

Spectralon® Diffuse Color Standards

High Lambertian reflectance over their effective spectral range



Reliable

Spectralon Diffuse Color Standards aid in developing consistent color reproduction for manufacturers of products such as textiles, papers, pharmaceuticals, paints and inks. As opposed to ceramic color tiles, which are characterized by a specular surface, Spectralon color standards are highly diffuse, thus simplifying measurement procedures by removing the effect of viewing geometry. Spectralon color standards are durable and maintain a consistent reflectance over time.

The reflectance of Spectralon Color Standards is extremely consistent and reproducible. This quality helps eliminate gross margins of error in manufacturing processes of color-dependent products such as paints or inks.

Durable

The high thermal stability of Spectralon Color Standards eliminates the need to rigorously control the temperature in the laboratory. The slight color change of the standards with increasing temperature is extremely gradual and can be easily monitored.

Spectralon color standards are durable, washable and easily machined without loss of color or surface texture. The standards retain uniformity throughout, despite daily exposure to harsh environments.

Labsphere can produce custom color standards to meet your individual needs. Spectralon Color Standards are available either calibrated or uncalibrated in a variety of configurations.

Lambertian behavior, durability and stability make Spectralon Diffuse Color Standards the ideal choice for calibrating colorimeters and spectrophotometers.

Value

- Highly diffuse, eliminating errors due to viewing angle
- Consistent reflectance to eliminate gross margins of color-dependent products
- Thermally stable for a wide range of environment conditions
- Durable, washable, and waterproof
- Data includes tristimulus values, chromaticity coordinates, UCS coordinates, and CIELAB and CIELUV values.
- Available calibrated or uncalibrated, in 1.25 or 2 inch diameters, and in multiple configurations
- Colors include red, green, blue, yellow, cyan, orange, purple, and violet

Measure

- LED sourced systems
- Solid state lighting
- Large area LED display
- Backlighting
- General lighting
- Automotive lighting
- Architectural lighting

Specifications

Part Number	Order Number	Number of Colors	Number of Neutrals	Reflective Area (inches)	Description
CSS-04-010	AS-01170-060	4	0	1.25 D	red, green, blue, yellow
CSS-04-020	AS-01178-060	4	0	2.00 D	red, green, blue, yellow
CSS-04A-010	AS-01170-160	4	0	1.25 D	cyan, orange, purple, violet
CSS-04A-020	AS-01178-160	4	0	2.00 D	cyan, orange, purple, violet
CSS-08-010	AS-01170-260	4	4	1.25 D	red, green, blue, yellow, 99%, 50%, 20%, 2%
CSS-08-020	AS-01178-260	4	4	2.00 D	red, green, blue, yellow, 99%, 50%, 20%, 2%
CSS-08A-010	AS-01170-360	8	0	1.25 D	red, green, blue, yellow, cyan, orange, purple, violet
CSS-08A-020	AS-01178-360	8	0	2.00 D	red, green, blue, yellow, cyan, orange, purple, violet
CSS-12-010	AS-01171-060	8	4	1.25 D	above eight colors and 99%, 50%, 20%, 2%
CSS-12-020	AS-01179-060	8	4	2.00 D	above eight colors and 99%, 50%, 20%, 2%

Hemispherical Spectral Reflectance Factors

