

# 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-B-B-8TW-OPEN-DL-ITL90630 ITL85134.902.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL90630 ITL85134.902 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]07/09/18

[ISSUE DATE]10/12/18

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HP-2-ID-4ft-B-B-8TW-OPEN-DL

[OTHER]ies file is based on 3500K; see luminaire tech sheet at

[more]www.finelite.com for lumen adjustment factors for other CCT's & CRI's

[ INPUT\_ELECTRICAL]120.0 VOLTS, 40.4 WATTS

[ INPUT\_ELECTRICAL]277.0 VOLTS, 43.1 WATTS

[ABSOLUTE LUMENS]3802

[OTHER]see 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                | 3802                |
| Total Luminaire Efficiency      | N.A.                |
| Luminaire Efficacy Rating (LER) | 94                  |
| Total Luminaire Watts           | 40.4                |
| 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 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-B-B-8TW-OPEN-DL-ITL90630 ITL85134.902.IES****CANDELA TABULATION**

|              | <u>0.0</u> | <u>22.5</u> | <u>45.0</u> | <u>67.5</u> | <u>90.0</u> |
|--------------|------------|-------------|-------------|-------------|-------------|
| <b>0.0</b>   | 499.004    | 499.004     | 499.004     | 499.004     | 499.004     |
| <b>2.5</b>   | 499.004    | 498.489     | 499.004     | 499.519     | 499.519     |
| <b>5.0</b>   | 496.429    | 496.944     | 497.974     | 499.519     | 500.034     |
| <b>7.5</b>   | 492.825    | 493.854     | 496.944     | 499.519     | 500.034     |
| <b>10.0</b>  | 488.190    | 489.220     | 494.884     | 498.489     | 499.004     |
| <b>12.5</b>  | 482.010    | 483.555     | 491.280     | 495.399     | 496.944     |
| <b>15.0</b>  | 474.286    | 476.346     | 486.130     | 491.795     | 492.825     |
| <b>17.5</b>  | 464.501    | 468.106     | 479.435     | 486.130     | 487.675     |
| <b>20.0</b>  | 454.202    | 458.837     | 471.711     | 478.920     | 479.950     |
| <b>22.5</b>  | 442.873    | 448.022     | 462.956     | 470.681     | 472.226     |
| <b>25.0</b>  | 428.969    | 436.693     | 453.172     | 460.897     | 463.471     |
| <b>27.5</b>  | 416.094    | 424.334     | 442.358     | 451.112     | 453.172     |
| <b>30.0</b>  | 401.675    | 411.460     | 430.513     | 440.298     | 442.358     |
| <b>32.5</b>  | 386.741    | 398.070     | 418.669     | 428.454     | 431.543     |
| <b>35.0</b>  | 369.747    | 383.651     | 405.795     | 416.094     | 419.184     |
| <b>37.5</b>  | 353.783    | 369.232     | 391.891     | 403.735     | 407.340     |
| <b>40.0</b>  | 337.304    | 353.783     | 378.502     | 390.861     | 394.466     |
| <b>42.5</b>  | 319.795    | 338.334     | 363.567     | 376.957     | 381.076     |
| <b>45.0</b>  | 301.771    | 322.885     | 348.634     | 363.053     | 367.687     |
| <b>47.5</b>  | 283.748    | 306.406     | 333.699     | 348.634     | 353.268     |
| <b>50.0</b>  | 266.238    | 289.412     | 318.250     | 334.214     | 339.364     |
| <b>52.5</b>  | 247.185    | 272.933     | 302.286     | 319.795     | 325.460     |
| <b>55.0</b>  | 229.161    | 255.939     | 286.322     | 304.346     | 310.526     |
| <b>57.5</b>  | 211.137    | 238.945     | 270.358     | 288.897     | 295.077     |
| <b>60.0</b>  | 192.598    | 220.921     | 253.879     | 273.448     | 280.143     |
| <b>62.5</b>  | 173.544    | 203.412     | 237.400     | 257.999     | 264.694     |
| <b>65.0</b>  | 155.005    | 186.418     | 219.891     | 241.005     | 248.730     |
| <b>67.5</b>  | 136.982    | 168.910     | 203.412     | 225.556     | 233.796     |
| <b>70.0</b>  | 118.443    | 150.886     | 186.418     | 209.592     | 216.802     |
| <b>72.5</b>  | 99.904     | 133.377     | 169.940     | 193.113     | 201.353     |
| <b>75.0</b>  | 81.880     | 116.383     | 153.460     | 177.149     | 185.904     |
| <b>77.5</b>  | 64.886     | 100.419     | 136.982     | 161.700     | 170.969     |
| <b>80.0</b>  | 49.437     | 84.455      | 122.562     | 147.281     | 155.520     |
| <b>82.5</b>  | 34.503     | 70.036      | 108.658     | 133.377     | 142.131     |
| <b>85.0</b>  | 22.144     | 57.676      | 96.299      | 121.017     | 129.772     |
| <b>87.5</b>  | 12.874     | 47.377      | 85.485      | 110.203     | 118.443     |
| <b>90.0</b>  | 5.665      | 40.167      | 77.245      | 101.964     | 109.688     |
| <b>92.5</b>  | 21.613     | 55.577      | 92.114      | 114.756     | 123.504     |
| <b>95.0</b>  | 42.197     | 75.132      | 110.125     | 132.253     | 139.457     |
| <b>97.5</b>  | 63.811     | 94.687      | 128.136     | 149.749     | 156.954     |
| <b>100.0</b> | 84.909     | 113.727     | 146.662     | 167.246     | 174.450     |
| <b>102.5</b> | 107.552    | 134.826     | 166.731     | 185.771     | 192.976     |
| <b>105.0</b> | 130.709    | 156.439     | 186.800     | 204.812     | 212.016     |
| <b>107.5</b> | 154.381    | 179.082     | 207.899     | 224.881     | 232.085     |
| <b>110.0</b> | 179.082    | 202.239     | 230.027     | 245.465     | 251.640     |
| <b>112.5</b> | 203.268    | 226.425     | 252.670     | 267.078     | 272.739     |
| <b>115.0</b> | 229.512    | 250.097     | 276.856     | 289.721     | 294.867     |
| <b>117.5</b> | 256.272    | 275.312     | 301.042     | 312.363     | 316.480     |
| <b>120.0</b> | 283.031    | 300.013     | 325.743     | 336.035     | 339.637     |
| <b>122.5</b> | 309.790    | 325.228     | 349.929     | 360.736     | 363.824     |
| <b>125.0</b> | 337.579    | 350.959     | 374.116     | 384.922     | 389.554     |
| <b>127.5</b> | 364.853    | 377.203     | 399.331     | 409.109     | 414.255     |
| <b>130.0</b> | 392.641    | 401.904     | 425.061     | 433.810     | 438.441     |
| <b>132.5</b> | 420.944    | 428.149     | 450.277     | 458.510     | 461.598     |

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-4FT-B-B-8TW-OPEN-DL-ITL90630 ITL85134.902.IES****CANDELA TABULATION - (Cont.)**

|              |         |         |         |         |         |
|--------------|---------|---------|---------|---------|---------|
| <b>135.0</b> | 448.218 | 453.879 | 474.978 | 483.211 | 486.299 |
| <b>137.5</b> | 475.492 | 480.124 | 499.164 | 507.398 | 510.485 |
| <b>140.0</b> | 502.766 | 504.825 | 522.321 | 531.069 | 534.157 |
| <b>142.5</b> | 529.011 | 529.525 | 544.963 | 554.741 | 556.799 |
| <b>145.0</b> | 553.712 | 553.712 | 568.121 | 576.869 | 577.898 |
| <b>147.5</b> | 578.413 | 576.354 | 590.249 | 596.938 | 598.482 |
| <b>150.0</b> | 601.570 | 598.482 | 611.347 | 618.037 | 618.037 |
| <b>152.5</b> | 622.668 | 619.066 | 630.902 | 637.077 | 637.077 |
| <b>155.0</b> | 643.253 | 639.136 | 649.942 | 655.088 | 655.088 |
| <b>157.5</b> | 662.293 | 657.147 | 667.439 | 670.526 | 671.556 |
| <b>160.0</b> | 678.760 | 674.129 | 682.877 | 685.450 | 686.479 |
| <b>162.5</b> | 694.198 | 689.567 | 697.286 | 698.315 | 699.859 |
| <b>165.0</b> | 707.578 | 703.976 | 709.121 | 710.151 | 711.694 |
| <b>167.5</b> | 718.899 | 716.326 | 719.414 | 720.443 | 721.472 |
| <b>170.0</b> | 728.162 | 727.133 | 727.647 | 728.676 | 729.191 |
| <b>172.5</b> | 735.881 | 735.366 | 734.852 | 735.881 | 735.881 |
| <b>175.0</b> | 740.512 | 740.512 | 740.512 | 740.512 | 740.512 |
| <b>177.5</b> | 744.114 | 744.114 | 744.114 | 743.600 | 744.114 |
| <b>180.0</b> | 745.144 | 745.144 | 745.144 | 745.144 | 745.144 |

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-4FT-B-B-8TW-OPEN-DL-ITL90630 ITL85134.902.IES****ZONAL LUMEN SUMMARY**

| Zone    | Lumens  | %Lamp | %Fixt  |
|---------|---------|-------|--------|
| 0-20    | 184.08  | N.A.  | 4.80   |
| 0-30    | 391.18  | N.A.  | 10.30  |
| 0-40    | 641.66  | N.A.  | 16.90  |
| 0-60    | 1155.64 | N.A.  | 30.40  |
| 0-80    | 1519.99 | N.A.  | 40.00  |
| 0-90    | 1617.24 | N.A.  | 42.50  |
| 10-90   | 1569.81 | N.A.  | 41.30  |
| 20-40   | 457.58  | N.A.  | 12.00  |
| 20-50   | 721.82  | N.A.  | 19.00  |
| 40-70   | 724.49  | N.A.  | 19.10  |
| 60-80   | 364.35  | N.A.  | 9.60   |
| 70-80   | 153.85  | N.A.  | 4.00   |
| 80-90   | 97.25   | N.A.  | 2.60   |
| 90-110  | 302.56  | N.A.  | 8.00   |
| 90-120  | 570.04  | N.A.  | 15.00  |
| 90-130  | 899.79  | N.A.  | 23.70  |
| 90-150  | 1616.47 | N.A.  | 42.50  |
| 90-180  | 2185.02 | N.A.  | 57.50  |
| 110-180 | 1882.46 | N.A.  | 49.50  |
| 0-180   | 3802.26 | 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  | 111.98 |
| 100-110 | 190.58 |
| 110-120 | 267.48 |
| 120-130 | 329.75 |
| 130-140 | 362.62 |
| 140-150 | 354.06 |
| 150-160 | 298.55 |
| 160-170 | 199.70 |
| 170-180 | 70.30  |

# IES INDOOR REPORT

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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

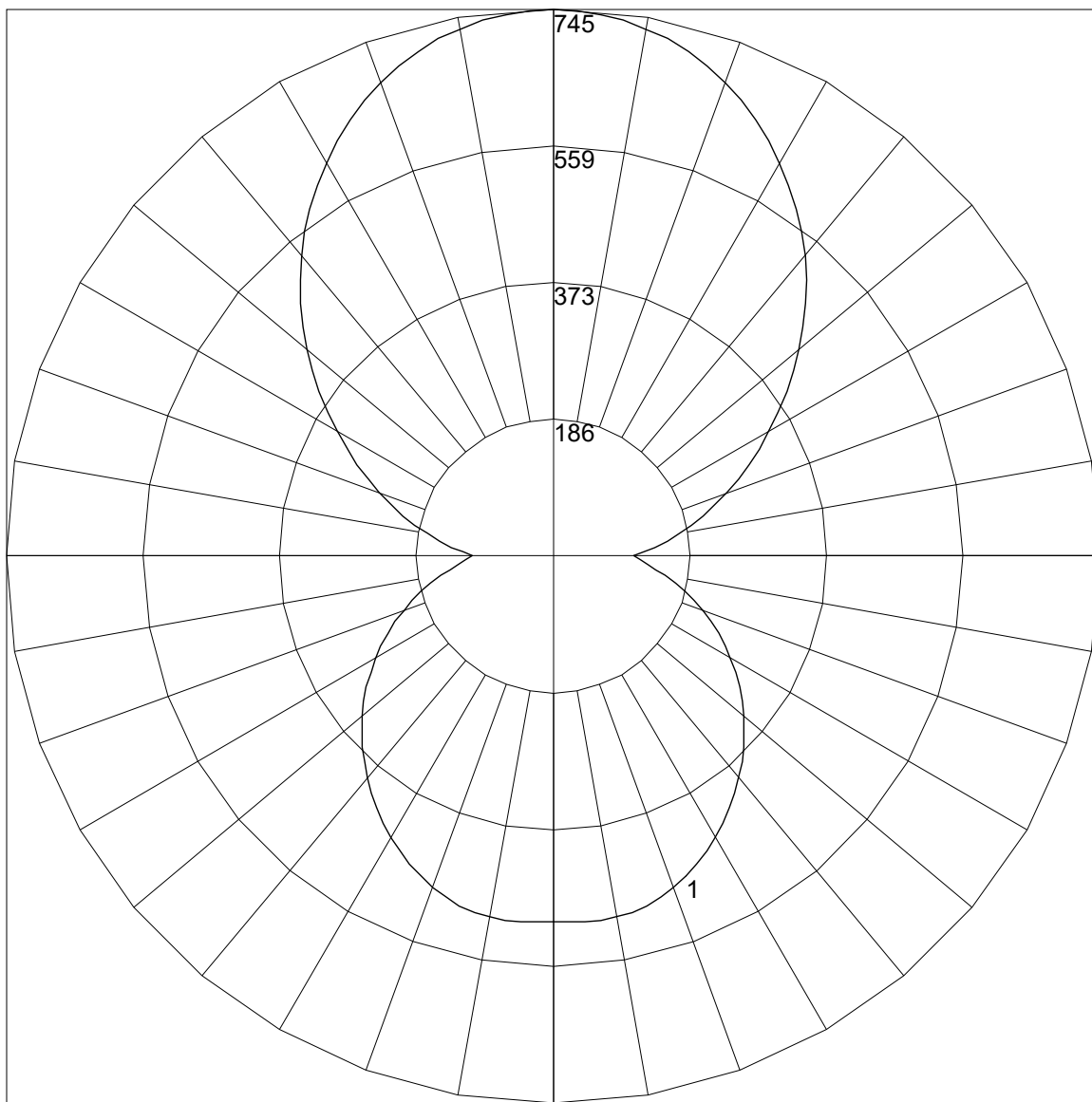
Effective Floor Cavity Reflectance 0.20

| 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  | 105 | 105 | 105 | 105 | 96 | 96 | 96 | 96 | 79 | 79 | 79 | 64 | 64 | 64 | 49 | 49 | 49 | 43 |
| 1  | 95  | 90  | 86  | 82  | 87 | 83 | 79 | 76 | 68 | 65 | 63 | 54 | 53 | 51 | 42 | 41 | 40 | 34 |
| 2  | 86  | 78  | 72  | 66  | 78 | 72 | 66 | 61 | 59 | 55 | 51 | 47 | 44 | 42 | 36 | 34 | 33 | 27 |
| 3  | 78  | 68  | 61  | 55  | 71 | 63 | 56 | 51 | 52 | 47 | 43 | 41 | 38 | 35 | 32 | 29 | 27 | 23 |
| 4  | 71  | 60  | 52  | 46  | 65 | 55 | 48 | 43 | 46 | 40 | 36 | 37 | 33 | 29 | 28 | 25 | 23 | 19 |
| 5  | 65  | 54  | 45  | 39  | 59 | 49 | 42 | 36 | 41 | 35 | 31 | 33 | 29 | 25 | 25 | 22 | 20 | 17 |
| 6  | 60  | 48  | 40  | 34  | 55 | 44 | 37 | 31 | 36 | 31 | 27 | 29 | 25 | 22 | 23 | 20 | 17 | 14 |
| 7  | 56  | 43  | 35  | 29  | 50 | 40 | 32 | 27 | 33 | 27 | 23 | 27 | 22 | 19 | 21 | 18 | 15 | 13 |
| 8  | 51  | 39  | 31  | 26  | 47 | 36 | 29 | 24 | 30 | 24 | 21 | 24 | 20 | 17 | 19 | 16 | 14 | 11 |
| 9  | 48  | 36  | 28  | 23  | 44 | 33 | 26 | 21 | 27 | 22 | 18 | 22 | 18 | 15 | 18 | 15 | 12 | 10 |
| 10 | 45  | 33  | 25  | 20  | 41 | 30 | 23 | 19 | 25 | 20 | 16 | 21 | 17 | 14 | 16 | 13 | 11 | 9  |

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POLAR GRAPH



Maximum Candela = 745.144 Located At Horizontal Angle = 0, Vertical Angle = 180

# 1 - Vertical Plane Through Horizontal Angles (90 - 270)