

RDWL1



Project Name:	Wisconsin DOT
Catalog Number:	RDWL109LUNVFD740GRT3TS2U
Type:	LED A
Notes:	
Date:	2/24/26



IP66

CONSTRUCTION

- Type II, III light distributions
- 9,000 to 24,000 lumens
- Efficacy up to 163 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
- 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 for $\pm 10^\circ$ in 5° steps
- Includes two axis bubble Level
- Rated for ambient operating temperature -40°F to 108°F (-40°C to 40°C)
- Breather valve prevents condensation

ELECTRICAL

- Available in 120v-277v and 277v-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. Factory set to specified lumen code
- Utility Wattage Label available

CONTROLS

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

ADDITIONAL OPTIONS

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

LISTINGS

- RoHS Compliant Components
- IK08 Impact Rating
- IP66 Rated
- 3.0 G Vibration load rating per ANSI C136.31
- Assembled in the U.S.A.

WARRANTY

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

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

RDWL115LUNVFD740GRT3TS2UWSP

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

Accessories (Field Installed)

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-BS1	Bird Spike Kit Small (09L -15L)
EXT-RDWL-BS2	Bird Spike Kit Large (18L-24L)
Shield Options	
EXT-RDWL-HSS1	House-Side Shield Small (09L -15L)
EXT-RDWL-HSS2	House-Side Shield Large (18L-24L)

Additional Specification Information

¹For actual lumens see performance table

²Special order, contact Orion representative for lead time.



Performance Information³, 120v, 4000K

Lumen Code	Nominal Lumens	Wattage	Type II			Type III		
			Lumens	LPW	BUG	Lumens	LPW	BUG
09L	9,000	61w	9,265	151	B2-UO-G2	9,901	148	B2-UO-G2
12L	12,000	81w	12,208	150	B3-UO-G2	11,965	148	B3-UO-G2
15L	15,000	101w	14,894	147	B3-UO-G3	14,582	144	B3-UO-G3
18L	18,000	119w	18,999	160	B3-UO-G3	19,413	163	B3-UO-G3
21L	21,000	139w	21,722	157	B3-UO-G3	22,117	159	B3-UO-G3
24L	24,000	158w	24,202	153	B3-UO-G3	24,626	156	B3-UO-G3

Lumen Maintenance⁴

Nominal Lumen Code	Operating Temperature	Calculated Lumen Maintenance		
		L70	L80	L90
All Lumen Packages	25°C	165,000	106,000	50,000
	40°C	160,000	100,000	47,000

Ambient Operating Temperatures

Nominal Lumen Code	Standard Operating Range
All Lumen Packages	-40°C to 40°C (-40°F to 108°F)

Additional Specification Information

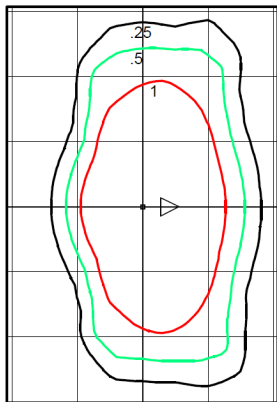
³Actual performance may vary by up to $\pm 10\%$ of values listed; facility factors and fixture options can affect performance values.

⁴Calculated hours based on TM-21 projections and components used at the time of testing. Warranty is not associated with Calculated Lumen Maintenance

Photometrics

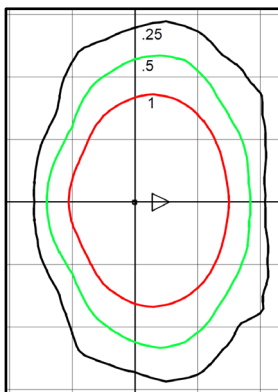
Visit orionlighting.com to obtain all .IES files

15L 4000K (TYPE II)



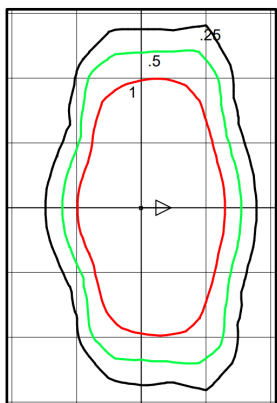
Distance are in Units of Mounting Height
Mounting Height 25'
Max. Calculated Value: 7.10 FC

15L 4000K (TYPE III)



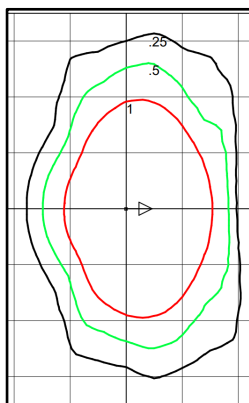
Distance are in Units of Mounting Height
Mounting Height 25'
Max. Calculated Value: 5.50 FC

24L 4000K (TYPE II)



Distance are in Units of Mounting Height
Mounting Height 30'
Max. Calculated Value: 8.11 FC

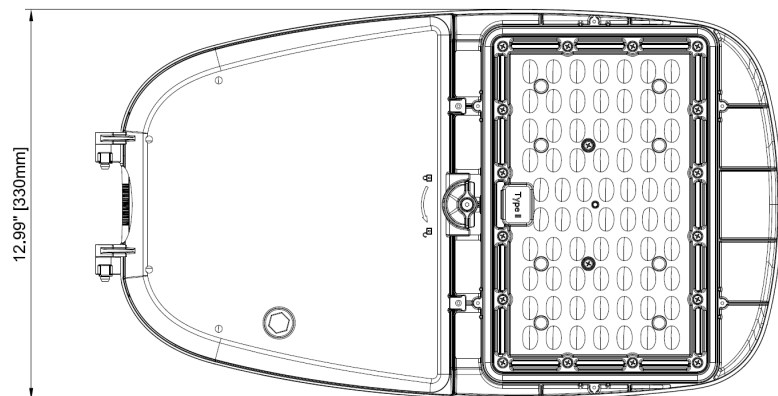
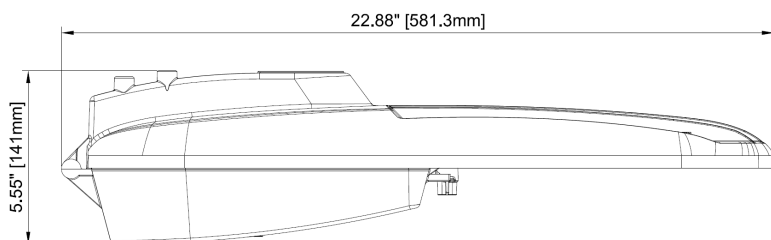
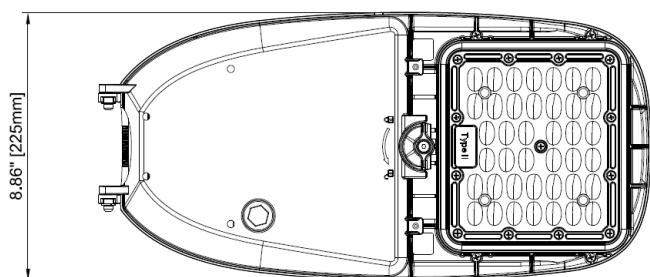
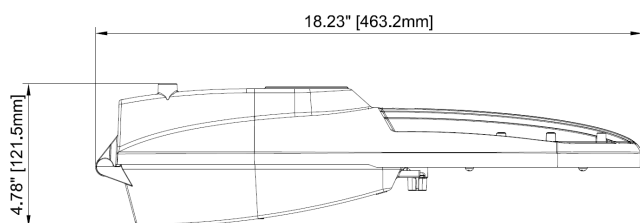
24L 4000K (TYPE III)



Distance are in Units of Mounting Height
Mounting Height 30'
Max. Calculated Value: 6.16 FC

Physical Information⁵

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



Additional Specification Information

⁵Weight will vary based on option selection