

# 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 : HPO-ID-4FT-H-H-835-WSO-F-ITL92549.301.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

[TEST]ITL92549.301 Family Correlation File  
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.  
[TESTDATE]11/20/19  
[ISSUEDATE]09/09/20  
[MANUFAC]FINELITE, INC.  
[LUMCAT]HPO-ID-4ft-H-H-835-WSO-F  
[INPUT\_ELECTRICAL]120.0 VOLTS, 52.9 WATTS  
[INPUT\_ELECTRICAL]277.0 VOLTS, 53.4 WATTS  
[ABSOLUTE LUMENS]6400  
[OTHER]see [www.finelite.com](http://www.finelite.com) for source files ITL92549. 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	6400
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	121
Total Luminaire Watts	52.9
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)	0.20 ft
Luminous Height	0.00 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	13777	13777	13672
55	13318	13318	13189
65	12676	12676	12626
75	11676	11839	11880
85	10305	10911	11032

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HPO-ID-4FT-H-H-835-WSO-F-ITL92549.301.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	1069.519	1069.519	1069.519	1069.519	1069.519
2.5	1067.185	1067.963	1067.963	1067.963	1068.741
5.0	1063.296	1064.074	1064.074	1064.074	1064.852
7.5	1057.851	1058.629	1059.407	1059.407	1059.407
10.0	1050.073	1049.295	1050.851	1050.851	1049.295
12.5	1041.517	1037.628	1041.517	1042.295	1039.961
15.0	1028.294	1023.627	1028.294	1029.071	1026.738
17.5	1014.293	1007.292	1013.515	1014.293	1010.404
20.0	997.958	988.624	995.625	996.403	993.291
22.5	980.068	968.401	976.179	976.957	973.845
25.0	956.733	947.399	954.400	955.177	952.844
27.5	932.620	924.842	931.065	932.620	929.509
30.0	907.730	898.396	906.952	905.396	903.841
32.5	879.728	871.172	878.950	878.172	875.839
35.0	850.948	843.170	849.392	848.615	845.503
37.5	819.057	812.056	819.057	817.501	815.168
40.0	785.610	779.388	787.166	784.832	783.277
42.5	752.163	746.718	752.941	750.608	746.718
45.0	717.161	711.716	717.161	714.050	711.716
47.5	679.047	675.158	679.825	676.714	675.936
50.0	641.711	636.266	642.489	638.600	637.044
52.5	602.042	598.153	602.042	599.708	597.375
55.0	562.372	558.483	562.372	559.261	556.928
57.5	521.147	518.036	520.369	518.814	517.258
60.0	479.144	476.033	479.144	476.811	476.811
62.5	435.586	433.252	436.364	434.030	435.586
65.0	394.361	392.027	394.361	392.805	392.805
67.5	350.024	348.469	351.580	350.024	352.358
70.0	308.021	307.244	308.799	308.799	308.799
72.5	263.685	264.463	266.796	267.574	268.352
75.0	222.460	222.460	225.571	226.349	226.349
77.5	181.235	182.791	184.346	186.680	186.680
80.0	142.343	143.121	145.454	146.232	147.788
82.5	104.230	105.007	107.341	108.897	108.897
85.0	66.116	66.894	70.005	71.561	70.783
87.5	30.335	31.113	33.447	35.002	35.780
90.0	0.000	0.000	0.000	0.000	0.000
92.5	10.890	30.335	65.338	33.447	28.780
95.0	28.780	64.560	166.456	77.005	60.671
97.5	49.003	96.451	308.021	148.566	108.897
100.0	69.227	125.231	462.032	258.240	177.346
102.5	90.228	147.010	578.707	441.808	292.465
105.0	112.786	169.567	630.822	717.939	506.368
107.5	134.565	191.347	630.044	1039.183	843.170
110.0	155.566	213.126	612.154	1232.086	1169.081
112.5	178.124	236.461	598.931	1291.201	1347.983
115.0	201.458	259.796	593.486	1284.978	1415.654
117.5	225.571	284.686	595.819	1249.976	1424.210
120.0	245.795	305.688	598.153	1202.528	1400.875
122.5	266.019	324.356	601.264	1155.080	1358.872
125.0	283.131	340.690	604.375	1106.855	1307.535
127.5	298.687	355.469	605.931	1059.407	1250.754
130.0	312.688	367.914	606.709	1015.848	1194.750
132.5	325.911	379.582	605.931	972.290	1138.746

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : HPO-ID-4FT-H-H-835-WSO-F-ITL92549.301.IES

CANDELA TABULATION - (Cont.)

135.0	339.135	390.472	602.820	931.065	1081.186
137.5	352.358	399.805	597.375	890.617	1025.960
140.0	365.581	410.695	590.374	847.837	968.401
142.5	378.026	420.029	581.040	804.278	909.285
145.0	391.249	429.363	571.706	763.053	853.282
147.5	403.695	437.142	562.372	724.161	800.389
150.0	414.584	444.920	553.038	686.826	749.052
152.5	426.252	451.920	544.482	653.379	702.382
155.0	436.364	458.143	535.926	623.043	661.935
157.5	446.476	463.588	528.148	595.819	626.155
160.0	455.809	469.810	521.147	573.262	595.819
162.5	464.366	475.255	514.147	553.816	570.151
165.0	470.588	479.144	507.924	536.704	546.816
167.5	476.811	483.034	502.479	521.925	528.926
170.0	481.478	486.145	497.812	511.036	514.925
172.5	485.367	488.478	494.701	501.702	504.813
175.0	487.700	489.256	492.368	494.701	496.257
177.5	490.034	490.812	491.590	492.368	491.590
180.0	490.034	490.034	490.034	490.034	490.034

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HPO-ID-4FT-H-H-835-WSO-F-ITL92549.301.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	391.02	N.A.	6.10
0-30	830.28	N.A.	13.00
0-40	1360.32	N.A.	21.30
0-60	2411.61	N.A.	37.70
0-80	3038.37	N.A.	47.50
0-90	3115.05	N.A.	48.70
10-90	3013.89	N.A.	47.10
20-40	969.31	N.A.	15.10
20-50	1520.17	N.A.	23.80
40-70	1440.12	N.A.	22.50
60-80	626.76	N.A.	9.80
70-80	237.92	N.A.	3.70
80-90	76.68	N.A.	1.20
90-110	596.23	N.A.	9.30
90-120	1316.62	N.A.	20.60
90-130	1954.74	N.A.	30.50
90-150	2840.91	N.A.	44.40
90-180	3284.53	N.A.	51.30
110-180	2688.31	N.A.	42.00
0-180	6399.58	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	101.16
10-20	289.85
20-30	439.27
30-40	530.04
40-50	550.87
50-60	500.42
60-70	388.84
70-80	237.92
80-90	76.68
90-100	110.02
100-110	486.21
110-120	720.40
120-130	638.11
130-140	510.36
140-150	375.81
150-160	251.78
160-170	144.65
170-180	47.19

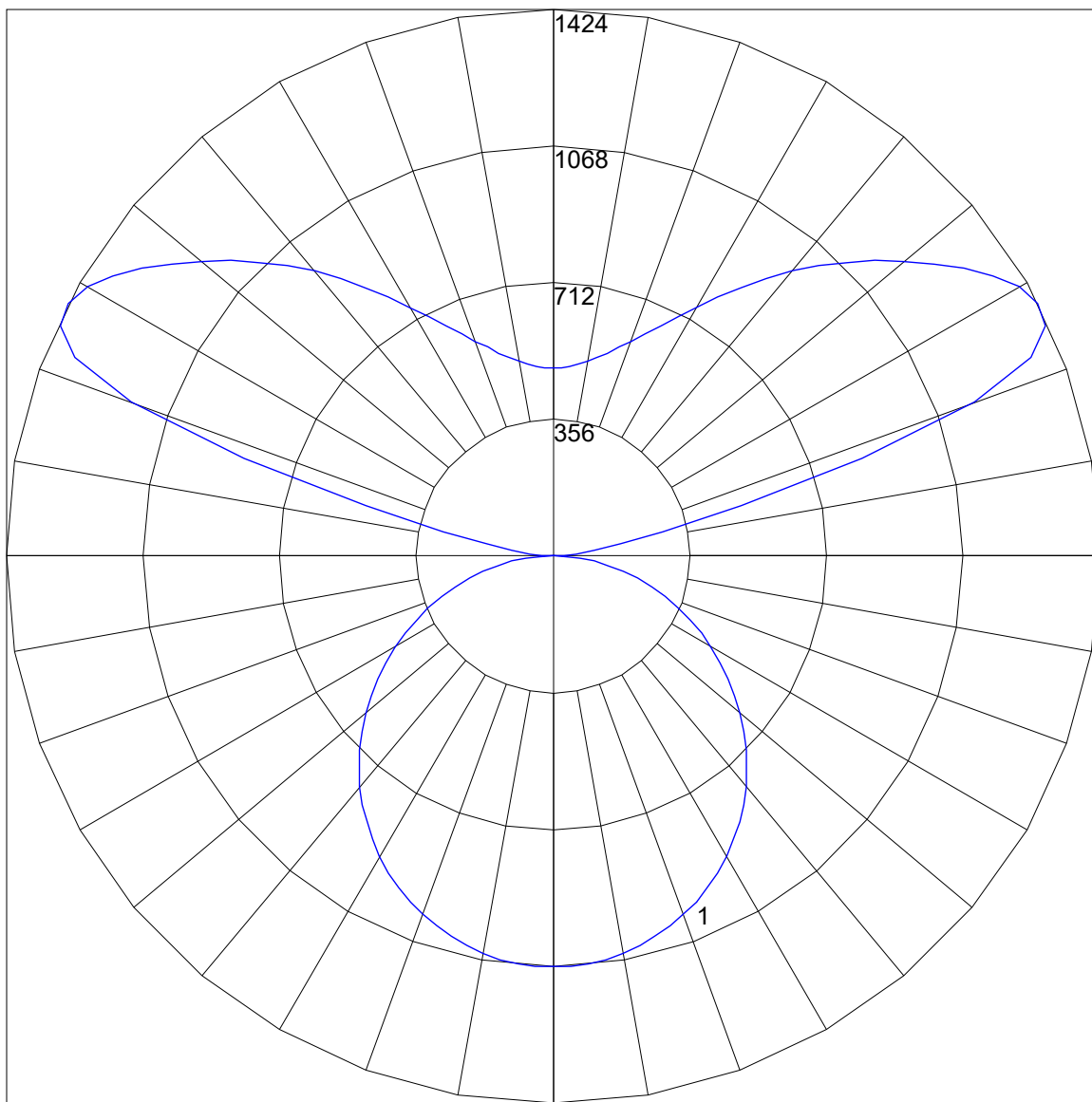
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HPO-ID-4FT-H-H-835-WSO-F-ITL92549.301.IES**

**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	98	98	98	98	83	83	83	68	68	68	55	55	55	49
1	97	93	89	85	89	85	82	79	72	69	67	59	58	56	48	47	46	40
2	88	81	74	69	81	74	69	64	63	59	55	52	49	46	42	40	38	33
3	80	71	63	57	74	65	59	53	55	50	46	46	42	39	37	34	32	28
4	73	62	54	48	67	58	51	45	49	43	39	41	37	33	33	30	28	24
5	67	56	47	41	62	51	44	39	44	38	34	36	32	29	30	26	24	21
6	62	50	41	36	57	46	39	33	39	33	29	33	28	25	27	23	21	18
7	57	45	37	31	52	42	34	29	35	30	26	30	25	22	24	21	19	16
8	53	41	33	27	49	38	31	26	32	27	23	27	23	20	22	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	21	27	22	18	23	19	16	19	16	13	11

POLAR GRAPH



Maximum Candela = 1424.21 Located At Horizontal Angle = 90, Vertical Angle = 117.5  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)