

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 : HP-2-ID-RG-4FT-S-V-835-WSOTG-F-ITL90350 ITL89456.015.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL90350 ITL89456.015 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]07/19/17

[ISSUEDATE]05/31/18

[MANUFAC]FINELITE, INC.

[LUMCAT]HP-2-ID-RG-4ft-S-V-835-WSO

[_INPUT_ELECTRICAL]120.0 VOLTS, 50.4 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 53.0 WATTS

[OTHER]see www.finelite.com for source file ITL89456. 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]4532

CHARACTERISTICS

| | |
|---------------------------------|-----------------|
| Lumens Per Lamp | N.A. (absolute) |
| Total Lamp Lumens | N.A. (absolute) |
| Luminaire Lumens | 4532 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 90 |
| Total Luminaire Watts | 50.4 |
| Ballast Factor | 1.00 |
| CIE Type | Semi-Direct |
| Spacing Criterion (0-180) | 1.18 |
| Spacing Criterion (90-270) | 0.94 |
| Spacing Criterion (Diagonal) | 1.12 |
| Basic Luminous Shape | Rectangular |
| Luminous Length (0-180) | 4.00 ft |
| Luminous Width (90-270) | 0.18 ft |
| Luminous Height | 0.00 ft |

LUMINANCE DATA (cd/sq.m)

| Angle In Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|---------------------|------------------|-------------------|-------------------|
| 45 | 18357 | 13054 | 10349 |
| 55 | 16517 | 10376 | 8073 |
| 65 | 14621 | 7867 | 6143 |
| 75 | 12436 | 6042 | 5514 |
| 85 | 9929 | 4877 | 4529 |

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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 | 1529.000 | 1529.000 | 1529.000 | 1529.000 | 1529.000 |
| 2.5 | 1527.000 | 1526.000 | 1525.000 | 1524.000 | 1523.000 |
| 5.0 | 1520.000 | 1518.000 | 1513.000 | 1507.000 | 1504.000 |
| 7.5 | 1508.000 | 1503.000 | 1489.000 | 1477.000 | 1471.000 |
| 10.0 | 1491.000 | 1479.000 | 1458.000 | 1436.000 | 1427.000 |
| 12.5 | 1470.000 | 1448.000 | 1417.000 | 1385.000 | 1372.000 |
| 15.0 | 1443.000 | 1412.000 | 1370.000 | 1327.000 | 1309.000 |
| 17.5 | 1413.000 | 1372.000 | 1316.000 | 1263.000 | 1240.000 |
| 20.0 | 1378.000 | 1327.000 | 1258.000 | 1195.000 | 1168.000 |
| 22.5 | 1336.000 | 1277.000 | 1196.000 | 1122.000 | 1092.000 |
| 25.0 | 1293.000 | 1224.000 | 1131.000 | 1049.000 | 1017.000 |
| 27.5 | 1246.000 | 1168.000 | 1064.000 | 975.000 | 941.000 |
| 30.0 | 1196.000 | 1111.000 | 997.000 | 900.000 | 867.000 |
| 32.5 | 1141.000 | 1053.000 | 929.000 | 826.000 | 795.000 |
| 35.0 | 1086.000 | 993.000 | 862.000 | 757.000 | 722.000 |
| 37.5 | 1030.000 | 932.000 | 796.000 | 690.000 | 656.000 |
| 40.0 | 972.000 | 870.000 | 731.000 | 627.000 | 594.000 |
| 42.5 | 914.000 | 810.000 | 668.000 | 567.000 | 536.000 |
| 45.0 | 855.000 | 749.000 | 608.000 | 511.000 | 482.000 |
| 47.5 | 795.000 | 691.000 | 550.000 | 458.000 | 433.000 |
| 50.0 | 736.000 | 632.000 | 494.000 | 408.000 | 386.000 |
| 52.5 | 681.000 | 574.000 | 442.000 | 364.000 | 344.000 |
| 55.0 | 624.000 | 516.000 | 392.000 | 322.000 | 305.000 |
| 57.5 | 568.000 | 462.000 | 344.000 | 283.000 | 268.000 |
| 60.0 | 513.000 | 410.000 | 299.000 | 246.000 | 233.000 |
| 62.5 | 459.000 | 359.000 | 258.000 | 212.000 | 200.000 |
| 65.0 | 407.000 | 311.000 | 219.000 | 178.000 | 171.000 |
| 67.5 | 354.000 | 265.000 | 183.000 | 154.000 | 152.000 |
| 70.0 | 305.000 | 221.000 | 150.000 | 134.000 | 132.000 |
| 72.5 | 258.000 | 180.000 | 124.000 | 115.000 | 112.000 |
| 75.0 | 212.000 | 141.000 | 103.000 | 95.000 | 94.000 |
| 77.5 | 171.000 | 105.000 | 82.000 | 77.000 | 76.000 |
| 80.0 | 131.000 | 74.000 | 63.000 | 59.000 | 59.000 |
| 82.5 | 92.000 | 52.000 | 45.000 | 42.000 | 42.000 |
| 85.0 | 57.000 | 32.000 | 28.000 | 26.000 | 26.000 |
| 87.5 | 24.000 | 14.000 | 12.000 | 11.000 | 11.000 |
| 90.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 92.5 | 7.370 | 12.692 | 12.692 | 12.283 | 12.283 |
| 95.0 | 19.243 | 33.982 | 33.982 | 28.250 | 27.841 |
| 97.5 | 32.344 | 55.681 | 68.373 | 49.131 | 46.265 |
| 100.0 | 45.855 | 72.468 | 135.928 | 79.018 | 69.602 |
| 102.5 | 60.594 | 88.435 | 187.924 | 139.613 | 110.953 |
| 105.0 | 74.924 | 105.631 | 217.812 | 227.638 | 187.515 |
| 107.5 | 89.254 | 122.417 | 236.236 | 307.066 | 286.186 |
| 110.0 | 103.584 | 137.975 | 252.613 | 353.740 | 357.425 |
| 112.5 | 117.913 | 153.124 | 271.856 | 384.447 | 400.005 |
| 115.0 | 132.653 | 167.453 | 294.784 | 406.556 | 429.074 |
| 117.5 | 147.392 | 181.783 | 319.758 | 427.436 | 451.592 |
| 120.0 | 162.131 | 196.932 | 340.229 | 449.545 | 474.110 |
| 122.5 | 175.642 | 209.624 | 354.969 | 480.661 | 497.857 |
| 125.0 | 188.334 | 221.906 | 363.157 | 514.643 | 531.839 |
| 127.5 | 200.207 | 233.370 | 368.070 | 537.571 | 569.505 |
| 130.0 | 210.033 | 243.196 | 370.936 | 546.987 | 596.527 |
| 132.5 | 219.859 | 252.204 | 371.755 | 543.302 | 605.125 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-2-ID-RG-4FT-S-V-835-WSOTG-F-ITL90350 ITL89456.015.IES****CANDELA TABULATION - (Cont.)**

| | | | | | |
|--------------|---------|---------|---------|---------|---------|
| 135.0 | 228.457 | 259.573 | 371.345 | 531.839 | 596.527 |
| 137.5 | 236.236 | 266.533 | 370.117 | 516.281 | 578.513 |
| 140.0 | 244.015 | 272.675 | 368.070 | 499.085 | 555.585 |
| 142.5 | 251.385 | 278.407 | 365.204 | 479.842 | 531.020 |
| 145.0 | 259.164 | 283.729 | 362.338 | 461.418 | 506.045 |
| 147.5 | 265.715 | 287.823 | 359.063 | 442.585 | 480.661 |
| 150.0 | 272.265 | 292.327 | 354.969 | 425.798 | 456.914 |
| 152.5 | 278.407 | 295.602 | 350.055 | 409.831 | 434.806 |
| 155.0 | 284.139 | 298.059 | 345.142 | 394.273 | 414.335 |
| 157.5 | 289.461 | 301.334 | 340.639 | 379.943 | 395.911 |
| 160.0 | 293.965 | 303.381 | 335.316 | 366.023 | 378.715 |
| 162.5 | 298.059 | 305.019 | 329.994 | 354.150 | 362.748 |
| 165.0 | 301.334 | 306.657 | 324.671 | 342.686 | 349.237 |
| 167.5 | 304.200 | 307.885 | 320.577 | 332.860 | 337.363 |
| 170.0 | 306.657 | 309.113 | 317.711 | 325.081 | 327.947 |
| 172.5 | 307.885 | 309.932 | 314.436 | 318.530 | 320.986 |
| 175.0 | 309.523 | 310.341 | 312.389 | 314.436 | 315.255 |
| 177.5 | 310.341 | 310.341 | 311.160 | 311.160 | 311.570 |
| 180.0 | 310.751 | 310.751 | 310.751 | 310.751 | 310.751 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-2-ID-RG-4FT-S-V-835-WSOTG-F-ITL90350 ITL89456.015.IES****ZONAL LUMEN SUMMARY**

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|--------|
| 0-20 | 527.37 | N.A. | 11.60 |
| 0-30 | 1050.87 | N.A. | 23.20 |
| 0-40 | 1600.47 | N.A. | 35.30 |
| 0-60 | 2470.38 | N.A. | 54.50 |
| 0-80 | 2851.03 | N.A. | 62.90 |
| 0-90 | 2887.32 | N.A. | 63.70 |
| 10-90 | 2744.7 | N.A. | 60.60 |
| 20-40 | 1073.1 | N.A. | 23.70 |
| 20-50 | 1563.06 | N.A. | 34.50 |
| 40-70 | 1119.36 | N.A. | 24.70 |
| 60-80 | 380.65 | N.A. | 8.40 |
| 70-80 | 131.21 | N.A. | 2.90 |
| 80-90 | 36.28 | N.A. | 0.80 |
| 90-110 | 215.27 | N.A. | 4.70 |
| 90-120 | 499.28 | N.A. | 11.00 |
| 90-130 | 823.95 | N.A. | 18.20 |
| 90-150 | 1361.55 | N.A. | 30.00 |
| 90-180 | 1644.98 | N.A. | 36.30 |
| 110-180 | 1429.71 | N.A. | 31.50 |
| 0-180 | 4532.29 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|--------|
| 0-10 | 142.62 |
| 10-20 | 384.75 |
| 20-30 | 523.50 |
| 30-40 | 549.60 |
| 40-50 | 489.96 |
| 50-60 | 379.95 |
| 60-70 | 249.45 |
| 70-80 | 131.21 |
| 80-90 | 36.28 |
| 90-100 | 37.55 |
| 100-110 | 177.72 |
| 110-120 | 284.02 |
| 120-130 | 324.66 |
| 130-140 | 303.44 |
| 140-150 | 234.16 |
| 150-160 | 160.96 |
| 160-170 | 92.50 |
| 170-180 | 29.97 |

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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

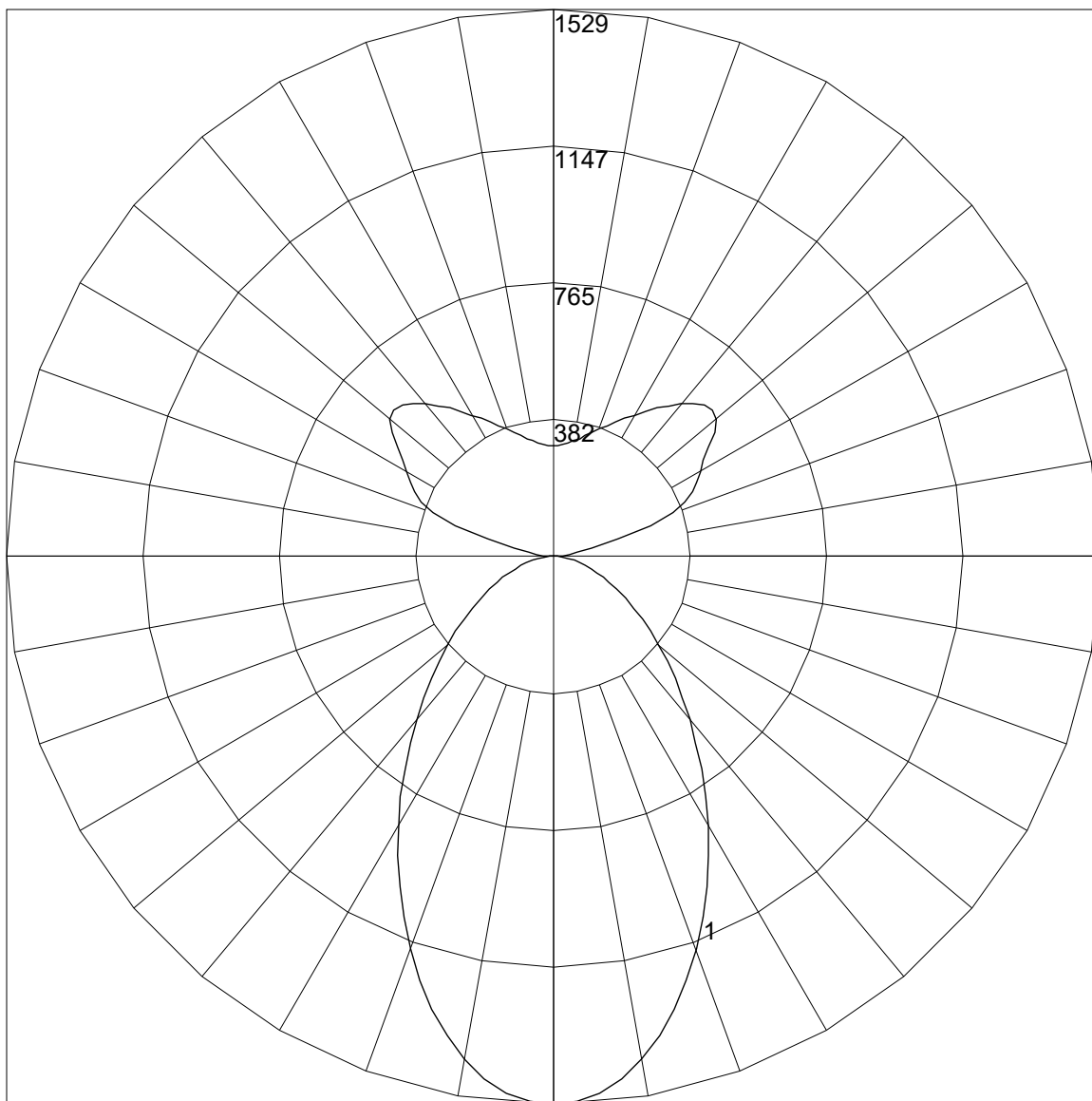
Effective Floor Cavity Reflectance 0.20

| 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 | 110 | 110 | 110 | 110 | 104 | 104 | 104 | 104 | 91 | 91 | 91 | 79 | 79 | 79 | 69 | 69 | 69 | 64 |
| 1 | 102 | 97 | 94 | 90 | 95 | 92 | 88 | 85 | 81 | 78 | 76 | 71 | 69 | 68 | 62 | 61 | 59 | 55 |
| 2 | 93 | 86 | 80 | 75 | 87 | 81 | 76 | 71 | 72 | 68 | 64 | 63 | 60 | 58 | 55 | 53 | 51 | 47 |
| 3 | 85 | 76 | 69 | 63 | 80 | 72 | 66 | 61 | 64 | 59 | 55 | 57 | 53 | 50 | 50 | 47 | 44 | 41 |
| 4 | 79 | 68 | 60 | 54 | 74 | 64 | 58 | 52 | 57 | 52 | 48 | 51 | 47 | 43 | 45 | 42 | 39 | 36 |
| 5 | 73 | 61 | 53 | 47 | 68 | 58 | 51 | 45 | 52 | 46 | 42 | 46 | 42 | 38 | 41 | 37 | 35 | 32 |
| 6 | 67 | 55 | 47 | 42 | 63 | 52 | 45 | 40 | 47 | 41 | 37 | 42 | 37 | 34 | 37 | 34 | 31 | 28 |
| 7 | 62 | 50 | 42 | 37 | 59 | 48 | 41 | 36 | 43 | 37 | 33 | 39 | 34 | 30 | 34 | 31 | 28 | 25 |
| 8 | 58 | 46 | 38 | 33 | 55 | 44 | 37 | 32 | 40 | 34 | 30 | 36 | 31 | 27 | 32 | 28 | 25 | 23 |
| 9 | 54 | 42 | 35 | 30 | 51 | 40 | 33 | 29 | 37 | 31 | 27 | 33 | 28 | 25 | 30 | 26 | 23 | 21 |
| 10 | 51 | 39 | 32 | 27 | 48 | 37 | 31 | 26 | 34 | 28 | 24 | 31 | 26 | 23 | 28 | 24 | 21 | 19 |

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POLAR GRAPH



Maximum Candela = 1529 Located At Horizontal Angle = 0, Vertical Angle = 0

1 - Vertical Plane Through Horizontal Angles (90 - 270)