

Date: _____ Customer: _____
 Project: _____
 Type: _____ Qty: _____



Ritorno Round Asymmetrical LED



Order Code: RRAL - _____ - _____ - _____ - _____ - _____ - _____

<u>RRAL</u>	Series	RRAL Ritorno Round Asymmetrical LED				
_____	Mounting	1 Single	W Wall Mount			
_____	Height	RP10 10 ft.	RP12 12 ft.	RP14 14 ft.	RP16 16 ft.	
_____	Light Engine	2G350 350 mA/43W	2G500 500 mA/59W	2G700 700 mA/84W	2G900 900 mA/109W	2G105 1050 mA/123W
_____	CCT	30 3000K	40 4000K	*For other CCT please consult factory		
_____	Finish	WH White	BK Black	BL Semi-Matte Black	BZ Bronze	SV Silver
_____	Voltage	120	208	277	347*	480* *Equipped with step-down transformer
_____	Options	DM Dimming (0-10V)	HLxx ¹ Hi-Lo Switching	REC GFCI Receptacle with weather- proof cover	REC2 GFCI Receptacle with padlockable in-use cover	¹ 120V, 240V, & 277V only ² See p. 6 for details
		REC3 USB & Duplex Receptacle with weather- proof cover	REC4 USB & Duplex Receptacle with weather- proof padlockable in-use cover			

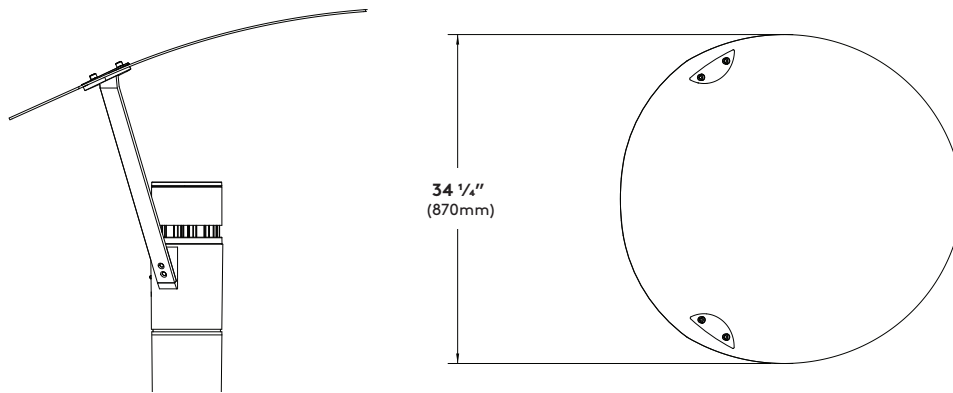
Product Modifications

Please list modification requirements for review by factory:

Approvals



Date: _____



Specifications

Reflective Shade - 34 1/4" x 34 1/4" (870mm x 870mm) minimum 3/16" (4.7mm) thick aluminum reflector shade painted white for maximum reflectivity. Supplied with drip groove around perimeter, to prevent rain marks on underside. Shade attached to fixture arms with low profile stainless steel hardware.

Fixture Arms - Two natural, marine grade stainless steel with bead-blasted finish, rigidly attach reflector shade to pole fitter.

Housing Cover - Heat-tempered flat glass lens protects LED light engine assembly. Continuous die cut silicone gasket creates sealed optic chamber for weatherproofing, dust and insect control. Lens retainer can be removed for servicing. Five stainless steel socket head cap screws secure retainer in place.

LED Light Engine - High efficacy LED light engine with reported 60,000+ hour life until L70. Available with 3000K or 4000K CCT and a CRI of 80.

Optics - Symmetric reflector and flat glass lens focus lumen output on secondary reflector shade. Secondary reflector shade redirects light for even illumination without shadows.

LED Driver - High Power factor, High Efficiency constant current LED driver. 120-277VAC input. Protection class IP66.

Surge Protection - 3-Pole Surge protection device safeguards electrical components from indirect lightning strikes and surges up to (10kA and 10kV).

Pole Fitter - Die cast aluminum fitter secures fixture arms and reflective shade to pole. Tapered to continue lines from pole.

Pole - Pole to be aluminum and taper from 5" diameter at the bottom to 7" diameter at the top. Pole wall thickness to be minimum 0.156" thick, supplied with 3" x 5" hand hole, with cast 356 aluminum tempered to T6 condition reinforced frame, with integral ground lug connection and gasketed flush fitting door.

Base Cover - Standard two-piece base cover is made from die cast 356 alloy aluminum which is heat treated to produce a T6 temper, measuring 4 1/2" (115mm) height by 12 1/2" (316mm) diameter.

Hi-Lo Switching Option - Please see options page for details.

Power Cord - Pre-installed at factory. Please specify power cord length in accordance to height of the pole. Add 2 feet to power cord length if double mounting (2) is specified.

Exterior Luminaire Finish - Selux utilizes a high quality Polyester Powder Coating. All Selux luminaires and poles are finished in our Tiger Drylac certified facility and undergo a five stage intensive pretreatment process where product is thoroughly cleaned, phosphated and sealed. Selux powder coated products provide excellent salt and humidity resistance as well as ultraviolet resistance for color retention. All products are tested in accordance with test specifications for coatings from ASTM and PCI.

Standard exterior colors are White (WH), Black (BK), Semi-Matte Black (BL), Bronze (BZ), and Silver (SV). Selux premium colors (SP) are available, please specify from your Selux color selection guide.

5 Year Limited LED Luminaire Warranty

- Selux offers a 5 Year Limited Warranty to the original purchaser that the Ritorno LED luminaire shall be free from defects in material and workmanship for up to five (5) years from date of shipment. This limited warranty covers the LED driver and LED array when installed and operated according to Selux instructions. For details, see "Selux Terms and Condition of Sale."

Listings and Ratings: Luminaire and LED tested to IP65 and IESNA LM-79-08 standards. LED tested to LM-80 standards. Luminaire and LED tested at 25°C ambient temperature.

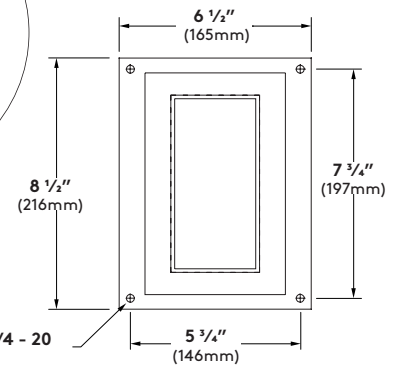
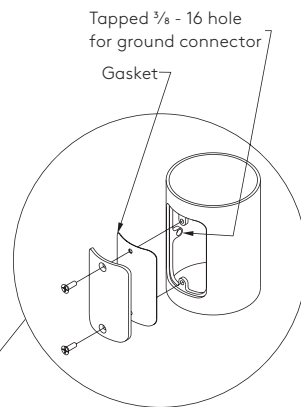
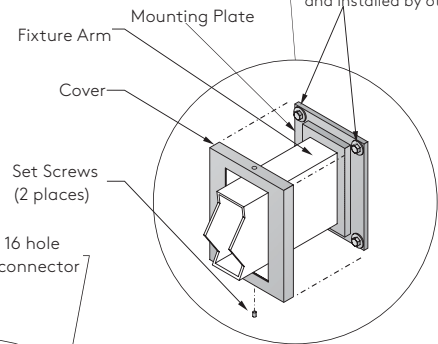
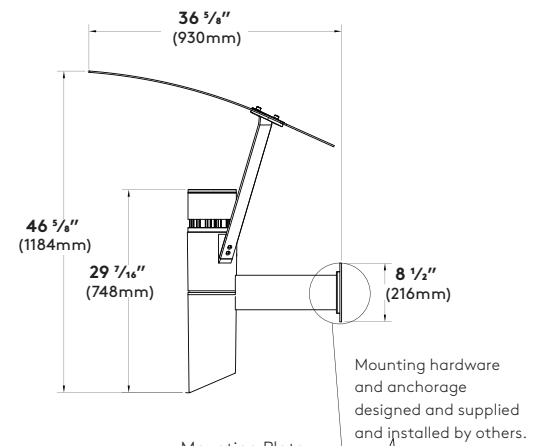
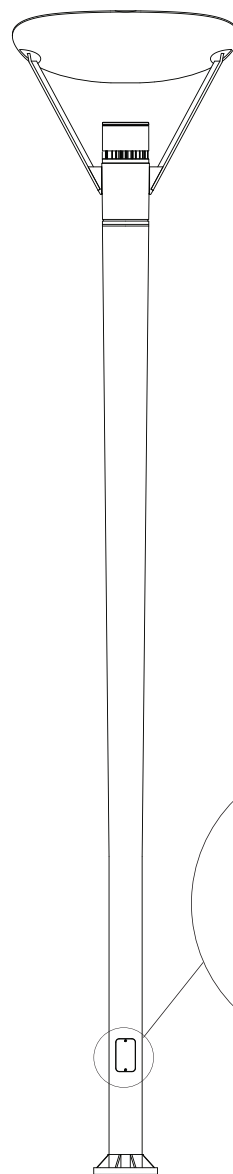
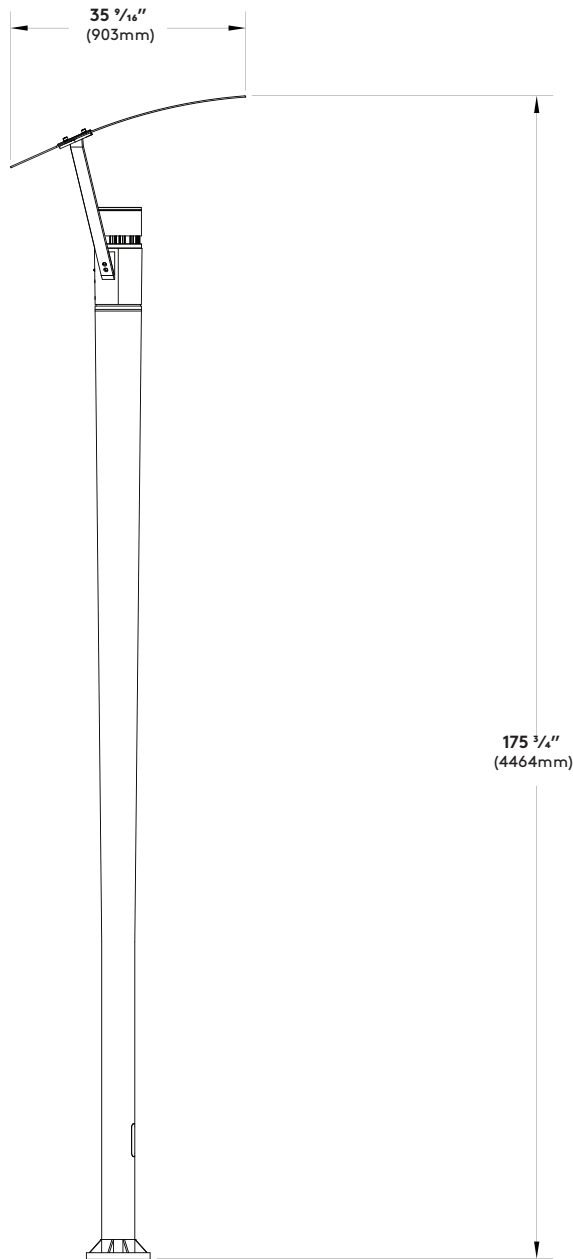
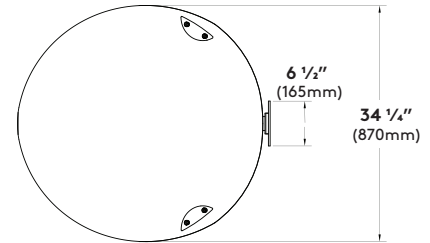
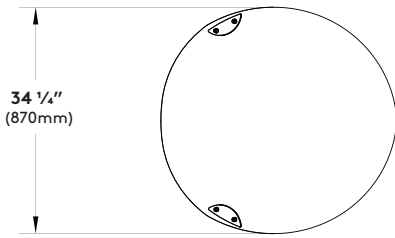
NRTL Listed (i.e. UL, CSA)

Visit selux.us for our LED End of Life recycling policy.

Mounting

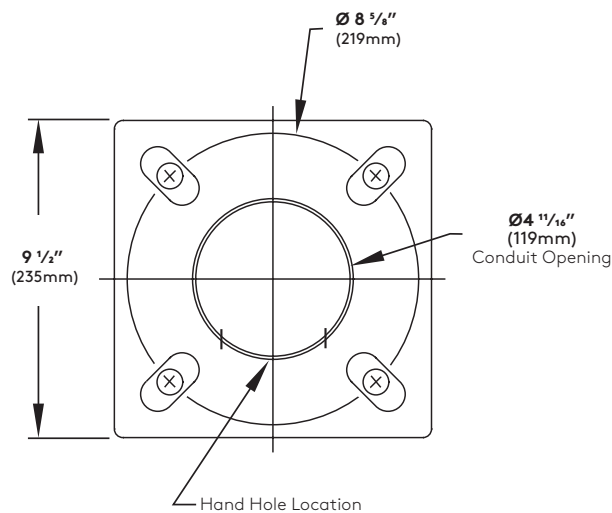
Single (1)

Wall (W)

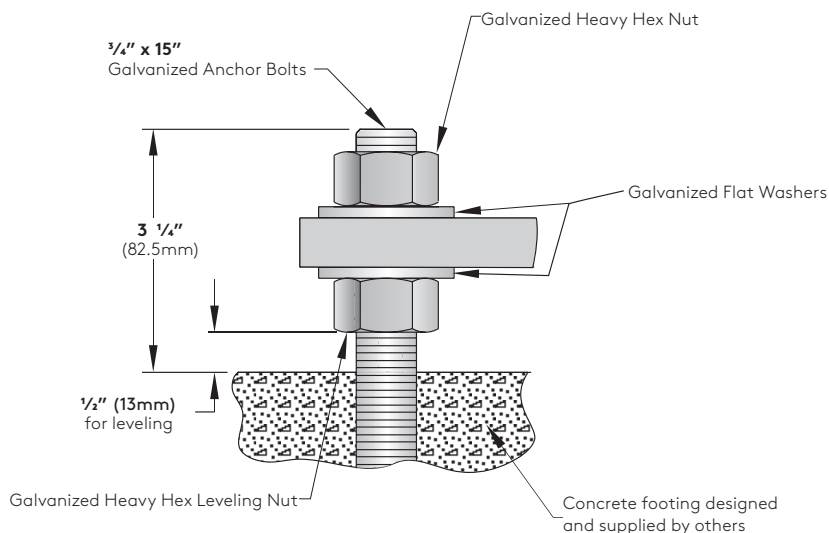


Bolt Circle

Use caution when setting anchor bolts. Bolts must be vertically straight and centered on dimensions shown.



Anchor Bolt Detail

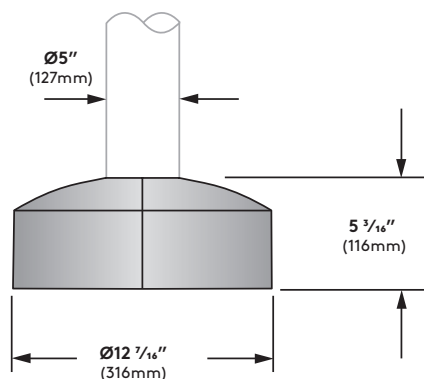


Base Cover Information

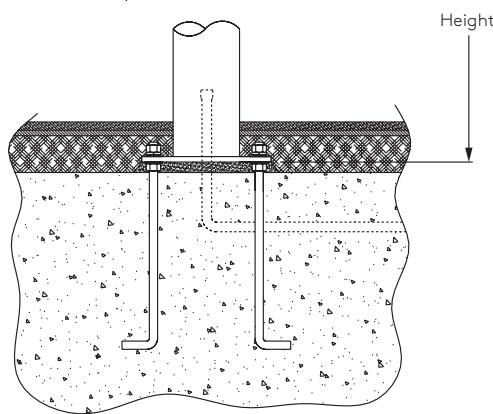
Refer to pole specification sheets for construction details, anchorage information, and additional options.

Standard Base Cover (BC3)

Die cast-aluminum, two-piece field installable base cover.



Alternate Mounting Detail



Ritorno Reverse Taper Pole (5" to 7")

EPA values calculated as per AASHTO LTS4 2001, to include fixture. Consult factory for heights other than 12'.

Pole Height	Wind Speed					
	70mph	80mph	90mph	100mph	110mph	120mph
10'	16.70	12.34	9.31	7.19	5.62	4.42
12'	13.60	9.86	7.27	5.46		
14'	10.13	7.06	5.02			
16'	8.25	5.53				

All Poles are constructed per AASHTO standards for structural supports for highway signs, luminaires, and traffic signals as published in 1975, amended and adopted in 1985 and 1994.

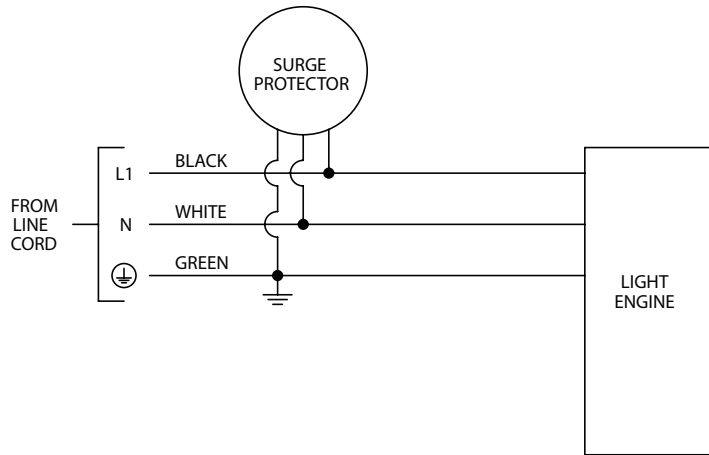
A consideration of field conditions such as (but not limited to) wind zone, height, vibration must be given by the designer/specifier for the appropriate application.

Performance of poles is dependant upon proper support/ attachment of pole to adequate foundation design. Selux does not design or offer recommendations for foundations. EPA values assume that the bottom of the pole is at grade level.

Call Selux (1-800-SELUXCS) if there are any questions, or for any assistance in determining suitability with appropriate fixtures.

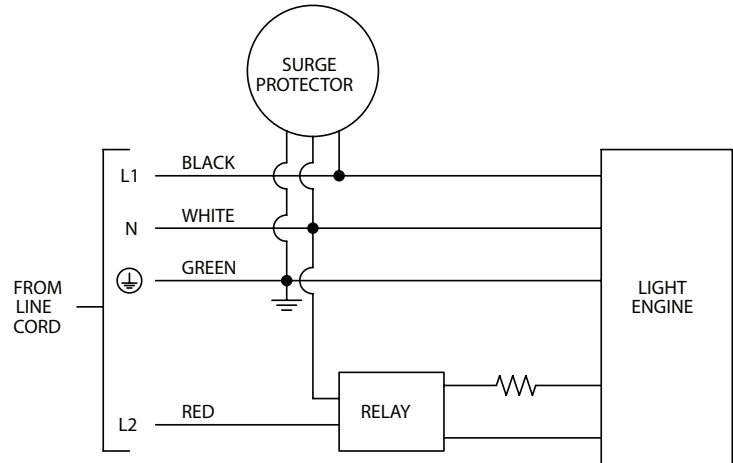
Wiring

Standard Single Wiring



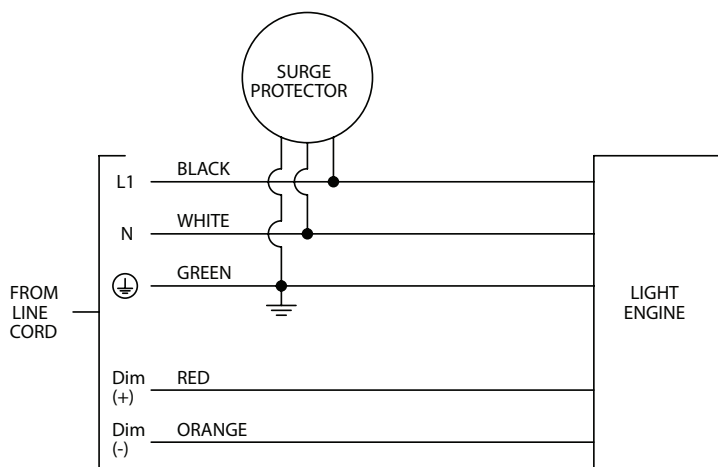
Hi-Lo Switching Option (HL) Wiring

2G350, 2G500, 2G700, 2G105, 120V, 240V, 277V. When red is energized, light output will be at "Lo" level. Standard HL level: HL50 = low output 50%

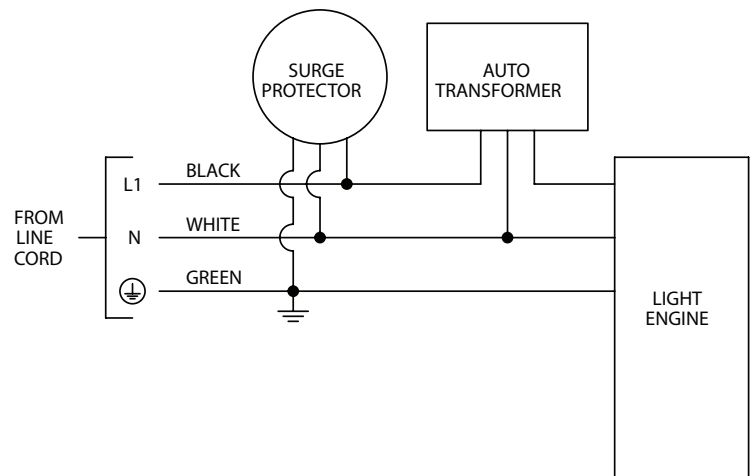


0-10V Dimming Option (DM) Wiring

2G350, 2G500, 2G700, 2G105, 120-277V
(347V and 480V available with step-down transformer)

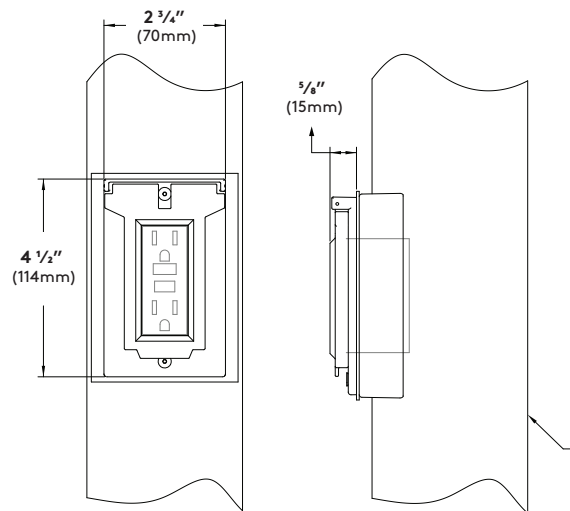


347/480 V



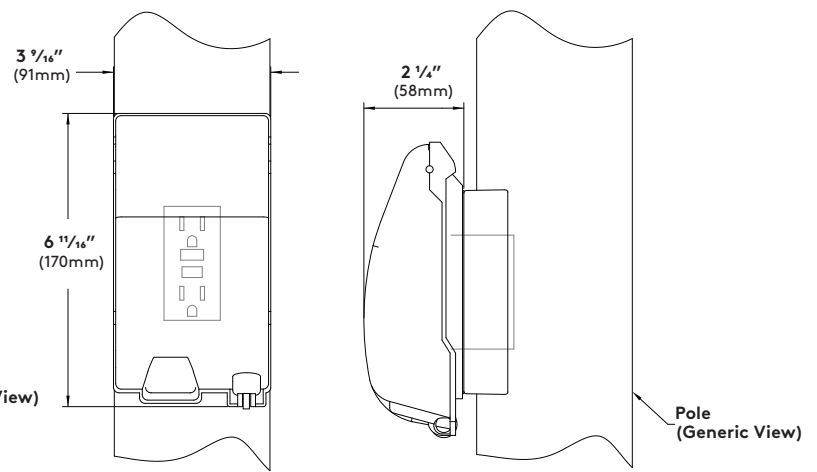
Optional Accessories

GFCI Receptacle (REC) - 120V 15A GFCI duplex receptacle with weather-proof, self-closing cover; located 36" (915mm) from base of pole, inline with handhole. Receptacle is intended only for portable tools or other portable equipment to be connected to outlet only when attended by operating personnel.



Cover shown in the closed position

GFCI Receptacle (REC2) - 120V 15A GFCI duplex receptacle with weather-proof, self-closing, padlockable in-use cover; located 36" (915mm) from base of pole, inline with handhole. Receptacle is intended only for portable tools or other portable equipment to be connected to outlet only when attended by operating personnel.



Cover shown in the closed position

USB & Duplex Receptacle (REC3) (not shown) - 120V 15A duplex receptacle with USB combination ports. (1) type A and (1) type C high power 5 Amp, 5 Volt USB outlets. With weather-proof, self-closing cover; located 36" (915mm) from base of pole, inline with handhole. Receptacle is intended only for portable tools or other portable equipment to be connected to outlet only when attended by operating personnel.

USB & Duplex Receptacle (REC4) (not shown)- 120V 15A duplex receptacle with USB combination ports. (1) type A and (1) type C high power 5 Amp, 5 Volt USB outlets. With weather-proof, self-closing padlockable in-use cover; located 36" (915mm) from base of pole, inline with handhole. Receptacle is intended only for portable tools or other portable equipment to be connected to outlet only when attended by operating personnel.

Conversion Chart Values based on 16' (4.9 m) mounting height	
Mounting Height	Multiply
10' (3.0 m)	1.27
12' (3.7 m)	1.16
14' (4.3 m)	1.07
16' (4.9 m)	1.00
18' (5.5 m)	0.84

LED CCT Prorate Table Values based on Flux Binning	
CCT	Theoretical Multiplier
3000K	1.00
4000K	1.073

Ritorno Round Asymmetric LED Lumen Matrix					
Model#	Watts	Delivered Lumens	Lumens/Watt	Light Engine Multiplier	CCT Multiplier
RRAL-X-RPXX-2G350-30-XX-UNV	43.04	2662	61.8	0.401	3000K CCT Multiplier = 1.00
RRAL-X-RPXX-2G500-30-XX-UNV	58.88	3632	61.7	0.547	
RRAL-X-RPXX-2G700-30-XX-UNV	84.74	4895	57.8	0.738	
RRAL-X-RPXX-2G900-30-XX-UNV	109.10	5958	54.6	0.898	
RRAL-X-RPXX-2G105-30-XX-UNV	123.40	6634	53.8	1.000	
RRAL-X-RPXX-2G350-40-XX-UNV	43.04	2778	64.5	0.401	
RRAL-X-RPXX-2G500-40-XX-UNV	58.88	3790	64.4	0.547	
RRAL-X-RPXX-2G700-40-XX-UNV	84.74	5108	60.3	0.738	
RRAL-X-RPXX-2G900-40-XX-UNV	109.10	6218	57.0	0.898	
RRAL-X-RPXX-2G105-40-XX-UNV	123.40	6923	56.1	1.000	

123W LED / 3000K CCT

Catalog #: RRAL-X-RPXX-2G105-30-XX-UNV
 Delivered Lumens: 6633
 Input Watts: 123.3W
 Efficacy: 54 lm/W
 CCT: 3048K
 CRI (Ra): 81.4
 Maximum candela of 1579 at 45°
 IES classification: Type IV
 Mounting Height: 16' (4.9 m)
 BUG Rating: B1-U5-G3
 Power Factor: 0.994
 Total Harmonic Distortion: 8.69%

