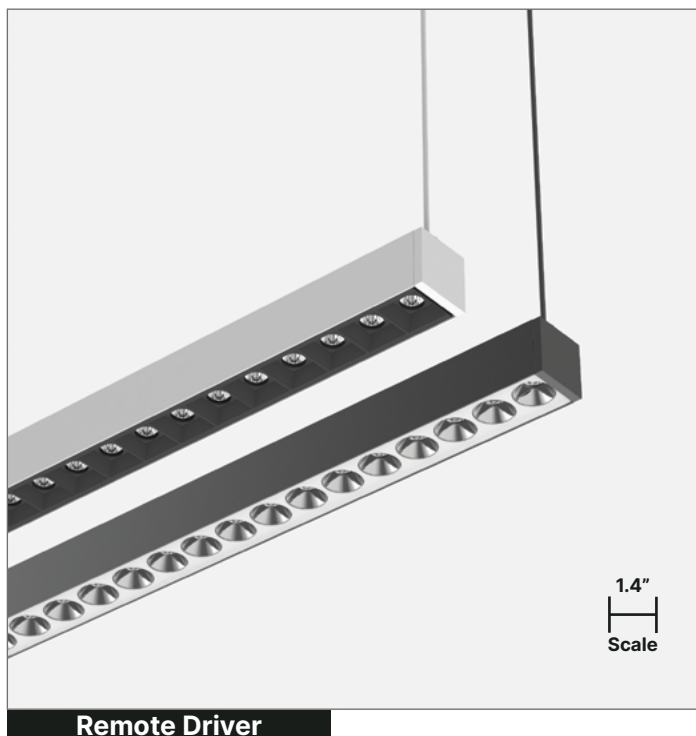


# MICROSquare MCO Pendant

## 1.4" Low-Profile Linear LED Pendant Mount



### 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**



## FIXTURE ORDERING

Project Name

### 1) FIXTURE DESIGN

Fixture Type

PRODUCT	LENGTH	FIXTURE FINISH	END CAP	MICRO CAVITY OPTICS (MCO) FINISH
<b>MSQ140MCO-P</b>				
1.4" Low-Profile Linear LED Pendant Mount	2 2' 4 4' 6 6' 8 8' 10 10' X_ Specify X', Y"	MWH Matte White (RAL9003) MBK Matte Black (RAL9005) MGR Matte Gray (RAL7001) CAE Clear Anodized Effect RAL_ Specify RAL#	E1 Flat End Cap	OSQMCOWH Square MCO, White OSQMCOBK Square MCO, Black ORMCOWH Round MCO, White ORMCOBK Round MCO, Black

### 2) LED LIGHT ENGINE

CRI	CCT	DIRECT BEAM PATTERN	DIRECT OUTPUT	INDIRECT BEAM PATTERN	INDIRECT OUTPUT
S80 Std. 80 CRI	22 2200K	DMCO45 Micro Cavity Optics 45°	35 350 lm/ft	NN Not Needed	NN Not Needed
S90 Std. 90 CRI	27 2700K	DMCO35 Micro Cavity Optics 35°	50 500 lm/ft	ILAM Lambertian	35 350 lm/ft
HE80 High-Eff. 80 CRI	30 3000K	DMCO25 Micro Cavity Optics 25°	75 750 lm/ft	IBW120 Batwing 120°	50 500 lm/ft
HE90 High-Eff. 90 CRI	35 3500K	X_ Specify Beam	100 1,000 lm/ft	IFT150 FlatTop 150°	75 750 lm/ft
HD95 High-Def. 95 CRI	40 4000K		X_ Specify lm/ft	IA6040 Asymmetric 60° at 40° Tilt	100 1,000 lm/ft
SUN Full SunLike	50 5000K			IA4560 Asymmetric 45° at 60° Tilt	X_ Specify lm/ft
SBIOS Static BIOS	3022D 3000K to 2200K			X_ Specify Beam	
DBIOS Dynamic BIOS					
TBIOS Tunable White BIOS	3527D 3500K to 2700K				
RGBW Red, Green, Blue, White	X_ Dim-to-Warm Specify CCT				

### 3) FIXTURE POWER & CONTROLS

LINE VOLTAGE (DC)	REMOTE DRIVER (POWER)	EMERGENCY BACKUP	REMOTE DRIVER BOX <sup>2</sup>	CONTROL SYSTEM <sup>4</sup>
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 <sup>3</sup> Remote Linear Driver Box (driver included by default)	LUT Lutron
	FD10 Factory 0-10V 10% Dim	EMB Emergency Battery (10 W — Remote)	RX2D <sup>3</sup> Optional Remote XBox2 Driver, Up to 2 Drivers	COO Cooper
	FDDA Factory DALI 0.1% Dim	X_ Specify Backup	RX3D <sup>3</sup> Optional Remote XBox3 Driver, Up to 3 Drivers	CAS Casambi
	FDDX Factory DMX Dim		RX5D <sup>3</sup> Optional Remote XBox5 Driver, Up to 5 Drivers	X_ Specify Control System
	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			

### 4) FIXTURE MOUNTING & CONNECTIONS

MOUNTING TYPE	CANOPY	POWER CORD
DJ Drywall/J-Box Mount	RCWH2 2" Round Canopy, White	S48WH 48" White Cable Kit
T1 9/16" Flat T-Bar Mount	RCBK2 2" Round Canopy, Black	S48BK 48" Black Cable Kit
T2 9/16" Bolt Slot T-Bar Mount	RCWH5 5" Round Canopy, White	S96WH 96" White Cable Kit
T3 15/16" Flat T-Bar Mount	RCBK5 5" Round Canopy, Black	S96BK 96" Black Cable Kit
	SQCWH2 2" Square Canopy, White	
	SQCBK2 2" Square Canopy, Black	
	SQCWH5 5" Square Canopy, White	
	SQCBK5 5" Square Canopy, Black	

Footnotes: <sup>1</sup> Continuous Regressed Lens ships on a roll for seamless lens installation. <sup>2</sup> Remote distance is dependent on driver type, up to 100' (30.5 m).<sup>3</sup> Creates a clean and organized power solution for multiple fixture installations. <sup>4</sup> The control system and driver must be compatible.

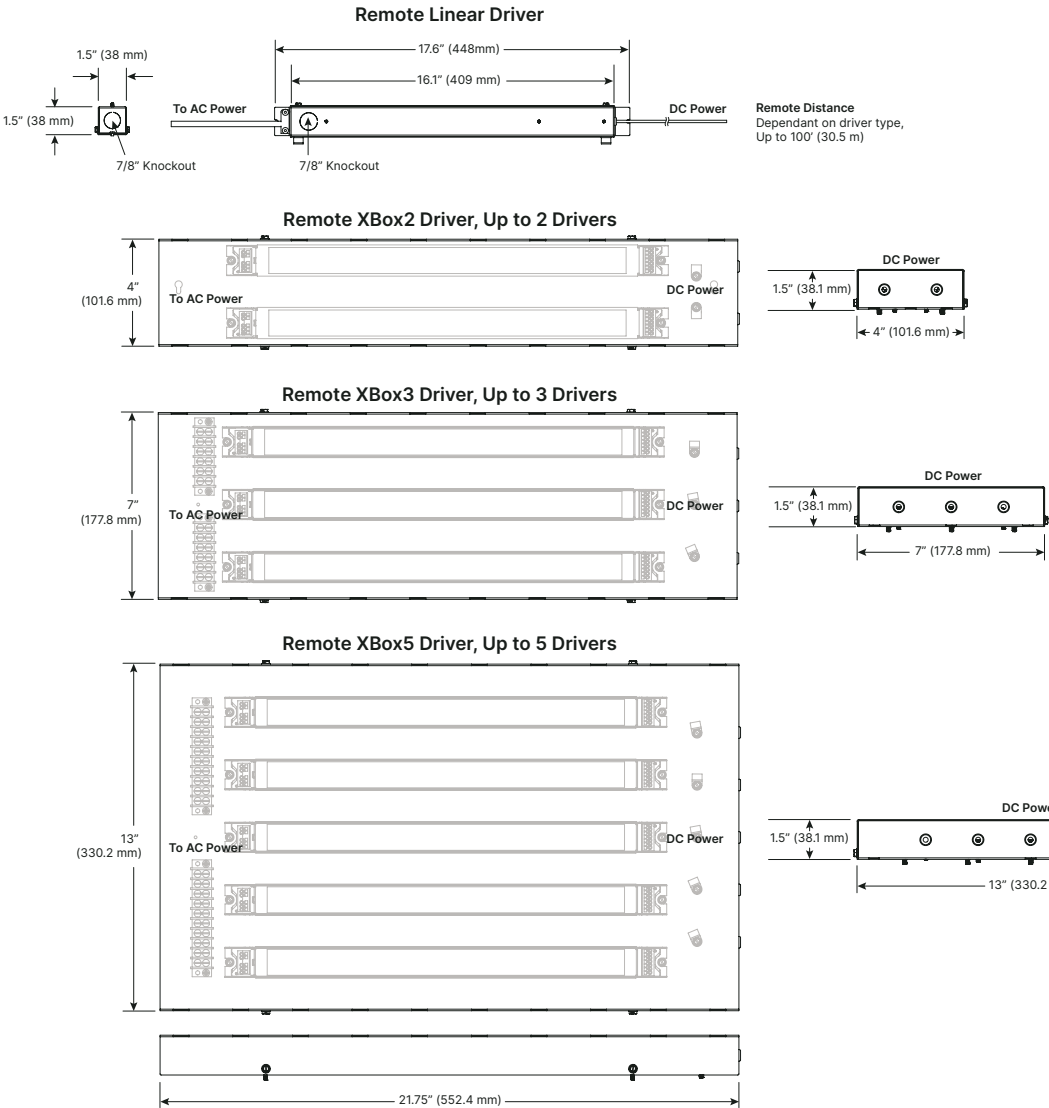
NOTES

Project Name

Fixture Type

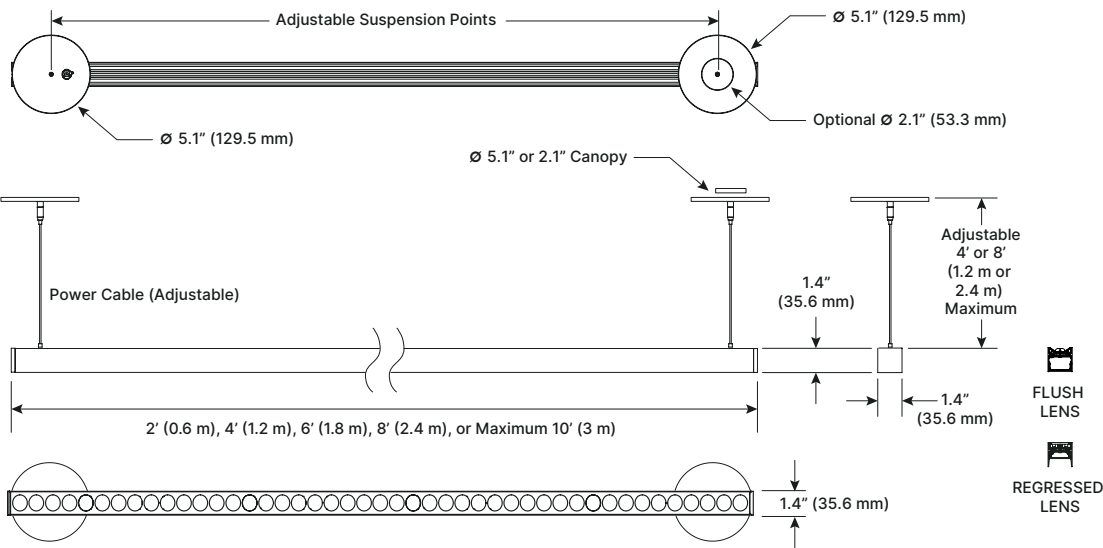
REMOTE DRIVER BOX

Dimensions



FIXTURE DESIGN

Dimensions








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

Length

Length Options 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 Square and Round Micro Cavity Optics

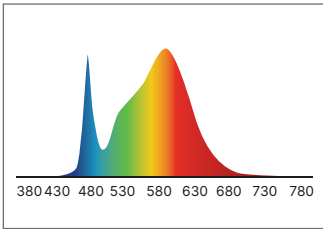
Lens Material Patented SmartOptics® made from Acrylic (PMMA)

Voltage

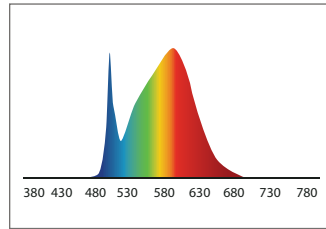
Fixture Voltage (AC) 120–277 VAC and 347 VAC, 50/60 Hz

## LED SELECTION GUIDE

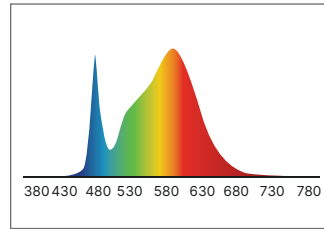
S80: Standard 80+ CRI



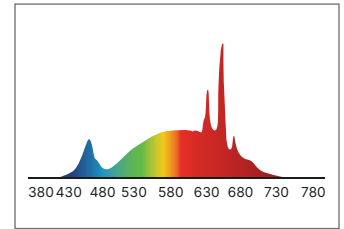
S90: Standard 90+ CRI



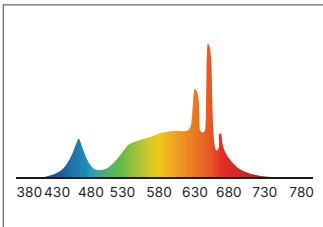
HE80: High-Efficiency 80+ CRI



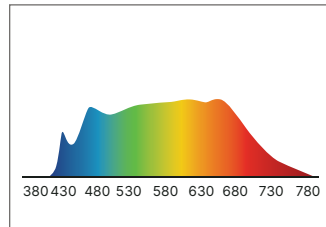
HE90: High-Efficiency 90+ CRI



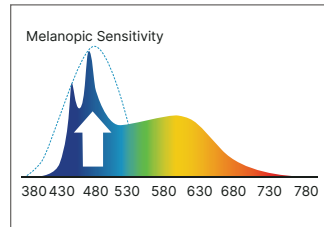
HD95: High-Definition 95+ CRI



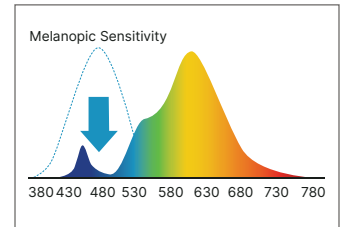
SUN: Full Spectrum "SunLike"



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

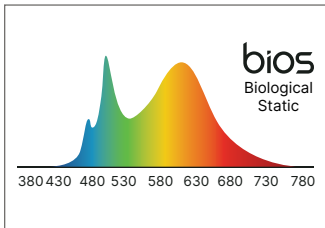
BIOS is offered in four Circadian LED Solutions with BIOS SkyBlue Technology — Biological Static, Biological Dynamic, Biological Tunable, and Biological Dim-to-Warm. BIOS SkyBlue™ Technology includes a blue peak at 490nm that provides an effective daytime circadian signal using standard architectural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

**bios**

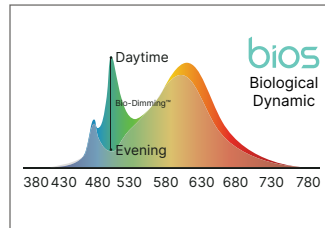
To learn more about BIOS Technology, please click or scan the QR Code.



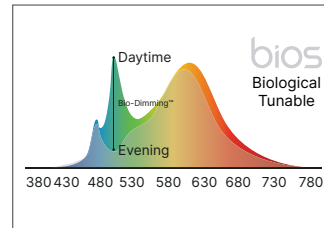
**BIOS Static**



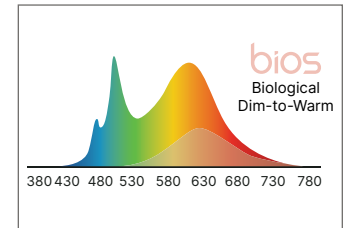
**BIOS Dynamic**



**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® 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

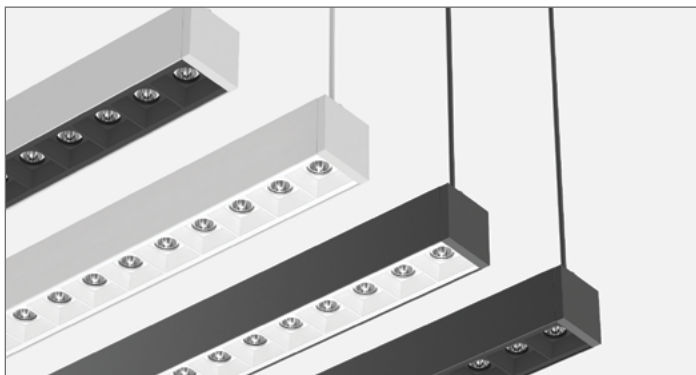
Cooper Compatible driver

Casambi (wireless) Compatible driver

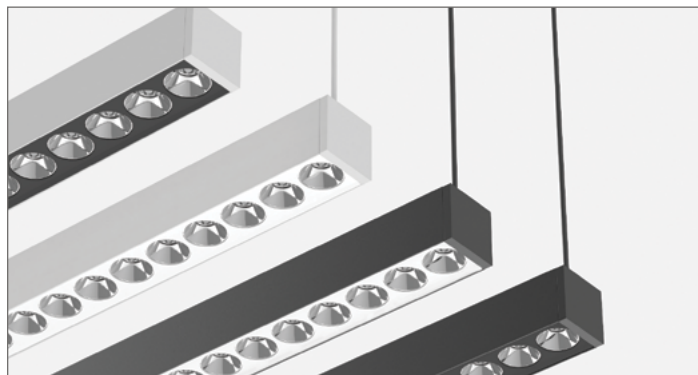
XBox

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.





Square MCOs



Round MCOs

## 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.

#### Drywall/J-Box Mount

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

### Canopy

#### Canopy Sizes & Shapes

2" and 5", Round and Square

#### Canopy Colors



White (RAL9003) Black (RAL9005)

#### Canopy Material

Powder Coated Steel

### Power Cords

#### 48" Cable Kit

White and Black

#### 96" Cable Kit

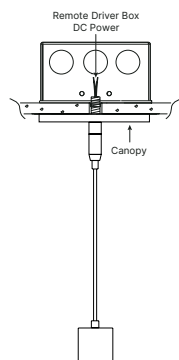
White and Black

### Mounting Options

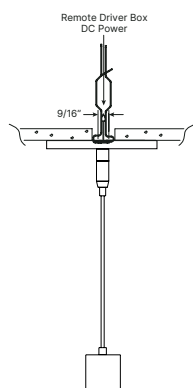
Typically suspended at a distance of between 24" and 72". Supplied hardware includes:

- Cable length adjustable at fixture level
- Standard 96" cord length or custom length
- Internal brackets to eliminate light leakage at joints

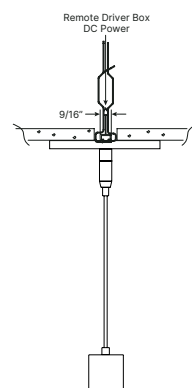
DJ - Drywall/J-Box Mount



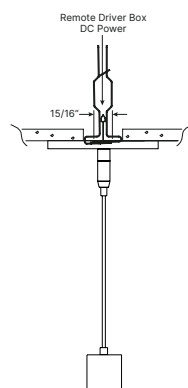
T1 - 9/16" Flat T-Bar Mount



T2 - 9/16" Bolt Slot T-Bar Mount



T3 - 15/16" Flat T-Bar Mount

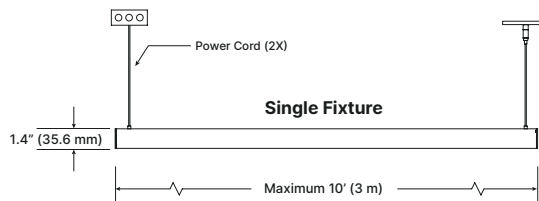




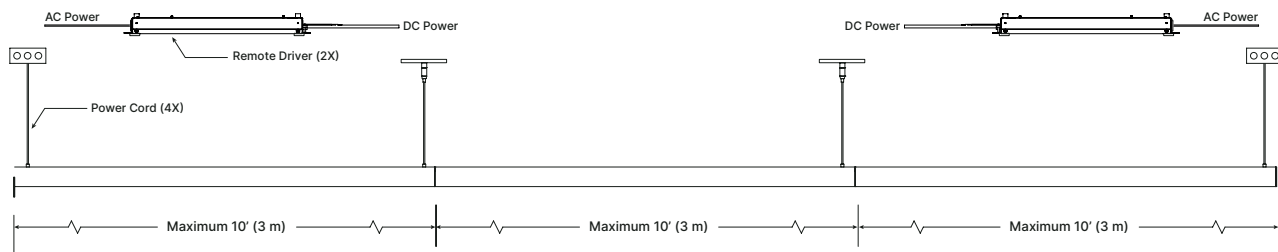
## Standard Lengths & Continuous Runs

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.

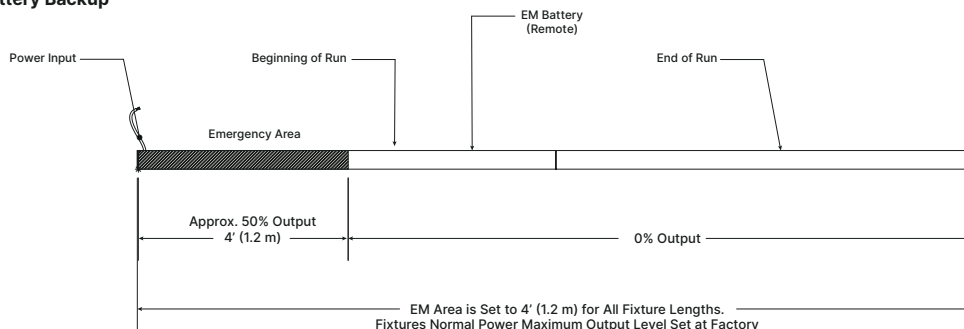
Lens can be supplied in a maximum 250' roll length with Continuous FlatLENS Optics to be installed on-site for a seamless light surface.



### Standard Continuous Run



### Emergency Battery Backup



Battery Power: 10 W  
 Illumination Time: 90 minutes  
 Light Output approx 300 lm/ft or 1200-1300 Total Lumens\*  
 Recharge Time: 24 Hours

\*Light output may vary based on fixture output level ordered.

## STANDARDS & CERTIFICATIONS



### 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](http://xicoled.com) for Declare Listed details.



### 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



### 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

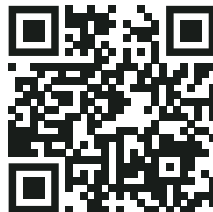
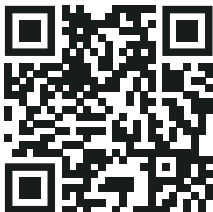
### Quality Assurance

Each product is engineered reliability and quality assurance tested

## Warranty & Terms

### 5-YR Warranty

### Business Terms



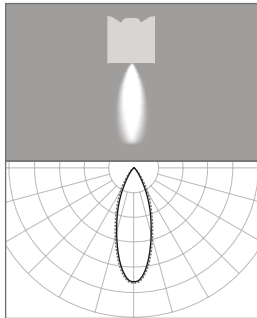
For details on our warranty and business terms, please click or scan the QR Code.

OPTIC	BEAM PATTERN		
	DMCO45	DMCO35	DMCO25
Micro Cavity Optics (MCO)	●	●	●

## DIRECT PHOTOMETRICS (cont.)

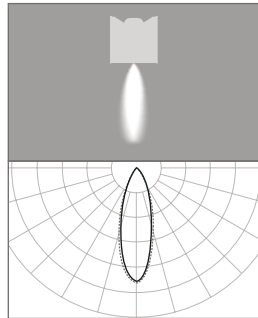
Static White Light

**DMCO45:** Micro Cavity Optic 45°



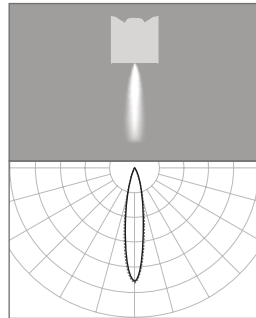
**Length** 48"  
**LED** HE80  
**CRI/CCT** 80+/3500K  
**Lumens** 3,000  
**lm/ft** 749  
**Watts** 37  
**W/ft** 9  
**LPW** 82

**DMCO35:** Micro Cavity Optic 35°



**Length** 48"  
**LED** HE80  
**CRI/CCT** 80+/3500K  
**Lumens** 3,000  
**lm/ft** 749  
**Watts** 37  
**W/ft** 9  
**LPW** 82

**DMCO25:** Micro Cavity Optic 25°

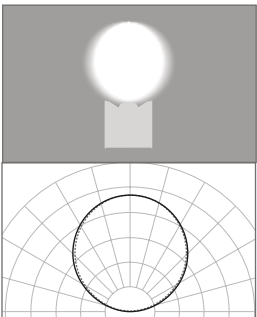


**Length** 48"  
**LED** HE80  
**CRI/CCT** 80+/3500K  
**Lumens** 3,000  
**lm/ft** 749  
**Watts** 37  
**W/ft** 9  
**LPW** 82

## INDIRECT PHOTOMETRICS

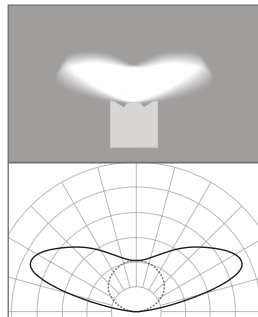
Static White Light

**ILAM:** Lambertian



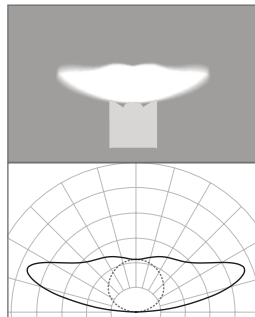
**Length** 48"  
**LED** HE80  
**CRI/CCT** 80+/3500K  
**Lumens** 4,000  
**lm/ft** 1,000  
**Watts** 28  
**W/ft** 7  
**LPW** 150

**IBW120:** Batwing 120°



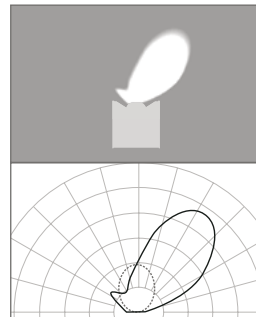
**Length** 48"  
**LED** HE80  
**CRI/CCT** 80+/3500K  
**Lumens** 4,000  
**lm/ft** 1,009  
**Watts** 26  
**W/ft** 6.4  
**LPW** 158

**IFT150:** FlatTop 150°



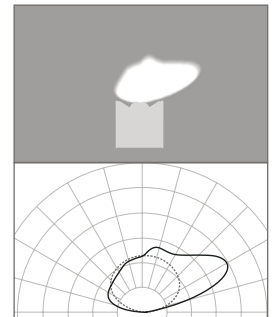
**Length** 48"  
**LED** HE80  
**CRI/CCT** 80+/3500K  
**Lumens** 4,000  
**lm/ft** 1,000  
**Watts** 28  
**W/ft** 7  
**LPW** 150

**IA6040:** Asymmetric 60° at 40° Tilt



**Length** 48"  
**LED** HE80  
**CRI/CCT** 80+/3500K  
**Lumens** 4,000  
**lm/ft** 991  
**Watts** 28  
**W/ft** 7  
**LPW** 143

**IA4560:** Asymmetric 45° at 60° Tilt



**Length** 48"  
**LED** HE80  
**CRI/CCT** 80+/3500K  
**Lumens** 4,000  
**lm/ft** 991  
**Watts** 28  
**W/ft** 7  
**LPW** 143

## PATENTS &amp; TRADEMARKS



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## Utility Patents

<b>United States</b>	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
<b>Canada</b>	CA2702600, CA2702685, CA2702690
<b>France</b>	FREP0800658
<b>Germany</b>	DEEP0800658
<b>Great Britain</b>	GB2492541, GB2492542, GBEP0800658, GB2492398
<b>Japan</b>	JP03958359
<b>Netherlands</b>	NLEP0800658
<b>Taiwan</b>	FTW360813B
<b>European Patent Organization</b>	EP0843203, EP0843203

## Design Patents

<b>United States</b>	USD719282, USD717973, USD669606, USD669608, USD669609, USD669614, USD663056
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## The Patent Corporation Treaty

<b>World Intellectual Property Organization</b>	WO2015200268
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## Trademarks

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