



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: ITL94139-GONIOPHOTOMETRY

PAGE: 1 OF 6

ISSUE DATE: 11/03/20

PREPARED FOR: FINELITE, INC.

ADDRESS: 30500 WHIPPLE ROAD

UNION CITY, CA 94587

CATALOG NUMBER: HP-2-P-D-4ft-V-835-DSO

LUMINAIRE: EXTRUDED WHITE PAINTED METAL HOUSING WITH CAST WHITE PAINTED FLAT METAL END CAPS AND 2 DISTINCT OPTICAL COMPARTMENTS, TOP OPTICAL COMPARTMENT CONSISTS OF: THREE PIECE FABRICATED DIFFUSE METAL CIRCUIT BOARD MOUNT, THREE WHITE CIRCUIT BOARDS WITH A TOTAL OF 160 LEDS, EXTRUDED FROSTED LINEAR PRISMATIC PLASTIC LENS. BOTTOM COMPARTMENT CONSISTS OF: FORMED WHITE PAINTED METAL REFLECTOR/CIRCUIT BOARD MOUNT, TWO WHITE CIRCUIT BOARDS EACH WITH 80 LEDS, EXTRUDED FROSTED LINEAR PRISMATIC PLASTIC LENS. LENSES FROSTED SIDE OUT WITH PRISMS IN AND PARALLEL WITH THE LENGTH OF THE HOUSING. TOP OPTICAL COMPARTMENT CIRCUIT BOARD MOUNT HAS OVERLAPPING SECTIONS. THIS CONFIGURATION HAS A TOTAL OF 2 OF THE ENERGIZED LEDS PROVIDING MINIMAL CONTRIBUTION TO THE TOTAL LIGHT OUTPUT. ONLY THE BOTTOM COMPARTMENT ENERGIZED FOR THIS TEST.

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

MOUNTING: SUSPENDED

LED DRIVER: OSRAM OTi 50/120-277/1A4 DIM-1 L G2, 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.

INPUT ELECTRICAL: 277.0 VOLTS, 35.7 WATTS, 0.140 AMPS

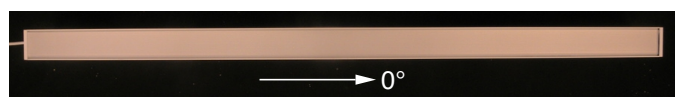
POWER FACTOR: 92.1%, VOLTAGE THD: 0.1%, CURRENT THD: 8.5%

TEST PROCEDURE: IESNA LM-79-19

TEST DISTANCE = 35.0 FEET

AMBIENT: 24.0

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 R BERGIN

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CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0	
0	1166	1166	1166	1166	1166	
5	1158	1159	1164	1169	1171	111
15	1093	1103	1150	1187	1197	324
25	971	1002	1096	1156	1170	498
35	814	866	984	1036	1042	596
45	644	703	814	842	836	597
55	475	525	608	616	608	512
65	314	348	398	397	387	370
75	171	185	208	203	197	207
85	50	52	53	50	48	58
90	0	0	0	0	0	

FLUX

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%FIXT
0- 30	933	28.5
0- 40	1528	46.7
0- 60	2637	80.6
0- 90	3273	100.0
90-180	0	0.0
0-180	3273	100.0

EFFICACY (277) = 91.7 lm/W

EFFICACY (120) = 91.7 lm/W **

** THE EFFICACY AT 120 VOLTS IS BASED ON THE LUMENS FROM THIS REPORT AND THE WATTAGE MEASURED AT 120 VOLTS INPUT.

CIE TYPE - DIRECT

PLANE : 0-DEG 90-DEG

SPACING CRITERIA : 1.15 1.38

BEAM ANGLE (50%) : 95.3 X 110.7 DEGREES

FIELD ANGLE (10%) : 158.2 X 159.5 DEGREES

LUMINOUS LENGTH : 48.000 2.125

LUMINANCE DATA IN CANDELA/SQ M

ANGLE AVERAGE AVERAGE AVERAGE

IN DEG 0-DEG 45-DEG 90-DEG

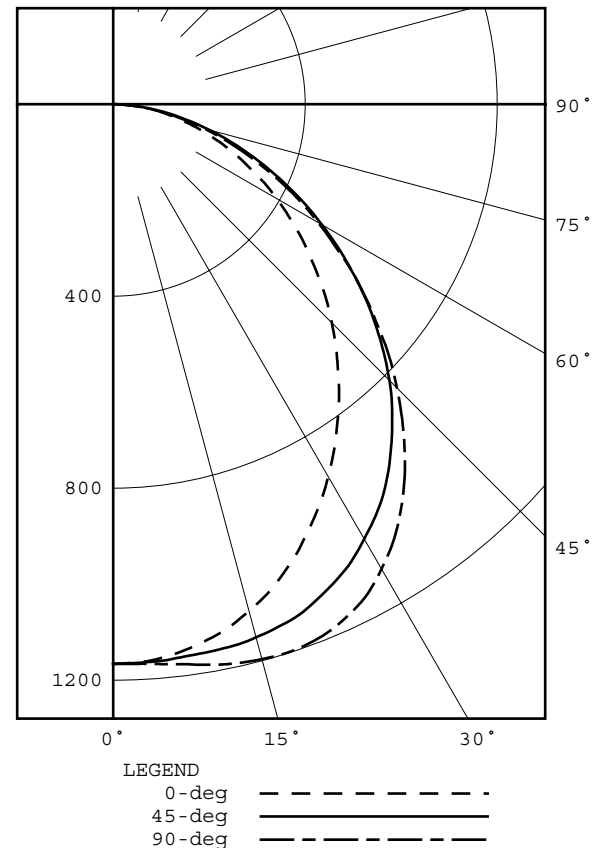
45 13840. 17493. 17966.

55 12584. 16108. 16108.

65 11291. 14311. 13915.

75 10040. 12212. 11567.

85 8718. 9241. 8369.





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CANDELA DISTRIBUTION
LATERAL ANGLE

	0.0	22.5	45.0	67.5	90.0
0.0	1166	1166	1166	1166	1166
2.5	1164	1164	1165	1167	1167
5.0	1158	1159	1164	1169	1171
7.5	1147	1151	1160	1171	1177
10.0	1133	1138	1158	1179	1186
12.5	1116	1122	1156	1185	1193
15.0	1093	1103	1150	1187	1197
17.5	1069	1082	1142	1187	1199
20.0	1039	1058	1132	1182	1195
22.5	1007	1030	1115	1171	1186
25.0	971	1002	1096	1156	1170
27.5	935	972	1074	1135	1149
30.0	896	940	1046	1107	1118
32.5	856	904	1017	1075	1084
35.0	814	866	984	1036	1042
37.5	773	828	945	993	996
40.0	729	788	903	947	945
42.5	687	746	860	895	891
45.0	644	703	814	842	836
47.5	602	660	764	787	781
50.0	558	616	713	730	720
52.5	515	570	661	674	664
55.0	475	525	608	616	608
57.5	433	480	555	560	547
60.0	393	434	502	506	493
62.5	355	390	451	450	440
65.0	314	348	398	397	387
67.5	278	305	348	345	335
70.0	241	264	300	295	286
72.5	205	224	253	248	240
75.0	171	185	208	203	197
77.5	139	149	165	160	155
80.0	109	114	126	120	116
82.5	80	82	88	84	81
85.0	50	52	53	50	48
87.5	23	23	21	20	18
90.0	0	0	0	0	0



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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	28
5- 10	83
10- 15	137
15- 20	187
20- 25	231
25- 30	267
30- 35	291
35- 40	304
40- 45	304
45- 50	293
50- 55	271
55- 60	241
60- 65	205
65- 70	165
70- 75	124
75- 80	83
80- 85	46
85- 90	13

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	111
0- 20	435
0- 30	933
0- 40	1528
0- 50	2125
0- 60	2637
0- 70	3008
0- 80	3215
0- 90	3273



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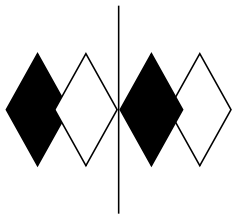
CATALOG NUMBER: HP-2-P-D-4'-V-835-DSO-277V-X-X-X

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	81	76	82	78	74	79	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60
4	83	71	63	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	59	52	47	57	51	46	44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	59	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

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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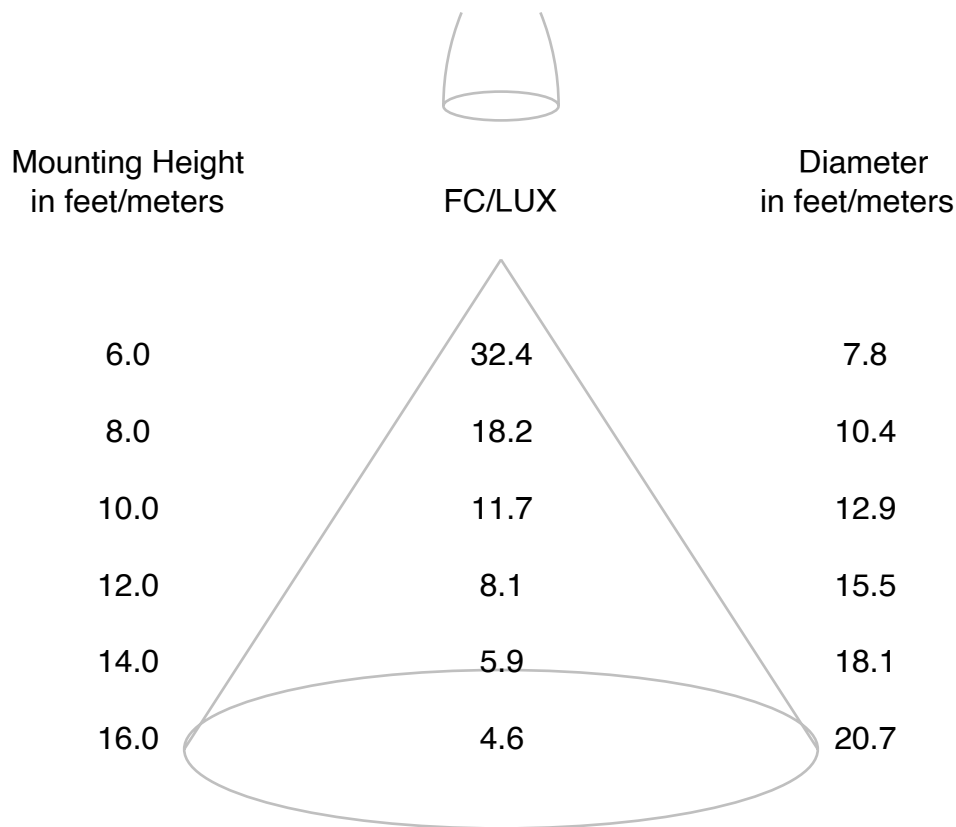
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CONE OF LIGHT DIAGRAM

(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.