

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-V-S-835-WSO-ITL89033.004-GONIOPHOTOMETRY.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89033.004-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-V-S-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]5807

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5807
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	114
Total Luminaire Watts	51
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

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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	16.000	28.000	30.000	30.000	30.000
95.0	45.000	80.000	82.000	64.000	64.000
97.5	79.000	136.000	210.000	131.000	114.000
100.0	119.000	186.000	333.000	246.000	193.000
102.5	167.000	227.000	492.000	381.000	310.000
105.0	211.000	271.000	614.000	589.000	472.000
107.5	256.000	315.000	670.000	862.000	725.000
110.0	299.000	356.000	697.000	1089.000	1038.000
112.5	343.000	396.000	729.000	1183.000	1245.000
115.0	385.000	434.000	783.000	1212.000	1323.000
117.5	419.000	469.000	826.000	1226.000	1352.000
120.0	450.000	503.000	854.000	1281.000	1373.000
122.5	477.000	536.000	872.000	1349.000	1438.000
125.0	503.000	565.000	885.000	1386.000	1514.000
127.5	527.000	591.000	895.000	1387.000	1554.000
130.0	547.000	614.000	903.000	1363.000	1547.000
132.5	568.000	636.000	910.000	1330.000	1510.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-4-ID-4FT-V-S-835-WSO-ITL89033.004-GONIOPHOTOMETRY.IES****CANDELA TABULATION - (Cont.)**

135.0	588.000	656.000	915.000	1294.000	1462.000
137.5	607.000	674.000	917.000	1255.000	1407.000
140.0	627.000	691.000	918.000	1216.000	1349.000
142.5	647.000	707.000	917.000	1175.000	1291.000
145.0	668.000	723.000	912.000	1137.000	1234.000
147.5	685.000	736.000	905.000	1099.000	1179.000
150.0	703.000	749.000	898.000	1062.000	1129.000
152.5	721.000	760.000	890.000	1026.000	1083.000
155.0	737.000	771.000	882.000	992.000	1037.000
157.5	752.000	780.000	872.000	961.000	996.000
160.0	766.000	789.000	864.000	933.000	959.000
162.5	778.000	796.000	854.000	907.000	927.000
165.0	790.000	802.000	845.000	884.000	899.000
167.5	799.000	807.000	837.000	864.000	875.000
170.0	806.000	812.000	831.000	848.000	854.000
172.5	811.000	815.000	826.000	835.000	839.000
175.0	816.000	817.000	821.000	825.000	828.000
177.5	818.000	818.000	819.000	820.000	820.000
180.0	819.000	819.000	819.000	819.000	819.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-4-ID-4FT-V-S-835-WSO-ITL89033.004-GONIOPHOTOMETRY.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	204.26	N.A.	3.50
0-30	428.40	N.A.	7.40
0-40	691.46	N.A.	11.90
0-60	1191.48	N.A.	20.50
0-80	1473.48	N.A.	25.40
0-90	1504.89	N.A.	25.90
10-90	1451.65	N.A.	25.00
20-40	487.20	N.A.	8.40
20-50	752.59	N.A.	13.00
40-70	677.35	N.A.	11.70
60-80	282.00	N.A.	4.90
70-80	104.67	N.A.	1.80
80-90	31.41	N.A.	0.50
90-110	581.48	N.A.	10.00
90-120	1385.14	N.A.	23.90
90-130	2237.22	N.A.	38.50
90-150	3574.02	N.A.	61.50
90-180	4302.09	N.A.	74.10
110-180	3720.6	N.A.	64.10
0-180	5806.98	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	96.89
100-110	484.59
110-120	803.65
120-130	852.09
130-140	751.91
140-150	584.88
150-160	409.48
160-170	239.90
170-180	78.69

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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

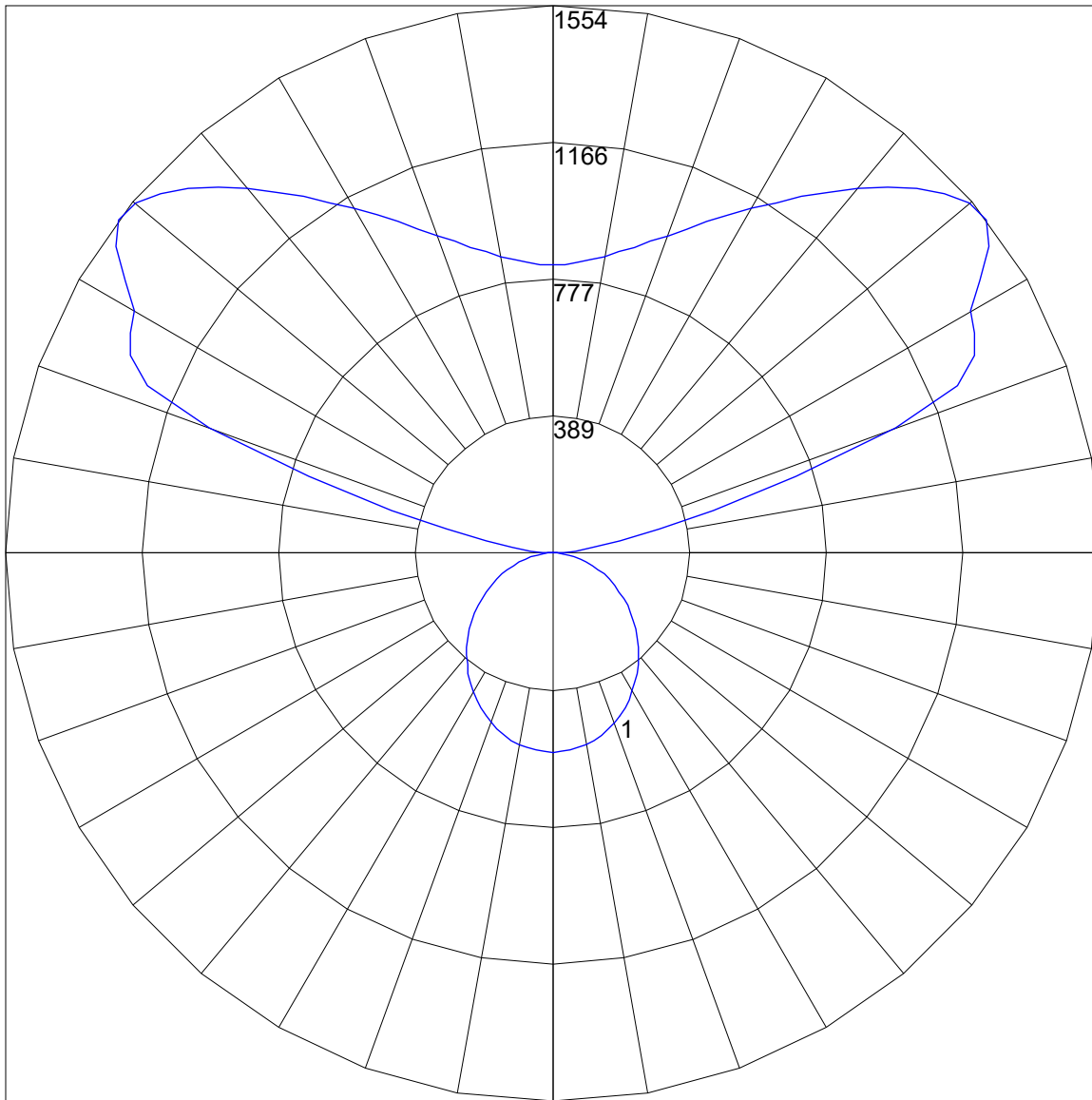
Effective Floor Cavity Reflectance 0.20

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	101	101	101	101	90	90	90	90	70	70	70	51	51	51	34	34	34	26
1	92	88	84	81	82	79	76	73	61	59	57	45	44	42	30	29	29	22
2	84	77	71	66	75	69	64	60	53	50	47	39	37	35	26	25	24	18
3	77	67	60	55	68	60	54	50	47	43	39	35	32	30	23	22	20	15
4	70	60	52	46	62	53	47	42	42	37	33	31	28	25	21	19	17	13
5	64	53	45	39	57	47	41	36	37	32	29	28	24	22	19	17	15	11
6	59	47	39	34	52	42	36	31	33	28	25	25	22	19	17	15	13	10
7	54	42	35	29	48	38	32	27	30	25	22	22	19	17	15	13	12	9
8	50	38	31	26	45	35	28	24	27	23	19	20	17	15	14	12	10	8
9	47	35	28	23	42	31	25	21	25	20	17	19	16	13	13	11	9	7
10	43	32	25	20	39	29	23	19	23	18	15	17	14	12	12	10	9	6

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POLAR GRAPH



Maximum Candela = 1554 Located At Horizontal Angle = 90, Vertical Angle = 127.5

1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)