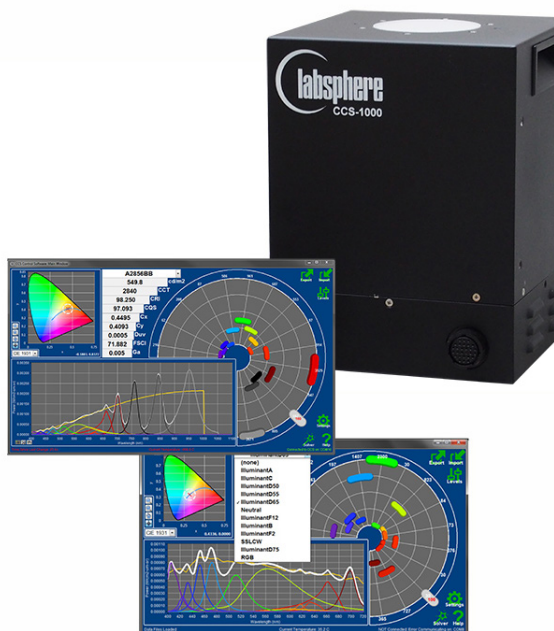


Color Tunable Sources for Image Sensor Characterization

Enhance production testing of image sensors to ensure exceptional image quality



VALUE

Save money with one instrument that produces multiple spectrums

Save space with a large area uniform luminance field in a compact and robust instrument

Trusted results from a recognized leader in image sensor calibration sources

Compact and robust for production environments

Tunable Image Sensor Characterization Sources are engineered for the high performance requirements in image sensor production testing and calibration. The sources are designed to easily mount in a production test station. The 7.5 cm diameter window enables test and calibration with highly uniform illumination. With Labsphere's diffuse reflectance material, Spectralon®, and thermal-controlled LED module, long term repeatability and reproducibility are ensured.

Order Information

Model Number	Order Number	Description
CCS-1000	AA-01367-000	Tunable Image Sensor Calibration Source
CCS-1100	AA-01367-100	Tunable Image Sensor Calibration Source with Integrated Spectrometer
OSC-1000	AS-03025-100	Optimization Solution Creator Option

Accessories Include:

Quick Start Guide
Programming Commands
Uniformity Report
Calibration Certificate

Specifications

Light Source:	Integrating Sphere Tunable LED light engine and discrete color channels Current regulated DC driver control Spectral Range: CCS-1000: Visible, 840 nm and 950 nm CCS-1100: Visible, 840 nm and calibration lamp		
Typical Spectral Output CIE 1931 Illuminants and more:	CCS-1000	CRI (Typical)	Duv Tolerance
	Illuminant A	98	± 0.001
	Illuminant B	98	± 0.002
	Illuminant C	98	± 0.002
	Illuminant D50	98	± 0.002
	Illuminant D55	98	± 0.002
	Illuminant D65	98	± 0.002
	Illuminant D75	98	± 0.002
	Illuminant F2	64	± 0.002
	Illuminant F12	81	± 0.003
	Neutral E	96	± 0.002
	SSL-WW	81	± 0.003
	840 nm		
	950nm		
Output Port:	75 mm diameter with protective window Apertures available for modifying f-numbers		
Luminance Spatial Uniformity:	>97%		
Luminance Range:	50 to 1000 cd/m ²		
Long Term Stability:	+/- 1%		
Short Term Stability:	+/- 0.1% COV after 500 msec		
Initial Warm-Up Time:	500 msec between spectra		
Control: Software Development Kit and LabVIEW User Software	Individual Light Channel Control On, Off Preset Functions for Illuminant Spectrums Luminance, x, y, CCT, CRI, Duv All Off Stability indicator		
With Spectrometer Monitor Option	Spectral Radiance (mW/cm ² -sr-nm) Luminance (cd/m ²) Illuminance (lux) (optional) CRI Duv Source Calibration		
Operating Temperature:	20 - 40 degrees C, 0 - 70% RH		
Computer Requirements:	Windows®, 32 bit RS-232 DB9 or USB		
Power Input:	110/220 VAC, 50/60 Hz		
Dimensions: Integrating Sphere Source Module Power Module	18 cm x 18 cm x 24 cm (H x W x L) 13 cm x 23 cm x 37 cm (H x W x L)		
Weight: Integrating Sphere Source Module Power Module	8 kg 6 kg		