

# 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-D-RG-4FT-S-835-RG-LHC-ABL-8H-ITL91937.201.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL91937.001 Family Correlation File  
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.  
[ISSUEDATE]06/11/19  
[ISSUEDATE]06/10/2020  
[MANUFAC]FINELITE, INC.  
[LUMCAT]HP-2-D-RG-4ft-S-835-RG-LHC-ABL-8H  
[INPUT\_ELECTRICAL]120.0 VOLTS, 14.3 WATTS  
[INPUT\_ELECTRICAL]277.0 VOLTS, 15.8 WATTS  
[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL91937. 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)  
[ABSOLUTE LUMENS]801

### CHARACTERISTICS

|                                 |                 |
|---------------------------------|-----------------|
| Lumens Per Lamp                 | N.A. (absolute) |
| Total Lamp Lumens               | N.A. (absolute) |
| Luminaire Lumens                | 801             |
| Total Luminaire Efficiency      | N.A.            |
| Luminaire Efficacy Rating (LER) | 56              |
| Total Luminaire Watts           | 14.3            |
| Ballast Factor                  | 1.00            |
| CIE Type                        | Direct          |
| Spacing Criterion (0-180)       | 0.80            |
| Spacing Criterion (90-270)      | 0.66            |
| Spacing Criterion (Diagonal)    | 0.80            |
| Basic Luminous Shape            | Rectangular     |
| Luminous Length (0-180)         | 4.00 ft         |
| Luminous Width (90-270)         | 0.19 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                  | 3395             | 2565              | 2357              |
| 55                  | 2947             | 2057              | 1944              |
| 65                  | 2583             | 1722              | 1653              |
| 75                  | 2199             | 1429              | 1383              |
| 85                  | 1549             | 1010              | 943               |

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-D-RG-4FT-S-835-RG-LHC-ABL-8H-ITL91937.201.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>  | 790.358    | 790.358     | 790.358     | 790.358     | 790.358     |
| <b>2.5</b>  | 780.944    | 780.944     | 779.307     | 777.670     | 777.261     |
| <b>5.0</b>  | 756.796    | 753.521     | 748.200     | 742.879     | 740.014     |
| <b>7.5</b>  | 724.052    | 717.912     | 707.680     | 698.675     | 693.354     |
| <b>10.0</b> | 687.215    | 676.573     | 661.838     | 649.968     | 641.373     |
| <b>12.5</b> | 648.740    | 631.959     | 613.950     | 597.578     | 586.936     |
| <b>15.0</b> | 605.355    | 584.480     | 564.425     | 543.141     | 527.997     |
| <b>17.5</b> | 561.559    | 538.229     | 513.262     | 486.248     | 471.923     |
| <b>20.0</b> | 514.490    | 491.160     | 462.509     | 433.858     | 417.895     |
| <b>22.5</b> | 468.239    | 445.318     | 410.937     | 382.695     | 366.733     |
| <b>25.0</b> | 421.170    | 398.249     | 363.458     | 334.807     | 320.891     |
| <b>27.5</b> | 375.328    | 354.863     | 320.891     | 291.012     | 279.552     |
| <b>30.0</b> | 329.077    | 313.114     | 280.370     | 252.129     | 241.487     |
| <b>32.5</b> | 290.194    | 273.822     | 243.124     | 218.566     | 207.515     |
| <b>35.0</b> | 255.812    | 235.757     | 211.199     | 189.915     | 180.501     |
| <b>37.5</b> | 226.343    | 203.013     | 183.776     | 164.539     | 157.990     |
| <b>40.0</b> | 202.603    | 177.227     | 160.036     | 146.939     | 141.208     |
| <b>42.5</b> | 181.729    | 157.990     | 141.208     | 132.204     | 127.702     |
| <b>45.0</b> | 167.404    | 141.618     | 126.474     | 119.516     | 116.241     |
| <b>47.5</b> | 154.306    | 126.064     | 113.376     | 107.646     | 105.599     |
| <b>50.0</b> | 141.208    | 112.557     | 101.916     | 97.413      | 95.367      |
| <b>52.5</b> | 129.339    | 100.278     | 91.683      | 87.999      | 86.362      |
| <b>55.0</b> | 117.878    | 89.227      | 82.269      | 78.995      | 77.767      |
| <b>57.5</b> | 106.827    | 79.404      | 73.674      | 70.809      | 69.990      |
| <b>60.0</b> | 96.595     | 70.809      | 65.488      | 63.441      | 62.214      |
| <b>62.5</b> | 86.362     | 62.214      | 58.121      | 56.074      | 55.255      |
| <b>65.0</b> | 76.130     | 54.437      | 50.753      | 49.116      | 48.707      |
| <b>67.5</b> | 66.716     | 46.660      | 43.795      | 42.567      | 42.158      |
| <b>70.0</b> | 57.302     | 40.111      | 37.656      | 36.428      | 36.018      |
| <b>72.5</b> | 48.707     | 33.563      | 31.516      | 30.697      | 30.288      |
| <b>75.0</b> | 39.702     | 27.014      | 25.786      | 24.967      | 24.967      |
| <b>77.5</b> | 31.516     | 21.284      | 20.056      | 19.646      | 19.237      |
| <b>80.0</b> | 23.739     | 15.963      | 15.144      | 14.735      | 14.735      |
| <b>82.5</b> | 16.372     | 10.642      | 10.232      | 10.232      | 9.823       |
| <b>85.0</b> | 9.414      | 6.139       | 6.139       | 5.730       | 5.730       |
| <b>87.5</b> | 3.274      | 2.046       | 2.046       | 2.046       | 2.046       |
| <b>90.0</b> | 0.000      | 0.000       | 0.000       | 0.000       | 0.000       |

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-D-RG-4FT-S-835-RG-LHC-ABL-8H-ITL91937.201.IES****ZONAL LUMEN SUMMARY**

| Zone    | Lumens | %Lamp | %Fixt  |
|---------|--------|-------|--------|
| 0-20    | 225.75 | N.A.  | 28.20  |
| 0-30    | 394.29 | N.A.  | 49.20  |
| 0-40    | 529.32 | N.A.  | 66.10  |
| 0-60    | 710.45 | N.A.  | 88.70  |
| 0-80    | 793.64 | N.A.  | 99.10  |
| 0-90    | 801.19 | N.A.  | 100.00 |
| 10-90   | 732.48 | N.A.  | 91.40  |
| 20-40   | 303.56 | N.A.  | 37.90  |
| 20-50   | 406.35 | N.A.  | 50.70  |
| 40-70   | 235.01 | N.A.  | 29.30  |
| 60-80   | 83.18  | N.A.  | 10.40  |
| 70-80   | 29.31  | N.A.  | 3.70   |
| 80-90   | 7.56   | N.A.  | 0.90   |
| 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   | 801.19 | N.A.  | 100.00 |

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

| Zone    | Lumens |
|---------|--------|
| 0-10    | 68.72  |
| 10-20   | 157.04 |
| 20-30   | 168.53 |
| 30-40   | 135.03 |
| 40-50   | 102.79 |
| 50-60   | 78.35  |
| 60-70   | 53.87  |
| 70-80   | 29.31  |
| 80-90   | 7.56   |
| 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   |

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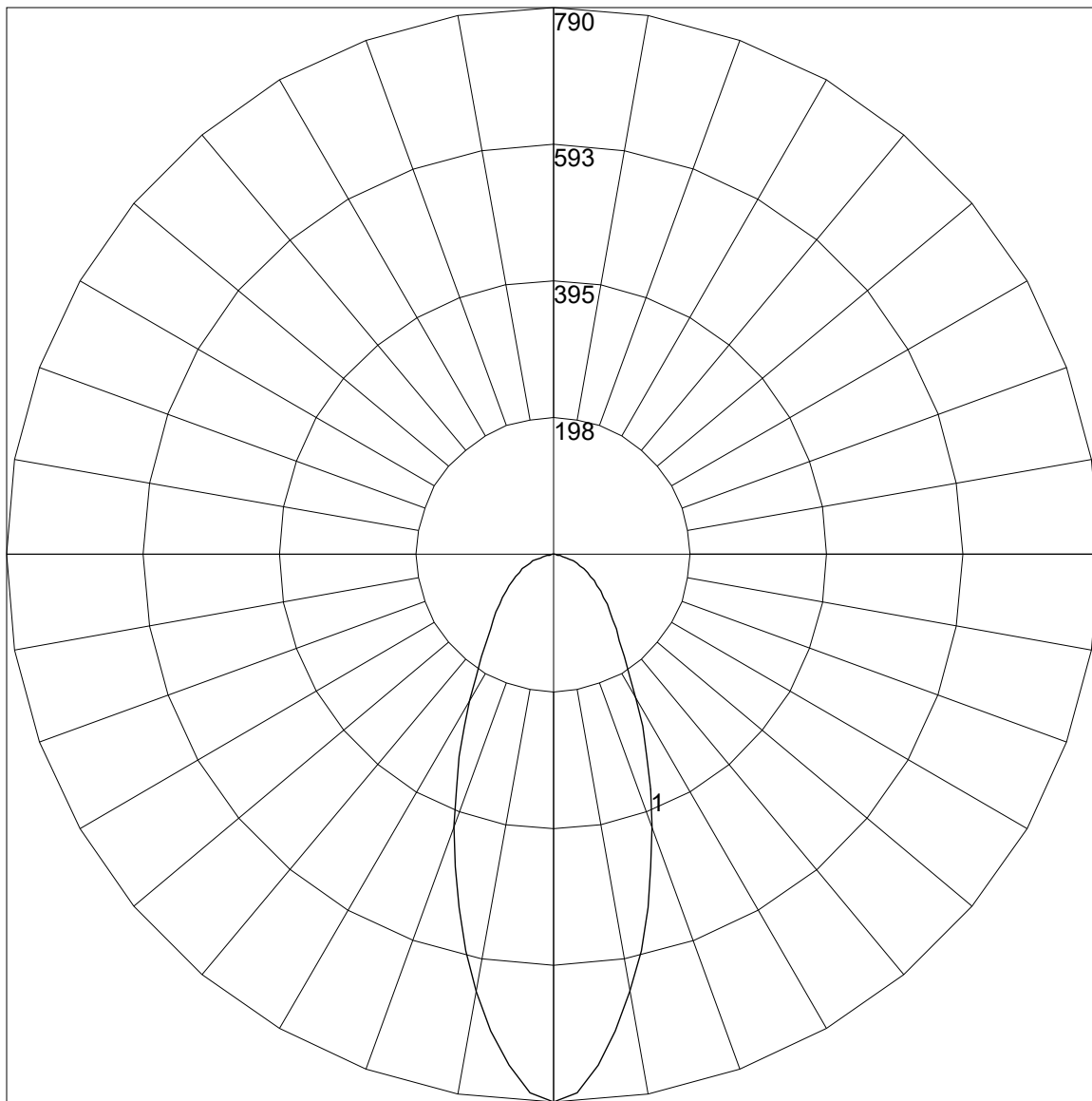
PHOTOMETRIC FILENAME : HP-2-D-RG-4FT-S-835-RG-LHC-ABL-8H-ITL91937.201.IES

## 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  | 111 | 107 | 104 | 101 | 108 | 105 | 102 | 99  | 101 | 98  | 96  | 97  | 95  | 93  | 94  | 92  | 90  | 89  |
| 2  | 103 | 97  | 91  | 87  | 101 | 95  | 90  | 86  | 91  | 87  | 84  | 88  | 85  | 82  | 85  | 83  | 80  | 78  |
| 3  | 96  | 88  | 81  | 76  | 94  | 86  | 80  | 75  | 83  | 78  | 74  | 81  | 76  | 73  | 78  | 75  | 71  | 70  |
| 4  | 90  | 80  | 73  | 67  | 88  | 79  | 72  | 67  | 76  | 71  | 66  | 74  | 69  | 65  | 72  | 68  | 64  | 62  |
| 5  | 84  | 73  | 66  | 60  | 82  | 72  | 65  | 60  | 70  | 64  | 60  | 69  | 63  | 59  | 67  | 62  | 58  | 57  |
| 6  | 79  | 68  | 60  | 55  | 77  | 67  | 60  | 55  | 65  | 59  | 54  | 64  | 58  | 54  | 62  | 57  | 53  | 52  |
| 7  | 74  | 63  | 55  | 50  | 73  | 62  | 55  | 50  | 61  | 54  | 50  | 59  | 54  | 49  | 58  | 53  | 49  | 47  |
| 8  | 70  | 59  | 51  | 46  | 69  | 58  | 51  | 46  | 57  | 50  | 46  | 56  | 50  | 46  | 54  | 49  | 46  | 44  |
| 9  | 66  | 55  | 48  | 43  | 65  | 54  | 48  | 43  | 53  | 47  | 43  | 52  | 47  | 43  | 51  | 46  | 42  | 41  |
| 10 | 63  | 51  | 45  | 40  | 62  | 51  | 44  | 40  | 50  | 44  | 40  | 49  | 44  | 40  | 48  | 43  | 40  | 38  |

POLAR GRAPH



Maximum Candela = 790.358 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)