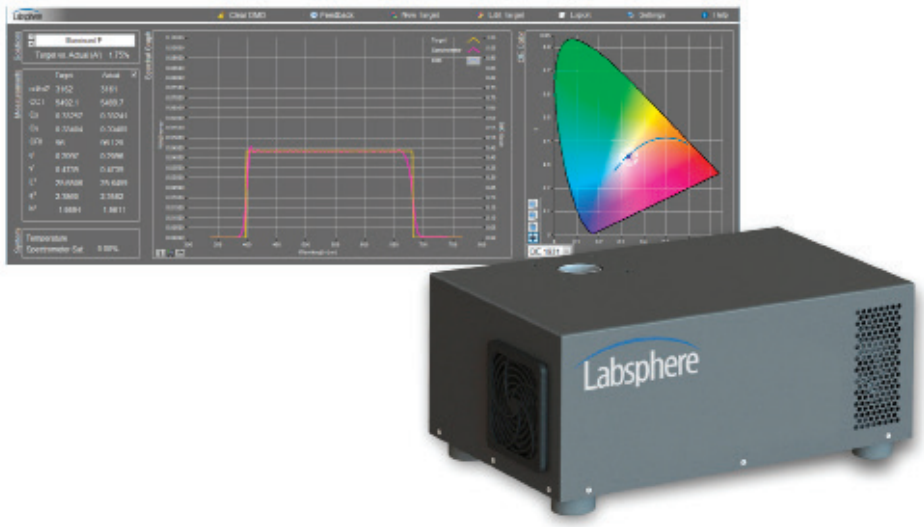
CREATE
any spectrum

Spectra-UT Ultra Tunable Spectral Calibration Sources



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

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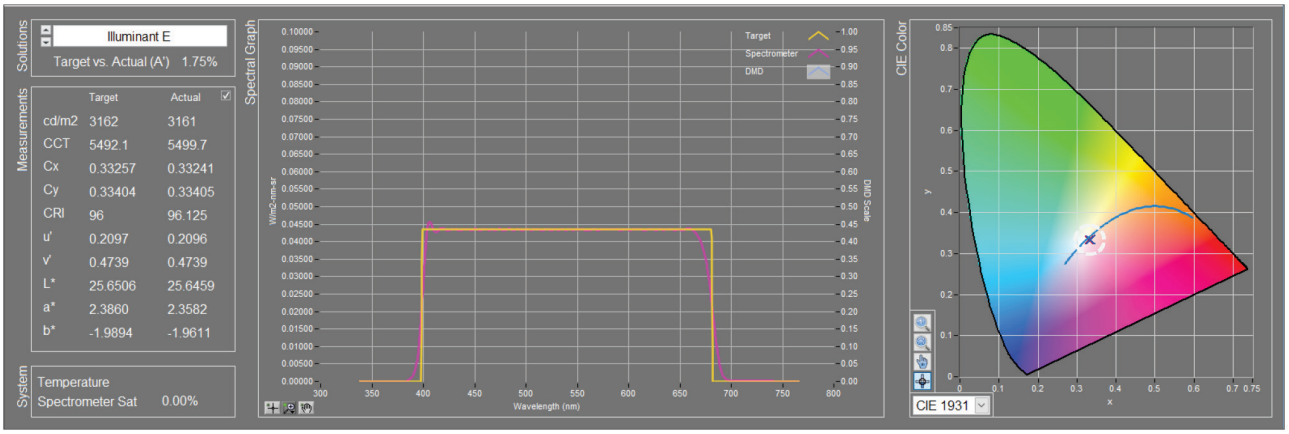
PB-14086-000 Rev 06



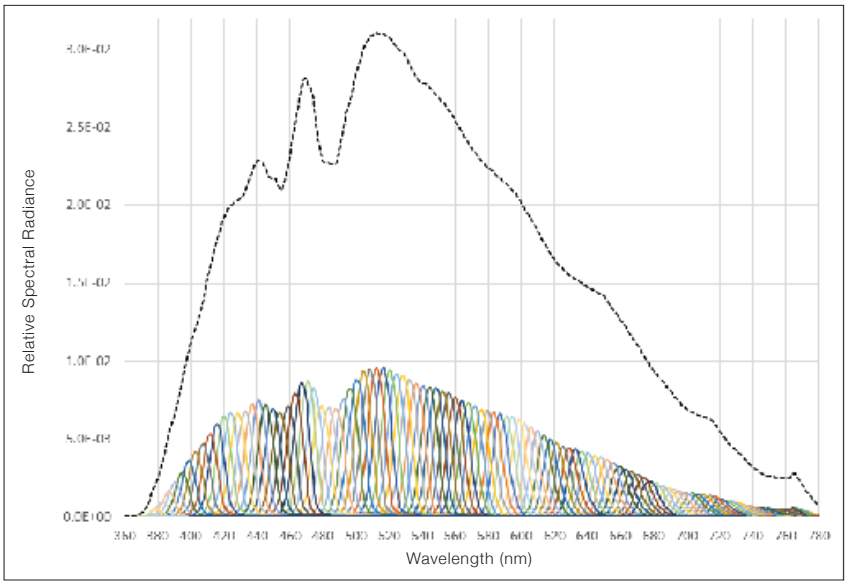
Flexible Control Software User Interface

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

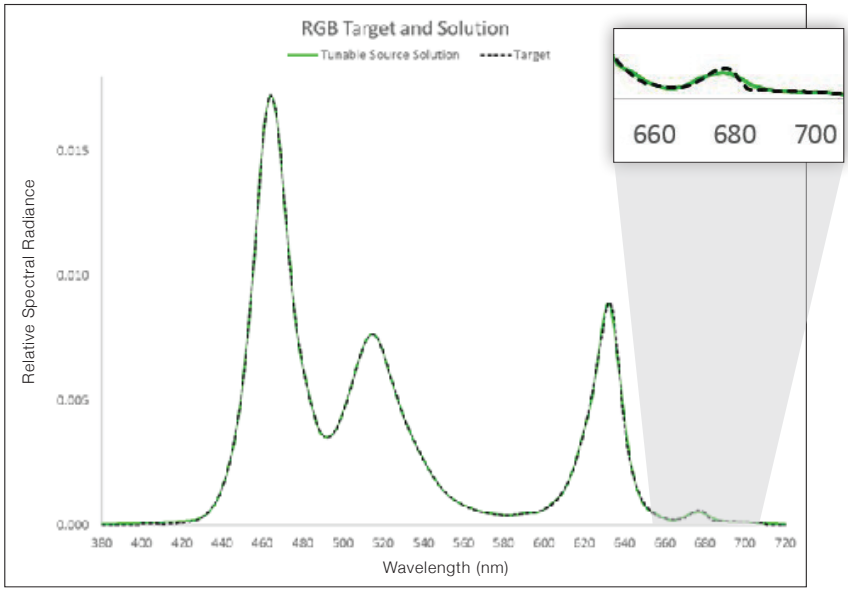
Specifications

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
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/m^2)



High Fidelity Spectral Matching of RGB Target Spectra

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Ordering Information

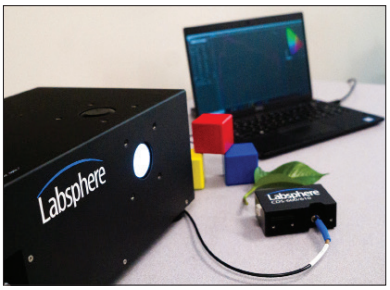
Model Number	Order Number	Description
UT-1000-D	AA-01581-000	Down looking with luminance port on top
UT-1000-S	AA-01581-100	Side looking with luminance port on side

Optional Accessory

Model Number	Order Number	Description
UT-CDS-600-EX	AA-01581-200	UT-1000 External Spectrometer Accessory

Includes

- CDS 600 spectrometer with 3m fiber optics cable and 2m USB 2 cable
- Radiance Head
- Radiance Head Calibration Adaptor
- UT-CDS-600-EX-LS Software



The UT-CDS-600-EX uses the CDS-600 to measure light from a source or reflected light off a surface. The measured spectrum is fed into the UT-1000 where the UT-1000 reproduces the measured spectrum in a highly uniform spectral radiance. It is as easy as making a spectral radiance measurement of a sample, hit send and the UT-1000 reproduce the spectrum through its uniform radiance port.

Benefits

- Reproduce display spectrum for color correction
- Reproduce natural objects under different illuminations for image analysis
- Save time creating visible spectral targets for the UT-1000
- User calibration feature using UT-1000 spectral radiance

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