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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: ITL64217

DATE: 03/03/10

PREPARED FOR: MILL SPECIALTIES INC.

CATALOG NUMBER: 400-CLPS

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 400-WATT CLEAR ED-37 PULSE START METAL HALIDE, VENTURE MP400W/BU/PS, VERTICAL BASE-UP POSITION.

MOUNTING: PENDANT

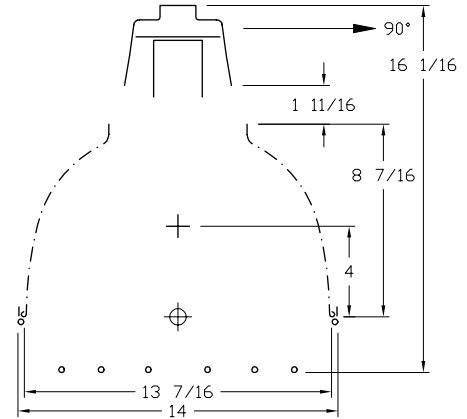
REPORT IS BASED ON 42000 LUMENS PER LAMP.

CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0
0	11648	11648	11648	11648	11648
5	7710	7838	7772	8098	8280
15	11680	11523	12330	12441	13062
25	12739	11420	12462	11701	11250
35	8520	7602	8024	7552	6882
45	7064	6618	6924	6477	6113
55	7213	6299	6700	6258	5989
65	2639	2196	2101	2097	1969
75	728	625	591	604	596
85	215	223	215	207	215
90	79	69	80	74	84
95	168	203	199	192	199
105	163	234	193	183	226
115	82	94	82	74	110
125	58	79	70	63	79
135	121	171	130	120	165
145	636	1281	855	902	1622
155	850	1421	1306	908	1989
165	122	115	121	127	124
175	145	140	156	165	160
180	147	147	147	147	147

FLUX

744
3416
5515
4944
5178
5641
2265
670
220
212
220
84
66
122
648
560
40
12



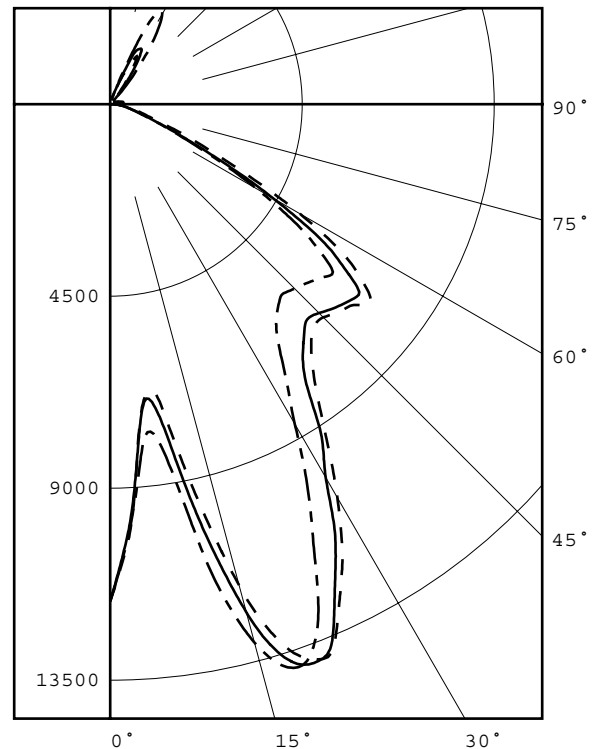
ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LAMP	%FIXT
0- 30	9675	23.0	31.7
0- 40	14619	34.8	47.8
0- 60	25438	60.6	83.3
0- 90	28593	68.1	93.6
90-120	516	1.2	1.7
90-130	582	1.4	1.9
90-150	1351	3.2	4.4
90-180	1964	4.7	6.4
0-180	30557	72.8	100.0

TOTAL LUMINAIRE EFFICIENCY = 72.8 %

CIE TYPE - DIRECT

PLANE : 0-DEG 90-DEG
SPACING CRITERIA : 1.3 1.1



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	107982.	105946.	93629.
55	133896.	124821.	111575.
65	64826.	51857.	48521.
75	27793.	22619.	22754.
85	19837.	19603.	19375.



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CANDELA DISTRIBUTION

CANDELA DISTRIBUTION						ZONAL LUMEN SUMMARY	
	0.0	22.5	45.0	67.5	90.0		
0.0	11648	11648	11648	11648	11648	0- 5	239.
5.0	7710	7838	7772	8098	8280	5- 10	505.
10.0	7412	7288	8098	8239	9074	10- 15	1216.
15.0	11680	11523	12330	12441	13062	15- 20	2200.
20.0	13839	13182	13938	13529	13732	20- 25	2755.
25.0	12739	11420	12462	11701	11250	25- 30	2760.
30.0	10646	9480	10100	9711	8653	30- 35	2573.
35.0	8520	7602	8024	7552	6882	35- 40	2371.
40.0	7329	6721	7068	6676	6138	40- 45	2441.
45.0	7064	6618	6924	6477	6113	45- 50	2737.
50.0	7346	6783	7226	6746	6361	50- 55	3078.
55.0	7213	6299	6700	6258	5989	55- 60	2563.
60.0	5137	4095	4405	4115	3971	60- 65	1505.
65.0	2639	2196	2101	2097	1969	65- 70	760.
70.0	1282	1067	1026	1042	1001	70- 75	406.
75.0	728	625	591	604	596	75- 80	264.
80.0	447	409	376	393	381	80- 85	168.
85.0	215	223	215	207	215	85- 90	52.
90.0	79	69	80	74	84	90- 95	89.
95.0	168	203	199	192	199	95-100	123.
100.0	214	304	265	259	306	100-105	128.
105.0	163	234	193	183	226	105-110	91.
110.0	96	128	128	106	160	110-115	49.
115.0	82	94	82	74	110	115-120	34.
120.0	58	81	65	61	80	120-125	32.
125.0	58	79	70	63	79	125-130	34.
130.0	79	110	93	88	111	130-135	48.
135.0	121	171	130	120	165	135-140	74.
140.0	261	567	362	409	655	140-145	234.
145.0	636	1281	855	902	1622	145-150	413.
150.0	1247	2030	1470	1414	2440	150-155	417.
155.0	850	1421	1306	908	1989	155-160	143.
160.0	299	414	357	263	411	160-165	26.
165.0	122	115	121	127	124	165-170	14.
170.0	123	123	135	146	137	170-175	9.
175.0	145	140	156	165	160	175-180	4.
180.0	147	147	147	147	147		



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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

RC RW	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	85	85	85	85	83	83	83	83	78	78	78	74	74	74	70	70	70	68
1	79	76	73	71	77	74	72	69	70	68	66	67	65	64	63	62	61	59
2	73	67	63	59	70	66	62	58	62	59	56	59	57	54	57	54	52	51
3	67	60	54	50	65	58	53	49	55	51	48	53	49	46	51	48	45	43
4	61	53	47	43	59	52	47	42	50	45	41	47	43	40	45	42	39	38
5	56	48	42	37	55	47	41	37	45	40	36	43	38	35	41	37	34	33
6	52	43	37	32	51	42	36	32	40	35	32	39	34	31	37	33	30	29
7	48	39	33	29	47	38	33	28	37	32	28	35	31	27	34	30	27	26
8	45	36	30	26	44	35	29	25	34	29	25	32	28	25	31	27	24	23
9	42	33	27	23	41	32	27	23	31	26	23	30	25	22	29	25	22	21
10	39	30	25	21	38	30	24	21	29	24	20	28	23	20	27	23	20	19

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.