

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: P511842

Luminaire Tested: **SQW-F-100U-025D-930-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511842
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-025D-930-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

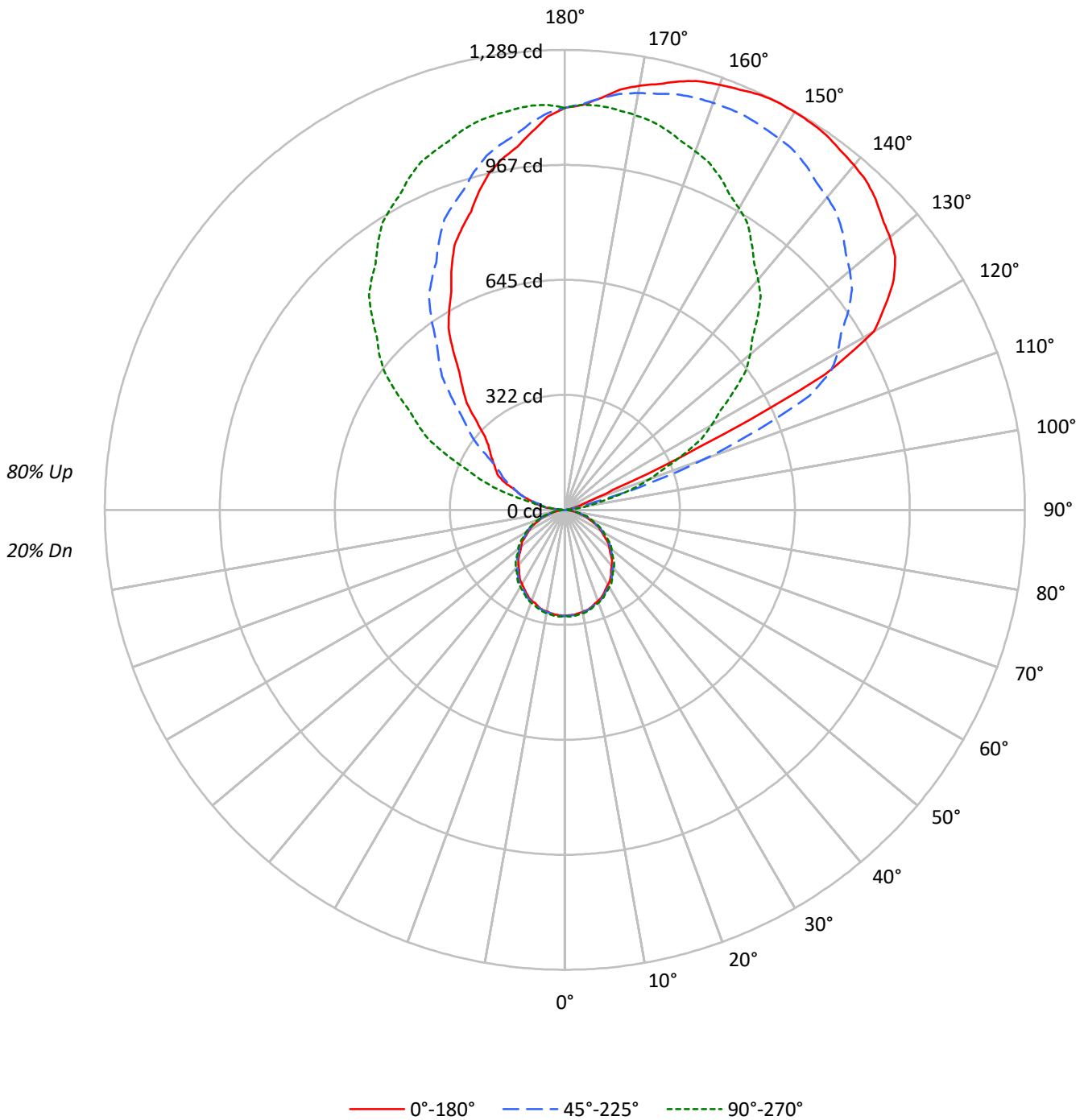
Lumens per Lamp: N/A
Luminaire Lumens: 3960.3 lumens
Efficiency: N/A
Efficacy: 110.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.34
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 35.7
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: P511842
CATALOG NUMBER: SQW-F-100U-025D-930-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P511842

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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 | 100 | 100 | 100 | 100 | 88 | 88 | 88 | 88 | 67 | 67 | 67 | 47 | 47 | 47 | 29 | 29 | 29 | 20 |
| 1 | 91 | 87 | 83 | 80 | 80 | 77 | 74 | 71 | 58 | 56 | 55 | 41 | 40 | 39 | 25 | 25 | 24 | 17 |
| 2 | 83 | 76 | 70 | 65 | 73 | 67 | 62 | 58 | 51 | 48 | 45 | 36 | 34 | 32 | 22 | 21 | 20 | 14 |
| 3 | 76 | 67 | 60 | 54 | 66 | 59 | 53 | 49 | 45 | 41 | 38 | 32 | 29 | 27 | 20 | 18 | 17 | 12 |
| 4 | 69 | 59 | 51 | 46 | 61 | 52 | 46 | 41 | 40 | 35 | 32 | 28 | 26 | 23 | 18 | 16 | 15 | 10 |
| 5 | 63 | 52 | 44 | 39 | 56 | 46 | 40 | 35 | 35 | 31 | 27 | 25 | 22 | 20 | 16 | 14 | 13 | 9 |
| 6 | 58 | 47 | 39 | 33 | 51 | 41 | 35 | 30 | 32 | 27 | 24 | 23 | 20 | 17 | 14 | 13 | 11 | 8 |
| 7 | 53 | 42 | 34 | 29 | 47 | 37 | 31 | 26 | 29 | 24 | 21 | 21 | 18 | 15 | 13 | 11 | 10 | 7 |
| 8 | 49 | 38 | 30 | 25 | 44 | 34 | 27 | 23 | 26 | 21 | 18 | 19 | 16 | 13 | 12 | 10 | 9 | 6 |
| 9 | 46 | 34 | 27 | 22 | 40 | 31 | 24 | 20 | 24 | 19 | 16 | 17 | 14 | 12 | 11 | 9 | 8 | 6 |
| 10 | 43 | 31 | 24 | 20 | 38 | 28 | 22 | 18 | 22 | 17 | 14 | 16 | 13 | 11 | 10 | 8 | 7 | 5 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|------|------|------|
| 0° | 9604 | 9604 | 9604 |
| 5° | 9562 | 9692 | 9562 |
| 10° | 9516 | 9647 | 9489 |
| 15° | 9464 | 9595 | 9411 |
| 20° | 9344 | 9509 | 9316 |
| 25° | 9207 | 9406 | 9121 |
| 30° | 9012 | 9311 | 8953 |
| 35° | 8870 | 9154 | 8775 |
| 40° | 8612 | 9017 | 8515 |
| 45° | 8389 | 8750 | 8280 |
| 50° | 8148 | 8586 | 8028 |
| 55° | 7831 | 8372 | 7831 |
| 60° | 7498 | 8112 | 7498 |
| 65° | 7106 | 7778 | 7106 |
| 70° | 6609 | 7355 | 6534 |
| 75° | 5752 | 6650 | 5852 |
| 80° | 4723 | 5467 | 4872 |
| 85° | 2668 | 3816 | 3223 |



TEST NUMBER: P511842

CATALOG NUMBER: SQW-F-100U-025D-930-1D-UNV-STD-W-4

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 28.1 | 0.7 |
| 10°-20° | 80.0 | 2.0 |
| 20°-30° | 119.8 | 3.0 |
| 30°-40° | 142.2 | 3.6 |
| 40°-50° | 144.5 | 3.6 |
| 50°-60° | 128.8 | 3.3 |
| 60°-70° | 96.1 | 2.4 |
| 70°-80° | 52.9 | 1.3 |
| 80°-90° | 13.1 | 0.3 |
| 90°-100° | 27.7 | 0.7 |
| 100°-110° | 130.8 | 3.3 |
| 110°-120° | 384.4 | 9.7 |
| 120°-130° | 558.8 | 14.1 |
| 130°-140° | 597.9 | 15.1 |
| 140°-150° | 569.9 | 14.4 |
| 150°-160° | 470.3 | 11.9 |
| 160°-170° | 308.0 | 7.8 |
| 170°-180° | 106.8 | 2.7 |
| 0°-30° | 227.9 | 5.8 |
| 0°-40° | 370.2 | 9.3 |
| 0°-60° | 643.5 | 16.2 |
| 0°-90° | 805.5 | 20.3 |
| 90°-120° | 542.9 | 13.7 |
| 90°-150° | 2269.6 | 57.3 |
| 90°-180° | 3155.0 | 79.7 |
| 0°-180° | 3960.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|------|------|------|------|------|------|------|
| 0° | 297 | 297 | 297 | 297 | 297 | |
| 5° | 295 | 296 | 299 | 296 | 295 | 28 |
| 15° | 283 | 285 | 287 | 283 | 282 | 80 |
| 25° | 258 | 262 | 264 | 261 | 256 | 119 |
| 35° | 225 | 230 | 232 | 228 | 223 | 140 |
| 45° | 184 | 189 | 192 | 188 | 181 | 142 |
| 55° | 139 | 146 | 149 | 144 | 139 | 125 |
| 65° | 93 | 97 | 102 | 97 | 93 | 92 |
| 75° | 46 | 49 | 53 | 49 | 47 | 50 |
| 85° | 7 | 10 | 10 | 10 | 9 | 10 |
| 90° | 2 | 2 | 2 | 3 | 6 | 1 |
| 95° | 8 | 9 | 21 | 34 | 30 | 9 |
| 105° | 35 | 98 | 145 | 93 | 99 | 43 |
| 115° | 413 | 756 | 366 | 175 | 191 | 469 |
| 125° | 1126 | 969 | 577 | 269 | 248 | 997 |
| 135° | 1232 | 1101 | 763 | 451 | 348 | 951 |
| 145° | 1280 | 1178 | 912 | 650 | 546 | 802 |
| 155° | 1285 | 1214 | 1029 | 833 | 750 | 594 |
| 165° | 1243 | 1206 | 1102 | 981 | 926 | 353 |
| 175° | 1158 | 1158 | 1137 | 1089 | 1062 | 112 |
| 180° | 1126 | 1126 | 1126 | 1126 | 1126 | |



TEST NUMBER: P511842

CATALOG NUMBER: SQW-F-100U-025D-930-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|-------|-------|-------|-------|-------|--------|-------|--------|-------|
| 0° | 297.4 | 297.4 | 297.4 | 297.4 | 297.4 | 297.4 | 297.4 | 297.4 | 297.4 |
| 2.5° | 295.5 | 296.7 | 296.7 | 296.8 | 299.3 | 296.8 | 296.7 | 296.7 | 296.1 |
| 5° | 295.0 | 295.0 | 295.8 | 295.8 | 299.0 | 295.8 | 295.8 | 295.0 | 295.0 |
| 7.5° | 292.8 | 292.9 | 293.7 | 293.6 | 296.1 | 292.8 | 292.9 | 292.8 | 292.6 |
| 10° | 290.2 | 291.0 | 291.8 | 291.1 | 294.2 | 290.3 | 291.0 | 290.2 | 289.4 |
| 12.5° | 287.7 | 288.4 | 289.3 | 288.5 | 291.6 | 288.4 | 288.5 | 287.7 | 287.5 |
| 15° | 283.1 | 283.8 | 284.6 | 283.9 | 287.0 | 283.1 | 283.1 | 282.2 | 281.5 |
| 17.5° | 276.4 | 277.8 | 278.9 | 278.2 | 281.1 | 277.4 | 278.1 | 276.2 | 274.9 |
| 20° | 271.9 | 272.7 | 275.1 | 274.4 | 276.7 | 273.6 | 274.3 | 271.1 | 271.1 |
| 22.5° | 266.8 | 267.6 | 270.0 | 269.3 | 272.2 | 268.5 | 269.2 | 266.0 | 265.4 |
| 25° | 258.4 | 259.2 | 261.6 | 260.9 | 264.0 | 260.1 | 260.8 | 256.8 | 256.0 |
| 27.5° | 248.7 | 249.6 | 253.5 | 252.8 | 256.0 | 251.4 | 252.0 | 248.0 | 247.1 |
| 30° | 241.7 | 243.3 | 246.5 | 245.8 | 249.7 | 245.0 | 245.7 | 241.7 | 240.1 |
| 32.5° | 235.3 | 236.9 | 239.5 | 240.0 | 242.7 | 238.6 | 238.7 | 234.7 | 233.1 |
| 35° | 225.0 | 226.6 | 229.8 | 229.8 | 232.2 | 228.3 | 228.2 | 224.2 | 222.6 |
| 37.5° | 213.2 | 214.6 | 218.2 | 219.2 | 220.9 | 217.3 | 216.4 | 212.4 | 210.9 |
| 40° | 204.3 | 205.1 | 209.9 | 211.5 | 213.9 | 208.4 | 207.5 | 203.5 | 202.0 |
| 42.5° | 196.1 | 197.5 | 201.6 | 202.6 | 204.3 | 200.8 | 199.3 | 195.2 | 193.7 |
| 45° | 183.7 | 185.2 | 189.2 | 190.8 | 191.6 | 188.5 | 187.6 | 183.6 | 181.3 |
| 47.5° | 171.1 | 172.7 | 176.7 | 178.4 | 179.2 | 176.9 | 174.4 | 171.1 | 168.7 |
| 50° | 162.2 | 163.8 | 167.8 | 170.2 | 170.9 | 168.6 | 166.2 | 162.1 | 159.8 |
| 52.5° | 153.9 | 154.9 | 158.9 | 161.9 | 162.0 | 160.3 | 157.3 | 153.3 | 151.5 |
| 55° | 139.1 | 141.5 | 145.5 | 148.7 | 148.7 | 147.1 | 143.9 | 139.9 | 139.1 |
| 57.5° | 126.3 | 127.2 | 131.2 | 134.4 | 134.5 | 133.6 | 130.4 | 126.4 | 125.6 |
| 60° | 116.1 | 117.6 | 121.6 | 124.8 | 125.6 | 124.1 | 120.9 | 116.9 | 116.1 |
| 62.5° | 107.8 | 108.1 | 112.1 | 115.3 | 116.1 | 114.5 | 111.3 | 107.9 | 106.5 |
| 65° | 93.0 | 93.8 | 97.0 | 101.0 | 101.8 | 100.2 | 97.0 | 93.8 | 93.0 |
| 67.5° | 78.9 | 79.7 | 82.7 | 86.5 | 87.5 | 85.9 | 81.9 | 79.5 | 78.7 |
| 70° | 70.0 | 70.7 | 73.1 | 76.4 | 77.9 | 76.4 | 72.4 | 70.0 | 69.2 |
| 72.5° | 60.4 | 61.2 | 63.6 | 66.8 | 67.7 | 66.2 | 62.8 | 61.0 | 60.3 |
| 75° | 46.1 | 47.7 | 49.3 | 52.5 | 53.3 | 52.5 | 49.3 | 47.7 | 46.9 |
| 77.5° | 33.7 | 34.5 | 36.1 | 38.3 | 39.0 | 38.3 | 36.9 | 34.5 | 34.5 |
| 80° | 25.4 | 26.2 | 27.8 | 29.4 | 29.4 | 29.4 | 28.6 | 26.2 | 26.2 |
| 82.5° | 17.8 | 18.6 | 19.6 | 21.8 | 21.1 | 21.8 | 21.0 | 19.2 | 18.6 |
| 85° | 7.2 | 7.9 | 9.5 | 11.1 | 10.3 | 11.1 | 10.3 | 8.7 | 8.7 |
| 87.5° | 1.1 | 1.7 | 1.7 | 3.5 | 3.5 | 4.3 | 3.2 | 3.0 | 3.2 |
| 90° | 2.4 | 2.4 | 2.4 | 1.6 | 1.6 | 2.3 | 3.1 | 5.5 | 6.3 |
| 92.5° | 4.2 | 4.2 | 4.2 | 5.3 | 6.0 | 12.3 | 8.2 | 9.2 | 8.8 |
| 95° | 7.8 | 8.6 | 9.4 | 24.2 | 21.2 | 31.2 | 33.7 | 32.1 | 29.8 |
| 97.5° | 13.8 | 14.6 | 19.6 | 66.4 | 46.9 | 42.3 | 55.2 | 58.5 | 55.4 |
| 100° | 18.8 | 19.6 | 29.0 | 107.4 | 68.3 | 54.4 | 62.8 | 73.0 | 73.0 |
| 102.5° | 24.5 | 25.9 | 46.0 | 162.0 | 95.9 | 68.6 | 72.2 | 81.8 | 84.3 |
| 105° | 35.3 | 39.1 | 98.1 | 274.0 | 145.1 | 91.4 | 92.6 | 96.5 | 98.8 |
| 107.5° | 55.1 | 70.7 | 253.4 | 379.5 | 206.9 | 119.5 | 122.1 | 120.6 | 119.6 |
| 110° | 77.7 | 112.9 | 416.6 | 444.4 | 253.4 | 141.4 | 139.6 | 138.8 | 136.5 |



TEST NUMBER: P511842

CATALOG NUMBER: SQW-F-100U-025D-930-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 145.4 | 241.5 | 584.1 | 501.2 | 299.2 | 165.7 | 153.4 | 162.6 | 158.5 |
| 115° | 413.4 | 588.3 | 756.2 | 580.4 | 366.4 | 208.3 | 174.9 | 187.6 | 190.6 |
| 117.5° | 820.7 | 887.8 | 841.1 | 647.3 | 431.9 | 257.4 | 194.6 | 206.1 | 212.1 |
| 120° | 1000.2 | 985.7 | 882.6 | 692.5 | 474.6 | 292.1 | 210.2 | 217.4 | 222.8 |
| 122.5° | 1064.9 | 1030.7 | 917.1 | 731.4 | 515.4 | 329.8 | 230.3 | 227.5 | 234.1 |
| 125° | 1125.7 | 1081.3 | 968.8 | 784.5 | 577.4 | 390.2 | 269.1 | 243.3 | 247.9 |
| 127.5° | 1166.7 | 1120.2 | 1014.3 | 835.9 | 638.4 | 452.3 | 319.8 | 268.3 | 263.6 |
| 130° | 1189.3 | 1144.0 | 1042.6 | 865.0 | 678.6 | 493.7 | 356.2 | 290.8 | 279.3 |
| 132.5° | 1206.9 | 1165.3 | 1067.1 | 896.4 | 713.1 | 533.2 | 393.8 | 320.2 | 303.1 |
| 135° | 1231.7 | 1192.5 | 1100.6 | 938.2 | 763.3 | 591.5 | 451.1 | 372.9 | 348.3 |
| 137.5° | 1250.6 | 1214.1 | 1127.5 | 974.6 | 812.4 | 648.1 | 509.4 | 431.8 | 406.5 |
| 140° | 1260.7 | 1225.4 | 1143.8 | 996.7 | 842.5 | 683.8 | 548.4 | 470.1 | 444.8 |
| 142.5° | 1269.5 | 1235.4 | 1157.6 | 1018.2 | 871.4 | 718.8 | 589.8 | 509.1 | 485.0 |
| 145° | 1280.3 | 1248.1 | 1178.3 | 1048.9 | 912.4 | 770.5 | 650.3 | 568.3 | 546.0 |
| 147.5° | 1285.5 | 1256.6 | 1194.3 | 1076.0 | 952.1 | 819.8 | 708.9 | 630.3 | 606.4 |
| 150° | 1287.3 | 1259.7 | 1201.8 | 1092.5 | 975.9 | 851.6 | 745.3 | 671.8 | 647.2 |
| 152.5° | 1289.2 | 1260.4 | 1206.9 | 1106.5 | 997.9 | 881.0 | 781.0 | 711.3 | 689.3 |
| 155° | 1285.0 | 1259.7 | 1213.6 | 1123.6 | 1029.3 | 922.6 | 833.1 | 769.1 | 750.0 |
| 157.5° | 1275.3 | 1258.2 | 1215.0 | 1137.5 | 1054.2 | 960.5 | 882.1 | 824.1 | 805.2 |
| 160° | 1267.7 | 1253.2 | 1214.4 | 1145.2 | 1069.3 | 984.1 | 911.6 | 858.6 | 841.0 |
| 162.5° | 1259.6 | 1244.4 | 1211.3 | 1150.4 | 1083.7 | 1006.5 | 940.4 | 889.5 | 875.5 |
| 165° | 1243.4 | 1229.6 | 1205.8 | 1155.9 | 1102.2 | 1037.0 | 981.4 | 937.2 | 925.7 |
| 167.5° | 1222.4 | 1213.8 | 1194.3 | 1157.6 | 1116.6 | 1063.7 | 1016.2 | 980.9 | 970.7 |
| 170° | 1207.3 | 1201.2 | 1186.2 | 1157.2 | 1124.2 | 1080.5 | 1039.5 | 1007.9 | 1000.2 |
| 172.5° | 1187.9 | 1185.4 | 1175.5 | 1154.8 | 1130.5 | 1094.1 | 1059.5 | 1032.4 | 1025.3 |
| 175° | 1157.9 | 1161.0 | 1157.9 | 1149.0 | 1136.7 | 1112.2 | 1088.9 | 1067.6 | 1062.2 |
| 177.5° | 1135.3 | 1136.5 | 1138.5 | 1138.4 | 1136.6 | 1125.5 | 1112.7 | 1101.5 | 1102.7 |
| 180° | 1126.5 | 1126.5 | 1126.5 | 1126.5 | 1126.5 | 1126.5 | 1126.5 | 1126.5 | 1126.5 |

(END OF REPORT)