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THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

NVLAP
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INDEPENDENT TESTING LABORATORIES, INC.
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REPORT NUMBER: ITL87814

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ISSUE DATE: 07/14/16

PREPARED FOR: FINELITE, INC.

CATALOG NUMBER: S12-LED-ID-DCO-4FT-2E-V-8-35-10U90D

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 0.1875" X 3.375" OBLONG ADJUSTABLE UPLIGHT APERTURES, FROSTED HOLOGRAPHIC FLAT PLASTIC TOP OVERLAY. OVERLAY FROSTED SIDE UP. TOP REFLECTOR ADJUSTED TO POSITION "1" 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, 0.145 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

	0.0	22.5	45.0	67.5	90.0	FLUX
0	936	936	936	936	936	
5	932	932	932	933	933	89
15	897	894	901	906	905	254
25	825	822	837	846	847	385
35	725	725	742	755	758	463
45	603	605	622	637	640	479
55	467	469	484	497	501	432
65	319	320	331	341	347	328
75	169	172	180	190	197	193
85	41	46	61	75	81	70
90	0	11	26	38	42	
95	6	7	14	25	26	20
105	25	29	38	45	47	39
115	48	56	74	87	92	71
125	73	82	103	124	131	91
135	88	94	115	138	147	89
145	96	99	113	129	136	72
155	100	101	107	114	116	50
165	101	101	103	104	105	29
175	101	101	101	101	101	10
180	101	101	101	101	101	

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%FIXT
0- 30	728	23.0
0- 40	1191	37.6
0- 60	2102	66.5
0- 90	2692	85.1
90-120	130	4.1
90-130	221	7.0
90-150	382	12.1
90-180	471	14.9
0-180	3163	100.0

EFFICACY (277V) = 83.5 lm/W

EFFICACY (120V) = 85.3 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.

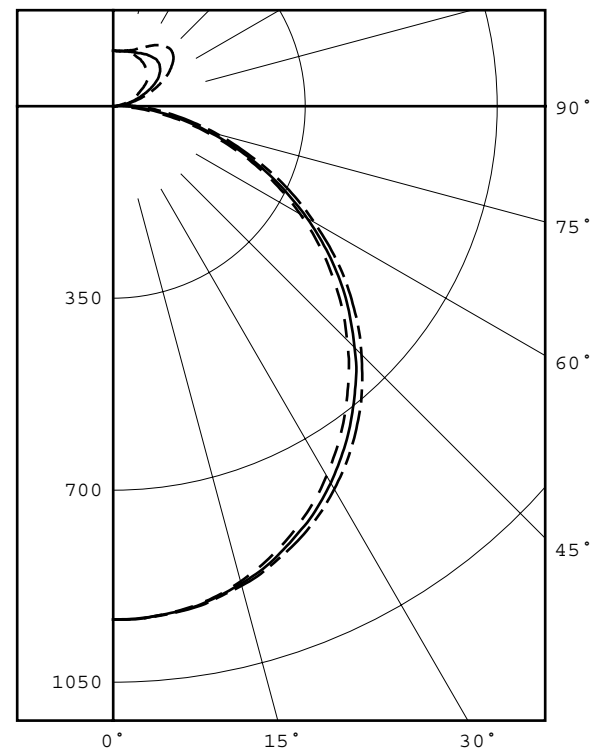
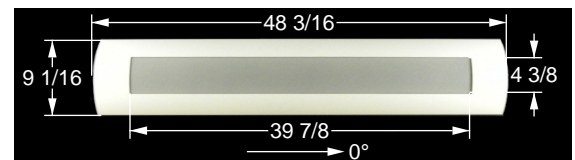
CIE TYPE - SEMI-DIRECT

PLANE : 0-DEG 90-DEG

SPACING CRITERIA : 1.24 1.28

BEAM ANGLE (50%) : 109.9 X 114.2 DEGREES

FIELD ANGLE (10%) : 161.0 X 167.3 DEGREES



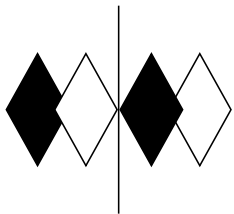
LEGEND:

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

Checked J. VILLANUEVA

Approved R. BEATTIE
Lighting Engineer

THIS REPORT IS BASED ON PUBLISHED INDUSTRY PROCEDURES. FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE.



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LUMINANCE DATA IN CANDELA/SQ M				
ANGLE	AVERAGE	AVERAGE	AVERAGE	
IN DEG	0-DEG	45-DEG	90-DEG	
45	7574.	7813.	8039.	
55	7231.	7495.	7758.	
65	6709.	6961.	7298.	
75	5795.	6173.	6653.	
85	4181.	4849.	5343.	



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CANDELA DISTRIBUTION
LATERAL ANGLE

	0.0	22.5	45.0	67.5	90.0
0.0	936	936	936	936	936
5.0	932	932	932	933	933
10.0	920	918	922	923	924
15.0	897	894	901	906	905
20.0	865	861	873	880	879
25.0	825	822	837	846	847
30.0	778	777	793	804	806
35.0	725	725	742	755	758
40.0	666	668	685	699	703
45.0	603	605	622	637	640
50.0	537	539	556	570	573
55.0	467	469	484	497	501
60.0	394	396	408	419	423
65.0	319	320	331	341	347
70.0	243	245	254	263	268
75.0	169	172	180	190	197
80.0	100	103	115	126	132
85.0	41	46	61	75	81
90.0	0	11	26	38	42
95.0	6	7	14	25	26
100.0	14	18	24	26	27
105.0	25	29	38	45	47
110.0	36	43	55	66	70
115.0	48	56	74	87	92
120.0	59	69	91	107	114
125.0	73	82	103	124	131
130.0	82	89	111	134	143
135.0	88	94	115	138	147
140.0	92	97	115	136	144
145.0	96	99	113	129	136
150.0	99	101	110	121	126
155.0	100	101	107	114	116
160.0	101	102	105	108	109
165.0	101	101	103	104	105
170.0	101	101	102	102	102
175.0	101	101	101	101	101
180.0	101	101	101	101	101



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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	22
5- 10	66
10- 15	108
15- 20	146
20- 25	179
25- 30	206
30- 35	226
35- 40	238
40- 45	242
45- 50	238
50- 55	226
55- 60	206
60- 65	180
65- 70	148
70- 75	114
75- 80	79
80- 85	47
85- 90	22
90- 95	10
95-100	10
100-105	16
105-110	24
110-115	32
115-120	39
120-125	44
125-130	47
130-135	46
135-140	43
140-145	39
145-150	33
150-155	28
155-160	22
160-165	17
165-170	12
170-175	7
175-180	2

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	89
0- 20	343
0- 30	728
0- 40	1191
0- 50	1670
0- 60	2102
0- 70	2430
0- 80	2623
0- 90	2692
0-100	2712
0-110	2751
0-120	2822
0-130	2913
0-140	3003
0-150	3074
0-160	3124
0-170	3154
0-180	3163



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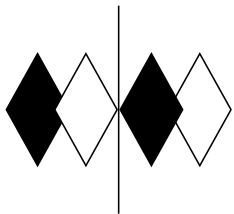
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	116	116	116	116	111	111	111	111	103	103	103	95	95	95	88	88	88	85
1	105	100	96	92	101	97	93	89	90	87	84	83	81	79	77	76	74	71
2	96	87	81	75	92	84	78	73	78	73	69	73	69	65	68	64	62	59
3	87	77	69	62	83	74	67	61	69	63	58	64	59	55	60	56	52	49
4	80	68	59	53	76	65	58	51	61	54	49	57	51	47	53	49	45	42
5	73	60	52	45	70	58	50	44	55	48	42	51	45	41	48	43	39	36
6	67	54	46	39	65	53	44	38	49	42	37	46	40	36	43	38	34	32
7	62	49	41	35	60	48	40	34	45	38	33	42	36	31	40	34	30	28
8	58	45	36	31	56	43	36	30	41	34	29	39	33	28	36	31	27	25
9	54	41	33	28	52	40	32	27	38	31	26	36	30	25	34	28	24	22
10	51	38	30	25	49	37	29	24	35	28	24	33	27	23	31	26	22	20

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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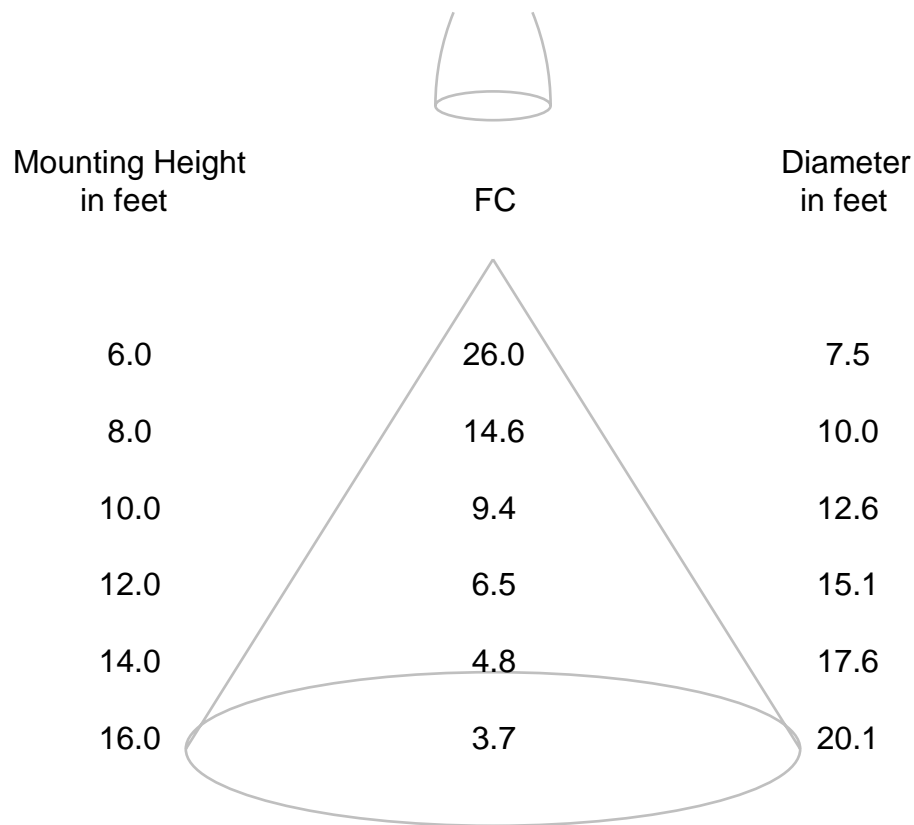
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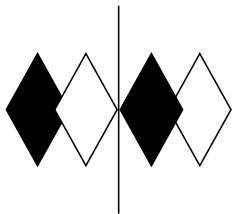
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CONE OF LIGHT DIAGRAM

(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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