

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-H-S-835-WSO-ITL89033.007-GONIOPHOTOMETRY.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89033.007-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-H-S-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]4851

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4851
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	114
Total Luminaire Watts	42.5
Ballast Factor	1.00
CIE Type	Semi-Indirect
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

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-4-ID-4FT-H-S-835-WSO-ITL89033.007-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	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	12.444	21.777	23.333	23.333	23.333
95.0	34.999	62.221	63.777	49.777	49.777
97.5	61.443	105.776	163.330	101.887	88.665
100.0	92.554	144.664	258.995	191.330	150.108
102.5	129.887	176.552	382.660	296.328	241.107
105.0	164.108	210.774	477.547	458.103	367.105
107.5	199.108	244.996	521.102	670.433	563.879
110.0	232.551	276.884	542.101	846.985	807.319
112.5	266.773	307.995	566.990	920.095	968.316
115.0	299.439	337.550	608.989	942.650	1028.982
117.5	325.883	364.771	642.433	953.539	1051.537
120.0	349.994	391.215	664.210	996.316	1067.870
122.5	370.993	416.882	678.210	1049.204	1118.425
125.0	391.215	439.437	688.321	1077.981	1177.535
127.5	409.882	459.659	696.099	1078.759	1208.645
130.0	425.437	477.547	702.321	1060.092	1203.201
132.5	441.770	494.658	707.765	1034.426	1174.424

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-4-ID-4FT-H-S-835-WSO-ITL89033.007-GONIOPHOTOMETRY.IES****CANDELA TABULATION - (Cont.)**

135.0	457.325	510.213	711.654	1006.427	1137.091
137.5	472.103	524.213	713.210	976.094	1094.314
140.0	487.658	537.435	713.987	945.761	1049.204
142.5	503.213	549.879	713.210	913.873	1004.093
145.0	519.546	562.323	709.321	884.318	959.761
147.5	532.768	572.434	703.876	854.763	916.984
150.0	546.768	582.545	698.432	825.985	878.096
152.5	560.768	591.101	692.210	797.986	842.318
155.0	573.212	599.656	685.988	771.542	806.541
157.5	584.879	606.656	678.210	747.431	774.653
160.0	595.767	613.656	671.988	725.654	745.876
162.5	605.100	619.100	664.210	705.432	720.987
165.0	614.433	623.767	657.211	687.543	699.210
167.5	621.433	627.655	650.989	671.988	680.543
170.0	626.878	631.544	646.322	659.544	664.210
172.5	630.767	633.878	642.433	649.433	652.544
175.0	634.655	635.433	638.544	641.655	643.989
177.5	636.211	636.211	636.989	637.766	637.766
180.0	636.989	636.989	636.989	636.989	636.989

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-4-ID-4FT-H-S-835-WSO-ITL89033.007-GONIOPHOTOMETRY.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	204.26	N.A.	4.20
0-30	428.40	N.A.	8.80
0-40	691.46	N.A.	14.30
0-60	1191.48	N.A.	24.60
0-80	1473.48	N.A.	30.40
0-90	1504.89	N.A.	31.00
10-90	1451.65	N.A.	29.90
20-40	487.20	N.A.	10.00
20-50	752.59	N.A.	15.50
40-70	677.35	N.A.	14.00
60-80	282.00	N.A.	5.80
70-80	104.67	N.A.	2.20
80-90	31.41	N.A.	0.60
90-110	452.25	N.A.	9.30
90-120	1077.31	N.A.	22.20
90-130	1740.03	N.A.	35.90
90-150	2779.74	N.A.	57.30
90-180	3346.01	N.A.	69.00
110-180	2893.75	N.A.	59.70
0-180	4850.9	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	75.36
100-110	376.89
110-120	625.05
120-130	662.72
130-140	584.81
140-150	454.90
150-160	318.48
160-170	186.58
170-180	61.20

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-4-ID-4FT-H-S-835-WSO-ITL89033.007-GONIOPHOTOMETRY.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

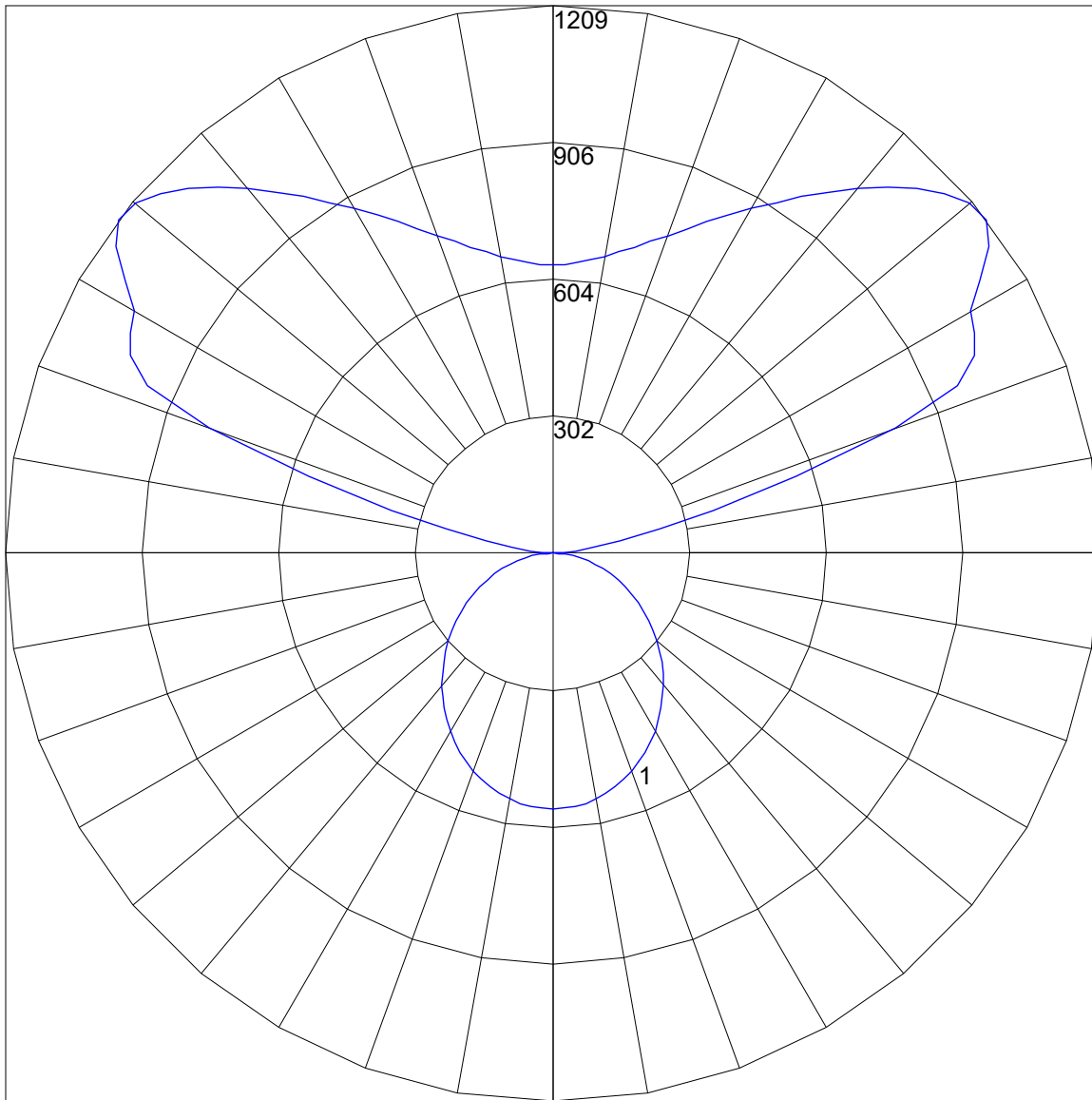
Effective Floor Cavity Reflectance 0.20

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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	31
1	93	89	85	82	84	80	77	74	64	61	59	48	47	46	34	33	32	26
2	85	78	72	67	76	70	65	61	56	52	49	42	40	38	30	28	27	22
3	77	68	61	55	69	62	56	51	49	45	41	37	34	32	26	25	23	18
4	71	60	53	47	63	54	48	43	43	39	35	33	30	27	24	22	20	16
5	65	54	46	40	58	48	42	37	39	34	30	30	26	24	21	19	17	14
6	60	48	40	34	53	43	37	32	35	30	26	27	23	21	19	17	15	12
7	55	43	35	30	49	39	32	28	31	26	23	24	21	18	17	15	13	11
8	51	39	32	26	46	35	29	24	29	24	20	22	19	16	16	14	12	9
9	47	36	28	23	42	32	26	22	26	21	18	20	17	14	15	12	11	8
10	44	32	25	21	40	30	23	19	24	19	16	19	15	13	14	11	10	8

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-4-ID-4FT-H-S-835-WSO-ITL89033.007-GONIOPHOTOMETRY.IES

POLAR GRAPH



Maximum Candela = 1208.645 Located At Horizontal Angle = 90, Vertical Angle = 127.5
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)