

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-S-835-F-MLW-ITL85132-ITL92590.003.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL85132-ITL92590.003 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/11/15

[ISSUEDATE]02/03/23

[MANUFAC]FINELITE, INC.

[LUMCAT]HP-2-ID-4ft-S-S-835-F-MLW

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 28.4 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 30.8 WATTS

[ABSOLUTE]LUMENS]2863

[OTHER]see www.finelite.com for source files ITL85132 and ITL92590. 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 | 2865 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 101 |
| Total Luminaire Watts | 28.4 |
| 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 | 1661 | 1600 | 1635 |
| 55 | 1398 | 1311 | 1300 |
| 65 | 1191 | 1103 | 1059 |
| 75 | 1032 | 936 | 864 |
| 85 | 856 | 784 | 642 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-2-ID-4FT-S-S-835-F-MLW-ITL85132-ITL92590.003.IES****CANDELA TABULATION**

| | <u>0.0</u> | <u>22.5</u> | <u>45.0</u> | <u>67.5</u> | <u>90.0</u> |
|--------------|------------|-------------|-------------|-------------|-------------|
| 0.0 | 3269.736 | 3269.736 | 3269.736 | 3269.736 | 3269.736 |
| 2.5 | 3211.202 | 3213.658 | 3209.974 | 3212.020 | 3208.746 |
| 5.0 | 3057.293 | 3053.609 | 3056.065 | 3052.381 | 3053.609 |
| 7.5 | 2799.005 | 2801.461 | 2832.571 | 2828.887 | 2836.254 |
| 10.0 | 2423.240 | 2460.079 | 2541.536 | 2575.920 | 2573.464 |
| 12.5 | 2004.494 | 2060.982 | 2211.206 | 2300.850 | 2285.704 |
| 15.0 | 1624.635 | 1672.526 | 1865.321 | 1997.535 | 1967.654 |
| 17.5 | 1256.237 | 1332.372 | 1532.945 | 1632.821 | 1565.691 |
| 20.0 | 895.616 | 995.493 | 1226.765 | 1275.885 | 1243.957 |
| 22.5 | 592.302 | 696.272 | 920.995 | 990.172 | 949.648 |
| 25.0 | 397.051 | 461.316 | 663.935 | 706.096 | 627.095 |
| 27.5 | 276.708 | 312.320 | 462.135 | 456.813 | 399.916 |
| 30.0 | 198.116 | 223.904 | 300.449 | 290.625 | 266.474 |
| 32.5 | 142.447 | 163.732 | 195.660 | 199.754 | 190.748 |
| 35.0 | 112.975 | 122.799 | 144.084 | 149.815 | 139.173 |
| 37.5 | 100.695 | 102.333 | 114.613 | 115.431 | 107.654 |
| 40.0 | 92.100 | 92.100 | 95.374 | 94.555 | 92.509 |
| 42.5 | 84.731 | 84.322 | 82.685 | 83.504 | 83.504 |
| 45.0 | 77.364 | 76.954 | 74.498 | 75.726 | 76.136 |
| 47.5 | 70.405 | 69.996 | 67.949 | 68.358 | 68.768 |
| 50.0 | 64.265 | 63.856 | 61.400 | 61.809 | 61.809 |
| 52.5 | 58.125 | 57.716 | 55.260 | 55.260 | 55.260 |
| 55.0 | 52.804 | 51.985 | 49.529 | 49.120 | 49.120 |
| 57.5 | 47.482 | 46.664 | 44.617 | 43.798 | 43.798 |
| 60.0 | 42.161 | 41.752 | 39.705 | 38.886 | 38.886 |
| 62.5 | 37.658 | 37.249 | 35.203 | 34.384 | 33.565 |
| 65.0 | 33.156 | 32.337 | 30.700 | 29.881 | 29.472 |
| 67.5 | 28.653 | 28.244 | 27.016 | 25.788 | 25.378 |
| 70.0 | 24.969 | 24.560 | 22.922 | 22.104 | 21.285 |
| 72.5 | 21.285 | 20.876 | 19.648 | 18.420 | 18.011 |
| 75.0 | 17.601 | 17.192 | 15.964 | 15.145 | 14.736 |
| 77.5 | 13.917 | 13.917 | 12.689 | 11.871 | 11.461 |
| 80.0 | 10.233 | 10.643 | 9.824 | 9.005 | 8.596 |
| 82.5 | 7.368 | 7.368 | 6.959 | 6.549 | 6.140 |
| 85.0 | 4.912 | 4.503 | 4.503 | 4.093 | 3.684 |
| 87.5 | 2.047 | 2.047 | 2.047 | 2.047 | 1.637 |
| 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 | 44.211 | 44.211 |
| 100.0 | 63.041 | 60.994 | 60.994 | 60.994 | 60.585 |
| 102.5 | 81.053 | 79.415 | 78.597 | 78.187 | 78.187 |
| 105.0 | 99.883 | 98.655 | 96.608 | 96.199 | 95.790 |
| 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 | 225.556 | 222.281 | 223.099 | 218.187 | 216.550 |
| 122.5 | 246.842 | 243.567 | 245.205 | 241.111 | 238.246 |
| 125.0 | 270.585 | 265.673 | 267.310 | 263.216 | 261.170 |
| 127.5 | 293.918 | 288.596 | 289.415 | 286.140 | 285.322 |
| 130.0 | 316.842 | 311.521 | 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-S-835-F-MLW-ITL85132-ITL92590.003.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 | 469.942 | 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 | 535.439 | 532.982 |
| 160.0 | 555.088 | 549.766 | 552.632 | 550.175 | 547.719 |
| 162.5 | 567.778 | 563.275 | 565.322 | 563.684 | 562.047 |
| 165.0 | 579.240 | 575.146 | 576.374 | 575.556 | 574.327 |
| 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-S-835-F-MLW-ITL85132-ITL92590.003.IES****ZONAL LUMEN SUMMARY**

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|--------|
| 0-20 | 773.26 | N.A. | 27.00 |
| 0-30 | 1053.35 | N.A. | 36.80 |
| 0-40 | 1146.25 | N.A. | 40.00 |
| 0-60 | 1250.69 | N.A. | 43.70 |
| 0-80 | 1298.83 | N.A. | 45.30 |
| 0-90 | 1303.76 | N.A. | 45.50 |
| 10-90 | 1029.23 | N.A. | 35.90 |
| 20-40 | 372.99 | N.A. | 13.00 |
| 20-50 | 432.05 | N.A. | 15.10 |
| 40-70 | 135.44 | N.A. | 4.70 |
| 60-80 | 48.15 | N.A. | 1.70 |
| 70-80 | 17.14 | N.A. | 0.60 |
| 80-90 | 4.93 | N.A. | 0.20 |
| 90-110 | 134.76 | N.A. | 4.70 |
| 90-120 | 311.00 | N.A. | 10.90 |
| 90-130 | 548.70 | N.A. | 19.20 |
| 90-150 | 1101.84 | N.A. | 38.50 |
| 90-180 | 1561.03 | N.A. | 54.50 |
| 110-180 | 1426.26 | N.A. | 49.80 |
| 0-180 | 2864.79 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|--------|
| 0-10 | 274.54 |
| 10-20 | 498.72 |
| 20-30 | 280.09 |
| 30-40 | 92.90 |
| 40-50 | 59.05 |
| 50-60 | 45.38 |
| 60-70 | 31.01 |
| 70-80 | 17.14 |
| 80-90 | 4.93 |
| 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

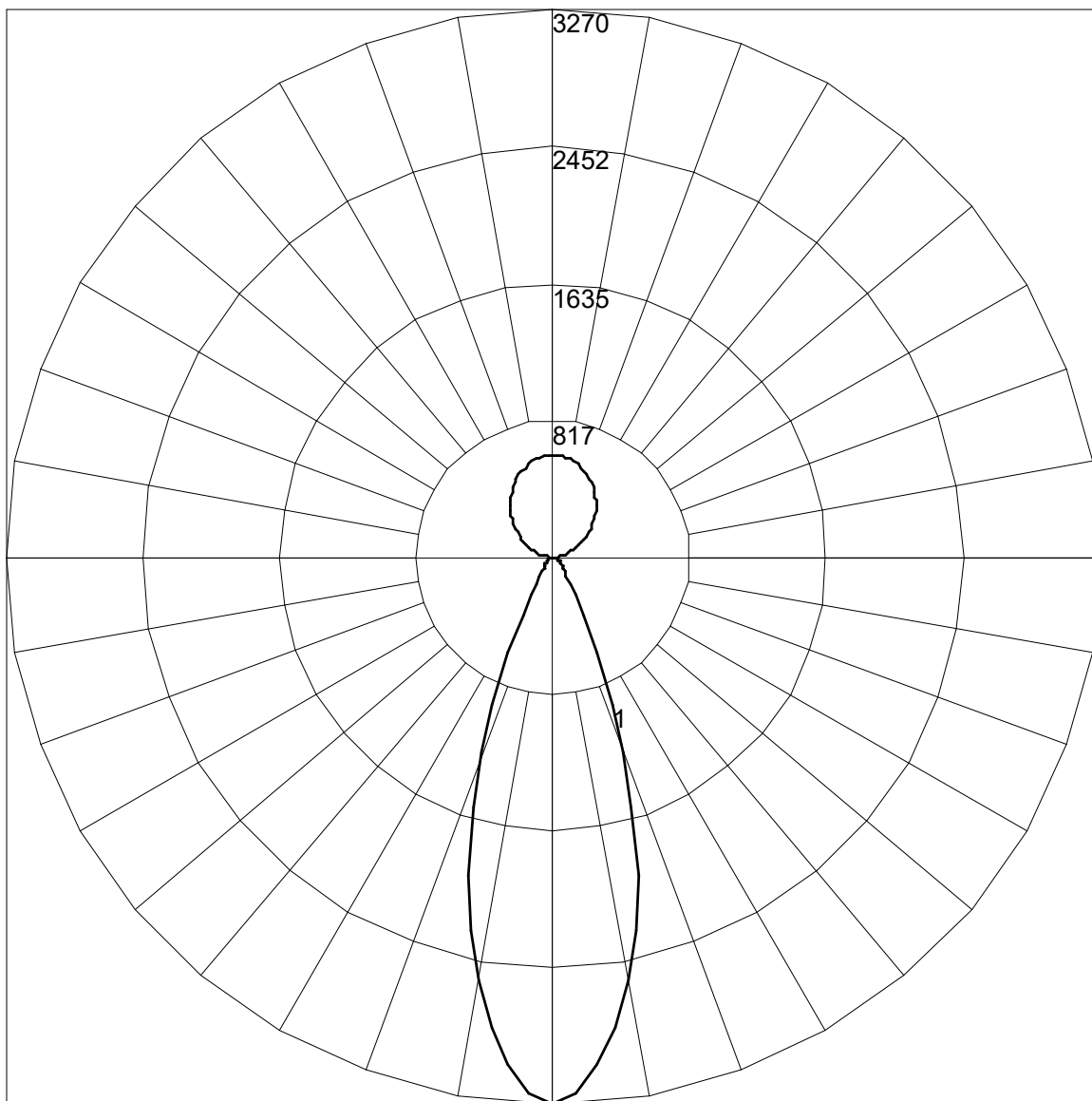
PHOTOMETRIC FILENAME : HP-2-ID-4FT-S-S-835-F-MLW-ITL85132-ITL92590.003.IES

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 | 106 | 106 | 106 | 106 | 97 | 97 | 97 | 97 | 81 | 81 | 81 | 66 | 66 | 66 | 52 | 52 | 52 | 46 |
| 1 | 99 | 95 | 92 | 90 | 91 | 88 | 85 | 83 | 74 | 72 | 71 | 61 | 60 | 59 | 49 | 49 | 48 | 43 |
| 2 | 92 | 86 | 82 | 77 | 85 | 80 | 76 | 72 | 68 | 65 | 63 | 57 | 55 | 53 | 47 | 45 | 44 | 40 |
| 3 | 86 | 79 | 73 | 68 | 79 | 73 | 68 | 64 | 63 | 59 | 56 | 53 | 51 | 49 | 44 | 43 | 41 | 38 |
| 4 | 81 | 72 | 66 | 61 | 74 | 67 | 62 | 58 | 58 | 54 | 51 | 50 | 47 | 45 | 42 | 40 | 39 | 35 |
| 5 | 76 | 66 | 60 | 55 | 70 | 62 | 57 | 52 | 54 | 50 | 47 | 47 | 44 | 42 | 40 | 38 | 37 | 34 |
| 6 | 71 | 62 | 55 | 50 | 66 | 58 | 52 | 48 | 51 | 47 | 44 | 44 | 41 | 39 | 38 | 36 | 35 | 32 |
| 7 | 67 | 57 | 51 | 46 | 63 | 54 | 48 | 44 | 48 | 44 | 41 | 42 | 39 | 37 | 36 | 34 | 33 | 31 |
| 8 | 64 | 54 | 47 | 43 | 59 | 51 | 45 | 41 | 45 | 41 | 38 | 40 | 37 | 35 | 35 | 33 | 31 | 29 |
| 9 | 60 | 50 | 44 | 40 | 56 | 48 | 42 | 39 | 43 | 39 | 36 | 38 | 35 | 33 | 34 | 32 | 30 | 28 |
| 10 | 57 | 47 | 42 | 38 | 54 | 45 | 40 | 36 | 41 | 37 | 34 | 36 | 33 | 31 | 32 | 30 | 29 | 27 |

POLAR GRAPH



Maximum Candela = 3269.736 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)