

# 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-X ID-4FT-V-B-835-TG-F-ITL92550.005.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

[TEST]ITL92550.005 Family Correlation Files  
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.  
[ISSUE DATE]11/21/19  
[TEST DATE]01/07/20  
[MANUFACTURER]FINELITE, INC.  
[LUMCAT]HP-X-ID-4ft-V-B-835-TG-F  
[INPUT ELECTRICAL]120.0 VOLTS, 51.6 WATTS  
[INPUT ELECTRICAL]277.0 VOLTS, 52.5 WATTS  
[ABSOLUTE LUMENS]6186  
[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL92550. 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	6186
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	120
Total Luminaire Watts	51.6
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 w/Sides
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	0.20 ft
Luminous Height	0.02 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	9089	8657	8512
55	8811	8255	8138
65	8349	7729	7653
75	7640	7003	7030
85	6603	6005	6408

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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	709.130	709.130	709.130	709.130	709.130
2.5	708.101	708.101	708.616	708.101	708.616
5.0	705.528	706.043	706.043	706.043	706.043
7.5	701.926	701.926	702.441	702.441	702.441
10.0	697.294	695.750	697.294	697.294	697.294
12.5	690.605	688.031	690.605	690.605	689.575
15.0	682.885	678.254	682.371	682.885	680.827
17.5	673.108	668.476	672.593	673.622	672.079
20.0	662.301	656.126	660.757	661.786	659.728
22.5	648.921	642.746	648.407	648.921	646.348
25.0	635.027	628.337	633.998	634.512	632.968
27.5	618.559	612.899	618.559	618.559	617.015
30.0	601.577	595.402	601.063	601.063	600.033
32.5	583.566	577.905	583.566	583.051	582.537
35.0	564.525	559.379	564.011	563.496	561.952
37.5	543.427	538.280	543.941	543.427	542.912
40.0	521.298	516.667	521.813	522.327	522.327
42.5	499.170	495.053	499.685	501.229	501.743
45.0	474.984	472.925	477.042	479.100	478.071
47.5	451.826	448.224	452.855	454.914	455.428
50.0	426.096	423.523	428.669	431.756	431.756
52.5	399.851	397.792	404.482	406.541	406.541
55.0	374.120	371.547	377.723	380.810	382.354
57.5	346.332	344.788	351.992	354.565	356.109
60.0	318.028	316.484	325.233	328.835	329.864
62.5	289.724	289.724	297.958	302.075	304.134
65.0	261.936	262.450	270.684	275.830	278.403
67.5	232.603	234.147	243.410	249.071	252.158
70.0	204.814	206.358	216.136	222.311	224.884
72.5	177.025	179.084	189.376	196.066	199.668
75.0	147.693	152.839	162.616	170.850	173.423
77.5	120.933	126.079	136.886	145.634	148.722
80.0	95.203	100.863	112.185	120.933	124.021
82.5	70.501	76.162	87.998	97.776	101.378
85.0	44.256	52.490	64.326	74.618	78.221
87.5	20.070	29.847	42.198	53.005	56.607
90.0	1.029	11.836	26.245	38.081	42.198
92.5	34.000	51.000	74.000	95.000	102.000
95.0	69.000	85.000	108.000	130.000	137.000
97.5	108.000	122.000	144.000	166.000	173.000
100.0	150.000	162.000	184.000	205.000	213.000
102.5	192.000	203.000	225.000	246.000	254.000
105.0	237.000	249.000	270.000	291.000	298.000
107.5	284.000	294.000	316.000	336.000	343.000
110.0	338.000	344.000	365.000	384.000	391.000
112.5	389.000	394.000	415.000	432.000	439.000
115.0	441.000	445.000	468.000	483.000	489.000
117.5	497.000	501.000	520.000	535.000	540.000
120.0	553.000	555.000	574.000	588.000	593.000
122.5	612.000	610.000	628.000	641.000	649.000
125.0	672.000	667.000	684.000	695.000	702.000
127.5	732.000	726.000	742.000	752.000	758.000
130.0	791.000	784.000	798.000	808.000	812.000
132.5	853.000	844.000	858.000	864.000	872.000

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CANDELA TABULATION - (Cont.)

135.0	912.000	903.000	916.000	922.000	926.000
137.5	973.000	960.000	972.000	978.000	980.000
140.0	1032.000	1019.000	1030.000	1034.000	1033.000
142.5	1091.000	1075.000	1086.000	1088.000	1088.000
145.0	1147.000	1129.000	1142.000	1141.000	1141.000
147.5	1202.000	1184.000	1194.000	1193.000	1192.000
150.0	1252.000	1236.000	1243.000	1243.000	1240.000
152.5	1301.000	1282.000	1291.000	1288.000	1286.000
155.0	1347.000	1328.000	1337.000	1332.000	1329.000
157.5	1386.000	1370.000	1378.000	1374.000	1370.000
160.0	1423.000	1408.000	1416.000	1412.000	1406.000
162.5	1455.000	1443.000	1449.000	1446.000	1442.000
165.0	1485.000	1474.000	1478.000	1476.000	1470.000
167.5	1508.000	1502.000	1504.000	1502.000	1498.000
170.0	1528.000	1525.000	1526.000	1525.000	1522.000
172.5	1543.000	1542.000	1542.000	1541.000	1541.000
175.0	1554.000	1554.000	1554.000	1554.000	1554.000
177.5	1562.000	1561.000	1561.000	1561.000	1561.000
180.0	1564.000	1564.000	1564.000	1564.000	1564.000

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	259.43	N.A.	4.20
0-30	550.96	N.A.	8.90
0-40	902.84	N.A.	14.60
0-60	1607.21	N.A.	26.00
0-80	2045.19	N.A.	33.10
0-90	2115.62	N.A.	34.20
10-90	2048.52	N.A.	33.10
20-40	643.41	N.A.	10.40
20-50	1010.74	N.A.	16.30
40-70	971.18	N.A.	15.70
60-80	437.98	N.A.	7.10
70-80	171.16	N.A.	2.80
80-90	70.44	N.A.	1.10
90-110	401.37	N.A.	6.50
90-120	863.12	N.A.	14.00
90-130	1475.08	N.A.	23.80
90-150	2892.83	N.A.	46.80
90-180	4070.19	N.A.	65.80
110-180	3668.83	N.A.	59.30
0-180	6185.82	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

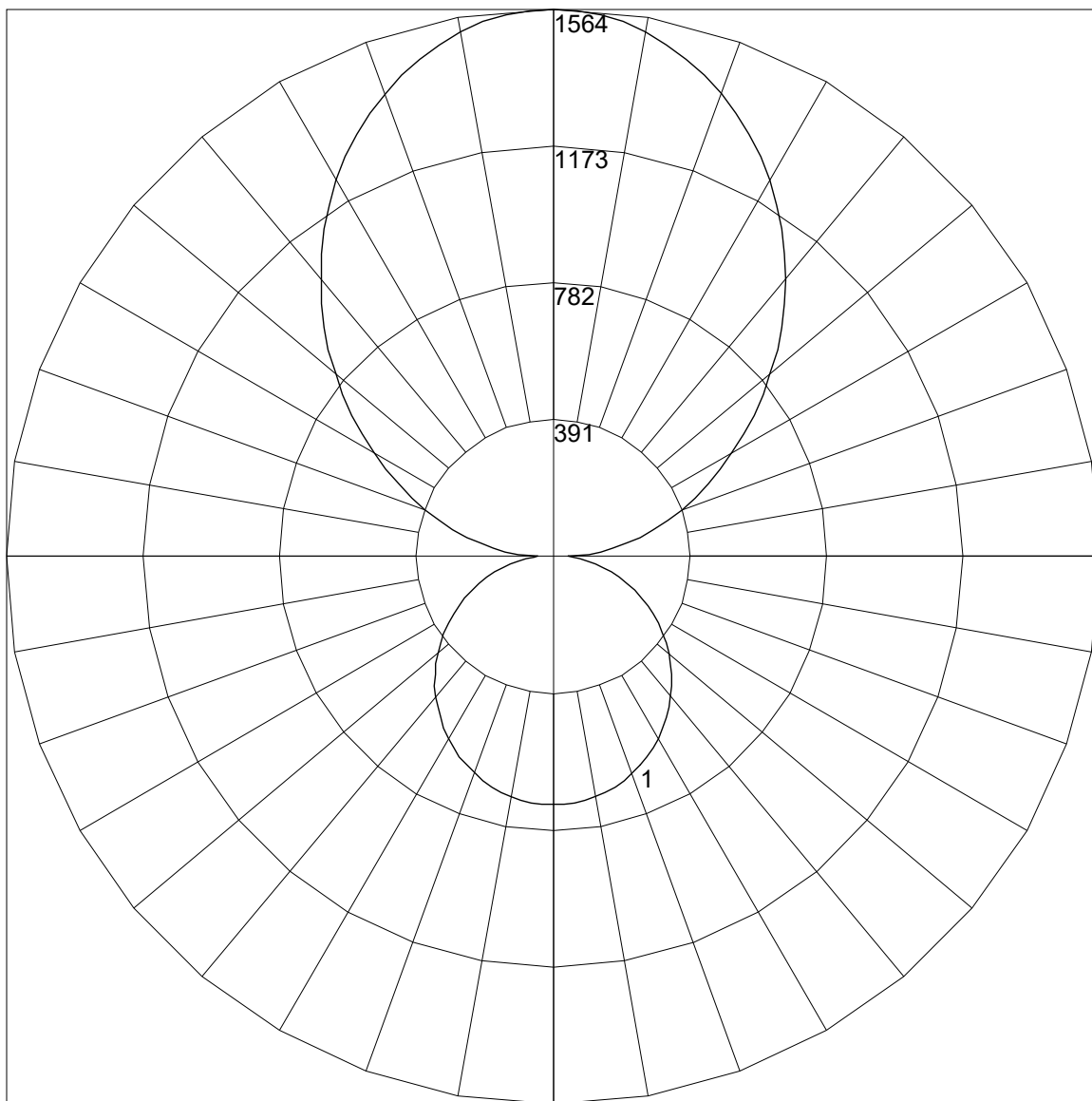
Zone	Lumens
0-10	67.10
10-20	192.33
20-30	291.52
30-40	351.88
40-50	367.34
50-60	337.03
60-70	266.82
70-80	171.16
80-90	70.44
90-100	115.84
100-110	285.53
110-120	461.75
120-130	611.96
130-140	705.63
140-150	712.13
150-160	613.83
160-170	416.11
170-180	147.42

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	103	103	103	103	93	93	93	93	75	75	75	57	57	57	42	42	42	34
1	94	89	86	82	85	81	78	75	65	62	60	50	48	47	36	35	34	28
2	85	78	72	67	77	70	65	61	56	53	50	43	41	39	32	30	29	23
3	78	68	61	55	70	62	55	50	50	45	41	38	35	33	28	26	24	19
4	71	60	52	46	64	55	48	43	44	39	35	34	30	28	25	22	21	16
5	65	53	45	39	58	48	41	36	39	34	30	30	27	24	22	20	18	14
6	60	48	40	34	54	43	36	31	35	30	26	27	24	21	20	18	16	12
7	55	43	35	30	49	39	32	27	32	26	23	25	21	18	18	16	14	11
8	51	39	31	26	46	35	29	24	29	24	20	23	19	16	17	14	12	10
9	47	35	28	23	43	32	26	21	26	21	18	21	17	14	15	13	11	9
10	44	32	25	21	40	29	23	19	24	19	16	19	15	13	14	12	10	8

POLAR GRAPH



Maximum Candela = 1564 Located At Horizontal Angle = 0, Vertical Angle = 180  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)