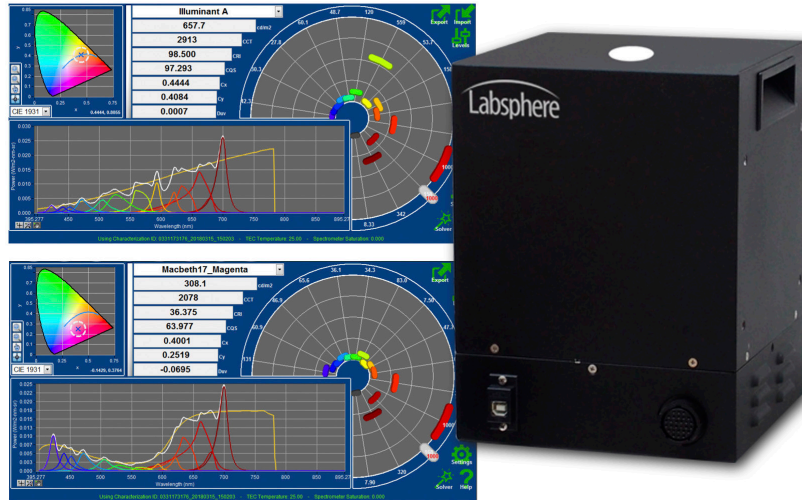


# Spectra-FT Fine Tunable VIS Spectral Calibration Source



## 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		
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 ( $\text{cd}/\text{m}^2$ ) (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  
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

**Model Number**

**Order Number**

**Description**

FT-1100-A

AA-01367-500

Tunable LED Source With Spectrometer  
Includes visible, 850 nm LED and calibration lamp

