

# 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: ITL65462

DATE: 08/09/10

PREPARED FOR: NUMBER EIGHT LIGHTING COMPANY

CATALOG NUMBER: 801/A-QT-120 WITH FS-P-WH TRIM

LUMINAIRE: FABRICATED METAL HOUSING WITH BLACK PAINTED GENERAL INTERIOR FINISH, FABRICATED BLACK PAINTED METAL LAMP MOUNTING BRACKET, CLEAR FLAT GLASS LENS IN MACHINED BLACK FINISHED METAL LAMP RETAINING RING, CAST WHITE PAINTED METAL INNER TRIM RING WITH BLACK PAINTED INTERIOR, INNER TRIM RING ATTACHED TO CAST WHITE PAINTED PERFORATED METAL OUTER TRIM RING WITH FOUR MAGNETS.

LAMP: ONE 50-WATT MR-16 HALOGEN INCANDESCENT, GE EXT Q50MR16/C/NS15, VERTICAL BASE-UP POSITION.

MOUNTING: RECESSED

TEST DISTANCE = 25.25 FEET

REPORT IS BASED ON 750 LUMENS PER LAMP.

### CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0	FLUX
0	7721	7721	7721	7721	7721	
5	5834	5820	5766	5376	5172	374
15	408	369	327	212	187	107
25	29	46	61	33	30	22
35	7	9	12	11	11	7
45	3	4	6	5	6	4
55	0	0	0	0	0	0
65	0	0	0	0	0	0
75	0	0	0	0	0	0
85	0	0	0	0	0	0
90	0	0	0	0	0	0

### ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LAMP	%FIXT
0- 30	504	67.2	98.0
0- 40	510	68.1	99.3
0- 60	514	68.5	100.0
0- 90	514	68.5	100.0
90-180	0	0.0	0.0
0-180	514	68.5	100.0

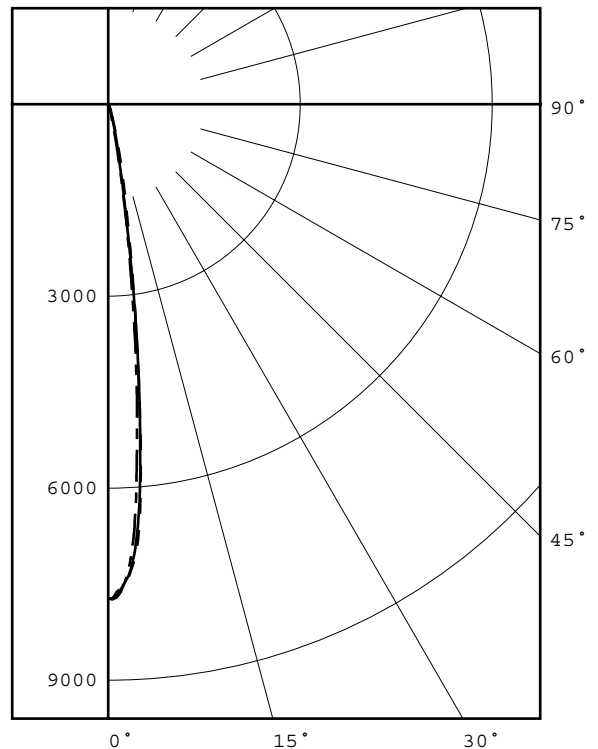
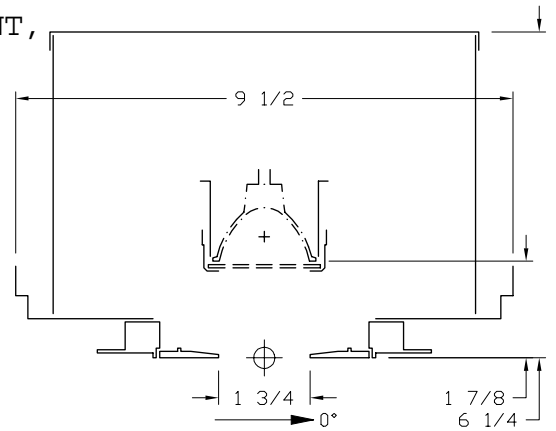
TOTAL LUMINAIRE EFFICIENCY = 68.5 %

### CIE TYPE - DIRECT

PLANE : 0-DEG 90-DEG  
SPACING CRITERIA : 0.2 0.2  
LUMINOUS LENGTH : 1.750 1.750

### LUMINANCE DATA IN CANDELA/SQ M

ANGLE IN DEG	AVERAGE 0-DEG	AVERAGE 45-DEG	AVERAGE 90-DEG
45	2147.	4295.	4295.
55	0.	0.	0.
65	0.	0.	0.
75	0.	0.	0.
85	0.	0.	0.



#### LEGEND:

0-deg: - - - - -  
45-deg: = = = = =  
90-deg: - . - . - .

Checked B. HYRE  
Approved R. BEATTIE



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 LATERAL ANGLE

	0.0	22.5	45.0	67.5	90.0
0.0	7721	7721	7721	7721	7721
0.5	7724	7720	7720	7720	7739
1.0	7624	7639	7670	7699	7706
1.5	7567	7558	7581	7582	7618
2.0	7495	7489	7472	7475	7468
2.5	7394	7391	7371	7300	7282
3.0	7228	7208	7194	7069	7026
3.5	7054	7005	6950	6790	6674
4.0	6775	6717	6626	6367	6224
4.5	6371	6330	6242	5887	5688
5.0	5834	5820	5766	5376	5172
5.5	5283	5265	5220	4883	4702
6.0	4707	4726	4687	4387	4202
6.5	4161	4183	4186	3915	3713
7.0	3622	3641	3645	3396	3221
7.5	3171	3174	3139	2930	2764
8.0	2752	2702	2637	2496	2379
8.5	2402	2322	2199	2108	2032
9.0	2079	1969	1811	1764	1715
9.5	1811	1693	1517	1480	1423
10.0	1603	1448	1286	1225	1176
10.5	1440	1250	1101	1027	973
11.0	1251	1094	945	860	796
11.5	1094	952	827	719	656
12.0	969	833	723	601	539
12.5	851	733	636	515	428
13.0	726	634	556	434	338
13.5	633	547	482	360	273
14.0	550	479	424	297	231
14.5	479	422	371	252	205
15.0	408	369	327	212	187
15.5	354	328	288	186	173
16.0	307	286	257	168	160
16.5	267	251	228	154	148
17.0	233	224	201	144	138
17.5	204	197	181	135	133
18.0	182	170	162	129	130
18.5	162	151	152	124	120
19.0	143	136	137	118	116
19.5	122	123	127	114	91
20.0	103	110	119	105	88
22.5	54	72	90	64	49
25.0	29	46	61	33	30
27.5	17	25	43	22	23
30.0	11	16	24	17	21
32.5	8	11	15	12	14
35.0	7	9	12	11	11
37.5	5	8	11	8	9
40.0	5	7	9	7	8
42.5	4	6	7	5	7
45.0	3	4	6	5	6
47.5	3	3	6	3	1
50.0	0	1	3	0	0
52.5	0	0	1	0	0
55.0	0	0	0	0	0
57.5	0	0	0	0	0
60.0	0	0	0	0	0
62.5	0	0	0	0	0
65.0	0	0	0	0	0
67.5	0	0	0	0	0
70.0	0	0	0	0	0
72.5	0	0	0	0	0
75.0	0	0	0	0	0
77.5	0	0	0	0	0
80.0	0	0	0	0	0



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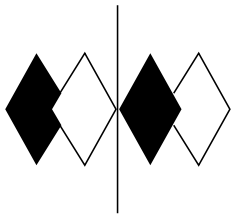
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CANDELA DISTRIBUTION  
LATERAL ANGLE

	0.0	22.5	45.0	67.5	90.0
82.5	0	0	0	0	0
85.0	0	0	0	0	0
87.5	0	0	0	0	0
90.0	0	0	0	0	0



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5-DEGREE  
ZONAL LUMEN SUMMARY

0- 5	162.
5- 10	212.
10- 15	78.
15- 20	29.
20- 25	15.
25- 30	7.
30- 35	4.
35- 40	3.
40- 45	2.
45- 50	1.
50- 55	0.
55- 60	0.
60- 65	0.
65- 70	0.
70- 75	0.
75- 80	0.
80- 85	0.
85- 90	0.

10-DEGREE  
ZONAL LUMEN SUMMARY

0- 10	374.
0- 20	481.
0- 30	504.
0- 40	510.
0- 50	514.
0- 60	514.
0- 70	514.
0- 80	514.
0- 90	514.
0-100	514.
0-110	514.
0-120	514.
0-130	514.
0-140	514.
0-150	514.
0-160	514.
0-170	514.
0-180	514.



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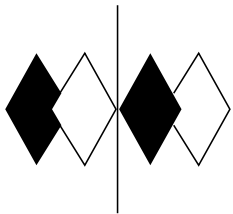
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	82	82	82	82	80	80	80	80	76	76	76	73	73	73	70	70	70	69	69
1	80	78	77	76	78	77	76	75	74	74	73	72	71	71	69	69	69	68	68
2	78	76	74	73	76	75	73	72	73	71	70	71	70	69	69	68	68	67	67
3	76	74	72	70	75	73	71	70	71	70	69	70	69	68	68	67	67	66	66
4	75	72	70	68	74	71	69	68	70	68	67	69	67	66	68	67	66	65	65
5	73	70	68	67	72	70	68	66	69	67	66	68	66	65	67	66	65	64	64
6	72	69	67	65	71	69	67	65	68	66	65	67	66	65	66	65	64	63	63
7	71	68	66	64	70	68	66	64	67	65	64	66	65	64	66	64	63	62	62
8	70	67	65	64	69	67	65	63	66	64	63	66	64	63	65	64	63	62	62
9	69	66	64	63	69	66	64	63	65	64	63	65	63	62	64	63	62	61	61
10	68	65	63	62	68	65	63	62	65	63	62	64	63	62	64	63	62	61	61

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.



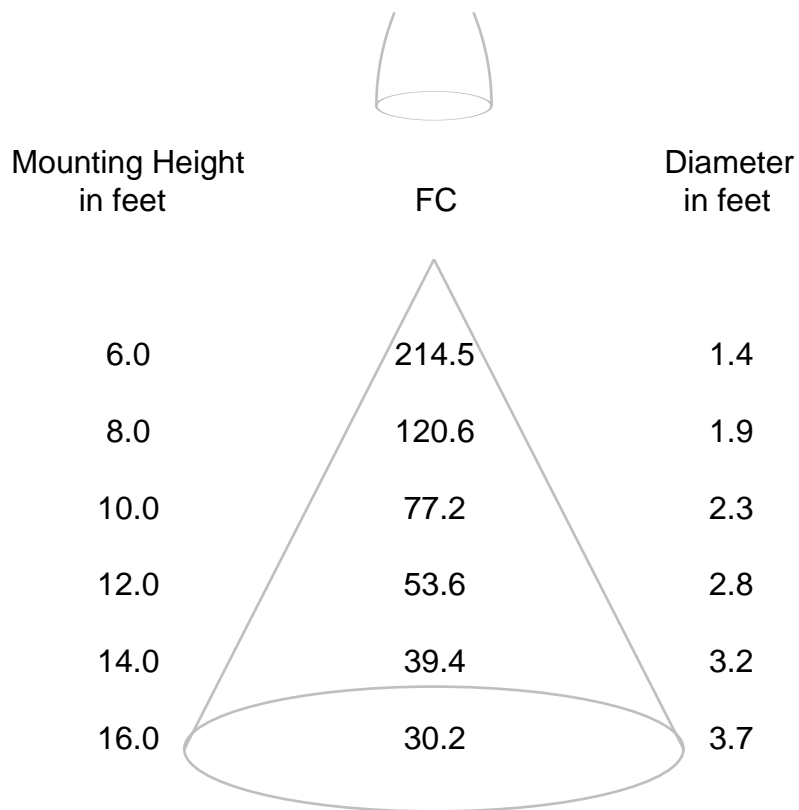
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## CONE OF LIGHT DIAGRAM

(diameter shown is where fc value is half the fc at nadir)



Note: The candela values used to generate this diagram were obtained by averaging the photometric data into a single plane.