



REPORT NUMBER: ITL87375-GONIOPHOTOMETRY
ISSUE DATE: 05/09/16
PREPARED FOR: OXYGEN LIGHTING
CATALOG NUMBER: 3-512

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LUMINAIRE: FABRICATED SEMI-SPECULAR METAL HOUSING, FABRICATED WHITE PAINTED METAL REFLECTOR AND DRIVER HOUSING, 1 WHITE CIRCUIT BOARD WITH 30 LEDS, FROSTED TRANSLUCENT WHITE ACRYLIC DIFFUSER. DIFFUSER FROSTED SIDE OUT.

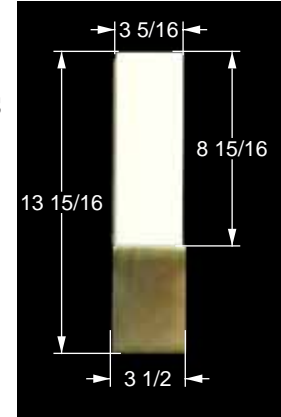
LAMPS: THIRTY WHITE LIGHT EMITTING DIODES (LEDs), AIMED AT THE HORIZON.

INPUT ELECTRICAL: 120.0 VOLTS, 12.8 WATTS, 0.111 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.

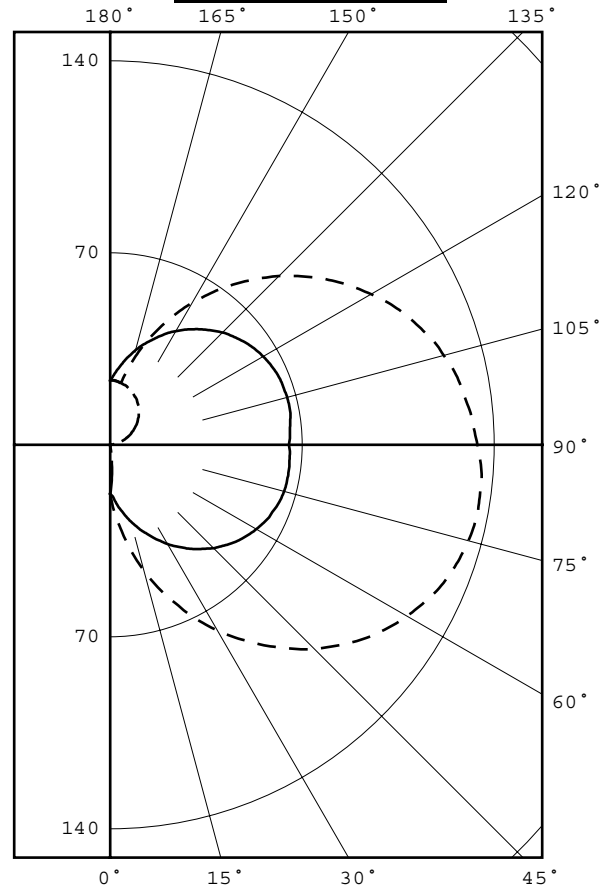
TEST PROCEDURE: IESNA LM-79-08
TEST DISTANCE = 35.0 FEET



CANDELA DISTRIBUTION

	0.0	45.0	90.0	135.0	180.0	
0	18	18	18	18	18	
5	27	26	21	12	7	2
15	48	46	29	9	0	8
25	68	66	37	14	0	18
35	87	85	46	20	0	31
45	105	102	53	25	0	46
55	119	116	59	30	0	60
65	130	126	64	34	0	73
75	135	132	66	36	0	81
85	136	133	66	38	0	85
90	134	131	65	38	0	
95	132	130	66	39	0	84
105	126	125	67	41	4	80
115	116	115	66	42	7	72
125	103	103	63	42	11	60
135	87	88	58	40	15	46
145	69	70	51	38	18	32
155	50	51	44	34	20	19
165	32	34	36	30	22	9
175	24	26	27	26	23	3
180	23	23	23	23	23	

FLUX



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

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%FIXT
0- 30	27	3.4
0- 40	58	7.2
0- 60	165	20.3
0- 90	403	49.9
90-120	236	29.2
90-130	296	36.6
90-150	374	46.3
90-180	405	50.1
0-180	809	100.0

EFFICACY = 63.2 lm/W
CIE TYPE - GENERAL DIFFUSE
PLANE : 0-DEG 90-DEG 180-DEG
SPACING CRITERIA : 4.46 3.22 0.14
BEAM ANGLE (50%) : 116.3 X N/A DEGREES
FIELD ANGLE (10%) : 227.4 X N/A DEGREES

Checked M KLOPF
Approved R BEATTIE
Lighting Engineer



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INDEPENDENT TESTING LABORATORIES, INC.
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LUMINANCE DATA IN CANDELA/SQ M

ANGLE IN DEG	AVERAGE 0-DEG	AVERAGE 90-DEG	AVERAGE 180-DEG
45	6635.	3060.	0.
55	6804.	3038.	0.
65	6927.	3038.	0.
75	7009.	3035.	0.
85	7045.	3017.	0.



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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	18	18	18	18	18	18	18	18	18
5.0	27	27	26	24	21	17	12	9	7
10.0	37	38	36	31	25	16	7	2	0
15.0	48	49	46	39	29	17	9	4	0
20.0	58	60	57	47	33	19	11	5	0
25.0	68	71	66	55	37	22	14	6	0
30.0	78	82	76	62	42	25	17	7	0
35.0	87	92	85	69	46	28	20	9	0
40.0	97	102	94	76	50	33	22	10	0
45.0	105	110	102	82	53	36	25	11	0
50.0	113	119	110	87	56	40	27	12	0
55.0	119	126	116	92	59	43	30	13	0
60.0	125	132	122	96	62	46	32	14	0
65.0	130	137	126	100	64	49	34	15	0
70.0	133	141	130	102	65	51	35	15	0
75.0	135	143	132	104	66	53	36	15	0
80.0	136	144	133	104	66	54	37	16	0
85.0	136	144	133	104	66	55	38	16	0
90.0	134	143	131	103	65	56	38	16	0
95.0	132	140	130	102	66	56	39	17	0
100.0	129	138	128	100	67	57	40	18	2
105.0	126	134	125	98	67	58	41	19	4
110.0	122	130	120	95	67	58	41	21	6
115.0	116	124	115	91	66	58	42	22	7
120.0	110	118	109	87	64	57	42	23	9
125.0	103	110	103	82	63	56	42	24	11
130.0	95	102	96	76	60	54	41	25	13
135.0	87	93	88	70	58	52	40	26	15
140.0	78	84	79	64	55	50	39	26	16
145.0	69	74	70	57	51	47	38	27	18
150.0	60	64	61	51	48	44	37	27	19
155.0	50	54	51	45	44	41	34	26	20
160.0	41	44	42	39	40	38	33	26	21
165.0	32	34	34	35	36	34	30	26	22
170.0	23	26	29	31	31	30	28	25	23
175.0	24	25	26	27	27	27	26	24	23
180.0	23	23	23	23	23	23	23	23	23



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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	0
5- 10	1
10- 15	3
15- 20	5
20- 25	7
25- 30	10
30- 35	14
35- 40	17
40- 45	21
45- 50	25
50- 55	28
55- 60	32
60- 65	35
65- 70	38
70- 75	40
75- 80	41
80- 85	42
85- 90	43
90- 95	42
95-100	42
100-105	41
105-110	39
110-115	37
115-120	35
120-125	32
125-130	28
130-135	25
135-140	21
140-145	18
145-150	14
150-155	11
155-160	8
160-165	6
165-170	4
170-175	2
175-180	1

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	2
0- 20	10
0- 30	27
0- 40	58
0- 50	104
0- 60	165
0- 70	237
0- 80	319
0- 90	403
0-100	487
0-110	567
0-120	639
0-130	699
0-140	746
0-150	778
0-160	797
0-170	806
0-180	809



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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	107	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	92	86	80	74	74	84	79	73	69	65	61	57	53	49	47	41	39	37	31
2	82	72	64	57	57	74	66	58	52	54	48	43	43	39	35	33	30	27	22
3	74	61	52	45	45	67	56	48	41	46	39	34	36	31	27	28	24	21	16
4	66	53	44	36	36	60	49	40	33	40	33	27	31	26	22	24	20	16	12
5	60	47	37	30	30	55	43	34	28	35	28	23	28	22	18	21	17	13	10
6	55	41	32	25	25	50	38	29	23	31	24	19	24	19	15	18	14	11	8
7	51	37	28	22	22	46	34	26	20	28	21	16	22	17	13	17	12	9	6
8	47	33	25	19	19	43	30	23	17	25	19	14	20	15	11	15	11	8	5
9	44	30	22	16	16	40	28	20	15	23	16	12	18	13	10	14	10	7	5
10	41	27	19	14	14	37	25	18	13	21	15	11	17	12	8	13	9	6	4

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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NVLAP LAB CODE: 200925-0

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