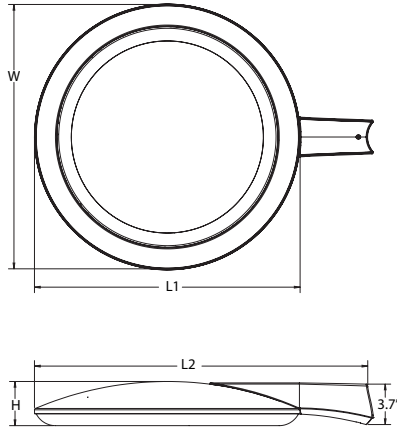


Radean Arm Mount LED Area Luminaire



Specifications

- EPA:** 0.75 ft²
(0.05 m²)
- Length:**
- L1** 24" (61 cm)
- L2** 30" (60.96 cm)
- Width:** 24" (61 cm)
- Height:** 4" (10.2 cm)
- Weight (max):** 29 lbs
(13.15 Kg)



Catalog
Number

Notes

Type

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

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 ¹ | 277 ¹ | SPA | Square pole mounting (includes adapter) |
| | P2 5,000 Lumens | 30K | 3000K | ASY | Asymmetric type IV | 120 ¹ | 347 | RPA | Round pole mounting |
| | P3 7,000 Lumens | 35K | 3500K | PATH | Pathway type III | 208 ¹ | 480 | WBA | Wall bracket |
| | P4 11,000 Lumens | 40K | 4000K | | | 240 ¹ | | | |
| | P5 16,000 Lumens | 50K | 5000K | | | | | | |

| Control options | Other options | Finish (required) | | | |
|---|----------------------------------|-------------------|------------------|--------|---------------------------|
| Shipped installed | Shipped separately | DDBXD | Dark bronze | DDBTXD | Textured dark bronze |
| NLTAIR2 nLight AIR 2.0 enabled ² | SF Single Fuse ¹ | DBLXD | Black | DBLBXD | Textured black |
| PIR Bi-level motion sensor (100% to 30%) ^{2,3,4,5,6} | DF Double Fuse ¹ | DNAXD | Natural aluminum | DNATXD | Textured natural aluminum |
| PE Button photocell ^{2,5} | L90 Left rotated optics | DWHXD | White | DWHGXD | Textured white |
| FAO Field adjustable output ^{2,3,7} | R90 Right rotated optics | | | | |
| | HS Houseside shield ⁸ | | | | |



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RAD1 LED
Rev. 03/16/20

Ordering Information

Accessories

Ordered and shipped separately.

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

For more control options, visit [DTL](#) and [ROAM](#) online.

NOTES

- 1 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.
- 2 NLTAIR2 not available with PIR, PE or FAO. Must link to external nLight Air network.
- 3 PIR will work with FAO, if adjustable dimming level is required.
- 4 PIR must specify 120V, 277V, 347V or 480V. Not available in MVOLT, 208V or 240V.
- 5 PE and PIR are available together.
- 6 PIR for use on mounting heights under 20'.
- 7 Field adjustable high-end trim.
- 8 Also available as a separate accessory; see Accessories information. Shield is field rotatable in 45° increments.

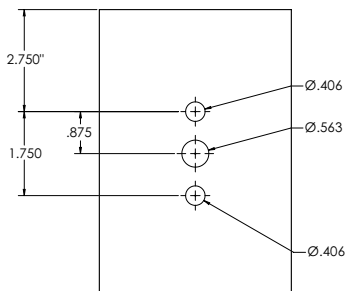
Mounting

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



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.



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RAD1 LED
Rev. 03/16/20

Performance Data

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°C (32-104°F).

| Ambient | LAT Factor | |
|---------|------------|------|
| 0°C | 32°F | 1.06 |
| 5°C | 41°F | 1.05 |
| 10°C | 50°F | 1.04 |
| 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 | 0.96 |

Projected LED Lumen Maintenance

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

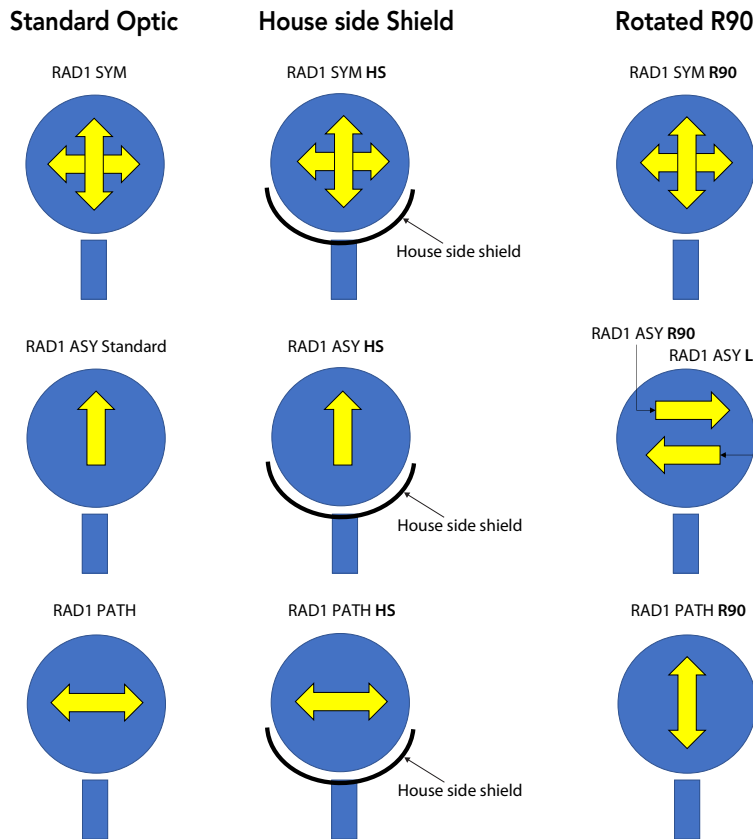
To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

| | 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 |





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 gasketed 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 (70CRI) 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. Class 1 electronic driver has a power factor >90%, THD <20%, and has an expected life of 100,000 hours with <1% failure rate. Easily-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.

WARRANTY

5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx.

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.