

# TRV LED

Project Name:	
Type:	



**APPLICATION**

Specification troffer design with hi-transmission acrylic, high performance static luminaires provide excellent visual control and subtle soft indirect illumination. It is high efficiency, great performance and value make it an ideal choice for commercial and institutional environments.

**FEATURES:**

- Die formed, cold-rolled, 20-gauge steel construction provides durability and strength.
- Finish in high-gloss baked white enamel over rust inhibiting phosphate coating for maximum corrosion resistance.
- High reflectance white reflector distributes light through both optical elements.
- Unique door frame design delivers a premium extruded appearance.
- Door latches and hinges from either side as standard.

**SHIELDING:**

- Two slope panels of the units are high transmission acrylic that provide a low-brightness glow.

**MOUNTING:**

- Recessed mounted in expose T-bar ceilings, Internal T-bar safety clips.
- Field installed flange kits are available.

**LED:**

- High quality array LEDs.
- LM80
- Color Temperature: 2700/3000/3500/4000/5000 (K)
- Color Rendering Index: > 82.8
- Calculated L70: 122,000 hours
- Reported L70: +60,000 hours

**ELECTRICAL:**

- High power factor electronic driver, operate from a 120~277 Vac input range, 50 / 60 Hz.
- Philips Xitanium: 0-10V Dim to 1%(PH).
- Osram Optotronic: 0-10V Dim to 1%(OS1) or 10%(OS).
- Generic : 0-10V 10% dim. (GR)
- Power Factor: +0.9
- Efficiency: +85%
- Ambient Operating Temperature: -22°F (-20°C) ~ 122°F (50°C).
- Constant Current, Class 2

• <ELCU-200>

- Guarantees emergency lighting remains ON or is turned on when power to the control device is lost.
- Interfaces with fire alarm panel or security system.
- "Watchdog" feature allows emergency loads to be controlled in tandem with normal power loads.
- UL listed for use in emergency circuits.

**LISTING:**

- UL/CUL listed and labeled.
- Listed to UL 1598 and UL 8750.
- Suitable for damp locations.
- CEC Compliant EM (please contact for more information)
- ARRA compliant.
- BAA compliant (optional)
- Made in USA.
- 7 or 10 years limited warranty. (optional)<sup>3</sup>
- Bluetooth Mesh System available, please contact factory for more information.

**CONFIGURATIONS**

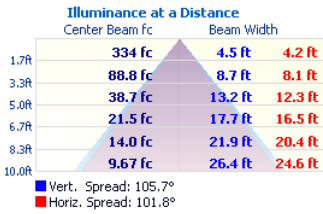
Series	Size	Model #	AC Input	Lumen Output	Lumen Efficiency	
TRV	1' x 4'	25LED	24.24W	2498.6 lm	103.1 lm/W	
		41LED	40.67W	4193.08 lm		
		54LED	54.2W	5588.02 lm		
	2' x 2'	28LED	27.73W	3327.5 lm	120 lm/W	
		36LED	36.5W	4380 lm		
		44LED	44.2W	5304 lm		
	2' x 4'	28LED	27.73W	3668.67 lm	132.3 lm/W	
		36LED	36.5W	4828.95 lm		
		44LED	44.2W	5847.66 lm		
		56LED	56.4W	7461.72 lm		
			68LED	68.5W	9062.55 lm	

**OUTPUT CURRENT**

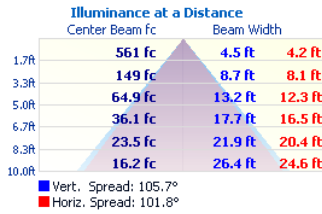
		Bi-Level		Tri-Level (Default)	
SW1	SW2	Config Range	Default	Config Range	Default
Close	Open	10% - 70%	40%	10% - 70%	30%
Open	Close	10% - 70%	40%	10% - 70%	70%
Close	Close	100%	100%	100%	100%
Open	Open	0%	0%	0%	0%

# TRV LED

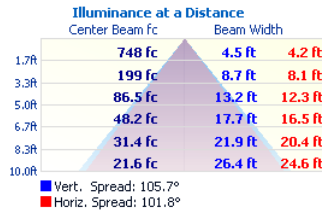
TRV-14-25LED



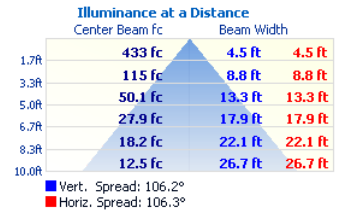
TRV-14-41LED



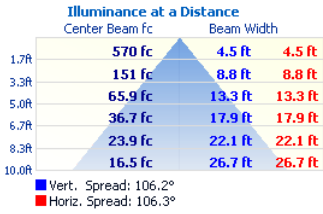
TRV-14-54LED



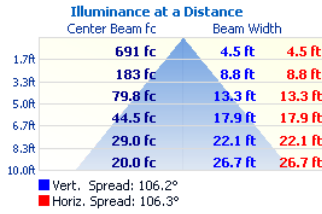
TRV-22-28LED



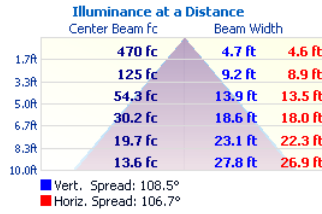
TRV-22-36LED



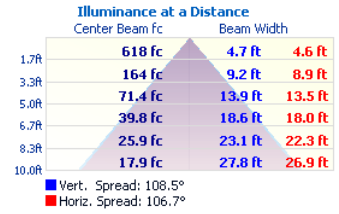
TRV-22-44LED



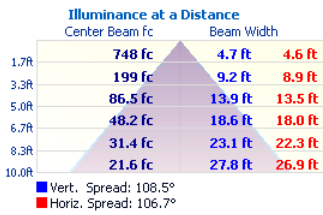
TRV-24-28LED



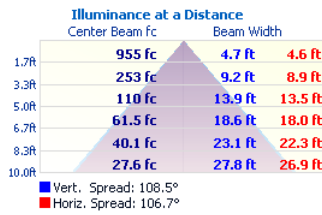
TRV-24-36LED



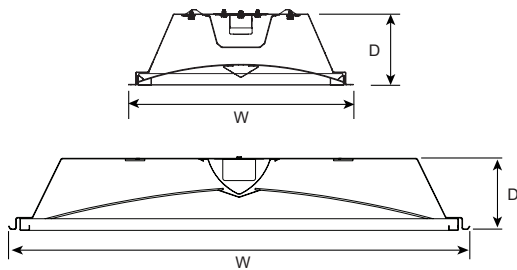
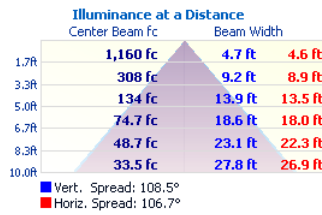
TRV-24-44LED



TRV-24-56LED



TRV-24-68LED



Specifications: 1'x4'

Length: 47-3/4 (1213)  
Width: 11-3/4 (298.4)  
Depth: 3-3/4 (95.3)

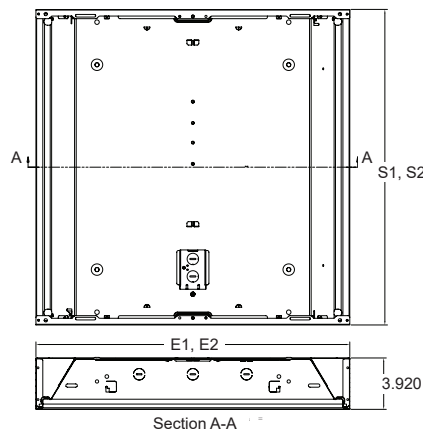
Specifications: 2'x2'

Length: 23-3/4 (603)  
Width: 23-15/16 (608)  
Depth: 3-3/4 (95.3)

Specifications: 2'x4'

Length: 47-3/4 (1213)  
Width: 23-15/16 (608)  
Depth: 3-3/4 (95.3)

All dimensions are in inches (millimeters).




**EL Shroud Assembly Variation Length**

Dimension	ELSM 1x4	ELSM 2x2	ELSM 2x4
E1, E2	E1 = 11.843"	E2 = 23.938"	E2 = 23.938"
S1, S2	S1 = 48.071"	S2 = 24.071"	S1 = 48.071"

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ORDERING INFORMATION

EXAMPLE: TRV-24-36LED-40K-UNV

MODEL	SIZE	LED	COLOR TEMP.	EFFICACY	CRI	TRIM TYPE
TRV	14 1' x 4'	25LED 25W LED 41LED 41W LED 54LED 54W LED	-27K 2700K <sup>4</sup> -30K 3000K -35K 3500K -40K 4000K -50K 5000K	(Blank) Standard HE High Efficacy 	(Blank) 80+ CRI C9 90+ CRI <sup>5</sup>	(Blank) Grid FK Flange <sup>1</sup> SMK Surface Mount Kit
	22 2' x 2'	28LED 28W LED 36LED 36W LED 44LED 44W LED				
	24 2' x 4'	28LED 28W LED 36LED 36W LED 44LED 44W LED 56LED 56W LED 68LED 68W LED				
		* Contact factory for custom wattage or lumen requirement.				

VOLTAGE		LED DRIVER			
UNV 120 277	120-277V 120V 277V	GR PH OS OS1 SD40 SDXX TDM TD30/70 TDXX/YY ES566	Generic, 0-10V 10% dim (Std.) <sup>8</sup> Philips Xitanium, 0-10V 1% dim <sup>8</sup> Osram Optotronic, 0-10V 10% dim <sup>8</sup> Osram Optotronic, 0-10V 1% dim <sup>8</sup> 40% / 100% Bi-Level Step dim (PH only) XX% / 100% Bi-Level Step dim (Specify XX : 10%~70%) (PH only) Triac Dim. (120V only) 30% / 70% / 100% Tri-Level Step dim (PH only) XX% / YY% / 100% Tri-Level Step dim (Specify XX, YY : 10% ~ 70%) (PH only) eldoLED SOLOdrive Natural Dimming to dark, 0-10V, 100% ~ 0.1% dim	LDE1 ELV PHSR PHDL ED560 DMX DLM LTEA2W BLT	Hi-lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology, 100% ~ 1% dim ELV compatible (reverse-phase or trailing-edge), (120V only) Philips Xitanium Sensor-Ready, Dali 5%~100% dim Philips Xitanium DALI driver, Dim to 5% eldoLED LightShape DALI dim to dark, 0.1% ~ 100% DMX512 control system (Only available with RGB+W option) Wattstopper's DLM interface (Only available with RGB+W option) Hi-lume 1% 2-wire LED driver (120V forward phase only) Bluetooth Mesh System (contact factory for more information)

OPTIONS		LIGHTING CONTROL SYSTEM	
PW6 EMG8 EMG15 EMG20 EMG25 ELCU-200 GTD GTD10DIM O7W O10W AMB HC403 BAA	Pre-wired 6' Whip Flex #18/3 1296 LUMEN EM Battery Backup (CEC Compliant EM) <sup>2</sup> 2430 LUMEN EM Battery Backup (CEC Compliant EM) <sup>2</sup> 3240 LUMEN EM Battery Backup (CEC Compliant EM) <sup>2</sup> 4050 LUMEN EM Battery Backup (CEC Compliant EM) <sup>2</sup> Fail-to-on Emergency lighting, UL924 <sup>6</sup> Bodine Generator Transfer Device Bodine Generator Transfer Device (0-10VDC Dimmer Override) Optional 7 Years Limited Warranty <sup>3</sup> Optional 10 Years Limited Warranty <sup>3</sup> Anti-Microbial Coating (Matte Skye White) Microwave bi-level Occupancy Sensor, adjustable via DIP switch <sup>9</sup> BAA(Buy American Act) and BABA(Build America Buy America) compliant	VRF FCJS0 FCJSE FCJS0EM FCJSEEM RMJS8T RMJS8TEM RMJSEC032 SNS200C RS-IR PPA102S	<Lutron Vive System Enabled> Vive Integral fixture control (RF only), (Must be ordered with EcoSystem drivers or PHSR) Vive Attached fixture control (RF only for 0-10V drivers) Vive Attached fixture control (RF only for Lutron EcoSystem drivers) UL 924 Emergency PowPak wireless fixture control for 0-10V drivers UL 924 Emergency PowPak wireless fixture control for Ecosystem drivers Vive Attached fixture control (RF only for 0-10V drivers), 0-10V control module 8A switched controls up to 60mA. UL924 Emergency PowPak wireless fixture control for RMJS8T Vive Attached fixture control (RF only for EcoSystem drivers), ECO control module <EasySense> EasySense Ceiling-mount occupancy sensing, daylight harvesting and task tuning in one device (Must be ordered with PHSR driver) <sup>7</sup> IR dongle for EasySense control  <Bluetooth> Bluetooth Powerpack (Consult factory for installation location)

NOTES:

1. Flange kits are supplied in separate boxes, field installed.
2. Contact factory for other emergency ballast options.
3. This limited warranty covers electrical parts only and does not apply to labor, equipment lease, or defect from improper installation or operation.
4. Available with C9 only.
5. Lumen per watt is around 15% less than standard CRI (80+).
6. Shipped separately.
7. Please see Compatible Phone list in the separate attachment. If not listed, please order "RS-IR", and follow IR-Dongle user guide and NFC and IR app user's manual. Android users only.
8. 10. To find an approved dimmer switch, please see table 1.
9. See Table2 to find factory setting.

COMPATIBLE DIMMER SWITCH (TABLE 1)

Model #	Brand	Compatible Dimmer Switch	
(Blank)	-	<Leviton>	IllumaTech IP7 series
		<Lutron>	Visit <a href="http://www.lutron.com/advance">www.lutron.com/advance</a> for a list of dimmers (Mark VII) that will work with this driver.
		<Philips>	Sunrise : SR1200ZTUNV
ES566	eldoLED SOLOdrive	<Busch-Jaeger>	2112U-101
		<Jung>	240-10
		<Leviton>	IllumaTech - IP710-DLX
		<Lightoller Controls>	ZP600FAM120
		<Merten>	5729
		<Pass & Seymour>	CD4FB-W
		<Wattstopper>	DCLV1
		<Sensor Switch>	nIO EZ
		<Synergy>	ISD BC
		<ABB>	SD/S 2.16.1
		<Lutron>	Nova T: NTFTV Diva - DVTV-xx, NFTV GRAFIK Eye: GRX-TVI w GRX3503 Energy Savr Node: QSN-4T16-S TVM2 Module
		<Crestron>	GLX-DIMFLV8, GLXP-DIMFLV8, GLPAC-DIMFLV4-*, GLPAC-DIMFLV8-*, GLPP-DIMFLVEX-PM, GLPP-1DIMFLV2EX-PM, GLPP-1DIMFLV3EX-PM, DIN-A08, DIN-4DIMFLV4, CLS-EXP-DIMFLV, CLCI-1DIMFLV2EX
ED560	eldoLED DUALdrive	<Lunatone>	SS-LUNAT PS2 30mA, SS-LUNAT Touch or BT, SS-LUNAT Comm
LDE1	Lutron Hi-lume 1% EcoSystem	<Lutron>	PowPak Dimming Modules: RMJ-ECO32-DV-B, FCJ/FCJS-ECO <sup>1,2</sup> Energj Savr Node (120V only): QSN-1ECO-S, QSN-2ECO-S GRAFIK Eye QS/Homeworks QS control unit (120V only): QSGRJ-_E(wireless) QSGR-_E Quantum Hub (120V only): QP2-_2C/4C/6C/8C Homeworks QS/myRoom Plus power module (120V only): LQSE-2ECO-D
TDM	KEYSTONE	<Lutron>	Diva DV-600P, SkyLark S-600P, Ariadni AY-600P, Ariadni TG-603P, Maestro MA-600 (Digital), Diva CFL/LED DVCL-153P, Satin Colors DVSC-600P-SW
		<Leviton>	6641, IllumaTech IPI06-1LX, ToggleTouch TGI06-1LW (Digital)
ELV	KEYSTONE	<Lutron>	MAELV-600BL (Digital), DVELV-300P, SkyLark SELV-300P
LTEA2W	Lutron Hi-lume 2-wire (120V forward voltage only)	<Lutron>	Visit <a href="http://www.lutron.com/TechnicalDocumentLibrary/369543_ENG.pdf">http://www.lutron.com/TechnicalDocumentLibrary/369543_ENG.pdf</a> for a list of compatible dimmer switches.

## NOTES:

- All devices connected to one FCJ/FCJS-ECO will be controlled together. Devices will dim to the same level as the result of a control command. For more detail on adjusting low-end light level refer to Application Note#556 at [www.lutron.com](http://www.lutron.com).
- For the Line/Hot (L/H) terminal on the driver, it is preferred not to use the switched hot (red) wire from the control but rather the hot wire directly from the power source.

HC403 FACTORY SETTING (TABLE 2)

Detection Area	100%
Hold-time	5 sec
Daylight sensor	Disable
Stand-by period (tri-level control)	10 sec
Stand-by dimming level	10%

\* See a separate attachment to find more setting options.