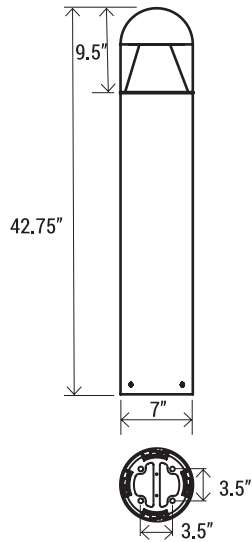


### DIMENSION:



### FEATURES

The LED Bollard 105 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	30K, 40K, 50K
CRI	85+
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	2139	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 43" 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.

## 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-85-BZ**

FIXTURE SIZE	LUMENS	DIMMING	VOLTAGE	CCT	CRI	EMERGENCY	FINISH
<b>OBO-105-LED</b>	<b>2000L</b> - 2000 lumens	<b>DIM10</b> - 0-10V Dimming	<b>MVOLT</b>	<b>30K</b> <b>40K</b> <b>50K</b>	<b>85</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-85

TEST NO.: **EL031827**

INPUT WATTS: **20.8**

LUMENS: **2139**

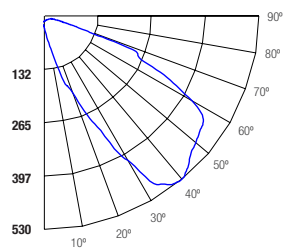
CRI: **85**

EFFICACY: **103**

CCT: **4000K**

SPACING CRITERIA: **11.46**

#### Candle Power Distribution (Candelas)



#### Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	18.71	0.9	0.9
0-30	132.16	6.2	6.2
0-40	396.42	18.5	18.5
0-60	1211.13	56.6	56.6
0-80	1837.89	85.9	85.9
0-90	1948.22	91.1	91.1

#### Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	4923	5160	4519
55	5815	5981	6281
65	7074	6374	8144
75	5493	5958	7731
85	6781	7139	10775

#### Lumens Per Zone

Zone	Lumens
0-10	0.3
10-20	18.41
20-30	113.46
30-40	264.26
40-50	383.77
50-60	430.93
60-70	391.6
70-80	235.16
80-90	110.33

#### Candela Tabulation

0	0.821
5	2.321
15	61.378
25	309.46
35	380.74
45	498.26
55	477.41
65	427.93
75	203.52
85	84.597
90	64.636

#### Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

Cone of Light			
2	0.21	2.1	9.6
4	0.05	4.1	19.1
6	0.02	6.2	28.7
8	0.01	8.3	38.2
10	0.01	10.4	47.8
12	0.01	12.4	57.4
(FT.) Distance to Plane	(FC.) Initial Footcandle at Nadir	(FT.) Beam Vert. Spread	(FT.) Beam Horiz. Spread

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

	RC	80%				70%				50%				30%				10%				0%
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
ROOM CAVITY RATIO	0	117	117	117	117	117	113	113	113	113	106	106	106	100	100	100	94	94	94	94	91	
	1	103	97	92	87	99	94	89	84	88	84	80	82	79	76	77	75	72	72	69	69	
	2	91	81	73	65	88	78	71	64	73	67	61	68	63	58	64	59	56	56	53		
	3	81	68	58	51	78	66	57	50	62	54	47	58	51	45	54	48	43	43	41		
	4	73	58	48	40	70	56	47	39	53	44	38	49	42	36	46	40	35	32	32		
	5	66	51	40	32	63	49	39	32	45	37	30	42	35	29	40	33	28	25	25		
	6	60	44	34	26	57	43	33	26	40	31	25	37	30	24	35	28	23	20	20		
	7	54	39	29	22	52	38	28	21	35	27	21	33	25	20	31	24	19	17	17		
	8	50	35	25	18	48	33	24	18	31	23	17	29	22	17	27	21	16	14	14		
	9	46	31	22	16	44	30	21	15	28	20	15	26	19	14	25	18	14	11	11		
10	43	28	19	13	41	27	19	13	25	18	13	24	17	12	22	16	12	10	10			

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance