

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 : S12-LED-ID-DCO-4FT-4E-H-8-35-TDO-ITL85163.215.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85163.215 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE] 09/11/15

[ISSUEDATE]08/15/16

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE S12-LED-ID-DCO-4ft-4E-H-8-35-TDO

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 47.5 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 47.6 WATTS

[_ABSOLUTE]LUMENS]5006

[OTHER]see www.finelite.com for source file ITL85163. 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

CHARACTERISTICS

| | |
|---------------------------------|---------------------|
| Lumens Per Lamp | N.A. (absolute) |
| Total Lamp Lumens | N.A. (absolute) |
| Luminaire Lumens | 5006 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 105 |
| Total Luminaire Watts | 47.5 |
| Ballast Factor | 1.00 |
| CIE Type | Direct |
| Spacing Criterion (0-180) | 1.22 |
| Spacing Criterion (90-270) | 1.22 |
| Spacing Criterion (Diagonal) | 1.34 |
| Basic Luminous Shape | Rectangular w/Sides |
| Luminous Length (0-180) | 3.32 ft |
| Luminous Width (90-270) | 0.36 ft |
| Luminous Height | 0.03 ft |

LUMINANCE DATA (cd/sq.m)

| Angle In Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|---------------------|------------------|-------------------|-------------------|
| 45 | 14234 | 13492 | 13291 |
| 55 | 13297 | 12329 | 12108 |
| 65 | 12036 | 10912 | 10635 |
| 75 | 9971 | 8791 | 8845 |
| 85 | 5898 | 5965 | 6853 |

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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 | 1859.892 | 1859.891 | 1859.891 | 1859.891 | 1859.891 |
| 2.5 | 1857.425 | 1857.425 | 1857.425 | 1857.425 | 1857.425 |
| 5.0 | 1850.025 | 1850.025 | 1850.025 | 1850.025 | 1850.025 |
| 7.5 | 1837.691 | 1837.691 | 1837.691 | 1837.691 | 1840.158 |
| 10.0 | 1817.957 | 1815.491 | 1820.424 | 1820.424 | 1820.424 |
| 12.5 | 1798.224 | 1793.291 | 1800.691 | 1800.691 | 1798.224 |
| 15.0 | 1771.090 | 1761.224 | 1771.090 | 1773.557 | 1771.090 |
| 17.5 | 1739.023 | 1729.156 | 1739.023 | 1741.490 | 1739.023 |
| 20.0 | 1702.023 | 1689.689 | 1702.023 | 1704.489 | 1704.489 |
| 22.5 | 1657.622 | 1645.289 | 1660.089 | 1662.555 | 1660.089 |
| 25.0 | 1610.755 | 1600.888 | 1613.222 | 1618.155 | 1615.688 |
| 27.5 | 1563.888 | 1551.554 | 1566.354 | 1568.821 | 1568.821 |
| 30.0 | 1509.620 | 1499.753 | 1512.087 | 1514.553 | 1512.087 |
| 32.5 | 1455.353 | 1445.486 | 1457.820 | 1462.753 | 1457.820 |
| 35.0 | 1398.619 | 1388.752 | 1401.085 | 1403.552 | 1401.085 |
| 37.5 | 1334.485 | 1327.084 | 1339.418 | 1341.884 | 1339.418 |
| 40.0 | 1272.817 | 1265.417 | 1275.284 | 1280.217 | 1277.750 |
| 42.5 | 1211.149 | 1203.749 | 1211.149 | 1218.550 | 1213.616 |
| 45.0 | 1144.549 | 1139.615 | 1147.015 | 1151.949 | 1149.482 |
| 47.5 | 1077.948 | 1073.014 | 1080.414 | 1082.881 | 1080.414 |
| 50.0 | 1006.413 | 1003.947 | 1013.813 | 1016.280 | 1013.813 |
| 52.5 | 939.813 | 937.346 | 942.279 | 947.213 | 947.213 |
| 55.0 | 870.745 | 868.278 | 873.212 | 878.145 | 878.145 |
| 57.5 | 799.211 | 799.211 | 806.611 | 809.077 | 809.077 |
| 60.0 | 730.143 | 727.676 | 735.077 | 740.010 | 740.010 |
| 62.5 | 656.142 | 658.609 | 663.542 | 668.476 | 670.942 |
| 65.0 | 584.608 | 587.074 | 594.475 | 596.941 | 599.408 |
| 67.5 | 513.073 | 515.540 | 522.940 | 527.874 | 527.874 |
| 70.0 | 441.539 | 446.473 | 456.339 | 458.806 | 463.740 |
| 72.5 | 370.005 | 377.405 | 387.272 | 394.672 | 402.072 |
| 75.0 | 300.937 | 310.804 | 320.671 | 333.004 | 340.404 |
| 77.5 | 234.337 | 244.203 | 261.470 | 273.804 | 278.737 |
| 80.0 | 170.202 | 182.536 | 202.269 | 217.070 | 222.003 |
| 82.5 | 113.468 | 125.802 | 148.002 | 167.736 | 175.136 |
| 85.0 | 64.134 | 78.934 | 103.601 | 125.802 | 133.202 |
| 87.5 | 22.200 | 39.467 | 69.068 | 88.801 | 96.201 |
| 90.0 | 0.000 | 14.800 | 39.467 | 59.201 | 66.601 |
| 92.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 95.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 97.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 100.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 102.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 105.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 107.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 110.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 112.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 115.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 117.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 120.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 122.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 125.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 127.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 130.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 132.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-4E-H-8-35-TDO-ITL85163.215.IES****CANDELA TABULATION - (Cont.)**

| | | | | | |
|-------|-------|-------|-------|-------|-------|
| 135.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 137.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 140.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 142.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 145.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 147.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 150.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 152.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 155.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 157.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 160.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 162.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 165.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 167.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 170.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 172.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 175.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 177.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 180.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-4E-H-8-35-TDO-ITL85163.215.IES****ZONAL LUMEN SUMMARY**

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|--------|
| 0-20 | 674.50 | N.A. | 13.50 |
| 0-30 | 1416.68 | N.A. | 28.30 |
| 0-40 | 2290.44 | N.A. | 45.80 |
| 0-60 | 3955.47 | N.A. | 79.00 |
| 0-80 | 4883.31 | N.A. | 97.60 |
| 0-90 | 5000.5 | N.A. | 99.90 |
| 10-90 | 4824.87 | N.A. | 96.40 |
| 20-40 | 1615.94 | N.A. | 32.30 |
| 20-50 | 2499.75 | N.A. | 49.90 |
| 40-70 | 2251.84 | N.A. | 45.00 |
| 60-80 | 927.84 | N.A. | 18.50 |
| 70-80 | 341.03 | N.A. | 6.80 |
| 80-90 | 117.19 | N.A. | 2.30 |
| 90-110 | 5.03 | N.A. | 0.10 |
| 90-120 | 5.03 | N.A. | 0.10 |
| 90-130 | 5.03 | N.A. | 0.10 |
| 90-150 | 5.03 | N.A. | 0.10 |
| 90-180 | 5.03 | N.A. | 0.10 |
| 110-180 | 0.00 | N.A. | 0.00 |
| 0-180 | 5005.53 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|--------|
| 0-10 | 175.63 |
| 10-20 | 498.87 |
| 20-30 | 742.18 |
| 30-40 | 873.75 |
| 40-50 | 883.81 |
| 50-60 | 781.22 |
| 60-70 | 586.81 |
| 70-80 | 341.03 |
| 80-90 | 117.19 |
| 90-100 | 5.03 |
| 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 |

IES INDOOR REPORT

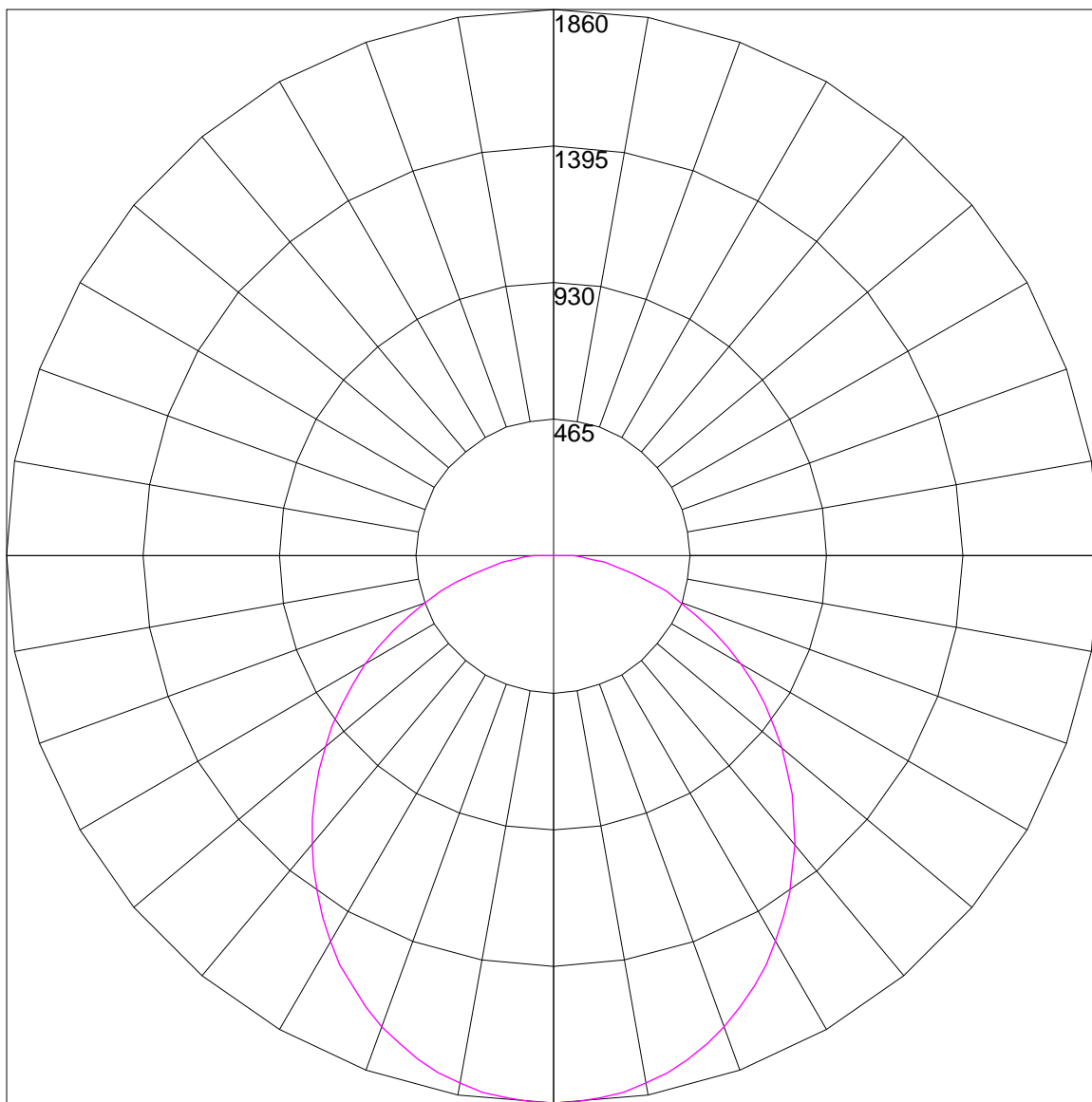
PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-4E-H-8-35-TDO-ITL85163.215.IES

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 | 109 | 104 | 99 | 96 | 106 | 102 | 98 | 94 | 97 | 94 | 91 | 93 | 91 | 88 | 90 | 88 | 86 | 83 |
| 2 | 99 | 91 | 84 | 78 | 96 | 89 | 82 | 77 | 85 | 80 | 75 | 82 | 77 | 73 | 79 | 75 | 72 | 70 |
| 3 | 90 | 80 | 71 | 65 | 88 | 78 | 70 | 64 | 75 | 69 | 63 | 72 | 67 | 62 | 70 | 65 | 61 | 59 |
| 4 | 83 | 71 | 62 | 55 | 80 | 69 | 61 | 55 | 67 | 60 | 54 | 64 | 58 | 53 | 62 | 57 | 52 | 50 |
| 5 | 76 | 63 | 54 | 48 | 74 | 62 | 54 | 47 | 60 | 52 | 47 | 58 | 51 | 46 | 56 | 50 | 46 | 44 |
| 6 | 70 | 57 | 48 | 42 | 68 | 56 | 48 | 41 | 54 | 47 | 41 | 52 | 46 | 41 | 51 | 45 | 40 | 38 |
| 7 | 65 | 52 | 43 | 37 | 63 | 51 | 43 | 37 | 49 | 42 | 36 | 48 | 41 | 36 | 47 | 40 | 36 | 34 |
| 8 | 61 | 47 | 39 | 33 | 59 | 47 | 38 | 33 | 45 | 38 | 33 | 44 | 37 | 32 | 43 | 37 | 32 | 30 |
| 9 | 57 | 43 | 35 | 30 | 55 | 43 | 35 | 30 | 42 | 34 | 29 | 41 | 34 | 29 | 40 | 33 | 29 | 27 |
| 10 | 53 | 40 | 32 | 27 | 52 | 40 | 32 | 27 | 39 | 32 | 27 | 38 | 31 | 27 | 37 | 31 | 26 | 25 |

POLAR GRAPH



Maximum Candela = 1859.892 Located At Horizontal Angle = 0, Vertical Angle = 0
Vertical Plane Through Horizontal Angles (90 - 270)