

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-H-835-WSOTG-F-ITL90350 ITL89456.014.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL90350 ITL89456.014 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-H-835-WSO

[_INPUT_ELECTRICAL]120.0 VOLTS, 42.0 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 44.5 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]3890

CHARACTERISTICS

| | |
|---------------------------------|-----------------|
| Lumens Per Lamp | N.A. (absolute) |
| Total Lamp Lumens | N.A. (absolute) |
| Luminaire Lumens | 3890 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 93 |
| Total Luminaire Watts | 42 |
| Ballast Factor | 1.00 |
| CIE Type | General Diffuse |
| 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) | 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 | 14275 | 10151 | 8047 |
| 55 | 12844 | 8068 | 6278 |
| 65 | 11370 | 6118 | 4777 |
| 75 | 9670 | 4698 | 4288 |
| 85 | 7721 | 3793 | 3522 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-2-ID-RG-4FT-S-H-835-WSOTG-F-ITL90350 ITL89456.014.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 | 1188.987 | 1188.987 | 1188.987 | 1188.987 | 1188.987 |
| 2.5 | 1187.432 | 1186.654 | 1185.876 | 1185.099 | 1184.321 |
| 5.0 | 1181.988 | 1180.433 | 1176.545 | 1171.879 | 1169.546 |
| 7.5 | 1172.657 | 1168.769 | 1157.882 | 1148.550 | 1143.885 |
| 10.0 | 1159.437 | 1150.106 | 1133.775 | 1116.668 | 1109.669 |
| 12.5 | 1143.107 | 1125.999 | 1101.893 | 1077.009 | 1066.900 |
| 15.0 | 1122.111 | 1098.005 | 1065.345 | 1031.907 | 1017.910 |
| 17.5 | 1098.783 | 1066.900 | 1023.353 | 982.139 | 964.254 |
| 20.0 | 1071.566 | 1031.907 | 978.251 | 929.260 | 908.265 |
| 22.5 | 1038.905 | 993.026 | 930.038 | 872.494 | 849.165 |
| 25.0 | 1005.468 | 951.812 | 879.493 | 815.727 | 790.843 |
| 27.5 | 968.919 | 908.265 | 827.392 | 758.183 | 731.744 |
| 30.0 | 930.038 | 863.940 | 775.291 | 699.861 | 674.200 |
| 32.5 | 887.269 | 818.838 | 722.413 | 642.317 | 618.211 |
| 35.0 | 844.500 | 772.181 | 670.312 | 588.661 | 561.444 |
| 37.5 | 800.953 | 724.745 | 618.989 | 536.560 | 510.121 |
| 40.0 | 755.850 | 676.533 | 568.443 | 487.570 | 461.909 |
| 42.5 | 710.748 | 629.875 | 519.453 | 440.913 | 416.806 |
| 45.0 | 664.868 | 582.440 | 472.795 | 397.366 | 374.815 |
| 47.5 | 618.211 | 537.338 | 427.693 | 356.152 | 336.711 |
| 50.0 | 572.331 | 491.458 | 384.146 | 317.271 | 300.163 |
| 52.5 | 529.562 | 446.356 | 343.710 | 283.055 | 267.503 |
| 55.0 | 485.237 | 401.254 | 304.829 | 250.395 | 237.175 |
| 57.5 | 441.690 | 359.262 | 267.503 | 220.068 | 208.403 |
| 60.0 | 398.921 | 318.826 | 232.510 | 191.296 | 181.186 |
| 62.5 | 356.929 | 279.167 | 200.627 | 164.856 | 155.525 |
| 65.0 | 316.493 | 241.841 | 170.300 | 138.417 | 132.974 |
| 67.5 | 275.279 | 206.070 | 142.305 | 119.754 | 118.199 |
| 70.0 | 237.175 | 171.855 | 116.644 | 104.202 | 102.646 |
| 72.5 | 200.627 | 139.972 | 96.425 | 89.427 | 87.094 |
| 75.0 | 164.856 | 109.645 | 80.095 | 73.874 | 73.097 |
| 77.5 | 132.974 | 81.650 | 63.765 | 59.877 | 59.099 |
| 80.0 | 101.869 | 57.544 | 48.990 | 45.880 | 45.880 |
| 82.5 | 71.541 | 40.436 | 34.993 | 32.660 | 32.660 |
| 85.0 | 44.325 | 24.884 | 21.773 | 20.218 | 20.218 |
| 87.5 | 18.663 | 10.887 | 9.332 | 8.554 | 8.554 |
| 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-H-835-WSOTG-F-ITL90350 ITL89456.014.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-H-835-WSOTG-F-ITL90350 ITL89456.014.IES****ZONAL LUMEN SUMMARY**

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|--------|
| 0-20 | 410.09 | N.A. | 10.50 |
| 0-30 | 817.18 | N.A. | 21.00 |
| 0-40 | 1244.56 | N.A. | 32.00 |
| 0-60 | 1921.03 | N.A. | 49.40 |
| 0-80 | 2217.03 | N.A. | 57.00 |
| 0-90 | 2245.25 | N.A. | 57.70 |
| 10-90 | 2134.34 | N.A. | 54.90 |
| 20-40 | 834.47 | N.A. | 21.50 |
| 20-50 | 1215.47 | N.A. | 31.20 |
| 40-70 | 870.44 | N.A. | 22.40 |
| 60-80 | 296.01 | N.A. | 7.60 |
| 70-80 | 102.03 | N.A. | 2.60 |
| 80-90 | 28.21 | N.A. | 0.70 |
| 90-110 | 215.27 | N.A. | 5.50 |
| 90-120 | 499.28 | N.A. | 12.80 |
| 90-130 | 823.95 | N.A. | 21.20 |
| 90-150 | 1361.55 | N.A. | 35.00 |
| 90-180 | 1644.98 | N.A. | 42.30 |
| 110-180 | 1429.71 | N.A. | 36.80 |
| 0-180 | 3890.22 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|--------|
| 0-10 | 110.91 |
| 10-20 | 299.19 |
| 20-30 | 407.09 |
| 30-40 | 427.38 |
| 40-50 | 381.00 |
| 50-60 | 295.46 |
| 60-70 | 193.97 |
| 70-80 | 102.03 |
| 80-90 | 28.21 |
| 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 |

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-2-ID-RG-4FT-S-H-835-WSOTG-F-ITL90350 ITL89456.014.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

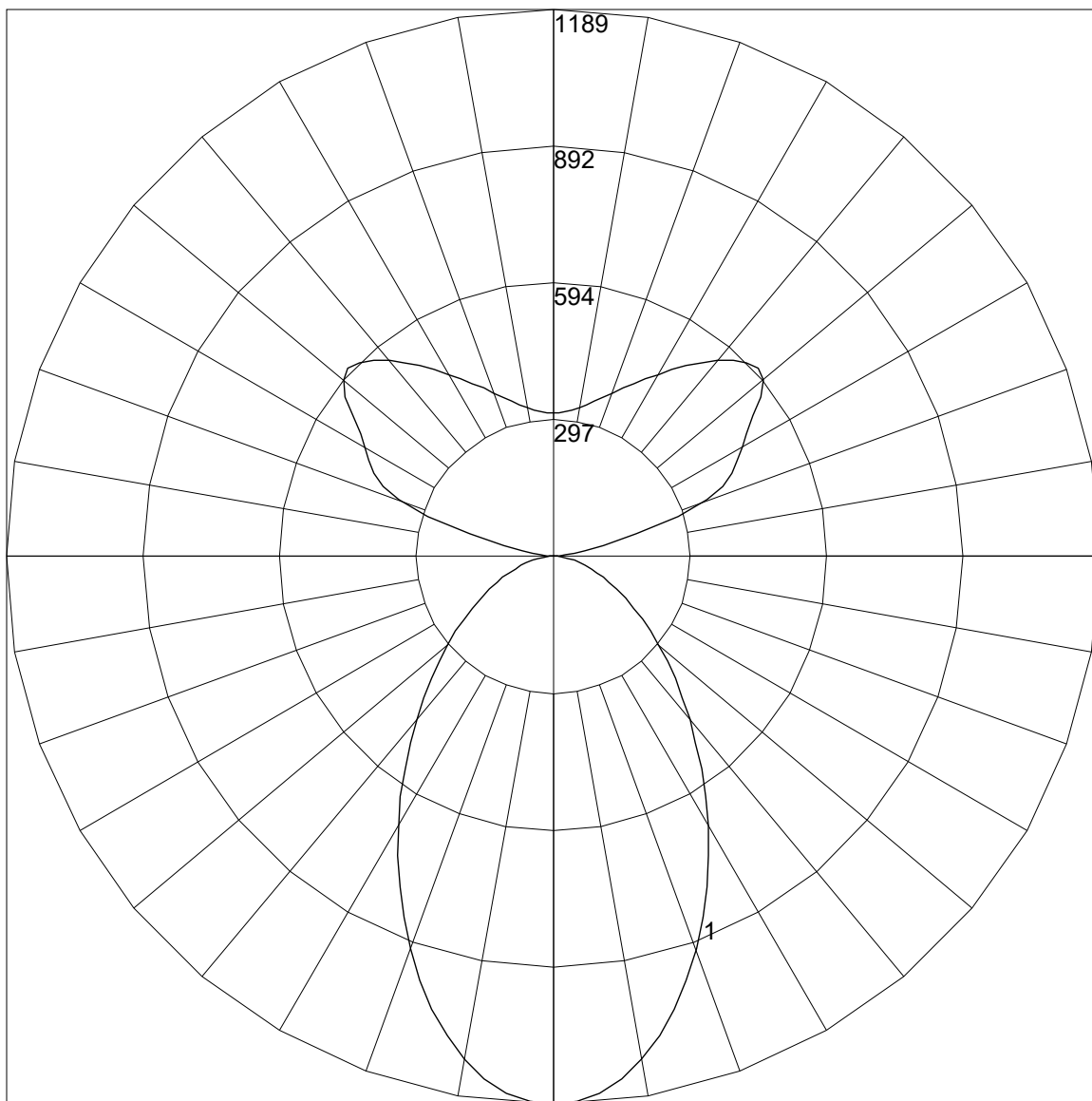
Effective Floor Cavity Reflectance 0.20

| 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 | 109 | 109 | 109 | 109 | 102 | 102 | 102 | 102 | 88 | 88 | 88 | 75 | 75 | 75 | 63 | 63 | 63 | 58 |
| 1 | 100 | 96 | 92 | 89 | 93 | 90 | 86 | 84 | 78 | 75 | 73 | 67 | 65 | 64 | 57 | 56 | 55 | 50 |
| 2 | 92 | 85 | 79 | 74 | 85 | 79 | 74 | 70 | 69 | 65 | 62 | 60 | 57 | 54 | 51 | 49 | 47 | 43 |
| 3 | 84 | 75 | 68 | 62 | 78 | 70 | 64 | 59 | 61 | 57 | 53 | 53 | 50 | 47 | 46 | 43 | 41 | 37 |
| 4 | 77 | 67 | 59 | 53 | 72 | 63 | 56 | 51 | 55 | 50 | 46 | 48 | 44 | 41 | 41 | 38 | 36 | 32 |
| 5 | 71 | 60 | 52 | 46 | 66 | 56 | 49 | 44 | 50 | 44 | 40 | 43 | 39 | 36 | 38 | 34 | 32 | 29 |
| 6 | 66 | 54 | 46 | 41 | 61 | 51 | 44 | 39 | 45 | 39 | 35 | 40 | 35 | 32 | 34 | 31 | 28 | 26 |
| 7 | 61 | 49 | 41 | 36 | 57 | 46 | 39 | 34 | 41 | 36 | 31 | 36 | 32 | 28 | 32 | 28 | 25 | 23 |
| 8 | 57 | 45 | 37 | 32 | 53 | 43 | 36 | 31 | 38 | 32 | 28 | 33 | 29 | 26 | 29 | 26 | 23 | 21 |
| 9 | 53 | 41 | 34 | 29 | 50 | 39 | 32 | 28 | 35 | 29 | 26 | 31 | 26 | 23 | 27 | 24 | 21 | 19 |
| 10 | 50 | 38 | 31 | 26 | 47 | 36 | 30 | 25 | 32 | 27 | 23 | 29 | 24 | 21 | 25 | 22 | 19 | 17 |

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POLAR GRAPH



Maximum Candela = 1188.987 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)