

# 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-MLW-ITL85132-KPL2008-7.910.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL85132-KPL2008-7.910 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/11/15

[ISSUEDATE]02/03/23

[MANUFAC]FINELITE, INC.

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

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 59.8 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 60.7 WATTS

[ABSOLUTE]LUMENS]5427

[OTHER]see [www.finelite.com](http://www.finelite.com) for source files ITL85132 and KPL2008-7. 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	5425
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	91
Total Luminaire Watts	59.8
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	0.48
Spacing Criterion (90-270)	0.56
Spacing Criterion (Diagonal)	0.56
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	5067	4951	4794
55	4222	4103	3905
65	3601	3407	3188
75	3051	2830	2556
85	2399	2167	1944

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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	8701.140	8701.140	8701.140	8701.140	8701.140
2.5	8503.900	8555.090	8516.110	8523.160	8539.590
5.0	8023.010	8081.720	8069.030	8076.080	8100.030
7.5	7259.780	7355.070	7384.890	7449.560	7446.880
10.0	6204.260	6404.140	6618.000	6741.140	6757.660
12.5	5066.280	5276.250	5747.980	5959.640	6004.770
15.0	4127.970	4349.640	4815.970	5136.820	5125.450
17.5	3213.520	3457.310	3940.120	4160.750	4031.040
20.0	2242.720	2577.850	3079.020	3211.130	3157.360
22.5	1508.420	1883.140	2319.550	2461.710	2393.940
25.0	1017.950	1213.410	1761.550	1862.140	1776.860
27.5	730.470	810.780	1166.160	1165.320	1044.250
30.0	533.280	613.860	745.100	733.480	676.840
32.5	406.560	462.840	525.590	505.650	498.890
35.0	339.330	360.940	395.490	390.990	378.630
37.5	309.270	312.340	327.410	317.260	299.990
40.0	283.200	285.730	281.920	270.540	265.060
42.5	259.630	261.600	252.600	245.170	244.960
45.0	235.990	238.620	230.600	224.960	223.280
47.5	206.820	217.080	209.850	205.650	202.370
50.0	194.080	196.200	191.470	188.170	187.150
52.5	177.140	178.200	172.510	167.220	165.310
55.0	159.520	160.240	155.000	151.040	147.540
57.5	143.050	143.370	138.110	133.490	131.460
60.0	127.470	127.980	122.750	118.360	116.390
62.5	113.720	113.190	108.280	104.310	101.930
65.0	100.250	99.600	94.850	90.940	88.740
67.5	86.640	86.740	82.040	78.520	76.120
70.0	74.460	74.220	70.160	66.790	64.340
72.5	62.220	62.360	58.840	55.660	53.420
75.0	52.020	51.490	48.240	45.580	43.580
77.5	41.440	40.450	38.310	36.140	34.550
80.0	32.100	31.320	29.180	27.290	26.450
82.5	22.370	22.110	20.400	19.290	18.240
85.0	13.770	13.220	12.440	11.600	11.160
87.5	5.620	5.740	5.160	4.820	4.580
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	283.555	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-MLW-ITL85132-KPL2008-7.910.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	474.479	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-MLW-ITL85132-KPL2008-7.910.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	2007.08	N.A.	37.00
0-30	2729.14	N.A.	50.30
0-40	2984.44	N.A.	55.00
0-60	3302.22	N.A.	60.90
0-80	3448.07	N.A.	63.60
0-90	3462.43	N.A.	63.80
10-90	2740.62	N.A.	50.50
20-40	977.36	N.A.	18.00
20-50	1156.11	N.A.	21.30
40-70	412.24	N.A.	7.60
60-80	145.84	N.A.	2.70
70-80	51.38	N.A.	0.90
80-90	14.36	N.A.	0.30
90-110	169.42	N.A.	3.10
90-120	390.97	N.A.	7.20
90-130	689.80	N.A.	12.70
90-150	1385.17	N.A.	25.50
90-180	1962.43	N.A.	36.20
110-180	1793.01	N.A.	33.10
0-180	5424.86	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	721.81
10-20	1285.27
20-30	722.05
30-40	255.31
40-50	178.76
50-60	139.03
60-70	94.46
70-80	51.38
80-90	14.36
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

# IES INDOOR REPORT

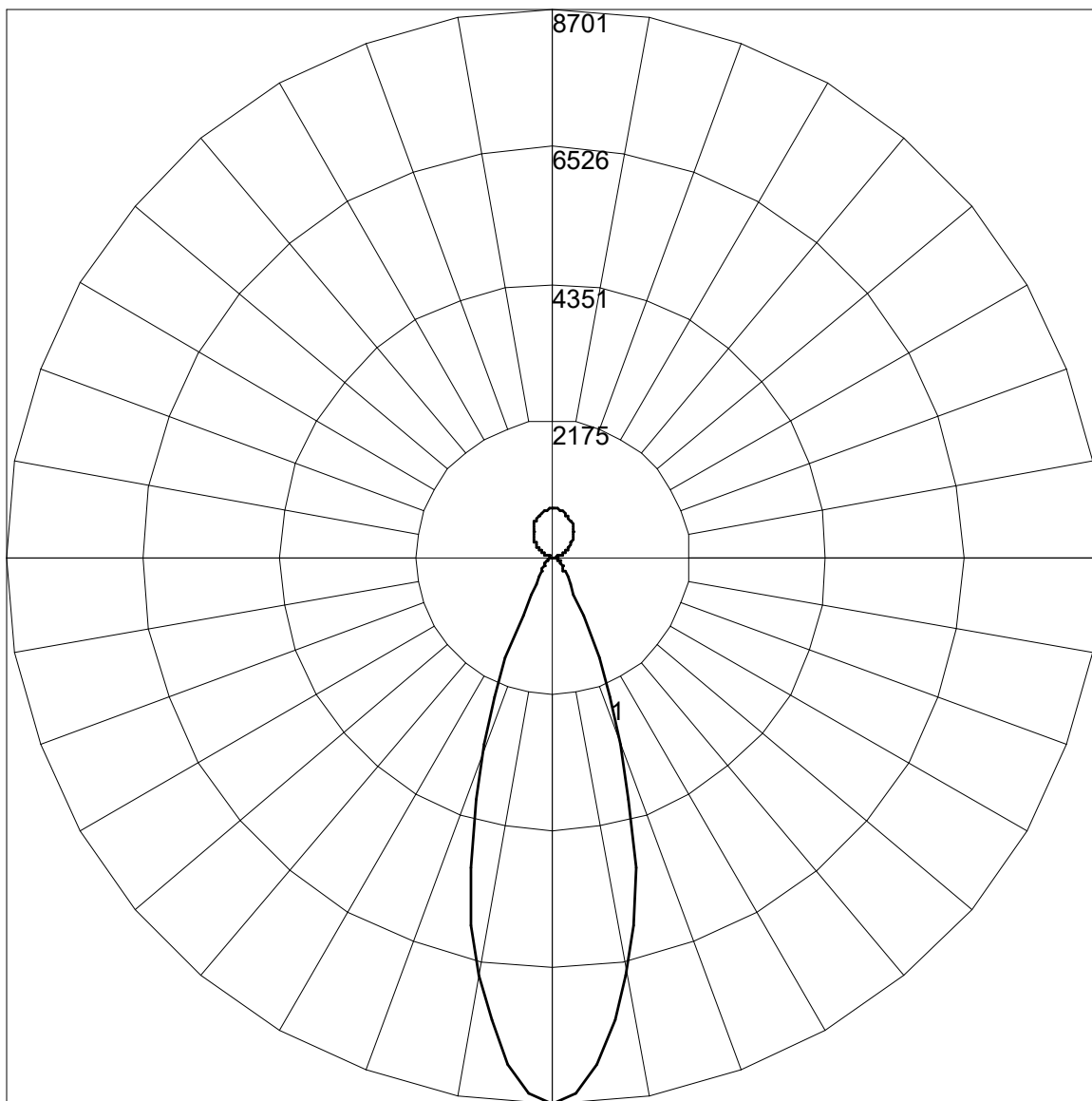
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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	110	110	110	110	104	104	104	104	91	91	91	79	79	79	69	69	69	64
1	104	100	98	95	98	95	92	90	84	82	81	74	73	72	65	64	64	60
2	97	92	87	83	92	87	83	80	78	75	73	70	68	66	62	60	59	56
3	92	85	79	75	86	80	76	72	73	69	66	65	63	61	59	57	55	52
4	86	78	72	68	82	75	69	65	68	64	61	62	59	56	56	54	52	49
5	82	73	67	62	77	70	64	60	64	60	56	58	55	53	53	51	49	47
6	77	68	62	57	74	65	60	56	60	56	53	55	52	50	51	48	46	44
7	74	64	58	54	70	62	56	52	57	53	50	53	49	47	49	46	44	42
8	70	60	54	50	67	58	53	49	54	50	47	50	47	44	47	44	42	40
9	67	57	51	47	64	55	50	46	52	47	44	48	45	42	45	42	40	39
10	64	54	49	45	61	53	47	44	49	45	42	46	43	40	43	41	39	37

POLAR GRAPH



Maximum Candela = 8701.14 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)