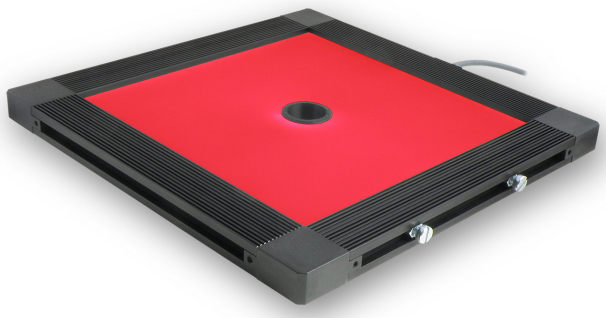
FX Series

Edge-lit Flat Diffuse Lights

Product Highlights

- Edge-lit Flat Diffuse Lights provide a space saving design for the illumination of highly reflective objects.
- Contained within a thinner housing than our Back-lit Flat Diffuse Lights (FD Series)
- Product to be discontinued. Refer to change notice for details.



General Specifications

Electrical Specifications	Color	24V Current	All Other Controls
	625	N/A	0.062 A Max per Linear Inch
	455, 530, WHI	N/A	0.103 A Max per Linear Inch
	850	N/A	0.05 A Max per Linear Inch
Normal Operating Temperature	0 - 60°C		
Weight	4" X 4" unit = 553.4g (19.52oz)		
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: 850 Group 1 (Low Risk) Applicable Wavelengths: 455, 530, 625, WHI		
Compliance	CE, RoHS, IEC 62471		
IP Rating	IP50		
Lumen Maintenance	L70 = 50,000 Hours		

Part Number Key

Model	Emitting Length (in)	Emitting Width (Cable Side) (in)	View Port Diameter	-	Peak Wavelength	Connector/ Control	-	Alternative Connector
FX	XX	XX	X	-	XXX	XX	-	XXX
FX	01" increments from 03" to 24"	01" increments from 03" to 24"	A (0.25")		455 (royal blue)	C1		M12[1]
			B (0.50")		530 (green)	C5		M8[1]
			C (0.75")		625 (red)	IC		
			D (1.00")		850 (IR)	I3		
			E (1.25")		WHI (white)	I3S		
			F (1.50")			I4		
			G (1.75")					
			H (2.00")					
			I (2.25")					
			J (2.50")					
			K (2.75")					
			L (3.00")					

Example Part Number:
FX0312D-455C1
FX0608B-625IC-M8

[1]**Available with IC, I3, I3S, and I4 options only**

Change Notice

PCN No: 173

Date Issued: July 22, 2024

Notice Type: Product Discontinuation

Product Type: BX, CX and FX

Change Notification Summary

Advanced Illumination (Ai) will be discontinuing the sale of BXXXYY, CXXXYY and FXXXYY Backlights on October 31, 2024, and will be recommending the new BX2 Series to replace BX and CX, and FX2 as a replacement for the FX. The BX2 and FX2 Series provides an improvement in light output, structural rigidity, emitting window uniformity, and efficiency, at no additional cost over the original BX, CX and FX designs. In addition the measurement system will be

changing from imperial to metric, so a BX0404 will be replaced with BX2-100100.

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

PCN 173 BX, CX AND FX

PCN No: 165

Date Issued: March 18, 2022

Notice Type: Optical Component Update

Product Type: BL, CB and FX

Change Notification Summary

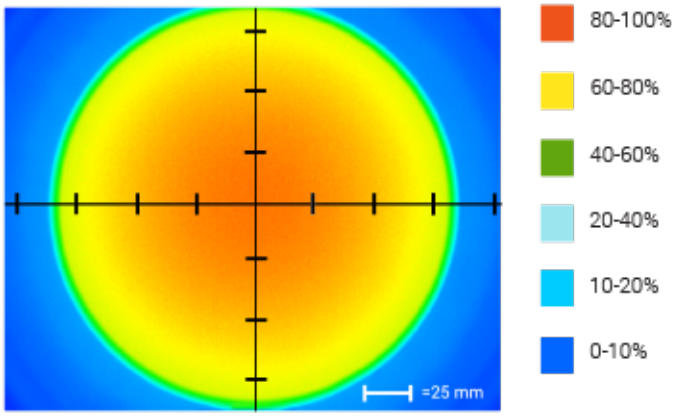
In an effort to improve our products, Advanced illumination (Ai) has upgraded the optical components on the BX, CX, and FX Series. This upgrade only applies to size configurations less than or equal to 8" in non-illuminated length, otherwise known as the power side of the unit. This change will result in a brightness increase of roughly 40% over the previous revision. Pricing for each unit will remain the same. This change has gone into effect on BX, CX, and FX lights with serial numbers greater than 22060XXXX.

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

PCN 165

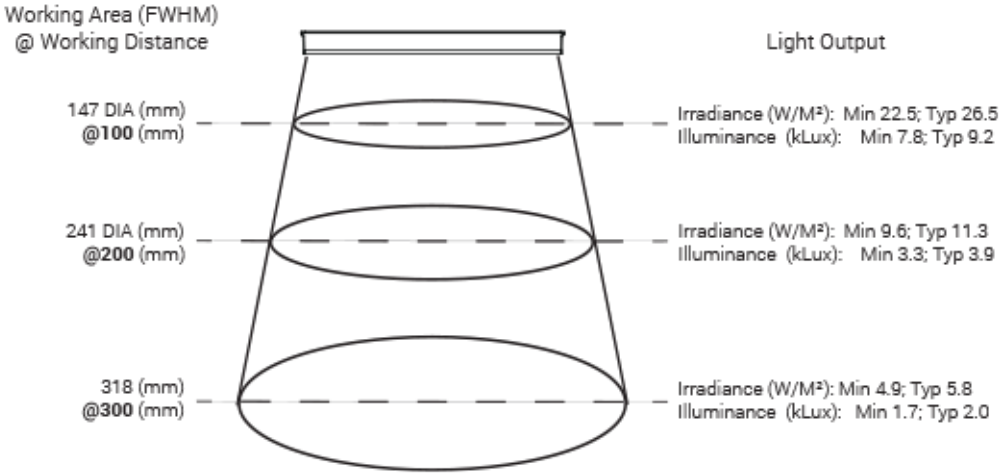
Optical Specs

Intensity Distribution



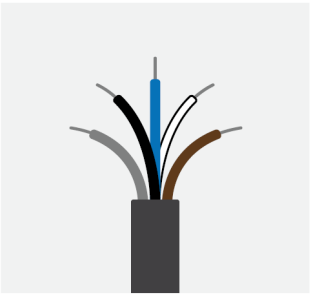
Optical measurement taken using FX0808-WHII3 @ 200mm

Area of Illuminance & Intensity



Electrical Specs

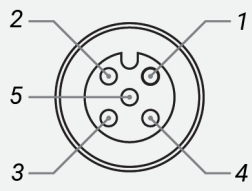
Standard Flying Lead Functions for IC, I3, I3S, and I4 Control Options



COLOR	IC FUNCTIONS	I3/I3S FUNCTIONS	I4 FUNCTIONS
BROWN	24 V DC	24 V DC	24 V DC
WHITE	0-10 V ANALOG DIMMING	RESERVED	NPN/ACTIVE LOW TRIGGER
BLUE	DC GND	DC GND	DC GND
BLACK	PNP/ACTIVE LOW GATE	PNP/ACTIVE HIGH TRIGGER	PNP/ACTIVE HIGH TRIGGER
GRAY	N/A	0-10 V ANALOG DIMMING	0-10 V ANALOG DIMMING

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

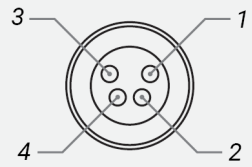
M12 Connector Pinout Functions for IC, I3, I3S, and I4 Control Options



PIN	IC FUNCTIONS	I3/I3S FUNCTIONS	I4 FUNCTIONS
1	24 V DC	24 V DC	24 V DC
2	0-10 V ANALOG DIMMING	RESERVED	NPN/ACTIVE LOW TRIGGER
3	DC GND	DC GND	DC GND
4	PNP/ACTIVE LOW GATE	PNP/ACTIVE HIGH TRIGGER	PNP/ACTIVE HIGH TRIGGER
5	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 IC, I3, I3S, or I4 control, with an A-coded 5-position Male M12 connector.

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



PIN	IC FUNCTIONS	I3/I3S FUNCTIONS	I4 FUNCTIONS
1	24 V DC	24 V DC	24 V DC
2	0-10 V ANALOG DIMMING	0-10 V ANALOG DIMMING	0-10 V ANALOG DIMMING
3	DC GND	DC GND	DC GND
4	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 IC, I3, I3S, or I4 control, with an A-coded 4-position Male M8 connector.

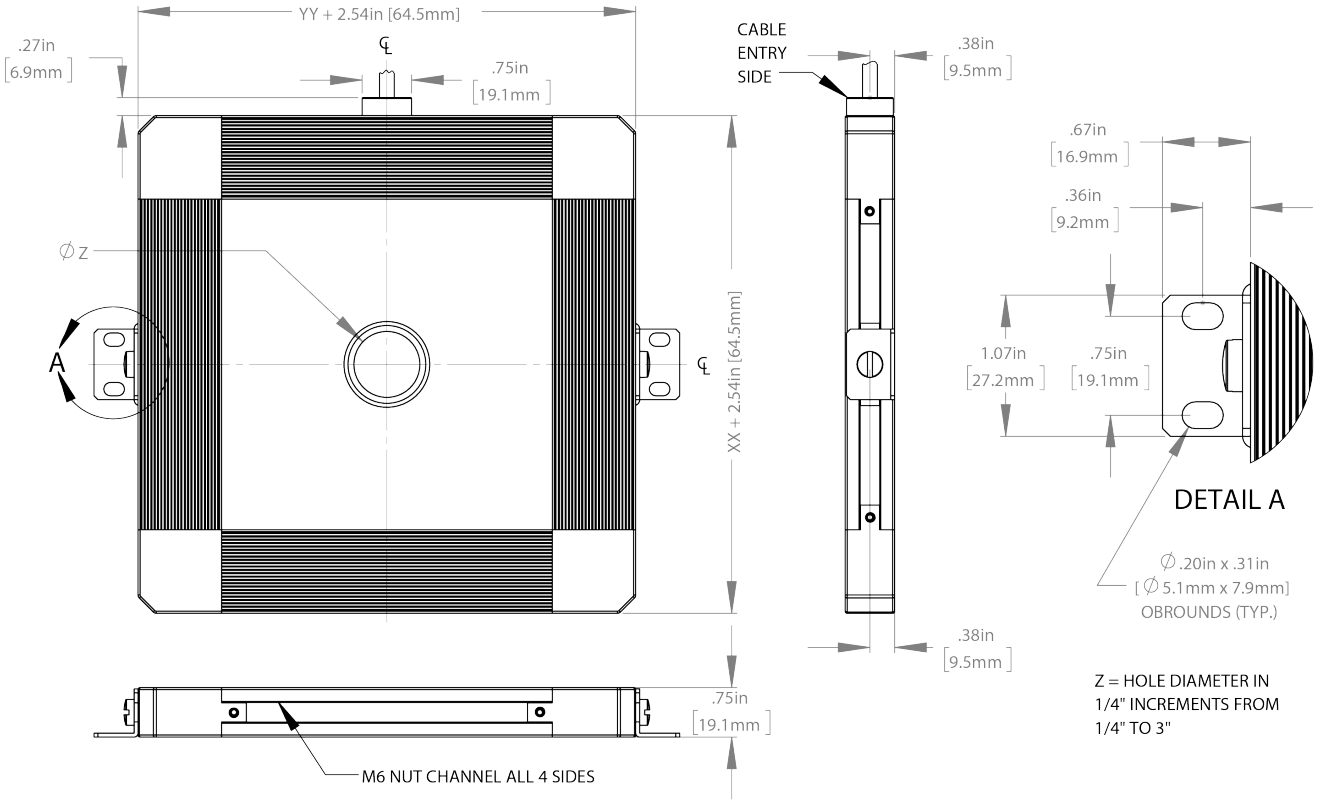
For details on operating configurations without built-in control (C1, C5, Q1, and Q4 control, when available), please refer to Advanced illumination's controller manuals.

Control Specs

C1 CONNECTOR	C5 CONNECTOR	ICS 2 (IC)	ICS 3
For use with: **DCS Series Controllers** Strobe/Continuous Controllers	For use with: **Pulsar 320** High Power Strobe only Controller	In-line Continuous Controller Powered with: **24V Power Supply**	In-line Strobe/ Continuous Controller Default On Powered with: **24V Power Supply**

ICS 3S (I3S)	I4
In-line Strobe/ Continuous Controller Default Off Powered with: **24V Power Supply**	In-line Strobe/ Continuous Controller Powered with: **24V Power Supply**

Mechanical Specs



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 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.

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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