# LED LPS Replacement Round Dome Bollards

## LED Low Pressure Sodium Replacement

12802 Commodity Pl
Tampa, FL 33626
Phone: 844-636-2036
sales@eco-revolution.com
www.eco-revolution.com

BUY AMERICAN ACT COMPLIANT

L70 (25°C) 147,000 Hours

*NEW* Soft Shine Low Glare White Cone Reflector
Daytime View Nighttime View

Glass
ECBOGQ

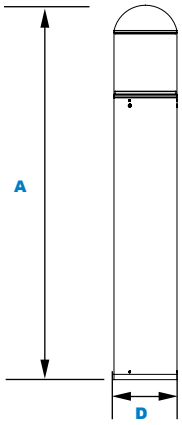
Louvers
ECBOLQ

LED Cone Reflector
ECBORLQ

SoftLED LumaLens Opal Array Lens

Shown with GFCI

Shown with "S3" Sensor




| Dimensions | |
|---|---|
| Diameter (D) | 7″ (178mm) |
| Height (A) | 42¼″ (1,073mm) |

The Eco-Revolution **LPS Replacement PC Amber LED** Bollards are designed to provide a direct 1-to-1 replacement for 35w Low Pressure Sodium (LPS) lighting systems. These fixtures are ideal for retail centers, industrial parks, schools and universities, public transit and airports, office buildings and medical facilities.

## Specifications and Features:

| | |
|---|---|
| **Housing:** | Extruded Aluminum Housing with Flush Mounting Base & Vandal-Resistant Screws, Domed Top, Internal Ballast Tray for Easy Maintenance. Bollards Can Be Cut to Custom Lengths Upon Request. |
| **Listing & Ratings:** | CSA: Listed for Wet Locations, ANSI/UL 1598, 8750 IP65 Sealed LED Compartment. |
| **Finish:** | Textured Architectural Bronze or Black Powdercoat Finish Over a Chromate Conversion Coating. Custom Colors Available Upon Request. |
| **Style:** | Clear Prismatic Borosilicate Glass Refractor, Specially Designed Cone Reflector or Internal Louvers |
| **Lens:** | Clear UV-Stabilized Polycarbonate Vandal-Resistant Lens or SoftLED LumaLens UV-Stabilized Polycarbonate Opal Vandal-Resistant Lens |
| **Mounting Options:** | Mounting Kit with 8″ Zinc-Plated Anchor Bolts, Included. |
| **LED Array:** | Aluminum Boards. Delivers 1800K CCT and can be successfully applied on projects requiring a nominal CCT range of 1700K to 2200K CCT. See Page 2 for Spectral Chart. |
| **Wattage:** | Array: 15w, System: 16.5w; (35w SOX LPS Replacement) |
| **Driver:** | Electronic Driver, 120-277V, 50/60Hz; Less Than 20% THD and PF>0.90. Standard Internal Surge Protection 2kV. 0-10V Dimming Standard for a Dimming Range of 100% to 10%; Dimming Source Current is 150 Microamps. |
| **Controls:** | Fixtures Ordered with Factory-Installed Motion Sensor Controls are Internally Wired for Switching and/or 1-10V Dimming Within the Housing. Remote Direct Wired Interface of 1-10V Dimming is Not Implied and May Not Be Available, Please Consult Factory. Fixtures are Tested with Eco-Revolution Controls and May Not Function Properly With Controls Supplied By Others. Fixtures are NOT Designed for Use with Line Voltage Dimmers. |
| **Warranty:** | 5-Year Warranty for -40°C to +40°C Environment. |

See Page 4 for Projected Lumen Maintenance Table.

**Certification & Listings:**

LPS REPLACEMENT · c SA us · IP65 · soft LED

**Project Information:**

Project Name: | Fixture Type:
Complete Catalog #: | Date:
Comments:

5 Locations: Tampa, FL · Vancouver, WA · Cerritos, CA · Walden, NY · Memphis, TN

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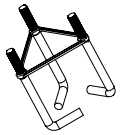
**Order Information Example:** ECBORLQF1X15UHAZ36SF

| | F | 1X15 | U | HA | | | | |
|---|---|---|---|---|---|---|---|---|
| **Model** | **Optics** | **Wattage** | **Driver** | **CCT** | **Lens** | **Color** | **Height** | **Options** |
| **ECBORWQ**=LPS Replacement PC Amber Round Dome Bollard with Soft Shine Low Glare White Cone Reflector<br>**ECBORLQ**=LPS Replacement PC Amber Round Dome Bollard with LED Cone Reflector<br>**ECBOGQ**=LPS Replacement PC Amber Round Dome Bollard with Glass<br>**ECBOLQ**=LPS Replacement PC Amber Round Dome Bollard with Louvers | **F**=Wide Beam Spread | **1X15**=15w | **U**=120-277V | **HA**=LPS Replacement PC Amber | **(Leave Blank)**= Clear Lens<br>**L**=SoftLED LumaLens Opal UV-Stabilized Polycarbonate Array Lens*<br><br>***White Cone Reflector Only** | **Z**=Bronze<br>**B**=Black<br>**C**=Custom (Consult Factory) | **(Leave Blank)**= 42" Standard Height<br>**36**=36" Height<br>**30**=30" Height | **SF**=Single Fuse*<br>**DF**=Double Fuse*<br>**SP**=Surge Protection<br>**GF1**=GFCI Outlet, 15A, 120V<br>**GSB**=180° Glare Shield, Black<br>**GSZ**=180° Glare Shield, Bronze<br>**GSC**=180° Glare Shield, Custom Color (Consult Factory)<br>**S3**=Microwave Sensor with Dimming & Remote Programming, 120-277V Only. See ECP17121 Spec. Page for Details.<br>**BU**=Battery Backup, 90 Minutes*<br>**BUC**=Cold Start Battery Backup, -20°C, 90 Minutes*<br><br>***120-277V Models Only.** |

## Accessories & Replacement Parts:

**Mounting Accessories (Order Separately, Field Installed)**

| | |
|---|---|
| ECBOLAN4 | Mounting Kit, Includes Bracket & Three (3) 4″ Zinc-Plated Anchor Bolts |
| ECBOLAN8 | Mounting Kit, Includes Bracket & Three (3) 8″ Zinc-Plated Anchor Bolts |
| ECBOLAN12 | Mounting Kit, Includes Bracket & Three (3) 12″ Zinc-Plated Anchor Bolts |
| ECBOLAN15 | Mounting Kit, Includes Bracket & Three (3) 15″ Zinc-Plated Anchor Bolts |
| ECBREBASE* | Bollard Retrofit Base Kit Adapts New Bollards to Most Existing Bolt Patterns. Fits all Eco-Revolution Bollards. Die Cast with Powdercoat Finish, Hardware Included. 11½″ Dia. x 1½″ H |
| *Specify Color: Z=Bronze, B=Black, C=Custom (Consult Factory) | |



**ECBOLAN**

**ECBREBASE***

***Shown Mounted**

**Accessories (Order Separately, Field Installed)**

| | |
|---|---|
| ECP17122 | Remote Programming Tool for ECP17121 |

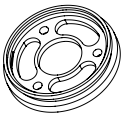
**ECP17122**

**Replacement Parts (Order Separately, Field Installed)**

| | |
|---|---|
| ECP17121 | Internal Microwave Sensor with Dimming & Remote Programming, 120-277V Only. See ECP17121 Spec. Page for Details. |
| ECBOLPC | Replacement Round UV-Stabilized Polycarbonate Vandal-Resistant Lens |
| ECBOLPCLL | Replacement SoftLED LumaLens Opal UV-Stabilized Polycarbonate Array Lens |
| ECBORBASE* | Die Cast Base Plate with Powdercoat Finish Over a Chromate Conversion Coating. |
| ECBOADP1 | Adapter Plate with Gaskets for Outlet Boxes. Fits Eco-Revolution Round Bollards. Die Cast with Bronze Powdercoat Finish. |
| *Specify Color: Z=Bronze, B=Black, C=Custom (Consult Factory) | |
| For Replacement Battery Backup, see the Eco-Revolution LED Battery Backup Specification Sheet. | |

**ECP17121**

**ECBOLPC, ECBOLPCLL**



**ECBORBASE**

**ECBOADP1**

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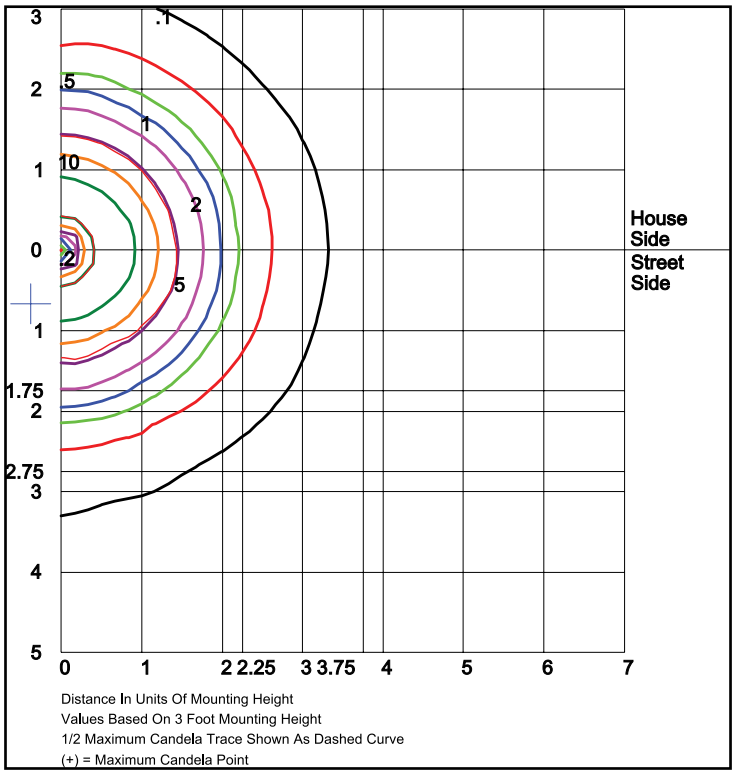
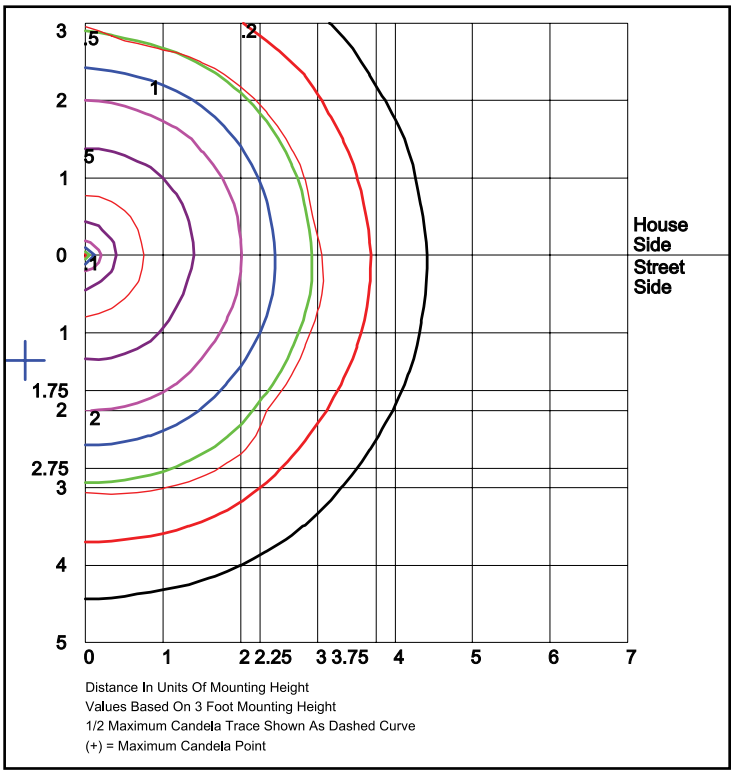
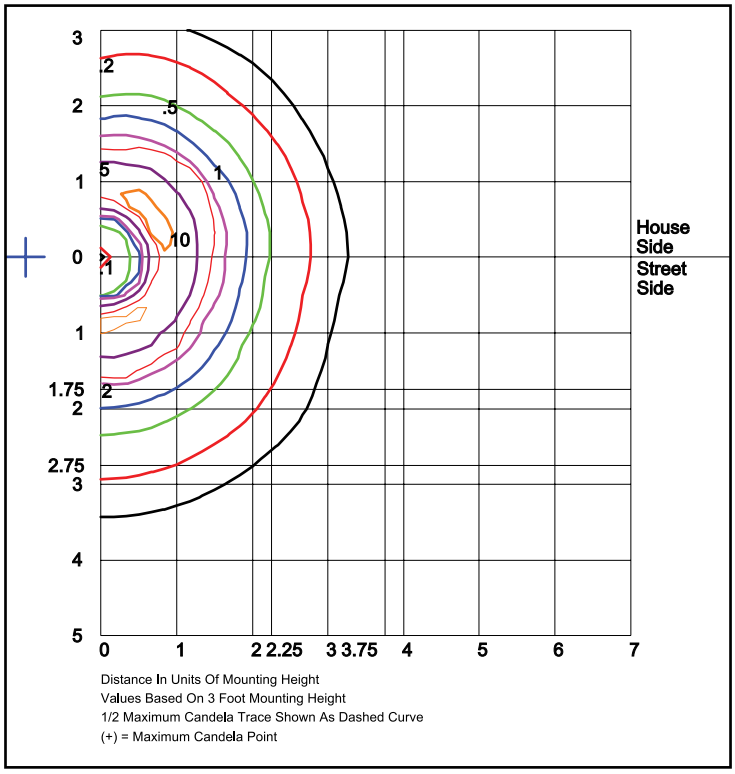
## Photometric Data



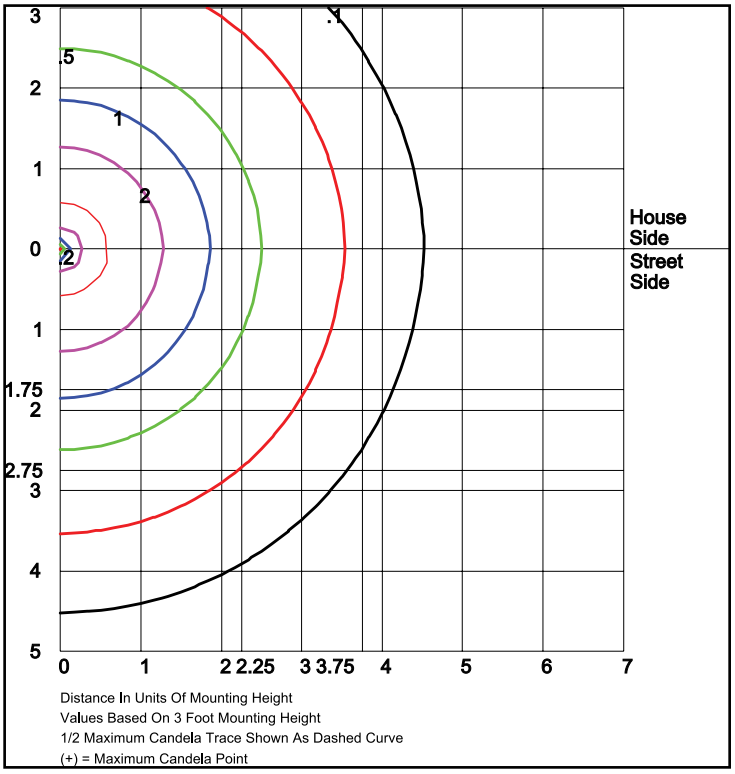

**ECBORWQF1X15UHA & ECBORLQF1X5UHA**
**Type V**
Grid in feet, Mounting Height = 3 ft.




**ECBOGQF1X15UHA**
**Type V**
Grid in feet, Mounting Height = 3 ft.




**ECBOLQF1X15UHA**
**Type V**
Grid in feet, Mounting Height = 3 ft.




**ECBORWQF1X15UHAL, LumaLens**
**Type V**
Grid in feet, Mounting Height = 3 ft.

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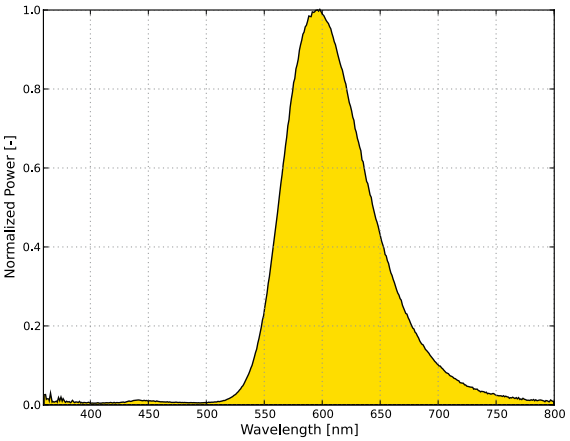
## Spectral Chart




**LPS Replacement PC Amber LEDs provide the same visual light output as traditional Low Pressure Sodium systems, but provide substantially reduced energy and maintenance costs, and increased lifespan and lumen maintenance values.**

**LED LPS Replacement PC Amber:** Dominant Wavelength 588.8-592.6
**Low Pressure Sodium Wavelength:** 589 and 589.6

## Photometric Performance

| | | | | LED LPS Replacement | | | | |
|---|---|---|---|---|---|---|---|---|
| LED Board Watts | Drive Current (mA) | Input Watts | Optics | Lumens | LPW | B | U | G |
| LPS Replacement 15w | 116 | 17 | Cone Reflectors | 1,178 | 69 | 1 | 3 | 1 |
| | | | ECBOG Glass | 883 | 52 | 1 | 3 | 1 |
| | | | ECBOL Louvers | 595 | 35 | 0 | 2 | 0 |

## Projected Lumen Maintenance

| Data shown for LED LPS Replacement PC Amber | | | Compare to LPS | | | |
|---|---|---|---|---|---|---|
| TM-21-11 | Input Watts | Initial | 25,000 Hrs | 50,000 Hrs | 100,000 Hrs | Calculated LED Life |
| L70 Lumen Maintenance @ 25°C / 77°F | 17 | 1.00 | 0.95 | 0.90 | 0.80 | 147,000 |
| L70 Lumen Maintenance @ 50°C / 122°F | | 1.00 | 0.89 | 0.78 | 0.55 | 67,000 |
| L80 Lumen Maintenance @ 40°C / 104°F | | 1.00 | 0.92 | 0.85 | 0.70 | 66,000 |

**NOTES:**
1. Projected per IESNA TM-21-11. Data references the extrapolated performance projections for the 116mA base model in a 25°C ambient, based on 10,000 hours of LED testing per IESNA LM-80-08.
2. Compare to LPS box indicates suggested Light Loss Factor (LLF) to be used when comparing to Low Pressure Sodium (LPS) systems.