

# 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-S-835-TG-F-ITL92550.006.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

[TEST]ITL92550.006 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-S-835-TG-F  
[INPUT ELECTRICAL]120.0 VOLTS, 47.9 WATTS  
[INPUT ELECTRICAL]277.0 VOLTS, 49.1 WATTS  
[ABSOLUTE LUMENS]5753  
[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	5752
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	120
Total Luminaire Watts	47.9
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 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	7229	6885	6770
55	7008	6565	6472
65	6640	6147	6086
75	6076	5570	5592
85	5251	4776	5097

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HP-X ID-4FT-V-S-835-TG-F-ITL92550.006.IES**

**CANDELA TABULATION**

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	563.989	563.989	563.989	563.989	563.989
2.5	563.170	563.170	563.579	563.170	563.579
5.0	561.124	561.533	561.533	561.533	561.533
7.5	558.259	558.259	558.668	558.668	558.668
10.0	554.575	553.347	554.575	554.575	554.575
12.5	549.255	547.208	549.255	549.255	548.436
15.0	543.115	539.432	542.706	543.115	541.478
17.5	535.339	531.655	534.930	535.748	534.520
20.0	526.744	521.833	525.516	526.335	524.698
22.5	516.103	511.192	515.694	516.103	514.057
25.0	505.052	499.732	504.234	504.643	503.415
27.5	491.955	487.453	491.955	491.955	490.728
30.0	478.449	473.538	478.040	478.040	477.221
32.5	464.124	459.622	464.124	463.715	463.306
35.0	448.981	444.888	448.572	448.162	446.934
37.5	432.200	428.108	432.610	432.200	431.791
40.0	414.601	410.918	415.011	415.420	415.420
42.5	397.002	393.728	397.411	398.639	399.049
45.0	377.766	376.129	379.403	381.040	380.222
47.5	359.348	356.483	360.167	361.804	362.213
50.0	338.884	336.838	340.931	343.386	343.386
52.5	318.011	316.374	321.695	323.332	323.332
55.0	297.547	295.501	300.412	302.868	304.096
57.5	275.446	274.218	279.948	281.994	283.222
60.0	252.935	251.708	258.665	261.530	262.349
62.5	230.425	230.425	236.974	240.248	241.885
65.0	208.324	208.733	215.282	219.374	221.421
67.5	184.995	186.223	193.590	198.092	200.548
70.0	162.894	164.121	171.898	176.809	178.856
72.5	140.792	142.430	150.615	155.936	158.801
75.0	117.463	121.556	129.333	135.881	137.928
77.5	96.181	100.274	108.869	115.826	118.282
80.0	75.717	80.219	89.223	96.181	98.637
82.5	56.071	60.574	69.987	77.763	80.628
85.0	35.198	41.747	51.160	59.346	62.211
87.5	15.962	23.738	33.561	42.156	45.021
90.0	0.819	9.414	20.873	30.287	33.561
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

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

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HP-X ID-4FT-V-S-835-TG-F-ITL92550.006.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	206.33	N.A.	3.60
0-30	438.19	N.A.	7.60
0-40	718.05	N.A.	12.50
0-60	1278.25	N.A.	22.20
0-80	1626.59	N.A.	28.30
0-90	1682.6	N.A.	29.30
10-90	1629.24	N.A.	28.30
20-40	511.72	N.A.	8.90
20-50	803.87	N.A.	14.00
40-70	772.41	N.A.	13.40
60-80	348.34	N.A.	6.10
70-80	136.13	N.A.	2.40
80-90	56.02	N.A.	1.00
90-110	400.68	N.A.	7.00
90-120	862.44	N.A.	15.00
90-130	1474.39	N.A.	25.60
90-150	2892.15	N.A.	50.30
90-180	4069.51	N.A.	70.70
110-180	3668.83	N.A.	63.80
0-180	5752.11	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

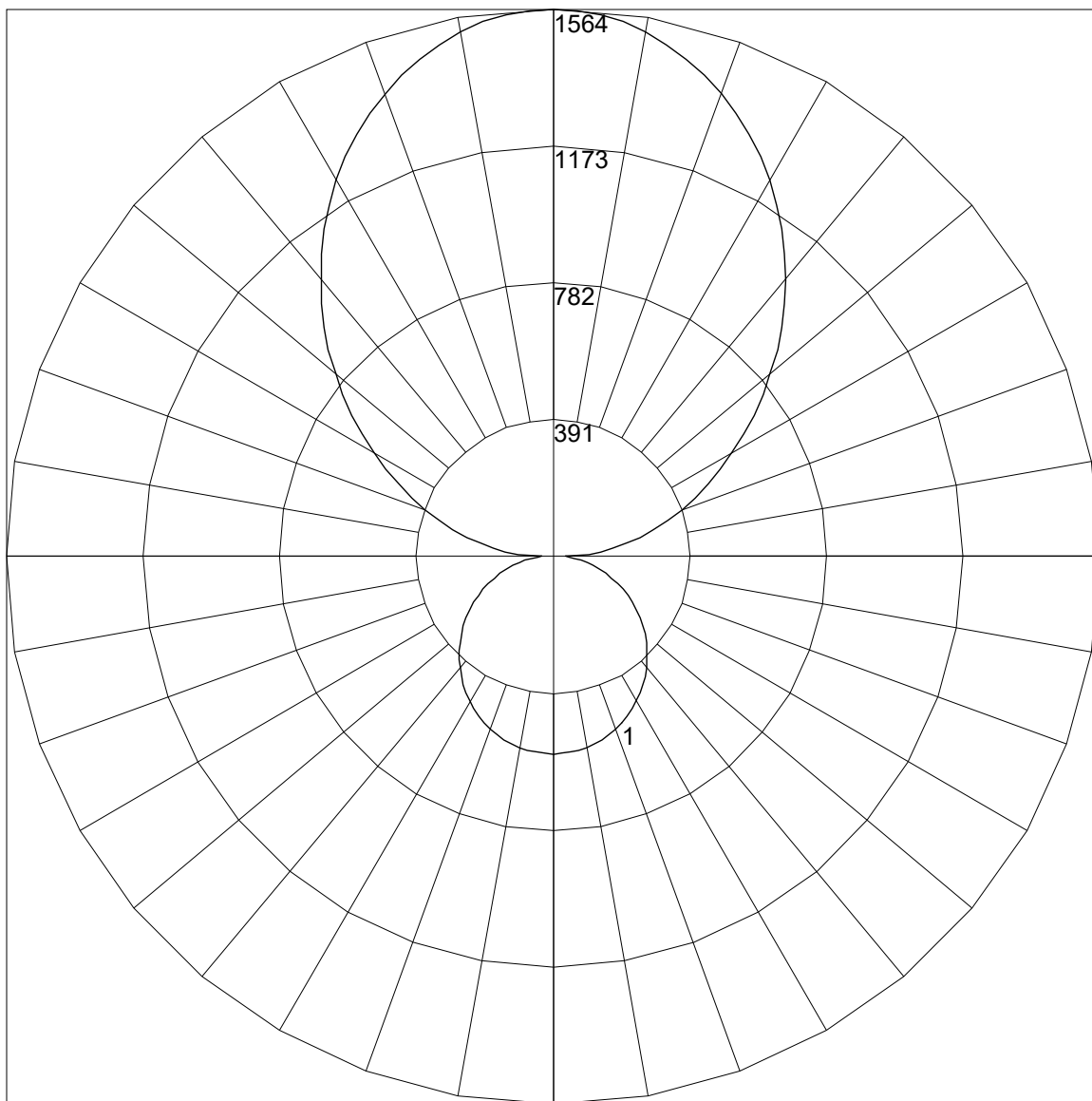
Zone	Lumens
0-10	53.37
10-20	152.96
20-30	231.86
30-40	279.86
40-50	292.15
50-60	268.05
60-70	212.21
70-80	136.13
80-90	56.02
90-100	115.15
100-110	285.53
110-120	461.75
120-130	611.96
130-140	705.63
140-150	712.13
150-160	613.83
160-170	416.11
170-180	147.42

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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	29
1	93	89	85	81	83	79	76	73	62	60	58	47	45	44	32	31	31	24
2	84	77	71	66	75	69	64	60	54	51	48	41	38	36	28	27	25	20
3	77	67	60	55	68	61	54	50	48	43	40	36	33	30	25	23	21	17
4	70	60	52	46	62	54	47	42	42	37	34	32	29	26	22	20	18	14
5	64	53	45	39	57	48	41	36	38	33	29	28	25	22	20	18	16	12
6	59	47	39	34	53	43	36	31	34	29	25	26	22	19	18	16	14	11
7	54	42	35	29	49	38	32	27	30	25	22	23	20	17	16	14	12	9
8	50	38	31	26	45	35	28	23	28	23	19	21	18	15	15	13	11	8
9	47	35	28	23	42	32	25	21	25	20	17	19	16	13	14	11	10	7
10	44	32	25	20	39	29	23	19	23	18	15	18	14	12	13	10	9	7

POLAR GRAPH



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