



itl boulder

THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

INDEPENDENT TESTING LABORATORIES, INC.
3386 LONGHORN ROAD, BOULDER, CO 80302 USA

PHONE: (303)442-1255 • FAX: (303)449-5274 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com

REPORT NUMBER: ITL57392

DATE: 04/17/06

PREPARED FOR: OXYGEN LIGHTING

CATALOG NUMBER: 2-6141-24-EM

LUMINAIRE: FORMED METAL HOUSING WITH WHITE PAINTED BALLAST/SOCKET MOUNTING SURFACE, FORMED WHITE PAINTED METAL EMERGENCY BALLAST COVER, TRANSLUCENT WHITE GLASS DIFFUSER. STANDARD BALLAST IS EXPOSED AND OFFSET.

LAMPS: TWO 26-WATT TWIN TUBE COMPACT FLUORESCENTS, SYLVANIA CF26DT/E/IN/835, LAMPS HORIZONTAL WITH TUBES VERTICAL.

BALLAST: ANTRON CSS-UV42PS

MOUNTING: SURFACE

TOTAL REFLECTANCE OF PAINT = 74.4 % (BALLAST COVER)

TOTAL REFLECTANCE OF PAINT = 85.3 % (HOUSING)

TOTAL INPUT WATTS= 43.0 AT 120.0 VOLTS

REPORT IS BASED ON 1800 LUMENS PER LAMP.

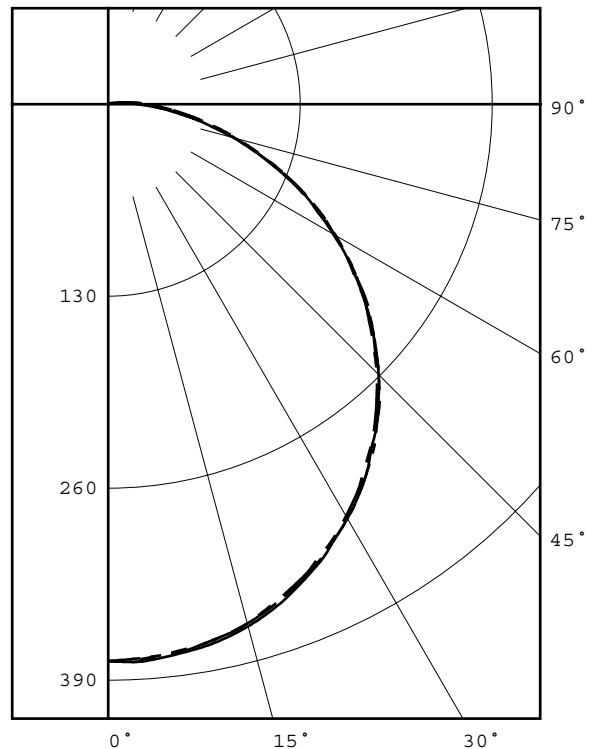
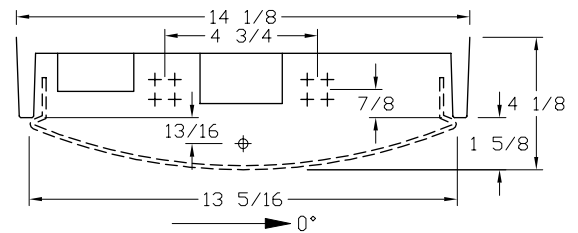
** (explanation follows) **

CANDELA DISTRIBUTION

	0.0	90.0	180.0	270.0
0	377	377	377	377
5	375	377	375	376
15	364	366	364	364
25	339	341	340	338
35	304	305	305	302
45	259	259	259	257
55	206	205	206	204
65	149	148	149	147
75	91	88	89	88
85	43	38	43	38
90	27	20	26	21
95	14	10	14	10
105	3	2	3	2
115	1	1	2	1
125	0	0	0	0
135	0	0	0	0
145	0	0	0	0
155	0	0	0	0
165	0	0	0	0
175	0	0	0	0
180	0	0	0	0

FLUX

36
103
156
190
199
184
146
94
45
14
3
1
0
0
0
0
0
0
0
0
0



LEGEND:

0-deg: - - - - -
90-deg: _____
180-deg: - - - - -
270-deg: - - - - -

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LAMP	%FIXT
0- 30	295	8.2	25.2
0- 40	485	13.5	41.4
0- 60	867	24.1	74.1
0- 90	1152	32.0	98.4
90-120	18	0.5	1.5
90-130	18	0.5	1.6
90-150	18	0.5	1.6
90-180	18	0.5	1.6
0-180	1170	32.5	100.0

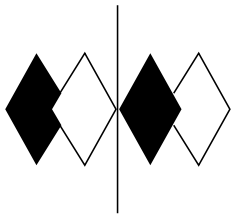
TOTAL LUMINAIRE EFFICIENCY = 32.5 %

CIE TYPE - DIRECT

PLANE : 0-DEG 90-DEG 180-DEG
SPACING CRITERIA : 1.3 1.3 1.3

Checked *N.WHITE*

Approved *R.BEATTIE*



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	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5	180.0	202.5
0.0	377	377	377	377	377	377	377	377	377	377
5.0	375	372	375	375	377	374	375	376	375	374
10.0	371	368	371	371	373	370	371	372	371	369
15.0	364	361	365	365	366	363	364	365	364	361
20.0	353	351	354	354	355	353	352	354	353	351
25.0	339	336	340	340	341	338	338	339	340	337
30.0	323	320	324	323	324	321	321	322	324	321
35.0	304	302	305	304	305	302	302	303	305	302
40.0	282	280	284	282	283	280	280	281	283	280
45.0	259	257	259	259	259	256	256	256	259	257
50.0	233	232	234	233	233	230	230	230	233	231
55.0	206	205	207	206	205	203	202	203	206	204
60.0	178	178	179	178	177	174	174	175	177	176
65.0	149	149	150	148	148	145	145	145	149	147
70.0	119	119	120	119	117	115	115	115	118	117
75.0	91	90	91	89	88	86	85	86	89	89
80.0	65	65	65	63	61	59	59	60	63	64
85.0	43	44	44	41	38	35	35	38	43	44
90.0	27	28	27	24	20	18	19	22	26	27
95.0	14	15	14	12	10	8	9	11	14	15
100.0	7	7	7	6	4	4	4	5	7	8
105.0	3	3	3	3	2	2	2	3	3	4
110.0	2	2	2	2	1	1	2	2	2	3
115.0	1	1	1	1	1	1	1	2	2	2
120.0	1	1	1	1	0	0	1	1	1	2
125.0	0	0	0	0	0	0	0	0	0	1
130.0	0	0	0	0	0	0	0	0	0	0
135.0	0	0	0	0	0	0	0	0	0	0
140.0	0	0	0	0	0	0	0	0	0	0
145.0	0	0	0	0	0	0	0	0	0	0
150.0	0	0	0	0	0	0	0	0	0	0
155.0	0	0	0	0	0	0	0	0	0	0
160.0	0	0	0	0	0	0	0	0	0	0
165.0	0	0	0	0	0	0	0	0	0	0
170.0	0	0	0	0	0	0	0	0	0	0
175.0	0	0	0	0	0	0	0	0	0	0
180.0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION

	225.0	247.5	270.0	292.5	315.0	337.5	360.0
0.0	377	377	377	377	377	377	377
5.0	376	375	376	374	376	377	375
10.0	371	370	371	370	372	373	371
15.0	363	362	364	361	364	365	364
20.0	352	351	352	351	353	354	353
25.0	339	337	338	337	340	342	339
30.0	322	321	322	321	323	325	323
35.0	303	302	302	301	304	306	304
40.0	282	280	281	280	282	285	282
45.0	258	256	257	256	259	262	259
50.0	232	230	231	230	233	236	233
55.0	205	204	204	203	206	209	206
60.0	177	175	176	175	178	181	178
65.0	148	147	147	147	150	152	149
70.0	118	117	117	117	119	122	119
75.0	90	88	88	87	90	93	91
80.0	64	63	62	61	62	64	65
85.0	43	40	38	37	39	43	43
90.0	27	24	21	19	21	25	27
95.0	15	13	10	9	10	13	14
100.0	7	6	5	4	4	6	7
105.0	4	3	2	2	2	3	3
110.0	3	2	2	1	1	2	2
115.0	2	1	1	1	1	1	1
120.0	1	1	1	1	0	1	1
125.0	1	0	0	0	0	0	0
130.0	0	0	0	0	0	0	0
135.0	0	0	0	0	0	0	0
140.0	0	0	0	0	0	0	0
145.0	0	0	0	0	0	0	0
150.0	0	0	0	0	0	0	0
155.0	0	0	0	0	0	0	0
160.0	0	0	0	0	0	0	0
165.0	0	0	0	0	0	0	0
170.0	0	0	0	0	0	0	0
175.0	0	0	0	0	0	0	0
180.0	0	0	0	0	0	0	0



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ZONAL LUMEN SUMMARY

0- 5	9.
5- 10	27.
10- 15	44.
15- 20	59.
20- 25	73.
25- 30	84.
30- 35	92.
35- 40	98.
40- 45	100.
45- 50	99.
50- 55	95.
55- 60	88.
60- 65	79.
65- 70	67.
70- 75	54.
75- 80	40.
80- 85	28.
85- 90	17.
90- 95	9.
95-100	5.
100-105	2.
105-110	1.
110-115	1.
115-120	0.
120-125	0.
125-130	0.
130-135	0.
135-140	0.
140-145	0.
145-150	0.
150-155	0.
155-160	0.
160-165	0.
165-170	0.
170-175	0.
175-180	0.



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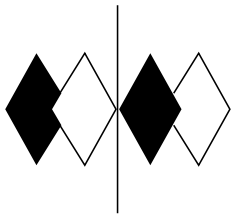
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	39	39	39	39	38	38	38	38	36	36	36	34	34	34	33	33	33	32
1	35	33	32	30	34	32	31	30	31	30	29	30	29	28	28	28	27	26
2	32	29	26	24	31	28	26	24	27	25	23	26	24	23	25	23	22	21
3	29	25	22	20	28	25	22	20	24	21	20	23	21	19	22	20	19	18
4	26	22	19	17	25	22	19	17	21	18	17	20	18	16	19	17	16	15
5	24	20	17	15	23	19	17	14	19	16	14	18	16	14	17	15	14	13
6	22	18	15	13	22	17	15	13	17	14	12	16	14	12	16	14	12	11
7	21	16	13	11	20	16	13	11	15	13	11	15	13	11	14	12	11	10
8	19	15	12	10	19	14	12	10	14	12	10	14	11	10	13	11	10	9
9	18	13	11	9	17	13	11	9	13	10	9	12	10	9	12	10	9	8
10	17	12	10	8	16	12	10	8	12	10	8	12	9	8	11	9	8	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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*** IMPORTANT ***

The compact fluorescent lamps of the type used in this report require special attention in photometry and luminaire application. Specifically, the lamps generate lower flux output when operated in the horizontal position than when operated in the vertical position. Unfortunately, at the time of this report, only the vertical flux output (lumens) is available from lamp manufacturers.

It is critical to note that, all else equal, a horizontal lamp calibration will yield higher luminaire candela and efficiency than a vertical lamp calibration. However, 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. For a report which was generated using a vertical lamp calibration, the flux output from a vertical lamp should be used. The published lamp lumen figure given on this report is for a vertical lamp. The lamp calibration for this report was performed with the lamp in the same orientation as when the lamp is in the luminaire.

CFL.DIS