

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: P332647

Luminaire Tested: **SA4XXDIP-C1020D810U835-4F0-1E-UDD-D1**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332647
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-C1020D810U835-4F0-1E-UDD-D1
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1020 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

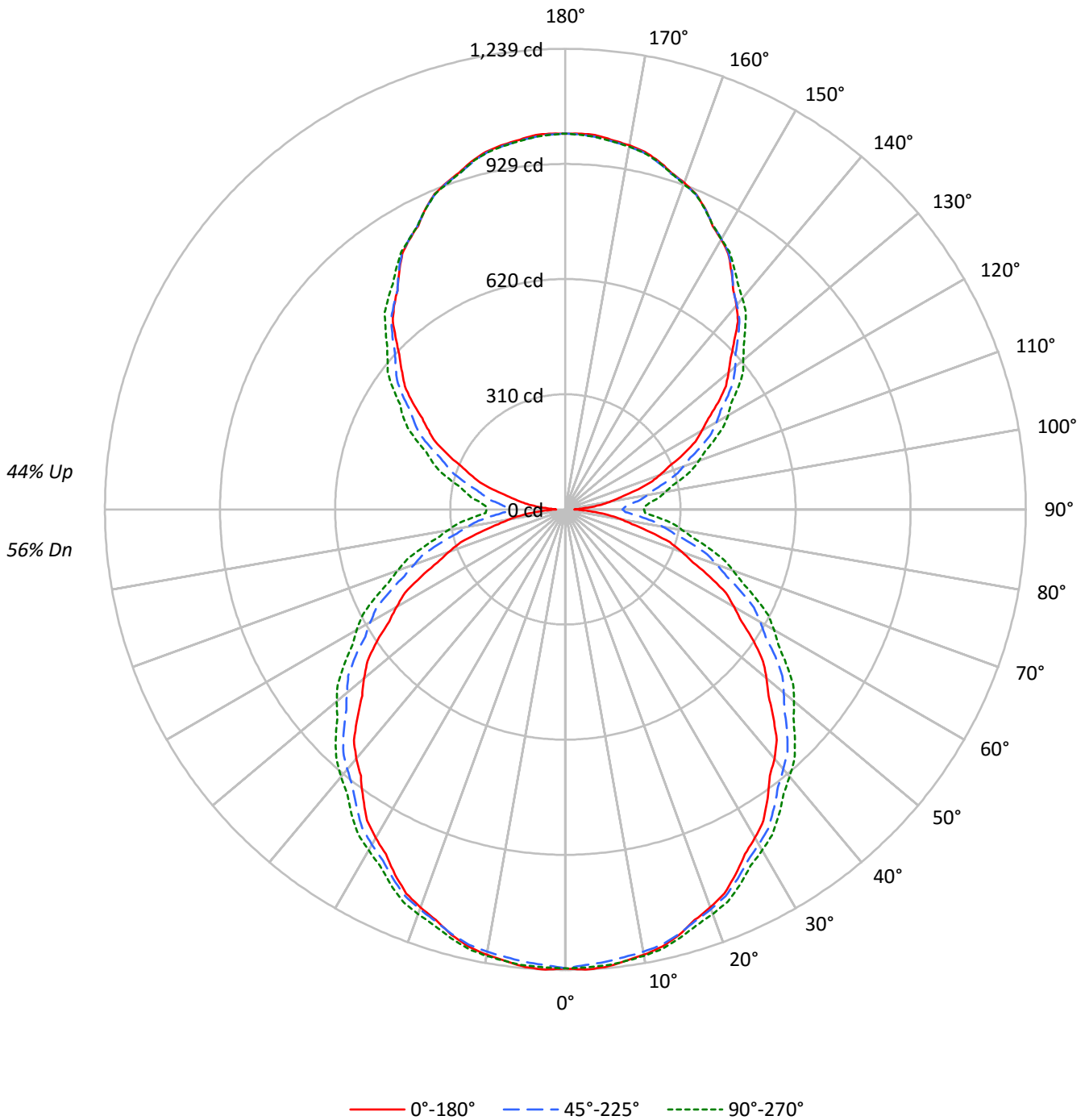
Lumens per Lamp: N/A
Luminaire Lumens: 7016.4 lumens
Efficiency: N/A
Efficacy: 129.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.08')
CIE Type: General Diffuse

Input Watts (W): 54.4
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: P332647
CATALOG NUMBER: SA4XXDIP-C1020D810U835-4F0-1E-UDD-D1

Luminous Intensity Polar Plot





TEST NUMBER: P332647

CATALOG NUMBER: SA4XXDIP-C1020D810U835-4F0-1E-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 | 50 | 30 | 10 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 108 | 108 | 108 | 108 | 101 | 101 | 101 | 101 | 86 | 86 | 86 | 73 | 73 | 73 | 61 | 61 | 61 | 56 | | | | |
| 1 | 98 | 93 | 89 | 85 | 91 | 86 | 83 | 79 | 74 | 71 | 69 | 63 | 61 | 59 | 52 | 51 | 49 | 44 | | | | |
| 2 | 89 | 81 | 74 | 68 | 82 | 75 | 69 | 64 | 64 | 60 | 56 | 54 | 51 | 48 | 45 | 43 | 41 | 36 | | | | |
| 3 | 81 | 70 | 63 | 56 | 74 | 66 | 59 | 53 | 56 | 51 | 46 | 48 | 44 | 40 | 40 | 37 | 34 | 30 | | | | |
| 4 | 74 | 62 | 54 | 47 | 68 | 58 | 50 | 45 | 50 | 44 | 39 | 42 | 38 | 34 | 35 | 32 | 29 | 26 | | | | |
| 5 | 67 | 55 | 47 | 40 | 62 | 51 | 44 | 38 | 44 | 38 | 34 | 38 | 33 | 29 | 32 | 28 | 25 | 22 | | | | |
| 6 | 62 | 49 | 41 | 35 | 57 | 46 | 38 | 33 | 40 | 34 | 29 | 34 | 29 | 26 | 29 | 25 | 22 | 19 | | | | |
| 7 | 57 | 45 | 36 | 30 | 53 | 42 | 34 | 29 | 36 | 30 | 26 | 31 | 26 | 23 | 26 | 22 | 19 | 17 | | | | |
| 8 | 53 | 40 | 32 | 27 | 49 | 38 | 31 | 25 | 33 | 27 | 23 | 28 | 23 | 20 | 24 | 20 | 17 | 15 | | | | |
| 9 | 49 | 37 | 29 | 24 | 46 | 35 | 27 | 23 | 30 | 24 | 20 | 26 | 21 | 18 | 22 | 18 | 16 | 13 | | | | |
| 10 | 46 | 34 | 26 | 21 | 43 | 32 | 25 | 20 | 28 | 22 | 18 | 24 | 19 | 16 | 20 | 17 | 14 | 12 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 9968 | 9968 | 9968 |
| 5° | 9998 | 9741 | 9769 |
| 10° | 9937 | 9582 | 9575 |
| 15° | 9848 | 9397 | 9346 |
| 20° | 9714 | 9194 | 9123 |
| 25° | 9563 | 8966 | 8879 |
| 30° | 9399 | 8739 | 8627 |
| 35° | 9213 | 8507 | 8407 |
| 40° | 9065 | 8285 | 8178 |
| 45° | 8844 | 8081 | 7981 |
| 50° | 8658 | 7846 | 7773 |
| 55° | 8466 | 7625 | 7529 |
| 60° | 8166 | 7342 | 7306 |
| 65° | 7837 | 7040 | 7032 |
| 70° | 7439 | 6694 | 6714 |
| 75° | 6882 | 6312 | 6425 |
| 80° | 6266 | 5946 | 6141 |
| 85° | 5484 | 5623 | 5977 |



TEST NUMBER: P332647

CATALOG NUMBER: SA4XXDIP-C1020D810U835-4F0-1E-UDD-D1

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 116.9 | 1.7 |
| 10°-20° | 335.0 | 4.8 |
| 20°-30° | 506.5 | 7.2 |
| 30°-40° | 612.9 | 8.7 |
| 40°-50° | 647.9 | 9.2 |
| 50°-60° | 609.8 | 8.7 |
| 60°-70° | 505.9 | 7.2 |
| 70°-80° | 355.4 | 5.1 |
| 80°-90° | 203.9 | 2.9 |
| 90°-100° | 186.0 | 2.7 |
| 100°-110° | 285.8 | 4.1 |
| 110°-120° | 394.5 | 5.6 |
| 120°-130° | 475.5 | 6.8 |
| 130°-140° | 510.9 | 7.3 |
| 140°-150° | 490.7 | 7.0 |
| 150°-160° | 410.3 | 5.8 |
| 160°-170° | 273.0 | 3.9 |
| 170°-180° | 95.6 | 1.4 |
| 0°-30° | 958.4 | 13.7 |
| 0°-40° | 1571.3 | 22.4 |
| 0°-60° | 2829.0 | 40.3 |
| 0°-90° | 3894.2 | 55.5 |
| 90°-120° | 866.3 | 12.3 |
| 90°-150° | 2343.3 | 33.4 |
| 90°-180° | 3122.0 | 44.5 |
| 0°-180° | 7016.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1235 | 1235 | 1235 | 1235 | 1235 | |
| 5° | 1236 | 1232 | 1222 | 1233 | 1232 | 117 |
| 15° | 1185 | 1186 | 1182 | 1194 | 1193 | 334 |
| 25° | 1084 | 1092 | 1096 | 1111 | 1113 | 499 |
| 35° | 948 | 965 | 979 | 997 | 1002 | 594 |
| 45° | 791 | 817 | 843 | 866 | 874 | 611 |
| 55° | 619 | 649 | 690 | 716 | 726 | 552 |
| 65° | 429 | 473 | 520 | 553 | 566 | 425 |
| 75° | 238 | 289 | 347 | 384 | 398 | 253 |
| 85° | 73 | 132 | 194 | 234 | 249 | 78 |
| 90° | 24 | 88 | 154 | 197 | 212 | 18 |
| 95° | 65 | 118 | 180 | 218 | 232 | 66 |
| 105° | 195 | 224 | 277 | 313 | 328 | 207 |
| 115° | 349 | 363 | 404 | 433 | 443 | 345 |
| 125° | 502 | 502 | 534 | 558 | 566 | 448 |
| 135° | 643 | 648 | 657 | 677 | 684 | 498 |
| 145° | 779 | 781 | 782 | 789 | 792 | 488 |
| 155° | 891 | 891 | 890 | 893 | 890 | 410 |
| 165° | 970 | 968 | 966 | 971 | 968 | 273 |
| 175° | 1009 | 1006 | 1005 | 1010 | 1005 | 96 |
| 180° | 1011 | 1011 | 1011 | 1011 | 1011 | |



TEST NUMBER: P332647

CATALOG NUMBER: SA4XXDIP-C1020D810U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1234.7 | 1234.7 | 1234.7 | 1234.7 | 1234.7 | 1234.7 | 1234.7 | 1234.7 | 1234.7 | 1234.7 | 1234.7 |
| 2.5° | 1239.1 | 1238.4 | 1237.6 | 1236.9 | 1236.1 | 1234.8 | 1232.8 | 1230.9 | 1228.9 | 1226.9 | 1228.6 |
| 5° | 1236.0 | 1235.1 | 1234.2 | 1233.3 | 1232.4 | 1230.8 | 1228.7 | 1226.5 | 1224.4 | 1222.2 | 1224.7 |
| 7.5° | 1225.5 | 1225.0 | 1224.4 | 1223.9 | 1223.3 | 1222.2 | 1220.4 | 1218.6 | 1216.8 | 1215.0 | 1217.8 |
| 10° | 1216.7 | 1216.4 | 1216.1 | 1215.8 | 1215.5 | 1214.5 | 1213.0 | 1211.5 | 1209.9 | 1208.4 | 1211.2 |
| 12.5° | 1204.5 | 1204.5 | 1204.4 | 1204.3 | 1204.3 | 1203.7 | 1202.7 | 1201.6 | 1200.6 | 1199.5 | 1202.1 |
| 15° | 1184.9 | 1185.2 | 1185.5 | 1185.8 | 1186.1 | 1185.8 | 1184.9 | 1184.0 | 1183.0 | 1182.1 | 1184.9 |
| 17.5° | 1158.1 | 1159.0 | 1159.9 | 1160.8 | 1161.8 | 1162.1 | 1161.9 | 1161.8 | 1161.6 | 1161.4 | 1164.2 |
| 20° | 1139.3 | 1140.2 | 1141.1 | 1142.0 | 1143.0 | 1143.6 | 1143.9 | 1144.2 | 1144.5 | 1144.8 | 1147.9 |
| 22.5° | 1118.2 | 1119.4 | 1120.6 | 1121.8 | 1122.9 | 1123.8 | 1124.3 | 1124.9 | 1125.4 | 1126.0 | 1129.1 |
| 25° | 1084.0 | 1085.8 | 1087.6 | 1089.5 | 1091.3 | 1092.7 | 1093.6 | 1094.6 | 1095.5 | 1096.4 | 1099.8 |
| 27.5° | 1045.8 | 1048.5 | 1051.2 | 1053.9 | 1056.6 | 1058.7 | 1060.1 | 1061.5 | 1062.9 | 1064.3 | 1067.5 |
| 30° | 1020.4 | 1022.8 | 1025.3 | 1027.7 | 1030.2 | 1032.5 | 1034.6 | 1036.8 | 1038.9 | 1041.1 | 1044.5 |
| 32.5° | 992.7 | 995.7 | 998.6 | 1001.6 | 1004.5 | 1007.2 | 1009.6 | 1012.0 | 1014.4 | 1016.8 | 1020.6 |
| 35° | 948.5 | 952.2 | 955.8 | 959.5 | 963.2 | 966.6 | 969.7 | 972.7 | 975.8 | 978.9 | 983.2 |
| 37.5° | 903.9 | 908.2 | 912.4 | 916.7 | 920.9 | 924.9 | 928.7 | 932.5 | 936.4 | 940.2 | 944.5 |
| 40° | 875.2 | 879.2 | 883.2 | 887.2 | 891.2 | 895.3 | 899.6 | 903.9 | 908.2 | 912.5 | 917.1 |
| 42.5° | 842.0 | 846.5 | 851.0 | 855.5 | 859.9 | 864.7 | 869.7 | 874.8 | 879.8 | 884.9 | 890.0 |
| 45° | 790.8 | 796.7 | 802.5 | 808.4 | 814.2 | 820.0 | 825.9 | 831.7 | 837.5 | 843.4 | 848.6 |
| 47.5° | 741.9 | 747.9 | 753.9 | 760.0 | 766.0 | 772.4 | 779.1 | 785.9 | 792.7 | 799.4 | 804.8 |
| 50° | 706.5 | 713.3 | 720.0 | 726.8 | 733.5 | 740.3 | 747.1 | 753.8 | 760.6 | 767.3 | 773.5 |
| 52.5° | 671.1 | 677.9 | 684.6 | 691.4 | 698.2 | 705.4 | 713.1 | 720.9 | 728.6 | 736.4 | 742.5 |
| 55° | 619.4 | 625.9 | 632.3 | 638.8 | 645.2 | 653.0 | 662.3 | 671.5 | 680.7 | 689.9 | 696.1 |
| 57.5° | 561.6 | 569.6 | 577.6 | 585.6 | 593.6 | 602.1 | 611.3 | 620.5 | 629.6 | 638.8 | 646.1 |
| 60° | 524.0 | 532.0 | 540.0 | 548.0 | 556.0 | 565.0 | 575.2 | 585.3 | 595.4 | 605.6 | 612.6 |
| 62.5° | 487.5 | 496.2 | 505.0 | 513.7 | 522.4 | 531.8 | 542.0 | 552.1 | 562.3 | 572.4 | 579.5 |
| 65° | 428.6 | 438.4 | 448.3 | 458.1 | 467.9 | 478.1 | 488.5 | 499.0 | 509.4 | 519.9 | 527.5 |
| 67.5° | 371.9 | 382.4 | 392.8 | 403.3 | 413.7 | 424.5 | 435.7 | 446.9 | 458.1 | 469.3 | 477.1 |
| 70° | 333.2 | 343.7 | 354.1 | 364.5 | 375.0 | 386.1 | 397.7 | 409.4 | 421.1 | 432.8 | 441.1 |
| 72.5° | 295.6 | 306.3 | 317.0 | 327.7 | 338.4 | 349.9 | 362.3 | 374.7 | 387.2 | 399.6 | 407.6 |
| 75° | 237.8 | 249.2 | 260.5 | 271.9 | 283.3 | 295.4 | 308.3 | 321.2 | 334.1 | 347.0 | 355.6 |
| 77.5° | 183.9 | 195.9 | 208.0 | 220.0 | 232.1 | 244.8 | 258.4 | 271.9 | 285.4 | 298.9 | 307.6 |
| 80° | 150.7 | 163.0 | 175.3 | 187.6 | 199.9 | 212.8 | 226.3 | 239.8 | 253.3 | 266.8 | 276.1 |
| 82.5° | 117.5 | 130.3 | 143.1 | 155.9 | 168.6 | 181.8 | 195.3 | 208.8 | 222.4 | 235.9 | 245.3 |
| 85° | 73.3 | 86.2 | 99.1 | 112.0 | 124.9 | 138.3 | 152.1 | 165.9 | 179.7 | 193.6 | 202.8 |
| 87.5° | 41.4 | 54.3 | 67.2 | 80.1 | 93.1 | 106.4 | 120.1 | 133.9 | 147.6 | 161.3 | 170.5 |
| 90° | 24.5 | 38.7 | 52.9 | 67.1 | 81.3 | 95.7 | 110.3 | 124.9 | 139.5 | 154.1 | 164.0 |
| 92.5° | 37.7 | 51.0 | 64.2 | 77.5 | 90.7 | 104.5 | 118.6 | 132.8 | 147.0 | 161.2 | 170.5 |
| 95° | 64.9 | 76.6 | 88.3 | 100.0 | 111.7 | 124.4 | 138.3 | 152.1 | 165.9 | 179.7 | 188.5 |
| 97.5° | 98.2 | 108.2 | 118.2 | 128.2 | 138.2 | 150.1 | 164.0 | 177.9 | 191.8 | 205.7 | 214.4 |
| 100° | 124.7 | 133.3 | 142.0 | 150.7 | 159.4 | 170.5 | 184.1 | 197.6 | 211.1 | 224.7 | 233.3 |
| 102.5° | 153.4 | 160.7 | 168.0 | 175.3 | 182.6 | 192.8 | 205.9 | 219.1 | 232.3 | 245.4 | 254.0 |
| 105° | 194.6 | 200.9 | 207.2 | 213.6 | 219.9 | 229.1 | 241.1 | 253.2 | 265.3 | 277.3 | 285.5 |
| 107.5° | 240.4 | 245.7 | 250.9 | 256.2 | 261.4 | 269.5 | 280.3 | 291.2 | 302.1 | 312.9 | 321.0 |
| 110° | 270.6 | 275.3 | 279.9 | 284.6 | 289.2 | 296.8 | 307.4 | 318.0 | 328.6 | 339.1 | 345.9 |



TEST NUMBER: P332647

CATALOG NUMBER: SA4XXDIP-C1020D810U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 302.0 | 305.9 | 309.8 | 313.7 | 317.5 | 324.5 | 334.4 | 344.4 | 354.3 | 364.3 | 371.0 |
| 115° | 349.2 | 351.9 | 354.7 | 357.5 | 360.2 | 366.3 | 375.8 | 385.3 | 394.8 | 404.3 | 410.9 |
| 117.5° | 394.8 | 396.6 | 398.4 | 400.2 | 402.0 | 407.4 | 416.3 | 425.2 | 434.1 | 443.0 | 448.8 |
| 120° | 424.4 | 426.0 | 427.6 | 429.2 | 430.9 | 435.9 | 444.2 | 452.6 | 461.0 | 469.4 | 474.7 |
| 122.5° | 456.3 | 456.7 | 457.2 | 457.7 | 458.1 | 462.5 | 470.6 | 478.8 | 487.0 | 495.2 | 500.7 |
| 125° | 502.0 | 501.7 | 501.4 | 501.0 | 500.7 | 504.3 | 511.8 | 519.4 | 526.9 | 534.4 | 539.9 |
| 127.5° | 544.4 | 544.6 | 544.8 | 545.0 | 545.2 | 548.1 | 553.8 | 559.4 | 565.0 | 570.6 | 575.8 |
| 130° | 573.3 | 573.5 | 573.7 | 573.9 | 574.1 | 576.7 | 581.6 | 586.5 | 591.5 | 596.4 | 601.6 |
| 132.5° | 603.9 | 604.0 | 604.1 | 604.2 | 604.2 | 606.2 | 610.0 | 613.8 | 617.5 | 621.3 | 626.3 |
| 135° | 643.0 | 644.1 | 645.1 | 646.2 | 647.2 | 648.8 | 651.0 | 653.1 | 655.3 | 657.4 | 662.0 |
| 137.5° | 687.1 | 687.3 | 687.5 | 687.7 | 687.9 | 688.6 | 689.9 | 691.3 | 692.6 | 693.9 | 697.9 |
| 140° | 716.5 | 716.6 | 716.6 | 716.7 | 716.7 | 716.9 | 717.2 | 717.5 | 717.8 | 718.1 | 721.9 |
| 142.5° | 742.3 | 742.6 | 742.9 | 743.2 | 743.5 | 743.4 | 743.1 | 742.8 | 742.5 | 742.2 | 745.6 |
| 145° | 779.3 | 779.6 | 780.0 | 780.4 | 780.8 | 781.1 | 781.3 | 781.4 | 781.6 | 781.8 | 783.5 |
| 147.5° | 816.2 | 816.7 | 817.2 | 817.7 | 818.3 | 818.5 | 818.3 | 818.2 | 818.0 | 817.9 | 818.0 |
| 150° | 838.7 | 839.1 | 839.5 | 839.8 | 840.2 | 840.4 | 840.4 | 840.4 | 840.4 | 840.4 | 840.4 |
| 152.5° | 858.8 | 859.2 | 859.5 | 859.9 | 860.3 | 860.5 | 860.6 | 860.8 | 860.9 | 861.1 | 861.5 |
| 155° | 891.2 | 891.2 | 891.2 | 891.2 | 891.2 | 891.1 | 891.0 | 890.8 | 890.6 | 890.5 | 891.1 |
| 157.5° | 918.8 | 918.4 | 918.1 | 917.8 | 917.5 | 917.3 | 917.3 | 917.3 | 917.2 | 917.2 | 917.7 |
| 160° | 935.0 | 934.8 | 934.7 | 934.5 | 934.3 | 934.1 | 934.0 | 933.8 | 933.6 | 933.5 | 934.0 |
| 162.5° | 950.0 | 949.6 | 949.1 | 948.7 | 948.2 | 947.9 | 947.7 | 947.6 | 947.4 | 947.2 | 948.2 |
| 165° | 970.2 | 969.7 | 969.2 | 968.6 | 968.1 | 967.7 | 967.3 | 967.0 | 966.6 | 966.3 | 967.3 |
| 167.5° | 985.7 | 984.9 | 984.2 | 983.5 | 982.8 | 982.4 | 982.4 | 982.5 | 982.5 | 982.5 | 983.6 |
| 170° | 994.4 | 993.6 | 992.7 | 991.8 | 991.0 | 990.6 | 990.8 | 991.0 | 991.1 | 991.3 | 992.3 |
| 172.5° | 1000.7 | 1000.0 | 999.2 | 998.5 | 997.8 | 997.4 | 997.5 | 997.5 | 997.5 | 997.6 | 998.7 |
| 175° | 1009.3 | 1008.4 | 1007.5 | 1006.7 | 1005.8 | 1005.3 | 1005.1 | 1004.9 | 1004.8 | 1004.6 | 1005.8 |
| 177.5° | 1012.1 | 1011.4 | 1010.7 | 1010.0 | 1009.3 | 1009.0 | 1009.0 | 1009.0 | 1009.0 | 1009.0 | 1009.9 |
| 180° | 1010.8 | 1010.8 | 1010.8 | 1010.8 | 1010.8 | 1010.8 | 1010.8 | 1010.8 | 1010.8 | 1010.8 | 1010.8 |



TEST NUMBER: P332647

CATALOG NUMBER: SA4XXDIP-C1020D810U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1234.7 | 1234.7 | 1234.7 | 1234.7 | 1234.7 | 1234.7 | 1234.7 | 1234.7 |
| 2.5° | 1230.4 | 1232.1 | 1233.8 | 1234.5 | 1234.3 | 1234.0 | 1233.8 | 1233.6 |
| 5° | 1227.1 | 1229.6 | 1232.1 | 1233.1 | 1232.8 | 1232.5 | 1232.2 | 1231.9 |
| 7.5° | 1220.6 | 1223.3 | 1226.1 | 1227.3 | 1227.0 | 1226.7 | 1226.4 | 1226.1 |
| 10° | 1213.9 | 1216.7 | 1219.5 | 1220.7 | 1220.4 | 1220.1 | 1219.8 | 1219.5 |
| 12.5° | 1204.6 | 1207.1 | 1209.6 | 1210.9 | 1210.8 | 1210.7 | 1210.7 | 1210.6 |
| 15° | 1187.7 | 1190.4 | 1193.2 | 1194.4 | 1194.1 | 1193.8 | 1193.5 | 1193.2 |
| 17.5° | 1167.0 | 1169.9 | 1172.7 | 1174.0 | 1173.7 | 1173.5 | 1173.2 | 1173.0 |
| 20° | 1150.9 | 1154.0 | 1157.1 | 1158.6 | 1158.6 | 1158.6 | 1158.6 | 1158.6 |
| 22.5° | 1132.1 | 1135.2 | 1138.3 | 1140.1 | 1140.6 | 1141.0 | 1141.5 | 1142.0 |
| 25° | 1103.2 | 1106.5 | 1109.9 | 1111.8 | 1112.1 | 1112.4 | 1112.7 | 1113.0 |
| 27.5° | 1070.6 | 1073.7 | 1076.9 | 1078.6 | 1079.0 | 1079.4 | 1079.7 | 1080.1 |
| 30° | 1047.9 | 1051.2 | 1054.6 | 1056.6 | 1057.2 | 1057.8 | 1058.5 | 1059.1 |
| 32.5° | 1024.5 | 1028.4 | 1032.3 | 1034.5 | 1035.1 | 1035.7 | 1036.3 | 1037.0 |
| 35° | 987.5 | 991.8 | 996.1 | 998.7 | 999.6 | 1000.5 | 1001.5 | 1002.4 |
| 37.5° | 948.9 | 953.3 | 957.6 | 960.3 | 961.3 | 962.3 | 963.2 | 964.2 |
| 40° | 921.7 | 926.3 | 931.0 | 933.9 | 935.1 | 936.3 | 937.6 | 938.8 |
| 42.5° | 895.1 | 900.2 | 905.3 | 908.3 | 909.3 | 910.3 | 911.3 | 912.2 |
| 45° | 853.8 | 859.1 | 864.3 | 867.7 | 869.2 | 870.7 | 872.3 | 873.8 |
| 47.5° | 810.2 | 815.6 | 821.1 | 824.7 | 826.5 | 828.4 | 830.2 | 832.1 |
| 50° | 779.6 | 785.8 | 791.9 | 795.9 | 797.8 | 799.6 | 801.4 | 803.3 |
| 52.5° | 748.7 | 754.8 | 761.0 | 764.9 | 766.8 | 768.6 | 770.5 | 772.3 |
| 55° | 702.2 | 708.4 | 714.5 | 718.5 | 720.3 | 722.2 | 724.0 | 725.9 |
| 57.5° | 653.4 | 660.7 | 668.0 | 672.5 | 674.2 | 676.0 | 677.7 | 679.4 |
| 60° | 619.7 | 626.8 | 633.8 | 638.6 | 641.1 | 643.5 | 646.0 | 648.4 |
| 62.5° | 586.5 | 593.6 | 600.7 | 605.4 | 607.9 | 610.3 | 612.8 | 615.3 |
| 65° | 535.2 | 542.9 | 550.6 | 555.7 | 558.1 | 560.6 | 563.0 | 565.5 |
| 67.5° | 484.9 | 492.7 | 500.5 | 505.6 | 508.0 | 510.4 | 512.8 | 515.2 |
| 70° | 449.3 | 457.6 | 465.9 | 471.2 | 473.3 | 475.5 | 477.6 | 479.8 |
| 72.5° | 415.7 | 423.7 | 431.8 | 437.0 | 439.4 | 441.8 | 444.2 | 446.6 |
| 75° | 364.2 | 372.8 | 381.4 | 387.1 | 389.9 | 392.7 | 395.4 | 398.2 |
| 77.5° | 316.4 | 325.1 | 333.8 | 339.7 | 342.6 | 345.6 | 348.5 | 351.5 |
| 80° | 285.3 | 294.5 | 303.7 | 309.5 | 312.0 | 314.5 | 316.9 | 319.4 |
| 82.5° | 254.8 | 264.3 | 273.7 | 279.8 | 282.5 | 285.2 | 287.9 | 290.6 |
| 85° | 212.0 | 221.2 | 230.4 | 236.6 | 239.7 | 242.7 | 245.8 | 248.9 |
| 87.5° | 179.6 | 188.7 | 197.8 | 203.8 | 206.5 | 209.3 | 212.1 | 214.8 |
| 90° | 174.0 | 183.9 | 193.9 | 200.3 | 203.1 | 205.9 | 208.7 | 211.5 |
| 92.5° | 179.8 | 189.1 | 198.4 | 204.3 | 207.0 | 209.7 | 212.3 | 215.0 |
| 95° | 197.3 | 206.2 | 215.0 | 220.8 | 223.5 | 226.3 | 229.1 | 231.8 |
| 97.5° | 223.0 | 231.7 | 240.4 | 246.0 | 248.7 | 251.3 | 254.0 | 256.6 |
| 100° | 242.0 | 250.6 | 259.3 | 264.7 | 266.8 | 269.0 | 271.1 | 273.3 |
| 102.5° | 262.5 | 271.0 | 279.6 | 285.1 | 287.6 | 290.2 | 292.7 | 295.3 |
| 105° | 293.7 | 301.9 | 310.1 | 315.7 | 318.7 | 321.7 | 324.7 | 327.6 |
| 107.5° | 329.0 | 337.1 | 345.1 | 350.2 | 352.4 | 354.6 | 356.7 | 358.9 |
| 110° | 352.6 | 359.3 | 366.0 | 370.9 | 373.8 | 376.8 | 379.8 | 382.8 |



TEST NUMBER: P332647

CATALOG NUMBER: SA4XXDIP-C1020D810U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 377.8 | 384.5 | 391.3 | 395.9 | 398.5 | 401.0 | 403.6 | 406.2 |
| 115° | 417.4 | 424.0 | 430.6 | 434.9 | 436.9 | 438.9 | 440.8 | 442.8 |
| 117.5° | 454.6 | 460.4 | 466.2 | 470.2 | 472.3 | 474.4 | 476.5 | 478.6 |
| 120° | 480.0 | 485.2 | 490.5 | 494.6 | 497.4 | 500.2 | 503.0 | 505.8 |
| 122.5° | 506.3 | 511.8 | 517.4 | 520.9 | 522.5 | 524.1 | 525.7 | 527.3 |
| 125° | 545.3 | 550.8 | 556.3 | 559.8 | 561.3 | 562.8 | 564.3 | 565.8 |
| 127.5° | 581.0 | 586.2 | 591.4 | 594.9 | 596.7 | 598.5 | 600.3 | 602.1 |
| 130° | 606.7 | 611.9 | 617.1 | 620.3 | 621.4 | 622.6 | 623.7 | 624.9 |
| 132.5° | 631.2 | 636.2 | 641.1 | 644.3 | 645.9 | 647.5 | 649.0 | 650.6 |
| 135° | 666.6 | 671.1 | 675.7 | 678.6 | 680.0 | 681.3 | 682.6 | 683.9 |
| 137.5° | 702.0 | 706.0 | 710.0 | 712.9 | 714.5 | 716.2 | 717.8 | 719.4 |
| 140° | 725.7 | 729.6 | 733.4 | 736.0 | 737.3 | 738.7 | 740.1 | 741.4 |
| 142.5° | 749.1 | 752.6 | 756.0 | 758.4 | 759.6 | 760.9 | 762.2 | 763.4 |
| 145° | 785.1 | 786.8 | 788.5 | 789.7 | 790.4 | 791.1 | 791.8 | 792.5 |
| 147.5° | 818.1 | 818.2 | 818.3 | 818.8 | 819.6 | 820.4 | 821.2 | 822.0 |
| 150° | 840.4 | 840.4 | 840.4 | 840.3 | 840.2 | 840.0 | 839.8 | 839.6 |
| 152.5° | 861.9 | 862.3 | 862.7 | 862.7 | 862.3 | 861.8 | 861.4 | 860.9 |
| 155° | 891.8 | 892.5 | 893.2 | 893.2 | 892.5 | 891.8 | 891.1 | 890.5 |
| 157.5° | 918.2 | 918.8 | 919.3 | 919.2 | 918.7 | 918.1 | 917.5 | 916.9 |
| 160° | 934.5 | 935.0 | 935.5 | 935.4 | 934.5 | 933.6 | 932.8 | 931.9 |
| 162.5° | 949.1 | 950.0 | 951.0 | 951.0 | 950.1 | 949.3 | 948.4 | 947.5 |
| 165° | 968.4 | 969.4 | 970.5 | 970.6 | 969.9 | 969.2 | 968.5 | 967.9 |
| 167.5° | 984.6 | 985.7 | 986.7 | 986.7 | 985.6 | 984.5 | 983.5 | 982.4 |
| 170° | 993.4 | 994.4 | 995.5 | 995.4 | 994.2 | 993.0 | 991.7 | 990.5 |
| 172.5° | 999.9 | 1001.1 | 1002.3 | 1002.3 | 1001.1 | 999.8 | 998.6 | 997.4 |
| 175° | 1007.0 | 1008.2 | 1009.5 | 1009.5 | 1008.2 | 1007.0 | 1005.8 | 1004.6 |
| 177.5° | 1010.9 | 1011.9 | 1012.9 | 1012.8 | 1011.7 | 1010.6 | 1009.5 | 1008.3 |
| 180° | 1010.8 | 1010.8 | 1010.8 | 1010.8 | 1010.8 | 1010.8 | 1010.8 | 1010.8 |

(END OF REPORT)