

# 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-DL-ITL90629 ITL85125.905.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL90629 ITL85125.905 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]07/09/18

[ISSUEDATE]10/12/18

[MANUFAC]FINELITE, INC.

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

[OTHER]ies file is based on 3500K; see luminaire tech sheet at

[more]www.finelite.com for lumen adjustment factors for other CCT's & CRI's

[ INPUT\_ELECTRICAL]120.0 VOLTS, 61.0 WATTS

[ INPUT\_ELECTRICAL]277.0 VOLTS, 63.3 WATTS

[ ABSOLUTE LUMENS]6404

[OTHER]see 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

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	6404
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	105
Total Luminaire Watts	61
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	4464	4141	4051
55	4128	3795	3729
65	3708	3399	3394
75	3057	2928	3019
85	1986	2493	2726

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-4-ID-4FT-V-B-8TW-F-DL-ITL90629 ITL85125.905.IES****CANDELA TABULATION**

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
<b>0.0</b>	643.902	643.902	643.902	643.902	643.902
<b>2.5</b>	642.873	642.873	643.388	643.902	644.417
<b>5.0</b>	639.784	640.299	641.843	642.873	643.388
<b>7.5</b>	635.152	636.696	639.270	640.299	641.329
<b>10.0</b>	628.976	630.005	634.123	636.182	637.211
<b>12.5</b>	621.255	621.255	627.946	631.034	631.034
<b>15.0</b>	610.961	611.476	619.711	622.799	622.799
<b>17.5</b>	599.122	600.152	609.417	613.534	613.534
<b>20.0</b>	585.740	586.769	597.063	601.696	601.696
<b>22.5</b>	570.299	572.357	584.196	588.828	588.313
<b>25.0</b>	554.343	556.916	569.269	574.416	574.931
<b>27.5</b>	536.328	540.446	554.343	558.975	559.490
<b>30.0</b>	517.798	522.431	536.842	542.504	543.534
<b>32.5</b>	498.239	503.901	519.857	525.519	526.034
<b>35.0</b>	475.592	483.827	500.813	507.504	508.019
<b>37.5</b>	454.489	464.783	481.769	487.945	490.519
<b>40.0</b>	433.386	443.680	462.210	469.416	470.960
<b>42.5</b>	410.224	422.062	441.621	450.371	451.915
<b>45.0</b>	387.062	400.959	421.033	430.298	432.871
<b>47.5</b>	363.385	379.341	399.930	410.224	413.312
<b>50.0</b>	340.223	357.209	378.312	389.121	392.724
<b>52.5</b>	317.576	334.562	357.209	369.562	372.650
<b>55.0</b>	292.870	310.885	335.076	348.459	351.547
<b>57.5</b>	268.164	288.752	312.944	326.841	331.473
<b>60.0</b>	244.487	266.105	290.811	305.738	311.399
<b>62.5</b>	220.296	242.428	268.164	284.120	289.267
<b>65.0</b>	196.619	218.752	245.517	262.502	267.649
<b>67.5</b>	171.398	196.619	223.899	240.884	247.061
<b>70.0</b>	148.237	172.943	201.252	219.266	226.472
<b>72.5</b>	125.075	150.810	178.604	198.163	204.855
<b>75.0</b>	102.427	128.163	158.016	177.575	184.266
<b>77.5</b>	79.780	107.060	136.913	157.501	164.707
<b>80.0</b>	59.192	86.986	117.354	138.457	146.178
<b>82.5</b>	41.177	68.971	99.854	120.957	129.192
<b>85.0</b>	25.735	53.530	84.927	106.030	112.722
<b>87.5</b>	14.412	41.177	71.545	92.648	98.824
<b>90.0</b>	5.147	31.397	61.765	82.354	89.045
<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-B-8TW-F-DL-ITL90629 ITL85125.905.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-B-8TW-F-DL-ITL90629 ITL85125.905.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	235.18	N.A.	3.70
0-30	496.08	N.A.	7.70
0-40	806.58	N.A.	12.60
0-60	1421.91	N.A.	22.20
0-80	1820.33	N.A.	28.40
0-90	1907.86	N.A.	29.80
10-90	1846.86	N.A.	28.80
20-40	571.40	N.A.	8.90
20-50	892.13	N.A.	13.90
40-70	852.97	N.A.	13.30
60-80	398.42	N.A.	6.20
70-80	160.78	N.A.	2.50
80-90	87.53	N.A.	1.40
90-110	563.17	N.A.	8.80
90-120	1114.79	N.A.	17.40
90-130	1804.76	N.A.	28.20
90-150	3309.73	N.A.	51.70
90-180	4496.63	N.A.	70.20
110-180	3933.46	N.A.	61.40
0-180	6404.49	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	61.00
10-20	174.18
20-30	260.90
30-40	310.50
40-50	320.73
50-60	294.59
60-70	237.64
70-80	160.78
80-90	87.53
90-100	189.37
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

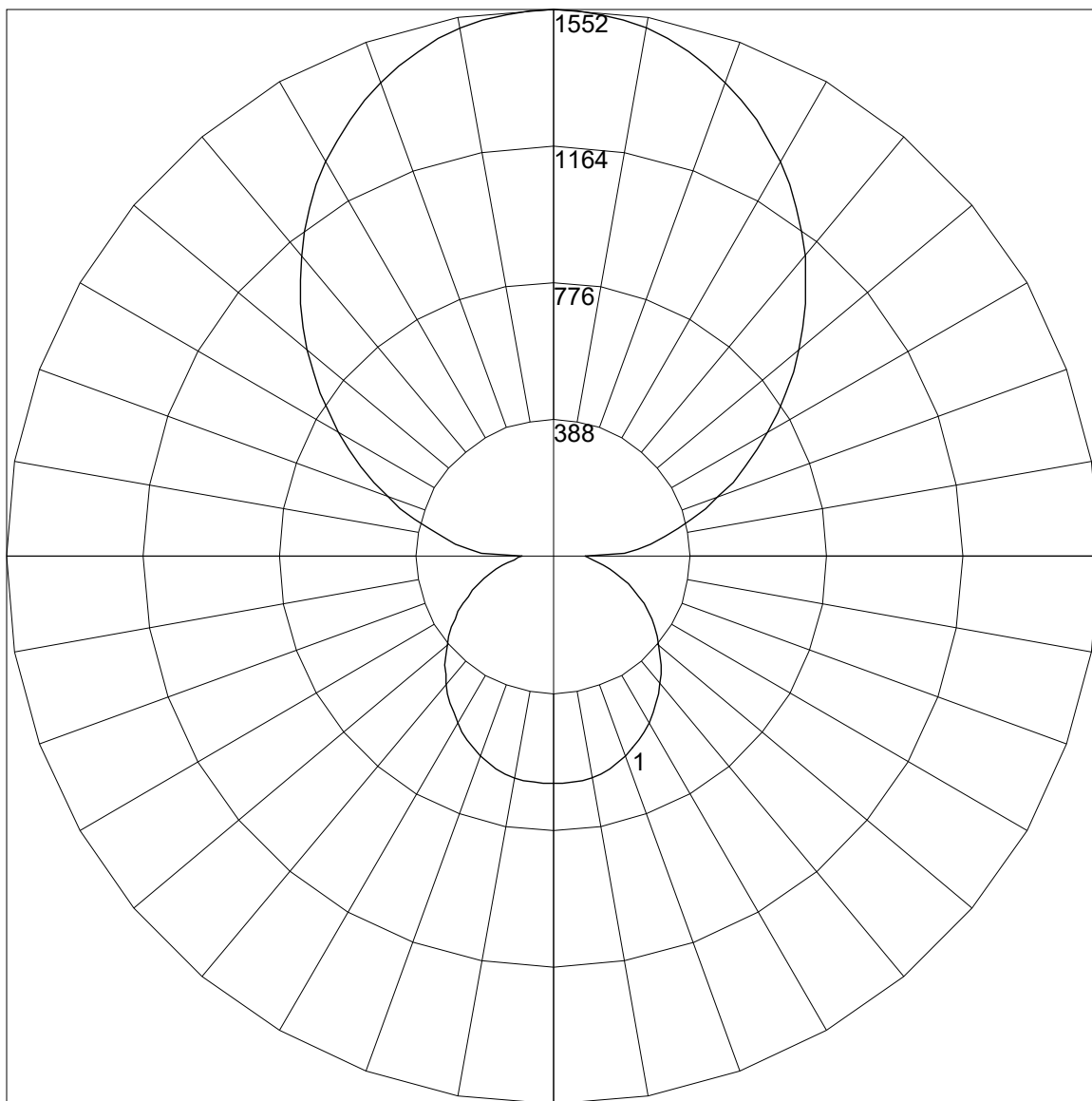
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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	38	38	38	30
1	93	88	84	81	83	79	76	73	62	60	58	47	45	44	32	32	31	24
2	84	77	71	66	75	69	64	60	54	51	48	41	38	36	28	27	26	20
3	77	67	60	54	68	61	54	49	48	43	40	36	33	30	25	23	22	17
4	70	59	52	46	62	53	47	42	42	37	34	32	29	26	22	20	18	14
5	64	53	45	39	57	48	41	36	38	33	29	28	25	22	20	18	16	12
6	59	47	39	34	53	43	36	31	34	29	25	26	22	19	18	16	14	11
7	54	42	35	29	49	38	32	27	30	25	22	23	20	17	16	14	12	9
8	50	38	31	26	45	35	28	23	28	23	19	21	18	15	15	13	11	8
9	47	35	28	23	42	32	25	21	25	20	17	19	16	13	14	12	10	8
10	44	32	25	20	39	29	23	18	23	18	15	18	14	12	13	11	9	7

POLAR GRAPH



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