

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 : S16-LED-ID-DCO-4FT-3E-B-S-835-FTO-ITL88524.010.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL88524.010 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]10/18/16

[ISSUEDATE]01/05/17

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE S16-LED-ID-DCO-4ft-3E-B-S-835-FTO

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 26.2 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 29.8 WATTS

[OTHER]see www.finelite.com for source file ITL88524. 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

[_ABSOLUTE]LUMENS]2890

CHARACTERISTICS

| | |
|---------------------------------|-----------------|
| Lumens Per Lamp | N.A. (absolute) |
| Total Lamp Lumens | N.A. (absolute) |
| Luminaire Lumens | 2890 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 110 |
| Total Luminaire Watts | 26.2 |
| 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 |
| Luminous Length (0-180) | 3.57 ft |
| Luminous Width (90-270) | 0.29 ft |
| Luminous Height | 0.00 ft |

LUMINANCE DATA (cd/sq.m)

| Angle In Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|---------------------|------------------|-------------------|-------------------|
| 45 | 2986 | 2950 | 2901 |
| 55 | 2804 | 2759 | 2707 |
| 65 | 2564 | 2513 | 2463 |
| 75 | 2177 | 2127 | 2094 |
| 85 | 1480 | 1480 | 1431 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-3E-B-S-835-FTO-ITL88524.010.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 | 327.025 | 327.025 | 327.025 | 327.025 | 327.025 |
| 2.5 | 326.616 | 326.616 | 327.025 | 326.616 | 326.616 |
| 5.0 | 324.979 | 324.979 | 325.388 | 324.979 | 324.979 |
| 7.5 | 322.932 | 322.932 | 322.932 | 322.932 | 322.932 |
| 10.0 | 320.067 | 319.658 | 320.067 | 319.658 | 319.249 |
| 12.5 | 315.974 | 314.747 | 315.565 | 315.156 | 314.747 |
| 15.0 | 311.063 | 309.426 | 310.654 | 310.244 | 309.426 |
| 17.5 | 305.333 | 303.286 | 304.923 | 304.514 | 303.286 |
| 20.0 | 299.193 | 296.328 | 297.966 | 297.556 | 296.328 |
| 22.5 | 291.826 | 288.552 | 290.189 | 289.780 | 288.552 |
| 25.0 | 283.640 | 280.366 | 281.594 | 281.185 | 279.957 |
| 27.5 | 274.636 | 271.361 | 272.589 | 271.771 | 270.543 |
| 30.0 | 265.222 | 262.357 | 263.176 | 261.948 | 260.720 |
| 32.5 | 255.399 | 252.534 | 252.943 | 251.715 | 250.488 |
| 35.0 | 245.167 | 242.302 | 242.711 | 241.074 | 240.255 |
| 37.5 | 234.525 | 231.660 | 232.069 | 230.432 | 229.204 |
| 40.0 | 223.883 | 221.018 | 221.018 | 219.381 | 218.153 |
| 42.5 | 212.423 | 210.377 | 209.967 | 207.921 | 206.693 |
| 45.0 | 200.963 | 198.917 | 198.507 | 196.461 | 195.233 |
| 47.5 | 189.094 | 187.456 | 186.638 | 184.591 | 183.363 |
| 50.0 | 177.224 | 175.587 | 174.768 | 172.313 | 171.494 |
| 52.5 | 165.355 | 163.308 | 162.899 | 160.443 | 159.624 |
| 55.0 | 153.076 | 151.439 | 150.620 | 148.164 | 147.755 |
| 57.5 | 140.797 | 139.160 | 138.341 | 135.885 | 135.476 |
| 60.0 | 128.518 | 126.881 | 126.062 | 123.607 | 123.197 |
| 62.5 | 115.830 | 114.602 | 113.374 | 111.328 | 111.328 |
| 65.0 | 103.142 | 102.323 | 101.095 | 99.049 | 99.049 |
| 67.5 | 90.454 | 89.635 | 88.407 | 87.180 | 86.770 |
| 70.0 | 77.766 | 77.356 | 76.129 | 74.901 | 74.901 |
| 72.5 | 65.487 | 65.078 | 64.259 | 63.441 | 63.031 |
| 75.0 | 53.617 | 53.208 | 52.389 | 51.571 | 51.571 |
| 77.5 | 41.748 | 42.157 | 40.929 | 40.929 | 40.520 |
| 80.0 | 31.106 | 31.106 | 30.697 | 30.288 | 29.878 |
| 82.5 | 20.874 | 21.283 | 21.283 | 20.874 | 20.465 |
| 85.0 | 12.279 | 12.279 | 12.279 | 11.870 | 11.870 |
| 87.5 | 4.093 | 4.093 | 4.502 | 4.093 | 3.684 |
| 90.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 92.5 | 13.898 | 14.412 | 12.353 | 13.383 | 13.383 |
| 95.0 | 30.369 | 32.428 | 33.457 | 31.398 | 29.854 |
| 97.5 | 48.899 | 53.016 | 59.708 | 59.193 | 58.164 |
| 100.0 | 69.487 | 74.635 | 83.385 | 88.532 | 88.532 |
| 102.5 | 91.621 | 98.312 | 112.209 | 118.901 | 120.960 |
| 105.0 | 114.783 | 123.533 | 143.093 | 152.872 | 155.961 |
| 107.5 | 138.975 | 150.299 | 175.005 | 188.903 | 193.021 |
| 110.0 | 163.681 | 178.094 | 208.977 | 225.448 | 231.625 |
| 112.5 | 188.388 | 205.889 | 242.434 | 263.538 | 272.288 |
| 115.0 | 213.609 | 234.198 | 276.920 | 302.656 | 312.436 |
| 117.5 | 238.831 | 263.023 | 311.921 | 341.775 | 353.099 |
| 120.0 | 263.538 | 291.332 | 345.893 | 379.865 | 393.247 |
| 122.5 | 288.244 | 319.127 | 379.350 | 417.439 | 431.851 |
| 125.0 | 311.921 | 345.378 | 410.748 | 452.955 | 468.911 |
| 127.5 | 335.084 | 371.114 | 440.087 | 486.927 | 503.398 |
| 130.0 | 357.732 | 395.306 | 467.882 | 517.295 | 535.311 |
| 132.5 | 379.350 | 417.439 | 492.074 | 544.061 | 563.106 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-3E-B-S-835-FTO-ITL88524.010.IES****CANDELA TABULATION - (Cont.)**

| | | | | | |
|--------------|---------|---------|---------|---------|---------|
| 135.0 | 400.454 | 438.028 | 513.692 | 567.223 | 586.783 |
| 137.5 | 420.013 | 456.043 | 532.737 | 586.783 | 605.313 |
| 140.0 | 438.543 | 473.029 | 548.179 | 601.710 | 620.754 |
| 142.5 | 455.529 | 488.471 | 561.047 | 614.063 | 631.563 |
| 145.0 | 471.485 | 501.339 | 570.312 | 621.269 | 638.770 |
| 147.5 | 486.412 | 513.178 | 577.518 | 625.902 | 641.858 |
| 150.0 | 499.280 | 522.957 | 582.150 | 626.931 | 641.858 |
| 152.5 | 511.119 | 531.707 | 584.209 | 625.387 | 639.284 |
| 155.0 | 521.413 | 538.399 | 585.239 | 621.784 | 634.137 |
| 157.5 | 530.163 | 544.576 | 585.239 | 616.122 | 627.446 |
| 160.0 | 538.399 | 549.208 | 583.694 | 609.945 | 619.210 |
| 162.5 | 545.090 | 553.326 | 581.121 | 602.224 | 610.460 |
| 165.0 | 550.752 | 555.899 | 578.033 | 593.989 | 601.195 |
| 167.5 | 555.385 | 558.988 | 574.429 | 587.298 | 592.445 |
| 170.0 | 559.503 | 561.561 | 571.341 | 580.091 | 584.209 |
| 172.5 | 562.076 | 563.620 | 568.768 | 573.915 | 576.488 |
| 175.0 | 564.135 | 565.164 | 566.709 | 569.282 | 570.312 |
| 177.5 | 565.679 | 565.679 | 566.194 | 566.709 | 567.223 |
| 180.0 | 565.679 | 565.679 | 565.679 | 565.679 | 565.679 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-3E-B-S-835-FTO-ITL88524.010.IES****ZONAL LUMEN SUMMARY**

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|--------|
| 0-20 | 118.29 | N.A. | 4.10 |
| 0-30 | 247.77 | N.A. | 8.60 |
| 0-40 | 399.26 | N.A. | 13.80 |
| 0-60 | 686.15 | N.A. | 23.70 |
| 0-80 | 841.69 | N.A. | 29.10 |
| 0-90 | 856.00 | N.A. | 29.60 |
| 10-90 | 825.13 | N.A. | 28.60 |
| 20-40 | 280.96 | N.A. | 9.70 |
| 20-50 | 433.64 | N.A. | 15.00 |
| 40-70 | 386.70 | N.A. | 13.40 |
| 60-80 | 155.54 | N.A. | 5.40 |
| 70-80 | 55.73 | N.A. | 1.90 |
| 80-90 | 14.31 | N.A. | 0.50 |
| 90-110 | 186.27 | N.A. | 6.40 |
| 90-120 | 452.77 | N.A. | 15.70 |
| 90-130 | 809.43 | N.A. | 28.00 |
| 90-150 | 1548.01 | N.A. | 53.60 |
| 90-180 | 2034.00 | N.A. | 70.40 |
| 110-180 | 1847.73 | N.A. | 63.90 |
| 0-180 | 2890.00 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|--------|
| 0-10 | 30.87 |
| 10-20 | 87.43 |
| 20-30 | 129.48 |
| 30-40 | 151.49 |
| 40-50 | 152.68 |
| 50-60 | 134.21 |
| 60-70 | 99.81 |
| 70-80 | 55.73 |
| 80-90 | 14.31 |
| 90-100 | 38.72 |
| 100-110 | 147.55 |
| 110-120 | 266.51 |
| 120-130 | 356.66 |
| 130-140 | 387.11 |
| 140-150 | 351.47 |
| 150-160 | 268.30 |
| 160-170 | 163.42 |
| 170-180 | 54.27 |

IES INDOOR REPORT

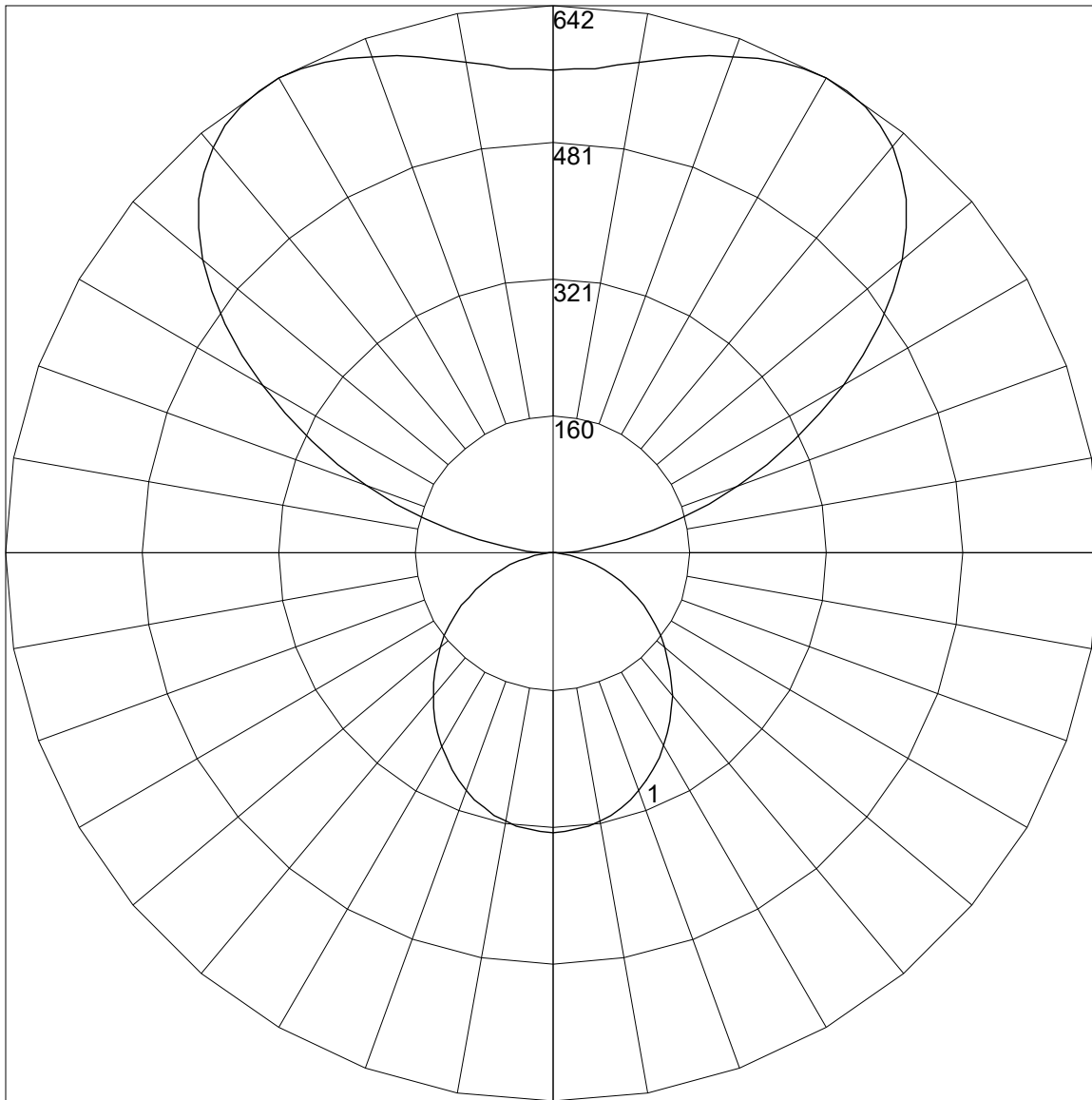
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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 | 102 | 102 | 102 | 102 | 92 | 92 | 92 | 92 | 72 | 72 | 72 | 54 | 54 | 54 | 37 | 37 | 37 | 30 |
| 1 | 93 | 89 | 85 | 82 | 83 | 80 | 77 | 74 | 63 | 61 | 59 | 47 | 46 | 45 | 33 | 32 | 32 | 25 |
| 2 | 85 | 78 | 72 | 67 | 76 | 70 | 65 | 61 | 55 | 52 | 49 | 42 | 39 | 37 | 29 | 28 | 27 | 21 |
| 3 | 77 | 68 | 61 | 55 | 69 | 61 | 55 | 51 | 49 | 44 | 41 | 37 | 34 | 32 | 26 | 24 | 23 | 18 |
| 4 | 71 | 60 | 53 | 47 | 63 | 54 | 48 | 43 | 43 | 38 | 35 | 33 | 29 | 27 | 23 | 21 | 19 | 15 |
| 5 | 65 | 54 | 46 | 40 | 58 | 48 | 42 | 37 | 38 | 34 | 30 | 29 | 26 | 23 | 21 | 19 | 17 | 13 |
| 6 | 60 | 48 | 40 | 34 | 53 | 43 | 36 | 32 | 35 | 30 | 26 | 26 | 23 | 20 | 19 | 16 | 15 | 12 |
| 7 | 55 | 43 | 35 | 30 | 49 | 39 | 32 | 28 | 31 | 26 | 23 | 24 | 20 | 18 | 17 | 15 | 13 | 10 |
| 8 | 51 | 39 | 31 | 26 | 46 | 35 | 29 | 24 | 28 | 23 | 20 | 22 | 18 | 16 | 16 | 13 | 12 | 9 |
| 9 | 47 | 35 | 28 | 23 | 42 | 32 | 26 | 21 | 26 | 21 | 18 | 20 | 17 | 14 | 14 | 12 | 11 | 8 |
| 10 | 44 | 32 | 25 | 21 | 40 | 29 | 23 | 19 | 24 | 19 | 16 | 18 | 15 | 13 | 13 | 11 | 10 | 7 |

POLAR GRAPH



Maximum Candela = 641.858 Located At Horizontal Angle = 90, Vertical Angle = 147.5
1 - Vertical Plane Through Horizontal Angles (90 - 270)