



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: ITL91933-GONIOPHOTOMETRY

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-LHE

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 64-CELL ELLIPSOIDAL 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.

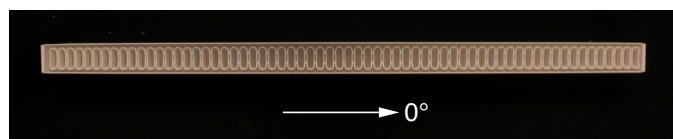
TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 35.0 FEET

PAGE: 1 OF 6

REVISED: 06/20/19

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

REPORT NUMBER: ITL91933-GONIOPHOTOMETRY

ISSUE DATE: 06/11/19

PREPARED FOR: FINELITE, INC.

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

PAGE: 2 OF 6

REVISED: 06/20/19

CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0	
0	1707	1707	1707	1707	1707	
5	1590	1597	1611	1627	1636	148
15	1207	1186	1192	1234	1281	338
25	839	801	784	803	854	371
35	515	470	462	489	535	308
45	364	280	280	316	357	241
55	257	182	182	207	239	184
65	167	111	112	122	135	124
75	88	56	57	57	58	65
85	21	13	12	10	10	16
90	0	0	0	0	0	

FLUX

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%FIXT
0- 30	857	47.8
0- 40	1165	65.0
0- 60	1589	88.6
0- 90	1793	100.0
90-180	0	0.0
0-180	1793	100.0

EFFICACY (277) = 48.1 lm/W

EFFICACY (120) = 49.3 lm/W **

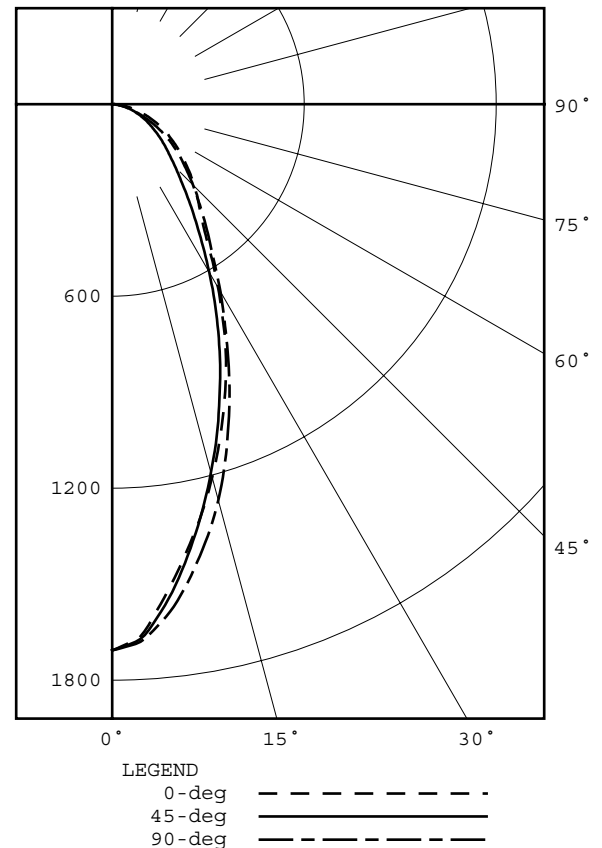
** THE EFFICACY AT 120 VOLTS IS BASED ON THE LUMENS FROM THIS REPORT AND THE WATTAGE MEASURED AT 120 VOLTS FROM ITL REPORT NUMBER ITL91937-SPHERE.

CIE TYPE - DIRECT

PLANE : 0-DEG 90-DEG
SPACING CRITERIA : 0.72 0.75
BEAM ANGLE (50%) : 49.2 X 50.0 DEGREES
FIELD ANGLE (10%) : 129.2 X 123.1 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	7388.	5683.	7246.
55	6431.	4554.	5980.
65	5671.	3803.	4585.
75	4880.	3161.	3216.
85	3458.	1976.	1647.





PHONE: (303) 442-1255 • FAX: (970) 535-3114 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com

REPORT NUMBER: ITL91933-GONIOPHOTOMETRY

PAGE: 3 OF 6

ISSUE DATE: 06/11/19

REVISED: 06/20/19

PREPARED FOR: FINELITE, INC.

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

CANDELA DISTRIBUTION
LATERAL ANGLE

	0.0	22.5	45.0	67.5	90.0
0.0	1707	1707	1707	1707	1707
2.5	1676	1677	1682	1685	1688
5.0	1590	1597	1611	1627	1636
7.5	1493	1498	1516	1547	1565
10.0	1396	1391	1409	1453	1475
12.5	1303	1287	1301	1342	1381
15.0	1207	1186	1192	1234	1281
17.5	1111	1088	1087	1125	1173
20.0	1018	989	980	1013	1062
22.5	927	894	881	903	958
25.0	839	801	784	803	854
27.5	745	712	693	710	759
30.0	662	627	606	628	676
32.5	584	544	529	550	599
35.0	515	470	462	489	535
37.5	464	404	406	437	482
40.0	425	353	356	393	435
42.5	394	313	314	352	393
45.0	364	280	280	316	357
47.5	335	253	250	286	323
50.0	307	227	225	258	293
52.5	281	203	203	232	266
55.0	257	182	182	207	239
57.5	233	162	162	184	213
60.0	210	144	144	163	186
62.5	189	127	128	141	161
65.0	167	111	112	122	135
67.5	146	96	97	105	113
70.0	126	82	82	88	92
72.5	107	68	70	72	74
75.0	88	56	57	57	58
77.5	70	44	44	43	43
80.0	52	34	32	31	30
82.5	36	23	21	20	19
85.0	21	13	12	10	10
87.5	8	5	4	4	4
90.0	0	0	0	0	0



INDEPENDENT TESTING LABORATORIES, INC.
4066 CAMELOT CIRCLE, LONGMONT, CO 80504 USA

PHONE: (303) 442-1255 • FAX: (970) 535-3114 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com

REPORT NUMBER: ITL91933-GONIOPHOTOMETRY

PAGE: 4 OF 6

ISSUE DATE: 06/11/19

REVISED: 06/20/19

PREPARED FOR: FINELITE, INC.

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

5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	40
5- 10	108
10- 15	156
15- 20	182
20- 25	190
25- 30	181
30- 35	164
35- 40	144
40- 45	127
45- 50	113
50- 55	99
55- 60	85
60- 65	69
65- 70	54
70- 75	39
75- 80	25
80- 85	13
85- 90	3

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	148
0- 20	486
0- 30	857
0- 40	1165
0- 50	1405
0- 60	1589
0- 70	1712
0- 80	1777
0- 90	1793



REPORT NUMBER: ITL91933-GONIOPHOTOMETRY

PAGE: 5 OF 6

ISSUE DATE: 06/11/19

REVISED: 06/20/19

PREPARED FOR: FINELITE, INC.

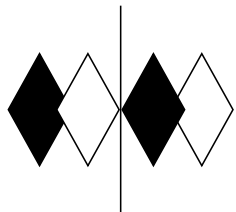
CATALOG NUMBER: HP-2 D-RG-4'-V-835-F-RG-LHE-277V

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	93	92	90	88
2	103	96	91	86	101	95	90	85	91	87	83	88	85	82	85	82	80	78
3	96	87	81	75	94	86	80	75	83	78	73	80	76	72	78	74	71	69
4	89	80	72	67	87	78	71	66	76	70	65	74	69	65	72	67	64	62
5	84	73	65	60	82	72	65	60	70	64	59	68	63	58	66	62	58	56
6	78	67	60	54	77	66	59	54	65	58	54	63	57	53	62	57	53	51
7	74	62	55	50	72	61	54	49	60	54	49	59	53	49	57	52	48	47
8	70	58	51	46	68	57	50	45	56	50	45	55	49	45	54	49	45	43
9	66	54	47	42	64	54	47	42	53	46	42	52	46	42	51	45	42	40
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37

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.



itl boulder
THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

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: ITL91933-GONIOPHOTOMETRY

PAGE: 6 OF 6

ISSUE DATE: 06/11/19

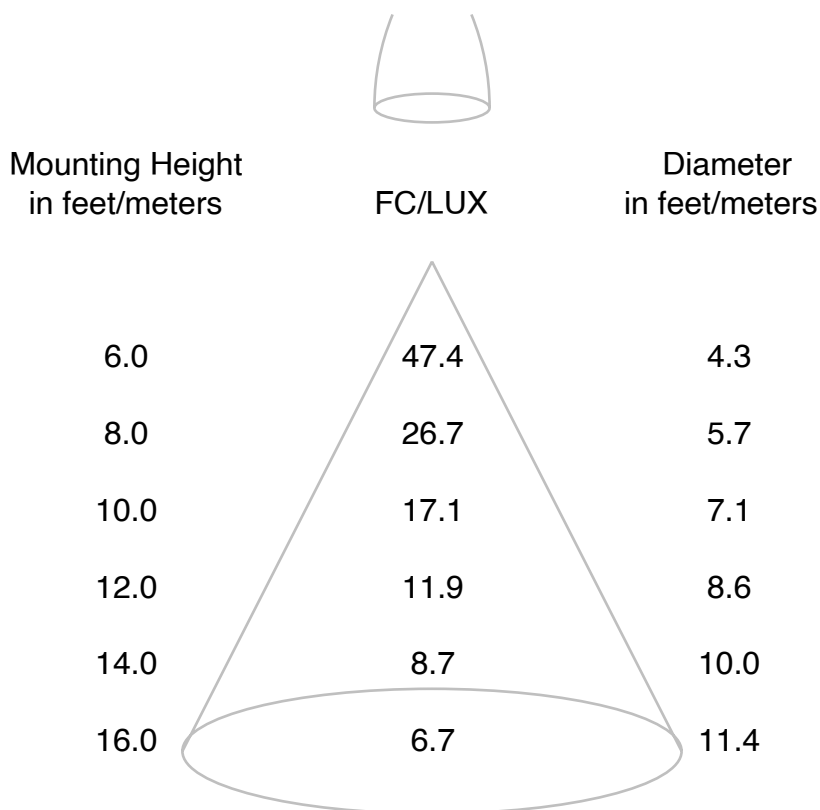
REVISED: 06/20/19

PREPARED FOR: FINELITE, INC.

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

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.