

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-H-S-835-WSO-DSO-ITL89033-ITL92993.007.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89033 and ITL92993.007 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]03/27/17

[ISSUEDATE]08/04/2020

[MANUFAC]FINELITE, INC.

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

[_INPUT_ELECTRICAL]120.0 VOLTS, 42.3 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 44.1 WATTS

[OTHER]see www.finelite.com for source files ITL89033 and ITL92993. 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]4886

CHARACTERISTICS

| | |
|---------------------------------|-----------------|
| Lumens Per Lamp | N.A. (absolute) |
| Total Lamp Lumens | N.A. (absolute) |
| Luminaire Lumens | 4886 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 116 |
| Total Luminaire Watts | 42.3 |
| 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 | 3407 | 4481 | 4886 |
| 55 | 3136 | 4259 | 4562 |
| 65 | 2870 | 3886 | 4088 |
| 75 | 2580 | 3383 | 3462 |
| 85 | 2267 | 2658 | 2580 |

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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 | 511.560 | 511.560 | 511.560 | 511.560 | 511.560 |
| 2.5 | 510.332 | 510.741 | 511.560 | 511.969 | 512.379 |
| 5.0 | 507.877 | 508.695 | 511.151 | 513.606 | 514.425 |
| 7.5 | 503.375 | 505.830 | 510.741 | 515.653 | 517.289 |
| 10.0 | 498.055 | 500.510 | 509.514 | 518.927 | 521.791 |
| 12.5 | 492.735 | 494.781 | 508.695 | 523.428 | 527.111 |
| 15.0 | 485.777 | 492.735 | 508.286 | 526.702 | 531.204 |
| 17.5 | 470.635 | 478.002 | 507.877 | 527.930 | 534.478 |
| 20.0 | 457.949 | 466.952 | 507.058 | 527.930 | 535.296 |
| 22.5 | 445.262 | 455.902 | 497.236 | 526.293 | 534.887 |
| 25.0 | 430.938 | 446.490 | 489.870 | 522.610 | 532.022 |
| 27.5 | 413.750 | 432.984 | 482.094 | 517.289 | 526.293 |
| 30.0 | 397.380 | 417.842 | 472.681 | 509.514 | 517.699 |
| 32.5 | 380.191 | 403.928 | 463.678 | 500.510 | 507.058 |
| 35.0 | 363.003 | 388.786 | 448.536 | 488.233 | 493.144 |
| 37.5 | 344.587 | 372.006 | 433.803 | 470.226 | 476.774 |
| 40.0 | 327.398 | 354.818 | 417.433 | 451.401 | 458.767 |
| 42.5 | 307.755 | 338.039 | 399.835 | 432.575 | 437.895 |
| 45.0 | 289.338 | 319.213 | 380.601 | 410.067 | 414.978 |
| 47.5 | 271.331 | 300.388 | 360.957 | 387.967 | 392.469 |
| 50.0 | 252.506 | 281.153 | 339.676 | 365.049 | 366.686 |
| 52.5 | 233.681 | 261.919 | 316.349 | 340.085 | 340.904 |
| 55.0 | 216.083 | 241.866 | 293.431 | 313.075 | 314.303 |
| 57.5 | 198.485 | 222.222 | 269.694 | 287.292 | 287.701 |
| 60.0 | 180.478 | 202.168 | 245.549 | 261.100 | 261.510 |
| 62.5 | 162.471 | 183.343 | 220.994 | 235.318 | 234.090 |
| 65.0 | 145.692 | 163.290 | 197.257 | 207.898 | 207.489 |
| 67.5 | 129.322 | 143.646 | 173.521 | 182.525 | 181.706 |
| 70.0 | 111.725 | 124.821 | 150.194 | 156.742 | 154.696 |
| 72.5 | 96.173 | 106.404 | 127.276 | 132.187 | 130.550 |
| 75.0 | 80.213 | 88.807 | 105.177 | 108.451 | 107.632 |
| 77.5 | 65.480 | 71.209 | 83.896 | 86.351 | 85.533 |
| 80.0 | 50.747 | 55.248 | 63.843 | 65.480 | 63.433 |
| 82.5 | 37.242 | 39.697 | 45.017 | 45.836 | 44.199 |
| 85.0 | 23.736 | 24.964 | 27.829 | 27.010 | 27.010 |
| 87.5 | 11.050 | 11.050 | 11.459 | 10.640 | 10.231 |
| 90.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 92.5 | 12.444 | 21.777 | 23.333 | 23.333 | 23.333 |
| 95.0 | 34.999 | 62.221 | 63.777 | 49.777 | 49.777 |
| 97.5 | 61.443 | 105.776 | 163.330 | 101.887 | 88.665 |
| 100.0 | 92.554 | 144.664 | 258.995 | 191.330 | 150.108 |
| 102.5 | 129.887 | 176.552 | 382.660 | 296.328 | 241.107 |
| 105.0 | 164.108 | 210.774 | 477.547 | 458.103 | 367.105 |
| 107.5 | 199.108 | 244.996 | 521.102 | 670.433 | 563.879 |
| 110.0 | 232.551 | 276.884 | 542.101 | 846.985 | 807.319 |
| 112.5 | 266.773 | 307.995 | 566.990 | 920.095 | 968.316 |
| 115.0 | 299.439 | 337.550 | 608.989 | 942.650 | 1028.982 |
| 117.5 | 325.883 | 364.771 | 642.433 | 953.539 | 1051.537 |
| 120.0 | 349.994 | 391.215 | 664.210 | 996.316 | 1067.870 |
| 122.5 | 370.993 | 416.882 | 678.210 | 1049.204 | 1118.425 |
| 125.0 | 391.215 | 439.437 | 688.321 | 1077.981 | 1177.535 |
| 127.5 | 409.882 | 459.659 | 696.099 | 1078.759 | 1208.645 |
| 130.0 | 425.437 | 477.547 | 702.321 | 1060.092 | 1203.201 |
| 132.5 | 441.770 | 494.658 | 707.765 | 1034.426 | 1174.424 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-4-ID-4FT-H-S-835-WSO-DSO-ITL89033-ITL92993.007.IES****CANDELA TABULATION - (Cont.)**

| | | | | | |
|--------------|---------|---------|---------|----------|----------|
| 135.0 | 457.325 | 510.213 | 711.654 | 1006.427 | 1137.091 |
| 137.5 | 472.103 | 524.213 | 713.210 | 976.094 | 1094.314 |
| 140.0 | 487.658 | 537.435 | 713.987 | 945.761 | 1049.204 |
| 142.5 | 503.213 | 549.879 | 713.210 | 913.873 | 1004.093 |
| 145.0 | 519.546 | 562.323 | 709.321 | 884.318 | 959.761 |
| 147.5 | 532.768 | 572.434 | 703.876 | 854.763 | 916.984 |
| 150.0 | 546.768 | 582.545 | 698.432 | 825.985 | 878.096 |
| 152.5 | 560.768 | 591.101 | 692.210 | 797.986 | 842.318 |
| 155.0 | 573.212 | 599.656 | 685.988 | 771.542 | 806.541 |
| 157.5 | 584.879 | 606.656 | 678.210 | 747.431 | 774.653 |
| 160.0 | 595.767 | 613.656 | 671.988 | 725.654 | 745.876 |
| 162.5 | 605.100 | 619.100 | 664.210 | 705.432 | 720.987 |
| 165.0 | 614.433 | 623.767 | 657.211 | 687.543 | 699.210 |
| 167.5 | 621.433 | 627.655 | 650.989 | 671.988 | 680.543 |
| 170.0 | 626.878 | 631.544 | 646.322 | 659.544 | 664.210 |
| 172.5 | 630.767 | 633.878 | 642.433 | 649.433 | 652.544 |
| 175.0 | 634.655 | 635.433 | 638.544 | 641.655 | 643.989 |
| 177.5 | 636.211 | 636.211 | 636.989 | 637.766 | 637.766 |
| 180.0 | 636.989 | 636.989 | 636.989 | 636.989 | 636.989 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-4-ID-4FT-H-S-835-WSO-DSO-ITL89033-ITL92993.007.IES****ZONAL LUMEN SUMMARY**

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|--------|
| 0-20 | 192.25 | N.A. | 3.90 |
| 0-30 | 415.71 | N.A. | 8.50 |
| 0-40 | 689.37 | N.A. | 14.10 |
| 0-60 | 1220.29 | N.A. | 25.00 |
| 0-80 | 1510.14 | N.A. | 30.90 |
| 0-90 | 1540.14 | N.A. | 31.50 |
| 10-90 | 1491.39 | N.A. | 30.50 |
| 20-40 | 497.12 | N.A. | 10.20 |
| 20-50 | 779.07 | N.A. | 15.90 |
| 40-70 | 715.56 | N.A. | 14.60 |
| 60-80 | 289.85 | N.A. | 5.90 |
| 70-80 | 105.20 | N.A. | 2.20 |
| 80-90 | 30.00 | N.A. | 0.60 |
| 90-110 | 452.25 | N.A. | 9.30 |
| 90-120 | 1077.31 | N.A. | 22.00 |
| 90-130 | 1740.03 | N.A. | 35.60 |
| 90-150 | 2779.74 | N.A. | 56.90 |
| 90-180 | 3346.01 | N.A. | 68.50 |
| 110-180 | 2893.75 | N.A. | 59.20 |
| 0-180 | 4886.14 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|--------|
| 0-10 | 48.75 |
| 10-20 | 143.50 |
| 20-30 | 223.45 |
| 30-40 | 273.67 |
| 40-50 | 281.95 |
| 50-60 | 248.97 |
| 60-70 | 184.64 |
| 70-80 | 105.20 |
| 80-90 | 30.00 |
| 90-100 | 75.36 |
| 100-110 | 376.89 |
| 110-120 | 625.05 |
| 120-130 | 662.72 |
| 130-140 | 584.81 |
| 140-150 | 454.90 |
| 150-160 | 318.48 |
| 160-170 | 186.58 |
| 170-180 | 61.20 |

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-4-ID-4FT-H-S-835-WSO-DSO-ITL89033-ITL92993.007.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

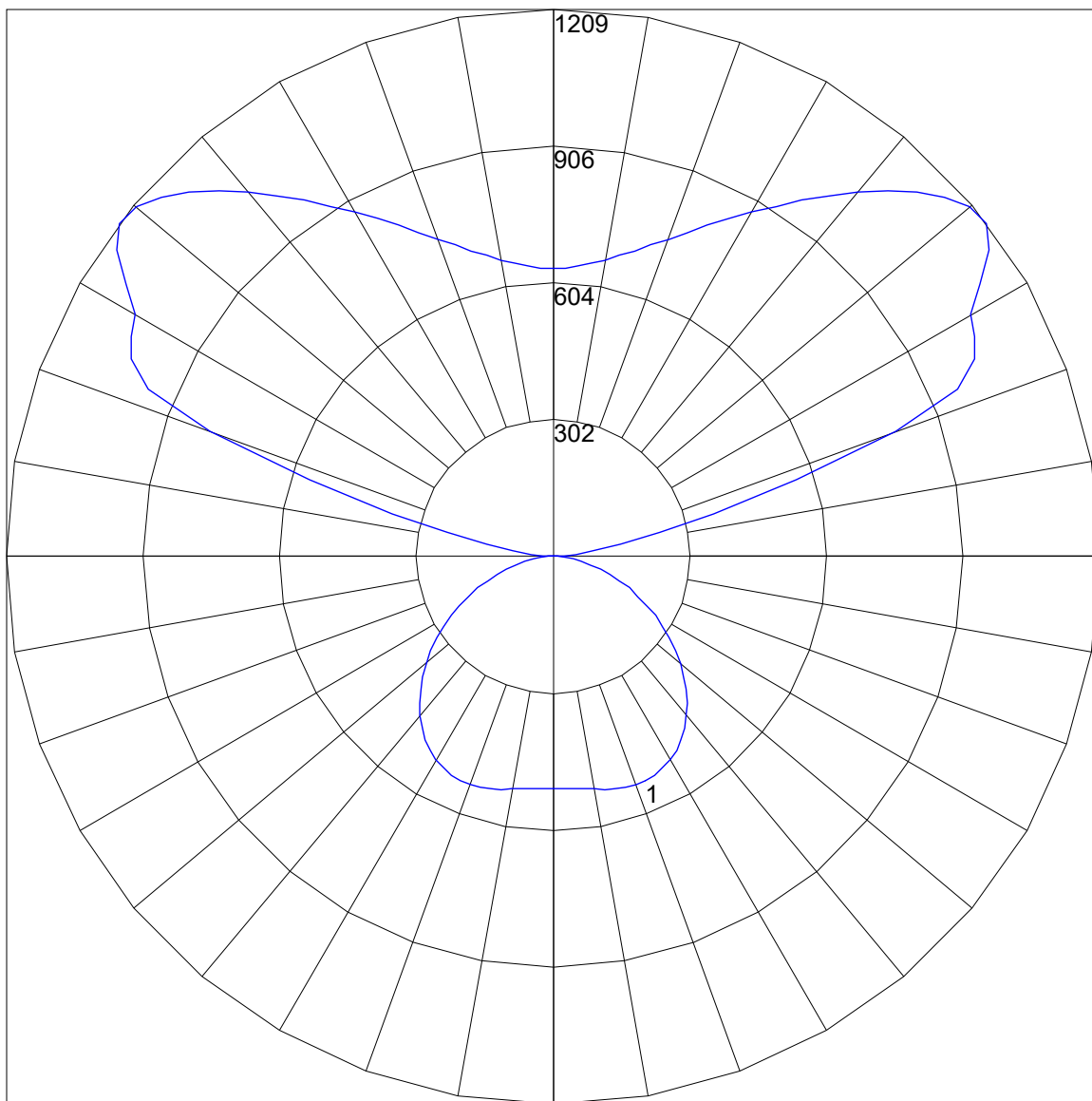
Effective Floor Cavity Reflectance 0.20

| 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 | 103 | 103 | 103 | 103 | 92 | 92 | 92 | 92 | 73 | 73 | 73 | 55 | 55 | 55 | 39 | 39 | 39 | 32 |
| 1 | 94 | 89 | 86 | 82 | 84 | 80 | 77 | 74 | 64 | 62 | 60 | 49 | 47 | 46 | 34 | 34 | 33 | 26 |
| 2 | 85 | 78 | 72 | 67 | 76 | 70 | 65 | 61 | 56 | 52 | 49 | 42 | 40 | 38 | 30 | 29 | 28 | 22 |
| 3 | 78 | 68 | 61 | 55 | 69 | 62 | 56 | 51 | 49 | 45 | 41 | 37 | 35 | 32 | 27 | 25 | 23 | 18 |
| 4 | 71 | 60 | 53 | 47 | 63 | 54 | 48 | 43 | 43 | 39 | 35 | 33 | 30 | 27 | 24 | 22 | 20 | 16 |
| 5 | 65 | 54 | 46 | 40 | 58 | 48 | 42 | 36 | 39 | 34 | 30 | 30 | 26 | 24 | 21 | 19 | 17 | 14 |
| 6 | 60 | 48 | 40 | 34 | 53 | 43 | 36 | 31 | 35 | 30 | 26 | 27 | 23 | 20 | 19 | 17 | 15 | 12 |
| 7 | 55 | 43 | 35 | 30 | 49 | 39 | 32 | 27 | 31 | 26 | 23 | 24 | 21 | 18 | 17 | 15 | 13 | 10 |
| 8 | 51 | 39 | 31 | 26 | 46 | 35 | 29 | 24 | 28 | 23 | 20 | 22 | 18 | 16 | 16 | 14 | 12 | 9 |
| 9 | 47 | 35 | 28 | 23 | 42 | 32 | 26 | 21 | 26 | 21 | 18 | 20 | 17 | 14 | 15 | 12 | 11 | 8 |
| 10 | 44 | 32 | 25 | 21 | 40 | 29 | 23 | 19 | 24 | 19 | 16 | 19 | 15 | 13 | 14 | 11 | 10 | 8 |

IES INDOOR REPORT

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POLAR GRAPH



Maximum Candela = 1208.645 Located At Horizontal Angle = 90, Vertical Angle = 127.5
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)