

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: P199528

Luminaire Tested: **S125-DIP-U1-2-35-X-X0048-1D-UDD-1-NA-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P199528
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-DIP-U1-2-35-X-X0048-1D-UDD-1-NA-W
Description: DEFINE 5-INCH DIRECT/INDIRECT PENDANT LED LUMINAIRE
UPLIGHT LL1-3500K, NO LENS
DOWNLIGHT LL2-3500K, SATIN WHITE DIFFUSER
Light Source: -
757G
Ballast/Driver: ELECTRONIC DRIVERS

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7616.9 lumens
Efficiency: N/A
Efficacy: 113.7 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

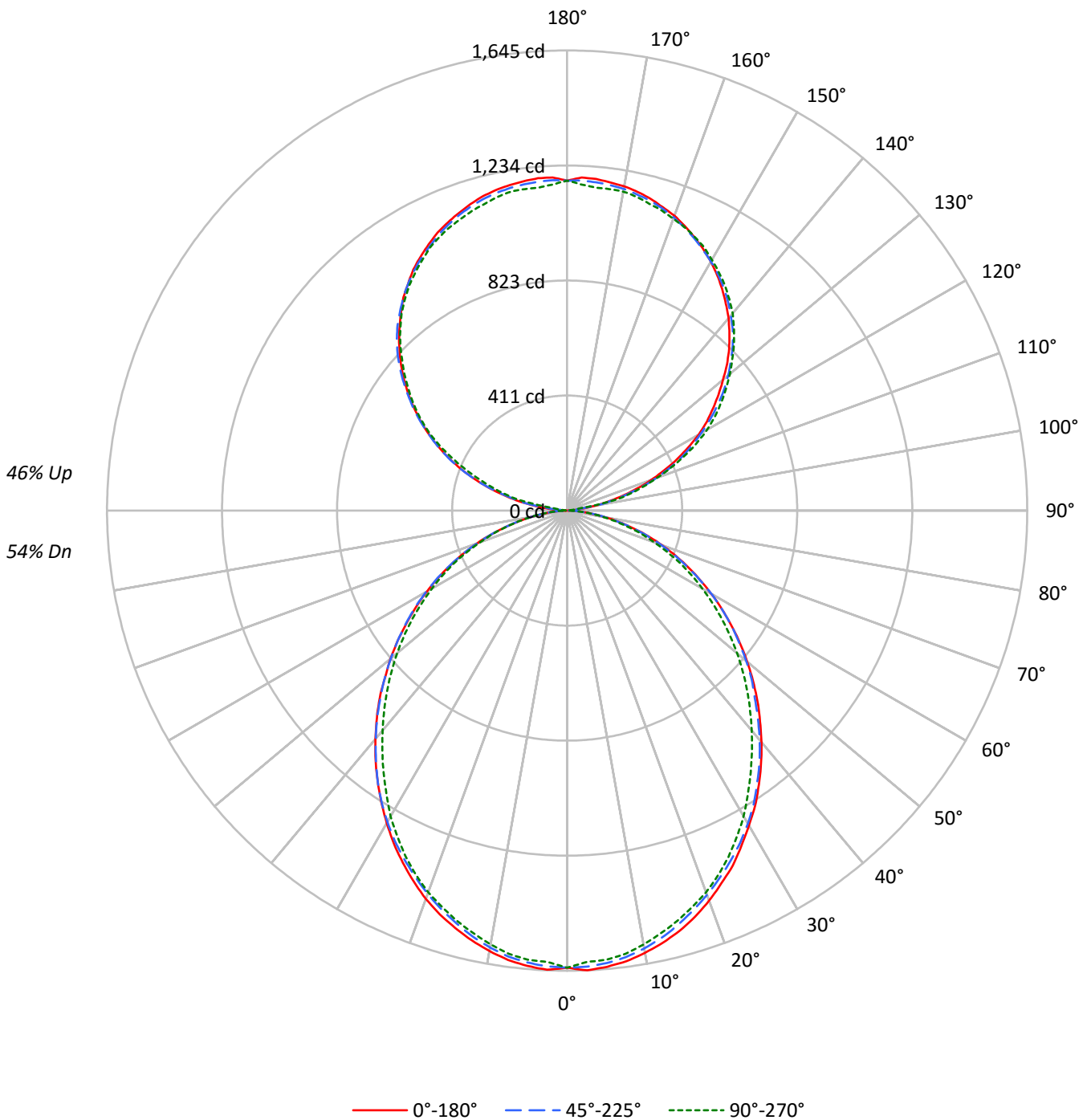
Input Watts (W): 67
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P199528

CATALOG NUMBER: S125-DIP-U1-2-35-X-X0048-1D-UDD-1-NA-W

Luminous Intensity Polar Plot





TEST NUMBER: P199528

CATALOG NUMBER: S125-DIP-U1-2-35-X-X0048-1D-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 | 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° | 10338 | 10338 | 10338 |
| 5° | 10313 | 9490 | 10294 |
| 10° | 10146 | 8732 | 10108 |
| 15° | 9940 | 8016 | 9876 |
| 20° | 9668 | 7364 | 9622 |
| 25° | 9378 | 6712 | 9298 |
| 30° | 9019 | 6067 | 8949 |
| 35° | 8672 | 5420 | 8570 |
| 40° | 8289 | 4828 | 8174 |
| 45° | 7883 | 4285 | 7768 |
| 50° | 7452 | 3766 | 7310 |
| 55° | 6991 | 3258 | 6826 |
| 60° | 6495 | 2759 | 6321 |
| 65° | 5953 | 2279 | 5741 |
| 70° | 5317 | 1768 | 5066 |
| 75° | 4460 | 1256 | 4151 |
| 80° | 3378 | 782 | 3090 |
| 85° | 2019 | 341 | 1771 |



TEST NUMBER: P199528

CATALOG NUMBER: S125-DIP-U1-2-35-X-X0048-1D-UDD-1-NA-W

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 153.6 | 2.0 |
| 10°-20° | 431.3 | 5.7 |
| 20°-30° | 633.7 | 8.3 |
| 30°-40° | 731.9 | 9.6 |
| 40°-50° | 725.5 | 9.5 |
| 50°-60° | 629.2 | 8.3 |
| 60°-70° | 459.6 | 6.0 |
| 70°-80° | 251.1 | 3.3 |
| 80°-90° | 65.3 | 0.9 |
| 90°-100° | 37.6 | 0.5 |
| 100°-110° | 250.5 | 3.3 |
| 110°-120° | 459.5 | 6.0 |
| 120°-130° | 595.7 | 7.8 |
| 130°-140° | 647.3 | 8.5 |
| 140°-150° | 611.8 | 8.0 |
| 150°-160° | 497.7 | 6.5 |
| 160°-170° | 323.6 | 4.2 |
| 170°-180° | 111.9 | 1.5 |
| 0°-30° | 1218.7 | 16.0 |
| 0°-40° | 1950.6 | 25.6 |
| 0°-60° | 3305.3 | 43.4 |
| 0°-90° | 4081.3 | 53.6 |
| 90°-120° | 747.6 | 9.8 |
| 90°-150° | 2602.4 | 34.2 |
| 90°-180° | 3536.0 | 46.4 |
| 0°-180° | 7616.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|------|------|------|------|------|------|------|
| 0° | 1634 | 1634 | 1634 | 1634 | 1634 | |
| 5° | 1637 | 1624 | 1612 | 1622 | 1634 | 155 |
| 15° | 1555 | 1533 | 1519 | 1528 | 1545 | 438 |
| 25° | 1401 | 1382 | 1365 | 1376 | 1389 | 644 |
| 35° | 1195 | 1185 | 1144 | 1181 | 1181 | 747 |
| 45° | 962 | 949 | 910 | 944 | 948 | 742 |
| 55° | 717 | 716 | 675 | 703 | 700 | 641 |
| 65° | 476 | 472 | 446 | 461 | 459 | 472 |
| 75° | 245 | 243 | 224 | 229 | 228 | 261 |
| 85° | 57 | 60 | 53 | 53 | 50 | 64 |
| 90° | 2 | 4 | 2 | 3 | 2 | 5 |
| 95° | 25 | 8 | 8 | 12 | 58 | 37 |
| 105° | 206 | 218 | 233 | 258 | 263 | 219 |
| 115° | 433 | 451 | 464 | 487 | 485 | 427 |
| 125° | 636 | 656 | 672 | 685 | 681 | 569 |
| 135° | 819 | 838 | 844 | 861 | 850 | 630 |
| 145° | 966 | 974 | 984 | 991 | 991 | 604 |
| 155° | 1078 | 1074 | 1079 | 1088 | 1097 | 497 |
| 165° | 1154 | 1147 | 1136 | 1154 | 1163 | 326 |
| 175° | 1190 | 1178 | 1159 | 1180 | 1193 | 113 |
| 180° | 1179 | 1179 | 1179 | 1179 | 1179 | |



TEST NUMBER: P199528

CATALOG NUMBER: S125-DIP-U1-2-35-X-X0048-1D-UDD-1-NA-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1634.0 | 1634.0 | 1634.0 | 1634.0 | 1634.0 | 1634.0 | 1634.0 | 1634.0 | 1634.0 |
| 2.5° | 1645.0 | 1628.0 | 1632.0 | 1629.0 | 1615.0 | 1627.0 | 1631.0 | 1625.0 | 1643.0 |
| 5° | 1637.0 | 1620.0 | 1624.0 | 1620.0 | 1612.0 | 1618.0 | 1622.0 | 1616.0 | 1634.0 |
| 7.5° | 1625.0 | 1607.0 | 1610.0 | 1606.0 | 1598.0 | 1603.0 | 1608.0 | 1602.0 | 1620.0 |
| 10° | 1605.0 | 1588.0 | 1589.0 | 1584.0 | 1575.0 | 1581.0 | 1586.0 | 1581.0 | 1599.0 |
| 12.5° | 1582.0 | 1564.0 | 1564.0 | 1556.0 | 1548.0 | 1553.0 | 1560.0 | 1556.0 | 1574.0 |
| 15° | 1555.0 | 1536.0 | 1533.0 | 1528.0 | 1519.0 | 1525.0 | 1528.0 | 1527.0 | 1545.0 |
| 17.5° | 1522.0 | 1502.0 | 1498.0 | 1497.0 | 1486.0 | 1494.0 | 1495.0 | 1492.0 | 1514.0 |
| 20° | 1484.0 | 1465.0 | 1462.0 | 1461.0 | 1452.0 | 1458.0 | 1458.0 | 1454.0 | 1477.0 |
| 22.5° | 1442.0 | 1424.0 | 1423.0 | 1421.0 | 1411.0 | 1418.0 | 1418.0 | 1412.0 | 1435.0 |
| 25° | 1401.0 | 1379.0 | 1382.0 | 1377.0 | 1365.0 | 1375.0 | 1376.0 | 1366.0 | 1389.0 |
| 27.5° | 1350.0 | 1333.0 | 1339.0 | 1330.0 | 1314.0 | 1327.0 | 1333.0 | 1318.0 | 1342.0 |
| 30° | 1300.0 | 1282.0 | 1292.0 | 1276.0 | 1262.0 | 1274.0 | 1285.0 | 1266.0 | 1290.0 |
| 32.5° | 1251.0 | 1230.0 | 1242.0 | 1222.0 | 1202.0 | 1217.0 | 1235.0 | 1217.0 | 1236.0 |
| 35° | 1195.0 | 1178.0 | 1185.0 | 1164.0 | 1144.0 | 1159.0 | 1181.0 | 1164.0 | 1181.0 |
| 37.5° | 1139.0 | 1125.0 | 1130.0 | 1105.0 | 1085.0 | 1100.0 | 1123.0 | 1110.0 | 1125.0 |
| 40° | 1081.0 | 1071.0 | 1071.0 | 1046.0 | 1026.0 | 1040.0 | 1064.0 | 1057.0 | 1066.0 |
| 42.5° | 1021.0 | 1017.0 | 1009.0 | 987.0 | 968.0 | 982.0 | 1005.0 | 1003.0 | 1007.0 |
| 45° | 962.0 | 962.0 | 949.0 | 926.0 | 910.0 | 923.0 | 944.0 | 949.0 | 948.0 |
| 47.5° | 901.0 | 906.0 | 895.0 | 870.0 | 852.0 | 865.0 | 884.0 | 893.0 | 883.0 |
| 50° | 840.0 | 849.0 | 835.0 | 813.0 | 793.0 | 807.0 | 823.0 | 835.0 | 824.0 |
| 52.5° | 779.0 | 790.0 | 775.0 | 754.0 | 734.0 | 747.0 | 763.0 | 777.0 | 763.0 |
| 55° | 717.0 | 730.0 | 716.0 | 694.0 | 675.0 | 687.0 | 703.0 | 717.0 | 700.0 |
| 57.5° | 656.0 | 668.0 | 656.0 | 634.0 | 616.0 | 627.0 | 644.0 | 655.0 | 640.0 |
| 60° | 595.0 | 608.0 | 596.0 | 575.0 | 558.0 | 567.0 | 583.0 | 594.0 | 579.0 |
| 62.5° | 535.0 | 546.0 | 533.0 | 516.0 | 503.0 | 507.0 | 522.0 | 535.0 | 519.0 |
| 65° | 476.0 | 486.0 | 472.0 | 457.0 | 446.0 | 448.0 | 461.0 | 468.0 | 459.0 |
| 67.5° | 418.0 | 429.0 | 414.0 | 400.0 | 387.0 | 391.0 | 402.0 | 412.0 | 401.0 |
| 70° | 360.0 | 371.0 | 355.0 | 343.0 | 332.0 | 334.0 | 343.0 | 354.0 | 343.0 |
| 72.5° | 303.0 | 312.0 | 301.0 | 287.0 | 279.0 | 281.0 | 286.0 | 296.0 | 285.0 |
| 75° | 245.0 | 255.0 | 243.0 | 232.0 | 224.0 | 226.0 | 229.0 | 237.0 | 228.0 |
| 77.5° | 191.0 | 198.0 | 190.0 | 181.0 | 176.0 | 177.0 | 178.0 | 184.0 | 176.0 |
| 80° | 141.0 | 147.0 | 142.0 | 135.0 | 131.0 | 131.0 | 131.0 | 136.0 | 129.0 |
| 82.5° | 96.0 | 102.0 | 98.0 | 93.0 | 90.0 | 87.0 | 89.0 | 93.0 | 87.0 |
| 85° | 57.0 | 62.0 | 60.0 | 55.0 | 53.0 | 51.0 | 53.0 | 55.0 | 50.0 |
| 87.5° | 26.0 | 30.0 | 27.0 | 22.0 | 20.0 | 18.0 | 18.0 | 21.0 | 17.0 |
| 90° | 2.0 | 5.0 | 4.0 | 3.0 | 2.0 | 2.0 | 3.0 | 4.0 | 2.0 |
| 92.5° | 3.5 | 4.9 | 4.9 | 5.6 | 5.6 | 6.3 | 6.9 | 8.3 | 23.6 |
| 95° | 25.0 | 27.8 | 7.6 | 8.3 | 8.3 | 9.0 | 11.8 | 67.4 | 57.6 |
| 97.5° | 57.6 | 73.6 | 24.3 | 14.6 | 13.2 | 19.4 | 75.0 | 107.0 | 101.4 |
| 100° | 102.8 | 114.6 | 116.0 | 75.7 | 51.4 | 106.3 | 147.9 | 159.8 | 152.1 |
| 102.5° | 152.1 | 165.3 | 161.8 | 175.7 | 180.6 | 195.9 | 199.3 | 214.6 | 208.4 |
| 105° | 205.6 | 220.2 | 218.1 | 232.0 | 233.4 | 250.7 | 257.7 | 266.7 | 263.2 |
| 107.5° | 261.9 | 272.3 | 277.8 | 286.9 | 286.2 | 304.9 | 318.8 | 323.0 | 319.5 |
| 110° | 319.5 | 326.4 | 336.9 | 343.1 | 343.1 | 361.9 | 377.8 | 378.5 | 375.1 |



TEST NUMBER: P199528

CATALOG NUMBER: S125-DIP-U1-2-35-X-X0048-1D-UDD-1-NA-W

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 374.4 | 386.2 | 395.9 | 403.5 | 402.2 | 422.3 | 433.4 | 435.5 | 431.3 |
| 115° | 432.7 | 437.6 | 450.8 | 461.9 | 464.0 | 479.3 | 486.9 | 489.0 | 484.8 |
| 117.5° | 486.2 | 493.8 | 502.2 | 515.4 | 522.3 | 532.0 | 537.6 | 541.1 | 536.9 |
| 120° | 543.2 | 548.0 | 552.9 | 565.4 | 577.9 | 583.4 | 587.6 | 590.4 | 586.9 |
| 122.5° | 592.5 | 595.9 | 606.4 | 614.7 | 627.2 | 631.4 | 637.6 | 636.9 | 634.1 |
| 125° | 636.2 | 641.1 | 656.4 | 661.2 | 671.6 | 677.2 | 684.8 | 680.7 | 680.7 |
| 127.5° | 682.1 | 686.2 | 705.7 | 706.4 | 716.1 | 722.3 | 732.1 | 725.1 | 725.8 |
| 130° | 727.2 | 734.2 | 751.5 | 751.5 | 759.2 | 766.1 | 777.2 | 766.8 | 769.6 |
| 132.5° | 775.1 | 777.2 | 793.2 | 793.9 | 800.8 | 807.8 | 821.0 | 807.1 | 809.9 |
| 135° | 818.9 | 816.8 | 837.6 | 834.2 | 843.9 | 848.1 | 861.3 | 844.6 | 849.5 |
| 137.5° | 858.5 | 853.6 | 875.8 | 872.4 | 882.8 | 883.5 | 897.4 | 881.4 | 887.0 |
| 140° | 897.4 | 891.8 | 910.6 | 908.5 | 920.3 | 918.9 | 929.3 | 916.1 | 923.8 |
| 142.5° | 932.1 | 925.9 | 943.9 | 943.2 | 952.2 | 952.2 | 961.3 | 950.2 | 961.3 |
| 145° | 966.1 | 957.8 | 974.5 | 973.8 | 983.5 | 982.8 | 991.1 | 980.7 | 991.1 |
| 147.5° | 998.1 | 989.8 | 1003.0 | 1001.6 | 1009.9 | 1010.6 | 1017.5 | 1011.3 | 1022.4 |
| 150° | 1027.3 | 1019.6 | 1028.0 | 1027.3 | 1034.9 | 1035.6 | 1042.5 | 1039.8 | 1048.1 |
| 152.5° | 1053.7 | 1046.7 | 1050.9 | 1049.5 | 1060.6 | 1056.4 | 1064.8 | 1063.4 | 1072.4 |
| 155° | 1078.0 | 1071.0 | 1074.5 | 1071.7 | 1079.4 | 1078.7 | 1087.7 | 1086.3 | 1096.7 |
| 157.5° | 1100.2 | 1092.6 | 1095.3 | 1091.2 | 1096.7 | 1096.7 | 1107.1 | 1107.1 | 1114.8 |
| 160° | 1121.7 | 1111.3 | 1114.8 | 1107.8 | 1109.9 | 1112.7 | 1125.2 | 1125.2 | 1132.1 |
| 162.5° | 1137.0 | 1130.1 | 1132.1 | 1122.4 | 1124.5 | 1125.9 | 1140.5 | 1140.5 | 1148.8 |
| 165° | 1153.7 | 1144.6 | 1146.7 | 1134.9 | 1135.6 | 1139.1 | 1153.7 | 1154.4 | 1163.4 |
| 167.5° | 1166.9 | 1157.8 | 1157.1 | 1145.3 | 1148.8 | 1149.5 | 1163.4 | 1164.1 | 1173.8 |
| 170° | 1177.3 | 1167.6 | 1167.6 | 1155.1 | 1157.8 | 1156.5 | 1171.0 | 1173.1 | 1181.5 |
| 172.5° | 1182.8 | 1175.9 | 1173.8 | 1159.9 | 1159.2 | 1161.3 | 1176.6 | 1179.4 | 1187.7 |
| 175° | 1189.8 | 1181.5 | 1178.0 | 1164.8 | 1159.2 | 1166.2 | 1180.1 | 1182.8 | 1192.6 |
| 177.5° | 1191.9 | 1183.5 | 1180.8 | 1166.9 | 1166.9 | 1168.3 | 1182.2 | 1184.2 | 1191.9 |
| 180° | 1179.4 | 1179.4 | 1179.4 | 1179.4 | 1179.4 | 1179.4 | 1179.4 | 1179.4 | 1179.4 |

(END OF REPORT)