

# 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-B-835-OPEN-DL-ITL90630 ITL85134.005.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL90630 ITL85134.005 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]07/09/18

[ISSUEDATE]08/21/18

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HP-2-ID-4ft-V-B-835-OPEN-DL

[\_INPUT\_ELECTRICAL]120.0 VOLTS, 55.3 WATTS

[\_INPUT\_ELECTRICAL]277.0 VOLTS, 57.3 WATTS

[\_ABSOLUTE]LUMENS]5854

[OTHER]see [www.finelite.com](http://www.finelite.com) for source files ITL90630 and ITL85134. 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](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                | 5854                |
| Total Luminaire Efficiency      | N.A.                |
| Luminaire Efficacy Rating (LER) | 106                 |
| Total Luminaire Watts           | 55.3                |
| 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 w/Sides |
| Luminous Length (0-180)         | 3.99 ft             |
| Luminous Width (90-270)         | 0.17 ft             |
| Luminous Height                 | 0.08 ft             |

### LUMINANCE DATA (cd/sq.m)

| Angle In<br>Degrees | Average<br>0-Deg | Average<br>45-Deg | Average<br>90-Deg |
|---------------------|------------------|-------------------|-------------------|
| 45                  | 6548             | 5688              | 5485              |
| 55                  | 6077             | 5175              | 5010              |
| 65                  | 5499             | 4612              | 4519              |
| 75                  | 4597             | 3978              | 4004              |
| 85                  | 3213             | 3402              | 3565              |

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-2-ID-4FT-V-B-835-OPEN-DL-ITL90630 ITL85134.005.IES

## CANDELA TABULATION

|       | <u>0.0</u> | <u>22.5</u> | <u>45.0</u> | <u>67.5</u> | <u>90.0</u> |
|-------|------------|-------------|-------------|-------------|-------------|
| 0.0   | 499.004    | 499.004     | 499.004     | 499.004     | 499.004     |
| 2.5   | 499.004    | 498.489     | 499.004     | 499.519     | 499.519     |
| 5.0   | 496.429    | 496.944     | 497.974     | 499.519     | 500.034     |
| 7.5   | 492.825    | 493.854     | 496.944     | 499.519     | 500.034     |
| 10.0  | 488.190    | 489.220     | 494.884     | 498.489     | 499.004     |
| 12.5  | 482.010    | 483.555     | 491.280     | 495.399     | 496.944     |
| 15.0  | 474.286    | 476.346     | 486.130     | 491.795     | 492.825     |
| 17.5  | 464.501    | 468.106     | 479.435     | 486.130     | 487.675     |
| 20.0  | 454.202    | 458.837     | 471.711     | 478.920     | 479.950     |
| 22.5  | 442.873    | 448.022     | 462.956     | 470.681     | 472.226     |
| 25.0  | 428.969    | 436.693     | 453.172     | 460.897     | 463.471     |
| 27.5  | 416.094    | 424.334     | 442.358     | 451.112     | 453.172     |
| 30.0  | 401.675    | 411.460     | 430.513     | 440.298     | 442.358     |
| 32.5  | 386.741    | 398.070     | 418.669     | 428.454     | 431.543     |
| 35.0  | 369.747    | 383.651     | 405.795     | 416.094     | 419.184     |
| 37.5  | 353.783    | 369.232     | 391.891     | 403.735     | 407.340     |
| 40.0  | 337.304    | 353.783     | 378.502     | 390.861     | 394.466     |
| 42.5  | 319.795    | 338.334     | 363.567     | 376.957     | 381.076     |
| 45.0  | 301.771    | 322.885     | 348.634     | 363.053     | 367.687     |
| 47.5  | 283.748    | 306.406     | 333.699     | 348.634     | 353.268     |
| 50.0  | 266.238    | 289.412     | 318.250     | 334.214     | 339.364     |
| 52.5  | 247.185    | 272.933     | 302.286     | 319.795     | 325.460     |
| 55.0  | 229.161    | 255.939     | 286.322     | 304.346     | 310.526     |
| 57.5  | 211.137    | 238.945     | 270.358     | 288.897     | 295.077     |
| 60.0  | 192.598    | 220.921     | 253.879     | 273.448     | 280.143     |
| 62.5  | 173.544    | 203.412     | 237.400     | 257.999     | 264.694     |
| 65.0  | 155.005    | 186.418     | 219.891     | 241.005     | 248.730     |
| 67.5  | 136.982    | 168.910     | 203.412     | 225.556     | 233.796     |
| 70.0  | 118.443    | 150.886     | 186.418     | 209.592     | 216.802     |
| 72.5  | 99.904     | 133.377     | 169.940     | 193.113     | 201.353     |
| 75.0  | 81.880     | 116.383     | 153.460     | 177.149     | 185.904     |
| 77.5  | 64.886     | 100.419     | 136.982     | 161.700     | 170.969     |
| 80.0  | 49.437     | 84.455      | 122.562     | 147.281     | 155.520     |
| 82.5  | 34.503     | 70.036      | 108.658     | 133.377     | 142.131     |
| 85.0  | 22.144     | 57.676      | 96.299      | 121.017     | 129.772     |
| 87.5  | 12.874     | 47.377      | 85.485      | 110.203     | 118.443     |
| 90.0  | 5.665      | 40.167      | 77.245      | 101.964     | 109.688     |
| 92.5  | 42.000     | 108.000     | 179.000     | 223.000     | 240.000     |
| 95.0  | 82.000     | 146.000     | 214.000     | 257.000     | 271.000     |
| 97.5  | 124.000    | 184.000     | 249.000     | 291.000     | 305.000     |
| 100.0 | 165.000    | 221.000     | 285.000     | 325.000     | 339.000     |
| 102.5 | 209.000    | 262.000     | 324.000     | 361.000     | 375.000     |
| 105.0 | 254.000    | 304.000     | 363.000     | 398.000     | 412.000     |
| 107.5 | 300.000    | 348.000     | 404.000     | 437.000     | 451.000     |
| 110.0 | 348.000    | 393.000     | 447.000     | 477.000     | 489.000     |
| 112.5 | 395.000    | 440.000     | 491.000     | 519.000     | 530.000     |
| 115.0 | 446.000    | 486.000     | 538.000     | 563.000     | 573.000     |
| 117.5 | 498.000    | 535.000     | 585.000     | 607.000     | 615.000     |
| 120.0 | 550.000    | 583.000     | 633.000     | 653.000     | 660.000     |
| 122.5 | 602.000    | 632.000     | 680.000     | 701.000     | 707.000     |
| 125.0 | 656.000    | 682.000     | 727.000     | 748.000     | 757.000     |
| 127.5 | 709.000    | 733.000     | 776.000     | 795.000     | 805.000     |
| 130.0 | 763.000    | 781.000     | 826.000     | 843.000     | 852.000     |
| 132.5 | 818.000    | 832.000     | 875.000     | 891.000     | 897.000     |

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-4FT-V-B-835-OPEN-DL-ITL90630 ITL85134.005.IES****CANDELA TABULATION - (Cont.)**

|              |          |          |          |          |          |
|--------------|----------|----------|----------|----------|----------|
| <b>135.0</b> | 871.000  | 882.000  | 923.000  | 939.000  | 945.000  |
| <b>137.5</b> | 924.000  | 933.000  | 970.000  | 986.000  | 992.000  |
| <b>140.0</b> | 977.000  | 981.000  | 1015.000 | 1032.000 | 1038.000 |
| <b>142.5</b> | 1028.000 | 1029.000 | 1059.000 | 1078.000 | 1082.000 |
| <b>145.0</b> | 1076.000 | 1076.000 | 1104.000 | 1121.000 | 1123.000 |
| <b>147.5</b> | 1124.000 | 1120.000 | 1147.000 | 1160.000 | 1163.000 |
| <b>150.0</b> | 1169.000 | 1163.000 | 1188.000 | 1201.000 | 1201.000 |
| <b>152.5</b> | 1210.000 | 1203.000 | 1226.000 | 1238.000 | 1238.000 |
| <b>155.0</b> | 1250.000 | 1242.000 | 1263.000 | 1273.000 | 1273.000 |
| <b>157.5</b> | 1287.000 | 1277.000 | 1297.000 | 1303.000 | 1305.000 |
| <b>160.0</b> | 1319.000 | 1310.000 | 1327.000 | 1332.000 | 1334.000 |
| <b>162.5</b> | 1349.000 | 1340.000 | 1355.000 | 1357.000 | 1360.000 |
| <b>165.0</b> | 1375.000 | 1368.000 | 1378.000 | 1380.000 | 1383.000 |
| <b>167.5</b> | 1397.000 | 1392.000 | 1398.000 | 1400.000 | 1402.000 |
| <b>170.0</b> | 1415.000 | 1413.000 | 1414.000 | 1416.000 | 1417.000 |
| <b>172.5</b> | 1430.000 | 1429.000 | 1428.000 | 1430.000 | 1430.000 |
| <b>175.0</b> | 1439.000 | 1439.000 | 1439.000 | 1439.000 | 1439.000 |
| <b>177.5</b> | 1446.000 | 1446.000 | 1446.000 | 1445.000 | 1446.000 |
| <b>180.0</b> | 1448.000 | 1448.000 | 1448.000 | 1448.000 | 1448.000 |

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-4FT-V-B-835-OPEN-DL-ITL90630 ITL85134.005.IES****ZONAL LUMEN SUMMARY**

| Zone    | Lumens  | %Lamp | %Fixt  |
|---------|---------|-------|--------|
| 0-20    | 184.08  | N.A.  | 3.10   |
| 0-30    | 391.18  | N.A.  | 6.70   |
| 0-40    | 641.66  | N.A.  | 11.00  |
| 0-60    | 1155.64 | N.A.  | 19.70  |
| 0-80    | 1519.99 | N.A.  | 26.00  |
| 0-90    | 1617.24 | N.A.  | 27.60  |
| 10-90   | 1569.81 | N.A.  | 26.80  |
| 20-40   | 457.58  | N.A.  | 7.80   |
| 20-50   | 721.82  | N.A.  | 12.30  |
| 40-70   | 724.49  | N.A.  | 12.40  |
| 60-80   | 364.35  | N.A.  | 6.20   |
| 70-80   | 153.85  | N.A.  | 2.60   |
| 80-90   | 97.25   | N.A.  | 1.70   |
| 90-110  | 579.00  | N.A.  | 9.90   |
| 90-120  | 1098.78 | N.A.  | 18.80  |
| 90-130  | 1739.56 | N.A.  | 29.70  |
| 90-150  | 3132.26 | N.A.  | 53.50  |
| 90-180  | 4237.08 | N.A.  | 72.40  |
| 110-180 | 3658.09 | N.A.  | 62.50  |
| 0-180   | 5854.33 | N.A.  | 100.00 |

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

| Zone    | Lumens |
|---------|--------|
| 0-10    | 47.43  |
| 10-20   | 136.66 |
| 20-30   | 207.10 |
| 30-40   | 250.48 |
| 40-50   | 264.25 |
| 50-60   | 249.74 |
| 60-70   | 210.50 |
| 70-80   | 153.85 |
| 80-90   | 97.25  |
| 90-100  | 208.65 |
| 100-110 | 370.35 |
| 110-120 | 519.78 |
| 120-130 | 640.78 |
| 130-140 | 704.67 |
| 140-150 | 688.02 |
| 150-160 | 580.15 |
| 160-170 | 388.07 |
| 170-180 | 136.61 |

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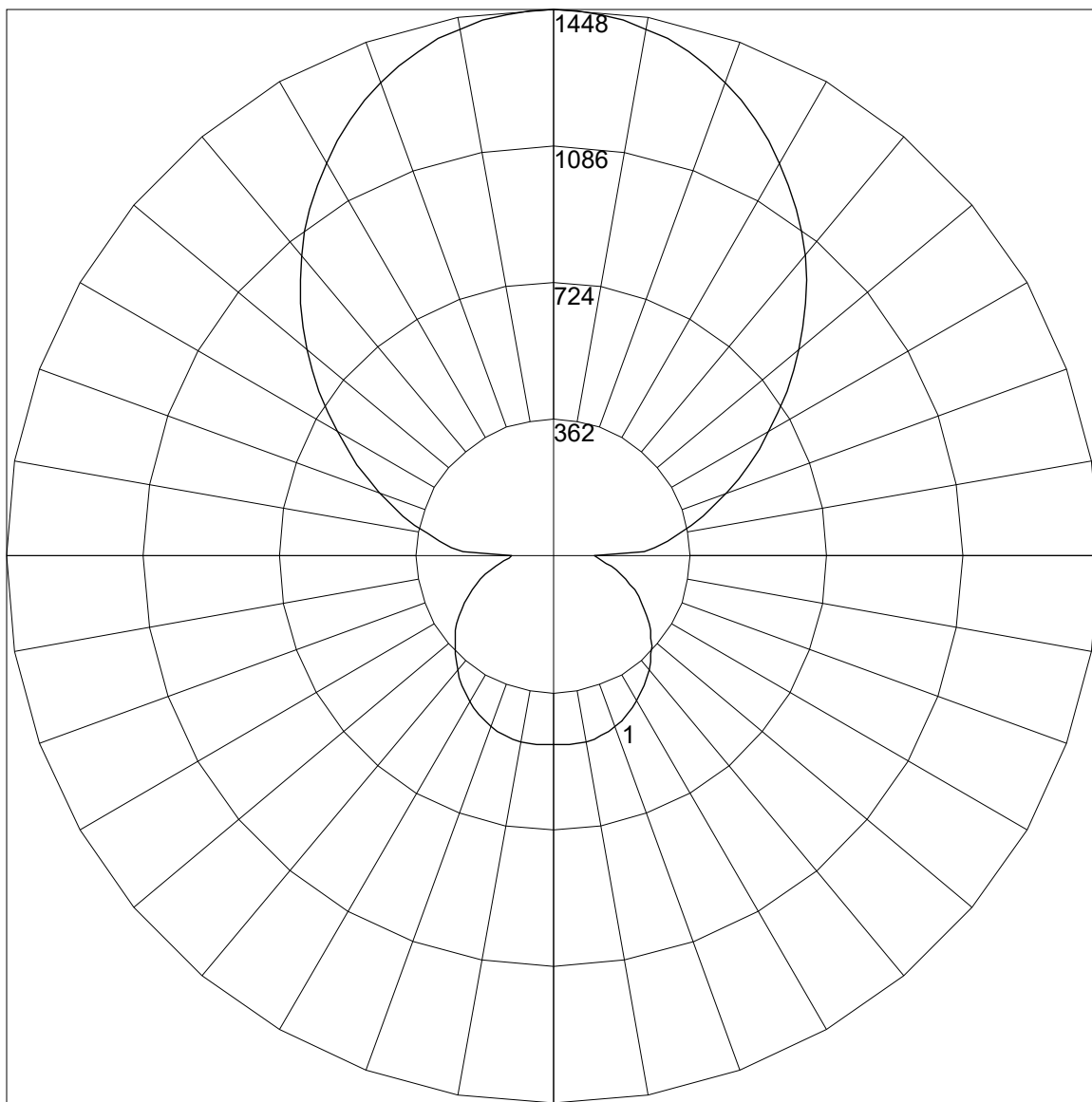
PHOTOMETRIC FILENAME : HP-2-ID-4FT-V-B-835-OPEN-DL-ITL90630 ITL85134.005.IES

## 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  | 102 | 102 | 102 | 102 | 91 | 91 | 91 | 91 | 71 | 71 | 71 | 52 | 52 | 52 | 36 | 36 | 36 | 28 |
| 1  | 92  | 88  | 84  | 80  | 82 | 78 | 75 | 72 | 61 | 59 | 57 | 45 | 44 | 42 | 30 | 29 | 29 | 22 |
| 2  | 84  | 76  | 70  | 65  | 74 | 68 | 63 | 58 | 53 | 49 | 46 | 39 | 37 | 35 | 26 | 25 | 24 | 18 |
| 3  | 76  | 67  | 59  | 54  | 68 | 60 | 53 | 48 | 47 | 42 | 39 | 34 | 31 | 29 | 23 | 21 | 20 | 15 |
| 4  | 69  | 59  | 51  | 45  | 62 | 53 | 46 | 41 | 41 | 36 | 33 | 30 | 27 | 25 | 20 | 18 | 17 | 13 |
| 5  | 63  | 52  | 44  | 38  | 56 | 47 | 40 | 35 | 37 | 32 | 28 | 27 | 24 | 21 | 18 | 16 | 15 | 11 |
| 6  | 58  | 46  | 39  | 33  | 52 | 42 | 35 | 30 | 33 | 28 | 24 | 24 | 21 | 18 | 17 | 14 | 13 | 9  |
| 7  | 54  | 42  | 34  | 29  | 48 | 38 | 31 | 26 | 30 | 25 | 21 | 22 | 19 | 16 | 15 | 13 | 11 | 8  |
| 8  | 50  | 38  | 30  | 25  | 44 | 34 | 27 | 23 | 27 | 22 | 18 | 20 | 17 | 14 | 14 | 12 | 10 | 7  |
| 9  | 46  | 34  | 27  | 22  | 41 | 31 | 25 | 20 | 24 | 20 | 16 | 18 | 15 | 13 | 13 | 11 | 9  | 7  |
| 10 | 43  | 31  | 24  | 20  | 38 | 28 | 22 | 18 | 22 | 18 | 15 | 17 | 14 | 11 | 12 | 10 | 8  | 6  |

POLAR GRAPH



Maximum Candela = 1448 Located At Horizontal Angle = 0, Vertical Angle = 180  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)