ILT550

Portable Spectroradiometer

ILT550 Series Turn-Key, Portable, NIST-Traceable, ISO17025 Calibrated Spectroradiometer System - Economically Priced, but with Research Grade Specifications

With budget conscious customers in mind, ILT is pleased to announce the addition of the new ILT550 Spectroradiometer.

The ILT550 comes standard with an SMA905 receptor allowing it to be used with all of the ILT950 spectroradiometer accessories including the R4 Right angle adapter, Mini and standard diffusers, Fiber optics, 2, 5 and 10 inch integrating spheres.

Standard and optional accessories can be combined to allow measurements for total flux, irradiance, radiance, colorimetry, luminance, illuminance and more.

Typical applications include:

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

To make ordering an ILT550 system as easy as possible, ILT offers a large number of complete measurement systems that include everything needed to make accurate, calibrated light measurements. Please visit the ILT550 Spectroradiometer Web page on the ILT Web site to review these pre-configured systems.

(If you prefer to configure your own ILT550 system, the ILT550 base spectrometers can be sold separately.)

SPECIFICATIONS

Two Versions:

- ILT550: 250-900 nm (Standard)
- ILT550V: 360-850 nm (VIS)

NIST-Traceable, ISO17025 Accredited Calibration**
Resolution: 2.4 nm with 50 micron slit
CCD Array: 2048 Pixel Sony ILX511
Focal Length: 45 mm
Blaze: 400 nm
Dynamic Range: 2184
Symmetrical Czerny-Turner
Stray light: <0.2% @ 600 nm
Signal/Noise: 372:1
Sensitivity: 75 photons/count @ 600 nm
Integration Time: 6 ms - 2 s
Data Transfer Speed: >85 ms/scan
14 bits, 0.4 MHz
No Trigger
No Synchronization
Dynamic Dark Correction: Yes
Non-Linearity Calibration: Yes
Temperature Range: 15 - 40°C
Size: 96 x 112.4 x 32.5 mm
Radiometric Accuracy:
200nm - 350nm: ±20%*
>350nm - 450 nm: ±10%*
>450nm - 900nm: ±5%

* Requires dual source calibration upgrade to assure radiometric accuracy in the UV
** Dual range calibration with D2 and QTH light source is strongly recommended for broadband measurements encompassing UV below 350 nm due to low output of the QTH lamp which increases the difficulty of accurate UV calibrations.

ISO 9001 / ISO/IEC 17025

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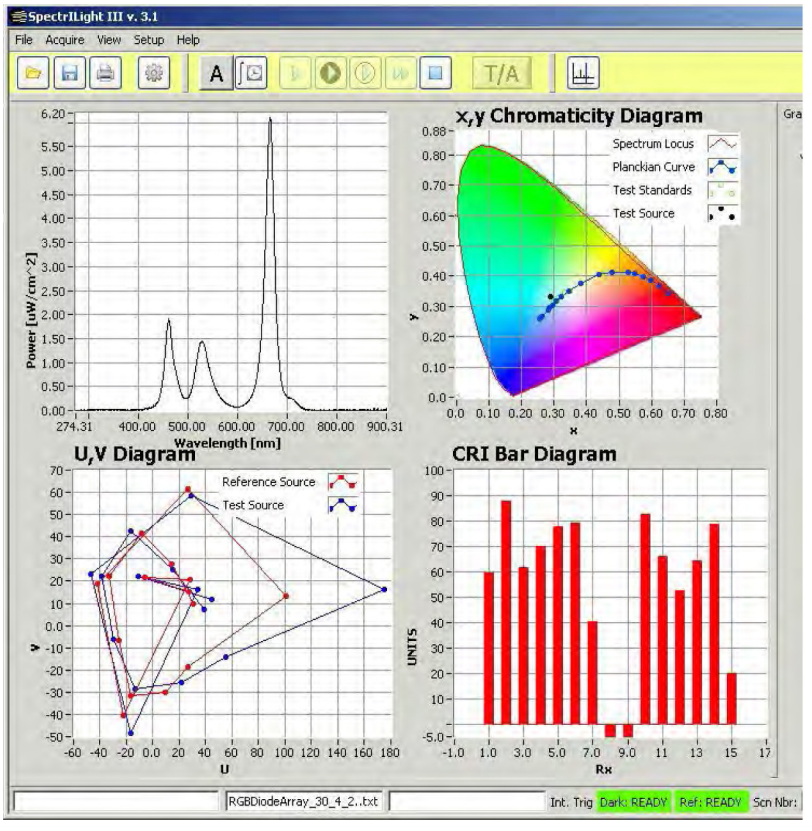
InternationalLight TECHNOLOGIES



SpectriLight III

ILT550 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 ILT550 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.

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!

SpectriLight III - Version 5 - New Features:

1. Overlay: allows comparison to baseline reading
2. PAR: plant growth calculations
3. New color calculation includes 2 & 10 degree observer, and Metamarism calculation

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 renderingindices.
- Correlated Color Temperature (CCT) and Duv.

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

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

Contact our software engineer at ilsales@intl-lighttech.com for more information.

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