

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-X-D-4FT-V-8TW-F-ITL92552.900.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL92552.900 Family Correlation File
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[TESTDATE]12/13/19
[ISSUEDATE]01/07/20
[MANUFAC]FINELITE, INC.
[LUMCAT]HP-X-D-4ft-V-8TW-F
[OTHER]ies file is based on 3500K; see luminaire tech sheet at
[more]www.finelite.com for lumen adjustment factors for other CCT's & CRI's
[INPUT_ELECTRICAL]120.0 VOLTS, 36.9 WATTS
[INPUT_ELECTRICAL]277.0 VOLTS, 36.7 WATTS
[ABSOLUTE LUMENS]4011

CHARACTERISTICS

| | |
|---------------------------------|-----------------|
| Lumens Per Lamp | N.A. (absolute) |
| Total Lamp Lumens | N.A. (absolute) |
| Luminaire Lumens | 4011 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 109 |
| Total Luminaire Watts | 36.9 |
| Ballast Factor | 1.00 |
| CIE Type | Direct |
| Spacing Criterion (0-180) | 1.28 |
| Spacing Criterion (90-270) | 1.26 |
| Spacing Criterion (Diagonal) | 1.38 |
| Basic Luminous Shape | Rectangular |
| Luminous Length (0-180) | 4.00 ft |
| Luminous Width (90-270) | 0.20 ft |
| Luminous Height | 0.00 ft |

LUMINANCE DATA (cd/sq.m)

| Angle In Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|---------------------|------------------|-------------------|-------------------|
| 45 | 17674 | 17693 | 17577 |
| 55 | 17123 | 17123 | 17028 |
| 65 | 16296 | 16360 | 16296 |
| 75 | 15220 | 15325 | 15430 |
| 85 | 13715 | 14183 | 14650 |

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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 | 1371 | 1371 | 1371 | 1371 | 1371 |
| 2.5 | 1370 | 1369 | 1369 | 1369 | 1370 |
| 5.0 | 1365 | 1364 | 1364 | 1364 | 1364 |
| 7.5 | 1358 | 1356 | 1357 | 1356 | 1357 |
| 10.0 | 1348 | 1345 | 1347 | 1348 | 1346 |
| 12.5 | 1336 | 1330 | 1334 | 1336 | 1334 |
| 15.0 | 1321 | 1312 | 1318 | 1320 | 1317 |
| 17.5 | 1303 | 1292 | 1300 | 1300 | 1298 |
| 20.0 | 1280 | 1267 | 1277 | 1278 | 1275 |
| 22.5 | 1254 | 1243 | 1253 | 1253 | 1250 |
| 25.0 | 1228 | 1215 | 1225 | 1225 | 1223 |
| 27.5 | 1198 | 1186 | 1197 | 1195 | 1194 |
| 30.0 | 1165 | 1152 | 1164 | 1162 | 1160 |
| 32.5 | 1128 | 1119 | 1128 | 1128 | 1124 |
| 35.0 | 1092 | 1081 | 1092 | 1090 | 1087 |
| 37.5 | 1052 | 1043 | 1053 | 1049 | 1047 |
| 40.0 | 1012 | 1002 | 1011 | 1007 | 1004 |
| 42.5 | 969 | 960 | 968 | 965 | 962 |
| 45.0 | 920 | 915 | 921 | 919 | 915 |
| 47.5 | 874 | 869 | 875 | 871 | 869 |
| 50.0 | 826 | 822 | 827 | 822 | 821 |
| 52.5 | 775 | 772 | 776 | 772 | 771 |
| 55.0 | 723 | 721 | 723 | 722 | 719 |
| 57.5 | 670 | 668 | 671 | 670 | 668 |
| 60.0 | 616 | 614 | 618 | 616 | 616 |
| 62.5 | 563 | 560 | 565 | 562 | 564 |
| 65.0 | 507 | 507 | 509 | 509 | 507 |
| 67.5 | 452 | 453 | 454 | 455 | 455 |
| 70.0 | 398 | 397 | 400 | 399 | 402 |
| 72.5 | 342 | 342 | 346 | 346 | 348 |
| 75.0 | 290 | 288 | 292 | 293 | 294 |
| 77.5 | 236 | 236 | 240 | 242 | 244 |
| 80.0 | 184 | 186 | 188 | 191 | 192 |
| 82.5 | 136 | 136 | 139 | 142 | 144 |
| 85.0 | 88 | 89 | 91 | 94 | 94 |
| 87.5 | 40 | 42 | 46 | 48 | 49 |
| 90.0 | 0 | 0 | 0 | 0 | 0 |

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ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|--------|
| 0-20 | 501.39 | N.A. | 12.50 |
| 0-30 | 1064.98 | N.A. | 26.60 |
| 0-40 | 1745.58 | N.A. | 43.50 |
| 0-60 | 3099.27 | N.A. | 77.30 |
| 0-80 | 3910.54 | N.A. | 97.50 |
| 0-90 | 4011.15 | N.A. | 100.00 |
| 10-90 | 3881.48 | N.A. | 96.80 |
| 20-40 | 1244.19 | N.A. | 31.00 |
| 20-50 | 1952.74 | N.A. | 48.70 |
| 40-70 | 1856.57 | N.A. | 46.30 |
| 60-80 | 811.27 | N.A. | 20.20 |
| 70-80 | 308.39 | N.A. | 7.70 |
| 80-90 | 100.61 | N.A. | 2.50 |
| 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 | 4011.15 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|--------|
| 0-10 | 129.66 |
| 10-20 | 371.72 |
| 20-30 | 563.60 |
| 30-40 | 680.60 |
| 40-50 | 708.55 |
| 50-60 | 645.14 |
| 60-70 | 502.88 |
| 70-80 | 308.39 |
| 80-90 | 100.61 |
| 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 |

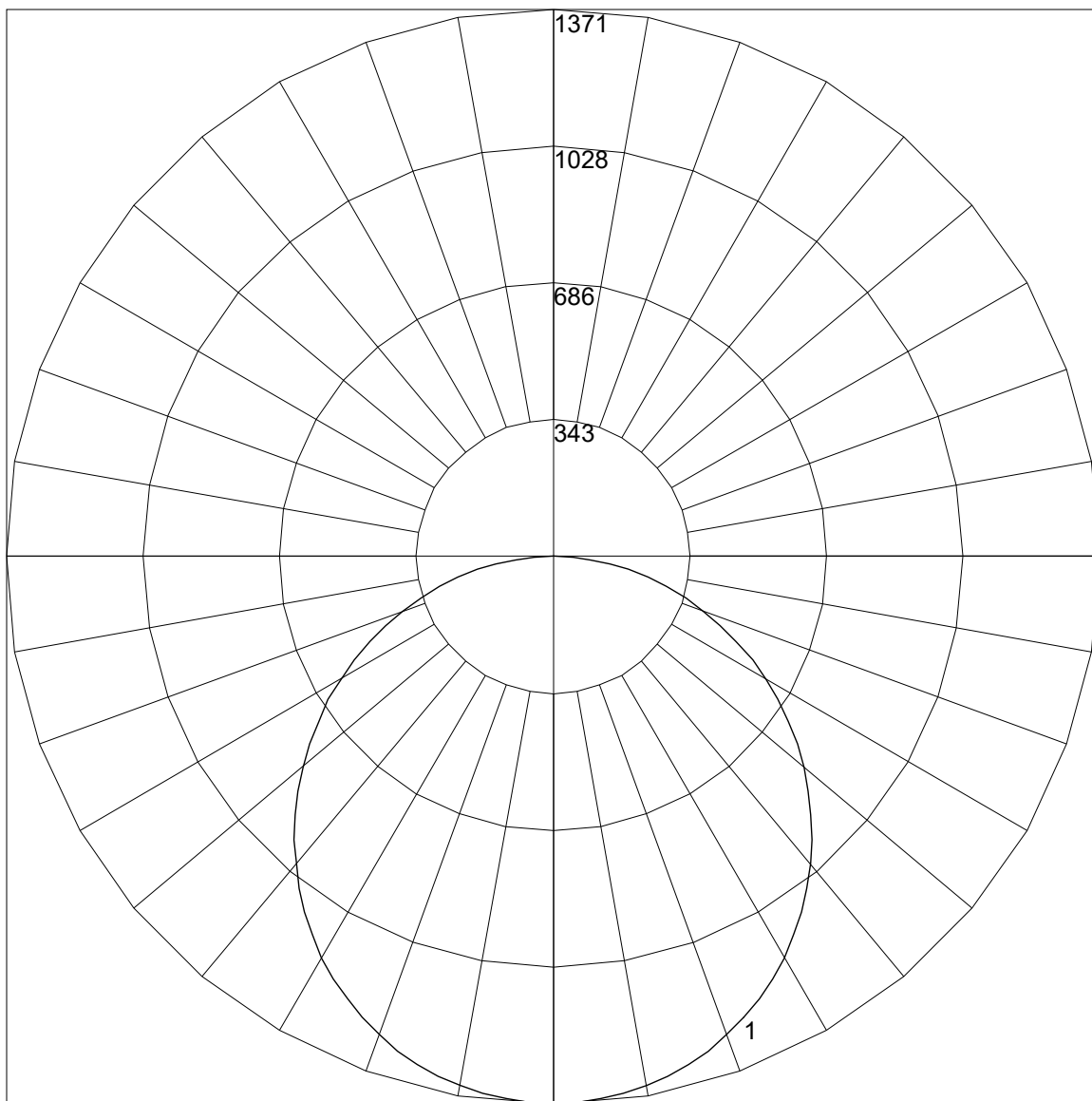
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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 | 108 | 103 | 99 | 95 | 106 | 101 | 97 | 93 | 97 | 93 | 90 | 93 | 90 | 88 | 89 | 87 | 85 | 83 |
| 2 | 98 | 90 | 83 | 77 | 96 | 88 | 81 | 76 | 84 | 79 | 74 | 81 | 76 | 72 | 78 | 74 | 71 | 69 |
| 3 | 89 | 79 | 70 | 64 | 87 | 77 | 69 | 63 | 74 | 67 | 62 | 71 | 66 | 61 | 69 | 64 | 60 | 57 |
| 4 | 82 | 70 | 61 | 54 | 79 | 68 | 60 | 53 | 66 | 58 | 53 | 63 | 57 | 52 | 61 | 56 | 51 | 49 |
| 5 | 75 | 62 | 53 | 46 | 73 | 61 | 52 | 46 | 59 | 51 | 45 | 57 | 50 | 45 | 55 | 49 | 44 | 42 |
| 6 | 69 | 56 | 47 | 40 | 67 | 55 | 46 | 40 | 53 | 45 | 40 | 51 | 44 | 39 | 50 | 44 | 39 | 37 |
| 7 | 64 | 51 | 42 | 35 | 63 | 50 | 41 | 35 | 48 | 41 | 35 | 47 | 40 | 35 | 45 | 39 | 34 | 32 |
| 8 | 60 | 46 | 37 | 32 | 58 | 45 | 37 | 31 | 44 | 37 | 31 | 43 | 36 | 31 | 42 | 35 | 31 | 29 |
| 9 | 56 | 42 | 34 | 28 | 54 | 42 | 34 | 28 | 41 | 33 | 28 | 39 | 33 | 28 | 38 | 32 | 28 | 26 |
| 10 | 52 | 39 | 31 | 26 | 51 | 38 | 31 | 26 | 37 | 30 | 26 | 37 | 30 | 25 | 36 | 30 | 25 | 24 |

POLAR GRAPH



Maximum Candela = 1371 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)