

**itl boulder**  
THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

**NVLAP**  
NVLAP LAB CODE: 200925-0

INDEPENDENT TESTING LABORATORIES, INC.  
3386 LONGHORN ROAD, BOULDER, CO 80302 USA

PHONE: (303)442-1255 • FAX: (303)449-5274 • E-MAIL: [itl@itlboulder.com](mailto:itl@itlboulder.com) • WEBSITE: [www.itlboulder.com](http://www.itlboulder.com)

REPORT NUMBER: ITL71680

PAGE: 1 OF 6

ISSUE DATE: 02/27/12

PREPARED FOR: PRUDENTIAL LIGHTING

CATALOG NUMBER: P-46-LED3

LUMINAIRE: FABRICATED METAL HOUSING WITH WHITE PAINTED GENERAL INTERIOR FINISH, FABRICATED WHITE PAINTED FLAT METAL END CAPS. HOUSING HAS 2 DISTINCT OPTICAL COMPARTMENTS, UPPER OPTICAL COMPARTMENT CONSISTS OF: FORMED WHITE PAINTED METAL REFLECTOR, 4 CIRCUIT BOARDS EACH WITH 105 LEDS. LOWER OPTICAL COMPARTMENT CONSISTS OF: FORMED WHITE PAINTED METAL REFLECTOR, 4 CIRCUIT BOARDS EACH WITH 105 LEDS, EXTRUDED TRANSLUCENT FROSTED PLASTIC DIFFUSER, DIFFUSER FROSTED BOTH SIDES. OPEN TOP.

LAMPS: EIGHT HUNDRED FORTY WHITE LIGHT EMITTING DIODES (LEDs), FOUR HUNDRED TWENTY VERTICAL BASE-UP POSITION, FOUR HUNDRED TWENTY VERTICAL BASE-DOWN POSITION.

LED DRIVER: TWO FULHAM TCD4UNV0300-34L

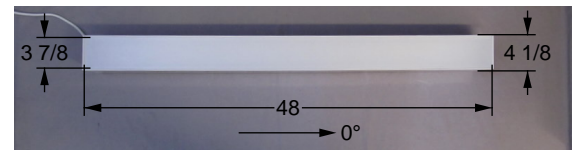
MOUNTING: SUSPENDED

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (120VAC, 60Hz) TO THE LED DRIVERS.

TOTAL INPUT WATTS = 61.8 AT 120.0 VOLTS

TEST PROCEDURE: IESNA LM-79-08

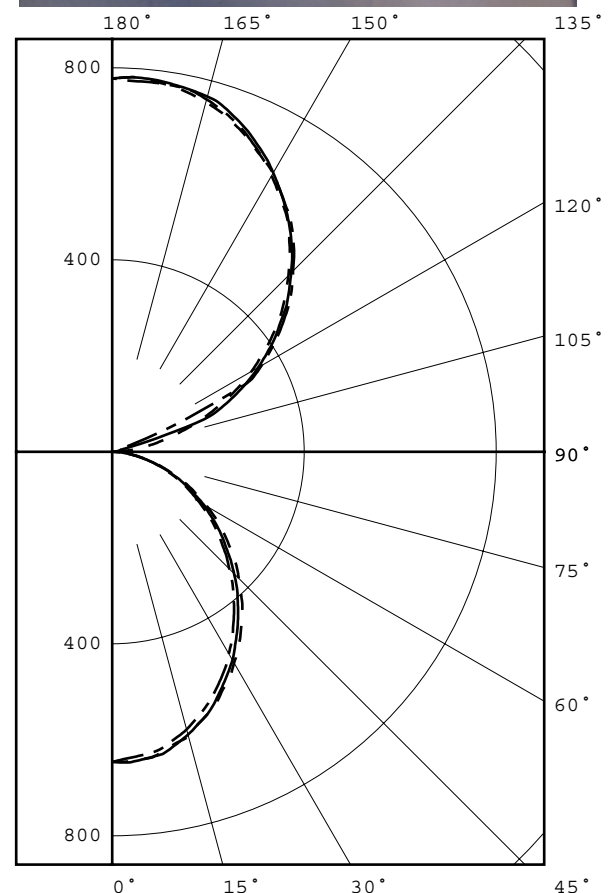
TEST DISTANCE = 33.25 FEET



#### CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0	FLUX
0	646	646	646	646	646	
5	643	643	645	638	636	61
15	614	612	610	599	599	171
25	546	549	541	532	529	249
35	466	465	454	445	440	284
45	373	371	359	349	345	278
55	278	276	265	257	255	238
65	182	180	173	169	168	173
75	94	94	90	89	89	97
85	20	23	24	24	24	27
90	0	0	0	0	0	
95	37	9	10	11	9	16
105	133	143	35	22	23	85
115	267	278	286	282	209	260
125	400	407	414	419	421	369
135	519	527	527	535	533	408
145	623	629	627	628	629	393
155	700	710	710	704	703	326
165	754	755	766	761	760	214
175	781	777	781	774	774	74
180	778	778	778	778	778	

#### FLUX



#### LEGEND:

0-deg - - - - -  
45-deg - - - - -  
90-deg - - - - -

#### ZONAL LUMEN SUMMARY

ZONE	LUMENS	%FIXT
0- 30	480	12.9
0- 40	764	20.5
0- 60	1280	34.4
0- 90	1577	42.4
90-120	360	9.7
90-130	729	19.6
90-150	1530	41.1
90-180	2144	57.6
0-180	3721	100.0

EFFICACY = 60.2 Lm/W

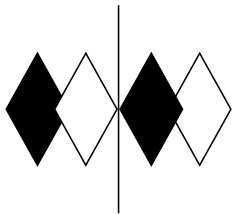
CIE TYPE - DIRECT-INDIRECT

PLANE : 0-DEG 90-DEG

SPACING CRITERIA : 1.18 1.13

Checked S. BERGIN

Approved R. BEATTIE  
Lighting Engineer



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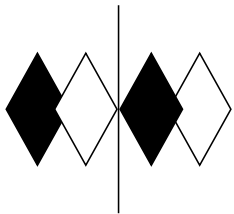
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PLANE : 0-DEG 90-DEG  
LUMINOUS LENGTH : 48.000 3.875

LUMINANCE DATA IN CANDELA/SQ M				
ANGLE	AVERAGE	AVERAGE	AVERAGE	
IN DEG	0-DEG	45-DEG	90-DEG	
45	4396.	4231.	4066.	
55	4039.	3850.	3705.	
65	3589.	3411.	3313.	
75	3027.	2898.	2866.	
85	1912.	2295.	2295.	



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CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0
0.0	646	646	646	646	646
5.0	643	643	645	638	636
10.0	630	631	636	624	624
15.0	614	612	610	599	599
20.0	581	582	581	572	567
25.0	546	549	541	532	529
30.0	508	510	501	488	486
35.0	466	465	454	445	440
40.0	422	418	407	397	393
45.0	373	371	359	349	345
50.0	325	324	310	305	299
55.0	278	276	265	257	255
60.0	229	228	220	213	209
65.0	182	180	173	169	168
70.0	135	137	130	129	126
75.0	94	94	90	89	89
80.0	53	55	55	55	54
85.0	20	23	24	24	24
90.0	0	0	0	0	0
95.0	37	9	10	11	9
100.0	82	62	16	18	19
105.0	133	143	35	22	23
110.0	198	206	216	88	31
115.0	267	278	286	282	209
120.0	335	343	351	359	359
125.0	400	407	414	419	421
130.0	463	468	474	478	482
135.0	519	527	527	535	533
140.0	574	583	580	586	586
145.0	623	629	627	628	629
150.0	664	674	671	669	670
155.0	700	710	710	704	703
160.0	731	737	743	736	736
165.0	754	755	766	761	760
170.0	770	768	775	773	773
175.0	781	777	781	774	774
180.0	778	778	778	778	778



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5-DEGREE  
ZONAL LUMEN SUMMARY

0- 5	15.
5- 10	46.
10- 15	73.
15- 20	98.
20- 25	117.
25- 30	131.
30- 35	140.
35- 40	144.
40- 45	142.
45- 50	136.
50- 55	126.
55- 60	112.
60- 65	96.
65- 70	78.
70- 75	58.
75- 80	39.
80- 85	21.
85- 90	6.
90- 95	4.
95-100	12.
100-105	29.
105-110	56.
110-115	107.
115-120	153.
120-125	176.
125-130	193.
130-135	202.
135-140	206.
140-145	202.
145-150	191.
150-155	174.
155-160	151.
160-165	123.
165-170	91.
170-175	55.
175-180	19.

10-DEGREE  
ZONAL LUMEN SUMMARY

0- 10	61.
0- 20	232.
0- 30	480.
0- 40	764.
0- 50	1042.
0- 60	1280.
0- 70	1453.
0- 80	1550.
0- 90	1577.
0-100	1593.
0-110	1677.
0-120	1937.
0-130	2306.
0-140	2714.
0-150	3107.
0-160	3433.
0-170	3647.
0-180	3721.



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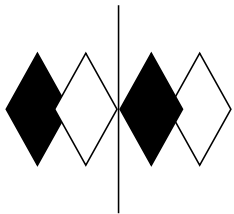
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# COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	49	49	49	42
1	96	92	88	85	88	84	81	78	69	67	65	56	54	53	44	43	42	36
2	88	80	74	69	80	74	68	64	61	57	54	49	47	44	38	37	35	30
3	80	71	63	58	73	65	59	54	54	49	45	44	40	38	34	32	30	26
4	73	63	55	49	67	57	51	45	48	43	39	39	35	32	31	28	26	22
5	67	56	48	42	61	51	44	39	43	37	33	35	31	28	28	25	23	19
6	62	50	42	36	56	46	39	34	39	33	29	32	28	25	25	22	20	17
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	23	20	18	15
8	53	41	33	28	48	38	31	26	32	27	23	26	22	19	21	18	16	14
9	49	37	30	25	45	35	28	23	29	24	20	24	20	17	19	17	14	12
10	46	34	27	22	42	32	25	21	27	22	18	22	18	16	18	15	13	11

ALL CANDELA, LUMENS, LUMINANCE, AND VCP VALUES IN THIS REPORT ARE BASED ON ABSOLUTE PHOTOMETRY. THE COEFFICIENT OF UTILIZATION VALUES ARE BASED ON THE TOTAL ABSOLUTE LUMEN OUTPUT OF THIS TEST SAMPLE.



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