

Solar Light's advanced **Model 601 Multichannel<sup>®</sup> SPF Testing Solar Simulator** is the industry standard for high throughput SPF testing and dermatological studies. It produces UVA or UVA+B (290-400nm) from its 6 individual 8mm square-channel outputs, each of which can be controlled separately. Up to 6 tests can be performed simultaneously in a short period of time, dramatically increasing lab productivity. The output intensity is rated up to 4 MEDs per minute, and can be controlled by the adjustment knobs on each channel, as well as via the included XPS-300 power supply. The output is approximately 20 times the intensity of the sun, and simulates the ultraviolet spectrum of the sun with over 90% homogeneity. A built-in locking Articulation Arm assures precise light guide placement on subjects. Solar Light Solar Simulators are used in 95% of SPF testing laboratories globally, and meet the latest ISO, FDA, JCIA, and COLIPA spectral irradiance standards. Everything required to begin testing is included with the 601 Multichannel<sup>®</sup>: The 6-Channel Simulator, DCS-2 Automated Dose Controller, NIST-Traceable PMA-Series SUV and UVA Sensors, Safety Glasses, and a starter pack of 100 disposable Hypoallergenic Placement Pads. An optional Point of Service Cart for the 601 Multichannel<sup>®</sup> is available with 2 dimensional electronic actuators to allow accurate placement of the light guides, and includes a fixture to carry the power supply, a stand for the radiometer, and a desktop for note taking as shown.



### Applications

- SPF Testing
- Mutagenesis
- Dermatology
- Allergy Testing
- Photobiology

### Features and Benefits

- Very High (98%) Uniformity from Homogenized Output
- Excellent Long-Term Stability
- 6 Channel Outputs Dramatically Reduces Test Time
- Complies with FDA, JCIA, Australian and ISO Guidelines
- Automatic Dose Control
- Easy to Use Intensity and Uniformity Measurement System
- Full System Supplied Ready to Use

SPECIFICATIONS	
<b>UVA Spectral Response</b>	Follows the distribution of sunlight from 290 to 400nm, Figure 1
<b>UVA+B Spectral Response</b>	Figure 2
<b>Simulator Spectrum</b>	290nm to 400nm
<b>Simulator Output</b>	300W Xenon Short Arc
<b>Exposure Area</b>	6 LLGs - Each 8mm
<b>Power Requirements</b>	110 or 220VAC, 50/60Hz
<b>Filters</b>	Validated to the International Sun Protection Factor Test Method Standard 2003
<b>Internal Igniter</b>	Igniter is used to ignite the Xenon Arc Lamp
<b>Light Source</b>	Xenon Lamp
<b>Lamp Housing</b>	Six Liquid Light Guides each 19.7" (50 cm) Long
<b>Output Selection Switch</b>	Choose between UVA only or UVA + UVB spectra
<b>Adjustable Stand</b>	Allows 20" (50 cm) - vertical adjustment
<b>Articulating Arm</b>	Holds Liquid Light Guides firmly in position during tests
<b>Complete High Performance Optics and Homogenizer:</b>	For collimation and uniformity
<b>Operating Conditions:</b>	0-50°C (32 to 120°F)
<b>Height</b>	21.8" (55 cm) Long <i>(Without Liquid Light Guides)</i> 39" (99 cm) <i>(With Liquid Light Guides)</i>
<b>Weight</b>	11lbs. (5.0 kg)

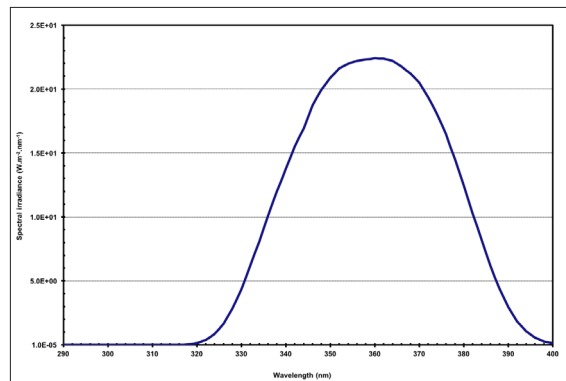


Fig. 1. 601 v.2.5 UVA Linear Spectral Response

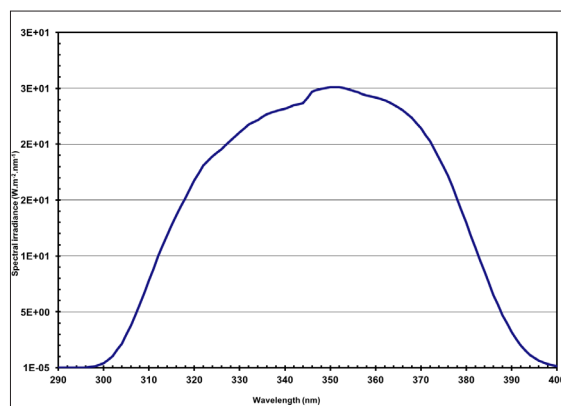


Fig. 2. 601 v.2.5 UVA+B Linear Spectral Response

Part Number: 210069

Revision Level: D

Specifications subject to change without notice.

\*U.S. Pat. 7,657,147



Included DCS-2 Automatic Dose Controller



Included NIST-Traceable SUV & UVA Sensors



Included XPS-300 Xenon Lamp Power Supply

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.