

## LMAR2

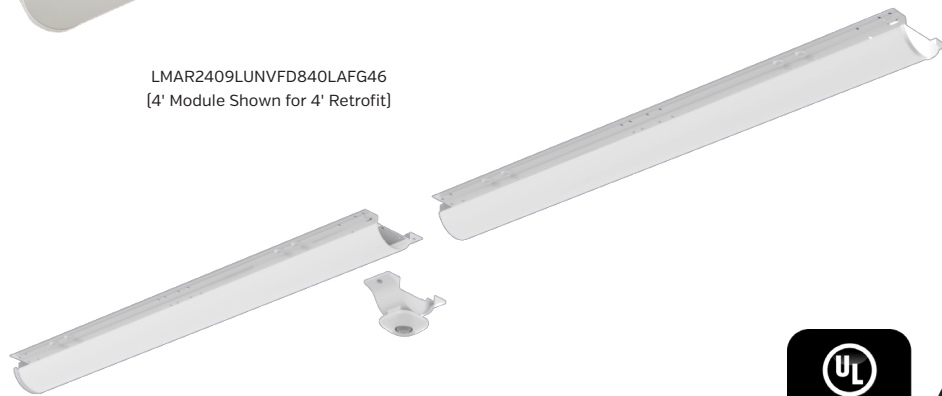
### Applications

The ISON™ LMAR2 low and high bay retrofit is ideal for retrofitting existing linear fluorescent high bay fixtures to LED. For use in applications such as retail, manufacturing, distribution, and warehouses facilities.

Project Name:	
Catalog Number:	
Type:	
Note:	
Date:	



LMAR2409LUNVFD840LAFG46  
[4' Module Shown for 4' Retrofit]



LMAR2818LUNVFD840LAFG96EN2  
[Two 4' Modules Shown for 8' Retrofit]



### Construction & Design

- Available in 4' kit modules that retrofit 4' and 8' fixtures
- Frosted acrylic matte contoured lens available
- LED modular engines made of lightweight aluminum, with a pre-coated white finish for better thermal dissipation
- Retrofit light engine is designed to fit in existing linear fluorescent high or low bay fixture channels for ease of retrofit install
- Mounting hardware included

### Additional Options

- Bulk pack standard. Single pack available
- For bulk pack standard, six 8' LMAR2 fixtures per box, 9 boxes per skid for 54 fixtures total

### Electrical

- Available in 120v-277v, 347v and 480v
- Standard 0-10v dimming drivers
- Power Factor >0.9\*
- Total Harmonic Distortion < 20%\*

\*Note: Varies based on option

### Control and Sensor Options

- Control and sensor options are available to be installed in the field
- On site Network Programming
- Internet/Cloud Based Network Programming

### Lumen Maintenance

See lumen maintenance table on page 2

### Fixture Certification & Listings

- Buy American Act Compliant
- UL/cUL Listed
- DesignLights Consortium™ Standard qualified luminaire
- Visit the [DLC QPL](#) for listed models

### Patent Information

Orion is serious about intellectual property. This product may be covered by one or more patents. Patent information available at <http://www.orionlighting.com/about/patents/>

### Warranty

See Orion's [Product Limited Warranty](#) for more details and information

### Performance Information, 4000K, ≥80 CRI<sup>1</sup>

Nominal Lumen Code	Wattage	Input Voltage	No Lens		Frosted Lens		Input Current
			Actual Lumens	LPW	Actual Lumens	LPW	
<b>4'</b>							
09L	51w	120v	8,709lm	171	8,060lm	158	0.42A
09L	52w	277v	8,709lm	169	8,060lm	156	0.19A
09L	55w	347v	8,706lm	158	8,057lm	146	0.16A
09L	59w	480v	8,706lm	148	8,057lm	138	0.12A
<b>8' (Two 4' Modules)</b>							
18L	104w	120v	17,570lm	168	16,650lm	160	0.86A
18L	103w	277v	17,570lm	171	16,650lm	162	0.37A
18L	110w	347v	17,580lm	159	16,390lm	149	0.32A
18L	112w	480v	17,580lm	157	16,390lm	146	0.23A

### Lumen Maintenance with Lens<sup>2</sup>

Fixture Size	Nominal Lumen Code	Nominal Lumens	Operating Temperature	Calculated Lumen Maintenance		
				L70	L80	L90
4'	09L	9,000	25°C	172,000	104,000	45,000
			45°C	169,000	102,000	44,000
8'	18L	18,000	25°C	172,000	104,000	45,000
			45°C	170,000	103,000	44,000

### Physical Information<sup>3</sup>

Length	Width	Depth	Weight
See Page 3 for Dimensions			5.00lbs.

### Ambient Operating Temperatures

Nominal Lumen Code	Standard Range
All Lumen Packages	-20°C to 45°C [-4°F to 113°F]

Sensor Type	Operating Range
ENx	0°C to 45°C [32°F to 113°F]

### Additional Specification Information

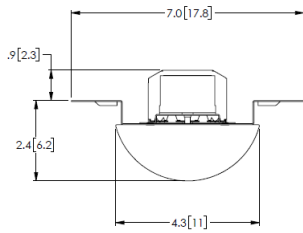
<sup>1</sup> Actual performance may vary by up to ±10% of values listed; facility factors and fixture options can affect performance values

<sup>2</sup> Calculated hours based on TM-21 projections and components used at the time of testing. Warranty is not associated with Calculated Lumen Maintenance

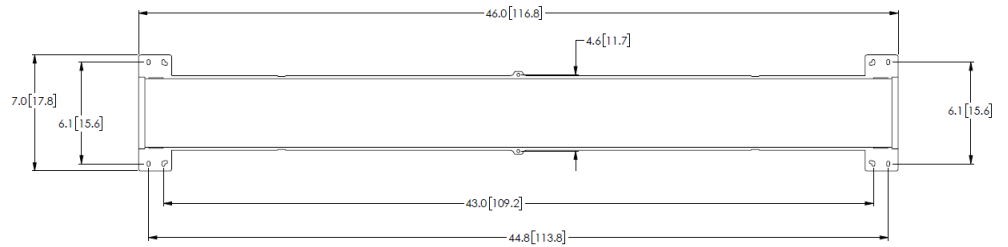
<sup>3</sup> Physical information described for 4' module weight. Weight will vary on option selected

### Retrofit Physical Dimensions

#### 46 Body Type

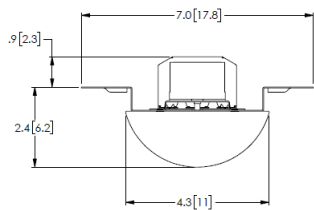


Width

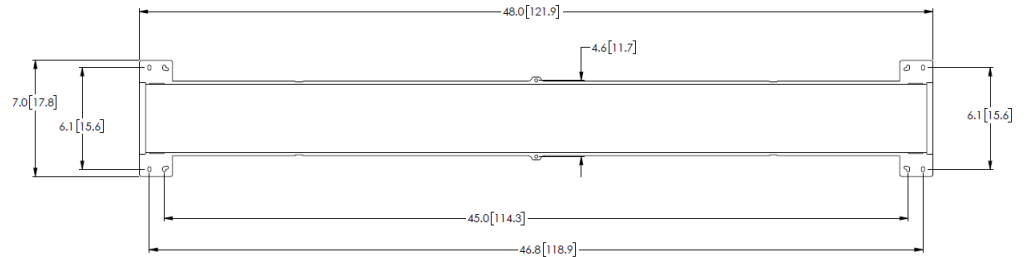


Length

#### 48 Body Type

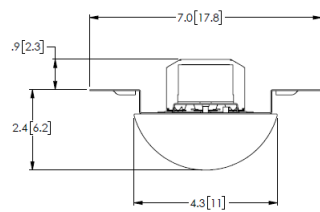


Width

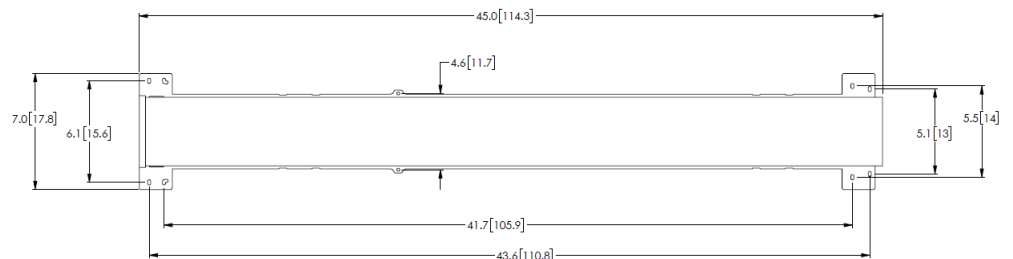


Length

#### 92/96 Body Type



Width



Length

### Fully Retrofitted Existing Fixture



4' Version



8' Version with Sensor

Ordering Information Example (NOTE: No dashes or spaces unless noted below)  
**LMAR2818LUNVFD840LAFG92EN2**

Ordering Information (Enter Selected Catalog Number Below)

Series	Fixture Size	Nominal Lumen Code <sup>4</sup>	Voltage	Driver Type	CRI; Color Temp	Lens Options	Fixture Body Type	Control Options	Packaging Options
<b>LMAR2=</b> ISON Linear LED Module Retrofit, Gen 2	<b>4=</b> 4' <b>8=</b> 8'	<b>4'</b> <b>09L=</b> 9,000lm  <b>8'</b> <b>18L=</b> 18,000lm	<b>UNV=</b> 120v-277v <b>347=</b> 347v <b>480=</b> 480v	<b>FD=</b> Full Dimming	<b>840=</b> 80CRI; 4000K	<b>[blank]=</b> No Lens <b>LAFG=</b> Lens Acrylic Frosted General 120°	<b>4'</b> <b>46=</b> 46" Length <b>48=</b> 48" Length <b>8'</b> <b>92=</b> 92" Length <b>96=</b> 96" Length	<b>[Blank]=</b> No Option <b>EN2=</b> Enlighted Connected Lighting Sensor: Network Lighting Control Component, PIR Occupancy Sensor, Daylight Harvesting, High End Trim, Dimming Modes, Luminaire Level Lighting Control, Wireless Zones, Modified IEEE 802.15.4.1, BLE Radio, Temperature Sensor, Scene Control, Demand Response, Data Collection, BMS Integration, Cloud Access* <b>EN3=</b> Enlighted IoT: All Features of EN2 - Network Lighting Control PLUS access to Apps: Space Management, Asset Tracking, and Contact Tracing Apps <sup>†</sup>	<b>[Blank]=</b> Bulk Pack <b>SP=</b> Single Pack

\*Only available for 8' fixture models.

### Additional Specification Information

<sup>4</sup> For actual lumens, see performance table

Accessories [Field Installed]

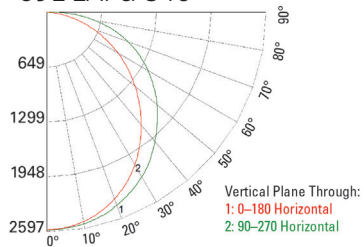


Enlighted Sensor Option- 8' Models Only  
[ENx]

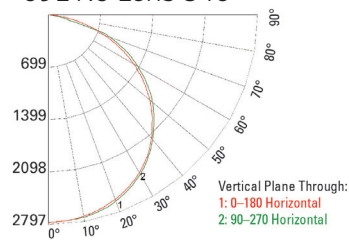
Photometrics

Visit [orionlighting.com](http://orionlighting.com)  
to obtain all .IES files

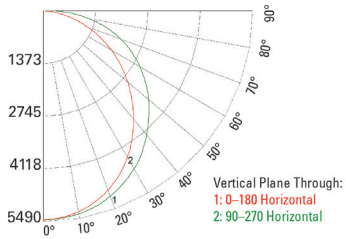
09L LAFG 840



09L No Lens 840



18L LAFG 840



18L No Lens 840

