

### Product Highlights

- This ultra high intensity line light series is built to handle the most extreme line scan lighting requirements.
- Provides an intensity level of 2,100 klx (working distance of 75 mm).
- Pre-engineered for expandability in 150 mm (6") increments up to 2400 mm (94.5").



### General Specifications

Electrical Specifications	Color	Current Limits Based on Power Supply	All Other Controls
	625	Please see Electrical Specs	N/A
Normal Operating Temperature	0 - 60°C		
Weight	300mm model - 2082.0g (73.4oz) (4.59lbs)		
Standard Cable Information	No cable included. Please see page 5.		
Photobiological Risk Factor	Group 3 (High-Risk) Applicable Wavelengths: 455, 530, 625, WHI		
Compliance	CE, RoHS, IEC 62471		
IP Rating	Not Rated		
Lumen Maintenance	L70 = 50,000 Hours		

## Part Number Key

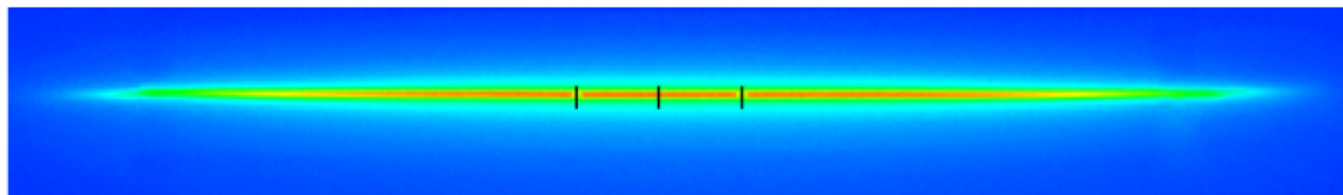
Model	Lens Focus	—	Emitting Length (mm)	Peak Wavelength	Connector/Control	Power Supply Option
LL230	X	—	XXXX	XXX	XX	XXX
LL230	D <sup>2</sup>		150 mm increments from 150 mm to 2400 mm	455 (blue)	M12 <sup>1</sup>	CS4805-A
	E <sup>2</sup>			530 (green)		CS4805-A-CN
	F <sup>2</sup>			625 (red orange)		CS4805-M
	G <sup>2</sup>			WHI (white)		CS4805-M-CN
EX: LL230D-0150625M12 LL230E-0300WHIM12-CS4805-A			<sup>1</sup> M12 wiring ordering code requires optional 5-pin female to flying lead cable M12 cable: LC2-M12-5-FX (refer to wiring diagram) <sup>2</sup> Refer to Part Number Chart for lens focus descriptions			

See website product page for in-stock product numbers.

Shipping:  
Stock Products: within three days  
Build-to-Order Products: within one to three weeks

## Optical Specs

## Intensity Distribution

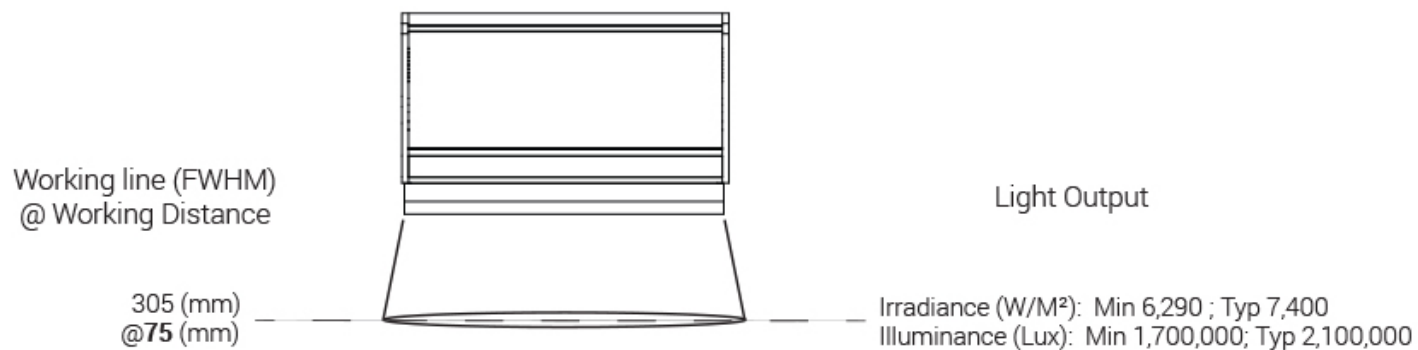


Optical measurement taken using LL230E0300-WHIPT@ 75mm

25mm



## Area of Illuminance & Intensity



LL230 Part Number Chart		
Lens	Working Distance	Beam Width
D	50 mm (2")	3.04 mm (0.12")
E	75 mm (3")	3.04 mm (0.12")
F	150 mm (6")	5.08 mm (0.20")
G	300 mm (12")	10.16 mm (0.40")
	600 mm (24")	17.78 mm (0.70")
	900 mm (36")	30.48 mm (1.20")
	1200 mm (36")	38.10 mm (1.50")

## Electrical Specs

**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.

**WARNING:**

Incorrect power supply will result in damaging voltage levels, product malfunction, and will void the warranty.

These controllers may be purchased from the Meanwell ([www.meanwell.com](http://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

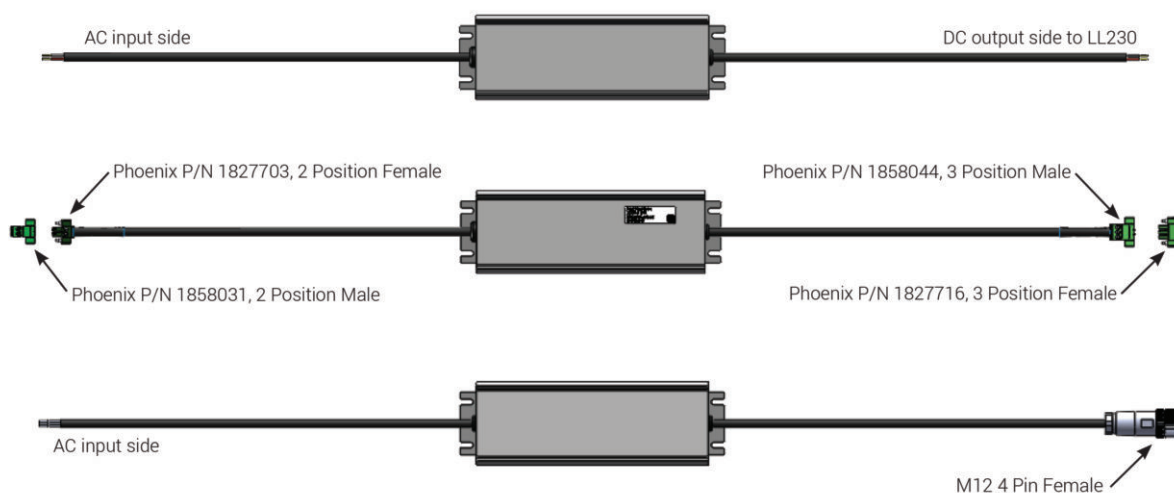
**Notes:**

- \* - 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.

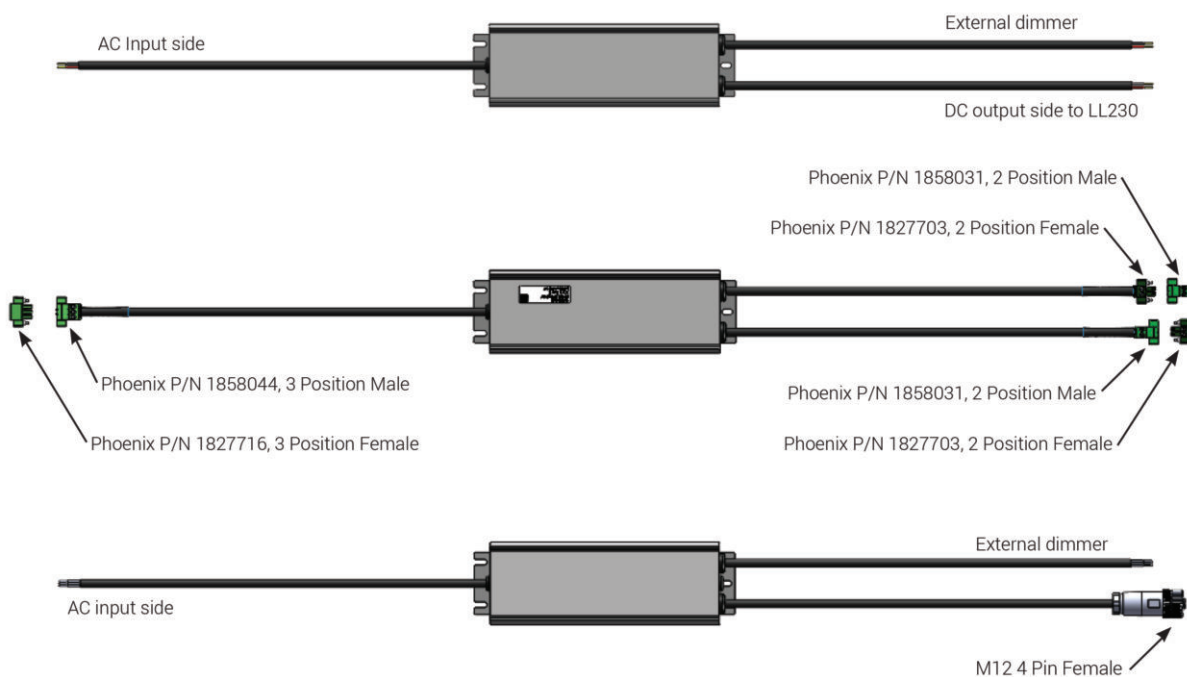
## Current Source Options

**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.



## 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.

## Power and Wiring



## Change Notice

PCN No: 159

Date Issued: June 15, 2021

Notice Type: Product Option Removal

Product Type: LL230

Change Notification Summary

Advanced illumination (Ai) is removing the push pin terminal connector option from the LL230 Ultra High Intensity Line Lights due to lack of demand. Those who prefer ordering push pin terminal configurations of the LL230 can do so until May 31, 2022 by contacting Ai directly.

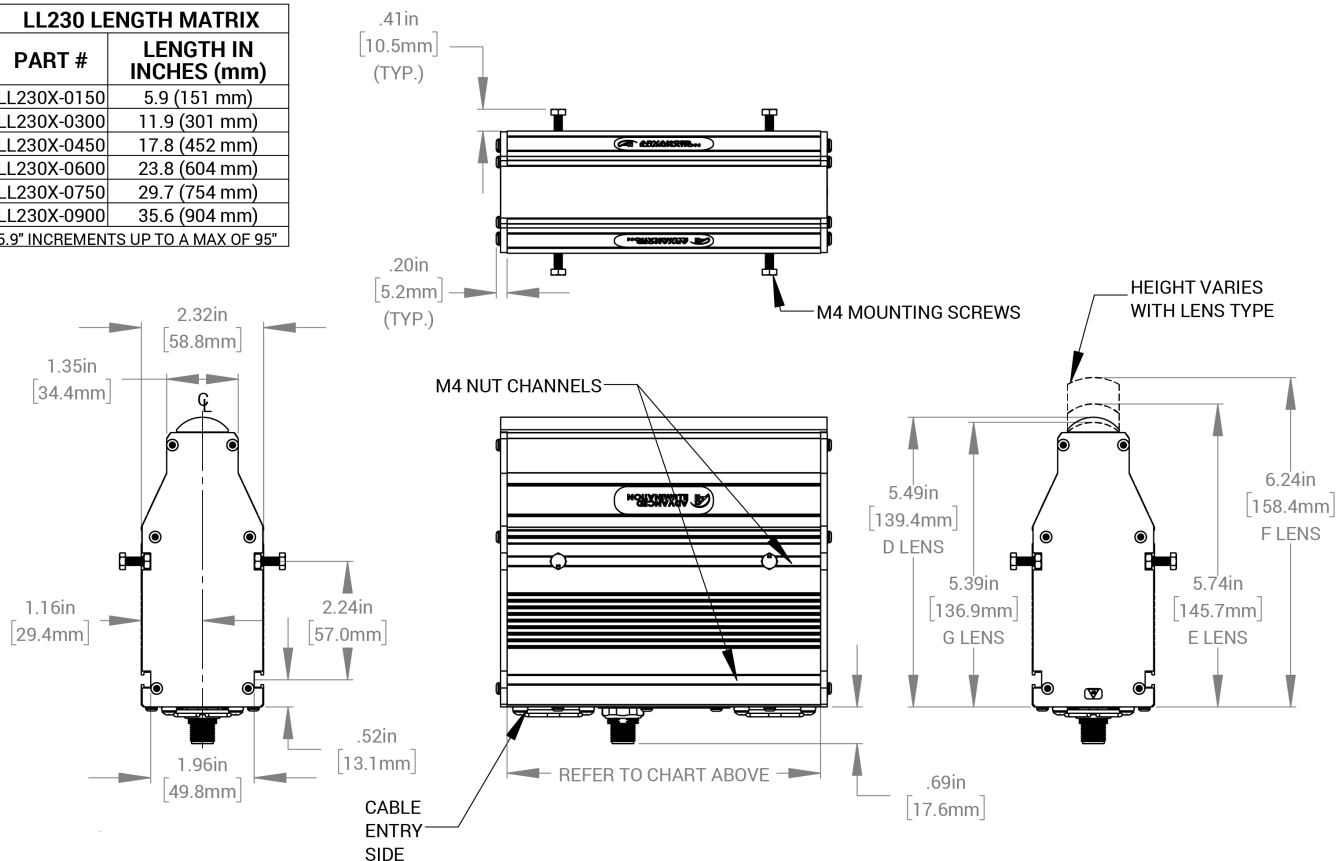
Please contact our sales department if you have any questions or concerns.

PCN 159 LL230

## Mechanical Specs

LL230 LENGTH MATRIX	
PART #	LENGTH IN INCHES (mm)
LL230X-0150	5.9 (151 mm)
LL230X-0300	11.9 (301 mm)
LL230X-0450	17.8 (452 mm)
LL230X-0600	23.8 (604 mm)
LL230X-0750	29.7 (754 mm)
LL230X-0900	35.6 (904 mm)

5.9" INCREMENTS UP TO A MAX OF 95"



## 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 FIVE YEARS from the original date of purchase. Should a defect develop during this period, customers may return the complete product, freight prepaid, to one of Ai's distributors or to the Ai factory. All product warranty returns require a Return Merchandise Authorization (RMA) number which is obtained from Customer Service. The RMA number must be clearly marked on the outside of the package. Ai will inspect the unit, and if a defect is found will, at our option, repair or replace the product without charge. Ai disclaims liability for any implied warranties, including implied warranties of "merchantability" and "fitness for a specific purpose." For products under warranty that have since been discontinued, Ai will make an effort to replace with equivalent parts; for circumstances that do not allow for equivalent replacement, Ai reserves the right to repair or replace these products with an updated version. Ai cannot be held responsible for the unauthorized or inappropriate use of its products. Any unauthorized repair or modifications will result in a voided warranty.

No Liability for Consequential Damages: In no event shall Ai be liable for any consequential, special, incidental, or indirect damages of any kind arising from the sale or use of the products.

## 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@advancedillumination.com](mailto:orders@advancedillumination.com).

## Company Information

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