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THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

INDEPENDENT TESTING LABORATORIES, INC.
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REPORT NUMBER: ITL61417
PREPARED FOR: OXYGEN LIGHTING
CATALOG NUMBER: 15-6-24

DATE: 12/09/08

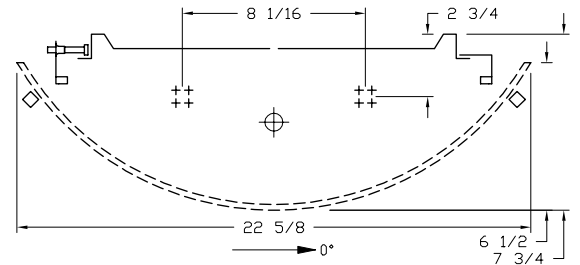
LUMINAIRE: FORMED WHITE PAINTED METAL REFLECTOR/MOUNTING PLATE, FROSTED TRANSLUCENT WHITE SEMI-HEMISPHERICAL GLASS DIFFUSER, FABRICATED METAL DIFFUSER MOUNTING ASSEMBLY WITH WHITE PAINTED INTERIOR RING AND SEMI-SPECULAR EXTERIOR MOUNTING TRIM RING, DIFFUSER FROSTED SIDE OUT. BALLASTS ARE EXPOSED IN THE OPTICAL COMPARTMENT AND TOWARD THE MIDDLE OF THE MOUNTING PLATE.

LAMPS: FOUR 13-WATT DOUBLE TWIN TUBE COMPACT FLUORESCENTS, SYLVANIA CF13DD/E/827. LAMPS HORIZONTAL WITH TUBES HORIZONTAL.

BALLAST: TWO ANTRON ELECTRONICS CSD-UV18P
MOUNTING: SURFACE

TOTAL REFLECTANCE OF PAINT = 67.1 %
TOTAL INPUT WATTS = 59.4 AT 120.0 VOLTS
REPORT IS BASED ON 900 LUMENS PER LAMP.

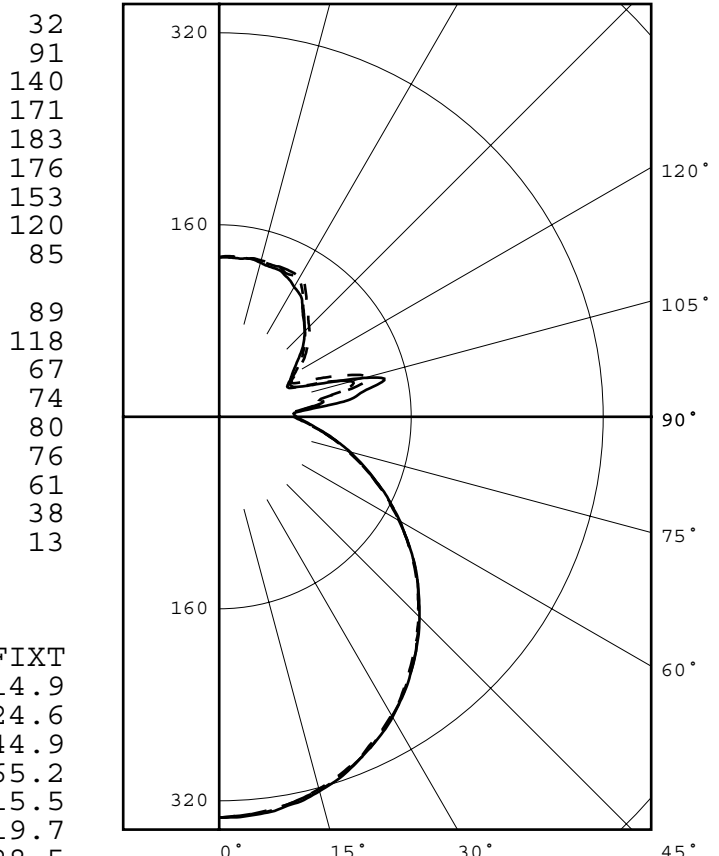
** (explanation follows) **



CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0
0	334	334	334	334	334
5	332	333	333	333	332
15	321	323	323	324	322
25	300	304	302	304	302
35	271	275	273	276	272
45	234	238	236	239	235
55	194	198	195	199	195
65	152	156	153	156	152
75	111	116	113	116	112
85	76	79	77	79	75
90	65	66	66	65	63
95	70	92	78	80	69
105	129	117	125	107	114
115	67	66	65	64	63
125	87	85	79	83	84
135	106	106	101	102	101
145	126	123	120	120	122
155	132	118	130	132	135
165	135	134	133	134	134
175	134	134	133	133	134
180	133	133	133	133	133

FLUX



LEGEND:
0-deg: - - - - -
45-deg: = = = = =
90-deg: - - - - -

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LAMP	%FIXT
0- 30	263	7.3	14.9
0- 40	434	12.1	24.6
0- 60	794	22.0	44.9
0- 90	1152	32.0	65.2
90-120	274	7.6	15.5
90-130	348	9.7	19.7
90-150	504	14.0	28.5
90-180	616	17.1	34.8
0-180	1768	49.1	100.0

TOTAL LUMINAIRE EFFICIENCY = 49.1 %

CIE TYPE - SEMI-DIRECT
PLANE : 0-DEG 90-DEG
SPACING CRITERIA : 1.3 1.3

Checked *B.HYRE*
Approved *R.BEATTIE*



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	0.0	22.5	45.0	67.5	90.0	ZONAL LUMEN SUMMARY
0.0	334	334	334	334	334	0- 5 8.
5.0	332	333	333	333	332	5- 10 24.
10.0	328	329	329	329	328	10- 15 39.
15.0	321	323	323	324	322	15- 20 53.
20.0	312	315	314	315	313	20- 25 65.
25.0	300	304	302	304	302	25- 30 75.
30.0	287	291	289	291	288	30- 35 83.
35.0	271	275	273	276	272	35- 40 88.
40.0	253	257	255	258	255	40- 45 91.
45.0	234	238	236	239	235	45- 50 92.
50.0	215	219	216	219	216	50- 55 90.
55.0	194	198	195	199	195	55- 60 86.
60.0	173	177	174	177	173	60- 65 80.
65.0	152	156	153	156	152	65- 70 73.
70.0	131	135	132	135	131	70- 75 64.
75.0	111	116	113	116	112	75- 80 56.
80.0	93	97	94	96	93	80- 85 47.
85.0	76	79	77	79	75	85- 90 39.
90.0	65	66	66	65	63	90- 95 34.
95.0	70	92	78	80	69	95-100 55.
100.0	86	114	122	117	88	100-105 68.
105.0	129	117	125	107	114	105-110 50.
110.0	97	80	74	67	76	110-115 34.
115.0	67	66	65	64	63	115-120 33.
120.0	75	74	70	73	73	120-125 36.
125.0	87	85	79	83	84	125-130 39.
130.0	97	96	91	94	93	130-135 40.
135.0	106	106	101	102	101	135-140 40.
140.0	115	115	109	110	110	140-145 39.
145.0	126	123	120	120	122	145-150 37.
150.0	135	128	125	129	133	150-155 33.
155.0	132	118	130	132	135	155-160 28.
160.0	135	134	132	133	134	160-165 22.
165.0	135	134	133	134	134	165-170 16.
170.0	134	134	134	134	134	170-175 10.
175.0	134	134	133	133	134	175-180 3.
180.0	133	133	133	133	133	



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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

RC RW	80				70				50			30			10			0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	54	54	54	54	51	51	51	51	45	45	45	39	39	39	34	34	34	32
1	49	46	44	42	46	43	41	39	38	36	35	33	32	31	29	28	27	25
2	44	40	36	33	41	37	34	32	33	30	28	29	27	25	25	23	22	20
3	40	35	31	27	37	33	29	26	29	26	23	25	23	21	22	20	18	17
4	36	30	26	23	34	29	25	22	25	22	20	22	20	18	19	17	16	14
5	33	27	23	19	31	25	22	19	23	19	17	20	17	15	17	15	13	12
6	31	24	20	17	29	23	19	16	20	17	15	18	15	13	16	13	12	10
7	28	22	18	15	26	21	17	14	18	15	13	16	14	12	14	12	10	9
8	26	20	16	13	25	19	15	12	17	14	11	15	12	10	13	11	9	8
9	24	18	14	12	23	17	14	11	15	12	10	14	11	9	12	10	8	7
10	23	17	13	10	21	16	12	10	14	11	9	13	10	8	11	9	7	7

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.

CFL.DIS