

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: P332834-840

Luminaire Tested: **S124DIW-S1020D1560U840-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332834-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-10,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DIW-S1020D1560U840-4F0-1E-UDD-F1
Description: DEFINE 4 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1020 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1560 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9939.9 lumens
Efficiency: N/A
Efficacy: 129.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: General Diffuse

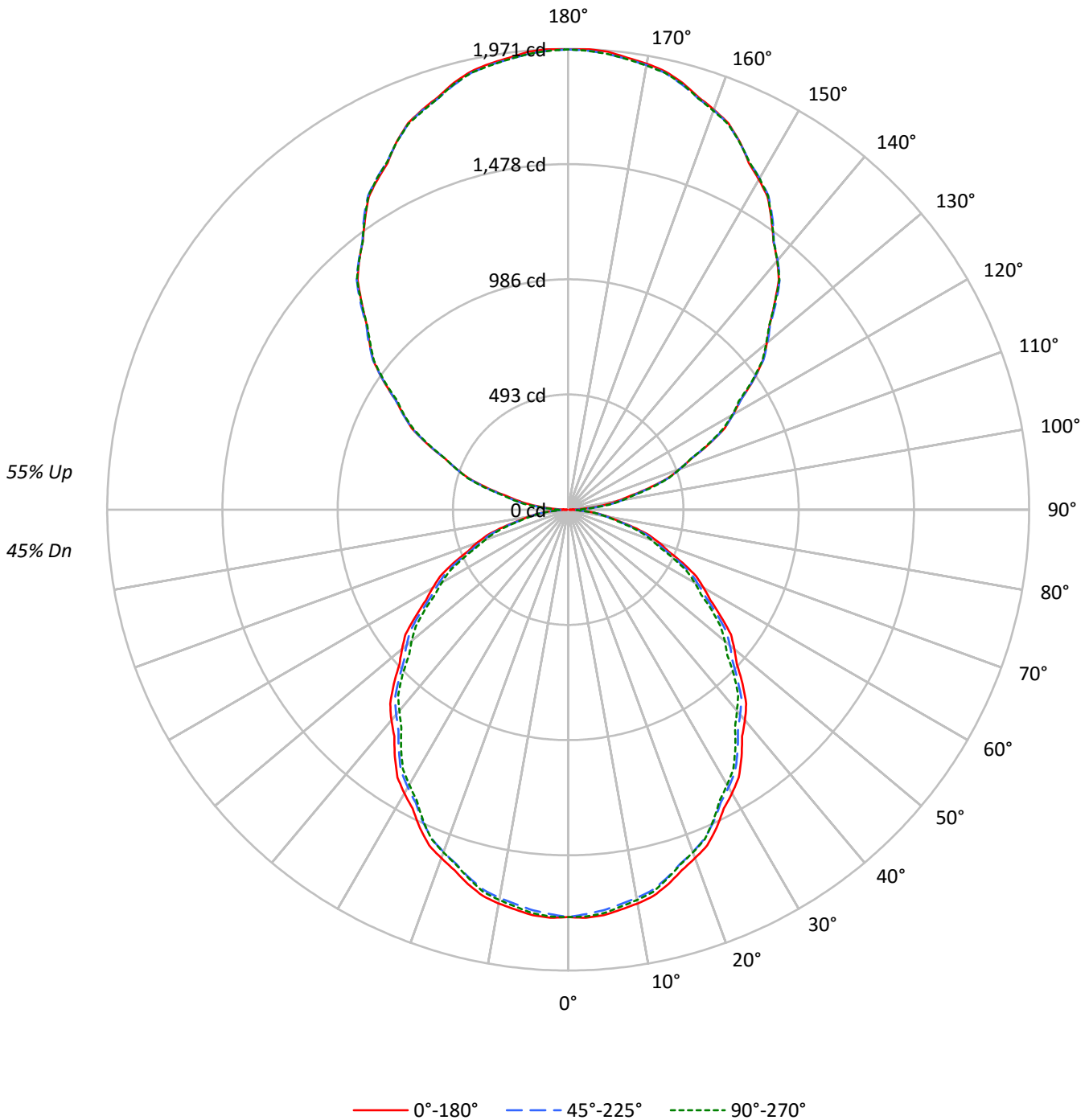
Input Watts (W): 76.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332834-840

CATALOG NUMBER: S124DIW-S1020D1560U840-4F0-1E-UDD-F1

Luminous Intensity Polar Plot





TEST NUMBER: P332834-840

CATALOG NUMBER: S124DIW-S1020D1560U840-4F0-1E-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 | 50 | 30 | 10 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 106 | 106 | 106 | 106 | 97 | 97 | 97 | 97 | 81 | 81 | 81 | 65 | 65 | 65 | 52 | 52 | 52 | 45 | | | | |
| 1 | 97 | 92 | 88 | 85 | 88 | 85 | 81 | 78 | 71 | 68 | 66 | 58 | 56 | 54 | 45 | 44 | 43 | 38 | | | | |
| 2 | 88 | 81 | 74 | 69 | 80 | 74 | 69 | 64 | 62 | 58 | 55 | 50 | 48 | 45 | 40 | 38 | 37 | 32 | | | | |
| 3 | 80 | 71 | 64 | 58 | 73 | 65 | 59 | 54 | 54 | 50 | 46 | 45 | 41 | 38 | 35 | 33 | 31 | 27 | | | | |
| 4 | 73 | 63 | 55 | 49 | 67 | 58 | 51 | 46 | 48 | 43 | 39 | 40 | 36 | 33 | 32 | 29 | 27 | 23 | | | | |
| 5 | 67 | 56 | 48 | 42 | 61 | 51 | 44 | 39 | 43 | 38 | 34 | 36 | 32 | 28 | 29 | 26 | 23 | 20 | | | | |
| 6 | 62 | 50 | 42 | 36 | 57 | 46 | 39 | 34 | 39 | 33 | 29 | 32 | 28 | 25 | 26 | 23 | 21 | 18 | | | | |
| 7 | 57 | 45 | 37 | 32 | 52 | 42 | 35 | 30 | 35 | 30 | 26 | 29 | 25 | 22 | 24 | 21 | 18 | 16 | | | | |
| 8 | 53 | 41 | 33 | 28 | 49 | 38 | 31 | 26 | 32 | 27 | 23 | 27 | 23 | 20 | 22 | 19 | 16 | 14 | | | | |
| 9 | 49 | 37 | 30 | 25 | 45 | 35 | 28 | 23 | 29 | 24 | 20 | 25 | 21 | 18 | 20 | 17 | 15 | 13 | | | | |
| 10 | 46 | 34 | 27 | 22 | 42 | 32 | 25 | 21 | 27 | 22 | 18 | 23 | 19 | 16 | 19 | 16 | 13 | 11 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 14067 | 14067 | 14067 |
| 5° | 14109 | 13940 | 14041 |
| 10° | 14021 | 13827 | 13896 |
| 15° | 13852 | 13630 | 13665 |
| 20° | 13626 | 13387 | 13399 |
| 25° | 13370 | 13109 | 13071 |
| 30° | 13055 | 12781 | 12665 |
| 35° | 12728 | 12439 | 12275 |
| 40° | 12390 | 12052 | 11830 |
| 45° | 12036 | 11669 | 11445 |
| 50° | 11645 | 11328 | 10977 |
| 55° | 11222 | 10888 | 10534 |
| 60° | 10798 | 10393 | 10077 |
| 65° | 10323 | 9922 | 9522 |
| 70° | 9788 | 9293 | 8932 |
| 75° | 8971 | 8537 | 8319 |
| 80° | 7987 | 7657 | 7466 |
| 85° | 6984 | 6725 | 6595 |



TEST NUMBER: P332834-840

CATALOG NUMBER: S124DIW-S1020D1560U840-4F0-1E-UDD-F1

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 164.1 | 1.7 |
| 10°-20° | 462.4 | 4.7 |
| 20°-30° | 680.5 | 6.8 |
| 30°-40° | 791.1 | 8.0 |
| 40°-50° | 791.2 | 8.0 |
| 50°-60° | 692.1 | 7.0 |
| 60°-70° | 514.0 | 5.2 |
| 70°-80° | 292.0 | 2.9 |
| 80°-90° | 90.1 | 0.9 |
| 90°-100° | 129.9 | 1.3 |
| 100°-110° | 384.7 | 3.9 |
| 110°-120° | 652.9 | 6.6 |
| 120°-130° | 861.0 | 8.7 |
| 130°-140° | 966.9 | 9.7 |
| 140°-150° | 950.1 | 9.6 |
| 150°-160° | 799.1 | 8.0 |
| 160°-170° | 531.7 | 5.3 |
| 170°-180° | 186.2 | 1.9 |
| 0°-30° | 1307.0 | 13.1 |
| 0°-40° | 2098.1 | 21.1 |
| 0°-60° | 3581.3 | 36.0 |
| 0°-90° | 4477.4 | 45.0 |
| 90°-120° | 1167.5 | 11.7 |
| 90°-150° | 3945.5 | 39.7 |
| 90°-180° | 5463.0 | 55.0 |
| 0°-180° | 9939.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1742 | 1742 | 1742 | 1742 | 1742 | |
| 5° | 1741 | 1735 | 1720 | 1735 | 1733 | 165 |
| 15° | 1657 | 1651 | 1631 | 1638 | 1635 | 467 |
| 25° | 1501 | 1491 | 1472 | 1473 | 1467 | 690 |
| 35° | 1292 | 1281 | 1262 | 1253 | 1246 | 807 |
| 45° | 1054 | 1044 | 1022 | 1007 | 1002 | 812 |
| 55° | 797 | 792 | 774 | 757 | 748 | 714 |
| 65° | 540 | 533 | 519 | 506 | 498 | 535 |
| 75° | 288 | 281 | 274 | 268 | 267 | 306 |
| 85° | 75 | 75 | 73 | 72 | 71 | 83 |
| 90° | 4 | 21 | 34 | 42 | 46 | 10 |
| 95° | 91 | 105 | 116 | 120 | 120 | 102 |
| 105° | 355 | 357 | 362 | 367 | 372 | 376 |
| 115° | 664 | 664 | 661 | 659 | 658 | 654 |
| 125° | 967 | 967 | 965 | 962 | 959 | 861 |
| 135° | 1247 | 1256 | 1256 | 1253 | 1249 | 964 |
| 145° | 1515 | 1521 | 1523 | 1521 | 1517 | 948 |
| 155° | 1736 | 1736 | 1734 | 1740 | 1734 | 798 |
| 165° | 1890 | 1885 | 1882 | 1890 | 1885 | 532 |
| 175° | 1966 | 1958 | 1957 | 1966 | 1957 | 187 |
| 180° | 1969 | 1969 | 1969 | 1969 | 1969 | |



TEST NUMBER: P332834-840

CATALOG NUMBER: S124DIW-S1020D1560U840-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1742.5 | 1742.5 | 1742.5 | 1742.5 | 1742.5 | 1742.5 | 1742.5 | 1742.5 | 1742.5 | 1742.5 | 1742.5 |
| 2.5° | 1747.0 | 1746.3 | 1745.5 | 1744.7 | 1744.0 | 1742.2 | 1739.5 | 1736.8 | 1734.0 | 1731.3 | 1733.8 |
| 5° | 1741.1 | 1739.9 | 1738.7 | 1737.4 | 1736.2 | 1733.8 | 1730.4 | 1727.0 | 1723.6 | 1720.2 | 1723.6 |
| 7.5° | 1725.0 | 1723.6 | 1722.4 | 1721.2 | 1720.0 | 1717.5 | 1713.6 | 1709.9 | 1706.1 | 1702.3 | 1705.1 |
| 10° | 1710.4 | 1709.2 | 1707.9 | 1706.7 | 1705.5 | 1702.8 | 1698.8 | 1694.8 | 1690.7 | 1686.7 | 1689.1 |
| 12.5° | 1691.4 | 1690.2 | 1688.9 | 1687.7 | 1686.5 | 1683.6 | 1679.4 | 1675.2 | 1670.8 | 1666.6 | 1669.3 |
| 15° | 1657.4 | 1656.1 | 1654.9 | 1653.7 | 1652.3 | 1649.4 | 1644.8 | 1640.1 | 1635.5 | 1630.8 | 1632.6 |
| 17.5° | 1616.3 | 1614.8 | 1613.2 | 1611.6 | 1610.1 | 1607.1 | 1602.7 | 1598.3 | 1593.9 | 1589.5 | 1590.6 |
| 20° | 1586.1 | 1584.6 | 1583.1 | 1581.4 | 1579.9 | 1576.8 | 1572.2 | 1567.5 | 1562.9 | 1558.2 | 1559.1 |
| 22.5° | 1553.8 | 1551.7 | 1549.6 | 1547.6 | 1545.6 | 1542.2 | 1537.5 | 1532.9 | 1528.2 | 1523.6 | 1525.3 |
| 25° | 1501.0 | 1498.8 | 1496.6 | 1494.4 | 1492.3 | 1489.0 | 1484.7 | 1480.4 | 1476.0 | 1471.7 | 1472.0 |
| 27.5° | 1440.7 | 1438.5 | 1436.1 | 1433.9 | 1431.7 | 1428.6 | 1424.5 | 1420.5 | 1416.4 | 1412.4 | 1411.7 |
| 30° | 1400.5 | 1398.0 | 1395.4 | 1393.0 | 1390.5 | 1387.3 | 1383.2 | 1379.2 | 1375.1 | 1371.1 | 1369.9 |
| 32.5° | 1358.0 | 1355.7 | 1353.5 | 1351.3 | 1349.1 | 1345.7 | 1341.5 | 1337.3 | 1332.9 | 1328.7 | 1327.2 |
| 35° | 1291.5 | 1289.4 | 1287.2 | 1285.1 | 1282.8 | 1279.6 | 1275.3 | 1270.9 | 1266.6 | 1262.2 | 1260.0 |
| 37.5° | 1221.4 | 1219.4 | 1217.5 | 1215.5 | 1213.5 | 1210.2 | 1205.5 | 1200.8 | 1196.2 | 1191.5 | 1189.2 |
| 40° | 1175.7 | 1173.2 | 1170.6 | 1168.2 | 1165.7 | 1162.2 | 1157.5 | 1152.9 | 1148.2 | 1143.6 | 1140.4 |
| 42.5° | 1126.5 | 1125.0 | 1123.5 | 1122.1 | 1120.5 | 1117.2 | 1112.1 | 1106.9 | 1101.8 | 1096.6 | 1093.0 |
| 45° | 1054.2 | 1052.0 | 1049.9 | 1047.6 | 1045.5 | 1041.9 | 1036.9 | 1032.0 | 1027.0 | 1022.1 | 1018.7 |
| 47.5° | 978.5 | 977.0 | 975.5 | 974.0 | 972.5 | 969.5 | 964.9 | 960.3 | 955.7 | 951.1 | 947.3 |
| 50° | 927.2 | 925.8 | 924.6 | 923.4 | 922.1 | 919.4 | 915.0 | 910.7 | 906.4 | 902.0 | 897.7 |
| 52.5° | 876.9 | 875.4 | 873.8 | 872.4 | 870.9 | 867.9 | 863.2 | 858.7 | 854.0 | 849.5 | 845.7 |
| 55° | 797.3 | 796.3 | 795.4 | 794.5 | 793.6 | 790.9 | 786.6 | 782.2 | 777.9 | 773.6 | 769.8 |
| 57.5° | 721.3 | 720.2 | 719.2 | 718.1 | 717.1 | 714.4 | 710.1 | 705.9 | 701.6 | 697.3 | 693.8 |
| 60° | 668.8 | 667.2 | 665.7 | 664.2 | 662.6 | 659.8 | 655.8 | 651.8 | 647.7 | 643.7 | 640.9 |
| 62.5° | 617.4 | 616.1 | 614.8 | 613.5 | 612.2 | 609.5 | 605.1 | 600.9 | 596.5 | 592.3 | 589.8 |
| 65° | 540.4 | 538.8 | 537.2 | 535.7 | 534.1 | 531.8 | 528.7 | 525.6 | 522.5 | 519.4 | 516.3 |
| 67.5° | 462.7 | 461.3 | 459.9 | 458.5 | 457.0 | 454.8 | 451.8 | 448.9 | 445.9 | 442.9 | 439.9 |
| 70° | 414.7 | 412.5 | 410.3 | 408.2 | 406.0 | 403.6 | 401.2 | 398.7 | 396.3 | 393.7 | 391.2 |
| 72.5° | 363.3 | 361.1 | 359.0 | 356.8 | 354.7 | 352.5 | 350.5 | 348.6 | 346.6 | 344.6 | 342.6 |
| 75° | 287.6 | 286.1 | 284.5 | 283.0 | 281.4 | 279.8 | 278.3 | 276.8 | 275.2 | 273.7 | 272.5 |
| 77.5° | 215.3 | 214.6 | 213.9 | 213.3 | 212.6 | 211.6 | 210.2 | 208.8 | 207.4 | 206.1 | 205.7 |
| 80° | 171.8 | 170.8 | 169.9 | 169.0 | 168.0 | 167.2 | 166.6 | 166.0 | 165.4 | 164.7 | 164.1 |
| 82.5° | 129.3 | 128.9 | 128.5 | 127.9 | 127.5 | 127.2 | 127.1 | 127.0 | 126.9 | 126.7 | 126.4 |
| 85° | 75.4 | 75.4 | 75.4 | 75.4 | 75.4 | 75.1 | 74.4 | 73.8 | 73.2 | 72.6 | 72.6 |
| 87.5° | 30.0 | 30.5 | 30.9 | 31.4 | 31.9 | 32.3 | 32.6 | 32.9 | 33.2 | 33.5 | 33.9 |
| 90° | 4.5 | 8.3 | 12.0 | 15.8 | 19.5 | 22.7 | 25.3 | 28.1 | 30.8 | 33.5 | 35.5 |
| 92.5° | 32.6 | 36.9 | 41.1 | 45.3 | 49.7 | 52.7 | 54.6 | 56.6 | 58.4 | 60.3 | 61.5 |
| 95° | 91.4 | 94.4 | 97.5 | 100.5 | 103.5 | 106.2 | 108.7 | 111.0 | 113.4 | 115.7 | 116.7 |
| 97.5° | 159.6 | 162.0 | 164.4 | 166.9 | 169.4 | 172.0 | 174.7 | 177.4 | 180.3 | 183.0 | 184.2 |
| 100° | 213.2 | 214.5 | 215.9 | 217.2 | 218.6 | 220.8 | 223.9 | 226.9 | 229.9 | 233.0 | 233.7 |
| 102.5° | 269.2 | 269.7 | 270.3 | 270.8 | 271.4 | 273.1 | 275.8 | 278.6 | 281.3 | 284.2 | 285.1 |
| 105° | 354.8 | 355.2 | 355.5 | 355.8 | 356.2 | 357.0 | 358.3 | 359.7 | 361.0 | 362.4 | 363.5 |
| 107.5° | 444.6 | 445.0 | 445.5 | 445.9 | 446.3 | 446.6 | 446.8 | 447.0 | 447.2 | 447.4 | 448.3 |
| 110° | 505.5 | 506.2 | 506.9 | 507.6 | 508.3 | 508.5 | 508.1 | 507.8 | 507.4 | 507.1 | 506.3 |



TEST NUMBER: P332834-840

CATALOG NUMBER: S124DIW-S1020D1560U840-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 568.9 | 569.1 | 569.2 | 569.3 | 569.5 | 569.2 | 568.6 | 567.9 | 567.3 | 566.7 | 566.6 |
| 115° | 663.9 | 663.9 | 663.9 | 663.9 | 663.9 | 663.6 | 662.9 | 662.2 | 661.6 | 660.9 | 660.6 |
| 117.5° | 753.5 | 753.7 | 754.0 | 754.3 | 754.6 | 754.5 | 754.0 | 753.5 | 753.0 | 752.6 | 751.3 |
| 120° | 813.1 | 814.5 | 815.9 | 817.2 | 818.5 | 818.7 | 817.7 | 816.7 | 815.7 | 814.7 | 812.9 |
| 122.5° | 875.3 | 875.8 | 876.4 | 876.9 | 877.4 | 877.5 | 877.0 | 876.5 | 876.1 | 875.6 | 874.4 |
| 125° | 966.9 | 966.9 | 966.9 | 966.9 | 966.9 | 966.7 | 966.4 | 966.0 | 965.7 | 965.4 | 964.7 |
| 127.5° | 1050.1 | 1051.1 | 1052.1 | 1053.1 | 1054.1 | 1054.4 | 1053.8 | 1053.3 | 1052.8 | 1052.2 | 1051.5 |
| 130° | 1108.5 | 1109.5 | 1110.5 | 1111.6 | 1112.6 | 1113.1 | 1113.1 | 1113.1 | 1113.1 | 1113.1 | 1112.5 |
| 132.5° | 1168.2 | 1169.0 | 1169.7 | 1170.4 | 1171.2 | 1171.4 | 1171.1 | 1170.9 | 1170.6 | 1170.3 | 1169.7 |
| 135° | 1247.1 | 1249.1 | 1251.1 | 1253.2 | 1255.3 | 1256.3 | 1256.3 | 1256.3 | 1256.3 | 1256.3 | 1255.6 |
| 137.5° | 1333.0 | 1333.9 | 1334.8 | 1335.8 | 1336.8 | 1337.6 | 1338.1 | 1338.6 | 1339.2 | 1339.7 | 1338.8 |
| 140° | 1390.3 | 1390.9 | 1391.6 | 1392.3 | 1392.9 | 1393.3 | 1393.3 | 1393.3 | 1393.3 | 1393.3 | 1392.9 |
| 142.5° | 1442.6 | 1443.3 | 1444.0 | 1444.6 | 1445.3 | 1445.5 | 1445.2 | 1445.0 | 1444.7 | 1444.4 | 1444.4 |
| 145° | 1515.1 | 1516.4 | 1517.8 | 1519.1 | 1520.6 | 1521.4 | 1521.7 | 1522.1 | 1522.4 | 1522.7 | 1522.4 |
| 147.5° | 1587.0 | 1588.6 | 1590.2 | 1591.9 | 1593.5 | 1594.2 | 1593.9 | 1593.6 | 1593.4 | 1593.1 | 1592.8 |
| 150° | 1630.8 | 1632.1 | 1633.6 | 1634.9 | 1636.3 | 1636.9 | 1636.9 | 1636.9 | 1636.9 | 1636.9 | 1636.9 |
| 152.5° | 1672.2 | 1673.0 | 1673.9 | 1674.7 | 1675.5 | 1676.1 | 1676.3 | 1676.6 | 1676.9 | 1677.1 | 1677.9 |
| 155° | 1735.9 | 1735.9 | 1735.9 | 1735.9 | 1735.9 | 1735.8 | 1735.4 | 1735.0 | 1734.7 | 1734.3 | 1735.8 |
| 157.5° | 1789.5 | 1788.9 | 1788.3 | 1787.7 | 1787.1 | 1786.8 | 1786.7 | 1786.6 | 1786.6 | 1786.5 | 1787.5 |
| 160° | 1821.2 | 1820.8 | 1820.5 | 1820.2 | 1819.8 | 1819.5 | 1819.2 | 1818.8 | 1818.5 | 1818.2 | 1819.2 |
| 162.5° | 1850.4 | 1849.6 | 1848.7 | 1847.8 | 1846.8 | 1846.2 | 1845.9 | 1845.6 | 1845.2 | 1844.9 | 1846.7 |
| 165° | 1889.7 | 1888.6 | 1887.6 | 1886.6 | 1885.6 | 1884.8 | 1884.1 | 1883.4 | 1882.8 | 1882.1 | 1884.1 |
| 167.5° | 1919.9 | 1918.4 | 1917.0 | 1915.6 | 1914.2 | 1913.5 | 1913.6 | 1913.6 | 1913.7 | 1913.8 | 1915.8 |
| 170° | 1936.9 | 1935.2 | 1933.5 | 1931.8 | 1930.2 | 1929.4 | 1929.8 | 1930.2 | 1930.5 | 1930.8 | 1932.8 |
| 172.5° | 1949.0 | 1947.6 | 1946.2 | 1944.8 | 1943.4 | 1942.7 | 1942.8 | 1942.9 | 1942.9 | 1943.0 | 1945.3 |
| 175° | 1965.8 | 1964.1 | 1962.5 | 1960.8 | 1959.0 | 1958.0 | 1957.7 | 1957.3 | 1957.0 | 1956.7 | 1959.0 |
| 177.5° | 1971.3 | 1969.9 | 1968.6 | 1967.2 | 1965.9 | 1965.2 | 1965.2 | 1965.2 | 1965.2 | 1965.2 | 1967.1 |
| 180° | 1968.8 | 1968.8 | 1968.8 | 1968.8 | 1968.8 | 1968.8 | 1968.8 | 1968.8 | 1968.8 | 1968.8 | 1968.8 |



TEST NUMBER: P332834-840

CATALOG NUMBER: S124DIW-S1020D1560U840-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1742.5 | 1742.5 | 1742.5 | 1742.5 | 1742.5 | 1742.5 | 1742.5 | 1742.5 |
| 2.5° | 1736.3 | 1738.8 | 1741.3 | 1742.4 | 1742.1 | 1741.9 | 1741.6 | 1741.4 |
| 5° | 1727.0 | 1730.4 | 1733.8 | 1735.3 | 1734.6 | 1733.9 | 1733.3 | 1732.7 |
| 7.5° | 1707.8 | 1710.5 | 1713.2 | 1714.4 | 1714.0 | 1713.6 | 1713.2 | 1712.9 |
| 10° | 1691.6 | 1694.1 | 1696.6 | 1697.5 | 1696.9 | 1696.3 | 1695.7 | 1695.1 |
| 12.5° | 1672.0 | 1674.8 | 1677.5 | 1678.4 | 1677.6 | 1676.7 | 1675.8 | 1675.0 |
| 15° | 1634.6 | 1636.4 | 1638.3 | 1638.7 | 1637.8 | 1636.9 | 1636.0 | 1635.0 |
| 17.5° | 1591.9 | 1593.1 | 1594.2 | 1594.5 | 1593.9 | 1593.3 | 1592.7 | 1592.0 |
| 20° | 1560.0 | 1561.0 | 1562.0 | 1562.1 | 1561.5 | 1560.8 | 1560.2 | 1559.6 |
| 22.5° | 1526.9 | 1528.6 | 1530.2 | 1530.6 | 1529.4 | 1528.3 | 1527.2 | 1526.1 |
| 25° | 1472.3 | 1472.6 | 1472.9 | 1472.4 | 1471.2 | 1470.0 | 1468.6 | 1467.4 |
| 27.5° | 1411.0 | 1410.2 | 1409.5 | 1408.4 | 1406.7 | 1405.2 | 1403.6 | 1402.1 |
| 30° | 1368.7 | 1367.4 | 1366.1 | 1364.7 | 1363.2 | 1361.6 | 1360.1 | 1358.6 |
| 32.5° | 1325.6 | 1324.2 | 1322.7 | 1321.2 | 1319.6 | 1318.1 | 1316.6 | 1314.9 |
| 35° | 1257.9 | 1255.7 | 1253.5 | 1251.6 | 1250.1 | 1248.6 | 1247.0 | 1245.5 |
| 37.5° | 1186.8 | 1184.5 | 1182.1 | 1179.9 | 1177.9 | 1175.8 | 1173.8 | 1171.7 |
| 40° | 1137.3 | 1134.2 | 1131.1 | 1128.8 | 1127.2 | 1125.7 | 1124.2 | 1122.6 |
| 42.5° | 1089.4 | 1085.8 | 1082.2 | 1079.8 | 1078.8 | 1077.7 | 1076.7 | 1075.7 |
| 45° | 1015.2 | 1011.8 | 1008.4 | 1006.2 | 1005.3 | 1004.4 | 1003.4 | 1002.5 |
| 47.5° | 943.4 | 939.6 | 935.7 | 932.6 | 930.3 | 927.9 | 925.5 | 923.2 |
| 50° | 893.3 | 889.0 | 884.6 | 881.5 | 879.6 | 877.8 | 876.0 | 874.0 |
| 52.5° | 841.8 | 837.9 | 834.0 | 831.0 | 828.6 | 826.3 | 823.9 | 821.5 |
| 55° | 766.1 | 762.3 | 758.6 | 755.9 | 754.0 | 752.1 | 750.2 | 748.4 |
| 57.5° | 690.2 | 686.7 | 683.2 | 680.4 | 678.6 | 676.9 | 675.1 | 673.3 |
| 60° | 638.1 | 635.3 | 632.5 | 630.4 | 628.7 | 627.2 | 625.7 | 624.1 |
| 62.5° | 587.2 | 584.6 | 582.1 | 580.1 | 578.6 | 576.9 | 575.4 | 573.9 |
| 65° | 513.2 | 510.1 | 507.0 | 504.6 | 503.1 | 501.6 | 500.0 | 498.5 |
| 67.5° | 437.0 | 433.9 | 431.0 | 429.3 | 428.8 | 428.4 | 428.0 | 427.6 |
| 70° | 388.8 | 386.3 | 383.8 | 382.1 | 381.2 | 380.2 | 379.3 | 378.4 |
| 72.5° | 340.6 | 338.6 | 336.7 | 335.2 | 334.3 | 333.4 | 332.4 | 331.4 |
| 75° | 271.1 | 269.9 | 268.7 | 267.9 | 267.6 | 267.3 | 267.0 | 266.7 |
| 77.5° | 205.3 | 205.0 | 204.6 | 204.0 | 203.2 | 202.4 | 201.6 | 200.8 |
| 80° | 163.5 | 162.9 | 162.3 | 161.8 | 161.5 | 161.2 | 160.9 | 160.6 |
| 82.5° | 126.0 | 125.6 | 125.3 | 124.9 | 124.6 | 124.3 | 124.0 | 123.7 |
| 85° | 72.6 | 72.6 | 72.6 | 72.4 | 72.1 | 71.8 | 71.5 | 71.2 |
| 87.5° | 34.3 | 34.7 | 35.1 | 35.4 | 35.5 | 35.6 | 35.9 | 36.0 |
| 90° | 37.6 | 39.6 | 41.6 | 43.0 | 43.6 | 44.3 | 45.0 | 45.6 |
| 92.5° | 62.7 | 63.9 | 65.1 | 65.9 | 66.3 | 66.8 | 67.2 | 67.6 |
| 95° | 117.8 | 118.8 | 119.8 | 120.3 | 120.3 | 120.3 | 120.3 | 120.3 |
| 97.5° | 185.5 | 186.7 | 187.9 | 188.5 | 188.5 | 188.5 | 188.5 | 188.5 |
| 100° | 234.3 | 235.0 | 235.7 | 236.0 | 236.0 | 236.0 | 236.0 | 236.0 |
| 102.5° | 286.0 | 287.0 | 287.9 | 288.5 | 288.8 | 289.1 | 289.3 | 289.6 |
| 105° | 364.5 | 365.5 | 366.5 | 367.5 | 368.5 | 369.5 | 370.5 | 371.5 |
| 107.5° | 449.3 | 450.2 | 451.2 | 451.6 | 451.5 | 451.5 | 451.4 | 451.3 |
| 110° | 505.7 | 505.0 | 504.3 | 504.5 | 505.5 | 506.5 | 507.6 | 508.6 |



TEST NUMBER: P332834-840

CATALOG NUMBER: S124DIW-S1020D1560U840-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 566.4 | 566.3 | 566.2 | 566.2 | 566.4 | 566.6 | 566.8 | 567.0 |
| 115° | 660.1 | 659.8 | 659.5 | 659.1 | 658.8 | 658.5 | 658.1 | 657.8 |
| 117.5° | 750.2 | 749.1 | 747.9 | 747.0 | 746.3 | 745.7 | 745.0 | 744.3 |
| 120° | 811.2 | 809.6 | 807.9 | 807.4 | 808.1 | 808.7 | 809.4 | 810.1 |
| 122.5° | 873.2 | 872.1 | 871.0 | 869.8 | 868.6 | 867.4 | 866.2 | 864.9 |
| 125° | 964.0 | 963.4 | 962.7 | 962.0 | 961.3 | 960.7 | 960.0 | 959.3 |
| 127.5° | 1050.9 | 1050.2 | 1049.5 | 1048.8 | 1048.3 | 1047.8 | 1047.2 | 1046.7 |
| 130° | 1111.8 | 1111.1 | 1110.3 | 1109.3 | 1108.0 | 1106.7 | 1105.3 | 1104.0 |
| 132.5° | 1169.0 | 1168.3 | 1167.6 | 1167.0 | 1166.5 | 1166.0 | 1165.4 | 1164.9 |
| 135° | 1254.9 | 1254.3 | 1253.5 | 1252.6 | 1251.6 | 1250.6 | 1249.6 | 1248.6 |
| 137.5° | 1338.0 | 1337.1 | 1336.2 | 1335.8 | 1336.1 | 1336.3 | 1336.5 | 1336.7 |
| 140° | 1392.6 | 1392.3 | 1391.9 | 1391.6 | 1391.3 | 1390.9 | 1390.6 | 1390.3 |
| 142.5° | 1444.3 | 1444.2 | 1444.2 | 1444.1 | 1444.0 | 1444.0 | 1443.9 | 1443.8 |
| 145° | 1522.1 | 1521.7 | 1521.4 | 1520.7 | 1519.6 | 1518.6 | 1517.6 | 1516.6 |
| 147.5° | 1592.6 | 1592.3 | 1592.0 | 1591.6 | 1591.3 | 1591.0 | 1590.6 | 1590.3 |
| 150° | 1636.9 | 1636.9 | 1636.9 | 1636.8 | 1636.4 | 1636.1 | 1635.8 | 1635.4 |
| 152.5° | 1678.7 | 1679.5 | 1680.3 | 1680.3 | 1679.4 | 1678.6 | 1677.7 | 1676.8 |
| 155° | 1737.1 | 1738.4 | 1739.8 | 1739.8 | 1738.4 | 1737.1 | 1735.8 | 1734.3 |
| 157.5° | 1788.5 | 1789.5 | 1790.5 | 1790.4 | 1789.3 | 1788.2 | 1787.0 | 1785.8 |
| 160° | 1820.2 | 1821.2 | 1822.2 | 1821.8 | 1820.2 | 1818.5 | 1816.7 | 1815.0 |
| 162.5° | 1848.6 | 1850.4 | 1852.2 | 1852.3 | 1850.6 | 1849.0 | 1847.2 | 1845.5 |
| 165° | 1886.1 | 1888.1 | 1890.2 | 1890.6 | 1889.2 | 1887.8 | 1886.4 | 1885.1 |
| 167.5° | 1917.8 | 1919.9 | 1921.9 | 1921.9 | 1919.8 | 1917.6 | 1915.5 | 1913.4 |
| 170° | 1934.9 | 1936.9 | 1938.9 | 1938.7 | 1936.4 | 1934.0 | 1931.7 | 1929.2 |
| 172.5° | 1947.6 | 1949.8 | 1952.2 | 1952.2 | 1949.7 | 1947.4 | 1945.0 | 1942.7 |
| 175° | 1961.5 | 1963.8 | 1966.2 | 1966.2 | 1963.8 | 1961.5 | 1959.0 | 1956.7 |
| 177.5° | 1969.0 | 1970.9 | 1972.8 | 1972.7 | 1970.4 | 1968.3 | 1966.2 | 1964.0 |
| 180° | 1968.8 | 1968.8 | 1968.8 | 1968.8 | 1968.8 | 1968.8 | 1968.8 | 1968.8 |

(END OF REPORT)