GE Evolve™
Next Generation Roadway Luminaires & Control Solutions

Re-imagining roadways for the future
Over a century ago, GE created the first streetlights, and we’ve been mastering the technology behind roadway fixtures ever since. More than one hundred years and thousands of miles of street lighting later, our passion for innovation still burns bright.

In 1962, GE scientist Dr. Nick Holonyak Jr. invented the first visible LED, leading the way to the next generation of lighting solutions. Today, we have applied our expertise in outdoor fixture and LED systems design to bring you our next generation GE Evolve™ LED Roadway & High Mast Luminaire fixtures.

Building on a reputation for excellence that dates back to Edison’s first electric light bulb, GE brings a depth of expertise that’s unsurpassed in the industry. From day one, we’ve been here, ready to work with you to provide a solution that helps save energy while bringing greater aesthetics and overall cost savings to city streets and roadways.

And you can count on GE to be there as we continue to lead the lighting revolution.
Differentiating factors

We’ve applied the science of light and our expertise in roadway fixtures to integrate application efficiency and reliability into every Evolve ERL & ERHM fixtures. The foundation of our exceptional, high-performance LED roadway lighting solution revolves around GE’s custom designs.

**Unique reflective optic design**
- Non-pixilated light distribution to minimize distracting glare
- Optimized to meet IESNA RP-8 recommended practices for luminance, illuminance and small target visibility design
- Excellent light control aims the light directly where you need it
- Low light trespass and zero up-light
- High optical efficiency and utilization of light
- Lower power consumption required for the target roadway space

**One manufacturer of complete system**
- Reliable GE Lightech™ LED Driver powers the GE Evolve™ LED fixture
- Entire system, including driver, fixture and controls are made, tested and warranted by the same manufacturer to ensure long-term system reliability

**Standard surge protection against multiple strikes**
- Surge protection against multiple strikes comes standard, with optional high-capacity protection available

**Removable power door assembly**
- Makes electrical components easily accessible for replacement or repairs
- Tool-less or single-tool entry and quick connects

**Dust & dirt mitigation**
- Flat tempered glass lens and IP65 rated enclosed cavity minimize effects of dirt to provide consistent light distribution over the life of the product

**Extensive testing of the LED, subsystem and complete system**
- Conforms to the most stringent regulatory and performance requirements including UL, Design Lights Consortium (DLC) and International Dark-Sky Association (IDA)
- Provides applicable supporting performance documentations such as including TM-21, LM-79 and LM-80 reporting methods
- Rather than rely solely on test data from LED suppliers, we extensively test the complete system to validate performance

**Available with wireless network control capability**
- GE LightGrid™ Outdoor Wireless Control System allows remote monitoring, utility-grade energy metering and GPS mapping of streetlights
- Adaptive controls ready, without any additional internal electrical components required
Optical design

Aiming to please

GE uses an advanced reflective optic design that meets RP-8 recommended practices for luminance, illuminance and small target visibility. This unique design ensures that Evolve ERL fixtures will deliver light control with significantly less waste than the other optical technologies used by many of our competitors.

Evolve ERL fixtures have improved ratings for backlight, up-light and glare (BUG ratings) to direct more light on the road and not in neighboring properties or in the eyes of nighttime drivers, meeting tight local ordinances and International Dark-Sky (IDA) requirements.

Minimizing glare

GE’s innovative reflective design only puts light where it is needed and minimizes direct view of the light source with a non-pixilated appearance.

GE design recesses the LED array within the optic (or reflector) to limit visibility of the LEDs from the drivers’ field of view, minimizing glare. Many competing optical designs use LED arrays with individual optics, making the entire array visible to the driver, resulting in a pixilated appearance with higher levels of glare and increased light trespass.
Why is luminance an important focus of GE’s optical reflector design?

GE optical design provides outstanding overall visibility while driving, offering reflector optics that were designed with the driver in mind. This design only puts necessary light at and above 45° angles, reducing glare to the driver. GE provides consistent luminance uniformity in the driver’s center field of view, while many competing products have greater variation. GE also ensures reduced glare at the critical angles, improving small target visibility which allows drivers to detect objects faster while driving. The uniformity of light in the driver’s field of view improves the retina image. Designing for the driver’s field of view with consistent retina light levels provides excellent overall visibility while driving.
Optical design

Light on target: coefficient of utilization

By putting energy toward the task of lighting the roadway and not the surrounding area, Evolve ERL fixtures put light where it is intended and provide more efficient utilization of light. This is known as coefficient of utilization or (CU), and is a key characteristic of any fixture when determining its ability to light the intended area. A higher CU means less wasted light which, in turn, means lower energy consumption. This will reduce costs over the life of the fixture.

Efficiency in action

- Lumens per Watt (LPW) = Total Lumen Output / Total Watts
- Coefficient of Utilization (CU) = Lumens on Primary Target Area / Total Lumen Output
- Higher the Coefficient of Utilization (CU) = Less Wasted Light
Electrical design

Dependable drivers

Reliable GE Lightech drivers power Evolve ERL roadway fixtures. You can rest assured that the entire system, including driver, fixture and controls, is made, tested and warranted by the same manufacturer to ensure long term system reliability.

Surge protection

LED fixtures require robust surge protection devices to protect valuable components from voltage spikes and surge events over their operating life. Many surge protection devices are only rated for a single event. GE knows that a product’s ability to survive repetitive events is key to maintenance-free operation.

GE’s standard transient voltage surge suppression (TVSS) exceeds the U.S. DOE Municipalities Solid State Lighting Consortium (MSSLC) specification for surge protection devices. Evolve LED roadway fixtures come standard with a surge protection device verified to provide protection against at least 120 combination wave events of 6kV/3kA per IEEE/ANSI C62.41.2-2002. An optional high-capacity protection device that can survive up to 5,000 6kV/3kA events or 120 10kV/5kA (UL 1449) events is also available.

Surge hit tolerance comparison

<table>
<thead>
<tr>
<th>RATINGS OF MOST COMPETITOR OFFERINGS</th>
<th>NUMBER OF STRIKES PROTECTED AGAINST</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE STANDARD OFFERING (6kV/3kA)</td>
<td>120</td>
</tr>
<tr>
<td>GE OPTIONAL HIGH-CAPACITY OFFERING</td>
<td>5,000 6kV/5kA 120 10kV/5kA</td>
</tr>
</tbody>
</table>
Flexibility in design

GE offers a range of roadway lighting solutions to meet a wide variety of key customer requirements:

- Complete scalable lumen range
- Wide range of photometric selections
- Optimized wattage choices with drive current options
- Lumens per watt
- Luminaire feature content
- Surge suppression options

Fixtures that stand the test of time

Advanced engineering at its best, Evolve ERL & ERHM balances the technical needs of a sophisticated LED system with the functional demands of an outdoor fixture facing the year-round hazards of Mother Nature. The Evolve ERL & ERHM has a broad operating temperature range of -40°C to +50°C, going above and beyond most standard fixture ratings to withstand potential extreme conditions.

The surface is protected by corrosion-resistant polyester powder paint applied at a minimum thickness of 2.0 mil to accommodate the long life of the fixture.
Sometimes, flat is better

Those crevices, pockets and ridges in competitor outdoor luminaires can become the perfect places for dirt and grime to collect—potentially reducing overall LED light output and impairing the intended pattern of light distribution. This problem is called Luminaire Dirt Depreciation (LDD) and it can reduce the performance of your outdoor LED lighting.

The Evolve fixture houses the LEDs and reflectors in a dirt- and dust-free cavity with an IP65/IP66-rated optical enclosure and a tempered glass lens to minimize the effects of dirt. This design approach provides consistent brightness and light distribution over the life of the product.

A recent Illuminating Engineering Society report* on LDD stated:

“LED luminaires with flat glass optics were less susceptible to average dirt depreciation than luminaires with exposed inner optics...With exposed optics, especially the individually molded acrylic, the surface of the optic is much more complex, has significantly more leeward edges, and significantly more surface area. These features will cause much more turbulence over the exposed optics, enabling dirt to accumulate on each individual optic and likely leading to more dirt sticking.”

*Source: Illuminating Engineering Society, RES-1-16 Measure and Report Luminaire Dirt Depreciation (LDD) in LED Luminaires for Street and Roadway Lighting Applications; page 71, Gibbons, Palmer, Meyer, Terry
Impressive long-life technology makes LED systems a long-term investment. Lasting significantly longer than traditional lighting sources, LED systems offer tremendous energy and maintenance savings that easily justify their higher upfront cost. But not all LED systems perform equally over their years of operation.

Inferior quality products can prematurely fail or degrade in light output far below initial claims — which results in failure to provide the value originally promised. At GE, our product life ratings recognize acceptable light levels for any given application to ensure you won’t be left in the dark.

Rather than rely solely on test data from LED suppliers, we extensively test the complete system, using both in-house and independent labs around the world to validate performance. GE has accumulated more than 1 million unit hours of testing and more than 16,000 hours of testing at +60°C ambient, going beyond the industry’s standard level of testing to ensure our fixtures can live up to our claims.

At GE, we know our fixtures can stand the test of time because we’ve designed them that way. It is this diligent approach to quality assurance that has earned GE a reputation as one of the most respected names in the industry.
You’re in control

While some might be satisfied with winning awards and industry recognition, we’ve never stopped to rest on those laurels. Instead, our team went the extra mile to bring you a whole new level of flexibility, efficiency and control.

Evolve ERL & ERHM fixtures are available with both wireless and non wireless stand alone control capability. The control module connection is made externally through an optional dimming control receptacle, making Evolve fixtures adaptive control ready.

Compatible for use with control options ranging from a simple shorting cap to a standard PE photocell control or sophisticated GE LightGrid Outdoor Wireless Control System, this solution allows for easy upgrading to other control solutions down the road, without any additional internal electrical components required.
**Intelligent design**

**LightGrid™ Outdoor Wireless Control System**

**The Right Light at the Right Time**

LightGrid™ is a groundbreaking outdoor wireless control system for street and roadway lights. Honored with the 2015 Gold Edison Award for Outstanding Energy Management and Conservation, the unique technology inside this system allows for remote operation and monitoring of all fixtures through a Web-enabled central management system.

Designed with municipalities and transportation departments in mind, LightGrid offers many features, including:

- **Accurate, utility-grade energy metering** per pole you pay for what is used
- **GPS chip** embedded into node always know the exact location of controllers and fixtures; node automatically connects to the network and acquires location in just minutes, reducing commissioning time.
- **One-piece control** no special electronics necessary in the fixture; node simply connects to external socket, so it can be added easily at any time
- **Operates with programmed schedules** in case of network outage

Together with award-winning Evolve™ LED roadway lighting fixtures, LightGrid will deliver the energy efficiency, reliability and flexibility needed to optimize street and roadway lighting.

Let there be light. How much is up to you.

Control more with GE’s LightGrid right from where you sit, and control costs every step of the way.
The LightGrid™ system is made up of three basic components:

**LightGrid nodes**
- Built-in GPS device lets you know the exact location of each fixture, which provides confirmation of installation, as well as making for more efficient maintenance
- Automatically connects to the network, reducing commissioning time
- Utility-grade metering means you pay for actual energy use, with measurement accuracy of up to ± 0.5%
- One-piece control ensures no special electronics are needed, as node connects to external socket

**LightGrid gateways**
Each LightGrid wireless gateway can control a mesh network made up of 500+ nodes. Protected by an IP66 enclosure, they’re designed for reliable operation, even in the harshest environments.
- Automated GPS detection
- 500m line-of-sight range
- Output: Standard TCP-IP interface
- Input: 120-277VAC

**LightGrid server**
With LightGrid, lighting data for every fixture is accessible through a Web-based interface that can be hosted remotely. Protected by a high level of security encryption, our central management server offers secure login for all users.

Armed with actionable information, municipalities and transportation departments can implement smarter energy-saving strategies through more precise on/off and dimming schedules, particularly during a middle-of-the-night operation in low-traffic areas. Other features include the ability to:
- Update easily with “over-the-air” firmware upgrades
- Send automated fault email notifications when something happens to a fixture
- Display GPS coordinates in the Google Maps format
- Present real-time lighting information with a single click
- Access scheduling, customized reporting, grouping and user access level management
- Dim manually with detailed information
GE Evolve™
LED Roadway Luminaire
ERL Series — with Next Generation Optics

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.

Features:
- Lumen output ranging from 1,900 to 30,000lm
- Photometric Options: Type II Narrow, Type II Wide, Type III, Type IV
- Evolve™ light engine consisting of reflective technology designed to optimize application efficiency and minimize glare
- 70 CRI at 3000K and 4000K typical
- -40° to 50°C UL Ambient Typical
- Coastal Finish Available
- International Dark-Sky Association (IDA) compliant

Applications:
- Local Roadways
- Collector Roadways
- Major Roadway/Streets

Previous Generation Optics vs. Next Generation Optics
GE Evolve™
LED Roadway High Mast Luminaire
ERHM Series

The Evolve™ LED High Mast is optimized for customers requiring a LED solution for expressway, freeway interchanges and other large area applications. GE’s unique reflective optics are designed to optimize application efficiency and minimize glare. This reliable unit has a 100,000-hour design life, significantly reducing maintenance needs and expense over the life of the fixture. The ERHM luminaire is an efficient solution lowering energy consumption as compared to traditional HID fixtures providing additional operating cost savings.

Features:
- Lumen output ranging from 28,800 to 58,300 lm
- Photometric Options: Type II Narrow, Type II Wide, Type III, Type IV
- 70 CRI at 3000K and 4000K typical
- Field rotatable optics
- –40° to 50°C UL Ambient Typical
- Coastal Finish Available
- Designed & Assembled in USA

Applications:
- Airport Lighting,
- Expressway and Freeway Interchanges
- Port Facilities
- Trailer/Container Yard and Rail Yard Operations
The GE Advantage™

1. Discovery & Design
   Before we illuminate, we listen. By understanding your goals and the makeup of your existing infrastructure, we can optimize a design that will meet codes, legislation and your objectives.

2. Innovative Systems
   Our unique reflective technology and broad product portfolio mean the best possible lighting solutions.

3. Seamless Distribution
   Our recently re-imagined manufacturing facility and local support networks ensure products are available and on time.

4. Integration Services
   Whether it’s new construction or an update of existing infrastructure, our network of partners provide turnkey installation solutions.

5. ROI Optimization
   We’ll help you see financial benefits – as soon as the first month – through energy savings, utility rebate capture programs and financing options.
GE Evolve®
LED Roadway Lighting
ERL1-ERLH-ERL2
GE Evolve®
LED Roadway Lighting
ERL1-ERLH-ERL2

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 a traditional HID fixture for additional operating cost savings.

Features:
• Optimized roadway photometric distributions
• Evolve® light engine consisting of reflective technology designed to optimize application efficiency and minimize glare
• 70 CRI at 2700K, 3000K and 4000K typical.
• −40°C to 50°C UL Ambient Typical.
• ULOR = 0 (zero uplight)
• Designed & Assembled in USA

Applications:
• Local Roadways
• Collector Roadways
• Major Roadway/Streets

Compatible with LightGrid Outdoor Wireless Control System

To learn more about GE Evolve® LED Roadway Lighting, go to: www.currentbyge.com
**Typical Specifications: ERL1-ERLH-ERL2**

**LED & Optical**
- **Output Range:** 1900 – 30000 lm
- **Photometric Options:** Type II Narrow, Type II Wide, Type III, Type IV
- **System Efficacy:** 100 - 145 LPW
- **CCT:** 2700K, 3000K, 4000K; LEDs @ 70 CRI

**Lumen Maintenance Tables**
Projected Lxx per IES TM-21 at 25°C for reference:

<table>
<thead>
<tr>
<th>ERL1 LUMEN OUTPUT CODES</th>
<th>LXX(10K)@HOURS 25,000 HR</th>
<th>LXX(10K)@HOURS 50,000 HR</th>
<th>LXX(10K)@HOURS 60,000 HR</th>
</tr>
</thead>
<tbody>
<tr>
<td>02, 03, 04, 05, 06</td>
<td>L96</td>
<td>L95</td>
<td>L94</td>
</tr>
<tr>
<td>07, 08, 09</td>
<td>L95</td>
<td>L91</td>
<td>L89</td>
</tr>
<tr>
<td>10</td>
<td>L89</td>
<td>L80</td>
<td>L76</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ERLH LUMEN OUTPUT CODES</th>
<th>LXX(10K)@HOURS 25,000 HR</th>
<th>LXX(10K)@HOURS 50,000 HR</th>
<th>LXX(10K)@HOURS 60,000 HR</th>
</tr>
</thead>
<tbody>
<tr>
<td>10, 11</td>
<td>L97</td>
<td>L96</td>
<td>L96</td>
</tr>
<tr>
<td>13, 14</td>
<td>L95</td>
<td>L93</td>
<td>L92</td>
</tr>
<tr>
<td>15, 16</td>
<td>L94</td>
<td>L91</td>
<td>L91</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ERL2 LUMEN OUTPUT CODES</th>
<th>LXX(10K)@HOURS 25,000 HR</th>
<th>LXX(10K)@HOURS 50,000 HR</th>
<th>LXX(10K)@HOURS 60,000 HR</th>
</tr>
</thead>
<tbody>
<tr>
<td>16, 18, 19, 21, 23</td>
<td>L96</td>
<td>L94</td>
<td>L95</td>
</tr>
<tr>
<td>25, 27, 28</td>
<td>L95</td>
<td>L93</td>
<td>L92</td>
</tr>
<tr>
<td>30</td>
<td>L94</td>
<td>L91</td>
<td>L90</td>
</tr>
</tbody>
</table>

**Construction & Finish**
- **Housing:**
  - Die Cast Enclosure
  - Casting-integral heat sink for maximum heat transfer
- **Lensing:** Impact resistant tempered glass, standard
- **Paint:** Corrosion resistant polyester powder painted, minimum 2.0 mil. thickness.
  - Standard Colors: Dark Bronze, Black, & Gray
  - RAL & custom colors available
  - Optional coastal finish available.
- **Weight:** 12.4lbs (5.6kg) – 24lbs (10.9kg)

**Warranty**
- **System Warranty:** 5 Year Standard, 10 Year Optional

**Controls**
- **Dimming:**
  - Standard: 0-10V; Optional: DALI (120-277V Only)
- **Sensors:**
  - Photo electric sensors (PE) available.
  - LightGrid™ compatible

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

**Suggested HID Replacement Lumen Levels**
- ~4,000–5,000 lumens to replace 100W HPS Cobra-head
- ~7,000–8,800 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
- ~21,000–30,000 lumens to replace 400W HPS Cobra-head

**Delayed start may be experienced < -35°C**

**Note:** The information above is designed to provide a guideline to select the correct luminaire for a roadway application. The best and most accurate way to ensure the proper design is to do a lighting layout utilizing AGI.
GE Evolve®
LED Roadway Lighting

**E R L 1**

<table>
<thead>
<tr>
<th>PROD. ID</th>
<th>VOLTAGE</th>
<th>LUMEN OUTPUT</th>
<th>DISTRIBUTION*</th>
<th>CCT</th>
<th>CONTROLS</th>
<th>COLOR</th>
<th>OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>E = Evolve</td>
<td>R = Roadway</td>
<td>L = Local</td>
<td>1 = Single Module</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>120-277V*</th>
<th>347-480V*</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>120</td>
<td>120</td>
</tr>
<tr>
<td>02</td>
<td>208</td>
<td>240</td>
</tr>
<tr>
<td>03</td>
<td>277</td>
<td>480</td>
</tr>
<tr>
<td>04</td>
<td>527</td>
<td>567</td>
</tr>
</tbody>
</table>

*Not available with Fusing. Must choose a discrete voltage with F option. Not available with E controls option.

**Typical System Wattage:**

- **120-277V:** 1400-3000 W
- **347-480V:** 1400-3000 W

**System Rating:**

- **120-277V:** 120-277 V
- **347-480V:** 347-480 V

**A** = ANSI C136.41 7-pin
**B** = ANSI C136.41 7-pin with Shorting Cap
**D** = ANSI C136.41 7-pin with non-Dimming PE Control

*PE Control Only available for 120-277V or 347-480V Discrete. Not available for 347-480V or 347V Discrete.

**NOTE:** Dimming controls wired for 0-10V standard unless DALI option "U" requested.

**NOTE:** *Not available with DALI U9 option.

---

**Product Number:**

- **ERL1**
- **ERLH**
- **ERL2**

---

**TYPICAL LUMEN OUTPUT DISTRIBUTION**

<table>
<thead>
<tr>
<th>LUMEN OUTPUT</th>
<th>DISTRIBUTION</th>
<th>INITIAL LUMENS</th>
<th>TYPICAL SYSTEM WATTAGE</th>
<th>BUS RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>2000</td>
<td>1900</td>
<td>1900</td>
<td>14</td>
</tr>
<tr>
<td>03</td>
<td>3000</td>
<td>2900</td>
<td>2800</td>
<td>22</td>
</tr>
<tr>
<td>04</td>
<td>4000</td>
<td>3900</td>
<td>3800</td>
<td>31</td>
</tr>
<tr>
<td>05</td>
<td>5000</td>
<td>4900</td>
<td>4700</td>
<td>39</td>
</tr>
<tr>
<td>06</td>
<td>6000</td>
<td>5800</td>
<td>5700</td>
<td>47</td>
</tr>
<tr>
<td>07</td>
<td>7000</td>
<td>6800</td>
<td>6600</td>
<td>58</td>
</tr>
<tr>
<td>08</td>
<td>8000</td>
<td>7800</td>
<td>7600</td>
<td>71</td>
</tr>
<tr>
<td>09</td>
<td>9000</td>
<td>8800</td>
<td>8500</td>
<td>84</td>
</tr>
<tr>
<td>10</td>
<td>9800</td>
<td>9600</td>
<td>9250</td>
<td>97</td>
</tr>
</tbody>
</table>

---

**Typical IES File Number for IDA**

<table>
<thead>
<tr>
<th>120-277V</th>
<th>347-480V</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>02</td>
</tr>
<tr>
<td>03</td>
<td>03</td>
</tr>
<tr>
<td>04</td>
<td>04</td>
</tr>
<tr>
<td>05</td>
<td>05</td>
</tr>
<tr>
<td>06</td>
<td>06</td>
</tr>
<tr>
<td>07</td>
<td>07</td>
</tr>
<tr>
<td>08</td>
<td>08</td>
</tr>
<tr>
<td>09</td>
<td>09</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

---

**400K** | **500K** | **600K** | **700K** | **800K** | **900K** | **1000K** | **1100K** | **1200K** | **1300K** | **1400K** | **1500K** | **1600K** | **1700K** | **1800K** | **1900K** | **2000K** | **2100K** | **2200K** | **2300K** | **2400K** | **2500K** | **2600K** | **2700K** | **2800K** | **2900K** | **3000K** | **3100K** | **3200K** | **3300K** | **3400K** | **3500K** | **3600K** | **3700K** | **3800K** | **3900K** | **4000K** | **4100K** | **4200K** | **4300K** | **4400K** | **4500K** | **4600K** |**
### Photometrics:
#### Evolve® LED Streetlight (ERL1)

**ERL1**
- **Type II Narrow** (05A340)
  - 5,000 Lumens
  - 4000K
  - ERL1_05A340___.IES

**ERL1**
- **Type II Wide** (05B340)
  - 5,000 Lumens
  - 4000K
  - ERL1_05B340___.IES

**ERL1**
- **Type III** (05C340)
  - 5,000 Lumens
  - 4000K
  - ERL1_05C340___.IES

**ERL1**
- **Type IV** (05D340)
  - 5,000 Lumens
  - 4000K
  - ERL1_05D340___.IES

**ERL1**
- **Type II Enhanced Back Light** (05E340)
  - 5,000 Lumens
  - 4000K
  - ERL1_05E340___.IES

---

**Grid Distance in Units of Mounting Height at 30’ Initial Footcandle Values at Grade**

<table>
<thead>
<tr>
<th>Street Width / Mounting Height</th>
<th>SS</th>
<th>HS</th>
<th>Coefficients of Utilization</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>3</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>4</td>
<td>0.3</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>5</td>
<td>0.4</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>6</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>7</td>
<td>0.6</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>8</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>9</td>
<td>0.8</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>10</td>
<td>0.9</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>11</td>
<td>1.0</td>
</tr>
</tbody>
</table>

---

**Vertical plane through horizontal angle of Max. Cd at 80°**
**Horizontal cone through vertical angle of Max. Cd at 67°**

**Vertical plane through horizontal angle of Max. Cd at 75°**
**Horizontal cone through vertical angle of Max. Cd at 69°**

**Vertical plane through horizontal angle of Max. Cd at 75°**
**Horizontal cone through vertical angle of Max. Cd at 70°**

**Vertical plane through horizontal angle of Max. Cd at 55°**
**Horizontal cone through vertical angle of Max. Cd at 64°**

---

**Grid Distance in Units of Mounting Height at 30’ Initial Footcandle Values at Grade**

<table>
<thead>
<tr>
<th>Street Width / Mounting Height</th>
<th>SS</th>
<th>HS</th>
<th>Coefficients of Utilization</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>3</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>4</td>
<td>0.3</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>5</td>
<td>0.4</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>6</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>7</td>
<td>0.6</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>8</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>9</td>
<td>0.8</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>10</td>
<td>0.9</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>11</td>
<td>1.0</td>
</tr>
</tbody>
</table>

---

**Vertical plane through horizontal angle of Max. Cd at 80°**
**Horizontal cone through vertical angle of Max. Cd at 67°**

**Vertical plane through horizontal angle of Max. Cd at 75°**
**Horizontal cone through vertical angle of Max. Cd at 69°**

**Vertical plane through horizontal angle of Max. Cd at 75°**
**Horizontal cone through vertical angle of Max. Cd at 70°**

**Vertical plane through horizontal angle of Max. Cd at 55°**
**Horizontal cone through vertical angle of Max. Cd at 64°**

---
# GE Evolve®
## LED Roadway Lighting
### ERL1-ERLH-ERL2

**Project name ________________________**
**Date ________________________**
**Type ________________________**

---

## OPTIONS

**A** = 4 Bolt Slipfitter
**B** = Split Phase 2P400V 120V
**C** = Coastal Finish
**D** = 2KVA 120-277V 480V
**E** = ANSI C136.41 7-pin
**F** = ANSI C136.41 7-pin with Shorting Cap
**G** = ANSI C136.41 7-pin with non-Dimming PE Control
**H** = ANSI C136.41 7-pin with PE Control Only
**I** = ANSI C136.41 7-pin with Tool-Less Entry
**L** = IP66 Optical
**P** = ANSI C136.41 7-pin with Internal Bubble Level
**R** = 2000/2000/5kA SPD
**S** = ANSI C136.41 7-pin with External Bubble Level
**T** = ANSI C136.41 7-pin with External LED Backlight
**U** = ANSI C136.41 7-pin with LED Backlight
**V** = ANSI C136.41 7-pin with Variable Output via Field Adjustable Module
**W** = ANSI C136.41 7-pin with Dimming Controls Wired for 0-10V standard unless DALI option "U" requested
**X** = ANSI C136.41 7-pin with 120-277V or 480V Discrete

---

## OUTPUT

<table>
<thead>
<tr>
<th>PROD. ID</th>
<th>VOLTAGE</th>
<th>LUMEN OUTPUT</th>
<th>DISTRIBUTION*</th>
<th>CCT</th>
<th>CONTROLS</th>
<th>COLOR</th>
<th>OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>E3</td>
<td>10</td>
<td>11</td>
<td>B3</td>
<td>A3</td>
<td>Type II Narrow</td>
<td>Gray</td>
<td>E controls option.</td>
</tr>
<tr>
<td>B3</td>
<td>11</td>
<td>12</td>
<td>C3</td>
<td>B3</td>
<td>Type II Wide</td>
<td>Black</td>
<td>Not available with F option.</td>
</tr>
<tr>
<td>D3</td>
<td>12</td>
<td>13</td>
<td>E3</td>
<td>E3</td>
<td>Type III</td>
<td>Dark Bronze</td>
<td>Not available with E controls option.</td>
</tr>
<tr>
<td>A3</td>
<td>13</td>
<td>14</td>
<td>A3</td>
<td>A3</td>
<td>Type IV</td>
<td>Dark Bronze</td>
<td>Not available with E controls option.</td>
</tr>
<tr>
<td>B3</td>
<td>14</td>
<td>15</td>
<td>A3</td>
<td>A3</td>
<td>Type II Enhanced Back Light</td>
<td>Dark Bronze</td>
<td>Not available with E controls option.</td>
</tr>
<tr>
<td>C3</td>
<td>15</td>
<td>16</td>
<td>A3</td>
<td>A3</td>
<td>Type II Enhanced Back Light</td>
<td>Dark Bronze</td>
<td>Not available with E controls option.</td>
</tr>
</tbody>
</table>

---

## LUMEN DISTRIBUTION

<table>
<thead>
<tr>
<th>LUMEN OUTPUT DISTRIBUTION</th>
<th>TYPICAL INITIAL LUMENS</th>
<th>3000K</th>
<th>2700K</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>9600</td>
<td>10000</td>
<td>11500</td>
</tr>
<tr>
<td>11</td>
<td>12000</td>
<td>13000</td>
<td>14000</td>
</tr>
<tr>
<td>12</td>
<td>14000</td>
<td>15000</td>
<td>16000</td>
</tr>
</tbody>
</table>

---

## SYSTEM WATTAGE

<table>
<thead>
<tr>
<th>SYSTEM WATTAGE 4000K</th>
<th>3000K</th>
<th>2700K</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>82</td>
<td>98</td>
</tr>
<tr>
<td>11</td>
<td>111</td>
<td>122</td>
</tr>
<tr>
<td>12</td>
<td>136</td>
<td>149</td>
</tr>
</tbody>
</table>

---

## BUS RATING

<table>
<thead>
<tr>
<th>BUS RATING 4000K</th>
<th>3000K</th>
<th>2700K</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>B2-U0-G2</td>
<td>B2-U0-G2</td>
</tr>
<tr>
<td>11</td>
<td>B2-U0-G2</td>
<td>B2-U0-G2</td>
</tr>
<tr>
<td>12</td>
<td>B2-U0-G2</td>
<td>B2-U0-G2</td>
</tr>
</tbody>
</table>

---

## IES FILE NUMBER

<table>
<thead>
<tr>
<th>IES FILE NUMBER 4000K</th>
<th>3000K</th>
<th>2700K</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>ERLM, 10A</td>
<td>ERLM, 10A</td>
</tr>
<tr>
<td>11</td>
<td>ERLM, 10A</td>
<td>ERLM, 10A</td>
</tr>
<tr>
<td>12</td>
<td>ERLM, 10A</td>
<td>ERLM, 10A</td>
</tr>
</tbody>
</table>

---

## Notes

* Nominal IES Type classing subject to typcial variation, individual units may differ.
* Dimming controls wired for 0-10V standard unless DALI option "U" requested.
* Not available with F option.
* Not available in 347V, 480V or 347-480V.
* Not available with DALI (U) option.
* Limited to one per IDA approved units.
* Suitable for installations, Standard packaging, 20 units per Magna pak container.
* Recommended for installations, 750 ft. from the coast. Contact Factory for Coastal Finish.*
* Compatible with LightGrid 2.0 nodes.
* Not available in 347V, 480V or 347-480V.
Photometrics:
Evolve® LED Streetlight (ERLH)

**ERLH Type II Narrow**
(13A340)
13,000 Lumens
4000K
ERLH_13A340_.IES

**ERLH Type II Wide**
(13B340)
13,000 Lumens
4000K
ERLH_13B340_.IES

**ERLH Type III**
(13C340)
13,000 Lumens
4000K
ERLH_13C340_.IES

**ERLH Type IV**
13D340
13,000 Lumens
4000K
ERLH_13D340_.IES

**ERLH Type II Enhanced Back Light**
13E340
13,000 Lumens
4000K
ERLH_13E340_.IES
GE Evolve®
LED Roadway Lighting
ERL1-ERLH-ERL2

**E R L 2**

<table>
<thead>
<tr>
<th>PROD. ID</th>
<th>VOLTAGE</th>
<th>LUMEN OUTPUT</th>
<th>DISTRIBUTION*</th>
<th>CCT</th>
<th>CONTROLS</th>
<th>COLOR</th>
<th>OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>E = Evolve</td>
<td>0 = 120-277V**</td>
<td>16</td>
<td>A3 = Type II Narrow</td>
<td>120</td>
<td>16</td>
<td>A Bolt Slipfitter</td>
<td>1</td>
</tr>
<tr>
<td>R = Roadway</td>
<td>1 = 120</td>
<td>18</td>
<td>B3 = Type II Wide</td>
<td>3000K</td>
<td>18</td>
<td>F = Fusing</td>
<td>F</td>
</tr>
<tr>
<td>L = Local</td>
<td>2 = 208</td>
<td>19</td>
<td>C3 = Type III</td>
<td>277</td>
<td>19</td>
<td>Internal Bubble Level</td>
<td>I</td>
</tr>
<tr>
<td>2 = Double Module</td>
<td>3 = 240</td>
<td>21</td>
<td>D3 = Type IV</td>
<td>480</td>
<td>21</td>
<td>Tool-Less Entry</td>
<td>L</td>
</tr>
<tr>
<td></td>
<td>A = ANSI C136.41 -7 pin</td>
<td>23</td>
<td>E3 = Type II Enhanced Back Light</td>
<td>4000K</td>
<td>23</td>
<td>Magnapack***</td>
<td>M1</td>
</tr>
<tr>
<td></td>
<td>= Select 2700K or 3400K CCT for IDA approved units.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A = ANSI C136.41 -7 pin with Shorting Cap</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>= ANSI C136.41 -7 pin with non-Dimming PE Control.*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>*= Discontinued</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>= 480V</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>= 277V</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>= 120V</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>= 3400K</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>= 2800K</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>= 208V</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>= 240V</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>= 208-240V</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* = Not available with Fusing. Must choose a discrete voltage with F option.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>= Not available with E controls option.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** Dimming controls wired for 0-10V standard unless DALI option "U" requested.

---

<table>
<thead>
<tr>
<th>LUMEN OUTPUT</th>
<th>DISTRIBUTION</th>
<th>TYPICAL INITIAL LUMENS</th>
<th>3000K</th>
<th>2700K</th>
<th>TYPICAL SYSTEM WATTAGE</th>
<th>4000K</th>
<th>2700K</th>
<th>IES FILE NUMBER</th>
<th>3000K</th>
<th>2700K</th>
<th>120-277V</th>
<th>347-480V</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>16000</td>
<td>15300</td>
<td>14900</td>
<td>120</td>
<td>B3-U0-G3</td>
<td>ERL2_16A340_IES</td>
<td>ERL2_16A330_IES</td>
<td>ERL2_16A327_IES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>18000</td>
<td>17300</td>
<td>16700</td>
<td>140</td>
<td>B3-U0-G3</td>
<td>ERL2_18A340_IES</td>
<td>ERL2_18A330_IES</td>
<td>ERL2_18A327_IES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>19000</td>
<td>18200</td>
<td>17400</td>
<td>149</td>
<td>B3-U0-G3</td>
<td>ERL2_19A340_IES</td>
<td>ERL2_19A330_IES</td>
<td>ERL2_19A327_IES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>21000</td>
<td>20100</td>
<td>19500</td>
<td>174</td>
<td>B3-U0-G3</td>
<td>ERL2_21A340_IES</td>
<td>ERL2_21A330_IES</td>
<td>ERL2_21A327_IES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>23000</td>
<td>22100</td>
<td>21400</td>
<td>194</td>
<td>B3-U0-G3</td>
<td>ERL2_23A340_IES</td>
<td>ERL2_23A330_IES</td>
<td>ERL2_23A327_IES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>25000</td>
<td>24000</td>
<td>23300</td>
<td>214</td>
<td>B3-U0-G3</td>
<td>ERL2_25A340_IES</td>
<td>ERL2_25A330_IES</td>
<td>ERL2_25A327_IES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>27000</td>
<td>25900</td>
<td>25100</td>
<td>237</td>
<td>B3-U0-G3</td>
<td>ERL2_27A340_IES</td>
<td>ERL2_27A330_IES</td>
<td>ERL2_27A327_IES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>28000</td>
<td>26900</td>
<td>26100</td>
<td>251</td>
<td>B3-U0-G3</td>
<td>ERL2_28A340_IES</td>
<td>ERL2_28A330_IES</td>
<td>ERL2_28A327_IES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>30000</td>
<td>28800</td>
<td>27900</td>
<td>278</td>
<td>B3-U0-G3</td>
<td>ERL2_30A340_IES</td>
<td>ERL2_30A330_IES</td>
<td>ERL2_30A327_IES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** Discontinued

---

* = Tool-Less Entry
** = Special Options
*** = 20 fixtures per Magnapack.

---

* = ANSI C136.41 7-pin with non-Dimming PE Control.*

---

**NOTE:** Dimming controls wired for 0-10V standard unless DALI option "U" requested.

---

**NOTE:** Discontinued

---

* = Tool-Less Entry
** = Special Options
*** = 20 fixtures per Magnapack.
Photometrics:
Evolve® LED Streetlight (ERL2)

ERL2
Type II Narrow
(23A340)
23,000 Lumens
4000K
ERL2_23A340___IES

ERL2
Type II Wide
(23B340)
23,000 Lumens
4000K
ERL2_23B340___IES

ERL2
Type III
(23C340)
23,000 Lumens
4000K
ERL2_23C340___IES

ERL2
Type IV
(23D340)
23,000 Lumens
4000K
ERL2_23D340___IES

ERL2
Type II Enhanced Back Light
(23E340)
23,000 Lumens
4000K
ERL2_23E340___IES
GE Evolve®
LED Roadway Lighting
ERL1-ERLH-ERL2

Product Dimensions:
Evolve® LED Streetlight (ERL1)

- Approximate net weight: 12.4 lbs (5.6kgs) -15.5 lbs (7.0kgs) with XFMR
- Effective Projected Area (EPA): 0.5 sq ft max (0.046 sq m)
GE Evolve®
LED Roadway Lighting
ERL1-ERLH-ERL2

Product Dimensions:
Evolve® LED Streetlight (ERLH)

DATA
- Approximate net weight: 15.15 lbs (6.9 kgs) - 2 Bolt Slipfitter
- Approximate net weight: 15.85 lbs (7.2 kgs) - 4 Bolt Slipfitter
- Effective Projected Area (EPA): 0.5 sq ft max (0.046 sq m)
GE Evolve®
LED Roadway Lighting
ERL1-ERLH-ERL2

Product Dimensions:
Evolve® LED Streetlight (ERL2)

- **Approximate net weight:** 24.0 lbs (10.9 kgs)
  Contact manufacturer for specific configuration weight.
- **Effective Projected Area (EPA):** 0.57 sq ft max (0.053 sq m)

**DATA**
GE Evolve™
LED Roadway Lighting
ERLC

The Evolve LED Roadway ERLC 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 a traditional HID fixture for additional operating cost savings.

Features:

- Optimized roadway photometric distributions
- Evolve light engine consisting of reflective technology designed to optimize application efficiency and minimize glare
- Die-Cast aluminum housing
- Light weight: 8.5 lbs
- System LPW performance: 102-133 LPW
- 10Kv/5kA surge protection standard
- Tool-Less option

Applications:

- Local Roadways
- Collector Roadways
- Major Roadway/Streets

Compatible with LightGrid™ Outdoor Wireless Control System

To learn more about GE Evolve LED Roadway ERLC Lighting, go to: www.currentbyge.com
Typical Specifications: ERLC

LED & Optical
- **Output Range:** 1,860 - 6,350 lm
- **Photometric Options:** Type II Narrow, Type II/III*, Type III, Type V.
- **System Efficacy:** 102-133
- **CCT:** 2700K, 3000K, 4000K, 5000K
  - High Brightness LED’s @ 70 CRI Minimum

Lumen Maintenance Tables
Projected Lxx per IES TM-21 at 25°C for reference:

<table>
<thead>
<tr>
<th>ERLC Lumen Output Codes</th>
<th>Distributions</th>
<th>Lxx(10k)@Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>25,000 HR</td>
</tr>
<tr>
<td>02, 03, 04</td>
<td>A4, B4, C4</td>
<td>L96</td>
</tr>
<tr>
<td>05</td>
<td>A4, B4, C4</td>
<td>L94</td>
</tr>
<tr>
<td>06</td>
<td>A4, B4, C4</td>
<td>L90</td>
</tr>
</tbody>
</table>

Electrical
- **Input Voltage:** 120-277 volt. (no 347-480V)
- **Input Frequency:** 50/60Hz
- **Power Factor (PF)***: > 90%
- **Total Harmonic Distortion (THD)***: <20%
  - *System PF and THD specified at rated watts

Ratings
- **Surge Protection:** Per ANSI C136.2-2015
  - 10kV/5kA "Enhanced: (40 Strikes)" - Standard on ERLC (02 - 06)
- **Safety:** UL/cUL Listed. UL 1598 listed, suitable for wet locations.
- **Environmental:** Compliant with the materials restrictions of RoHS.
- **EMI:** Title 47 CFR Part 15 Class A
- **Vibration:** 3G per ANSI C136.31-2010
- **LM-79 testing in accordance with IESNA Standards**
- **Ingress Rating:** IP66 optical enclosure rated per ANSI C136.25-2013
- **Impact:** IK08 Lens

Operating Temperature:

<table>
<thead>
<tr>
<th>PRODUCT ID</th>
<th>Lumen Output</th>
<th>Ambient Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERLC 02-06</td>
<td></td>
<td>-40°C to 50°C</td>
</tr>
</tbody>
</table>

Construction & Finish
- **Housing:**
  - Aluminum Die Cast Enclosure
  - Casting-integral heat sink for maximum heat transfer
- **Lensing:** Impact resistant tempered glass, standard
- **Paint:** Corrosion resistant polyester powder painted, minimum 2.0 mil. thickness.
  - Standard Colors: Gray, Black, Dark Bronze & White
  - RAL & custom colors available
  - Optional coastal finish available.
- **Weight:** 8.5 Lbs

Warranty
- **System Warranty:** 5 Year Standard, 10 Year Optional

Controls
- **Dimming:**
  - Standard: 0-10V; Optional: DALI (Option U)
- **Sensors:**
  - Photo electric sensors (PE) available.
  - LightGrid™ compatible

Mounting
- Adjustable for 1.25 to 2 in. nominal mounting pipe
- Integral diecast mounting pipe stop
- Slipfitter with +/- 5 degrees of leveling adjustment

Suggested HID Replacement Lumen Levels
- ~2,000–6,000 lumens to replace 50-100W HPS Cobra-head

**The information above is designed to provide a guideline to select the correct luminaire for a roadway application. The best and most accurate way to ensure the proper design is to do a lighting layout.

^ See Page 5 for the typical ISO Plot of the B4 distribution. This optic is designed to address a Roadway Photometric Application and may classify as Type II or III.
<table>
<thead>
<tr>
<th>PROD. ID</th>
<th>VOLTAGE</th>
<th>LUMEN OUTPUT</th>
<th>DISTRIBUTION*</th>
<th>CCT</th>
<th>CONTROLS</th>
<th>COLOR</th>
<th>OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>Voltage1</td>
<td>Lumen1</td>
<td>Distribution1</td>
<td>C</td>
<td>Controls1</td>
<td>Color1</td>
<td>Options1</td>
</tr>
<tr>
<td>R</td>
<td>Voltage2</td>
<td>Lumen2</td>
<td>Distribution2</td>
<td>C</td>
<td>Controls2</td>
<td>Color2</td>
<td>Options2</td>
</tr>
<tr>
<td>L</td>
<td>Voltage3</td>
<td>Lumen3</td>
<td>Distribution3</td>
<td>C</td>
<td>Controls3</td>
<td>Color3</td>
<td>Options3</td>
</tr>
<tr>
<td>C</td>
<td>Voltage4</td>
<td>Lumen4</td>
<td>Distribution4</td>
<td>C</td>
<td>Controls4</td>
<td>Color4</td>
<td>Options4</td>
</tr>
</tbody>
</table>

*NOTE: Dimming controls wired for 0-10V standard unless DALI option "U" requested.

**TYPICAL INITIAL LUMENS**

<table>
<thead>
<tr>
<th>LUMEN OUTPUT</th>
<th>DISTRIBUTION</th>
<th>TYPICAL INITIAL LUMENS</th>
<th>TYPICAL SYSTEM WATTAGE</th>
<th>BUG RATING</th>
<th>IES FILE NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>4000/5000k</td>
<td>3000K</td>
<td>2700K</td>
<td>5000K</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3000k</td>
<td>3000k</td>
<td>3000k</td>
<td>3000k</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2700k</td>
<td>2700k</td>
<td>2700k</td>
<td>2700k</td>
<td></td>
</tr>
</tbody>
</table>

**IES FILE NUMBER**

<table>
<thead>
<tr>
<th>IES FILE NUMBER</th>
<th>4000K</th>
<th>3000K</th>
<th>2700K</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERLC_02A450_120-240V.IES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ERLC_02A440_120-240V.IES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ERLC_02A430_120-240V.IES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ERLC_02A427_120-240V.IES</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

^See Page 5 for the typical ISO Plot of the B4 distribution. This optic is designed to address a Roadway Photometric Application and may classify as Type II or III.
Photometrics:
Evolve™ LED Streetlight (ERLC)

ERLC
Type II Narrow
(05A440)
4,900 Lumens
4000K
ERLC_05A440___.IES

Grid Distance in Units of Mounting Height at 30'
Initial Footcandle Values at Grade

— Vertical plane through horizontal angle of Max. Cd at 85°
— Horizontal cone through vertical angle of Max. Cd at 67°

ERLC
Type II/III^ (05B440)
5,000 Lumens
4000K
ERLC_05B440___.IES

Grid Distance in Units of Mounting Height at 30'
Initial Footcandle Values at Grade

— Vertical plane through horizontal angle of Max. Cd at 80°
— Horizontal cone through vertical angle of Max. Cd at 68°

ERLC
Type III (05C440)
5,000 Lumens
4000K
ERLC_05C440___.IES

Grid Distance in Units of Mounting Height at 30'
Initial Footcandle Values at Grade

— Vertical plane through horizontal angle of Max. Cd at 70°
— Horizontal cone through vertical angle of Max. Cd at 68°

ERLC
Type V (05V440)
5,200 Lumens
4000K
ERLC_05V440___.IES

Grid Distance in Units of Mounting Height at 30'
Initial Footcandle Values at Grade

— Vertical plane through horizontal angle of Max. Cd at 55°
— Horizontal cone through vertical angle of Max. Cd at 64°
GE Evolve™
LED Roadway Lighting
ERLC

Product Dimensions:
Evolve™ LED Streetlight (ERLC)

**DATA**
- Approximate net weight: 8.5 lbs [3.8 kgs]
- Contact manufacturer for specific configuration weight.
- Effective Projected Area (EPA): 0.3 sq ft max [0.029 sq m]