

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: P332682

Luminaire Tested: **SA4XXDIP-C1195D590U835-4F0-1E-UDD-D**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332682
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-C1195D590U835-4F0-1E-UDD-D
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1195 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

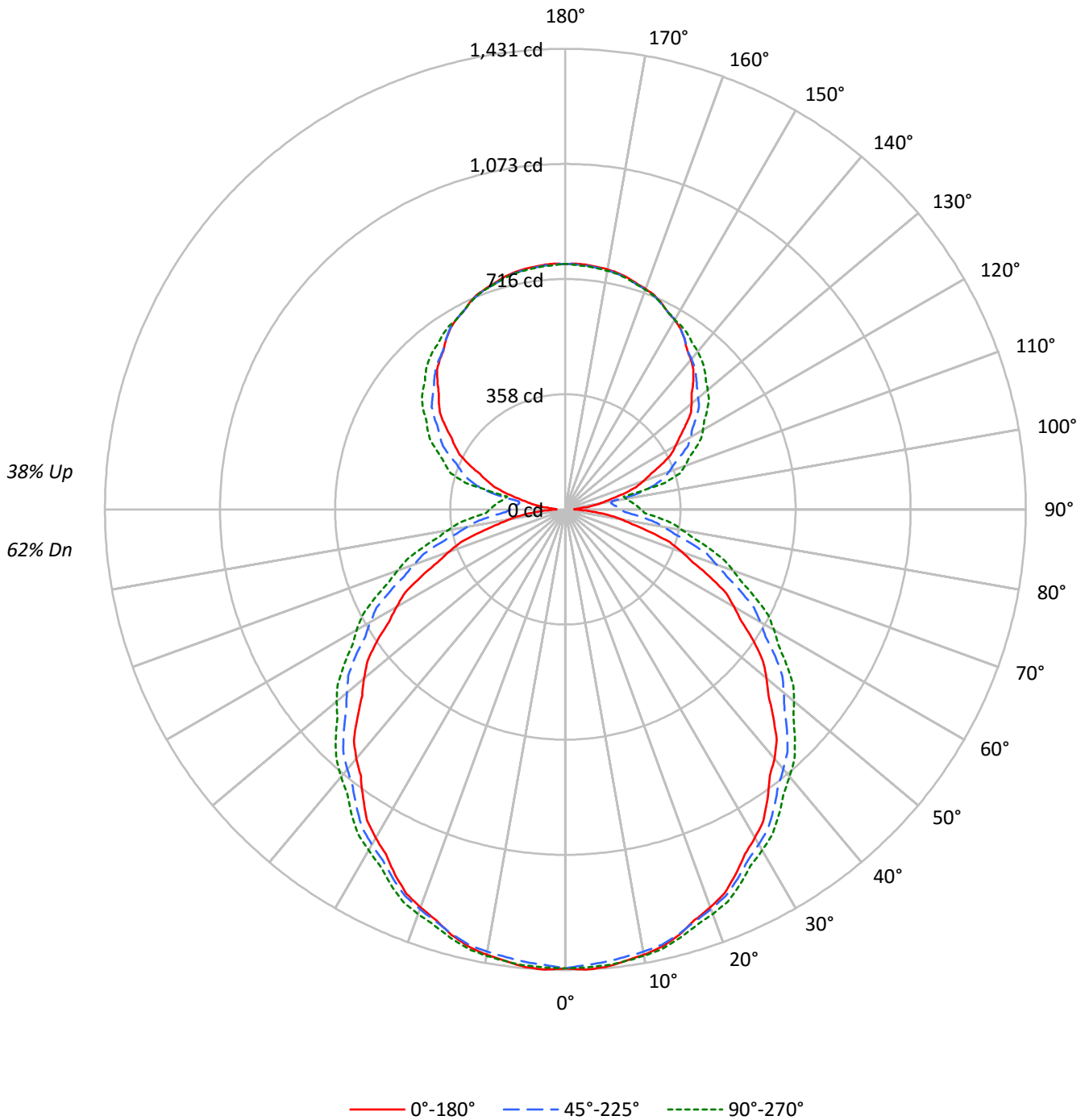
Lumens per Lamp: N/A
Luminaire Lumens: 7222.2 lumens
Efficiency: N/A
Efficacy: 131.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.08')
CIE Type: Semi-Direct

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: P332682
CATALOG NUMBER: SA4XXDIP-C1195D590U835-4F0-1E-UDD-D

Luminous Intensity Polar Plot





TEST NUMBER: P332682

CATALOG NUMBER: SA4XXDIP-C1195D590U835-4F0-1E-UDD-D

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|--|--|----|--|--|--|--|--|--|--|--|----|
| RF | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | 20 |
| RC | 80 | | | | | | | | | 50 | | | | | | | | | 30 | | | | | | | | | 10 | | | | | | | | | 0 | | | | | | | | | 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 | 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 | 67 | 67 | 67 | 62 | 62 | 62 | 62 | 62 | 62 | 62 | 62 | 62 | 62 | 62 | 62 | 62 | 62 | | | | | | | | | | | | | | |
| | 1 | 99 | 94 | 90 | 86 | 93 | 88 | 84 | 81 | 77 | 74 | 72 | 67 | 65 | 63 | 58 | 56 | 54 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | | | | | | | | | | | | | | |
| | 2 | 90 | 82 | 75 | 69 | 84 | 77 | 70 | 65 | 67 | 62 | 58 | 58 | 55 | 51 | 50 | 47 | 45 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | | | | | | | | | | | | | |
| | 3 | 82 | 71 | 63 | 57 | 76 | 67 | 60 | 54 | 59 | 53 | 48 | 51 | 47 | 43 | 44 | 40 | 38 | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 34 | | | | | | | | | | | | | |
| | 4 | 75 | 63 | 54 | 48 | 69 | 59 | 51 | 45 | 52 | 46 | 41 | 45 | 40 | 36 | 39 | 35 | 32 | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 29 | | | | | | | | | | | | | |
| | 5 | 68 | 56 | 47 | 41 | 64 | 53 | 45 | 39 | 46 | 40 | 35 | 40 | 35 | 31 | 35 | 31 | 28 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | | | | | | | | | | | | | |
| | 6 | 63 | 50 | 41 | 35 | 59 | 47 | 39 | 34 | 42 | 35 | 30 | 36 | 31 | 27 | 32 | 27 | 24 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | | | | | | | | | | | | | |
| | 7 | 58 | 45 | 37 | 31 | 54 | 43 | 35 | 29 | 38 | 31 | 27 | 33 | 28 | 24 | 29 | 25 | 21 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | | | | | | | | | | | | | |
| | 8 | 54 | 41 | 33 | 27 | 50 | 39 | 31 | 26 | 34 | 28 | 24 | 30 | 25 | 21 | 26 | 22 | 19 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | | | | | | | | | | | | | |
| | 9 | 50 | 37 | 30 | 24 | 47 | 35 | 28 | 23 | 31 | 25 | 21 | 28 | 23 | 19 | 24 | 20 | 17 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | | | | | | | | | | | | | |
| | 10 | 47 | 34 | 27 | 22 | 44 | 33 | 26 | 21 | 29 | 23 | 19 | 26 | 21 | 17 | 23 | 18 | 16 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 11512 | 11512 | 11512 |
| 5° | 11547 | 11251 | 11283 |
| 10° | 11477 | 11067 | 11058 |
| 15° | 11374 | 10854 | 10794 |
| 20° | 11219 | 10619 | 10537 |
| 25° | 11044 | 10355 | 10254 |
| 30° | 10854 | 10093 | 9964 |
| 35° | 10640 | 9824 | 9710 |
| 40° | 10469 | 9569 | 9445 |
| 45° | 10215 | 9334 | 9218 |
| 50° | 10000 | 9062 | 8977 |
| 55° | 9778 | 8806 | 8695 |
| 60° | 9431 | 8480 | 8438 |
| 65° | 9051 | 8130 | 8122 |
| 70° | 8591 | 7730 | 7753 |
| 75° | 7950 | 7291 | 7421 |
| 80° | 7239 | 6868 | 7093 |
| 85° | 6329 | 6495 | 6901 |



TEST NUMBER: P332682

CATALOG NUMBER: SA4XXDIP-C1195D590U835-4F0-1E-UDD-D

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 135.0 | 1.9 |
| 10°-20° | 386.9 | 5.4 |
| 20°-30° | 585.0 | 8.1 |
| 30°-40° | 707.8 | 9.8 |
| 40°-50° | 748.3 | 10.4 |
| 50°-60° | 704.2 | 9.8 |
| 60°-70° | 584.3 | 8.1 |
| 70°-80° | 410.4 | 5.7 |
| 80°-90° | 234.2 | 3.2 |
| 90°-100° | 163.9 | 2.3 |
| 100°-110° | 268.3 | 3.7 |
| 110°-120° | 386.6 | 5.4 |
| 120°-130° | 442.5 | 6.1 |
| 130°-140° | 448.8 | 6.2 |
| 140°-150° | 407.5 | 5.6 |
| 150°-160° | 325.9 | 4.5 |
| 160°-170° | 210.2 | 2.9 |
| 170°-180° | 72.4 | 1.0 |
| 0°-30° | 1106.9 | 15.3 |
| 0°-40° | 1814.7 | 25.1 |
| 0°-60° | 3267.3 | 45.2 |
| 0°-90° | 4496.2 | 62.3 |
| 90°-120° | 818.8 | 11.3 |
| 90°-150° | 2117.5 | 29.3 |
| 90°-180° | 2726.0 | 37.7 |
| 0°-180° | 7222.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1426 | 1426 | 1426 | 1426 | 1426 | |
| 5° | 1428 | 1422 | 1412 | 1424 | 1423 | 135 |
| 15° | 1368 | 1370 | 1365 | 1379 | 1378 | 385 |
| 25° | 1252 | 1261 | 1266 | 1283 | 1285 | 576 |
| 35° | 1095 | 1114 | 1130 | 1152 | 1158 | 686 |
| 45° | 913 | 944 | 974 | 1000 | 1009 | 706 |
| 55° | 715 | 750 | 797 | 828 | 838 | 637 |
| 65° | 495 | 546 | 600 | 639 | 653 | 490 |
| 75° | 275 | 334 | 401 | 444 | 460 | 292 |
| 85° | 85 | 152 | 224 | 270 | 287 | 90 |
| 90° | 27 | 98 | 171 | 218 | 234 | 18 |
| 95° | 52 | 87 | 152 | 196 | 213 | 57 |
| 105° | 186 | 223 | 283 | 326 | 321 | 196 |
| 115° | 330 | 348 | 397 | 432 | 444 | 325 |
| 125° | 457 | 460 | 496 | 527 | 539 | 408 |
| 135° | 562 | 562 | 575 | 601 | 612 | 434 |
| 145° | 646 | 646 | 646 | 656 | 664 | 404 |
| 155° | 707 | 707 | 706 | 708 | 706 | 326 |
| 165° | 746 | 743 | 743 | 747 | 742 | 211 |
| 175° | 763 | 759 | 760 | 764 | 758 | 73 |
| 180° | 763 | 763 | 763 | 763 | 763 | |



TEST NUMBER: P332682

CATALOG NUMBER: SA4XXDIP-C1195D590U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1426.0 | 1426.0 | 1426.0 | 1426.0 | 1426.0 | 1426.0 | 1426.0 | 1426.0 | 1426.0 | 1426.0 | 1426.0 |
| 2.5° | 1431.1 | 1430.2 | 1429.4 | 1428.5 | 1427.7 | 1426.1 | 1423.8 | 1421.6 | 1419.3 | 1417.0 | 1419.0 |
| 5° | 1427.5 | 1426.5 | 1425.4 | 1424.4 | 1423.3 | 1421.5 | 1419.0 | 1416.5 | 1414.1 | 1411.6 | 1414.4 |
| 7.5° | 1415.4 | 1414.8 | 1414.1 | 1413.5 | 1412.9 | 1411.5 | 1409.5 | 1407.4 | 1405.3 | 1403.3 | 1406.5 |
| 10° | 1405.2 | 1404.8 | 1404.5 | 1404.1 | 1403.8 | 1402.7 | 1400.9 | 1399.2 | 1397.4 | 1395.6 | 1398.8 |
| 12.5° | 1391.1 | 1391.1 | 1391.0 | 1390.9 | 1390.9 | 1390.2 | 1389.0 | 1387.8 | 1386.6 | 1385.4 | 1388.3 |
| 15° | 1368.5 | 1368.8 | 1369.2 | 1369.5 | 1369.9 | 1369.5 | 1368.5 | 1367.4 | 1366.3 | 1365.3 | 1368.5 |
| 17.5° | 1337.5 | 1338.6 | 1339.6 | 1340.7 | 1341.7 | 1342.2 | 1342.0 | 1341.7 | 1341.5 | 1341.3 | 1344.6 |
| 20° | 1315.8 | 1316.8 | 1317.9 | 1319.0 | 1320.0 | 1320.7 | 1321.1 | 1321.5 | 1321.8 | 1322.2 | 1325.7 |
| 22.5° | 1291.5 | 1292.8 | 1294.2 | 1295.5 | 1296.9 | 1297.9 | 1298.5 | 1299.2 | 1299.8 | 1300.4 | 1304.0 |
| 25° | 1251.9 | 1254.0 | 1256.2 | 1258.3 | 1260.4 | 1262.0 | 1263.1 | 1264.1 | 1265.2 | 1266.3 | 1270.2 |
| 27.5° | 1207.8 | 1211.0 | 1214.1 | 1217.2 | 1220.3 | 1222.7 | 1224.3 | 1226.0 | 1227.6 | 1229.2 | 1232.8 |
| 30° | 1178.4 | 1181.3 | 1184.1 | 1187.0 | 1189.8 | 1192.5 | 1194.9 | 1197.4 | 1199.9 | 1202.4 | 1206.3 |
| 32.5° | 1146.5 | 1149.9 | 1153.3 | 1156.7 | 1160.1 | 1163.2 | 1166.0 | 1168.8 | 1171.5 | 1174.3 | 1178.8 |
| 35° | 1095.4 | 1099.7 | 1103.9 | 1108.2 | 1112.4 | 1116.3 | 1119.9 | 1123.4 | 1127.0 | 1130.5 | 1135.5 |
| 37.5° | 1044.0 | 1048.9 | 1053.8 | 1058.7 | 1063.6 | 1068.2 | 1072.6 | 1077.0 | 1081.4 | 1085.8 | 1090.9 |
| 40° | 1010.8 | 1015.4 | 1020.0 | 1024.6 | 1029.2 | 1034.0 | 1039.0 | 1044.0 | 1048.9 | 1053.9 | 1059.2 |
| 42.5° | 972.5 | 977.6 | 982.8 | 988.0 | 993.2 | 998.7 | 1004.5 | 1010.3 | 1016.1 | 1022.0 | 1027.9 |
| 45° | 913.4 | 920.1 | 926.9 | 933.6 | 940.3 | 947.1 | 953.8 | 960.6 | 967.3 | 974.1 | 980.1 |
| 47.5° | 856.8 | 863.8 | 870.8 | 877.7 | 884.7 | 892.1 | 899.9 | 907.7 | 915.5 | 923.3 | 929.5 |
| 50° | 816.0 | 823.8 | 831.6 | 839.4 | 847.2 | 855.0 | 862.8 | 870.6 | 878.4 | 886.2 | 893.3 |
| 52.5° | 775.1 | 782.9 | 790.7 | 798.5 | 806.3 | 814.7 | 823.6 | 832.6 | 841.5 | 850.5 | 857.6 |
| 55° | 715.4 | 722.8 | 730.3 | 737.7 | 745.2 | 754.2 | 764.9 | 775.5 | 786.2 | 796.8 | 803.9 |
| 57.5° | 648.6 | 657.9 | 667.1 | 676.3 | 685.5 | 695.4 | 706.0 | 716.6 | 727.2 | 737.7 | 746.2 |
| 60° | 605.2 | 614.4 | 623.6 | 632.9 | 642.1 | 652.6 | 664.3 | 676.0 | 687.7 | 699.4 | 707.6 |
| 62.5° | 563.0 | 573.1 | 583.2 | 593.3 | 603.3 | 614.2 | 626.0 | 637.7 | 649.4 | 661.1 | 669.2 |
| 65° | 495.0 | 506.4 | 517.7 | 529.1 | 540.4 | 552.1 | 564.2 | 576.3 | 588.3 | 600.4 | 609.3 |
| 67.5° | 429.5 | 441.6 | 453.7 | 465.7 | 477.8 | 490.3 | 503.2 | 516.1 | 529.0 | 542.0 | 551.0 |
| 70° | 384.8 | 396.9 | 409.0 | 421.0 | 433.1 | 445.9 | 459.3 | 472.8 | 486.3 | 499.8 | 509.4 |
| 72.5° | 341.4 | 353.7 | 366.1 | 378.4 | 390.8 | 404.1 | 418.5 | 432.8 | 447.1 | 461.5 | 470.8 |
| 75° | 274.7 | 287.8 | 300.9 | 314.0 | 327.2 | 341.2 | 356.1 | 371.0 | 385.9 | 400.8 | 410.7 |
| 77.5° | 212.4 | 226.3 | 240.2 | 254.1 | 268.0 | 282.8 | 298.4 | 314.0 | 329.6 | 345.2 | 355.3 |
| 80° | 174.1 | 188.2 | 202.4 | 216.6 | 230.8 | 245.7 | 261.3 | 277.0 | 292.6 | 308.2 | 318.8 |
| 82.5° | 135.7 | 150.5 | 165.3 | 180.0 | 194.8 | 210.0 | 225.6 | 241.2 | 256.8 | 272.4 | 283.3 |
| 85° | 84.6 | 99.5 | 114.4 | 129.3 | 144.2 | 159.7 | 175.6 | 191.6 | 207.6 | 223.6 | 234.2 |
| 87.5° | 47.6 | 62.4 | 77.1 | 91.9 | 106.6 | 121.9 | 137.6 | 153.4 | 169.1 | 184.9 | 195.3 |
| 90° | 27.3 | 42.8 | 58.4 | 74.0 | 89.6 | 105.5 | 121.8 | 138.1 | 154.4 | 170.6 | 181.7 |
| 92.5° | 31.5 | 44.3 | 57.2 | 70.0 | 82.9 | 97.4 | 113.7 | 130.0 | 146.2 | 162.5 | 173.3 |
| 95° | 52.1 | 59.5 | 66.9 | 74.3 | 81.7 | 92.8 | 107.4 | 122.1 | 136.8 | 151.5 | 161.8 |
| 97.5° | 85.5 | 98.2 | 111.0 | 123.8 | 136.5 | 143.0 | 143.3 | 143.6 | 143.8 | 144.1 | 153.5 |
| 100° | 111.1 | 122.6 | 134.1 | 145.6 | 157.1 | 161.1 | 157.4 | 153.8 | 150.1 | 146.5 | 153.9 |
| 102.5° | 141.2 | 151.0 | 160.8 | 170.5 | 180.3 | 190.8 | 202.1 | 213.4 | 224.6 | 235.9 | 221.9 |
| 105° | 186.1 | 193.9 | 201.8 | 209.6 | 217.5 | 228.3 | 242.1 | 255.8 | 269.6 | 283.4 | 293.4 |
| 107.5° | 230.4 | 236.6 | 242.8 | 249.0 | 255.2 | 264.9 | 278.2 | 291.5 | 304.7 | 318.0 | 327.3 |
| 110° | 259.2 | 264.5 | 269.9 | 275.2 | 280.6 | 289.9 | 303.0 | 316.2 | 329.4 | 342.6 | 351.0 |



TEST NUMBER: P332682

CATALOG NUMBER: SA4XXDIP-C1195D590U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 287.1 | 292.2 | 297.3 | 302.4 | 307.5 | 316.1 | 328.3 | 340.5 | 352.7 | 364.9 | 372.8 |
| 115° | 330.2 | 333.7 | 337.3 | 340.9 | 344.5 | 351.9 | 363.1 | 374.3 | 385.5 | 396.8 | 404.8 |
| 117.5° | 370.3 | 372.8 | 375.2 | 377.6 | 380.0 | 386.7 | 397.5 | 408.4 | 419.2 | 430.1 | 437.4 |
| 120° | 396.4 | 398.0 | 399.6 | 401.2 | 402.7 | 408.6 | 418.8 | 428.9 | 439.1 | 449.3 | 456.6 |
| 122.5° | 422.0 | 422.5 | 423.0 | 423.6 | 424.1 | 429.3 | 439.2 | 449.1 | 459.0 | 468.9 | 476.1 |
| 125° | 457.0 | 457.2 | 457.3 | 457.5 | 457.6 | 462.0 | 470.6 | 479.3 | 487.9 | 496.5 | 503.6 |
| 127.5° | 491.4 | 491.2 | 490.9 | 490.7 | 490.5 | 494.1 | 501.5 | 508.9 | 516.2 | 523.6 | 530.0 |
| 130° | 512.5 | 512.2 | 512.0 | 511.8 | 511.6 | 514.5 | 520.5 | 526.6 | 532.6 | 538.7 | 545.2 |
| 132.5° | 533.0 | 532.9 | 532.8 | 532.6 | 532.5 | 534.9 | 540.0 | 545.0 | 550.0 | 555.0 | 561.3 |
| 135° | 562.2 | 562.1 | 562.0 | 561.8 | 561.7 | 563.1 | 566.1 | 569.1 | 572.1 | 575.1 | 581.0 |
| 137.5° | 589.5 | 589.2 | 588.9 | 588.6 | 588.3 | 589.0 | 590.8 | 592.5 | 594.3 | 596.0 | 601.5 |
| 140° | 607.3 | 607.2 | 607.1 | 607.0 | 606.9 | 607.1 | 607.7 | 608.3 | 608.9 | 609.6 | 614.5 |
| 142.5° | 622.0 | 622.4 | 622.7 | 623.1 | 623.5 | 623.7 | 623.6 | 623.6 | 623.5 | 623.4 | 627.8 |
| 145° | 646.2 | 646.2 | 646.2 | 646.3 | 646.3 | 646.3 | 646.3 | 646.3 | 646.3 | 646.3 | 648.5 |
| 147.5° | 665.7 | 666.0 | 666.4 | 666.8 | 667.1 | 667.2 | 667.1 | 667.0 | 666.8 | 666.7 | 667.1 |
| 150° | 679.8 | 680.0 | 680.1 | 680.3 | 680.4 | 680.5 | 680.3 | 680.2 | 680.1 | 679.9 | 679.9 |
| 152.5° | 690.4 | 690.8 | 691.1 | 691.4 | 691.8 | 691.8 | 691.6 | 691.4 | 691.1 | 690.9 | 691.1 |
| 155° | 706.8 | 706.9 | 707.0 | 707.1 | 707.3 | 707.1 | 706.8 | 706.4 | 706.0 | 705.6 | 706.1 |
| 157.5° | 720.8 | 720.7 | 720.6 | 720.6 | 720.5 | 720.2 | 719.8 | 719.4 | 718.9 | 718.5 | 719.2 |
| 160° | 729.0 | 728.6 | 728.2 | 727.9 | 727.5 | 727.2 | 727.1 | 727.0 | 726.8 | 726.7 | 727.5 |
| 162.5° | 736.3 | 735.8 | 735.3 | 734.9 | 734.4 | 734.1 | 733.9 | 733.8 | 733.7 | 733.6 | 734.3 |
| 165° | 745.5 | 744.9 | 744.3 | 743.6 | 743.0 | 742.7 | 742.7 | 742.7 | 742.7 | 742.7 | 743.7 |
| 167.5° | 752.8 | 752.2 | 751.5 | 750.9 | 750.2 | 749.8 | 749.8 | 749.7 | 749.6 | 749.5 | 750.7 |
| 170° | 757.0 | 756.2 | 755.4 | 754.7 | 753.9 | 753.6 | 753.7 | 753.8 | 754.0 | 754.1 | 755.1 |
| 172.5° | 759.7 | 758.9 | 758.2 | 757.4 | 756.7 | 756.3 | 756.5 | 756.6 | 756.7 | 756.8 | 757.9 |
| 175° | 762.7 | 761.9 | 761.1 | 760.4 | 759.6 | 759.3 | 759.4 | 759.6 | 759.7 | 759.8 | 760.9 |
| 177.5° | 764.0 | 763.3 | 762.6 | 761.9 | 761.2 | 760.9 | 761.1 | 761.3 | 761.5 | 761.7 | 762.6 |
| 180° | 762.7 | 762.7 | 762.7 | 762.7 | 762.7 | 762.7 | 762.7 | 762.7 | 762.7 | 762.7 | 762.7 |



TEST NUMBER: P332682

CATALOG NUMBER: SA4XXDIP-C1195D590U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1426.0 | 1426.0 | 1426.0 | 1426.0 | 1426.0 | 1426.0 | 1426.0 | 1426.0 |
| 2.5° | 1421.0 | 1423.0 | 1425.0 | 1425.8 | 1425.5 | 1425.2 | 1425.0 | 1424.7 |
| 5° | 1417.3 | 1420.1 | 1422.9 | 1424.2 | 1423.8 | 1423.5 | 1423.1 | 1422.8 |
| 7.5° | 1409.7 | 1412.9 | 1416.1 | 1417.5 | 1417.1 | 1416.8 | 1416.4 | 1416.1 |
| 10° | 1402.0 | 1405.2 | 1408.4 | 1409.8 | 1409.5 | 1409.1 | 1408.7 | 1408.4 |
| 12.5° | 1391.2 | 1394.1 | 1397.0 | 1398.5 | 1398.4 | 1398.3 | 1398.2 | 1398.2 |
| 15° | 1371.7 | 1374.9 | 1378.0 | 1379.5 | 1379.1 | 1378.8 | 1378.4 | 1378.0 |
| 17.5° | 1347.9 | 1351.1 | 1354.4 | 1355.9 | 1355.6 | 1355.3 | 1355.0 | 1354.7 |
| 20° | 1329.3 | 1332.8 | 1336.4 | 1338.1 | 1338.1 | 1338.1 | 1338.1 | 1338.1 |
| 22.5° | 1307.5 | 1311.1 | 1314.6 | 1316.7 | 1317.3 | 1317.8 | 1318.4 | 1319.0 |
| 25° | 1274.1 | 1278.0 | 1281.9 | 1284.0 | 1284.4 | 1284.7 | 1285.1 | 1285.4 |
| 27.5° | 1236.5 | 1240.1 | 1243.7 | 1245.7 | 1246.2 | 1246.6 | 1247.0 | 1247.4 |
| 30° | 1210.2 | 1214.1 | 1218.0 | 1220.3 | 1221.0 | 1221.7 | 1222.4 | 1223.2 |
| 32.5° | 1183.2 | 1187.7 | 1192.2 | 1194.8 | 1195.5 | 1196.2 | 1196.9 | 1197.6 |
| 35° | 1140.5 | 1145.4 | 1150.4 | 1153.4 | 1154.5 | 1155.6 | 1156.6 | 1157.7 |
| 37.5° | 1095.9 | 1100.9 | 1106.0 | 1109.1 | 1110.2 | 1111.3 | 1112.5 | 1113.6 |
| 40° | 1064.5 | 1069.9 | 1075.2 | 1078.6 | 1080.0 | 1081.4 | 1082.8 | 1084.2 |
| 42.5° | 1033.7 | 1039.6 | 1045.5 | 1049.0 | 1050.2 | 1051.3 | 1052.4 | 1053.6 |
| 45° | 986.1 | 992.2 | 998.2 | 1002.1 | 1003.9 | 1005.6 | 1007.4 | 1009.2 |
| 47.5° | 935.8 | 942.0 | 948.3 | 952.4 | 954.6 | 956.7 | 958.8 | 961.0 |
| 50° | 900.4 | 907.5 | 914.6 | 919.2 | 921.4 | 923.5 | 925.6 | 927.7 |
| 52.5° | 864.7 | 871.8 | 878.8 | 883.5 | 885.6 | 887.7 | 889.8 | 892.0 |
| 55° | 811.0 | 818.1 | 825.2 | 829.8 | 831.9 | 834.1 | 836.2 | 838.3 |
| 57.5° | 754.6 | 763.1 | 771.5 | 776.7 | 778.7 | 780.7 | 782.7 | 784.7 |
| 60° | 715.7 | 723.9 | 732.0 | 737.5 | 740.4 | 743.2 | 746.1 | 748.9 |
| 62.5° | 677.4 | 685.6 | 693.7 | 699.2 | 702.1 | 704.9 | 707.7 | 710.6 |
| 65° | 618.1 | 627.0 | 635.9 | 641.7 | 644.6 | 647.4 | 650.3 | 653.1 |
| 67.5° | 560.0 | 569.0 | 578.0 | 583.9 | 586.7 | 589.4 | 592.2 | 595.0 |
| 70° | 519.0 | 528.5 | 538.1 | 544.2 | 546.6 | 549.1 | 551.6 | 554.1 |
| 72.5° | 480.1 | 489.4 | 498.7 | 504.7 | 507.5 | 510.2 | 513.0 | 515.8 |
| 75° | 420.7 | 430.6 | 440.5 | 447.1 | 450.3 | 453.5 | 456.7 | 459.9 |
| 77.5° | 365.4 | 375.5 | 385.5 | 392.3 | 395.7 | 399.1 | 402.5 | 405.9 |
| 80° | 329.5 | 340.1 | 350.8 | 357.5 | 360.3 | 363.2 | 366.0 | 368.9 |
| 82.5° | 294.3 | 305.2 | 316.1 | 323.2 | 326.3 | 329.4 | 332.5 | 335.6 |
| 85° | 244.8 | 255.5 | 266.1 | 273.2 | 276.8 | 280.3 | 283.9 | 287.4 |
| 87.5° | 205.8 | 216.2 | 226.6 | 233.4 | 236.6 | 239.8 | 243.0 | 246.1 |
| 90° | 192.7 | 203.8 | 214.8 | 221.9 | 225.0 | 228.1 | 231.2 | 234.3 |
| 92.5° | 184.0 | 194.8 | 205.6 | 212.4 | 215.3 | 218.2 | 221.1 | 224.0 |
| 95° | 172.2 | 182.5 | 192.8 | 199.7 | 203.0 | 206.3 | 209.6 | 213.0 |
| 97.5° | 162.8 | 172.2 | 181.6 | 187.8 | 191.0 | 194.2 | 197.4 | 200.6 |
| 100° | 161.3 | 168.7 | 176.2 | 181.2 | 183.8 | 186.4 | 189.0 | 191.6 |
| 102.5° | 208.0 | 194.0 | 180.1 | 174.5 | 177.3 | 180.1 | 182.9 | 185.7 |
| 105° | 303.4 | 313.4 | 323.4 | 327.6 | 325.8 | 324.1 | 322.4 | 320.7 |
| 107.5° | 336.6 | 345.9 | 355.2 | 361.3 | 364.4 | 367.4 | 370.4 | 373.5 |
| 110° | 359.4 | 367.8 | 376.2 | 382.1 | 385.3 | 388.5 | 391.7 | 394.9 |



TEST NUMBER: P332682

CATALOG NUMBER: SA4XXDIP-C1195D590U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 380.6 | 388.4 | 396.2 | 401.8 | 405.1 | 408.5 | 411.8 | 415.1 |
| 115° | 412.9 | 421.0 | 429.0 | 434.3 | 436.8 | 439.3 | 441.7 | 444.2 |
| 117.5° | 444.7 | 452.1 | 459.4 | 464.5 | 467.3 | 470.0 | 472.8 | 475.6 |
| 120° | 464.0 | 471.3 | 478.7 | 483.6 | 486.2 | 488.8 | 491.4 | 494.0 |
| 122.5° | 483.4 | 490.6 | 497.9 | 502.6 | 505.0 | 507.3 | 509.6 | 511.9 |
| 125° | 510.7 | 517.9 | 525.0 | 529.7 | 531.9 | 534.2 | 536.4 | 538.7 |
| 127.5° | 536.3 | 542.6 | 548.9 | 553.2 | 555.5 | 557.8 | 560.1 | 562.4 |
| 130° | 551.7 | 558.2 | 564.8 | 569.1 | 571.2 | 573.3 | 575.5 | 577.6 |
| 132.5° | 567.5 | 573.7 | 580.0 | 584.1 | 586.1 | 588.1 | 590.2 | 592.2 |
| 135° | 587.0 | 592.9 | 598.8 | 603.0 | 605.4 | 607.7 | 610.1 | 612.5 |
| 137.5° | 607.0 | 612.4 | 617.9 | 621.5 | 623.2 | 624.9 | 626.6 | 628.3 |
| 140° | 619.5 | 624.5 | 629.5 | 633.0 | 634.9 | 636.8 | 638.7 | 640.6 |
| 142.5° | 632.1 | 636.4 | 640.7 | 643.6 | 645.2 | 646.7 | 648.2 | 649.7 |
| 145° | 650.8 | 653.1 | 655.3 | 657.3 | 659.0 | 660.6 | 662.3 | 664.0 |
| 147.5° | 667.5 | 667.9 | 668.3 | 669.1 | 670.3 | 671.6 | 672.9 | 674.1 |
| 150° | 679.9 | 679.9 | 679.9 | 680.0 | 680.1 | 680.3 | 680.4 | 680.5 |
| 152.5° | 691.3 | 691.5 | 691.7 | 691.8 | 691.7 | 691.6 | 691.5 | 691.5 |
| 155° | 706.6 | 707.1 | 707.6 | 707.7 | 707.3 | 706.9 | 706.6 | 706.2 |
| 157.5° | 719.8 | 720.5 | 721.1 | 721.1 | 720.5 | 719.8 | 719.2 | 718.5 |
| 160° | 728.2 | 729.0 | 729.8 | 729.8 | 729.0 | 728.2 | 727.5 | 726.7 |
| 162.5° | 735.1 | 735.8 | 736.6 | 736.6 | 735.7 | 734.8 | 734.0 | 733.1 |
| 165° | 744.7 | 745.7 | 746.8 | 746.7 | 745.5 | 744.4 | 743.3 | 742.1 |
| 167.5° | 751.8 | 752.9 | 754.0 | 753.9 | 752.7 | 751.4 | 750.1 | 748.9 |
| 170° | 756.1 | 757.1 | 758.2 | 758.0 | 756.8 | 755.5 | 754.2 | 753.0 |
| 172.5° | 758.9 | 759.9 | 760.9 | 760.7 | 759.4 | 758.0 | 756.6 | 755.2 |
| 175° | 762.1 | 763.2 | 764.4 | 764.2 | 762.7 | 761.1 | 759.6 | 758.1 |
| 177.5° | 763.4 | 764.2 | 765.0 | 764.8 | 763.6 | 762.4 | 761.1 | 759.9 |
| 180° | 762.7 | 762.7 | 762.7 | 762.7 | 762.7 | 762.7 | 762.7 | 762.7 |

(END OF REPORT)