

# 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-3FT-V-8TW-ITL91221.904.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL91221.904 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-3ft-V-8TW

[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 & C

[\_INPUT\_ELECTRICAL]120.0 VOLTS, 26.4 WATTS

[\_INPUT\_ELECTRICAL]277.0 VOLTS, 27.0 WATTS

[\_ABSOLUTE]LUMENS]2403

[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	2402
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	91
Total Luminaire Watts	26.4
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	3613	3669	3743
55	3372	3434	3504
65	3098	3155	3212
75	2738	2800	2831
85	2343	2343	2343

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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>
<b>0.0</b>	914.674	914.674	914.674	914.674	914.674	914.674	914.674	914.674	914.674
<b>2.5</b>	913.829	913.829	913.829	913.829	913.829	913.829	913.829	913.829	914.674
<b>5.0</b>	909.602	909.602	909.602	909.602	909.602	910.447	910.447	910.447	910.447
<b>7.5</b>	901.994	902.839	902.839	902.839	902.839	903.684	903.684	903.684	903.684
<b>10.0</b>	891.849	891.849	893.540	894.386	895.231	895.231	895.231	894.386	894.386
<b>12.5</b>	877.478	878.324	880.860	882.551	884.241	885.932	884.241	884.241	883.396
<b>15.0</b>	861.417	863.107	866.489	867.334	871.561	871.561	869.025	867.334	869.025
<b>17.5</b>	841.974	844.510	847.891	852.118	855.499	855.499	852.118	849.582	852.963
<b>20.0</b>	821.685	824.221	828.448	833.520	837.747	836.056	831.829	829.293	832.675
<b>22.5</b>	798.860	801.397	806.469	811.541	816.613	814.922	808.159	808.159	809.005
<b>25.0</b>	776.036	777.727	782.799	789.562	794.634	790.407	784.489	781.953	785.335
<b>27.5</b>	748.985	750.675	757.438	764.201	767.582	765.046	759.129	756.593	758.283
<b>30.0</b>	723.624	724.469	729.541	738.840	740.531	738.840	732.923	728.696	728.696
<b>32.5</b>	694.882	696.572	703.335	709.253	714.325	711.789	704.181	700.799	699.109
<b>35.0</b>	663.604	666.985	672.903	681.356	683.892	682.201	674.593	672.903	669.521
<b>37.5</b>	634.862	636.552	644.160	650.923	655.150	652.614	644.160	639.934	638.243
<b>40.0</b>	602.738	606.120	611.192	617.954	623.027	621.336	615.418	610.346	607.810
<b>42.5</b>	572.305	574.841	581.604	586.676	592.594	590.058	581.604	577.377	574.841
<b>45.0</b>	539.336	542.718	547.790	553.708	558.780	557.089	548.635	546.945	543.563
<b>47.5</b>	508.058	510.594	516.512	521.584	526.656	524.120	516.512	510.594	509.749
<b>50.0</b>	474.244	476.780	481.852	487.770	491.997	490.306	483.543	478.471	477.626
<b>52.5</b>	442.966	444.657	449.729	455.646	458.182	455.646	449.729	443.811	443.811
<b>55.0</b>	408.306	410.843	415.915	420.141	424.368	421.832	417.605	411.688	413.379
<b>57.5</b>	377.028	378.719	383.791	388.018	389.709	388.018	382.946	377.028	376.183
<b>60.0</b>	342.369	344.059	349.132	352.513	355.894	354.204	349.977	344.905	344.059
<b>62.5</b>	311.091	312.781	317.008	320.390	321.235	320.390	315.317	310.245	309.400
<b>65.0</b>	276.431	278.122	281.503	284.885	286.575	286.575	281.503	278.122	278.122
<b>67.5</b>	245.153	246.844	249.380	252.761	254.452	252.761	248.534	244.308	243.462
<b>70.0</b>	211.339	213.029	215.566	218.102	219.792	219.792	215.566	213.875	213.029
<b>72.5</b>	181.751	181.751	185.133	187.669	187.669	185.978	183.442	180.906	180.061
<b>75.0</b>	149.628	151.319	153.009	154.700	154.700	154.700	153.855	150.473	151.319
<b>77.5</b>	121.731	121.731	123.422	124.267	125.958	124.267	122.576	120.886	120.886
<b>80.0</b>	92.989	93.834	93.834	95.525	95.525	95.525	94.680	93.834	93.834
<b>82.5</b>	67.628	67.628	68.474	68.474	69.319	68.474	68.474	67.628	67.628
<b>85.0</b>	43.113	43.113	43.113	43.958	43.113	43.958	43.958	43.958	44.804
<b>87.5</b>	21.979	21.979	21.979	21.134	21.134	21.979	21.979	22.825	22.825
<b>90.0</b>	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-3FT-V-8TW-ITL91221.904.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	330.88	N.A.	13.80
0-30	692.34	N.A.	28.80
0-40	1114.6	N.A.	46.40
0-60	1911.22	N.A.	79.60
0-80	2352.97	N.A.	97.90
0-90	2402.24	N.A.	100.00
10-90	2315.9	N.A.	96.40
20-40	783.73	N.A.	32.60
20-50	1207.8	N.A.	50.30
40-70	1076.08	N.A.	44.80
60-80	441.75	N.A.	18.40
70-80	162.29	N.A.	6.80
80-90	49.27	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	2402.24	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	86.35
10-20	244.53
20-30	361.46
30-40	422.27
40-50	424.07
50-60	372.55
60-70	279.46
70-80	162.29
80-90	49.27
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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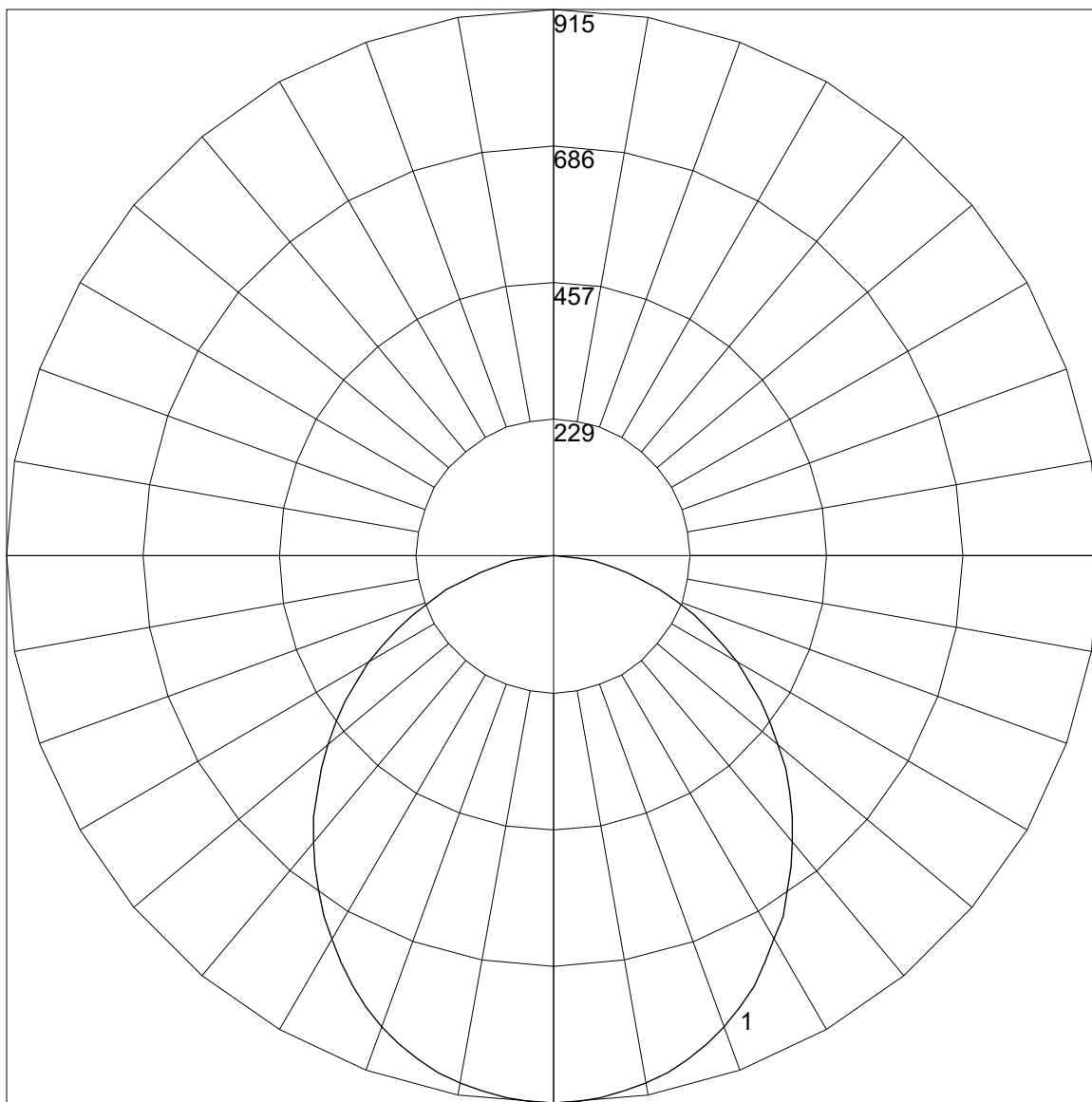
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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

POLAR GRAPH



Maximum Candela = 914.674 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)