

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-V-835-WSO-ITL89033.015-GONIOPHOTOMETRY.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89033.015-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-V-835-WSO

[_INPUT_ELECTRICAL]120.0 VOLTS, 51.0 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 53.1 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]5437

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5437
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	107
Total Luminaire Watts	51
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	10020	9926	9808
55	9464	9319	9217
65	8786	8629	8530
75	7881	7785	7720
85	6687	6400	6591

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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	1378.000	1378.000	1378.000	1378.000	1378.000
2.5	1376.000	1376.000	1376.000	1376.000	1376.000
5.0	1370.000	1370.000	1369.000	1370.000	1370.000
7.5	1361.000	1360.000	1360.000	1361.000	1361.000
10.0	1349.000	1346.000	1346.000	1348.000	1346.000
12.5	1333.000	1327.000	1331.000	1331.000	1327.000
15.0	1314.000	1304.000	1309.000	1310.000	1305.000
17.5	1291.000	1287.000	1285.000	1285.000	1279.000
20.0	1266.000	1250.000	1256.000	1255.000	1250.000
22.5	1231.000	1220.000	1231.000	1222.000	1218.000
25.0	1197.000	1184.000	1190.000	1187.000	1184.000
27.5	1161.000	1149.000	1157.000	1150.000	1146.000
30.0	1122.000	1110.000	1115.000	1111.000	1106.000
32.5	1081.000	1069.000	1073.000	1069.000	1064.000
35.0	1038.000	1027.000	1030.000	1025.000	1020.000
37.5	992.000	981.000	985.000	981.000	975.000
40.0	947.000	936.000	937.000	933.000	928.000
42.5	899.000	890.000	891.000	885.000	881.000
45.0	851.000	841.000	843.000	837.000	833.000
47.5	802.000	791.000	793.000	785.000	784.000
50.0	752.000	743.000	743.000	737.000	734.000
52.5	703.000	693.000	693.000	687.000	685.000
55.0	652.000	643.000	642.000	636.000	635.000
57.5	600.000	591.000	591.000	586.000	584.000
60.0	549.000	540.000	540.000	535.000	534.000
62.5	498.000	489.000	489.000	485.000	483.000
65.0	446.000	437.000	438.000	435.000	433.000
67.5	394.000	386.000	387.000	386.000	383.000
70.0	343.000	337.000	337.000	336.000	334.000
72.5	293.000	288.000	288.000	288.000	286.000
75.0	245.000	240.000	242.000	241.000	240.000
77.5	198.000	194.000	196.000	195.000	195.000
80.0	153.000	151.000	152.000	151.000	151.000
82.5	111.000	109.000	109.000	109.000	111.000
85.0	70.000	68.000	67.000	67.000	69.000
87.5	30.000	29.000	29.000	28.000	29.000
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-V-835-WSO-ITL89033.015-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-V-835-WSO-ITL89033.015-GONIOPHOTOMETRY.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	498.95	N.A.	9.20
0-30	1046.47	N.A.	19.20
0-40	1689.07	N.A.	31.10
0-60	2910.49	N.A.	53.50
0-80	3599.34	N.A.	66.20
0-90	3676.06	N.A.	67.60
10-90	3546.02	N.A.	65.20
20-40	1190.11	N.A.	21.90
20-50	1838.38	N.A.	33.80
40-70	1654.6	N.A.	30.40
60-80	688.85	N.A.	12.70
70-80	255.68	N.A.	4.70
80-90	76.72	N.A.	1.40
90-110	238.04	N.A.	4.40
90-120	567.04	N.A.	10.40
90-130	915.86	N.A.	16.80
90-150	1463.12	N.A.	26.90
90-180	1761.17	N.A.	32.40
110-180	1523.13	N.A.	28.00
0-180	5437.23	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	130.04
10-20	368.91
20-30	547.51
30-40	642.60
40-50	648.26
50-60	573.16
60-70	433.18
70-80	255.68
80-90	76.72
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

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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

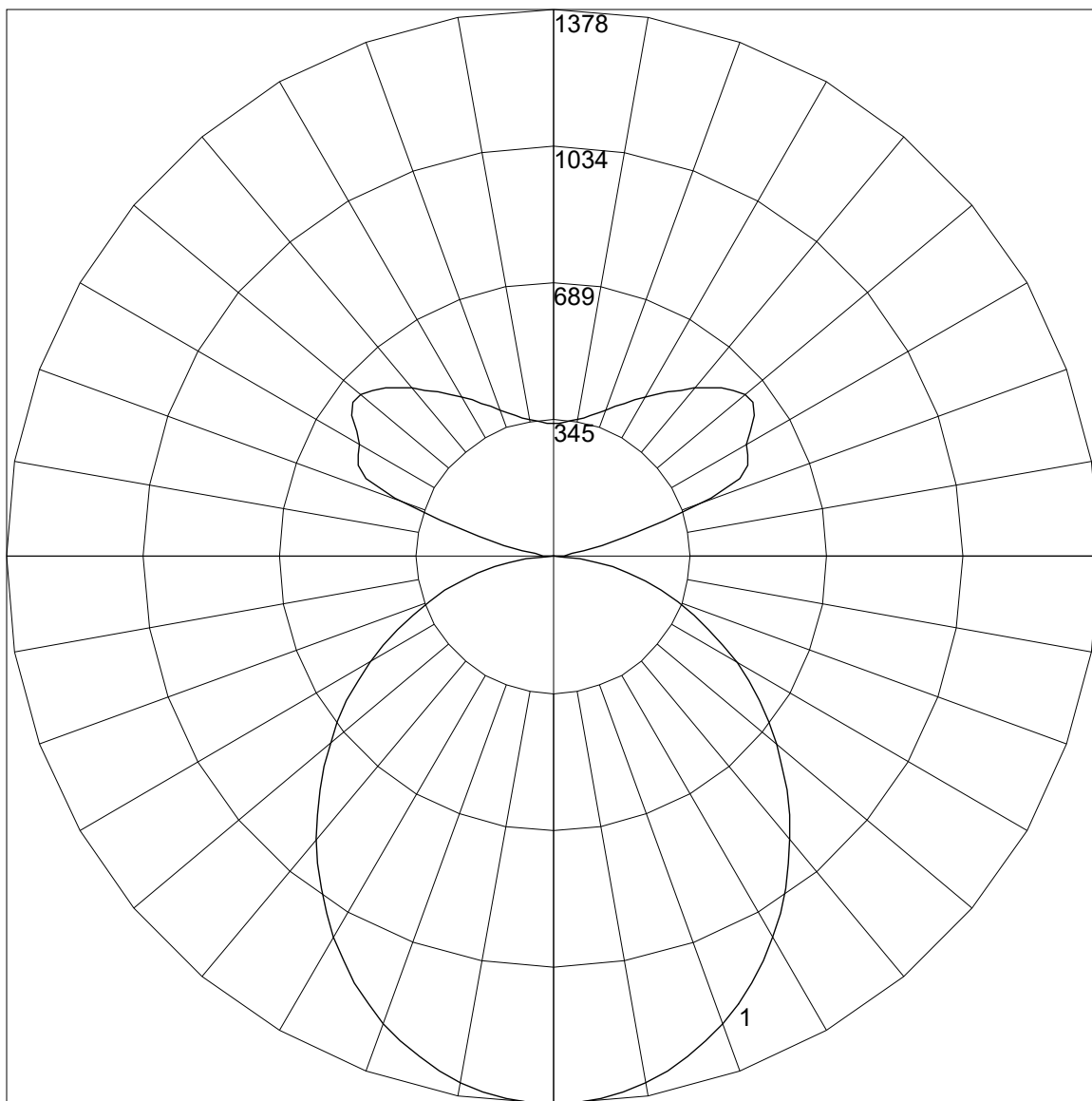
Effective Floor Cavity Reflectance 0.20

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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	68
1	102	97	93	89	96	92	88	85	82	79	76	72	70	68	64	62	61	57
2	92	85	78	73	87	80	74	69	71	67	63	63	60	57	56	53	51	47
3	84	74	67	61	79	70	63	58	63	57	53	56	52	48	49	46	43	40
4	77	66	58	51	72	62	55	49	56	50	45	50	45	41	44	40	37	34
5	71	59	50	44	66	56	48	42	50	44	39	45	40	36	40	36	32	30
6	65	53	44	38	61	50	42	37	45	39	34	40	35	31	36	32	29	26
7	60	48	39	34	57	45	38	32	41	35	30	37	32	28	33	29	25	23
8	56	43	35	30	53	41	34	29	37	31	27	34	29	25	30	26	23	21
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	28	24	21	19
10	49	37	29	24	46	35	28	23	32	26	22	29	24	20	26	22	19	17

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POLAR GRAPH



Maximum Candela = 1378 Located At Horizontal Angle = 0, Vertical Angle = 0

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