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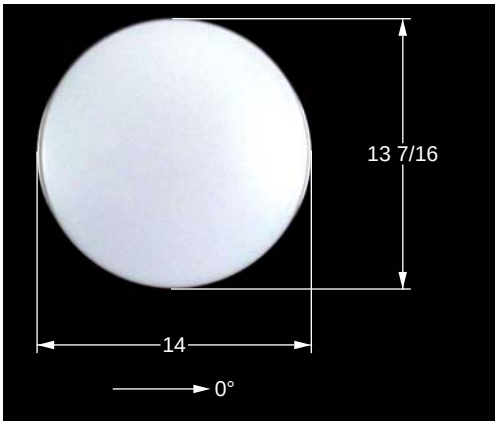
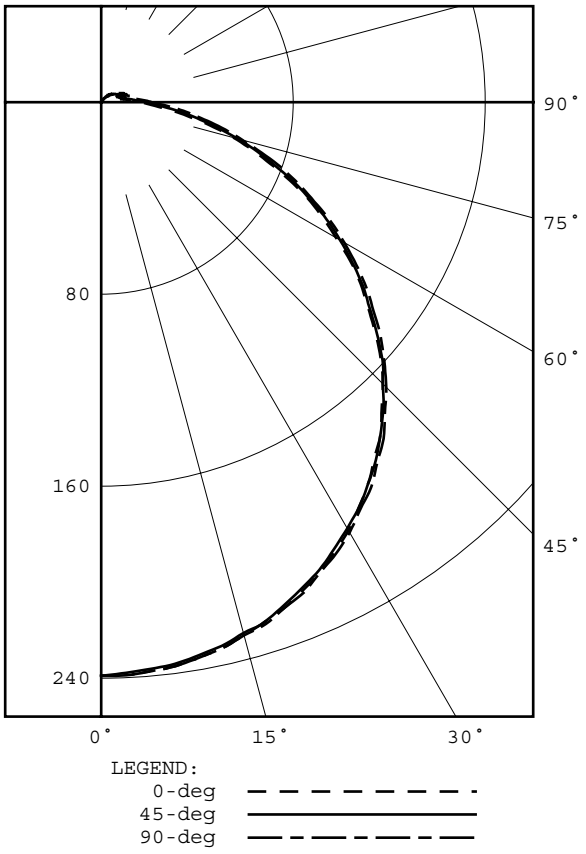
THE LIGHT CENTER OF THE INDUSTRY SINCE 1955
INDEPENDENT TESTING LABORATORIES, INC.
4066 CAMELOT CIRCLE, LONGMONT, CO 80504 USA
PHONE: (303) 442-1255 • FAX: (970) 535-3114 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com

REPORT NUMBER: ITL77199
ISSUE DATE: 06/18/13
PREPARED FOR: OXYGEN LIGHTING
CATALOG NUMBER: 2-6135-24
LUMINAIRE: FORMED SEMI-SPECULAR METAL HOUSING WITH WHITE PAINTED BALLAST/LAMP MOUNTING SURFACE, TRANSLUCENT WHITE ACRYLIC DIFFUSER. TWO FORMED WHITE PAINTED REFLECTORS ON EACH SIDE OF BALLAST. BALLAST IS SYMMETRICALLY ALIGNED ALONG THE 0-DEGREE PLANE IN THE OPTICAL COMPARTMENT.
LAMPS: TWO 26-WATT DOUBLE TWIN TUBE COMPACT FLUORESCENTS, SYLVANIA CF26DD/E/830, LAMPS HORIZONTAL WITH TUBES VERTICAL.
TOTAL INPUT WATTS = 41.8 AT 120.0 VOLTS
TOTAL REFLECTANCE OF PAINT = 80.0 %
MOUNTING: SURFACE
LED DRIVER: ANTRON ELECTRONICS CSS-UV42PS
NOTE: ACRYLIC MATERIAL INFORMATION PROVIDED BY CLIENT.
REPORT IS BASED ON 1710 LUMENS PER LAMP.
** (EXPLANATION FOLLOWS) **



CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0	FLUX
0	239	239	239	239	239	
5	238	237	237	238	238	23
15	230	230	229	230	230	65
25	216	215	215	216	216	99
35	194	193	194	195	196	122
45	166	166	166	168	168	129
55	132	132	133	134	135	119
65	95	95	96	98	98	95
75	57	57	59	60	61	62
85	25	26	28	31	32	32
90	16	16	19	21	21	
95	11	11	13	15	15	15
105	8	8	10	11	11	10
115	6	7	8	8	9	8
125	4	5	6	6	7	5
135	3	3	3	4	4	3
145	1	1	1	2	2	1
155	0	0	0	0	0	0
165	0	0	0	0	0	0
175	0	0	0	0	0	0
180	0	0	0	0	0	



ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LAMP	%FIXT
0- 30	187	5.5	23.8
0- 40	308	9.0	39.2
0- 60	556	16.3	70.7
0- 90	745	21.8	94.8
90-120	32	0.9	4.1
90-130	37	1.1	4.7
90-150	41	1.2	5.2
90-180	41	1.2	5.2
0-180	786	23.0	100.0

TOTAL LUMINAIRE EFFICIENCY = 23.0 %

CIE TYPE - DIRECT

PLANE	0-DEG	90-DEG
SPACING CRITERIA	1.28	1.28

Checked *B HYRE*
Approved *R BEATTIE*
Lighting Engineer

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CANDELA DISTRIBUTION
LATERAL ANGLE

	0.0	22.5	45.0	67.5	90.0
0.0	239	239	239	239	239
5.0	238	237	237	238	238
10.0	235	234	234	235	235
15.0	230	230	229	230	230
20.0	224	223	223	224	224
25.0	216	215	215	216	216
30.0	206	205	205	206	207
35.0	194	193	194	195	196
40.0	181	180	181	182	183
45.0	166	166	166	168	168
50.0	149	149	150	152	152
55.0	132	132	133	134	135
60.0	113	114	115	116	117
65.0	95	95	96	98	98
70.0	75	76	77	79	80
75.0	57	57	59	60	61
80.0	39	40	42	44	45
85.0	25	26	28	31	32
90.0	16	16	19	21	21
95.0	11	11	13	15	15
100.0	9	9	10	12	12
105.0	8	8	10	11	11
110.0	7	7	9	10	10
115.0	6	7	8	8	9
120.0	5	6	7	7	8
125.0	4	5	6	6	7
130.0	4	4	4	5	5
135.0	3	3	3	4	4
140.0	2	2	2	3	3
145.0	1	1	1	2	2
150.0	0	0	1	1	1
155.0	0	0	0	0	0
160.0	0	0	0	0	0
165.0	0	0	0	0	0
170.0	0	0	0	0	0
175.0	0	0	0	0	0
180.0	0	0	0	0	0

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5-DEGREE ZONAL LUMEN SUMMARY

0- 5	6
5- 10	17
10- 15	28
15- 20	37
20- 25	46
25- 30	53
30- 35	59
35- 40	63
40- 45	64
45- 50	64
50- 55	62
55- 60	57
60- 65	51
65- 70	44
70- 75	35
75- 80	27
80- 85	19
85- 90	13
90- 95	8
95-100	6
100-105	5
105-110	5
110-115	4
115-120	3
120-125	3
125-130	2
130-135	2
135-140	1
140-145	1
145-150	0
150-155	0
155-160	0
160-165	0
165-170	0
170-175	0
175-180	0

10-DEGREE ZONAL LUMEN SUMMARY

0- 10	23
0- 20	88
0- 30	187
0- 40	308
0- 50	437
0- 60	556
0- 70	651
0- 80	713
0- 90	745
0-100	760
0-110	770
0-120	778
0-130	782
0-140	785
0-150	786
0-160	786
0-170	786
0-180	786

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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	27	27	27	27	26	26	26	26	25	25	25	24	24	24	22	22	22	22
1	24	23	22	21	24	23	22	21	21	21	20	20	20	19	19	19	18	18
2	22	20	18	17	21	20	18	17	19	17	16	18	17	16	17	16	15	15
3	20	18	16	14	19	17	15	14	16	15	13	15	14	13	15	14	13	12
4	18	16	13	12	18	15	13	12	14	13	11	14	12	11	13	12	11	10
5	17	14	12	10	16	13	11	10	13	11	10	12	11	10	12	10	9	9
6	16	12	10	9	15	12	10	9	12	10	9	11	10	8	11	9	8	8
7	14	11	9	8	14	11	9	8	11	9	8	10	9	7	10	8	7	7
8	13	10	8	7	13	10	8	7	10	8	7	9	8	7	9	7	6	6
9	13	9	7	6	12	9	7	6	9	7	6	8	7	6	8	7	6	5
10	12	9	7	6	11	8	7	6	8	7	5	8	6	5	8	6	5	5

ALL CANDELA, LUMENS, LUMINANCE, COEFFICIENT OF UTILIZATION AND VCP VALUES IN THIS REPORT ARE BASED ON RELATIVE PHOTOMETRY WHICH ASSUMES A BALLAST FACTOR OF 1.000. ANY CALCULATIONS PREPARED FROM THESE DATA SHOULD INCLUDE AN APPROPRIATE BALLAST FACTOR.

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ADDENDUM

The compact fluorescent lamps of the type used in this report may require special attention in photometry and luminaire application. Specifically, the lamps may generate lower flux output when operated in the horizontal position than when operated in the vertical base-up position. Unfortunately, at the time of this report, only the vertical flux output (lumen) rating is available from the lamp manufacturer. It is critical to note that if the lamp produces less lumens when in a horizontal position than when it is in a vertical position, the horizontal lamp calibration will yield higher luminaire candela and efficiency than a vertical lamp calibration. When applying the vertical lamp lumen rating to a report for a luminaire with a horizontal lamp(s) and using a horizontal lamp calibration, the report will show higher candela values than what the luminaire actually produced (since a horizontal lamp produces lower flux). For a report which was generated using a horizontal lamp calibration, any application calculations should use the actual flux output (lumens) from a horizontal lamp -- at this time, no such published lumen figures are available. The published lamp lumen rating given on this report is for a vertical base-up lamp. The lamp calibration for this report was performed with the lamp(s) in the same orientation as when the lamp(s) is/are in the luminaire.

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