

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-X-ID-4FT-S-S-835-WSO-F-ITL92314.001.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL92314.001 Family Correlation File
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[TESTDATE]10/01/19
[ISSUEDATE]11/01/19
[MANUFAC]FINELITE, INC.
[LUMCAT]HP-X-ID-4ft-S-S-835-WSO-F
[INPUT_ELECTRICAL]120.0 VOLTS, 27.0 WATTS
[INPUT_ELECTRICAL]277.0 VOLTS, 29.2 WATTS
[ABSOLUTE LUMENS]3368
[OTHER]see www.finelite.com for source file ITL92314. 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 | 3368 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 125 |
| Total Luminaire Watts | 27 |
| 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) | 0.20 ft |
| Luminous Height | 0.00 ft |

LUMINANCE DATA (cd/sq.m)

| Angle In Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|---------------------|------------------|-------------------|-------------------|
| 45 | 7217 | 7249 | 7194 |
| 55 | 6982 | 7001 | 6953 |
| 65 | 6616 | 6655 | 6642 |
| 75 | 6155 | 6240 | 6283 |
| 85 | 5358 | 5736 | 5862 |

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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 | 560.929 | 560.929 | 560.929 | 560.929 | 560.929 |
| 2.5 | 560.524 | 560.524 | 560.524 | 560.524 | 560.524 |
| 5.0 | 558.907 | 558.907 | 558.907 | 558.907 | 558.907 |
| 7.5 | 555.267 | 555.671 | 555.671 | 556.076 | 555.671 |
| 10.0 | 551.627 | 550.414 | 552.032 | 552.032 | 550.818 |
| 12.5 | 546.370 | 544.348 | 546.774 | 546.774 | 544.752 |
| 15.0 | 540.304 | 537.473 | 540.304 | 540.708 | 537.877 |
| 17.5 | 532.620 | 528.575 | 532.620 | 533.428 | 529.789 |
| 20.0 | 522.914 | 519.274 | 523.318 | 523.722 | 521.296 |
| 22.5 | 512.803 | 508.354 | 513.207 | 513.612 | 511.185 |
| 25.0 | 501.884 | 497.840 | 502.288 | 502.693 | 500.266 |
| 27.5 | 488.942 | 485.303 | 489.751 | 490.156 | 487.729 |
| 30.0 | 475.597 | 472.361 | 476.405 | 476.405 | 473.979 |
| 32.5 | 461.442 | 457.398 | 462.251 | 461.846 | 459.420 |
| 35.0 | 446.478 | 442.030 | 446.478 | 446.478 | 444.861 |
| 37.5 | 429.088 | 426.662 | 431.110 | 430.302 | 428.280 |
| 40.0 | 412.507 | 410.081 | 413.720 | 412.912 | 410.485 |
| 42.5 | 394.713 | 391.882 | 395.522 | 394.713 | 392.691 |
| 45.0 | 375.705 | 374.087 | 377.323 | 375.705 | 374.492 |
| 47.5 | 356.697 | 355.080 | 357.911 | 355.889 | 354.675 |
| 50.0 | 336.476 | 334.859 | 338.094 | 335.668 | 334.454 |
| 52.5 | 315.447 | 315.042 | 317.469 | 315.851 | 314.233 |
| 55.0 | 294.821 | 294.821 | 295.630 | 294.417 | 293.608 |
| 57.5 | 273.387 | 272.983 | 273.792 | 272.578 | 271.769 |
| 60.0 | 251.144 | 250.740 | 252.357 | 251.144 | 250.740 |
| 62.5 | 229.305 | 228.901 | 230.114 | 229.305 | 228.901 |
| 65.0 | 205.849 | 206.658 | 207.062 | 206.658 | 206.658 |
| 67.5 | 184.011 | 184.415 | 185.224 | 185.224 | 185.224 |
| 70.0 | 161.363 | 161.363 | 162.981 | 162.576 | 162.981 |
| 72.5 | 139.524 | 139.524 | 140.738 | 140.333 | 140.738 |
| 75.0 | 117.281 | 117.686 | 118.899 | 119.304 | 119.708 |
| 77.5 | 95.443 | 96.252 | 97.465 | 98.678 | 98.678 |
| 80.0 | 75.222 | 75.222 | 76.840 | 77.648 | 77.648 |
| 82.5 | 54.597 | 55.405 | 56.619 | 57.023 | 57.832 |
| 85.0 | 34.376 | 35.589 | 36.802 | 37.611 | 37.611 |
| 87.5 | 15.368 | 16.581 | 17.794 | 19.008 | 19.008 |
| 90.0 | 0.809 | 2.427 | 3.640 | 5.257 | 6.066 |
| 92.5 | 6.471 | 16.581 | 33.567 | 17.390 | 15.772 |
| 95.0 | 15.368 | 35.184 | 86.141 | 41.251 | 32.354 |
| 97.5 | 25.883 | 51.766 | 159.745 | 77.648 | 56.214 |
| 100.0 | 36.802 | 67.134 | 241.842 | 133.054 | 92.612 |
| 102.5 | 48.530 | 78.457 | 304.527 | 223.644 | 150.444 |
| 105.0 | 59.450 | 90.590 | 334.859 | 366.808 | 257.210 |
| 107.5 | 70.773 | 101.914 | 337.690 | 531.406 | 421.000 |
| 110.0 | 82.906 | 113.642 | 329.601 | 642.621 | 599.753 |
| 112.5 | 95.038 | 125.370 | 321.917 | 679.424 | 704.498 |
| 115.0 | 106.767 | 137.907 | 318.278 | 681.041 | 744.131 |
| 117.5 | 118.495 | 150.039 | 318.682 | 664.865 | 754.645 |
| 120.0 | 128.605 | 160.959 | 319.086 | 640.195 | 743.726 |
| 122.5 | 138.311 | 170.260 | 319.895 | 613.908 | 721.888 |
| 125.0 | 146.400 | 178.349 | 321.109 | 588.834 | 694.387 |
| 127.5 | 154.488 | 186.033 | 321.109 | 563.355 | 665.269 |
| 130.0 | 162.576 | 192.908 | 321.513 | 539.090 | 634.938 |
| 132.5 | 169.451 | 198.570 | 320.300 | 515.634 | 604.202 |

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP-X-ID-4FT-S-S-835-WSO-F-ITL92314.001.IES

CANDELA TABULATION - (Cont.)

| | | | | | |
|--------------|---------|---------|---------|---------|---------|
| 135.0 | 176.731 | 203.827 | 317.873 | 492.582 | 571.444 |
| 137.5 | 184.011 | 209.489 | 315.042 | 470.743 | 542.326 |
| 140.0 | 190.886 | 214.746 | 310.189 | 447.692 | 511.994 |
| 142.5 | 197.761 | 219.599 | 305.336 | 424.235 | 480.045 |
| 145.0 | 204.636 | 224.452 | 299.674 | 401.992 | 448.500 |
| 147.5 | 211.107 | 228.497 | 294.417 | 379.749 | 419.787 |
| 150.0 | 217.173 | 232.541 | 289.564 | 359.528 | 391.882 |
| 152.5 | 222.835 | 236.181 | 285.115 | 342.138 | 368.021 |
| 155.0 | 228.901 | 239.820 | 280.262 | 326.366 | 346.182 |
| 157.5 | 233.350 | 242.651 | 276.218 | 312.211 | 327.579 |
| 160.0 | 238.203 | 245.482 | 272.174 | 299.674 | 310.998 |
| 162.5 | 242.247 | 247.909 | 268.534 | 289.159 | 297.652 |
| 165.0 | 246.291 | 250.335 | 265.299 | 280.262 | 285.924 |
| 167.5 | 249.122 | 251.953 | 262.468 | 272.578 | 276.622 |
| 170.0 | 251.548 | 253.571 | 260.041 | 266.512 | 268.938 |
| 172.5 | 253.975 | 255.188 | 258.828 | 262.468 | 263.681 |
| 175.0 | 255.188 | 255.593 | 257.210 | 258.828 | 259.637 |
| 177.5 | 255.997 | 255.997 | 256.402 | 256.806 | 257.210 |
| 180.0 | 256.402 | 256.402 | 256.402 | 256.402 | 256.402 |

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ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|--------|
| 0-20 | 205.30 | N.A. | 6.10 |
| 0-30 | 436.06 | N.A. | 12.90 |
| 0-40 | 714.58 | N.A. | 21.20 |
| 0-60 | 1267.44 | N.A. | 37.60 |
| 0-80 | 1597.71 | N.A. | 47.40 |
| 0-90 | 1638.68 | N.A. | 48.70 |
| 10-90 | 1585.58 | N.A. | 47.10 |
| 20-40 | 509.28 | N.A. | 15.10 |
| 20-50 | 798.84 | N.A. | 23.70 |
| 40-70 | 757.69 | N.A. | 22.50 |
| 60-80 | 330.27 | N.A. | 9.80 |
| 70-80 | 125.44 | N.A. | 3.70 |
| 80-90 | 40.97 | N.A. | 1.20 |
| 90-110 | 311.22 | N.A. | 9.20 |
| 90-120 | 692.65 | N.A. | 20.60 |
| 90-130 | 1030.85 | N.A. | 30.60 |
| 90-150 | 1497.42 | N.A. | 44.50 |
| 90-180 | 1729.38 | N.A. | 51.30 |
| 110-180 | 1418.16 | N.A. | 42.10 |
| 0-180 | 3368.06 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

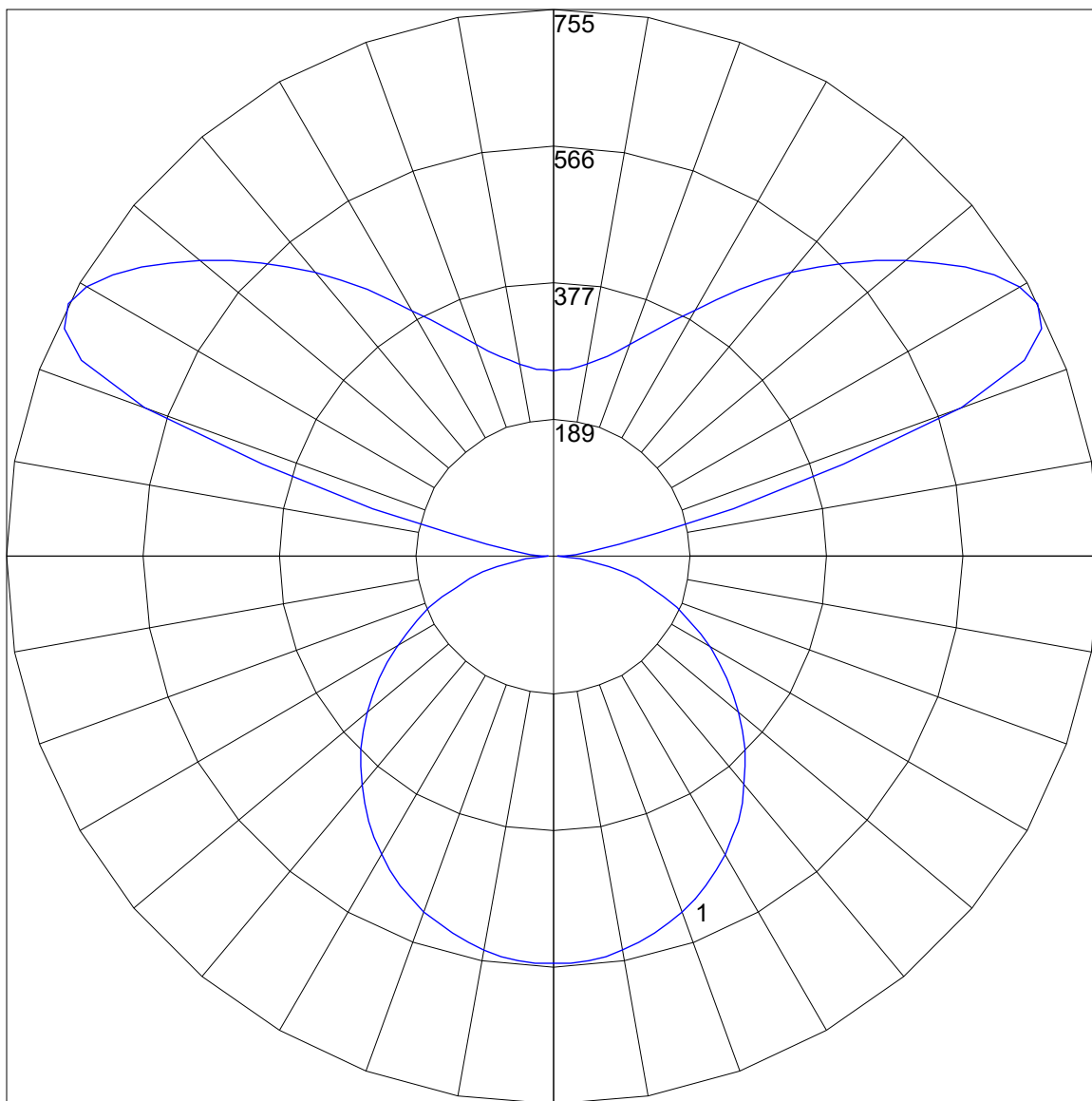
| Zone | Lumens |
|---------|--------|
| 0-10 | 53.11 |
| 10-20 | 152.19 |
| 20-30 | 230.76 |
| 30-40 | 278.52 |
| 40-50 | 289.56 |
| 50-60 | 263.31 |
| 60-70 | 204.83 |
| 70-80 | 125.44 |
| 80-90 | 40.97 |
| 90-100 | 58.21 |
| 100-110 | 253.01 |
| 110-120 | 381.43 |
| 120-130 | 338.21 |
| 130-140 | 269.28 |
| 140-150 | 197.29 |
| 150-160 | 131.76 |
| 160-170 | 75.54 |
| 170-180 | 24.66 |

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 | 83 | 83 | 83 | 68 | 68 | 68 | 55 | 55 | 55 | 49 |
| 1 | 97 | 93 | 89 | 85 | 89 | 85 | 82 | 79 | 72 | 69 | 67 | 59 | 58 | 56 | 48 | 47 | 46 | 40 |
| 2 | 88 | 81 | 74 | 69 | 81 | 74 | 69 | 64 | 63 | 59 | 55 | 52 | 49 | 46 | 42 | 40 | 38 | 33 |
| 3 | 80 | 71 | 63 | 57 | 74 | 65 | 59 | 53 | 55 | 50 | 46 | 46 | 42 | 39 | 37 | 34 | 32 | 28 |
| 4 | 73 | 62 | 54 | 48 | 67 | 58 | 51 | 45 | 49 | 43 | 39 | 41 | 37 | 33 | 33 | 30 | 28 | 24 |
| 5 | 67 | 55 | 47 | 41 | 62 | 51 | 44 | 39 | 44 | 38 | 34 | 36 | 32 | 29 | 30 | 26 | 24 | 21 |
| 6 | 62 | 50 | 41 | 36 | 57 | 46 | 39 | 33 | 39 | 33 | 29 | 33 | 28 | 25 | 27 | 23 | 21 | 18 |
| 7 | 57 | 45 | 37 | 31 | 52 | 42 | 34 | 29 | 35 | 30 | 26 | 30 | 25 | 22 | 24 | 21 | 18 | 16 |
| 8 | 53 | 41 | 33 | 27 | 49 | 38 | 31 | 26 | 32 | 27 | 23 | 27 | 23 | 20 | 22 | 19 | 17 | 14 |
| 9 | 49 | 37 | 29 | 24 | 45 | 34 | 28 | 23 | 30 | 24 | 20 | 25 | 21 | 18 | 21 | 17 | 15 | 13 |
| 10 | 46 | 34 | 27 | 22 | 42 | 32 | 25 | 21 | 27 | 22 | 18 | 23 | 19 | 16 | 19 | 16 | 13 | 11 |

POLAR GRAPH



Maximum Candela = 754.645 Located At Horizontal Angle = 90, Vertical Angle = 117.5
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)