



# VOL-R VOLUMETRIC TROFFER RETROFIT

## FEATURES

- Architectural recessed LED retrofit luminaire, designed to deliver energy savings and code compliance in minutes
- Clean styling complements today's modern office decor and provides direct/indirect illumination
- One for one alternative LED solution to fluorescent luminaires provides greater than 50% energy savings
- PowerSet allows for multiple "set and forget" lumen stops per fixture
- FieldCCeT feature allows for multiple "set and forget" CCT options in each fixture
- Technology partner Silvair
- Multiple controls options, including 0-10V, occupancy sensors, and DLC Qualified Bluetooth mesh wireless controls systems when paired with a DLC Listed Network Lighting Control System. Contact EiKO for details
- 130 lumens per watt

## CERTIFICATIONS

- UL Listed for dry/damp locations
- DesignLights Consortium® Qualified - meets DLC requirements for efficacy and lumen maintenance

## PERFORMANCE

- Rated life L70: >50,000 hours
- PowerSet: 39/32/24/19W and 49/39/34/29W options
- FieldCCeT: 3500K/4000K/5000K selectable
- CRI: >80

## ELECTRICAL

- Input voltage: 120-277V; 100-347V
- 0-10V dim-to-off driver (<5% minimum dimming level)
- 12V, 60mA DC auxiliary power
- Power Factor: >.90
- THD: <20%

## THERMAL

- -4°F to 104°F (-20°C to 40°C) operating temperature

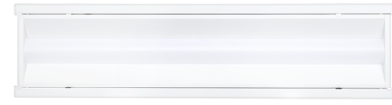
## CONSTRUCTION

- Reflector precision die-formed, powder-coated steel construction
- Diffuse polycarbonate lens provides even illumination and visual comfort

## WARRANTY

- 5 year limited warranty. Additional warranty options available. Contact EiKO for details

project name	type
catalog number	voltage
approved by	date



1' X 4'



2' X 2'



2' X 4'

## APPLICATIONS

- Conference rooms
- Retail
- Offices
- Hospitality
- Healthcare
- Schools
- Reception areas
- Corridors
- Foyer

## NOMENCLATURE

MODEL	SIZE	PACKAGE	CRI/CCT	VOLTAGE	DIMMING	OPTIONS
VOLxxR : Volumetric Troffer Retrofit	14 - 1' x 4' 22 - 2' x 2' 24 - 2' x 4'	PS39 - 39/32/24/19W PS49 - 49/39/34/29W	835K - 80 CRI; 3500K 840K - 80 CRI; 4000K 850K - 80 CRI; 5000K FCCT - 35/40/5000K	U - 100-277V H - 100-347V	D - 0-10V Dimming	see page 2 for options



## PERFORMANCE SUMMARY

ORDER CODE	ITEM #	SIZE	WATTS	NOMINAL LUMENS	CCT	VOLTS	DLC STANDARD
11052	VOL22R/PS39/835/UD	2'x2'	39/32/24/19W	5,000/4,100/3,100/2,500	3500K	120-277V	✓
11053	VOL22R/PS39/840/UD	2'x2'	39/32/24/19W	5,000/4,100/3,100/2,500	4000K	120-277V	✓
11054	VOL22R/PS39/850/UD	2'x2'	39/32/24/19W	5,000/4,100/3,100/2,500	5000K	120-277V	✓
11055	VOL22R/PS39/FCCT/UD	2'x2'	39/32/24/19W	5,000/4,100/3,100/2,500	35/40/5000K	120-277V	✓
11059	VOL24R/PS49/FCCT/UD	2'x4'	49/39/34/29W	6,300/5,000/4,400/3,700	35/40/5000K	120-277V	✓
11056	VOL24R/PS49/835/UD	2'x4'	49/39/34/29W	6,300/5,000/4,400/3,700	3500K	120-277V	✓
11057	VOL24R/PS49/840/UD	2'x4'	49/39/34/29W	6,300/5,000/4,400/3,700	4000K	120-277V	✓
11058	VOL24R/PS49/850/UD	2'x4'	39/32/24/19W	6,300/5,000/4,400/3,700	5000K	120-277V	✓
11060	VOL14R/PS39/FCCT/HD	1'x4'	39/32/24/19W	5,000/4,100/3,100/2,500	35/40/5000K	120-347V	✓
11061	VOL22R/PS39/FCCT/HD	2'x2'	39/32/24/19W	5,000/4,100/3,100/2,500	35/40/5000K	120-347V	✓
11062	VOL24R/PS49/FCCT/HD	2'x4'	39/32/24/19W	6,300/5,000/4,400/3,700	35/40/5000K	120-347V	✓
FIELD OR FACTORY INSTALLED NETWORKED LIGHTING CONTROL MODELS							
12700	VOL22R/PS39/840/UD/CR*	2'x2'	39/32/24/19W	5,000/4,100/3,100/2,500	4000K	120-277V	✓
12702	VOL22R/PS39/FCCT/UD/CR*	2'x2'	39/32/24/19W	5,000/4,100/3,100/2,500	35/40/5000K	120-277V	✓
12701	VOL24R/PS49/840/UD/CR*	2'x4'	49/39/34/29W	6,300/5,000/4,400/3,700	4000K	120-277V	✓
12703	VOL24R/PS49/FCCT/UD/CR*	2'x4'	49/39/34/29W	6,300/5,000/4,400/3,700	35/40/5000K	120-277V	✓

\* Controls can be added in the field or factory installed. Sensor (SENA-WHPA) and Cable (EC-01-0004) are required; both sold separately.

## ADDITIONAL FACTORY INSTALLED OPTIONS

EXAMPLE: VOL24R/PS49/840/UD-LFO-EM8W

### CONTROLS

**LFD** - Silvair SIG Bluetooth mesh with PIR occupancy and daylight harvesting sensor <sup>1,2</sup>  
**LFC** - Silvair SIG Bluetooth mesh with integral wireless controller <sup>2</sup>

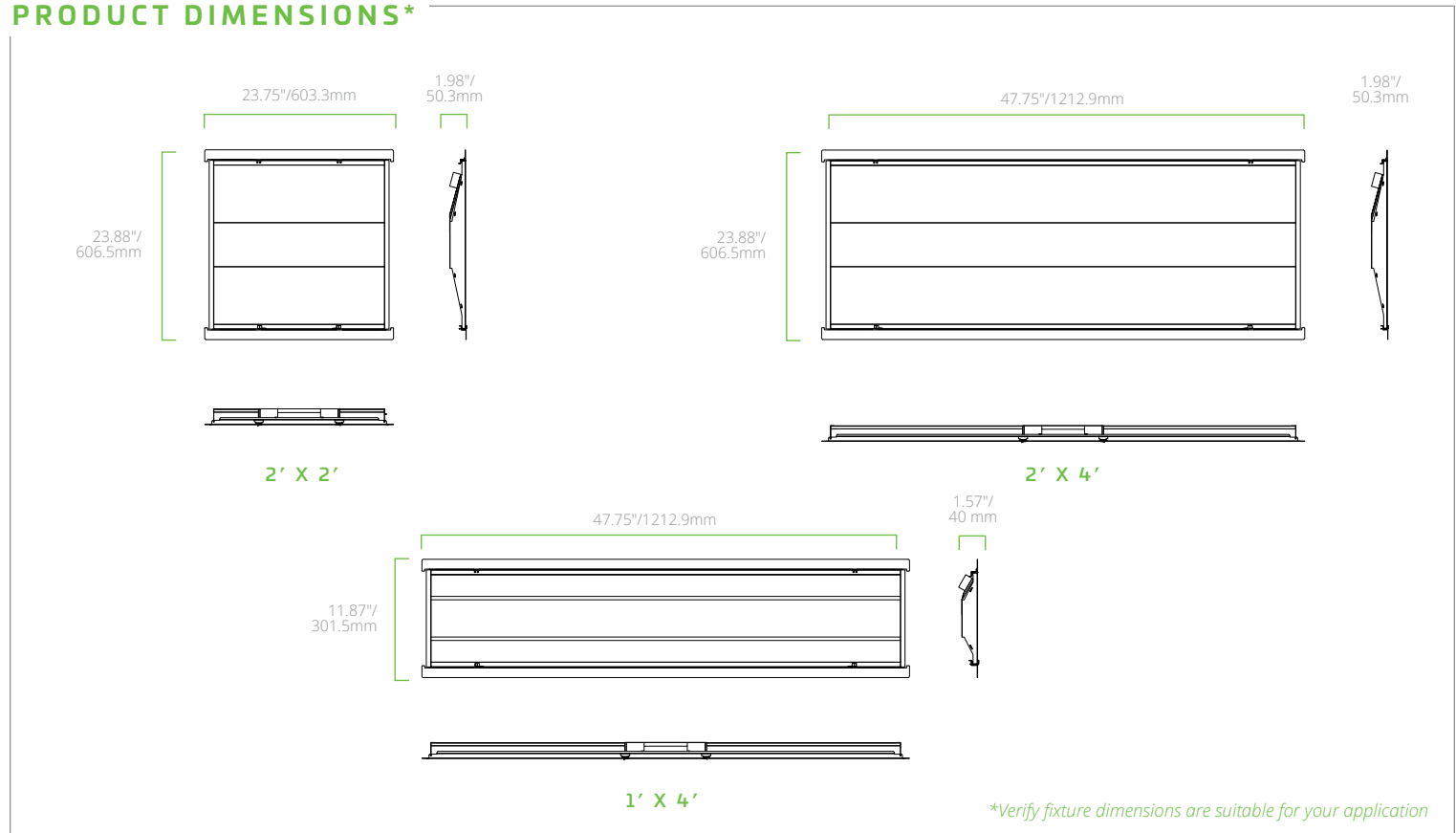
### EMERGENCY BATTERIES

**EM8W** - 8W Emergency Battery  
**EM15W** - 15W Emergency Battery  
**EM20W** - 20W Emergency Battery

<sup>1</sup> Available on 4000K and FieldCCeT versions only

<sup>2</sup> Part of a DLC Qualified Network Control when paired with a DLC Qualified Lighting Control System. Contact Eiko for details.

## PRODUCT DIMENSIONS\*



## BLUETOOTH CONTROL OPTIONS

### BLUETOOTH LIGHTING CONTROL SOLUTIONS

EiKO has comprehensive lighting control solutions, with a combination of intelligent hardware, software, and cloud-based services, all built upon Silvair **Bluetooth®** technology. The system includes, sensors, fixture controllers, wireless wall controls, and gateway designed to meet a wide range of users connected lighting needs, including advanced features like remote access, diagnostics, energy monitoring, and asset tracking.

- SIG Qualified Bluetooth mesh powered by Silvair
- High-End Trim and Low-End Trim
- Zoning
- Continuous Bi-Level Dimming
- Energy Monitoring and Scheduling with optional Silvair Gateway
- 5 year warranty

### BLUETOOTH LIGHTING CONTROL TOOLS

EiKO's lighting control tools offers everything needed to make commissioning complex lighting control projects easy. Projects can be prepared in advance using the Lighting Control web portal. The web portal allows users to establish areas, zones, and preset all functions before visiting the job site using a standard web browser. On-site commissioning is performed using the Lighting Control App, either on-the-fly, or using pre-defined projects from the web portal. The app allows users to identify fixtures, and fine tune as required. The Lighting Control system is powered by Silvair, the leading Bluetooth Mesh Lighting Control system.

### (LFD) PIR OCCUPANCY AND DAYLIGHT HARVESTING SENSOR

- 360° Digital PIR Motion Detector Architecture and passive infrared (PIR) technology for improved detection
- Bi-Level Dimming, High-end trim and Low-end trim Zoning
- Provides dynamic dimming for daylight harvesting control
- Detection coverage area: 20ft (6m) at 10ft (3m)
- Typical maximum wireless range: 49 ~ 65ft (15 ~ 20m)

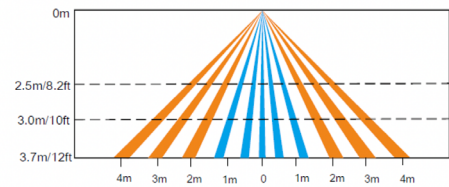
### (LFC) WIRELESS FIXTURE CONTROLLER

- Complete wireless fixture control
- High end trim and low-end trim zoning
- Wireless dimming, when paired with sensor or switch
- Typical maximum wireless range: 49 ~ 65ft (15 ~ 20m)



SENSOR CONTROLLER PLACEMENT  
(LFD)

#### Coverage Side View



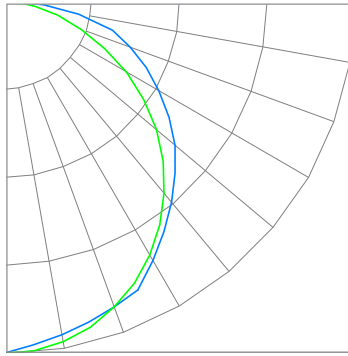
The detection area for movement sensor can be roughly divided into two parts:

- Slow movement (person moving <math>< 1.0'/s</math> or <math>0.3m/s</math>)
- Quick movement (person moving > <math>1.3'/s</math> or <math>0.4m/s</math>)

# PHOTOMETRICS

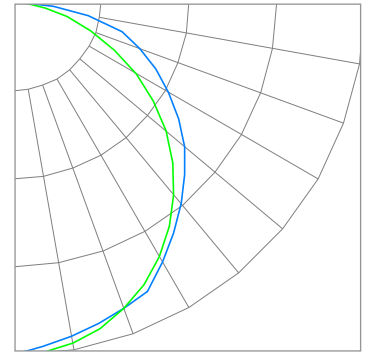
**VOL22R/PS39/8XX/UD** (Typical performance @ 39W, 4000K)

ZONAL LUMEN SUMMARY		
ZONE	LUMENS	%FIXTURE
0-30	1328.35	26.2%
0-40	2173.14	42.9%
0-60	3851.54	75.9%
0-80	4913.82	96.9%
0-90	5071.43	100%
60-80	1062.29	20.9%
70-80	422.02	8.3%
80-90	157.61	3.1%
0-180	5071.43	100%



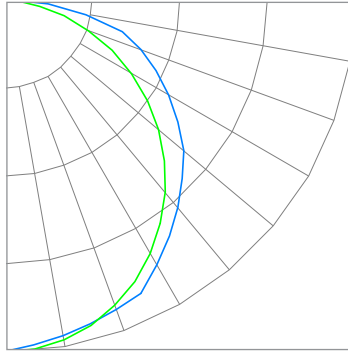
**VOL22R/PS39/FCCT/XD** (Typical performance @ 39W, 4000K)

ZONAL LUMEN SUMMARY		
ZONE	LUMENS	%FIXTURE
0-30	1328.35	26.2%
0-40	2173.14	42.9%
0-60	3851.54	75.9%
0-80	4913.82	96.9%
0-90	5071.43	100%
60-80	1062.29	20.9%
70-80	422.02	8.3%
80-90	157.61	3.1%
0-180	5071.43	100%



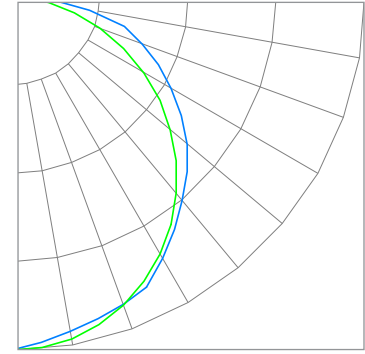
**VOL24R/PS49/FCCT/XD** (Typical performance @ 49W, 4000K)

ZONAL LUMEN SUMMARY		
ZONE	LUMENS	%FIXTURE
0-30	1676.68	25.7%
0-40	2746.32	42.1%
0-60	4895.05	75.1%
0-80	6303.3	96.7%
0-90	6519.1	100%
60-80	1408.25	21.6%
70-80	568.51	8.7%
80-90	215.8	3.3%
0-180	6519.1	100%



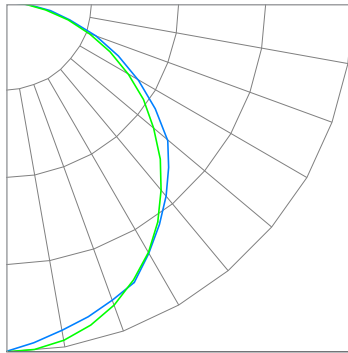
**VOL24R/PS49/8XX/UD** (Typical performance @ 49W, 4000K)

ZONAL LUMEN SUMMARY		
ZONE	LUMENS	%FIXTURE
0-30	1606.17	25.4%
0-40	2637.19	41.7%
0-60	4727.92	74.7%
0-80	6113.88	96.6%
0-90	6327.07	100%
60-80	1385.96	21.9%
70-80	561.31	8.9%
80-90	213.19	3.4%
0-180	6327.07	100%



**VOL14R/PS99/FCCT/XD** (Typical performance @ 39W, 4000K)

ZONAL LUMEN SUMMARY		
ZONE	LUMENS	%FIXTURE
0-30	1409.05	25.9%
0-40	2309.44	42.5%
0-60	4124.52	75.8%
0-80	5268.17	96.9%
0-90	5438.55	100%
60-80	1143.65	21.0%
70-80	449.18	8.3%
80-90	170.39	3.1%
0-180	5438.55	100%



## SECTION PLANES

■ 0° ■ 90°

# SCALING FACTORS

ZONAL LUMEN SUMMARY			FIELD CCT		
FIXTURE	WATTS	35/40/5000K	3500K	4000K	5000K
1' x 4'	19	n/a	0.47	0.48	0.48
	24		0.60	0.61	0.66
	32		0.80	0.83	0.83
	39		0.97	1.00	1.00
2' x 2'	19	0.51	0.52	0.50	0.54
	24	0.64	0.65	0.63	0.64
	32	0.84	0.84	0.84	0.85
	39	1.00	0.97	1.00	1.00
2' x 4'	29	0.64	0.62	0.63	0.62
	34	0.73	0.71	0.73	0.71
	39	0.86	0.84	0.87	0.85
	49	1.00	0.96	1.00	1.00