

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-H-835-WSO-DAO-ITL89033-ITL94331.011.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89033-ITL94331.011 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-B-H-835-WSO-DAO

[_INPUT_ELECTRICAL]120.0 VOLTS, 46.9 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 48.9 WATTS

[_ABSOLUTELUMENS]5235

[_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	5235
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	112
Total Luminaire Watts	46.9
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	9332	9634	7986
55	8016	8569	7101
65	6711	7294	6190
75	5404	5980	5354
85	4235	4607	4681

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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	1207.155	1207.155	1207.155	1207.155	1207.155	1207.155	1207.155	1207.155	1207.155
2.5	1232.045	1230.489	1224.267	1215.711	1206.377	1195.488	1187.710	1181.487	1179.154
5.0	1251.490	1248.379	1237.489	1220.378	1200.155	1180.709	1162.042	1151.931	1148.042
7.5	1266.268	1260.823	1246.045	1220.378	1190.043	1159.709	1134.041	1120.041	1114.596
10.0	1276.380	1271.713	1249.157	1215.711	1177.598	1136.374	1106.040	1086.595	1077.261
12.5	1279.491	1275.602	1249.157	1206.377	1162.820	1109.929	1075.706	1051.594	1041.482
15.0	1276.380	1271.713	1243.712	1192.377	1141.819	1080.373	1043.038	1015.815	1004.925
17.5	1266.268	1262.379	1233.600	1176.043	1117.707	1049.260	1005.703	980.036	966.813
20.0	1249.157	1246.823	1218.044	1152.708	1091.262	1014.259	969.146	942.701	931.034
22.5	1225.822	1223.489	1197.043	1128.597	1063.261	977.702	934.145	905.366	896.810
25.0	1196.266	1195.488	1171.376	1100.595	1029.037	941.145	896.810	870.365	863.365
27.5	1161.264	1161.264	1139.486	1067.928	993.258	903.033	857.142	836.141	827.586
30.0	1120.819	1123.152	1103.707	1032.149	953.590	861.809	821.363	801.140	795.696
32.5	1075.706	1078.817	1064.039	994.814	912.366	822.141	783.251	766.139	763.806
35.0	1022.815	1030.593	1022.037	952.034	868.032	780.139	746.694	733.471	730.360
37.5	971.480	980.813	973.035	906.922	821.363	738.916	708.581	700.803	700.025
40.0	913.922	927.145	924.034	860.253	776.250	696.136	670.469	665.802	669.691
42.5	857.142	866.476	873.476	812.807	729.582	654.913	633.912	633.912	637.023
45.0	792.584	808.140	818.252	759.139	678.247	612.133	597.355	602.022	605.911
47.5	733.471	750.583	762.250	708.581	631.578	571.687	558.465	568.576	576.354
50.0	673.580	688.358	704.692	658.024	582.577	531.241	522.686	535.131	543.686
52.5	614.467	627.689	647.912	603.577	534.353	486.907	486.129	500.907	511.019
55.0	552.242	570.132	590.355	549.909	489.240	448.016	449.572	467.461	479.128
57.5	496.240	511.019	532.797	499.351	442.572	407.570	413.015	434.016	445.683
60.0	438.683	456.572	478.351	449.572	399.014	369.458	375.680	396.681	409.126
62.5	388.125	400.570	424.682	398.237	357.013	331.345	341.457	362.458	374.902
65.0	340.679	351.568	370.236	350.013	314.234	296.344	304.122	327.456	339.123
67.5	290.899	300.233	319.678	304.900	273.788	259.787	270.676	292.455	300.233
70.0	248.898	255.898	273.010	260.565	237.231	224.786	235.675	255.898	264.454
72.5	205.341	213.119	228.675	217.786	201.452	191.340	203.007	219.341	228.675
75.0	168.006	174.228	185.896	178.895	166.451	160.228	169.562	185.118	192.896
77.5	133.783	137.672	147.005	143.116	133.783	129.116	138.450	150.117	154.783
80.0	101.115	104.226	111.226	110.448	102.670	100.337	107.337	117.449	120.560
82.5	71.558	72.336	77.781	77.003	74.669	73.114	77.781	84.003	87.114
85.0	44.335	44.335	48.224	48.224	49.002	46.668	49.780	52.113	54.446
87.5	17.112	18.667	20.223	21.779	22.556	21.779	22.556	23.334	24.112
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	8.234	14.410	15.439	15.439	15.439	15.439	15.439	14.410	8.234
95.0	23.159	41.172	42.201	32.937	32.937	32.937	42.201	41.172	23.159
97.5	40.657	69.992	108.075	67.418	58.669	67.418	108.075	69.992	40.657
100.0	61.243	95.724	171.376	126.602	99.326	126.602	171.376	95.724	61.243
102.5	85.945	116.824	253.205	196.079	159.540	196.079	253.205	116.824	85.945
105.0	108.590	139.469	315.991	303.125	242.912	303.125	315.991	139.469	108.590
107.5	131.749	162.113	344.812	443.623	373.117	443.623	344.812	162.113	131.749
110.0	153.879	183.213	358.707	560.447	534.201	560.447	358.707	183.213	153.879
112.5	176.523	203.799	375.175	608.824	640.732	608.824	375.175	203.799	176.523
115.0	198.138	223.356	402.966	623.749	680.874	623.749	402.966	223.356	198.138
117.5	215.636	241.368	425.096	630.954	695.799	630.954	425.096	241.368	215.636
120.0	231.590	258.866	439.506	659.259	706.606	659.259	439.506	258.866	231.590
122.5	245.485	275.849	448.770	694.255	740.058	694.255	448.770	275.849	245.485
125.0	258.866	290.774	455.460	713.297	779.171	713.297	455.460	290.774	258.866
127.5	271.217	304.155	460.606	713.811	799.757	713.811	460.606	304.155	271.217
130.0	281.510	315.991	464.724	701.460	796.154	701.460	464.724	315.991	281.510
132.5	292.318	327.314	468.326	684.476	777.112	684.476	468.326	327.314	292.318

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135.0	302.611	337.606	470.899	665.949	752.409	665.949	470.899	337.606	302.611
137.5	312.389	346.870	471.929	645.878	724.104	645.878	471.929	346.870	312.389
140.0	322.682	355.619	472.443	625.807	694.255	625.807	472.443	355.619	322.682
142.5	332.975	363.853	471.929	604.707	664.405	604.707	471.929	363.853	332.975
145.0	343.782	372.088	469.355	585.150	635.071	585.150	469.355	372.088	343.782
147.5	352.531	378.778	465.753	565.594	606.765	565.594	465.753	378.778	352.531
150.0	361.795	385.468	462.150	546.552	581.033	546.552	462.150	385.468	361.795
152.5	371.058	391.129	458.033	528.025	557.359	528.025	458.033	391.129	371.058
155.0	379.293	396.791	453.916	510.527	533.686	510.527	453.916	396.791	379.293
157.5	387.012	401.422	448.770	494.573	512.585	494.573	448.770	401.422	387.012
160.0	394.217	406.054	444.652	480.163	493.544	480.163	444.652	406.054	394.217
162.5	400.393	409.657	439.506	466.782	477.075	466.782	439.506	409.657	400.393
165.0	406.569	412.745	434.874	454.945	462.665	454.945	434.874	412.745	406.569
167.5	411.201	415.318	430.757	444.652	450.313	444.652	430.757	415.318	411.201
170.0	414.803	417.891	427.669	436.418	439.506	436.418	427.669	417.891	414.803
172.5	417.376	419.435	425.096	429.728	431.786	429.728	425.096	419.435	417.376
175.0	419.950	420.464	422.523	424.581	426.125	424.581	422.523	420.464	419.950
177.5	420.979	420.979	421.493	422.008	422.008	422.008	421.493	420.979	420.979
180.0	421.493	421.493	421.493	421.493	421.493	421.493	421.493	421.493	421.493

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-4-ID-4FT-B-H-835-WSO-DAO-ITL89033-ITL94331.011.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	435.32	N.A.	8.30
0-30	908.93	N.A.	17.40
0-40	1456.55	N.A.	27.80
0-60	2450.71	N.A.	46.80
0-80	2965.95	N.A.	56.70
0-90	3020.62	N.A.	57.70
10-90	2906.8	N.A.	55.50
20-40	1021.24	N.A.	19.50
20-50	1559.09	N.A.	29.80
40-70	1323.22	N.A.	25.30
60-80	515.24	N.A.	9.80
70-80	186.18	N.A.	3.60
80-90	54.67	N.A.	1.00
90-110	299.26	N.A.	5.70
90-120	712.85	N.A.	13.60
90-130	1151.37	N.A.	22.00
90-150	1839.35	N.A.	35.10
90-180	2214.04	N.A.	42.30
110-180	1914.79	N.A.	36.60
0-180	5234.66	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	113.82
10-20	321.50
20-30	473.61
30-40	547.63
40-50	537.85
50-60	456.31
60-70	329.06
70-80	186.18
80-90	54.67
90-100	49.87
100-110	249.39
110-120	413.60
120-130	438.52
130-140	386.97
140-150	301.01
150-160	210.74
160-170	123.46
170-180	40.50

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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

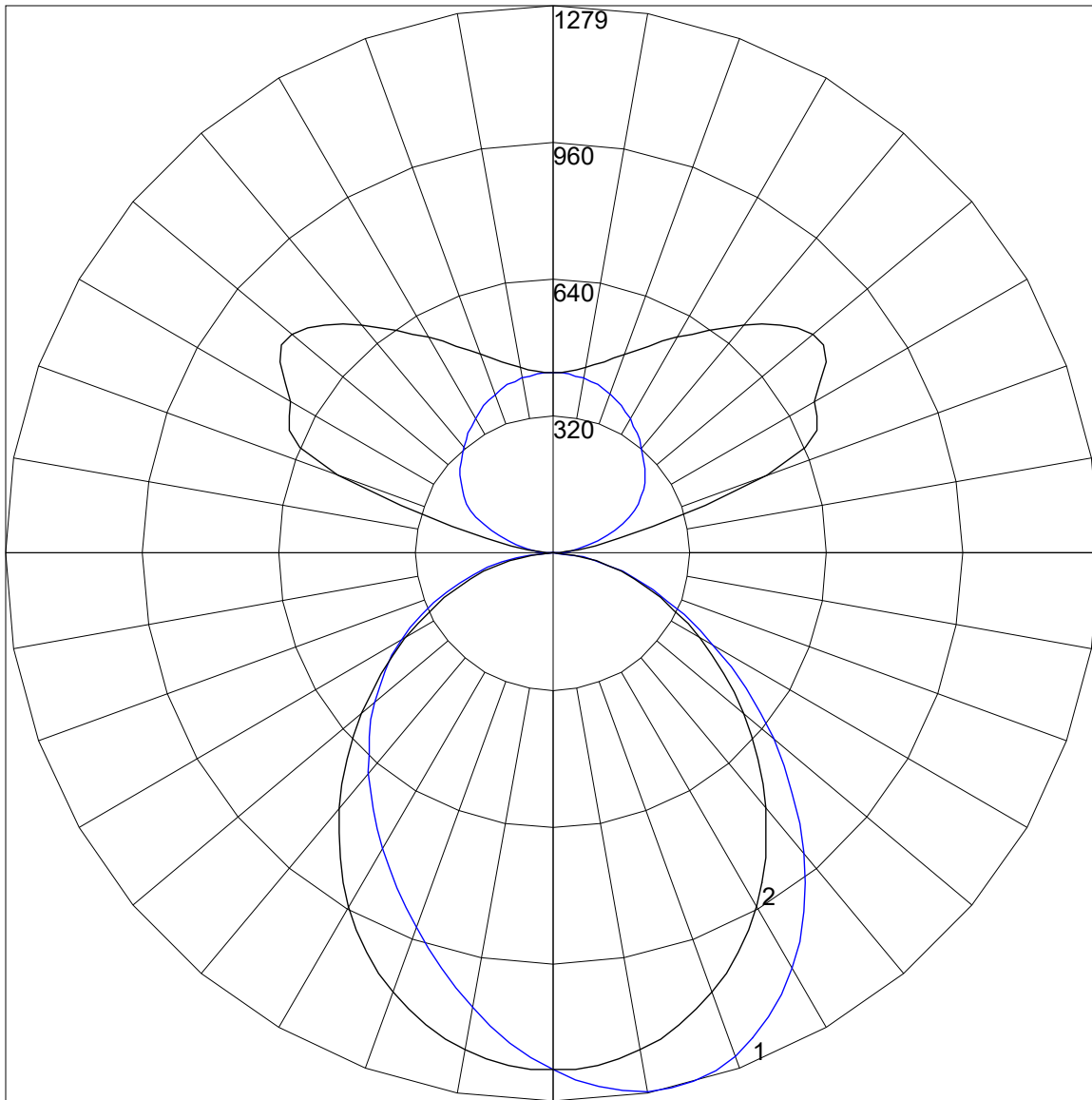
Effective Floor Cavity Reflectance 0.20

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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58
1	100	95	91	88	93	89	85	82	77	74	72	66	64	63	56	55	54	49
2	91	83	77	72	84	78	72	68	68	63	60	58	55	52	49	47	45	41
3	83	73	66	60	77	69	62	57	60	55	51	51	48	44	44	41	39	35
4	76	65	57	51	70	61	54	48	53	48	43	46	42	38	39	36	33	30
5	70	58	50	44	65	54	47	42	48	42	37	41	37	33	35	32	29	26
6	64	52	44	38	60	49	42	36	43	37	33	37	33	29	32	29	26	23
7	60	47	39	33	55	44	37	32	39	33	29	34	29	26	29	26	23	20
8	55	43	35	30	51	40	33	28	36	30	26	31	27	23	27	23	21	18
9	52	39	32	27	48	37	30	25	33	27	23	29	24	21	25	21	19	17
10	48	36	29	24	45	34	27	23	30	25	21	27	22	19	23	20	17	15

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POLAR GRAPH



Maximum Candela = 1279.491 Located At Horizontal Angle = 0, Vertical Angle = 12.5

1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)

2 - Vertical Plane Through Horizontal Angles (90 - 270)