

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: P511798

Luminaire Tested: **SQW-F-075U-100D-835-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511798
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-17,
Test Lab: INNOVATION CENTER
Issue Date: 4/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQW-F-075U-100D-835-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

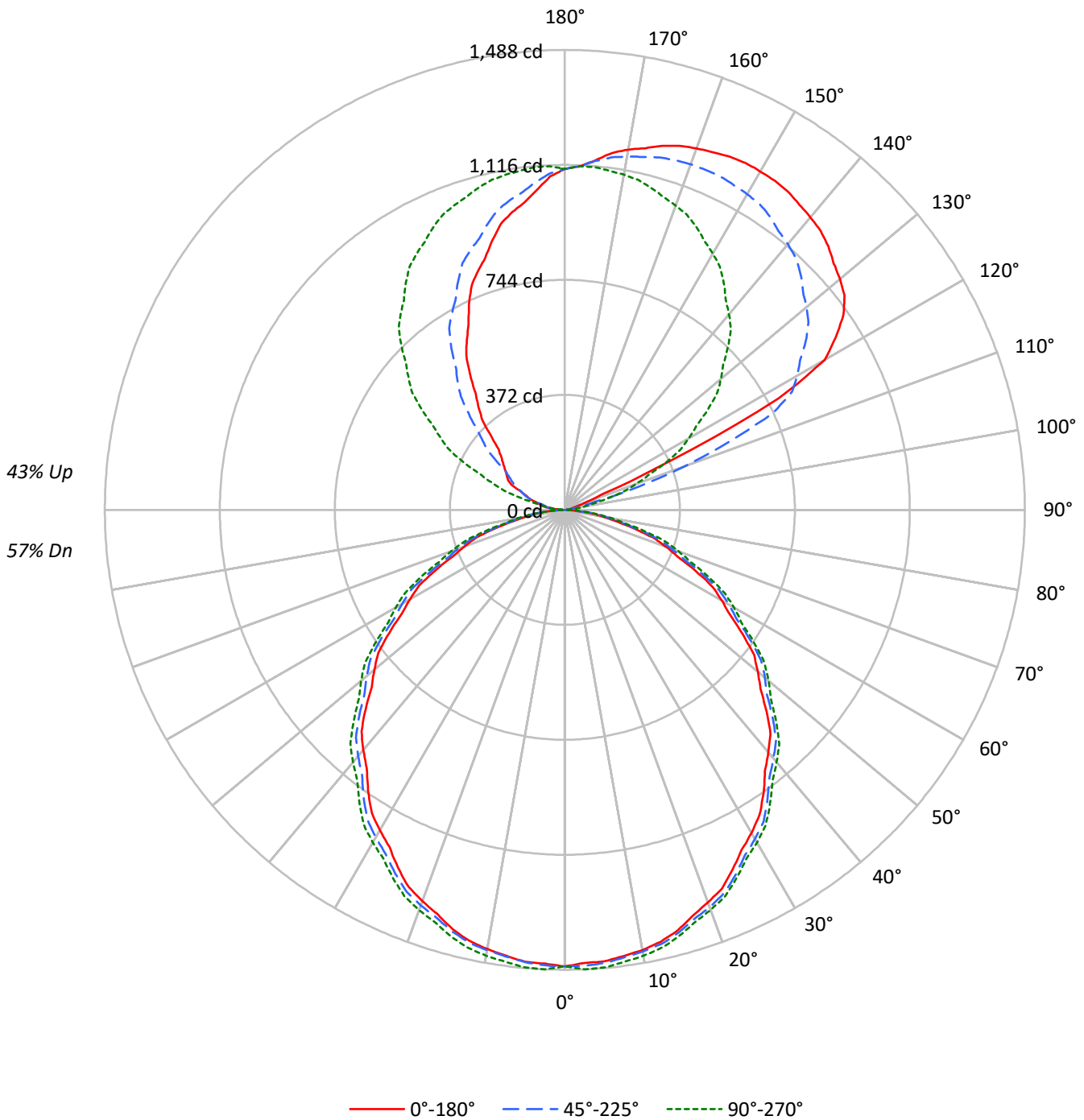
Lumens per Lamp: N/A
Luminaire Lumens: 7116.1 lumens
Efficiency: N/A
Efficacy: 124.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 57.2
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: P511798
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Luminous Intensity Polar Plot





TEST NUMBER: P511798

CATALOG NUMBER: SQW-F-075U-100D-835-1D-UNV-STD-W-4

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 | 109 | 109 | 109 | 109 | 101 | 101 | 101 | 101 | 87 | 87 | 87 | 74 | 74 | 74 | 62 | 62 | 62 | 57 | | | | 57 |
| 1 | 99 | 95 | 91 | 87 | 92 | 88 | 85 | 82 | 76 | 74 | 71 | 65 | 63 | 62 | 55 | 54 | 52 | 48 | | | | 48 |
| 2 | 90 | 83 | 77 | 71 | 84 | 77 | 72 | 67 | 67 | 63 | 59 | 57 | 54 | 51 | 48 | 46 | 44 | 40 | | | | 40 |
| 3 | 82 | 73 | 65 | 59 | 76 | 68 | 61 | 56 | 59 | 54 | 50 | 50 | 47 | 43 | 43 | 40 | 37 | 34 | | | | 34 |
| 4 | 75 | 64 | 56 | 50 | 70 | 60 | 53 | 47 | 52 | 47 | 42 | 45 | 41 | 37 | 38 | 35 | 32 | 29 | | | | 29 |
| 5 | 69 | 57 | 49 | 43 | 64 | 54 | 46 | 41 | 47 | 41 | 36 | 40 | 36 | 32 | 34 | 31 | 28 | 25 | | | | 25 |
| 6 | 64 | 51 | 43 | 37 | 59 | 48 | 41 | 35 | 42 | 36 | 32 | 36 | 32 | 28 | 31 | 27 | 25 | 22 | | | | 22 |
| 7 | 59 | 46 | 38 | 33 | 55 | 43 | 36 | 31 | 38 | 32 | 28 | 33 | 28 | 25 | 28 | 25 | 22 | 19 | | | | 19 |
| 8 | 55 | 42 | 34 | 29 | 51 | 40 | 32 | 27 | 35 | 29 | 25 | 30 | 26 | 22 | 26 | 22 | 19 | 17 | | | | 17 |
| 9 | 51 | 38 | 31 | 26 | 47 | 36 | 29 | 24 | 32 | 26 | 22 | 28 | 23 | 20 | 24 | 20 | 18 | 15 | | | | 15 |
| 10 | 48 | 35 | 28 | 23 | 44 | 33 | 27 | 22 | 29 | 24 | 20 | 26 | 21 | 18 | 22 | 19 | 16 | 14 | | | | 14 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|-------|-------|-------|
| 0° | 47695 | 47695 | 47695 |
| 5° | 47521 | 48169 | 47586 |
| 10° | 47414 | 48037 | 47316 |
| 15° | 47104 | 47739 | 46937 |
| 20° | 46461 | 47354 | 46289 |
| 25° | 45749 | 46854 | 45500 |
| 30° | 45006 | 46348 | 44633 |
| 35° | 44152 | 45650 | 43718 |
| 40° | 43166 | 44936 | 42744 |
| 45° | 42106 | 44115 | 41603 |
| 50° | 40943 | 43204 | 40391 |
| 55° | 39578 | 41999 | 39015 |
| 60° | 37846 | 40752 | 37329 |
| 65° | 35607 | 39121 | 35148 |
| 70° | 32762 | 36916 | 32384 |
| 75° | 28447 | 33437 | 29071 |
| 80° | 22873 | 27708 | 24175 |
| 85° | 12597 | 18896 | 16302 |



TEST NUMBER: P511798

CATALOG NUMBER: SQW-F-075U-100D-835-1D-UNV-STD-W-4

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 139.6 | 2.0 |
| 10°-20° | 398.1 | 5.6 |
| 20°-30° | 596.7 | 8.4 |
| 30°-40° | 709.4 | 10.0 |
| 40°-50° | 726.3 | 10.2 |
| 50°-60° | 647.4 | 9.1 |
| 60°-70° | 482.6 | 6.8 |
| 70°-80° | 263.7 | 3.7 |
| 80°-90° | 62.5 | 0.9 |
| 90°-100° | 27.8 | 0.4 |
| 100°-110° | 128.9 | 1.8 |
| 110°-120° | 375.9 | 5.3 |
| 120°-130° | 546.3 | 7.7 |
| 130°-140° | 584.5 | 8.2 |
| 140°-150° | 559.2 | 7.9 |
| 150°-160° | 461.1 | 6.5 |
| 160°-170° | 301.6 | 4.2 |
| 170°-180° | 104.6 | 1.5 |
| 0°-30° | 1134.4 | 15.9 |
| 0°-40° | 1843.8 | 25.9 |
| 0°-60° | 3217.5 | 45.2 |
| 0°-90° | 4026.3 | 56.6 |
| 90°-120° | 532.6 | 7.5 |
| 90°-150° | 2222.6 | 31.2 |
| 90°-180° | 3090.0 | 43.4 |
| 0°-180° | 7116.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|------|------|------|------|------|------|------|
| 0° | 1477 | 1477 | 1477 | 1477 | 1477 | |
| 5° | 1466 | 1472 | 1486 | 1469 | 1468 | 139 |
| 15° | 1409 | 1417 | 1428 | 1411 | 1404 | 397 |
| 25° | 1284 | 1305 | 1315 | 1298 | 1277 | 592 |
| 35° | 1120 | 1143 | 1158 | 1135 | 1109 | 700 |
| 45° | 922 | 950 | 966 | 939 | 911 | 711 |
| 55° | 703 | 731 | 746 | 724 | 693 | 628 |
| 65° | 466 | 489 | 512 | 485 | 460 | 461 |
| 75° | 228 | 246 | 268 | 248 | 233 | 244 |
| 85° | 34 | 47 | 51 | 52 | 44 | 50 |
| 90° | 2 | 2 | 1 | 4 | 8 | 2 |
| 95° | 8 | 10 | 21 | 34 | 31 | 9 |
| 105° | 34 | 100 | 143 | 91 | 98 | 42 |
| 115° | 378 | 744 | 358 | 171 | 189 | 444 |
| 125° | 1101 | 951 | 564 | 261 | 238 | 973 |
| 135° | 1205 | 1079 | 746 | 439 | 337 | 930 |
| 145° | 1257 | 1158 | 896 | 640 | 534 | 787 |
| 155° | 1261 | 1190 | 1008 | 817 | 733 | 583 |
| 165° | 1219 | 1180 | 1079 | 960 | 904 | 346 |
| 175° | 1135 | 1133 | 1113 | 1065 | 1038 | 110 |
| 180° | 1103 | 1103 | 1103 | 1103 | 1103 | |



TEST NUMBER: P511798

CATALOG NUMBER: SQW-F-075U-100D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1477.0 | 1477.0 | 1477.0 | 1477.0 | 1477.0 | 1477.0 | 1477.0 | 1477.0 | 1477.0 |
| 2.5° | 1467.4 | 1474.4 | 1476.2 | 1474.9 | 1488.2 | 1475.7 | 1475.4 | 1474.5 | 1469.8 |
| 5° | 1466.0 | 1468.0 | 1472.0 | 1469.4 | 1486.0 | 1469.4 | 1469.0 | 1467.0 | 1468.0 |
| 7.5° | 1456.4 | 1458.4 | 1460.6 | 1458.0 | 1474.6 | 1457.6 | 1457.4 | 1454.0 | 1455.0 |
| 10° | 1446.0 | 1448.0 | 1451.0 | 1448.4 | 1465.0 | 1446.4 | 1447.0 | 1442.0 | 1443.0 |
| 12.5° | 1431.6 | 1433.6 | 1439.0 | 1435.6 | 1451.4 | 1433.6 | 1434.2 | 1428.4 | 1428.6 |
| 15° | 1409.0 | 1411.9 | 1417.0 | 1411.4 | 1428.0 | 1410.4 | 1411.0 | 1405.0 | 1404.0 |
| 17.5° | 1376.8 | 1382.7 | 1388.8 | 1383.9 | 1398.8 | 1382.0 | 1382.8 | 1373.5 | 1371.0 |
| 20° | 1352.0 | 1357.9 | 1368.0 | 1362.4 | 1378.0 | 1360.4 | 1362.0 | 1348.0 | 1347.0 |
| 22.5° | 1327.2 | 1331.5 | 1344.0 | 1338.4 | 1354.0 | 1336.4 | 1337.2 | 1320.8 | 1320.6 |
| 25° | 1284.0 | 1289.9 | 1305.0 | 1300.3 | 1315.0 | 1297.4 | 1298.0 | 1279.9 | 1277.0 |
| 27.5° | 1239.8 | 1245.9 | 1261.2 | 1256.7 | 1271.8 | 1253.8 | 1255.0 | 1234.9 | 1229.0 |
| 30° | 1207.0 | 1213.8 | 1230.0 | 1226.4 | 1243.0 | 1223.4 | 1223.0 | 1202.9 | 1197.0 |
| 32.5° | 1171.8 | 1180.2 | 1196.4 | 1194.3 | 1209.4 | 1190.6 | 1188.6 | 1168.5 | 1162.6 |
| 35° | 1120.0 | 1128.8 | 1143.0 | 1144.3 | 1158.0 | 1140.4 | 1135.0 | 1115.8 | 1109.0 |
| 37.5° | 1064.0 | 1072.2 | 1087.6 | 1090.3 | 1103.6 | 1085.2 | 1077.6 | 1060.2 | 1052.4 |
| 40° | 1024.0 | 1033.8 | 1050.0 | 1054.3 | 1066.0 | 1048.4 | 1040.0 | 1021.8 | 1014.0 |
| 42.5° | 984.8 | 994.6 | 1011.6 | 1018.2 | 1026.8 | 1010.0 | 1000.0 | 982.6 | 973.2 |
| 45° | 922.0 | 931.8 | 950.0 | 959.2 | 966.0 | 950.4 | 939.0 | 920.8 | 911.0 |
| 47.5° | 858.2 | 869.0 | 887.4 | 898.7 | 903.2 | 888.9 | 878.4 | 858.2 | 847.2 |
| 50° | 815.0 | 825.8 | 845.0 | 857.1 | 860.0 | 847.3 | 836.0 | 815.7 | 804.0 |
| 52.5° | 771.0 | 780.2 | 799.4 | 813.0 | 814.4 | 804.0 | 792.0 | 771.8 | 760.8 |
| 55° | 703.0 | 712.8 | 731.0 | 747.0 | 746.0 | 739.2 | 724.0 | 703.8 | 693.0 |
| 57.5° | 633.2 | 641.0 | 660.0 | 677.0 | 677.4 | 669.6 | 655.0 | 635.0 | 624.4 |
| 60° | 586.0 | 593.8 | 612.0 | 629.0 | 631.0 | 623.2 | 607.0 | 587.8 | 578.0 |
| 62.5° | 538.8 | 545.8 | 563.2 | 581.8 | 583.8 | 576.0 | 559.0 | 540.6 | 530.8 |
| 65° | 466.0 | 471.9 | 489.0 | 508.1 | 512.0 | 503.2 | 485.0 | 468.8 | 460.0 |
| 67.5° | 394.2 | 399.9 | 415.8 | 434.7 | 439.8 | 429.8 | 413.4 | 398.0 | 389.4 |
| 70° | 347.0 | 351.9 | 367.0 | 385.1 | 391.0 | 380.2 | 367.0 | 350.8 | 343.0 |
| 72.5° | 299.0 | 303.9 | 319.0 | 336.3 | 341.4 | 331.4 | 319.0 | 304.5 | 301.4 |
| 75° | 228.0 | 232.9 | 246.0 | 264.1 | 268.0 | 259.2 | 248.0 | 235.0 | 233.0 |
| 77.5° | 164.6 | 167.7 | 179.6 | 192.1 | 194.6 | 189.3 | 182.6 | 171.0 | 170.0 |
| 80° | 123.0 | 126.9 | 138.0 | 148.0 | 149.0 | 146.1 | 141.0 | 131.0 | 130.0 |
| 82.5° | 86.2 | 89.3 | 98.8 | 108.0 | 106.6 | 106.8 | 103.4 | 94.2 | 94.0 |
| 85° | 34.0 | 36.9 | 47.0 | 54.9 | 51.0 | 53.9 | 52.0 | 45.0 | 44.0 |
| 87.5° | 3.6 | 4.4 | 8.4 | 16.2 | 14.6 | 17.2 | 15.2 | 11.9 | 12.1 |
| 90° | 2.1 | 2.1 | 2.1 | 1.0 | 1.0 | 2.0 | 4.1 | 7.3 | 8.3 |
| 92.5° | 3.7 | 4.5 | 4.6 | 5.2 | 6.0 | 11.9 | 8.3 | 9.7 | 9.9 |
| 95° | 8.3 | 8.3 | 10.4 | 24.8 | 20.7 | 30.9 | 34.2 | 32.1 | 31.1 |
| 97.5° | 13.7 | 14.7 | 20.1 | 65.1 | 46.6 | 41.4 | 56.4 | 60.2 | 56.6 |
| 100° | 18.7 | 19.7 | 30.1 | 102.8 | 67.4 | 53.2 | 62.2 | 73.6 | 75.7 |
| 102.5° | 24.5 | 26.3 | 46.6 | 158.6 | 94.7 | 67.6 | 71.3 | 81.9 | 84.8 |
| 105° | 34.2 | 39.3 | 99.5 | 262.6 | 143.0 | 89.3 | 91.2 | 94.4 | 98.5 |
| 107.5° | 53.1 | 71.3 | 252.7 | 372.8 | 202.5 | 117.2 | 121.3 | 118.4 | 118.6 |
| 110° | 74.6 | 113.1 | 413.5 | 436.1 | 245.6 | 139.2 | 137.8 | 135.7 | 132.7 |

TEST NUMBER: P511798

CATALOG NUMBER: SQW-F-075U-100D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 135.1 | 236.9 | 576.0 | 492.3 | 291.2 | 162.9 | 151.1 | 160.5 | 154.2 |
| 115° | 378.3 | 573.9 | 744.1 | 569.4 | 357.6 | 203.5 | 171.0 | 184.6 | 188.6 |
| 117.5° | 780.2 | 868.8 | 827.9 | 637.9 | 421.0 | 250.9 | 190.1 | 199.8 | 206.5 |
| 120° | 970.1 | 967.0 | 868.5 | 680.1 | 463.3 | 285.9 | 204.2 | 210.5 | 215.6 |
| 122.5° | 1039.7 | 1010.7 | 902.5 | 718.3 | 503.9 | 323.3 | 223.2 | 219.6 | 225.5 |
| 125° | 1100.7 | 1061.1 | 951.4 | 770.5 | 563.8 | 380.4 | 261.2 | 234.3 | 238.4 |
| 127.5° | 1140.3 | 1096.9 | 993.3 | 818.4 | 621.8 | 440.9 | 311.3 | 257.5 | 252.7 |
| 130° | 1161.8 | 1119.3 | 1019.8 | 847.6 | 659.2 | 479.8 | 346.2 | 280.6 | 268.4 |
| 132.5° | 1180.1 | 1139.9 | 1044.7 | 876.0 | 695.6 | 519.5 | 383.5 | 309.5 | 291.6 |
| 135° | 1205.3 | 1166.8 | 1078.9 | 917.5 | 746.2 | 577.0 | 439.4 | 362.2 | 336.8 |
| 137.5° | 1224.6 | 1189.6 | 1105.9 | 954.6 | 795.3 | 633.6 | 498.1 | 420.4 | 394.5 |
| 140° | 1235.4 | 1202.0 | 1122.4 | 978.0 | 826.0 | 670.0 | 537.9 | 458.6 | 434.3 |
| 142.5° | 1245.4 | 1212.7 | 1136.5 | 998.9 | 855.0 | 704.7 | 578.5 | 497.5 | 473.2 |
| 145° | 1257.2 | 1225.8 | 1157.7 | 1029.3 | 896.5 | 756.7 | 639.5 | 557.1 | 533.8 |
| 147.5° | 1262.8 | 1233.8 | 1172.8 | 1056.2 | 933.6 | 804.7 | 696.1 | 617.0 | 593.5 |
| 150° | 1264.4 | 1237.1 | 1179.4 | 1072.2 | 957.6 | 836.0 | 731.7 | 657.6 | 633.2 |
| 152.5° | 1265.3 | 1237.1 | 1184.4 | 1085.6 | 979.2 | 864.1 | 766.5 | 696.6 | 673.9 |
| 155° | 1261.3 | 1236.0 | 1189.8 | 1101.7 | 1008.4 | 904.1 | 816.7 | 753.0 | 732.7 |
| 157.5° | 1252.2 | 1233.5 | 1190.6 | 1115.2 | 1032.9 | 941.5 | 864.4 | 806.1 | 787.1 |
| 160° | 1244.7 | 1228.5 | 1189.8 | 1122.8 | 1047.8 | 963.7 | 893.4 | 840.1 | 821.9 |
| 162.5° | 1234.8 | 1218.6 | 1185.7 | 1126.3 | 1061.1 | 984.3 | 920.7 | 870.0 | 855.0 |
| 165° | 1218.8 | 1203.6 | 1180.5 | 1131.6 | 1078.9 | 1015.1 | 959.7 | 915.9 | 903.8 |
| 167.5° | 1198.5 | 1189.0 | 1169.1 | 1133.7 | 1093.2 | 1041.5 | 995.4 | 959.7 | 949.4 |
| 170° | 1183.6 | 1176.5 | 1160.8 | 1133.1 | 1100.7 | 1057.1 | 1017.8 | 985.5 | 978.4 |
| 172.5° | 1164.5 | 1160.7 | 1150.0 | 1130.0 | 1106.5 | 1071.0 | 1037.7 | 1009.5 | 1002.4 |
| 175° | 1134.9 | 1136.9 | 1132.8 | 1125.3 | 1113.1 | 1088.8 | 1065.4 | 1045.6 | 1038.5 |
| 177.5° | 1112.7 | 1112.7 | 1113.5 | 1114.3 | 1112.7 | 1102.2 | 1090.3 | 1078.7 | 1079.5 |
| 180° | 1102.7 | 1102.7 | 1102.7 | 1102.7 | 1102.7 | 1102.7 | 1102.7 | 1102.7 | 1102.7 |

(END OF REPORT)