

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-B-S-835-WSO-ITL89033.010-GONIOPHOTOMETRY.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89033.010-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-B-S-835-WSO

[_INPUT_ELECTRICAL]120.0 VOLTS, 32.6 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 35.2 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]3719

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3719
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	114
Total Luminaire Watts	32.6
Ballast Factor	1.00
CIE Type	General Diffuse
Spacing Criterion (0-180)	N.A.
Spacing Criterion (90-270)	N.A.
Spacing Criterion (Diagonal)	N.A.
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	4102	4063	4015
55	3874	3815	3773
65	3597	3532	3492
75	3226	3187	3160
85	2737	2620	2698

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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	564.120	564.120	564.120	564.120	564.120
2.5	563.301	563.301	563.301	563.301	563.301
5.0	560.845	560.845	560.436	560.845	560.845
7.5	557.161	556.751	556.751	557.161	557.161
10.0	552.248	551.020	551.020	551.839	551.020
12.5	545.698	543.242	544.880	544.880	543.242
15.0	537.920	533.826	535.873	536.283	534.236
17.5	528.504	526.867	526.048	526.048	523.592
20.0	518.270	511.720	514.176	513.767	511.720
22.5	503.942	499.439	503.942	500.257	498.620
25.0	490.023	484.701	487.157	485.929	484.701
27.5	475.286	470.373	473.648	470.782	469.145
30.0	459.320	454.407	456.454	454.817	452.770
32.5	442.536	437.623	439.260	437.623	435.576
35.0	424.932	420.429	421.657	419.610	417.563
37.5	406.101	401.598	403.235	401.598	399.142
40.0	387.679	383.176	383.585	381.948	379.901
42.5	368.029	364.345	364.754	362.298	360.660
45.0	348.379	344.285	345.104	342.648	341.010
47.5	328.320	323.816	324.635	321.360	320.951
50.0	307.851	304.166	304.166	301.710	300.482
52.5	287.791	283.698	283.698	281.241	280.423
55.0	266.913	263.229	262.819	260.363	259.954
57.5	245.626	241.941	241.941	239.894	239.076
60.0	224.747	221.063	221.063	219.016	218.607
62.5	203.869	200.185	200.185	198.547	197.729
65.0	182.582	178.897	179.307	178.079	177.260
67.5	161.294	158.019	158.429	158.019	156.791
70.0	140.416	137.960	137.960	137.550	136.732
72.5	119.947	117.900	117.900	117.900	117.082
75.0	100.297	98.250	99.069	98.660	98.250
77.5	81.056	79.419	80.238	79.828	79.828
80.0	62.635	61.816	62.225	61.816	61.816
82.5	45.441	44.622	44.622	44.622	45.441
85.0	28.656	27.838	27.428	27.428	28.247
87.5	12.281	11.872	11.872	11.463	11.872
90.0	0.000	0.000	0.000	0.000	0.000
92.5	8.235	14.411	15.440	15.440	15.440
95.0	23.160	41.173	42.203	32.939	32.939
97.5	40.658	69.994	108.080	67.421	58.672
100.0	61.245	95.728	171.383	126.608	99.330
102.5	85.949	116.829	253.215	196.087	159.546
105.0	108.594	139.474	316.004	303.138	242.922
107.5	131.754	162.119	344.826	443.641	373.132
110.0	153.885	183.221	358.721	560.470	534.222
112.5	176.530	203.807	375.191	608.849	640.758
115.0	198.146	223.365	402.983	623.774	680.902
117.5	215.645	241.378	425.113	630.979	695.827
120.0	231.599	258.877	439.524	659.286	706.635
122.5	245.495	275.860	448.788	694.283	740.088
125.0	258.877	290.786	455.478	713.326	779.203
127.5	271.228	304.167	460.625	713.840	799.789
130.0	281.522	316.004	464.743	701.488	796.187
132.5	292.330	327.327	468.345	684.505	777.144

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-4-ID-4FT-B-S-835-WSO-ITL89033.010-GONIOPHOTOMETRY.IES****CANDELA TABULATION - (Cont.)**

135.0	302.623	337.620	470.918	665.976	752.440
137.5	312.402	346.884	471.948	645.905	724.134
140.0	322.695	355.634	472.462	625.833	694.283
142.5	332.988	363.868	471.948	604.731	664.433
145.0	343.796	372.103	469.375	585.174	635.097
147.5	352.546	378.793	465.772	565.617	606.790
150.0	361.810	385.484	462.169	546.574	581.057
152.5	371.074	391.145	458.052	528.046	557.382
155.0	379.308	396.807	453.935	510.548	533.708
157.5	387.028	401.439	448.788	494.593	512.606
160.0	394.233	406.071	444.671	480.182	493.564
162.5	400.409	409.673	439.524	466.801	477.094
165.0	406.585	412.761	434.892	454.964	462.684
167.5	411.217	415.335	430.775	444.671	450.332
170.0	414.820	417.908	427.687	436.436	439.524
172.5	417.393	419.452	425.113	429.745	431.804
175.0	419.967	420.481	422.540	424.599	426.143
177.5	420.996	420.996	421.511	422.025	422.025
180.0	421.511	421.511	421.511	421.511	421.511

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-4-ID-4FT-B-S-835-WSO-ITL89033.010-GONIOPHOTOMETRY.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	204.26	N.A.	5.50
0-30	428.40	N.A.	11.50
0-40	691.46	N.A.	18.60
0-60	1191.48	N.A.	32.00
0-80	1473.48	N.A.	39.60
0-90	1504.89	N.A.	40.50
10-90	1451.65	N.A.	39.00
20-40	487.20	N.A.	13.10
20-50	752.59	N.A.	20.20
40-70	677.35	N.A.	18.20
60-80	282.00	N.A.	7.60
70-80	104.67	N.A.	2.80
80-90	31.41	N.A.	0.80
90-110	299.27	N.A.	8.00
90-120	712.88	N.A.	19.20
90-130	1151.42	N.A.	31.00
90-150	1839.42	N.A.	49.50
90-180	2214.13	N.A.	59.50
110-180	1914.87	N.A.	51.50
0-180	3719.02	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	53.24
10-20	151.02
20-30	224.14
30-40	263.06
40-50	265.38
50-60	234.64
60-70	177.33
70-80	104.67
80-90	31.41
90-100	49.87
100-110	249.40
110-120	413.61
120-130	438.54
130-140	386.98
140-150	301.02
150-160	210.75
160-170	123.47
170-180	40.50

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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

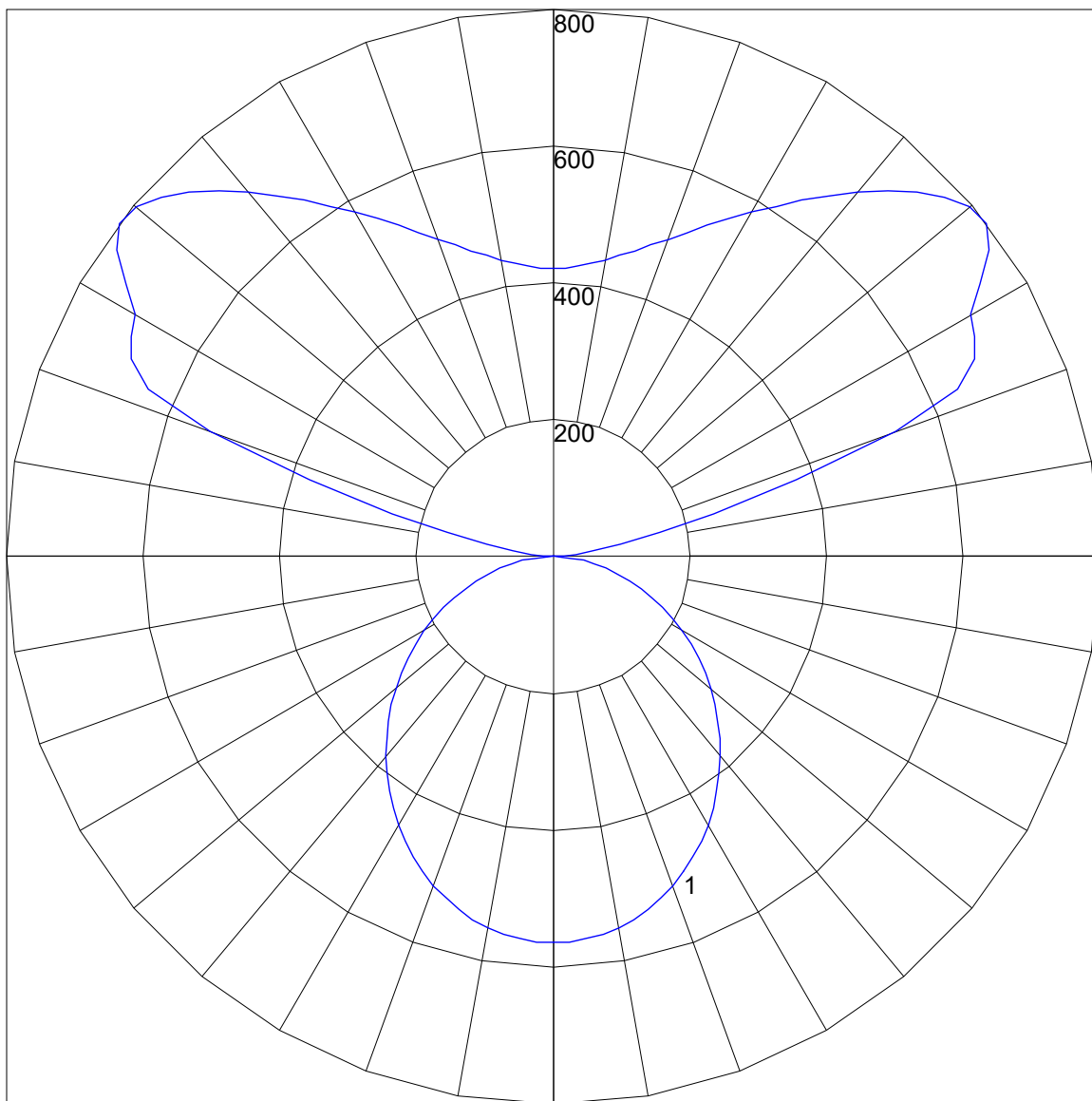
Effective Floor Cavity Reflectance 0.20

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	105	105	105	105	96	96	96	96	78	78	78	62	62	62	47	47	47	40
1	96	91	87	84	87	83	80	77	68	66	64	54	53	51	42	41	40	34
2	87	80	73	68	79	73	67	63	60	56	53	48	45	43	37	35	33	28
3	79	70	63	57	72	64	58	53	53	48	44	42	39	36	32	30	28	24
4	72	62	54	48	66	56	50	44	47	42	38	37	34	31	29	26	24	20
5	66	55	47	41	60	50	43	38	42	36	32	34	30	27	26	23	21	18
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	24	21	19	16
7	56	44	36	31	51	41	34	29	34	29	25	27	24	21	21	19	17	14
8	52	40	33	27	48	37	30	25	31	26	22	25	21	18	20	17	15	12
9	49	37	29	24	44	34	27	23	28	23	19	23	19	16	18	15	13	11
10	45	34	26	22	41	31	25	20	26	21	18	21	17	15	17	14	12	10

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POLAR GRAPH



Maximum Candela = 799.789 Located At Horizontal Angle = 90, Vertical Angle = 127.5
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)