

Diffuse Reflectance Standards



WS-1

WS-1 Diffuse Reflectance Standard

The WS-1 Diffuse Reflectance Standard (at left) is made of PTFE, a diffuse white plastic that provides a Lambertian reference surface for reflectance experiments. The WS-1 comes in an anodized aluminum housing, and is hydrophobic, chemically inert and very stable, even in deep-ultraviolet applications. It is >98% reflective from 250-1500 nm and >95% reflective from 250-2200 nm.



WS-1-SL

WS-1-SL White Reflectance Standard with Spectralon

The WS-1-SL is a diffuse reflectance standard from Labsphere and is made from their patented diffuse reflectance material, Spectralon. Spectralon is hydrophobic and is thermally stable to 350 °C. The durable material provides highly accurate, reproducible data. Unlike all the other PTFE-based standards on this page, the WS-1-SL often can be smoothed, flattened and cleaned if nicked or soiled.

WS-1-SS Includes Stainless-steel Housing

The WS-1-SS comes in a stainless steel housing and has the same properties as the WS-1. In addition, the surface of the WS-1-SS is slightly recessed to allow the RPH-1 Reflection Probe Holder to sit on the standard without coming in direct contact with the standard's surface.



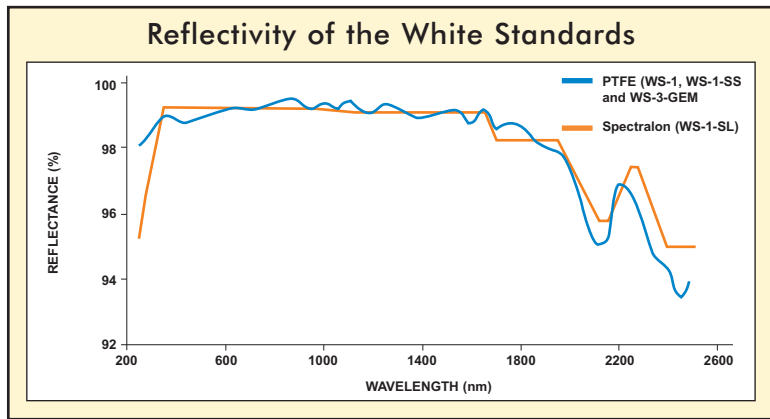
WS-1-SS

WS-3-GEM White Reference Tile

Conceived for use in colorimetric applications involving diamonds and other gems, the WS-3-GEM White Reference Tile consists of a diffuse PTFE material, shaped to form a holder within its stainless steel receptacle. Because of its concave shape, the WS-3-GEM becomes an integrating sphere when illuminated. The WS-3-GEM has >98% reflectivity from 250-1500 nm and >95% reflectivity from 250-2200 nm. Like the WS-1, the WS-3-GEM's reflectance material is hydrophobic, chemically inert and very stable, even in deep-UV applications.



WS-3-GEM



Specifications				
	WS-1	WS-1-SL	WS-1-SS	WS-3-GEM
Dimensions:	38 mm diameter (housing) 32 mm OD, 10 mm thick (tile)	38 mm diameter (housing) 32 mm OD, 10 mm thick (tile)	38 mm diameter (housing) 32 mm OD, 10 mm thick (tile)	38 mm diameter (housing) 31 mm OD, 10 mm thick (tile)
Weight:	30 g	30 g	30 g	30 g
Spectral range:	250-2000 nm	250-2500 nm	250-2000 nm	250-2000 nm
Housing:	Aluminum	Delrin holder, protective cover	Stainless steel	Stainless steel
Reflectivity:	>98% (250-1500 nm) >95% (250-2200 nm)	99% (400-1500 nm) >96% (250-2000 nm)	>98% (250-1500 nm) >95% (250-2200 nm)	>98% (250-1500 nm) >95% (250-2200 nm)

