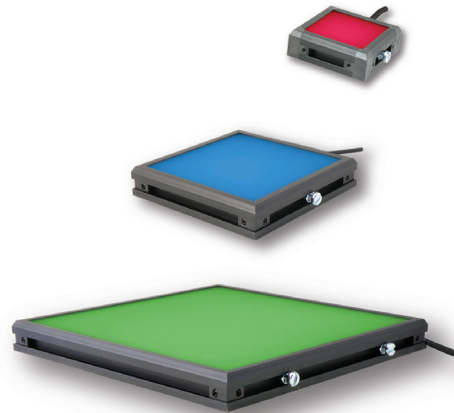





Expandable

### 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"

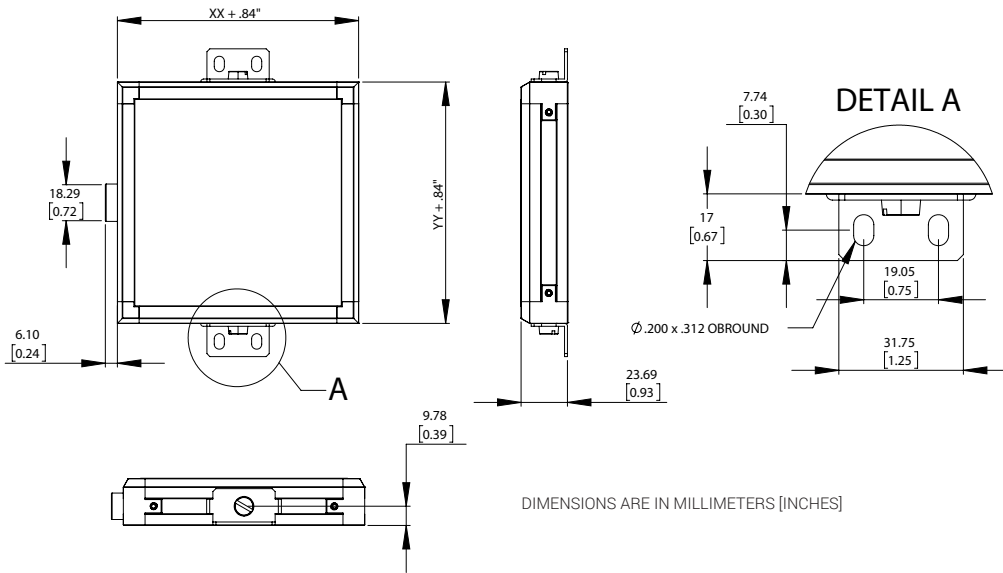


### General Specifications

| Electrical Specifications                | Color                                                                                                                       | 24v Current         | All Other Controls       |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|---------------------|--------------------------|
|                                          | 660, 880                                                                                                                    | 0.03 A per sq. inch | 0.018 A Max per sq. inch |
|                                          | 470, 520, WHI                                                                                                               | 0.02 A per sq. inch | 0.015 A Max per sq. inch |
| Normal Operating Temperature             | 0 - 60°C                                                                                                                    |                     |                          |
| Weight (g)                               | 8" X 8" unit - 1034.2g (36.48oz)                                                                                            |                     |                          |
| Standard Cable Information               | Up to 2 meters (80") long - 105°C rated PVC jacket, foil shield with drain.                                                 |                     |                          |
| Photobiological Risk Factor<br>IEC 62471 | <b>Exempt (No-Risk) Applicable Wavelengths:</b> 880<br><b>Group 1 (Low-Risk) Applicable Wavelengths:</b> 470, 520, 660, WHI |                     |                          |
| Compliance                               |                                          |                     |                          |
| IP Rating                                | IP50                                                                                                                        |                     |                          |
| Lumen Maintenance                        | L70 = 50,000 hours                                                                                                          |                     |                          |

# BL 2D Expandable Series

## Mechanical Specifications



**Note:** Please contact the factory if brackets are required on power side and non power side as that is considered a non-standard build.

## Part Number Key

| Model                                 | Height                          | Width (Cable Side)              | —        | Spectral Wavelength                                                      | Connector/Control           | Optional Conditioning                                                                                                                        | —        | Alternative Connector |
|---------------------------------------|---------------------------------|---------------------------------|----------|--------------------------------------------------------------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------------|
| <b>BL</b>                             | <b>XX</b>                       | <b>YY</b>                       | <b>—</b> | <b>XXX</b>                                                               | <b>XX</b>                   | <b>X</b>                                                                                                                                     | <b>—</b> | <b>XXX</b>            |
| BL                                    | in 1" increments from 1" to 34" | in 1" increments from 1" to 34" |          | (blue) 470<br>(green) 520<br>(red) 660<br>(infra-red) 880<br>(white) WHI | C1<br>C5<br>IC<br>I3S<br>24 | P <sup>2</sup><br>(Polarizer)                                                                                                                |          | M12 <sup>1</sup>      |
| Ex: BL0312-455C1P<br>BL0608-660IC-M12 |                                 |                                 |          |                                                                          |                             | <sup>1</sup> Available with IC, I3, I3S and 24v<br><sup>2</sup> Maximum size: 16" X 16",<br>(blue) 470 will reduce the life of the polarizer |          |                       |

**Stock Product:** *shipped within 3 days*

**Build to Order:** *shipped within 2 weeks*

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

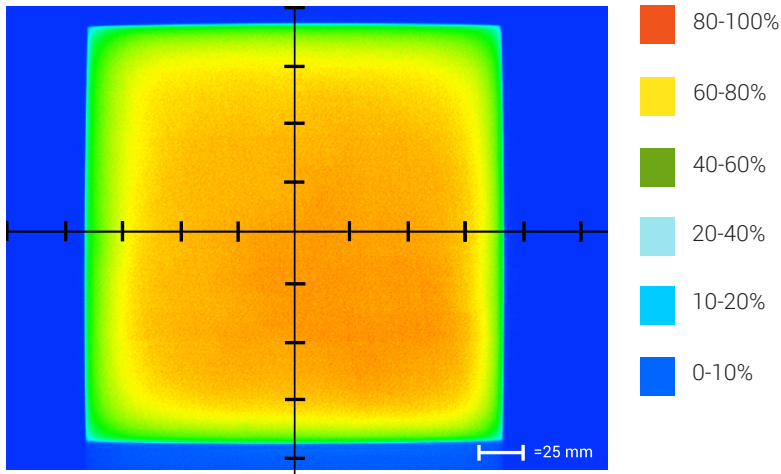
## Connector | Control Options

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

# BL 2D Expandable Series

## Optical Performance

### Intensity Distribution



Optical measurement taken using BL0808-66024

### Area of Illuminance & Intensity

Working Area (FWHM)  
@ Working Distance

Light Output

193 X 193 (mm)  
@surface



Irradiance (W/M<sup>2</sup>): 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         | 0-10 VDC<br>Analog Control | White      |
| 3         | GND                        | Blue       |
| 4         | GLO                        | Black      |
| 5         | N/A                        | Gray       |

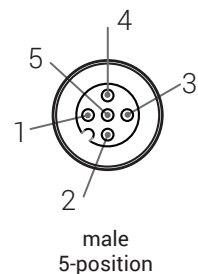
### ICS 3 (I3 and I3S)

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

### 24 Volt

| Pin (M12) | Function | Wire Color |
|-----------|----------|------------|
| 1         | +24 VDC  | Brown      |
| 2         | N/A      | White      |
| 3         | -24 VDC  | Blue       |
| 4         | N/A      | Black      |
| 5         | N/A      | Gray       |

### Optional M12 Pinout



# BL 2D Expandable Series

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

## Company Information

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