

# 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-4-ID-4FT-S-V-835-WSO-DAO-ITL89033-ITL94331.013.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89033-ITL94331.013 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]03/08/17

[ISSUEDATE]08/27/2021

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HP-4-ID-4ft-S-V-835-WSO-DAO

[\_INPUT\_ELECTRICAL]120.0 VOLTS, 51.6 WATTS

[\_INPUT\_ELECTRICAL]277.0 VOLTS, 53.9 WATTS

[\_ABSOLUTE]LUMENS]5645

[\_CONVERT] Photometric web converted from original test data

[OTHER]see [www.finelite.com](http://www.finelite.com) for source files ITL89033 and ITL94331. 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	5645
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	109
Total Luminaire Watts	51.6
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.34
Spacing Criterion (90-270)	1.18
Spacing Criterion (Diagonal)	1.30
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	0.32 ft
Luminous Height	0.00 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	11998	12386	10267
55	10306	11017	9130
65	8629	9377	7959
75	6948	7688	6884
85	5445	5923	6018

**IES INDOOR REPORT**

**PHOTOMETRIC FILENAME : HP-4-ID-4FT-S-V-835-WSO-DAO-ITL89033-ITL94331.013.IES**

**CANDELA TABULATION**

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>
0.0	1552.000	1552.000	1552.000	1552.000	1552.000	1552.000	1552.000	1552.000	1552.000
2.5	1584.000	1582.000	1574.000	1563.000	1551.000	1537.000	1527.000	1519.000	1516.000
5.0	1609.000	1605.000	1591.000	1569.000	1543.000	1518.000	1494.000	1481.000	1476.000
7.5	1628.000	1621.000	1602.000	1569.000	1530.000	1491.000	1458.000	1440.000	1433.000
10.0	1641.000	1635.000	1606.000	1563.000	1514.000	1461.000	1422.000	1397.000	1385.000
12.5	1645.000	1640.000	1606.000	1551.000	1495.000	1427.000	1383.000	1352.000	1339.000
15.0	1641.000	1635.000	1599.000	1533.000	1468.000	1389.000	1341.000	1306.000	1292.000
17.5	1628.000	1623.000	1586.000	1512.000	1437.000	1349.000	1293.000	1260.000	1243.000
20.0	1606.000	1603.000	1566.000	1482.000	1403.000	1304.000	1246.000	1212.000	1197.000
22.5	1576.000	1573.000	1539.000	1451.000	1367.000	1257.000	1201.000	1164.000	1153.000
25.0	1538.000	1537.000	1506.000	1415.000	1323.000	1210.000	1153.000	1119.000	1110.000
27.5	1493.000	1493.000	1465.000	1373.000	1277.000	1161.000	1102.000	1075.000	1064.000
30.0	1441.000	1444.000	1419.000	1327.000	1226.000	1108.000	1056.000	1030.000	1023.000
32.5	1383.000	1387.000	1368.000	1279.000	1173.000	1057.000	1007.000	985.000	982.000
35.0	1315.000	1325.000	1314.000	1224.000	1116.000	1003.000	960.000	943.000	939.000
37.5	1249.000	1261.000	1251.000	1166.000	1056.000	950.000	911.000	901.000	900.000
40.0	1175.000	1192.000	1188.000	1106.000	998.000	895.000	862.000	856.000	861.000
42.5	1102.000	1114.000	1123.000	1045.000	938.000	842.000	815.000	815.000	819.000
45.0	1019.000	1039.000	1052.000	976.000	872.000	787.000	768.000	774.000	779.000
47.5	943.000	965.000	980.000	911.000	812.000	735.000	718.000	731.000	741.000
50.0	866.000	885.000	906.000	846.000	749.000	683.000	672.000	688.000	699.000
52.5	790.000	807.000	833.000	776.000	687.000	626.000	625.000	644.000	657.000
55.0	710.000	733.000	759.000	707.000	629.000	576.000	578.000	601.000	616.000
57.5	638.000	657.000	685.000	642.000	569.000	524.000	531.000	558.000	573.000
60.0	564.000	587.000	615.000	578.000	513.000	475.000	483.000	510.000	526.000
62.5	499.000	515.000	546.000	512.000	459.000	426.000	439.000	466.000	482.000
65.0	438.000	452.000	476.000	450.000	404.000	381.000	391.000	421.000	436.000
67.5	374.000	386.000	411.000	392.000	352.000	334.000	348.000	376.000	386.000
70.0	320.000	329.000	351.000	335.000	305.000	289.000	303.000	329.000	340.000
72.5	264.000	274.000	294.000	280.000	259.000	246.000	261.000	282.000	294.000
75.0	216.000	224.000	239.000	230.000	214.000	206.000	218.000	238.000	248.000
77.5	172.000	177.000	189.000	184.000	172.000	166.000	178.000	193.000	199.000
80.0	130.000	134.000	143.000	142.000	132.000	129.000	138.000	151.000	155.000
82.5	92.000	93.000	100.000	99.000	96.000	94.000	100.000	108.000	112.000
85.0	57.000	57.000	62.000	62.000	63.000	60.000	64.000	67.000	70.000
87.5	22.000	24.000	26.000	28.000	29.000	28.000	29.000	30.000	31.000
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	6.550	11.462	12.280	12.280	12.280	12.280	12.280	11.462	6.550
95.0	18.420	32.748	33.566	26.198	26.198	26.198	33.566	32.748	18.420
97.5	32.338	55.671	85.962	53.624	46.665	53.624	85.962	55.671	32.338
100.0	48.712	76.138	136.312	100.699	79.003	100.699	136.312	76.138	48.712
102.5	68.360	92.921	201.397	155.960	126.897	155.960	201.397	92.921	68.360
105.0	86.372	110.932	251.337	241.104	193.210	241.104	251.337	110.932	86.372
107.5	104.792	128.943	274.260	352.855	296.774	352.855	274.260	128.943	104.792
110.0	122.394	145.726	285.313	445.776	424.899	445.776	285.313	145.726	122.394
112.5	140.405	162.100	298.412	484.254	509.633	484.254	298.412	162.100	140.405
115.0	157.597	177.655	320.516	496.125	541.562	496.125	320.516	177.655	157.597
117.5	171.515	191.982	338.118	501.856	553.433	501.856	338.118	191.982	171.515
120.0	184.205	205.900	349.580	524.370	562.029	524.370	349.580	205.900	184.205
122.5	195.257	219.408	356.948	552.205	588.637	552.205	356.948	219.408	195.257
125.0	205.900	231.279	362.269	567.351	619.747	567.351	362.269	231.279	205.900
127.5	215.724	241.922	366.363	567.760	636.121	567.760	366.363	241.922	215.724
130.0	223.911	251.337	369.638	557.936	633.255	557.936	369.638	251.337	223.911
132.5	232.507	260.343	372.503	544.427	618.109	544.427	372.503	260.343	232.507

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-4-ID-4FT-S-V-835-WSO-DAO-ITL89033-ITL94331.013.IES****CANDELA TABULATION - (Cont.)**

<b>135.0</b>	240.694	268.530	374.550	529.691	598.461	529.691	374.550	268.530	240.694
<b>137.5</b>	248.472	275.898	375.368	513.727	575.947	513.727	375.368	275.898	248.472
<b>140.0</b>	256.659	282.857	375.778	497.762	552.205	497.762	375.778	282.857	256.659
<b>142.5</b>	264.846	289.406	375.368	480.979	528.463	480.979	375.368	289.406	264.846
<b>145.0</b>	273.442	295.956	373.322	465.424	505.130	465.424	373.322	295.956	273.442
<b>147.5</b>	280.401	301.277	370.456	449.869	482.617	449.869	370.456	301.277	280.401
<b>150.0</b>	287.769	306.599	367.591	434.723	462.149	434.723	367.591	306.599	287.769
<b>152.5</b>	295.137	311.101	364.316	419.987	443.320	419.987	364.316	311.101	295.137
<b>155.0</b>	301.687	315.604	361.041	406.069	424.490	406.069	361.041	315.604	301.687
<b>157.5</b>	307.827	319.288	356.948	393.380	407.707	393.380	356.948	319.288	307.827
<b>160.0</b>	313.557	322.972	353.673	381.918	392.561	381.918	353.673	322.972	313.557
<b>162.5</b>	318.470	325.838	349.580	371.275	379.462	371.275	349.580	325.838	318.470
<b>165.0</b>	323.382	328.294	345.896	361.860	368.000	361.860	345.896	328.294	323.382
<b>167.5</b>	327.066	330.341	342.621	353.673	358.176	353.673	342.621	330.341	327.066
<b>170.0</b>	329.931	332.387	340.165	347.124	349.580	347.124	340.165	332.387	329.931
<b>172.5</b>	331.978	333.615	338.118	341.802	343.440	341.802	338.118	333.615	331.978
<b>175.0</b>	334.025	334.434	336.071	337.709	338.937	337.709	336.071	334.434	334.025
<b>177.5</b>	334.843	334.843	335.253	335.662	335.662	335.662	335.253	334.843	334.843
<b>180.0</b>	335.253	335.253	335.253	335.253	335.253	335.253	335.253	335.253	335.253

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-4-ID-4FT-S-V-835-WSO-DAO-ITL89033-ITL94331.013.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	559.67	N.A.	9.90
0-30	1168.58	N.A.	20.70
0-40	1872.64	N.A.	33.20
0-60	3150.8	N.A.	55.80
0-80	3813.23	N.A.	67.60
0-90	3883.51	N.A.	68.80
10-90	3737.17	N.A.	66.20
20-40	1312.97	N.A.	23.30
20-50	2004.47	N.A.	35.50
40-70	1701.22	N.A.	30.10
60-80	662.43	N.A.	11.70
70-80	239.36	N.A.	4.20
80-90	70.28	N.A.	1.20
90-110	238.03	N.A.	4.20
90-120	567.00	N.A.	10.00
90-130	915.79	N.A.	16.20
90-150	1463.00	N.A.	25.90
90-180	1761.03	N.A.	31.20
110-180	1523.01	N.A.	27.00
0-180	5644.54	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	146.34
10-20	413.34
20-30	608.90
30-40	704.07
40-50	691.50
50-60	586.66
60-70	423.06
70-80	239.36
80-90	70.28
90-100	39.66
100-110	198.36
110-120	328.97
120-130	348.80
130-140	307.79
140-150	239.42
150-160	167.62
160-170	98.20
170-180	32.21

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-4-ID-4FT-S-V-835-WSO-DAO-ITL89033-ITL94331.013.IES

## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

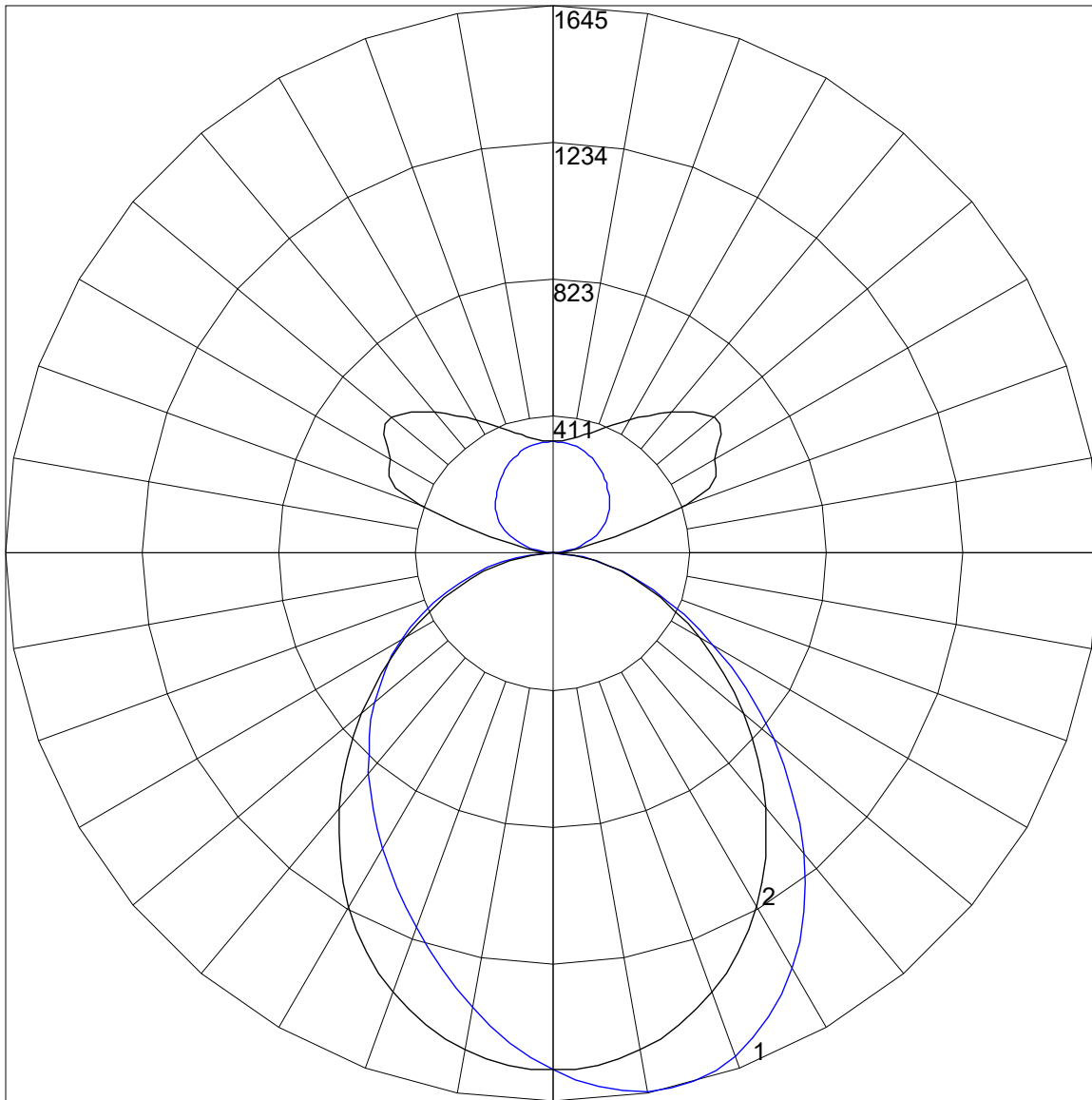
Effective Floor Cavity Reflectance 0.20

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	112	112	112	112	105	105	105	105	94	94	94	83	83	83	73	73	73	69
1	102	98	94	90	96	92	89	86	82	80	77	73	71	70	65	64	62	58
2	93	85	79	74	88	81	75	71	72	68	64	65	61	58	57	55	53	49
3	85	75	68	62	80	71	65	59	64	59	54	57	53	49	51	48	45	42
4	78	67	59	52	73	63	56	50	57	51	46	51	46	43	46	42	39	36
5	72	60	51	45	67	57	49	44	51	45	40	46	41	37	41	37	34	31
6	66	54	45	39	62	51	44	38	46	40	35	42	37	33	37	33	30	27
7	61	49	40	35	58	46	39	34	42	36	31	38	33	29	34	30	27	24
8	57	44	36	31	54	42	35	30	38	32	28	35	30	26	32	27	24	22
9	53	41	33	28	50	39	32	27	35	29	25	32	27	23	29	25	22	20
10	50	37	30	25	47	36	29	24	33	27	23	30	25	21	27	23	20	18

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-4-ID-4FT-S-V-835-WSO-DAO-ITL89033-ITL94331.013.IES

## POLAR GRAPH



Maximum Candela = 1645 Located At Horizontal Angle = 0, Vertical Angle = 12.5

# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)

# 2 - Vertical Plane Through Horizontal Angles (90 - 270)