

# 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-V-H-837-XXIC-ITL85125.206.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

[TEST]ITL85125.206 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-V-H-837-XXIC  
[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 62.3 WATTS  
[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 62.5 WATTS  
[ABSOLUTE]LUMENS]6568  
[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	6568
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	105
Total Luminaire Watts	62.3
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	27.900	29.760	31.620	35.340	36.270
95.0	66.030	66.960	70.680	75.330	76.260
97.5	106.950	107.880	112.530	117.180	116.250
100.0	148.800	150.660	155.310	159.960	159.030
102.5	191.580	195.300	199.950	204.600	204.600
105.0	239.010	242.730	247.380	251.100	250.170
107.5	289.230	292.020	294.810	298.530	298.530
110.0	343.170	343.170	345.960	349.680	348.750
112.5	397.110	395.250	398.970	404.550	399.900
115.0	451.050	449.190	451.050	455.700	451.980
117.5	504.990	505.920	506.850	507.780	504.990
120.0	559.860	561.720	560.790	559.860	558.000
122.5	615.660	617.520	617.520	614.730	611.940
125.0	672.390	675.180	675.180	669.600	666.810
127.5	729.120	730.980	732.840	724.470	718.890
130.0	783.990	784.920	786.780	781.200	776.550
132.5	839.790	838.860	839.790	836.070	830.490

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CANDELA TABULATION - (Cont.)

135.0	895.590	890.940	893.730	890.940	884.430
137.5	949.530	942.090	946.740	943.020	936.510
140.0	1003.470	995.100	1000.680	996.960	989.520
142.5	1052.760	1046.250	1052.760	1047.180	1040.670
145.0	1105.770	1094.610	1102.050	1096.470	1089.960
147.5	1153.200	1142.040	1149.480	1143.900	1137.390
150.0	1199.700	1187.610	1195.050	1189.470	1183.890
152.5	1240.620	1231.320	1238.760	1232.250	1227.600
155.0	1280.610	1271.310	1277.820	1272.240	1267.590
157.5	1319.670	1310.370	1315.950	1310.370	1306.650
160.0	1353.150	1345.710	1351.290	1345.710	1342.920
162.5	1384.770	1376.400	1382.910	1377.330	1375.470
165.0	1410.810	1404.300	1408.020	1405.230	1404.300
167.5	1434.060	1428.480	1431.270	1429.410	1429.410
170.0	1453.590	1449.870	1451.730	1449.870	1449.870
172.5	1467.540	1467.540	1466.610	1466.610	1466.610
175.0	1478.700	1478.700	1478.700	1477.770	1478.700
177.5	1485.210	1486.140	1486.140	1486.140	1486.140
180.0	1488.000	1488.000	1488.000	1488.000	1488.000

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	376.01	N.A.	5.70
0-30	784.21	N.A.	11.90
0-40	1257.56	N.A.	19.10
0-60	2140.03	N.A.	32.60
0-80	2625.81	N.A.	40.00
0-90	2680.81	N.A.	40.80
10-90	2582.44	N.A.	39.30
20-40	881.55	N.A.	13.40
20-50	1353.1	N.A.	20.60
40-70	1188.87	N.A.	18.10
60-80	485.78	N.A.	7.40
70-80	179.38	N.A.	2.70
80-90	55.00	N.A.	0.80
90-110	341.16	N.A.	5.20
90-120	789.17	N.A.	12.00
90-130	1390.18	N.A.	21.20
90-150	2764.08	N.A.	42.10
90-180	3887.62	N.A.	59.20
110-180	3546.46	N.A.	54.00
0-180	6568.43	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

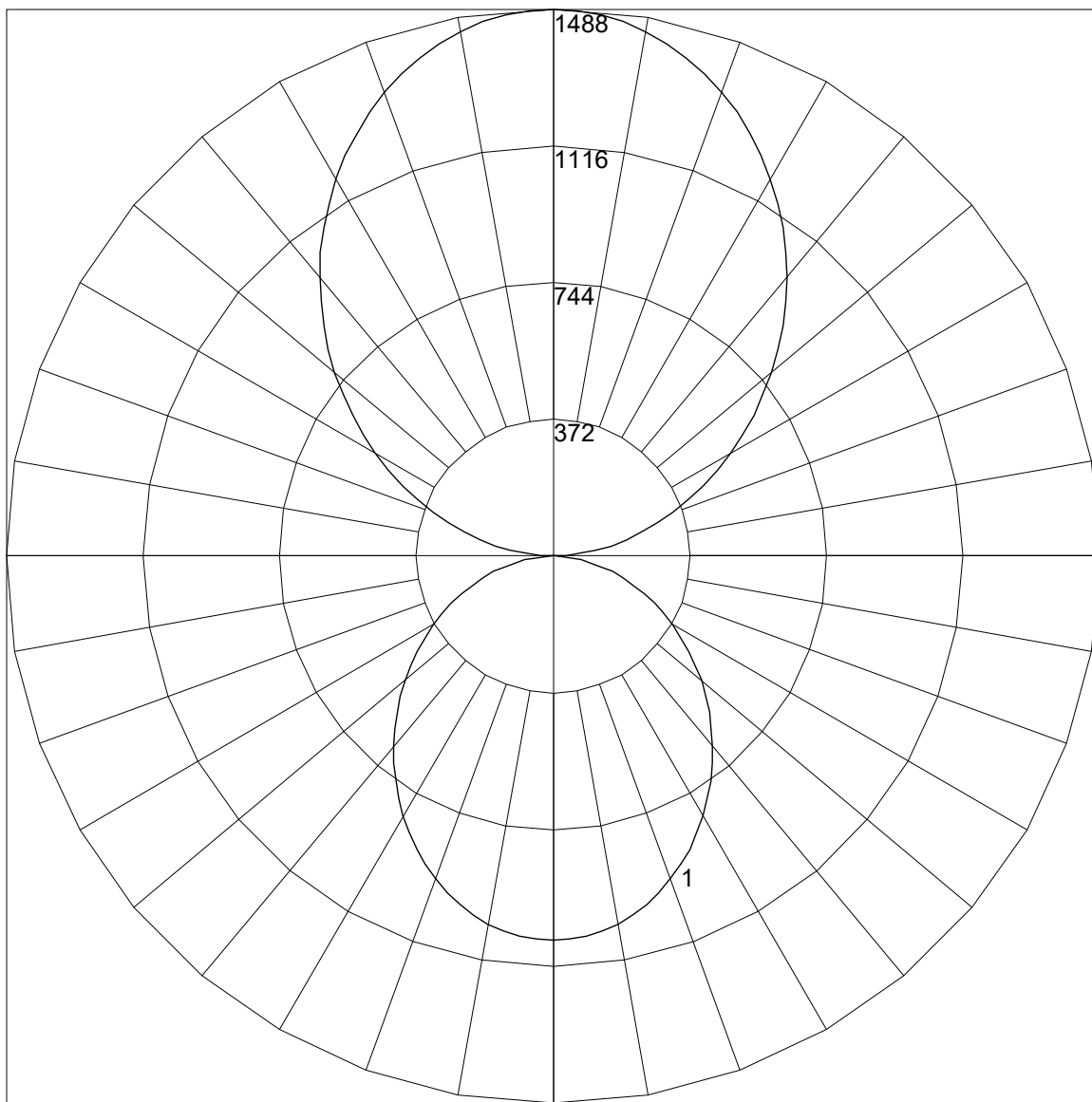
Zone	Lumens
0-10	98.38
10-20	277.64
20-30	408.20
30-40	473.35
40-50	471.55
50-60	410.92
60-70	306.40
70-80	179.38
80-90	55.00
90-100	79.72
100-110	261.44
110-120	448.01
120-130	601.01
130-140	687.56
140-150	686.34
150-160	586.85
160-170	396.43
170-180	140.26

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	105	105	105	105	96	96	96	96	78	78	78	62	62	62	48	48	48	41
1	96	91	88	84	87	83	80	77	68	66	64	55	53	52	42	41	40	34
2	87	80	74	69	79	73	68	63	60	56	53	48	45	43	37	35	34	29
3	79	70	63	57	72	64	58	53	53	48	44	42	39	36	33	31	29	24
4	73	62	54	48	66	57	50	45	47	42	38	38	34	31	29	27	25	21
5	67	55	47	41	60	51	44	38	42	37	33	34	30	27	26	24	22	18
6	61	49	41	36	56	45	38	33	38	32	28	31	27	24	24	21	19	16
7	57	45	37	31	51	41	34	29	34	29	25	28	24	21	22	19	17	14
8	53	40	33	28	48	37	30	26	31	26	22	25	21	19	20	17	15	13
9	49	37	29	24	44	34	27	23	29	23	20	23	19	17	18	16	14	11
10	46	34	27	22	42	31	25	21	26	21	18	22	18	15	17	14	12	10

POLAR GRAPH



Maximum Candela = 1488 Located At Horizontal Angle = 0, Vertical Angle = 180  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)