



REPORT NUMBER: ITL87394-GONIOPHOTOMETRY

ISSUE DATE: 05/23/16

PREPARED FOR: OXYGEN LIGHTING

CATALOG NUMBER: 3-588

LUMINAIRE: FABRICATED COPPER COLORED METAL HOUSING, WHITE PAINTED FLAT METAL CIRCUIT BOARD MOUNTING STRIP, FABRICATED SEMI-SPECULAR METAL CENTER DRIVER COVER, 2 WHITE CIRCUIT BOARDS EACH WITH 36 LEDS, 2 FROSTED TRANSLUCENT WHITE CYLINDRICAL ACRYLIC DIFFUSERS EACH WITH MACHINED DIFFUSE METAL MOUNTING COLLAR. DIFFUSERS FROSTED SIDE OUT.

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

INPUT ELECTRICAL: 120.0 VOLTS, 28.8 WATTS, 0.244 AMPS

MOUNTING: WALL

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

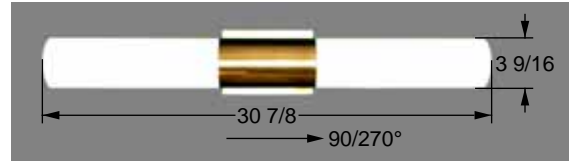
NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE

PROVIDED AT RATED INPUT VOLTAGE (120VAC, 60Hz) TO THE DRIVERS.

ACRYLIC MATERIAL INFORMATION PROVIDED BY CLIENT.

TEST PROCEDURE: IESNA LM-79-08

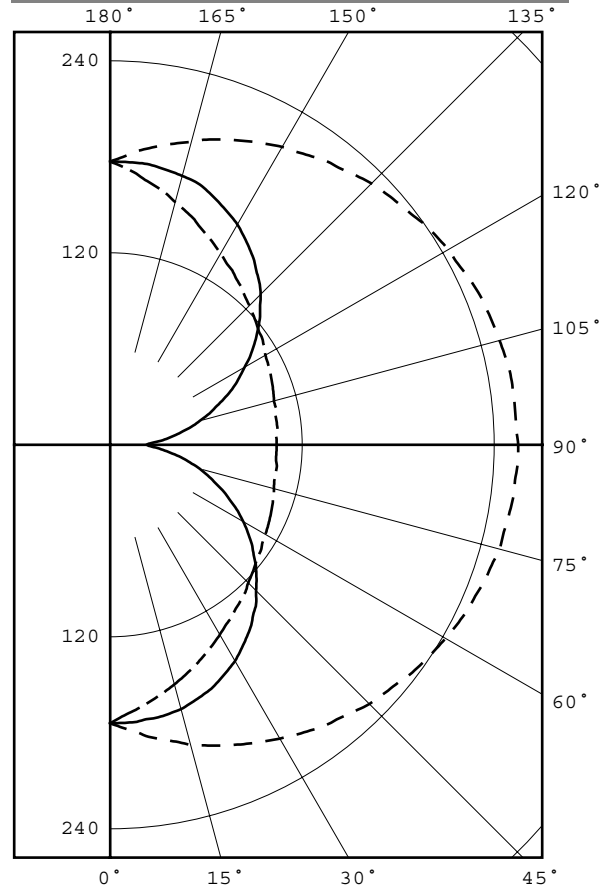
TEST DISTANCE = 35.0 FEET



**CANDELA DISTRIBUTION**

	0.0	45.0	90.0	135.0	180.0
0	174	174	174	174	174
5	180	178	174	169	167
15	194	186	171	159	155
25	206	191	162	146	143
35	218	193	148	133	132
45	229	192	129	119	122
55	238	190	108	106	115
65	246	187	83	94	110
75	252	185	58	85	106
85	254	183	32	75	104
90	255	183	23	73	104
95	254	183	33	76	105
105	252	185	58	86	106
115	247	189	85	95	110
125	240	192	110	107	116
135	231	195	133	120	123
145	220	196	151	135	133
155	209	194	165	149	144
165	196	189	174	162	157
175	184	182	177	173	171
180	177	177	177	177	177

**FLUX**



**ZONAL LUMEN SUMMARY**

ZONE	LUMENS	% FIXT
0- 30	143	8.0
0- 40	245	13.6
0- 60	494	27.5
0- 90	895	49.7
90-120	403	22.4
90-130	535	29.7
90-150	759	42.2
90-180	905	50.3
0-180	1800	100.0

EFFICACY = 62.5 lm/W

CIE TYPE - GENERAL DIFFUSE

PLANE : 0-DEG 90-DEG 180-DEG

SPACING CRITERIA : 1.89 1.33 1.18

BEAM ANGLE (50%) : 259.8 X 94.6 DEGREES

FIELD ANGLE (10%) : N/A X 175.8 DEGREES

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

Checked       M KLOPF        
Approved       R BEATTIE        
Lighting Engineer



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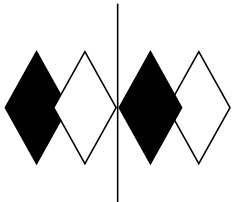
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LUMINANCE DATA IN CANDELA/SQ M

ANGLE IN DEG	AVERAGE 0-DEG	AVERAGE 90-DEG	AVERAGE 180-DEG
45	4151.	2530.	2801.
55	4315.	2218.	3116.
65	4460.	1786.	3775.
75	4568.	1298.	5174.
85	4605.	733.	9274.



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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	174	174	174	174	174	174	174	174	174
5.0	180	180	178	176	174	171	169	168	167
10.0	187	186	183	178	173	168	164	162	161
15.0	194	192	186	178	171	164	159	156	155
20.0	200	198	189	177	167	158	153	150	149
25.0	206	203	191	175	162	151	146	144	143
30.0	212	208	192	172	156	144	140	138	137
35.0	218	212	193	168	148	136	133	133	132
40.0	223	216	193	163	139	127	126	127	127
45.0	229	220	192	157	129	118	119	122	122
50.0	233	223	191	150	119	108	112	118	118
55.0	238	227	190	143	108	98	106	114	115
60.0	242	230	189	135	96	88	99	110	112
65.0	246	232	187	127	83	79	94	107	110
70.0	249	234	186	120	70	70	90	104	108
75.0	252	236	185	113	58	62	85	103	106
80.0	253	237	184	108	45	55	80	101	105
85.0	254	238	183	105	32	47	75	99	104
90.0	255	238	183	104	23	46	73	99	104
95.0	254	238	183	105	33	49	76	100	105
100.0	254	237	184	109	45	56	82	101	105
105.0	252	236	185	114	58	63	86	103	106
110.0	250	235	187	121	71	71	90	105	108
115.0	247	233	189	129	85	80	95	107	110
120.0	244	231	190	137	97	89	100	110	112
125.0	240	229	192	145	110	100	107	114	116
130.0	235	226	194	153	122	110	113	118	119
135.0	231	222	195	160	133	120	120	123	123
140.0	225	219	196	166	142	129	128	128	128
145.0	220	215	196	172	151	139	135	134	133
150.0	215	210	196	176	159	147	142	140	138
155.0	209	205	194	180	165	155	149	146	144
160.0	203	200	193	182	171	162	155	152	151
165.0	196	195	189	182	174	167	162	158	157
170.0	190	189	186	182	176	171	167	165	164
175.0	184	183	182	180	177	175	173	171	171
180.0	177	177	177	177	177	177	177	177	177



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5-DEGREE  
ZONAL LUMEN SUMMARY

0- 5	4
5- 10	12
10- 15	21
15- 20	28
20- 25	36
25- 30	42
30- 35	48
35- 40	53
40- 45	58
45- 50	61
50- 55	64
55- 60	66
60- 65	67
65- 70	68
70- 75	68
75- 80	67
80- 85	66
85- 90	65
90- 95	65
95-100	67
100-105	68
105-110	68
110-115	68
115-120	68
120-125	67
125-130	65
130-135	62
135-140	59
140-145	54
145-150	49
150-155	43
155-160	36
160-165	29
165-170	21
170-175	13
175-180	4

10-DEGREE  
ZONAL LUMEN SUMMARY

0- 10	17
0- 20	65
0- 30	143
0- 40	245
0- 50	364
0- 60	494
0- 70	629
0- 80	764
0- 90	895
0-100	1027
0-110	1163
0-120	1298
0-130	1430
0-140	1551
0-150	1654
0-160	1733
0-170	1783
0-180	1800



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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	94	88	83	79	86	81	77	73	68	64	61	55	53	50	44	42	40	35	35
2	85	75	68	62	77	69	63	57	58	52	48	47	43	40	37	34	31	27	27
3	76	65	57	50	70	60	52	46	50	44	39	40	36	32	32	28	25	21	21
4	69	57	48	41	63	52	44	38	44	37	32	35	31	27	28	24	21	17	17
5	63	50	41	35	58	46	38	32	39	32	27	31	26	23	25	21	18	14	14
6	58	45	36	30	53	41	33	28	35	28	23	28	23	19	22	18	15	12	12
7	54	40	32	26	49	37	29	24	31	25	20	25	21	17	20	16	13	11	11
8	50	37	28	22	45	34	26	21	28	22	18	23	18	15	18	15	12	9	9
9	46	33	25	20	42	31	23	18	26	20	16	21	17	13	17	13	11	8	8
10	43	30	23	18	39	28	21	16	24	18	14	20	15	12	16	12	10	7	7

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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