



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



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

REPORT NUMBER: ITL90629-GONIOPHOTOMETRY

PAGE: 1 OF 7

ISSUE DATE: 07/09/18

PREPARED FOR: FINELITE, INC.

ADDRESS: 30500 WHIPPLE ROAD

UNION CITY, CA 94587

CATALOG NUMBER: FINELITE HP-4-D-4ft-V-835-DL

LUMINAIRE: EXTRUDED WHITE PAINTED METAL HOUSING WITH WHITE PAINTED FLAT METAL END CAPS, 2-PIECE FORMED WHITE PAINTED METAL REFLECTOR/CIRCUIT BOARD MOUNT, 2 WHITE CIRCUIT BOARDS EACH WITH 80 LEDS, EXTRUDED TRANSLUCENT WHITE FROSTED PLASTIC DROP DIFFUSER WITH FROSTED TRANSLUCENT WHITE PLASTIC END CAPS. DIFFUSER AND END CAPS FROSTED BOTH SIDES.

LAMPS: ONE HUNDRED SIXTY WHITE LIGHT EMITTING DIODES (LEDS), VERTICAL BASE-UP POSITION.

INPUT ELECTRICAL: 277.0 VOLTS, 37.6 WATTS, 0.141 AMPS

MOUNTING: SUSPENDED

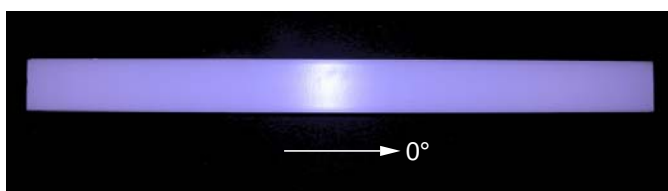
LED DRIVER: OSRAM OTi 50/120-277/1A4 DIM L, DRIVER HAS MULTIPLE LEADS, ONLY LINE INPUT AND LED OUTPUT LEADS CONNECTED FOR THIS TEST, CLIENT STATES DRIVER PROGRAMMED FOR 700mA OUTPUT.

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

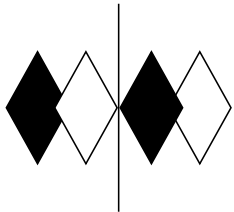
TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 35.0 FEET

THIS 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.



Approved C STOUT



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: ITL90629-GONIOPHOTOMETRY

PAGE: 2 OF 7

ISSUE DATE: 07/09/18

PREPARED FOR: FINELITE, INC.

CATALOG NUMBER: HP-4-D-4'-V-835-DL-277V-X-X-DE-X-X

CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0	
0	1251	1251	1251	1251	1251	
5	1243	1244	1247	1249	1250	119
15	1187	1188	1204	1210	1210	338
25	1077	1082	1106	1116	1117	507
35	924	940	973	986	987	603
45	752	779	818	836	841	623
55	569	604	651	677	683	572
65	382	425	477	510	520	462
75	199	249	307	345	358	312
85	50	104	165	206	219	170
90	10	61	120	160	173	
95	8	57	111	147	159	109
105	6	48	96	127	138	91
115	5	39	82	109	118	72
125	4	30	66	89	97	53
135	3	21	50	69	76	35
145	2	12	32	50	55	19
155	1	5	17	30	34	8
165	1	1	6	11	15	2
175	0	0	0	0	0	0
180	0	0	0	0	0	

FLUX

ZONE	LUMEN LUMENS	%FIXT
0- 30	964	23.5
0- 40	1567	38.3
0- 60	2763	67.4
0- 90	3707	90.5
90-120	272	6.6
90-130	325	7.9
90-150	379	9.3
90-180	390	9.5
0-180	4096	100.0

EFFICACY = 108.9 lm/W

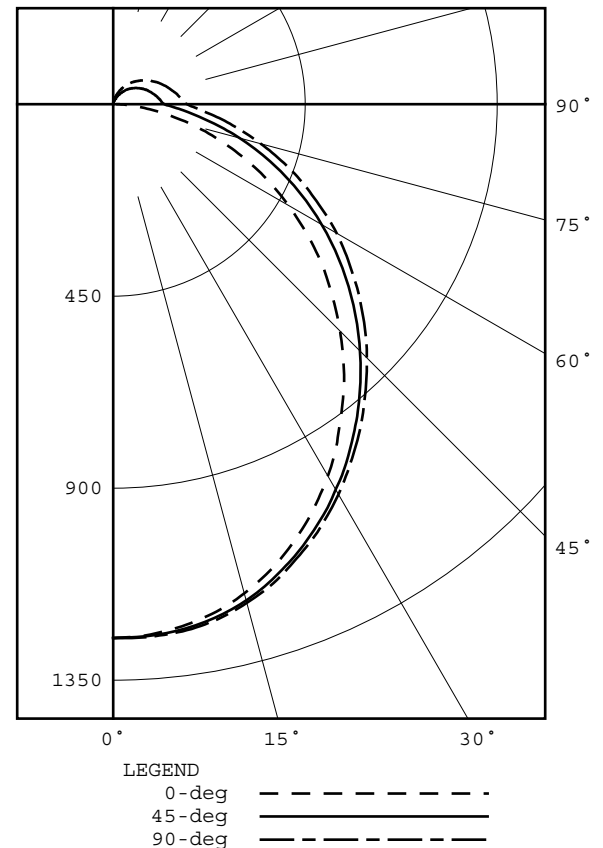
CIE TYPE - DIRECT

PLANE : 0-DEG 90-DEG

SPACING CRITERIA : 1.20 1.25

BEAM ANGLE (50%) : 104.0 X 117.3 DEGREES

FIELD ANGLE (10%) : 158.7 X 222.8 DEGREES





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: ITL90629-GONIOPHOTOMETRY

PAGE: 3 OF 7

ISSUE DATE: 07/09/18

PREPARED FOR: FINELITE, INC.

CATALOG NUMBER: HP-4-D-4' -V-835-DL-277V-X-X-DE-X-X

PLANE : 0-DEG 90-DEG
LUMINOUS LENGTH : 48.000 3.875
HEIGHT OF SIDE : 1.000 1.000

LUMINANCE DATA IN CANDELA/SQ M			
ANGLE	AVERAGE	AVERAGE	AVERAGE
IN DEG	0-DEG	45-DEG	90-DEG
45	8682.	8052.	7878.
55	8028.	7380.	7251.
65	7210.	6610.	6601.
75	5945.	5694.	5872.
85	3861.	4848.	5302.



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

REPORT NUMBER: ITL90629-GONIOPHOTOMETRY

PAGE: 4 OF 7

ISSUE DATE: 07/09/18

PREPARED FOR: FINELITE, INC.

CATALOG NUMBER: HP-4-D-4' -V-835-DL-277V-X-X-DE-X-X

CANDELA DISTRIBUTION
LATERAL ANGLE

	0.0	22.5	45.0	67.5	90.0
0.0	1251	1251	1251	1251	1251
5.0	1243	1244	1247	1249	1250
10.0	1222	1224	1232	1236	1238
15.0	1187	1188	1204	1210	1210
20.0	1138	1140	1160	1169	1169
25.0	1077	1082	1106	1116	1117
30.0	1006	1015	1043	1054	1056
35.0	924	940	973	986	987
40.0	842	862	898	912	915
45.0	752	779	818	836	841
50.0	661	694	735	756	763
55.0	569	604	651	677	683
60.0	475	517	565	594	605
65.0	382	425	477	510	520
70.0	288	336	391	426	440
75.0	199	249	307	345	358
80.0	115	169	228	269	284
85.0	50	104	165	206	219
90.0	10	61	120	160	173
95.0	8	57	111	147	159
100.0	7	52	104	137	149
105.0	6	48	96	127	138
110.0	6	43	89	118	128
115.0	5	39	82	109	118
120.0	4	34	74	99	107
125.0	4	30	66	89	97
130.0	3	25	58	79	87
135.0	3	21	50	69	76
140.0	2	16	41	59	66
145.0	2	12	32	50	55
150.0	1	9	24	40	45
155.0	1	5	17	30	34
160.0	1	3	11	19	24
165.0	1	1	6	11	15
170.0	1	1	2	5	7
175.0	0	0	0	0	0
180.0	0	0	0	0	0



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

REPORT NUMBER: ITL90629-GONIOPHOTOMETRY

PAGE: 5 OF 7

ISSUE DATE: 07/09/18

PREPARED FOR: FINELITE, INC.

CATALOG NUMBER: HP-4-D-4' -V-835-DL-277V-X-X-DE-X-X

5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	30
5- 10	89
10- 15	144
15- 20	194
20- 25	237
25- 30	270
30- 35	294
35- 40	309
40- 45	314
45- 50	309
50- 55	297
55- 60	276
60- 65	248
65- 70	214
70- 75	176
75- 80	136
80- 85	100
85- 90	70
90- 95	57
95-100	52
100-105	48
105-110	43
110-115	39
115-120	34
120-125	29
125-130	24
130-135	20
135-140	15
140-145	11
145-150	8
150-155	5
155-160	3
160-165	1
165-170	1
170-175	0
175-180	0

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	119
0- 20	457
0- 30	964
0- 40	1567
0- 50	2190
0- 60	2763
0- 70	3224
0- 80	3537
0- 90	3707
0-100	3816
0-110	3907
0-120	3979
0-130	4032
0-140	4066
0-150	4086
0-160	4094
0-170	4096
0-180	4096



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

REPORT NUMBER: ITL90629-GONIOPHOTOMETRY

PAGE: 6 OF 7

ISSUE DATE: 07/09/18

PREPARED FOR: FINELITE, INC.

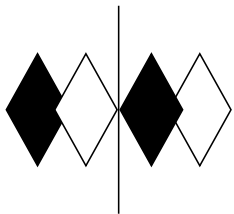
CATALOG NUMBER: HP-4-D-4'-V-835-DL-277V-X-X-DE-X-X

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	105	100	96	91	102	97	93	89	91	88	84	85	83	80	80	78	76	73
2	95	87	80	74	92	84	78	72	79	74	69	74	70	66	70	66	63	60
3	87	76	68	61	84	74	66	60	69	63	57	65	60	55	61	57	53	50
4	79	67	58	51	76	65	57	50	61	54	49	58	52	47	55	50	45	43
5	73	60	51	44	70	58	50	43	55	48	42	52	46	41	49	44	39	37
6	67	54	45	38	65	52	44	38	50	42	37	47	41	36	45	39	35	32
7	62	49	40	34	60	48	39	33	45	38	32	43	36	32	41	35	31	29
8	58	44	36	30	56	43	35	30	41	34	29	39	33	28	37	32	27	25
9	54	41	33	27	52	40	32	27	38	31	26	36	30	25	35	29	25	23
10	51	38	30	24	49	37	29	24	35	28	24	34	27	23	32	27	23	21

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: ITL90629-GONIOPHOTOMETRY

PAGE: 7 OF 7

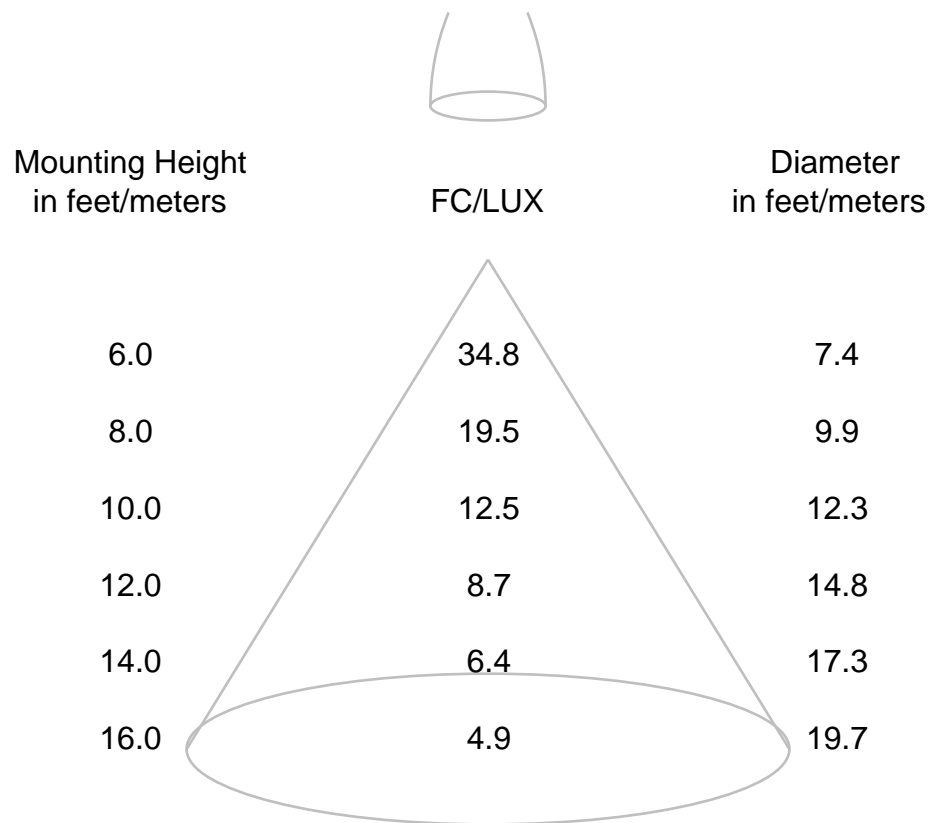
ISSUE DATE: 07/09/18

PREPARED FOR: FINELITE, INC.

CATALOG NUMBER: HP-4-D-4'-V-835-DL-277V-X-X-DE-X-X

CONE OF LIGHT DIAGRAM

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



If distances are feet, results are footcandles.
If distances are meters, results are lux.

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