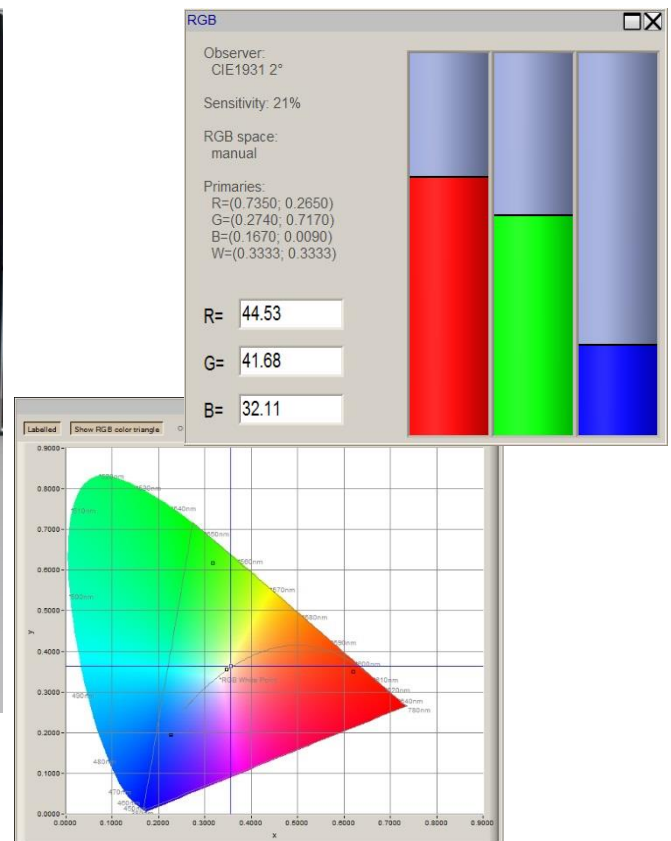
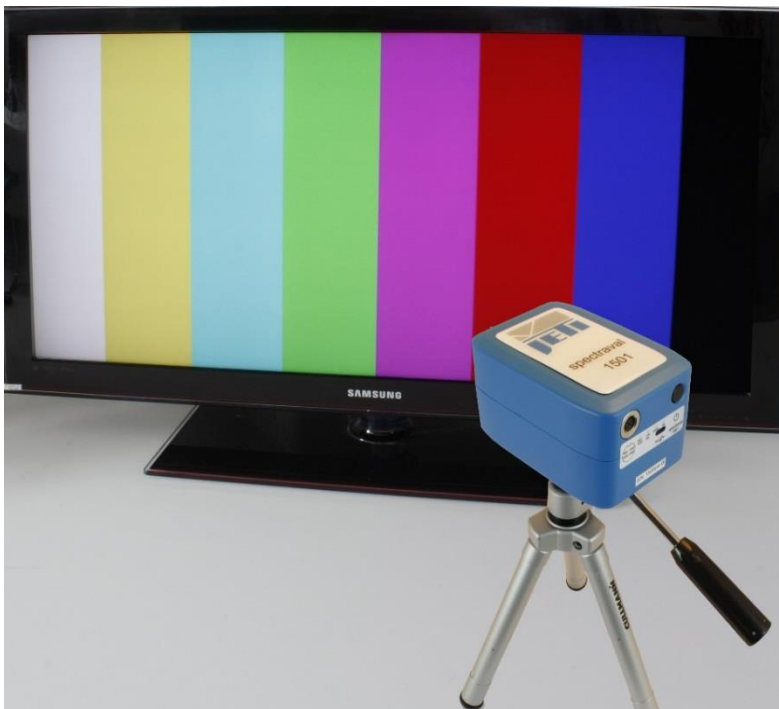




spectraval 1501 VIS Spectroradiometer

spectraval 1501 is a compact spectroradiometer for the visible spectral range. It can be used for spectral Radiance measurements with a viewing angle of 1.8° . The actual measuring area is marked by a red circle.

spectraval 1501 comes with the radiometric software *JETI LiVal* (demo version see: www.jeti.com), but can be used with special programs, for monitor calibration (CalMAN, LightSpace CMS, ChromaPure; HCFR under preparation).



Advantages:

- ◆ Compact solution
- ◆ Fast measurement
- ◆ Precise results due to high quality spectrograph and NIST traceable calibration
- ◆ Comfortable handling due to Bluetooth interface
- ◆ Measurement of source repetition rate

Examples for applications:

- ◆ Calibration of broadcast monitors
- ◆ Color adjustment of digital projectors
- ◆ Color characterization of LED displays
- ◆ Color measurement of video walls



Specifications

Optical parameters

Spectral range 380 ... 780 nm

Optical bandwidth 4.5 nm

Wavelength resolution 1 nm

Digital electronic resolution 16 bit ADC

Viewing angle 1.8°

Measuring distance/ diameter 20 cm - Ø 6 mm; 100 cm - Ø 31 mm

Measuring values

Spectral Radiance/ Integral Radiance, Luminance

Chromaticity coordinates x,y and u',v'

Correlated Color Temperature

Color purity, dominant wavelength

CRI, CQS, RGB and others

With optional diffusor

Spectral Irradiance/ Integral Irradiance/ Illuminance

Measuring ranges and accuracies

Measuring range luminance 0.1 ... 150 000 cd/m² (III. A)

0.1 ... 100 000 cd/ m² (typical white LED)

Luminance accuracy ± 2 % (@ 100 cd/m² and III. A)

Luminance repeatability ± 1 %

Chromaticity accuracy ± 0.002 x, y (@ 100 cd/m² and III. A)

Color repeatability ± 0.0005 x, y (@ 100 cd/m² and III. A)

CCT repeatability ± 20 K (@ 100 cd/m² and III. A)

Wavelength accuracy ± 0.5 nm

Polarization error < 2 % (f8)

Measuring range illuminance 2 ... 1 000 000 lx (III. A)

(with optional diffusor) 2 ... 740 000 lx (typical white LED)

Other technical data

Dispersive element Imaging grating (flat field)

Light receiving element CCD line array 2048 pixels (binned)

Power supply Battery and USB powered

Interfaces USB 2.0 fullspeed

Bluetooth, alternatively LAN

Dimensions 140 mm x 80 mm x 70 mm

Weight 400 g

Operating conditions Temperature 10 ... 40 °C

Humidity < 85 % relative humidity at 35 °C

Accessories (included) PC software *JETI LiVal* for Windows 7/ 8/ 10

Software development kit

USB cable and trigger connector

Bluetooth stick, Battery charger

Calibration certificate

Tripod, transport box

Operating instructions

Calibration NIST traceable

Recommended interval 1 year