

Spectralon® Diffuse Reflectance Standards

High Lambertian reflectance over their effective spectral range



Accurate

Spectralon Diffuse Reflectance Standards offer the highest diffuse reflectance values of any known substance. These durable, chemically inert standards can have typical reflectance values ranging from 2% to 99% and are spectrally flat over the UV-VIS-NIR spectrum. All Spectralon materials are optically flat to +/- 4% over the photopic region of the spectrum.

Spectralon Diffuse Reflectance Standards are Lambertian, with Spectralon SRM-99 reflectance material being the most Lambertian reflector available for use over the wavelength range from 250 - 2500 nm.

Value

- Calibrated Spectralon standards accredited under NVLAP ISO 17025 Lab Code 200951-0
- Highly Lambertian
- Durable
- Chemically inert

Consistent

All reflectance calibration tests are performed in the Reflectance Spectroscopy Laboratory at Labsphere. The standards used in these tests are directly traceable to the National Institute of Standards and Technology (NIST).

Spectralon Diffuse Reflectance Standards are available individually and in sets, consisting of a diffuse white standard and a selection of diffuse gray standards. Each standard is supplied with complete diffuse reflectance data from 250 - 2500, every 50 nm. All standards are housed in a durable delrin holder with a protective cover.

Applications

- Densitometers
- Integrating sphere systems
- Optical equipment
- Photographic equipment
- Reflectometers
- Remote sensing instruments

Specifications and Ordering Information

Diffuse Reflectance Standards are available in sets of four or eight standards in either 1.25 or 2.00 inch diameters.

A set of four standards includes one each of the following reflectance values: 99%, 75%, 50% and 2%. A set of eight standards includes one each of the following reflectance values: 99%, 80%, 60%, 40%, 20%, 10%, 5% and 2%.

| Set Model Number | Standards Included | Order Number | Reflectance Factor | Reflective Area (Inches) | Dimensions (Inches) |
|-------------------|--------------------|--------------|--------------------|--------------------------|---------------------|
| RSS-04-010 | | AS-01163-060 | | | |
| | SRS-99-010 | AS-01160-060 | 99% | 1.25 D | 1.50 D x 0.55 H |
| | SRS-75-010 | AS-01160-260 | 75% | 1.25 D | 1.50 D x 0.55 H |
| | SRS-50-010 | AS-01160-460 | 50% | 1.25 D | 1.50 D x 0.55 H |
| | SRS-02-010 | AS-01161-960 | 2% | 1.25 D | 1.50 D x 0.55 H |
| RSS-04-020 | | AS-01165-060 | | | |
| | SRS-99-020 | AS-01161-060 | 99% | 2.00 D | 2.38 D x 0.60 H |
| | SRS-75-020 | AS-01161-260 | 75% | 2.00 D | 2.38 D x 0.60 H |
| | SRS-50-020 | AS-01161-460 | 50% | 2.00 D | 2.38 D x 0.60 H |
| | SRS-02-020 | AS-01161-960 | 2% | 2.00 D | 2.38 D x 0.60 H |
| RSS-08-010 | | AS-01163-160 | | | |
| | SRS-99-010 | AS-01160-060 | 99% | 1.25 D | 1.50 D x 0.55 H |
| | SRS-80-010 | AS-01160-160 | 80% | 1.25 D | 1.50 D x 0.55 H |
| | SRS-60-010 | AS-01160-360 | 60% | 1.25 D | 1.50 D x 0.55 H |
| | SRS-40-010 | AS-01160-560 | 40% | 1.25 D | 1.50 D x 0.55 H |
| | SRS-20-010 | AS-01160-660 | 20% | 1.25 D | 1.50 D x 0.55 H |
| | SRS-10-010 | AS-01160-760 | 10% | 1.25 D | 1.50 D x 0.55 H |
| | SRS-05-010 | AS-01160-860 | 5% | 1.25 D | 1.50 D x 0.55 H |
| | SRS-02-010 | AS-01160-960 | 2% | 1.25 D | 1.50 D x 0.55 H |
| RSS-08-020 | | AS-01165-160 | | | |
| | SRS-99-020 | AS-01161-060 | 99% | 2.00 D | 2.38 D x 0.60 H |
| | SRS-80-020 | AS-01161-160 | 80% | 2.00 D | 2.38 D x 0.60 H |
| | SRS-60-020 | AS-01161-360 | 60% | 2.00 D | 2.38 D x 0.60 H |
| | SRS-40-020 | AS-01161-560 | 40% | 2.00 D | 2.38 D x 0.60 H |
| | SRS-20-020 | AS-01161-660 | 20% | 2.00 D | 2.38 D x 0.60 H |
| | SRS-10-020 | AS-01161-760 | 10% | 2.00 D | 2.38 D x 0.60 H |
| | SRS-05-020 | AS-01161-860 | 5% | 2.00 D | 2.38 D x 0.60 H |
| | SRS-02-020 | AS-01161-960 | 2% | 2.00 D | 2.38 D x 0.60 H |

Individual Diffuse Reflectance Standard

Diffuse Reflectance Standards are available individually (1.25 or 2.00 inch diameter) in the following reflectance values: 99%, 80%, 75%, 60%, 50%, 40%, 25%, 20%, 10%, 5% and 2%.

Custom Reflectance Standards

Spectralon Diffuse Reflectance Standards are available on custom order with reflectance properties to meet your specific needs. Please contact our Technical Sales Department for details.



Advancing the Technology of Light: Measure. Create. Reflect.

