



Gardco LED round full cutoff bollards feature LEDs concealed below cast louvers to provide down lighting for landscape and pathway applications. The BR40 series bollards have 4" diameter extruded aluminum shafts. Available mountings include the standard shaft, with a welded cast base mounted firmly to anchor bolts. They are also available with a galvanized steel base tenon reinforced shaft (BR842) for applications requiring additional support, such as schools.

Project: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Cat.No: \_\_\_\_\_  
 Type: \_\_\_\_\_  
 Lamps: \_\_\_\_\_ Qty: \_\_\_\_\_  
 Notes: \_\_\_\_\_

### Ordering guide

Example: BR840-42-14L-175-3-NW-G2-UNV-BZ

Prefix	Shaft Height	Number of LEDs	Drive Current	LED Color - Generation	Distribution	Voltage
<b>BR840</b> Standard shaft	<b>30</b> Standard shaft 30"	<b>14L</b> 14 LEDs	<b>175</b> 175mA <b>350</b> 350mA	<b>WW-G2</b> Warm White 3000K, 80CRI Generation 2 <b>NW-G2</b> Neutral White 4000K, 80CRI Generation 2 <b>CW-G2</b> Cool White 5000K, 70CRI Generation 2 <b>WY-G2</b> Warm Yellow 2700K, 80 CRI Generation 2 <sup>1</sup> <b>AM-G2</b> Direct Amber (590nm) Generation 2 <sup>1</sup>	<b>3</b> Type 3 <b>5</b> Type 5	<b>120</b> 120V <b>208</b> 208V <b>240</b> 240V <b>277</b> 277V <b>UNV</b> 120-277V (50/60Hz)
<b>BR842</b> School bollard reinforced shaft with galvanized steel tenon	<b>36</b> Standard shaft 36"					
	<b>42</b> Standard shaft 42"					

Options			
Controls	Photo-sensing	Surge Protection	Finish
<b>DD</b> 0-10V External dimming (by others) <sup>2</sup>  <b>IMRI</b> Integral infrared	<b>PCB</b> Photocontrol Button <sup>3</sup>	<b>Surge Protection (10kA standard)</b> <b>SP2</b> Increased 20kA	<b>Textured</b> <b>BK</b> Black <b>WH</b> White <b>BZ</b> Bronze <b>DGY</b> Dark Gray <b>MGY</b> Medium Gray <b>Customer specified</b> <b>RAL</b> Specify optional color or RAL (ex: RAL7024) <b>CC</b> Custom color (Must supply color chip for required factory quote)

1. Consult factory for lead times.
2. Not available with other control options.
3. Must specify input voltage.

### Accessories

Service	12NC	Description
<b>(4) 3/8X8X1.5 A/B 2N-2W-1LW + (1) Template</b>		
For shipment with the bollard (order 1 per bollard)	912401538596	KIT, BR840 ANCHOR BOLTS & TEMPL
	912401538598	KIT, BR842 ANCHOR BOLTS & TEMPL



# BRM840 series LED bollard

## Bollard – Round Full Cutoff

### LED Wattage and Lumen Values

Ordering Code	LED Qty	LED Current (mA)	Color Temp.	Average System Watts	Type 3			Type 5		
					Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
BR84X-14L-175-NW-G2-XX	14	175	4000	8.2	986	B0-U0-G0	120	1051	B1-U0-G0	128
BR84X-14L-350-NW-G2-XX	14	350	4000	16.8	1876	B0-U0-G0	112	1999	B2-U0-G1	119

Values from photometric tests performed in accordance with IESNA LM-79 and are representative of the configurations shown. Actual performance may vary due to installation and environmental variables, LED and driver tolerances, and field measurement considerations. It is highly recommended to confirm performance with a photometric layout.

NOTE: Some data may be scaled based on tests of similar (but not identical) luminaires. Contact factory for configurations not shown.

### Predicted Lumen Depreciation Data

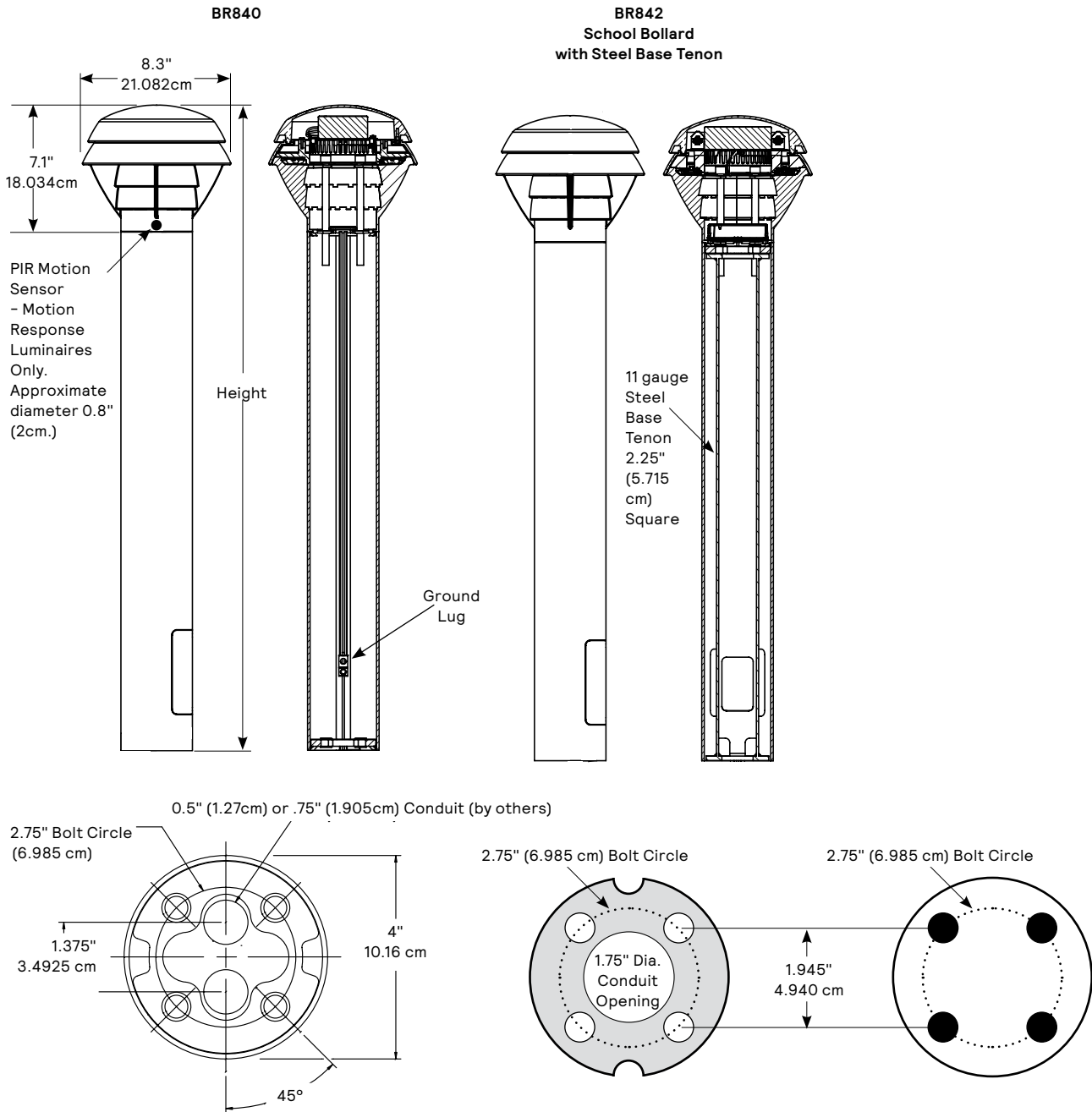
Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions. L<sub>70</sub> is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-11. Published L<sub>70</sub> hours limited to 6 times actual LED test hours

Ambient Temperature °C	System Current	LED Current	Calculated L <sub>70</sub> Hours	L <sub>70</sub> per TM-21	Lumen Maintenance % at 60,000 hrs
25°C	350mA	350mA	>100,000 hours	>60,000 hours	95%

# BRM840 series LED bollard

## Bollard - Round Full Cutoff

### Dimensions



**NOTE:** Factory supplied template must be used when setting anchor bolts. Gardco will not honor any claim for incorrect anchorage placement from failure to use factory supplied templates.

# BRM840 series LED bollard

## Bollard – Round Full Cutoff

### Specifications

#### Upper Housing

Cast aluminum upper housing featuring shielding louvers to provide down light.

#### Lower Housing

**BR840 :** The lower housing assembly consists of a .140" wall by 4" diameter high strength 6063-T6 extruded aluminum section, incorporating a flush, weather-tight gasketed hand hole cover.

**BR842 :** The lower housing assembly consists of a .140" wall by 4" diameter high strength 6063-T6 extruded aluminum section, incorporating a flush, weather-tight gasketed hand hole cover, for placement over the galvanized steel tenon support structure. Tenon support structure is made from a .12" thick wall, 11 gauge steel, 2.25" square tube, welded to top and bottom round steel support plates. The steel tenon support structure includes an opening aligned with the aluminum shaft hand hole to permit wiring. The entire steel tenon support structure is hot dipped galvanized after fabrication.

#### Light engine

Light engine comprises of a 14-LED module made out of aluminum metal clad board fully sealed with optics. Module is RoHS compliant. Color temperatures: 3000K +/- 125K, 4000K, 5000K +/- 200K. Minimum CRI of 70. Also available in 2700K and Amber (590nm) with extended lead times. Contact factory for details. LED light engine is rated IP66 in accordance to IEC 60598.

#### Energy saving benefits

System efficacy up to 100 lms/W with significant energy savings over Pulse Start Metal Halide luminaires. Optional control options provide added energy savings during unoccupied periods.

#### Optical systems

Type 3 and 5 distributions available. Performance tested per LM-79 and TM-15 certifying its photometric performance. Luminaire designed with 0% uplight (U0 per IESNA TM-15).

#### Mounting

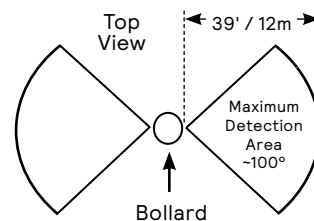
Base assembly consists of a cast aluminum platform. Assembly is secured and leveled to the mounting foundation with four (4) 3/8" X 8" x 1 1/2" (.953 cm x 20.32 cm x 3.81 cm)-16 anchor bolts on a 2 3/4" (6.9 cm) bolt circle.

#### Control options

**0-10V dimming (DD):** Access to 0-10V dimming leads supplied through base of luminaire (for secondary dimming controls by others). Cannot be used with other control options.

#### Motion response options

**Infrared Motion Response Integral (IMRI):** Bi-level motion response module is mounted integral to luminaire factory pre-programmed to 20% dimming when not ordered with other control options. IMRI is set/operates in the following fashion: When motion is not detected for a 5 -minute period, luminaires automatically dim to 20% power and light, gradually over a 2-minute period. Once Motion is detected, luminaires immediately ramp to full power and light output until motion is not detected for a 5-minute period.



#### Electrical

**Driver:** Driver efficiency (>90% standard). 120-277V available. Open/short circuit protection. Optional 0-10V dimming to 10% power. RoHS compliant.

**Surge protection:** Each luminaire is provided as standard with surge protector tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/5kA waveforms for Line Ground, Line Neutral and Neutral Ground, and in accordance with U.S. DOE (Department of Energy) MSSLC (Municipal Solid-State Street Lighting Consortium) Model Specification for LED Roadway Luminaires Appendix D Electrical Immunity High Test Level 10kV / 5kA. Optional 20kV is available for additional protection.

#### Listings

UL 1598 standard, suitable for Wet Locations. Suitable for use in ambients from -40° to 40°C (-40° to 104°F). The quality systems of this facility have been registered by UL to the ISO 9001 series standards. All configurations are DesignLights Consortium® qualified. Consult DLC Qualified Products list for more details.

#### Finish

Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidyl isocyanurate (TGIC) textured polyester powdercoat finish. The surface treatment achieves a minimum of 1000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard. Standard colors include bronze (BZ), black (BK), white (WH), dark gray (DGY), and medium gray (MGY). Consult factory for specs on optional or custom colors.

#### Warranty

BR84X luminaires feature a 5-year limited warranty. See [signify.com/warranties](https://www.signify.com/warranties) for complete details and exclusions.