

Evolve™ LED Roadway Lighting

LED Roadway Luminaire (ERL1-ERLH-ERS1-ERS2)



current
powered by GE

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

- Evolve™ light engine consisting of reflective technology designed to optimize application efficiency and minimize glare.
- Utilizes high brightness LEDs, 70 CRI at 3000K and 4000K typical.
- LM-79 tests and reports in accordance with IESNA standards.

Lumen Maintenance

- Lumen Maintenance per TM21.

Ratings

-  listed, suitable for wet locations per UL 1598.
- Std. Optical enclosure rated per ANSI C136.25-2009: ERL1 = IP65, ERS1-2 = IP66, ERLH = IP65.
- Upward Light Output Ratio (ULOR) = 0.
- Compliant with the material restriction requirements of RoHS.
-  3000k must be selected to meet IDA certification and approval - ERL1 and ERLH only.

Product ID	Lumen Output	Ambient Rating
ERL1	02-09	-40°C to 50°C
ERLH	10-11	-40°C to 50°C
ERLH	13-15	-40°C to 40°C
ERS1	10-15	-40°C to 50°C
ERS2	16-23	-40°C to 50°C
ERS2	25-28	-40°C to 40°C

Delayed start may be experienced <-35°C.

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.

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 VAC and 347-480 VAC.
- System power factor is >90% and THD <20%.*
- Class "A" Sound rating.
- 0-10V dimming standard or DALI dimming available upon request for 120V-277V.
- Surge Protection per ANSI C136.2-2015:
 - Standard: 6kV/3kA "Basic: (120 Strikes)"
 - Optional Secondary: 10kV/5kA "Enhanced: (40 Strikes)"
- EMI: Title 47 CFR Part 15 Class A
- Photo electric sensors (PE) available.

* 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

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
- ~21,000–28,000 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 (ERLH)



ERLH

PROD. ID	VOLTAGE	LUMEN OUTPUT	DISTRIBUTION	CCT	CONTROLS	COLOR	OPTIONS
E = Evolve R = Roadway L = Local H = High Output	0 = 120-277* 1 = 120 2 = 208 3 = 240 4 = 277 5 = 480 D = 347 H = 347-480* * Not available with Fusing. Must choose a discreet voltage with F option.	10 11 13 14 15 See Data Table for more information.	A1 = Extra Narrow Asymmetric B1 = Narrow Asymmetric (Medium) C1 = Asymmetric (Short) D1 = Asymmetric Forward E1 = Asymmetric (Medium) F1 = Asymmetric (Wide) G1 = Asymmetric (Extra Wide) See Data Table for more information	30 = 3000K 40 = 4000K	A = ANSI C136.41 7-pin D = ANSI C136.41 7-pin receptacle with Shorting Cap E = ANSI C136.41 7-pin Receptacle with non-Dimming PE Control.* * PE Control Only available for 120-277V or 480V Discrete. Not available for 347-480V or 347V Discrete. NOTE: Dimming controls wired for 0-10V standard unless DALI option "U" requested.	GRAY = Gray BLCK = Black DKBZ = Dark Bronze	A = 4 Bolt Slipfitter † F = Fusing G = Internal Bubble Level I = IP66 Optical L = Tool-Less Entry R = Optional Secondary Enhanced Surge Protection (10kV/5kA) U = Universal DALI Programmable + ^ X = Single Package # Y = Coastal Finish * XXX = Special Options † Contact manufacturer for Lead-Time. # Std Packaging = 20 units per container. * Recommended for installations within 1 mile from the coast. Contact Factory for Lead-Time. + Compatible with LightGrid 2.0 nodes. ^ Not available at 347V, 480V or 347-480V.

PRODUCT ID	LUMEN OUTPUT	DISTRIBUTION	TYPICAL INITIAL LUMENS	TYPICAL SYSTEM WATTAGE	BUG RATING	IES FILE NUMBER
			4000K	3000K	4000K	3000K
ERLH	10	A1	9500	9100	B3-U0-G2	ERLH_10A140__IES
ERLH		B1	9800	9500	B3-U0-G1	ERLH_10B140__IES
ERLH		C1	10000	9600	B2-U0-G1	ERLH_10C140__IES
ERLH		D1	9800	9500	B2-U0-G2	ERLH_10D140__IES
ERLH		E1	10000	9600	B2-U0-G2	ERLH_10E140__IES
ERLH		F1	10000	9600	B2-U0-G2	ERLH_10F140__IES
ERLH		G1	10000	9600	B2-U0-G2	ERLH_10G140__IES
ERLH	11	A1	10900	10500	B3-U0-G2	ERLH_11A140__IES
ERLH		B1	11200	10800	B3-U0-G1	ERLH_11B140__IES
ERLH		C1	11500	11100	B3-U0-G2	ERLH_11C140__IES
ERLH		D1	11200	10800	B2-U0-G2	ERLH_11D140__IES
ERLH		E1	11500	11100	B3-U0-G2	ERLH_11E140__IES
ERLH		F1	11500	11100	B3-U0-G2	ERLH_11F140__IES
ERLH		G1	11500	11100	B3-U0-G2	ERLH_11G140__IES
ERLH	13	A1	12300	11900	B3-U0-G2	ERLH_13A140__IES
ERLH		B1	12700	12200	B3-U0-G2	ERLH_13B140__IES
ERLH		C1	13000	12500	B3-U0-G2	ERLH_13C140__IES
ERLH		D1	12700	12200	B3-U0-G2	ERLH_13D140__IES
ERLH		E1	13000	12500	B3-U0-G2	ERLH_13E140__IES
ERLH		F1	13000	12500	B3-U0-G2	ERLH_13F140__IES
ERLH		G1	13000	12500	B3-U0-G2	ERLH_13G140__IES
ERLH	14	A1	13300	12800	B3-U0-G3	ERLH_14A140__IES
ERLH		B1	13700	13200	B3-U0-G2	ERLH_14B140__IES
ERLH		C1	14000	13500	B3-U0-G2	ERLH_14C140__IES
ERLH		D1	13700	13200	B3-U0-G2	ERLH_14D140__IES
ERLH		E1	14000	13500	B3-U0-G2	ERLH_14E140__IES
ERLH		F1	14000	13500	B3-U0-G2	ERLH_14F140__IES
ERLH		G1	14000	13500	B3-U0-G2	ERLH_14G140__IES
ERLH	15	A1	14200	13700	B3-U0-G3	ERLH_15A140__IES
ERLH		B1	14700	14200	B3-U0-G2	ERLH_15B140__IES
ERLH		C1	15000	14500	B3-U0-G2	ERLH_15C140__IES
ERLH		D1	14700	14200	B3-U0-G2	ERLH_15D140__IES
ERLH		E1	15000	14500	B3-U0-G2	ERLH_15E140__IES
ERLH		F1	15000	14500	B3-U0-G2	ERLH_15F140__IES
ERLH		G1	15000	14500	B3-U0-G2	ERLH_15G140__IES