

# VRB2 LED Round Bollard

DUAL FUNCTION, VANDAL-RESISTANT, ALUMINUM SHAFT

**Type:**  
**Job:**  
**Catalog number:**

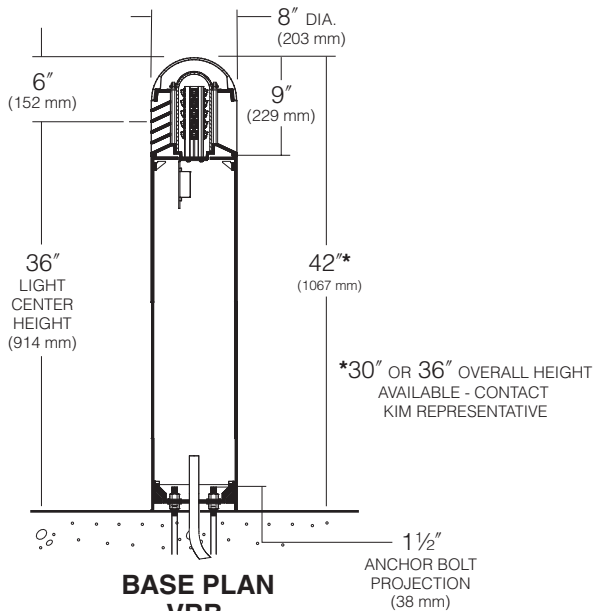
**Approvals:**

<b>VRB2</b>	/	/	/
Fixture	Electrical Module	Luminaire Finish (includes top cap and shaft)	Option
See page 2			

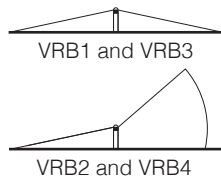
## Specifications

**VRB-LED Models**  
 10 - 20 Diodes

**VRB2 - Dual Function Luminaire (Aluminum Shaft)**  
 Maximum weight: 30 lb



**BASE PLAN**  
**VRB**  
**ALUMINUM SHAFT**



**Domed Top Cap:** Die-cast aluminum secured to louvers by concealed allen screws in keyhole slots. For relamping access, allen screws shall not require complete removal.

**Louvers:** One-piece sand-cast with horizontal and vertical blades. Horizontal louvers provide 210° of downlighting with source cutoff above horizontal. Vertical louvers provide 150° of non-cutoff lighting. Horizontal louver blades shall have a 1 3/4" depth with a 65° upward pitch from horizontal. Vertical louver blades have a 1 3/4" depth with a 30° spacing. Louver assembly shall be secured to shaft by four internal tie rods.

**Lamp Enclosure:** One-piece tempered molded glass with internal flutes and full gasketing at bottom edge.

**Socket:** Porcelain medium base socket rated 4KV for HID and incandescent. Plastic socket for Fluorescent.

**Fixture Head:** Allows flow-through ventilation around and above the lamp enclosure.

**Shaft:** One-piece extruded aluminum, .125" wall thickness with heavy cast aluminum twist-lock anchor base concealed within the shaft. Concealed set screws shall lock shaft onto the cast anchor base.

**Electronic Module:** All electrical components are either UL or ETL recognized, mounted on a single plate and factory prewired with quick disconnect plugs. Driver is rated for -40°F starting and has a 0-10V dimming interface for multi-level illumination options.

**Optical Module:** Each LED equipped with a directional optic for maximum beam angle projecting through louver stack spacings. LED boards to be mounted to an anodized inter-locking heat sink extrusion. (Type I) two 5-LED boards for a total of 10-LED. (Type III) three 5-LED boards for a total of 15-LED. (Type V) four 5-LED boards for a total of 20-LED. Available in 580nm Amber, 3000K, 4200K and 5100K color temperatures.

**Anchor Bolts:** Four 3/8" x 10" + 2" zinc plated L-hooks, each with two nuts, washers and a rigid pressed board template.

**Finish:** Each luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) polyester powdercoat finish.

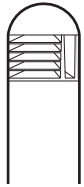
**Listed to:** UL 1598 Standard for Luminaires - UL 8750 Standard for Safety for Light Emitting Diode (LED) Equipment for use in Lighting Products and CSA C22.2#250.0 Luminaires. RoHS compliant. Meets Buy American provisions within ARRA.

**CAUTION:** Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

KIM LIGHTING RESERVES THE RIGHT TO CHANGE SPECIFICATIONS WITHOUT NOTICE

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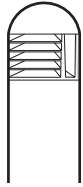


## Standard and Optional Features



<p><b>Fixture</b></p>	<p>Cat. No. <b>VRB2</b> Dual Function, Aluminum Shaft, Domed Top</p>			
<p><b>Electrical Module</b> LED = Light Emitting Diode</p>	<p>Cat. Nos. for LED Electrical Modules available:</p> <table border="0" style="width: 100%;"> <tr> <td style="text-align: center; vertical-align: top;"> <p><b>xL</b></p> <p><b>Source:</b></p> <ul style="list-style-type: none"> <li>  <b>10L</b>= 10 LED (IES Type I)</li> <li>  <b>15L</b>= 15 LED (IES Type III)</li> <li>  <b>20L</b>= 20 LED (IES Type V)</li> </ul> </td> <td style="text-align: center; vertical-align: top;"> <p><b>xK</b></p> <p><b>Color Temperature:</b></p> <ul style="list-style-type: none"> <li>  2K = 580nm - Amber</li> <li>  3K = 3000K</li> <li>  4K = 4200K</li> <li>  5K = 5100K</li> </ul> </td> <td style="text-align: center; vertical-align: top;"> <p><b>UV</b></p> <p><b>Voltage:</b></p> <ul style="list-style-type: none"> <li>  <b>UV</b> Universal Voltage shall range from 120V-277V</li> </ul> </td> </tr> </table>	<p><b>xL</b></p> <p><b>Source:</b></p> <ul style="list-style-type: none"> <li>  <b>10L</b>= 10 LED (IES Type I)</li> <li>  <b>15L</b>= 15 LED (IES Type III)</li> <li>  <b>20L</b>= 20 LED (IES Type V)</li> </ul>	<p><b>xK</b></p> <p><b>Color Temperature:</b></p> <ul style="list-style-type: none"> <li>  2K = 580nm - Amber</li> <li>  3K = 3000K</li> <li>  4K = 4200K</li> <li>  5K = 5100K</li> </ul>	<p><b>UV</b></p> <p><b>Voltage:</b></p> <ul style="list-style-type: none"> <li>  <b>UV</b> Universal Voltage shall range from 120V-277V</li> </ul>
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<p><b>Finish</b> TGIC thermoset polyester powder coat paint applied over a titanated zirconium conversion coating on fixture and shaft.</p>	<table border="0" style="width: 100%;"> <tr> <td style="vertical-align: top;"> <p>Cat. No.: Color:</p> <ul style="list-style-type: none"> <li>  <b>BLS</b> Black Gloss Smooth</li> <li>  <b>BLT</b> Black Matte Textured</li> <li>  <b>DBS</b> Dark Bronze Gloss Smooth</li> <li>  <b>DBT</b> Dark Bronze Matte Textured</li> <li>  <b>GTT</b> Graphic Matte Textured</li> <li>  <b>LGS</b> Light Grey Gloss Smooth</li> </ul> </td> <td style="vertical-align: top;"> <p>Cat. No.: Color:</p> <ul style="list-style-type: none"> <li>  <b>LGT</b> Light Grey Matte Textured</li> <li>  <b>PSS</b> Platinum Silver Gloss Smooth</li> <li>  <b>VGT</b> Verde Green Matte Textured</li> <li>  <b>WHS</b> White Gloss Smooth</li> <li>  <b>WHT</b> White Matte Textured</li> <li>  <b>CC</b><sup>1</sup> Custom Color</li> </ul> </td> </tr> </table> <p><b>NOTE:</b> Black and Dark Bronze colors will produce slightly less louver brightness than Light Gray or White.</p> <p><sup>1</sup> Custom colors subject to additional charges, minimum quantities and extended lead times. Consult representative. Custom color description: _____</p>	<p>Cat. No.: Color:</p> <ul style="list-style-type: none"> <li>  <b>BLS</b> Black Gloss Smooth</li> <li>  <b>BLT</b> Black Matte Textured</li> <li>  <b>DBS</b> Dark Bronze Gloss Smooth</li> <li>  <b>DBT</b> Dark Bronze Matte Textured</li> <li>  <b>GTT</b> Graphic Matte Textured</li> <li>  <b>LGS</b> Light Grey Gloss Smooth</li> </ul>	<p>Cat. No.: Color:</p> <ul style="list-style-type: none"> <li>  <b>LGT</b> Light Grey Matte Textured</li> <li>  <b>PSS</b> Platinum Silver Gloss Smooth</li> <li>  <b>VGT</b> Verde Green Matte Textured</li> <li>  <b>WHS</b> White Gloss Smooth</li> <li>  <b>WHT</b> White Matte Textured</li> <li>  <b>CC</b><sup>1</sup> Custom Color</li> </ul>	
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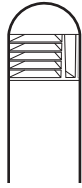


## Standard and Optional Features

<p><b>Battery Back-up</b>                  Cat. No.   <b>EM</b>                    <b>No Option</b></p>	<p>Internal battery pack provides 90 minutes of supplemental light at 50% of initial lamp lumens.</p>	 <p>battery back-up</p>
<p><b>Optional Duplex Receptacle</b>                  Cat. No.   <b>DR</b>                    <b>DR-GFI</b>                    <b>No Option</b></p>	<p>Mounted 18" from bottom of shaft, in a cast aluminum box that is internally welded and sealed with a gasketed While-In-Use cover with locking tab. Painted to match bollard.  <b>DR</b> weather proof duplex receptacle rated 20A, 125V.  <b>DR-GFI</b> weather proof duplex receptacle with ground fault circuit interrupter rated 20A, 125V.</p>	
<p><b>0-10V Dimming Interface</b></p>	<p>Driver has a 0-10V dimming interface with a dimming range of 10-100%. Is compatible with most control systems. Note: Not compatible with current sourcing dimmers. Controls compatible via Pink and Purple dimming lead.</p>	

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## Lumen Data

Spectroradiometric			
	3000K Average	4200K Average	5100K Average
Correlated Color Temp. CCT (K)	2800K - 3175K	3800K - 4600K	4600K - 5600K
Color Rendering Index (CRI)	≥75	≥70	≥65
Power Factor	>.90	>.90	>.90

Projected Lumen Maintenance		
mA	50,000 hrs	100,000 hrs
350mA	N/A	N/A

Based on 20LED version.

Electrical Drive Current - @350mA						
Volts - AC	Type 1		Type 3		Type 5	
	Amps - AC	System Watts	Amps - AC	System Watts	Amps - AC	System Watts
120	0.11	13	0.16	19	0.21	25
208	0.06	13	0.09	19	0.12	25
240	0.05	13	0.08	19	0.10	25
277	0.05	13	0.07	19	0.09	25

B.U.G. Rating (TM15) in Lumens where B = Backlight, U = Uplight, G = Glare			
Temperature	TYPE 1	TYPE 3	TYPE 5
3000K	N/A	N/A	B1 U2 G1
4200K	N/A	N/A	B1 U2 G1
5100K	N/A	N/A	B1 U3 G1

Absolute Lumens			
Temperature	TYPE 1	TYPE 3	TYPE 5
3000K	N/A	N/A	816
4200K	N/A	N/A	1012
5100K	N/A	N/A	1063

LED performance and lumen output continues to improve at a rapid pace. For custom optics and color temperature configurations, contact factory.