

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-WM-WL-D-4FT-S-835-F-ITL90390.005.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL90390.005 Family Correlation File
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[TESTDATE]04/13/18
[ISSUEDATE]06/18/18
[MANUFAC]FINELITE, INC.
[LUMCAT]HP-4-WM-WL-D-4ft-S-835-F
[INPUT_ELECTRICAL]120.0 VOLTS, 14.4 WATTS
[INPUT_ELECTRICAL]277.0 VOLTS, 15.8 WATTS
[ABSOLUTE LUMENS]1415
[OTHER]see www.finelite.com for source file ITL90390. 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 | 1415 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 98 |
| Total Luminaire Watts | 14.4 |
| Ballast Factor | 1.00 |
| CIE Type | Direct |
| Spacing Criterion (0-180) | 1.24 |
| Spacing Criterion (90-270) | 1.24 |
| Spacing Criterion (Diagonal) | 1.36 |
| Basic Luminous Shape | Rectangular |
| Luminous Length (0-180) | 3.88 ft |
| Luminous Width (90-270) | 0.31 ft |
| Luminous Height | 0.00 ft |

LUMINANCE DATA (cd/sq.m)

| Angle In Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|---------------------|------------------|-------------------|-------------------|
| 45 | 4186 | 4134 | 4073 |
| 55 | 3987 | 3930 | 3848 |
| 65 | 3700 | 3631 | 3562 |
| 75 | 3175 | 3133 | 3147 |
| 85 | 2169 | 2295 | 2378 |

CANDELA TABULATION

| | <u>0.0</u> | <u>22.5</u> | <u>45.0</u> | <u>67.5</u> | <u>90.0</u> |
|------|------------|-------------|-------------|-------------|-------------|
| 0.0 | 514.248 | 514.248 | 514.248 | 514.248 | 514.248 |
| 2.5 | 513.429 | 513.429 | 513.429 | 513.429 | 513.429 |
| 5.0 | 511.791 | 511.791 | 511.791 | 511.382 | 511.382 |
| 7.5 | 508.516 | 508.106 | 508.106 | 507.697 | 507.697 |
| 10.0 | 504.831 | 503.193 | 504.012 | 503.602 | 502.784 |
| 12.5 | 499.508 | 496.642 | 498.280 | 497.870 | 496.642 |
| 15.0 | 492.548 | 489.272 | 490.910 | 490.910 | 489.272 |
| 17.5 | 485.178 | 480.674 | 483.131 | 482.312 | 480.674 |
| 20.0 | 475.761 | 470.848 | 473.304 | 472.486 | 470.848 |
| 22.5 | 465.116 | 459.793 | 463.069 | 461.431 | 459.793 |
| 25.0 | 453.242 | 448.329 | 451.604 | 449.557 | 447.920 |
| 27.5 | 441.778 | 436.455 | 439.321 | 437.274 | 435.637 |
| 30.0 | 428.267 | 423.354 | 425.401 | 423.354 | 421.716 |
| 32.5 | 414.346 | 409.023 | 411.480 | 408.614 | 406.976 |
| 35.0 | 399.606 | 394.693 | 396.331 | 393.056 | 391.827 |
| 37.5 | 383.639 | 379.135 | 380.363 | 377.497 | 375.450 |
| 40.0 | 367.671 | 363.167 | 363.576 | 361.120 | 359.073 |
| 42.5 | 350.884 | 346.790 | 346.380 | 343.924 | 341.876 |
| 45.0 | 333.278 | 329.184 | 329.184 | 326.318 | 324.271 |
| 47.5 | 315.263 | 311.578 | 311.169 | 307.894 | 306.256 |
| 50.0 | 296.839 | 293.154 | 292.335 | 289.060 | 287.422 |
| 52.5 | 276.777 | 274.320 | 273.911 | 269.816 | 268.588 |
| 55.0 | 257.533 | 254.667 | 253.848 | 250.573 | 248.526 |
| 57.5 | 237.881 | 234.605 | 234.196 | 231.330 | 229.282 |
| 60.0 | 217.818 | 214.543 | 213.724 | 211.267 | 209.630 |
| 62.5 | 197.347 | 194.890 | 193.252 | 191.205 | 189.567 |
| 65.0 | 176.056 | 174.418 | 172.781 | 170.734 | 169.505 |
| 67.5 | 155.175 | 153.947 | 152.309 | 150.262 | 149.443 |
| 70.0 | 134.294 | 132.247 | 131.428 | 130.200 | 129.790 |
| 72.5 | 113.003 | 112.185 | 111.366 | 110.137 | 110.137 |
| 75.0 | 92.532 | 92.122 | 91.304 | 90.894 | 91.713 |
| 77.5 | 72.470 | 72.470 | 72.060 | 72.470 | 72.879 |
| 80.0 | 54.045 | 54.045 | 54.045 | 54.455 | 55.273 |
| 82.5 | 36.030 | 36.849 | 37.258 | 37.668 | 38.487 |
| 85.0 | 21.291 | 22.109 | 22.519 | 22.928 | 23.338 |
| 87.5 | 9.826 | 9.826 | 9.417 | 9.417 | 9.417 |
| 90.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP-4-WM-WL-D-4FT-S-835-F-ITL90390.005.IES

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|--------|
| 0-20 | 186.92 | N.A. | 13.20 |
| 0-30 | 394.33 | N.A. | 27.90 |
| 0-40 | 641.33 | N.A. | 45.30 |
| 0-60 | 1120.8 | N.A. | 79.20 |
| 0-80 | 1388.71 | N.A. | 98.10 |
| 0-90 | 1414.95 | N.A. | 100.00 |
| 10-90 | 1366.38 | N.A. | 96.60 |
| 20-40 | 454.42 | N.A. | 32.10 |
| 20-50 | 707.65 | N.A. | 50.00 |
| 40-70 | 650.29 | N.A. | 46.00 |
| 60-80 | 267.92 | N.A. | 18.90 |
| 70-80 | 97.09 | N.A. | 6.90 |
| 80-90 | 26.23 | N.A. | 1.90 |
| 90-110 | 0.00 | N.A. | 0.00 |
| 90-120 | 0.00 | N.A. | 0.00 |
| 90-130 | 0.00 | N.A. | 0.00 |
| 90-150 | 0.00 | N.A. | 0.00 |
| 90-180 | 0.00 | N.A. | 0.00 |
| 110-180 | 0.00 | N.A. | 0.00 |
| 0-180 | 1414.95 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

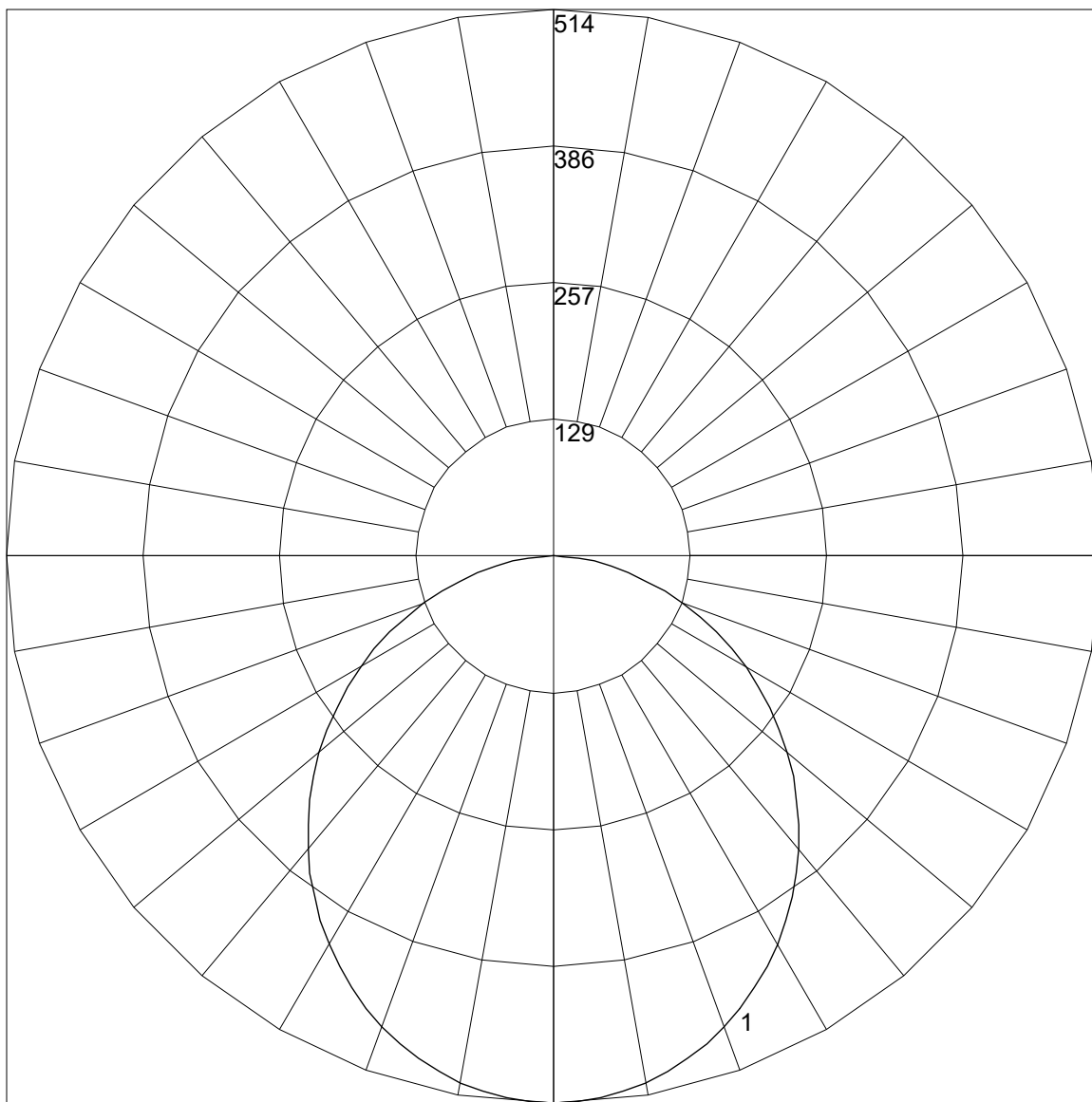
| Zone | Lumens |
|---------|--------|
| 0-10 | 48.57 |
| 10-20 | 138.35 |
| 20-30 | 207.41 |
| 30-40 | 247.00 |
| 40-50 | 253.23 |
| 50-60 | 226.23 |
| 60-70 | 170.83 |
| 70-80 | 97.09 |
| 80-90 | 26.23 |
| 90-100 | 0.00 |
| 100-110 | 0.00 |
| 110-120 | 0.00 |
| 120-130 | 0.00 |
| 130-140 | 0.00 |
| 140-150 | 0.00 |
| 150-160 | 0.00 |
| 160-170 | 0.00 |
| 170-180 | 0.00 |

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 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 109 | 104 | 100 | 96 | 106 | 102 | 98 | 94 | 97 | 94 | 91 | 94 | 91 | 89 | 90 | 88 | 86 | 84 |
| 2 | 99 | 91 | 84 | 78 | 96 | 89 | 82 | 77 | 85 | 80 | 75 | 82 | 78 | 74 | 79 | 75 | 72 | 70 |
| 3 | 90 | 80 | 71 | 65 | 88 | 78 | 70 | 64 | 75 | 69 | 63 | 72 | 67 | 62 | 70 | 65 | 61 | 59 |
| 4 | 83 | 71 | 62 | 55 | 80 | 69 | 61 | 55 | 67 | 60 | 54 | 64 | 58 | 53 | 62 | 57 | 52 | 50 |
| 5 | 76 | 63 | 54 | 47 | 74 | 62 | 53 | 47 | 60 | 52 | 47 | 58 | 51 | 46 | 56 | 50 | 46 | 43 |
| 6 | 70 | 57 | 48 | 41 | 68 | 56 | 47 | 41 | 54 | 46 | 41 | 52 | 46 | 40 | 51 | 45 | 40 | 38 |
| 7 | 65 | 52 | 43 | 37 | 63 | 51 | 42 | 36 | 49 | 42 | 36 | 48 | 41 | 36 | 46 | 40 | 36 | 34 |
| 8 | 61 | 47 | 39 | 33 | 59 | 46 | 38 | 33 | 45 | 38 | 32 | 44 | 37 | 32 | 43 | 36 | 32 | 30 |
| 9 | 57 | 43 | 35 | 29 | 55 | 43 | 35 | 29 | 41 | 34 | 29 | 40 | 34 | 29 | 39 | 33 | 29 | 27 |
| 10 | 53 | 40 | 32 | 27 | 52 | 39 | 32 | 27 | 38 | 31 | 26 | 37 | 31 | 26 | 36 | 31 | 26 | 24 |

POLAR GRAPH



Maximum Candela = 514.248 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)