

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-3E-B-H-8-35-FTO-ITL85165.011.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85165.011 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]09/09/15

[ISSUEDATE]04/27/16

[MANUFAC]FINELITE, INC.

[LUMCAT]S12-LED-ID-DCO-4ft-3E-B-H-8-35-FTO

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 33.9 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 37.6 WATTS

[ABSOLUTE]LUMENS]3971

[OTHER]see www.finelite.com for source file ITL85165. 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 | 3971 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 117 |
| Total Luminaire Watts | 33.9 |
| Ballast Factor | 1.00 |
| CIE Type | Semi-Indirect |
| 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) | 3.32 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 | 4459 | 4263 | 4200 |
| 55 | 4181 | 3899 | 3839 |
| 65 | 3795 | 3469 | 3353 |
| 75 | 3170 | 2793 | 2809 |
| 85 | 1860 | 2015 | 2281 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-3E-B-H-8-35-FTO-ITL85165.011.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 | 582.556 | 582.556 | 582.556 | 582.556 | 582.556 |
| 2.5 | 581.778 | 581.778 | 581.778 | 581.778 | 581.778 |
| 5.0 | 578.667 | 579.444 | 579.444 | 579.444 | 579.444 |
| 7.5 | 575.556 | 575.556 | 575.556 | 575.556 | 576.333 |
| 10.0 | 570.111 | 569.333 | 570.889 | 570.889 | 570.111 |
| 12.5 | 563.111 | 561.556 | 563.889 | 563.889 | 563.111 |
| 15.0 | 554.556 | 551.444 | 555.333 | 555.333 | 554.556 |
| 17.5 | 544.444 | 541.333 | 546.000 | 546.000 | 545.222 |
| 20.0 | 532.778 | 528.889 | 533.556 | 534.333 | 533.556 |
| 22.5 | 519.556 | 515.667 | 521.111 | 521.889 | 521.889 |
| 25.0 | 504.778 | 501.667 | 506.333 | 507.889 | 508.667 |
| 27.5 | 489.222 | 486.889 | 490.778 | 493.889 | 493.889 |
| 30.0 | 472.889 | 470.555 | 474.445 | 478.333 | 477.555 |
| 32.5 | 455.000 | 453.445 | 458.889 | 460.445 | 459.667 |
| 35.0 | 436.333 | 435.555 | 441.000 | 443.333 | 441.778 |
| 37.5 | 418.445 | 416.889 | 422.333 | 423.889 | 423.111 |
| 40.0 | 399.000 | 398.222 | 402.889 | 404.445 | 403.667 |
| 42.5 | 379.555 | 378.000 | 382.667 | 384.222 | 383.445 |
| 45.0 | 358.555 | 357.778 | 362.445 | 363.222 | 363.222 |
| 47.5 | 337.555 | 336.778 | 340.667 | 343.000 | 342.222 |
| 50.0 | 316.555 | 316.555 | 319.667 | 321.222 | 321.222 |
| 52.5 | 295.555 | 296.333 | 297.889 | 300.222 | 300.222 |
| 55.0 | 273.778 | 274.555 | 276.111 | 278.445 | 278.445 |
| 57.5 | 252.000 | 252.778 | 254.333 | 256.667 | 255.889 |
| 60.0 | 229.444 | 230.222 | 232.556 | 234.889 | 234.111 |
| 62.5 | 206.889 | 208.444 | 210.778 | 212.333 | 211.556 |
| 65.0 | 184.333 | 185.889 | 189.000 | 189.778 | 189.000 |
| 67.5 | 161.778 | 163.333 | 166.444 | 168.000 | 167.222 |
| 70.0 | 139.222 | 141.556 | 144.667 | 146.222 | 147.000 |
| 72.5 | 116.667 | 119.778 | 122.111 | 126.778 | 127.556 |
| 75.0 | 95.667 | 98.778 | 101.889 | 107.333 | 108.111 |
| 77.5 | 74.667 | 77.778 | 82.444 | 87.889 | 89.444 |
| 80.0 | 54.444 | 58.333 | 64.556 | 70.778 | 72.333 |
| 82.5 | 36.556 | 40.444 | 48.222 | 56.000 | 57.556 |
| 85.0 | 20.222 | 24.889 | 35.000 | 42.778 | 44.333 |
| 87.5 | 6.222 | 13.222 | 23.333 | 31.111 | 33.444 |
| 90.0 | 0.000 | 7.000 | 17.889 | 26.444 | 29.556 |
| 92.5 | 16.983 | 20.070 | 27.790 | 33.965 | 35.509 |
| 95.0 | 35.509 | 40.140 | 48.889 | 55.579 | 58.667 |
| 97.5 | 56.094 | 62.784 | 74.105 | 81.825 | 85.427 |
| 100.0 | 78.737 | 87.485 | 102.924 | 113.216 | 117.848 |
| 102.5 | 103.953 | 115.275 | 134.830 | 149.240 | 155.415 |
| 105.0 | 130.714 | 144.608 | 169.825 | 188.351 | 195.556 |
| 107.5 | 158.503 | 175.485 | 206.363 | 229.520 | 236.210 |
| 110.0 | 187.836 | 207.906 | 244.959 | 272.234 | 280.468 |
| 112.5 | 216.140 | 240.842 | 284.070 | 314.433 | 325.240 |
| 115.0 | 247.018 | 273.778 | 323.696 | 358.175 | 370.012 |
| 117.5 | 277.895 | 307.228 | 361.778 | 401.404 | 413.754 |
| 120.0 | 308.257 | 340.678 | 400.374 | 443.602 | 456.983 |
| 122.5 | 338.620 | 373.099 | 436.398 | 483.743 | 498.667 |
| 125.0 | 368.983 | 404.491 | 471.906 | 521.310 | 537.263 |
| 127.5 | 398.316 | 435.368 | 505.357 | 556.304 | 572.772 |
| 130.0 | 427.135 | 464.187 | 535.719 | 587.696 | 604.164 |
| 132.5 | 455.439 | 491.977 | 563.509 | 615.485 | 631.953 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-3E-B-H-8-35-FTO-ITL85165.011.IES****CANDELA TABULATION - (Cont.)**

| | | | | | |
|--------------|---------|---------|---------|---------|---------|
| 135.0 | 481.684 | 517.193 | 588.211 | 640.187 | 656.140 |
| 137.5 | 507.415 | 541.380 | 610.339 | 660.257 | 676.211 |
| 140.0 | 531.602 | 562.994 | 629.380 | 677.240 | 692.164 |
| 142.5 | 553.731 | 581.520 | 644.819 | 689.591 | 704.000 |
| 145.0 | 575.345 | 600.047 | 658.713 | 700.912 | 713.778 |
| 147.5 | 593.357 | 615.485 | 669.006 | 707.602 | 719.953 |
| 150.0 | 611.368 | 629.895 | 678.269 | 713.263 | 723.556 |
| 152.5 | 627.322 | 642.246 | 685.474 | 716.865 | 725.614 |
| 155.0 | 640.702 | 653.567 | 690.620 | 718.409 | 726.643 |
| 157.5 | 653.053 | 662.830 | 694.737 | 717.895 | 725.614 |
| 160.0 | 663.345 | 671.579 | 697.825 | 716.351 | 723.556 |
| 162.5 | 672.608 | 678.269 | 699.883 | 714.292 | 720.982 |
| 165.0 | 680.327 | 684.444 | 700.912 | 712.234 | 716.865 |
| 167.5 | 686.503 | 689.591 | 701.427 | 709.146 | 713.263 |
| 170.0 | 691.649 | 693.708 | 700.912 | 706.573 | 709.661 |
| 172.5 | 695.251 | 697.310 | 700.912 | 704.515 | 706.573 |
| 175.0 | 698.339 | 699.368 | 700.912 | 702.456 | 702.971 |
| 177.5 | 700.398 | 700.398 | 700.398 | 701.427 | 701.427 |
| 180.0 | 700.912 | 700.912 | 700.912 | 700.912 | 700.912 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-3E-B-H-8-35-FTO-ITL85165.011.IES****ZONAL LUMEN SUMMARY**

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|--------|
| 0-20 | 211.32 | N.A. | 5.30 |
| 0-30 | 444.26 | N.A. | 11.20 |
| 0-40 | 719.22 | N.A. | 18.10 |
| 0-60 | 1244.75 | N.A. | 31.30 |
| 0-80 | 1539.33 | N.A. | 38.80 |
| 0-90 | 1578.52 | N.A. | 39.80 |
| 10-90 | 1523.5 | N.A. | 38.40 |
| 20-40 | 507.90 | N.A. | 12.80 |
| 20-50 | 786.43 | N.A. | 19.80 |
| 40-70 | 711.51 | N.A. | 17.90 |
| 60-80 | 294.58 | N.A. | 7.40 |
| 70-80 | 108.60 | N.A. | 2.70 |
| 80-90 | 39.19 | N.A. | 1.00 |
| 90-110 | 232.96 | N.A. | 5.90 |
| 90-120 | 545.53 | N.A. | 13.70 |
| 90-130 | 958.22 | N.A. | 24.10 |
| 90-150 | 1810.78 | N.A. | 45.60 |
| 90-180 | 2392.53 | N.A. | 60.20 |
| 110-180 | 2159.57 | N.A. | 54.40 |
| 0-180 | 3971.06 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|--------|
| 0-10 | 55.02 |
| 10-20 | 156.30 |
| 20-30 | 232.94 |
| 30-40 | 274.95 |
| 40-50 | 278.54 |
| 50-60 | 246.99 |
| 60-70 | 185.98 |
| 70-80 | 108.60 |
| 80-90 | 39.19 |
| 90-100 | 56.02 |
| 100-110 | 176.94 |
| 110-120 | 312.56 |
| 120-130 | 412.69 |
| 130-140 | 445.53 |
| 140-150 | 407.03 |
| 150-160 | 316.94 |
| 160-170 | 197.92 |
| 170-180 | 66.89 |

IES INDOOR REPORT

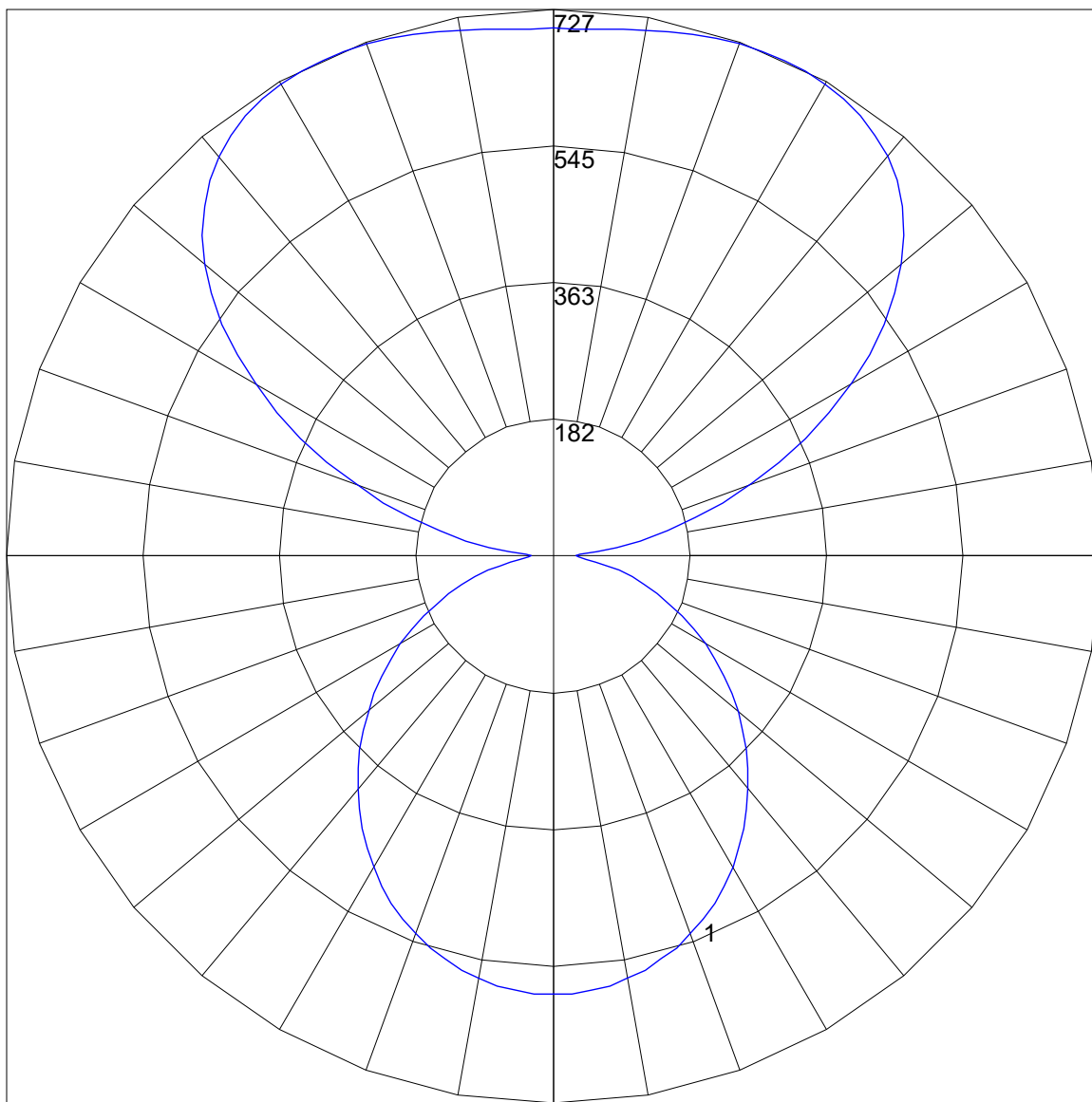
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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 | 95 | 95 | 95 | 95 | 78 | 78 | 78 | 62 | 62 | 62 | 47 | 47 | 47 | 40 |
| 1 | 95 | 91 | 87 | 84 | 87 | 83 | 80 | 77 | 68 | 65 | 63 | 54 | 52 | 51 | 41 | 40 | 39 | 33 |
| 2 | 87 | 79 | 73 | 68 | 79 | 72 | 67 | 63 | 59 | 56 | 52 | 47 | 45 | 42 | 36 | 34 | 33 | 28 |
| 3 | 79 | 70 | 62 | 57 | 72 | 64 | 57 | 52 | 52 | 48 | 44 | 42 | 38 | 36 | 32 | 30 | 28 | 23 |
| 4 | 72 | 62 | 54 | 48 | 65 | 56 | 49 | 44 | 46 | 41 | 37 | 37 | 33 | 30 | 28 | 26 | 24 | 20 |
| 5 | 66 | 55 | 47 | 41 | 60 | 50 | 43 | 38 | 41 | 36 | 32 | 33 | 29 | 26 | 26 | 23 | 21 | 17 |
| 6 | 61 | 49 | 41 | 35 | 55 | 45 | 38 | 33 | 37 | 32 | 28 | 30 | 26 | 23 | 23 | 20 | 18 | 15 |
| 7 | 56 | 44 | 36 | 31 | 51 | 41 | 34 | 29 | 34 | 28 | 24 | 27 | 23 | 20 | 21 | 18 | 16 | 13 |
| 8 | 52 | 40 | 32 | 27 | 47 | 37 | 30 | 25 | 31 | 25 | 22 | 25 | 21 | 18 | 19 | 17 | 14 | 12 |
| 9 | 49 | 36 | 29 | 24 | 44 | 34 | 27 | 22 | 28 | 23 | 19 | 23 | 19 | 16 | 18 | 15 | 13 | 11 |
| 10 | 45 | 33 | 26 | 22 | 41 | 31 | 24 | 20 | 26 | 21 | 17 | 21 | 17 | 15 | 17 | 14 | 12 | 10 |

POLAR GRAPH



Maximum Candela = 726.643 Located At Horizontal Angle = 90, Vertical Angle = 155
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)