

Evolve™ LED Roadway Lighting

LED Roadway Luminaire (ERS1-ERS2)



Product Features

The Evolve™ LED Roadway Luminaire is optimised for customers requiring a LED solution for local, collector and major roadways. GE's unique reflective optics are designed to optimise application efficiency and minimise 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.
- Material complies with SA/SNZ TS 1158.6:2015.

LED & Optical Assembly

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

Lumen Maintenance

- Lumen Maintenance per TM21.

Ratings

- Optical enclosure rated IP66.
- IP44 control chamber, IP66 driver.
- Upward Light Output Ratio (ULOR) = 0.
- Compliant with the material restriction requirements of RoHS.

Mounting

- Slipfitter with +/- 5 degree of adjustment for leveling.
- Horizontal entrance: 42mm-60mm.

Finish

- Corrosion resistant polyester powder paint, minimum 2.0 mil. thickness.
- Standard color: Silver Gray.
- RAL & custom colors available on request.

Electrical

- 120-277 VAC.
- System power factor is >90% and THD <20%.*
- 0-10V dimming.
- Surge Protection 6KV.
- EMC: CISPR15.
- ANSI C136.41-7-pin dimming receptacle with shorting cap.

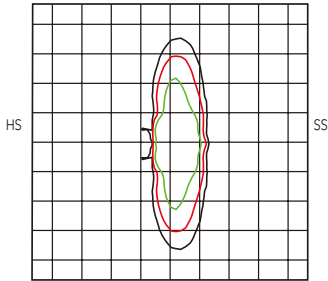
Product ID	Wattage	Ambient Rating
ERS1	108	-40°C to 50°C
ERS2	157-219	-40°C to 50°C
ERS2	275	-40°C to 40°C

Delayed start may be experienced <-35°C.

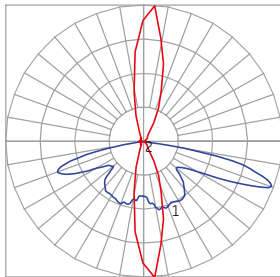
Photometrics

Evolve™ LED Streetlight (ERS1)

ERS1
Extra Narrow Asymmetric
(11A1)

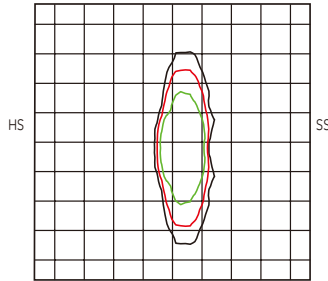


Grid Distance in Units of Mounting Height at 9m Initial lux Values at Grade

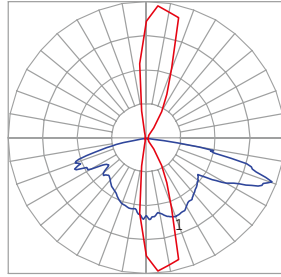


- Vertical plane through horizontal angle of maximum candela at 85°
- Vertical plane through horizontal angle of 71°

ERS1
Narrow Asymmetric (Medium)
(11B1)

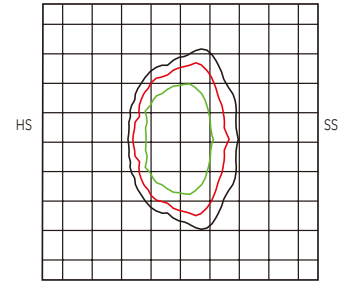


Grid Distance in Units of Mounting Height at 9m Initial lux Values at Grade

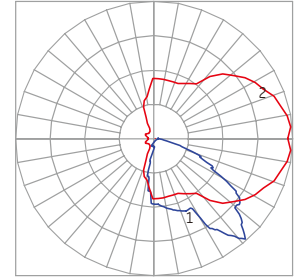


- Vertical plane through horizontal angle of maximum candela at 85°
- Vertical plane through horizontal angle of 71°

ERS1
Asymmetric Forward
(11D1)

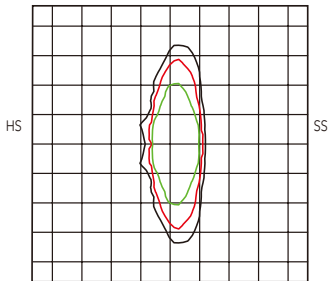


Grid Distance in Units of Mounting Height at 9m Initial lux Values at Grade

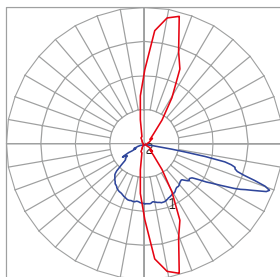


- Vertical plane through horizontal angle of maximum candela at 5°
- Vertical plane through horizontal angle of 41°

ERS1
Asymmetric Medium
(11E1)



Grid Distance in Units of Mounting Height at 9m Initial lux Values at Grade

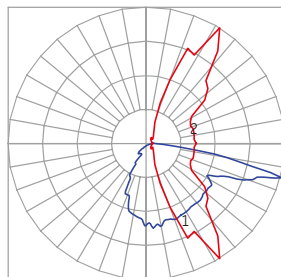


- Vertical plane through horizontal angle of maximum candela at 75°
- Vertical plane through horizontal angle of 70°

ERS1
Asymmetric Wide
(11F1)

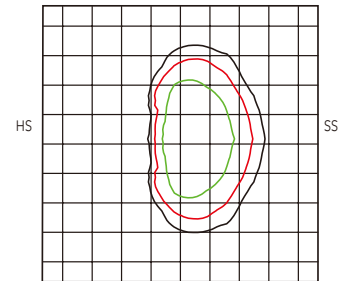


Grid Distance in Units of Mounting Height at 9m Initial lux Values at Grade

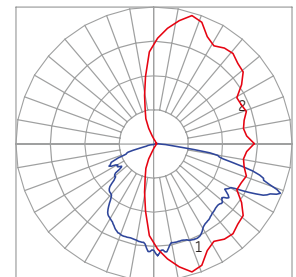


- Vertical plane through horizontal angle of maximum candela at 60°
- Vertical plane through horizontal angle of 75°

ERS1
Asymmetric Extra Wide
(11G1)



Grid Distance in Units of Mounting Height at 9m Initial lux Values at Grade

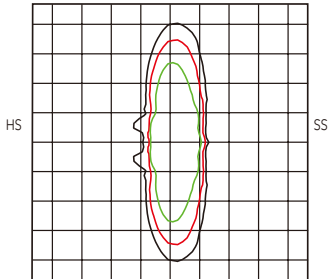


- Vertical plane through horizontal angle of maximum candela at 75°
- Vertical plane through horizontal angle of 68°

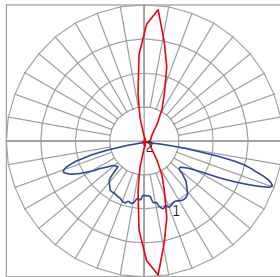
Photometrics

Evolve™ LED Streetlight (ERS2)

**ERS2
Extra Narrow Asymmetric
(27A1)**

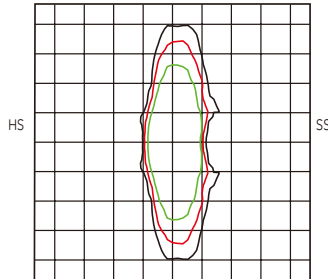


Grid Distance in Units of Mounting Height at 9m Initial lux Values at Grade

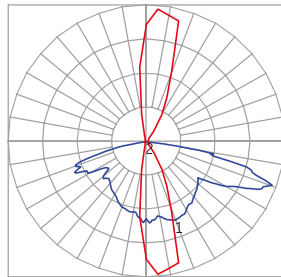


- Vertical plane through horizontal angle of maximum candela at 85°
- Vertical plane through horizontal angle of 71°

**ERS2
Narrow Asymmetric (Medium)
(27B1)**

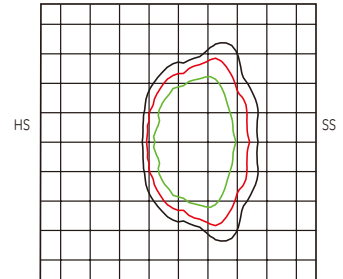


Grid Distance in Units of Mounting Height at 9m Initial lux Values at Grade

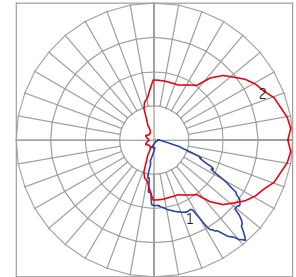


- Vertical plane through horizontal angle of maximum candela at 85°
- Vertical plane through horizontal angle of 71°

**ERS2
Asymmetric Forward
(27D1)**

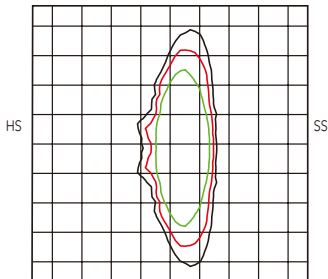


Grid Distance in Units of Mounting Height at 9m Initial lux Values at Grade

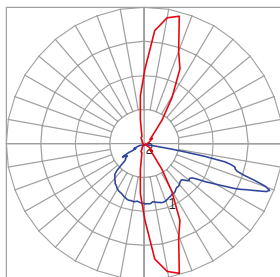


- Vertical plane through horizontal angle of maximum candela at 5°
- Vertical plane through horizontal angle of 41°

**ERS2
Asymmetric Medium
(27E1)**

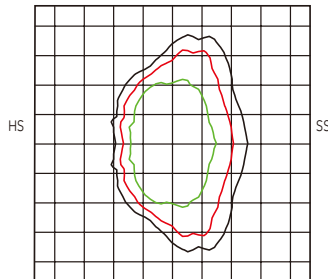


Grid Distance in Units of Mounting Height at 9m Initial lux Values at Grade

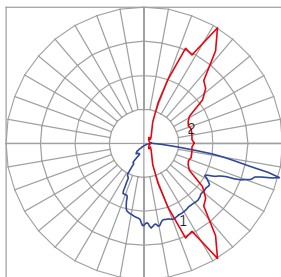


- Vertical plane through horizontal angle of maximum candela at 75°
- Vertical plane through horizontal angle of 70°

**ERS2
Asymmetric Wide
(27F1)**

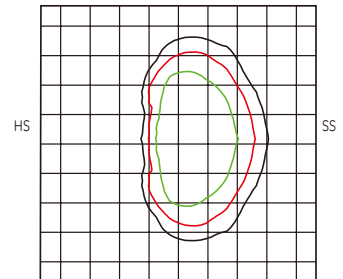


Grid Distance in Units of Mounting Height at 9m Initial lux Values at Grade

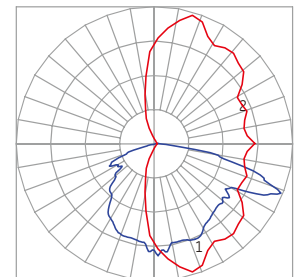


- Vertical plane through horizontal angle of maximum candela at 60°
- Vertical plane through horizontal angle of 75°

**ERS2
Asymmetric Extra Wide
(27G1)**



Grid Distance in Units of Mounting Height at 9m Initial lux Values at Grade



- Vertical plane through horizontal angle of maximum candela at 75°
- Vertical plane through horizontal angle of 68°

Ordering Number Logic

Evolve™ LED Streetlight (ERS1&ERS2)



E R S 1 U S1 C 108W A SG A

PRODUCT ID	MODULE NUMBER	VOLTAGE	DISTRIBUTION	CCT	SYS WATTAGE	LPW	FINISHING COLOR	control
E=LED Product R=Roadway S=Systems	1= 1 MODULE 2= 2 MODULE	U = 120V-277V (50-60Hz)	S1= Extra Narrow Asymmetric S3= Narrow Asymmetric Medium S2= Asymmetric Short S4= Asymmetric Forward S5= Asymmetric Medium S6= Asymmetric Wide S7= Asymmetric Extra Wide	CR=5700K N=4000K W=3000K	108w 157w 219w 275w	A = lm/W (95-105) B = lm/W (105-115) C = lm/W (115-125) D = lm/W(125-135)	SG=RAL9007 WH=RAL9003 GB=RAL5010 DB=RAL8022	A = ANSI C136.41 7-pin receptacle with Shorting Cap

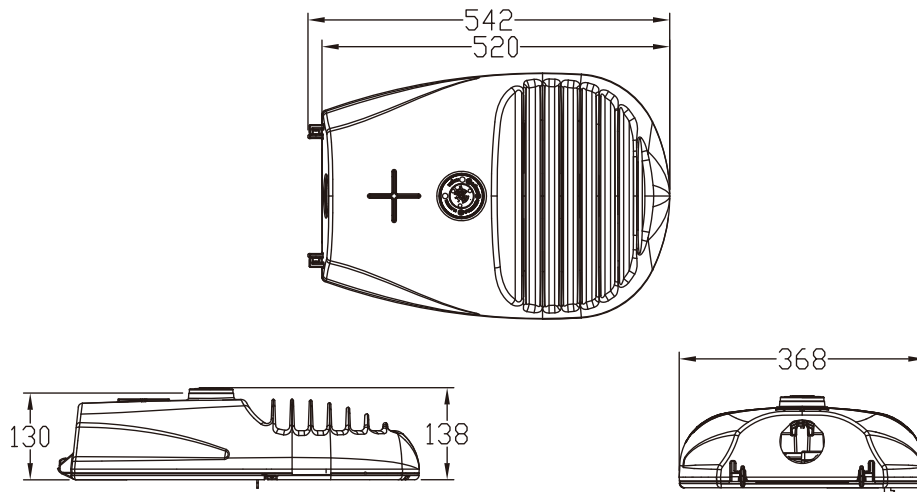


SKU	Model number	Power(W)	Voltage	Power Factor	Reflector Type	Distribution	Lumen (lm)	CCT	Lifetime	Dimming
69264	ERS1US1N108WASGA	108	120V-277V	0.95	A1	S1	10900	4000K	100,000 hours	0-10V
76966	ERS1US3N108WASGA	108	120V-277V	0.95	B1	S3	11200	4000K	100,000 hours	0-10V
77424	ERS1US4N108WASGA	108	120V-277V	0.95	D1	S4	11200	4000K	100,000 hours	0-10V
69265	ERS1US5N108WBSGA	108	120V-277V	0.95	E1	S5	11500	4000K	100,000 hours	0-10V
76997	ERS1US6N108WBSGA	108	120V-277V	0.95	F1	S6	11500	4000K	100,000 hours	0-10V
69266	ERS1US7N108WBSGA	108	120V-277V	0.95	G1	S7	11500	4000K	100,000 hours	0-10V
69267	ERS2US1N157WBSGA	157	120V-277V	0.95	A1	S1	17100	4000K	100,000 hours	0-10V
69288	ERS2US3N157WBSGA	157	120V-277V	0.95	B1	S3	17600	4000K	100,000 hours	0-10V
69290	ERS2US4N157WBSGA	157	120V-277V	0.95	D1	S4	17600	4000K	100,000 hours	0-10V
69289	ERS2US5N157WBSGA	157	120V-277V	0.95	E1	S5	18000	4000K	100,000 hours	0-10V
69291	ERS2US6N157WBSGA	157	120V-277V	0.95	F1	S6	18000	4000K	100,000 hours	0-10V
69292	ERS2US7N157WBSGA	157	120V-277V	0.95	G1	S7	18000	4000K	100,000 hours	0-10V
77043	ERS2US1N219WASGA	219	120V-277V	0.95	A1	S1	21900	4000K	100,000 hours	0-10V
69295	ERS2US3N219WASGA	219	120V-277V	0.95	B1	S3	22500	4000K	100,000 hours	0-10V
77045	ERS2US4N219WASGA	219	120V-277V	0.95	D1	S4	22500	4000K	100,000 hours	0-10V
69296	ERS2US5N219WASGA	219	120V-277V	0.95	E1	S5	23000	4000K	100,000 hours	0-10V
77072	ERS2US6N219WASGA	219	120V-277V	0.95	F1	S6	23000	4000K	100,000 hours	0-10V
77076	ERS2US7N219WASGA	219	120V-277V	0.95	G1	S7	23000	4000K	100,000 hours	0-10V
69298	ERS2US1N275WASGA	275	120V-277V	0.95	A1	S1	25700	4000K	100,000 hours	0-10V
69299	ERS2US3N275WASGA	275	120V-277V	0.95	B1	S3	26500	4000K	100,000 hours	0-10V
77077	ERS2US4N275WASGA	275	120V-277V	0.95	D1	S4	26500	4000K	100,000 hours	0-10V
69300	ERS2US5N275WASGA	275	120V-277V	0.95	E1	S5	27000	4000K	100,000 hours	0-10V
77326	ERS2US6N275WASGA	275	120V-277V	0.95	F1	S6	27000	4000K	100,000 hours	0-10V
77363	ERS2US7N275WASGA	275	120V-277V	0.95	G1	S7	27000	4000K	100,000 hours	0-10V

* SKU details for additional options can be supplied on request.

Product Dimensions

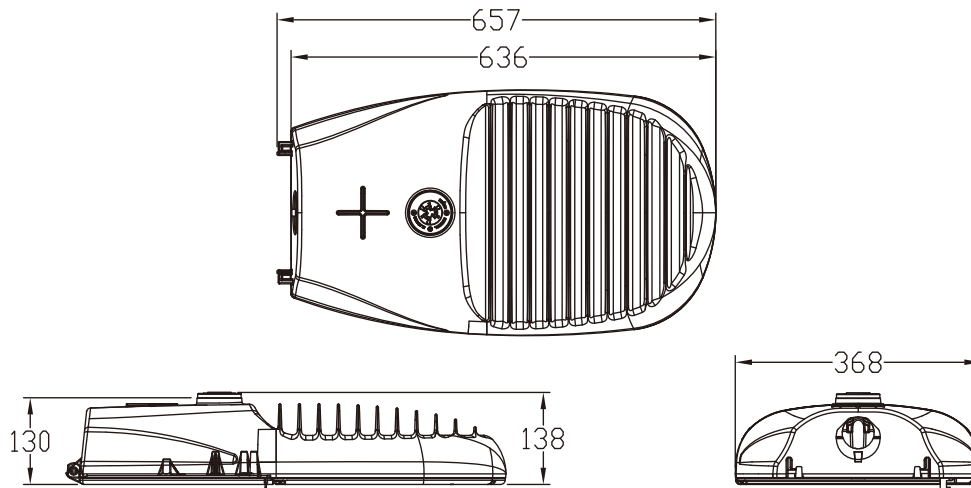
Evolve™ LED Streetlight (ERS1)



DATA

- Approximate net weight: 9.1 kgs to 11.4 kgs
- Effective Projected Area (EPA): 0.046 sq m

Evolve™ LED Streetlight (ERS2)



DATA

- Approximate net weight: 11.4 kgs to 13.2 kgs
- Effective Projected Area (EPA): 0.065 sq m