

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: P332239-935

Luminaire Tested: **S123DIW-S1165D1535U935-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332239-935  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-9,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S123DIW-S1165D1535U935-4F0-1E-UDD-F1  
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1165 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
UPLIGHT 1535 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8679.9 lumens  
Efficiency: N/A  
Efficacy: 104.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31  
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')  
CIE Type: General Diffuse

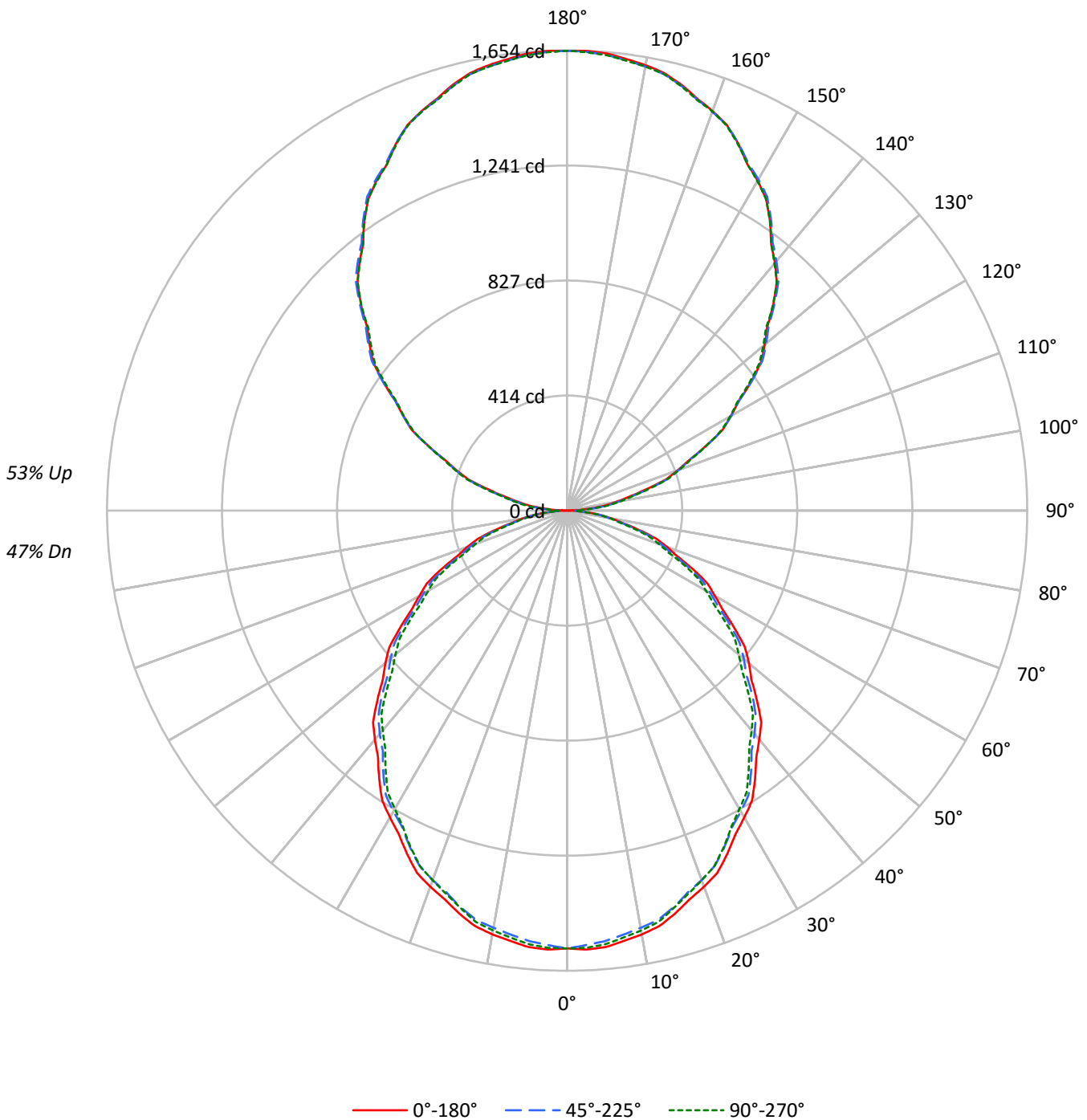
Input Watts (W): 82.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





TEST NUMBER: P332239-935

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**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 | 50 | 30 | 10 | 0  |  |   |
| RCR |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |   |
| 0   | 106 | 106 | 106 | 106 | 98 | 98 | 98 | 98 | 82 | 82 | 82 | 67 | 67 | 67 | 54 | 54 | 54 | 47 | 47 | 47 | 47 | 47 | 47 | 47 |  |   |
| 1   | 97  | 93  | 89  | 85  | 89 | 85 | 82 | 79 | 72 | 69 | 67 | 59 | 57 | 56 | 47 | 46 | 45 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |  |   |
| 2   | 88  | 81  | 75  | 70  | 81 | 75 | 69 | 65 | 63 | 59 | 55 | 52 | 49 | 46 | 42 | 40 | 38 | 33 | 33 | 33 | 33 | 33 | 33 | 33 |  |   |
| 3   | 81  | 71  | 64  | 58  | 74 | 66 | 59 | 54 | 55 | 50 | 47 | 46 | 42 | 39 | 37 | 34 | 32 | 28 | 28 | 28 | 28 | 28 | 28 | 28 |  |   |
| 4   | 74  | 63  | 55  | 49  | 67 | 58 | 51 | 46 | 49 | 44 | 40 | 41 | 37 | 34 | 33 | 30 | 28 | 24 | 24 | 24 | 24 | 24 | 24 | 24 |  |   |
| 5   | 68  | 56  | 48  | 42  | 62 | 52 | 45 | 39 | 44 | 38 | 34 | 36 | 32 | 29 | 30 | 27 | 24 | 21 | 21 | 21 | 21 | 21 | 21 | 21 |  |   |
| 6   | 62  | 50  | 42  | 36  | 57 | 47 | 39 | 34 | 40 | 34 | 30 | 33 | 29 | 25 | 27 | 24 | 21 | 18 | 18 | 18 | 18 | 18 | 18 | 18 |  |   |
| 7   | 58  | 45  | 37  | 32  | 53 | 42 | 35 | 30 | 36 | 30 | 26 | 30 | 26 | 23 | 24 | 21 | 19 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |  |   |
| 8   | 53  | 41  | 33  | 28  | 49 | 38 | 31 | 26 | 33 | 27 | 23 | 27 | 23 | 20 | 22 | 19 | 17 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |  |   |
| 9   | 50  | 38  | 30  | 25  | 46 | 35 | 28 | 24 | 30 | 25 | 21 | 25 | 21 | 18 | 21 | 18 | 15 | 13 | 13 | 13 | 13 | 13 | 13 | 13 |  |   |
| 10  | 46  | 34  | 27  | 22  | 43 | 32 | 26 | 21 | 28 | 22 | 19 | 23 | 19 | 16 | 19 | 16 | 14 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |  |   |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 16942 | 16942 | 16942 |
| 5°  | 17022 | 16788 | 16904 |
| 10° | 16909 | 16642 | 16746 |
| 15° | 16711 | 16454 | 16485 |
| 20° | 16479 | 16186 | 16200 |
| 25° | 16170 | 15865 | 15833 |
| 30° | 15830 | 15509 | 15392 |
| 35° | 15473 | 15135 | 14939 |
| 40° | 15100 | 14720 | 14491 |
| 45° | 14690 | 14338 | 13988 |
| 50° | 14277 | 13870 | 13485 |
| 55° | 13741 | 13386 | 12979 |
| 60° | 13199 | 12820 | 12411 |
| 65° | 12720 | 12202 | 11826 |
| 70° | 12013 | 11500 | 10990 |
| 75° | 10975 | 10580 | 10131 |
| 80° | 9899  | 9478  | 9397  |
| 85° | 8682  | 8361  | 8028  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 148.3  | 1.7       |
| 10°-20°   | 418.7  | 4.8       |
| 20°-30°   | 618.4  | 7.1       |
| 30°-40°   | 722.4  | 8.3       |
| 40°-50°   | 726.3  | 8.4       |
| 50°-60°   | 638.0  | 7.3       |
| 60°-70°   | 475.3  | 5.5       |
| 70°-80°   | 270.8  | 3.1       |
| 80°-90°   | 82.6   | 1.0       |
| 90°-100°  | 107.7  | 1.2       |
| 100°-110° | 322.3  | 3.7       |
| 110°-120° | 548.1  | 6.3       |
| 120°-130° | 721.0  | 8.3       |
| 130°-140° | 810.4  | 9.3       |
| 140°-150° | 796.6  | 9.2       |
| 150°-160° | 670.6  | 7.7       |
| 160°-170° | 446.4  | 5.1       |
| 170°-180° | 156.3  | 1.8       |
| 0°-30°    | 1185.3 | 13.7      |
| 0°-40°    | 1907.7 | 22.0      |
| 0°-60°    | 3272.0 | 37.7      |
| 0°-90°    | 4100.6 | 47.2      |
| 90°-120°  | 978.1  | 11.3      |
| 90°-150°  | 3306.0 | 38.1      |
| 90°-180°  | 4579.0 | 52.8      |
| 0°-180°   | 8679.9 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1574 | 1574  | 1574 | 1574  | 1574 |      |
| 5°   | 1575 | 1568  | 1554 | 1566  | 1564 | 149  |
| 15°  | 1500 | 1494  | 1476 | 1486  | 1479 | 423  |
| 25°  | 1362 | 1353  | 1336 | 1337  | 1333 | 627  |
| 35°  | 1178 | 1169  | 1152 | 1144  | 1137 | 736  |
| 45°  | 965  | 959   | 942  | 926   | 919  | 745  |
| 55°  | 732  | 730   | 713  | 699   | 692  | 656  |
| 65°  | 499  | 492   | 479  | 469   | 464  | 493  |
| 75°  | 264  | 259   | 254  | 248   | 244  | 282  |
| 85°  | 70   | 68    | 68   | 65    | 65   | 77   |
| 90°  | 1    | 14    | 31   | 36    | 39   | 9    |
| 95°  | 77   | 86    | 96   | 101   | 101  | 86   |
| 105° | 292  | 295   | 306  | 307   | 309  | 313  |
| 115° | 552  | 555   | 553  | 554   | 553  | 546  |
| 125° | 808  | 811   | 809  | 804   | 798  | 720  |
| 135° | 1048 | 1055  | 1054 | 1049  | 1046 | 807  |
| 145° | 1271 | 1274  | 1278 | 1276  | 1271 | 794  |
| 155° | 1455 | 1456  | 1457 | 1461  | 1453 | 670  |
| 165° | 1585 | 1582  | 1581 | 1588  | 1580 | 447  |
| 175° | 1649 | 1644  | 1644 | 1651  | 1642 | 157  |
| 180° | 1653 | 1653  | 1653 | 1653  | 1653 |      |



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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 1574.0 | 1574.0 | 1574.0 | 1574.0 | 1574.0 | 1574.0 | 1574.0 | 1574.0 | 1574.0 | 1574.0 | 1574.0 |
| 2.5°   | 1579.4 | 1578.5 | 1577.5 | 1576.6 | 1575.5 | 1573.7 | 1571.2 | 1568.5 | 1565.8 | 1563.1 | 1565.6 |
| 5°     | 1575.4 | 1573.9 | 1572.4 | 1570.9 | 1569.3 | 1566.9 | 1563.7 | 1560.3 | 1557.0 | 1553.7 | 1556.7 |
| 7.5°   | 1560.0 | 1558.4 | 1556.9 | 1555.4 | 1553.9 | 1551.4 | 1548.0 | 1544.6 | 1541.2 | 1537.7 | 1540.4 |
| 10°    | 1547.0 | 1545.4 | 1543.9 | 1542.4 | 1540.9 | 1538.3 | 1534.3 | 1530.4 | 1526.5 | 1522.6 | 1525.3 |
| 12.5°  | 1529.7 | 1528.4 | 1527.1 | 1525.9 | 1524.6 | 1522.1 | 1518.5 | 1514.8 | 1511.1 | 1507.4 | 1509.4 |
| 15°    | 1499.6 | 1498.4 | 1497.2 | 1496.0 | 1494.8 | 1492.2 | 1488.3 | 1484.4 | 1480.5 | 1476.5 | 1478.9 |
| 17.5°  | 1464.6 | 1463.1 | 1461.5 | 1460.0 | 1458.4 | 1455.7 | 1451.7 | 1447.9 | 1443.9 | 1440.0 | 1441.7 |
| 20°    | 1438.6 | 1436.8 | 1435.0 | 1433.2 | 1431.5 | 1428.6 | 1424.7 | 1420.8 | 1416.9 | 1413.0 | 1414.2 |
| 22.5°  | 1409.5 | 1407.6 | 1405.8 | 1404.0 | 1402.2 | 1399.4 | 1395.4 | 1391.5 | 1387.7 | 1383.7 | 1384.7 |
| 25°    | 1361.5 | 1359.7 | 1357.9 | 1356.1 | 1354.4 | 1351.4 | 1347.6 | 1343.7 | 1339.7 | 1335.8 | 1336.1 |
| 27.5°  | 1310.4 | 1308.6 | 1306.9 | 1305.1 | 1303.4 | 1300.5 | 1296.2 | 1292.0 | 1287.8 | 1283.6 | 1283.8 |
| 30°    | 1273.6 | 1272.0 | 1270.6 | 1269.0 | 1267.6 | 1264.7 | 1260.5 | 1256.3 | 1252.1 | 1247.8 | 1247.8 |
| 32.5°  | 1236.7 | 1234.8 | 1232.8 | 1230.8 | 1228.8 | 1226.2 | 1223.0 | 1219.7 | 1216.4 | 1213.2 | 1211.5 |
| 35°    | 1177.5 | 1175.7 | 1173.9 | 1172.1 | 1170.3 | 1167.4 | 1163.5 | 1159.6 | 1155.6 | 1151.8 | 1150.0 |
| 37.5°  | 1116.8 | 1114.6 | 1112.2 | 1110.0 | 1107.7 | 1104.6 | 1100.6 | 1096.7 | 1092.7 | 1088.6 | 1086.5 |
| 40°    | 1074.6 | 1072.8 | 1071.0 | 1069.2 | 1067.4 | 1064.4 | 1060.1 | 1055.9 | 1051.7 | 1047.6 | 1045.2 |
| 42.5°  | 1032.3 | 1030.4 | 1028.3 | 1026.2 | 1024.2 | 1021.1 | 1016.8 | 1012.6 | 1008.4 | 1004.3 | 1001.9 |
| 45°    | 965.0  | 963.8  | 962.6  | 961.4  | 960.2  | 957.6  | 953.7  | 949.8  | 945.9  | 941.9  | 938.4  |
| 47.5°  | 898.1  | 896.4  | 894.7  | 892.9  | 891.1  | 888.5  | 884.8  | 881.1  | 877.4  | 873.7  | 870.2  |
| 50°    | 852.6  | 851.2  | 849.6  | 848.2  | 846.6  | 844.0  | 840.0  | 836.1  | 832.2  | 828.3  | 825.0  |
| 52.5°  | 805.0  | 804.0  | 803.0  | 801.9  | 800.9  | 798.3  | 794.2  | 790.1  | 785.9  | 781.7  | 778.9  |
| 55°    | 732.2  | 731.9  | 731.6  | 731.3  | 731.0  | 728.9  | 725.0  | 721.1  | 717.1  | 713.3  | 710.0  |
| 57.5°  | 662.9  | 661.9  | 660.8  | 659.9  | 658.8  | 656.8  | 653.6  | 650.5  | 647.4  | 644.2  | 641.3  |
| 60°    | 613.1  | 612.8  | 612.5  | 612.2  | 611.9  | 609.9  | 606.3  | 602.7  | 599.1  | 595.5  | 592.8  |
| 62.5°  | 568.7  | 567.9  | 567.1  | 566.4  | 565.6  | 563.4  | 559.7  | 556.1  | 552.6  | 549.0  | 546.2  |
| 65°    | 499.4  | 497.9  | 496.4  | 494.9  | 493.4  | 491.1  | 488.1  | 485.1  | 482.1  | 479.1  | 476.7  |
| 67.5°  | 426.0  | 424.7  | 423.4  | 422.1  | 420.8  | 419.0  | 416.6  | 414.4  | 412.1  | 409.8  | 407.7  |
| 70°    | 381.7  | 379.9  | 378.1  | 376.3  | 374.4  | 372.6  | 370.8  | 369.0  | 367.2  | 365.4  | 363.3  |
| 72.5°  | 335.1  | 333.8  | 332.4  | 331.1  | 329.8  | 328.1  | 326.1  | 324.0  | 322.0  | 319.9  | 318.1  |
| 75°    | 263.9  | 262.7  | 261.5  | 260.3  | 259.1  | 258.0  | 257.2  | 256.2  | 255.4  | 254.4  | 253.0  |
| 77.5°  | 200.9  | 200.2  | 199.5  | 198.9  | 198.2  | 197.3  | 196.2  | 195.2  | 194.1  | 193.0  | 192.0  |
| 80°    | 159.7  | 158.8  | 157.9  | 157.0  | 156.1  | 155.3  | 154.7  | 154.1  | 153.5  | 152.9  | 152.7  |
| 82.5°  | 119.7  | 119.4  | 119.2  | 119.1  | 118.9  | 118.7  | 118.6  | 118.6  | 118.4  | 118.3  | 117.8  |
| 85°    | 70.3   | 69.7   | 69.1   | 68.5   | 67.9   | 67.7   | 67.7   | 67.7   | 67.7   | 67.7   | 67.1   |
| 87.5°  | 28.4   | 28.2   | 28.2   | 28.0   | 27.8   | 28.0   | 28.5   | 29.0   | 29.5   | 30.0   | 30.0   |
| 90°    | 1.3    | 4.2    | 7.1    | 10.0   | 12.8   | 16.2   | 19.9   | 23.7   | 27.4   | 31.2   | 32.3   |
| 92.5°  | 31.4   | 33.4   | 35.3   | 37.3   | 39.3   | 41.3   | 43.5   | 45.5   | 47.7   | 49.9   | 50.8   |
| 95°    | 76.6   | 78.6   | 80.7   | 82.7   | 84.7   | 86.9   | 89.1   | 91.4   | 93.8   | 96.1   | 97.2   |
| 97.5°  | 136.0  | 137.6  | 139.1  | 140.6  | 142.1  | 143.6  | 145.3  | 147.0  | 148.7  | 150.3  | 151.7  |
| 100°   | 176.6  | 178.3  | 180.0  | 181.8  | 183.5  | 185.1  | 186.5  | 188.0  | 189.4  | 190.9  | 191.7  |
| 102.5° | 223.3  | 224.4  | 225.4  | 226.4  | 227.5  | 228.9  | 230.8  | 232.7  | 234.6  | 236.5  | 237.5  |
| 105°   | 292.1  | 292.7  | 293.3  | 293.9  | 294.5  | 296.0  | 298.6  | 301.2  | 303.8  | 306.4  | 306.4  |
| 107.5° | 372.1  | 372.5  | 372.8  | 373.2  | 373.5  | 374.2  | 375.2  | 376.3  | 377.3  | 378.3  | 379.3  |
| 110°   | 422.0  | 422.6  | 423.1  | 423.7  | 424.3  | 424.8  | 425.4  | 426.0  | 426.5  | 427.1  | 428.3  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 473.9  | 474.2  | 474.6  | 474.9  | 475.3  | 475.5  | 475.6  | 475.7  | 475.9  | 476.0  | 477.3  |
| 115°   | 551.8  | 552.7  | 553.5  | 554.4  | 555.3  | 555.4  | 554.8  | 554.2  | 553.7  | 553.1  | 553.4  |
| 117.5° | 630.3  | 630.8  | 631.4  | 632.0  | 632.5  | 632.4  | 631.7  | 630.9  | 630.2  | 629.5  | 629.4  |
| 120°   | 679.1  | 680.8  | 682.5  | 684.2  | 686.0  | 686.1  | 684.7  | 683.2  | 681.7  | 680.4  | 680.0  |
| 122.5° | 730.0  | 731.2  | 732.5  | 733.7  | 735.0  | 735.3  | 734.5  | 733.7  | 733.1  | 732.3  | 731.5  |
| 125°   | 807.5  | 808.4  | 809.3  | 810.2  | 811.1  | 811.1  | 810.6  | 810.0  | 809.4  | 808.9  | 807.7  |
| 127.5° | 879.3  | 881.1  | 883.0  | 884.8  | 886.7  | 887.3  | 886.6  | 886.0  | 885.4  | 884.7  | 883.0  |
| 130°   | 927.0  | 929.4  | 931.6  | 933.9  | 936.3  | 936.9  | 936.1  | 935.2  | 934.4  | 933.5  | 932.4  |
| 132.5° | 974.8  | 977.1  | 979.4  | 981.7  | 984.0  | 984.9  | 984.2  | 983.6  | 982.9  | 982.3  | 980.9  |
| 135°   | 1047.8 | 1049.5 | 1051.2 | 1052.9 | 1054.7 | 1055.4 | 1055.2 | 1054.8 | 1054.6 | 1054.3 | 1053.1 |
| 137.5° | 1115.3 | 1116.7 | 1118.2 | 1119.6 | 1121.0 | 1122.1 | 1122.9 | 1123.6 | 1124.4 | 1125.2 | 1123.9 |
| 140°   | 1162.0 | 1163.5 | 1164.9 | 1166.3 | 1167.8 | 1168.6 | 1169.0 | 1169.2 | 1169.5 | 1169.8 | 1169.5 |
| 142.5° | 1204.6 | 1206.0 | 1207.5 | 1208.9 | 1210.4 | 1211.3 | 1211.9 | 1212.4 | 1212.9 | 1213.4 | 1213.1 |
| 145°   | 1271.1 | 1271.7 | 1272.2 | 1272.8 | 1273.4 | 1274.1 | 1275.0 | 1275.8 | 1276.7 | 1277.6 | 1277.3 |
| 147.5° | 1329.2 | 1330.2 | 1331.3 | 1332.4 | 1333.4 | 1334.3 | 1335.2 | 1335.9 | 1336.7 | 1337.6 | 1337.6 |
| 150°   | 1369.8 | 1370.4 | 1370.9 | 1371.5 | 1372.1 | 1372.6 | 1373.2 | 1373.8 | 1374.3 | 1374.9 | 1374.9 |
| 152.5° | 1403.0 | 1403.8 | 1404.6 | 1405.4 | 1406.2 | 1406.8 | 1407.1 | 1407.5 | 1407.8 | 1408.2 | 1408.7 |
| 155°   | 1455.4 | 1455.4 | 1455.4 | 1455.4 | 1455.4 | 1455.6 | 1455.9 | 1456.1 | 1456.5 | 1456.7 | 1457.9 |
| 157.5° | 1500.1 | 1499.8 | 1499.4 | 1499.1 | 1498.7 | 1498.7 | 1498.9 | 1499.1 | 1499.3 | 1499.6 | 1500.8 |
| 160°   | 1528.2 | 1527.6 | 1527.0 | 1526.4 | 1525.9 | 1525.5 | 1525.5 | 1525.5 | 1525.5 | 1525.5 | 1527.0 |
| 162.5° | 1553.1 | 1552.3 | 1551.4 | 1550.7 | 1549.9 | 1549.5 | 1549.8 | 1550.1 | 1550.2 | 1550.5 | 1552.0 |
| 165°   | 1585.3 | 1584.4 | 1583.6 | 1582.7 | 1581.8 | 1581.4 | 1581.4 | 1581.4 | 1581.4 | 1581.4 | 1583.1 |
| 167.5° | 1611.0 | 1609.8 | 1608.7 | 1607.5 | 1606.4 | 1605.9 | 1606.1 | 1606.4 | 1606.6 | 1606.8 | 1608.6 |
| 170°   | 1625.5 | 1624.4 | 1623.2 | 1622.0 | 1620.9 | 1620.3 | 1620.3 | 1620.3 | 1620.3 | 1620.3 | 1622.4 |
| 172.5° | 1636.9 | 1635.8 | 1634.6 | 1633.5 | 1632.4 | 1631.8 | 1631.8 | 1631.8 | 1631.8 | 1631.8 | 1633.6 |
| 175°   | 1648.9 | 1647.8 | 1646.6 | 1645.5 | 1644.3 | 1643.7 | 1643.7 | 1643.7 | 1643.7 | 1643.7 | 1645.5 |
| 177.5° | 1653.8 | 1652.9 | 1652.0 | 1651.1 | 1650.1 | 1649.7 | 1649.7 | 1649.7 | 1649.7 | 1649.7 | 1651.1 |
| 180°   | 1652.8 | 1652.8 | 1652.8 | 1652.8 | 1652.8 | 1652.8 | 1652.8 | 1652.8 | 1652.8 | 1652.8 | 1652.8 |



TEST NUMBER: P332239-935

CATALOG NUMBER: S123DIW-S1165D1535U935-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

|        | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 1574.0 | 1574.0 | 1574.0 | 1574.0 | 1574.0 | 1574.0 | 1574.0 | 1574.0 |
| 2.5°   | 1568.0 | 1570.4 | 1572.8 | 1573.9 | 1573.6 | 1573.4 | 1573.1 | 1573.0 |
| 5°     | 1559.7 | 1562.7 | 1565.7 | 1566.9 | 1566.3 | 1565.7 | 1565.1 | 1564.5 |
| 7.5°   | 1543.2 | 1545.8 | 1548.6 | 1549.7 | 1549.4 | 1549.0 | 1548.7 | 1548.3 |
| 10°    | 1528.0 | 1530.7 | 1533.4 | 1534.5 | 1533.9 | 1533.3 | 1532.7 | 1532.1 |
| 12.5°  | 1511.4 | 1513.4 | 1515.4 | 1516.2 | 1515.8 | 1515.4 | 1515.1 | 1514.8 |
| 15°    | 1481.4 | 1483.8 | 1486.2 | 1486.5 | 1484.7 | 1482.9 | 1481.1 | 1479.3 |
| 17.5°  | 1443.4 | 1445.1 | 1446.7 | 1447.3 | 1446.7 | 1446.0 | 1445.3 | 1444.7 |
| 20°    | 1415.4 | 1416.6 | 1417.8 | 1417.9 | 1417.0 | 1416.1 | 1415.2 | 1414.3 |
| 22.5°  | 1385.7 | 1386.6 | 1387.6 | 1387.5 | 1386.4 | 1385.2 | 1384.1 | 1382.9 |
| 25°    | 1336.4 | 1336.7 | 1337.0 | 1336.7 | 1335.8 | 1334.9 | 1334.0 | 1333.1 |
| 27.5°  | 1284.1 | 1284.3 | 1284.5 | 1284.1 | 1283.0 | 1281.8 | 1280.7 | 1279.5 |
| 30°    | 1247.8 | 1247.8 | 1247.8 | 1246.8 | 1244.7 | 1242.6 | 1240.4 | 1238.4 |
| 32.5°  | 1209.8 | 1208.2 | 1206.4 | 1205.1 | 1203.9 | 1202.7 | 1201.6 | 1200.5 |
| 35°    | 1148.1 | 1146.3 | 1144.5 | 1142.9 | 1141.3 | 1139.9 | 1138.3 | 1136.9 |
| 37.5°  | 1084.3 | 1082.2 | 1080.0 | 1078.5 | 1077.5 | 1076.5 | 1075.6 | 1074.6 |
| 40°    | 1042.8 | 1040.3 | 1037.9 | 1036.1 | 1034.9 | 1033.7 | 1032.5 | 1031.3 |
| 42.5°  | 999.4  | 997.0  | 994.6  | 992.8  | 991.6  | 990.4  | 989.2  | 988.0  |
| 45°    | 934.8  | 931.2  | 927.6  | 925.0  | 923.5  | 922.0  | 920.5  | 918.9  |
| 47.5°  | 866.7  | 863.2  | 859.5  | 857.1  | 855.8  | 854.5  | 853.2  | 851.9  |
| 50°    | 821.7  | 818.4  | 815.0  | 812.5  | 810.7  | 808.9  | 807.1  | 805.3  |
| 52.5°  | 776.1  | 773.3  | 770.4  | 768.1  | 766.3  | 764.5  | 762.7  | 760.9  |
| 55°    | 706.6  | 703.4  | 700.0  | 697.6  | 696.1  | 694.6  | 693.1  | 691.6  |
| 57.5°  | 638.3  | 635.4  | 632.4  | 630.1  | 628.4  | 626.6  | 624.8  | 623.1  |
| 60°    | 590.1  | 587.4  | 584.7  | 582.6  | 581.1  | 579.5  | 578.1  | 576.5  |
| 62.5°  | 543.5  | 540.8  | 538.1  | 536.2  | 535.2  | 534.2  | 533.2  | 532.2  |
| 65°    | 474.3  | 471.9  | 469.5  | 467.9  | 466.9  | 466.1  | 465.1  | 464.3  |
| 67.5°  | 405.6  | 403.5  | 401.4  | 399.7  | 398.5  | 397.2  | 395.9  | 394.7  |
| 70°    | 361.2  | 359.1  | 357.0  | 355.2  | 353.7  | 352.1  | 350.7  | 349.2  |
| 72.5°  | 316.2  | 314.4  | 312.5  | 311.2  | 310.4  | 309.6  | 308.8  | 308.1  |
| 75°    | 251.4  | 249.9  | 248.4  | 247.2  | 246.3  | 245.4  | 244.5  | 243.6  |
| 77.5°  | 191.0  | 189.9  | 188.9  | 188.4  | 188.4  | 188.4  | 188.4  | 188.4  |
| 80°    | 152.3  | 152.1  | 151.7  | 151.6  | 151.6  | 151.6  | 151.6  | 151.6  |
| 82.5°  | 117.2  | 116.7  | 116.1  | 115.7  | 115.5  | 115.3  | 115.0  | 114.8  |
| 85°    | 66.5   | 65.9   | 65.3   | 65.0   | 65.0   | 65.0   | 65.0   | 65.0   |
| 87.5°  | 30.0   | 30.0   | 30.0   | 30.0   | 30.2   | 30.3   | 30.4   | 30.6   |
| 90°    | 33.5   | 34.6   | 35.8   | 36.7   | 37.2   | 37.8   | 38.4   | 38.9   |
| 92.5°  | 51.7   | 52.6   | 53.6   | 53.8   | 53.5   | 53.1   | 52.8   | 52.4   |
| 95°    | 98.4   | 99.5   | 100.7  | 101.3  | 101.3  | 101.3  | 101.3  | 101.3  |
| 97.5°  | 153.0  | 154.3  | 155.7  | 156.3  | 156.2  | 156.0  | 155.9  | 155.8  |
| 100°   | 192.6  | 193.5  | 194.3  | 195.0  | 195.6  | 196.2  | 196.7  | 197.3  |
| 102.5° | 238.3  | 239.2  | 240.0  | 240.4  | 240.3  | 240.1  | 240.0  | 240.0  |
| 105°   | 306.4  | 306.4  | 306.4  | 306.7  | 307.3  | 307.9  | 308.4  | 309.0  |
| 107.5° | 380.2  | 381.1  | 382.0  | 382.3  | 381.9  | 381.6  | 381.3  | 380.9  |
| 110°   | 429.5  | 430.6  | 431.8  | 432.0  | 431.4  | 430.9  | 430.3  | 429.7  |





TEST NUMBER: P332239-935

CATALOG NUMBER: S123DIW-S1165D1535U935-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

|        | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 478.7  | 480.1  | 481.5  | 482.2  | 482.1  | 481.9  | 481.8  | 481.6  |
| 115°   | 553.7  | 554.0  | 554.2  | 554.2  | 554.0  | 553.7  | 553.4  | 553.1  |
| 117.5° | 629.3  | 629.3  | 629.2  | 628.8  | 627.9  | 627.2  | 626.4  | 625.5  |
| 120°   | 679.8  | 679.5  | 679.2  | 678.7  | 678.2  | 677.6  | 677.0  | 676.4  |
| 122.5° | 730.7  | 730.0  | 729.3  | 728.5  | 727.7  | 726.9  | 726.1  | 725.2  |
| 125°   | 806.6  | 805.4  | 804.3  | 803.1  | 801.9  | 800.8  | 799.6  | 798.5  |
| 127.5° | 881.5  | 879.9  | 878.2  | 876.8  | 875.5  | 874.1  | 872.8  | 871.4  |
| 130°   | 931.2  | 930.1  | 928.9  | 927.3  | 925.3  | 923.3  | 921.3  | 919.2  |
| 132.5° | 979.6  | 978.2  | 976.8  | 975.3  | 973.8  | 972.2  | 970.6  | 969.1  |
| 135°   | 1052.0 | 1050.8 | 1049.6 | 1048.8 | 1048.2 | 1047.6 | 1047.1 | 1046.5 |
| 137.5° | 1122.7 | 1121.5 | 1120.3 | 1119.1 | 1118.0 | 1117.0 | 1115.9 | 1114.7 |
| 140°   | 1169.2 | 1169.0 | 1168.6 | 1167.5 | 1165.4 | 1163.5 | 1161.4 | 1159.4 |
| 142.5° | 1212.9 | 1212.5 | 1212.3 | 1211.3 | 1209.8 | 1208.2 | 1206.7 | 1205.1 |
| 145°   | 1276.9 | 1276.7 | 1276.4 | 1275.7 | 1274.5 | 1273.4 | 1272.2 | 1271.1 |
| 147.5° | 1337.6 | 1337.6 | 1337.6 | 1336.7 | 1335.0 | 1333.3 | 1331.5 | 1329.7 |
| 150°   | 1374.9 | 1374.9 | 1374.9 | 1374.1 | 1372.3 | 1370.6 | 1368.9 | 1367.2 |
| 152.5° | 1409.1 | 1409.5 | 1410.1 | 1409.5 | 1408.0 | 1406.5 | 1405.0 | 1403.5 |
| 155°   | 1459.1 | 1460.2 | 1461.4 | 1460.9 | 1458.9 | 1456.9 | 1454.8 | 1452.9 |
| 157.5° | 1502.0 | 1503.2 | 1504.4 | 1504.3 | 1502.6 | 1501.0 | 1499.3 | 1497.8 |
| 160°   | 1528.4 | 1529.9 | 1531.3 | 1531.5 | 1530.3 | 1529.1 | 1528.0 | 1526.8 |
| 162.5° | 1553.3 | 1554.8 | 1556.3 | 1556.1 | 1554.2 | 1552.4 | 1550.5 | 1548.7 |
| 165°   | 1584.8 | 1586.6 | 1588.3 | 1588.2 | 1586.1 | 1584.2 | 1582.1 | 1580.1 |
| 167.5° | 1610.4 | 1612.2 | 1613.9 | 1613.9 | 1612.2 | 1610.4 | 1608.6 | 1606.8 |
| 170°   | 1624.4 | 1626.4 | 1628.4 | 1628.4 | 1626.4 | 1624.4 | 1622.4 | 1620.3 |
| 172.5° | 1635.3 | 1637.1 | 1638.9 | 1638.8 | 1636.8 | 1634.8 | 1632.7 | 1630.7 |
| 175°   | 1647.2 | 1648.9 | 1650.6 | 1650.5 | 1648.5 | 1646.4 | 1644.4 | 1642.4 |
| 177.5° | 1652.4 | 1653.8 | 1655.2 | 1655.1 | 1653.5 | 1651.8 | 1650.3 | 1648.6 |
| 180°   | 1652.8 | 1652.8 | 1652.8 | 1652.8 | 1652.8 | 1652.8 | 1652.8 | 1652.8 |

(END OF REPORT)