

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: ITL59228-1

DATE: 09/24/07

PREPARED FOR: BOYD LIGHTING CO.

CATALOG NUMBER: C10118FL

LUMINAIRE: FABRICATED SEMI-SPECULAR METAL FRAME AND VERTICAL MOUNTING STEM, FABRICATED WHITE PAINTED METAL BALLAST/SOCKET MOUNTING PLATE AND BRACKET, FROSTED TRANSLUCENT WHITE CYLINDRICAL PLASTIC VERTICAL DIFFUSER, FROSTED TRANSLUCENT WHITE FLAT PLASTIC BOTTOM DIFFUSER, FABRICATED WHITE PAINTED "HONEYCOMB" TOP DIFFUSER, BOTTOM LENS FROSTED SIDE IN, VERTICAL LENS FROSTED ON BOTH SIDES. BALLAST IS EXPOSED AND OFFSET TO ONE SIDE OF OPTICAL COMPARTMENT.

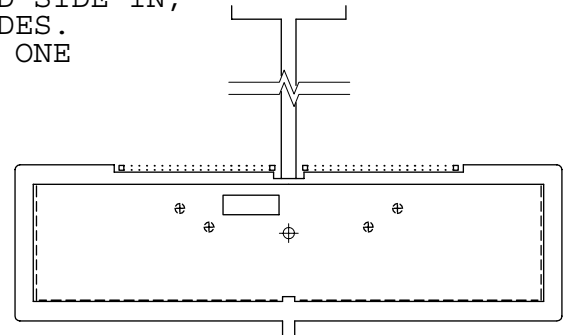
LAMP: ONE 22-WATT T-5 CIRCULAR FLUORESCENT, PHILIPS FC9T5/835, RATED 1800 LUMENS, HORIZONTAL POSITION. ONE 40-WATT T-5 CIRCULAR FLUORESCENT, PHILIPS FC12T5/835, RATED 3300 LUMENS, HORIZONTAL POSITION.

BALLAST: UNIVERSAL C242UNVSE

MOUNTING: PENDANT

TOTAL INPUT WATTS= 63.6 AT 120.0 VOLTS

REPORT IS BASED ON 5100 TOTAL LAMP LUMENS.



CANDELA DISTRIBUTION

	0.0	45.0	90.0	135.0	180.0	FLUX
0	488	488	488	488	488	
5	484	485	486	485	485	46
15	470	471	473	469	469	133
25	440	439	444	437	437	203
35	396	394	400	390	392	248
45	339	335	344	332	335	261
55	275	269	279	266	269	244
65	204	197	207	192	197	199
75	133	127	134	122	125	137
85	84	78	85	71	75	87
90	78	74	75	66	70	
95	149	114	124	115	143	132
105	318	321	334	293	283	307
115	304	308	312	293	254	289
125	283	279	282	273	274	250
135	353	342	339	339	342	266
145	473	454	455	451	473	285
155	572	555	566	555	575	259
165	663	648	657	645	663	184
175	739	740	740	739	739	69
180	751	751	751	751	751	

ZONAL LUMEN SUMMARY

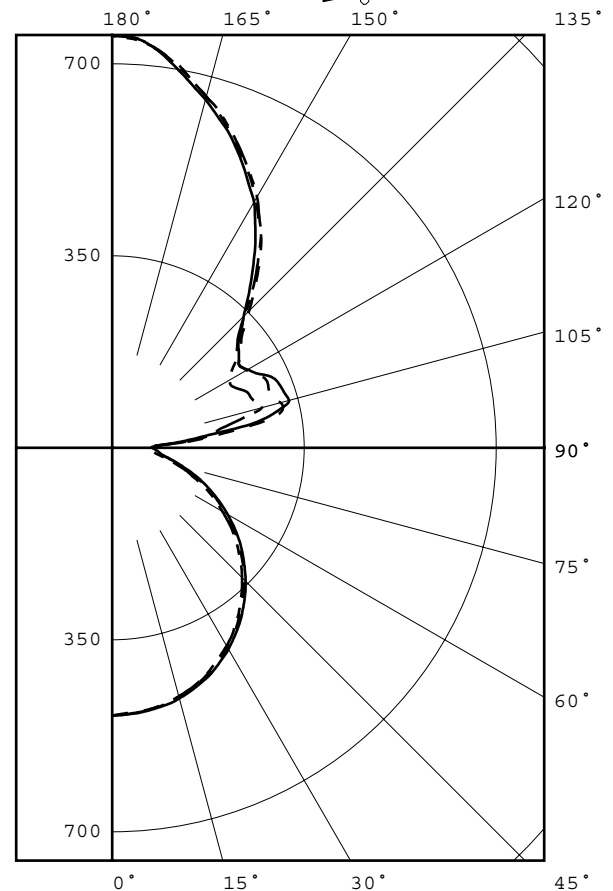
ZONE	LUMENS	%LAMP	%FIXT
0- 30	383	7.5	10.6
0- 40	630	12.4	17.5
0- 60	1136	22.3	31.5
0- 90	1559	30.6	43.3
90-120	728	14.3	20.2
90-130	978	19.2	27.2
90-150	1530	30.0	42.5
90-180	2042	40.0	56.7
0-180	3601	70.6	100.0

TOTAL LUMINAIRE EFFICIENCY = 70.6 %

CIE TYPE - DIRECT-INDIRECT

PLANE : 0-DEG 90-DEG 180-DEG

SPACING CRITERIA : 1.3 1.3 1.3

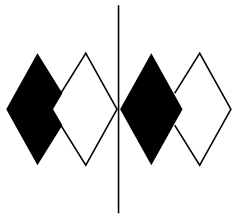


LEGEND:

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

Checked N. WHITE

Approved R. BEATTIE



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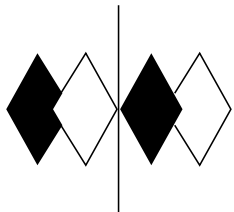
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LUMINANCE DATA IN CANDELA/SQ M			
ANGLE	AVERAGE	AVERAGE	AVERAGE
IN DEG	0-DEG	90-DEG	180-DEG
45	1070.	1086.	1057.
55	969.	984.	948.
65	843.	856.	814.
75	688.	693.	647.
85	582.	588.	519.



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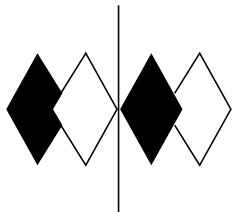
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CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5	180.0
0.0	488	488	488	488	488	488	488	488	488
5.0	484	485	485	486	486	486	485	486	485
10.0	479	480	480	481	481	481	479	480	480
15.0	470	471	471	472	473	472	469	470	469
20.0	457	458	457	460	460	459	455	457	456
25.0	440	441	439	443	444	442	437	439	437
30.0	419	420	418	423	424	423	415	418	417
35.0	396	397	394	399	400	398	390	393	392
40.0	368	369	366	372	373	371	362	366	364
45.0	339	341	335	343	344	341	332	335	335
50.0	308	308	304	311	312	309	299	304	302
55.0	275	275	269	277	279	275	266	269	269
60.0	240	239	234	242	243	239	228	233	232
65.0	204	204	197	206	207	203	192	197	197
70.0	168	168	162	169	171	167	156	161	159
75.0	133	134	127	134	134	132	122	125	125
80.0	101	101	95	101	102	99	90	93	93
85.0	84	81	78	81	85	78	71	73	75
90.0	78	75	74	74	75	69	66	66	70
95.0	149	124	114	121	124	102	115	128	143
100.0	283	264	261	258	266	228	200	185	201
105.0	318	304	321	321	334	311	293	277	283
110.0	304	299	315	315	327	308	295	270	269
115.0	304	295	308	302	312	302	293	261	254
120.0	283	280	282	280	285	277	273	257	248
125.0	283	279	279	279	282	274	273	273	274
130.0	307	304	298	296	301	296	298	299	298
135.0	353	347	342	337	339	339	339	343	342
140.0	412	400	396	397	393	397	393	396	406
145.0	473	460	454	455	455	457	451	457	473
150.0	523	517	508	507	517	510	505	515	528
155.0	572	566	555	555	566	556	555	566	575
160.0	619	615	604	601	615	604	601	613	622
165.0	663	660	648	647	657	647	645	654	663
170.0	707	702	691	692	699	693	692	699	704
175.0	739	742	740	743	740	742	739	739	739
180.0	751	751	751	751	751	751	751	751	751



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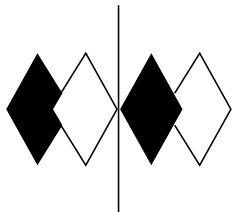
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0- 5	12.
5- 10	35.
10- 15	57.
15- 20	77.
20- 25	94.
25- 30	109.
30- 35	120.
35- 40	128.
40- 45	131.
45- 50	130.
50- 55	126.
55- 60	118.
60- 65	107.
65- 70	93.
70- 75	77.
75- 80	60.
80- 85	46.
85- 90	41.
90- 95	43.
95-100	89.
100-105	149.
105-110	158.
110-115	152.
115-120	137.
120-125	125.
125-130	125.
130-135	129.
135-140	137.
140-145	142.
145-150	143.
150-155	136.
155-160	123.
160-165	104.
165-170	80.
170-175	52.
175-180	18.



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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	74	74	74	74	68	68	68	68	56	56	56	45	45	45	35	35	35	31
1	67	64	61	58	61	59	56	54	48	46	45	39	38	36	30	29	28	24
2	61	56	51	47	55	51	47	44	42	39	37	34	32	30	26	25	24	20
3	55	49	43	39	50	44	40	36	37	33	30	30	27	25	23	21	20	17
4	51	43	37	33	46	39	34	30	32	29	26	26	23	21	20	18	17	14
5	46	38	32	28	42	35	30	26	29	25	22	23	21	18	18	16	15	12
6	43	34	28	24	39	31	26	22	26	22	19	21	18	16	17	14	13	11
7	39	31	25	21	36	28	23	20	23	20	17	19	16	14	15	13	11	9
8	36	28	22	18	33	26	21	17	21	17	15	17	15	12	14	12	10	8
9	34	25	20	16	31	23	18	15	20	16	13	16	13	11	13	11	9	7
10	32	23	18	15	29	21	17	14	18	14	12	15	12	10	12	10	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.