

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-V-V-8-TW-FTO-ITL85165.900.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85165.900 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]09/07/15

[ISSUEDATE]04/15/16

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE S12-LED-ID-DCO-4ft-3E-V-V-8-TW-FTO

[OTHER]ies file is based on 3500K; see luminaire tech sheet at www.finelite.com for lumen adjustment factors for other CCT's & CRI

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 62.7 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 65.3 WATTS

[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

[_ABSOLUTELUMENS]6677

CHARACTERISTICS

| | |
|---------------------------------|---------------------|
| Lumens Per Lamp | N.A. (absolute) |
| Total Lamp Lumens | N.A. (absolute) |
| Luminaire Lumens | 6677 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 106 |
| Total Luminaire Watts | 62.7 |
| 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 | 5733 | 5481 | 5400 |
| 55 | 5375 | 5012 | 4936 |
| 65 | 4880 | 4461 | 4311 |
| 75 | 4075 | 3591 | 3612 |
| 85 | 2391 | 2591 | 2932 |

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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 | 749 | 749 | 749 | 749 | 749 |
| 2.5 | 748 | 748 | 748 | 748 | 748 |
| 5.0 | 744 | 745 | 745 | 745 | 745 |
| 7.5 | 740 | 740 | 740 | 740 | 741 |
| 10.0 | 733 | 732 | 734 | 734 | 733 |
| 12.5 | 724 | 722 | 725 | 725 | 724 |
| 15.0 | 713 | 709 | 714 | 714 | 713 |
| 17.5 | 700 | 696 | 702 | 702 | 701 |
| 20.0 | 685 | 680 | 686 | 687 | 686 |
| 22.5 | 668 | 663 | 670 | 671 | 671 |
| 25.0 | 649 | 645 | 651 | 653 | 654 |
| 27.5 | 629 | 626 | 631 | 635 | 635 |
| 30.0 | 608 | 605 | 610 | 615 | 614 |
| 32.5 | 585 | 583 | 590 | 592 | 591 |
| 35.0 | 561 | 560 | 567 | 570 | 568 |
| 37.5 | 538 | 536 | 543 | 545 | 544 |
| 40.0 | 513 | 512 | 518 | 520 | 519 |
| 42.5 | 488 | 486 | 492 | 494 | 493 |
| 45.0 | 461 | 460 | 466 | 467 | 467 |
| 47.5 | 434 | 433 | 438 | 441 | 440 |
| 50.0 | 407 | 407 | 411 | 413 | 413 |
| 52.5 | 380 | 381 | 383 | 386 | 386 |
| 55.0 | 352 | 353 | 355 | 358 | 358 |
| 57.5 | 324 | 325 | 327 | 330 | 329 |
| 60.0 | 295 | 296 | 299 | 302 | 301 |
| 62.5 | 266 | 268 | 271 | 273 | 272 |
| 65.0 | 237 | 239 | 243 | 244 | 243 |
| 67.5 | 208 | 210 | 214 | 216 | 215 |
| 70.0 | 179 | 182 | 186 | 188 | 189 |
| 72.5 | 150 | 154 | 157 | 163 | 164 |
| 75.0 | 123 | 127 | 131 | 138 | 139 |
| 77.5 | 96 | 100 | 106 | 113 | 115 |
| 80.0 | 70 | 75 | 83 | 91 | 93 |
| 82.5 | 47 | 52 | 62 | 72 | 74 |
| 85.0 | 26 | 32 | 45 | 55 | 57 |
| 87.5 | 8 | 17 | 30 | 40 | 43 |
| 90.0 | 0 | 9 | 23 | 34 | 38 |
| 92.5 | 33 | 39 | 54 | 66 | 69 |
| 95.0 | 69 | 78 | 95 | 108 | 114 |
| 97.5 | 109 | 122 | 144 | 159 | 166 |
| 100.0 | 153 | 170 | 200 | 220 | 229 |
| 102.5 | 202 | 224 | 262 | 290 | 302 |
| 105.0 | 254 | 281 | 330 | 366 | 380 |
| 107.5 | 308 | 341 | 401 | 446 | 459 |
| 110.0 | 365 | 404 | 476 | 529 | 545 |
| 112.5 | 420 | 468 | 552 | 611 | 632 |
| 115.0 | 480 | 532 | 629 | 696 | 719 |
| 117.5 | 540 | 597 | 703 | 780 | 804 |
| 120.0 | 599 | 662 | 778 | 862 | 888 |
| 122.5 | 658 | 725 | 848 | 940 | 969 |
| 125.0 | 717 | 786 | 917 | 1013 | 1044 |
| 127.5 | 774 | 846 | 982 | 1081 | 1113 |
| 130.0 | 830 | 902 | 1041 | 1142 | 1174 |
| 132.5 | 885 | 956 | 1095 | 1196 | 1228 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-3E-V-V-8-TW-FTO-ITL85165.900.IES****CANDELA TABULATION - (Cont.)**

| | | | | | |
|--------------|------|------|------|------|------|
| 135.0 | 936 | 1005 | 1143 | 1244 | 1275 |
| 137.5 | 986 | 1052 | 1186 | 1283 | 1314 |
| 140.0 | 1033 | 1094 | 1223 | 1316 | 1345 |
| 142.5 | 1076 | 1130 | 1253 | 1340 | 1368 |
| 145.0 | 1118 | 1166 | 1280 | 1362 | 1387 |
| 147.5 | 1153 | 1196 | 1300 | 1375 | 1399 |
| 150.0 | 1188 | 1224 | 1318 | 1386 | 1406 |
| 152.5 | 1219 | 1248 | 1332 | 1393 | 1410 |
| 155.0 | 1245 | 1270 | 1342 | 1396 | 1412 |
| 157.5 | 1269 | 1288 | 1350 | 1395 | 1410 |
| 160.0 | 1289 | 1305 | 1356 | 1392 | 1406 |
| 162.5 | 1307 | 1318 | 1360 | 1388 | 1401 |
| 165.0 | 1322 | 1330 | 1362 | 1384 | 1393 |
| 167.5 | 1334 | 1340 | 1363 | 1378 | 1386 |
| 170.0 | 1344 | 1348 | 1362 | 1373 | 1379 |
| 172.5 | 1351 | 1355 | 1362 | 1369 | 1373 |
| 175.0 | 1357 | 1359 | 1362 | 1365 | 1366 |
| 177.5 | 1361 | 1361 | 1361 | 1363 | 1363 |
| 180.0 | 1362 | 1362 | 1362 | 1362 | 1362 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-3E-V-V-8-TW-FTO-ITL85165.900.IES****ZONAL LUMEN SUMMARY**

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|--------|
| 0-20 | 271.70 | N.A. | 4.10 |
| 0-30 | 571.20 | N.A. | 8.60 |
| 0-40 | 924.71 | N.A. | 13.80 |
| 0-60 | 1600.39 | N.A. | 24.00 |
| 0-80 | 1979.14 | N.A. | 29.60 |
| 0-90 | 2029.53 | N.A. | 30.40 |
| 10-90 | 1958.79 | N.A. | 29.30 |
| 20-40 | 653.01 | N.A. | 9.80 |
| 20-50 | 1011.13 | N.A. | 15.10 |
| 40-70 | 914.80 | N.A. | 13.70 |
| 60-80 | 378.75 | N.A. | 5.70 |
| 70-80 | 139.63 | N.A. | 2.10 |
| 80-90 | 50.39 | N.A. | 0.80 |
| 90-110 | 451.20 | N.A. | 6.80 |
| 90-120 | 1058.57 | N.A. | 15.90 |
| 90-130 | 1860.51 | N.A. | 27.90 |
| 90-150 | 3517.19 | N.A. | 52.70 |
| 90-180 | 4647.64 | N.A. | 69.60 |
| 110-180 | 4196.44 | N.A. | 62.80 |
| 0-180 | 6677.17 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|--------|
| 0-10 | 70.74 |
| 10-20 | 200.96 |
| 20-30 | 299.50 |
| 30-40 | 353.51 |
| 40-50 | 358.12 |
| 50-60 | 317.56 |
| 60-70 | 239.12 |
| 70-80 | 139.63 |
| 80-90 | 50.39 |
| 90-100 | 107.37 |
| 100-110 | 343.83 |
| 110-120 | 607.36 |
| 120-130 | 801.94 |
| 130-140 | 865.75 |
| 140-150 | 790.93 |
| 150-160 | 615.87 |
| 160-170 | 384.60 |
| 170-180 | 129.99 |

IES INDOOR REPORT

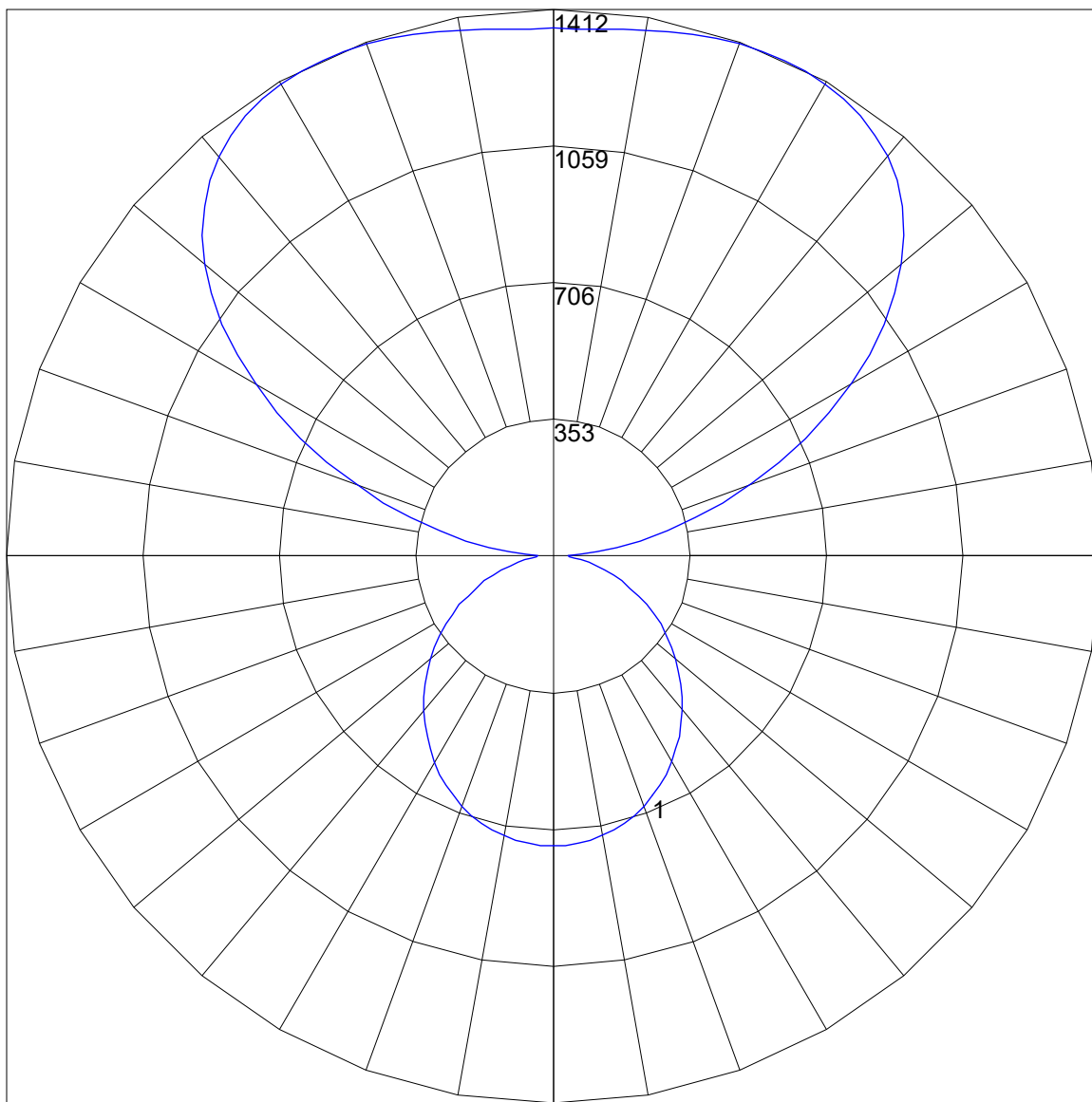
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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 | 55 | 55 | 55 | 38 | 38 | 38 | 30 |
| 1 | 93 | 89 | 85 | 82 | 84 | 80 | 77 | 74 | 63 | 61 | 59 | 48 | 46 | 45 | 33 | 33 | 32 | 25 |
| 2 | 85 | 78 | 72 | 67 | 76 | 70 | 65 | 61 | 55 | 52 | 49 | 42 | 40 | 37 | 29 | 28 | 27 | 21 |
| 3 | 77 | 68 | 61 | 55 | 69 | 61 | 55 | 50 | 49 | 44 | 41 | 37 | 34 | 32 | 26 | 24 | 23 | 18 |
| 4 | 71 | 60 | 52 | 47 | 63 | 54 | 48 | 43 | 43 | 38 | 35 | 33 | 30 | 27 | 23 | 21 | 19 | 15 |
| 5 | 65 | 53 | 46 | 40 | 58 | 48 | 41 | 36 | 38 | 34 | 30 | 29 | 26 | 23 | 21 | 19 | 17 | 13 |
| 6 | 60 | 48 | 40 | 34 | 53 | 43 | 36 | 31 | 35 | 30 | 26 | 26 | 23 | 20 | 19 | 17 | 15 | 12 |
| 7 | 55 | 43 | 35 | 30 | 49 | 39 | 32 | 27 | 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 = 1412 Located At Horizontal Angle = 90, Vertical Angle = 155
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)