

# Evolve® LED Roadway Lighting

## Cobra Head (ERL2)



Project Name \_\_\_\_\_  
 Date \_\_\_\_\_ Type \_\_\_\_\_  
 Notes \_\_\_\_\_

The **Evolve®** LED Roadway ERL2 Luminaire is optimized utilizing advanced LED reflective optical system for local, collector and major roadways. The modern design incorporates the heat sink directly into the unit for heat transfer to prolong LED life.

### CONSTRUCTION

<b>Housing:</b>	Aluminum die cast enclosure. Casting Integral heat sink for maximum heat transfer
<b>Lens:</b>	Impact resistant tempered glass
<b>Paint:</b>	Corrosion resistant polyester powder painted, minimum 2.0 mil thickness (RAL & custom colors available) Standard = Black, Dark Bronze Gray, White Optional = Coastal Finish
<b>Weight:</b>	24.0 lbs (10.9 kgs)

### OPTICAL SYSTEM

<b>Lumens:</b>	16,000 - 32,000
<b>Distribution:</b>	Type II Narrow, Type II Wide, Type III, Type IV and Type II Enhanced Back light
<b>Efficacy:</b>	112-140 LPW
<b>CCT:</b>	2700K, 3000K, 4000K, 5000K
<b>CRI (Min):</b>	70 CRI

### ELECTRICAL

<b>Input Voltage:</b>	120-277V or 347-480V
<b>Input Frequency:</b>	50/60Hz
<b>Power Factor:</b>	≥ 90% at rated watts
<b>Total Harmonic Distortion:</b>	≤ 20% at rated watts

### SURGE PROTECTION\*

Standard	Optional
10kV/5kA	Secondary 10kV/5kA (R Option) or Secondary 20kV/10kA (T Option)

\*Per ANSI C136.2-2018

### LUMEN MAINTENANCE

Projected Lxx per IES TM-21-11 at 25°C

Lumen Codes	Distributions	LXX(10K) @ Hours		
		25,000 HR	50,000 HR	60,000 HR
16	A5, B5, C5, D5, E5	L99	L99	L99
18	A5, B5, C5, D5, E5	L99	L98	L98
19	A5, B5, C5, D5, E5	L99	L98	L97
21	A5, B5, C5, D5, E5	L94	L87	L85
23	A5, B5, C5, D5, E5	L97	L96	L95
25	A5, B5, C5, D5, E5	L96	L95	L95
27	A5, B5, C5, D5, E5	L96	L94	L94
28	A5, B5, C5, D5, E5	L96	L94	L93
30, 31	A5, B5, C5, D5, E5	L95	L93	L92
32	A5, B5, C5, D5, E5	L94	L91	L90

Note: Projected Lxx based on LM80 (≥ 10,000 hour testing). Accepted industry tolerances apply to initial luminous flux and lumen maintenance measurements.

### RATINGS

<b>Operating Temp:</b>	-40°C to 50°C *
<b>Vibration:</b>	3G per ANSI C136.31-2018
<b>LM-79:</b>	Testing in accordance with IES Standards
<b>EMI:</b>	Title 47 CFR Part 15 Class A
<b>RoHS:</b>	Complies with the material restrictions of RoHS

\*ERL2 (32K Lumen 347-480V SKU) operates at -40°C to 45°C

### CONTROLS

<b>Dimming:</b>	Standard-0-10V Optional-DALI (Option U)
<b>Sensors:</b>	Photo Electric Sensors (PE) available LightGrid Compatible

### WARRANTY

5 Year (Standard)      10 Year (Optional)



Project Name \_\_\_\_\_

Date \_\_\_\_\_ Type \_\_\_\_\_

Notes \_\_\_\_\_

## ERL2

PROD. ID	VOLTAGE	LUMENS	DISTRIBUTION <sup>3</sup>	CCT	CONTROLS PER ANSI C136.41	COLOR	OPTIONS
<b>E = Evolve</b>	0 = 120-277 <sup>1</sup>	16	A5 = Type II Narrow	27 = 2700K <sup>2</sup>	A = 7-Pin Receptacle	GRAY = Gray	A = 4 Bolt Slipfitter <sup>4</sup>
<b>R = Roadway</b>	H = 347-480 <sup>1</sup>	18	B5 = Type II Wide	30 = 3000K <sup>2</sup>	D = 7-Pin Receptacle with Shorting Cap	BLCK = Black	B = Tether
<b>L = Local</b>		19	<b>C5 = Type III</b>	<b>40 = 4000K</b>	E = 7-Pin Receptacle with non-Dimming Long Life PE <sup>5</sup>	DKBZ = Dark Bronze	F = Fusing
<b>2 = Double Module</b>	1 = 120	<b>21</b>	D5 = Type IV <sup>10</sup>	50 = 5000K	<b>Note:</b> 0-10V control standard unless <b>DALI Option "U"</b> requested	WHITE = White	G = Internal Bubble Level
	2 = 208	23	E5 = Type II Enhanced Back Light			I = Optional IP66 Optical Enclosure	
	3 = 240	25				L = Tool-Less Entry	
	4 = 277	27				R = Secondary 10kV/5kA SPD	
	D = 347	28				T = Secondary 20kV/10kA SPD	
	5 = 480	30				U = DALI Programmable <sup>6,7</sup>	
		31				<b>V1 = Field Adjustable Module<sup>9</sup></b>	
	32			Y = Coastal Finish <sup>8</sup>			
					XXX = Special Options		

<sup>1</sup> Not Available with Fusing

<sup>2</sup> Select 2700K or 3000K CCT for IDA approved units

<sup>3</sup> Nominal IES Type classing subject to typical variation, individual units may differ

<sup>4</sup> Lead time varies, contact Factory

<sup>5</sup> Per ANSI C136.10-2017

<sup>6</sup> Compatible with LightGrid

<sup>7</sup> Not available in 347V, 480V or 347-480V

<sup>8</sup> Recommended for installations within 750 feet from coast. Lead time varies, check with factory.

<sup>9</sup> Not available with DALI "U" option

<sup>10</sup> Forward throw distribution. Classifies as Type III for lumen codes 23-32. Review IES curve for application.

### SUGGESTED HID REPLACEMENT

Approximately 21,500 -32,000 lumens to replace 400W HPS Cobra-head

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

LUMEN OUTPUT	DIST.	TYPICAL INITIAL LUMENS			WATTAGE		BUG RATINGS		
		5000K/4000K	3000K	2700K	120V 277V	347V 480V	5000K/4000K	3000K	2700K
16	A5	16000	15300	14200	114	B3-U0-G3	B3-U0-G3	B3-U0-G3	
	B5					B3-U0-G3	B3-U0-G3	B2-U0-G2	
	C5					B2-U0-G3	B2-U0-G3	B2-U0-G3	
	D5					B2-U0-G3	B2-U0-G3	B2-U0-G2	
	E5					B3-U0-G3	B3-U0-G3	B3-U0-G3	
18	A5	18000	17200	16000	130	B3-U0-G3	B3-U0-G3	B3-U0-G3	
	B5					B3-U0-G3	B3-U0-G3	B3-U0-G3	
	C5					B3-U0-G3	B2-U0-G3	B2-U0-G3	
	D5					B2-U0-G3	B2-U0-G3	B2-U0-G3	
	E5					B3-U0-G3	B3-U0-G3	B3-U0-G3	
19	A5	19000	18200	16900	140	B3-U0-G3	B3-U0-G3	B3-U0-G3	
	B5					B3-U0-G3	B3-U0-G3	B3-U0-G3	
	C5					B3-U0-G3	B3-U0-G3	B2-U0-G3	
	D5					B2-U0-G3	B2-U0-G3	B2-U0-G3	
	E5					B3-U0-G3	B3-U0-G3	B3-U0-G3	
21	A5	21000	20100	18600	160	B3-U0-G3	B3-U0-G3	B3-U0-G3	
	B5					B3-U0-G3	B3-U0-G3	B3-U0-G3	
	C5					B3-U0-G3	B3-U0-G3	B3-U0-G3	
	D5					B2-U0-G3	B2-U0-G3	B2-U0-G3	
	E5					B3-U0-G3	B3-U0-G3	B3-U0-G3	
23	A5	23000	22000	21300	177	B3-U0-G3	B3-U0-G3	B3-U0-G3	
	B5					B3-U0-G3	B3-U0-G3	B3-U0-G3	
	C5					B3-U0-G4	B3-U0-G4	B3-U0-G3	
	D5					B2-U0-G3	B2-U0-G3	B2-U0-G3	
	E5					B3-U0-G3	B3-U0-G3	B3-U0-G3	
25	A5	25000	24000	23200	191	B3-U0-G3	B3-U0-G3	B3-U0-G3	
	B5					B3-U0-G3	B3-U0-G3	B3-U0-G3	
	C5					B3-U0-G4	B3-U0-G4	B3-U0-G4	
	D5					B2-U0-G4	B2-U0-G4	B2-U0-G3	
	E5					B4-U0-G4	B4-U0-G4	B4-U0-G4	

For additional information on ERL2 IES files, please click one of the following links:

[Non-Shielded](#)

[Shielded](#)

LUMEN OUTPUT	DIST.	TYPICAL INITIAL LUMENS			WATTAGE		BUG RATINGS		
		5000K/4000K	3000K	2700K	120V 277V	347V 480V	5000K/4000K	3000K	2700K
27	A5	27000	25900	25100	212	B4-U0-G4	B4-U0-G4	B3-U0-G3	
	B5					B3-U0-G3	B3-U0-G3		
	C5					B3-U0-G4	B3-U0-G4		
	D5					B2-U0-G4	B2-U0-G4		
	E5					B4-U0-G4	B4-U0-G4		
28	A5	28000	26800	26000	223	B4-U0-G4	B4-U0-G4	B4-U0-G4	
	B5					B3-U0-G4	B3-U0-G3		
	C5					B3-U0-G4	B3-U0-G4		
	D5					B3-U0-G4	B2-U0-G4		
	E5					B4-U0-G4	B4-U0-G4		
30	A5	30000	28800	27900	242	B4-U0-G4	B4-U0-G4	B4-U0-G4	
	B5					B3-U0-G4	B3-U0-G4		
	C5					B3-U0-G4	B3-U0-G4		
	D5					B3-U0-G4	B3-U0-G4		
	E5					B4-U0-G4	B4-U0-G4		
31	A5	31000	29700	28800	252	B4-U0-G4	B4-U0-G4	B4-U0-G4	
	B5					B3-U0-G4	B3-U0-G4		
	C5					B3-U0-G4	B3-U0-G4		
	D5					B3-U0-G4	B3-U0-G4		
	E5					B4-U0-G4	B4-U0-G4		
32	A5	32000	30700	29700	265	B4-U0-G4	B4-U0-G4	B4-U0-G4	
	B5					B3-U0-G4	B3-U0-G4		
	C5					B3-U0-G4	B3-U0-G4		
	D5					B3-U0-G4	B3-U0-G4		
	E5					B4-U0-G4	B4-U0-G4		

For additional information on ERL2 IES files, please click one of the following links:

[Non-Shielded](#)

[Shielded](#)

## ERL2 Cobra Head

### LED Roadway Lighting

#### Photometric Plots

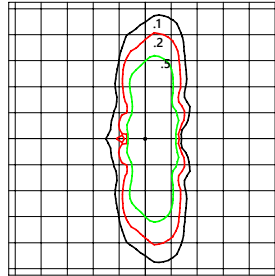
Project Name \_\_\_\_\_

Date \_\_\_\_\_ Type \_\_\_\_\_

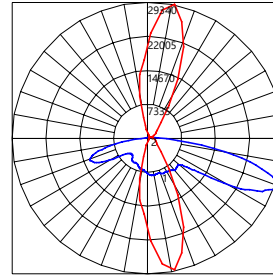
Notes \_\_\_\_\_

**ERL2**  
**Type II Narrow**

32,000 Lumens  
5000K  
ERL2\_32A550\_\_\_\_.IES



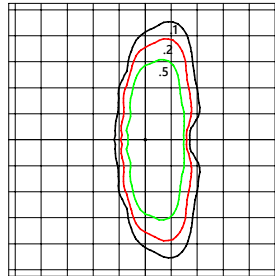
- Mounting Height at 30'
- Initial Footcandle at Grade



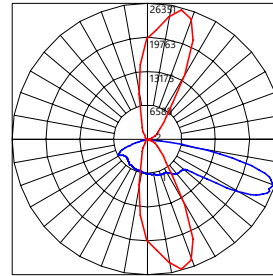
- Vertical plane at max Cd horiz. angle 80°
- Horizontal cone at max Cd vert. angle 68°

**ERL2**  
**Type II Wide**

32,000 Lumens  
5000K  
ERL2\_32B550\_\_\_\_.IES



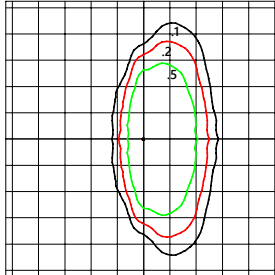
- Mounting Height at 30'
- Initial Footcandle at Grade



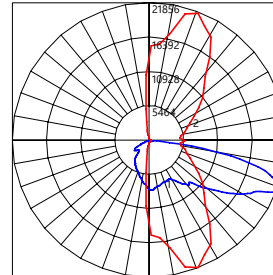
- Vertical plane at max Cd horiz. angle 75°
- Horizontal cone at max Cd vert. angle 70°

**ERL2**  
**Type III**

32,000 Lumens  
5000K  
ERL2\_32C550\_\_\_\_.IES



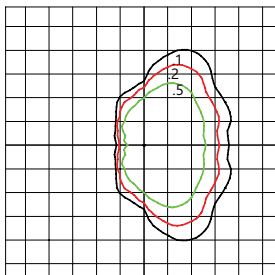
- Mounting Height at 30'
- Initial Footcandle at Grade



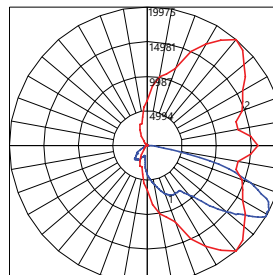
- Vertical plane at max Cd horiz. angle 70°
- Horizontal cone at max Cd vert. angle 70°

**ERL2**  
**Type III (FWT)**

32,000 Lumens  
5000K  
ERL2\_32D550\_\_\_\_.IES  
Forward Throw



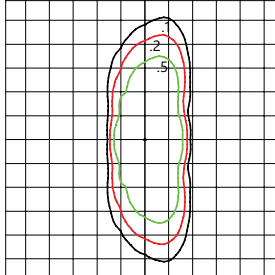
- Mounting Height at 30'
- Initial Footcandle at Grade



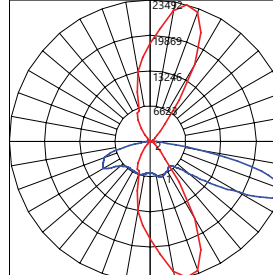
- Vertical plane at max Cd horiz. angle 50°
- Horizontal cone at max Cd vert. angle 59°

**ERL2**  
**Type II Medium**

32,000 Lumens  
5000K  
ERL2\_32E550\_\_\_\_.IES

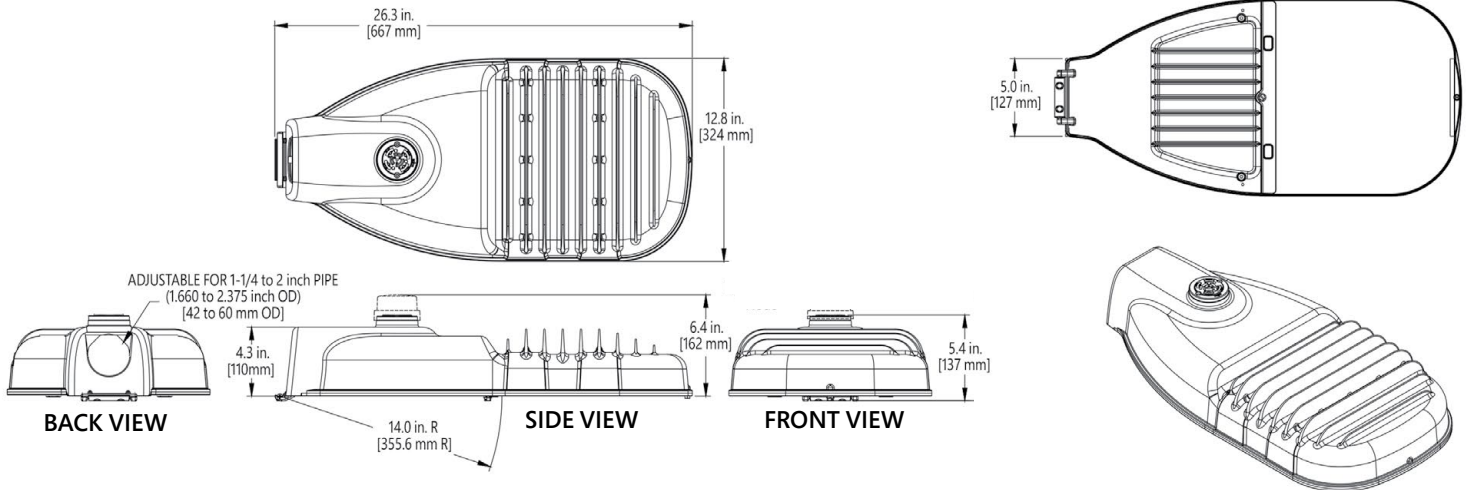


- Mounting Height at 30'
- Initial Footcandle at Grade



- Vertical plane at max Cd horiz. angle 75°
- Horizontal cone at max Cd vert. angle 67°

ISO illuminate diagrams and polar plots are representative of the SKUs illustrated.  
Refer to IES files for SKU specific information.



### MOUNTING

- Adjustable for 1.25 to 2 in. nominal mounting pipe (1.660 to 2.375 inch OD)
- Integral diecast mounting pipe stop
- Slipfitter with +/- 5 degrees of leveling adjustment

### EFFECTIVE PROJECTED AREA

- 0.57 sq ft max (0.053 sq m)

### WEIGHT

- 24.0 lbs (10.9 kgs)

### ACCESSORIES

SAP Number	Part Number	Description
93029237	PED-MV-LED-7	ANSI C136.41 Dimming PE, 120-277V
93029238	PED-347-LED-7	ANSI C136.41 Dimming PE, 347V
93029239	PED-480-LED-7	ANSI C136.41 Dimming PE, 480V
28299	PECOTL	Long Life PE 120-277V
93147530	PECHTL	Long Life PE 347-480V
73251	SCCL-PECTL	Shorting Cap

### NETWORK LIGHTING CONTROLS

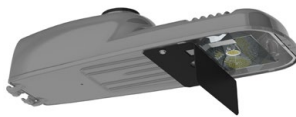


Current's **LightGrid™** Outdoor Lighting Control System is designed for Street and Roadway Applications. It enables remote monitoring, control, and asset management of a single fixture or a group of fixtures through a web enabled Central Management System.

## HOUSE SIDE SHIELDS

### ERLC SHIELDS

Product Code:	93110037	Description:	ELSHS-ERLC-BLCK
Product Code:	93110038	Description:	ELSHS-ERLC-GRAY



### ERL1 SHIELDS

Product Code:	93024487	Description:	ELSHS-ERL1-BLCK
Product Code:	93046386	Description:	ELSHS-ERL1-GRAY
Product Code:	93068998	Description:	ELSHS-ERL1-DKBZ



### ERL2 SHIELDS

Product Code:	93070722	Description:	ELSHS-ERL2-BLCK
Product Code:	93085564	Description:	ELSHS-ERL2-GRAY
Product Code:	93096747	Description:	ELSHS-ERL2-DKBZ



## STREET SIDE SHIELDS

### ERLC SHIELDS

Product Code:	93132372	Description:	ELSFS-ERLC-BLCK-10
Product Code:	93132373	Description:	ELSFS-ERLC-BLCK-15
Product Code:	93134760	Description:	ELSFS-ERLC-BLCK-20



### ERL1 SHIELDS

Product Code:	93092595	Description:	ELSFS-ERL1-BLCK-10
Product Code:	93108740	Description:	ELSFS-ERL1-GRAY-10
Product Code:	93092906	Description:	ELSFS-ERL1-BLCK-15
Product Code:	93105144	Description:	ELSFS-ERL1-GRAY-15
Product Code:	93088130	Description:	ELSFS-ERL1-BLCK-20
Product Code:	93088131	Description:	ELSFS-ERL1-GRAY-20



### ERL2 SHIELDS


Product Code:	93132955	Description:	ELSFS-ERL2-BLCK-20
Product Code:	93132986	Description:	ELSFS-ERL2-GRAY-20




## SIDE SHIELDS (L&R)

Shipped as a kit - L & R can be used independently

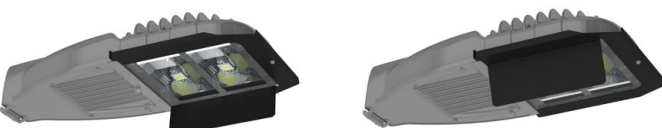
### ERLC SHIELDS

Product Code:	93132374	Description:	ELS-ERLC-LEFTRIGHTSIDEKIT-BLCK-10
			

### ERL1 SHIELDS

Product Code:	93118695	Description:	ELS-ERL1H-LEFTRIGHTSIDEKIT-BLCK-10
			

### ERL2 SHIELDS

Product Code:	93132989	Description:	ELS-ERL2-LEFTRIGHTSIDEKIT-BLCK-10
			

#### FOOTNOTES:

- 1) 10 = 1" Shield Depth; 15 = 1.5" Shield Depth; 20 = 2" Shield Depth
- 2) Black is recommended to reduce potential for glare coming off of the shield
- 3) Use "House Side" Shield to block light trespass behind the pole
- 4) Use "Street Side" / Front Shield to block light trespass across the street