NANOFlat

1" Low-Profile Linear LED Flat Rail with Lens Options

XICO®

1.0"
Scale
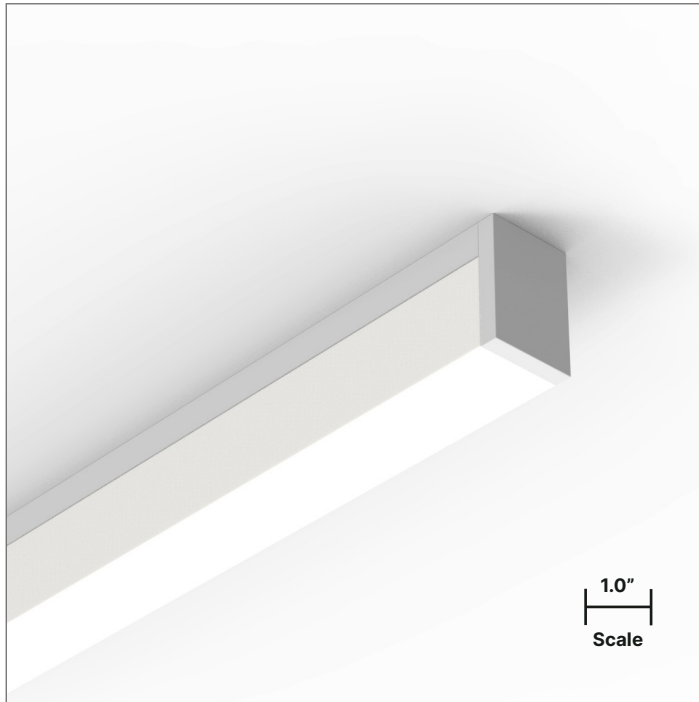
Remote Driver

Features & Benefits

Exceptional Performance
Up to 1,000 lm/ft, 150 lm/W efficacy

Wide Range of LED Selections
Static, 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

Red List Free

FIXTURE ORDERING

Project Name	
Fixture Type	

1) FIXTURE DESIGN

PRODUCT	MOUNTING TYPE		LENGTH		FINISH		DAISY CHAIN	
NFL								

PRODUCT	MOUNTING TYPE		LENGTH		FINISH		DAISY CHAIN	
1.4" Low-Profile	**SMC**	Surface Mount Clip	**1F**	1'	**MWH**	Matte White (RAL9003)	**DN**	No Daisy Chain
Linear LED	**SMM**	Surface Mount Magnet	**2F**	2'	**MBK**	Matte Black (RAL9005)	**DY**	Yes Daisy Chain
Flat Rail	**TC1**	9/16" Flat T-Bar Mount Clip	**4F**	4'	**MGR**	Matte Gray (RAL7001)		
	TC2	9/16" Bolt Slot T-Bar Mount Clip	**6F**	6'	**CAE**	Clear Anodized Effect		
	TC3	15/16" Flat T-Bar Mount Clip	**8F**	8'	**RAL_**	Specify RAL#		
			X_	Specify X', Y"				

2) LED LIGHT ENGINE

CRI		CCT		OPTIC		BEAM PATTERN		LUMEN OUTPUT	

CRI		CCT		OPTIC		BEAM PATTERN		LUMEN OUTPUT	
S80	Std. 80 CRI	**22**	2200K	**OFL**	Flat Lens	**LAM**	Lambertian	**25**	250 lm/ft
S90	Std. 90 CRI	**27**	2700K	**OSL0.5**	0.5" Square Lens	**BW60**	Batwing 60°	**35**	350 lm/ft
HE80	High-Eff. 80 CRI	**30**	3000K	**OSL1.0**	1.0" Square Lens	**CW5560**	Ceiling Wash 55° at 60° Tilt	**50**	500 lm/ft
HE90	High-Eff. 90 CRI	**35**	3500K			**A4015**	Asymmetric 40° at 15° Tilt	**75**	750 lm/ft
HD95	High-Def. 95 CRI	**40**	4000K			**M50**	Medium 50°	**100**	1,000 lm/ft
SUN	Full SunLike	**50**	5000K			**N40**	Narrow 40°		
SBIOS	Static BIOS					**MCO25**	Micro Cavity Optic 25°	**X_**	Specify lm/ft
DBIOS	Dynamic BIOS		Dim-to-Warm						
TBIOS	Tunable White BIOS	**3022DW**	3000K to 2200K			**X_**	Specify Beam		
RGBW	Red, Green, Blue, White	**3527DW**	3500K to 2700K						
		X_	Specify CCT						

3) FIXTURE POWER & CONTROLS

LINE VOLTAGE (DC)		REMOTE DRIVER (POWER)		EMERGENCY BACKUP		REMOTE DRIVER BOX[1]		CONTROL SYSTEM[3]	

LINE VOLTAGE (DC)		REMOTE DRIVER (POWER)		EMERGENCY BACKUP		REMOTE DRIVER BOX[1]		CONTROL SYSTEM[3]	
UNV	120/277V	**FDND**	Factory Non-Dimming	**NN**	Not Needed	**NN**	Not Needed	**NN**	Not Needed
347	347V	**FD01**	Factory 0-10V 1% Dim	**EMC**	Emergency Circuit	**RLDB**[2]	Remote Linear Driver Box	**LUT**	Lutron
		FD10	Factory 0-10V 10% Dim	**EMB**	Emergency Battery		(driver included by default)	**COO**	Cooper
		FDDA	Factory DALI 0.1% Dim		(10 W — Remote)	**RX2D**[2]	Optional Remote XBox2	**CAS**	Casambi
		FDDX	Factory DMX Dim	**X_**	Specify Backup		Driver, Up to 2 Drivers	**X_**	Specify Control
		FDTR	Factory TRIAC Dim			**RX3D**[2]	Optional Remote XBox3		System
		LD01	Lutron Hi-Lume 1% Dim				Driver, Up to 3 Drivers		
		LD05	Lutron 5-Series 5% Dim			**RX5D**[2]	Optional Remote XBox5		
		ED00	eldoLED 0-10V 0.1% Dim				Driver, Up to 5 Drivers		
		ED01	eldoLED 0-10V 1% Dim						
		EDDA	eldoLED DALI 0.1% Dim						
		X_	Specify Driver						

4) ELECTRICAL CONNECTIONS

POWER CORD		CONNECTOR (DC)	

POWER CORD		CONNECTOR (DC)	
S24WH	24" White Cable Kit	**SW**	Strip Wire
S24BK	24" Black Cable Kit	**FP**	Factory Plug

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.

FIXTURE DESIGN

Dimensions

.38

.94

.88

.94

1.37

.94

.38

.94

.88

.94

1.37

.94

Flat Lens   0.5" Square Lens   1.0" Square Lens
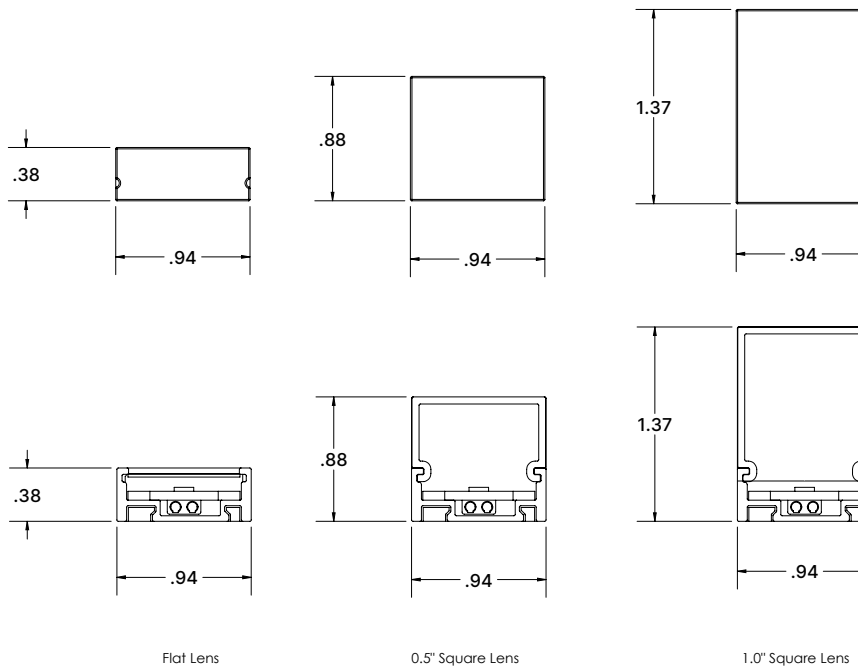
To download BIM (Revit) Files, please click or scan the QR Code.

Length

Length Options   1', 2', 4', 6', 8', 10' nominal, or custom within 3"

Finish

Housing Colors (Matte Finish)

White (RAL9003)   Black (RAL9005)   Gray (RAL7001)   Clear Anodized Effect   Custom RAL

Housing Material   6063-T5 extruded, recycled aluminum

Mounting Brackets   Sheet metal

End Cap

End Cap Option   Flat

End Cap Material   Machined or cast aluminum

Optic

Lens Options   Dome Diffusion, Flat, Light Guide, and Micro Cavity Optics

Lens Material   Patented SmartOptics® made from Acrylic (PMMA)

Voltage

Fixture Voltage (AC)   120–277 VAC and 347 VAC, 50/60 Hz

LED SELECTION GUIDE

S80: Standard 80+ CRI
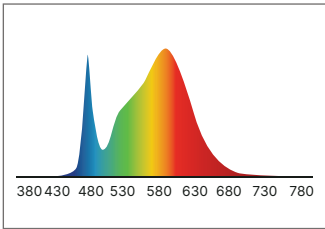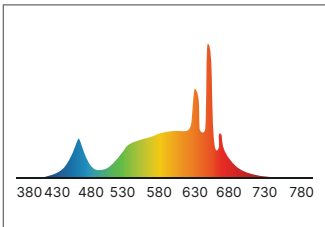

S90: Standard 90+ CRI
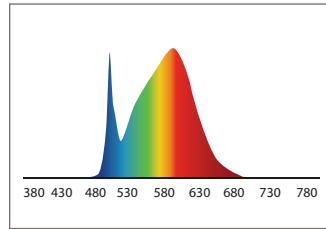
HE80: High-Efficiency 80+ CRI
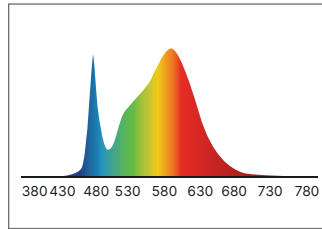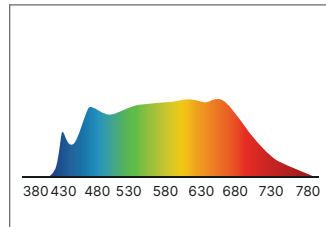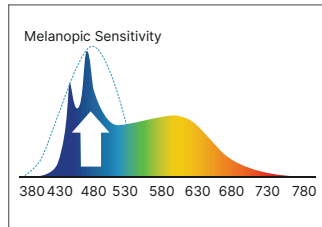

HE90: High-Efficiency 90+ CRI
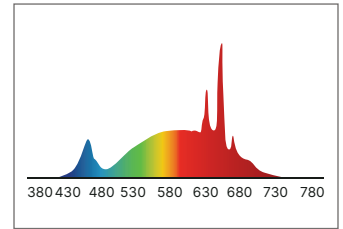
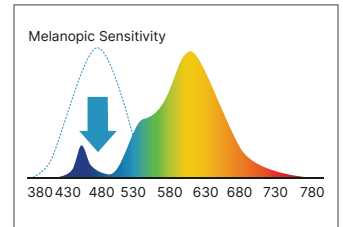**HD95: High-Definition 95+ CRI**

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

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

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.
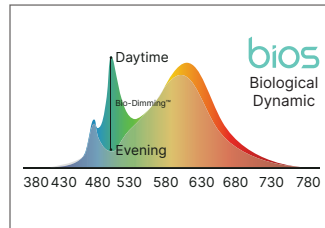
BIOS Static
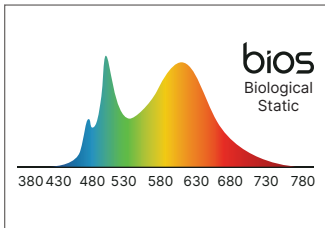
BIOS Dynamic

BIOS Tunable
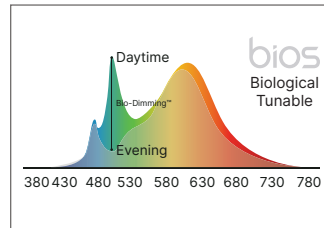
BIOS Dim-to-Warm
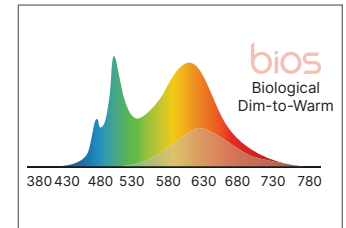
Daytime

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

		BIO-DIMMING MODULE TECHNOLOGY GUIDE					
CODE	DESCRIPTION	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® TECHNOLOGY

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.

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

Partners

| Control Systems	Remote Drivers (Sold Separately)
Other	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

XBox

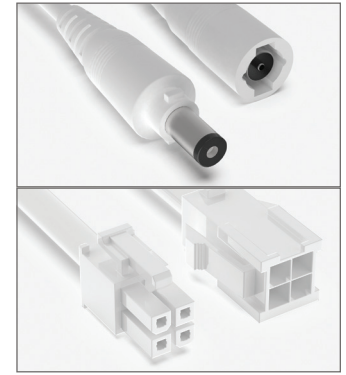|	
Remote Driver Boxes (Optional)	To create a clean and organized power solution for multiple fixture installations see our XBox Specification Guide. Reach out to a XICO Sales Representative to discuss you projects needs.
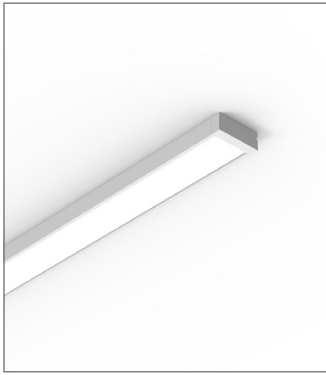
Flush Lens
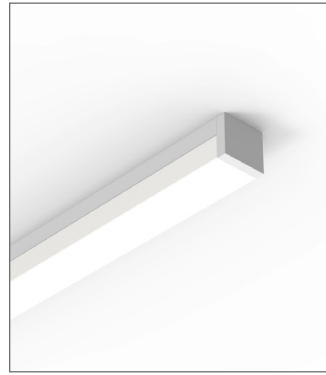
0.5" Square Lens
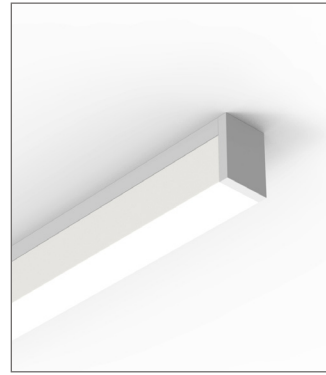
1.0" Square Lens

Connectors (DC)

FIXTURE MOUNTING & CONNECTIONS

Mounting Type

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.

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.

Wall Mount

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

Power Cord

24" Cable Kit

White and Black

Connector (DC)
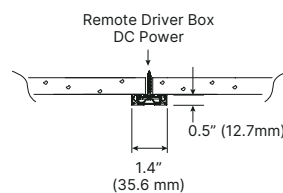
Connector Plug Options

Strip Wire and Factory

Mounting Kit

Surface Mounting Bracket
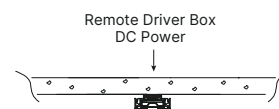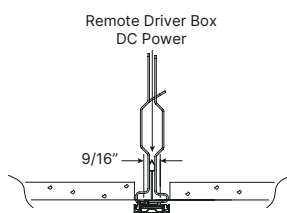
Stainless Steel
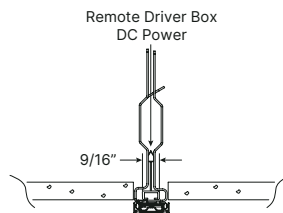
Mounting Options

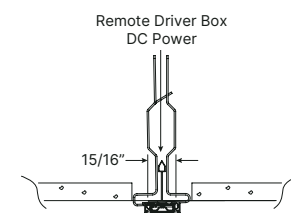**SMC - Surface Mount Clip**

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

STANDARDS & CERTIFICATIONS

Declare.

Micro Series
XICO Lighting

Final Assembly: Woburn, Massachusetts, USA
Life Expectancy: 10+ Year(s)
End of Life Options: Recyclable (99%), Landfill (1%)

Ingredients:
Aluminum; Polymethyl methacrylate; 1,3-Benzenedicarboxylic acid; 1,3-dimethyl ester; polymer with 1,4-dimethyl 1,4-benzenedicarboxylate and 1,2-ethanediol; Glass, oxide, chemicals; Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2,2'-[(1-methylethylidene) bis[4-phenyleneoxymethylene]]bis[oxirane]; Polyethylene; Copper; Magnesium; Barium sulfate; Polyethylene Terephthalate; Silicon; Iron; Chromium, metallic; Manganese; Titanium; Zinc

Living Building Challenge Criteria: Compliant

I-13 Red List:
■ LBC Red List Free   % Disclosed: 100% at 100ppm
☐ LBC Red List Approved   VOC Content: Not Applicable
☐ Declared

I-10 Interior Performance: Not Applicable
I-14 Responsible Sourcing: Not Applicable

XIC-0002
EXP. 01 JUN 2023
Original Issue Date: 2022

MANUFACTURER RESPONSIBLE FOR LABEL ACCURACY
INTERNATIONAL LIVING FUTURE INSTITUTE™ living-future.org/declare

Declare Listed

Declare labels provide a quick and reliable way to make choices about the environmental footprint and safety of the product. Declare is internationally recognized and the labels can be found on the product, product packaging, or company website. Visit **xicoled.com** for Declare Listed details.

Red List Free

Red List Free

An industry standard certification for LED lighting products based on the International Living Future Institute (ILFI). These products only use materials based on the "Red List of Toxic Chemicals" (a list of chemicals and materials known to be hazardous to people and/or the Earth) that are safe, healthy, and environmentally sustainable.

Certifications

Compliance	BAA & TAA compliant in-house manufacturing in Boston, MA with North American supply chain
Certifications	UL LISTED · CSA · RoHS 2002/95/EC · IC RATED
Sustainability	Declare Listed and Red List Free
Packaging	Low carbon, environmentally conscious packaging and shipping methods

Environmental Suitability

IP Rating	Suitable for Dry and Damp Locations, indoor use only
Recyclable	SmartOptics and all powder coated and anodized parts are fully recyclable at end of life

Reliability
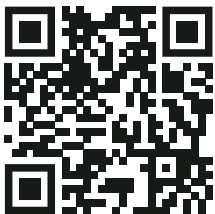
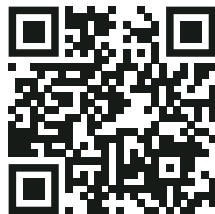|	
Manufacturing	All XICO products and associated optics and LED engines are assembled at our factory in Woburn, MA
Quality Assurance	Each product is engineered reliability and quality assurance tested

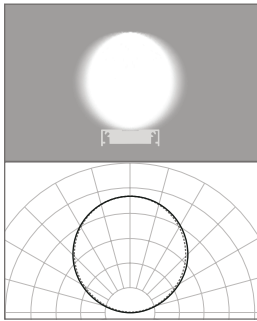## Warranty & Terms

5-YR Warranty

Business Terms

For details on our warranty and business terms, please click or scan the QR Code.
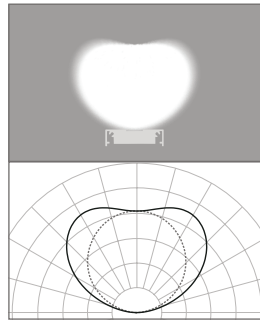
PHOTOMETRICS
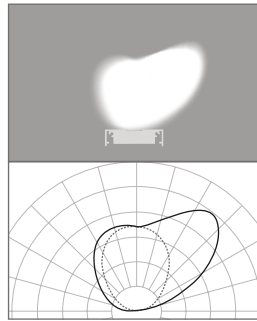
Static White Light

LAM: Lambertian

Length	48"
LED	HE80
CRI/CCT	80+/3500K
Lumens	3,000
lm/ft	750
Watts	8
W/ft	5.8
LPW	130

BW60: Batwing 60°

Length	48"
LED	HE80
CRI/CCT	80+/3500K
Lumens	3,000
lm/ft	750
Watts	5
W/ft	5
LPW	149

CW5560: Ceiling Wash 55° at 60° Tilt

Length	48"
LED	HE80
CRI/CCT	80+/3500K
Lumens	3,000
lm/ft	750
Watts	5
W/ft	5
LPW	149

A4015: Asymmetric 40° at 15° Tilt
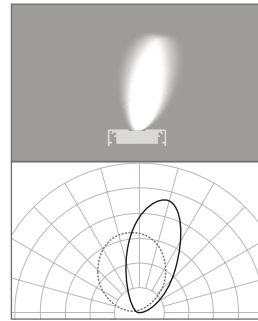
Length	48"
LED	HE80
CRI/CCT	80+/3500K
Lumens	3,000
lm/ft	750
Watts	10
W/ft	5.6
LPW	134

M50: Medium 50°
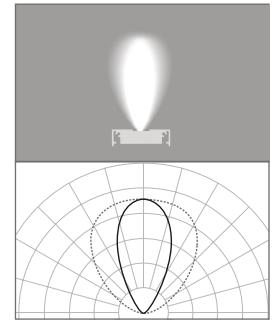
Length	48"
LED	HE80
CRI/CCT	80+/3500K
Lumens	3,000
lm/ft	750
Watts	4.7
W/ft	5
LPW	153

N40: Narrow 40°
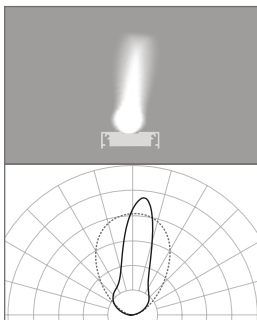
Length	48"
LED	HE80
CRI/CCT	80+/3500K
Lumens	3,000
lm/ft	754
Watts	20
W/ft	5
LPW	151

MCO25: Micro Cavity Optic 25°
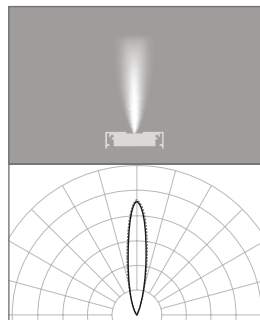
Length	48"
LED	HE80
CRI/CCT	80+/3500K
Lumens	3,000
lm/ft	750
Watts	37
W/ft	9
LPW	82