

**NEW – Advanced Digital Luminance and Illuminance Measurement System:
Spectra Phorad® Photometer.**

Spectra Phorad® SC-850 / SC-830 / SC-800 Series

**Engineered for Radiography Displays, NDT, QA
Compliance and Industrial Light Measurement. *Trusted
by Professionals for Over 85 Years.***

Control the lighting conditions under which radiographic
images are viewed and interpreted.

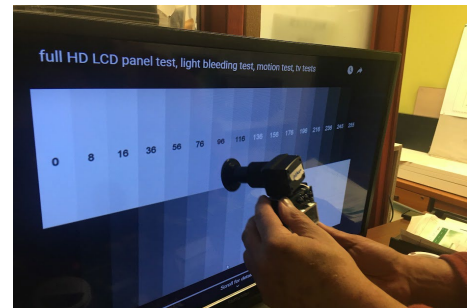
The new **Spectra Phorad® SC-830**—successor to the Model SC-810—embodies over 85 years of Spectra innovation in precision light measurement. Designed and manufactured in Burbank, California, the SC-830 delivers laboratory-grade luminance accuracy in a compact, portable instrument engineered for professional radiography and imaging environments. **Ideal for DICOM-compliant display calibration and quality assurance.**

Key Features & Benefits

- **Ultra-Wide Dynamic Range**
Measures luminance from **0.05 to 1,000,000 cd/m²** (nits or foot-lamberts) for complete low- to high-level evaluation
- **High Precision & Repeatability**
Advanced optical design with **photopic V(λ) filter** matched to **CIE 1931** response for accurate luminance measurement
- **Designed for Medical Display Calibration**
DICOM GSDF-compliant measurements for evaluating luminance, contrast, and uniformity of radiography displays
- **NIST-Traceable Calibration**
Ensures **measurement accuracy, repeatability, and certification confidence** for QA programs
- **Compact, Rugged & User-Friendly**
Handheld, battery-powered instrument with **intuitive operation** for field and laboratory use.
- **Compliant with International Standards Supports FDA, ACR, AAPM TG-18 / TG-270, ASTM E1742/E1742M, and other global QA guidelines**



Spectra Phorad model SC-830
Photometer



Applications

- **Medical Imaging / Radiography**
Calibrate and verify luminance of diagnostic displays, film viewers, and collimator light fields in compliance with QA standards
- **NDT / Industrial Quality Assurance**
Evaluate luminance and uniformity of radiography displays used in non-destructive testing environments
- **Display & Projection Systems**
Measure low- and high-luminance regions for accurate display and projector calibration



Spectra Phorad model SC-850 Photometer

Technical Highlights

- **Display: 2.8-inch TFT color touch screen (240 × 320 resolution)**
- **Detector: Ultra-stable silicon photodiode with precision glass filters matched to CIE 1931 V(λ) response**
- **Measurement Range-Luminance: 0.05 to 1,000,000 cd/m² (nits or foot-lamberts). Illuminance Range: 0.05 to 1,000,000 Lux or foot-candles.**
- **Accuracy: $\pm 2\%$ typical (luminance)**
- **Cosine Response (SC-850): $\leq 2\%$ with cosine-corrected photo-disc**
- **Memory: Stores up to 10 readings with recall (RCL function)**
- **Power: 3 × AA alkaline or rechargeable lithium cells; Optional USB-C Spectra Power Bank**
- **Firmware & Connectivity: USB-C interface for firmware updates; supports open-source firmware and data logging**
- **Construction: Durable handheld housing with dedicated Power and Measure switches**
- **Warranty: One-year limited warranty**
- **Manufacturing: Made in USA | Specifications subject to change without notice**



Spectra Phorad model SC-800 Photometer



Explore Other Spectra Phorad Photometer Models:

1. Spectra Phorad SC-850 Luminance and Illuminance Photometer System
2. Spectra Phorad SC-830 Luminance Photometer
3. Spectra Candela Phorad SC-800 Illuminance Photometer

All Spectra Phorad Photometers include Hard carrying case, NIST-traceable calibration certificate, 3AA batteries.

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