



# RSX1 LED Area Luminaire

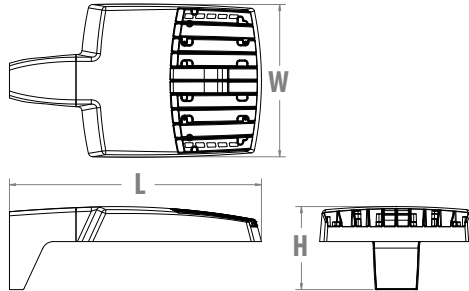


Catalog Number
Notes
Type

Hit the Tab key or mouse over the page to see all interactive elements.

## Specifications

EPA (ft <sup>2</sup> @0°):	0.57 ft <sup>2</sup> (0.05 m <sup>2</sup> )
Length:	21.8" (55.4 cm) (SPA mount)
Width:	13.3" (33.8 cm)
Height:	3.0" (7.6 cm) Main Body 7.2" (18.4 cm) Arm
Weight (max):	25.0 lbs (11.3 kg)



## Introduction

The new RSX LED Area family delivers maximum value by providing significant energy savings, long life and outstanding photometric performance at an affordable price. The RSX1 delivers 7,000 to 17,000 lumens allowing it to replace 70W to 400W HID luminaires.

The RSX features an integral universal mounting mechanism that allows the luminaire to be mounted on most existing drill hole patterns. This "no-drill" solution provides significant labor savings. An easy-access door on the bottom of mounting arm allows for wiring without opening the electrical compartment. A mast arm adaptor and an adjustable integral slip-fitter are also available.

## Ordering Information

**EXAMPLE: RSX1 LED P4 40K R3 MVOLT SPA DDBXD**

Series	Performance Package	Color Temperature	Distribution	Voltage	Mounting
RSX1 LED	P1 P2 P3 P4	30K 3000K 40K 4000K 50K 5000K	R3 Type 3 Wide R4 Type 4 Wide R5 Type 5 Wide R5S Type 5 Short AFR Automotive Front Row	MVOLT (120V-277V) <sup>1</sup> HVOLT (347V-480V) <sup>2</sup> (use specific voltage for options as noted) 120 <sup>3</sup> 277 <sup>3</sup> 208 <sup>3</sup> 347 <sup>3</sup> 240 <sup>3</sup> 480 <sup>3</sup>	SPA Square pole mounting (Min. 3.0" SQ for 1 at 90°, Min. 3.5" SQ for 2, 3, 4 at 90°) RPA Round pole mounting (3.2" min pole dia. for 1,2,3 or 4 at 90°) MA Mast arm adaptor (fits 2-3/8" OD horizontal tenon) IS Adjustable slipfitter (fits 2-3/8" OD tenon) <sup>4</sup> WBA Wall bracket

Options	Finish
<b>Shipped Installed</b> HS House-side shield PE Photocontrol, button style <sup>5,7</sup> PEX Photocontrol external threaded, adjustable <sup>6,7</sup> PER7 Seven-wire twist-lock receptacle only (no controls) <sup>7,8,9</sup> CE34 Conduit entry 3/4" NPT (Qty 2) SF Single fuse (120, 277, 347) <sup>3</sup> DF Double fuse (208, 240, 480) <sup>3</sup> SPD20KV 20KV Surge pack (10KV standard) FAO Field adjustable output DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately)	DDBXD Dark Bronze DBLXD Black DNAXD Natural Aluminum DWHXD White DDBTXD Textured Dark Bronze DBLBXD Textured Black DNATXD Textured Natural Aluminum DWHGXD Textured White
<b>Shipped Separately (requires some field assembly)</b> EGS External glare shield EGFV External glare full visor (360° around light aperture) BS Bird spikes <sup>12</sup>	<b>Shipped Installed</b> <b>*Standalone Sensors Controls (factory default settings, see table page 5)</b> PIRS Motion/ambient sensor for 8-20' mounting heights <sup>7,14,15</sup> PIRHS Motion/ambient sensor for 20-40' mounting heights <sup>7,14,15</sup>  <b>*Networked Sensors/Controls</b> NL TAIR2 nLight AIR generation 2 <sup>10,15</sup> PIRHN Networked, Bi-Level motion/ambient sensor (for use with NLTAIR2) <sup>7,11,14,15</sup>  <b>*Note: Sensor coverage pattern is affected when luminaire is tilted.</b>



## Ordering Information

### Accessories

Ordered and shipped separately.

RSX1HS	RSX1 House side shield (includes 1 shield)
RSX1EGS U	External glare shield (specify finish)
RSX1EGFV U	External glare full visor (specify finish)
RSXRPA U	RSX Universal round pole adaptor plate (specify finish)
RCPIRS	Remote control PIRS/PIRHS field programmer
DLL127F 1.5 JU	Photocell -SSL twist-lock (120-277V) <sup>13</sup>
DLL347F 1.5 CUL JU	Photocell -SSL twist-lock (347V) <sup>13</sup>
DLL480F 1.5 CUL JU	Photocell -SSL twist-lock (480V) <sup>13</sup>
DSHORT SBK U	Shorting cap <sup>13</sup>

### NOTES

- 1 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
- 2 HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).
- 3 Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
- 4 IS maximum tilt is 90° above horizontal.
- 5 Requires MOVLT or 347V.
- 6 Requires 120V, 208V, 240V, 277V or 347V.
- 7 Not available in combination with other light sensing control options (following options cannot be combined: PE, PEX, PER7, PIRS, PIRHS, PIRHN).
- 8 Twistlock photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included. Dimming leads capped for future use.

- 9 For units with option PER7, the mounting must be restricted to +/- 45° from horizontal aim per ANSI C136.10-2010.
- 10 Must be ordered with PIRHN.
- 11 Must be ordered with NLTAIR2. For additional information on PIRHN visit [here](#).
- 12 Must be ordered with fixture for factory pre-drilling.
- 13 Requires luminaire to be specified with PER7 option. Ordered and shipped as a separate line item from Acuity Brands Controls.
- 14 Two or more of the following options cannot be combined including DMG, PER7, FAO, PIRS, PIRHS and PIRHN.
- 15 Requires MVOLT or HVOLT.

## External Shields



House Side Shield



External Glare Shield



External 360 Full Visor

## Pole/Mounting Information

Accessories including bullhorns, cross arms and other adaptors are available under the accessories tab at Lithonia's Outdoor Poles and Arms product page. Click here to visit [Accessories](#).

### Tenon Adapters

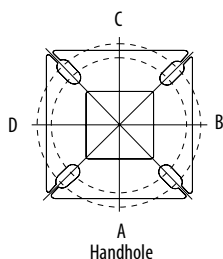
Tenon O.D.	Single Unit	2 at 180°	2 at 90°	3 at 120°	3 at 90°	4 at 90°
2-3/8"	AST20-190	AST20-280	AST20-290	AST20-320	AST20-390	AST20-490
2-7/8"	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
4"	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490

### Pole Drilling Nomenclature

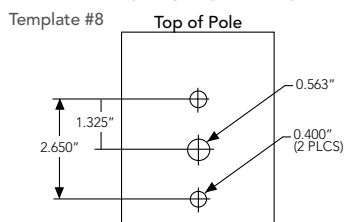
Number of heads at degree from handhole (default side A)					
DM19AS	DM28AS	DM29AS	DM32AS	DM39AS	DM49AS
1 @ 90°	2 @ 280°	2 @ 90°	3 @ 120°	3 @ 90°	4 @ 90°
Side B	Side B & D	Side B & C	Round pole only	Side B, C, & D	Sides A, B, C, D

Note: Review luminaire spec sheet for specific nomenclature

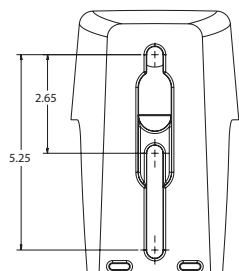
### HANDHOLE ORIENTATION



### RSX POLE DRILLING



### RSX STANDARD ARM



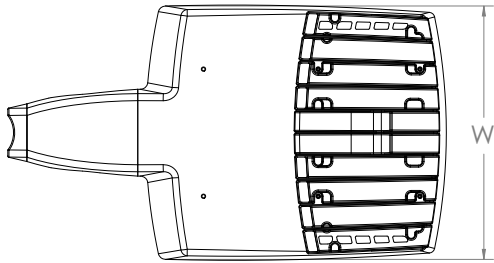
### RSX1 - Luminaire EPA

\*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

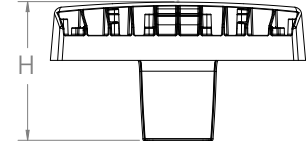
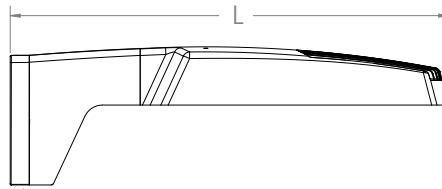
Fixture Quantity & Mounting Configuration		Single	2 @ 90	2 @ 180	3 @ 90	3 @ 120	4 @ 90	2 Side by Side	3 Side by Side	4 Side by Side
Mounting Type	Tilt									
SPA - Square Pole Adaptor	0°	0.57	1.03	1.05	1.52	1.36	2.03	1.13	1.7	2.26
RPA - Round Pole Adaptor	0°	0.57	1.03	1.05	1.52	1.36	2.03	1.13	1.7	2.26
MA - Mast Arm Adaptor	0°	0.57	1.03	1.05	1.52	1.36	2.03	1.13	1.7	2.26
IS - Integral Slipfitter	0°	0.57	1.03	1.05	1.52	1.36	2.03	1.31	1.7	2.26
	10°	0.68	1.34	1.33	2	1.74	2.64	1.35	2.03	2.71
	20°	0.87	1.71	1.73	2.56	2.26	3.42	1.75	2.62	3.49
	30°	1.24	2.19	2.3	3.21	2.87	4.36	2.49	3.73	4.97
	40°	1.81	2.68	2.98	3.85	3.68	5.3	3.62	5.43	7.24
	45°	2.11	2.92	3.44	4.2	4.08	5.77	4.22	6.33	8.44
	50°	2.31	3.17	3.72	4.52	4.44	6.26	4.62	6.94	9.25
	60°	2.71	3.66	4.38	5.21	5.15	7.24	5.43	8.14	10.86
	70°	2.78	3.98	4.54	5.67	5.47	7.91	5.52	8.27	11.03
	80°	2.76	4.18	4.62	5.97	5.76	8.31	5.51	8.27	11.03
	90°	2.73	4.25	4.64	6.11	5.91	8.47	5.45	8.18	10.97

## Dimensions

### RSX1 with Round Pole Adapter (RPA)



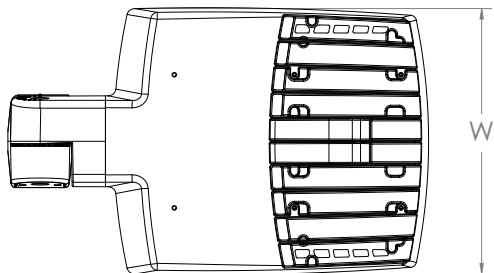
Length: 22.8" (57.9 cm)  
 Width: 13.3" (33.8 cm)  
 Height: 3.0" (7.6 cm) Main Body  
 7.2" (18.4 cm) Arm



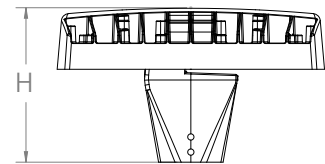
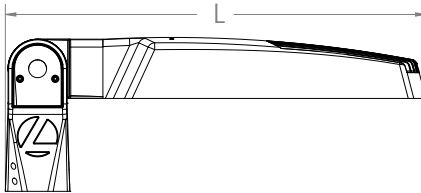
Note: RPA — Round Pole mount can also be used to mount on square poles by omitting the round pole adapter plate shown here.



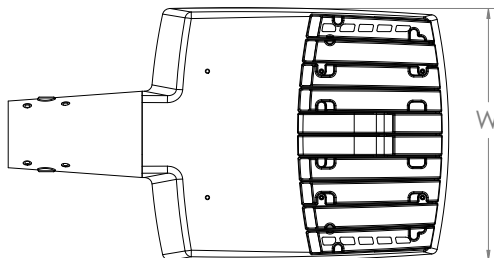
### RSX1 with Adjustable Slipfitter (IS)



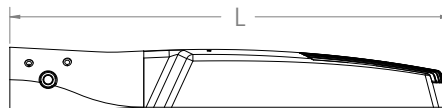
Length: 20.7" (52.7 cm)  
 Width: 13.3" (33.8 cm)  
 Height: 3.0" (7.6 cm) Main Body  
 7.6" (19.3 cm) Arm



### RSX1 with Mast Arm Adapter (MA)



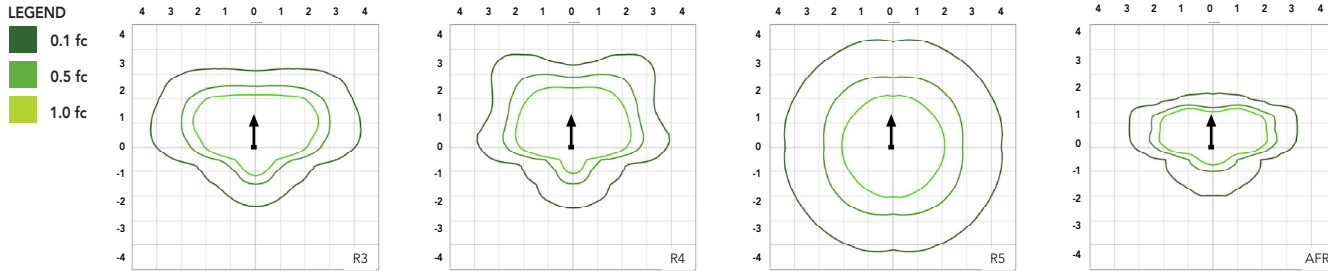
Length: 23.2" (59.1 cm)  
 Width: 13.3" (33.8 cm)  
 Height: 3.0" (7.6 cm) Main Body  
 3.5" (8.9 cm) Arm



## Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's [RSX Area homepage](#).

Isofootcandle plots for the RSX1 LED P4 40K. Distances are in units of mounting height (20').



## Performance Data

### Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-50°C (32-122°F).

Ambient	Ambient	Lumen Multiplier
0°C	32°F	1.05
5°C	41°F	1.04
10°C	50°F	1.03
15°C	59°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97
45°C	113°F	0.96
50°C	122°F	0.95

### Electrical Load

Performance Package	System Watts (W)	Current (A)					
		120V	208V	240V	277V	347V	480V
P1	51W	0.42	0.25	0.21	0.19	0.14	0.11
P2	72W	0.60	0.35	0.30	0.26	0.21	0.15
P3	109W	0.91	0.52	0.45	0.39	0.31	0.23
P4	133W	1.11	0.64	0.55	0.48	0.38	0.27

### Projected LED Lumen Maintenance

Operating Hours	50,000	75,000	100,000
Lumen Maintenance Factor	>0.97	>0.95	>0.92

Values calculated according to IESNA TM-21-11 methodology and valid up to 40°C.

### Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

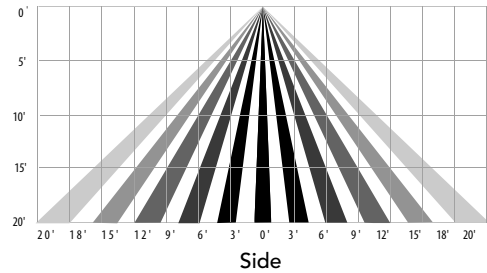
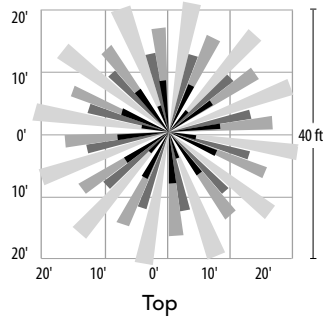
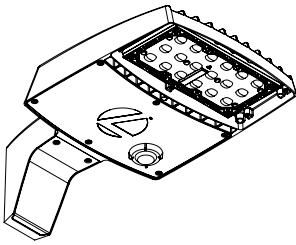
Performance Package	System Watts	Distribution Type	30K (3000K, 70 CRI)						40K (4000K, 70 CRI)						50K (5000K, 70 CRI)					
			Lumens	B	U	G	LPW		Lumens	B	U	G	LPW		Lumens	B	U	G	LPW	
P1	51W	R3	6,459	1	0	2	127		7,096	1	0	2	139		7,096	1	0	2	139	
		R4	6,543	1	0	2	128		7,189	1	0	2	141		7,189	1	0	2	141	
		R5	6,631	3	0	2	130		7,286	3	0	2	143		7,286	3	0	2	143	
		R5S	6,807	3	0	1	133		7,479	3	0	1	147		7,479	3	0	1	147	
		AFR	6,473	1	0	1	127		7,112	1	0	1	139		7,112	1	0	1	139	
P2	72W	R3	8,959	2	0	2	124		9,843	2	0	2	137		9,843	2	0	2	137	
		R4	9,077	2	0	2	126		9,972	2	0	2	139		9,972	2	0	2	139	
		R5	9,198	4	0	2	128		10,106	4	0	2	140		10,106	4	0	2	140	
		R5S	9,443	3	0	1	131		10,374	3	0	1	144		10,374	3	0	1	144	
		AFR	8,979	2	0	1	125		9,865	2	0	1	137		9,865	2	0	1	137	
P3	109W	R3	12,763	2	0	2	117		14,023	2	0	2	129		14,023	2	0	2	129	
		R4	12,930	2	0	2	119		14,206	2	0	2	130		14,206	2	0	2	130	
		R5	13,104	4	0	2	120		14,397	4	0	2	132		14,397	4	0	2	132	
		R5S	13,452	3	0	2	123		14,779	3	0	2	136		14,779	3	0	2	136	
		AFR	12,791	2	0	1	117		14,053	2	0	2	129		14,053	2	0	2	129	
P4	133W	R3	14,890	2	0	3	112		16,360	2	0	3	123		16,360	2	0	3	123	
		R4	15,085	2	0	3	113		16,574	2	0	3	125		16,574	2	0	3	125	
		R5	15,287	4	0	2	115		16,796	4	0	2	126		16,796	4	0	2	126	
		R5S	15,693	4	0	2	118		17,242	4	0	2	130		17,242	4	0	2	130	
		AFR	14,923	2	0	2	112		16,395	2	0	2	123		16,395	2	0	2	123	

## Sensor Coverage

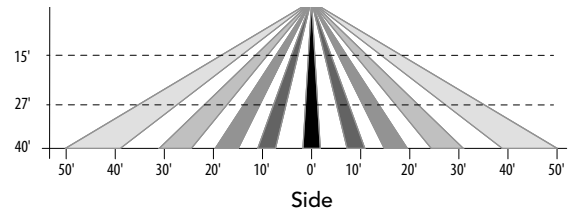
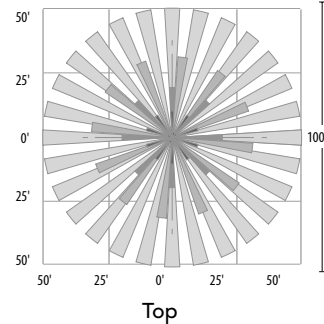
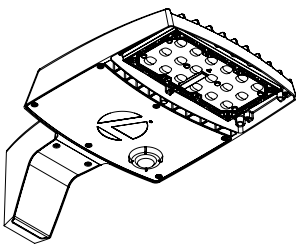
Motion Sensor Default Settings (PIRS and PIRHS only)						
Option	Dimmed State	High Level (when triggered)	Photocell Operation	Dwell Time	Ramp-up Time	Ramp-down Time
PIRS or PIRHS	Approx. 37% Output	100% Output	Enabled @ 5FC	5 minutes	3 seconds	20 seconds

\*Note: Remote control sensor reprogrammer not included.

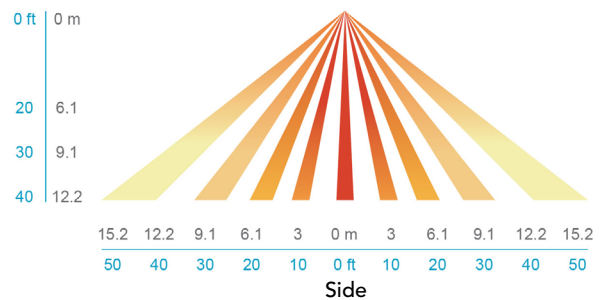
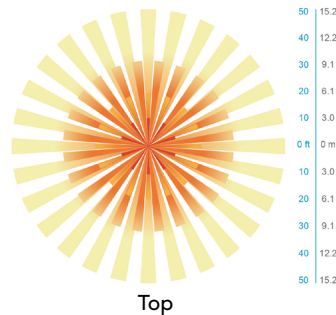
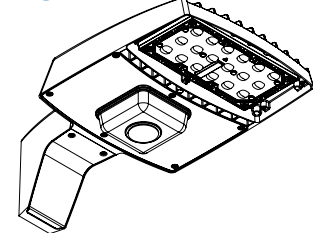
### PIRS Coverage Patterns



### PIRHS Coverage Pattern



### PIRHN nLight Sensor Coverage Pattern



## FEATURES & SPECIFICATIONS

#### INTENDED USE

The RSX LED area family is designed to provide a long-lasting, energy-efficient solution for the one-for-one replacement of existing metal halide or high pressure sodium lighting. The RSX1 delivers 7,000 to 17,000 lumens and is ideal for replacing 70W to 400W HID pole-mounted luminaires in parking lots and other area lighting applications.

#### CONSTRUCTION

The RSX LED area luminaire features a rugged die-cast aluminum main body that uses heat-dissipating fins and flow-through venting to provide optimal thermal management that both enhances LED performance and extends component life. Integral "no drill" mounting arm allows the luminaire to be mounted on existing pole drillings, greatly reducing installation labor. The light engines and housing are sealed against moisture and environmental contaminants to IP66. The low-profile design results in a low EPA, allowing pole optimization. All mountings are rated for a 1.5 G vibration load per ANSI C136.31.

#### FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures superior adhesion as well as a minimum finish thickness of 3 mils. The result is a high-quality finish that is warranted not to crack or peel.

#### OPTICS

Precision acrylic refractive lenses are engineered for superior application efficiency, distributing the light to where it is needed most. Available in short and wide pattern distributions including Type 3, Type 4, Type 5, Type 5S and AFR (Automotive Front Row).

#### ELECTRICAL

Light engine(s) configurations consist of high-efficacy LEDs mounted on metal-core circuit boards and aluminum heat sinks to maximize heat dissipation. Light engines are IP66 rated. LED lumen maintenance is >L92/100,000 hours. CCT's of 3000K, 4000K and 5000K (minimum 70 CRI) are available. Class 1 electronic drivers ensure system power factor >90% and THD <20%. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

#### STANDARD CONTROLS

The RSX LED area luminaire has a wide assortment of control options. Dusk to dawn controls include MVOLT and 347V button-type photocells and NEMA twist-lock photocell receptacles. Integrated motion sensors with on-board photocells feature the capability for remote control

sensor reprogramming and are suitable for mounting heights up to 40 feet. (Remote control programmer RCPIRS not included, ordered separately under accessories).

#### nLIGHT AIR CONTROLS

The RSX LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing and photocell functionality and is suitable for mounting heights up to 40 feet. Once commissioned using a smartphone and the easy-to-use CLAIRITY app, nLight AIR equipped luminaires can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclipse. Additional information about nLight Air can be found [here](#).

#### INSTALLATION

Integral "no-drill" mounting arm allows for fast, easy mounting using existing pole drillings. Select the "SPA" option for square poles and the "RPA" option to mount to round poles. Note, the RPA mount can also be used for mounting to square poles by omitting the RPA adapter plate. Select the "MA" option to attach the luminaire to a 2 3/8" horizontal mast arm or the "IS" option for an adjustable slipfitter that mounts on a 2 3/8" OD tenon. The adjustable slip fitter has an integral junction box and offers easy installation. IS adjustable slipfitter is not rated for tilting above 90° or mounting within 4 feet of ground. Can be tilted up to 90° above horizontal.

#### LISTINGS

CSA Certified to meet U.S. and Canadian standards. Suitable for wet locations. Rated for -40°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at [www.designlights.org/QPL](http://www.designlights.org/QPL) to confirm which versions are qualified.

#### WARRANTY

5-year limited warranty. Complete warranty terms located at:

[www.acuitybrands.com/resources/terms-and-conditions](http://www.acuitybrands.com/resources/terms-and-conditions)

**Note:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

