

MICRODash MCO Woodworks®

Micro-Aperture Downlight for Wood Ceiling Grids



Remote Driver

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

Declare



FIXTURE ORDERING

Project Name

1) FIXTURE DESIGN

Fixture Type

| PRODUCT | MODEL | FIXTURE FINISH | MCO FINISH |
|--|--|---|--|
| MDA-MCO | | | |
| Linear LED MCO Downlight Wood Surface Mount | 6C 6 CELL 12C 12 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 | CCT | BEAM PATTERN | LUMEN OUTPUT |
|---|---|---|--|
| S80 Std. 80 CRI S90 Std. 90 CRI HE80 High-Eff. 80 CRI HE90 High-Eff. 90 CRI HD95 High-Def. 95 CRI SUN Full SunLike SBIOS Static BIOS DBIOS Dynamic BIOS TBIOS Tunable White BIOS | 22 2200K 27 2700K 30 3000K 35 3500K 40 4000K 50 5000K 3022D 3000K to 2200K Dim-to-Warm 3527D 3500K to 2700K Dim-to-Warm X_ Specify CCT | DMCO45 Micro Cavity Optics 45° DMCO35 Micro Cavity Optics 35° DMCO25 Micro Cavity Optics 25° X_ Specify Beam | 35 350 lm/ft 50 500 lm/ft 75 750 lm/ft 100 1,000 lm/ft X_ Specify lm/ft |

3) FIXTURE POWER & CONTROLS

| LINE VOLTAGE (DC) | REMOTE DRIVER (POWER) | REMOTE DRIVER BOX ¹¹ | CONTROL SYSTEM ³ |
|--|---|--|--|
| UNV 120/277V 347 347V | FDND Factory Non-Dimming FD01 Factory 0-10V 1% Dim FD10 Factory 0-10V 10% Dim FDDA Factory DALI 0.1% Dim FDDX Factory DMX Dim 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 | NN Not Needed RLDB² Remote Linear Driver Box (driver included by default) RX2D² Optional Remote XBox2 Driver, Up to 2 Drivers RX3D² Optional Remote XBox3 Driver, Up to 3 Drivers RX5D² Optional Remote XBox5 Driver, Up to 5 Drivers | NN Not Needed LUT Lutron COO Cooper CAS Casambi X_ Specify Control System |

4) FIXTURE MOUNTING & CONNECTIONS

| MOUNTING TYPE | POWER CORD | MOUNTING KIT |
|---|--|--|
| 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 | S24WH 24" White Cable Kit S24BK 24" Black Cable Kit | SWSMB Stainless Steel Wood Surface Mounting Bracket |

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.³ The control system and driver must be compatible.

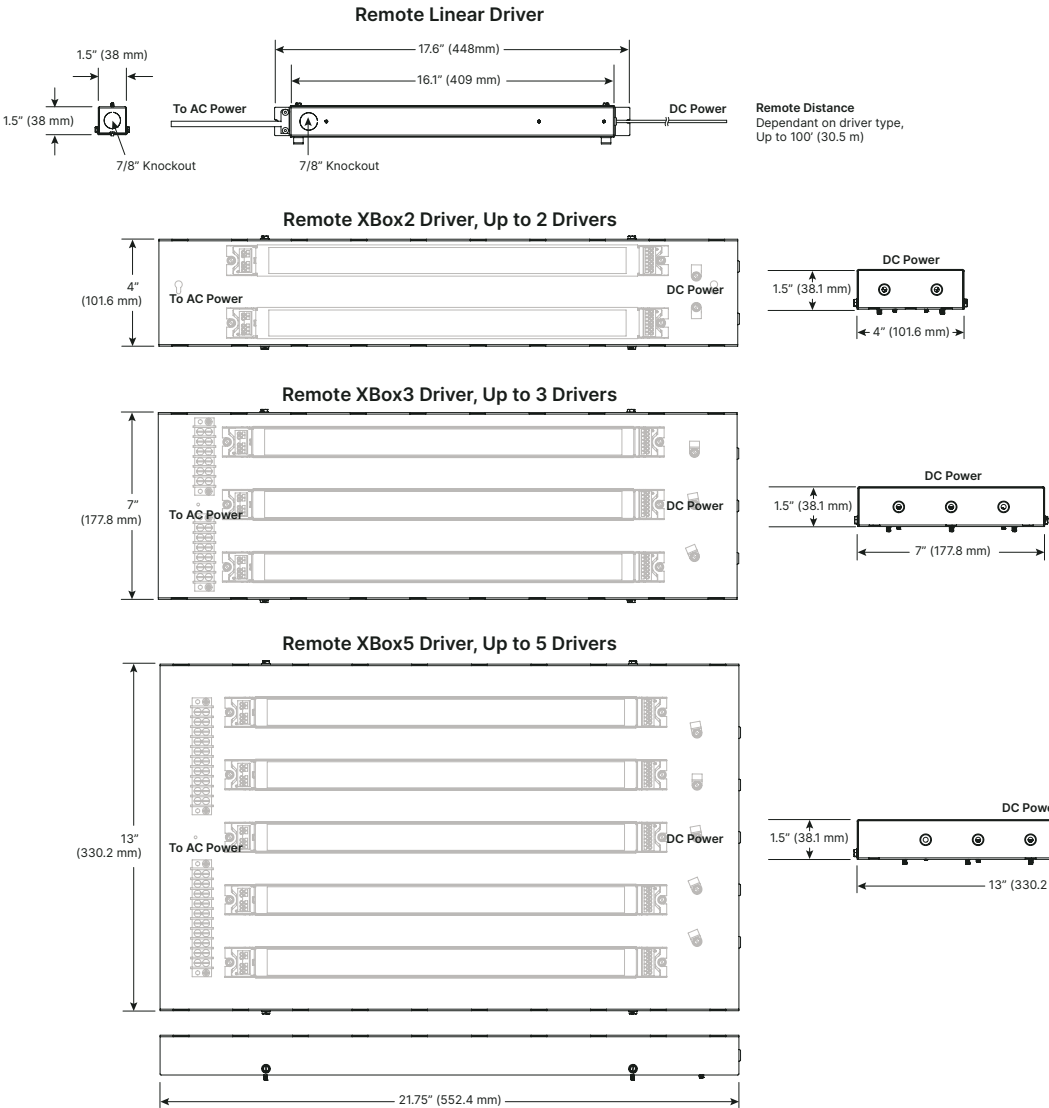
NOTES

Project Name

Fixture Type

REMOTE DRIVER BOX

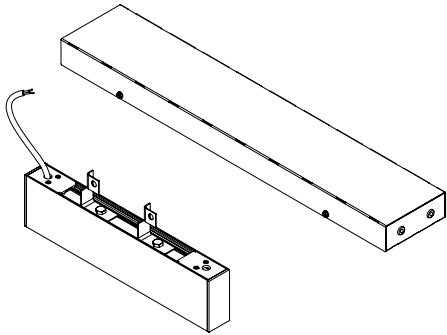
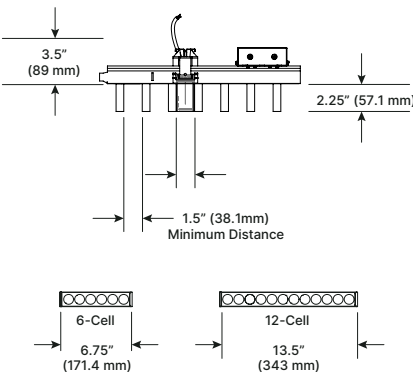
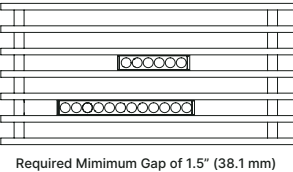
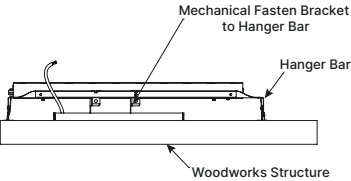
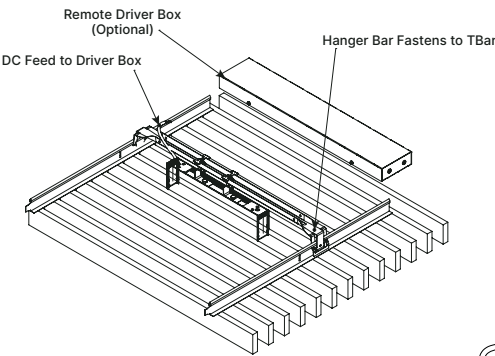
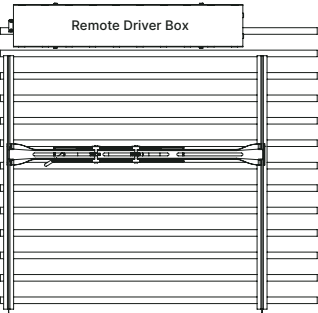
Dimensions



DESIGN

Dimensions

Woodworks (Requires Hanging Bar)



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

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)

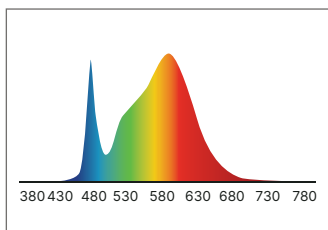
Voltage

Fixture Voltage (AC)

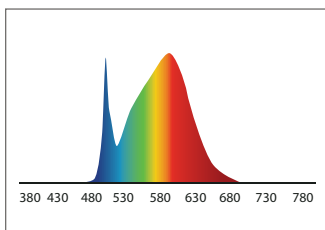
120–277 VAC and 347 VAC, 50/60 Hz

LED SELECTION GUIDE

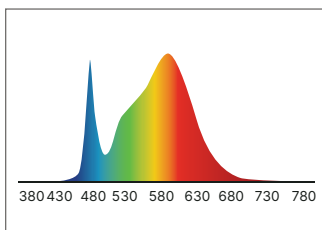
S80: Standard 80+ CRI



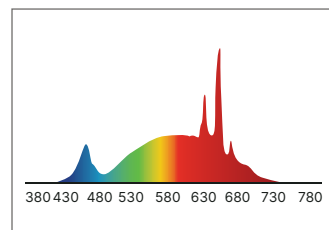
S90: Standard 90+ CRI



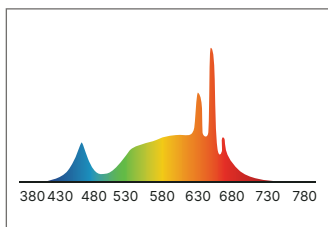
HE80: High-Efficiency 80+ CRI



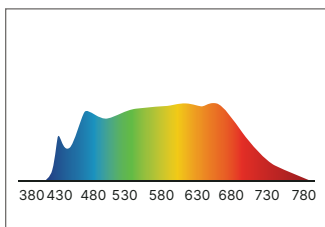
HE90: High-Efficiency 90+ CRI



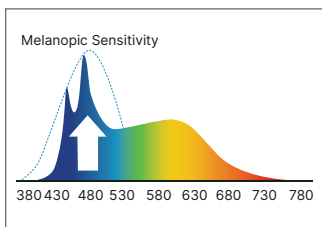
HD95: High-Definition 95+ CRI



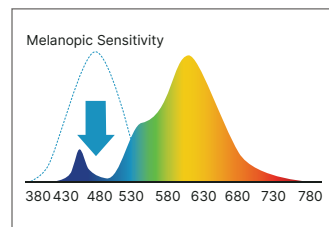
SUN: Full Spectrum "SunLike"



HCD: Human Centric Day



HCN: Human Centric Night



Static White Light (LED Light Engine Only)

| 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

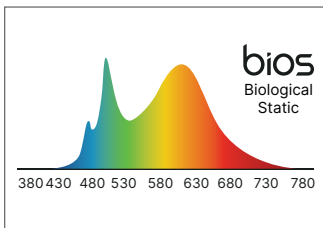
BIOS is offered in four Circadian LED Solutions with BIOS SkyBlue Technology — Biological Static, Biological Dynamic, Biological Tunable, and Biological Dim-to-Warm. BIOS SkyBlue™ Technology includes a blue peak at 490nm that provides an effective daytime circadian signal using standard architectural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

bios

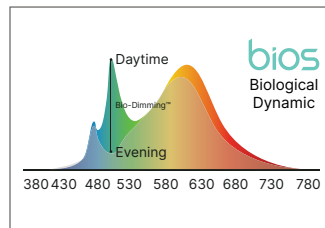
To learn more about BIOS Technology, please click or scan the QR Code.



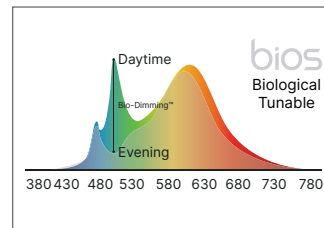
BIOS Static



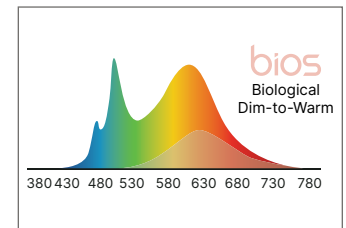
BIOS Dynamic



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

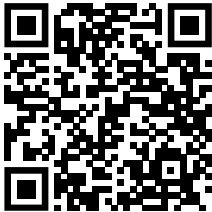
| CODE | DESCRIPTION | BIO-DIMMING MODULE TECHNOLOGY GUIDE | | | | | |
|----------|--------------------------------|-------------------------------------|--|---------------|-----------------------------|---|---|
| | | Driver | Driver Voltage | CCT | Requires BIO-Dimming Module | Lighting Control | BIOS 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

Input Voltage

LED Driver Factory Selected, 36–39V Constant Current

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 |

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

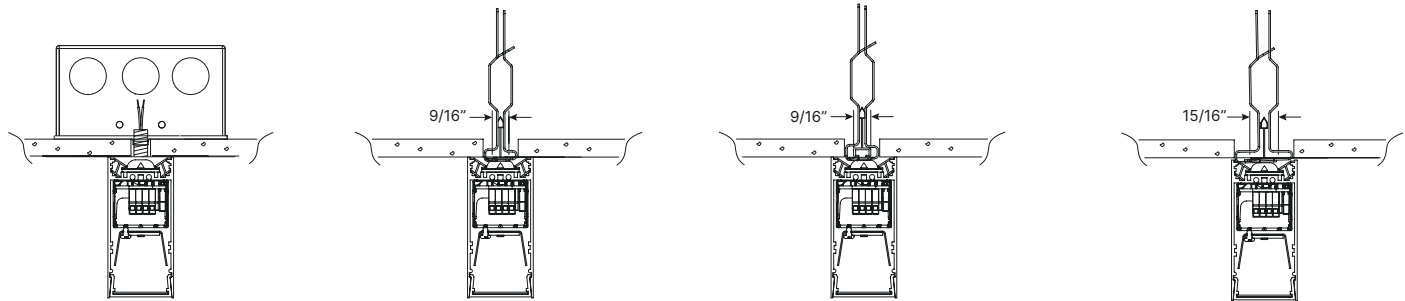
Mounting Kit

- 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

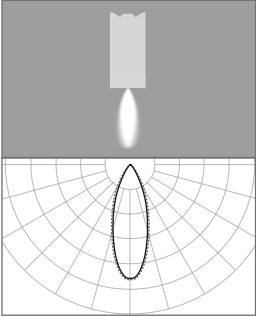


| OPTIC | | | |
|---------------------------|--------|--------|--------|
| | DMCO45 | DMCO35 | DMCO25 |
| Micro Cavity Optics (MCO) | ● | ● | ● |

DIRECT PHOTOMETRICS

Static White Light

DMCO45: Micro Cavity Optic 45°



Length48"

LEDHE80

CRI/CCT80+/3500K

Lumens3,000

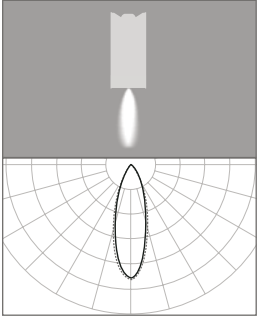
lm/ft749

Watts37

W/ft9

LPW82

DMCO35: Micro Cavity Optic 35°



Length48"

LEDHE80

CRI/CCT80+/3500K

Lumens3,000

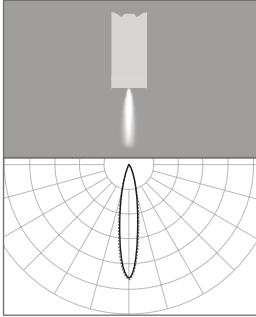
lm/ft749

Watts37

W/ft9

LPW82

DMCO25: Micro Cavity Optic 25°



Length48"

LEDHE80

CRI/CCT80+/3500K

Lumens3,000

lm/ft749

Watts37

W/ft9

LPW82

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 |
|----------------------|---|