



# Specular Reflectance Standards

## Versatile & Durable Standards

We offer three specular reflectance standards for use as references when measuring the reflection of surfaces with high or low specular reflectivity. Each standard consists of a 31.7-mm outer diameter optical reflectance material in a protective aluminum receptacle with screw-on top. The superior coatings on the substrates are environmentally stable; they are able to withstand high temperatures and mechanical stresses.

## Software Referencing & Calibration

Reflectivity values for the standards are built into our Spectroscopy Operating Software to provide a reference for any specular measurement. You simply choose the standard from a software menu and the software reads data from the electronic file shipped with the standard.

## For High Reflectivity

The STAN-SSH High-reflectivity Specular Reflectance Standard is a fused-silica substrate coated with aluminum and protected by a thin layer of magnesium fluoride. This standard is typically used for measuring high-reflectance surfaces of optical substrates and coatings, machined metals and semiconductor materials. Values for the STAN-SSH are calculated for any angle from 0-45°.

## For Calibrated High Reflectivity

Also available is a calibrated version of the STAN-SSH. The STAN-SSH-NIST is calibrated at a 6° angle traceable to NIST and is accurate to ±0.1% from 250-2500 nm. The STAN-SSH-NIST comes with calibrated reflectivity values (from a 6° angle) in both paper and electronic formats. We recommend a periodic recalibration of the STAN-SSH-NIST, which costs \$149. Should the calibrated surface become corrupted, a recoat and calibration service is available for \$299.

## For Low Reflectivity

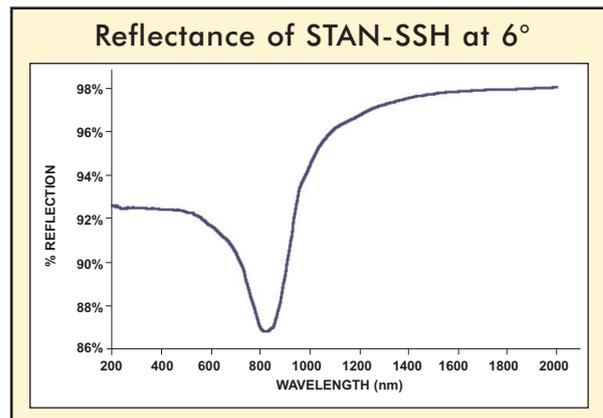
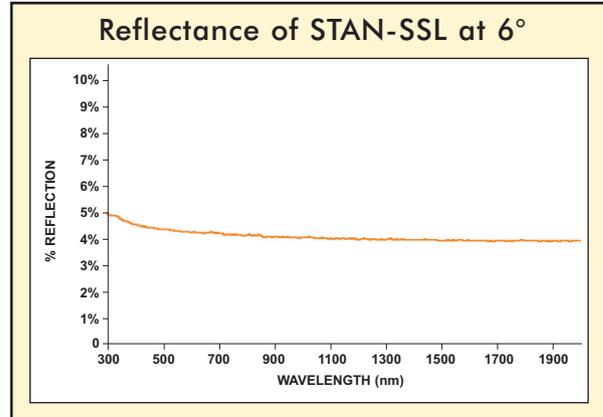
The STAN-SSL Low-reflectivity Specular Reflectance Standard is a black glass standard that can be used as a reference when measuring the low-reflectance surfaces of samples such as thin film coatings, anti-reflective coatings, blocking filters and substrates.

## Holder Protects Standards

We also offer a holder for use with our reflectance standards. The STAN-HOLDER supports a standard during measurements, which helps to preserve its coating.



With the STAN-SSH High-reflectivity Specular Reflectance Standard (above), you receive a certificate of calibration in paper and electronic formats.



## Specifications

|                       | STAN-SSH  | STAN-SSH-NIST   | STAN-SSL                                 |
|-----------------------|---|---|--|
| Substrate dimensions: | 31.75 mm outer diameter x 6.35 mm height                          | 31.75 mm outer diameter x 6.35 mm height                          | 31.75 mm outer diameter x 6.35 mm height |
| Housing dimensions:   | 38 mm outer diameter x 19 mm height                               | 38 mm outer diameter x 19 mm height                               | 38 mm outer diameter x 19 mm height      |
| Weight:               | 40 g  | 40 g  | 40 g                                     |
| Reflectance material: | Front-surface protected aluminum mirror on fused silica substrate | Front-surface protected aluminum mirror on fused silica substrate | Schott ND9 glass                         |
| Reflectivity:         | ~87-93% (200-1000 nm)<br>~93-98% (1000-2500 nm)                   | ~87-93% (200-1000 nm)<br>~93-98% (1000-2500 nm)                   | ~5% (200-950 nm)<br>~4% (950-2500 nm)    |

