

REPORT NUMBER: ITL87393-GONIOPHOTOMETRY
ISSUE DATE: 04/29/16
PREPARED FOR: OXYGEN LIGHTING
CATALOG NUMBER: 3-518

LUMINAIRE: FABRICATED SPECULAR METAL WALL MOUNTING BRACKET AND BASE, WHITE PAINTED FLAT METAL CIRCUIT BOARD MOUNTING STRIP, 1 WHITE CIRCUIT BOARD WITH 36 LEDS, MACHINED DIFFUSE METAL DIFFUSER MOUNTING COLLAR, FROSTED TRANSLUCENT WHITE CYLINDRICAL ACRYLIC DIFFUSER. DIFFUSER FROSTED SIDE OUT.

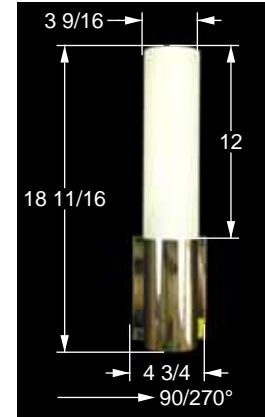
LAMPS: THIRTY-SIX WHITE LIGHT EMITTING DIODES (LEDS), AIMED AT THE HORIZON.

INPUT ELECTRICAL: 120.0 VOLTS, 15.1 WATTS, 0.128 AMPS
MOUNTING: WALL

LED DRIVER: L.T.F. DA12W350C1834D010-0000, DRIVER HAS MULTIPLE LEADS, ONLY LINE INPUT AND LED OUTPUT LEADS CONNECTED FOR THIS TEST.

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (120VAC, 60Hz) TO THE DRIVER. ACRYLIC MATERIAL INFORMATION PROVIDED BY CLIENT.

TEST PROCEDURE: IESNA LM-79-08
TEST DISTANCE = 35.0 FEET

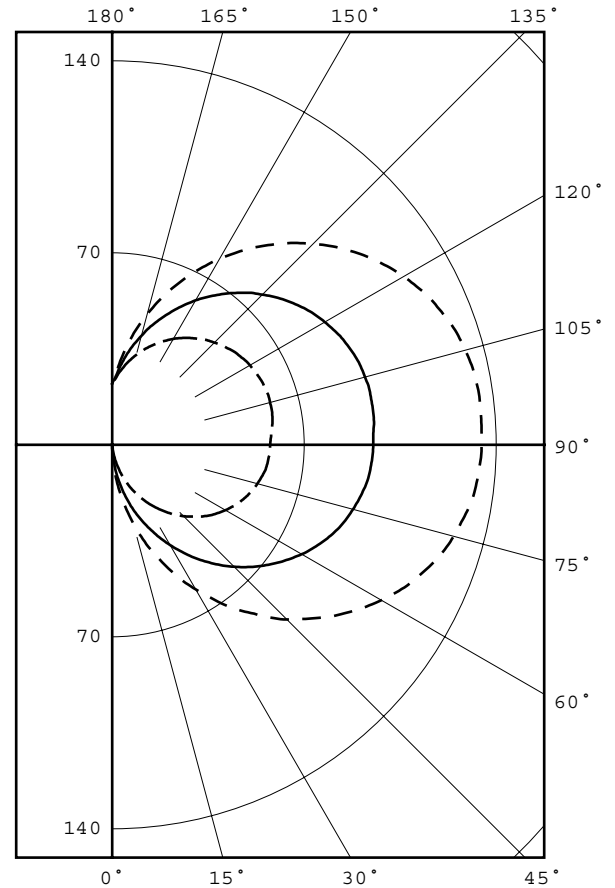


CANDELA DISTRIBUTION

	0.0	45.0	90.0	135.0	180.0	FLUX
0	0	0	0	0	0	0
5	9	8	6	2	0	1
15	30	27	20	12	9	6
25	51	46	35	23	19	16
35	71	65	49	33	28	31
45	90	82	63	43	37	49
55	106	97	75	52	45	67
65	120	109	84	60	51	84
75	129	117	91	65	55	96
85	134	122	95	67	57	103
90	135	123	95	68	58	105
95	135	123	96	69	58	101
105	133	122	95	69	60	92
115	127	117	92	68	59	77
125	117	108	86	65	57	60
135	104	96	77	59	53	42
145	87	81	67	53	48	25
155	69	64	54	45	41	12
165	49	47	41	36	34	26
175	30	29	28	26	26	3
180	22	22	22	22	22	

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%FIXT
0- 30	22	2.3
0- 40	53	5.5
0- 60	169	17.4
0- 90	452	46.6
90-120	297	30.7
90-130	375	38.7
90-150	477	49.2
90-180	518	53.4
0-180	970	100.0



LEGEND:
0-deg -----
90-deg =====
180-deg -----

EFFICACY = 64.2 lm/W
CIE TYPE - GENERAL DIFFUSE
PLANE : 0-DEG 90-DEG
BEAM ANGLE (50%) : 122.3 X 95.6 DEGREES
FIELD ANGLE (10%) : 333.2 X 338.9 DEGREES

Checked M KLOPF
Approved R BEATTIE
Lighting Engineer



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INDEPENDENT TESTING LABORATORIES, INC.
 4066 CAMELOT CIRCLE, LONGMONT, CO 80504 USA

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PAGE: 2 OF 6

LUMINANCE DATA IN CANDELA/SQ M

ANGLE IN DEG	AVERAGE 0-DEG	AVERAGE 45-DEG	AVERAGE 90-DEG
45	4620.	4194.	3225.
55	4696.	4289.	3302.
65	4789.	4365.	3372.
75	4838.	4407.	3412.
85	4870.	4433.	3443.



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PAGE: 3 OF 6

CANDELA DISTRIBUTION
LATERAL ANGLE

	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5	180.0
0.0	0	0	0	0	0	0	0	0	0
5.0	9	9	8	7	6	4	2	1	0
10.0	19	19	18	15	13	9	6	3	4
15.0	30	29	27	24	20	15	12	8	9
20.0	40	40	37	33	28	22	17	13	14
25.0	51	50	46	41	35	28	23	17	19
30.0	61	60	55	50	42	34	28	22	23
35.0	71	70	65	58	49	41	33	27	28
40.0	80	79	73	66	56	47	39	31	33
45.0	90	88	82	73	63	52	43	36	37
50.0	98	96	90	80	69	57	48	41	41
55.0	106	104	97	87	75	62	52	45	45
60.0	113	111	103	92	80	67	56	48	48
65.0	120	117	109	98	84	71	60	51	51
70.0	125	122	114	102	88	74	62	54	53
75.0	129	126	117	105	91	76	65	56	55
80.0	132	129	120	108	93	79	66	59	56
85.0	134	131	122	109	95	80	67	60	57
90.0	135	132	123	110	95	80	68	60	58
95.0	135	132	123	110	96	81	69	61	58
100.0	135	132	123	111	96	81	69	62	59
105.0	133	130	122	110	95	81	69	62	60
110.0	131	128	120	108	94	80	69	62	59
115.0	127	125	117	105	92	79	68	61	59
120.0	123	120	113	102	90	77	66	60	58
125.0	117	115	108	98	86	74	65	59	57
130.0	111	109	102	93	82	71	62	57	55
135.0	104	102	96	87	77	68	59	54	53
140.0	96	94	89	81	72	64	56	52	50
145.0	87	86	81	74	67	59	53	49	48
150.0	78	77	73	67	61	54	49	46	45
155.0	69	68	64	60	54	49	45	42	41
160.0	59	58	56	52	48	44	40	38	38
165.0	49	49	47	44	41	38	36	34	34
170.0	40	39	38	36	35	33	31	30	30
175.0	30	30	29	28	28	27	26	26	26
180.0	22	22	22	22	22	22	22	22	22



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PAGE: 4 OF 6

5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	0
5- 10	1
10- 15	2
15- 20	4
20- 25	6
25- 30	10
30- 35	13
35- 40	18
40- 45	22
45- 50	27
50- 55	31
55- 60	36
60- 65	40
65- 70	44
70- 75	47
75- 80	49
80- 85	51
85- 90	52
90- 95	52
95-100	52
100-105	51
105-110	50
110-115	47
115-120	44
120-125	41
125-130	37
130-135	32
135-140	28
140-145	23
145-150	19
150-155	15
155-160	11
160-165	7
165-170	5
170-175	2
175-180	1

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	1
0- 20	6
0- 30	22
0- 40	53
0- 50	102
0- 60	169
0- 70	252
0- 80	349
0- 90	452
0-100	557
0-110	658
0-120	749
0-130	827
0-140	887
0-150	929
0-160	955
0-170	967
0-180	970



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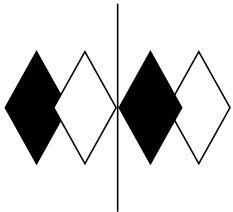
COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	0
0	106	106	106	106	98	98	98	98	81	81	81	67	67	67	53	53	53	47	
1	92	85	79	74	83	77	72	67	63	59	55	50	47	44	38	36	34	28	
2	81	71	63	56	73	65	57	51	52	47	42	41	37	33	31	27	24	19	
3	73	61	51	44	66	55	47	40	44	38	33	34	30	25	25	22	18	14	
4	66	53	43	36	59	48	39	32	38	32	26	30	25	20	22	18	15	10	
5	60	46	36	29	54	42	33	27	34	27	22	26	21	17	19	15	12	8	
6	55	41	31	25	49	37	29	23	30	23	18	23	18	14	17	13	10	6	
7	50	36	27	21	45	33	25	19	27	20	15	21	16	12	15	11	8	5	
8	46	33	24	18	42	30	22	16	24	18	13	19	14	10	14	10	7	4	
9	43	30	21	16	39	27	19	14	22	16	11	17	12	9	12	9	6	4	
10	40	27	19	14	36	25	17	13	20	14	10	16	11	8	11	8	5	3	

ALL CANDELA, LUMENS, LUMINANCE, AND VCP VALUES IN THIS REPORT ARE BASED ON ABSOLUTE PHOTOMETRY. THE COEFFICIENT OF UTILIZATION VALUES ARE BASED ON THE TOTAL ABSOLUTE LUMEN OUTPUT OF THIS TEST SAMPLE.

NOTE: THE ZONAL CAVITY CALCULATION TECHNIQUE IS ACCURATE WHEN LUMINAIRES WITH SYMMETRIC CANDELA DISTRIBUTIONS ARE EMPLOYED AND WHEN THE LUMINAIRES ARE LOCATED SYMMETRICALLY THROUGHOUT THE ROOM. THIS UNIT HAS SPECIAL CHARACTERISTICS AND THEREFORE THESE COEFFICIENTS SHOULD BE USED WITH CAUTION.



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