

Spectroradiometer specbos 1200

specbos 1200 is an easy to use and compact Visible light spectroradiometer. The included, user friendly software has a full complement of the radiometric and colormetric functions required for precision research, diagnostic, and quality control applications. Uses include the measurement of diffuse light sources and screens.

Applications:

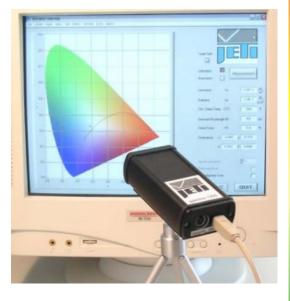
- CRT Monitors, LCD and LED Displays
- Traffic lights, automotive lighting
- Illumination sources
- Lamp burn-in testing

Advantages:

- USB version is bus powered
- Internal target spot laser
- Exports data in Excel format
- Measurement in time step intervals

Measuring values:

- Luminance, Radiance
- Illuminance, Irradiance
- xy and u'v' coordinates
- Dominate wavelength
- Color purity
- Correlated color temperature
- Color rendering indexLuminous Intensity and Luminous Flux measuring heads are optional.



Specification

Optical parameters

Spectral range 380 nm ... 760 nm

Resolution 5 nm Calculated resolution 1 nm

Digital resolution 14-bit A/D converter

Wavelength accuracy \pm 0.5 nm Viewing angle 2°

Dispersive element Holographic diffraction grating (9 nm FWHM)

Light receiving element 128-pixel photodiode detector array
Measuring distance/ diameter 20 cm - Ø 7 mm; 100 cm - Ø 35 mm

Measuring values Spectral radiance

Total luminance / total radiance Total illuminance / total irradiance Chromaticity coordinates x,y; u',v' Correlated color temperature Dominant wavelength, purity Color rendering index

Measuring ranges and accuracies

Measuring range luminance 2 ... 1•10⁵ cd/m² Measuring range illuminance 20 ...5•10⁵ lx

 $\begin{array}{lll} \text{Luminance accuracy} & \pm \, 5\% \\ \text{Luminance reproducibility} & \pm \, 2\% \end{array}$

Chromaticity accuracy $\pm 0.002 \text{ x, y } (@ 2856^{\circ}\text{K})$

Color reproducibility $\pm 0.0005 \text{ x, y}$ CCT reproducibility $\pm 20^{\circ}\text{K (@ 2856°K)}$

Technical data

Interfaces RS-232c, 8N1, 38,400 Baud or

USB 1.1 full speed (12 Mbit/sec)

Dimensions 150 mm x 58 mm x 34 mm

Weight 300 g

Operating conditions Temperature 10 ... 40°C

Humidity < 85% relative humidity at 35°C

Power supply Switching mode power supply, RS-232c version only

Accessories (included) Operational instructions & Calibration certificate

JETI Specbos Lighting software for Windows 98/2000/

XP/ NT (Version 5)

Transport case

RS-232c version: PC Serial cable (9-pin D connector)

USB version: USB 1.1 A-B cable

NPL traceable calibration
One year recommended interval