

# 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-H-835-WSO-DAO-ITL89033-ITL94331.001.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89033-ITL94331.001 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-H-H-835-WSO-DAO

[\_INPUT\_ELECTRICAL]120.0 VOLTS, 56.8 WATTS

[\_INPUT\_ELECTRICAL]277.0 VOLTS, 58.4 WATTS

[\_ABSOLUTE]LUMENS]6367

[\_CONVERT] Photometric web converted from original test data

[OTHER]see [www.finelite.com](http://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](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	6367
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	112
Total Luminaire Watts	56.8
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

**IES INDOOR REPORT**

**PHOTOMETRIC FILENAME : HP-4-ID-4FT-H-H-835-WSO-DAO-ITL89033-ITL94331.001.IES**

**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	12.444	21.778	23.333	23.333	23.333	23.333	23.333	21.778	12.444
95.0	35.000	62.222	63.778	49.778	49.778	49.778	63.778	62.222	35.000
97.5	61.444	105.778	163.333	101.889	88.667	101.889	163.333	105.778	61.444
100.0	92.556	144.667	259.000	191.333	150.111	191.333	259.000	144.667	92.556
102.5	129.889	176.556	382.667	296.333	241.111	296.333	382.667	176.556	129.889
105.0	164.111	210.778	477.556	458.111	367.111	458.111	477.556	210.778	164.111
107.5	199.111	245.000	521.111	670.445	563.889	670.445	521.111	245.000	199.111
110.0	232.556	276.889	542.111	847.000	807.334	847.000	542.111	276.889	232.556
112.5	266.778	308.000	567.000	920.111	968.334	920.111	567.000	308.000	266.778
115.0	299.445	337.556	609.000	942.667	1029.000	942.667	609.000	337.556	299.445
117.5	325.889	364.778	642.445	953.556	1051.556	953.556	642.445	364.778	325.889
120.0	350.000	391.222	664.222	996.334	1067.889	996.334	664.222	391.222	350.000
122.5	371.000	416.889	678.222	1049.223	1118.445	1049.223	678.222	416.889	371.000
125.0	391.222	439.445	688.334	1078.000	1177.556	1078.000	688.334	439.445	391.222
127.5	409.889	459.667	696.111	1078.778	1208.667	1078.778	696.111	459.667	409.889
130.0	425.445	477.556	702.334	1060.111	1203.223	1060.111	702.334	477.556	425.445
132.5	441.778	494.667	707.778	1034.445	1174.445	1034.445	707.778	494.667	441.778

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-4-ID-4FT-H-H-835-WSO-DAO-ITL89033-ITL94331.001.IES****CANDELA TABULATION - (Cont.)**

135.0	457.334	510.222	711.667	1006.445	1137.111	1006.445	711.667	510.222	457.334
137.5	472.111	524.222	713.222	976.111	1094.334	976.111	713.222	524.222	472.111
140.0	487.667	537.445	714.000	945.778	1049.223	945.778	714.000	537.445	487.667
142.5	503.222	549.889	713.222	913.889	1004.111	913.889	713.222	549.889	503.222
145.0	519.556	562.333	709.334	884.334	959.778	884.334	709.334	562.333	519.556
147.5	532.778	572.445	703.889	854.778	917.000	854.778	703.889	572.445	532.778
150.0	546.778	582.556	698.445	826.000	878.111	826.000	698.445	582.556	546.778
152.5	560.778	591.111	692.222	798.000	842.334	798.000	692.222	591.111	560.778
155.0	573.222	599.667	686.000	771.556	806.556	771.556	686.000	599.667	573.222
157.5	584.889	606.667	678.222	747.445	774.667	747.445	678.222	606.667	584.889
160.0	595.778	613.667	672.000	725.667	745.889	725.667	672.000	613.667	595.778
162.5	605.111	619.111	664.222	705.445	721.000	705.445	664.222	619.111	605.111
165.0	614.445	623.778	657.222	687.556	699.222	687.556	657.222	623.778	614.445
167.5	621.445	627.667	651.000	672.000	680.556	672.000	651.000	627.667	621.445
170.0	626.889	631.556	646.333	659.556	664.222	659.556	646.333	631.556	626.889
172.5	630.778	633.889	642.445	649.445	652.556	649.445	642.445	633.889	630.778
175.0	634.667	635.445	638.556	641.667	644.000	641.667	638.556	635.445	634.667
177.5	636.222	636.222	637.000	637.778	637.778	637.778	637.000	636.222	636.222
180.0	637.000	637.000	637.000	637.000	637.000	637.000	637.000	637.000	637.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-4-ID-4FT-H-H-835-WSO-DAO-ITL89033-ITL94331.001.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	435.32	N.A.	6.80
0-30	908.93	N.A.	14.30
0-40	1456.55	N.A.	22.90
0-60	2450.71	N.A.	38.50
0-80	2965.95	N.A.	46.60
0-90	3020.62	N.A.	47.40
10-90	2906.8	N.A.	45.70
20-40	1021.24	N.A.	16.00
20-50	1559.09	N.A.	24.50
40-70	1323.22	N.A.	20.80
60-80	515.24	N.A.	8.10
70-80	186.18	N.A.	2.90
80-90	54.67	N.A.	0.90
90-110	452.26	N.A.	7.10
90-120	1077.33	N.A.	16.90
90-130	1740.06	N.A.	27.30
90-150	2779.79	N.A.	43.70
90-180	3346.07	N.A.	52.60
110-180	2893.8	N.A.	45.50
0-180	6366.68	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	75.36
100-110	376.90
110-120	625.06
120-130	662.73
130-140	584.82
140-150	454.91
150-160	318.49
160-170	186.59
170-180	61.20

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-4-ID-4FT-H-H-835-WSO-DAO-ITL89033-ITL94331.001.IES

## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

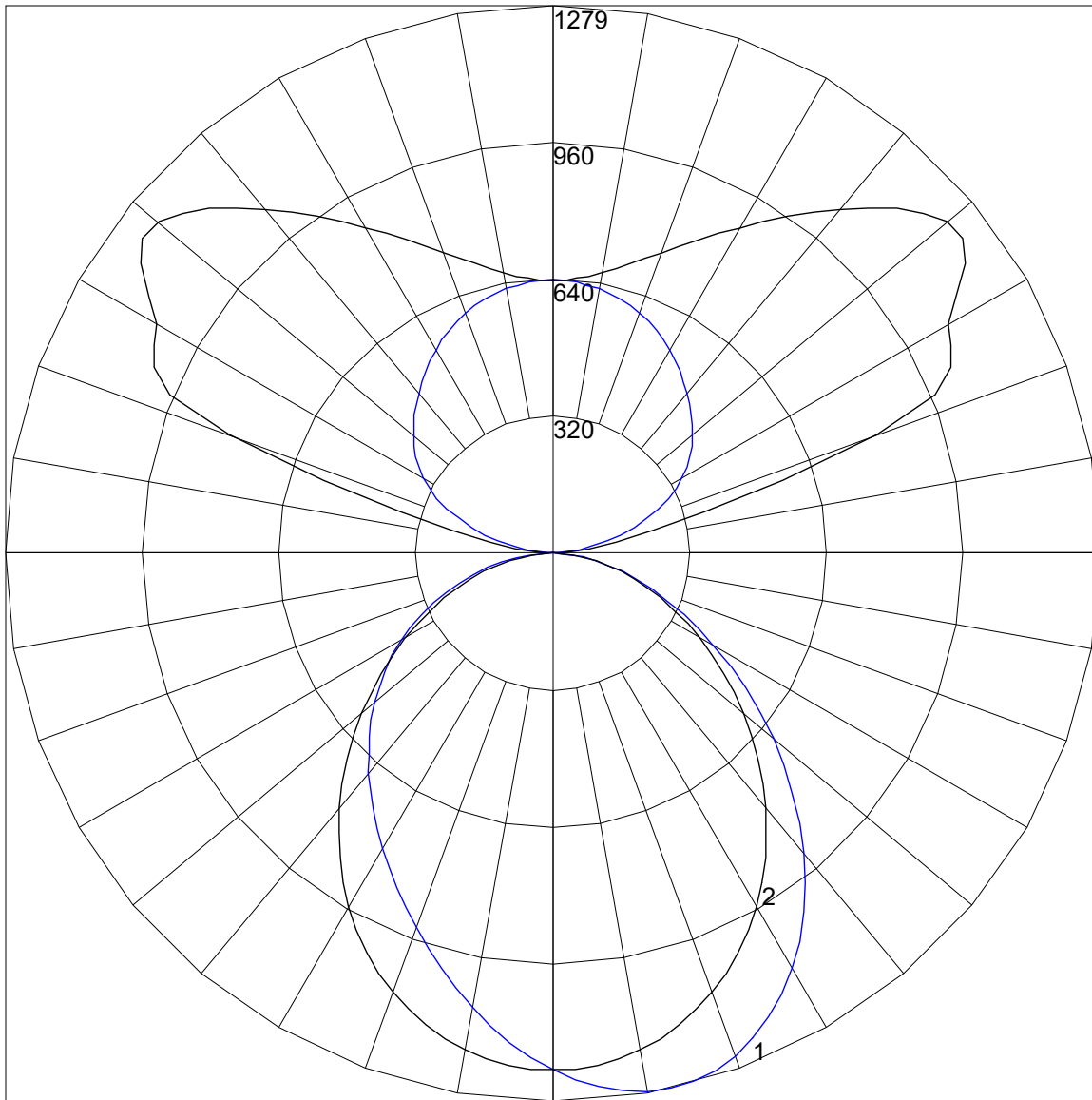
Effective Floor Cavity Reflectance 0.20

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	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	47
1	97	93	89	86	89	86	82	79	72	70	67	59	58	56	48	47	46	40
2	89	81	75	70	81	75	70	65	63	59	56	52	49	47	42	40	38	34
3	81	71	64	58	74	66	60	55	56	51	47	46	43	40	37	35	33	29
4	74	63	55	49	68	59	52	46	50	44	40	41	37	34	33	31	28	25
5	68	56	48	42	62	52	45	40	44	39	35	37	33	30	30	27	25	21
6	63	51	43	37	57	47	40	35	40	34	30	33	29	26	27	24	22	19
7	58	46	38	32	53	42	35	30	36	31	27	30	26	23	25	22	19	17
8	54	42	34	29	49	39	32	27	33	28	24	28	24	21	23	20	17	15
9	50	38	30	25	46	35	29	24	30	25	21	26	21	18	21	18	16	14
10	47	35	28	23	43	32	26	22	28	23	19	24	20	17	20	17	14	12

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-4-ID-4FT-H-H-835-WSO-DAO-ITL89033-ITL94331.001.IES

## 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)