

# 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-WSO-F-ITL92314.005.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

[TEST]ITL92314.005 Family Correlation File  
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.  
[TESTDATE]10/01/19  
[ISSUEDATE]12/13/19  
[MANUFAC]FINELITE, INC.  
[LUMCAT]HP-X-ID-4ft-V-B-835-WSO-F  
[INPUT\_ELECTRICAL]120.0 VOLTS, 51.7 WATTS  
[INPUT\_ELECTRICAL]277.0 VOLTS, 52.6 WATTS  
[ABSOLUTE LUMENS]6284  
[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL92314. 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	6283
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	122
Total Luminaire Watts	51.7
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
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	9077	9117	9048
55	8782	8806	8745
65	8322	8371	8354
75	7742	7849	7902
85	6738	7214	7373

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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	705.491	705.491	705.491	705.491	705.491
2.5	704.982	704.982	704.982	704.982	704.982
5.0	702.947	702.947	702.947	702.947	702.947
7.5	698.370	698.878	698.878	699.387	698.878
10.0	693.792	692.266	694.300	694.300	692.774
12.5	687.179	684.636	687.688	687.688	685.145
15.0	679.550	675.989	679.550	680.058	676.498
17.5	669.885	664.799	669.885	670.903	666.325
20.0	657.678	653.100	658.187	658.695	655.643
22.5	644.962	639.367	645.471	645.979	642.927
25.0	631.229	626.142	631.737	632.246	629.194
27.5	614.952	610.374	615.969	616.478	613.426
30.0	598.167	594.097	599.184	599.184	596.132
32.5	580.364	575.278	581.381	580.873	577.821
35.0	561.544	555.949	561.544	561.544	559.510
37.5	539.672	536.620	542.216	541.198	538.655
40.0	518.818	515.766	520.344	519.327	516.275
42.5	496.438	492.877	497.455	496.438	493.894
45.0	472.531	470.497	474.566	472.531	471.005
47.5	448.625	446.590	450.151	447.608	446.082
50.0	423.193	421.158	425.227	422.175	420.649
52.5	396.743	396.235	399.286	397.252	395.217
55.0	370.802	370.802	371.820	370.293	369.276
57.5	343.844	343.335	344.353	342.827	341.809
60.0	315.868	315.360	317.394	315.868	315.360
62.5	288.402	287.893	289.419	288.402	287.893
65.0	258.900	259.918	260.426	259.918	259.918
67.5	231.434	231.942	232.959	232.959	232.959
70.0	202.949	202.949	204.984	204.475	204.984
72.5	175.482	175.482	177.008	176.500	177.008
75.0	147.507	148.016	149.542	150.050	150.559
77.5	120.040	121.058	122.583	124.109	124.109
80.0	94.608	94.608	96.642	97.660	97.660
82.5	68.667	69.684	71.210	71.719	72.736
85.0	43.235	44.761	46.287	47.304	47.304
87.5	19.328	20.854	22.380	23.906	23.906
90.0	1.017	3.052	4.578	6.612	7.630
92.5	15.801	40.490	81.967	42.465	38.515
95.0	37.527	85.918	210.350	100.731	79.005
97.5	63.204	126.407	390.085	189.611	137.270
100.0	89.868	163.935	590.559	324.906	226.151
102.5	118.507	191.586	743.630	546.119	367.371
105.0	145.171	221.213	817.697	895.714	628.086
107.5	172.822	248.864	824.610	1297.650	1028.047
110.0	202.449	277.503	804.859	1569.228	1464.547
112.5	232.076	306.143	786.095	1659.096	1720.324
115.0	260.715	336.757	777.207	1663.046	1817.105
117.5	289.354	366.384	778.195	1623.544	1842.781
120.0	314.043	393.048	779.183	1563.303	1816.117
122.5	337.745	415.762	781.158	1499.112	1762.789
125.0	357.496	435.513	784.120	1437.883	1695.635
127.5	377.247	454.276	784.120	1375.667	1624.531
130.0	396.998	471.065	785.108	1316.414	1550.465
132.5	413.786	484.890	782.145	1259.135	1475.410

CANDELA TABULATION - (Cont.)

135.0	431.562	497.729	776.220	1202.844	1395.418
137.5	449.338	511.555	769.307	1149.516	1324.314
140.0	466.127	524.393	757.456	1093.226	1250.247
142.5	482.915	536.244	745.606	1035.947	1172.230
145.0	499.704	548.094	731.780	981.632	1095.201
147.5	515.505	557.970	718.942	927.316	1025.084
150.0	530.318	567.845	707.091	877.938	956.943
152.5	544.144	576.733	696.228	835.473	898.677
155.0	558.957	585.621	684.377	796.958	845.349
157.5	569.820	592.534	674.501	762.394	799.921
160.0	581.671	599.447	664.626	731.780	759.431
162.5	591.547	605.372	655.738	706.103	726.842
165.0	601.422	611.298	647.837	684.377	698.203
167.5	608.335	615.248	640.924	665.613	675.489
170.0	614.260	619.198	634.999	650.800	656.725
172.5	620.186	623.148	632.037	640.924	643.887
175.0	623.148	624.136	628.086	632.037	634.012
177.5	625.124	625.124	626.111	627.099	628.086
180.0	626.111	626.111	626.111	626.111	626.111

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	258.20	N.A.	4.10
0-30	548.44	N.A.	8.70
0-40	898.74	N.A.	14.30
0-60	1594.09	N.A.	25.40
0-80	2009.47	N.A.	32.00
0-90	2061.00	N.A.	32.80
10-90	1994.21	N.A.	31.70
20-40	640.54	N.A.	10.20
20-50	1004.71	N.A.	16.00
40-70	952.96	N.A.	15.20
60-80	415.38	N.A.	6.60
70-80	157.77	N.A.	2.50
80-90	51.53	N.A.	0.80
90-110	759.36	N.A.	12.10
90-120	1690.79	N.A.	26.90
90-130	2516.66	N.A.	40.10
90-150	3655.97	N.A.	58.20
90-180	4222.4	N.A.	67.20
110-180	3463.04	N.A.	55.10
0-180	6283.4	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

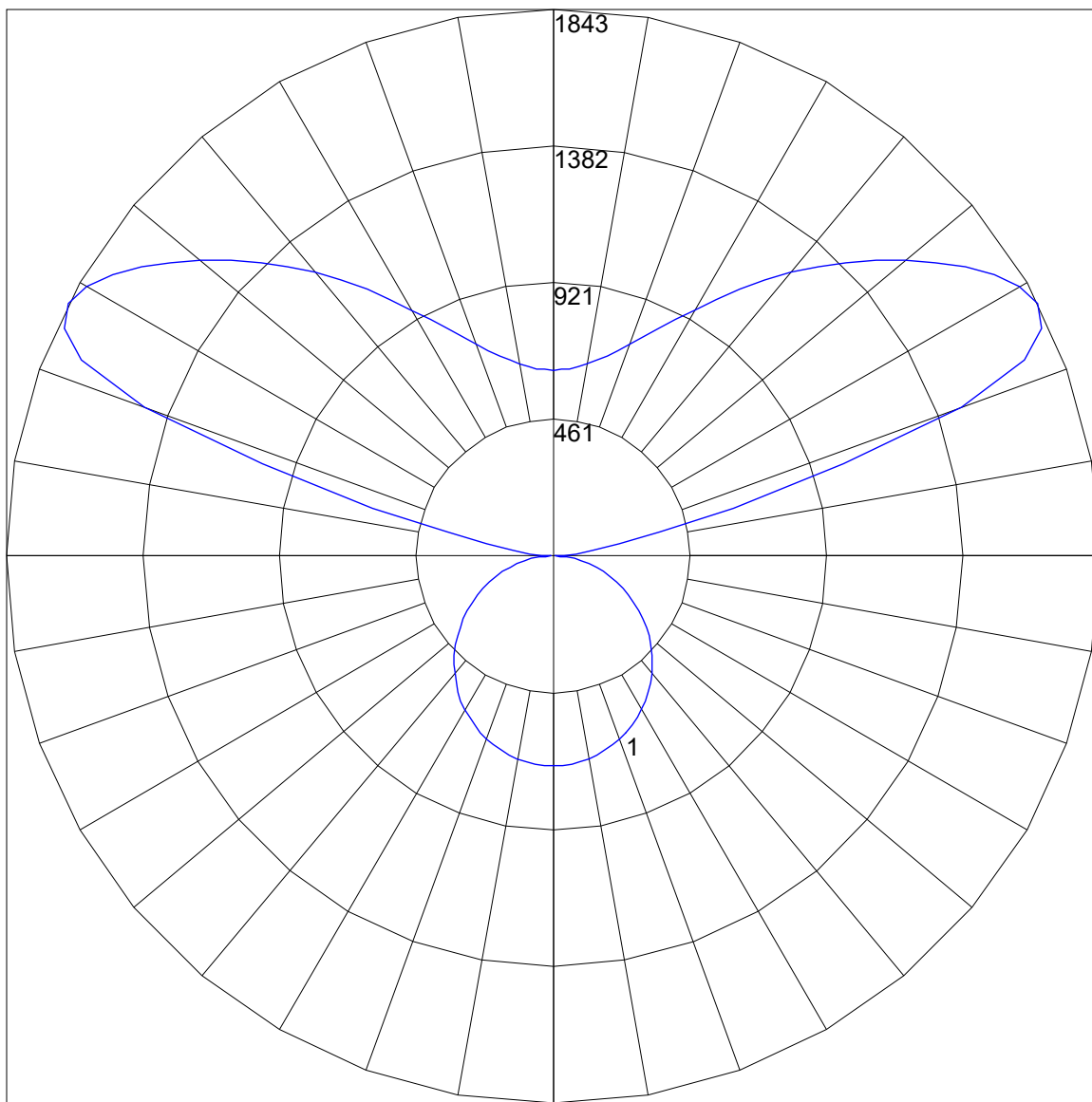
Zone	Lumens
0-10	66.79
10-20	191.41
20-30	290.23
30-40	350.30
40-50	364.18
50-60	331.17
60-70	257.62
70-80	157.77
80-90	51.53
90-100	141.54
100-110	617.82
110-120	931.43
120-130	825.87
130-140	657.55
140-150	481.76
150-160	321.74
160-170	184.47
170-180	60.22

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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	94	89	86	82	84	81	77	74	64	62	60	49	48	46	35	34	34	27
2	85	78	72	67	76	70	65	61	56	52	49	43	41	38	31	29	28	22
3	78	68	61	55	70	62	55	50	49	45	41	38	35	32	27	25	24	19
4	71	60	52	46	63	54	48	43	44	39	35	34	30	27	24	22	20	16
5	65	53	45	40	58	48	42	36	39	34	30	30	26	24	22	19	17	14
6	60	48	40	34	53	43	36	31	35	30	26	27	23	21	20	17	15	12
7	55	43	35	30	49	39	32	27	31	26	23	24	21	18	18	15	14	11
8	51	39	31	26	46	35	29	24	29	24	20	22	19	16	16	14	12	10
9	47	35	28	23	43	32	26	21	26	21	18	20	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 = 1842.781 Located At Horizontal Angle = 90, Vertical Angle = 117.5  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)