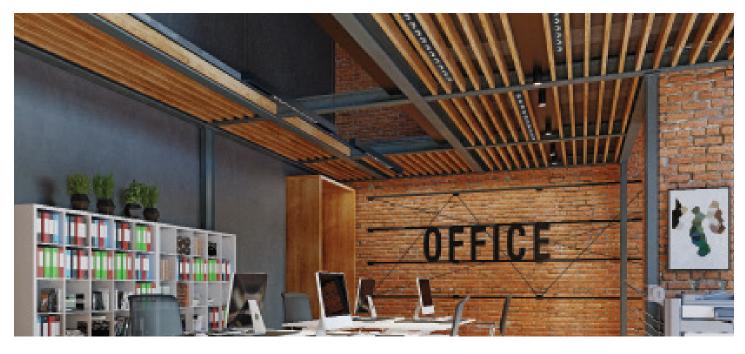
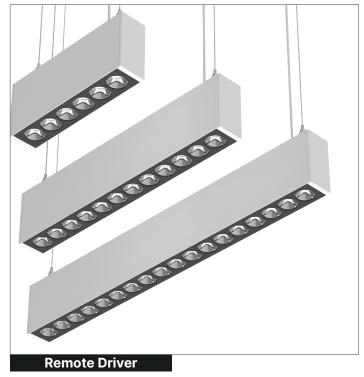
# MICRODash MCO Pendant



Micro-Aperture Downlight with Controlled Lighting





## **Features & Benefits**

Exceptional Performance
Low Glare (UGR<16), Up to 1,000 lm/ft, 110 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 MODEL		FIXTURE FINISH	MCO FINISH
MDA-MCO-P			
Linear LED MCO Downlight Pendant	6C 6 Cell 12C 12 Cell 18C 18 Cell	MWH Matte White (RAL9003) MBK Matte Black (RAL9005) MGR Matte Gray (RAL7001) CAE Clear Anodized Effect RAL_ Specify RAL#	BMC Black MCO WMC White MCO

## 2) LED LIGHT ENGINE

CRI	ССТ		BEAM PAT	ΓERN	LUM	LUMEN OUTPUT	
S80 S90	Std. 80 CRI Std. 90 CRI	22 27	2200K 2700K	DMCO45 DMCO35	Micro Cavity Optics 45° Micro Cavity Optics 35°	35 50	350 lm/ft 500 lm/ft
HE80 HE90	High-Eff. 80 CRI High-Eff. 90 CRI	30 35	3000K 3500K	DMCO25 X_	Micro Cavity Optics 35° Specify Beam	75 100	750 lm/ft 1,000 lm/ft
HD95	High-Def. 95 CRI	40	4000K	^_	эреспу веапі	X_	Specify Im/ft
SUN SBIOS DBIOS TBIOS	Full SunLike Static BIOS Dynamic BIOS Tunable White BIOS	50 3022D 3527D X_	5000K 3000K to 2200K Dim-to-Warm 3500K to 2700K Dim-to-Warm Specify CCT				

## 3) FIXTURE POWER & CONTROLS

LINE VOLTAGE (DC) REMOTE DRIVER (POWER)		REMOT	REMOTE DRIVER BOX <sup>11</sup>		CONTROL SYSTEM <sup>3</sup>		
UNV	120/277V	FDND	Factory Non-Dimming	NN	Not Needed	NN	Not Needed
347	347V	FD01	Factory 0-10V 1% Dim	$RLDB^2$	Remote Linear Driver Box (driver included by default)	LUT	Lutron
		FD10	Factory 0-10V 10% Dim	RX2D <sup>2</sup>	Optional Remote XBox2 Driver, Up to 2 Drivers	COO	Cooper
		FDDA	Factory DALI 0.1% Dim	RX3D <sup>2</sup>	Optional Remote XBox3 Driver, Up to 3 Drivers	CAS	Casambi
		FDDX	Factory DMX Dim	RX5D <sup>2</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		POWER CORD		MOUNTING KIT			
DJ	Drywall/J-Box Mount	S24WH	24" White Cable Kit		SWSMB	Stainless Steel Wood Surface Mounting Bracket	
T1	9/16" Flat T-Bar Mount	S24BK	24" Black Cable Kit				

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.

<sup>3</sup> The control system and driver must be compatible.

15/16" Flat T-Bar Mount

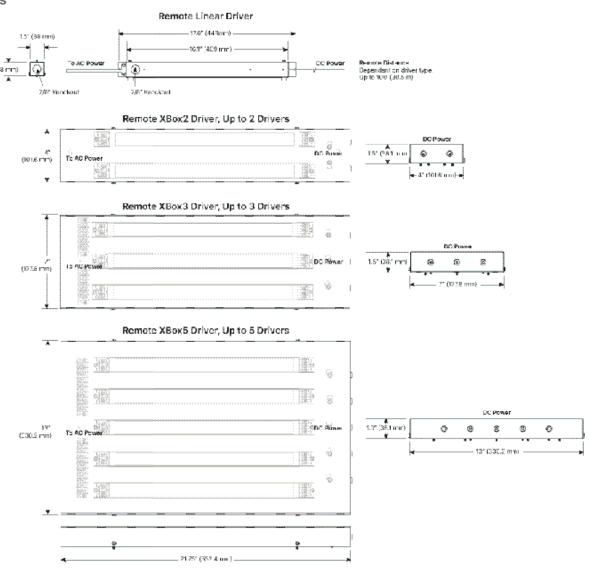
Т3

N	U.	TI	F	C

<b>Project Name</b>	
Fixture Type	

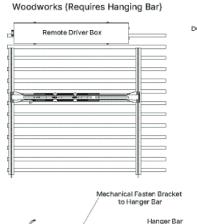
## **REMOTE DRIVER BOX**

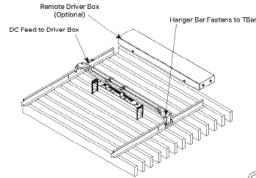
#### **Dimensions**



## **DESIGN**

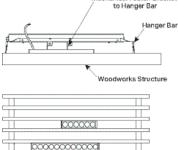
#### **Dimensions**



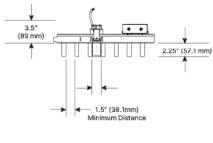




evit) Files, ase click or the QR Code.



Required Mirnimum Gap of 1.5" (38.1 mm)



6-Cell 12-Cell 12-Cell 13.5° (343 mm)

#### Length

**Length Options** 

6.75" and 13.5"

#### 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

Optic

**Lens Option** 

Micro Cavity Optics

**Lens Material** 

Patented SmartOptics® made from Acrylic (PMMA)

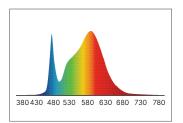
Voltage

Fixture Voltage (AC)

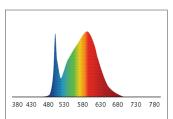
120-277 VAC and 347 VAC, 50/60 Hz

## **LED SELECTION GUIDE**

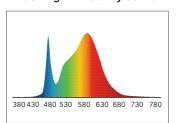
S80: Standard 80+ CRI



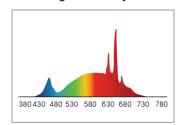
S90: Standard 90+ CRI



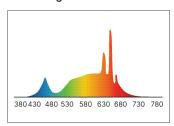
HE80: High-Efficiency 80+ CRI



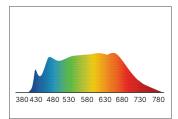
HE90: High-Efficiency 90+ CRI



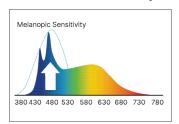
HD95: High-Definition 95+ CRI



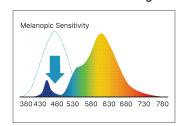
SUN: Full Spectrum "SunLike"



**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**

	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**

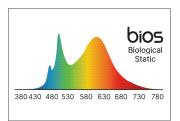


To learn more about BIOS Technology, please click or scan the QR Code.

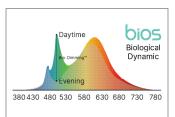


BIOS is offered in four Circadian LED Solutions with BIOS SkyBlue Technology — Biological Static, Biological Dynamic, Biological Tunable, and Biological Dim-to-Warm. BIOS SkyBlue™ Technology includes a blue peak at 490nm that provides an effective daytime circadian signal using standard architectural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

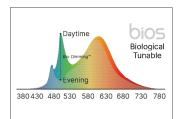
#### **BIOS Static**



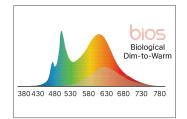
#### **BIOS Dynamic**



#### **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 MOD	ULE TECHNOI	LOGY 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		Yes	Intensity Dimming & Spectrum Change Controlled Together	Removed with BIO-Dimming				
TBIOS-2	BIOS Tunable (Two Channel)	ATW / DTW	2 Channels / DALI Control of Intensity & CCT on Separate 2 Channels	Dims to 2700K	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**

**Input Voltage** 

**LED Driver** Factory Selected, 36-39V Constant Current

**Partners** 









**Control Systems** Remote Drivers (Sold Separately)

Factory Non-Dimming, Factory 0-10V 1% Dim, Factory 0-10V 10% Dim, Factory DALI 0.1% Dim, Factory Other

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.



**Micro Cavity Optics** 

#### **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 wood surface via a junction box. 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

**Mounting Kit** 

Wood Surface Mounting Bracket Stainless Steel

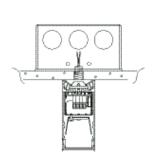
**Mounting Options** 

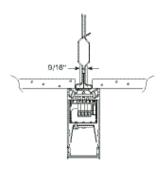
DJ - Drywall/J-Box Mount

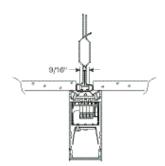
T1 - 9/16" Flat T-Bar Mount

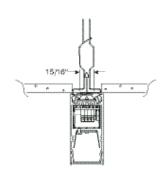
T2 - 9/16" Bolt Slot T-Bar Mount

T3 - 15/16" Flat T-Bar Mount









#### **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







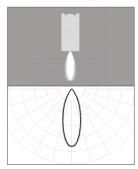
For details on our warranty and business terms, please click or scan the QR Code.

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

## **DIRECT PHOTOMETRICS**

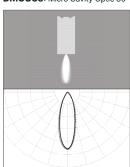
**Static White Light** 

DMCO45: Micro Cavity Optic 45°



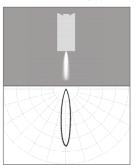
Length	48"
LED	HE80
CRI/CCT	80+/3500K
Lumens	3,000
lm/ft	749
Watts	37
W/ft	9
LPW	82

DMCO35: Micro Cavity Optic 35°



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

#### **PATENTS & TRADEMARKS**



To learn more about our unique technologies, please click or scan the QR Code.

## **Utility Patents**

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

