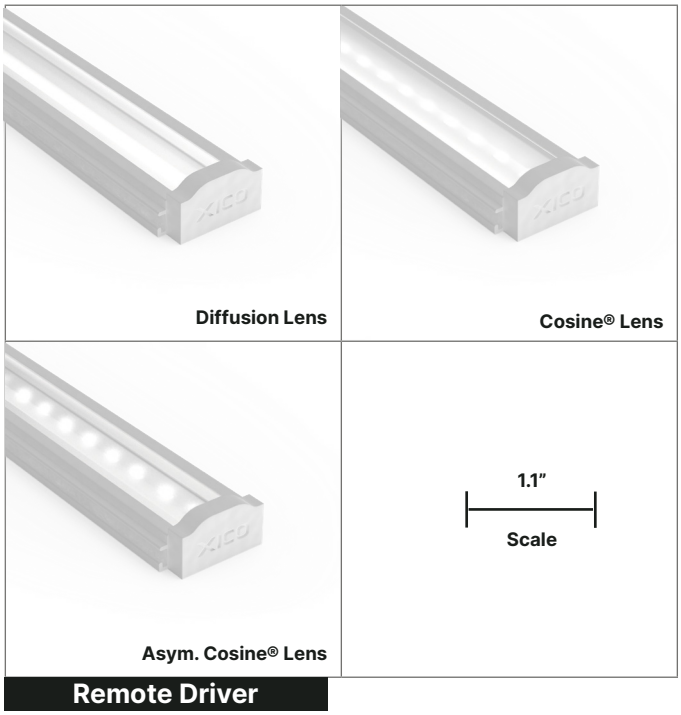
SPECIFICATION GUIDE

MICRORail 110

Direct | Standard Lengths

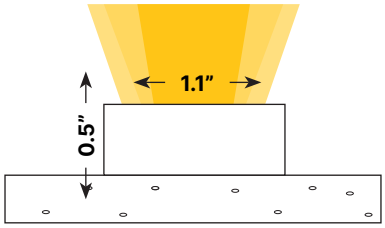
Project Name _____

Fixture Type _____



LIGHTING CONFIGURATIONS

Direct



DESCRIPTION

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

The MICRORail with a choice of dome, diffuse and a unique, patented, wide-angle and asymmetric Cosine® optic to deliver the perfect indirect “batwing” and patented “flattop” style light distribution with an overall optical efficiency of over 90%—the industry’s best linear wide-angle indirect luminaire. A low-profile surface mount LED rail featuring the patented Cosine® Optic delivers a uniform uplight with various beam widths and a choice of beam widths, lumen outputs, color temperature, & color quality.

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, Tunable White, and Dim-to-Warm

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

Project Name _____ Fixture Type _____

1) FIXTURE DESIGN

PRODUCT	FIXTURE LENGTH	FINISH	END CAP STYLE	DAISY CHAIN
MRA110 1.1" Low-Profile linear LED Rail				
	1 - 1 ft **2** - 2 ft **3** - 3 ft **4** - 4 ft **6** - 6 ft **8** - 8 ft **X_** - Specify Ft', In" (Ask Factory	**Powder Coated** **PMW** - Matte White **PMB** - Matte Black **PMG** - Matte Gray **PRAL_** - Specify RAL # **Anodized** **ACL** - Clear Anodized **ACU_** - Custom Anodized #	**E1** - Flat End Cap	**NDC** - No: Daisy Chain **YDC** - Yes: Daisy Chain

2) LED LIGHT ENGINE

CRI	CCT	OPTIC (DIRECT ONLY)	DIRECT BEAM PATTERN	DIRECT OUTPUT
80 - Std. 80 CRI **90** - Std. 90 CRI **95** - High-Def. 95 CRI **SUN** - Full SunLike	**27** - 2700K **30** - 3000K **35** - 3500K **40** - 4000K **XD** - Dim-to-Warm **XT** - Tunable **X_** - Specify CCT Specify Dim-to-Warm and Tunable between 2700K-6500K.	**DO** - Diffusion Optics	**DLAM** - Lambertian	**35** - 350 lm/ft **50** - 500 lm/ft **75** - 750 lm/ft **100** - 1,000 lm/ft **X_** - Specify lm/ft
		CO - Cosine Optics®	**DBW120** - Batwing 120° **DFT150** - FlatTop 150°	
		AC - Asymmetric Cosine®	**DA6040** - Asym 60° at 40° Tilt **DA4560** - Asym 45° at 60° Tilt	

3) FIXTURE POWER & CONTROLS

LINE VOLTAGE (DC)	REMOTE DRIVER (POWER)[1]
UNV - 120/277V **347** - 347V	**FDND** - Factory Non-Dimming **FD00** - Factory 0-10V 0.1% Dim **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 **X_** - Specify Driver

Footnotes: [1] Standard driver box is included

4) FIXTURE MOUNTING & CONNECTIONS

MOUNTING TYPE	CONNECTOR (DC)
SMC - Surface Mount Clip **SMM** - Surface Mount Magnet **TC1** - 9/16" Flat T-Bar Mount **TC2** - 9/16" Bolt Slot T-Bar Mount **TC3** - 15/16" Flat T-Bar Mount TC1, TC2 and TC3 clips directly to grid t-bar.	**SW** - Strip Wire **FP** - Factory Plug

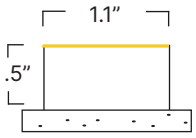
OPTIONAL

EMERGENCY BACKUP	WIRELESS MODULE
EMC - Emergency Circuit **EMB** - Emergency Battery (10 W — Remote) **X_** - Specify Backup Specify requirements at time of order.	**WCN** - Wireless Communication Node (Connected to LED Driver In-Fixture or In-Driver Box) **PIR** - Wireless Communication Node + PIR Sensor (Standard Lens for Low Bay < 10') **MW** - Wireless Communication Node + MW Sensor (Standard for Low Bay < 10') **X_** - Other – Specify Embedded Component or Specific Non-Standard Sensor Detection Range

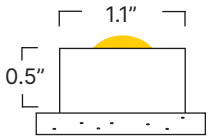
DIMENSIONS & INSTALLATION

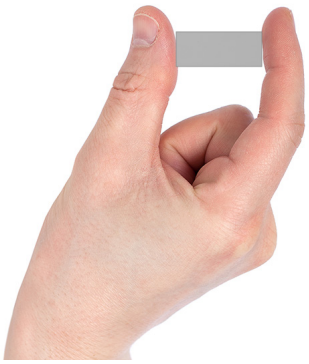
Dimensions

Diffusion Lens Optic

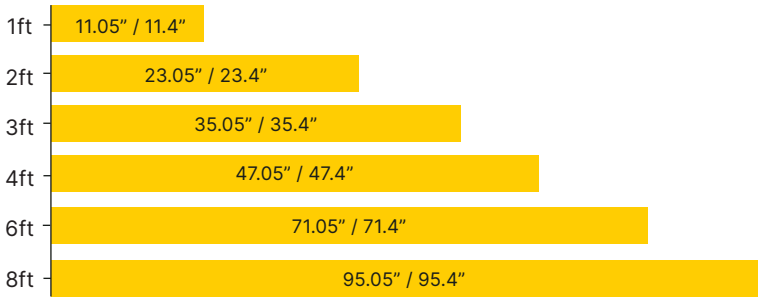


Cosine® Optic





Standard Fixtures



Lens Length / Fixture Length

FIXTURE MOUNTING

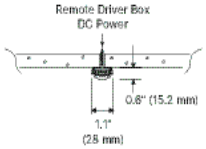
Mounting Type

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.

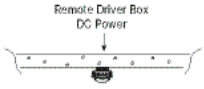
Mounting Kit

Surface Mounting Bracket	Stainless Steel

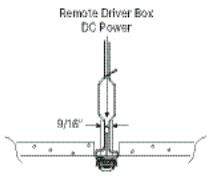
SMC - Surface Mount Clip



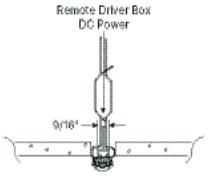
SMM - Surface Mount Magnet



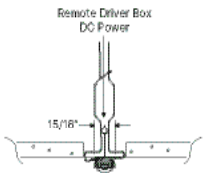
TC1 - 9/16" Flat T-Bar Mount Clip



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



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



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.

Direct Optics Choices

	BEAM PATTERN				
DIRECT OPTICS	**LAM**	**BW120**	**FT150**	**A6040**	**A4560**
Diffusion Lens	■				
Cosine® Optic		■	■		
Asym Cosine® Optic				■	■

LPW Efficacy Conversion Chart

	CCT SELECTED							
CODE	**2200K**	**2700K**	**3000K**	**3500K**	**4000K**	**5000K**	**5700K**	**6500K**
80	–	0.91	0.96	1.00	1.04	1.11	1.11	1.11
90	–	0.91	0.96	1.00	1.04	1.11	1.11	1.11
95	–	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

LPW Performance

	DIRECT				
	DLAM	**DA6040**	**DA4560**	**DFT150**	**DBW120**
LM/W	150	150	150	150	150

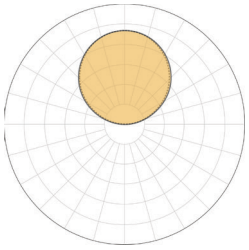
$$\text{LM/W} = \left(\frac{\text{DIRECT LM/FT} + \text{INDIRECT LM/FT}}{\text{DIRECT W/FT} + \text{INDIRECT W/FT}}\right)$$

PHOTOMETRICS

Static White Light

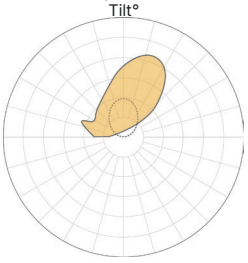
48" Length, HE80 LED, 80+/3500K CRI/CCT, 3,000 Lumens

DLAM: Lambertian



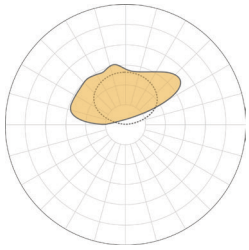
LM/FT	W/FT	LM/W
350	2.4	145.8
500	3.4	150
750	5.1	147.1
1000	6.8	147.1

DA6040: Asymmetric 60° at 40 Tilt°



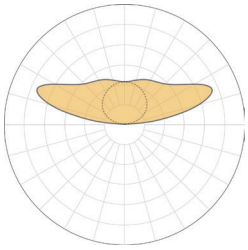
LM/FT	W/FT	LM/W
350	2.4	145.8
500	3.4	150
750	5.1	147.1
1000	6.8	147.1

DA4560: Asymmetric 45° at 60 Tilt°



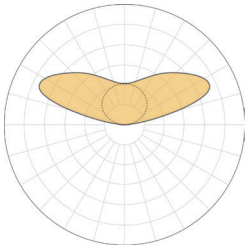
LM/FT	W/FT	LM/W
350	2.4	145.8
500	3.4	150
750	5.1	147.1
1000	6.8	147.1

DFT150: Flattop 150°



LM/FT	W/FT	LM/W
350	2.4	145.8
500	3.4	150
750	5.1	147.1
1000	6.8	147.1

DBW120

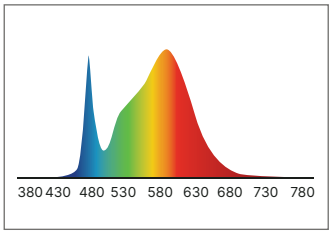


LM/FT	W/FT	LM/W
350	2.4	145.8
500	3.4	150
750	5.1	147.1
1000	6.8	147.1

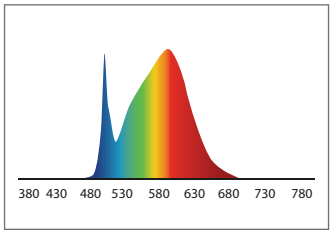
COMPATIBLE OPTIC		
DIFFUSION	COSINE®	ASYM COSINE®

LED OPTIONS

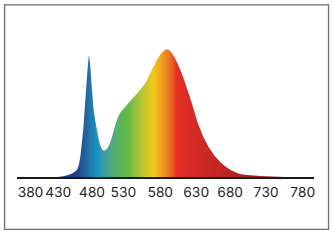
S80: Standard 80+ CRI



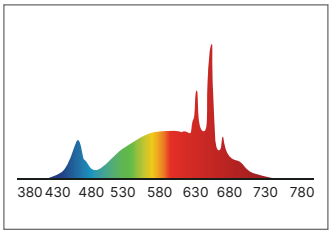
S90: Standard 90+ CRI



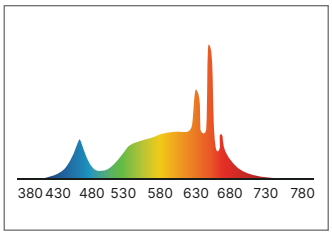
HE80: High-Efficiency 80+ CRI



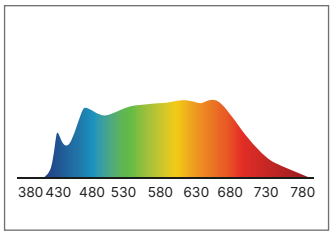
HE90: High-Efficiency 90+ CRI



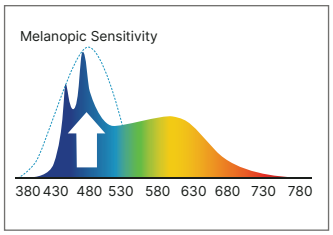
HD95: High-Definition 95+ CRI



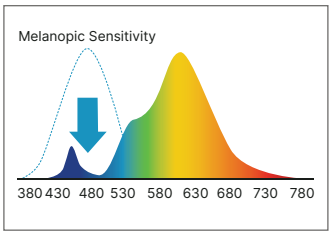
SUN: Full Spectrum "SunLike"



HCD: Human Centric Day



HCN: Human Centric Night



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

POWER & CONTROLS

Voltage

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

Power Location
Remote

LED Driver
Factory Selected, 36–39V Constant Current

Drivers

FDND - Factory Non-Dimming
FD00 - Factory 0-10V 0.1% Dim
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
X_ - Specify Driver

Emergency Backup (Optional)

EMC - Emergency Circuit
EMB - Emergency Battery
(10 W — Remote)
X_ - Specify Backup

Power
10 W

Illumination Time
90 minutes

IP Rating
Suitable for Dry and Damp Locations,
indoor use only

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.

Compatible Control Options

LUT - Lutron

CAS - Casambi

COO - Cooper

TECHNICAL SPECIFICATIONS

Finishes & Design Options

Housing Colors (Matte Finish)

White (RAL9003)
Black (RAL9005)
Gray (RAL7001)
Custom RAL

Housing Material

6063-T5 extruded, recycled aluminum

Mounting Brackes

Sheet Metal

Flat End Cap Material

Machined or cast alumninum

Lens Options and Material

Diffusion, Cosine and Asymetric Cosine lens options with Patented SmartOptics® made from Acrylic (PMMA)

Standards & Certifications

Sustainability

Low carbon, environmentally conscious packaging and shipping methods

Compliance

BABAA & TAA compliant in-house manufacturing in Boston, MA with North American supply chain

Certifications

Declare Listed and Red List Free

Low carbon, environmentally conscious packaging and shipping methods

Recyclable

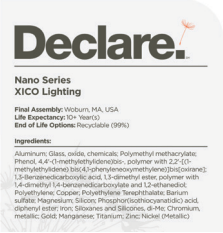
SmartOptics and all powder coated and anodized parts are fully recyclable at end of life

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



Declare Listed

At Xico Lighting, we are committed to transparency and sustainability. That's why all our products are Declare listed, providing clear insights into their environmental footprint and safety. Look for these internationally recognized labels on Xico products, packaging, or at xicoled.com/declare.

Red List Free

Xico Lighting is dedicated to creating safe, sustainable solutions. All our products are Red List Free, meeting the highest industry standards for healthy and environmentally responsible materials as defined by the International Living Future Institute (ILFI). Learn more at xicoled.com/declare.

Quick Links

5-YR Warranty | **Business Terms** | **Patents & Trademarks** | **SmartBeam** | **Revit Files**