

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: P332665-840

Luminaire Tested: **SA4XXDIP-C1020D1205U840-4F0-1E-UDD-D1**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332665-840
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: SA4XXDIP-C1020D1205U840-4F0-1E-UDD-D1
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1020 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8463.7 lumens
Efficiency: N/A
Efficacy: 129.4 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: General Diffuse

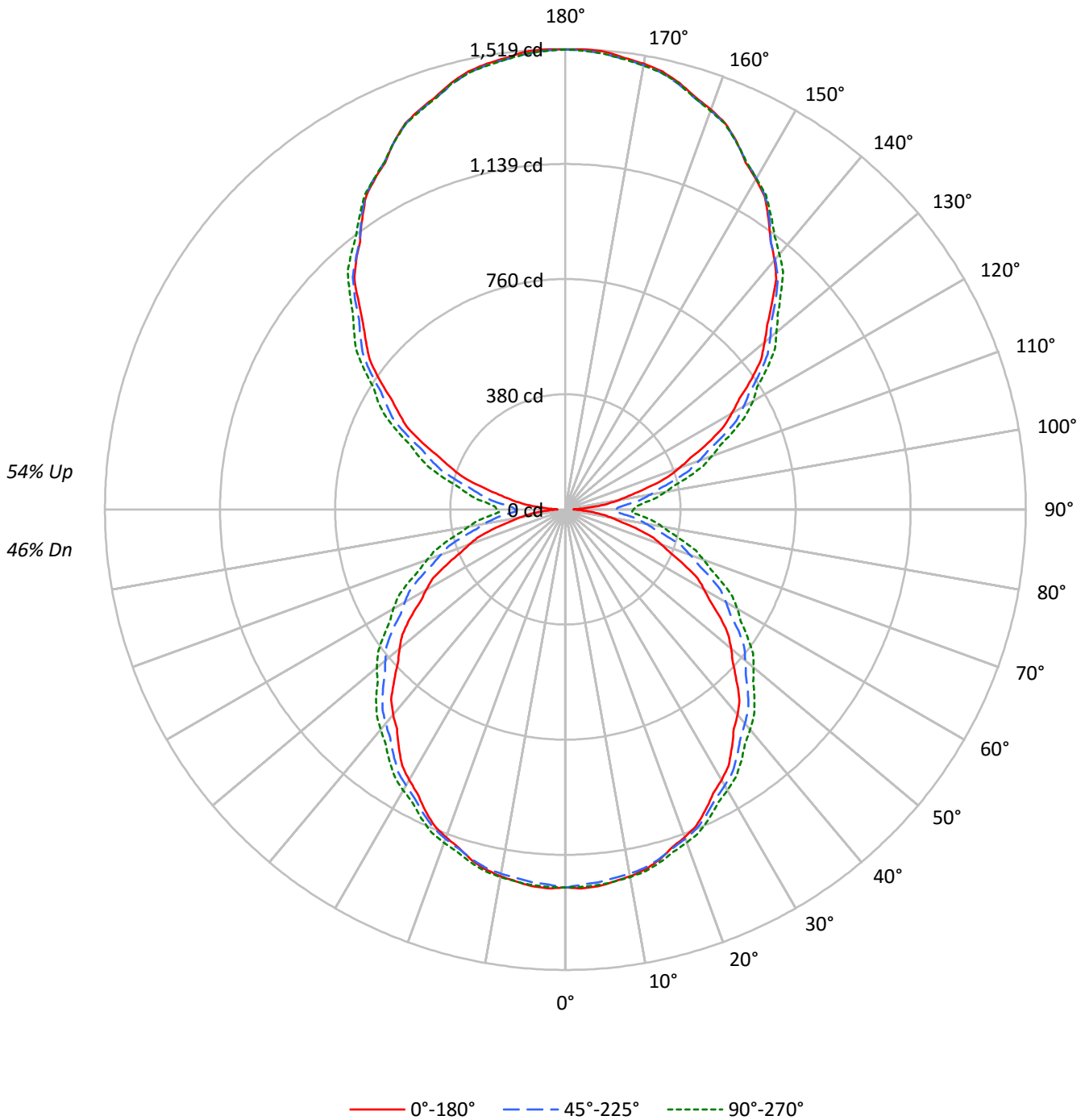
Input Watts (W): 65.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332665-840

CATALOG NUMBER: SA4XXDIP-C1020D1205U840-4F0-1E-UDD-D1

Luminous Intensity Polar Plot





TEST NUMBER: P332665-840

CATALOG NUMBER: SA4XXDIP-C1020D1205U840-4F0-1E-UDD-D1

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 | 106 | 106 | 106 | 106 | 98 | 98 | 98 | 98 | 81 | 81 | 81 | 67 | 67 | 67 | 53 | 53 | 53 | 46 |
| 1 | 96 | 91 | 87 | 83 | 88 | 84 | 80 | 77 | 70 | 67 | 65 | 57 | 55 | 53 | 45 | 44 | 43 | 37 |
| 2 | 87 | 79 | 73 | 67 | 79 | 73 | 67 | 62 | 61 | 56 | 53 | 50 | 47 | 44 | 39 | 37 | 35 | 30 |
| 3 | 79 | 69 | 62 | 55 | 72 | 64 | 57 | 52 | 53 | 48 | 44 | 43 | 40 | 37 | 34 | 32 | 30 | 25 |
| 4 | 72 | 61 | 53 | 47 | 66 | 56 | 49 | 43 | 47 | 42 | 37 | 38 | 34 | 31 | 31 | 28 | 25 | 21 |
| 5 | 66 | 54 | 46 | 40 | 60 | 50 | 43 | 37 | 42 | 36 | 32 | 34 | 30 | 27 | 27 | 24 | 22 | 18 |
| 6 | 61 | 48 | 40 | 34 | 56 | 45 | 37 | 32 | 38 | 32 | 28 | 31 | 27 | 23 | 25 | 22 | 19 | 16 |
| 7 | 56 | 44 | 36 | 30 | 51 | 40 | 33 | 28 | 34 | 28 | 24 | 28 | 24 | 20 | 23 | 19 | 17 | 14 |
| 8 | 52 | 40 | 32 | 26 | 48 | 37 | 30 | 25 | 31 | 25 | 21 | 26 | 21 | 18 | 21 | 17 | 15 | 13 |
| 9 | 48 | 36 | 28 | 23 | 44 | 33 | 27 | 22 | 28 | 23 | 19 | 24 | 19 | 16 | 19 | 16 | 13 | 11 |
| 10 | 45 | 33 | 26 | 21 | 41 | 31 | 24 | 20 | 26 | 21 | 17 | 22 | 18 | 15 | 18 | 14 | 12 | 10 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 10066 | 10066 | 10066 |
| 5° | 10097 | 9838 | 9866 |
| 10° | 10035 | 9677 | 9669 |
| 15° | 9945 | 9490 | 9439 |
| 20° | 9810 | 9285 | 9213 |
| 25° | 9657 | 9054 | 8967 |
| 30° | 9492 | 8825 | 8712 |
| 35° | 9305 | 8591 | 8490 |
| 40° | 9154 | 8367 | 8259 |
| 45° | 8931 | 8161 | 8059 |
| 50° | 8744 | 7924 | 7849 |
| 55° | 8549 | 7700 | 7603 |
| 60° | 8247 | 7415 | 7378 |
| 65° | 7914 | 7109 | 7102 |
| 70° | 7513 | 6760 | 6779 |
| 75° | 6949 | 6374 | 6488 |
| 80° | 6328 | 6004 | 6203 |
| 85° | 5536 | 5679 | 6037 |



TEST NUMBER: P332665-840

CATALOG NUMBER: SA4XXDIP-C1020D1205U840-4F0-1E-UDD-D1

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 118.1 | 1.4 |
| 10°-20° | 338.3 | 4.0 |
| 20°-30° | 511.5 | 6.0 |
| 30°-40° | 618.9 | 7.3 |
| 40°-50° | 654.3 | 7.7 |
| 50°-60° | 615.8 | 7.3 |
| 60°-70° | 510.9 | 6.0 |
| 70°-80° | 358.9 | 4.2 |
| 80°-90° | 207.4 | 2.5 |
| 90°-100° | 220.5 | 2.6 |
| 100°-110° | 385.6 | 4.6 |
| 110°-120° | 562.9 | 6.7 |
| 120°-130° | 697.1 | 8.2 |
| 130°-140° | 759.6 | 9.0 |
| 140°-150° | 735.0 | 8.7 |
| 150°-160° | 615.8 | 7.3 |
| 160°-170° | 409.7 | 4.8 |
| 170°-180° | 143.5 | 1.7 |
| 0°-30° | 967.9 | 11.4 |
| 0°-40° | 1586.8 | 18.7 |
| 0°-60° | 2856.9 | 33.8 |
| 0°-90° | 3934.1 | 46.5 |
| 90°-120° | 1169.1 | 13.8 |
| 90°-150° | 3360.8 | 39.7 |
| 90°-180° | 4530.0 | 53.5 |
| 0°-180° | 8463.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1247 | 1247 | 1247 | 1247 | 1247 | |
| 5° | 1248 | 1244 | 1234 | 1245 | 1244 | 118 |
| 15° | 1197 | 1198 | 1194 | 1206 | 1205 | 337 |
| 25° | 1095 | 1103 | 1107 | 1122 | 1124 | 504 |
| 35° | 958 | 974 | 989 | 1007 | 1012 | 600 |
| 45° | 799 | 825 | 852 | 875 | 882 | 617 |
| 55° | 626 | 656 | 697 | 724 | 733 | 557 |
| 65° | 433 | 478 | 525 | 559 | 571 | 429 |
| 75° | 240 | 292 | 350 | 388 | 402 | 255 |
| 85° | 74 | 133 | 196 | 236 | 251 | 79 |
| 90° | 26 | 95 | 164 | 210 | 225 | 19 |
| 95° | 89 | 146 | 211 | 250 | 264 | 93 |
| 105° | 286 | 317 | 371 | 408 | 424 | 304 |
| 115° | 520 | 534 | 575 | 603 | 613 | 513 |
| 125° | 751 | 751 | 783 | 806 | 813 | 669 |
| 135° | 964 | 971 | 980 | 1000 | 1005 | 746 |
| 145° | 1169 | 1172 | 1173 | 1180 | 1183 | 731 |
| 155° | 1338 | 1337 | 1336 | 1340 | 1336 | 615 |
| 165° | 1456 | 1453 | 1450 | 1456 | 1452 | 410 |
| 175° | 1515 | 1509 | 1508 | 1515 | 1508 | 144 |
| 180° | 1517 | 1517 | 1517 | 1517 | 1517 | |



TEST NUMBER: P332665-840

CATALOG NUMBER: SA4XXDIP-C1020D1205U840-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1246.9 | 1246.9 | 1246.9 | 1246.9 | 1246.9 | 1246.9 | 1246.9 | 1246.9 | 1246.9 | 1246.9 | 1246.9 |
| 2.5° | 1251.3 | 1250.6 | 1249.8 | 1249.1 | 1248.3 | 1247.0 | 1245.0 | 1243.0 | 1241.0 | 1239.0 | 1240.7 |
| 5° | 1248.2 | 1247.3 | 1246.4 | 1245.5 | 1244.6 | 1242.9 | 1240.8 | 1238.6 | 1236.5 | 1234.3 | 1236.8 |
| 7.5° | 1237.6 | 1237.1 | 1236.5 | 1236.0 | 1235.4 | 1234.3 | 1232.4 | 1230.6 | 1228.8 | 1227.0 | 1229.8 |
| 10° | 1228.7 | 1228.4 | 1228.1 | 1227.8 | 1227.5 | 1226.5 | 1225.0 | 1223.5 | 1221.8 | 1220.3 | 1223.1 |
| 12.5° | 1216.4 | 1216.4 | 1216.3 | 1216.2 | 1216.2 | 1215.6 | 1214.6 | 1213.5 | 1212.4 | 1211.3 | 1214.0 |
| 15° | 1196.6 | 1196.9 | 1197.2 | 1197.5 | 1197.8 | 1197.5 | 1196.6 | 1195.7 | 1194.7 | 1193.8 | 1196.6 |
| 17.5° | 1169.5 | 1170.4 | 1171.3 | 1172.3 | 1173.3 | 1173.6 | 1173.4 | 1173.3 | 1173.1 | 1172.9 | 1175.7 |
| 20° | 1150.5 | 1151.4 | 1152.4 | 1153.3 | 1154.3 | 1154.9 | 1155.2 | 1155.5 | 1155.8 | 1156.1 | 1159.2 |
| 22.5° | 1129.2 | 1130.4 | 1131.7 | 1132.9 | 1134.0 | 1134.9 | 1135.4 | 1136.0 | 1136.5 | 1137.1 | 1140.2 |
| 25° | 1094.7 | 1096.5 | 1098.3 | 1100.2 | 1102.1 | 1103.5 | 1104.4 | 1105.4 | 1106.3 | 1107.2 | 1110.6 |
| 27.5° | 1056.1 | 1058.8 | 1061.6 | 1064.3 | 1067.0 | 1069.1 | 1070.6 | 1072.0 | 1073.4 | 1074.8 | 1078.0 |
| 30° | 1030.5 | 1032.9 | 1035.4 | 1037.8 | 1040.4 | 1042.7 | 1044.8 | 1047.0 | 1049.1 | 1051.4 | 1054.8 |
| 32.5° | 1002.5 | 1005.5 | 1008.5 | 1011.5 | 1014.4 | 1017.1 | 1019.6 | 1022.0 | 1024.4 | 1026.8 | 1030.7 |
| 35° | 957.9 | 961.6 | 965.2 | 969.0 | 972.7 | 976.1 | 979.3 | 982.3 | 985.4 | 988.6 | 992.9 |
| 37.5° | 912.8 | 917.2 | 921.4 | 925.7 | 930.0 | 934.0 | 937.9 | 941.7 | 945.6 | 949.5 | 953.8 |
| 40° | 883.8 | 887.9 | 891.9 | 896.0 | 900.0 | 904.1 | 908.5 | 912.8 | 917.2 | 921.5 | 926.1 |
| 42.5° | 850.3 | 854.9 | 859.4 | 863.9 | 868.4 | 873.2 | 878.3 | 883.4 | 888.5 | 893.6 | 898.8 |
| 45° | 798.6 | 804.6 | 810.4 | 816.4 | 822.2 | 828.1 | 834.0 | 839.9 | 845.8 | 851.7 | 857.0 |
| 47.5° | 749.2 | 755.3 | 761.3 | 767.5 | 773.6 | 780.0 | 786.8 | 793.7 | 800.5 | 807.3 | 812.7 |
| 50° | 713.5 | 720.3 | 727.1 | 734.0 | 740.7 | 747.6 | 754.5 | 761.2 | 768.1 | 774.9 | 781.1 |
| 52.5° | 677.7 | 684.6 | 691.4 | 698.2 | 705.1 | 712.4 | 720.1 | 728.0 | 735.8 | 743.7 | 749.8 |
| 55° | 625.5 | 632.1 | 638.5 | 645.1 | 651.6 | 659.4 | 668.8 | 678.1 | 687.4 | 696.7 | 703.0 |
| 57.5° | 567.1 | 575.2 | 583.3 | 591.4 | 599.5 | 608.0 | 617.3 | 626.6 | 635.8 | 645.1 | 652.5 |
| 60° | 529.2 | 537.2 | 545.3 | 553.4 | 561.5 | 570.6 | 580.9 | 591.1 | 601.3 | 611.6 | 618.6 |
| 62.5° | 492.3 | 501.1 | 510.0 | 518.8 | 527.6 | 537.0 | 547.3 | 557.5 | 567.8 | 578.0 | 585.2 |
| 65° | 432.8 | 442.7 | 452.7 | 462.6 | 472.5 | 482.8 | 493.3 | 503.9 | 514.4 | 525.0 | 532.7 |
| 67.5° | 375.6 | 386.2 | 396.7 | 407.3 | 417.8 | 428.7 | 440.0 | 451.3 | 462.6 | 473.9 | 481.8 |
| 70° | 336.5 | 347.1 | 357.6 | 368.1 | 378.7 | 389.9 | 401.6 | 413.4 | 425.3 | 437.1 | 445.5 |
| 72.5° | 298.5 | 309.3 | 320.1 | 330.9 | 341.7 | 353.4 | 365.9 | 378.4 | 391.0 | 403.5 | 411.6 |
| 75° | 240.1 | 251.7 | 263.1 | 274.6 | 286.1 | 298.3 | 311.3 | 324.4 | 337.4 | 350.4 | 359.1 |
| 77.5° | 185.7 | 197.8 | 210.1 | 222.2 | 234.4 | 247.2 | 260.9 | 274.6 | 288.2 | 301.8 | 310.6 |
| 80° | 152.2 | 164.6 | 177.0 | 189.5 | 201.9 | 214.9 | 228.5 | 242.2 | 255.8 | 269.4 | 278.8 |
| 82.5° | 118.7 | 131.6 | 144.5 | 157.4 | 170.3 | 183.6 | 197.2 | 210.9 | 224.6 | 238.2 | 247.7 |
| 85° | 74.0 | 87.1 | 100.1 | 113.1 | 126.1 | 139.7 | 153.6 | 167.5 | 181.5 | 195.5 | 204.8 |
| 87.5° | 42.0 | 55.2 | 68.5 | 81.7 | 94.9 | 108.6 | 122.6 | 136.6 | 150.6 | 164.6 | 173.9 |
| 90° | 25.9 | 41.1 | 56.5 | 71.7 | 86.9 | 102.3 | 117.8 | 133.2 | 148.7 | 164.0 | 174.6 |
| 92.5° | 46.4 | 60.8 | 75.2 | 89.7 | 104.1 | 118.8 | 133.6 | 148.3 | 163.2 | 177.9 | 187.6 |
| 95° | 88.6 | 101.1 | 113.7 | 126.3 | 138.9 | 152.5 | 167.0 | 181.6 | 196.1 | 210.7 | 219.8 |
| 97.5° | 139.5 | 150.2 | 160.8 | 171.5 | 182.2 | 194.9 | 209.6 | 224.4 | 239.1 | 253.9 | 262.9 |
| 100° | 179.7 | 188.7 | 197.8 | 206.9 | 216.0 | 227.8 | 242.3 | 256.7 | 271.1 | 285.6 | 294.5 |
| 102.5° | 222.8 | 230.2 | 237.8 | 245.3 | 252.8 | 263.5 | 277.5 | 291.4 | 305.5 | 319.4 | 328.3 |
| 105° | 285.9 | 292.4 | 298.8 | 305.4 | 311.8 | 321.3 | 333.9 | 346.4 | 358.9 | 371.4 | 379.9 |
| 107.5° | 354.9 | 360.3 | 365.7 | 371.1 | 376.5 | 384.7 | 395.7 | 406.8 | 417.8 | 428.8 | 437.2 |
| 110° | 400.7 | 405.6 | 410.4 | 415.3 | 420.1 | 427.9 | 438.5 | 449.1 | 459.7 | 470.3 | 476.9 |



TEST NUMBER: P332665-840

CATALOG NUMBER: SA4XXDIP-C1020D1205U840-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 448.4 | 452.3 | 456.3 | 460.2 | 464.2 | 471.1 | 481.0 | 490.9 | 500.8 | 510.7 | 517.5 |
| 115° | 519.9 | 522.7 | 525.5 | 528.3 | 531.1 | 537.1 | 546.6 | 556.0 | 565.4 | 574.8 | 581.4 |
| 117.5° | 588.7 | 590.5 | 592.4 | 594.3 | 596.1 | 601.6 | 610.5 | 619.4 | 628.2 | 637.0 | 642.7 |
| 120° | 633.5 | 635.5 | 637.4 | 639.4 | 641.4 | 646.5 | 654.7 | 662.9 | 671.2 | 679.3 | 684.3 |
| 122.5° | 681.4 | 682.0 | 682.6 | 683.2 | 683.8 | 688.1 | 696.3 | 704.4 | 712.6 | 720.7 | 726.0 |
| 125° | 750.6 | 750.3 | 750.0 | 749.7 | 749.3 | 753.0 | 760.4 | 767.9 | 775.5 | 782.9 | 788.3 |
| 127.5° | 814.4 | 814.9 | 815.4 | 815.8 | 816.3 | 819.3 | 824.9 | 830.3 | 835.9 | 841.4 | 846.5 |
| 130° | 858.3 | 858.8 | 859.3 | 859.7 | 860.2 | 862.9 | 867.9 | 872.8 | 877.8 | 882.8 | 887.9 |
| 132.5° | 904.3 | 904.5 | 904.8 | 905.1 | 905.3 | 907.4 | 911.1 | 914.9 | 918.7 | 922.4 | 927.3 |
| 135° | 963.7 | 965.2 | 966.8 | 968.4 | 970.0 | 971.8 | 974.0 | 976.1 | 978.4 | 980.5 | 984.9 |
| 137.5° | 1029.9 | 1030.3 | 1030.7 | 1031.2 | 1031.6 | 1032.5 | 1034.0 | 1035.4 | 1036.9 | 1038.3 | 1042.2 |
| 140° | 1074.0 | 1074.2 | 1074.4 | 1074.6 | 1074.8 | 1075.1 | 1075.4 | 1075.7 | 1076.0 | 1076.3 | 1080.1 |
| 142.5° | 1113.2 | 1113.7 | 1114.2 | 1114.6 | 1115.1 | 1115.1 | 1114.7 | 1114.3 | 1113.9 | 1113.5 | 1117.0 |
| 145° | 1168.8 | 1169.5 | 1170.2 | 1170.9 | 1171.7 | 1172.3 | 1172.5 | 1172.8 | 1173.0 | 1173.3 | 1174.9 |
| 147.5° | 1224.2 | 1225.1 | 1226.1 | 1227.0 | 1227.9 | 1228.3 | 1228.1 | 1227.9 | 1227.7 | 1227.5 | 1227.5 |
| 150° | 1258.0 | 1258.7 | 1259.4 | 1260.1 | 1260.9 | 1261.2 | 1261.2 | 1261.2 | 1261.2 | 1261.2 | 1261.2 |
| 152.5° | 1288.8 | 1289.3 | 1289.9 | 1290.4 | 1291.0 | 1291.4 | 1291.6 | 1291.8 | 1292.0 | 1292.2 | 1292.8 |
| 155° | 1337.5 | 1337.5 | 1337.5 | 1337.5 | 1337.5 | 1337.4 | 1337.2 | 1336.9 | 1336.6 | 1336.4 | 1337.4 |
| 157.5° | 1378.8 | 1378.4 | 1377.9 | 1377.5 | 1377.0 | 1376.6 | 1376.6 | 1376.5 | 1376.5 | 1376.4 | 1377.3 |
| 160° | 1403.2 | 1403.0 | 1402.7 | 1402.4 | 1402.2 | 1401.9 | 1401.7 | 1401.4 | 1401.1 | 1400.9 | 1401.7 |
| 162.5° | 1425.7 | 1425.0 | 1424.4 | 1423.7 | 1423.0 | 1422.6 | 1422.3 | 1422.1 | 1421.8 | 1421.5 | 1422.9 |
| 165° | 1456.0 | 1455.2 | 1454.4 | 1453.7 | 1452.9 | 1452.2 | 1451.7 | 1451.2 | 1450.7 | 1450.2 | 1451.7 |
| 167.5° | 1479.3 | 1478.1 | 1477.0 | 1475.9 | 1474.9 | 1474.3 | 1474.4 | 1474.4 | 1474.5 | 1474.5 | 1476.1 |
| 170° | 1492.4 | 1491.1 | 1489.8 | 1488.4 | 1487.1 | 1486.6 | 1486.9 | 1487.1 | 1487.4 | 1487.7 | 1489.2 |
| 172.5° | 1501.8 | 1500.7 | 1499.5 | 1498.4 | 1497.4 | 1496.8 | 1496.9 | 1497.0 | 1497.0 | 1497.1 | 1498.8 |
| 175° | 1514.7 | 1513.4 | 1512.1 | 1510.8 | 1509.4 | 1508.6 | 1508.4 | 1508.1 | 1507.9 | 1507.6 | 1509.4 |
| 177.5° | 1518.9 | 1517.8 | 1516.8 | 1515.8 | 1514.7 | 1514.2 | 1514.2 | 1514.2 | 1514.2 | 1514.2 | 1515.7 |
| 180° | 1517.0 | 1517.0 | 1517.0 | 1517.0 | 1517.0 | 1517.0 | 1517.0 | 1517.0 | 1517.0 | 1517.0 | 1517.0 |



TEST NUMBER: P332665-840

CATALOG NUMBER: SA4XXDIP-C1020D1205U840-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1246.9 | 1246.9 | 1246.9 | 1246.9 | 1246.9 | 1246.9 | 1246.9 | 1246.9 |
| 2.5° | 1242.5 | 1244.3 | 1246.0 | 1246.7 | 1246.5 | 1246.2 | 1246.0 | 1245.8 |
| 5° | 1239.2 | 1241.7 | 1244.3 | 1245.3 | 1245.0 | 1244.7 | 1244.4 | 1244.1 |
| 7.5° | 1232.6 | 1235.4 | 1238.2 | 1239.4 | 1239.1 | 1238.8 | 1238.5 | 1238.2 |
| 10° | 1225.9 | 1228.7 | 1231.5 | 1232.7 | 1232.4 | 1232.1 | 1231.8 | 1231.5 |
| 12.5° | 1216.5 | 1219.0 | 1221.5 | 1222.8 | 1222.7 | 1222.6 | 1222.6 | 1222.5 |
| 15° | 1199.4 | 1202.1 | 1205.0 | 1206.2 | 1205.9 | 1205.6 | 1205.3 | 1205.0 |
| 17.5° | 1178.5 | 1181.4 | 1184.3 | 1185.6 | 1185.3 | 1185.1 | 1184.8 | 1184.6 |
| 20° | 1162.3 | 1165.4 | 1168.5 | 1170.0 | 1170.0 | 1170.0 | 1170.0 | 1170.0 |
| 22.5° | 1143.3 | 1146.4 | 1149.5 | 1151.3 | 1151.9 | 1152.3 | 1152.8 | 1153.3 |
| 25° | 1114.1 | 1117.4 | 1120.8 | 1122.8 | 1123.1 | 1123.4 | 1123.7 | 1124.0 |
| 27.5° | 1081.2 | 1084.3 | 1087.5 | 1089.2 | 1089.6 | 1090.0 | 1090.4 | 1090.8 |
| 30° | 1058.2 | 1061.6 | 1065.0 | 1067.0 | 1067.6 | 1068.2 | 1068.9 | 1069.5 |
| 32.5° | 1034.6 | 1038.5 | 1042.5 | 1044.7 | 1045.3 | 1045.9 | 1046.5 | 1047.2 |
| 35° | 997.2 | 1001.6 | 1005.9 | 1008.6 | 1009.5 | 1010.4 | 1011.4 | 1012.3 |
| 37.5° | 958.3 | 962.7 | 967.0 | 969.8 | 970.8 | 971.8 | 972.7 | 973.7 |
| 40° | 930.8 | 935.4 | 940.2 | 943.1 | 944.3 | 945.5 | 946.8 | 948.1 |
| 42.5° | 903.9 | 909.1 | 914.2 | 917.3 | 918.3 | 919.3 | 920.3 | 921.2 |
| 45° | 862.2 | 867.6 | 872.8 | 876.3 | 877.8 | 879.3 | 880.9 | 882.4 |
| 47.5° | 818.2 | 823.6 | 829.2 | 832.8 | 834.7 | 836.6 | 838.4 | 840.3 |
| 50° | 787.3 | 793.6 | 799.7 | 803.8 | 805.7 | 807.5 | 809.3 | 811.2 |
| 52.5° | 756.1 | 762.2 | 768.5 | 772.4 | 774.4 | 776.2 | 778.1 | 779.9 |
| 55° | 709.1 | 715.4 | 721.5 | 725.6 | 727.4 | 729.3 | 731.1 | 733.1 |
| 57.5° | 659.8 | 667.2 | 674.6 | 679.1 | 680.9 | 682.7 | 684.4 | 686.1 |
| 60° | 625.8 | 633.0 | 640.1 | 644.9 | 647.4 | 649.8 | 652.4 | 654.8 |
| 62.5° | 592.3 | 599.5 | 606.6 | 611.4 | 613.9 | 616.3 | 618.8 | 621.4 |
| 65° | 540.5 | 548.3 | 556.0 | 561.2 | 563.6 | 566.1 | 568.6 | 571.1 |
| 67.5° | 489.7 | 497.6 | 505.4 | 510.6 | 513.0 | 515.4 | 517.9 | 520.3 |
| 70° | 453.7 | 462.1 | 470.5 | 475.8 | 478.0 | 480.2 | 482.3 | 484.5 |
| 72.5° | 419.8 | 427.9 | 436.1 | 441.3 | 443.7 | 446.2 | 448.6 | 451.0 |
| 75° | 367.8 | 376.5 | 385.2 | 390.9 | 393.7 | 396.6 | 399.3 | 402.1 |
| 77.5° | 319.5 | 328.3 | 337.1 | 343.1 | 346.0 | 349.0 | 351.9 | 355.0 |
| 80° | 288.1 | 297.4 | 306.7 | 312.6 | 315.1 | 317.6 | 320.0 | 322.6 |
| 82.5° | 257.3 | 266.9 | 276.4 | 282.6 | 285.3 | 288.0 | 290.7 | 293.5 |
| 85° | 214.1 | 223.4 | 232.7 | 238.9 | 242.1 | 245.1 | 248.2 | 251.4 |
| 87.5° | 183.2 | 192.6 | 201.9 | 207.9 | 210.8 | 213.6 | 216.4 | 219.2 |
| 90° | 185.2 | 195.7 | 206.3 | 213.1 | 216.1 | 219.0 | 222.1 | 225.1 |
| 92.5° | 197.3 | 207.0 | 216.7 | 223.0 | 225.8 | 228.5 | 231.4 | 234.2 |
| 95° | 228.9 | 238.1 | 247.3 | 253.3 | 256.0 | 258.8 | 261.7 | 264.4 |
| 97.5° | 272.0 | 281.0 | 290.1 | 296.0 | 298.6 | 301.3 | 304.0 | 306.7 |
| 100° | 303.5 | 312.4 | 321.2 | 326.8 | 328.9 | 331.1 | 333.3 | 335.5 |
| 102.5° | 337.2 | 346.1 | 354.9 | 360.6 | 363.2 | 365.9 | 368.5 | 371.1 |
| 105° | 388.5 | 397.0 | 405.6 | 411.4 | 414.8 | 418.0 | 421.2 | 424.5 |
| 107.5° | 445.5 | 453.8 | 462.2 | 467.5 | 469.7 | 471.8 | 474.0 | 476.3 |
| 110° | 483.5 | 490.1 | 496.8 | 501.7 | 504.9 | 508.2 | 511.5 | 514.7 |



TEST NUMBER: P332665-840

CATALOG NUMBER: SA4XXDIP-C1020D1205U840-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 524.2 | 531.1 | 537.9 | 542.5 | 545.1 | 547.9 | 550.5 | 553.1 |
| 115° | 587.9 | 594.5 | 601.1 | 605.3 | 607.2 | 609.2 | 611.1 | 613.0 |
| 117.5° | 648.2 | 653.8 | 659.3 | 663.1 | 665.1 | 667.0 | 669.0 | 671.0 |
| 120° | 689.1 | 694.1 | 698.9 | 702.9 | 705.9 | 708.9 | 712.0 | 714.9 |
| 122.5° | 731.3 | 736.7 | 741.9 | 745.3 | 746.6 | 747.9 | 749.2 | 750.4 |
| 125° | 793.7 | 799.1 | 804.5 | 807.8 | 809.1 | 810.5 | 811.8 | 813.1 |
| 127.5° | 851.5 | 856.7 | 861.7 | 865.1 | 866.8 | 868.5 | 870.1 | 871.8 |
| 130° | 892.9 | 898.0 | 903.0 | 905.9 | 906.8 | 907.7 | 908.5 | 909.3 |
| 132.5° | 932.1 | 936.9 | 941.7 | 944.8 | 946.2 | 947.8 | 949.2 | 950.6 |
| 135° | 989.4 | 993.8 | 998.3 | 1001.1 | 1002.1 | 1003.2 | 1004.3 | 1005.3 |
| 137.5° | 1046.1 | 1050.0 | 1053.8 | 1056.5 | 1058.2 | 1060.0 | 1061.7 | 1063.4 |
| 140° | 1083.9 | 1087.6 | 1091.5 | 1094.0 | 1095.2 | 1096.5 | 1097.8 | 1099.1 |
| 142.5° | 1120.4 | 1124.0 | 1127.4 | 1129.8 | 1131.0 | 1132.4 | 1133.6 | 1134.8 |
| 145° | 1176.5 | 1178.1 | 1179.6 | 1180.7 | 1181.1 | 1181.6 | 1182.0 | 1182.6 |
| 147.5° | 1227.6 | 1227.6 | 1227.6 | 1228.0 | 1228.7 | 1229.5 | 1230.2 | 1230.9 |
| 150° | 1261.2 | 1261.2 | 1261.2 | 1261.1 | 1260.8 | 1260.6 | 1260.3 | 1260.1 |
| 152.5° | 1293.4 | 1294.1 | 1294.7 | 1294.7 | 1294.0 | 1293.3 | 1292.6 | 1292.0 |
| 155° | 1338.5 | 1339.5 | 1340.5 | 1340.5 | 1339.5 | 1338.5 | 1337.4 | 1336.4 |
| 157.5° | 1378.1 | 1378.8 | 1379.6 | 1379.6 | 1378.7 | 1377.8 | 1376.8 | 1376.0 |
| 160° | 1402.4 | 1403.2 | 1404.0 | 1403.7 | 1402.4 | 1401.1 | 1399.9 | 1398.6 |
| 162.5° | 1424.3 | 1425.7 | 1427.1 | 1427.2 | 1425.9 | 1424.6 | 1423.3 | 1422.0 |
| 165° | 1453.3 | 1454.8 | 1456.4 | 1456.6 | 1455.6 | 1454.6 | 1453.5 | 1452.5 |
| 167.5° | 1477.6 | 1479.3 | 1480.8 | 1480.8 | 1479.1 | 1477.5 | 1475.9 | 1474.3 |
| 170° | 1490.9 | 1492.4 | 1494.0 | 1493.8 | 1492.0 | 1490.2 | 1488.3 | 1486.5 |
| 172.5° | 1500.7 | 1502.4 | 1504.2 | 1504.2 | 1502.3 | 1500.5 | 1498.6 | 1496.8 |
| 175° | 1511.3 | 1513.1 | 1514.9 | 1514.9 | 1513.1 | 1511.3 | 1509.4 | 1507.6 |
| 177.5° | 1517.1 | 1518.6 | 1520.0 | 1519.9 | 1518.2 | 1516.6 | 1514.9 | 1513.3 |
| 180° | 1517.0 | 1517.0 | 1517.0 | 1517.0 | 1517.0 | 1517.0 | 1517.0 | 1517.0 |

(END OF REPORT)