

**Profusion Glo-Black  
LED UV-A LIGHT**

*American. Brilliance.*

Tested to comply with both

ASTM  
E3022  
Standard

Rolls-Royce  
RRES 90061  
Requirements



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# Profusion Glo-Black Single Module

## UV-A LED Salient Characteristics

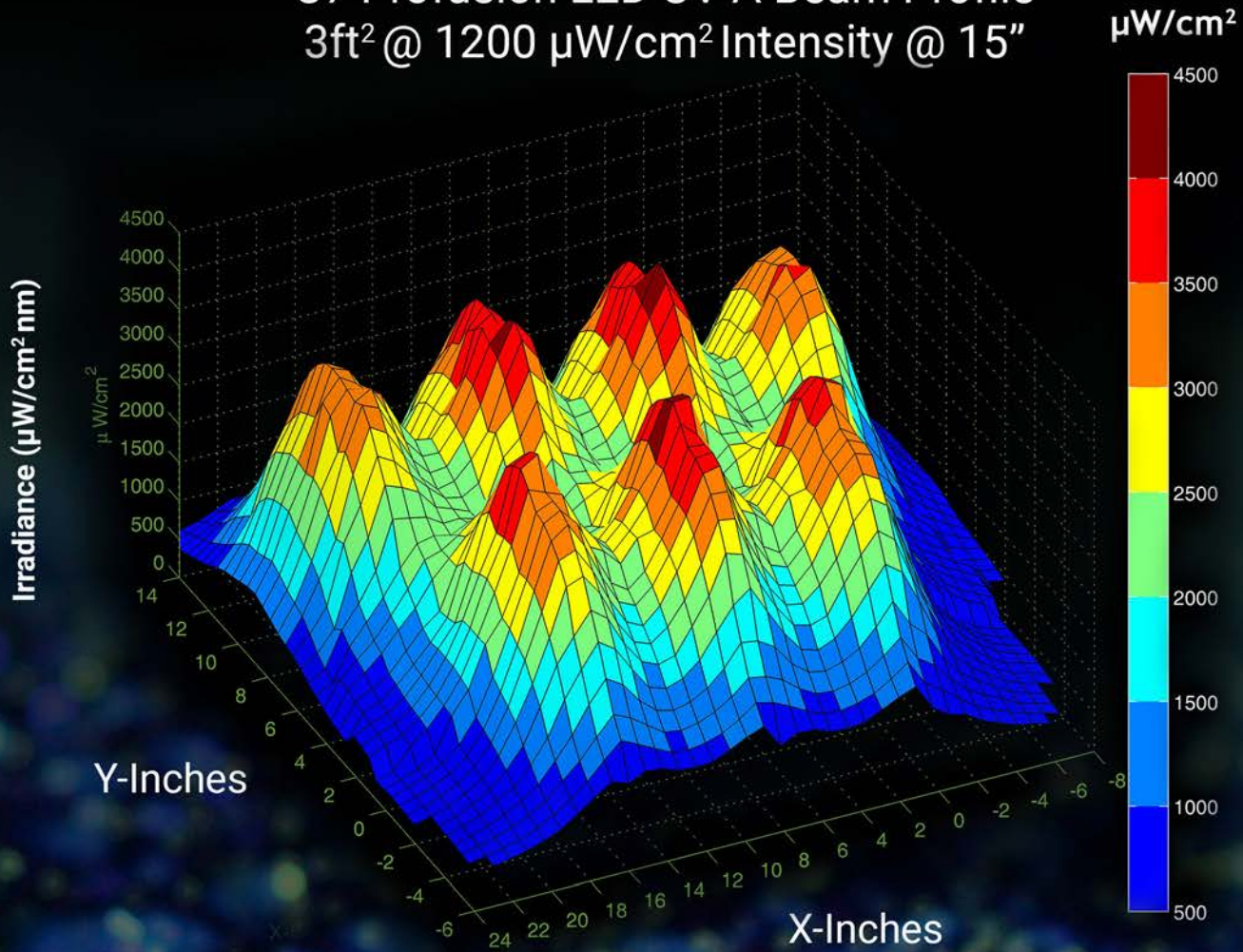
<i>Performance Attributes</i>	<i>Parameters</i>
Maximum Irradiance (at 15 in/38cm)	5000 $\mu\text{W}/\text{cm}^2$
Peak Wavelength	365 $\pm$ 5 nm
Irradiance at Peak Wavelength (at 15 in)	> 200 $\mu\text{W}/\text{cm}^2$
Typical Irradiated Area (profile at 15 in)	Circular Spot 9" Diameter > 1000 $\mu\text{W}/\text{cm}^2$ (347-382nm)
<b>Emission Spectrum</b>	
Full Width at Half Maximum (FWHM)	$\leq$ 15 nm
Longest Wavelength at Half Max (LWHM)	$\leq$ 380 nm
Full width at 10% Maximum	$\leq$ 30 nm
Excitation Irradiance (347-382 nm)	> 2500 $\mu\text{W}/\text{cm}^2$
Wavelength Drift (at 70° F ambient)	$\leq$ 3 nm
<b>Working Distances</b>	
ASTM	Minimum WD $\leq$ 5 in
RRES 90061	Minimum WD = 15 in
	Maximum WD = 36 in
<b>Typical Visible Emission</b>	
ASTM range (400-760 nm)	$\leq$ 2 ft candles
RRES 90061 range (390-800 nm)	$\leq$ 20 lux at 15 in
	$\leq$ 5 lux at 36 in
<b>Physical Attributes</b>	<b>Parameters</b>
Operating Environment	32 - 120° F
Maximum Housing Temperature (at 70° F ambient)	104° F
Lamp Cord Length	Custom
Power Supply	Custom
Weight	3.08 lb
Power in	90-264 VAC / 47 ~ 63Hz < 0.6A
Specification Compliance	ASTM E3022
	RRES 90061



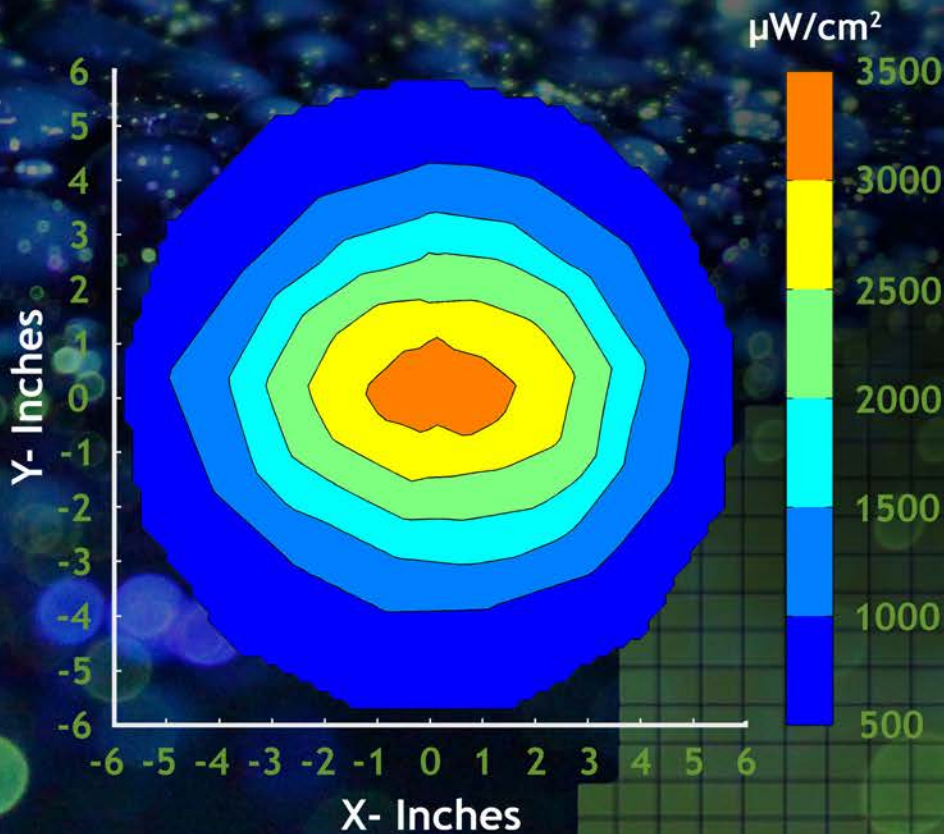


# LED Output Profile at 15 Inches

C7 Profusion LED UV-A Beam Profile  
3ft<sup>2</sup> @ 1200  $\mu\text{W}/\text{cm}^2$  Intensity @ 15"



## Single Profusion Module UV-A Beam Profile







////////// 1-Year Warranty //////////

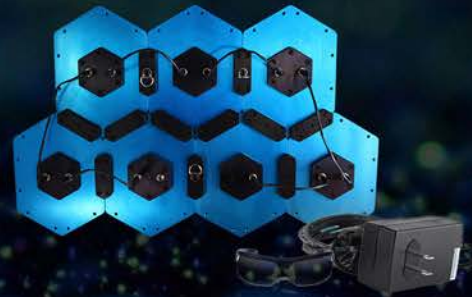


REL's booth mounted Glo-Black Profusion LED UV-A Inspection light modules utilize the latest in safe high output LED technology. The Profusion is an expandable modular solution that provides brilliant and uniform ambient UV-A light for in-process verification and inspection.

The Profusion is designed for the intensity requirements of Fluorescent Penetrant Inspection (FPI) and Magnetic Particle Inspection (MPI). Each Profusion module provides a 9-inch diameter of UV-A intensity above 1000  $\mu\text{W}/\text{cm}^2$  at 15 inches. The integral filter in the Profusion limits the visible light to 20 lux (1.86 foot-candles) at 15 inches and 5 lux (0.47 foot-candles) at 36 inches. Each Profusion module contains LED emitters with a built-in static-electric discharge circuit. The light's electrical components are sealed and passively cooled within an engineered finned housing manufactured from military grade aluminum. This allows the light to perform in all environments regardless of ambient conditions. These modules can be assembled together and wired in a series to obtain a conformable area of uniform intensity UV-A light.

#### **Kit includes:**

- Profusion Glo-Black LED UV-A light
- Power supply
- Connection cords
- D-rings for mounting
- Safety glasses



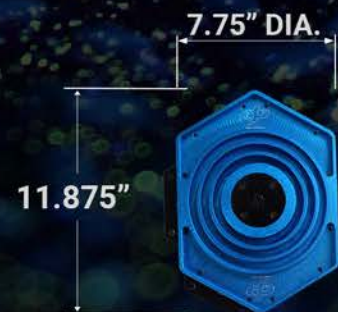
#### **Profusion LED attributes:**

- Certificate of Conformance and a serialized validation report
- Tested to comply with Rolls-Royce RRES 90061 Requirements
- Tested to comply with ASTM E3022 Standard
- Input voltage 90V-264V AC
- Customized for your inspection area
- Refurbishable

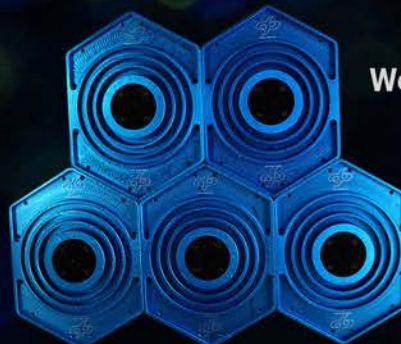
#### **Directions For Use**

1. Drop
2. Kick
3. Use

\*Note: Steps can be performed in any order!



Weight of 1 Module: 3.08 lb.



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