

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: P199526

Luminaire Tested: **S125-DIW-U1-2-30-0048-1D-UDD-1-NA-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P199526
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P27900 P27899)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125-DIW-U1-2-30-0048-1D-UDD-1-NA-W
Description: DEFINE 5-INCH DIRECT/INDIRECT WALL LED LUMINAIRE
UPLIGHT LL1-3000K, NO LENS
DOWNLIGHT LL2-3000K, SATIN WHITE DIFFUSER
Light Source: -
757G
Ballast/Driver: ELECTRONIC DRIVERS

Summary

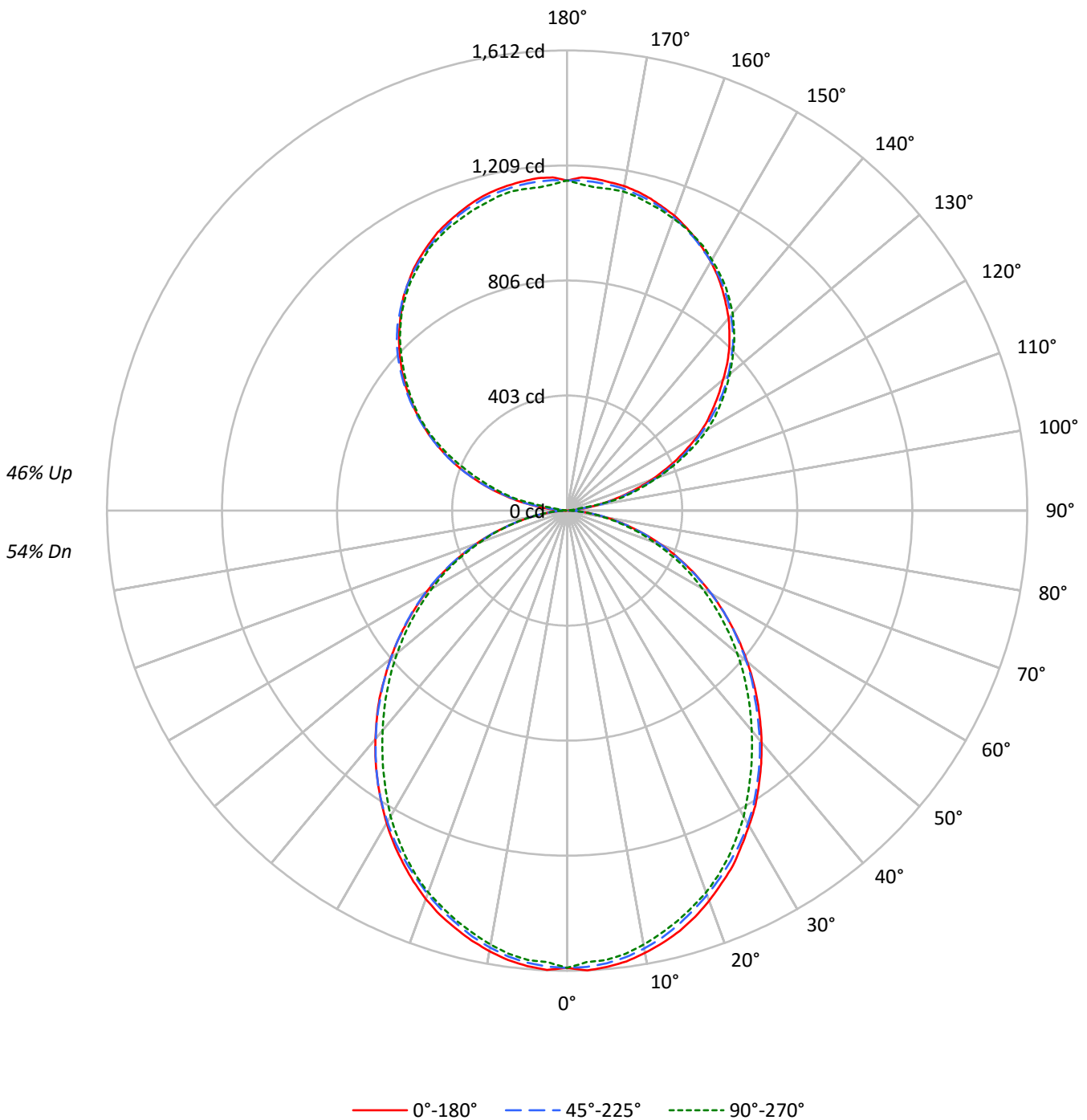
Lumens per Lamp: N/A
Luminaire Lumens: 7466.3 lumens
Efficiency: N/A
Efficacy: 111.4 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4.08' x H: 0.38')
CIE Type: General Diffuse

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: P199526

CATALOG NUMBER: S125-DIW-U1-2-30-0048-1D-UDD-1-NA-W

Luminous Intensity Polar Plot





TEST NUMBER: P199526

CATALOG NUMBER: S125-DIW-U1-2-30-0048-1D-UDD-1-NA-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 | 108 | 108 | 108 | 108 | 100 | 100 | 100 | 100 | 85 | 85 | 85 | 72 | 72 | 72 | 59 | 59 | 59 | 54 |
| 1 | 99 | 94 | 90 | 87 | 91 | 88 | 84 | 81 | 75 | 73 | 70 | 63 | 62 | 60 | 53 | 51 | 50 | 45 |
| 2 | 90 | 82 | 76 | 71 | 83 | 77 | 71 | 67 | 66 | 62 | 58 | 56 | 53 | 50 | 46 | 44 | 42 | 38 |
| 3 | 82 | 73 | 65 | 59 | 76 | 68 | 61 | 56 | 58 | 53 | 49 | 49 | 46 | 43 | 41 | 39 | 36 | 32 |
| 4 | 75 | 64 | 56 | 50 | 69 | 60 | 53 | 47 | 52 | 46 | 42 | 44 | 40 | 37 | 37 | 34 | 31 | 28 |
| 5 | 69 | 57 | 49 | 43 | 64 | 53 | 46 | 41 | 46 | 41 | 36 | 40 | 35 | 32 | 33 | 30 | 27 | 24 |
| 6 | 64 | 51 | 43 | 37 | 59 | 48 | 41 | 35 | 42 | 36 | 32 | 36 | 31 | 28 | 30 | 27 | 24 | 21 |
| 7 | 59 | 46 | 38 | 33 | 54 | 43 | 36 | 31 | 38 | 32 | 28 | 33 | 28 | 25 | 28 | 24 | 21 | 19 |
| 8 | 55 | 42 | 34 | 29 | 51 | 40 | 33 | 28 | 35 | 29 | 25 | 30 | 25 | 22 | 25 | 22 | 19 | 17 |
| 9 | 51 | 39 | 31 | 26 | 47 | 36 | 29 | 25 | 32 | 26 | 22 | 27 | 23 | 20 | 23 | 20 | 17 | 15 |
| 10 | 48 | 35 | 28 | 23 | 44 | 33 | 27 | 22 | 29 | 24 | 20 | 25 | 21 | 18 | 22 | 18 | 16 | 14 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|-------|-------|-------|
| 0° | 10133 | 10133 | 10133 |
| 5° | 10109 | 9302 | 10091 |
| 10° | 9946 | 8560 | 9909 |
| 15° | 9744 | 7858 | 9681 |
| 20° | 9477 | 7218 | 9432 |
| 25° | 9193 | 6579 | 9114 |
| 30° | 8840 | 5947 | 8772 |
| 35° | 8500 | 5313 | 8400 |
| 40° | 8125 | 4732 | 8012 |
| 45° | 7727 | 4200 | 7615 |
| 50° | 7305 | 3691 | 7165 |
| 55° | 6853 | 3194 | 6691 |
| 60° | 6367 | 2705 | 6196 |
| 65° | 5836 | 2234 | 5627 |
| 70° | 5213 | 1733 | 4966 |
| 75° | 4373 | 1231 | 4069 |
| 80° | 3311 | 766 | 3028 |
| 85° | 1980 | 334 | 1735 |



TEST NUMBER: P199526

CATALOG NUMBER: S125-DIW-U1-2-30-0048-1D-UDD-1-NA-W

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 150.6 | 2.0 |
| 10°-20° | 422.8 | 5.7 |
| 20°-30° | 621.2 | 8.3 |
| 30°-40° | 717.4 | 9.6 |
| 40°-50° | 711.1 | 9.5 |
| 50°-60° | 616.8 | 8.3 |
| 60°-70° | 450.5 | 6.0 |
| 70°-80° | 246.2 | 3.3 |
| 80°-90° | 64.0 | 0.9 |
| 90°-100° | 36.8 | 0.5 |
| 100°-110° | 245.5 | 3.3 |
| 110°-120° | 450.4 | 6.0 |
| 120°-130° | 584.0 | 7.8 |
| 130°-140° | 634.5 | 8.5 |
| 140°-150° | 599.7 | 8.0 |
| 150°-160° | 487.8 | 6.5 |
| 160°-170° | 317.2 | 4.2 |
| 170°-180° | 109.7 | 1.5 |
| 0°-30° | 1194.6 | 16.0 |
| 0°-40° | 1912.0 | 25.6 |
| 0°-60° | 3239.9 | 43.4 |
| 0°-90° | 4000.6 | 53.6 |
| 90°-120° | 732.8 | 9.8 |
| 90°-150° | 2551.0 | 34.2 |
| 90°-180° | 3466.0 | 46.4 |
| 0°-180° | 7466.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|------|------|------|------|------|------|------|
| 0° | 1602 | 1602 | 1602 | 1602 | 1602 | |
| 5° | 1605 | 1592 | 1580 | 1590 | 1602 | 152 |
| 15° | 1524 | 1503 | 1489 | 1498 | 1514 | 429 |
| 25° | 1373 | 1355 | 1338 | 1349 | 1362 | 631 |
| 35° | 1171 | 1162 | 1121 | 1158 | 1158 | 733 |
| 45° | 943 | 930 | 892 | 925 | 929 | 727 |
| 55° | 703 | 702 | 662 | 689 | 686 | 629 |
| 65° | 467 | 463 | 437 | 452 | 450 | 462 |
| 75° | 240 | 238 | 220 | 224 | 224 | 256 |
| 85° | 56 | 59 | 52 | 52 | 49 | 63 |
| 90° | 2 | 4 | 2 | 3 | 2 | 5 |
| 95° | 24 | 8 | 8 | 12 | 56 | 36 |
| 105° | 202 | 214 | 229 | 253 | 258 | 215 |
| 115° | 424 | 442 | 455 | 477 | 475 | 418 |
| 125° | 624 | 643 | 658 | 671 | 667 | 558 |
| 135° | 803 | 821 | 827 | 844 | 833 | 618 |
| 145° | 947 | 955 | 964 | 972 | 972 | 592 |
| 155° | 1057 | 1053 | 1058 | 1066 | 1075 | 487 |
| 165° | 1131 | 1124 | 1113 | 1131 | 1140 | 319 |
| 175° | 1166 | 1155 | 1136 | 1157 | 1169 | 111 |
| 180° | 1156 | 1156 | 1156 | 1156 | 1156 | |



TEST NUMBER: P199526

CATALOG NUMBER: S125-DIW-U1-2-30-0048-1D-UDD-1-NA-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1601.7 | 1601.7 | 1601.7 | 1601.7 | 1601.7 | 1601.7 | 1601.7 | 1601.7 | 1601.7 |
| 2.5° | 1612.5 | 1595.8 | 1599.7 | 1596.8 | 1583.1 | 1594.8 | 1598.7 | 1592.9 | 1610.5 |
| 5° | 1604.6 | 1588.0 | 1591.9 | 1588.0 | 1580.1 | 1586.0 | 1589.9 | 1584.0 | 1601.7 |
| 7.5° | 1592.9 | 1575.2 | 1578.2 | 1574.2 | 1566.4 | 1571.3 | 1576.2 | 1570.3 | 1588.0 |
| 10° | 1573.3 | 1556.6 | 1557.6 | 1552.7 | 1543.9 | 1549.7 | 1554.6 | 1549.7 | 1567.4 |
| 12.5° | 1550.7 | 1533.1 | 1533.1 | 1525.2 | 1517.4 | 1522.3 | 1529.2 | 1525.2 | 1542.9 |
| 15° | 1524.3 | 1505.6 | 1502.7 | 1497.8 | 1489.0 | 1494.8 | 1497.8 | 1496.8 | 1514.4 |
| 17.5° | 1491.9 | 1472.3 | 1468.4 | 1467.4 | 1456.6 | 1464.5 | 1465.4 | 1462.5 | 1484.1 |
| 20° | 1454.7 | 1436.0 | 1433.1 | 1432.1 | 1423.3 | 1429.2 | 1429.2 | 1425.2 | 1447.8 |
| 22.5° | 1413.5 | 1395.8 | 1394.9 | 1392.9 | 1383.1 | 1390.0 | 1390.0 | 1384.1 | 1406.6 |
| 25° | 1373.3 | 1351.7 | 1354.7 | 1349.8 | 1338.0 | 1347.8 | 1348.8 | 1339.0 | 1361.5 |
| 27.5° | 1323.3 | 1306.6 | 1312.5 | 1303.7 | 1288.0 | 1300.8 | 1306.6 | 1291.9 | 1315.5 |
| 30° | 1274.3 | 1256.7 | 1266.5 | 1250.8 | 1237.0 | 1248.8 | 1259.6 | 1241.0 | 1264.5 |
| 32.5° | 1226.3 | 1205.7 | 1217.4 | 1197.8 | 1178.2 | 1192.9 | 1210.6 | 1192.9 | 1211.6 |
| 35° | 1171.4 | 1154.7 | 1161.6 | 1141.0 | 1121.4 | 1136.1 | 1157.6 | 1141.0 | 1157.6 |
| 37.5° | 1116.5 | 1102.8 | 1107.7 | 1083.2 | 1063.5 | 1078.2 | 1100.8 | 1088.1 | 1102.8 |
| 40° | 1059.6 | 1049.8 | 1049.8 | 1025.3 | 1005.7 | 1019.4 | 1043.0 | 1036.1 | 1044.9 |
| 42.5° | 1000.8 | 996.9 | 989.0 | 967.5 | 948.9 | 962.6 | 985.1 | 983.2 | 987.1 |
| 45° | 943.0 | 943.0 | 930.2 | 907.7 | 892.0 | 904.7 | 925.3 | 930.2 | 929.3 |
| 47.5° | 883.2 | 888.1 | 877.3 | 852.8 | 835.2 | 847.9 | 866.5 | 875.3 | 865.5 |
| 50° | 823.4 | 832.2 | 818.5 | 796.9 | 777.3 | 791.0 | 806.7 | 818.5 | 807.7 |
| 52.5° | 763.6 | 774.4 | 759.7 | 739.1 | 719.5 | 732.2 | 747.9 | 761.6 | 747.9 |
| 55° | 702.8 | 715.6 | 701.8 | 680.3 | 661.7 | 673.4 | 689.1 | 702.8 | 686.2 |
| 57.5° | 643.0 | 654.8 | 643.0 | 621.5 | 603.8 | 614.6 | 631.3 | 642.0 | 627.3 |
| 60° | 583.2 | 596.0 | 584.2 | 563.6 | 547.0 | 555.8 | 571.5 | 582.3 | 567.6 |
| 62.5° | 524.4 | 535.2 | 522.5 | 505.8 | 493.1 | 497.0 | 511.7 | 524.4 | 508.7 |
| 65° | 466.6 | 476.4 | 462.7 | 448.0 | 437.2 | 439.1 | 451.9 | 458.7 | 449.9 |
| 67.5° | 409.7 | 420.5 | 405.8 | 392.1 | 379.3 | 383.3 | 394.1 | 403.9 | 393.1 |
| 70° | 352.9 | 363.7 | 348.0 | 336.2 | 325.4 | 327.4 | 336.2 | 347.0 | 336.2 |
| 72.5° | 297.0 | 305.8 | 295.0 | 281.3 | 273.5 | 275.4 | 280.3 | 290.1 | 279.4 |
| 75° | 240.2 | 250.0 | 238.2 | 227.4 | 219.6 | 221.5 | 224.5 | 232.3 | 223.5 |
| 77.5° | 187.2 | 194.1 | 186.2 | 177.4 | 172.5 | 173.5 | 174.5 | 180.4 | 172.5 |
| 80° | 138.2 | 144.1 | 139.2 | 132.3 | 128.4 | 128.4 | 128.4 | 133.3 | 126.4 |
| 82.5° | 94.1 | 100.0 | 96.1 | 91.2 | 88.2 | 85.3 | 87.2 | 91.2 | 85.3 |
| 85° | 55.9 | 60.8 | 58.8 | 53.9 | 52.0 | 50.0 | 52.0 | 53.9 | 49.0 |
| 87.5° | 25.5 | 29.4 | 26.5 | 21.6 | 19.6 | 17.6 | 17.6 | 20.6 | 16.7 |
| 90° | 2.0 | 4.9 | 3.9 | 2.9 | 2.0 | 2.0 | 2.9 | 3.9 | 2.0 |
| 92.5° | 3.4 | 4.8 | 4.8 | 5.4 | 5.4 | 6.1 | 6.8 | 8.2 | 23.1 |
| 95° | 24.5 | 27.2 | 7.5 | 8.2 | 8.2 | 8.9 | 11.6 | 66.0 | 56.5 |
| 97.5° | 56.5 | 72.2 | 23.8 | 14.3 | 12.9 | 19.1 | 73.5 | 104.8 | 99.4 |
| 100° | 100.8 | 112.3 | 113.7 | 74.2 | 50.4 | 104.2 | 145.0 | 156.6 | 149.1 |
| 102.5° | 149.1 | 162.0 | 158.6 | 172.3 | 177.0 | 192.0 | 195.4 | 210.4 | 204.2 |
| 105° | 201.5 | 215.8 | 213.8 | 227.4 | 228.8 | 245.8 | 252.6 | 261.4 | 258.0 |
| 107.5° | 256.7 | 266.9 | 272.3 | 281.2 | 280.5 | 298.9 | 312.5 | 316.6 | 313.2 |
| 110° | 313.2 | 320.0 | 330.2 | 336.3 | 336.3 | 354.7 | 370.4 | 371.1 | 367.6 |



TEST NUMBER: P199526

CATALOG NUMBER: S125-DIW-U1-2-30-0048-1D-UDD-1-NA-W

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 367.0 | 378.5 | 388.1 | 395.6 | 394.2 | 413.9 | 424.8 | 426.9 | 422.8 |
| 115° | 424.2 | 428.9 | 441.9 | 452.8 | 454.8 | 469.8 | 477.3 | 479.3 | 475.2 |
| 117.5° | 476.6 | 484.1 | 492.2 | 505.2 | 512.0 | 521.5 | 527.0 | 530.4 | 526.3 |
| 120° | 532.4 | 537.2 | 541.9 | 554.2 | 566.5 | 571.9 | 576.0 | 578.7 | 575.3 |
| 122.5° | 580.7 | 584.2 | 594.4 | 602.5 | 614.8 | 618.9 | 625.0 | 624.3 | 621.6 |
| 125° | 623.6 | 628.4 | 643.4 | 648.2 | 658.4 | 663.8 | 671.3 | 667.2 | 667.2 |
| 127.5° | 668.6 | 672.7 | 691.7 | 692.4 | 701.9 | 708.1 | 717.6 | 710.8 | 711.5 |
| 130° | 712.8 | 719.6 | 736.7 | 736.7 | 744.1 | 751.0 | 761.9 | 751.6 | 754.4 |
| 132.5° | 759.8 | 761.9 | 777.5 | 778.2 | 785.0 | 791.8 | 804.7 | 791.1 | 793.8 |
| 135° | 802.7 | 800.7 | 821.1 | 817.7 | 827.2 | 831.3 | 844.2 | 827.9 | 832.7 |
| 137.5° | 841.5 | 836.7 | 858.5 | 855.1 | 865.3 | 866.0 | 879.6 | 864.0 | 869.4 |
| 140° | 879.6 | 874.2 | 892.6 | 890.5 | 902.1 | 900.7 | 911.0 | 898.0 | 905.5 |
| 142.5° | 913.7 | 907.5 | 925.2 | 924.6 | 933.4 | 933.4 | 942.3 | 931.4 | 942.3 |
| 145° | 947.0 | 938.9 | 955.2 | 954.5 | 964.1 | 963.4 | 971.5 | 961.3 | 971.5 |
| 147.5° | 978.4 | 970.2 | 983.1 | 981.8 | 989.9 | 990.6 | 997.4 | 991.3 | 1002.2 |
| 150° | 1006.9 | 999.5 | 1007.6 | 1006.9 | 1014.4 | 1015.1 | 1021.9 | 1019.2 | 1027.4 |
| 152.5° | 1032.8 | 1026.0 | 1030.1 | 1028.7 | 1039.6 | 1035.5 | 1043.7 | 1042.4 | 1051.2 |
| 155° | 1056.7 | 1049.8 | 1053.2 | 1050.5 | 1058.0 | 1057.3 | 1066.2 | 1064.8 | 1075.0 |
| 157.5° | 1078.4 | 1070.9 | 1073.7 | 1069.6 | 1075.0 | 1075.0 | 1085.2 | 1085.2 | 1092.7 |
| 160° | 1099.5 | 1089.3 | 1092.7 | 1085.9 | 1088.0 | 1090.7 | 1102.9 | 1102.9 | 1109.8 |
| 162.5° | 1114.5 | 1107.7 | 1109.8 | 1100.2 | 1102.3 | 1103.6 | 1117.9 | 1117.9 | 1126.1 |
| 165° | 1130.9 | 1122.0 | 1124.1 | 1112.5 | 1113.2 | 1116.6 | 1130.9 | 1131.5 | 1140.4 |
| 167.5° | 1143.8 | 1134.9 | 1134.3 | 1122.7 | 1126.1 | 1126.8 | 1140.4 | 1141.1 | 1150.6 |
| 170° | 1154.0 | 1144.5 | 1144.5 | 1132.2 | 1134.9 | 1133.6 | 1147.9 | 1149.9 | 1158.1 |
| 172.5° | 1159.5 | 1152.6 | 1150.6 | 1137.0 | 1136.3 | 1138.4 | 1153.3 | 1156.1 | 1164.2 |
| 175° | 1166.3 | 1158.1 | 1154.7 | 1141.8 | 1136.3 | 1143.1 | 1156.7 | 1159.5 | 1169.0 |
| 177.5° | 1168.3 | 1160.1 | 1157.4 | 1143.8 | 1143.8 | 1145.2 | 1158.8 | 1160.8 | 1168.3 |
| 180° | 1156.1 | 1156.1 | 1156.1 | 1156.1 | 1156.1 | 1156.1 | 1156.1 | 1156.1 | 1156.1 |

(END OF REPORT)