

# VR9 LED

Project Name:	
Type:	



**APPLICATION**

The VR9 series is a premium grade architectural linear LED luminaire that can be wall or ceiling mounted. It is designed to provide the extra level of protection and security required in high occupancy public areas.

**FEATURES:**

- Heavy gauge marine grade extruded aluminum with die-cast end caps. Includes knockouts for surface conduit and tandem mounting.
- The polycarbonate lens and tamper resistant fasteners for high abuse areas. Also available with occupancy sensors.
- Paint after fabrication.

**MOUNTING:**

- Surface wall, ceiling and pendant mount.
- Can be continuous row mounted as needed.

**LENS & REFLECTOR:**

- UV stabilized polycarbonate lens available in opal, secured by four tamper resistant screws.
- Precision die formed 20 gauge full reflector that also acts as a wire cover with 92% reflectivity.

**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.
- Features included over voltage protection, surge, short circuit protection and over load protection.
- Power Factor: typical > 0.95, THD <20, meets Class1 or Class 2 circuit.
- 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)
- Operating temperature: -4°F (-20°C) ~ 122°F (50°C).

**<ELCU-200>**

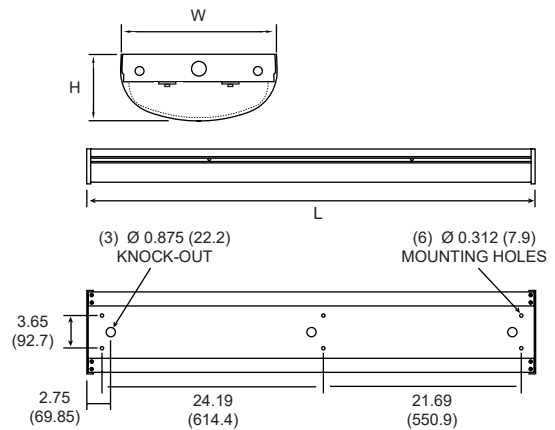
- Guarantees emergency lighting remains ON or is turned on when power to the control device is lost.
- Interfaces with fire alarm panel or security system.
- "Watchdog" feature allows emergency loads to be controlled in tandem with normal power loads.
- UL listed for use in emergency circuits.

**LISTING:**

- UL listed.
- Listed to UL 1598 and UL 8750.
- ADA compliant. <sup>8</sup>
- Suitable for damp location. (wet location optional)
- CEC Compliant EM (please contact for more information)
- ARRA/BAA compliant as an option
- 7 or 10 years limited warranty. (optional) <sup>2</sup>
- Bluetooth Mesh System available, please contact factory for more information.

**CONFIGURATIONS**

Size	LED Watts	System Lumen	Color Temp.	CRI	Lumen Efficiency
2FT	27LED	1494 lm +	4000K	> 82.8	110.7 lm/W
	36LED	1993 lm +			
	40LED	2214 lm +			
	54LED	2989 lm +			
	72LED	3985 lm +			
4FT	27LED	2988 lm +	4000K	> 82.8	110.7 lm/W
	36LED	3985 lm +			
	40LED	4428 lm +			
	54LED	5977 lm +			
	72LED	7969 lm +			
	108LED	11955 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%

**Specifications: VR9**

Height : 3.97 (100.8)  
 Width : 9.26 (235.3)  
 Length : 24.56 (623.9) / 49.13 (1247.8)

All dimensions are in inches (millimeters).

# VR9 LED

**ORDERING INFORMATION**

**EXAMPLE:** VR9-4-36LED-40K-UNV

MODEL	LENGTH	LED		COLOR TEMP.		EFFICACY		CRI		LENS		
VR9	2	2' Length	27LED	27W LED	-27K	2700K <sup>4</sup>	(Blank)	Standard High Efficacy	(Blank)	80+ CRI	(Blank)	Opal (Std.)
	4	4' Length	36LED	36W LED	-30K	3000K	HE		C9	90+ CRI <sup>5</sup>		
			40LED	40W LED	-35K	3500K						
			54LED	54W LED	-40K	4000K (Std.)						
			72LED	72W LED	-50K	5000K						
			108LED	108W LED								

\* Contact factory for custom wattage or lumen requirement.

VOLTAGE		LED DRIVER				OPTIONS	
UNV	120-277V (Std.)	GR	Generic, 0-10V 10% dim (Std.) <sup>3</sup>			EMG8	1296 LUMEN EM Battery Backup (CEC Compliant EM) <sup>1</sup>
120	120V	PH	Philips Xitanium, 0-10V 1% dim <sup>3</sup>			EMG15	2430 LUMEN EM Battery Backup (CEC Compliant EM) <sup>1</sup>
277	277V	OS	Osram Optotronic, 0-10V 10% dim <sup>3</sup>			EMG20	3240 LUMEN EM Battery Backup (CEC Compliant EM) <sup>1</sup>
347	347V	OS1	Osram Optotronic, 0-10V 1% dim <sup>3</sup>			EMG25	4050 LUMEN EM Battery Backup (CEC Compliant EM) <sup>1</sup>
		SD40	40% / 100% Bi-Level Step dim (PH only)			CWEM8	8W EM Cold Weather -4°F (-20°C) ~ 131°F (55°C)
		SDXX	XX% / 100% Bi-Level Step dim (Specify XX : 10% ~ 70%) (PH only)			CWEM18	18W EM Cold Weather -4°F (-20°C) ~ 140°F (60°C)
		TDM	Triac Dim. (120V only)			ELCU-200	Fail-to-on Emergency lighting, UL924 <sup>6</sup>
		TD30/70	30% / 70% / 100% Tri-Level Step dim (PH only)			GTD	Bodine Generator Transfer Device
		TDXX/YY	XX% / YY% / 100% Tri-Level Step dim (Specify XX, YY : 10% ~ 70%) (PH only)			GTD10DIM	Bodine Generator Transfer Device (0-10VDC Dimmer Override)
		ES566	eldoLED SOLOdrive Natural Dimming to dark, 0-10V, 100% ~ 0.1% dim			WMS	Motion Sensor for Wet Location Use
		EC	eldoLED ECOdrive 0-10V natural dim to 1% (Hybrid HydraDrive)			O7W	Optional 7 Years Limited Warranty <sup>2</sup>
		LDE1	Hi-lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology, 100% ~ 1% dim			O10W	Optional 10 Years Limited Warranty <sup>2</sup>
		ELV	ELV compatible (reverse-phase or trailing-edge)), (120V only)			AMB	Anti-Microbial Coating (Matte Skye White)
		PHSR	Philips Xitanium Sensor-Ready, Dalı 5%-100% dim			HC403	Integrated Hytronik Microwave Daylight Harvesting bi level Occupancy Sensor, adjustable via DIP switch <sup>9</sup>
		PHDL	Philips Xitanium DALI driver, Dim to 5%			ARRA	Assembled in USA for Buy American Act
		LTEA2W	Hi-lume 1% 2-wire LED driver (120V forward phase only)			BAA	BAA(Buy American Act) and BABA(Build America Buy America) compliant
		BLT	Bluetooth Mesh System (contact factory for more information)			WET	Wet Location

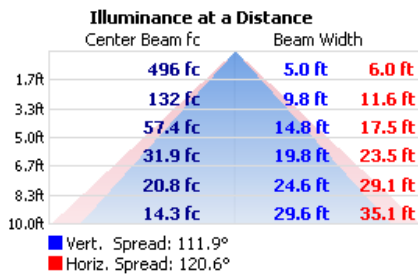
FINISH		LIGHTING CONTROL SYSTEM	
(Blank)	Semi-Glossy White (Std.)	VRF	<Lutron Vive System Enabled> Vive Integral fixture control (RF only), (Must be ordered with EcoSystem drivers or PHSR)
*BK	Black (RAL #9011)	FCJS0	Vive Attached fixture control (RF only for 0-10V drivers), (N/A with GR driver)
**CC	Custom Color	FCJSE	Vive Attached fixture control (RF only for Lutron EcoSystem drivers)
*AMB	Anti-Microbial Coating (Matte Skye White)	FCJS0EM	UL 924 Emergency PowPak wireless fixture control for 0-10V drivers
		FCJSEEM	UL 924 Emergency PowPak wireless fixture control for Ecosystem drivers
		SNS200C	<EasySense> EasySense Ceiling-mount occupancy sensing, daylight harvesting and task tuning in one device (Must be ordered with PHSR driver) <sup>7</sup>
		RS-IR	IR dongle for EasySense control
		LMS-109	Fixture integrated Occupancy sensor with Ambient Light Sensor
		PPA102S	<Bluetooth> Bluetooth Powerpack (Consult factory for installation location)

**NOTES:**

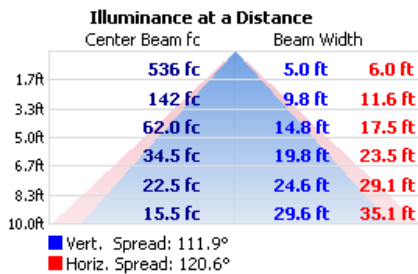
- Contact factory for other emergency ballast options. Must specify voltage, not available with 347V.
- This limited warranty covers electrical parts only and does not apply to labor, equipment lease, or defect from improper installation or operation. (EM battery backup does not included)
- To find an approved dimmer switch, please see table 1.
- Available with C9 only.
- Lumen per watt is around 15% less than standard CRI (80+).
- Shipped separately.
- 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.
- Available with wall mount only.
- See Table2 to find factory setting.

# VR9 LED

**VR9-4-40LED**



**VR9-4-54LED**



**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-AO8, DIN-4DIMFLV4, CLS-EXP-DIMFLV, CLCI-1DIMFLV2EX		
LDE1	Lutron Hi-lume 1% Eco-System	<Lutron>	PowPak Dimming Modules: RMJ-ECO32-DV-B, FCJ/FCJS-ECO 1,2 Energi 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.