

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-ID-4FT-S-H-835-WSO-ITL89033.014-GONIOPHOTOMETRY.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89033.014-GONIOPHOTOMETRY Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]03/27/17

[ISSUEDATE]03/08/17

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HP-4-ID-4ft-S-H-835-WSO

[_INPUT_ELECTRICAL]120.0 VOLTS, 42.5 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 44.6 WATTS

[OTHER]see www.finelite.com for source file ITL89033. 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

[_ABSOLUTE]LUMENS]4620

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4620
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	109
Total Luminaire Watts	42.5
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.20
Spacing Criterion (Diagonal)	1.32
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	0.32 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	7793	7720	7628
55	7361	7248	7169
65	6834	6711	6634
75	6130	6055	6004
85	5201	4978	5126

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-4-ID-4FT-S-H-835-WSO-ITL89033.014-GONIOPHOTOMETRY.IES

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	1071.759	1071.759	1071.759	1071.759	1071.759
2.5	1070.203	1070.203	1070.203	1070.203	1070.203
5.0	1065.537	1065.537	1064.759	1065.537	1065.537
7.5	1058.537	1057.759	1057.759	1058.537	1058.537
10.0	1049.204	1046.870	1046.870	1048.426	1046.870
12.5	1036.759	1032.093	1035.204	1035.204	1032.093
15.0	1021.982	1014.204	1018.093	1018.871	1014.982
17.5	1004.093	1000.982	999.427	999.427	994.760
20.0	984.649	972.205	976.872	976.094	972.205
22.5	957.428	948.872	957.428	950.428	947.317
25.0	930.984	920.873	925.539	923.206	920.873
27.5	902.984	893.651	899.873	894.429	891.318
30.0	872.651	863.318	867.207	864.096	860.207
32.5	840.763	831.430	834.541	831.430	827.541
35.0	807.319	798.764	801.097	797.208	793.319
37.5	771.542	762.986	766.097	762.986	758.320
40.0	736.543	727.987	728.765	725.654	721.765
42.5	699.210	692.210	692.988	688.321	685.210
45.0	661.877	654.100	655.655	650.989	647.877
47.5	623.767	615.211	616.767	610.545	609.767
50.0	584.879	577.879	577.879	573.212	570.879
52.5	546.768	538.990	538.990	534.324	532.768
55.0	507.102	500.102	499.325	494.658	493.880
57.5	466.658	459.659	459.659	455.770	454.214
60.0	426.992	419.993	419.993	416.104	415.326
62.5	387.327	380.327	380.327	377.216	375.660
65.0	346.883	339.883	340.661	338.327	336.772
67.5	306.439	300.217	300.995	300.217	297.884
70.0	266.773	262.106	262.106	261.329	259.773
72.5	227.885	223.996	223.996	223.996	222.440
75.0	190.552	186.663	188.219	187.441	186.663
77.5	153.997	150.886	152.442	151.664	151.664
80.0	118.998	117.442	118.220	117.442	117.442
82.5	86.332	84.776	84.776	84.776	86.332
85.0	54.444	52.888	52.110	52.110	53.666
87.5	23.333	22.555	22.555	21.777	22.555
90.0	0.000	0.000	0.000	0.000	0.000
92.5	6.550	11.463	12.281	12.281	12.281
95.0	18.422	32.750	33.569	26.200	26.200
97.5	32.341	55.675	85.969	53.628	46.669
100.0	48.716	76.144	136.322	100.707	79.010
102.5	68.366	92.928	201.413	155.972	126.907
105.0	86.378	110.941	251.357	241.123	193.226
107.5	104.800	128.953	274.282	352.882	296.798
110.0	122.403	145.738	285.335	445.810	424.932
112.5	140.416	162.113	298.435	484.292	509.673
115.0	157.610	177.669	320.541	496.164	541.604
117.5	171.529	191.997	338.145	501.895	553.476
120.0	184.219	205.916	349.607	524.411	562.073
122.5	195.272	219.425	356.976	552.248	588.683
125.0	205.916	231.297	362.298	567.395	619.795
127.5	215.741	241.941	366.392	567.804	636.170
130.0	223.929	251.357	369.666	557.980	633.305
132.5	232.526	260.363	372.532	544.470	618.158

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-4-ID-4FT-S-H-835-WSO-ITL89033.014-GONIOPHOTOMETRY.IES****CANDELA TABULATION - (Cont.)**

135.0	240.713	268.551	374.579	529.732	598.508
137.5	248.491	275.919	375.398	513.767	575.992
140.0	256.679	282.879	375.807	497.801	552.248
142.5	264.866	289.429	375.398	481.017	528.504
145.0	273.463	295.979	373.351	465.461	505.170
147.5	280.423	301.301	370.485	449.904	482.654
150.0	287.791	306.623	367.620	434.757	462.185
152.5	295.160	311.126	364.345	420.020	443.354
155.0	301.710	315.629	361.070	406.101	424.523
157.5	307.851	319.313	356.976	393.410	407.738
160.0	313.582	322.998	353.701	381.948	392.592
162.5	318.495	325.863	349.607	371.304	379.491
165.0	323.407	328.320	345.923	361.888	368.029
167.5	327.091	330.366	342.648	353.701	358.204
170.0	329.957	332.413	340.192	347.151	349.607
172.5	332.004	333.641	338.145	341.829	343.466
175.0	334.051	334.460	336.098	337.735	338.963
177.5	334.870	334.870	335.279	335.688	335.688
180.0	335.279	335.279	335.279	335.279	335.279

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-4-ID-4FT-S-H-835-WSO-ITL89033.014-GONIOPHOTOMETRY.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	388.07	N.A.	8.40
0-30	813.91	N.A.	17.60
0-40	1313.69	N.A.	28.40
0-60	2263.67	N.A.	49.00
0-80	2799.44	N.A.	60.60
0-90	2859.11	N.A.	61.90
10-90	2757.96	N.A.	59.70
20-40	925.63	N.A.	20.00
20-50	1429.82	N.A.	30.90
40-70	1286.89	N.A.	27.90
60-80	535.77	N.A.	11.60
70-80	198.86	N.A.	4.30
80-90	59.67	N.A.	1.30
90-110	238.04	N.A.	5.20
90-120	567.04	N.A.	12.30
90-130	915.86	N.A.	19.80
90-150	1463.12	N.A.	31.70
90-180	1761.17	N.A.	38.10
110-180	1523.13	N.A.	33.00
0-180	4620.28	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	101.14
10-20	286.93
20-30	425.84
30-40	499.79
40-50	504.20
50-60	445.78
60-70	336.91
70-80	198.86
80-90	59.67
90-100	39.67
100-110	198.38
110-120	329.00
120-130	348.82
130-140	307.81
140-150	239.44
150-160	167.63
160-170	98.21
170-180	32.21

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-4-ID-4FT-S-H-835-WSO-ITL89033.014-GONIOPHOTOMETRY.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

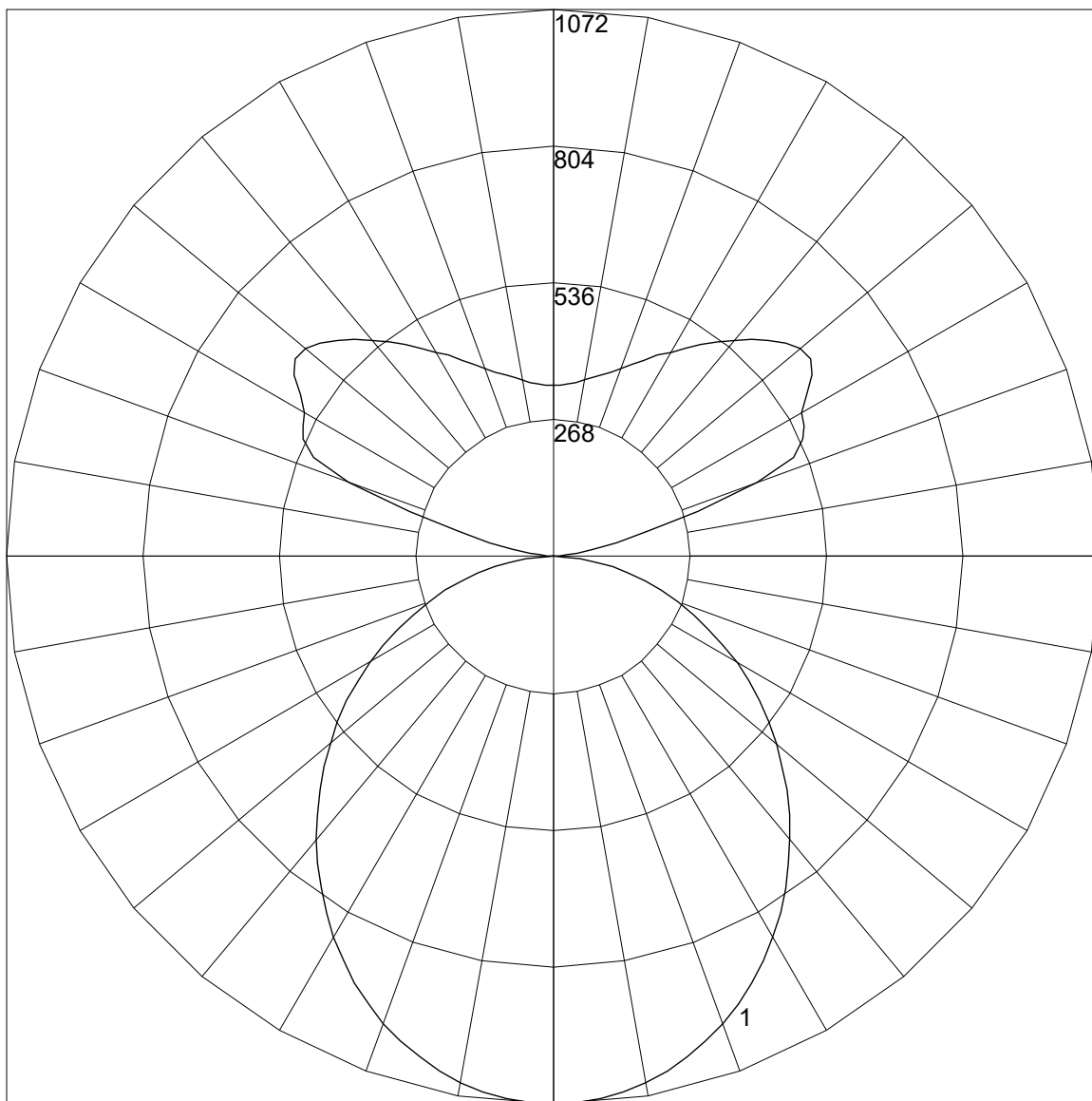
Effective Floor Cavity Reflectance 0.20

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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	62
1	100	96	92	88	94	90	86	83	79	76	74	68	67	65	59	58	56	52
2	91	84	77	72	85	78	73	68	69	65	61	60	57	54	52	49	47	43
3	83	73	66	60	78	69	62	57	61	55	51	53	49	45	46	43	40	36
4	76	65	57	51	71	61	54	48	54	48	43	47	43	39	41	37	35	31
5	70	58	50	43	65	55	47	41	48	42	38	42	38	34	37	33	30	27
6	64	52	44	38	60	49	42	36	44	37	33	38	33	30	33	30	26	24
7	60	47	39	33	56	44	37	32	39	33	29	35	30	26	31	27	24	21
8	55	43	35	29	52	40	33	28	36	30	26	32	27	23	28	24	21	19
9	52	39	31	26	48	37	30	25	33	27	23	29	25	21	26	22	19	17
10	48	36	29	24	45	34	27	23	31	25	21	27	22	19	24	20	17	15

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-4-ID-4FT-S-H-835-WSO-ITL89033.014-GONIOPHOTOMETRY.IES

POLAR GRAPH



Maximum Candela = 1071.759 Located At Horizontal Angle = 0, Vertical Angle = 0

1 - Vertical Plane Through Horizontal Angles (90 - 270)