



4600
EAST INDIAN SCHOOL RD
PHOENIX, ARIZONA 85018
602-840-2929 P
602-840-6646 F

GATEWAY COMMERCE
CENTER
7132 E. SEAVER AVE
MESA, AZ 85212

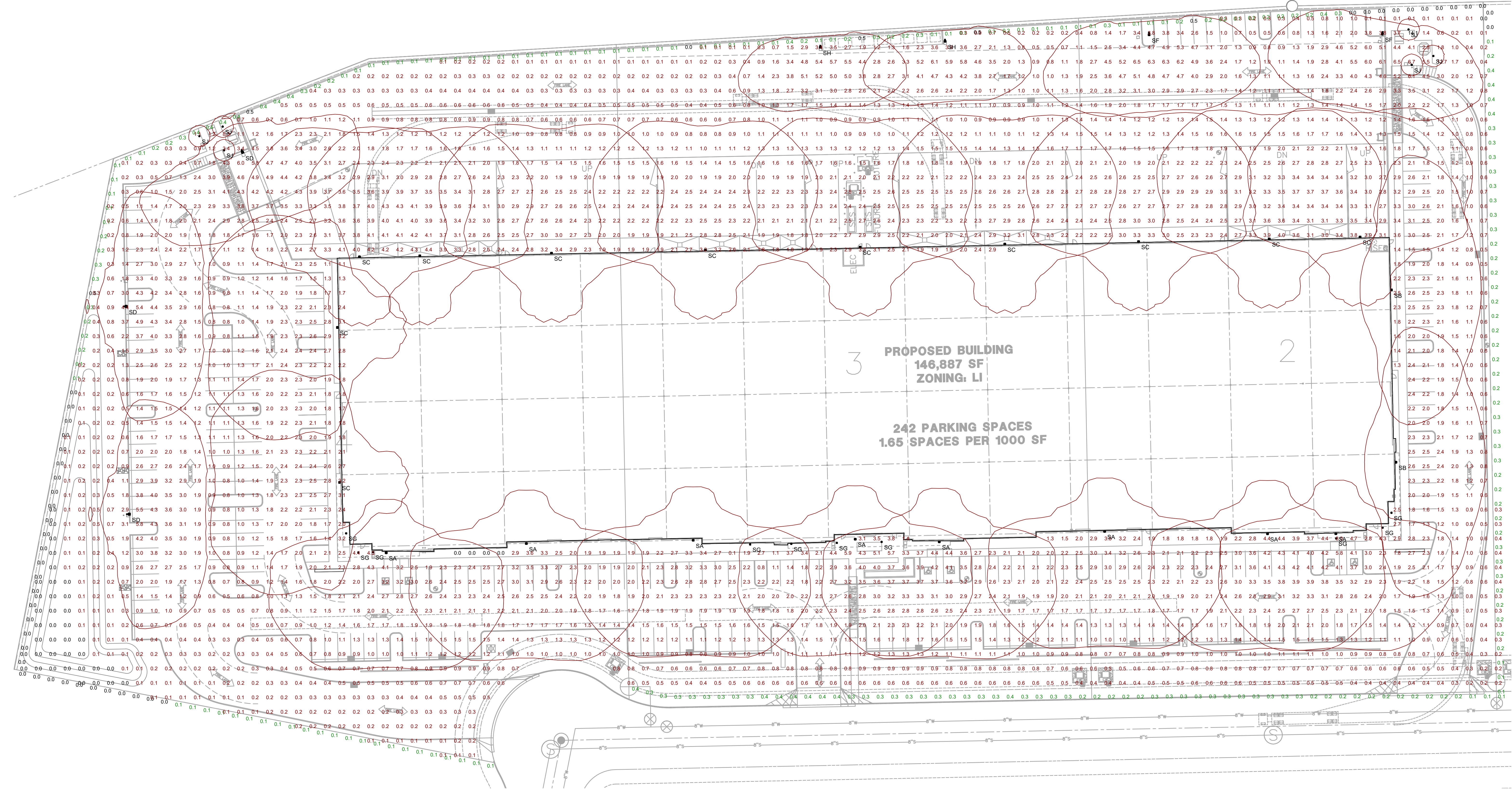
1ST ISSUED:
Revisions

PROJECT NO:
DRAWN BY: CDS
CHK'D BY: MRH
COPYRIGHT 2020: DEUTSCH
ARCHITECTURE GROUP

PHOTOMETRICS
SITE
PLAN

PH1.0

NOTICE OF EXTENDED CERTIFICATION AND APPROVAL PERIOD PROVISION: THIS CONTRACT ALLOWS THE OWNER TO CERTIFY AND APPROVE BILLINGS AND ESTIMATES WITHIN 30 DAYS AFTER THE BILLINGS AND ESTIMATES ARE RECEIVED FROM THE CONTRACTOR.



PHOTOMETRIC SITE PLAN
1"=40'-0"

Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Lumens per Lamp	Lumen Multiple	LLF	Wattage	Notes
	SA	8	Lithonia Lighting	DSX1 LED P9 30K T4M MVOLT VISA37	DSX1 LED P9 30K T4M MVOLT	LED	1	25059	1	1	241	
	SB	2	Lithonia Lighting	DSX1 LED P7 30K T2M MVOLT VISA37	DSX1 LED P7 30K T2M MVOLT	LED	1	19205	1	1	183	
	SC	11	Lithonia Lighting	DSX1 LED P9 30K TFTM MVOLT VISA37	DSX1 LED P9 30K TFTM MVOLT	LED	1	25600	1	1	241	
	SD	3	Lithonia Lighting	DSX1 LED P9 30K T3M MVOLT 1/4\" SSS 22.5\" POLE ON 2.5' BASE	DSX1 LED P9 30K T3M MVOLT with house-side shield	LED	1	20151	1	1	241	
	SF	2	Lithonia Lighting	DSX1 LED P9 30K BLC MVOLT/7\" SSS 22.5\" POLE ON 2.5' BASE	DSX1 LED P9 30K BLC MVOLT	LED	1	20989	1	1	241	
	SG	10	ALW	Q4SM D V W 10 83 30 51	SURFACE MOUNT DOWNLIGHT- WET LOCATION	LED	1	965	1	1	6.6	
	SH	2	Lithonia Lighting	DSX1 LED P5 30K BLC MVOLT SSS 17.5\" POLE ON 2.5' BASE	DSX1 LED P5 30K BLC MVOLT	LED	1	12047	1	1	138	
	SJ	6	Lithonia Lighting	RADB LED P2 30K SYM DOBXD	RADB LED P2 30K SYM DOBXD	LED	1	589	1	1	8	

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
FC ON SITE AT GRADE/2'		1.8 fc	14.1 fc	0.0 fc	N/A	N/A
PROP LINE AT 3'		0.2 fc	0.5 fc	0.0 fc	N/A	N/A

PETERSON ASSOCIATES
CONSULTING ENGINEERS, INC.

7201 N. Dreamy Drive Drive
Suite 200
Phoenix, Arizona 85020
(602) 943-4116
Fax: (602) 943-2507
www.petersonassoc.com
Job No. 20099

ALL CONCEPTS, DESIGNS, AND DATA INDICATED ON THESE DOCUMENTS ARE THE SOLE PROPERTY OF THE PETERSON ASSOC. ENGINEERS, INC. AND SHALL NOT BE USED FOR ANY OTHER PURPOSE THAN ORIGINALLY INTENDED WITHOUT THE WRITTEN PERMISSION OF THE ENGINEER.

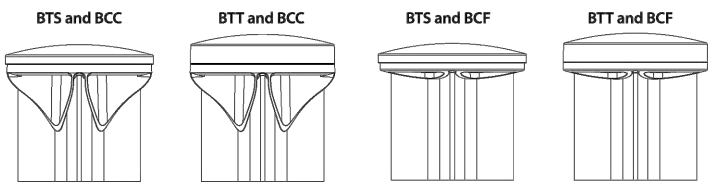
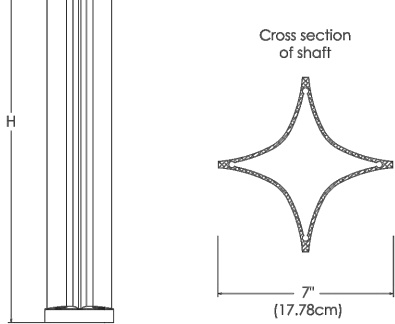


RADEAN Bollard LED Site Luminaire



Specifications

Diameter: D = 8.25" (207.65mm)
Height: H = 41.5" Standard (105.41cm)
Weight (max): 20lbs (9.07Kg)



Ordering Information

EXAMPLE: RADB LED P4 30K SYM MVOLT BTS BCCDNATXD DBLXD

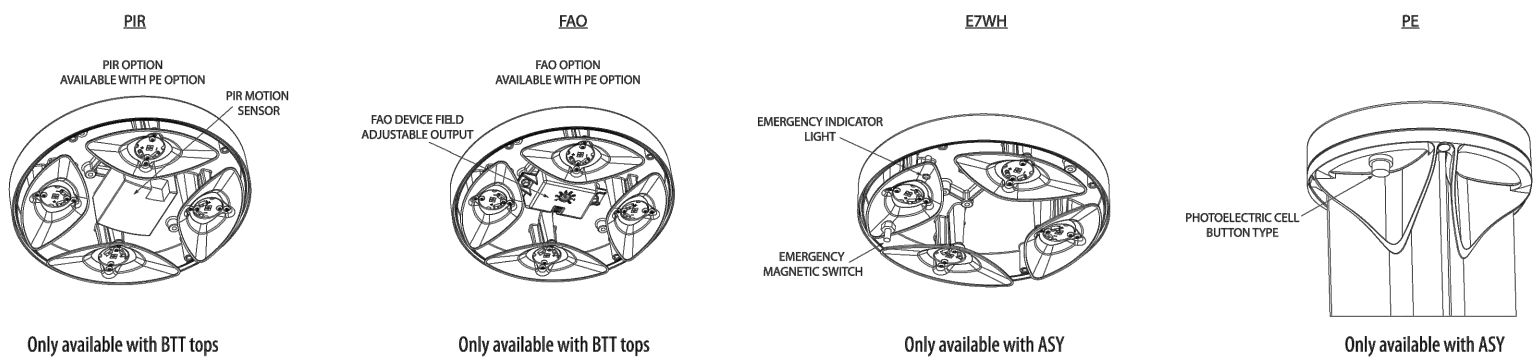
Series	Performance Package	Color Temperature	Structure	Voltage	Control options	Bollard top options
RADB LED	P1 P2 P3 P4 P5	27K 30K 35K 40K 50K	2700 K 3000 K 3500 K 4000 K 5000 K	ASY SYM	Asymmetric ¹ Symmetric ¹	MVOLT ¹ 120 208 ¹ 240 ¹ 277 347 480

Bollard crown options	Other options	Finish options
Deep Crown BCC Deep crown, painted to match shaft ¹ BCCDWXD Deep crown, white ¹ BCCBLXD Deep crown, black ¹ BCCBLBXXD Deep crown, black textured ¹ BCCDBXXD Deep crown, dark bronze textured ¹ BCCDBXXD Deep crown, dark bronze ¹ BCCDBXXD Deep crown, dark bronze ¹ BCCDNATXD Deep crown, natural aluminum textured ¹ BCCDNATXD Deep crown, natural aluminum ¹ BCCDNATXD Deep crown, white textured ¹	Flat Crown BCF Flat crown, painted to match shaft ¹ BCFBLLBXXD Flat crown, black textured ¹ BCFBLLBXXD Flat crown, black ¹ BCFBDBXXD Flat crown, dark bronze textured ¹ BCFBDBXXD Flat crown, dark bronze ¹ BCFBNATXD Flat crown, natural aluminum textured ¹ BCFBNATXD Flat crown, natural aluminum ¹ BCFBNATXD Flat crown, white textured ¹ BCFBNATXD Flat crown, white ¹	Finish options H24 ^{1,2} 24" overall height H30 ^{1,2} 30" overall height H36 ^{1,2} 36" overall height L/AB Without anchor bolts DBXXD Dark bronze DBLXD Black DNATXD Natural aluminum DNATXD White DNATXD Textured dark bronze DNATXD Textured black DNATXD Textured natural aluminum DNATXD Textured white

Accessories	NOTES
RADBAS U Anchor bolts (4) RADBARC DBXDD U Replacement anchor bolt covers (specify finish) (4)	1 PS only available in SYM distribution. 2 ASY has only two illuminated quadrants driven at higher drive currents to generate similar output as the SYM 4-quadrant product. 3 PIR not available with 208V or 240V. 4 PE only available with ASY. 5 PE, PIS and FAQ not available with BTS.

LITHONIA LIGHTING COMMERCIAL OUTDOOR One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com © 2012-2019 Acuity Brands Lighting, Inc. All rights reserved.

Options



Only available with BTS tops Only available with BTT tops Only available with ASY Only available with ASY

Performance Data

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. Actual performance may differ as a result of end-user environment and application. Actual wattage may differ by +/- 8% when operating between 120-480V +/- 10%.

Light Engines	Performance Package	Systems Watts	2700K					3000K					3500K					4000K					5000K				
			Lumens	S	U	G	LPW	Lumens	S	U	G	LPW	Lumens	S	U	G	LPW	Lumens	S	U	G	LPW	Lumens	S	U	G	LPW
*Symmetric (4 light engines)	P1	5	345	0	1	0	66	362	0	1	0	69	370	0	1	0	71	380	0	1	0	73	382	0	1	0	73
	P2	8	644	0	1	0	81	677	0	1	0	85	692	0	1	0	87	711	0	1	0	89	713	0	1	0	89
	P3	13	1036	1	1	0	77	1086	1	1	0	81	1112	1	1	0	83	1142	1	1	0	85	1146	1	1	0	85
	P4	19	1460	1	1	0	79	1534	1	1	0	83	1568	1	1	0	84	1610	1	1	0	87	1616	1	1	0	87
	P5	32	2314	1	1	0	72	2430	1	1	0	75	2484	1	1	0	77	2551	1	1	0	79	2561	1	1	0	79
*Asymmetric (2 light engines)	P1	5	312	0	1	0	60	328	0	1	0	63	335	0	1	0	64	344	0	1	0	66	346	0	1	0	66
	P2	8	584	0	1	0	73	613	0	1	0	77	627	0	1	0	78	644	0	1	0	81	646	0	1	0	81
	P3	13	938	0	1	0	70	985	0	1	0	73	1007	0	1	0	75	1035	0	1	0	77	1038	0	1	0	77
	P4	19	1323	0	1	0	71	1390	0	1	0	75	1420	0	1	0	76	1459	0	1	0	78	1464	0	1	0	78
	P5	32	2114	0	1	0	64	2214	0	1	0	67	2284	0	1	0	69	2351	0	1	0	71	2356	0	1	0	71

*Notes: Lumen output varies based on finish. Silver color shown, for black (worst) or white (best) photometry, see specific photometric files downloadable from www.acuitybrands.com

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted 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 LMF, 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			
	25,000	50,000	75,000	100,000
P1	0.94	0.89	0.85	0.80
P2	0.94	0.89	0.85	0.80
P3	0.94	0.89	0.85	0.80
P4	0.94	0.89	0.85	0.80
P5	0.94	0.89	0.85	0.80

Lumen Ambient Temperature (LAT) Multipliers

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

Ambient	LAT Factor
0	1.00
5	0.98
10	0.96
15	0.94
20	0.92
25	0.90
30	0.88
35	0.86
40	0.84

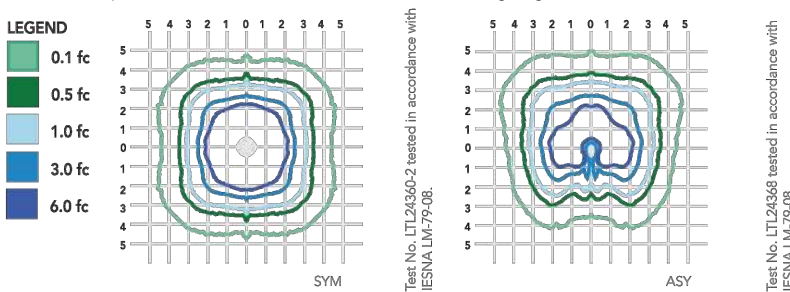
Electrical Load

	Current (amps)									
	Watts = 120V (W)	Watts = 277V (W)	120V (A)	120V (A)	120V (A)	120V (A)	277V (A)	277V (A)	277V (A)	277V (A)
P1 ASY	5	6	0.044	0.029	0.027	0.026	10	10	0.044	0.031
P2 ASY	8	10	0.071	0.047	0.045	0.044	14	14	0.071	0.044
P3 ASY	13	15	0.114	0.069	0.067	0.066	18	18	0.114	0.066
P4 ASY	19	19	0.156	0.092	0.089	0.088	23	23	0.156	0.088
P5 SYM	5	6	0.044	0.030	0.029	0.028	9	9	0.044	0.031
P2 SYM	8	10	0.074	0.048	0.047	0.046	13	13	0.074	0.046
P3 SYM	13	14	0.112	0.067	0.066	0.065	18	18	0.112	0.065
P4 SYM	18	19	0.155	0.090	0.088	0.087	22	22	0.155	0.087
P5 SYM	31	31	0.257	0.152	0.150	0.149	35	35	0.257	0.089

LITHONIA LIGHTING COMMERCIAL OUTDOOR One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com © 2012-2019 Acuity Brands Lighting, Inc. All rights reserved.

Photometric Diagrams

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



Notes: All diagrams are based on a mounting height of 3.5'. All diagrams are based on a mounting height of 3.5'. All diagrams are based on a mounting height of 3.5'.

FEATURES & SPECIFICATIONS

INTENDED USE

The rugged construction and maintenance-free performance of the Radcan LED Bollard is ideal for illuminating building entryways, walking paths and pedestrian plazas, as well as any other location requiring a low-mounting-height light source.

CONSTRUCTION

One-piece extruded aluminum shaft with thick die walls for extreme durability, and die-cast reflector and top cap. Four 3/8" x 16" anchor bolts with double nuts and washers and 5-2/3" max. bolt circle template ensure stability. Overall height is 42" standard.

FINISH

Exterior parts are protected by a zinc-infused super durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering for maximum retention of gloss and luster. A tightly controlled multi-stage process ensures a minimum 3-mil thickness for a finish that can withstand the elements without cracking or peeling. Available in both textured and non-textured finishes.

OPTICS

Two optical distributions are available: symmetrical and asymmetrical. IP66 sealed LED light engine provides smoothly graduated illumination. Light engines are available in 2700K, 3000K, 3500K, 4000K or 5000K.

ELECTRICAL

Light engines consist of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (LSI/100,000 hours at P5 at 25°C). Class 2 electronic drivers are designed for an expected life of 100,000 hours with < 1% failure rate. Electrical components are mounted on a removable power tray.

LISTINGS

CSA certified to U.S. and Canadian standards. Light engines are IP66 rated. Rated for 40°C minimum ambient. Emergency battery backup rated for 10°C minimum ambient. International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color or less.

WARRANTY

Five-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 and color. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

LITHONIA LIGHTING COMMERCIAL OUTDOOR One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com © 2012-2019 Acuity Brands Lighting, Inc. All rights reserved.

RADB-LED Rev. 10/11/19

2929.COM



4600 EAST INDIAN SCHOOL RD
PHOENIX, ARIZONA 85018
602-840-2929 P
602-840-6646 F

GATEWAY COMMERCIAL
CENTER
7132 E. SEAVER AVE
MESA, AZ 85212

1ST ISSUED:

Revisions

PROJECT NO:

DRAWN BY: CDS

CHK'D BY: MRH

COPYRIGHT 2020: DEUTSCH
ARCHITECTURE GROUP

PHOTOMETRICS
SITE PLAN
CUT SHEETS

PH1.2



7201 N. Dreamy Drive
Suite 200
Phoenix, Arizona 85020
(602) 943-4116
Fax: (602) 943-2507
www.mpsconsult.com
Job No. 20099

ALL CONCEPTS, DESIGNS, AND DATA INDICATED ON THESE DOCUMENTS ARE THE SOLE PROPERTY OF THE PETERSON ASSOC. ENGINEERS, INC. AND SHALL NOT BE USED FOR ANY OTHER PURPOSE THAN ORIGINALLY INTENDED WITHOUT THE WRITTEN PERMISSION OF THE ENGINEER.