



LANCE

VOLUMETRIC TROFFER RETROFIT KIT

PRODUCT
OVERVIEW



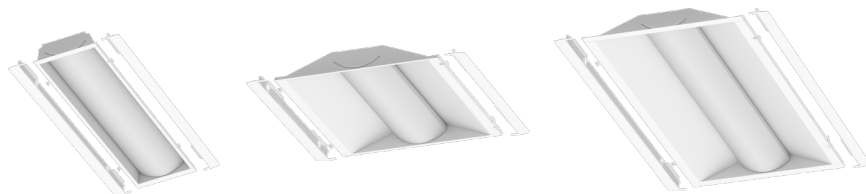
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FEATURES

- 3-Piece Versatile Volumetric Selectable Troffer Retrofit Kit allowing for quick, easy and simple installation.
- Steel white body with a high-transmission PMMA frosted acrylic lens for sleek aesthetics and uniform illumination.
- Suitable for recessed, surface, or flange mounting, with optional air return configurations for added functionality.
- Available in 1x4, 2x2, and 2x4 sizes, delivers 2,300–6,200 lumens with high efficacy up to 155 lm/W and 80 or 90 CRI options.
- Available in 3000K, 3500K, 4000K, or 5000K CCT featuring reliable performance with calculated L70 > 100,000 hours for long-lasting efficiency.
- Standard 0–10V Dimmable Driver with advanced wireless controls options available.
- DLC® Premium qualified and ETL listed, backed by a 5-year standard warranty (10-year optional)

DIGITAL NAVIGATION

Explore the spec sheet through the links below

[ORDERING GUIDE](#)
[LED SYSTEMS TABLE](#)
[CONTROLS](#)
[LINE DRAWINGS](#)
[PHOTOMETRIC DATA](#)
[INSTALLATION INSTRUCTIONS](#)


SUITABLE APPLICATIONS

- Offices
- Healthcare
- Education
- Hallways
- Conference Rooms
- Multipurpose

CERTIFICATIONS



SPECIFICATIONS

CONSTRUCTION

Steel white body for rigidity, durability & ease of installation. One-piece unit with two universal mounting brackets for quick and easy installation. Optional paint after fabrication.

ELECTRICAL

Class 2 LED light engine for high efficacy and long life. Calculated L70 > 100,000 hours. LED Lumen Maintenance Estimates based on TM-21 projections for the light source at 25°C ambient. Power Factor > 0.90. Standard 120-277 VAC 0-10V dimmable (10%-100%). Optional 347V High Voltage (HV) driver. 1% dimming driver standard on optional 347V High Voltage (HV) drivers. Optional Sensor Ready & DALI Ready drivers for pairing with controls & integrated controls networks. Optional Bi-level dimming driver (100% / 50%), 1% dimming driver & Lutron Hi-Lume 1% dimming driver.

MOUNTING

One-piece door frame light engine with two universal mounting brackets for easy installation. See page 5 for step-by-step troffer kit installation instructions. Air return options include slots in mounting rails.

WARRANTY

5 Year Warranty Standard; 10 Year Warranty Optional ([Terms and Conditions apply](#)).

OPTICS

Standard high transmission extruded PMMA frosted acrylic volumetric lens. Removable lens for easy access to LED board for maintenance.

CONTROLS

Factory installed Advanced sensor options available. Sensor mounts within the body of the fixture. View controls page for more detail (pg.3). Inquire with manufacturer for additional controls options, including customer supplied items.

TROFFER COMPATIBILITY

LANCE is designed to fit into most existing parabolic and lensed troffers with a housing depth of 3.125" or greater. ILP recommends a test installation prior to ordering project quantities. Contact factory for additional troffer compatibility confirmation and custom size configuration options.

CERTIFICATIONS

ETL Listed to US & Canadian safety standards. ETL Listed for UL1598C. Suitable for damp locations. American Recovery & Reinvestment Act Funding Compliant. DLC (DesignLights Consortium) Premium Qualified, with some Standard Qualified configurations. Please refer to the DLC Qualified Products List at www.designlights.org/QPL to confirm specific product qualifications.



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VOLUMETRIC TROFFER RETROFIT KIT

ORDERING GUIDE

PART # Example: LANCE22-48L-U-40-NURO

SERIES	LUMENS		DRIVER	80 CRI/CCT	AIR RETURN	FINISH
LANCE14 LANCE Troffer Kit 1'x4'	23L 2,300 lm 29L 2,900 lm	40L 4,000 lm 49L 4,900 lm 61L 6,100 lm	U ⁴ 120-277V HV ⁵ 347V	50 5000K 40 4000K 35 3500K 30 3000K	BLANK Standard Mounting Brackets AR/W Air Return White Reveal AR/B Air Return Black Reveal	BLANK Pre-paint White PAF Post-Paint White
LANCE22 LANCE Troffer Kit 2'x2'	24L 2,400 lm 31L 3,100 lm 34L 3,400 lm	37L 3,700 lm 48L 4,800 lm		90 CRI/CCT 940 935 930		
LANCE24 LANCE Troffer Kit 2'x4'	30L 3,000 lm 37L 3,700 lm 43L 4,300 lm	49L 4,900 lm 54L 5,400 lm 62L 6,200 lm				

ALT DRIVERS	EMERGENCY	CONTROLS	WARRANTY
BLANK None SR Sensor Ready Driver DR DALI-Ready Driver DIM1 1% Dimming Driver BLD ⁷ Bi-level dimming driver (100% / 50%) with two hot leads LDE1 Lutron Hi-Lume Driver	BLANK None EM5 5W Battery Backup EM5/HE 5W Battery Backup - CEC Title 20 Compliant EM7 7W Battery Backup EM7/HE 7W Battery Backup - CEC Title 20 Compliant EM10 10W Battery Backup EM10/HE 10W Battery Backup - CEC Title 20 Compliant EM10/HE/SD 10W Self Diagnostic Battery Backup EM12 12W Battery Backup	ADVANCED BLANK None NURO ^{1,3} NUROAir Integrated Bluetooth Groupable Sensor ESMC ^{1,3} EasySense Sensor VDO ^{2,3} Lutron Vive DFCSJ-OEM-OCC (Daylight and Occupancy) VRF ^{2,3} Lutron Vive DFCSJ-OEM-RF (Radio Frequency Only) AWN ^{2,3} Lutron Athena Wireless Node RF only AWNS ^{2,3} Lutron Athena Wireless Node with Sensor	BLANK 5 Year 10YR ⁶ 10 Year

SHIP WITH ACCESSORIES	
NURO-SW-3B-BT-BLE-WP-V1	NUROAir Bluetooth 3-Key Wireless Battery Powered Wall Switch
NURO-SW-5B-BT-BLE-WP-V1	NUROAir Bluetooth 5-Key Wireless Battery Powered Wall Switch
NURO-SW-7B-AC-BLE-WP-V1	NUROAir Bluetooth 7-Key Line Voltage (AC 120-277V) Powered Wall Switch
ESMC/WWS/DR	EasySense Dual Rocker Wireless Wall Switch

FOOTNOTES

¹ Easily Controlled via Mobile Phone with Bluetooth App
² Must be used with SR Sensor Ready Driver
³ View controls page for more detail (pg.3)
⁴ Standard 120-277V Driver dimmable down to 10%
⁵ Standard 347V High Voltage Driver dimmable down to 1%
⁶ Contact Factory for more details
⁷ Will not work with stepdowns or sensors



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LED SYSTEMS INFO

SYSTEMS INFO ¹	3000K CCT		3500K CCT		4000K CCT		5000K CCT		Watts ²	CRI	Replaces
	Part #	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens			
LANCE14-23L	2,170	131	2,223	134	2,277	137	2,394	144	17 W	>80	1T8
LANCE14-29L	2,755	131	2,822	134	2,892	137	3,037	144	21 W	>80	2T8
LANCE14-40L	3,765	129	3,858	132	3,952	136	4,152	142	29 W	>80	2T8
LANCE14-49L	4,656	124	4,831	127	4,947	130	5,199	137	38 W	>80	2T8
LANCE14-61L	5,774	127	5,915	130	6,059	133	6,310	135	46 W	>80	3T8
LANCE22-24L	2,187	128	2,359	139	2,448	144	2,561	151	17 W	>80	2T8
LANCE22-31L	2,891	136	3,005	142	3,120	147	3,264	154	21 W	>80	2T8
LANCE22-34L	3,162	127	3,209	129	3,256	130	3,403	134	25 W	>80	3T8
LANCE22-37L	3,446	129	3,582	134	3,717	139	3,889	146	27 W	>80	3T8
LANCE22-48L	4,265	124	4,614	135	4,789	140	5,008	146	34 W	>80	4T8
LANCE24-30L	2,836	133	2,921	137	3,004	141	3,128	147	21 W	>80	2T8
LANCE24-37L	3,530	132	3,634	136	3,738	140	3,891	145	27 W	>80	2T8
LANCE24-43L	4,095	140	4,215	144	4,339	149	4,516	155	29 W	>80	3T8
LANCE24-49L	4,619	136	4,758	140	4,892	144	5,094	150	34 W	>80	3T8
LANCE24-54L	5,050	128	5,225	132	5,373	136	5,596	142	40 W	>80	3T8
LANCE24-62L	5,877	129	6,049	133	6,222	137	6,482	142	46 W	>80	4T8
LANCE14-23L	2,145	130	2,154	131	2,170	132	N/A	N/A	16 W	>90	1T8
LANCE14-29L	2,647	127	2,666	128	2,686	129	N/A	N/A	21 W	>90	2T8
LANCE14-40L	3,495	123	3,520	124	3,546	124	N/A	N/A	29 W	>90	2T8
LANCE14-49L	4,253	118	4,284	119	4,315	119	N/A	N/A	36 W	>90	2T8
LANCE14-61L	5,316	111	5,445	113	5,622	116	N/A	N/A	45 W	>90	3T8
LANCE22-24L	2,062	120	2,089	121	2,129	123	N/A	N/A	17 W	>90	2T8
LANCE22-31L	2,514	115	2,546	117	2,577	118	N/A	N/A	22 W	>90	2T8
LANCE22-34L	2,903	113	2,924	114	2,971	115	N/A	N/A	26 W	>90	3T8
LANCE22-37L	3,379	123	3,421	124	3,463	126	N/A	N/A	28 W	>90	3T8
LANCE22-48L	4,103	119	4,155	121	4,206	122	N/A	N/A	34 W	>90	4T8
LANCE24-30L	2,810	133	2,816	135	2,856	137	N/A	N/A	21 W	>90	2T8
LANCE24-37L	3,365	128	3,461	131	3,510	133	N/A	N/A	27 W	>90	2T8
LANCE24-43L	3,641	127	3,693	129	3,746	131	N/A	N/A	29 W	>90	3T8
LANCE24-49L	4,115	125	4,174	127	4,233	128	N/A	N/A	34 W	>90	3T8
LANCE24-54L	4,460	123	4,524	125	4,588	126	N/A	N/A	40 W	>90	3T8
LANCE24-62L	5,560	116	5,637	117	5,716	119	N/A	N/A	46 W	>90	4T8

¹ LED Chips are frequently updated therefore values are nominal

² Electrical data at 25C (77F). Actual wattage may differ by +/-10%.

CONTROLS OPTIONS

ADVANCED CONTROLS OPTIONS

NUROAir by ILLUMUS

NURO

NUROAir Integrated Bluetooth Sensor is the optimal groupable controls lighting solution. With main features such as PIR Motion Sensing, Occupancy/Vacancy, Bi-Level Dimming and Daylight Harvesting - this flexibility makes the NUROAir Integrated Sensor ideal for tailoring lighting to specific space needs, optimizing both ambiance and efficiency. The NUROAir App, available for download on iOS and Google Play Store, offers a user-friendly interface for automatic or manual customization of your space. Through the app, users can configure sensor settings such as the Light Output, Hold Time, Standby Time/Level, High/Low End Trim, Background Light Level, Set Schedules, and Control Lighting Groups or Zones, all from a mobile or tablet device. Manual control is also available with a range of compatible wireless & wired wall switch options.



POWERED BY ILLUMUS, BRANDS



Click Here or Scan Code
to Learn More About

NUROAir Bluetooth Controls



LANCE

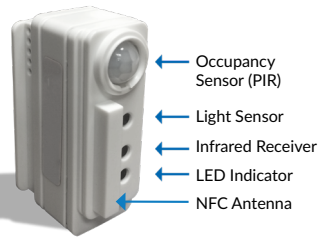
VOLUMETRIC TROFFER RETROFIT KIT

ADVANCED CONTROLS OPTIONS Continued

EASYSENSE

ESMC

EasySense sensor combines occupancy sensing, daylight harvesting and institutional tuning in one compact solution. This is an ideal control for any Commercial application. Each device allows you to turn on/off occupancy and/or daylight harvesting functions as well as set the full light output, background light level, occupancy prolong time, occupancy grace fading time & occupancy time out/hold time. It can be easily controlled via the Philips MasterConnect Bluetooth App on a mobile phone.



ESMC/WWS/DR

Optional Wireless / Batteryless Dual Rocker Wall Switch. Up to 100ft range. Functions include: On/Off, dimming and setting of (2) scenes for full room control.

Specifications:

- Wireless
- Batteryless
- Dual Rocker
- ZigBee®
- 30-100ft Range

Functions:

1. On (Hold to brighten up)
2. Off (Hold to dim down)
3. Scene 1
4. Scene 2



LUTRON

VDO

Vive DFCSJ-OEM-OCC integral fixture control sensor with daylight & occupancy. Vive provides intuitive programming allowing for maximum flexibility with wireless communication & sensing as desired. Provided with factory installed components only. Lutron system provided by others. Sensor must be used in conjunction with Pico Switch/Dimmer. Cannot be used in conjunction with mechanical on/off power switch. Contact factory for more information.



AWNDR

Athena wireless node is a radio frequency (RF) device that enables simple, digital control of individual light fixtures in an Athena control system. Enables individual wireless control of each fixture in an Athena control system. Accommodates zone and control changes without rewiring. All drivers on the link are controlled as a single zone. Provided with factory installed components only. Lutron Athena system provided by others.



VRF

Vive DFCSJ-OEM-RF integral fixture control with Radio Frequency (RF) communication. Vive provides intuitive programming allowing for maximum flexibility with wireless communication as desired. Provided with factory installed components only. Lutron system provided by others. Sensor must be used in conjunction with Pico Switch/Dimmer. Cannot be used in conjunction with mechanical on/off power switch. Contact factory for more information.



AWNS

Athena wireless node with a sensor that enables simple, digital control of individual light fixtures in an Athena control system. Provides wireless control of the fixture and includes a passive infrared (PIR) sensor for occupancy and a daylight sensor. Enables individual wireless control of each fixture in an Athena control system. Accommodates zone and control changes without rewiring. All drivers on the link are controlled as a single zone. Provided with factory installed components only. Lutron Athena system provided by others.

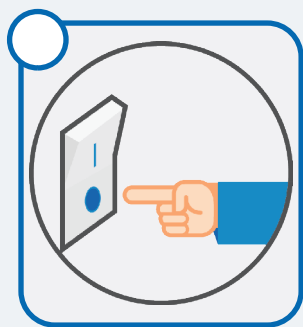




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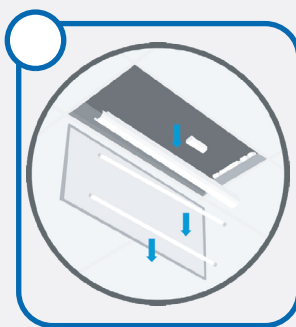
VOLUMETRIC TROFFER RETROFIT KIT

INSTALLATION INSTRUCTIONS



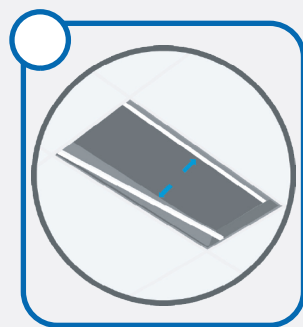
STEP 1

Shut off or disconnect power to the fixture.



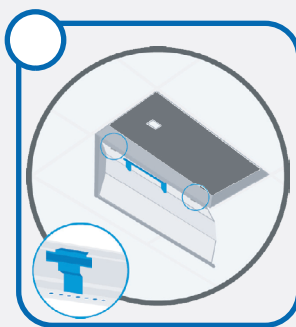
STEP 2

Remove existing fluorescent lamps and components, then disconnect existing connections to the fluorescent ballast.



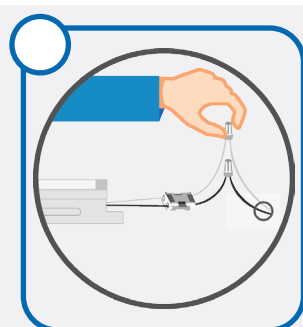
STEP 3

Gently lift the original housing and insert the brackets between the housing and the T-grid. Allow the housing to rest on the brackets, securing them in place. Optional tether included on the mounting brackets to secure the kit to the housing.



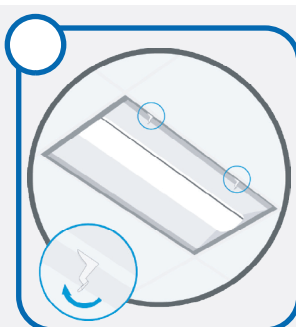
STEP 4

Hang the LANCE body by hooking the T-hinges into the respective slots in the bracket.



STEP 5

Connect the LANCE to AC power and ground.



STEP 6

Rotate the LANCE body up into the fixture and close the latches. Turn on or reconnect power to the fixture to complete the installation.

ILP recommends a test installation prior to ordering project quantities.



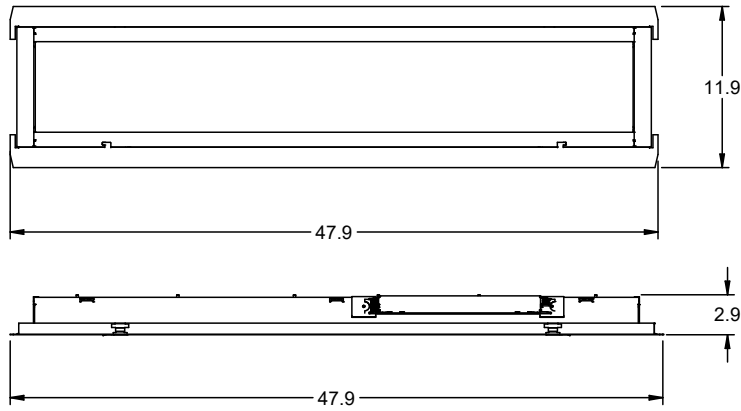
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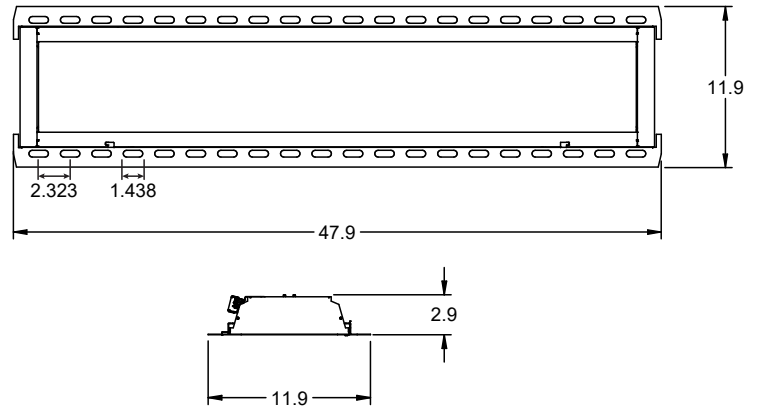
LINE DRAWINGS

LANCE14- 1'x4'

Shown with standard bracket

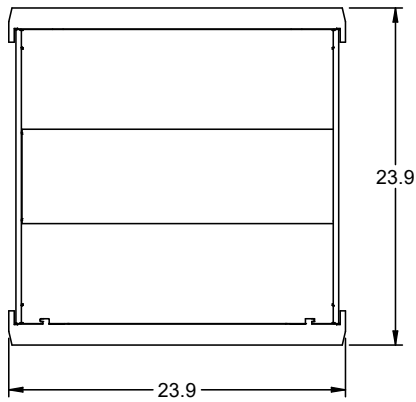


Shown with Air Return bracket

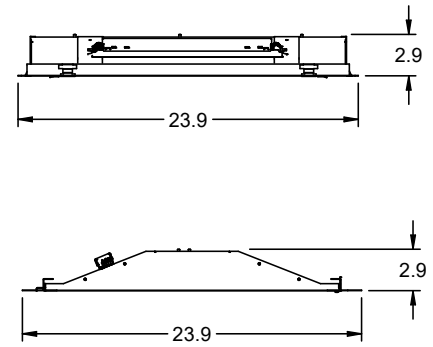
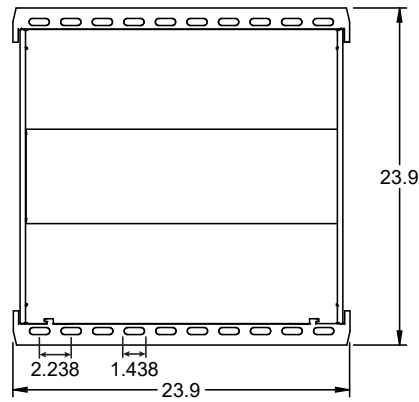


LANCE22- 2'x2'

Shown with standard bracket

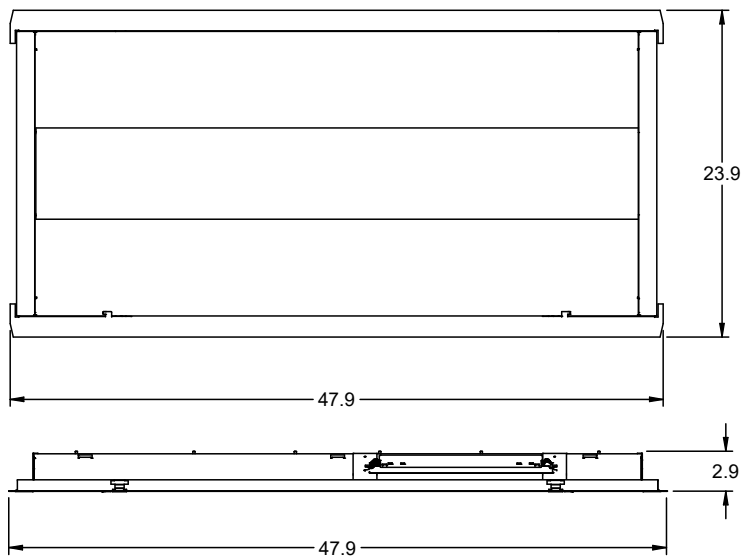


Shown with Air Return bracket

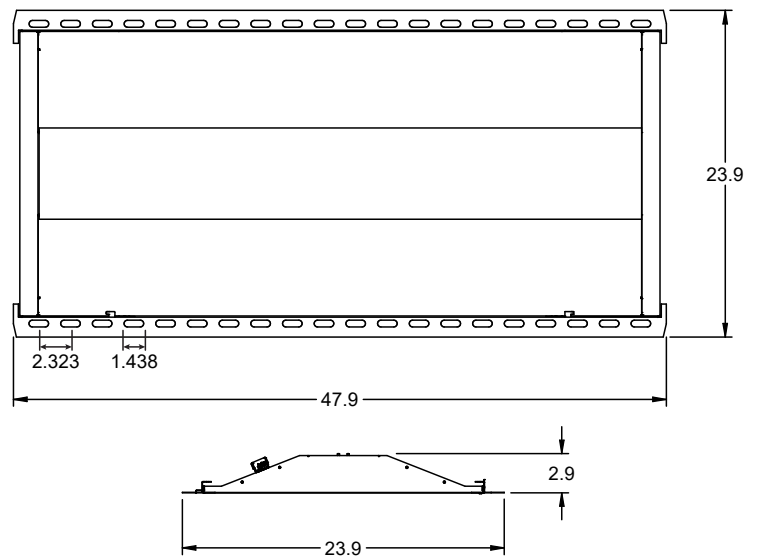


LANCE24- 2'x4'

Shown with standard bracket



Shown with Air Return bracket





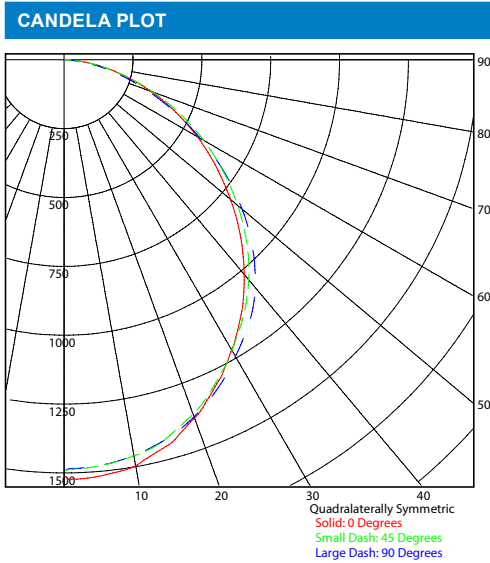
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PHOTOMETRIC DATA

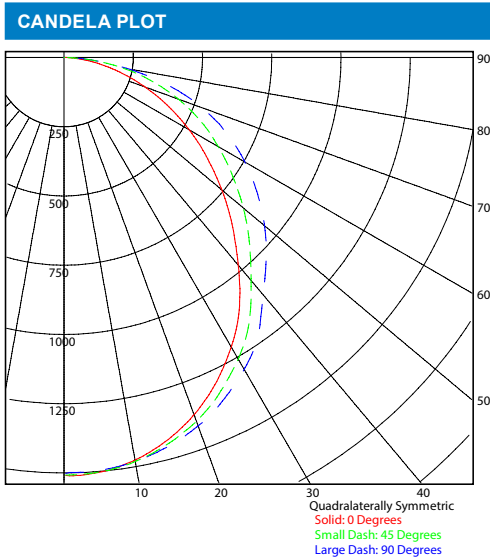
LUMINAIRE DATA	
Part Number	LANCE14-40L-U-40
Description	Latch and Close LED Troffer Retrofit Kit for 1x4 fixture, 4,000lm, with Frosted Acrylic Lens.
Fixture Lumens (lm)	3,952 lm
Wattage (W)	29 W
Efficacy (lm/W)	136 lm/W
Mounting	Recessed
Spacing Criteria	0° = 1.22, 90° = 1.24

ZONAL LUMEN SUMMARY		
Zone	Lumens (lm)	% Fixture
0° - 40°	1,858	47%
0° - 60°	3,203	81%
0° - 90°	3,952	100%
90° - 180°	0	0%
0° - 180°	3,952	100%



LUMINAIRE DATA	
Part Number	LANCE22-37L-U-40
Description	Latch and Close LED Troffer Retrofit Kit for 2x2 fixture, 3,700lm, with Frosted Acrylic Lens.
Fixture Lumens (lm)	3,717 lm
Wattage (W)	27 W
Efficacy (lm/W)	139 lm/W
Mounting	Recessed
Spacing Criteria	0° = 1.20, 90° = 1.30

ZONAL LUMEN SUMMARY		
Zone	Lumens (lm)	% Fixture
0° - 40°	1,652	44%
0° - 60°	2,875	77%
0° - 90°	3,717	100%
90° - 180°	0	0%
0° - 180°	3,717	100%



LUMINAIRE DATA	
Part Number	LANCE24-43L-U-40
Description	Latch and Close LED Troffer Retrofit Kit for 2X4 fixture, 4,300lm, with frosted acrylic lens.
Fixture Lumens (lm)	4,339 lm
Wattage (W)	29 W
Efficacy (lm/W)	149 lm/W
Mounting	Recessed
Spacing Criteria	0° = 1.20, 90° = 1.30

ZONAL LUMEN SUMMARY		
Zone	Lumens (lm)	% Fixture
0° - 40°	1,860	43%
0° - 60°	3,311	76%
0° - 90°	4,339	100%
90° - 180°	0	0%
0° - 180°	4,339	100%

