

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: CORELITE

Report Number: P522454

Luminaire Tested: **SQW-F-100U-025D-92765-1D-UNV-STD-W-4 (5700K)**

Issue Date: 5/11/2021

Test Information

Test Method: LM-79-08
Report Number: P522454
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-52,
Test Lab: INNOVATION CENTER
Issue Date: 5/11/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQW-F-100U-025D-92765-1D-UNV-STD-W-4 (5700K)
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K/65000K CCT, 90 CRI LEDS, TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6008.5 lumens
Efficiency: N/A
Efficacy: 121.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.26 / 1.36
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: Semi-Indirect

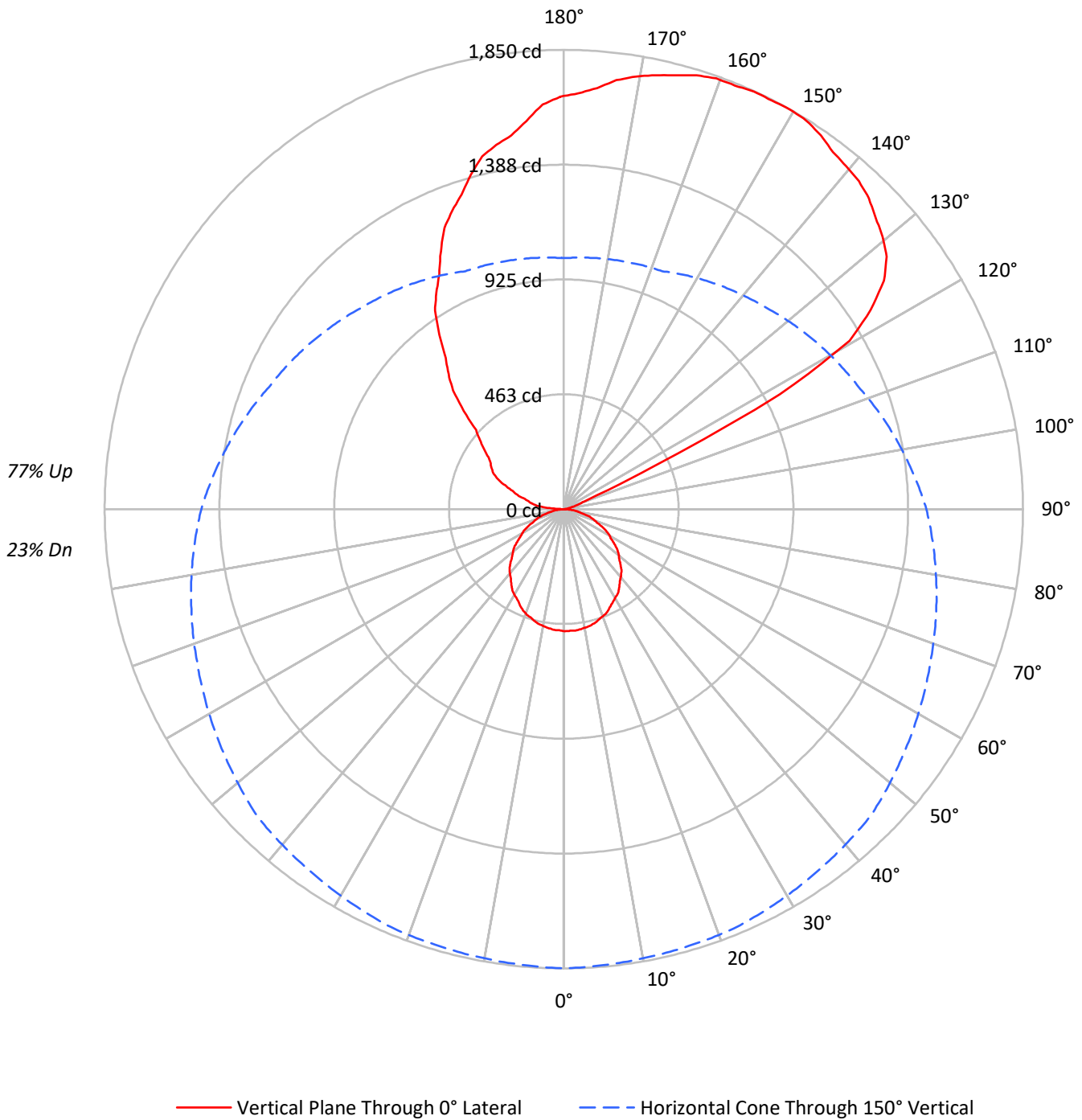
Input Watts (W): 49.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P522454

CATALOG NUMBER: SQW-F-100U-025D-92765-1D-UNV-STD-W-4 (5700K)

Luminous Intensity Polar Plot





TEST NUMBER: P522454

CATALOG NUMBER: SQW-F-100U-025D-92765-1D-UNV-STD-W-4 (5700K)

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 | 89 | 89 | 89 | 89 | 68 | 68 | 68 | 49 | 49 | 49 | 31 | 31 | 31 | 23 |
| 1 | 92 | 87 | 84 | 80 | 81 | 78 | 75 | 72 | 60 | 58 | 56 | 43 | 42 | 40 | 27 | 27 | 26 | 19 |
| 2 | 83 | 76 | 70 | 65 | 74 | 68 | 63 | 59 | 52 | 49 | 46 | 38 | 35 | 34 | 24 | 23 | 22 | 16 |
| 3 | 76 | 67 | 60 | 54 | 67 | 60 | 54 | 49 | 46 | 42 | 38 | 33 | 30 | 28 | 21 | 20 | 19 | 13 |
| 4 | 69 | 59 | 51 | 46 | 61 | 53 | 46 | 41 | 41 | 36 | 33 | 29 | 26 | 24 | 19 | 17 | 16 | 11 |
| 5 | 63 | 52 | 45 | 39 | 56 | 47 | 40 | 35 | 36 | 31 | 28 | 26 | 23 | 21 | 17 | 15 | 14 | 10 |
| 6 | 58 | 47 | 39 | 33 | 52 | 42 | 35 | 30 | 32 | 28 | 24 | 24 | 20 | 18 | 15 | 13 | 12 | 9 |
| 7 | 54 | 42 | 34 | 29 | 48 | 38 | 31 | 26 | 29 | 24 | 21 | 21 | 18 | 16 | 14 | 12 | 11 | 8 |
| 8 | 50 | 38 | 31 | 25 | 44 | 34 | 28 | 23 | 26 | 22 | 19 | 19 | 16 | 14 | 13 | 11 | 9 | 7 |
| 9 | 46 | 34 | 27 | 22 | 41 | 31 | 25 | 20 | 24 | 20 | 16 | 18 | 15 | 12 | 12 | 10 | 8 | 6 |
| 10 | 43 | 31 | 25 | 20 | 38 | 28 | 22 | 18 | 22 | 18 | 15 | 16 | 13 | 11 | 11 | 9 | 8 | 6 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|------|------|------|
| 0° | 7949 | 7949 | 7949 |
| 5° | 7963 | 8031 | 7911 |
| 10° | 7950 | 8020 | 7863 |
| 15° | 7928 | 7982 | 7804 |
| 20° | 7876 | 7931 | 7730 |
| 25° | 7750 | 7844 | 7580 |
| 30° | 7676 | 7754 | 7457 |
| 35° | 7592 | 7675 | 7340 |
| 40° | 7470 | 7558 | 7179 |
| 45° | 7341 | 7437 | 7003 |
| 50° | 7196 | 7302 | 6769 |
| 55° | 6959 | 7139 | 6570 |
| 60° | 6749 | 6956 | 6303 |
| 65° | 6403 | 6770 | 5998 |
| 70° | 6061 | 6463 | 5608 |
| 75° | 5627 | 5958 | 5028 |
| 80° | 5030 | 5225 | 4435 |
| 85° | 3742 | 3927 | 2946 |



TEST NUMBER: P522454

CATALOG NUMBER: SQW-F-100U-025D-92765-1D-UNV-STD-W-4 (5700K)

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 46.6 | 0.8 |
| 10°-20° | 133.2 | 2.2 |
| 20°-30° | 200.2 | 3.3 |
| 30°-40° | 239.4 | 4.0 |
| 40°-50° | 246.1 | 4.1 |
| 50°-60° | 219.9 | 3.7 |
| 60°-70° | 167.0 | 2.8 |
| 70°-80° | 95.4 | 1.6 |
| 80°-90° | 25.2 | 0.4 |
| 90°-100° | 43.7 | 0.7 |
| 100°-110° | 189.1 | 3.1 |
| 110°-120° | 539.2 | 9.0 |
| 120°-130° | 819.8 | 13.6 |
| 130°-140° | 886.7 | 14.8 |
| 140°-150° | 847.2 | 14.1 |
| 150°-160° | 696.8 | 11.6 |
| 160°-170° | 455.3 | 7.6 |
| 170°-180° | 157.5 | 2.6 |
| 0°-30° | 380.0 | 6.3 |
| 0°-40° | 619.4 | 10.3 |
| 0°-60° | 1085.5 | 18.1 |
| 0°-90° | 1373.2 | 22.9 |
| 90°-120° | 771.9 | 12.8 |
| 90°-150° | 3325.7 | 55.3 |
| 90°-180° | 4635.0 | 77.1 |
| 0°-180° | 6008.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|------|------|------|------|------|------|------|
| 0° | 492 | 492 | 492 | 492 | 492 | |
| 5° | 491 | 491 | 496 | 490 | 488 | 47 |
| 15° | 474 | 475 | 478 | 471 | 467 | 134 |
| 25° | 435 | 440 | 440 | 433 | 426 | 201 |
| 35° | 385 | 390 | 389 | 381 | 372 | 241 |
| 45° | 322 | 326 | 326 | 316 | 307 | 248 |
| 55° | 247 | 252 | 254 | 241 | 233 | 221 |
| 65° | 168 | 173 | 177 | 164 | 157 | 166 |
| 75° | 90 | 93 | 96 | 86 | 81 | 96 |
| 85° | 20 | 23 | 21 | 19 | 16 | 24 |
| 90° | 0 | 0 | 0 | 0 | 0 | 1 |
| 95° | 7 | 10 | 30 | 70 | 66 | 9 |
| 105° | 44 | 111 | 219 | 150 | 161 | 50 |
| 115° | 398 | 1058 | 546 | 260 | 293 | 547 |
| 125° | 1585 | 1395 | 873 | 429 | 368 | 1393 |
| 135° | 1754 | 1588 | 1148 | 712 | 564 | 1352 |
| 145° | 1828 | 1710 | 1368 | 1012 | 863 | 1145 |
| 155° | 1849 | 1767 | 1527 | 1268 | 1151 | 854 |
| 165° | 1805 | 1766 | 1636 | 1467 | 1399 | 513 |
| 175° | 1701 | 1705 | 1675 | 1615 | 1571 | 165 |
| 180° | 1661 | 1661 | 1661 | 1661 | 1661 | |



TEST NUMBER: P522454

CATALOG NUMBER: SQW-F-100U-025D-92765-1D-UNV-STD-W-4 (5700K)

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|-------|-------|-------|-------|-------|--------|-------|--------|-------|
| 0° | 492.3 | 492.3 | 492.3 | 492.3 | 492.3 | 492.3 | 492.3 | 492.3 | 492.3 |
| 2.5° | 490.6 | 491.5 | 492.3 | 492.4 | 496.6 | 491.6 | 491.5 | 490.6 | 488.9 |
| 5° | 491.3 | 491.3 | 491.3 | 490.3 | 495.5 | 489.3 | 490.2 | 488.1 | 488.1 |
| 7.5° | 488.3 | 487.5 | 487.7 | 486.5 | 491.7 | 485.3 | 485.3 | 484.1 | 483.8 |
| 10° | 484.9 | 484.9 | 486.0 | 484.0 | 489.2 | 481.9 | 482.8 | 480.6 | 479.6 |
| 12.5° | 481.5 | 480.7 | 481.7 | 479.7 | 484.9 | 477.6 | 477.7 | 474.7 | 474.5 |
| 15° | 474.3 | 474.3 | 475.4 | 473.3 | 477.5 | 471.3 | 471.1 | 467.9 | 466.9 |
| 17.5° | 465.2 | 465.0 | 467.3 | 464.2 | 468.4 | 461.1 | 461.1 | 458.3 | 456.7 |
| 20° | 458.4 | 457.3 | 460.5 | 457.4 | 461.6 | 454.3 | 455.2 | 449.9 | 449.9 |
| 22.5° | 449.9 | 448.9 | 452.9 | 448.9 | 453.1 | 445.8 | 446.7 | 440.5 | 439.7 |
| 25° | 435.0 | 436.1 | 440.3 | 437.2 | 440.3 | 433.1 | 432.9 | 426.5 | 425.5 |
| 27.5° | 422.7 | 421.9 | 427.4 | 423.0 | 426.1 | 418.9 | 418.9 | 411.2 | 410.2 |
| 30° | 411.7 | 411.7 | 418.1 | 412.8 | 415.9 | 408.7 | 409.6 | 401.1 | 400.0 |
| 32.5° | 401.5 | 401.5 | 407.0 | 403.5 | 405.8 | 398.5 | 397.7 | 390.0 | 389.0 |
| 35° | 385.2 | 385.2 | 390.5 | 387.3 | 389.4 | 382.2 | 380.9 | 372.4 | 372.4 |
| 37.5° | 367.1 | 366.3 | 371.4 | 369.3 | 371.4 | 364.3 | 361.8 | 354.4 | 353.3 |
| 40° | 354.4 | 354.4 | 358.6 | 356.6 | 358.6 | 352.4 | 349.1 | 341.6 | 340.6 |
| 42.5° | 340.8 | 340.8 | 345.9 | 343.8 | 345.9 | 338.9 | 335.5 | 328.1 | 327.0 |
| 45° | 321.5 | 321.5 | 325.7 | 324.7 | 325.7 | 319.5 | 316.2 | 307.7 | 306.7 |
| 47.5° | 300.9 | 300.1 | 304.1 | 304.4 | 306.0 | 299.2 | 294.8 | 286.7 | 285.6 |
| 50° | 286.5 | 286.5 | 289.7 | 290.7 | 290.7 | 285.5 | 281.2 | 270.6 | 269.5 |
| 52.5° | 269.5 | 270.3 | 273.5 | 274.6 | 275.5 | 268.6 | 264.2 | 256.1 | 255.1 |
| 55° | 247.2 | 246.2 | 251.5 | 252.6 | 253.6 | 247.4 | 240.9 | 234.5 | 233.4 |
| 57.5° | 224.3 | 224.1 | 228.6 | 229.8 | 230.7 | 225.5 | 219.0 | 211.8 | 210.5 |
| 60° | 209.0 | 208.0 | 213.3 | 215.4 | 215.4 | 210.2 | 203.7 | 197.3 | 195.2 |
| 62.5° | 191.2 | 193.5 | 197.1 | 199.3 | 201.0 | 194.9 | 187.6 | 182.0 | 180.0 |
| 65° | 167.6 | 168.7 | 173.0 | 175.1 | 177.2 | 171.0 | 164.5 | 159.1 | 157.0 |
| 67.5° | 143.7 | 145.5 | 148.8 | 150.9 | 153.0 | 147.0 | 140.5 | 136.0 | 134.1 |
| 70° | 128.4 | 129.4 | 132.6 | 134.8 | 136.9 | 131.7 | 125.2 | 119.9 | 118.8 |
| 72.5° | 113.1 | 114.1 | 117.4 | 118.7 | 119.9 | 114.7 | 109.1 | 105.4 | 103.6 |
| 75° | 90.2 | 91.2 | 93.4 | 94.5 | 95.5 | 90.3 | 85.9 | 82.7 | 80.6 |
| 77.5° | 68.5 | 68.5 | 70.7 | 71.5 | 71.5 | 68.4 | 64.3 | 61.3 | 59.6 |
| 80° | 54.1 | 54.1 | 56.2 | 56.2 | 56.2 | 53.1 | 49.9 | 47.7 | 47.7 |
| 82.5° | 39.7 | 40.5 | 42.7 | 42.6 | 41.8 | 39.5 | 37.1 | 35.0 | 35.0 |
| 85° | 20.2 | 21.2 | 23.3 | 23.3 | 21.2 | 21.2 | 19.1 | 18.0 | 15.9 |
| 87.5° | 5.1 | 5.9 | 7.6 | 8.5 | 6.8 | 6.8 | 5.1 | 3.4 | 3.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 2.3 | 2.3 | 2.3 | 4.6 | 6.8 | 24.4 | 27.1 | 23.7 | 23.7 |
| 95° | 7.1 | 7.1 | 9.9 | 31.0 | 29.6 | 50.3 | 70.5 | 66.3 | 66.3 |
| 97.5° | 14.4 | 15.8 | 22.6 | 91.7 | 69.1 | 67.2 | 95.3 | 106.1 | 108.0 |
| 100° | 21.2 | 22.5 | 33.8 | 149.8 | 102.9 | 87.8 | 104.4 | 124.2 | 128.3 |
| 102.5° | 29.0 | 31.5 | 54.2 | 235.7 | 144.7 | 103.0 | 119.0 | 136.6 | 141.9 |
| 105° | 43.7 | 47.9 | 111.4 | 395.1 | 218.6 | 134.5 | 149.5 | 156.6 | 160.8 |
| 107.5° | 64.9 | 81.7 | 300.1 | 555.1 | 310.2 | 177.6 | 193.5 | 192.4 | 196.0 |
| 110° | 87.4 | 121.9 | 518.9 | 642.7 | 377.9 | 211.1 | 211.5 | 222.7 | 218.6 |



TEST NUMBER: P522454

CATALOG NUMBER: SQW-F-100U-025D-92765-1D-UNV-STD-W-4 (5700K)

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 145.0 | 242.3 | 773.9 | 726.9 | 445.6 | 251.2 | 228.4 | 253.3 | 254.7 |
| 115° | 397.7 | 683.1 | 1057.6 | 844.9 | 545.7 | 322.4 | 259.5 | 283.7 | 293.3 |
| 117.5° | 986.0 | 1188.4 | 1202.9 | 949.7 | 645.6 | 401.8 | 295.0 | 305.7 | 318.4 |
| 120° | 1336.8 | 1378.2 | 1270.6 | 1014.1 | 712.1 | 458.4 | 324.3 | 320.4 | 334.2 |
| 122.5° | 1474.5 | 1459.6 | 1325.8 | 1074.0 | 777.6 | 518.3 | 360.4 | 338.4 | 347.7 |
| 125° | 1585.0 | 1546.4 | 1394.7 | 1156.9 | 872.9 | 608.2 | 428.7 | 368.1 | 368.1 |
| 127.5° | 1651.0 | 1606.1 | 1457.8 | 1230.5 | 958.9 | 698.9 | 510.8 | 416.3 | 403.3 |
| 130° | 1689.4 | 1641.1 | 1496.2 | 1281.4 | 1015.3 | 757.5 | 568.3 | 457.8 | 437.2 |
| 132.5° | 1718.7 | 1674.9 | 1532.3 | 1321.3 | 1070.6 | 815.0 | 625.8 | 509.4 | 475.5 |
| 135° | 1754.2 | 1717.0 | 1587.8 | 1382.3 | 1147.9 | 901.1 | 712.1 | 598.5 | 564.1 |
| 137.5° | 1777.1 | 1748.1 | 1637.8 | 1432.4 | 1219.5 | 986.5 | 799.3 | 685.2 | 654.0 |
| 140° | 1789.5 | 1766.1 | 1662.6 | 1462.1 | 1263.5 | 1041.5 | 860.2 | 743.9 | 715.0 |
| 142.5° | 1801.9 | 1782.9 | 1680.6 | 1495.0 | 1306.4 | 1096.5 | 920.0 | 803.7 | 772.5 |
| 145° | 1827.6 | 1805.5 | 1710.5 | 1534.7 | 1367.9 | 1173.4 | 1012.5 | 890.6 | 863.0 |
| 147.5° | 1845.6 | 1819.2 | 1735.1 | 1577.4 | 1426.0 | 1243.1 | 1097.4 | 979.7 | 952.4 |
| 150° | 1850.1 | 1822.6 | 1748.6 | 1600.2 | 1460.9 | 1285.8 | 1149.3 | 1037.3 | 1011.1 |
| 152.5° | 1846.8 | 1825.8 | 1758.8 | 1619.6 | 1490.3 | 1327.3 | 1196.7 | 1092.6 | 1068.6 |
| 155° | 1848.7 | 1829.4 | 1766.9 | 1645.8 | 1527.2 | 1385.2 | 1267.7 | 1175.5 | 1150.7 |
| 157.5° | 1840.3 | 1827.6 | 1772.6 | 1665.9 | 1561.3 | 1437.0 | 1332.9 | 1255.3 | 1230.2 |
| 160° | 1840.3 | 1821.0 | 1772.6 | 1677.4 | 1585.0 | 1470.6 | 1373.5 | 1303.9 | 1283.3 |
| 162.5° | 1827.9 | 1810.8 | 1771.5 | 1685.6 | 1607.6 | 1502.0 | 1411.9 | 1346.9 | 1331.8 |
| 165° | 1805.0 | 1791.2 | 1765.5 | 1696.5 | 1635.8 | 1544.8 | 1466.6 | 1408.5 | 1398.9 |
| 167.5° | 1787.2 | 1768.2 | 1754.2 | 1696.1 | 1655.0 | 1575.6 | 1512.8 | 1464.8 | 1459.2 |
| 170° | 1766.9 | 1754.5 | 1743.0 | 1693.0 | 1664.0 | 1597.8 | 1545.5 | 1497.5 | 1492.0 |
| 172.5° | 1741.0 | 1734.1 | 1728.3 | 1690.9 | 1669.6 | 1616.7 | 1573.7 | 1530.1 | 1520.2 |
| 175° | 1700.7 | 1706.2 | 1704.9 | 1686.3 | 1675.3 | 1640.8 | 1614.6 | 1583.3 | 1570.9 |
| 177.5° | 1675.8 | 1673.6 | 1679.2 | 1675.8 | 1674.7 | 1653.8 | 1646.5 | 1625.2 | 1631.8 |
| 180° | 1661.2 | 1661.2 | 1661.2 | 1661.2 | 1661.2 | 1661.2 | 1661.2 | 1661.2 | 1661.2 |

(END OF REPORT)