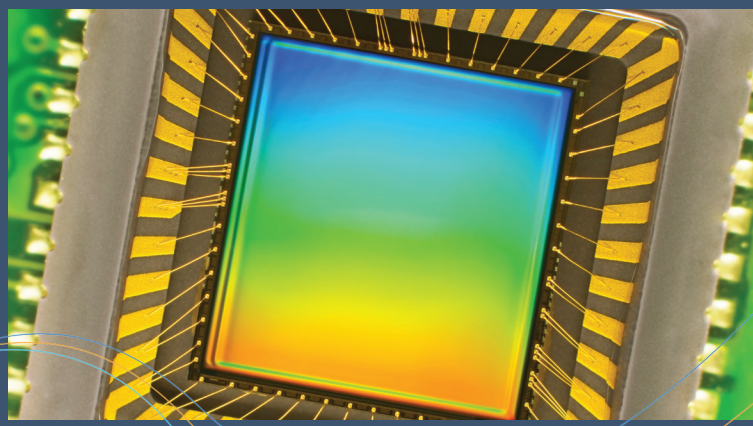
SpectrALL
Tunable Spectral Calibration Solutions

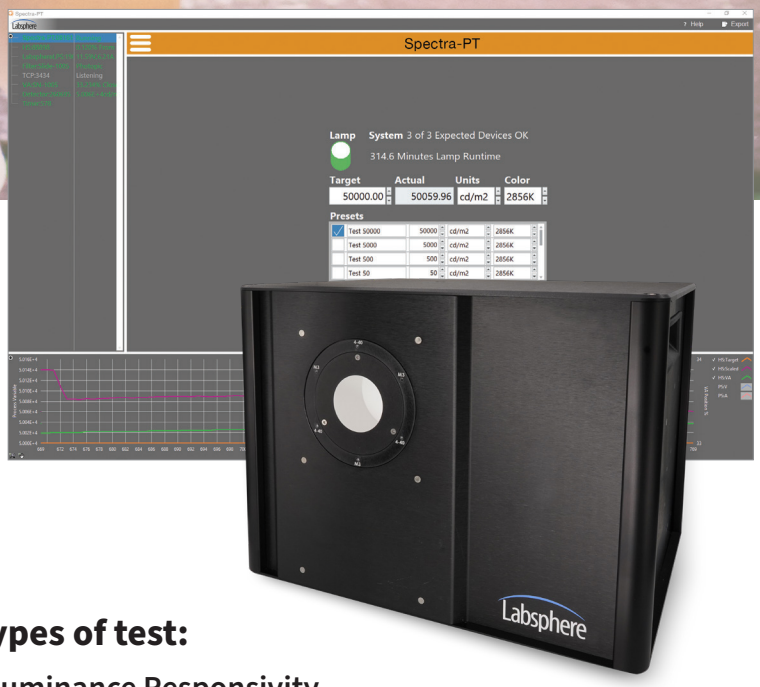


Labsphere

MEASURE
any light source

CREATE
any spectrum

REFLECT
any wavelength



Spectra-PT Power Tunable Spectral Calibration Sources

Ideal for testing VIS-NIR optical sensor response over a high dynamic range of uniform broadband light

Ideal for calibrating:

- CCD and CMOS cameras
- Small area remote sensing devices
- Electronic imaging devices
- Medical endoscopes
- Ambient light sensors
- Security cameras

Types of test:

- Luminance Responsivity
- Image Validation and Correction
- Uniformity
- Flat Fielding
- Dynamic Range

Spectra-PT Portable Luminance Source

Delivers uniform and stable luminance output where you need it

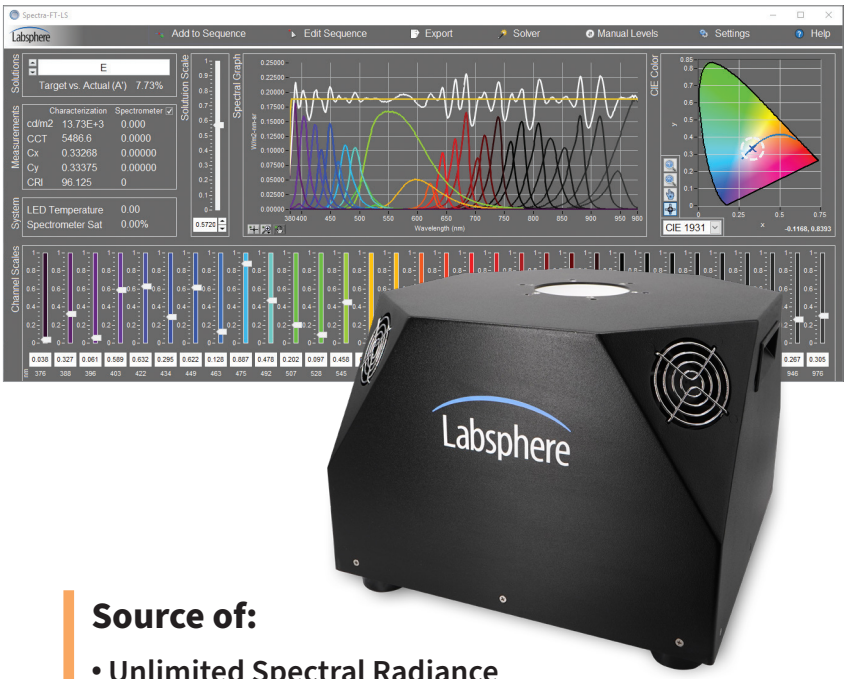
Ideal for calibrating:

- Luminance meters
- Image sensors
- Photometers
- Radiometers
- Electronic imaging equipment in the field or in house

Spectra-FT Fine Tunable VIS-NIR Spectral Calibration Sources

Accurately reproduce almost any spectrum from 390 nm to 1700 nm

- Correct vignetting and aberrations inherent with fisheye lensed imaging systems
- Perform color balance over a wide range of spectral responses
- Save time and space with RGB and multiple integrated illuminant spectrums from one source
- Streamline quantum efficiency testing with compact robust designs featuring no moving parts
- Shorten time between R&D and production with multiple design configurations, adaptable firmware and triggering

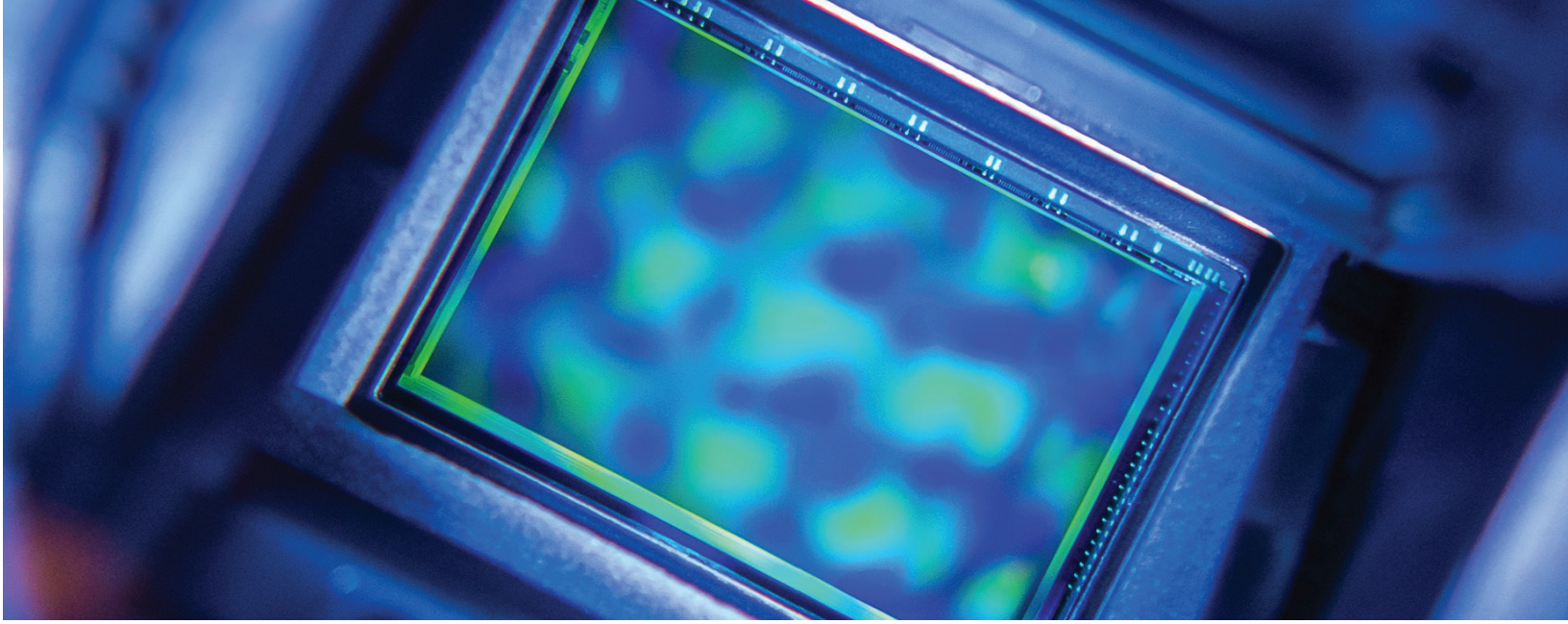


Source of:

- **Unlimited Spectral Radiance**
- **Solid State Spectral Tunability**
- **High Luminance Uniformity**
- **Variable Light Output**

Spectra-CT Color Tunable LED Spectral Calibration Sources

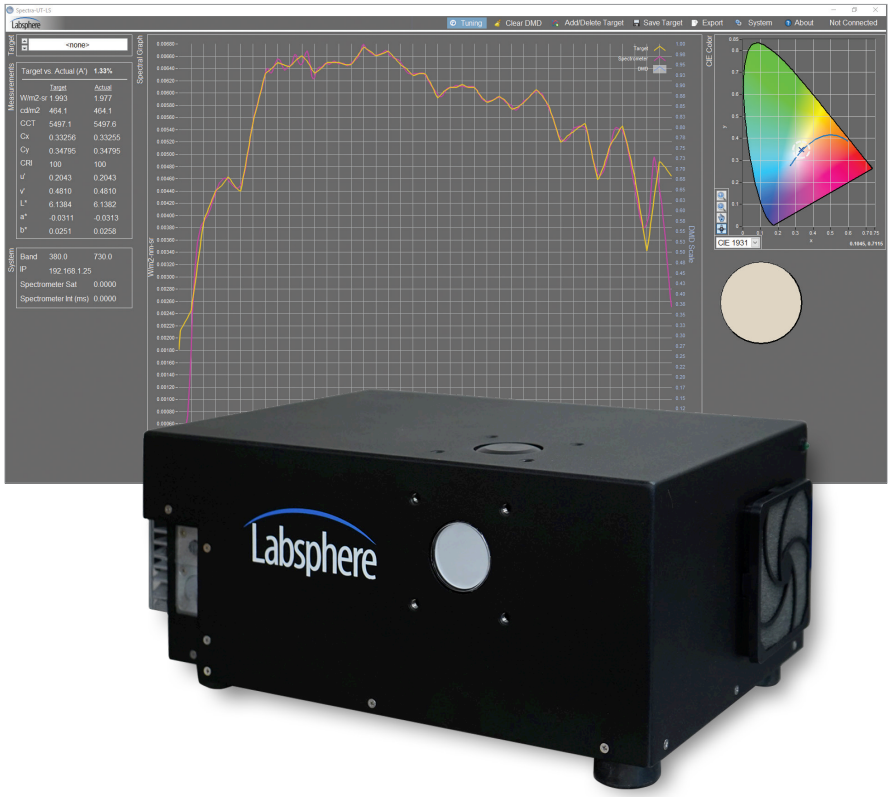
Source of continuous CCT from 2800K to 7500K



Spectra-UT Ultra Tunable Spectral Calibration Sources

Delivers unprecedented spectral matching resolution

- 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



Source of:

- Unlimited Visible Spectrums
- High Luminance Uniformity
- Digital Spectral Tunability
- Efficiencies in Testing with One Source
- Color Corrections for Your Colorimeters

Spectra-QT Quantum Tunable Irradiance/Radiance Calibration Source

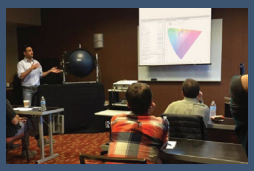
Characterize spectral responsiv and quantum efficiency of your image sensors and camera modules

- Turnkey calibration systems to get your products to market faster, saving you tim and effort
- Ideal solution for testing optical sensors for quantum efficiency and linearity over a large dynamic range
- Sensor performance is sensitive to f/#. Differentiate your products with the highest uniformity across the sensor over a broad range of f/#s
- Results you can trust with real-time spectral output monitoring and NIST traceability
- Software Development Kit for rapid development of user defined test protocols and source/sensor synchronization

Characterization of:

- Quantum Efficiency
- Spectral Irradiance Responsivity
- Spectral Radiance Responsivity
- Linearity

Our services and capabilities give us the flexibility to meet your specific application needs.



Knowledge Leadership

We lead because we listen. Regularly called upon to guide the future and set the standard, our expertise at solving radiometric, photometric and electro-optical challenges results in innovative solutions for the most complex applications.

Global Presence

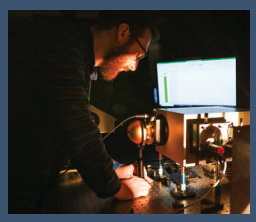
We are here for you. With a headquarters in the United States, a satellite facility in China, and over 41 international value add representatives, our global network is unmatched.

User Centered Product Design

Together we solve the impossible. We will continually answer the call to apply our creativity and experience towards engineering answers for tomorrow's next big challenge, confident in the understanding that the future is limited only by our imagination.

Consultative Custom Order Process

We are ready to adapt and meet you wherever you are. We are a team of experts in radiometry and photometry which translates in our ability to listen, understand, and adapt to a variety of applications and inform how our technologies can be tailored to multiple industries.



Responsive Manufacturing

Let's build the future together. We are ready to build your next optical system with a proprietary suite of industry leading optically diffuse materials and coatings, onsite manufacturing and fabrication, and dedicated quality facilities for unmatched performance assurance.

Calibrate with Confidence

We deliver confidence and trust. We strive for perfection and hold our radiometric calibration laboratories to the highest standards. Our laboratories are voluntarily certified through national metrology institutes so you can have complete confidence in your results.

Custom and OEM Solutions

Challenging problems require innovative solutions. Labsphere has created thousands of customized solutions, tailored to the specific and often proprietary radiometry and photometry needs of our customers.

Our expert team of Scientists, Engineers, and Manufacturing Professionals continue to advance our 40+ years of experience in dozens of industries. We can quickly turn this expertise into finished product through our internal prototype shop and advanced manufacturing techniques.

Let's Connect: www.labsphere.com

© 2024 Labsphere, Inc. All Rights Reserved