

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: P332226-927

Luminaire Tested: **S123DIW-S1165D1030U927-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332226-927  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-5,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S123DIW-S1165D1030U927-4F0-1E-UDD-F  
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1165 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
UPLIGHT 1030 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

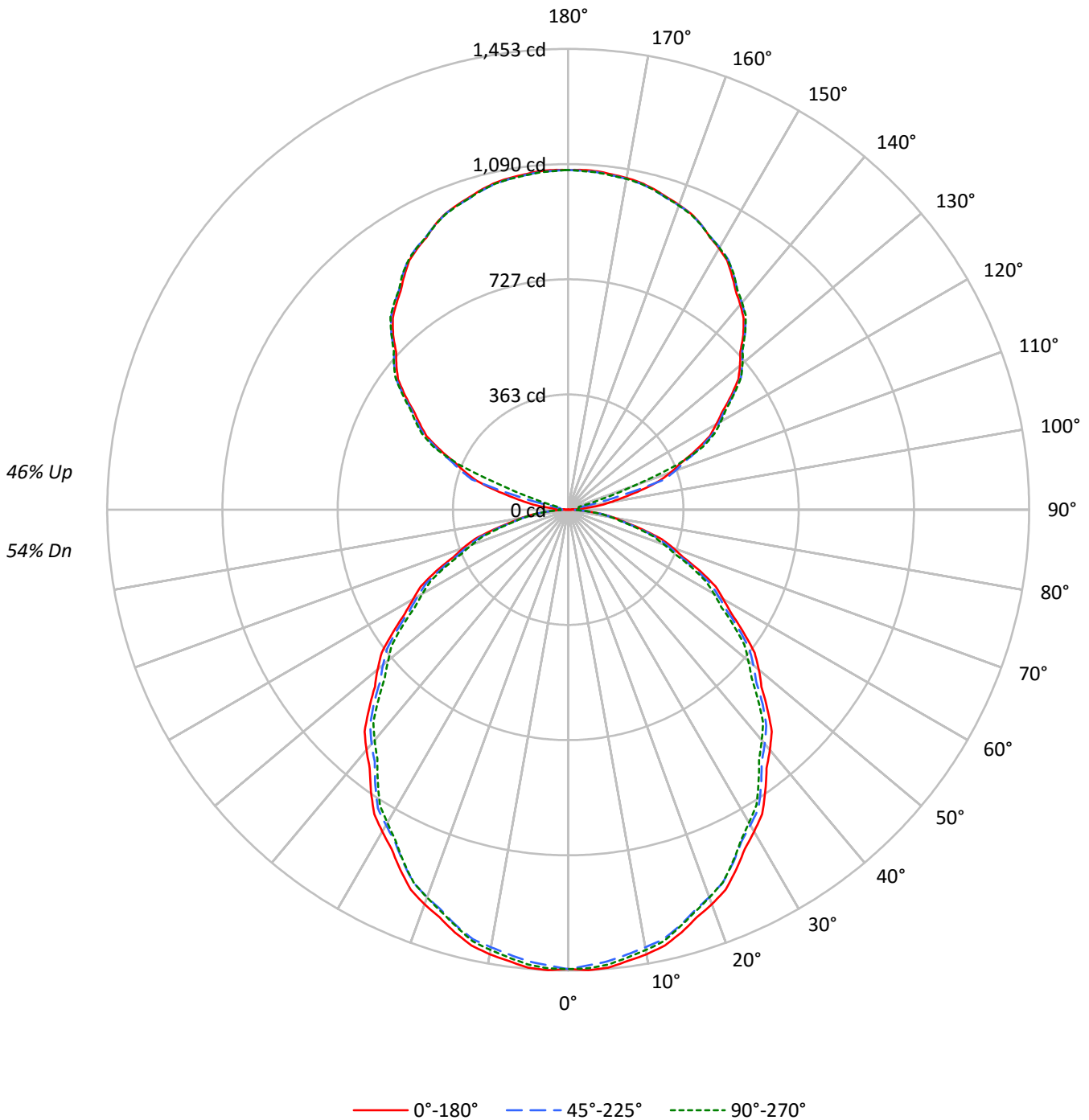
Lumens per Lamp: N/A  
Luminaire Lumens: 7037.3 lumens  
Efficiency: N/A  
Efficacy: 104.4 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31  
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')  
CIE Type: General Diffuse  
  
Input Watts (W): 67.4  
Input Voltage (V): 120  
Input Current (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: P332226-927

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### Luminous Intensity Polar Plot





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**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   | 108 | 108 | 108 | 108 | 100 | 100 | 100 | 100 | 85 | 85 | 85 | 72 | 72 | 72 | 59 | 59 | 59 | 54 |
| 1   | 99  | 94  | 90  | 87  | 91  | 87  | 84  | 81  | 75 | 72 | 70 | 63 | 61 | 60 | 52 | 51 | 50 | 45 |
| 2   | 90  | 82  | 76  | 71  | 83  | 76  | 71  | 66  | 65 | 61 | 58 | 55 | 52 | 50 | 46 | 44 | 42 | 38 |
| 3   | 82  | 72  | 65  | 59  | 75  | 67  | 61  | 55  | 58 | 53 | 49 | 49 | 45 | 42 | 41 | 38 | 36 | 32 |
| 4   | 75  | 64  | 56  | 50  | 69  | 60  | 52  | 47  | 51 | 46 | 41 | 44 | 39 | 36 | 36 | 33 | 31 | 27 |
| 5   | 69  | 57  | 49  | 43  | 63  | 53  | 46  | 40  | 46 | 40 | 36 | 39 | 35 | 31 | 33 | 30 | 27 | 24 |
| 6   | 63  | 51  | 43  | 37  | 58  | 48  | 40  | 35  | 41 | 36 | 31 | 35 | 31 | 27 | 30 | 26 | 24 | 21 |
| 7   | 59  | 46  | 38  | 32  | 54  | 43  | 36  | 31  | 37 | 32 | 27 | 32 | 28 | 24 | 27 | 24 | 21 | 18 |
| 8   | 54  | 42  | 34  | 29  | 50  | 39  | 32  | 27  | 34 | 28 | 24 | 29 | 25 | 22 | 25 | 21 | 19 | 16 |
| 9   | 51  | 38  | 31  | 26  | 47  | 36  | 29  | 24  | 31 | 26 | 22 | 27 | 23 | 19 | 23 | 20 | 17 | 15 |
| 10  | 47  | 35  | 28  | 23  | 44  | 33  | 26  | 22  | 29 | 23 | 20 | 25 | 21 | 18 | 21 | 18 | 15 | 13 |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 15588 | 15588 | 15588 |
| 5°  | 15662 | 15446 | 15554 |
| 10° | 15557 | 15312 | 15407 |
| 15° | 15375 | 15139 | 15166 |
| 20° | 15163 | 14892 | 14905 |
| 25° | 14878 | 14598 | 14567 |
| 30° | 14564 | 14270 | 14162 |
| 35° | 14236 | 13925 | 13745 |
| 40° | 13893 | 13543 | 13333 |
| 45° | 13516 | 13192 | 12871 |
| 50° | 13137 | 12762 | 12407 |
| 55° | 12643 | 12314 | 11941 |
| 60° | 12144 | 11795 | 11418 |
| 65° | 11703 | 11227 | 10878 |
| 70° | 11053 | 10581 | 10112 |
| 75° | 10098 | 9736  | 9320  |
| 80° | 9106  | 8722  | 8647  |
| 85° | 7991  | 7694  | 7385  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 136.4  | 1.9       |
| 10°-20°   | 385.2  | 5.5       |
| 20°-30°   | 569.0  | 8.1       |
| 30°-40°   | 664.6  | 9.4       |
| 40°-50°   | 668.2  | 9.5       |
| 50°-60°   | 587.0  | 8.3       |
| 60°-70°   | 437.3  | 6.2       |
| 70°-80°   | 249.1  | 3.5       |
| 80°-90°   | 74.5   | 1.1       |
| 90°-100°  | 38.9   | 0.6       |
| 100°-110° | 185.6  | 2.6       |
| 110°-120° | 445.8  | 6.3       |
| 120°-130° | 567.6  | 8.1       |
| 130°-140° | 606.5  | 8.6       |
| 140°-150° | 567.1  | 8.1       |
| 150°-160° | 457.5  | 6.5       |
| 160°-170° | 295.2  | 4.2       |
| 170°-180° | 101.8  | 1.4       |
| 0°-30°    | 1090.6 | 15.5      |
| 0°-40°    | 1755.3 | 24.9      |
| 0°-60°    | 3010.4 | 42.8      |
| 0°-90°    | 3771.4 | 53.6      |
| 90°-120°  | 670.3  | 9.5       |
| 90°-150°  | 2411.5 | 34.3      |
| 90°-180°  | 3266.0 | 46.4      |
| 0°-180°   | 7037.3 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1448 | 1448  | 1448 | 1448  | 1448 |      |
| 5°   | 1450 | 1443  | 1430 | 1441  | 1440 | 137  |
| 15°  | 1380 | 1374  | 1358 | 1368  | 1361 | 389  |
| 25°  | 1253 | 1245  | 1229 | 1230  | 1226 | 577  |
| 35°  | 1083 | 1075  | 1060 | 1052  | 1046 | 677  |
| 45°  | 888  | 882   | 867  | 852   | 846  | 685  |
| 55°  | 674  | 672   | 656  | 643   | 636  | 603  |
| 65°  | 460  | 453   | 441  | 431   | 427  | 453  |
| 75°  | 243  | 238   | 234  | 228   | 224  | 260  |
| 85°  | 65   | 62    | 62   | 60    | 60   | 71   |
| 90°  | 1    | 9     | 19   | 22    | 24   | 6    |
| 95°  | 49   | 18    | 25   | 30    | 30   | 60   |
| 105° | 237  | 241   | 174  | 41    | 35   | 251  |
| 115° | 445  | 450   | 457  | 464   | 468  | 439  |
| 125° | 627  | 633   | 636  | 638   | 640  | 560  |
| 135° | 780  | 785   | 788  | 791   | 788  | 601  |
| 145° | 901  | 906   | 908  | 909   | 909  | 564  |
| 155° | 992  | 991   | 991  | 995   | 991  | 457  |
| 165° | 1046 | 1044  | 1043 | 1049  | 1044 | 295  |
| 175° | 1071 | 1067  | 1068 | 1073  | 1067 | 102  |
| 180° | 1071 | 1071  | 1071 | 1071  | 1071 |      |



TEST NUMBER: P332226-927

CATALOG NUMBER: S123DIW-S1165D1030U927-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 1448.2 | 1448.2 | 1448.2 | 1448.2 | 1448.2 | 1448.2 | 1448.2 | 1448.2 | 1448.2 | 1448.2 | 1448.2 |
| 2.5°   | 1453.2 | 1452.3 | 1451.4 | 1450.6 | 1449.6 | 1448.0 | 1445.6 | 1443.1 | 1440.7 | 1438.2 | 1440.4 |
| 5°     | 1449.5 | 1448.1 | 1446.7 | 1445.3 | 1443.9 | 1441.7 | 1438.7 | 1435.6 | 1432.6 | 1429.5 | 1432.3 |
| 7.5°   | 1435.3 | 1433.8 | 1432.5 | 1431.1 | 1429.7 | 1427.4 | 1424.3 | 1421.2 | 1418.0 | 1414.8 | 1417.3 |
| 10°    | 1423.3 | 1421.9 | 1420.5 | 1419.1 | 1417.8 | 1415.3 | 1411.7 | 1408.1 | 1404.5 | 1400.9 | 1403.4 |
| 12.5°  | 1407.4 | 1406.2 | 1405.0 | 1403.9 | 1402.7 | 1400.4 | 1397.1 | 1393.7 | 1390.3 | 1387.0 | 1388.8 |
| 15°    | 1379.7 | 1378.6 | 1377.5 | 1376.4 | 1375.3 | 1372.9 | 1369.4 | 1365.7 | 1362.2 | 1358.5 | 1360.7 |
| 17.5°  | 1347.6 | 1346.2 | 1344.7 | 1343.3 | 1341.8 | 1339.3 | 1335.7 | 1332.1 | 1328.5 | 1324.9 | 1326.5 |
| 20°    | 1323.7 | 1322.0 | 1320.3 | 1318.7 | 1317.1 | 1314.4 | 1310.8 | 1307.3 | 1303.6 | 1300.1 | 1301.2 |
| 22.5°  | 1296.8 | 1295.1 | 1293.5 | 1291.8 | 1290.1 | 1287.5 | 1283.9 | 1280.3 | 1276.8 | 1273.1 | 1274.0 |
| 25°    | 1252.7 | 1251.0 | 1249.4 | 1247.7 | 1246.1 | 1243.4 | 1239.8 | 1236.3 | 1232.6 | 1229.1 | 1229.3 |
| 27.5°  | 1205.6 | 1204.0 | 1202.5 | 1200.8 | 1199.2 | 1196.5 | 1192.6 | 1188.7 | 1184.9 | 1181.0 | 1181.2 |
| 30°    | 1171.8 | 1170.4 | 1169.0 | 1167.6 | 1166.3 | 1163.6 | 1159.8 | 1155.9 | 1152.0 | 1148.1 | 1148.1 |
| 32.5°  | 1137.9 | 1136.1 | 1134.2 | 1132.4 | 1130.6 | 1128.1 | 1125.2 | 1122.2 | 1119.2 | 1116.3 | 1114.7 |
| 35°    | 1083.4 | 1081.7 | 1080.1 | 1078.4 | 1076.7 | 1074.1 | 1070.5 | 1066.9 | 1063.3 | 1059.7 | 1058.0 |
| 37.5°  | 1027.5 | 1025.5 | 1023.3 | 1021.3 | 1019.1 | 1016.3 | 1012.6 | 1009.0 | 1005.4 | 1001.6 | 999.7  |
| 40°    | 988.7  | 987.1  | 985.4  | 983.7  | 982.1  | 979.3  | 975.4  | 971.5  | 967.7  | 963.8  | 961.6  |
| 42.5°  | 949.8  | 948.0  | 946.1  | 944.2  | 942.3  | 939.4  | 935.6  | 931.7  | 927.8  | 924.0  | 921.8  |
| 45°    | 887.9  | 886.8  | 885.7  | 884.6  | 883.4  | 881.1  | 877.5  | 873.9  | 870.3  | 866.6  | 863.4  |
| 47.5°  | 826.3  | 824.7  | 823.2  | 821.5  | 819.9  | 817.5  | 814.0  | 810.6  | 807.3  | 803.9  | 800.7  |
| 50°    | 784.5  | 783.2  | 781.7  | 780.4  | 779.0  | 776.5  | 772.9  | 769.3  | 765.6  | 762.1  | 759.1  |
| 52.5°  | 740.7  | 739.7  | 738.8  | 737.8  | 736.9  | 734.5  | 730.7  | 726.9  | 723.1  | 719.2  | 716.6  |
| 55°    | 673.7  | 673.4  | 673.1  | 672.9  | 672.6  | 670.7  | 667.0  | 663.5  | 659.8  | 656.2  | 653.2  |
| 57.5°  | 609.9  | 609.0  | 608.0  | 607.1  | 606.2  | 604.3  | 601.3  | 598.5  | 595.6  | 592.7  | 590.0  |
| 60°    | 564.1  | 563.8  | 563.6  | 563.2  | 563.0  | 561.2  | 557.9  | 554.5  | 551.2  | 547.9  | 545.4  |
| 62.5°  | 523.2  | 522.5  | 521.8  | 521.1  | 520.4  | 518.3  | 515.0  | 511.7  | 508.4  | 505.1  | 502.6  |
| 65°    | 459.5  | 458.1  | 456.7  | 455.3  | 453.9  | 451.9  | 449.1  | 446.3  | 443.5  | 440.8  | 438.6  |
| 67.5°  | 392.0  | 390.8  | 389.6  | 388.3  | 387.1  | 385.5  | 383.3  | 381.3  | 379.1  | 377.1  | 375.1  |
| 70°    | 351.2  | 349.5  | 347.8  | 346.2  | 344.5  | 342.9  | 341.2  | 339.5  | 337.9  | 336.2  | 334.3  |
| 72.5°  | 308.3  | 307.1  | 305.9  | 304.7  | 303.5  | 301.9  | 300.0  | 298.1  | 296.3  | 294.4  | 292.6  |
| 75°    | 242.8  | 241.7  | 240.6  | 239.5  | 238.4  | 237.4  | 236.6  | 235.8  | 235.0  | 234.1  | 232.7  |
| 77.5°  | 184.8  | 184.2  | 183.5  | 183.0  | 182.4  | 181.6  | 180.5  | 179.6  | 178.6  | 177.6  | 176.7  |
| 80°    | 146.9  | 146.1  | 145.3  | 144.4  | 143.6  | 142.9  | 142.4  | 141.8  | 141.2  | 140.7  | 140.5  |
| 82.5°  | 110.1  | 109.9  | 109.7  | 109.6  | 109.4  | 109.2  | 109.2  | 109.1  | 108.9  | 108.8  | 108.4  |
| 85°    | 64.7   | 64.2   | 63.6   | 63.1   | 62.5   | 62.3   | 62.3   | 62.3   | 62.3   | 62.3   | 61.7   |
| 87.5°  | 26.1   | 25.7   | 25.4   | 25.1   | 24.8   | 24.8   | 25.0   | 25.3   | 25.5   | 25.7   | 25.7   |
| 90°    | 0.8    | 2.5    | 4.4    | 6.1    | 7.8    | 9.9    | 12.2   | 14.5   | 16.8   | 19.1   | 19.8   |
| 92.5°  | 14.8   | 14.3   | 13.8   | 13.3   | 12.8   | 13.5   | 15.2   | 16.9   | 18.6   | 20.4   | 21.5   |
| 95°    | 48.6   | 41.3   | 34.1   | 26.8   | 19.6   | 16.9   | 18.9   | 20.8   | 22.7   | 24.6   | 25.9   |
| 97.5°  | 97.5   | 94.3   | 91.0   | 87.8   | 84.5   | 76.5   | 63.8   | 51.1   | 38.3   | 25.6   | 27.0   |
| 100°   | 134.4  | 138.0  | 141.6  | 145.0  | 148.6  | 136.6  | 109.0  | 81.4   | 53.9   | 26.2   | 27.6   |
| 102.5° | 176.5  | 179.0  | 181.6  | 184.1  | 186.6  | 172.9  | 142.8  | 112.6  | 82.5   | 52.4   | 48.0   |
| 105°   | 237.1  | 239.1  | 241.0  | 243.0  | 244.9  | 237.9  | 222.0  | 206.0  | 190.2  | 174.3  | 143.0  |
| 107.5° | 301.1  | 302.6  | 304.2  | 305.8  | 307.3  | 309.3  | 311.9  | 314.3  | 316.9  | 319.4  | 296.4  |
| 110°   | 343.7  | 345.2  | 346.6  | 348.0  | 349.4  | 351.1  | 353.0  | 355.0  | 356.9  | 358.9  | 353.0  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 384.4  | 385.7  | 387.0  | 388.3  | 389.6  | 391.2  | 393.1  | 395.1  | 397.0  | 398.9  | 399.0  |
| 115°   | 444.8  | 445.8  | 446.9  | 448.0  | 449.0  | 450.4  | 451.9  | 453.5  | 455.1  | 456.7  | 458.5  |
| 117.5° | 503.2  | 504.5  | 505.8  | 507.1  | 508.4  | 509.5  | 510.3  | 511.1  | 511.9  | 512.7  | 514.1  |
| 120°   | 539.5  | 541.1  | 542.6  | 544.2  | 545.8  | 546.9  | 547.4  | 548.0  | 548.5  | 549.0  | 550.4  |
| 122.5° | 576.4  | 577.7  | 579.0  | 580.3  | 581.6  | 582.6  | 583.3  | 583.9  | 584.6  | 585.3  | 586.3  |
| 125°   | 627.0  | 628.4  | 629.8  | 631.2  | 632.6  | 633.7  | 634.4  | 635.1  | 635.8  | 636.5  | 636.9  |
| 127.5° | 676.0  | 677.4  | 678.8  | 680.2  | 681.7  | 682.8  | 683.7  | 684.5  | 685.3  | 686.2  | 686.7  |
| 130°   | 706.5  | 708.0  | 709.4  | 710.8  | 712.3  | 713.3  | 714.0  | 714.7  | 715.4  | 716.1  | 716.8  |
| 132.5° | 735.9  | 737.3  | 738.6  | 740.1  | 741.5  | 742.5  | 743.1  | 743.6  | 744.2  | 744.7  | 745.4  |
| 135°   | 780.5  | 781.6  | 782.7  | 783.7  | 784.8  | 785.7  | 786.4  | 787.1  | 787.8  | 788.5  | 789.0  |
| 137.5° | 818.7  | 820.1  | 821.4  | 822.8  | 824.1  | 825.0  | 825.4  | 825.8  | 826.2  | 826.6  | 827.4  |
| 140°   | 844.2  | 845.3  | 846.4  | 847.4  | 848.4  | 849.2  | 849.8  | 850.3  | 850.8  | 851.4  | 852.1  |
| 142.5° | 867.8  | 868.8  | 869.9  | 870.9  | 872.0  | 872.8  | 873.3  | 873.9  | 874.4  | 874.9  | 875.5  |
| 145°   | 900.7  | 901.9  | 903.2  | 904.4  | 905.6  | 906.4  | 906.8  | 907.1  | 907.5  | 907.8  | 908.2  |
| 147.5° | 931.8  | 932.6  | 933.3  | 934.1  | 935.0  | 935.6  | 935.9  | 936.3  | 936.6  | 937.0  | 937.3  |
| 150°   | 950.9  | 951.3  | 951.9  | 952.4  | 952.9  | 953.4  | 953.7  | 954.1  | 954.4  | 954.8  | 955.1  |
| 152.5° | 968.0  | 968.3  | 968.5  | 968.8  | 969.0  | 969.2  | 969.5  | 969.6  | 969.9  | 970.1  | 970.7  |
| 155°   | 992.2  | 991.8  | 991.5  | 991.2  | 990.8  | 990.7  | 990.9  | 991.0  | 991.3  | 991.4  | 992.3  |
| 157.5° | 1011.0 | 1011.0 | 1010.9 | 1010.9 | 1010.8 | 1010.7 | 1010.6 | 1010.3 | 1010.2 | 1010.0 | 1011.1 |
| 160°   | 1022.5 | 1022.2 | 1022.1 | 1021.9 | 1021.8 | 1021.5 | 1021.4 | 1021.2 | 1021.0 | 1020.9 | 1021.9 |
| 162.5° | 1033.2 | 1032.8 | 1032.4 | 1031.9 | 1031.4 | 1031.1 | 1030.9 | 1030.8 | 1030.5 | 1030.4 | 1031.6 |
| 165°   | 1046.3 | 1045.8 | 1045.3 | 1044.7 | 1044.2 | 1043.9 | 1043.6 | 1043.5 | 1043.3 | 1043.1 | 1044.6 |
| 167.5° | 1056.5 | 1055.8 | 1055.1 | 1054.4 | 1053.7 | 1053.3 | 1053.3 | 1053.3 | 1053.3 | 1053.3 | 1054.7 |
| 170°   | 1062.2 | 1061.5 | 1060.8 | 1060.1 | 1059.4 | 1059.1 | 1059.1 | 1059.1 | 1059.1 | 1059.1 | 1060.4 |
| 172.5° | 1066.0 | 1065.2 | 1064.4 | 1063.5 | 1062.6 | 1062.3 | 1062.4 | 1062.6 | 1062.7 | 1062.9 | 1064.3 |
| 175°   | 1071.0 | 1070.1 | 1069.2 | 1068.3 | 1067.5 | 1067.1 | 1067.2 | 1067.5 | 1067.6 | 1067.8 | 1069.1 |
| 177.5° | 1072.2 | 1071.5 | 1070.9 | 1070.2 | 1069.4 | 1069.1 | 1069.3 | 1069.4 | 1069.5 | 1069.7 | 1070.9 |
| 180°   | 1071.0 | 1071.0 | 1071.0 | 1071.0 | 1071.0 | 1071.0 | 1071.0 | 1071.0 | 1071.0 | 1071.0 | 1071.0 |



TEST NUMBER: P332226-927

CATALOG NUMBER: S123DIW-S1165D1030U927-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

|        | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 1448.2 | 1448.2 | 1448.2 | 1448.2 | 1448.2 | 1448.2 | 1448.2 | 1448.2 |
| 2.5°   | 1442.6 | 1444.9 | 1447.1 | 1448.1 | 1447.9 | 1447.6 | 1447.4 | 1447.2 |
| 5°     | 1435.0 | 1437.8 | 1440.6 | 1441.7 | 1441.1 | 1440.6 | 1440.0 | 1439.5 |
| 7.5°   | 1419.8 | 1422.3 | 1424.8 | 1425.8 | 1425.5 | 1425.2 | 1424.9 | 1424.6 |
| 10°    | 1405.9 | 1408.3 | 1410.9 | 1411.8 | 1411.3 | 1410.7 | 1410.2 | 1409.6 |
| 12.5°  | 1390.6 | 1392.4 | 1394.2 | 1395.0 | 1394.6 | 1394.3 | 1394.0 | 1393.7 |
| 15°    | 1362.9 | 1365.2 | 1367.4 | 1367.7 | 1366.0 | 1364.4 | 1362.7 | 1361.0 |
| 17.5°  | 1328.0 | 1329.6 | 1331.1 | 1331.6 | 1331.0 | 1330.4 | 1329.8 | 1329.2 |
| 20°    | 1302.3 | 1303.4 | 1304.5 | 1304.6 | 1303.8 | 1302.9 | 1302.1 | 1301.2 |
| 22.5°  | 1274.9 | 1275.8 | 1276.7 | 1276.6 | 1275.6 | 1274.5 | 1273.4 | 1272.4 |
| 25°    | 1229.6 | 1229.9 | 1230.2 | 1229.9 | 1229.1 | 1228.2 | 1227.4 | 1226.5 |
| 27.5°  | 1181.5 | 1181.6 | 1181.9 | 1181.5 | 1180.4 | 1179.3 | 1178.3 | 1177.3 |
| 30°    | 1148.1 | 1148.1 | 1148.1 | 1147.2 | 1145.2 | 1143.3 | 1141.3 | 1139.4 |
| 32.5°  | 1113.1 | 1111.6 | 1110.0 | 1108.7 | 1107.7 | 1106.6 | 1105.6 | 1104.5 |
| 35°    | 1056.4 | 1054.7 | 1053.0 | 1051.5 | 1050.1 | 1048.8 | 1047.3 | 1046.0 |
| 37.5°  | 997.7  | 995.7  | 993.7  | 992.3  | 991.3  | 990.5  | 989.6  | 988.7  |
| 40°    | 959.4  | 957.2  | 955.0  | 953.3  | 952.2  | 951.1  | 950.0  | 948.9  |
| 42.5°  | 919.6  | 917.3  | 915.1  | 913.5  | 912.4  | 911.2  | 910.1  | 909.0  |
| 45°    | 860.1  | 856.7  | 853.4  | 851.0  | 849.7  | 848.3  | 846.9  | 845.5  |
| 47.5°  | 797.4  | 794.2  | 790.8  | 788.6  | 787.4  | 786.2  | 785.0  | 783.8  |
| 50°    | 756.0  | 753.0  | 749.9  | 747.6  | 745.9  | 744.3  | 742.6  | 740.9  |
| 52.5°  | 714.1  | 711.5  | 708.8  | 706.7  | 705.0  | 703.4  | 701.7  | 700.1  |
| 55°    | 650.1  | 647.1  | 644.0  | 641.8  | 640.5  | 639.1  | 637.7  | 636.3  |
| 57.5°  | 587.3  | 584.6  | 581.9  | 579.7  | 578.1  | 576.6  | 574.9  | 573.3  |
| 60°    | 543.0  | 540.4  | 538.0  | 536.0  | 534.6  | 533.2  | 531.9  | 530.4  |
| 62.5°  | 500.1  | 497.6  | 495.1  | 493.4  | 492.4  | 491.5  | 490.6  | 489.6  |
| 65°    | 436.4  | 434.2  | 432.0  | 430.5  | 429.6  | 428.8  | 427.9  | 427.1  |
| 67.5°  | 373.2  | 371.2  | 369.3  | 367.7  | 366.6  | 365.4  | 364.2  | 363.1  |
| 70°    | 332.3  | 330.4  | 328.4  | 326.8  | 325.4  | 324.0  | 322.7  | 321.3  |
| 72.5°  | 291.0  | 289.2  | 287.5  | 286.3  | 285.6  | 284.9  | 284.2  | 283.4  |
| 75°    | 231.3  | 230.0  | 228.5  | 227.4  | 226.6  | 225.8  | 225.0  | 224.1  |
| 77.5°  | 175.7  | 174.8  | 173.8  | 173.3  | 173.3  | 173.3  | 173.3  | 173.3  |
| 80°    | 140.1  | 139.9  | 139.6  | 139.5  | 139.5  | 139.5  | 139.5  | 139.5  |
| 82.5°  | 107.8  | 107.3  | 106.9  | 106.5  | 106.2  | 106.1  | 105.8  | 105.6  |
| 85°    | 61.2   | 60.6   | 60.0   | 59.8   | 59.8   | 59.8   | 59.8   | 59.8   |
| 87.5°  | 25.6   | 25.5   | 25.4   | 25.4   | 25.5   | 25.6   | 25.6   | 25.7   |
| 90°    | 20.5   | 21.2   | 21.9   | 22.4   | 22.8   | 23.1   | 23.5   | 23.8   |
| 92.5°  | 22.7   | 23.8   | 24.9   | 25.6   | 25.7   | 26.0   | 26.2   | 26.4   |
| 95°    | 27.2   | 28.4   | 29.6   | 30.3   | 30.3   | 30.3   | 30.3   | 30.3   |
| 97.5°  | 28.4   | 29.9   | 31.3   | 32.1   | 32.2   | 32.4   | 32.6   | 32.8   |
| 100°   | 29.1   | 30.5   | 31.9   | 32.7   | 32.9   | 33.0   | 33.3   | 33.4   |
| 102.5° | 43.6   | 39.2   | 34.8   | 32.8   | 33.1   | 33.4   | 33.7   | 34.1   |
| 105°   | 111.7  | 80.3   | 49.0   | 33.6   | 34.0   | 34.3   | 34.6   | 35.0   |
| 107.5° | 273.5  | 250.6  | 227.6  | 204.3  | 180.7  | 157.2  | 133.6  | 110.0  |
| 110°   | 347.2  | 341.4  | 335.5  | 320.0  | 294.7  | 269.3  | 244.1  | 218.8  |





TEST NUMBER: P332226-927

CATALOG NUMBER: S123DIW-S1165D1030U927-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

|        | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 399.2  | 399.3  | 399.3  | 396.7  | 391.4  | 386.1  | 380.7  | 375.4  |
| 115°   | 460.3  | 462.0  | 463.8  | 465.0  | 465.7  | 466.4  | 467.1  | 467.9  |
| 117.5° | 515.6  | 517.0  | 518.4  | 519.2  | 519.3  | 519.4  | 519.6  | 519.8  |
| 120°   | 551.8  | 553.3  | 554.7  | 555.4  | 555.4  | 555.4  | 555.4  | 555.4  |
| 122.5° | 587.2  | 588.3  | 589.2  | 589.9  | 589.9  | 590.1  | 590.3  | 590.4  |
| 125°   | 637.2  | 637.6  | 637.9  | 638.3  | 638.7  | 639.0  | 639.4  | 639.7  |
| 127.5° | 687.3  | 687.9  | 688.5  | 688.6  | 688.2  | 687.9  | 687.5  | 687.1  |
| 130°   | 717.6  | 718.2  | 718.9  | 719.1  | 718.7  | 718.4  | 718.0  | 717.7  |
| 132.5° | 746.2  | 746.9  | 747.6  | 747.7  | 747.2  | 746.7  | 746.2  | 745.7  |
| 135°   | 789.6  | 790.1  | 790.6  | 790.6  | 790.1  | 789.6  | 789.0  | 788.5  |
| 137.5° | 828.2  | 829.1  | 830.0  | 830.2  | 829.8  | 829.5  | 829.1  | 828.8  |
| 140°   | 852.8  | 853.5  | 854.2  | 854.4  | 854.1  | 853.7  | 853.3  | 852.9  |
| 142.5° | 876.1  | 876.6  | 877.2  | 877.2  | 876.7  | 876.2  | 875.8  | 875.2  |
| 145°   | 908.6  | 908.9  | 909.3  | 909.4  | 909.4  | 909.4  | 909.4  | 909.4  |
| 147.5° | 937.7  | 938.0  | 938.4  | 938.2  | 937.4  | 936.5  | 935.7  | 934.9  |
| 150°   | 955.5  | 955.8  | 956.2  | 956.2  | 955.6  | 955.1  | 954.6  | 954.0  |
| 152.5° | 971.4  | 972.0  | 972.6  | 972.6  | 971.7  | 970.9  | 970.1  | 969.3  |
| 155°   | 993.2  | 994.0  | 995.0  | 994.8  | 993.8  | 992.8  | 991.7  | 990.6  |
| 157.5° | 1012.2 | 1013.2 | 1014.2 | 1014.1 | 1012.7 | 1011.4 | 1010.0 | 1008.6 |
| 160°   | 1022.9 | 1024.1 | 1025.1 | 1025.0 | 1023.7 | 1022.5 | 1021.3 | 1020.0 |
| 162.5° | 1032.8 | 1034.0 | 1035.2 | 1035.2 | 1034.2 | 1033.1 | 1032.0 | 1030.9 |
| 165°   | 1045.9 | 1047.3 | 1048.8 | 1048.8 | 1047.7 | 1046.4 | 1045.1 | 1043.9 |
| 167.5° | 1056.1 | 1057.6 | 1059.0 | 1059.0 | 1057.6 | 1056.1 | 1054.7 | 1053.3 |
| 170°   | 1061.8 | 1063.3 | 1064.7 | 1064.7 | 1063.3 | 1061.8 | 1060.4 | 1059.1 |
| 172.5° | 1065.7 | 1067.1 | 1068.5 | 1068.4 | 1066.9 | 1065.3 | 1063.7 | 1062.2 |
| 175°   | 1070.2 | 1071.5 | 1072.8 | 1072.7 | 1071.3 | 1069.8 | 1068.4 | 1067.0 |
| 177.5° | 1072.0 | 1073.1 | 1074.2 | 1074.1 | 1072.7 | 1071.3 | 1069.8 | 1068.4 |
| 180°   | 1071.0 | 1071.0 | 1071.0 | 1071.0 | 1071.0 | 1071.0 | 1071.0 | 1071.0 |

(END OF REPORT)