

Alucore Zenith Reflectance Targets

LIGHTWEIGHT AND RUGGED REFLECTANCE TARGETS

FEATURES

- Nearly ideal diffuse, lambertian reflectance within the range of 250 nm to 2500 nm
- Calibrated reflectance curve, NIST traceable
- Lightweight and rugged for lab and field applications
- Multiple reflectivities possible on one surface with no visible seams
- Thermally stable and able to withstand harsh conditions

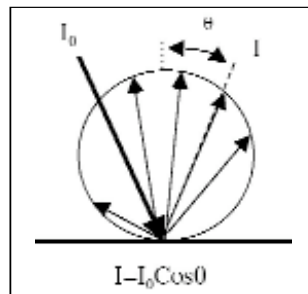
APPLICATIONS

- Field calibration of portable spectrometers (e.g. LabSpec, FieldSpec)
- Homogeneous projector walls for inspection and quality check of whole projectors and projector lamps
- Adjustment of built-in measurement devices in planes, helicopters and military vehicles of all kinds
- Contrast measurements for camera applications
- Reflectance standard for illumination measurements and calibrations.

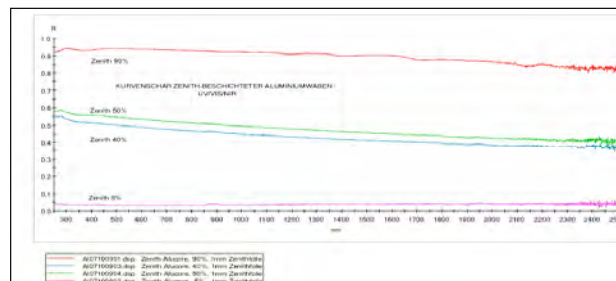
Zenith™ Alucore Targets are quickly becoming the new standard in reflectance targets. Featuring lower weight (below 1kg for a 20 x 20 cm target), flexible custom adaptation and multi-reflectivities in one surface, Zenith Alucore targets are a great alternative to the heavy, hard-to-handle conventional targets available today.

The targets feature a 1 mm to 2 mm thick Zenith™ film material laminated to a 10 mm thick aluminum honeycomb structured plate which serves as a solid but lightweight backing. The laminating technique allows for multiple reflectivities in one target with no visible seams. Targets can be made to any size and combination of white or grey scale reflectances. The unique backing can be drilled for easy attachment to other mounting devices.

Thermally stable in the field of -250°C and +300°C, fluoropolymer Zenith™ is ideal for almost all outer environments, without losing its nearly perfect lambertian behavior. Being chemically inert, stable and unpolar, Zenith™ is resistant against water, watery solvents and dust. SphereOptics targets leave the facility with a NIST and BAM traceable calibration certificate, packed in a solid, portable aluminum box.



*Lambertian
Surface*



Reflectance graphs from 250 nm to 2500 nm

QUALITY / RELIABILITY

SPECIFICATIONS

OPTICAL PROPERTIES:

- Lambertian reflectance of 95%, 90%, 50%, 20% and 5%
- Constant reflection over the wavelength range of 250 nm to 2500 nm
- Reflection tolerances of +/- 3% from Batch to Batch
- Certified calibration on a Perkin Elmer Lambda 19, NIST traceable
- Homogeneity over the surface of +/- 1%R
- Stability of the material up to 8 J/cm² (Laser applications)

CHEMICAL AND MECHANICAL PROPERTIES:

- Unpolar, therefore water repellent
- Pure material insulator
- Working temperature range of -5°C to +65°C
- Humidity range of 10% to 80%
- Weight < 9 kg/m²
- All targets have M6 threads on the backside and at one thin side



Lightweight and drillable aluminum backing allows for ease-of-use with a variety of mounting devices.



Zenith Alucore targets withstand harsh environmental conditions such as UV radiation, rain and snow without losing their reflective and high lambertian properties.



Positioned at the end of runways, multi-step Alucore targets can be used to help pilots adjust and calibrate their measurement equipment.



20% and 50% Alucore Reflectance Target

ORDERING INFORMATION

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As part of our product improvement program, specifications are subject to change without notice.

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