



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: ITL90672-GONIOPHOTOMETRY

PAGE: 1 OF 6

ISSUE DATE: 07/30/18

PREPARED FOR: FINELITE, INC.

ADDRESS: 30500 WHIPPLE ROAD

UNION CITY, CA 94587

CATALOG NUMBER: HP-4-D-RG-4ft-V-835-RG-WCB

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, FABRICATED WHITE PAINTED METAL 48-CELL LOUVER WITH TRANSLUCENT WHITE FLAT PLASTIC OVERLAY.

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

INPUT ELECTRICAL: 277.0 VOLTS, 37.7 WATTS, 0.142 AMPS

MOUNTING: SUSPENDED

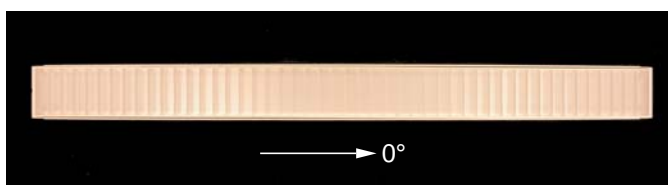
LED DRIVER: OSRAM OTi 50/120-277/1A4 DIM L, DRIVER HAS MULTIPLE LEADS, ONLY LINE INPUT AND LED OUTPUT LEADS CONNECTED FOR THIS TEST, CLIENT STATES DRIVER PROGRAMMED FOR 700mA OUTPUT.

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

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CATALOG NUMBER: HP-4 RG-4'-V-835-277V-WCB-X-X-X

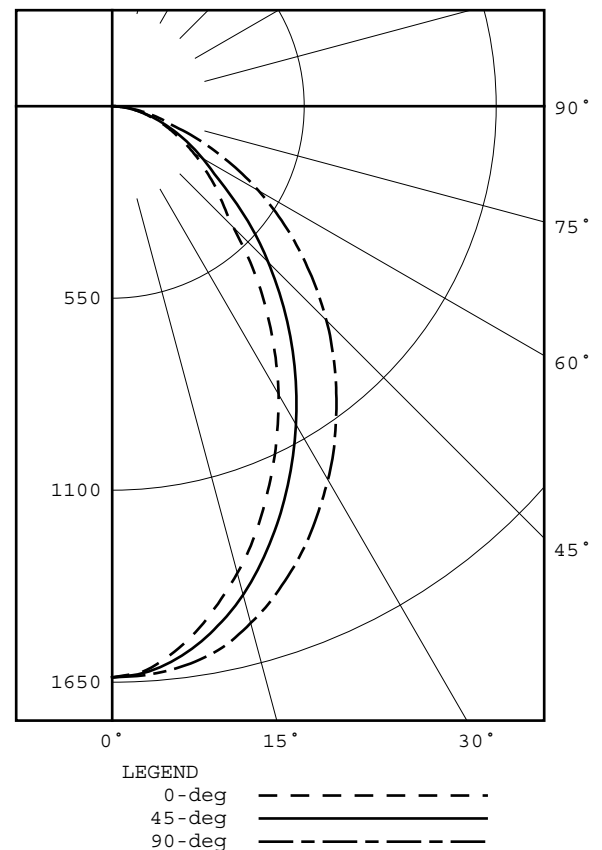
CANDELA DISTRIBUTION						FLUX
	0.0	22.5	45.0	67.5	90.0	
0	1636	1636	1636	1636	1636	
5	1597	1601	1611	1623	1627	152
15	1385	1397	1449	1505	1533	408
25	1102	1121	1193	1286	1347	554
35	796	822	911	1028	1116	580
45	491	526	632	765	868	504
55	332	339	380	514	611	383
65	210	214	232	290	356	253
75	111	112	118	131	150	131
85	30	30	30	31	34	35
90	0	0	0	0	0	

ZONAL LUMEN SUMMARY		
ZONE	LUMENS	%FIXT
0- 30	1113	37.1
0- 40	1694	56.4
0- 60	2581	86.0
0- 90	3001	100.0
90-180	0	0.0
0-180	3001	100.0

EFFICACY (277) = 79.6 lm/W
 EFFICACY (120) = 81.3 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 ITL90672-SPHERE.

CIE TYPE - DIRECT
 PLANE : 0-DEG 90-DEG
 SPACING CRITERIA : 0.94 1.14
 BEAM ANGLE (50%) : 68.6 X 93.8 DEGREES
 FIELD ANGLE (10%) : 139.1 X 147.7 DEGREES
 LUMINOUS LENGTH : 48.000 3.625

LUMINANCE DATA IN CANDELA/SQ M				
ANGLE	AVERAGE	AVERAGE	AVERAGE	
IN DEG	0-DEG	45-DEG	90-DEG	
45	6186.	7962.	10935.	
55	5156.	5902.	9489.	
65	4426.	4890.	7504.	
75	3820.	4061.	5163.	
85	3066.	3066.	3475.	





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CATALOG NUMBER: HP-4 RG-4'-V-835-277V-WCB-X-X-X

CANDELA DISTRIBUTION
LATERAL ANGLE

	0.0	22.5	45.0	67.5	90.0
0.0	1636	1636	1636	1636	1636
2.5	1626	1627	1630	1634	1634
5.0	1597	1601	1611	1623	1627
7.5	1555	1563	1583	1606	1615
10.0	1504	1514	1545	1583	1597
12.5	1445	1456	1500	1549	1570
15.0	1385	1397	1449	1505	1533
17.5	1320	1331	1390	1458	1493
20.0	1249	1262	1327	1404	1447
22.5	1175	1192	1261	1348	1399
25.0	1102	1121	1193	1286	1347
27.5	1027	1048	1123	1223	1291
30.0	953	971	1053	1159	1236
32.5	875	899	981	1094	1179
35.0	796	822	911	1028	1116
37.5	720	747	839	961	1055
40.0	644	673	771	897	993
42.5	565	600	701	832	931
45.0	491	526	632	765	868
47.5	440	458	567	701	803
50.0	402	410	502	638	738
52.5	368	373	438	574	674
55.0	332	339	380	514	611
57.5	301	306	335	454	546
60.0	270	273	299	397	484
62.5	240	242	264	342	420
65.0	210	214	232	290	356
67.5	184	187	200	240	297
70.0	159	160	170	199	239
72.5	135	136	143	163	180
75.0	111	112	118	131	150
77.5	89	90	93	103	119
80.0	69	69	70	77	87
82.5	49	48	50	53	58
85.0	30	30	30	31	34
87.5	12	12	11	12	12
90.0	0	0	0	0	0



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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	39
5- 10	113
10- 15	178
15- 20	230
20- 25	266
25- 30	288
30- 35	294
35- 40	286
40- 45	266
45- 50	238
50- 55	207
55- 60	176
60- 65	143
65- 70	110
70- 75	79
75- 80	52
80- 85	28
85- 90	7

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	152
0- 20	559
0- 30	1113
0- 40	1694
0- 50	2198
0- 60	2581
0- 70	2834
0- 80	2966
0- 90	3001



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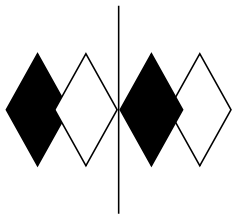
CATALOG NUMBER: HP-4 RG-4'-V-835-277V-WCB-X-X-X

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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75
3	93	84	77	71	91	83	76	70	80	74	69	77	72	68	74	70	67	65
4	86	76	68	62	84	74	67	61	72	65	60	70	64	60	68	63	59	57
5	80	68	60	54	78	67	60	54	65	59	53	63	57	53	62	56	52	50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	56	51	47	45
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	46	42	40
8	65	52	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33
10	58	45	38	33	56	45	37	33	44	37	33	43	37	32	42	36	32	31

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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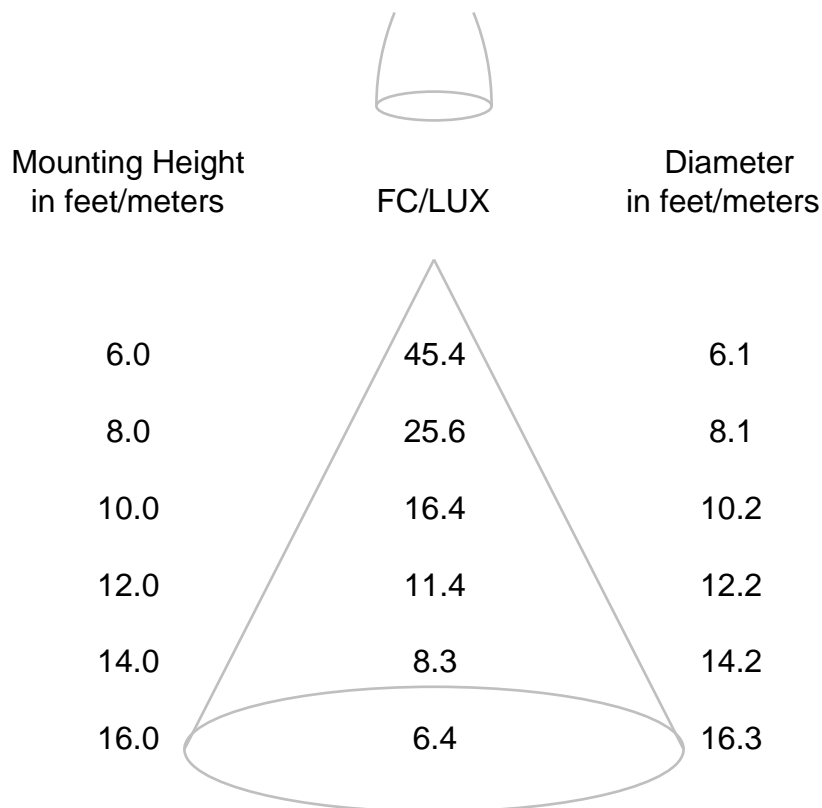
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CONE OF LIGHT DIAGRAM

(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.