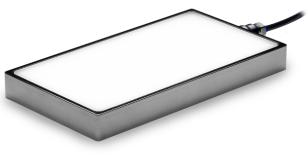


# BL245 Series UltraSeal Backlights

## 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

Electrical Specifications	Color	24V Current	All Other Controls		
	470, 520, 660, 880, WHI	0.03A per sq. inch	0.018A Max per sq. inch		
Normal Operating Temperature	0-60°C				
Weight	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

	Emitting Length (in)	Emitting Width (in)	Peak Wavelength	Connector/ Control	-	Alternative Connector
-	xx	xx	ххх	хх	-	xxx
	01" increments	01" increments	470 (blue)	C1		M81
	from 02" to 12"	from 02" to 12"	520 (green)	C5		M121
			660 (red)	IC		
			880 (IR)	13		
			WHI (white)	135		
				24		
			<sup>1</sup> Available with IC, I	3, and I3S		
		- XX  01" increments from 02" to 12"	-       XX       XX         01" increments from 02" to 12"       01" increments from 02" to 12"         -       - </td <td>-         XX         XX         XXX           01" increments from 02" to 12"         01" increments from 02" to 12"         470 (blue) 520 (green)           660 (red)         880 (IR)           WHI (white)         880 (IR)           WHI (white)         9           Image: State S</td> <td>-         XX         XX         XXX         XX           01" increments from 02" to 12"         01" increments from 02" to 12"         470 (blue)         C1           520 (green)         C5         660 (red)         1C           880 (IR)         13         WHI (white)         13S           WHI (white)         13S         24         24           Image: Stress of the stres of the stress of the stress of</td> <td>-         XX         XX         XX         XX         XX         -           01" increments from 02" to 12"         01" increments from 02" to 12"         470 (blue)         C1         -           660 (red)         IC         520 (green)         C5         -           880 (IR)         I3         -         -         -           WHI (white)         I3S         -         -         -           WHI (white)         I3S         -         -         -           Image: Image:</td>	-         XX         XX         XXX           01" increments from 02" to 12"         01" increments from 02" to 12"         470 (blue) 520 (green)           660 (red)         880 (IR)           WHI (white)         880 (IR)           WHI (white)         9           Image: State S	-         XX         XX         XXX         XX           01" increments from 02" to 12"         01" increments from 02" to 12"         470 (blue)         C1           520 (green)         C5         660 (red)         1C           880 (IR)         13         WHI (white)         13S           WHI (white)         13S         24         24           Image: Stress of the stres of the stress of the stress of	-         XX         XX         XX         XX         XX         -           01" increments from 02" to 12"         01" increments from 02" to 12"         470 (blue)         C1         -           660 (red)         IC         520 (green)         C5         -           880 (IR)         I3         -         -         -           WHI (white)         I3S         -         -         -           WHI (white)         I3S         -         -         -           Image:

For sizes beyond 12" x 12", contact sales: sales@advancedillumination.com. See website product page for in-stock product numbers.

Shipping:

Stock Products: within three days

## 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

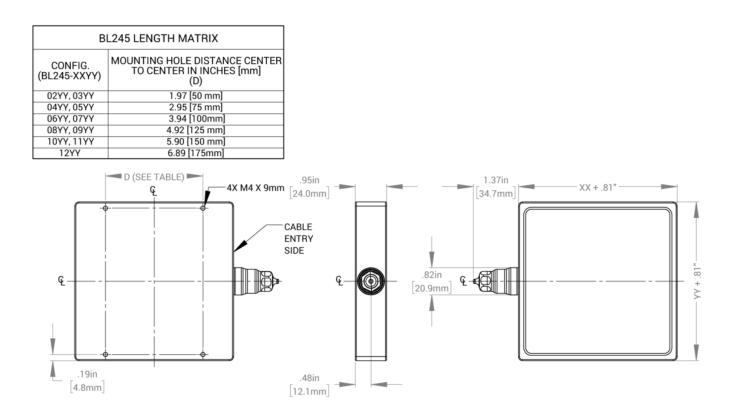
30mA per sq. inch for 470nm, 520nm and white units while controller configured units will see a current draw shift from 15mA to 18mA per sq. inch for the same color configurations. Color temperatures will remain unchanged.

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.

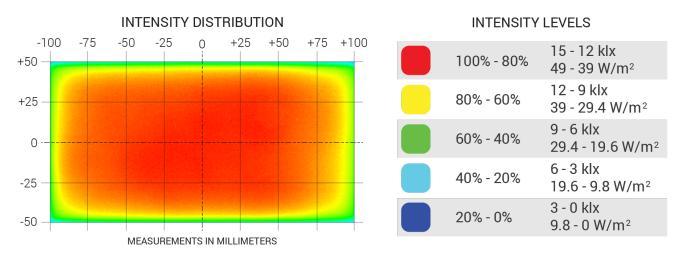
Please contact your Ai Sales Representative if you have any questions.

PCN 152

### Mechanical Specs



## Optical Specs



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

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

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

The functions listed above are applicable when this product is configured with built-in 24V, 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 24V, IC, I3 and I3S Control Options

	PIN	24V FUNCTIONS	IC FUNCTIONS	<b>I3/I3S FUNCTIONS</b>
2	7	24 V DC	24 V DC	24 V DC
5	2	N/A	0-10 V ANALOG DIMMING	RESERVED
	3	DC GND	DC GND	DC GND
34	4	N/A	PNP/ACTIVE LOW GATE	PNP/ACTIVE HIGH TRIGGER
	5	N/A	N/A	0-10 V ANALOG DIMMING

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

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

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

The functions listed above are only applicable when this product is configured with built-in 24V, 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

For use with: DCS Series Controllers

Strobe/Continous Controllers

#### C5 CONNECTOR

For use with: Pulsar 320 High Power Strobe Only Controller

## ICS 2 (IC)

In-line Continous Controller

Powered with: 24V Power Supply

#### ICS 3

In-line Strobe/ Continous Controller Default On Powered with: **24V Power Supply** 

#### ICS 3S (I3S)

In-line Strobe/ Continous Controller Default Off Powered with: 24V Power Supply

#### 24 VOLT

Flying/Tinned Leads

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