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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

PHONE: (303) 442-1255 • FAX: (970) 535-3114 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com

REPORT NUMBER: ITL87815

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ISSUE DATE: 07/14/16

PREPARED FOR: FINELITE, INC.

CATALOG NUMBER: S12-LED-ID-DCO-4FT-2E-V-8-35-20U80D

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 0.375" X 3.500" OBLONG ADJUSTABLE UPLIGHT APERTURES, FROSTED HOLOGRAPHIC FLAT PLASTIC TOP OVERLAY. OVERLAY FROSTED SIDE UP. TOP REFLECTOR ADJUSTED TO POSITION "2" 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

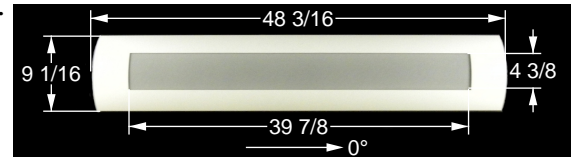
MOUNTING: SUSPENDED

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	849	849	849	849	849	
5	846	845	846	846	846	80
15	815	811	819	823	822	231
25	750	748	762	771	773	351
35	659	661	678	691	695	423
45	549	553	571	586	589	439
55	425	428	443	457	461	396
65	291	294	304	315	318	301
75	154	158	164	176	181	177
85	37	42	55	69	74	64
90	0	10	24	34	39	
95	11	13	21	33	35	28
105	44	53	71	87	91	74
115	83	101	141	170	180	134
125	124	146	198	242	256	172
135	151	169	221	271	288	169
145	166	176	212	250	263	134
155	172	176	193	210	217	90
165	174	175	180	184	186	51
175	173	174	174	174	175	17
180	173	173	173	173	173	

ZONAL LUMEN SUMMARY	
ZONE	LUMENS
0- 30	662
0- 40	1085
0- 60	1920
0- 90	2462
90-120	236
90-130	408
90-150	711
90-180	869
0-180	3331
	%FIXT
	19.9
	32.6
	57.6
	73.9
	7.1
	12.3
	21.3
	26.1
	100.0

EFFICACY (277V) = 87.9 lm/W

EFFICACY (120V) = 89.8 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.

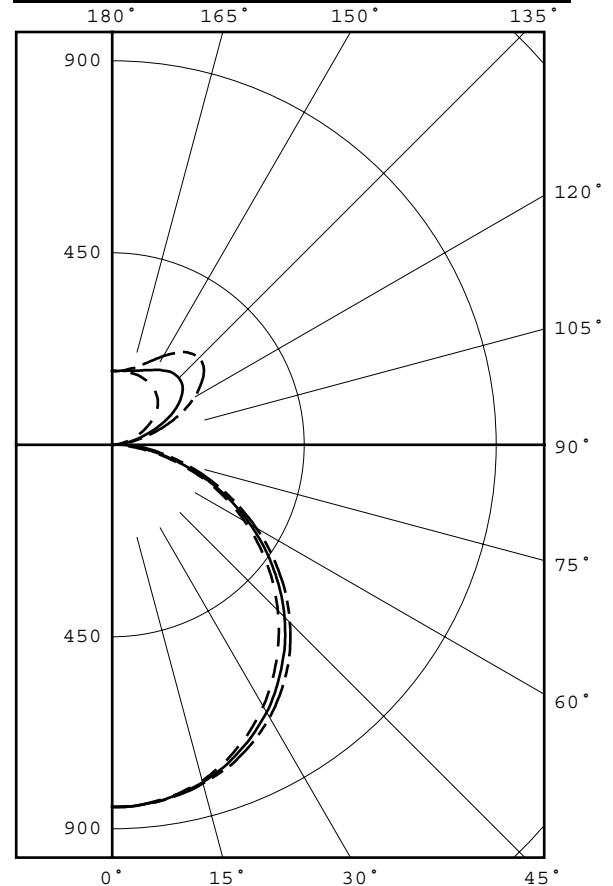
CIE TYPE - SEMI-DIRECT

PLANE : 0-DEG 90-DEG

SPACING CRITERIA : 1.24 1.29

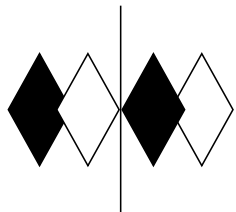
BEAM ANGLE (50%) : 110.1 X 115.2 DEGREES

FIELD ANGLE (10%) : 161.1 X 167.5 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	6896.	7172.	7398.	
55	6581.	6860.	7138.	
65	6120.	6393.	6688.	
75	5281.	5624.	6112.	
85	3773.	4372.	4881.	



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CANDELA DISTRIBUTION
LATERAL ANGLE

	0.0	22.5	45.0	67.5	90.0
0.0	849	849	849	849	849
5.0	846	845	846	846	846
10.0	834	832	836	837	837
15.0	815	811	819	823	822
20.0	786	783	794	801	802
25.0	750	748	762	771	773
30.0	708	708	724	735	738
35.0	659	661	678	691	695
40.0	606	610	628	642	646
45.0	549	553	571	586	589
50.0	489	493	509	523	528
55.0	425	428	443	457	461
60.0	359	363	374	387	390
65.0	291	294	304	315	318
70.0	222	226	233	243	248
75.0	154	158	164	176	181
80.0	91	95	104	116	121
85.0	37	42	55	69	74
90.0	0	10	24	34	39
95.0	11	13	21	33	35
100.0	25	32	43	49	52
105.0	44	53	71	87	91
110.0	64	77	105	128	135
115.0	83	101	141	170	180
120.0	103	125	173	209	223
125.0	124	146	198	242	256
130.0	139	160	215	263	280
135.0	151	169	221	271	288
140.0	159	173	220	265	281
145.0	166	176	212	250	263
150.0	170	177	203	230	240
155.0	172	176	193	210	217
160.0	174	176	185	194	199
165.0	174	175	180	184	186
170.0	174	174	176	177	178
175.0	173	174	174	174	175
180.0	173	173	173	173	173



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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	20
5- 10	60
10- 15	98
15- 20	133
20- 25	163
25- 30	188
30- 35	206
35- 40	217
40- 45	221
45- 50	218
50- 55	207
55- 60	189
60- 65	165
65- 70	136
70- 75	104
75- 80	72
80- 85	43
85- 90	20
90- 95	11
95-100	16
100-105	29
105-110	45
110-115	60
115-120	74
120-125	84
125-130	89
130-135	88
135-140	82
140-145	72
145-150	61
150-155	50
155-160	40
160-165	30
165-170	21
170-175	13
175-180	4

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	80
0- 20	311
0- 30	662
0- 40	1085
0- 50	1524
0- 60	1920
0- 70	2221
0- 80	2398
0- 90	2462
0-100	2489
0-110	2564
0-120	2698
0-130	2870
0-140	3039
0-150	3173
0-160	3263
0-170	3314
0-180	3331



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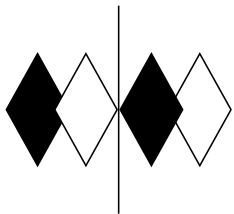
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	113	113	113	113	107	107	107	107	97	97	97	87	87	87	78	78	78	74
1	103	98	94	90	97	93	89	86	84	81	79	76	74	72	68	67	65	61
2	93	85	79	73	88	81	75	70	73	69	65	66	63	59	60	57	54	51
3	85	75	67	61	80	71	64	58	65	59	54	58	54	50	53	49	46	43
4	78	66	58	51	73	63	55	49	57	51	46	52	47	43	47	43	39	36
5	71	59	50	44	67	56	48	42	51	45	40	47	41	37	42	38	34	31
6	66	53	44	38	62	51	43	37	46	40	35	42	37	32	38	34	30	27
7	61	48	39	33	58	46	38	32	42	35	30	38	33	29	35	30	27	24
8	57	43	35	30	54	42	34	29	38	32	27	35	29	25	32	27	24	22
9	53	40	32	27	50	38	31	26	35	29	24	32	27	23	30	25	21	19
10	49	37	29	24	47	35	28	23	32	26	22	30	24	21	27	23	19	18

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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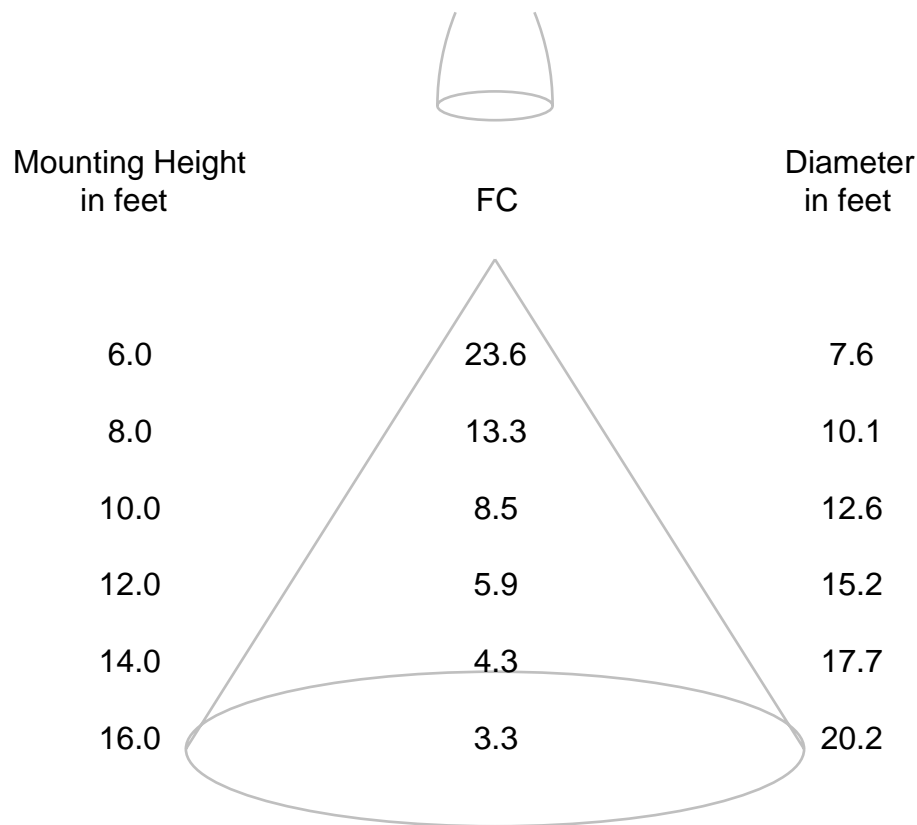
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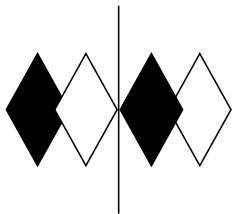
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CONE OF LIGHT DIAGRAM

(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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