

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: P522501

Luminaire Tested: **SQW-F-025U-075D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/11/2021

Test Information

Test Method: LM-79-08
Report Number: P522501
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-53,
Test Lab: INNOVATION CENTER
Issue Date: 5/11/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQW-F-025U-075D-93050-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

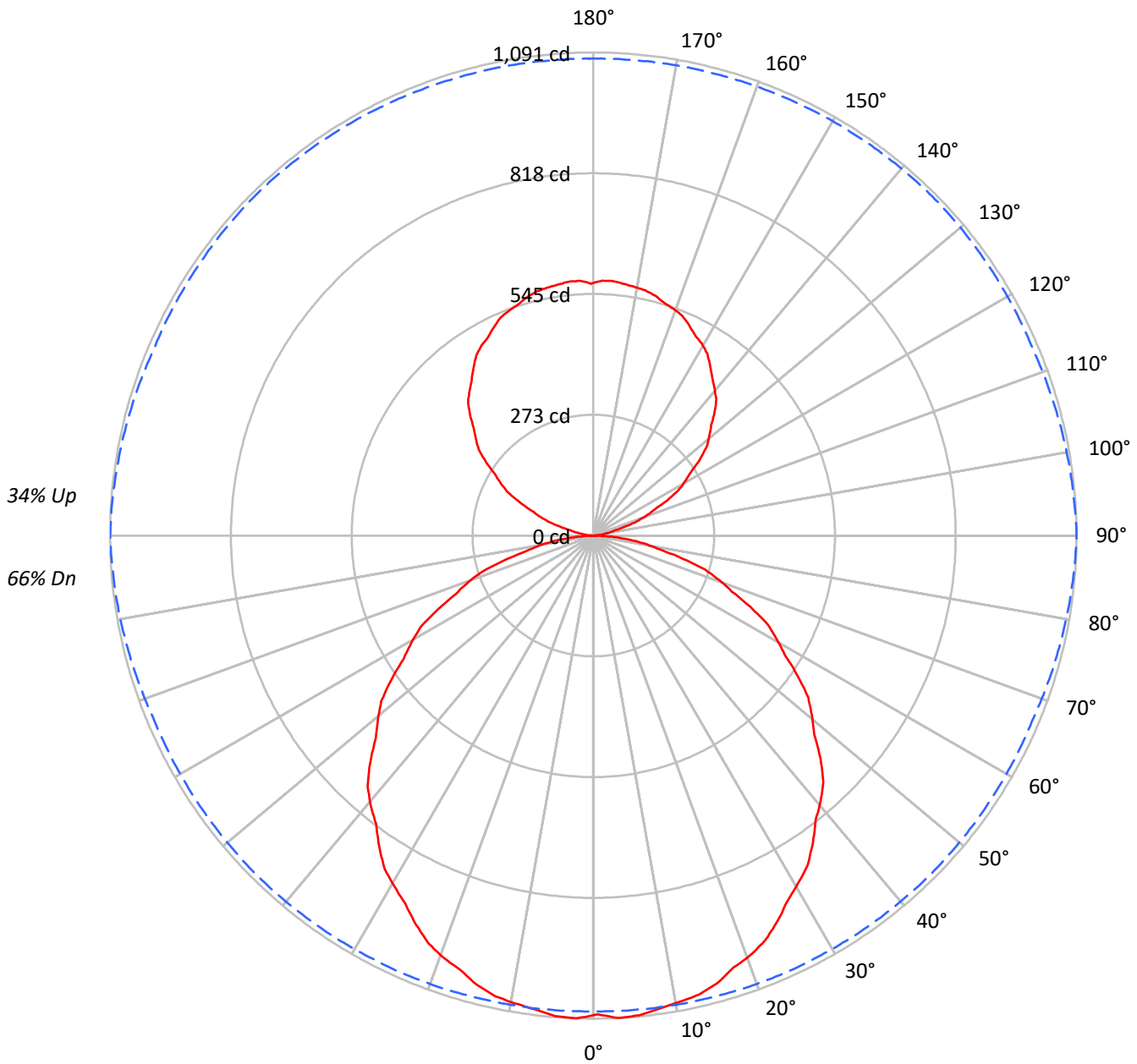
Lumens per Lamp: N/A
Luminaire Lumens: 4598.5 lumens
Efficiency: N/A
Efficacy: 101.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.26 / 1.36
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 45.4
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: P522501
CATALOG NUMBER: SQW-F-025U-075D-93050-1D-UNV-STD-W-4 (4500K)

Luminous Intensity Polar Plot



34% Up

66% Dn

— Vertical Plane Through 90° Lateral - - - Horizontal Cone Through 2.5° Vertical



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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 | 111 | 111 | 111 | 111 | 104 | 104 | 104 | 104 | 92 | 92 | 92 | 81 | 81 | 81 | 70 | 70 | 70 | 66 |
| 1 | 101 | 97 | 93 | 89 | 95 | 91 | 87 | 84 | 81 | 78 | 75 | 71 | 69 | 67 | 62 | 61 | 59 | 55 |
| 2 | 92 | 84 | 78 | 72 | 86 | 79 | 74 | 69 | 70 | 66 | 62 | 62 | 59 | 56 | 54 | 52 | 50 | 46 |
| 3 | 84 | 74 | 66 | 60 | 78 | 70 | 63 | 57 | 62 | 57 | 52 | 55 | 50 | 47 | 48 | 45 | 42 | 38 |
| 4 | 77 | 65 | 57 | 51 | 72 | 62 | 54 | 49 | 55 | 49 | 44 | 49 | 44 | 40 | 43 | 39 | 36 | 33 |
| 5 | 70 | 58 | 50 | 43 | 66 | 55 | 47 | 42 | 49 | 43 | 38 | 44 | 39 | 35 | 38 | 35 | 31 | 28 |
| 6 | 65 | 52 | 44 | 38 | 61 | 49 | 42 | 36 | 44 | 38 | 33 | 39 | 34 | 30 | 35 | 31 | 27 | 25 |
| 7 | 60 | 47 | 39 | 33 | 56 | 45 | 37 | 32 | 40 | 34 | 29 | 36 | 31 | 27 | 32 | 28 | 24 | 22 |
| 8 | 56 | 43 | 35 | 29 | 52 | 41 | 33 | 28 | 37 | 30 | 26 | 33 | 28 | 24 | 29 | 25 | 22 | 20 |
| 9 | 52 | 39 | 31 | 26 | 49 | 37 | 30 | 25 | 34 | 28 | 23 | 30 | 25 | 22 | 27 | 23 | 20 | 18 |
| 10 | 49 | 36 | 29 | 24 | 46 | 34 | 27 | 23 | 31 | 25 | 21 | 28 | 23 | 19 | 25 | 21 | 18 | 16 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|-------|-------|-------|
| 0° | 17452 | 17452 | 17452 |
| 5° | 17386 | 17634 | 17485 |
| 10° | 17203 | 17554 | 17505 |
| 15° | 17115 | 17523 | 17387 |
| 20° | 16857 | 17383 | 17295 |
| 25° | 16554 | 17190 | 17152 |
| 30° | 16242 | 16982 | 16887 |
| 35° | 15948 | 16811 | 16630 |
| 40° | 15616 | 16647 | 16432 |
| 45° | 15269 | 16408 | 16175 |
| 50° | 14878 | 16056 | 15850 |
| 55° | 14410 | 15758 | 15415 |
| 60° | 13837 | 15381 | 14987 |
| 65° | 13066 | 14892 | 14388 |
| 70° | 12203 | 14224 | 13695 |
| 75° | 10792 | 12951 | 12445 |
| 80° | 8991 | 11353 | 10981 |
| 85° | 5854 | 8855 | 8485 |



TEST NUMBER: P522501

CATALOG NUMBER: SQW-F-025U-075D-93050-1D-UNV-STD-W-4 (4500K)

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 102.2 | 2.2 |
| 10°-20° | 291.8 | 6.3 |
| 20°-30° | 439.0 | 9.5 |
| 30°-40° | 524.5 | 11.4 |
| 40°-50° | 539.7 | 11.7 |
| 50°-60° | 485.2 | 10.6 |
| 60°-70° | 369.6 | 8.0 |
| 70°-80° | 209.7 | 4.6 |
| 80°-90° | 54.9 | 1.2 |
| 90°-100° | 14.4 | 0.3 |
| 100°-110° | 63.8 | 1.4 |
| 110°-120° | 183.2 | 4.0 |
| 120°-130° | 279.1 | 6.1 |
| 130°-140° | 302.9 | 6.6 |
| 140°-150° | 289.7 | 6.3 |
| 150°-160° | 238.7 | 5.2 |
| 160°-170° | 156.2 | 3.4 |
| 170°-180° | 54.1 | 1.2 |
| 0°-30° | 833.1 | 18.1 |
| 0°-40° | 1357.5 | 29.5 |
| 0°-60° | 2382.3 | 51.8 |
| 0°-90° | 3016.6 | 65.6 |
| 90°-120° | 261.3 | 5.7 |
| 90°-150° | 1133.0 | 24.6 |
| 90°-180° | 1582.0 | 34.4 |
| 0°-180° | 4598.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|------|------|------|------|------|------|------|
| 0° | 1081 | 1081 | 1081 | 1081 | 1081 | |
| 5° | 1073 | 1074 | 1088 | 1081 | 1079 | 102 |
| 15° | 1024 | 1029 | 1048 | 1043 | 1040 | 288 |
| 25° | 929 | 950 | 965 | 971 | 963 | 428 |
| 35° | 809 | 830 | 853 | 858 | 844 | 506 |
| 45° | 669 | 688 | 719 | 716 | 708 | 515 |
| 55° | 512 | 532 | 560 | 557 | 548 | 457 |
| 65° | 342 | 363 | 390 | 387 | 377 | 339 |
| 75° | 173 | 187 | 208 | 206 | 200 | 184 |
| 85° | 32 | 41 | 48 | 51 | 46 | 41 |
| 90° | 0 | 0 | 0 | 0 | 0 | 1 |
| 95° | 2 | 3 | 10 | 22 | 22 | 3 |
| 105° | 14 | 39 | 73 | 50 | 54 | 17 |
| 115° | 137 | 361 | 185 | 86 | 97 | 190 |
| 125° | 546 | 475 | 294 | 146 | 124 | 479 |
| 135° | 602 | 545 | 390 | 242 | 192 | 464 |
| 145° | 630 | 586 | 466 | 344 | 294 | 394 |
| 155° | 636 | 610 | 521 | 432 | 394 | 294 |
| 165° | 623 | 607 | 559 | 502 | 478 | 177 |
| 175° | 586 | 588 | 576 | 550 | 537 | 57 |
| 180° | 569 | 569 | 569 | 569 | 569 | |



TEST NUMBER: P522501

CATALOG NUMBER: SQW-F-025U-075D-93050-1D-UNV-STD-W-4 (4500K)

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1080.9 | 1080.9 | 1080.9 | 1080.9 | 1080.9 | 1080.9 | 1080.9 | 1080.9 | 1080.9 |
| 2.5° | 1074.4 | 1077.6 | 1079.3 | 1075.5 | 1090.7 | 1077.9 | 1082.5 | 1079.2 | 1076.8 |
| 5° | 1072.7 | 1071.7 | 1073.8 | 1070.1 | 1088.0 | 1074.1 | 1080.9 | 1075.9 | 1078.8 |
| 7.5° | 1062.4 | 1060.4 | 1064.0 | 1064.5 | 1078.0 | 1067.9 | 1071.9 | 1070.6 | 1074.2 |
| 10° | 1049.3 | 1051.3 | 1057.5 | 1058.8 | 1070.7 | 1059.8 | 1064.6 | 1065.7 | 1067.7 |
| 12.5° | 1043.6 | 1040.1 | 1046.9 | 1050.6 | 1063.4 | 1050.0 | 1058.9 | 1058.4 | 1062.0 |
| 15° | 1023.9 | 1022.9 | 1029.0 | 1032.4 | 1048.3 | 1036.4 | 1043.2 | 1043.2 | 1040.2 |
| 17.5° | 999.1 | 999.1 | 1007.2 | 1008.8 | 1025.5 | 1016.8 | 1023.5 | 1020.4 | 1019.6 |
| 20° | 981.1 | 981.1 | 993.4 | 991.8 | 1011.7 | 1003.7 | 1009.6 | 1002.6 | 1006.6 |
| 22.5° | 960.8 | 961.6 | 976.3 | 973.8 | 992.9 | 988.2 | 995.0 | 984.7 | 989.5 |
| 25° | 929.2 | 932.2 | 949.6 | 947.9 | 964.9 | 959.9 | 971.0 | 958.8 | 962.8 |
| 27.5° | 895.6 | 899.8 | 917.2 | 917.0 | 933.7 | 930.1 | 942.9 | 928.8 | 929.4 |
| 30° | 871.2 | 876.2 | 893.6 | 895.0 | 910.9 | 904.9 | 920.1 | 906.8 | 905.8 |
| 32.5° | 847.6 | 851.8 | 869.2 | 872.2 | 888.1 | 884.5 | 896.5 | 883.2 | 881.4 |
| 35° | 809.1 | 814.1 | 830.5 | 836.0 | 852.9 | 847.9 | 858.0 | 845.7 | 843.7 |
| 37.5° | 769.4 | 772.6 | 790.0 | 794.7 | 815.0 | 810.9 | 817.3 | 805.5 | 805.7 |
| 40° | 740.9 | 744.9 | 762.3 | 767.9 | 789.8 | 784.8 | 788.8 | 778.6 | 779.6 |
| 42.5° | 712.4 | 716.4 | 733.0 | 741.0 | 761.3 | 756.3 | 759.5 | 750.9 | 751.1 |
| 45° | 668.7 | 671.7 | 688.0 | 698.7 | 718.6 | 713.6 | 715.5 | 707.4 | 708.4 |
| 47.5° | 623.3 | 625.5 | 640.4 | 655.2 | 671.7 | 669.5 | 669.9 | 659.8 | 662.8 |
| 50° | 592.3 | 595.3 | 608.6 | 624.2 | 639.2 | 640.2 | 638.1 | 628.0 | 631.0 |
| 52.5° | 560.6 | 562.8 | 578.5 | 591.7 | 607.4 | 609.2 | 605.6 | 596.3 | 598.5 |
| 55° | 511.9 | 513.9 | 532.3 | 545.8 | 559.8 | 560.8 | 556.7 | 549.6 | 547.6 |
| 57.5° | 461.9 | 464.9 | 482.0 | 496.8 | 510.5 | 508.7 | 506.7 | 498.3 | 496.7 |
| 60° | 428.5 | 431.5 | 447.8 | 463.4 | 476.3 | 475.3 | 473.3 | 464.1 | 464.1 |
| 62.5° | 394.3 | 398.1 | 415.3 | 429.2 | 442.1 | 441.9 | 439.1 | 432.3 | 430.7 |
| 65° | 342.0 | 346.0 | 363.3 | 375.9 | 389.8 | 389.8 | 386.8 | 378.6 | 376.6 |
| 67.5° | 291.9 | 295.9 | 310.2 | 323.2 | 337.1 | 335.9 | 333.0 | 327.9 | 325.1 |
| 70° | 258.5 | 262.5 | 272.8 | 287.3 | 301.3 | 299.3 | 297.2 | 292.1 | 290.1 |
| 72.5° | 222.7 | 227.5 | 237.8 | 250.7 | 263.8 | 263.4 | 261.4 | 258.6 | 254.2 |
| 75° | 173.0 | 176.0 | 187.3 | 198.7 | 207.6 | 208.6 | 205.6 | 204.5 | 199.5 |
| 77.5° | 126.0 | 129.8 | 139.0 | 148.9 | 155.5 | 158.7 | 156.9 | 154.4 | 150.6 |
| 80° | 96.7 | 99.7 | 108.9 | 117.2 | 122.1 | 126.1 | 125.2 | 121.0 | 118.1 |
| 82.5° | 69.0 | 72.0 | 79.6 | 87.0 | 91.2 | 95.2 | 94.2 | 91.7 | 87.1 |
| 85° | 31.6 | 33.5 | 40.7 | 45.8 | 47.8 | 52.8 | 50.9 | 48.8 | 45.8 |
| 87.5° | 4.9 | 5.7 | 10.6 | 15.5 | 14.7 | 19.4 | 17.1 | 13.8 | 10.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 0.4 | 0.4 | 0.8 | 1.3 | 2.1 | 7.9 | 8.9 | 8.1 | 7.6 |
| 95° | 2.1 | 2.1 | 3.2 | 10.1 | 10.1 | 16.3 | 22.3 | 21.7 | 21.7 |
| 97.5° | 4.8 | 5.3 | 7.4 | 30.7 | 22.9 | 22.3 | 31.8 | 35.0 | 35.3 |
| 100° | 6.9 | 7.4 | 11.7 | 50.0 | 33.9 | 28.8 | 33.9 | 41.4 | 43.0 |
| 102.5° | 9.4 | 10.4 | 18.5 | 79.0 | 47.9 | 34.5 | 39.9 | 45.2 | 46.8 |
| 105° | 14.3 | 15.9 | 38.7 | 132.3 | 73.2 | 45.7 | 50.4 | 53.1 | 53.6 |
| 107.5° | 21.5 | 27.3 | 106.0 | 186.1 | 103.9 | 60.5 | 63.2 | 65.0 | 65.7 |
| 110° | 29.2 | 41.6 | 184.0 | 218.6 | 126.8 | 71.8 | 70.0 | 74.8 | 73.7 |



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CATALOG NUMBER: SQW-F-025U-075D-93050-1D-UNV-STD-W-4 (4500K)

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|-------|-------|-------|-------|-------|--------|-------|--------|-------|
| 112.5° | 49.1 | 85.6 | 270.2 | 245.2 | 149.7 | 85.2 | 76.4 | 84.1 | 84.8 |
| 115° | 137.4 | 235.9 | 361.2 | 283.1 | 184.6 | 108.3 | 86.5 | 94.0 | 97.1 |
| 117.5° | 344.8 | 410.2 | 409.1 | 318.2 | 218.1 | 135.6 | 98.5 | 102.1 | 105.7 |
| 120° | 463.6 | 473.4 | 433.3 | 341.9 | 239.7 | 155.2 | 108.7 | 107.2 | 110.3 |
| 122.5° | 507.7 | 499.7 | 451.6 | 362.7 | 261.8 | 175.6 | 121.9 | 112.7 | 115.4 |
| 125° | 545.8 | 530.2 | 475.2 | 392.4 | 294.4 | 205.7 | 145.9 | 124.6 | 124.1 |
| 127.5° | 566.9 | 550.6 | 498.4 | 418.2 | 324.3 | 236.9 | 173.1 | 141.5 | 136.7 |
| 130° | 577.1 | 562.0 | 514.5 | 433.9 | 344.2 | 258.1 | 193.1 | 156.3 | 149.0 |
| 132.5° | 589.4 | 573.1 | 525.9 | 450.1 | 363.3 | 278.1 | 213.0 | 174.1 | 165.6 |
| 135° | 601.5 | 586.4 | 544.7 | 471.3 | 390.4 | 307.4 | 241.9 | 203.4 | 192.5 |
| 137.5° | 612.3 | 598.5 | 561.9 | 487.9 | 414.8 | 336.3 | 272.4 | 235.0 | 221.7 |
| 140° | 619.5 | 604.5 | 569.1 | 500.7 | 429.6 | 354.4 | 292.8 | 255.4 | 245.0 |
| 142.5° | 622.0 | 612.8 | 576.8 | 511.4 | 446.2 | 371.8 | 313.1 | 274.5 | 265.0 |
| 145° | 629.6 | 623.4 | 586.1 | 524.3 | 465.7 | 397.7 | 344.2 | 304.2 | 293.8 |
| 147.5° | 634.5 | 625.1 | 594.7 | 538.2 | 484.8 | 421.0 | 372.4 | 334.0 | 324.4 |
| 150° | 634.9 | 627.6 | 601.5 | 546.8 | 497.5 | 437.9 | 389.8 | 353.6 | 344.8 |
| 152.5° | 638.3 | 629.4 | 604.9 | 554.0 | 506.8 | 452.2 | 407.2 | 373.5 | 363.9 |
| 155° | 635.9 | 629.7 | 610.0 | 563.4 | 521.4 | 470.6 | 431.7 | 401.9 | 393.6 |
| 157.5° | 635.9 | 628.3 | 610.6 | 570.6 | 535.4 | 490.8 | 454.7 | 427.0 | 420.8 |
| 160° | 631.7 | 628.6 | 611.0 | 575.8 | 542.6 | 502.1 | 469.9 | 444.8 | 436.5 |
| 162.5° | 630.0 | 624.8 | 611.9 | 579.2 | 549.0 | 511.4 | 483.1 | 459.3 | 453.1 |
| 165° | 622.7 | 618.0 | 606.8 | 580.8 | 559.0 | 527.9 | 502.3 | 481.0 | 477.9 |
| 167.5° | 614.3 | 610.7 | 603.3 | 583.4 | 565.7 | 540.3 | 518.7 | 501.5 | 497.3 |
| 170° | 608.4 | 602.7 | 599.9 | 584.7 | 569.1 | 547.8 | 529.3 | 513.8 | 509.2 |
| 172.5° | 598.2 | 597.5 | 595.2 | 581.4 | 572.1 | 554.6 | 539.1 | 524.9 | 521.9 |
| 175° | 586.1 | 586.1 | 587.7 | 579.1 | 576.0 | 561.5 | 550.5 | 542.0 | 537.3 |
| 177.5° | 572.1 | 572.5 | 575.9 | 575.5 | 575.9 | 567.6 | 564.4 | 556.4 | 555.5 |
| 180° | 569.1 | 569.1 | 569.1 | 569.1 | 569.1 | 569.1 | 569.1 | 569.1 | 569.1 |

(END OF REPORT)