

# Aurora™ UV Classic Linesource & Driver



Aurora ultraviolet line source modules' patented optics produce unparalleled UV LED light intensity in a highly uniform linear beam with two optional focal positions. The Aurora modules have a wide range of uses for the UV curing market as well as many other applications.

The Aurora UV Classic model is available in five beam lengths which can be in the finite or infinite focal position and have an optional Plenum cooling fan.

### Benefits:

- Uniform illumination line light
- Continuous high current or pulsed operation
- RoHS compliant - Environmentally friendly

### ULTRAVIOLET:

- $\lambda_p$  360 nm thru 405 nm

### Features:

- 2.7 mm FWHM line width
- Nominal working distance is 36 mm
- Patented, imaging and non-imaging optics
- High thermal conductivity metal core PCB
- COB array technology
- Convenient and hardy connectors

### Options:

- Fixed illumination lengths: 4", 8", 12", 16", 24"
- Finite or infinite focal position
- Several PC board configurations
- Several cooling options
- Drivers and controllers

### Typical Applications:

#### ULTRAVIOLET:

- UV Curing
- Machine vision
- High speed printing
- Document verification
- Water and air purification
- Mercury lamp replacement

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## AURORA UV CLASSIC LINESOURCE

The Aurora UV Classic is a multi-configurable linesource with a single color PCB using our standard 42 mil die. Peak wavelengths available are from 360 nm to 405 nm. Multiple linear beam sizes as well as two focal adjustments allow for flexibility and customization. The data below is provided as a general guideline.

### LINESOURCE & DRIVER COMMON SPECIFICATIONS

Parameter	Specification	Comment
Max UV optical power density	Finite focus: 2.0 W/cm <sup>2</sup> Infinite focus: 1.4 W/cm <sup>2</sup>	Fan-cooled @ max current
Line Source output voltage	7.5 to 60 VDC	Single channel
Line Source output current	200 to 2000 mA DC	Set via local or remote
Input voltage	+24 VDC	+/- 15%
Efficiency	90% minimum	At maximum load (2A, 60V DC)
P-P current noise	1% maximum	At maximum load (2A, 60V DC)
Cooling fan option	+24 VDC output	Tied to input power
Over temperature sensors	In both line source and driver	LED status indicators (local) Signal pin indicator (remote)
Operating modes	Continuous mode (CM) Pulse width modulation (PWM)	User selectable
External trigger	Supports PWM, analog dimming, or remote operation	User enabled
Current level control	Local: 4-turn potentiometer Remote: 0 to 10 V DC	User selectable
Current control range	Minimum: 10:1 (CM) Minimum: 2000:1 (PWM)	Local or remote
PWM pulse repetition rate	10 kHz	Maximum
PWM pulse width	20 μsec	Minimum
Operating temperature	-20° C to 45° C	<85% RH, non-condensing

Figure 1

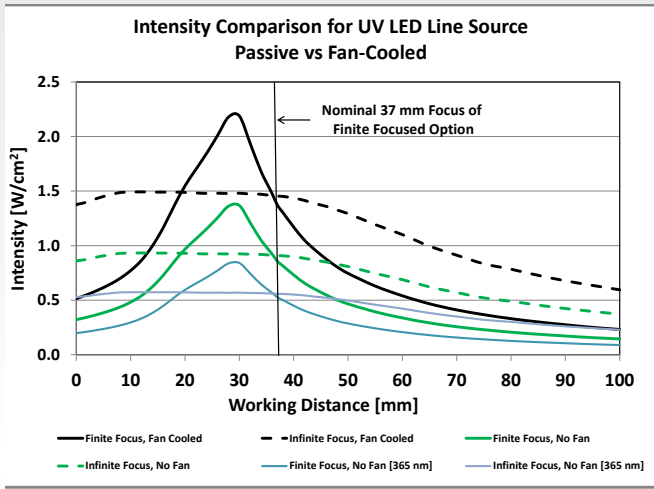


Figure 2

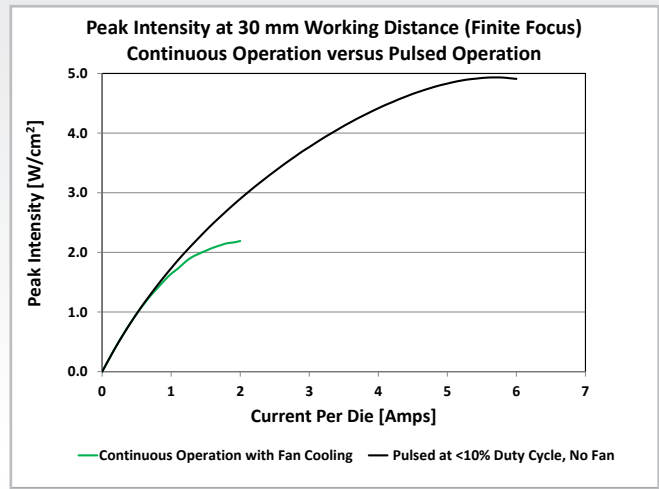


Figure 3

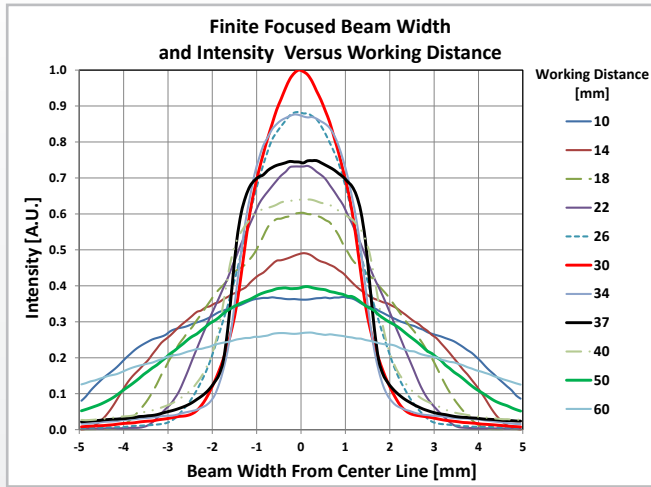


Figure 4

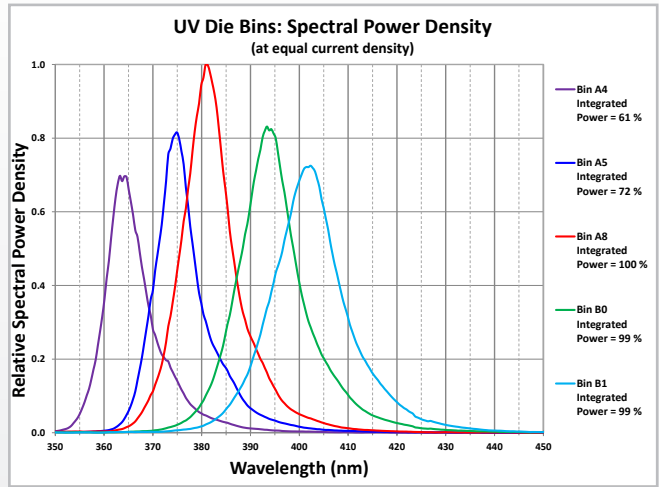
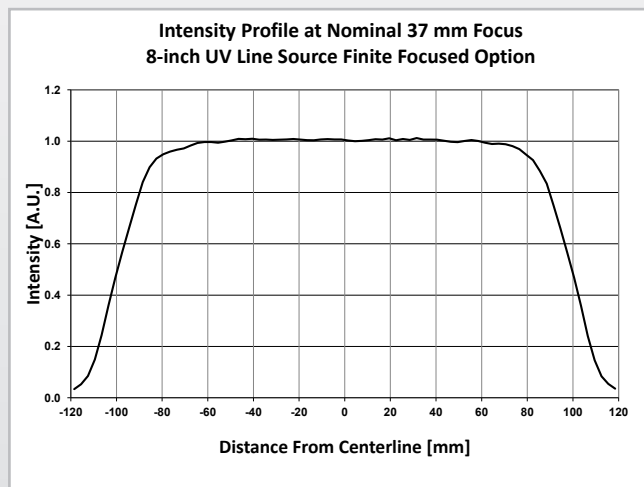



Figure 5



INSTALLATION CONTROL DRAWING

REVISIONS			
REV	DESCRIPTION	DATE	ECO
1	PRERELEASE	6/10/2011	BG
2	A] PICTORIAL UPDATE	5/19/2014	BG


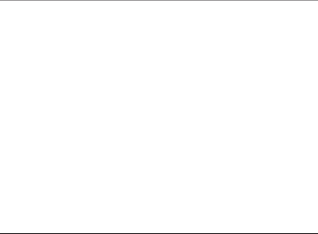

**INSTALLATION CONTROL DRAWING**

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS		DRW	BG	DATE	6/10/2011		INNOVATIONS IN OPTICS, INC. 82 Cummings Park Woburn, MA 01801 TEL: (781) 933-4477 FAX: (781) 933-0007	
TOLERANCES:		ENG	BG	DATE	6/10/2011		TITLE	LUMIBRIGHT LS4 ASSY
1 PLACE DECIMAL: ± .1		ENG APVD	TB	DATE	6/10/2011		SIZE	DWG. NO. 2604A-100-ICD REV 2
2 PLACE DECIMALS: ± .01		MATERIAL:		FINISH:		SCALE	1:2 SHEET 1 of 1	
3 PLACE DECIMALS: ± .001		THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF INNOVATIONS IN OPTICS, INC. AND SHALL NOT BE REPRODUCED OR COPIED WITHOUT THE WRITTEN PERMISSION OF INNOVATIONS IN OPTICS, INC.						
ANGLE: ± .5°								

NOTES:  
1. CONTENT FOR REFERENCE ONLY AND SUBJECT TO CHANGE

Additional ICD Links for: Classic 8 \* Classic 12 \* Classic 16 \* Classic 24

ACCESSORIES

	<p>Cooling Fans</p>	
	<p>LumiBright DR Driver/ Controller</p>	<p>Wire Harness Assemblies</p>

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