

REPORT NUMBER: ITL87401-GONIOPHOTOMETRY
ISSUE DATE: 06/02/16
PREPARED FOR: OXYGEN LIGHTING
CATALOG NUMBER: 3-540

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LUMINAIRE: FABRICATED SEMI-DIFFUSE METAL WALL MOUNTING PLATE AND BASE, WHITE PAINTED FLAT METAL CIRCUIT BOARD MOUNTING STRIP, 1 WHITE CIRCUIT BOARD WITH 36 LEDS, FROSTED TRANSLUCENT WHITE ACRYLIC DIFFUSER. DIFFUSER FROSTED SIDE OUT.

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

INPUT ELECTRICAL: 120.0 VOLTS, 7.49 WATTS, 0.0688 AMPS

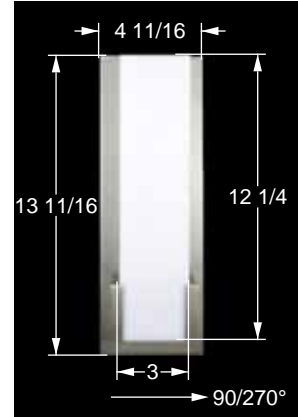
MOUNTING: WALL

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



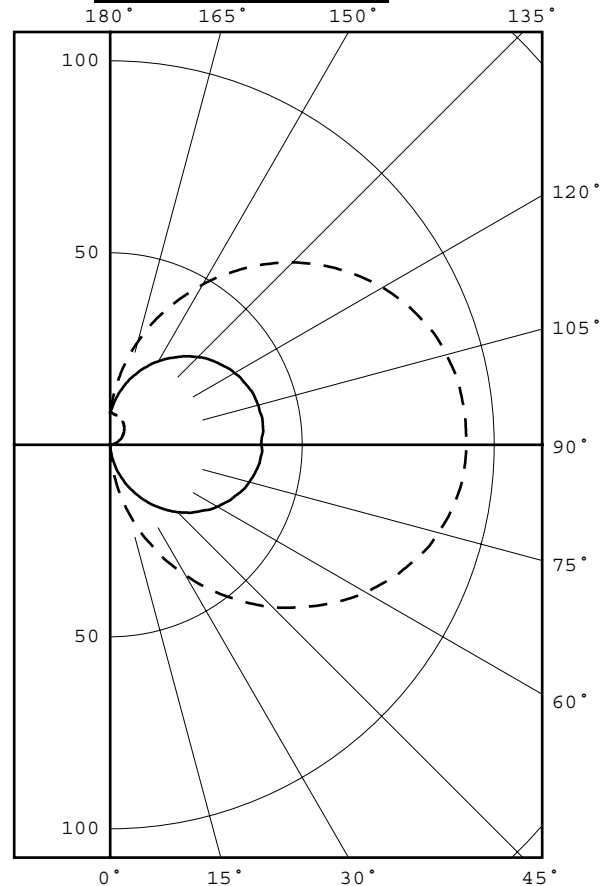
CANDELA DISTRIBUTION

FLUX

	0.0	45.0	90.0	135.0	180.0	
0	0.0	0.0	0.0	0.0	0.0	0
5	4.9	3.6	1.1	0.4	0.0	3
15	18.0	16.4	6.8	3.3	0.0	8
25	32.3	29.9	12.8	6.3	0.0	15
35	46.3	43.3	19.0	9.5	0.0	24
45	59.9	55.6	24.8	12.2	0.0	33
55	71.5	66.3	29.8	14.7	0.0	42
65	81.5	75.6	34.3	16.9	0.0	49
75	88.4	82.0	37.5	18.5	0.0	52
85	92.3	85.6	39.3	19.4	0.0	53
90	92.8	86.1	39.4	19.4	0.0	51
95	92.7	86.3	40.0	20.8	0.2	46
105	90.6	84.8	39.9	21.5	1.4	39
115	85.6	80.2	38.5	21.4	2.5	30
125	77.5	73.2	35.9	20.8	3.9	20
135	67.2	63.8	32.3	19.5	5.1	12
145	54.8	52.6	27.6	17.8	6.2	5
155	41.4	40.2	22.4	15.6	7.1	1
165	27.7	27.1	16.8	12.9	7.6	
175	14.4	14.0	10.9	10.0	8.2	
180	8.5	8.5	8.5	8.5	8.5	

ZONAL LUMEN SUMMARY

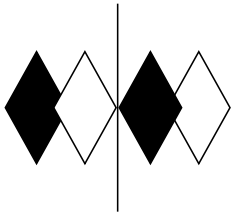
ZONE	LUMENS	%FIXT
0- 30	11	2.2
0- 40	26	5.3
0- 60	83	17.2
0- 90	226	46.7
90-120	151	31.1
90-130	189	39.1
90-150	239	49.4
90-180	258	53.3
0-180	484	100.0



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

EFFICACY = 64.6 lm/W
CIE TYPE - GENERAL DIFFUSE
PLANE : 0-DEG 90-DEG
BEAM ANGLE (50%) : 114.0 X N/A DEGREES
FIELD ANGLE (10%) : 170.3 X 157.4 DEGREES

Checked M KLOPF
Approved R BEATTIE
Lighting Engineer



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THE LIGHT CENTER OF THE INDUSTRY SINCE 1955



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

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LUMINANCE DATA IN CANDELA/SQ M

ANGLE IN DEG	AVERAGE 0-DEG	AVERAGE 45-DEG	AVERAGE 90-DEG
45	3664.	2899.	2267.
55	3769.	2963.	2326.
65	3878.	3037.	2400.
75	3943.	3076.	2445.
85	3988.	3101.	2469.



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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	0.0	0.0	0.0	0.0	0.0
5.0	4.9	4.7	3.6	2.2	1.1	0.9	0.4	0.1	0.0
10.0	11.3	11.2	9.9	6.9	3.8	3.2	1.8	0.2	0.0
15.0	18.0	18.3	16.4	12.0	6.8	5.8	3.3	0.4	0.0
20.0	25.2	25.5	23.0	17.1	9.7	8.2	4.9	0.3	0.0
25.0	32.3	33.0	29.9	22.1	12.8	10.9	6.3	0.5	0.0
30.0	39.1	40.4	36.6	27.2	15.9	13.5	7.9	0.6	0.0
35.0	46.3	47.7	43.3	32.3	19.0	16.1	9.5	0.8	0.0
40.0	53.1	54.7	49.4	37.0	21.9	18.5	10.9	0.9	0.0
45.0	59.9	61.6	55.6	41.7	24.8	20.9	12.2	1.0	0.0
50.0	65.7	68.0	61.3	46.0	27.5	23.2	13.6	1.1	0.0
55.0	71.5	73.8	66.3	49.9	29.8	25.3	14.7	1.0	0.0
60.0	76.8	79.1	71.2	53.7	32.2	27.2	15.8	1.2	0.0
65.0	81.5	84.1	75.6	57.0	34.3	29.2	16.9	1.5	0.0
70.0	85.4	88.0	79.1	59.7	36.1	30.6	17.8	1.5	0.0
75.0	88.4	91.2	82.0	61.9	37.5	31.7	18.5	1.6	0.0
80.0	90.8	93.7	84.2	63.7	38.6	32.7	19.1	1.6	0.0
85.0	92.3	95.3	85.6	64.7	39.3	33.3	19.4	1.6	0.0
90.0	92.8	95.7	86.1	65.2	39.4	33.4	19.4	1.4	0.0
95.0	92.7	95.8	86.3	65.4	40.0	34.0	20.8	2.0	0.2
100.0	92.1	95.2	85.8	65.3	40.2	34.2	21.2	2.7	0.7
105.0	90.6	93.9	84.8	64.6	39.9	34.1	21.5	3.3	1.4
110.0	88.6	91.7	82.9	63.4	39.5	33.9	21.6	4.1	2.1
115.0	85.6	88.6	80.2	61.6	38.5	33.2	21.4	4.7	2.5
120.0	81.9	84.8	77.1	59.4	37.4	32.5	21.2	5.4	3.4
125.0	77.5	80.4	73.2	56.6	35.9	31.2	20.8	5.9	3.9
130.0	72.6	75.3	68.7	53.5	34.3	29.8	20.3	6.4	4.5
135.0	67.2	69.5	63.8	49.8	32.3	28.2	19.5	7.1	5.1
140.0	61.2	63.4	58.4	46.0	30.1	26.5	18.7	7.6	5.7
145.0	54.8	57.0	52.6	41.6	27.6	24.5	17.8	8.1	6.2
150.0	48.2	50.1	46.5	37.2	25.1	22.4	16.7	8.5	6.7
155.0	41.4	43.1	40.2	32.4	22.4	20.2	15.6	8.8	7.1
160.0	34.7	35.8	33.7	27.5	19.6	17.9	14.2	9.1	7.3
165.0	27.7	28.7	27.1	22.7	16.8	15.5	12.9	9.4	7.6
170.0	21.0	21.4	20.5	17.6	13.9	13.1	11.6	9.4	7.9
175.0	14.4	14.6	14.0	12.7	10.9	10.6	10.0	9.0	8.2
180.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5



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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	0
5- 10	0
10- 15	1
15- 20	2
20- 25	3
25- 30	5
30- 35	7
35- 40	9
40- 45	11
45- 50	13
50- 55	16
55- 60	18
60- 65	20
65- 70	22
70- 75	24
75- 80	25
80- 85	26
85- 90	26
90- 95	27
95-100	27
100-105	26
105-110	25
110-115	24
115-120	22
120-125	20
125-130	18
130-135	16
135-140	14
140-145	11
145-150	9
150-155	7
155-160	5
160-165	3
165-170	2
170-175	1
175-180	0

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	0
0- 20	3
0- 30	11
0- 40	26
0- 50	50
0- 60	83
0- 70	125
0- 80	174
0- 90	226
0-100	279
0-110	331
0-120	377
0-130	415
0-140	445
0-150	466
0-160	478
0-170	483
0-180	484



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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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	53	53	53	47
1	91	85	79	73	83	77	72	67	63	59	55	50	47	44	38	36	34	28
2	81	71	63	56	73	64	57	51	52	46	42	41	37	33	30	27	24	19
3	73	61	51	44	65	55	47	40	44	38	32	34	29	25	25	21	18	14
4	66	52	43	35	59	48	39	32	38	31	26	30	24	20	22	18	14	10
5	60	46	36	29	54	42	33	27	33	27	21	26	21	16	19	15	12	8
6	55	41	31	25	49	37	28	22	30	23	18	23	18	14	17	13	10	6
7	50	36	27	21	45	33	25	19	27	20	15	21	15	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	29	21	16	39	27	19	14	22	16	11	17	12	9	12	9	6	3
10	40	27	19	14	36	24	17	12	20	14	10	15	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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