Evolve™ LED Roadway Lighting
LED Roadway Luminaire (ERL1-ERS1-ERS2)
Product Features

The Evolve™ LED Roadway Luminaire is optimized for customers requiring a LED solution for local, collector and major roadways. GE’s unique reflective optics are designed to optimize application efficiency and minimize glare. The modern design incorporates the heat sink directly into the unit for heat transfer to prolong LED life. This reliable unit has a 100,000 hour design life, significantly reducing maintenance needs and expense over the life of the fixture. This efficient solution lowers energy consumption compared to traditional HID fixture for additional operating cost savings.

Applications

- Designed to meet recommended luminance and illuminance requirements for local, collector and major roadway/street classifications.

Housing

- The modern design incorporates Casting-integral heatsink for maximum heat transfer.
- Meets 3G vibration per ANSI C136.31-2010.
- Die Cast Enclosure.

LED & Optical Assembly

- Structured LED array for optimized roadway photometric distribution.
- Evolve™ light engine consisting of reflective technology designed to optimize application efficiency and minimize glare.
- Utilizes high brightness LEDs, 70 CRI at 4000K typical.
- LM-79 tests and reports are performed in accordance with IESNA standards.

Lumen Maintenance

- Lumen Maintenance per TM21.

Ratings

- UL listed, suitable for wet locations per UL 1598.
- Std. Optical enclosure rated per ANSI C136.25-2009:
  - ERL1 = IP65, ERS1-2 = IP66
- -40°C to 50°C UL Ambient Typical.
  - Delayed start may be experienced <-35°C.
- Upward Light Output Ratio (ULOR) = 0.
- Compliant with the material restriction requirements of RoHS.

<table>
<thead>
<tr>
<th>Product ID</th>
<th>Lumen Output</th>
<th>Ambient Rating (°C)</th>
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</thead>
<tbody>
<tr>
<td>ERL</td>
<td>02-08</td>
<td>-40°C-50°C</td>
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<tr>
<td>ERS</td>
<td>10-15, 19-23</td>
<td>-40°C-50°C</td>
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<td>ERS</td>
<td>16-18, 25-29</td>
<td>Contact Manufacturer</td>
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</table>

Mounting

- Slipfitter with +/- 5 degree of adjustment for leveling.
- Integral die cast mounting pipe stop feature.
- Adjustable for 1.25 in. or 2 in. mounting pipe.

Finish

- Corrosion resistant polyester powder paint, minimum 2.0 mil. thickness.
- Standard colors: Black, Gray and Dark Bronze.
- RAL & custom colors available.
- Optional coastal finish available.

Electrical

- 120-277 volt and 347-480 volt.
- System power factor is >90% and THD <20%.*
- Class “A” Sound rating.
- Surge Protection per ANSI C136.2-2015:
  - Standard: 6kV/3kA “Basic: (120 Strikes)”
  - Secondary: 10kV/5kA “Enhanced: (40 Strikes)”
- EMI: Title 47 CFR Part 15 Class A
- Photo electric sensors (PE) available for all voltages.
* System power factor and THD is tested and specified at 120V input and maximum load conditions. THD<26% for 347/480V supply with 03 power level.

Warranty

- 5 Year Standard
- 10 Year Optional

Focused Lumen Levels

- ~4,000–5,000 lumens to replace 100W HPS Cobra-head
- ~7,000–8,500 lumens to replace 150W HPS Cobra-head
- ~8,500–11,500 lumens to replace 200W HPS Cobra-head
- ~11,500–14,000 lumens to replace 250W HPS Cobra-head
- ~21,000–27,000 lumens to replace 400W HPS Cobra-head

Note: Actual replacement lumens may vary based upon mounting height, pole spacing, design criteria, etc.
### Ordering Number Logic

**Evolve™ LED Streetlight (ERL)**

<table>
<thead>
<tr>
<th>PROD. ID</th>
<th>VOLTAGE</th>
<th>LUMEN OUTPUT</th>
<th>DISTRIBUTION</th>
<th>TYPICAL INITIAL LUMENS</th>
<th>TYPICAL SYSTEM Wattage</th>
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<th>CONTROLS</th>
<th>COLOR</th>
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**E = Evolve**

**R = Roadway**

**L = Local**

**1 = Single Module**
### Ordering Number Logic

#### Evolve™ LED Streetlight (ERS1)

<table>
<thead>
<tr>
<th>PROD. ID</th>
<th>VOLTAGE</th>
<th>LUMEN OUTPUT</th>
<th>DISTRIBUTION</th>
<th>DRIVE CURRENT</th>
<th>CCT</th>
<th>CONTROLS</th>
<th>COLOR</th>
<th>OPTIONS</th>
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<tr>
<td>E = Evolve&lt;br&gt;R = Roadway&lt;br&gt;S = Scalable&lt;br&gt;1 = Single Module</td>
<td>0 = 120-277 V&lt;br&gt;1 = 120&lt;br&gt;2 = 208&lt;br&gt;3 = 240&lt;br&gt;4 = 277&lt;br&gt;5 = 480&lt;br&gt;D = 347-480 V*&lt;br&gt;H = 347-480 V*&lt;br&gt;* Not available with Fusing. Must choose a discrete voltage with F option.</td>
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<td>A</td>
<td>4000 K</td>
<td>PROD. ID</td>
<td>VOLTAGE</td>
<td>LUMEN OUTPUT</td>
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</table>
| ERS1 | 0*<br>11*<br>13*<br>14*<br>15* | See Data Table for more information<br>* Contact Manufacturer for Availability | X = Not Applicable | A1 = Extra Narrow Asymmetric<br>B1 = Narrow Asymmetric (Medium)<br>C1 = Asymmetric (Short)<br>D1 = Asymmetric Forward<br>E1 = Asymmetric (Wide)<br>F1 = Asymmetric (Extra Wide) | 40 | 4000K | GRAY = Gray<br>BLCK = Black<br>DKBZ = Dark Bronze | F = Fusing<br>G = Internal Bubble Level<br>L = Tool-Less Entry<br>R = Secondary Enhanced Surge Protection (10kV/5kA)<br>T = Secondary Enhanced Surge Protection (20kV/10kA)<br>Y = Coastal Finish*<br>XXX = Special Options | * Recommended for installations within 1 mile from the coast. Contact Factory for Lead-Time.

#### Typical Initial Lumens 4000K

<table>
<thead>
<tr>
<th>PRODUCT ID</th>
<th>LUMEN OUTPUT</th>
<th>DISTRIBUTION</th>
<th>TYPICAL INITIAL LUMENS 4000K</th>
<th>TYPICAL SYSTEM WATTAGE 120-277 V &amp; 347-480 V</th>
<th>BUG RATING 4000K</th>
<th>IES FILE NUMBER</th>
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<td>90</td>
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### Ordering Number Logic

**Evolve™ LED Streetlight (ERS2)**

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<td>0 = 120-277V</td>
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<td>5 = 480</td>
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<td>H = 347-480V*</td>
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<td>R = Roadway</td>
<td>S = Scalable</td>
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* Not available with Fusing, Must choose a discreet voltage with F option.

- **A1** = Extra Narrow Asymmetric
- **B1** = Narrow Asymmetric (Medium)
- **C1** = Asymmetric (Short)
- **D1** = Asymmetric Forward
- **E1** = Asymmetric (Wide)
- **F1** = Asymmetric (Extra Wide)

See Data Table for more information

**Silver**

**Bronze**

**DKBZ**

**Gray**

**Tool-Less Entry**

**Coastal Finish** *

**Remote Wiring**

**Recommended for installations within 1 mile from the coast.**

***Recommended for installations within 1 mile from the coast.***

Contact Factory for Lead-Time.

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### PRODUCT ID

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<th>LUMEN OUTPUT</th>
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<th>TYPICAL SYSTEM WATTAGE 120-277V &amp; 347-480V</th>
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Photometrics
Evolve™ LED Streetlight (ERL)

ERL
Extra Narrow Asymmetric (08A1)
8,200 Lumens
4000K
ERL1_08A140_____.IES

ERL
Narrow Asymmetric (Medium) (08B1)
8,300 Lumens
4000K
ERL1_08B140_____.IES

ERL
Asymmetric Short (08C1)
8,500 Lumens
4000K
ERL1_08C140_____.IES

ERL
Asymmetric Forward (08D1)
8,300 Lumens
4000K
ERL1_08D140_____.IES
Photometrics
Evolve™ LED Streetlight (ERL)

ERL
Asymmetric Medium (08E1)
8,500 Lumens
4000K
ERL1_08E140_____.IES

ERL
Asymmetric Wide (08F1)
8,500 Lumens
4000K
ERL1_08F140_____.IES

ERL
Asymmetric Extra Wide (08G1)
8,500 Lumens
4000K
ERL1_08G140_____.IES
Photometrics
Evolve™ LED Streetlight (ERS)

ERS
Extra Narrow Asymmetric
(27A1)
25,700 Lumens
4000K
ERS2_27A140____.IES

ERS
Narrow Asymmetric (Medium)
(27B1)
26,500 Lumens
4000K
ERS2_27B140____.IES

ERS
Asymmetric Short
(27C1)
27,000 Lumens
4000K
ERS2_27C140____.IES

ERS
Asymmetric Forward
(27D1)
26,500 Lumens
4000K
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Photometrics
Evolve™ LED Streetlight (ERS)

ERS
Asymmetric Medium
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Asymmetric Wide
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ERS2_27F140____.IES

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Asymmetric Extra Wide
(27G1)
27,000 Lumens
4000K
ERS2_27G140____.IES
Product Dimensions
Evolve™ LED Streetlight (ERL)

- Approximate net weight: 15.5 lbs (7.0 kgs)
  Contact manufacturer for specific configuration weight.
- Effective Projected Area (EPA): 0.5 sq ft max (0.046 sq m)
**Product Dimensions**

_Evolve™ LED Streetlight (ERS1)_

- **Approximate Net Weight:** 20 to 25 lbs. (9.07 to 11.34 kgs.)
  - Contact manufacturer for specific configuration weight.
- **Effective Projected Area (EPA):** 0.5 sq. ft. max (0.046 sq. m)

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**SIDE VIEW**

- Adjustable for 1-1/4 to 2 in. mounting pipe
  - (1.660 to 2.375 inch OD)
  - (42 to 60 mm OD)

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**BACK VIEW**

**FRONT VIEW**

- Optional LightGrid Node
Product Dimensions
Evolve™ LED Streetlight (ERS2)

- **Approximate Net Weight:** 25 to 29 lbs. (11.34 to 13.15 kgs.)
  Contact manufacturer for specific configuration weight.
- **Effective Projected Area (EPA):** 0.7 sq. ft. max (0.065 sq. m)

DATA

Adjustable for 1-1/4 to 2 in. mounting pipe
(1.660 to 2.375 inch OD)
(42 to 60 mm OD)

www.gelighting.com

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