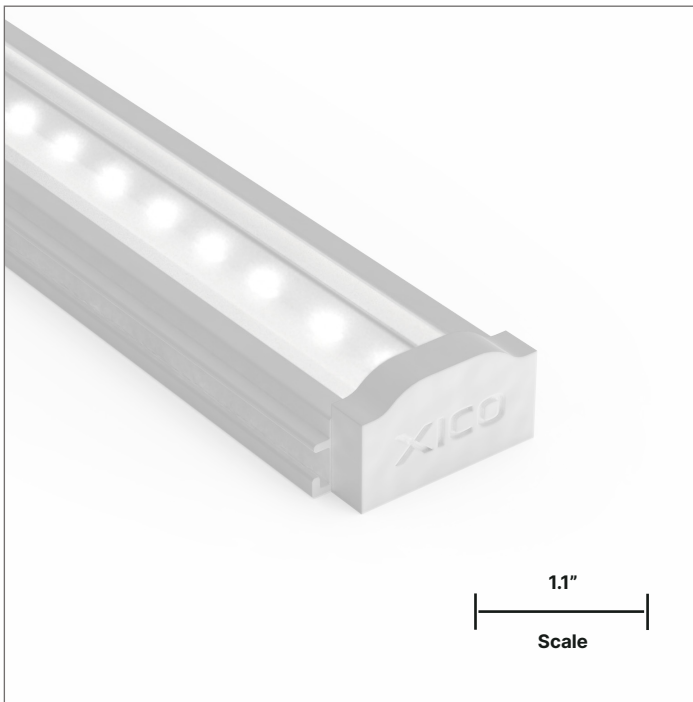


MICRORail 110

0.5" x 1.1" Low-Profile Narrow Linear LED Fixture



Remote Driver

Features & Benefits

Small Size + Exceptional Performance

0.5" x 1.1" form delivering up to 1,000 lm/ft, at >150 lm/W

Wide Range of LED Selections

Static White, Tunable White, Dim-to-Warm, and RGBW

Designed with Options

Wide choice of SmartOptic® lenses, beam distributions, 80/90/95+ CRI, 2200K to 5000K CCT, and 0-10V, DALI, DMX, and TRIAC dimming

Patented Innovations

Fusion® Optix Inside with unique SmartBeam® capabilities

Proprietary Optical Components

Provides excellent light distribution and high-transmission

Committed to Sustainability

Declare Listed and Red Free List materials

Compliance

UL Listed, Dry and Damp Locations

5-Year Warranty

Standard 5-year warranty, 50,000 hours

Designed & Built in
BOSTON

Declare



FIXTURE ORDERING

Project Name

1) FIXTURE DESIGN

Fixture Type

PRODUCT	MOUNTING TYPE	LENGTH	DAISY CHAIN	END CAP	COLOR & FINISH
MRA110					
1.1" Low-Profile Linear LED Rail	SMC Surface Mount Clip SMM Surface Mount Magnet TC1 9/16" Flat T-Bar Mount TC2 Clip TC3 9/16" Bolt Slot T-Bar Mount Clip 15/16" Flat T-Bar Mount Clip	1FT 1FT Nominal 2FT 2FT Nominal 4FT 4FT Nominal 6FT 6FT Nominal 8FT 8FT Nominal X_ Specify X', Y" [Ask Factory]	NDC No Daisy Chain YDC Yes Daisy Chain	E1 Flat End Cap	MWH Matte White (RAL9003) MBK Matte Black (RAL9005) MGR Matte Gray (RAL7001) CAE Clear Anodized Effect RAL_ Specify RAL# [Ask Factory]

2) LED LIGHT ENGINE

CRI	CCT	OPTIC / BEAM DISTRIBUTION	LUMEN OUTPUT
S80 Std. 80 CRI	22 2200K	LAM Lambertian (Diffuse)	25 250 lm/ft
S90 Std. 90 CRI	27 2700K	BW120 Batwing 120°	35 350 lm/ft
HE80 High-Eff. 80 CRI	30 3000K	FT150 Flattop 150°	50 500 lm/ft
HE90 High-Eff. 90 CRI	35 3500K	A6040 Asymmetric 60° at 40° Tilt	75 750 lm/ft
HD95 High-Def. 95 CRI	40 4000K	A4560 Asymmetric 45° at 60° Tilt	100 1,000 lm/ft
SUN Full SunLike	50 5000K		
SBIOS Static BIOS	3022D 3000K to 2200K Dim-to-Warm		X_ Specify lm/ft [Ask Factory]
DBIOS Dynamic BIOS	3527D 3500K to 2700K Dim-to-Warm		
TBIOS Tunable White BIOS			
RGBW Red, Green, Blue, White			

3) FIXTURE POWER & CONTROLS

LINE VOLTAGE (DC)	REMOTE DRIVER (POWER)	EMERGENCY BACKUP	REMOTE DRIVER BOX ¹	CONTROL SYSTEM ³
UNV 120/277V 347 347V	FDND Factory Non-Dimming FD01 Factory 0-10V 1% Dim FD10 Factory 0-10V 10% Dim FDDA Factory DALI 0.1% Dim FDDX Factory DMX Dim FDTR Factory TRIAC Dim LD01 Lutron Hi-Lume 1% Dim LD05 Lutron 5-Series 5% Dim ED00 eldoLED 0-10V 0.1% Dim ED01 eldoLED 0-10V 1% Dim EDDA eldoLED DALI 0.1% Dim X_ Specify Driver [Ask Factory]	NN Not Needed EMC Emergency Circuit EMB Emergency Battery (10 W — Remote) X_ Specify Backup	NN Not Needed RLDB² Remote Linear Driver Box (driver included by default) RX2D² Optional Remote XBox2 Driver, Up to 2 Drivers RX3D² Optional Remote XBox3 Driver, Up to 3 Drivers RX5D² Optional Remote XBox5 Driver, Up to 5 Drivers	NN Not Needed LUT Lutron COO Cooper CAS Casambi X_ Specify Control System [Ask Factory]

4) FIXTURE MOUNTING & CONNECTIONS

POWER CORD	CONNECTOR (DC)	MOUNTING RAIL (ACCESSORY)
S24WH 24" White Cable Kit S24BK 24" Black Cable Kit	SW Strip Wire FP Factory Plug	FMR Flush Mount Rail 10TMR 10deg Tilt Mounting Rail 20TMR 20deg Tilt Mounting Rail

Footnotes: ¹ Remote distance is dependent on driver type, up to 100' (30.5 m). ² Creates a clean and organized power solution for multiple fixture installations.³ The control system and driver must be compatible.

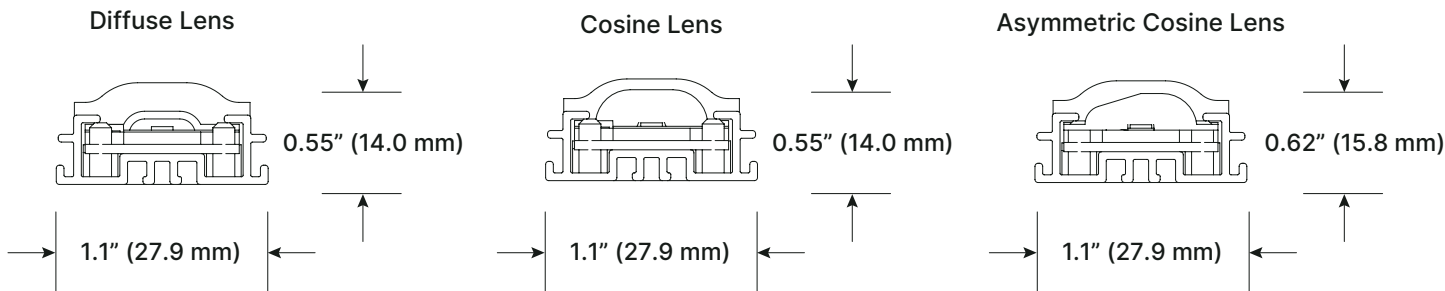
NOTES

Project Name

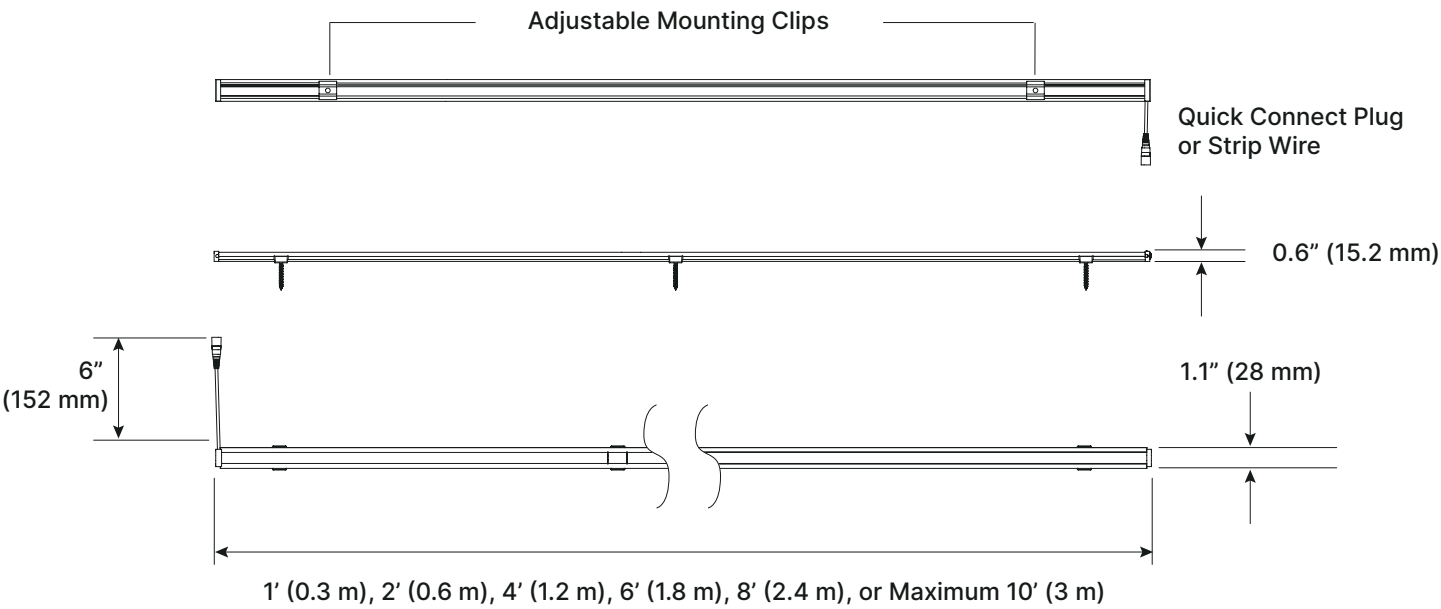
Fixture Type

FIXTURE DESIGN

Cross Section



Body & Lengths



FIXTURE FINISHES

Fixture Finish

Housing Colors (Matte Finish)



White (RAL9003)



Black (RAL9005)



Gray (RAL7001)



Clear Anodized Effect



Custom RAL



To download BIM (Revit) Files, please click or scan the QR Code.

Housing Material

6063-T5 extruded, recycled aluminum

Mounting Rail or Brackets

Continuous extruded mounting rail or discrete sheet metal brackets

FIXTURE MOUNTING

Mounting Type

Surface Mount

Installs onto a surface. Available with a range of accessories, mounts and inserts that provide easy customization of visual appearance and performance enhancements.

T-Bar Mount

Installs into a ceiling grid system and mount on to, or replace, typical T-Bar elements. Available with a range of accessories, mounts and inserts that provide easy customization of visual appearance and performance enhancements.

Drywall Mount

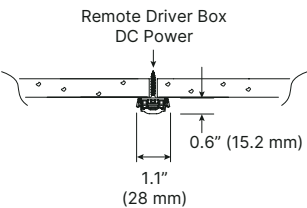
Installs onto any drywall or gypsum panel. Available with a range of accessories, mounts and inserts that provide easy customization of visual appearance and performance enhancements.

Mounting Kit

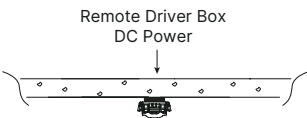
Surface Mounting Bracket

Stainless Steel

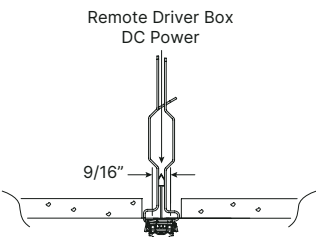
SMC - Surface Mount Clip



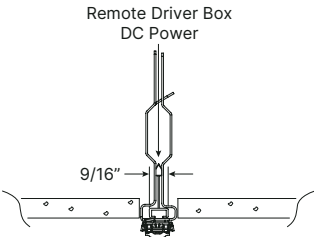
SMM - Surface Mount Magnet



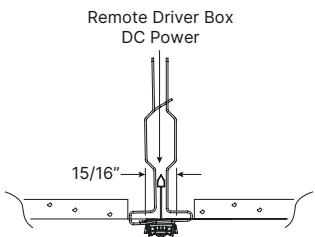
TC1 - 9/16" Flat T-Bar Mount Clip

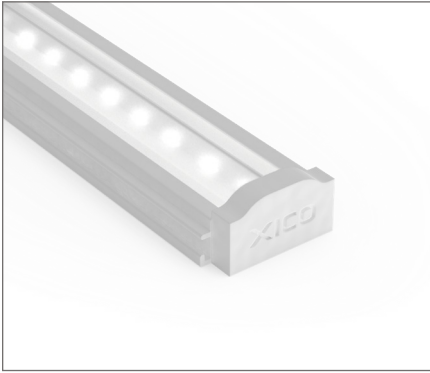


TC2 - 9/16" Bolt Slot T-Bar Mount Clip

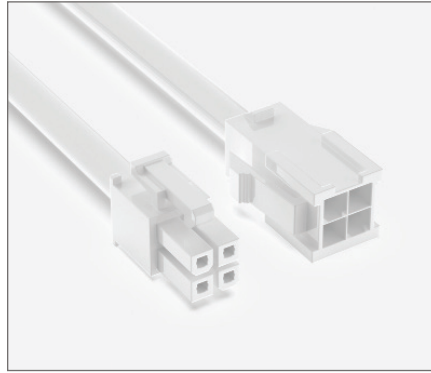


TC3 - 15/16" Flat T-Bar Mount Clip





MICRORail 110 Fixture



Factory Connectors (DC)



Plug Connectors (DC)

FIXTURE POWER & CONTROLS

Voltage

LED Driver

Factory Selected, 36–39V Constant Current

Emergency Backup

Backup Types

Emergency Circuit, Emergency Battery (Remote), and other emergency backups are available

Wiring

Typically the Emergency Backup is wired to 48" sections

Power

10 W

Illumination Time

90 minutes

Power Cord 24" Cable Kit

Choice of white and black cord. Standard or specified lengths.

Connector (DC)

Connector Plug Options

Choice of stripped wire or factory connectors.



Control Systems

Other

Remote Drivers (Sold Separately)

Factory Non-Dimming, Factory 0-10V 1% Dim, Factory 0-10V 10% Dim, Factory DALI 0.1% Dim, Factory DMX Dim, Factory TRIAC Dim, eldoLED 0-10V 0.1% Dim, eldoLED 0-10V 1% Dim, eldoLED DALI 0.1% Dim, and other drivers are available, consult factory (not all integral)

Lutron

Hi-Lume 1% Dimming and 5-Series 5% Dimming

Cooper

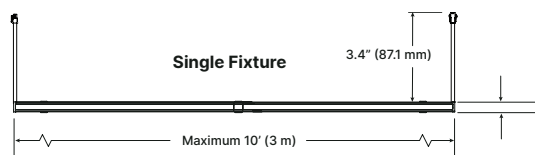
Compatible driver

Casambi (wireless)

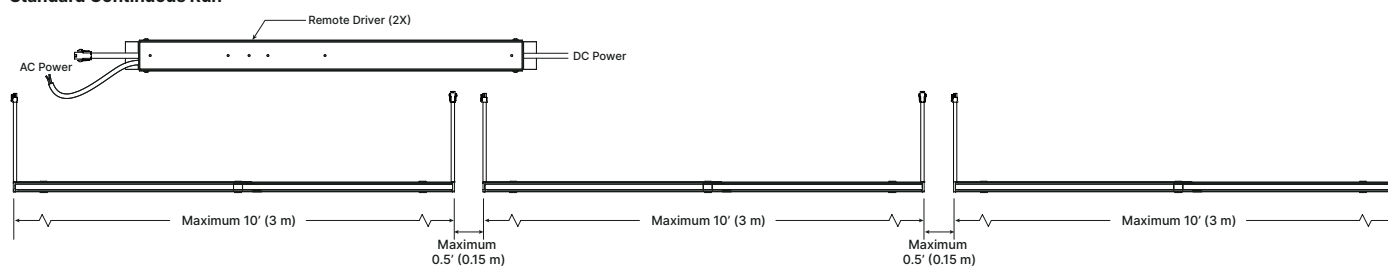
Compatible driver

Standard Lengths & Continuous Runs

Maximum length of one fixture is 10'. Longer runs can be produced by joining sections. Customer approval of shop drawings is required prior to build of any non-standard length order.

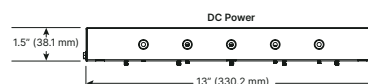
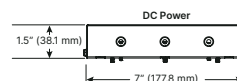
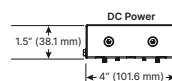
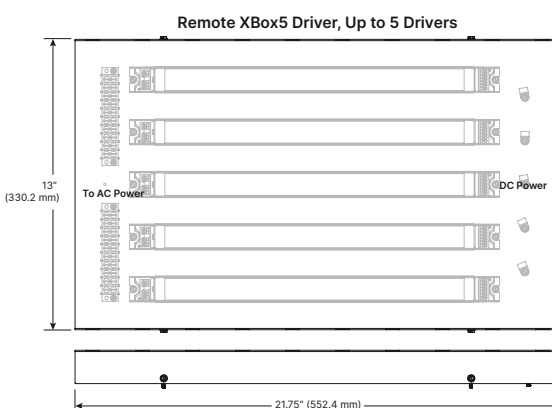
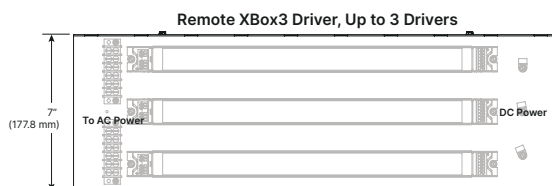
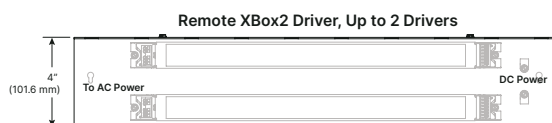
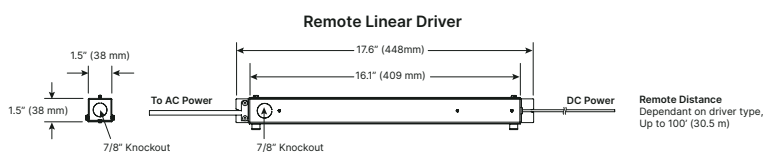


Standard Continuous Run



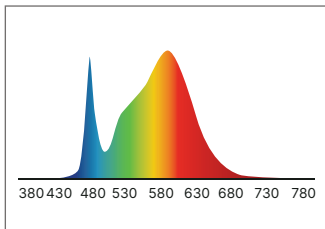
REMOTE DRIVER BOX

Remote Driver Box Dimensions

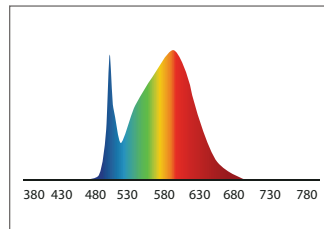


LED SELECTION GUIDE

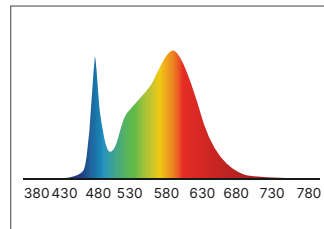
S80: Standard 80+ CRI



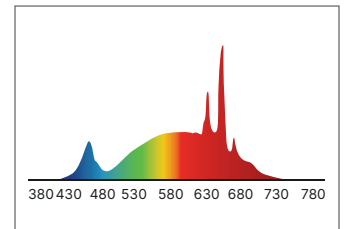
S90: Standard 90+ CRI



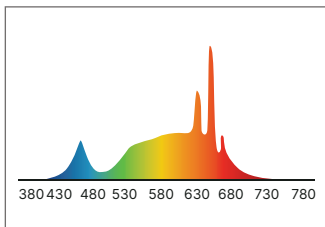
HE80: High-Efficiency 80+ CRI



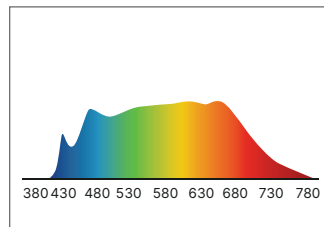
HE90: High-Efficiency 90+ CRI



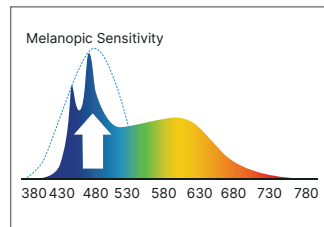
HD95: High-Definition 95+ CRI



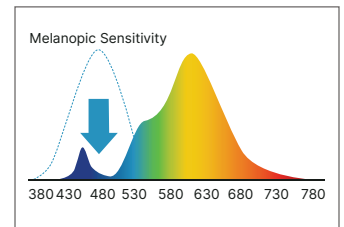
SUN: Full Spectrum "SunLike"



HCD: Human Centric Day



HCN: Human Centric Night



Static White Light (LED Light Engine Only)

CODE	DESCRIPTION	TYPICAL LED DATA							
		CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	M/P Ratio	LPW
S80	Standard 80 CRI	3500K	82.5	7.8	84	96.7	82.5	0.51	190
S90	Standard 90 CRI	3500K	91	54.3	89.3	98.9	89.2	0.55	175
HE80	High Efficiency 80 CRI	3500K	82.1	5.9	83	94.2	81.2	0.52	210
HE90	High Efficiency 90 CRI	3500K	92.2	90	90.7	103.8	92.1	0.56	190
HD95	High Definition 95 CRI	3500K	97.1	95	–	–	–	0.70	163
SUN	Full Spectrum SunLike®	3500K	95	85	–	–	–	–	130
HCD	Human Centric Day	4000K	83	95	–	–	–	0.92	155
HCN	Human Centric Night	2700K	80	–	–	–	–	0.44	134

LPW Efficacy Conversion Chart

CODE	CCT SELECTED							
	2200K	2700K	3000K	3500K	4000K	5000K	5700K	6500K
S80	–	0.91	0.96	1.00	1.04	1.11	1.11	1.11
S90	–	0.91	0.96	1.00	1.04	1.11	1.11	1.11
HE80	–	0.96	0.99	1.00	1.03	1.04	1.03	1.03
HE90	–	0.91	0.96	1.00	1.04	1.11	N/A	N/A
HD95	–	0.91	0.96	1.00	1.04	1.11	1.03	1.04
SUN95	–	0.90	0.92	1.00	1.01	1.07	1.04	1.05
HCD	–	N/A	0.96	1.00	1.04	1.04	1.04	1.04
HCN	–	0.87	0.96	1.00	1.04	N/A	N/A	N/A

BIOS TECHNOLOGY

Choosing Your BIOS Solution

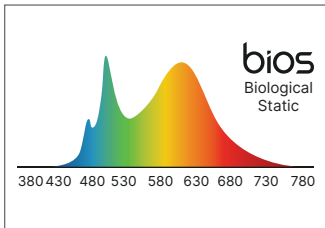
BIOS is offered in four Circadian LED Solutions with BIOS SkyBlue Technology — Biological Static, Biological Dynamic, Biological Tunable, and Biological Dim-to-Warm. BIOS SkyBlue™ Technology includes a blue peak at 490nm that provides an effective daytime circadian signal using standard architectural color temperatures.

bios

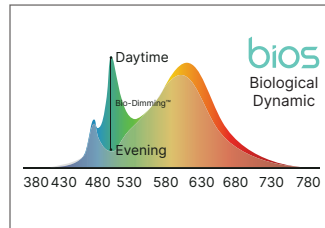
To learn more about BIOS Technology, please click or scan the QR Code.



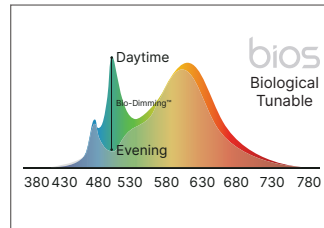
BIOS Static



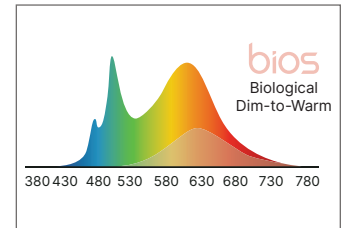
BIOS Dynamic



BIOS Tunable



BIOS Dim-to-Warm



Daytime

No color change when dimmed

Spaces that operate during daytime hours — 7am and 7pm

Daytime & Evening

500K shift when dimmed

Spaces that operate overnight — after 7pm and before 7am

Daytime & Evening

Dims to 2700K

Spaces that operate with overnight shifts — after 7pm and before 7am

Daytime & Evening

Dims from cool to warm

Spaces where people sleep — after 7pm and before 7am

Circadian and Human Centric Light

CODE	DESCRIPTION	BIO-DIMMING MODULE TECHNOLOGY GUIDE					
		Driver	Driver Voltage	CCT	Requires BIO-Dimming Module	Lighting Control	BIOS SkyBlue (490nm)
SBIOS	BIOS Static	DIM1	0-10V Dimming to 1% Dim-to-Dark	No CCT Change	No	Intensity Dimming Control Only	Always Present
DBIOS	BIOS Dynamic	BIODIM1	0-10V Intensity Dimming to 1% Dim-to-Dark	500K Shift	Yes	Intensity Dimming & Spectrum Change Controlled Together	Removed with BIO-Dimming
DBIOS-2	BIOS Dynamic (Two Channel)				No	Intensity Dimming & Spectrum Change Controlled Separately	Removed by Adjusting "Spectrum Channel"
TBIOS	BIOS Tunable	ATW / DTW	0-10V Control of Intensity & CCT on Separate 2 Channels / DALI Control of Intensity & CCT on Separate 2 Channels	Dims to 2700K	Yes	Intensity Dimming & Spectrum Change Controlled Together	Removed with BIO-Dimming
TBIOS-2	BIOS Tunable (Two Channel)				No	Intensity Dimming & Spectrum Change Controlled Separately	Removed by Adjusting "Spectrum Channel"
DWBIOS	BIOS Dim-to-Warm	-	-	Dims to 2200K	Yes	Intensity Dimming & Spectrum Change Controlled Together	Removed with BIO-Dimming
DWBIOS-2	BIOS Dim-to-Warm (Two Channel)				No	Intensity Dimming & Spectrum Change Controlled Separately	Removed by Adjusting "Spectrum Channel"

SMARTBEAM®**The Ultimate Control of Lighting Distributions**

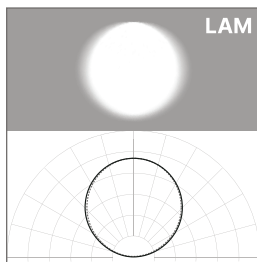
SmartBeam makes it easy to specify the exact light required for any architectural space. Available in every XICO product; it is now possible to create truly tailored and engaging lighting that transform spaces, improves visual comfort, and saves energy.

To learn more about our SmartBeam Technology, please click or scan the QR Code.

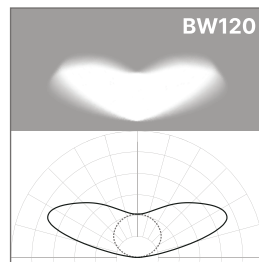


OPTIC	OPTICS - BEAM DISTRIBUTIONS				
	LAM	BW120	FT150	A6040	A4560
Diffusion Lens	●				
Cosine® Optic*		●	●		
Asymmetric Cosine® Optic*				●	●

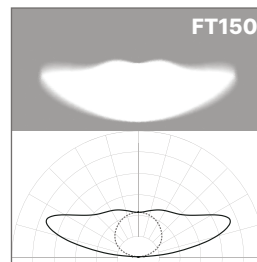
*Patented Fusion Optix technology

PHOTOMETRICS**Static White Light**

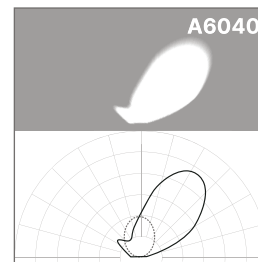
LAM: Lambertian



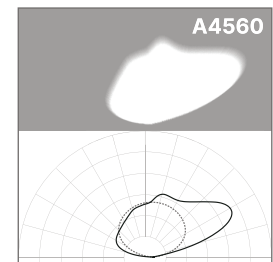
BW120: Batwing 120°



FT150: FlatTop 150



A6040: Asymmetric 60° at 40°



A4560: Asymmetric 45° at 60°

Length 48"
LED HE80
CRI/CCT 80+/3500K
Lumens 3,000
lm/ft 750
Watts 20
W/ft 5.0
LPW 150

Length 48"
LED HE80
CRI/CCT 80+/3500K
Lumens 3,000
lm/ft 750
Watts 20
W/ft 5.0
LPW 150

Length 48"
LED HE80
CRI/CCT 80+/3500K
Lumens 3,000
lm/ft 750
Watts 20
W/ft 5.0
LPW 150

Length 48"
LED HE80
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Lumens 3,000
lm/ft 750
Watts 20
W/ft 5.0
LPW 150

Length 48"
LED HE80
CRI/CCT 80+/3500K
Lumens 3,000
lm/ft 750
Watts 20
W/ft 5.0
LPW 150

PATENTS & TRADEMARKS



To learn more about our unique technologies, please click or scan the QR Code.

Utility Patents

United States	US11543582, US11520097, US11512466, US11441749, US11396751, US11333822, US11163104, US11156762, US10852466, US10068447, US8953926, US8948564, US8911099, US8876348, US8794812, US8783898, US8761565, US8750671, US8721152, US8619363, US8430548, US8408775, US8249408, US8231256, US8177408, US8033706, US8033674, US7991257, US7914192, US7784954, US7758227, US7722224, US7542635, US7453636, US7453635, US7431489, US7408707, US7278775, US6369944, US6346311, US6123877, US5932342, US5837346, US20220373144, US20220372752, US20220364708, US20220357006, US20220357005, US20220342141, US20220290432, US20220206210A1, US20220171119A1, US20220171115A1, US20220162856A1, US20220162853A1, US20220146063A1, US20220137287, US20210301991A1, US20200355345A1, US20200217071A1, US20220333765A1, US20220228366A1, US20220196906A1, US20220010554A1, US20080043490A1, US20060290253A1, US20060215958A1, US20120321247, US20120250330, US20120099204
Canada	CA2702600, CA2702685, CA2702690
France	FREP0800658
Germany	DEEP0800658
Great Britain	GB2492541, GB2492542, GBEP0800658, GB2492398
Japan	JP03958359
Netherlands	NLEP0800658
Taiwan	FTW360813B
European Patent Organization	EP0843203, EP0843203

Design Patents

United States	USD719282, USD717973, USD669606, USD669608, USD669609, USD669614, USD663056
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The Patent Corporation Treaty

World Intellectual Property Organization	WO2015200268
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Trademarks

United States	US6672871, US6397231, US6373493, US6257728, US6190558, US6190559, US6142905, US6114408, US6038234, US6025279, US6060740, US6257729, US5856164, US5734112, US5543304, US5309290, US5309315, US4691124, US4640751
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