

# EV6000

## Hand-Held LED UV Lamp

The EV6000 LED UV lamp is a portable, hand-held UV lamp for fluorescent non-destructive testing applications like fluorescent penetrant testing and fluorescent magnetic particle inspections.

The EV6000 features a uniform beam with no hot-spots and a 9 in / 23 cm wide beam, 33% wider than the next widest hand-held UV lamp in the industry.

Custom-designed optics provide intense and even UV-A coverage of UV-A to easily identify indications, and an integrated filter ensures minimal visible light emission to improve inspection reliability.

The EV6000 is certified to NDT standards for LED UV lamps and certified for Aerospace Prime and OEM specifications for emission spectrum and beam profile. 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

#### Minimizes time to inspect parts

- Speeds up inspection time with one of the widest, most even beams on the market
- Indications are clearly visible even at the edge of the 9 inch / 23 cm beam, thanks to the high intensity LEDs

#### Safer working conditions with LED technology

- Removes the possibility of operator burns through cool LED technology
- Eliminates hazardous mercury vapor waste disposal for safer working conditions

#### Improves operator comfort

- 30% lighter than a mercury-vapor lamp, the EV6000 helps inspectors work more comfortably by reducing arm strain
- Keeps inspection booths from heating up by using cool-running LEDs

#### Maximize range of inspections

- Use for virtually any fluorescent penetrant or mag particle inspection
- Inspect a wide range of components, including aerospace parts, without worry
- Full NDT specification compliance, including ASTM E3022 and RRES 90061

#### Increases real-world reliability

- Reduces on-the-job downtime with dependable, reinforced construction
- Fully sealed housing will stand up to the elements, along with a fan-less cooling system and non-clouding lens for reliable, consistent inspections
- NDT-focused engineering and dependable construction

## FEATURES

- 9 in / 23 cm wide, uniform beam
- No hot-spots in the beam profile
- Rugged, durable design
- No internal fan
- Low energy consumption
- Aerospace prime and OEM certified
- Improved operator and environmental safety
- Certified to ASTM / RRES / NADCAP

## SPECIFICATION COMPLIANCE

- ASTM E2297
- ASTM E3022
- ISO 3059
- RRES 90061

### Penetrant Testing Specifications:

- Airbus AIM6-1001
- ASME BPVC
- ASTM E165
- ASTM E1417
- ASTM F601
- ISO 3452
- NADCAP AC7114/1

### Magnetic Particle Testing Specifications:

- ASME BPVC
- ASTM E709
- ASTM E1444
- ASTM E3024
- ISO 9934
- NADCAP AC7114/2

## PART NUMBERS

EV6000	625784
EV6000 ZP Kit	626776
EV6000 MG Kit	626779

## PRODUCT PROPERTIES

<b>Max. Irradiance*</b>	5,000 $\mu\text{W}/\text{cm}^2$
<b>Peak Wavelength</b>	365 $\pm$ 5 nm
<b>Typical Beam Profile*</b>	Circular spot, 9 in / 23 cm diameter, > 1,000 $\mu\text{W}/\text{cm}^2$ UV-A intensity
<b>Excitation Irradiance</b> (347-382 nm)	$\geq$ 2,000 $\mu\text{W}/\text{cm}^2$
<b>Working Distances</b> ASTM RRES 90061	Min. WD $\leq$ 6 in / 13 cm Min. WD = 15 in / 38 cm Max. WD = 36 in / 92 cm
<b>Typical Visible Emission</b> ASTM RRES 90061 range (390-800 nm)	$\leq$ 2 ft-candles* $\leq$ 20 lux at 15 in / 38 cm $\leq$ 5 lux at 36 in / 92 cm
<b>Stabilization Time</b>	5 minutes at ambient conditions
<b>Lamp Cord Length</b>	17 ft / 5.18 m
<b>Power Supply Cord Length</b>	9 ft / 2.75 m
<b>Weight</b>	2 lb / 0.9 kg
<b>Power In</b>	100-240 VAC / 50-60 Hz / < 1 A

\* At 15 in / 38 cm

## USE RECOMMENDATIONS

<b>NDT Method</b>	Fluorescent Penetrant Testing and Mag Particle Inspection
<b>Recommended Accessories</b>	UV-A Meter, PN 625024 Visible Light Meter, PN 622338 UV-A Safety Glasses, PN 506249