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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: ITL87819

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ISSUE DATE: 07/18/16

PREPARED FOR: FINELITE, INC.

CATALOG NUMBER: S16-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, TWO 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, TRANSLUCENT WHITE FLAT PLASTIC TOP OVERLAY, OVERLAY WITH PERFORATED WHITE PATTERN ON BOTTOM SURFACE. TOP REFLECTOR ADJUSTED TO POSITION "1" FOR THIS TEST.

LAMPS: ONE HUNDRED SIXTY WHITE LIGHT EMITTING DIODES (LEDS), AIMED 5-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	996	996	996	996	996	
5	992	992	993	993	993	94
15	956	952	960	962	962	270
25	882	876	891	897	897	409
35	777	773	789	798	799	492
45	648	648	662	670	671	509
55	502	502	513	520	520	457
65	344	344	350	354	354	345
75	182	183	185	186	185	196
85	43	44	44	44	43	52
90	0	0	0	0	0	
95	5	5	5	5	5	6
105	21	21	21	21	21	22
115	39	39	39	39	39	38
125	57	57	57	56	56	51
135	73	73	73	73	72	56
145	88	87	87	87	87	54
155	99	98	99	99	99	45
165	106	106	106	106	106	30
175	110	110	110	110	110	10
180	111	111	111	111	111	

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%FIXT
0- 30	774	24.7
0- 40	1267	40.4
0- 60	2233	71.1
0- 90	2825	90.0
90-120	66	2.1
90-130	117	3.7
90-150	227	7.2
90-180	313	10.0
0-180	3138	100.0

EFFICACY (277V) = 82.8 lm/W

EFFICACY (120V) = 84.4 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 ITL87819-THD.

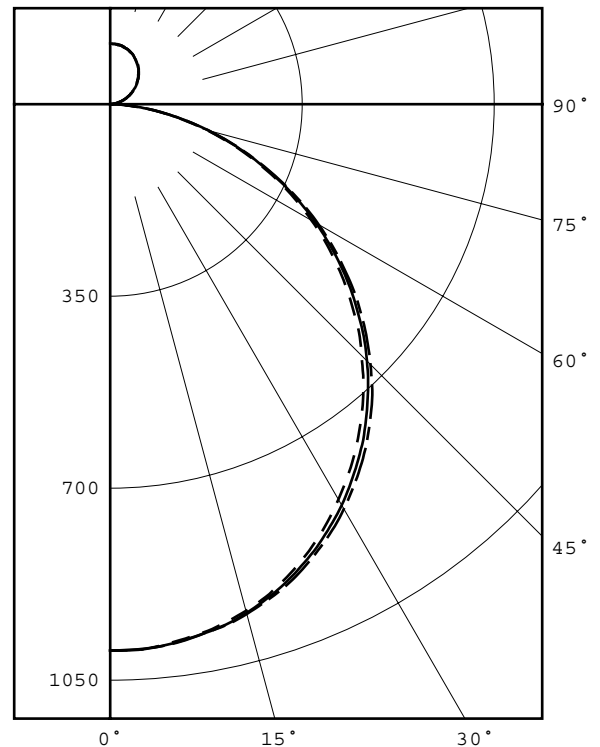
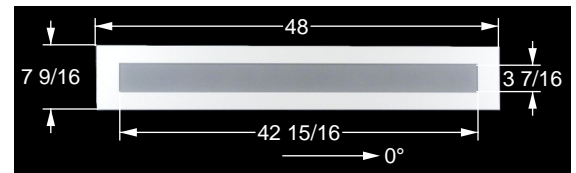
CIE TYPE - DIRECT

PLANE : 0-DEG 90-DEG

SPACING CRITERIA : 1.24 1.27

BEAM ANGLE (50%) : 110.5 X 112.8 DEGREES

FIELD ANGLE (10%) : 161.1 X 161.3 DEGREES



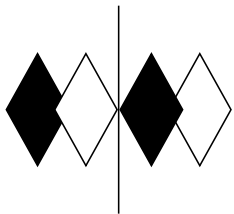
LEGEND:

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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PLANE : 0-DEG 90-DEG
LUMINOUS LENGTH : 42.938 3.437

LUMINANCE DATA IN CANDELA/SQ M			
ANGLE	AVERAGE	AVERAGE	AVERAGE
IN DEG	0-DEG	45-DEG	90-DEG
45	9624.	9832.	9965.
55	9191.	9392.	9521.
65	8548.	8697.	8796.
75	7385.	7506.	7506.
85	5181.	5302.	5181.



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CANDELA DISTRIBUTION
 LATERAL ANGLE

	0.0	22.5	45.0	67.5	90.0
0.0	996	996	996	996	996
5.0	992	992	993	993	993
10.0	978	977	980	982	980
15.0	956	952	960	962	962
20.0	924	919	930	935	935
25.0	882	876	891	897	897
30.0	832	829	844	851	852
35.0	777	773	789	798	799
40.0	716	714	728	738	739
45.0	648	648	662	670	671
50.0	577	577	589	597	598
55.0	502	502	513	520	520
60.0	424	424	433	439	439
65.0	344	344	350	354	354
70.0	262	263	266	269	269
75.0	182	183	185	186	185
80.0	107	109	109	109	109
85.0	43	44	44	44	43
90.0	0	0	0	0	0
95.0	5	5	5	5	5
100.0	12	12	12	12	12
105.0	21	21	21	21	21
110.0	30	30	30	30	30
115.0	39	39	39	39	39
120.0	48	48	48	48	47
125.0	57	57	57	56	56
130.0	65	65	65	65	64
135.0	73	73	73	73	72
140.0	81	80	80	80	80
145.0	88	87	87	87	87
150.0	94	93	93	93	93
155.0	99	98	99	99	99
160.0	103	102	103	103	103
165.0	106	106	106	106	106
170.0	109	109	109	109	109
175.0	110	110	110	110	110
180.0	111	111	111	111	111



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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	24
5- 10	71
10- 15	115
15- 20	156
20- 25	191
25- 30	219
30- 35	240
35- 40	253
40- 45	257
45- 50	252
50- 55	239
55- 60	218
60- 65	190
65- 70	156
70- 75	118
75- 80	78
80- 85	41
85- 90	11
90- 95	1
95-100	5
100-105	9
105-110	13
110-115	17
115-120	21
120-125	24
125-130	26
130-135	28
135-140	28
140-145	28
145-150	27
150-155	24
155-160	21
160-165	17
165-170	13
170-175	8
175-180	3

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	94
0- 20	365
0- 30	774
0- 40	1267
0- 50	1776
0- 60	2233
0- 70	2578
0- 80	2774
0- 90	2825
0-100	2831
0-110	2853
0-120	2891
0-130	2942
0-140	2998
0-150	3053
0-160	3098
0-170	3128
0-180	3138



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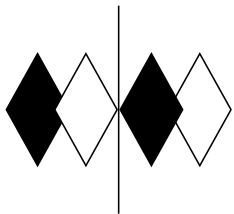
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	117	117	117	117	113	113	113	113	106	106	106	99	99	99	93	93	93	90
1	107	102	98	94	103	99	95	91	93	89	87	87	85	82	82	80	78	75
2	97	89	82	76	93	86	80	75	81	76	71	76	72	68	72	68	65	63
3	88	78	70	63	85	76	68	62	71	65	60	67	62	58	63	59	55	53
4	81	69	60	54	78	67	59	53	63	56	51	60	54	49	56	52	47	45
5	74	61	53	46	71	60	52	45	57	49	44	54	47	43	51	45	41	39
6	68	55	46	40	66	54	46	40	51	44	38	48	42	37	46	41	36	34
7	63	50	41	35	61	49	41	35	46	39	34	44	38	33	42	36	32	30
8	59	46	37	31	57	45	37	31	42	35	30	40	34	30	38	33	29	27
9	55	42	34	28	53	41	33	28	39	32	27	37	31	27	36	30	26	24
10	52	39	31	26	50	38	30	25	36	29	25	34	28	24	33	28	24	22

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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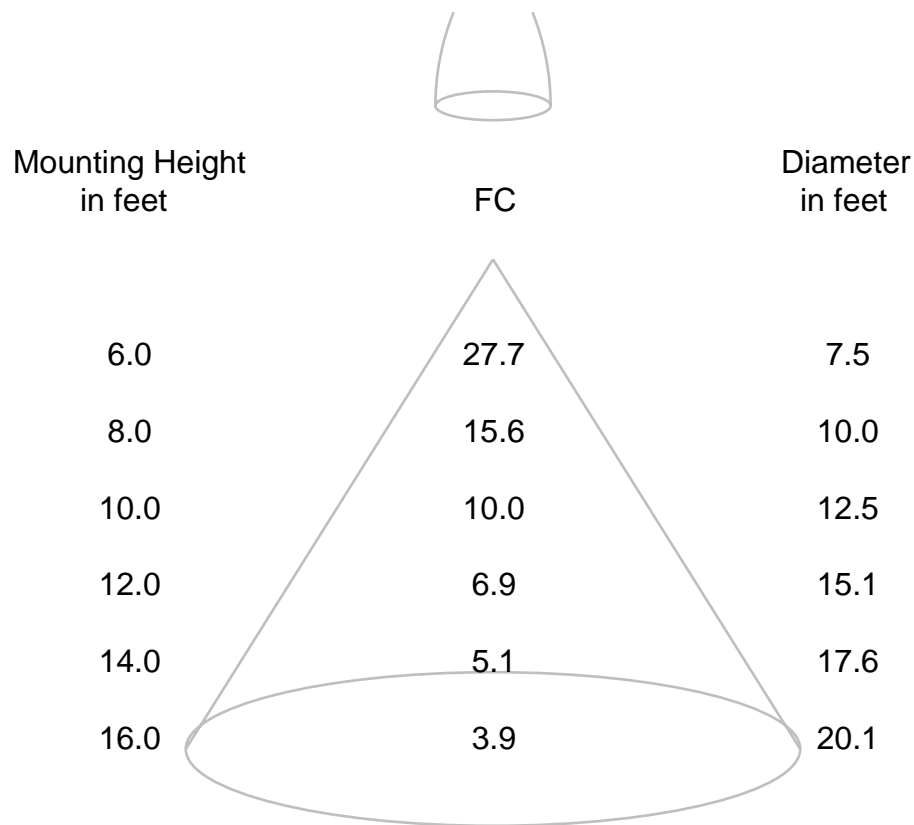
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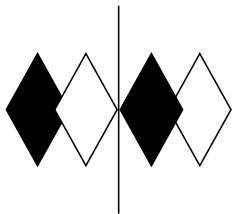
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CONE OF LIGHT DIAGRAM

(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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