

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: P332227-930

Luminaire Tested: **S123DIW-S1165D1030U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332227-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-9,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123DIW-S1165D1030U930-4F0-1E-UDD-F1
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1030 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6794.7 lumens
Efficiency: N/A
Efficacy: 100.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: General Diffuse

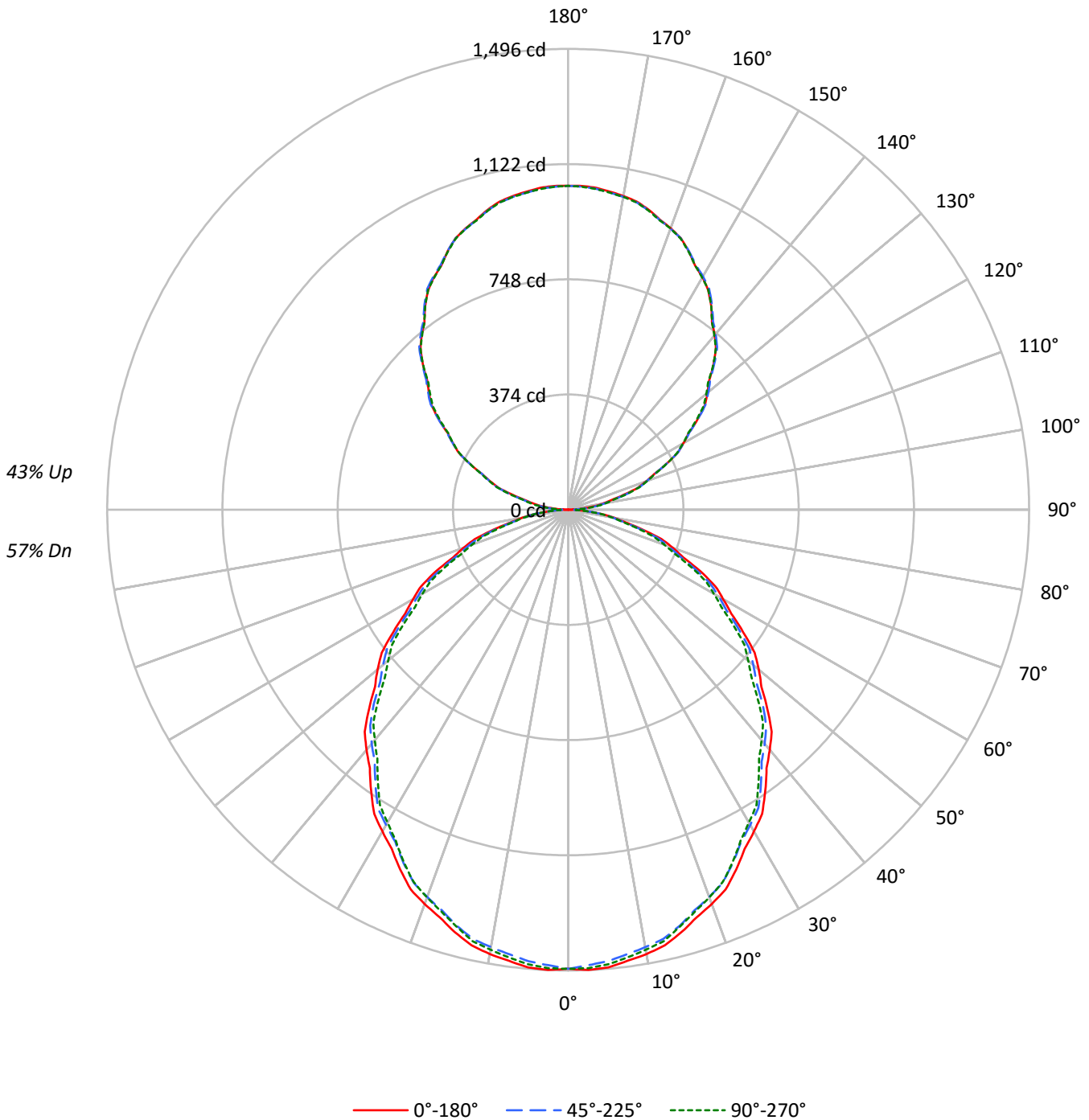
Input Watts (W): 67.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332227-930

CATALOG NUMBER: S123DIW-S1165D1030U930-4F0-1E-UDD-F1

Luminous Intensity Polar Plot





TEST NUMBER: P332227-930

CATALOG NUMBER: S123DIW-S1165D1030U930-4F0-1E-UDD-F1

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 | 109 | 109 | 109 | 109 | 101 | 101 | 101 | 101 | 87 | 87 | 87 | 74 | 74 | 74 | 63 | 63 | 63 | 57 |
| 1 | 99 | 95 | 91 | 87 | 92 | 88 | 85 | 82 | 76 | 74 | 72 | 65 | 64 | 62 | 55 | 54 | 53 | 48 |
| 2 | 90 | 83 | 77 | 71 | 84 | 77 | 72 | 67 | 67 | 63 | 59 | 57 | 54 | 52 | 49 | 46 | 44 | 40 |
| 3 | 82 | 73 | 65 | 59 | 76 | 68 | 61 | 56 | 59 | 54 | 50 | 51 | 47 | 44 | 43 | 40 | 38 | 34 |
| 4 | 75 | 64 | 56 | 50 | 70 | 60 | 53 | 48 | 52 | 47 | 42 | 45 | 41 | 37 | 38 | 35 | 33 | 29 |
| 5 | 69 | 57 | 49 | 43 | 64 | 54 | 46 | 41 | 47 | 41 | 37 | 41 | 36 | 32 | 35 | 31 | 28 | 25 |
| 6 | 64 | 52 | 43 | 37 | 59 | 48 | 41 | 36 | 42 | 36 | 32 | 37 | 32 | 28 | 31 | 28 | 25 | 22 |
| 7 | 59 | 47 | 39 | 33 | 55 | 44 | 36 | 31 | 38 | 33 | 28 | 33 | 29 | 25 | 29 | 25 | 22 | 20 |
| 8 | 55 | 42 | 34 | 29 | 51 | 40 | 33 | 28 | 35 | 29 | 25 | 31 | 26 | 22 | 26 | 23 | 20 | 18 |
| 9 | 51 | 39 | 31 | 26 | 48 | 36 | 30 | 25 | 32 | 26 | 22 | 28 | 24 | 20 | 24 | 21 | 18 | 16 |
| 10 | 48 | 36 | 28 | 23 | 44 | 34 | 27 | 22 | 30 | 24 | 20 | 26 | 21 | 18 | 23 | 19 | 16 | 14 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 16043 | 16043 | 16043 |
| 5° | 16119 | 15896 | 16008 |
| 10° | 16010 | 15759 | 15856 |
| 15° | 15824 | 15581 | 15610 |
| 20° | 15605 | 15326 | 15340 |
| 25° | 15311 | 15023 | 14992 |
| 30° | 14989 | 14686 | 14574 |
| 35° | 14651 | 14331 | 14146 |
| 40° | 14299 | 13939 | 13722 |
| 45° | 13910 | 13577 | 13247 |
| 50° | 13520 | 13134 | 12769 |
| 55° | 13011 | 12675 | 12288 |
| 60° | 12499 | 12140 | 11752 |
| 65° | 12045 | 11556 | 11196 |
| 70° | 11374 | 10889 | 10408 |
| 75° | 10393 | 10019 | 9590 |
| 80° | 9372 | 8976 | 8901 |
| 85° | 8225 | 7916 | 7608 |



TEST NUMBER: P332227-930

CATALOG NUMBER: S123DIW-S1165D1030U930-4F0-1E-UDD-F1

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 140.4 | 2.1 |
| 10°-20° | 396.4 | 5.8 |
| 20°-30° | 585.6 | 8.6 |
| 30°-40° | 684.0 | 10.1 |
| 40°-50° | 687.7 | 10.1 |
| 50°-60° | 604.1 | 8.9 |
| 60°-70° | 450.0 | 6.6 |
| 70°-80° | 256.4 | 3.8 |
| 80°-90° | 76.7 | 1.1 |
| 90°-100° | 68.5 | 1.0 |
| 100°-110° | 205.0 | 3.0 |
| 110°-120° | 348.7 | 5.1 |
| 120°-130° | 458.7 | 6.8 |
| 130°-140° | 515.5 | 7.6 |
| 140°-150° | 506.8 | 7.5 |
| 150°-160° | 426.6 | 6.3 |
| 160°-170° | 284.0 | 4.2 |
| 170°-180° | 99.4 | 1.5 |
| 0°-30° | 1122.4 | 16.5 |
| 0°-40° | 1806.5 | 26.6 |
| 0°-60° | 3098.3 | 45.6 |
| 0°-90° | 3881.4 | 57.1 |
| 90°-120° | 622.2 | 9.2 |
| 90°-150° | 2103.2 | 31.0 |
| 90°-180° | 2913.0 | 42.9 |
| 0°-180° | 6794.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1490 | 1490 | 1490 | 1490 | 1490 | |
| 5° | 1492 | 1485 | 1471 | 1483 | 1482 | 141 |
| 15° | 1420 | 1414 | 1398 | 1407 | 1401 | 400 |
| 25° | 1289 | 1281 | 1265 | 1266 | 1262 | 594 |
| 35° | 1115 | 1107 | 1091 | 1083 | 1076 | 697 |
| 45° | 914 | 908 | 892 | 877 | 870 | 705 |
| 55° | 693 | 691 | 675 | 662 | 655 | 621 |
| 65° | 473 | 466 | 454 | 444 | 440 | 466 |
| 75° | 250 | 245 | 241 | 235 | 231 | 267 |
| 85° | 67 | 64 | 64 | 62 | 62 | 73 |
| 90° | 1 | 9 | 20 | 23 | 25 | 7 |
| 95° | 49 | 55 | 61 | 64 | 64 | 55 |
| 105° | 186 | 188 | 195 | 195 | 197 | 199 |
| 115° | 351 | 353 | 352 | 353 | 352 | 347 |
| 125° | 514 | 516 | 515 | 511 | 508 | 458 |
| 135° | 667 | 671 | 671 | 667 | 666 | 513 |
| 145° | 809 | 810 | 813 | 812 | 809 | 505 |
| 155° | 926 | 926 | 927 | 930 | 924 | 426 |
| 165° | 1008 | 1006 | 1006 | 1010 | 1005 | 284 |
| 175° | 1049 | 1046 | 1046 | 1050 | 1045 | 100 |
| 180° | 1052 | 1052 | 1052 | 1052 | 1052 | |



TEST NUMBER: P332227-930

CATALOG NUMBER: S123DIW-S1165D1030U930-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1490.4 | 1490.4 | 1490.4 | 1490.4 | 1490.4 | 1490.4 | 1490.4 | 1490.4 | 1490.4 | 1490.4 | 1490.4 |
| 2.5° | 1495.6 | 1494.7 | 1493.8 | 1492.9 | 1491.9 | 1490.2 | 1487.8 | 1485.2 | 1482.7 | 1480.2 | 1482.5 |
| 5° | 1491.8 | 1490.4 | 1488.9 | 1487.5 | 1486.0 | 1483.8 | 1480.7 | 1477.5 | 1474.4 | 1471.2 | 1474.1 |
| 7.5° | 1477.2 | 1475.7 | 1474.3 | 1472.8 | 1471.5 | 1469.1 | 1465.8 | 1462.6 | 1459.4 | 1456.1 | 1458.7 |
| 10° | 1464.8 | 1463.4 | 1462.0 | 1460.5 | 1459.1 | 1456.6 | 1452.9 | 1449.2 | 1445.4 | 1441.8 | 1444.3 |
| 12.5° | 1448.5 | 1447.2 | 1446.0 | 1444.9 | 1443.7 | 1441.3 | 1437.9 | 1434.4 | 1430.9 | 1427.4 | 1429.3 |
| 15° | 1420.0 | 1418.9 | 1417.7 | 1416.6 | 1415.4 | 1413.0 | 1409.3 | 1405.6 | 1401.9 | 1398.2 | 1400.4 |
| 17.5° | 1386.9 | 1385.4 | 1384.0 | 1382.5 | 1381.0 | 1378.4 | 1374.7 | 1371.0 | 1367.3 | 1363.6 | 1365.2 |
| 20° | 1362.3 | 1360.6 | 1358.9 | 1357.1 | 1355.5 | 1352.7 | 1349.1 | 1345.4 | 1341.7 | 1338.0 | 1339.1 |
| 22.5° | 1334.6 | 1332.9 | 1331.2 | 1329.5 | 1327.8 | 1325.1 | 1321.4 | 1317.7 | 1314.0 | 1310.3 | 1311.2 |
| 25° | 1289.2 | 1287.5 | 1285.8 | 1284.1 | 1282.5 | 1279.7 | 1276.0 | 1272.4 | 1268.6 | 1264.9 | 1265.2 |
| 27.5° | 1240.8 | 1239.2 | 1237.5 | 1235.8 | 1234.2 | 1231.4 | 1227.4 | 1223.4 | 1219.4 | 1215.4 | 1215.7 |
| 30° | 1206.0 | 1204.5 | 1203.1 | 1201.7 | 1200.3 | 1197.6 | 1193.6 | 1189.6 | 1185.6 | 1181.6 | 1181.6 |
| 32.5° | 1171.1 | 1169.2 | 1167.3 | 1165.5 | 1163.6 | 1161.1 | 1158.1 | 1155.0 | 1151.9 | 1148.8 | 1147.2 |
| 35° | 1115.0 | 1113.3 | 1111.6 | 1109.9 | 1108.2 | 1105.5 | 1101.7 | 1098.0 | 1094.3 | 1090.6 | 1088.9 |
| 37.5° | 1057.5 | 1055.4 | 1053.2 | 1051.1 | 1048.9 | 1045.9 | 1042.2 | 1038.4 | 1034.7 | 1030.9 | 1028.8 |
| 40° | 1017.6 | 1015.9 | 1014.2 | 1012.4 | 1010.7 | 1007.9 | 1003.9 | 999.9 | 995.9 | 992.0 | 989.7 |
| 42.5° | 977.5 | 975.7 | 973.7 | 971.8 | 969.8 | 966.9 | 962.9 | 958.9 | 954.9 | 951.0 | 948.7 |
| 45° | 913.8 | 912.6 | 911.5 | 910.4 | 909.2 | 906.8 | 903.1 | 899.4 | 895.7 | 891.9 | 888.6 |
| 47.5° | 850.4 | 848.8 | 847.2 | 845.5 | 843.8 | 841.3 | 837.8 | 834.3 | 830.9 | 827.4 | 824.0 |
| 50° | 807.4 | 806.0 | 804.5 | 803.2 | 801.7 | 799.2 | 795.4 | 791.7 | 788.0 | 784.3 | 781.2 |
| 52.5° | 762.3 | 761.3 | 760.3 | 759.4 | 758.4 | 755.9 | 752.0 | 748.1 | 744.2 | 740.2 | 737.5 |
| 55° | 693.3 | 693.1 | 692.8 | 692.5 | 692.2 | 690.2 | 686.5 | 682.8 | 679.1 | 675.4 | 672.3 |
| 57.5° | 627.7 | 626.7 | 625.7 | 624.8 | 623.9 | 621.9 | 618.9 | 616.0 | 613.0 | 610.0 | 607.2 |
| 60° | 580.6 | 580.2 | 580.0 | 579.7 | 579.4 | 577.6 | 574.1 | 570.7 | 567.3 | 563.9 | 561.3 |
| 62.5° | 538.5 | 537.8 | 537.0 | 536.3 | 535.6 | 533.5 | 530.0 | 526.6 | 523.3 | 519.8 | 517.2 |
| 65° | 472.9 | 471.5 | 470.0 | 468.6 | 467.2 | 465.0 | 462.2 | 459.3 | 456.5 | 453.7 | 451.4 |
| 67.5° | 403.4 | 402.2 | 401.0 | 399.7 | 398.4 | 396.7 | 394.5 | 392.4 | 390.2 | 388.1 | 386.0 |
| 70° | 361.4 | 359.7 | 358.0 | 356.3 | 354.6 | 352.9 | 351.1 | 349.4 | 347.7 | 346.0 | 344.1 |
| 72.5° | 317.3 | 316.1 | 314.8 | 313.6 | 312.3 | 310.7 | 308.8 | 306.8 | 304.9 | 303.0 | 301.2 |
| 75° | 249.9 | 248.7 | 247.6 | 246.5 | 245.3 | 244.3 | 243.5 | 242.6 | 241.8 | 240.9 | 239.5 |
| 77.5° | 190.2 | 189.6 | 188.9 | 188.3 | 187.7 | 186.9 | 185.8 | 184.8 | 183.8 | 182.8 | 181.8 |
| 80° | 151.2 | 150.3 | 149.5 | 148.6 | 147.8 | 147.1 | 146.5 | 145.9 | 145.4 | 144.8 | 144.6 |
| 82.5° | 113.3 | 113.1 | 112.9 | 112.8 | 112.6 | 112.4 | 112.3 | 112.3 | 112.1 | 112.0 | 111.5 |
| 85° | 66.6 | 66.0 | 65.5 | 64.9 | 64.3 | 64.1 | 64.1 | 64.1 | 64.1 | 64.1 | 63.5 |
| 87.5° | 26.8 | 26.5 | 26.2 | 25.8 | 25.5 | 25.5 | 25.8 | 26.0 | 26.3 | 26.5 | 26.4 |
| 90° | 0.8 | 2.7 | 4.5 | 6.4 | 8.2 | 10.3 | 12.6 | 15.1 | 17.4 | 19.8 | 20.5 |
| 92.5° | 20.0 | 21.2 | 22.5 | 23.7 | 24.9 | 26.3 | 27.6 | 29.0 | 30.3 | 31.7 | 32.3 |
| 95° | 48.8 | 50.0 | 51.3 | 52.6 | 53.9 | 55.3 | 56.7 | 58.2 | 59.7 | 61.1 | 61.9 |
| 97.5° | 86.6 | 87.5 | 88.5 | 89.4 | 90.4 | 91.4 | 92.5 | 93.5 | 94.6 | 95.6 | 96.5 |
| 100° | 112.3 | 113.4 | 114.5 | 115.6 | 116.8 | 117.7 | 118.7 | 119.6 | 120.5 | 121.4 | 122.0 |
| 102.5° | 142.1 | 142.8 | 143.4 | 144.1 | 144.7 | 145.6 | 146.8 | 148.1 | 149.3 | 150.5 | 151.1 |
| 105° | 185.9 | 186.2 | 186.6 | 186.9 | 187.4 | 188.3 | 190.0 | 191.6 | 193.3 | 194.9 | 194.9 |
| 107.5° | 236.8 | 236.9 | 237.2 | 237.4 | 237.6 | 238.1 | 238.7 | 239.4 | 240.0 | 240.7 | 241.2 |
| 110° | 268.5 | 268.8 | 269.2 | 269.5 | 269.9 | 270.3 | 270.7 | 271.0 | 271.4 | 271.7 | 272.5 |



TEST NUMBER: P332227-930

CATALOG NUMBER: S123DIW-S1165D1030U930-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 301.5 | 301.7 | 301.9 | 302.1 | 302.4 | 302.5 | 302.6 | 302.6 | 302.7 | 302.8 | 303.7 |
| 115° | 351.1 | 351.6 | 352.1 | 352.7 | 353.3 | 353.4 | 352.9 | 352.6 | 352.2 | 351.9 | 352.0 |
| 117.5° | 401.0 | 401.3 | 401.7 | 402.0 | 402.4 | 402.4 | 401.9 | 401.4 | 400.9 | 400.5 | 400.4 |
| 120° | 432.0 | 433.1 | 434.2 | 435.3 | 436.4 | 436.5 | 435.5 | 434.6 | 433.7 | 432.8 | 432.6 |
| 122.5° | 464.4 | 465.2 | 466.0 | 466.8 | 467.6 | 467.7 | 467.3 | 466.8 | 466.4 | 465.9 | 465.4 |
| 125° | 513.8 | 514.3 | 514.9 | 515.4 | 516.0 | 516.1 | 515.7 | 515.4 | 514.9 | 514.6 | 513.9 |
| 127.5° | 559.4 | 560.5 | 561.7 | 562.9 | 564.0 | 564.4 | 564.0 | 563.6 | 563.2 | 562.8 | 561.8 |
| 130° | 589.8 | 591.3 | 592.7 | 594.2 | 595.7 | 596.1 | 595.6 | 595.0 | 594.4 | 593.9 | 593.1 |
| 132.5° | 620.1 | 621.6 | 623.1 | 624.6 | 626.1 | 626.6 | 626.1 | 625.7 | 625.3 | 624.9 | 624.0 |
| 135° | 666.6 | 667.6 | 668.8 | 669.8 | 671.0 | 671.4 | 671.2 | 671.1 | 670.9 | 670.7 | 669.9 |
| 137.5° | 709.6 | 710.5 | 711.3 | 712.2 | 713.2 | 713.9 | 714.4 | 714.9 | 715.3 | 715.8 | 715.0 |
| 140° | 739.2 | 740.2 | 741.1 | 742.0 | 742.9 | 743.5 | 743.6 | 743.9 | 744.0 | 744.2 | 744.0 |
| 142.5° | 766.4 | 767.3 | 768.2 | 769.1 | 770.1 | 770.6 | 770.9 | 771.3 | 771.7 | 772.0 | 771.8 |
| 145° | 808.6 | 809.0 | 809.3 | 809.8 | 810.1 | 810.6 | 811.1 | 811.7 | 812.2 | 812.8 | 812.6 |
| 147.5° | 845.6 | 846.3 | 846.9 | 847.7 | 848.3 | 848.9 | 849.4 | 849.9 | 850.4 | 850.9 | 850.9 |
| 150° | 871.4 | 871.8 | 872.1 | 872.5 | 872.9 | 873.3 | 873.6 | 874.0 | 874.3 | 874.7 | 874.7 |
| 152.5° | 892.6 | 893.1 | 893.6 | 894.1 | 894.6 | 895.0 | 895.2 | 895.4 | 895.7 | 895.9 | 896.2 |
| 155° | 925.9 | 925.9 | 925.9 | 925.9 | 925.9 | 926.0 | 926.2 | 926.4 | 926.6 | 926.8 | 927.5 |
| 157.5° | 954.4 | 954.1 | 953.9 | 953.7 | 953.5 | 953.4 | 953.6 | 953.7 | 953.9 | 954.0 | 954.8 |
| 160° | 972.2 | 971.8 | 971.4 | 971.1 | 970.7 | 970.5 | 970.5 | 970.5 | 970.5 | 970.5 | 971.4 |
| 162.5° | 988.1 | 987.6 | 987.0 | 986.5 | 986.0 | 985.8 | 985.9 | 986.1 | 986.3 | 986.4 | 987.3 |
| 165° | 1008.5 | 1008.0 | 1007.5 | 1006.9 | 1006.3 | 1006.1 | 1006.1 | 1006.1 | 1006.1 | 1006.1 | 1007.1 |
| 167.5° | 1024.9 | 1024.2 | 1023.4 | 1022.7 | 1022.0 | 1021.7 | 1021.8 | 1022.0 | 1022.1 | 1022.2 | 1023.4 |
| 170° | 1034.1 | 1033.4 | 1032.7 | 1031.9 | 1031.2 | 1030.9 | 1030.9 | 1030.9 | 1030.9 | 1030.9 | 1032.1 |
| 172.5° | 1041.4 | 1040.6 | 1039.9 | 1039.2 | 1038.4 | 1038.1 | 1038.1 | 1038.1 | 1038.1 | 1038.1 | 1039.3 |
| 175° | 1049.0 | 1048.3 | 1047.6 | 1046.8 | 1046.1 | 1045.7 | 1045.7 | 1045.7 | 1045.7 | 1045.7 | 1046.8 |
| 177.5° | 1052.1 | 1051.6 | 1051.0 | 1050.4 | 1049.8 | 1049.5 | 1049.5 | 1049.5 | 1049.5 | 1049.5 | 1050.4 |
| 180° | 1051.5 | 1051.5 | 1051.5 | 1051.5 | 1051.5 | 1051.5 | 1051.5 | 1051.5 | 1051.5 | 1051.5 | 1051.5 |



TEST NUMBER: P332227-930

CATALOG NUMBER: S123DIW-S1165D1030U930-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1490.4 | 1490.4 | 1490.4 | 1490.4 | 1490.4 | 1490.4 | 1490.4 | 1490.4 |
| 2.5° | 1484.7 | 1487.0 | 1489.3 | 1490.4 | 1490.1 | 1489.9 | 1489.6 | 1489.5 |
| 5° | 1476.9 | 1479.8 | 1482.6 | 1483.8 | 1483.2 | 1482.6 | 1482.1 | 1481.5 |
| 7.5° | 1461.3 | 1463.8 | 1466.4 | 1467.5 | 1467.1 | 1466.8 | 1466.5 | 1466.2 |
| 10° | 1446.9 | 1449.4 | 1452.0 | 1453.0 | 1452.5 | 1451.9 | 1451.3 | 1450.7 |
| 12.5° | 1431.2 | 1433.1 | 1434.9 | 1435.7 | 1435.3 | 1435.0 | 1434.7 | 1434.4 |
| 15° | 1402.7 | 1405.0 | 1407.3 | 1407.6 | 1405.9 | 1404.2 | 1402.5 | 1400.8 |
| 17.5° | 1366.8 | 1368.4 | 1369.9 | 1370.4 | 1369.9 | 1369.2 | 1368.6 | 1368.0 |
| 20° | 1340.3 | 1341.4 | 1342.6 | 1342.6 | 1341.8 | 1340.9 | 1340.1 | 1339.2 |
| 22.5° | 1312.1 | 1313.0 | 1313.9 | 1313.9 | 1312.8 | 1311.7 | 1310.6 | 1309.5 |
| 25° | 1265.5 | 1265.8 | 1266.1 | 1265.8 | 1264.9 | 1264.0 | 1263.2 | 1262.3 |
| 27.5° | 1215.9 | 1216.1 | 1216.3 | 1215.9 | 1214.9 | 1213.7 | 1212.7 | 1211.6 |
| 30° | 1181.6 | 1181.6 | 1181.6 | 1180.6 | 1178.6 | 1176.6 | 1174.6 | 1172.6 |
| 32.5° | 1145.6 | 1144.0 | 1142.4 | 1141.1 | 1140.0 | 1138.9 | 1137.8 | 1136.8 |
| 35° | 1087.2 | 1085.5 | 1083.8 | 1082.2 | 1080.8 | 1079.4 | 1077.9 | 1076.5 |
| 37.5° | 1026.8 | 1024.7 | 1022.7 | 1021.2 | 1020.3 | 1019.4 | 1018.5 | 1017.6 |
| 40° | 987.4 | 985.1 | 982.8 | 981.1 | 980.0 | 978.8 | 977.7 | 976.6 |
| 42.5° | 946.4 | 944.1 | 941.8 | 940.1 | 939.0 | 937.8 | 936.7 | 935.6 |
| 45° | 885.2 | 881.7 | 878.3 | 875.9 | 874.5 | 873.0 | 871.6 | 870.2 |
| 47.5° | 820.7 | 817.3 | 813.9 | 811.6 | 810.4 | 809.1 | 807.9 | 806.7 |
| 50° | 778.0 | 774.9 | 771.8 | 769.4 | 767.7 | 766.0 | 764.3 | 762.5 |
| 52.5° | 734.9 | 732.2 | 729.5 | 727.3 | 725.6 | 723.9 | 722.2 | 720.5 |
| 55° | 669.1 | 666.0 | 662.8 | 660.6 | 659.2 | 657.7 | 656.3 | 654.8 |
| 57.5° | 604.5 | 601.7 | 598.8 | 596.6 | 595.0 | 593.4 | 591.7 | 590.0 |
| 60° | 558.8 | 556.2 | 553.7 | 551.6 | 550.2 | 548.8 | 547.4 | 545.9 |
| 62.5° | 514.7 | 512.1 | 509.6 | 507.8 | 506.8 | 505.8 | 504.9 | 503.9 |
| 65° | 449.1 | 446.9 | 444.6 | 443.0 | 442.1 | 441.3 | 440.4 | 439.6 |
| 67.5° | 384.1 | 382.0 | 380.1 | 378.5 | 377.3 | 376.1 | 374.9 | 373.7 |
| 70° | 342.0 | 340.1 | 338.0 | 336.3 | 334.9 | 333.5 | 332.1 | 330.7 |
| 72.5° | 299.5 | 297.7 | 295.9 | 294.6 | 293.9 | 293.2 | 292.4 | 291.7 |
| 75° | 238.1 | 236.7 | 235.2 | 234.1 | 233.3 | 232.4 | 231.5 | 230.6 |
| 77.5° | 180.8 | 179.9 | 178.9 | 178.4 | 178.4 | 178.4 | 178.4 | 178.4 |
| 80° | 144.2 | 144.0 | 143.7 | 143.6 | 143.6 | 143.6 | 143.6 | 143.6 |
| 82.5° | 111.0 | 110.5 | 110.0 | 109.6 | 109.3 | 109.2 | 108.9 | 108.7 |
| 85° | 62.9 | 62.4 | 61.8 | 61.6 | 61.6 | 61.6 | 61.6 | 61.6 |
| 87.5° | 26.3 | 26.3 | 26.2 | 26.2 | 26.3 | 26.3 | 26.4 | 26.5 |
| 90° | 21.3 | 22.0 | 22.7 | 23.3 | 23.6 | 24.1 | 24.4 | 24.8 |
| 92.5° | 32.9 | 33.5 | 34.1 | 34.2 | 34.0 | 33.8 | 33.6 | 33.3 |
| 95° | 62.6 | 63.3 | 64.1 | 64.4 | 64.4 | 64.4 | 64.4 | 64.4 |
| 97.5° | 97.3 | 98.2 | 99.1 | 99.4 | 99.3 | 99.3 | 99.2 | 99.1 |
| 100° | 122.5 | 123.1 | 123.6 | 124.1 | 124.4 | 124.8 | 125.1 | 125.6 |
| 102.5° | 151.6 | 152.1 | 152.7 | 153.0 | 152.9 | 152.8 | 152.7 | 152.6 |
| 105° | 194.9 | 194.9 | 194.9 | 195.1 | 195.5 | 195.8 | 196.2 | 196.6 |
| 107.5° | 241.9 | 242.5 | 243.0 | 243.2 | 243.0 | 242.8 | 242.6 | 242.3 |
| 110° | 273.2 | 273.9 | 274.7 | 274.8 | 274.5 | 274.1 | 273.8 | 273.4 |



TEST NUMBER: P332227-930

CATALOG NUMBER: S123DIW-S1165D1030U930-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 304.6 | 305.4 | 306.3 | 306.7 | 306.6 | 306.6 | 306.6 | 306.5 |
| 115° | 352.2 | 352.5 | 352.6 | 352.6 | 352.5 | 352.2 | 352.0 | 351.9 |
| 117.5° | 400.4 | 400.3 | 400.3 | 400.0 | 399.5 | 399.0 | 398.4 | 397.9 |
| 120° | 432.4 | 432.3 | 432.1 | 431.8 | 431.5 | 431.0 | 430.7 | 430.3 |
| 122.5° | 464.9 | 464.4 | 464.0 | 463.4 | 462.9 | 462.4 | 461.9 | 461.4 |
| 125° | 513.1 | 512.4 | 511.7 | 510.9 | 510.2 | 509.5 | 508.7 | 508.0 |
| 127.5° | 560.8 | 559.8 | 558.7 | 557.7 | 556.9 | 556.1 | 555.2 | 554.4 |
| 130° | 592.4 | 591.7 | 590.9 | 590.0 | 588.6 | 587.3 | 586.1 | 584.8 |
| 132.5° | 623.2 | 622.3 | 621.4 | 620.5 | 619.5 | 618.5 | 617.5 | 616.5 |
| 135° | 669.2 | 668.5 | 667.7 | 667.2 | 666.8 | 666.5 | 666.1 | 665.8 |
| 137.5° | 714.3 | 713.5 | 712.7 | 712.0 | 711.3 | 710.6 | 709.9 | 709.2 |
| 140° | 743.9 | 743.6 | 743.5 | 742.7 | 741.4 | 740.2 | 738.9 | 737.6 |
| 142.5° | 771.6 | 771.4 | 771.3 | 770.6 | 769.6 | 768.7 | 767.7 | 766.7 |
| 145° | 812.4 | 812.2 | 812.0 | 811.5 | 810.8 | 810.1 | 809.3 | 808.6 |
| 147.5° | 850.9 | 850.9 | 850.9 | 850.4 | 849.3 | 848.2 | 847.1 | 846.0 |
| 150° | 874.7 | 874.7 | 874.7 | 874.2 | 873.1 | 872.0 | 870.9 | 869.8 |
| 152.5° | 896.4 | 896.7 | 897.1 | 896.7 | 895.8 | 894.8 | 893.8 | 892.9 |
| 155° | 928.2 | 929.0 | 929.7 | 929.4 | 928.1 | 926.8 | 925.6 | 924.3 |
| 157.5° | 955.5 | 956.3 | 957.1 | 957.0 | 955.9 | 955.0 | 953.9 | 952.8 |
| 160° | 972.4 | 973.3 | 974.2 | 974.3 | 973.5 | 972.8 | 972.1 | 971.3 |
| 162.5° | 988.2 | 989.1 | 990.1 | 989.9 | 988.8 | 987.6 | 986.4 | 985.2 |
| 165° | 1008.3 | 1009.3 | 1010.5 | 1010.4 | 1009.1 | 1007.8 | 1006.5 | 1005.3 |
| 167.5° | 1024.5 | 1025.6 | 1026.8 | 1026.8 | 1025.6 | 1024.5 | 1023.4 | 1022.2 |
| 170° | 1033.4 | 1034.7 | 1036.0 | 1036.0 | 1034.7 | 1033.4 | 1032.1 | 1030.9 |
| 172.5° | 1040.4 | 1041.5 | 1042.7 | 1042.6 | 1041.3 | 1040.0 | 1038.7 | 1037.5 |
| 175° | 1047.9 | 1049.0 | 1050.1 | 1050.0 | 1048.7 | 1047.4 | 1046.2 | 1044.9 |
| 177.5° | 1051.2 | 1052.1 | 1053.0 | 1053.0 | 1051.9 | 1050.9 | 1049.9 | 1048.9 |
| 180° | 1051.5 | 1051.5 | 1051.5 | 1051.5 | 1051.5 | 1051.5 | 1051.5 | 1051.5 |

(END OF REPORT)