

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-D-4FT-H-835-DL-ITL90630.003.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL90630.003 Family Correlation File
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[TESTDATE]07/09/18
[ISSUEDATE]07/31/18
[MANUFAC]FINELITE, INC.
[LUMCAT]FINELITE HP-2-D-4ft-H-835-DL
[INPUT_ELECTRICAL]120.0 VOLTS, 28.3 WATTS
[INPUT_ELECTRICAL]277.0 VOLTS, 29.1 WATTS
[ABSOLUTE LUMENS]2830
[OTHER]see www.finelite.com for source file ITL90630. 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 | 2830 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 100 |
| Total Luminaire Watts | 28.3 |
| Ballast Factor | 1.00 |
| CIE Type | Semi-Direct |
| Spacing Criterion (0-180) | 1.22 |
| Spacing Criterion (90-270) | 1.32 |
| Spacing Criterion (Diagonal) | 1.42 |
| Basic Luminous Shape | Rectangular w/Sides |
| Luminous Length (0-180) | 3.99 ft |
| Luminous Width (90-270) | 0.17 ft |
| Luminous Height | 0.08 ft |

LUMINANCE DATA (cd/sq.m)

| Angle In Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|---------------------|------------------|-------------------|-------------------|
| 45 | 9891 | 8593 | 8286 |
| 55 | 9179 | 7818 | 7568 |
| 65 | 8306 | 6967 | 6827 |
| 75 | 6944 | 6009 | 6049 |
| 85 | 4854 | 5139 | 5385 |

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP-2-D-4FT-H-835-DL-ITL90630.003.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 | 753.801 | 753.801 | 753.801 | 753.801 | 753.801 |
| 2.5 | 753.801 | 753.023 | 753.801 | 754.579 | 754.579 |
| 5.0 | 749.911 | 750.689 | 752.245 | 754.579 | 755.356 |
| 7.5 | 744.466 | 746.021 | 750.689 | 754.579 | 755.356 |
| 10.0 | 737.464 | 739.020 | 747.577 | 753.023 | 753.801 |
| 12.5 | 728.129 | 730.463 | 742.132 | 748.355 | 750.689 |
| 15.0 | 716.461 | 719.572 | 734.353 | 742.910 | 744.466 |
| 17.5 | 701.680 | 707.126 | 724.240 | 734.353 | 736.686 |
| 20.0 | 686.122 | 693.123 | 712.571 | 723.462 | 725.018 |
| 22.5 | 669.008 | 676.787 | 699.346 | 711.015 | 713.349 |
| 25.0 | 648.004 | 659.673 | 684.566 | 696.235 | 700.124 |
| 27.5 | 628.556 | 641.003 | 668.230 | 681.454 | 684.566 |
| 30.0 | 606.774 | 621.555 | 650.338 | 665.118 | 668.230 |
| 32.5 | 584.215 | 601.329 | 632.446 | 647.226 | 651.894 |
| 35.0 | 558.544 | 579.547 | 612.998 | 628.556 | 633.224 |
| 37.5 | 534.428 | 557.766 | 591.994 | 609.886 | 615.332 |
| 40.0 | 509.535 | 534.428 | 571.768 | 590.438 | 595.884 |
| 42.5 | 483.086 | 511.091 | 549.209 | 569.435 | 575.658 |
| 45.0 | 455.859 | 487.753 | 526.649 | 548.431 | 555.432 |
| 47.5 | 428.632 | 462.860 | 504.090 | 526.649 | 533.650 |
| 50.0 | 402.183 | 437.189 | 480.752 | 504.867 | 512.647 |
| 52.5 | 373.400 | 412.295 | 456.637 | 483.086 | 491.643 |
| 55.0 | 346.173 | 386.624 | 432.521 | 459.748 | 469.083 |
| 57.5 | 318.946 | 360.953 | 408.406 | 436.411 | 445.746 |
| 60.0 | 290.941 | 333.726 | 383.513 | 413.073 | 423.186 |
| 62.5 | 262.158 | 307.277 | 358.619 | 389.736 | 399.849 |
| 65.0 | 234.153 | 281.606 | 332.170 | 364.065 | 375.733 |
| 67.5 | 206.926 | 255.156 | 307.277 | 340.727 | 353.174 |
| 70.0 | 178.921 | 227.929 | 281.606 | 316.612 | 327.503 |
| 72.5 | 150.916 | 201.480 | 256.712 | 291.719 | 304.165 |
| 75.0 | 123.689 | 175.809 | 231.819 | 267.603 | 280.828 |
| 77.5 | 98.017 | 151.694 | 206.926 | 244.266 | 258.268 |
| 80.0 | 74.680 | 127.578 | 185.144 | 222.484 | 234.931 |
| 82.5 | 52.120 | 105.797 | 164.140 | 201.480 | 214.705 |
| 85.0 | 33.450 | 87.127 | 145.470 | 182.810 | 196.035 |
| 87.5 | 19.448 | 71.568 | 129.134 | 166.474 | 178.921 |
| 90.0 | 8.557 | 60.677 | 116.687 | 154.027 | 165.696 |
| 92.5 | 8.557 | 58.344 | 112.798 | 147.804 | 160.251 |
| 95.0 | 7.779 | 56.788 | 109.686 | 143.914 | 154.805 |
| 97.5 | 7.779 | 54.454 | 105.797 | 139.247 | 150.138 |
| 100.0 | 7.001 | 52.120 | 102.685 | 134.579 | 145.470 |
| 102.5 | 7.001 | 50.565 | 99.573 | 130.690 | 140.803 |
| 105.0 | 7.001 | 47.453 | 95.684 | 126.022 | 136.135 |
| 107.5 | 6.223 | 45.119 | 92.572 | 121.355 | 131.468 |
| 110.0 | 5.445 | 43.563 | 88.682 | 116.687 | 126.800 |
| 112.5 | 5.445 | 41.230 | 84.793 | 112.020 | 122.133 |
| 115.0 | 5.445 | 38.896 | 81.681 | 108.130 | 117.465 |
| 117.5 | 4.667 | 36.562 | 77.792 | 103.463 | 112.020 |
| 120.0 | 4.667 | 34.228 | 73.902 | 98.795 | 107.352 |
| 122.5 | 3.890 | 31.895 | 70.012 | 94.128 | 102.685 |
| 125.0 | 3.890 | 29.561 | 66.123 | 89.460 | 97.240 |
| 127.5 | 3.112 | 27.227 | 62.233 | 84.015 | 92.572 |
| 130.0 | 3.112 | 24.893 | 58.344 | 79.347 | 87.127 |
| 132.5 | 3.112 | 22.560 | 54.454 | 74.680 | 81.681 |

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP-2-D-4FT-H-835-DL-ITL90630.003.IES

CANDELA TABULATION - (Cont.)

| | | | | | |
|--------------|-------|--------|--------|--------|--------|
| 135.0 | 2.334 | 20.226 | 49.787 | 70.012 | 77.014 |
| 137.5 | 2.334 | 17.892 | 45.897 | 64.567 | 71.568 |
| 140.0 | 2.334 | 15.558 | 41.230 | 59.900 | 66.123 |
| 142.5 | 2.334 | 13.225 | 36.562 | 55.232 | 61.455 |
| 145.0 | 1.556 | 11.669 | 32.672 | 50.565 | 56.010 |
| 147.5 | 1.556 | 10.113 | 28.783 | 45.119 | 50.565 |
| 150.0 | 1.556 | 8.557 | 24.893 | 40.452 | 45.119 |
| 152.5 | 0.778 | 6.223 | 21.004 | 35.006 | 39.674 |
| 155.0 | 0.778 | 5.445 | 17.114 | 29.561 | 34.228 |
| 157.5 | 0.778 | 3.890 | 14.002 | 23.337 | 28.783 |
| 160.0 | 0.778 | 2.334 | 10.891 | 18.670 | 23.337 |
| 162.5 | 0.778 | 1.556 | 8.557 | 14.002 | 18.670 |
| 165.0 | 0.778 | 1.556 | 6.223 | 10.113 | 14.002 |
| 167.5 | 0.778 | 0.778 | 3.890 | 7.001 | 9.335 |
| 170.0 | 0.778 | 0.778 | 1.556 | 3.890 | 5.445 |
| 172.5 | 0.778 | 0.778 | 0.778 | 1.556 | 2.334 |
| 175.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 177.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 180.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP-2-D-4FT-H-835-DL-ITL90630.003.IES

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|--------|
| 0-20 | 278.08 | N.A. | 9.80 |
| 0-30 | 590.92 | N.A. | 20.90 |
| 0-40 | 969.29 | N.A. | 34.30 |
| 0-60 | 1745.73 | N.A. | 61.70 |
| 0-80 | 2296.12 | N.A. | 81.10 |
| 0-90 | 2443.02 | N.A. | 86.30 |
| 10-90 | 2371.38 | N.A. | 83.80 |
| 20-40 | 691.22 | N.A. | 24.40 |
| 20-50 | 1090.4 | N.A. | 38.50 |
| 40-70 | 1094.42 | N.A. | 38.70 |
| 60-80 | 550.39 | N.A. | 19.50 |
| 70-80 | 232.41 | N.A. | 8.20 |
| 80-90 | 146.90 | N.A. | 5.20 |
| 90-110 | 196.99 | N.A. | 7.00 |
| 90-120 | 268.86 | N.A. | 9.50 |
| 90-130 | 321.78 | N.A. | 11.40 |
| 90-150 | 376.29 | N.A. | 13.30 |
| 90-180 | 386.57 | N.A. | 13.70 |
| 110-180 | 189.58 | N.A. | 6.70 |
| 0-180 | 2829.59 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|--------|
| 0-10 | 71.64 |
| 10-20 | 206.43 |
| 20-30 | 312.84 |
| 30-40 | 378.37 |
| 40-50 | 399.18 |
| 50-60 | 377.25 |
| 60-70 | 317.99 |
| 70-80 | 232.41 |
| 80-90 | 146.90 |
| 90-100 | 106.77 |
| 100-110 | 90.22 |
| 110-120 | 71.87 |
| 120-130 | 52.92 |
| 130-140 | 34.92 |
| 140-150 | 19.59 |
| 150-160 | 8.24 |
| 160-170 | 1.94 |
| 170-180 | 0.09 |

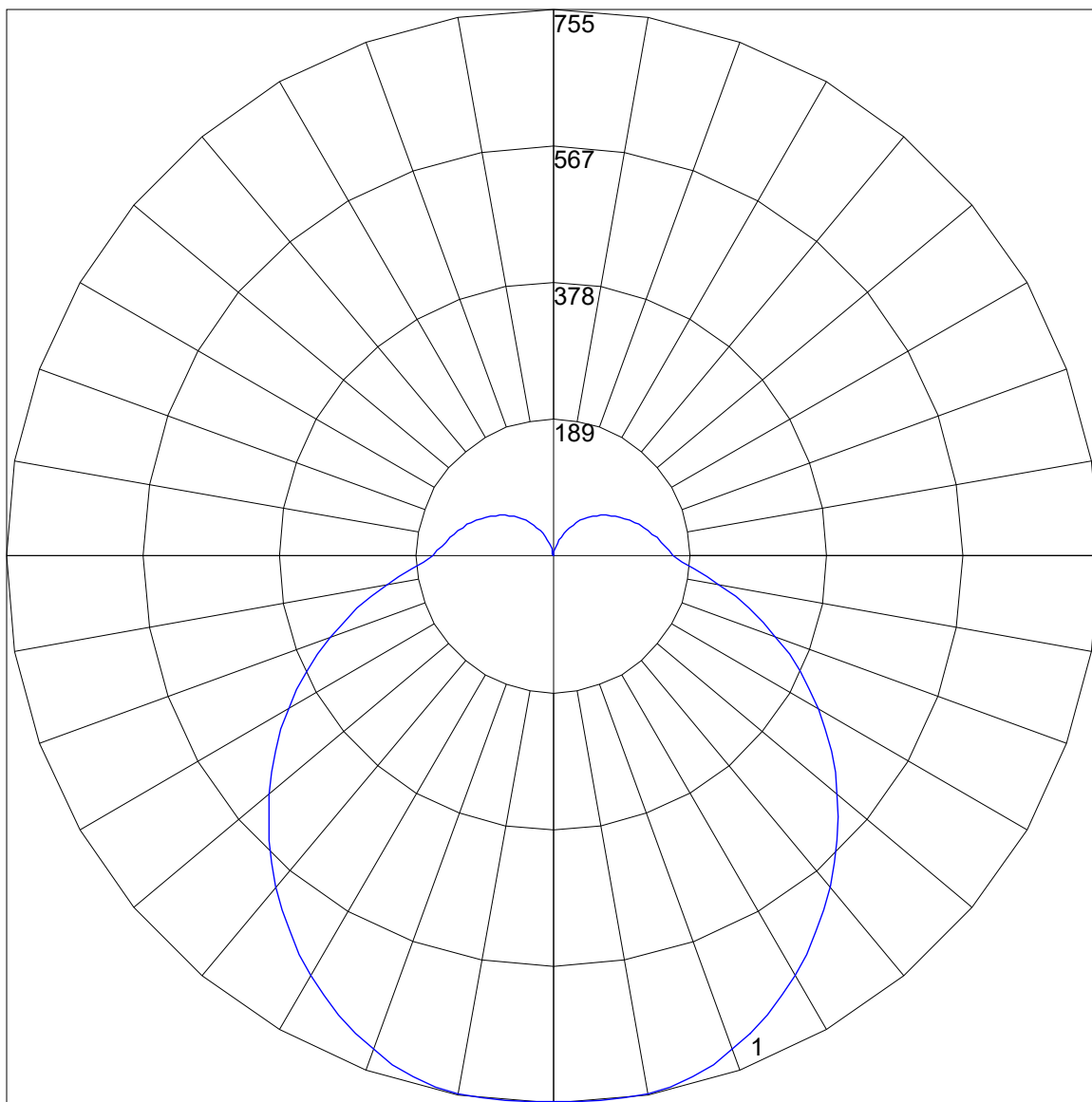
IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP-2-D-4FT-H-835-DL-ITL90630.003.IES

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 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 111 | 104 | 104 | 104 | 96 | 96 | 96 | 89 | 89 | 89 | 86 |
| 1 | 104 | 98 | 93 | 89 | 100 | 95 | 90 | 86 | 88 | 84 | 81 | 82 | 79 | 76 | 76 | 74 | 72 | 68 |
| 2 | 94 | 85 | 77 | 71 | 90 | 82 | 75 | 69 | 76 | 70 | 66 | 71 | 66 | 62 | 66 | 62 | 59 | 56 |
| 3 | 85 | 74 | 65 | 58 | 81 | 71 | 63 | 57 | 66 | 60 | 54 | 62 | 56 | 52 | 57 | 53 | 49 | 46 |
| 4 | 78 | 65 | 56 | 49 | 74 | 63 | 55 | 48 | 59 | 52 | 46 | 55 | 49 | 44 | 51 | 46 | 42 | 39 |
| 5 | 71 | 58 | 49 | 42 | 68 | 56 | 48 | 41 | 52 | 45 | 39 | 49 | 43 | 38 | 46 | 40 | 36 | 34 |
| 6 | 66 | 52 | 43 | 36 | 63 | 50 | 42 | 36 | 47 | 40 | 34 | 44 | 38 | 33 | 41 | 36 | 32 | 29 |
| 7 | 61 | 47 | 38 | 32 | 58 | 46 | 37 | 31 | 43 | 36 | 30 | 40 | 34 | 29 | 38 | 32 | 28 | 26 |
| 8 | 57 | 43 | 34 | 28 | 54 | 42 | 34 | 28 | 39 | 32 | 27 | 37 | 31 | 26 | 35 | 29 | 25 | 23 |
| 9 | 53 | 39 | 31 | 25 | 51 | 38 | 30 | 25 | 36 | 29 | 24 | 34 | 28 | 23 | 32 | 27 | 22 | 21 |
| 10 | 49 | 36 | 28 | 23 | 47 | 35 | 28 | 23 | 33 | 26 | 22 | 31 | 25 | 21 | 30 | 24 | 20 | 19 |

POLAR GRAPH



Maximum Candela = 755.356 Located At Horizontal Angle = 90, Vertical Angle = 5
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)