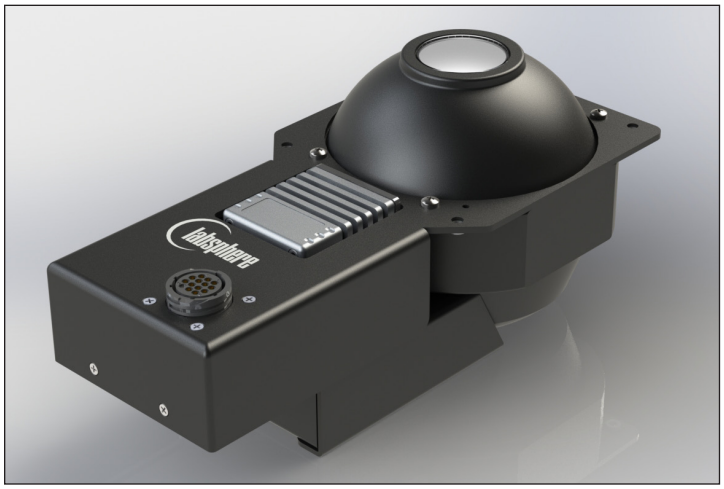
Enable accurate and reproducible calibration of displays across devices

TruLume Solid State Luminance Standards



VALUE

Correct for instrument errors in production testing to ensure reproducible display image quality

Compact and robust for easy adaptation into existing test environments

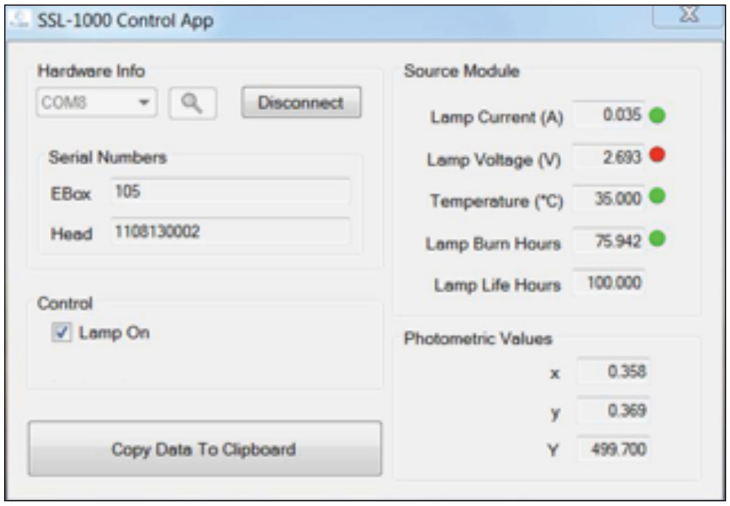
Completely enclosed with raised reference port window to minimize contaminations and easy cleaning

Accurate

Many mobile devices have LCD displays that are backlit with cool white LEDs. These LEDs have a strong peak in the blue region to excite the phosphor that produces the visible cool white appearance. The spectrometers and colorimeters used to calibrate these displays are typically calibrated with tungsten halogen sources which can result in inconsistent measurement results of the displays due to spectral mismatch errors and stray light in the meters. The best way to correct for these errors is to correct the meter response with a spectrum that matches that of the display backlight. The TruLume Solid State Luminance Standards are highly stable and accurate cool white solid state integrating sphere luminance and color standards that enables accurate and reproducible calibration of displays across devices.

Compact and Robust for Production Environments

The TruLume Solid State Luminance Standards are engineered for the demanding high quality and consistent appearance requirements of consumer product displays. The source is engineered to easily mount in a production test station. The reference port window enables validation and correction across the field of view of the test spectrometers with highly uniform luminance and color accuracy. With Labsphere's highly diffuse and durable reflectance coating, Permaflect® and a seasoned LED module, long term repeatability and reproducibility are ensured in the application environment.



Order Information

Model Number	Order Number	Description
SSL-1000	AA-01269-000	25.5 mm diameter reference port
SSL-1010	AA-01270-000	40 mm diameter reference port

Accessories Include:

Uniform Source and Control Module
Control Commands and UI
Calibration Reports
Transport Case

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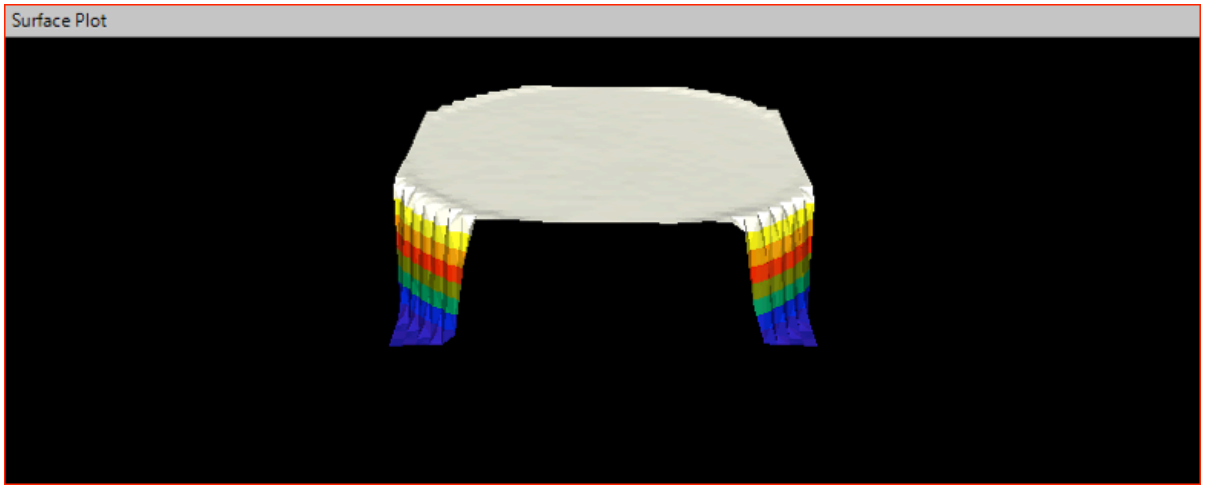
PB-13092-000 Rev. 00

Specifications

	SSL-1000		SSL-1010	
Luminance Spatial Uniformity:	>98% inside of 23 mm diameter reference area		>98% inside of 35 mm diameter reference area	
Luminance:	500 cd/m2		500 cd/m2	
Luminance Uncertainty:	+/- 0.9% k=2		+/- 0.9% k=2	
Chromaticity x Uncertainty:	+/- 0.0009 k=2		+/- 0.0009 k=2	
Chromaticity y Uncertainty:	+/- 0.0009 k=2		+/- 0.0009 k=2	
Light Source:	Fully enclosed Integrating Sphere		Fully enclosed Integrating Sphere	
	TE Controlled Cool White LED		TE Controlled Cool White LED	
	25.4 mm Luminance Port		40 mm Luminance Port	
	Luminance Port shutter		Luminance Port shutter	
	3 m Detachable Cable		3 m Detachable Cable	
	Power Module		Power Module	
Calibrated Life:	100 hrs.		100 hrs.	
Stability over 100 hours:	Y: < +/- 0.5%		Y: < +/- 0.5%	
	x: +/- 0.0009		x: +/- 0.0009	
	y: +/- 0.0009		y: +/- 0.0009	
Warm-up Time:	<45 seconds from cold start		<45 seconds from cold start	
Control Software and User Interface:	x, y, and Y		x, y, and Y	
	TEC Temperature		TEC Temperature	
	On/Off		On/Off	
	LED Current Set and Actual		LED Current Set and Actual	
	Operation Timer		Operation Timer	
	Connection Status		Connection Status	
	Optical Head IDN		Optical Head IDN	
Operating Temperature:	20 - 40 degrees C, 0 - 70% RH		20 - 40 degrees C, 0 - 70% RH	
Computer Requirements:	Windows 32 bit		Windows 32 bit	
	USB		USB	
Power Input:	110/220 VAC, 50/60 Hz		110/220 VAC, 50/60 Hz	
Dimensions/Weight:	Height x Width x Depth	Weight	Height x Width x Depth	Weight
	13 cm x 11 cm x 26 cm (source module)	9 kg	13 cm x 11 cm x 26 cm (source module)	9 kg
	13 cm x 23 cm x 37 cm (power module)	9 kg	13 cm x 23 cm x 37 cm (power module)	9 kg



Luminance Uniformity Chart of Typical SSL

TruLume

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