

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-V-B-835-RT-RB-RE-ITL93794.005.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL93794.005 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-V-B-835-RT-RB-RE
[INPUT_ELECTRICAL]120.0 VOLTS, 51.7 WATTS
[INPUT_ELECTRICAL]277.0 VOLTS, 52.6 WATTS
[ABSOLUTE LUMENS]6488
[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 | 6488 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 126 |
| Total Luminaire Watts | 51.7 |
| Ballast Factor | 1.00 |
| CIE Type | Semi-Indirect |
| 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 | 8199 | 7447 | 7358 |
| 55 | 7721 | 6845 | 6924 |
| 65 | 7103 | 6319 | 6758 |
| 75 | 6343 | 6244 | 7381 |
| 85 | 5089 | 8378 | 10219 |

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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 | 686.998 | 686.998 | 686.998 | 686.998 | 686.998 |
| 2.5 | 685.969 | 685.969 | 685.969 | 685.969 | 685.969 |
| 5.0 | 682.881 | 683.396 | 683.396 | 683.911 | 683.911 |
| 7.5 | 678.764 | 678.250 | 679.279 | 679.794 | 680.308 |
| 10.0 | 672.075 | 671.560 | 674.133 | 675.162 | 674.648 |
| 12.5 | 664.870 | 662.812 | 666.414 | 668.472 | 667.958 |
| 15.0 | 655.093 | 652.005 | 657.666 | 660.239 | 659.724 |
| 17.5 | 644.286 | 639.654 | 647.374 | 650.976 | 649.947 |
| 20.0 | 630.392 | 626.789 | 634.509 | 639.654 | 639.140 |
| 22.5 | 615.983 | 612.380 | 621.129 | 626.789 | 625.760 |
| 25.0 | 599.001 | 595.913 | 606.720 | 611.866 | 612.895 |
| 27.5 | 582.019 | 578.931 | 590.252 | 595.913 | 596.942 |
| 30.0 | 562.978 | 560.405 | 573.270 | 579.960 | 580.475 |
| 32.5 | 542.394 | 541.365 | 553.716 | 561.434 | 562.978 |
| 35.0 | 522.324 | 521.295 | 534.675 | 541.880 | 544.452 |
| 37.5 | 500.711 | 500.197 | 514.091 | 522.324 | 524.898 |
| 40.0 | 477.039 | 478.583 | 491.963 | 502.255 | 504.828 |
| 42.5 | 453.882 | 456.455 | 470.349 | 481.156 | 484.758 |
| 45.0 | 431.239 | 432.783 | 448.221 | 458.513 | 463.659 |
| 47.5 | 406.024 | 409.111 | 425.064 | 436.900 | 442.561 |
| 50.0 | 380.808 | 384.925 | 400.878 | 414.772 | 421.462 |
| 52.5 | 356.107 | 360.738 | 377.720 | 393.673 | 400.363 |
| 55.0 | 330.891 | 334.493 | 353.534 | 371.545 | 380.293 |
| 57.5 | 305.676 | 309.792 | 329.862 | 350.446 | 359.709 |
| 60.0 | 277.887 | 284.577 | 305.676 | 330.891 | 340.669 |
| 62.5 | 252.157 | 259.361 | 283.548 | 310.822 | 322.658 |
| 65.0 | 225.912 | 233.631 | 262.449 | 291.781 | 305.161 |
| 67.5 | 200.696 | 208.930 | 241.864 | 275.314 | 289.208 |
| 70.0 | 174.966 | 185.258 | 221.795 | 259.361 | 274.285 |
| 72.5 | 150.265 | 162.615 | 203.784 | 245.981 | 261.420 |
| 75.0 | 125.564 | 139.973 | 188.346 | 233.631 | 251.127 |
| 77.5 | 101.892 | 119.903 | 175.481 | 223.853 | 241.350 |
| 80.0 | 78.735 | 102.406 | 163.644 | 215.105 | 233.631 |
| 82.5 | 57.121 | 87.998 | 155.925 | 208.930 | 227.970 |
| 85.0 | 36.537 | 77.705 | 149.750 | 203.784 | 223.339 |
| 87.5 | 15.438 | 72.045 | 146.148 | 201.211 | 221.795 |
| 90.0 | 0.000 | 136.000 | 282.000 | 390.000 | 429.000 |
| 92.5 | 36.000 | 142.000 | 287.000 | 394.000 | 434.000 |
| 95.0 | 79.000 | 156.000 | 296.000 | 401.000 | 441.000 |
| 97.5 | 121.000 | 178.000 | 309.000 | 412.000 | 451.000 |
| 100.0 | 164.000 | 211.000 | 327.000 | 429.000 | 464.000 |
| 102.5 | 209.000 | 247.000 | 351.000 | 446.000 | 481.000 |
| 105.0 | 260.000 | 287.000 | 381.000 | 468.000 | 502.000 |
| 107.5 | 308.000 | 330.000 | 414.000 | 494.000 | 525.000 |
| 110.0 | 358.000 | 379.000 | 450.000 | 525.000 | 552.000 |
| 112.5 | 408.000 | 429.000 | 489.000 | 558.000 | 583.000 |
| 115.0 | 461.000 | 478.000 | 531.000 | 592.000 | 618.000 |
| 117.5 | 517.000 | 528.000 | 576.000 | 630.000 | 653.000 |
| 120.0 | 568.000 | 579.000 | 624.000 | 671.000 | 690.000 |
| 122.5 | 618.000 | 629.000 | 671.000 | 713.000 | 729.000 |
| 125.0 | 672.000 | 678.000 | 720.000 | 754.000 | 768.000 |
| 127.5 | 725.000 | 731.000 | 768.000 | 795.000 | 811.000 |
| 130.0 | 775.000 | 784.000 | 815.000 | 839.000 | 851.000 |
| 132.5 | 828.000 | 837.000 | 861.000 | 886.000 | 895.000 |

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HPO-P-ID-4FT-V-B-835-RT-RB-RE-ITL93794.005.IES

CANDELA TABULATION - (Cont.)

| | | | | | |
|-------|----------|----------|----------|----------|----------|
| 135.0 | 877.000 | 882.000 | 905.000 | 930.000 | 939.000 |
| 137.5 | 929.000 | 926.000 | 952.000 | 974.000 | 987.000 |
| 140.0 | 974.000 | 969.000 | 994.000 | 1016.000 | 1030.000 |
| 142.5 | 1017.000 | 1014.000 | 1036.000 | 1062.000 | 1070.000 |
| 145.0 | 1061.000 | 1055.000 | 1080.000 | 1102.000 | 1110.000 |
| 147.5 | 1103.000 | 1095.000 | 1122.000 | 1139.000 | 1145.000 |
| 150.0 | 1142.000 | 1133.000 | 1161.000 | 1175.000 | 1182.000 |
| 152.5 | 1178.000 | 1172.000 | 1197.000 | 1209.000 | 1214.000 |
| 155.0 | 1212.000 | 1206.000 | 1229.000 | 1239.000 | 1245.000 |
| 157.5 | 1247.000 | 1240.000 | 1262.000 | 1268.000 | 1273.000 |
| 160.0 | 1276.000 | 1269.000 | 1288.000 | 1292.000 | 1296.000 |
| 162.5 | 1300.000 | 1297.000 | 1310.000 | 1316.000 | 1316.000 |
| 165.0 | 1321.000 | 1318.000 | 1330.000 | 1334.000 | 1332.000 |
| 167.5 | 1339.000 | 1337.000 | 1346.000 | 1350.000 | 1349.000 |
| 170.0 | 1354.000 | 1353.000 | 1359.000 | 1361.000 | 1361.000 |
| 172.5 | 1365.000 | 1367.000 | 1369.000 | 1370.000 | 1371.000 |
| 175.0 | 1375.000 | 1375.000 | 1376.000 | 1376.000 | 1376.000 |
| 177.5 | 1379.000 | 1379.000 | 1380.000 | 1379.000 | 1380.000 |
| 180.0 | 1381.000 | 1381.000 | 1381.000 | 1381.000 | 1381.000 |

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HPO-P-ID-4FT-V-B-835-RT-RB-RE-ITL93794.005.IES

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|--------|
| 0-20 | 250.23 | N.A. | 3.90 |
| 0-30 | 529.03 | N.A. | 8.20 |
| 0-40 | 862.34 | N.A. | 13.30 |
| 0-60 | 1523.91 | N.A. | 23.50 |
| 0-80 | 1985.24 | N.A. | 30.60 |
| 0-90 | 2157.43 | N.A. | 33.30 |
| 10-90 | 2092.51 | N.A. | 32.20 |
| 20-40 | 612.11 | N.A. | 9.40 |
| 20-50 | 956.86 | N.A. | 14.70 |
| 40-70 | 923.23 | N.A. | 14.20 |
| 60-80 | 461.33 | N.A. | 7.10 |
| 70-80 | 199.67 | N.A. | 3.10 |
| 80-90 | 172.19 | N.A. | 2.70 |
| 90-110 | 710.48 | N.A. | 10.90 |
| 90-120 | 1242.11 | N.A. | 19.10 |
| 90-130 | 1885.2 | N.A. | 29.10 |
| 90-150 | 3260.78 | N.A. | 50.30 |
| 90-180 | 4331.03 | N.A. | 66.70 |
| 110-180 | 3620.55 | N.A. | 55.80 |
| 0-180 | 6488.47 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|--------|
| 0-10 | 64.92 |
| 10-20 | 185.30 |
| 20-30 | 278.80 |
| 30-40 | 333.31 |
| 40-50 | 344.75 |
| 50-60 | 316.82 |
| 60-70 | 261.66 |
| 70-80 | 199.67 |
| 80-90 | 172.19 |
| 90-100 | 307.30 |
| 100-110 | 403.18 |
| 110-120 | 531.63 |
| 120-130 | 643.09 |
| 130-140 | 699.75 |
| 140-150 | 675.84 |
| 150-160 | 564.99 |
| 160-170 | 374.52 |
| 170-180 | 130.74 |

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 | 103 | 103 | 103 | 103 | 93 | 93 | 93 | 93 | 74 | 74 | 74 | 57 | 57 | 57 | 41 | 41 | 41 | 33 |
| 1 | 93 | 88 | 84 | 81 | 84 | 80 | 76 | 73 | 63 | 61 | 59 | 48 | 47 | 45 | 34 | 33 | 32 | 26 |
| 2 | 84 | 77 | 70 | 65 | 76 | 69 | 64 | 59 | 55 | 51 | 48 | 42 | 39 | 37 | 30 | 28 | 27 | 21 |
| 3 | 77 | 67 | 60 | 54 | 69 | 61 | 54 | 49 | 48 | 44 | 40 | 37 | 34 | 31 | 26 | 24 | 22 | 18 |
| 4 | 70 | 59 | 51 | 45 | 63 | 54 | 47 | 41 | 43 | 38 | 34 | 33 | 29 | 26 | 23 | 21 | 19 | 15 |
| 5 | 64 | 53 | 44 | 39 | 57 | 48 | 41 | 35 | 38 | 33 | 29 | 29 | 26 | 23 | 21 | 18 | 17 | 13 |
| 6 | 59 | 47 | 39 | 33 | 53 | 43 | 36 | 30 | 34 | 29 | 25 | 26 | 23 | 20 | 19 | 16 | 14 | 11 |
| 7 | 54 | 42 | 34 | 29 | 49 | 38 | 31 | 27 | 31 | 26 | 22 | 24 | 20 | 17 | 17 | 15 | 13 | 10 |
| 8 | 50 | 38 | 31 | 25 | 45 | 35 | 28 | 23 | 28 | 23 | 19 | 22 | 18 | 15 | 16 | 13 | 11 | 9 |
| 9 | 47 | 35 | 27 | 22 | 42 | 32 | 25 | 21 | 26 | 21 | 17 | 20 | 16 | 14 | 15 | 12 | 10 | 8 |
| 10 | 44 | 32 | 25 | 20 | 39 | 29 | 23 | 18 | 24 | 19 | 15 | 18 | 15 | 12 | 13 | 11 | 9 | 7 |

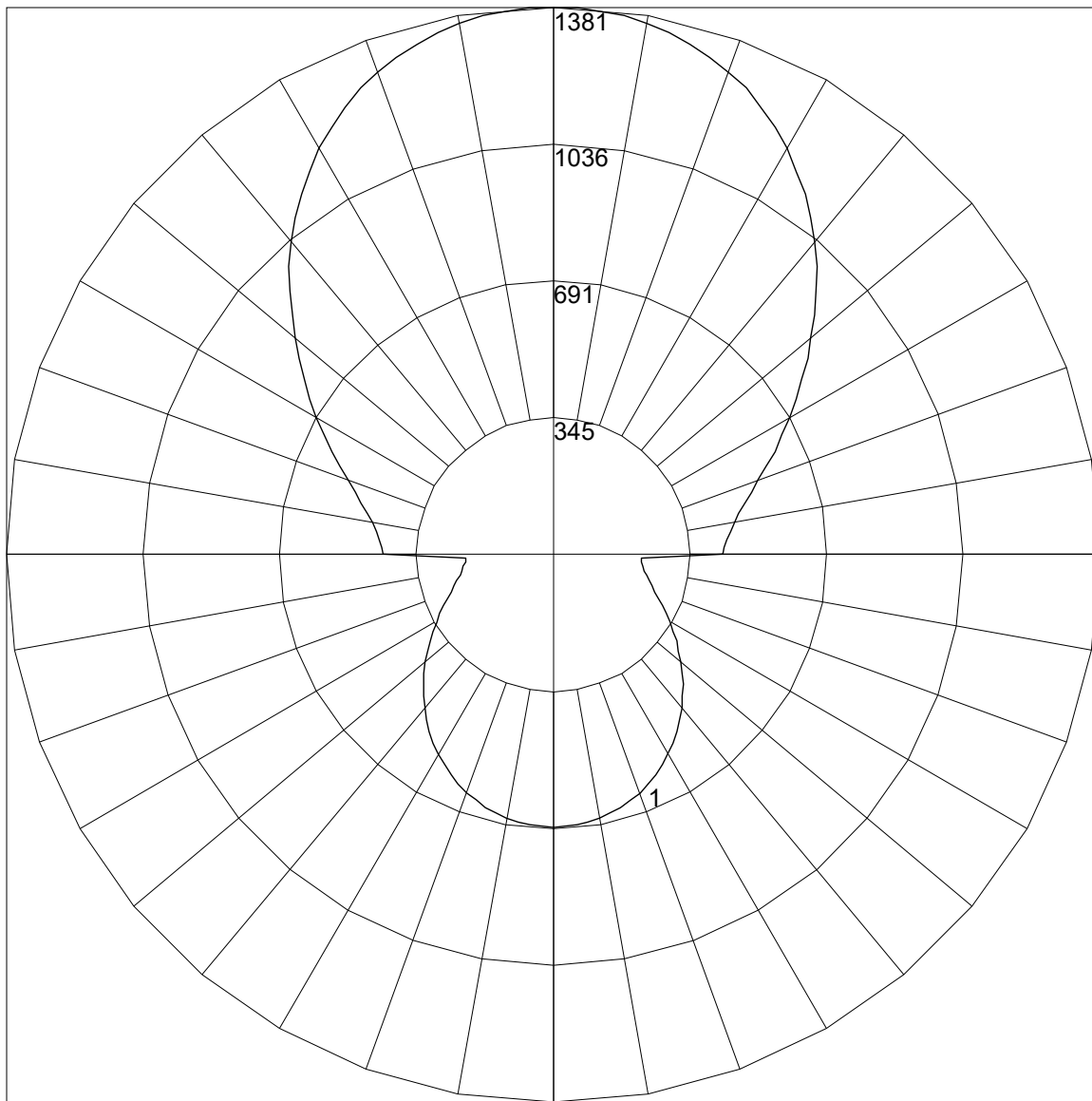
IES INDOOR REPORT
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UGR TABLE - CORRECTED

| | | | | | | | | | | | |
|----------------|------|----------------------|------|------|------|------|--------------------|------|------|------|------|
| 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 | 12.2 | 13.0 | 13.3 | 14.1 | 15.6 | 13.7 | 14.5 | 14.8 | 15.6 | 17.0 |
| | 3H | 13.8 | 14.5 | 14.9 | 15.6 | 17.1 | 16.2 | 16.9 | 17.3 | 18.0 | 19.5 |
| | 4H | 14.4 | 15.0 | 15.5 | 16.1 | 17.6 | 17.6 | 18.2 | 18.7 | 19.3 | 20.8 |
| | 6H | 14.7 | 15.3 | 15.8 | 16.4 | 18.0 | 19.1 | 19.7 | 20.2 | 20.8 | 22.3 |
| | 8H | 14.8 | 15.4 | 15.9 | 16.5 | 18.0 | 19.9 | 20.5 | 21.0 | 21.6 | 23.1 |
| | 12H | 14.9 | 15.4 | 16.0 | 16.5 | 18.1 | 20.9 | 21.5 | 22.1 | 22.6 | 24.1 |
| 4H | 2H | 13.0 | 13.6 | 14.1 | 14.7 | 16.2 | 14.1 | 14.8 | 15.2 | 15.9 | 17.4 |
| | 3H | 14.8 | 15.3 | 15.9 | 16.4 | 18.0 | 16.9 | 17.4 | 18.0 | 18.5 | 20.1 |
| | 4H | 15.4 | 15.9 | 16.6 | 17.1 | 18.6 | 18.4 | 18.9 | 19.5 | 20.0 | 21.6 |
| | 6H | 16.0 | 16.4 | 17.1 | 17.5 | 19.1 | 20.1 | 20.6 | 21.3 | 21.7 | 23.2 |
| | 8H | 16.1 | 16.5 | 17.2 | 17.6 | 19.2 | 21.1 | 21.5 | 22.2 | 22.7 | 24.2 |
| | 12H | 16.2 | 16.6 | 17.3 | 17.7 | 19.3 | 22.3 | 22.6 | 23.4 | 23.8 | 25.3 |
| 8H | 4H | 16.1 | 16.5 | 17.2 | 17.6 | 19.2 | 18.6 | 19.0 | 19.7 | 20.1 | 21.7 |
| | 6H | 16.8 | 17.2 | 18.0 | 18.3 | 19.9 | 20.6 | 20.9 | 21.7 | 22.1 | 23.6 |
| | 8H | 17.1 | 17.4 | 18.2 | 18.5 | 20.1 | 21.7 | 22.0 | 22.9 | 23.2 | 24.8 |
| | 12H | 17.3 | 17.6 | 18.4 | 18.7 | 20.3 | 23.1 | 23.4 | 24.3 | 24.5 | 26.1 |
| 12H | 4H | 16.3 | 16.7 | 17.5 | 17.8 | 19.4 | 18.6 | 19.0 | 19.7 | 20.1 | 21.7 |
| | 6H | 17.2 | 17.5 | 18.3 | 18.6 | 20.2 | 20.6 | 20.9 | 21.8 | 22.1 | 23.7 |
| | 8H | 17.6 | 17.8 | 18.7 | 19.0 | 20.6 | 21.9 | 22.1 | 23.0 | 23.3 | 24.9 |

Maximum UGR = 26.1

POLAR GRAPH



Maximum Candela = 1381 Located At Horizontal Angle = 0, Vertical Angle = 180
1 - Vertical Plane Through Horizontal Angles (90 - 270)