

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-4-ID-4FT-B-H-835-ASY-ITL89988.011.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89988.011 Family Correlation File
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[TESTDATE]11/16/17
[ISSUEDATE]12/11/17
[MANUFAC]FINELITE, INC.
[LUMCAT]HP-4-ID-4ft-B-H-835-ASYM
[INPUT_ELECTRICAL]120.0 VOLTS, 46.7 WATTS
[INPUT_ELECTRICAL]277.0 VOLTS, 48.4 WATTS
[OTHER]see www.finelite.com for source file ITL89988. 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]5212

CHARACTERISTICS

| | |
|---------------------------------|-----------------|
| Lumens Per Lamp | N.A. (absolute) |
| Total Lamp Lumens | N.A. (absolute) |
| Luminaire Lumens | 5212 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 112 |
| Total Luminaire Watts | 46.7 |
| 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) | 0.32 ft |
| Luminous Width (90-270) | 4.00 ft |
| Luminous Height | 0.00 ft |

LUMINANCE DATA (cd/sq.m)

| Angle In Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|---------------------|------------------|-------------------|-------------------|
| 45 | 7875 | 7930 | 7939 |
| 55 | 7315 | 7383 | 7417 |
| 65 | 6726 | 6803 | 6803 |
| 75 | 6129 | 6104 | 6079 |
| 85 | 5052 | 4978 | 4978 |

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP-4-ID-4FT-B-H-835-ASY-ITL89988.011.IES

CANDELA TABULATION

| | <u>0.0</u> | <u>5.0</u> | <u>15.0</u> | <u>25.0</u> | <u>35.0</u> | <u>45.0</u> | <u>55.0</u> | <u>65.0</u> | <u>75.0</u> | <u>85.0</u> |
|-------|------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 0.0 | 1115.275 | 1115.275 | 1115.275 | 1115.275 | 1115.275 | 1115.275 | 1115.275 | 1115.275 | 1115.275 | 1115.275 |
| 2.5 | 1113.720 | 1113.720 | 1113.720 | 1113.720 | 1113.720 | 1113.720 | 1113.720 | 1112.942 | 1113.720 | 1113.720 |
| 5.0 | 1109.831 | 1109.831 | 1109.831 | 1109.831 | 1109.831 | 1109.831 | 1109.831 | 1109.053 | 1109.053 | 1109.831 |
| 7.5 | 1102.831 | 1102.053 | 1102.053 | 1102.053 | 1102.053 | 1102.053 | 1101.276 | 1100.498 | 1100.498 | 1100.498 |
| 10.0 | 1091.165 | 1091.165 | 1093.498 | 1092.721 | 1092.721 | 1091.165 | 1091.943 | 1088.054 | 1088.054 | 1088.832 |
| 12.5 | 1076.388 | 1076.388 | 1078.721 | 1079.499 | 1080.277 | 1077.944 | 1077.166 | 1072.499 | 1072.499 | 1074.055 |
| 15.0 | 1058.500 | 1057.723 | 1060.833 | 1063.167 | 1063.945 | 1060.056 | 1060.056 | 1054.612 | 1054.612 | 1057.723 |
| 17.5 | 1035.168 | 1035.168 | 1037.501 | 1041.390 | 1042.946 | 1039.835 | 1039.835 | 1034.390 | 1038.279 | 1039.057 |
| 20.0 | 1011.058 | 1011.836 | 1013.391 | 1017.280 | 1018.058 | 1015.725 | 1020.391 | 1009.503 | 1009.503 | 1012.614 |
| 22.5 | 985.393 | 984.615 | 986.948 | 990.059 | 992.393 | 992.393 | 991.615 | 983.060 | 985.393 | 990.059 |
| 25.0 | 956.617 | 955.061 | 956.617 | 960.505 | 962.839 | 960.505 | 962.061 | 958.950 | 955.061 | 958.172 |
| 27.5 | 924.729 | 924.729 | 925.507 | 929.396 | 934.840 | 929.396 | 931.729 | 925.507 | 924.729 | 928.618 |
| 30.0 | 891.287 | 891.287 | 892.064 | 895.953 | 899.064 | 897.509 | 896.731 | 892.842 | 892.064 | 895.175 |
| 32.5 | 857.844 | 857.844 | 857.844 | 862.510 | 864.066 | 863.288 | 862.510 | 859.399 | 860.955 | 861.733 |
| 35.0 | 819.735 | 821.290 | 821.290 | 827.512 | 828.290 | 826.735 | 825.957 | 823.624 | 825.179 | 825.957 |
| 37.5 | 783.959 | 784.737 | 783.959 | 787.848 | 792.514 | 790.181 | 789.403 | 788.625 | 789.403 | 789.403 |
| 40.0 | 747.405 | 745.850 | 745.850 | 748.961 | 752.072 | 750.516 | 752.072 | 750.516 | 752.072 | 752.072 |
| 42.5 | 708.519 | 707.741 | 706.185 | 710.074 | 712.407 | 712.407 | 713.185 | 711.630 | 713.963 | 713.185 |
| 45.0 | 668.854 | 668.854 | 668.854 | 671.187 | 672.743 | 673.520 | 671.965 | 672.743 | 674.298 | 674.298 |
| 47.5 | 627.634 | 628.412 | 628.412 | 630.745 | 632.300 | 633.078 | 632.300 | 632.300 | 633.856 | 633.856 |
| 50.0 | 586.414 | 587.969 | 588.747 | 588.747 | 591.080 | 592.636 | 592.636 | 590.303 | 594.191 | 593.413 |
| 52.5 | 545.194 | 547.527 | 547.527 | 547.527 | 550.638 | 552.193 | 551.416 | 549.860 | 553.749 | 552.971 |
| 55.0 | 503.974 | 507.085 | 507.085 | 506.307 | 509.418 | 508.640 | 510.196 | 508.640 | 511.751 | 511.751 |
| 57.5 | 462.754 | 465.865 | 466.642 | 467.420 | 468.198 | 467.420 | 468.976 | 468.198 | 470.531 | 471.309 |
| 60.0 | 421.534 | 424.644 | 426.200 | 426.200 | 426.978 | 428.533 | 427.755 | 426.978 | 428.533 | 430.089 |
| 62.5 | 381.869 | 383.424 | 385.758 | 385.758 | 384.202 | 387.313 | 386.535 | 385.758 | 388.091 | 389.646 |
| 65.0 | 341.427 | 342.982 | 345.315 | 345.315 | 343.760 | 345.315 | 344.538 | 345.315 | 345.315 | 346.093 |
| 67.5 | 301.762 | 303.317 | 304.095 | 305.651 | 304.095 | 306.428 | 304.095 | 302.540 | 304.873 | 305.651 |
| 70.0 | 262.875 | 263.653 | 265.208 | 264.431 | 265.208 | 265.986 | 263.653 | 263.653 | 264.431 | 265.208 |
| 72.5 | 224.766 | 225.544 | 226.321 | 226.321 | 226.321 | 227.099 | 224.766 | 224.766 | 225.544 | 226.321 |
| 75.0 | 190.546 | 188.212 | 188.212 | 188.990 | 188.990 | 189.768 | 186.657 | 186.657 | 186.657 | 187.435 |
| 77.5 | 153.992 | 151.659 | 153.992 | 151.659 | 152.436 | 153.214 | 150.103 | 150.103 | 148.548 | 150.103 |
| 80.0 | 118.994 | 116.661 | 118.216 | 117.438 | 116.661 | 118.216 | 115.883 | 116.661 | 115.105 | 114.327 |
| 82.5 | 84.773 | 83.218 | 84.773 | 84.773 | 83.218 | 83.996 | 82.440 | 83.218 | 83.218 | 83.218 |
| 85.0 | 52.886 | 51.331 | 52.886 | 51.331 | 51.331 | 52.108 | 50.553 | 52.108 | 51.331 | 52.108 |
| 87.5 | 24.110 | 24.110 | 24.110 | 23.332 | 21.777 | 22.554 | 21.777 | 21.777 | 22.554 | 21.777 |
| 90.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 92.5 | 34.480 | 33.966 | 35.510 | 34.480 | 32.936 | 29.849 | 30.878 | 31.907 | 29.849 | 21.614 |
| 95.0 | 73.078 | 73.078 | 75.651 | 74.107 | 72.563 | 75.136 | 81.826 | 80.282 | 65.873 | 42.714 |
| 97.5 | 115.277 | 112.704 | 120.424 | 123.511 | 130.716 | 139.980 | 140.494 | 122.997 | 96.236 | 62.785 |
| 100.0 | 178.577 | 176.004 | 184.752 | 189.899 | 200.706 | 204.823 | 193.501 | 163.138 | 127.114 | 83.370 |
| 102.5 | 241.362 | 239.303 | 248.567 | 254.742 | 269.666 | 267.608 | 243.935 | 203.794 | 155.418 | 103.955 |
| 105.0 | 299.515 | 297.457 | 309.293 | 326.790 | 341.715 | 332.966 | 296.942 | 244.964 | 181.150 | 125.055 |
| 107.5 | 368.990 | 366.417 | 388.031 | 415.307 | 421.483 | 401.412 | 351.493 | 282.017 | 205.338 | 145.126 |
| 110.0 | 464.711 | 462.138 | 491.987 | 507.426 | 502.794 | 466.770 | 402.441 | 312.895 | 228.496 | 165.711 |
| 112.5 | 581.018 | 577.415 | 596.971 | 598.515 | 583.591 | 531.099 | 443.612 | 339.142 | 250.625 | 186.811 |
| 115.0 | 687.032 | 682.915 | 695.266 | 688.061 | 657.183 | 583.591 | 475.004 | 362.815 | 271.210 | 208.425 |
| 117.5 | 786.356 | 781.209 | 786.870 | 765.256 | 714.822 | 620.644 | 498.162 | 382.370 | 292.825 | 230.554 |
| 120.0 | 866.123 | 861.492 | 857.889 | 822.380 | 753.934 | 643.288 | 514.631 | 401.412 | 313.410 | 252.684 |
| 122.5 | 923.762 | 920.674 | 903.691 | 859.433 | 774.519 | 656.154 | 529.555 | 419.938 | 335.539 | 276.357 |
| 125.0 | 957.727 | 954.640 | 931.481 | 875.387 | 782.753 | 662.844 | 541.391 | 437.436 | 356.639 | 299.515 |
| 127.5 | 969.564 | 966.476 | 938.686 | 876.416 | 782.239 | 666.961 | 553.228 | 454.419 | 378.768 | 322.673 |
| 130.0 | 964.418 | 961.330 | 931.996 | 868.182 | 777.607 | 670.049 | 566.094 | 472.431 | 399.868 | 345.317 |
| 132.5 | 948.464 | 946.406 | 917.072 | 855.831 | 771.946 | 673.651 | 578.959 | 490.958 | 422.512 | 368.990 |

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP-4-ID-4FT-B-H-835-ASY-ITL89988.011.IES

CANDELA TABULATION - (Cont.)

| | | | | | | | | | | |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 135.0 | 927.879 | 926.335 | 898.545 | 842.450 | 766.285 | 678.283 | 592.340 | 509.484 | 444.641 | 392.663 |
| 137.5 | 906.779 | 905.750 | 879.504 | 829.070 | 761.653 | 683.944 | 605.720 | 529.555 | 467.285 | 416.336 |
| 140.0 | 885.679 | 884.650 | 861.492 | 817.748 | 759.080 | 690.120 | 619.101 | 549.111 | 490.443 | 440.009 |
| 142.5 | 867.153 | 865.609 | 847.082 | 808.999 | 758.566 | 696.810 | 633.510 | 569.181 | 512.572 | 463.682 |
| 145.0 | 852.743 | 850.684 | 834.216 | 802.309 | 758.566 | 703.500 | 648.434 | 588.737 | 534.701 | 487.355 |
| 147.5 | 840.392 | 838.848 | 824.953 | 797.677 | 759.080 | 711.734 | 663.359 | 607.779 | 556.316 | 510.514 |
| 150.0 | 830.614 | 828.041 | 817.233 | 793.560 | 761.139 | 720.483 | 678.283 | 625.791 | 576.901 | 533.157 |
| 152.5 | 821.865 | 819.292 | 810.543 | 790.473 | 763.712 | 729.231 | 690.120 | 641.744 | 595.942 | 554.772 |
| 155.0 | 813.631 | 812.087 | 804.368 | 789.443 | 767.314 | 736.951 | 701.956 | 655.639 | 613.954 | 574.842 |
| 157.5 | 808.999 | 807.455 | 801.280 | 788.929 | 769.887 | 742.612 | 710.705 | 667.990 | 629.908 | 593.884 |
| 160.0 | 805.397 | 803.853 | 799.221 | 788.414 | 770.917 | 746.214 | 717.395 | 678.283 | 644.317 | 611.381 |
| 162.5 | 798.707 | 799.221 | 795.104 | 784.812 | 769.373 | 746.729 | 721.512 | 686.003 | 656.154 | 627.335 |
| 165.0 | 790.987 | 790.987 | 787.385 | 777.092 | 763.712 | 744.156 | 722.027 | 691.663 | 665.932 | 640.715 |
| 167.5 | 778.121 | 778.636 | 775.548 | 766.800 | 754.448 | 737.466 | 718.939 | 694.237 | 672.622 | 651.008 |
| 170.0 | 761.653 | 762.683 | 759.595 | 752.390 | 742.612 | 728.717 | 713.278 | 694.751 | 677.254 | 659.242 |
| 172.5 | 741.068 | 742.612 | 740.553 | 734.893 | 727.173 | 716.366 | 705.044 | 692.693 | 678.798 | 665.417 |
| 175.0 | 720.997 | 719.968 | 718.424 | 715.337 | 710.190 | 702.985 | 695.780 | 687.546 | 678.798 | 669.534 |
| 177.5 | 695.266 | 695.266 | 694.751 | 692.693 | 690.634 | 686.517 | 683.944 | 679.312 | 674.681 | 670.564 |
| 180.0 | 670.049 | 670.049 | 670.049 | 670.049 | 670.049 | 670.049 | 670.049 | 670.049 | 670.049 | 670.049 |

**Vert.
Angles**

Horizontal Angles

| | <u>90.0</u> | <u>95.0</u> | <u>112.5</u> | <u>135.0</u> | <u>157.5</u> | <u>180.0</u> |
|------|-------------|-------------|--------------|--------------|--------------|--------------|
| 0.0 | 1115.275 | 1115.275 | 1115.275 | 1115.275 | 1115.275 | 1115.275 |
| 2.5 | 1113.720 | 1113.720 | 1113.720 | 1113.720 | 1113.720 | 1113.720 |
| 5.0 | 1109.053 | 1109.831 | 1109.053 | 1108.275 | 1107.498 | 1109.053 |
| 7.5 | 1101.276 | 1101.276 | 1100.498 | 1098.943 | 1099.720 | 1099.720 |
| 10.0 | 1090.388 | 1090.388 | 1087.276 | 1088.054 | 1089.610 | 1088.054 |
| 12.5 | 1076.388 | 1075.611 | 1070.944 | 1074.055 | 1076.388 | 1074.055 |
| 15.0 | 1060.056 | 1058.500 | 1051.501 | 1057.723 | 1058.500 | 1056.167 |
| 17.5 | 1041.390 | 1040.612 | 1031.279 | 1036.724 | 1037.501 | 1034.390 |
| 20.0 | 1014.169 | 1012.614 | 1005.614 | 1012.614 | 1012.614 | 1009.503 |
| 22.5 | 992.393 | 990.837 | 979.949 | 989.282 | 986.948 | 983.837 |
| 25.0 | 960.505 | 958.950 | 951.950 | 959.728 | 956.617 | 954.283 |
| 27.5 | 930.174 | 929.396 | 921.619 | 928.618 | 926.285 | 923.174 |
| 30.0 | 895.953 | 895.953 | 889.731 | 896.731 | 892.064 | 890.509 |
| 32.5 | 862.510 | 863.288 | 856.289 | 860.955 | 857.844 | 857.066 |
| 35.0 | 826.735 | 823.624 | 820.513 | 824.401 | 821.290 | 816.624 |
| 37.5 | 788.625 | 787.070 | 783.181 | 787.848 | 784.737 | 780.848 |
| 40.0 | 751.294 | 749.739 | 745.850 | 749.739 | 747.405 | 743.517 |
| 42.5 | 713.185 | 711.630 | 707.741 | 711.630 | 707.741 | 705.408 |
| 45.0 | 674.298 | 673.520 | 668.854 | 671.965 | 668.076 | 665.743 |
| 47.5 | 634.634 | 633.856 | 628.412 | 631.523 | 627.634 | 626.078 |
| 50.0 | 594.969 | 593.413 | 587.969 | 591.080 | 586.414 | 586.414 |
| 52.5 | 552.193 | 552.971 | 547.527 | 549.860 | 545.971 | 545.194 |
| 55.0 | 510.973 | 510.196 | 507.085 | 508.640 | 504.751 | 503.196 |
| 57.5 | 469.753 | 468.198 | 465.865 | 467.420 | 464.309 | 462.754 |
| 60.0 | 428.533 | 426.978 | 425.422 | 426.200 | 423.867 | 421.534 |
| 62.5 | 386.535 | 387.313 | 384.202 | 384.980 | 383.424 | 381.091 |
| 65.0 | 345.315 | 346.093 | 342.982 | 343.760 | 341.427 | 339.871 |
| 67.5 | 307.984 | 304.873 | 300.984 | 303.317 | 301.762 | 300.207 |
| 70.0 | 266.764 | 264.431 | 262.097 | 263.653 | 262.875 | 261.320 |
| 72.5 | 227.099 | 224.766 | 223.211 | 225.544 | 224.766 | 222.433 |
| 75.0 | 188.990 | 186.657 | 185.101 | 186.657 | 186.657 | 185.101 |
| 77.5 | 151.659 | 149.326 | 148.548 | 150.881 | 150.103 | 153.214 |
| 80.0 | 116.661 | 114.327 | 115.105 | 115.105 | 115.105 | 117.438 |

IES INDOOR REPORT
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CANDELA TABULATION - (Cont.)

| | | | | | | |
|-------|---------|---------|---------|---------|---------|---------|
| 82.5 | 83.218 | 83.218 | 82.440 | 82.440 | 83.218 | 83.996 |
| 85.0 | 52.108 | 51.331 | 51.331 | 51.331 | 50.553 | 51.331 |
| 87.5 | 21.777 | 21.777 | 20.999 | 21.777 | 20.999 | 21.777 |
| 90.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 92.5 | 11.322 | 15.439 | 29.849 | 46.831 | 56.095 | 59.697 |
| 95.0 | 29.334 | 30.878 | 47.346 | 72.563 | 85.943 | 90.060 |
| 97.5 | 47.861 | 46.831 | 62.785 | 95.721 | 115.277 | 120.938 |
| 100.0 | 66.902 | 63.814 | 79.768 | 114.763 | 138.950 | 147.184 |
| 102.5 | 86.973 | 80.797 | 96.751 | 135.348 | 156.962 | 165.196 |
| 105.0 | 106.528 | 99.838 | 112.704 | 151.301 | 177.033 | 182.694 |
| 107.5 | 127.114 | 118.880 | 127.114 | 166.740 | 194.530 | 199.677 |
| 110.0 | 147.699 | 137.921 | 141.523 | 182.694 | 212.542 | 217.689 |
| 112.5 | 168.799 | 156.962 | 155.418 | 198.647 | 230.040 | 236.215 |
| 115.0 | 189.899 | 177.033 | 169.828 | 213.057 | 247.023 | 253.713 |
| 117.5 | 210.999 | 198.133 | 184.752 | 226.438 | 264.005 | 271.210 |
| 120.0 | 234.157 | 220.262 | 200.706 | 238.274 | 278.930 | 288.193 |
| 122.5 | 257.830 | 242.906 | 216.145 | 249.596 | 293.854 | 304.661 |
| 125.0 | 280.474 | 265.035 | 231.069 | 259.374 | 305.176 | 319.071 |
| 127.5 | 303.632 | 287.164 | 246.508 | 268.637 | 314.439 | 331.937 |
| 130.0 | 326.276 | 308.778 | 261.432 | 277.386 | 320.100 | 339.656 |
| 132.5 | 349.434 | 331.422 | 276.357 | 286.649 | 324.217 | 342.229 |
| 135.0 | 372.592 | 354.580 | 293.854 | 295.398 | 327.305 | 343.259 |
| 137.5 | 396.265 | 377.739 | 312.895 | 304.661 | 330.393 | 343.259 |
| 140.0 | 420.453 | 401.412 | 333.481 | 313.410 | 332.966 | 343.259 |
| 142.5 | 444.126 | 424.056 | 355.095 | 322.159 | 335.539 | 343.259 |
| 145.0 | 467.799 | 448.243 | 376.195 | 331.422 | 339.142 | 343.773 |
| 147.5 | 491.472 | 471.402 | 397.809 | 342.744 | 344.288 | 346.346 |
| 150.0 | 515.145 | 495.075 | 420.968 | 357.154 | 349.949 | 350.463 |
| 152.5 | 536.760 | 518.233 | 445.670 | 377.739 | 357.154 | 355.095 |
| 155.0 | 557.860 | 540.362 | 471.916 | 402.956 | 367.961 | 363.329 |
| 157.5 | 577.930 | 561.462 | 498.677 | 430.231 | 386.488 | 376.710 |
| 160.0 | 596.457 | 581.533 | 524.409 | 458.021 | 415.307 | 401.412 |
| 162.5 | 613.440 | 599.545 | 549.625 | 486.841 | 447.729 | 434.348 |
| 165.0 | 627.849 | 615.498 | 572.784 | 519.262 | 480.150 | 468.314 |
| 167.5 | 640.200 | 629.393 | 593.884 | 550.140 | 515.145 | 503.309 |
| 170.0 | 651.008 | 641.744 | 613.440 | 579.474 | 554.257 | 544.994 |
| 172.5 | 658.727 | 652.037 | 630.423 | 606.235 | 588.737 | 582.562 |
| 175.0 | 665.417 | 660.786 | 645.861 | 630.423 | 619.615 | 615.498 |
| 177.5 | 668.505 | 666.447 | 658.727 | 651.008 | 645.347 | 643.288 |
| 180.0 | 670.049 | 670.049 | 670.049 | 670.049 | 670.049 | 670.049 |

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP-4-ID-4FT-B-H-835-ASY-ITL89988.011.IES

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|--------|
| 0-20 | 403.32 | N.A. | 7.70 |
| 0-30 | 844.37 | N.A. | 16.20 |
| 0-40 | 1359.53 | N.A. | 26.10 |
| 0-60 | 2331.36 | N.A. | 44.70 |
| 0-80 | 2870.74 | N.A. | 55.10 |
| 0-90 | 2929.16 | N.A. | 56.20 |
| 10-90 | 2823.92 | N.A. | 54.20 |
| 20-40 | 956.21 | N.A. | 18.30 |
| 20-50 | 1473.63 | N.A. | 28.30 |
| 40-70 | 1312.61 | N.A. | 25.20 |
| 60-80 | 539.38 | N.A. | 10.30 |
| 70-80 | 198.59 | N.A. | 3.80 |
| 80-90 | 58.42 | N.A. | 1.10 |
| 90-110 | 297.46 | N.A. | 5.70 |
| 90-120 | 653.58 | N.A. | 12.50 |
| 90-130 | 1063.77 | N.A. | 20.40 |
| 90-150 | 1777.73 | N.A. | 34.10 |
| 90-180 | 2282.85 | N.A. | 43.80 |
| 110-180 | 1985.39 | N.A. | 38.10 |
| 0-180 | 5212.00 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|--------|
| 0-10 | 105.24 |
| 10-20 | 298.08 |
| 20-30 | 441.05 |
| 30-40 | 515.16 |
| 40-50 | 517.41 |
| 50-60 | 454.41 |
| 60-70 | 340.79 |
| 70-80 | 198.59 |
| 80-90 | 58.42 |
| 90-100 | 75.43 |
| 100-110 | 222.02 |
| 110-120 | 356.12 |
| 120-130 | 410.19 |
| 130-140 | 383.34 |
| 140-150 | 330.63 |
| 150-160 | 264.25 |
| 160-170 | 177.65 |
| 170-180 | 63.22 |

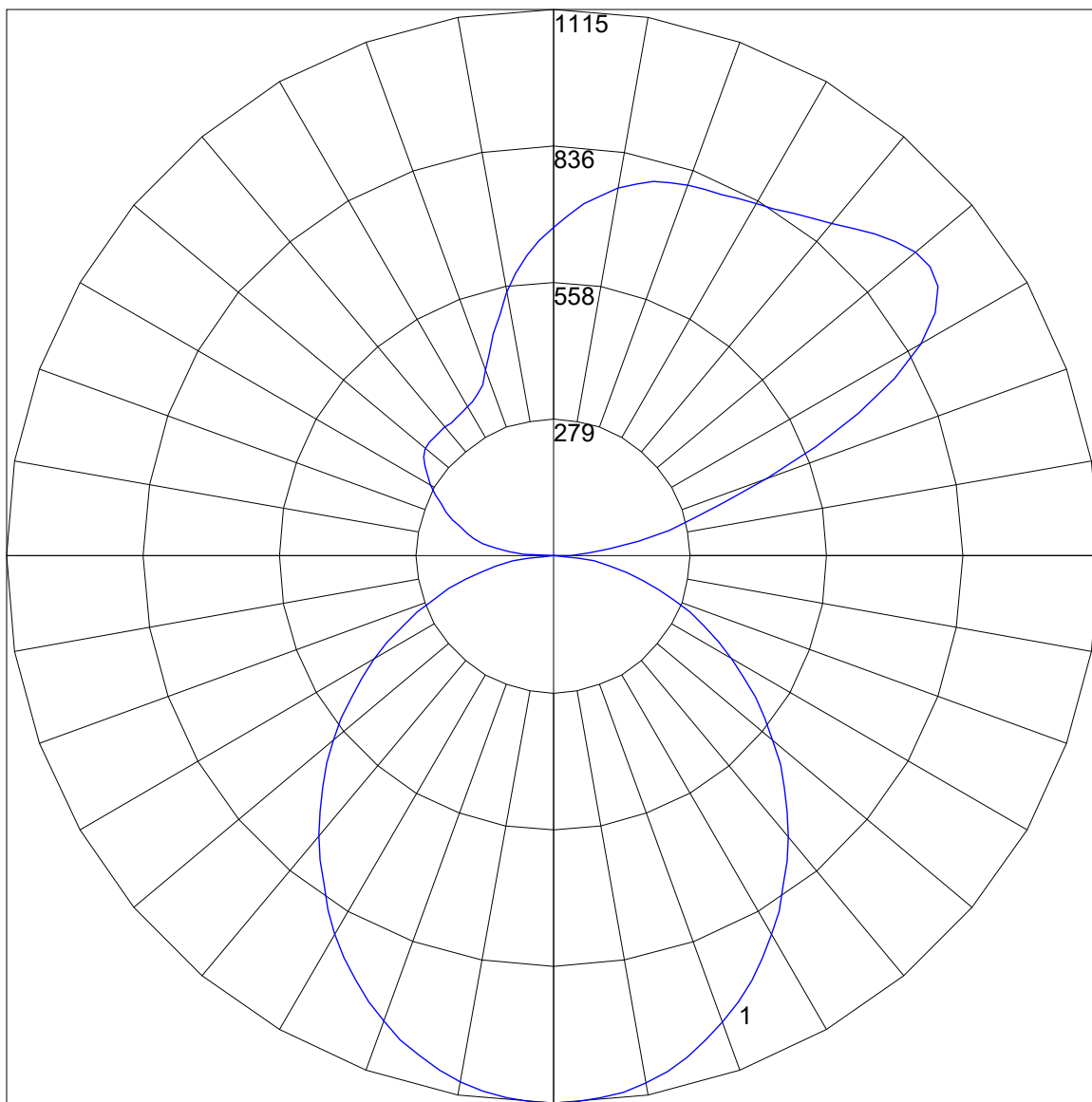
IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP-4-ID-4FT-B-H-835-ASY-ITL89988.011.IES

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 | 101 | 101 | 101 | 101 | 87 | 87 | 87 | 74 | 74 | 74 | 62 | 62 | 62 | 56 |
| 1 | 99 | 95 | 91 | 87 | 92 | 88 | 85 | 82 | 76 | 73 | 71 | 65 | 63 | 61 | 54 | 53 | 52 | 47 |
| 2 | 90 | 83 | 76 | 71 | 84 | 77 | 72 | 67 | 67 | 62 | 59 | 57 | 54 | 51 | 48 | 46 | 44 | 39 |
| 3 | 82 | 73 | 65 | 59 | 76 | 68 | 61 | 56 | 59 | 54 | 49 | 50 | 46 | 43 | 42 | 40 | 37 | 33 |
| 4 | 75 | 64 | 56 | 50 | 70 | 60 | 53 | 47 | 52 | 47 | 42 | 45 | 40 | 37 | 38 | 35 | 32 | 29 |
| 5 | 69 | 57 | 49 | 43 | 64 | 54 | 46 | 41 | 47 | 41 | 36 | 40 | 36 | 32 | 34 | 31 | 28 | 25 |
| 6 | 64 | 51 | 43 | 37 | 59 | 48 | 41 | 35 | 42 | 36 | 32 | 36 | 32 | 28 | 31 | 27 | 25 | 22 |
| 7 | 59 | 46 | 38 | 33 | 55 | 44 | 36 | 31 | 38 | 32 | 28 | 33 | 28 | 25 | 28 | 25 | 22 | 19 |
| 8 | 55 | 42 | 34 | 29 | 51 | 40 | 33 | 28 | 35 | 29 | 25 | 30 | 26 | 22 | 26 | 22 | 20 | 17 |
| 9 | 51 | 39 | 31 | 26 | 47 | 36 | 29 | 25 | 32 | 26 | 22 | 28 | 23 | 20 | 24 | 20 | 18 | 16 |
| 10 | 48 | 35 | 28 | 23 | 44 | 33 | 27 | 22 | 29 | 24 | 20 | 26 | 21 | 18 | 22 | 19 | 16 | 14 |

POLAR GRAPH



Maximum Candela = 1115.275 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)