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HARRIS LED TROFFER LTHE, GEN 2

LTHE2

Applications

The HARRIS LTHE2 recessed Lay-In Troffer is for use in commercial, office, retail, education, healthcare or anywhere T-Bar Lay-In Grid is found in 1' \times 4', 2' \times 2', and 2' \times 4'. This Luminaire has the same aesthetic as the LDRE3 troffer retrofit and can be used in the same space. The LTHE2 provides even light distribution and improved energy savings over commonly used fluorescent troffers.



r roject riame.	
Catalog Number:	
Туре:	
Note:	
Date:	



Project Name









LTHE22403LUNVFD840MSP

Construction & Design

- Wide light distribution reduces wall and ceiling dark spaces
- Matte white finish fixture ends and acrylic contour lens diffuses LEDs in the work environment
- Energy efficient with low environmental impact

Additional Options

- Title 24 compliant seismic cable kit option
- Antimicrobial Britex[™] finish available
- Factory installed Battery Back Up available in 10w, Certified in CA Title 20
- Dial dimmer available for field adjustment of power and lumen output

Electrical

- Available in 120v-277v and 347v
- Hardwired connection to power
- Standard 0-10v Dimming Drivers
- Step Dimming Drivers available
- Lutron® dimming drivers available.
 Requires an existing Lutron® control system
- Power Factor >0.9*
- Total Harmonic Distortion < 20%*

Control and Sensor Options

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

Lumen Maintenance

See lumen maintenance table on page 2

Fixture Certification & Listings

- UL/cUL Listed
- UL/cUL Listed for Damp Locations
- Buy American Act Compliant
- Type IC Rated (for insulation)
- DesignLights Consortium™
 Standard qualified luminaire
- Visit the <u>DLC QPL</u> for listed models

Patent Information

Orion is serious about intellectual property. This product may be covered by one or more patents.

Warranty

See Orion's <u>Product Limited Warranty</u> for more details and information

^{*}Note: Varies based on option



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LTHE2

Performance Information, 120v, 4000K, >80 CRI¹

Nominal Lumen Code	Actual Lumens	Wattage	LPW	Input Current				
1' x 4'								
02L	2,122lm	14w	153	0.12A				
03L	3,229lm	21w	154	0.18A				
04L	4,042lm	27w	150	0.23A				
	2' x 2'							
02L	2,290lm	15w	154	0.13A				
03L	3,111lm	21w	148	0.18A				
04L	3,960lm	27w	146	0.23A				
	2' x 4'							
03L	3,323lm	21w	158	0.18A				
04L	4,158lm	27w	155	0.22A				
06L	5,821lm	40w	146	0.34A				
08L	7,851lm	52w	150	0.44A				

Lumen Maintenance²

Firstura Ciza	Name in all Lumana Carda	Name in all Lumana	Operating Temperature	Calculated Lumen Maintenance			
Fixture Size	Nominal Lumen Code	Nominal Lumens	Operating Temperature	L70	L80	L90	
11 41	021	2,000	25°C	197,000	123,000	59,000	
1' × 4'	02L	2,000	55°C	149,000	93,000	44,000	
1' × 4'	031	3,000	25°C	197,000	123,000	59,000	
1 X 4	03L	3,000	55°C	149,000	93,000	44,000	
1' × 4'	04L	4,000	25°C	197,000	123,000	59,000	
1 X 4	U4L	4,000	55°C	149,000	93,000	44,000	
21 21	021	2.000	25°C	403,000	243,000	103,000	
2' x 2'	02L	2,000	55°C	128,000	78,000	34,000	
21 21	021	3,000	25°C	403,000	243,000	103,000	
2' x 2'	03L		55°C	128,000	78,000	34,000	
21 21	0.41	0.41	25°C	403,000	243,000	103,000	
2' x 2'	04L	4,000	55°C	128,000	78,000	34,000	
2' x 4'	03L	3,000	25°C	197,000	123,000	59,000	
2 X 4	USL	3,000	55°C	149,000	93,000	44,000	
2' x 4'	04L	04L 4,000	25°C	197,000	123,000	59,000	
2 X 4	04L	4,000	55°C	149,000	93,000	44,000	
2' x 4'	06L	6,000	25°C	197,000	123,000	59,000	
Z X 4	UOL		55°C	149,000	93,000	44,000	
2' x 4'	08L	8,000	25°C	197,000	123,000	59,000	
2 X 4	UGL	0,000	55°C	149,000	93,000	44,000	

Additional Specification Information

 $^{^{\}rm l}$ Actual performance may vary by up to $\pm 10\%$ 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



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Physical Information³

Length/Width	Depth	Fixture Size	Weight
Designed to Fit Industry	3.13"	1' × 4'	4.00lbs.
Standard 1' x 4', 2' x 2', and	3.13"	2' x 2'	6.00lbs.
2' x 4' T-Bar Grid Openings	3.13"	2' x 4'	11.00lbs.

Ambient Operating Temperatures

Nominal Lumen Code	120-277v Voltages	347v Voltage	With Battery Back Up
All Lumen Packages	0°C to 55°C	0°C to 50°C	Min. Operating Temp.
	(32°F to 131°F)	(32°F to 122°F)	0°C (32°F)

Sensor Type	Operating Range
VL	0°C to 55°C (32°F to 131°F)
VBM	0°C to 55°C (32°F to 131°F)
Lx	0°C to 55°C (32°F to 131°F)
P3	0°C to 55°C (32°F to 131°F)
ENx	0°C to 50°C (32°F to 122°F)

Ordering Information Example (NOTE: No dashes or spaces unless noted below) LTHE22403LUNVFD835MBB10SP

Ordering Information (Enter Selected Catalog Number Below)

Series	Fixture Size	Nominal Lumen Code ⁴	Voltage	Driver Type	CRI; Color Temp	Lens Options	Fixture Options	Factory Installed Control Options	Packaging Options
Series	Fixture Size	Nominal Lumen Code ⁴	Voltage	Driver Type	CRI; Color Temp	Lens Options	Fixture Options	Factory Installed Control Options	Packaging Options
LTHE2= HARRIS LED Troffer LTHE, Gen 2	14= 1' x 4' 22= 2' x 2' 24= 2' x 4'	1' x 4' 02L= 2,000lm 03L= 3,000lm 04L= 4,000lm 2' x 2' 02L= 2,000lm 04L= 4,000lm 2' x 4' 03L= 3,000lm 04L= 4,000lm 04L= 6,000lm 06L= 6,000lm 08L= 8,000lm5	UNV= 120v-277v 347 = 347v	FD= Full Dimming FD50= Step Dimming 50% 6,7,9 FDHB= LDE1 1% Dimming Ecosystem Driver 7,8,9 FDH3= L3DA Hi-lume 1% 3-wire or Ecosystem ^{7,8,9}	835= 80CRI; 3500K 840= 80CRI; 4000K 850= 80CRI; 5000K	M= Opaque Matte	(Blank)= No Option BB10= Battery Back Up, 10w9,10 AM= Antimicrobial Britex™ Finish DD= Dial Dimmer ^{7,11}	(See Page 4 for part numbers and descriptions)	(Blank)= Bulk Pack SP= Single Pack

Additional Specification Information

- ³ Weight and depth will vary based on option selection
- ⁴ For actual lumens, see performance table
- $^{\rm 5}$ ${\bf 08L}$ lumen package options are not available with FDH2 driver type
- $^{\rm 6}$ FD50 [step dimming] option requires two separate hot leads per fixture
- ⁷ FD50 (step dimming) or Lutron driver options are not available with ENx, P3, Lx, DD, VL, VBM listed under "control options" and "fixture options" section in order information
- ⁸ Special order. Lutron* dimming drivers require a Lutron* control system installed
- ⁹ Not compatible with 347v option
- $^{\rm 10}$ Multiply 10w by the lumens per watt (LPW) of the fixture to calculate lumen output in emergency mode
- $^{\mathrm{11}}\,\mathbf{DD}$ is not compatible with sensor options

Sensor and Control Ordering Information

LTHE2

Factory Installed Control Options¹²

(Blank)=

No Option

VL= Keilton: PIR Occupancy Sensor, Daylight Harvesting, High and Low End Trim, 0-10V Dimming, IR Remote Programmable^{7,13}

VBM=
Keilton Bluetooth Mesh Network: Wireless Fixture Controller, PIR Occupancy Sensor, HIGH/LOW/OFF, 0-10v Dimming, Daylight Harvesting, High End Trim, Luminare Level Lighting Control, Wireless Zones, Time-of-Day Scheduling, Keilton Mobile App Programmable⁷

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^{7,9}

EN3=

Enlighted IoT: All Features of EN2 - Network Lighting Control PLUS access to Apps: Space Management, Asset Tracking, and Contact Tracing Apps^{7,9}

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^{7,9}

Lutron Vive: Integral RF Control, Network Lighting Control Component, Wireless Zones, DALI SR Dimming^{7,9}

Lutron Vive: Integral PIR Occupancy Sensor, Daylight Harvesting, High and Low End Trim, Network Lighting Control Component, Wireless Zones, DALI SR Dimming^{7,9}

Fixture Options (Factory Installed)



Battery Back-Up (BB10)



Integrated Lutron Vive Control



Integrated Enlighted Sensor (ENx)



Vealite Sensor (VL)



Integrated EasySense Sensor (P3)



Keilton Sensor (VBM)

Additional Specification Information

⁷ FD50 (step dimming) or Lutron driver options are not available with ENx, P3, Lx, VL, KLBM listed under "control options" section in order information

9 Not compatible with 347v option

12 Visit our Lighting Controls page for more information

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



OCIOC HARRIS LED TROFFER LTHE, GEN 2

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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			
<u>RM51</u>	Vealite Keilton Sensor IR Remote Controller			
	Keilton Ecosystem Accessories			
	e commissioned and controlled via the Keilton app as they are part of the same ecosystem as the VBM Keilton sensors. For the Keilton Ecosystem, please visit this <u>link</u> .			
WP1013	3-Key Battery Powered Bluetooth Wireless Wall Switch. Order additional WP accessory if mounting to wall.			
WP1025	5-Key Battery Powered Bluetooth Wireless Wall Switch. Order additional WP accessory if mounting to wall.			
WP1013S	3-Key AC Powered Bluetooth Wireless Wall Switch			
WP1017S	7-Key AC Powered Bluetooth Wireless Wall Switch			
WP	Wall Plate for use with wall switches WP1013 and WP1025			
WP1015S	5-Key Solar Powered Bluetooth Wireless Wall Switch			
WF20R	20A Bluetooth Plug Load Controller			
CR01-ETC	Real Time Clock USB Dongle (Keeps Keilton devices schedules in sync in case of power loss - 1 per zone)			



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



Handheld Sensor Remote (RM51)

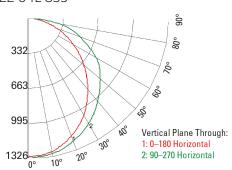


Keilton Ecosystem Accessories

Photometrics

Visit orionlighting.com to obtain all .IES files

22 04L 835



24 04L 835

