



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: ITL64218
PREPARED FOR: MILL SPECIALTIES INC.
CATALOG NUMBER: 1000-CL
LUMINAIRE: CAST METAL HOUSING WITH 6 UPLIGHT APERTURES AROUND BASE OF LAMP, SPUN SEMI-SPECULAR METAL REFLECTOR, FABRICATED SEMI-SPECULAR METAL WIRE GUARD.
LAMP: ONE 1000-WATT CLEAR BT-56 METAL HALIDE, VERTICAL BASE-UP POSITION.
MOUNTING: PENDANT
REPORT IS BASED ON 109000 LUMENS PER LAMP.

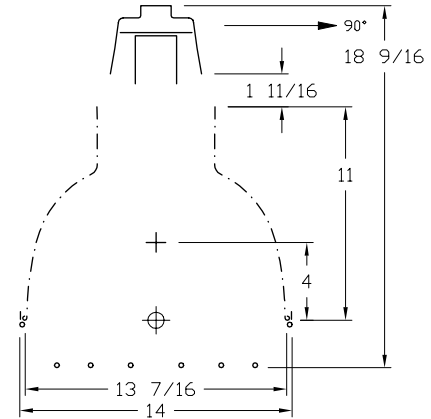
DATE: 03/08/10

CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0
0	46408	46408	46408	46408	46408
5	36381	36492	36081	36449	37134
15	27542	27414	26994	27876	28090
25	23877	23158	22010	23851	24117
35	20348	19646	18516	20126	20314
45	17813	17060	15964	17248	17437
55	13788	13163	12298	13172	13446
65	7399	7014	6397	6620	6560
75	3152	2938	2646	2544	2552
85	993	985	951	899	891
90	293	342	313	314	320
95	399	465	458	446	452
105	334	389	375	366	420
115	272	331	312	313	411
125	488	708	621	595	790
135	286	350	340	345	370
145	218	429	369	372	456
155	552	3152	2365	1516	3260
165	875	2264	1752	1242	2573
175	569	623	631	610	635
180	358	358	358	358	358

FLUX

3363
7770
10745
12307
13129
11660
6746
2973
1050
467
411
350
552
274
250
1007
606
63



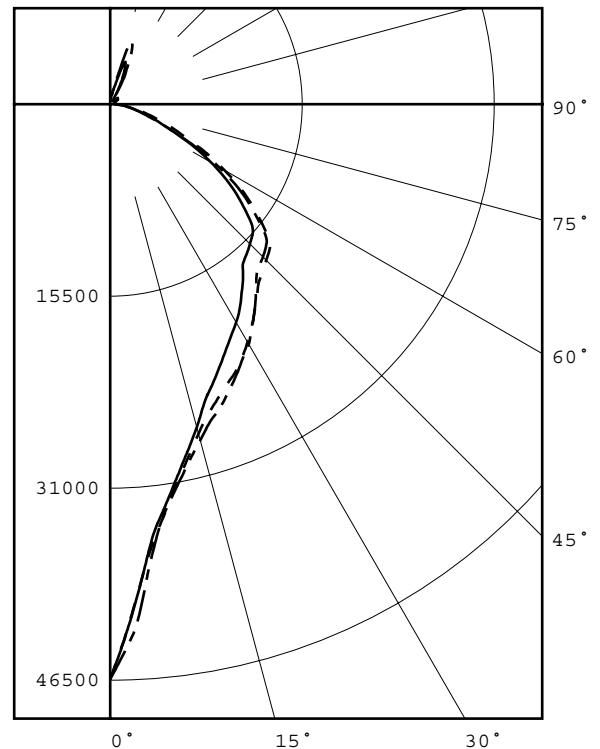
ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LAMP	%FIXT
0- 30	21878	20.1	29.7
0- 40	34184	31.4	46.4
0- 60	58974	54.1	80.0
0- 90	69742	64.0	94.6
90-120	1228	1.1	1.7
90-130	1780	1.6	2.4
90-150	2305	2.1	3.1
90-180	3980	3.7	5.4
0-180	73723	67.6	100.0

TOTAL LUMINAIRE EFFICIENCY = 67.6 %

CIE TYPE - DIRECT

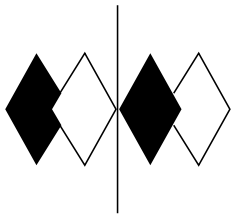
PLANE : 0-DEG 90-DEG
SPACING CRITERIA : 0.6 0.6



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

Checked N. WHITE

Approved R. BEATTIE



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LUMINANCE DATA IN CANDELA/SQ M			
ANGLE IN DEG	AVERAGE 0-DEG	AVERAGE 45-DEG	AVERAGE 90-DEG
45	272293.	244270.	267072.
55	255949.	229113.	250500.
65	181753.	157890.	161656.
75	120337.	101268.	97430.
85	91617.	86710.	80295.



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CANDELA DISTRIBUTION

CANDELA DISTRIBUTION						ZONAL LUMEN SUMMARY	
	0.0	22.5	45.0	67.5	90.0		
0.0	46408	46408	46408	46408	46408	0- 5	986.
5.0	36381	36492	36081	36449	37134	5- 10	2377.
10.0	31037	31122	30728	31345	31259	10- 15	3454.
15.0	27542	27414	26994	27876	28090	15- 20	4316.
20.0	25333	24973	24091	25735	26035	20- 25	5082.
25.0	23877	23158	22010	23851	24117	25- 30	5662.
30.0	22181	21470	20331	22061	22370	30- 35	6072.
35.0	20348	19646	18516	20126	20314	35- 40	6235.
40.0	18687	17891	16700	18182	18362	40- 45	6417.
45.0	17813	17060	15964	17248	17437	45- 50	6712.
50.0	16614	15835	14842	16006	16323	50- 55	6299.
55.0	13788	13163	12298	13172	13446	55- 60	5362.
60.0	10637	10054	9395	9960	10106	60- 65	4052.
65.0	7399	7014	6397	6620	6560	65- 70	2694.
70.0	5001	4650	4119	4162	4042	70- 75	1796.
75.0	3152	2938	2646	2544	2552	75- 80	1177.
80.0	1936	1824	1704	1619	1610	80- 85	728.
85.0	993	985	951	899	891	85- 90	321.
90.0	293	342	313	314	320	90- 95	228.
95.0	399	465	458	446	452	95-100	239.
100.0	382	429	425	415	447	100-105	219.
105.0	334	389	375	366	420	105-110	192.
110.0	293	312	309	316	409	110-115	158.
115.0	272	331	312	313	411	115-120	191.
120.0	404	529	480	470	618	120-125	273.
125.0	488	708	621	595	790	125-130	279.
130.0	418	570	539	516	766	130-135	159.
135.0	286	350	340	345	370	135-140	115.
140.0	233	319	287	297	313	140-145	104.
145.0	218	429	369	372	456	145-150	146.
150.0	361	1083	934	732	1105	150-155	395.
155.0	552	3152	2365	1516	3260	155-160	611.
160.0	784	4803	3615	2138	5258	160-165	476.
165.0	875	2264	1752	1242	2573	165-170	131.
170.0	788	764	807	835	820	170-175	53.
175.0	569	623	631	610	635	175-180	10.
180.0	358	358	358	358	358		



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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	80	80	80	80	77	77	77	77	73	73	73	69	69	69	66	66	66	66	64
1	73	70	68	65	71	68	66	64	65	63	61	62	60	59	59	58	56	56	55
2	67	62	58	54	65	60	57	53	57	54	51	55	52	50	52	50	48	48	47
3	62	55	50	46	60	54	49	45	51	47	44	49	45	43	47	44	41	41	40
4	57	49	43	39	55	48	43	39	46	41	38	44	40	37	42	39	36	36	34
5	52	44	38	34	50	43	38	34	41	36	33	39	35	32	38	34	31	31	30
6	48	40	34	30	47	39	33	29	37	33	29	36	32	28	34	31	28	28	26
7	45	36	30	26	43	35	30	26	34	29	26	33	29	25	32	28	25	25	24
8	42	33	27	24	41	32	27	24	31	27	23	30	26	23	29	25	22	22	21
9	39	30	25	21	38	30	25	21	29	24	21	28	24	21	27	23	20	20	19
10	37	28	23	20	36	28	23	19	27	22	19	26	22	19	25	21	19	19	17

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.