

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-D-4FT-H-835-DL-ITL90629.003.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL90629.003 Family Correlation File
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[TESTDATE]07/09/18
[ISSUEDATE]07/31/18
[MANUFAC]FINELITE, INC.
[LUMCAT]FINELITE HP-4-D-4ft-H-835-DL
[INPUT_ELECTRICAL]120.0 VOLTS, 28.4 WATTS
[INPUT_ELECTRICAL]277.0 VOLTS, 29.3 WATTS
[ABSOLUTE LUMENS]3186
[OTHER]see www.finelite.com for source file ITL90629. 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

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3186
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	112
Total Luminaire Watts	28.4
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.26
Spacing Criterion (Diagonal)	1.38
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	0.32 ft
Luminous Height	0.08 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	6747	6258	6123
55	6239	5735	5635
65	5603	5137	5130
75	4620	4425	4563
85	3001	3768	4120

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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>
0.0	973.112	973.112	973.112	973.112	973.112
2.5	971.557	971.557	972.335	973.112	973.890
5.0	966.890	967.667	970.001	971.557	972.335
7.5	959.889	962.222	966.112	967.667	969.223
10.0	950.554	952.110	958.333	961.444	963.000
12.5	938.886	938.886	948.999	953.666	953.666
15.0	923.329	924.107	936.553	941.220	941.220
17.5	905.438	906.994	920.995	927.218	927.218
20.0	885.213	886.769	902.327	909.327	909.327
22.5	861.877	864.989	882.880	889.881	889.103
25.0	837.763	841.653	860.322	868.100	868.878
27.5	810.538	816.761	837.763	844.764	845.542
30.0	782.535	789.536	811.316	819.873	821.428
32.5	752.976	761.532	785.646	794.203	794.981
35.0	718.750	731.196	756.865	766.978	767.755
37.5	686.857	702.415	728.084	737.419	741.308
40.0	654.965	670.522	698.525	709.415	711.749
42.5	619.961	637.851	667.410	680.634	682.968
45.0	584.956	605.959	636.296	650.297	654.187
47.5	549.175	573.288	604.403	619.961	624.628
50.0	514.171	539.840	571.733	588.068	593.513
52.5	479.944	505.614	539.840	558.509	563.176
55.0	442.607	469.832	506.392	526.616	531.284
57.5	405.269	436.384	472.944	493.946	500.947
60.0	369.487	402.158	439.495	462.053	470.610
62.5	332.927	366.376	405.269	429.383	437.162
65.0	297.145	330.594	371.043	396.713	404.491
67.5	259.030	297.145	338.372	364.042	373.376
70.0	224.026	261.364	304.146	331.372	342.262
72.5	189.022	227.915	269.920	299.479	309.591
75.0	154.796	193.689	238.805	268.364	278.477
77.5	120.569	161.796	206.913	238.028	248.918
80.0	89.455	131.460	177.354	209.246	220.914
82.5	62.229	104.234	150.906	182.799	195.245
85.0	38.893	80.898	128.348	160.241	170.353
87.5	21.780	62.229	108.124	140.016	149.351
90.0	7.779	47.450	93.344	124.459	134.571
92.5	7.001	45.894	88.677	118.236	127.570
95.0	6.223	44.338	86.343	114.347	123.681
97.5	6.223	42.783	83.232	110.457	119.792
100.0	5.445	40.449	80.898	106.568	115.902
102.5	5.445	38.893	77.787	102.679	111.235
105.0	4.667	37.338	74.675	98.789	107.346
107.5	4.667	35.782	72.342	95.678	103.456
110.0	4.667	33.448	69.230	91.788	99.567
112.5	4.667	31.893	66.897	87.899	95.678
115.0	3.889	30.337	63.785	84.788	91.788
117.5	3.889	28.781	60.674	80.898	87.899
120.0	3.111	26.448	57.562	77.009	83.232
122.5	3.111	24.892	54.451	73.120	79.343
125.0	3.111	23.336	51.339	69.230	75.453
127.5	3.111	21.002	48.228	65.341	71.564
130.0	2.334	19.447	45.116	61.452	67.674
132.5	2.334	17.891	42.005	57.562	63.007

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CANDELA TABULATION - (Cont.)

135.0	2.334	16.335	38.893	53.673	59.118
137.5	1.556	14.002	35.782	49.784	55.229
140.0	1.556	12.446	31.893	45.894	51.339
142.5	1.556	10.890	28.003	42.005	47.450
145.0	1.556	9.334	24.892	38.893	42.783
147.5	1.556	7.779	21.780	35.004	38.893
150.0	0.778	7.001	18.669	31.115	35.004
152.5	0.778	5.445	16.335	27.225	30.337
155.0	0.778	3.889	13.224	23.336	26.448
157.5	0.778	3.111	10.890	18.669	22.558
160.0	0.778	2.334	8.557	14.779	18.669
162.5	0.778	1.556	7.001	11.668	14.779
165.0	0.778	0.778	4.667	8.557	11.668
167.5	0.778	0.778	3.111	5.445	7.779
170.0	0.778	0.778	1.556	3.889	5.445
172.5	0.778	0.778	0.778	1.556	2.334
175.0	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	355.42	N.A.	11.20
0-30	749.71	N.A.	23.50
0-40	1218.97	N.A.	38.30
0-60	2148.89	N.A.	67.40
0-80	2751.01	N.A.	86.30
0-90	2883.3	N.A.	90.50
10-90	2791.11	N.A.	87.60
20-40	863.55	N.A.	27.10
20-50	1348.25	N.A.	42.30
40-70	1289.07	N.A.	40.50
60-80	602.12	N.A.	18.90
70-80	242.98	N.A.	7.60
80-90	132.29	N.A.	4.20
90-110	155.50	N.A.	4.90
90-120	211.72	N.A.	6.60
90-130	252.83	N.A.	7.90
90-150	294.98	N.A.	9.30
90-180	303.10	N.A.	9.50
110-180	147.60	N.A.	4.60
0-180	3186.39	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	92.18
10-20	263.24
20-30	394.29
30-40	469.26
40-50	484.71
50-60	445.21
60-70	359.15
70-80	242.98
80-90	132.29
90-100	84.71
100-110	70.78
110-120	56.23
120-130	41.10
130-140	27.06
140-150	15.09
150-160	6.44
160-170	1.59
170-180	0.09

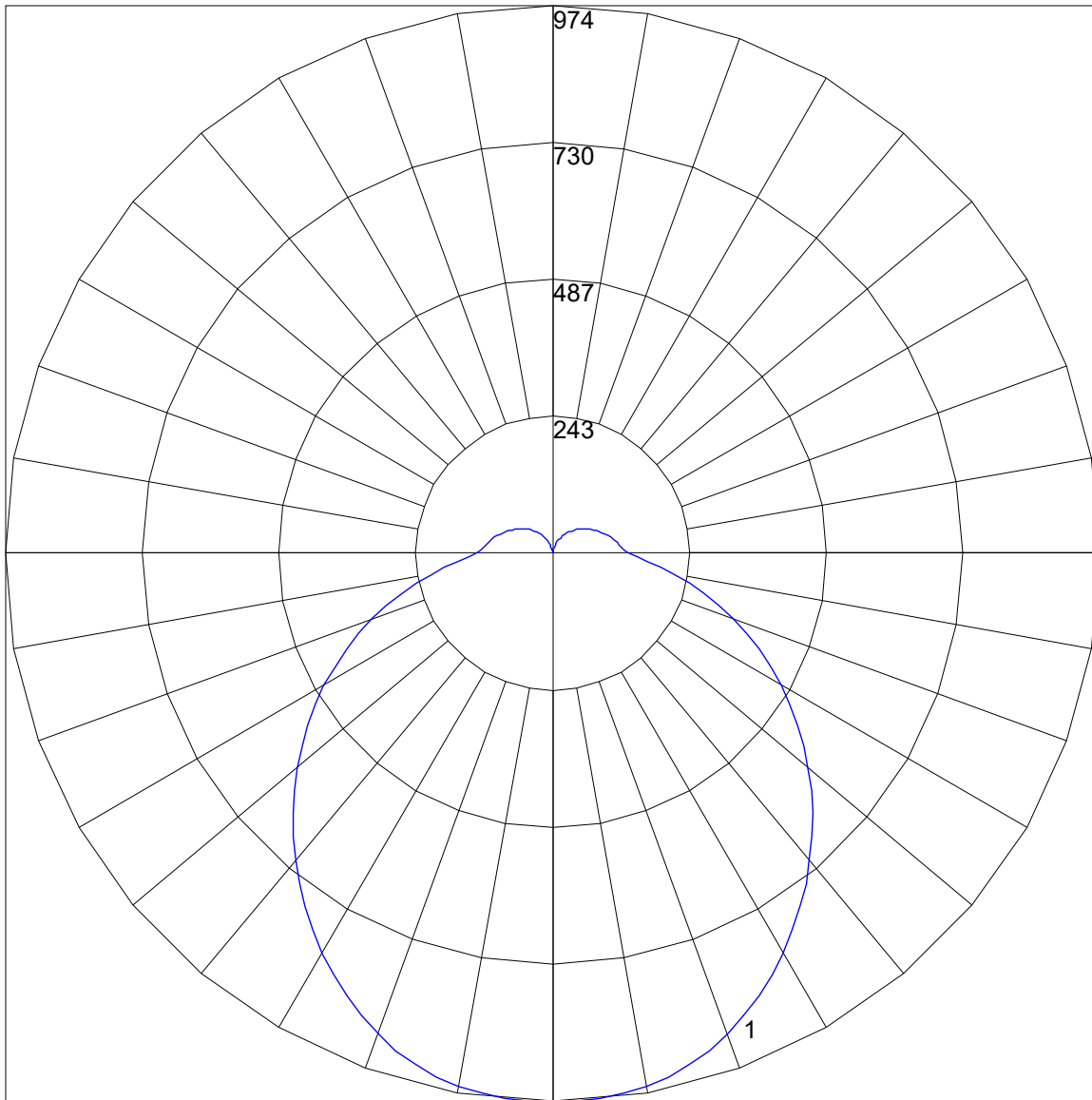
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	117	117	117	117	113	113	113	113	106	106	106	99	99	99	93	93	93	90
1	105	100	96	91	102	97	93	89	91	88	84	85	83	80	80	78	76	73
2	95	87	80	74	92	84	78	72	79	74	69	74	70	66	70	66	63	60
3	87	76	68	61	84	74	66	60	69	63	57	65	60	55	62	57	53	50
4	79	67	58	51	76	65	57	50	61	54	49	58	52	47	55	50	45	43
5	73	60	51	44	70	58	50	43	55	48	42	52	46	41	49	44	39	37
6	67	54	45	38	65	52	44	38	50	42	37	47	41	36	45	39	35	32
7	62	49	40	34	60	48	39	33	45	38	32	43	36	32	41	35	31	29
8	58	44	36	30	56	43	35	30	41	34	29	39	33	28	37	32	27	25
9	54	41	33	27	52	40	32	27	38	31	26	36	30	25	35	29	25	23
10	51	38	30	24	49	37	29	24	35	28	24	34	27	23	32	27	23	21

POLAR GRAPH



Maximum Candela = 973.89 Located At Horizontal Angle = 90, Vertical Angle = 2.5
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)