



# 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: ITL80581

PAGE: 1 OF 4

ISSUE DATE: 02/14/14

PREPARED FOR: OXYGEN LIGHTING

CATALOG NUMBER: 2-6165-124

LUMINAIRE: FORMED SEMI-DIFFUSE METAL HOUSING WITH WHITE PAINTED INTERIOR, CLEAR FLAT GLASS LENS WITH TRANSLUCENT WHITE FINISHED INTERIOR, SPUN SEMI-DIFFUSE LENS RETAINING PLATE. BALLAST IS EXPOSED AND OFFSET TOWARDS THE 180-DEGREE PLANE OF OPTICAL COMPARTMENT.

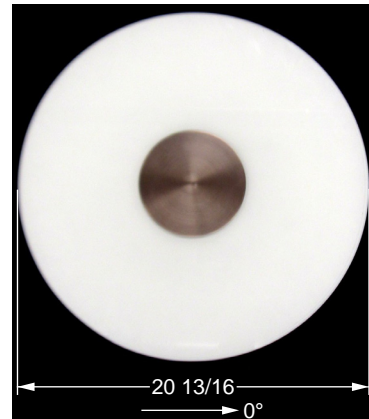
LAMP: ONE 55-WATT T-5 CIRCULAR FLUORESCENT, SYLVANIA FPC55/830/HO, HORIZONTAL POSITION.

TOTAL INPUT WATTS = 51.6 AT 120.0 VOLTS

TOTAL REFLECTANCE OF PAINT = 77.0 %

MOUNTING: SURFACE

REPORT IS BASED ON 4200 LUMENS PER LAMP.



CANDELA DISTRIBUTION						FLUX
	0.0	22.5	45.0	67.5	90.0	
0	327	327	327	327	327	
5	325	325	325	325	325	31
15	314	314	314	314	314	89
25	293	293	293	293	293	135
35	263	263	263	263	263	165
45	224	224	224	224	223	173
55	177	177	177	177	177	158
65	123	123	123	123	123	121
75	63	63	63	63	63	67
85	12	12	12	12	11	15
90	1	1	1	1	1	
95	1	1	1	1	1	1
105	1	1	1	1	1	1
115	2	2	1	2	2	2
125	2	2	2	2	2	2
135	3	2	2	2	2	2
145	2	2	3	2	2	1
155	1	2	3	2	1	1
165	1	1	1	1	1	0
175	1	1	1	1	1	0
180	1	1	1	1	1	

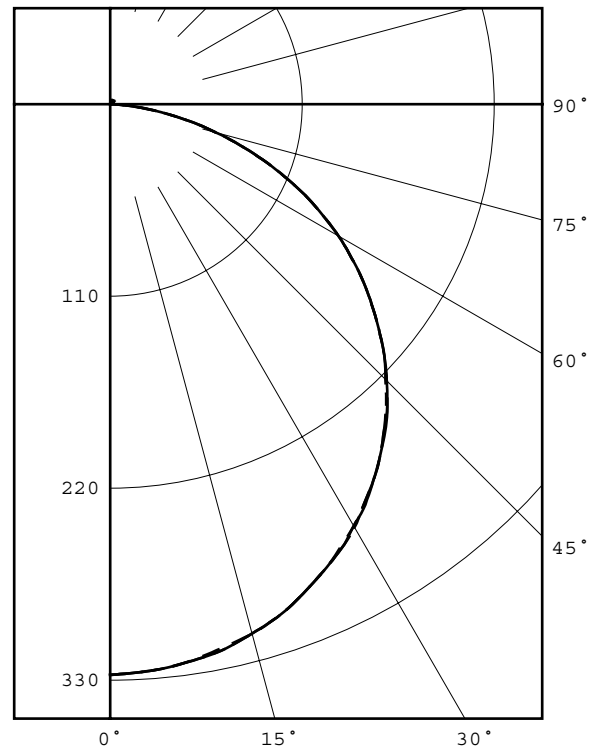
ZONAL LUMEN SUMMARY			
ZONE	LUMENS	%LAMP	%FIXT
0- 30	255	6.1	26.4
0- 40	419	10.0	43.5
0- 60	750	17.9	77.8
0- 90	953	22.7	98.9
90-120	4	0.1	0.4
90-130	6	0.1	0.6
90-150	9	0.2	0.9
90-180	10	0.2	1.1
0-180	963	22.9	100.0

TOTAL LUMINAIRE EFFICIENCY = 22.9 %

CIE TYPE - DIRECT

PLANE : 0-DEG 90-DEG

SPACING CRITERIA : 1.27 1.27



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

Checked       M KLOPF        
 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	327	327	327	327	327
5.0	325	325	325	325	325
10.0	320	321	321	321	321
15.0	314	314	314	314	314
20.0	305	305	305	305	305
25.0	293	293	293	293	293
30.0	279	279	279	279	280
35.0	263	263	263	263	263
40.0	244	245	245	245	244
45.0	224	224	224	224	223
50.0	201	201	201	201	201
55.0	177	177	177	177	177
60.0	151	151	151	151	151
65.0	123	123	123	123	123
70.0	93	93	93	93	93
75.0	63	63	63	63	63
80.0	35	35	35	35	35
85.0	12	12	12	12	11
90.0	1	1	1	1	1
95.0	1	1	1	1	1
100.0	1	1	1	1	1
105.0	1	1	1	1	1
110.0	1	1	1	1	2
115.0	2	2	1	2	2
120.0	2	2	2	2	2
125.0	2	2	2	2	2
130.0	3	2	2	2	2
135.0	3	2	2	2	2
140.0	3	2	3	2	2
145.0	2	2	3	2	2
150.0	2	2	3	2	2
155.0	1	2	3	2	1
160.0	1	2	2	2	1
165.0	1	1	1	1	1
170.0	1	1	1	1	1
175.0	1	1	1	1	1
180.0	1	1	1	1	1



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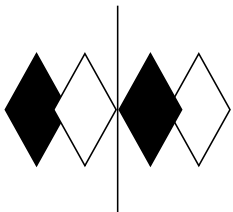
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### 5-DEGREE ZONAL LUMEN SUMMARY

0- 5	8
5- 10	23
10- 15	38
15- 20	51
20- 25	63
25- 30	72
30- 35	80
35- 40	85
40- 45	87
45- 50	86
50- 55	82
55- 60	76
60- 65	67
65- 70	55
70- 75	41
75- 80	26
80- 85	12
85- 90	3
90- 95	1
95-100	1
100-105	1
105-110	1
110-115	1
115-120	1
120-125	1
125-130	1
130-135	1
135-140	1
140-145	1
145-150	1
150-155	1
155-160	0
160-165	0
165-170	0
170-175	0
175-180	0

### 10-DEGREE ZONAL LUMEN SUMMARY

0- 10	31
0- 20	120
0- 30	255
0- 40	419
0- 50	592
0- 60	750
0- 70	871
0- 80	938
0- 90	953
0-100	954
0-110	956
0-120	957
0-130	959
0-140	961
0-150	962
0-160	963
0-170	963
0-180	963



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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

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