Imatest Spectral Illuminance Color Sensor

Measure illuminance, color temperature, CRI, & visible spectrum

Why Choose the Imatest Spectral Illuminance Color Sensor?

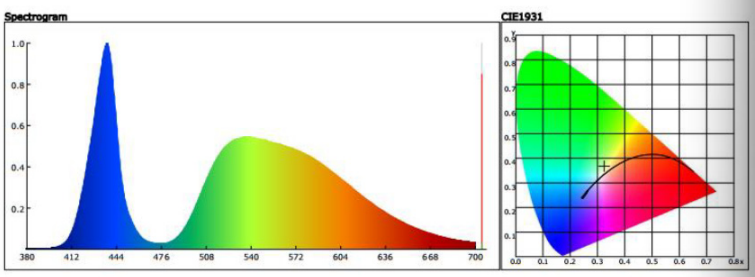
The Spectral Illuminance Sensor enables quick accurate measurements over a USB interface. Quickly measure Correlated Color Temperature (CCT), Illuminance (Lux), and photosynthetic photon flux density (PPFD). The included adapter allows you to easily mount the spectral sensor to the Imatest Modular Test Stand, Sensor Plate, Magnetic Chart Mounting System, or other ferrous materials. Separate the transmitter and receiver for wireless communication.

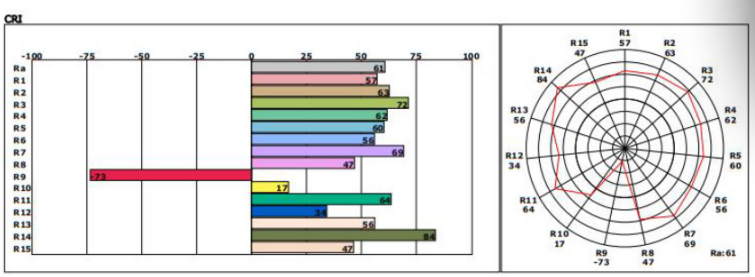
Imatest Spectral Illuminance Color Sensor Features

- ✓ Measures Correlated Color Temperature (CCT), Illuminance (Lux), and photosynthetic photon flux density (PPFD)
- ✓ Can measure wide and narrow spectrum light sources, such as CFL, HID, etc.
- ✓ Includes adapter with 1/4”-20 tripod mount and embedded magnet for mounting to the Imatest Sensor Plate
- ✓ Includes PC control software

Parameter

Name	Value	Name	Value	Name	Value
L(cd/m²)	6150.40	Purity(%)	8.0	Compensate level	2890
Footlamber (fl)	1795.06	HalfWidth(nm)	20.9		
CCT(K)	5809	Peak(nm)	437.5		
Duv	0.01627	Center(nm)	435.5		
CIE x,y	0.3245,0.3673	Centroid(nm)	532.3		
CIE u,v	0.1920,0.3261	Color Ratio(RGB)	10.9,87.7,1.3		
CIE u',v'	0.1920,0.4891	CIE1931 X	7955.053		
SDCM	11.07	CIE1931 Y	9004.982		
Ra	60.8	CIE1931 Z	7554.475		
Le(mW/cm²/sr)	1.781	Integral Time(ms)	7		
S/P	1.785	Peak Signal	55706		
Dominant(nm)	539.10	Dark Signal	1688		





imatest®

Spectral Illuminance Color Sensor Specifications

Specifications	Details
Illuminance Range	5-200,000 lux
FWHM	4nm
CCT Range	1000 – 100,000K
Spectral Resolution	0.5nm
Sensor	CCD | 1500 Sensor Array Points
Zeroing Mode	Auto Zeroing
Wave Accuracy	±0.5nm
Chromaticity Coordinates (x,y)	Accuracy: ±0.0025 | Repeatability: ±0.0025
Illuminance Accuracy	±4%
Window Size	Ø17mm
Interface	USB-C
Sensor Dimensions	61.2 x 63.0 x 17.2 mm (2.41" x 2.48" x 0.675")
Sensor + Mounting Adapter Dimensions	67.3 x 72.1 x 24.1 mm (2.65" x 2.84" x 0.95")
Control Software	Windows HPCS330X Software | Serial Interface

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