

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: P199529

Luminaire Tested: **S125-DIW-U1-2-40-0048-1D-UDD-1-5-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P199529
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P27900 P27900)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125-DIW-U1-2-40-0048-1D-UDD-1-5-W
Description: DEFINE 5-INCH DIRECT/INDIRECT WALL LED LUMINAIRE
UPLIGHT LL1-4000K, SATIN WHITE DIFFUSER
DOWNLIGHT LL2-4000K, SATIN WHITE DIFFUSER
Light Source: -
757G
Ballast/Driver: ELECTRONIC DRIVERS

Summary

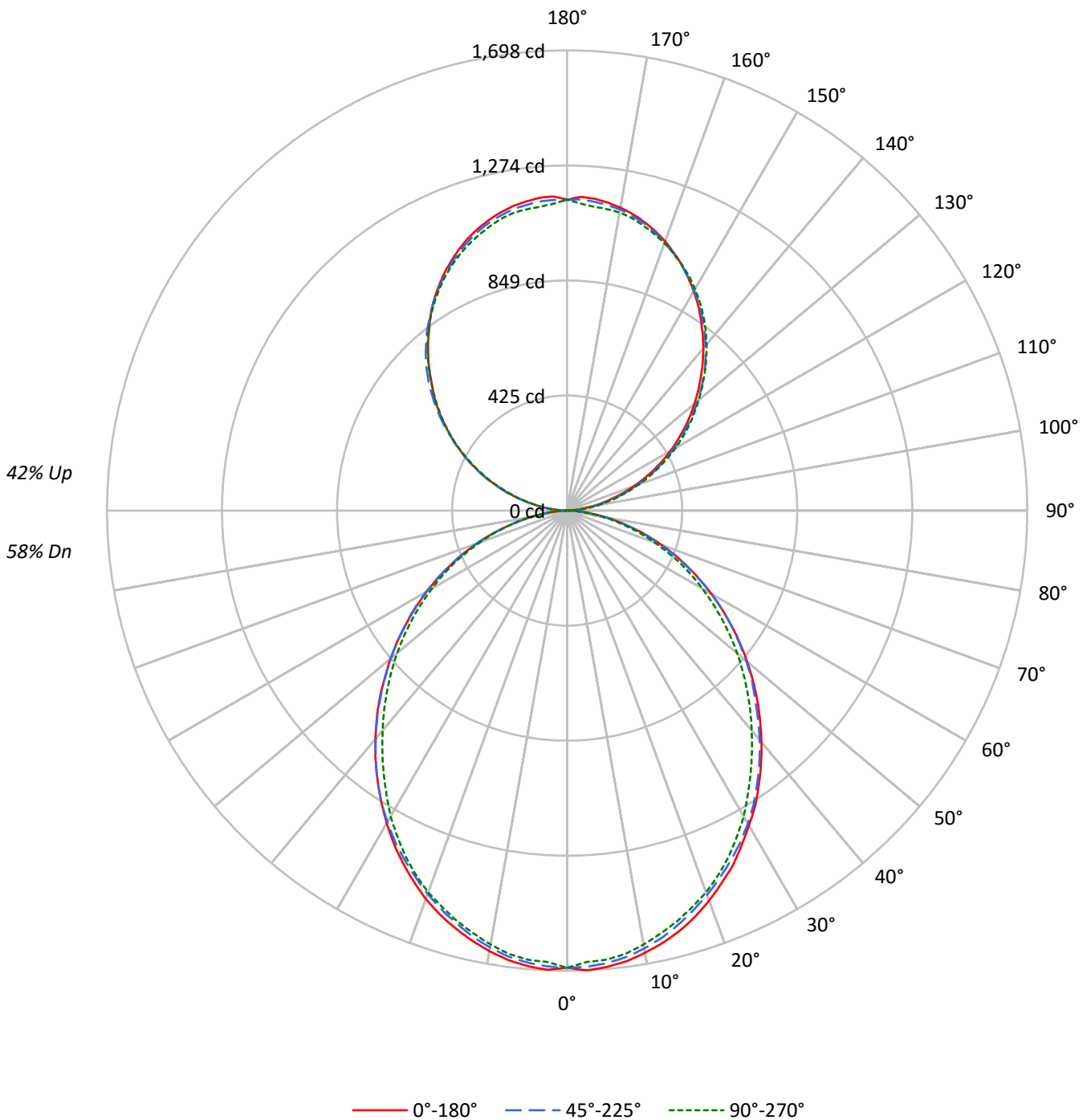
Lumens per Lamp: N/A
Luminaire Lumens: 7303.3 lumens
Efficiency: N/A
Efficacy: 109.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4.08' x H: 0.38')
CIE Type: General Diffuse

Input Watts (W): 67
Input Voltage (V): NR
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: P199529

CATALOG NUMBER: S125-DIW-U1-2-40-0048-1D-UDD-1-5-W

Luminous Intensity Polar Plot





TEST NUMBER: P199529

CATALOG NUMBER: S125-DIW-U1-2-40-0048-1D-UDD-1-5-W

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 | 102 | 102 | 102 | 102 | 88 | 88 | 88 | 75 | 75 | 75 | 63 | 63 | 63 | 58 |
| 1 | 100 | 95 | 91 | 88 | 93 | 89 | 86 | 82 | 77 | 74 | 72 | 66 | 64 | 63 | 56 | 55 | 54 | 49 |
| 2 | 91 | 83 | 77 | 72 | 84 | 78 | 72 | 68 | 68 | 63 | 60 | 58 | 55 | 52 | 49 | 47 | 45 | 41 |
| 3 | 83 | 73 | 66 | 60 | 77 | 69 | 62 | 57 | 60 | 55 | 50 | 51 | 48 | 44 | 44 | 41 | 39 | 35 |
| 4 | 76 | 65 | 57 | 51 | 70 | 61 | 54 | 48 | 53 | 48 | 43 | 46 | 42 | 38 | 39 | 36 | 33 | 30 |
| 5 | 70 | 58 | 50 | 44 | 65 | 54 | 47 | 41 | 48 | 42 | 37 | 41 | 37 | 33 | 35 | 32 | 29 | 26 |
| 6 | 64 | 52 | 44 | 38 | 60 | 49 | 41 | 36 | 43 | 37 | 33 | 37 | 33 | 29 | 32 | 28 | 26 | 23 |
| 7 | 59 | 47 | 39 | 33 | 55 | 44 | 37 | 32 | 39 | 33 | 29 | 34 | 29 | 26 | 29 | 26 | 23 | 20 |
| 8 | 55 | 43 | 35 | 30 | 51 | 40 | 33 | 28 | 36 | 30 | 26 | 31 | 26 | 23 | 27 | 23 | 20 | 18 |
| 9 | 51 | 39 | 32 | 26 | 48 | 37 | 30 | 25 | 33 | 27 | 23 | 29 | 24 | 21 | 25 | 21 | 19 | 16 |
| 10 | 48 | 36 | 29 | 24 | 45 | 34 | 27 | 23 | 30 | 25 | 21 | 27 | 22 | 19 | 23 | 19 | 17 | 15 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|-------|-------|-------|
| 0° | 10671 | 10671 | 10671 |
| 5° | 10646 | 9796 | 10626 |
| 10° | 10474 | 9014 | 10435 |
| 15° | 10261 | 8274 | 10195 |
| 20° | 9980 | 7601 | 9933 |
| 25° | 9681 | 6929 | 9598 |
| 30° | 9310 | 6262 | 9238 |
| 35° | 8952 | 5595 | 8847 |
| 40° | 8556 | 4983 | 8438 |
| 45° | 8138 | 4424 | 8019 |
| 50° | 7692 | 3887 | 7546 |
| 55° | 7217 | 3363 | 7046 |
| 60° | 6705 | 2848 | 6525 |
| 65° | 6146 | 2352 | 5926 |
| 70° | 5489 | 1825 | 5230 |
| 75° | 4604 | 1297 | 4285 |
| 80° | 3488 | 807 | 3191 |
| 85° | 2082 | 352 | 1827 |



TEST NUMBER: P199529

CATALOG NUMBER: S125-DIW-U1-2-40-0048-1D-UDD-1-5-W

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 158.6 | 2.2 |
| 10°-20° | 445.3 | 6.1 |
| 20°-30° | 654.2 | 9.0 |
| 30°-40° | 755.5 | 10.3 |
| 40°-50° | 748.9 | 10.3 |
| 50°-60° | 649.5 | 8.9 |
| 60°-70° | 474.4 | 6.5 |
| 70°-80° | 259.3 | 3.5 |
| 80°-90° | 67.4 | 0.9 |
| 90°-100° | 57.1 | 0.8 |
| 100°-110° | 205.4 | 2.8 |
| 110°-120° | 365.5 | 5.0 |
| 120°-130° | 487.4 | 6.7 |
| 130°-140° | 551.4 | 7.6 |
| 140°-150° | 544.7 | 7.5 |
| 150°-160° | 461.3 | 6.3 |
| 160°-170° | 308.9 | 4.2 |
| 170°-180° | 108.4 | 1.5 |
| 0°-30° | 1258.0 | 17.2 |
| 0°-40° | 2013.5 | 27.6 |
| 0°-60° | 3412.0 | 46.7 |
| 0°-90° | 4213.1 | 57.7 |
| 90°-120° | 628.0 | 8.6 |
| 90°-150° | 2211.7 | 30.3 |
| 90°-180° | 3090.0 | 42.3 |
| 0°-180° | 7303.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|------|------|------|------|------|------|------|
| 0° | 1687 | 1687 | 1687 | 1687 | 1687 | |
| 5° | 1690 | 1676 | 1664 | 1674 | 1687 | 160 |
| 15° | 1605 | 1582 | 1568 | 1577 | 1595 | 452 |
| 25° | 1446 | 1427 | 1409 | 1420 | 1434 | 665 |
| 35° | 1234 | 1223 | 1181 | 1219 | 1219 | 771 |
| 45° | 993 | 980 | 939 | 974 | 979 | 766 |
| 55° | 740 | 739 | 697 | 726 | 723 | 662 |
| 65° | 491 | 487 | 460 | 476 | 474 | 487 |
| 75° | 253 | 251 | 231 | 236 | 235 | 269 |
| 85° | 59 | 62 | 55 | 55 | 52 | 66 |
| 90° | 2 | 4 | 2 | 3 | 2 | 6 |
| 95° | 39 | 47 | 52 | 54 | 50 | 44 |
| 105° | 174 | 188 | 195 | 202 | 199 | 186 |
| 115° | 351 | 365 | 371 | 379 | 376 | 347 |
| 125° | 527 | 540 | 549 | 557 | 551 | 471 |
| 135° | 698 | 716 | 718 | 732 | 716 | 539 |
| 145° | 860 | 870 | 876 | 881 | 879 | 538 |
| 155° | 1000 | 999 | 1002 | 1008 | 1014 | 460 |
| 165° | 1102 | 1097 | 1088 | 1102 | 1111 | 311 |
| 175° | 1155 | 1144 | 1126 | 1145 | 1159 | 110 |
| 180° | 1147 | 1147 | 1147 | 1147 | 1147 | |



TEST NUMBER: P199529

CATALOG NUMBER: S125-DIW-U1-2-40-0048-1D-UDD-1-5-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1686.7 | 1686.7 | 1686.7 | 1686.7 | 1686.7 | 1686.7 | 1686.7 | 1686.7 | 1686.7 |
| 2.5° | 1698.1 | 1680.6 | 1684.7 | 1681.6 | 1667.1 | 1679.5 | 1683.6 | 1677.5 | 1696.0 |
| 5° | 1689.8 | 1672.3 | 1676.4 | 1672.3 | 1664.0 | 1670.2 | 1674.4 | 1668.2 | 1686.7 |
| 7.5° | 1677.5 | 1658.9 | 1662.0 | 1657.8 | 1649.6 | 1654.7 | 1659.9 | 1653.7 | 1672.3 |
| 10° | 1656.8 | 1639.3 | 1640.3 | 1635.1 | 1625.8 | 1632.0 | 1637.2 | 1632.0 | 1650.6 |
| 12.5° | 1633.1 | 1614.5 | 1614.5 | 1606.2 | 1598.0 | 1603.1 | 1610.4 | 1606.2 | 1624.8 |
| 15° | 1605.2 | 1585.6 | 1582.5 | 1577.3 | 1568.0 | 1574.2 | 1577.3 | 1576.3 | 1594.9 |
| 17.5° | 1571.1 | 1550.5 | 1546.4 | 1545.3 | 1534.0 | 1542.2 | 1543.3 | 1540.2 | 1562.9 |
| 20° | 1531.9 | 1512.3 | 1509.2 | 1508.2 | 1498.9 | 1505.1 | 1505.1 | 1500.9 | 1524.7 |
| 22.5° | 1488.5 | 1470.0 | 1468.9 | 1466.9 | 1456.5 | 1463.8 | 1463.8 | 1457.6 | 1481.3 |
| 25° | 1446.2 | 1423.5 | 1426.6 | 1421.4 | 1409.1 | 1419.4 | 1420.4 | 1410.1 | 1433.8 |
| 27.5° | 1393.6 | 1376.0 | 1382.2 | 1372.9 | 1356.4 | 1369.8 | 1376.0 | 1360.5 | 1385.3 |
| 30° | 1342.0 | 1323.4 | 1333.7 | 1317.2 | 1302.7 | 1315.1 | 1326.5 | 1306.9 | 1331.6 |
| 32.5° | 1291.4 | 1269.7 | 1282.1 | 1261.4 | 1240.8 | 1256.3 | 1274.9 | 1256.3 | 1275.9 |
| 35° | 1233.6 | 1216.0 | 1223.3 | 1201.6 | 1180.9 | 1196.4 | 1219.1 | 1201.6 | 1219.1 |
| 37.5° | 1175.8 | 1161.3 | 1166.5 | 1140.7 | 1120.0 | 1135.5 | 1159.2 | 1145.8 | 1161.3 |
| 40° | 1115.9 | 1105.6 | 1105.6 | 1079.8 | 1059.1 | 1073.6 | 1098.3 | 1091.1 | 1100.4 |
| 42.5° | 1054.0 | 1049.8 | 1041.6 | 1018.9 | 999.2 | 1013.7 | 1037.4 | 1035.4 | 1039.5 |
| 45° | 993.1 | 993.1 | 979.6 | 955.9 | 939.4 | 952.8 | 974.5 | 979.6 | 978.6 |
| 47.5° | 930.1 | 935.2 | 923.9 | 898.1 | 879.5 | 892.9 | 912.5 | 921.8 | 911.5 |
| 50° | 867.1 | 876.4 | 862.0 | 839.2 | 818.6 | 833.0 | 849.6 | 862.0 | 850.6 |
| 52.5° | 804.1 | 815.5 | 800.0 | 778.3 | 757.7 | 771.1 | 787.6 | 802.1 | 787.6 |
| 55° | 740.1 | 753.6 | 739.1 | 716.4 | 696.8 | 709.2 | 725.7 | 740.1 | 722.6 |
| 57.5° | 677.2 | 689.6 | 677.2 | 654.5 | 635.9 | 647.2 | 664.8 | 676.1 | 660.7 |
| 60° | 614.2 | 627.6 | 615.2 | 593.6 | 576.0 | 585.3 | 601.8 | 613.2 | 597.7 |
| 62.5° | 552.3 | 563.6 | 550.2 | 532.7 | 519.2 | 523.4 | 538.8 | 552.3 | 535.8 |
| 65° | 491.4 | 501.7 | 487.2 | 471.8 | 460.4 | 462.5 | 475.9 | 483.1 | 473.8 |
| 67.5° | 431.5 | 442.8 | 427.4 | 412.9 | 399.5 | 403.6 | 415.0 | 425.3 | 413.9 |
| 70° | 371.6 | 383.0 | 366.5 | 354.1 | 342.7 | 344.8 | 354.1 | 365.4 | 354.1 |
| 72.5° | 312.8 | 322.1 | 310.7 | 296.3 | 288.0 | 290.1 | 295.2 | 305.6 | 294.2 |
| 75° | 252.9 | 263.2 | 250.8 | 239.5 | 231.2 | 233.3 | 236.4 | 244.7 | 235.4 |
| 77.5° | 197.2 | 204.4 | 196.1 | 186.8 | 181.7 | 182.7 | 183.7 | 189.9 | 181.7 |
| 80° | 145.6 | 151.7 | 146.6 | 139.4 | 135.2 | 135.2 | 135.2 | 140.4 | 133.2 |
| 82.5° | 99.1 | 105.3 | 101.2 | 96.0 | 92.9 | 89.8 | 91.9 | 96.0 | 89.8 |
| 85° | 58.8 | 64.0 | 61.9 | 56.8 | 54.7 | 52.6 | 54.7 | 56.8 | 51.6 |
| 87.5° | 26.8 | 31.0 | 27.9 | 22.7 | 20.6 | 18.6 | 18.6 | 21.7 | 17.5 |
| 90° | 2.1 | 5.2 | 4.1 | 3.1 | 2.1 | 2.1 | 3.1 | 4.1 | 2.1 |
| 92.5° | 13.6 | 18.6 | 18.6 | 16.5 | 20.1 | 22.9 | 28.0 | 28.0 | 24.4 |
| 95° | 39.4 | 44.5 | 46.6 | 48.0 | 51.6 | 53.1 | 54.5 | 54.5 | 50.2 |
| 97.5° | 67.4 | 74.6 | 76.0 | 78.2 | 82.5 | 83.2 | 85.3 | 86.0 | 81.0 |
| 100° | 98.9 | 107.5 | 109.0 | 111.8 | 116.9 | 117.6 | 120.5 | 121.9 | 116.9 |
| 102.5° | 134.8 | 144.8 | 147.0 | 149.1 | 152.7 | 155.6 | 159.2 | 161.3 | 155.6 |
| 105° | 174.2 | 186.4 | 187.9 | 190.7 | 195.0 | 197.9 | 202.2 | 203.6 | 198.6 |
| 107.5° | 218.0 | 227.3 | 231.6 | 233.0 | 237.3 | 240.2 | 245.9 | 246.6 | 242.3 |
| 110° | 261.0 | 269.6 | 275.3 | 276.8 | 281.1 | 283.9 | 289.7 | 289.7 | 286.1 |



TEST NUMBER: P199529

CATALOG NUMBER: S125-DIW-U1-2-40-0048-1D-UDD-1-5-W

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 305.4 | 314.8 | 319.8 | 321.2 | 326.2 | 328.4 | 334.1 | 334.8 | 331.2 |
| 115° | 350.6 | 359.2 | 364.9 | 366.4 | 370.7 | 373.5 | 378.6 | 380.0 | 376.4 |
| 117.5° | 395.8 | 404.4 | 408.7 | 411.5 | 416.6 | 418.7 | 421.6 | 423.7 | 420.2 |
| 120° | 439.5 | 448.1 | 451.7 | 456.0 | 461.0 | 463.2 | 467.5 | 466.0 | 463.9 |
| 122.5° | 484.0 | 491.9 | 495.4 | 500.5 | 506.2 | 506.9 | 509.8 | 509.1 | 507.6 |
| 125° | 527.0 | 533.4 | 539.9 | 542.8 | 549.2 | 549.2 | 557.1 | 550.6 | 550.6 |
| 127.5° | 570.7 | 575.7 | 584.3 | 585.8 | 591.5 | 592.2 | 601.6 | 592.2 | 594.4 |
| 130° | 613.7 | 617.3 | 628.8 | 628.8 | 633.1 | 634.5 | 646.7 | 633.8 | 636.7 |
| 132.5° | 656.0 | 658.9 | 672.5 | 671.1 | 675.4 | 676.8 | 690.5 | 675.4 | 674.7 |
| 135° | 698.3 | 699.8 | 715.6 | 713.4 | 717.7 | 719.9 | 732.0 | 715.6 | 716.3 |
| 137.5° | 739.9 | 739.2 | 755.7 | 755.0 | 759.3 | 760.7 | 772.2 | 752.8 | 757.9 |
| 140° | 782.2 | 777.2 | 794.4 | 795.9 | 800.2 | 801.6 | 809.5 | 794.4 | 798.7 |
| 142.5° | 820.9 | 818.8 | 831.7 | 833.9 | 839.6 | 839.6 | 846.8 | 831.7 | 837.4 |
| 145° | 860.4 | 855.4 | 869.7 | 869.7 | 876.2 | 875.4 | 881.2 | 871.1 | 879.0 |
| 147.5° | 899.1 | 892.6 | 904.8 | 905.6 | 911.3 | 911.3 | 916.3 | 906.3 | 916.3 |
| 150° | 934.2 | 928.5 | 937.1 | 937.8 | 943.6 | 942.8 | 947.9 | 942.8 | 951.4 |
| 152.5° | 967.9 | 962.2 | 967.9 | 967.2 | 974.4 | 972.2 | 978.7 | 974.4 | 984.4 |
| 155° | 1000.2 | 993.7 | 998.8 | 995.9 | 1001.6 | 1000.9 | 1008.1 | 1006.6 | 1014.5 |
| 157.5° | 1029.6 | 1022.4 | 1026.7 | 1023.1 | 1026.7 | 1027.4 | 1035.3 | 1034.6 | 1043.2 |
| 160° | 1056.8 | 1049.7 | 1052.5 | 1046.1 | 1049.7 | 1050.4 | 1060.4 | 1060.4 | 1069.0 |
| 162.5° | 1081.2 | 1073.3 | 1076.2 | 1066.2 | 1069.7 | 1069.7 | 1082.6 | 1082.6 | 1091.3 |
| 165° | 1102.0 | 1094.8 | 1097.0 | 1084.8 | 1088.4 | 1089.1 | 1102.0 | 1102.7 | 1110.6 |
| 167.5° | 1120.6 | 1112.8 | 1113.5 | 1102.0 | 1104.9 | 1105.6 | 1117.1 | 1118.5 | 1127.8 |
| 170° | 1135.0 | 1127.8 | 1127.8 | 1114.9 | 1117.1 | 1117.8 | 1130.0 | 1132.1 | 1141.4 |
| 172.5° | 1146.5 | 1138.6 | 1137.1 | 1123.5 | 1122.1 | 1125.7 | 1137.9 | 1142.2 | 1150.8 |
| 175° | 1155.1 | 1146.5 | 1144.3 | 1130.7 | 1125.7 | 1132.8 | 1145.0 | 1148.6 | 1158.6 |
| 177.5° | 1158.6 | 1150.0 | 1148.6 | 1134.3 | 1133.6 | 1135.7 | 1147.2 | 1151.5 | 1160.1 |
| 180° | 1147.2 | 1147.2 | 1147.2 | 1147.2 | 1147.2 | 1147.2 | 1147.2 | 1147.2 | 1147.2 |

(END OF REPORT)