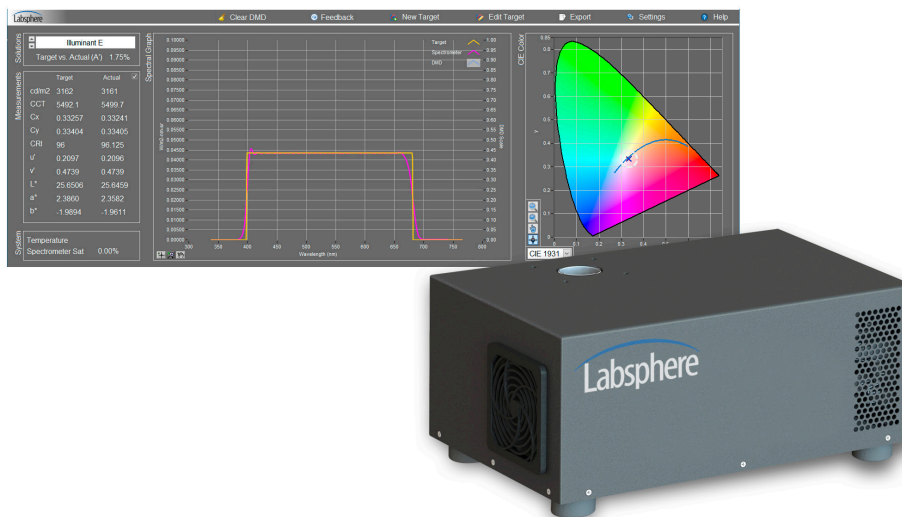


Spectra-UT Ultra Tunable Spectral Calibration Sources



Spectra-UT delivers unprecedented spectral matching resolution.

Using a continuous-spectrum light source and polychromator technology Spectra-UT offers incomparable control over generated spectral waveforms.

Spectra-UT can reproduce complex spectral features with a precision that enables high-resolution simulation of standard illuminants as well as natural or synthetic sources and emissions. Spectra-UT is a uniform source for flat-fielding applications and can be adapted to optical light guides and collimators for remote sample spectral illumination.

Spectra-UT is capable of producing a near-perfect match to almost any target spectral waveform in the visible-light region by using a sophisticated spectral matching algorithm. It can render narrow-band targets on the order of 10 nm full-width half-max, broad VIS spectra and complex shapes.

Features

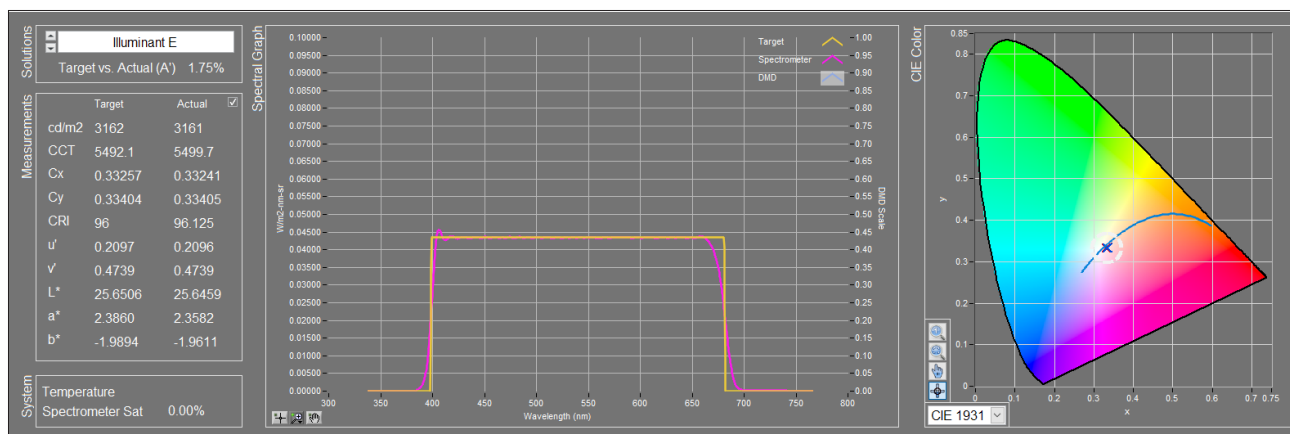
- Controllable variable light output levels
- Fast switching and settling time
- Digital performance feedback
- User-friendly software interface

Benefits

- Unmatched programmable high resolution spectral outputs
- Unlimited spectral reproduction over the visible range
- Accurately simulated OLED, MicroLED and LED displays
- Simulate RGB and broadband backlighting
- Reproduce indoor lighting conditions
- Spectrally pure, avoid channel cross talk in multicoloring imaging
- Traceable calibrations with integrated QTH calibration lamp and spectrometer

Applications

- Calibrate colorimeters and spectrophotometers
- Correct for tristimulus color mismatch errors
- Compare and differentiate instrument performance
- Test filtered and unfiltered optical sensor response
- Optimize display color reproduction



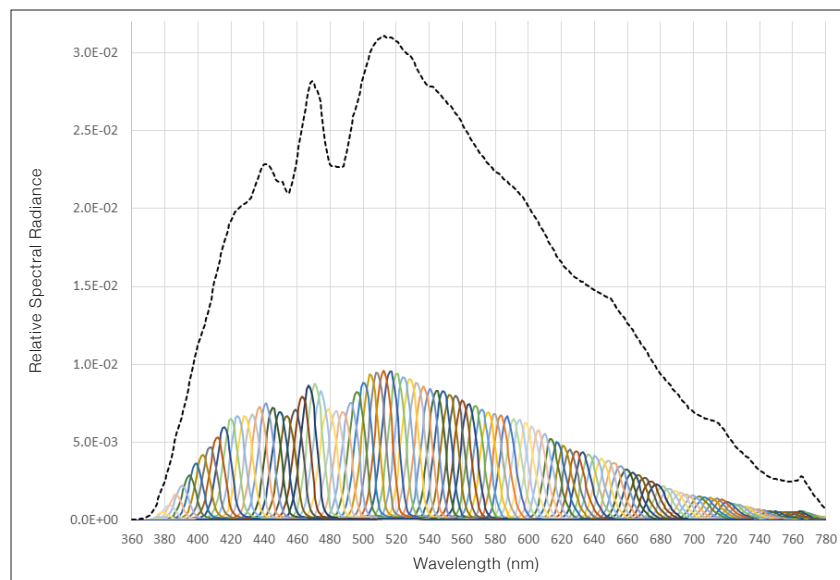
Flexible Control Software User Interface

- Yellow plot shows example of a desired spectra
- Red plot shows spectral matching and source spectral radiance

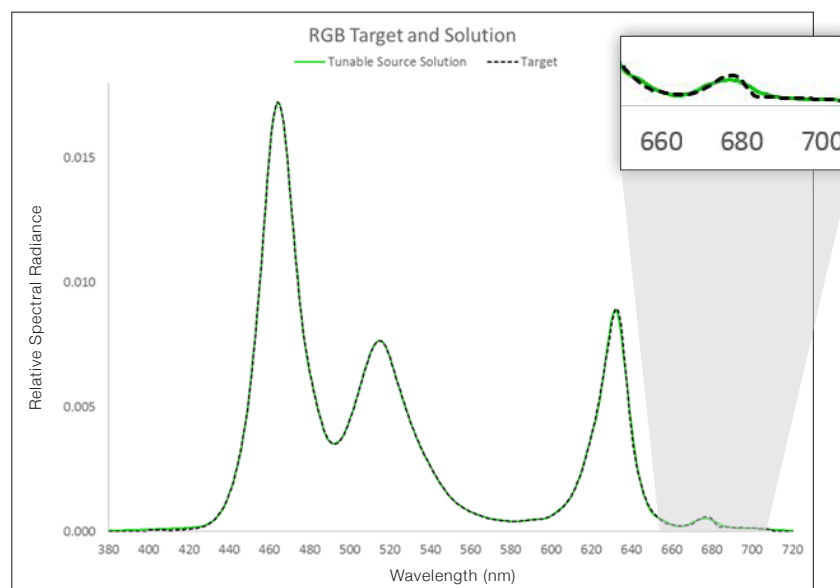
Specifications

| | |
|------------------------------------|--|
| Max Output Power in Visible Range: | 1000 cd/m ² |
| Light Control Levels: | 25 cd/m ² to 1000 cd/m ² |
| Luminance Port: | 36 mm diameter with protective window |
| Luminance Uniformity: | 99% |
| Spectral Range: | 390 nm – 780 nm |
| FWHM: | 12 nm ± 2 nm |
| Peak Wavelength Separation: | 0.4 nm |
| Spectral Monitor Accuracy: | < 0.5 nm |
| Settling Time: | < 1.0 sec |
| Spectral Monitor Scan Rate: | < 1.0 spectra/sec |
| Source: | Continuous wave |
| Triggering: | Software |
| Communication: | USB 3.0 or TCP |
| Operating System: | Windows 10 with LabVIEW Runtime |
| Voltage Input: | 12 V, 300 W through 110/220 VAC converter |
| Source Dimensions: | 15 cm H 36 cm W 24 cm D |
| Weight: | 7 kg (plus separate source power supply) |

Specifications subject to change.



Example of 10 nm FWHM Peak Power (1500 cd/m²)



High Fidelity Spectral Matching of RGB Target Spectra

Ordering Information

| Model Number | Order Number | Description |
|--------------|--------------|--|
| UT-1000-D | AA-01581-000 | Down looking with luminance port on top |
| UT-1000-S | AA-01581-100 | Side looking with luminance port on side |



Advancing the Technology of Light: Measure. Create. Reflect.

sales@labsphere.com

www.labsphere.com

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PB-14086-000 Rev 04