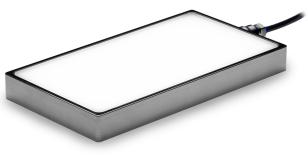


BL245 Series UltraSeal Backlights

Product Highlights

• Built for extreme environments, our IP69K certified lights are specifically engineered to withstand everything from prolonged liquid immersion to high-pressure steam cleaning and corrosive washdown solutions.



* Patent Pending

General Specifications

| | Color | 24V Current | All Other Controls | | | | | |
|------------------------------|---|------------------------------|--------------------|--|--|--|--|--|
| Electrical Specifications | 470, 520, 660, 880, WHI | 0.018A Max per sq. inch | | | | | | |
| Normal Operating Temperature | 0-60°C | | | | | | | |
| Weight | 4" x 8" unit - 635g (22.4oz) | 4" x 8" unit - 635g (22.4oz) | | | | | | |
| 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 Group 1 (Low Risk) Applicable Wavelengths: 470, 520, 660, WHI | | | | | | | |
| Compliance | CE, RoHS, IEC 62471 | | | | | | | |
| IP Rating | IP69K Certified | | | | | | | |
| Lumen Maintenance | L70 = 50,000 Hours | | | | | | | |

Part Number Key

| Model | - | Emitting Length (in) | Emitting Width (in) | Peak Wavelength | Connector/ Control | Housing Material | - | Alternative Connector |
|---|---------|--------------------------------|--------------------------------|--------------------|-----------------------|-------------------------|--------|--------------------------|
| BL245 | - | XX | YY | XXX | XX | XX | - | XXX |
| BL245 | | 01" increments from 02" to 12" | 01" increments from 02" to 12" | 470 (blue) | C1 | NP (Nickel Plating) | | M12 ¹ |
| | | | | 520 (green) | C5 | SS (Stainless Steel) | | M8 ¹ |
| | | | | 660 (red) | IC | | | |
| | | | | 880 (IR) | 13 | | | |
| | | | | WHI (white) | I3S | | | |
| | | | | | 14 | | | |
| | | | | | 24 | | | |
| Example Part M BL245-0412W BL245-121266 | HII3-M1 | | | | | ¹ Availa | able w | ith IC, I3, I3S, and I4 |

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

PCN No: 169

Date Issued: March 16, 2023

Notice Type: LED Update & amp; New Housing Options

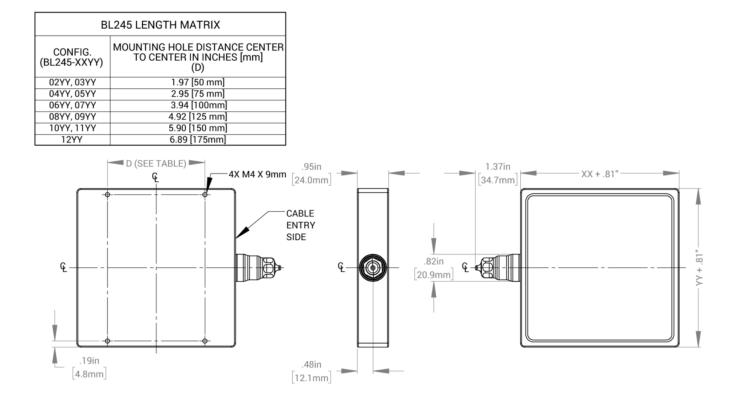
Product Type: BL245

Change Notification Summary

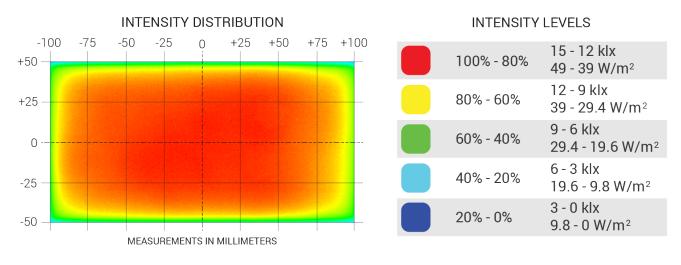
In an effort to improve our products, Advanced illumination (Ai) will update the LEDs used in the BL245 design. This change will result in a light 2-3x brighter at the same price. The conversion will begin on May 1st, 2023. In addition Ai will be adding stainless steel as a housing material choice for those applications that require it. This material will be stocked initially in the following sizes, 4x4, 6x6 and 8x4. Other sizes will be made to order with a 6-8 wks lead time. All part numbers moving forward with include the housing material in the PN. This LED change will result in slightly different wavelengths being available: 470nm, 530nm, 625nm, 850nm and White. Orders for customized (dash numbers) versions of BL245 will be honored until August 1st of 2023. Ai will be actively working with customers for those products to simplify the transition.

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

PCN 169



Optical Specs



OPTICAL MEASUREMENTS TAKEN AT THE DIFFUSER SURFACE USING 4" x 8" WHITE LED MODEL

| | COLOR | 24V FUNCTIONS | IC FUNCTIONS | 13/13S FUNCTIONS | 14 FUNCTIONS |
|--|-------|---------------|-----------------------|-------------------------|-------------------------|
| | BROWN | 24 V DC | 24 V DC | 24 V DC | 24 V DC |
| | WHITE | N/A | 0-10 V ANALOG DIMMING | RESERVED | NPN/ACTIVE LOW TRIGGER |
| | BLUE | DC GND | DC GND | DC GND | DC GND |
| | BLACK | N/A | PNP/ACTIVE LOW GATE | PNP/ACTIVE HIGH TRIGGER | PNP/ACTIVE HIGH TRIGGER |
| | GRAY | N/A | N/A | 0-10 V ANALOG DIMMING | 0-10 V ANALOG DIMMING |

Standard Flying Lead Functions for 24V, IC, I3, I3S, and I4 Control Options

The functions listed above are applicable when this product is configured with built-in 24V, IC, I3, I3S, or I4 control, without the optional A-coded 5-position Male M12 or A-coded 4-position Male M8 connector.

M12 Connector Pinout Functions for 24V, IC, I3, I3S, and I4 Control Options

| | PIN | 24V FUNCTIONS | IC FUNCTIONS | 13/13S FUNCTIONS | 14 FUNCTIONS | |
|----|-----|---------------|-----------------------|-------------------------|-------------------------|--|
| 21 | 1 | 24 V DC | 24 V DC | 24 V DC | 24 V DC | |
| 5 | 2 | N/A | 0-10 V ANALOG DIMMING | RESERVED | NPN/ACTIVE LOW TRIGGER | |
| | 3 | DC GND | DC GND | DC GND | DC GND | |
| 34 | 4 | N/A | PNP/ACTIVE LOW GATE | PNP/ACTIVE HIGH TRIGGER | PNP/ACTIVE HIGH TRIGGER | |
| | 5 | N/A | N/A | 0-10 V ANALOG DIMMING | 0-10 V ANALOG DIMMING | |

The functions listed above are only applicable when this product is configured with built-in 24V, IC, I3, I3S, or I4 control, with an A-coded 5-position Male M12 connector.

M8 Connector Pinout Functions for 24V, IC, I3, I3S, and I4 Control Options

| | PIN | 24V FUNCTIONS | IC FUNCTIONS | 13/13S FUNCTIONS | 14 FUNCTIONS |
|--|-----|---------------|-----------------------|-------------------------|-------------------------|
| | 1 | 24 V DC | 24 V DC | 24 V DC | 24 V DC |
| | 2 | N/A | 0-10 V ANALOG DIMMING | 0-10 V ANALOG DIMMING | 0-10 V ANALOG DIMMING |
| | 3 | DC GND | DC GND | DC GND | DC GND |
| | 4 | N/A | PNP/ACTIVE LOW GATE | PNP/ACTIVE HIGH TRIGGER | PNP/ACTIVE HIGH TRIGGER |

The functions listed above are only applicable when this product is configured with built-in 24V, IC, I3, I3S, or I4 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 S | pecs | | | | | | | | |
|--|-----------------------------------|------------------------------------|--------------|-----------------------------------|-----------------------------------|-----------------------------------|--|----|--|
| C1 CONNECTOR C5 C | | C5 CON | C5 CONNECTOR | | ICS 2 (IC) | | ICS 3 | | |
| For use with: DCS Series Controllers | | For use with: Pulsar 320 | | | In-line Continuous Controller | | In-line Strobe/ Continuous Controller | | |
| | | High | | | | Def | ault On | | |
| Strobe/Continuous Controllers | | Strobe only Controller | | | Powered with: 24V Power Supply | | Powered with: 24V Power Supply | | |
| ICS 3S | | | - | | | | /o | | |
| | | 5 (138) | | 14 | | 24 \ | /OLT | | |
| | In-line S Continuous Defau | Controller | | e Strobe/ us Controlle | | | 'Tinned ads | ed | |
| | Powered with: 24V Power Supply | | | Powered with: 24V Power Supply | | Powered with: 24V Power Supply | | | |

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. 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.

Company Information

Advanced Illumination

440 State Garage Road, Rochester, VT 05767 Phone: 802.767.3830 Fax: 802.767.2636 Email: info@advancedillumination.com Web: advancedillumination.com © 2021 Advanced illumination Inc. All rights reserved