

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

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

INDEPENDENT TESTING LABORATORIES, INC.  
4066 CAMELOT CIRCLE, LONGMONT, CO 80504 USA

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REPORT NUMBER: ITL87816

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ISSUE DATE: 07/14/16

PREPARED FOR: FINELITE, INC.

CATALOG NUMBER: S12-LED-ID-DCO-4FT-2E-V-8-35-30U70D

LUMINAIRE: FABRICATED METAL HOUSING WITH WHITE PAINTED GENERAL INTERIOR FINISH, WHITE PAINTED FLAT METAL END CAPS, 2 FORMED WHITE PAINTED METAL OUTBOARD REFLECTORS/DRIVER COVERS, 2 WHITE CIRCUIT BOARDS EACH WITH 80 LEDS, TRANSLUCENT WHITE HOLOGRAPHIC BOTTOM LENS, 2-PIECE WHITE PAINTED FLAT METAL TOP REFLECTOR WITH 40 0.4375" X 3.500" OBLONG ADJUSTABLE UPLIGHT APERTURES, FROSTED HOLOGRAPHIC FLAT PLASTIC TOP OVERLAY. OVERLAY FROSTED SIDE UP. TOP REFLECTOR ADJUSTED TO POSITION "3" FOR THIS TEST.

LAMPS: ONE HUNDRED SIXTY WHITE LIGHT EMITTING DIODES (LEDs), AIMED 3-DEGREES ABOVE THE HORIZON.

INPUT ELECTRICAL: 277.0 VOLTS, 37.9 WATTS, 0.144 AMPS

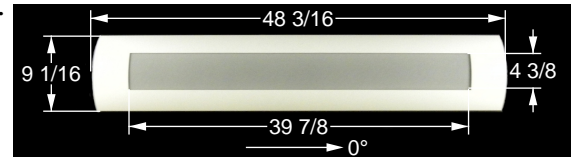
MOUNTING: SUSPENDED

LED DRIVER: OSRAM OT50W/PRG1400C/UNV/DIM/L, DRIVER HAS MULTIPLE LEADS, ONLY LINE INPUT AND LED OUTPUT LEADS CONNECTED FOR THIS TEST, CLIENT STATES DRIVER PROGRAMMED FOR 700mA OUTPUT.

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (277VAC, 60Hz) TO THE DRIVER.

TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 35.0 FEET



CANDELA DISTRIBUTION						FLUX
	0.0	22.5	45.0	67.5	90.0	
0	784	784	784	784	784	
5	781	781	781	781	781	74
15	753	750	758	762	761	214
25	696	694	708	717	719	326
35	613	615	632	645	650	394
45	513	516	534	548	554	411
55	397	401	416	429	435	371
65	272	276	286	296	301	283
75	144	148	156	165	171	166
85	36	40	53	65	70	60
90	0	10	23	33	36	
95	14	17	26	40	41	34
105	57	68	93	117	124	98
115	108	131	185	232	249	179
125	159	189	265	332	358	232
135	193	220	299	374	402	229
145	213	229	286	343	365	180
155	221	228	255	282	293	119
165	222	224	232	239	242	66
175	221	221	222	222	223	21
180	221	221	221	221	221	

ZONAL LUMEN SUMMARY	
ZONE	LUMENS
0- 30	613
0- 40	1008
0- 60	1790
0- 90	2299
90-120	311
90-130	543
90-150	952
90-180	1158
0-180	3457
	%FIXT
	17.7
	29.2
	51.8
	66.5
	9.0
	15.7
	27.5
	33.5
	100.0

EFFICACY (277V) = 91.2 lm/W

EFFICACY (120V) = 93.2 lm/W \*\*

\*\* THE EFFICACY AT 120 VOLTS IS BASED ON THE LUMENS FROM THIS REPORT AND THE WATTAGE MEASURED AT 120 VOLTS FROM ITL REPORT NUMBER ITL87814-THD.

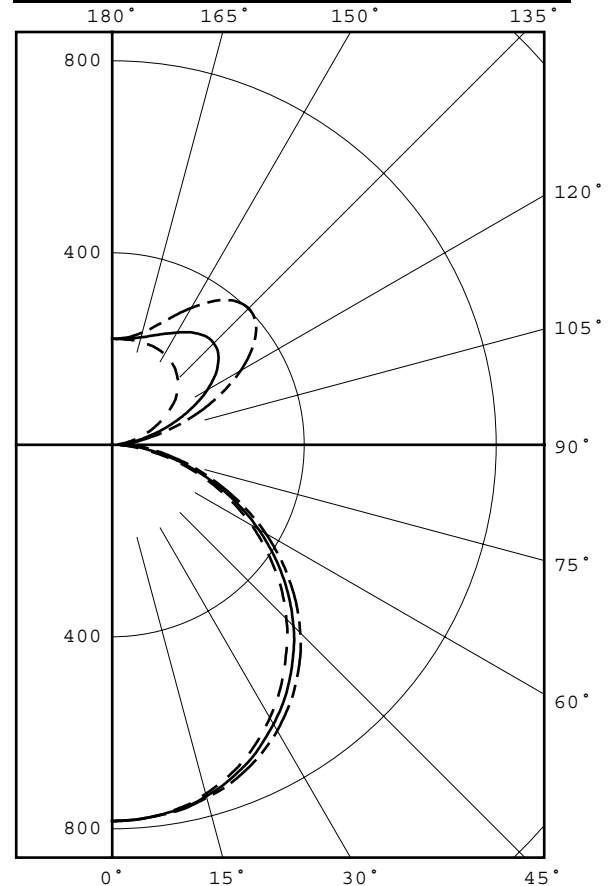
CIE TYPE - SEMI-DIRECT

PLANE : 0-DEG 90-DEG

SPACING CRITERIA : 1.25 1.30

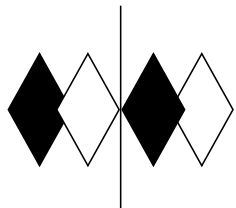
BEAM ANGLE (50%) : 110.8 X 116.5 DEGREES

FIELD ANGLE (10%) : 161.2 X 167.9 DEGREES



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

Checked J. VILLANUEVA  
Approved R. BEATTIE  
Lighting Engineer



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LUMINANCE DATA IN CANDELA/SQ M			
ANGLE	AVERAGE	AVERAGE	AVERAGE
IN DEG	0-DEG	45-DEG	90-DEG
45	6444.	6707.	6959.
55	6147.	6442.	6736.
65	5720.	6015.	6330.
75	4938.	5350.	5775.
85	3671.	4213.	4617.



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CANDELA DISTRIBUTION  
LATERAL ANGLE

	0.0	22.5	45.0	67.5	90.0
0.0	784	784	784	784	784
5.0	781	781	781	781	781
10.0	771	770	773	774	775
15.0	753	750	758	762	761
20.0	728	725	736	743	744
25.0	696	694	708	717	719
30.0	657	657	672	684	688
35.0	613	615	632	645	650
40.0	564	568	585	599	605
45.0	513	516	534	548	554
50.0	458	460	477	491	497
55.0	397	401	416	429	435
60.0	336	340	352	363	369
65.0	272	276	286	296	301
70.0	207	211	220	228	233
75.0	144	148	156	165	171
80.0	85	89	99	109	114
85.0	36	40	53	65	70
90.0	0	10	23	33	36
95.0	14	17	26	40	41
100.0	33	40	55	66	71
105.0	57	68	93	117	124
110.0	82	100	138	174	186
115.0	108	131	185	232	249
120.0	133	162	229	286	309
125.0	159	189	265	332	358
130.0	178	208	289	363	391
135.0	193	220	299	374	402
140.0	205	227	297	366	392
145.0	213	229	286	343	365
150.0	218	230	270	313	329
155.0	221	228	255	282	293
160.0	222	226	242	257	263
165.0	222	224	232	239	242
170.0	222	222	226	228	229
175.0	221	221	222	222	223
180.0	221	221	221	221	221



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5-DEGREE  
ZONAL LUMEN SUMMARY

0- 5	19
5- 10	56
10- 15	91
15- 20	123
20- 25	151
25- 30	174
30- 35	192
35- 40	203
40- 45	207
45- 50	204
50- 55	194
55- 60	177
60- 65	155
65- 70	128
70- 75	98
75- 80	68
80- 85	41
85- 90	19
90- 95	12
95-100	21
100-105	39
105-110	60
110-115	81
115-120	99
120-125	112
125-130	119
130-135	118
135-140	110
140-145	98
145-150	82
150-155	67
155-160	52
160-165	39
165-170	27
170-175	16
175-180	5

10-DEGREE  
ZONAL LUMEN SUMMARY

0- 10	74
0- 20	288
0- 30	613
0- 40	1008
0- 50	1419
0- 60	1790
0- 70	2073
0- 80	2240
0- 90	2299
0-100	2333
0-110	2431
0-120	2611
0-130	2843
0-140	3071
0-150	3251
0-160	3370
0-170	3436
0-180	3457



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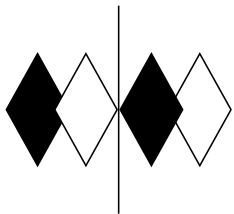
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# COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	11111111111111	105105105105	93	93	93	81	81	81	71	71	71	67						
1	101 96 92 89	95 91 87 84	81	78	75	71	69	67	62	61	59	55						
2	92 84 77 72	86 79 73 68	70	66	62	62	59	56	55	52	50	46						
3	84 74 66 60	78 69 63 57	62	56	52	55	50	47	48	45	42	38						
4	76 65 57 50	72 61 54 48	55	49	44	49	44	40	43	39	36	33						
5	70 58 49 43	66 55 47 41	49	43	38	44	38	34	38	34	31	28						
6	65 52 43 37	61 49 41 36	44	38	33	39	34	30	35	31	27	25						
7	60 47 39 33	56 44 37 31	40	34	29	36	30	27	32	27	24	22						
8	55 43 34 29	52 40 33 28	36	30	26	33	27	24	29	25	22	19						
9	52 39 31 26	49 37 30 25	33	27	23	30	25	21	27	23	19	17						
10	48 36 28 23	45 34 27 22	31	25	21	28	23	19	25	21	18	16						

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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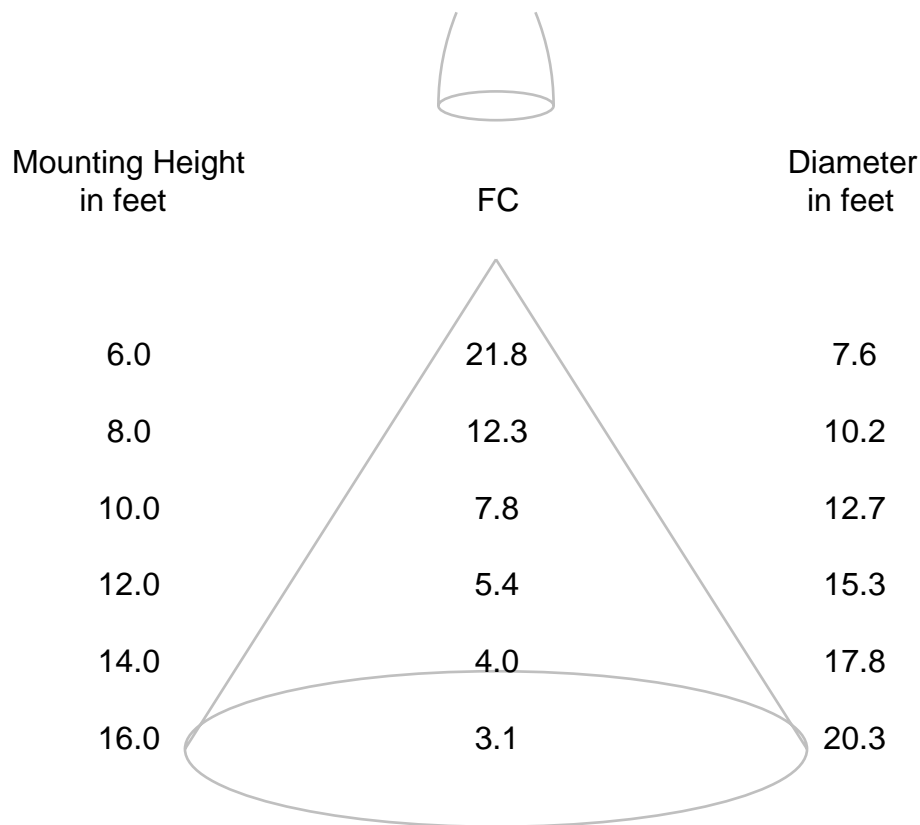
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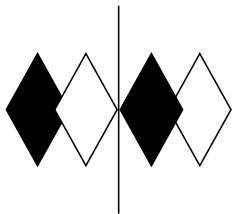
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## CONE OF LIGHT DIAGRAM

(diameter shown is where fc value is half the fc at nadir)



Note: The candela values used to generate this diagram were obtained by averaging the photometric data into a single plane.



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