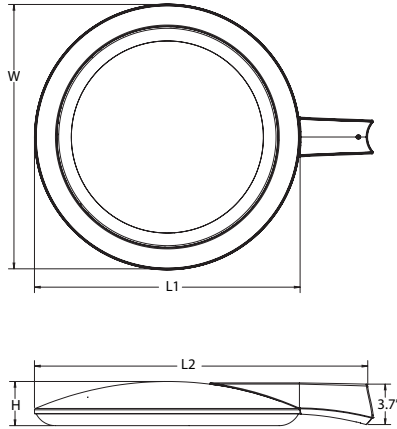# Radean Arm Mount
LED Area Luminaire

Specifications

EPA: 0.75 ft² (0.05 m²)

Length:
L1 24" (61cm)
L2 30" (60.96 cm)

Width: 24" (61cm)

Height: 4" (10.2cm)

Weight (max): 29lbs (13.15Kg)

Introduction

The RADEAN arm mount luminaire is the perfect choice for pedestrian applications where daytime aesthetics and visual comfort are needed. Adding architectural flair to any space, the RADEAN's low-profile shape and smooth curves blend in while adding a touch of elegance.

Perfect for campuses, parks, pedestrian malls, courtyards and pathways, the RADEAN arm mount is the Architect's choice to provide beautiful aesthetics both day and night.

Ordering Information

EXAMPLE: RAD1 LED P3 30K SYM MVOLT RPA PE DNAXD

RAD1 LED

Series	Performance package	Color temperature	Distribution	Voltage		Mounting	
RAD1 LED	P1 3,000 Lumens	27K 2700K	SYM Symmetric type V	MVOLT [2]	277 [2]	SPA	Square pole mounting (includes adapter)
	P2 5,000 Lumens	30K 3000K	ASY Asymmetric type IV	120 [2]	347	RPA	Round pole mounting
	P3 7,000 Lumens	35K 3500K	PATH Pathway type III	208 [2]	480	WBA	Wall bracket
	P4 11,000 Lumens	40K 4000K		240 [2]			
	P5 16,000 Lumens	50K 5000K					

Control options	Other options		Finish *(required)*			
Shipped installed	SF Single Fuse [2]	**Shipped separately**	DDBXD Dark bronze		DDBTXD Textured dark bronze	
NLTAIR2 nLight AIR 2.0 enabled [3]	DF Double Fuse [2]	HS Houseside shield [5]	DBLXD Black		DBLBXD Textured black	
PE Button photocell [3]	L90 Left rotated optics		DNAXD Natural aluminum		DNATXD Textured natural aluminum	
FAO Field adjustable output [3]	R90 Right rotated optics		DWHXD White		DWHGXD Textured white	
DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately)						

Accessories
Ordered and shipped separately.

RADHS Houseside shield (shield is white)
RADFBC Full base cover for 4" RSS pole (specify finish)

For more control options, visit DTL and ROAM online.

NOTES
1. 2700K and 3500K may require extended lead-times.
2. MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Single fuse (SF) requires 120, 277 or 347 voltage option. Double fuse (DF) requires 208, 240 or 480 voltage option.
3. NLTAIR2 not available with PE or FAO. Must link to external nLight Air network. Does not include occupancy sensor. For more information refer to rSBOR pole mount sensor.
4. DMG not available with NLTAIR2 or FAO.
5. Also available as a separate accessory; see Accessories information. Shield is field rotatable in 45° increments.

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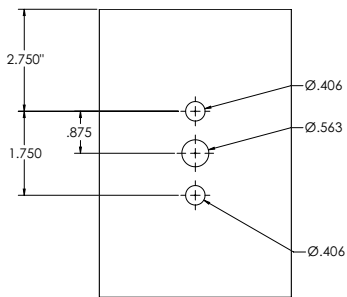
RAD1 LED
Rev. 11/14/24

Mounting

Recommended Poles for use with RADEAN RAD1 LED Luminaires.			
Acuity Part Number	**Description**	**For luminaires:**	**Used with Mounting**
RSS 10 4B DM19RAD DDBXD	10' Round Straight Steel - Template #20 Drilling	RAD1 LED	RPA
RSS 12 4B DM19RAD DDBXD	12' Round Straight Steel - Template #20 Drilling	RAD1 LED	RPA
RSS 14 4B DM19RAD DDBXD	14' Round Straight Steel - Template #20 Drilling	RAD1 LED	RPA
RSS 16 4B DM19RAD DDBXD	16' Round Straight Steel - Template #20 Drilling	RAD1 LED	RPA
RSS 18 4B DM19RAD DDBXD	18' Round Straight Steel - Template #20 Drilling	RAD1 LED	RPA
RSS 20 4B DM19RAD DDBXD	20' Round Straight Steel - Template #20 Drilling	RAD1 LED	RPA
RSS 25 4B DM19RAD DDBXD	25' Round Straight Steel - Template #20 Drilling	RAD1 LED	RPA
SSS 10 4C DM19RAD DDBXD	10' Square Straight Steel -Template #20 Drilling	RAD1 LED	SPA
SSS 12 4C DM19RAD DDBXD	12' Square Straight Steel -Template #20 Drilling	RAD1 LED	SPA
SSS 14 4C DM19RAD DDBXD	14' Square Straight Steel -Template #20 Drilling	RAD1 LED	SPA
SSS 16 4C DM19RAD DDBXD	16' Square Straight Steel -Template #20 Drilling	RAD1 LED	SPA
SSS 18 4C DM19RAD DDBXD	18' Square Straight Steel -Template #20 Drilling	RAD1 LED	SPA
SSS 20 4C DM19RAD DDBXD	20' Square Straight Steel -Template #20 Drilling	RAD1 LED	SPA
SSS 25 4C DM19RAD DDBXD	25' Square Straight Steel -Template #20 Drilling	RAD1 LED	SPA

* Customer must verify pole loading per required design criteria and specified wind speed. Consult pole specification sheet for additional details.

Drilling Template #20

2.750"
.875
1.750
Ø.406
Ø.563
Ø.406

RAD1 has a unique drilling pattern. Specify this drilling pattern when specifying poles, per the table below.

DM19RAD	Single unit	**DM29RAD**	2 at 90° [1,2]
DM28RAD	2 at 180°	**DM39RAD**	3 at 90° *
DM49RAD	4 at 90° [1]	**DM32RAD**	3 at 120°

Example: SSA 20 4C **DM19RAD** DDBXD

Visit Lithonia Lighting's POLES CENTRAL to see our wide selection of poles, accessories and educational tools.

1. Round pole top must be 4.25" O.D. minimum.
2. Square pole top must be 3.125" O.D. minimum.

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. Contact factory for performance data on any configurations not shown here.

Performance Package	Input Wattage	Distribution	2700K					3000K					3500K					4000K					5000K				
			Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P1	25	ASY	3,103	1	0	1	122	3,207	1	0	1	126	3,285	1	0	1	129	3,362	1	0	1	132	3,362	1	0	1	132
		PATH	2,695	2	0	2	106	2,785	2	0	2	110	2,853	2	0	2	112	2,920	2	0	2	115	2,920	2	0	2	115
		SYM	3,271	2	0	1	129	3,380	2	0	1	133	3,461	2	0	1	136	3,543	2	0	1	139	3,543	2	0	1	139
P2	38	ASY	4,798	1	0	2	126	4,958	1	0	2	130	5,078	2	0	2	134	5,198	2	0	2	137	5,198	2	0	2	137
		PATH	4,167	2	0	2	110	4,306	3	0	3	113	4,410	3	0	3	116	4,514	3	0	3	119	4,514	3	0	3	119
		SYM	5,056	2	0	1	133	5,225	3	0	1	137	5,351	3	0	1	141	5,478	3	0	1	144	5,478	3	0	1	144
P3	54	ASY	6,779	2	0	2	126	7,005	2	0	2	131	7,174	2	0	2	134	7,344	2	0	2	137	7,344	2	0	2	137
		PATH	5,887	3	0	3	110	6,084	3	0	3	113	6,231	3	0	3	116	6,378	3	0	3	119	6,378	3	0	3	119
		SYM	7,144	3	0	2	133	7,382	3	0	2	138	7,561	3	0	2	141	7,739	3	0	2	144	7,739	3	0	2	144
P4	86	ASY	10,773	3	0	3	126	11,132	3	0	3	130	11,401	3	0	3	133	11,671	3	0	3	136	11,671	3	0	3	136
		PATH	9,356	3	0	3	109	9,668	3	0	3	113	9,902	3	0	3	116	10,136	3	0	3	118	10,136	3	0	3	118
		SYM	11,353	3	0	2	133	11,731	3	0	2	137	12,015	3	0	2	140	12,299	3	0	2	144	12,299	3	0	2	144
P5	122	ASY	15,001	3	0	3	123	15,501	3	0	3	127	15,876	3	0	3	130	16,251	3	0	3	133	16,251	3	0	3	133
		PATH	13,028	4	0	4	107	13,462	4	0	4	110	13,788	4	0	4	113	14,114	4	0	4	116	14,114	4	0	4	116
		SYM	15,808	4	0	3	130	16,335	4	0	3	134	16,731	4	0	3	137	17,126	4	0	3	140	17,126	4	0	3	140

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40℃ (32-104°F).

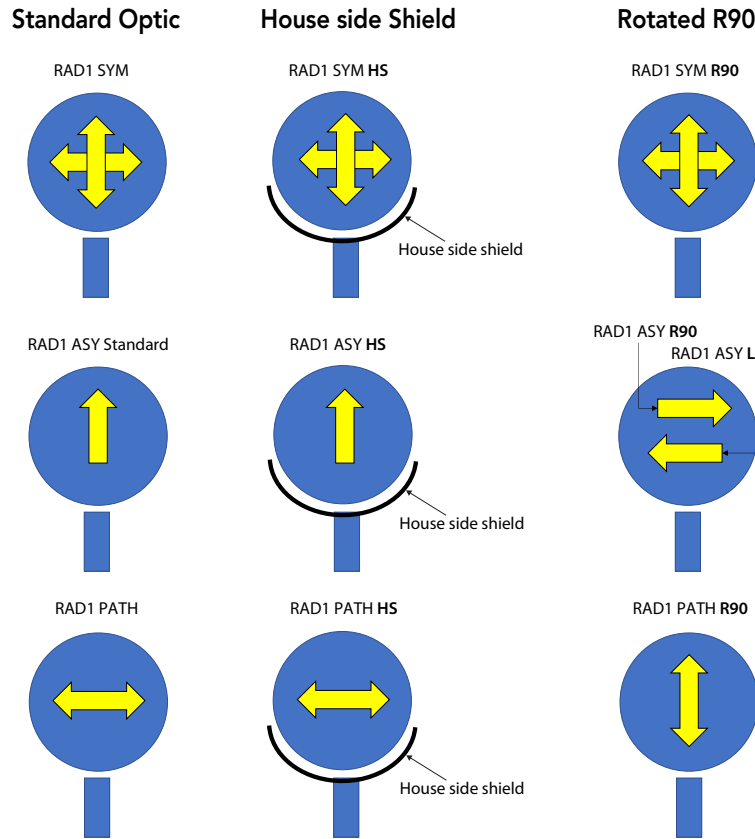| Ambient		LAT Factor
0℃	32°F	1.06
5℃	41°F	1.05
10℃	50°F	1.04
15℃	59°F	1.02
20℃	68°F	1.01
25℃	77°F	1.00
30℃	86°F	0.99
35℃	95°F	0.98
40℃	104°F	0.96

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the **RAD1 LED P5** platform in a **25℃ ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Projected LED Lumen Maintenance				
	0	25,000	50,000	100,000
P1	1.00	0.96	0.91	0.82
P2	1.00	0.96	0.91	0.82
P3	1.00	0.96	0.91	0.82
P4	1.00	0.96	0.91	0.82
P5	1.00	0.95	0.89	0.78

Electrical Load

Lumen Package	LED Drive Current	Voltage	Wattage		Current (A)					
					120	208	240	277	347	480
P1	500	42.8	21.4	Input Current	0.22	0.13	0.11	0.1	0.08	0.06
				System Watts	26	26	26	27	25	26
P2	770	43	33.1	Input Current	0.33	0.19	0.16	0.14	0.11	0.08
				System Watts	39	39	39	39	38	38
P3	1100	43.2	47.5	Input Current	0.46	0.26	0.23	0.2	0.16	0.12
				System Watts	55	54	54	54	54	54
P4	900	87.3	78.6	Input Current	0.73	0.42	0.36	0.32	0.25	0.18
				System Watts	87	86	86	86	86	86
P5	1250	88.2	110.2	Input Current	1	0.58	0.5	0.44	0.35	0.25
				System Watts	120	119	119	119	120	120

Orientation Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's RAD1 LED homepage.

Standard Optic

RAD1 SYM

RAD1 ASY Standard

RAD1 PATH

House side Shield

RAD1 SYM HS

House side shield

RAD1 ASY HS

House side shield

RAD1 PATH HS

House side shield

Rotated R90

RAD1 SYM R90

RAD1 ASY R90
RAD1 ASY L90

RAD1 PATH R90

FEATURES & SPECIFICATIONS

INTENDED USE
Pedestrian areas such as parks, campuses, pathways, courtyards and pedestrians malls.

CONSTRUCTION
Single-piece die-cast aluminum housing with nominal wall thickness of 0.125" on a 6mm thick acrylic waveguide is fully gasketd with a single piece tubular silicone gasket.

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 a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Standard Super Durable colors include dark bronze, black, natural aluminum and white. Available in textured and non-textured finishes.

OPTICS
6MM thick acrylic waveguide with 360° flexible LED board. Available in 2700K, 3000K, 3500K, 4000K and 5000K (80CRI) CCT configurations.

ELECTRICAL
Light engine consists of 96 high-efficacy LEDs mounted to a flexible circuit board and aluminum heat sink, ensuring optimal thermal management and long life. Fixtures ship standard with 0-10v dimming driver (order option DMG for connection to exterior controls). Class 1 electronic driver has a power factor >90%, THD <20%, with an expected life of 100,000 hours with <1% failure rate. Serviceable 10kV surge protection device meets a minimum Category C Low for operation (per ANSI/IEEE C62.41.2).

INSTALLATION
Included luminaire and integral arm facilitate quick and easy installation. Stainless steel bolts fasten the mounting block securely to poles and walls.

LISTINGS
CSA certified to U.S. and Canadian standards. Luminaire is IP65 rated. 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 to confirm which versions are qualified. International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color or less.

GOVERNMENT PROCUREMENT
BAA – Buy America(n) Act: Product qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product also qualifies as manufactured in the United States under DOT Buy America regulations.
BABA – Build America Buy America: Product qualifies as produced in the United States under the definitions of the Build America, Buy America Act.
Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY
5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/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.

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