Project Name: Part Number: Type:

# **FLT**

# FLAT LENS VOLUMETRIC TROFFER

## **FEATURES**

• Architecturally Designed Flat Lensed Volumetric Troffer

- Lightweight Aluminum Matte White Finish Body
- Impact & Scratch Resistant PMMA Frosted Acrylic Lens
- Tamper & Vandal Resistant Design
- Recessed, Surface or Flange Mount
- Advanced Wireless Controls Options
- 1x4, 2x2, 2x4 sizes
- 2,300 4,800 Delivered Lumens
- 3000K-4000K CCT
- >80 Color Rendering Index (CRI)
- Calculated L70 >100,000 hrs
- 0-10V Dimmable Driver (100%-1%)
- 120-277V Universal Voltage
- 5 Year Warranty
- ETL Listed for Damp Locations



















• Education • Healthcare • Offices

12W LED Eactory Installed Battery Backup

• Hallways

• Multipurpose Rooms

• Conference Rooms

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

## **ORDERING GUIDE:**

SERIES	WATTS	DRIVER	ССТ
FLT14 1x4 Flat Lens Troffer	19WLED	<b>U</b> 120-277V	40
	30WLED		35
	45WLED		30
FLT22 2x2 Flat Lens Troffer	19WLED		
	30WLED		
	45WLED		
<b>FLT24</b> 2x4 Flat Lens Troffer	26WLED		
	35WLED		
	45WLED		

DRIVER & EMERGENCY OPTIONS		CONTROLS OPTIONS			
	Factory Installed		Advanced		
POSTP	Post Painted Aluminum	ES 2,4	EasySense Sensor		
SR	Sensor Ready Module	5E/CU/IL 4	Enlighted 5E Individual Lighting (IL) Sensor with Control Unit		
DR	DALI Ready Module	5E/CU/CL 4	Enlighted 5E Connected Lighting (CL) Sensor with Control Unit		
SD3471	347V Step Down Transformer	5E/CU/IOT 4	Enlighted 5E Internet of Things (IOT) Sensor with Control Unit		
EM5	5W LED Factory Installed Battery Backup	5E/5W/IL 4	Enlighted 5E Individual Lighting (IL) Sensor w/ Aux Driver/5 Wire Connection		
EM5/HE <sup>6</sup>	5W LED Factory Installed Battery Backup	5E/5W/CL 4	Enlighted 5E Connected Lighting (CL) Sensor w/ Aux Driver/5 Wire Connection		
EM7	7W LED Factory Installed Battery Backup	5E/5W/IOT 4	Enlighted 5E Internet of Things (IOT) Sensor w/ Aux Driver/5 Wire Connection		
EM7/HE <sup>6</sup>	7W LED Factory Installed Battery Backup	<b>VDO</b> 3,4	Lutron Vive DFCSJ-OEM-OCC (Daylight and Occupancy)		
EM10	10W LED Factory Installed Battery Backup	VRF 3,4	Lutron Vive DFCSJ-OEM-RF (Radio Frequency Only)		
EM10/HE6	10W LED Factory Installed Battery Backup				

WHIP OPTIONS—FACTORY INSTALLED			SHIP WITH ACCESSORIES
WHIP/6FT/3WIRE	6ft MC Cable w/ 3 leads attached to power-non-dimming	ES/WWS/D	OR EasySense Dual Rocker Wireless Wall Switch
WHIP/6FT/4WIRE	6ft 4 Wire MC Cable Whip w/ 3 leads attached to power	ES/PCD <sup>5</sup>	Pre-installed app on controlled device for commissioning
	& 1 lead for battery backup	HC	Hurricane Clips
WHIP/6FT/5WIRE	6ft 4 Wire MC Cable Whip w/ 3 leads attached to power	FLGK	Flange Kit
	& 2 lead attached to dimming	SM	Surface Mount Kit
WHIP/6FT/6WIRE	6ft 6 Wire MC Cable Whip w/ 3 leads for fixture power		
	& 2 leads for dimming & 1 battery backup		

EM12

LED SYSTEMS INFO <sup>1</sup>	300	00K	3500K		4000K				
Part Numbers	Lumens	Efficacy	Lumens	Efficacy	Lumens	Efficacy	Watts <sup>2</sup>	DLC Listing	Replaces
FLT14-19WLED	2,263 lm	121 lm/w	2,302 lm	123 lm/w	2,341 lm	125 lm/w	19W	Standard	2T8
FLT14-30WLED	3,485 lm	116 lm/w	3,546 lm	118 lm/w	3,609 lm	120 lm/w	30W	Standard	2T8
FLT14-45WLED	4,911 lm	110 lm/w	4,996 lm	112 lm/w	5,027 lm	112 lm/w	45W	Standard	2T8
FLT22-19WLED	2,148 lm	114 lm/w	2,234 lm	119 lm/w	2,319 lm	124 lm/w	19W	Standard	2T8
FLT22-30WLED	3,292 lm	110 lm/w	3,425 lm	114 lm/w	3,557 lm	119 lm/w	30W	Standard	3T8
FLT22-45WLED	4,609 lm	104 lm/w	4,793 lm	108 lm/w	4,802 lm	107 lm/w	45W	Standard	3T8
FLT24-26WLED	3,147 lm	122 lm/w	3,157 lm	123 lm/w	3,168 lm	123 lm/w	26W	Premium	2T8
FLT24-35WLED	4,141 lm	118 lm/w	4,155 lm	119 lm/w	4,171 lm	119 lm/w	35W	Standard	3T8
FLT24-45WLED	5,072lm	114 lm/w	5,089 lm	115 lm/w	4,832 lm	108 lm/w	45W	Standard	3T8

Values are nominal, see IES file for more detail

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

### **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. Tamper resistant design with no bottom access to electrical components; requires use of Hurricane Clips (HC) when recess mounting.

## **ELECTRICAL**

Class 2 LED light engine for high efficacy and long life. Calculated L70 >100,000 hrs. 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 (1%-100%) with optional 347-480 Vac step down transformer. Optional emergency battery backups available to meet critical life safety lighting requirements.

## MOUNTING

Installs into standard 15/16" & narrow 9/16" T-grid ceiling. Optional Flange Kit (FLGK) for recessed drywall mounting & Surface Mount (SM) to ceiling mount options available. Hurricane Clips (HC) required for use in tamper resistant applications. 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.

## WARRANTY

5 Year Warranty (Terms and Conditions apply)

#### **OPTICS**

Impact and Scratch resistant PMMA frosted acrylic lens. Optimized optical design provides soothing illumination and glare reduction for maximum visual comfort.

#### **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.

### **CERTIFICATIONS**

ETL Listed to US & Canadian safety standards. Suitable for damp locations. Type IC rated. American Recovery & Reinvestment Act Funding Compliant. Title 24 Compliant with sensor options; see local ordinance for qualification information. 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 the use of EasySense Pre-Programmed Control Device (ES/PCD), or approved phone from compatibility list; one needed per project.



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:**

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

## ES/WWS/DR

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

## **Specifications:**

- Wireless
- ZigBee®
- Batteryless • 30-100ft Range
- Dual Rocker
- 1. On (Hold to brighten up)
- 2. Off (Hold to dim down)

**Functions:** 

- 3. Scene 1
- 4. Scene 2



Occupancy

Sensor (PIR)

Light Sensor

LED Indicator

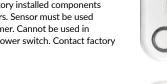
NFC Antenna

Infrared Receiver

## **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)

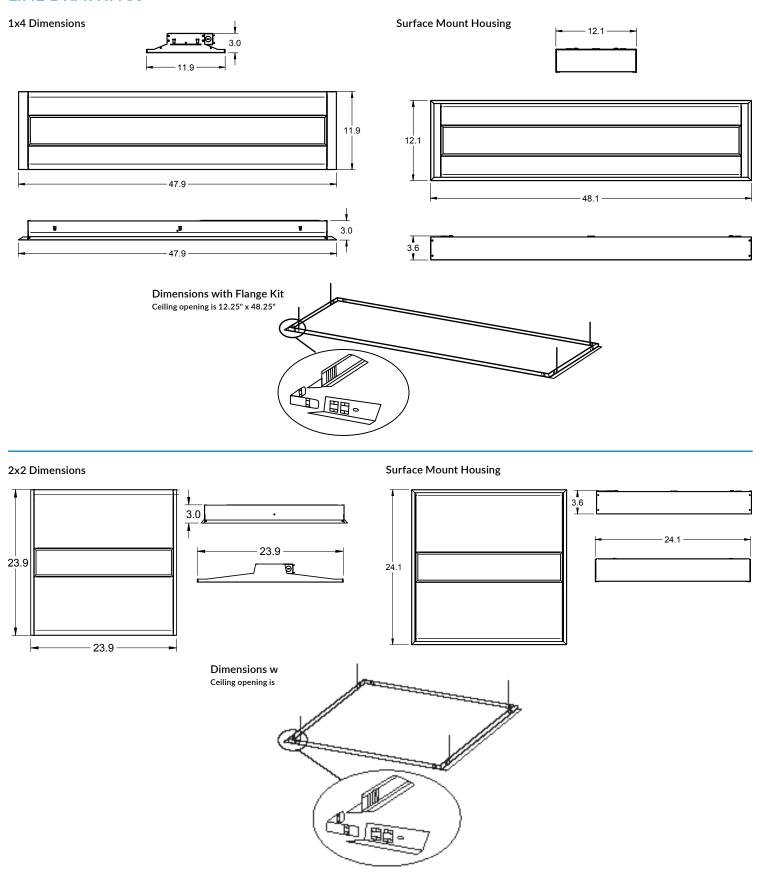
## 5E/5W/CL

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

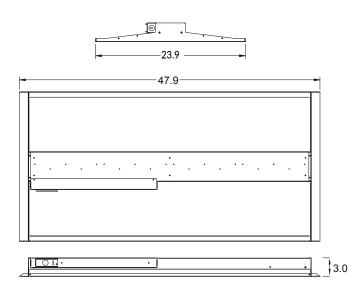
Bundled System with Enlighted 5E sensor (SU-5E-IOT) & Cable (CBL-5E-CU4-30N) paired w/ a driver w/ auxiliary power and 5 wire connection. Fixtures are controlled based on occupancy & ambient light. Includes individual lighting control plus connection to Enlighted Energy Manager. The Energy Manager provides 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)

## **LINE DRAWINGS**

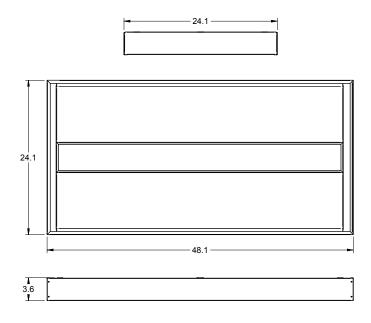


# **LINE DRAWINGS**

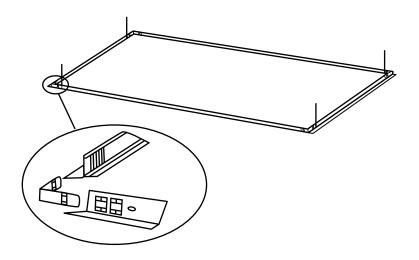
2x4 Dimensions



Surface Mount Housing



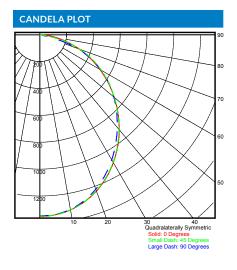
Dimensions with Flange Kit Ceiling opening is 24.25" x 48.25"



## **PHOTOMETRIC REPORTS**

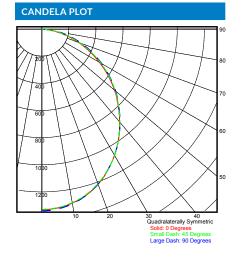
LUMINAIRE DATA					
Part Number	FLT14-30WLED-UNIV-40				
Description	1' x 4' Flat Lens Troffer with a flat frosted acrylic lens 3,600 lumens				
Fixture Lumens (Im)	3,609 lm				
Wattage (W)	30 W				
Efficacy (lm/W)	120 lm/W				
Mounting	Recessed				
Spacing Criteria	0° = 1.21, 90° = 1.19				

ZONAL LUMEN SUMMARY					
Zone	Lumens (Im)	% Fixture			
0° - 40°	1,661	47%			
0° - 60°	2,863	82%			
0° - 90°	3,609	100%			
90° - 180°	0	0%			
0° - 180°	3,609	100%			



LUMINAIRE DATA	
Part Number	FLT22-30WLED-UNIV-40
Description	2' x 2' Flat Lens Troffer with a flat frosted acrylic lens 3,600 lumens
Fixture Lumens (Im)	3,557 lm
Wattage (W)	30 W
Efficacy (lm/W)	119 lm/W
Mounting	Recessed
Spacing Criteria	0° = 1.21, 90° = 1.19

ZONAL LUMEN SUMMARY					
Zone	Lumens (Im)	% Fixture			
0° - 40°	1,633	47%			
0° - 60°	2,799	81%			
0° - 90°	3,557	100%			
90° - 180°	0	0%			
0° - 180°	3,557	100%			



LUMINAIRE DATA	
Part Number	FLT24-35WLED-UNIV-40
Description	2' x 4' Flat Lens Troffer with a flat frosted acrylic lens 4,100 lumens
Fixture Lumens (Im)	4,171 lm
Wattage (W)	35 W
Efficacy (Im/W)	119 lm/W
Mounting	Recessed
Spacing Criteria	0° = 1.21, 90° = 1.19

ZONAL LUMEN SUMMARY					
Zone	Lumens (Im)	% Fixture			
0° - 40°	1,844	47%			
0° - 60°	3,165	80%			
0° - 90°	4,171	100%			
90° - 180°	0	0%			
0° - 180°	4,171	100%			

