

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 : HO4-UD-RO-4FT-H-S-835-OPN-ITL89462.007.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89462.007 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]07/25/17

[ISSUEDATE]08/31/17

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HO4-UD-RO-4ft-H-S-835-OPN

[_INPUT_ELECTRICAL]120.0 VOLTS, 40.6 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 42.9 WATTS

[_ABSOLUTE]LUMENS]5420

[OTHER]see www.finelite.com for source file ITL89462. 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 | 5420 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 134 |
| Total Luminaire Watts | 40.6 |
| 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) | 0.25 ft |
| Luminous Height | 0.18 ft |

LUMINANCE DATA (cd/sq.m)

| Angle In Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|---------------------|------------------|-------------------|-------------------|
| 45 | 4448 | 2884 | 2571 |
| 55 | 4395 | 2562 | 2214 |
| 65 | 4279 | 2213 | 2064 |
| 75 | 4026 | 2056 | 1860 |
| 85 | 3055 | 960 | 260 |

IES INDOOR REPORT
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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 | 422.434 | 422.434 | 422.434 | 422.434 | 422.434 |
| 2.5 | 422.024 | 421.615 | 420.796 | 420.387 | 419.978 |
| 5.0 | 420.796 | 419.568 | 417.522 | 415.884 | 415.884 |
| 7.5 | 419.159 | 416.703 | 413.428 | 411.382 | 410.972 |
| 10.0 | 416.703 | 412.610 | 409.335 | 406.879 | 405.651 |
| 12.5 | 413.838 | 407.698 | 404.014 | 401.558 | 399.511 |
| 15.0 | 410.154 | 401.967 | 398.692 | 395.827 | 393.780 |
| 17.5 | 405.651 | 395.827 | 392.552 | 389.687 | 388.050 |
| 20.0 | 400.330 | 389.278 | 386.003 | 383.956 | 381.500 |
| 22.5 | 394.599 | 381.909 | 378.635 | 376.588 | 374.541 |
| 25.0 | 387.640 | 373.723 | 370.858 | 369.220 | 367.583 |
| 27.5 | 379.863 | 365.536 | 362.671 | 361.443 | 359.805 |
| 30.0 | 371.267 | 356.122 | 354.075 | 353.256 | 352.028 |
| 32.5 | 362.262 | 346.707 | 344.660 | 344.251 | 343.432 |
| 35.0 | 352.437 | 336.473 | 335.245 | 335.655 | 334.836 |
| 37.5 | 340.976 | 325.831 | 325.012 | 325.831 | 325.012 |
| 40.0 | 329.924 | 314.779 | 315.188 | 315.597 | 314.779 |
| 42.5 | 318.463 | 302.908 | 304.545 | 304.955 | 304.136 |
| 45.0 | 305.773 | 291.037 | 293.493 | 293.493 | 292.265 |
| 47.5 | 293.084 | 278.348 | 282.441 | 281.623 | 279.576 |
| 50.0 | 279.166 | 265.658 | 270.161 | 268.524 | 266.477 |
| 52.5 | 264.840 | 252.560 | 257.062 | 254.606 | 252.150 |
| 55.0 | 249.694 | 238.642 | 243.554 | 239.461 | 241.098 |
| 57.5 | 234.549 | 225.134 | 229.637 | 229.637 | 232.912 |
| 60.0 | 218.176 | 211.217 | 214.492 | 220.222 | 224.316 |
| 62.5 | 201.802 | 196.481 | 200.165 | 211.626 | 216.129 |
| 65.0 | 184.610 | 181.745 | 189.113 | 203.440 | 207.942 |
| 67.5 | 167.418 | 167.009 | 179.289 | 194.844 | 199.756 |
| 70.0 | 149.817 | 151.863 | 169.874 | 186.247 | 190.341 |
| 72.5 | 131.806 | 136.309 | 160.869 | 176.423 | 179.698 |
| 75.0 | 113.386 | 121.982 | 150.635 | 164.553 | 166.599 |
| 77.5 | 94.556 | 110.930 | 139.583 | 148.998 | 149.817 |
| 80.0 | 76.136 | 100.696 | 125.257 | 126.075 | 122.800 |
| 82.5 | 57.307 | 90.054 | 101.924 | 87.188 | 78.183 |
| 85.0 | 37.659 | 74.090 | 56.488 | 27.835 | 19.648 |
| 87.5 | 17.601 | 36.022 | 20.467 | 10.643 | 5.321 |
| 90.0 | 0.000 | 21.695 | 15.964 | 8.596 | 3.275 |
| 92.5 | 10.888 | 54.440 | 47.441 | 33.442 | 23.331 |
| 95.0 | 30.331 | 73.883 | 68.439 | 52.885 | 42.774 |
| 97.5 | 59.884 | 100.325 | 94.881 | 78.549 | 66.106 |
| 100.0 | 95.659 | 131.434 | 124.434 | 105.769 | 93.326 |
| 102.5 | 136.100 | 172.652 | 158.654 | 139.211 | 125.212 |
| 105.0 | 185.873 | 217.760 | 199.872 | 178.874 | 163.320 |
| 107.5 | 243.424 | 270.644 | 249.646 | 225.537 | 208.427 |
| 110.0 | 307.974 | 330.528 | 307.197 | 279.199 | 261.312 |
| 112.5 | 378.746 | 395.856 | 374.858 | 341.416 | 321.973 |
| 115.0 | 454.184 | 466.628 | 445.630 | 412.966 | 391.967 |
| 117.5 | 531.956 | 539.733 | 517.179 | 490.737 | 469.739 |
| 120.0 | 611.282 | 613.615 | 594.173 | 571.619 | 552.176 |
| 122.5 | 687.498 | 685.943 | 670.389 | 647.835 | 634.614 |
| 125.0 | 761.381 | 755.937 | 744.271 | 725.606 | 714.718 |
| 127.5 | 830.597 | 825.931 | 815.043 | 798.711 | 790.156 |
| 130.0 | 895.925 | 889.704 | 881.149 | 865.595 | 858.595 |
| 132.5 | 957.365 | 951.143 | 944.144 | 929.367 | 920.812 |

CANDELA TABULATION - (Cont.)

| | | | | | |
|-------|----------|----------|----------|----------|----------|
| 135.0 | 1014.915 | 1007.916 | 1004.028 | 986.918 | 978.363 |
| 137.5 | 1068.578 | 1060.801 | 1058.467 | 1042.135 | 1032.025 |
| 140.0 | 1117.574 | 1108.241 | 1108.241 | 1091.909 | 1081.799 |
| 142.5 | 1163.459 | 1154.126 | 1155.681 | 1140.127 | 1129.239 |
| 145.0 | 1207.011 | 1195.345 | 1199.233 | 1185.235 | 1174.347 |
| 147.5 | 1245.896 | 1233.453 | 1238.119 | 1225.676 | 1215.565 |
| 150.0 | 1280.893 | 1270.005 | 1276.227 | 1262.228 | 1252.896 |
| 152.5 | 1313.557 | 1300.336 | 1308.891 | 1295.670 | 1287.115 |
| 155.0 | 1339.999 | 1329.889 | 1338.444 | 1325.223 | 1319.779 |
| 157.5 | 1366.442 | 1356.331 | 1364.886 | 1352.443 | 1347.777 |
| 160.0 | 1390.551 | 1379.663 | 1388.995 | 1377.330 | 1374.219 |
| 162.5 | 1409.216 | 1399.883 | 1408.438 | 1399.883 | 1395.995 |
| 165.0 | 1426.326 | 1418.549 | 1424.770 | 1419.326 | 1416.215 |
| 167.5 | 1441.102 | 1436.436 | 1437.991 | 1436.436 | 1434.880 |
| 170.0 | 1452.768 | 1449.657 | 1450.435 | 1450.435 | 1448.879 |
| 172.5 | 1461.323 | 1460.545 | 1459.767 | 1460.545 | 1460.545 |
| 175.0 | 1467.544 | 1468.322 | 1467.544 | 1468.322 | 1468.322 |
| 177.5 | 1471.433 | 1472.211 | 1471.433 | 1471.433 | 1472.211 |
| 180.0 | 1472.988 | 1472.988 | 1472.988 | 1472.988 | 1472.988 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HO4-UD-RO-4FT-H-S-835-OPN-ITL89462.007.IES****ZONAL LUMEN SUMMARY**

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|--------|
| 0-20 | 152.50 | N.A. | 2.80 |
| 0-30 | 324.50 | N.A. | 6.00 |
| 0-40 | 535.86 | N.A. | 9.90 |
| 0-60 | 980.07 | N.A. | 18.10 |
| 0-80 | 1322.57 | N.A. | 24.40 |
| 0-90 | 1381.22 | N.A. | 25.50 |
| 10-90 | 1341.58 | N.A. | 24.80 |
| 20-40 | 383.37 | N.A. | 7.10 |
| 20-50 | 610.46 | N.A. | 11.30 |
| 40-70 | 635.31 | N.A. | 11.70 |
| 60-80 | 342.50 | N.A. | 6.30 |
| 70-80 | 151.40 | N.A. | 2.80 |
| 80-90 | 58.65 | N.A. | 1.10 |
| 90-110 | 275.28 | N.A. | 5.10 |
| 90-120 | 710.23 | N.A. | 13.10 |
| 90-130 | 1370.34 | N.A. | 25.30 |
| 90-150 | 2884.5 | N.A. | 53.20 |
| 90-180 | 4038.92 | N.A. | 74.50 |
| 110-180 | 3763.64 | N.A. | 69.40 |
| 0-180 | 5420.14 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|--------|
| 0-10 | 39.64 |
| 10-20 | 112.86 |
| 20-30 | 172.00 |
| 30-40 | 211.37 |
| 40-50 | 227.09 |
| 50-60 | 217.12 |
| 60-70 | 191.10 |
| 70-80 | 151.40 |
| 80-90 | 58.65 |
| 90-100 | 66.22 |
| 100-110 | 209.07 |
| 110-120 | 434.95 |
| 120-130 | 660.10 |
| 130-140 | 768.78 |
| 140-150 | 745.38 |
| 150-160 | 613.54 |
| 160-170 | 401.33 |
| 170-180 | 139.55 |

IES INDOOR REPORT

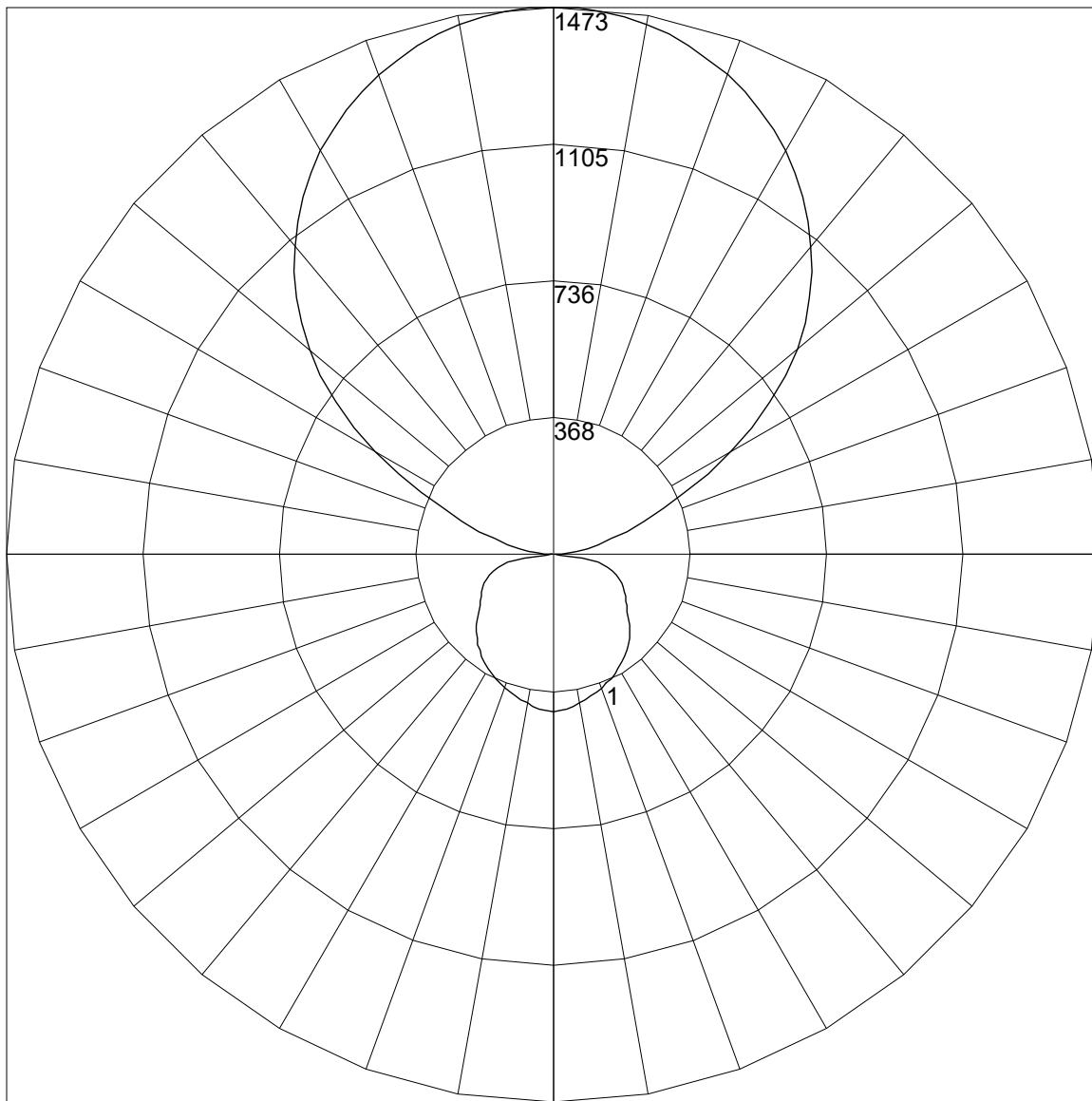
PHOTOMETRIC FILENAME : HO4-UD-RO-4FT-H-S-835-OPN-ITL89462.007.IES

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 | 101 | 101 | 101 | 101 | 90 | 90 | 90 | 90 | 70 | 70 | 70 | 51 | 51 | 51 | 34 | 34 | 34 | 25 |
| 1 | 92 | 87 | 83 | 80 | 82 | 78 | 75 | 72 | 60 | 58 | 56 | 44 | 42 | 41 | 29 | 28 | 27 | 20 |
| 2 | 83 | 76 | 70 | 65 | 74 | 68 | 62 | 58 | 52 | 49 | 46 | 38 | 36 | 34 | 25 | 24 | 22 | 16 |
| 3 | 76 | 66 | 59 | 53 | 67 | 59 | 53 | 48 | 46 | 41 | 38 | 33 | 31 | 28 | 22 | 20 | 19 | 14 |
| 4 | 69 | 58 | 51 | 45 | 61 | 52 | 46 | 40 | 40 | 36 | 32 | 29 | 26 | 24 | 19 | 17 | 16 | 11 |
| 5 | 63 | 52 | 44 | 38 | 56 | 46 | 39 | 34 | 36 | 31 | 27 | 26 | 23 | 20 | 17 | 15 | 14 | 10 |
| 6 | 58 | 46 | 38 | 33 | 51 | 41 | 35 | 30 | 32 | 27 | 24 | 24 | 20 | 18 | 16 | 13 | 12 | 9 |
| 7 | 53 | 41 | 34 | 28 | 47 | 37 | 30 | 26 | 29 | 24 | 21 | 21 | 18 | 15 | 14 | 12 | 10 | 7 |
| 8 | 49 | 37 | 30 | 25 | 44 | 34 | 27 | 22 | 26 | 21 | 18 | 19 | 16 | 14 | 13 | 11 | 9 | 7 |
| 9 | 46 | 34 | 27 | 22 | 41 | 31 | 24 | 20 | 24 | 19 | 16 | 18 | 14 | 12 | 12 | 10 | 8 | 6 |
| 10 | 43 | 31 | 24 | 19 | 38 | 28 | 22 | 18 | 22 | 17 | 14 | 16 | 13 | 11 | 11 | 9 | 7 | 5 |

POLAR GRAPH



Maximum Candela = 1472.988 Located At Horizontal Angle = 0, Vertical Angle = 180
1 - Vertical Plane Through Horizontal Angles (90 - 270)