



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: ITL89351

PAGE: 1 OF 6

ISSUE DATE: 06/20/17

PREPARED FOR: FINELITE, INC.

ADDRESS: 30500 WHIPPLE ROAD

UNION CITY, CA 94587

CATALOG NUMBER: HO4-R-RO-4ft-V-835-OPN

LUMINAIRE: EXTRUDED WHITE PAINTED METAL HOUSING WITH CAST WHITE PAINTED METAL END CAPS, FORMED METAL REFLECTOR POSITIONING PLATE, FORMED "WHITE98 REFLECTIVE FILM" REFLECTOR, 4 CIRCUIT BOARDS EACH WITH 80 LEDS. OPEN BOTTOM.

LAMPS: THREE HUNDRED TWENTY WHITE LIGHT EMITTING DIODES (LEDs), VERTICAL BASE-DOWN POSITION.

INPUT ELECTRICAL: 277.0 VOLTS, 36.1 WATTS, 0.135 AMPS

MOUNTING: RECESSED

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.



Checked	<u>M KLOPF</u> TECHNICIAN
Approved	<u>R BEATTIE</u> LIGHTING ENGINEER

REPORT NUMBER: ITL89351-GONIOPHOTOMETRY

PAGE: 2 OF 6

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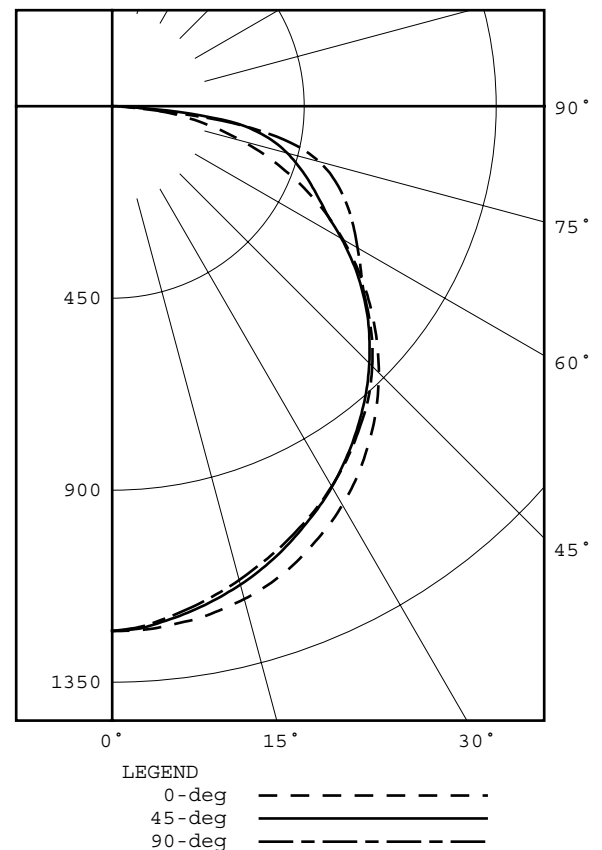
CANDELA DISTRIBUTION						FLUX
	0.0	22.5	45.0	67.5	90.0	
0	1230	1230	1230	1230	1230	
5	1227	1223	1217	1212	1212	116
15	1196	1170	1161	1155	1150	329
25	1126	1085	1078	1077	1073	501
35	1022	974	975	980	979	615
45	884	840	852	860	862	661
55	717	685	706	708	715	631
65	528	514	542	597	618	552
75	316	329	425	484	502	432
85	95	178	159	98	72	155
90	0	0	0	0	0	

ZONAL LUMEN SUMMARY		
ZONE	LUMENS	%FIXT
0 - 30	945	23.7
0 - 40	1560	39.1
0 - 60	2852	71.5
0 - 90	3991	100.0
90-180	0	0.0
0-180	3991	100.0

EFFICACY (277) = 110.6 lm/W
 EFFICACY (120) = 113.7 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 ITL89351-THD.

CIE TYPE - DIRECT
 PLANE : 0-DEG 90-DEG
 SPACING CRITERIA : 1.30 1.25
 BEAM ANGLE (50%) : 121.0 X 130.6 DEGREES
 FIELD ANGLE (10%) : 167.5 X 168.6 DEGREES
 LUMINOUS LENGTH : 48.000 3.000

LUMINANCE DATA IN CANDELA/SQ M				
ANGLE IN DEG	AVERAGE 0-DEG	AVERAGE 45-DEG	AVERAGE 90-DEG	
45	13457.	12970.	13122.	
55	13455.	13249.	13418.	
65	13448.	13805.	15740.	
75	13142.	17675.	20877.	
85	11733.	19637.	8892.	





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CANDELA DISTRIBUTION
LATERAL ANGLE

	0.0	22.5	45.0	67.5	90.0
0.0	1230	1230	1230	1230	1230
2.5	1230	1229	1227	1225	1224
5.0	1227	1223	1217	1212	1212
7.5	1221	1214	1205	1199	1198
10.0	1216	1202	1192	1186	1183
12.5	1206	1187	1177	1171	1167
15.0	1196	1170	1161	1155	1150
17.5	1183	1151	1143	1137	1131
20.0	1167	1131	1123	1119	1113
22.5	1148	1108	1101	1098	1093
25.0	1126	1085	1078	1077	1073
27.5	1104	1060	1055	1055	1052
30.0	1079	1033	1030	1031	1029
32.5	1052	1004	1003	1006	1005
35.0	1022	974	975	980	979
37.5	990	943	946	952	952
40.0	957	910	916	923	925
42.5	921	876	885	893	895
45.0	884	840	852	860	862
47.5	844	803	818	824	827
50.0	803	765	783	788	789
52.5	761	726	745	749	749
55.0	717	685	706	708	715
57.5	671	644	664	675	689
60.0	624	601	621	647	664
62.5	577	558	576	622	641
65.0	528	514	542	597	618
67.5	477	469	512	572	594
70.0	424	423	484	547	568
72.5	371	375	455	518	539
75.0	316	329	425	484	502
77.5	261	294	390	439	453
80.0	206	259	345	375	374
82.5	150	225	280	270	259
85.0	95	178	159	98	72
87.5	41	73	25	23	23
90.0	0	0	0	0	0



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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	29
5- 10	86
10- 15	140
15- 20	189
20- 25	232
25- 30	269
30- 35	297
35- 40	318
40- 45	329
45- 50	331
50- 55	323
55- 60	308
60- 65	288
65- 70	264
70- 75	235
75- 80	196
80- 85	127
85- 90	28

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	116
0- 20	444
0- 30	945
0- 40	1560
0- 50	2221
0- 60	2852
0- 70	3403
0- 80	3835
0- 90	3991



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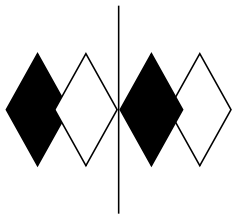
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	107	102	97	92	104	99	95	91	95	91	88	91	88	85	87	85	82	80
2	96	87	80	73	94	85	78	72	82	76	71	78	73	69	75	71	67	65
3	87	76	67	60	85	74	66	59	71	64	58	68	62	57	66	60	56	54
4	80	67	57	50	77	65	57	50	63	55	49	60	54	48	58	52	48	45
5	73	59	50	43	71	58	49	42	56	48	42	54	47	41	52	46	41	39
6	67	53	44	37	65	52	43	37	50	42	36	49	42	36	47	41	36	34
7	62	48	39	33	61	47	39	32	46	38	32	44	37	32	43	36	32	30
8	58	44	35	29	56	43	35	29	42	34	29	41	34	28	39	33	28	26
9	54	40	32	26	53	40	31	26	38	31	26	37	30	26	36	30	25	23
10	51	37	29	23	49	37	29	23	36	28	23	35	28	23	34	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: ITL89351-GONIOPHOTOMETRY

PAGE: 6 OF 6

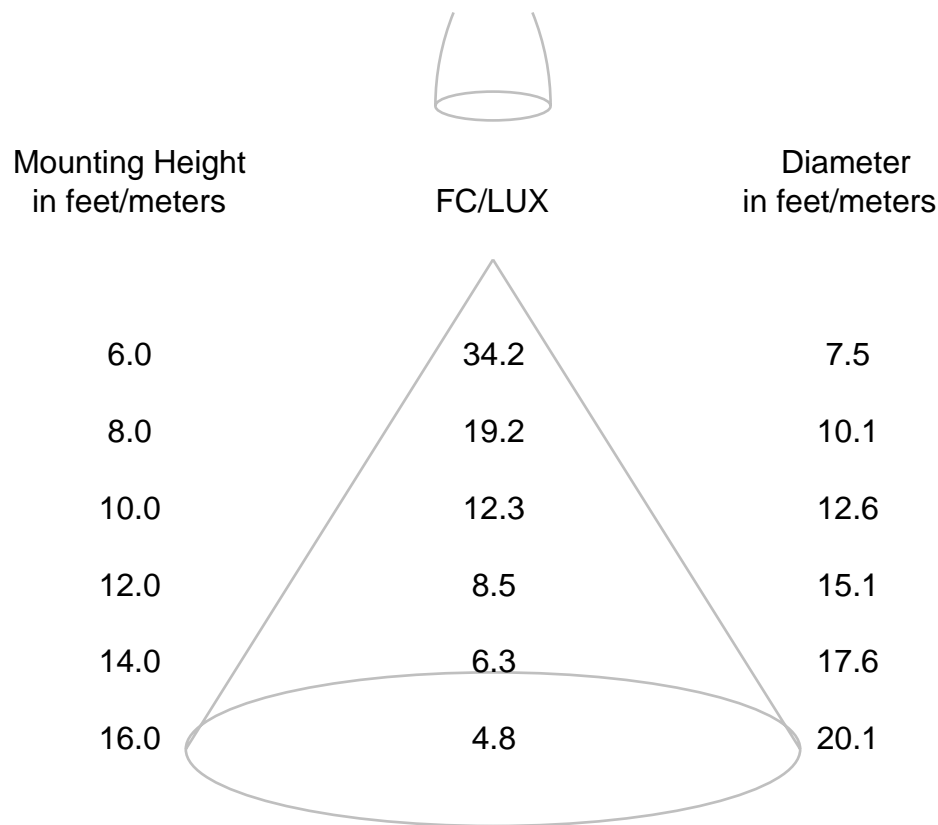
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CONE OF LIGHT DIAGRAM

(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.