

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-S-V-835-F-MLB-ITL85132-KPL2008-6.015.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL85132-KPL2008-6.015 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-S-V-835

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 50.4 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 51.6 WATTS

[ABSOLUTE]LUMENS]4022

[OTHER]see 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

CHARACTERISTICS

| | |
|---------------------------------|-----------------|
| Lumens Per Lamp | N.A. (absolute) |
| Total Lamp Lumens | N.A. (absolute) |
| Luminaire Lumens | 4018 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 80 |
| Total Luminaire Watts | 50.4 |
| 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 | 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 | 12.281 | 12.281 | 12.281 | 13.509 | 13.509 |
| 95.0 | 29.064 | 27.836 | 27.836 | 28.246 | 28.655 |
| 97.5 | 45.848 | 44.620 | 43.801 | 44.210 | 44.210 |
| 100.0 | 63.041 | 60.994 | 60.994 | 60.994 | 60.585 |
| 102.5 | 81.053 | 79.415 | 78.596 | 78.187 | 78.187 |
| 105.0 | 99.883 | 98.655 | 96.608 | 96.199 | 95.789 |
| 107.5 | 119.123 | 117.895 | 115.439 | 115.029 | 114.620 |
| 110.0 | 139.181 | 137.953 | 135.906 | 135.088 | 133.860 |
| 112.5 | 160.059 | 158.012 | 156.784 | 154.737 | 153.509 |
| 115.0 | 180.936 | 179.708 | 178.889 | 174.795 | 173.977 |
| 117.5 | 203.041 | 200.994 | 200.994 | 196.082 | 195.263 |
| 120.0 | 225.555 | 222.281 | 223.099 | 218.187 | 216.550 |
| 122.5 | 246.842 | 243.567 | 245.205 | 241.111 | 238.246 |
| 125.0 | 270.585 | 265.672 | 267.310 | 263.216 | 261.170 |
| 127.5 | 293.918 | 288.596 | 289.415 | 286.140 | 285.322 |
| 130.0 | 316.842 | 311.520 | 312.339 | 308.246 | 308.655 |
| 132.5 | 339.766 | 334.035 | 335.263 | 331.170 | 331.170 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-2-ID-4FT-S-V-835-F-MLB-ITL85132-KPL2008-6.015.IES****CANDELA TABULATION - (Cont.)**

| | | | | | |
|--------------|---------|---------|---------|---------|---------|
| 135.0 | 361.871 | 356.550 | 358.187 | 354.503 | 354.503 |
| 137.5 | 384.386 | 379.064 | 380.702 | 377.427 | 377.017 |
| 140.0 | 406.901 | 401.579 | 402.807 | 400.760 | 399.532 |
| 142.5 | 428.187 | 422.456 | 424.094 | 422.047 | 420.409 |
| 145.0 | 449.883 | 443.743 | 445.380 | 443.743 | 440.877 |
| 147.5 | 469.941 | 463.801 | 465.848 | 463.392 | 460.526 |
| 150.0 | 489.181 | 483.041 | 485.497 | 482.632 | 480.175 |
| 152.5 | 507.602 | 501.462 | 503.918 | 501.462 | 499.006 |
| 155.0 | 525.205 | 519.064 | 521.930 | 519.474 | 517.018 |
| 157.5 | 540.351 | 534.620 | 537.895 | 535.438 | 532.982 |
| 160.0 | 555.088 | 549.766 | 552.631 | 550.175 | 547.719 |
| 162.5 | 567.778 | 563.275 | 565.322 | 563.684 | 562.047 |
| 165.0 | 579.240 | 575.146 | 576.374 | 575.555 | 574.328 |
| 167.5 | 587.836 | 585.380 | 586.199 | 585.380 | 584.971 |
| 170.0 | 595.614 | 594.386 | 594.795 | 593.977 | 593.567 |
| 172.5 | 602.164 | 601.754 | 601.754 | 601.345 | 601.345 |
| 175.0 | 606.667 | 606.667 | 606.667 | 606.667 | 606.257 |
| 177.5 | 609.123 | 609.532 | 609.532 | 609.532 | 609.123 |
| 180.0 | 610.760 | 610.760 | 610.760 | 610.760 | 610.760 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-2-ID-4FT-S-V-835-F-MLB-ITL85132-KPL2008-6.015.IES****ZONAL LUMEN SUMMARY**

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|--------|
| 0-20 | 1792.87 | N.A. | 44.60 |
| 0-30 | 2354.14 | N.A. | 58.60 |
| 0-40 | 2440.51 | N.A. | 60.70 |
| 0-60 | 2455.1 | N.A. | 61.10 |
| 0-80 | 2457.22 | N.A. | 61.20 |
| 0-90 | 2457.31 | N.A. | 61.20 |
| 10-90 | 1808.53 | N.A. | 45.00 |
| 20-40 | 647.64 | N.A. | 16.10 |
| 20-50 | 658.27 | N.A. | 16.40 |
| 40-70 | 16.15 | N.A. | 0.40 |
| 60-80 | 2.12 | N.A. | 0.10 |
| 70-80 | 0.56 | N.A. | 0.00 |
| 80-90 | 0.09 | N.A. | 0.00 |
| 90-110 | 134.76 | N.A. | 3.40 |
| 90-120 | 311.00 | N.A. | 7.70 |
| 90-130 | 548.70 | N.A. | 13.70 |
| 90-150 | 1101.84 | N.A. | 27.40 |
| 90-180 | 1561.03 | N.A. | 38.80 |
| 110-180 | 1426.26 | N.A. | 35.50 |
| 0-180 | 4018.34 | 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 | 31.55 |
| 100-110 | 103.22 |
| 110-120 | 176.24 |
| 120-130 | 237.70 |
| 130-140 | 275.32 |
| 140-150 | 277.82 |
| 150-160 | 239.38 |
| 160-170 | 162.28 |
| 170-180 | 57.52 |

IES INDOOR REPORT

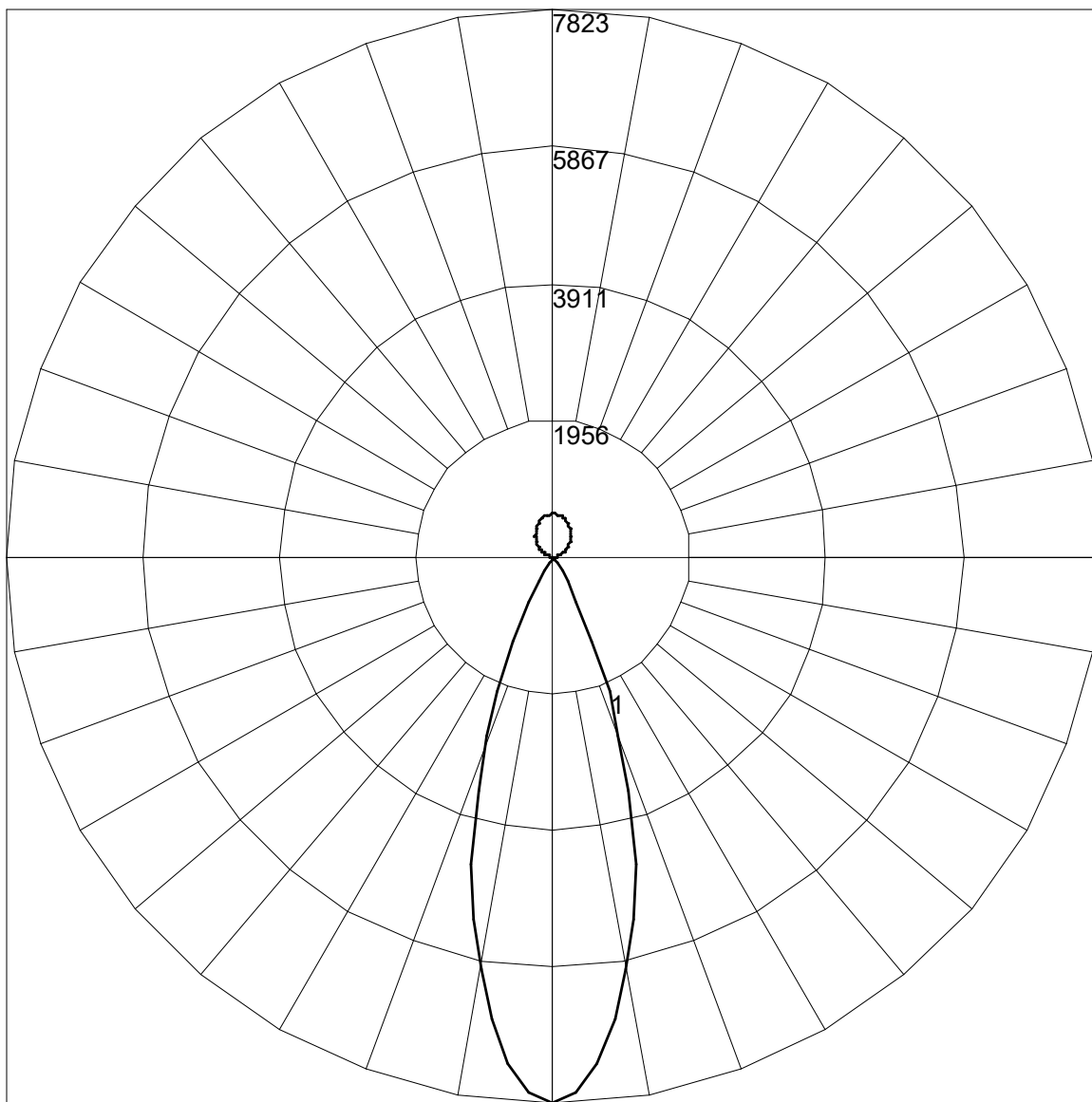
PHOTOMETRIC FILENAME : HP-2-ID-4FT-S-V-835-F-MLB-ITL85132-KPL2008-6.015.IES

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 | 110 | 110 | 110 | 110 | 103 | 103 | 103 | 103 | 90 | 90 | 90 | 77 | 77 | 77 | 66 | 66 | 66 | 61 |
| 1 | 104 | 101 | 98 | 96 | 97 | 95 | 93 | 91 | 84 | 82 | 81 | 74 | 73 | 72 | 64 | 64 | 63 | 59 |
| 2 | 98 | 93 | 89 | 86 | 93 | 88 | 85 | 82 | 79 | 76 | 74 | 70 | 69 | 67 | 62 | 61 | 60 | 57 |
| 3 | 93 | 87 | 82 | 78 | 88 | 83 | 78 | 75 | 74 | 71 | 69 | 67 | 65 | 63 | 60 | 59 | 57 | 54 |
| 4 | 89 | 81 | 76 | 72 | 84 | 78 | 73 | 69 | 71 | 67 | 64 | 64 | 62 | 60 | 58 | 56 | 55 | 52 |
| 5 | 84 | 76 | 71 | 67 | 80 | 73 | 68 | 65 | 67 | 63 | 61 | 61 | 59 | 57 | 56 | 54 | 53 | 50 |
| 6 | 80 | 72 | 66 | 62 | 76 | 69 | 64 | 61 | 64 | 60 | 57 | 59 | 56 | 54 | 54 | 52 | 51 | 49 |
| 7 | 77 | 68 | 63 | 59 | 73 | 66 | 61 | 57 | 61 | 57 | 54 | 57 | 54 | 52 | 52 | 50 | 49 | 47 |
| 8 | 74 | 65 | 59 | 56 | 70 | 63 | 58 | 54 | 58 | 55 | 52 | 54 | 52 | 49 | 51 | 49 | 47 | 45 |
| 9 | 70 | 62 | 56 | 53 | 67 | 60 | 55 | 52 | 56 | 52 | 50 | 52 | 50 | 47 | 49 | 47 | 45 | 44 |
| 10 | 68 | 59 | 54 | 50 | 65 | 57 | 53 | 49 | 54 | 50 | 48 | 51 | 48 | 46 | 48 | 45 | 44 | 42 |

POLAR GRAPH



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