

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-V-V-837-XXIC-ITL85132.200.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL85132.200 Family Correlation File
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[TESTDATE]08/11/15
[ISSUE DATE]04/27/2021
[MANUFAC]FINELITE, INC.
[LUMCAT]HP-2-ID-4ft-V-V-837-XXIC
[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 70.0 WATTS
[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 69.9 WATTS
[OTHER]see www.finelite.com for source file ITL85132. 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]6778

CHARACTERISTICS

| | |
|---------------------------------|-----------------|
| Lumens Per Lamp | N.A. (absolute) |
| Total Lamp Lumens | N.A. (absolute) |
| Luminaire Lumens | 6778 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 97 |
| Total Luminaire Watts | 70 |
| 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 | 15599 | 14953 | 14224 |
| 55 | 14198 | 13505 | 12812 |
| 65 | 12823 | 12161 | 11569 |
| 75 | 11550 | 10925 | 10469 |
| 85 | 10138 | 9800 | 9293 |

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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 | 1274.58 | 1274.58 | 1274.58 | 1274.58 | 1274.58 |
| 2.5 | 1271.67 | 1273.61 | 1272.64 | 1272.64 | 1272.64 |
| 5.0 | 1266.82 | 1267.79 | 1265.85 | 1264.88 | 1264.88 |
| 7.5 | 1256.15 | 1257.12 | 1254.21 | 1253.24 | 1253.24 |
| 10.0 | 1242.57 | 1240.63 | 1238.69 | 1237.72 | 1235.78 |
| 12.5 | 1224.14 | 1220.26 | 1218.32 | 1215.41 | 1211.53 |
| 15.0 | 1203.77 | 1196.01 | 1194.07 | 1188.25 | 1183.40 |
| 17.5 | 1178.55 | 1167.88 | 1164.97 | 1156.24 | 1150.42 |
| 20.0 | 1149.45 | 1136.84 | 1131.99 | 1121.32 | 1112.59 |
| 22.5 | 1115.50 | 1101.92 | 1096.10 | 1084.46 | 1073.79 |
| 25.0 | 1080.58 | 1065.06 | 1056.33 | 1043.72 | 1032.08 |
| 27.5 | 1040.81 | 1027.23 | 1016.56 | 1000.07 | 987.46 |
| 30.0 | 1000.07 | 985.52 | 972.91 | 954.48 | 941.87 |
| 32.5 | 956.42 | 941.87 | 928.29 | 907.92 | 898.22 |
| 35.0 | 913.74 | 897.25 | 882.70 | 860.39 | 850.69 |
| 37.5 | 868.15 | 852.63 | 836.14 | 814.80 | 804.13 |
| 40.0 | 821.59 | 805.10 | 790.55 | 766.30 | 756.60 |
| 42.5 | 774.06 | 758.54 | 743.02 | 718.77 | 709.07 |
| 45.0 | 726.53 | 711.98 | 696.46 | 672.21 | 662.51 |
| 47.5 | 679.00 | 664.45 | 648.93 | 625.65 | 616.92 |
| 50.0 | 630.50 | 616.92 | 602.37 | 579.09 | 571.33 |
| 52.5 | 582.97 | 570.36 | 555.81 | 534.47 | 526.71 |
| 55.0 | 536.41 | 525.74 | 510.22 | 490.82 | 484.03 |
| 57.5 | 490.82 | 481.12 | 465.60 | 448.14 | 442.32 |
| 60.0 | 444.26 | 435.53 | 421.95 | 405.46 | 400.61 |
| 62.5 | 400.61 | 391.88 | 379.27 | 366.66 | 360.84 |
| 65.0 | 356.96 | 349.20 | 338.53 | 326.89 | 322.04 |
| 67.5 | 316.22 | 307.49 | 299.73 | 288.09 | 284.21 |
| 70.0 | 274.51 | 268.69 | 259.96 | 252.20 | 247.35 |
| 72.5 | 234.74 | 229.89 | 223.10 | 216.31 | 212.43 |
| 75.0 | 196.91 | 192.06 | 186.24 | 181.39 | 178.48 |
| 77.5 | 160.05 | 156.17 | 152.29 | 148.41 | 144.53 |
| 80.0 | 124.16 | 122.22 | 118.34 | 115.43 | 113.49 |
| 82.5 | 90.21 | 88.27 | 86.33 | 84.39 | 82.45 |
| 85.0 | 58.20 | 57.23 | 56.26 | 55.29 | 53.35 |
| 87.5 | 26.19 | 25.22 | 26.19 | 27.16 | 26.19 |
| 90.0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 92.5 | 29.10 | 29.10 | 29.10 | 32.01 | 32.01 |
| 95.0 | 68.87 | 65.96 | 65.96 | 66.93 | 67.90 |
| 97.5 | 108.64 | 105.73 | 103.79 | 104.76 | 104.76 |
| 100.0 | 149.38 | 144.53 | 144.53 | 144.53 | 143.56 |
| 102.5 | 192.06 | 188.18 | 186.24 | 185.27 | 185.27 |
| 105.0 | 236.68 | 233.77 | 228.92 | 227.95 | 226.98 |
| 107.5 | 282.27 | 279.36 | 273.54 | 272.57 | 271.60 |
| 110.0 | 329.80 | 326.89 | 322.04 | 320.10 | 317.19 |
| 112.5 | 379.27 | 374.42 | 371.51 | 366.66 | 363.75 |
| 115.0 | 428.74 | 425.83 | 423.89 | 414.19 | 412.25 |
| 117.5 | 481.12 | 476.27 | 476.27 | 464.63 | 462.69 |
| 120.0 | 534.47 | 526.71 | 528.65 | 517.01 | 513.13 |
| 122.5 | 584.91 | 577.15 | 581.03 | 571.33 | 564.54 |
| 125.0 | 641.17 | 629.53 | 633.41 | 623.71 | 618.86 |
| 127.5 | 696.46 | 683.85 | 685.79 | 678.03 | 676.09 |
| 130.0 | 750.78 | 738.17 | 740.11 | 730.41 | 731.38 |
| 132.5 | 805.10 | 791.52 | 794.43 | 784.73 | 784.73 |

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CANDELA TABULATION - (Cont.)

| | | | | | |
|--------------|---------|---------|---------|---------|---------|
| 135.0 | 857.48 | 844.87 | 848.75 | 840.02 | 840.02 |
| 137.5 | 910.83 | 898.22 | 902.10 | 894.34 | 893.37 |
| 140.0 | 964.18 | 951.57 | 954.48 | 949.63 | 946.72 |
| 142.5 | 1014.62 | 1001.04 | 1004.92 | 1000.07 | 996.19 |
| 145.0 | 1066.03 | 1051.48 | 1055.36 | 1051.48 | 1044.69 |
| 147.5 | 1113.56 | 1099.01 | 1103.86 | 1098.04 | 1091.25 |
| 150.0 | 1159.15 | 1144.60 | 1150.42 | 1143.63 | 1137.81 |
| 152.5 | 1202.80 | 1188.25 | 1194.07 | 1188.25 | 1182.43 |
| 155.0 | 1244.51 | 1229.96 | 1236.75 | 1230.93 | 1225.11 |
| 157.5 | 1280.40 | 1266.82 | 1274.58 | 1268.76 | 1262.94 |
| 160.0 | 1315.32 | 1302.71 | 1309.50 | 1303.68 | 1297.86 |
| 162.5 | 1345.39 | 1334.72 | 1339.57 | 1335.69 | 1331.81 |
| 165.0 | 1372.55 | 1362.85 | 1365.76 | 1363.82 | 1360.91 |
| 167.5 | 1392.92 | 1387.10 | 1389.04 | 1387.10 | 1386.13 |
| 170.0 | 1411.35 | 1408.44 | 1409.41 | 1407.47 | 1406.50 |
| 172.5 | 1426.87 | 1425.90 | 1425.90 | 1424.93 | 1424.93 |
| 175.0 | 1437.54 | 1437.54 | 1437.54 | 1437.54 | 1436.57 |
| 177.5 | 1443.36 | 1444.33 | 1444.33 | 1444.33 | 1443.36 |
| 180.0 | 1447.24 | 1447.24 | 1447.24 | 1447.24 | 1447.24 |

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ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|--------|
| 0-20 | 455.68 | N.A. | 6.70 |
| 0-30 | 941.24 | N.A. | 13.90 |
| 0-40 | 1492.01 | N.A. | 22.00 |
| 0-60 | 2483.08 | N.A. | 36.60 |
| 0-80 | 3017.36 | N.A. | 44.50 |
| 0-90 | 3079.4 | N.A. | 45.40 |
| 10-90 | 2959.4 | N.A. | 43.70 |
| 20-40 | 1036.33 | N.A. | 15.30 |
| 20-50 | 1571.59 | N.A. | 23.20 |
| 40-70 | 1327.03 | N.A. | 19.60 |
| 60-80 | 534.28 | N.A. | 7.90 |
| 70-80 | 198.32 | N.A. | 2.90 |
| 80-90 | 62.04 | N.A. | 0.90 |
| 90-110 | 319.33 | N.A. | 4.70 |
| 90-120 | 736.94 | N.A. | 10.90 |
| 90-130 | 1300.2 | N.A. | 19.20 |
| 90-150 | 2610.88 | N.A. | 38.50 |
| 90-180 | 3698.96 | N.A. | 54.60 |
| 110-180 | 3379.63 | N.A. | 49.90 |
| 0-180 | 6778.36 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

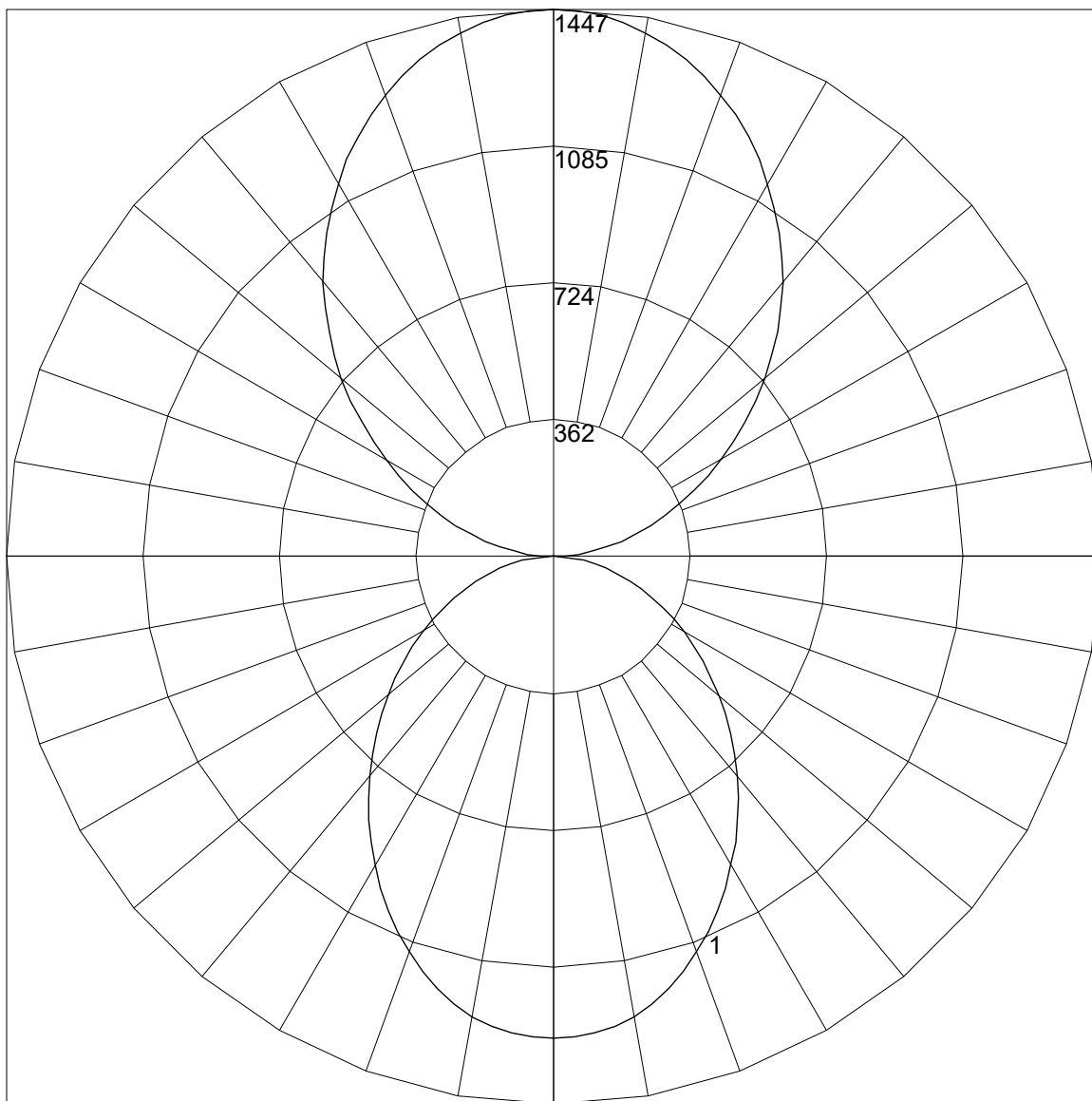
| Zone | Lumens |
|---------|--------|
| 0-10 | 119.99 |
| 10-20 | 335.68 |
| 20-30 | 485.56 |
| 30-40 | 550.78 |
| 40-50 | 535.25 |
| 50-60 | 455.82 |
| 60-70 | 335.96 |
| 70-80 | 198.32 |
| 80-90 | 62.04 |
| 90-100 | 74.75 |
| 100-110 | 244.58 |
| 110-120 | 417.61 |
| 120-130 | 563.25 |
| 130-140 | 652.38 |
| 140-150 | 658.31 |
| 150-160 | 567.24 |
| 160-170 | 384.55 |
| 170-180 | 136.30 |

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 | 97 | 97 | 97 | 97 | 81 | 81 | 81 | 66 | 66 | 66 | 52 | 52 | 52 | 45 |
| 1 | 97 | 92 | 89 | 85 | 89 | 85 | 82 | 79 | 71 | 68 | 66 | 58 | 56 | 55 | 46 | 45 | 44 | 38 |
| 2 | 88 | 81 | 75 | 70 | 81 | 74 | 69 | 65 | 62 | 58 | 55 | 51 | 48 | 46 | 40 | 39 | 37 | 32 |
| 3 | 80 | 71 | 64 | 58 | 74 | 65 | 59 | 54 | 55 | 50 | 46 | 45 | 42 | 39 | 36 | 34 | 32 | 27 |
| 4 | 74 | 63 | 55 | 49 | 67 | 58 | 51 | 46 | 49 | 44 | 40 | 40 | 36 | 33 | 32 | 30 | 27 | 24 |
| 5 | 68 | 56 | 48 | 42 | 62 | 52 | 45 | 40 | 44 | 38 | 34 | 36 | 32 | 29 | 29 | 26 | 24 | 21 |
| 6 | 62 | 50 | 42 | 37 | 57 | 47 | 40 | 34 | 39 | 34 | 30 | 33 | 29 | 25 | 26 | 23 | 21 | 18 |
| 7 | 58 | 46 | 38 | 32 | 53 | 42 | 35 | 30 | 36 | 30 | 26 | 30 | 26 | 23 | 24 | 21 | 19 | 16 |
| 8 | 53 | 41 | 34 | 28 | 49 | 38 | 31 | 27 | 33 | 27 | 23 | 27 | 23 | 20 | 22 | 19 | 17 | 14 |
| 9 | 50 | 38 | 30 | 25 | 46 | 35 | 28 | 24 | 30 | 25 | 21 | 25 | 21 | 18 | 21 | 17 | 15 | 13 |
| 10 | 47 | 35 | 27 | 23 | 43 | 32 | 26 | 21 | 28 | 22 | 19 | 23 | 19 | 16 | 19 | 16 | 14 | 12 |

POLAR GRAPH



Maximum Candela = 1447.24 Located At Horizontal Angle = 0, Vertical Angle = 180
1 - Vertical Plane Through Horizontal Angles (90 - 270)