

Project Name:	Part Number:	Type:
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VOLA

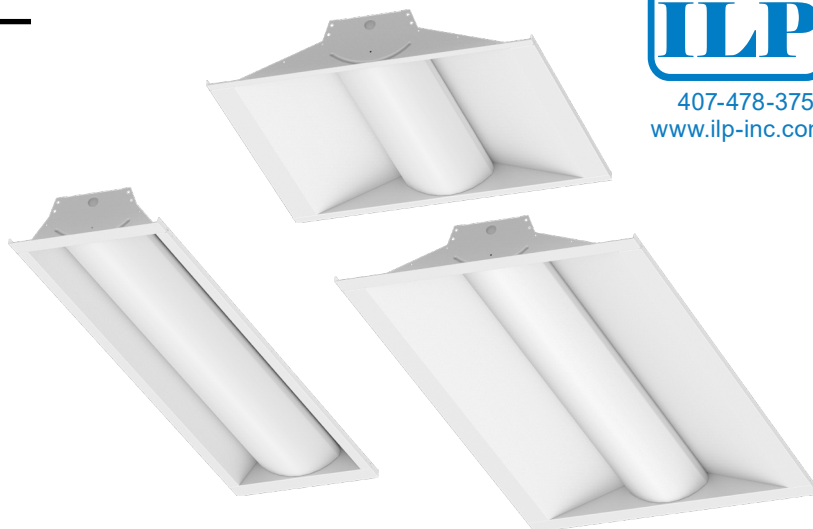
VOLUMETRIC TROFFER



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

FEATURES

- Architecturally designed volumetric troffer
- Lightweight aluminum matte white finish body
- High transmission extruded PMMA frosted acrylic lens
- Recessed, Surface or Flange Mount
- Air Return Options
- Advanced Wireless Controls Options
- 1x4, 2x2, 2x4 sizes
- 2,400 – 10,000 Delivered Lumens
- High Efficacy – Up to 151 lm/W
- 3000K – 5000K CCT
- 80 & 90 CRI Options
- Calculated L70 > 100,000 hrs
- 0-10V Dimmable Driver
- 5 Year Warranty
- ETL Listed
- 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
VOLA14 VolumetricTroffer 1'x4'	24L	46L	U 120-277V	50	BLANK Pre-paint white	BLANK None - std. housing
	30L	52L	HV ⁶ 347V	40	PAF Post-paint white	AR/W Air Return - White Reveal
	41L	62L		35		AR/B Air Return - Black Reveal
				30		
VOLA22 VolumetricTroffer 2'x2'	24L	45L		90CRI / CCT		
	31L	50L				
	34L	61L				
	39L	76L ⁵				
VOLA24 VolumetricTroffer 2'x4'	29L	53L				
	34L	62L				
	37L	79L ⁵				
	43L	86L ⁵				
	49L	104L ⁵				

OPTIONS		CONTROLS	
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 with Control Unit
BLD	Bi-level dimming driver (100%/50%) with two hot leads	5E/CU/CL ⁴	Enlighted 5E Connected Lighting (CL) Sensor with Control Unit
LDE1	Lutron Hi-Lume Driver	5E/CU/IOT ⁴	Enlighted 5E Internet of Things (IOT) Sensor with Control Unit
DIM1	1% Dimming Driver	5E/5W/IL ⁴	Enlighted 5E Individual Lighting (IL) Sensor w/ Aux Driver/5 Wire Connection
FII/LBCP05	5W LED Factory Installed Battery Backup	5E/5W/CL ⁴	Enlighted 5E Connected Lighting (CL) Sensor w/ Aux Driver/5 Wire Connection
FII/LBCP05/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
FII/LBCP07	7W LED Factory Installed Battery Backup	VDO ^{2,4}	Lutron Vive DFCSJ-OEM-OCC (Daylight and Occupancy)
FII/LBCP07/HE	7W LED Factory Installed Battery Backup-CEC Title 20 Compliant	VRF ^{2,4}	Lutron Vive DFCSJ-OEM-RF (Radio Frequency Only)
FII/LBCP10	10W LED Factory Installed Battery Backup	Ship With Options and Controls	
FII/LBCP10/HE	10W LED Factory Installed Battery Backup-CEC Title 20 Compliant		
FII/LBCP12	12W LED Factory Installed Battery Backup	ES/PCD ³	EasySense Pre-Programmed Control Device
WHIP/6FT/3WIRE	6FT MC Cable w/ 3 leads attached to power—non-dimming function	ES/WWS/DR	EasySense Dual Rocker Wireless Wall Switch
WHIP/6FT/4WIRE	6FT MC Cable w/ 3 leads attached to power & 1 lead for use w/ Battery Backup—non-dimming functions	HC	Hurricane Clips
WHIP/6FT/5WIRE	6FT MC Cable w/ 3 leads attached to power & 2 leads attached to dimming	SM	Surface Mount Housing Kit
WHIP/6FT/6WIRE	6FT MC Cable w/ 3 leads attached to power, 2 leads attached to dimming & 1 lead for use w/ Battery Backup	FLGK	Flange Kit

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 details (pg.3)

⁵ Standard 120-277V driver dimmable down to 1%

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

VOLUMETRIC TROFFER

LED SYSTEMS INFO

LED SYSTEMS INFO¹	3000K CCT		3500K CCT		4000K CCT		5000K CCT					
Part #	Lumens	Efficacy	Lumens	Efficacy	Lumens	Efficacy	Lumens	Efficacy	Watts²	CRI	DLC	Replaces
VOLA14-24L	2,227 lm	134 lm/W	2,309 lm	139 lm/W	2,389 lm	143 lm/W	2,444 lm	148 lm/W	17 W	>80	Premium	1T8
VOLA14-30L	2,806 lm	132 lm/W	2,906 lm	136 lm/W	3,008 lm	141 lm/W	3,076 lm	144 lm/W	21 W	>80	Premium	2T8
VOLA14-41L	3,804 lm	129 lm/W	3,942 lm	134 lm/W	4,081 lm	139 lm/W	4,175 lm	142 lm/W	29 W	>80	Premium	2T8
VOLA14-46L	4,279 lm	127 lm/W	4,434 lm	132 lm/W	4,588 lm	137 lm/W	4,693 lm	140 lm/W	34 W	>80	Premium	2T8
VOLA14-52L	4,855 lm	129 lm/W	5,032 lm	133 lm/W	5,206 lm	138 lm/W	5,327 lm	141 lm/W	38 W	>80	Premium	3T8
VOLA14-62L	5,811 lm	126 lm/W	5,961 lm	130 lm/W	6,167 lm	135 lm/W	6,309 lm	138 lm/W	46 W	>80	Premium	3T8
VOLA22-24L	2,261 lm	134 lm/W	2,353 lm	141 lm/W	2,435 lm	145 lm/W	2,491 lm	149 lm/W	17 W	>80	Premium	2T8
VOLA22-31L	2,862 lm	136 lm/W	2,965 lm	141 lm/W	3,069 lm	146 lm/W	3,138 lm	149 lm/W	21 W	>80	Premium	2T8
VOLA22-34L	3,146 lm	129 lm/W	3,261 lm	133 lm/W	3,373 lm	138 lm/W	3,452 lm	141 lm/W	25 W	>80	Premium	3T8
VOLA22-39L	3,657 lm	126 lm/W	3,791 lm	131 lm/W	3,924 lm	135 lm/W	4,014 lm	139 lm/W	29 W	>80	Premium	3T8
VOLA22-45L	4,240 lm	126 lm/W	4,396 lm	130 lm/W	4,547 lm	135 lm/W	4,652 lm	138 lm/W	34 W	>80	Premium	4T8
VOLA22-50L	4,652 lm	127 lm/W	4,821 lm	131 lm/W	4,990 lm	136 lm/W	5,104 lm	139 lm/W	37 W	>80	Premium	2T5
VOLA22-61L	5,652 lm	123 lm/W	5,858 lm	128 lm/W	6,065 lm	132 lm/W	6,202 lm	135 lm/W	46 W	>80	Premium	3T5
VOLA22-76L	6,843 lm	123 lm/W	7,166 lm	128 lm/W	7,555 lm	135 lm/W	7,802 lm	140 lm/W	56 W	>80	Premium	4T5
VOLA24-29L	2,739 lm	129 lm/W	2,839 lm	134 lm/W	2,938 lm	139 lm/W	3,006 lm	142 lm/W	23 W	>80	Premium	2T8
VOLA24-34L	3,198 lm	128 lm/W	3,315 lm	133 lm/W	3,430 lm	137 lm/W	3,510 lm	140 lm/W	25 W	>80	Premium	2T8
VOLA24-37L	3,449 lm	130 lm/W	3,574 lm	134 lm/W	3,699 lm	139 lm/W	3,784 lm	142 lm/W	27 W	>80	Premium	2T8
VOLA24-43L	4,031 lm	138 lm/W	4,177 lm	143 lm/W	4,323 lm	148 lm/W	4,422 lm	151 lm/W	29 W	>80	Premium	3T8
VOLA24-49L	4,584 lm	134 lm/W	4,752 lm	139 lm/W	4,919 lm	144 lm/W	5,031 lm	148 lm/W	34 W	>80	Premium	3T8
VOLA24-53L	4,942 lm	130 lm/W	5,121 lm	135 lm/W	5,301 lm	140 lm/W	5,421 lm	143 lm/W	38 W	>80	Premium	3T8
VOLA24-62L	5,878 lm	127 lm/W	6,022 lm	132 lm/W	6,233 lm	136 lm/W	6,374 lm	139 lm/W	46 W	>80	Premium	4T8
VOLA24-79L	7,135 lm	126 lm/W	7,525 lm	133 lm/W	7,920 lm	140 lm/W	8,197 lm	145 lm/W	57 W	>80	Premium	2T5
VOLA24-86L	7,766 lm	125 lm/W	8,188 lm	132 lm/W	8,617 lm	139 lm/W	8,921 lm	144 lm/W	62 W	>80	Premium	3T5
VOLA24-104L	9,340 lm	123 lm/W	9,854 lm	130 lm/W	10,379 lm	137 lm/W	10,731 lm	142 lm/W	76 W	>80	Premium	4T5
VOLA14-24L	2,199 lm	133 lm/W	2,239 lm	135 lm/W	2,278 lm	137 lm/W	N/A	N/A	17 W	>90	Premium	1T8
VOLA14-30L	2,634 lm	125 lm/W	2,681 lm	128 lm/W	2,728 lm	130 lm/W	N/A	N/A	21 W	>90	Premium	2T8
VOLA14-41L	3,474 lm	121 lm/W	3,536 lm	123 lm/W	3,599 lm	125 lm/W	N/A	N/A	29 W	>90	Premium	2T8
VOLA14-46L	3,902 lm	118 lm/W	3,972 lm	120 lm/W	4,041 lm	122 lm/W	N/A	N/A	33 W	>90	Premium	2T8
VOLA14-52L	4,453 lm³	115 lm/W	4,532 lm	117 lm/W	4,612 lm	119 lm/W	N/A	N/A	39 W	>90	Premium	3T8
VOLA14-62L	5,414 lm³	113 lm/W	5,509 lm³	115 lm/W	5,607 lm	117 lm/W	N/A	N/A	48 W	>90	Premium	3T8
VOLA22-24L	2,083 lm	120 lm/W	2,120 lm	123 lm/W	2,164 lm	125 lm/W	N/A	N/A	17 W	>90	Premium	2T8
VOLA22-31L	2,539 lm	116 lm/W	2,584 lm	118 lm/W	2,629 lm	120 lm/W	N/A	N/A	22 W	>90	Premium	2T8
VOLA22-34L	2,871 lm³	111 lm/W	2,926 lm³	113 lm/W	2,993 lm	116 lm/W	N/A	N/A	25 W	>90	Premium	3T8
VOLA22-39L	3,573 lm	123 lm/W	3,637 lm	125 lm/W	3,700 lm	127 lm/W	N/A	N/A	29 W	>90	Premium	3T8
VOLA22-45L	4,143 lm	120 lm/W	4,217 lm	122 lm/W	4,291 lm	124 lm/W	N/A	N/A	35 W	>90	Premium	4T8
VOLA22-50L	4,496 lm	118 lm/W	4,576 lm	120 lm/W	4,656 lm	122 lm/W	N/A	N/A	38 W	>90	Premium	2T5
VOLA22-61L	5,384 lm³	114 lm/W	5,481 lm	117 lm/W	5,577 lm	119 lm/W	N/A	N/A	47 W	>90	Premium	3T5
VOLA22-76L	6,078 lm	116 lm/W	6,186 lm	118 lm/W	6,294 lm	120 lm/W	N/A	N/A	53 W	>90	Premium	4T5
VOLA24-29L	2,734 lm	131 lm/W	2,754 lm	132 lm/W	2,804 lm	133 lm/W	N/A	N/A	21 W	>90	Premium	2T8
VOLA24-34L	3,375 lm	137 lm/W	3,398 lm	138 lm/W	3,422 lm	139 lm/W	N/A	N/A	25 W	>90	Premium	2T8
VOLA24-37L	3,365 lm	128 lm/W	3,461 lm	131 lm/W	3,510 lm	133 lm/W	N/A	N/A	26 W	>90	Premium	2T8
VOLA24-43L	3,915 lm	134 lm/W	3,942 lm	135 lm/W	3,969 lm	136 lm/W	N/A	N/A	29 W	>90	Premium	3T8
VOLA24-49L	4,336 lm	129 lm/W	4,366 lm	130 lm/W	4,396 lm	131 lm/W	N/A	N/A	34 W	>90	Premium	3T8
VOLA24-53L	5,015 lm	128 lm/W	5,050 lm	129 lm/W	5,084 lm	129 lm/W	N/A	N/A	39 W	>90	Premium	3T8
VOLA24-62L	5,457 lm	116 lm/W	5,495 lm	116 lm/W	5,532 lm	117 lm/W	N/A	N/A	47 W	>90	Premium	4T8
VOLA24-79L	6,795 lm	132 lm/W	6,841 lm	133 lm/W	6,969 lm	133 lm/W	N/A	N/A	52 W	>90	Premium	2T5
VOLA24-86L	7,782 lm	133 lm/W	7,836 lm	134 lm/W	7,889 lm	135 lm/W	N/A	N/A	58 W	>90	Premium	3T5
VOLA24-104L	8,409 lm	119 lm/W	8,591 lm	121 lm/W	8,753 lm	124 lm/W	N/A	N/A	71 W	>90	Premium	4T5

¹LED Chips are frequently updated therefore values are nominal

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

³ Standard DLC Listing

VOLA

VOLUMETRIC TROFFER

SPECIFICATIONS

CONSTRUCTION

Lightweight aluminum matte white finish body for rigidity, durability and ease of installation. Optional paint after fabrication. Designed to achieve maximum performance and improved aesthetics.

ELECTRICAL

Class 2 LED light engine for high efficacy and long life. Calculated L70 > 100,000 hrs. 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 and DALI Ready drivers for pairing with controls and integrated controls networks. Optional Bi-level dimming driver (100% / 50%), 1% Dimming driver and Lutron Hi-Lume 1% dimming driver.

INSTALLATION

VOLA fits into standard 1 $\frac{5}{8}$ " & narrow $\frac{5}{8}$ " T-grid ceiling. Optional Flange Kit (FLGK) for recessed drywall mounting & Surface Mount (SM) to ceiling mount options available. Access plate installed on top of fixture for easy hardwire power connections. Optional factory installed power flex conduit whip (WHIP) available to reduce electrical installation time.

OPTICS

Standard high transmission extruded PMMA frosted acrylic volumetric lens. Removeable lens for easy access to LED boards and drivers for maintenance.

CONTROLS

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

WARRANTY

5 Year Warranty (Terms and Conditions apply)

CERTIFICATIONS

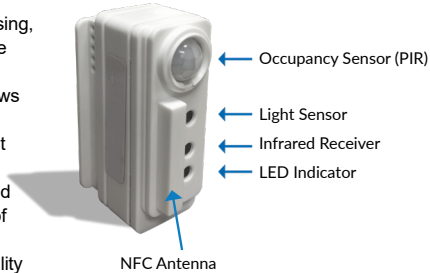
ETL Listed to US & Canadian safety standards. Suitable for damp locations. Type IC rated. American Recovery & Reinvestment Act Funding Compliant. DLC (DesignLights Consortium) Premium Qualified, with some Standard Qualified configurations. Please refer to the DLC Qualified Products List at www.designlights.org/QPL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

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 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 an approved compatible cell phone (listed to the right).

Compatible Cell Phones:

- LG G3
- LG G Vista
- LG G4
- Samsung S5
- Samsung S5 WHT
- Samsung Note 4
- Samsung Note Edge
- Samsung Galaxy S7 Edge
- Samsung Galaxy J3
- Samsung Galaxy J7
- Samsung S8
- Samsung Galaxy S9
- Nexus 5X
- Nexus 6P

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
- 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. 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. 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)

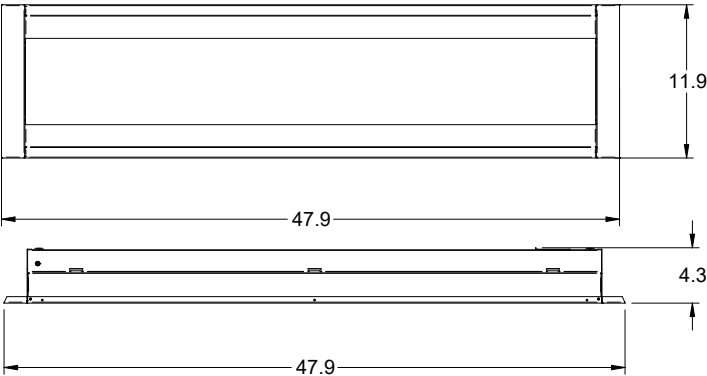
5E/5W/IOT

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)

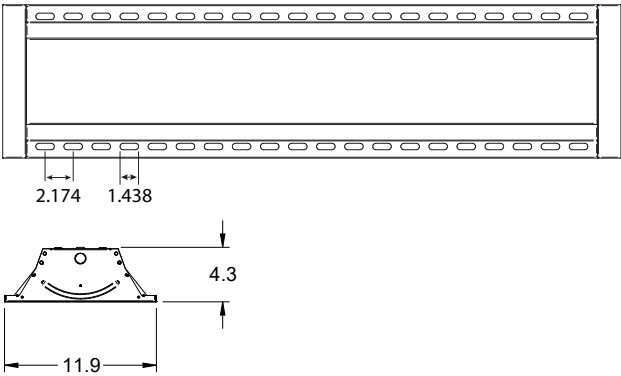
LINE DRAWINGS

1'x4'

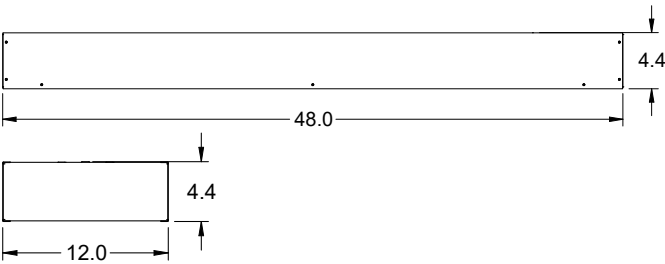
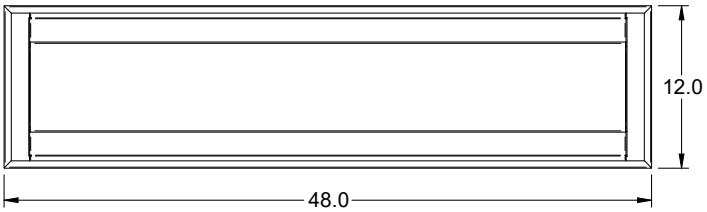
Standard Housing



Air Return Housing

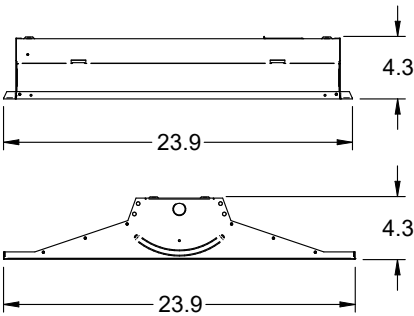
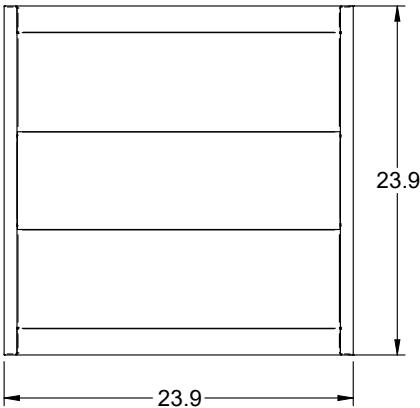


Surface Mount Housing

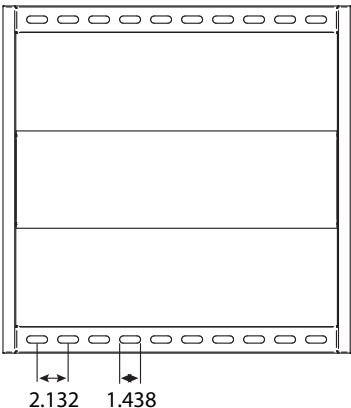


2'x2'

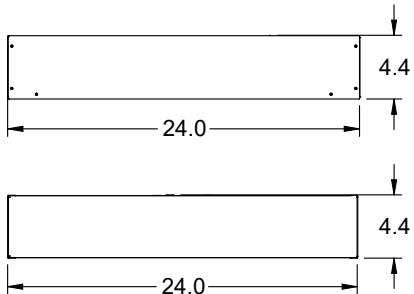
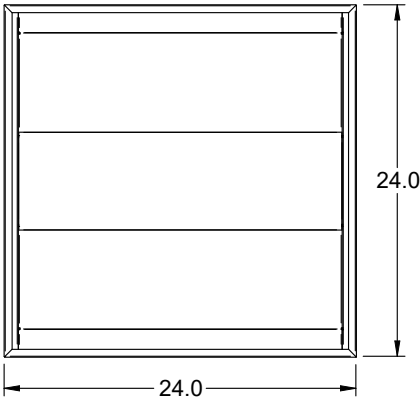
Standard Housing



Air Return Housing



Surface Mount Housing



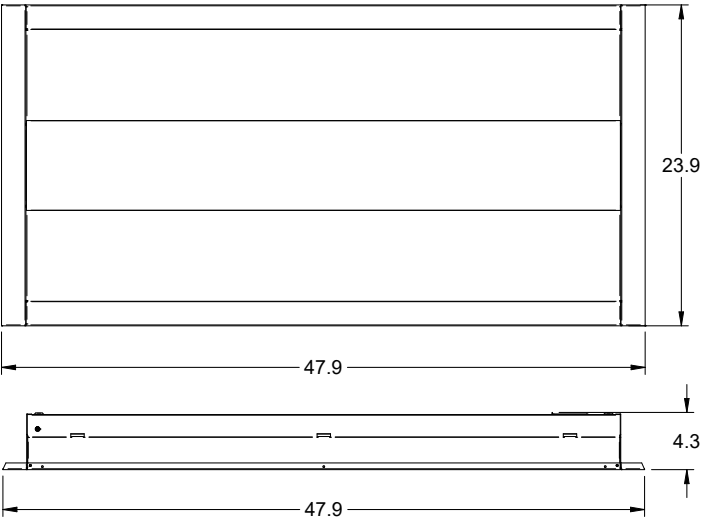
VOLA

VOLUMETRIC TROFFER

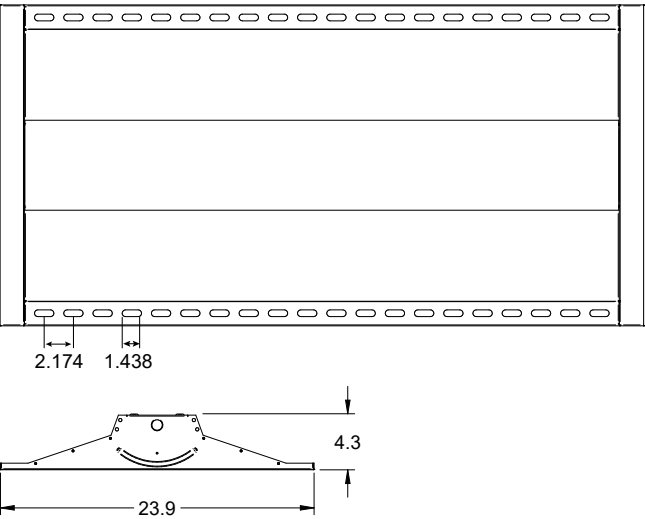
LINE DRAWINGS

2'x4'

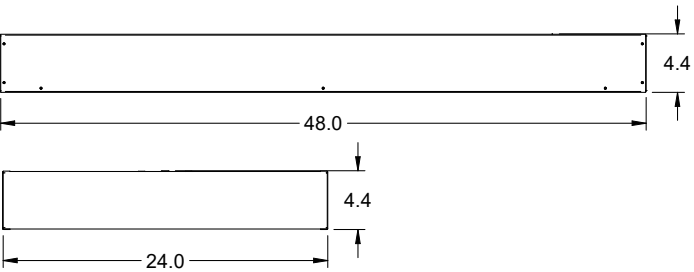
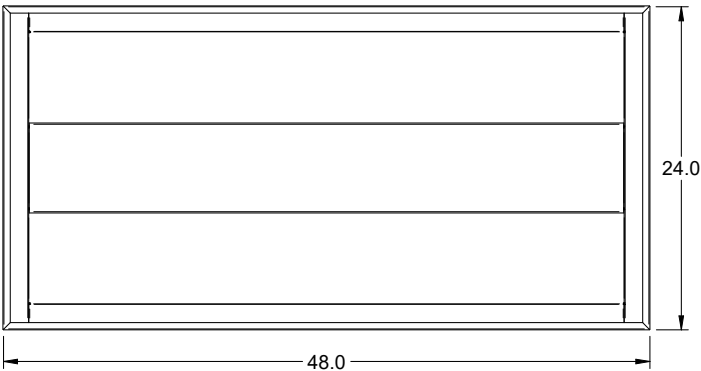
Standard Housing



Air Return Housing



Surface Mount Housing



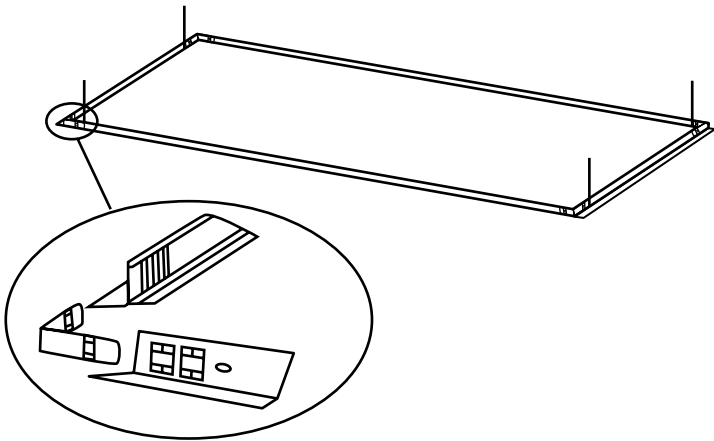
Flange Kit

Dimensions:

1x4 - Ceiling opening is 12.25" x 48.25"

2x2 - Ceiling opening is 24.25" x 24.25"

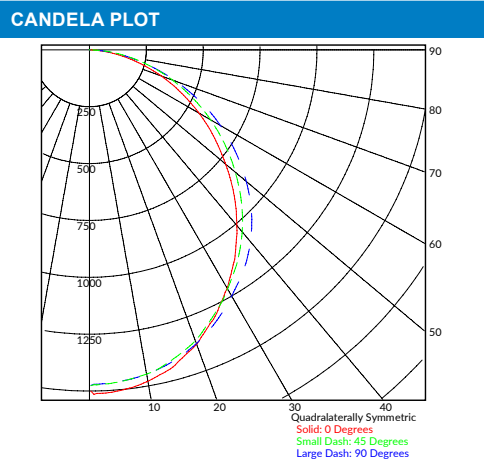
2x4 - Ceiling opening is 24.25" x 48.25"



PHOTOMETRIC DATA

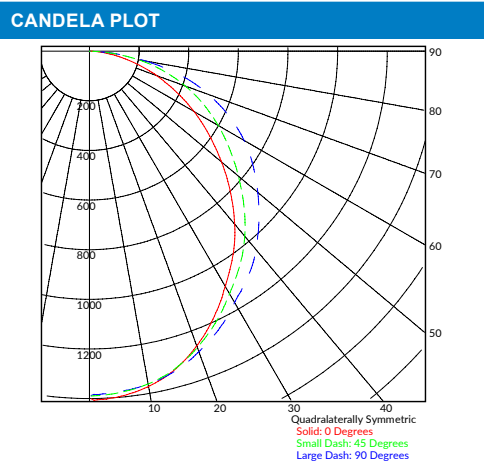
LUMINAIRE DATA	
Part Number	VOLA14-41L-U-40
Description	1x4 Volumetric LED Troffer, 4,100lm, with Frosted Acrylic Lens.
Fixture Lumens (lm)	4,081 lm
Wattage (W)	29 W
Efficacy (lm/W)	139 lm/W
Mounting	Recessed
Spacing Criteria	0° = 1.22, 90° = 1.26

ZONAL LUMEN SUMMARY		
Zone	Lumens (lm)	% Fixture
0° - 40°	1,851	45%
0° - 60°	3,231	79%
0° - 90°	4,081	100%
90° - 180°	0	0%
0° - 180°	4,081	100%



LUMINAIRE DATA	
Part Number	VOLA22-39L-U-40
Description	2x2 Volumetric LED Troffer, 3,900lm, with Frosted Acrylic Lens.
Fixture Lumens (lm)	3,924 lm
Wattage (W)	29 W
Efficacy (lm/W)	135 lm/W
Mounting	Recessed
Spacing Criteria	0° = 1.18, 90° = 1.26

ZONAL LUMEN SUMMARY		
Zone	Lumens (lm)	% Fixture
0° - 40°	1,723	44%
0° - 60°	3,023	77%
0° - 90°	3,924	100%
90° - 180°	0	0%
0° - 180°	3,924	100%



LUMINAIRE DATA	
Part Number	VOLA24-43L-U-40
Description	2x4 Volumetric LED Troffer, 4,300lm, with Frosted Acrylic Lens.
Fixture Lumens (lm)	4,323 lm
Wattage (W)	29 W
Efficacy (lm/W)	148 lm/W
Mounting	Recessed
Spacing Criteria	0° = 1.22, 90° = 1.30

ZONAL LUMEN SUMMARY		
Zone	Lumens (lm)	% Fixture
0° - 40°	2,105	43%
0° - 60°	3,739	76%
0° - 90°	4,323	100%
90° - 180°	0	0%
0° - 180°	4,323	100%

