

Type:
Job:
Catalog number:

Approvals:

GEM1	/	/	/
Fixture	Electrical Module	Top Cap Finish (Includes top cap and shaft)	Options
See page 2		See page 3	

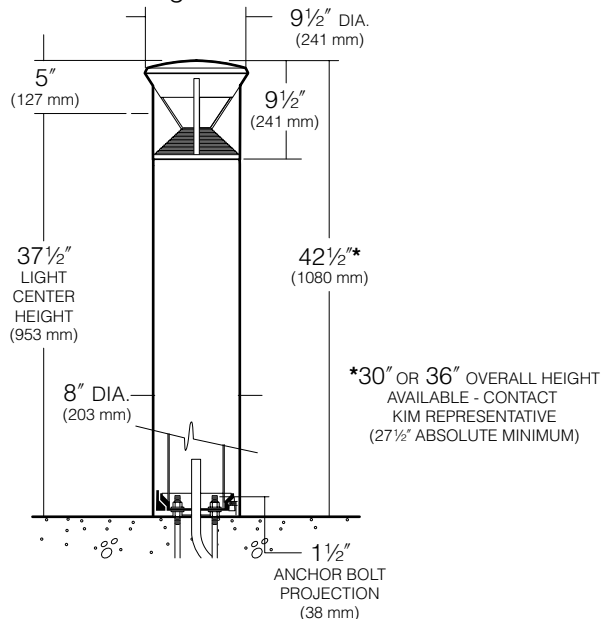
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Specifications

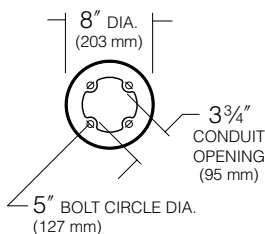
GEM Models

GEM1

Maximum weight: 28 lb



BASE PLAN GEM ALUMINUM SHAFT



Top Cap: Die-cast, low copper (< 0.6% Cu) aluminum secured to rib body by captive stainless steel allen cap screws. For lamp access, allen screws shall not require complete removal.

Supports: Die-cast, low copper (< 0.6% Cu) aluminum supports secured in place as a complete cage assembly. The top section provides a cutoff lamp compartment. The supports are secured to the shaft by four stainless steel tie rods.

Refractor: Thermally tempered soda lime glass sealed with silicone gaskets top and bottom.

Shaft: One-piece aluminum extrusion, .125" minimum wall thickness with a heavy cast aluminum anchor base concealed within the shaft. Hex socket stainless steel set screws shall lock the shaft onto the cast frangible anchor base.

LED Optical System: A total of 9 mid power LED emitters configured in a rectangular array comprised together as a module. Two (2) modules, 18 diodes for Type I version; three (3) modules, 27 diodes for Type III version; and four (4) modules, 36 diodes for Type V version. Available in 580nm Amber, 3000K, 4000K and 5000K color temperatures.

LED Driver: Universal voltage from 120 to 277V with a ±10% tolerance. -40°F. starting temperature. All drivers are Underwriters Laboratories recognized.

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

Finish: Each luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidic 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.



U.S. PATENT D443,094

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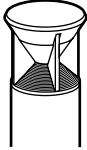
Standard Features

<p>Fixture</p>	<p>Cat. No. GEM1 Fixture with Aluminum Shaft</p>			
<p>Electrical Module 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>xL</p> <p>Source:</p> <p><input type="checkbox"/> 18L= Type I</p> <p><input type="checkbox"/> 27L= Type III</p> <p><input type="checkbox"/> 36L= Type V</p> </td> <td style="text-align: center; vertical-align: top;"> <p>xK</p> <p>Color Temperature:</p> <p><input type="checkbox"/> 2K = 580nm - Amber</p> <p><input type="checkbox"/> 3K = 3000K</p> <p><input type="checkbox"/> 4K = 4000K</p> <p><input type="checkbox"/> 5K = 5000K</p> </td> <td style="text-align: center; vertical-align: top;"> <p>UV</p> <p>Voltage:</p> <p><input type="checkbox"/> UV Universal Voltage shall range from 120V-277V</p> </td> </tr> </table>	<p>xL</p> <p>Source:</p> <p><input type="checkbox"/> 18L= Type I</p> <p><input type="checkbox"/> 27L= Type III</p> <p><input type="checkbox"/> 36L= Type V</p>	<p>xK</p> <p>Color Temperature:</p> <p><input type="checkbox"/> 2K = 580nm - Amber</p> <p><input type="checkbox"/> 3K = 3000K</p> <p><input type="checkbox"/> 4K = 4000K</p> <p><input type="checkbox"/> 5K = 5000K</p>	<p>UV</p> <p>Voltage:</p> <p><input type="checkbox"/> UV Universal Voltage shall range from 120V-277V</p>
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<p>Finish TGIC thermoset polyester powder coat paint over a titanated zirconium conversion coating on fixture and shaft.</p>	<p>Top Cap Color: Black Dark Bronze Light Gray Platinum Silver White Custom Color¹ Cat. No.: <input type="checkbox"/> BL <input type="checkbox"/> DB <input type="checkbox"/> LG <input type="checkbox"/> PS <input type="checkbox"/> WH <input type="checkbox"/> CC</p> <p>¹Custom colors subject to additional charges, minimum quantities and extended lead times. Consult representative. Custom color description: _____</p> <p>Aluminum Riser (Shaft) Aluminum Riser shaft is finished to match fixture with TGIC thermoset polyester powder coat paint over a titanated zirconium conversion coating.</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 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.</p> <div style="text-align: right;"> </div>			


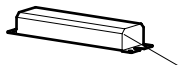
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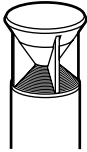


Optional Features

<p>Houseside Shield Cat. No. <input type="checkbox"/> HS <input type="checkbox"/> No Option</p>	<p>90° houseside shield. .032" thick aluminum, painted to match fixture.</p>	
<p>Battery Back-up Cat. No. <input type="checkbox"/> EM <input type="checkbox"/> No Option</p>	<p>Internal battery pack provides 90 minutes of supplemental light at 25% of initial lamp lumens.</p>	 Battery Back-up
<p>Optional Duplex Receptacle Cat. No. <input type="checkbox"/> DR <input type="checkbox"/> DR-GFI <input type="checkbox"/> 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.</p> <p>DR weather proof duplex receptacle rated 20A, 125V. DR-GFI weather proof duplex receptacle with ground fault circuit interrupter rated 20A, 125V.</p>	

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Lumen Data

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	0.18	21	0.26	31	0.34	41
208	0.10	21	0.15	31	0.20	41
240	0.09	21	0.13	31	0.17	41
277	0.08	21	0.11	31	0.15	41

B.U.G. Rating (TM15) in Lumens where B = Backlight, U = Uplight, G = Glare			
Temperature	TYPE 1	TYPE 3	TYPE 5
3000K	B1 U3 G1	B1 U3 G1	B1 U3 G1
4000K	B1 U3 G1	B1 U3 G1	B1 U3 G1
5000K	B1 U3 G1	B1 U3 G1	B1 U3 G1

Absolute Lumens			
Temperature	TYPE 1	TYPE 3	TYPE 5
3000K	1101	1750	2290
4000K	1129	1794	2349
5000K	1142	1815	2376

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.