





**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, .125" thick side walls for increased durability. Top cover is one-piece die-cast aluminum round, secured to louvers by hidden Allen screws in keyhole slots. Die-cast aluminum louvers with stacked ribs placed vertically at 90° intervals. Horizontal louver blades with a 60° upward pitch and delivering light source cutoff above horizontal. Louver secured to shaft by four internal tie rods. 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-103-LED-2000L-DIM10-MVOLT-40K-80-BZ**

FIXTURE SIZE	LUMENS	DIMMING	VOLTAGE	CCT	CRI	EMEGENCY	FINISH
OBO-103-LED	2000L - 2000 lumens	DIM10 - 0-10V Dimming LUTH - Lutron HiLume	MVOLT	30K 40K 50K	80	O-EMG-LED * Consult Factory	BZ - Bronze BK - Black



**OBO-103-LED-1000L-DIM10-MVOLT-40K-BZ**

**TEST NO.: EL081829**

INPUT WATTS: **18.7**

LUMENS: **1062**

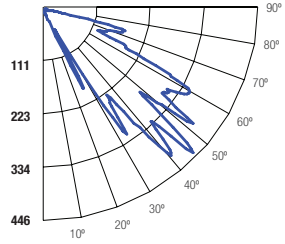
CRI: **80**

EFFICACY: **57**

CCT: **4000K**

SPACING CRITERIA: **N/A**

**Candle Power Distribution (Candelas)**



**Zonal Lumens Summary**

Zone	Lumens	%Lamp	%Fixt
0-20	1.26	0.10	0.10
0-30	3.05	0.30	0.30
0-40	5.66	0.50	0.50
0-60	13.03	1.20	1.20
0-80	23.89	2.20	2.20
0-90	30.42	2.90	2.90

**Luminance (Average candela/M<sup>2</sup>)**

Angle in Degrees	Average		
	0°	45°	90°
45	22	23	24
55	22	24	23
65	24	25	25
75	30	32	31
85	32	33	31

**Lumens Per Zone**

Zone	Lumens
0-10	0.30
10-20	0.97
20-30	1.79
30-40	2.61
40-50	3.32
50-60	4.04
60-70	4.79
70-80	6.07
80-90	6.53

**Candela Tabulation**

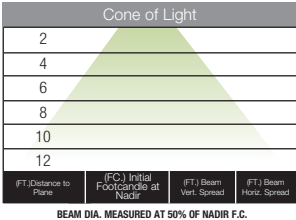
Q		Q	
0	3.099	0	3.099
5	3.130	5	3.130
15	3.410	15	3.410
25	3.780	25	3.780
35	3.920	35	3.920
45	4.360	45	4.360
55	4.510	55	4.510
65	4.780	65	4.780
75	5.860	75	5.860
85	5.860	85	5.860
90	6.580	90	6.580

**Coefficients of Utilization - Zonal Cavity Method**

Effective Floor Cavity Reflectance 0.20

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%		
0	96	96	96	96	82	82	82	82	57	57	57	34	34	34	13	13	13	13	3	3	3	3		
2	79	72	66	62	68	62	57	53	43	40	38	25	24	23	9	9	9	9	8	8	8	8		
3	72	63	56	51	61	54	49	44	38	34	31	22	20	19	8	7	7	7	7	7	7	7		
4	66	56	48	43	56	48	42	37	33	29	26	20	18	16	7	6	6	6	6	6	6	6		
5	60	49	42	36	51	42	36	32	30	26	22	18	15	14	6	6	6	6	5	5	5	5		
6	55	44	36	31	47	38	32	27	26	22	19	16	13	12	6	5	5	5	4	4	4	4		
7	51	39	32	27	43	34	28	23	24	20	17	14	12	10	5	4	4	4	4	3	3	3		
8	47	35	28	23	40	30	24	20	21	17	14	13	10	9	5	4	4	4	3	3	3	3		
9	43	32	25	20	37	28	22	18	19	15	13	12	9	8	4	4	4	4	3	3	3	3		
10	40	29	22	18	34	25	19	16	18	14	11	11	8	7	4	3	3	3	2	2	2	2		

RC - Ceiling Cavity Reflectance



**OBO-103-LED-2000L-DIM10-MVOLT-30K-BZ**

**TEST NO.: EL06281992**

INPUT WATTS: **36.9**

LUMENS: **1987**

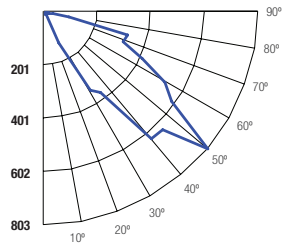
CRI: **80**

EFFICACY: **54**

CCT: **3000K**

SPACING CRITERIA: **N/A**

**Candle Power Distribution (Candelas)**



**Zonal Lumens Summary**

Zone	Lumens	%Lamp	%Fixt
0-20	0.97	0.00	0.00
0-30	43.29	2.20	2.20
0-40	284.69	14.30	14.30
0-60	1209.89	60.70	60.90
0-80	1881.38	94.40	94.70
0-90	1944.18	97.60	97.90

**Luminance (Average candela/M<sup>2</sup>)**

Angle in Degrees	Average		
	0°	45°	90°
45	1102221	1201092	1090273
55	1229079	1337718	1252592
65	1311330	1656245	1183777
75	1226124	1673310	1536292
85	445223	566347	380497

**Lumens Per Zone**

Zone	Lumens
0-10	0.10
10-20	0.88
20-30	42.32
30-40	241.40
40-50	438.88
50-60	486.32
60-70	402.37
70-80	269.12
80-90	62.81

**Candela Tabulation**

Q		Q	
0	0.729	0	0.729
5	0.610	5	0.610
15	2.310	15	2.310
25	22.450	25	22.450
35	263.840	35	263.840
45	569.220	45	569.220
55	514.870	55	514.870
65	404.750	65	404.750
75	231.770	75	231.770
85	28.340	85	28.340
90	12.050	90	12.050

**Coefficients of Utilization - Zonal Cavity Method**

Effective Floor Cavity Reflectance 0.20

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%		
0	118	118	118	118	115	115	115	115	110	110	110	104	104	104	100	100	100	100	98	98	98	98		
1	104	96	93	88	101	96	91	86	91	87	83	87	83	80	82	80	77	75	75	75	75	75		
2	92	81	72	65	89	79	71	64	75	68	62	71	65	60	68	63	59	56	56	56	56	56		
3	81	68	57	49	78	66	56	49	62	54	47	59	52	46	56	50	45	42	42	42	42	42		
4	72	57	46	38	69	56	46	38	53	44	37	50	42	36	47	41	35	32	32	32	32	32		
5	65	49	38	30	62	48	37	30	45	36	29	43	35	28	40	33	28	25	25	25	25	25		
6	58	42	32	24	56	41	31	24	39	30	23	37	29	23	35	28	22	20	20	20	20	20		
7	53	37	27	19	51	36	26	19	34	25	19	32	24	18	31	24	18	16	16	16	16	16		
8	49	33	23	16	47	32	22	16	30	22	15	29	21	15	27	20	15	13	13	13	13	13		
9	45	29	20	13	43	28	19	13	27	19	13	26	18	12	24	17	12	10	10	10	10	10		
10	41	26	17	11	40	26	17	11	24	16	11	23	16	10	22	15	10	8	8	8	8	8		

RC - Ceiling Cavity Reflectance

