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 Diffuse Color Standards are highly diffuse, thus simplifying measurement procedures by removing the effect of viewing geometry. These standards are durable and maintain a consistent reflectance over time. Lambertian behavior, durability and stability make Spectralon Diffuse Color Standards the ideal choice for calibrating colorimeters and spectrophotometers.

The reflectance of Spectralon Diffuse 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

High thermal stability 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.

Durable, washable and easily machined without loss of color or surface texture, Spectralon Diffuse Color Standards retain uniformity throughout, despite daily exposure to harsh environments.

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

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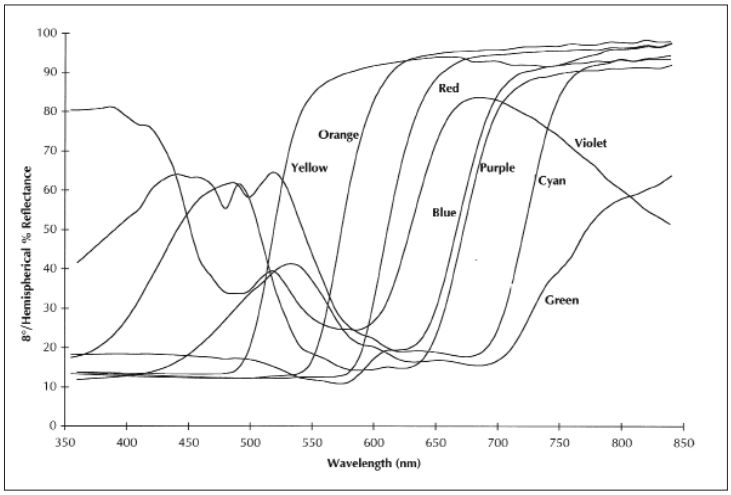
Value

- 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

Hemispherical Spectral Reflectance Factors



Calibration

Calibrated color standards include an 8°/Hemispherical (8/h) Spectral Reflectance Calibration over the range 360 – 830 nm, reported in 10 nm intervals. Each calibrated color standard ships with a complementary data file that includes reflectance data in 1 nm intervals.

Specifications and Ordering Information - Standard Sets

Model Number	Order Number	Calibration	Diameter	Included Standards
UCSS-04-010	AS-01168-060	N	1.25	red, green, blue, yellow
CSS-04-010	AS-01170-060	Y	1.25	red, green, blue, yellow
CSS-04-020	AS-01178-060	Y	2.00	red, green, blue, yellow
CSS-08A-020	AS-01178-360	Y	2.00	red, green, blue, yellow, cyan, orange, purple, violet
CSS-04A-020	AS-01178-460	Y	2.00	cyan, orange, purple, violet

Specifications and Ordering Information - Individual Standards

Model Number	Order Number	Description
SCS-GN-010	AS-01167-160	1” Green, Calibrated 360 – 830 nm
SCS-RD-020	AS-01175-060	2” Red, Calibrated 360 – 830 nm
SCS-GN-020	AS-01175-160	2” Green, Calibrated 360 – 830 nm