

# 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-837-XXIC-ITL85125.203.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL85125.203 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/06/15

[ISSUEDATE]05/12/2021

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HP-4-ID-4ft-H-H-837-XXIC

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 54.1 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 54.4 WATTS

[ABSOLUTE LUMENS]5704

[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL85125. 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	5705
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	105
Total Luminaire Watts	54.1
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	7316	7214	7086
55	6793	6688	6552
65	6199	6113	6013
75	5421	5421	5398
85	4491	4699	4837

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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>
0.0	1043.770	1043.770	1043.770	1043.770	1043.770
2.5	1041.600	1041.600	1041.600	1041.600	1041.600
5.0	1036.537	1037.260	1037.260	1036.537	1037.260
7.5	1029.303	1030.027	1029.303	1027.857	1029.303
10.0	1019.177	1017.007	1017.730	1017.730	1016.283
12.5	1006.880	1003.263	1003.987	1003.987	1000.370
15.0	989.520	983.733	987.350	985.903	980.840
17.5	970.713	962.757	966.373	964.927	959.863
20.0	948.290	939.610	942.503	940.333	935.270
22.5	923.697	914.293	916.463	913.570	908.507
25.0	896.210	886.083	888.253	885.360	879.573
27.5	866.553	856.427	857.873	854.257	849.193
30.0	834.727	824.600	825.323	821.707	815.920
32.5	801.453	793.497	792.773	787.710	782.647
35.0	768.180	759.500	758.777	752.267	747.927
37.5	732.013	723.333	724.057	716.100	711.760
40.0	695.847	688.613	687.890	679.933	675.593
42.5	661.127	651.723	649.553	643.043	638.703
45.0	621.343	614.833	612.663	606.153	601.813
47.5	583.007	576.497	575.050	568.540	564.200
50.0	544.670	538.883	536.713	530.203	526.587
52.5	506.333	500.547	499.823	492.590	488.973
55.0	467.997	462.933	460.763	454.253	451.360
57.5	428.937	424.597	422.427	416.640	413.747
60.0	391.323	386.260	384.813	379.750	377.580
62.5	352.263	347.923	346.477	342.137	340.690
65.0	314.650	311.033	310.310	306.693	305.247
67.5	276.313	274.143	273.420	270.527	269.080
70.0	239.423	237.977	237.977	235.807	234.360
72.5	203.257	203.980	202.533	203.257	201.087
75.0	168.537	169.260	168.537	169.260	167.813
77.5	135.263	135.987	137.433	137.433	137.433
80.0	104.160	104.883	106.330	107.053	107.053
82.5	75.950	76.673	77.397	78.120	78.120
85.0	47.017	48.463	49.187	49.910	50.633
87.5	20.253	21.700	22.423	24.593	24.593
90.0	0.000	0.000	0.000	0.000	0.000
92.5	21.700	23.147	24.593	27.487	28.210
95.0	51.357	52.080	54.973	58.590	59.313
97.5	83.183	83.907	87.523	91.140	90.417
100.0	115.733	117.180	120.797	124.413	123.690
102.5	149.007	151.900	155.517	159.133	159.133
105.0	185.897	188.790	192.407	195.300	194.577
107.5	224.957	227.127	229.297	232.190	232.190
110.0	266.910	266.910	269.080	271.973	271.250
112.5	308.863	307.417	310.310	314.650	311.033
115.0	350.817	349.370	350.817	354.433	351.540
117.5	392.770	393.493	394.217	394.940	392.770
120.0	435.447	436.893	436.170	435.447	434.000
122.5	478.847	480.293	480.293	478.123	475.953
125.0	522.970	525.140	525.140	520.800	518.630
127.5	567.093	568.540	569.987	563.477	559.137
130.0	609.770	610.493	611.940	607.600	603.983
132.5	653.170	652.447	653.170	650.277	645.937

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-4-ID-4FT-H-H-837-XXIC-ITL85125.203.IES****CANDELA TABULATION - (Cont.)**

<b>135.0</b>	696.570	692.953	695.123	692.953	687.890
<b>137.5</b>	738.523	732.737	736.353	733.460	728.397
<b>140.0</b>	780.477	773.967	778.307	775.413	769.627
<b>142.5</b>	818.813	813.750	818.813	814.473	809.410
<b>145.0</b>	860.043	851.363	857.150	852.810	847.747
<b>147.5</b>	896.933	888.253	894.040	889.700	884.637
<b>150.0</b>	933.100	923.697	929.483	925.143	920.803
<b>152.5</b>	964.927	957.693	963.480	958.417	954.800
<b>155.0</b>	996.030	988.797	993.860	989.520	985.903
<b>157.5</b>	1026.410	1019.177	1023.517	1019.177	1016.283
<b>160.0</b>	1052.450	1046.663	1051.003	1046.663	1044.493
<b>162.5</b>	1077.043	1070.533	1075.597	1071.257	1069.810
<b>165.0</b>	1097.297	1092.233	1095.127	1092.957	1092.233
<b>167.5</b>	1115.380	1111.040	1113.210	1111.763	1111.763
<b>170.0</b>	1130.570	1127.677	1129.123	1127.677	1127.677
<b>172.5</b>	1141.420	1141.420	1140.697	1140.697	1140.697
<b>175.0</b>	1150.100	1150.100	1150.100	1149.377	1150.100
<b>177.5</b>	1155.163	1155.887	1155.887	1155.887	1155.887
<b>180.0</b>	1157.333	1157.333	1157.333	1157.333	1157.333

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	376.01	N.A.	6.60
0-30	784.21	N.A.	13.70
0-40	1257.56	N.A.	22.00
0-60	2140.03	N.A.	37.50
0-80	2625.81	N.A.	46.00
0-90	2680.81	N.A.	47.00
10-90	2582.44	N.A.	45.30
20-40	881.55	N.A.	15.50
20-50	1353.1	N.A.	23.70
40-70	1188.87	N.A.	20.80
60-80	485.78	N.A.	8.50
70-80	179.38	N.A.	3.10
80-90	55.00	N.A.	1.00
90-110	265.35	N.A.	4.70
90-120	613.80	N.A.	10.80
90-130	1081.25	N.A.	19.00
90-150	2149.84	N.A.	37.70
90-180	3023.71	N.A.	53.00
110-180	2758.36	N.A.	48.40
0-180	5704.52	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

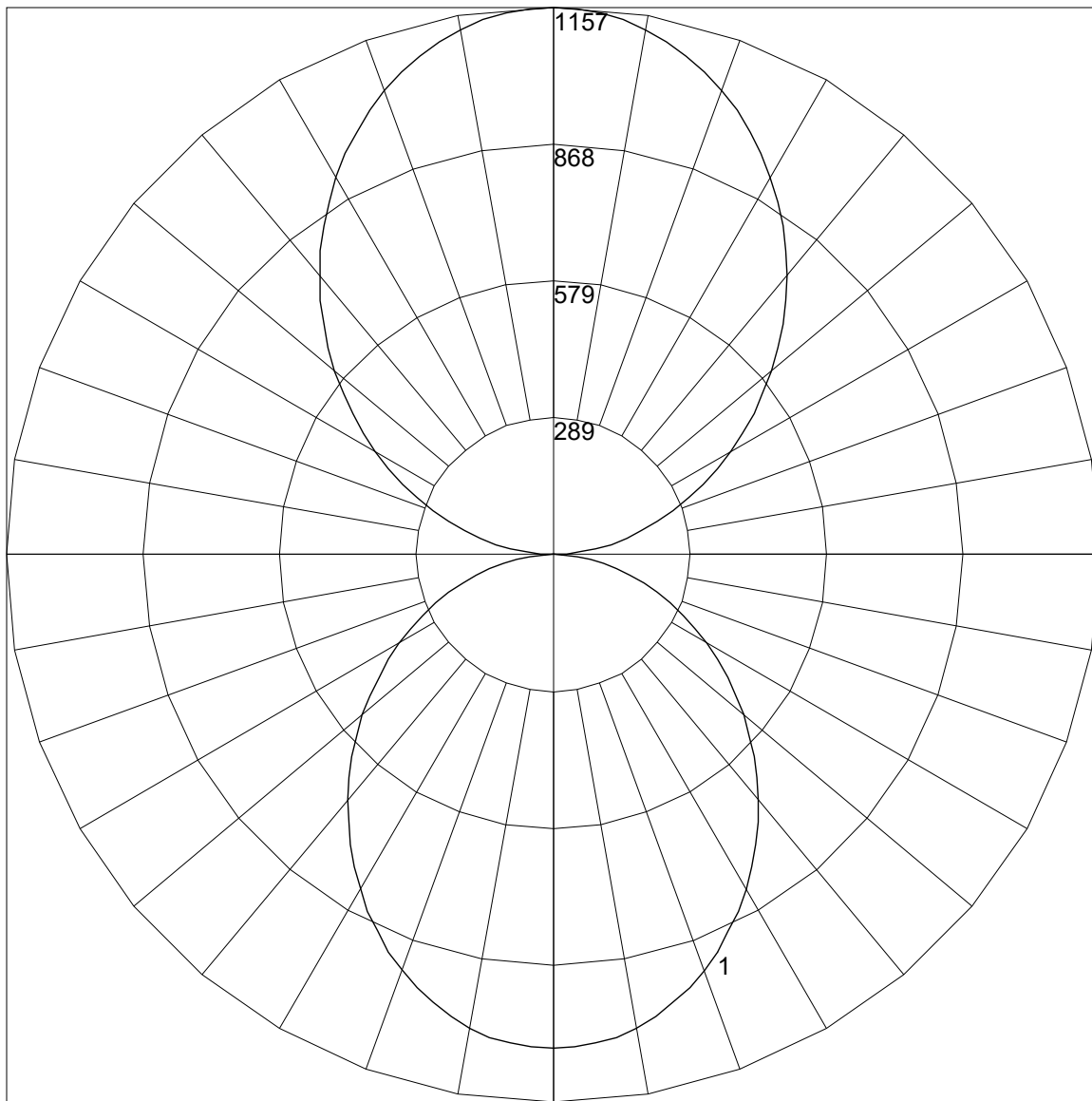
Zone	Lumens
0-10	98.38
10-20	277.64
20-30	408.20
30-40	473.35
40-50	471.55
50-60	410.92
60-70	306.40
70-80	179.38
80-90	55.00
90-100	62.00
100-110	203.34
110-120	348.45
120-130	467.46
130-140	534.77
140-150	533.82
150-160	456.44
160-170	308.33
170-180	109.09

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	85	89	85	82	79	71	69	67	59	57	56	47	46	45	39
2	88	81	75	70	81	75	69	65	63	59	55	52	49	46	41	39	38	33
3	81	71	64	58	74	66	59	54	55	50	47	46	42	39	37	34	32	28
4	74	63	55	49	67	58	51	46	49	44	40	41	37	34	33	30	28	24
5	68	56	48	42	62	52	45	39	44	38	34	36	32	29	30	27	24	21
6	62	50	42	36	57	47	39	34	40	34	30	33	29	25	27	24	21	18
7	58	45	37	32	53	42	35	30	36	30	26	30	26	23	24	21	19	16
8	53	41	33	28	49	38	31	27	33	27	23	27	23	20	22	19	17	15
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	21	18	15	13
10	46	34	27	22	43	32	26	21	28	22	19	23	19	16	19	16	14	12

POLAR GRAPH



Maximum Candela = 1157.333 Located At Horizontal Angle = 0, Vertical Angle = 180  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)