

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: P199521

Luminaire Tested: **S125-DIW-U1-1-35-0048-1D-UDD-1-5-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P199521
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-U1-1-35-0048-1D-UDD-1-5-W
Description: DEFINE 5-INCH DIRECT/INDIRECT WALL LED LUMINAIRE
UPLIGHT LL1-3500K, SATIN WHITE DIFFUSER
DOWNLIGHT LL1-3500K, SATIN WHITE DIFFUSER
Light Source: -
757G
Ballast/Driver: ELECTRONIC DRIVERS

Summary

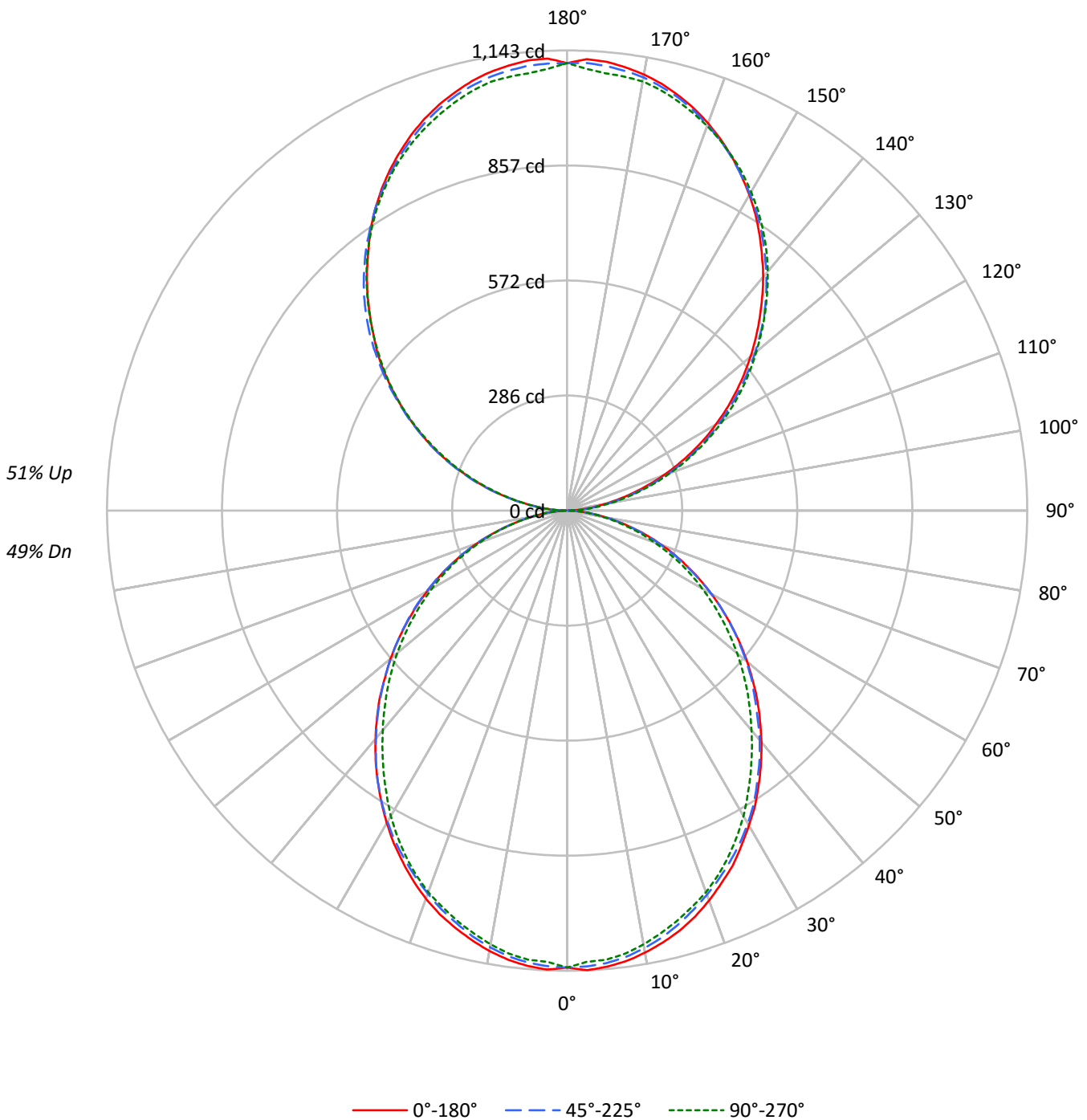
Lumens per Lamp: N/A
Luminaire Lumens: 5828.3 lumens
Efficiency: N/A
Efficacy: 112.1 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4.08' x H: 0.38')
CIE Type: General Diffuse

Input Watts (W): 52
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: P199521

CATALOG NUMBER: S125-DIW-U1-1-35-0048-1D-UDD-1-5-W

Luminous Intensity Polar Plot





TEST NUMBER: P199521

CATALOG NUMBER: S125-DIW-U1-1-35-0048-1D-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 | 107 | 107 | 107 | 107 | 98 | 98 | 98 | 98 | 83 | 83 | 83 | 68 | 68 | 68 | 55 | 55 | 55 | 49 |
| 1 | 98 | 93 | 89 | 86 | 90 | 86 | 83 | 80 | 73 | 70 | 68 | 60 | 58 | 57 | 49 | 48 | 46 | 41 |
| 2 | 89 | 82 | 75 | 70 | 82 | 75 | 70 | 66 | 64 | 60 | 56 | 53 | 50 | 48 | 43 | 41 | 39 | 35 |
| 3 | 81 | 72 | 64 | 59 | 74 | 66 | 60 | 55 | 56 | 51 | 47 | 47 | 43 | 40 | 38 | 36 | 33 | 29 |
| 4 | 74 | 63 | 56 | 50 | 68 | 59 | 52 | 47 | 50 | 45 | 40 | 42 | 38 | 35 | 34 | 31 | 29 | 25 |
| 5 | 68 | 57 | 48 | 43 | 62 | 52 | 45 | 40 | 45 | 39 | 35 | 37 | 33 | 30 | 31 | 28 | 25 | 22 |
| 6 | 63 | 51 | 43 | 37 | 58 | 47 | 40 | 35 | 40 | 35 | 30 | 34 | 30 | 26 | 28 | 25 | 22 | 19 |
| 7 | 58 | 46 | 38 | 32 | 53 | 43 | 36 | 30 | 36 | 31 | 27 | 31 | 26 | 23 | 25 | 22 | 20 | 17 |
| 8 | 54 | 42 | 34 | 29 | 50 | 39 | 32 | 27 | 33 | 28 | 24 | 28 | 24 | 21 | 23 | 20 | 18 | 15 |
| 9 | 50 | 38 | 31 | 25 | 46 | 35 | 29 | 24 | 31 | 25 | 21 | 26 | 22 | 19 | 22 | 18 | 16 | 14 |
| 10 | 47 | 35 | 28 | 23 | 43 | 33 | 26 | 22 | 28 | 23 | 19 | 24 | 20 | 17 | 20 | 17 | 15 | 13 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|------|------|------|
| 0° | 7180 | 7180 | 7180 |
| 5° | 7163 | 6591 | 7150 |
| 10° | 7047 | 6065 | 7021 |
| 15° | 6904 | 5567 | 6860 |
| 20° | 6715 | 5114 | 6683 |
| 25° | 6514 | 4662 | 6458 |
| 30° | 6264 | 4214 | 6216 |
| 35° | 6023 | 3765 | 5953 |
| 40° | 5757 | 3353 | 5677 |
| 45° | 5476 | 2977 | 5395 |
| 50° | 5176 | 2616 | 5077 |
| 55° | 4856 | 2263 | 4741 |
| 60° | 4512 | 1917 | 4391 |
| 65° | 4135 | 1583 | 3987 |
| 70° | 3693 | 1228 | 3518 |
| 75° | 3098 | 873 | 2884 |
| 80° | 2345 | 543 | 2146 |
| 85° | 1402 | 237 | 1229 |



TEST NUMBER: P199521

CATALOG NUMBER: S125-DIW-U1-1-35-0048-1D-UDD-1-5-W

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 106.7 | 1.8 |
| 10°-20° | 299.6 | 5.1 |
| 20°-30° | 440.2 | 7.6 |
| 30°-40° | 508.4 | 8.7 |
| 40°-50° | 503.9 | 8.6 |
| 50°-60° | 437.0 | 7.5 |
| 60°-70° | 319.2 | 5.5 |
| 70°-80° | 174.4 | 3.0 |
| 80°-90° | 45.3 | 0.8 |
| 90°-100° | 55.2 | 0.9 |
| 100°-110° | 199.0 | 3.4 |
| 110°-120° | 354.1 | 6.1 |
| 120°-130° | 472.2 | 8.1 |
| 130°-140° | 534.2 | 9.2 |
| 140°-150° | 527.7 | 9.1 |
| 150°-160° | 446.9 | 7.7 |
| 160°-170° | 299.2 | 5.1 |
| 170°-180° | 105.0 | 1.8 |
| 0°-30° | 846.5 | 14.5 |
| 0°-40° | 1354.8 | 23.2 |
| 0°-60° | 2295.7 | 39.4 |
| 0°-90° | 2834.8 | 48.6 |
| 90°-120° | 608.3 | 10.4 |
| 90°-150° | 2142.4 | 36.8 |
| 90°-180° | 2994.0 | 51.4 |
| 0°-180° | 5828.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|------|------|------|------|------|------|------|
| 0° | 1135 | 1135 | 1135 | 1135 | 1135 | |
| 5° | 1137 | 1128 | 1120 | 1127 | 1135 | 108 |
| 15° | 1080 | 1065 | 1055 | 1061 | 1073 | 304 |
| 25° | 973 | 960 | 948 | 956 | 965 | 447 |
| 35° | 830 | 823 | 795 | 820 | 820 | 519 |
| 45° | 668 | 659 | 632 | 656 | 658 | 515 |
| 55° | 498 | 497 | 469 | 488 | 486 | 446 |
| 65° | 331 | 328 | 310 | 320 | 319 | 328 |
| 75° | 170 | 169 | 156 | 159 | 158 | 181 |
| 85° | 40 | 42 | 37 | 37 | 35 | 45 |
| 90° | 1 | 3 | 1 | 2 | 1 | 5 |
| 95° | 38 | 45 | 50 | 53 | 49 | 43 |
| 105° | 169 | 182 | 189 | 196 | 192 | 181 |
| 115° | 340 | 354 | 359 | 367 | 365 | 336 |
| 125° | 510 | 523 | 532 | 540 | 533 | 457 |
| 135° | 676 | 693 | 695 | 709 | 694 | 522 |
| 145° | 834 | 842 | 849 | 854 | 852 | 521 |
| 155° | 969 | 968 | 970 | 977 | 983 | 446 |
| 165° | 1068 | 1063 | 1054 | 1068 | 1076 | 301 |
| 175° | 1119 | 1108 | 1090 | 1109 | 1122 | 106 |
| 180° | 1111 | 1111 | 1111 | 1111 | 1111 | |



TEST NUMBER: P199521

CATALOG NUMBER: S125-DIW-U1-1-35-0048-1D-UDD-1-5-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1134.9 | 1134.9 | 1134.9 | 1134.9 | 1134.9 | 1134.9 | 1134.9 | 1134.9 | 1134.9 |
| 2.5° | 1142.6 | 1130.8 | 1133.5 | 1131.4 | 1121.7 | 1130.1 | 1132.8 | 1128.7 | 1141.2 |
| 5° | 1137.0 | 1125.2 | 1128.0 | 1125.2 | 1119.6 | 1123.8 | 1126.6 | 1122.4 | 1134.9 |
| 7.5° | 1128.7 | 1116.2 | 1118.3 | 1115.5 | 1109.9 | 1113.4 | 1116.9 | 1112.7 | 1125.2 |
| 10° | 1114.8 | 1103.0 | 1103.7 | 1100.2 | 1093.9 | 1098.1 | 1101.6 | 1098.1 | 1110.6 |
| 12.5° | 1098.8 | 1086.3 | 1086.3 | 1080.7 | 1075.2 | 1078.7 | 1083.5 | 1080.7 | 1093.2 |
| 15° | 1080.0 | 1066.9 | 1064.8 | 1061.3 | 1055.0 | 1059.2 | 1061.3 | 1060.6 | 1073.1 |
| 17.5° | 1057.1 | 1043.2 | 1040.5 | 1039.8 | 1032.1 | 1037.7 | 1038.4 | 1036.3 | 1051.6 |
| 20° | 1030.7 | 1017.5 | 1015.5 | 1014.8 | 1008.5 | 1012.7 | 1012.7 | 1009.9 | 1025.9 |
| 22.5° | 1001.6 | 989.1 | 988.4 | 987.0 | 980.0 | 984.9 | 984.9 | 980.7 | 996.7 |
| 25° | 973.1 | 957.8 | 959.9 | 956.4 | 948.1 | 955.0 | 955.7 | 948.8 | 964.8 |
| 27.5° | 937.7 | 925.9 | 930.0 | 923.8 | 912.7 | 921.7 | 925.9 | 915.4 | 932.1 |
| 30° | 902.9 | 890.4 | 897.4 | 886.3 | 876.5 | 884.9 | 892.5 | 879.3 | 896.0 |
| 32.5° | 868.9 | 854.3 | 862.7 | 848.8 | 834.9 | 845.3 | 857.8 | 845.3 | 858.5 |
| 35° | 830.0 | 818.2 | 823.1 | 808.5 | 794.6 | 805.0 | 820.3 | 808.5 | 820.3 |
| 37.5° | 791.1 | 781.4 | 784.9 | 767.5 | 753.6 | 764.0 | 780.0 | 771.0 | 781.4 |
| 40° | 750.8 | 743.9 | 743.9 | 726.5 | 712.6 | 722.3 | 739.0 | 734.2 | 740.4 |
| 42.5° | 709.2 | 706.4 | 700.8 | 685.5 | 672.3 | 682.1 | 698.0 | 696.6 | 699.4 |
| 45° | 668.2 | 668.2 | 659.1 | 643.2 | 632.1 | 641.1 | 655.7 | 659.1 | 658.4 |
| 47.5° | 625.8 | 629.3 | 621.6 | 604.3 | 591.8 | 600.8 | 614.0 | 620.2 | 613.3 |
| 50° | 583.4 | 589.7 | 580.0 | 564.7 | 550.8 | 560.5 | 571.6 | 580.0 | 572.3 |
| 52.5° | 541.1 | 548.7 | 538.3 | 523.7 | 509.8 | 518.8 | 530.0 | 539.7 | 530.0 |
| 55° | 498.0 | 507.0 | 497.3 | 482.0 | 468.8 | 477.2 | 488.3 | 498.0 | 486.2 |
| 57.5° | 455.6 | 464.0 | 455.6 | 440.4 | 427.9 | 435.5 | 447.3 | 454.9 | 444.5 |
| 60° | 413.3 | 422.3 | 414.0 | 399.4 | 387.6 | 393.8 | 404.9 | 412.6 | 402.2 |
| 62.5° | 371.6 | 379.2 | 370.2 | 358.4 | 349.4 | 352.1 | 362.6 | 371.6 | 360.5 |
| 65° | 330.6 | 337.6 | 327.8 | 317.4 | 309.8 | 311.2 | 320.2 | 325.1 | 318.8 |
| 67.5° | 290.3 | 298.0 | 287.6 | 277.8 | 268.8 | 271.6 | 279.2 | 286.2 | 278.5 |
| 70° | 250.0 | 257.7 | 246.6 | 238.2 | 230.6 | 232.0 | 238.2 | 245.9 | 238.2 |
| 72.5° | 210.5 | 216.7 | 209.1 | 199.3 | 193.8 | 195.2 | 198.6 | 205.6 | 198.0 |
| 75° | 170.2 | 177.1 | 168.8 | 161.1 | 155.6 | 157.0 | 159.1 | 164.6 | 158.4 |
| 77.5° | 132.7 | 137.5 | 132.0 | 125.7 | 122.2 | 122.9 | 123.6 | 127.8 | 122.2 |
| 80° | 97.9 | 102.1 | 98.6 | 93.8 | 91.0 | 91.0 | 91.0 | 94.5 | 89.6 |
| 82.5° | 66.7 | 70.8 | 68.1 | 64.6 | 62.5 | 60.4 | 61.8 | 64.6 | 60.4 |
| 85° | 39.6 | 43.1 | 41.7 | 38.2 | 36.8 | 35.4 | 36.8 | 38.2 | 34.7 |
| 87.5° | 18.1 | 20.8 | 18.8 | 15.3 | 13.9 | 12.5 | 12.5 | 14.6 | 11.8 |
| 90° | 1.4 | 3.5 | 2.8 | 2.1 | 1.4 | 1.4 | 2.1 | 2.8 | 1.4 |
| 92.5° | 13.2 | 18.1 | 18.1 | 16.0 | 19.4 | 22.2 | 27.1 | 27.1 | 23.6 |
| 95° | 38.2 | 43.1 | 45.1 | 46.5 | 50.0 | 51.4 | 52.8 | 52.8 | 48.6 |
| 97.5° | 65.3 | 72.2 | 73.6 | 75.7 | 79.9 | 80.6 | 82.7 | 83.3 | 78.5 |
| 100° | 95.9 | 104.2 | 105.6 | 108.4 | 113.2 | 113.9 | 116.7 | 118.1 | 113.2 |
| 102.5° | 130.6 | 140.3 | 142.4 | 144.5 | 147.9 | 150.7 | 154.2 | 156.3 | 150.7 |
| 105° | 168.8 | 180.6 | 182.0 | 184.8 | 188.9 | 191.7 | 195.9 | 197.3 | 192.4 |
| 107.5° | 211.1 | 220.2 | 224.3 | 225.7 | 229.9 | 232.7 | 238.2 | 238.9 | 234.8 |
| 110° | 252.8 | 261.2 | 266.7 | 268.1 | 272.3 | 275.0 | 280.6 | 280.6 | 277.1 |



TEST NUMBER: P199521

CATALOG NUMBER: S125-DIW-U1-1-35-0048-1D-UDD-1-5-W

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 295.9 | 304.9 | 309.8 | 311.2 | 316.0 | 318.1 | 323.7 | 324.4 | 320.9 |
| 115° | 339.6 | 348.0 | 353.5 | 354.9 | 359.1 | 361.9 | 366.7 | 368.1 | 364.6 |
| 117.5° | 383.4 | 391.7 | 395.9 | 398.7 | 403.5 | 405.6 | 408.4 | 410.5 | 407.0 |
| 120° | 425.8 | 434.1 | 437.6 | 441.7 | 446.6 | 448.7 | 452.9 | 451.5 | 449.4 |
| 122.5° | 468.8 | 476.5 | 479.9 | 484.8 | 490.4 | 491.1 | 493.8 | 493.1 | 491.8 |
| 125° | 510.5 | 516.8 | 523.0 | 525.8 | 532.0 | 532.0 | 539.7 | 533.4 | 533.4 |
| 127.5° | 552.9 | 557.7 | 566.1 | 567.5 | 573.0 | 573.7 | 582.7 | 573.7 | 575.8 |
| 130° | 594.5 | 598.0 | 609.1 | 609.1 | 613.3 | 614.7 | 626.5 | 614.0 | 616.8 |
| 132.5° | 635.5 | 638.3 | 651.5 | 650.1 | 654.3 | 655.7 | 668.9 | 654.3 | 653.6 |
| 135° | 676.5 | 677.9 | 693.2 | 691.1 | 695.3 | 697.3 | 709.2 | 693.2 | 693.9 |
| 137.5° | 716.8 | 716.1 | 732.1 | 731.4 | 735.5 | 736.9 | 748.0 | 729.3 | 734.2 |
| 140° | 757.8 | 752.9 | 769.6 | 771.0 | 775.1 | 776.5 | 784.2 | 769.6 | 773.7 |
| 142.5° | 795.3 | 793.2 | 805.7 | 807.8 | 813.3 | 813.3 | 820.3 | 805.7 | 811.3 |
| 145° | 833.5 | 828.6 | 842.5 | 842.5 | 848.8 | 848.1 | 853.6 | 843.9 | 851.5 |
| 147.5° | 871.0 | 864.7 | 876.5 | 877.2 | 882.8 | 882.8 | 887.7 | 877.9 | 887.7 |
| 150° | 905.0 | 899.5 | 907.8 | 908.5 | 914.0 | 913.4 | 918.2 | 913.4 | 921.7 |
| 152.5° | 937.7 | 932.1 | 937.7 | 937.0 | 943.9 | 941.8 | 948.1 | 943.9 | 953.6 |
| 155° | 968.9 | 962.7 | 967.5 | 964.8 | 970.3 | 969.6 | 976.6 | 975.2 | 982.8 |
| 157.5° | 997.4 | 990.5 | 994.6 | 991.1 | 994.6 | 995.3 | 1003.0 | 1002.3 | 1010.6 |
| 160° | 1023.8 | 1016.8 | 1019.6 | 1013.4 | 1016.8 | 1017.5 | 1027.3 | 1027.3 | 1035.6 |
| 162.5° | 1047.4 | 1039.8 | 1042.5 | 1032.8 | 1036.3 | 1036.3 | 1048.8 | 1048.8 | 1057.1 |
| 165° | 1067.5 | 1060.6 | 1062.7 | 1050.9 | 1054.4 | 1055.0 | 1067.5 | 1068.2 | 1075.9 |
| 167.5° | 1085.6 | 1078.0 | 1078.7 | 1067.5 | 1070.3 | 1071.0 | 1082.1 | 1083.5 | 1092.6 |
| 170° | 1099.5 | 1092.6 | 1092.6 | 1080.0 | 1082.1 | 1082.8 | 1094.6 | 1096.7 | 1105.7 |
| 172.5° | 1110.6 | 1103.0 | 1101.6 | 1088.4 | 1087.0 | 1090.5 | 1102.3 | 1106.4 | 1114.8 |
| 175° | 1118.9 | 1110.6 | 1108.5 | 1095.3 | 1090.5 | 1097.4 | 1109.2 | 1112.7 | 1122.4 |
| 177.5° | 1122.4 | 1114.1 | 1112.7 | 1098.8 | 1098.1 | 1100.2 | 1111.3 | 1115.5 | 1123.8 |
| 180° | 1111.3 | 1111.3 | 1111.3 | 1111.3 | 1111.3 | 1111.3 | 1111.3 | 1111.3 | 1111.3 |

(END OF REPORT)