

# 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 : HPR-LED-ANR-2X2-DCO-H-837-XXIC-ITL85148.203.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL85148.203 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/24/15

[ISSUEDATE]05/17/2021

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HPR-LED-ANR-2X2-DCO-H-837-XXIC

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 40.2 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 40.7 WATTS

[ABSOLUTE LUMENS]4099

[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL85148. 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                | 4099            |
| Total Luminaire Efficiency      | N.A.            |
| Luminaire Efficacy Rating (LER) | 102             |
| Total Luminaire Watts           | 40.2            |
| Ballast Factor                  | 1.00            |
| CIE Type                        | Direct          |
| Spacing Criterion (0-180)       | 1.18            |
| Spacing Criterion (90-270)      | 1.16            |
| Spacing Criterion (Diagonal)    | 1.28            |
| Basic Luminous Shape            | Rectangular     |
| Luminous Length (0-180)         | 1.82 ft         |
| Luminous Width (90-270)         | 1.81 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                  | 4395             | 4325              | 4359              |
| 55                  | 3931             | 3852              | 3897              |
| 65                  | 3423             | 3341              | 3397              |
| 75                  | 2848             | 2774              | 2799              |
| 85                  | 2121             | 2022              | 1776              |

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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  | 1703.061   | 1703.061    | 1703.061    | 1703.061    | 1703.061    |
| 2.5  | 1701.740   | 1701.740    | 1701.080    | 1700.420    | 1699.759    |
| 5.0  | 1693.816   | 1693.816    | 1691.835    | 1690.514    | 1689.854    |
| 7.5  | 1681.269   | 1679.949    | 1677.967    | 1674.666    | 1674.005    |
| 10.0 | 1664.760   | 1662.779    | 1657.496    | 1653.534    | 1650.893    |
| 12.5 | 1639.006   | 1636.365    | 1632.403    | 1628.441    | 1625.139    |
| 15.0 | 1609.951   | 1606.649    | 1601.366    | 1596.744    | 1593.442    |
| 17.5 | 1574.291   | 1571.650    | 1564.386    | 1560.424    | 1557.782    |
| 20.0 | 1535.991   | 1530.708    | 1524.104    | 1520.142    | 1517.501    |
| 22.5 | 1490.426   | 1485.143    | 1479.200    | 1475.238    | 1471.276    |
| 25.0 | 1442.220   | 1436.277    | 1429.673    | 1426.371    | 1423.730    |
| 27.5 | 1390.052   | 1383.448    | 1376.845    | 1374.203    | 1372.222    |
| 30.0 | 1335.902   | 1327.318    | 1321.375    | 1319.394    | 1317.412    |
| 32.5 | 1277.791   | 1267.886    | 1261.942    | 1261.942    | 1259.961    |
| 35.0 | 1216.378   | 1205.812    | 1201.190    | 1202.510    | 1200.529    |
| 37.5 | 1152.323   | 1142.418    | 1137.795    | 1138.456    | 1138.456    |
| 40.0 | 1086.948   | 1076.382    | 1073.080    | 1075.722    | 1075.722    |
| 42.5 | 1020.912   | 1010.346    | 1007.705    | 1011.007    | 1011.667    |
| 45.0 | 954.876    | 944.311     | 939.688     | 946.292     | 946.952     |
| 47.5 | 888.180    | 877.615     | 873.652     | 880.256     | 881.577     |
| 50.0 | 822.145    | 811.579     | 808.277     | 814.881     | 816.201     |
| 52.5 | 756.769    | 746.204     | 742.902     | 750.166     | 750.826     |
| 55.0 | 692.715    | 680.828     | 678.847     | 686.111     | 686.771     |
| 57.5 | 626.679    | 617.434     | 614.792     | 623.377     | 624.037     |
| 60.0 | 564.605    | 556.021     | 552.719     | 561.304     | 561.964     |
| 62.5 | 503.852    | 495.268     | 492.626     | 499.890     | 500.551     |
| 65.0 | 444.420    | 437.817     | 433.855     | 440.458     | 441.119     |
| 67.5 | 386.969    | 379.045     | 377.064     | 383.007     | 383.667     |
| 70.0 | 331.499    | 324.235     | 321.594     | 327.537     | 327.537     |
| 72.5 | 277.350    | 272.067     | 270.746     | 273.388     | 273.388     |
| 75.0 | 226.502    | 221.880     | 220.559     | 223.201     | 222.540     |
| 77.5 | 180.277    | 174.334     | 173.674     | 174.995     | 173.674     |
| 80.0 | 135.373    | 130.751     | 131.411     | 130.751     | 129.430     |
| 82.5 | 94.431     | 91.790      | 91.129      | 89.809      | 85.846      |
| 85.0 | 56.791     | 55.470      | 54.149      | 50.187      | 47.546      |
| 87.5 | 23.773     | 23.773      | 22.452      | 22.452      | 21.131      |
| 90.0 | 0.000      | 0.000       | 0.000       | 0.000       | 0.000       |

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HPR-LED-ANR-2X2-DCO-H-837-XXIC-ITL85148.203.IES****ZONAL LUMEN SUMMARY**

| Zone    | Lumens  | %Lamp | %Fixt  |
|---------|---------|-------|--------|
| 0-20    | 611.43  | N.A.  | 14.90  |
| 0-30    | 1270.00 | N.A.  | 31.00  |
| 0-40    | 2022.51 | N.A.  | 49.30  |
| 0-60    | 3363.71 | N.A.  | 82.10  |
| 0-80    | 4035.83 | N.A.  | 98.50  |
| 0-90    | 4098.98 | N.A.  | 100.00 |
| 10-90   | 3938.56 | N.A.  | 96.10  |
| 20-40   | 1411.08 | N.A.  | 34.40  |
| 20-50   | 2140.3  | N.A.  | 52.20  |
| 40-70   | 1776.32 | N.A.  | 43.30  |
| 60-80   | 672.12  | N.A.  | 16.40  |
| 70-80   | 237.00  | N.A.  | 5.80   |
| 80-90   | 63.15   | N.A.  | 1.50   |
| 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   | 4098.98 | N.A.  | 100.00 |

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

| Zone    | Lumens |
|---------|--------|
| 0-10    | 160.42 |
| 10-20   | 451.01 |
| 20-30   | 658.57 |
| 30-40   | 752.51 |
| 40-50   | 729.22 |
| 50-60   | 611.98 |
| 60-70   | 435.12 |
| 70-80   | 237.00 |
| 80-90   | 63.15  |
| 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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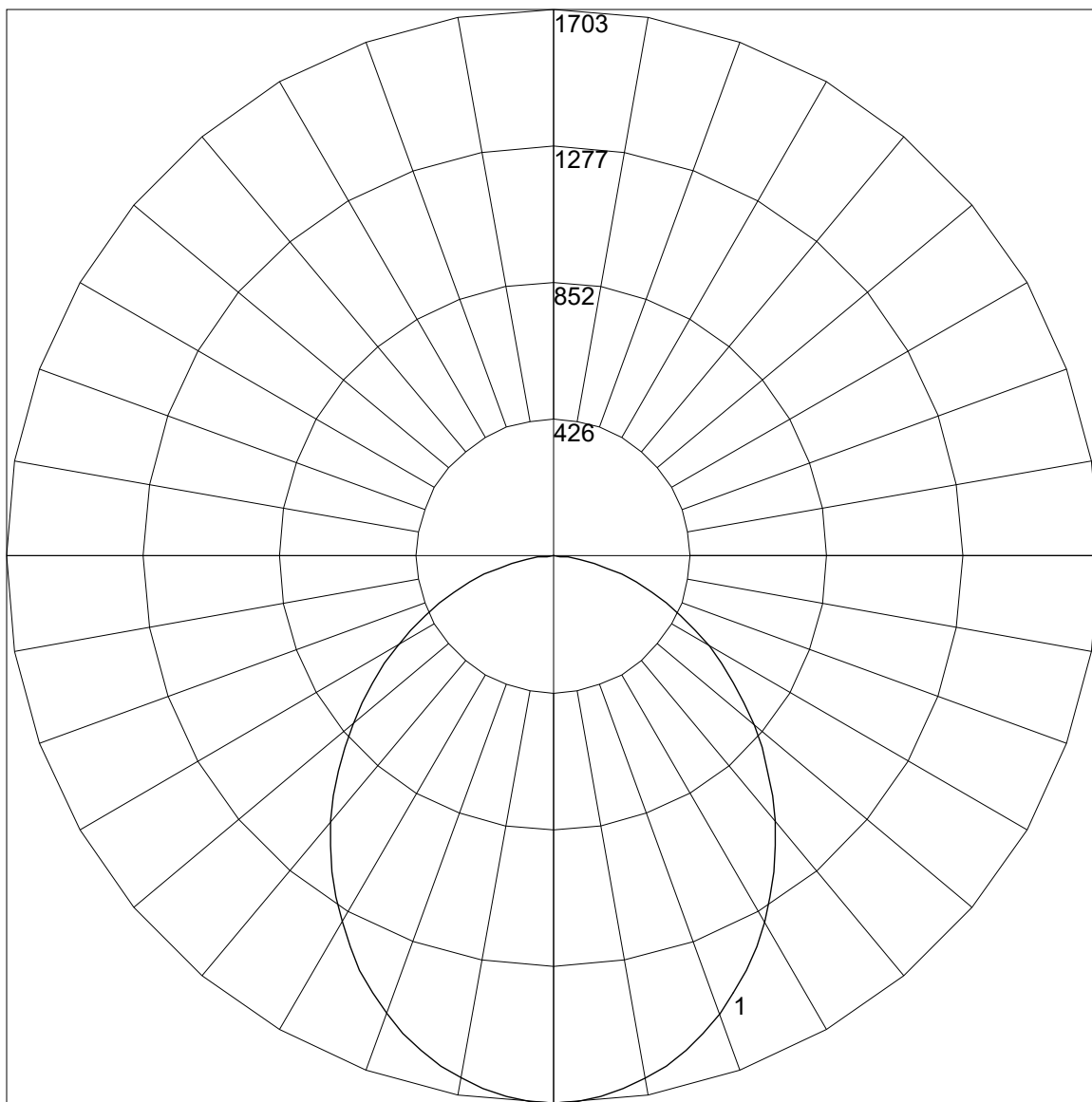
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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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  | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1  | 109 | 105 | 101 | 97  | 107 | 103 | 99  | 95  | 98  | 95  | 92  | 94  | 92  | 90  | 91  | 89  | 87  | 85  |
| 2  | 100 | 92  | 85  | 80  | 97  | 90  | 84  | 79  | 87  | 82  | 77  | 83  | 79  | 75  | 80  | 77  | 74  | 72  |
| 3  | 91  | 81  | 73  | 67  | 89  | 80  | 72  | 67  | 77  | 71  | 65  | 74  | 69  | 64  | 72  | 67  | 63  | 61  |
| 4  | 84  | 72  | 64  | 57  | 82  | 71  | 63  | 57  | 69  | 62  | 56  | 66  | 60  | 56  | 64  | 59  | 55  | 53  |
| 5  | 77  | 65  | 56  | 50  | 75  | 64  | 56  | 50  | 62  | 55  | 49  | 60  | 54  | 49  | 58  | 53  | 48  | 46  |
| 6  | 72  | 59  | 50  | 44  | 70  | 58  | 50  | 44  | 56  | 49  | 43  | 54  | 48  | 43  | 53  | 47  | 43  | 41  |
| 7  | 67  | 53  | 45  | 39  | 65  | 53  | 45  | 39  | 51  | 44  | 39  | 50  | 43  | 38  | 48  | 43  | 38  | 36  |
| 8  | 62  | 49  | 41  | 35  | 61  | 48  | 40  | 35  | 47  | 40  | 35  | 46  | 39  | 34  | 45  | 39  | 34  | 32  |
| 9  | 58  | 45  | 37  | 32  | 57  | 44  | 37  | 32  | 43  | 36  | 31  | 42  | 36  | 31  | 41  | 35  | 31  | 29  |
| 10 | 55  | 42  | 34  | 29  | 53  | 41  | 34  | 29  | 40  | 33  | 29  | 39  | 33  | 28  | 38  | 33  | 28  | 27  |

POLAR GRAPH



Maximum Candela = 1703.061 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)