

VRB1 LED Round Bollard

SINGLE FUNCTION, VANDAL-RESISTANT, ALUMINUM SHAFT

Type:
Job:
Catalog number:

Approvals:

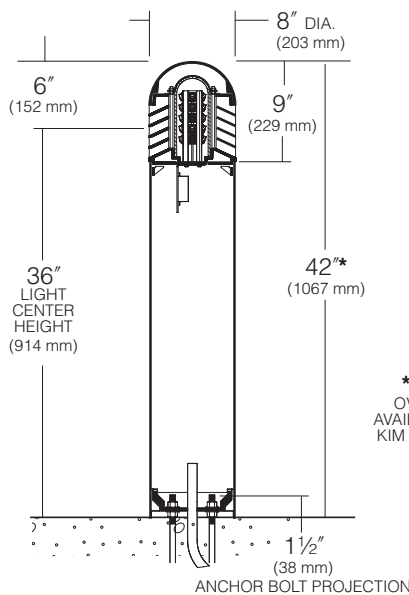
VRB1	/	/	/
Fixture	Electrical Module	Luminaire Finish (includes top cap and shaft)	Option
See page 2			

Date:
Page: 1 of 4

Specifications

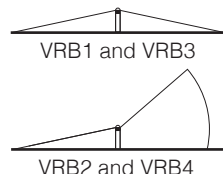
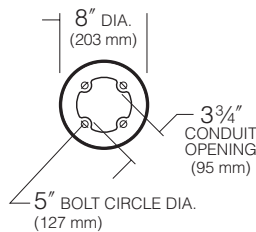
VRB-LED Models
 10 - 20 Diodes

VRB1- Single Function Luminaire (Aluminum Shaft)
 Maximum weight: 30 lb



*30" OR 36" OVERALL HEIGHT AVAILABLE - CONTACT KIM REPRESENTATIVE

BASE PLAN VRB ALUMINUM SHAFT



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

Louvers: Aluminum die-cast with vertical support ribs at 90° intervals. Horizontal louver blades shall have a 13/4" depth, a 65° upward pitch and provide light source cutoff above horizontal. 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.

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

Shaft: One-piece extruded aluminum, .125" wall thickness with a 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, 4000K and 5000K 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.

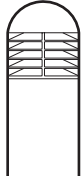
Listed to: UL 1598 Standard for Luminaires - UL 8750 Standard for Safety for Light Emitting Diode (LED) Equipment for use in Lighting Products and CSA C22.2#250.0 Luminaires. RoHS compliant. Meets Buy American provisions within ARRA.

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

VRB1 LED Round Bollard

SINGLE FUNCTION, VANDAL-RESISTANT, ALUMINUM SHAFT

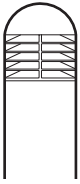


Standard and Optional Features



<p>Fixture</p>	<p>Cat. No. VRB1 Single Function, Aluminum Shaft, Domed Top</p>				
<p>Electrical Module LED = Light Emitting Diode</p>	<p>Cat. Nos. for LED Electrical Modules available:</p> <table border="0" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; border-right: 1px solid black; padding: 5px;"> <p>xL</p> <p>Source:</p> <ul style="list-style-type: none"> 10L= 10 LED (IES Type I) 15L= 15 LED (IES Type III) 20L= 20 LED (IES Type V) </td> <td style="text-align: center; border-right: 1px solid black; padding: 5px;"> <p>xK</p> <p>Color Temperature:</p> <ul style="list-style-type: none"> 2K = 580nm - Amber 3K = 3000K 4K = 4000K 5K = 5000K </td> <td style="text-align: center; padding: 5px;"> <p>UV</p> <p>Voltage:</p> <ul style="list-style-type: none"> UV Universal Voltage shall range from 120V-277V </td> </tr> </table>		<p>xL</p> <p>Source:</p> <ul style="list-style-type: none"> 10L= 10 LED (IES Type I) 15L= 15 LED (IES Type III) 20L= 20 LED (IES Type V) 	<p>xK</p> <p>Color Temperature:</p> <ul style="list-style-type: none"> 2K = 580nm - Amber 3K = 3000K 4K = 4000K 5K = 5000K 	<p>UV</p> <p>Voltage:</p> <ul style="list-style-type: none"> UV Universal Voltage shall range from 120V-277V
<p>xL</p> <p>Source:</p> <ul style="list-style-type: none"> 10L= 10 LED (IES Type I) 15L= 15 LED (IES Type III) 20L= 20 LED (IES Type V) 	<p>xK</p> <p>Color Temperature:</p> <ul style="list-style-type: none"> 2K = 580nm - Amber 3K = 3000K 4K = 4000K 5K = 5000K 	<p>UV</p> <p>Voltage:</p> <ul style="list-style-type: none"> UV Universal Voltage shall range from 120V-277V 			
<p>Finish TGIC thermoset polyester powder coat paint applied over a titanated zirconium conversion coating on fixture and shaft.</p>	<table border="0" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>Cat. No.: Color:</p> <ul style="list-style-type: none"> BLS Black Gloss Smooth BLT Black Matte Textured DBS Dark Bronze Gloss Smooth DBT Dark Bronze Matte Textured GTT Graphic Matte Textured LGS Light Grey Gloss Smooth </td> <td style="width: 50%; vertical-align: top;"> <p>Cat. No.: Color:</p> <ul style="list-style-type: none"> LGT Light Grey Matte Textured PSS Platinum Silver Gloss Smooth VGT Verde Green Matte Textured WHS White Gloss Smooth WHT White Matte Textured CC¹ Custom Color </td> </tr> </table> <p>NOTE: Black and Dark Bronze colors will produce slightly less louver brightness than Light Gray or White.</p> <p>¹Custom 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"> BLS Black Gloss Smooth BLT Black Matte Textured DBS Dark Bronze Gloss Smooth DBT Dark Bronze Matte Textured GTT Graphic Matte Textured LGS Light Grey Gloss Smooth 	<p>Cat. No.: Color:</p> <ul style="list-style-type: none"> LGT Light Grey Matte Textured PSS Platinum Silver Gloss Smooth VGT Verde Green Matte Textured WHS White Gloss Smooth WHT White Matte Textured CC¹ Custom Color 	
<p>Cat. No.: Color:</p> <ul style="list-style-type: none"> BLS Black Gloss Smooth BLT Black Matte Textured DBS Dark Bronze Gloss Smooth DBT Dark Bronze Matte Textured GTT Graphic Matte Textured LGS Light Grey Gloss Smooth 	<p>Cat. No.: Color:</p> <ul style="list-style-type: none"> LGT Light Grey Matte Textured PSS Platinum Silver Gloss Smooth VGT Verde Green Matte Textured WHS White Gloss Smooth WHT White Matte Textured CC¹ Custom Color 				

VRB1 LED Round Bollard

SINGLE FUNCTION, VANDAL-RESISTANT, ALUMINUM SHAFT

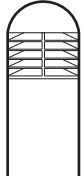


Standard and Optional Features

<p>Battery Back-up Cat. No. EM No Option</p>	<p>Internal battery pack provides 90 minutes of supplemental light at 50% of initial lamp lumens.</p>	 battery back-up
<p>Optional Duplex Receptacle Cat. No. DR DR-GFI No Option</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. DR weather proof duplex receptacle rated 20A, 125V. DR-GFI weather proof duplex receptacle with ground fault circuit interrupter rated 20A, 125V.</p>	
<p>0-10V Dimming Interface</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>	

VRB1 LED Round Bollard

SINGLE FUNCTION, VANDAL-RESISTANT, ALUMINUM SHAFT



Lumen Data

Spectroradiometric			
	3000K Average	4000K Average	5000K 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	B1 U2 G1	B1 U2 G1	B1 U2 G1
4000K	B1 U2 G1	B1 U2 G1	B1 U2 G1
5000K	B1 U2 G1	B1 U2 G1	B1 U2 G1

Absolute Lumens			
Temperature	TYPE 1	TYPE 3	TYPE 5
3000K	396	567	811
4000K	491	703	1005
5000K	515	739	1057

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