

# 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-B-8-TW-ITL85138.902.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85138.902 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/15/15

[ISSUEDATE]04/26/16

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HP-2-WW-D-FO-4ft-B-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, 11.1 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 13.8 WATTS

[ABSOLUTE]LUMENS]915

[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)

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	915
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	82
Total Luminaire Watts	11.1
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	7639	8418	6734
55	4597	6844	5849
65	2584	4493	4982
75	2167	2623	4029
85	1693	2145	3048

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	430.222	430.222	430.222	430.222	430.222	430.222	430.222	430.222	430.222
2.5	441.544	441.029	438.971	434.854	429.708	424.561	420.444	417.357	416.842
5.0	451.322	450.292	445.146	437.942	428.164	417.871	409.123	402.433	400.374
7.5	458.012	456.982	450.292	439.485	425.076	409.637	395.743	385.450	381.333
10.0	463.673	461.614	452.866	438.456	421.474	399.860	380.819	365.380	359.719
12.5	467.275	464.702	454.409	437.427	416.842	388.538	364.351	344.795	337.076
15.0	468.304	465.731	453.895	433.825	410.667	375.673	345.310	321.637	312.374
17.5	467.789	465.216	452.351	429.708	402.947	361.778	326.784	298.994	287.158
20.0	464.187	461.614	448.749	423.532	394.199	347.368	306.199	274.807	261.427
22.5	459.556	456.468	443.602	416.842	384.936	331.930	285.614	250.620	236.211
25.0	451.836	449.263	436.398	408.608	373.099	315.462	263.485	226.947	213.567
27.5	441.029	439.485	427.649	398.830	361.263	298.480	243.415	205.333	191.953
30.0	429.708	427.135	416.842	387.509	347.368	280.982	222.830	185.263	172.912
32.5	414.784	413.754	403.977	375.673	332.959	263.485	203.789	167.251	155.415
35.0	395.743	396.257	389.053	362.292	317.520	245.988	186.292	151.298	140.491
37.5	373.614	376.702	372.585	347.368	301.567	229.006	169.310	136.889	127.626
40.0	347.883	353.029	354.573	331.415	284.585	211.509	153.871	124.023	115.789
42.5	314.947	325.754	333.474	313.918	266.573	195.041	139.977	112.702	105.497
45.0	282.526	294.877	311.345	295.392	249.076	179.602	126.596	102.409	96.749
47.5	243.415	260.912	287.158	275.322	230.550	163.649	114.760	92.632	88.000
50.0	205.333	225.404	260.912	255.251	212.538	148.725	103.439	84.398	80.795
52.5	169.825	191.953	233.637	233.637	193.497	134.316	92.632	76.678	73.591
55.0	137.918	158.503	205.333	212.538	175.485	120.421	82.854	69.474	66.901
57.5	110.129	128.655	177.029	190.924	159.018	107.041	74.105	62.784	60.725
60.0	88.000	101.380	149.240	169.825	142.035	94.690	65.357	56.608	54.550
62.5	70.503	80.281	122.994	149.240	126.082	81.825	57.637	50.433	48.889
65.0	57.123	64.327	99.322	129.684	110.129	71.018	49.918	44.257	43.228
67.5	47.345	51.977	78.737	110.129	95.205	60.211	42.713	38.596	37.053
70.0	40.140	42.713	60.725	92.117	80.795	50.433	36.538	32.421	30.877
72.5	34.480	35.509	46.830	75.135	67.415	41.170	30.363	26.760	26.246
75.0	29.333	29.848	35.509	58.667	54.550	32.421	24.187	22.129	21.614
77.5	24.187	24.187	27.275	43.743	42.713	24.187	19.041	18.012	17.497
80.0	19.556	19.556	21.099	30.363	32.421	17.497	14.409	13.895	13.380
82.5	14.409	14.409	14.924	19.041	22.643	10.807	9.778	9.778	9.263
85.0	7.719	8.234	9.778	10.807	13.895	6.690	6.175	6.175	6.175
87.5	4.117	4.632	4.632	4.632	6.175	2.573	2.573	2.573	2.573
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-WW-D-FO-4FT-B-8-TW-ITL85138.902.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	152.91	N.A.	16.70
0-30	314.28	N.A.	34.30
0-40	495.14	N.A.	54.10
0-60	789.61	N.A.	86.30
0-80	905.12	N.A.	98.90
0-90	915.18	N.A.	100.00
10-90	874.75	N.A.	95.60
20-40	342.23	N.A.	37.40
20-50	510.27	N.A.	55.80
40-70	371.93	N.A.	40.60
60-80	115.50	N.A.	12.60
70-80	38.05	N.A.	4.20
80-90	10.06	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	915.18	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	40.43
10-20	112.48
20-30	161.37
30-40	180.86
40-50	168.03
50-60	126.44
60-70	77.45
70-80	38.05
80-90	10.06
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

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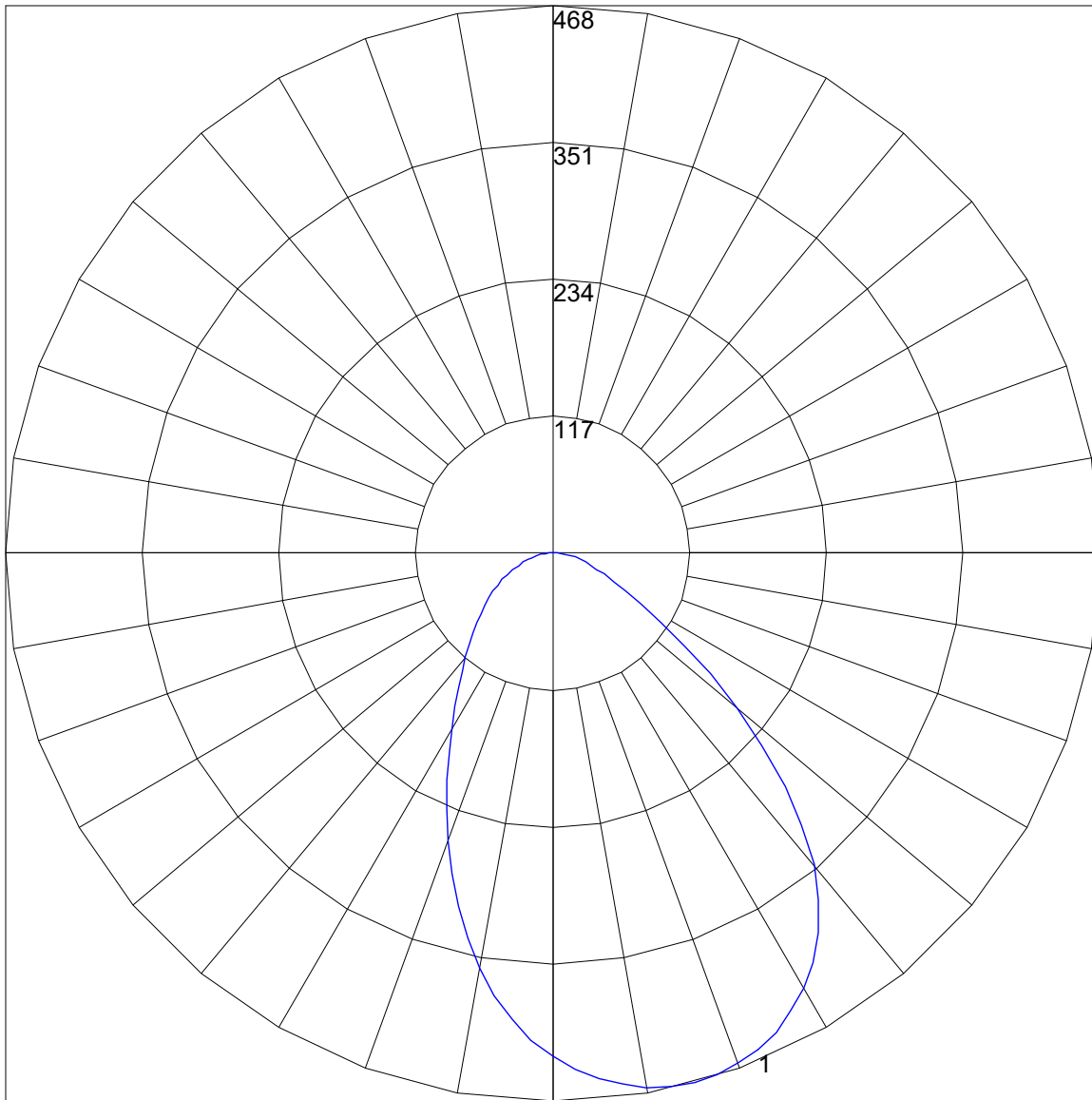
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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	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 = 468.304 Located At Horizontal Angle = 0, Vertical Angle = 15  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)