

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: P511793

Luminaire Tested: **SQW-F-075U-075D-840-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511793
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-075D-840-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

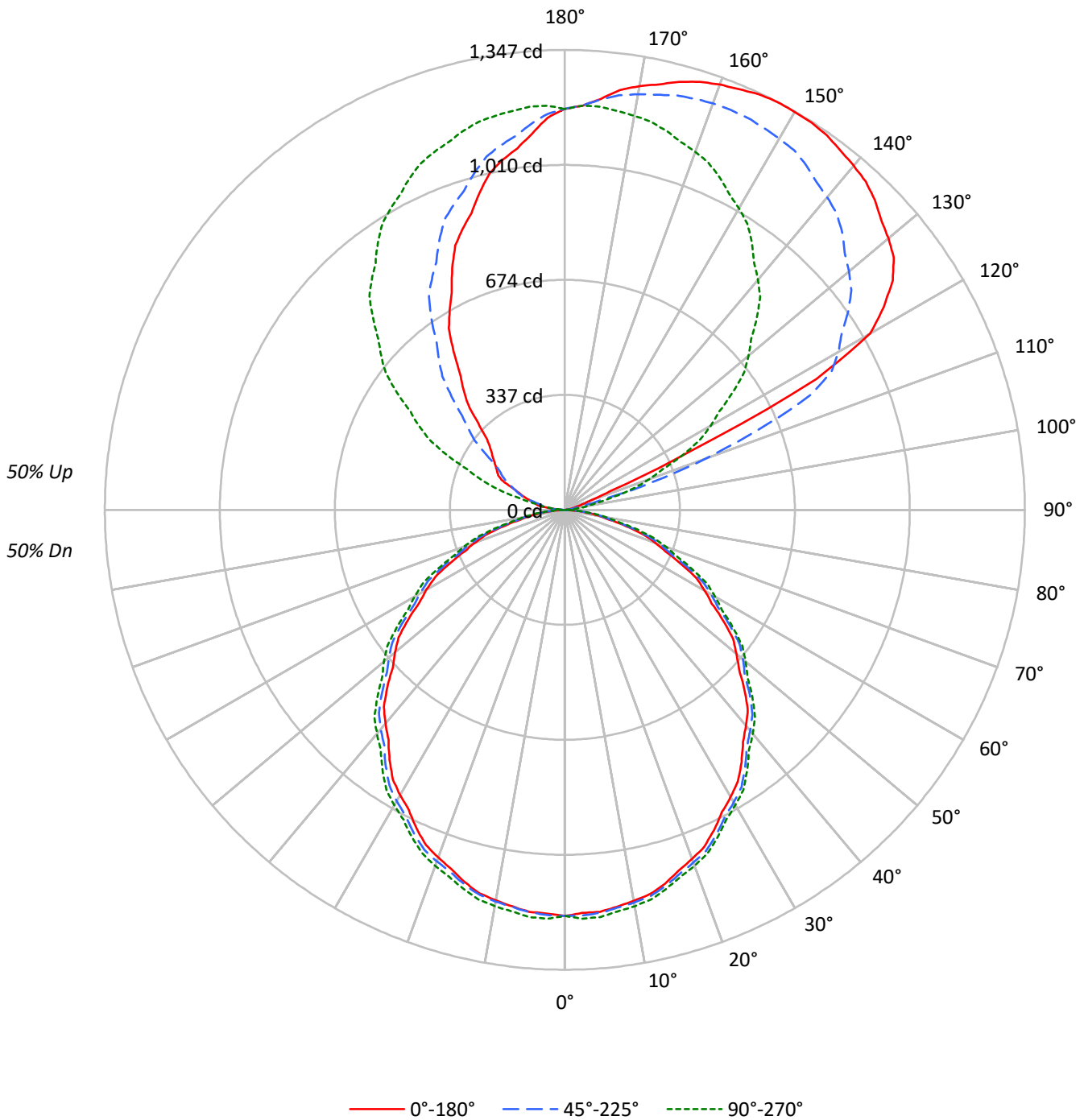
Lumens per Lamp: N/A
Luminaire Lumens: 6530.9 lumens
Efficiency: N/A
Efficacy: 136.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 47.8
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: P511793
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Luminous Intensity Polar Plot





TEST NUMBER: P511793

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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 | 83 | 83 | 83 | 69 | 69 | 69 | 56 | 56 | 56 | 50 |
| 1 | 98 | 93 | 89 | 86 | 90 | 86 | 83 | 80 | 73 | 70 | 68 | 61 | 59 | 57 | 49 | 48 | 47 | 42 |
| 2 | 89 | 81 | 75 | 70 | 82 | 75 | 70 | 65 | 64 | 60 | 56 | 53 | 50 | 48 | 43 | 41 | 40 | 35 |
| 3 | 81 | 71 | 64 | 58 | 74 | 66 | 60 | 55 | 56 | 51 | 47 | 47 | 43 | 40 | 38 | 36 | 34 | 29 |
| 4 | 74 | 63 | 55 | 49 | 68 | 59 | 52 | 46 | 50 | 44 | 40 | 42 | 38 | 34 | 34 | 31 | 29 | 25 |
| 5 | 68 | 56 | 48 | 42 | 62 | 52 | 45 | 40 | 45 | 39 | 35 | 37 | 33 | 30 | 31 | 28 | 25 | 22 |
| 6 | 63 | 50 | 42 | 36 | 57 | 47 | 40 | 34 | 40 | 34 | 30 | 34 | 29 | 26 | 28 | 25 | 22 | 19 |
| 7 | 58 | 45 | 37 | 32 | 53 | 42 | 35 | 30 | 36 | 31 | 26 | 31 | 26 | 23 | 25 | 22 | 19 | 17 |
| 8 | 54 | 41 | 33 | 28 | 49 | 38 | 31 | 27 | 33 | 27 | 23 | 28 | 24 | 20 | 23 | 20 | 17 | 15 |
| 9 | 50 | 38 | 30 | 25 | 46 | 35 | 28 | 24 | 30 | 25 | 21 | 26 | 21 | 18 | 21 | 18 | 16 | 14 |
| 10 | 47 | 34 | 27 | 22 | 43 | 32 | 26 | 21 | 28 | 23 | 19 | 24 | 20 | 17 | 20 | 17 | 14 | 12 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|-------|-------|-------|
| 0° | 38405 | 38405 | 38405 |
| 5° | 38312 | 38795 | 38312 |
| 10° | 38125 | 38650 | 38089 |
| 15° | 37907 | 38409 | 37767 |
| 20° | 37395 | 38127 | 37247 |
| 25° | 36838 | 37707 | 36646 |
| 30° | 36206 | 37239 | 35971 |
| 35° | 35550 | 36685 | 35258 |
| 40° | 34786 | 36084 | 34427 |
| 45° | 33940 | 35447 | 33552 |
| 50° | 32951 | 34714 | 32574 |
| 55° | 31888 | 33808 | 31471 |
| 60° | 30529 | 32802 | 30186 |
| 65° | 28722 | 31488 | 28478 |
| 70° | 26540 | 29656 | 26342 |
| 75° | 23119 | 26563 | 23119 |
| 80° | 18615 | 22185 | 19210 |
| 85° | 10634 | 15006 | 12634 |



TEST NUMBER: P511793

CATALOG NUMBER: SQW-F-075U-075D-840-1D-UNV-STD-W-4

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 112.4 | 1.7 |
| 10°-20° | 320.4 | 4.9 |
| 20°-30° | 480.1 | 7.4 |
| 30°-40° | 570.8 | 8.7 |
| 40°-50° | 584.3 | 8.9 |
| 50°-60° | 521.0 | 8.0 |
| 60°-70° | 389.3 | 6.0 |
| 70°-80° | 212.2 | 3.2 |
| 80°-90° | 50.6 | 0.8 |
| 90°-100° | 29.6 | 0.5 |
| 100°-110° | 137.3 | 2.1 |
| 110°-120° | 400.2 | 6.1 |
| 120°-130° | 581.6 | 8.9 |
| 130°-140° | 622.3 | 9.5 |
| 140°-150° | 595.4 | 9.1 |
| 150°-160° | 490.9 | 7.5 |
| 160°-170° | 321.1 | 4.9 |
| 170°-180° | 111.3 | 1.7 |
| 0°-30° | 912.9 | 14.0 |
| 0°-40° | 1483.7 | 22.7 |
| 0°-60° | 2589.0 | 39.6 |
| 0°-90° | 3241.1 | 49.6 |
| 90°-120° | 567.1 | 8.7 |
| 90°-150° | 2366.4 | 36.2 |
| 90°-180° | 3290.0 | 50.4 |
| 0°-180° | 6530.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|------|------|------|------|------|------|------|
| 0° | 1189 | 1189 | 1189 | 1189 | 1189 | |
| 5° | 1182 | 1185 | 1197 | 1183 | 1182 | 112 |
| 15° | 1134 | 1140 | 1149 | 1136 | 1130 | 319 |
| 25° | 1034 | 1050 | 1058 | 1046 | 1028 | 476 |
| 35° | 902 | 920 | 931 | 915 | 894 | 563 |
| 45° | 743 | 766 | 776 | 757 | 735 | 573 |
| 55° | 566 | 589 | 600 | 582 | 559 | 506 |
| 65° | 376 | 395 | 412 | 393 | 373 | 373 |
| 75° | 185 | 199 | 213 | 200 | 185 | 198 |
| 85° | 29 | 37 | 40 | 42 | 34 | 41 |
| 90° | 2 | 2 | 1 | 4 | 9 | 2 |
| 95° | 9 | 11 | 22 | 36 | 33 | 10 |
| 105° | 36 | 106 | 152 | 97 | 105 | 44 |
| 115° | 403 | 792 | 381 | 182 | 201 | 473 |
| 125° | 1172 | 1013 | 600 | 278 | 254 | 1036 |
| 135° | 1283 | 1149 | 794 | 468 | 359 | 990 |
| 145° | 1339 | 1233 | 954 | 681 | 568 | 838 |
| 155° | 1343 | 1267 | 1074 | 870 | 780 | 620 |
| 165° | 1298 | 1257 | 1149 | 1022 | 962 | 368 |
| 175° | 1208 | 1206 | 1185 | 1134 | 1106 | 117 |
| 180° | 1174 | 1174 | 1174 | 1174 | 1174 | |



TEST NUMBER: P511793

CATALOG NUMBER: SQW-F-075U-075D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1189.3 | 1189.3 | 1189.3 | 1189.3 | 1189.3 | 1189.3 | 1189.3 | 1189.3 | 1189.3 |
| 2.5° | 1181.6 | 1187.5 | 1188.5 | 1187.0 | 1198.7 | 1187.9 | 1187.6 | 1187.5 | 1183.3 |
| 5° | 1181.9 | 1181.9 | 1185.1 | 1183.2 | 1196.8 | 1183.2 | 1182.9 | 1180.8 | 1181.9 |
| 7.5° | 1172.1 | 1173.3 | 1175.7 | 1173.6 | 1186.3 | 1172.6 | 1173.3 | 1170.2 | 1171.9 |
| 10° | 1162.7 | 1164.8 | 1168.0 | 1165.1 | 1178.7 | 1164.1 | 1164.8 | 1161.6 | 1161.6 |
| 12.5° | 1152.5 | 1154.6 | 1158.6 | 1154.9 | 1168.4 | 1154.7 | 1154.6 | 1150.6 | 1150.6 |
| 15° | 1133.9 | 1136.0 | 1140.3 | 1136.4 | 1148.9 | 1134.3 | 1136.1 | 1130.7 | 1129.7 |
| 17.5° | 1107.8 | 1112.1 | 1117.8 | 1113.8 | 1126.5 | 1111.7 | 1112.7 | 1105.4 | 1103.5 |
| 20° | 1088.2 | 1093.4 | 1099.9 | 1095.9 | 1109.5 | 1093.8 | 1095.6 | 1084.9 | 1083.9 |
| 22.5° | 1067.7 | 1072.1 | 1081.1 | 1077.2 | 1089.9 | 1075.1 | 1076.9 | 1062.8 | 1062.6 |
| 25° | 1033.9 | 1038.0 | 1049.8 | 1046.9 | 1058.3 | 1043.8 | 1045.6 | 1029.6 | 1028.5 |
| 27.5° | 997.4 | 1002.9 | 1014.7 | 1012.0 | 1023.4 | 1007.8 | 1009.6 | 992.3 | 990.2 |
| 30° | 971.0 | 977.3 | 989.1 | 987.3 | 998.7 | 983.1 | 984.9 | 966.7 | 964.7 |
| 32.5° | 942.9 | 950.8 | 962.7 | 961.7 | 972.3 | 957.5 | 956.8 | 939.5 | 936.5 |
| 35° | 901.8 | 908.1 | 919.9 | 921.2 | 930.6 | 917.0 | 914.6 | 897.5 | 894.4 |
| 37.5° | 856.7 | 863.1 | 875.0 | 877.7 | 885.9 | 872.5 | 868.6 | 851.5 | 848.2 |
| 40° | 825.2 | 832.5 | 844.3 | 848.8 | 856.0 | 843.6 | 837.9 | 820.8 | 816.7 |
| 42.5° | 792.8 | 800.9 | 813.7 | 818.1 | 824.5 | 812.0 | 805.6 | 789.3 | 784.3 |
| 45° | 743.2 | 751.5 | 765.5 | 771.0 | 776.2 | 764.7 | 757.0 | 739.9 | 734.7 |
| 47.5° | 691.7 | 700.0 | 714.4 | 721.1 | 725.1 | 715.7 | 706.8 | 689.6 | 683.3 |
| 50° | 655.9 | 664.2 | 680.4 | 687.9 | 691.0 | 681.6 | 671.8 | 654.7 | 648.4 |
| 52.5° | 621.0 | 628.5 | 644.6 | 652.9 | 655.2 | 647.5 | 636.9 | 620.6 | 613.5 |
| 55° | 566.4 | 573.7 | 588.8 | 598.4 | 600.5 | 594.3 | 582.4 | 565.2 | 559.0 |
| 57.5° | 510.2 | 517.5 | 532.4 | 543.1 | 545.4 | 539.1 | 526.2 | 511.1 | 504.0 |
| 60° | 472.7 | 480.0 | 494.0 | 504.8 | 507.9 | 501.6 | 488.7 | 473.7 | 467.4 |
| 62.5° | 434.4 | 440.0 | 454.9 | 465.6 | 470.4 | 465.0 | 451.2 | 434.5 | 429.1 |
| 65° | 375.9 | 382.1 | 395.0 | 407.9 | 412.1 | 407.9 | 392.9 | 377.9 | 372.7 |
| 67.5° | 319.4 | 323.6 | 335.4 | 348.1 | 353.3 | 348.7 | 335.2 | 319.8 | 316.4 |
| 70° | 281.1 | 285.3 | 297.1 | 308.9 | 314.1 | 307.9 | 296.0 | 283.1 | 279.0 |
| 72.5° | 241.1 | 245.2 | 256.2 | 268.0 | 272.4 | 266.1 | 256.0 | 244.8 | 239.8 |
| 75° | 185.3 | 189.4 | 199.1 | 208.8 | 212.9 | 208.8 | 200.2 | 190.5 | 185.3 |
| 77.5° | 133.3 | 137.3 | 145.7 | 154.0 | 155.9 | 153.2 | 147.1 | 138.8 | 134.8 |
| 80° | 100.1 | 103.2 | 110.7 | 118.2 | 119.3 | 118.2 | 113.9 | 106.4 | 103.3 |
| 82.5° | 70.3 | 72.6 | 80.1 | 85.8 | 85.2 | 87.5 | 83.3 | 76.6 | 74.3 |
| 85° | 28.7 | 30.8 | 37.3 | 43.6 | 40.5 | 45.7 | 41.5 | 37.2 | 34.1 |
| 87.5° | 3.8 | 3.8 | 7.3 | 12.1 | 11.3 | 14.8 | 12.0 | 10.0 | 8.6 |
| 90° | 2.2 | 2.2 | 2.2 | 1.1 | 1.1 | 2.2 | 4.4 | 7.7 | 8.8 |
| 92.5° | 4.0 | 4.8 | 4.9 | 5.5 | 6.4 | 12.7 | 8.8 | 10.4 | 10.6 |
| 95° | 8.8 | 8.8 | 11.0 | 26.4 | 22.1 | 32.9 | 36.4 | 34.2 | 33.1 |
| 97.5° | 14.6 | 15.6 | 21.4 | 69.3 | 49.7 | 44.0 | 60.0 | 64.1 | 60.3 |
| 100° | 19.9 | 20.9 | 32.0 | 109.5 | 71.7 | 56.6 | 66.2 | 78.4 | 80.6 |
| 102.5° | 26.0 | 28.0 | 49.7 | 168.8 | 100.9 | 71.9 | 75.9 | 87.2 | 90.3 |
| 105° | 36.4 | 41.8 | 105.9 | 279.6 | 152.3 | 95.1 | 97.1 | 100.5 | 104.8 |
| 107.5° | 56.5 | 75.9 | 269.0 | 396.9 | 215.6 | 124.8 | 129.1 | 126.0 | 126.2 |
| 110° | 79.5 | 120.5 | 440.3 | 464.4 | 261.5 | 148.2 | 146.8 | 144.5 | 141.2 |



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CATALOG NUMBER: SQW-F-075U-075D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 143.9 | 252.2 | 613.3 | 524.2 | 310.1 | 173.5 | 160.9 | 170.9 | 164.2 |
| 115° | 402.8 | 611.0 | 792.3 | 606.2 | 380.7 | 216.7 | 182.1 | 196.5 | 200.8 |
| 117.5° | 830.7 | 925.0 | 881.5 | 679.1 | 448.2 | 267.2 | 202.4 | 212.7 | 219.8 |
| 120° | 1032.9 | 1029.6 | 924.7 | 724.2 | 493.3 | 304.4 | 217.4 | 224.1 | 229.5 |
| 122.5° | 1107.0 | 1076.2 | 960.9 | 764.8 | 536.5 | 344.3 | 237.7 | 233.9 | 240.1 |
| 125° | 1171.9 | 1129.8 | 1013.0 | 820.4 | 600.3 | 405.0 | 278.1 | 249.5 | 253.8 |
| 127.5° | 1214.1 | 1167.9 | 1057.6 | 871.4 | 662.1 | 469.4 | 331.5 | 274.2 | 269.0 |
| 130° | 1237.0 | 1191.7 | 1085.9 | 902.5 | 701.8 | 510.9 | 368.6 | 298.8 | 285.8 |
| 132.5° | 1256.5 | 1213.7 | 1112.3 | 932.7 | 740.7 | 553.1 | 408.3 | 329.5 | 310.5 |
| 135° | 1283.4 | 1242.4 | 1148.8 | 976.9 | 794.5 | 614.3 | 467.9 | 385.6 | 358.6 |
| 137.5° | 1303.9 | 1266.6 | 1177.4 | 1016.4 | 846.8 | 674.6 | 530.3 | 447.6 | 420.0 |
| 140° | 1315.4 | 1279.8 | 1195.1 | 1041.3 | 879.5 | 713.3 | 572.7 | 488.3 | 462.4 |
| 142.5° | 1326.0 | 1291.2 | 1210.1 | 1063.6 | 910.4 | 750.3 | 616.0 | 529.8 | 503.9 |
| 145° | 1338.6 | 1305.1 | 1232.6 | 1095.9 | 954.5 | 805.6 | 680.9 | 593.1 | 568.3 |
| 147.5° | 1344.5 | 1313.7 | 1248.7 | 1124.6 | 994.0 | 856.8 | 741.1 | 656.9 | 631.9 |
| 150° | 1346.3 | 1317.1 | 1255.8 | 1141.6 | 1019.6 | 890.2 | 779.1 | 700.1 | 674.2 |
| 152.5° | 1347.2 | 1317.2 | 1261.1 | 1155.9 | 1042.6 | 920.0 | 816.2 | 741.7 | 717.5 |
| 155° | 1343.0 | 1316.0 | 1266.8 | 1173.0 | 1073.7 | 962.6 | 869.6 | 801.8 | 780.2 |
| 157.5° | 1333.3 | 1313.4 | 1267.7 | 1187.4 | 1099.8 | 1002.4 | 920.3 | 858.3 | 838.0 |
| 160° | 1325.3 | 1308.0 | 1266.8 | 1195.5 | 1115.6 | 1026.1 | 951.2 | 894.5 | 875.1 |
| 162.5° | 1314.7 | 1297.5 | 1262.4 | 1199.3 | 1129.8 | 1048.0 | 980.4 | 926.4 | 910.4 |
| 165° | 1297.7 | 1281.5 | 1256.9 | 1204.9 | 1148.8 | 1080.8 | 1021.8 | 975.2 | 962.3 |
| 167.5° | 1276.1 | 1266.0 | 1244.8 | 1207.1 | 1164.0 | 1109.0 | 1059.8 | 1021.8 | 1010.8 |
| 170° | 1260.2 | 1252.7 | 1235.9 | 1206.5 | 1171.9 | 1125.5 | 1083.6 | 1049.3 | 1041.7 |
| 172.5° | 1239.9 | 1235.8 | 1224.5 | 1203.1 | 1178.1 | 1140.3 | 1104.8 | 1074.9 | 1067.3 |
| 175° | 1208.3 | 1210.5 | 1206.1 | 1198.1 | 1185.2 | 1159.3 | 1134.4 | 1113.3 | 1105.7 |
| 177.5° | 1184.7 | 1184.7 | 1185.6 | 1186.5 | 1184.7 | 1173.5 | 1160.9 | 1148.6 | 1149.4 |
| 180° | 1174.1 | 1174.1 | 1174.1 | 1174.1 | 1174.1 | 1174.1 | 1174.1 | 1174.1 | 1174.1 |

(END OF REPORT)