



APPLICATIONS

- Monitoring UV Lamp Intensity and Aging
- Measuring Outdoor UVA
- Testing Acrylic Shield Transmission
- Testing Eyewear UVA Blocking Capabilities
- Testing Window Film/Tint Transmission
- Choose Standard Model 4.0 For Outdoor / High Intensity Applications
- Choose Sensitive Model 4.2 For Indoor / Low Intensity Applications



ENVIRONMENT



METROLOGY



OUTDOOR
ACTIVITIES

FEATURES AND BENEFITS

- Compact, Handheld, and Durable
- Simple Single-Button Operation
- NIST Traceable Accuracy
- LCD Display
- Made In USA

SENSOR

The sensor consists of a GaAsP photodiode and a UV filter. It is completely insensitive to visible light longer than 400nm and infrared radiation, because its spectral response only covers the UVA region from 320-400nm.

METER OPERATION

To operate your Solarmeter, aim the sensor window located on the top panel of the meter directly at a UV source. Press and hold the push-button switch on the face of the meter.

Battery operation voltage is viable from 9V down to 6.5V. Below 6.5V, the numbers on the LCD display will begin to dim, indicating the need for battery replacement. Under typical service load, a standard 9V battery will last approximately 2 years.

PROPER USAGE OF SOLARMETER™ ULTRAVIOLET RADIOMETER

- Wear eye protection when checking UV lamps. Glasses that provide wrap around protection are ideal.
- Allow lights to warm-up prior to taking readings (at least 5 min).

LAMP AGING

- When checking lamp aging, make sure to use the same location and distance to ensure accurate readings.
- Lamps should be replaced when output drops to about 70% of their original (new) readings.

CURING LAMPS

- For curing lamps, hold the meter at the distance you intend your work piece to be cured.

MODEL 4.0

UVA Meter • 0-199.9 mW/cm²

TANNING LAMPS

- To take the overall reading at the center of the tanning bed, place meter pointing up with canopy closed.
- To take individual lamp readings, hold the meter against the acrylic with canopy open.
- This meter is “seeing” the UVA “browning” rays. For erythema readings use Model 7.0 MED/hr meter.

ACRYLIC TESTING

- For acrylic testing, take readings with and without acrylic at a fixed distance.
- When comparing different types of lamps consider readings to be relative rather than absolute.
- Lamps that peak near 365nm (newer designs) will read higher than lamps that peak near 350nm.

GENERAL

- Do not subject the meter to extremes in temperature, humidity, shock or dust.
- Use a dry, soft cloth to clean the instrument. Keep sensor free of oil, dirt, etc.

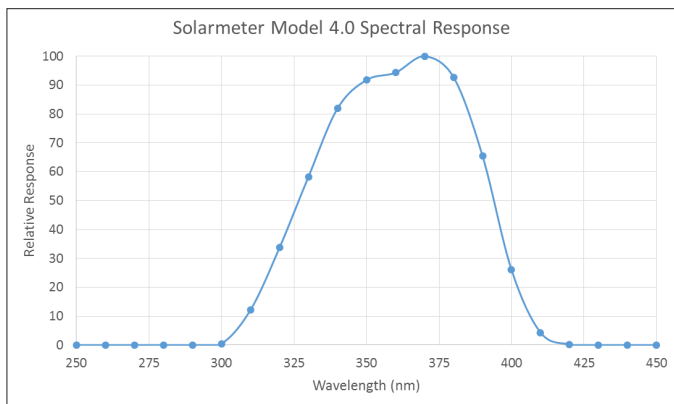


Fig. 1. Model 4.0 Spectral Response

SPECIFICATIONS

MODEL	4.0
IRRADIATION RANGE	0-199.9 mW/cm ² UVA
RESPONSE	320-400 nm
RESOLUTION	0.1 mW/cm ²
CONVERSION RATE	3.0 Readings / Sec
DISPLAY	3.5 Digit LCD
DIGIT SIZE	0.4" / 10.2 mm
OPERATIONAL TEMPERATURE	32°F to 100°F / 0°C to 37.8°C
OPERATIONAL HUMIDITY	5% to 80% RH
ACCURACY	±10% Ref. NIST
METER DIMENSIONS	4.2L x 2.4W x 0.9D in / 106.7L x 61W x 22.9D mm
WEIGHT	4.5 oz / 128g Including Battery
POWER SOURCE	9-Volt DC Battery
LENS	UV Glass
DIFFUSER	Teflon
AGENCY APPROVAL	CE Mark

REV A | MODEL 4.0 | Sept 2020
Specifications subject to change without notice.

SOLARMETER™ by Solar Light Company Inc. is the industry standard for UV and visible light radiometers that measure both indoor and outdoor light sources. Our NIST Traceable meters are used to monitor lamp irradiance and aging for UV sterilization, reptile husbandry, indoor tanning, red/blue light phototherapy, UV curing and UV Index.