

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-4-ID-4FT-V-H-835-WSO-ITL89033.006-GONIOPHOTOMETRY.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89033.006-GONIOPHOTOMETRY Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]03/27/17

[ISSUEDATE]03/08/17

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HP-4-ID-4ft-V-H-835-WSO

[_INPUT_ELECTRICAL]120.0 VOLTS, 64.8 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 66.2 WATTS

[OTHER]see www.finelite.com for source file ITL89033. 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

[_ABSOLUTE]LUMENS]7161

CHARACTERISTICS

| | |
|---------------------------------|-----------------|
| Lumens Per Lamp | N.A. (absolute) |
| Total Lamp Lumens | N.A. (absolute) |
| Luminaire Lumens | 7161 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 111 |
| Total Luminaire Watts | 64.8 |
| 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 |
| Luminous Length (0-180) | 4.00 ft |
| Luminous Width (90-270) | 0.32 ft |
| Luminous Height | 0.00 ft |

LUMINANCE DATA (cd/sq.m)

| Angle In Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|---------------------|------------------|-------------------|-------------------|
| 45 | 7793 | 7720 | 7628 |
| 55 | 7361 | 7248 | 7169 |
| 65 | 6834 | 6711 | 6634 |
| 75 | 6130 | 6055 | 6004 |
| 85 | 5201 | 4978 | 5126 |

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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 | 1071.759 | 1071.759 | 1071.759 | 1071.759 | 1071.759 |
| 2.5 | 1070.203 | 1070.203 | 1070.203 | 1070.203 | 1070.203 |
| 5.0 | 1065.537 | 1065.537 | 1064.759 | 1065.537 | 1065.537 |
| 7.5 | 1058.537 | 1057.759 | 1057.759 | 1058.537 | 1058.537 |
| 10.0 | 1049.204 | 1046.870 | 1046.870 | 1048.426 | 1046.870 |
| 12.5 | 1036.759 | 1032.093 | 1035.204 | 1035.204 | 1032.093 |
| 15.0 | 1021.982 | 1014.204 | 1018.093 | 1018.871 | 1014.982 |
| 17.5 | 1004.093 | 1000.982 | 999.427 | 999.427 | 994.760 |
| 20.0 | 984.649 | 972.205 | 976.872 | 976.094 | 972.205 |
| 22.5 | 957.428 | 948.872 | 957.428 | 950.428 | 947.317 |
| 25.0 | 930.984 | 920.873 | 925.539 | 923.206 | 920.873 |
| 27.5 | 902.984 | 893.651 | 899.873 | 894.429 | 891.318 |
| 30.0 | 872.651 | 863.318 | 867.207 | 864.096 | 860.207 |
| 32.5 | 840.763 | 831.430 | 834.541 | 831.430 | 827.541 |
| 35.0 | 807.319 | 798.764 | 801.097 | 797.208 | 793.319 |
| 37.5 | 771.542 | 762.986 | 766.097 | 762.986 | 758.320 |
| 40.0 | 736.543 | 727.987 | 728.765 | 725.654 | 721.765 |
| 42.5 | 699.210 | 692.210 | 692.988 | 688.321 | 685.210 |
| 45.0 | 661.877 | 654.100 | 655.655 | 650.989 | 647.877 |
| 47.5 | 623.767 | 615.211 | 616.767 | 610.545 | 609.767 |
| 50.0 | 584.879 | 577.879 | 577.879 | 573.212 | 570.879 |
| 52.5 | 546.768 | 538.990 | 538.990 | 534.324 | 532.768 |
| 55.0 | 507.102 | 500.102 | 499.325 | 494.658 | 493.880 |
| 57.5 | 466.658 | 459.659 | 459.659 | 455.770 | 454.214 |
| 60.0 | 426.992 | 419.993 | 419.993 | 416.104 | 415.326 |
| 62.5 | 387.327 | 380.327 | 380.327 | 377.216 | 375.660 |
| 65.0 | 346.883 | 339.883 | 340.661 | 338.327 | 336.772 |
| 67.5 | 306.439 | 300.217 | 300.995 | 300.217 | 297.884 |
| 70.0 | 266.773 | 262.106 | 262.106 | 261.329 | 259.773 |
| 72.5 | 227.885 | 223.996 | 223.996 | 223.996 | 222.440 |
| 75.0 | 190.552 | 186.663 | 188.219 | 187.441 | 186.663 |
| 77.5 | 153.997 | 150.886 | 152.442 | 151.664 | 151.664 |
| 80.0 | 118.998 | 117.442 | 118.220 | 117.442 | 117.442 |
| 82.5 | 86.332 | 84.776 | 84.776 | 84.776 | 86.332 |
| 85.0 | 54.444 | 52.888 | 52.110 | 52.110 | 53.666 |
| 87.5 | 23.333 | 22.555 | 22.555 | 21.777 | 22.555 |
| 90.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 92.5 | 16.000 | 28.000 | 30.000 | 30.000 | 30.000 |
| 95.0 | 45.000 | 80.000 | 82.000 | 64.000 | 64.000 |
| 97.5 | 79.000 | 136.000 | 210.000 | 131.000 | 114.000 |
| 100.0 | 119.000 | 186.000 | 333.000 | 246.000 | 193.000 |
| 102.5 | 167.000 | 227.000 | 492.000 | 381.000 | 310.000 |
| 105.0 | 211.000 | 271.000 | 614.000 | 589.000 | 472.000 |
| 107.5 | 256.000 | 315.000 | 670.000 | 862.000 | 725.000 |
| 110.0 | 299.000 | 356.000 | 697.000 | 1089.000 | 1038.000 |
| 112.5 | 343.000 | 396.000 | 729.000 | 1183.000 | 1245.000 |
| 115.0 | 385.000 | 434.000 | 783.000 | 1212.000 | 1323.000 |
| 117.5 | 419.000 | 469.000 | 826.000 | 1226.000 | 1352.000 |
| 120.0 | 450.000 | 503.000 | 854.000 | 1281.000 | 1373.000 |
| 122.5 | 477.000 | 536.000 | 872.000 | 1349.000 | 1438.000 |
| 125.0 | 503.000 | 565.000 | 885.000 | 1386.000 | 1514.000 |
| 127.5 | 527.000 | 591.000 | 895.000 | 1387.000 | 1554.000 |
| 130.0 | 547.000 | 614.000 | 903.000 | 1363.000 | 1547.000 |
| 132.5 | 568.000 | 636.000 | 910.000 | 1330.000 | 1510.000 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-4-ID-4FT-V-H-835-WSO-ITL89033.006-GONIOPHOTOMETRY.IES****CANDELA TABULATION - (Cont.)**

| | | | | | |
|--------------|---------|---------|---------|----------|----------|
| 135.0 | 588.000 | 656.000 | 915.000 | 1294.000 | 1462.000 |
| 137.5 | 607.000 | 674.000 | 917.000 | 1255.000 | 1407.000 |
| 140.0 | 627.000 | 691.000 | 918.000 | 1216.000 | 1349.000 |
| 142.5 | 647.000 | 707.000 | 917.000 | 1175.000 | 1291.000 |
| 145.0 | 668.000 | 723.000 | 912.000 | 1137.000 | 1234.000 |
| 147.5 | 685.000 | 736.000 | 905.000 | 1099.000 | 1179.000 |
| 150.0 | 703.000 | 749.000 | 898.000 | 1062.000 | 1129.000 |
| 152.5 | 721.000 | 760.000 | 890.000 | 1026.000 | 1083.000 |
| 155.0 | 737.000 | 771.000 | 882.000 | 992.000 | 1037.000 |
| 157.5 | 752.000 | 780.000 | 872.000 | 961.000 | 996.000 |
| 160.0 | 766.000 | 789.000 | 864.000 | 933.000 | 959.000 |
| 162.5 | 778.000 | 796.000 | 854.000 | 907.000 | 927.000 |
| 165.0 | 790.000 | 802.000 | 845.000 | 884.000 | 899.000 |
| 167.5 | 799.000 | 807.000 | 837.000 | 864.000 | 875.000 |
| 170.0 | 806.000 | 812.000 | 831.000 | 848.000 | 854.000 |
| 172.5 | 811.000 | 815.000 | 826.000 | 835.000 | 839.000 |
| 175.0 | 816.000 | 817.000 | 821.000 | 825.000 | 828.000 |
| 177.5 | 818.000 | 818.000 | 819.000 | 820.000 | 820.000 |
| 180.0 | 819.000 | 819.000 | 819.000 | 819.000 | 819.000 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-4-ID-4FT-V-H-835-WSO-ITL89033.006-GONIOPHOTOMETRY.IES****ZONAL LUMEN SUMMARY**

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|--------|
| 0-20 | 388.07 | N.A. | 5.40 |
| 0-30 | 813.91 | N.A. | 11.40 |
| 0-40 | 1313.69 | N.A. | 18.30 |
| 0-60 | 2263.67 | N.A. | 31.60 |
| 0-80 | 2799.44 | N.A. | 39.10 |
| 0-90 | 2859.11 | N.A. | 39.90 |
| 10-90 | 2757.96 | N.A. | 38.50 |
| 20-40 | 925.63 | N.A. | 12.90 |
| 20-50 | 1429.82 | N.A. | 20.00 |
| 40-70 | 1286.89 | N.A. | 18.00 |
| 60-80 | 535.77 | N.A. | 7.50 |
| 70-80 | 198.86 | N.A. | 2.80 |
| 80-90 | 59.67 | N.A. | 0.80 |
| 90-110 | 581.48 | N.A. | 8.10 |
| 90-120 | 1385.14 | N.A. | 19.30 |
| 90-130 | 2237.22 | N.A. | 31.20 |
| 90-150 | 3574.02 | N.A. | 49.90 |
| 90-180 | 4302.09 | N.A. | 60.10 |
| 110-180 | 3720.6 | N.A. | 52.00 |
| 0-180 | 7161.19 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|--------|
| 0-10 | 101.14 |
| 10-20 | 286.93 |
| 20-30 | 425.84 |
| 30-40 | 499.79 |
| 40-50 | 504.20 |
| 50-60 | 445.78 |
| 60-70 | 336.91 |
| 70-80 | 198.86 |
| 80-90 | 59.67 |
| 90-100 | 96.89 |
| 100-110 | 484.59 |
| 110-120 | 803.65 |
| 120-130 | 852.09 |
| 130-140 | 751.91 |
| 140-150 | 584.88 |
| 150-160 | 409.48 |
| 160-170 | 239.90 |
| 170-180 | 78.69 |

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-4-ID-4FT-V-H-835-WSO-ITL89033.006-GONIOPHOTOMETRY.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

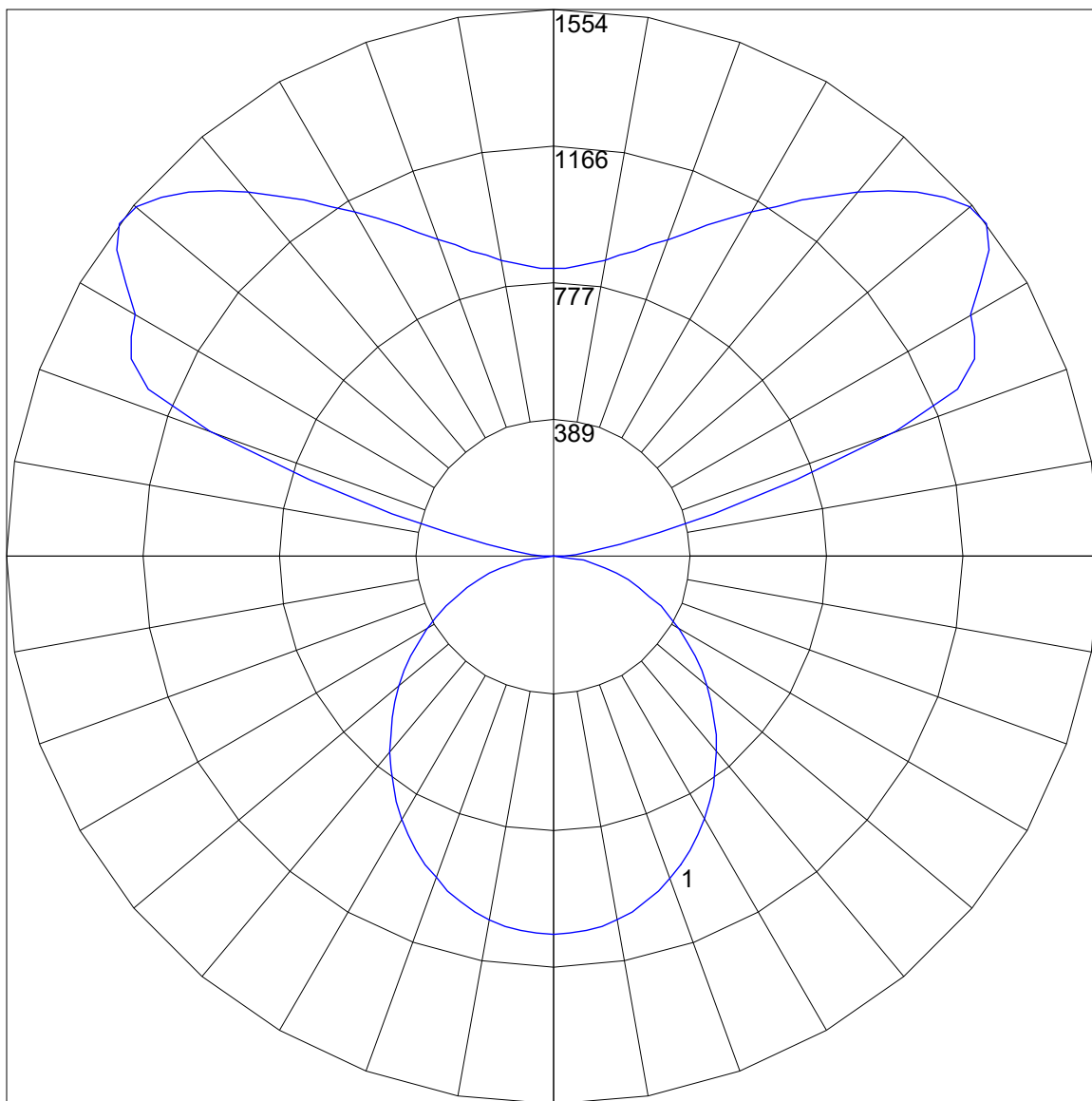
Effective Floor Cavity Reflectance 0.20

| 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 | 78 | 78 | 78 | 62 | 62 | 62 | 47 | 47 | 47 | 40 |
| 1 | 95 | 91 | 87 | 84 | 87 | 83 | 80 | 77 | 68 | 66 | 64 | 54 | 52 | 51 | 41 | 40 | 39 | 33 |
| 2 | 87 | 79 | 73 | 68 | 79 | 73 | 67 | 63 | 59 | 56 | 52 | 47 | 45 | 43 | 36 | 35 | 33 | 28 |
| 3 | 79 | 70 | 63 | 57 | 72 | 64 | 57 | 52 | 52 | 48 | 44 | 42 | 39 | 36 | 32 | 30 | 28 | 24 |
| 4 | 72 | 62 | 54 | 48 | 66 | 56 | 50 | 44 | 46 | 41 | 37 | 37 | 34 | 31 | 29 | 26 | 24 | 20 |
| 5 | 66 | 55 | 47 | 41 | 60 | 50 | 43 | 38 | 41 | 36 | 32 | 33 | 29 | 26 | 26 | 23 | 21 | 17 |
| 6 | 61 | 49 | 41 | 35 | 55 | 45 | 38 | 33 | 37 | 32 | 28 | 30 | 26 | 23 | 23 | 21 | 18 | 15 |
| 7 | 56 | 44 | 36 | 31 | 51 | 41 | 34 | 29 | 34 | 28 | 25 | 27 | 23 | 20 | 21 | 18 | 16 | 14 |
| 8 | 52 | 40 | 32 | 27 | 47 | 37 | 30 | 25 | 31 | 25 | 22 | 25 | 21 | 18 | 19 | 17 | 15 | 12 |
| 9 | 49 | 37 | 29 | 24 | 44 | 34 | 27 | 23 | 28 | 23 | 19 | 23 | 19 | 16 | 18 | 15 | 13 | 11 |
| 10 | 45 | 33 | 26 | 22 | 41 | 31 | 24 | 20 | 26 | 21 | 17 | 21 | 17 | 15 | 17 | 14 | 12 | 10 |

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POLAR GRAPH



Maximum Candela = 1554 Located At Horizontal Angle = 90, Vertical Angle = 127.5

1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)