

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-H-8-35-ITL85132.011.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST]ITL85132.011 Family Correlation File
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[TESTDATE]08/11/15
[ISSUE DATE]04/26/16
[MANUFAC]FINELITE, INC.
[LUMCAT]FINELITE HP-2-ID-4ft-B-H-8-35
[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 46.4 WATTS
[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 48.6 WATTS
[ABSOLUTE LUMENS]4432
[OTHER]see www.finelite.com for source file ITL85132. 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 | 4432 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 96 |
| Total Luminaire Watts | 46.4 |
| 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 | 12508 | 11990 | 11406 |
| 55 | 11385 | 10829 | 10273 |
| 65 | 10282 | 9751 | 9276 |
| 75 | 9262 | 8760 | 8395 |
| 85 | 8129 | 7858 | 7452 |

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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 | 1022.000 | 1022.000 | 1022.000 | 1022.000 | 1022.000 |
| 2.5 | 1019.667 | 1021.222 | 1020.444 | 1020.444 | 1020.444 |
| 5.0 | 1015.778 | 1016.556 | 1015.000 | 1014.222 | 1014.222 |
| 7.5 | 1007.222 | 1008.000 | 1005.667 | 1004.889 | 1004.889 |
| 10.0 | 996.333 | 994.778 | 993.222 | 992.444 | 990.889 |
| 12.5 | 981.556 | 978.444 | 976.889 | 974.556 | 971.444 |
| 15.0 | 965.222 | 959.000 | 957.444 | 952.778 | 948.889 |
| 17.5 | 945.000 | 936.444 | 934.111 | 927.111 | 922.444 |
| 20.0 | 921.667 | 911.556 | 907.667 | 899.111 | 892.111 |
| 22.5 | 894.444 | 883.556 | 878.889 | 869.556 | 861.000 |
| 25.0 | 866.444 | 854.000 | 847.000 | 836.889 | 827.556 |
| 27.5 | 834.556 | 823.667 | 815.111 | 801.889 | 791.778 |
| 30.0 | 801.889 | 790.222 | 780.111 | 765.333 | 755.222 |
| 32.5 | 766.889 | 755.222 | 744.333 | 728.000 | 720.222 |
| 35.0 | 732.667 | 719.444 | 707.778 | 689.889 | 682.111 |
| 37.5 | 696.111 | 683.667 | 670.444 | 653.333 | 644.778 |
| 40.0 | 658.778 | 645.556 | 633.889 | 614.444 | 606.667 |
| 42.5 | 620.667 | 608.222 | 595.778 | 576.333 | 568.556 |
| 45.0 | 582.556 | 570.889 | 558.444 | 539.000 | 531.222 |
| 47.5 | 544.444 | 532.778 | 520.333 | 501.667 | 494.667 |
| 50.0 | 505.555 | 494.667 | 483.000 | 464.333 | 458.111 |
| 52.5 | 467.445 | 457.333 | 445.667 | 428.555 | 422.333 |
| 55.0 | 430.111 | 421.555 | 409.111 | 393.555 | 388.111 |
| 57.5 | 393.555 | 385.778 | 373.333 | 359.333 | 354.667 |
| 60.0 | 356.222 | 349.222 | 338.333 | 325.111 | 321.222 |
| 62.5 | 321.222 | 314.222 | 304.111 | 294.000 | 289.333 |
| 65.0 | 286.222 | 280.000 | 271.445 | 262.111 | 258.222 |
| 67.5 | 253.556 | 246.556 | 240.333 | 231.000 | 227.889 |
| 70.0 | 220.111 | 215.444 | 208.444 | 202.222 | 198.333 |
| 72.5 | 188.222 | 184.333 | 178.889 | 173.444 | 170.333 |
| 75.0 | 157.889 | 154.000 | 149.333 | 145.444 | 143.111 |
| 77.5 | 128.333 | 125.222 | 122.111 | 119.000 | 115.889 |
| 80.0 | 99.556 | 98.000 | 94.889 | 92.556 | 91.000 |
| 82.5 | 72.333 | 70.778 | 69.222 | 67.667 | 66.111 |
| 85.0 | 46.667 | 45.889 | 45.111 | 44.333 | 42.778 |
| 87.5 | 21.000 | 20.222 | 21.000 | 21.778 | 21.000 |
| 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 | 283.555 | 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-H-8-35-ITL85132.011.IES

CANDELA TABULATION - (Cont.)

| | | | | | |
|--------------|---------|---------|---------|---------|---------|
| 135.0 | 454.924 | 448.234 | 450.292 | 445.661 | 445.661 |
| 137.5 | 483.228 | 476.538 | 478.596 | 474.479 | 473.965 |
| 140.0 | 511.532 | 504.842 | 506.386 | 503.813 | 502.269 |
| 142.5 | 538.292 | 531.088 | 533.146 | 530.573 | 528.515 |
| 145.0 | 565.567 | 557.848 | 559.906 | 557.848 | 554.246 |
| 147.5 | 590.784 | 583.064 | 585.638 | 582.550 | 578.947 |
| 150.0 | 614.971 | 607.251 | 610.339 | 606.737 | 603.649 |
| 152.5 | 638.129 | 630.409 | 633.497 | 630.409 | 627.322 |
| 155.0 | 660.257 | 652.538 | 656.140 | 653.053 | 649.965 |
| 157.5 | 679.298 | 672.094 | 676.211 | 673.123 | 670.035 |
| 160.0 | 697.825 | 691.135 | 694.737 | 691.649 | 688.561 |
| 162.5 | 713.778 | 708.117 | 710.690 | 708.632 | 706.573 |
| 165.0 | 728.187 | 723.041 | 724.585 | 723.556 | 722.012 |
| 167.5 | 738.994 | 735.906 | 736.936 | 735.906 | 735.392 |
| 170.0 | 748.772 | 747.228 | 747.743 | 746.713 | 746.199 |
| 172.5 | 757.006 | 756.491 | 756.491 | 755.977 | 755.977 |
| 175.0 | 762.667 | 762.667 | 762.667 | 762.667 | 762.152 |
| 177.5 | 765.754 | 766.269 | 766.269 | 766.269 | 765.754 |
| 180.0 | 767.813 | 767.813 | 767.813 | 767.813 | 767.813 |

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ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|--------|
| 0-20 | 365.38 | N.A. | 8.20 |
| 0-30 | 754.71 | N.A. | 17.00 |
| 0-40 | 1196.34 | N.A. | 27.00 |
| 0-60 | 1991.01 | N.A. | 44.90 |
| 0-80 | 2419.42 | N.A. | 54.60 |
| 0-90 | 2469.16 | N.A. | 55.70 |
| 10-90 | 2372.95 | N.A. | 53.50 |
| 20-40 | 830.97 | N.A. | 18.80 |
| 20-50 | 1260.15 | N.A. | 28.40 |
| 40-70 | 1064.05 | N.A. | 24.00 |
| 60-80 | 428.40 | N.A. | 9.70 |
| 70-80 | 159.02 | N.A. | 3.60 |
| 80-90 | 49.74 | N.A. | 1.10 |
| 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. | 44.30 |
| 110-180 | 1793.01 | N.A. | 40.50 |
| 0-180 | 4431.59 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|--------|
| 0-10 | 96.21 |
| 10-20 | 269.16 |
| 20-30 | 389.34 |
| 30-40 | 441.63 |
| 40-50 | 429.18 |
| 50-60 | 365.49 |
| 60-70 | 269.38 |
| 70-80 | 159.02 |
| 80-90 | 49.74 |
| 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 |

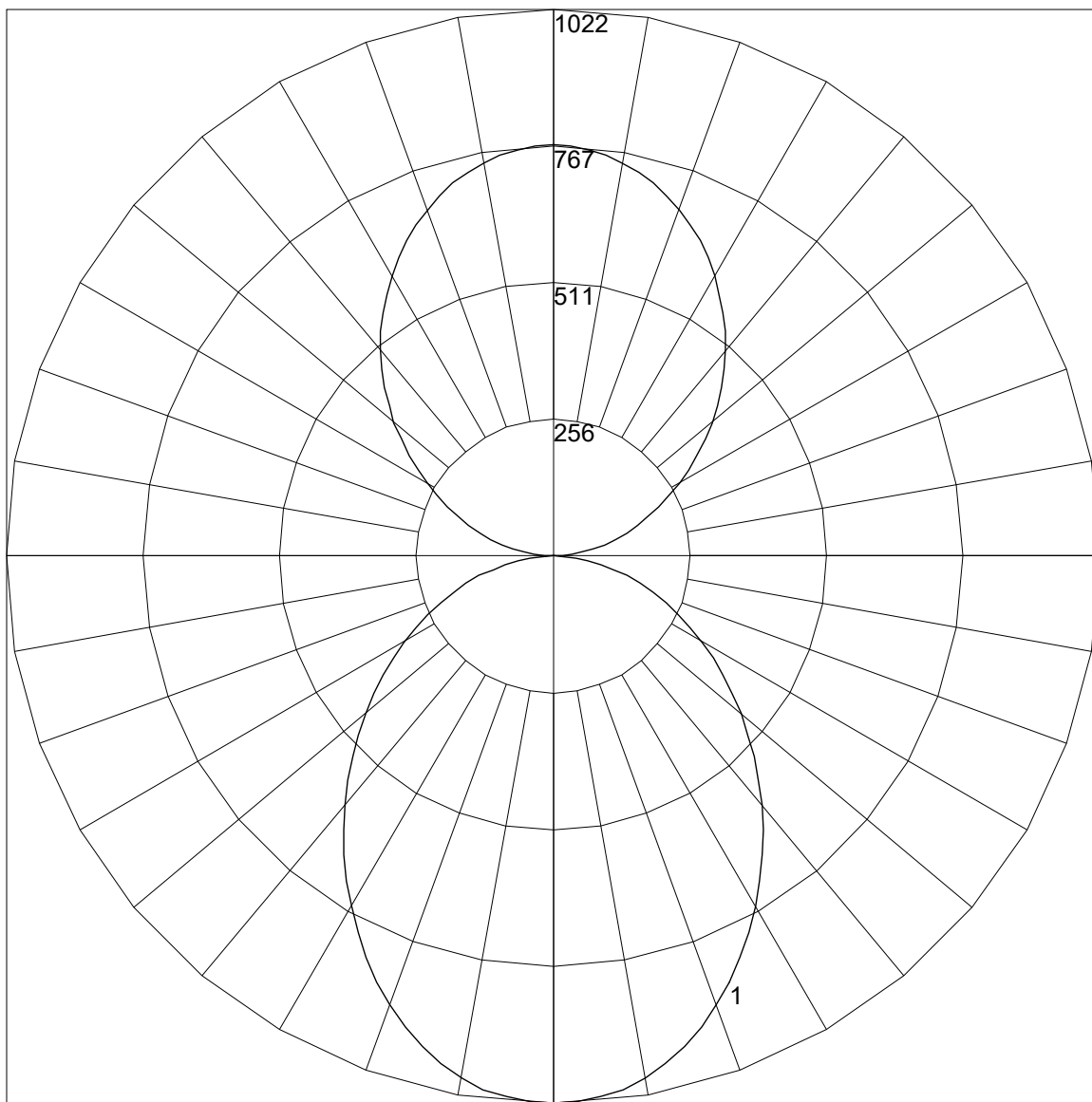
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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 | 87 | 87 | 87 | 73 | 73 | 73 | 61 | 61 | 61 | 56 |
| 1 | 99 | 95 | 91 | 87 | 92 | 88 | 85 | 82 | 76 | 73 | 71 | 65 | 63 | 61 | 54 | 53 | 52 | 47 |
| 2 | 90 | 83 | 77 | 71 | 84 | 77 | 72 | 67 | 67 | 63 | 59 | 57 | 54 | 51 | 48 | 46 | 44 | 39 |
| 3 | 82 | 73 | 66 | 60 | 76 | 68 | 62 | 56 | 59 | 54 | 50 | 50 | 47 | 43 | 43 | 40 | 37 | 34 |
| 4 | 76 | 65 | 57 | 51 | 70 | 60 | 53 | 48 | 52 | 47 | 43 | 45 | 41 | 37 | 38 | 35 | 32 | 29 |
| 5 | 69 | 58 | 50 | 44 | 64 | 54 | 47 | 41 | 47 | 41 | 37 | 40 | 36 | 33 | 34 | 31 | 28 | 25 |
| 6 | 64 | 52 | 44 | 38 | 59 | 49 | 41 | 36 | 42 | 37 | 32 | 37 | 32 | 29 | 31 | 28 | 25 | 22 |
| 7 | 59 | 47 | 39 | 33 | 55 | 44 | 37 | 32 | 39 | 33 | 29 | 33 | 29 | 25 | 29 | 25 | 22 | 20 |
| 8 | 55 | 43 | 35 | 30 | 51 | 40 | 33 | 28 | 35 | 30 | 25 | 31 | 26 | 23 | 26 | 23 | 20 | 18 |
| 9 | 51 | 39 | 32 | 26 | 48 | 37 | 30 | 25 | 32 | 27 | 23 | 28 | 24 | 20 | 24 | 21 | 18 | 16 |
| 10 | 48 | 36 | 29 | 24 | 45 | 34 | 27 | 23 | 30 | 24 | 21 | 26 | 22 | 19 | 23 | 19 | 17 | 15 |

POLAR GRAPH



Maximum Candela = 1022 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)