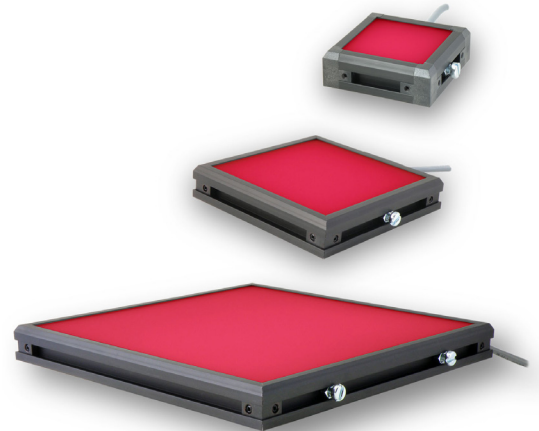# BL Series
Expandable Surface Mount LED Back Light

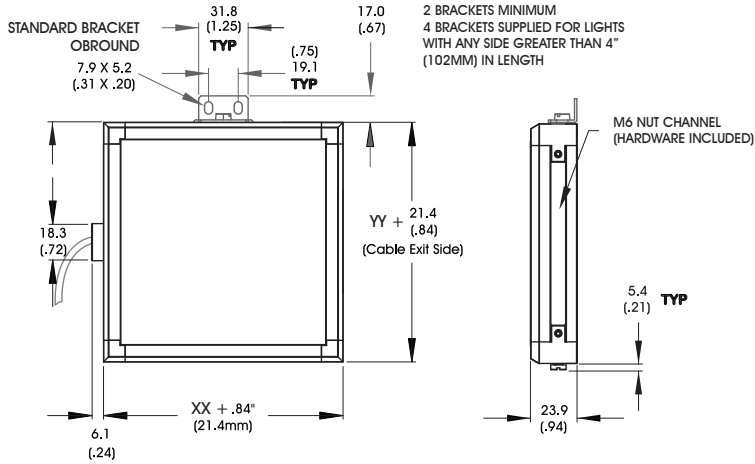Expandable

Product Highlights

- Extremely consistent light over the entire active area of illumination

- Available in 1" x 1" increments; Sizes from 1" x 1" up to 22" x 34"

General Specifications

	Color	24v Current	All Other Controls
Electrical Specifications	660, 880	0.03 A per 1 inches	0.015 A Max per 1 inches
	470, 520, WHI	0.02 A per 1 inches	0.018 A Max per 1 inches
Normal Operating Temperature	0 - 60°C		
Weight (g)			
Standard Cable Information	Up to 2 meters (80") long - 105°C rated PVC jacket, foil shield with drain.		
Photobiological Risk Factor IEC 62471	**Exempt (No-Risk) Applicable Wavelengths:** 880 **Group 1 (Low-Risk) Applicable Wavelengths:** 470, 520, 625, WHI		
Compliance	CE RoHS IEC 62471		
IP Rating	IP50		
Lumen Maintenance	L70 = 50,000 hours		

BL Series

Mechanical Specifications

STANDARD BRACKET OBROUND
7.9 X 5.2 (.31 X .20)
31.8 (1.25) TYP
17.0 (.67)
(.75)
19.1 TYP
2 BRACKETS MINIMUM
4 BRACKETS SUPPLIED FOR LIGHTS WITH ANY SIDE GREATER THAN 4" (102MM) IN LENGTH

M6 NUT CHANNEL (HARDWARE INCLUDED)

18.3 (.72)
YY + 21.4 (.84) (Cable Exit Side)
5.4 (.21) TYP
6.1 (.24)
XX + .84" (21.4mm)
23.9 (.94)

YY = WIDTH IN 1" INCREMENTS FROM 3" to 12"
XX = HEIGHT IN 1" INCREMENTS FROM 3" to 12"

DIMENSIONS ARE IN MILLIMETERS (INCHES)

Part Number Key

Model	Height	Width (Cable Side)	—	Spectral Wavelength	Connector/ Control	Optional Conditioning	—	Alternative Connector
BL	**XX**	**YY**	**—**	**XXX**	**XX**	**X**	**—**	**XXX**
BL	in 1" increments from 1" to 22"	in 1" increments from 1" to 34"		(blue) 470 (green) 520 (red) 660 (infra-red) 880 (white) WHI	C1 C2 C5 IC I3 I3S 24	P [2] (Polarizer)		M12 [1]
Ex: BL0312-455C1P BL0608-625IC-M12						[1] Available with IC, I3, I3S and 24v [2] Maximum size: 12" X 12"		

Stock Product: *shipped next day*

BL0202-66024   BL0404-66024   BL0808-66024
BL0202-660C2   BL0404-660C2
BL0202-660IC   BL0404-660C5
BL0202-WHI24   BL0404-660IC
                 BL0404-WHI24
   BL0404-WHIIC

Build to Order:

Red & Infra-red: *shipped within 2 weeks*
White: *within 3 weeks*
Blue & Green: *within 4 weeks*

Connector | Control Options

C1 Connector	C2 Connector	C5 Connector	IC	I3	I3S	24
For use with: DCS Series Controllers	*For use with:* Legacy Controllers (Not recommended for new applications)	*For use with:* Pulsar 320 Strobe Controller.	Continous in-line controller *Powered with:* 24V power supply	Combination strobe/continous in-line controller *Powered with:* 24V power supply	Default-OFF strobe/continous in-line controller *Powered with:* 24V power supply	Flying/tinned leads *Powered with:* 24V power supply

BL Series

Optical Performance

Intensity Distribution

🟧	80-100%
🟨	60-80%
🟩	40-60%
🟦	20-40%
🟦	10-20%
🟦	0-10%

= 25 mm
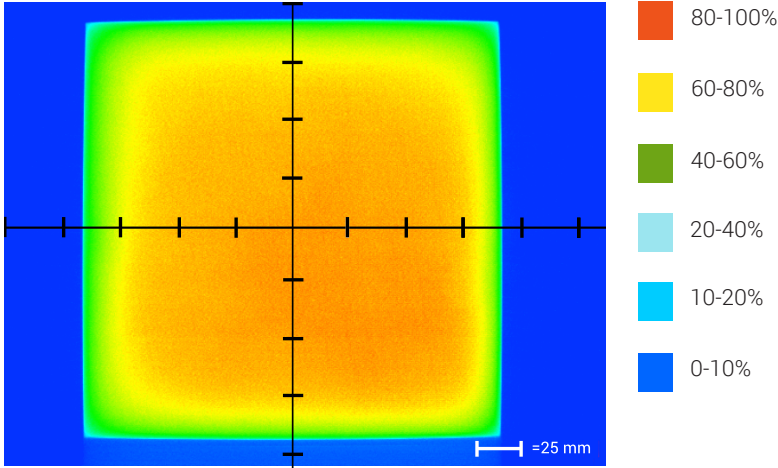
Optical measurement taken using BL0808-625

Area of Illuminance & Intensity

Working Area (FWHM)
@ Working Distance

Light Output

193 X 193 (mm)
@surface

Irradiance (W/M²): Min 20.4; Typ 24
Illuminance (kLux):   Min 2.6 ; Typ 3

Operation and Wiring

ICS 2 (IC)

Pin (M12)	Function	Wire Color
1	+24 VDC	Brown
2	GHI	White
3	GND	Blue
4	GLO	Black

ICS 3 (I3 and I3S)

Pin (M12)	Function	Wire Color
1	+24 VDC	Brown
2	Reserved	White
3	GND	Blue
4	PNP/Active High Trigger	Black
5	0-10 VDC Analog Control	Gray

24 Volt

Pin (M12)	Function	Wire Color
1	+24 VDC	Brown
2	N/A	White
3	GND	Blue
4	N/A	Black

Optional M12 Pinout

male
4-position

male
5-position
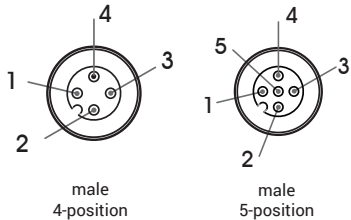
Warranty Information

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, EST or send an email to orders@advill.com.

Company Information

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