

# Family Correlated Photometric Data

The following photometric information is developed using correlated data. Finelite considers a family to be a group of luminaires where critical performance metrics such as photometric performance, thermal performance, and electrical performance can be accurately projected via a combination of LM79 tests at the luminaire level and well-documented specifications at the component level.

For more information, please download [Finelite's Family Correlated White Paper](#)

Additional links:

- [Solid-State Lighting: Early Lessons Learned on the Way to Market](#)  
(U.S. Department of Energy)
- [Lighting Facts®](#)
- [Design Lights Consortium®](#)

## IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-2-WW-D-FO-4FT-V-8-TW-ITL85138.900.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85138.900 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE] 08/15/15

[ISSUEDATE]04/14/16

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HP-2-WW-D-FO-4ft-V-8-TW

[OTHER]ies file is based on 3500K; see luminaire tech sheet at [www.finelite.com](http://www.finelite.com) for lumen adjustment factors for other CCT's & CRI

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 21.6 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 23.3 WATTS

[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL85138. For further details on Finelite family correlation files, go to

[more][http://www.finelite.com/download\\_files/series\\_downloads/photometry\\_pdf/FL\\_Family\\_Correlation\\_WhitePaper.pdf](http://www.finelite.com/download_files/series_downloads/photometry_pdf/FL_Family_Correlation_WhitePaper.pdf)

[\_ABSOLUTELUMENS]1778

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1778
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	82
Total Luminaire Watts	21.6
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.42
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.24
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	0.14 ft
Luminous Width (90-270)	4.00 ft
Luminous Height	0.00 ft

### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	14843	16357	13086
55	8933	13299	11366
65	5021	8731	9681
75	4210	5097	7830
85	3290	4168	5923

IES INDOOR REPORT  
 PHOTOMETRIC FILENAME : HP-2-WW-D-FO-4FT-V-8-TW-ITL85138.900.IES

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>
0.0	836	836	836	836	836	836	836	836	836
2.5	858	857	853	845	835	825	817	811	810
5.0	877	875	865	851	832	812	795	782	778
7.5	890	888	875	854	826	796	769	749	741
10.0	901	897	880	852	819	777	740	710	699
12.5	908	903	883	850	810	755	708	670	655
15.0	910	905	882	843	798	730	671	625	607
17.5	909	904	879	835	783	703	635	581	558
20.0	902	897	872	823	766	675	595	534	508
22.5	893	887	862	810	748	645	555	487	459
25.0	878	873	848	794	725	613	512	441	415
27.5	857	854	831	775	702	580	473	399	373
30.0	835	830	810	753	675	546	433	360	336
32.5	806	804	785	730	647	512	396	325	302
35.0	769	770	756	704	617	478	362	294	273
37.5	726	732	724	675	586	445	329	266	248
40.0	676	686	689	644	553	411	299	241	225
42.5	612	633	648	610	518	379	272	219	205
45.0	549	573	605	574	484	349	246	199	188
47.5	473	507	558	535	448	318	223	180	171
50.0	399	438	507	496	413	289	201	164	157
52.5	330	373	454	454	376	261	180	149	143
55.0	268	308	399	413	341	234	161	135	130
57.5	214	250	344	371	309	208	144	122	118
60.0	171	197	290	330	276	184	127	110	106
62.5	137	156	239	290	245	159	112	98	95
65.0	111	125	193	252	214	138	97	86	84
67.5	92	101	153	214	185	117	83	75	72
70.0	78	83	118	179	157	98	71	63	60
72.5	67	69	91	146	131	80	59	52	51
75.0	57	58	69	114	106	63	47	43	42
77.5	47	47	53	85	83	47	37	35	34
80.0	38	38	41	59	63	34	28	27	26
82.5	28	28	29	37	44	21	19	19	18
85.0	15	16	19	21	27	13	12	12	12
87.5	8	9	9	9	12	5	5	5	5
90.0	0	0	0	0	0	0	0	0	0

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HP-2-WW-D-FO-4FT-V-8-TW-ITL85138.900.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	297.13	N.A.	16.70
0-30	610.70	N.A.	34.30
0-40	962.15	N.A.	54.10
0-60	1534.37	N.A.	86.30
0-80	1758.81	N.A.	98.90
0-90	1778.36	N.A.	100.00
10-90	1699.79	N.A.	95.60
20-40	665.02	N.A.	37.40
20-50	991.54	N.A.	55.80
40-70	722.72	N.A.	40.60
60-80	224.44	N.A.	12.60
70-80	73.94	N.A.	4.20
80-90	19.55	N.A.	1.10
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	1778.36	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	78.57
10-20	218.56
20-30	313.57
30-40	351.45
40-50	326.52
50-60	245.69
60-70	150.51
70-80	73.94
80-90	19.55
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

# IES INDOOR REPORT

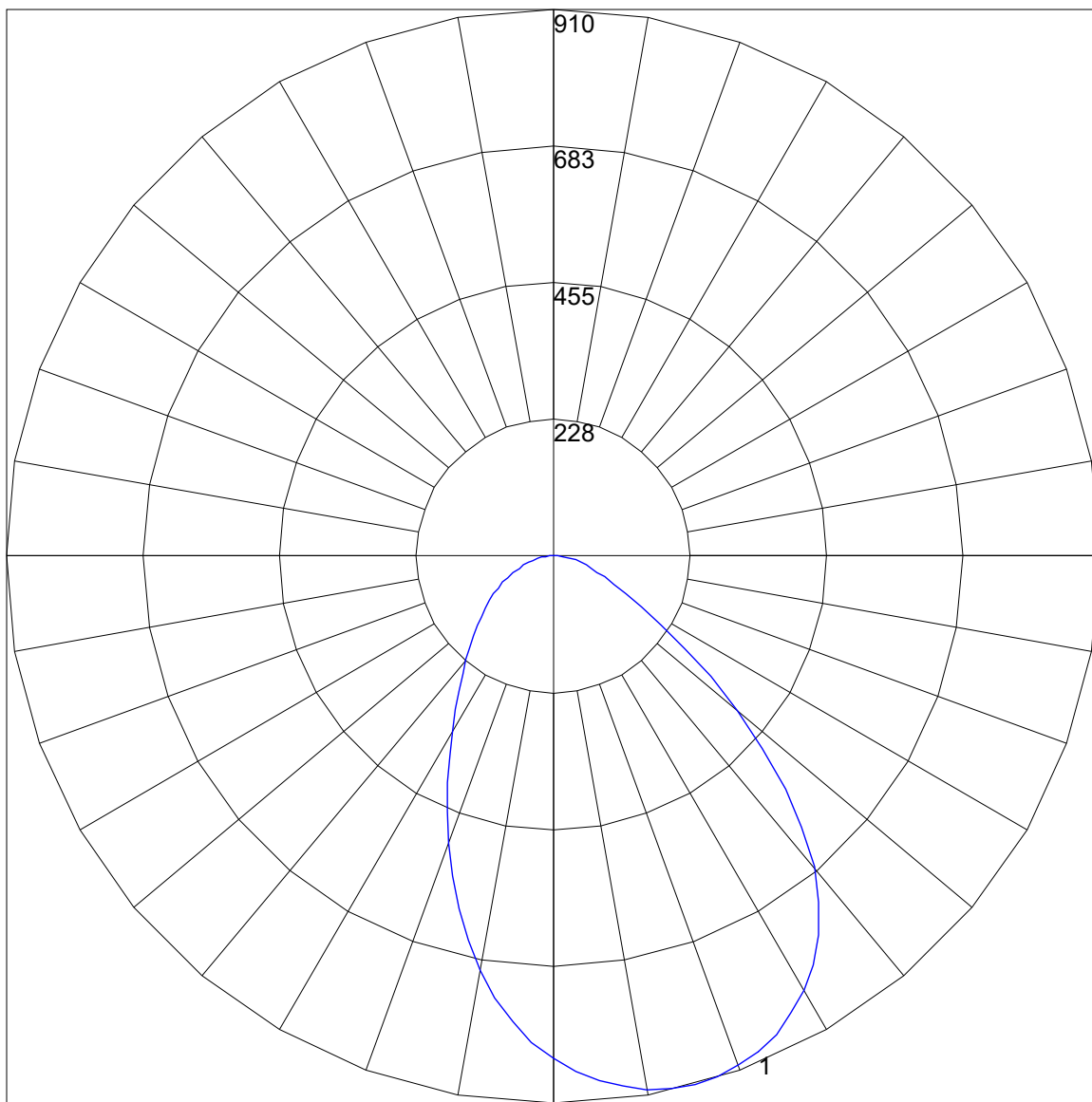
PHOTOMETRIC FILENAME : HP-2-WW-D-FO-4FT-V-8-TW-ITL85138.900.IES

## 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	107	104	100	97	99	97	94	96	93	91	92	90	89	87
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74
3	93	84	76	70	91	82	75	70	79	73	68	76	71	67	74	70	66	64
4	86	75	67	61	84	74	66	60	71	65	59	69	63	59	67	62	58	56
5	79	68	59	53	77	66	59	53	64	57	52	62	56	52	61	55	51	49
6	74	61	53	47	72	60	52	47	59	52	46	57	51	46	55	50	46	44
7	69	56	48	42	67	55	47	42	54	47	41	52	46	41	51	45	41	39
8	64	51	43	38	63	51	43	38	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29

POLAR GRAPH



Maximum Candela = 910 Located At Horizontal Angle = 0, Vertical Angle = 15  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)