

# 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-B-H-835-WSO-F-ITL92549.311.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

[TEST]ITL92549.311 Family Correlation File  
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.  
[TESTDATE]11/20/19  
[ISSUEDATE]09/09/20  
[MANUFAC]FINELITE, INC.  
[LUMCAT]HPO-ID-4ft-B-H-835-WSO-F  
[INPUT\_ELECTRICAL]120.0 VOLTS, 43.6 WATTS  
[INPUT\_ELECTRICAL]277.0 VOLTS, 44.7 WATTS  
[ABSOLUTE LUMENS]5288  
[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	5288
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	121
Total Luminaire Watts	43.6
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-B-H-835-WSO-F-ITL92549.311.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	746.719	752.941	750.608	746.719
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	182.790	184.346	186.680	186.680
80.0	142.343	143.121	145.454	146.232	147.788
82.5	104.229	105.007	107.341	108.896	108.896
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	7.204	20.069	43.225	22.127	19.040
95.0	19.040	42.710	110.121	50.944	40.138
97.5	32.419	63.808	203.775	98.286	72.042
100.0	45.798	82.848	305.663	170.842	117.325
102.5	59.692	97.256	382.851	292.284	193.484
105.0	74.615	112.179	417.328	474.961	334.994
107.5	89.023	126.588	416.813	687.485	557.809
110.0	102.917	140.996	404.978	815.102	773.420
112.5	117.840	156.434	396.230	854.210	891.775
115.0	133.277	171.871	392.628	850.093	936.544
117.5	149.230	188.338	394.172	826.937	942.204
120.0	162.609	202.232	395.715	795.547	926.766
122.5	175.988	214.582	397.774	764.158	898.979
125.0	187.309	225.388	399.832	732.253	865.016
127.5	197.600	235.165	400.861	700.864	827.452
130.0	206.863	243.398	401.376	672.047	790.402
132.5	215.611	251.117	400.861	643.230	753.352

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : HPO-ID-4FT-B-H-835-WSO-F-ITL92549.311.IES

CANDELA TABULATION - (Cont.)

135.0	224.359	258.321	398.803	615.958	715.272
137.5	233.107	264.496	395.201	589.199	678.737
140.0	241.855	271.701	390.569	560.897	640.657
142.5	250.088	277.875	384.395	532.080	601.549
145.0	258.836	284.051	378.220	504.807	564.499
147.5	267.069	289.196	372.044	479.078	529.507
150.0	274.273	294.342	365.870	454.378	495.545
152.5	281.992	298.974	360.209	432.251	464.670
155.0	288.682	303.090	354.549	412.182	437.911
157.5	295.371	306.692	349.403	394.172	414.240
160.0	301.546	310.809	344.772	379.249	394.172
162.5	307.207	314.411	340.140	366.384	377.190
165.0	311.323	316.984	336.024	355.063	361.753
167.5	315.440	319.557	332.422	345.286	349.917
170.0	318.528	321.615	329.334	338.082	340.655
172.5	321.101	323.159	327.276	331.907	333.965
175.0	322.644	323.674	325.732	327.276	328.305
177.5	324.188	324.703	325.217	325.732	325.217
180.0	324.188	324.188	324.188	324.188	324.188

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HPO-ID-4FT-B-H-835-WSO-F-ITL92549.311.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	391.02	N.A.	7.40
0-30	830.28	N.A.	15.70
0-40	1360.32	N.A.	25.70
0-60	2411.61	N.A.	45.60
0-80	3038.37	N.A.	57.50
0-90	3115.05	N.A.	58.90
10-90	3013.89	N.A.	57.00
20-40	969.31	N.A.	18.30
20-50	1520.17	N.A.	28.70
40-70	1440.12	N.A.	27.20
60-80	626.76	N.A.	11.90
70-80	237.92	N.A.	4.50
80-90	76.68	N.A.	1.50
90-110	394.44	N.A.	7.50
90-120	871.03	N.A.	16.50
90-130	1293.18	N.A.	24.50
90-150	1879.44	N.A.	35.50
90-180	2172.92	N.A.	41.10
110-180	1778.48	N.A.	33.60
0-180	5287.97	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

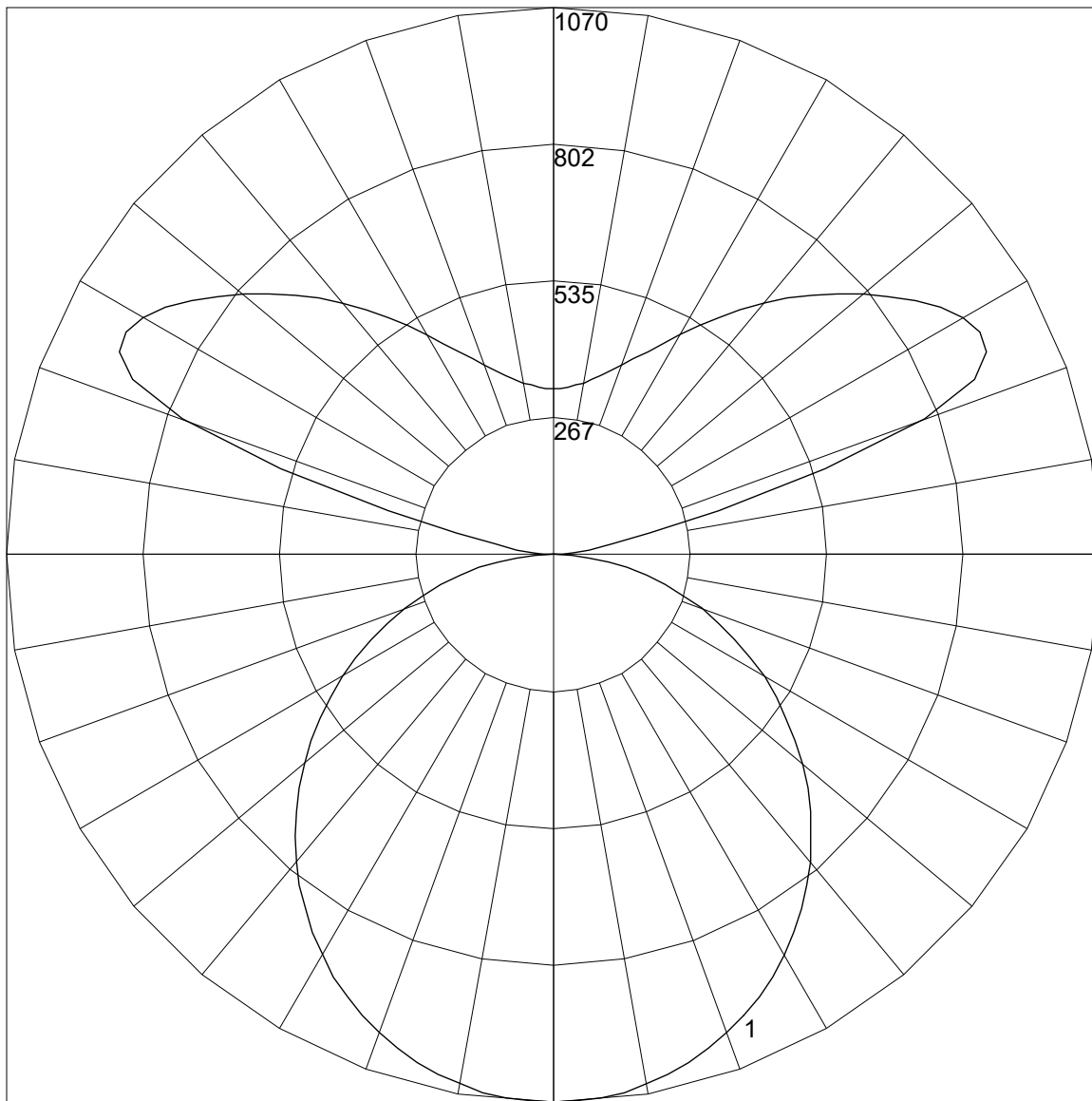
Zone	Lumens
0-10	101.16
10-20	289.85
20-30	439.27
30-40	530.04
40-50	550.87
50-60	500.42
60-70	388.84
70-80	237.92
80-90	76.68
90-100	72.78
100-110	321.66
110-120	476.59
120-130	422.15
130-140	337.64
140-150	248.62
150-160	166.57
160-170	95.70
170-180	31.22

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	109	109	109	109	102	102	102	102	88	88	88	76	76	76	64	64	64	59
1	99	95	91	87	93	89	85	82	77	74	72	66	64	62	56	55	54	49
2	90	83	76	71	84	77	71	67	67	63	59	58	55	52	49	47	45	40
3	82	72	65	59	76	68	61	55	59	54	49	51	47	43	43	40	38	34
4	75	64	56	49	70	60	52	47	52	46	42	45	41	37	39	35	32	29
5	69	57	48	42	64	53	46	40	47	41	36	40	36	32	35	31	28	25
6	63	51	43	37	59	48	40	35	42	36	31	36	32	28	31	28	25	22
7	59	46	38	32	54	43	36	30	38	32	28	33	28	25	29	25	22	19
8	54	42	34	28	51	39	32	27	35	29	24	30	25	22	26	22	19	17
9	51	38	30	25	47	36	29	24	32	26	22	28	23	20	24	20	17	15
10	47	35	28	23	44	33	26	22	29	24	20	26	21	18	22	19	16	14

POLAR GRAPH



Maximum Candela = 1069.519 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)