

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-2-ID-4FT-S-S-835-WSO-MLW-ITL89456-KPL2008-7.001.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89456-KPL2008-7.001 Family Correlation File
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[TESTDATE]07/19/17
[ISSUE DATE]02/07/23
[MANUFACTURER]FINELITE, INC.
[LUMCAT]HP-2-ID-4ft-S-S-835-WSO-MLW
[INPUT_ELECTRICAL]120.0 VOLTS, 28.4 WATTS
[INPUT_ELECTRICAL]277.0 VOLTS, 30.8 WATTS
[OTHER]see www.finelite.com for source files ITL89456 and KPL2008-7. For further details on Finelite family correlation files, go to http://www.finelite.com/download_files/series_downloads/photometry_pdf/FL_Family_Correlation_WhitePaper.pdf
[ABSOLUTE LUMENS]3062

CHARACTERISTICS

| | |
|---------------------------------|-----------------|
| Lumens Per Lamp | N.A. (absolute) |
| Total Lamp Lumens | N.A. (absolute) |
| Luminaire Lumens | 3063 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 108 |
| Total Luminaire Watts | 28.4 |
| Ballast Factor | 1.00 |
| CIE Type | General Diffuse |
| 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) | 0.18 ft |
| Luminous Height | 0.00 ft |

LUMINANCE DATA (cd/sq.m)

| Angle In Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|------------------|---------------|----------------|----------------|
| 45 | 2074 | 2027 | 1963 |
| 55 | 1729 | 1680 | 1599 |
| 65 | 1474 | 1395 | 1305 |
| 75 | 1249 | 1159 | 1047 |
| 85 | 982 | 887 | 796 |

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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 | 3562.363 | 3562.363 | 3562.363 | 3562.363 | 3562.363 |
| 2.5 | 3481.611 | 3502.568 | 3486.610 | 3489.496 | 3496.222 |
| 5.0 | 3284.728 | 3308.765 | 3303.569 | 3306.455 | 3316.261 |
| 7.5 | 2972.251 | 3011.264 | 3023.473 | 3049.950 | 3048.852 |
| 10.0 | 2540.107 | 2621.941 | 2709.498 | 2759.913 | 2766.677 |
| 12.5 | 2074.203 | 2160.167 | 2353.300 | 2439.957 | 2458.433 |
| 15.0 | 1690.046 | 1780.801 | 1971.723 | 2103.083 | 2098.428 |
| 17.5 | 1315.658 | 1415.469 | 1613.138 | 1703.467 | 1650.362 |
| 20.0 | 918.200 | 1055.406 | 1260.592 | 1314.680 | 1292.666 |
| 22.5 | 617.567 | 770.983 | 949.655 | 1007.857 | 980.111 |
| 25.0 | 416.762 | 496.786 | 721.202 | 762.385 | 727.470 |
| 27.5 | 299.064 | 331.944 | 477.442 | 477.098 | 427.530 |
| 30.0 | 218.332 | 251.323 | 305.054 | 300.297 | 277.107 |
| 32.5 | 166.451 | 189.493 | 215.184 | 207.020 | 204.252 |
| 35.0 | 138.926 | 147.774 | 161.919 | 160.077 | 155.016 |
| 37.5 | 126.619 | 127.876 | 134.046 | 129.890 | 122.820 |
| 40.0 | 115.946 | 116.982 | 115.422 | 110.763 | 108.519 |
| 42.5 | 106.296 | 107.103 | 103.418 | 100.376 | 100.290 |
| 45.0 | 96.617 | 97.694 | 94.411 | 92.102 | 91.414 |
| 47.5 | 84.675 | 88.875 | 85.915 | 84.196 | 82.853 |
| 50.0 | 79.459 | 80.327 | 78.390 | 77.039 | 76.622 |
| 52.5 | 72.523 | 72.957 | 70.628 | 68.462 | 67.680 |
| 55.0 | 65.310 | 65.604 | 63.459 | 61.838 | 60.405 |
| 57.5 | 58.567 | 58.698 | 56.544 | 54.653 | 53.821 |
| 60.0 | 52.188 | 52.397 | 50.255 | 48.458 | 47.652 |
| 62.5 | 46.558 | 46.342 | 44.331 | 42.706 | 41.732 |
| 65.0 | 41.044 | 40.778 | 38.833 | 37.232 | 36.331 |
| 67.5 | 35.472 | 35.513 | 33.588 | 32.147 | 31.165 |
| 70.0 | 30.485 | 30.387 | 28.724 | 27.345 | 26.342 |
| 72.5 | 25.474 | 25.531 | 24.090 | 22.788 | 21.871 |
| 75.0 | 21.298 | 21.081 | 19.750 | 18.661 | 17.842 |
| 77.5 | 16.966 | 16.561 | 15.685 | 14.796 | 14.145 |
| 80.0 | 13.142 | 12.823 | 11.947 | 11.173 | 10.829 |
| 82.5 | 9.159 | 9.052 | 8.352 | 7.898 | 7.468 |
| 85.0 | 5.638 | 5.412 | 5.093 | 4.749 | 4.569 |
| 87.5 | 2.301 | 2.350 | 2.113 | 1.973 | 1.875 |
| 90.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 92.5 | 7.369 | 12.692 | 12.692 | 12.282 | 12.282 |
| 95.0 | 19.242 | 33.981 | 33.981 | 28.250 | 27.840 |
| 97.5 | 32.344 | 55.680 | 68.372 | 49.130 | 46.264 |
| 100.0 | 45.854 | 72.466 | 135.925 | 79.017 | 69.600 |
| 102.5 | 60.593 | 88.433 | 187.921 | 139.610 | 110.951 |
| 105.0 | 74.923 | 105.629 | 217.808 | 227.634 | 187.511 |
| 107.5 | 89.252 | 122.415 | 236.232 | 307.060 | 286.180 |
| 110.0 | 103.582 | 137.972 | 252.608 | 353.733 | 357.418 |
| 112.5 | 117.911 | 153.121 | 271.850 | 384.439 | 399.997 |
| 115.0 | 132.650 | 167.450 | 294.778 | 406.548 | 429.065 |
| 117.5 | 147.389 | 181.780 | 319.752 | 427.428 | 451.583 |
| 120.0 | 162.128 | 196.928 | 340.223 | 449.536 | 474.101 |
| 122.5 | 175.638 | 209.620 | 354.961 | 480.651 | 497.847 |
| 125.0 | 188.330 | 221.902 | 363.150 | 514.633 | 531.828 |
| 127.5 | 200.203 | 233.366 | 368.063 | 537.560 | 569.494 |
| 130.0 | 210.029 | 243.192 | 370.929 | 546.976 | 596.515 |
| 132.5 | 219.855 | 252.199 | 371.747 | 543.292 | 605.113 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-2-ID-4FT-S-S-835-WSO-MLW-ITL89456-KPL2008-7.001.IES****CANDELA TABULATION - (Cont.)**

| | | | | | |
|--------------|---------|---------|---------|---------|---------|
| 135.0 | 228.453 | 259.568 | 371.338 | 531.828 | 596.515 |
| 137.5 | 236.232 | 266.528 | 370.110 | 516.270 | 578.501 |
| 140.0 | 244.010 | 272.669 | 368.063 | 499.075 | 555.574 |
| 142.5 | 251.380 | 278.401 | 365.197 | 479.833 | 531.009 |
| 145.0 | 259.159 | 283.723 | 362.331 | 461.409 | 506.035 |
| 147.5 | 265.709 | 287.818 | 359.056 | 442.576 | 480.651 |
| 150.0 | 272.260 | 292.321 | 354.961 | 425.790 | 456.905 |
| 152.5 | 278.401 | 295.596 | 350.048 | 409.823 | 434.797 |
| 155.0 | 284.133 | 298.053 | 345.135 | 394.265 | 414.326 |
| 157.5 | 289.455 | 301.328 | 340.632 | 379.936 | 395.903 |
| 160.0 | 293.959 | 303.375 | 335.310 | 366.016 | 378.707 |
| 162.5 | 298.053 | 305.013 | 329.987 | 354.143 | 362.740 |
| 165.0 | 301.328 | 306.651 | 324.665 | 342.679 | 349.230 |
| 167.5 | 304.194 | 307.879 | 320.571 | 332.853 | 337.357 |
| 170.0 | 306.651 | 309.107 | 317.705 | 325.074 | 327.940 |
| 172.5 | 307.879 | 309.926 | 314.429 | 318.524 | 320.980 |
| 175.0 | 309.517 | 310.335 | 312.382 | 314.429 | 315.248 |
| 177.5 | 310.335 | 310.335 | 311.154 | 311.154 | 311.564 |
| 180.0 | 310.745 | 310.745 | 310.745 | 310.745 | 310.745 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-2-ID-4FT-S-S-835-WSO-MLW-ITL89456-KPL2008-7.001.IES****ZONAL LUMEN SUMMARY**

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|--------|
| 0-20 | 821.73 | N.A. | 26.80 |
| 0-30 | 1117.35 | N.A. | 36.50 |
| 0-40 | 1221.87 | N.A. | 39.90 |
| 0-60 | 1351.98 | N.A. | 44.10 |
| 0-80 | 1411.69 | N.A. | 46.10 |
| 0-90 | 1417.56 | N.A. | 46.30 |
| 10-90 | 1122.05 | N.A. | 36.60 |
| 20-40 | 400.14 | N.A. | 13.10 |
| 20-50 | 473.33 | N.A. | 15.50 |
| 40-70 | 168.78 | N.A. | 5.50 |
| 60-80 | 59.71 | N.A. | 1.90 |
| 70-80 | 21.04 | N.A. | 0.70 |
| 80-90 | 5.88 | N.A. | 0.20 |
| 90-110 | 215.26 | N.A. | 7.00 |
| 90-120 | 499.27 | N.A. | 16.30 |
| 90-130 | 823.93 | N.A. | 26.90 |
| 90-150 | 1361.52 | N.A. | 44.50 |
| 90-180 | 1644.94 | N.A. | 53.70 |
| 110-180 | 1429.68 | N.A. | 46.70 |
| 0-180 | 3062.51 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|--------|
| 0-10 | 295.52 |
| 10-20 | 526.21 |
| 20-30 | 295.62 |
| 30-40 | 104.53 |
| 40-50 | 73.19 |
| 50-60 | 56.92 |
| 60-70 | 38.67 |
| 70-80 | 21.04 |
| 80-90 | 5.88 |
| 90-100 | 37.55 |
| 100-110 | 177.72 |
| 110-120 | 284.01 |
| 120-130 | 324.65 |
| 130-140 | 303.43 |
| 140-150 | 234.16 |
| 150-160 | 160.96 |
| 160-170 | 92.50 |
| 170-180 | 29.97 |

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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

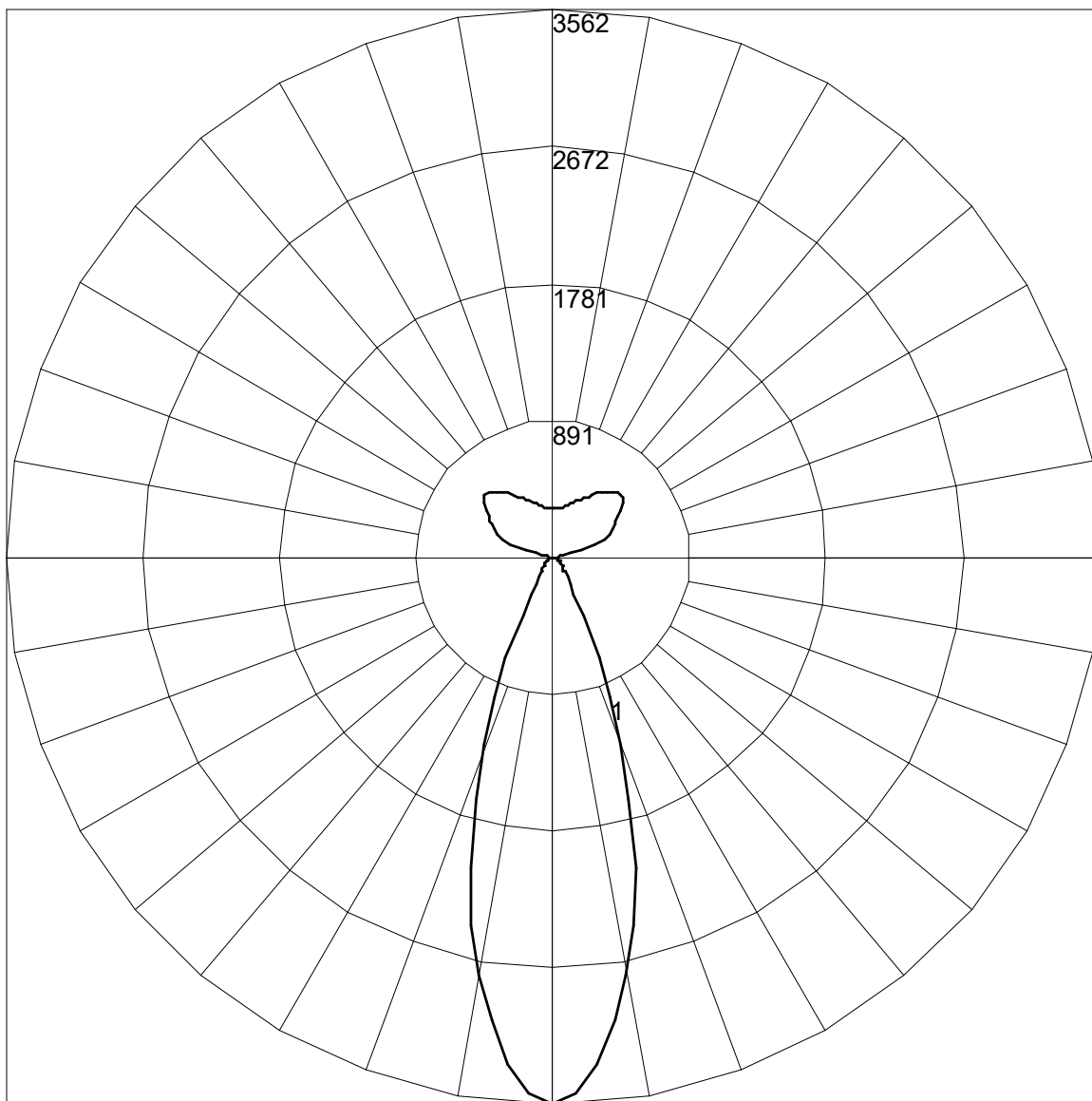
Effective Floor Cavity Reflectance 0.20

| 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 | 106 | 106 | 106 | 106 | 98 | 98 | 98 | 98 | 81 | 81 | 81 | 66 | 66 | 66 | 53 | 53 | 53 | 46 |
| 1 | 99 | 96 | 92 | 90 | 91 | 88 | 86 | 83 | 74 | 73 | 71 | 62 | 60 | 59 | 50 | 49 | 49 | 43 |
| 2 | 92 | 86 | 82 | 77 | 85 | 80 | 76 | 72 | 68 | 65 | 63 | 57 | 55 | 54 | 47 | 46 | 45 | 40 |
| 3 | 86 | 79 | 73 | 68 | 79 | 73 | 68 | 64 | 63 | 59 | 56 | 53 | 51 | 49 | 44 | 43 | 42 | 38 |
| 4 | 81 | 72 | 66 | 61 | 75 | 67 | 62 | 58 | 58 | 54 | 51 | 50 | 47 | 45 | 42 | 40 | 39 | 36 |
| 5 | 76 | 66 | 60 | 55 | 70 | 62 | 57 | 52 | 54 | 50 | 47 | 47 | 44 | 42 | 40 | 38 | 37 | 34 |
| 6 | 71 | 61 | 55 | 50 | 66 | 58 | 52 | 48 | 51 | 47 | 43 | 44 | 41 | 39 | 38 | 36 | 35 | 32 |
| 7 | 67 | 57 | 51 | 46 | 63 | 54 | 48 | 44 | 48 | 44 | 40 | 42 | 39 | 37 | 37 | 35 | 33 | 31 |
| 8 | 64 | 53 | 47 | 43 | 59 | 51 | 45 | 41 | 45 | 41 | 38 | 40 | 37 | 35 | 35 | 33 | 31 | 29 |
| 9 | 60 | 50 | 44 | 40 | 56 | 48 | 42 | 38 | 43 | 39 | 36 | 38 | 35 | 33 | 34 | 32 | 30 | 28 |
| 10 | 57 | 47 | 41 | 37 | 54 | 45 | 40 | 36 | 41 | 36 | 34 | 36 | 33 | 31 | 32 | 30 | 29 | 27 |

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POLAR GRAPH



Maximum Candela = 3562.363 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)