

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: P199551

Luminaire Tested: **S125-DIP-U2-LO-35-X-X0048-1D-UDD-1-5-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P199551
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-DIP-U2-LO-35-X-X0048-1D-UDD-1-5-W
Description: DEFINE 5-INCH DIRECT/INDIRECT PENDANT LED LUMINAIRE
UPLIGHT LL2-3500K, SATIN WHITE DIFFUSER
DOWNLIGHT LLO-3500K, SATIN WHITE DIFFUSER
Light Source: -
757G
Ballast/Driver: ELECTRONIC DRIVERS

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5766.2 lumens
Efficiency: N/A
Efficacy: 110.3 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

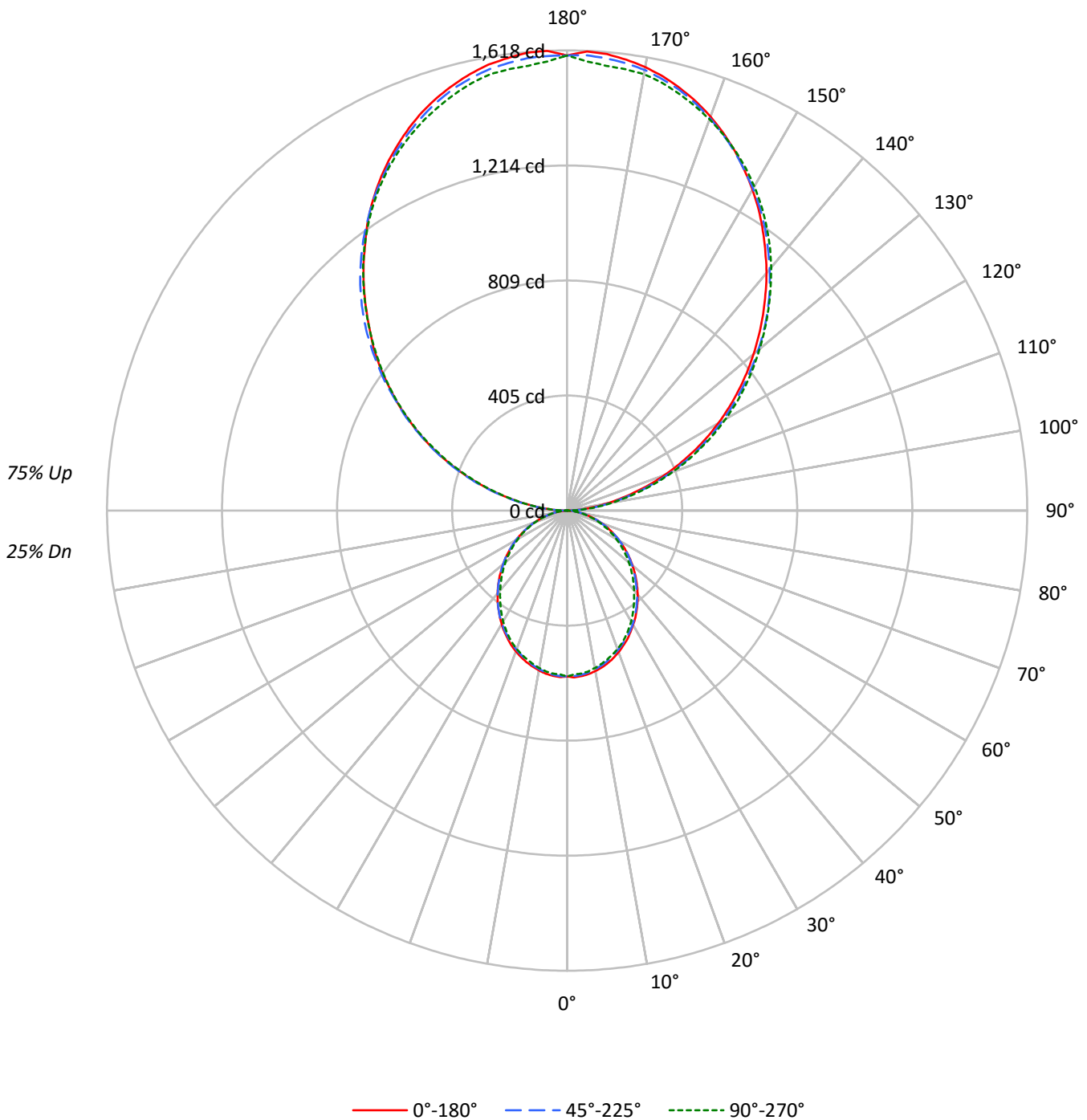
Input Watts (W): 52.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P199551

CATALOG NUMBER: S125-DIP-U2-LO-35-X-X0048-1D-UDD-1-5-W

Luminous Intensity Polar Plot





TEST NUMBER: P199551

CATALOG NUMBER: S125-DIP-U2-LO-35-X-X0048-1D-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 | 101 | 101 | 101 | 101 | 90 | 90 | 90 | 90 | 70 | 70 | 70 | 51 | 51 | 51 | 33 | 33 | 33 | 25 |
| 1 | 92 | 88 | 84 | 81 | 82 | 79 | 76 | 73 | 61 | 59 | 57 | 45 | 43 | 42 | 30 | 29 | 28 | 21 |
| 2 | 84 | 77 | 71 | 66 | 75 | 69 | 64 | 60 | 53 | 50 | 47 | 39 | 37 | 35 | 26 | 25 | 24 | 18 |
| 3 | 77 | 68 | 61 | 55 | 68 | 60 | 55 | 50 | 47 | 43 | 40 | 35 | 32 | 30 | 23 | 22 | 20 | 15 |
| 4 | 70 | 60 | 52 | 46 | 62 | 53 | 47 | 42 | 42 | 37 | 34 | 31 | 28 | 25 | 21 | 19 | 17 | 13 |
| 5 | 64 | 53 | 45 | 40 | 57 | 48 | 41 | 36 | 37 | 32 | 29 | 28 | 24 | 22 | 19 | 17 | 15 | 11 |
| 6 | 59 | 47 | 40 | 34 | 52 | 43 | 36 | 31 | 33 | 29 | 25 | 25 | 22 | 19 | 17 | 15 | 13 | 10 |
| 7 | 54 | 43 | 35 | 30 | 48 | 38 | 32 | 27 | 30 | 25 | 22 | 22 | 19 | 17 | 15 | 13 | 12 | 9 |
| 8 | 50 | 39 | 31 | 26 | 45 | 35 | 28 | 24 | 27 | 23 | 19 | 21 | 17 | 15 | 14 | 12 | 11 | 8 |
| 9 | 47 | 35 | 28 | 23 | 42 | 32 | 25 | 21 | 25 | 20 | 17 | 19 | 16 | 13 | 13 | 11 | 10 | 7 |
| 10 | 44 | 32 | 25 | 20 | 39 | 29 | 23 | 19 | 23 | 18 | 15 | 17 | 14 | 12 | 12 | 10 | 9 | 7 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|------|------|------|
| 0° | 3690 | 3690 | 3690 |
| 5° | 3680 | 3387 | 3674 |
| 10° | 3621 | 3116 | 3608 |
| 15° | 3548 | 2861 | 3525 |
| 20° | 3450 | 2628 | 3434 |
| 25° | 3347 | 2396 | 3318 |
| 30° | 3219 | 2165 | 3194 |
| 35° | 3095 | 1934 | 3059 |
| 40° | 2958 | 1723 | 2918 |
| 45° | 2813 | 1529 | 2772 |
| 50° | 2660 | 1344 | 2609 |
| 55° | 2495 | 1163 | 2436 |
| 60° | 2319 | 985 | 2255 |
| 65° | 2125 | 813 | 2049 |
| 70° | 1898 | 631 | 1808 |
| 75° | 1591 | 448 | 1482 |
| 80° | 1205 | 279 | 1102 |
| 85° | 719 | 122 | 630 |



TEST NUMBER: P199551

CATALOG NUMBER: S125-DIP-U2-LO-35-X-X0048-1D-UDD-1-5-W

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 54.8 | 1.0 |
| 10°-20° | 153.9 | 2.7 |
| 20°-30° | 226.2 | 3.9 |
| 30°-40° | 261.2 | 4.5 |
| 40°-50° | 258.9 | 4.5 |
| 50°-60° | 224.6 | 3.9 |
| 60°-70° | 164.0 | 2.8 |
| 70°-80° | 89.6 | 1.6 |
| 80°-90° | 23.3 | 0.4 |
| 90°-100° | 79.2 | 1.4 |
| 100°-110° | 286.5 | 5.0 |
| 110°-120° | 509.8 | 8.8 |
| 120°-130° | 679.9 | 11.8 |
| 130°-140° | 769.1 | 13.3 |
| 140°-150° | 759.8 | 13.2 |
| 150°-160° | 643.4 | 11.2 |
| 160°-170° | 430.8 | 7.5 |
| 170°-180° | 151.2 | 2.6 |
| 0°-30° | 434.9 | 7.5 |
| 0°-40° | 696.2 | 12.1 |
| 0°-60° | 1179.6 | 20.5 |
| 0°-90° | 1456.6 | 25.3 |
| 90°-120° | 875.5 | 15.2 |
| 90°-150° | 3084.2 | 53.5 |
| 90°-180° | 4310.0 | 74.7 |
| 0°-180° | 5766.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|------|------|------|------|------|------|------|
| 0° | 583 | 583 | 583 | 583 | 583 | |
| 5° | 584 | 580 | 575 | 579 | 583 | 55 |
| 15° | 555 | 547 | 542 | 545 | 551 | 156 |
| 25° | 500 | 493 | 487 | 491 | 496 | 230 |
| 35° | 426 | 423 | 408 | 422 | 422 | 267 |
| 45° | 343 | 339 | 325 | 337 | 338 | 265 |
| 55° | 256 | 256 | 241 | 251 | 250 | 229 |
| 65° | 170 | 168 | 159 | 164 | 164 | 168 |
| 75° | 87 | 87 | 80 | 82 | 81 | 93 |
| 85° | 20 | 21 | 19 | 19 | 18 | 23 |
| 90° | 1 | 1 | 1 | 1 | 1 | 4 |
| 95° | 55 | 65 | 72 | 76 | 70 | 62 |
| 105° | 243 | 262 | 272 | 282 | 277 | 260 |
| 115° | 489 | 509 | 517 | 528 | 525 | 484 |
| 125° | 735 | 753 | 766 | 777 | 768 | 657 |
| 135° | 974 | 998 | 1001 | 1021 | 999 | 752 |
| 145° | 1200 | 1213 | 1222 | 1229 | 1226 | 751 |
| 155° | 1395 | 1393 | 1397 | 1406 | 1415 | 642 |
| 165° | 1537 | 1530 | 1518 | 1537 | 1549 | 433 |
| 175° | 1611 | 1596 | 1570 | 1597 | 1616 | 153 |
| 180° | 1600 | 1600 | 1600 | 1600 | 1600 | |



TEST NUMBER: P199551

CATALOG NUMBER: S125-DIP-U2-LO-35-X-X0048-1D-UDD-1-5-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|-------|-------|-------|-------|-------|--------|-------|--------|-------|
| 0° | 583.2 | 583.2 | 583.2 | 583.2 | 583.2 | 583.2 | 583.2 | 583.2 | 583.2 |
| 2.5° | 587.1 | 581.0 | 582.5 | 581.4 | 576.4 | 580.7 | 582.1 | 580.0 | 586.4 |
| 5° | 584.2 | 578.2 | 579.6 | 578.2 | 575.3 | 577.5 | 578.9 | 576.7 | 583.2 |
| 7.5° | 580.0 | 573.5 | 574.6 | 573.2 | 570.3 | 572.1 | 573.9 | 571.8 | 578.2 |
| 10° | 572.8 | 566.8 | 567.1 | 565.3 | 562.1 | 564.3 | 566.0 | 564.3 | 570.7 |
| 12.5° | 564.6 | 558.2 | 558.2 | 555.3 | 552.5 | 554.3 | 556.8 | 555.3 | 561.8 |
| 15° | 555.0 | 548.2 | 547.1 | 545.3 | 542.1 | 544.3 | 545.3 | 545.0 | 551.4 |
| 17.5° | 543.2 | 536.1 | 534.6 | 534.3 | 530.4 | 533.2 | 533.6 | 532.5 | 540.3 |
| 20° | 529.6 | 522.9 | 521.8 | 521.4 | 518.2 | 520.4 | 520.4 | 518.9 | 527.1 |
| 22.5° | 514.6 | 508.2 | 507.9 | 507.2 | 503.6 | 506.1 | 506.1 | 503.9 | 512.2 |
| 25° | 500.0 | 492.2 | 493.2 | 491.5 | 487.2 | 490.7 | 491.1 | 487.5 | 495.7 |
| 27.5° | 481.8 | 475.7 | 477.9 | 474.7 | 469.0 | 473.6 | 475.7 | 470.4 | 479.0 |
| 30° | 464.0 | 457.5 | 461.1 | 455.4 | 450.4 | 454.7 | 458.6 | 451.8 | 460.4 |
| 32.5° | 446.5 | 439.0 | 443.3 | 436.1 | 429.0 | 434.3 | 440.8 | 434.3 | 441.1 |
| 35° | 426.5 | 420.4 | 422.9 | 415.4 | 408.3 | 413.6 | 421.5 | 415.4 | 421.5 |
| 37.5° | 406.5 | 401.5 | 403.3 | 394.4 | 387.2 | 392.6 | 400.8 | 396.2 | 401.5 |
| 40° | 385.8 | 382.2 | 382.2 | 373.3 | 366.2 | 371.2 | 379.7 | 377.2 | 380.5 |
| 42.5° | 364.4 | 363.0 | 360.1 | 352.3 | 345.5 | 350.5 | 358.7 | 358.0 | 359.4 |
| 45° | 343.3 | 343.3 | 338.7 | 330.5 | 324.8 | 329.4 | 336.9 | 338.7 | 338.3 |
| 47.5° | 321.6 | 323.4 | 319.4 | 310.5 | 304.1 | 308.7 | 315.5 | 318.7 | 315.1 |
| 50° | 299.8 | 303.0 | 298.0 | 290.2 | 283.0 | 288.0 | 293.7 | 298.0 | 294.1 |
| 52.5° | 278.0 | 282.0 | 276.6 | 269.1 | 262.0 | 266.6 | 272.3 | 277.3 | 272.3 |
| 55° | 255.9 | 260.5 | 255.5 | 247.7 | 240.9 | 245.2 | 250.9 | 255.9 | 249.8 |
| 57.5° | 234.1 | 238.4 | 234.1 | 226.3 | 219.9 | 223.8 | 229.8 | 233.8 | 228.4 |
| 60° | 212.4 | 217.0 | 212.7 | 205.2 | 199.2 | 202.4 | 208.1 | 212.0 | 206.6 |
| 62.5° | 190.9 | 194.9 | 190.2 | 184.2 | 179.5 | 180.9 | 186.3 | 190.9 | 185.2 |
| 65° | 169.9 | 173.5 | 168.5 | 163.1 | 159.2 | 159.9 | 164.5 | 167.0 | 163.8 |
| 67.5° | 149.2 | 153.1 | 147.8 | 142.8 | 138.1 | 139.5 | 143.5 | 147.0 | 143.1 |
| 70° | 128.5 | 132.4 | 126.7 | 122.4 | 118.5 | 119.2 | 122.4 | 126.3 | 122.4 |
| 72.5° | 108.1 | 111.4 | 107.4 | 102.4 | 99.6 | 100.3 | 102.1 | 105.6 | 101.7 |
| 75° | 87.4 | 91.0 | 86.7 | 82.8 | 79.9 | 80.7 | 81.7 | 84.6 | 81.4 |
| 77.5° | 68.2 | 70.7 | 67.8 | 64.6 | 62.8 | 63.2 | 63.5 | 65.7 | 62.8 |
| 80° | 50.3 | 52.5 | 50.7 | 48.2 | 46.8 | 46.8 | 46.8 | 48.5 | 46.0 |
| 82.5° | 34.3 | 36.4 | 35.0 | 33.2 | 32.1 | 31.1 | 31.8 | 33.2 | 31.1 |
| 85° | 20.3 | 22.1 | 21.4 | 19.6 | 18.9 | 18.2 | 18.9 | 19.6 | 17.8 |
| 87.5° | 9.3 | 10.7 | 9.6 | 7.9 | 7.1 | 6.4 | 6.4 | 7.5 | 6.1 |
| 90° | 0.7 | 1.8 | 1.4 | 1.1 | 0.7 | 0.7 | 1.1 | 1.4 | 0.7 |
| 92.5° | 19.0 | 26.0 | 26.0 | 23.0 | 28.0 | 32.0 | 39.0 | 39.0 | 34.0 |
| 95° | 55.0 | 62.0 | 65.0 | 67.0 | 72.0 | 74.0 | 76.0 | 76.0 | 70.0 |
| 97.5° | 94.0 | 104.0 | 106.0 | 109.0 | 115.0 | 116.0 | 119.0 | 120.0 | 113.0 |
| 100° | 138.0 | 150.0 | 152.0 | 156.0 | 163.0 | 164.0 | 168.0 | 170.0 | 163.0 |
| 102.5° | 188.0 | 202.0 | 205.0 | 208.0 | 213.0 | 217.0 | 222.0 | 225.0 | 217.0 |
| 105° | 243.0 | 260.0 | 262.0 | 266.0 | 272.0 | 276.0 | 282.0 | 284.0 | 277.0 |
| 107.5° | 304.0 | 317.0 | 323.0 | 325.0 | 331.0 | 335.0 | 343.0 | 344.0 | 338.0 |
| 110° | 364.0 | 376.0 | 384.0 | 386.0 | 392.0 | 396.0 | 404.0 | 404.0 | 399.0 |



TEST NUMBER: P199551

CATALOG NUMBER: S125-DIP-U2-LO-35-X-X0048-1D-UDD-1-5-W

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 426.0 | 439.0 | 446.0 | 448.0 | 455.0 | 458.0 | 466.0 | 467.0 | 462.0 |
| 115° | 489.0 | 501.0 | 509.0 | 511.0 | 517.0 | 521.0 | 528.0 | 530.0 | 525.0 |
| 117.5° | 552.0 | 564.0 | 570.0 | 574.0 | 581.0 | 584.0 | 588.0 | 591.0 | 586.0 |
| 120° | 613.0 | 625.0 | 630.0 | 636.0 | 643.0 | 646.0 | 652.0 | 650.0 | 647.0 |
| 122.5° | 675.0 | 686.0 | 691.0 | 698.0 | 706.0 | 707.0 | 711.0 | 710.0 | 708.0 |
| 125° | 735.0 | 744.0 | 753.0 | 757.0 | 766.0 | 766.0 | 777.0 | 768.0 | 768.0 |
| 127.5° | 796.0 | 803.0 | 815.0 | 817.0 | 825.0 | 826.0 | 839.0 | 826.0 | 829.0 |
| 130° | 856.0 | 861.0 | 877.0 | 877.0 | 883.0 | 885.0 | 902.0 | 884.0 | 888.0 |
| 132.5° | 915.0 | 919.0 | 938.0 | 936.0 | 942.0 | 944.0 | 963.0 | 942.0 | 941.0 |
| 135° | 974.0 | 976.0 | 998.0 | 995.0 | 1001.0 | 1004.0 | 1021.0 | 998.0 | 999.0 |
| 137.5° | 1032.0 | 1031.0 | 1054.0 | 1053.0 | 1059.0 | 1061.0 | 1077.0 | 1050.0 | 1057.0 |
| 140° | 1091.0 | 1084.0 | 1108.0 | 1110.0 | 1116.0 | 1118.0 | 1129.0 | 1108.0 | 1114.0 |
| 142.5° | 1145.0 | 1142.0 | 1160.0 | 1163.0 | 1171.0 | 1171.0 | 1181.0 | 1160.0 | 1168.0 |
| 145° | 1200.0 | 1193.0 | 1213.0 | 1213.0 | 1222.0 | 1221.0 | 1229.0 | 1215.0 | 1226.0 |
| 147.5° | 1254.0 | 1245.0 | 1262.0 | 1263.0 | 1271.0 | 1271.0 | 1278.0 | 1264.0 | 1278.0 |
| 150° | 1303.0 | 1295.0 | 1307.0 | 1308.0 | 1316.0 | 1315.0 | 1322.0 | 1315.0 | 1327.0 |
| 152.5° | 1350.0 | 1342.0 | 1350.0 | 1349.0 | 1359.0 | 1356.0 | 1365.0 | 1359.0 | 1373.0 |
| 155° | 1395.0 | 1386.0 | 1393.0 | 1389.0 | 1397.0 | 1396.0 | 1406.0 | 1404.0 | 1415.0 |
| 157.5° | 1436.0 | 1426.0 | 1432.0 | 1427.0 | 1432.0 | 1433.0 | 1444.0 | 1443.0 | 1455.0 |
| 160° | 1474.0 | 1464.0 | 1468.0 | 1459.0 | 1464.0 | 1465.0 | 1479.0 | 1479.0 | 1491.0 |
| 162.5° | 1508.0 | 1497.0 | 1501.0 | 1487.0 | 1492.0 | 1492.0 | 1510.0 | 1510.0 | 1522.0 |
| 165° | 1537.0 | 1527.0 | 1530.0 | 1513.0 | 1518.0 | 1519.0 | 1537.0 | 1538.0 | 1549.0 |
| 167.5° | 1563.0 | 1552.0 | 1553.0 | 1537.0 | 1541.0 | 1542.0 | 1558.0 | 1560.0 | 1573.0 |
| 170° | 1583.0 | 1573.0 | 1573.0 | 1555.0 | 1558.0 | 1559.0 | 1576.0 | 1579.0 | 1592.0 |
| 172.5° | 1599.0 | 1588.0 | 1586.0 | 1567.0 | 1565.0 | 1570.0 | 1587.0 | 1593.0 | 1605.0 |
| 175° | 1611.0 | 1599.0 | 1596.0 | 1577.0 | 1570.0 | 1580.0 | 1597.0 | 1602.0 | 1616.0 |
| 177.5° | 1616.0 | 1604.0 | 1602.0 | 1582.0 | 1581.0 | 1584.0 | 1600.0 | 1606.0 | 1618.0 |
| 180° | 1600.0 | 1600.0 | 1600.0 | 1600.0 | 1600.0 | 1600.0 | 1600.0 | 1600.0 | 1600.0 |

(END OF REPORT)