

# 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-V-B-8TW-F-DAO-ITL85125-ITL94331.905.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL85125-ITL94331.905 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/06/15

[ISSUEDATE]08/26/2021

[MANUFAC]FINELITE, INC.

[LUMCAT]HP-4-ID-4ft-V-B-8TW-F-DAO

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 61.2 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 63.4 WATTS

[ABSOLUTE]LUMENS]6179

[CONVERT] Photometric web converted from original test data

[OTHER]see [www.finelite.com](http://www.finelite.com) for source files ITL85125 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	6179
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	101
Total Luminaire Watts	61.2
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)	0.32 ft
Luminous Height	0.00 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	6175	6375	5284
55	5304	5670	4699
65	4441	4826	4096
75	3576	3957	3543
85	2802	3048	3097

**IES INDOOR REPORT**

**PHOTOMETRIC FILENAME : HP-4-ID-4FT-V-B-8TW-F-DAO-ITL85125-ITL94331.905.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	798.777	798.777	798.777	798.777	798.777	798.777	798.777	798.777	798.777
2.5	815.247	814.217	810.100	804.439	798.263	791.057	785.910	781.793	780.249
5.0	828.114	826.055	818.850	807.527	794.145	781.278	768.926	762.235	759.662
7.5	837.893	834.290	824.511	807.527	787.454	767.382	750.398	741.133	737.531
10.0	844.583	841.495	826.570	804.439	779.220	751.942	731.869	719.002	712.826
12.5	846.642	844.069	826.570	798.263	769.441	734.443	711.797	695.842	689.151
15.0	844.583	841.495	822.967	788.998	755.544	714.885	690.181	672.167	664.961
17.5	837.893	835.319	816.276	778.190	739.589	694.298	665.476	648.492	639.742
20.0	826.570	825.026	805.983	762.750	722.091	671.138	641.286	623.787	616.067
22.5	811.129	809.585	792.086	746.795	703.562	646.948	618.126	599.083	593.421
25.0	791.572	791.057	775.102	728.266	680.916	622.758	593.421	575.922	571.290
27.5	768.411	768.411	754.000	706.650	657.241	597.539	567.173	553.277	547.615
30.0	741.648	743.192	730.325	682.975	630.993	570.261	543.498	530.116	526.514
32.5	711.797	713.856	704.077	658.271	603.715	544.013	518.279	506.956	505.412
35.0	676.799	681.946	676.284	629.963	574.378	516.220	494.089	485.339	483.281
37.5	642.830	649.006	643.860	600.112	543.498	488.942	468.870	463.723	463.208
40.0	604.744	613.494	611.435	569.232	513.647	460.635	443.651	440.563	443.136
42.5	567.173	573.349	577.981	537.836	482.766	433.357	419.461	419.461	421.520
45.0	524.455	534.748	541.439	502.324	448.798	405.050	395.271	398.359	400.933
47.5	485.339	496.662	504.382	468.870	417.917	378.287	369.537	376.228	381.375
50.0	445.709	455.488	466.296	435.416	385.492	351.524	345.862	354.097	359.759
52.5	406.594	415.344	428.725	399.389	353.582	322.187	321.673	331.451	338.142
55.0	365.420	377.257	390.639	363.876	323.731	296.453	297.483	309.320	317.040
57.5	328.363	338.142	352.553	330.422	292.851	269.690	273.293	287.189	294.909
60.0	290.277	302.115	316.526	297.483	264.029	244.471	248.589	262.485	270.720
62.5	256.823	265.058	281.013	263.514	236.236	219.252	225.943	239.839	248.074
65.0	225.428	232.633	244.986	231.604	207.929	196.092	201.238	216.679	224.399
67.5	192.489	198.665	211.532	201.753	181.166	171.902	179.107	193.518	198.665
70.0	164.696	169.328	180.651	172.417	156.976	148.741	155.947	169.328	174.990
72.5	135.875	141.021	151.315	144.109	133.301	126.610	134.330	145.139	151.315
75.0	111.170	115.287	123.008	118.376	110.141	106.023	112.199	122.493	127.640
77.5	88.524	91.098	97.274	94.700	88.524	85.436	91.612	99.332	102.421
80.0	66.908	68.967	73.599	73.084	67.937	66.393	71.025	77.716	79.775
82.5	47.350	47.865	51.468	50.953	49.409	48.380	51.468	55.585	57.644
85.0	29.337	29.337	31.910	31.910	32.425	30.881	32.939	34.483	36.027
87.5	11.323	12.352	13.382	14.411	14.926	14.411	14.926	15.440	15.955
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	30.000	32.000	34.000	38.000	39.000	38.000	34.000	32.000	30.000
95.0	71.000	72.000	76.000	81.000	82.000	81.000	76.000	72.000	71.000
97.5	115.000	116.000	121.000	126.000	125.000	126.000	121.000	116.000	115.000
100.0	160.000	162.000	167.000	172.000	171.000	172.000	167.000	162.000	160.000
102.5	206.000	210.000	215.000	220.000	220.000	220.000	215.000	210.000	206.000
105.0	257.000	261.000	266.000	270.000	269.000	270.000	266.000	261.000	257.000
107.5	311.000	314.000	317.000	321.000	321.000	321.000	317.000	314.000	311.000
110.0	369.000	369.000	372.000	376.000	375.000	376.000	372.000	369.000	369.000
112.5	427.000	425.000	429.000	435.000	430.000	435.000	429.000	425.000	427.000
115.0	485.000	483.000	485.000	490.000	486.000	490.000	485.000	483.000	485.000
117.5	543.000	544.000	545.000	546.000	543.000	546.000	545.000	544.000	543.000
120.0	602.000	604.000	603.000	602.000	600.000	602.000	603.000	604.000	602.000
122.5	662.000	664.000	664.000	661.000	658.000	661.000	664.000	664.000	662.000
125.0	723.000	726.000	726.000	720.000	717.000	720.000	726.000	726.000	723.000
127.5	784.000	786.000	788.000	779.000	773.000	779.000	788.000	786.000	784.000
130.0	843.000	844.000	846.000	840.000	835.000	840.000	846.000	844.000	843.000
132.5	903.000	902.000	903.000	899.000	893.000	899.000	903.000	902.000	903.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-4-ID-4FT-V-B-8TW-F-DAO-ITL85125-ITL94331.905.IES****CANDELA TABULATION - (Cont.)**

135.0	963.000	958.000	961.000	958.000	951.000	958.000	961.000	958.000	963.000
137.5	1021.000	1013.000	1018.000	1014.000	1007.000	1014.000	1018.000	1013.000	1021.000
140.0	1079.000	1070.000	1076.000	1072.000	1064.000	1072.000	1076.000	1070.000	1079.000
142.5	1132.000	1125.000	1132.000	1126.000	1119.000	1126.000	1132.000	1125.000	1132.000
145.0	1189.000	1177.000	1185.000	1179.000	1172.000	1179.000	1185.000	1177.000	1189.000
147.5	1240.000	1228.000	1236.000	1230.000	1223.000	1230.000	1236.000	1228.000	1240.000
150.0	1290.000	1277.000	1285.000	1279.000	1273.000	1279.000	1285.000	1277.000	1290.000
152.5	1334.000	1324.000	1332.000	1325.000	1320.000	1325.000	1332.000	1324.000	1334.000
155.0	1377.000	1367.000	1374.000	1368.000	1363.000	1368.000	1374.000	1367.000	1377.000
157.5	1419.000	1409.000	1415.000	1409.000	1405.000	1409.000	1415.000	1409.000	1419.000
160.0	1455.000	1447.000	1453.000	1447.000	1444.000	1447.000	1453.000	1447.000	1455.000
162.5	1489.000	1480.000	1487.000	1481.000	1479.000	1481.000	1487.000	1480.000	1489.000
165.0	1517.000	1510.000	1514.000	1511.000	1510.000	1511.000	1514.000	1510.000	1517.000
167.5	1542.000	1536.000	1539.000	1537.000	1537.000	1537.000	1539.000	1536.000	1542.000
170.0	1563.000	1559.000	1561.000	1559.000	1559.000	1559.000	1561.000	1559.000	1563.000
172.5	1578.000	1578.000	1577.000	1577.000	1577.000	1577.000	1577.000	1578.000	1578.000
175.0	1590.000	1590.000	1590.000	1589.000	1590.000	1589.000	1590.000	1590.000	1590.000
177.5	1597.000	1598.000	1598.000	1598.000	1598.000	1598.000	1598.000	1598.000	1597.000
180.0	1600.000	1600.000	1600.000	1600.000	1600.000	1600.000	1600.000	1600.000	1600.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-4-ID-4FT-V-B-8TW-F-DAO-ITL85125-ITL94331.905.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	288.05	N.A.	4.70
0-30	601.44	N.A.	9.70
0-40	963.81	N.A.	15.60
0-60	1621.64	N.A.	26.20
0-80	1962.58	N.A.	31.80
0-90	1998.75	N.A.	32.30
10-90	1923.43	N.A.	31.10
20-40	675.76	N.A.	10.90
20-50	1031.65	N.A.	16.70
40-70	875.58	N.A.	14.20
60-80	340.94	N.A.	5.50
70-80	123.20	N.A.	2.00
80-90	36.17	N.A.	0.60
90-110	366.84	N.A.	5.90
90-120	848.57	N.A.	13.70
90-130	1494.82	N.A.	24.20
90-150	2972.13	N.A.	48.10
90-180	4180.24	N.A.	67.70
110-180	3813.4	N.A.	61.70
0-180	6178.99	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	75.32
10-20	212.73
20-30	313.39
30-40	362.37
40-50	355.90
50-60	301.94
60-70	217.74
70-80	123.20
80-90	36.17
90-100	85.72
100-110	281.12
110-120	481.73
120-130	646.25
130-140	739.31
140-150	738.00
150-160	631.02
160-170	426.27
170-180	150.82

# IES INDOOR REPORT

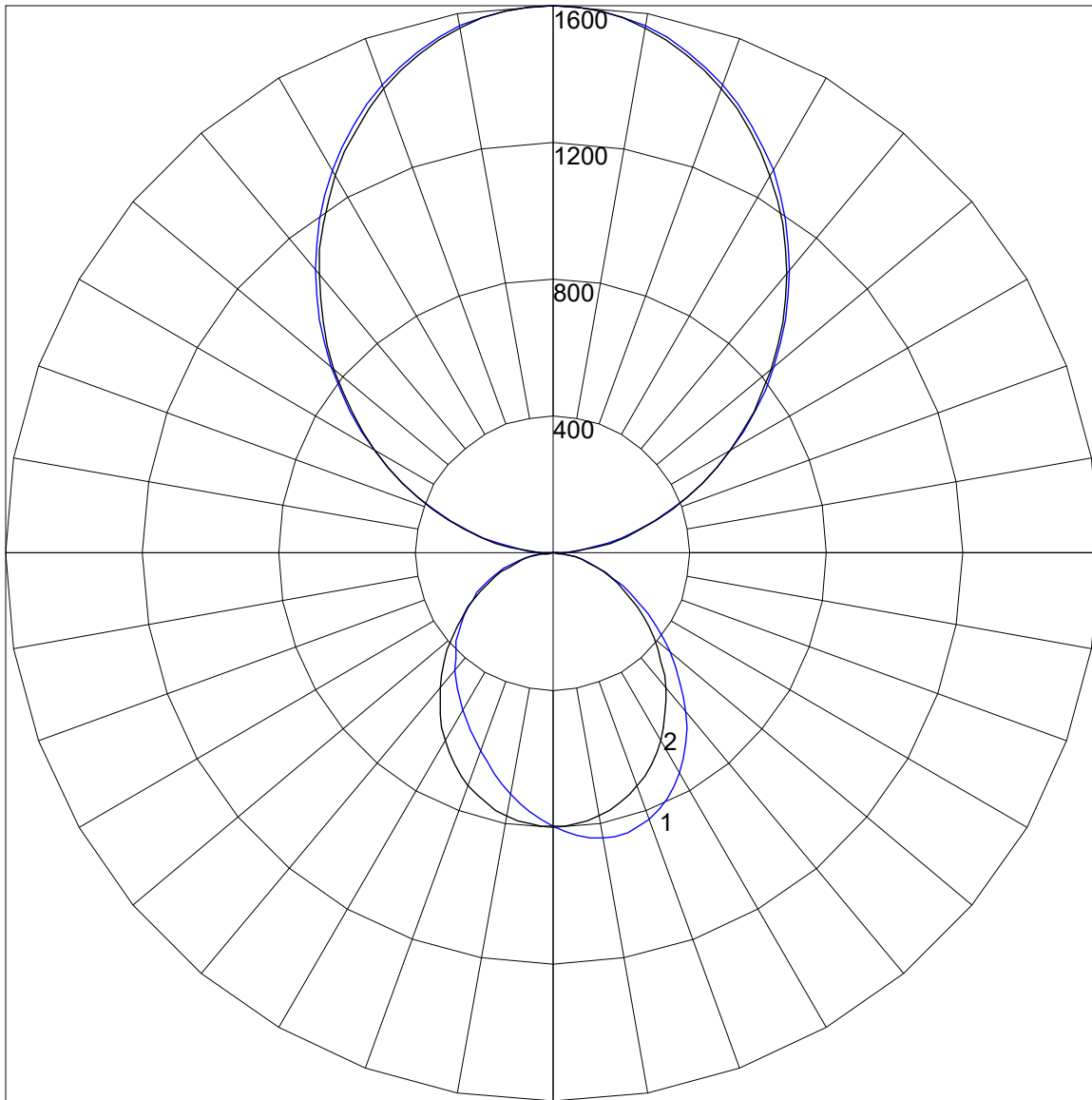
PHOTOMETRIC FILENAME : HP-4-ID-4FT-V-B-8TW-F-DAO-ITL85125-ITL94331.905.IES

## 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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	32
1	94	90	86	83	84	81	78	75	64	62	60	49	48	47	35	34	34	27
2	85	78	72	67	77	71	66	61	56	53	50	43	41	39	31	30	28	23
3	78	69	62	56	70	62	56	51	50	46	42	38	35	33	28	26	24	20
4	71	61	53	47	64	55	49	43	44	39	36	34	31	28	25	23	21	17
5	65	54	46	41	59	49	42	37	40	35	31	31	27	24	22	20	18	15
6	60	48	41	35	54	44	37	32	36	31	27	28	24	21	20	18	16	13
7	56	44	36	31	50	40	33	28	32	27	23	25	22	19	18	16	14	11
8	51	40	32	27	46	36	29	25	29	24	21	23	19	17	17	15	13	10
9	48	36	29	24	43	33	26	22	27	22	19	21	18	15	16	13	12	9
10	45	33	26	21	40	30	24	20	25	20	17	19	16	14	14	12	10	8

POLAR GRAPH



Maximum Candela = 1600 Located At Horizontal Angle = 0, Vertical Angle = 180  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)  
# 2 - Vertical Plane Through Horizontal Angles (90 - 270)