KIM LIGHTING

VRB1 LED Round Bollard

Single Function, Vandal-Resistant, Aluminum Shaft

revision 8/7/14 • kl_vrb1led_spec.pdf

Type:
Job:
Catalog number:

Approvals:

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

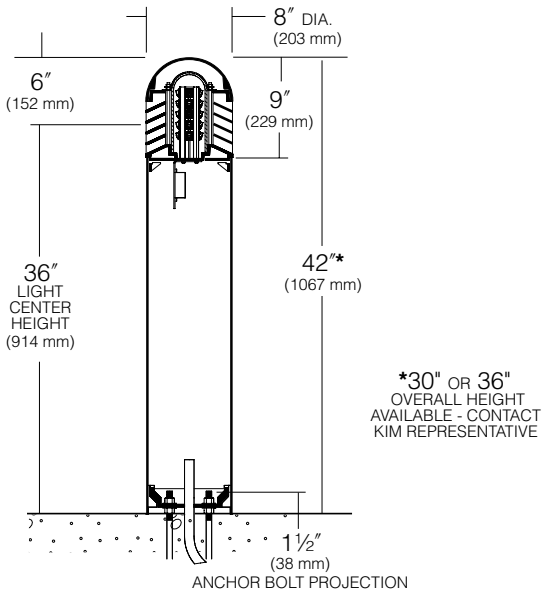
See page 2

Date:

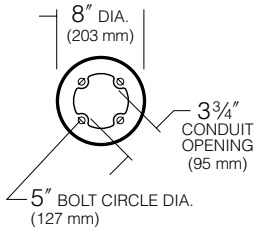
Specifications

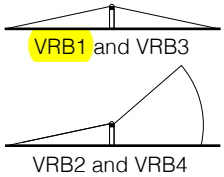
VRB-LED Models
10 - 20 Diodes

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



BASE PLAN VRB
ALUMINUM SHAFT





HUBBELL® Lighting

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 1¾″ 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, 4200K and 5100K color temperatures.

Anchor Bolts: Four ⅜″ x 10″ + 2″ zinc plated L-hooks, each with two nuts, washers and a rigid pressed board template.

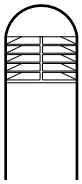
Finish: Each luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) polyester powdercoat finish. Standard colors include (BL) Black, (DB) Dark Bronze, (WH) White, (PS) Platinum Silver, (SG) Stealth Gray, (LG) Light Gray, and (CC) Custom Color (Include RAL#).

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.

Warranty: Kim Lighting warrants Bollard LED products sold by Kim Lighting to be free from defects in material and workmanship for (i) a period of five (5) years for metal parts, (ii) a period of five (5) years for exterior housing paint finish(s), (iii) a period of five (5) years for LED Light Engines and, (iv) a period of five (5) years for LED power components (driver, surge protector and LifeShield® device), from the date of sale of such goods to the buyer as specified in Kim Lighting shipment documents for each product.

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



Standard and Optional Features

Fixture

Cat. No. **VRB1** Single Function, Aluminum Shaft, Domed Top

Electrical Module
LED = Light Emitting Diode

Cat. Nos. for LED Electrical Modules available:

xL

Source:

- ☐ **10L**= 10 LED (IES Type I)
- ☐ **15L**= 15 LED (IES Type III)
- ☐ **20L**= 20 LED (IES Type V)

xK

Color Temperature:

- ☐ 2K = 580nm - Amber
- ☐ 3K = 3000K
- ☐ 4K = 4200K
- ☐ 5K = 5100K

UV

Voltage:

- ☐ **UV** Universal Voltage shall range from 120V-277V

Finish
TGIC thermoset polyester powder coat paint applied over a titanated zirconium conversion coating on fixture and shaft.

Color:	Black	Dark Bronze	Light Gray	Stealth Gray	Platinum Silver	White	Custom Color[1]
Cat. No.:	☐ **BL**	☐ **DB**	☐ **LG**	☐ **SG**	☐ **PS**	☐ **WH**	☐ **CC**

NOTE: Black and Dark Bronze colors will produce slightly less louver brightness than Light Gray or White.

[1] Custom colors subject to additional charges, minimum quantities and extended lead times. Consult representative. Custom color description:_____

Battery Back-up
Cat. No. ☐ **EM** ☐ **No Option**

Internal battery pack provides 90 minutes of supplemental light at 50% of initial lamp lumens.

battery back-up

Optional Duplex Receptacle
Cat. No. ☐ **DR** ☐ **DR-GFI** ☐ **No Option**

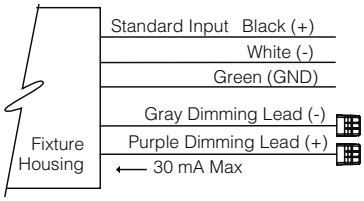
Mounted 18″ from bottom of shaft, in a cast aluminum box that is internally welded and sealed with a gasketed While-In-Use cover with locking tab. Painted to match bollard.

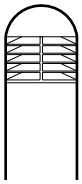
DR weather proof duplex receptacle rated 20A, 125V.

DR-GFI weather proof duplex receptacle with ground fault circuit interrupter rated 20A, 125V.

0-10V Dimming Interface

Driver has a 0-10V dimming interface with a dimming range of 10-100%. Is compatible with most control systems including Hubbell Building Automation wiHUBB™. Approved dimmers include Lutron Diva AVTV, Lutron Nova NFTV and NTFTV. Note: Not compatible with current sourcing dimmers. Controls compatible via Gray and Purple dimming lead.





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						
	Type 1		**Type 3**		**Type 5**	
Volts - AC	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
4200K	B1 U2 G1	B1 U2 G1	B1 U2 G1
5100K	B1 U2 G1	B1 U2 G1	B1 U2 G1

Absolute Lumens			
Temperature	TYPE 1	TYPE 3	TYPE 5
3000K	396	567	811
4200K	491	703	1005
5100K	515	739	1057

LED performance and lumen output continues to improve at a rapid pace. Log onto www.kimlighting.com to download the most current photometric files from Kim Lighting's IES File Library.
For custom optics and color temperature configurations, contact factory.