

MICROSquare 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
MSQ140MCO-W				
1.4" Low-Profile	2 2'	MWH Matte White (RAL9003)	E1 Flat End Cap	ORMCOWH Round MCO, White
Linear LED	4 4'	MBK Matte Black (RAL9005)		ORMCOBK Round MCO, Black
Wall Mount	6 6'	MGR Matte Gray (RAL7001)		
	8 8'	CAE Clear Anodized Effect		
	10 10'	RAL_ Specify RAL#		
	X_ Specify X', Y"			

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				
	X_ Specify CCT				

3) FIXTURE POWER & CONTROLS

LINE VOLTAGE (DC)	REMOTE DRIVER (POWER)	EMERGENCY BACKUP	REMOTE DRIVER BOX ²	CONTROL SYSTEM ⁴
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	RLDB³ Remote Linear Driver Box (driver included by default)	LUT Lutron
	FD10 Factory 0-10V 10% Dim	EMB Emergency Battery (10 W — Remote)	RX2D³ Optional Remote XBox2 Driver, Up to 2 Drivers	COO Cooper
	FDDA Factory DALI 0.1% Dim	X_ Specify Backup	RX3D³ Optional Remote XBox3 Driver, Up to 3 Drivers	CAS Casambi
	FDDX Factory DMX Dim		RX5D³ 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	MOUNTING KIT
WM Wall Mount	WM2WH 2.8" White Stainless Steel Wall Mounting Plate WM2BK 2.8" Black Stainless Steel Wall Mounting Plate

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

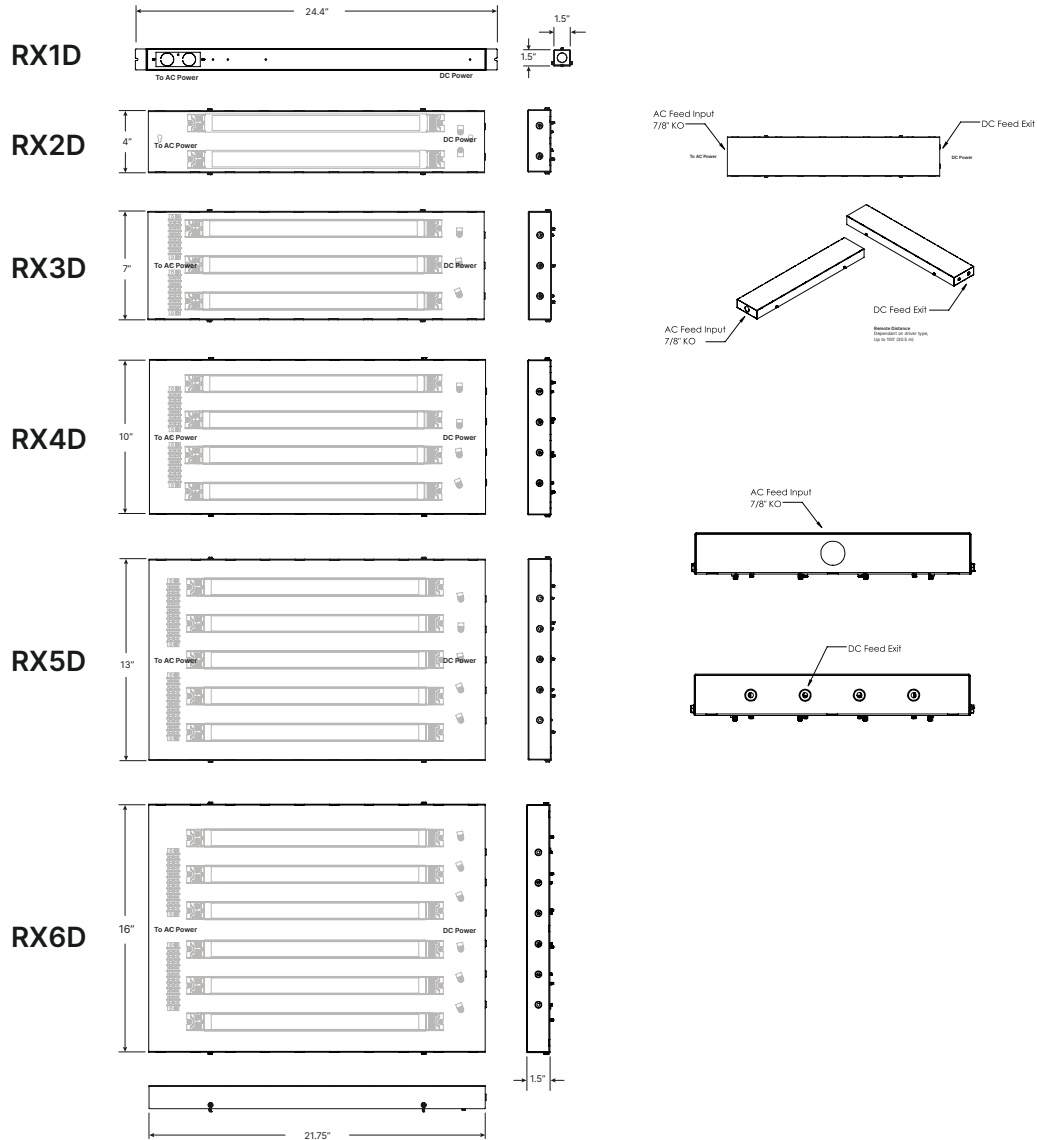
NOTES

Project Name

Fixture Type

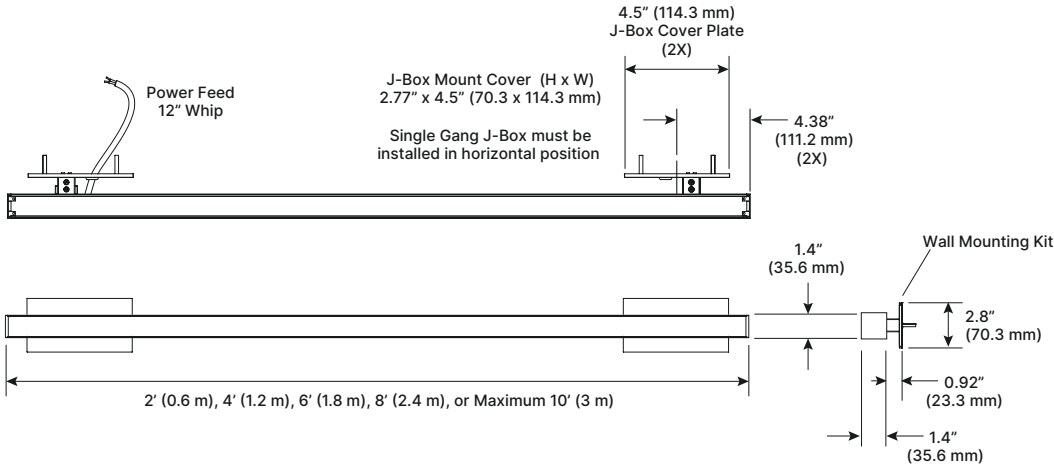
REMOTE DRIVER BOX

Dimensions

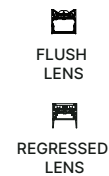


FIXTURE DESIGN

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

Round Micro Cavity Optics

Lens Material

Patented SmartOptics® made from Acrylic (PMMA)

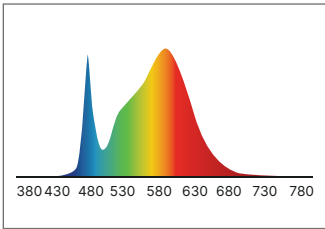
Voltage

Fixture Voltage (AC)

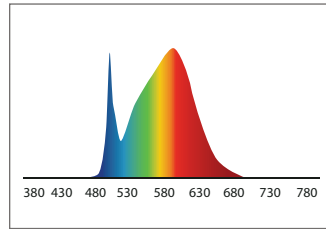
120–277 VAC and 347 VAC, 50/60 Hz

LED SELECTION GUIDE

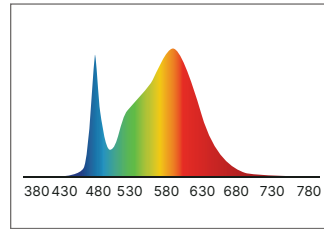
S80: Standard 80+ CRI



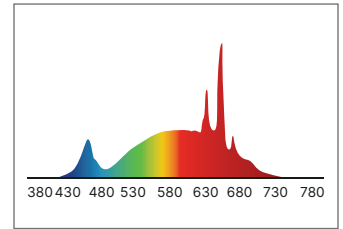
S90: Standard 90+ CRI



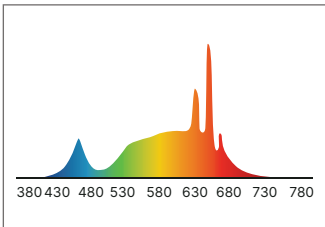
HE80: High-Efficiency 80+ CRI



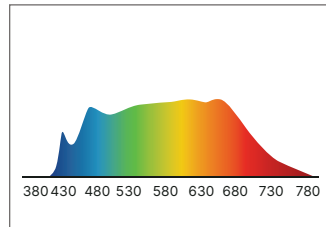
HE90: High-Efficiency 90+ CRI



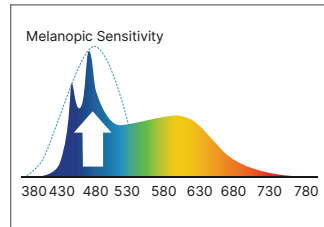
HD95: High-Definition 95+ CRI



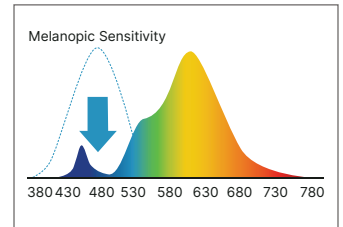
SUN: Full Spectrum "SunLike"



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

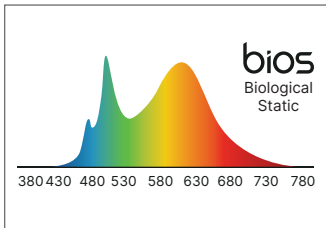
BIOS is offered in four Circadian LED Solutions with BIOS SkyBlue Technology — Biological Static, Biological Dynamic, Biological Tunable, and Biological Dim-to-Warm. BIOS SkyBlue™ Technology includes a blue peak at 490nm that provides an effective daytime circadian signal using standard architectural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



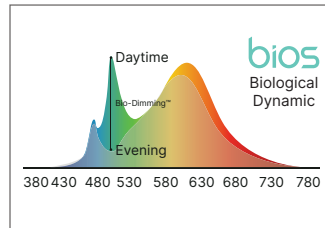
To learn more about BIOS Technology, please click or scan the QR Code.



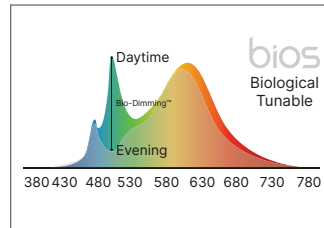
BIOS Static



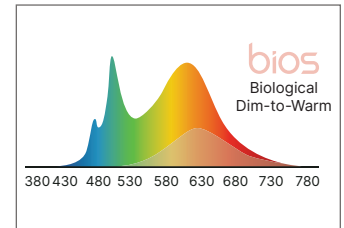
BIOS Dynamic



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 (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

Other Remote Drivers (Sold Separately)
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 your projects needs.



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

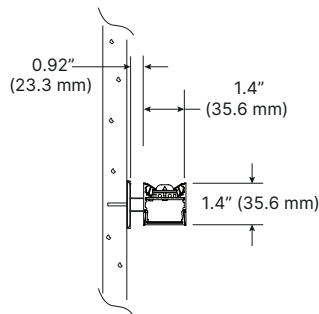
Power Feed

Power Whip

12"

Mounting Option

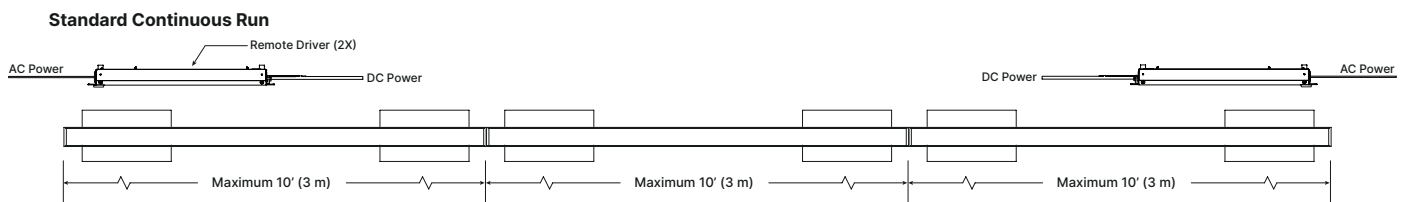
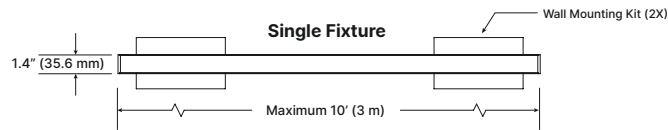
WM - Wall Mount



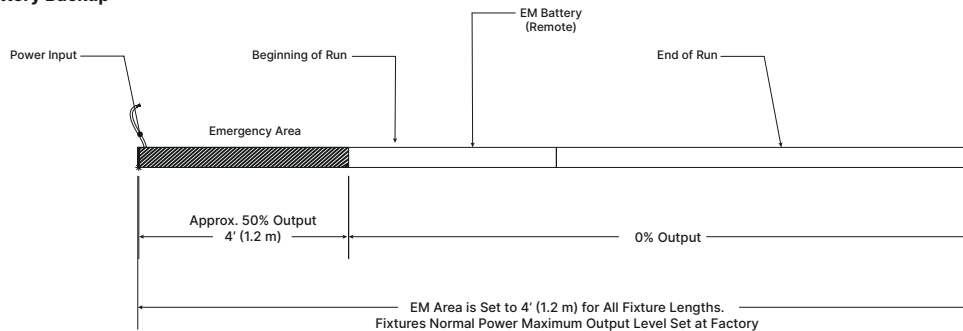
Standard Lengths & Continuous Runs

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.



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.

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

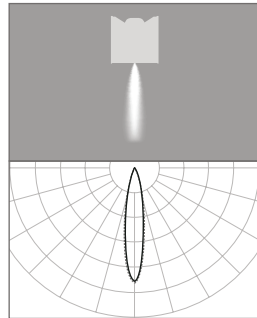
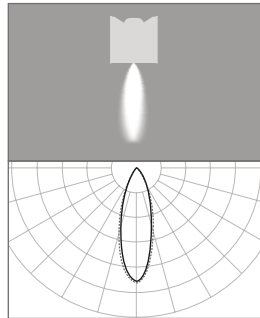
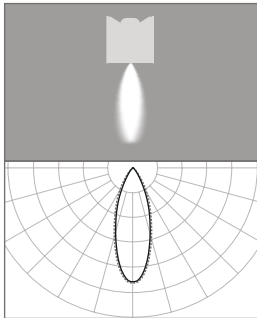
DIRECT PHOTOMETRICS (cont.)

Static White Light

DMCO45: Micro Cavity Optic 45°

DMCO35: Micro Cavity Optic 35°

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

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

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

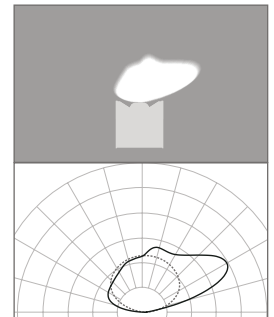
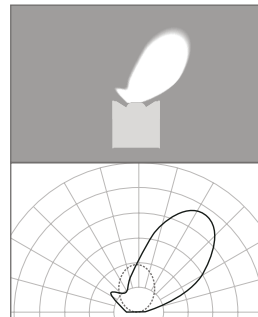
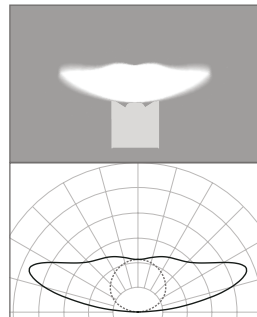
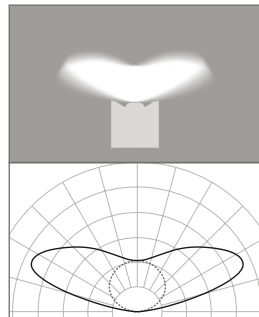
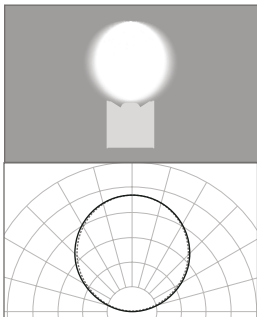
ILAM: Lambertian

IBW120: Batwing 120°

IFT150: FlatTop 150°

IA6040: Asymmetric 60° at 40° Tilt

IA4560: Asymmetric 45° at 60° Tilt



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

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

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

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

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
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The Patent Corporation Treaty

World Intellectual Property Organization	WO2015200268
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Trademarks

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