

# 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-F-DAO-ITL85125-ITL94331.008.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL85125-ITL94331.008 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/06/15

[ISSUEDATE]08/26/2021

[MANUFAC]FINELITE, INC.

[LUMCAT]HP-4-ID-4ft-H-B-835-F-DAO

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 46.9 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 48.9 WATTS

[ABSOLUTE LUMENS]5250

[CONVERT] Photometric web converted from original test data

[OTHER]see [www.finelite.com](http://www.finelite.com) for source files ITL85125 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	5250
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	112
Total Luminaire Watts	46.9
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	6175	6375	5284
55	5304	5670	4699
65	4441	4826	4096
75	3576	3957	3543
85	2802	3048	3097

**IES INDOOR REPORT**

**PHOTOMETRIC FILENAME : HP-4-ID-4FT-H-B-835-F-DAO-ITL85125-ITL94331.008.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	798.777	798.777	798.777	798.777	798.777	798.777	798.777	798.777	798.777
2.5	815.247	814.217	810.100	804.439	798.262	791.057	785.910	781.793	780.249
5.0	828.114	826.055	818.849	807.527	794.145	781.278	768.926	762.235	759.662
7.5	837.893	834.290	824.511	807.527	787.454	767.382	750.398	741.133	737.531
10.0	844.583	841.495	826.570	804.439	779.219	751.942	731.869	719.002	712.826
12.5	846.642	844.069	826.570	798.262	769.441	734.443	711.797	695.842	689.151
15.0	844.583	841.495	822.967	788.998	755.544	714.885	690.181	672.167	664.961
17.5	837.893	835.319	816.276	778.190	739.589	694.298	665.476	648.492	639.742
20.0	826.570	825.026	805.983	762.750	722.090	671.138	641.286	623.787	616.067
22.5	811.129	809.585	792.086	746.795	703.562	646.948	618.126	599.083	593.421
25.0	791.572	791.057	775.102	728.267	680.916	622.758	593.421	575.922	571.290
27.5	768.411	768.411	754.000	706.650	657.241	597.539	567.173	553.277	547.615
30.0	741.648	743.192	730.325	682.975	630.993	570.261	543.498	530.116	526.514
32.5	711.797	713.856	704.077	658.271	603.715	544.013	518.279	506.956	505.412
35.0	676.799	681.946	676.284	629.963	574.378	516.220	494.089	485.339	483.281
37.5	642.830	649.006	643.860	600.112	543.498	488.942	468.870	463.723	463.208
40.0	604.744	613.494	611.435	569.232	513.647	460.635	443.651	440.563	443.136
42.5	567.173	573.349	577.981	537.836	482.766	433.357	419.461	419.461	421.520
45.0	524.455	534.748	541.439	502.324	448.797	405.050	395.271	398.359	400.933
47.5	485.339	496.662	504.382	468.870	417.917	378.287	369.537	376.228	381.375
50.0	445.709	455.488	466.296	435.416	385.492	351.524	345.862	354.097	359.759
52.5	406.594	415.344	428.725	399.389	353.582	322.187	321.672	331.451	338.142
55.0	365.420	377.258	390.639	363.876	323.731	296.453	297.483	309.320	317.040
57.5	328.363	338.142	352.553	330.422	292.851	269.690	273.293	287.189	294.909
60.0	290.277	302.115	316.526	297.483	264.029	244.471	248.589	262.485	270.720
62.5	256.823	265.058	281.013	263.514	236.236	219.252	225.943	239.839	248.074
65.0	225.428	232.634	244.986	231.604	207.929	196.092	201.238	216.679	224.399
67.5	192.489	198.665	211.532	201.753	181.166	171.902	179.107	193.518	198.665
70.0	164.696	169.328	180.651	172.416	156.976	148.741	155.947	169.328	174.990
72.5	135.874	141.021	151.315	144.109	133.301	126.610	134.330	145.139	151.315
75.0	111.170	115.287	123.008	118.375	110.141	106.023	112.199	122.493	127.640
77.5	88.524	91.098	97.274	94.700	88.524	85.436	91.612	99.332	102.421
80.0	66.908	68.967	73.599	73.084	67.937	66.393	71.025	77.716	79.775
82.5	47.350	47.865	51.468	50.953	49.409	48.380	51.468	55.585	57.644
85.0	29.337	29.337	31.910	31.910	32.425	30.881	32.939	34.483	36.027
87.5	11.323	12.352	13.382	14.411	14.926	14.411	14.926	15.440	15.955
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	23.333	24.888	26.444	29.555	30.332	29.555	26.444	24.888	23.333
95.0	55.220	55.998	59.109	62.998	63.776	62.998	59.109	55.998	55.220
97.5	89.441	90.219	94.108	97.997	97.219	97.997	94.108	90.219	89.441
100.0	124.440	125.996	129.884	133.773	132.995	133.773	129.884	125.996	124.440
102.5	160.217	163.328	167.216	171.105	171.105	171.105	167.216	163.328	160.217
105.0	199.882	202.993	206.882	209.993	209.215	209.993	206.882	202.993	199.882
107.5	241.881	244.214	246.547	249.658	249.658	249.658	246.547	244.214	241.881
110.0	286.990	286.990	289.323	292.434	291.657	292.434	289.323	286.990	286.990
112.5	332.100	330.544	333.655	338.322	334.433	338.322	333.655	330.544	332.100
115.0	377.209	375.654	377.209	381.098	377.987	381.098	377.209	375.654	377.209
117.5	422.319	423.097	423.874	424.652	422.319	424.652	423.874	423.097	422.319
120.0	468.206	469.762	468.984	468.206	466.651	468.206	468.984	469.762	468.206
122.5	514.871	516.427	516.427	514.093	511.760	514.093	516.427	516.427	514.871
125.0	562.314	564.647	564.647	559.981	557.647	559.981	564.647	564.647	562.314
127.5	609.757	611.312	612.868	605.868	601.202	605.868	612.868	611.312	609.757
130.0	655.644	656.422	657.977	653.311	649.422	653.311	657.977	656.422	655.644
132.5	702.309	701.531	702.309	699.198	694.532	699.198	702.309	701.531	702.309

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-4-ID-4FT-H-B-835-F-DAO-ITL85125-ITL94331.008.IES****CANDELA TABULATION - (Cont.)**

<b>135.0</b>	748.974	745.085	747.419	745.085	739.641	745.085	747.419	745.085	748.974
<b>137.5</b>	794.084	787.862	791.750	788.640	783.195	788.640	791.750	787.862	794.084
<b>140.0</b>	839.193	832.194	836.860	833.749	827.527	833.749	836.860	832.194	839.193
<b>142.5</b>	880.414	874.970	880.414	875.748	870.303	875.748	880.414	874.970	880.414
<b>145.0</b>	924.746	915.413	921.635	916.968	911.524	916.968	921.635	915.413	924.746
<b>147.5</b>	964.411	955.078	961.300	956.634	951.189	956.634	961.300	955.078	964.411
<b>150.0</b>	1003.299	993.188	999.410	994.744	990.077	994.744	999.410	993.188	1003.299
<b>152.5</b>	1037.520	1029.742	1035.964	1030.520	1026.631	1030.520	1035.964	1029.742	1037.520
<b>155.0</b>	1070.963	1063.186	1068.630	1063.963	1060.075	1063.963	1068.630	1063.186	1070.963
<b>157.5</b>	1103.629	1095.851	1100.518	1095.851	1092.740	1095.851	1100.518	1095.851	1103.629
<b>160.0</b>	1131.628	1125.406	1130.072	1125.406	1123.072	1125.406	1130.072	1125.406	1131.628
<b>162.5</b>	1158.071	1151.072	1156.516	1151.849	1150.294	1151.849	1156.516	1151.072	1158.071
<b>165.0</b>	1179.848	1174.404	1177.515	1175.182	1174.404	1175.182	1177.515	1174.404	1179.848
<b>167.5</b>	1199.292	1194.625	1196.959	1195.403	1195.403	1195.403	1196.959	1194.625	1199.292
<b>170.0</b>	1215.625	1212.514	1214.069	1212.514	1212.514	1212.514	1214.069	1212.514	1215.625
<b>172.5</b>	1227.291	1227.291	1226.513	1226.513	1226.513	1226.513	1226.513	1227.291	1227.291
<b>175.0</b>	1236.624	1236.624	1236.624	1235.846	1236.624	1235.846	1236.624	1236.624	1236.624
<b>177.5</b>	1242.068	1242.846	1242.846	1242.846	1242.846	1242.846	1242.846	1242.846	1242.068
<b>180.0</b>	1244.402	1244.402	1244.402	1244.402	1244.402	1244.402	1244.402	1244.402	1244.402

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-4-ID-4FT-H-B-835-F-DAO-ITL85125-ITL94331.008.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	288.05	N.A.	5.50
0-30	601.44	N.A.	11.50
0-40	963.80	N.A.	18.40
0-60	1621.64	N.A.	30.90
0-80	1962.58	N.A.	37.40
0-90	1998.75	N.A.	38.10
10-90	1923.43	N.A.	36.60
20-40	675.76	N.A.	12.90
20-50	1031.65	N.A.	19.70
40-70	875.58	N.A.	16.70
60-80	340.93	N.A.	6.50
70-80	123.20	N.A.	2.30
80-90	36.17	N.A.	0.70
90-110	285.31	N.A.	5.40
90-120	659.98	N.A.	12.60
90-130	1162.6	N.A.	22.10
90-150	2311.58	N.A.	44.00
90-180	3251.18	N.A.	61.90
110-180	2965.88	N.A.	56.50
0-180	5249.93	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	75.32
10-20	212.73
20-30	313.39
30-40	362.37
40-50	355.90
50-60	301.94
60-70	217.74
70-80	123.20
80-90	36.17
90-100	66.67
100-110	218.64
110-120	374.67
120-130	502.62
130-140	575.00
140-150	573.98
150-160	490.78
160-170	331.53
170-180	117.30

# IES INDOOR REPORT

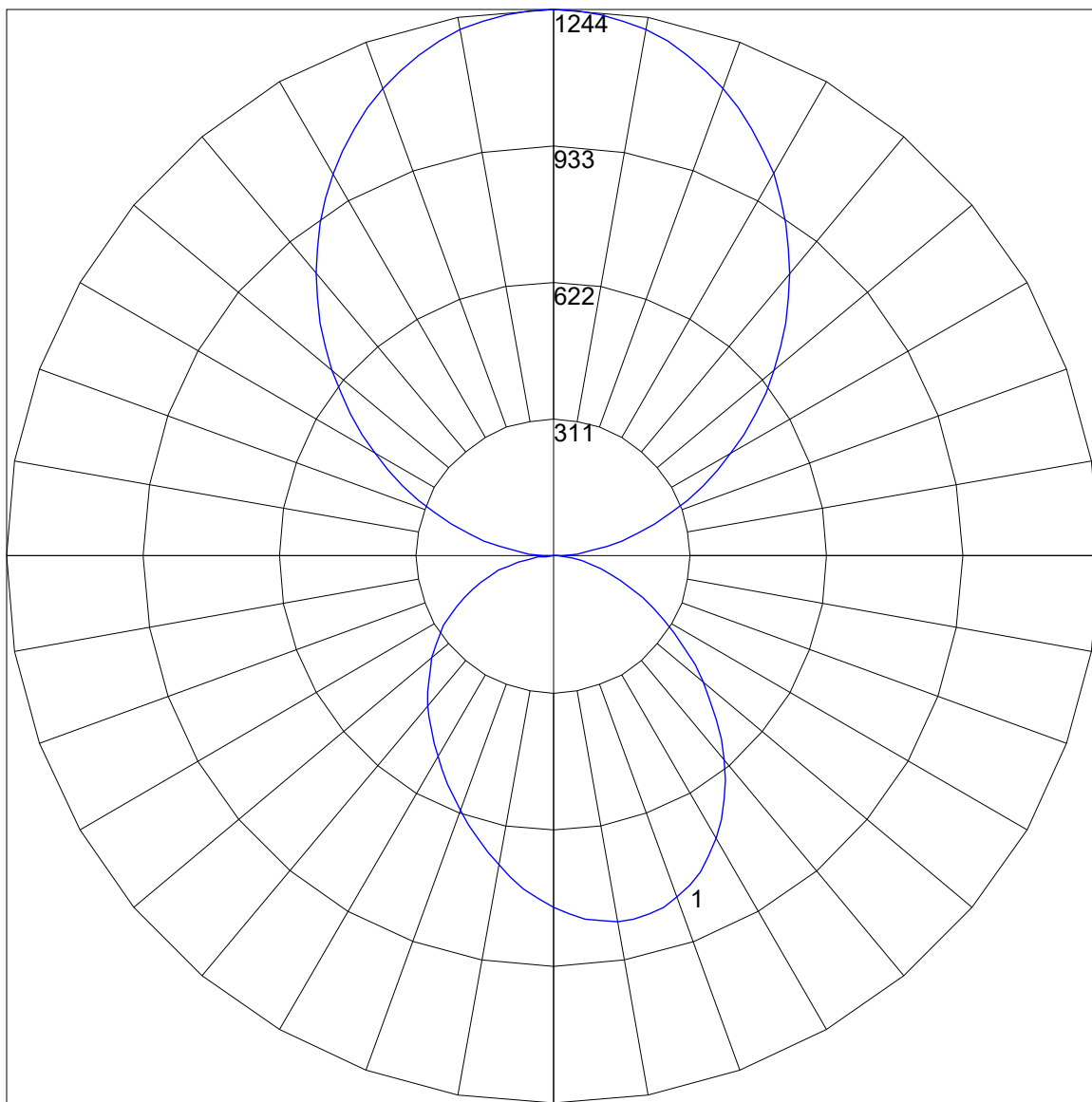
PHOTOMETRIC FILENAME : HP-4-ID-4FT-H-B-835-F-DAO-ITL85125-ITL94331.008.IES

## 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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	95	91	87	84	86	83	79	77	67	65	63	53	52	50	40	39	38	32
2	87	79	73	68	78	72	67	63	59	55	52	47	44	42	35	34	32	27
3	79	70	63	57	72	64	58	53	52	48	44	41	38	36	31	29	28	23
4	72	62	54	48	65	56	50	45	46	41	37	37	33	30	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	25	23	21	17
6	61	49	41	36	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	37	31	51	41	34	29	34	28	25	27	23	20	21	18	16	13
8	52	40	33	28	47	37	30	26	31	26	22	25	21	18	19	17	15	12
9	49	37	29	24	44	34	27	23	28	23	20	23	19	16	18	15	13	11
10	45	34	27	22	41	31	25	20	26	21	18	21	17	15	16	14	12	10

POLAR GRAPH



Maximum Candela = 1244.402 Located At Horizontal Angle = 0, Vertical Angle = 180  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)