

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P331600-840

Luminaire Tested: **S122DIW-S1005D970U840-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P331600-840  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-8,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S122DIW-S1005D970U840-4F0-1E-UDD-D1  
Description: DEFINE 2 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1005 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 970 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

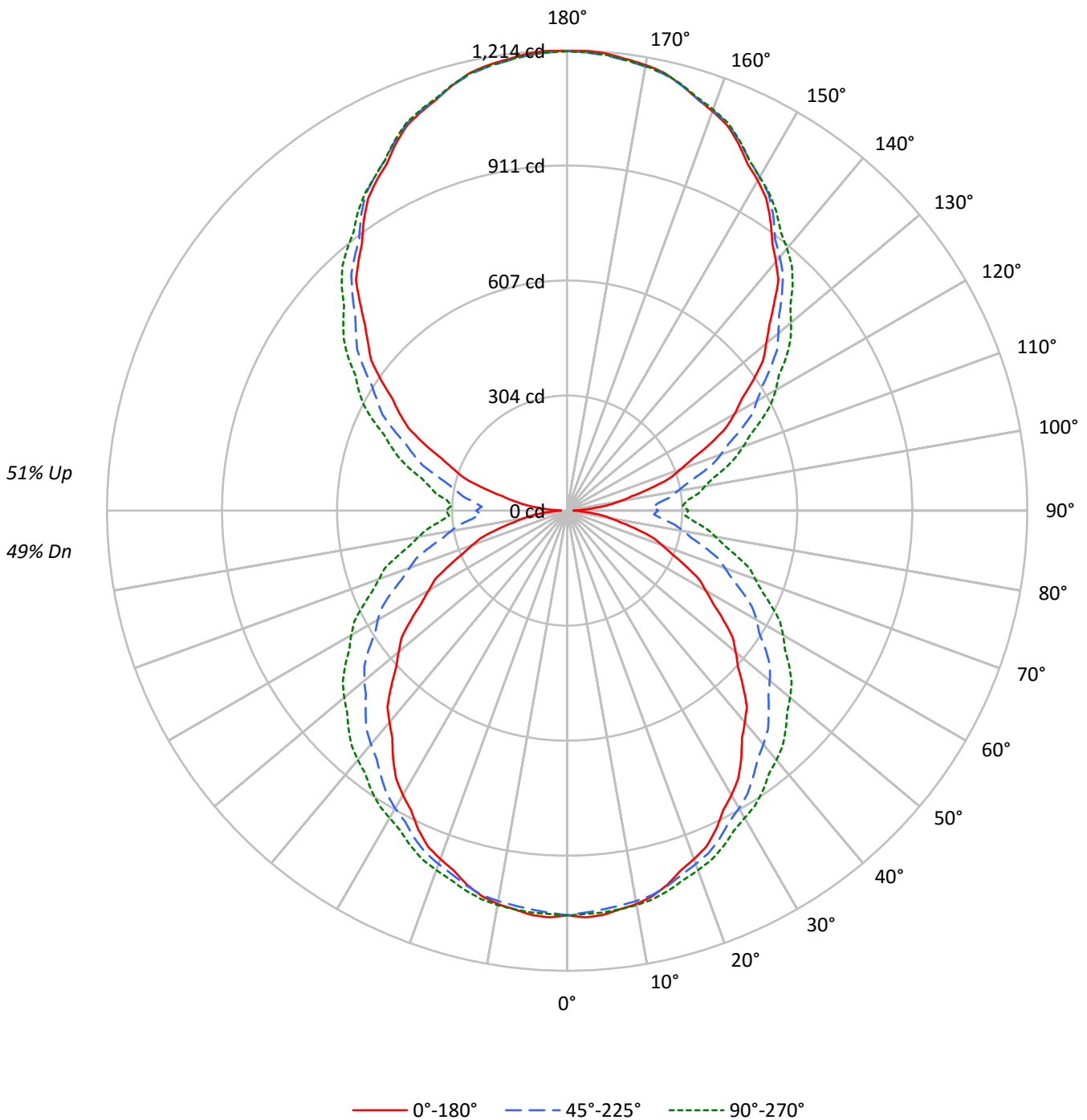
Lumens per Lamp: N/A  
Luminaire Lumens: 7468.0 lumens  
Efficiency: N/A  
Efficacy: 110.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.32 / 1.42  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.08')  
CIE Type: General Diffuse  
  
Input Watts (W): 67.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P331600-840

CATALOG NUMBER: S122DIW-S1005D970U840-4F0-1E-UDD-D1

### Luminous Intensity Polar Plot





TEST NUMBER: P331600-840

CATALOG NUMBER: S122DIW-S1005D970U840-4F0-1E-UDD-D1

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |
|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|
| RF  | 20  |     |     |     |    | 20 |    |    |    |    | 20 |    |    |    |    | 20 |    |    |    |    | 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 | 50 | 30 | 10 | 0  |   |
| RCR |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |
| 0   | 107 | 107 | 107 | 107 | 98 | 98 | 98 | 98 | 83 | 83 | 83 | 68 | 68 | 68 | 55 | 55 | 55 | 49 |    |    |    |   |
| 1   | 96  | 91  | 87  | 83  | 88 | 84 | 80 | 76 | 70 | 67 | 65 | 58 | 56 | 54 | 46 | 45 | 43 | 38 |    |    |    |   |
| 2   | 87  | 79  | 72  | 66  | 79 | 72 | 67 | 62 | 61 | 56 | 52 | 50 | 47 | 44 | 40 | 37 | 35 | 31 |    |    |    |   |
| 3   | 79  | 69  | 61  | 55  | 72 | 63 | 56 | 51 | 53 | 48 | 43 | 43 | 40 | 36 | 35 | 32 | 29 | 25 |    |    |    |   |
| 4   | 72  | 60  | 52  | 46  | 66 | 56 | 48 | 43 | 47 | 41 | 37 | 38 | 34 | 31 | 31 | 28 | 25 | 21 |    |    |    |   |
| 5   | 66  | 54  | 45  | 39  | 60 | 49 | 42 | 36 | 42 | 36 | 31 | 34 | 30 | 26 | 28 | 24 | 22 | 18 |    |    |    |   |
| 6   | 61  | 48  | 39  | 33  | 55 | 44 | 37 | 31 | 37 | 31 | 27 | 31 | 26 | 23 | 25 | 21 | 19 | 16 |    |    |    |   |
| 7   | 56  | 43  | 35  | 29  | 51 | 40 | 33 | 27 | 34 | 28 | 24 | 28 | 23 | 20 | 23 | 19 | 17 | 14 |    |    |    |   |
| 8   | 52  | 39  | 31  | 26  | 47 | 36 | 29 | 24 | 31 | 25 | 21 | 26 | 21 | 18 | 21 | 17 | 15 | 12 |    |    |    |   |
| 9   | 48  | 36  | 28  | 23  | 44 | 33 | 26 | 21 | 28 | 23 | 19 | 23 | 19 | 16 | 19 | 16 | 13 | 11 |    |    |    |   |
| 10  | 45  | 33  | 25  | 20  | 41 | 30 | 24 | 19 | 26 | 20 | 17 | 22 | 17 | 14 | 18 | 14 | 12 | 10 |    |    |    |   |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 17241 | 17241 | 17241 |
| 5°  | 17327 | 16597 | 16534 |
| 10° | 17217 | 16106 | 15925 |
| 15° | 16980 | 15587 | 15284 |
| 20° | 16681 | 15031 | 14669 |
| 25° | 16384 | 14494 | 14107 |
| 30° | 15966 | 13945 | 13546 |
| 35° | 15544 | 13412 | 13150 |
| 40° | 15099 | 12958 | 12754 |
| 45° | 14678 | 12551 | 12415 |
| 50° | 14226 | 12185 | 12082 |
| 55° | 13750 | 11789 | 11742 |
| 60° | 13168 | 11380 | 11382 |
| 65° | 12566 | 10901 | 10957 |
| 70° | 11886 | 10385 | 10497 |
| 75° | 11021 | 9881  | 10071 |
| 80° | 9646  | 9362  | 9643  |
| 85° | 8334  | 8915  | 9308  |



TEST NUMBER: P331600-840

CATALOG NUMBER: S122DIW-S1005D970U840-4F0-1E-UDD-D1

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 101.2  | 1.4       |
| 10°-20°   | 290.2  | 3.9       |
| 20°-30°   | 439.7  | 5.9       |
| 30°-40°   | 535.6  | 7.2       |
| 40°-50°   | 576.2  | 7.7       |
| 50°-60°   | 559.5  | 7.5       |
| 60°-70°   | 488.6  | 6.5       |
| 70°-80°   | 376.1  | 5.0       |
| 80°-90°   | 257.3  | 3.4       |
| 90°-100°  | 250.7  | 3.4       |
| 100°-110° | 365.5  | 4.9       |
| 110°-120° | 491.6  | 6.6       |
| 120°-130° | 583.0  | 7.8       |
| 130°-140° | 621.5  | 8.3       |
| 140°-150° | 593.5  | 7.9       |
| 150°-160° | 494.9  | 6.6       |
| 160°-170° | 328.3  | 4.4       |
| 170°-180° | 114.7  | 1.5       |
| 0°-30°    | 831.1  | 11.1      |
| 0°-40°    | 1366.6 | 18.3      |
| 0°-60°    | 2502.3 | 33.5      |
| 0°-90°    | 3624.3 | 48.5      |
| 90°-120°  | 1107.8 | 14.8      |
| 90°-150°  | 2905.8 | 38.9      |
| 90°-180°  | 3844.0 | 51.5      |
| 0°-180°   | 7468.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1068 | 1068  | 1068 | 1068  | 1068 |      |
| 5°   | 1071 | 1066  | 1057 | 1066  | 1065 | 102  |
| 15°  | 1022 | 1024  | 1024 | 1038  | 1037 | 288  |
| 25°  | 929  | 940   | 953  | 971   | 976  | 427  |
| 35°  | 800  | 827   | 856  | 889   | 901  | 500  |
| 45°  | 656  | 699   | 752  | 798   | 816  | 506  |
| 55°  | 503  | 560   | 639  | 693   | 715  | 450  |
| 65°  | 344  | 420   | 511  | 572   | 594  | 341  |
| 75°  | 190  | 278   | 376  | 440   | 463  | 201  |
| 85°  | 56   | 152   | 251  | 313   | 337  | 60   |
| 90°  | 16   | 120   | 240  | 298   | 320  | 13   |
| 95°  | 66   | 149   | 244  | 300   | 319  | 71   |
| 105° | 228  | 278   | 358  | 412   | 431  | 241  |
| 115° | 415  | 441   | 506  | 550   | 565  | 410  |
| 125° | 598  | 610   | 654  | 691   | 706  | 535  |
| 135° | 772  | 783   | 800  | 831   | 841  | 596  |
| 145° | 935  | 942   | 948  | 958   | 962  | 584  |
| 155° | 1069 | 1072  | 1075 | 1080  | 1077 | 492  |
| 165° | 1163 | 1162  | 1162 | 1168  | 1164 | 328  |
| 175° | 1210 | 1207  | 1205 | 1211  | 1206 | 115  |
| 180° | 1212 | 1212  | 1212 | 1212  | 1212 |      |



TEST NUMBER: P331600-840

CATALOG NUMBER: S122DIW-S1005D970U840-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 1067.8 | 1067.8 | 1067.8 | 1067.8 | 1067.8 | 1067.8 | 1067.8 | 1067.8 | 1067.8 | 1067.8 | 1067.8 |
| 2.5°   | 1074.1 | 1073.3 | 1072.4 | 1071.6 | 1070.8 | 1069.3 | 1067.4 | 1065.5 | 1063.6 | 1061.7 | 1063.1 |
| 5°     | 1071.0 | 1070.0 | 1068.9 | 1067.8 | 1066.8 | 1065.3 | 1063.3 | 1061.2 | 1059.1 | 1057.0 | 1059.1 |
| 7.5°   | 1061.4 | 1060.7 | 1060.0 | 1059.3 | 1058.6 | 1057.5 | 1055.9 | 1054.3 | 1052.8 | 1051.2 | 1053.6 |
| 10°    | 1054.0 | 1053.3 | 1052.6 | 1051.9 | 1051.2 | 1050.4 | 1049.4 | 1048.2 | 1047.2 | 1046.2 | 1048.9 |
| 12.5°  | 1041.6 | 1041.7 | 1041.9 | 1042.0 | 1042.1 | 1041.8 | 1041.1 | 1040.3 | 1039.6 | 1038.7 | 1041.6 |
| 15°    | 1021.5 | 1022.2 | 1022.8 | 1023.5 | 1024.2 | 1024.5 | 1024.5 | 1024.5 | 1024.5 | 1024.5 | 1027.6 |
| 17.5°  | 995.4  | 996.9  | 998.4  | 999.8  | 1001.2 | 1002.5 | 1003.6 | 1004.7 | 1005.8 | 1006.9 | 1010.2 |
| 20°    | 978.2  | 979.9  | 981.6  | 983.3  | 985.0  | 986.5  | 988.0  | 989.3  | 990.7  | 992.1  | 995.8  |
| 22.5°  | 959.6  | 961.5  | 963.5  | 965.5  | 967.6  | 969.5  | 971.4  | 973.3  | 975.2  | 977.1  | 981.0  |
| 25°    | 928.6  | 931.0  | 933.4  | 935.8  | 938.3  | 941.0  | 944.0  | 947.2  | 950.3  | 953.3  | 957.5  |
| 27.5°  | 891.4  | 895.3  | 899.3  | 903.2  | 907.2  | 910.9  | 914.5  | 918.2  | 921.8  | 925.5  | 930.7  |
| 30°    | 866.7  | 871.1  | 875.7  | 880.1  | 884.5  | 889.1  | 893.5  | 898.0  | 902.4  | 907.0  | 912.4  |
| 32.5°  | 839.4  | 844.4  | 849.5  | 854.5  | 859.5  | 864.6  | 870.0  | 875.3  | 880.6  | 885.9  | 892.2  |
| 35°    | 800.1  | 806.0  | 811.8  | 817.7  | 823.5  | 829.7  | 836.3  | 842.7  | 849.3  | 855.9  | 863.4  |
| 37.5°  | 757.4  | 764.2  | 770.9  | 777.6  | 784.4  | 791.9  | 800.4  | 808.9  | 817.4  | 825.9  | 834.2  |
| 40°    | 728.9  | 736.5  | 744.1  | 751.6  | 759.2  | 767.6  | 776.9  | 786.2  | 795.5  | 804.8  | 813.7  |
| 42.5°  | 701.8  | 709.2  | 716.8  | 724.4  | 732.0  | 741.0  | 751.7  | 762.4  | 773.1  | 783.8  | 793.5  |
| 45°    | 656.2  | 665.5  | 674.8  | 684.1  | 693.4  | 704.0  | 716.1  | 728.1  | 740.1  | 752.1  | 762.9  |
| 47.5°  | 611.4  | 621.5  | 631.6  | 641.7  | 651.8  | 663.9  | 678.0  | 692.1  | 706.2  | 720.2  | 731.4  |
| 50°    | 580.4  | 591.1  | 601.7  | 612.4  | 623.0  | 636.1  | 651.6  | 667.0  | 682.5  | 698.0  | 709.7  |
| 52.5°  | 550.7  | 561.9  | 573.1  | 584.3  | 595.5  | 609.3  | 625.5  | 641.9  | 658.1  | 674.5  | 686.4  |
| 55°    | 503.0  | 515.3  | 527.8  | 540.2  | 552.5  | 567.6  | 585.5  | 603.4  | 621.3  | 639.1  | 651.6  |
| 57.5°  | 456.0  | 469.9  | 483.8  | 497.9  | 511.8  | 527.9  | 546.1  | 564.3  | 582.6  | 600.8  | 614.1  |
| 60°    | 422.5  | 437.3  | 452.1  | 466.9  | 481.7  | 498.9  | 518.5  | 538.1  | 557.6  | 577.2  | 590.4  |
| 62.5°  | 392.8  | 408.1  | 423.4  | 438.8  | 454.1  | 471.6  | 491.2  | 510.8  | 530.5  | 550.1  | 563.9  |
| 65°    | 343.6  | 360.4  | 377.3  | 394.2  | 411.0  | 429.6  | 449.9  | 470.1  | 490.4  | 510.7  | 524.8  |
| 67.5°  | 298.4  | 316.0  | 333.6  | 351.2  | 368.8  | 388.0  | 408.8  | 429.6  | 450.3  | 471.1  | 485.3  |
| 70°    | 266.2  | 284.1  | 301.9  | 319.8  | 337.7  | 357.3  | 378.7  | 400.0  | 421.3  | 442.6  | 457.4  |
| 72.5°  | 236.5  | 254.9  | 273.4  | 291.8  | 310.2  | 330.2  | 351.8  | 373.4  | 395.1  | 416.7  | 431.1  |
| 75°    | 190.4  | 209.6  | 228.8  | 248.1  | 267.4  | 288.0  | 310.0  | 332.0  | 354.1  | 376.1  | 390.8  |
| 77.5°  | 145.8  | 165.9  | 186.1  | 206.2  | 226.4  | 247.6  | 270.0  | 292.4  | 314.7  | 337.1  | 351.8  |
| 80°    | 116.0  | 137.0  | 158.0  | 179.0  | 200.0  | 221.7  | 244.0  | 266.4  | 288.7  | 311.0  | 325.5  |
| 82.5°  | 91.3   | 112.0  | 132.7  | 153.4  | 174.1  | 195.8  | 218.4  | 241.1  | 263.7  | 286.3  | 300.7  |
| 85°    | 55.7   | 77.1   | 98.4   | 119.7  | 141.0  | 162.7  | 184.7  | 206.7  | 228.7  | 250.7  | 265.2  |
| 87.5°  | 30.5   | 51.6   | 72.6   | 93.7   | 114.7  | 136.7  | 159.8  | 182.8  | 205.8  | 228.7  | 242.8  |
| 90°    | 16.5   | 39.2   | 61.8   | 84.5   | 107.2  | 132.1  | 159.1  | 186.0  | 213.1  | 240.0  | 253.4  |
| 92.5°  | 32.4   | 53.0   | 73.6   | 94.1   | 114.7  | 136.2  | 158.5  | 181.0  | 203.3  | 225.7  | 239.2  |
| 95°    | 65.5   | 84.0   | 102.4  | 120.9  | 139.4  | 159.1  | 180.2  | 201.3  | 222.4  | 243.5  | 256.5  |
| 97.5°  | 108.0  | 124.4  | 140.8  | 157.1  | 173.5  | 192.1  | 212.7  | 233.4  | 254.1  | 274.7  | 287.4  |
| 100°   | 140.8  | 155.3  | 169.9  | 184.4  | 198.9  | 216.1  | 236.1  | 256.0  | 276.0  | 295.9  | 308.6  |
| 102.5° | 173.9  | 186.9  | 200.1  | 213.1  | 226.2  | 242.5  | 262.1  | 281.7  | 301.2  | 320.8  | 333.5  |
| 105°   | 227.6  | 238.3  | 248.9  | 259.6  | 270.2  | 284.8  | 303.1  | 321.4  | 339.8  | 358.1  | 370.6  |
| 107.5° | 283.4  | 292.4  | 301.3  | 310.3  | 319.3  | 332.3  | 349.5  | 366.6  | 383.7  | 400.9  | 412.6  |
| 110°   | 318.2  | 326.4  | 334.7  | 342.8  | 351.1  | 363.7  | 380.5  | 397.4  | 414.2  | 431.1  | 442.1  |



TEST NUMBER: P331600-840

CATALOG NUMBER: S122DIW-S1005D970U840-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 357.4  | 364.6  | 371.7  | 378.9  | 386.0  | 397.5  | 413.3  | 429.2  | 445.0  | 460.9  | 471.3  |
| 115°   | 415.4  | 420.5  | 425.7  | 430.8  | 436.0  | 446.0  | 461.0  | 476.1  | 491.1  | 506.0  | 516.1  |
| 117.5° | 471.5  | 475.7  | 480.1  | 484.3  | 488.7  | 497.4  | 510.4  | 523.4  | 536.4  | 549.5  | 559.1  |
| 120°   | 509.9  | 513.1  | 516.3  | 519.5  | 522.7  | 530.3  | 542.2  | 554.1  | 566.1  | 578.0  | 587.6  |
| 122.5° | 545.1  | 547.9  | 550.6  | 553.3  | 556.0  | 563.2  | 574.9  | 586.5  | 598.2  | 609.9  | 618.6  |
| 125°   | 598.3  | 600.5  | 602.5  | 604.5  | 606.5  | 612.8  | 623.1  | 633.4  | 643.7  | 654.1  | 662.7  |
| 127.5° | 651.8  | 654.0  | 656.3  | 658.5  | 660.8  | 665.9  | 674.0  | 682.1  | 690.0  | 698.1  | 705.9  |
| 130°   | 685.3  | 687.9  | 690.5  | 693.2  | 695.8  | 700.4  | 707.2  | 714.0  | 720.7  | 727.5  | 735.4  |
| 132.5° | 723.0  | 725.1  | 727.1  | 729.1  | 731.2  | 735.1  | 740.7  | 746.4  | 752.0  | 757.7  | 764.8  |
| 135°   | 771.7  | 774.3  | 776.8  | 779.2  | 781.7  | 785.0  | 788.8  | 792.7  | 796.6  | 800.5  | 807.5  |
| 137.5° | 824.8  | 826.7  | 828.7  | 830.7  | 832.6  | 834.7  | 836.8  | 838.9  | 841.0  | 843.1  | 849.3  |
| 140°   | 856.7  | 858.4  | 860.0  | 861.7  | 863.4  | 865.3  | 867.1  | 868.9  | 870.7  | 872.5  | 878.0  |
| 142.5° | 889.4  | 891.1  | 892.8  | 894.4  | 896.2  | 897.5  | 898.4  | 899.3  | 900.2  | 901.1  | 905.7  |
| 145°   | 934.8  | 936.4  | 938.1  | 939.7  | 941.3  | 942.7  | 944.1  | 945.4  | 946.8  | 948.2  | 950.5  |
| 147.5° | 976.8  | 978.8  | 980.7  | 982.5  | 984.4  | 985.8  | 986.7  | 987.6  | 988.6  | 989.5  | 990.3  |
| 150°   | 1005.4 | 1006.8 | 1008.1 | 1009.6 | 1010.9 | 1012.1 | 1013.0 | 1013.9 | 1014.8 | 1015.7 | 1016.3 |
| 152.5° | 1030.9 | 1032.2 | 1033.6 | 1034.9 | 1036.3 | 1037.5 | 1038.6 | 1039.7 | 1040.8 | 1041.9 | 1042.7 |
| 155°   | 1068.8 | 1069.5 | 1070.3 | 1071.0 | 1071.6 | 1072.3 | 1073.0 | 1073.7 | 1074.3 | 1075.0 | 1076.1 |
| 157.5° | 1101.4 | 1101.9 | 1102.3 | 1102.8 | 1103.2 | 1103.7 | 1104.1 | 1104.5 | 1104.9 | 1105.3 | 1106.8 |
| 160°   | 1121.1 | 1121.5 | 1122.0 | 1122.4 | 1122.9 | 1123.2 | 1123.5 | 1123.7 | 1123.9 | 1124.1 | 1125.5 |
| 162.5° | 1139.0 | 1139.1 | 1139.2 | 1139.3 | 1139.4 | 1139.5 | 1139.8 | 1140.0 | 1140.2 | 1140.4 | 1142.1 |
| 165°   | 1163.0 | 1162.8 | 1162.6 | 1162.3 | 1162.1 | 1162.0 | 1162.0 | 1162.0 | 1162.0 | 1162.0 | 1163.6 |
| 167.5° | 1183.1 | 1182.3 | 1181.6 | 1180.9 | 1180.3 | 1179.9 | 1179.9 | 1179.8 | 1179.8 | 1179.7 | 1181.3 |
| 170°   | 1193.7 | 1193.0 | 1192.3 | 1191.6 | 1190.9 | 1190.5 | 1190.2 | 1190.0 | 1189.8 | 1189.6 | 1191.1 |
| 172.5° | 1201.0 | 1200.3 | 1199.6 | 1199.0 | 1198.3 | 1197.8 | 1197.6 | 1197.4 | 1197.2 | 1196.9 | 1198.5 |
| 175°   | 1210.0 | 1209.3 | 1208.7 | 1208.0 | 1207.3 | 1206.7 | 1206.3 | 1205.8 | 1205.4 | 1204.9 | 1206.5 |
| 177.5° | 1213.8 | 1213.2 | 1212.6 | 1212.0 | 1211.5 | 1211.0 | 1210.7 | 1210.3 | 1210.0 | 1209.6 | 1210.7 |
| 180°   | 1212.0 | 1212.0 | 1212.0 | 1212.0 | 1212.0 | 1212.0 | 1212.0 | 1212.0 | 1212.0 | 1212.0 | 1212.0 |



TEST NUMBER: P331600-840

CATALOG NUMBER: S122DIW-S1005D970U840-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

|        | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 1067.8 | 1067.8 | 1067.8 | 1067.8 | 1067.8 | 1067.8 | 1067.8 | 1067.8 |
| 2.5°   | 1064.4 | 1065.8 | 1067.2 | 1067.6 | 1067.0 | 1066.5 | 1065.9 | 1065.4 |
| 5°     | 1061.2 | 1063.3 | 1065.3 | 1066.1 | 1065.8 | 1065.5 | 1065.1 | 1064.8 |
| 7.5°   | 1056.1 | 1058.6 | 1061.1 | 1062.2 | 1061.8 | 1061.5 | 1061.1 | 1060.8 |
| 10°    | 1051.7 | 1054.5 | 1057.2 | 1058.4 | 1058.0 | 1057.7 | 1057.4 | 1057.0 |
| 12.5°  | 1044.3 | 1047.0 | 1049.8 | 1051.0 | 1050.7 | 1050.3 | 1050.0 | 1049.7 |
| 15°    | 1030.8 | 1033.8 | 1036.9 | 1038.3 | 1037.9 | 1037.6 | 1037.2 | 1036.9 |
| 17.5°  | 1013.4 | 1016.6 | 1019.9 | 1021.5 | 1021.5 | 1021.5 | 1021.5 | 1021.5 |
| 20°    | 999.6  | 1003.4 | 1007.1 | 1009.1 | 1009.1 | 1009.1 | 1009.1 | 1009.1 |
| 22.5°  | 984.7  | 988.6  | 992.3  | 994.5  | 995.0  | 995.6  | 996.1  | 996.7  |
| 25°    | 961.6  | 965.7  | 969.9  | 972.4  | 973.5  | 974.5  | 975.5  | 976.5  |
| 27.5°  | 935.9  | 941.2  | 946.4  | 949.4  | 950.2  | 950.9  | 951.7  | 952.4  |
| 30°    | 918.0  | 923.4  | 929.0  | 932.2  | 933.2  | 934.2  | 935.3  | 936.3  |
| 32.5°  | 898.6  | 904.8  | 911.2  | 915.2  | 917.2  | 919.0  | 920.9  | 922.7  |
| 35°    | 871.0  | 878.6  | 886.2  | 891.1  | 893.5  | 896.0  | 898.4  | 900.7  |
| 37.5°  | 842.6  | 851.0  | 859.4  | 864.8  | 867.4  | 870.0  | 872.5  | 875.0  |
| 40°    | 822.6  | 831.6  | 840.5  | 846.6  | 849.7  | 852.7  | 855.9  | 859.0  |
| 42.5°  | 803.2  | 813.0  | 822.8  | 829.2  | 832.3  | 835.5  | 838.5  | 841.6  |
| 45°    | 773.5  | 784.2  | 794.8  | 801.8  | 805.3  | 808.7  | 812.1  | 815.6  |
| 47.5°  | 742.6  | 753.7  | 764.9  | 772.3  | 776.1  | 779.9  | 783.7  | 787.5  |
| 50°    | 721.3  | 733.1  | 744.8  | 752.6  | 756.3  | 760.0  | 763.9  | 767.6  |
| 52.5°  | 698.4  | 710.3  | 722.4  | 730.3  | 734.4  | 738.5  | 742.6  | 746.6  |
| 55°    | 664.0  | 676.3  | 688.7  | 697.1  | 701.6  | 706.1  | 710.5  | 715.0  |
| 57.5°  | 627.5  | 640.9  | 654.2  | 663.1  | 667.6  | 672.2  | 676.7  | 681.3  |
| 60°    | 603.4  | 616.5  | 629.5  | 638.5  | 643.3  | 648.1  | 653.0  | 657.7  |
| 62.5°  | 577.8  | 591.7  | 605.6  | 614.8  | 619.4  | 623.9  | 628.4  | 633.0  |
| 65°    | 539.0  | 553.0  | 567.1  | 576.4  | 580.9  | 585.3  | 589.9  | 594.3  |
| 67.5°  | 499.6  | 513.8  | 528.1  | 537.6  | 542.2  | 546.8  | 551.6  | 556.2  |
| 70°    | 472.2  | 487.0  | 501.8  | 511.2  | 515.3  | 519.5  | 523.6  | 527.8  |
| 72.5°  | 445.7  | 460.2  | 474.6  | 484.4  | 489.4  | 494.3  | 499.3  | 504.2  |
| 75°    | 405.7  | 420.4  | 435.3  | 444.8  | 449.3  | 453.8  | 458.3  | 462.7  |
| 77.5°  | 366.5  | 381.2  | 396.0  | 405.8  | 410.5  | 415.4  | 420.2  | 425.0  |
| 80°    | 339.9  | 354.5  | 368.9  | 378.5  | 383.3  | 388.1  | 392.9  | 397.8  |
| 82.5°  | 315.2  | 329.6  | 344.1  | 353.6  | 358.1  | 362.6  | 367.2  | 371.7  |
| 85°    | 279.6  | 294.1  | 308.5  | 318.1  | 323.0  | 327.8  | 332.5  | 337.4  |
| 87.5°  | 256.7  | 270.6  | 284.6  | 293.8  | 298.2  | 302.7  | 307.1  | 311.5  |
| 90°    | 266.7  | 280.0  | 293.3  | 302.2  | 306.5  | 310.8  | 315.2  | 319.5  |
| 92.5°  | 252.8  | 266.4  | 279.9  | 288.8  | 293.0  | 297.2  | 301.3  | 305.5  |
| 95°    | 269.5  | 282.7  | 295.7  | 304.1  | 307.8  | 311.4  | 315.1  | 318.8  |
| 97.5°  | 300.1  | 312.9  | 325.6  | 334.0  | 338.0  | 342.0  | 346.1  | 350.0  |
| 100°   | 321.3  | 334.1  | 346.8  | 355.0  | 358.5  | 362.0  | 365.7  | 369.2  |
| 102.5° | 346.1  | 358.7  | 371.3  | 379.4  | 382.9  | 386.6  | 390.1  | 393.6  |
| 105°   | 383.1  | 395.6  | 408.1  | 416.3  | 420.0  | 423.8  | 427.6  | 431.3  |
| 107.5° | 424.3  | 436.1  | 447.8  | 455.0  | 457.8  | 460.5  | 463.2  | 466.1  |
| 110°   | 453.1  | 464.1  | 475.1  | 482.1  | 485.2  | 488.4  | 491.5  | 494.5  |





TEST NUMBER: P331600-840

CATALOG NUMBER: S122DIW-S1005D970U840-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

|        | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 481.8  | 492.2  | 502.7  | 509.6  | 512.9  | 516.1  | 519.5  | 522.7  |
| 115°   | 526.2  | 536.3  | 546.4  | 553.0  | 556.1  | 559.3  | 562.4  | 565.4  |
| 117.5° | 568.8  | 578.3  | 587.9  | 594.2  | 597.0  | 599.9  | 602.7  | 605.5  |
| 120°   | 597.3  | 606.9  | 616.5  | 622.9  | 626.0  | 629.1  | 632.2  | 635.3  |
| 122.5° | 627.5  | 636.3  | 645.1  | 650.9  | 653.6  | 656.3  | 659.0  | 661.8  |
| 125°   | 671.3  | 679.8  | 688.4  | 694.2  | 697.1  | 699.9  | 702.8  | 705.7  |
| 127.5° | 713.6  | 721.2  | 729.0  | 734.0  | 736.3  | 738.6  | 740.9  | 743.2  |
| 130°   | 743.2  | 750.9  | 758.7  | 763.6  | 765.4  | 767.2  | 769.1  | 770.9  |
| 132.5° | 771.7  | 778.7  | 785.7  | 790.1  | 792.2  | 794.3  | 796.3  | 798.3  |
| 135°   | 814.6  | 821.5  | 828.5  | 833.0  | 835.1  | 837.2  | 839.2  | 841.3  |
| 137.5° | 855.4  | 861.5  | 867.7  | 871.5  | 872.9  | 874.3  | 875.8  | 877.2  |
| 140°   | 883.5  | 889.0  | 894.5  | 897.9  | 899.0  | 900.2  | 901.3  | 902.5  |
| 142.5° | 910.3  | 914.8  | 919.5  | 922.2  | 923.1  | 923.9  | 924.8  | 925.7  |
| 145°   | 952.8  | 955.0  | 957.4  | 958.9  | 959.7  | 960.5  | 961.3  | 962.1  |
| 147.5° | 991.1  | 991.8  | 992.6  | 993.0  | 992.9  | 992.9  | 992.9  | 992.8  |
| 150°   | 1017.0 | 1017.7 | 1018.4 | 1018.4 | 1017.7 | 1017.0 | 1016.3 | 1015.7 |
| 152.5° | 1043.6 | 1044.5 | 1045.3 | 1045.3 | 1044.5 | 1043.6 | 1042.7 | 1041.9 |
| 155°   | 1077.3 | 1078.4 | 1079.5 | 1079.7 | 1079.1 | 1078.4 | 1077.7 | 1077.0 |
| 157.5° | 1108.4 | 1109.9 | 1111.5 | 1111.7 | 1110.6 | 1109.5 | 1108.4 | 1107.3 |
| 160°   | 1126.8 | 1128.2 | 1129.5 | 1129.8 | 1128.9 | 1128.0 | 1127.1 | 1126.2 |
| 162.5° | 1143.6 | 1145.1 | 1146.7 | 1146.9 | 1145.8 | 1144.7 | 1143.6 | 1142.6 |
| 165°   | 1165.2 | 1166.7 | 1168.3 | 1168.5 | 1167.4 | 1166.3 | 1165.2 | 1164.0 |
| 167.5° | 1183.0 | 1184.6 | 1186.1 | 1186.3 | 1185.2 | 1184.0 | 1182.8 | 1181.6 |
| 170°   | 1192.8 | 1194.4 | 1196.0 | 1196.1 | 1194.7 | 1193.4 | 1191.9 | 1190.6 |
| 172.5° | 1200.1 | 1201.7 | 1203.3 | 1203.5 | 1202.0 | 1200.7 | 1199.3 | 1198.0 |
| 175°   | 1208.1 | 1209.7 | 1211.2 | 1211.4 | 1210.0 | 1208.7 | 1207.3 | 1206.0 |
| 177.5° | 1211.8 | 1212.8 | 1214.0 | 1214.0 | 1212.8 | 1211.8 | 1210.7 | 1209.6 |
| 180°   | 1212.0 | 1212.0 | 1212.0 | 1212.0 | 1212.0 | 1212.0 | 1212.0 | 1212.0 |

(END OF REPORT)