

Solar Light's **UV Minder<sup>®</sup> Model 3D** UV intensity radiometer accurately measures both UVA and UVB spectra. It displays the intensity of UVB (also called SUV – Sunburning UV) in Minimal Erythema Doses per Hour (MED/Hr,) the accepted clinical measure for sunburn potential. The UVA detector measures UV intensity in the range between 320 and 400nm, displaying UVA irradiance in mW/cm<sup>2</sup>. This device is very easy to use. The UVA and SUV sensors are conveniently mounted on the top of the meter, making it easy to point the sensors at the target. A green flashing indicator light on the keypad shows which sensor is active. An analog output is provided at the bottom of the meter, allowing the user to continuously monitor and record the intensity irradiated on the active sensor. Recording can be accomplished by a strip chart recorder, or an A/D card connected to a computer. A rugged carrying case is included.



### Applications

- SPF testing
- Cosmetics Research
- Dermatology
- Xeroderma Pigmentosum
- Environmental Monitoring
- Environmental Research
- Agriculture and Forestry

### Features and Benefits

- High Sensitivity
- Battery Operated
- LCD Display
- Optional Six foot Shielded Extension Cable for Analog Output
- NIST Traceable Calibration
- Radiometric Units
- HOLD Toggle, Freezes the Present Reading
- AUTO SHUT OFF Meter Turns Off After 8 Minutes with Near Zero Reading
- Rugged Carrying Case Included
- BAT Low Indicator
- Made in USA



SPECIFICATIONS	
Detector Inputs	Two
Input Ranges	UVA 0.19.99 mW/cm <sup>2</sup>
	UVB (SUV) 0.19.99 MED/Hr
Resolution	0.01 MED/Hr or mW/cm <sup>2</sup>
Operating Environment	32 to 120°F (0 to +50°C)
Power Source	9 volt Alkaline Batteries
Power Consumption	<300µA
Battery Life	>40 Hours Continuous Use
External Power	9-12V AC or DC Adapter
Program Control	4-Button Keypad
Size (WxDxH)	3.75"x5.5"x3.4" (9.5x14x8.6 cm)
LCD Size	3.5 Digit
Weight	8 oz. (227 grams)
ORDERING INFORMATION	
UV Minder <sup>®</sup>	Model 3D
UV Minder <sup>®</sup> Model 3D-XP	Xeroderma Erythema UV Intensity Meter for Measuring Very Low UV Intensity to 3 Decimal Places <i>(Please Specify)</i>
REFERENCES	
The biological effects of UV-A radiation - Edited by F. Urbach and R.W. Gange, Praeger Publishers, New York, 1986	
Nichodemus F., "Self study manual on optical radiation measurements", NBS Technical Note 910-1 (1976).	

Part Number: 210080

Revision Level: B

Specifications subject to change without notice.

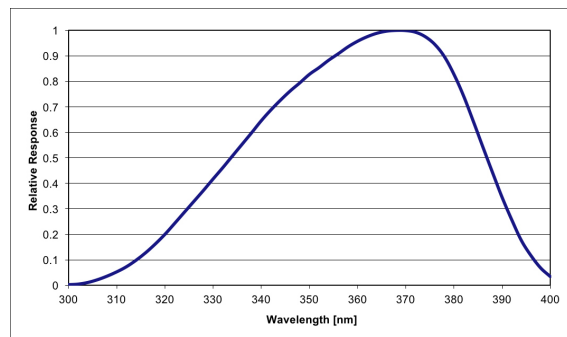


Fig. 1. Linear 3D UVA Spectral Response

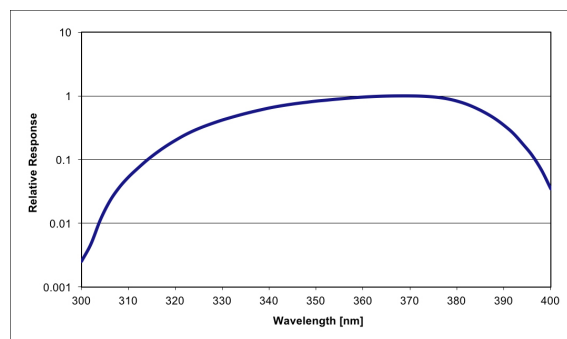


Fig. 2. Log 3D UVA Spectral Response

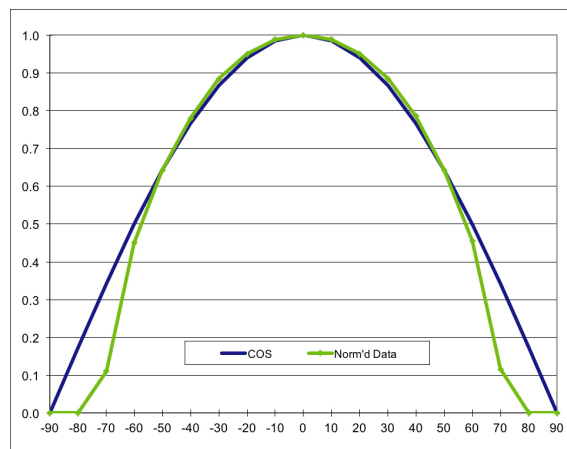


Fig. 3. 3D-XP Cosine Response

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.