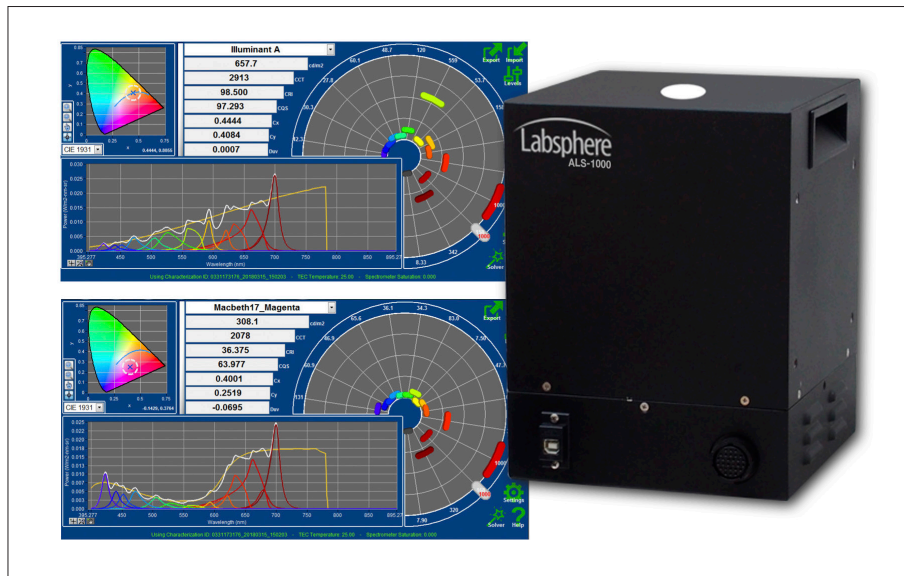


Tunable Ambient Light Sensor Calibration Sources



Highly uniform illumination

The 2.54 cm diameter port enables test and calibration with highly uniform illumination.

Trusted test data

Labsphere is a recognized leader in image sensor calibration sources. Our Tunable Image Sensor Characterization Sources are engineered for the high performance requirements in image sensor production testing and calibration.

Save money, save space

One instrument produces multiple spectrums. Large area uniform luminance field in a compact and robust instrument. The sources are designed to easily mount in a production test station with active spectral feedback loop and user recalibration features.

Repeatable, reproducible results

With Labsphere's diffuse reflectance material, Spectralon®, and thermal-controlled LED module, long term repeatability and reproducibility are ensured.

Specifications

Light Source:	Integrating Sphere Tunable LED Light Engine and Discrete Color Channels Current Regulated DC Driver Control Spectral Range: CCS-1000-ALS: Visible, 850 nm and 940 nm, no spectrometer CCS-1100-ALS: Visible, 850 nm and calibration lamp, with spectrometer		
Typical Spectral Output CIE 1931 Illuminants & 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-VW	81	± 0.003
	840 nm		
	950 nm		
Luminance Spatial Uniformity:	>97%		
Output Port:	25 mm diameter		
Illuminance Range:	150 to 3000 lux		
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 Preset Functions for Illuminant Spectrums Illuminance, x, y, CCT, CRI, Duv Stability Indicator Active Spectral Feedback Loop Embedded User Recalibration Process		
With Spectrometer Monitor Option	Spectral Irradiance ($\mu\text{W}/\text{cm}^2\text{-sr-}\mu\text{m}$) Illuminance (lux) Luminance (cd/m^2) (optional) CRI Duv		
Operating Temperature:	20 - 40 degrees C, 0 - 70% RH		
Computer Requirements:	Windows®, 32 bit RS-232 DB9 or USB		
Power Input:	110/240 VAC, 50/60 Hz, 335 W		
Dimensions: Integrating Sphere Source Module Power Module	18 cm x 18 cm x 24 cm (L x W x H) 37 cm x 23 cm x 13 cm (L x W x H)		
Weight: Integrating Sphere Source Module Power Module	8 kg 6 kg		

Ordering Information

Order Number	Model Number	Description
AA-01367-400	CCS-1000-ALS	Tunable LED Source Without Spectrometer Includes visible, 850 nm and 940 nm LEDs
AA-01367-500	CCS-1100-ALS	Tunable LED Source With Spectrometer Includes visible, 850 nm LED and calibration lamp