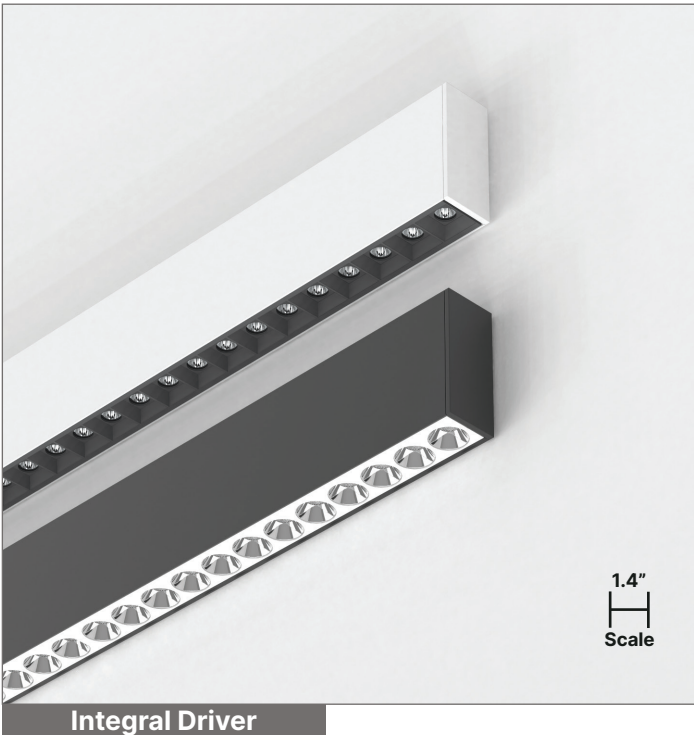


# MICROBeam MCO Wall

## 1.4" Low-Profile Linear LED Wall Mount



### Features & Benefits

#### Exceptional Performance

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

#### 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**



## FIXTURE ORDERING

Project Name

### 1) FIXTURE DESIGN

Fixture Type

PRODUCT	LENGTH	FIXTURE FINISH	END CAP	MICRO CAVITY OPTICS (MCO) FINISH
<b>MBE140MCO-W</b>				
1.4" Low-Profile	2 2'	<b>MWH</b> Matte White (RAL9003)	<b>E1</b> Flat End Cap	<b>OSQMCOWH</b> Square MCO, White
Linear LED	4 4'	<b>MBK</b> Matte Black (RAL9005)		<b>OSQMCOBK</b> Square MCO, Black
Wall Mount	6 6'	<b>MGR</b> Matte Gray (RAL7001)		<b>ORMCOWH</b> Round MCO, White
	8 8'	<b>CAE</b> Clear Anodized Effect		<b>ORMCOBK</b> Round MCO, Black
	10 10'	<b>RAL_</b> Specify RAL#		
	X_ Specify X; Y"			

### 2) LED LIGHT ENGINE

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

### 3) FIXTURE POWER & CONTROLS

LINE VOLTAGE (DC)	INTEGRAL DRIVER (POWER)	EMERGENCY BACKUP	CONTROL SYSTEM <sup>2</sup>
<b>UNV</b> 120/277V	<b>FDND</b> Factory Non-Dimming	<b>NN</b> Not Needed	<b>NN</b> Not Needed
<b>347</b> 347V	<b>FD01</b> Factory 0-10V 1% Dim	<b>EMC</b> Emergency Circuit	<b>LUT</b> Lutron
	<b>FD10</b> Factory 0-10V 10% Dim	<b>EMB</b> Emergency Battery (10 W — Onboard)	<b>COO</b> Cooper
	<b>FDDA</b> Factory DALI 0.1% Dim	<b>X_</b> Specify Backup	<b>CAS</b> Casambi
	<b>FDDX</b> Factory DMX Dim		<b>X_</b> Specify Control System
	<b>FDTR</b> Factory TRIAC Dim		
	<b>LD01</b> Lutron Hi-Lume 1% Dim		
	<b>LD05</b> Lutron 5-Series 5% Dim		
	<b>ED00</b> eldoLED 0-10V 0.1% Dim		
	<b>ED01</b> eldoLED 0-10V 1% Dim		
	<b>EDDA</b> eldoLED DALI 0.1% Dim		
	<b>X_</b> Specify Driver		

### 4) FIXTURE MOUNTING & CONNECTIONS

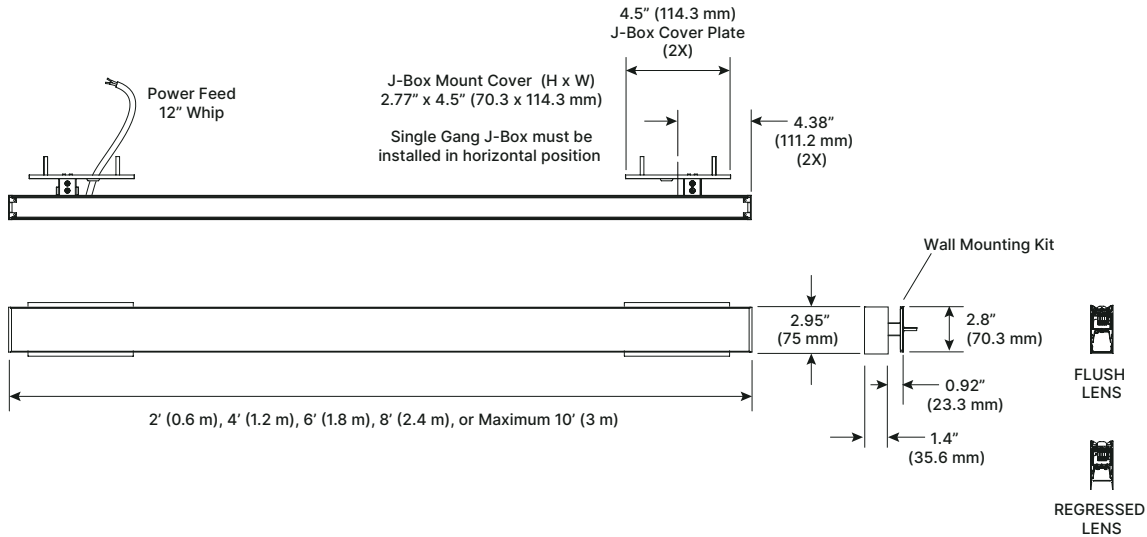
MOUNTING TYPE	MOUNTING KIT
<b>WM</b> Wall Mount	<b>WM2WH</b> 2.8" White Stainless Steel Wall Mounting Plate
	<b>WM2BK</b> 2.8" Black Stainless Steel Wall Mounting Plate

### NOTES

Footnotes: <sup>1</sup> Continuous Regressed Lens ships on a roll for seamless lens installation. <sup>2</sup> The control system and driver must be compatible.

## 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)

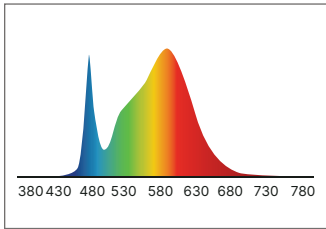
### Voltage

#### Fixture Voltage (AC)

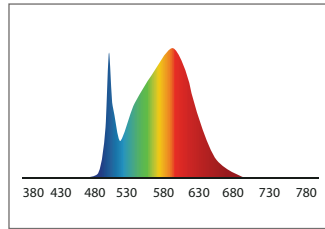
120–277 VAC and 347 VAC, 50/60 Hz

## LED SELECTION GUIDE

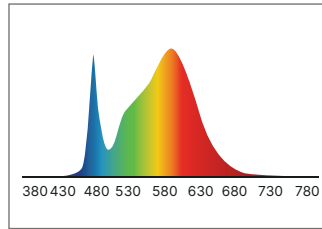
**S80: Standard 80+ CRI**



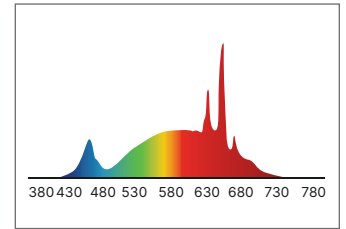
**S90: Standard 90+ CRI**



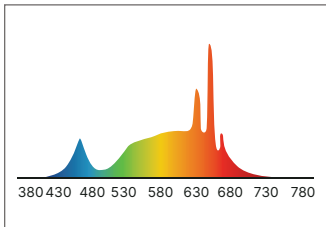
**HE80: High-Efficiency 80+ CRI**



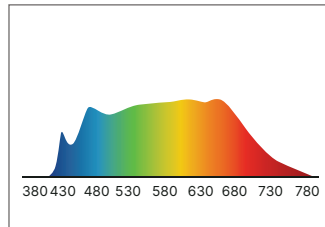
**HE90: High-Efficiency 90+ CRI**



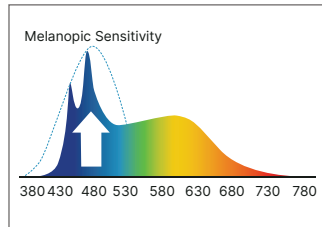
**HD95: High-Definition 95+ CRI**



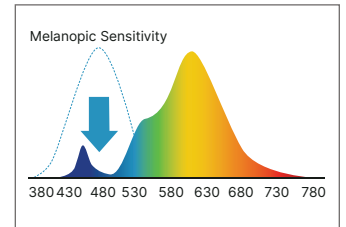
**SUN: Full Spectrum "SunLike"**



**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

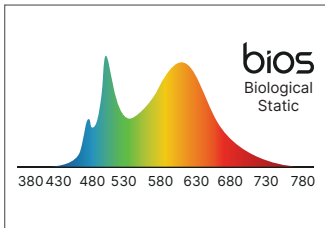
BIOS is offered in four Circadian LED Solutions with BIOS SkyBlue Technology — Biological Static, Biological Dynamic, Biological Tunable, and Biological Dim-to-Warm. BIOS SkyBlue™ Technology includes a blue peak at 490nm that provides an effective daytime circadian signal using standard architectural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



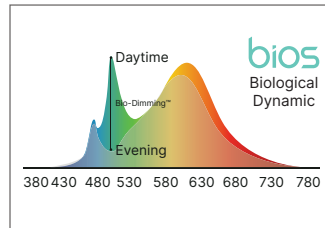
To learn more about BIOS Technology, please click or scan the QR Code.



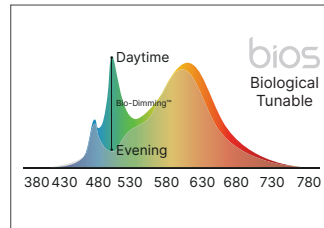
**BIOS Static**



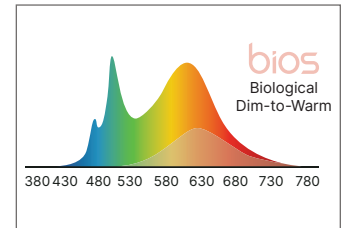
**BIOS Dynamic**



**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 (Onboard), 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

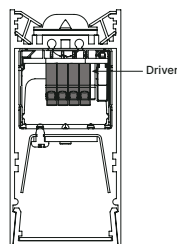
**Other** Factory Non-Dimming, Factory 0–10V 1% Dim, Factory 0–10V 10% Dim, Factory DALI 0.1% Dim, Factory DMX Dim, Factory TRIAC Dim, eldoLED 0–10V 0.1% Dim, eldoLED 0–10V 1% Dim, eldoLED DALI 0.1% Dim, and other drivers are available, consult factory (not all integral)

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

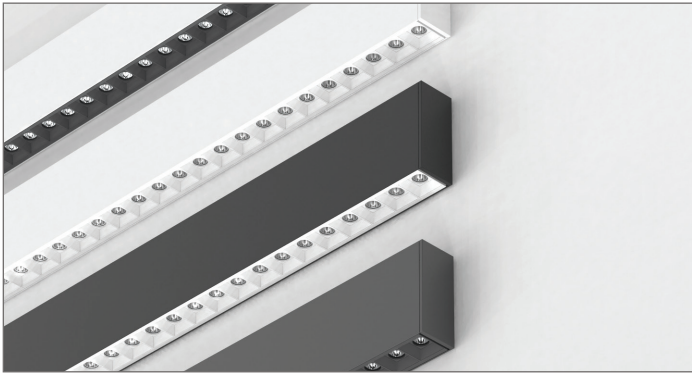
**Cooper** Compatible driver

**Casambi (wireless)** Compatible driver

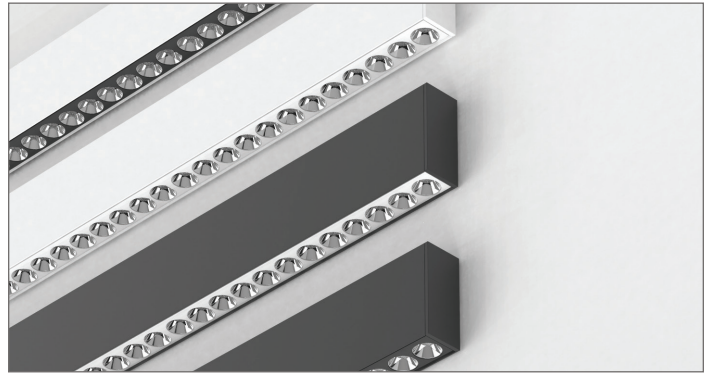
### Integral Drivers



Drivers are integral to the fixture and are included. They provide 0–10V, DALI, DMX, and TRIAC dimming. Also compatible with Cooper and other common building control systems, including PoE and wireless.



Square MCOs



Round MCOs

## FIXTURE MOUNTING & CONNECTIONS

### Mounting Type

**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.

### Mounting Kit

**Wall Mounting Kit**

2.8" Stainless Steel Wall Mounting Plate, White and Black

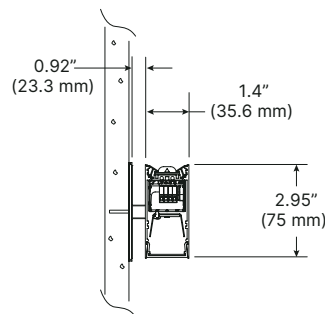
### Power Feed

**Power Whip**

12"

### Mounting Options

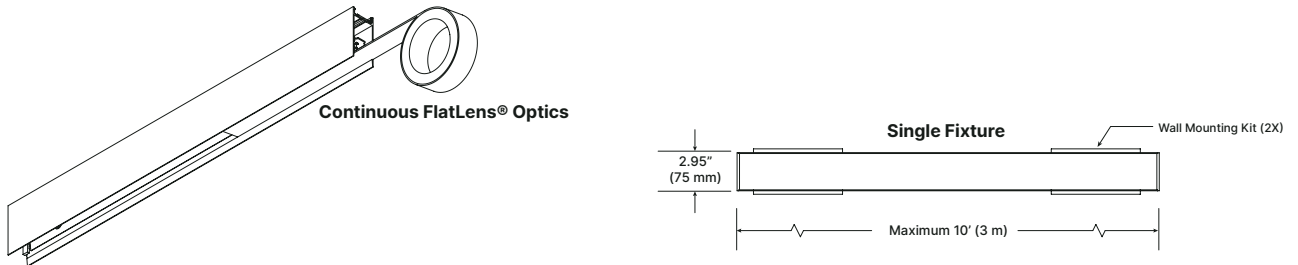
**WM - Wall Mount**



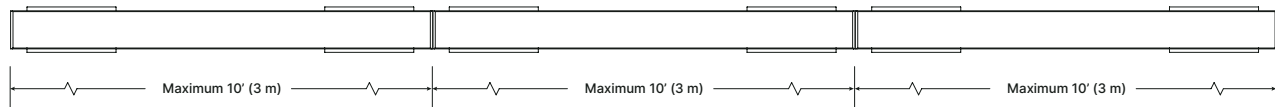
## Standard Lengths & Continuous Runs

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.

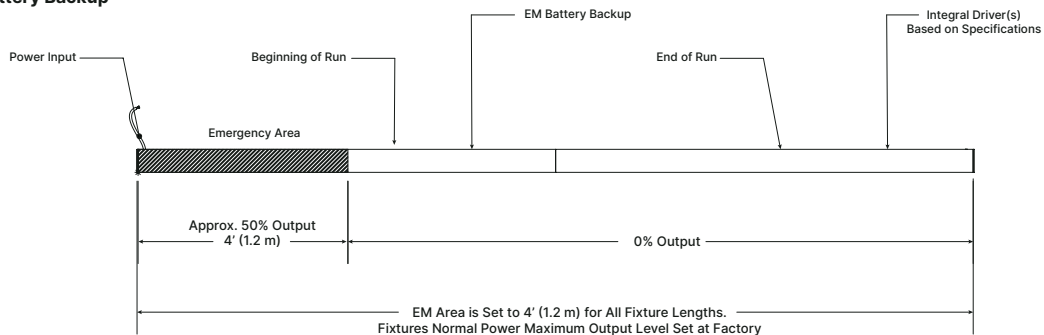
Lens can be supplied in a maximum 250' roll length with Continuous FlatLens Optics to be installed on-site for a seamless light surface.



### Standard Continuous Run



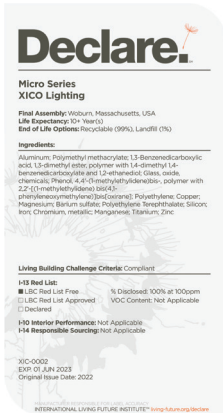
### Emergency Battery Backup



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

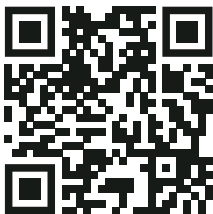
All XICO products and associated optics and LED engines are assembled at our factory in Woburn, MA

### Quality Assurance

Each product is engineered reliability and quality assurance tested

## Warranty & Terms

### 5-YR Warranty



### Business Terms



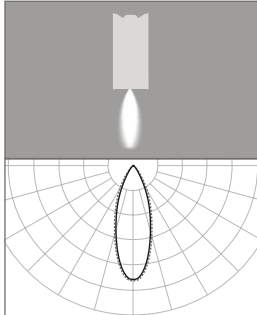
For details on our warranty and business terms, please click or scan the QR Code.

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

## DIRECT PHOTOMETRICS

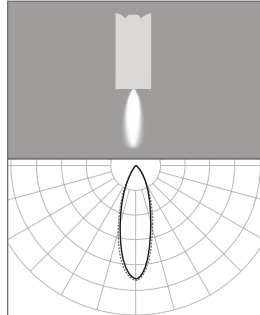
Static White Light

**DMCO45:** Micro Cavity Optic 45°



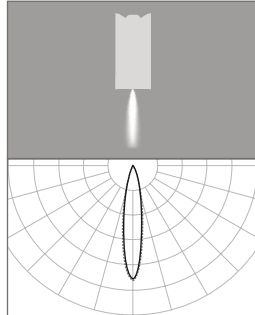
**Length** 48"  
**LED** HE80  
**CRI/CCT** 80+/3500K  
**Lumens** 3,000  
**lm/ft** 749  
**Watts** 37  
**W/ft** 9  
**LPW** 82

**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°

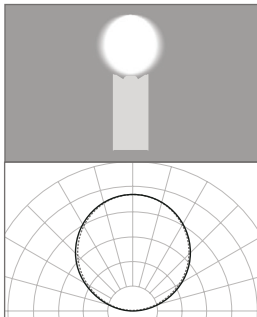


**Length** 48"  
**LED** HE80  
**CRI/CCT** 80+/3500K  
**Lumens** 3,000  
**lm/ft** 749  
**Watts** 37  
**W/ft** 9  
**LPW** 82

## INDIRECT PHOTOMETRICS

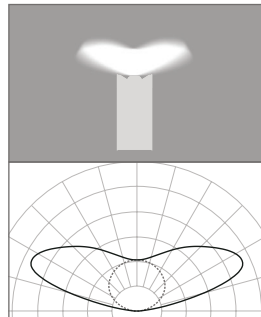
Static White Light

**ILAM:** Lambertian



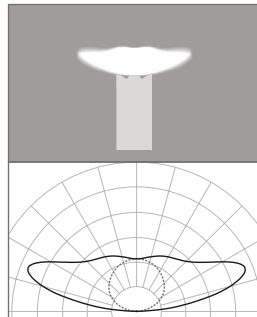
**Length** 48"  
**LED** HE80  
**CRI/CCT** 80+/3500K  
**Lumens** 4,000  
**lm/ft** 1,000  
**Watts** 28  
**W/ft** 7  
**LPW** 150

**IBW120:** Batwing 120°



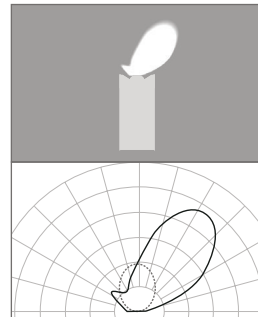
**Length** 48"  
**LED** HE80  
**CRI/CCT** 80+/3500K  
**Lumens** 4,000  
**lm/ft** 1,009  
**Watts** 26  
**W/ft** 6.4  
**LPW** 158

**IFT150:** FlatTop 150°



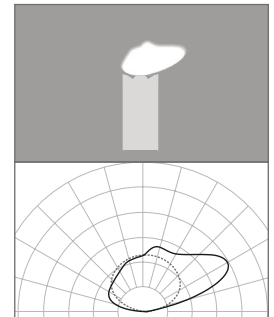
**Length** 48"  
**LED** HE80  
**CRI/CCT** 80+/3500K  
**Lumens** 4,000  
**lm/ft** 1,000  
**Watts** 28  
**W/ft** 7  
**LPW** 150

**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 & TRADEMARKS



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### Utility Patents

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### Design Patents

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### The Patent Corporation Treaty

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