

Zenith Lite™ Diffuse Reflectance Targets

For use over the UV, VIS and NIR spectral regions

Ideal for field radiance calibrations

Zenith Polymer® reflectance material provides the highest diffuse reflectance of any known material over the UV-VIS-NIR region. The reflectance is very flat and generally > 99% over a range from 400 nm to 1500 nm and > 95% from 250 nm to 2500 nm. Surface or subsurface contamination may lower the reflectance at the extreme upper and lower ends of the spectral range.

The surface and the porous structure of Zenith exhibits highly Lambertian behavior. The material is extremely hydrophobic and shows no signs of optical or physical degradation after long-term immersion testing in fresh water. They are the ideal choice for both laboratory and field applications since they are lightweight and can withstand harsh environments for long exposure periods. Due to their design, very flexible mounting solutions are possible.

Targets for field applications

Zenith Lite diffuse targets provide nearly ideal diffuse Lambertian reflectance over the wavelength range from 250 nm to 2450 nm. Zenith Lite targets are constructed using a 1 mm or 2 mm thick Zenith Polymer® diffuser laminated to a 10 mm thick aluminum honeycomb structured plate that serves as a solid, lightweight backing.

The laminating technique used with Zenith Lite diffuse targets allows for multiple reflectance values in one target with almost no visible seams. Targets can be made to any size and combination of white or greyscale reflectance.

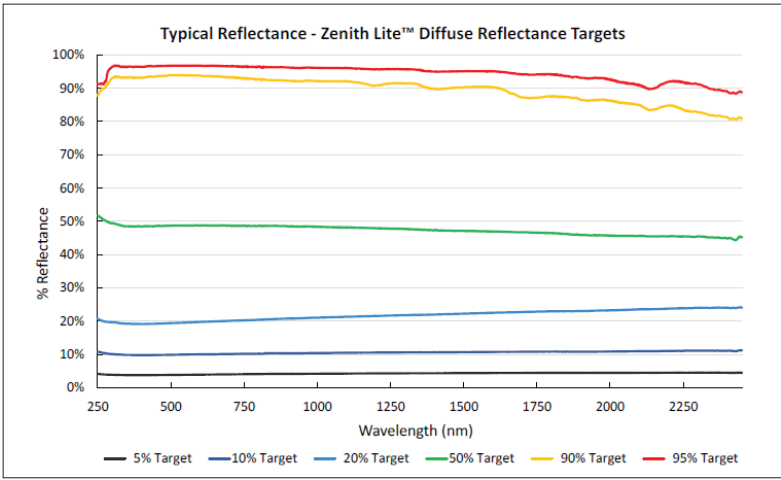


Features:

- Highly Lambertian
- Durable
- Lightweight
- Extremely Hydrophobic

The aluminum backing can be drilled to allow attachment to a variety of mounting devices. Even with a 1 mm or 2 mm Zenith Polymer film, the diffuse optical properties are maintained. All targets can be provided with Physikalisch-Technische Bundesanstalt (PTB) traceable calibration certificates from 250 nm and 2450 nm. For targets larger than 300 mm x 300 mm a smaller witness sample is provided and the calibration is performed on the reference.





Specifications and Ordering Information

Order Number	Model Number	Reflectivity	Dimensions
AA-90044-195	SG 3141	95%	100 x 100 x 12 mm (approx. 4 x 4 inch)
AA-90044-190	SG 3142	90%	100x 100 x 11 mm (approx. 4 x 4 inch)
AA-90044-180	SG 3180	80%	100 x 100 x 11 mm (approx. 4 x 4 inch)
AA-90044-150	SG 3430	50%	100 x 100 x 11 mm (approx. 4 x 4 inch)
AA-90044-130	SG 3181	30%	100 x 100 x 11 mm (approx. 4 x 4 inch)
AA-90044-120	SG 3145	20%	100 x 100 x 11 mm (approx. 4 x 4 inch)
AA-90044-110	SG 3144	10%	100 x 100 x 11 mm (approx. 4 x 4 inch)
AA-90044-105	SG 3146	05%	100 x 100 x 11 mm (approx. 4 x 4 inch)
AA-90044-295	SG 3151	95%	200 x 200 x 12 mm (approx. 8 x 8 inch)
AA-90044-290	SG 3152	90%	200 x 200 x 11 mm (approx. 8 x 8 inch)
AA-90044-280	SG 3182	80%	200 x 200 x 11 mm (approx. 8 x 8 inch)
AA-90044-250	SG 3153	50%	200 x 200 x 11 mm (approx. 8 x 8 inch)
AA-90044-230	SG 3183	30%	200 x 200 x 11 mm (approx. 8 x 8 inch)
AA-90044-220	SG 3154	20%	200 x 200 x 11 mm (approx. 8 x 8 inch)
AA-90044-210	SG 3171	10%	200 x 200 x 11 mm (approx. 8 x 8 inch)
AA-90044-205	SG 3155	05%	200 x 200 x 11 mm (approx. 8 x 8 inch)
AA-90044-395	SG 3166	95%	300 x 300 x 12 mm (approx. 12 x 12 inch)
AA-90044-390	SG 3167	90%	300 x 300 x 11 mm (approx. 12 x 12 inch)
AA-90044-380	SG 3184	80%	300 x 300 x 11 mm (approx. 12 x 12 inch)
AA-90044-350	SG 3168	50%	300 x 300 x 11 mm (approx. 12 x 12 inch)
AA-90044-330	SG 3185	30%	300 x 300 x 11 mm (approx. 12 x 12 inch)
AA-90044-320	SG 3169	20%	300 x 300 x 11 mm (approx. 12 x 12 inch)
AA-90044-310	SG 3172	10%	300 x 300 x 11 mm (approx. 12 x 12 inch)
AA-90044-305	SG 3170	05%	300 x 300 x 11 mm (approx. 12 x 12 inch)
AA-90044-595	SG 3156	95%	500 x 500 x 12 mm (approx. 20 x 20 inch)
AA-90044-590	SG 3157	90%	500 x 500 x 11 mm (approx. 20 x 20 inch)
AA-90044-580	SG 3186	80%	500 x 500 x 11 mm (approx. 20 x 20 inch)
AA-90044-550	SG 3158	50%	500 x 500 x 11 mm (approx. 20 x 20 inch)
AA-90044-530	SG 3187	30%	500 x 500 x 11 mm (approx. 20 x 20 inch)
AA-90044-520	SG 3159	20%	500 x 500 x 11 mm (approx. 20 x 20 inch)
AA-90044-510	SG 3173	10%	500 x 500 x 11 mm (approx. 20 x 20 inch)
AA-90044-505	SG 3160	05%	500 x 500 x 11 mm (approx. 20 x 20 inch)
AA-90044-095	SG 3161	95%	1000 x 1000 x 12 mm (approx. 40 x 40 inch)
AA-90044-090	SG 3162	90%	1000 x 1000 x 11 mm (approx. 40 x 40 inch)
AA-90044-080	SG 3188	80%	1000 x 1000 x 11 mm (approx. 40 x 40 inch)
AA-90044-050	SG 3163	50%	1000 x 1000 x 11 mm (approx. 40 x 40 inch)
AA-90044-030	SG 3189	30%	1000 x 1000 x 11 mm (approx. 40 x 40 inch)
AA-90044-020	SG 3164	20%	1000 x 1000 x 11 mm (approx. 40 x 40 inch)
AA-90044-010	SG 3174	10%	1000 x 1000 x 11 mm (approx. 40 x 40 inch)
AA-90044-005	SG 3165	05%	1000 x 1000 x 11 mm (approx. 40 x 40 inch)