

Solarmeter® Model 4.2

UVA Meter • 0-1999 $\mu\text{W}/\text{cm}^2$

Handheld Digital UVA Radiometer
with Integral Sensor



Applications

- Testing Window Film/Tint Transmission
- Monitoring Low Level UV from Household Lamps
- Testing Ground-level UV from Stadium Lighting
- Measuring Outdoor Shady Area UVA
- Choose Sensitive Model 4.2 For Indoor / Low Intensity Applications
- Choose Standard Model 4.0 For Outdoor / High Intensity Applications

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. For best results take note of the distance the reading was taken from the UV source in order to ensure repeatable results.

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

- To measure home, business, school or car window UV transmission, take reading through window or film and compare to outdoor reading.
- For household lighting, including compact fluorescents, take reading near lamps and increase distance until reading falls below 1 $\mu\text{W}/\text{cm}^2$.
- For gym or stadium lighting, take readings at floor level. Ask to have UV shields installed if readings are too high.
- 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.



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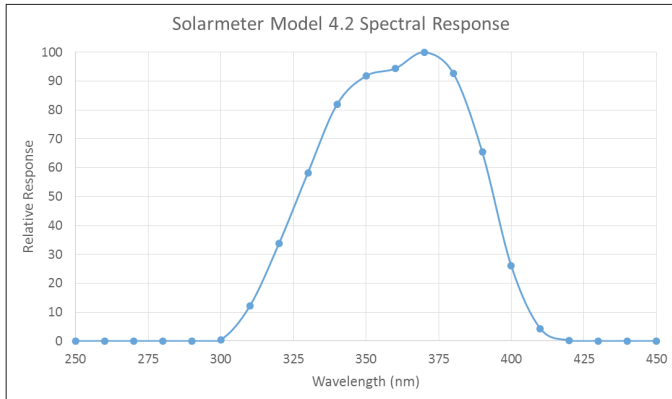


Fig. 1. Model 4.2 Spectral Response

SPECIFICATIONS	
Model	4.2
Irradiation Range	0-1999 $\mu\text{W}/\text{cm}^2$ UVA
Response	320-400 nm UVA
Resolution	1 $\mu\text{W}/\text{cm}^2$
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	Acrylic
Diffuser	Teflon
Agency Approval	CE Mark

Rev: sm/sensors/model4.2_5/2018
Specifications subject to change without notice.

Solar Light Company, Inc. is recognized worldwide for over 50 years as America's premier manufacturer of precision ultraviolet light sources, solar simulators, and radiometers. Our standard line of UV, visible, and IR radiometers and light meters measure laboratory, industrial, environmental, and health related light levels with NIST traceable accuracy. Column ozone, aerosol, and water vapor thickness measurements, in addition to long-term global ultraviolet radiation studies all over the world are performed using our atmospheric line of instrumentation. Solar Light also provides NIST traceable spectroradiometric analyses, calibrations for light meters and light sources, OEM instrumentation and monitors, and accelerated ultraviolet radiation degradation testing of materials.

