

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: P511759

Luminaire Tested: **SQW-F-050U-050D-935-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P511759  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-16,  
Test Lab: INNOVATION CENTER  
Issue Date: 4/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQW-F-050U-050D-935-1D-UNV-STD-W-4  
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

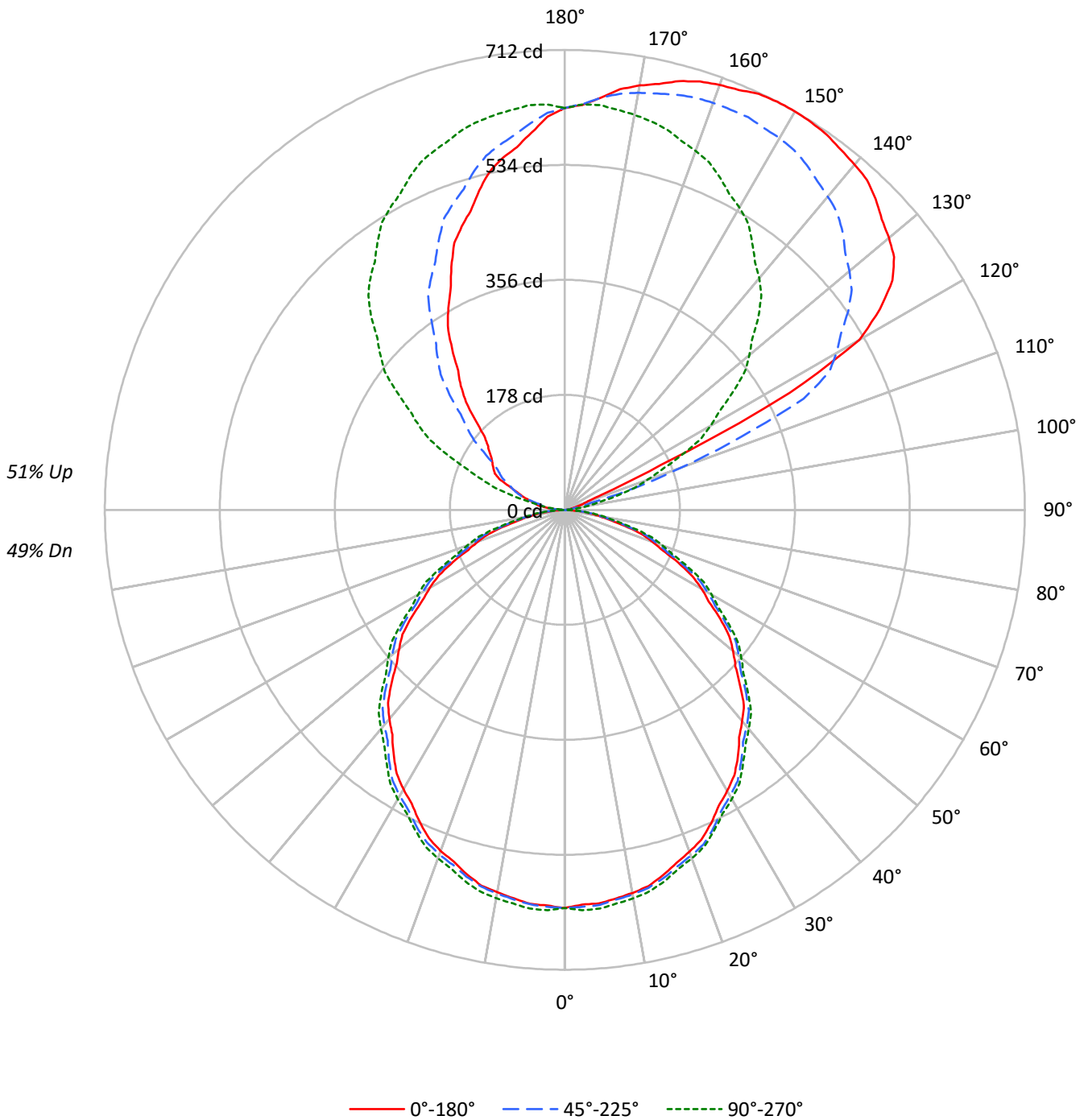
Lumens per Lamp: N/A  
Luminaire Lumens: 3409.7 lumens  
Efficiency: N/A  
Efficacy: 108.6 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 31.4  
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



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### Luminous Intensity Polar Plot





TEST NUMBER: P511759

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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 | 55 | 55 | 55 | 49 |
| 1   | 98  | 93  | 89  | 86  | 90 | 86 | 83 | 80 | 73 | 70 | 68 | 60 | 59 | 57 | 49 | 48 | 47 | 41 |
| 2   | 89  | 81  | 75  | 70  | 82 | 75 | 70 | 65 | 64 | 60 | 56 | 53 | 50 | 48 | 43 | 41 | 39 | 35 |
| 3   | 81  | 71  | 64  | 58  | 74 | 66 | 60 | 54 | 56 | 51 | 47 | 47 | 43 | 40 | 38 | 35 | 33 | 29 |
| 4   | 74  | 63  | 55  | 49  | 68 | 58 | 51 | 46 | 50 | 44 | 40 | 41 | 37 | 34 | 34 | 31 | 29 | 25 |
| 5   | 68  | 56  | 48  | 42  | 62 | 52 | 45 | 39 | 44 | 39 | 34 | 37 | 33 | 30 | 30 | 27 | 25 | 22 |
| 6   | 62  | 50  | 42  | 36  | 57 | 47 | 40 | 34 | 40 | 34 | 30 | 34 | 29 | 26 | 28 | 24 | 22 | 19 |
| 7   | 58  | 45  | 37  | 32  | 53 | 42 | 35 | 30 | 36 | 31 | 26 | 30 | 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 | 13 |
| 10  | 47  | 34  | 27  | 22  | 43 | 32 | 26 | 21 | 28 | 22 | 19 | 24 | 19 | 16 | 20 | 16 | 14 | 12 |

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

|     | 0°    | 90°   | 180°  |
|-----|-------|-------|-------|
| 0°  | 19908 | 19908 | 19908 |
| 5°  | 19819 | 20094 | 19848 |
| 10° | 19746 | 20022 | 19717 |
| 15° | 19594 | 19905 | 19537 |
| 20° | 19361 | 19735 | 19302 |
| 25° | 19080 | 19500 | 18962 |
| 30° | 18741 | 19278 | 18618 |
| 35° | 18418 | 18950 | 18220 |
| 40° | 17987 | 18666 | 17810 |
| 45° | 17523 | 18331 | 17331 |
| 50° | 17076 | 17920 | 16819 |
| 55° | 16524 | 17475 | 16287 |
| 60° | 15797 | 16940 | 15578 |
| 65° | 14755 | 16107 | 14564 |
| 70° | 13615 | 15210 | 13454 |
| 75° | 11990 | 13787 | 11890 |
| 80° | 9726  | 11604 | 9875  |
| 85° | 5632  | 7818  | 6558  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 58.2   | 1.7       |
| 10°-20°   | 165.9  | 4.9       |
| 20°-30°   | 248.6  | 7.3       |
| 30°-40°   | 295.4  | 8.7       |
| 40°-50°   | 302.3  | 8.9       |
| 50°-60°   | 269.6  | 7.9       |
| 60°-70°   | 200.0  | 5.9       |
| 70°-80°   | 109.5  | 3.2       |
| 80°-90°   | 26.2   | 0.8       |
| 90°-100°  | 15.3   | 0.4       |
| 100°-110° | 69.8   | 2.0       |
| 110°-120° | 204.7  | 6.0       |
| 120°-130° | 308.2  | 9.0       |
| 130°-140° | 331.0  | 9.7       |
| 140°-150° | 315.8  | 9.3       |
| 150°-160° | 259.9  | 7.6       |
| 160°-170° | 170.2  | 5.0       |
| 170°-180° | 59.0   | 1.7       |
| 0°-30°    | 472.7  | 13.9      |
| 0°-40°    | 768.0  | 22.5      |
| 0°-60°    | 1340.0 | 39.3      |
| 0°-90°    | 1675.7 | 49.1      |
| 90°-120°  | 289.8  | 8.5       |
| 90°-150°  | 1244.8 | 36.5      |
| 90°-180°  | 1734.0 | 50.9      |
| 0°-180°   | 3409.7 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 45° | 90° | 135° | 180° | Flux |
|------|-----|-----|-----|------|------|------|
| 0°   | 616 | 616 | 616 | 616  | 616  |      |
| 5°   | 611 | 614 | 620 | 613  | 612  | 58   |
| 15°  | 586 | 590 | 595 | 588  | 584  | 165  |
| 25°  | 536 | 544 | 547 | 542  | 532  | 246  |
| 35°  | 467 | 476 | 481 | 474  | 462  | 292  |
| 45°  | 384 | 396 | 401 | 392  | 380  | 296  |
| 55°  | 294 | 304 | 310 | 303  | 289  | 262  |
| 65°  | 193 | 202 | 211 | 202  | 191  | 191  |
| 75°  | 96  | 103 | 110 | 103  | 95   | 102  |
| 85°  | 15  | 20  | 21  | 22   | 18   | 21   |
| 90°  | 1   | 1   | 1   | 2    | 4    | 1    |
| 95°  | 4   | 5   | 11  | 19   | 18   | 5    |
| 105° | 19  | 45  | 80  | 53   | 56   | 22   |
| 115° | 164 | 407 | 199 | 100  | 110  | 220  |
| 125° | 619 | 535 | 317 | 149  | 138  | 544  |
| 135° | 680 | 608 | 424 | 252  | 194  | 525  |
| 145° | 708 | 652 | 506 | 361  | 304  | 444  |
| 155° | 710 | 671 | 568 | 461  | 415  | 328  |
| 165° | 687 | 665 | 610 | 543  | 512  | 195  |
| 175° | 640 | 640 | 629 | 601  | 586  | 62   |
| 180° | 622 | 622 | 622 | 622  | 622  |      |



TEST NUMBER: P511759

CATALOG NUMBER: SQW-F-050U-050D-935-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   | 112.5° | 135°  | 157.5° | 180°  |
|--------|-------|-------|-------|-------|-------|--------|-------|--------|-------|
| 0°     | 616.5 | 616.5 | 616.5 | 616.5 | 616.5 | 616.5  | 616.5 | 616.5  | 616.5 |
| 2.5°   | 611.8 | 614.4 | 615.1 | 614.6 | 620.5 | 615.3  | 615.1 | 614.4  | 613.1 |
| 5°     | 611.4 | 612.3 | 614.0 | 612.4 | 619.9 | 612.4  | 613.1 | 611.5  | 612.3 |
| 7.5°   | 606.9 | 607.7 | 608.7 | 607.9 | 614.6 | 607.9  | 608.4 | 606.7  | 606.7 |
| 10°    | 602.2 | 603.0 | 604.7 | 603.2 | 610.6 | 603.2  | 603.0 | 601.3  | 601.3 |
| 12.5°  | 596.8 | 597.6 | 599.3 | 597.8 | 605.2 | 597.8  | 597.6 | 595.3  | 595.9 |
| 15°    | 586.1 | 588.6 | 590.3 | 588.0 | 595.4 | 588.0  | 587.8 | 586.1  | 584.4 |
| 17.5°  | 573.5 | 576.0 | 578.9 | 576.3 | 583.1 | 575.5  | 576.3 | 572.6  | 571.1 |
| 20°    | 563.4 | 565.8 | 570.1 | 566.9 | 574.3 | 566.1  | 567.6 | 562.5  | 561.7 |
| 22.5°  | 552.6 | 554.4 | 560.7 | 557.4 | 564.2 | 556.6  | 557.5 | 551.0  | 550.2 |
| 25°    | 535.5 | 537.2 | 544.0 | 541.6 | 547.3 | 539.9  | 542.3 | 533.0  | 532.2 |
| 27.5°  | 516.1 | 518.6 | 524.7 | 523.2 | 529.8 | 521.6  | 523.9 | 514.2  | 512.8 |
| 30°    | 502.6 | 505.1 | 511.9 | 510.4 | 517.0 | 508.7  | 511.1 | 500.1  | 499.3 |
| 32.5°  | 487.8 | 491.6 | 497.7 | 497.5 | 502.8 | 495.2  | 496.2 | 485.9  | 484.4 |
| 35°    | 467.2 | 469.7 | 475.7 | 475.8 | 480.7 | 474.1  | 474.0 | 463.8  | 462.2 |
| 37.5°  | 443.6 | 446.9 | 453.2 | 454.2 | 459.0 | 451.7  | 450.5 | 441.4  | 438.7 |
| 40°    | 426.7 | 430.0 | 437.7 | 438.6 | 442.8 | 436.2  | 434.3 | 425.8  | 422.5 |
| 42.5°  | 410.5 | 413.8 | 421.5 | 422.4 | 426.6 | 420.6  | 417.5 | 409.6  | 405.0 |
| 45°    | 383.7 | 387.9 | 395.5 | 398.1 | 401.4 | 395.7  | 392.2 | 382.8  | 379.5 |
| 47.5°  | 358.1 | 361.4 | 369.2 | 373.5 | 375.0 | 371.0  | 366.5 | 356.5  | 353.0 |
| 50°    | 339.9 | 343.2 | 351.7 | 355.9 | 356.7 | 353.4  | 348.3 | 338.9  | 334.8 |
| 52.5°  | 321.0 | 324.3 | 333.5 | 337.7 | 338.5 | 335.2  | 330.1 | 320.7  | 316.6 |
| 55°    | 293.5 | 296.8 | 303.6 | 310.4 | 310.4 | 308.7  | 302.8 | 292.6  | 289.3 |
| 57.5°  | 264.1 | 267.3 | 275.8 | 281.7 | 281.8 | 279.5  | 273.4 | 264.1  | 260.8 |
| 60°    | 244.6 | 247.0 | 255.5 | 261.5 | 262.3 | 260.6  | 253.9 | 244.5  | 241.2 |
| 62.5°  | 223.0 | 226.1 | 234.6 | 241.2 | 242.7 | 240.4  | 232.9 | 224.2  | 219.6 |
| 65°    | 193.1 | 194.8 | 202.4 | 209.2 | 210.8 | 208.4  | 201.6 | 193.1  | 190.6 |
| 67.5°  | 163.8 | 164.8 | 172.0 | 178.8 | 180.6 | 178.0  | 171.2 | 165.4  | 161.4 |
| 70°    | 144.2 | 145.9 | 151.8 | 158.6 | 161.1 | 157.8  | 151.0 | 145.8  | 142.5 |
| 72.5°  | 124.6 | 126.3 | 132.2 | 138.4 | 140.8 | 138.2  | 132.1 | 126.9  | 123.6 |
| 75°    | 96.1  | 97.0  | 102.9 | 108.8 | 110.5 | 108.0  | 102.9 | 98.6   | 95.3  |
| 77.5°  | 69.2  | 70.0  | 76.2  | 79.8  | 81.3  | 79.8   | 75.7  | 71.6   | 69.3  |
| 80°    | 52.3  | 53.1  | 57.3  | 61.6  | 62.4  | 61.6   | 58.2  | 54.8   | 53.1  |
| 82.5°  | 36.1  | 36.9  | 41.8  | 44.7  | 44.9  | 45.4   | 42.7  | 39.9   | 37.6  |
| 85°    | 15.2  | 16.0  | 20.2  | 22.7  | 21.1  | 23.6   | 21.9  | 19.4   | 17.7  |
| 87.5°  | 2.2   | 2.2   | 4.2   | 6.2   | 6.2   | 6.9    | 5.7   | 5.2    | 4.1   |
| 90°    | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9    | 1.7   | 2.6    | 3.5   |
| 92.5°  | 2.3   | 2.3   | 2.3   | 3.0   | 3.0   | 7.0    | 5.2   | 4.7    | 5.6   |
| 95°    | 4.3   | 4.3   | 5.2   | 13.0  | 11.3  | 17.2   | 19.1  | 18.2   | 18.2  |
| 97.5°  | 7.6   | 7.6   | 9.9   | 34.5  | 25.5  | 23.5   | 32.1  | 33.2   | 32.8  |
| 100°   | 10.4  | 10.4  | 14.8  | 55.2  | 37.4  | 30.6   | 35.6  | 40.9   | 42.6  |
| 102.5° | 13.2  | 13.9  | 22.4  | 85.4  | 52.6  | 39.0   | 40.5  | 45.7   | 47.4  |
| 105°   | 19.1  | 20.8  | 45.2  | 143.6 | 79.9  | 51.9   | 53.0  | 53.9   | 56.5  |
| 107.5° | 28.3  | 34.6  | 114.5 | 205.0 | 112.7 | 68.1   | 70.4  | 67.6   | 67.8  |
| 110°   | 37.4  | 51.8  | 193.7 | 244.2 | 136.4 | 79.5   | 80.8  | 77.3   | 78.2  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   | 112.5° | 135°  | 157.5° | 180°  |
|--------|-------|-------|-------|-------|-------|--------|-------|--------|-------|
| 112.5° | 61.0  | 102.6 | 294.5 | 275.4 | 161.4 | 92.9   | 88.4  | 91.9   | 90.0  |
| 115°   | 164.2 | 267.8 | 407.4 | 320.4 | 198.9 | 115.7  | 99.9  | 107.8  | 110.3 |
| 117.5° | 392.3 | 462.3 | 460.5 | 358.4 | 236.3 | 143.2  | 110.5 | 117.9  | 122.1 |
| 120°   | 526.4 | 536.6 | 485.6 | 382.0 | 260.6 | 162.1  | 118.1 | 123.4  | 127.7 |
| 122.5° | 578.5 | 566.3 | 506.4 | 403.6 | 283.5 | 182.3  | 128.6 | 127.6  | 132.6 |
| 125°   | 619.3 | 597.2 | 535.1 | 433.4 | 317.0 | 216.0  | 149.4 | 135.6  | 138.1 |
| 127.5° | 642.4 | 618.0 | 559.7 | 461.3 | 351.1 | 249.7  | 177.0 | 148.7  | 147.1 |
| 130°   | 654.9 | 631.2 | 575.0 | 478.8 | 372.6 | 273.3  | 197.2 | 159.7  | 155.5 |
| 132.5° | 665.4 | 643.6 | 588.9 | 495.6 | 393.5 | 296.2  | 218.7 | 176.3  | 168.7 |
| 135°   | 680.1 | 659.7 | 608.0 | 518.2 | 423.9 | 328.8  | 251.9 | 204.7  | 193.7 |
| 137.5° | 692.6 | 671.9 | 624.2 | 539.6 | 450.1 | 360.6  | 284.2 | 239.4  | 226.5 |
| 140°   | 697.5 | 678.8 | 633.2 | 552.3 | 468.2 | 380.7  | 305.8 | 260.4  | 250.2 |
| 142.5° | 702.4 | 684.4 | 641.6 | 564.8 | 483.5 | 400.1  | 328.0 | 282.6  | 271.7 |
| 145°   | 707.9 | 690.1 | 652.3 | 581.1 | 505.5 | 428.2  | 361.3 | 315.1  | 304.0 |
| 147.5° | 710.9 | 694.9 | 660.3 | 594.9 | 527.1 | 454.2  | 394.2 | 347.6  | 337.5 |
| 150°   | 712.3 | 697.0 | 664.5 | 604.0 | 540.3 | 471.5  | 414.3 | 369.8  | 360.5 |
| 152.5° | 712.3 | 696.3 | 666.6 | 611.0 | 551.4 | 487.4  | 433.8 | 391.4  | 382.7 |
| 155°   | 710.5 | 695.2 | 670.6 | 619.9 | 568.1 | 510.3  | 461.2 | 424.5  | 415.2 |
| 157.5° | 703.6 | 694.4 | 670.6 | 628.0 | 582.5 | 531.7  | 488.0 | 455.3  | 447.0 |
| 160°   | 700.1 | 691.6 | 670.6 | 632.3 | 591.5 | 544.8  | 504.7 | 474.1  | 466.4 |
| 162.5° | 695.2 | 686.7 | 669.2 | 635.2 | 599.2 | 556.5  | 520.7 | 490.8  | 485.2 |
| 165°   | 687.1 | 678.6 | 665.4 | 637.8 | 609.8 | 573.3  | 542.9 | 517.6  | 511.6 |
| 167.5° | 675.4 | 670.7 | 660.0 | 638.6 | 616.2 | 588.2  | 561.6 | 541.4  | 536.6 |
| 170°   | 667.1 | 663.7 | 655.8 | 638.0 | 621.1 | 596.4  | 574.2 | 556.7  | 553.3 |
| 172.5° | 656.7 | 654.6 | 649.6 | 637.4 | 624.5 | 604.7  | 586.0 | 569.2  | 566.5 |
| 175°   | 640.2 | 641.9 | 640.2 | 634.8 | 628.9 | 615.3  | 601.1 | 588.9  | 586.3 |
| 177.5° | 627.5 | 627.5 | 628.9 | 628.9 | 628.2 | 621.4  | 615.0 | 608.1  | 609.4 |
| 180°   | 621.9 | 621.9 | 621.9 | 621.9 | 621.9 | 621.9  | 621.9 | 621.9  | 621.9 |

(END OF REPORT)