

# 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-4-C-D-P-2FT-S-835-ITL91221.009.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

[TEST]ITL91221.009 Family Correlation File  
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.  
[TESTDATE]12/22/18  
[ISSUEDATE]03/01/19  
[MANUFAC]FINELITE, INC.  
[LUMCAT]HP-4-C-D-P-2ft-S-835  
[INPUT\_ELECTRICAL]120.0 VOLTS, 5.7 WATTS  
[INPUT\_ELECTRICAL]277.0 VOLTS, 6.5 WATTS  
[ABSOLUTE LUMENS]594  
[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL91221. 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	594
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	104
Total Luminaire Watts	5.7
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.32
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	0.81 ft
Luminous Width (90-270)	2.81 ft
Luminous Height	0.00 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	894	908	926
55	834	849	867
65	766	780	794
75	677	693	700
85	580	580	580

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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	226.242	226.242	226.242	226.242	226.242	226.242	226.242	226.242	226.242
2.5	226.032	226.032	226.032	226.032	226.032	226.032	226.032	226.032	226.242
5.0	224.987	224.987	224.987	224.987	224.987	225.196	225.196	225.196	225.196
7.5	223.105	223.314	223.314	223.314	223.314	223.523	223.523	223.523	223.523
10.0	220.596	220.596	221.014	221.223	221.432	221.432	221.432	221.223	221.223
12.5	217.041	217.250	217.878	218.296	218.714	219.132	218.714	218.714	218.505
15.0	213.069	213.487	214.323	214.532	215.578	215.578	214.950	214.532	214.950
17.5	208.259	208.887	209.723	210.768	211.605	211.605	210.768	210.141	210.978
20.0	203.241	203.868	204.914	206.168	207.214	206.796	205.750	205.123	205.959
22.5	197.595	198.223	199.477	200.732	201.986	201.568	199.895	199.895	200.105
25.0	191.950	192.368	193.623	195.295	196.550	195.504	194.041	193.414	194.250
27.5	185.259	185.677	187.350	189.023	189.859	189.232	187.768	187.141	187.559
30.0	178.986	179.195	180.450	182.750	183.168	182.750	181.286	180.240	180.240
32.5	171.877	172.295	173.968	175.431	176.686	176.059	174.177	173.340	172.922
35.0	164.140	164.977	166.440	168.531	169.158	168.740	166.858	166.440	165.604
37.5	157.031	157.449	159.331	161.004	162.049	161.422	159.331	158.285	157.867
40.0	149.085	149.922	151.176	152.849	154.104	153.685	152.222	150.967	150.340
42.5	141.558	142.185	143.858	145.112	146.576	145.949	143.858	142.812	142.185
45.0	133.403	134.239	135.494	136.958	138.212	137.794	135.703	135.285	134.449
47.5	125.667	126.294	127.757	129.012	130.267	129.639	127.757	126.294	126.085
50.0	117.303	117.930	119.185	120.648	121.694	121.276	119.603	118.348	118.139
52.5	109.566	109.984	111.239	112.703	113.330	112.703	111.239	109.775	109.775
55.0	100.993	101.621	102.875	103.921	104.966	104.339	103.293	101.830	102.248
57.5	93.257	93.675	94.929	95.975	96.393	95.975	94.720	93.257	93.048
60.0	84.684	85.102	86.357	87.193	88.029	87.611	86.566	85.311	85.102
62.5	76.947	77.365	78.411	79.247	79.456	79.247	77.993	76.738	76.529
65.0	68.374	68.792	69.629	70.465	70.883	70.883	69.629	68.792	68.792
67.5	60.638	61.056	61.683	62.520	62.938	62.520	61.474	60.429	60.220
70.0	52.274	52.692	53.319	53.947	54.365	54.365	53.319	52.901	52.692
72.5	44.956	44.956	45.792	46.419	46.419	46.001	45.374	44.746	44.537
75.0	37.010	37.428	37.846	38.265	38.265	38.265	38.055	37.219	37.428
77.5	30.110	30.110	30.528	30.737	31.155	30.737	30.319	29.901	29.901
80.0	23.001	23.210	23.210	23.628	23.628	23.628	23.419	23.210	23.210
82.5	16.728	16.728	16.937	16.937	17.146	16.937	16.937	16.728	16.728
85.0	10.664	10.664	10.664	10.873	10.664	10.873	10.873	10.873	11.082
87.5	5.436	5.436	5.436	5.227	5.227	5.436	5.436	5.646	5.646
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-4-C-D-P-2FT-S-835-ITL91221.009.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	81.84	N.A.	13.80
0-30	171.25	N.A.	28.80
0-40	275.69	N.A.	46.40
0-60	472.74	N.A.	79.60
0-80	582.00	N.A.	97.90
0-90	594.19	N.A.	100.00
10-90	572.83	N.A.	96.40
20-40	193.85	N.A.	32.60
20-50	298.74	N.A.	50.30
40-70	266.17	N.A.	44.80
60-80	109.26	N.A.	18.40
70-80	40.14	N.A.	6.80
80-90	12.19	N.A.	2.10
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	594.19	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	21.36
10-20	60.48
20-30	89.41
30-40	104.45
40-50	104.89
50-60	92.15
60-70	69.12
70-80	40.14
80-90	12.19
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

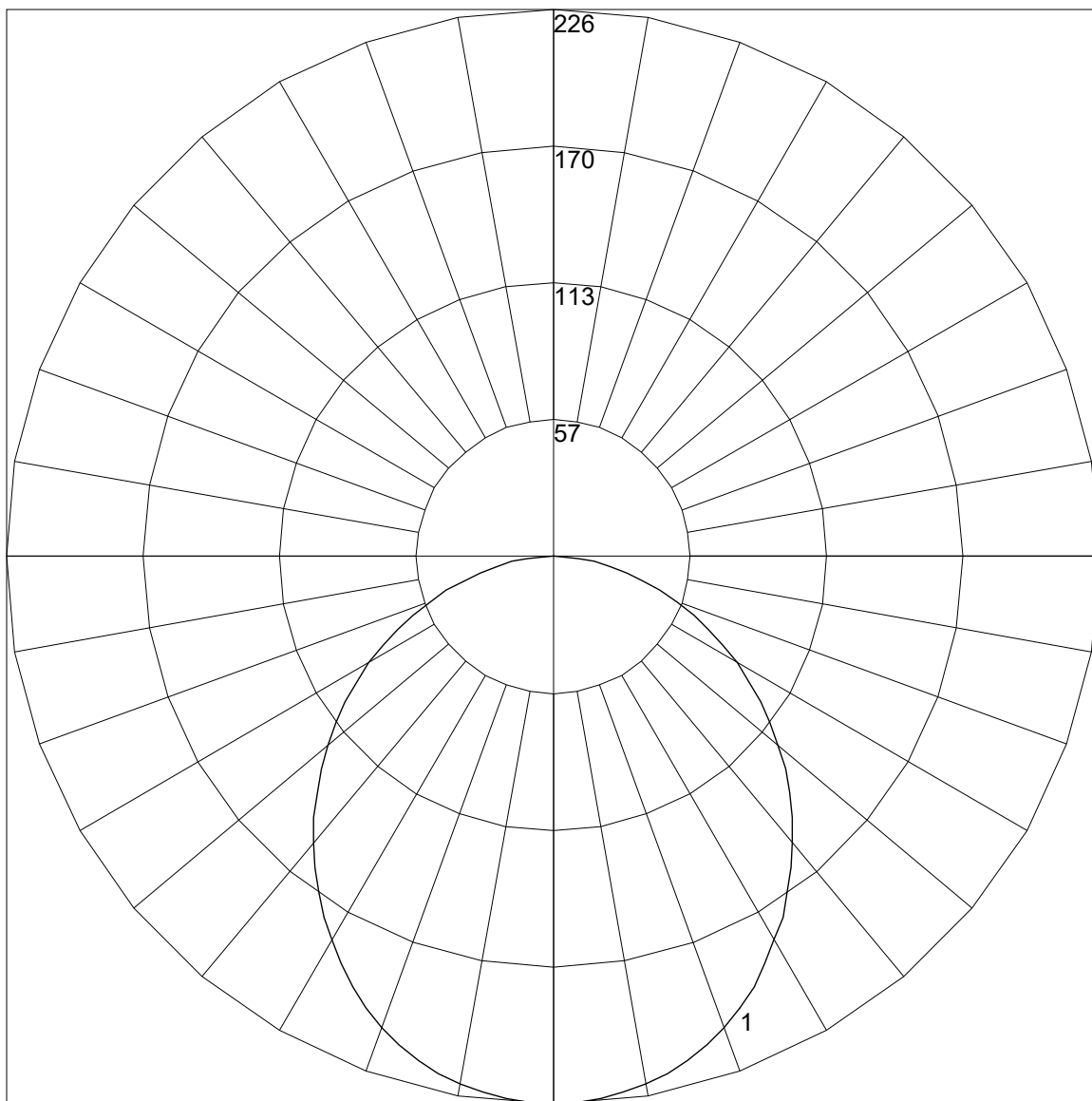
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**COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

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	109	104	100	96	106	102	98	94	98	94	91	94	91	89	90	88	86	84
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	75	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	65	61	59
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	71	57	48	42	69	56	48	42	55	47	41	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	59	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	54	40	33	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

POLAR GRAPH



Maximum Candela = 226.242 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)