SPECTROLINE®

PowerMAX™ 365 Series

UV-A LED Panel Flood Lamps
Designed Specifically for NDT Professionals!

PowerMAX™ 365 Series flood lamps feature a panel of 16 powerful UV-A (365 nm) LEDs specially engineered for non-destructive testing applications. These versatile, stationary light sources can be installed overhead or in-line, and can be ganged together to provide an even wider coverage area.

Available in <u>four models</u> to meet your specific inspection needs: high-intensity and standard-intensity versions, each with or without a black light filter. Ideal for NDT inspection booths, fluorescent penetrant and magnetic particle inspection, screening of fluorescent particles, wash station inspection and many other applications requiring maximum uniformity of UV-A coverage over a large area.

FEATURES:

- Choice of two high-intensity models with a nominal steady-state UV-A intensity as high as *8,000 μW/cm²* or two standard-intensity models with a maximum UV-A intensity of *4,500 μW/cm²* at 15 inches (38 cm)

- Large coverage area of 15 inches by 6 inches (38 cm x 15 cm), with a minimum UV-A intensity of *2,000 μW/cm²*

- Low visible light emission – <u>less than</u> 2 foot-candles (22 lux)

- Easily mountable for overhead inspection or in-line applications

- Built-in fans keep LEDs cool to maintain optimum light output during extended use

- Meets ASTM UV-A intensity and wavelength specifications for FPI and MPI

- Customizable! Multiple lamp units can be "ganged" together longitudinally or back-to-back for a larger coverage area to meet <u>your</u> specific inspection requirements

- Both high- and standard-intensity versions available with or without black light filter
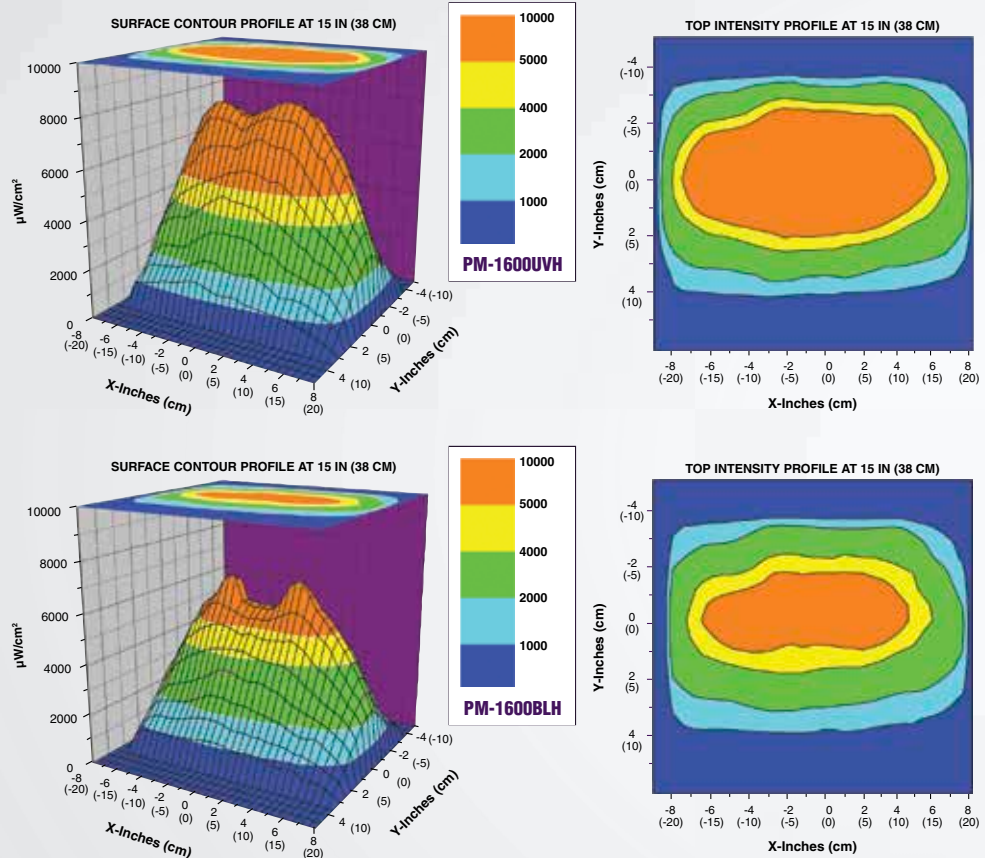
High-Intensity Models

UV-A Beam Profile

PowerMAX™ 365 Series UV-A LED panel flood lamps are available in two <u>high-intensity</u> models that are specifically designed for NDT inspection applications requiring high UV-A output.
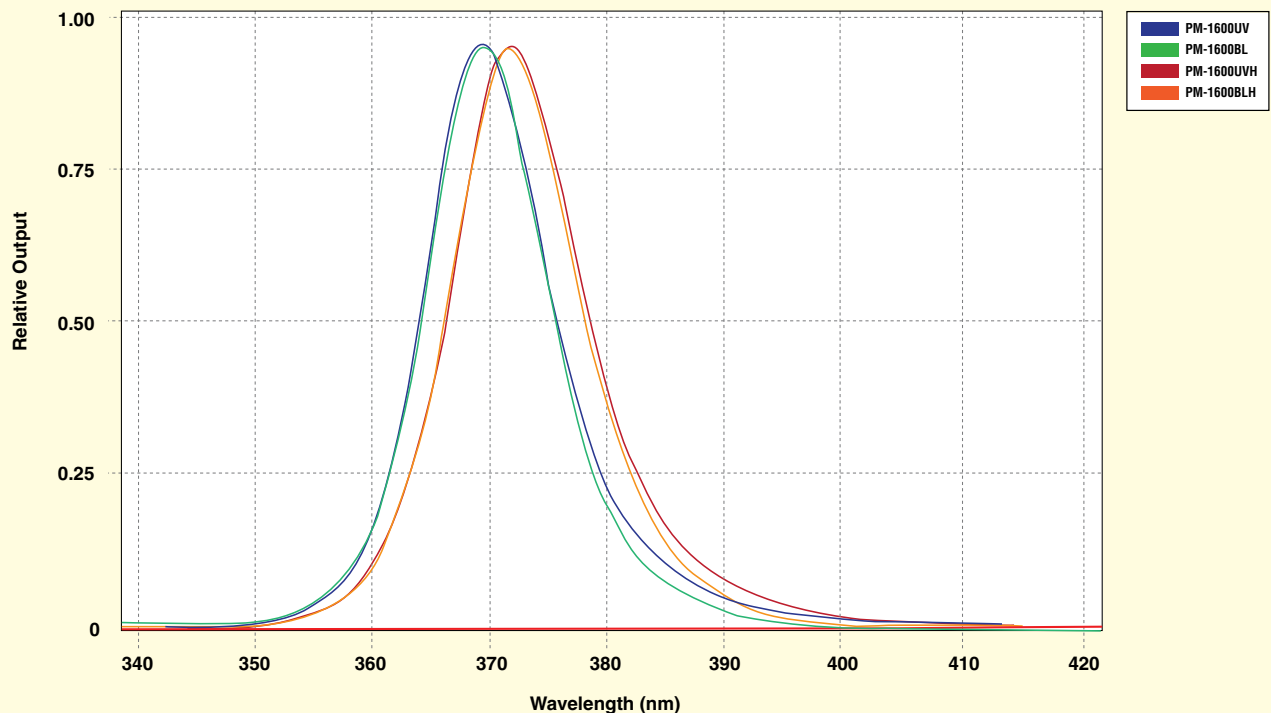
The PM-1600UVH is equipped with a <u>clear glass filter</u> and provides a nominal steady-state UV-A intensity of <u>8,000 µW/cm^2</u> at 15 inches (38 cm).

The PM-1600BLH is equipped with a <u>black light filter</u> that reduces the output of wavelengths longer than 400 nm. It provides a nominal steady-state UV-A intensity of <u>6,500 µW/cm^2</u> at 15 inches (38 cm).

SURFACE CONTOUR PROFILE AT 15 IN (38 CM) — PM-1600UVH

TOP INTENSITY PROFILE AT 15 IN (38 CM)

SURFACE CONTOUR PROFILE AT 15 IN (38 CM) — PM-1600BLH

TOP INTENSITY PROFILE AT 15 IN (38 CM)

Typical wavelength output profile of PowerMAX™ 365 Series with and without black light filter.

Normalized UV Irradiance

Legend:
- PM-1600UV
- PM-1600BL
- PM-1600UVH
- PM-1600BLH

Relative Output vs Wavelength (nm)

Standard-Intensity Models

UV-A Beam Profile

SURFACE CONTOUR PROFILE AT 15 IN (38 CM)

PM-1600UV

5000	
4000	
2000	
1000	

TOP INTENSITY PROFILE AT 15 IN (38 CM)

SURFACE CONTOUR PROFILE AT 15 IN (38 CM)

PM-1600BL

5000	
4000	
2000	
1000	

TOP INTENSITY PROFILE AT 15 IN (38 CM)

PowerMAX™ 365 Series UV-A LED panel flood lamps are also available in two <u>standard-intensity</u> models that are designed for NDT inspection applications requiring limited UV-A output. <u>Both versions address aerospace industry concerns</u>.

The PM-1600UV is equipped with a <u>clear glass filter</u> and provides a nominal steady-state UV-A intensity of <u>4,500 µW/cm^2</u> (maximum) at 15 inches (38 cm).

The PM-1600BL is equipped with a <u>black light filter</u> that reduces the output of wavelengths longer than 400 nm. It provides a nominal steady-state UV-A intensity of <u>4,000 µW/cm^2</u> (maximum) at 15 inches (38 cm).
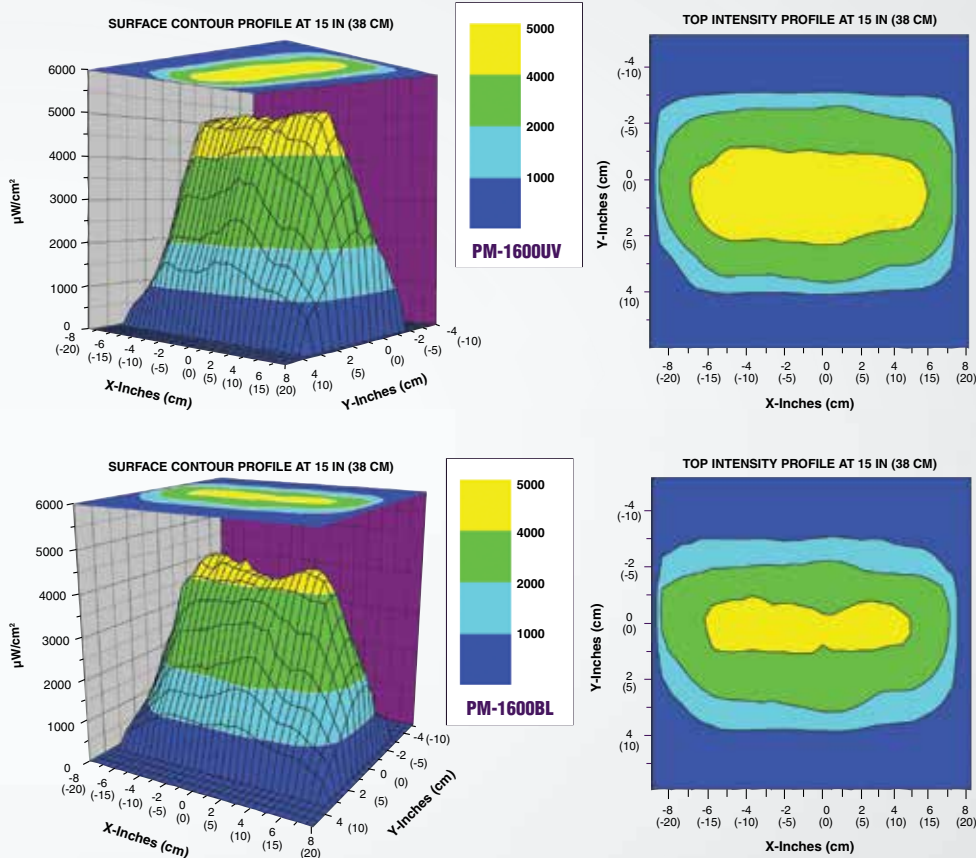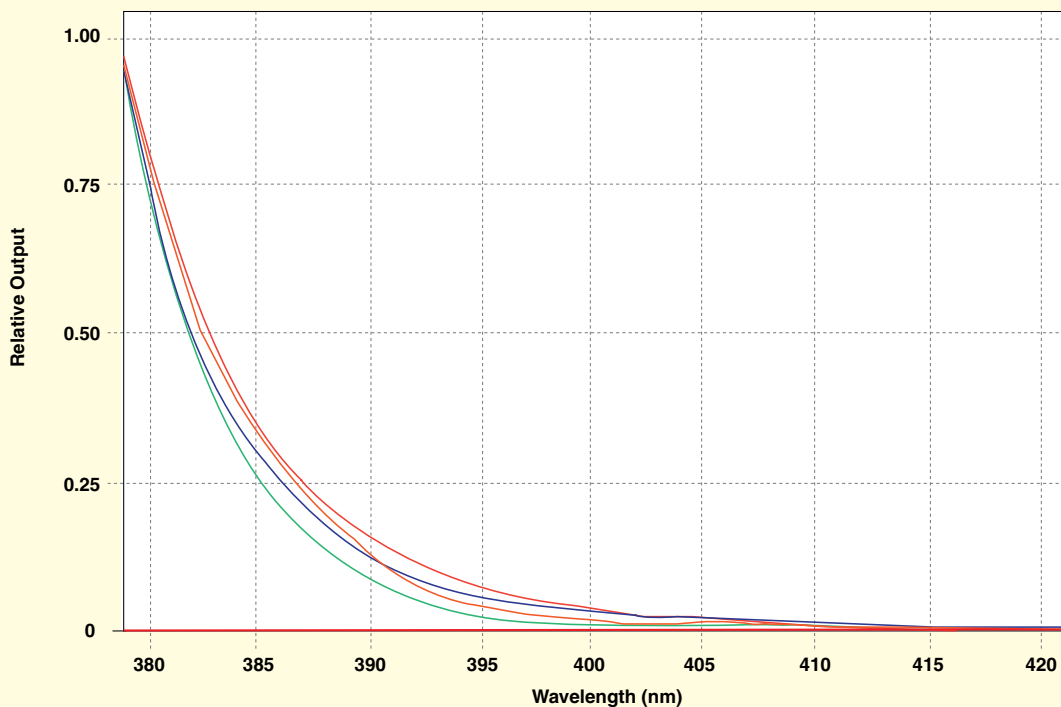
Wavelengths With and Without Black Light Filter

As the wavelength of the PowerMAX™ 365 moves into the visible light range, the black light filter significantly reduces the output of the lamp at 400 nm.

Easily Expandable!

For applications requiring extremely large coverage areas, the PowerMAX™ 365 can be quickly ganged together longitudinally (top) or back-to-back (below) using customized, easy-to-install connecting plates and brackets.

Top View

Specifications

Model	Nominal steady-state UV-A (365 nm) intensity at 15 inches (38 cm) ①	Visible light measurement	UV-A coverage area (at minimum 2000 µW/cm²)
PM-1600UVH High intensity, with clear filter	8,000 µW/cm²	< 2 foot-candles (22 lux)	15 in by 6 in (38 cm x 15 cm)
PM-1600BLH High intensity, with black light filter	6,500 µW/cm²	< 2 foot-candles (22 lux)	15 in by 6 in (38 cm x 15 cm)
PM-1600UV Standard intensity, with clear filter	4,500 µW/cm² maximum ②	< 2 foot-candles (22 lux)	15 in by 6 in (38 cm x 15 cm)
PM-1600BL Standard intensity, with black light filter	4,000 µW/cm² maximum ②	< 2 foot-candles (22 lux)	15 in by 6 in (38 cm x 15 cm)

Light Source: 16 UV-A (365 nm) LEDs

Lamp Style: Panel flood lamp

Dimensions: 5.5 x 13.75 x 6 in (14 x 35 x 15 cm)
(W x L x H)

Weight: 9 lb (4 kg)

Power Requirement: AC power (main AC power cord supplied with the unit)
(Available in 120V, 230V, 240V and 100V versions)

① All UV-A intensity readings were taken with Spectroline® AccuMAX™ Series meter, and are factory set to the values shown
② To address aerospace industry concerns

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Replacement Parts & Accessories

BF-365PM	Black Light Filter Assembly
CF-100	Clear Glass Filter Assembly
127918	Particulate Air Filter
127956	End Cap
CC-200	Connector Cable for Ganging Lamps
CP-100	Top Connecting Plate for Ganging Lamps Longitudinally
CP-200	Top Connecting Plate for Ganging Lamps Back-to-Back *(Two Required)*
CP-300	Side Connecting Bracket for Ganging Lamps Longitudinally *(Two Required)*
UL-100	UV-A Lens
UVF-80	Face Shield, UV-Absorbing
UVG-50	Goggles, UV-Absorbing
UVS-30	Spectacles, UV-Absorbing