

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: P332694-840

Luminaire Tested: **SA4XXDIP-C1195D810U840-4F0-1E-UDD-F**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P332694-840  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: SA4XXDIP-C1195D810U840-4F0-1E-UDD-F  
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1195 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
UPLIGHT 810 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8433.0 lumens  
Efficiency: N/A  
Efficacy: 138.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3  
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')  
CIE Type: Semi-Direct

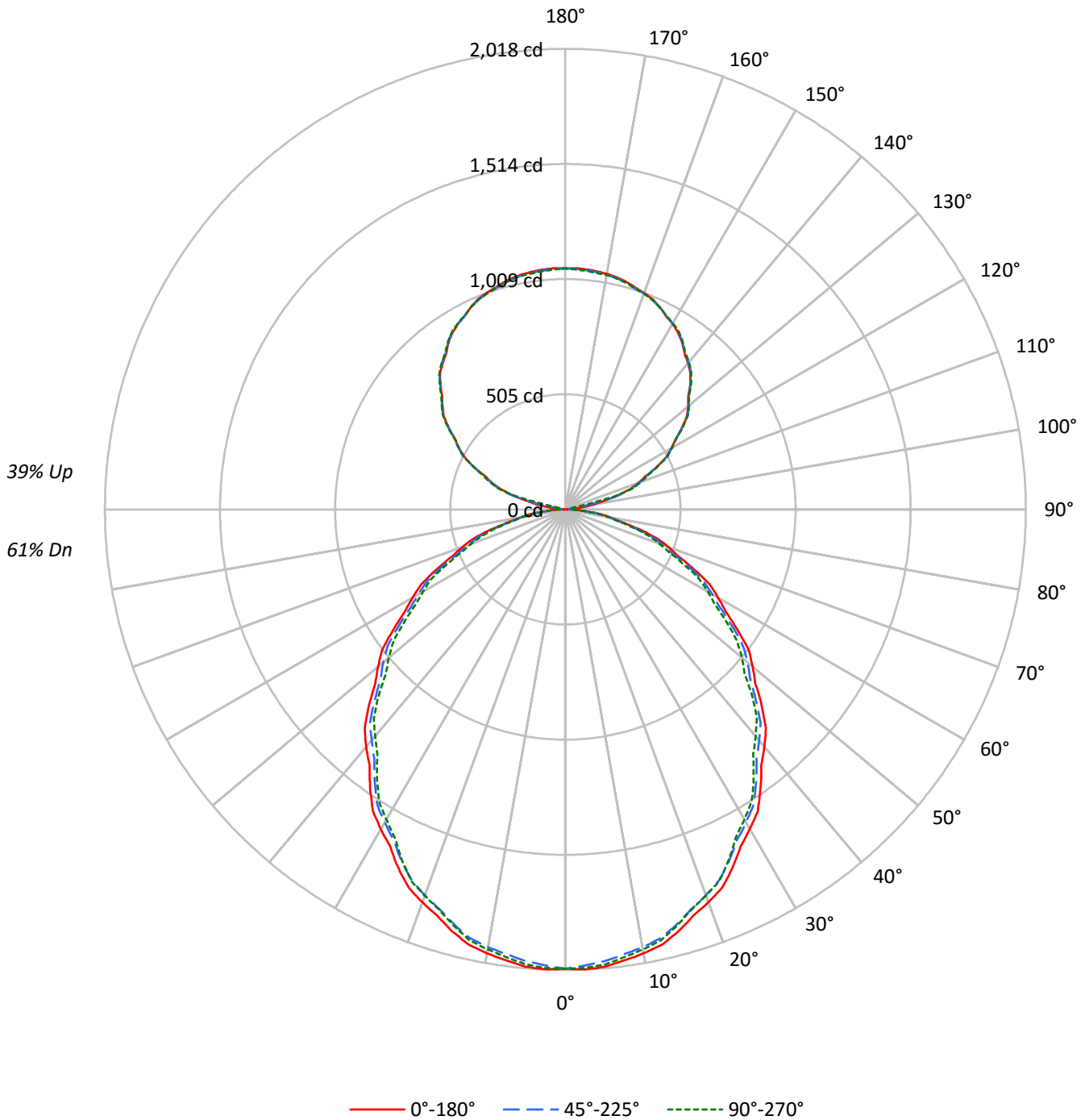
Input Watts (W): 60.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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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   | 110 | 110 | 110 | 110 | 103 | 103 | 103 | 103 | 90 | 90 | 90 | 78 | 78 | 78 | 66 | 66 | 66 | 61 |
| 1   | 100 | 96  | 92  | 88  | 94  | 90  | 86  | 83  | 79 | 76 | 74 | 68 | 66 | 65 | 59 | 57 | 56 | 52 |
| 2   | 91  | 84  | 77  | 72  | 85  | 79  | 73  | 68  | 69 | 65 | 61 | 60 | 57 | 54 | 52 | 49 | 47 | 43 |
| 3   | 83  | 74  | 66  | 60  | 78  | 69  | 62  | 57  | 61 | 56 | 51 | 53 | 49 | 46 | 46 | 43 | 40 | 37 |
| 4   | 76  | 65  | 57  | 51  | 71  | 61  | 54  | 48  | 54 | 48 | 44 | 47 | 43 | 39 | 41 | 37 | 35 | 31 |
| 5   | 70  | 58  | 50  | 44  | 65  | 55  | 47  | 42  | 48 | 42 | 38 | 42 | 38 | 34 | 37 | 33 | 30 | 27 |
| 6   | 65  | 52  | 44  | 38  | 60  | 49  | 42  | 36  | 44 | 38 | 33 | 38 | 34 | 30 | 33 | 30 | 27 | 24 |
| 7   | 60  | 47  | 39  | 33  | 56  | 45  | 37  | 32  | 40 | 34 | 29 | 35 | 30 | 26 | 31 | 27 | 24 | 21 |
| 8   | 56  | 43  | 35  | 30  | 52  | 41  | 33  | 28  | 36 | 30 | 26 | 32 | 27 | 24 | 28 | 24 | 21 | 19 |
| 9   | 52  | 39  | 32  | 26  | 48  | 37  | 30  | 25  | 33 | 27 | 23 | 29 | 25 | 21 | 26 | 22 | 19 | 17 |
| 10  | 48  | 36  | 29  | 24  | 45  | 34  | 27  | 23  | 31 | 25 | 21 | 27 | 23 | 19 | 24 | 20 | 17 | 16 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 16247 | 16247 | 16247 |
| 5°  | 16295 | 16100 | 16216 |
| 10° | 16193 | 15969 | 16047 |
| 15° | 15998 | 15742 | 15782 |
| 20° | 15738 | 15460 | 15474 |
| 25° | 15441 | 15139 | 15097 |
| 30° | 15077 | 14762 | 14626 |
| 35° | 14701 | 14366 | 14177 |
| 40° | 14309 | 13918 | 13663 |
| 45° | 13900 | 13476 | 13218 |
| 50° | 13448 | 13083 | 12679 |
| 55° | 12960 | 12573 | 12165 |
| 60° | 12471 | 12003 | 11638 |
| 65° | 11922 | 11459 | 10997 |
| 70° | 11306 | 10733 | 10315 |
| 75° | 10359 | 9860  | 9607  |
| 80° | 9219  | 8847  | 8619  |
| 85° | 8068  | 7762  | 7614  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 189.5  | 2.2       |
| 10°-20°   | 534.0  | 6.3       |
| 20°-30°   | 786.0  | 9.3       |
| 30°-40°   | 913.7  | 10.8      |
| 40°-50°   | 913.7  | 10.8      |
| 50°-60°   | 799.3  | 9.5       |
| 60°-70°   | 593.6  | 7.0       |
| 70°-80°   | 337.2  | 4.0       |
| 80°-90°   | 100.4  | 1.2       |
| 90°-100°  | 36.1   | 0.4       |
| 100°-110° | 230.2  | 2.7       |
| 110°-120° | 440.4  | 5.2       |
| 120°-130° | 559.1  | 6.6       |
| 130°-140° | 598.2  | 7.1       |
| 140°-150° | 559.3  | 6.6       |
| 150°-160° | 451.1  | 5.3       |
| 160°-170° | 290.9  | 3.4       |
| 170°-180° | 100.3  | 1.2       |
| 0°-30°    | 1509.5 | 17.9      |
| 0°-40°    | 2423.2 | 28.7      |
| 0°-60°    | 4136.2 | 49.0      |
| 0°-90°    | 5167.4 | 61.3      |
| 90°-120°  | 706.7  | 8.4       |
| 90°-150°  | 2423.3 | 28.7      |
| 90°-180°  | 3266.0 | 38.7      |
| 0°-180°   | 8433.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 2012 | 2012  | 2012 | 2012  | 2012 |      |
| 5°   | 2011 | 2004  | 1987 | 2003  | 2001 | 191  |
| 15°  | 1914 | 1907  | 1884 | 1892  | 1888 | 539  |
| 25°  | 1734 | 1722  | 1700 | 1701  | 1695 | 797  |
| 35°  | 1492 | 1480  | 1458 | 1447  | 1438 | 932  |
| 45°  | 1218 | 1205  | 1180 | 1163  | 1158 | 938  |
| 55°  | 921  | 915   | 893  | 875   | 864  | 824  |
| 65°  | 624  | 616   | 600  | 584   | 576  | 618  |
| 75°  | 332  | 324   | 316  | 310   | 308  | 353  |
| 85°  | 87   | 87    | 84   | 84    | 82   | 96   |
| 90°  | 2    | 11    | 17   | 22    | 24   | 7    |
| 95°  | 43   | 18    | 17   | 22    | 23   | 56   |
| 105° | 238  | 242   | 246  | 252   | 225  | 249  |
| 115° | 444  | 446   | 445  | 447   | 447  | 437  |
| 125° | 624  | 627   | 625  | 628   | 628  | 557  |
| 135° | 774  | 773   | 776  | 778   | 779  | 596  |
| 145° | 892  | 894   | 895  | 895   | 897  | 557  |
| 155° | 978  | 979   | 977  | 980   | 978  | 451  |
| 165° | 1032 | 1028  | 1028 | 1034  | 1027 | 292  |
| 175° | 1056 | 1051  | 1052 | 1058  | 1049 | 100  |
| 180° | 1056 | 1056  | 1056 | 1056  | 1056 |      |



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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 2012.5 | 2012.5 | 2012.5 | 2012.5 | 2012.5 | 2012.5 | 2012.5 | 2012.5 | 2012.5 | 2012.5 | 2012.5 |
| 2.5°   | 2017.6 | 2016.8 | 2015.9 | 2015.1 | 2014.2 | 2012.2 | 2009.0 | 2005.9 | 2002.8 | 1999.6 | 2002.5 |
| 5°     | 2010.8 | 2009.4 | 2008.0 | 2006.6 | 2005.2 | 2002.5 | 1998.5 | 1994.6 | 1990.6 | 1986.7 | 1990.6 |
| 7.5°   | 1992.2 | 1990.7 | 1989.3 | 1987.8 | 1986.4 | 1983.6 | 1979.1 | 1974.8 | 1970.4 | 1966.0 | 1969.2 |
| 10°    | 1975.4 | 1974.0 | 1972.6 | 1971.1 | 1969.6 | 1966.6 | 1962.0 | 1957.3 | 1952.7 | 1948.0 | 1950.9 |
| 12.5°  | 1953.5 | 1952.1 | 1950.6 | 1949.1 | 1947.7 | 1944.5 | 1939.6 | 1934.7 | 1929.8 | 1924.8 | 1927.9 |
| 15°    | 1914.1 | 1912.7 | 1911.3 | 1909.9 | 1908.3 | 1905.0 | 1899.6 | 1894.2 | 1888.9 | 1883.5 | 1885.6 |
| 17.5°  | 1866.7 | 1864.9 | 1863.1 | 1861.4 | 1859.6 | 1856.1 | 1851.0 | 1845.9 | 1840.9 | 1835.7 | 1837.1 |
| 20°    | 1831.9 | 1830.1 | 1828.3 | 1826.5 | 1824.7 | 1821.1 | 1815.7 | 1810.4 | 1805.0 | 1799.6 | 1800.7 |
| 22.5°  | 1794.4 | 1792.1 | 1789.8 | 1787.4 | 1785.0 | 1781.1 | 1775.7 | 1770.4 | 1765.0 | 1759.6 | 1761.6 |
| 25°    | 1733.5 | 1731.0 | 1728.5 | 1726.0 | 1723.4 | 1719.7 | 1714.6 | 1709.7 | 1704.7 | 1699.6 | 1700.0 |
| 27.5°  | 1663.9 | 1661.2 | 1658.7 | 1656.1 | 1653.6 | 1649.9 | 1645.3 | 1640.6 | 1636.0 | 1631.2 | 1630.4 |
| 30°    | 1617.4 | 1614.6 | 1611.6 | 1608.8 | 1606.0 | 1602.2 | 1597.5 | 1592.9 | 1588.2 | 1583.6 | 1582.2 |
| 32.5°  | 1568.4 | 1565.8 | 1563.3 | 1560.6 | 1558.0 | 1554.3 | 1549.3 | 1544.4 | 1539.4 | 1534.5 | 1532.8 |
| 35°    | 1491.7 | 1489.1 | 1486.6 | 1484.1 | 1481.6 | 1477.8 | 1472.8 | 1467.8 | 1462.8 | 1457.7 | 1455.2 |
| 37.5°  | 1410.7 | 1408.4 | 1406.1 | 1403.8 | 1401.5 | 1397.7 | 1392.3 | 1386.9 | 1381.5 | 1376.1 | 1373.4 |
| 40°    | 1357.8 | 1354.9 | 1352.0 | 1349.2 | 1346.4 | 1342.2 | 1336.9 | 1331.4 | 1326.1 | 1320.7 | 1317.1 |
| 42.5°  | 1301.0 | 1299.3 | 1297.6 | 1295.9 | 1294.1 | 1290.3 | 1284.3 | 1278.4 | 1272.4 | 1266.5 | 1262.3 |
| 45°    | 1217.5 | 1215.0 | 1212.4 | 1209.9 | 1207.5 | 1203.4 | 1197.6 | 1191.8 | 1186.1 | 1180.4 | 1176.5 |
| 47.5°  | 1130.0 | 1128.3 | 1126.6 | 1124.9 | 1123.2 | 1119.7 | 1114.4 | 1109.1 | 1103.8 | 1098.5 | 1094.1 |
| 50°    | 1070.8 | 1069.3 | 1067.8 | 1066.4 | 1065.0 | 1061.8 | 1056.7 | 1051.8 | 1046.7 | 1041.7 | 1036.7 |
| 52.5°  | 1012.7 | 1011.0 | 1009.3 | 1007.5 | 1005.8 | 1002.3 | 997.0  | 991.7  | 986.4  | 981.1  | 976.6  |
| 55°    | 920.8  | 919.7  | 918.7  | 917.6  | 916.5  | 913.4  | 908.4  | 903.4  | 898.4  | 893.3  | 889.1  |
| 57.5°  | 833.0  | 831.8  | 830.6  | 829.4  | 828.2  | 825.1  | 820.1  | 815.2  | 810.2  | 805.3  | 801.2  |
| 60°    | 772.4  | 770.6  | 768.8  | 767.1  | 765.3  | 762.0  | 757.4  | 752.8  | 748.0  | 743.4  | 740.1  |
| 62.5°  | 713.1  | 711.6  | 710.0  | 708.5  | 707.1  | 703.9  | 698.9  | 694.0  | 689.0  | 684.1  | 681.2  |
| 65°    | 624.1  | 622.3  | 620.5  | 618.6  | 616.9  | 614.2  | 610.7  | 607.0  | 603.5  | 599.9  | 596.3  |
| 67.5°  | 534.4  | 532.8  | 531.1  | 529.5  | 527.9  | 525.2  | 521.8  | 518.4  | 514.9  | 511.5  | 508.1  |
| 70°    | 479.0  | 476.5  | 473.9  | 471.4  | 468.9  | 466.3  | 463.3  | 460.5  | 457.6  | 454.7  | 451.9  |
| 72.5°  | 419.6  | 417.1  | 414.5  | 412.0  | 409.6  | 407.2  | 404.9  | 402.5  | 400.3  | 398.0  | 395.7  |
| 75°    | 332.1  | 330.4  | 328.6  | 326.8  | 325.0  | 323.3  | 321.4  | 319.6  | 317.9  | 316.1  | 314.7  |
| 77.5°  | 248.6  | 247.8  | 247.1  | 246.3  | 245.5  | 244.3  | 242.8  | 241.2  | 239.6  | 238.0  | 237.6  |
| 80°    | 198.3  | 197.2  | 196.2  | 195.1  | 194.1  | 193.2  | 192.5  | 191.7  | 191.0  | 190.3  | 189.6  |
| 82.5°  | 149.4  | 148.9  | 148.3  | 147.8  | 147.3  | 147.0  | 146.8  | 146.7  | 146.5  | 146.4  | 146.0  |
| 85°    | 87.1   | 87.1   | 87.1   | 87.1   | 87.1   | 86.7   | 86.0   | 85.3   | 84.5   | 83.8   | 83.8   |
| 87.5°  | 34.0   | 34.1   | 34.2   | 34.3   | 34.4   | 34.4   | 34.4   | 34.4   | 34.4   | 34.4   | 34.6   |
| 90°    | 2.3    | 4.3    | 6.3    | 8.2    | 10.1   | 11.7   | 13.1   | 14.5   | 16.0   | 17.4   | 18.4   |
| 92.5°  | 10.0   | 10.1   | 10.2   | 10.3   | 10.4   | 11.1   | 12.5   | 13.9   | 15.3   | 16.8   | 17.8   |
| 95°    | 43.4   | 37.5   | 31.5   | 25.5   | 19.6   | 16.7   | 16.9   | 17.1   | 17.2   | 17.4   | 18.4   |
| 97.5°  | 92.2   | 95.9   | 99.7   | 103.4  | 107.1  | 99.2   | 79.6   | 60.0   | 40.4   | 20.8   | 20.9   |
| 100°   | 129.5  | 132.7  | 135.8  | 139.0  | 142.1  | 131.6  | 107.3  | 83.2   | 59.0   | 34.7   | 31.7   |
| 102.5° | 171.2  | 173.5  | 175.8  | 178.1  | 180.5  | 180.1  | 176.8  | 173.7  | 170.6  | 167.4  | 135.2  |
| 105°   | 237.6  | 238.7  | 239.7  | 240.9  | 241.9  | 242.9  | 243.7  | 244.6  | 245.5  | 246.3  | 247.9  |
| 107.5° | 299.4  | 299.9  | 300.4  | 301.0  | 301.5  | 302.4  | 303.6  | 304.8  | 306.0  | 307.2  | 307.9  |
| 110°   | 341.1  | 341.6  | 342.1  | 342.6  | 343.3  | 344.0  | 345.1  | 346.1  | 347.2  | 348.2  | 348.6  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 381.5  | 382.4  | 383.4  | 384.4  | 385.4  | 386.1  | 386.6  | 387.0  | 387.5  | 388.0  | 388.0  |
| 115°   | 443.7  | 444.2  | 444.8  | 445.4  | 445.9  | 446.1  | 445.9  | 445.7  | 445.6  | 445.4  | 445.7  |
| 117.5° | 499.8  | 500.5  | 501.2  | 501.9  | 502.6  | 503.2  | 503.5  | 503.9  | 504.3  | 504.7  | 504.6  |
| 120°   | 537.8  | 538.5  | 539.2  | 539.9  | 540.5  | 540.8  | 540.6  | 540.5  | 540.3  | 540.1  | 540.5  |
| 122.5° | 573.1  | 573.5  | 573.9  | 574.3  | 574.8  | 575.1  | 575.3  | 575.6  | 575.8  | 576.1  | 576.3  |
| 125°   | 623.8  | 624.5  | 625.2  | 625.9  | 626.6  | 626.7  | 626.4  | 626.1  | 625.7  | 625.4  | 625.9  |
| 127.5° | 671.8  | 672.0  | 672.2  | 672.4  | 672.5  | 673.0  | 673.8  | 674.6  | 675.4  | 676.2  | 676.1  |
| 130°   | 702.8  | 703.0  | 703.1  | 703.3  | 703.5  | 703.8  | 704.3  | 704.9  | 705.4  | 705.9  | 706.1  |
| 132.5° | 731.1  | 731.4  | 731.8  | 732.2  | 732.5  | 733.0  | 733.6  | 734.3  | 734.9  | 735.6  | 735.8  |
| 135°   | 773.9  | 773.7  | 773.5  | 773.3  | 773.2  | 773.4  | 774.1  | 774.8  | 775.5  | 776.2  | 776.5  |
| 137.5° | 811.5  | 811.6  | 811.7  | 811.7  | 811.8  | 812.2  | 813.0  | 813.9  | 814.6  | 815.4  | 815.8  |
| 140°   | 836.2  | 836.6  | 836.9  | 837.3  | 837.6  | 838.0  | 838.3  | 838.7  | 839.0  | 839.3  | 839.9  |
| 142.5° | 858.3  | 858.9  | 859.6  | 860.2  | 860.8  | 861.2  | 861.4  | 861.7  | 861.9  | 862.1  | 862.5  |
| 145°   | 892.2  | 892.8  | 893.3  | 893.8  | 894.3  | 894.6  | 894.6  | 894.6  | 894.6  | 894.6  | 894.8  |
| 147.5° | 919.3  | 920.3  | 921.2  | 922.2  | 923.2  | 923.6  | 923.4  | 923.2  | 923.0  | 922.9  | 923.0  |
| 150°   | 938.9  | 939.6  | 940.3  | 941.0  | 941.6  | 941.9  | 941.7  | 941.6  | 941.4  | 941.2  | 941.2  |
| 152.5° | 955.2  | 955.8  | 956.3  | 956.9  | 957.6  | 957.7  | 957.4  | 957.0  | 956.6  | 956.3  | 956.6  |
| 155°   | 978.4  | 978.5  | 978.7  | 978.9  | 979.1  | 978.9  | 978.4  | 977.8  | 977.2  | 976.7  | 977.4  |
| 157.5° | 997.7  | 997.6  | 997.5  | 997.4  | 997.3  | 996.9  | 996.3  | 995.8  | 995.2  | 994.6  | 995.5  |
| 160°   | 1009.2 | 1008.6 | 1008.0 | 1007.5 | 1007.0 | 1006.6 | 1006.5 | 1006.3 | 1006.1 | 1005.9 | 1007.0 |
| 162.5° | 1019.3 | 1018.5 | 1017.8 | 1017.2 | 1016.5 | 1016.1 | 1015.9 | 1015.8 | 1015.6 | 1015.4 | 1016.5 |
| 165°   | 1032.0 | 1031.2 | 1030.3 | 1029.4 | 1028.5 | 1028.0 | 1028.0 | 1028.0 | 1028.0 | 1028.0 | 1029.5 |
| 167.5° | 1042.1 | 1041.2 | 1040.3 | 1039.4 | 1038.4 | 1037.9 | 1037.8 | 1037.7 | 1037.6 | 1037.5 | 1039.1 |
| 170°   | 1047.8 | 1046.7 | 1045.7 | 1044.6 | 1043.6 | 1043.2 | 1043.3 | 1043.5 | 1043.7 | 1043.9 | 1045.2 |
| 172.5° | 1051.6 | 1050.6 | 1049.5 | 1048.4 | 1047.4 | 1046.9 | 1047.1 | 1047.3 | 1047.4 | 1047.6 | 1049.0 |
| 175°   | 1055.7 | 1054.6 | 1053.6 | 1052.6 | 1051.5 | 1051.1 | 1051.3 | 1051.4 | 1051.6 | 1051.8 | 1053.3 |
| 177.5° | 1057.6 | 1056.6 | 1055.6 | 1054.6 | 1053.7 | 1053.3 | 1053.6 | 1053.9 | 1054.2 | 1054.4 | 1055.5 |
| 180°   | 1055.7 | 1055.7 | 1055.7 | 1055.7 | 1055.7 | 1055.7 | 1055.7 | 1055.7 | 1055.7 | 1055.7 | 1055.7 |



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**CANDELA DISTRIBUTION (continued):**

|        | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 2012.5 | 2012.5 | 2012.5 | 2012.5 | 2012.5 | 2012.5 | 2012.5 | 2012.5 |
| 2.5°   | 2005.3 | 2008.2 | 2011.0 | 2012.4 | 2012.1 | 2011.8 | 2011.4 | 2011.1 |
| 5°     | 1994.6 | 1998.5 | 2002.5 | 2004.1 | 2003.4 | 2002.7 | 2002.0 | 2001.1 |
| 7.5°   | 1972.4 | 1975.5 | 1978.6 | 1980.0 | 1979.6 | 1979.1 | 1978.7 | 1978.3 |
| 10°    | 1953.7 | 1956.6 | 1959.4 | 1960.6 | 1959.8 | 1959.1 | 1958.3 | 1957.6 |
| 12.5°  | 1931.1 | 1934.2 | 1937.4 | 1938.4 | 1937.4 | 1936.4 | 1935.4 | 1934.4 |
| 15°    | 1887.7 | 1890.0 | 1892.1 | 1892.6 | 1891.6 | 1890.5 | 1889.4 | 1888.3 |
| 17.5°  | 1838.5 | 1839.9 | 1841.2 | 1841.5 | 1840.8 | 1840.1 | 1839.4 | 1838.7 |
| 20°    | 1801.8 | 1802.8 | 1803.9 | 1804.1 | 1803.4 | 1802.7 | 1802.0 | 1801.2 |
| 22.5°  | 1763.5 | 1765.4 | 1767.4 | 1767.7 | 1766.5 | 1765.1 | 1763.8 | 1762.5 |
| 25°    | 1700.4 | 1700.7 | 1701.1 | 1700.5 | 1699.1 | 1697.7 | 1696.3 | 1694.9 |
| 27.5°  | 1629.5 | 1628.7 | 1627.8 | 1626.5 | 1624.7 | 1623.0 | 1621.1 | 1619.3 |
| 30°    | 1580.6 | 1579.2 | 1577.8 | 1576.2 | 1574.4 | 1572.7 | 1570.8 | 1569.0 |
| 32.5°  | 1531.1 | 1529.3 | 1527.6 | 1525.9 | 1524.1 | 1522.3 | 1520.6 | 1518.7 |
| 35°    | 1452.8 | 1450.3 | 1447.7 | 1445.6 | 1443.8 | 1442.0 | 1440.2 | 1438.5 |
| 37.5°  | 1370.7 | 1368.0 | 1365.2 | 1362.7 | 1360.4 | 1358.0 | 1355.6 | 1353.2 |
| 40°    | 1313.5 | 1309.9 | 1306.4 | 1303.6 | 1301.9 | 1300.1 | 1298.3 | 1296.5 |
| 42.5°  | 1258.2 | 1254.1 | 1249.9 | 1247.2 | 1246.0 | 1244.8 | 1243.5 | 1242.3 |
| 45°    | 1172.6 | 1168.6 | 1164.7 | 1162.2 | 1161.0 | 1159.9 | 1158.9 | 1157.8 |
| 47.5°  | 1089.6 | 1085.2 | 1080.8 | 1077.1 | 1074.4 | 1071.7 | 1068.9 | 1066.2 |
| 50°    | 1031.7 | 1026.6 | 1021.7 | 1018.0 | 1015.9 | 1013.8 | 1011.6 | 1009.5 |
| 52.5°  | 972.2  | 967.8  | 963.3  | 959.8  | 957.0  | 954.3  | 951.6  | 948.9  |
| 55°    | 884.7  | 880.5  | 876.2  | 872.9  | 870.8  | 868.7  | 866.5  | 864.3  |
| 57.5°  | 797.2  | 793.0  | 789.0  | 785.9  | 783.9  | 781.7  | 779.6  | 777.6  |
| 60°    | 736.9  | 733.8  | 730.5  | 728.0  | 726.2  | 724.4  | 722.7  | 720.8  |
| 62.5°  | 678.1  | 675.2  | 672.3  | 669.9  | 668.1  | 666.3  | 664.6  | 662.8  |
| 65°    | 592.7  | 589.2  | 585.5  | 582.9  | 581.1  | 579.3  | 577.4  | 575.7  |
| 67.5°  | 504.6  | 501.2  | 497.8  | 495.7  | 495.2  | 494.7  | 494.2  | 493.7  |
| 70°    | 449.0  | 446.2  | 443.2  | 441.3  | 440.2  | 439.2  | 438.1  | 437.0  |
| 72.5°  | 393.4  | 391.1  | 388.8  | 387.1  | 386.1  | 385.0  | 383.8  | 382.8  |
| 75°    | 313.2  | 311.7  | 310.3  | 309.4  | 309.1  | 308.7  | 308.3  | 308.0  |
| 77.5°  | 237.1  | 236.7  | 236.3  | 235.6  | 234.7  | 233.8  | 232.8  | 231.9  |
| 80°    | 188.8  | 188.1  | 187.4  | 186.9  | 186.5  | 186.1  | 185.8  | 185.4  |
| 82.5°  | 145.5  | 145.1  | 144.7  | 144.3  | 143.9  | 143.6  | 143.2  | 142.9  |
| 85°    | 83.8   | 83.8   | 83.8   | 83.7   | 83.3   | 82.9   | 82.6   | 82.2   |
| 87.5°  | 34.8   | 35.0   | 35.2   | 35.4   | 35.4   | 35.5   | 35.6   | 35.7   |
| 90°    | 19.5   | 20.5   | 21.6   | 22.3   | 22.6   | 23.0   | 23.3   | 23.7   |
| 92.5°  | 18.9   | 19.9   | 20.9   | 21.5   | 21.6   | 21.6   | 21.7   | 21.8   |
| 95°    | 19.5   | 20.5   | 21.6   | 22.2   | 22.4   | 22.5   | 22.7   | 22.9   |
| 97.5°  | 21.1   | 21.2   | 21.3   | 21.4   | 21.6   | 21.7   | 21.9   | 22.1   |
| 100°   | 28.8   | 25.8   | 22.8   | 21.4   | 21.6   | 21.7   | 21.9   | 22.1   |
| 102.5° | 103.0  | 70.9   | 38.7   | 22.6   | 22.6   | 22.6   | 22.7   | 22.7   |
| 105°   | 249.5  | 251.1  | 252.7  | 250.3  | 244.0  | 237.6  | 231.4  | 225.0  |
| 107.5° | 308.7  | 309.4  | 310.2  | 310.9  | 311.6  | 312.3  | 313.0  | 313.7  |
| 110°   | 348.9  | 349.3  | 349.6  | 350.0  | 350.6  | 351.1  | 351.6  | 352.1  |





TEST NUMBER: P332694-840

CATALOG NUMBER: SA4XXDIP-C1195D810U840-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

|        | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 387.9  | 387.8  | 387.7  | 388.0  | 388.7  | 389.4  | 390.0  | 390.7  |
| 115°   | 446.1  | 446.4  | 446.8  | 447.0  | 447.0  | 447.0  | 447.0  | 447.0  |
| 117.5° | 504.5  | 504.5  | 504.4  | 504.3  | 504.3  | 504.2  | 504.1  | 504.1  |
| 120°   | 540.8  | 541.2  | 541.5  | 541.5  | 541.2  | 540.8  | 540.5  | 540.1  |
| 122.5° | 576.5  | 576.7  | 576.9  | 576.8  | 576.5  | 576.1  | 575.8  | 575.4  |
| 125°   | 626.4  | 626.9  | 627.4  | 627.8  | 628.0  | 628.1  | 628.3  | 628.5  |
| 127.5° | 676.0  | 675.9  | 675.8  | 675.7  | 675.5  | 675.4  | 675.3  | 675.1  |
| 130°   | 706.3  | 706.4  | 706.6  | 706.7  | 706.7  | 706.7  | 706.7  | 706.7  |
| 132.5° | 736.0  | 736.1  | 736.3  | 736.3  | 736.2  | 736.0  | 735.9  | 735.8  |
| 135°   | 776.9  | 777.2  | 777.6  | 777.9  | 778.3  | 778.6  | 779.0  | 779.3  |
| 137.5° | 816.1  | 816.5  | 816.9  | 817.0  | 816.9  | 816.8  | 816.7  | 816.6  |
| 140°   | 840.4  | 840.9  | 841.4  | 841.8  | 842.0  | 842.1  | 842.3  | 842.5  |
| 142.5° | 862.8  | 863.2  | 863.6  | 863.8  | 863.8  | 863.9  | 863.9  | 863.9  |
| 145°   | 894.9  | 895.1  | 895.3  | 895.5  | 896.0  | 896.3  | 896.7  | 897.0  |
| 147.5° | 923.2  | 923.3  | 923.4  | 923.6  | 923.8  | 923.9  | 924.1  | 924.3  |
| 150°   | 941.2  | 941.2  | 941.2  | 941.3  | 941.5  | 941.6  | 941.8  | 942.0  |
| 152.5° | 956.9  | 957.3  | 957.5  | 957.6  | 957.5  | 957.4  | 957.3  | 957.2  |
| 155°   | 978.2  | 978.9  | 979.6  | 979.7  | 979.1  | 978.6  | 978.1  | 977.5  |
| 157.5° | 996.4  | 997.3  | 998.3  | 998.3  | 997.3  | 996.4  | 995.5  | 994.6  |
| 160°   | 1008.0 | 1009.2 | 1010.2 | 1010.2 | 1009.2 | 1008.0 | 1007.0 | 1005.9 |
| 162.5° | 1017.5 | 1018.5 | 1019.7 | 1019.6 | 1018.3 | 1017.1 | 1016.0 | 1014.8 |
| 165°   | 1030.9 | 1032.3 | 1033.7 | 1033.6 | 1032.0 | 1030.5 | 1028.9 | 1027.2 |
| 167.5° | 1040.7 | 1042.2 | 1043.7 | 1043.6 | 1041.9 | 1040.1 | 1038.3 | 1036.6 |
| 170°   | 1046.6 | 1048.0 | 1049.5 | 1049.2 | 1047.5 | 1045.8 | 1044.0 | 1042.3 |
| 172.5° | 1050.5 | 1051.9 | 1053.3 | 1053.0 | 1051.2 | 1049.2 | 1047.3 | 1045.4 |
| 175°   | 1054.9 | 1056.5 | 1058.0 | 1057.8 | 1055.7 | 1053.6 | 1051.5 | 1049.4 |
| 177.5° | 1056.7 | 1057.8 | 1058.9 | 1058.6 | 1056.9 | 1055.3 | 1053.6 | 1051.9 |
| 180°   | 1055.7 | 1055.7 | 1055.7 | 1055.7 | 1055.7 | 1055.7 | 1055.7 | 1055.7 |

(END OF REPORT)