

# 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-S-H-835-F-MLB-ITL85132-KPL2008-6.014.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL85132-KPL2008-6.014 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/11/15

[ISSUEDATE]02/10/17

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HP-2-ID-4ft-S-H-835

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 42.0 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 43.2 WATTS

[ABSOLUTE]LUMENS]3475

[OTHER]see [www.finelite.com](http://www.finelite.com) for source files ITL85132 and KPL2008-6. For further details on Finelite family correlation files, go

[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                | 3472            |
| Total Luminaire Efficiency      | N.A.            |
| Luminaire Efficacy Rating (LER) | 82              |
| Total Luminaire Watts           | 42.5            |
| 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<br>Degrees | Average<br>0-Deg | Average<br>45-Deg | Average<br>90-Deg |
|---------------------|------------------|-------------------|-------------------|
| 45                  | 293              | 174               | 182               |
| 55                  | 130              | 68                | 77                |
| 65                  | 63               | 34                | 38                |
| 75                  | 33               | 19                | 19                |
| 85                  | 12               | 5                 | 5                 |

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-2-ID-4FT-S-H-835-F-MLB-ITL85132-KPL2008-6.014.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   | 6084.714   | 6084.714    | 6084.714    | 6084.714    | 6084.714    |
| 2.5   | 5931.128   | 5984.797    | 5959.409    | 5952.526    | 5977.540    |
| 5.0   | 5590.252   | 5668.189    | 5630.870    | 5628.692    | 5661.625    |
| 7.5   | 5074.891   | 5171.021    | 5173.090    | 5180.051    | 5202.973    |
| 10.0  | 4411.863   | 4495.088    | 4637.855    | 4674.296    | 4679.336    |
| 12.5  | 3540.109   | 3674.608    | 4010.583    | 4128.040    | 4135.833    |
| 15.0  | 2845.027   | 2988.704    | 3347.990    | 3589.757    | 3539.821    |
| 17.5  | 2139.934   | 2340.391    | 2842.997    | 2907.835    | 2747.839    |
| 20.0  | 1447.170   | 1664.280    | 2110.128    | 2184.938    | 2138.915    |
| 22.5  | 901.637    | 1161.566    | 1549.724    | 1643.715    | 1621.376    |
| 25.0  | 530.886    | 640.355     | 1063.080    | 1157.654    | 1026.383    |
| 27.5  | 315.589    | 412.605     | 632.982     | 643.661     | 572.499     |
| 30.0  | 178.850    | 239.130     | 376.343     | 358.298     | 315.106     |
| 32.5  | 88.165     | 136.700     | 193.239     | 186.394     | 175.295     |
| 35.0  | 41.628     | 59.370      | 103.947     | 104.825     | 87.667      |
| 37.5  | 27.807     | 28.779      | 51.880      | 50.830      | 32.481      |
| 40.0  | 22.175     | 20.036      | 25.318      | 20.628      | 13.954      |
| 42.5  | 17.407     | 15.743      | 12.251      | 9.964       | 10.952      |
| 45.0  | 13.635     | 12.157      | 8.105       | 7.630       | 8.455       |
| 47.5  | 10.765     | 9.209       | 6.005       | 5.771       | 6.487       |
| 50.0  | 8.097      | 7.016       | 4.496       | 4.356       | 4.994       |
| 52.5  | 6.324      | 5.328       | 3.399       | 3.360       | 3.803       |
| 55.0  | 4.900      | 4.091       | 2.582       | 2.543       | 2.901       |
| 57.5  | 3.772      | 3.135       | 1.976       | 1.937       | 2.217       |
| 60.0  | 2.901      | 2.435       | 1.540       | 1.509       | 1.727       |
| 62.5  | 2.263      | 1.859       | 1.190       | 1.167       | 1.346       |
| 65.0  | 1.758      | 1.447       | 0.933       | 0.910       | 1.058       |
| 67.5  | 1.361      | 1.112       | 0.731       | 0.708       | 0.801       |
| 70.0  | 1.042      | 0.856       | 0.576       | 0.552       | 0.622       |
| 72.5  | 0.786      | 0.646       | 0.436       | 0.420       | 0.451       |
| 75.0  | 0.568      | 0.474       | 0.327       | 0.319       | 0.319       |
| 77.5  | 0.404      | 0.342       | 0.249       | 0.241       | 0.249       |
| 80.0  | 0.264      | 0.241       | 0.171       | 0.163       | 0.148       |
| 82.5  | 0.171      | 0.140       | 0.101       | 0.086       | 0.086       |
| 85.0  | 0.070      | 0.062       | 0.031       | 0.039       | 0.031       |
| 87.5  | 0.016      | 0.000       | 0.000       | 0.000       | 0.000       |
| 90.0  | 0.000      | 0.000       | 0.000       | 0.000       | 0.000       |
| 92.5  | 12.281     | 12.281      | 12.281      | 13.509      | 13.509      |
| 95.0  | 29.064     | 27.836      | 27.836      | 28.246      | 28.655      |
| 97.5  | 45.848     | 44.620      | 43.801      | 44.210      | 44.210      |
| 100.0 | 63.041     | 60.994      | 60.994      | 60.994      | 60.585      |
| 102.5 | 81.053     | 79.415      | 78.596      | 78.187      | 78.187      |
| 105.0 | 99.883     | 98.655      | 96.608      | 96.199      | 95.789      |
| 107.5 | 119.123    | 117.895     | 115.439     | 115.029     | 114.620     |
| 110.0 | 139.181    | 137.953     | 135.906     | 135.088     | 133.860     |
| 112.5 | 160.059    | 158.012     | 156.784     | 154.737     | 153.509     |
| 115.0 | 180.936    | 179.708     | 178.889     | 174.795     | 173.977     |
| 117.5 | 203.041    | 200.994     | 200.994     | 196.082     | 195.263     |
| 120.0 | 225.555    | 222.281     | 223.099     | 218.187     | 216.550     |
| 122.5 | 246.842    | 243.567     | 245.205     | 241.111     | 238.246     |
| 125.0 | 270.585    | 265.672     | 267.310     | 263.216     | 261.170     |
| 127.5 | 293.918    | 288.596     | 289.415     | 286.140     | 285.322     |
| 130.0 | 316.842    | 311.520     | 312.339     | 308.246     | 308.655     |
| 132.5 | 339.766    | 334.035     | 335.263     | 331.170     | 331.170     |

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-4FT-S-H-835-F-MLB-ITL85132-KPL2008-6.014.IES****CANDELA TABULATION - (Cont.)**

|              |         |         |         |         |         |
|--------------|---------|---------|---------|---------|---------|
| <b>135.0</b> | 361.871 | 356.550 | 358.187 | 354.503 | 354.503 |
| <b>137.5</b> | 384.386 | 379.064 | 380.702 | 377.427 | 377.017 |
| <b>140.0</b> | 406.901 | 401.579 | 402.807 | 400.760 | 399.532 |
| <b>142.5</b> | 428.187 | 422.456 | 424.094 | 422.047 | 420.409 |
| <b>145.0</b> | 449.883 | 443.743 | 445.380 | 443.743 | 440.877 |
| <b>147.5</b> | 469.941 | 463.801 | 465.848 | 463.392 | 460.526 |
| <b>150.0</b> | 489.181 | 483.041 | 485.497 | 482.632 | 480.175 |
| <b>152.5</b> | 507.602 | 501.462 | 503.918 | 501.462 | 499.006 |
| <b>155.0</b> | 525.205 | 519.064 | 521.930 | 519.474 | 517.018 |
| <b>157.5</b> | 540.351 | 534.620 | 537.895 | 535.438 | 532.982 |
| <b>160.0</b> | 555.088 | 549.766 | 552.631 | 550.175 | 547.719 |
| <b>162.5</b> | 567.778 | 563.275 | 565.322 | 563.684 | 562.047 |
| <b>165.0</b> | 579.240 | 575.146 | 576.374 | 575.555 | 574.328 |
| <b>167.5</b> | 587.836 | 585.380 | 586.199 | 585.380 | 584.971 |
| <b>170.0</b> | 595.614 | 594.386 | 594.795 | 593.977 | 593.567 |
| <b>172.5</b> | 602.164 | 601.754 | 601.754 | 601.345 | 601.345 |
| <b>175.0</b> | 606.667 | 606.667 | 606.667 | 606.667 | 606.257 |
| <b>177.5</b> | 609.123 | 609.532 | 609.532 | 609.532 | 609.123 |
| <b>180.0</b> | 610.760 | 610.760 | 610.760 | 610.760 | 610.760 |

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-4FT-S-H-835-F-MLB-ITL85132-KPL2008-6.014.IES****ZONAL LUMEN SUMMARY**

| Zone    | Lumens  | %Lamp | %Fixt  |
|---------|---------|-------|--------|
| 0-20    | 1394.52 | N.A.  | 40.20  |
| 0-30    | 1831.07 | N.A.  | 52.70  |
| 0-40    | 1898.25 | N.A.  | 54.70  |
| 0-60    | 1909.6  | N.A.  | 55.00  |
| 0-80    | 1911.25 | N.A.  | 55.00  |
| 0-90    | 1911.32 | N.A.  | 55.00  |
| 10-90   | 1406.69 | N.A.  | 40.50  |
| 20-40   | 503.74  | N.A.  | 14.50  |
| 20-50   | 512.01  | N.A.  | 14.70  |
| 40-70   | 12.56   | N.A.  | 0.40   |
| 60-80   | 1.65    | N.A.  | 0.00   |
| 70-80   | 0.44    | N.A.  | 0.00   |
| 80-90   | 0.07    | N.A.  | 0.00   |
| 90-110  | 134.76  | N.A.  | 3.90   |
| 90-120  | 311.00  | N.A.  | 9.00   |
| 90-130  | 548.70  | N.A.  | 15.80  |
| 90-150  | 1101.84 | N.A.  | 31.70  |
| 90-180  | 1561.03 | N.A.  | 45.00  |
| 110-180 | 1426.26 | N.A.  | 41.10  |
| 0-180   | 3472.35 | N.A.  | 100.00 |

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

| Zone    | Lumens |
|---------|--------|
| 0-10    | 504.63 |
| 10-20   | 889.89 |
| 20-30   | 436.56 |
| 30-40   | 67.18  |
| 40-50   | 8.27   |
| 50-60   | 3.08   |
| 60-70   | 1.21   |
| 70-80   | 0.44   |
| 80-90   | 0.07   |
| 90-100  | 31.55  |
| 100-110 | 103.22 |
| 110-120 | 176.24 |
| 120-130 | 237.70 |
| 130-140 | 275.32 |
| 140-150 | 277.82 |
| 150-160 | 239.38 |
| 160-170 | 162.28 |
| 170-180 | 57.52  |

# IES INDOOR REPORT

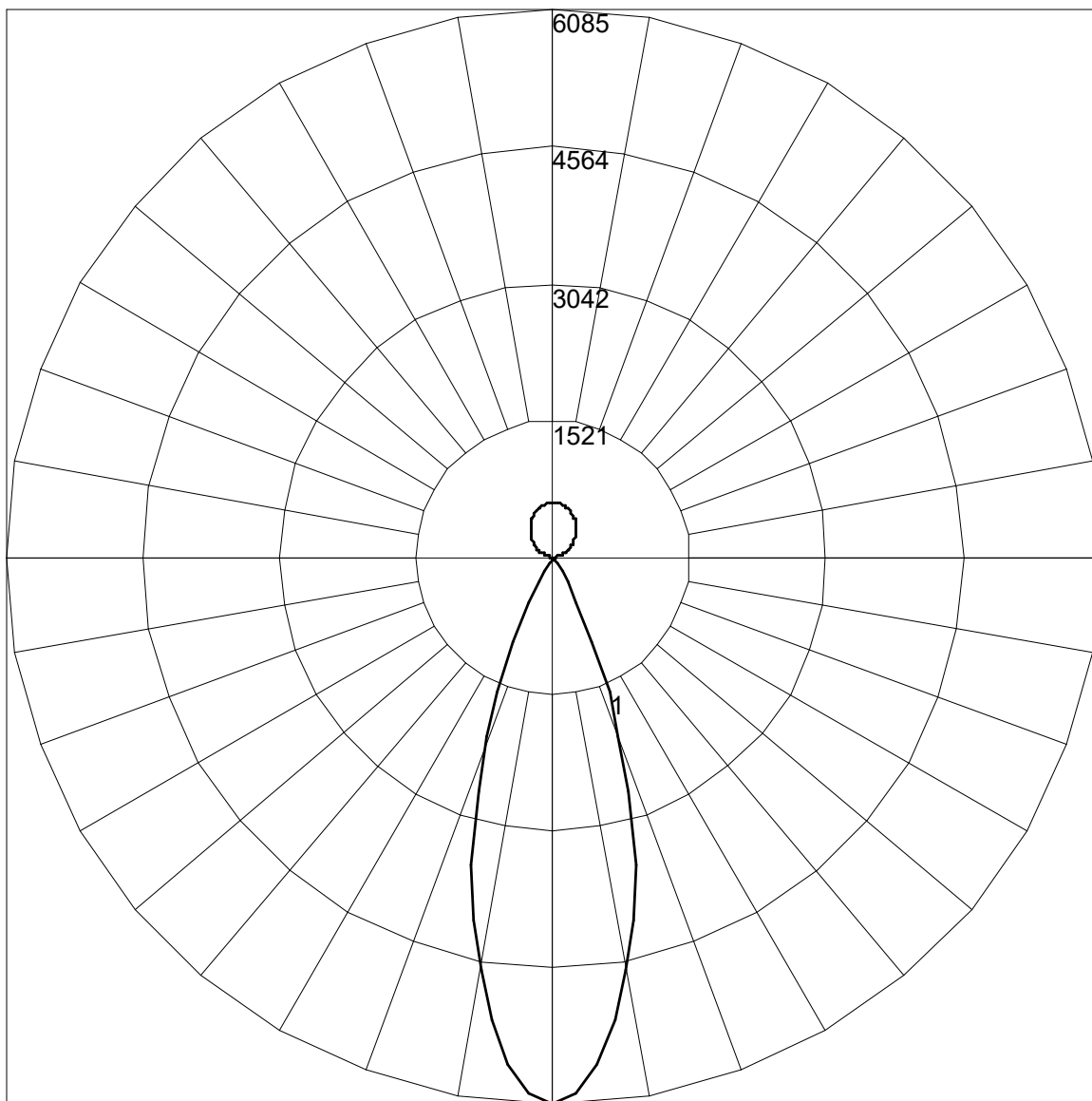
PHOTOMETRIC FILENAME : HP-2-ID-4FT-S-H-835-F-MLB-ITL85132-KPL2008-6.014.IES

## 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  | 108 | 108 | 108 | 108 | 101 | 101 | 101 | 101 | 86 | 86 | 86 | 73 | 73 | 73 | 61 | 61 | 61 | 55 |
| 1  | 102 | 99  | 96  | 94  | 95  | 93  | 90  | 88  | 80 | 79 | 77 | 69 | 68 | 67 | 59 | 58 | 58 | 53 |
| 2  | 96  | 91  | 87  | 83  | 90  | 86  | 82  | 79  | 75 | 73 | 71 | 66 | 64 | 63 | 57 | 56 | 55 | 51 |
| 3  | 91  | 85  | 79  | 75  | 85  | 80  | 75  | 72  | 71 | 68 | 65 | 62 | 60 | 59 | 55 | 53 | 52 | 49 |
| 4  | 86  | 79  | 73  | 69  | 81  | 75  | 70  | 66  | 67 | 63 | 61 | 60 | 57 | 55 | 53 | 51 | 50 | 47 |
| 5  | 82  | 74  | 68  | 64  | 77  | 70  | 65  | 61  | 63 | 60 | 57 | 57 | 54 | 52 | 51 | 49 | 48 | 45 |
| 6  | 78  | 69  | 63  | 59  | 73  | 66  | 61  | 57  | 60 | 56 | 54 | 54 | 52 | 50 | 49 | 47 | 46 | 44 |
| 7  | 74  | 65  | 60  | 56  | 70  | 63  | 58  | 54  | 57 | 53 | 51 | 52 | 49 | 47 | 48 | 46 | 44 | 42 |
| 8  | 71  | 62  | 56  | 52  | 67  | 59  | 54  | 51  | 55 | 51 | 48 | 50 | 47 | 45 | 46 | 44 | 43 | 41 |
| 9  | 68  | 59  | 53  | 50  | 64  | 57  | 52  | 48  | 52 | 49 | 46 | 48 | 45 | 43 | 45 | 43 | 41 | 39 |
| 10 | 65  | 56  | 51  | 47  | 62  | 54  | 49  | 46  | 50 | 46 | 44 | 47 | 44 | 42 | 43 | 41 | 40 | 38 |

POLAR GRAPH



Maximum Candela = 6084.714 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)