

REFLECTANCE MEASUREMENT EQUIPMENT



MODEL: Ocean Optics Integrating Sphere ISP-50-8-R-GT / ThetaMetrisis FR-Reflection kit

INSTALLATION PLACE: Microfluidics Characterization Laboratory, (room No16-new building), Department of Microelectronics

DESCRIPTION: The fiber optic integrating sphere couples to a spectrometer and a light source to measure the total integrated reflectance of surfaces placed against the sphere's sample port.

These integrating spheres are well-suited for measurement of variegated samples, as well as for analysis of opaque or highly directional samples. The gloss-trap option allows you to measure the specular component of the total integrated reflection. A high-reflectivity Specular Reflectance Standard calibrated to a NIST master can be used as a reference.

SPECIFICATIONS

A. Ocean Optics Integrating Sphere ISP-50-8-R-GT (Gloss trap version)

1. Spectral range : 200-2500 nm
2. Sphere diameter = 50 mm
3. Sample port = 8 mm
4. Sphere coating: PTFE-based diffusing material
5. Reflectivity : >98% (400-1500 nm); >95% (250-2000 nm)
6. "White" or "black" trap to include or exclude, respectively, the specular reflection

B. Ocean Optics Optical Fibers P400-2-SR

1. Spectral range: 200-1100 nm
2. Core diameter = 400 μm ,
3. Fiber length = 2 m

C. Ocean Optics Specular Reflectance Standard STAN-SSH-NIST

1. Spectral range: 250-2500 nm
2. Reflectance material: Mirrored, fused-silica with protective overcoat
3. Reflectivity: ~85-90% (250-800 nm), ~85-98% (800-2500 nm) calibrated to a NIST master

APPLICATIONS

1. Total integrated reflectance measurement
2. Specular and diffuse reflectance measurement

CERTIFICATION/ACCREDITATION

The facility is not certified or accredited.

CONTACT PERSON

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