

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-DAO-ITL89033-ITL94331.006.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89033-ITL94331.006 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]03/08/17

[ISSUEDATE]08/27/2021

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HP-4-ID-4ft-V-S-835-WSO-DAO

[_INPUT_ELECTRICAL]120.0 VOLTS, 51.6 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 53.9 WATTS

[_ABSOLUTE]LUMENS]5892

[_CONVERT] Photometric web converted from original test data

[OTHER]see www.finelite.com for source files ITL89033 and ITL94331. 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

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5892
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	114
Total Luminaire Watts	51.6
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	4912	5071	4203
55	4219	4510	3738
65	3532	3839	3258
75	2844	3147	2818
85	2229	2425	2464

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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>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>
0.0	635.345	635.345	635.345	635.345	635.345	635.345	635.345	635.345	635.345
2.5	648.445	647.626	644.351	639.848	634.936	629.205	625.111	621.836	620.608
5.0	658.680	657.042	651.311	642.305	631.661	621.427	611.602	606.280	604.233
7.5	666.458	663.592	655.814	642.305	626.339	610.374	596.864	589.496	586.630
10.0	671.779	669.323	657.451	639.848	619.789	598.092	582.127	571.893	566.980
12.5	673.417	671.370	657.451	634.936	612.011	584.174	566.162	553.471	548.149
15.0	671.779	669.323	654.586	627.567	600.958	568.618	548.968	534.640	528.909
17.5	666.458	664.411	649.264	618.971	588.268	552.243	529.318	515.809	508.849
20.0	657.451	656.223	641.077	606.689	574.349	533.821	510.077	496.159	490.018
22.5	645.170	643.942	630.024	593.999	559.611	514.581	491.656	476.509	472.006
25.0	629.614	629.205	616.514	579.261	541.599	495.340	472.006	458.087	454.403
27.5	611.192	611.192	599.730	562.068	522.768	475.281	451.128	440.075	435.572
30.0	589.905	591.133	580.899	543.237	501.890	453.584	432.297	421.653	418.788
32.5	566.162	567.799	560.021	523.587	480.193	432.706	412.238	403.231	402.003
35.0	538.324	542.418	537.915	501.071	456.859	410.600	392.997	386.038	384.400
37.5	511.306	516.218	512.124	477.328	432.297	388.903	372.938	368.844	368.435
40.0	481.012	487.971	486.334	452.765	408.553	366.388	352.879	350.422	352.469
42.5	451.128	456.040	459.725	427.794	383.991	344.691	333.638	333.638	335.276
45.0	417.150	425.337	430.659	399.547	356.972	322.176	314.398	316.854	318.901
47.5	386.038	395.044	401.185	372.938	332.410	300.888	293.929	299.251	303.345
50.0	354.516	362.294	370.891	346.329	306.620	279.601	275.098	281.648	286.151
52.5	323.404	330.363	341.007	317.673	281.239	256.267	255.857	263.636	268.957
55.0	290.654	300.070	310.713	289.426	257.495	235.798	236.617	246.033	252.173
57.5	261.179	268.957	280.420	262.817	232.933	214.511	217.376	228.430	234.570
60.0	230.886	240.301	251.764	236.617	210.008	194.452	197.727	208.780	215.330
62.5	204.277	210.827	223.517	209.599	187.902	174.393	179.714	190.767	197.317
65.0	179.305	185.036	194.861	184.217	165.386	155.971	160.065	172.346	178.486
67.5	153.105	158.018	168.252	160.474	144.099	136.730	142.462	153.924	158.018
70.0	130.999	134.683	143.690	137.140	124.859	118.308	124.040	134.683	139.186
72.5	108.074	112.168	120.355	114.624	106.027	100.706	106.846	115.443	120.355
75.0	88.424	91.699	97.840	94.156	87.606	84.331	89.243	97.430	101.524
77.5	70.412	72.459	77.371	75.324	70.412	67.956	72.868	79.009	81.465
80.0	53.218	54.856	58.540	58.131	54.037	52.809	56.493	61.815	63.453
82.5	37.662	38.072	40.937	40.528	39.300	38.481	40.937	44.212	45.850
85.0	23.334	23.334	25.381	25.381	25.790	24.562	26.200	27.428	28.656
87.5	9.006	9.825	10.644	11.462	11.872	11.462	11.872	12.281	12.691
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	16.000	28.000	30.000	30.000	30.000	30.000	30.000	28.000	16.000
95.0	45.000	80.000	82.000	64.000	64.000	64.000	82.000	80.000	45.000
97.5	79.000	136.000	210.000	131.000	114.000	131.000	210.000	136.000	79.000
100.0	119.000	186.000	333.000	246.000	193.000	246.000	333.000	186.000	119.000
102.5	167.000	227.000	492.000	381.000	310.000	381.000	492.000	227.000	167.000
105.0	211.000	271.000	614.000	589.000	472.000	589.000	614.000	271.000	211.000
107.5	256.000	315.000	670.000	862.000	725.000	862.000	670.000	315.000	256.000
110.0	299.000	356.000	697.000	1089.000	1038.000	1089.000	697.000	356.000	299.000
112.5	343.000	396.000	729.000	1183.000	1245.000	1183.000	729.000	396.000	343.000
115.0	385.000	434.000	783.000	1212.000	1323.000	1212.000	783.000	434.000	385.000
117.5	419.000	469.000	826.000	1226.000	1352.000	1226.000	826.000	469.000	419.000
120.0	450.000	503.000	854.000	1281.000	1373.000	1281.000	854.000	503.000	450.000
122.5	477.000	536.000	872.000	1349.000	1438.000	1349.000	872.000	536.000	477.000
125.0	503.000	565.000	885.000	1386.000	1514.000	1386.000	885.000	565.000	503.000
127.5	527.000	591.000	895.000	1387.000	1554.000	1387.000	895.000	591.000	527.000
130.0	547.000	614.000	903.000	1363.000	1547.000	1363.000	903.000	614.000	547.000
132.5	568.000	636.000	910.000	1330.000	1510.000	1330.000	910.000	636.000	568.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-4-ID-4FT-V-S-835-WSO-DAO-ITL89033-ITL94331.006.IES****CANDELA TABULATION - (Cont.)**

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

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-4-ID-4FT-V-S-835-WSO-DAO-ITL89033-ITL94331.006.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	229.11	N.A.	3.90
0-30	478.38	N.A.	8.10
0-40	766.61	N.A.	13.00
0-60	1289.85	N.A.	21.90
0-80	1561.03	N.A.	26.50
0-90	1589.8	N.A.	27.00
10-90	1529.89	N.A.	26.00
20-40	537.49	N.A.	9.10
20-50	820.57	N.A.	13.90
40-70	696.43	N.A.	11.80
60-80	271.18	N.A.	4.60
70-80	97.99	N.A.	1.70
80-90	28.77	N.A.	0.50
90-110	581.48	N.A.	9.90
90-120	1385.14	N.A.	23.50
90-130	2237.22	N.A.	38.00
90-150	3574.02	N.A.	60.70
90-180	4302.09	N.A.	73.00
110-180	3720.6	N.A.	63.10
0-180	5891.89	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	59.91
10-20	169.21
20-30	249.27
30-40	288.23
40-50	283.08
50-60	240.16
60-70	173.19
70-80	97.99
80-90	28.77
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

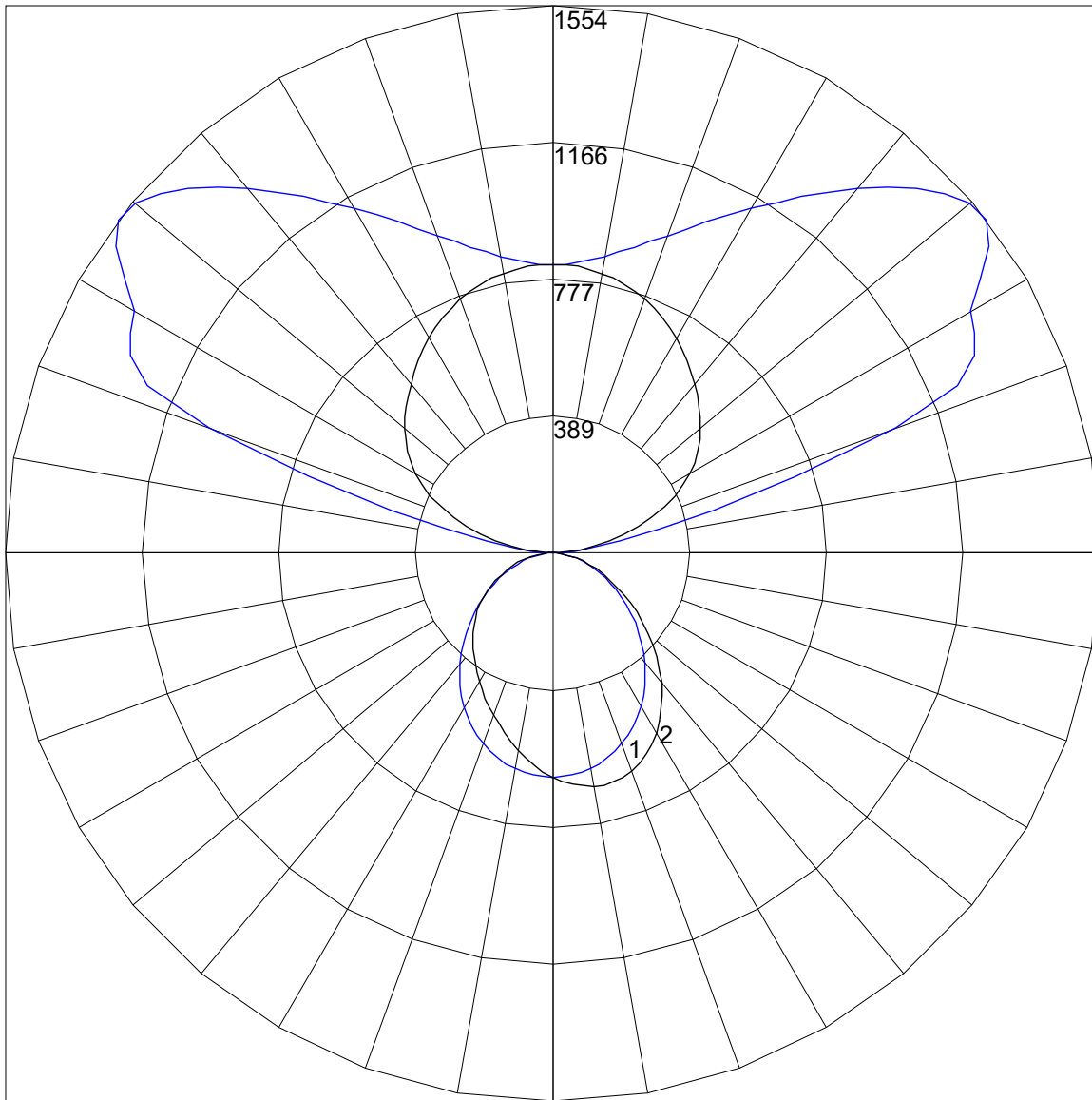
Effective Floor Cavity Reflectance 0.20

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	102	102	102	102	91	91	91	91	71	71	71	52	52	52	35	35	35	27
1	93	89	85	81	83	79	76	73	62	60	58	46	44	43	31	30	30	23
2	84	77	71	67	75	69	64	60	54	51	48	40	38	36	27	26	25	19
3	77	68	61	55	68	61	55	50	48	44	40	36	33	31	24	23	21	16
4	70	60	52	47	63	54	47	42	42	38	34	32	29	26	22	20	18	14
5	64	53	46	40	57	48	41	36	38	33	29	28	25	23	19	18	16	12
6	59	48	40	34	53	43	36	31	34	29	26	26	22	20	18	16	14	11
7	55	43	35	30	49	39	32	27	31	26	22	23	20	17	16	14	12	10
8	51	39	31	26	45	35	29	24	28	23	20	21	18	15	15	13	11	9
9	47	35	28	23	42	32	26	21	25	21	18	19	16	14	14	12	10	8
10	44	32	25	21	39	29	23	19	23	19	16	18	15	12	13	11	9	7

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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.)

2 - Vertical Plane Through Horizontal Angles (0 - 180)