

# 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-B-S-835-F-DAO-ITL85125-ITL94331.012.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL85125-ITL94331.012 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/06/15

[ISSUEDATE]08/26/2021

[MANUFAC]FINELITE, INC.

[LUMCAT]HP-4-ID-4ft-B-S-835-F-DAO

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 33.0 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 35.7 WATTS

[\_ABSOLUTE]LUMENS]3741

[\_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	3741
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	113
Total Luminaire Watts	33
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)	0.32 ft
Luminous Height	0.00 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	4912	5071	4203
55	4219	4510	3738
65	3532	3839	3258
75	2844	3147	2818
85	2229	2425	2464

**IES INDOOR REPORT**

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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>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>
0.0	635.345	635.345	635.345	635.345	635.345	635.345	635.345	635.345	635.345
2.5	648.445	647.627	644.352	639.848	634.936	629.205	625.111	621.836	620.608
5.0	658.680	657.042	651.311	642.305	631.661	621.427	611.602	606.280	604.233
7.5	666.458	663.592	655.814	642.305	626.339	610.374	596.864	589.496	586.630
10.0	671.779	669.323	657.451	639.848	619.789	598.092	582.127	571.893	566.980
12.5	673.417	671.370	657.451	634.936	612.011	584.174	566.161	553.471	548.149
15.0	671.779	669.323	654.586	627.567	600.958	568.618	548.968	534.640	528.909
17.5	666.458	664.411	649.264	618.970	588.268	552.243	529.318	515.809	508.849
20.0	657.451	656.223	641.077	606.689	574.349	533.821	510.078	496.159	490.018
22.5	645.170	643.942	630.023	593.999	559.612	514.581	491.656	476.509	472.006
25.0	629.614	629.205	616.514	579.261	541.599	495.340	472.006	458.087	454.403
27.5	611.192	611.192	599.730	562.068	522.768	475.281	451.128	440.075	435.572
30.0	589.905	591.133	580.899	543.237	501.890	453.584	432.297	421.653	418.788
32.5	566.161	567.799	560.021	523.587	480.193	432.706	412.238	403.231	402.003
35.0	538.324	542.418	537.915	501.071	456.859	410.600	392.997	386.038	384.400
37.5	511.306	516.218	512.124	477.328	432.297	388.903	372.938	368.844	368.435
40.0	481.012	487.971	486.334	452.765	408.553	366.388	352.879	350.422	352.469
42.5	451.128	456.040	459.725	427.794	383.991	344.691	333.638	333.638	335.276
45.0	417.150	425.337	430.659	399.547	356.972	322.176	314.398	316.854	318.901
47.5	386.038	395.044	401.185	372.938	332.410	300.888	293.929	299.251	303.345
50.0	354.516	362.294	370.891	346.329	306.620	279.601	275.098	281.648	286.151
52.5	323.404	330.363	341.007	317.673	281.239	256.267	255.857	263.636	268.957
55.0	290.654	300.070	310.713	289.426	257.495	235.798	236.617	246.033	252.173
57.5	261.179	268.957	280.420	262.817	232.933	214.511	217.377	228.430	234.570
60.0	230.886	240.301	251.764	236.617	210.008	194.452	197.727	208.780	215.330
62.5	204.277	210.827	223.517	209.598	187.902	174.392	179.714	190.767	197.317
65.0	179.305	185.036	194.861	184.217	165.386	155.971	160.064	172.346	178.486
67.5	153.105	158.018	168.252	160.474	144.099	136.730	142.461	153.924	158.018
70.0	130.999	134.683	143.690	137.140	124.858	118.309	124.040	134.683	139.186
72.5	108.074	112.168	120.355	114.624	106.027	100.706	106.846	115.443	120.355
75.0	88.424	91.699	97.840	94.156	87.606	84.331	89.243	97.431	101.524
77.5	70.412	72.459	77.371	75.324	70.412	67.956	72.868	79.009	81.465
80.0	53.218	54.856	58.540	58.131	54.037	52.809	56.493	61.815	63.453
82.5	37.662	38.072	40.937	40.528	39.300	38.481	40.937	44.212	45.850
85.0	23.334	23.334	25.381	25.381	25.790	24.562	26.200	27.428	28.656
87.5	9.006	9.825	10.644	11.462	11.872	11.462	11.872	12.281	12.691
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	15.438	16.467	17.496	19.555	20.069	19.555	17.496	16.467	15.438
95.0	36.536	37.051	39.109	41.682	42.197	41.682	39.109	37.051	36.536
97.5	59.178	59.693	62.266	64.839	64.324	64.839	62.266	59.693	59.178
100.0	82.335	83.364	85.937	88.510	87.995	88.510	85.937	83.364	82.335
102.5	106.006	108.065	110.637	113.210	113.210	113.210	110.637	108.065	106.006
105.0	132.250	134.309	136.882	138.940	138.426	138.940	136.882	134.309	132.250
107.5	160.038	161.582	163.126	165.184	165.184	165.184	163.126	161.582	160.038
110.0	189.885	189.885	191.429	193.487	192.972	193.487	191.429	189.885	189.885
112.5	219.731	218.702	220.760	223.848	221.275	223.848	220.760	218.702	219.731
115.0	249.578	248.548	249.578	252.151	250.092	252.151	249.578	248.548	249.578
117.5	279.424	279.939	280.453	280.968	279.424	280.968	280.453	279.939	279.424
120.0	309.785	310.814	310.300	309.785	308.756	309.785	310.300	310.814	309.785
122.5	340.661	341.690	341.690	340.146	338.602	340.146	341.690	341.690	340.661
125.0	372.051	373.595	373.595	370.507	368.963	370.507	373.595	373.595	372.051
127.5	403.441	404.470	405.499	400.868	397.780	400.868	405.499	404.470	403.441
130.0	433.802	434.316	435.346	432.258	429.685	432.258	435.346	434.316	433.802
132.5	464.677	464.163	464.677	462.619	459.532	462.619	464.677	464.163	464.677

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-4-ID-4FT-B-S-835-F-DAO-ITL85125-ITL94331.012.IES****CANDELA TABULATION - (Cont.)**

135.0	495.553	492.980	494.524	492.980	489.378	492.980	494.524	492.980	495.553
137.5	525.399	521.283	523.856	521.797	518.195	521.797	523.856	521.283	525.399
140.0	555.246	550.615	553.702	551.644	547.527	551.644	553.702	550.615	555.246
142.5	582.519	578.917	582.519	579.432	575.830	579.432	582.519	578.917	582.519
145.0	611.851	605.676	609.793	606.705	603.103	606.705	609.793	605.676	611.851
147.5	638.095	631.920	636.037	632.949	629.347	632.949	636.037	631.920	638.095
150.0	663.825	657.135	661.252	658.164	655.077	658.164	661.252	657.135	663.825
152.5	686.467	681.321	685.438	681.836	679.263	681.836	685.438	681.321	686.467
155.0	708.595	703.449	707.051	703.963	701.390	703.963	707.051	703.449	708.595
157.5	730.207	725.062	728.149	725.062	723.003	725.062	728.149	725.062	730.207
160.0	748.733	744.616	747.704	744.616	743.072	744.616	747.704	744.616	748.733
162.5	766.229	761.598	765.200	762.112	761.083	762.112	765.200	761.598	766.229
165.0	780.638	777.035	779.094	777.550	777.035	777.550	779.094	777.035	780.638
167.5	793.502	790.415	791.959	790.929	790.929	790.929	791.959	790.415	793.502
170.0	804.309	802.250	803.280	802.250	802.250	802.250	803.280	802.250	804.309
172.5	812.028	812.028	811.513	811.513	811.513	811.513	811.513	812.028	812.028
175.0	818.203	818.203	818.203	817.688	818.203	817.688	818.203	818.203	818.203
177.5	821.805	822.320	822.320	822.320	822.320	822.320	822.320	822.320	821.805
180.0	823.349	823.349	823.349	823.349	823.349	823.349	823.349	823.349	823.349

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-4-ID-4FT-B-S-835-F-DAO-ITL85125-ITL94331.012.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	229.11	N.A.	6.10
0-30	478.38	N.A.	12.80
0-40	766.61	N.A.	20.50
0-60	1289.85	N.A.	34.50
0-80	1561.03	N.A.	41.70
0-90	1589.8	N.A.	42.50
10-90	1529.89	N.A.	40.90
20-40	537.49	N.A.	14.40
20-50	820.57	N.A.	21.90
40-70	696.43	N.A.	18.60
60-80	271.18	N.A.	7.20
70-80	97.99	N.A.	2.60
80-90	28.77	N.A.	0.80
90-110	188.77	N.A.	5.00
90-120	436.67	N.A.	11.70
90-130	769.23	N.A.	20.60
90-150	1529.44	N.A.	40.90
90-180	2151.12	N.A.	57.50
110-180	1962.35	N.A.	52.50
0-180	3740.92	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	59.91
10-20	169.21
20-30	249.27
30-40	288.23
40-50	283.08
50-60	240.16
60-70	173.19
70-80	97.99
80-90	28.77
90-100	44.11
100-110	144.66
110-120	247.90
120-130	332.56
130-140	380.45
140-150	379.77
150-160	324.72
160-170	219.35
170-180	77.61

# IES INDOOR REPORT

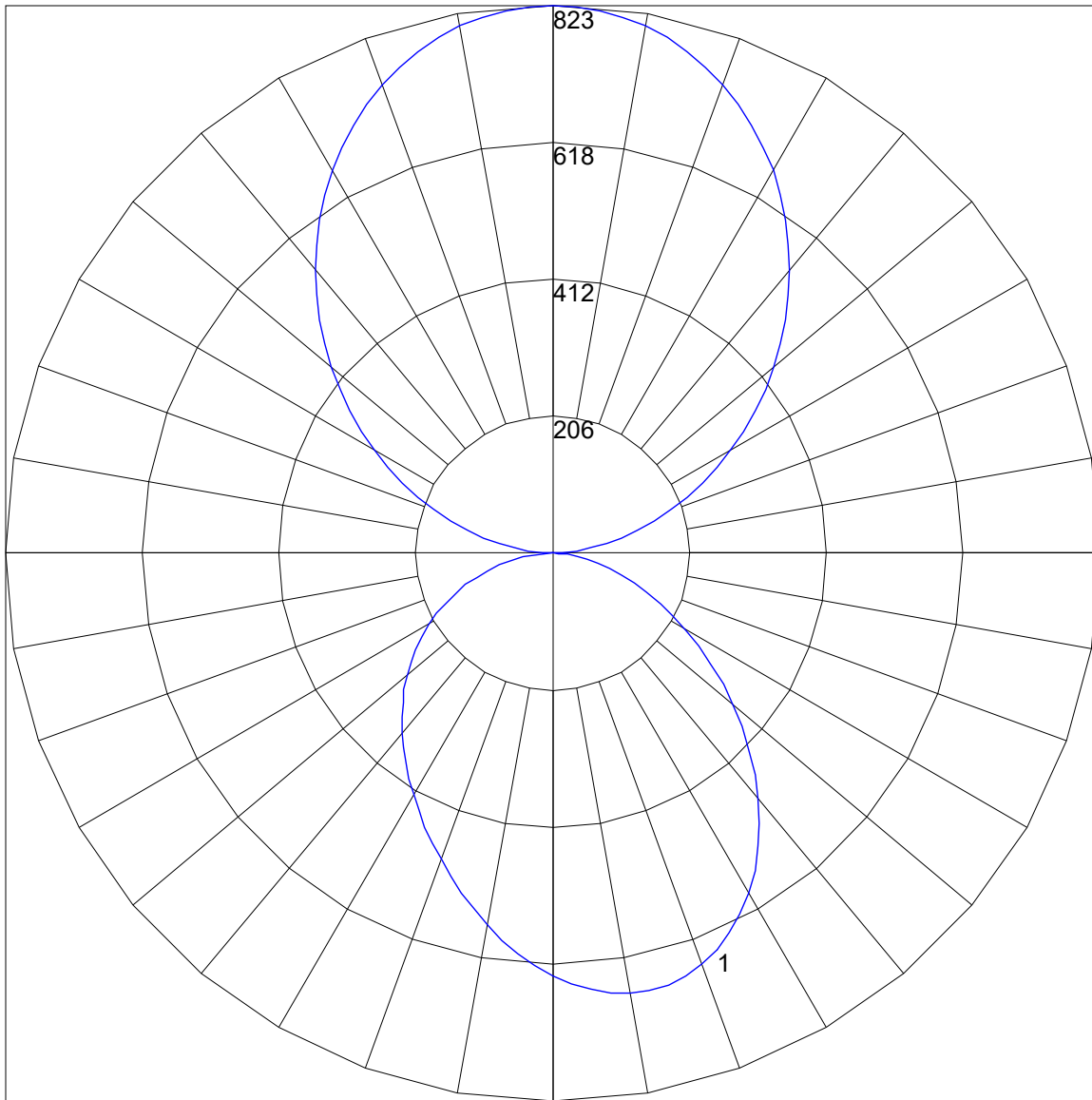
PHOTOMETRIC FILENAME : HP-4-ID-4FT-B-S-835-F-DAO-ITL85125-ITL94331.012.IES

## 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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	42
1	96	92	88	85	88	84	81	78	69	67	65	56	54	53	44	43	42	36
2	88	80	74	69	80	74	68	64	61	57	54	49	47	44	38	37	35	30
3	80	71	63	58	73	65	59	54	54	49	45	44	40	38	34	32	30	26
4	73	63	55	49	67	57	51	45	48	43	39	39	35	32	31	28	26	22
5	67	56	48	42	61	51	44	39	43	37	33	35	31	28	28	25	23	19
6	62	50	42	36	56	46	39	34	39	33	29	32	28	24	25	22	20	17
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	23	20	18	15
8	53	41	33	28	48	38	31	26	32	27	23	26	22	19	21	18	16	13
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14	12
10	46	34	27	22	42	32	25	21	27	22	18	22	18	16	18	15	13	11

POLAR GRAPH



Maximum Candela = 823.349 Located At Horizontal Angle = 0, Vertical Angle = 180  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)