



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



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

**REPORT NUMBER:** ITL90630

**PAGE:** 1 OF 7

**ISSUE DATE:** 07/09/18

**PREPARED FOR:** FINELITE, INC.

**ADDRESS:** 30500 WHIPPLE ROAD

UNION CITY, CA 94587

**CATALOG NUMBER:** HP-2-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

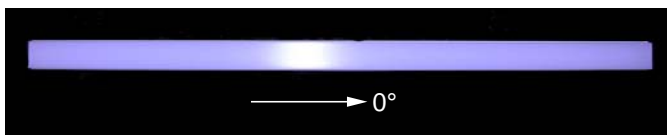
**LED DRIVER:** OSRAM OTi 50/120-277/1A4 DIM L, DRIVER HAS MULTIPLE LEADS, ONLY LINE INPUT AND LED OUTPUT LEADS CONNECTED FOR THIS TEST, CLIENT STATES DRIVER PROGRAMMED FOR 700mA OUTPUT.

**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

**REPORT NUMBER:** ITL90630-GONIOPHOTOMETRY

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**CATALOG NUMBER:** HP-2-D-4'-V-835-DL-277V-X-X-DE-X-X

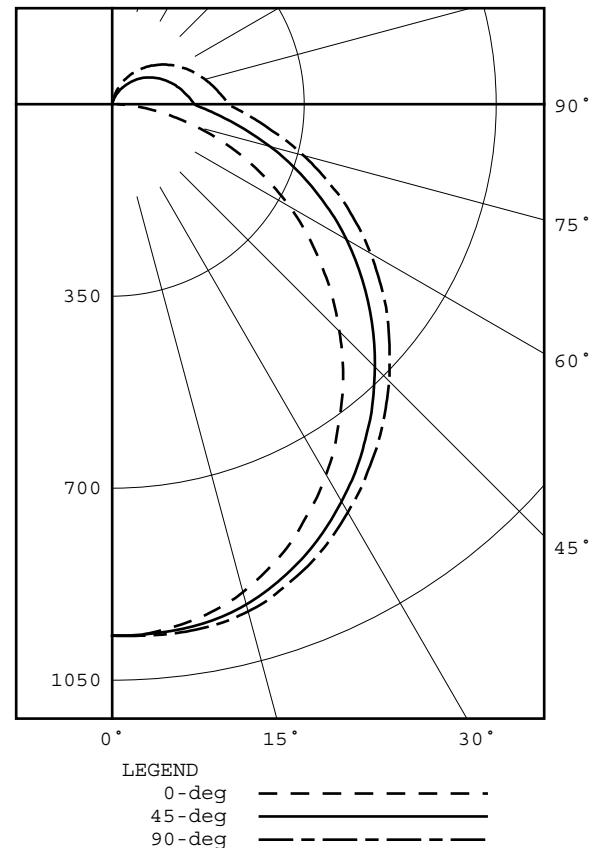
# CANDELA DISTRIBUTION

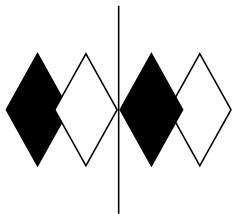
	0.0	22.5	45.0	67.5	90.0	
0	969	969	969	969	969	
5	964	965	967	970	971	92
15	921	925	944	955	957	265
25	833	848	880	895	900	402
35	718	745	788	808	814	486
45	586	627	677	705	714	513
55	445	497	556	591	603	485
65	301	362	427	468	483	409
75	159	226	298	344	361	299
85	43	112	187	235	252	189
90	11	78	150	198	213	
95	10	73	141	185	199	137
105	9	61	123	162	175	116
115	7	50	105	139	151	92
125	5	38	85	115	125	68
135	3	26	64	90	99	45
145	2	15	42	65	72	25
155	1	7	22	38	44	11
165	1	2	8	13	18	2
175	0	0	0	0	0	0
180	0	0	0	0	0	

# FLUX

ZONAL LUMEN ZONE	SUMMARY LUMENS	%FIXT
0- 30	760	20.9
0- 40	1246	34.3
0- 60	2244	61.7
0- 90	3140	86.3
90-120	346	9.5
90-130	414	11.4
90-150	484	13.3
90-180	497	13.7
0-180	3637	100.0

EFFICACY = 96.7 lm/W  
CIE TYPE - SEMI-DIRECT  
PLANE : 0-DEG 90-DEG  
SPACING CRITERIA : 1.20 1.31  
BEAM ANGLE (50%) : 104.3 X 129.6 DEGREES  
FIELD ANGLE (10%) : 159.8 X 271.4 DEGREES





**itl boulder**  
THE LIGHT CENTER OF THE INDUSTRY SINCE 1955



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**CATALOG NUMBER:** HP-2-D-4' -V-835-DL-277V-X-X-DE-X-X

PLANE : 0-DEG 90-DEG  
LUMINOUS LENGTH : 47.938 2.063  
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	12727.	11056.	10661.	
55	11811.	10059.	9738.	
65	10687.	8965.	8784.	
75	8935.	7732.	7783.	
85	6245.	6612.	6929.	



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CANDELA DISTRIBUTION  
LATERAL ANGLE

	0.0	22.5	45.0	67.5	90.0
0.0	969	969	969	969	969
5.0	964	965	967	970	971
10.0	948	950	961	968	969
15.0	921	925	944	955	957
20.0	882	891	916	930	932
25.0	833	848	880	895	900
30.0	780	799	836	855	859
35.0	718	745	788	808	814
40.0	655	687	735	759	766
45.0	586	627	677	705	714
50.0	517	562	618	649	659
55.0	445	497	556	591	603
60.0	374	429	493	531	544
65.0	301	362	427	468	483
70.0	230	293	362	407	421
75.0	159	226	298	344	361
80.0	96	164	238	286	302
85.0	43	112	187	235	252
90.0	11	78	150	198	213
95.0	10	73	141	185	199
100.0	9	67	132	173	187
105.0	9	61	123	162	175
110.0	7	56	114	150	163
115.0	7	50	105	139	151
120.0	6	44	95	127	138
125.0	5	38	85	115	125
130.0	4	32	75	102	112
135.0	3	26	64	90	99
140.0	3	20	53	77	85
145.0	2	15	42	65	72
150.0	2	11	32	52	58
155.0	1	7	22	38	44
160.0	1	3	14	24	30
165.0	1	2	8	13	18
170.0	1	1	2	5	7
175.0	0	0	0	0	0
180.0	0	0	0	0	0



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5-DEGREE  
ZONAL LUMEN SUMMARY

0- 5	23
5- 10	69
10- 15	113
15- 20	153
20- 25	187
25- 30	215
30- 35	236
35- 40	250
40- 45	257
45- 50	256
50- 55	249
55- 60	236
60- 65	216
65- 70	192
70- 75	164
75- 80	135
80- 85	106
85- 90	83
90- 95	71
95-100	66
100-105	61
105-110	55
110-115	49
115-120	43
120-125	37
125-130	31
130-135	25
135-140	20
140-145	15
145-150	10
150-155	7
155-160	4
160-165	2
165-170	1
170-175	0
175-180	0

10-DEGREE  
ZONAL LUMEN SUMMARY

0- 10	92
0- 20	357
0- 30	760
0- 40	1246
0- 50	1759
0- 60	2244
0- 70	2653
0- 80	2952
0- 90	3140
0-100	3278
0-110	3394
0-120	3486
0-130	3554
0-140	3599
0-150	3624
0-160	3635
0-170	3637
0-180	3637



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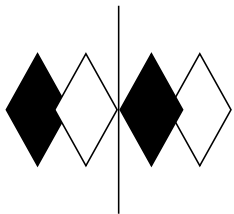
**CATALOG NUMBER:** HP-2-D-4'-V-835-DL-277V-X-X-DE-X-X

# 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	116	116	116	116	112	112	112	112	104	104	104	96	96	96	89	89	89	86
1	104	98	93	89	100	95	90	86	88	84	81	82	79	76	76	74	72	68
2	94	85	77	71	90	82	75	69	76	70	66	71	66	62	66	62	59	56
3	85	74	65	58	81	71	63	57	66	60	54	62	56	52	58	53	49	46
4	78	65	56	49	74	63	55	48	59	52	46	55	49	44	51	46	42	39
5	71	58	49	42	68	56	48	41	52	45	39	49	43	38	46	40	36	34
6	66	52	43	36	63	50	42	36	47	40	34	44	38	33	41	36	32	29
7	61	47	38	32	58	46	37	31	43	36	30	40	34	29	38	32	28	26
8	57	43	34	28	54	42	34	28	39	32	27	37	31	26	35	29	25	23
9	53	39	31	25	51	38	30	25	36	29	24	34	28	23	32	27	22	21
10	49	36	28	23	47	35	28	23	33	26	22	31	25	21	30	24	20	19

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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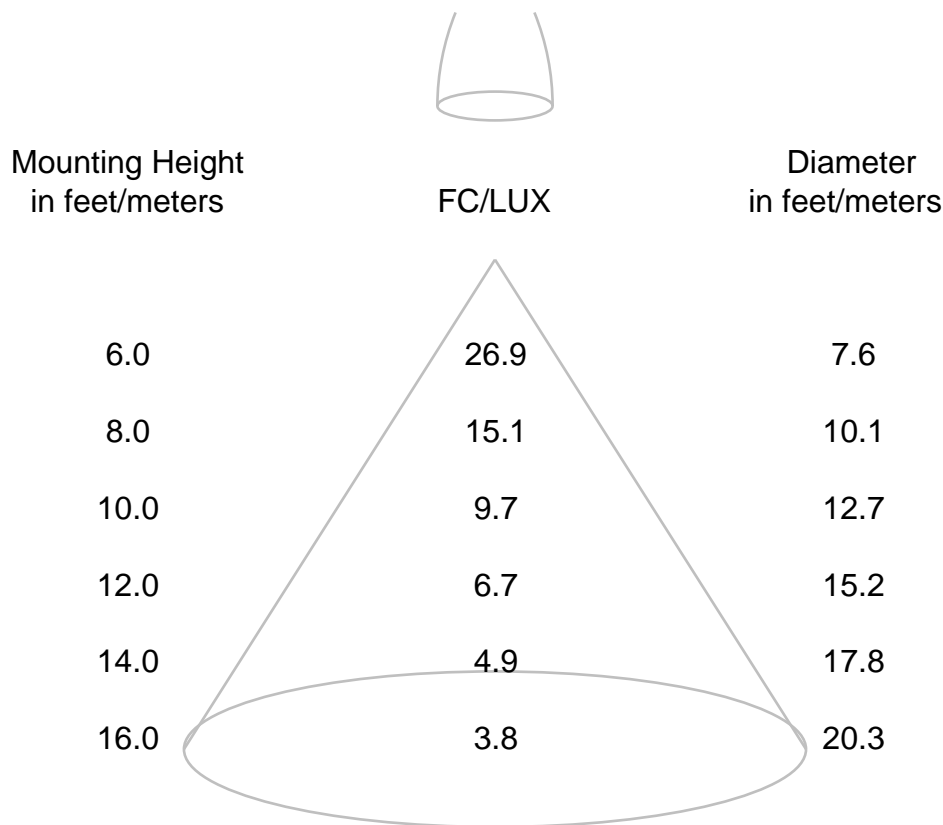
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## CONE OF LIGHT DIAGRAM

(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.