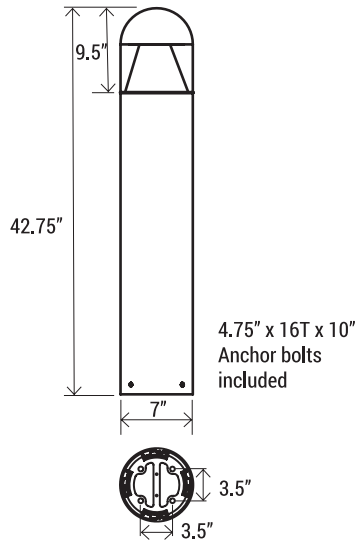


**DIMENSION:**



**FEATURES**

The LED Bollard 103 has a sleek, low profile designed to provide extreme vandal resistance and deliver high performance and efficiency. High efficacy of 100 lumens per watt, ideal for replacing 100W metal halide. Aluminum cone reflector provides uniform illumination while reducing glare with its even beam pattern. Small but durable and gasketed to seal out outside contaminants, the LED Bollard is perfect for entrances, courtyards, walkways, office grounds, residential, and hospitality applications.

LUMENS	2000
CCT & DYNAMIC PLATFORMS	40K, 50K
CRI	80+
COLOR QUALITY	3 Step MacAdam Ellipse
SIZE	3.5' L X 7" W
DIMMING & CONTROL	0-10V Flicker Free 1% Dimming Standard (DIM10) LUTH
LIFETIME	L70 at 50,000 Hours
PHOTOMETRIC TESTS	In Accordance with IES LM79-08, LM80 and TM-30, TM-21

NOMINAL LUMENS	DELIVERED LUMENS	*WATTAGE
2000	xxxx	20 W

Based on 4000K, 85+ CRI. Actual wattage may vary +/- 5%





**OPTICAL SYSTEM**

Clear polycarbonate lens with internal flutes and full gasketing at bottom edge provides durability and superior resistance to vandalism.

**CONSTRUCTION**

One-piece 7-inch round extruded aluminum shaft (bottom housing) with .125" thick side walls for supreme durability. Top cover is one-piece die-cast aluminum round. Fixture head allows for ventilation surrounding the luminaire enclosure. Overall height is 33" standard.

**FINISH**

TGIC thermoset polyester powder coat that reinforces durability and resistance to fade and corrosion. Standard finishes in Bronze or Black.

**MOUNTING**

Four 4.75" x 16T x 10" anchor bolts included.

**OPTIONS**

Optional backup battery provides 90 minutes of battery life at 50% of initial lumens.

**DRIVER ELECTRICAL INFORMATION**

Powered by high-quality constant-current power LED drivers rated for 50 to 60Hz at 120V/277V. Produce less than 20% THD, have a power factor of .90 to 1.00. Thermally protected for increased performance and safety.

**DIMMING & DRIVER INFORMATION**

**DIM10** - Flicker Free 1% Dimming Standard (DIM10) 0-10V dimming on either MVOLT 120, 277 or 347V.

**LUTH** - Lutron LDE1 Hi-Lume Eco System. 1% dimming with Soft in Fade to Black dimming technology.

**WARRANTY**

Five-year warranty for parts and components. (Labor not included)

**LISTINGS**

- UL 1598
- UL 8750
- CSA C22.2
- RoHS compliant
- Damp and Wet Location Rated
- IP65 rated

Example: **OBO-105-LED-2000L-DIM10-MVOLT-40K-80-BZ**

FIXTURE SIZE	LUMENS	DIMMING	VOLTAGE	CCT	CRI	EMEGENCY	FINISH
<b>OBO-105-LED</b>	<b>2000L</b> - 2000 lumens	<b>DIM10</b> - 0-10V Dimming <b>LUTH</b> - Lutron HiLume	<b>MVOLT</b>	<b>40K</b> <b>50K</b>	<b>80</b>	<b>O-EMG-LED</b> <i>* Consult Factory</i>	<b>BZ</b> - Bronze <b>BK</b> - Black

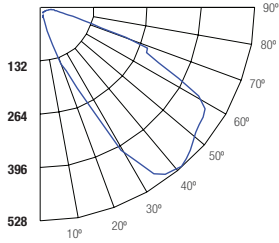


**OBO-105-LED-2000L-DIM10-MVOLT-40K-80-BZ**

TEST NO.: **EL031827**

INPUT WATTS: **20.9**      LUMENS: **2139**      CRI: **85**      EFFICACY: **102**      CCT: **4000K**

**Candle Power Distribution (Candelas)**



**Zonal Lumens Summary**

Zone	Lumens	%Lamp	%Fixt
0-30°	8.38	0.40	0.40
0-40°	17.48	0.80	0.80
0-60°	54.87	2.60	2.60
0-90°	190.55	8.90	8.90
0-180°	2139.11	100.00	100.00

**Luminance Data (cd/sq.m)**

Angle In Degrees	Average 0°	Average 45°	Average 90°
45°	137	136	136
55°	224	230	224
65°	374	384	368
75°	777	773	766
85°	3197	3194	3086

**Candela Tabulation**

	0	45	90
0	5.842	5.842	5.842
5	5.630	5.970	5.690
15	7.480	8.510	7.500
25	10.160	10.490	10.200
35	13.580	13.740	13.700
45	18.070	17.980	18.040
55	24.050	24.670	24.030
65	29.520	30.330	29.070
75	37.590	37.410	37.060
85	52.090	52.050	50.290
90	64.640	64.640	61.720

**Spacing Criteria**

0-180 : N.A.  
 90-270 : N.A.  
 Diagonal : N.A.

**EFFICACY: 102 LM/W**

**Coefficients of Utilization - Zonal Cavity Method**  
 Effective Floor Cavity Reflectance 20% = PF

RC RW	80%				70%				50%				30%				10%				0%	
	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%	
0	97	97	97	97	84	84	84	84	60	60	60	39	39	39	18	18	18	9				
1	87	83	78	75	75	71	68	65	51	48	46	32	30	29	14	13	13	5				
2	79	71	65	60	68	62	57	52	44	40	37	27	25	23	12	11	10	3				
3	72	62	55	49	62	54	48	43	38	34	31	24	21	19	10	9	8	2				
4	65	55	47	41	56	47	41	36	34	29	26	21	18	16	9	8	7	2				
5	60	48	41	35	51	42	35	30	30	25	22	18	16	14	8	6	5	1				
6	55	43	35	30	47	37	31	26	27	22	19	16	14	12	7	6	5	1				
7	50	39	31	26	43	33	27	22	24	19	16	15	12	10	6	5	4	1				
8	46	35	27	22	40	30	24	19	21	17	14	13	11	9	6	4	3	1				
9	43	31	24	19	37	27	21	17	19	15	12	12	10	8	5	4	3	1				
10	40	29	22	17	34	25	19	15	18	14	11	11	9	7	5	4	3	0				

RC - Ceiling Cavity Reflectance      RW - Wall Reflectance