



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: ITL91937-GONIOPHOTOMETRY

PAGE: 1 OF 6

ISSUE DATE: 06/11/19

PREPARED FOR: FINELITE, INC.

ADDRESS: 30500 WHIPPLE ROAD

UNION CITY, CA 94587

CATALOG NUMBER: HP-2-D-RG-4ft-V-835-RG-LHC

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, MOLDED WHITE PLASTIC 96-CELL HONEYCOMB BAFFLE, EXTRUDED PLASTIC LENS ON TOP OF BAFFLE.

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

INPUT ELECTRICAL: 277.0 VOLTS, 37.3 WATTS, 0.140 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 R BERGIN

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CATALOG NUMBER: HP-2 D-RG-4'-V-835-F-RG-LHC-277V

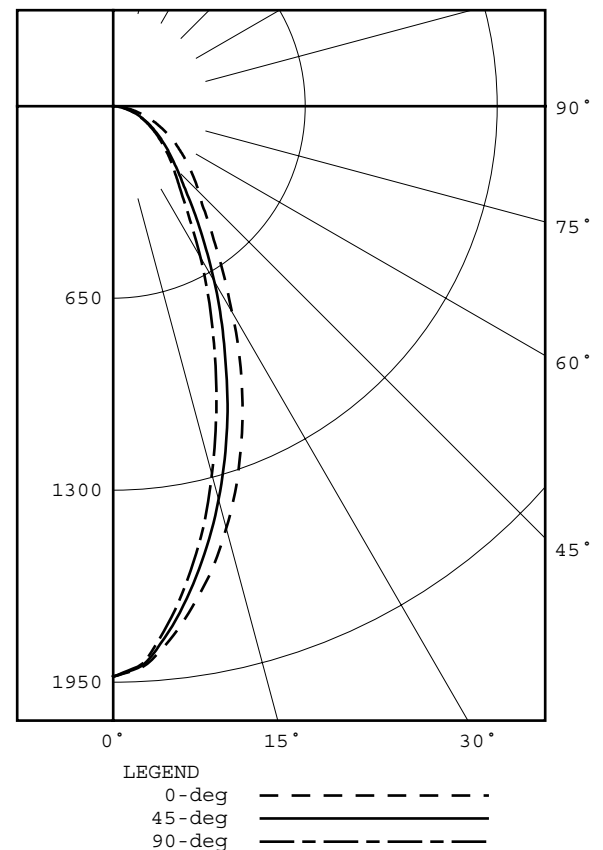
CANDELA DISTRIBUTION						FLUX
	0.0	22.5	45.0	67.5	90.0	
0	1931	1931	1931	1931	1931	
5	1849	1841	1828	1815	1808	168
15	1479	1428	1379	1327	1290	384
25	1029	973	888	818	784	412
35	625	576	516	464	441	330
45	409	346	309	292	284	251
55	288	218	201	193	190	191
65	186	133	124	120	119	132
75	97	66	63	61	61	72
85	23	15	15	14	14	18
90	0	0	0	0	0	

ZONAL LUMEN SUMMARY		
ZONE	LUMENS	%FIXT
0- 30	963	49.2
0- 40	1293	66.1
0- 60	1736	88.7
0- 90	1957	100.0
90-180	0	0.0
0-180	1957	100.0

EFFICACY (277) = 52.5 lm/W
 EFFICACY (120) = 53.8 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 ITL91937-SPHERE.

CIE TYPE - DIRECT
 PLANE : 0-DEG 90-DEG
 SPACING CRITERIA : 0.78 0.65
 BEAM ANGLE (50%) : 52.8 X 42.2 DEGREES
 FIELD ANGLE (10%) : 128.6 X 109.3 DEGREES
 LUMINOUS LENGTH : 48.000 2.250

LUMINANCE DATA IN CANDELA/SQ M				
ANGLE IN DEG	AVERAGE 0-DEG	AVERAGE 45-DEG	AVERAGE 90-DEG	
45	8301.	6272.	5764.	
55	7206.	5029.	4754.	
65	6316.	4211.	4041.	
75	5379.	3493.	3383.	
85	3787.	2470.	2305.	





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CANDELA DISTRIBUTION
LATERAL ANGLE

	0.0	22.5	45.0	67.5	90.0
0.0	1931	1931	1931	1931	1931
2.5	1908	1908	1904	1900	1899
5.0	1849	1841	1828	1815	1808
7.5	1769	1754	1729	1707	1694
10.0	1679	1653	1617	1588	1567
12.5	1585	1544	1500	1460	1434
15.0	1479	1428	1379	1327	1290
17.5	1372	1315	1254	1188	1153
20.0	1257	1200	1130	1060	1021
22.5	1144	1088	1004	935	896
25.0	1029	973	888	818	784
27.5	917	867	784	711	683
30.0	804	765	685	616	590
32.5	709	669	594	534	507
35.0	625	576	516	464	441
37.5	553	496	449	402	386
40.0	495	433	391	359	345
42.5	444	386	345	323	312
45.0	409	346	309	292	284
47.5	377	308	277	263	258
50.0	345	275	249	238	233
52.5	316	245	224	215	211
55.0	288	218	201	193	190
57.5	261	194	180	173	171
60.0	236	173	160	155	152
62.5	211	152	142	137	135
65.0	186	133	124	120	119
67.5	163	114	107	104	103
70.0	140	98	92	89	88
72.5	119	82	77	75	74
75.0	97	66	63	61	61
77.5	77	52	49	48	47
80.0	58	39	37	36	36
82.5	40	26	25	25	24
85.0	23	15	15	14	14
87.5	8	5	5	5	5
90.0	0	0	0	0	0



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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	45
5- 10	123
10- 15	177
15- 20	206
20- 25	212
25- 30	200
30- 35	177
35- 40	152
40- 45	133
45- 50	118
50- 55	103
55- 60	88
60- 65	73
65- 70	58
70- 75	43
75- 80	28
80- 85	15
85- 90	4

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	168
0- 20	552
0- 30	963
0- 40	1293
0- 50	1544
0- 60	1736
0- 70	1867
0- 80	1939
0- 90	1957



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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	88
2	103	97	91	87	101	95	90	86	91	87	84	88	85	82	85	83	80	78
3	96	88	81	76	94	86	80	75	83	78	74	81	76	73	78	75	71	70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62
5	84	73	66	60	82	72	65	60	70	64	60	69	63	59	67	62	58	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47
8	70	59	51	46	69	58	51	46	57	50	46	56	50	46	54	49	46	44
9	66	55	48	43	65	54	47	43	53	47	43	52	47	43	51	46	42	41
10	63	51	45	40	62	51	44	40	50	44	40	49	44	40	48	43	40	38

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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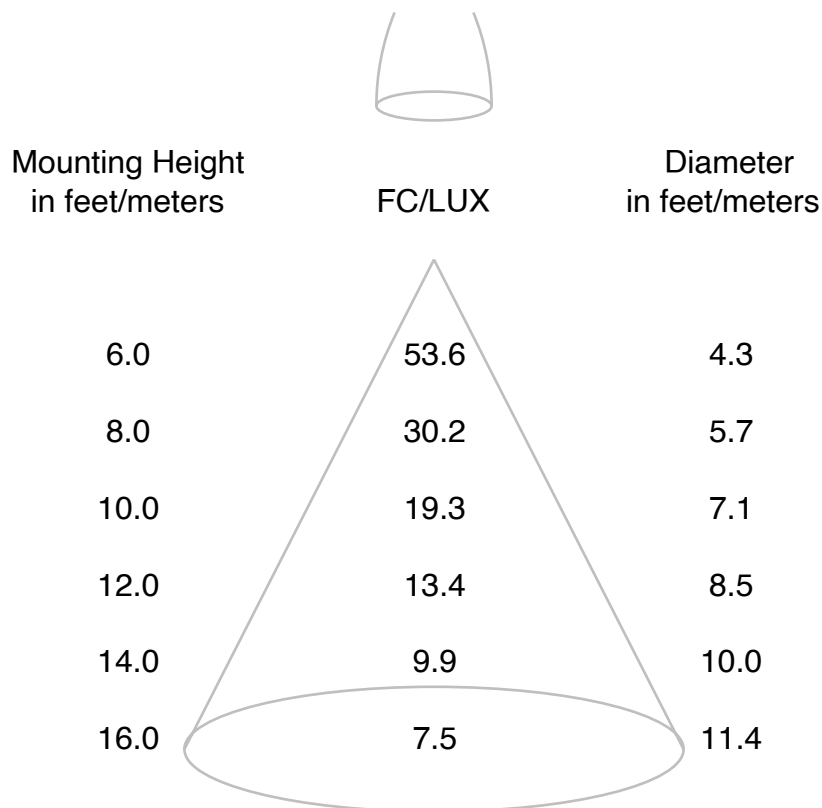
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CONE OF LIGHT DIAGRAM

(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.