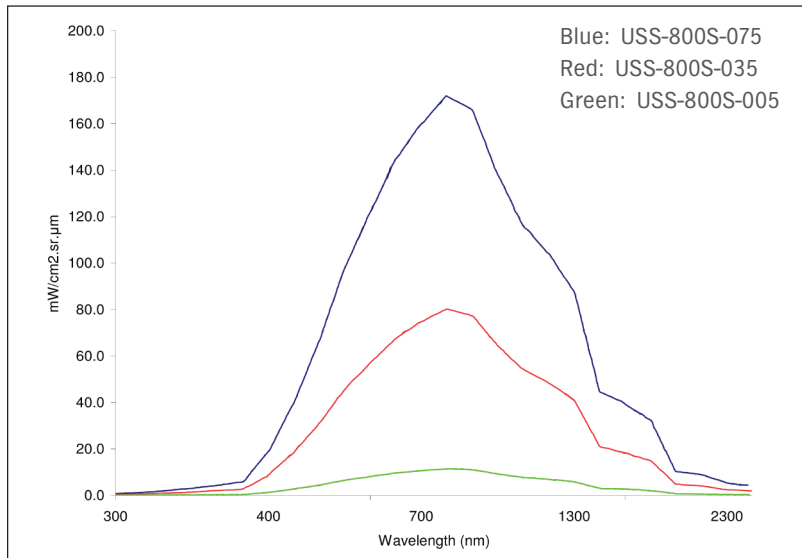


USS-800S STEPPED UNIFORM SOURCE SYSTEMS

Exceptional Uniform Radiance for the Test and Calibration of Imaging and Non-imaging Devices

SPECTRAL RADIANCE PLOT



ACCURATE

The USS-800S systems are sensor calibration systems designed to provide stepped exceptional luminance output values of 70500, 31000 or 3000 cd/m² depending on the system configuration, for imaging and non-imaging systems. A built-in photopic response photodetector monitors the source luminance. Each system provides calibrations that are traceable to the National Institute of Standards and Technology (NIST).

The USS-800S Systems feature an 8 inch diameter integrating sphere with a 2 inch exit port suitable for portable imaging systems and arrays. The sphere is coated with highly reflective Spectrafect® coated interior that provides a better than 98% uniformity. Both durable and highly stable over time, Spectrafect coating ensures the consistent integration of light over the lifetime of your sphere.

FLEXIBLE DESIGN

The USS-800S Systems yield high returns on investment by facilitating system modifications, upgrades and enhancements. A broad choice of light sources allow users to swap lamps in order to choose the appropriate configuration to meet their radiance performance requirement. Spectrafect coated port accessories allow users to reduce the port size of their sphere to match their applications.

EASY-TO-USE

A durable port framed exit port allows for the repetitious mounting of devices under test. The USS-800 systems are operated through a control chassis that features a regulated DC constant current power supply and an SC 6000 radiometer/controller that provides accurate monitoring and control of the exit port luminance. Digital readout of the source output is displayed on an LCD display located on the front panel of the SC 6000. Ethernet ports are included for optional computer interface.

FEATURES

Stepped Radiance Output of 70500, 31000 or 3000 cd/m²

Spectrafect Interior Provides >98% Radiance Uniformity

Radiometric and Photometric Calibration Reports

NIST Traceable Luminance Calibration

Backed by an ISO 9000:2001 Registered Quality Management System

BEST FOR CALIBRATING

Imaging Radiometers

Cameras

Telespectroradiometers

Small-Area Remote Sensing Devices

Displays

USS-800S UNIFORM SOURCE SYSTEM



SPECIFICATIONS

Model and Description	USS-800S-005	USS-800S-035	USS-800S-075
USS-800S 8 inch Stepped Uniform Source System	AS-02710-100	AS-02710-200	AS-02710-300
System Includes			
8 inch Uniform Source Sphere, USS-800-SF	AS-02465-000	AS-02465-000	AS-02465-000
Internal Halogen Lamp Supply, IHLS-100-005, 035, 075	AS-02631-005	AS-02631-035	AS-02631-075
Preset Power Supply, LPS-100-0042, 0307, 0625	AS-02600-042	AS-02600-307	AS-02600-625
Photopic Detector, SDA-050-P-RTA-CX	AS-02522-301	AS-02522-301	AS-02522-301
Radiometer/Photometer, SC 6000	AS-02702-000	AS-02702-000	AS-02702-000
Luminance Calibration, SCC-LU	SCC-LU	SCC-LU	SCC-LU

SYSTEM PROPERTIES AND PERFORMANCE

System Specifications	USS-800S-005	USS-800S-035	USS-800S-075
Sphere Diameter:	8 in (20 cm)	8 in (20 cm)	8 in (20 cm)
Exit Port Diameter:	2 in (5 cm)	2 in (5 cm)	2 in (5 cm)
Sphere Coating Reflectance:	98%	98%	98%
Luminance Range: (cd/m ²)	3000	31000	70500
Luminance Range: (ft-L)	850	9200	20600
Illuminance Range: (lux)	9400	97000	220000
Peak Radiance: (mW/cm ² -sr- μ m at 0.9 μ m)	11	77	166
Luminance Uniformity*:	>98%	>98%	>98%

* Applies at maximum radiance, uniformity may vary at lower radiance levels.

Detector	VI Filter Silicon Photodiode
Active Area:	5.7 mm ²
Range:	Visible
f1':	4%
Connector:	BNC

Radiometer/Photometer	SC 6000
Power Requirements:	110./220 VAC, 50/60 Hz
Current Dynamic Range:	1 pA – 1 mA
Voltage Dynamic Range:	10 mVdc – 50 Vdc-
Computer Interface:	Ethernet

Lamp Assemblies	IHLS-100-005	IHLS-100-035	IHLS-100-075
Power:	Qty 1, 5 W	Qty 1, 35 W	Qty 1, 75 W
Color Temperature:	3000K	3000K	3000K

Power Supplies	LPS-100-0042	LPS-100-0307	LPS-100-0625
Power Requirements:	110./220 VAC, 50/60 Hz	110./220 VAC, 50/60 Hz	110./220 VAC, 50/60 Hz
Current Stability:	0.42 A +/- 0.1%	3.07 A +/- 0.1%	6.25 A +/- 0.1%
Current Rise Time:	20 s	20 s	20 s
Weight:	6.5 lbs (2.9 kg)	6.5 lbs (2.9 kg)	6.5 lbs (2.9 kg)
Dimension: (W x D x H)	8.3 x 10.5 x 3.5 in (21.1 x 26.7 x 8.9 cm)	8.3 x 10.5 x 3.5 in (21.1 x 26.7 x 8.9 cm)	8.3 x 10.5 x 3.5 in (21.1 x 26.7 x 8.9 cm)
Compliance:	CE	CE	CE

Recommended Computer Requirements

Operating System:	XP Pro
Drives:	CD-ROM Drive
Ports:	TCP/IP

Optional Calibrations

Standard Spectral Radiance Calibrations:	USC-SR (300-2400 nm)
Radiance Calibration:	SCC-RA
Exit Port Luminance Uniformity Mapping:	USC-PM
Illuminance Calibration:	SCC-IL
Custom Spectral Radiance Calibrations Optional	