

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: P332685-935

Luminaire Tested: **SA4XXDIP-C1195D590U935-4F0-1E-UDD-F**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332685-935
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-C1195D590U935-4F0-1E-UDD-F
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1195 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

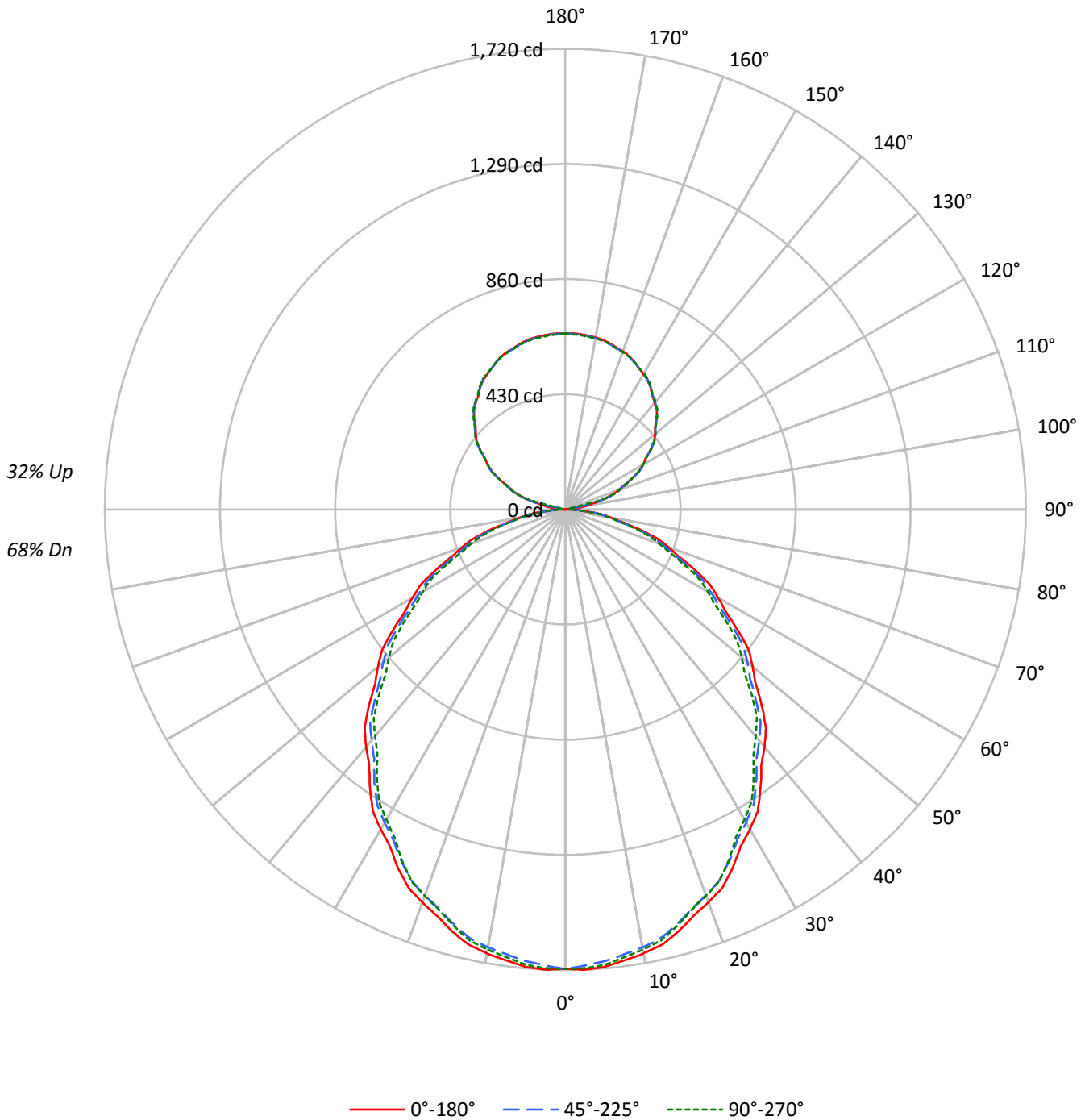
Lumens per Lamp: N/A
Luminaire Lumens: 6436.1 lumens
Efficiency: N/A
Efficacy: 116.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 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: P332685-935
CATALOG NUMBER: SA4XXDIP-C1195D590U935-4F0-1E-UDD-F

Luminous Intensity Polar Plot





TEST NUMBER: P332685-935

CATALOG NUMBER: SA4XXDIP-C1195D590U935-4F0-1E-UDD-F

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 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 112 | 112 | 112 | 112 | 105 | 105 | 105 | 105 | 94 | 94 | 94 | 83 | 83 | 83 | 73 | 73 | 73 | 68 | | | | |
| 1 | 102 | 97 | 93 | 90 | 96 | 92 | 89 | 85 | 82 | 79 | 77 | 73 | 71 | 69 | 65 | 63 | 62 | 58 | | | | |
| 2 | 93 | 85 | 79 | 73 | 87 | 81 | 75 | 70 | 72 | 68 | 64 | 64 | 61 | 58 | 57 | 54 | 52 | 48 | | | | |
| 3 | 85 | 75 | 67 | 61 | 80 | 71 | 64 | 59 | 64 | 58 | 54 | 57 | 52 | 49 | 50 | 47 | 44 | 41 | | | | |
| 4 | 78 | 66 | 58 | 52 | 73 | 63 | 56 | 50 | 56 | 51 | 46 | 51 | 46 | 42 | 45 | 41 | 38 | 35 | | | | |
| 5 | 71 | 59 | 51 | 45 | 67 | 56 | 49 | 43 | 51 | 44 | 40 | 45 | 40 | 36 | 41 | 36 | 33 | 30 | | | | |
| 6 | 66 | 53 | 45 | 39 | 62 | 51 | 43 | 37 | 46 | 39 | 35 | 41 | 36 | 32 | 37 | 33 | 29 | 27 | | | | |
| 7 | 61 | 48 | 40 | 34 | 57 | 46 | 38 | 33 | 42 | 35 | 31 | 37 | 32 | 28 | 34 | 29 | 26 | 24 | | | | |
| 8 | 57 | 44 | 36 | 30 | 53 | 42 | 34 | 29 | 38 | 32 | 27 | 34 | 29 | 25 | 31 | 27 | 23 | 21 | | | | |
| 9 | 53 | 40 | 32 | 27 | 50 | 38 | 31 | 26 | 35 | 29 | 25 | 32 | 27 | 23 | 29 | 24 | 21 | 19 | | | | |
| 10 | 49 | 37 | 29 | 25 | 47 | 35 | 28 | 24 | 32 | 26 | 22 | 29 | 24 | 21 | 27 | 22 | 19 | 17 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 13852 | 13852 | 13852 |
| 5° | 13893 | 13726 | 13827 |
| 10° | 13806 | 13615 | 13682 |
| 15° | 13639 | 13422 | 13456 |
| 20° | 13418 | 13181 | 13193 |
| 25° | 13165 | 12908 | 12871 |
| 30° | 12855 | 12585 | 12470 |
| 35° | 12534 | 12249 | 12086 |
| 40° | 12199 | 11866 | 11649 |
| 45° | 11851 | 11490 | 11270 |
| 50° | 11465 | 11154 | 10810 |
| 55° | 11050 | 10719 | 10372 |
| 60° | 10634 | 10233 | 9923 |
| 65° | 10164 | 9769 | 9377 |
| 70° | 9640 | 9151 | 8795 |
| 75° | 8833 | 8406 | 8191 |
| 80° | 7861 | 7541 | 7350 |
| 85° | 6873 | 6623 | 6493 |



TEST NUMBER: P332685-935

CATALOG NUMBER: SA4XXDIP-C1195D590U935-4F0-1E-UDD-F

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 161.6 | 2.5 |
| 10°-20° | 455.3 | 7.1 |
| 20°-30° | 670.1 | 10.4 |
| 30°-40° | 779.0 | 12.1 |
| 40°-50° | 779.1 | 12.1 |
| 50°-60° | 681.5 | 10.6 |
| 60°-70° | 506.1 | 7.9 |
| 70°-80° | 287.5 | 4.5 |
| 80°-90° | 84.9 | 1.3 |
| 90°-100° | 22.5 | 0.3 |
| 100°-110° | 143.2 | 2.2 |
| 110°-120° | 273.9 | 4.3 |
| 120°-130° | 347.7 | 5.4 |
| 130°-140° | 372.1 | 5.8 |
| 140°-150° | 347.9 | 5.4 |
| 150°-160° | 280.6 | 4.4 |
| 160°-170° | 181.0 | 2.8 |
| 170°-180° | 62.4 | 1.0 |
| 0°-30° | 1287.0 | 20.0 |
| 0°-40° | 2066.0 | 32.1 |
| 0°-60° | 3526.5 | 54.8 |
| 0°-90° | 4405.0 | 68.4 |
| 90°-120° | 439.6 | 6.8 |
| 90°-150° | 1507.3 | 23.4 |
| 90°-180° | 2031.0 | 31.6 |
| 0°-180° | 6436.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1716 | 1716 | 1716 | 1716 | 1716 | |
| 5° | 1714 | 1708 | 1694 | 1708 | 1706 | 163 |
| 15° | 1632 | 1626 | 1606 | 1613 | 1610 | 460 |
| 25° | 1478 | 1468 | 1449 | 1450 | 1445 | 680 |
| 35° | 1272 | 1262 | 1243 | 1233 | 1226 | 795 |
| 45° | 1038 | 1028 | 1006 | 992 | 987 | 800 |
| 55° | 785 | 780 | 762 | 746 | 737 | 703 |
| 65° | 532 | 525 | 511 | 498 | 491 | 527 |
| 75° | 283 | 276 | 270 | 264 | 263 | 301 |
| 85° | 74 | 74 | 72 | 71 | 70 | 82 |
| 90° | 2 | 7 | 11 | 14 | 15 | 5 |
| 95° | 27 | 11 | 11 | 14 | 14 | 35 |
| 105° | 148 | 151 | 153 | 156 | 140 | 155 |
| 115° | 276 | 277 | 277 | 278 | 278 | 272 |
| 125° | 388 | 390 | 389 | 390 | 391 | 346 |
| 135° | 481 | 481 | 483 | 484 | 485 | 371 |
| 145° | 555 | 556 | 556 | 557 | 558 | 347 |
| 155° | 609 | 609 | 608 | 609 | 608 | 280 |
| 165° | 642 | 640 | 640 | 643 | 639 | 181 |
| 175° | 657 | 654 | 654 | 658 | 653 | 63 |
| 180° | 657 | 657 | 657 | 657 | 657 | |



TEST NUMBER: P332685-935

CATALOG NUMBER: SA4XXDIP-C1195D590U935-4F0-1E-UDD-F

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1715.8 | 1715.8 | 1715.8 | 1715.8 | 1715.8 | 1715.8 | 1715.8 | 1715.8 | 1715.8 | 1715.8 | 1715.8 |
| 2.5° | 1720.2 | 1719.5 | 1718.7 | 1718.0 | 1717.3 | 1715.5 | 1712.9 | 1710.2 | 1707.5 | 1704.9 | 1707.3 |
| 5° | 1714.4 | 1713.2 | 1712.0 | 1710.8 | 1709.6 | 1707.3 | 1703.9 | 1700.6 | 1697.2 | 1693.8 | 1697.2 |
| 7.5° | 1698.5 | 1697.3 | 1696.1 | 1694.8 | 1693.6 | 1691.2 | 1687.4 | 1683.7 | 1680.0 | 1676.2 | 1679.0 |
| 10° | 1684.2 | 1683.0 | 1681.8 | 1680.5 | 1679.3 | 1676.7 | 1672.8 | 1668.8 | 1664.8 | 1660.9 | 1663.3 |
| 12.5° | 1665.5 | 1664.3 | 1663.0 | 1661.8 | 1660.6 | 1657.9 | 1653.7 | 1649.5 | 1645.3 | 1641.1 | 1643.7 |
| 15° | 1631.9 | 1630.7 | 1629.5 | 1628.3 | 1627.0 | 1624.2 | 1619.5 | 1615.0 | 1610.4 | 1605.9 | 1607.7 |
| 17.5° | 1591.6 | 1590.0 | 1588.5 | 1587.0 | 1585.4 | 1582.5 | 1578.1 | 1573.8 | 1569.5 | 1565.1 | 1566.3 |
| 20° | 1561.9 | 1560.3 | 1558.8 | 1557.3 | 1555.7 | 1552.6 | 1548.1 | 1543.5 | 1539.0 | 1534.3 | 1535.2 |
| 22.5° | 1529.9 | 1527.9 | 1526.0 | 1523.9 | 1521.9 | 1518.5 | 1514.0 | 1509.4 | 1504.9 | 1500.2 | 1501.9 |
| 25° | 1478.0 | 1475.8 | 1473.7 | 1471.5 | 1469.4 | 1466.2 | 1461.9 | 1457.7 | 1453.4 | 1449.1 | 1449.4 |
| 27.5° | 1418.6 | 1416.3 | 1414.2 | 1412.0 | 1409.8 | 1406.7 | 1402.7 | 1398.8 | 1394.8 | 1390.8 | 1390.1 |
| 30° | 1379.0 | 1376.6 | 1374.1 | 1371.7 | 1369.2 | 1366.0 | 1362.0 | 1358.1 | 1354.1 | 1350.1 | 1348.9 |
| 32.5° | 1337.2 | 1335.0 | 1332.8 | 1330.6 | 1328.4 | 1325.2 | 1320.9 | 1316.7 | 1312.5 | 1308.3 | 1306.8 |
| 35° | 1271.8 | 1269.6 | 1267.5 | 1265.3 | 1263.2 | 1260.0 | 1255.7 | 1251.5 | 1247.2 | 1242.9 | 1240.7 |
| 37.5° | 1202.7 | 1200.8 | 1198.9 | 1196.9 | 1194.9 | 1191.6 | 1187.1 | 1182.5 | 1177.8 | 1173.3 | 1171.0 |
| 40° | 1157.6 | 1155.2 | 1152.7 | 1150.3 | 1147.9 | 1144.4 | 1139.8 | 1135.1 | 1130.6 | 1126.0 | 1122.9 |
| 42.5° | 1109.2 | 1107.8 | 1106.3 | 1104.8 | 1103.4 | 1100.1 | 1095.0 | 1089.9 | 1084.9 | 1079.8 | 1076.2 |
| 45° | 1038.0 | 1035.9 | 1033.7 | 1031.6 | 1029.5 | 1026.0 | 1021.1 | 1016.2 | 1011.2 | 1006.4 | 1003.1 |
| 47.5° | 963.5 | 962.0 | 960.5 | 959.1 | 957.6 | 954.7 | 950.1 | 945.6 | 941.1 | 936.6 | 932.8 |
| 50° | 912.9 | 911.7 | 910.4 | 909.2 | 908.0 | 905.3 | 901.0 | 896.7 | 892.4 | 888.1 | 883.9 |
| 52.5° | 863.4 | 861.9 | 860.5 | 859.0 | 857.6 | 854.5 | 850.1 | 845.5 | 841.0 | 836.5 | 832.7 |
| 55° | 785.1 | 784.1 | 783.3 | 782.3 | 781.4 | 778.8 | 774.5 | 770.3 | 765.9 | 761.6 | 758.0 |
| 57.5° | 710.2 | 709.2 | 708.2 | 707.1 | 706.1 | 703.4 | 699.2 | 695.0 | 690.8 | 686.6 | 683.1 |
| 60° | 658.6 | 657.0 | 655.5 | 654.0 | 652.5 | 649.7 | 645.8 | 641.8 | 637.7 | 633.8 | 631.0 |
| 62.5° | 608.0 | 606.7 | 605.4 | 604.1 | 602.9 | 600.1 | 595.9 | 591.7 | 587.5 | 583.2 | 580.7 |
| 65° | 532.1 | 530.5 | 529.0 | 527.4 | 526.0 | 523.7 | 520.6 | 517.5 | 514.5 | 511.4 | 508.4 |
| 67.5° | 455.6 | 454.3 | 452.8 | 451.4 | 450.0 | 447.8 | 444.9 | 442.0 | 439.0 | 436.1 | 433.2 |
| 70° | 408.4 | 406.2 | 404.1 | 401.9 | 399.8 | 397.5 | 395.0 | 392.6 | 390.1 | 387.7 | 385.3 |
| 72.5° | 357.7 | 355.6 | 353.4 | 351.3 | 349.2 | 347.2 | 345.2 | 343.2 | 341.3 | 339.3 | 337.3 |
| 75° | 283.2 | 281.7 | 280.2 | 278.6 | 277.1 | 275.6 | 274.1 | 272.5 | 271.0 | 269.5 | 268.3 |
| 77.5° | 212.0 | 211.3 | 210.7 | 210.0 | 209.3 | 208.3 | 207.0 | 205.6 | 204.3 | 202.9 | 202.6 |
| 80° | 169.1 | 168.2 | 167.3 | 166.3 | 165.5 | 164.7 | 164.1 | 163.4 | 162.8 | 162.2 | 161.6 |
| 82.5° | 127.3 | 126.9 | 126.5 | 126.1 | 125.6 | 125.4 | 125.2 | 125.1 | 124.9 | 124.8 | 124.5 |
| 85° | 74.2 | 74.2 | 74.2 | 74.2 | 74.2 | 74.0 | 73.4 | 72.8 | 72.1 | 71.5 | 71.5 |
| 87.5° | 28.9 | 28.9 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.7 | 28.6 | 28.6 | 28.7 |
| 90° | 1.5 | 2.7 | 3.9 | 5.1 | 6.3 | 7.3 | 8.2 | 9.0 | 9.9 | 10.8 | 11.5 |
| 92.5° | 6.2 | 6.3 | 6.3 | 6.4 | 6.5 | 6.9 | 7.8 | 8.7 | 9.6 | 10.4 | 11.1 |
| 95° | 27.0 | 23.3 | 19.6 | 15.8 | 12.1 | 10.3 | 10.5 | 10.6 | 10.7 | 10.8 | 11.5 |
| 97.5° | 57.3 | 59.7 | 62.0 | 64.3 | 66.6 | 61.6 | 49.5 | 37.4 | 25.1 | 13.0 | 13.0 |
| 100° | 80.5 | 82.5 | 84.5 | 86.4 | 88.4 | 81.9 | 66.8 | 51.7 | 36.7 | 21.6 | 19.7 |
| 102.5° | 106.5 | 107.9 | 109.3 | 110.8 | 112.3 | 112.0 | 110.0 | 108.1 | 106.1 | 104.1 | 84.1 |
| 105° | 147.8 | 148.5 | 149.1 | 149.8 | 150.4 | 151.0 | 151.6 | 152.1 | 152.7 | 153.3 | 154.2 |
| 107.5° | 186.2 | 186.6 | 186.9 | 187.2 | 187.5 | 188.0 | 188.8 | 189.6 | 190.3 | 191.1 | 191.6 |
| 110° | 212.2 | 212.5 | 212.8 | 213.2 | 213.4 | 214.0 | 214.6 | 215.2 | 215.9 | 216.6 | 216.8 |



TEST NUMBER: P332685-935

CATALOG NUMBER: SA4XXDIP-C1195D590U935-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 237.3 | 237.9 | 238.5 | 239.1 | 239.7 | 240.1 | 240.4 | 240.7 | 241.1 | 241.3 | 241.3 |
| 115° | 276.0 | 276.4 | 276.6 | 277.0 | 277.3 | 277.4 | 277.3 | 277.2 | 277.1 | 277.0 | 277.2 |
| 117.5° | 310.9 | 311.3 | 311.8 | 312.2 | 312.6 | 313.0 | 313.2 | 313.5 | 313.7 | 313.9 | 313.9 |
| 120° | 334.5 | 334.9 | 335.4 | 335.8 | 336.2 | 336.4 | 336.3 | 336.1 | 336.0 | 336.0 | 336.1 |
| 122.5° | 356.5 | 356.7 | 357.0 | 357.2 | 357.5 | 357.7 | 357.9 | 358.0 | 358.2 | 358.3 | 358.4 |
| 125° | 388.0 | 388.4 | 388.9 | 389.3 | 389.8 | 389.9 | 389.6 | 389.4 | 389.2 | 389.0 | 389.3 |
| 127.5° | 417.8 | 417.9 | 418.1 | 418.2 | 418.3 | 418.6 | 419.1 | 419.6 | 420.1 | 420.6 | 420.5 |
| 130° | 437.1 | 437.2 | 437.3 | 437.5 | 437.6 | 437.7 | 438.1 | 438.4 | 438.8 | 439.1 | 439.2 |
| 132.5° | 454.8 | 455.0 | 455.2 | 455.4 | 455.6 | 455.9 | 456.3 | 456.7 | 457.1 | 457.5 | 457.6 |
| 135° | 481.3 | 481.2 | 481.1 | 481.0 | 480.9 | 481.0 | 481.5 | 481.9 | 482.3 | 482.8 | 483.0 |
| 137.5° | 504.8 | 504.8 | 504.9 | 504.9 | 505.0 | 505.2 | 505.7 | 506.2 | 506.7 | 507.1 | 507.4 |
| 140° | 520.1 | 520.3 | 520.6 | 520.7 | 521.0 | 521.2 | 521.4 | 521.7 | 521.9 | 522.1 | 522.4 |
| 142.5° | 533.9 | 534.3 | 534.7 | 535.0 | 535.5 | 535.7 | 535.8 | 536.0 | 536.1 | 536.2 | 536.5 |
| 145° | 555.0 | 555.3 | 555.6 | 555.9 | 556.3 | 556.5 | 556.5 | 556.5 | 556.5 | 556.5 | 556.6 |
| 147.5° | 571.8 | 572.4 | 573.0 | 573.6 | 574.2 | 574.5 | 574.4 | 574.3 | 574.1 | 574.0 | 574.1 |
| 150° | 583.9 | 584.4 | 584.9 | 585.3 | 585.7 | 585.9 | 585.7 | 585.7 | 585.6 | 585.4 | 585.4 |
| 152.5° | 594.2 | 594.5 | 594.9 | 595.2 | 595.6 | 595.6 | 595.5 | 595.3 | 595.0 | 594.9 | 595.0 |
| 155° | 608.6 | 608.6 | 608.7 | 608.8 | 609.0 | 608.8 | 608.6 | 608.2 | 607.9 | 607.5 | 608.0 |
| 157.5° | 620.6 | 620.5 | 620.4 | 620.4 | 620.4 | 620.1 | 619.7 | 619.4 | 619.0 | 618.6 | 619.2 |
| 160° | 627.7 | 627.3 | 627.0 | 626.7 | 626.4 | 626.1 | 626.0 | 625.9 | 625.8 | 625.7 | 626.4 |
| 162.5° | 634.0 | 633.5 | 633.1 | 632.7 | 632.3 | 632.1 | 631.9 | 631.8 | 631.7 | 631.6 | 632.2 |
| 165° | 641.9 | 641.4 | 640.8 | 640.2 | 639.7 | 639.5 | 639.5 | 639.5 | 639.5 | 639.5 | 640.3 |
| 167.5° | 648.2 | 647.6 | 647.0 | 646.5 | 645.9 | 645.6 | 645.6 | 645.5 | 645.4 | 645.3 | 646.4 |
| 170° | 651.8 | 651.1 | 650.4 | 649.8 | 649.1 | 648.8 | 648.9 | 649.0 | 649.2 | 649.3 | 650.1 |
| 172.5° | 654.1 | 653.4 | 652.8 | 652.1 | 651.5 | 651.2 | 651.3 | 651.4 | 651.5 | 651.6 | 652.6 |
| 175° | 656.7 | 656.0 | 655.3 | 654.7 | 654.0 | 653.8 | 653.8 | 654.0 | 654.1 | 654.2 | 655.1 |
| 177.5° | 657.8 | 657.2 | 656.6 | 656.0 | 655.4 | 655.1 | 655.3 | 655.5 | 655.7 | 655.8 | 656.6 |
| 180° | 656.7 | 656.7 | 656.7 | 656.7 | 656.7 | 656.7 | 656.7 | 656.7 | 656.7 | 656.7 | 656.7 |



TEST NUMBER: P332685-935

CATALOG NUMBER: SA4XXDIP-C1195D590U935-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1715.8 | 1715.8 | 1715.8 | 1715.8 | 1715.8 | 1715.8 | 1715.8 | 1715.8 |
| 2.5° | 1709.7 | 1712.2 | 1714.6 | 1715.7 | 1715.5 | 1715.2 | 1714.9 | 1714.7 |
| 5° | 1700.6 | 1703.9 | 1707.3 | 1708.7 | 1708.1 | 1707.4 | 1706.8 | 1706.2 |
| 7.5° | 1681.6 | 1684.3 | 1687.0 | 1688.2 | 1687.8 | 1687.4 | 1687.0 | 1686.7 |
| 10° | 1665.7 | 1668.2 | 1670.6 | 1671.5 | 1670.9 | 1670.3 | 1669.7 | 1669.0 |
| 12.5° | 1646.4 | 1649.1 | 1651.8 | 1652.7 | 1651.8 | 1651.0 | 1650.1 | 1649.2 |
| 15° | 1609.5 | 1611.4 | 1613.2 | 1613.6 | 1612.7 | 1611.8 | 1610.8 | 1610.0 |
| 17.5° | 1567.5 | 1568.7 | 1569.8 | 1570.0 | 1569.4 | 1568.8 | 1568.2 | 1567.6 |
| 20° | 1536.2 | 1537.1 | 1538.0 | 1538.2 | 1537.6 | 1537.0 | 1536.4 | 1535.7 |
| 22.5° | 1503.6 | 1505.2 | 1506.8 | 1507.1 | 1506.1 | 1504.9 | 1503.8 | 1502.7 |
| 25° | 1449.8 | 1450.0 | 1450.4 | 1449.8 | 1448.6 | 1447.4 | 1446.2 | 1445.0 |
| 27.5° | 1389.3 | 1388.6 | 1387.8 | 1386.7 | 1385.2 | 1383.7 | 1382.2 | 1380.6 |
| 30° | 1347.6 | 1346.4 | 1345.2 | 1343.8 | 1342.3 | 1340.8 | 1339.3 | 1337.7 |
| 32.5° | 1305.4 | 1303.9 | 1302.4 | 1301.0 | 1299.4 | 1297.9 | 1296.4 | 1294.9 |
| 35° | 1238.6 | 1236.5 | 1234.3 | 1232.5 | 1231.0 | 1229.4 | 1227.9 | 1226.4 |
| 37.5° | 1168.6 | 1166.3 | 1164.0 | 1161.8 | 1159.9 | 1157.8 | 1155.8 | 1153.7 |
| 40° | 1119.9 | 1116.8 | 1113.8 | 1111.5 | 1110.0 | 1108.5 | 1106.9 | 1105.4 |
| 42.5° | 1072.7 | 1069.2 | 1065.7 | 1063.3 | 1062.3 | 1061.3 | 1060.2 | 1059.2 |
| 45° | 999.7 | 996.3 | 993.0 | 990.8 | 989.9 | 988.9 | 988.1 | 987.1 |
| 47.5° | 929.0 | 925.2 | 921.4 | 918.3 | 916.0 | 913.7 | 911.4 | 909.0 |
| 50° | 879.6 | 875.3 | 871.1 | 868.0 | 866.2 | 864.4 | 862.5 | 860.7 |
| 52.5° | 828.9 | 825.1 | 821.3 | 818.3 | 816.0 | 813.6 | 811.3 | 809.0 |
| 55° | 754.3 | 750.7 | 747.0 | 744.2 | 742.4 | 740.6 | 738.7 | 736.9 |
| 57.5° | 679.7 | 676.1 | 672.7 | 670.0 | 668.3 | 666.5 | 664.7 | 663.0 |
| 60° | 628.3 | 625.6 | 622.8 | 620.7 | 619.1 | 617.6 | 616.1 | 614.6 |
| 62.5° | 578.2 | 575.7 | 573.2 | 571.2 | 569.6 | 568.1 | 566.6 | 565.1 |
| 65° | 505.3 | 502.3 | 499.2 | 497.0 | 495.4 | 493.9 | 492.3 | 490.9 |
| 67.5° | 430.2 | 427.3 | 424.4 | 422.7 | 422.2 | 421.8 | 421.4 | 420.9 |
| 70° | 382.8 | 380.4 | 377.9 | 376.3 | 375.3 | 374.4 | 373.5 | 372.6 |
| 72.5° | 335.4 | 333.5 | 331.5 | 330.0 | 329.2 | 328.2 | 327.3 | 326.4 |
| 75° | 267.0 | 265.8 | 264.6 | 263.8 | 263.6 | 263.2 | 262.9 | 262.6 |
| 77.5° | 202.2 | 201.8 | 201.5 | 200.9 | 200.1 | 199.3 | 198.5 | 197.7 |
| 80° | 161.0 | 160.4 | 159.8 | 159.4 | 159.0 | 158.7 | 158.4 | 158.1 |
| 82.5° | 124.1 | 123.7 | 123.4 | 123.0 | 122.7 | 122.4 | 122.1 | 121.8 |
| 85° | 71.5 | 71.5 | 71.5 | 71.4 | 71.0 | 70.7 | 70.4 | 70.1 |
| 87.5° | 28.8 | 28.9 | 29.1 | 29.2 | 29.2 | 29.3 | 29.3 | 29.4 |
| 90° | 12.1 | 12.7 | 13.4 | 13.9 | 14.1 | 14.3 | 14.6 | 14.7 |
| 92.5° | 11.7 | 12.4 | 13.0 | 13.3 | 13.4 | 13.4 | 13.5 | 13.5 |
| 95° | 12.1 | 12.7 | 13.4 | 13.8 | 13.9 | 14.0 | 14.1 | 14.2 |
| 97.5° | 13.1 | 13.2 | 13.3 | 13.3 | 13.4 | 13.5 | 13.6 | 13.8 |
| 100° | 17.9 | 16.0 | 14.2 | 13.3 | 13.4 | 13.5 | 13.6 | 13.8 |
| 102.5° | 64.1 | 44.1 | 24.0 | 14.0 | 14.1 | 14.1 | 14.1 | 14.1 |
| 105° | 155.2 | 156.2 | 157.1 | 155.7 | 151.8 | 147.8 | 143.9 | 140.0 |
| 107.5° | 192.0 | 192.5 | 193.0 | 193.4 | 193.8 | 194.2 | 194.7 | 195.1 |
| 110° | 217.1 | 217.2 | 217.5 | 217.7 | 218.1 | 218.3 | 218.7 | 219.0 |



TEST NUMBER: P332685-935

CATALOG NUMBER: SA4XXDIP-C1195D590U935-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 241.3 | 241.3 | 241.2 | 241.3 | 241.8 | 242.2 | 242.6 | 243.0 |
| 115° | 277.4 | 277.7 | 277.8 | 278.0 | 278.0 | 278.0 | 278.0 | 278.0 |
| 117.5° | 313.8 | 313.8 | 313.7 | 313.7 | 313.7 | 313.7 | 313.6 | 313.6 |
| 120° | 336.4 | 336.6 | 336.8 | 336.8 | 336.6 | 336.4 | 336.1 | 336.0 |
| 122.5° | 358.6 | 358.7 | 358.9 | 358.8 | 358.6 | 358.3 | 358.2 | 357.9 |
| 125° | 389.6 | 389.9 | 390.3 | 390.5 | 390.6 | 390.7 | 390.8 | 391.0 |
| 127.5° | 420.5 | 420.4 | 420.3 | 420.3 | 420.2 | 420.1 | 420.0 | 419.9 |
| 130° | 439.3 | 439.4 | 439.5 | 439.5 | 439.5 | 439.5 | 439.5 | 439.5 |
| 132.5° | 457.8 | 457.9 | 458.0 | 458.0 | 457.9 | 457.8 | 457.7 | 457.6 |
| 135° | 483.2 | 483.5 | 483.6 | 483.9 | 484.1 | 484.3 | 484.6 | 484.7 |
| 137.5° | 507.6 | 507.9 | 508.1 | 508.2 | 508.2 | 508.1 | 508.0 | 507.9 |
| 140° | 522.7 | 523.1 | 523.4 | 523.6 | 523.7 | 523.8 | 523.9 | 524.0 |
| 142.5° | 536.7 | 536.9 | 537.2 | 537.4 | 537.4 | 537.4 | 537.4 | 537.4 |
| 145° | 556.6 | 556.8 | 556.9 | 557.1 | 557.2 | 557.5 | 557.8 | 557.9 |
| 147.5° | 574.2 | 574.3 | 574.4 | 574.5 | 574.6 | 574.7 | 574.8 | 574.9 |
| 150° | 585.4 | 585.4 | 585.4 | 585.5 | 585.6 | 585.7 | 585.8 | 585.9 |
| 152.5° | 595.2 | 595.4 | 595.6 | 595.6 | 595.6 | 595.5 | 595.4 | 595.4 |
| 155° | 608.4 | 608.8 | 609.2 | 609.3 | 609.0 | 608.6 | 608.4 | 608.0 |
| 157.5° | 619.7 | 620.4 | 620.9 | 620.9 | 620.4 | 619.7 | 619.2 | 618.6 |
| 160° | 627.0 | 627.7 | 628.4 | 628.4 | 627.7 | 627.0 | 626.4 | 625.7 |
| 162.5° | 632.9 | 633.5 | 634.2 | 634.2 | 633.4 | 632.7 | 632.0 | 631.2 |
| 165° | 641.2 | 642.0 | 643.0 | 642.9 | 641.9 | 640.9 | 640.0 | 638.9 |
| 167.5° | 647.3 | 648.2 | 649.2 | 649.1 | 648.1 | 647.0 | 645.8 | 644.8 |
| 170° | 651.0 | 651.9 | 652.8 | 652.6 | 651.6 | 650.5 | 649.4 | 648.3 |
| 172.5° | 653.4 | 654.3 | 655.1 | 655.0 | 653.8 | 652.6 | 651.4 | 650.2 |
| 175° | 656.2 | 657.1 | 658.1 | 658.0 | 656.7 | 655.3 | 654.0 | 652.7 |
| 177.5° | 657.3 | 658.0 | 658.7 | 658.5 | 657.5 | 656.4 | 655.3 | 654.3 |
| 180° | 656.7 | 656.7 | 656.7 | 656.7 | 656.7 | 656.7 | 656.7 | 656.7 |

(END OF REPORT)