

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-B-S-835-TG-F-ITL92550.012.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL92550.012 Family Correlation Files
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[ISSUEDATE]11/21/19
[TESTDATE]01/07/20
[MANUFAC]FINELITE, INC.
[LUMCAT]HP-X-ID-4ft-B-S-835-TG-F
[INPUT_ELECTRICAL]120.0 VOLTS, 30.6 WATTS
[INPUT_ELECTRICAL]277.0 VOLTS, 32.6 WATTS
[ABSOLUTE LUMENS]3778
[OTHER]see www.finelite.com for source file ITL92550. 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 | 3778 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 123 |
| Total Luminaire Watts | 30.6 |
| 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 w/Sides |
| Luminous Length (0-180) | 4.00 ft |
| Luminous Width (90-270) | 0.20 ft |
| Luminous Height | 0.02 ft |

LUMINANCE DATA (cd/sq.m)

| Angle In Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|---------------------|------------------|-------------------|-------------------|
| 45 | 7229 | 6885 | 6770 |
| 55 | 7008 | 6565 | 6472 |
| 65 | 6640 | 6147 | 6086 |
| 75 | 6076 | 5570 | 5592 |
| 85 | 5251 | 4776 | 5097 |

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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 | 563.989 | 563.989 | 563.989 | 563.989 | 563.989 |
| 2.5 | 563.170 | 563.170 | 563.579 | 563.170 | 563.579 |
| 5.0 | 561.124 | 561.533 | 561.533 | 561.533 | 561.533 |
| 7.5 | 558.259 | 558.259 | 558.668 | 558.668 | 558.668 |
| 10.0 | 554.575 | 553.347 | 554.575 | 554.575 | 554.575 |
| 12.5 | 549.255 | 547.208 | 549.255 | 549.255 | 548.436 |
| 15.0 | 543.115 | 539.432 | 542.706 | 543.115 | 541.478 |
| 17.5 | 535.339 | 531.655 | 534.930 | 535.748 | 534.520 |
| 20.0 | 526.744 | 521.833 | 525.516 | 526.335 | 524.698 |
| 22.5 | 516.103 | 511.192 | 515.694 | 516.103 | 514.057 |
| 25.0 | 505.052 | 499.732 | 504.234 | 504.643 | 503.415 |
| 27.5 | 491.955 | 487.453 | 491.955 | 491.955 | 490.728 |
| 30.0 | 478.449 | 473.538 | 478.040 | 478.040 | 477.221 |
| 32.5 | 464.124 | 459.622 | 464.124 | 463.715 | 463.306 |
| 35.0 | 448.981 | 444.888 | 448.572 | 448.162 | 446.934 |
| 37.5 | 432.200 | 428.108 | 432.610 | 432.200 | 431.791 |
| 40.0 | 414.601 | 410.918 | 415.011 | 415.420 | 415.420 |
| 42.5 | 397.002 | 393.728 | 397.411 | 398.639 | 399.049 |
| 45.0 | 377.766 | 376.129 | 379.403 | 381.040 | 380.222 |
| 47.5 | 359.348 | 356.483 | 360.167 | 361.804 | 362.213 |
| 50.0 | 338.884 | 336.838 | 340.931 | 343.386 | 343.386 |
| 52.5 | 318.011 | 316.374 | 321.695 | 323.332 | 323.332 |
| 55.0 | 297.547 | 295.501 | 300.412 | 302.868 | 304.096 |
| 57.5 | 275.446 | 274.218 | 279.948 | 281.994 | 283.222 |
| 60.0 | 252.935 | 251.708 | 258.665 | 261.530 | 262.349 |
| 62.5 | 230.425 | 230.425 | 236.974 | 240.248 | 241.885 |
| 65.0 | 208.324 | 208.733 | 215.282 | 219.374 | 221.421 |
| 67.5 | 184.995 | 186.223 | 193.590 | 198.092 | 200.548 |
| 70.0 | 162.894 | 164.121 | 171.898 | 176.809 | 178.856 |
| 72.5 | 140.792 | 142.430 | 150.615 | 155.936 | 158.801 |
| 75.0 | 117.463 | 121.556 | 129.333 | 135.881 | 137.928 |
| 77.5 | 96.181 | 100.274 | 108.869 | 115.826 | 118.282 |
| 80.0 | 75.717 | 80.219 | 89.223 | 96.181 | 98.637 |
| 82.5 | 56.071 | 60.574 | 69.987 | 77.763 | 80.628 |
| 85.0 | 35.198 | 41.747 | 51.160 | 59.346 | 62.211 |
| 87.5 | 15.962 | 23.738 | 33.561 | 42.156 | 45.021 |
| 90.0 | 0.819 | 9.414 | 20.873 | 30.287 | 33.561 |
| 92.5 | 17.492 | 26.238 | 38.071 | 48.875 | 52.476 |
| 95.0 | 35.499 | 43.730 | 55.563 | 66.882 | 70.483 |
| 97.5 | 55.563 | 62.766 | 74.084 | 85.403 | 89.004 |
| 100.0 | 77.171 | 83.345 | 94.663 | 105.467 | 109.583 |
| 102.5 | 98.779 | 104.438 | 115.757 | 126.560 | 130.676 |
| 105.0 | 121.930 | 128.104 | 138.908 | 149.712 | 153.313 |
| 107.5 | 146.110 | 151.255 | 162.574 | 172.863 | 176.464 |
| 110.0 | 173.892 | 176.979 | 187.783 | 197.558 | 201.159 |
| 112.5 | 200.130 | 202.702 | 213.506 | 222.252 | 225.854 |
| 115.0 | 226.883 | 228.941 | 240.774 | 248.491 | 251.577 |
| 117.5 | 255.693 | 257.751 | 267.526 | 275.243 | 277.816 |
| 120.0 | 284.504 | 285.533 | 295.308 | 302.510 | 305.083 |
| 122.5 | 314.858 | 313.829 | 323.089 | 329.777 | 333.893 |
| 125.0 | 345.726 | 343.154 | 351.900 | 357.559 | 361.160 |
| 127.5 | 376.594 | 373.508 | 381.739 | 386.884 | 389.971 |
| 130.0 | 406.948 | 403.347 | 410.550 | 415.695 | 417.752 |
| 132.5 | 438.846 | 434.216 | 441.418 | 444.505 | 448.621 |

IES INDOOR REPORT
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CANDELA TABULATION - (Cont.)

| | | | | | |
|--------------|---------|---------|---------|---------|---------|
| 135.0 | 469.200 | 464.570 | 471.258 | 474.344 | 476.402 |
| 137.5 | 500.583 | 493.894 | 500.068 | 503.155 | 504.184 |
| 140.0 | 530.937 | 524.248 | 529.908 | 531.966 | 531.451 |
| 142.5 | 561.290 | 553.059 | 558.718 | 559.747 | 559.747 |
| 145.0 | 590.101 | 580.841 | 587.529 | 587.014 | 587.014 |
| 147.5 | 618.397 | 609.136 | 614.281 | 613.767 | 613.252 |
| 150.0 | 644.121 | 635.889 | 639.490 | 639.490 | 637.947 |
| 152.5 | 669.330 | 659.555 | 664.185 | 662.642 | 661.613 |
| 155.0 | 692.996 | 683.221 | 687.851 | 685.279 | 683.735 |
| 157.5 | 713.060 | 704.828 | 708.944 | 706.886 | 704.828 |
| 160.0 | 732.096 | 724.379 | 728.494 | 726.436 | 723.350 |
| 162.5 | 748.559 | 742.385 | 745.472 | 743.928 | 741.871 |
| 165.0 | 763.993 | 758.334 | 760.392 | 759.363 | 756.276 |
| 167.5 | 775.826 | 772.739 | 773.768 | 772.739 | 770.681 |
| 170.0 | 786.115 | 784.572 | 785.086 | 784.572 | 783.028 |
| 172.5 | 793.832 | 793.318 | 793.318 | 792.803 | 792.803 |
| 175.0 | 799.492 | 799.492 | 799.492 | 799.492 | 799.492 |
| 177.5 | 803.607 | 803.093 | 803.093 | 803.093 | 803.093 |
| 180.0 | 804.636 | 804.636 | 804.636 | 804.636 | 804.636 |

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ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|--------|
| 0-20 | 206.33 | N.A. | 5.50 |
| 0-30 | 438.19 | N.A. | 11.60 |
| 0-40 | 718.05 | N.A. | 19.00 |
| 0-60 | 1278.25 | N.A. | 33.80 |
| 0-80 | 1626.59 | N.A. | 43.10 |
| 0-90 | 1682.6 | N.A. | 44.50 |
| 10-90 | 1629.24 | N.A. | 43.10 |
| 20-40 | 511.72 | N.A. | 13.50 |
| 20-50 | 803.87 | N.A. | 21.30 |
| 40-70 | 772.41 | N.A. | 20.40 |
| 60-80 | 348.34 | N.A. | 9.20 |
| 70-80 | 136.13 | N.A. | 3.60 |
| 80-90 | 56.02 | N.A. | 1.50 |
| 90-110 | 207.43 | N.A. | 5.50 |
| 90-120 | 444.99 | N.A. | 11.80 |
| 90-130 | 759.83 | N.A. | 20.10 |
| 90-150 | 1489.23 | N.A. | 39.40 |
| 90-180 | 2094.95 | N.A. | 55.50 |
| 110-180 | 1887.51 | N.A. | 50.00 |
| 0-180 | 3777.55 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|--------|
| 0-10 | 53.37 |
| 10-20 | 152.96 |
| 20-30 | 231.86 |
| 30-40 | 279.86 |
| 40-50 | 292.15 |
| 50-60 | 268.05 |
| 60-70 | 212.21 |
| 70-80 | 136.13 |
| 80-90 | 56.02 |
| 90-100 | 60.54 |
| 100-110 | 146.90 |
| 110-120 | 237.56 |
| 120-130 | 314.84 |
| 130-140 | 363.03 |
| 140-150 | 366.37 |
| 150-160 | 315.80 |
| 160-170 | 214.08 |
| 170-180 | 75.84 |

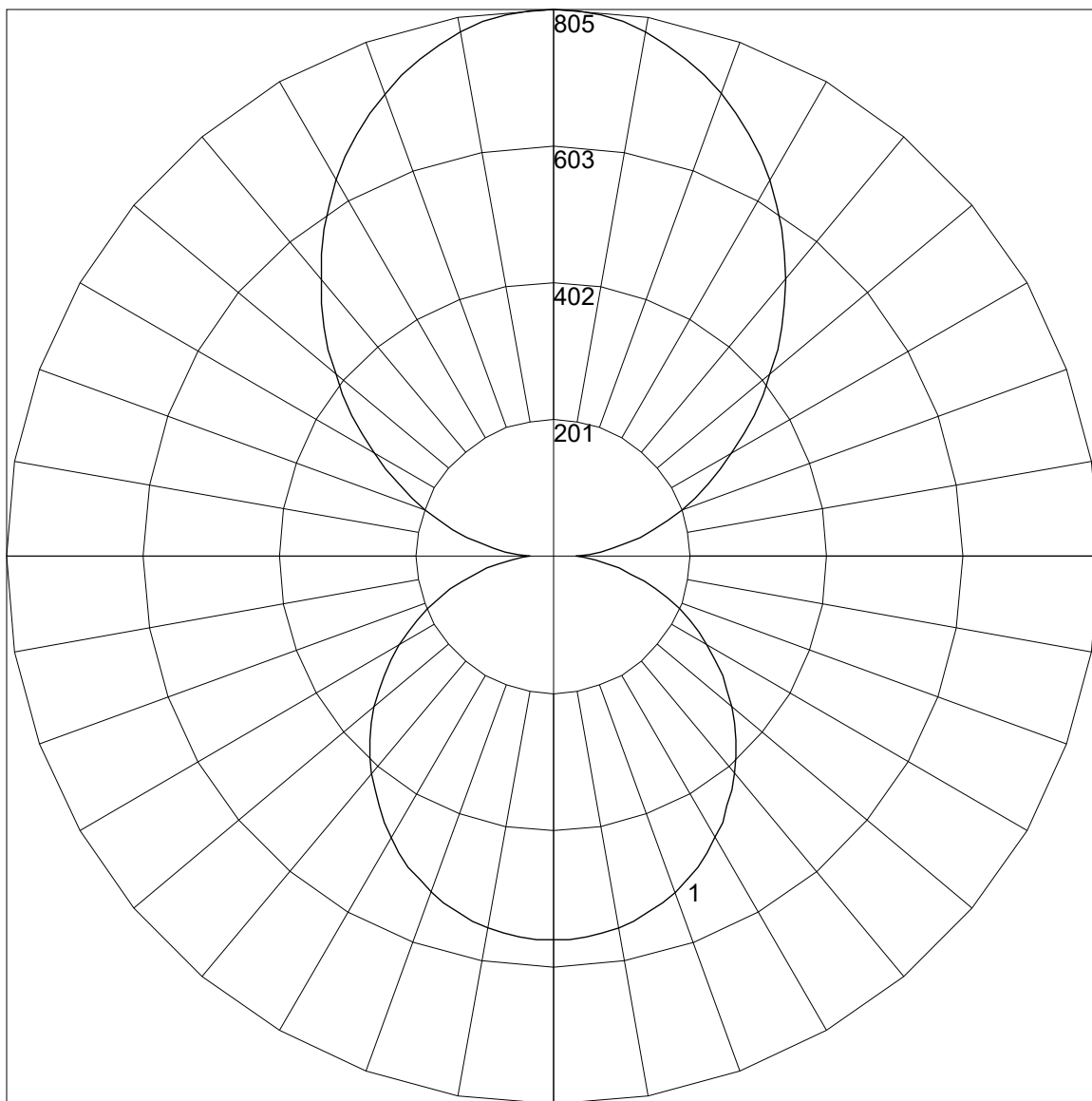
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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 | 106 | 106 | 106 | 106 | 97 | 97 | 97 | 97 | 80 | 80 | 80 | 65 | 65 | 65 | 51 | 51 | 51 | 45 |
| 1 | 96 | 92 | 88 | 84 | 88 | 84 | 80 | 77 | 70 | 67 | 65 | 57 | 55 | 53 | 44 | 43 | 42 | 37 |
| 2 | 87 | 80 | 73 | 68 | 80 | 73 | 68 | 63 | 61 | 57 | 53 | 49 | 46 | 44 | 39 | 37 | 35 | 30 |
| 3 | 79 | 70 | 62 | 56 | 72 | 64 | 58 | 52 | 53 | 48 | 44 | 43 | 40 | 37 | 34 | 32 | 30 | 25 |
| 4 | 72 | 62 | 53 | 47 | 66 | 57 | 50 | 44 | 47 | 42 | 38 | 38 | 35 | 31 | 30 | 28 | 25 | 21 |
| 5 | 66 | 55 | 46 | 40 | 60 | 50 | 43 | 38 | 42 | 37 | 32 | 34 | 30 | 27 | 27 | 24 | 22 | 18 |
| 6 | 61 | 49 | 41 | 35 | 56 | 45 | 38 | 33 | 38 | 32 | 28 | 31 | 27 | 24 | 25 | 22 | 19 | 16 |
| 7 | 56 | 44 | 36 | 30 | 51 | 41 | 34 | 28 | 34 | 29 | 25 | 28 | 24 | 21 | 22 | 19 | 17 | 14 |
| 8 | 52 | 40 | 32 | 27 | 48 | 37 | 30 | 25 | 31 | 26 | 22 | 26 | 21 | 18 | 21 | 17 | 15 | 13 |
| 9 | 49 | 36 | 29 | 24 | 44 | 34 | 27 | 22 | 28 | 23 | 19 | 24 | 19 | 16 | 19 | 16 | 14 | 11 |
| 10 | 45 | 33 | 26 | 21 | 42 | 31 | 24 | 20 | 26 | 21 | 17 | 22 | 18 | 15 | 18 | 14 | 12 | 10 |

POLAR GRAPH



Maximum Candela = 804.636 Located At Horizontal Angle = 0, Vertical Angle = 180
1 - Vertical Plane Through Horizontal Angles (90 - 270)