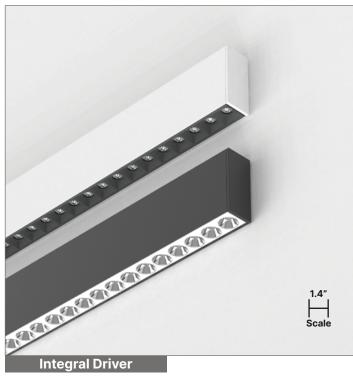
# MICROBeam MCO Wall



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** 





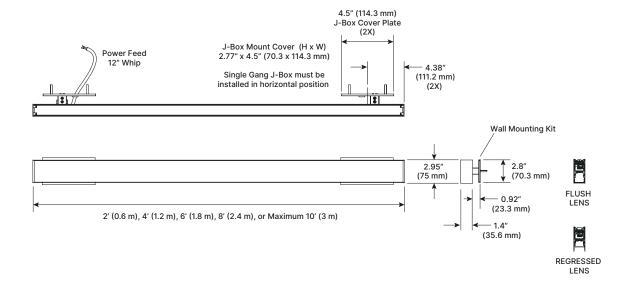


#### FIXTURE ORDERING **Project Name Fixture Type** 1) FIXTURE DESIGN **PRODUCT** LENGTH **FIXTURE FINISH END CAP** MICRO CAVITY OPTICS (MCO) FINISH MBE140MCO-W 1.4" Low-Profile 2 2' **MWH** Matte White (RAL9003) Flat End Cap OSOMCOWH Square MCO, White Linear LED 4 4' MBK Matte Black (RAL9005) OSQMCOBK Square MCO, Black Wall Mount 6 6' MGR Matte Gray (RAL7001) ORMCOWH Round MCO, White 8 8' CAE Clear Anodized Effect **ORMCOBK** Round MCO, Black 10 10' RAL Specify RAL# Specify X', Y" 2) LED LIGHT ENGINE CRI CCT **DIRECT BEAM PATTERN** DIRECT OUTPUT INDIRECT BEAM PATTERN INDIRECT OUTPUT 350 lm/ft S80 Std. 80 CRI 22 2200K DMCO45 Micro Cavity Optics 45° 35 NN Not Needed NN Not Needed Std. 90 CRI 2700K DMCO35 Micro Cavity Optics 35° ILAM 35 S90 27 50 500 lm/ft Lambertian 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 3500K Specify Beam 100 1,000 lm/ft IFT150 FlatTop 150° 75 750 lm/ft 35 HD95 High-Def. 95 CRI 40 4000K X\_ Specify Im/ft IA6040 Asymmetric 100 1,000 lm/ft 60° at 40° Tilt SUN Full SunLike 50 5000K Specify Im/ft $X_{-}$ 3022D 3000K to SRIOS Static BIOS 144560 Asymmetric 45° at 60° Tilt **DBIOS** Dynamic BIOS 2200K **TBIOS Tunable White** Dim-to-Warm X\_ Specify Beam **BIOS** 3527D 3500K to 2700K Dim-to-Warm X\_ Specify CCT 3) FIXTURE POWER & CONTROLS LINE VOLTAGE (DC) INTEGRAL DRIVER (POWER) **EMERGENCY BACKUP** CONTROL SYSTEM<sup>2</sup> UNV 120/277V **FDND** Factory Non-Dimming NN Not Needed NN Not Needed Factory 0-10V 1% Dim **Emergency Circuit** 347V FD01 **EMC** LUT Lutron 347 FD10 Factory 0-10V 10% Dim **FMB Emergency Battery** COO Cooper **FDDA** Factory DALI 0.1% Dim (10 W — Onboard) CAS Casambi **FDDX** Factory DMX Dim X\_ Specify Backup X\_ Specify Control System **FDTR** Factory TRIAC Dim LD01 Lutron Hi-Lume 1% Dim LD05 Lutron 5-Series 5% Dim eldoLED 0-10V 0.1% Dim FDOO ED01 eldoLED 0-10V 1% Dim **EDDA** eldoLED DALI 0.1% Dim Specify Driver $X_{-}$ 4) FIXTURE MOUNTING & CONNECTIONS MOUNTING TYPE MOUNTING KIT WM2WH WM Wall Mount 2.8" White Stainless Steel Wall Mounting Plate WM2BK 2.8" Black Stainless Steel Wall Mounting Plate **NOTES**

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

### **FIXTURE DESIGN**

### **Dimensions**





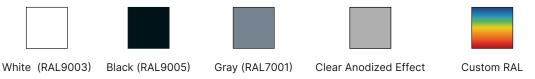
To download BIM (Revit) Files, please click or scan the QR Code.

Length

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

**Finish** 

#### **Housing Colors (Matte Finish)**



**Housing Material** 6063-T5 extruded, recycled aluminum

**Mounting Brackets** Sheet metal

**End Cap** 

Flat **End Cap Option** 

**End Cap Material** Machined or cast aluminum

Optic

**Lens Options** Square and Round Micro Cavity Optics

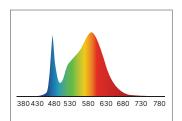
**Lens Material** Patented SmartOptics® made from Acrylic (PMMA)

Voltage

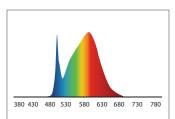
**Fixture Voltage (AC)** 120-277 VAC and 347 VAC, 50/60 Hz

### **LED SELECTION GUIDE**

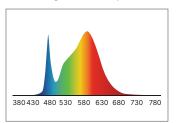
S80: Standard 80+ CRI



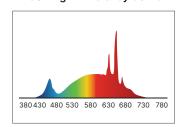
S90: Standard 90+ CRI



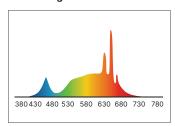
HE80: High-Efficiency 80+ CRI



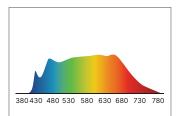
HE90: High-Efficiency 90+ CRI



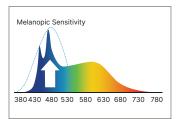
HD95: High-Definition 95+ CRI



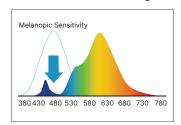
SUN: Full Spectrum "SunLike"



**HCD:** Human Centric Day



**HCN:** Human Centric Night



**Static White Light (LED Light Engine Only)** 

		TYPICAL LED DATA							
CODE	DESCRIPTION	ССТ	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**

LF W Lineacy Conversion Chart								
CCT SELECTED								
CODE	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**

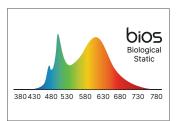


To learn more about BIOS Technology, please click or scan the QR Code.

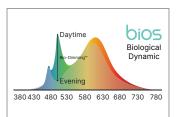


BIOS is offered in four Circadian LED Solutions with BIOS SkyBlue Technology — Biological Static, Biological Dynamic, Biological Tunable, and Biological Dim-to-Warm. BIOS SkyBlue™ Technology includes a blue peak at 490nm that provides an effective daytime circadian signal using standard architectural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

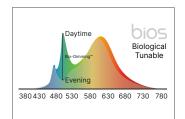
#### **BIOS Static**



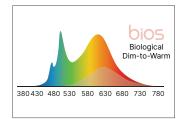
### **BIOS Dynamic**



#### **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	сст	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		0-10V Intensity	500K Shift	Yes	Intensity Dimming & Spectrum Change Controlled Together	Removed with BIO-Dimming	
DBIOS-2	BIOS Dynamic (Two Channel)	BIODIM1	Dimming to 1% Dim-to-Dark		No	Intensity Dimming & Spectrum Change Controlled Separately	Removed by Adjusting "Spectrum Channel"	
TBIOS	BIOS Tunable		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)	ATW / DTW			No	Intensity Dimming & Spectrum Change Controlled Separately	Removed by Adjusting "Spectrum Channel"	
DWBIOS	BIOS Dim-to-Warm					Yes	Intensity Dimming & Spectrum Change Controlled Together	Removed with BIO-Dimming
DWBIOS-2	BIOS Dim-to-Warm (Two Channel)	_	-	Dims to 2200K	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** 

**Integral Drivers** 

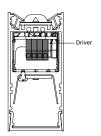
Other

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,

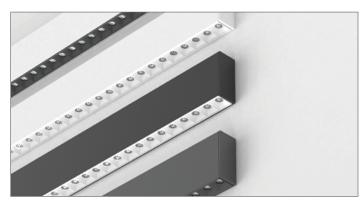
and other drivers are available, consult factory (not all integral)

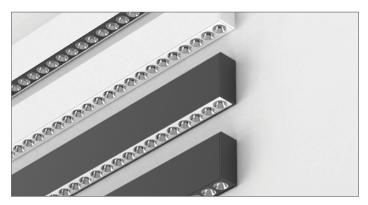
Hi-Lume 1% Dimming and 5-Series 5% Dimming Lutron

Cooper Compatible driver Casambi (wireless) Compatible driver



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** 

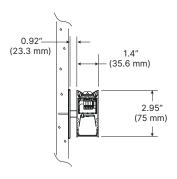
Wall Mounting Kit 2.8" Stainless Steel Wall Mounting Plate, White and Black

**Power Feed** 

Power Whip 12"

**Mounting Options** 

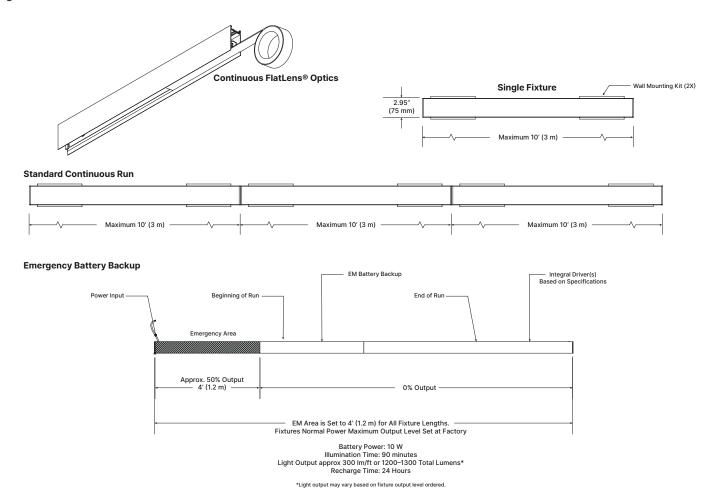
#### WM - Wall Mount



### **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.



### 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 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







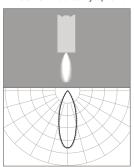
For details on our warranty and business terms, please click or scan the QR Code.

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

### **DIRECT PHOTOMETRICS**

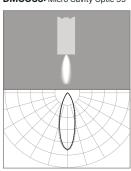
### **Static White Light**

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°



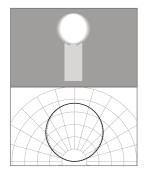
Length	48"
LED	HE80
CRI/CCT	80+/3500
Lumens	3,000
lm/ft	749
Watts	37
W/ft	9
LPW	82

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

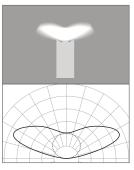
### **INDIRECT PHOTOMETRICS**

ILAM: Lambertian



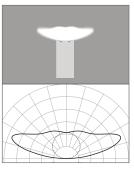
Length	48"
LED	HE80
CRI/CCT	80+/3500K
Lumens	4,000
lm/ft	1,000
Watts	28
W/ft	7
LPW	150

IBW120: Batwing 120°



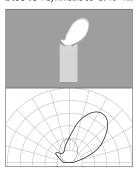
Length	48"
LED	HE80
CRI/CCT	80+/3500K
Lumens	4,000
lm/ft	1,009
Watts	26
W/ft	6.4
LPW	158

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

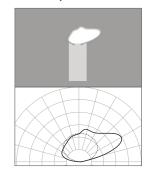
IA6040: Asymmetric 60° at 40° Tilt



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

**Static White Light** 

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**



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

**The Patent Corporation Treaty** 

World Intellectual Property Organization WO2015200268

**Trademarks** 

**United States** US6672871, US6397231, US6373493, US6257728, US6190558, US6190559, US6142905, US6114408,

US6038234, US6025279, US6060740, US6257729, US5856164, US5734112, US5543304, US5309290,

US5309315, US4691124, US4640751

