

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: P332461-840

Luminaire Tested: **S123RDIW-S1000D1030U840-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332461-840  
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: S123RDIW-S1000D1030U840-4F0-1E-UDD-F1  
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 1030 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7440.9 lumens  
Efficiency: N/A  
Efficacy: 121.6 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.06 / 1.22  
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')  
CIE Type: General Diffuse

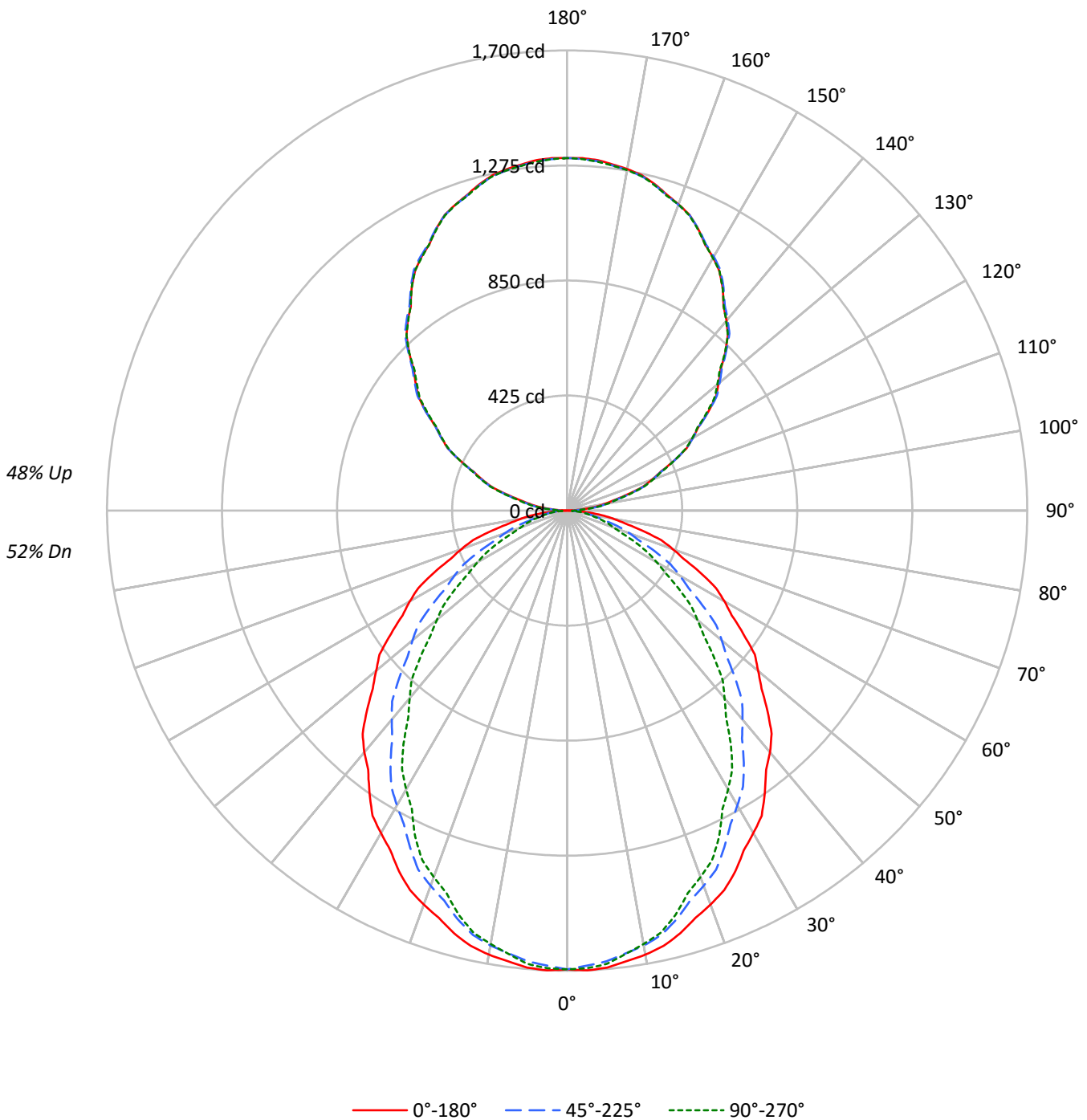
Input Watts (W): 61.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





TEST NUMBER: P332461-840

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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 | 0  |
| RCR |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 0   | 108 | 108 | 108 | 108 | 99 | 99 | 99 | 99 | 84 | 84 | 84 | 70 | 70 | 70 | 58 | 58 | 58 | 52 |
| 1   | 98  | 94  | 90  | 87  | 91 | 87 | 84 | 81 | 74 | 72 | 70 | 62 | 61 | 59 | 51 | 50 | 49 | 44 |
| 2   | 90  | 83  | 77  | 72  | 83 | 77 | 72 | 67 | 65 | 62 | 58 | 55 | 52 | 50 | 46 | 44 | 42 | 37 |
| 3   | 82  | 73  | 66  | 60  | 76 | 68 | 62 | 56 | 58 | 53 | 49 | 49 | 46 | 43 | 41 | 38 | 36 | 32 |
| 4   | 75  | 65  | 57  | 51  | 69 | 60 | 53 | 48 | 52 | 47 | 42 | 44 | 40 | 37 | 37 | 34 | 31 | 28 |
| 5   | 69  | 58  | 50  | 44  | 64 | 54 | 47 | 42 | 46 | 41 | 37 | 40 | 35 | 32 | 33 | 30 | 27 | 24 |
| 6   | 64  | 52  | 44  | 38  | 59 | 49 | 41 | 36 | 42 | 36 | 32 | 36 | 32 | 28 | 30 | 27 | 24 | 21 |
| 7   | 59  | 47  | 39  | 34  | 55 | 44 | 37 | 32 | 38 | 33 | 28 | 33 | 28 | 25 | 28 | 24 | 22 | 19 |
| 8   | 55  | 43  | 35  | 30  | 51 | 40 | 33 | 28 | 35 | 29 | 25 | 30 | 26 | 22 | 25 | 22 | 20 | 17 |
| 9   | 51  | 39  | 32  | 27  | 47 | 37 | 30 | 25 | 32 | 27 | 23 | 28 | 23 | 20 | 23 | 20 | 18 | 16 |
| 10  | 48  | 36  | 29  | 24  | 44 | 34 | 27 | 23 | 30 | 24 | 21 | 26 | 21 | 18 | 22 | 19 | 16 | 14 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 18243 | 18243 | 18243 |
| 5°  | 18312 | 18058 | 18163 |
| 10° | 18208 | 17832 | 17772 |
| 15° | 18013 | 17415 | 17231 |
| 20° | 17743 | 16893 | 16501 |
| 25° | 17467 | 16308 | 15785 |
| 30° | 17100 | 15632 | 14777 |
| 35° | 16724 | 14954 | 13853 |
| 40° | 16378 | 14155 | 12708 |
| 45° | 15923 | 13370 | 11676 |
| 50° | 15421 | 12476 | 10518 |
| 55° | 14910 | 11453 | 9439  |
| 60° | 14441 | 10357 | 8254  |
| 65° | 13827 | 9172  | 7070  |
| 70° | 13064 | 7701  | 5712  |
| 75° | 11948 | 6059  | 5373  |
| 80° | 10649 | 5362  | 4940  |
| 85° | 8991  | 4755  | 4409  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 159.1  | 2.1       |
| 10°-20°   | 442.8  | 6.0       |
| 20°-30°   | 637.6  | 8.6       |
| 30°-40°   | 718.2  | 9.7       |
| 40°-50°   | 687.1  | 9.2       |
| 50°-60°   | 562.6  | 7.6       |
| 60°-70°   | 379.6  | 5.1       |
| 70°-80°   | 191.0  | 2.6       |
| 80°-90°   | 54.4   | 0.7       |
| 90°-100°  | 84.9   | 1.1       |
| 100°-110° | 254.0  | 3.4       |
| 110°-120° | 431.9  | 5.8       |
| 120°-130° | 568.1  | 7.6       |
| 130°-140° | 638.6  | 8.6       |
| 140°-150° | 627.7  | 8.4       |
| 150°-160° | 528.4  | 7.1       |
| 160°-170° | 351.8  | 4.7       |
| 170°-180° | 123.2  | 1.7       |
| 0°-30°    | 1239.5 | 16.7      |
| 0°-40°    | 1957.7 | 26.3      |
| 0°-60°    | 3207.4 | 43.1      |
| 0°-90°    | 3832.4 | 51.5      |
| 90°-120°  | 770.8  | 10.4      |
| 90°-150°  | 2605.2 | 35.0      |
| 90°-180°  | 3609.0 | 48.5      |
| 0°-180°   | 7440.9 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1695 | 1695  | 1695 | 1695  | 1695 |      |
| 5°   | 1695 | 1687  | 1671 | 1683  | 1681 | 161  |
| 15°  | 1616 | 1600  | 1563 | 1556  | 1546 | 455  |
| 25°  | 1471 | 1435  | 1373 | 1345  | 1329 | 676  |
| 35°  | 1273 | 1221  | 1138 | 1081  | 1054 | 796  |
| 45°  | 1046 | 982   | 878  | 802   | 767  | 807  |
| 55°  | 794  | 724   | 610  | 533   | 503  | 712  |
| 65°  | 543  | 466   | 360  | 296   | 278  | 537  |
| 75°  | 287  | 221   | 146  | 133   | 129  | 306  |
| 85°  | 73   | 44    | 38   | 36    | 36   | 82   |
| 90°  | 1    | 11    | 24   | 29    | 31   | 7    |
| 95°  | 60   | 68    | 76   | 80    | 80   | 68   |
| 105° | 230  | 233   | 242  | 242   | 244  | 247  |
| 115° | 435  | 438   | 436  | 437   | 436  | 430  |
| 125° | 636  | 639   | 637  | 633   | 629  | 567  |
| 135° | 826  | 831   | 831  | 827   | 825  | 636  |
| 145° | 1002 | 1004  | 1007 | 1006  | 1002 | 625  |
| 155° | 1147 | 1147  | 1148 | 1151  | 1145 | 528  |
| 165° | 1249 | 1246  | 1246 | 1252  | 1245 | 352  |
| 175° | 1299 | 1296  | 1295 | 1301  | 1294 | 123  |
| 180° | 1302 | 1302  | 1302 | 1302  | 1302 |      |



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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 1694.8 | 1694.8 | 1694.8 | 1694.8 | 1694.8 | 1694.8 | 1694.8 | 1694.8 | 1694.8 | 1694.8 | 1694.8 |
| 2.5°   | 1700.2 | 1699.2 | 1698.3 | 1697.3 | 1696.3 | 1694.4 | 1691.4 | 1688.5 | 1685.6 | 1682.6 | 1685.3 |
| 5°     | 1694.8 | 1693.1 | 1691.6 | 1690.1 | 1688.6 | 1686.0 | 1682.3 | 1678.7 | 1675.1 | 1671.3 | 1674.1 |
| 7.5°   | 1679.0 | 1677.4 | 1675.8 | 1674.1 | 1672.4 | 1669.2 | 1664.5 | 1659.7 | 1655.0 | 1650.2 | 1651.7 |
| 10°    | 1665.9 | 1663.8 | 1661.5 | 1659.4 | 1657.3 | 1653.5 | 1648.0 | 1642.4 | 1637.0 | 1631.5 | 1631.8 |
| 12.5°  | 1647.2 | 1644.8 | 1642.4 | 1640.0 | 1637.6 | 1633.1 | 1626.4 | 1619.6 | 1613.0 | 1606.2 | 1606.0 |
| 15°    | 1616.4 | 1613.1 | 1609.6 | 1606.3 | 1603.0 | 1597.0 | 1588.4 | 1579.8 | 1571.3 | 1562.8 | 1561.3 |
| 17.5°  | 1577.6 | 1573.7 | 1569.8 | 1565.9 | 1562.0 | 1554.6 | 1543.7 | 1532.9 | 1522.0 | 1511.1 | 1507.8 |
| 20°    | 1549.0 | 1544.2 | 1539.2 | 1534.4 | 1529.4 | 1521.3 | 1509.6 | 1498.0 | 1486.4 | 1474.8 | 1470.9 |
| 22.5°  | 1517.1 | 1511.6 | 1505.9 | 1500.3 | 1494.7 | 1485.7 | 1473.3 | 1461.0 | 1448.7 | 1436.3 | 1431.4 |
| 25°    | 1470.7 | 1463.1 | 1455.4 | 1447.7 | 1440.2 | 1429.3 | 1415.2 | 1401.2 | 1387.2 | 1373.1 | 1366.7 |
| 27.5°  | 1414.3 | 1405.9 | 1397.5 | 1389.1 | 1380.6 | 1368.6 | 1352.9 | 1337.3 | 1321.6 | 1306.1 | 1297.1 |
| 30°    | 1375.8 | 1366.7 | 1357.6 | 1348.4 | 1339.2 | 1326.1 | 1309.0 | 1291.8 | 1274.8 | 1257.7 | 1247.3 |
| 32.5°  | 1337.4 | 1327.0 | 1316.6 | 1306.2 | 1295.9 | 1281.6 | 1263.5 | 1245.5 | 1227.3 | 1209.2 | 1197.9 |
| 35°    | 1272.7 | 1261.7 | 1250.7 | 1239.8 | 1228.8 | 1213.8 | 1194.9 | 1175.9 | 1157.0 | 1138.0 | 1124.9 |
| 37.5°  | 1207.3 | 1195.1 | 1182.9 | 1170.6 | 1158.4 | 1142.3 | 1122.1 | 1101.8 | 1081.6 | 1061.4 | 1046.4 |
| 40°    | 1165.6 | 1152.2 | 1138.6 | 1125.2 | 1111.8 | 1094.2 | 1072.6 | 1050.9 | 1029.2 | 1007.4 | 991.6  |
| 42.5°  | 1118.2 | 1104.8 | 1091.4 | 1077.9 | 1064.5 | 1046.6 | 1024.2 | 1001.8 | 979.4  | 956.9  | 939.6  |
| 45°    | 1046.0 | 1032.2 | 1018.4 | 1004.7 | 991.0  | 972.4  | 948.9  | 925.3  | 901.8  | 878.3  | 860.9  |
| 47.5°  | 973.7  | 958.6  | 943.5  | 928.4  | 913.3  | 894.0  | 870.5  | 847.0  | 823.4  | 799.9  | 781.0  |
| 50°    | 920.9  | 906.6  | 892.2  | 877.9  | 863.4  | 843.9  | 819.2  | 794.5  | 769.7  | 745.0  | 726.0  |
| 52.5°  | 873.6  | 858.1  | 842.4  | 826.9  | 811.3  | 791.2  | 766.8  | 742.3  | 717.8  | 693.3  | 673.6  |
| 55°    | 794.5  | 779.5  | 764.5  | 749.5  | 734.6  | 714.1  | 688.1  | 662.2  | 636.2  | 610.3  | 592.6  |
| 57.5°  | 721.3  | 705.0  | 688.7  | 672.4  | 656.1  | 634.9  | 608.7  | 582.7  | 556.6  | 530.6  | 513.8  |
| 60°    | 670.8  | 654.0  | 637.1  | 620.4  | 603.5  | 582.5  | 557.1  | 531.8  | 506.4  | 481.1  | 464.5  |
| 62.5°  | 620.2  | 603.4  | 586.5  | 569.8  | 553.0  | 531.9  | 506.5  | 481.2  | 455.9  | 430.5  | 415.0  |
| 65°    | 542.9  | 526.1  | 509.3  | 492.5  | 475.7  | 455.4  | 431.6  | 407.8  | 384.0  | 360.1  | 345.2  |
| 67.5°  | 465.6  | 448.7  | 431.7  | 414.8  | 397.8  | 377.8  | 355.0  | 332.1  | 309.3  | 286.4  | 275.3  |
| 70°    | 415.1  | 398.6  | 382.1  | 365.6  | 349.1  | 330.2  | 308.8  | 287.4  | 266.0  | 244.7  | 234.0  |
| 72.5°  | 364.5  | 348.3  | 332.0  | 315.8  | 299.5  | 281.7  | 262.3  | 242.9  | 223.4  | 204.0  | 195.2  |
| 75°    | 287.3  | 272.6  | 257.9  | 243.3  | 228.6  | 212.9  | 196.1  | 179.3  | 162.5  | 145.7  | 142.6  |
| 77.5°  | 216.9  | 203.6  | 190.4  | 177.1  | 163.9  | 151.8  | 141.0  | 130.2  | 119.4  | 108.6  | 106.9  |
| 80°    | 171.8  | 159.3  | 146.7  | 134.2  | 121.7  | 112.3  | 105.8  | 99.4   | 93.0   | 86.5   | 85.6   |
| 82.5°  | 129.0  | 118.2  | 107.3  | 96.4   | 85.6   | 78.8   | 75.7   | 72.8   | 69.8   | 66.8   | 65.8   |
| 85°    | 72.8   | 66.1   | 59.4   | 52.7   | 45.9   | 42.1   | 41.2   | 40.3   | 39.4   | 38.5   | 37.9   |
| 87.5°  | 26.6   | 24.3   | 22.1   | 19.9   | 17.7   | 16.9   | 17.5   | 18.0   | 18.6   | 19.2   | 19.2   |
| 90°    | 1.0    | 3.3    | 5.6    | 7.9    | 10.1   | 12.7   | 15.7   | 18.7   | 21.6   | 24.5   | 25.4   |
| 92.5°  | 24.7   | 26.3   | 27.9   | 29.4   | 30.9   | 32.5   | 34.2   | 36.0   | 37.6   | 39.3   | 40.0   |
| 95°    | 60.4   | 61.9   | 63.5   | 65.1   | 66.8   | 68.5   | 70.3   | 72.1   | 73.9   | 75.7   | 76.6   |
| 97.5°  | 107.2  | 108.4  | 109.6  | 110.8  | 112.0  | 113.2  | 114.5  | 115.8  | 117.1  | 118.5  | 119.6  |
| 100°   | 139.2  | 140.5  | 141.9  | 143.2  | 144.6  | 145.8  | 147.0  | 148.1  | 149.3  | 150.4  | 151.1  |
| 102.5° | 176.0  | 176.8  | 177.6  | 178.4  | 179.3  | 180.4  | 181.9  | 183.4  | 184.9  | 186.4  | 187.1  |
| 105°   | 230.2  | 230.7  | 231.2  | 231.6  | 232.1  | 233.3  | 235.3  | 237.3  | 239.4  | 241.5  | 241.5  |
| 107.5° | 293.3  | 293.5  | 293.8  | 294.1  | 294.3  | 294.9  | 295.7  | 296.5  | 297.3  | 298.1  | 298.8  |
| 110°   | 332.5  | 333.0  | 333.5  | 333.9  | 334.4  | 334.8  | 335.3  | 335.7  | 336.2  | 336.6  | 337.5  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 373.4  | 373.8  | 374.0  | 374.3  | 374.6  | 374.7  | 374.8  | 374.9  | 375.0  | 375.1  | 376.2  |
| 115°   | 434.8  | 435.5  | 436.2  | 436.9  | 437.6  | 437.7  | 437.2  | 436.8  | 436.3  | 435.9  | 436.1  |
| 117.5° | 496.7  | 497.1  | 497.6  | 498.0  | 498.5  | 498.4  | 497.8  | 497.2  | 496.6  | 496.0  | 495.9  |
| 120°   | 535.1  | 536.4  | 537.9  | 539.2  | 540.6  | 540.7  | 539.5  | 538.4  | 537.2  | 536.1  | 535.8  |
| 122.5° | 575.2  | 576.2  | 577.2  | 578.1  | 579.2  | 579.4  | 578.9  | 578.2  | 577.6  | 577.0  | 576.4  |
| 125°   | 636.4  | 637.0  | 637.7  | 638.4  | 639.1  | 639.2  | 638.7  | 638.3  | 637.8  | 637.4  | 636.5  |
| 127.5° | 692.9  | 694.3  | 695.8  | 697.2  | 698.6  | 699.1  | 698.6  | 698.1  | 697.6  | 697.1  | 695.9  |
| 130°   | 730.5  | 732.4  | 734.2  | 736.0  | 737.8  | 738.3  | 737.7  | 737.0  | 736.3  | 735.6  | 734.7  |
| 132.5° | 768.1  | 769.9  | 771.7  | 773.7  | 775.5  | 776.1  | 775.6  | 775.1  | 774.6  | 774.1  | 773.0  |
| 135°   | 825.7  | 827.0  | 828.4  | 829.7  | 831.1  | 831.6  | 831.4  | 831.2  | 831.0  | 830.7  | 829.8  |
| 137.5° | 878.9  | 880.0  | 881.1  | 882.2  | 883.4  | 884.2  | 884.8  | 885.4  | 886.1  | 886.7  | 885.7  |
| 140°   | 915.6  | 916.9  | 918.0  | 919.1  | 920.2  | 920.9  | 921.1  | 921.4  | 921.6  | 921.8  | 921.6  |
| 142.5° | 949.3  | 950.4  | 951.5  | 952.6  | 953.8  | 954.5  | 954.9  | 955.3  | 955.8  | 956.2  | 955.9  |
| 145°   | 1001.6 | 1002.1 | 1002.5 | 1003.0 | 1003.4 | 1004.0 | 1004.7 | 1005.4 | 1006.0 | 1006.7 | 1006.5 |
| 147.5° | 1047.4 | 1048.2 | 1049.0 | 1050.0 | 1050.8 | 1051.5 | 1052.1 | 1052.8 | 1053.4 | 1054.0 | 1054.0 |
| 150°   | 1079.3 | 1079.8 | 1080.3 | 1080.8 | 1081.2 | 1081.7 | 1082.1 | 1082.6 | 1083.0 | 1083.5 | 1083.5 |
| 152.5° | 1105.6 | 1106.2 | 1106.8 | 1107.5 | 1108.1 | 1108.5 | 1108.8 | 1109.1 | 1109.4 | 1109.6 | 1110.0 |
| 155°   | 1146.9 | 1146.9 | 1146.9 | 1146.9 | 1146.9 | 1147.0 | 1147.2 | 1147.5 | 1147.7 | 1147.9 | 1148.8 |
| 157.5° | 1182.1 | 1181.8 | 1181.5 | 1181.2 | 1181.0 | 1180.9 | 1181.1 | 1181.3 | 1181.5 | 1181.6 | 1182.7 |
| 160°   | 1204.2 | 1203.8 | 1203.3 | 1202.9 | 1202.3 | 1202.1 | 1202.1 | 1202.1 | 1202.1 | 1202.1 | 1203.3 |
| 162.5° | 1223.9 | 1223.2 | 1222.5 | 1221.9 | 1221.3 | 1221.0 | 1221.2 | 1221.4 | 1221.6 | 1221.8 | 1222.9 |
| 165°   | 1249.2 | 1248.5 | 1247.9 | 1247.2 | 1246.5 | 1246.2 | 1246.2 | 1246.2 | 1246.2 | 1246.2 | 1247.5 |
| 167.5° | 1269.5 | 1268.6 | 1267.7 | 1266.8 | 1265.9 | 1265.5 | 1265.7 | 1265.9 | 1266.1 | 1266.2 | 1267.6 |
| 170°   | 1280.9 | 1280.0 | 1279.1 | 1278.2 | 1277.3 | 1276.9 | 1276.9 | 1276.9 | 1276.9 | 1276.9 | 1278.4 |
| 172.5° | 1289.9 | 1289.0 | 1288.1 | 1287.2 | 1286.3 | 1285.9 | 1285.9 | 1285.9 | 1285.9 | 1285.9 | 1287.3 |
| 175°   | 1299.4 | 1298.5 | 1297.6 | 1296.7 | 1295.8 | 1295.3 | 1295.3 | 1295.3 | 1295.3 | 1295.3 | 1296.7 |
| 177.5° | 1303.2 | 1302.5 | 1301.8 | 1301.0 | 1300.3 | 1300.0 | 1300.0 | 1300.0 | 1300.0 | 1300.0 | 1301.0 |
| 180°   | 1302.4 | 1302.4 | 1302.4 | 1302.4 | 1302.4 | 1302.4 | 1302.4 | 1302.4 | 1302.4 | 1302.4 | 1302.4 |



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CATALOG NUMBER: S123RDIW-S1000D1030U840-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

|        | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 1694.8 | 1694.8 | 1694.8 | 1694.8 | 1694.8 | 1694.8 | 1694.8 | 1694.8 |
| 2.5°   | 1688.0 | 1690.7 | 1693.3 | 1694.5 | 1693.9 | 1693.5 | 1693.0 | 1692.5 |
| 5°     | 1676.9 | 1679.6 | 1682.3 | 1683.4 | 1682.8 | 1682.2 | 1681.6 | 1681.0 |
| 7.5°   | 1653.3 | 1654.8 | 1656.3 | 1656.6 | 1655.5 | 1654.5 | 1653.5 | 1652.3 |
| 10°    | 1632.1 | 1632.4 | 1632.7 | 1632.1 | 1630.5 | 1629.0 | 1627.5 | 1626.0 |
| 12.5°  | 1605.8 | 1605.7 | 1605.5 | 1604.5 | 1602.8 | 1600.9 | 1599.2 | 1597.4 |
| 15°    | 1559.7 | 1558.2 | 1556.7 | 1554.8 | 1552.7 | 1550.5 | 1548.4 | 1546.3 |
| 17.5°  | 1504.6 | 1501.4 | 1498.1 | 1494.9 | 1491.8 | 1488.5 | 1485.4 | 1482.2 |
| 20°    | 1466.8 | 1462.9 | 1459.0 | 1455.1 | 1451.5 | 1447.7 | 1444.1 | 1440.5 |
| 22.5°  | 1426.4 | 1421.5 | 1416.5 | 1412.3 | 1409.0 | 1405.5 | 1402.1 | 1398.7 |
| 25°    | 1360.3 | 1353.8 | 1347.5 | 1342.5 | 1339.2 | 1335.8 | 1332.5 | 1329.1 |
| 27.5°  | 1288.2 | 1279.3 | 1270.3 | 1263.3 | 1258.2 | 1253.0 | 1247.9 | 1242.8 |
| 30°    | 1236.9 | 1226.5 | 1216.1 | 1208.5 | 1203.6 | 1198.7 | 1193.8 | 1188.9 |
| 32.5°  | 1186.5 | 1175.2 | 1163.8 | 1155.6 | 1150.4 | 1145.3 | 1140.1 | 1135.0 |
| 35°    | 1111.8 | 1098.6 | 1085.5 | 1076.2 | 1070.8 | 1065.2 | 1059.8 | 1054.2 |
| 37.5°  | 1031.6 | 1016.6 | 1001.8 | 990.9  | 984.1  | 977.3  | 970.6  | 963.8  |
| 40°    | 975.7  | 959.9  | 943.9  | 932.5  | 925.4  | 918.5  | 911.4  | 904.4  |
| 42.5°  | 922.2  | 904.8  | 887.5  | 875.7  | 869.4  | 863.1  | 856.8  | 850.5  |
| 45°    | 843.4  | 826.1  | 808.6  | 796.3  | 788.9  | 781.6  | 774.3  | 767.0  |
| 47.5°  | 762.0  | 743.2  | 724.2  | 711.4  | 704.9  | 698.4  | 691.9  | 685.3  |
| 50°    | 707.1  | 688.1  | 669.2  | 656.2  | 649.2  | 642.2  | 635.2  | 628.1  |
| 52.5°  | 654.0  | 634.3  | 614.6  | 601.6  | 595.3  | 589.1  | 582.8  | 576.4  |
| 55°    | 574.8  | 557.1  | 539.4  | 527.5  | 521.4  | 515.2  | 509.2  | 503.0  |
| 57.5°  | 497.1  | 480.3  | 463.6  | 452.6  | 447.5  | 442.2  | 437.1  | 431.8  |
| 60°    | 448.1  | 431.6  | 415.1  | 404.2  | 399.1  | 393.8  | 388.7  | 383.4  |
| 62.5°  | 399.4  | 384.0  | 368.4  | 357.9  | 352.5  | 347.1  | 341.6  | 336.2  |
| 65°    | 330.2  | 315.2  | 300.2  | 291.0  | 287.7  | 284.4  | 281.0  | 277.6  |
| 67.5°  | 264.1  | 252.9  | 241.8  | 234.3  | 230.8  | 227.1  | 223.5  | 219.9  |
| 70°    | 223.3  | 212.6  | 201.9  | 194.9  | 191.5  | 188.1  | 184.8  | 181.5  |
| 72.5°  | 186.5  | 177.7  | 169.1  | 164.0  | 162.6  | 161.2  | 159.8  | 158.3  |
| 75°    | 139.6  | 136.5  | 133.5  | 131.7  | 131.1  | 130.4  | 129.8  | 129.2  |
| 77.5°  | 105.3  | 103.6  | 102.0  | 100.9  | 100.3  | 99.7   | 99.1   | 98.5   |
| 80°    | 84.7   | 83.8   | 82.9   | 82.2   | 81.6   | 81.0   | 80.3   | 79.7   |
| 82.5°  | 64.9   | 64.0   | 63.1   | 62.6   | 62.5   | 62.4   | 62.2   | 62.1   |
| 85°    | 37.3   | 36.7   | 36.1   | 35.7   | 35.7   | 35.7   | 35.7   | 35.7   |
| 87.5°  | 19.1   | 19.0   | 19.0   | 18.9   | 18.7   | 18.6   | 18.4   | 18.3   |
| 90°    | 26.4   | 27.3   | 28.2   | 28.9   | 29.3   | 29.8   | 30.2   | 30.7   |
| 92.5°  | 40.7   | 41.5   | 42.2   | 42.4   | 42.1   | 41.9   | 41.6   | 41.3   |
| 95°    | 77.6   | 78.5   | 79.4   | 79.8   | 79.8   | 79.8   | 79.8   | 79.8   |
| 97.5°  | 120.6  | 121.6  | 122.7  | 123.1  | 123.0  | 123.0  | 122.9  | 122.8  |
| 100°   | 151.8  | 152.5  | 153.1  | 153.7  | 154.1  | 154.6  | 155.0  | 155.5  |
| 102.5° | 187.7  | 188.4  | 189.1  | 189.5  | 189.3  | 189.2  | 189.1  | 189.0  |
| 105°   | 241.5  | 241.5  | 241.5  | 241.7  | 242.2  | 242.6  | 243.1  | 243.5  |
| 107.5° | 299.6  | 300.3  | 301.0  | 301.2  | 301.0  | 300.7  | 300.4  | 300.1  |
| 110°   | 338.4  | 339.3  | 340.2  | 340.4  | 340.0  | 339.5  | 339.1  | 338.6  |





TEST NUMBER: P332461-840

CATALOG NUMBER: S123RDIW-S1000D1030U840-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

|        | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 377.3  | 378.3  | 379.4  | 379.9  | 379.8  | 379.7  | 379.7  | 379.6  |
| 115°   | 436.3  | 436.6  | 436.8  | 436.8  | 436.6  | 436.3  | 436.1  | 435.9  |
| 117.5° | 495.9  | 495.8  | 495.8  | 495.4  | 494.8  | 494.2  | 493.5  | 492.9  |
| 120°   | 535.6  | 535.4  | 535.2  | 534.8  | 534.4  | 533.9  | 533.5  | 533.0  |
| 122.5° | 575.8  | 575.2  | 574.7  | 574.0  | 573.4  | 572.8  | 572.2  | 571.5  |
| 125°   | 635.6  | 634.7  | 633.8  | 632.9  | 632.0  | 631.1  | 630.2  | 629.2  |
| 127.5° | 694.6  | 693.4  | 692.1  | 690.8  | 689.8  | 688.8  | 687.7  | 686.7  |
| 130°   | 733.8  | 732.9  | 732.0  | 730.7  | 729.1  | 727.5  | 726.0  | 724.4  |
| 132.5° | 771.9  | 770.8  | 769.7  | 768.6  | 767.3  | 766.1  | 764.9  | 763.7  |
| 135°   | 828.9  | 828.0  | 827.1  | 826.5  | 826.0  | 825.6  | 825.1  | 824.7  |
| 137.5° | 884.7  | 883.7  | 882.8  | 881.9  | 881.0  | 880.2  | 879.3  | 878.5  |
| 140°   | 921.4  | 921.1  | 920.9  | 920.0  | 918.4  | 916.9  | 915.2  | 913.6  |
| 142.5° | 955.7  | 955.5  | 955.3  | 954.5  | 953.3  | 952.1  | 950.9  | 949.7  |
| 145°   | 1006.3 | 1006.0 | 1005.8 | 1005.2 | 1004.3 | 1003.4 | 1002.5 | 1001.6 |
| 147.5° | 1054.0 | 1054.0 | 1054.0 | 1053.3 | 1052.0 | 1050.6 | 1049.2 | 1047.8 |
| 150°   | 1083.5 | 1083.5 | 1083.5 | 1082.8 | 1081.5 | 1080.1 | 1078.7 | 1077.3 |
| 152.5° | 1110.3 | 1110.8 | 1111.2 | 1110.8 | 1109.5 | 1108.3 | 1107.1 | 1106.0 |
| 155°   | 1149.7 | 1150.6 | 1151.5 | 1151.2 | 1149.6 | 1148.0 | 1146.5 | 1144.9 |
| 157.5° | 1183.6 | 1184.6 | 1185.5 | 1185.4 | 1184.1 | 1182.9 | 1181.5 | 1180.2 |
| 160°   | 1204.5 | 1205.6 | 1206.7 | 1206.8 | 1205.9 | 1205.0 | 1204.1 | 1203.2 |
| 162.5° | 1224.1 | 1225.2 | 1226.4 | 1226.2 | 1224.8 | 1223.2 | 1221.8 | 1220.3 |
| 165°   | 1248.9 | 1250.2 | 1251.6 | 1251.5 | 1249.9 | 1248.3 | 1246.7 | 1245.2 |
| 167.5° | 1269.0 | 1270.4 | 1271.8 | 1271.8 | 1270.4 | 1269.0 | 1267.6 | 1266.2 |
| 170°   | 1280.0 | 1281.6 | 1283.2 | 1283.2 | 1281.6 | 1280.0 | 1278.4 | 1276.9 |
| 172.5° | 1288.7 | 1290.1 | 1291.5 | 1291.4 | 1289.8 | 1288.2 | 1286.6 | 1285.1 |
| 175°   | 1298.0 | 1299.4 | 1300.7 | 1300.6 | 1299.0 | 1297.4 | 1295.9 | 1294.2 |
| 177.5° | 1302.1 | 1303.2 | 1304.3 | 1304.2 | 1302.9 | 1301.7 | 1300.4 | 1299.2 |
| 180°   | 1302.4 | 1302.4 | 1302.4 | 1302.4 | 1302.4 | 1302.4 | 1302.4 | 1302.4 |

(END OF REPORT)