

The New SPECTRA CANDELA PHORAD® Photometer

Model SC-830 (replaces model SC-810 & SC-810 A & SC-810-A-XTD) is supplied with Luminance Probe for Display Measurement

Control the Lighting Condition Under Which Radiographs and Images Viewed and interpreted!



Model SC-830 Designed for Display Surface Luminance Measurement

Included Luminance Probe for measurement of Cd/m2 and/or Footlamberts

Key Features and Benefits

- **Widest dynamic range in a hand-held photometer:** Measures surface luminance levels from 0.05 to 1, 000,000 cd/m², footlamberts (fL) & nits
- **Precision, accuracy, and repeatability:** The SC-830 is designed to deliver precise and reliable measurements, ensuring confidence in the quality of your imaging results.
- **Easy to use and cost-effective:** Spectra PHORAD Photometers are known for their user-friendly interface and affordability, making them an excellent choice for quality assurance in medical imaging & NDT/QA departments.
- **The instrument complies with the guidelines and standards** set by the Federal Drug Administration, American College of Radiology (ACR), the American Cancer Society, and the European community of radiologists. In accordance with the standards outlined in the ASTM E-1742/E1742M-18 Standard Practice for Radiographic Examination.

The NEW Spectra PHORAD® Photometer Model SC-830

We are proud to introduce the latest addition to our product line, the Spectra PHORAD Photometer SC-830. This new model replaces the previous SC-810 & 810-A-XTD and offers significant improvements in performance and features. Designed specifically for medical radiologists and radiographers in the field of quality assurance (QA) applications and Non-Destructive Testing (NDT), the SC-830 is renowned for its precision, accuracy, and repeatability.

It provides the widest dynamic range ever seen in a hand-held photometer, allowing you to measure luminance levels ranging from as low as 0.05 cd/m² and nits to as high as 1,000,000 cd/m². This wide range ensures accurate measurement of both dark grey images and bright white images, making it ideal for calibrating displays and projectors.

Key Features and Benefits

Widest dynamic range in a hand-held photometer:

Measures from 0.05 to 1,000,000 cd/m² & footlamberts allowing accurate measurement of a wide range of luminance levels.

Precision, accuracy, and repeatability: The SC-830 is designed to deliver precise and reliable measurements, ensuring confidence in the quality of your imaging results.

Easy to use and cost-effective: Spectra PHORAD Photometers are known for their user-friendly interface and affordability, making them an excellent choice for quality assurance in medical imaging & NDT/QA in diagnostic imaging departments in hospitals and clinics.

Applications and Versatility

The Spectra PHORAD Photometer SC-830 is an innovative, portable, and battery-powered auto-ranging photometer that can be used for various applications. It is specifically designed to measure light intensity in medical diagnostic imaging displays, film viewing boxes, image monitors, and collimator light fields, among others. The photometer provides direct readings in candelas per squared meter (cd/m²) fL & nits, in accordance with the standards.



Ensure Compliance and Improve Diagnosis Accuracy

By measuring display device luminance measurement, the SC-830 enables radiology departments to meet the recommended display device luminance light levels set by organizations such as the ACR. This ensures compliance with standards and helps improve the accuracy and reliability of diagnosis, ultimately reducing the rate of misdiagnosis.



Preliminary Specifications:

- **Hardware:** The device features a powerful microprocessor, a 2.8-inch TFT color touch 240x320 pixels display, optical sensor circuitry, and battery management. Firmware manages the touch display, auto ranging, storage, energy-saving, settings, calibration, and diagnostics.
- **Light Sensor:** Ultra-stable silicon photodiode, together with computer selected glass filters to match the spectral response of the human eye (the CIE 1931 photopic response function) $V(\lambda)$ filter.
- **Measuring range:** The device has a wide dynamic range from 0.05 to 1,000,000-cd/m² or Foot Lamberts.
- **Measurement types:** The device measures reflected or surface luminance of display measurement in cd/m², nits & footlamberts (with a 10-degree measuring surface luminance probe).
- **Accuracy:** The device is highly accurate.
- **Measuring units:** The device displays luminance measurements in Cd/m², footlamberts.
- **Memory:** The device can store up to 10 different measurements, which can be recalled using the RCL switch.
- **Memory recall of all measurements and calculations:** By pressing the recall (RCL) switch, the first stored reading (mem0) can be displayed, and subsequent readings can be recalled up to mem9. **Memory erasure:** Long pressing the STR switch deletes the stored readings.
- **Power:** Included long lasting 3 x AA 1.5-volt Lithium-ion rechargeable batteries. It also comes with fast charging USB-C cables for the batteries. You may have to charge once a month depending on your use.
- **Flexible power supply:** The device can be powered using 3 x AA 1.5 volts long-lasting lithium batteries. The Spectra Power Bank is optional, which can be connected via the meter's USB-C port and should be able to continuously operate the meter for several days.
- **Power/ ON Switch:** Turns the Power ON (power switch is on the left side of the meter). The display will turn on and display previous settings, and now you may want to measure take a reading by pressing Read/On-measure switch (measure switch is on the right side of the meter). After taking a reading, the readings will be held on the display for 60 seconds or until the Power switch is turned off to conserve power. The meter will automatically turn off after 60 seconds of non-use.

- Accessories supplied: The Spectra PHORAD display Photometer comes with calibrated Luminance probe for measuring surface luminance and Carrying case.
- Quick reference chart (brief instructional manual), and a warranty registration form to be filed online. www.spectracine.com
- Warranty: One-year limited warranty.
- **Specifications are subject to change without notice.**

CONTACT INFORMATION

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