

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: P332995-940

Luminaire Tested: **SA4XXRDIP-C1195D590U940-4F0-1E-UDD-F1**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P332995-940  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-10,  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: SA4XXRDIP-C1195D590U940-4F0-1E-UDD-F1  
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1195 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6122.9 lumens  
Efficiency: N/A  
Efficacy: 111.1 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24  
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')  
CIE Type: Semi-Direct

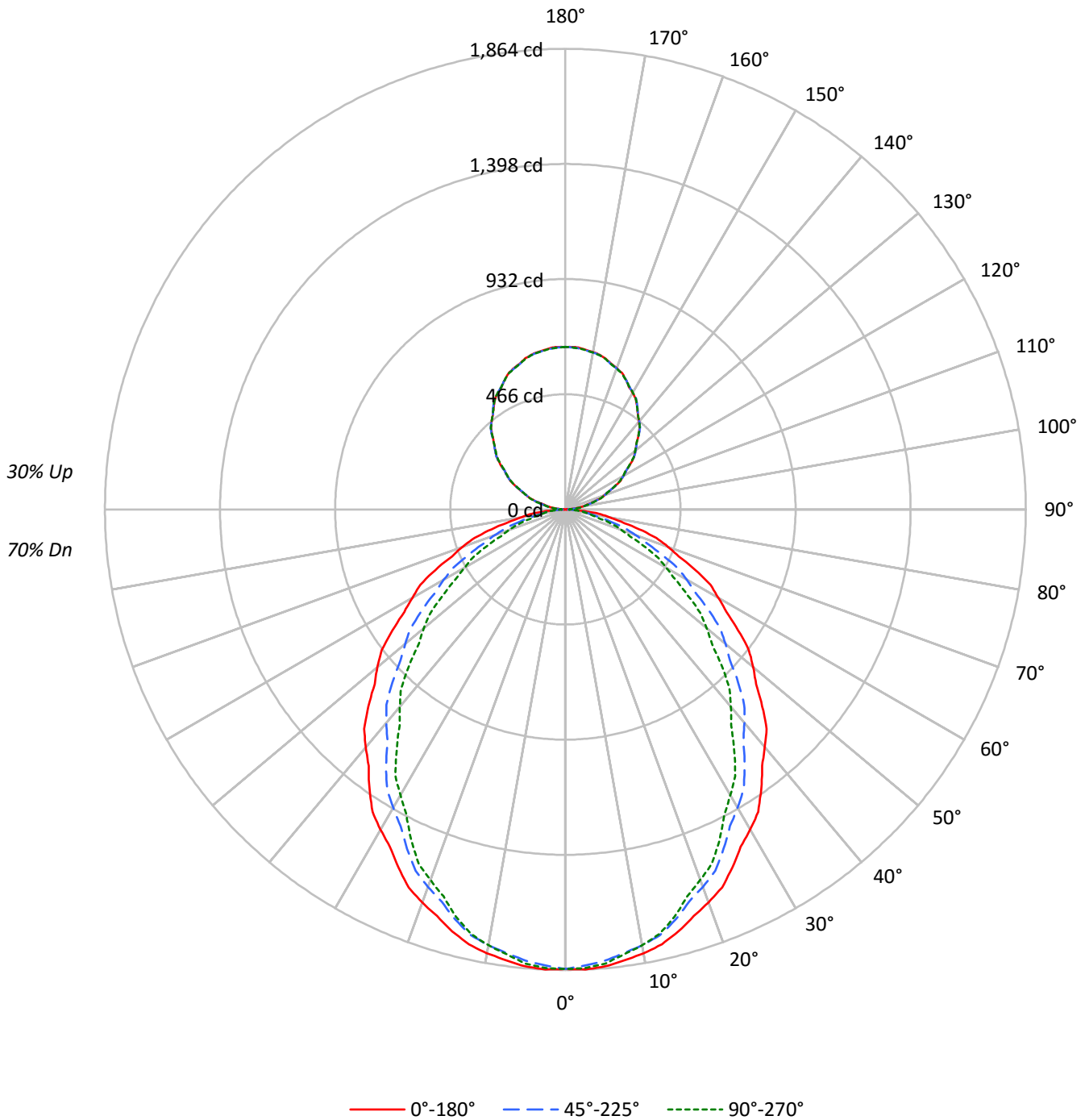
Input Watts (W): 55.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P332995-940

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### Luminous Intensity Polar Plot





TEST NUMBER: P332995-940

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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   | 112 | 112 | 112 | 112 | 106 | 106 | 106 | 106 | 95 | 95 | 95 | 84 | 84 | 84 | 75 | 75 | 75 | 70 |
| 1   | 103 | 98  | 95  | 91  | 97  | 93  | 90  | 87  | 84 | 81 | 79 | 75 | 73 | 71 | 67 | 65 | 64 | 60 |
| 2   | 94  | 86  | 80  | 75  | 89  | 82  | 77  | 72  | 74 | 69 | 66 | 66 | 63 | 60 | 59 | 57 | 54 | 51 |
| 3   | 86  | 76  | 69  | 63  | 81  | 73  | 66  | 61  | 65 | 60 | 56 | 59 | 55 | 51 | 53 | 49 | 47 | 43 |
| 4   | 79  | 68  | 60  | 54  | 74  | 65  | 57  | 52  | 58 | 53 | 48 | 53 | 48 | 44 | 47 | 44 | 41 | 38 |
| 5   | 73  | 61  | 52  | 46  | 68  | 58  | 50  | 45  | 52 | 46 | 42 | 47 | 42 | 39 | 43 | 39 | 36 | 33 |
| 6   | 67  | 55  | 46  | 41  | 63  | 52  | 45  | 39  | 48 | 41 | 37 | 43 | 38 | 34 | 39 | 35 | 31 | 29 |
| 7   | 62  | 50  | 42  | 36  | 59  | 47  | 40  | 35  | 43 | 37 | 32 | 39 | 34 | 30 | 36 | 31 | 28 | 26 |
| 8   | 58  | 45  | 37  | 32  | 55  | 43  | 36  | 31  | 40 | 33 | 29 | 36 | 31 | 27 | 33 | 29 | 25 | 23 |
| 9   | 54  | 42  | 34  | 29  | 51  | 40  | 33  | 28  | 36 | 30 | 26 | 33 | 28 | 25 | 30 | 26 | 23 | 21 |
| 10  | 51  | 38  | 31  | 26  | 48  | 37  | 30  | 25  | 34 | 28 | 24 | 31 | 26 | 22 | 28 | 24 | 21 | 19 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 15012 | 15012 | 15012 |
| 5°  | 15046 | 14862 | 14955 |
| 10° | 14952 | 14684 | 14684 |
| 15° | 14780 | 14375 | 14269 |
| 20° | 14545 | 13970 | 13713 |
| 25° | 14243 | 13495 | 13153 |
| 30° | 13951 | 12995 | 12450 |
| 35° | 13626 | 12476 | 11745 |
| 40° | 13235 | 11884 | 10984 |
| 45° | 12875 | 11298 | 10209 |
| 50° | 12465 | 10623 | 9388  |
| 55° | 12024 | 9920  | 8497  |
| 60° | 11541 | 9150  | 7585  |
| 65° | 11096 | 8187  | 6692  |
| 70° | 10452 | 7124  | 5681  |
| 75° | 9638  | 5908  | 4619  |
| 80° | 8405  | 4500  | 4235  |
| 85° | 7123  | 4085  | 3825  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 174.7  | 2.9       |
| 10°-20°   | 487.1  | 8.0       |
| 20°-30°   | 703.4  | 11.5      |
| 30°-40°   | 797.3  | 13.0      |
| 40°-50°   | 770.0  | 12.6      |
| 50°-60°   | 640.3  | 10.5      |
| 60°-70°   | 442.1  | 7.2       |
| 70°-80°   | 224.1  | 3.7       |
| 80°-90°   | 59.5   | 1.0       |
| 90°-100°  | 43.4   | 0.7       |
| 100°-110° | 128.5  | 2.1       |
| 110°-120° | 218.1  | 3.6       |
| 120°-130° | 287.6  | 4.7       |
| 130°-140° | 322.9  | 5.3       |
| 140°-150° | 317.3  | 5.2       |
| 150°-160° | 266.9  | 4.4       |
| 160°-170° | 177.6  | 2.9       |
| 170°-180° | 62.2   | 1.0       |
| 0°-30°    | 1365.2 | 22.3      |
| 0°-40°    | 2162.6 | 35.3      |
| 0°-60°    | 3572.8 | 58.4      |
| 0°-90°    | 4298.4 | 70.2      |
| 90°-120°  | 389.9  | 6.4       |
| 90°-150°  | 1317.8 | 21.5      |
| 90°-180°  | 1824.0 | 29.8      |
| 0°-180°   | 6122.9 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1860 | 1860  | 1860 | 1860  | 1860 |      |
| 5°   | 1857 | 1850  | 1834 | 1847  | 1845 | 176  |
| 15°  | 1768 | 1754  | 1720 | 1717  | 1707 | 498  |
| 25°  | 1599 | 1572  | 1515 | 1491  | 1477 | 736  |
| 35°  | 1383 | 1336  | 1266 | 1219  | 1192 | 864  |
| 45°  | 1128 | 1073  | 990  | 922   | 894  | 869  |
| 55°  | 854  | 795   | 705  | 633   | 604  | 764  |
| 65°  | 581  | 518   | 429  | 370   | 350  | 573  |
| 75°  | 309  | 256   | 189  | 158   | 148  | 326  |
| 85°  | 77   | 50    | 44   | 41    | 41   | 87   |
| 90°  | 2    | 7     | 11   | 14    | 15   | 6    |
| 95°  | 30   | 35    | 39   | 40    | 40   | 34   |
| 105° | 118  | 119   | 121  | 123   | 124  | 126  |
| 115° | 222  | 222   | 221  | 220   | 220  | 219  |
| 125° | 323  | 323   | 322  | 321   | 320  | 288  |
| 135° | 416  | 419   | 420  | 419   | 417  | 322  |
| 145° | 506  | 508   | 508  | 508   | 507  | 317  |
| 155° | 580  | 580   | 579  | 581   | 579  | 267  |
| 165° | 631  | 630   | 629  | 631   | 630  | 178  |
| 175° | 657  | 654   | 654  | 657   | 654  | 62   |
| 180° | 658  | 658   | 658  | 658   | 658  |      |



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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 1859.6 | 1859.6 | 1859.6 | 1859.6 | 1859.6 | 1859.6 | 1859.6 | 1859.6 | 1859.6 | 1859.6 | 1859.6 |
| 2.5°   | 1864.1 | 1863.1 | 1862.2 | 1861.1 | 1860.1 | 1858.2 | 1855.5 | 1852.6 | 1849.9 | 1847.1 | 1849.9 |
| 5°     | 1856.7 | 1855.5 | 1854.2 | 1853.0 | 1851.7 | 1849.1 | 1845.4 | 1841.6 | 1837.8 | 1834.0 | 1837.1 |
| 7.5°   | 1840.0 | 1838.6 | 1837.3 | 1835.9 | 1834.6 | 1831.5 | 1826.6 | 1821.7 | 1816.7 | 1811.8 | 1813.8 |
| 10°    | 1824.0 | 1822.4 | 1820.9 | 1819.3 | 1817.7 | 1814.0 | 1808.4 | 1802.7 | 1797.0 | 1791.3 | 1792.5 |
| 12.5°  | 1803.5 | 1801.7 | 1799.8 | 1798.0 | 1796.2 | 1791.9 | 1785.2 | 1778.5 | 1771.7 | 1765.1 | 1765.9 |
| 15°    | 1768.4 | 1765.6 | 1762.8 | 1760.0 | 1757.1 | 1751.7 | 1743.8 | 1735.9 | 1728.0 | 1720.0 | 1719.4 |
| 17.5°  | 1726.1 | 1721.9 | 1717.8 | 1713.7 | 1709.6 | 1702.8 | 1693.3 | 1683.8 | 1674.3 | 1664.8 | 1663.0 |
| 20°    | 1693.0 | 1688.9 | 1684.8 | 1680.7 | 1676.6 | 1669.1 | 1658.4 | 1647.6 | 1636.8 | 1626.1 | 1623.5 |
| 22.5°  | 1656.5 | 1652.0 | 1647.3 | 1642.7 | 1638.1 | 1630.0 | 1618.5 | 1607.0 | 1595.4 | 1583.9 | 1580.1 |
| 25°    | 1599.0 | 1593.3 | 1587.6 | 1582.0 | 1576.3 | 1566.9 | 1554.0 | 1541.0 | 1528.0 | 1515.0 | 1509.7 |
| 27.5°  | 1538.6 | 1531.5 | 1524.4 | 1517.2 | 1510.0 | 1499.6 | 1485.7 | 1471.9 | 1457.9 | 1444.1 | 1437.4 |
| 30°    | 1496.6 | 1488.6 | 1480.7 | 1472.7 | 1464.9 | 1453.5 | 1438.6 | 1423.7 | 1408.9 | 1394.0 | 1386.1 |
| 32.5°  | 1452.1 | 1443.1 | 1434.2 | 1425.3 | 1416.4 | 1404.3 | 1388.8 | 1373.5 | 1358.1 | 1342.7 | 1333.6 |
| 35°    | 1382.6 | 1372.4 | 1362.4 | 1352.2 | 1342.1 | 1329.1 | 1313.3 | 1297.5 | 1281.7 | 1265.9 | 1255.1 |
| 37.5°  | 1308.3 | 1297.8 | 1287.4 | 1276.9 | 1266.5 | 1252.5 | 1235.0 | 1217.5 | 1200.0 | 1182.4 | 1170.4 |
| 40°    | 1255.9 | 1245.5 | 1235.0 | 1224.6 | 1214.1 | 1199.9 | 1181.9 | 1163.8 | 1145.8 | 1127.7 | 1114.5 |
| 42.5°  | 1205.8 | 1194.8 | 1183.8 | 1172.9 | 1162.0 | 1147.1 | 1128.3 | 1109.5 | 1090.7 | 1071.9 | 1058.4 |
| 45°    | 1127.7 | 1116.0 | 1104.3 | 1092.6 | 1080.9 | 1065.5 | 1046.6 | 1027.6 | 1008.6 | 989.6  | 974.1  |
| 47.5°  | 1047.1 | 1035.0 | 1023.0 | 1010.8 | 998.8  | 982.8  | 963.1  | 943.3  | 923.6  | 903.9  | 887.8  |
| 50°    | 992.5  | 980.1  | 967.8  | 955.5  | 943.1  | 926.8  | 906.5  | 886.3  | 866.0  | 845.8  | 830.0  |
| 52.5°  | 936.7  | 924.5  | 912.5  | 900.4  | 888.3  | 871.8  | 851.1  | 830.4  | 809.6  | 788.8  | 772.8  |
| 55°    | 854.3  | 841.7  | 829.0  | 816.4  | 803.7  | 787.1  | 766.5  | 746.0  | 725.4  | 704.8  | 688.4  |
| 57.5°  | 772.8  | 759.7  | 746.5  | 733.4  | 720.2  | 703.6  | 683.3  | 663.0  | 642.7  | 622.5  | 605.8  |
| 60°    | 714.8  | 702.1  | 689.5  | 676.8  | 664.1  | 647.7  | 627.5  | 607.3  | 586.9  | 566.7  | 550.3  |
| 62.5°  | 662.4  | 649.3  | 636.1  | 622.9  | 609.8  | 592.8  | 572.0  | 551.3  | 530.5  | 509.8  | 494.5  |
| 65°    | 580.9  | 567.3  | 553.8  | 540.1  | 526.6  | 509.6  | 489.4  | 469.1  | 448.9  | 428.6  | 415.0  |
| 67.5°  | 496.3  | 483.3  | 470.3  | 457.3  | 444.3  | 428.3  | 409.5  | 390.7  | 371.9  | 353.1  | 341.4  |
| 70°    | 442.8  | 429.5  | 416.3  | 403.0  | 389.7  | 374.0  | 356.0  | 338.0  | 319.9  | 301.8  | 291.4  |
| 72.5°  | 385.8  | 373.9  | 361.9  | 349.8  | 337.8  | 323.2  | 306.2  | 289.2  | 272.2  | 255.1  | 246.2  |
| 75°    | 309.0  | 297.3  | 285.5  | 273.8  | 262.2  | 248.9  | 234.0  | 219.1  | 204.3  | 189.4  | 182.1  |
| 77.5°  | 231.0  | 221.1  | 211.1  | 201.2  | 191.2  | 180.2  | 168.2  | 156.2  | 144.2  | 132.2  | 127.9  |
| 80°    | 180.8  | 171.7  | 162.5  | 153.3  | 144.1  | 134.8  | 125.3  | 115.8  | 106.3  | 96.8   | 95.9   |
| 82.5°  | 137.6  | 129.1  | 120.7  | 112.3  | 103.9  | 96.9   | 91.5   | 86.1   | 80.6   | 75.2   | 74.5   |
| 85°    | 76.9   | 70.5   | 64.2   | 57.9   | 51.5   | 48.0   | 47.0   | 46.0   | 45.1   | 44.1   | 43.5   |
| 87.5°  | 26.5   | 24.7   | 22.9   | 21.1   | 19.4   | 18.5   | 18.4   | 18.4   | 18.3   | 18.2   | 18.1   |
| 90°    | 1.5    | 2.8    | 4.0    | 5.3    | 6.5    | 7.6    | 8.5    | 9.4    | 10.3   | 11.1   | 11.9   |
| 92.5°  | 10.9   | 12.3   | 13.7   | 15.2   | 16.6   | 17.6   | 18.3   | 18.9   | 19.5   | 20.2   | 20.5   |
| 95°    | 30.5   | 31.6   | 32.5   | 33.5   | 34.6   | 35.5   | 36.3   | 37.1   | 37.9   | 38.6   | 39.0   |
| 97.5°  | 53.3   | 54.1   | 54.9   | 55.7   | 56.5   | 57.4   | 58.3   | 59.3   | 60.2   | 61.2   | 61.5   |
| 100°   | 71.2   | 71.7   | 72.1   | 72.6   | 73.0   | 73.7   | 74.7   | 75.8   | 76.8   | 77.8   | 78.0   |
| 102.5° | 89.9   | 90.1   | 90.2   | 90.4   | 90.6   | 91.2   | 92.1   | 93.0   | 94.0   | 94.9   | 95.2   |
| 105°   | 118.5  | 118.6  | 118.7  | 118.9  | 119.0  | 119.2  | 119.7  | 120.1  | 120.6  | 121.0  | 121.4  |
| 107.5° | 148.5  | 148.6  | 148.7  | 148.9  | 149.1  | 149.2  | 149.2  | 149.3  | 149.4  | 149.5  | 149.7  |
| 110°   | 168.9  | 169.1  | 169.3  | 169.5  | 169.8  | 169.8  | 169.7  | 169.6  | 169.5  | 169.3  | 169.2  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 40°   | 45°   | 50°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 190.0 | 190.0 | 190.1 | 190.1 | 190.2 | 190.1 | 189.9 | 189.7 | 189.5 | 189.3 | 189.2 |
| 115°   | 221.8 | 221.8 | 221.8 | 221.8 | 221.8 | 221.6 | 221.4 | 221.1 | 221.0 | 220.7 | 220.6 |
| 117.5° | 251.6 | 251.7 | 251.8 | 251.9 | 252.0 | 252.0 | 251.8 | 251.6 | 251.5 | 251.4 | 250.9 |
| 120°   | 271.6 | 272.1 | 272.5 | 273.0 | 273.4 | 273.5 | 273.1 | 272.8 | 272.4 | 272.1 | 271.5 |
| 122.5° | 292.3 | 292.5 | 292.7 | 292.8 | 293.0 | 293.1 | 292.9 | 292.7 | 292.6 | 292.5 | 292.0 |
| 125°   | 323.0 | 323.0 | 323.0 | 323.0 | 323.0 | 322.9 | 322.8 | 322.7 | 322.5 | 322.4 | 322.2 |
| 127.5° | 350.7 | 351.1 | 351.4 | 351.8 | 352.0 | 352.1 | 352.0 | 351.8 | 351.6 | 351.4 | 351.2 |
| 130°   | 370.2 | 370.6 | 371.0 | 371.3 | 371.6 | 371.8 | 371.8 | 371.8 | 371.8 | 371.8 | 371.6 |
| 132.5° | 390.2 | 390.5 | 390.7 | 390.9 | 391.2 | 391.3 | 391.2 | 391.1 | 391.0 | 390.9 | 390.7 |
| 135°   | 416.5 | 417.2 | 417.9 | 418.6 | 419.3 | 419.5 | 419.5 | 419.5 | 419.5 | 419.5 | 419.4 |
| 137.5° | 445.2 | 445.5 | 445.9 | 446.1 | 446.5 | 446.7 | 446.9 | 447.1 | 447.3 | 447.5 | 447.2 |
| 140°   | 464.3 | 464.6 | 464.8 | 465.0 | 465.2 | 465.4 | 465.4 | 465.4 | 465.4 | 465.4 | 465.2 |
| 142.5° | 481.8 | 482.1 | 482.3 | 482.5 | 482.8 | 482.8 | 482.7 | 482.6 | 482.5 | 482.4 | 482.4 |
| 145°   | 506.0 | 506.5 | 506.9 | 507.4 | 507.8 | 508.1 | 508.3 | 508.4 | 508.5 | 508.5 | 508.5 |
| 147.5° | 530.0 | 530.6 | 531.1 | 531.6 | 532.3 | 532.4 | 532.4 | 532.3 | 532.2 | 532.1 | 532.0 |
| 150°   | 544.7 | 545.2 | 545.6 | 546.1 | 546.5 | 546.7 | 546.7 | 546.7 | 546.7 | 546.7 | 546.7 |
| 152.5° | 558.6 | 558.8 | 559.1 | 559.4 | 559.6 | 559.8 | 559.9 | 560.0 | 560.1 | 560.2 | 560.4 |
| 155°   | 579.8 | 579.8 | 579.8 | 579.8 | 579.8 | 579.7 | 579.6 | 579.5 | 579.4 | 579.3 | 579.7 |
| 157.5° | 597.7 | 597.4 | 597.3 | 597.1 | 596.9 | 596.7 | 596.7 | 596.7 | 596.7 | 596.6 | 597.0 |
| 160°   | 608.2 | 608.1 | 608.1 | 608.0 | 607.8 | 607.7 | 607.6 | 607.5 | 607.3 | 607.3 | 607.6 |
| 162.5° | 618.0 | 617.8 | 617.4 | 617.2 | 616.9 | 616.6 | 616.5 | 616.4 | 616.4 | 616.2 | 616.8 |
| 165°   | 631.2 | 630.8 | 630.4 | 630.2 | 629.8 | 629.5 | 629.3 | 629.1 | 628.8 | 628.7 | 629.3 |
| 167.5° | 641.2 | 640.8 | 640.2 | 639.8 | 639.4 | 639.1 | 639.1 | 639.2 | 639.2 | 639.2 | 639.9 |
| 170°   | 646.9 | 646.4 | 645.8 | 645.2 | 644.6 | 644.4 | 644.5 | 644.6 | 644.8 | 644.9 | 645.6 |
| 172.5° | 650.9 | 650.5 | 650.1 | 649.6 | 649.1 | 648.9 | 648.9 | 648.9 | 648.9 | 649.0 | 649.7 |
| 175°   | 656.6 | 656.0 | 655.5 | 654.9 | 654.3 | 654.0 | 653.9 | 653.8 | 653.6 | 653.5 | 654.3 |
| 177.5° | 658.4 | 658.0 | 657.5 | 657.1 | 656.6 | 656.4 | 656.4 | 656.4 | 656.4 | 656.4 | 657.0 |
| 180°   | 657.6 | 657.6 | 657.6 | 657.6 | 657.6 | 657.6 | 657.6 | 657.6 | 657.6 | 657.6 | 657.6 |



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**CANDELA DISTRIBUTION (continued):**

|        | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 1859.6 | 1859.6 | 1859.6 | 1859.6 | 1859.6 | 1859.6 | 1859.6 | 1859.6 |
| 2.5°   | 1852.6 | 1855.5 | 1858.2 | 1859.5 | 1859.2 | 1858.9 | 1858.7 | 1858.5 |
| 5°     | 1840.3 | 1843.4 | 1846.6 | 1847.9 | 1847.3 | 1846.6 | 1846.0 | 1845.4 |
| 7.5°   | 1815.8 | 1817.8 | 1819.9 | 1820.3 | 1819.4 | 1818.4 | 1817.3 | 1816.3 |
| 10°    | 1793.8 | 1795.0 | 1796.4 | 1796.4 | 1795.0 | 1793.8 | 1792.5 | 1791.3 |
| 12.5°  | 1766.6 | 1767.4 | 1768.1 | 1767.5 | 1765.9 | 1764.1 | 1762.3 | 1760.5 |
| 15°    | 1718.8 | 1718.1 | 1717.5 | 1716.1 | 1713.9 | 1711.6 | 1709.5 | 1707.3 |
| 17.5°  | 1661.3 | 1659.5 | 1657.7 | 1655.2 | 1651.8 | 1648.4 | 1645.1 | 1641.7 |
| 20°    | 1621.0 | 1618.5 | 1616.0 | 1612.7 | 1608.6 | 1604.5 | 1600.3 | 1596.2 |
| 22.5°  | 1576.4 | 1572.5 | 1568.8 | 1565.2 | 1561.8 | 1558.4 | 1555.1 | 1551.8 |
| 25°    | 1504.2 | 1498.9 | 1493.5 | 1489.2 | 1486.0 | 1482.9 | 1479.7 | 1476.6 |
| 27.5°  | 1430.8 | 1424.2 | 1417.6 | 1411.9 | 1407.4 | 1402.8 | 1398.3 | 1393.7 |
| 30°    | 1378.1 | 1370.3 | 1362.4 | 1355.8 | 1350.8 | 1345.8 | 1340.7 | 1335.6 |
| 32.5°  | 1324.4 | 1315.2 | 1306.0 | 1299.0 | 1294.2 | 1289.4 | 1284.6 | 1279.8 |
| 35°    | 1244.3 | 1233.6 | 1222.8 | 1214.6 | 1208.9 | 1203.2 | 1197.5 | 1191.8 |
| 37.5°  | 1158.3 | 1146.3 | 1134.3 | 1125.4 | 1119.7 | 1114.0 | 1108.4 | 1102.7 |
| 40°    | 1101.2 | 1087.9 | 1074.6 | 1065.1 | 1059.4 | 1053.6 | 1048.0 | 1042.3 |
| 42.5°  | 1044.8 | 1031.3 | 1017.7 | 1008.0 | 1002.0 | 996.1  | 990.2  | 984.2  |
| 45°    | 958.6  | 943.1  | 927.6  | 916.9  | 911.3  | 905.6  | 899.9  | 894.2  |
| 47.5°  | 871.7  | 855.7  | 839.6  | 828.4  | 822.2  | 815.9  | 809.6  | 803.3  |
| 50°    | 814.1  | 798.3  | 782.5  | 771.6  | 765.6  | 759.6  | 753.6  | 747.5  |
| 52.5°  | 756.7  | 740.7  | 724.5  | 713.4  | 707.1  | 700.9  | 694.6  | 688.3  |
| 55°    | 671.9  | 655.5  | 639.0  | 627.8  | 621.8  | 615.7  | 609.8  | 603.7  |
| 57.5°  | 589.2  | 572.4  | 555.7  | 545.1  | 540.6  | 535.9  | 531.4  | 526.8  |
| 60°    | 533.8  | 517.4  | 500.9  | 490.2  | 485.1  | 480.0  | 474.9  | 469.8  |
| 62.5°  | 479.4  | 464.2  | 449.0  | 439.3  | 435.3  | 431.3  | 427.2  | 423.2  |
| 65°    | 401.4  | 387.8  | 374.2  | 365.4  | 361.7  | 357.8  | 354.1  | 350.3  |
| 67.5°  | 329.8  | 318.0  | 306.3  | 298.4  | 294.2  | 290.0  | 285.8  | 281.6  |
| 70°    | 281.0  | 270.5  | 260.1  | 253.3  | 250.1  | 247.0  | 243.8  | 240.7  |
| 72.5°  | 237.3  | 228.4  | 219.5  | 213.6  | 210.6  | 207.8  | 204.8  | 201.9  |
| 75°    | 174.9  | 167.6  | 160.2  | 155.7  | 153.8  | 151.9  | 150.0  | 148.1  |
| 77.5°  | 123.7  | 119.4  | 115.2  | 112.8  | 112.2  | 111.6  | 111.1  | 110.5  |
| 80°    | 95.0   | 94.0   | 93.0   | 92.4   | 92.1   | 91.8   | 91.5   | 91.1   |
| 82.5°  | 73.8   | 73.1   | 72.4   | 71.9   | 71.6   | 71.2   | 71.0   | 70.6   |
| 85°    | 42.9   | 42.3   | 41.6   | 41.3   | 41.3   | 41.3   | 41.3   | 41.3   |
| 87.5°  | 17.9   | 17.8   | 17.7   | 17.8   | 18.1   | 18.4   | 18.7   | 19.0   |
| 90°    | 12.6   | 13.2   | 13.9   | 14.4   | 14.6   | 14.8   | 15.1   | 15.2   |
| 92.5°  | 21.0   | 21.4   | 21.8   | 22.0   | 22.2   | 22.3   | 22.5   | 22.6   |
| 95°    | 39.3   | 39.7   | 40.0   | 40.2   | 40.2   | 40.2   | 40.2   | 40.2   |
| 97.5°  | 62.0   | 62.3   | 62.8   | 63.0   | 63.0   | 63.0   | 63.0   | 63.0   |
| 100°   | 78.3   | 78.5   | 78.7   | 78.8   | 78.8   | 78.8   | 78.8   | 78.8   |
| 102.5° | 95.5   | 95.9   | 96.1   | 96.4   | 96.5   | 96.6   | 96.7   | 96.8   |
| 105°   | 121.7  | 122.1  | 122.4  | 122.7  | 123.1  | 123.4  | 123.8  | 124.1  |
| 107.5° | 150.1  | 150.3  | 150.7  | 150.9  | 150.8  | 150.8  | 150.8  | 150.8  |
| 110°   | 168.9  | 168.7  | 168.4  | 168.5  | 168.9  | 169.2  | 169.5  | 169.9  |





TEST NUMBER: P332995-940

CATALOG NUMBER: SA4XXRDIP-C1195D590U940-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

|        | 55°   | 60°   | 65°   | 70°   | 75°   | 80°   | 85°   | 90°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 189.2 | 189.1 | 189.1 | 189.1 | 189.2 | 189.2 | 189.3 | 189.4 |
| 115°   | 220.5 | 220.4 | 220.3 | 220.2 | 220.1 | 219.9 | 219.8 | 219.7 |
| 117.5° | 250.6 | 250.2 | 249.8 | 249.5 | 249.2 | 249.1 | 248.8 | 248.6 |
| 120°   | 271.0 | 270.4 | 269.8 | 269.7 | 269.9 | 270.1 | 270.4 | 270.5 |
| 122.5° | 291.7 | 291.3 | 290.9 | 290.5 | 290.1 | 289.7 | 289.3 | 288.9 |
| 125°   | 322.0 | 321.7 | 321.6 | 321.3 | 321.1 | 320.8 | 320.7 | 320.4 |
| 127.5° | 351.0 | 350.8 | 350.5 | 350.4 | 350.2 | 350.0 | 349.8 | 349.6 |
| 130°   | 371.3 | 371.1 | 370.9 | 370.5 | 370.1 | 369.6 | 369.2 | 368.7 |
| 132.5° | 390.5 | 390.2 | 390.0 | 389.8 | 389.6 | 389.4 | 389.2 | 389.1 |
| 135°   | 419.1 | 418.9 | 418.7 | 418.4 | 418.0 | 417.7 | 417.4 | 417.1 |
| 137.5° | 446.8 | 446.6 | 446.3 | 446.1 | 446.2 | 446.3 | 446.4 | 446.5 |
| 140°   | 465.1 | 465.0 | 464.9 | 464.8 | 464.7 | 464.6 | 464.5 | 464.3 |
| 142.5° | 482.4 | 482.4 | 482.3 | 482.3 | 482.3 | 482.3 | 482.2 | 482.2 |
| 145°   | 508.4 | 508.3 | 508.1 | 507.9 | 507.6 | 507.2 | 506.8 | 506.6 |
| 147.5° | 531.9 | 531.8 | 531.7 | 531.6 | 531.5 | 531.4 | 531.3 | 531.2 |
| 150°   | 546.7 | 546.7 | 546.7 | 546.7 | 546.5 | 546.4 | 546.4 | 546.3 |
| 152.5° | 560.7 | 561.0 | 561.2 | 561.2 | 561.0 | 560.6 | 560.4 | 560.1 |
| 155°   | 580.1 | 580.6 | 581.1 | 581.1 | 580.6 | 580.1 | 579.7 | 579.3 |
| 157.5° | 597.4 | 597.7 | 598.1 | 598.0 | 597.6 | 597.3 | 596.8 | 596.5 |
| 160°   | 608.0 | 608.2 | 608.6 | 608.5 | 608.0 | 607.3 | 606.8 | 606.3 |
| 162.5° | 617.4 | 618.0 | 618.7 | 618.7 | 618.1 | 617.5 | 617.0 | 616.4 |
| 165°   | 630.0 | 630.6 | 631.3 | 631.4 | 631.0 | 630.5 | 630.1 | 629.6 |
| 167.5° | 640.5 | 641.2 | 641.9 | 641.9 | 641.2 | 640.5 | 639.8 | 639.1 |
| 170°   | 646.2 | 646.9 | 647.6 | 647.6 | 646.8 | 646.0 | 645.2 | 644.4 |
| 172.5° | 650.5 | 651.3 | 652.0 | 652.0 | 651.2 | 650.4 | 649.6 | 648.9 |
| 175°   | 655.1 | 655.9 | 656.7 | 656.7 | 655.9 | 655.1 | 654.3 | 653.5 |
| 177.5° | 657.6 | 658.3 | 658.9 | 658.9 | 658.2 | 657.5 | 656.7 | 655.9 |
| 180°   | 657.6 | 657.6 | 657.6 | 657.6 | 657.6 | 657.6 | 657.6 | 657.6 |

(END OF REPORT)