

# 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 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

#### Minimises 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 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 vapour waste disposal for safer working conditions

#### Improves operator comfort

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

#### Maximise 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

# EV6000

## FEATURES

- 23cm 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 AITM6-1001
- 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

628000	EV6000 lamp with power supply
628001	EV6000 lamp only
628003	Power supply only

## PRODUCT PROPERTIES

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

\* At 38 cm

## USER RECOMMENDATIONS

<b>NDT Method</b>	Fluorescent Penetrant Testing and Mag Particle Inspection
<b>Accessories</b>	UVe-Lux Dual Function Meter (017B012) UV-absorbing spectacles (017G001)
<b>Mounting brackets</b>	See separate Product Data Sheet.