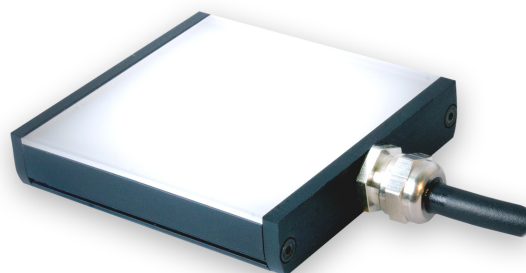


### Product Highlights

- The BL128 Series of Compact Backlights provide edge to edge illumination in a 12mm thick housing.



### General Specifications

| Electrical Specifications    | Color   | 24V Current | All Other Controls |
|------------------------------|---|-------------|--------------------|
|                              | 660, 880  | N/A         | 0.042A per inch    |
|                              | 470, 520, WHI   | N/A         | 0.06A per inch     |
| Normal Operating Temperature | 0 - 60°C  |             |                    |
| Weight                       | 2" unit - 69.85g (2.46oz)   |             |                    |
| Standard Cable Information   | 2 m long -0/+150 mm (80" -0/+6") - 105°C rated PVC jacket, foil shield with drain.                  |             |                    |
| Photobiological Risk Factor  | Exempt Applicable Wavelengths: 880<br>Group 1 (Low-Risk) Applicable Wavelengths: 470, 520, 660, WHI |             |                    |
| Compliance                   | CE, RoHS, IEC 62471   |             |                    |
| IP Rating                    | IP64 Sealed, IP50 Unsealed  |             |                    |
| Lumen Maintenance            | L70 = 50,000 Hours  |             |                    |

## Part Number Key

| Model                                      | Emitting Length (in)           | —   | Peak Wavelength   | Connector/Control           | Washdown Option | — | Alternative Connector               |
|--|--------------------------------|---|---|-----------------------------|-----------------|---|-------------------------------------|
| BL128                                      | XX                             | —   | XXX   | XX                          | X               | — | XXX                                 |
| BL128                                      | 01" increments from 01" to 14" |   | 470 (blue)<br>520 (green)<br>660 (red)<br>880 (IR)<br>WHI (white) | C1<br>C5<br>IC<br>I3<br>I3S | W               |   | M8 <sup>1</sup><br>M12 <sup>1</sup> |
| EX:<br>BL12806-470C5W<br>BL12808-660I3-M12 |                                | <sup>1</sup> Available with IC, I3, and I3S |   |                             |                 |   |                                     |

See website product page for in-stock product numbers.

**Shipping:**

Stock Products: within three days

Build-to-Order Products: within one to three weeks

## Change Notice

PCN No: 152

Date Issued: June 15, 2020

Notice Type: Product Revision Change

Product Type: BLXXYY, CBXXYY, FDXXYY, BL128, BL193, BL245

Change Notification Summary

In an effort to improve our products, Advanced illumination (Ai) will be updating the internal drivers and white LEDs used in the BLXXYY, CBXXYY, FDXXYY, BL128, BL193, and BL245. This change will result in white lights seeing a brightness increase of roughly 70% while maintaining equal pricing for small configurations and reduced pricing for large configurations. Excluding the BL128, 24V configured units will experience a current draw shift from 20mA to

30mA per sq. inch for 470nm, 520nm and white units while controller configured units will see a current draw shift from 15mA to 18mA per sq. inch for the same color configurations. Color temperatures will remain unchanged.

The LED upgrade and internal driver update for white color configurations will take place September 15th. The internal driver updates will occur November 9th for 470nm and January 7th for 520nm.

Please contact your Ai Sales Representative if you have any questions.

PCN 152

&nbsp;

&nbsp;

PCN No: 144

Date Issued: February 22, 2018

Notice Type: Product Change

Type: Washdown Lights

Change Notification Summary

Advanced illumination (Ai) is improving the way we manufacture washdown lights which will change their outward appearance. We will be replacing the black cordstock with clear flowable silicon. This change will provide a more durable finish and will effect the following lights: AL116, AL126, AL143, AL179, AL295, BL128, QM116, QM126, LL174 and SL147.

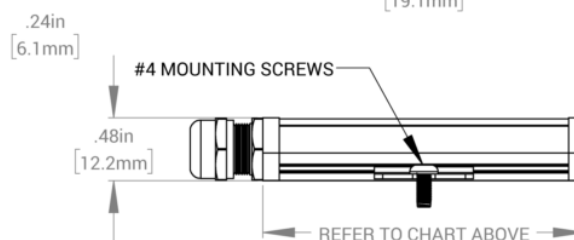
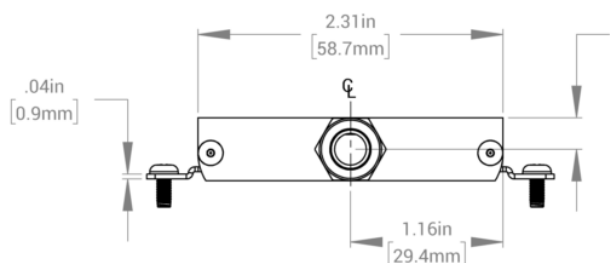
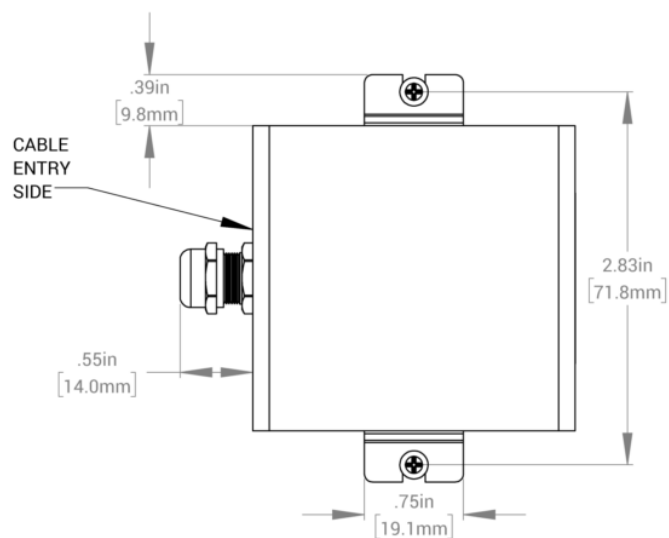
Please contact your Ai Sales Representative if you have any questions.

Washdown Lights Flowable Silicon

## Mechanical Specs

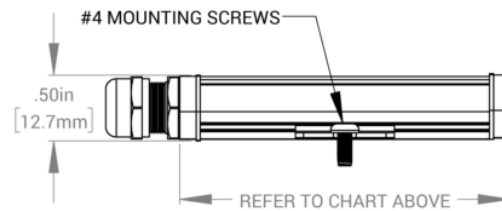
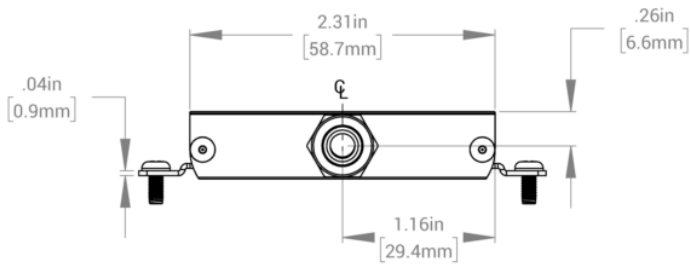
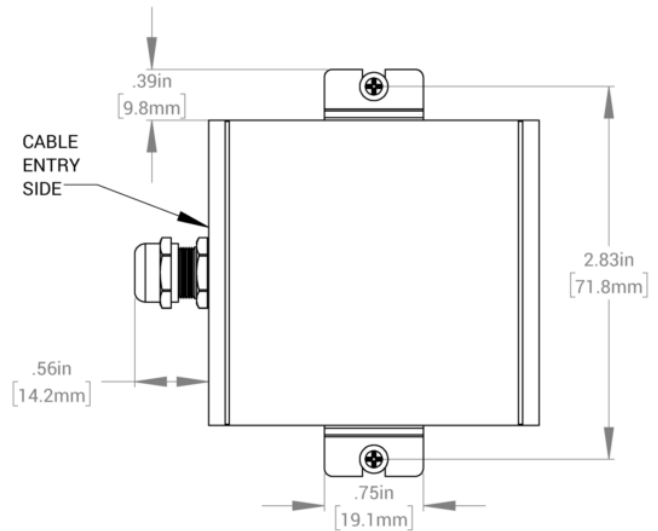
[ NONSEALED ]

| BL128 LENGTH MATRIX |                       |
|---------------------|-----------------------|
| PART #              | LENGTH IN INCHES (mm) |
| BL12801             | 1.44 (36.6 mm)        |
| BL12802             | 2.44 (62.0 mm)        |
| BL12803             | 3.44 (87.4 mm)        |
| BL12804             | 4.44 (112.8 mm)       |
| BL12805             | 5.44 (138.2 mm)       |
| BL12806             | 6.44 (163.6 mm)       |
| BL12807             | 7.44 (189.0 mm)       |
| BL12808             | 8.44 (214.4 mm)       |
| BL12809             | 9.44 (239.8 mm)       |
| BL12810             | 10.44 (265.2 mm)      |
| BL12811             | 11.44 (290.6 mm)      |
| BL12812             | 12.44 (316.0 mm)      |
| BL12813             | 13.44 (341.4 mm)      |
| BL12814             | 14.44 (366.8 mm)      |



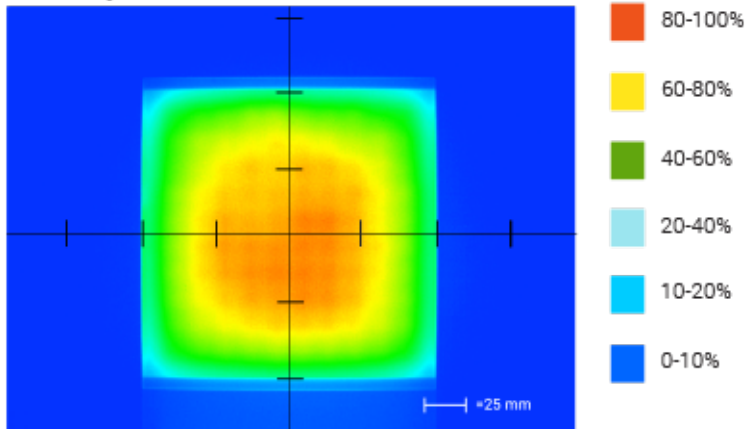
[ SEALED ]

| BL128 LENGTH MATRIX |                       |
|---------------------|-----------------------|
| PART #              | LENGTH IN INCHES (mm) |
| BL12801             | 1.50 (38.1 mm)        |
| BL12802             | 2.50 (63.5 mm)        |
| BL12803             | 3.50 (88.9 mm)        |
| BL12804             | 4.50 (114.3 mm)       |
| BL12805             | 5.50 (139.7 mm)       |
| BL12806             | 6.50 (165.1 mm)       |
| BL12807             | 7.50 (190.5 mm)       |
| BL12808             | 8.50 (215.9 mm)       |
| BL12809             | 9.50 (241.3 mm)       |
| BL12810             | 10.50 (266.7 mm)      |
| BL12811             | 11.50 (292.1 mm)      |
| BL12812             | 12.50 (317.5 mm)      |
| BL12813             | 13.50 (342.9 mm)      |
| BL12814             | 14.50 (368.3 mm)      |



## Optical Specs

### Intensity Distribution



Optical measurement taken using BL128-WHIIC

## Area of Illuminance &amp; Intensity

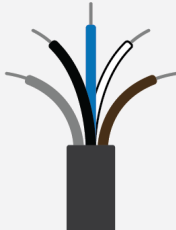
Working Area (FWHM)  
@ Working Distance

Light Output

43.2 X 43.2 (mm)  
@surfaceIrradiance (W/M<sup>2</sup>): Min 123.3; Typ 145  
Illuminance (kLux): Min 38.3; Typ 45

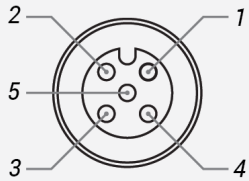
## Electrical Specs

## Standard Flying Lead Functions for IC, I3 and I3S Control Options

|  | COLOR | IC FUNCTIONS          | I3/I3S FUNCTIONS        |
|---|-------|-----------------------|-------------------------|
|   | BROWN | 24 V DC               | 24 V DC                 |
|   | WHITE | 0-10 V ANALOG DIMMING | RESERVED                |
|   | BLUE  | DC GND                | DC GND                  |
|   | BLACK | PNP/ACTIVE LOW GATE   | PNP/ACTIVE HIGH TRIGGER |
|   | GRAY  | N/A                   | 0-10 V ANALOG DIMMING   |

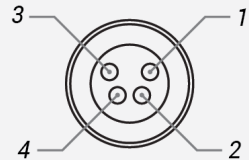
The functions listed above are applicable when this product is configured with built-in IC, I3, or I3S control, **without** the optional A-coded 5-position Male M12 or A-coded 4-position Male M8 connector.

## M12 Connector Pinout Functions for IC, I3 and I3S Control Options

|  | PIN | IC FUNCTIONS          | I3/I3S FUNCTIONS        |
|---|-----|-----------------------|-------------------------|
|   | 1   | 24 V DC               | 24 V DC                 |
|   | 2   | 0-10 V ANALOG DIMMING | RESERVED                |
|   | 3   | DC GND                | DC GND                  |
|   | 4   | PNP/ACTIVE LOW GATE   | PNP/ACTIVE HIGH TRIGGER |
|   | 5   | N/A                   | 0-10 V ANALOG DIMMING   |

The functions listed above are only applicable when this product is configured with built-in IC, I3, or I3S control, **with** an A-coded 5-position Male M12 connector.

## M8 Connector Pinout Functions for IC, I3 and I3S Control Options

|  | PIN | IC FUNCTIONS          | I3/I3S FUNCTIONS        |
|---|-----|-----------------------|-------------------------|
|   | 1   | 24 V DC               | 24 V DC                 |
|   | 2   | 0-10 V ANALOG DIMMING | 0-10 V ANALOG DIMMING   |
|   | 3   | DC GND                | DC GND                  |
|   | 4   | PNP/ACTIVE LOW GATE   | PNP/ACTIVE HIGH TRIGGER |

The functions listed above are only applicable when this product is configured with built-in IC, I3, or I3S control, **with** an A-coded 4-position Male M8 connector.

For details on operating configurations without built-in control (C1, C5, Q1, and Q4 control, when available), please refer to Advanced illumination's controller manuals.

## Control Specs

| C1 Connector                                       | C5 Connector  | ICS 2 (IC)  | ICS 3 (I3)  | ICS 3S (I3S)  |
|--|---|---|---|---|
| For use with:<br><b>DCS Series<br/>Controllers</b> | For use with:<br><b>Pulsar 320 Strobe<br/>Controller.</b> | Continuous in-line<br>controller<br><br><i>Powered with:</i><br><b>24V power supply</b> | Combination<br>strobe/continuous<br>in-line controller<br><br><i>Powered with:</i><br><b>24V power supply</b> | Default-OFF<br>strobe/continuous<br>in-line controller<br><br><i>Powered with:</i><br><b>24V power supply</b> |

## 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

### **Advanced Illumination**

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