



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: ITL92552-GONIOPHOTOMETRY

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ISSUE DATE: 12/13/19

PREPARED FOR: FINELITE, INC.

ADDRESS: 30500 WHIPPLE ROAD

UNION CITY, CA 94587

CATALOG NUMBER: HP-X-D-4ft-V-835-F

LUMINAIRE: EXTRUDED WHITE PAINTED METAL HOUSING WITH CAST WHITE PAINTED METAL END CAPS, 2-PIECE FLAT METAL CIRCUIT BOARD MOUNTING PLATE, 4 CIRCUIT BOARDS EACH WITH 120 LEDS, EXTRUDED PLASTIC REFLECTOR/LENS ASSEMBLY WITH WHITE REFLECTOR AND A TRANSLUCENT WHITE FROSTED PLASTIC DIFFUSER. DIFFUSER FROSTED BOTH SIDES.

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

INPUT ELECTRICAL: 120.0 VOLTS, 33.5 WATTS, 0.284 AMPS

MOUNTING: SUSPENDED

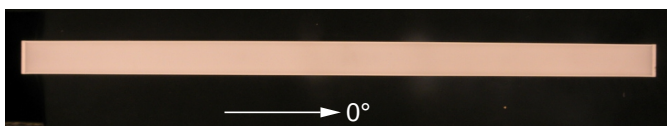
LED DRIVER: OSRAM OTi 50/120-277/1A4 DIM-1 L G2, DRIVER HAS MULTIPLE LEADS, ONLY LINE INPUT AND LED OUTPUT LEADS CONNECTED FOR THIS TEST, CLIENT STATES DRIVER PROGRAMMED FOR 700mA OUTPUT.

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (120VAC, 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

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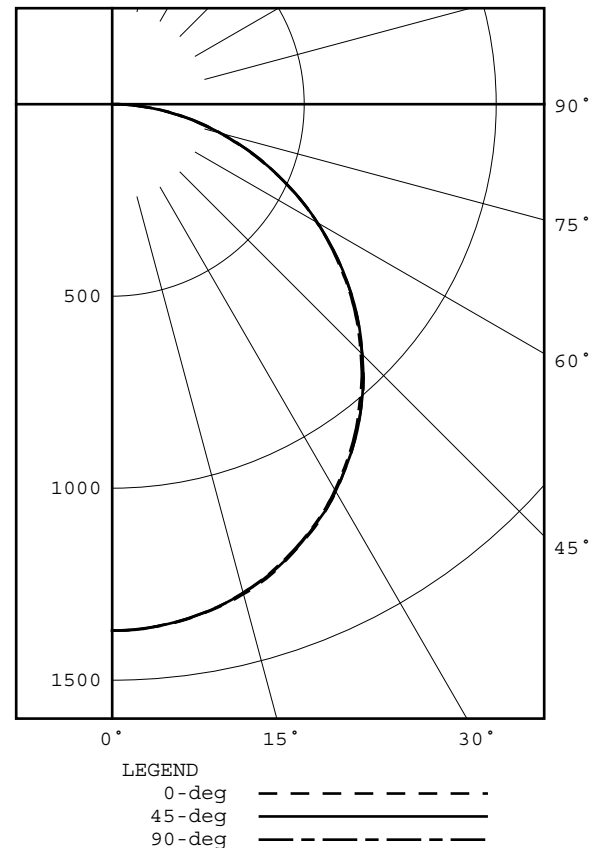
CANDELA DISTRIBUTION						FLUX
	0.0	22.5	45.0	67.5	90.0	
0	1371	1371	1371	1371	1371	
5	1365	1364	1364	1364	1364	130
15	1321	1312	1318	1320	1317	372
25	1228	1215	1225	1225	1223	564
35	1092	1081	1092	1090	1087	681
45	920	915	921	919	915	709
55	723	721	723	722	719	645
65	507	507	509	509	507	503
75	290	288	292	293	294	308
85	88	89	91	94	94	101
90	0	0	0	0	0	

ZONAL LUMEN SUMMARY		
ZONE	LUMENS	%FIXT
0- 30	1065	26.6
0- 40	1746	43.5
0- 60	3099	77.3
0- 90	4011	100.0
90-180	0	0.0
0-180	4011	100.0

EFFICACY (120) = 119.7 lm/W
 EFFICACY (277) = 120.1 lm/W **
 ** THE EFFICACY AT 277 VOLTS IS BASED ON
 THE LUMENS FROM THIS REPORT AND THE
 WATTAGE MEASURED AT 277 VOLTS FROM ITL
 REPORT NUMBER ITL92552-SPHERE.

CIE TYPE - DIRECT
 PLANE : 0-DEG 90-DEG
 SPACING CRITERIA : 1.26 1.26
 BEAM ANGLE (50%) : 113.5 X 113.3 DEGREES
 FIELD ANGLE (10%) : 164.9 X 165.7 DEGREES
 LUMINOUS LENGTH : 48.000 2.375

LUMINANCE DATA IN CANDELA/SQ M			
ANGLE IN DEG	AVERAGE 0-DEG	AVERAGE 45-DEG	AVERAGE 90-DEG
45	17690.	17709.	17594.
55	17139.	17139.	17044.
65	16311.	16376.	16311.
75	15235.	15340.	15445.
85	13728.	14196.	14664.





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CANDELA DISTRIBUTION
LATERAL ANGLE

	0.0	22.5	45.0	67.5	90.0
0.0	1371	1371	1371	1371	1371
2.5	1370	1369	1369	1369	1370
5.0	1365	1364	1364	1364	1364
7.5	1358	1356	1357	1356	1357
10.0	1348	1345	1347	1348	1346
12.5	1336	1330	1334	1336	1334
15.0	1321	1312	1318	1320	1317
17.5	1303	1292	1300	1300	1298
20.0	1280	1267	1277	1278	1275
22.5	1254	1243	1253	1253	1250
25.0	1228	1215	1225	1225	1223
27.5	1198	1186	1197	1195	1194
30.0	1165	1152	1164	1162	1160
32.5	1128	1119	1128	1128	1124
35.0	1092	1081	1092	1090	1087
37.5	1052	1043	1053	1049	1047
40.0	1012	1002	1011	1007	1004
42.5	969	960	968	965	962
45.0	920	915	921	919	915
47.5	874	869	875	871	869
50.0	826	822	827	822	821
52.5	775	772	776	772	771
55.0	723	721	723	722	719
57.5	670	668	671	670	668
60.0	616	614	618	616	616
62.5	563	560	565	562	564
65.0	507	507	509	509	507
67.5	452	453	454	455	455
70.0	398	397	400	399	402
72.5	342	342	346	346	348
75.0	290	288	292	293	294
77.5	236	236	240	242	244
80.0	184	186	188	191	192
82.5	136	136	139	142	144
85.0	88	89	91	94	94
87.5	40	42	46	48	49
90.0	0	0	0	0	0



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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	33
5- 10	97
10- 15	158
15- 20	214
20- 25	262
25- 30	302
30- 35	331
35- 40	350
40- 45	357
45- 50	352
50- 55	336
55- 60	309
60- 65	273
65- 70	230
70- 75	180
75- 80	128
80- 85	76
85- 90	25

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	130
0- 20	501
0- 30	1065
0- 40	1746
0- 50	2454
0- 60	3099
0- 70	3602
0- 80	3911
0- 90	4011



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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	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	57
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	26	37	30	25	36	30	25	24

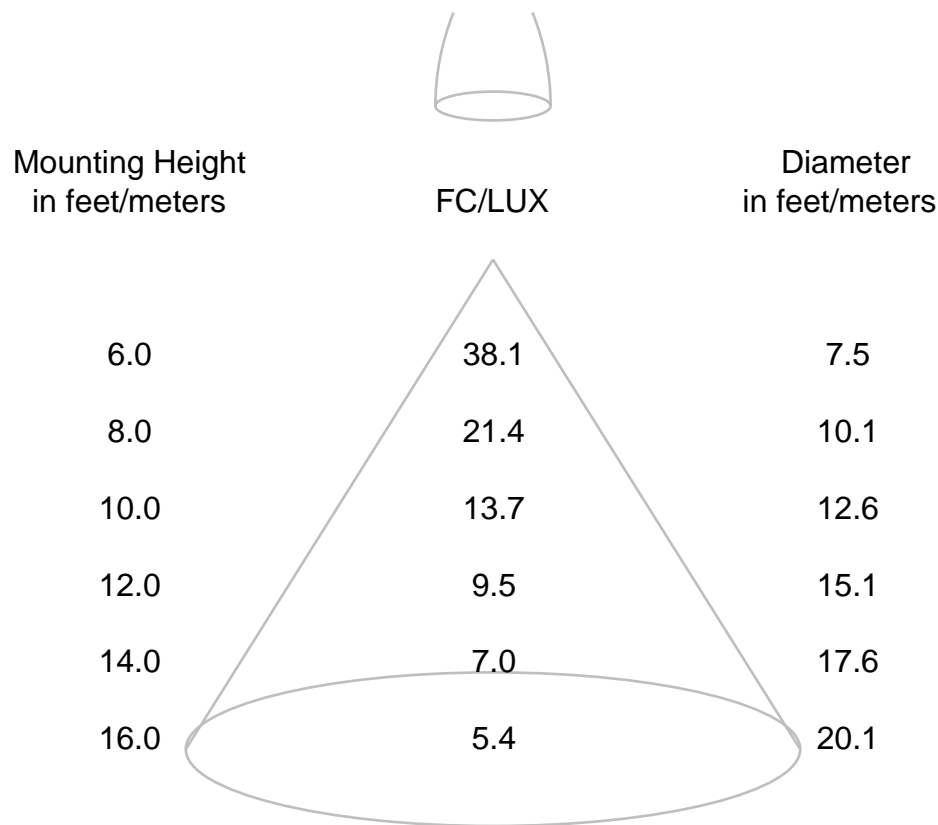
ALL CANDELA, LUMENS, LUMINANCE, AND VCP VALUES IN THIS REPORT ARE BASED ON ABSOLUTE PHOTOMETRY. THE COEFFICIENT OF UTILIZATION VALUES ARE BASED ON THE TOTAL ABSOLUTE LUMEN OUTPUT OF THIS TEST SAMPLE.

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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.