

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: ITL71196

PAGE: 1 OF 5

ISSUE DATE: 02/04/12

PREPARED FOR: PRECISION ARCHITECTURAL LIGHTING

CATALOG NUMBER: LTS-03-X-4-X-OC2/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, FORMED WHITE PAINTED METAL UPPER REFLECTOR WITH 62 UPLIGHT APERTURES OF VARIOUS SHAPES AND SIZES, FABRICATED SEMI-SPECULAR METAL PARABOLIC 29-CELL LOUVER.

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 = 85.7 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	1868	1868	1868	1868	1868	
5	1867	1869	1868	1861	1859	177
15	1767	1783	1818	1847	1858	513
25	1602	1645	1720	1790	1808	790
35	1387	1456	1547	1609	1652	959
45	1111	1212	1288	1374	1441	993
55	700	843	962	1067	1150	834
65	97	155	406	616	731	413
75	22	29	42	158	281	110
85	4	6	7	13	22	13
90	0	0	0	0	0	
95	27	50	45	51	44	53
105	109	167	185	189	178	178
115	193	251	302	309	289	272
125	272	316	372	397	387	316
135	340	373	415	438	437	312
145	391	412	443	462	458	273
155	426	438	457	471	468	209
165	447	451	458	464	465	130
175	453	454	453	451	450	43
180	450	450	450	450	450	

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LAMP	%FIXT
0- 30	1480	16.7	22.5
0- 40	2439	27.6	37.0
0- 60	4266	48.2	64.7
0- 90	4802	54.3	72.9
90-120	503	5.7	7.6
90-130	820	9.3	12.4
90-150	1405	15.9	21.3
90-180	1787	20.2	27.1
0-180	6589	74.4	100.0

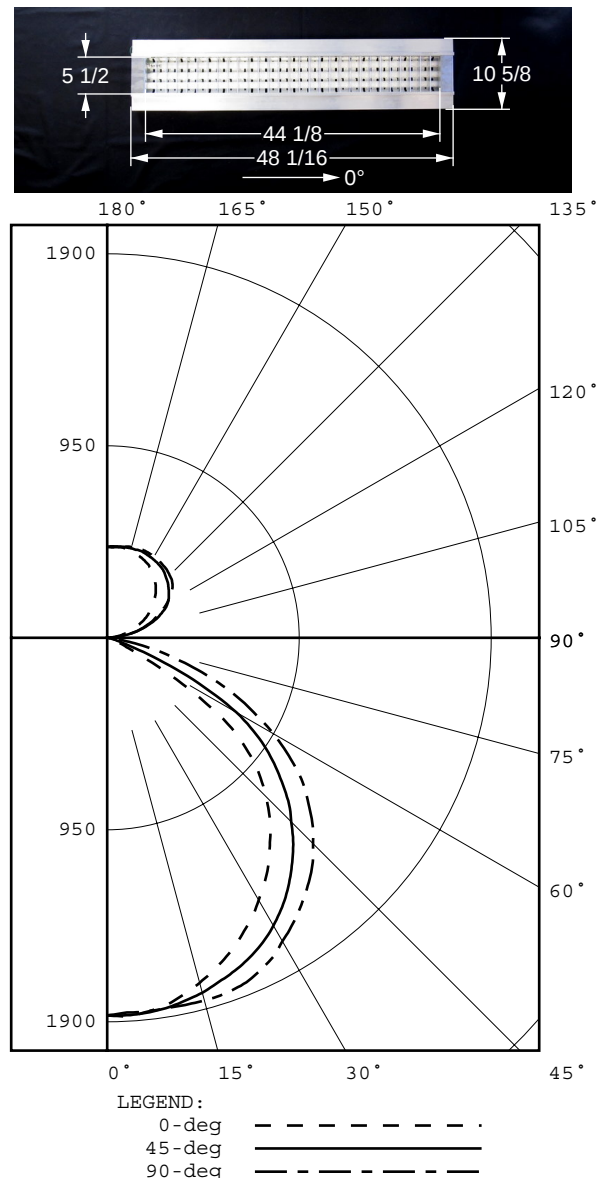
TOTAL LUMINAIRE EFFICIENCY = 74.4 %

CIE TYPE - SEMI-DIRECT

PLANE : 0-DEG 90-DEG

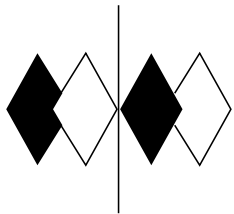
SPACING CRITERIA : 1.20 1.37

SHIELDING ANGLES : 27 12



CheckedS.BERGIN.....

ApprovedR.BEATTIE.....
Lighting Engineer



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: ITL71196

PAGE: 2 OF 5

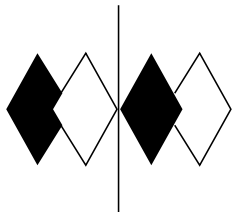
ISSUE DATE: 02/04/12

PREPARED FOR: PRECISION ARCHITECTURAL LIGHTING

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	10035.	11634.	13016.
55	7795.	10712.	12806.
65	1466.	6136.	11047.
75	543.	1036.	6934.
85	293.	513.	1612.



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: ITL71196

PAGE: 3 OF 5

ISSUE DATE: 02/04/12

PREPARED FOR: PRECISION ARCHITECTURAL LIGHTING

CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0
0.0	1868	1868	1868	1868	1868
5.0	1867	1869	1868	1861	1859
10.0	1831	1836	1850	1855	1856
15.0	1767	1783	1818	1847	1858
20.0	1692	1718	1773	1832	1848
25.0	1602	1645	1720	1790	1808
30.0	1499	1557	1645	1711	1734
35.0	1387	1456	1547	1609	1652
40.0	1256	1344	1427	1498	1558
45.0	1111	1212	1288	1374	1441
50.0	940	1065	1137	1234	1306
55.0	700	843	962	1067	1150
60.0	325	499	737	858	951
65.0	97	155	406	616	731
70.0	44	60	127	392	498
75.0	22	29	42	158	281
80.0	9	13	18	45	95
85.0	4	6	7	13	22
90.0	0	0	0	0	0
95.0	27	50	45	51	44
100.0	63	108	114	114	117
105.0	109	167	185	189	178
110.0	151	213	249	255	236
115.0	193	251	302	309	289
120.0	235	285	346	357	341
125.0	272	316	372	397	387
130.0	308	347	395	425	421
135.0	340	373	415	438	437
140.0	367	395	433	453	450
145.0	391	412	443	462	458
150.0	413	427	451	469	465
155.0	426	438	457	471	468
160.0	438	447	461	471	469
165.0	447	451	458	464	465
170.0	453	454	455	457	457
175.0	453	454	453	451	450
180.0	450	450	450	450	450



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: ITL71196

PAGE: 4 OF 5

ISSUE DATE: 02/04/12

PREPARED FOR: PRECISION ARCHITECTURAL LIGHTING

5-DEGREE

ZONAL LUMEN SUMMARY

0- 5	45.
5- 10	133.
10- 15	217.
15- 20	296.
20- 25	366.
25- 30	424.
30- 35	466.
35- 40	493.
40- 45	502.
45- 50	491.
50- 55	455.
55- 60	379.
60- 65	261.
65- 70	152.
70- 75	78.
75- 80	32.
80- 85	10.
85- 90	3.
90- 95	11.
95-100	42.
100-105	74.
105-110	104.
110-115	127.
115-120	145.
120-125	156.
125-130	161.
130-135	159.
135-140	153.
140-145	143.
145-150	130.
150-155	114.
155-160	96.
160-165	75.
165-170	54.
170-175	32.
175-180	11.

10-DEGREE

ZONAL LUMEN SUMMARY

0- 10	177.
0- 20	690.
0- 30	1480.
0- 40	2439.
0- 50	3432.
0- 60	4266.
0- 70	4679.
0- 80	4789.
0- 90	4802.
0-100	4854.
0-110	5033.
0-120	5305.
0-130	5621.
0-140	5933.
0-150	6206.
0-160	6416.
0-170	6545.
0-180	6589.



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: ITL71196

PAGE: 5 OF 5

ISSUE DATE: 02/04/12

PREPARED FOR: PRECISION ARCHITECTURAL LIGHTING

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	84	84	84	84	80	80	80	80	72	72	72	64	64	64	57	57	57	54
1	77	74	72	69	73	71	68	66	64	62	61	58	56	55	52	51	50	47
2	71	66	61	58	67	63	59	55	57	54	51	51	49	47	46	45	43	41
3	65	58	53	48	62	55	51	47	50	47	43	46	43	40	42	39	37	35
4	60	52	46	41	56	49	44	40	45	41	37	41	38	35	37	34	32	30
5	55	46	40	36	52	44	39	35	40	36	32	37	33	30	34	31	28	26
6	51	42	35	31	48	40	34	30	36	32	28	33	30	27	30	27	25	23
7	47	38	32	27	44	36	31	27	33	28	25	30	26	24	28	25	22	20
8	44	34	28	24	41	33	27	24	30	26	22	28	24	21	26	22	20	18
9	41	31	26	22	39	30	25	21	28	23	20	26	22	19	24	20	18	16
10	38	29	23	20	36	28	23	19	26	21	18	24	20	17	22	19	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.