

# 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-V-8TW-ITL91221.908.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL91221.908 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-V-8TW

[\_INPUT\_ELECTRICAL]120.0 VOLTS, 13.1 WATTS

[\_INPUT\_ELECTRICAL]277.0 VOLTS, 14.0 WATTS

[\_ABSOLUTE]LUMENS]1452

[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	1451
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	111
Total Luminaire Watts	13.1
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	2183	2217	2261
55	2037	2075	2117
65	1872	1906	1940
75	1654	1692	1710
85	1415	1415	1415

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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	552.612	552.612	552.612	552.612	552.612	552.612	552.612	552.612	552.612
2.5	552.101	552.101	552.101	552.101	552.101	552.101	552.101	552.101	552.612
5.0	549.547	549.547	549.547	549.547	549.547	550.058	550.058	550.058	550.058
7.5	544.951	545.462	545.462	545.462	545.462	545.972	545.972	545.972	545.972
10.0	538.822	538.822	539.844	540.354	540.865	540.865	540.865	540.354	540.354
12.5	530.140	530.650	532.183	533.204	534.226	535.247	534.226	534.226	533.715
15.0	520.436	521.457	523.500	524.011	526.565	526.565	525.032	524.011	525.032
17.5	508.689	510.221	512.264	514.818	516.861	516.861	514.818	513.286	515.328
20.0	496.431	497.964	500.517	503.582	506.135	505.114	502.560	501.028	503.071
22.5	482.642	484.174	487.238	490.303	493.367	492.346	488.260	488.260	488.770
25.0	468.852	469.873	472.938	477.024	480.088	477.534	473.959	472.427	474.470
27.5	452.508	453.530	457.616	461.702	463.745	462.212	458.637	457.105	458.126
30.0	437.186	437.697	440.762	446.380	447.401	446.380	442.805	440.251	440.251
32.5	419.822	420.843	424.929	428.504	431.568	430.036	425.440	423.397	422.375
35.0	400.925	402.967	406.543	411.650	413.182	412.161	407.564	406.543	404.500
37.5	383.560	384.581	389.178	393.264	395.817	394.285	389.178	386.624	385.603
40.0	364.152	366.195	369.259	373.345	376.409	375.388	371.813	368.748	367.216
42.5	345.765	347.298	351.384	354.448	358.023	356.491	351.384	348.830	347.298
45.0	325.847	327.890	330.954	334.529	337.594	336.572	331.465	330.444	328.401
47.5	306.950	308.482	312.057	315.122	318.186	316.654	312.057	308.482	307.971
50.0	286.521	288.053	291.117	294.692	297.246	296.224	292.139	289.074	288.564
52.5	267.624	268.645	271.709	275.284	276.817	275.284	271.709	268.134	268.134
55.0	246.683	248.216	251.280	253.834	256.387	254.855	252.302	248.726	249.748
57.5	227.786	228.808	231.872	234.426	235.447	234.426	231.362	227.786	227.276
60.0	206.846	207.868	210.932	212.975	215.018	213.997	211.443	208.379	207.868
62.5	187.949	188.971	191.524	193.567	194.078	193.567	190.503	187.439	186.928
65.0	167.009	168.031	170.074	172.117	173.138	173.138	170.074	168.031	168.031
67.5	148.112	149.134	150.666	152.709	153.730	152.709	150.155	147.602	147.091
70.0	127.683	128.704	130.237	131.769	132.790	132.790	130.237	129.215	128.704
72.5	109.807	109.807	111.850	113.382	113.382	112.361	110.829	109.297	108.786
75.0	90.400	91.421	92.442	93.464	93.464	93.464	92.953	90.910	91.421
77.5	73.545	73.545	74.567	75.078	76.099	75.078	74.056	73.035	73.035
80.0	56.181	56.691	56.691	57.713	57.713	57.713	57.202	56.691	56.691
82.5	40.859	40.859	41.369	41.369	41.880	41.369	41.369	40.859	40.859
85.0	26.047	26.047	26.047	26.558	26.047	26.558	26.558	26.558	27.069
87.5	13.279	13.279	13.279	12.768	12.768	13.279	13.279	13.790	13.790
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-V-8TW-ITL91221.908.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	199.90	N.A.	13.80
0-30	418.28	N.A.	28.80
0-40	673.40	N.A.	46.40
0-60	1154.69	N.A.	79.60
0-80	1421.58	N.A.	97.90
0-90	1451.35	N.A.	100.00
10-90	1399.18	N.A.	96.40
20-40	473.50	N.A.	32.60
20-50	729.71	N.A.	50.30
40-70	650.13	N.A.	44.80
60-80	266.89	N.A.	18.40
70-80	98.05	N.A.	6.80
80-90	29.77	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	1451.35	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	52.17
10-20	147.74
20-30	218.38
30-40	255.12
40-50	256.21
50-60	225.08
60-70	168.84
70-80	98.05
80-90	29.77
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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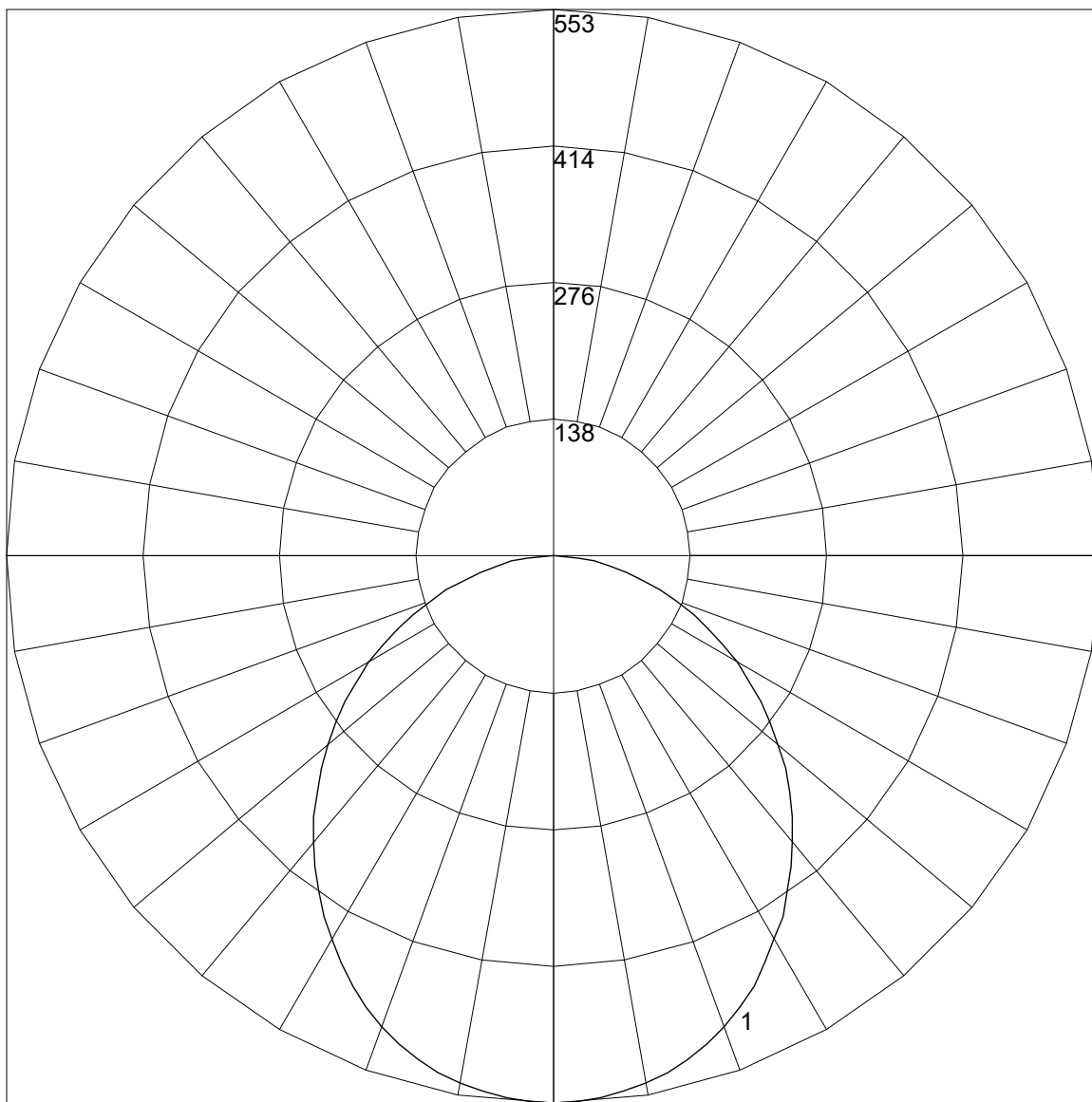
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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	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 = 552.612 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)