

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 : HPR-LED-A-1X4-DCO-S-8-35-ITL85141.005.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST]ITL85141.005 Family Correlation File
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[TESTDATE]08/18/15
[ISSUE DATE]04/28/16
[MANUFAC]FINELITE, INC.
[LUMCAT]FINELITE HPR-LED-A-1X4-DCO-S-8-35
[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 28.4 WATTS
[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 29.4 WATTS
[ABSOLUTE LUMENS]3099
[OTHER]see www.finelite.com for source file ITL85141. 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 | 3100 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 109 |
| Total Luminaire Watts | 28.4 |
| Ballast Factor | 1.00 |
| CIE Type | Direct |
| Spacing Criterion (0-180) | 1.20 |
| Spacing Criterion (90-270) | 1.18 |
| Spacing Criterion (Diagonal) | 1.30 |
| Basic Luminous Shape | Rectangular |
| Luminous Length (0-180) | 3.83 ft |
| Luminous Width (90-270) | 0.81 ft |
| Luminous Height | 0.00 ft |

LUMINANCE DATA (cd/sq.m)

| Angle In Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|---------------------|------------------|-------------------|-------------------|
| 45 | 3648 | 3556 | 3429 |
| 55 | 3317 | 3161 | 3006 |
| 65 | 2952 | 2747 | 2517 |
| 75 | 2499 | 2206 | 1924 |
| 85 | 2018 | 1180 | 932 |

CANDELA TABULATION

| | <u>0.0</u> | <u>22.5</u> | <u>45.0</u> | <u>67.5</u> | <u>90.0</u> |
|------|------------|-------------|-------------|-------------|-------------|
| 0.0 | 1263.889 | 1263.889 | 1263.889 | 1263.889 | 1263.889 |
| 2.5 | 1263.111 | 1263.111 | 1263.889 | 1263.111 | 1263.111 |
| 5.0 | 1256.889 | 1257.667 | 1258.444 | 1258.444 | 1258.444 |
| 7.5 | 1248.333 | 1249.111 | 1250.667 | 1250.667 | 1250.667 |
| 10.0 | 1236.667 | 1235.111 | 1239.000 | 1239.778 | 1237.444 |
| 12.5 | 1219.556 | 1218.778 | 1223.444 | 1225.000 | 1221.111 |
| 15.0 | 1200.111 | 1197.778 | 1204.778 | 1204.778 | 1201.667 |
| 17.5 | 1176.000 | 1172.889 | 1181.444 | 1180.667 | 1176.000 |
| 20.0 | 1149.556 | 1146.444 | 1153.444 | 1151.111 | 1147.222 |
| 22.5 | 1121.556 | 1116.889 | 1122.333 | 1120.000 | 1113.778 |
| 25.0 | 1088.889 | 1083.444 | 1088.111 | 1083.444 | 1078.000 |
| 27.5 | 1052.333 | 1046.889 | 1051.556 | 1044.556 | 1036.778 |
| 30.0 | 1014.222 | 1008.778 | 1010.333 | 1001.778 | 993.222 |
| 32.5 | 972.222 | 967.556 | 966.778 | 955.889 | 947.333 |
| 35.0 | 928.667 | 924.778 | 920.889 | 908.444 | 899.111 |
| 37.5 | 884.333 | 879.667 | 873.444 | 858.667 | 849.333 |
| 40.0 | 837.667 | 833.000 | 825.222 | 808.111 | 799.556 |
| 42.5 | 789.444 | 785.556 | 773.889 | 756.778 | 747.444 |
| 45.0 | 741.222 | 735.778 | 722.556 | 705.444 | 696.889 |
| 47.5 | 693.000 | 688.333 | 672.778 | 653.333 | 644.778 |
| 50.0 | 644.000 | 639.333 | 622.222 | 602.778 | 593.444 |
| 52.5 | 595.778 | 591.111 | 572.444 | 552.222 | 546.000 |
| 55.0 | 546.778 | 540.556 | 521.111 | 502.444 | 495.444 |
| 57.5 | 498.556 | 492.333 | 474.444 | 454.222 | 445.667 |
| 60.0 | 451.889 | 444.889 | 426.222 | 406.000 | 397.444 |
| 62.5 | 404.444 | 398.222 | 379.556 | 357.778 | 350.778 |
| 65.0 | 358.556 | 352.333 | 333.667 | 311.889 | 305.667 |
| 67.5 | 313.444 | 308.000 | 289.333 | 267.556 | 262.111 |
| 70.0 | 269.111 | 264.444 | 245.000 | 225.556 | 220.111 |
| 72.5 | 226.333 | 222.444 | 203.778 | 185.889 | 180.444 |
| 75.0 | 185.889 | 182.000 | 164.111 | 147.778 | 143.111 |
| 77.5 | 147.778 | 143.889 | 126.778 | 112.778 | 107.333 |
| 80.0 | 114.333 | 107.333 | 91.000 | 77.778 | 73.111 |
| 82.5 | 80.889 | 73.111 | 57.556 | 48.222 | 44.333 |
| 85.0 | 50.556 | 42.778 | 29.556 | 24.889 | 23.333 |
| 87.5 | 22.556 | 14.000 | 10.111 | 9.333 | 8.556 |
| 90.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HPR-LED-A-1X4-DCO-S-8-35-ITL85141.005.IES

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|--------|
| 0-20 | 458.03 | N.A. | 14.80 |
| 0-30 | 956.98 | N.A. | 30.90 |
| 0-40 | 1529.96 | N.A. | 49.40 |
| 0-60 | 2553.1 | N.A. | 82.40 |
| 0-80 | 3058.3 | N.A. | 98.70 |
| 0-90 | 3099.74 | N.A. | 100.00 |
| 10-90 | 2980.28 | N.A. | 96.10 |
| 20-40 | 1071.94 | N.A. | 34.60 |
| 20-50 | 1628.14 | N.A. | 52.50 |
| 40-70 | 1353.07 | N.A. | 43.70 |
| 60-80 | 505.19 | N.A. | 16.30 |
| 70-80 | 175.26 | N.A. | 5.70 |
| 80-90 | 41.44 | N.A. | 1.30 |
| 90-110 | 0.00 | N.A. | 0.00 |
| 90-120 | 0.00 | N.A. | 0.00 |
| 90-130 | 0.00 | N.A. | 0.00 |
| 90-150 | 0.00 | N.A. | 0.00 |
| 90-180 | 0.00 | N.A. | 0.00 |
| 110-180 | 0.00 | N.A. | 0.00 |
| 0-180 | 3099.74 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|--------|
| 0-10 | 119.46 |
| 10-20 | 338.57 |
| 20-30 | 498.95 |
| 30-40 | 572.98 |
| 40-50 | 556.20 |
| 50-60 | 466.94 |
| 60-70 | 329.93 |
| 70-80 | 175.26 |
| 80-90 | 41.44 |
| 90-100 | 0.00 |
| 100-110 | 0.00 |
| 110-120 | 0.00 |
| 120-130 | 0.00 |
| 130-140 | 0.00 |
| 140-150 | 0.00 |
| 150-160 | 0.00 |
| 160-170 | 0.00 |
| 170-180 | 0.00 |

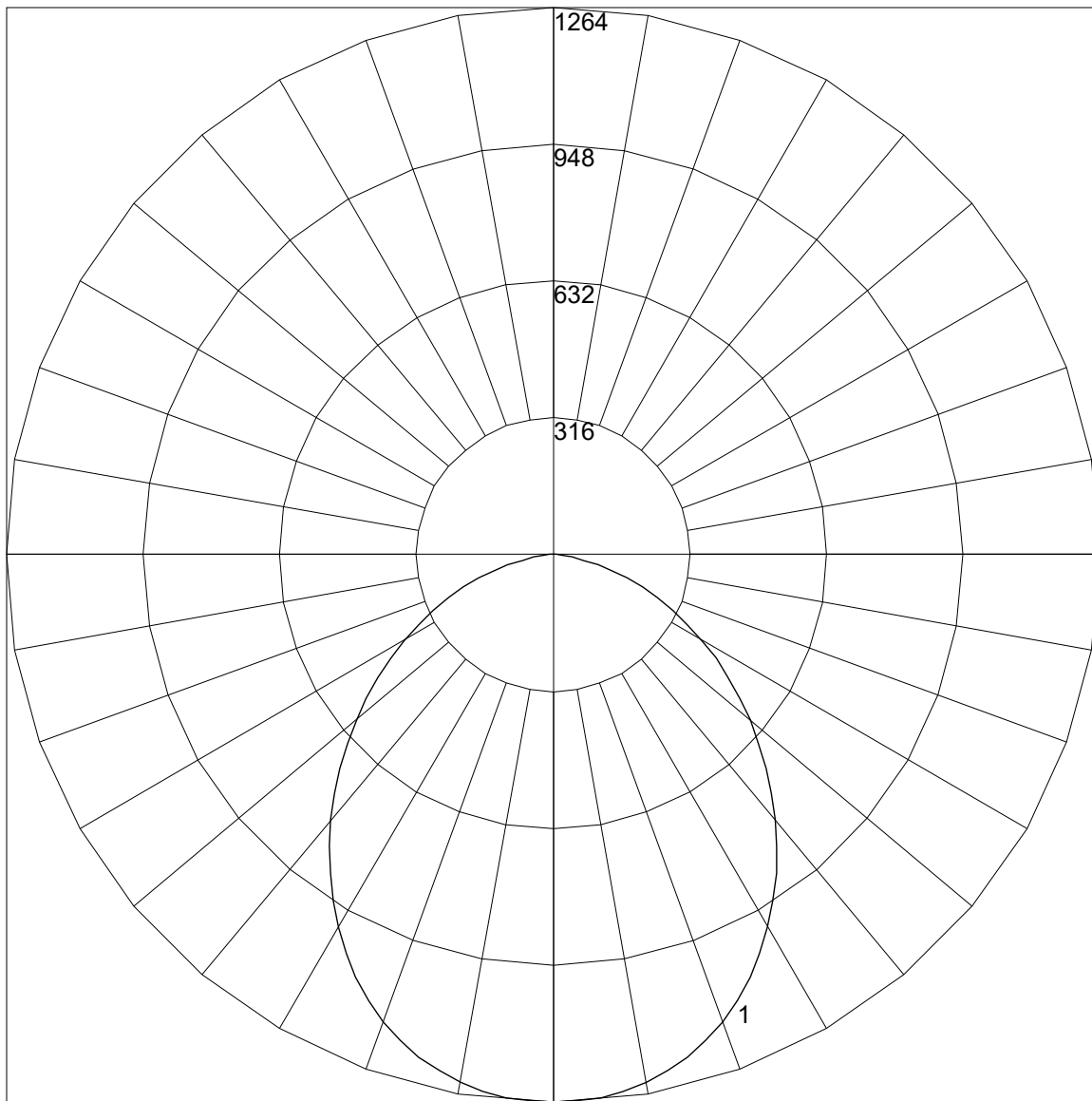
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 109 | 105 | 101 | 97 | 107 | 103 | 99 | 96 | 98 | 95 | 93 | 95 | 92 | 90 | 91 | 89 | 87 | 85 |
| 2 | 100 | 92 | 86 | 80 | 97 | 90 | 84 | 79 | 87 | 82 | 77 | 83 | 79 | 76 | 80 | 77 | 74 | 72 |
| 3 | 92 | 81 | 74 | 67 | 89 | 80 | 73 | 67 | 77 | 71 | 66 | 74 | 69 | 64 | 72 | 67 | 63 | 61 |
| 4 | 84 | 73 | 64 | 58 | 82 | 71 | 63 | 57 | 69 | 62 | 56 | 66 | 60 | 56 | 64 | 59 | 55 | 53 |
| 5 | 78 | 65 | 56 | 50 | 75 | 64 | 56 | 50 | 62 | 55 | 49 | 60 | 54 | 49 | 58 | 53 | 48 | 46 |
| 6 | 72 | 59 | 50 | 44 | 70 | 58 | 50 | 44 | 56 | 49 | 43 | 54 | 48 | 43 | 53 | 47 | 43 | 41 |
| 7 | 67 | 53 | 45 | 39 | 65 | 53 | 45 | 39 | 51 | 44 | 39 | 50 | 43 | 38 | 48 | 43 | 38 | 36 |
| 8 | 62 | 49 | 41 | 35 | 61 | 48 | 40 | 35 | 47 | 40 | 35 | 46 | 39 | 34 | 45 | 39 | 34 | 32 |
| 9 | 58 | 45 | 37 | 32 | 57 | 44 | 37 | 32 | 43 | 36 | 31 | 42 | 36 | 31 | 41 | 35 | 31 | 29 |
| 10 | 55 | 42 | 34 | 29 | 53 | 41 | 34 | 29 | 40 | 33 | 29 | 39 | 33 | 28 | 38 | 33 | 28 | 27 |

POLAR GRAPH



Maximum Candela = 1263.889 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)