

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-4-ID-4FT-B-B-835-WSO-DAO-ITL89033-ITL94331.002.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89033-ITL94331.002 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]03/08/17

[ISSUEDATE]08/27/2021

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HP-4-ID-4ft-B-B-835-WSO-DAO

[_INPUT_ELECTRICAL]120.0 VOLTS, 36.9 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 39.5 WATTS

[_ABSOLUTE]LUMENS]4213

[_CONVERT] Photometric web converted from original test data

[OTHER]see www.finelite.com for source files ITL89033 and ITL94331. 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 | 4213 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 114 |
| Total Luminaire Watts | 36.9 |
| 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) | 0.32 ft |
| Luminous Height | 0.00 ft |

LUMINANCE DATA (cd/sq.m)

| Angle In Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|---------------------|------------------|-------------------|-------------------|
| 45 | 6175 | 6375 | 5284 |
| 55 | 5304 | 5670 | 4699 |
| 65 | 4441 | 4826 | 4096 |
| 75 | 3576 | 3957 | 3543 |
| 85 | 2802 | 3048 | 3097 |

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PHOTOMETRIC FILENAME : HP-4-ID-4FT-B-B-835-WSO-DAO-ITL89033-ITL94331.002.IES

CANDELA TABULATION

| | <u>0.0</u> | <u>22.5</u> | <u>45.0</u> | <u>67.5</u> | <u>90.0</u> | <u>112.5</u> | <u>135.0</u> | <u>157.5</u> | <u>180.0</u> |
|-------|------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|
| 0.0 | 798.777 | 798.777 | 798.777 | 798.777 | 798.777 | 798.777 | 798.777 | 798.777 | 798.777 |
| 2.5 | 815.247 | 814.217 | 810.100 | 804.439 | 798.263 | 791.057 | 785.910 | 781.793 | 780.249 |
| 5.0 | 828.114 | 826.055 | 818.850 | 807.527 | 794.145 | 781.278 | 768.926 | 762.235 | 759.662 |
| 7.5 | 837.893 | 834.290 | 824.511 | 807.527 | 787.454 | 767.382 | 750.398 | 741.133 | 737.531 |
| 10.0 | 844.583 | 841.495 | 826.570 | 804.439 | 779.220 | 751.942 | 731.869 | 719.002 | 712.826 |
| 12.5 | 846.642 | 844.069 | 826.570 | 798.263 | 769.441 | 734.443 | 711.797 | 695.842 | 689.151 |
| 15.0 | 844.583 | 841.495 | 822.967 | 788.998 | 755.544 | 714.885 | 690.181 | 672.167 | 664.961 |
| 17.5 | 837.893 | 835.319 | 816.276 | 778.190 | 739.589 | 694.298 | 665.476 | 648.492 | 639.742 |
| 20.0 | 826.570 | 825.026 | 805.983 | 762.750 | 722.091 | 671.138 | 641.286 | 623.787 | 616.067 |
| 22.5 | 811.129 | 809.585 | 792.086 | 746.795 | 703.562 | 646.948 | 618.126 | 599.083 | 593.421 |
| 25.0 | 791.572 | 791.057 | 775.102 | 728.266 | 680.916 | 622.758 | 593.421 | 575.922 | 571.290 |
| 27.5 | 768.411 | 768.411 | 754.000 | 706.650 | 657.241 | 597.539 | 567.173 | 553.277 | 547.615 |
| 30.0 | 741.648 | 743.192 | 730.325 | 682.975 | 630.993 | 570.261 | 543.498 | 530.116 | 526.514 |
| 32.5 | 711.797 | 713.856 | 704.077 | 658.271 | 603.715 | 544.013 | 518.279 | 506.956 | 505.412 |
| 35.0 | 676.799 | 681.946 | 676.284 | 629.963 | 574.378 | 516.220 | 494.089 | 485.339 | 483.281 |
| 37.5 | 642.830 | 649.006 | 643.860 | 600.112 | 543.498 | 488.942 | 468.870 | 463.723 | 463.208 |
| 40.0 | 604.744 | 613.494 | 611.435 | 569.232 | 513.647 | 460.635 | 443.651 | 440.563 | 443.136 |
| 42.5 | 567.173 | 573.349 | 577.981 | 537.836 | 482.766 | 433.357 | 419.461 | 419.461 | 421.520 |
| 45.0 | 524.455 | 534.748 | 541.439 | 502.324 | 448.798 | 405.050 | 395.271 | 398.359 | 400.933 |
| 47.5 | 485.339 | 496.662 | 504.382 | 468.870 | 417.917 | 378.287 | 369.537 | 376.228 | 381.375 |
| 50.0 | 445.709 | 455.488 | 466.296 | 435.416 | 385.492 | 351.524 | 345.862 | 354.097 | 359.759 |
| 52.5 | 406.594 | 415.344 | 428.725 | 399.389 | 353.582 | 322.187 | 321.673 | 331.451 | 338.142 |
| 55.0 | 365.420 | 377.257 | 390.639 | 363.876 | 323.731 | 296.453 | 297.483 | 309.320 | 317.040 |
| 57.5 | 328.363 | 338.142 | 352.553 | 330.422 | 292.851 | 269.690 | 273.293 | 287.189 | 294.909 |
| 60.0 | 290.277 | 302.115 | 316.526 | 297.483 | 264.029 | 244.471 | 248.589 | 262.485 | 270.720 |
| 62.5 | 256.823 | 265.058 | 281.013 | 263.514 | 236.236 | 219.252 | 225.943 | 239.839 | 248.074 |
| 65.0 | 225.428 | 232.633 | 244.986 | 231.604 | 207.929 | 196.092 | 201.238 | 216.679 | 224.399 |
| 67.5 | 192.489 | 198.665 | 211.532 | 201.753 | 181.166 | 171.902 | 179.107 | 193.518 | 198.665 |
| 70.0 | 164.696 | 169.328 | 180.651 | 172.417 | 156.976 | 148.741 | 155.947 | 169.328 | 174.990 |
| 72.5 | 135.875 | 141.021 | 151.315 | 144.109 | 133.301 | 126.610 | 134.330 | 145.139 | 151.315 |
| 75.0 | 111.170 | 115.287 | 123.008 | 118.376 | 110.141 | 106.023 | 112.199 | 122.493 | 127.640 |
| 77.5 | 88.524 | 91.098 | 97.274 | 94.700 | 88.524 | 85.436 | 91.612 | 99.332 | 102.421 |
| 80.0 | 66.908 | 68.967 | 73.599 | 73.084 | 67.937 | 66.393 | 71.025 | 77.716 | 79.775 |
| 82.5 | 47.350 | 47.865 | 51.468 | 50.953 | 49.409 | 48.380 | 51.468 | 55.585 | 57.644 |
| 85.0 | 29.337 | 29.337 | 31.910 | 31.910 | 32.425 | 30.881 | 32.939 | 34.483 | 36.027 |
| 87.5 | 11.323 | 12.352 | 13.382 | 14.411 | 14.926 | 14.411 | 14.926 | 15.440 | 15.955 |
| 90.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 92.5 | 8.234 | 14.410 | 15.439 | 15.439 | 15.439 | 15.439 | 15.439 | 14.410 | 8.234 |
| 95.0 | 23.159 | 41.172 | 42.201 | 32.937 | 32.937 | 32.937 | 42.201 | 41.172 | 23.159 |
| 97.5 | 40.657 | 69.992 | 108.075 | 67.418 | 58.669 | 67.418 | 108.075 | 69.992 | 40.657 |
| 100.0 | 61.243 | 95.724 | 171.376 | 126.602 | 99.326 | 126.602 | 171.376 | 95.724 | 61.243 |
| 102.5 | 85.945 | 116.824 | 253.205 | 196.079 | 159.540 | 196.079 | 253.205 | 116.824 | 85.945 |
| 105.0 | 108.590 | 139.469 | 315.991 | 303.125 | 242.912 | 303.125 | 315.991 | 139.469 | 108.590 |
| 107.5 | 131.749 | 162.113 | 344.812 | 443.623 | 373.117 | 443.623 | 344.812 | 162.113 | 131.749 |
| 110.0 | 153.879 | 183.213 | 358.707 | 560.447 | 534.201 | 560.447 | 358.707 | 183.213 | 153.879 |
| 112.5 | 176.523 | 203.799 | 375.175 | 608.824 | 640.732 | 608.824 | 375.175 | 203.799 | 176.523 |
| 115.0 | 198.138 | 223.356 | 402.966 | 623.749 | 680.874 | 623.749 | 402.966 | 223.356 | 198.138 |
| 117.5 | 215.636 | 241.368 | 425.096 | 630.954 | 695.799 | 630.954 | 425.096 | 241.368 | 215.636 |
| 120.0 | 231.590 | 258.866 | 439.506 | 659.259 | 706.606 | 659.259 | 439.506 | 258.866 | 231.590 |
| 122.5 | 245.485 | 275.849 | 448.770 | 694.255 | 740.058 | 694.255 | 448.770 | 275.849 | 245.485 |
| 125.0 | 258.866 | 290.774 | 455.460 | 713.297 | 779.171 | 713.297 | 455.460 | 290.774 | 258.866 |
| 127.5 | 271.217 | 304.155 | 460.606 | 713.811 | 799.757 | 713.811 | 460.606 | 304.155 | 271.217 |
| 130.0 | 281.510 | 315.991 | 464.724 | 701.460 | 796.154 | 701.460 | 464.724 | 315.991 | 281.510 |
| 132.5 | 292.318 | 327.314 | 468.326 | 684.476 | 777.112 | 684.476 | 468.326 | 327.314 | 292.318 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-4-ID-4FT-B-B-835-WSO-DAO-ITL89033-ITL94331.002.IES****CANDELA TABULATION - (Cont.)**

| | | | | | | | | | |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 135.0 | 302.611 | 337.606 | 470.899 | 665.949 | 752.409 | 665.949 | 470.899 | 337.606 | 302.611 |
| 137.5 | 312.389 | 346.870 | 471.929 | 645.878 | 724.104 | 645.878 | 471.929 | 346.870 | 312.389 |
| 140.0 | 322.682 | 355.619 | 472.443 | 625.807 | 694.255 | 625.807 | 472.443 | 355.619 | 322.682 |
| 142.5 | 332.975 | 363.853 | 471.929 | 604.707 | 664.405 | 604.707 | 471.929 | 363.853 | 332.975 |
| 145.0 | 343.782 | 372.088 | 469.355 | 585.150 | 635.071 | 585.150 | 469.355 | 372.088 | 343.782 |
| 147.5 | 352.531 | 378.778 | 465.753 | 565.594 | 606.765 | 565.594 | 465.753 | 378.778 | 352.531 |
| 150.0 | 361.795 | 385.468 | 462.150 | 546.552 | 581.033 | 546.552 | 462.150 | 385.468 | 361.795 |
| 152.5 | 371.058 | 391.129 | 458.033 | 528.025 | 557.359 | 528.025 | 458.033 | 391.129 | 371.058 |
| 155.0 | 379.293 | 396.791 | 453.916 | 510.527 | 533.686 | 510.527 | 453.916 | 396.791 | 379.293 |
| 157.5 | 387.012 | 401.422 | 448.770 | 494.573 | 512.585 | 494.573 | 448.770 | 401.422 | 387.012 |
| 160.0 | 394.217 | 406.054 | 444.652 | 480.163 | 493.544 | 480.163 | 444.652 | 406.054 | 394.217 |
| 162.5 | 400.393 | 409.657 | 439.506 | 466.782 | 477.075 | 466.782 | 439.506 | 409.657 | 400.393 |
| 165.0 | 406.569 | 412.745 | 434.874 | 454.945 | 462.665 | 454.945 | 434.874 | 412.745 | 406.569 |
| 167.5 | 411.201 | 415.318 | 430.757 | 444.652 | 450.313 | 444.652 | 430.757 | 415.318 | 411.201 |
| 170.0 | 414.803 | 417.891 | 427.669 | 436.418 | 439.506 | 436.418 | 427.669 | 417.891 | 414.803 |
| 172.5 | 417.376 | 419.435 | 425.096 | 429.728 | 431.786 | 429.728 | 425.096 | 419.435 | 417.376 |
| 175.0 | 419.950 | 420.464 | 422.523 | 424.581 | 426.125 | 424.581 | 422.523 | 420.464 | 419.950 |
| 177.5 | 420.979 | 420.979 | 421.493 | 422.008 | 422.008 | 422.008 | 421.493 | 420.979 | 420.979 |
| 180.0 | 421.493 | 421.493 | 421.493 | 421.493 | 421.493 | 421.493 | 421.493 | 421.493 | 421.493 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-4-ID-4FT-B-B-835-WSO-DAO-ITL89033-ITL94331.002.IES****ZONAL LUMEN SUMMARY**

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|--------|
| 0-20 | 288.05 | N.A. | 6.80 |
| 0-30 | 601.44 | N.A. | 14.30 |
| 0-40 | 963.81 | N.A. | 22.90 |
| 0-60 | 1621.64 | N.A. | 38.50 |
| 0-80 | 1962.58 | N.A. | 46.60 |
| 0-90 | 1998.75 | N.A. | 47.40 |
| 10-90 | 1923.43 | N.A. | 45.70 |
| 20-40 | 675.76 | N.A. | 16.00 |
| 20-50 | 1031.65 | N.A. | 24.50 |
| 40-70 | 875.58 | N.A. | 20.80 |
| 60-80 | 340.94 | N.A. | 8.10 |
| 70-80 | 123.20 | N.A. | 2.90 |
| 80-90 | 36.17 | N.A. | 0.90 |
| 90-110 | 299.26 | N.A. | 7.10 |
| 90-120 | 712.85 | N.A. | 16.90 |
| 90-130 | 1151.37 | N.A. | 27.30 |
| 90-150 | 1839.35 | N.A. | 43.70 |
| 90-180 | 2214.04 | N.A. | 52.60 |
| 110-180 | 1914.79 | N.A. | 45.50 |
| 0-180 | 4212.79 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|--------|
| 0-10 | 75.32 |
| 10-20 | 212.73 |
| 20-30 | 313.39 |
| 30-40 | 362.37 |
| 40-50 | 355.90 |
| 50-60 | 301.94 |
| 60-70 | 217.74 |
| 70-80 | 123.20 |
| 80-90 | 36.17 |
| 90-100 | 49.87 |
| 100-110 | 249.39 |
| 110-120 | 413.60 |
| 120-130 | 438.52 |
| 130-140 | 386.97 |
| 140-150 | 301.01 |
| 150-160 | 210.74 |
| 160-170 | 123.46 |
| 170-180 | 40.50 |

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-4-ID-4FT-B-B-835-WSO-DAO-ITL89033-ITL94331.002.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

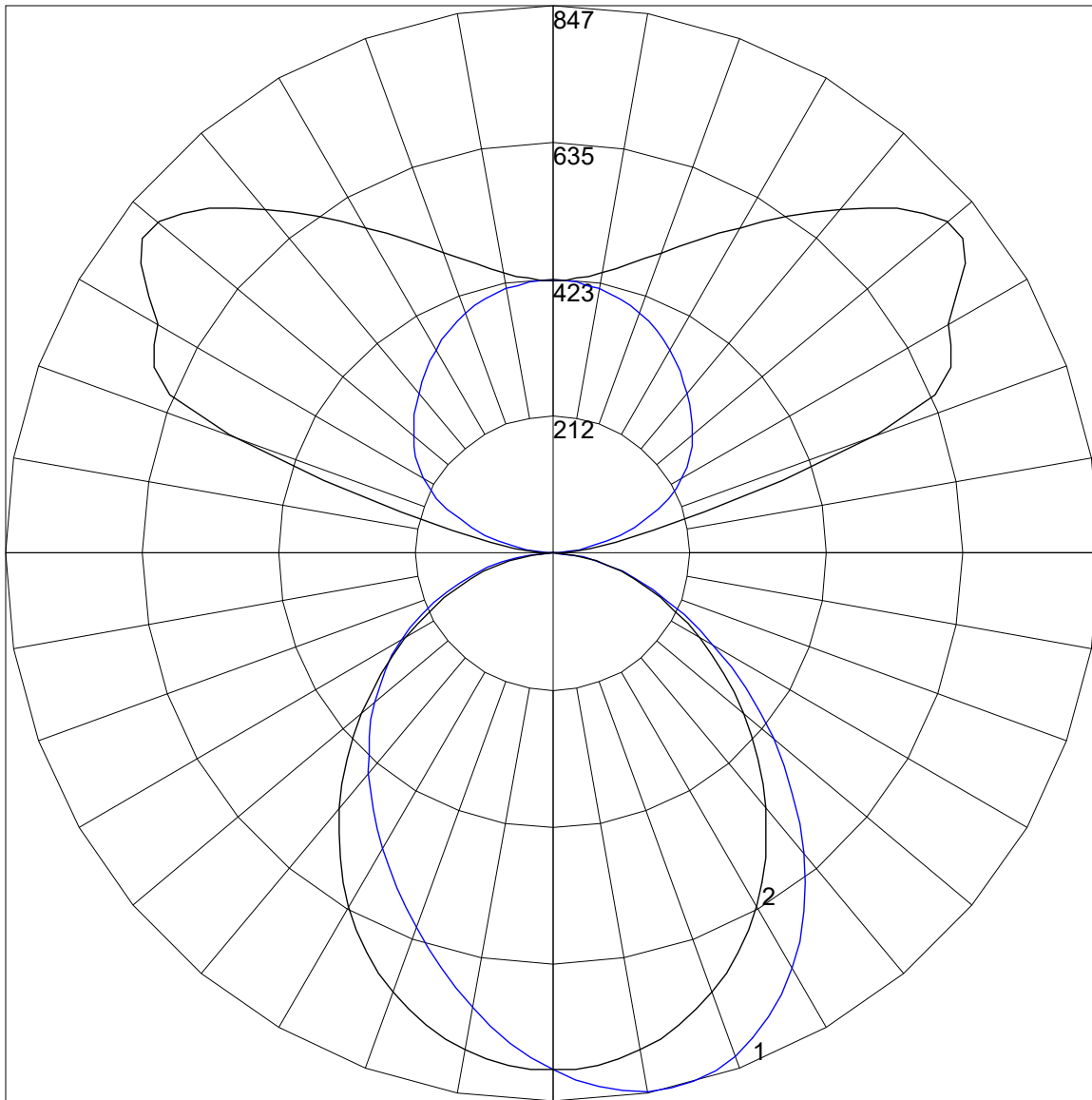
Effective Floor Cavity Reflectance 0.20

| 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 | 107 | 107 | 107 | 107 | 98 | 98 | 98 | 98 | 82 | 82 | 82 | 67 | 67 | 67 | 54 | 54 | 54 | 47 |
| 1 | 97 | 93 | 89 | 86 | 89 | 86 | 82 | 79 | 72 | 70 | 67 | 59 | 58 | 56 | 48 | 47 | 46 | 40 |
| 2 | 89 | 81 | 75 | 70 | 81 | 75 | 70 | 65 | 63 | 59 | 56 | 52 | 49 | 47 | 42 | 40 | 38 | 34 |
| 3 | 81 | 71 | 64 | 58 | 74 | 66 | 60 | 55 | 56 | 51 | 47 | 46 | 43 | 40 | 37 | 35 | 33 | 29 |
| 4 | 74 | 63 | 55 | 49 | 68 | 59 | 52 | 46 | 50 | 44 | 40 | 41 | 37 | 34 | 33 | 31 | 28 | 25 |
| 5 | 68 | 56 | 48 | 42 | 62 | 52 | 45 | 40 | 44 | 39 | 35 | 37 | 33 | 30 | 30 | 27 | 25 | 21 |
| 6 | 63 | 51 | 43 | 37 | 57 | 47 | 40 | 35 | 40 | 34 | 30 | 33 | 29 | 26 | 27 | 24 | 22 | 19 |
| 7 | 58 | 46 | 38 | 32 | 53 | 42 | 35 | 30 | 36 | 31 | 27 | 30 | 26 | 23 | 25 | 22 | 19 | 17 |
| 8 | 54 | 42 | 34 | 29 | 49 | 39 | 32 | 27 | 33 | 28 | 24 | 28 | 24 | 21 | 23 | 20 | 17 | 15 |
| 9 | 50 | 38 | 30 | 25 | 46 | 35 | 29 | 24 | 30 | 25 | 21 | 26 | 21 | 18 | 21 | 18 | 16 | 14 |
| 10 | 47 | 35 | 28 | 23 | 43 | 32 | 26 | 22 | 28 | 23 | 19 | 24 | 20 | 17 | 20 | 17 | 14 | 12 |

IES INDOOR REPORT

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POLAR GRAPH



Maximum Candela = 846.642 Located At Horizontal Angle = 0, Vertical Angle = 12.5

1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)

2 - Vertical Plane Through Horizontal Angles (90 - 270)