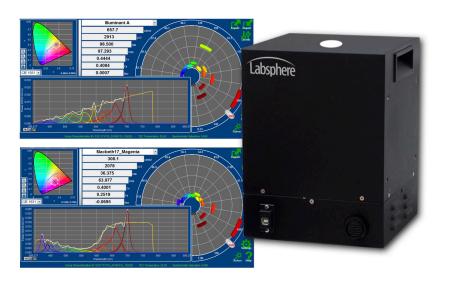


Spectra-FT Fine Tunable VIS Spectral Calibration Source



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 spectral calibration 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:

FT-1100-A: Visible, 850 nm and calibration lamp, with spectrometer

Typical Spectral Output CIE 1931 Illuminants & more:

FT-1100	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		

840 nm 950 nm

Luminance Spatial Uniformity: >97%

Output Port: 25 mm diameter lluminance 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 Individual Light Channel Control

and LabVIEW User Software 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 (µW/cm²-sr-µm)

Illuminance (lux)

Luminance (cd/m²) (optional)

CRI Duv

Operating Temperature: 20 - 40°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 18 cm x 18 cm x 24 cm (L x W x H)

Power Module 37 cm x 23 cm x 13 cm (L x W x H)

Weight: Integrating Sphere Source Module 8 kg

Power Module 6 kg

Ordering Information

Model Number Order Number Description

FT-1100-A AA-01367-500 Tunable LED Source With Spectrometer

Includes visible, 850 nm LED and calibration lamp

