

LDRE3

Applications

Industry's first patented LED troffer retrofit contained within the door frame. Installs in as little as a few minutes and with minimal disruption to the workplace. Retrofits into the existing housing 1' x 4', 2' x 2' and 2' x 4' T8/T12 fluorescent troffers.



LDRE32403LUNVFD840MSTSP

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



Construction & Design

- Ultra-light, highly efficient troffer retrofit solution
- Installs in a few minutes
- Low environmental impact due to energy efficiency
- Lightweight, white painted aluminum body for better thermal dissipation
- LDR® fits most existing fluorescent troffer fixtures with either prismatic lens or parabolic louvers
- Matte finish, acrylic contour lens diffuses LEDs in the work environment

Construction & Design

- Multiple bracket options to fit various application requirements
- Title 24 compliant seismic cable kit option
- Field or factory installed Battery Back Up available in 10w, Certified in CA Title 20
- Antimicrobial Britex™ finish available
- Dial Dimmer available for field adjustment of power and lumen output

Electrical

- Available in 120v-277v and 347v
- Standard 0-10v dimming drivers
- Step-dimming driver available
- Lutron drivers available. Lutron dimming drivers require an existing Lutron® Ecosystem
- Power Factor > .90*
- Total Harmonic Distortion < 20%*

*Note: Varies based on option

Control and Sensor Options

- Factory installed control and sensor options
- Manual Programming Sensors
- Remote Programming Sensors
- Onsite Network Programming
- Internet/Cloud Based Network Programming

Lumen Maintenance

See lumen maintenance table on page 2

Fixture Certification & Listings

- Patented LDR® design
- UL Classified
- Buy American Act Compliant
- DesignLights Consortium® 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, 120v, 4000K, ≥80 CRI¹

Nominal Lumen Code	Actual Lumens	Wattage	LPW	Input Current
1' x 4'				
02L	2,102lm	14w	152	0.12A
03L	3,238lm	21w	157	0.17A
04L	4,152lm	28w	151	0.23A
2' x 2'				
02L	2,482lm	16w	156	0.13A
03L	3,416lm	22w	158	0.18A
04L	4,756lm	29w	165	0.24A
2' x 4'				
03L	3,294lm	21w	159	0.17A
04L	4,131lm	27w	154	0.23A
06L	6,130lm	40w	154	0.34A
08L	8,262lm	52w	157	0.44A

Lumen Maintenance²

Fixture Size	Nominal Lumen Code	Nominal Lumens	Operating Temperature	Calculated Lumen Maintenance		
				L70	L80	L90
1' x 4'	02L	2,000	25°C	197,000	123,000	59,000
			55°C	149,000	93,000	44,000
1' x 4'	03L	3,000	25°C	197,000	123,000	59,000
			55°C	149,000	93,000	44,000
1' x 4'	04L	4,000	25°C	197,000	123,000	59,000
			55°C	149,000	93,000	44,000
2' x 2'	02L	2,000	25°C	403,000	244,000	103,000
			55°C	134,000	82,000	36,000
2' x 2'	03L	3,000	25°C	403,000	244,000	103,000
			55°C	134,000	82,000	36,000
2' x 2'	04L	4,000	25°C	403,000	244,000	103,000
			55°C	134,000	82,000	36,000
2' x 4'	03L	3,000	25°C	197,000	123,000	59,000
			55°C	149,000	93,000	44,000
2' x 4'	04L	4,000	25°C	197,000	123,000	59,000
			55°C	149,000	93,000	44,000
2' x 4'	06L	6,000	25°C	197,000	123,000	59,000
			55°C	149,000	93,000	44,000
2' x 4'	08L	8,000	25°C	197,000	123,000	59,000
			55°C	149,000	93,000	44,000

Additional Specification Information

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

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

Ordering Information Example (NOTE: No dashes or spaces unless noted below)
LDRE32403LUNVFD840MSTSP

Ordering Information (Enter Selected Catalog Number Below)

Series	Fixture Size	Nominal Lumen Code ³	Voltage	Driver Type	CRI; Color Temp	Lens Options	Bracket Type	Fixture Options	Factory Installed Sensor/Control Options	Packaging Options
LDRE3= HARRIS LED Troffer Retrofit LDRE, Gen 3	14= 1' x 4' 22= 2' x 2' 24= 2' x 4'	1' x 4' and 2' x 2' 02L= 2,000lm ⁴ 03L= 3,000lm 04L= 4,000lm 2' x 4' 03L= 3,000lm 04L= 4,000lm 06L= 6,000lm 08L= 8,000lm	UNV= 120v-277v 347= 347v	FD= Full Dimming FD50= Step Dimming 50% ^{4,5,6,9} FDH2= LTEA Hi-lume 1% 2-wire LED driver (120 V forward phase only) ^{6,7,9} FDH3= L3DA Hi-lume 1% 3-wire or Ecosystem ^{6,7,9}	835= 80CRI; 3500K 840= 80CRI; 4000K 850= 80CRI; 5000K	M= Opaque Matte	ST= Standard PL= Plenum LF= Lift (for shallow fixtures)	[Blank]= No Option BB10= Battery Back up, 10w ^{8,9} DD= Dial Dimmer ⁶ AM= Antimicrobial Britex™ Finish	[See Page 4 for part numbers and descriptions]	[Blank]= Bulk Pack SP= Single Pack

Additional Specification Information

³ For actual lumens, see performance table

⁴ **02L** lumen package is not available with **FD50** driver

⁵ **FD50** (step dimming) option requires two separate hot leads per fixture

⁶ **FD50** (step dimming) or Lutron driver options are not available with **ENx, Px, Lx, DD, EL, VL** listed under "control options" and "fixture options" section in order information

⁷ Special order. Lutron® dimming drivers require a Lutron® control system installed prior to ordering fixtures with Lutron® dimming drivers

⁸ Multiply 10w by the lumens per watt (LPW) of the fixture to calculate lumen output in emergency mode

⁹ Not compatible with 347v **[347]** option

¹⁰ **DD** is not compatible with sensor options

Sensor and Control Ordering Information

Factory Installed Sensor and Control Options

[Blank]=
No Option

VL=
Vealite Keilton: PIR Occupancy Sensor, Photosensor, High and Low End Trim, 0-10V Dimming, IR Remote Programmable^{6,12}

P2=
Philips EasySense SNS200: PIR Occupancy Sensor, Daylight Harvesting, High and Low End Trim, Luminaire Level Lighting Control, Wireless Zones SR Dimming, ZigBee, Android App Programmable with IR Dongle or NFC Radio^{6,9}

P3=
Philips EasySense SNS210: PIR Occupancy Sensor, Daylight Harvesting, High and Low End Trim, Luminaire Level Lighting Control, Wireless Zones, SR Dimming, ZigBee, Apple iOS and Android Bluetooth App Programmable^{6,9}

EN2=
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 Access⁶

EN3=
Enlighted IoT: All Features of EN2 - Network Lighting Control PLUS access to Apps: Space Management, Asset Tracking, and Contact Tracing Apps^{6,9}

L1=
Lutron Vive: Integral RF Control, Network Lighting Control Component, Wireless Zones, DALI SR Dimming^{6,9}

L2=
Lutron Vive: Integral PIR Occupancy Sensor, Daylight Harvesting, High and Low End Trim, Network Lighting Control Component, Wireless Zones, DALI SR Dimming^{6,9}

EL=
Osram Connected Lighting Module - Encelium: ZigBee Control for Encelium Edge and Extend Network Lighting Control Systems^{6,11}

Physical Information¹³

Length/Width	Depth	Fixture Size	Weight
The Orion LDR is designed to retrofit industry standard 1' x 4', 2' x 2', and 2' x 4' existing troffer pans in T-Bar grid openings	3.13"	1' x 4'	5.80 lbs.
	3.13"	2' x 2'	4.30lbs.
	3.13"	2' x 4'	7.90lbs.

Ambient Operating Temperatures

Nominal Lumen Code	120-347v Range	With Battery Back Up
All Lumen Packages	0°C - 55°C [32°F - 131°F]	Min. Operating Temp. 0°C [32°F]

Sensor Type	Operating Range
VL	0°C - 55°C [32°F - 131°F]
Px	0°C - 55°C [32°F - 131°F]
ENx	0°C - 50°C [32°F - 122°F]
Lx	0°C - 55°C [32°F - 131°F]
EL	0°C - 55°C [32°F - 131°F]

Additional Specification Information

⁶ FD50 (step dimming) or Lutron driver options are not available with **ENx, Px, Lx, DD, EL, VL** listed under "control options" and "fixture options" section in order information

⁹ Not compatible with 347v [347] option

¹¹ Only compatible with ENCELIUM EXTEND Network Light Management System and ENCELIUM EDGE Wireless Light Management System

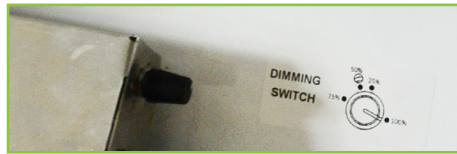
¹² Require **RM51** remote for commissioning and/or modifying settings. See accessories table

¹³ Weight and depth will vary based on option selection, weight includes brackets

Fixture Options (Factory Installed)



**Battery Back Up
(BB10)**



**Dial Dimmer
(DD)**



**Integrated Enlighted Sensor
(ENx)**



**Integrated EasySense Sensor
(Px)**



**Integrated Lutron Vive Control
(L1)**



**Integrated Vealite Sensor
(VL)**

Accessories (Field Installed)

Additional Fixture Accessories	
LDRE-SCBL-1FT-KIT	1' x 4' Fixture Seismic Cable
LDRE-SCBL-2FT-KIT	2' x 2' Fixture Seismic Cable
LDRE-SCBL-4FT-KIT	2' x 4' Fixture Seismic Cable
VL Remote Required for Commissioning	
RM51	Vealite Keilton Sensor IR Remote Controller

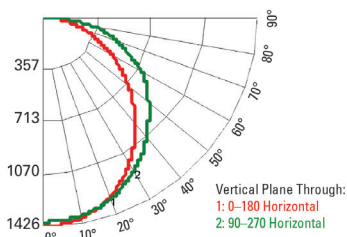


**Seismic Cable Kit
(LDRE-SCBL-4FT-KIT)**

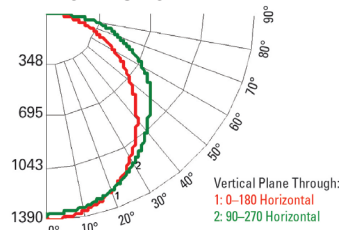
Photometrics

Visit orionlighting.com to obtain all .IES files

22 04L 840



24 04L 840



14 04L 840

