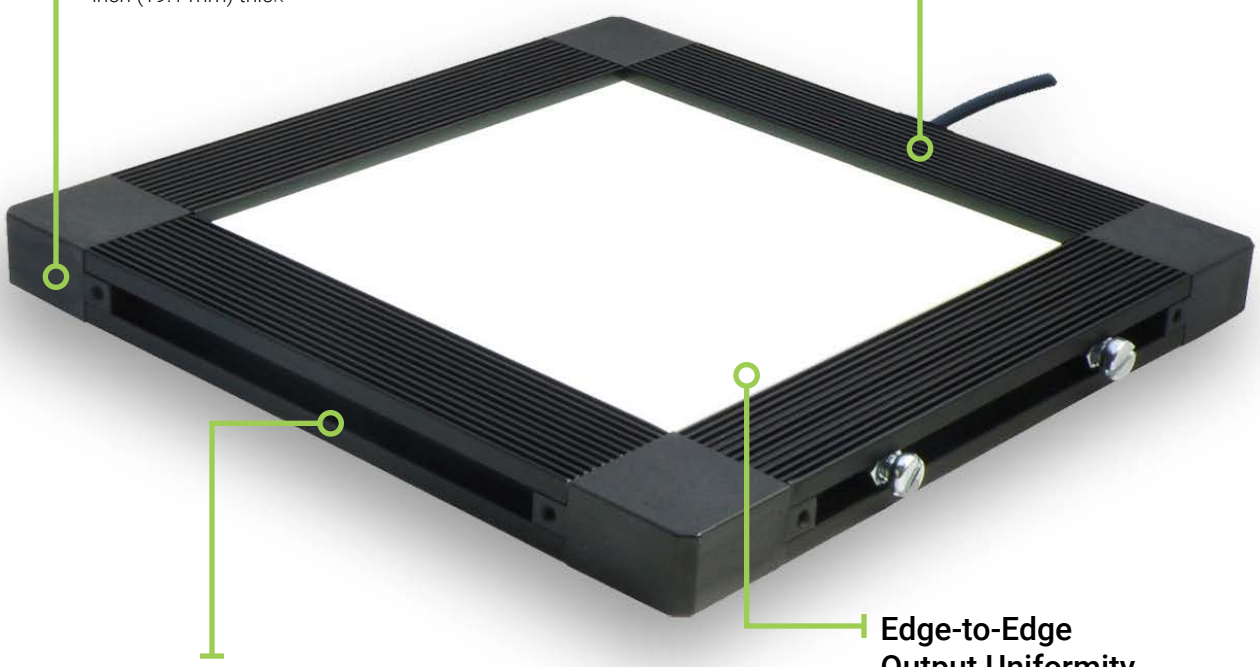
# BX/CX Series

**Edge-lit Backlights** | Product Datasheet

ADVANCED ILLUMINATION
An Exaktera Company

### Thin Profile Housing
Designed with spatial constraints in mind, these backlights are only ¾ inch (19.1 mm) thick

### Scalable Extrusion-Based Housing
Pre-engineered for two-dimensional scalability with extrusion-based aluminum construction



### M6 Mounting Channels
Engineered with M6 mounting channels on all four sides, allowing for highly adjustable positioning

### Edge-to-Edge Output Uniformity
Built with a side-fired backlight design translating to minimal intensity falloff around the outer perimeter of the emitting window

## BX/CX Series Description

The BX/CX Series of edge-lit backlights provides a highly diffuse source of illumination, packed within a thin and thermally efficient housing.

While the BX variant allows for configuration with or without a polarization film, the CX Series comes with a built-in collimation option best suited for backlight applications requiring a higher degree of edge clarity when imaging object silhouettes.

As with most planar backlight designs, this product is useful for edge detection, part location & orientation identification, presence & absence, hole detection and object gauging.

- **Medium Intensity**
- **Scalable Design**
- **5 Wavelengths Available**
- **Collimation & Polarization**
- **1-2 Week BTO Lead Times Typical**

## General Information

### General Specifications

| Category | Specification | | | Detail | |
|---|---|---|---|---|---|
| **Optical** | Available Wavelengths | | | White, 455 nm, 530 nm, 625 nm, 850 nm | |
| | Available Lensing | | | No Lenses | |
| | Available Light Conditioning | | | Polarizer (BX), Collimation (CX) | |
| **Electrical** | Power Consumption Info | | | See Power Requirements on Page 11 | |
| | Cable Info | | | 80" -0/+6" Long (2 m -0/+150 mm), 105 °C Rated, Foil Shield w/ Drain | |
| **Mechanical** | BX Series Sizing Info | Standard | Length | 3.78" (96.0 mm) to 26.78" (680.2 mm) | See Page 10 for More Details |
| | | | Width | 3.54" (89.9 mm) to 26.54" (674.1 mm) | |
| | | | Height | .75" (19.1 mm) | |
| | CX Series Sizing Info | Standard | Length | 3.78" (96.0 mm) to 18.78" (680.2 mm) | |
| | | | Width | 3.54" (89.9 mm) to 18.54" (674.1 mm) | |
| | | | Height | .75" (19.1 mm) | |
| | Weight Info (Standard) | | | ~ 3.24 lbs (~1469 g) per 8x8" Unit | |
| | Mounting Info | | | M6 Mounting Nut Channel | |
| | Material Info | | | Anodized Aluminum Housing, Acrylic Window, Polycarbonate Strain Relief & Corners, PVC Cable Jacket, Steel Black Oxide and Zinc Plated Steel Fasteners | |
| **Thermal** | Operating Case Temperatures | | | 25 °C to 60 °C | |
| | Operating Ambient Temperatures | | | 0 °C to 35 °C | |
| **Certification** | Compliance | | | CE, RoHS, IEC 62471 | |
| | IP Rating | | | IP50 | |
| | Lumen Maintenance - White Only | | | L70 (50,000 Hours) | |

## General Information - Continued

### Part Number Key

| Model | Emitting Length (in) | Emitting Width (in) | - | Peak Wavelength | Connector/ Control | Light Conditioning Option | - | Alternative Connector |
|---|---|---|---|---|---|---|---|---|
| XX | XX | XX | - | XXX | XX | X | - | XXX |
| BX (non-collimated) | 01" increments from 01" to 24" | 01" increments from 01" to 24" | | 455 (royal-blue) | C1 | P (Polarization) [2, 3, 5] | | M12 [1] |
| CX (collimated) [2, 4] | | | | 530 (green) | C5 | | | M8 [1] |
| | | | | 625 (red-orange) | IC | | | |
| | | | | 850 (IR) | I3 | | | |
| | | | | WHI (white) | I3S | | | |
| | | | | | I4 | | | |
| more information on page | 10 | 10 | | 5 | 11 | 6 | | 13 |

**Example Part Numbers:**
BX0312-455C1
BX0608-625ICP-M12
CX1212-WHII3-M12

[1] Available with IC, I3, I3S, and I4
[2] Maximum size of 16" x 16"
[3] 455 (royal-blue) will reduce the life of the polarizer if selected
[4] Equipped with a collimation film
[5] Only available when configuring a BX model

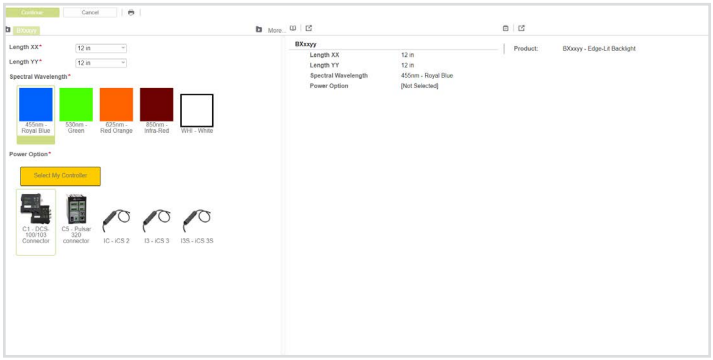
### In Stock

Unavailable

### Lead Times

Build-to-Order custom products ship within one to two weeks (typical).

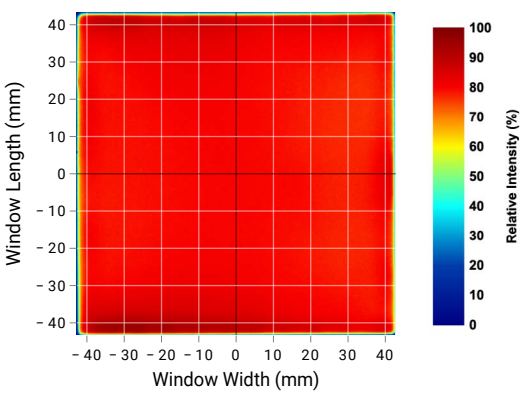
### Configurator



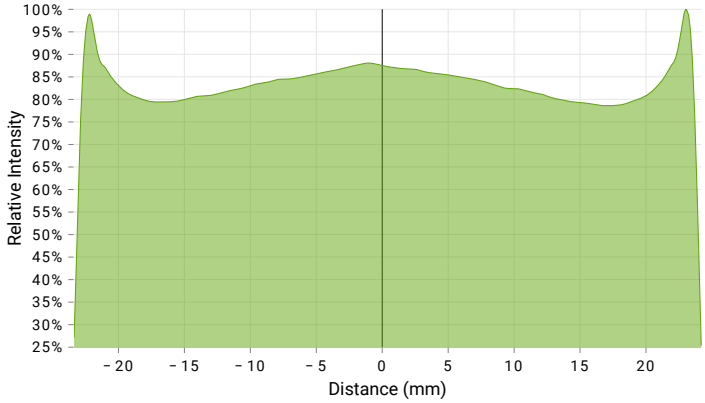
Need a build-to-order custom lighting solution in 2 weeks or less? Advanced Illumination's online configurator helps you tailor our BX and CX Edge-lit Backlights to your specific needs. For a guided configuration of the BX and CX Series, visit our online configurator by navegating to the product's web-page and selecting the "Configure" button.

## Optical Information

### Intensity Distribution



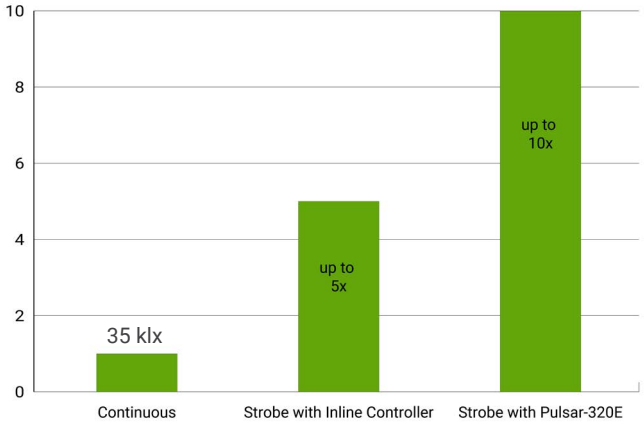

### Uniformity Profile Plot




The BX and CX Series provides a highly uniform output across its emitting window with practically no edge effect, and a uniformity of roughly +/- 10% within the optical area.

Note: The optical data shown above has been sampled from a 8-inch x 8-inch white BX unit (BX0808-WHIIC) at the emitting surface.

### Continuous vs Strobe Intensity

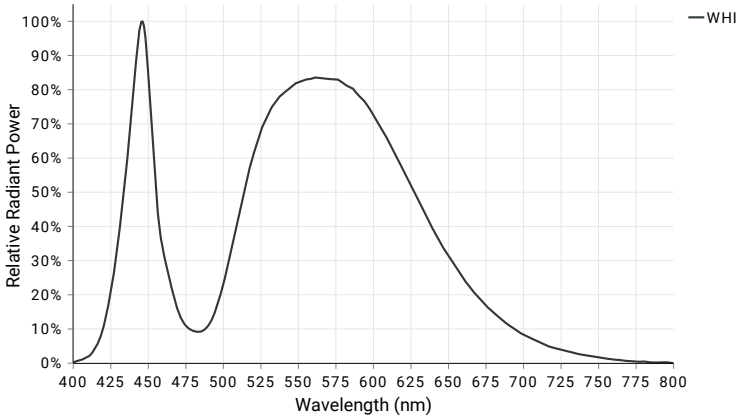



Under continuous operation, an 8-inch white BX/CX unit will output a **maximum illuminance of 35 klx** and a **maximum irradiance of 105 W/m²** at the emitting surface. For applications that require higher output, the BX/CX Series has been engineered to be overdrive strobe capable. When configured with AI's strobe enabled Inline Controller (I3, I3S, and I4), the BX/CX is capable of outputting up-to 5X continuous levels. When configured with a C5 connector, compatible with AI's Pulsar 320E, a BX/CX can be strobed up-to 10X continuous intensity levels.

Disclaimer: The measurements provided above are for approximations only and may vary depending on the method of measurement and the specific configuration being measured.

## Optical Information - Continued

### White Spectral Profile

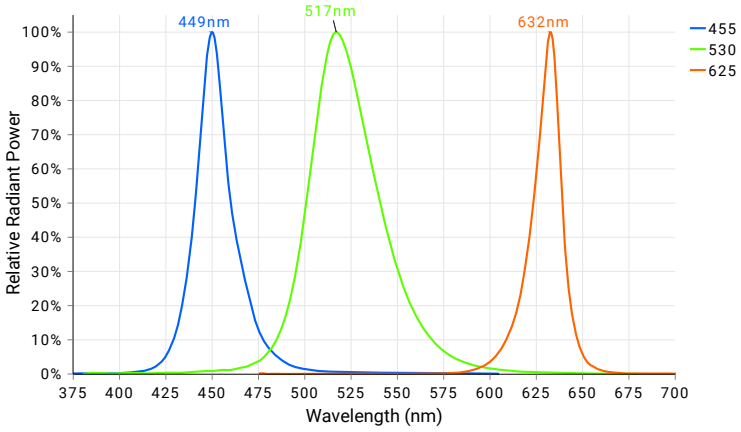



White LED illumination is the most commonly used machine vision lighting configuration. It is often the default choice when specific features of interest do not require color-based highlighting. However, white LEDs can vary in color temperature between different lighting families, which can impact machine vision systems, specifically when matching white light sources.

The BX/CX Series white LEDs have a relatively neutral color correlated temperature (CCT) of **5500k.**

For a more detailed look at the white spectral data, download the csv file of the raw spectral values and refer to our Product Spectra Distribution Charts PDF.

### Visible Spectral Profiles

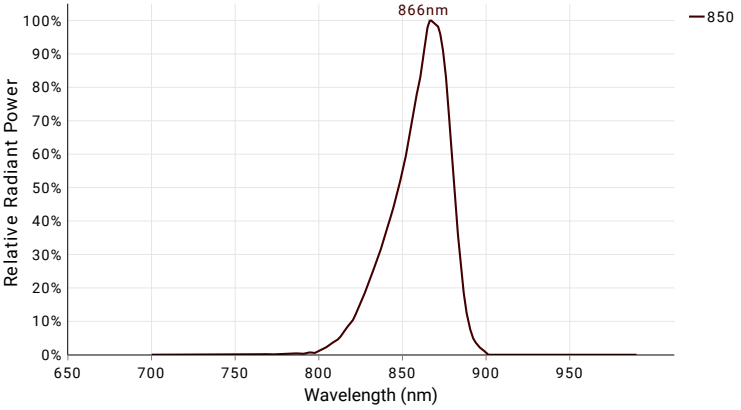



Visible color illumination consists of using wavelengths between 400-700 nm to either create or eliminate contrast on an inspection subject based on differences in a features color hue. When referring to a color wheel, simply remember the following: like colors reflect and brighten surfaces; conversely, opposing colors absorb and darken surfaces.

The BX/CX Series is available in **455nm, 530nm, and 625nm** configurations.

For a more detailed look at the visible color spectral data, download the csv file of the raw spectral values and refer to our Product Spectra Distribution Charts PDF.

### Non-Visible Spectral Profiles




Near-infrared (NIR) imaging is a machine vision technique using longer wavelengths of 700-1000 nm to penetrate specific materials that are otherwise opaque to under the visible spectrum. When paired with a NIR camera, a NIR light can be ideal for applications such as fill level inspection, circuit board inspection, food safety inspection, and medical imaging.

The BX/CX Series is available in an **850nm** configuration.

For a more detailed look at the NIR spectral data, download the csv file of the raw spectral values and refer to our Product Spectra Distribution Charts PDF.

Disclaimer: The measurements provided above are for approximations only and may vary depending on the method of measurement and the specific configuration being measured.

## Optical Information - Continued

### BX Series Polarization Option

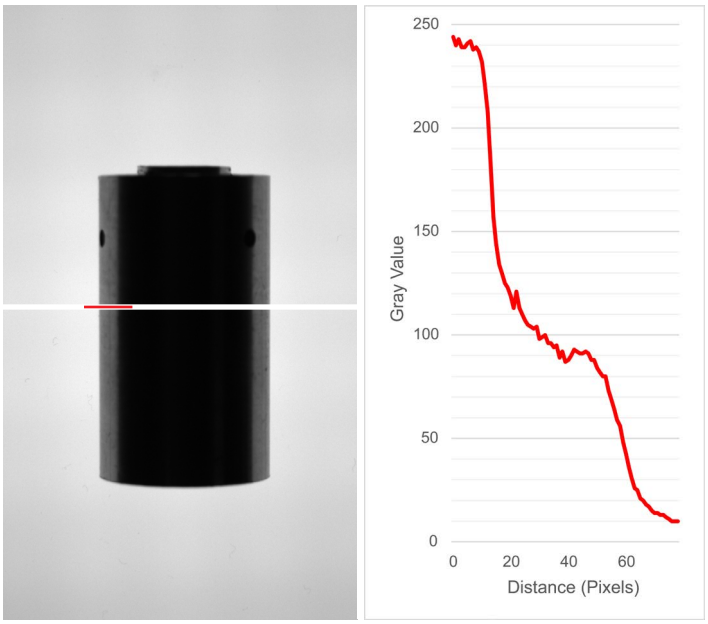
**Non-polarized**

**Cross Polarized**

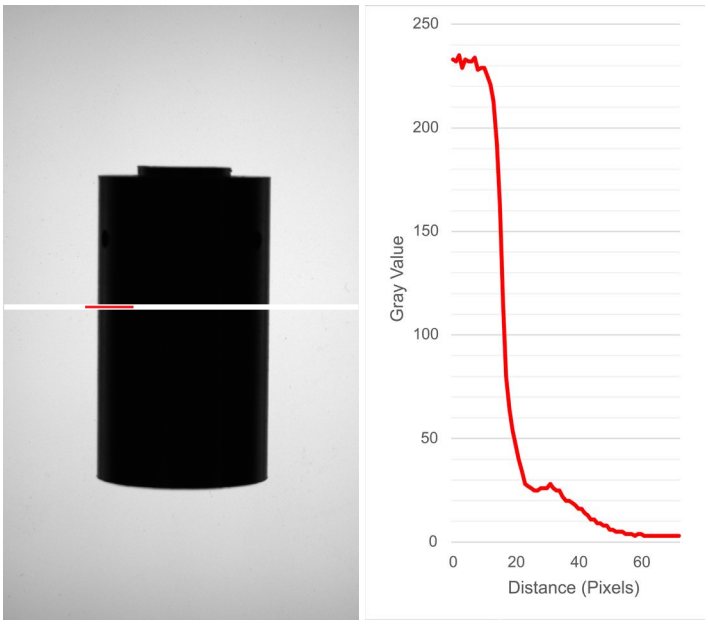
Our BX Series is pre-engineered with the option to add a polarization film. Polarization can be used in a variety of ways, such as to reduce glare on specular surfaces or to increase edge clarity of transparent injection-molded objects, as shown above. This is known as cross-polarization. When unpolarized light passes through two cross-polarized filters (oriented 90 degrees perpendicular to each other), it is completely blocked. However, if the light is already polarized, it will only be blocked if its polarization is perpendicular to the axis of the second polarizer, creating the cross-polarization effect shown above.

### CX Series Collimation

**Non-collimated**




**Collimated**




Our CX Series is designed with built-in collimation. This light conditioning allows for **greater edge clarity** by collimating photons to travel parallel with the surface normal of the emitting window, diminishing dispersion, and creating a cleaner silhouette. This especially becomes useful when backlighting curved specular objects like the one shown above. On the left side, the edge clarity of the curved object (shown with a profile plot) is insufficient due to the highly diffuse nature of the backlight. On the right side, the edge clarity shows significant improvement with the addition of the collimated light conditioning.

Disclaimer: The measurements provided above are for approximations only and may vary depending on the method of measurement and the specific configuration being measured.

## Optical Information - Continued

### Photobiological Risk Factors

| Group | Description | Affected Wavelengths |
|---|---|---|
| Exempt | No Photobiological Hazard | 850 nm |
| Group 1 | No Photobiological hazard under normal behavioral limitations | 470 nm, 530 nm, 625 nm |
| Group 2 | Does not pose a hazard due to aversion response to bright light or thermal discomfort | White |

Advanced Illumination's ligthing products have been tested and classified to IEC standards by accredited testing services. For more information on our of photobiological risk factors, please view the following PDF: https://www.advancedillumination.com/wp-content/uploads/2019/04/IEC-040119.pdf

### Cleaning Guidelines


To clean our light's optics, it is best to only clean when necessary.  Dusting is always the first step in cleaning your optics. Wiping a dusty optic is like cleaning it with sandpaper. So always dust with a canned air duster or compressed and filtered air before wiping any optic. If the dusted optic has no visible stains after you dust it, then remember: "If it's not dirty, don't clean it." Avoid wiping optics when possible.

If dusting did not clean the lens or the lens has stains, use only de-ionized water and mild dish soap with a low lint cloth designed for optics to avoid damage to the optic by any harsh chemicals.

Polarizers, beam splitters and collimated films should never be wiped with any type of cloth or solvent, only use the air dusting method to clean these types of optics.

The aluminum housing can be wiped down when dusting is not a sufficient means to thoroughly clean.

Disclaimer: The measurements provided above are for approximations only and may vary depending on the method of measurement and the specific configuration being measured.

## Backlight Comparison Matrix

Not finding the optical specifications you are looking for with the BX or CX Series? Refer to the backlight comparison matrix below to compare and contrast Advanced Illumination's comprehensive product offering:

| Attributes | Planar Backlights | | | | Linear Backlights / High Diffusion Bar Lights | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **BL2** | **BX/CX** | **BT** | **BL245** | **BL313** | **BL138** | **BL168** | **BL128** | **BL193** |
| **Emitting Window Surface Intensity** | 86 klx | 35 klx (200 mm x 200 mm unit) | 48 klx (100 mm x 100 mm unit) | 86 klx | 231 klx | 542 klx | 567 klx | 51 klx | 12 klx |
| | 249 W/m² | 105 W/m² (200 mm x 200 mm unit) | 137 W/m² (100 mm x 100 mm unit) | 249 W/m² | 735 W/m² | 1,642 W/m² | 1,760 W/m² | 173 W/m² | 41 W/m² |
| **Emitting Window Surface Edge Effect** | 0.681 in (17.3 mm) | 0 in (0mm) | 0 in (0mm) | 0.724in (18.4mm) | 0.987in (25.1mm) | 0.343in (8.7mm) | 0.429in (10.9mm) | 0.634in (16.1mm) | 1.524in (38.7mm) |
| **100 mm Working Distance Intensity** | N/A | N/A | N/A | N/A | 22 klx | 48 klx | 50 klx | 9 klx | 1 klx |
| | | | | | 74 W/m² | 153 W/m² | 164 W/m² | 32 W/m² | 4 W/m² |
| **100 mm Working Distance FWHM** | | | | | Longitudinal: ~12 in (~300 mm)<br>Transversal: ~6 in (~150 mm) | | | | |
| **Minimum Bezel Thickness** | 0.465 in (11.8 mm) | 1.265 in (32.1 mm) | 0.380 in (9.65 mm) | 0.215 in (5.46 mm) | 0.125 in (3.18 mm) | 0.050 in (1.27 mm) | 0.050 in (1.27 mm) | 0.00 in (0.00 mm) | 0.065 in (1.65 mm) |
| **Maximum Light Thickness** | 0.940 in (23.9 mm) | 0.75 in (19.0 mm) | 0.420 in (10.7 mm) | 0.950 in (24.1 mm) | 0.850 in (21.6 mm) | 3.570 in (90.7 mm) | 3.570 in (90.7 mm) | 0.480 in (12.2 mm) | 1.180 in (30.0 mm) |
| **Largest Possible Emitting Window Length** | 46 in (1168 mm) | 24 in (610 mm) | 8 in (204 mm) | 12 in (305 mm) | 20 in (508 mm) | 96 in (2438 mm) | 96 in (2438 mm) | 14 in (356 mm) | 80 in (2032 mm) |
| **Sizes Available** | 736 | 576 | 3 | 144 | 10 | 17 | 17 | 14 | 80 |
| **Visible Wavelengths Available** | 4 | 4 | 4 | 4 | 6 | 4 | 1 | 4 | 4 |
| **IR Wavelengths Available** | 1 | 1 | 1 | 1 | 2 | 1 | 0 | 1 | 1 |
| **RGB Available** | No | No | No | No | No | Yes | No | No | No |
| **Collimation Available** | Yes | Yes | Yes | No | No | No | No | No | No |
| **Polarization Available** | Yes | Yes | Yes | No | No | No | No | No | No |
| **IP Rating** | IP50 | IP50 | IP50 | IP69K Certified | IP50 | IP50 | IP50 | IP50 | IP50 |
| **Price** | $$$ | $$ | $$$ | $$$$ | $$ | $$$ | $$$ | $$$ | $ |

To ensure consistent comparisons, all data presented above is based on 12-inch white LED models unless explicitly stated otherwise. This corresponds to 12 inches by 12 inches (300 mm x 300 mm) in length as well as width for planar backlights and 12 inches in length for linear backlights. Additionally, all measurements provided above are derived from "standard" configurations, excluding sealed models if available as optional.

If you are still not finding the optical specifications needed for your application, inquire about our semi-custom and full-custom capabilities.

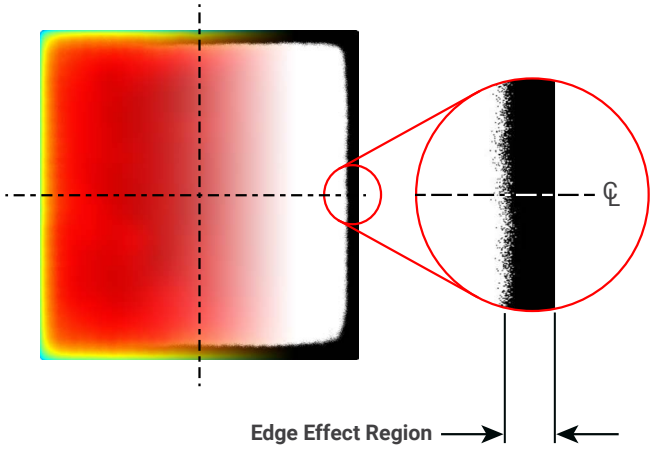
Disclaimer: The measurements provided above are for approximations only and may vary depending on the method of measurement and the specific configuration being measured.

## Backlight Comparison Matrix - Definitions

For definitions on the terminology used on the previous page, please refer to the table below:

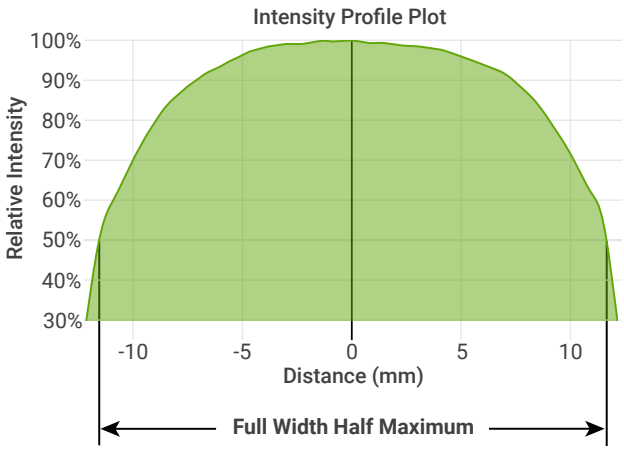
### Definitions

#### Emitting Window Surface Edge Effect



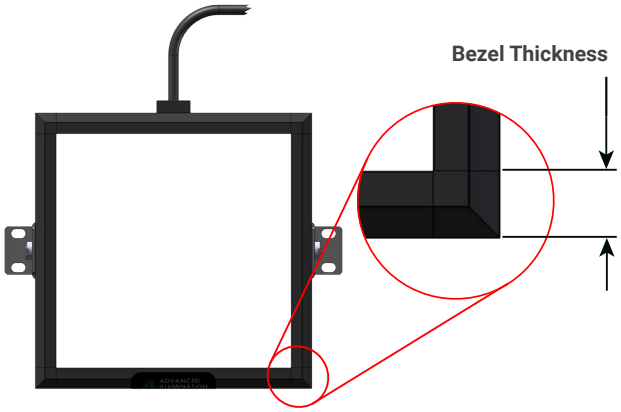

Edge Effect refers to the decrease in light intensity along the outer perimeter of a backlight's emitting surface. It's characterized by the region where the intensity falls below 80% of the peak value. For linear backlights, edge effect is measured along the length of the light. We recommend users avoid this region when sizing a backlight for their application.

#### FWHM (Full Width Half Maximum)




FWHM (Full Width Half Maximum) is a measure of the width of a light source's intensity distribution. Specifically, it defines the distance between the points on the intensity profile where the light intensity drops to 50% of its peak value. This FWHM distance is often used to determine the usable FOV (Field of View) when aiming a light at a surface for inspection.

#### Bezel Thickness




Bezel Thickness refers to the width of the non-illuminated border or frame surrounding the light-emitting surface of a machine vision backlight. Bezel thickness is an important consideration when integrating a backlight into a tight space, as it directly affects how close you can place the light-emitting surface to an object on its side.

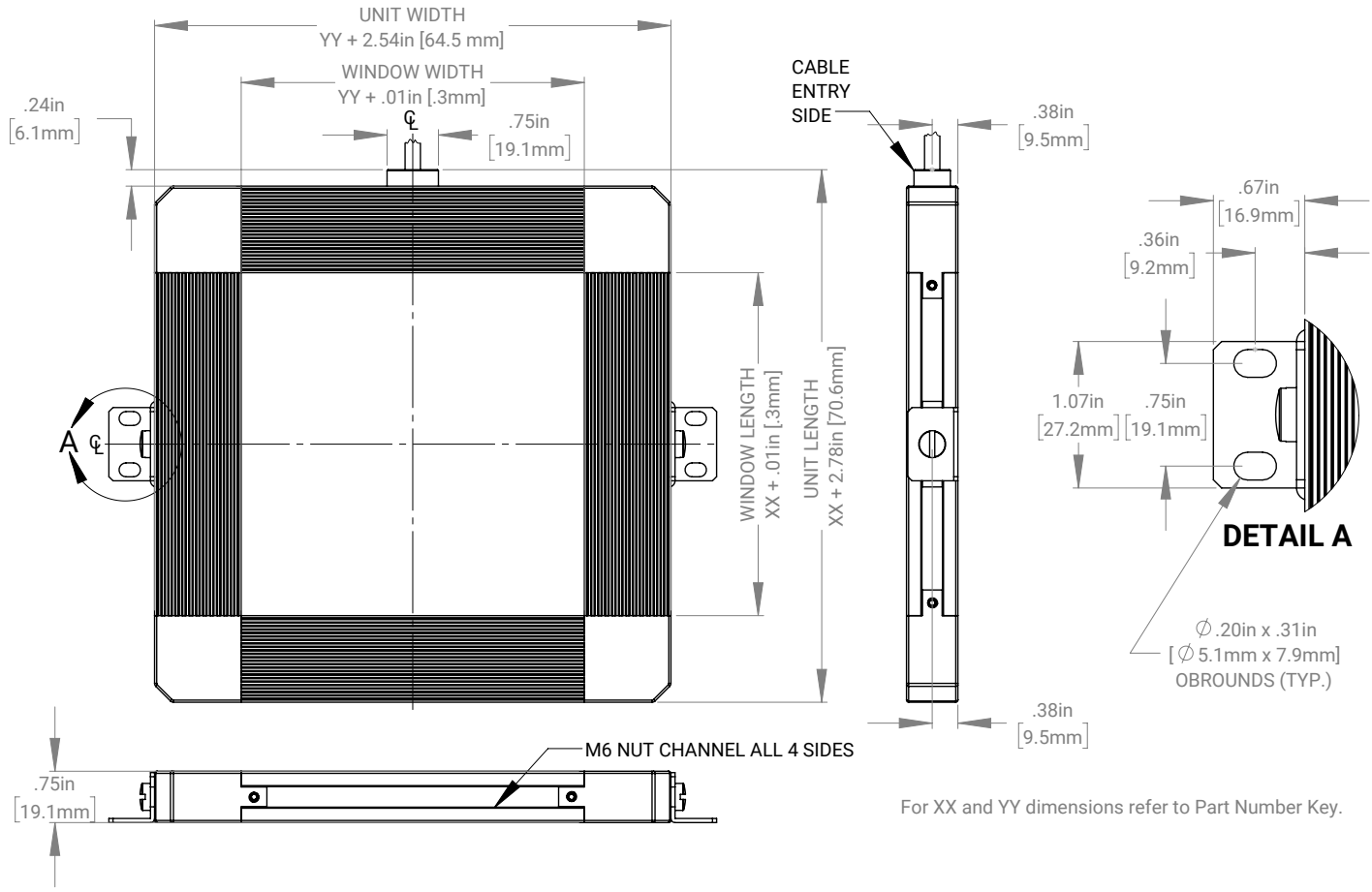
#### Light Thickness


Light Thickness refers to the overall depth of a machine vision backlight, measured from the back of the unit to the front of the light-emitting surface. A thinner light thickness is critical in applications with limited space constraints, allowing flexible integration into tight machine vision setups.

Disclaimer: The measurements provided above are for approximations only and may vary depending on the method of measurement and the specific configuration being measured.

## Mechanical Information

### Installation Drawings




For XX and YY dimensions refer to Part Number Key.

For full installation drawings and complete CAD models of this non-sealed configuration, please visit the downloads section of the product webpage.

### Sizing Information

Our edge-lit backlights are scalable to your specific sizing requirements.

We can manufacture our BX backlights in 1" increments up to a 576 sq. inch emitting window, from a small 1" x 1" backlight to a large-format 24" x 24" backlight.

Our CX backlights are scalable in 1" increments up to a 256 sq. inch emitting window, from 1" x 1" to 16" x 16".

All BX and CX backlight configuraction are built-to-order with the majority shipping with only two week lead times.

For assistance configuring a backlight to meet your specific needs, please visit our online configurator by selecting the "configure" button on our product webpage.

## Electrical Information

### Power Requirements

#### Current Required for Power Supply Sizing

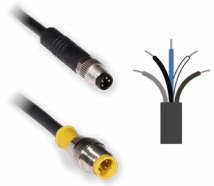
| Wavelengths | Configured with Standard Controller (IC, I3, I3S, I4, C1, C5) |
|---|---|
| WHI | 0.133 A per inch of illuminated length (XX dimension) |
| 455 nm | 0.133 A per inch of illuminated length (XX dimension) |
| 530 nm | 0.133 A per inch of illuminated length (XX dimension) |
| 625 nm | 0.133 A per inch of illuminated length (XX dimension) |
| 850 nm | 0.060 A per inch of illuminated length (XX dimension) |

Note: All Advanced Illumination lights and controllers are nominally powered by 24V DC unless otherwise noted. Strobe overdriving with controller based models may require more current and voltage overhead. The values above do not include background current draw from the controller (~100 mA total).

### Control Options

| Controller Image | Controller Details | Connector Image |
|---|---|---|
|  | **DCS Single Output Controller - Compatible with C1 Configurations**<br>*PN: DCS-100E*<br><br>The DCS-100E is a compact, din-rail mounted general-purpose external controller with one C1 output connector, wired with three channels. Capable of providing single channel control or multi-channel control for RGB compatible lights.<br><br>**Output Power:** 90 W Max Continuous, 540 W Max Pulsed (Overdrive Strobe)<br>**Output Current:** 4.5A Max Continuous, 15 A Max Pulsed<br>**I/Os:** 3 External Trigger Inputs<br>**Interface:** 10/100 Ethernet with Software and browser-based GUIs. SDKs are also available.<br><br>For more information about our DCS-100E, please visit the controller product page. |  |
|  | **DCS Triple Output Controller - Compatible with C1 Configurations**<br>*PN: DCS-103E*<br><br>The DCS-103E is a din-rail mounted general-purpose multi-light controller with three C1 output connectors. Capable of driving three lights in sync or asynchronously.<br><br>**Output Power:** 30 W Max Continuous / Output, 180 W Max Pulsed / Output<br>**Output Current:** 1.5A Max Continuous / Output, 5 A Max Pulsed / Output<br>**I/Os:** 3 External Trigger Inputs<br>**Interface:** 10/100 Ethernet with Software and browser-based GUIs. SDKs are also available.<br><br>For more information about our DCS-103E, please visit the controller product page. |  |
|  | **Pulsar 320E High Current Controller - Compatible with C5 Configuration**<br>*PN: Pulsar 320E*<br><br>The Pulsar 320E is a high-power, dual output, pulse-only controller geared for overdriving driving lights at very short flash durations with very high current.<br><br>**Output Power:** 2500 W Max Pulsed / Output<br>**Output Current:** 50 A Max Pulsed / Output<br>**I/Os:** 2 External Trigger Inputs<br>**Interface:** 10/100 Ethernet with Software GUI. SDKs are also available.<br><br>For more information about our Pulsar 320E, please visit the controller product page. |  |

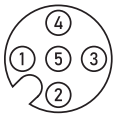
## Electrical Information - Continued

| Controller Image | Controller Details | Connector Image |
|---|---|---|
|  | **Inline Controller - Continuous Only - IC Configurations**<br>*PN: N/A*<br><br>The IC is an inline, cable-mounted continuous-only controller configured/wired directly for the ordered light head.<br><br>**Output Power:** 25 W Max Continuous<br>**Output Current:** 1.25 A Max Continuous<br>**I/O:** 1 0-10 V Analog Dimming Input<br>**Interface:** Direct Cable (flying leads or optional connector)<br><br>For more information about our IC Controller please visit the controller product page. |  |
|  | **Inline Controller - Strobe and Continuous - I3 & I3S Configurations**<br>*PN: N/A*<br><br>The I3 and I3S are inline, cable-mounted continuous and pulse (overdrive strobe) capable controllers configured/wired directly for the ordered light head. When operated in pulsed mode, the I3 is a default-on device on power up, whereas the I3S is default-off, requiring a trigger to illuminate.<br><br>**Output Power:** 25 W Max Continuous, 125 W Max Pulsed<br>**Output Current:** 1.25 A Max Continuous, 8 A Max Pulsed (Load Dependent)<br>**I/Os:** 1 Gated Trigger Signal, 1 0-10 V Analog Dimming Input<br>**Interface:** Direct Cable (flying leads or optional connector)<br><br>For more information about our I3/I3S Controller, please visit the controller product page. |  |
|  | **Inline Controller - Continuous Only - I4 Configurations**<br>*PN: N/A*<br><br>The I4 is an inline, cable-mounted continuous and pulse (overdrive strobe) capable controller configured/wired directly for the ordered light head. The I4 can either be operated with a PNP or NPN trigger signal.<br><br>**Output Power:** 50 W Max Continuous, 150 W Max Pulsed<br>**Output Current:** 2.1 A Max Continuous, 8 A Max Pulsed (Load Dependent)<br>**I/Os:** 1 Gated Trigger Signal, 1 0-10 V Analog Dimming Input<br>**Interface:** Direct Cable (flying leads or optional connector)<br><br>For more information about our IC Controller please visit the controller product page. |  |

## Electrical Information - Continued

### Inline Control Option Wiring Information

#### Standard Flying Lead and Optional M12 Connector Pinout Functions

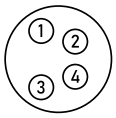
| Pin (M12) | Wire Color | 24V Functions | IC Functions | I3/I3S Functions | I4 Functions | M12 Pinout |
|---|---|---|---|---|---|---|
| 1 | BROWN | 24V DC | 24V DC | 24V DC | 24 V DC |  |
| 2 | WHITE | N/A | 0-10V Analog Control | Reserved | NPN/Active Low Trigger | |
| 3 | BLUE | DC GND | DC GND | DC GND | DC GND | |
| 4 | BLACK | N/A | Gate Low | PNP/Active High Trigger | PNP/Active High Trigger | |
| 5 | GRAY | N/A | N/A | 0-10V Analog Control | 0-10 V Analog Dimming | |



*5-Position Male Connector*

The functions above are only applicable when ordering an 24, IC, I3, I3s, or I4 power configuration with our without an M12 connector. For more wiring information pertaining to strobing and dimming functionality, please download the controller manuals and datasheets.

#### Optional M8 Connector Pinout Functions

| Pin (M8) | Wire Color | 24V Functions | IC Functions | I3/I3S Functions | I4 Functions | M8 Pinout |
|---|---|---|---|---|---|---|
| 1 | BROWN | 24V DC | 24V DC | 24V DC | 24 V DC |  |
| 2 | WHITE | N/A | 0-10V Analog Control | Reserved | Active Low Trigger | |
| 3 | BLUE | DC GND | DC GND | DC GND | DC GND | |
| 4 | BLACK | N/A | Gate Low | Active High Trigger | Active High Trigger | |



*4-Position Male Connector*

The functions above are only applicable when ordering an 24, IC, I3, I3s, or I4 power configuration with our without an M8 connector. For more wiring information pertaining to strobing and dimming functionality, please download the controller manuals and datasheets.

## Accessories

Advanced Illumination offers a variety of accessories designed to pair with our lighting and control products. Below you will find a table of accessories which are compatible with many configurations of the BX and CX Series.

| Category | Accessory Image | Accessory Detail |
|---|---|---|
| **Power Supply** |  | **24 Volt DC Power Supply**<br>*PN: PS24-TL*<br><br>This convenient power source is a universal AC input switching power supply with a regulated output DC current. The power supply comes with an LED Power Indicator, tinned leads marked Positive (+) and Negative (-) and 2 WAGO connectors for simplified assembly.<br><br>For more information about our 24 Volt DC Power Supply, please visit this webpage. |
| **Dimmer** |  | **Manual Dimming Accessory for the IC, I3 and I3s**<br>*PN: DCS-MP*<br><br>The DCS-MP is a 30-position potentiometer, detented for precision level control and provides repeatable dimming with cable inline controllers. Features include DIN-rail mountable, a flip up cover to prevent accidental adjustments, spring clamp wiring terminal for flying leads or an M12 connector for use with the IC or I3/I3S Inline Controllers.<br><br>For more information about our Manual Dimming Accessory please visit this webpage. |

## Electrical Information - Continued

| Category | Accessory Image | Accessory Detail |
|---|---|---|
| **Dimmer** |  | **Manual Dimming Accessory for the IC**<br>*PN: MP-ICS*<br><br>The MP-ICS is a dimmer which is designed for use on lights with the IC Inline Controller. This unit provides for 0 – 100% intensity control. It is NOT COMPATIBLE with LLI37, BLI38, LLI67, and BLI68 "IC" Lights or lights built with the "24v controller" option.<br><br>For more information about our Manual Dimming Accessory, please visit this webpage. |
| **Extension Cable** |  | **DCS-100E/103E Extension Cable, Single Light Power Cable - C1 Configuration**<br>*PN: LC-XX-S*<br><br>This extension cable was designed for applications requiring power cables longer than the standard 2 meters provided with Ai lights. This single light cable features a single male and single female 7 pin locking connector (C1) and can be purchased in 3 - 15-meter lengths.<br><br>For more information about our DCS-100E/103E Extension Cable, Single Output, please visit this webpage. |
| **Extension Cable** |  | **DCS-100E/103E Extension Cable, Dual Light Power Cable - C1 Configuration**<br>*PN: LC-XX-Y*<br><br>This extension cable was designed for applications requiring two identical lights to be powered through a single controller. These Y cables feature a single male and dual female 7 pin locking connectors (C1) and can be purchased in 3 - 15-meter lengths. See attached spec sheet for compatible light configuration.<br><br>For more information about our DCS-100E/103E Extension Cable, Split Output, please visit this webpage. |
| **Extension Cable** |  | **Pulsar 320E Extension Cable - C5 Configuration**<br>*PN: LC-XX-S-C5*<br><br>This extension cable was designed for applications requiring power cables longer than the standard 2 meters provided with Ai lights. This single light cable features a single male and single female Pulsar 320 connector (C5) and can be purchased in 3 - 15 meter lengths.<br><br>For more information about our Pulsar 320E Extension Cable, please visit this webpage. |
| **Adaptor Cable** |  | **Cognex Gen2 Inline Controller Adaptor Cable**<br>*PN: AD-I3-CGX2*<br><br>This cable adaptor is for connecting I3/I3S configured lights with Cognex Gen2 Cameras, and comes with a male to female M12 connectors.<br><br>For more information about our Cognex Gen2 Inline Controller Adaptor Cable, please visit this webpage. |
| **Filters** |  | **Camera Lens Band Pass FIlters**<br>*PN: BPXXX-YYY*<br><br>Eliminating all but a narrow band of light (+/- 40nm) centered on the specified wavelength, band pass filters are used to enhance colors, or to stop unwanted ambient light from reaching the camera. Filtering can replace existing shrouds, simplifying the physical set up of an inspection site. Ai offers 635nm and 660nm band pass filters to fit several different lens sizes.<br><br>For more information about our Camera Lens Band Pass FIlters, please visit this webpage. |
| **Mounting Brackets** |  | **Mounting Brackets**<br>*PN: LB*<br><br>Fastens to the M6 mounting channel for simplified mounting. Included in product purchase.<br><br>For more information about our Mounting Brackets, please visit this webpage. |

## Additional Information

### Warranty

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.

### Compliancy

Our lighting products are designed and tested to meet CE, RoHS, and IEC standards. As a global ISO 9001 certified company, we understand the importance of compliance and perform accelerated testing on every product before shipment. For more information on our compliance standards, please see our compliancy documentation here: https://www.advancedillumination.com/services/compliance-statements/

### 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

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