

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

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

REPORT NUMBER: ITL87820

PAGE: 1 OF 7

ISSUE DATE: 07/18/16

PREPARED FOR: FINELITE, INC.

CATALOG NUMBER: S16-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, 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, 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 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	963	963	963	963	963	
5	959	959	959	960	960	91
15	925	921	928	932	930	262
25	855	848	863	869	869	396
35	755	750	764	774	776	477
45	630	627	641	650	652	493
55	489	489	497	506	506	444
65	335	335	340	345	345	336
75	177	177	179	181	182	190
85	42	43	42	43	44	50
90	0	0	0	0	0	
95	8	9	9	9	10	10
105	29	33	40	46	48	42
115	55	64	80	93	97	77
125	79	93	119	138	145	103
135	99	115	145	168	176	109
145	113	125	152	174	182	93
155	119	125	144	160	165	66
165	121	123	131	137	141	37
175	122	122	123	123	124	12
180	122	122	122	122	122	

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%FIXT
0- 30	749	22.8
0- 40	1227	37.3
0- 60	2164	65.8
0- 90	2741	83.3
90-120	130	3.9
90-130	233	7.1
90-150	435	13.2
90-180	550	16.7
0-180	3291	100.0

EFFICACY (277V) = 86.8 lm/W

EFFICACY (120V) = 88.5 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.

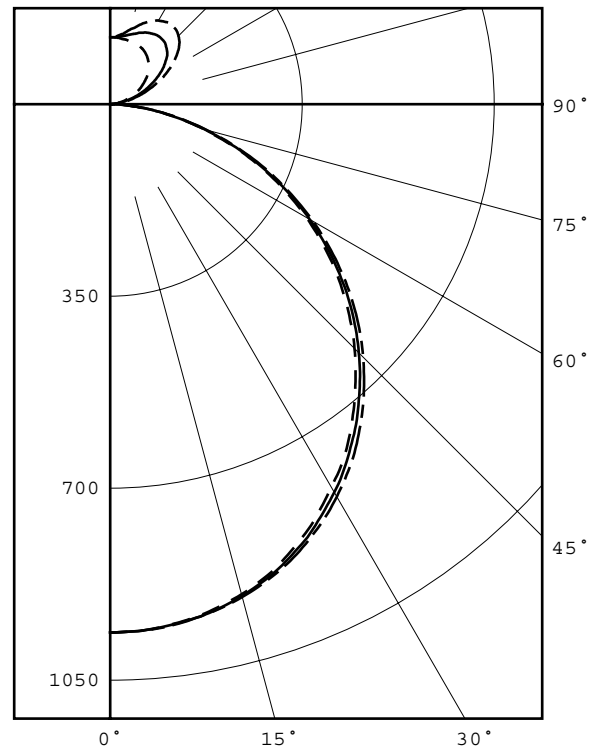
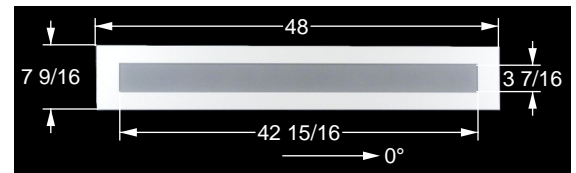
CIE TYPE - SEMI-DIRECT

PLANE : 0-DEG 90-DEG

SPACING CRITERIA : 1.25 1.27

BEAM ANGLE (50%) : 111.0 X 113.1 DEGREES

FIELD ANGLE (10%) : 161.3 X 161.7 DEGREES



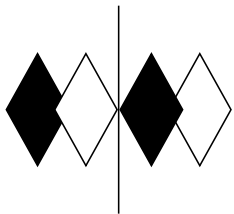
LEGEND:

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.



itl boulder
THE LIGHT CENTER OF THE INDUSTRY SINCE 1955



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: ITL87820
ISSUE DATE: 07/18/16
PREPARED FOR: FINELITE, INC.

PAGE: 2 OF 7

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	9356.	9520.	9683.
55	8953.	9100.	9264.
65	8324.	8449.	8573.
75	7182.	7263.	7385.
85	5061.	5061.	5302.



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

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

REPORT NUMBER: ITL87820

PAGE: 3 OF 7

ISSUE DATE: 07/18/16

PREPARED FOR: FINELITE, INC.

CANDELA DISTRIBUTION
LATERAL ANGLE

	0.0	22.5	45.0	67.5	90.0
0.0	963	963	963	963	963
5.0	959	959	959	960	960
10.0	946	944	948	949	948
15.0	925	921	928	932	930
20.0	895	889	900	906	904
25.0	855	848	863	869	869
30.0	806	802	817	825	826
35.0	755	750	764	774	776
40.0	694	691	705	715	717
45.0	630	627	641	650	652
50.0	561	559	572	579	582
55.0	489	489	497	506	506
60.0	413	413	420	427	427
65.0	335	335	340	345	345
70.0	255	256	259	262	263
75.0	177	177	179	181	182
80.0	105	105	105	106	108
85.0	42	43	42	43	44
90.0	0	0	0	0	0
95.0	8	9	9	9	10
100.0	18	20	23	26	28
105.0	29	33	40	46	48
110.0	41	48	60	69	72
115.0	55	64	80	93	97
120.0	67	79	100	117	122
125.0	79	93	119	138	145
130.0	90	105	135	156	164
135.0	99	115	145	168	176
140.0	107	121	151	174	182
145.0	113	125	152	174	182
150.0	117	126	149	169	176
155.0	119	125	144	160	165
160.0	120	124	137	148	153
165.0	121	123	131	137	141
170.0	121	122	126	129	130
175.0	122	122	123	123	124
180.0	122	122	122	122	122



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: ITL87820
ISSUE DATE: 07/18/16
PREPARED FOR: FINELITE, INC.

PAGE: 4 OF 7

5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	23
5- 10	68
10- 15	111
15- 20	150
20- 25	184
25- 30	212
30- 35	233
35- 40	245
40- 45	249
45- 50	245
50- 55	232
55- 60	212
60- 65	185
65- 70	152
70- 75	114
75- 80	76
80- 85	40
85- 90	10
90- 95	2
95-100	9
100-105	17
105-110	26
110-115	35
115-120	43
120-125	49
125-130	54
130-135	55
135-140	54
140-145	50
145-150	44
150-155	37
155-160	29
160-165	22
165-170	15
170-175	9
175-180	3

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	91
0- 20	353
0- 30	749
0- 40	1227
0- 50	1720
0- 60	2164
0- 70	2501
0- 80	2691
0- 90	2741
0-100	2751
0-110	2793
0-120	2871
0-130	2974
0-140	3082
0-150	3176
0-160	3242
0-170	3279
0-180	3291



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: ITL87820

PAGE: 5 OF 7

ISSUE DATE: 07/18/16

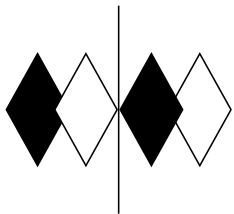
PREPARED FOR: FINELITE, INC.

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	115	115	115	115	110	110	110	110	102	102	102	94	94	94	87	87	87	83
1	105	100	96	92	101	96	93	89	89	86	84	83	80	78	76	75	73	70
2	95	87	81	75	91	84	78	73	78	73	69	72	68	65	67	64	61	58
3	87	77	69	62	83	74	67	61	69	63	58	64	59	55	59	55	52	49
4	80	68	59	53	76	65	58	52	61	54	49	57	51	47	53	48	44	42
5	73	61	52	45	70	58	50	44	54	48	42	51	45	40	47	42	38	36
6	67	54	46	39	64	53	44	39	49	42	37	46	40	35	43	38	34	31
7	62	49	41	35	60	48	40	34	45	38	33	42	36	31	39	34	30	28
8	58	45	37	31	56	43	36	30	41	34	29	38	32	28	36	31	27	25
9	54	41	33	28	52	40	32	27	37	31	26	35	29	25	33	28	24	22
10	51	38	30	25	49	37	29	25	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.



REPORT NUMBER: ITL87820

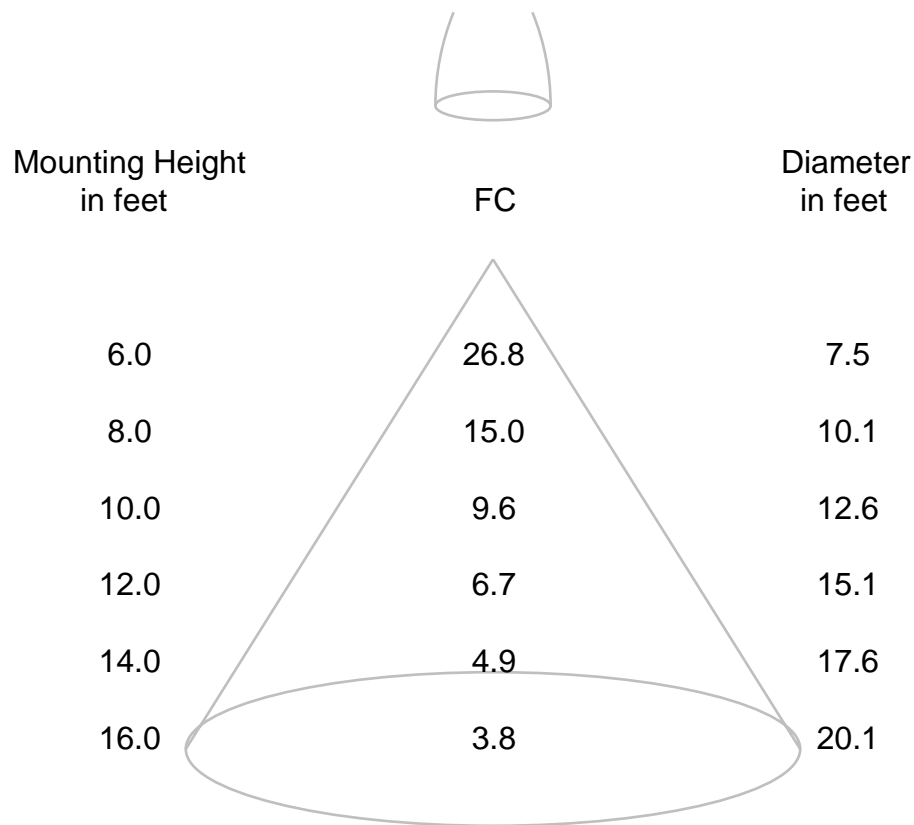
PAGE: 6 OF 7

ISSUE DATE: 07/18/16

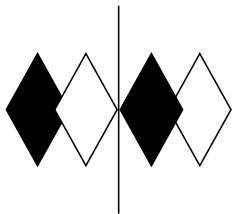
PREPARED FOR: FINELITE, INC.

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.



itl boulder
THE LIGHT CENTER OF THE INDUSTRY SINCE 1955



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: ITL87820
ISSUE DATE: 07/18/16
PREPARED FOR: FINELITE, INC.

PAGE: 7 OF 7

ADDRESS: 30500 WHIPPLE ROAD
UNION CITY, CA 94587

THIS ITL REPORT WITH THE USE OF THE NVLAP LOGO SHALL NOT BE USED BY THE CLIENT TO CLAIM PRODUCT CERTIFICATION, APPROVAL, OR ENDORSEMENT BY NVLAP, NIST, OR ANY AGENCY OF THE FEDERAL GOVERNMENT.