

# 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-2-ID-4FT-B-V-8TW-F-MLB-ITL85132-KPL2008-6.912.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL85132-KPL2008-6.912 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/11/15

[ISSUEDATE]02/10/17

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HP-2-ID-4ft-B-V-8TW

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 59.8 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 60.7 WATTS

[ABSOLUTE]LUMENS]4420

[OTHER]see [www.finelite.com](http://www.finelite.com) for source files ITL85132 and KPL2008-6. For further details on Finelite family correlation files, go

[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	4420
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	74
Total Luminaire Watts	59.8
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)	0.18 ft
Luminous Height	0.00 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	376	224	233
55	167	88	99
65	81	43	49
75	43	25	24
85	16	7	7

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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>
0.0	7822.880	7822.880	7822.880	7822.880	7822.880
2.5	7625.420	7694.420	7661.780	7652.930	7685.090
5.0	7187.170	7287.370	7239.390	7236.590	7278.930
7.5	6524.590	6648.180	6650.840	6659.790	6689.260
10.0	5672.160	5779.160	5962.710	6009.560	6016.040
12.5	4551.380	4724.300	5156.250	5307.260	5317.280
15.0	3657.740	3842.460	4304.380	4615.210	4551.010
17.5	2751.230	3008.950	3655.130	3738.490	3532.790
20.0	1860.570	2139.700	2712.910	2809.090	2749.920
22.5	1159.200	1493.380	1992.420	2113.260	2084.540
25.0	682.540	823.280	1366.760	1488.350	1319.580
27.5	405.740	530.470	813.800	827.530	736.040
30.0	229.940	307.440	483.850	460.650	405.120
32.5	113.350	175.750	248.440	239.640	225.370
35.0	53.520	76.330	133.640	134.770	112.710
37.5	35.750	37.000	66.700	65.350	41.760
40.0	28.510	25.760	32.550	26.520	17.940
42.5	22.380	20.240	15.750	12.810	14.080
45.0	17.530	15.630	10.420	9.810	10.870
47.5	13.840	11.840	7.720	7.420	8.340
50.0	10.410	9.020	5.780	5.600	6.420
52.5	8.130	6.850	4.370	4.320	4.890
55.0	6.300	5.260	3.320	3.270	3.730
57.5	4.850	4.030	2.540	2.490	2.850
60.0	3.730	3.130	1.980	1.940	2.220
62.5	2.910	2.390	1.530	1.500	1.730
65.0	2.260	1.860	1.200	1.170	1.360
67.5	1.750	1.430	0.940	0.910	1.030
70.0	1.340	1.100	0.740	0.710	0.800
72.5	1.010	0.830	0.560	0.540	0.580
75.0	0.730	0.610	0.420	0.410	0.410
77.5	0.520	0.440	0.320	0.310	0.320
80.0	0.340	0.310	0.220	0.210	0.190
82.5	0.220	0.180	0.130	0.110	0.110
85.0	0.090	0.080	0.040	0.050	0.040
87.5	0.020	0.000	0.000	0.000	0.000
90.0	0.000	0.000	0.000	0.000	0.000
92.5	15.439	15.439	15.439	16.983	16.983
95.0	36.538	34.994	34.994	35.509	36.023
97.5	57.637	56.094	55.064	55.579	55.579
100.0	79.251	76.678	76.678	76.678	76.164
102.5	101.895	99.836	98.807	98.292	98.292
105.0	125.567	124.023	121.450	120.936	120.421
107.5	149.754	148.210	145.123	144.608	144.094
110.0	174.971	173.427	170.854	169.825	168.281
112.5	201.216	198.643	197.099	194.526	192.982
115.0	227.462	225.918	224.889	219.743	218.714
117.5	255.251	252.678	252.678	246.503	245.474
120.0	283.556	279.439	280.468	274.292	272.234
122.5	310.316	306.199	308.257	303.111	299.509
125.0	340.164	333.988	336.047	330.901	328.327
127.5	369.497	362.807	363.836	359.719	358.690
130.0	398.316	391.626	392.655	387.509	388.023
132.5	427.135	419.930	421.474	416.327	416.327

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-4FT-B-V-8TW-F-MLB-ITL85132-KPL2008-6.912.IES****CANDELA TABULATION - (Cont.)**

<b>135.0</b>	454.924	448.234	450.292	445.661	445.661
<b>137.5</b>	483.228	476.538	478.596	474.480	473.965
<b>140.0</b>	511.532	504.842	506.386	503.813	502.269
<b>142.5</b>	538.292	531.088	533.146	530.573	528.515
<b>145.0</b>	565.567	557.848	559.906	557.848	554.246
<b>147.5</b>	590.784	583.064	585.638	582.550	578.947
<b>150.0</b>	614.971	607.251	610.339	606.737	603.649
<b>152.5</b>	638.129	630.409	633.497	630.409	627.322
<b>155.0</b>	660.257	652.538	656.140	653.053	649.965
<b>157.5</b>	679.298	672.094	676.211	673.123	670.035
<b>160.0</b>	697.825	691.135	694.737	691.649	688.561
<b>162.5</b>	713.778	708.117	710.690	708.632	706.573
<b>165.0</b>	728.187	723.041	724.585	723.556	722.012
<b>167.5</b>	738.994	735.906	736.936	735.906	735.392
<b>170.0</b>	748.772	747.228	747.743	746.713	746.199
<b>172.5</b>	757.006	756.491	756.491	755.977	755.977
<b>175.0</b>	762.667	762.667	762.667	762.667	762.152
<b>177.5</b>	765.754	766.269	766.269	766.269	765.754
<b>180.0</b>	767.813	767.813	767.813	767.813	767.813

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-4FT-B-V-8TW-F-MLB-ITL85132-KPL2008-6.912.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	1792.87	N.A.	40.60
0-30	2354.14	N.A.	53.30
0-40	2440.51	N.A.	55.20
0-60	2455.1	N.A.	55.50
0-80	2457.22	N.A.	55.60
0-90	2457.31	N.A.	55.60
10-90	1808.53	N.A.	40.90
20-40	647.64	N.A.	14.70
20-50	658.27	N.A.	14.90
40-70	16.15	N.A.	0.40
60-80	2.12	N.A.	0.00
70-80	0.56	N.A.	0.00
80-90	0.09	N.A.	0.00
90-110	169.42	N.A.	3.80
90-120	390.97	N.A.	8.80
90-130	689.80	N.A.	15.60
90-150	1385.17	N.A.	31.30
90-180	1962.43	N.A.	44.40
110-180	1793.01	N.A.	40.60
0-180	4419.74	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	648.78
10-20	1144.1
20-30	561.26
30-40	86.37
40-50	10.64
50-60	3.95
60-70	1.56
70-80	0.56
80-90	0.09
90-100	39.66
100-110	129.76
110-120	221.56
120-130	298.83
130-140	346.11
140-150	349.26
150-160	300.94
160-170	204.02
170-180	72.31

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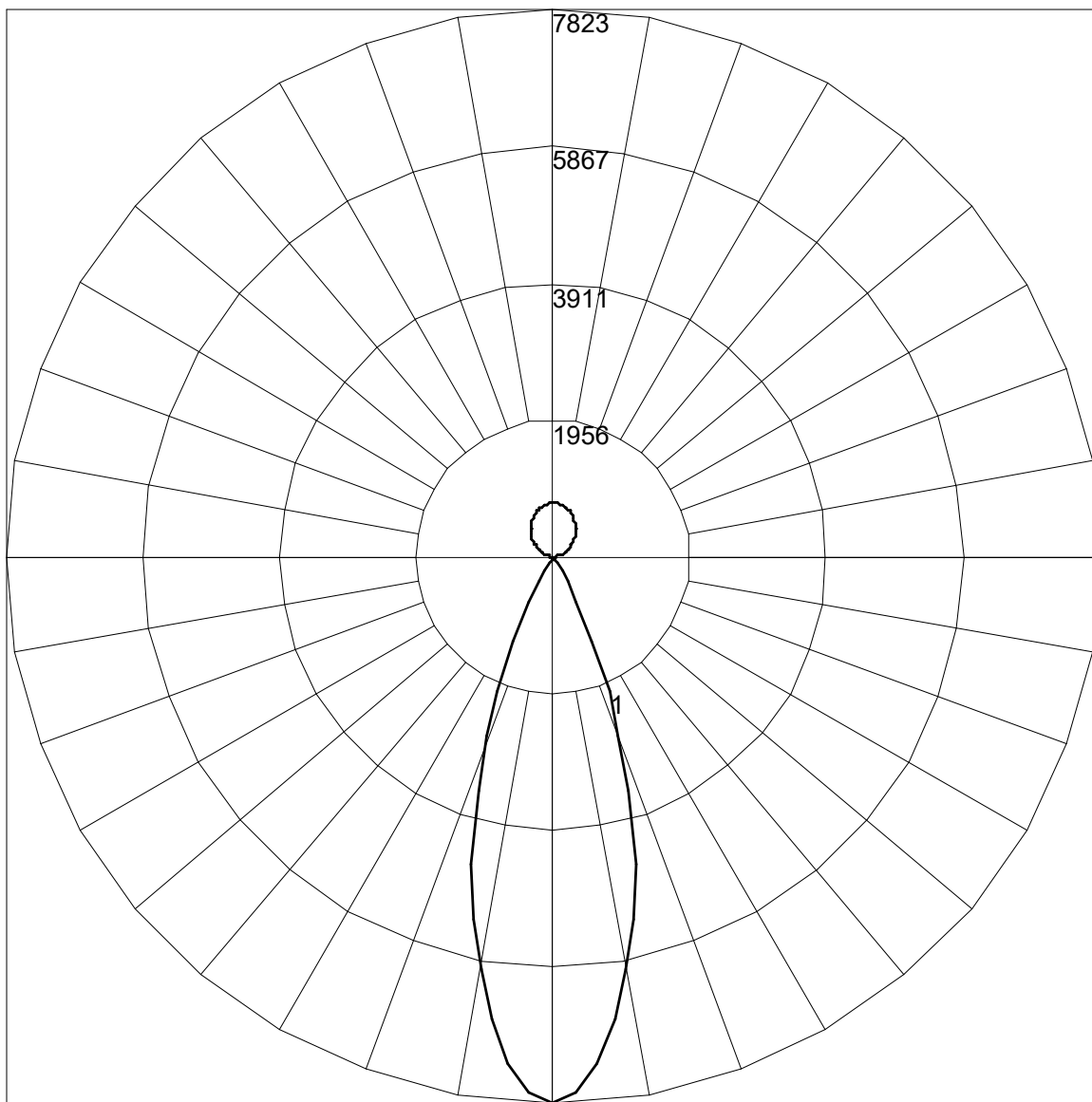
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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	56
1	102	99	97	94	95	93	91	88	81	79	78	69	69	68	59	59	58	53
2	97	91	87	84	90	86	82	79	76	73	71	66	64	63	57	56	55	51
3	91	85	80	76	86	80	76	72	71	68	65	63	61	59	55	54	53	49
4	86	79	73	69	81	75	70	66	67	64	61	60	58	56	53	52	50	48
5	82	74	68	64	77	70	65	62	64	60	57	57	55	53	51	50	48	46
6	78	69	64	60	74	66	61	58	60	57	54	55	52	50	50	48	46	44
7	74	66	60	56	70	63	58	54	58	54	51	53	50	48	48	46	45	43
8	71	62	57	53	67	60	55	51	55	51	48	51	48	46	46	44	43	41
9	68	59	54	50	65	57	52	49	53	49	46	49	46	44	45	43	41	40
10	65	56	51	47	62	54	50	46	50	47	44	47	44	42	44	42	40	39

POLAR GRAPH



Maximum Candela = 7822.88 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)