

NEOVU-4

Version 09042018

Handheld LED UV-A Inspection Lamp

The NeoVU-4 was developed for the aerospace sector and meets or exceeds all common magnetic particle and liquid penetrant inspection requirements including RRES 90061 and ASTM E3022. Using an array of 15 high performance Nichia LED's with optical filters the NeoVU-4 produces a wide and uniform circular beam profile with minimal visible light emissions and no hot spots. The NeoVU-4 also features integrated cooling so UV-A output stability is maintained during use.

Key Features

Peak Irradiance	> 1200 $\mu\text{W}/\text{cm}^2$ @ 380mm
Irradiated Area	300mm Dia. Circular Spot
Peak Wavelength	365nm \pm 5nm
Weight	1.2 kg (approx.)



Technical Information

Meets or exceeds all common magnetic particle and liquid penetrant inspection standards - Suitable for almost any NDT application.

Extremely wide and uniform 300mm circular beam profile at a distance of 380mm where intensity is >1,200 $\mu\text{W}/\text{cm}^2$.

Ideal for improving inspection times by illuminating much greater component surface areas when compared to most competitor units. Faster and more efficient NDT for businesses and individuals alike.

Features integrated cooling so UV output stability is maintained regardless of operating period or working environment.

Lightweight unit with comfortable to hold ergonomic handle

reduces the chance of operator arm fatigue.

Lamp handle features a mounting hole so the NeoVU-4 can be readily mounted on a work bench.

Rear cable in the back of the lamp is detachable and can be removed for transport or easily replaced if damaged.

Low power consumption giving noticeable energy savings in the long run compared to older discharge type units.

All units are individually serialised and supplied with certificate of conformity as standard which includes a peak irradiance measurement and the results of all manufacturer 'type tests'.

As a requirement of RRES 90061 the results for all manufacturer 'unit tests' are available upon request on placement of order.

Johnson and Allen Ltd

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NEOVU-4

Version 29032018

Product Data

Emission Information	
Peak Irradiance (@ 380mm / 15 in)	> 1200 $\mu\text{W}/\text{cm}^2$
Peak wavelength	365 nm \pm 5nm
Typical Irradiated Area (beam profile @ 380mm / 15 in)	300mm Dia. Circular Spot > 1,200 $\mu\text{W}/\text{cm}^2$ UV-A intensity
Full Width @ Half Max. (FWHM)	\leq 15 nm
Longest Wavelength @ Half Max. (LWHM)	\leq 377 nm
\pm Width @ Half Max.	$\leq \pm$ 10 nm
Full Width @ 10% Max. (FW10%)	\leq 30 nm
\pm Width @ 10% Max.	$\leq \pm$ 15 nm
Wavelength Drift (@ elevated temp.)	\leq 5 nm
Visible Light	< 20 lux
General Information	
Dimensions	150 Dia. x 175 x 250 mm (approx.)
Operating Temp.	5-50 $^{\circ}\text{C}$
Warm-up Time (ambient conditions)	15 seconds
Maximum Housing Temp.	32 $^{\circ}\text{C}$
Voltage (into lamp head)	12 V DC
Voltage (into power brick)	100 to 240 V AC @ 50/60 Hz
Power	33 W
Weight	1.2 kg (approx.)
Life Expectancy (TL70)	16,000 hrs
Life Expectancy (TL50)	20,000 hrs
Warranty	12 Months

Standard Compliance

General NDT UV-A Specifications	Fluorescent Penetrant Specifications	Fluorescent Magnetic Particle Specifications
RRES 90061 ASTM E3022 ISO 3059	ASTM E1417 ISO 3452	ASTM E1444 ISO 9934

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