Irradiance Measurement System

BIX-8805 Series

The BIX-8805 is a configurable Irradiance Measurement System consisting of a spectrometer, optical fiber, cosine corrector, and mounting stand. The spectrometer is connected via fiber optic cable to a cosine corrector with a known surface area. The entire system is radiometrically calibrated using NIST-traceable standard light sources.

It enables precise measurement of ultraviolet intensity across UVA, UVB, and UVC bands, as well as key radiometric parameters including irradiance, radiant flux, and radiant intensity within specific wavelength ranges.

With its simple operation and user-friendly design, the BIX-8805 is widely applicable for:

- UV disinfection lamp testing
- UV fluorescent lamp irradiance measurement
- LED optical radiation safety evaluation
- Related research fields requiring accurate UV/optical radiation data

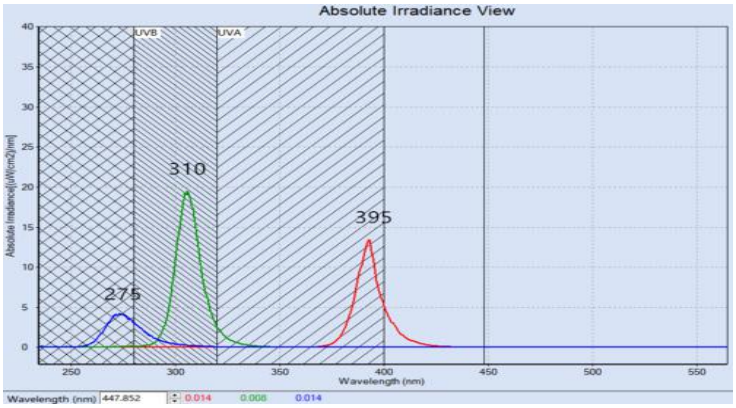
Features

- Calibration with NIST-traceable light source
- Multi-band UV measurement capability
- Integrated cosine correction
- Modular design for flexible configuration
- Software compatible with Win XP, Windows 7, Windows 8, Windows 10
- USB 2.0 data transmission and power supply, supporting RS232 communication

Applications

- UV standard detection and measurement
- LED optical radiation safety measurement
- Plant growth/PAR/plant photobiology
- Characterization of UV curing systems
- Light stability measurement
- Spectral reflectance/absorbance/transmittance measurement
- Fluorescence measurement

Typical Spectrum



LED Irradiance Measurement
275, 310, 395 nm LED irradiance test, integration time 25ms

Specifications

Model	BIX-8805-01	BIX-8805-02	BIX-8805-03
Spectral Range	200-1100nm	200-900nm	400-1100nm
Resolution	2nm	1nm	
Integrating Time	0.5ms-10s		
SNR	600:1		
Communication Mode	USB 2.0		
Optical Diffuser	PTFE		
Host Size	94 × 60 × 36.5mm		
Probe Size	Φ 6.4 × 115 mm		
Radiation Calibration	Radiation calibration through NIST traceable standard light source		
Measurable Parameters	Spectral distribution graph		
	irradiance of UVA，UVB，UVC		
	custom-defined band range of the irradiance, radiation intensity and radiation flux		