

# 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 3mm thick 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.
- Generic : 0-10V 10% dim. (GR)
- Operating temperature: -4°F (-20°C) ~ 122°F (50°C).

**<ELCU-200>**

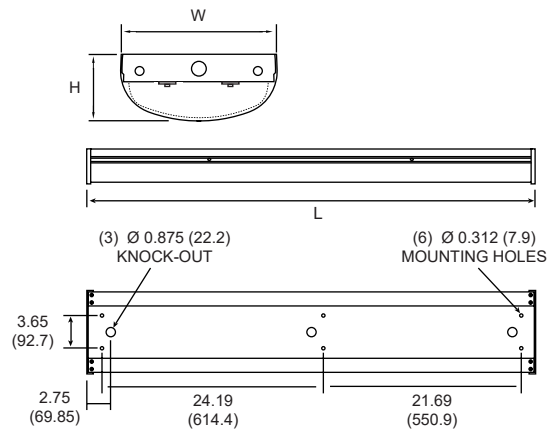
- Guarantees emergency lighting remains ON or is turned on when power to the control device is lost.
- Interfaces with fire alarm panel or security system.
- "Watchdog" feature allows emergency loads to be controlled in tandem with normal power loads.
- UL listed for use in emergency circuits.

**LISTING:**

- ROHS.
- UL listed.
- Listed to UL 1598 and UL 8750.
- ADA compliant. <sup>8</sup>
- Suitable for damp location (wet location for covered ceiling optional).
- CEC Compliant EM (please contact for more information)
- ARRA/BAA compliant (optional).
- Trade Agreements Act compliant (optional).
- 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-GR**

| MODEL | LENGTH | LED    | COLOR TEMP.  | EFFICACY | CRI                | LENS    |  |         |         |         |             |
|-------|--------|--------|--|----------|--------------------|---------|--|---------|---------|---------|-------------|
| VR9   | 2      | 27LED  | 27W LED  | -27K     | 2700K <sup>4</sup> | (Blank) | Standard High Efficacy  | (Blank) | 80+ CRI | (Blank) | Opal (Std.) |
|       | 4      | 36LED  | 36W LED  | -30K     | 3000K              | HE      |  |         |         |         |             |
|       |        | 40LED  | 40W LED  | -35K     | 3500K              |         |  |         |         |         |             |
|       |        | 54LED  | 54W LED  | -40K     | 4000K (Std.)       |         |  |         |         |         |             |
|       |        | 72LED  | 72W LED  | -50K     | 5000K              |         |  |         |         |         |             |
|       |        | 108LED | 108W LED   |          |                    |         |  |         |         |         |             |
|       |        | xx     | Custom lumen or watt:<br>__LM or __W   |          |                    |         |  |         |         |         |             |
|       |        |        | <small>* Max up to 747lm/ft or 108W.<br/>* with TDM/ELV: offered to closest lm or W.</small> |          |                    |         |  |         |         |         |             |

| VOLTAGE   | LED DRIVER <sup>3</sup>   | OPTIONS   |
|---|---|---|
| UNV 120-277V (Std.)<br>120 120V<br>277 277V<br>347 347V | <b>GR</b> Generic, 0-10V 10% dim (Std.)<br><b>DM1</b> Generic 0-10V 1% dim<br><b>SD40</b> 40% / 100% Bi-Level Step dim<br><b>SDXX</b> XX% / 100% Bi-Level Step dim (Specify XX : 10% ~ 70%)<br><b>TDM</b> Triac Dim. (120V only)<br><b>ELV</b> ELV compatible (reverse-phase or trailing-edge)), (120V only)<br><b>TD30/70</b> 30% / 70% / 100% Tri-Level Step dim<br><b>TDXX/YY</b> XX% / YY% / 100% Tri-Level Step dim (Specify XX, YY : 10% ~ 70%)<br><b>ES566</b> eldoLED SOLOdrive Natural Dimming to dark, 0-10V, 100% ~ 0.1% dim<br><b>EC</b> eldoLED ECOdrive 0-10V natural dim to 1% (Hybrid HydraDrive)<br><b>LDE1</b> Hi-lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology, 100% ~ 1% dim<br><b>PHSR</b> Philips Xitanium Sensor-Ready, Dali 5%~100% dim<br><b>PHDL</b> Philips Xitanium DALI driver, Dim to 5%<br><br> <b>BLT</b> Bluetooth Mesh System (contact factory for more information) | <b>EMG8</b> 1296 LUMEN EM Battery Backup (CEC Compliant EM) <sup>1</sup><br><b>EMG15</b> 2430 LUMEN EM Battery Backup (CEC Compliant EM) <sup>1</sup><br><b>EMG20</b> 3240 LUMEN EM Battery Backup (CEC Compliant EM) <sup>1</sup><br><b>EMG25</b> 4050 LUMEN EM Battery Backup (CEC Compliant EM) <sup>1</sup><br><b>CWEM8</b> 8W EM Cold Weather -4°F (-20°C) ~ 131°F (55°C)<br><b>CWEM18</b> 18W EM Cold Weather -4°F (-20°C) ~ 140°F (60°C)<br><b>ELCU-200</b> Fail-to-on Emergency lighting, UL924 <sup>6</sup><br><b>GTD</b> Bodine Generator Transfer Device<br><b>GTD10DIM</b> Bodine Generator Transfer Device (0-10VDC Dimmer Override)<br><b>LT</b> Low temperature environment (-40°C/-40°F to 50°C/122°F)<br><b>WMS</b> Motion Sensor for Wet Location Use<br><b>HC403</b> Integrated Hytronik Microwave Daylight Harvesting bi level Occupancy Sensor, adjustable via DIP switch <sup>9</sup><br><br><b>O7W</b> Optional 7 Years Limited Warranty <sup>2</sup><br><b>O10W</b> Optional 10 Years Limited Warranty <sup>2</sup><br><b>AMB</b> Anti-Microbial Coating (Matte Skye White)<br><b>ARRA</b> Assembled in USA<br><b>BAA</b> BAA(Buy American Act) compliant<br><b>TAA</b> Trade Agreements Act compliant<br><b>WET</b> Wet Location for covered ceiling |

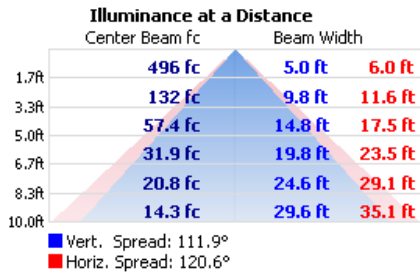
| FINISH   | LIGHTING CONTROL SYSTEM   |
|--|---|
| <b>(Blank)</b> Semi-Glossy White (Std.)<br><b>*BK</b> Black (RAL #9011)<br><b>**CC</b> Custom Color<br><b>*AMB</b> Anti-Microbial Coating (Matte Skye White)<br><br><small>* Non-standard finish with extra charge.<br/> ** CC: additional charge &amp; set up fee. Provide RAL# code.</small> | <u>&lt;Lutron&gt;</u><br><b>VIVE</b> Lutron Vive Bluetooth ready options, please contact factory.<br><b>ATHENA</b> Lutron Athena Bluetooth ready options, please contact factory.<br><br><u>&lt;EasySense&gt;</u><br><b>SNS200C</b> EasySense Ceiling-mount occupancy sensing, daylight harvesting and task tuning in one device (Must be ordered with PHSR driver) <sup>7,8</sup><br><b>RS-IR</b> IR dongle v2.0 for EasySense control<br><br><u>&lt;Bluetooth&gt;</u><br><b>AUTANI</b> Autani / Keilton Bluetooth control ready options.<br><b>CASAMBI</b> Casambi Bluetooth control ready options.<br><b>AVI-ON</b> Avi-On Bluetooth control ready options.<br><br><small>* Please contact factory for Bluetooth control with sensor and other options</small> |

**NOTES:**

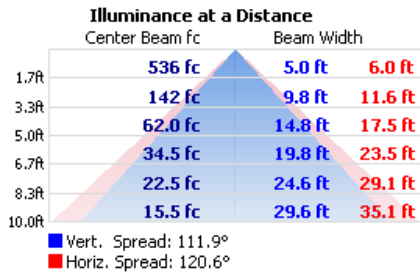
- Contact factory for other emergency ballast options. Must specify voltage, not available with 347V.
- This limited warranty covers electrical parts only and does not apply to labor, equipment lease, or defect from improper installation or operation. (EM battery backup does not included)
- To find an 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.
- Refer to Advanced Grouping Datasheet for its default setting and compatible wireless switches.
- 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<br>Diva - DVTv-xx, NFTV<br>GRAFIK Eye: GRX-TVI w GRX3503<br>Energy Savr Node: QSN-4T16-S<br>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 <sup>1,2</sup><br>Energi Savr Node (120V only): QSN-1ECO-S, QSN-2ECO-S<br>GRAFIK Eye QS/Homeworks QS control unit (120V only): QSGRJ- E(wireless) QSGR- E<br>Quantum Hub (120V only): QP2- _2C/4C/6C/8C<br>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   |

**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.