OCIOC

ISON™ LINEAR LED MODULE RETROFIT

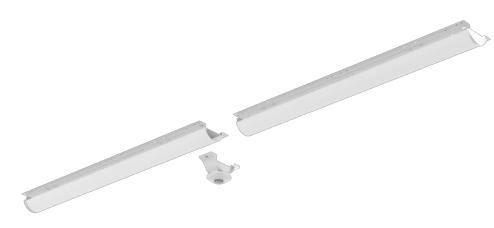
LMAR1

Applications

The ISON™ LMAR1 is ideal for retrofitting existing linear fluorescent high bay fixtures to LED. For use in applications such as retail, manufacturing, distribution, and warehouses facilities.



LMAR14A1UNVFDXXLFA84046 (4' Module Shown for 4' Retrofit)



LMAR18D1UNVFDXXLFA84096EN1 [Two 4' Modules Shown for 8' Retrofit]

Features

- 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 precoated white finish for better thermal dissipation
- Retrofit light engine is designed to fit in existing linear fluorescent high bay fixture channel for ease of retrofit install
- Bulk pack standard. Single pack available
- For bulk pack standard, six 8' LMAR1 fixtures per box, 7 boxes per skid for 42 fixtures total
- Enlighted Control Option available for IoT applications

Electrical

- Available in 120v-277v, 347v and 480v
- Full Dimming (0-10v) fixtures

Ambient Operating Range

See ambient operating table on page 2

Fixture Certification & Listings

- UL Classified
- Buy American Act Compliant
- DesignLights Constortium® premium 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/

Rated Life

L70 > 150,000 hours

For Calculated L70 hours, please contact an Orion representative

Warranty

Orion LED ISON™ class fixtures are covered by a five-year limited warranty, ten-year limited warranty optional. Please contact Orion for additional details . Accessories and individual components are covered by separate OEM supplier warranties.













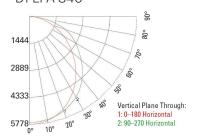
ISON™ LINEAR LED MODULE RETROFIT

LMAR1

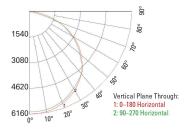
Performance Information, No Lens²

Series	Nominal Lumen Code	Actual Lumens	Input Voltage	Wattage	LPW	CCT	CRI	Input Current	Power Factor
	4'								
LMAR1	A1	9,253lm	120v	54w	170	4000K	≥80	0.45A	>.90
LMAR1	A1	9,253lm	277w	55w	168	4000K	≥80	0.19A	>.90
LMAR1	A1	9,024lm	347v	58w	155	4000K	≥80	0.17A	>.90
LMAR1	A1	9,024lm	480v	59w	152	4000K	≥80	0.12A	>.90
				8' (Two 4' Modules	s)			
LMAR1	D1	18,340lm	120v	107w	172	4000K	≥80	0.89A	>.90
LMAR1	D1	18,340lm	277v	106w	174	4000K	≥80	0.38A	>.90
LMAR1	D1	18,380lm	347v	112w	164	4000K	≥80	0.32A	>.90
LMAR1	D1	18,380lm	480v	114w	160	4000K	≥80	0.24A	>.90

Photometrics D1 LFA 840



D1 NOL 840



Ambient Operating Temperatures⁴

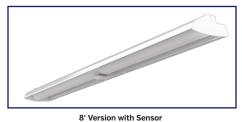
Nominal	Standard				
Lumen Code	Range				
All Lumen Packages	-20°C to 45°C (-4°F to 113°F)				

Physical Information³

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

Fully Retrofitted Existing Fixture





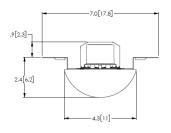
2



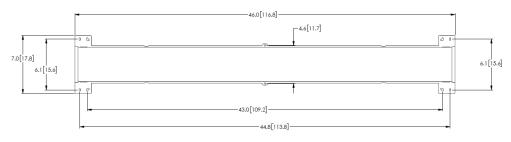
ISON™ LINEAR LED MODULE RETROFIT

LMAR1

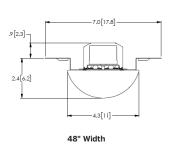
Retrofit Physical Dimensions



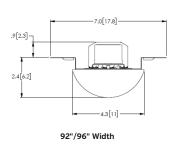
46" Width

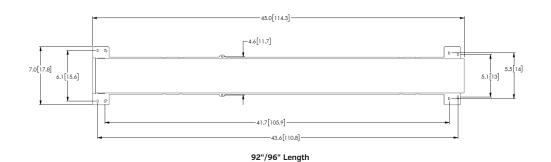


46" Length



48.0[121.9] 7.0[17.8] 6.1[15.6] 45.0[114.3] 46.8[118.9] 48" Length







ISON™ LINEAR LED MODULE RETROFIT

LMAR1

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

Series	Fixture Size	Nominal Lumen Code	Voltage	Driver Type	Lens Options	CRI; Color Temp	Fixture Body Type	Control Options	Packaging Options
LMAR1	8	D1	UNV	FDXX	LFA	840	92	EN1	(Blank)

Ordering Information

	J								
Series	Fixture Size	Nominal Lumen Code ¹	Voltage	Driver Type⁵	Lens Options	CRI; Color Temp	Fixture Body Type	Control Options	Packaging Options
LMAR1= ISON Linear LED Module Retrofit, Gen 1	4 = 4' 8 = 8'	4' A1= 9,000lm 8' D1= 18,000lm	UNV= 120v-277v 347= 347v 480= 480v	FDXX= Full Dimming 0-10v	NOL= No Lens LFA= Lens, Frosted Acrylic	840 = 80CRI; 4000K	4' 46= 46" Length 48= 48" Length 8' 92= 92" Length 96= 96" Length	[Blank]= No Option EN1= Enlighted One PIR Sensor, HIGH/LOW/ OFF, Active Dimming And Daylighting, Wireless GroupingSee EN1 Accessories Table ⁴ ,6* EN2= Enlighted Connected: All Features of EN1 - PLUS BLE Radio, Temperature Sensor, Scene Control, Demand Response, Data Collection, BMS Integration, Cloud Access ^{4*} EN3= Enlighted IoT: All Features of EN2 - PLUS access to Apps: Space Management, Asset Tracking, and Contact Tracing Apps ^{4*} *Only available for 8' fixture models.	(Blank)= Bulk Pack -SP= Single Pack

Accessories (Field Installed)



Enlighted Sensor Option- 8' Models Only [ENx]



LMAR1

Accessories (Field Installed)

EN1 Accessories Required for Commissioning ⁴						
ws-2-00-IL Enlighted Wall Switch Room Controller - For Use with EN1 Enlighted Sensor (Quantity Needed Varies by Facility Layout and Fixture Group Size) Note: Max. of 4 switches per zone/group						
LP-1-00	Green Laser for Commissioning EN1 Enlighted Sensor					
Note: Contact your Orion representative regarding additional commissioning, quantities and back end control system pricing						

Additional Specification Information

- $^{\mbox{\tiny 1}}$ For actual lumens, see performance table
- $^{\rm 2}$ Actual performance may vary by up to ±10% of values listed; facility factors and fixture options can affect performance values
- $^{\rm 3}$ Physical information described for 4' module weight. Weight will vary on option selected
- 4 **ENx** is limited to 0°C (32°F) environments. Contact Customer Service regarding additional commissioning and back end control system pricing
- $^{\mbox{\scriptsize 5}}\mbox{"XX"}$ is a character placeholder for the manufacturing configuration
- ⁶ **EN1** allows for 75 fixtures max. per group. Contact Customer Service regarding commissioning