

LED UV Lamp

Special Certification Report

Model: EV6000

Covering Part No.: 625782, 628001 & 625786

Introduction

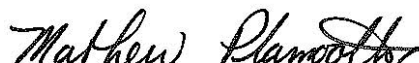
Magnaflux hereby certifies the above product meets the performance requirements of ASTM E3022 - Standard Practice for Measurement of Emission Characteristics and Requirements for LED UV-A Lamps Used in Fluorescent Penetrant and Magnetic Particle Testing. This equipment has been certified in accordance with ANSI/NCSL Z540-1-1994 and the manufacturer's specifications. All standards and test equipment used are traceable to National Institute of Standards and Technology or other accepted Manufacturer Standards. This document shall not be reproduced, except in full, without the written approval of Magnaflux.

Property	Criteria	Type Test – Nominal	Results
10.1.1 - Maximum Irradiance	Report Only	5000 $\mu\text{W}/\text{cm}^2$	Report Only
10.1.2 - Beam Irradiance	≥ 5 inches (127mm) at 1000 $\mu\text{W}/\text{cm}^2$	9.0 inches	PASS
10.1.3 - Minimum Working Distance	Report Only	5.0 inches	Report Only
10.1.4 – Ambient Testing	Ambient Environment	NA	PASS
10.1.4.1 – Maximum Lamp Housing Temperature	122°F (50°C)	146°F (63.3°C)	PASS
10.1.4.2 – Emission Spectrum	Measure & Plot	Between 300 – 400 nm	PASS
10.1.4.3 – Peak Wavelength	360 -370 nm	365 nm	PASS
10.1.4.4 – FWHM	≤ 15 nm	10 nm	PASS
10.1.4.5 – LWHM	≤ 377 nm	370 nm	PASS
10.1.4.6 – Excitation Irradiance	≥ 2000 $\mu\text{W}/\text{cm}^2$	≥ 2498 $\mu\text{W}/\text{cm}^2$	PASS
10.1.4.7 – Current Ripple	≤ 5.0 %	< 0.2%	PASS
10.1.5 – Elevated Temperature Tests	120°F (48.9°C)	122°F (50°C)(ACTUAL)	PASS
10.1.5.2 – Peak Wavelength	360 -370 nm	368nm	PASS
10.1.5.3 - FWHM	≤ 15 nm	10	PASS
10.1.5.4 - LWHM	≤ 377 nm	373	PASS
10.1.5.5 – Excitation Irradiance	≥ 2000 $\mu\text{W}/\text{cm}^2$	2294 $\mu\text{W}/\text{cm}^2$	PASS
10.1.5.6 – Current Ripple	≤ 5.0 %	0.2%	PASS
10.1.6 – Battery Type / Discharge Time / Plot	Report Only	N/A	Report Only
10.1.7 – Filter Transmittance	< 85% @ 380 nm < 30% @ 400 nm < 5% @ 420 nm < 0.2% @ 425-670 nm	82% 26% 0.2% 0.2%	PASS

N/R = NOT REQUIRED

N/A = NOT APPLICABLE

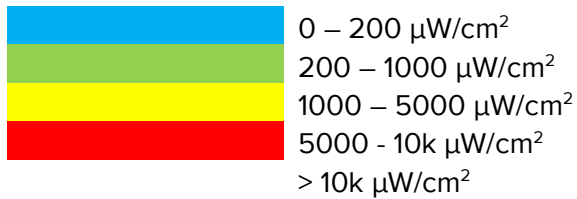
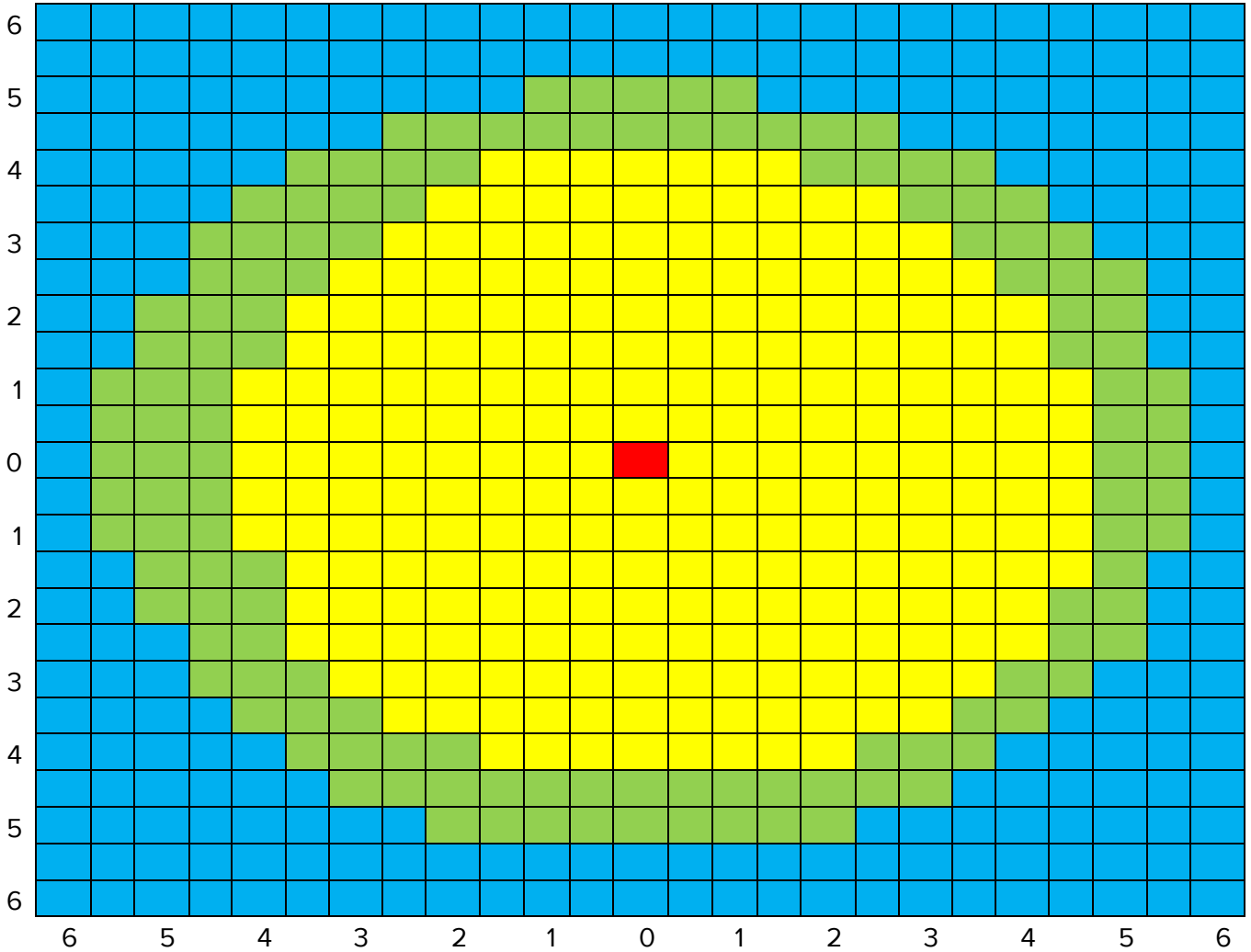
Performance to specifications within tolerance given nominal conditions and routine maintenance.



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ASTM E3022 Beam Plot - EV6000

- 0.5" x 0.5" grid
- 12.5-inch diameter at 200 $\mu\text{W}/\text{cm}^2$
- 9.0-inch diameter at 1000 $\mu\text{W}/\text{cm}^2$



EV6000 Beam Plot

