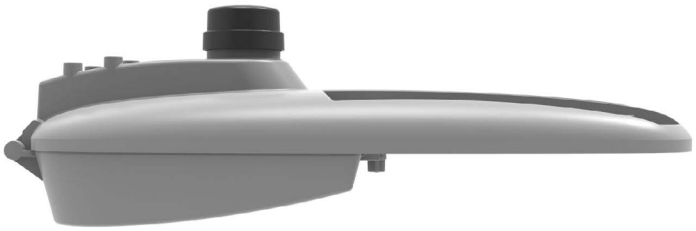
HARRIS LED ROADWAY LIGHTER, GEN 1

RDWL1



RDWL124LUNVFD740GRT3SP

Project Name:	
Catalog Number:	
Type:	
Note:	
Date:	

CERTIFIED | 10 YEAR WARRANTY | ASSEMBLED IN THE USA | IK10 Rated | 3G Vibration Rating | DarkSky Approved Commercial Luminaire | BAA COMPLIANT | IP66 | UL WET RATED

Intended Use

- The RDWL1 is ideal for roadway and municipal lighting projects, providing the reliability, efficiency, and performance required for public infrastructure while reducing energy costs and maintenance requirements.
- The RDWL1 ensures visibility for both motorists and pedestrians by providing reliable illumination at intersections and crossing points.

Construction

- Type II, III light distributions
- 9,000 to 24,000 lumens
- Efficacy up to 172 LPW
- Tool-less access to electrical components for field maintenance and installation
- Anti-corrosion stainless steel hardware
- Heavy duty die-cast aluminum housing for optimal thermal management
- Precision engineered lens made of optical grade polycarbonate for maximum light intensity
- Rated for ambient operating temperature -40°F to 104°F (-40°C to 40°C)
- Breather valve prevents condensation

Electrical

- Available in 120v-277v and 480v
- 10kV/5kA Surge Protection standard
- 20kV/10kA surge protection available
- Power Factor > .90
- Total Harmonic Distortion < 20%
- Terminal Block accommodates #6 to 16 gauge wire
- Lumen output can be adjusted in the field (120-277v only). Factory set to specified lumen code
- Utility Wattage Label available

Controls & Sensor Options

- Standard Factory installed NEMA 7-pin photocell receptacle
- Shorting Cap included

Additional Options

- Bird spike kit options
- Photocontrol options
- House side shield options

Installation

- Universal Four-bolt slip fitter mounts to 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) diameter mast arm
- Mounting has levelling adjustment from -10° to 5°, includes two axis bubble level

Fixture Certifications & Listings

- RoHS Compliant Components
- IK10 Impact Rating
- IP66 Rated
- UL Wet Rated
- 3.0 G Vibration load rating per ANSI C136.31
- Assembled in the U.S.A.
- Internal labeling per ANSI C136.22
- Optional Utility Wattage Label per ANSI C136.15
- DarkSky Compliant. 727 (2700K) or 730 (3000K) must be selected to meet DarkSky International approval criteria

Warranty

- 10 year warranty standard
- See Orion's Product Limited Warranty for more details and information

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HARRIS LED ROADWAY LIGHTER, GEN 1

RDWL1

Ordering Information Example (NOTE: No dashes or spaces unless noted below)

RDWL115LUNVFD740GRT3TS2UWSP

Ordering Information (Enter Selected Catalog Number Below for Factory-Installed Options)

Series	Nominal Lumen Code[1]	Voltage	Driver Type	CRI; CCT	Fixture Color	Light Distribution	Control Options	Standard Factory Installed	Packaging Options
RDWL1= HARRIS LED Roadway Lighter, Gen 1	**09L=** 9,000 lm **12L=** 12,000 lm **15L=** 15,000 lm **18L=** 18,000 lm **21L=** 21,000 lm **24L=** 24,000 lm	**UNV=** 120V-277V **HV=** 480V	**FD=** Full Dimming	**727[2]=** 70CRI; 2700K *DarkSky Approved[3]* **730[2]=** 70CRI; 3000K *DarkSky Approved[3]* **740=** 70CRI; 4000K **750[2]=** 70CRI; 5000K	**GR=** Gray **BR[2]=** Bronze **BL[2]=** Black	**T2[2]=** Type II **T3=** Type III	**(BLANK) =** 7 Pin NEMA Receptacle With Shorting Cap included	**TS2=** 20kV/10kA Surge Protection **UW=** Utility Wattage Label	**SP=** Single Pack

Accessories (Field installed) View our Install Instructions Here

Photo Control Options		
EXT-RDWL-PE3-001	Twist-lock Photocell On/Off, 120- 277v	
EXT-RDWL-PE3-003	Twist-lock Photocell On/Off, 480v	
EXT-RDWL-PE3L-001	Extended Life Twist-lock Photocell On/Off, 120- 277v	
EXT-RDWL-PE3L-003	Extended Life Twist-lock Photocell On/Off, 480V	
Bird Spike Options		
EXT-RDWL-BS	Bird Spike Kit	
Shield Options		
EXT-RDWL-HSS1	House-Side Shield Small (09L -15L)	
EXT-RDWL-HSS2	House-Side Shield Large (18L-24L)	

Additional Specification Information

[1] For actual lumens, see performance table

[2] Special order. Contact your Orion representative for lead times

[3] DarkSky Approved Luminaire should be mounted horizontally

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HARRIS LED ROADWAY LIGHTER, GEN 1

RDWL1

Performance Information[4], 277v, 4000K

Lumen Code	Nominal Lumens	Wattage	Type II			Type III		
			Lumens	LPW	BUG	Lumens	LPW	BUG
09L	9,000	59w	9,267	158	B2-UO-G2	8,961	154	B2-UO-G2
12L	12,000	75w	11,956	160	B3-UO-G2	11,755	156	B3-UO-G3
15L	15,000	100w	15,295	149	B3-UO-G3	14,628	150	B3-UO-G3
18L	18,000	112w	19,263	172	B3-UO-G3	19,040	170	B3-UO-G3
21L	21,000	130w	22,193	171	B3-UO-G3	21,732	168	B3-UO-G3
24L	24,000	149w	24,202	162	B3-UO-G3	24,154	163	B3-UO-G3

2700K - Lumens Scaling Factor	0.84
3000K - Lumens Scaling Factor	0.95
5000K - Lumens Scaling Factor	1.01

Ambient Operating Temperatures

Nominal Lumen Code	Standard Operating Range
All Lumen Packages	-40°C to 40°C (-40°F to 104°F)

Lumen Maintenance[5]

Nominal Lumen Code	Operating Temperature	Calculated Lumen Maintenance		
		L70	L80	L90
09L / 12L / 15L	25°C	168,000	105,000	50,000
	40°C	148,000	92,000	43,000
18L / 21L / 24L	25°C	168,000	105,000	50,000
	40°C	165,000	103,000	48,000

Additional Specification Information

[4] Actual performance may vary by up to ±10% of values listed; facility factors and fixture options can affect performance values.

[5] Calculated hours based on TM-21 projections and components used at the time of testing. Warranty is not associated with Calculated Lumen Maintenance

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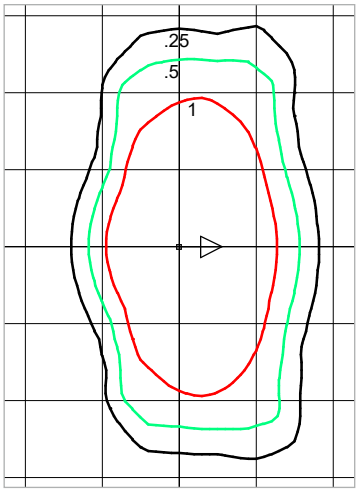
HARRIS LED ROADWAY LIGHTER, GEN 1

RDWL1

Photometrics

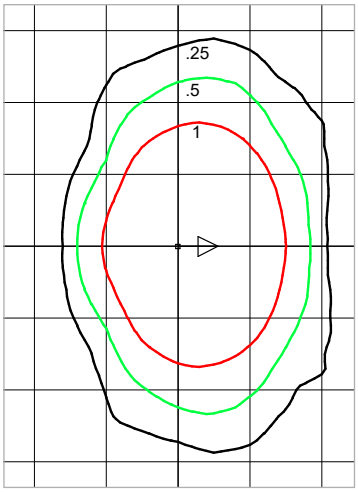
Visit orionlighting.com to obtain all .IES files

15L 4000K (TYPE II)



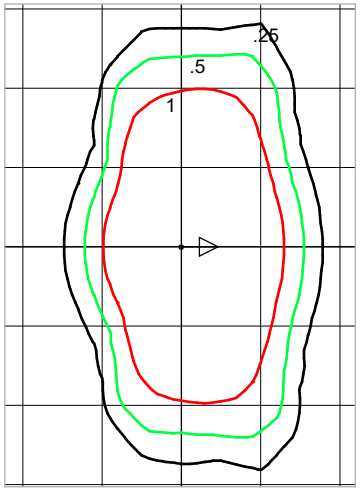
Distance are in Units of Mounting Height
Mounting Height: 25'
Max calculated value: 7.10 FC

15L 4000K (TYPE III)



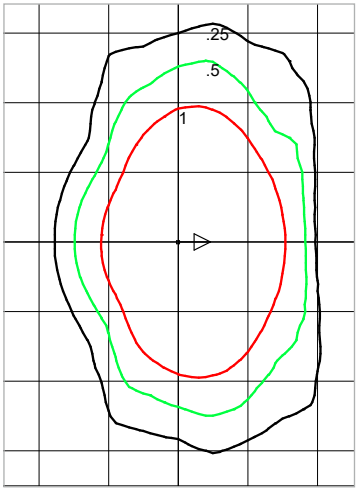
Distance are in Units of Mounting Height
Mounting Height: 25'
Max calculated value: 5.50 FC

24L 4000K (TYPE II)



Distance are in Units of Mounting Height
Mounting Height: 30'
Max calculated value: 8.11 FC

24L 4000K (TYPE III)



Distance are in Units of Mounting Height
Mounting Height: 30'
Max calculated value: 6.16 FC

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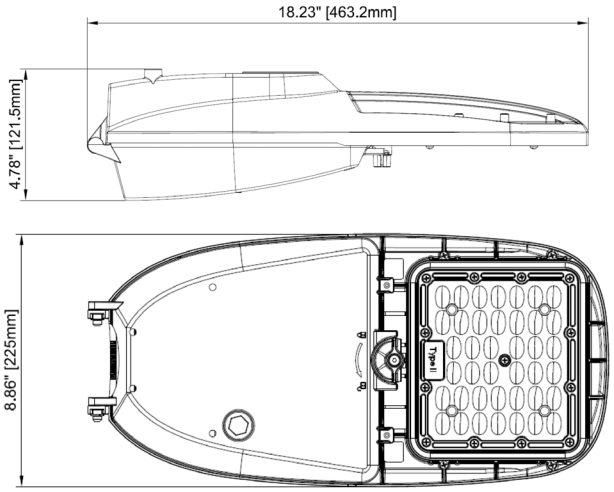
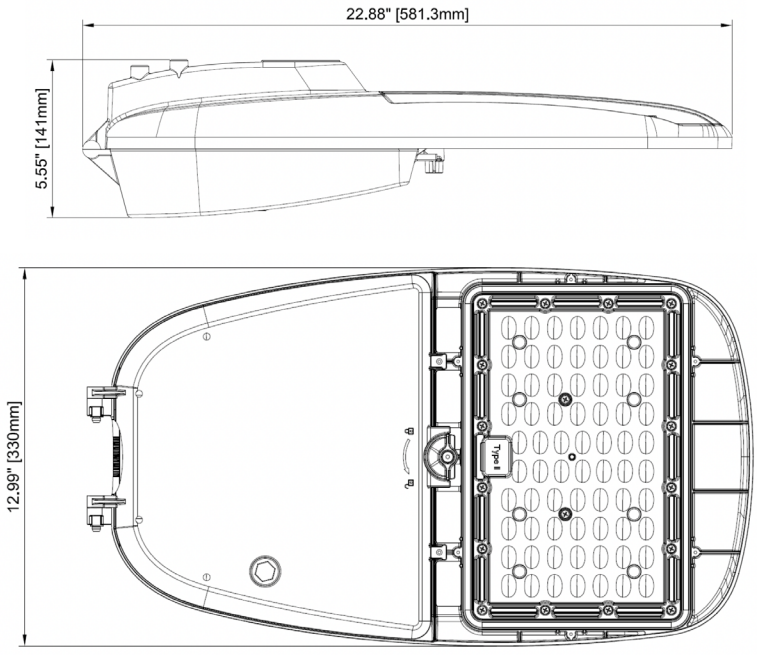
HARRIS LED ROADWAY LIGHTER, GEN 1

RDWL1

Physical Information[6]

Nominal Lumen Code	Length	Width	Height	Weight	EPA
09L / 12L / 15L	18.23"	8.86"	4.78"	9.9 lb	0.427 ft²
18L / 21L / 24L	22.88"	12.99"	5.55"	14.3 lb	0.588 ft²





Additional Specification Information

[6] Weight will vary based on option selection

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