

Solar Light's **Model PMA2112 Digital High Intensity UVA Probe** is a useful tool for UV curing applications. It measures UVA radiation in the range from 320 to 400nm (with peak sensitivity at the 365nm mercury emission line) via a diffuser mounted at the end of its 18" (45.7 cm) probe. The light is delivered to the sensor through a quartz light guide encapsulated in a metal envelope inside the probe, making it suitable for high temperature applications up to 400°C. When used with our PMA2100 or PMA2200 Radiometers, the irradiance is displayed in  $W/cm^2$  or  $mW/cm^2$ . The UVA sensor's high dynamic range allows measurement of signals as strong as  $10 W/cm^2$  and as weak as  $0.1 mW/cm^2$ . The probe is milled with a guide slot for repeatable positioning.



### Applications

- UV Curing, Printing and Photolithography
- Monitoring of UV Sources Stability and Lifetime
- Measurements in Hazardous Environment
- Industrial Radiometry

### Features and Benefits

- High Sensitivity
- High Temperature Operation
- Durable Construction
- Excellent Long-Term Stability
- NIST Traceable Calibration
- Radiometric Units
- Probe Electrically Isolated from the Meter
- Easy to Install
- Guide Slot for Repeatable Positioning

SPECIFICATIONS	
<b>Spectral Response</b>	320-400nm, Figure 1
<b>Cosine Response</b>	5% for Angle $\leq 60^\circ$
<b>Range</b>	10 [W/cm <sup>2</sup> ] or 10,000 [mW/cm <sup>2</sup> ]
<b>Display Resolution</b>	0.001 [W/cm <sup>2</sup> ] or 0.1 [mW/cm <sup>2</sup> ]
<b>Operating Environment</b>	<b>Tip</b> - -56 to 750°F (-50 to +400°C) <b>Sensor</b> - 32 to 120°F (0 to +50°C)
<b>Temperature Coefficient</b>	Negligible
<b>Cable Length</b>	6ft (1.82m)
<b>Dimensions and Weight</b>	*See Outline Drawing

Part Number: 210001

Revision Level: C

Specifications subject to change without notice.

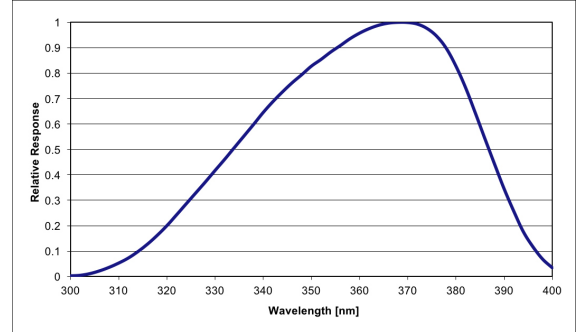
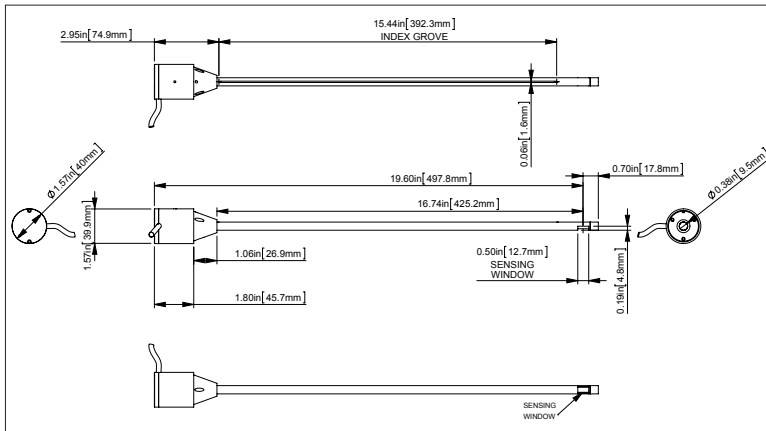


Fig. 1. Linear Spectral Response

### High Intensity UVA Probe



Est. Weight: 10 oz. (280 g)

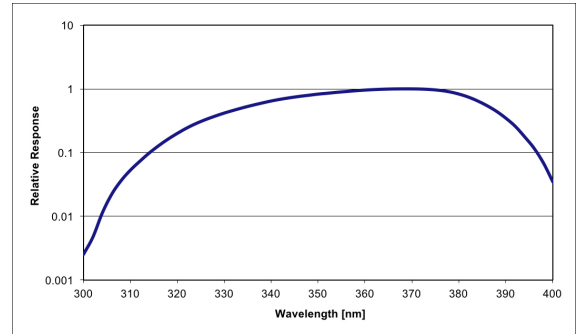


Fig. 2. Log Spectral Response

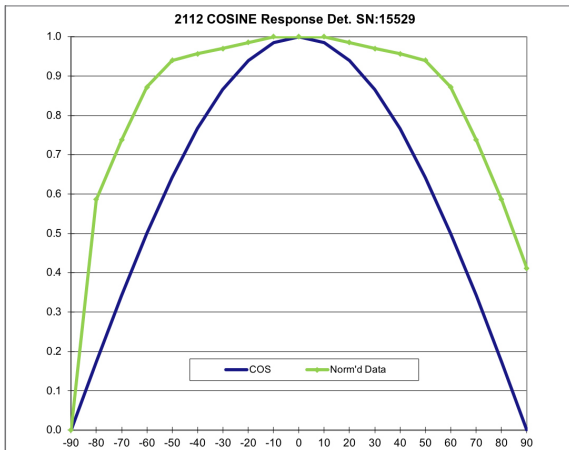


Fig. 3. Transverse Cosine Response

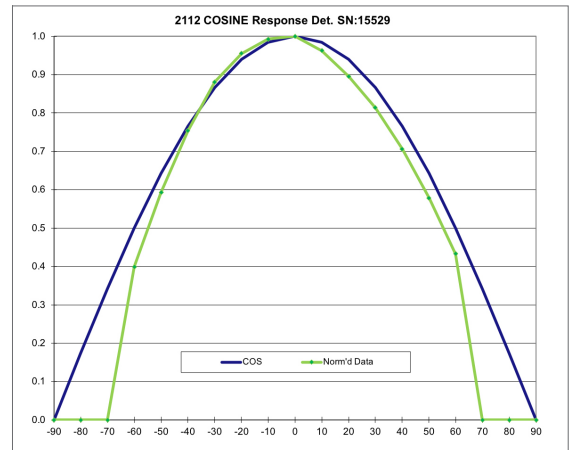


Fig. 4. Longitudinal Cosine Response

Since 1967, Solar Light Company, LLC has been recognized worldwide as America's premier manufacturer of Precision Solar Simulators and Light Sources, Light Measurement Instrumentation, UV Transmittance Analyzers, Meteorological Instrumentation, and Digital and Analog Sensors. Our advanced 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, accelerated ultraviolet radiation degradation testing of materials, and OEM instrumentation and monitors. Please visit our website for more details, specifications, and pictures!



**State Of The Art Solar Simulators** available in 150-1000+ watt UV or AM variations for a variety of applications including PV Cell Testing, Materials Testing, Pre-Irradiation for *In Vitro* Broad Spectrum Sunscreen Testing, SPF Testing, and much more.



**Multi-Functional Professional Grade Radiometers** available with and without data logging, and compatible with over 130 Solar Light PMA-Series Sensors to measure UV, Visible and IR wavelengths. Specialty Meters also available to measure UV Radiation, SUV/UVA, Scotopic/Photopic Spectra, and much more.



**Advanced NIST-Traceable Sensors** for accurate measurement of UVA, UVB, UVA+B, UVC, Visible, IR, Photostability, Temperature, and Custom Wavelength – well over 130 models in both digital and analog configurations, all compatible with our Radiometers.



**Ultraviolet Transmittance Analyzers** available as complete integrated turnkey systems to meet the latest ISO24443 requirements.



**Handheld Ozonometers and Sunphotometers** for fast and dependable Column Ozone, Aerosol, and Water Vapor Thickness measurements, in addition to long-term global ultraviolet radiation studies.