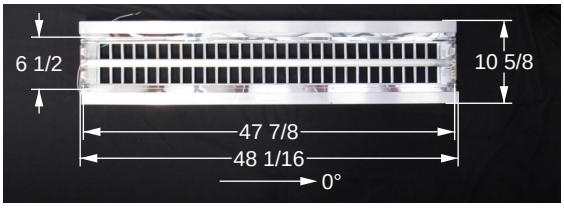
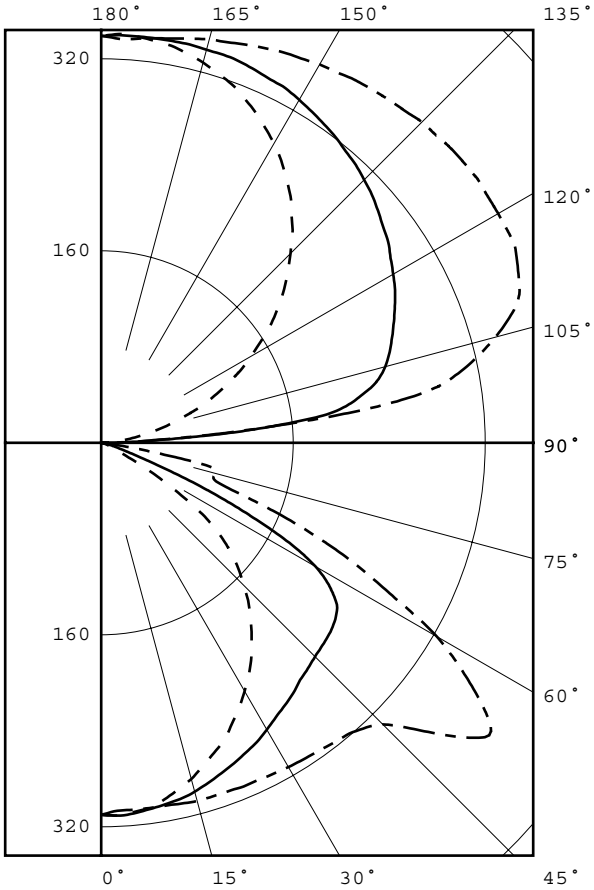
itl boulder
THE LIGHT CENTER OF THE INDUSTRY SINCE 1955
INDEPENDENT TESTING LABORATORIES, INC.
3386 LONGHORN ROAD, BOULDER, CO 80302 USA
PHONE: (303)442-1255 • FAX: (303)449-5274 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com

REPORT NUMBER: ITL70236
ISSUE DATE: 11/03/11
PREPARED FOR: PRECISION ARCHITECTURAL LIGHTING
CATALOG NUMBER: 907S-01-X-4-X-OP/PB-X-120-T8
LUMINAIRE: EXTRUDED SEMI-DIFFUSE METAL HOUSING WITH FABRICATED SEMI-DIFFUSE METAL END CAPS, TWO FORMED METAL SIDE REFLECTORS WITH PREMIUM SPECULAR FINISH, FABRICATED SEMI-SPECULAR METAL PARABOLIC 29-CELL LOUVER. OPEN TOP.
LAMP: ONE 32-WATT T-8 FO32/835 LINEAR FLUORESCENT.
BALLAST: SYLVANIA QTP 1X32T8/UNV ISN-SC
MOUNTING: SUSPENDED
THE 0 DEGREE PLANE IS PARALLEL WITH THE LAMP.
TOTAL INPUT WATTS = 30.2 AT 120.0 VOLTS
LUMEN TO CANDELA RATIO USED = 9.17
REPORT IS BASED ON 2950 LUMENS PER LAMP.



CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0	FLUX
0	310	310	310	310	310	
5	309	310	310	308	307	29
15	290	294	301	306	309	85
25	258	268	285	303	310	132
35	218	237	267	298	314	167
45	168	200	252	300	332	195
55	101	159	240	341	391	213
65	15	37	117	195	225	119
75	3	7	10	57	98	32
85	0	1	1	3	5	3
90	0	0	0	0	0	
95	12	99	128	163	123	117
105	59	136	245	322	340	237
115	116	175	270	351	381	259
125	173	217	292	358	383	256
135	223	257	310	357	378	237
145	269	290	324	355	369	202
155	304	315	334	350	359	154
165	328	332	339	344	348	96
175	340	340	340	338	338	32
180	339	339	339	339	339	



LEGEND:
0-deg: — — — — — — —
45-deg: ————————
90-deg: — — — — — — —

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LAMP	%FIXT
0- 30	246	8.3	9.6
0- 40	413	14.0	16.1
0- 60	821	27.8	32.0
0- 90	975	33.1	38.0
90-120	613	20.8	23.9
90-130	869	29.5	33.9
90-150	1308	44.3	51.0
90-180	1590	53.9	62.0
0-180	2565	86.9	100.0

TOTAL LUMINAIRE EFFICIENCY = 86.9 %

CIE TYPE - SEMI-INDIRECT

PLANE	: 0-DEG	90-DEG
SHIELDING ANGLES :	27	18

Checked M KLOPF
Approved R BEATTIE
Lighting Engineer

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PLANE	: 0-DEG	90-DEG
LUMINOUS LENGTH	:44.125	5.500

LUMINANCE DATA IN CANDELA/SQ M

ANGLE IN DEG	AVERAGE 0-DEG	AVERAGE 45-DEG	AVERAGE 90-DEG
45	1517.	2276.	2999.
55	1125.	2672.	4354.
65	227.	1768.	3400.
75	74.	247.	2418.
85	0.	73.	366.

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	0.0	22.5	45.0	67.5	90.0
0.0	310	310	310	310	310
5.0	309	310	310	308	307
10.0	302	304	306	307	307
15.0	290	294	301	306	309
20.0	275	281	293	305	309
25.0	258	268	285	303	310
30.0	239	253	276	300	312
35.0	218	237	267	298	314
40.0	194	218	258	297	318
45.0	168	200	252	300	332
50.0	140	182	248	318	380
55.0	101	159	240	341	391
60.0	45	105	206	287	323
65.0	15	37	117	195	225
70.0	7	14	30	107	119
75.0	3	7	10	57	98
80.0	1	3	4	13	39
85.0	0	1	1	3	5
90.0	0	0	0	0	0
95.0	12	99	128	163	123
100.0	33	121	218	281	292
105.0	59	136	245	322	340
110.0	88	154	258	343	371
115.0	116	175	270	351	381
120.0	144	196	281	355	382
125.0	173	217	292	358	383
130.0	199	238	301	358	381
135.0	223	257	310	357	378
140.0	247	275	317	356	373
145.0	269	290	324	355	369
150.0	288	304	330	353	364
155.0	304	315	334	350	359
160.0	318	325	338	348	353
165.0	328	332	339	344	348
170.0	336	337	340	341	342
175.0	340	340	340	338	338
180.0	339	339	339	339	339

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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	7.
5- 10	22.
10- 15	36.
15- 20	49.
20- 25	61.
25- 30	71.
30- 35	80.
35- 40	87.
40- 45	94.
45- 50	101.
50- 55	109.
55- 60	103.
60- 65	76.
65- 70	42.
70- 75	21.
75- 80	11.
80- 85	3.
85- 90	0.
90- 95	29.
95-100	89.
100-105	113.
105-110	124.
110-115	128.
115-120	130.
120-125	129.
125-130	127.
130-135	122.
135-140	115.
140-145	106.
145-150	96.
150-155	84.
155-160	70.
160-165	56.
165-170	40.
170-175	24.
175-180	8.

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	29.
0- 20	114.
0- 30	246.
0- 40	413.
0- 50	608.
0- 60	821.
0- 70	939.
0- 80	972.
0- 90	975.
0-100	1092.
0-110	1329.
0-120	1588.
0-130	1844.
0-140	2081.
0-150	2283.
0-160	2437.
0-170	2533.
0-180	2565.

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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	91	91	91	91	82	82	82	82	67	67	67	52	52	52	39	39	39	33
1	83	79	76	73	75	72	69	67	59	57	55	46	45	44	35	34	34	28
2	75	69	64	60	68	63	59	55	51	48	46	41	39	37	31	29	28	24
3	69	61	54	49	62	55	50	46	45	41	38	36	33	31	27	25	24	20
4	63	53	47	42	57	49	43	38	40	36	32	32	29	26	24	22	20	17
5	57	47	40	35	52	43	37	33	35	31	27	28	25	22	21	19	17	14
6	53	42	35	30	48	39	33	28	32	27	24	25	22	19	19	17	15	12
7	49	38	31	26	44	35	29	24	29	24	21	23	19	17	17	15	13	11
8	45	34	28	23	41	31	26	21	26	21	18	21	17	15	16	14	12	10
9	42	31	25	20	38	29	23	19	24	19	16	19	16	13	15	12	11	9
10	39	28	22	18	35	26	21	17	22	17	14	17	14	12	13	11	9	8

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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