

Project Name:	Part Number:	Type:
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LANCE

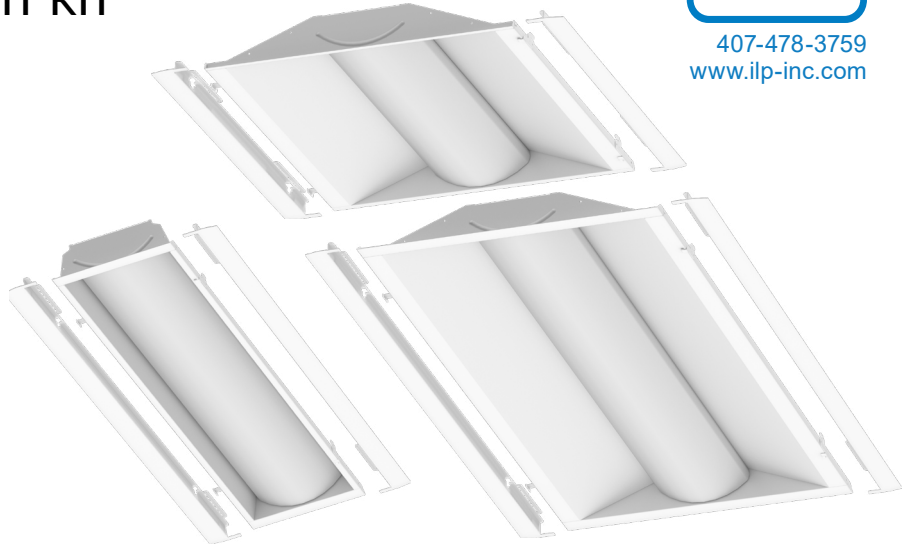
VOLUMETRIC TROFFER RETROFIT KIT



407-478-3759
www.ilp-inc.com

FEATURES

- Troffer Retrofit Kit for recessed lighting applications
- One-piece unit with two universal mounting brackets
- Average install time less than 3 minutes
- Lightweight aluminum matte white finish body
- High transmission extruded PMMA frosted acrylic lens
- Air Return Options
- Advanced Wireless Controls Options
- 1x4, 2x2, 2x4 sizes
- 2,300 – 6,200 Delivered Lumens
- High Efficacy – Up to 155 lm/W
- 3000K – 5000K CCT
- 80 & 90 CRI Options
- Calculated L70 > 100,000 hours
- 0-10V Dimmable Driver (Dims to 10%)
- 5 Year Warranty (std); 10 Year Warranty Optional
- ETL Listed for UL1598C
- DesignLights Consortium® Premium Qualified Luminaire



SUITABLE APPLICATIONS

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

ORDERING GUIDE

SERIES	LUMENS (Select 1)		DRIVER	80CRI / CCT	FINISH	AIR RETURN	WARRANTY
LANCE14	23L	40L	U ⁵ 120-277V	50	BLANK Pre-paint white	BLANK Std. Mounting Brackets	BLANK 5 Year
LANCE Troffer Kit 1'x4'	29L	49L	HV ⁶ 347V	40	PAF Post-paint white	AR/W Air Return White Reveal	10YR ⁷ 10 Year
		61L		35		AR/B Air Return Black Reveal	
				30			
LANCE22	24L	37L		90CRI / CCT			
LANCE Troffer Kit 2'x2'	31L	48L		940			
	34L			935			
				930			
LANCE24	30L	49L					
LANCE Troffer Kit 2'x4'	37L	54L					
	43L	62L					

DRIVER & EMERGENCY OPTIONS		CONTROLS OPTIONS	
Factory Installed		Advanced	
SR	Sensor Ready Driver	ES ^{1,4}	EasySense Sensor
DR	DALI Ready Driver	5E/CU/IL ⁴	Enlighted 5E Individual Lighting (IL) Sensor w/ Control Unit
BLD	Bi-level dimming driver (100% / 50%) with two hot leads	5E/CU/CL ⁴	Enlighted 5E Connected Lighting (CL) Sensor w/ Control Unit
LDE1	Lutron Hi-Lume Driver	5E/CU/IOT ⁴	Enlighted 5E Internet of Things (IOT) Sensor w/ Control Unit
DIM1	1% Dimming Driver	5E/5W/IL ⁴	Enlighted 5E Individual Lighting (IL) Sensor w/ Aux Driver/5 Wire Connection
FI/ILBCP05	5W LED Factory Installed Battery Backup	5E/5W/CL ⁴	Enlighted 5E Connected Lighting (CL) Sensor w/ Aux Driver/5 Wire Connection
FI/ILBCP05/HE	5W LED Factory Installed Battery Backup - CEC Title 20 Compliant	5E/5W/IOT ⁴	Enlighted 5E Internet of Things (IOT) Sensor w/ Aux Driver/5 Wire Connection
FI/ILBCP07	7W LED Factory Installed Battery Backup	VDO ^{2,4}	Lutron Vive DFCSJ-OEM-OCC (Daylight and Occupancy)
FI/ILBCP07/HE	7W LED Factory Installed Battery Backup - CEC Title 20 Compliant	VRF ^{2,4}	Lutron Vive DFCSJ-OEM-RF (Radio Frequency Only)
FI/ILBCP10	10W LED Factory Installed Battery Backup		
FI/ILBCP10/HE	10W LED Factory Installed Battery Backup - CEC Title 20 Compliant		
FI/ILBCP12	12W LED Factory Installed Battery Backup		
		Ship With Accessories	
		ES/PCD ³	EasySense Pre-Programmed Control Device
		ES/WWS/DR	EasySense Dual Rocker Wireless Wall Switch

¹ Must be used with ES/PCD for commissioning

² Must be used with SR Sensor Ready Driver

³ One needed per project

⁴ View controls page for more detail (pg.3)

⁵ Standard 120-277V Driver dimmable down to 10%

⁶ Standard 347V High Voltage Driver dimmable down to 1%

⁷ Contact Factory for more details

LANCE

VOLUMETRIC TROFFER RETROFIT KIT

LED SYSTEMS INFO ¹	3000K CCT		3500K CCT		4000K CCT		5000K CCT		Watts ²	CRI	DLC	Replaces
	Part #	Lumens	Efficacy	Lumens	Efficacy	Lumens	Efficacy	Lumens				
LANCE14-23L	2,170 lm	131 lm/W	2,223 lm	134 lm/w	2,277 lm	137 lm/W	2,394 lm	144 lm/W	17 W	>80	Premium	1T8
LANCE14-29L	2,755 lm	131 lm/W	2,822 lm	134 lm/W	2,892 lm	137 lm/W	3,037 lm	144 lm/W	21 W	>80	Premium	2T8
LANCE14-40L	3,765 lm	129 lm/W	3,858 lm	132 lm/W	3,952 lm	136 lm/W	4,152 lm	142 lm/W	29 W	>80	Premium	2T8
LANCE14-49L	4,656 lm	124 lm/W	4,831 lm	127 lm/W	4,947 lm	130 lm/W	5,199 lm	137 lm/W	38 W	>80	Premium	2T8
LANCE14-61L	5,774 lm	127 lm/W	5,915 lm	130 lm/W	6,059 lm	133 lm/W	6,369 lm	140 lm/W	45 W	>80	Premium	3T8
LANCE22-24L	2,187 lm	128 lm/W	2,359 lm	139 lm/W	2,448 lm	144 lm/W	2,561 lm	151 lm/W	17 W	>80	Premium	2T8
LANCE22-31L	2,891 lm	136 lm/W	3,005 lm	142 lm/W	3,120 lm	147 lm/W	3,264 lm	154 lm/W	21 W	>80	Premium	2T8
LANCE22-34L	3,162 lm	127 lm/W	3,270 lm	132 lm/W	3,394 lm	137 lm/W	3,551 lm	143 lm/W	25 W	>80	Premium	3T8
LANCE22-37L	3,446 lm	129 lm/W	3,582 lm	134 lm/W	3,717 lm	139 lm/W	3,889 lm	146 lm/W	27 W	>80	Premium	3T8
LANCE22-48L	4,265 lm ³	124 lm/W	4,614 lm	135 lm/W	4,789 lm	140 lm/W	5,008 lm	146 lm/W	34 W	>80	Premium	4T8
LANCE24-30L	2,836 lm	133 lm/W	2,921 lm	137 lm/W	3,004 lm	141 lm/W	3,128 lm	147 lm/W	21 W	>80	Premium	2T8
LANCE24-37L	3,530 lm	132 lm/W	3,634 lm	136lm/W	3,738lm	140 lm/W	3,891 lm	145 lm/W	27 W	>80	Premium	2T8
LANCE24-43L	4,095 lm	140 lm/W	4,215 lm	144 lm/W	4,339 lm	149 lm/W	4,516 lm	155 lm/W	29 W	>80	Premium	3T8
LANCE24-49L	4,619 lm	136 lm/W	4,758 lm	140 lm/W	4,892 lm	144 lm/W	5,094 lm	150 lm/W	34 W	>80	Premium	3T8
LANCE24-54L	5,050 lm	128 lm/W	5,225 lm	132 lm/W	5,373 lm	136 lm/W	5,596 lm	142 lm/W	40 W	>80	Premium	3T8
LANCE24-62L	5,877 lm	129 lm/W	6,049 lm	133 lm/W	6,222 lm	137 lm/W	6,482 lm	142 lm/W	46 W	>80	Premium	4T8
LANCE14-23L	2,145 lm	130 lm/W	2,154 lm	131 lm/w	2,170 lm	132 lm/W	N/A	N/A	16 W	>90	Premium	1T8
LANCE14-29L	2,647 lm	127 lm/W	2,666 lm	128 lm/W	2,686 lm	129 lm/W	N/A	N/A	21 W	>90	Premium	2T8
LANCE14-40L	3,495 lm	123 lm/W	3,520 lm	124 lm/W	3,546 lm	124 lm/W	N/A	N/A	29 W	>90	Premium	2T8
LANCE14-49L	4,253 lm	118 lm/W	4,284 lm	119 lm/W	4,315 lm	119 lm/W	N/A	N/A	36 W	>90	Standard	2T8
LANCE14-61L	5,316 lm ³	111 lm/W	5,445 lm ³	113 lm/W	5,622 lm	116 lm/W	N/A	N/A	45 W	>90	Standard	3T8
LANCE22-24L	2,062 lm	120 lm/W	2,089 lm	121 lm/W	2,129 lm	123 lm/W	N/A	N/A	17 W	>90	Premium	2T8
LANCE22-31L	2,514 lm ³	115 lm/W	2,546 lm ³	117 lm/W	2,577 lm ³	118 lm/W	N/A	N/A	22 W	>90	Standard	2T8
LANCE22-34L	2,903 lm ³	113 lm/W	2,924 lm ³	114 lm/W	2,971 lm ³	115 lm/W	N/A	N/A	26 W	>90	Standard	3T8
LANCE22-37L	3,379 lm	123 lm/W	3,421 lm	124 lm/W	3,463 lm	126 lm/W	N/A	N/A	28 W	>90	Standard	3T8
LANCE22-48L	4,103 lm ³	119 lm/W	4,155 lm	121 lm/W	4,206 lm	122 lm/W	N/A	N/A	34 W	>90	Standard	4T8
LANCE24-30L	2,810 lm	133 lm/W	2,816 lm	135 lm/W	2,856 lm	137 lm/W	N/A	N/A	21 W	>90	Premium	2T8
LANCE24-37L	3,365 lm	128 lm/W	3,461 lm	131 lm/W	3,510 lm	133 lm/W	N/A	N/A	27 W	>90	Premium	2T8
LANCE24-43L	3,641 lm	127 lm/W	3,693 lm	129 lm/W	3,746 lm	131 lm/W	N/A	N/A	29 W	>90	Premium	3T8
LANCE24-49L	4,115 lm	125 lm/W	4,174 lm	127 lm/W	4,233 lm	128 lm/W	N/A	N/A	34 W	>90	Premium	3T8
LANCE24-54L	4,460 lm	123 lm/W	4,524 lm	125 lm/W	4,588 lm	126 lm/W	N/A	N/A	40 W	>90	Premium	3T8
LANCE24-62L	5,560 lm	116 lm/W	5,637 lm	117 lm/W	5,716 lm	119 lm/W	N/A	N/A	46 W	>90	Standard	4T8

¹LED Chips are frequently updated therefore values are nominal

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

³ Standard DLC Listing

SPECIFICATIONS

CONSTRUCTION

Light weight aluminum white body for rigidity, durability & ease of installation. One-piece unit with two universal mounting brackets for quick and easy installation into grid and hard-lid ceilings. 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 4 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](#)).

LANCESPEC0221

OPTICS

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

TROFFER COMPATIBILITY

LANCE is designed to fit into most existing parabolic and lensed troffers with a housing depth of 3 1/8" or greater. ILP recommends a test installation prior to ordering project quantities. Contact factory for additional troffer compatibility confirmation and custom size configuration options.

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.

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.

LANCE

VOLUMETRIC TROFFER RETROFIT KIT

ADVANCED CONTROLS OPTIONS

EASYSENSE

ES

EasySense sensor combines occupancy sensing, daylight harvesting & institutional tuning in one compact solution. This is an ideal control for any commercial application. Each sensor 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 and occupancy time out/hold time. Requires the use of EasySense Pre-Programmed Control Device (ES/PCD), or approved phone from compatibility list; one needed per project.



ES/PCD

Pre-Programmed EasySense Control Device. One needed per project. Sensor can also be programmed with the approved compatible cell phone (listed below).

Compatible Cell Phones:

- LG G4
- Samsung S5
- Samsung Note 4
- Samsung S4 Mini
- Samsung S6
- Samsung Note Edge 1
- Samsung S4

ES/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
- ZigBee®
- Batteryless
- 30-100ft Range
- Dual Rocker

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.



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. Providing 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.



ENLIGHTED

5E/CU/IL

Bundled System with Enlighted 5E sensor (SU-5E-IL), Control Unit (CU-4E-FM) and Cable (CBL-5E-CU4-30N). Fixtures are controlled based on occupancy & ambient light. Includes ability to group fixtures together and connect to a switch to zone fixtures for group operation. Provided with factory installed components only. Enlighted system provided by others. Contact factory for more information.



5E/CU/CL

Bundled System with Enlighted 5E sensor (SU-5E-CL), Control Unit (CU-4E-FM) and Cable (CBL-5E-CU4-30N). Fixtures are controlled based on occupancy and ambient light. Includes individual lighting control plus connection to Enlighted Energy Manager. The Energy Manager provides data analysis for all data collected by the Enlighted Smart Sensors for energy, occupancy and environment. Provided with factory installed components only. Enlighted system provided by others. Contact factory for more information. (see image above)

5E/CU/IOT

Bundled System with Enlighted 5E sensor (SU-5E-IOT), Control Unit (CU-4E-FM) and Cable (CBL-5E-CU4-30N). Fixtures are controlled based on occupancy and ambient light. Includes individual lighting control plus connection to Enlighted Energy Manager. Energy Manager provides data analysis for all data collected by Enlighted Smart Sensors for energy, occupancy & environment. Additionally, the IOT functionality takes the data access and function beyond just lighting to a wide range of applications beyond the standard connected lighting controls. Provided with factory installed components only. Enlighted system provided by others. Contact factory for more information. (see image above)

5E/5W/IL

Bundled System with Enlighted 5E sensor (SU-5E-IL) & Cable (CBL-5E-CU4-30N) paired with a driver with auxiliary power and 5 wire connection. Fixtures are controlled based on occupancy and ambient light. Includes ability to group fixtures together and connect to a switch to zone fixtures for group operation. Provided with factory installed components only. Enlighted system provided by others. Contact factory for more information. (see image above)

5E/5W/CL

Bundled System with Enlighted 5E sensor (SU-5E-CL) & Cable (CBL-5E-CU4-30N) paired with a driver with auxiliary power & 5 wire connection. Fixtures are controlled based on occupancy and ambient light. Includes individual lighting control plus connection to Enlighted Energy Manager. The Energy Manager provides data analysis for all data collected by the Enlighted Smart Sensors for energy, occupancy and environment. Provided with factory installed components only. Enlighted system provided by others. Contact factory for more information. (see image above)


5E/5W/IOT

Bundled System with Enlighted 5E sensor (SU-5E-IOT) & Cable (CBL-5E-CU4-30N) paired w/ a driver w/ auxiliary power and 5 wire connection. Fixtures are controlled based on occupancy & ambient light. Includes individual lighting control plus connection to Enlighted Energy Manager. The Energy Manager provides data analysis for all data collected by Enlighted Smart Sensors for energy, occupancy & environment. Additionally, the IOT functionality takes the data access and function beyond just lighting to a wide range of applications beyond the standard connected lighting controls. Provided with factory installed components only. Enlighted system provided by others. Contact factory for more information. (see image above)

LANCE

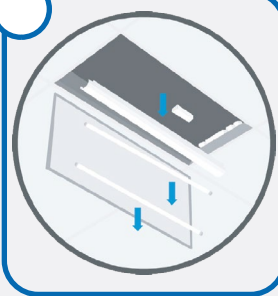
VOLUMETRIC TROFFER RETROFIT KIT

INSTALLATION INSTRUCTIONS



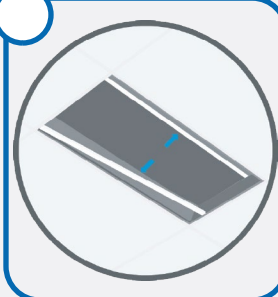
STEP 1

Shut off or disconnect power to the fixture.



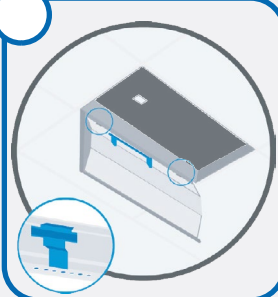
STEP 2

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



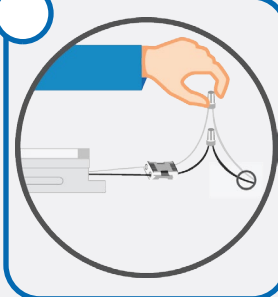
STEP 3

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.



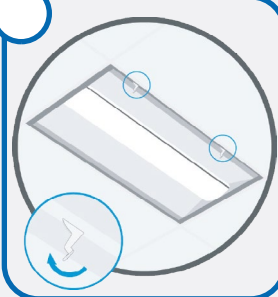
STEP 4

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

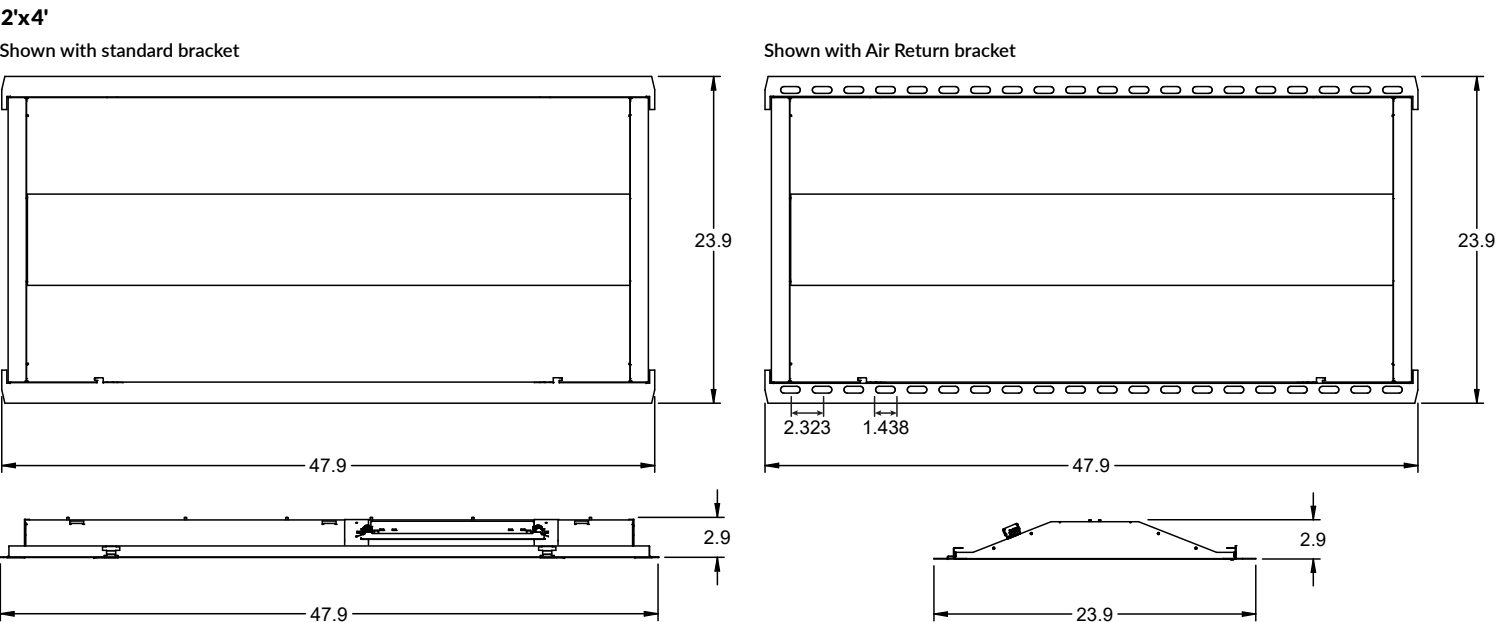
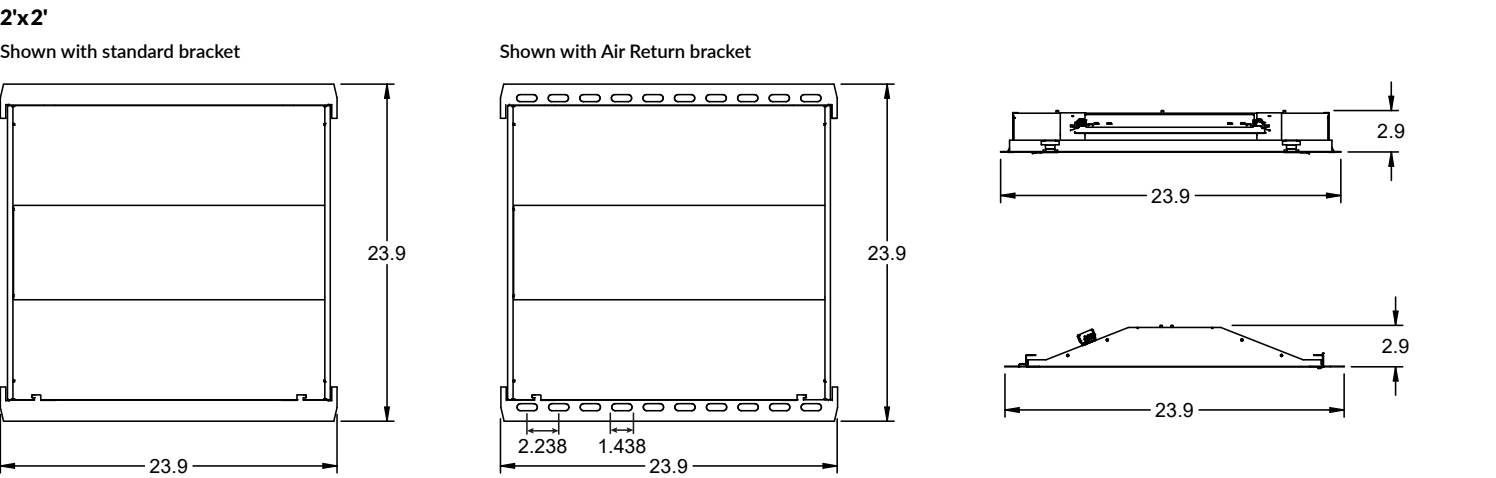
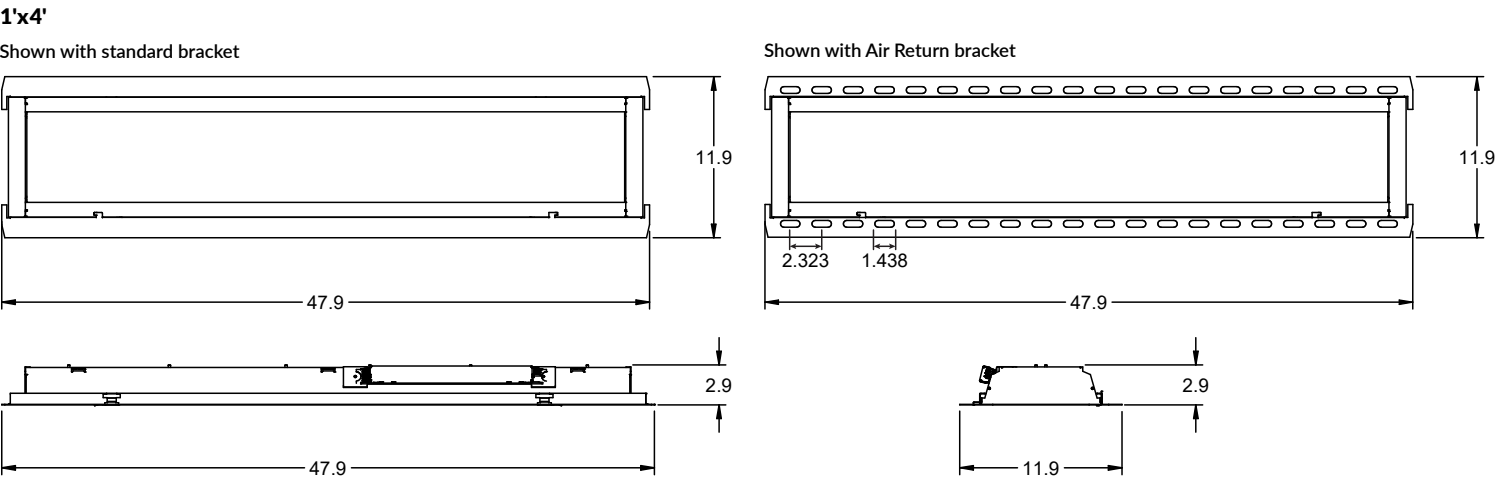
Rotate the LANCE body up into the fixture and close the latches. Turn on or reconnect power to the fixture to complete the installation.

ILP recommends a test installation prior to ordering project quantities.

LANCE

VOLUMETRIC TROFFER RETROFIT KIT

LINE DRAWINGS



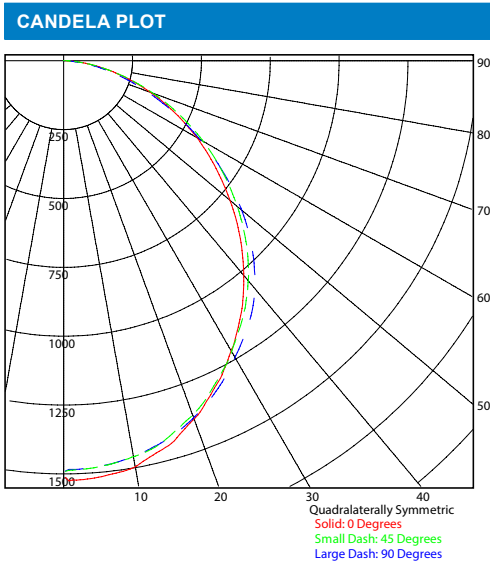
LANCE

VOLUMETRIC TROFFER RETROFIT KIT

PHOTOMETRIC DATA

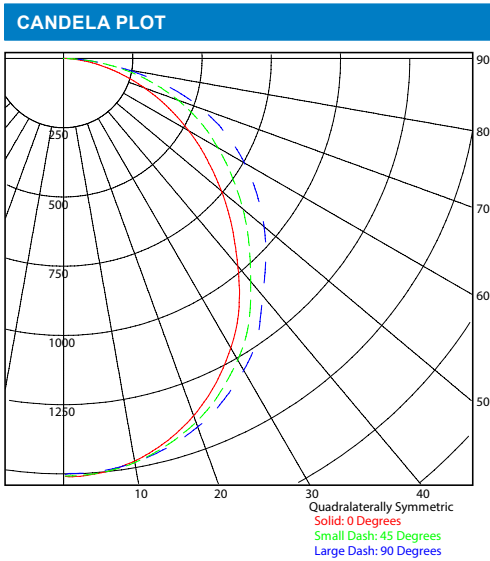
LUMINAIRE DATA	
Part Number	LANCE14-40L-U-40
Description	Latch and Close LED Troffer Retrofit Kit for 1x4 fixture, 4,000lm, with Frosted Acrylic Lens.
Fixture Lumens (lm)	3,952 lm
Wattage (W)	29 W
Efficacy (lm/W)	136 lm/W
Mounting	Recessed
Spacing Criteria	0° = 1.22, 90° = 1.24

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%

