COST LESS LIGHTING

06-BOL-LKFS

ROUND & SQUARE BOLLARDS
LUMEN & KELVIN FIELD SELECTABLE

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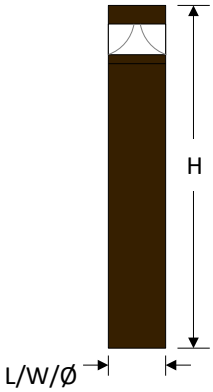
PROJECT	TYPE	CATALOG #



MODEL	L	W/Ø	H	Weight (lbs)
06-BOL-S	6	6	42	12
06-BOL-R	6	6	42	15
06-BOL-RD	6	6	44	12
06-BOL-RDL	6	6	44	13

SERIES	MODEL	NOMINAL LUMEN OUTPUT (SELECTABLE)	SELECT	HOUSING COLOR	REQUIRED HOUSING MEANS (ORDER SEPARATELY)
06-BOL	R = Round S = Square RD = Round Dome	3L = 3,000lm	LKFS	BKL = Black Blank = Bronze	BOL-R-MTGKIT = Anchor bolt for round bollard BOL-S-MTGKIT = Anchor bolt for square bollard
	RDL = Round Dome Louvered	2L = 2,000lm			

Specifications

Housing

- *Cast aluminum housing with choice of dark bronze or black powder coat finish.*
- *High-impact, polycarbonate lens.*

Electrical

- *Universal 120-277 AC voltage (50-60Hz) is standard.*
- *0-10vdc dimming drivers, are standard.*
- *Surge protection = 4kV.*
- *Power factor > 0.90.*
- *Total harmonic distortion < 20%.*

Code Compliance

- *cULus listed for wet locations in ambient temperatures from -40°C to 55°C (-40°F to 131°F).*
- *IP65 rated for ingress protection.*
- *Complies with FCC Part 15, class A.*

Mounting

- *Easy installation in new construction or retrofit applications.*

Optical System

- *Field selectable 3000k (warm white), 4000k (neutral white), and 5000k (cool white) color temperatures.**
- *Long-life LEDs provide at least 70% of initial lumen output (L70) for >163,000 hours of operation, and at least 90% of initial lumen output (L90) for >50,000 hours of operation.***
- *LED chromaticity based on < 5-step ANSI quadrangles.*
- *LED color maintenance < 0.003 chromaticity shift (Δu'v') over the initial 6,000 hours of operation.*
- *Provides a range of 905 to 3,296 nominal lumens and 69 to 148 nominal lumens per watt (lm/W).*
- *Color rendering index (Ra) > 80.*

Warranty

- *5-year warranty of all electronics and housing.*

***L_{70} hours are IES TM 21 11 calculated hours.*

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Electrical Data

Series	Measurements	Low Lumens			Mid Lumens			High Lumens		
		3000K	4000K	5000K	3000K	4000K	5000K	3000K	4000K	5000K
06-BOL-R-3L-LKFS	Lumens	1827	1974	1942	2507	2686	2665	3090	3244	3296
	Watts	13	14	13	18	19	18	23	22	23
	Efficacy	139	144	148	138	145	146	134	145	144
	Input Current (A)	120V = 0.11A	120V = 0.12A	120V = 0.11A	120V = 0.15A	120V = 0.16A	120V = 0.15A	120V = 0.19A	120V = 0.18A	120V = 0.19A
		240V = 0.05A	240V = 0.06A	240V = 0.05A	240V = 0.08A	240V = 0.08A	240V = 0.08A	240V = 0.10A	240V = 0.09A	240V = 0.10A
		277V = 0.05A	277V = 0.05A	277V = 0.05A	277V = 0.06A	277V = 0.07A	277V = 0.06A	277V = 0.08A	277V = 0.08A	277V = 0.08A

Series	Measurements	Low Lumens			Mid Lumens			High Lumens		
		3000K	4000K	5000K	3000K	4000K	5000K	3000K	4000K	5000K
06-BOL-S-3L-LKFS	Lumens	1702	1790	1805	2303	2450	2459	2887	3047	3041
	Watts	13	14	13	18	18	19	23	23	23
	Efficacy	128	132	135	125	134	133	125	135	131
	Input Current (A)	120V = 0.11A	120V = 0.12A	120V = 0.11A	120V = 0.15A	120V = 0.15A	120V = 0.16A	120V = 0.19A	120V = 0.19A	120V = 0.19A
		240V = 0.05A	240V = 0.06A	240V = 0.05A	240V = 0.08A	240V = 0.08A	240V = 0.08A	240V = 0.10A	240V = 0.10A	240V = 0.10A
		277V = 0.05A	277V = 0.05A	277V = 0.05A	277V = 0.06A	277V = 0.06A	277V = 0.07A	277V = 0.08A	277V = 0.08A	277V = 0.08A

Series	Measurements	Low Lumens			Mid Lumens			High Lumens		
		3000K	4000K	5000K	3000K	4000K	5000K	3000K	4000K	5000K
06-BOL-RD-3L-LKFS	Lumens	1819	1818	1895	2512	2530	2614	3103	3249	3251
	Watts	13	12	13	18	17	18	23	22	23
	Efficacy	140	148	146	138	147	144	136	146	143
	Input Current (A)	120V = 0.11A	120V = 0.10A	120V = 0.11A	120V = 0.15A	120V = 0.14A	120V = 0.15A	120V = 0.19A	120V = 0.18A	120V = 0.19A
		240V = 0.05A	240V = 0.05A	240V = 0.05A	240V = 0.08A	240V = 0.07A	240V = 0.08A	240V = 0.10A	240V = 0.09A	240V = 0.10A
		277V = 0.05A	277V = 0.04A	277V = 0.05A	277V = 0.06A	277V = 0.06A	277V = 0.06A	277V = 0.08A	277V = 0.08A	277V = 0.08A

Series	Measurements	Low Lumens			Mid Lumens			High Lumens		
		3000K	4000K	5000K	3000K	4000K	5000K	3000K	4000K	5000K
06-BOL-RDL-2L-LKFS	Lumens	905	973	983	1263	1351	1359	1573	1692	1687
	Watts	13	12	13	18	17	18	23	22	23
	Efficacy	71	79	77	71	78	76	69	76	74
	Input Current (A)	120V = 0.11A	120V = 0.10A	120V = 0.11A	120V = 0.15A	120V = 0.14A	120V = 0.15A	120V = 0.19A	120V = 0.18A	120V = 0.19A
		240V = 0.05A	240V = 0.05A	240V = 0.05A	240V = 0.08A	240V = 0.07A	240V = 0.08A	240V = 0.10A	240V = 0.09A	240V = 0.10A
		277V = 0.05A	277V = 0.04A	277V = 0.05A	277V = 0.06A	277V = 0.06A	277V = 0.06A	277V = 0.08A	277V = 0.08A	277V = 0.08A

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Photometric Data

06-BOL-R-3L-LKFS

Luminaire Data

Description	BOLLARD (ROUND) 3L 5K - LKFS
Total Lumens	3,296
Input Wattage	23
Efficacy (lm/W)	144
Max. Cd.	815.81 (67.5H, 53V)
IES Classification	Type VS
Longitudinal Classification	Short

Zonal Lumen Summary

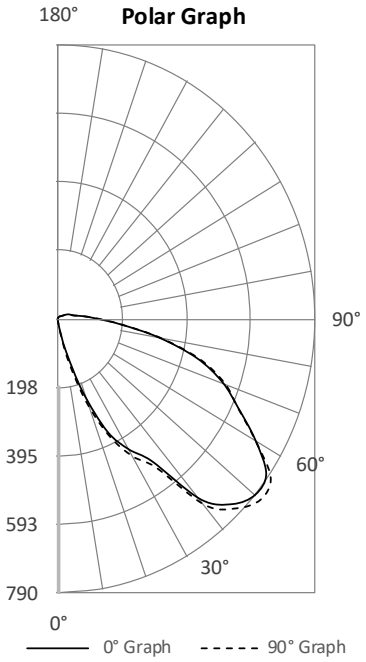
Zone	Lumens	%Fixt
0-30°	201	6.1%
0-60°	1,823	55.3%
0-80°	2,890	87.7%
80-90°	225	6.8%
0-90°	3,115	94.5%
90-110°	134	4.1%
110-180°	0	0.0%
0-180°	3,296	100.0%

Luminaire Classification Systems (LCS)

LCS Zone		Lumens	%Lum
FL	0-30	99	3.0%
FM	30-60	813	24.7%
FH	60-80	540	16.4%
FVH	80-90	116	3.5%
BL	0-30	101	3.1%
BM	30-60	809	24.5%
BH	60-80	527	16.0%
BVH	80-90	109	3.3%
UL	90-100	89	2.7%
UH	100-180	93	2.8%
Total		3,296	100.0%
BUG Rating		B2-U3-G2	

Photometrics calculated at 5000k - high lumens setting

Polar Graph



06-BOL-S-3L-LKFS

Luminaire Data

Description	BOLLARD (SQUARE) 3L 5K - LKFS
Total Lumens	3,041
Input Wattage	23
Efficacy (lm/W)	132
Max. Cd.	843.54 (270H, 53V)
IES Classification	Type VS
Longitudinal Classification	Short

Zonal Lumen Summary

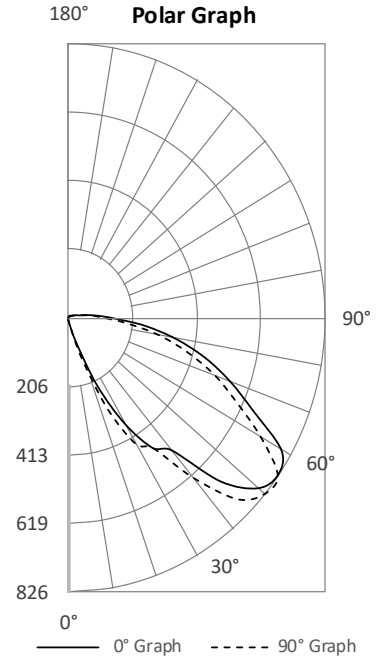
Zone	Lumens	%Fixt
0-30°	114	3.8%
0-60°	1,611	53.0%
0-80°	2,646	87.0%
80-90°	230	7.6%
0-90°	2,876	94.6%
90-110°	126	4.1%
110-180°	0	0.0%
0-180°	3,041	100.0%

Luminaire Classification Systems (LCS)

LCS Zone		Lumens	%Lum
FL	0-30	47	1.6%
FM	30-60	738	24.3%
FH	60-80	552	18.2%
FVH	80-90	132	4.3%
BL	0-30	67	2.2%
BM	30-60	760	25.0%
BH	60-80	482	15.9%
BVH	80-90	98	3.2%
UL	90-100	89	2.9%
UH	100-180	76	2.5%
Total		3,041	99.9%
BUG Rating		B1-U3-G2	

Photometrics calculated at 5000k - high lumens setting

Polar Graph



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Photometric Data

06-BOL-RD-3L-LKFS

Luminaire Data

Description	BOLLARD (ROUND DOME) 3L 5K - LKFS
Total Lumens	3,251
Input Wattage	23
Efficacy (lm/W)	143
Max. Cd.	765.57 (45H, 52V)
IES Classification	Type VS
Longitudinal Classification	Very Short

Zonal Lumen Summary

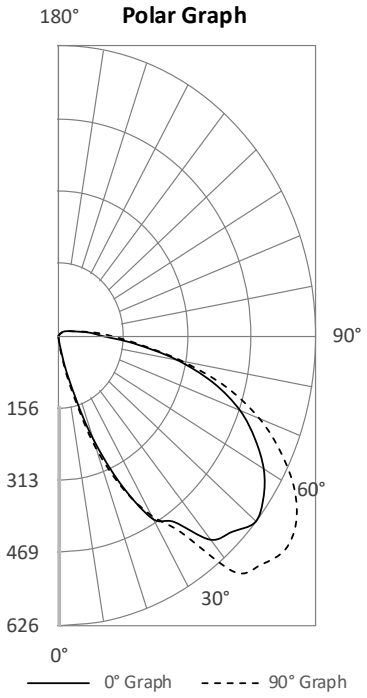
Zone	Lumens	%Fixt
0-30°	200	6.2%
0-60°	1,724	53.0%
0-80°	2,790	85.8%
80-90°	240	7.4%
0-90°	3,030	93.2%
90-110°	161	5.0%
110-180°	0	0.0%
0-180°	3,251	100.0%

Luminaire Classification Systems (LCS)

LCS Zone		Lumens	%Lum
FL	0-30	96	3.0%
FM	30-60	756	23.3%
FH	60-80	539	16.6%
FVH	80-90	124	3.8%
BL	0-30	104	3.2%
BM	30-60	768	23.6%
BH	60-80	528	16.2%
BVH	80-90	116	3.6%
UL	90-100	110	3.4%
UH	100-180	111	3.4%
Total		3,251	100.0%
BUG Rating		B2-U3-G2	

Photometrics calculated at 5000k - high lumens setting

Polar Graph



06-BOL-RDL-2L-LKFS

Luminaire Data

Description	BOLLARD (ROUND DOME LOUVERED) 2L 5K - LKFS
Total Lumens	1,688
Input Wattage	23
Efficacy (lm/W)	74
Max. Cd.	292.72 (225H, 67V)
IES Classification	Type VS
Longitudinal Classification	Short

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-30°	61	3.6%
0-60°	455	27.0%
0-80°	959	56.8%
80-90°	231	13.7%
0-90°	1,190	70.5%
90-110°	345	20.4%
110-180°	0	0.0%
0-180°	1,688	100.0%

Luminaire Classification Systems (LCS)

LCS Zone		Lumens	%Lum
FL	0-30	32	1.9%
FM	30-60	201	11.9%
FH	60-80	253	15.0%
FVH	80-90	115	6.8%
BL	0-30	29	1.7%
BM	30-60	192	11.4%
BH	60-80	250	14.8%
BVH	80-90	116	6.9%
UL	90-100	202	12.0%
UH	100-180	296	17.5%
Total		1,688	100.0%
BUG Rating		B1-U3-G2	

Photometrics calculated at 5000k - high lumens setting

Polar Graph