

# 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-P-D-4FT-H-H-835-ASY-DAO-ITL89988-ITL94331.601.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89988-ITL94331.601 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[ISSUEDATE]01/11/21

[\_REVISED]08/25/2021

[MANUFAC]FINELITE, INC.

[LUMCAT]HP-4-P-D-4ft-H-H-835-ASY-DAO

[\_INPUT\_ELECTRICAL]120.0 VOLTS, 56.8 WATTS

[\_INPUT\_ELECTRICAL]277.0 VOLTS, 58.4 WATTS

[OTHER]see [www.finelite.com](http://www.finelite.com) for source files ITL89988 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)

[\_ABSOLUTE LUMENS]6471

[\_CONVERT] Photometric web converted from original test data

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	6467
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	114
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)	0.33 ft
Luminous Width (90-270)	4.00 ft
Luminous Height	0.00 ft

### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	9184	9481	7859
55	7889	8433	6989
65	6605	7178	6092
75	5319	5885	5269
85	4168	4533	4607

**IES INDOOR REPORT**

**PHOTOMETRIC FILENAME : HP-4-P-D-4FT-H-H-835-ASY-DAO-ITL89988-ITL94331.601.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	52.108	52.886	45.108	47.441	17.110	45.108	70.773	84.772	90.216
95.0	110.437	112.771	113.548	115.882	44.331	71.551	109.660	129.881	136.102
97.5	174.211	185.877	211.542	175.767	72.329	94.883	144.657	174.211	182.766
100.0	269.872	285.426	309.536	233.318	101.105	120.548	173.433	209.987	222.430
102.5	364.754	382.642	404.418	290.092	131.436	146.213	204.542	237.207	249.651
105.0	452.638	487.635	503.190	346.089	160.990	170.322	228.652	267.538	276.093
107.5	557.631	617.516	606.628	397.419	192.099	192.099	251.984	293.981	301.759
110.0	702.288	761.396	705.399	440.972	223.208	213.875	276.093	321.202	328.979
112.5	878.055	903.720	802.615	479.080	255.095	234.874	300.203	347.644	356.977
115.0	1038.267	1042.933	881.943	514.078	286.982	256.650	321.979	373.309	383.420
117.5	1188.368	1165.036	937.940	544.410	318.868	279.204	342.200	398.974	409.863
120.0	1308.916	1256.031	972.160	573.186	353.866	303.314	360.088	421.529	435.528
122.5	1396.022	1315.916	991.603	602.739	389.642	326.646	377.198	444.083	460.415
125.0	1447.352	1343.914	1001.714	630.737	423.862	349.200	391.975	461.193	482.191
127.5	1465.239	1347.803	1007.936	657.958	458.860	372.532	405.974	475.192	501.635
130.0	1457.462	1336.137	1012.602	686.734	493.080	395.086	419.195	483.747	513.301
132.5	1433.353	1316.694	1018.046	716.288	528.077	417.640	433.195	489.969	517.189

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-4-P-D-4FT-H-H-835-ASY-DAO-ITL89988-ITL94331.601.IES****CANDELA TABULATION - (Cont.)**

<b>135.0</b>	1402.244	1294.139	1025.045	745.841	563.075	444.083	446.416	494.635	518.745
<b>137.5</b>	1370.357	1272.363	1033.601	776.950	598.851	472.859	460.415	499.301	518.745
<b>140.0</b>	1338.470	1252.142	1042.933	808.059	635.404	503.968	473.636	503.190	518.745
<b>142.5</b>	1310.472	1237.365	1053.044	839.168	671.179	536.632	486.858	507.079	518.745
<b>145.0</b>	1288.695	1224.922	1063.154	869.500	706.955	568.519	500.857	512.523	519.522
<b>147.5</b>	1270.030	1215.589	1075.598	899.054	742.730	601.184	517.967	520.300	523.411
<b>150.0</b>	1255.253	1208.589	1088.819	927.052	778.506	636.182	539.743	528.855	529.633
<b>152.5</b>	1242.032	1202.367	1102.041	952.717	811.170	673.513	570.852	539.743	536.632
<b>155.0</b>	1229.588	1198.479	1113.707	975.271	843.057	713.177	608.961	556.076	549.076
<b>157.5</b>	1222.588	1196.923	1122.262	995.492	873.389	753.618	650.181	584.074	569.297
<b>160.0</b>	1217.144	1195.368	1127.706	1012.602	901.387	792.505	692.178	627.626	606.628
<b>162.5</b>	1207.034	1189.924	1128.483	1025.823	927.052	830.614	735.731	676.623	656.402
<b>165.0</b>	1195.368	1178.258	1124.595	1035.934	948.828	865.611	784.727	725.620	707.732
<b>167.5</b>	1175.925	1161.926	1114.484	1041.378	967.494	897.498	831.391	778.506	760.618
<b>170.0</b>	1151.037	1140.149	1101.263	1043.711	983.826	927.052	875.722	837.613	823.614
<b>172.5</b>	1119.928	1112.929	1082.597	1041.378	995.492	952.717	916.164	889.721	880.388
<b>175.0</b>	1089.597	1082.597	1062.377	1035.934	1005.602	976.049	952.717	936.385	930.163
<b>177.5</b>	1050.711	1047.600	1037.489	1025.045	1010.269	995.492	983.826	975.271	972.160
<b>180.0</b>	1012.602	1012.602	1012.602	1012.602	1012.602	1012.602	1012.602	1012.602	1012.602

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-4-P-D-4FT-H-H-835-ASY-DAO-ITL89988-ITL94331.601.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	435.32	N.A.	6.70
0-30	908.93	N.A.	14.10
0-40	1456.55	N.A.	22.50
0-60	2450.71	N.A.	37.90
0-80	2965.95	N.A.	45.90
0-90	3020.62	N.A.	46.70
10-90	2906.8	N.A.	44.90
20-40	1021.24	N.A.	15.80
20-50	1559.09	N.A.	24.10
40-70	1323.22	N.A.	20.50
60-80	515.24	N.A.	8.00
70-80	186.18	N.A.	2.90
80-90	54.67	N.A.	0.80
90-110	449.14	N.A.	6.90
90-120	987.57	N.A.	15.30
90-130	1606.87	N.A.	24.80
90-150	2683.75	N.A.	41.50
90-180	3446.13	N.A.	53.30
110-180	2996.99	N.A.	46.30
0-180	6466.74	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	113.36
100-110	335.78
110-120	538.43
120-130	619.30
130-140	578.16
140-150	498.72
150-160	398.72
160-170	268.16
170-180	95.50

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-4-P-D-4FT-H-H-835-ASY-DAO-ITL89988-ITL94331.601.IES

## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

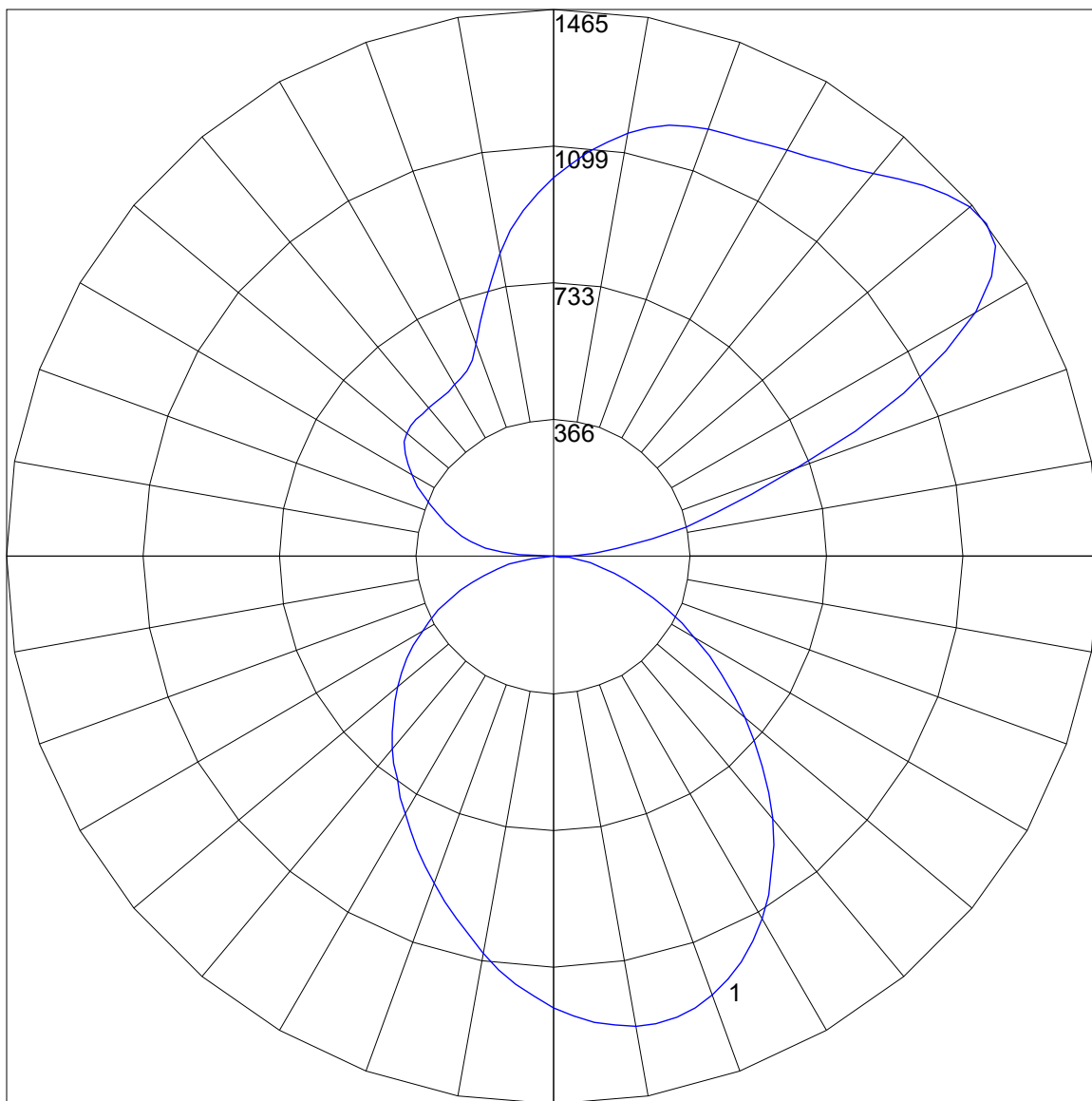
Effective Floor Cavity Reflectance 0.20

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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	53	53	53	47
1	97	93	89	86	89	85	82	79	72	69	67	59	57	56	47	46	45	39
2	88	81	75	70	81	75	70	65	63	59	56	52	49	47	41	40	38	33
3	81	71	64	58	74	66	60	54	55	51	47	46	42	39	37	34	32	28
4	74	63	55	49	68	58	52	46	49	44	40	41	37	34	33	30	28	24
5	68	56	48	42	62	52	45	40	44	39	35	37	33	29	30	27	24	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	41	34	28	49	38	32	27	33	27	24	28	23	20	23	20	17	15
9	50	38	30	25	46	35	29	24	30	25	21	25	21	18	21	18	16	13
10	47	35	28	23	43	32	26	22	28	23	19	23	19	17	19	16	14	12

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## POLAR GRAPH



Maximum Candela = 1465.239 Located At Horizontal Angle = 0, Vertical Angle = 127.5

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