# Labsphere

### Zenith Polymer<sup>®</sup> White Diffuser

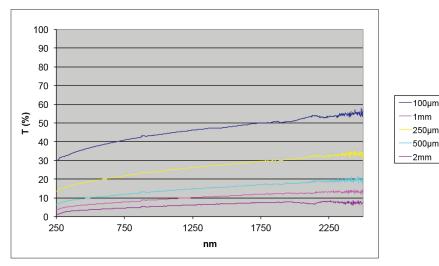
## Durable, low cost diffusers for backlighting systems

#### **Unique properties**

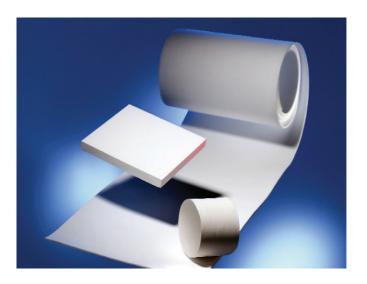
Labsphere's Zenith Diffusers are made of a PTFE based polymer with unique optical properties. The thin sheets offer diffuse transmittance for a variety of light scattering applications, as well as diffuse reflectance and durability for a variety of backlighting applications. The material is ideal for use as radiometric and photometric diffusers, general backlighting, flat panel, and display applications.

#### Variety of sizes and thicknesses

Zenith Diffusers are available in thicknesses of 100  $\mu$ m, 250  $\mu$ m, 500  $\mu$ m, 1 mm and 2 mm with transmission values of approximately 4% to 50% over the wavelength region covering 250 to 2500 nm. Custom sizes and thicknesses are available upon request.



Typical Transmission Values



#### Features:

- Lambertian
- Durable, Cleanable
- High Transmittance with Low Backscatter Characteristics

#### **Applications:**

- Radiometric and Photometric Diffusers
- General Backlighting
- Flat Panels
- Displays

### **Specifications and Ordering Information**

Order Number	Model Number	Transmisson	Thickness	Size
AA-90046-250	SG 3201	≈ 50%	100 µm	300 x 200 mm ( approx. 11.8 x 8 inch)
AA-90046-550	SG 3202	≈ 50%	100 µm	300 x 500 mm ( approx. 11.8 x 20 inch)
AA-90046-350	SG 3234	≈ 50%	100 µm	300 x 1000 mm (approx. 11.8 x 40 inch)
AA-90046-225	SG 3203	≈ 25%	200 µm	300 x 200 mm (approx. 11.8 x 8 inch)
AA-90046-525	SG 3204	≈ 25%	200 µm	300 x 500 mm ( approx. 11.8 x 20 inch)
AA-09946-325	SG 3235	≈ 25%	200 µm	300 x 1000 mm ( approx. 11.8 x 40 inch)
AA-90046-216	SG 3205	≈ 16%	500 µm	200 x 200 mm ( approx. 8 x 8 inch)
AA-90046-516	SG 3206	≈ 16%	500 µm	500 x 500 mm (approx. 20 x 20 inch)
AA-90046-208	SG 3210	≈ 8%	1 mm	200 x 200 mm (approx. 8 x 8 inch)
AA-90046-508	SG 3211	≈ 8%	1 mm	500 x 500 mm (approx. 20 x 20 inch)
AA-90046-008	SG 3212	≈ 8%	1 mm	1000 x 1000 mm (approx. 40 x 40 inch)
AA-90046-204	SG 3213	≈ 4%	2 mm	200 x 200 mm (approx. 8 x 8 inch)
AA-90046-504	SG 3214	≈ 4%	2 mm	500 x 500 mm (approx. 20 x 20 inch)
AA-90046-004	SG 3215	≈ 4%	2 mm	1000 x 1000 mm (approx. 40 x 40 inch)
AA-90046-080	SG 3230	≈ 80%	1 mm	1000 x 1000 mm (approx. 40 x 40 inch)
AA-90045-580	SG 3229	≈ 80%	1 mm	500 x 500 mm (approx. 20 x 20 inch)
AA-90045-280	SG 3228	≈ 80%	1 mm	200 x 200 mm (approx. 8 x 8 inch)
AA-90045-050	SG 3224	≈ 50%	1 mm	1000 x 1000 mm (approx. 40 x 40 inch)
AA-90045-550	SG 3223	≈ 50%	1 mm	500 x 500 mm (approx. 20 x 20 inch)
AA-90045-250	SG 3222	≈ 50%	1 mm	200 x 200 mm (approx. 8 x 8 inch)
AA-90045-030	SG 3233	≈ 30%	1 mm	1000 x 1000 mm (approx. 40 x 40 inch)
AA-90045-530	SG 3232	≈ 30%	1 mm	500 x 500 mm (approx. 20 x 20 inch)
AA-90045-230	SG 3231	≈ 30%	1 mm	200 x 200 mm (approx. 8 x 8 inch)
AA-90045-020	SG 3221	≈ 20%	1 mm	1000 x 1000 mm (approx. 40 x 40 inch)
AA-90045-520	SG 3220	≈ 20%	1 mm	500 x 500 mm (approx. 20 x 20 inch)
AA-90045-220	SG 3219	≈ 20%	1 mm	200 x 200 mm (approx. 8 x 8 inch)
AA-90045-010	SG 3227	≈ 10%	1 mm	1000 x 1000 mm (approx. 40 x 40 inch)
AA-90045-510	SG 3226	≈ 10%	1 mm	500 x 500 mm (approx. 20 x 20 inch)
AA-90045-210	SG 3225	≈ 10%	1 mm	200 x 200 mm (approx. 8 x 8 inch)
AA-90045-005	SG 3218	≈ 5%	1 mm	1000 x 1000 mm (approx. 40 x 40 inch)
AA-90045-505	SG 3217	≈ 5%	1 mm	500 x 500 mm (approx. 20 x 20 inch)
AA-90045-205	SG 3216	≈ 5%	1 mm	200 x 200 mm (approx. 8 x 8 inch)