

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: P199531

Luminaire Tested: **S125-DIW-U1-LO-30-0048-1D-UDD-1-5-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P199531
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-LO-30-0048-1D-UDD-1-5-W
Description: DEFINE 5-INCH DIRECT/INDIRECT WALL LED LUMINAIRE
UPLIGHT LL1-3000K, SATIN WHITE DIFFUSER
DOWNLIGHT LLO-3000K, SATIN WHITE DIFFUSER
Light Source: -
757G
Ballast/Driver: ELECTRONIC DRIVERS

Summary

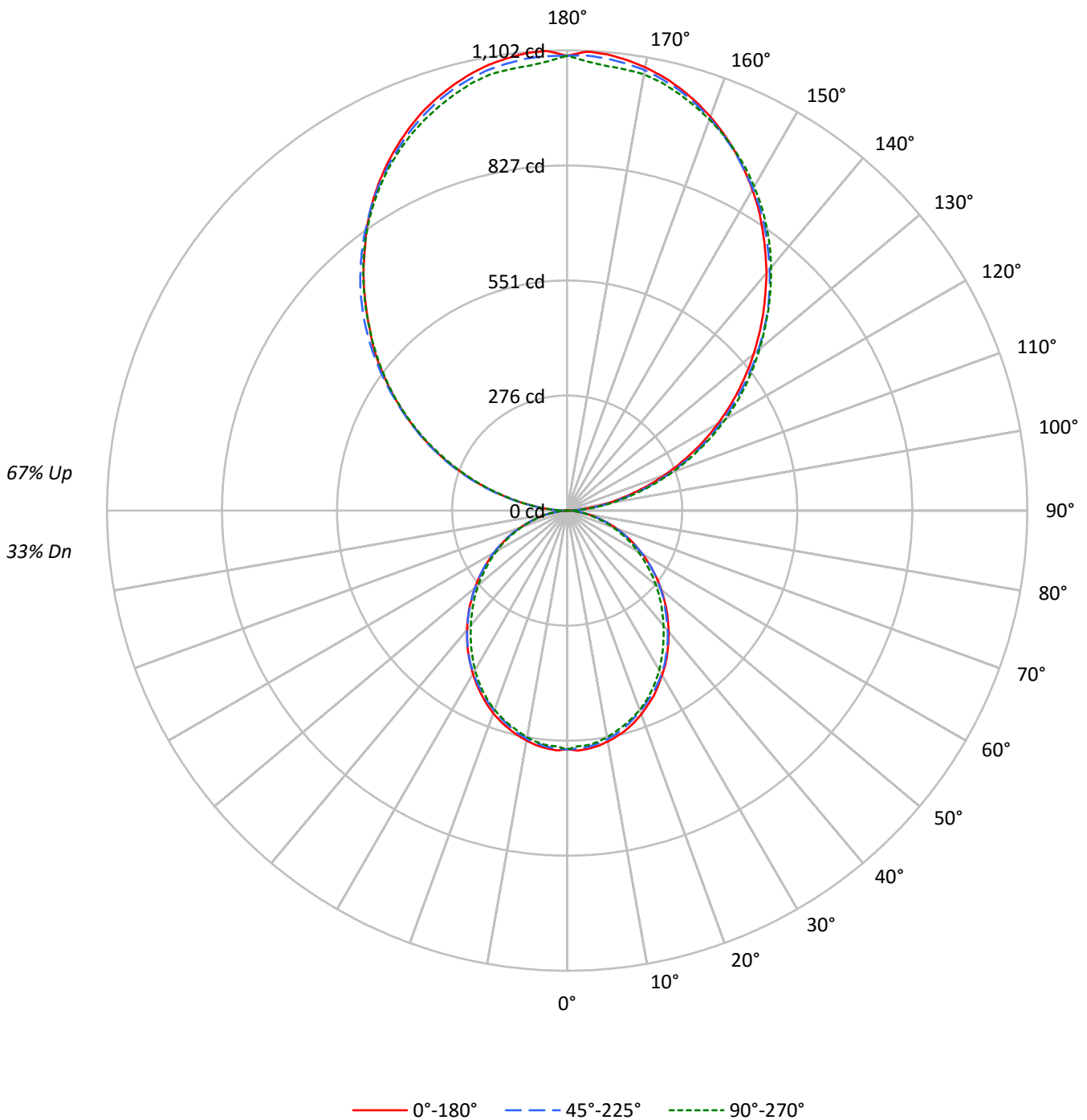
Lumens per Lamp: N/A
Luminaire Lumens: 4362.0 lumens
Efficiency: N/A
Efficacy: 112.4 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4.08' x H: 0.38')
CIE Type: Semi-Indirect

Input Watts (W): 38.8
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: P199531

CATALOG NUMBER: S125-DIW-U1-LO-30-0048-1D-UDD-1-5-W

Luminous Intensity Polar Plot





TEST NUMBER: P199531

CATALOG NUMBER: S125-DIW-U1-LO-30-0048-1D-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 | 103 | 103 | 103 | 103 | 93 | 93 | 93 | 93 | 74 | 74 | 74 | 56 | 56 | 56 | 40 | 40 | 40 | 33 |
| 1 | 94 | 90 | 86 | 83 | 85 | 81 | 78 | 75 | 65 | 62 | 60 | 50 | 48 | 47 | 36 | 35 | 34 | 28 |
| 2 | 86 | 78 | 72 | 67 | 77 | 71 | 66 | 62 | 57 | 53 | 50 | 44 | 41 | 39 | 31 | 30 | 29 | 23 |
| 3 | 78 | 69 | 62 | 56 | 70 | 62 | 56 | 51 | 50 | 46 | 42 | 38 | 36 | 33 | 28 | 26 | 24 | 20 |
| 4 | 71 | 61 | 53 | 47 | 64 | 55 | 49 | 43 | 44 | 40 | 36 | 34 | 31 | 28 | 25 | 23 | 21 | 17 |
| 5 | 65 | 54 | 46 | 40 | 59 | 49 | 42 | 37 | 40 | 35 | 31 | 31 | 27 | 25 | 22 | 20 | 18 | 15 |
| 6 | 60 | 48 | 41 | 35 | 54 | 44 | 37 | 32 | 36 | 31 | 27 | 28 | 24 | 21 | 20 | 18 | 16 | 13 |
| 7 | 56 | 44 | 36 | 31 | 50 | 40 | 33 | 28 | 32 | 27 | 23 | 25 | 22 | 19 | 19 | 16 | 14 | 12 |
| 8 | 51 | 40 | 32 | 27 | 46 | 36 | 29 | 25 | 29 | 24 | 21 | 23 | 19 | 17 | 17 | 15 | 13 | 10 |
| 9 | 48 | 36 | 29 | 24 | 43 | 33 | 26 | 22 | 27 | 22 | 19 | 21 | 18 | 15 | 16 | 13 | 12 | 9 |
| 10 | 45 | 33 | 26 | 21 | 40 | 30 | 24 | 20 | 25 | 20 | 17 | 19 | 16 | 14 | 15 | 12 | 11 | 8 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|------|------|------|
| 0° | 3616 | 3616 | 3616 |
| 5° | 3608 | 3320 | 3601 |
| 10° | 3550 | 3055 | 3536 |
| 15° | 3477 | 2804 | 3455 |
| 20° | 3382 | 2576 | 3366 |
| 25° | 3281 | 2348 | 3253 |
| 30° | 3155 | 2122 | 3131 |
| 35° | 3034 | 1896 | 2998 |
| 40° | 2900 | 1689 | 2859 |
| 45° | 2757 | 1499 | 2718 |
| 50° | 2607 | 1317 | 2558 |
| 55° | 2446 | 1140 | 2388 |
| 60° | 2273 | 965 | 2212 |
| 65° | 2082 | 797 | 2009 |
| 70° | 1860 | 618 | 1772 |
| 75° | 1560 | 440 | 1453 |
| 80° | 1181 | 273 | 1080 |
| 85° | 705 | 119 | 620 |



TEST NUMBER: P199531

CATALOG NUMBER: S125-DIW-U1-LO-30-0048-1D-UDD-1-5-W

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 53.7 | 1.2 |
| 10°-20° | 150.9 | 3.5 |
| 20°-30° | 221.7 | 5.1 |
| 30°-40° | 256.1 | 5.9 |
| 40°-50° | 253.8 | 5.8 |
| 50°-60° | 220.1 | 5.0 |
| 60°-70° | 160.8 | 3.7 |
| 70°-80° | 87.9 | 2.0 |
| 80°-90° | 22.8 | 0.5 |
| 90°-100° | 53.9 | 1.2 |
| 100°-110° | 195.1 | 4.5 |
| 110°-120° | 347.1 | 8.0 |
| 120°-130° | 462.9 | 10.6 |
| 130°-140° | 523.6 | 12.0 |
| 140°-150° | 517.3 | 11.9 |
| 150°-160° | 438.0 | 10.0 |
| 160°-170° | 293.3 | 6.7 |
| 170°-180° | 103.0 | 2.4 |
| 0°-30° | 426.3 | 9.8 |
| 0°-40° | 682.4 | 15.6 |
| 0°-60° | 1156.3 | 26.5 |
| 0°-90° | 1427.8 | 32.7 |
| 90°-120° | 596.1 | 13.7 |
| 90°-150° | 2099.9 | 48.1 |
| 90°-180° | 2934.0 | 67.3 |
| 0°-180° | 4362.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|------|------|------|------|------|------|------|
| 0° | 572 | 572 | 572 | 572 | 572 | |
| 5° | 573 | 568 | 564 | 567 | 572 | 54 |
| 15° | 544 | 536 | 531 | 535 | 540 | 153 |
| 25° | 490 | 484 | 478 | 481 | 486 | 225 |
| 35° | 418 | 415 | 400 | 413 | 413 | 261 |
| 45° | 336 | 332 | 318 | 330 | 332 | 260 |
| 55° | 251 | 250 | 236 | 246 | 245 | 224 |
| 65° | 166 | 165 | 156 | 161 | 161 | 165 |
| 75° | 86 | 85 | 78 | 80 | 80 | 91 |
| 85° | 20 | 21 | 18 | 18 | 18 | 22 |
| 90° | 1 | 1 | 1 | 1 | 1 | 3 |
| 95° | 37 | 44 | 49 | 52 | 48 | 42 |
| 105° | 165 | 178 | 185 | 192 | 189 | 177 |
| 115° | 333 | 346 | 352 | 360 | 357 | 329 |
| 125° | 500 | 513 | 522 | 529 | 523 | 448 |
| 135° | 663 | 680 | 682 | 695 | 680 | 512 |
| 145° | 817 | 826 | 832 | 837 | 835 | 511 |
| 155° | 950 | 948 | 951 | 957 | 963 | 437 |
| 165° | 1046 | 1042 | 1034 | 1046 | 1055 | 295 |
| 175° | 1097 | 1087 | 1069 | 1087 | 1100 | 104 |
| 180° | 1089 | 1089 | 1089 | 1089 | 1089 | |



TEST NUMBER: P199531

CATALOG NUMBER: S125-DIW-U1-LO-30-0048-1D-UDD-1-5-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|-------|-------|-------|-------|-------|--------|-------|--------|-------|
| 0° | 571.6 | 571.6 | 571.6 | 571.6 | 571.6 | 571.6 | 571.6 | 571.6 | 571.6 |
| 2.5° | 575.5 | 569.5 | 570.9 | 569.9 | 565.0 | 569.2 | 570.6 | 568.5 | 574.8 |
| 5° | 572.7 | 566.7 | 568.1 | 566.7 | 563.9 | 566.0 | 567.4 | 565.3 | 571.6 |
| 7.5° | 568.5 | 562.2 | 563.2 | 561.8 | 559.0 | 560.8 | 562.5 | 560.4 | 566.7 |
| 10° | 561.5 | 555.5 | 555.9 | 554.2 | 551.0 | 553.1 | 554.9 | 553.1 | 559.4 |
| 12.5° | 553.5 | 547.2 | 547.2 | 544.4 | 541.6 | 543.3 | 545.8 | 544.4 | 550.7 |
| 15° | 544.0 | 537.4 | 536.3 | 534.6 | 531.4 | 533.5 | 534.6 | 534.2 | 540.5 |
| 17.5° | 532.5 | 525.5 | 524.1 | 523.7 | 519.9 | 522.7 | 523.0 | 522.0 | 529.7 |
| 20° | 519.2 | 512.5 | 511.5 | 511.1 | 508.0 | 510.1 | 510.1 | 508.7 | 516.7 |
| 22.5° | 504.5 | 498.2 | 497.8 | 497.1 | 493.6 | 496.1 | 496.1 | 494.0 | 502.0 |
| 25° | 490.1 | 482.4 | 483.5 | 481.7 | 477.5 | 481.0 | 481.4 | 477.9 | 485.9 |
| 27.5° | 472.3 | 466.3 | 468.4 | 465.3 | 459.7 | 464.2 | 466.3 | 461.1 | 469.5 |
| 30° | 454.8 | 448.5 | 452.0 | 446.4 | 441.5 | 445.7 | 449.5 | 442.9 | 451.3 |
| 32.5° | 437.7 | 430.3 | 434.5 | 427.5 | 420.5 | 425.8 | 432.1 | 425.8 | 432.4 |
| 35° | 418.1 | 412.1 | 414.6 | 407.2 | 400.2 | 405.5 | 413.2 | 407.2 | 413.2 |
| 37.5° | 398.5 | 393.6 | 395.3 | 386.6 | 379.6 | 384.8 | 392.9 | 388.3 | 393.6 |
| 40° | 378.2 | 374.7 | 374.7 | 365.9 | 358.9 | 363.8 | 372.2 | 369.8 | 372.9 |
| 42.5° | 357.2 | 355.8 | 353.0 | 345.3 | 338.6 | 343.5 | 351.6 | 350.9 | 352.3 |
| 45° | 336.5 | 336.5 | 332.0 | 324.0 | 318.4 | 322.9 | 330.3 | 332.0 | 331.7 |
| 47.5° | 315.2 | 317.0 | 313.1 | 304.4 | 298.1 | 302.6 | 309.3 | 312.4 | 308.9 |
| 50° | 293.9 | 297.0 | 292.1 | 284.4 | 277.4 | 282.3 | 287.9 | 292.1 | 288.3 |
| 52.5° | 272.5 | 276.4 | 271.1 | 263.8 | 256.8 | 261.3 | 266.9 | 271.8 | 266.9 |
| 55° | 250.8 | 255.4 | 250.5 | 242.8 | 236.1 | 240.3 | 245.9 | 250.8 | 244.9 |
| 57.5° | 229.5 | 233.7 | 229.5 | 221.8 | 215.5 | 219.4 | 225.3 | 229.1 | 223.9 |
| 60° | 208.2 | 212.7 | 208.5 | 201.2 | 195.2 | 198.4 | 204.0 | 207.8 | 202.6 |
| 62.5° | 187.2 | 191.0 | 186.5 | 180.5 | 176.0 | 177.4 | 182.6 | 187.2 | 181.6 |
| 65° | 166.5 | 170.0 | 165.1 | 159.9 | 156.0 | 156.7 | 161.3 | 163.7 | 160.6 |
| 67.5° | 146.2 | 150.1 | 144.8 | 139.9 | 135.4 | 136.8 | 140.6 | 144.1 | 140.3 |
| 70° | 125.9 | 129.8 | 124.2 | 120.0 | 116.1 | 116.8 | 120.0 | 123.8 | 120.0 |
| 72.5° | 106.0 | 109.2 | 105.3 | 100.4 | 97.6 | 98.3 | 100.1 | 103.6 | 99.7 |
| 75° | 85.7 | 89.2 | 85.0 | 81.2 | 78.4 | 79.1 | 80.1 | 82.9 | 79.8 |
| 77.5° | 66.8 | 69.3 | 66.5 | 63.3 | 61.6 | 61.9 | 62.3 | 64.4 | 61.6 |
| 80° | 49.3 | 51.4 | 49.7 | 47.2 | 45.8 | 45.8 | 45.8 | 47.6 | 45.1 |
| 82.5° | 33.6 | 35.7 | 34.3 | 32.5 | 31.5 | 30.4 | 31.1 | 32.5 | 30.4 |
| 85° | 19.9 | 21.7 | 21.0 | 19.2 | 18.5 | 17.8 | 18.5 | 19.2 | 17.5 |
| 87.5° | 9.1 | 10.5 | 9.4 | 7.7 | 7.0 | 6.3 | 6.3 | 7.3 | 5.9 |
| 90° | 0.7 | 1.7 | 1.4 | 1.0 | 0.7 | 0.7 | 1.0 | 1.4 | 0.7 |
| 92.5° | 12.9 | 17.7 | 17.7 | 15.7 | 19.1 | 21.8 | 26.6 | 26.6 | 23.1 |
| 95° | 37.4 | 42.2 | 44.3 | 45.6 | 49.0 | 50.4 | 51.7 | 51.7 | 47.7 |
| 97.5° | 64.0 | 70.8 | 72.2 | 74.2 | 78.3 | 79.0 | 81.0 | 81.7 | 76.9 |
| 100° | 94.0 | 102.1 | 103.5 | 106.2 | 111.0 | 111.7 | 114.4 | 115.7 | 111.0 |
| 102.5° | 128.0 | 137.5 | 139.6 | 141.6 | 145.0 | 147.7 | 151.1 | 153.2 | 147.7 |
| 105° | 165.4 | 177.0 | 178.4 | 181.1 | 185.2 | 187.9 | 192.0 | 193.4 | 188.6 |
| 107.5° | 207.0 | 215.8 | 219.9 | 221.3 | 225.4 | 228.1 | 233.5 | 234.2 | 230.1 |
| 110° | 247.8 | 256.0 | 261.4 | 262.8 | 266.9 | 269.6 | 275.1 | 275.1 | 271.7 |



TEST NUMBER: P199531

CATALOG NUMBER: S125-DIW-U1-LO-30-0048-1D-UDD-1-5-W

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 290.0 | 298.9 | 303.7 | 305.0 | 309.8 | 311.8 | 317.3 | 317.9 | 314.5 |
| 115° | 332.9 | 341.1 | 346.5 | 347.9 | 352.0 | 354.7 | 359.5 | 360.8 | 357.4 |
| 117.5° | 375.8 | 384.0 | 388.1 | 390.8 | 395.6 | 397.6 | 400.3 | 402.4 | 399.0 |
| 120° | 417.3 | 425.5 | 428.9 | 433.0 | 437.8 | 439.8 | 443.9 | 442.5 | 440.5 |
| 122.5° | 459.6 | 467.1 | 470.5 | 475.2 | 480.7 | 481.3 | 484.1 | 483.4 | 482.0 |
| 125° | 500.4 | 506.5 | 512.7 | 515.4 | 521.5 | 521.5 | 529.0 | 522.9 | 522.9 |
| 127.5° | 541.9 | 546.7 | 554.9 | 556.2 | 561.7 | 562.4 | 571.2 | 562.4 | 564.4 |
| 130° | 582.8 | 586.2 | 597.1 | 597.1 | 601.2 | 602.5 | 614.1 | 601.9 | 604.6 |
| 132.5° | 623.0 | 625.7 | 638.6 | 637.3 | 641.3 | 642.7 | 655.6 | 641.3 | 640.7 |
| 135° | 663.1 | 664.5 | 679.5 | 677.4 | 681.5 | 683.6 | 695.1 | 679.5 | 680.2 |
| 137.5° | 702.6 | 701.9 | 717.6 | 716.9 | 721.0 | 722.4 | 733.3 | 714.9 | 719.6 |
| 140° | 742.8 | 738.0 | 754.4 | 755.7 | 759.8 | 761.2 | 768.7 | 754.4 | 758.4 |
| 142.5° | 779.6 | 777.5 | 789.8 | 791.8 | 797.3 | 797.3 | 804.1 | 789.8 | 795.2 |
| 145° | 817.0 | 812.2 | 825.8 | 825.8 | 832.0 | 831.3 | 836.7 | 827.2 | 834.7 |
| 147.5° | 853.8 | 847.6 | 859.2 | 859.9 | 865.3 | 865.3 | 870.1 | 860.6 | 870.1 |
| 150° | 887.1 | 881.7 | 889.8 | 890.5 | 896.0 | 895.3 | 900.1 | 895.3 | 903.5 |
| 152.5° | 919.1 | 913.7 | 919.1 | 918.4 | 925.2 | 923.2 | 929.3 | 925.2 | 934.8 |
| 155° | 949.8 | 943.6 | 948.4 | 945.7 | 951.1 | 950.4 | 957.2 | 955.9 | 963.4 |
| 157.5° | 977.7 | 970.9 | 975.0 | 971.5 | 975.0 | 975.6 | 983.1 | 982.4 | 990.6 |
| 160° | 1003.5 | 996.7 | 999.5 | 993.3 | 996.7 | 997.4 | 1006.9 | 1006.9 | 1015.1 |
| 162.5° | 1026.7 | 1019.2 | 1021.9 | 1012.4 | 1015.8 | 1015.8 | 1028.1 | 1028.1 | 1036.2 |
| 165° | 1046.4 | 1039.6 | 1041.7 | 1030.1 | 1033.5 | 1034.2 | 1046.4 | 1047.1 | 1054.6 |
| 167.5° | 1064.1 | 1056.7 | 1057.3 | 1046.4 | 1049.2 | 1049.8 | 1060.7 | 1062.1 | 1070.9 |
| 170° | 1077.8 | 1070.9 | 1070.9 | 1058.7 | 1060.7 | 1061.4 | 1073.0 | 1075.0 | 1083.9 |
| 172.5° | 1088.6 | 1081.2 | 1079.8 | 1066.9 | 1065.5 | 1068.9 | 1080.5 | 1084.6 | 1092.7 |
| 175° | 1096.8 | 1088.6 | 1086.6 | 1073.7 | 1068.9 | 1075.7 | 1087.3 | 1090.7 | 1100.2 |
| 177.5° | 1100.2 | 1092.1 | 1090.7 | 1077.1 | 1076.4 | 1078.4 | 1089.3 | 1093.4 | 1101.6 |
| 180° | 1089.3 | 1089.3 | 1089.3 | 1089.3 | 1089.3 | 1089.3 | 1089.3 | 1089.3 | 1089.3 |

(END OF REPORT)