

# itl boulder

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: ITL80578  
ISSUE DATE: 02/28/14  
PREPARED FOR: OXYGEN LIGHTING  
CATALOG NUMBER: 2-698-24

PAGE: 1 OF 4

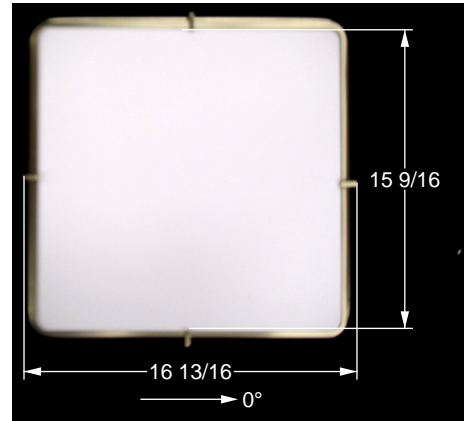
LUMINAIRE: FORMED SEMI-DIFFUSE METAL HOUSING WITH WHITE PAINTED OPTICAL COMPARTMENT, FORMED SEMI-DIFFUSE METAL TRIM RING WITH 4 CAST SEMI-DIFFUSE METAL POSTS, TRANSLUCENT WHITE ACRYLIC DIFFUSER. BALLAST IS EXPOSED AND MOUNTED OBLIQUELY ACROSS THE OPTICAL COMPARTMENT.

LAMP: ONE 22-WATT T-5 CIRCULAR FLUORESCENT, SYLVANIA FPC22/830, RATED 1800 LUMENS, HORIZONTAL POSITION. ONE 40-WATT T-5 CIRCULAR FLUORESCENT, SYLVANIA FPC40/830, RATED 3200 LUMENS, HORIZONTAL POSITION.

BALLAST: ANTRON CSD-UV42P/BMCL  
TOTAL INPUT WATTS = 64.4 AT 120.0 VOLTS  
TOTAL REFLECTANCE OF PAINT = 81.7 %  
MOUNTING: SURFACE

NOTE: DIFFUSER MATERIAL INFORMATION PROVIDED BY CLIENT.

REPORT IS BASED ON 5000 TOTAL LAMP LUMENS.

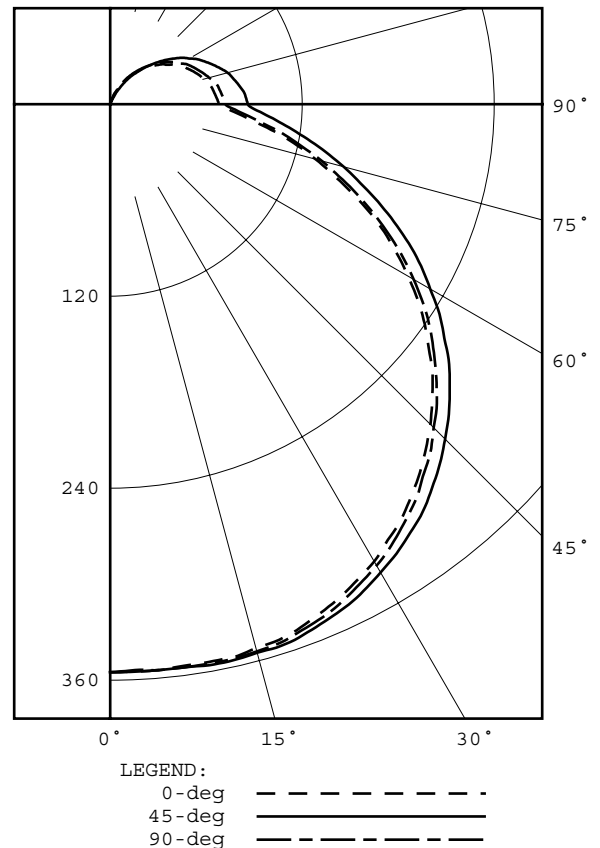


CANDELA DISTRIBUTION						FLUX
	0.0	22.5	45.0	67.5	90.0	
0	355	355	355	355	355	
5	355	355	355	355	355	34
15	352	354	355	355	354	100
25	340	344	347	345	343	159
35	317	323	327	325	320	202
45	283	291	296	293	286	225
55	240	250	255	252	244	223
65	189	199	206	201	192	197
75	133	144	151	146	137	152
85	83	95	102	97	87	105
90	68	79	86	82	72	
95	66	77	84	79	70	84
105	60	69	76	71	64	73
115	53	58	64	60	56	59
125	43	45	50	47	46	42
135	33	31	34	33	34	26
145	21	18	19	19	22	12
155	9	7	4	8	9	4
165	1	1	1	1	1	0
175	0	0	0	0	0	0
180	0	0	0	0	0	0

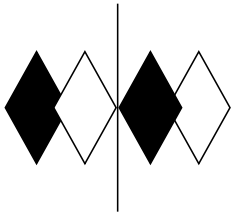
ZONAL ZONE	LUMEN LUMENS	%LAMP	%FIXT
0- 30	293	5.9	17.3
0- 40	496	9.9	29.2
0- 60	944	18.9	55.6
0- 90	1398	28.0	82.4
90-120	216	4.3	12.7
90-130	258	5.2	15.2
90-150	296	5.9	17.4
90-180	300	6.0	17.6
0-180	1697	33.9	100.0

TOTAL LUMINAIRE EFFICIENCY = 33.9 %

CIE TYPE - SEMI-DIRECT  
PLANE : 0-DEG 90-DEG  
SPACING CRITERIA : 1.38 1.39



Checked	<u>S. BERGIN</u>
Approved	<u>R. BEATTIE</u> Lighting Engineer



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## CANDELA DISTRIBUTION LATERAL ANGLE

	0.0	22.5	45.0	67.5	90.0
0.0	355	355	355	355	355
5.0	355	355	355	355	355
10.0	354	355	356	356	355
15.0	352	354	355	355	354
20.0	348	350	353	352	350
25.0	340	344	347	345	343
30.0	330	334	338	336	333
35.0	317	323	327	325	320
40.0	301	308	313	310	304
45.0	283	291	296	293	286
50.0	263	272	277	273	266
55.0	240	250	255	252	244
60.0	215	225	231	227	219
65.0	189	199	206	201	192
70.0	160	172	178	173	164
75.0	133	144	151	146	137
80.0	107	118	125	120	111
85.0	83	95	102	97	87
90.0	68	79	86	82	72
95.0	66	77	84	79	70
100.0	64	73	80	76	68
105.0	60	69	76	71	64
110.0	57	63	70	66	60
115.0	53	58	64	60	56
120.0	48	52	57	54	51
125.0	43	45	50	47	46
130.0	38	38	42	40	40
135.0	33	31	34	33	34
140.0	27	24	26	25	28
145.0	21	18	19	19	22
150.0	15	13	11	13	16
155.0	9	7	4	8	9
160.0	4	3	1	3	4
165.0	1	1	1	1	1
170.0	1	1	1	1	1
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	8
5- 10	25
10- 15	42
15- 20	58
20- 25	73
25- 30	86
30- 35	97
35- 40	105
40- 45	111
45- 50	114
50- 55	113
55- 60	110
60- 65	103
65- 70	94
70- 75	82
75- 80	70
80- 85	58
85- 90	47
90- 95	43
95-100	41
100-105	38
105-110	35
110-115	31
115-120	27
120-125	23
125-130	19
130-135	15
135-140	11
140-145	8
145-150	5
150-155	3
155-160	1
160-165	0
165-170	0
170-175	0
175-180	0

10-DEGREE  
ZONAL LUMEN SUMMARY

0- 10	34
0- 20	134
0- 30	293
0- 40	496
0- 50	720
0- 60	944
0- 70	1141
0- 80	1293
0- 90	1398
0-100	1482
0-110	1555
0-120	1614
0-130	1656
0-140	1681
0-150	1693
0-160	1697
0-170	1697
0-180	1697



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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	39	39	39	39	37	37	37	37	34	34	34	32	32	32	29	29	29	28	28
1	35	33	31	29	33	31	30	28	29	28	26	26	25	25	24	23	23	22	22
2	31	28	25	23	30	27	25	22	25	23	21	23	21	20	21	20	18	17	17
3	28	24	21	19	27	23	21	18	21	19	17	20	18	16	18	17	15	14	14
4	26	21	18	16	24	20	18	15	19	16	14	17	15	14	16	14	13	12	12
5	24	19	16	13	22	18	15	13	17	14	12	15	13	12	14	12	11	10	10
6	22	17	14	11	21	16	13	11	15	13	11	14	12	10	13	11	10	9	9
7	20	15	12	10	19	15	12	10	14	11	9	13	10	9	12	10	8	8	8
8	19	14	11	9	18	13	11	9	12	10	8	12	9	8	11	9	7	7	7
9	17	13	10	8	16	12	10	8	11	9	7	11	8	7	10	8	7	6	6
10	16	12	9	7	15	11	9	7	10	8	7	10	8	6	9	7	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.