

EV6000 LED UV Lamp

GENERAL DESCRIPTION

The EV6000 is the latest in LED technology from Magnaflux, building on 5 years of LED UV lamp designs and over 85 years in the non-destructive testing industry. UV-A radiation is generated by special high-performance LEDs and focused through custom-designed optics to provide the maximum irradiated area available from any hand-held lamp on the market. Each unit is shipped with a manufacturer's certificate of conformance which meets or exceeds all current specifications for use with fluorescent liquid penetrant and magnetic particle testing.



BENEFITS

Wide, Uniform Beam with No Hot-Spots

Inspections of large structures and areas can be done faster with the EV6000, thanks to the widest beam on the market from a hand-held lamp. At 9 inches wide, the beam is a full 33% wider than a traditional UV light. Custom-designed optics provide an extremely intense and even coverage of UV-A for clearly visible indications, and the included filter ensures minimal visible light emission.

· Rugged and Durable Design

Fluorescent inspection is not only done in a laboratory, it's done out in the real world. The EV6000 is designed to stand up to the kinds of environments that NDT professionals deal with. With reinforced construction and a sealed enclosure using chemical-resistant materials, there are no fan-cooling systems to clog or fail. And clouded optics are a thing of the past with Magnaflux's custom-designed optics that do not solarize.

Improved Operator and Environmental Safety

Faster inspections and rugged design are not the only reason to switch to the EV6000. Its compact, lightweight, easy-to-hold design weighs in a full 30% less than mercury-vapor UV lamps, reducing stress and fatigue in the inspection booth. Cool-running LEDs and passive heat dissipation prevent any risk of operator burns, eliminating the need for a cooling fan to further reduce energy costs. Making the switch to LED is an environmental plus as well, eliminating the need for fragile mercury-vapor lamps and the hazardous waste associated with them.

• Certified to Latest Specifications

Each EV6000 unit is individually certified to the latest ASTM standards for LED UV lamps. With its controlled emission and included UV filter, the EV6000 meets or exceeds all Aerospace Prime and OEM specifications for emission spectrum and beam profile.





PRODUCT DATA SHEET

SPECIFICATIONS

Maximum Irradiance (at 15 in / 38 cm)	5,000 μW/cm ²	
Peak Wavelength	365 ±5 nm	
Typical Irradiated Area (beam profile at 15 in / 38 cm)	Circular spot, 9 in / 23 cm diameter, > 1,000 μW/cm² UV-A intensity	
Emission Spectrum		
Full Width at Half Maximum (FWHM)	≤ 15 nm	
Longest Wavelength at Half Max (LWHM)	≤ 377 nm	
+/- Width at Half Maximum	≤ ±10 nm	
Full Width at 10% Maximum (FW10%)	≤ 30 nm	
+/- Width at 10% Maximum	≤ ± 15 nm	
Excitation Irradiance (347-382 nm)	≥ 2,000 µW/cm ²	
Wavelength Drift (at elevated temperature)	≤ 5 nm	
Working Distances		
• ASTM	Min. WD ≤ 6 in / 13 cm	
• RRES 90061	Min. WD = 15 in / 38 cm Max. WD = 36 in / 92 cm	
Typical Visible Emission		
• ASTM range (400-760 nm)	≤ 2 ft-candles at 15 in / 38 cm	
• RRES 90061 range (390-800 nm)	≤ 20 lux at 15 in / 38 cm (min. WD) ≤ 5 lux at 36 in / 92 cm (max. WD)	
Operating Environment	40-120°F / 5-49°C max. 90% relative humidity	
Warm-Up Time (ambient conditions)	5 minutes	
Maximum Housing Temperature	< 120°F / 49°C	
Lamp Cord Length	9 ft / 2.75 m	
Power Supply Cord Length	9 ft / 2.75 m	
Weight	2 lb / 0.9 kg	
Power In	100-240 VAC / 50-60 Hz / < 1 A	
Specification Compliance	ASTM E3022 RRES 90061 (additional certification required)	

RECOMMENDED ACCESSORIES

Description	Part No.
UV-A Meter	625024
Visible Light Meter	623338
UV Absorbing Safety Glasses	506249

