

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-WW-D-FO-4FT-S-835-ITL85138.001.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85138.001 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/15/15

[ISSUEDATE]02/10/17

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HP-2-WW-D-FO-4ft-S-835

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 8.1 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 10.2 WATTS

[ABSOLUTE]LUMENS]728

[OTHER]see www.finelite.com for source file ITL85138. 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 | 728 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 90 |
| Total Luminaire Watts | 8.1 |
| Ballast Factor | 1.00 |
| CIE Type | Direct |
| Spacing Criterion (0-180) | 1.42 |
| Spacing Criterion (90-270) | 1.22 |
| Spacing Criterion (Diagonal) | 1.24 |
| Basic Luminous Shape | Rectangular |
| Luminous Length (0-180) | 0.14 ft |
| Luminous Width (90-270) | 4.00 ft |
| Luminous Height | 0.00 ft |

LUMINANCE DATA (cd/sq.m)

| Angle In Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|---------------------|------------------|-------------------|-------------------|
| 45 | 6076 | 6696 | 5357 |
| 55 | 3657 | 5444 | 4653 |
| 65 | 2056 | 3574 | 3963 |
| 75 | 1724 | 2086 | 3205 |
| 85 | 1347 | 1706 | 2425 |

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP-2-WW-D-FO-4FT-S-835-ITL85138.001.IES

CANDELA TABULATION

| | <u>0.0</u> | <u>22.5</u> | <u>45.0</u> | <u>67.5</u> | <u>90.0</u> | <u>112.5</u> | <u>135.0</u> | <u>157.5</u> | <u>180.0</u> |
|------|------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|
| 0.0 | 342.222 | 342.222 | 342.222 | 342.222 | 342.222 | 342.222 | 342.222 | 342.222 | 342.222 |
| 2.5 | 351.228 | 350.819 | 349.181 | 345.906 | 341.813 | 337.719 | 334.444 | 331.988 | 331.579 |
| 5.0 | 359.006 | 358.187 | 354.094 | 348.363 | 340.585 | 332.398 | 325.439 | 320.117 | 318.480 |
| 7.5 | 364.327 | 363.509 | 358.187 | 349.591 | 338.129 | 325.848 | 314.795 | 306.608 | 303.333 |
| 10.0 | 368.830 | 367.193 | 360.234 | 348.772 | 335.263 | 318.070 | 302.924 | 290.643 | 286.140 |
| 12.5 | 371.696 | 369.649 | 361.462 | 347.953 | 331.579 | 309.064 | 289.825 | 274.269 | 268.129 |
| 15.0 | 372.515 | 370.468 | 361.053 | 345.088 | 326.667 | 298.830 | 274.678 | 255.848 | 248.480 |
| 17.5 | 372.105 | 370.058 | 359.825 | 341.813 | 320.526 | 287.778 | 259.942 | 237.836 | 228.421 |
| 20.0 | 369.240 | 367.193 | 356.959 | 336.901 | 313.567 | 276.316 | 243.567 | 218.596 | 207.953 |
| 22.5 | 365.556 | 363.099 | 352.865 | 331.579 | 306.199 | 264.035 | 227.193 | 199.357 | 187.895 |
| 25.0 | 359.415 | 357.368 | 347.134 | 325.029 | 296.784 | 250.936 | 209.591 | 180.526 | 169.883 |
| 27.5 | 350.819 | 349.591 | 340.175 | 317.251 | 287.368 | 237.427 | 193.626 | 163.333 | 152.690 |
| 30.0 | 341.813 | 339.766 | 331.579 | 308.246 | 276.316 | 223.509 | 177.251 | 147.368 | 137.544 |
| 32.5 | 329.942 | 329.123 | 321.345 | 298.830 | 264.854 | 209.591 | 162.105 | 133.041 | 123.626 |
| 35.0 | 314.795 | 315.205 | 309.474 | 288.187 | 252.573 | 195.673 | 148.187 | 120.351 | 111.754 |
| 37.5 | 297.193 | 299.649 | 296.374 | 276.316 | 239.883 | 182.164 | 134.678 | 108.889 | 101.520 |
| 40.0 | 276.725 | 280.819 | 282.047 | 263.626 | 226.374 | 168.246 | 122.398 | 98.655 | 92.105 |
| 42.5 | 250.526 | 259.123 | 265.263 | 249.708 | 212.047 | 155.146 | 111.345 | 89.649 | 83.918 |
| 45.0 | 224.737 | 234.561 | 247.661 | 234.971 | 198.129 | 142.865 | 100.702 | 81.462 | 76.959 |
| 47.5 | 193.626 | 207.544 | 228.421 | 219.006 | 183.392 | 130.175 | 91.287 | 73.684 | 70.000 |
| 50.0 | 163.333 | 179.298 | 207.544 | 203.041 | 169.064 | 118.304 | 82.281 | 67.135 | 64.269 |
| 52.5 | 135.088 | 152.690 | 185.848 | 185.848 | 153.918 | 106.842 | 73.684 | 60.994 | 58.538 |
| 55.0 | 109.708 | 126.082 | 163.333 | 169.064 | 139.591 | 95.789 | 65.906 | 55.263 | 53.216 |
| 57.5 | 87.602 | 102.339 | 140.819 | 151.871 | 126.491 | 85.146 | 58.947 | 49.942 | 48.304 |
| 60.0 | 70.000 | 80.643 | 118.713 | 135.088 | 112.982 | 75.322 | 51.988 | 45.029 | 43.392 |
| 62.5 | 56.082 | 63.860 | 97.836 | 118.713 | 100.292 | 65.088 | 45.848 | 40.117 | 38.889 |
| 65.0 | 45.439 | 51.170 | 79.006 | 103.158 | 87.602 | 56.491 | 39.708 | 35.205 | 34.386 |
| 67.5 | 37.661 | 41.345 | 62.632 | 87.602 | 75.731 | 47.895 | 33.977 | 30.702 | 29.474 |
| 70.0 | 31.930 | 33.977 | 48.304 | 73.275 | 64.269 | 40.117 | 29.064 | 25.789 | 24.561 |
| 72.5 | 27.427 | 28.246 | 37.251 | 59.766 | 53.626 | 32.749 | 24.152 | 21.287 | 20.877 |
| 75.0 | 23.333 | 23.743 | 28.246 | 46.667 | 43.392 | 25.789 | 19.240 | 17.602 | 17.193 |
| 77.5 | 19.240 | 19.240 | 21.696 | 34.795 | 33.977 | 19.240 | 15.146 | 14.327 | 13.918 |
| 80.0 | 15.556 | 15.556 | 16.784 | 24.152 | 25.789 | 13.918 | 11.462 | 11.053 | 10.643 |
| 82.5 | 11.462 | 11.462 | 11.871 | 15.146 | 18.012 | 8.596 | 7.778 | 7.778 | 7.368 |
| 85.0 | 6.140 | 6.550 | 7.778 | 8.596 | 11.053 | 5.322 | 4.912 | 4.912 | 4.912 |
| 87.5 | 3.275 | 3.684 | 3.684 | 3.684 | 4.912 | 2.047 | 2.047 | 2.047 | 2.047 |
| 90.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP-2-WW-D-FO-4FT-S-835-ITL85138.001.IES

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|--------|-------|--------|
| 0-20 | 121.63 | N.A. | 16.70 |
| 0-30 | 250.00 | N.A. | 34.30 |
| 0-40 | 393.86 | N.A. | 54.10 |
| 0-60 | 628.10 | N.A. | 86.30 |
| 0-80 | 719.98 | N.A. | 98.90 |
| 0-90 | 727.98 | N.A. | 100.00 |
| 10-90 | 695.82 | N.A. | 95.60 |
| 20-40 | 272.23 | N.A. | 37.40 |
| 20-50 | 405.89 | N.A. | 55.80 |
| 40-70 | 295.85 | N.A. | 40.60 |
| 60-80 | 91.88 | N.A. | 12.60 |
| 70-80 | 30.27 | N.A. | 4.20 |
| 80-90 | 8.00 | N.A. | 1.10 |
| 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 | 727.98 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|--------|
| 0-10 | 32.16 |
| 10-20 | 89.47 |
| 20-30 | 128.36 |
| 30-40 | 143.87 |
| 40-50 | 133.66 |
| 50-60 | 100.58 |
| 60-70 | 61.61 |
| 70-80 | 30.27 |
| 80-90 | 8.00 |
| 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 |

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP-2-WW-D-FO-4FT-S-835-ITL85138.001.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

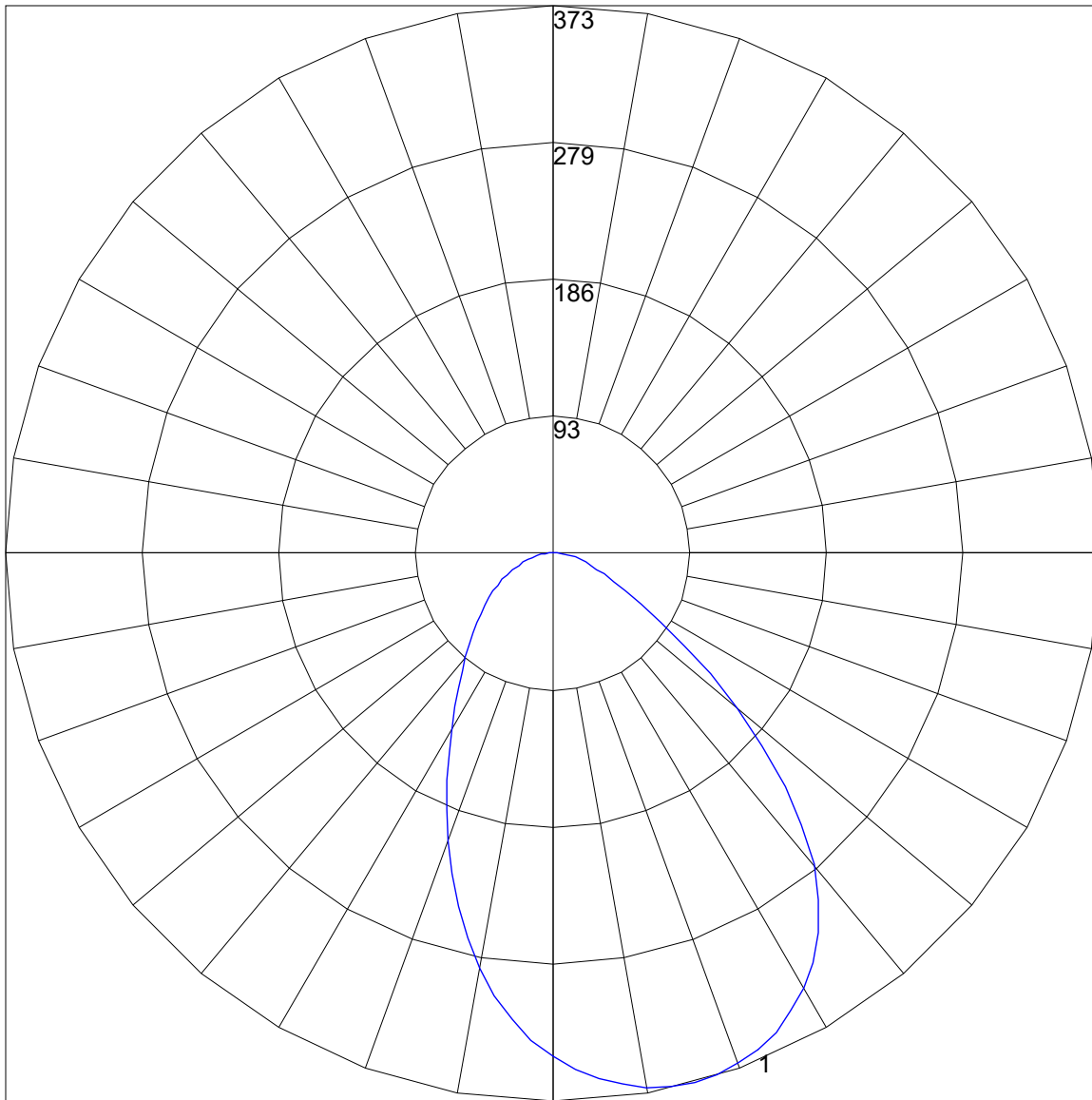
Effective Floor Cavity Reflectance 0.20

| 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 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 110 | 106 | 102 | 99 | 107 | 104 | 100 | 97 | 99 | 97 | 94 | 96 | 93 | 91 | 92 | 90 | 88 | 86 |
| 2 | 101 | 94 | 88 | 83 | 99 | 92 | 86 | 82 | 88 | 84 | 80 | 85 | 81 | 78 | 82 | 79 | 76 | 74 |
| 3 | 93 | 84 | 76 | 70 | 91 | 82 | 75 | 70 | 79 | 73 | 68 | 76 | 71 | 67 | 74 | 70 | 66 | 64 |
| 4 | 86 | 75 | 67 | 61 | 84 | 74 | 66 | 60 | 71 | 65 | 59 | 69 | 63 | 59 | 67 | 62 | 58 | 56 |
| 5 | 79 | 68 | 59 | 53 | 77 | 66 | 59 | 53 | 64 | 57 | 52 | 62 | 56 | 52 | 61 | 55 | 51 | 49 |
| 6 | 74 | 61 | 53 | 47 | 72 | 60 | 52 | 47 | 59 | 52 | 46 | 57 | 51 | 46 | 55 | 50 | 46 | 44 |
| 7 | 69 | 56 | 48 | 42 | 67 | 55 | 47 | 42 | 54 | 47 | 41 | 52 | 46 | 41 | 51 | 45 | 41 | 39 |
| 8 | 64 | 51 | 43 | 38 | 63 | 51 | 43 | 38 | 49 | 42 | 37 | 48 | 42 | 37 | 47 | 41 | 37 | 35 |
| 9 | 60 | 47 | 39 | 34 | 59 | 47 | 39 | 34 | 46 | 39 | 34 | 45 | 38 | 34 | 44 | 38 | 34 | 32 |
| 10 | 56 | 44 | 36 | 31 | 55 | 43 | 36 | 31 | 42 | 36 | 31 | 41 | 35 | 31 | 41 | 35 | 31 | 29 |

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-2-WW-D-FO-4FT-S-835-ITL85138.001.IES

POLAR GRAPH



Maximum Candela = 372.515 Located At Horizontal Angle = 0, Vertical Angle = 15
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)