

# 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-H-835-F-DL-ITL90629 ITL85125.006.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL90629 ITL85125.006 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]07/09/18

[ISSUEDATE]08/10/18

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HP-4-ID-4ft-V-H-835-F-DL

[\_INPUT\_ELECTRICAL]120.0 VOLTS, 65.5 WATTS

[\_INPUT\_ELECTRICAL]277.0 VOLTS, 67.1 WATTS

[\_ABSOLUTE]LUMENS]7384

[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL90629 and ITL85125. 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	7384
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	113
Total Luminaire Watts	65.5
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 w/Sides
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	0.32 ft
Luminous Height	0.08 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	6746	6257	6122
55	6238	5735	5634
65	5603	5137	5129
75	4620	4425	4563
85	3000	3767	4120

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	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
<b>0.0</b>	973.012	973.012	973.012	973.012	973.012
<b>2.5</b>	971.456	971.456	972.234	973.012	973.789
<b>5.0</b>	966.789	967.567	969.900	971.456	972.234
<b>7.5</b>	959.789	962.123	966.011	967.567	969.123
<b>10.0</b>	950.456	952.011	958.234	961.345	962.900
<b>12.5</b>	938.789	938.789	948.900	953.567	953.567
<b>15.0</b>	923.233	924.011	936.456	941.122	941.122
<b>17.5</b>	905.344	906.900	920.900	927.122	927.122
<b>20.0</b>	885.122	886.677	902.233	909.233	909.233
<b>22.5</b>	861.788	864.899	882.788	889.788	889.011
<b>25.0</b>	837.677	841.566	860.232	868.010	868.788
<b>27.5</b>	810.454	816.677	837.677	844.677	845.455
<b>30.0</b>	782.454	789.454	811.232	819.788	821.343
<b>32.5</b>	752.898	761.454	785.565	794.121	794.898
<b>35.0</b>	718.675	731.120	756.787	766.898	767.676
<b>37.5</b>	686.786	702.342	728.009	737.342	741.231
<b>40.0</b>	654.897	670.452	698.453	709.342	711.675
<b>42.5</b>	619.896	637.785	667.341	680.564	682.897
<b>45.0</b>	584.896	605.896	636.230	650.230	654.119
<b>47.5</b>	549.118	573.229	604.341	619.896	624.563
<b>50.0</b>	514.117	539.784	571.673	588.007	593.452
<b>52.5</b>	479.895	505.562	539.784	558.451	563.118
<b>55.0</b>	442.561	469.783	506.339	526.562	531.229
<b>57.5</b>	405.227	436.339	472.894	493.895	500.895
<b>60.0</b>	369.449	402.116	439.450	462.005	470.561
<b>62.5</b>	332.893	366.338	405.227	429.339	437.116
<b>65.0</b>	297.115	330.560	371.004	396.671	404.449
<b>67.5</b>	259.003	297.115	338.337	364.004	373.338
<b>70.0</b>	224.003	261.337	304.115	331.337	342.226
<b>72.5</b>	189.002	227.892	269.892	299.448	309.559
<b>75.0</b>	154.780	193.669	238.781	268.337	278.448
<b>77.5</b>	120.557	161.780	206.891	238.003	248.892
<b>80.0</b>	89.445	131.446	177.335	209.225	220.892
<b>82.5</b>	62.223	104.224	150.891	182.780	195.225
<b>85.0</b>	38.889	80.890	128.335	160.224	170.335
<b>87.5</b>	21.778	62.223	108.112	140.002	149.335
<b>90.0</b>	7.778	47.445	93.334	124.446	134.557
<b>92.5</b>	44.000	95.000	151.000	189.000	202.000
<b>95.0</b>	84.000	134.000	190.000	227.000	239.000
<b>97.5</b>	128.000	175.000	230.000	267.000	279.000
<b>100.0</b>	172.000	218.000	273.000	309.000	321.000
<b>102.5</b>	220.000	262.000	317.000	352.000	363.000
<b>105.0</b>	270.000	311.000	363.000	397.000	407.000
<b>107.5</b>	323.000	360.000	413.000	445.000	454.000
<b>110.0</b>	379.000	411.000	461.000	493.000	502.000
<b>112.5</b>	435.000	466.000	513.000	545.000	552.000
<b>115.0</b>	492.000	520.000	564.000	598.000	602.000
<b>117.5</b>	549.000	574.000	617.000	648.000	653.000
<b>120.0</b>	604.000	629.000	671.000	694.000	703.000
<b>122.5</b>	659.000	684.000	725.000	746.000	755.000
<b>125.0</b>	718.000	745.000	780.000	797.000	807.000
<b>127.5</b>	776.000	802.000	837.000	850.000	859.000
<b>130.0</b>	833.000	859.000	891.000	902.000	911.000
<b>132.5</b>	889.000	913.000	944.000	955.000	961.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-4-ID-4FT-V-H-835-F-DL-ITL90629 ITL85125.006.IES****CANDELA TABULATION - (Cont.)**

<b>135.0</b>	946.000	968.000	997.000	1009.000	1013.000
<b>137.5</b>	1000.000	1017.000	1048.000	1060.000	1062.000
<b>140.0</b>	1057.000	1068.000	1099.000	1111.000	1112.000
<b>142.5</b>	1110.000	1118.000	1148.000	1158.000	1160.000
<b>145.0</b>	1163.000	1163.000	1198.000	1205.000	1206.000
<b>147.5</b>	1212.000	1211.000	1244.000	1249.000	1251.000
<b>150.0</b>	1258.000	1257.000	1283.000	1292.000	1293.000
<b>152.5</b>	1303.000	1298.000	1322.000	1332.000	1329.000
<b>155.0</b>	1344.000	1337.000	1358.000	1368.000	1365.000
<b>157.5</b>	1382.000	1374.000	1393.000	1400.000	1399.000
<b>160.0</b>	1416.000	1407.000	1424.000	1428.000	1429.000
<b>162.5</b>	1448.000	1439.000	1455.000	1457.000	1458.000
<b>165.0</b>	1476.000	1468.000	1479.000	1482.000	1483.000
<b>167.5</b>	1499.000	1492.000	1499.000	1503.000	1504.000
<b>170.0</b>	1518.000	1514.000	1517.000	1520.000	1521.000
<b>172.5</b>	1532.000	1531.000	1532.000	1533.000	1534.000
<b>175.0</b>	1542.000	1542.000	1543.000	1543.000	1542.000
<b>177.5</b>	1550.000	1549.000	1549.000	1549.000	1550.000
<b>180.0</b>	1552.000	1552.000	1552.000	1552.000	1552.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-4-ID-4FT-V-H-835-F-DL-ITL90629 ITL85125.006.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	355.38	N.A.	4.80
0-30	749.63	N.A.	10.20
0-40	1218.84	N.A.	16.50
0-60	2148.67	N.A.	29.10
0-80	2750.73	N.A.	37.30
0-90	2883.00	N.A.	39.00
10-90	2790.83	N.A.	37.80
20-40	863.46	N.A.	11.70
20-50	1348.12	N.A.	18.30
40-70	1288.93	N.A.	17.50
60-80	602.06	N.A.	8.20
70-80	242.95	N.A.	3.30
80-90	132.27	N.A.	1.80
90-110	567.07	N.A.	7.70
90-120	1118.68	N.A.	15.20
90-130	1808.66	N.A.	24.50
90-150	3313.63	N.A.	44.90
90-180	4500.53	N.A.	61.00
110-180	3933.46	N.A.	53.30
0-180	7383.53	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	92.17
10-20	263.21
20-30	394.25
30-40	469.21
40-50	484.66
50-60	445.17
60-70	359.11
70-80	242.95
80-90	132.27
90-100	193.27
100-110	373.80
110-120	551.62
120-130	689.98
130-140	762.06
140-150	742.91
150-160	624.00
160-170	416.44
170-180	146.46

# IES INDOOR REPORT

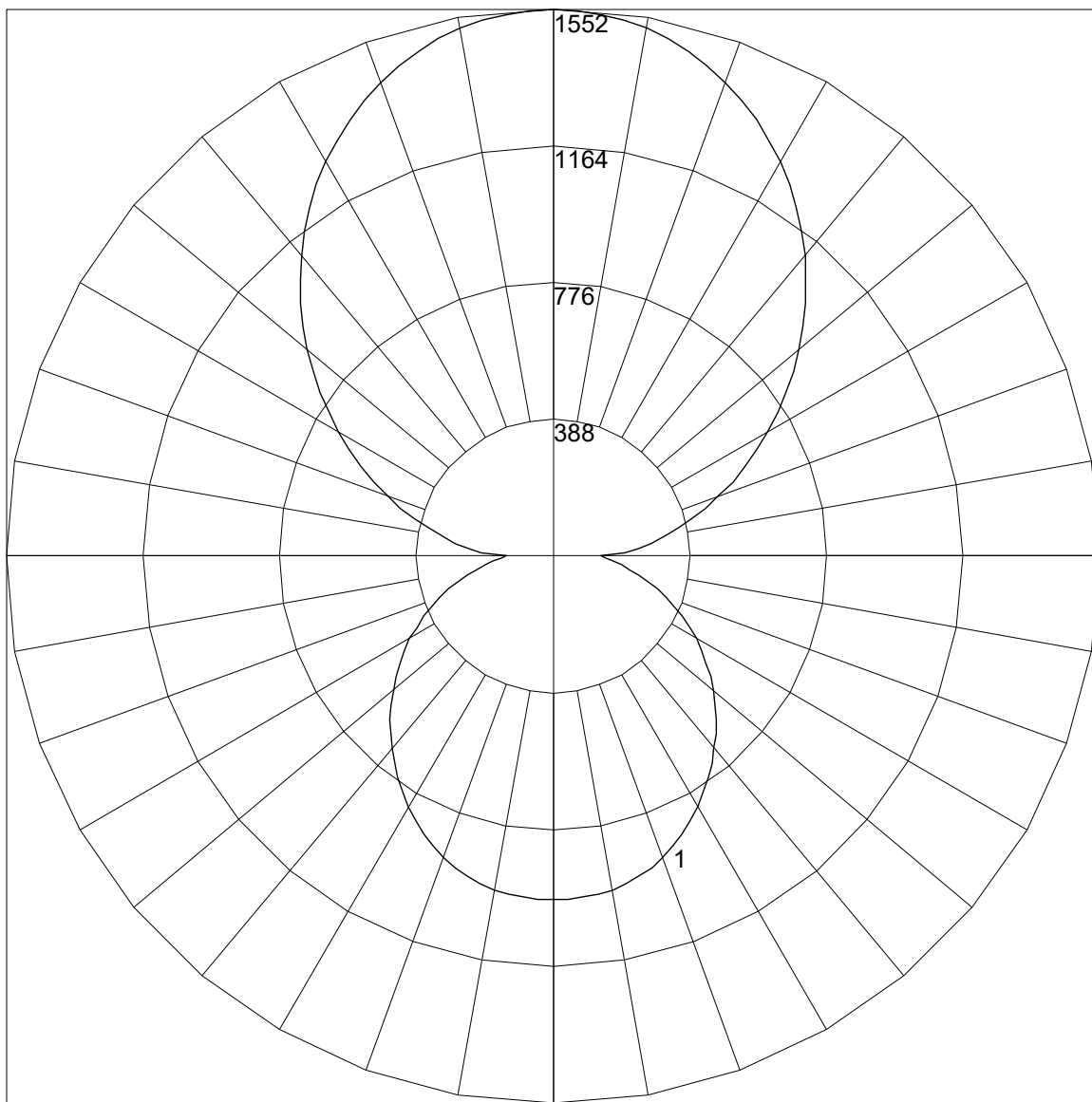
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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	95	90	86	82	86	82	79	75	67	64	62	53	51	49	40	39	38	32
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	35	33	31	26
3	78	69	61	55	71	63	56	51	51	46	42	40	37	34	30	28	26	22
4	71	61	53	47	65	55	48	43	45	40	36	36	32	29	27	25	22	19
5	65	54	46	40	59	49	42	37	40	35	31	32	28	25	24	22	19	16
6	60	48	40	34	54	44	37	32	36	31	27	29	25	22	22	19	17	14
7	56	43	35	30	50	40	33	28	33	27	23	26	22	19	20	17	15	12
8	52	39	32	26	47	36	29	24	30	24	21	24	20	17	18	16	13	11
9	48	36	28	23	43	33	26	22	27	22	18	22	18	15	17	14	12	10
10	45	33	26	21	41	30	24	19	25	20	17	20	16	14	16	13	11	9

POLAR GRAPH



Maximum Candela = 1552 Located At Horizontal Angle = 0, Vertical Angle = 180  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)