

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-B-B-835-OPN-ITL89462.002.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89462.002 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-B-B-835-OPN

[_INPUT_ELECTRICAL]120.0 VOLTS, 34.8 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 37.4 WATTS

[_ABSOLUTE]LUMENS]4410

[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 | 4410 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 127 |
| Total Luminaire Watts | 34.8 |
| 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 | 5591 | 3625 | 3231 |
| 55 | 5526 | 3221 | 2784 |
| 65 | 5380 | 2782 | 2595 |
| 75 | 5062 | 2584 | 2338 |
| 85 | 3841 | 1207 | 326 |

CANDELA TABULATION

| | <u>0.0</u> | <u>22.5</u> | <u>45.0</u> | <u>67.5</u> | <u>90.0</u> |
|-------|------------|-------------|-------------|-------------|-------------|
| 0.0 | 531.052 | 531.052 | 531.052 | 531.052 | 531.052 |
| 2.5 | 530.538 | 530.023 | 528.994 | 528.479 | 527.965 |
| 5.0 | 528.994 | 527.450 | 524.877 | 522.819 | 522.819 |
| 7.5 | 526.936 | 523.848 | 519.732 | 517.159 | 516.644 |
| 10.0 | 523.848 | 518.702 | 514.586 | 511.498 | 509.954 |
| 12.5 | 520.246 | 512.527 | 507.896 | 504.809 | 502.236 |
| 15.0 | 515.615 | 505.323 | 501.206 | 497.604 | 495.031 |
| 17.5 | 509.954 | 497.604 | 493.488 | 489.886 | 487.827 |
| 20.0 | 503.265 | 489.371 | 485.254 | 482.681 | 479.594 |
| 22.5 | 496.061 | 480.108 | 475.992 | 473.419 | 470.846 |
| 25.0 | 487.313 | 469.817 | 466.215 | 464.156 | 462.098 |
| 27.5 | 477.536 | 459.525 | 455.923 | 454.379 | 452.321 |
| 30.0 | 466.729 | 447.690 | 445.117 | 444.087 | 442.544 |
| 32.5 | 455.408 | 435.854 | 433.281 | 432.767 | 431.737 |
| 35.0 | 443.058 | 422.989 | 421.446 | 421.960 | 420.931 |
| 37.5 | 428.650 | 409.610 | 408.581 | 409.610 | 408.581 |
| 40.0 | 414.756 | 395.716 | 396.231 | 396.746 | 395.716 |
| 42.5 | 400.348 | 380.793 | 382.852 | 383.366 | 382.337 |
| 45.0 | 384.395 | 365.870 | 368.958 | 368.958 | 367.414 |
| 47.5 | 368.443 | 349.918 | 355.064 | 354.035 | 351.462 |
| 50.0 | 350.947 | 333.966 | 339.627 | 337.568 | 334.995 |
| 52.5 | 332.937 | 317.499 | 323.160 | 320.072 | 316.985 |
| 55.0 | 313.897 | 300.003 | 306.178 | 301.033 | 303.091 |
| 57.5 | 294.858 | 283.022 | 288.683 | 288.683 | 292.799 |
| 60.0 | 274.274 | 265.526 | 269.643 | 276.847 | 281.993 |
| 62.5 | 253.691 | 247.001 | 251.632 | 266.041 | 271.701 |
| 65.0 | 232.078 | 228.476 | 237.739 | 255.749 | 261.410 |
| 67.5 | 210.466 | 209.951 | 225.389 | 244.943 | 251.118 |
| 70.0 | 188.338 | 190.911 | 213.553 | 234.136 | 239.282 |
| 72.5 | 165.697 | 171.357 | 202.232 | 221.786 | 225.903 |
| 75.0 | 142.540 | 153.347 | 189.368 | 206.863 | 209.436 |
| 77.5 | 118.869 | 139.453 | 175.474 | 187.309 | 188.338 |
| 80.0 | 95.713 | 126.588 | 157.463 | 158.492 | 154.376 |
| 82.5 | 72.042 | 113.209 | 128.132 | 109.607 | 98.286 |
| 85.0 | 47.342 | 93.140 | 71.013 | 34.992 | 24.700 |
| 87.5 | 22.127 | 45.284 | 25.729 | 13.379 | 6.690 |
| 90.0 | 0.000 | 27.273 | 20.069 | 10.806 | 4.117 |
| 92.5 | 7.204 | 36.021 | 31.390 | 22.127 | 15.438 |
| 95.0 | 20.069 | 48.886 | 45.284 | 34.992 | 28.302 |
| 97.5 | 39.623 | 66.382 | 62.779 | 51.973 | 43.740 |
| 100.0 | 63.294 | 86.965 | 82.334 | 69.984 | 61.750 |
| 102.5 | 90.052 | 114.238 | 104.975 | 92.111 | 82.848 |
| 105.0 | 122.986 | 144.084 | 132.249 | 118.355 | 108.063 |
| 107.5 | 161.065 | 179.076 | 165.182 | 149.230 | 137.909 |
| 110.0 | 203.776 | 218.699 | 203.261 | 184.736 | 172.901 |
| 112.5 | 250.603 | 261.924 | 248.030 | 225.903 | 213.038 |
| 115.0 | 300.518 | 308.751 | 294.858 | 273.245 | 259.351 |
| 117.5 | 351.977 | 357.122 | 342.199 | 324.704 | 310.810 |
| 120.0 | 404.464 | 406.008 | 393.143 | 378.220 | 365.356 |
| 122.5 | 454.894 | 453.865 | 443.573 | 428.650 | 419.902 |
| 125.0 | 503.779 | 500.177 | 492.458 | 480.108 | 472.904 |
| 127.5 | 549.577 | 546.490 | 539.286 | 528.479 | 522.819 |
| 130.0 | 592.803 | 588.686 | 583.026 | 572.734 | 568.103 |
| 132.5 | 633.455 | 629.338 | 624.707 | 614.930 | 609.269 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HO4-UD-RO-4FT-B-B-835-OPN-ITL89462.002.IES****CANDELA TABULATION - (Cont.)**

| | | | | | |
|--------------|---------|---------|---------|---------|---------|
| 135.0 | 671.534 | 666.903 | 664.330 | 653.009 | 647.349 |
| 137.5 | 707.041 | 701.895 | 700.351 | 689.545 | 682.855 |
| 140.0 | 739.460 | 733.285 | 733.285 | 722.478 | 715.789 |
| 142.5 | 769.820 | 763.645 | 764.674 | 754.383 | 747.178 |
| 145.0 | 798.637 | 790.918 | 793.491 | 784.229 | 777.024 |
| 147.5 | 824.366 | 816.133 | 819.220 | 810.987 | 804.297 |
| 150.0 | 847.523 | 840.318 | 844.435 | 835.173 | 828.998 |
| 152.5 | 869.135 | 860.387 | 866.048 | 857.300 | 851.639 |
| 155.0 | 886.631 | 879.942 | 885.602 | 876.854 | 873.252 |
| 157.5 | 904.127 | 897.437 | 903.098 | 894.864 | 891.777 |
| 160.0 | 920.079 | 912.875 | 919.050 | 911.331 | 909.273 |
| 162.5 | 932.429 | 926.254 | 931.915 | 926.254 | 923.681 |
| 165.0 | 943.750 | 938.604 | 942.721 | 939.119 | 937.061 |
| 167.5 | 953.527 | 950.440 | 951.469 | 950.440 | 949.411 |
| 170.0 | 961.246 | 959.188 | 959.702 | 959.702 | 958.673 |
| 172.5 | 966.906 | 966.392 | 965.877 | 966.392 | 966.392 |
| 175.0 | 971.023 | 971.538 | 971.023 | 971.538 | 971.538 |
| 177.5 | 973.596 | 974.111 | 973.596 | 973.596 | 974.111 |
| 180.0 | 974.625 | 974.625 | 974.625 | 974.625 | 974.625 |

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HO4-UD-RO-4FT-B-B-835-OPN-ITL89462.002.IES

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|--------|
| 0-20 | 191.71 | N.A. | 4.30 |
| 0-30 | 407.93 | N.A. | 9.30 |
| 0-40 | 673.65 | N.A. | 15.30 |
| 0-60 | 1232.07 | N.A. | 27.90 |
| 0-80 | 1662.64 | N.A. | 37.70 |
| 0-90 | 1736.36 | N.A. | 39.40 |
| 10-90 | 1686.53 | N.A. | 38.20 |
| 20-40 | 481.94 | N.A. | 10.90 |
| 20-50 | 767.42 | N.A. | 17.40 |
| 40-70 | 798.66 | N.A. | 18.10 |
| 60-80 | 430.57 | N.A. | 9.80 |
| 70-80 | 190.33 | N.A. | 4.30 |
| 80-90 | 73.73 | N.A. | 1.70 |
| 90-110 | 183.12 | N.A. | 4.20 |
| 90-120 | 470.91 | N.A. | 10.70 |
| 90-130 | 907.68 | N.A. | 20.60 |
| 90-150 | 1909.55 | N.A. | 43.30 |
| 90-180 | 2673.39 | N.A. | 60.60 |
| 110-180 | 2490.27 | N.A. | 56.50 |
| 0-180 | 4409.75 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|--------|
| 0-10 | 49.83 |
| 10-20 | 141.87 |
| 20-30 | 216.23 |
| 30-40 | 265.71 |
| 40-50 | 285.48 |
| 50-60 | 272.94 |
| 60-70 | 240.24 |
| 70-80 | 190.33 |
| 80-90 | 73.73 |
| 90-100 | 44.79 |
| 100-110 | 138.33 |
| 110-120 | 287.79 |
| 120-130 | 436.77 |
| 130-140 | 508.68 |
| 140-150 | 493.19 |
| 150-160 | 405.96 |
| 160-170 | 265.55 |
| 170-180 | 92.34 |

IES INDOOR REPORT

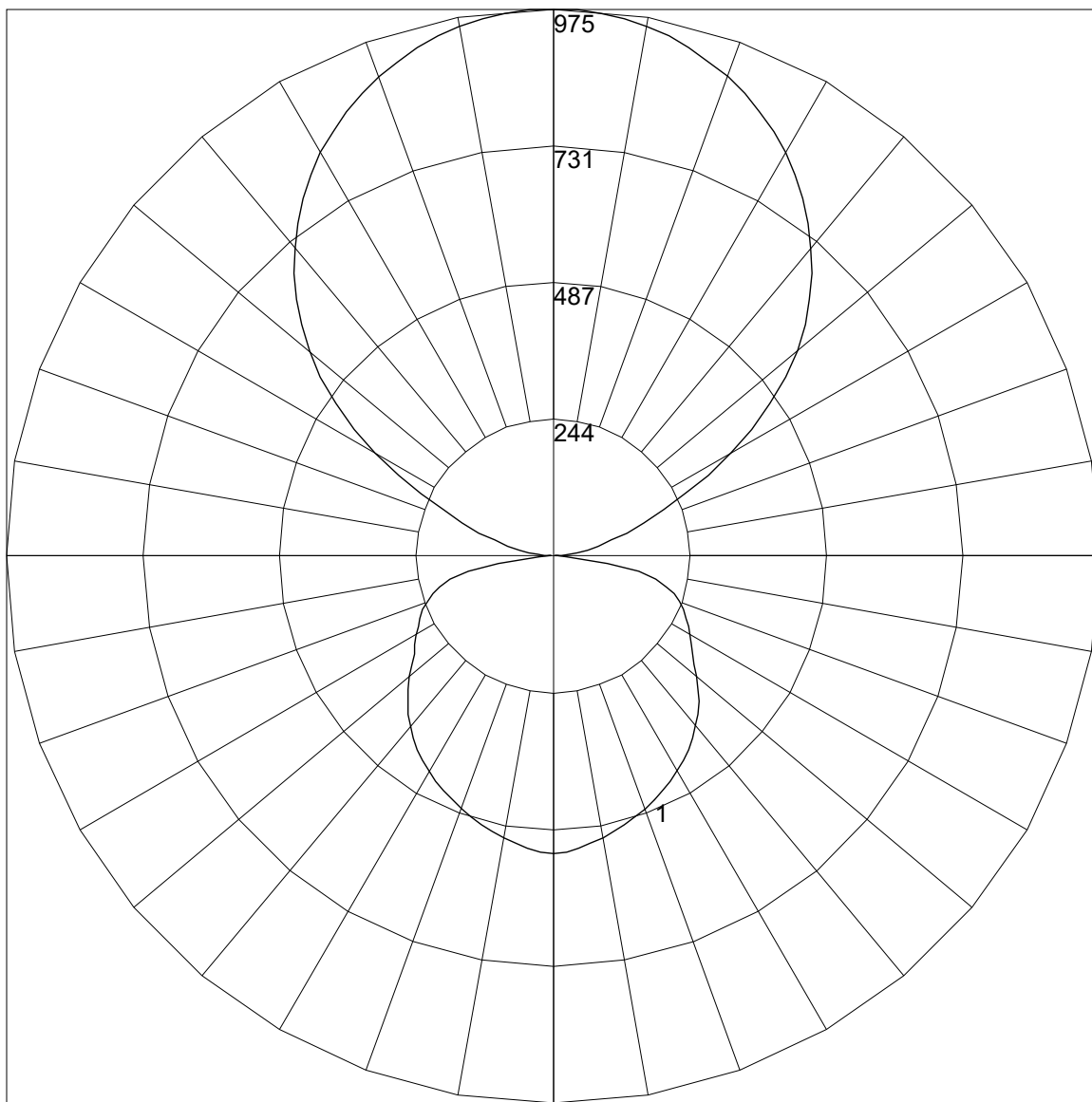
PHOTOMETRIC FILENAME : HO4-UD-RO-4FT-B-B-835-OPN-ITL89462.002.IES

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 | 105 | 105 | 105 | 105 | 95 | 95 | 95 | 95 | 77 | 77 | 77 | 61 | 61 | 61 | 46 | 46 | 46 | 39 |
| 1 | 95 | 90 | 86 | 82 | 86 | 82 | 78 | 75 | 67 | 64 | 62 | 53 | 51 | 49 | 40 | 39 | 37 | 31 |
| 2 | 86 | 78 | 72 | 66 | 77 | 71 | 65 | 61 | 58 | 54 | 50 | 45 | 43 | 40 | 34 | 32 | 31 | 25 |
| 3 | 78 | 68 | 60 | 54 | 70 | 62 | 55 | 50 | 50 | 46 | 42 | 40 | 36 | 33 | 30 | 28 | 26 | 21 |
| 4 | 71 | 60 | 52 | 46 | 64 | 55 | 48 | 42 | 45 | 39 | 35 | 35 | 31 | 28 | 26 | 24 | 22 | 18 |
| 5 | 65 | 53 | 45 | 39 | 59 | 48 | 41 | 36 | 40 | 34 | 30 | 31 | 27 | 24 | 24 | 21 | 19 | 15 |
| 6 | 60 | 47 | 39 | 33 | 54 | 43 | 36 | 31 | 36 | 30 | 26 | 28 | 24 | 21 | 21 | 19 | 16 | 13 |
| 7 | 55 | 43 | 35 | 29 | 50 | 39 | 32 | 27 | 32 | 27 | 23 | 26 | 21 | 18 | 19 | 17 | 14 | 12 |
| 8 | 51 | 39 | 31 | 25 | 46 | 35 | 28 | 24 | 29 | 24 | 20 | 23 | 19 | 16 | 18 | 15 | 13 | 10 |
| 9 | 47 | 35 | 28 | 23 | 43 | 32 | 26 | 21 | 27 | 21 | 18 | 21 | 17 | 15 | 16 | 14 | 11 | 9 |
| 10 | 44 | 32 | 25 | 20 | 40 | 29 | 23 | 19 | 24 | 19 | 16 | 20 | 16 | 13 | 15 | 12 | 10 | 8 |

POLAR GRAPH



Maximum Candela = 974.625 Located At Horizontal Angle = 0, Vertical Angle = 180
1 - Vertical Plane Through Horizontal Angles (90 - 270)