



Product Highlights

- 2.1 **Million** lux @ 75mm working distance
- High intensity focused line light for high-speed line-scan applications
- 10X brightness increase over the LL137
- Four lens options available based on working distance
- Expandable in 150mm increments from 150 to 2400mm
- M12 cable option (recommended for quick disconnect option to lighthouse)

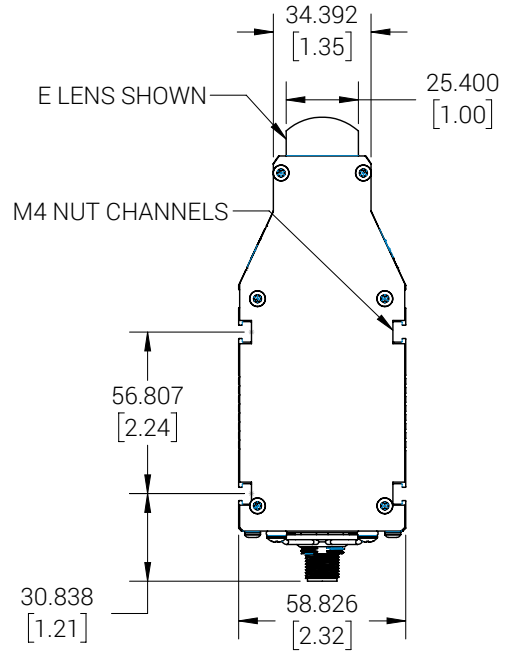
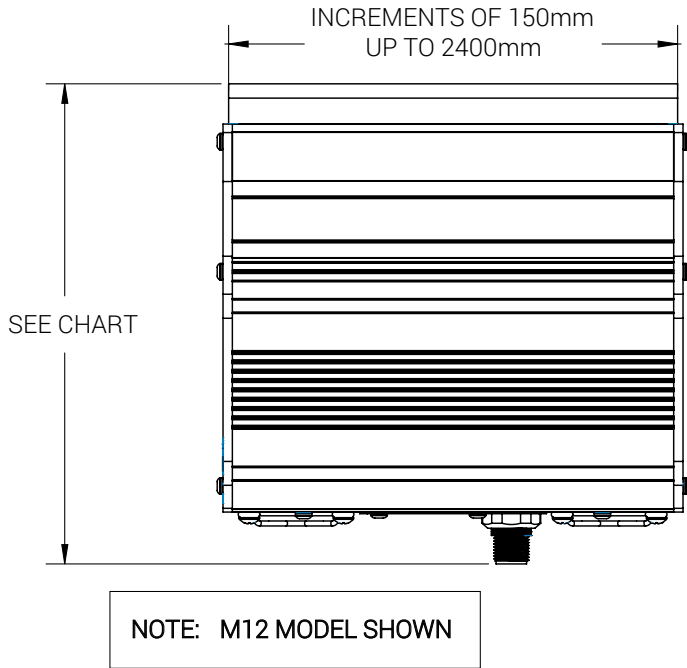
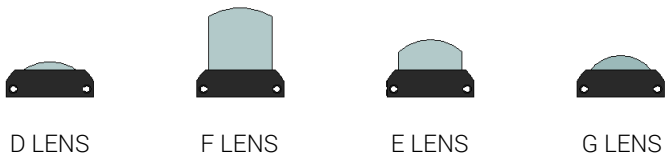


General Specifications

Electrical Specifications	Color	Current Limits Based on Power Supply
	625	Please see page 4
	455, 530, WHI	Please see page 4
Normal Operating Temperature	0 - 60°C ¹	
Weight (g)	300mm model - 4.59lbs (73.4 oz)	
Standard Cable Information	No cable included. Please see page 6.	
Photobiological Risk Factor IEC 62471	Group 3 (High Risk) Applicable Wavelengths: 455, 530, 625, WHI	
Compliance		
IP Rating	Not Rated	
Lumen Maintenance	L70 = 50,000 hours	

¹ If the unit temperature exceeds 60°C, the unit will shut off to protect from overtemperature damage. When the unit cools to 56°C, it will automatically turn back on.

Mechanical Specifications



Measurements shown in mm [inches]

PUSH TERMINAL HEIGHT MATRIX

LENS TYPE	HEIGHT IN MM (INCHES)
D	143.94 [5.67]
F	162.99 [6.42]
E	150.30 [5.92]
G	141.48 [5.57]

M12 HEIGHT MATRIX

LENS TYPE	HEIGHT IN MM [INCHES]
D	156.89 [6.18]
F	175.94 [6.93]
E	163.25 [6.43]
G	154.43 [6.08]

Part Number Key

Model	Lens Type	—	Lit Length	Spectral Wavelength	Connector/ Control	Optional Power Supply
LL230	X	—	XXXX	XXX	XX(X)	XXXXXX-X
LL230	D E F G		Increments of 150mm Max of 2400mm	(royal blue) 455 (green) 530 (red-orange) 625 (white) WHI	PT ¹ M12 ²	CS4805-A CS4805-A-CN CS4805-M CS4805-M-CN
<p>Ex: LL230D-0150625PT LL230G-2250455M12 LL230E-0300WHIPT-CS4805-A</p>				<p>¹PT = Push Terminal Connector; see wiring section for diagram</p> <p>²M12 wiring ordering code requires optional 5-pin female to flying lead cable M12 cable: LC2-M12-5-FX (refer to wiring diagram P. 4)</p>		

Stock Product: *shipped within 3 days*

TBD

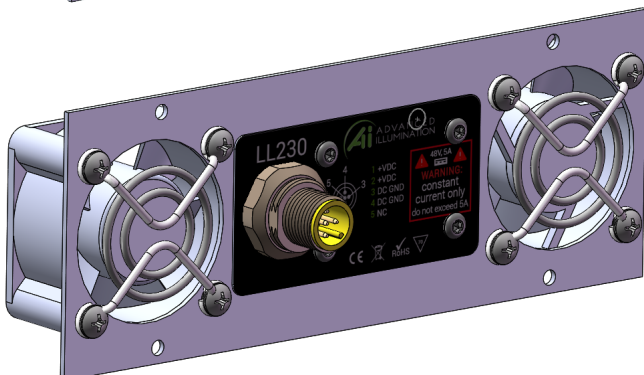
Build to Order: *shipped within two weeks,*
1650mm and above shipped within three weeks

Lens	Working Distance	Beam Width
D	50mm (2")	3.04mm (0.12")
E	75mm (3")	3.04mm (0.12")
F	150mm (6")	5.08mm (0.20")
G	300mm (12")	10.16mm (0.40")
	600mm (24")	17.78mm (0.70")
	900mm (36")	30.48mm (1.20")
	1200mm (48")	38.10mm (1.50")



(left) Push Terminal Shown

NOTE: PT is positioned on the **right** side of the back plate.

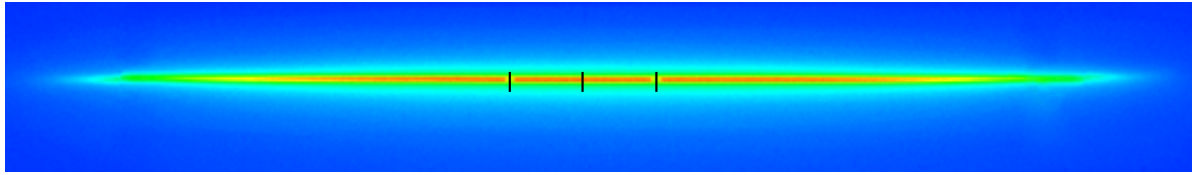


(left) M12 Shown

NOTE: M12 is positioned on the **left** side of the back plate.

Optical Performance

Intensity Distribution

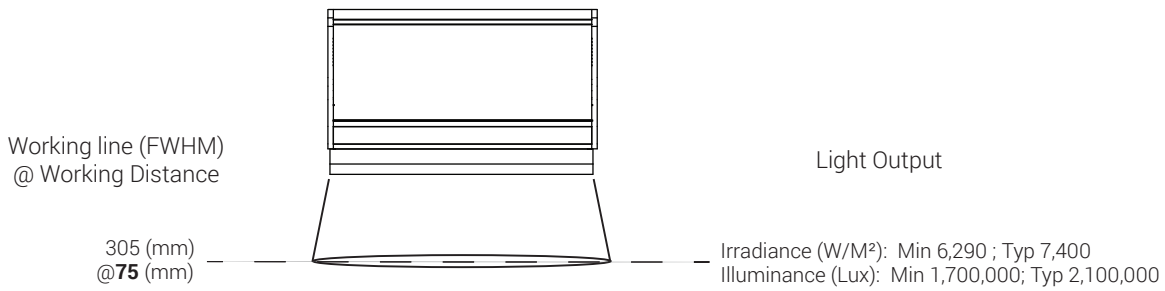


Optical measurement taken using LL230E0300-WHIPT@ 75mm

25mm

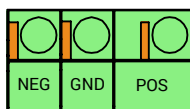
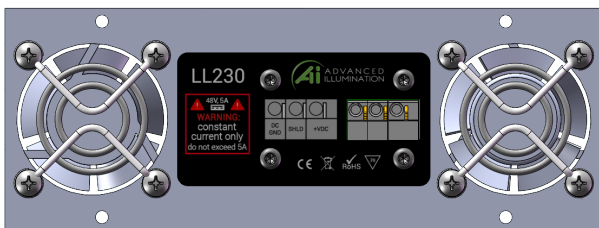


Area of Illuminance & Intensity

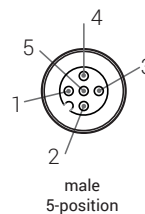


Power and Wiring

Push Terminal Connector



Optional M12



M12

Pin (M12)	Function	Wire Color
1	+VDC	Brown
2	+VDC	White
3	DC GND	Blue
4	DC GND	Black
5	NC	Gray

Current Source Options

Required:

The LL230 requires an external constant current source controller outputting approximately 5A @ 48 volt DC per 150 mm light length increment.

Advanced illumination recommends the Meanwell HLG-240H-48x* Series.

These controllers may be purchased from the Meanwell (www.meanwell.com) sales channel or directly from Ai in either of the following two fashions:

- As separate line items:

Ai Part Name	Meanwell Part Name	Data Sheet
CS4805-M	HLG-240H-48A	HLG-240H
CS4805-M-CN**	HLG-240H-48A	HLG-240H
CS4805-A	HLG-240H-48B	HLG-240H
CS4805-A-CN**	HLG-240H-48B	HLG-240H



- As an ordering code in the light p/n:

Ex: LL230E-0300625PT-CS4805-M

Notes:

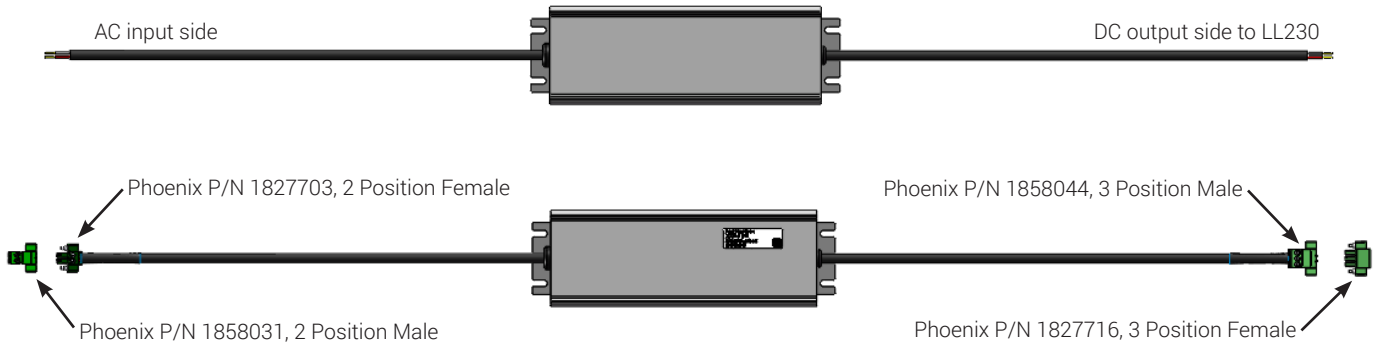
- * - M (-A Meanwell p/n) has voltage & current adjust potentiometers on housing
- A (-B Meanwell p/n) cabling for connection to a 3rd party 0-10 volt analog device.

** - CN variants include Ai supplied Phoenix connectors - see page 6 for details.

Current Source Options

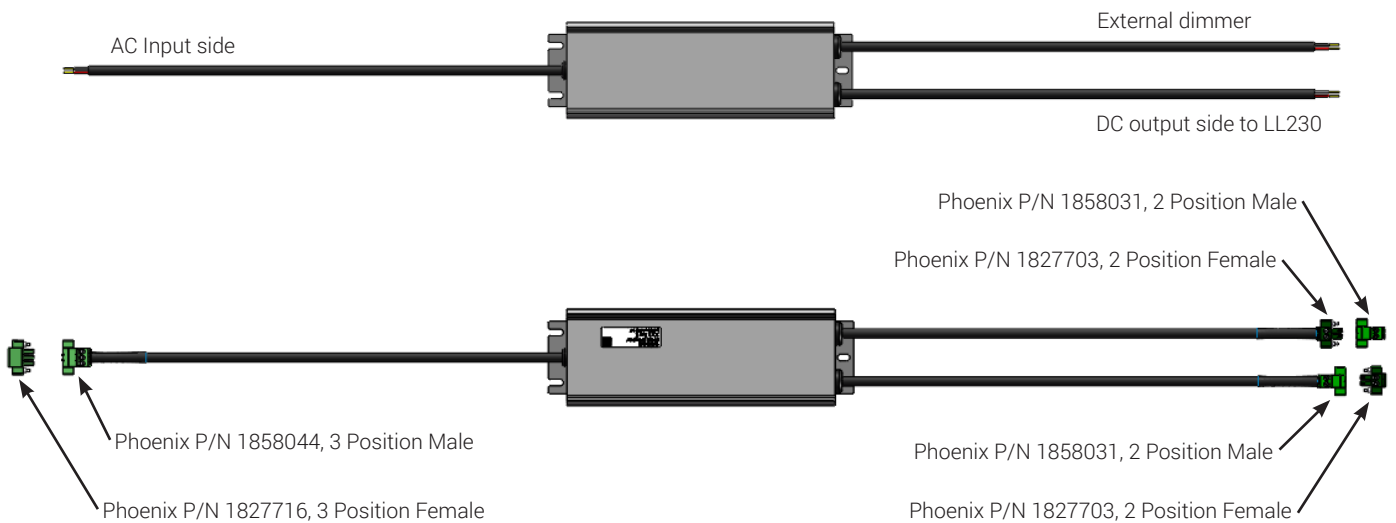
Manual Controlled, CS4805-M or CS4805-M-CN

Power supply comes with tinned leads, they will need to be cut back and left un-tinned. The CS4805-M or CS4805-M-CN power supply type has a potentiometer (a small screw to turn) to dim the output (no extra cable). 'CN' denotes added connectors.



Analog Controlled, CS4805-A or CS4805-A-CN

Power supply comes with tinned leads, they will need to be cut back and left un-tinned. The CS4805-A or CS4805-A-CN power supply type has an extra cable for dimming with external voltage. 'CN' denotes added connectors.



Current Source Options

M12 Cable Option Only (P/N: LC2-M12-5-FX, no connectors offered)



M12 Cable Option Notes:

- 1) The Ai cable or a user supplied standard 4-pin or 5-pin female to flying leads M12 cable may be used.
- 2) Wire the M12 cable with both brown and white flying leads to the Meanwell + 48 volt power lead wire to ensure proper power distribution. See diagram on P. 4 for M12 pin-outs and wire color assignments.
- 3) If using a user supplied female to male M12 cable, and pins 1 and 2 are not jumpered, each pin must be powered by +48 volts DC and 2.5A each.

Warranty Information

Every Advanced illumination, Inc. (Ai) product is thoroughly inspected and tested before leaving the factory. Products are warranted to be free of defects in workmanship and materials for a period of two years from the original date of purchase. Should a defect develop during this period, please contact Ai Customer Service or your Ai distributor for a Return Merchandise Authorization (RMA), and return the complete product, freight prepaid, to Ai. If a defect is found, Ai will - at our discretion - repair or replace the product without charge. Ai claims no liability for any implied warranties, including "merchantability" and "fitness for a specific purpose."

Electromagnetic Compatibility

This product was tested and complies with the regulatory requirements and limits for electromagnetic compatibility (EMC) as stated in the product specifications. These requirements and limits are designed to provide reasonable protection against harmful interference only when the product is operated in its intended industrial electromagnetic environment. To minimize the potential for electromagnetic interference or unacceptable performance degradation, install and use this product in strict accordance with the instructions in the product documentation.

Customer Service

For information on existing orders, or to make an order adjustment, contact us Monday through Friday 8:00 am to 5:00 pm ET or send an email to orders@advill.com.

Company Information

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