



**GE Evolve™**

LED Roadway Lighting

ERLC

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# 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](http://www.currentbyge.com)

# GE Evolve™

## LED Roadway Lighting

ERLC



Project name \_\_\_\_\_

Date \_\_\_\_\_

Type \_\_\_\_\_

## 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:

ERLC LUMEN OUTPUT CODES	DISTRIBUTIONS	LXX(10K)@HOURS		
		25,000 HR	50,000 HR	60,000 HR
02, 03, 04	A4, B4, C4	L96	L95	L94
05	A4, B4, C4	L94	L90	L89
06	A4, B4, C4	L90	L80	L77

ERLC LUMEN OUTPUT CODES	DISTRIBUTIONS	LXX(10K)@HOURS		
		25,000 HR	50,000 HR	60,000 HR
02, 03, 04, 05	V4	L96	L93	L93
06	V4	L94	L89	L88

Note: Projected Lxx based on LM80 (10,000 hour testing). DOE Lighting Facts Verification Testing Tolerances apply to initial luminous flux and lumen maintenance measurements.

### 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:**

PRODUCT ID	LUMEN OUTPUT	AMBIENT READING
ERLC	02-06	-40°C to 50°C

### 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

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

CONVERSION FROM PREVIOUS GENERATION OPTICS TO PREVIOUS	DESCRIPTION	CURRENT	DESCRIPTION
A3	Type II Narrow	A4	Type II Narrow
B3	Type II Wide	B4	Type II/III^
C3	Type III	C4	Type III
D3	Type IV	None	
E3	Type II Enhanced Backlight	None	
		V4	Type V

\*\*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 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.

# GE Evolve™

## LED Roadway Lighting

ERLC



Project name \_\_\_\_\_  
 Date \_\_\_\_\_  
 Type \_\_\_\_\_

**ERLC**

PROD. ID	VOLTAGE	LUMEN OUTPUT	DISTRIBUTION*	CCT	CONTROLS	COLOR	OPTIONS
E = Evolve R = Roadway L = Local C = Compact	0 = 120-277V* 1 = 120 2 = 208 3 = 240 4 = 277 8 = 120-240V* *Not available with fusing.	02* 03 04 05 06 *02 Lumen choice only offered for 120-240V.	A4 = Type II Narrow B4 = Type II/III^ C4 = Type III V4 = Type V	27 = 2700K 30 = 3000K 40 = 4000K 50 = 5000K	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  <b>NOTE:</b> Dimming controls wired for 0-10V standard unless DALI option "U" requested.	GRAY = Gray BLCK = Black DKBZ = Dark Bronze WHITE = White	B = Tether C1 = Captive Door F = Fusing G = Internal Bubble Level L = Tool-Less Entry M1 = Magnapak** R = Optional Secondary Enhanced Surge Protection (10kV/5kA) U = DALI Programmable + V1 = Variable Output via Field Adjustable Module*** Y = Coastal Finish* XXX = Special Options  * Recommended for installations within 750 ft. from the coast. Contact Factory for Lead-Time. + Compatible with LightGrid 2.0 nodes. ** 40 fixtures per Magnapak ***No DALI available (U) or Fusing (F). System PF and THD specified at rated watts.

LUMEN OUTPUT	DISTRIBUTION	TYPICAL INITIAL LUMENS			TYPICAL SYSTEM WATTAGE	BUG RATING			IES FILE NUMBER			
		4000K/5000K	3000K	2700K		4000K/5000K	3000K	2700K	5000K	4000K	3000K	2700K
02	A4	1960	1920	1860	15	B1-U0-G1	B1-U0-G1	B1-U0-G1	ERLC_02A450_-120-240V.IES	ERLC_02A440_-120-240V.IES	ERLC_02A430_-120-240V.IES	ERLC_02A427_-120-240V.IES
	B4	2000	1960	1900		B1-U0-G1	B1-U0-G1	B1-U0-G1	ERLC_02B450_-120-240V.IES	ERLC_02B440_-120-240V.IES	ERLC_02B430_-120-240V.IES	ERLC_02B427_-120-240V.IES
	C4	2000	1960	1900		B1-U0-G1	B1-U0-G1	B1-U0-G1	ERLC_02C450_-120-240V.IES	ERLC_02C440_-120-240V.IES	ERLC_02C430_-120-240V.IES	ERLC_02C427_-120-240V.IES
	V4	1990	1950	1890		B1-U0-G0	B1-U0-G0	B1-U0-G0	ERLC_02V450_-120-240V.IES	ERLC_02V440_-120-240V.IES	ERLC_02V430_-120-240V.IES	ERLC_02V427_-120-240V.IES
03	A4	2940	2880	2800	23	B1-U0-G1	B1-U0-G1	B1-U0-G1	ERLC_03A450_-120-277V.IES	ERLC_03A440_-120-277V.IES	ERLC_03A430_-120-277V.IES	ERLC_03A427_-120-277V.IES
	B4	3000	2940	2860		B1-U0-G1	B1-U0-G1	B1-U0-G1	ERLC_03B450_-120-277V.IES	ERLC_03B440_-120-277V.IES	ERLC_03B430_-120-277V.IES	ERLC_03B427_-120-277V.IES
	C4	3000	2940	2860		B1-U0-G1	B1-U0-G1	B1-U0-G1	ERLC_03C450_-120-277V.IES	ERLC_03C440_-120-277V.IES	ERLC_03C430_-120-277V.IES	ERLC_03C427_-120-277V.IES
	V4	3100	3030	2950		B1-U0-G0	B1-U0-G0	B1-U0-G0	ERLC_03V450_-120-277V.IES	ERLC_03V440_-120-277V.IES	ERLC_03V430_-120-277V.IES	ERLC_03V427_-120-277V.IES
04	A4	3920	3840	3730	32	B1-U0-G1	B1-U0-G1	B1-U0-G1	ERLC_04A450_-120-277V.IES	ERLC_04A440_-120-277V.IES	ERLC_04A430_-120-277V.IES	ERLC_04A427_-120-277V.IES
	B4	4000	3920	3810		B1-U0-G1	B1-U0-G1	B1-U0-G1	ERLC_04B450_-120-277V.IES	ERLC_04B440_-120-277V.IES	ERLC_04B430_-120-277V.IES	ERLC_04B427_-120-277V.IES
	C4	4000	3920	3810		B1-U0-G2	B1-U0-G2	B1-U0-G2	ERLC_04C450_-120-277V.IES	ERLC_04C440_-120-277V.IES	ERLC_04C430_-120-277V.IES	ERLC_04C427_-120-277V.IES
	V4	4030	3940	3840		B2-U0-G0	B2-U0-G0	B2-U0-G0	ERLC_04V450_-120-277V.IES	ERLC_04V440_-120-277V.IES	ERLC_04V430_-120-277V.IES	ERLC_04V427_-120-277V.IES
05	A4	4900	4800	4670	43	B1-U0-G1	B1-U0-G1	B1-U0-G1	ERLC_05A450_-120-277V.IES	ERLC_05A440_-120-277V.IES	ERLC_05A430_-120-277V.IES	ERLC_05A427_-120-277V.IES
	B4	5000	4900	4760		B1-U0-G2	B1-U0-G2	B1-U0-G2	ERLC_05B450_-120-277V.IES	ERLC_05B440_-120-277V.IES	ERLC_05B430_-120-277V.IES	ERLC_05B427_-120-277V.IES
	C4	5000	4900	4760		B1-U0-G2	B1-U0-G2	B1-U0-G2	ERLC_05C450_-120-277V.IES	ERLC_05C440_-120-277V.IES	ERLC_05C430_-120-277V.IES	ERLC_05C427_-120-277V.IES
	V4	5200	5090	4950		B2-U0-G0	B2-U0-G0	B2-U0-G0	ERLC_05V450_-120-277V.IES	ERLC_05V440_-120-277V.IES	ERLC_05V430_-120-277V.IES	ERLC_05V427_-120-277V.IES
06	A4	5880	5760	5600	55	B1-U0-G1	B1-U0-G1	B1-U0-G1	ERLC_06A450_-120-277V.IES	ERLC_06A440_-120-277V.IES	ERLC_06A430_-120-277V.IES	ERLC_06A427_-120-277V.IES
	B4	6000	5880	5700		B1-U0-G2	B1-U0-G2	B1-U0-G2	ERLC_06B450_-120-277V.IES	ERLC_06B440_-120-277V.IES	ERLC_06B430_-120-277V.IES	ERLC_06B427_-120-277V.IES
	C4	6000	5880	5700		B1-U0-G2	B1-U0-G2	B1-U0-G2	ERLC_06C450_-120-277V.IES	ERLC_06C440_-120-277V.IES	ERLC_06C430_-120-277V.IES	ERLC_06C427_-120-277V.IES
	V4	6350	6220	6050		B2-U0-G1	B2-U0-G1	B2-U0-G1	ERLC_06V450_-120-277V.IES	ERLC_06V440_-120-277V.IES	ERLC_06V430_-120-277V.IES	ERLC_06V427_-120-277V.IES

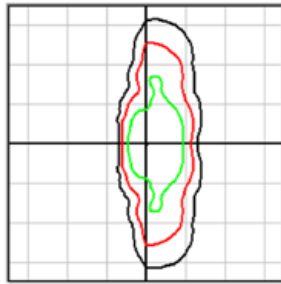
^ See Page 5 for the typical ISO Plot of the B4 distribution. This optic is designed to address a Roadway Photometric Application and may classify as Type II or III.

# Photometrics: Evolve™ LED Streetlight (ERLC)

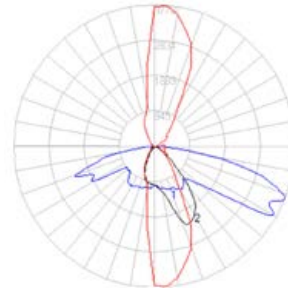
## ERLC

Type II Narrow  
(05A440)

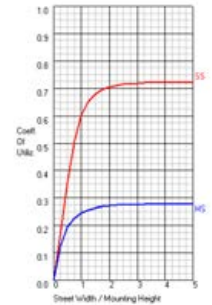
4,900 Lumens  
4000K  
ERLC\_05A440\_\_\_.IES



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



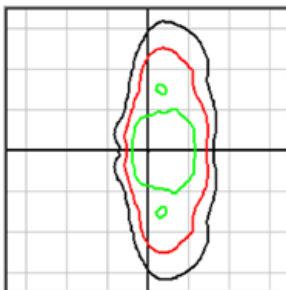
— Vertical plane through horizontal angle of Max. Cd at 85°  
— Horizontal cone through vertical angle of Max. Cd at 67°



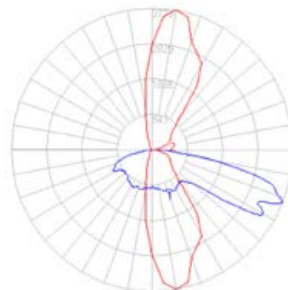
## ERLC

Type II/III^  
(05B440)

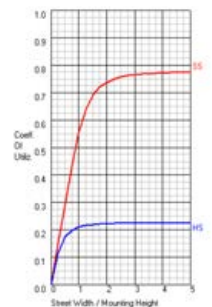
5,000 Lumens  
4000K  
ERLC\_05B440\_\_\_.IES



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



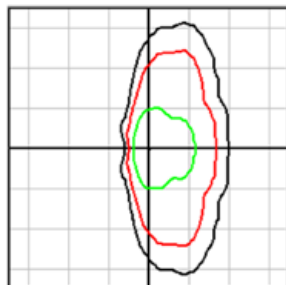
— Vertical plane through horizontal angle of Max. Cd at 80°  
— Horizontal cone through vertical angle of Max. Cd at 68°



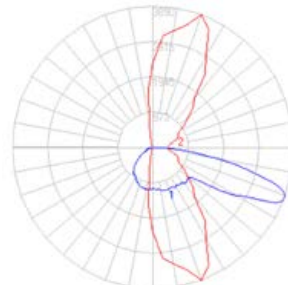
## ERLC

Type III  
(05C440)

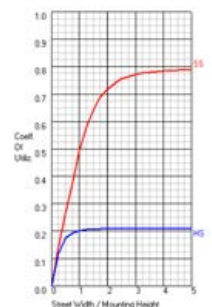
5,000 Lumens  
4000K  
ERLC\_05C440\_\_\_.IES



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



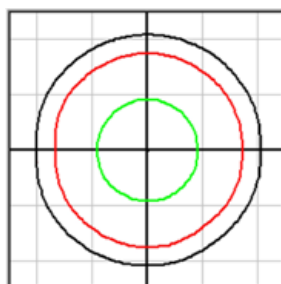
— Vertical plane through horizontal angle of Max. Cd at 70°  
— Horizontal cone through vertical angle of Max. Cd at 68°



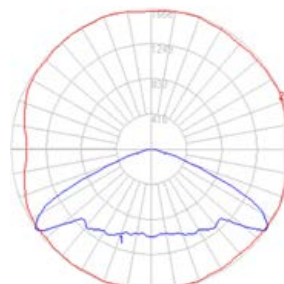
## ERLC

Type V  
(05V440)

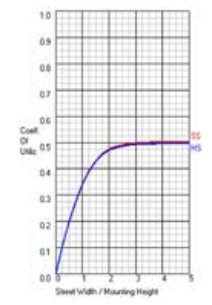
5,200 Lumens  
4000K  
ERLC\_05V440\_\_\_.IES



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

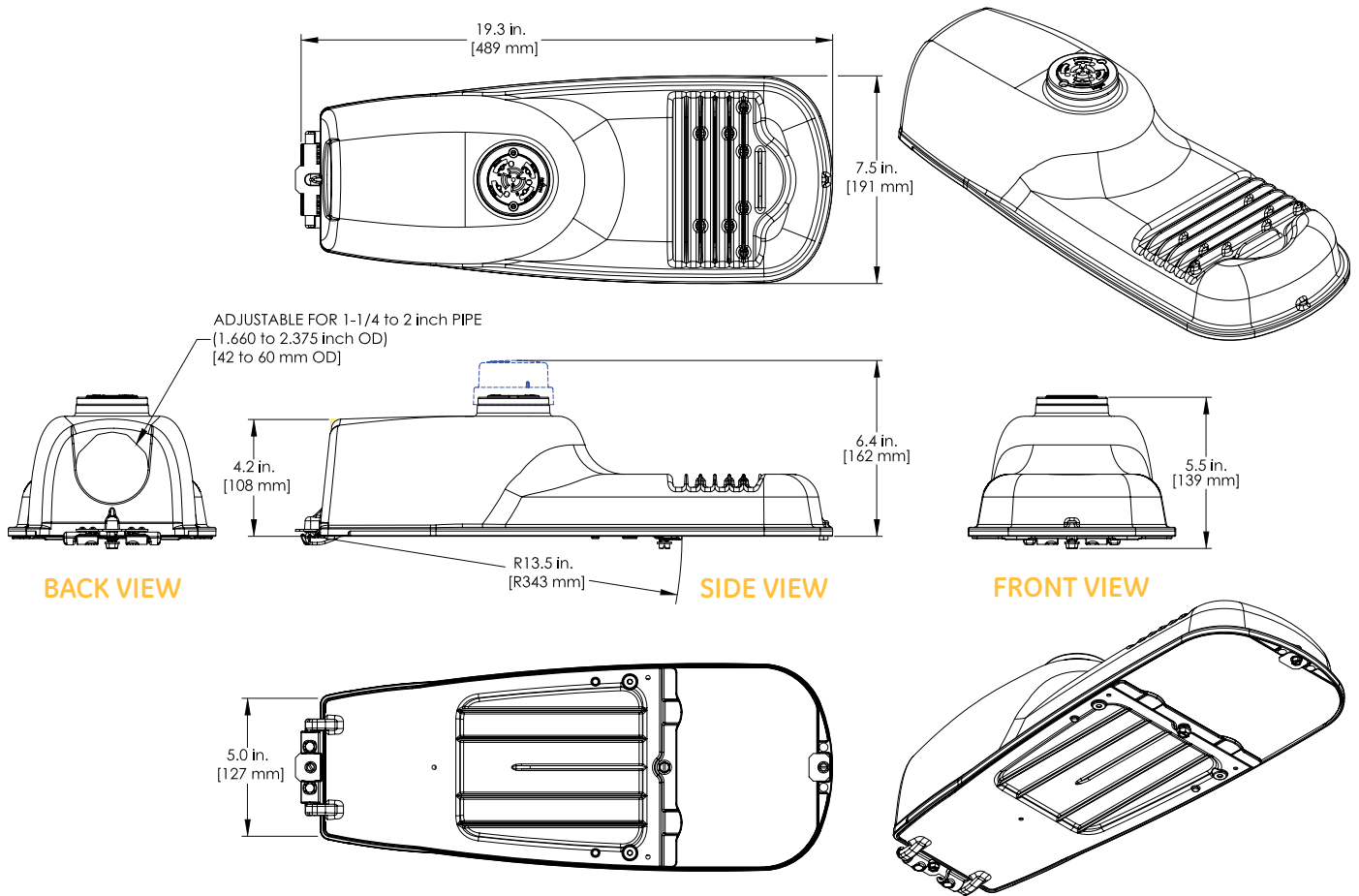


— Vertical plane through horizontal angle of Max. Cd at 55°  
— Horizontal cone through vertical angle of Max. Cd at 64°



**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)