

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-S-S-835-TG-F-ITL92550.003.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL92550.003 Family Correlation Files
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[ISSUEDATE]11/21/19
[TESTDATE]01/07/20
[MANUFAC]FINELITE, INC.
[LUMCAT]HP-X-ID-4ft-S-S-835-TG-F
[INPUT_ELECTRICAL]120.0 VOLTS, 27.0 WATTS
[INPUT_ELECTRICAL]277.0 VOLTS, 29.2 WATTS
[ABSOLUTE LUMENS]3350
[OTHER]see 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

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3350
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	124
Total Luminaire Watts	27
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 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

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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	563.989	563.989	563.989	563.989	563.989
2.5	563.171	563.171	563.580	563.171	563.580
5.0	561.124	561.534	561.534	561.534	561.534
7.5	558.259	558.259	558.669	558.669	558.669
10.0	554.576	553.348	554.576	554.576	554.576
12.5	549.255	547.209	549.255	549.255	548.437
15.0	543.116	539.432	542.707	543.116	541.479
17.5	535.340	531.656	534.930	535.749	534.521
20.0	526.745	521.833	525.517	526.335	524.698
22.5	516.103	511.192	515.694	516.103	514.057
25.0	505.053	499.732	504.234	504.644	503.416
27.5	491.956	487.454	491.956	491.956	490.728
30.0	478.450	473.538	478.040	478.040	477.222
32.5	464.125	459.623	464.125	463.715	463.306
35.0	448.981	444.889	448.572	448.163	446.935
37.5	432.201	428.108	432.610	432.201	431.791
40.0	414.602	410.918	415.011	415.420	415.420
42.5	397.003	393.728	397.412	398.640	399.049
45.0	377.766	376.129	379.404	381.041	380.222
47.5	359.349	356.484	360.167	361.804	362.214
50.0	338.885	336.838	340.931	343.387	343.387
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	281.995	283.222
60.0	252.936	251.708	258.666	261.531	262.349
62.5	230.425	230.425	236.974	240.248	241.885
65.0	208.324	208.733	215.282	219.375	221.421
67.5	184.995	186.223	193.590	198.092	200.548
70.0	162.894	164.122	171.898	176.809	178.856
72.5	140.793	142.430	150.615	155.936	158.801
75.0	117.464	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	56.072	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	13.919	20.879	30.295	38.892	41.758
95.0	28.248	34.798	44.214	53.221	56.086
97.5	44.214	49.946	58.952	67.959	70.824
100.0	61.408	66.321	75.328	83.925	87.200
102.5	78.603	83.106	92.112	100.710	103.985
105.0	97.025	101.938	110.535	119.132	121.998
107.5	116.266	120.360	129.367	137.555	140.420
110.0	138.374	140.830	149.427	157.205	160.071
112.5	159.252	161.299	169.896	176.856	179.722
115.0	180.541	182.178	191.594	197.735	200.191
117.5	203.466	205.104	212.882	219.023	221.070
120.0	226.392	227.211	234.989	240.721	242.768
122.5	250.546	249.727	257.096	262.418	265.693
125.0	275.109	273.063	280.022	284.525	287.391
127.5	299.673	297.216	303.767	307.861	310.317
130.0	323.827	320.961	326.692	330.786	332.424
132.5	349.209	345.524	351.256	353.712	356.987

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CANDELA TABULATION - (Cont.)

135.0	373.363	369.678	375.000	377.457	379.094
137.5	398.336	393.013	397.926	400.382	401.201
140.0	422.489	417.167	421.671	423.308	422.899
142.5	446.643	440.093	444.596	445.415	445.415
145.0	469.569	462.200	467.522	467.113	467.113
147.5	492.086	484.717	488.810	488.401	487.992
150.0	512.555	506.005	508.870	508.870	507.642
152.5	532.615	524.837	528.521	527.293	526.474
155.0	551.447	543.669	547.353	545.306	544.078
157.5	567.413	560.863	564.138	562.500	560.863
160.0	582.561	576.420	579.695	578.057	575.601
162.5	595.661	590.748	593.205	591.976	590.339
165.0	607.943	603.439	605.077	604.258	601.802
167.5	617.359	614.902	615.721	614.902	613.265
170.0	625.546	624.318	624.728	624.318	623.090
172.5	631.687	631.278	631.278	630.869	630.869
175.0	636.191	636.191	636.191	636.191	636.191
177.5	639.466	639.056	639.056	639.056	639.056
180.0	640.284	640.284	640.284	640.284	640.284

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	206.33	N.A.	6.20
0-30	438.19	N.A.	13.10
0-40	718.05	N.A.	21.40
0-60	1278.25	N.A.	38.20
0-80	1626.59	N.A.	48.60
0-90	1682.61	N.A.	50.20
10-90	1629.24	N.A.	48.60
20-40	511.72	N.A.	15.30
20-50	803.87	N.A.	24.00
40-70	772.41	N.A.	23.10
60-80	348.34	N.A.	10.40
70-80	136.13	N.A.	4.10
80-90	56.02	N.A.	1.70
90-110	165.61	N.A.	4.90
90-120	354.65	N.A.	10.60
90-130	605.17	N.A.	18.10
90-150	1185.59	N.A.	35.40
90-180	1667.59	N.A.	49.80
110-180	1501.98	N.A.	44.80
0-180	3350.19	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

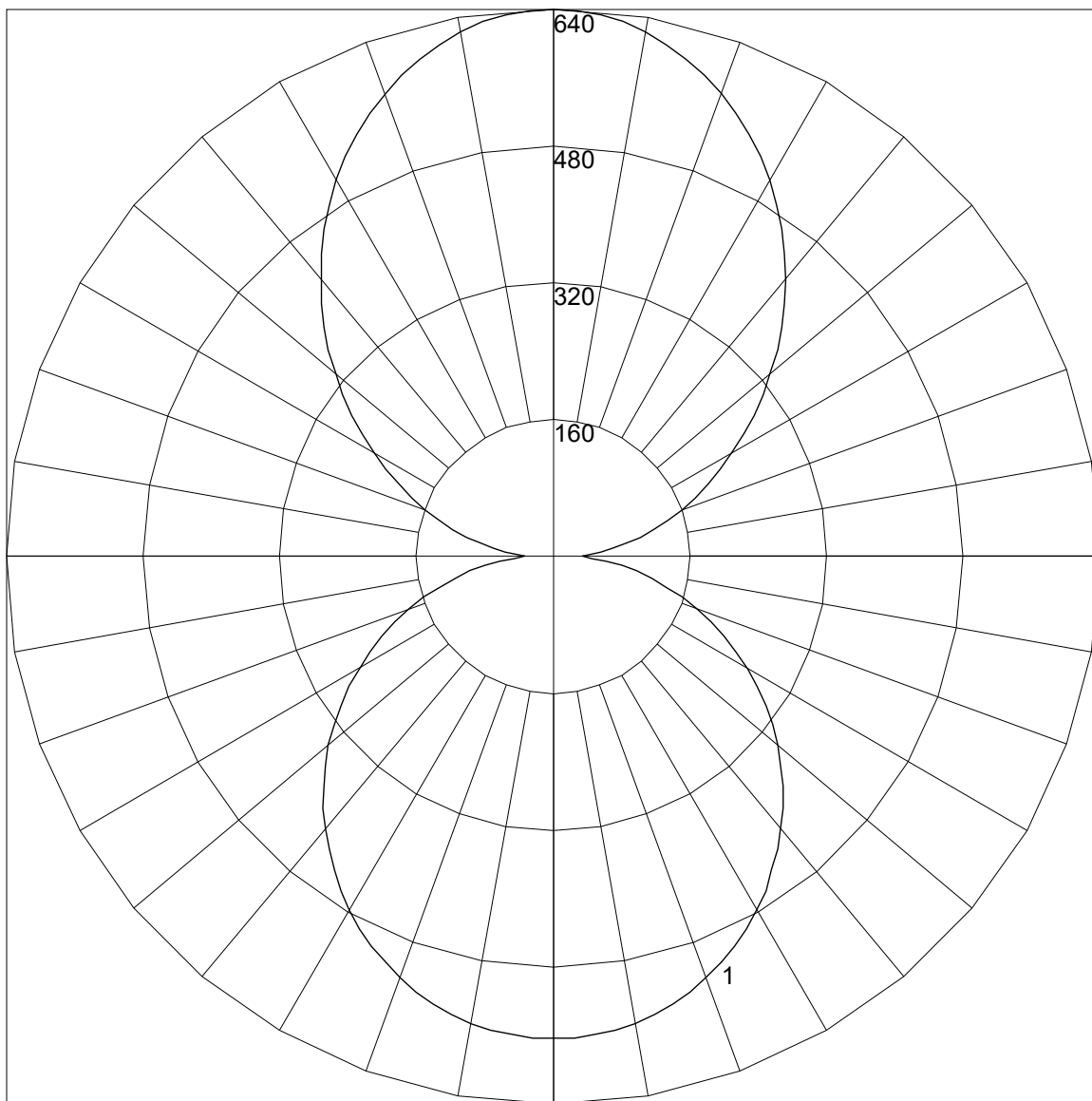
Zone	Lumens
0-10	53.37
10-20	152.96
20-30	231.86
30-40	279.86
40-50	292.15
50-60	268.05
60-70	212.21
70-80	136.13
80-90	56.02
90-100	48.72
100-110	116.89
110-120	189.04
120-130	250.53
130-140	288.88
140-150	291.54
150-160	251.30
160-170	170.35
170-180	60.35

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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	97	93	89	85	90	86	82	79	72	70	67	60	58	57	49	48	46	41
2	88	81	74	69	81	74	69	64	63	59	55	52	49	47	43	41	39	34
3	80	71	63	57	74	65	59	53	55	50	46	46	42	39	38	35	33	28
4	73	62	54	48	67	58	50	45	49	43	39	41	37	33	33	30	28	24
5	67	55	47	41	62	51	44	38	44	38	34	37	32	29	30	27	24	21
6	62	50	41	35	57	46	39	33	39	33	29	33	29	25	27	24	21	18
7	57	45	37	31	53	42	34	29	36	30	26	30	25	22	25	21	19	16
8	53	41	33	27	49	38	31	26	32	27	23	27	23	20	23	19	17	14
9	49	37	29	24	45	34	28	23	30	24	20	25	21	18	21	17	15	13
10	46	34	27	22	42	32	25	20	27	22	18	23	19	16	19	16	14	12

POLAR GRAPH



Maximum Candela = 640.284 Located At Horizontal Angle = 0, Vertical Angle = 180
1 - Vertical Plane Through Horizontal Angles (90 - 270)