ILP VTK
VOLUMETRIC TROFFER KIT

PRODUCT OVERVIEW SCAN OR CLICK HERE

FEATURES

- Shallow, Lightweight, 3-Piece Versatile Volumetric Selectable Troffer Retrofit Kit allowing for quick, easy and simple installation

- Shallow Depths of 2.1" for VTK22 & VTK24, 2.9" for VTK14. This allows for installation into a wide array of ceiling applications

- Available in 1x4, 2x2, & 2x4 Sizes with a Lumen Range from 2,000 to 5,000 Lumens

- CCT and Lumen Field Selectable, with optional factory pre-set selections for customized ambiance and application

- High Efficacy (Up to 165 LPW) provides lower operational costs compared to traditional fluorescent fixtures

- Advanced Control Options Available, Enables flexible lighting control and additional energy savings

- Buy American Act (BAA) option available

DIGITAL NAVIGATION
Explore the spec sheet through the links below

| ORDERING GUIDE | QUICK SHIP | LED SYSTEMS TABLE |
| CONTROLS | LINE DRAWINGS | PHOTOMETRIC DATA |

SUITABLE APPLICATIONS

- Education
- Healthcare
- Offices
- Grocery Store
- Retail
- Storage Facility
- Conference Rooms

CERTIFICATIONS

NURO Air Bluetooth Controls POWERED BY ILLUMIS BRANDS | CCT SELECTABLE | LUMEN SELECTABLE | ES EasySense | LUTRON | VS VALUE SELECT | QUICK SHIP | ETL LISTED Intertek | BAA COMPLIANT BUY AMERICAN ACT *OPTIONAL | *OPTIONAL | 5 YEAR WARRANTY | 10 OPTIONAL 10 YEAR | DLC LISTED PREMIUM

SPECIFICATIONS

CONSTRUCTION
A Post Painted Sleek Steel housing body for rigidity, durability, and ease of installation. Designed for maximum rigidity and durability. One-piece unit with two universal mounting brackets for quick and easy installation into grid.

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 (10%-100%) with optional 1%, Sensor Ready, & Bi-Level Driver options available. Optional emergency battery backups available to meet critical life safety lighting requirements.

TROFFER COMPATIBILITY & INSTALLATION
VTK 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. One-piece door frame light engine with two universal mounting brackets for easy installation. See page 3 for step-by-step troffer kit installation instructions.

CONTROLS
Factory installed Advanced sensor options available. Sensor mounts within the body of the fixture. View controls page for more detail (pg.4). Inquire with manufacturer for additional controls options, including customer supplied items.

CERTIFICATIONS
ETL Listed to US and Canadian safety standards. Suitable for damp locations. Buy American Act (BAA) Compliant Option Available. Title24 Compliant with sensor option; see local ordinance for qualification information. DLC (DesignLights Consortium) Premium Qualified. Please refer to the DLC Qualified Products List at www. Designlights.org/QPL to confirm specific product qualifications.

WARRANTY
5 Year Warranty Standard; 10 Year Warranty Optional (Terms and Conditions apply).

ORDERING GUIDE

PART #   **Example:** VTK22-2L/3L/4L-U-CCTS-BAA

SERIES		—	LUMENS	—	DRIVER	—	CCT	—	BAA

SERIES	
VTK14	1x4 Volumetric Troffer Kit
VTK22	2x2 Volumetric Troffer Kit
VTK24	2x4 Volumetric Troffer Kit

LUMENS	
2L/3L/4L - Lumen Selectable	
2L	
3L	
4L	
2L/3L/4L - Lumen Selectable	
2L	
3L	
4L	
3L/4L/5L - Lumen Selectable	
3L	
4L	
5L	

DRIVER	
U[4]	120-277V

CCT	
CCTS	Selectable CCT (3500K, 4000K, 5000K)
35	3500K
40	4000K
50	5000K

BAA	
BLANK	None
BAA[5]	BAA Compliant

ALTERNATE DRIVERS	—	EMERGENCY	—	CONTROLS

ALTERNATE DRIVERS	
BLANK	None
SR[2]	Sensor-Ready Driver
DR[2]	DALI-Ready Driver
BLD[2,8]	Bi-Level Dimming Driver
DIM1[2]	1% Dimming Driver

EMERGENCY	
BLANK	None
EM5[6]	5W LED Battery Backup
EM5/HE[6]	5W LED Battery Backup CEC Title 20 Compliant
EM7[6]	7W LED Battery Backup
EM7/HE[6]	7W LED Battery Backup CEC Title 20 Compliant
EM10[6]	10W LED Battery Backup
EM10/HE[6]	10W LED Battery Backup CEC Title 20 Compliant
EM10/HE/SD[6]	10W LED Self-Diagnosing Battery Backup CEC Title 20 Compliant
EM12[6]	12W LED Battery Backup

CONTROLS	
ADVANCED	
BLANK	None
NURO[3,7]	NUROAir Integrated Groupable Sensor
ESMC[2,3]	EasySense Grouping Sensor
5E/CU/CL	Enlighted 5E Connected Lighting (CL) Sensor w/ Control Unit
5E/CU/IOT	Enlighted 5E Internet of Things (IOT) Sensor w/ Control Unit
VDO[1,2]	Lutron Vive Daylight & Occupancy Sensor
VRF[1,2]	Lutron Vive Radio Frequency Only
AWNR[1,2]	Lutron Athena Wireless Node RF Only
AWNS[1,2]	Lutron Athena Wireless Node with Sensor

WARRANTY	
BLANK	5 Year
10YR[5]	10 Year

SHIP WITH ACCESSORIES	
NURO-SW-3B-BA-BL-WP-V1	NUROAir Bluetooth 3-Key Wireless Battery Powered Wall Switch
NURO-SW-5B-BA-BL-WP-V1	NUROAir Bluetooth 5-Key Wireless Battery Powered Wall Switch
NURO-SW-7B-AC-BL-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] Must be used with SR Sensor Ready Driver

[2] Not compatible with the Lumen selectable and CCT selectable functions. Must select dedicated Lumen and CCT options.

[3] Requires Bluetooth enabled device for programming (provided by others)

[4] Standard 120-277V Driver Dimmable Down to 10%

[5] Contact factory for more details

[6] Minimum ambient temperature of 32°F

[7] Must be ordered with a dedicated lumen output

[8] Will not work with the stepdowns or sensors

ILP VTK
VOLUMETRIC TROFFER KIT

QUICK SHIP ITEMS

PRODUCT	DESCRIPTION	DLC LISTING
VTK22-2L/3L/4L-U-CCTS	Volumetric Troffer Kit 2x2, Lumen Selectable 2551 - 3220 - 3870lm, CCT Selectable -35-40-50K	Premium
VTK24-3L/4L/5L-U-CCTS	Volumetric Troffer Kit 2x4, Lumen Selectable 3276 - 3904 - 4796lm, CCT Selectable -35-40-50K	Premium

For Quick Ship, orders must be placed in quantities of two

SYSTEMS INFO [1,2,3]		3500K CCT		4000K CCT		5000K CCT		
Part Numbers	Fixed Model Numbers	Lumens	LPW	Lumens	LPW	Lumens	LPW	Watts[2]
VTK14-2L/3L/4L	VTK14-2L	2550	150.2	2591	155.5	2572	151.4	17
	VTK14-3L	3222	147.6	3291	153.9	3247	148.6	22
	VTK14-4L	3834	145.3	3930	152.1	3852	145.6	26
VTK22-2L/3L/4L	VTK22-2L	2505	149.4	2551	154.5	2522	150.2	17
	VTK22-3L	3207	148.3	3220	153.2	3220	148.7	22
	VTK22-4L	3763	145.3	3870	151.7	3801	146.1	26
VTK24-3L/4L/5L	VTK24-3L	3228	159.3	3276	164.7	3259	160.7	20
	VTK24-4L	3837	157.4	3904	163.5	3870	158.7	24
	VTK24-5L	4690	154.2	4796	161.3	4730	155.2	30

[1] LED Chips are frequently updated therefore values are nominal

[2] Electrical data at 25°C (77°F) 120V. Actual wattage may differ by +/-10%.

[3] Ambient Temperature range is -4°F - 104°F for all models

INSTALLATION INSTRUCTIONS
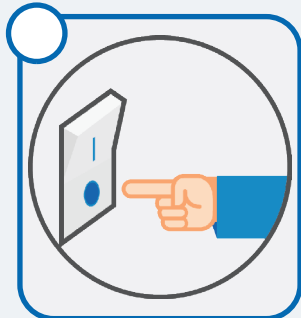
STEP 1

Shut off or disconnect power to the fixture.

STEP 2

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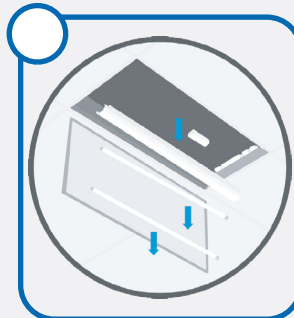

STEP 3

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.
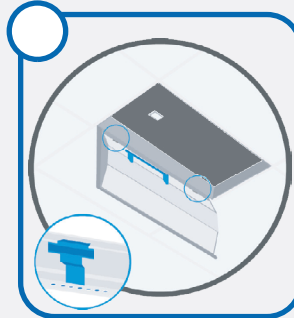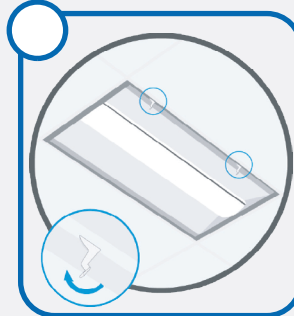

STEP 4

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

STEP 5

Connect the VTK to AC power and ground.

STEP 6

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

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, CCT, 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.

NUROAir ®
Bluetooth Controls

POWERED BY ILLUMUS. BRANDS

Click Here or Scan Code to Learn More About

NUROAir Bluetooth Controls

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.

← Occupancy Sensor (PIR)
← Light Sensor
← Infrared Receiver
← LED Indicator
→ NFC Antenna

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

ENLIGHTED

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.

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.

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. 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.

AWNR

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.
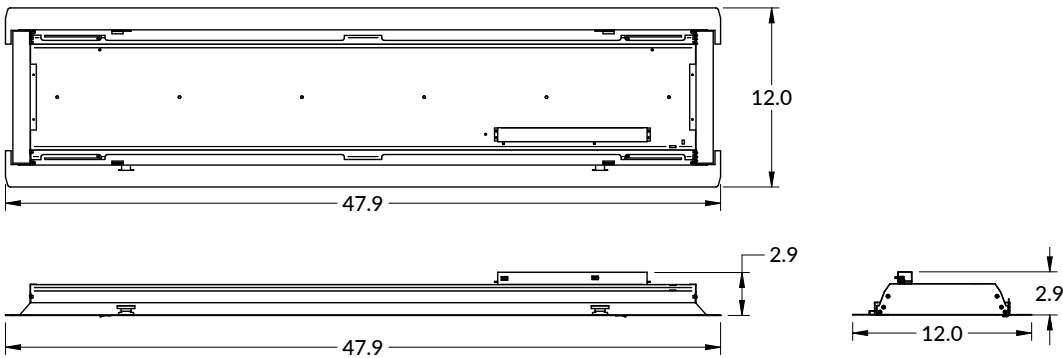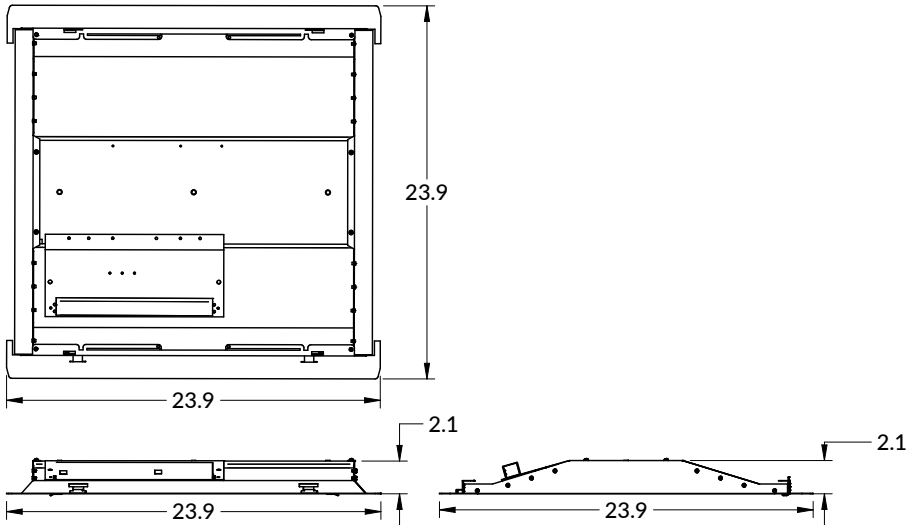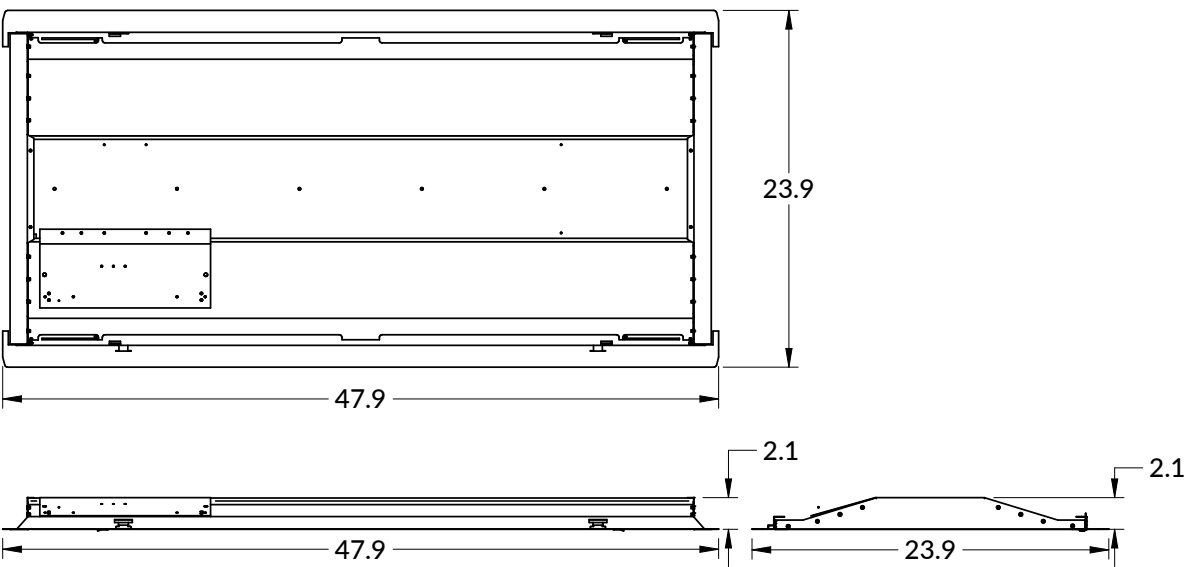
AWNS

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.

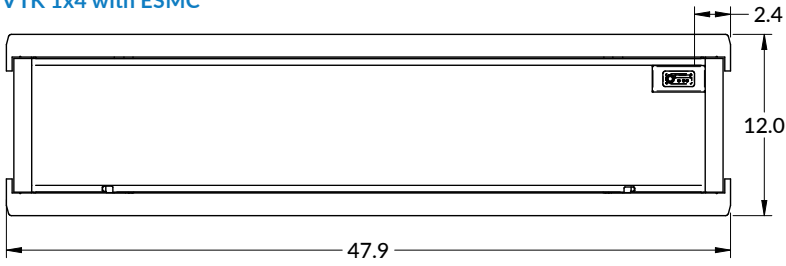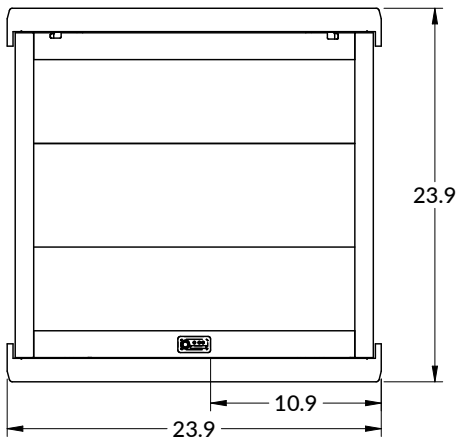# LINE DRAWINGS

VTK 1x4

12.0

47.9

2.9

47.9

2.9

12.0

VTK 2x2

23.9

23.9

2.1

23.9

2.1

23.9

VTK 2x4

23.9

47.9

2.1

47.9

2.1

23.9

LINE DRAWINGS

VTK 1x4 with ESMC

2.4

12.0

47.9

VTK 2x2 with ESMC

23.9

10.9

23.9

VTK 2x4 with ESMC

23.9

22.9

47.9

LINE DRAWINGS

VTK 1x4 with EM10

12.0

47.9

47.9

3.3　12.0

VTK 2x2 with EM10

23.9

23.9

23.9

2.5　23.9

VTK 2x4 with EM10

23.9

47.9

47.9

2.5　23.9
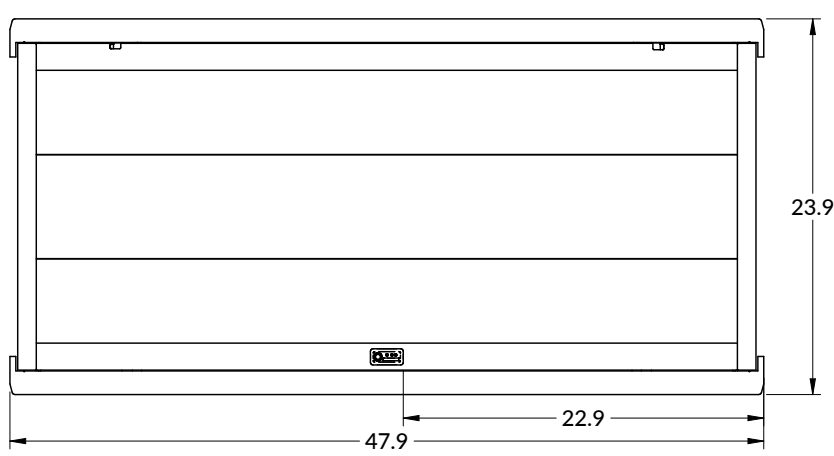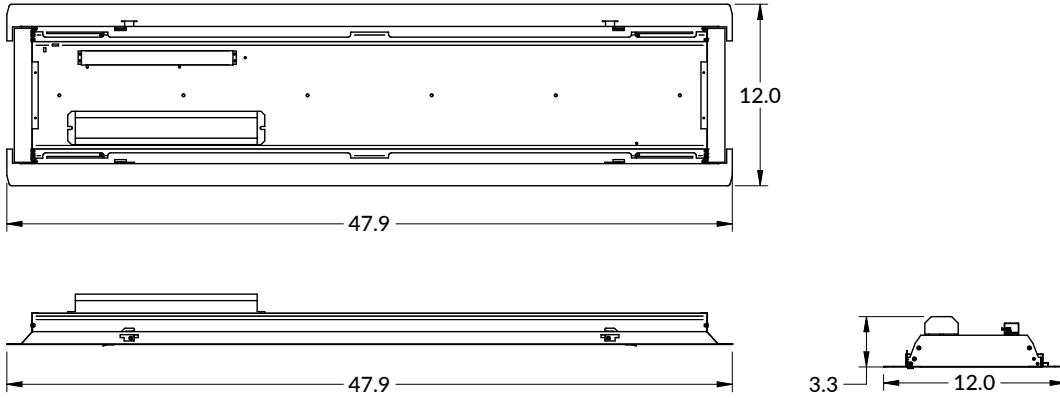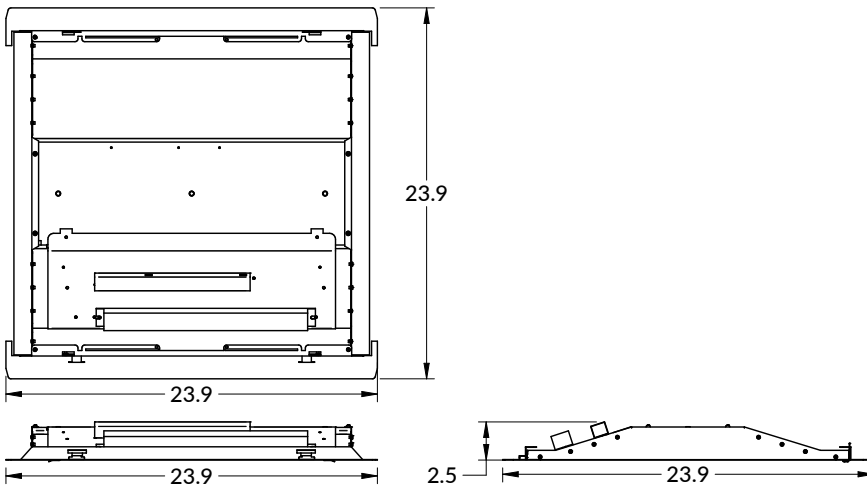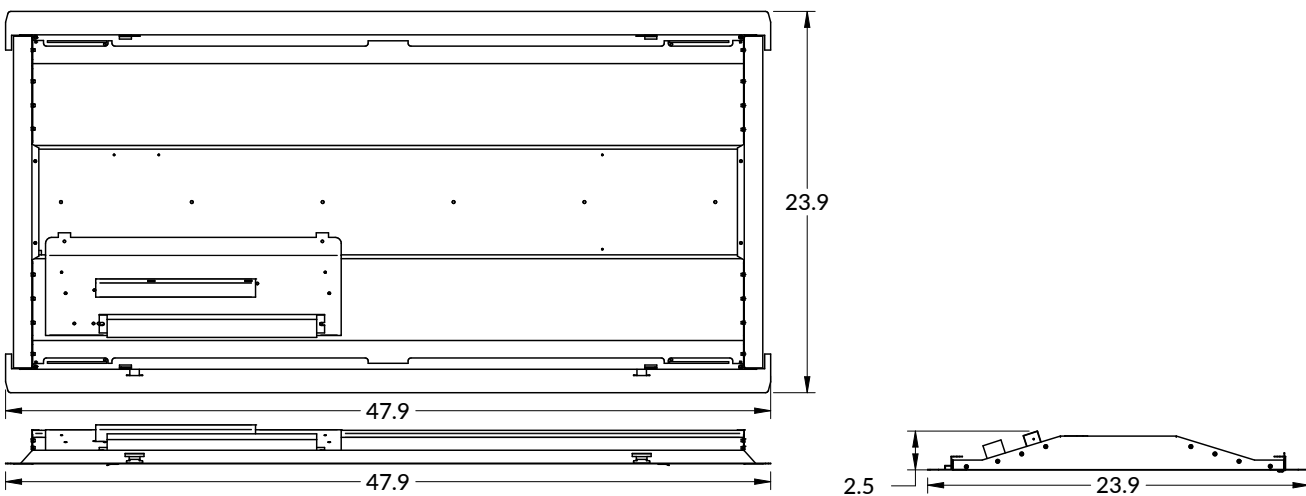
PHOTOMETRIC DATA

LUMINAIRE DATA

Part Number	VTK14-2L/3L/4L-U-CCTS
Description	1x4 Volumetric Troffer Kit, 4000lm, 4000K
Fixture Lumens (lm)	3,931 lm
Wattage (W)	26 W
Efficacy (lm/W)	152 lm/W
Mounting	Recessed
Spacing Criteria	0° = 1.22, 90° = 1.22

ZONAL LUMEN SUMMARY

Zone	Lumens (lm)	% Fixture
0° - 40°	1979	50%
0° - 60°	3278	83%
0° - 90°	3931	100%
90° - 180°	0	0%
0° - 180°	3931	100%

CANDELA PLOT

Totally Asymmetric Solid: 180-0 Degrees Dashed: 270-90 Degrees
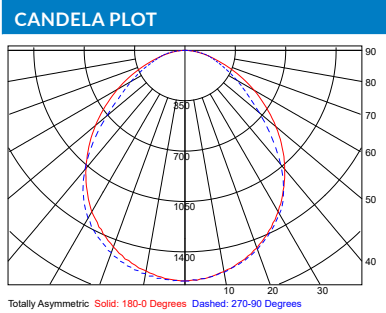
LUMINAIRE DATA

Part Number	VTK22-2L/3L/4L-U-CCTS
Description	2x2 Volumetric Troffer Kit, 4000lm, 4000K
Fixture Lumens (lm)	3874 lm
Wattage (W)	26 W
Efficacy (lm/W)	152 lm/W
Mounting	Recessed
Spacing Criteria	0° = 1.18, 90° = 1.20

ZONAL LUMEN SUMMARY

Zone	Lumens (lm)	% Fixture
0° - 40°	1876	48%
0° - 60°	3118	80%
0° - 90°	3874	100%
90° - 180°	0	0%
0° - 180°	3874	100%

CANDELA PLOT

Totally Asymmetric Solid: 180-0 Degrees Dashed: 270-90 Degrees
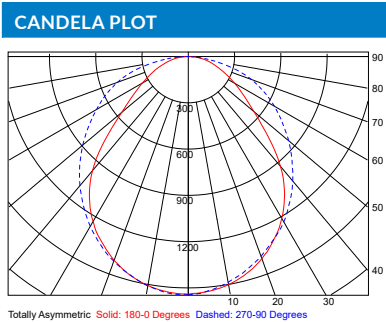
LUMINAIRE DATA

Part Number	VTK24-3L/4L/5L-U-CCTS
Description	2x4 Volumetric Troffer Kit, 5000lm, 4000K
Fixture Lumens (lm)	4804 lm
Wattage (W)	30 W
Efficacy (lm/W)	161 lm/W
Mounting	Recessed
Spacing Criteria	0° = 1.22, 90° = 1.22

ZONAL LUMEN SUMMARY

Zone	Lumens (lm)	% Fixture
0° - 40°	2292	48%
0° - 60°	3850	80%
0° - 90°	4805	100%
90° - 180°	0	0%
0° - 180°	4805	100%

CANDELA PLOT

Totally Asymmetric Solid: 180-0 Degrees Dashed: 270-90 Degrees