

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-B-835-WSO-ITL89033.008-GONIOPHOTOMETRY.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89033.008-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-B-835-WSO

[_INPUT_ELECTRICAL]120.0 VOLTS, 46.3 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 48.3 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]5238

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5238
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	113
Total Luminaire Watts	46.3
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	5157	5108	5048
55	4871	4796	4744
65	4522	4441	4390
75	4056	4006	3973
85	3441	3294	3392

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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	709.208	709.208	709.208	709.208	709.208
2.5	708.179	708.179	708.179	708.179	708.179
5.0	705.091	705.091	704.576	705.091	705.091
7.5	700.459	699.944	699.944	700.459	700.459
10.0	694.283	692.739	692.739	693.768	692.739
12.5	686.048	682.960	685.019	685.019	682.960
15.0	676.270	671.123	673.697	674.211	671.638
17.5	664.433	662.374	661.345	661.345	658.256
20.0	651.566	643.331	646.419	645.905	643.331
22.5	633.553	627.891	633.553	628.921	626.862
25.0	616.054	609.363	612.451	610.907	609.363
27.5	597.526	591.350	595.467	591.865	589.806
30.0	577.454	571.278	573.851	571.793	569.220
32.5	556.353	550.177	552.236	550.177	547.604
35.0	534.222	528.561	530.105	527.532	524.958
37.5	510.548	504.886	506.945	504.886	501.798
40.0	487.388	481.726	482.241	480.182	477.609
42.5	462.684	458.052	458.567	455.478	453.420
45.0	437.980	432.833	433.863	430.775	428.716
47.5	412.761	407.100	408.129	404.012	403.497
50.0	387.028	382.396	382.396	379.308	377.764
52.5	361.810	356.663	356.663	353.575	352.546
55.0	335.562	330.930	330.415	327.327	326.812
57.5	308.799	304.167	304.167	301.594	300.564
60.0	282.551	277.919	277.919	275.346	274.831
62.5	256.303	251.671	251.671	249.613	248.583
65.0	229.541	224.909	225.423	223.879	222.850
67.5	202.778	198.661	199.175	198.661	197.117
70.0	176.530	173.442	173.442	172.927	171.898
72.5	150.797	148.224	148.224	148.224	147.194
75.0	126.093	123.520	124.549	124.034	123.520
77.5	101.904	99.845	100.874	100.360	100.360
80.0	78.744	77.714	78.229	77.714	77.714
82.5	57.128	56.099	56.099	56.099	57.128
85.0	36.027	34.997	34.483	34.483	35.512
87.5	15.440	14.925	14.925	14.411	14.925
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-B-835-WSO-ITL89033.008-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-B-835-WSO-ITL89033.008-GONIOPHOTOMETRY.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	256.79	N.A.	4.90
0-30	538.58	N.A.	10.30
0-40	869.30	N.A.	16.60
0-60	1497.93	N.A.	28.60
0-80	1852.46	N.A.	35.40
0-90	1891.94	N.A.	36.10
10-90	1825.01	N.A.	34.80
20-40	612.51	N.A.	11.70
20-50	946.15	N.A.	18.10
40-70	851.57	N.A.	16.30
60-80	354.53	N.A.	6.80
70-80	131.59	N.A.	2.50
80-90	39.48	N.A.	0.80
90-110	452.25	N.A.	8.60
90-120	1077.31	N.A.	20.60
90-130	1740.03	N.A.	33.20
90-150	2779.74	N.A.	53.10
90-180	3346.01	N.A.	63.90
110-180	2893.75	N.A.	55.20
0-180	5237.95	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	66.93
10-20	189.87
20-30	281.79
30-40	330.72
40-50	333.64
50-60	294.99
60-70	222.94
70-80	131.59
80-90	39.48
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

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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

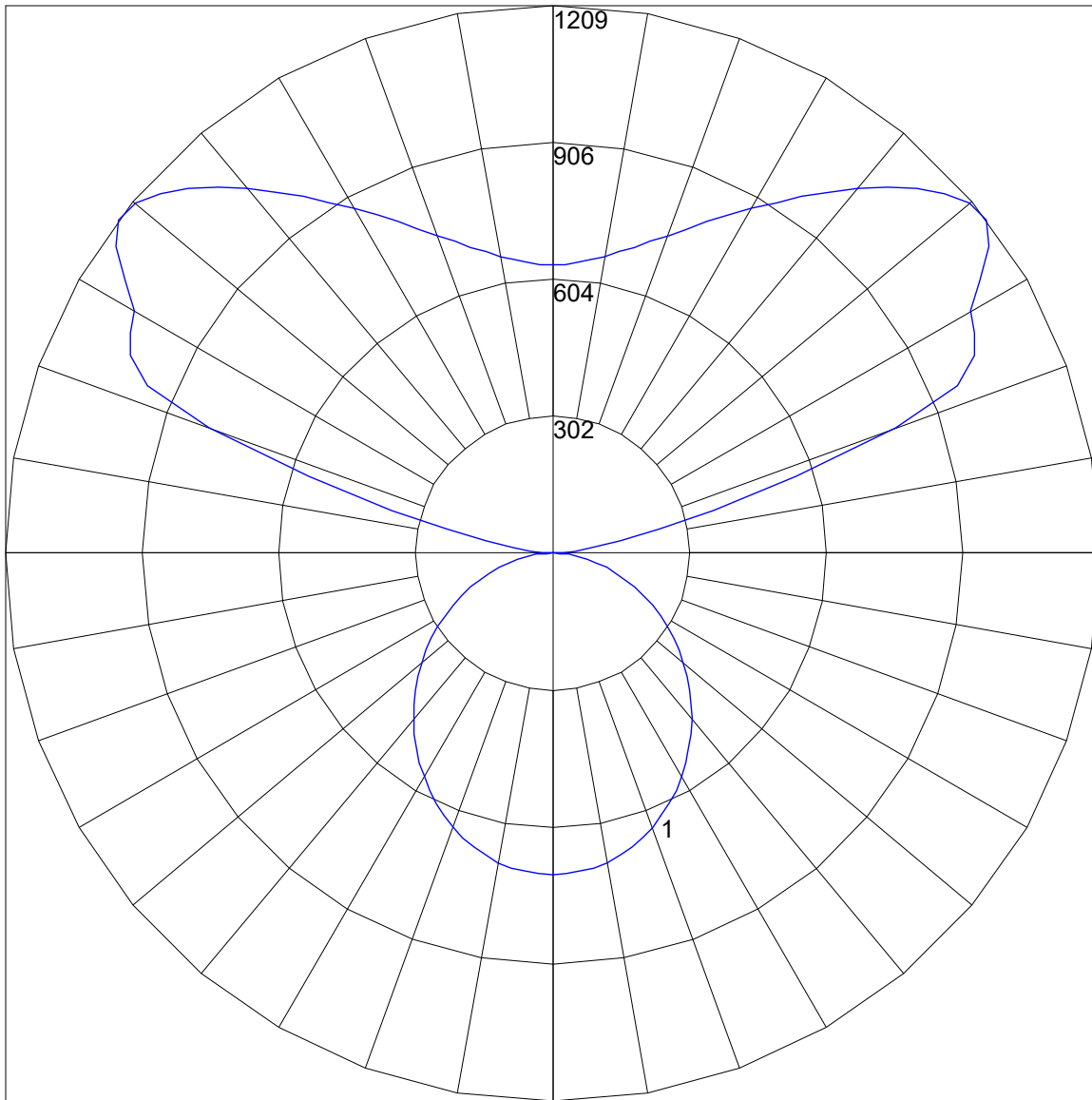
Effective Floor Cavity Reflectance 0.20

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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	43	43	43	36
1	95	90	86	83	85	82	79	76	66	64	62	52	50	49	38	37	36	30
2	86	79	73	68	78	71	66	62	58	54	51	45	43	41	33	32	31	25
3	78	69	62	56	71	63	57	52	51	46	43	40	37	34	30	28	26	21
4	72	61	53	47	65	56	49	44	45	40	36	35	32	29	26	24	22	18
5	66	54	46	40	59	49	43	37	40	35	31	32	28	25	24	21	19	16
6	60	49	41	35	54	44	37	32	36	31	27	29	25	22	22	19	17	14
7	56	44	36	31	50	40	33	28	33	28	24	26	22	19	20	17	15	12
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	15	13	11
9	48	36	29	24	43	33	27	22	27	22	19	22	18	15	17	14	12	10
10	45	33	26	21	41	30	24	20	25	20	17	20	16	14	15	13	11	9

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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.)