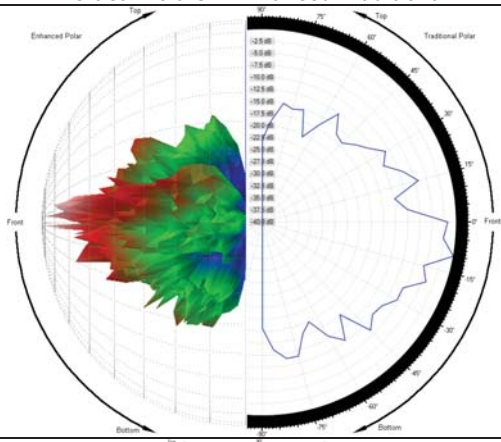
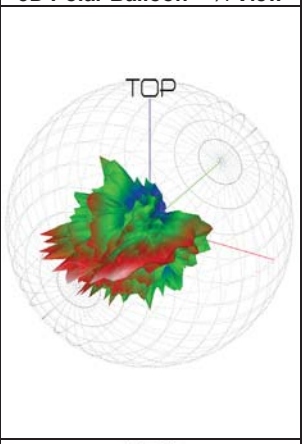
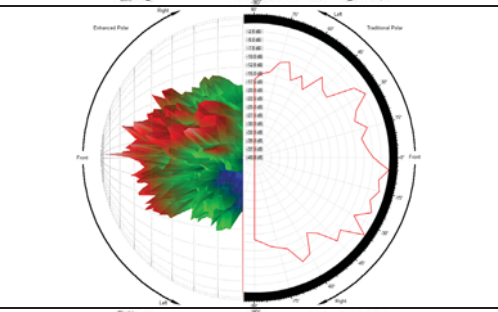
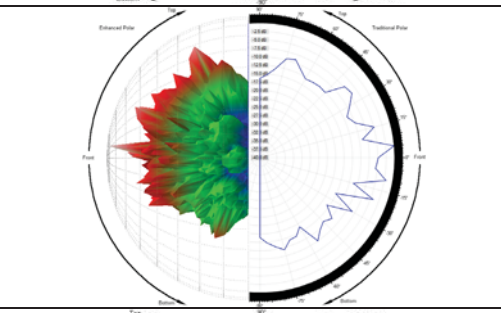
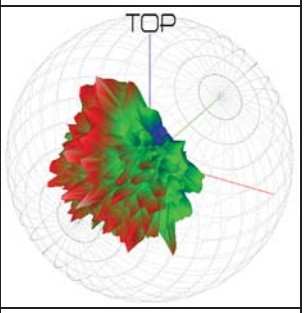
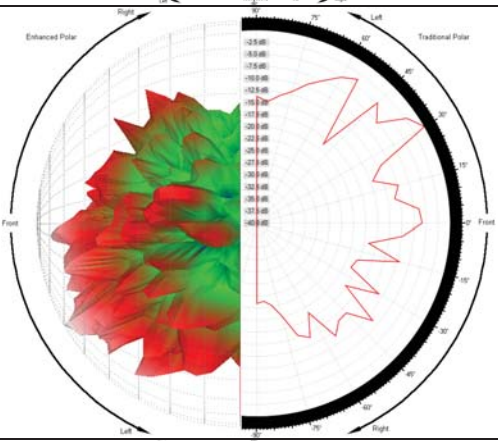
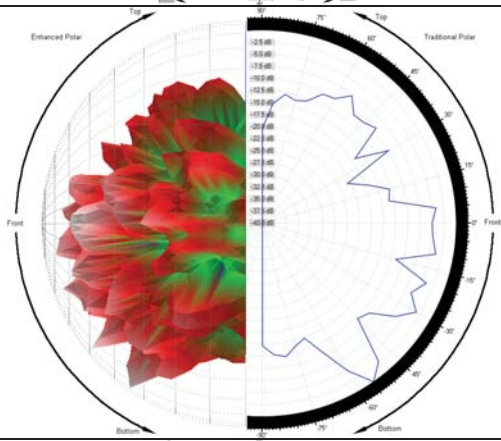
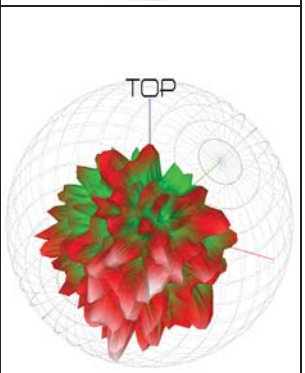
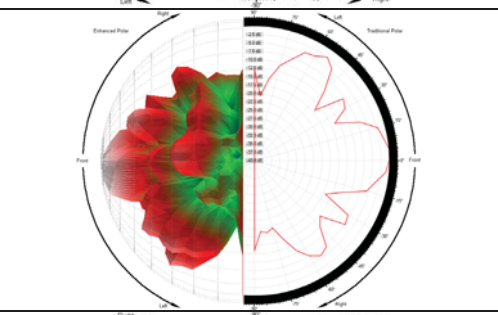
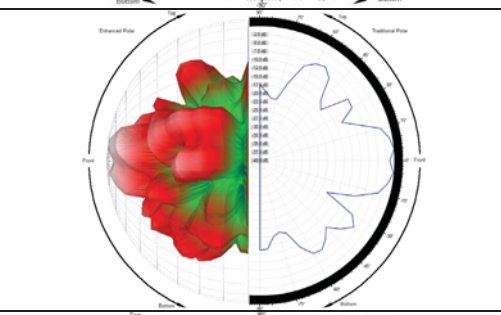
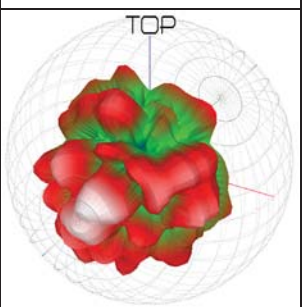
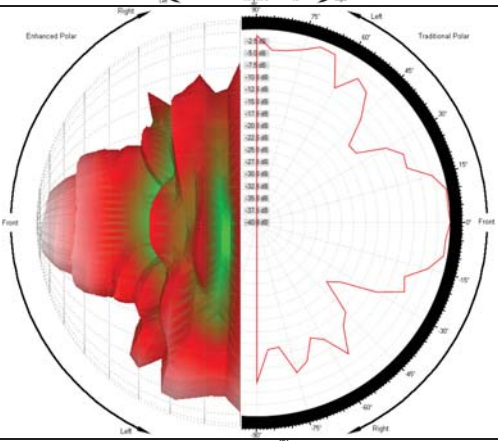
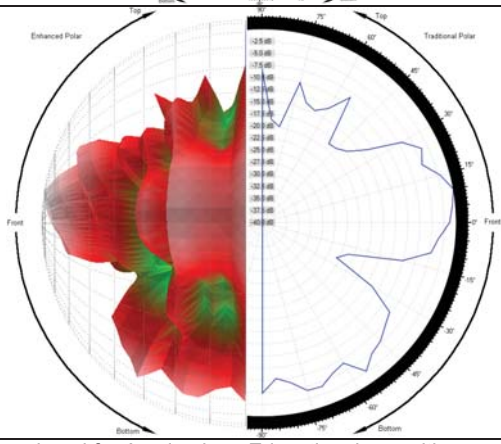
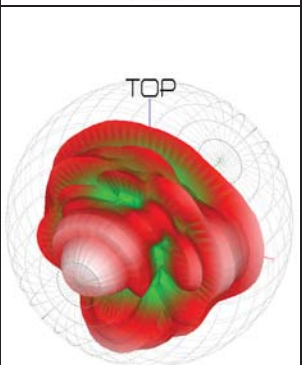
Operational Parameters:
Diffusion: Mid to High-Mid band
Primary: 1.6K- 7.5k
Hemispheric Pattern (2D -150°H/V)
Wide Phase & Directional Diffusion

Ceiling or Wall Mountable
Asymmetric Distribution



Sound Absorption Coefficients – Aeolian® Performance							
Mounting	**125 Hz**	**250 Hz**	**500 Hz**	**1000 Hz**	**2000 Hz**	**4000 Hz**	**NRC**
Type A	0.55	0.24	0.22	0.16	0.10	0.13	0.20
E400 (No Insulation)	0.40	0.26	0.26	0.25	0.17	0.15	0.25
E400 (Insulated)	0.41	0.24	0.25	0.25	0.17	0.15	0.25

The horizontal and vertical polars are displayed in Traditional and Enhanced format; the traditional view shows only the dB at an angle along the axis, the enhanced shows adjacent angles.

	Horizontal Polars – Enhanced/Traditional	Vertical Polars – Enhanced/Traditional	3D Polar Balloon – ¾ View
16000 Hz			
8000 Hz			
4000 Hz			
2000 Hz			
1000 Hz			

Acoustics First Corporation · 2247 Tomlyn Street Richmond, VA 23230 USA · Phone (888) 765-2900 · Fax (804) 342-1107 · info@acousticsfirst.com · www.acousticsfirst.com

AcousticsFirst® CORPORATION

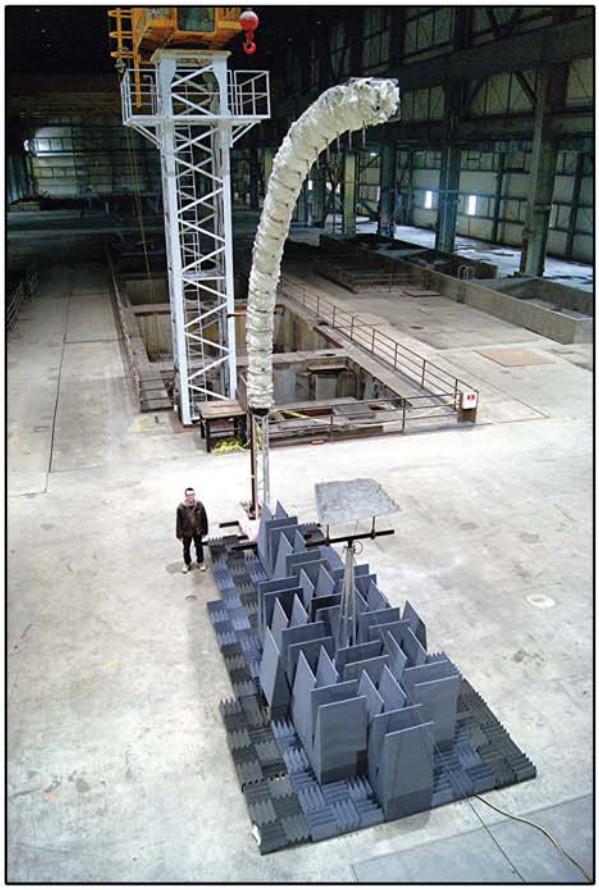
Materials to Control Sound & Eliminate Noise.™

The information within this booklet is only part of the data currently available on the materials that were tested. An electronic component is also available upon request. This electronic data allows for access to the raw test results, enabling further refinement, including previously absent data describing the phase of the reflections, attenuation, and directionality with a granularity exceeding all prior published data.

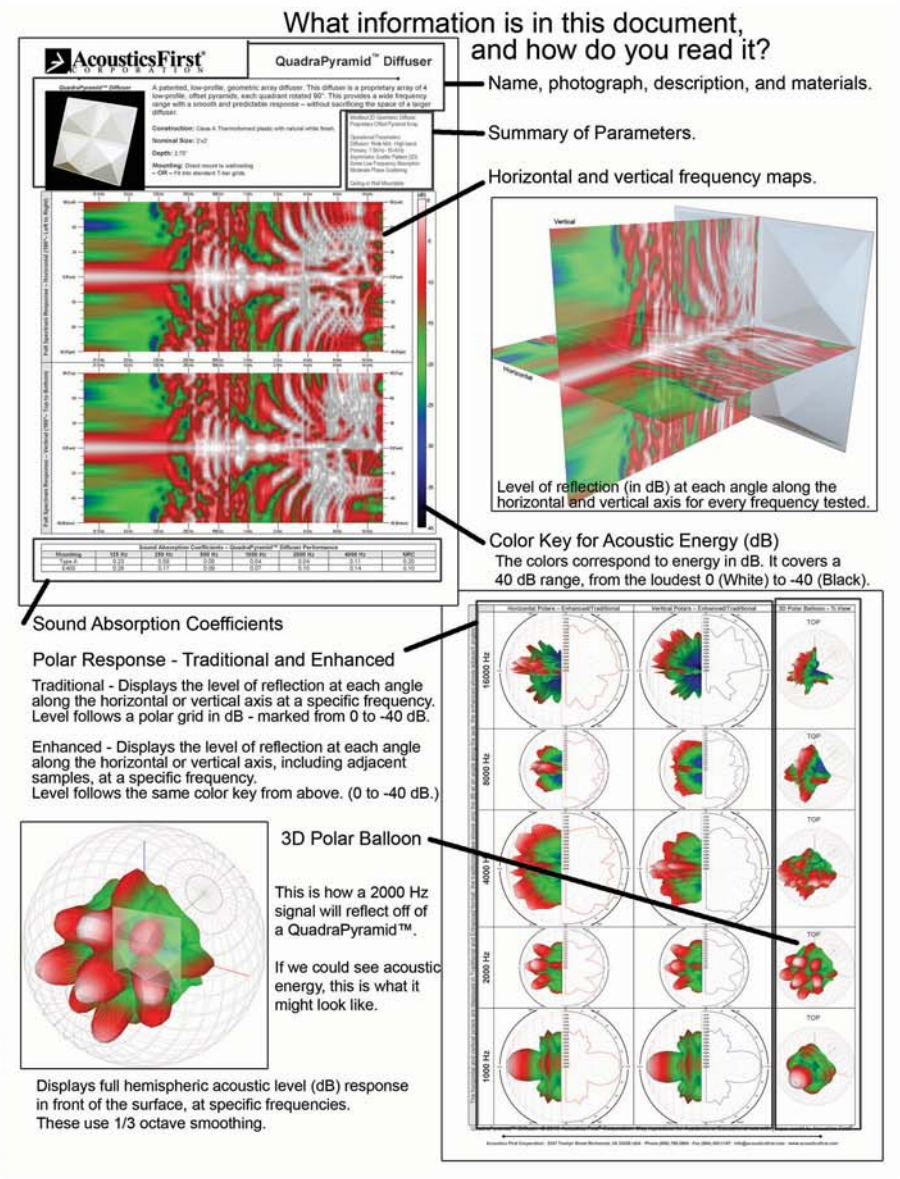
This electronic data has been compiled for Acoustics First by NWAA Labs in Elma, WA.

Acoustics First is offering this data without warranty, upon request, as no universally accepted standard currently exists.

Contact us for more information. Additional test data and product configurations appear on the web site. More information will be added as it becomes available.



Above: Testing rig at NWAA Labs in Elma, WA,



Member of:
ASA
and
ASTM
International

ASTM INTERNATIONAL

Acoustics First Corporation
2247 Tomlyn Street
Richmond, VA 23230
acousticsfirst.com

Toll Free-(888) 765-2900
Main-(804) 342-2900
Fax-(804) 342-1107
info@acousticsfirst.com