

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: P332831-935

Luminaire Tested: **S124DIW-S1020D1560U935-4F0-1E-UDD-D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332831-935  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S124DIW-S1020D1560U935-4F0-1E-UDD-D  
Description: DEFINE 4 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1020 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 1560 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8998.7 lumens  
Efficiency: N/A  
Efficacy: 117.5 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.08')  
CIE Type: Semi-Indirect

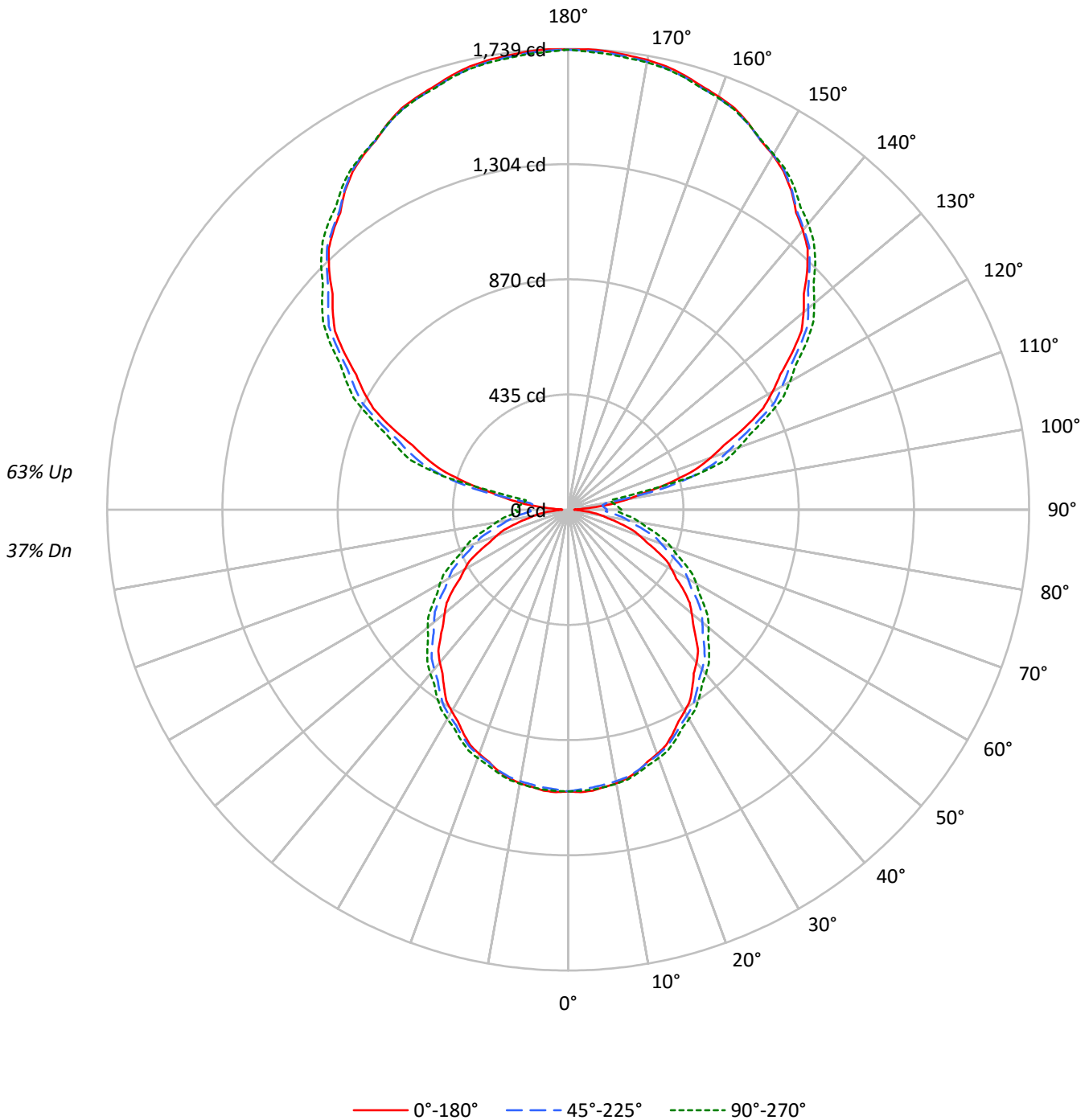
Input Watts (W): 76.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P332831-935

CATALOG NUMBER: S124DIW-S1020D1560U935-4F0-1E-UDD-D

### Luminous Intensity Polar Plot





TEST NUMBER: P332831-935

CATALOG NUMBER: S124DIW-S1020D1560U935-4F0-1E-UDD-D

**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 | 0  |
| RCR |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 0   | 104 | 104 | 104 | 104 | 94 | 94 | 94 | 94 | 76 | 76 | 76 | 60 | 60 | 60 | 44 | 44 | 44 | 37 |
| 1   | 94  | 90  | 85  | 82  | 85 | 81 | 78 | 75 | 66 | 63 | 61 | 51 | 50 | 48 | 38 | 37 | 36 | 30 |
| 2   | 85  | 78  | 71  | 66  | 77 | 71 | 65 | 61 | 57 | 53 | 50 | 45 | 42 | 39 | 33 | 31 | 30 | 24 |
| 3   | 78  | 68  | 61  | 55  | 70 | 62 | 55 | 50 | 50 | 45 | 41 | 39 | 36 | 33 | 29 | 27 | 25 | 20 |
| 4   | 71  | 60  | 52  | 46  | 64 | 55 | 48 | 42 | 44 | 39 | 35 | 35 | 31 | 28 | 26 | 23 | 21 | 17 |
| 5   | 65  | 53  | 45  | 39  | 58 | 48 | 41 | 36 | 39 | 34 | 30 | 31 | 27 | 24 | 23 | 20 | 18 | 15 |
| 6   | 60  | 48  | 39  | 34  | 54 | 43 | 36 | 31 | 35 | 30 | 26 | 28 | 24 | 21 | 21 | 18 | 16 | 13 |
| 7   | 55  | 43  | 35  | 29  | 50 | 39 | 32 | 27 | 32 | 27 | 23 | 25 | 21 | 18 | 19 | 16 | 14 | 11 |
| 8   | 51  | 39  | 31  | 26  | 46 | 35 | 29 | 24 | 29 | 24 | 20 | 23 | 19 | 16 | 17 | 15 | 13 | 10 |
| 9   | 47  | 35  | 28  | 23  | 43 | 32 | 26 | 21 | 26 | 21 | 18 | 21 | 17 | 15 | 16 | 13 | 11 | 9  |
| 10  | 44  | 32  | 25  | 20  | 40 | 29 | 23 | 19 | 24 | 19 | 16 | 19 | 16 | 13 | 15 | 12 | 10 | 8  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 8582 | 8582 | 8582 |
| 5°  | 8608 | 8387 | 8412 |
| 10° | 8556 | 8250 | 8244 |
| 15° | 8479 | 8091 | 8047 |
| 20° | 8364 | 7916 | 7856 |
| 25° | 8233 | 7719 | 7645 |
| 30° | 8093 | 7524 | 7428 |
| 35° | 7933 | 7324 | 7239 |
| 40° | 7804 | 7134 | 7041 |
| 45° | 7615 | 6958 | 6871 |
| 50° | 7455 | 6755 | 6692 |
| 55° | 7289 | 6565 | 6482 |
| 60° | 7031 | 6322 | 6290 |
| 65° | 6747 | 6061 | 6055 |
| 70° | 6405 | 5763 | 5780 |
| 75° | 5924 | 5435 | 5533 |
| 80° | 5397 | 5119 | 5288 |
| 85° | 4721 | 4842 | 5146 |



TEST NUMBER: P332831-935

CATALOG NUMBER: S124DIW-S1020D1560U935-4F0-1E-UDD-D

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 100.7  | 1.1       |
| 10°-20°   | 288.4  | 3.2       |
| 20°-30°   | 436.1  | 4.8       |
| 30°-40°   | 527.7  | 5.9       |
| 40°-50°   | 557.9  | 6.2       |
| 50°-60°   | 525.0  | 5.8       |
| 60°-70°   | 435.6  | 4.8       |
| 70°-80°   | 306.0  | 3.4       |
| 80°-90°   | 178.0  | 2.0       |
| 90°-100°  | 162.1  | 1.8       |
| 100°-110° | 454.6  | 5.1       |
| 110°-120° | 775.2  | 8.6       |
| 120°-130° | 948.1  | 10.5      |
| 130°-140° | 996.1  | 11.1      |
| 140°-150° | 922.3  | 10.2      |
| 150°-160° | 741.8  | 8.2       |
| 160°-170° | 478.4  | 5.3       |
| 170°-180° | 164.9  | 1.8       |
| 0°-30°    | 825.2  | 9.2       |
| 0°-40°    | 1352.9 | 15.0      |
| 0°-60°    | 2435.8 | 27.1      |
| 0°-90°    | 3355.3 | 37.3      |
| 90°-120°  | 1391.9 | 15.5      |
| 90°-150°  | 4258.4 | 47.3      |
| 90°-180°  | 5643.0 | 62.7      |
| 0°-180°   | 8998.7 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1063 | 1063  | 1063 | 1063  | 1063 |      |
| 5°   | 1064 | 1060  | 1052 | 1061  | 1061 | 101  |
| 15°  | 1020 | 1021  | 1018 | 1028  | 1027 | 287  |
| 25°  | 933  | 940   | 944  | 956   | 958  | 430  |
| 35°  | 817  | 831   | 843  | 859   | 863  | 511  |
| 45°  | 681  | 704   | 726  | 746   | 752  | 526  |
| 55°  | 533  | 559   | 594  | 617   | 625  | 475  |
| 65°  | 369  | 407   | 448  | 476   | 487  | 366  |
| 75°  | 205  | 249   | 299  | 331   | 343  | 218  |
| 85°  | 63   | 113   | 167  | 201   | 214  | 67   |
| 90°  | 23   | 85    | 146  | 187   | 201  | 16   |
| 95°  | 87   | 85    | 132  | 170   | 184  | 104  |
| 105° | 402  | 434   | 484  | 521   | 488  | 421  |
| 115° | 737  | 753   | 788  | 816   | 825  | 725  |
| 125° | 1030 | 1036  | 1062 | 1087  | 1097 | 920  |
| 135° | 1275 | 1274  | 1287 | 1308  | 1318 | 982  |
| 145° | 1468 | 1471  | 1471 | 1480  | 1487 | 917  |
| 155° | 1609 | 1610  | 1606 | 1611  | 1608 | 742  |
| 165° | 1697 | 1691  | 1691 | 1700  | 1689 | 479  |
| 175° | 1736 | 1729  | 1730 | 1740  | 1726 | 165  |
| 180° | 1736 | 1736  | 1736 | 1736  | 1736 |      |



TEST NUMBER: P332831-935

CATALOG NUMBER: S124DIW-S1020D1560U935-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 1063.1 | 1063.1 | 1063.1 | 1063.1 | 1063.1 | 1063.1 | 1063.1 | 1063.1 | 1063.1 | 1063.1 | 1063.1 |
| 2.5°   | 1066.9 | 1066.3 | 1065.6 | 1065.0 | 1064.3 | 1063.2 | 1061.4 | 1059.8 | 1058.1 | 1056.4 | 1057.8 |
| 5°     | 1064.2 | 1063.4 | 1062.6 | 1061.9 | 1061.1 | 1059.7 | 1057.9 | 1056.0 | 1054.2 | 1052.3 | 1054.5 |
| 7.5°   | 1055.2 | 1054.7 | 1054.2 | 1053.8 | 1053.3 | 1052.3 | 1050.8 | 1049.2 | 1047.7 | 1046.1 | 1048.5 |
| 10°    | 1047.6 | 1047.3 | 1047.1 | 1046.8 | 1046.5 | 1045.7 | 1044.4 | 1043.1 | 1041.7 | 1040.4 | 1042.8 |
| 12.5°  | 1037.1 | 1037.1 | 1037.0 | 1036.9 | 1036.9 | 1036.4 | 1035.5 | 1034.6 | 1033.7 | 1032.8 | 1035.0 |
| 15°    | 1020.2 | 1020.5 | 1020.7 | 1021.0 | 1021.2 | 1021.0 | 1020.2 | 1019.4 | 1018.6 | 1017.8 | 1020.2 |
| 17.5°  | 997.1  | 997.9  | 998.7  | 999.4  | 1000.3 | 1000.6 | 1000.4 | 1000.3 | 1000.1 | 1000.0 | 1002.4 |
| 20°    | 980.9  | 981.7  | 982.5  | 983.3  | 984.1  | 984.6  | 984.9  | 985.2  | 985.4  | 985.7  | 988.3  |
| 22.5°  | 962.8  | 963.8  | 964.8  | 965.9  | 966.8  | 967.6  | 968.0  | 968.5  | 969.0  | 969.5  | 972.2  |
| 25°    | 933.3  | 934.9  | 936.4  | 938.1  | 939.6  | 940.8  | 941.6  | 942.5  | 943.2  | 944.0  | 946.9  |
| 27.5°  | 900.4  | 902.8  | 905.1  | 907.4  | 909.7  | 911.5  | 912.7  | 914.0  | 915.2  | 916.4  | 919.1  |
| 30°    | 878.6  | 880.6  | 882.8  | 884.8  | 887.0  | 889.0  | 890.8  | 892.7  | 894.5  | 896.4  | 899.3  |
| 32.5°  | 854.7  | 857.3  | 859.8  | 862.4  | 864.9  | 867.2  | 869.3  | 871.3  | 873.4  | 875.5  | 878.7  |
| 35°    | 816.7  | 819.8  | 822.9  | 826.1  | 829.3  | 832.2  | 834.9  | 837.5  | 840.2  | 842.8  | 846.5  |
| 37.5°  | 778.3  | 782.0  | 785.6  | 789.3  | 792.9  | 796.3  | 799.6  | 802.9  | 806.2  | 809.5  | 813.2  |
| 40°    | 753.5  | 757.0  | 760.4  | 763.9  | 767.3  | 770.9  | 774.6  | 778.3  | 782.0  | 785.7  | 789.6  |
| 42.5°  | 725.0  | 728.8  | 732.7  | 736.6  | 740.4  | 744.5  | 748.8  | 753.2  | 757.5  | 761.9  | 766.3  |
| 45°    | 680.9  | 686.0  | 691.0  | 696.0  | 701.0  | 706.0  | 711.1  | 716.1  | 721.1  | 726.2  | 730.6  |
| 47.5°  | 638.8  | 643.9  | 649.1  | 654.4  | 659.5  | 665.0  | 670.8  | 676.7  | 682.5  | 688.3  | 692.9  |
| 50°    | 608.3  | 614.2  | 619.9  | 625.8  | 631.5  | 637.4  | 643.3  | 649.0  | 654.9  | 660.6  | 666.0  |
| 52.5°  | 577.8  | 583.7  | 589.4  | 595.3  | 601.2  | 607.3  | 614.0  | 620.7  | 627.3  | 634.0  | 639.3  |
| 55°    | 533.3  | 538.9  | 544.4  | 550.0  | 555.5  | 562.2  | 570.2  | 578.2  | 586.1  | 594.0  | 599.3  |
| 57.5°  | 483.5  | 490.4  | 497.3  | 504.2  | 511.1  | 518.4  | 526.3  | 534.3  | 542.1  | 550.0  | 556.3  |
| 60°    | 451.2  | 458.1  | 464.9  | 471.8  | 478.7  | 486.5  | 495.2  | 503.9  | 512.6  | 521.4  | 527.4  |
| 62.5°  | 419.7  | 427.2  | 434.8  | 442.3  | 449.8  | 457.9  | 466.7  | 475.4  | 484.1  | 492.8  | 498.9  |
| 65°    | 369.0  | 377.5  | 386.0  | 394.4  | 402.9  | 411.6  | 420.6  | 429.6  | 438.6  | 447.6  | 454.2  |
| 67.5°  | 320.2  | 329.2  | 338.2  | 347.2  | 356.2  | 365.5  | 375.1  | 384.8  | 394.4  | 404.1  | 410.8  |
| 70°    | 286.9  | 295.9  | 304.9  | 313.8  | 322.9  | 332.4  | 342.4  | 352.5  | 362.6  | 372.6  | 379.8  |
| 72.5°  | 254.5  | 263.7  | 272.9  | 282.1  | 291.4  | 301.3  | 311.9  | 322.6  | 333.4  | 344.1  | 350.9  |
| 75°    | 204.7  | 214.6  | 224.3  | 234.1  | 243.9  | 254.3  | 265.4  | 276.6  | 287.7  | 298.8  | 306.2  |
| 77.5°  | 158.3  | 168.7  | 179.1  | 189.4  | 199.8  | 210.8  | 222.5  | 234.1  | 245.7  | 257.4  | 264.8  |
| 80°    | 129.8  | 140.3  | 150.9  | 161.5  | 172.1  | 183.2  | 194.8  | 206.5  | 218.1  | 229.7  | 237.7  |
| 82.5°  | 101.2  | 112.2  | 123.2  | 134.2  | 145.2  | 156.5  | 168.2  | 179.8  | 191.5  | 203.1  | 211.2  |
| 85°    | 63.1   | 74.2   | 85.3   | 96.4   | 107.5  | 119.1  | 131.0  | 142.8  | 154.7  | 166.7  | 174.6  |
| 87.5°  | 36.0   | 47.4   | 58.9   | 70.3   | 81.7   | 93.5   | 105.5  | 117.5  | 129.6  | 141.6  | 149.6  |
| 90°    | 22.9   | 36.7   | 50.5   | 64.2   | 78.0   | 91.7   | 105.4  | 119.1  | 132.8  | 146.5  | 155.8  |
| 92.5°  | 34.4   | 44.2   | 53.8   | 63.5   | 73.3   | 84.9   | 98.6   | 112.3  | 126.0  | 139.7  | 148.9  |
| 95°    | 86.9   | 85.8   | 84.7   | 83.7   | 82.6   | 87.6   | 98.8   | 109.9  | 121.0  | 132.2  | 141.0  |
| 97.5°  | 165.7  | 179.3  | 193.0  | 206.6  | 220.2  | 216.3  | 194.8  | 173.4  | 152.0  | 130.4  | 137.6  |
| 100°   | 226.0  | 238.1  | 250.2  | 262.3  | 274.3  | 265.6  | 236.1  | 206.6  | 177.1  | 147.6  | 149.8  |
| 102.5° | 294.6  | 304.4  | 314.3  | 324.1  | 334.0  | 341.3  | 346.2  | 351.1  | 356.0  | 361.0  | 315.0  |
| 105°   | 401.6  | 408.5  | 415.6  | 422.6  | 429.6  | 438.8  | 450.0  | 461.2  | 472.4  | 483.7  | 492.9  |
| 107.5° | 502.8  | 508.1  | 513.2  | 518.4  | 523.7  | 531.8  | 543.1  | 554.3  | 565.5  | 576.8  | 584.5  |
| 110°   | 570.4  | 575.0  | 579.5  | 584.2  | 588.8  | 596.5  | 607.5  | 618.5  | 629.5  | 640.5  | 647.1  |



TEST NUMBER: P332831-935

CATALOG NUMBER: S124DIW-S1020D1560U935-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 635.9  | 640.8  | 645.7  | 650.5  | 655.3  | 662.5  | 672.2  | 681.8  | 691.5  | 701.1  | 706.9  |
| 115°   | 736.8  | 740.1  | 743.4  | 746.6  | 749.8  | 755.5  | 763.7  | 771.9  | 780.1  | 788.2  | 794.6  |
| 117.5° | 828.8  | 831.4  | 834.0  | 836.5  | 839.1  | 844.7  | 853.2  | 861.7  | 870.2  | 878.7  | 884.2  |
| 120°   | 890.2  | 892.2  | 894.1  | 896.0  | 897.9  | 902.7  | 910.0  | 917.4  | 924.8  | 932.2  | 938.1  |
| 122.5° | 948.3  | 949.2  | 950.0  | 950.9  | 951.7  | 956.0  | 963.6  | 971.3  | 979.0  | 986.6  | 992.2  |
| 125°   | 1030.5 | 1031.4 | 1032.3 | 1033.2 | 1034.1 | 1037.5 | 1043.5 | 1049.6 | 1055.7 | 1061.7 | 1067.6 |
| 127.5° | 1109.2 | 1109.2 | 1109.2 | 1109.3 | 1109.3 | 1112.5 | 1119.0 | 1125.3 | 1131.8 | 1138.2 | 1142.7 |
| 130°   | 1159.2 | 1159.2 | 1159.3 | 1159.3 | 1159.3 | 1161.8 | 1166.9 | 1172.0 | 1177.2 | 1182.2 | 1187.2 |
| 132.5° | 1205.9 | 1206.2 | 1206.4 | 1206.7 | 1206.9 | 1209.3 | 1213.8 | 1218.2 | 1222.7 | 1227.3 | 1232.1 |
| 135°   | 1274.8 | 1274.5 | 1274.3 | 1273.9 | 1273.7 | 1275.1 | 1278.1 | 1281.1 | 1284.1 | 1287.0 | 1291.8 |
| 137.5° | 1336.9 | 1336.8 | 1336.6 | 1336.4 | 1336.3 | 1337.3 | 1339.5 | 1341.6 | 1343.8 | 1346.0 | 1350.5 |
| 140°   | 1377.4 | 1377.7 | 1378.0 | 1378.4 | 1378.6 | 1379.2 | 1380.1 | 1381.0 | 1381.7 | 1382.6 | 1386.9 |
| 142.5° | 1412.8 | 1413.8 | 1414.8 | 1415.7 | 1416.8 | 1417.4 | 1417.6 | 1417.7 | 1417.9 | 1418.1 | 1421.8 |
| 145°   | 1468.4 | 1469.0 | 1469.6 | 1470.2 | 1470.8 | 1471.1 | 1471.1 | 1471.1 | 1471.1 | 1471.1 | 1473.0 |
| 147.5° | 1512.8 | 1514.2 | 1515.5 | 1516.9 | 1518.2 | 1518.7 | 1518.5 | 1518.2 | 1517.9 | 1517.6 | 1518.0 |
| 150°   | 1545.0 | 1545.9 | 1546.8 | 1547.6 | 1548.6 | 1548.9 | 1548.6 | 1548.3 | 1548.0 | 1547.7 | 1547.7 |
| 152.5° | 1571.1 | 1571.9 | 1572.8 | 1573.6 | 1574.5 | 1574.8 | 1574.2 | 1573.6 | 1573.1 | 1572.6 | 1573.1 |
| 155°   | 1608.8 | 1609.0 | 1609.3 | 1609.6 | 1609.9 | 1609.6 | 1608.8 | 1607.9 | 1607.1 | 1606.1 | 1607.3 |
| 157.5° | 1640.7 | 1640.5 | 1640.4 | 1640.2 | 1640.0 | 1639.4 | 1638.4 | 1637.4 | 1636.5 | 1635.5 | 1637.0 |
| 160°   | 1659.4 | 1658.5 | 1657.7 | 1656.8 | 1656.0 | 1655.4 | 1655.0 | 1654.8 | 1654.5 | 1654.2 | 1656.0 |
| 162.5° | 1676.0 | 1674.9 | 1673.8 | 1672.8 | 1671.6 | 1670.9 | 1670.6 | 1670.3 | 1670.1 | 1669.7 | 1671.5 |
| 165°   | 1697.0 | 1695.6 | 1694.2 | 1692.7 | 1691.3 | 1690.6 | 1690.6 | 1690.6 | 1690.6 | 1690.6 | 1692.8 |
| 167.5° | 1713.6 | 1712.2 | 1710.6 | 1709.2 | 1707.6 | 1706.8 | 1706.7 | 1706.5 | 1706.3 | 1706.2 | 1708.7 |
| 170°   | 1723.0 | 1721.3 | 1719.5 | 1717.8 | 1716.1 | 1715.4 | 1715.6 | 1716.0 | 1716.2 | 1716.5 | 1718.8 |
| 172.5° | 1729.2 | 1727.5 | 1725.8 | 1724.1 | 1722.3 | 1721.6 | 1721.9 | 1722.2 | 1722.4 | 1722.8 | 1725.0 |
| 175°   | 1735.9 | 1734.2 | 1732.5 | 1730.8 | 1729.1 | 1728.4 | 1728.6 | 1728.9 | 1729.2 | 1729.5 | 1732.1 |
| 177.5° | 1739.1 | 1737.5 | 1735.9 | 1734.2 | 1732.7 | 1732.1 | 1732.5 | 1733.0 | 1733.5 | 1733.9 | 1735.8 |
| 180°   | 1735.9 | 1735.9 | 1735.9 | 1735.9 | 1735.9 | 1735.9 | 1735.9 | 1735.9 | 1735.9 | 1735.9 | 1735.9 |



TEST NUMBER: P332831-935

CATALOG NUMBER: S124DIW-S1020D1560U935-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

|        | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 1063.1 | 1063.1 | 1063.1 | 1063.1 | 1063.1 | 1063.1 | 1063.1 | 1063.1 |
| 2.5°   | 1059.4 | 1060.8 | 1062.3 | 1062.9 | 1062.7 | 1062.5 | 1062.3 | 1062.1 |
| 5°     | 1056.5 | 1058.7 | 1060.8 | 1061.7 | 1061.4 | 1061.2 | 1060.9 | 1060.7 |
| 7.5°   | 1050.9 | 1053.3 | 1055.7 | 1056.7 | 1056.4 | 1056.2 | 1055.9 | 1055.7 |
| 10°    | 1045.2 | 1047.6 | 1050.0 | 1051.0 | 1050.8 | 1050.5 | 1050.2 | 1050.0 |
| 12.5°  | 1037.2 | 1039.3 | 1041.5 | 1042.6 | 1042.5 | 1042.4 | 1042.4 | 1042.3 |
| 15°    | 1022.6 | 1024.9 | 1027.3 | 1028.4 | 1028.1 | 1027.9 | 1027.6 | 1027.3 |
| 17.5°  | 1004.8 | 1007.3 | 1009.7 | 1010.8 | 1010.6 | 1010.4 | 1010.1 | 1010.0 |
| 20°    | 990.9  | 993.6  | 996.3  | 997.6  | 997.6  | 997.6  | 997.6  | 997.6  |
| 22.5°  | 974.7  | 977.4  | 980.1  | 981.6  | 982.1  | 982.4  | 982.8  | 983.3  |
| 25°    | 949.9  | 952.7  | 955.6  | 957.3  | 957.5  | 957.8  | 958.0  | 958.3  |
| 27.5°  | 921.8  | 924.5  | 927.2  | 928.7  | 929.0  | 929.4  | 929.6  | 930.0  |
| 30°    | 902.2  | 905.1  | 908.0  | 909.7  | 910.2  | 910.8  | 911.4  | 911.9  |
| 32.5°  | 882.1  | 885.5  | 888.8  | 890.7  | 891.2  | 891.7  | 892.3  | 892.9  |
| 35°    | 850.2  | 853.9  | 857.6  | 859.9  | 860.7  | 861.4  | 862.3  | 863.1  |
| 37.5°  | 817.0  | 820.8  | 824.5  | 826.8  | 827.7  | 828.5  | 829.3  | 830.2  |
| 40°    | 793.6  | 797.5  | 801.6  | 804.1  | 805.1  | 806.2  | 807.3  | 808.3  |
| 42.5°  | 770.7  | 775.1  | 779.5  | 782.0  | 782.9  | 783.8  | 784.6  | 785.4  |
| 45°    | 735.1  | 739.7  | 744.2  | 747.1  | 748.4  | 749.7  | 751.1  | 752.3  |
| 47.5°  | 697.6  | 702.2  | 707.0  | 710.1  | 711.6  | 713.3  | 714.8  | 716.4  |
| 50°    | 671.2  | 676.6  | 681.8  | 685.3  | 686.9  | 688.5  | 690.0  | 691.6  |
| 52.5°  | 644.6  | 649.9  | 655.2  | 658.6  | 660.2  | 661.8  | 663.4  | 665.0  |
| 55°    | 604.6  | 609.9  | 615.2  | 618.6  | 620.2  | 621.8  | 623.4  | 625.0  |
| 57.5°  | 562.6  | 568.9  | 575.1  | 579.0  | 580.5  | 582.0  | 583.5  | 585.0  |
| 60°    | 533.6  | 539.7  | 545.7  | 549.8  | 552.0  | 554.1  | 556.2  | 558.3  |
| 62.5°  | 505.0  | 511.1  | 517.2  | 521.2  | 523.4  | 525.5  | 527.6  | 529.8  |
| 65°    | 460.8  | 467.4  | 474.1  | 478.5  | 480.5  | 482.7  | 484.7  | 486.9  |
| 67.5°  | 417.5  | 424.2  | 430.9  | 435.3  | 437.4  | 439.5  | 441.5  | 443.6  |
| 70°    | 386.8  | 394.0  | 401.1  | 405.7  | 407.5  | 409.4  | 411.2  | 413.1  |
| 72.5°  | 357.9  | 364.8  | 371.8  | 376.3  | 378.3  | 380.4  | 382.5  | 384.5  |
| 75°    | 313.6  | 321.0  | 328.4  | 333.3  | 335.7  | 338.1  | 340.4  | 342.9  |
| 77.5°  | 272.4  | 279.9  | 287.4  | 292.5  | 295.0  | 297.6  | 300.1  | 302.6  |
| 80°    | 245.6  | 253.6  | 261.5  | 266.5  | 268.6  | 270.8  | 272.9  | 275.0  |
| 82.5°  | 219.4  | 227.6  | 235.7  | 240.9  | 243.2  | 245.6  | 247.9  | 250.2  |
| 85°    | 182.5  | 190.5  | 198.4  | 203.7  | 206.4  | 209.0  | 211.6  | 214.3  |
| 87.5°  | 157.7  | 165.7  | 173.7  | 179.0  | 181.4  | 183.8  | 186.3  | 188.7  |
| 90°    | 165.2  | 174.6  | 184.0  | 190.1  | 192.8  | 195.4  | 198.1  | 200.9  |
| 92.5°  | 158.1  | 167.2  | 176.4  | 182.1  | 184.3  | 186.6  | 188.8  | 191.1  |
| 95°    | 149.9  | 158.8  | 167.6  | 173.4  | 176.1  | 178.7  | 181.4  | 184.1  |
| 97.5°  | 144.6  | 151.8  | 158.9  | 163.7  | 166.3  | 168.8  | 171.4  | 174.0  |
| 100°   | 152.1  | 154.3  | 156.5  | 158.8  | 160.9  | 163.0  | 165.1  | 167.3  |
| 102.5° | 269.0  | 223.0  | 177.0  | 155.1  | 157.2  | 159.4  | 161.4  | 163.6  |
| 105°   | 502.1  | 511.3  | 520.5  | 521.0  | 512.7  | 504.5  | 496.2  | 487.9  |
| 107.5° | 592.3  | 600.1  | 607.9  | 613.3  | 616.2  | 619.2  | 622.2  | 625.3  |
| 110°   | 653.8  | 660.5  | 667.1  | 671.9  | 674.9  | 677.9  | 680.9  | 683.9  |





TEST NUMBER: P332831-935

CATALOG NUMBER: S124DIW-S1020D1560U935-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

|        | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 712.6  | 718.4  | 724.2  | 728.7  | 731.8  | 735.0  | 738.3  | 741.5  |
| 115°   | 801.1  | 807.4  | 813.8  | 817.9  | 819.8  | 821.7  | 823.5  | 825.4  |
| 117.5° | 889.5  | 894.9  | 900.3  | 904.0  | 906.0  | 908.0  | 910.0  | 912.0  |
| 120°   | 943.9  | 949.8  | 955.6  | 959.3  | 960.9  | 962.4  | 964.0  | 965.5  |
| 122.5° | 997.9  | 1003.5 | 1009.2 | 1012.6 | 1014.0 | 1015.3 | 1016.6 | 1018.0 |
| 125°   | 1073.5 | 1079.3 | 1085.3 | 1089.2 | 1091.0 | 1092.9 | 1094.8 | 1096.7 |
| 127.5° | 1147.4 | 1151.9 | 1156.5 | 1159.6 | 1161.1 | 1162.7 | 1164.3 | 1165.9 |
| 130°   | 1192.3 | 1197.4 | 1202.4 | 1205.7 | 1207.3 | 1208.9 | 1210.5 | 1212.1 |
| 132.5° | 1236.9 | 1241.7 | 1246.6 | 1249.7 | 1251.0 | 1252.4 | 1253.8 | 1255.1 |
| 135°   | 1296.7 | 1301.5 | 1306.3 | 1309.8 | 1312.0 | 1314.1 | 1316.3 | 1318.4 |
| 137.5° | 1355.0 | 1359.5 | 1364.0 | 1366.8 | 1368.0 | 1369.1 | 1370.3 | 1371.4 |
| 140°   | 1391.2 | 1395.5 | 1399.8 | 1402.7 | 1404.4 | 1406.0 | 1407.6 | 1409.2 |
| 142.5° | 1425.4 | 1429.1 | 1432.7 | 1435.1 | 1436.2 | 1437.4 | 1438.6 | 1439.8 |
| 145°   | 1474.9 | 1476.7 | 1478.6 | 1480.4 | 1482.0 | 1483.7 | 1485.3 | 1486.9 |
| 147.5° | 1518.5 | 1518.9 | 1519.4 | 1520.2 | 1521.3 | 1522.4 | 1523.5 | 1524.7 |
| 150°   | 1547.7 | 1547.7 | 1547.7 | 1547.9 | 1548.2 | 1548.4 | 1548.8 | 1549.0 |
| 152.5° | 1573.6 | 1574.0 | 1574.5 | 1574.6 | 1574.4 | 1574.3 | 1574.1 | 1573.9 |
| 155°   | 1608.4 | 1609.6 | 1610.8 | 1610.9 | 1610.1 | 1609.2 | 1608.3 | 1607.5 |
| 157.5° | 1638.5 | 1640.0 | 1641.5 | 1641.5 | 1640.0 | 1638.5 | 1637.0 | 1635.5 |
| 160°   | 1657.7 | 1659.4 | 1661.1 | 1661.1 | 1659.4 | 1657.7 | 1656.0 | 1654.2 |
| 162.5° | 1673.3 | 1675.0 | 1676.7 | 1676.5 | 1674.6 | 1672.7 | 1670.7 | 1668.7 |
| 165°   | 1695.1 | 1697.5 | 1699.8 | 1699.6 | 1697.0 | 1694.4 | 1691.9 | 1689.3 |
| 167.5° | 1711.2 | 1713.7 | 1716.3 | 1716.1 | 1713.2 | 1710.4 | 1707.4 | 1704.6 |
| 170°   | 1721.1 | 1723.5 | 1725.8 | 1725.4 | 1722.6 | 1719.7 | 1716.8 | 1713.9 |
| 172.5° | 1727.3 | 1729.7 | 1732.0 | 1731.6 | 1728.5 | 1725.4 | 1722.3 | 1719.1 |
| 175°   | 1734.7 | 1737.3 | 1739.9 | 1739.5 | 1735.9 | 1732.5 | 1729.1 | 1725.6 |
| 177.5° | 1737.6 | 1739.5 | 1741.3 | 1740.9 | 1738.1 | 1735.3 | 1732.5 | 1729.7 |
| 180°   | 1735.9 | 1735.9 | 1735.9 | 1735.9 | 1735.9 | 1735.9 | 1735.9 | 1735.9 |

(END OF REPORT)