ILT960 Series

Portable Mini Spectroradiometers

The most cost-effective, fully integrated CMOS-based spectroradiometer family available with ISO17025 accredited calibration

The ILT960 is equally at home on the production floor as it is the laboratory, combining high performance, accuracy, ease-of-use, and a wide array of features all in a rugged, compact, portable design.

The ILT960-UV is a compact, portable mini spectrometer used to measure both the light's amplitude and wavelength, and provide calibrated spectral irradiance, or power measurements. The ILT960 kits are combined with high end optics for proper light collection, including diffusers for cosine correction, and integrating spheres for total flux. All ILT960 spectrometers include both wavelength and optical NIST traceable - ISO17025 accredited calibrations, with certification and data files. Complimentary SpectrILight III software is included at no cost, and DLL's are available upon request.

The ILT960 spectroradiometer light measurement systems come in three models, each with configured optics kits. The ILT960-UV, the ILT960-VIS, and the ILT960-BB. All systems come standard with SpectrILight III software, 1 meter long fiber, input optic, tripod, hard storage case, and calibration.

Typical applications include:

- Plant Growth/PAR/Plant Photobiology
- Characterization of Solar Simulation
- Characterization of UV Curing Systems
- Photostability Testing
- Accelerated Weathering
- Radiometery and Photometry Measurements
- LED Illumination and Color Analysis
- Absorbance/Transmittance
- Reflectance
- Fluorescence

Please visit the ILT960 Spectroradiometer pages on the our web site to review the individual specs of the kits. Inquire about custom configuration.

SPECIFICATIONS

Three Models:
ILT960-UV: 200 - 500 nm
ILT960-VIS: 200 - 850 nm
ILT960-BB: 230 - 1050 nm

NIST-Traceable/ISO17025 Accredited Calibration
Detector: CMOS Linear Image Sensor
Focal Length: 60 mm
Dynamic Range: 3450
Symmetrical Czerny-Turner
Stray Light: <0.2%
Signal/Noise: 330:1
Integration Time: 0.2 ms - 1 min
Data Transfer Speed:
16 bits, 2 MHz
Trigger Compatible
Synchronization Capability
Temperature Range: 0 - 50°C
Size (mm): 35.4 H x 86 W x 110 L
Dynamic Dark Correction: yes
Non-Linearity Calibration: yes
Wavelength Accuracy:
ILT960-UV: ±0.21 nm
ILT960-VIS: ±0.3 nm
ILT960-BB: ±0.6 nm

Radiometric Accuracy:

200nm - 350nm: ±20%*
350nm - 400 nm: ±10%*
400nm - 900nm: ±5%
900nm - 1050nm: ±10%

*** Requires dual source calibration upgrade to assure radiometric accuracy in the UV**

ISO 9001 / ISO/IEC 17025 / ISO13485

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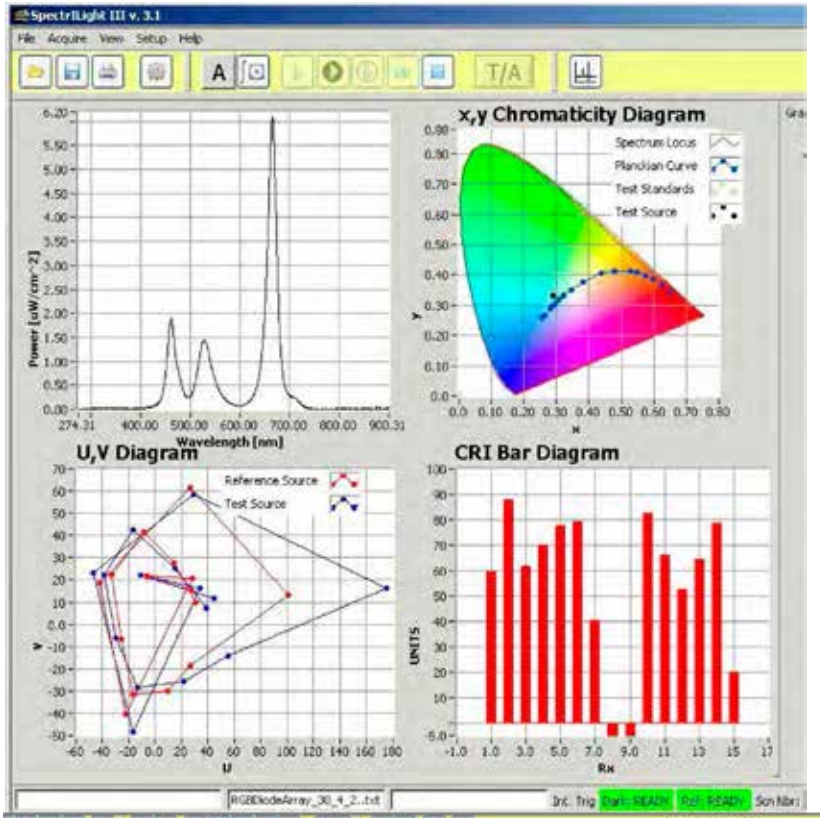
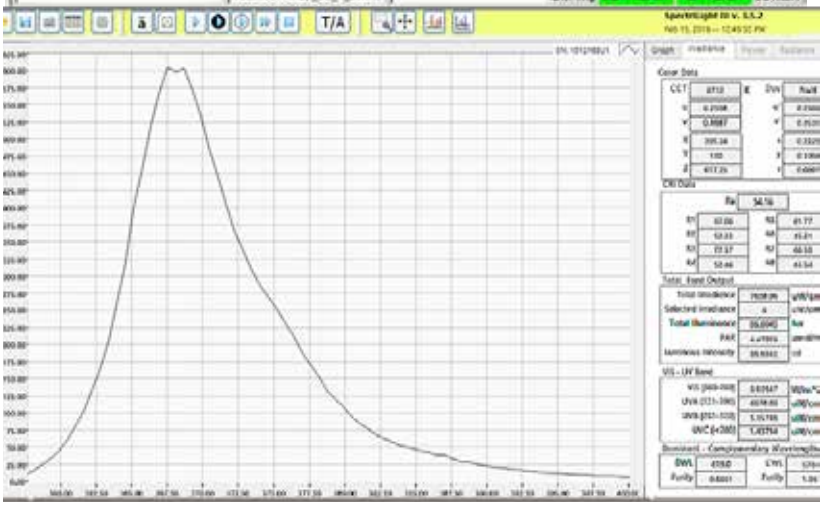
International Light TECHNOLOGIES

SpectriLight III

ILT960 Control & Analysis Software





SpectriLight™ III is a LabView™ based software package for Windows that allows acquisition of spectral and color data. Analysis of the data is calculated instantly within the same program - no exporting required.

SpectriLight™ III provides easy setting of all operating controls of the ILT960 spectrometer with an integrated data analysis package, making your spectral analysis fast and simple. Wavelength range, integration time, scan average and other controls can be easily set through pop up windows, menus and toolbars. Absolute Irradiance and chromaticity are calculated instantly.

REAL-TIME ANALYSIS

- Irradiance: Total, Visible, UVA, UVB, UVC, PAR, photopic data.
- Selectable bandwidth for irradiance, power, and radiance
  (requires additional hardware & calibration options)
- Chromaticity analysis: x, y, u, v coordinates and display in CIEcolor spaces.
- Dominant and complementary wavelength and color purity.
- General Color Rendering Index (CRI) and 15 special color rendering indices.
- Correlated Color Temperature (CCT) and Duv.

SPECIFICATIONS

- Automated time line measurements
- Access multiple calibration files
- Auto-integration simplifies user interactions
- Scan Average: 1 to 999 for reduced noise
- External Trigger
- Peak Find
- Enhanced scaling and zoom features including movable vertical cursors
- Export to ASCII text, report, or directly into Excel. Save screens/scans in multiple formats including .bmp, .jpg, and .png
- Powerful import data wizard can even import data from other spectrometers!

Requires: Windows XP Professional, 7&10; Pentium II 300 MHz or better

C, C++, and Visual Basic DLL's as well as custom DLL's are also available.

Please contact our software engineer at ilsupport@intl-light-tech.com for more information.

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