

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: P511859

Luminaire Tested: **SQW-F-100U-100D-840-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P511859  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-18,  
Test Lab: INNOVATION CENTER  
Issue Date: 4/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQW-F-100U-100D-840-1D-UNV-STD-W-4  
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

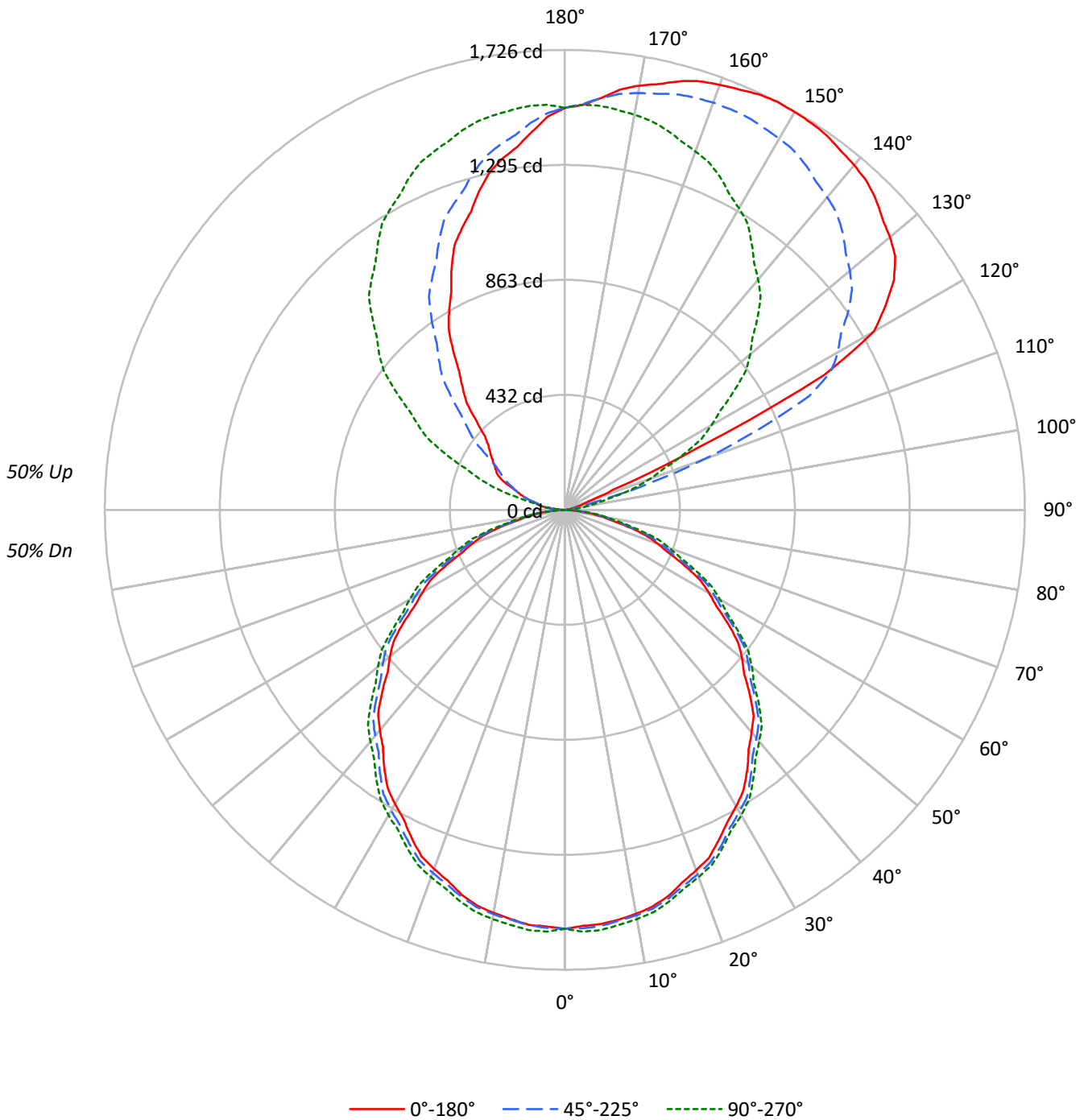
Lumens per Lamp: N/A  
Luminaire Lumens: 8511.7 lumens  
Efficiency: N/A  
Efficacy: 134.3 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 63.4  
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: P511859  
CATALOG NUMBER: SQW-F-100U-100D-840-1D-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P511859

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**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 | 99 | 99 | 99 | 99 | 84 | 84 | 84 | 69 | 69 | 69 | 56 | 56 | 56 | 50 |
| 1   | 98  | 94  | 90  | 86  | 90 | 86 | 83 | 80 | 73 | 71 | 69 | 61 | 59 | 58 | 50 | 49 | 48 | 42 |
| 2   | 89  | 82  | 75  | 70  | 82 | 75 | 70 | 66 | 64 | 60 | 57 | 54 | 51 | 48 | 44 | 42 | 40 | 35 |
| 3   | 81  | 72  | 64  | 58  | 75 | 66 | 60 | 55 | 56 | 52 | 48 | 47 | 44 | 41 | 39 | 36 | 34 | 30 |
| 4   | 74  | 63  | 55  | 49  | 68 | 59 | 52 | 46 | 50 | 45 | 40 | 42 | 38 | 35 | 35 | 32 | 29 | 26 |
| 5   | 68  | 56  | 48  | 42  | 63 | 52 | 45 | 40 | 45 | 39 | 35 | 38 | 33 | 30 | 31 | 28 | 25 | 22 |
| 6   | 63  | 50  | 42  | 36  | 58 | 47 | 40 | 34 | 40 | 35 | 30 | 34 | 30 | 26 | 28 | 25 | 22 | 19 |
| 7   | 58  | 46  | 38  | 32  | 53 | 42 | 35 | 30 | 36 | 31 | 27 | 31 | 26 | 23 | 26 | 22 | 20 | 17 |
| 8   | 54  | 41  | 34  | 28  | 49 | 39 | 32 | 27 | 33 | 28 | 24 | 28 | 24 | 21 | 24 | 20 | 18 | 15 |
| 9   | 50  | 38  | 30  | 25  | 46 | 35 | 28 | 24 | 30 | 25 | 21 | 26 | 22 | 18 | 22 | 18 | 16 | 14 |
| 10  | 47  | 35  | 27  | 22  | 43 | 32 | 26 | 21 | 28 | 23 | 19 | 24 | 20 | 17 | 20 | 17 | 14 | 12 |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°    | 90°   | 180°  |
|-----|-------|-------|-------|
| 0°  | 50782 | 50782 | 50782 |
| 5°  | 50597 | 51287 | 50665 |
| 10° | 50484 | 51146 | 50379 |
| 15° | 50153 | 50829 | 49976 |
| 20° | 49467 | 50419 | 49285 |
| 25° | 48710 | 49886 | 48446 |
| 30° | 47918 | 49350 | 47523 |
| 35° | 47010 | 48606 | 46548 |
| 40° | 45961 | 47845 | 45510 |
| 45° | 44832 | 46969 | 44298 |
| 50° | 43596 | 46002 | 43003 |
| 55° | 42140 | 44718 | 41543 |
| 60° | 40294 | 43394 | 39745 |
| 65° | 37914 | 41651 | 37425 |
| 70° | 34886 | 39305 | 34480 |
| 75° | 30293 | 35596 | 30954 |
| 80° | 24361 | 29493 | 25737 |
| 85° | 13412 | 20119 | 17340 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 148.7  | 1.7       |
| 10°-20°   | 423.8  | 5.0       |
| 20°-30°   | 635.3  | 7.5       |
| 30°-40°   | 755.4  | 8.9       |
| 40°-50°   | 773.3  | 9.1       |
| 50°-60°   | 689.3  | 8.1       |
| 60°-70°   | 513.9  | 6.0       |
| 70°-80°   | 280.8  | 3.3       |
| 80°-90°   | 66.6   | 0.8       |
| 90°-100°  | 37.1   | 0.4       |
| 100°-110° | 175.2  | 2.1       |
| 110°-120° | 514.8  | 6.0       |
| 120°-130° | 748.3  | 8.8       |
| 130°-140° | 800.7  | 9.4       |
| 140°-150° | 763.2  | 9.0       |
| 150°-160° | 629.7  | 7.4       |
| 160°-170° | 412.5  | 4.8       |
| 170°-180° | 143.0  | 1.7       |
| 0°-30°    | 1207.8 | 14.2      |
| 0°-40°    | 1963.2 | 23.1      |
| 0°-60°    | 3425.8 | 40.2      |
| 0°-90°    | 4287.1 | 50.4      |
| 90°-120°  | 727.1  | 8.5       |
| 90°-150°  | 3039.3 | 35.7      |
| 90°-180°  | 4225.0 | 49.6      |
| 0°-180°   | 8511.7 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 45°  | 90°  | 135° | 180° | Flux |
|------|------|------|------|------|------|------|
| 0°   | 1573 | 1573 | 1573 | 1573 | 1573 |      |
| 5°   | 1561 | 1567 | 1582 | 1564 | 1563 | 148  |
| 15°  | 1500 | 1509 | 1520 | 1502 | 1495 | 422  |
| 25°  | 1367 | 1390 | 1400 | 1382 | 1360 | 630  |
| 35°  | 1192 | 1217 | 1233 | 1208 | 1181 | 745  |
| 45°  | 982  | 1012 | 1028 | 1000 | 970  | 757  |
| 55°  | 748  | 778  | 794  | 771  | 738  | 668  |
| 65°  | 496  | 521  | 545  | 516  | 490  | 491  |
| 75°  | 243  | 262  | 285  | 264  | 248  | 260  |
| 85°  | 36   | 50   | 54   | 55   | 47   | 53   |
| 90°  | 3    | 3    | 2    | 4    | 8    | 2    |
| 95°  | 10   | 13   | 28   | 45   | 40   | 12   |
| 105° | 47   | 131  | 194  | 124  | 132  | 57   |
| 115° | 554  | 1013 | 491  | 234  | 255  | 628  |
| 125° | 1508 | 1297 | 773  | 360  | 332  | 1335 |
| 135° | 1649 | 1474 | 1022 | 604  | 466  | 1273 |
| 145° | 1714 | 1578 | 1222 | 871  | 731  | 1074 |
| 155° | 1721 | 1625 | 1378 | 1116 | 1004 | 795  |
| 165° | 1665 | 1615 | 1476 | 1314 | 1240 | 472  |
| 175° | 1551 | 1551 | 1522 | 1458 | 1422 | 150  |
| 180° | 1509 | 1509 | 1509 | 1509 | 1509 |      |



TEST NUMBER: P511859

CATALOG NUMBER: SQW-F-100U-100D-840-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    | 112.5° | 135°   | 157.5° | 180°   |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 1572.6 | 1572.6 | 1572.6 | 1572.6 | 1572.6 | 1572.6 | 1572.6 | 1572.6 | 1572.6 |
| 2.5°   | 1562.4 | 1569.9 | 1571.8 | 1570.4 | 1584.5 | 1571.2 | 1570.9 | 1569.9 | 1565.0 |
| 5°     | 1560.9 | 1563.0 | 1567.3 | 1564.5 | 1582.2 | 1564.5 | 1564.1 | 1562.0 | 1563.0 |
| 7.5°   | 1550.7 | 1552.8 | 1555.2 | 1552.4 | 1570.1 | 1551.9 | 1551.7 | 1548.2 | 1549.2 |
| 10°    | 1539.6 | 1541.7 | 1544.9 | 1542.1 | 1559.8 | 1540.1 | 1540.7 | 1535.4 | 1536.4 |
| 12.5°  | 1524.3 | 1526.4 | 1532.2 | 1528.5 | 1545.4 | 1526.4 | 1527.0 | 1520.9 | 1521.1 |
| 15°    | 1500.2 | 1503.3 | 1508.7 | 1502.7 | 1520.4 | 1501.7 | 1502.3 | 1495.9 | 1494.9 |
| 17.5°  | 1465.9 | 1472.2 | 1478.7 | 1473.5 | 1489.4 | 1471.4 | 1472.3 | 1462.5 | 1459.8 |
| 20°    | 1439.5 | 1445.8 | 1456.6 | 1450.6 | 1467.2 | 1448.5 | 1450.2 | 1435.2 | 1434.2 |
| 22.5°  | 1413.1 | 1417.7 | 1431.0 | 1425.0 | 1441.7 | 1422.9 | 1423.8 | 1406.3 | 1406.1 |
| 25°    | 1367.1 | 1373.4 | 1389.5 | 1384.5 | 1400.1 | 1381.4 | 1382.0 | 1362.8 | 1359.7 |
| 27.5°  | 1320.1 | 1326.5 | 1342.8 | 1338.1 | 1354.1 | 1335.0 | 1336.2 | 1314.8 | 1308.6 |
| 30°    | 1285.1 | 1292.4 | 1309.6 | 1305.8 | 1323.5 | 1302.6 | 1302.2 | 1280.7 | 1274.5 |
| 32.5°  | 1247.7 | 1256.6 | 1273.9 | 1271.7 | 1287.7 | 1267.7 | 1265.5 | 1244.1 | 1237.9 |
| 35°    | 1192.5 | 1201.9 | 1217.0 | 1218.4 | 1233.0 | 1214.2 | 1208.5 | 1188.1 | 1180.8 |
| 37.5°  | 1132.9 | 1141.6 | 1158.0 | 1160.9 | 1175.0 | 1155.5 | 1147.4 | 1128.9 | 1120.5 |
| 40°    | 1090.3 | 1100.7 | 1118.0 | 1122.5 | 1135.0 | 1116.3 | 1107.3 | 1088.0 | 1079.6 |
| 42.5°  | 1048.6 | 1059.0 | 1077.1 | 1084.1 | 1093.3 | 1075.4 | 1064.7 | 1046.2 | 1036.2 |
| 45°    | 981.7  | 992.1  | 1011.5 | 1021.2 | 1028.5 | 1011.9 | 999.8  | 980.4  | 970.0  |
| 47.5°  | 913.8  | 925.2  | 944.8  | 956.9  | 961.7  | 946.5  | 935.3  | 913.7  | 902.0  |
| 50°    | 867.8  | 879.2  | 899.7  | 912.6  | 915.7  | 902.1  | 890.1  | 868.5  | 856.0  |
| 52.5°  | 820.9  | 830.7  | 851.2  | 865.7  | 867.1  | 856.1  | 843.3  | 821.7  | 810.1  |
| 55°    | 748.5  | 758.9  | 778.3  | 795.3  | 794.3  | 787.0  | 770.9  | 749.3  | 737.9  |
| 57.5°  | 674.2  | 682.5  | 702.7  | 720.8  | 721.3  | 712.9  | 697.4  | 676.1  | 664.8  |
| 60°    | 623.9  | 632.3  | 651.6  | 669.8  | 671.9  | 663.5  | 646.3  | 625.8  | 615.4  |
| 62.5°  | 573.7  | 581.2  | 599.7  | 619.5  | 621.6  | 613.3  | 595.2  | 575.6  | 565.2  |
| 65°    | 496.2  | 502.4  | 520.7  | 541.0  | 545.1  | 535.8  | 516.4  | 499.1  | 489.8  |
| 67.5°  | 419.7  | 425.8  | 442.7  | 462.9  | 468.3  | 457.7  | 440.2  | 423.8  | 414.6  |
| 70°    | 369.5  | 374.7  | 390.8  | 410.1  | 416.3  | 404.9  | 390.8  | 373.5  | 365.2  |
| 72.5°  | 318.4  | 323.6  | 339.7  | 358.1  | 363.5  | 352.9  | 339.7  | 324.2  | 320.9  |
| 75°    | 242.8  | 248.0  | 261.9  | 281.2  | 285.3  | 276.0  | 264.1  | 250.2  | 248.1  |
| 77.5°  | 175.3  | 178.6  | 191.2  | 204.5  | 207.2  | 201.6  | 194.4  | 182.0  | 181.0  |
| 80°    | 131.0  | 135.1  | 146.9  | 157.6  | 158.6  | 155.5  | 150.1  | 139.5  | 138.4  |
| 82.5°  | 91.8   | 95.1   | 105.2  | 115.0  | 113.5  | 113.7  | 110.1  | 100.3  | 100.1  |
| 85°    | 36.2   | 39.3   | 50.0   | 58.5   | 54.3   | 57.4   | 55.4   | 47.9   | 46.8   |
| 87.5°  | 4.0    | 4.9    | 9.1    | 17.4   | 15.8   | 18.5   | 16.2   | 12.5   | 12.8   |
| 90°    | 3.2    | 3.2    | 3.2    | 2.1    | 2.1    | 3.1    | 4.2    | 7.4    | 8.4    |
| 92.5°  | 5.7    | 5.7    | 5.7    | 7.2    | 8.0    | 16.4   | 10.9   | 12.4   | 11.8   |
| 95°    | 10.5   | 11.5   | 12.6   | 32.5   | 28.4   | 41.7   | 45.2   | 43.0   | 39.9   |
| 97.5°  | 18.5   | 19.5   | 26.3   | 88.9   | 62.8   | 56.7   | 74.0   | 78.3   | 74.2   |
| 100°   | 25.2   | 26.2   | 38.9   | 143.8  | 91.4   | 72.9   | 84.0   | 97.7   | 97.7   |
| 102.5° | 32.8   | 34.6   | 61.6   | 216.9  | 128.4  | 91.8   | 96.6   | 109.5  | 112.8  |
| 105°   | 47.3   | 52.4   | 131.3  | 366.9  | 194.3  | 122.4  | 124.0  | 129.3  | 132.4  |
| 107.5° | 73.7   | 94.7   | 339.3  | 508.3  | 277.1  | 160.0  | 163.5  | 161.5  | 160.1  |
| 110°   | 104.0  | 151.3  | 557.8  | 595.1  | 339.3  | 189.4  | 187.0  | 185.9  | 182.8  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    | 112.5° | 135°   | 157.5° | 180°   |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 194.8  | 323.4  | 782.2  | 671.2  | 400.7  | 221.9  | 205.5  | 217.8  | 212.2  |
| 115°   | 553.6  | 787.8  | 1012.7 | 777.2  | 490.6  | 279.0  | 234.3  | 251.2  | 255.3  |
| 117.5° | 1099.1 | 1188.8 | 1126.4 | 866.9  | 578.4  | 344.6  | 260.5  | 276.1  | 284.1  |
| 120°   | 1339.4 | 1319.9 | 1181.9 | 927.3  | 635.6  | 391.1  | 281.5  | 291.2  | 298.4  |
| 122.5° | 1426.0 | 1380.2 | 1228.1 | 979.5  | 690.2  | 441.6  | 308.4  | 304.6  | 313.5  |
| 125°   | 1507.5 | 1447.9 | 1297.4 | 1050.5 | 773.2  | 522.6  | 360.3  | 325.8  | 332.0  |
| 127.5° | 1562.4 | 1500.1 | 1358.3 | 1119.3 | 854.9  | 605.7  | 428.2  | 359.3  | 353.0  |
| 130°   | 1592.6 | 1532.0 | 1396.2 | 1158.3 | 908.7  | 661.2  | 476.9  | 389.4  | 374.0  |
| 132.5° | 1616.1 | 1560.5 | 1428.9 | 1200.4 | 954.9  | 714.0  | 527.4  | 428.7  | 405.9  |
| 135°   | 1649.3 | 1597.0 | 1473.9 | 1256.4 | 1022.2 | 792.1  | 604.1  | 499.3  | 466.4  |
| 137.5° | 1674.8 | 1625.9 | 1509.8 | 1305.1 | 1087.9 | 867.9  | 682.2  | 578.3  | 544.4  |
| 140°   | 1688.2 | 1641.0 | 1531.7 | 1334.7 | 1128.3 | 915.6  | 734.3  | 629.6  | 595.7  |
| 142.5° | 1700.0 | 1654.4 | 1550.2 | 1363.5 | 1166.9 | 962.5  | 789.8  | 681.7  | 649.4  |
| 145°   | 1714.5 | 1671.3 | 1577.9 | 1404.6 | 1221.8 | 1031.7 | 870.9  | 761.0  | 731.2  |
| 147.5° | 1721.4 | 1682.8 | 1599.3 | 1440.9 | 1274.9 | 1097.8 | 949.3  | 844.1  | 812.1  |
| 150°   | 1723.9 | 1687.0 | 1609.4 | 1463.0 | 1306.9 | 1140.5 | 998.0  | 899.6  | 866.7  |
| 152.5° | 1726.5 | 1687.8 | 1616.1 | 1481.7 | 1336.3 | 1179.7 | 1045.9 | 952.6  | 923.0  |
| 155°   | 1720.8 | 1686.9 | 1625.2 | 1504.7 | 1378.3 | 1235.5 | 1115.7 | 1030.0 | 1004.3 |
| 157.5° | 1707.8 | 1685.0 | 1627.1 | 1523.3 | 1411.7 | 1286.2 | 1181.2 | 1103.5 | 1078.3 |
| 160°   | 1697.7 | 1678.2 | 1626.2 | 1533.6 | 1431.9 | 1317.9 | 1220.7 | 1149.8 | 1126.2 |
| 162.5° | 1686.7 | 1666.4 | 1622.0 | 1540.6 | 1451.2 | 1347.9 | 1259.4 | 1191.1 | 1172.4 |
| 165°   | 1665.1 | 1646.6 | 1614.7 | 1547.9 | 1476.0 | 1388.7 | 1314.2 | 1255.0 | 1239.6 |
| 167.5° | 1636.9 | 1625.4 | 1599.3 | 1550.2 | 1495.3 | 1424.5 | 1360.9 | 1313.5 | 1299.9 |
| 170°   | 1616.8 | 1608.6 | 1588.4 | 1549.6 | 1505.4 | 1446.9 | 1392.0 | 1349.7 | 1339.4 |
| 172.5° | 1590.7 | 1587.4 | 1574.1 | 1546.5 | 1513.8 | 1465.1 | 1418.9 | 1382.5 | 1373.1 |
| 175°   | 1550.6 | 1554.7 | 1550.6 | 1538.7 | 1522.2 | 1489.4 | 1458.1 | 1429.6 | 1422.4 |
| 177.5° | 1520.3 | 1522.0 | 1524.5 | 1524.5 | 1522.0 | 1507.2 | 1490.1 | 1475.0 | 1476.6 |
| 180°   | 1508.6 | 1508.6 | 1508.6 | 1508.6 | 1508.6 | 1508.6 | 1508.6 | 1508.6 | 1508.6 |

(END OF REPORT)