

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: ITL70232

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ISSUE DATE: 10/25/11

PREPARED FOR: PRECISION ARCHITECTURAL LIGHTING

CATALOG NUMBER: 907S-03-X-4-X-OC4/MPL-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, FORMED WHITE PAINTED METAL UPPER REFLECTOR WITH 141 UPLIGHT APERTURES OF VARIOUS SHAPES AND SIZES, CLEAR FLAT MICRO-PRISMATIC PLASTIC LENS. LENS PRISMS DOWN.

LAMPS: THREE 32-WATT T-8 FO32/835 LINEAR FLUORESCENTS.

BALLAST: ONE SYLVANIA QTP 1X32T8/UNV ISN-SC, ONE SYLVANIA QTP 2X32T8/UNV ISN-SC

MOUNTING: SUSPENDED

THE 0 DEGREE PLANE IS PARALLEL WITH THE LAMPS.

TOTAL INPUT WATTS = 85.6 AT 120.0 VOLTS

LUMEN TO CANDELA RATIO USED = 9.17

REPORT IS BASED ON 2950 LUMENS PER LAMP.

CANDELA DISTRIBUTION

FLUX

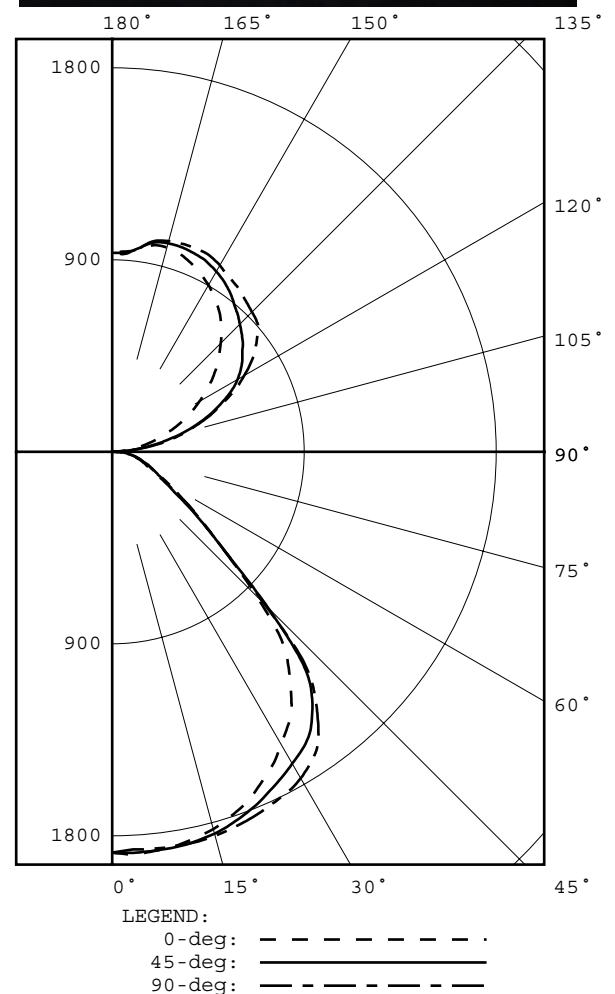
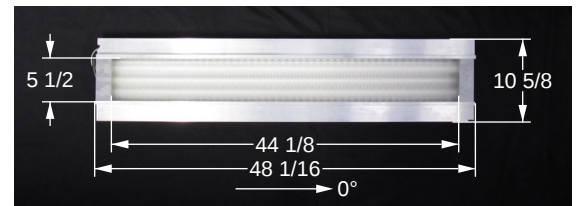
	0.0	22.5	45.0	67.5	90.0	
0	1879	1879	1879	1879	1879	
5	1885	1883	1881	1872	1870	179
15	1831	1837	1853	1859	1863	522
25	1687	1705	1752	1796	1809	808
35	1466	1510	1613	1663	1679	985
45	958	1016	1031	1005	1011	782
55	439	431	417	419	434	391
65	205	230	225	218	221	224
75	126	143	135	128	134	142
85	60	62	60	60	52	61
90	0	0	0	0	0	
95	52	89	88	91	88	99
105	204	314	346	356	357	340
115	382	481	583	614	598	535
125	562	632	744	819	815	643
135	719	770	846	920	927	649
145	852	884	941	978	980	583
155	943	966	1001	1026	1030	458
165	991	998	1012	1021	1022	285
175	944	945	941	938	938	91
180	932	932	932	932	932	

ZONAL LUMEN SUMMARY

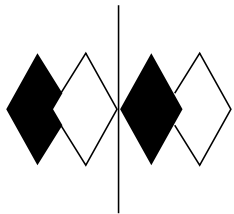
ZONE	LUMENS	%LAMP	%FIXT
0- 30	1509	17.0	19.4
0- 40	2494	28.2	32.1
0- 60	3667	41.4	47.1
0- 90	4093	46.2	52.6
90-120	974	11.0	12.5
90-130	1617	18.3	20.8
90-150	2849	32.2	36.6
90-180	3684	41.6	47.4
0-180	7777	87.9	100.0

TOTAL LUMINAIRE EFFICIENCY = 87.9 %

CIE TYPE - DIRECT-INDIRECT
PLANE : 0-DEG 90-DEG
SPACING CRITERIA : 1.25 1.38
SHIELDING ANGLES : 90 90



CheckedS.BERGIN.....
ApprovedR.BEATTIE.....
Lighting Engineer



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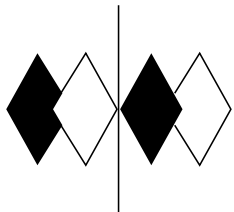
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PLANE : 0-DEG 90-DEG
LUMINOUS LENGTH : 44.125 5.500

LUMINANCE DATA IN CANDELA/SQ M

ANGLE IN DEG	AVERAGE 0-DEG	AVERAGE 45-DEG	AVERAGE 90-DEG
45	8653.	9312.	9132.
55	4888.	4643.	4833.
65	3098.	3400.	3340.
75	3109.	3331.	3307.
85	4397.	4397.	3811.



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CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0
0.0	1879	1879	1879	1879	1879
5.0	1885	1883	1881	1872	1870
10.0	1866	1867	1875	1871	1872
15.0	1831	1837	1853	1859	1863
20.0	1773	1782	1810	1832	1841
25.0	1687	1705	1752	1796	1809
30.0	1583	1613	1688	1752	1767
35.0	1466	1510	1613	1663	1679
40.0	1279	1375	1450	1456	1474
45.0	958	1016	1031	1005	1011
50.0	627	620	627	650	629
55.0	439	431	417	419	434
60.0	289	302	294	290	314
65.0	205	230	225	218	221
70.0	162	180	169	163	179
75.0	126	143	135	128	134
80.0	108	100	99	99	95
85.0	60	62	60	60	52
90.0	0	0	0	0	0
95.0	52	89	88	91	88
100.0	127	203	214	219	233
105.0	204	314	346	356	357
110.0	292	400	470	490	479
115.0	382	481	583	614	598
120.0	472	555	678	724	715
125.0	562	632	744	819	815
130.0	645	706	799	886	893
135.0	719	770	846	920	927
140.0	793	833	893	954	953
145.0	852	884	941	978	980
150.0	903	929	976	1007	1009
155.0	943	966	1001	1026	1030
160.0	975	988	1011	1028	1030
165.0	991	998	1012	1021	1022
170.0	980	986	990	994	995
175.0	944	945	941	938	938
180.0	932	932	932	932	932



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5-DEGREE

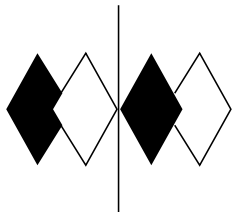
ZONAL LUMEN SUMMARY

0- 5	45.
5- 10	134.
10- 15	221.
15- 20	301.
20- 25	373.
25- 30	434.
30- 35	482.
35- 40	503.
40- 45	459.
45- 50	323.
50- 55	226.
55- 60	164.
60- 65	125.
65- 70	99.
70- 75	80.
75- 80	62.
80- 85	44.
85- 90	17.
90- 95	21.
95-100	78.
100-105	141.
105-110	199.
110-115	248.
115-120	287.
120-125	314.
125-130	329.
130-135	329.
135-140	320.
140-145	303.
145-150	279.
150-155	248.
155-160	210.
160-165	166.
165-170	119.
170-175	69.
175-180	22.

10-DEGREE

ZONAL LUMEN SUMMARY

0- 10	179.
0- 20	701.
0- 30	1509.
0- 40	2494.
0- 50	3276.
0- 60	3667.
0- 70	3890.
0- 80	4032.
0- 90	4093.
0-100	4192.
0-110	4531.
0-120	5066.
0-130	5710.
0-140	6359.
0-150	6942.
0-160	7400.
0-170	7685.
0-180	7777.



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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	95	95	95	95	88	88	88	88	75	75	75	62	62	62	51	51	51	46
1	87	84	80	78	81	78	75	72	66	64	63	56	55	53	47	46	45	40
2	80	74	69	65	74	69	65	61	59	56	53	50	48	46	42	40	39	35
3	74	66	60	55	68	61	56	52	53	49	46	45	42	40	38	36	34	31
4	68	59	52	47	63	55	49	45	48	43	40	41	38	35	35	32	30	27
5	63	53	46	41	58	49	43	39	43	38	35	37	34	31	32	29	27	24
6	58	48	41	36	54	45	39	34	39	34	31	34	30	27	29	26	24	22
7	54	43	37	32	50	41	35	30	36	31	27	31	27	24	27	24	22	19
8	50	39	33	28	46	37	31	27	33	28	25	28	25	22	24	22	20	18
9	47	36	30	25	43	34	28	24	30	25	22	26	23	20	23	20	18	16
10	44	33	27	23	40	31	26	22	28	23	20	24	21	18	21	18	16	15

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.