

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 : HPO-P-ID-4FT-B-B-835-RT-RB-RE-ITL93794.002.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL93794.002 Family Correlation File
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[ISSUEDATE]08/19/20
[TESTDATE]09/04/20
[MANUFAC]FINELITE, INC.
[LUMCAT]FINELITE HPO-P-ID-4ft-B-B-835-RT-RB-RE
[INPUT_ELECTRICAL]120.0 VOLTS, 34.3 WATTS
[INPUT_ELECTRICAL]277.0 VOLTS, 36.0 WATTS
[ABSOLUTE LUMENS]4369
[OTHER]see www.finelite.com for source file ITL93794. 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 | 4370 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 127 |
| Total Luminaire Watts | 34.3 |
| 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 | 0.04 ft |

LUMINANCE DATA (cd/sq.m)

| Angle In Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|---------------------|------------------|-------------------|-------------------|
| 45 | 8200 | 7448 | 7359 |
| 55 | 7723 | 6846 | 6925 |
| 65 | 7104 | 6320 | 6759 |
| 75 | 6344 | 6245 | 7382 |
| 85 | 5089 | 8379 | 10220 |

CANDELA TABULATION

| | <u>0.0</u> | <u>22.5</u> | <u>45.0</u> | <u>67.5</u> | <u>90.0</u> |
|-------|------------|-------------|-------------|-------------|-------------|
| 0.0 | 687.095 | 687.095 | 687.095 | 687.095 | 687.095 |
| 2.5 | 686.066 | 686.066 | 686.066 | 686.066 | 686.066 |
| 5.0 | 682.978 | 683.493 | 683.493 | 684.007 | 684.007 |
| 7.5 | 678.861 | 678.346 | 679.375 | 679.890 | 680.405 |
| 10.0 | 672.170 | 671.655 | 674.228 | 675.258 | 674.743 |
| 12.5 | 664.964 | 662.905 | 666.508 | 668.567 | 668.052 |
| 15.0 | 655.185 | 652.097 | 657.759 | 660.332 | 659.817 |
| 17.5 | 644.377 | 639.745 | 647.465 | 651.068 | 650.039 |
| 20.0 | 630.481 | 626.878 | 634.598 | 639.745 | 639.230 |
| 22.5 | 616.070 | 612.467 | 621.217 | 626.878 | 625.849 |
| 25.0 | 599.085 | 595.997 | 606.806 | 611.952 | 612.982 |
| 27.5 | 582.101 | 579.013 | 590.336 | 595.997 | 597.027 |
| 30.0 | 563.058 | 560.485 | 573.351 | 580.042 | 580.557 |
| 32.5 | 542.471 | 541.441 | 553.794 | 561.514 | 563.058 |
| 35.0 | 522.398 | 521.369 | 534.751 | 541.956 | 544.530 |
| 37.5 | 500.782 | 500.267 | 514.164 | 522.398 | 524.972 |
| 40.0 | 477.107 | 478.651 | 492.032 | 502.326 | 504.899 |
| 42.5 | 453.946 | 456.520 | 470.416 | 481.224 | 484.827 |
| 45.0 | 431.300 | 432.844 | 448.285 | 458.578 | 463.725 |
| 47.5 | 406.081 | 409.169 | 425.124 | 436.962 | 442.623 |
| 50.0 | 380.862 | 384.979 | 400.934 | 414.831 | 421.521 |
| 52.5 | 356.157 | 360.789 | 377.774 | 393.729 | 400.420 |
| 55.0 | 330.938 | 334.541 | 353.584 | 371.598 | 380.347 |
| 57.5 | 305.719 | 309.836 | 329.909 | 350.496 | 359.760 |
| 60.0 | 277.926 | 284.617 | 305.719 | 330.938 | 340.717 |
| 62.5 | 252.192 | 259.398 | 283.588 | 310.866 | 322.703 |
| 65.0 | 225.944 | 233.664 | 262.486 | 291.823 | 305.204 |
| 67.5 | 200.724 | 208.959 | 241.899 | 275.353 | 289.249 |
| 70.0 | 174.991 | 185.284 | 221.826 | 259.398 | 274.323 |
| 72.5 | 150.286 | 162.638 | 203.813 | 246.016 | 261.457 |
| 75.0 | 125.581 | 139.992 | 188.372 | 233.664 | 251.163 |
| 77.5 | 101.906 | 119.920 | 175.505 | 223.885 | 241.384 |
| 80.0 | 78.746 | 102.421 | 163.668 | 215.135 | 233.664 |
| 82.5 | 57.129 | 88.010 | 155.947 | 208.959 | 228.002 |
| 85.0 | 36.542 | 77.716 | 149.771 | 203.813 | 223.370 |
| 87.5 | 15.440 | 72.055 | 146.169 | 201.239 | 221.826 |
| 90.0 | 0.000 | 69.996 | 145.139 | 200.724 | 220.797 |
| 92.5 | 18.528 | 73.084 | 147.713 | 202.783 | 223.370 |
| 95.0 | 40.660 | 80.290 | 152.345 | 206.386 | 226.973 |
| 97.5 | 62.276 | 91.613 | 159.036 | 212.047 | 232.120 |
| 100.0 | 84.407 | 108.597 | 168.300 | 220.797 | 238.811 |
| 102.5 | 107.568 | 127.126 | 180.652 | 229.546 | 247.560 |
| 105.0 | 133.816 | 147.713 | 196.092 | 240.869 | 258.368 |
| 107.5 | 158.521 | 169.844 | 213.077 | 254.251 | 270.206 |
| 110.0 | 184.255 | 195.063 | 231.605 | 270.206 | 284.102 |
| 112.5 | 209.989 | 220.797 | 251.678 | 287.190 | 300.057 |
| 115.0 | 237.267 | 246.016 | 273.294 | 304.689 | 318.071 |
| 117.5 | 266.089 | 271.750 | 296.455 | 324.247 | 336.085 |
| 120.0 | 292.337 | 297.999 | 321.159 | 345.349 | 355.128 |
| 122.5 | 318.071 | 323.733 | 345.349 | 366.966 | 375.200 |
| 125.0 | 345.864 | 348.952 | 370.568 | 388.067 | 395.273 |
| 127.5 | 373.142 | 376.230 | 395.273 | 409.169 | 417.404 |
| 130.0 | 398.876 | 403.508 | 419.463 | 431.815 | 437.991 |
| 132.5 | 426.154 | 430.786 | 443.138 | 456.005 | 460.637 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HPO-P-ID-4FT-B-B-835-RT-RB-RE-ITL93794.002.IES****CANDELA TABULATION - (Cont.)**

| | | | | | |
|--------------|---------|---------|---------|---------|---------|
| 135.0 | 451.373 | 453.946 | 465.784 | 478.651 | 483.283 |
| 137.5 | 478.136 | 476.592 | 489.974 | 501.297 | 507.987 |
| 140.0 | 501.297 | 498.723 | 511.590 | 522.913 | 530.119 |
| 142.5 | 523.428 | 521.884 | 533.207 | 546.588 | 550.706 |
| 145.0 | 546.074 | 542.985 | 555.852 | 567.175 | 571.293 |
| 147.5 | 567.690 | 563.573 | 577.469 | 586.218 | 589.307 |
| 150.0 | 587.762 | 583.130 | 597.541 | 604.747 | 608.350 |
| 152.5 | 606.291 | 603.203 | 616.070 | 622.246 | 624.819 |
| 155.0 | 623.790 | 620.702 | 632.539 | 637.686 | 640.774 |
| 157.5 | 641.804 | 638.201 | 649.524 | 652.612 | 655.185 |
| 160.0 | 656.729 | 653.127 | 662.905 | 664.964 | 667.023 |
| 162.5 | 669.082 | 667.538 | 674.228 | 677.316 | 677.316 |
| 165.0 | 679.890 | 678.346 | 684.522 | 686.581 | 685.551 |
| 167.5 | 689.154 | 688.125 | 692.757 | 694.816 | 694.301 |
| 170.0 | 696.874 | 696.360 | 699.448 | 700.477 | 700.477 |
| 172.5 | 702.536 | 703.565 | 704.594 | 705.109 | 705.624 |
| 175.0 | 707.682 | 707.682 | 708.197 | 708.197 | 708.197 |
| 177.5 | 709.741 | 709.741 | 710.256 | 709.741 | 710.256 |
| 180.0 | 710.771 | 710.771 | 710.771 | 710.771 | 710.771 |

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HPO-P-ID-4FT-B-B-835-RT-RB-RE-ITL93794.002.IES

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|--------|
| 0-20 | 250.26 | N.A. | 5.70 |
| 0-30 | 529.10 | N.A. | 12.10 |
| 0-40 | 862.46 | N.A. | 19.70 |
| 0-60 | 1524.13 | N.A. | 34.90 |
| 0-80 | 1985.52 | N.A. | 45.40 |
| 0-90 | 2140.73 | N.A. | 49.00 |
| 10-90 | 2075.8 | N.A. | 47.50 |
| 20-40 | 612.20 | N.A. | 14.00 |
| 20-50 | 957.00 | N.A. | 21.90 |
| 40-70 | 923.36 | N.A. | 21.10 |
| 60-80 | 461.39 | N.A. | 10.60 |
| 70-80 | 199.70 | N.A. | 4.60 |
| 80-90 | 155.21 | N.A. | 3.60 |
| 90-110 | 365.67 | N.A. | 8.40 |
| 90-120 | 639.29 | N.A. | 14.60 |
| 90-130 | 970.27 | N.A. | 22.20 |
| 90-150 | 1678.25 | N.A. | 38.40 |
| 90-180 | 2229.09 | N.A. | 51.00 |
| 110-180 | 1863.42 | N.A. | 42.60 |
| 0-180 | 4369.82 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|--------|
| 0-10 | 64.93 |
| 10-20 | 185.33 |
| 20-30 | 278.84 |
| 30-40 | 333.36 |
| 40-50 | 344.80 |
| 50-60 | 316.86 |
| 60-70 | 261.70 |
| 70-80 | 199.70 |
| 80-90 | 155.21 |
| 90-100 | 158.16 |
| 100-110 | 207.51 |
| 110-120 | 273.62 |
| 120-130 | 330.98 |
| 130-140 | 360.14 |
| 140-150 | 347.84 |
| 150-160 | 290.79 |
| 160-170 | 192.76 |
| 170-180 | 67.29 |

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 | 96 | 91 | 87 | 83 | 88 | 84 | 80 | 77 | 71 | 68 | 65 | 58 | 56 | 54 | 47 | 45 | 44 | 39 |
| 2 | 87 | 79 | 73 | 67 | 80 | 73 | 67 | 62 | 61 | 57 | 53 | 50 | 47 | 44 | 40 | 38 | 36 | 31 |
| 3 | 79 | 69 | 61 | 55 | 73 | 64 | 57 | 52 | 54 | 48 | 44 | 44 | 40 | 37 | 36 | 33 | 30 | 26 |
| 4 | 72 | 61 | 53 | 46 | 66 | 56 | 49 | 43 | 48 | 42 | 37 | 39 | 35 | 32 | 32 | 29 | 26 | 22 |
| 5 | 66 | 54 | 46 | 40 | 61 | 50 | 43 | 37 | 42 | 37 | 32 | 35 | 31 | 27 | 28 | 25 | 22 | 19 |
| 6 | 61 | 49 | 40 | 34 | 56 | 45 | 38 | 32 | 38 | 32 | 28 | 32 | 27 | 24 | 26 | 22 | 20 | 17 |
| 7 | 56 | 44 | 36 | 30 | 52 | 41 | 33 | 28 | 35 | 29 | 24 | 29 | 24 | 21 | 23 | 20 | 17 | 15 |
| 8 | 52 | 40 | 32 | 26 | 48 | 37 | 30 | 25 | 31 | 26 | 22 | 26 | 22 | 19 | 22 | 18 | 16 | 13 |
| 9 | 49 | 36 | 29 | 23 | 45 | 34 | 27 | 22 | 29 | 23 | 19 | 24 | 20 | 17 | 20 | 16 | 14 | 12 |
| 10 | 45 | 33 | 26 | 21 | 42 | 31 | 24 | 20 | 26 | 21 | 17 | 22 | 18 | 15 | 18 | 15 | 13 | 11 |

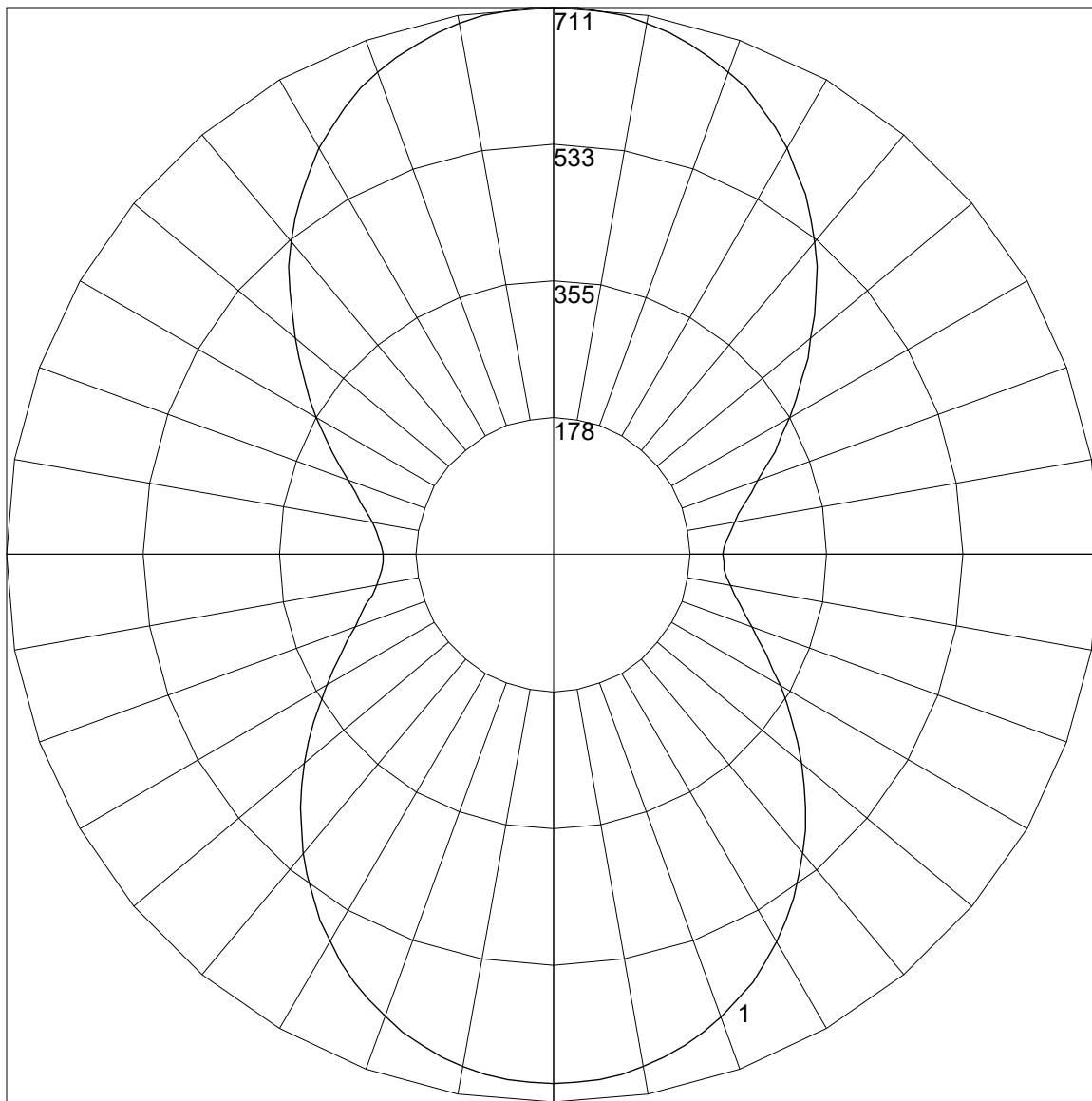
IES INDOOR REPORT
PHOTOMETRIC FILENAME : HPO-P-ID-4FT-B-B-835-RT-RB-RE-ITL93794.002.IES

UGR TABLE - CORRECTED

| | | | | | | | | | | | |
|----------------|------|----------------------|------|------|------|------|--------------------|------|------|------|------|
| Reflectances | | | | | | | | | | | |
| Ceiling Cavity | 70 | 70 | 50 | 50 | 30 | 70 | 70 | 50 | 50 | 30 | |
| Walls | 50 | 30 | 50 | 30 | 30 | 50 | 30 | 50 | 30 | 30 | |
| Floor Cavity | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | |
| Room Size | | UGR Viewed Crosswise | | | | | UGR Viewed Endwise | | | | |
| X=2H | Y=2H | 13.9 | 14.8 | 14.9 | 15.8 | 17.1 | 15.4 | 16.3 | 16.4 | 17.3 | 18.6 |
| | 3H | 15.5 | 16.3 | 16.5 | 17.3 | 18.6 | 17.9 | 18.7 | 18.9 | 19.7 | 21.0 |
| | 4H | 16.1 | 16.8 | 17.0 | 17.8 | 19.1 | 19.3 | 20.0 | 20.2 | 21.0 | 22.3 |
| | 6H | 16.5 | 17.2 | 17.4 | 18.2 | 19.5 | 20.8 | 21.5 | 21.8 | 22.5 | 23.8 |
| | 8H | 16.5 | 17.2 | 17.5 | 18.2 | 19.6 | 21.7 | 22.3 | 22.6 | 23.3 | 24.7 |
| | 12H | 16.6 | 17.2 | 17.6 | 18.3 | 19.6 | 22.7 | 23.3 | 23.7 | 24.3 | 25.7 |
| 4H | 2H | 14.7 | 15.4 | 15.7 | 16.4 | 17.7 | 15.8 | 16.6 | 16.8 | 17.6 | 18.9 |
| | 3H | 16.5 | 17.1 | 17.5 | 18.2 | 19.5 | 18.6 | 19.2 | 19.6 | 20.3 | 21.6 |
| | 4H | 17.2 | 17.8 | 18.2 | 18.8 | 20.1 | 20.1 | 20.7 | 21.1 | 21.7 | 23.1 |
| | 6H | 17.7 | 18.2 | 18.7 | 19.2 | 20.6 | 21.9 | 22.4 | 22.9 | 23.4 | 24.8 |
| | 8H | 17.8 | 18.3 | 18.9 | 19.4 | 20.7 | 22.9 | 23.3 | 23.9 | 24.4 | 25.7 |
| | 12H | 17.9 | 18.4 | 19.0 | 19.4 | 20.8 | 24.0 | 24.5 | 25.1 | 25.5 | 26.9 |
| 8H | 4H | 17.8 | 18.3 | 18.9 | 19.4 | 20.7 | 20.3 | 20.8 | 21.4 | 21.9 | 23.2 |
| | 6H | 18.6 | 19.0 | 19.6 | 20.0 | 21.4 | 22.3 | 22.7 | 23.4 | 23.8 | 25.2 |
| | 8H | 18.8 | 19.2 | 19.9 | 20.3 | 21.6 | 23.5 | 23.9 | 24.5 | 24.9 | 26.3 |
| | 12H | 19.0 | 19.4 | 20.1 | 20.4 | 21.8 | 24.9 | 25.2 | 25.9 | 26.3 | 27.7 |
| 12H | 4H | 18.1 | 18.5 | 19.1 | 19.6 | 20.9 | 20.3 | 20.8 | 21.4 | 21.8 | 23.2 |
| | 6H | 18.9 | 19.3 | 20.0 | 20.4 | 21.7 | 22.4 | 22.7 | 23.4 | 23.8 | 25.2 |
| | 8H | 19.3 | 19.6 | 20.4 | 20.7 | 22.1 | 23.6 | 23.9 | 24.7 | 25.0 | 26.4 |

Maximum UGR = 27.7

POLAR GRAPH



Maximum Candela = 710.771 Located At Horizontal Angle = 0, Vertical Angle = 180
1 - Vertical Plane Through Horizontal Angles (90 - 270)