



# 1" MODULAR DOWNLIGHTING SYSTEM

10W, 2700K-3000K OR SUNSET,  
UP TO 1000 LM, 120V



## FEATURES

- Integral 120V, Triac/ELV dimmable driver (dims to 1%) on module for easy maintenance and upgrades
- 25°, 35° and 45° beam angle options
- Excellent color rendering 93+ CRI
- Title 24 JA8-2022 E Listed
- ENERGY STAR Compliant
- Covered by U.S. PATENTS and Patents Pending

## SPECIFICATIONS

WATTAGE:	10W
LUMENS:	850 lm - 1000 lm
VOLTAGE:	120V
COLOR TEMP:	2700K, 3000K & Sunset Dim to Warm
DIMMING:	Triac/ELV (1%)
LAMP TYPE	LED
CRI:	93+

## HOUSING PRODUCT NUMBER BUILDER | 1. Specify housing part number

ITEM	STYLE	SPECIFICATION
<input type="text" value="MBN175"/>	<input type="text"/>	<input type="text"/>
<b>MBN175</b>	<p><b>(Blank)</b> Standard Single Head (3 1/2" Height)</p> <p><b>DH2</b> Double Head (3 1/2" Height)</p> <p><b>JB</b> Single Head (4 1/8" Height) 2-Hour Fire Rated Ceilings</p>	<p><b>ICA</b> IC RATED, AIRTIGHT</p> <p><b>AJICA</b> IC Airtight for R60 &amp; Chicago Plenum Insulation <sup>1</sup></p> <p><sup>1</sup> Only available for Standard Single Head option.</p>

## MODULE PRODUCT NUMBER BUILDER | 2. Specify module part number

ITEM	LUMENS	COLOR TEMP.	BEAM ANGLE
<input type="text" value="MBN"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>MBN</b>	<p><b>10</b> 1000 lm (10W)</p>	<p><b>27</b> 2400K</p> <p><b>30</b> 3000K</p>	<p><b>(Blank)</b> 35° <sup>2</sup></p> <p><b>-N</b> 25°</p> <p><b>-W</b> 45°</p>
<b>DIM TO WARM TECHNOLOGY</b>			<sup>2</sup> 35° installed on module with 25° & 45° included in the box.
<b>08</b> 850 lm (10W)	<b>D31</b> DIM TO WARM 3000-1800K <sup>1</sup>		
<sup>1</sup> Dim to Warm technology, dims from 3000K to 1800K.			

## ROUND TRIMS PRODUCT NUMBER BUILDER | 3. Specify trim part number (Choose one option only)

ITEM	SHAPE	STYLE	COLOR FINISH
<input type="text" value="MBN1"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>MBN1</b>	<p><b>RD</b> ROUND</p> <p><b>SQ</b> SQUARE</p>	<p><b>18</b> DOWNLIGHT</p> <p><b>29</b> ADJUSTABLE <sup>1</sup></p> <p><b>27</b> PINHOLE ADJUSTABLE</p> <p><sup>1</sup> Only available in RD (Round) option</p>	<p><b>W</b> ALL WHITE</p> <p><b>BB</b> ALL BLACK</p>

### Secondary Optics

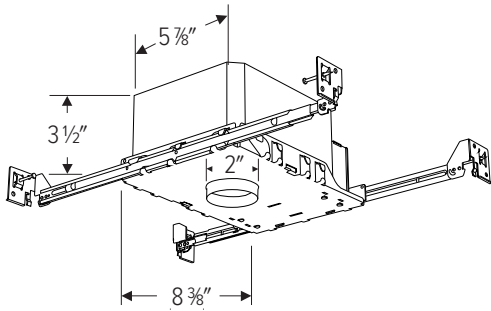
		
<b>L60</b> Frosted Diffuser	<b>L61</b> Black Hex Louver	<b>L62</b> White Hex Louver

### 1" Modular - Lumen Value Multiplier

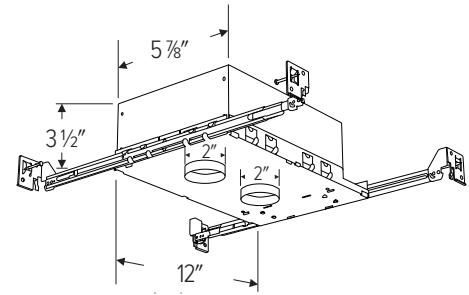
CCT	Multiplier	Beam Angle	Multiplier
<b>2700K</b>	0.96	<b>25°</b>	0.98
<b>3000K</b>	1	<b>35°</b>	1
<b>SD</b>	0.80	<b>45°</b>	1.02

## DIMENSIONS

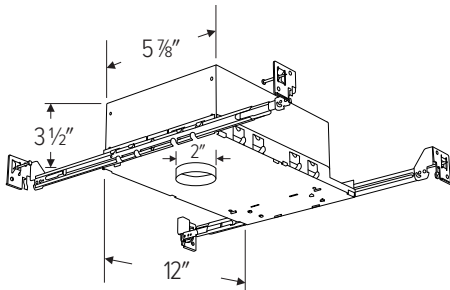
**MBN175ICA**  
SINGLE HEAD IC AIRTIGHT HOUSING



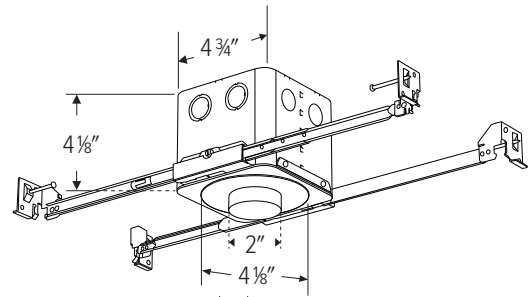
**MBN175DH2ICA**  
DOUBLE HEAD IC AIRTIGHT HOUSING



**MBN175AJICA**  
SINGLE HEAD IC AIRTIGHT R60 & CHICAGO  
PLENUM HOUSING

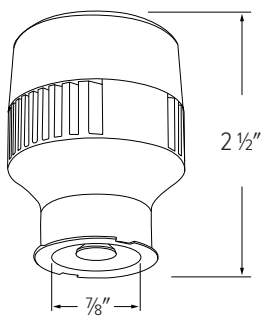


**MBN175JBICA**  
SINGLE HEAD 2-HOUR FIRE RATED IC AIRTIGHT HOUSING



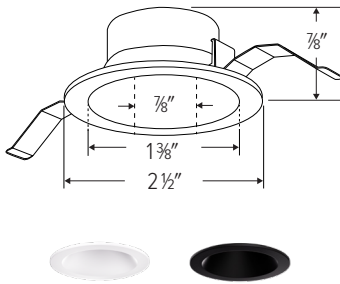
## MODULE

**MBN08/ EMN10**  
LED MODULE

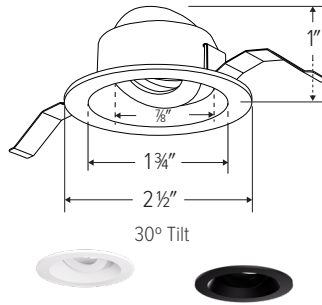


## DIMENSIONS

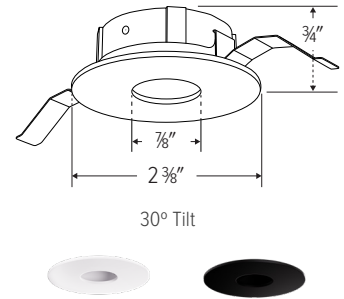
**MBN1RD18**  
1" ROUND DOWNLIGHT



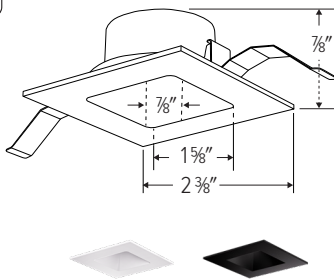
**MBN1RD29**  
1" ROUND ADJUSTABLE



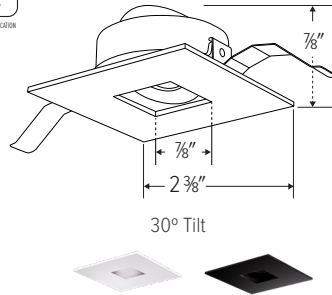
**MBN1RD27**  
1" ROUND PINHOLE  
ADJUSTABLE



**MBN1SQ18**  
1" SQUARE DOWNLIGHT



**MBN1SQ27W**  
1" SQUARE PINHOLE  
ADJUSTABLE

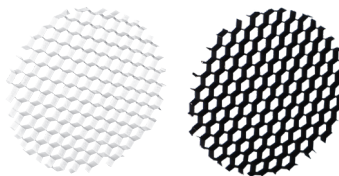


## DIMENSIONS

**L60 FOR A SOFTER LIGHT**  
FROSTED DIFFUSER



**L61 (WHITE) L62 (BLACK)**  
FOR A BETTER GLARE SHIELD  
HEX LOUVER





# Technical Details

**Optics:** Frosted polycarbonate module lens diffuses light evenly throughout while reducing glare with LED technology. Standard lens is shaterproof.

**Construction (Light Engine):** Diecast aluminum body with heat fins allow for efficient cooling.

**Installation (Light Engine):** Twist-on design for toolless trim installation. For use with standard Modular downlight trims only. Can be used in embr® 1" Modular downlight housings with quick connect.

**Hanger Bars:** Pre-installed hanger bars with True Nail easy installation in regular lumber, engineered lumber, and laminated beams. Integral T-bar slots for easy installation in T-bars. Spans up 24" and can be repositioned 90°. Score lines allow for tool-free hanger bar size reduction. Integral leveling flange allows for single-person installation while easily aligning the housings with the joists.

**LED Technology:** Extremely accurate Color Rendering Index of 93+. Lumen Maintenance of 50,000 hours L70 Life based on LM80 standardized test results. Superior Thermal Management by utilizing integrated heat sink. Instant On to Full Brightness technology. No LED pixelation.

**Electrical:** Module connects to 120V power supply. High efficiency driver with a power factor >0.9. Start time of less than 0.75 seconds.

**Dimming:** Works with 120V Triac/ELV type dimmers. Dims down to 1%. For full list of dimmers, refer to the Dimmer Compatibility List. Industry leading dimming that dims smoothly with no hot spots or flickering.

**Sunset:** Sunset color temperature is our dim-to-warm LED technology that allows the color temperature to become warmer as the product is dimmed. Our Dim to Warm items start at 3000K and go as low as 1800K when dimmed. For Dim to Warm technology be sure to order an item with "Dim to Warm" in the Color Temperature (CCT) attribute.

**Listings:** UL and cUL Listed for Damp Locations. UL and cUL Listed for Wet Location with Wet location trims. RoHS Compliant. Meets Energy Star & California Title 24 JA8-2022-E standards.

**Warranty:** Embr® Products are built to last with a 5-year Limited warranty.

Integrating our lighting with your Smart Home System is a breeze. Simply check your Smart Home system for compatible smart switches and cross reference that with our Dimming Compatibility Chart. Once the switches are integrated with your Smart Home system your lights will be ready to go.





# Dimmer Compatibility Chart

## 120V – Triac/ELV – Dimmers

### For Reference Only

Testing conducted by embr® is not a substitute for and does not imply certification by an independent laboratory or any other standards certification. Refer to manufacturer specifications for more detailed information on product certifications and standards. Consult the dimmer manufacturer prior to installation to ensure compatibility.

Manufacturer	Product	Part Number	Dimmed Light Output Range
Lutron	Caséta Wireless In-Wall Dimmer (PD-6WCL)	PD-6WCL	1% - 100%
	Maestro PRO LED + Tap Dimme, 250 Watts of dimmable LED/CFL, 500 Watts of incandescent/halogen/ELV, or 400VA MLV lighting loads	MA-PRO	1% - 100%
	Maestro LED+ Dimmer Switch 150 W LED/CFL, 150W of dimmable LEDs, 600W of incandescent or halogen lighting	MACL-153M	1% - 100%
	Skylark Contour LED+ Preset Dimmer, Incandescent / Halogen, 600 W, 120 V, LED / CFL, 150 W, 120 V	CTCL-153P	1% - 100%
	Diva LED, Single Pole, 3-Way, LED+ Preset Dimmer, Incandescent / Halogen, 120 V, LED / CFL, 120 V	DVCL-153P	1% - 100%
	Skylark LED+, Single Pole, 3-Way, LED+ Dimmer, Incandescent / Halogen, 600 W, 120 V, LED / CFL, 150 W, 120 V	SCL-153P	1% - 100%
	Maestro, 600 W/600 VA Neutral Wire Dimmer, 120 V - 50/60 Hz	RRD-6ND	1% - 100%
	Preset Dimmers, Single Pole, Magnetic Low Voltage, 120 V	DVLV-600P	1% - 100%
	Ariadni® / Toggler® 600 W Incandescent/Halogen Preset Dimmer (3-Way)	AY-603P	1% - 100%
	RadioRa 3 250 W (LED/CFL)* or 500 W Incandescent/Halogen/ELV or 400 VA MLV Phase Selectable Neutral Dimmer	RRST-PRO-N	1% - 100%
Leviton	Decora Digital Dimmer Switch, Low Voltage/LED/CFL/Incandescent dimmer with Bluetooth & timer	DDE06-BLZ	1% - 100%
	Trimatron Rotary Dimmer Switch Universal Dimmer, Single pole, 600W Incandescent, 150W LED, CFL	RNL06	1% - 100%
	Decora SureSlide Dimmer Switch for Dimmable LED, Halogen, and Incandescent Bulbs	6672	5% - 100%
	Decora SureSlide Dimmer Switch for Dimmable LED, Halogen, and Incandescent Bulbs	6674	5% - 100%

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# Photometric Report

## Embr® Downlights

PHOTOMETRIC REPORT	CANDLE POWER SUMMARY		ILLUMINANCE AT A DISTANCE		
Product #: MBN1030 (25°) Wattage / Lumens: 9.8W / 988.8 lm Luminaire LPW: 100.8 lm/W	Degree Vertical	0°	Distance to Target Plane	Center Beam Footcandles	Beam Diameter
	0	3560	4'	222	1.9'
	5	3109	6'	98.9	2.8'
	15	1165	8'	55.6	3.7'
	25	270	10'	35.6	4.7'
	35	57	ZONAL LUMEN SUMMARY		
	45	23			
	55	14	Zone	Lumens	%Luminaire
	65	9	0-30°	884.0	89.5
	75	6	0-40°	942.4	95.4
	85	0	0-60°	976.4	98.8
90	0	0-90°	988.0	100	

PHOTOMETRIC REPORT	CANDLE POWER SUMMARY		ILLUMINANCE AT A DISTANCE		
Product #: MBN1030 (55°) Wattage / Lumens: 9.8W / 1021.3 lm Luminaire LPW: 104.2 lm/W	Degree Vertical	0°	Distance to Target Plane	Center Beam Footcandles	Beam Diameter
	0	1025	4'	64.1	4.3'
	5	999	6'	28.5	6.4'
	15	867	8'	16.0	8.6'
	25	563	10'	10.3	10.7'
	35	263	ZONAL LUMEN SUMMARY		
	45	78			
	55	16	Zone	Lumens	%Luminaire
	65	9	0-30°	694.9	68.1
	75	3	0-40°	910.2	89.1
	85	1	0-60°	1,005.6	98.5
90	0	0-90°	1,021.0	100	

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