

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: P511727

Luminaire Tested: **SQW-F-025U-050D-840-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511727
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-15,
Test Lab: INNOVATION CENTER
Issue Date: 4/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQW-F-025U-050D-840-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

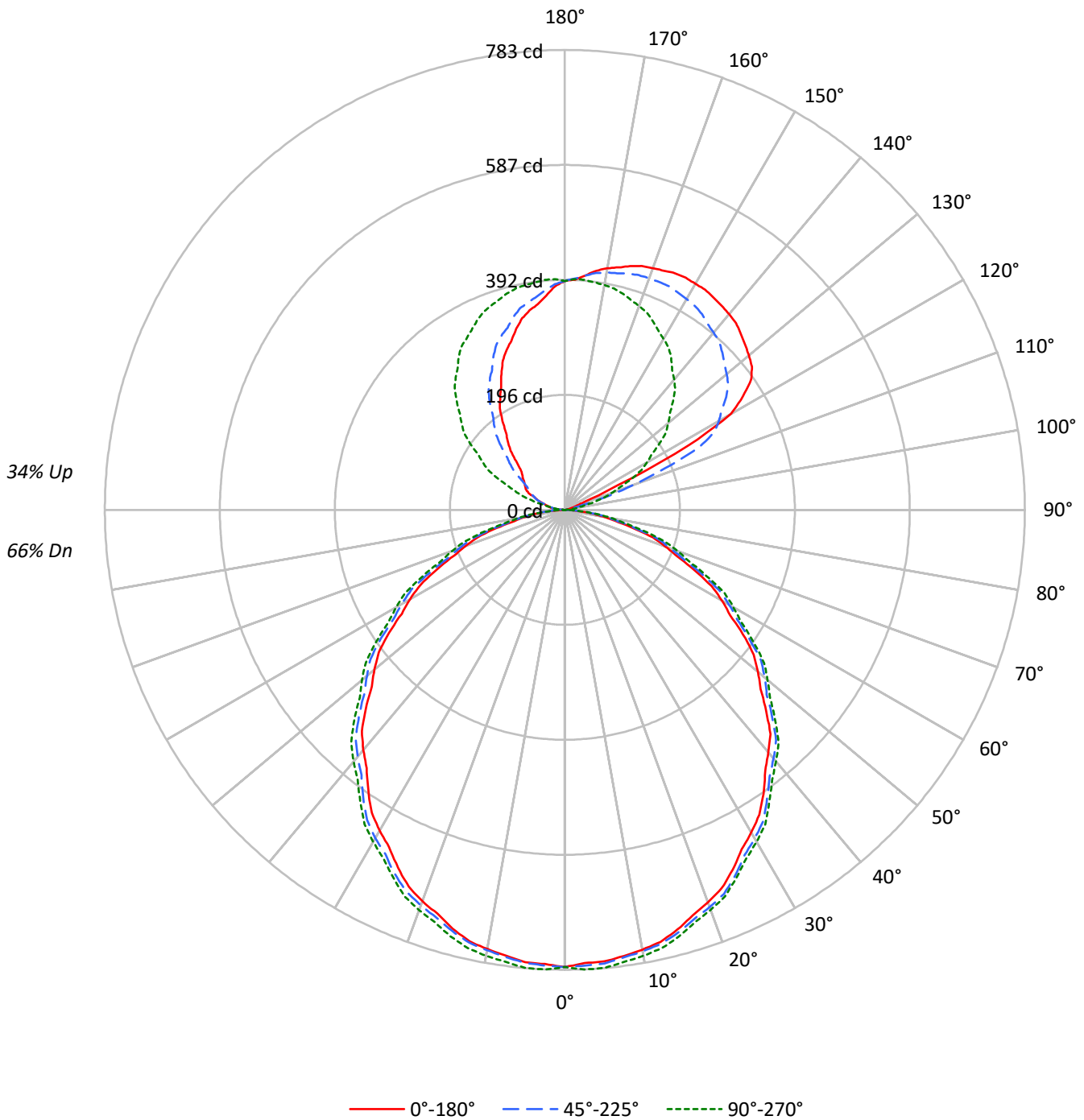
Lumens per Lamp: N/A
Luminaire Lumens: 3192.5 lumens
Efficiency: N/A
Efficacy: 129.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 24.6
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: P511727
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Luminous Intensity Polar Plot





TEST NUMBER: P511727

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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 | 105 | 105 | 105 | 105 | 92 | 92 | 92 | 81 | 81 | 81 | 71 | 71 | 71 | 66 |
| 1 | 101 | 97 | 93 | 89 | 95 | 91 | 88 | 85 | 81 | 78 | 76 | 72 | 70 | 68 | 63 | 61 | 60 | 56 |
| 2 | 92 | 85 | 78 | 73 | 87 | 80 | 74 | 69 | 71 | 67 | 63 | 63 | 59 | 56 | 55 | 53 | 50 | 47 |
| 3 | 84 | 74 | 67 | 61 | 79 | 70 | 63 | 58 | 63 | 57 | 53 | 55 | 51 | 48 | 49 | 46 | 43 | 39 |
| 4 | 77 | 66 | 58 | 51 | 72 | 62 | 55 | 49 | 56 | 50 | 45 | 49 | 45 | 41 | 44 | 40 | 37 | 34 |
| 5 | 71 | 59 | 50 | 44 | 66 | 56 | 48 | 42 | 50 | 43 | 39 | 44 | 39 | 35 | 39 | 35 | 32 | 29 |
| 6 | 65 | 53 | 44 | 38 | 61 | 50 | 42 | 37 | 45 | 38 | 34 | 40 | 35 | 31 | 36 | 31 | 28 | 25 |
| 7 | 60 | 48 | 39 | 34 | 57 | 45 | 38 | 32 | 41 | 34 | 30 | 36 | 31 | 27 | 32 | 28 | 25 | 23 |
| 8 | 56 | 43 | 35 | 30 | 53 | 41 | 34 | 29 | 37 | 31 | 27 | 33 | 28 | 24 | 30 | 26 | 22 | 20 |
| 9 | 52 | 40 | 32 | 27 | 49 | 38 | 31 | 26 | 34 | 28 | 24 | 31 | 26 | 22 | 27 | 23 | 20 | 18 |
| 10 | 49 | 36 | 29 | 24 | 46 | 35 | 28 | 23 | 31 | 26 | 21 | 28 | 23 | 20 | 25 | 21 | 18 | 16 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|-------|-------|-------|
| 0° | 25133 | 25133 | 25133 |
| 5° | 25021 | 25368 | 25057 |
| 10° | 24927 | 25278 | 24894 |
| 15° | 24739 | 25130 | 24669 |
| 20° | 24440 | 24918 | 24368 |
| 25° | 24090 | 24620 | 23940 |
| 30° | 23663 | 24338 | 23502 |
| 35° | 23255 | 23925 | 23002 |
| 40° | 22713 | 23564 | 22485 |
| 45° | 22126 | 23144 | 21879 |
| 50° | 21557 | 22627 | 21235 |
| 55° | 20859 | 22058 | 20560 |
| 60° | 19943 | 21384 | 19666 |
| 65° | 18629 | 20340 | 18384 |
| 70° | 17193 | 19204 | 16985 |
| 75° | 15147 | 17405 | 15009 |
| 80° | 12273 | 14654 | 12478 |
| 85° | 7114 | 9856 | 8299 |



TEST NUMBER: P511727

CATALOG NUMBER: SQW-F-025U-050D-840-1D-UNV-STD-W-4

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 73.5 | 2.3 |
| 10°-20° | 209.4 | 6.6 |
| 20°-30° | 313.8 | 9.8 |
| 30°-40° | 372.9 | 11.7 |
| 40°-50° | 381.7 | 12.0 |
| 50°-60° | 340.4 | 10.7 |
| 60°-70° | 252.5 | 7.9 |
| 70°-80° | 138.3 | 4.3 |
| 80°-90° | 32.9 | 1.0 |
| 90°-100° | 9.5 | 0.3 |
| 100°-110° | 43.7 | 1.4 |
| 110°-120° | 126.7 | 4.0 |
| 120°-130° | 191.3 | 6.0 |
| 130°-140° | 204.8 | 6.4 |
| 140°-150° | 195.7 | 6.1 |
| 150°-160° | 162.0 | 5.1 |
| 160°-170° | 106.4 | 3.3 |
| 170°-180° | 36.9 | 1.2 |
| 0°-30° | 596.7 | 18.7 |
| 0°-40° | 969.7 | 30.4 |
| 0°-60° | 1691.7 | 53.0 |
| 0°-90° | 2115.5 | 66.3 |
| 90°-120° | 180.0 | 5.6 |
| 90°-150° | 771.7 | 24.2 |
| 90°-180° | 1077.0 | 33.7 |
| 0°-180° | 3192.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|------|-----|-----|-----|------|------|------|
| 0° | 778 | 778 | 778 | 778 | 778 | |
| 5° | 772 | 775 | 783 | 774 | 773 | 73 |
| 15° | 740 | 745 | 752 | 742 | 738 | 209 |
| 25° | 676 | 687 | 691 | 685 | 672 | 311 |
| 35° | 590 | 600 | 607 | 598 | 584 | 368 |
| 45° | 484 | 499 | 507 | 495 | 479 | 374 |
| 55° | 370 | 383 | 392 | 382 | 365 | 330 |
| 65° | 244 | 256 | 266 | 254 | 241 | 242 |
| 75° | 121 | 130 | 140 | 130 | 120 | 129 |
| 85° | 19 | 26 | 27 | 28 | 22 | 27 |
| 90° | 1 | 1 | 0 | 1 | 2 | 1 |
| 95° | 3 | 3 | 8 | 13 | 11 | 3 |
| 105° | 12 | 29 | 50 | 33 | 35 | 14 |
| 115° | 100 | 253 | 124 | 62 | 68 | 134 |
| 125° | 388 | 335 | 196 | 92 | 85 | 339 |
| 135° | 424 | 379 | 260 | 154 | 117 | 328 |
| 145° | 441 | 407 | 316 | 222 | 185 | 277 |
| 155° | 444 | 420 | 354 | 288 | 256 | 205 |
| 165° | 429 | 416 | 381 | 339 | 319 | 122 |
| 175° | 400 | 400 | 393 | 376 | 366 | 39 |
| 180° | 390 | 390 | 390 | 390 | 390 | |



TEST NUMBER: P511727

CATALOG NUMBER: SQW-F-025U-050D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|-------|-------|-------|-------|-------|--------|-------|--------|-------|
| 0° | 778.3 | 778.3 | 778.3 | 778.3 | 778.3 | 778.3 | 778.3 | 778.3 | 778.3 |
| 2.5° | 772.4 | 775.7 | 776.6 | 775.9 | 783.4 | 776.8 | 776.6 | 775.7 | 774.1 |
| 5° | 771.9 | 773.0 | 775.1 | 773.2 | 782.6 | 773.2 | 774.1 | 772.0 | 773.0 |
| 7.5° | 766.2 | 767.2 | 768.5 | 767.4 | 776.0 | 767.4 | 768.1 | 766.0 | 766.0 |
| 10° | 760.2 | 761.3 | 763.4 | 761.5 | 770.9 | 761.5 | 761.3 | 759.2 | 759.2 |
| 12.5° | 753.4 | 754.5 | 756.6 | 754.7 | 764.1 | 754.7 | 754.5 | 751.5 | 752.3 |
| 15° | 740.0 | 743.1 | 745.3 | 742.3 | 751.7 | 742.3 | 742.1 | 739.9 | 737.9 |
| 17.5° | 724.0 | 727.1 | 730.8 | 727.6 | 736.2 | 726.6 | 727.6 | 722.9 | 721.0 |
| 20° | 711.2 | 714.4 | 719.8 | 715.7 | 725.1 | 714.7 | 716.6 | 710.2 | 709.1 |
| 22.5° | 697.6 | 699.9 | 707.8 | 703.8 | 712.3 | 702.7 | 703.8 | 695.7 | 694.6 |
| 25° | 676.1 | 678.2 | 686.8 | 683.7 | 691.0 | 681.6 | 684.6 | 672.9 | 671.9 |
| 27.5° | 651.6 | 654.7 | 662.5 | 660.5 | 668.9 | 658.5 | 661.4 | 649.2 | 647.4 |
| 30° | 634.6 | 637.7 | 646.3 | 644.4 | 652.7 | 642.3 | 645.2 | 631.4 | 630.3 |
| 32.5° | 615.8 | 620.6 | 628.4 | 628.1 | 634.8 | 625.2 | 626.5 | 613.5 | 611.6 |
| 35° | 589.9 | 593.0 | 600.5 | 600.7 | 606.9 | 598.6 | 598.4 | 585.6 | 583.5 |
| 37.5° | 560.1 | 564.2 | 572.2 | 573.4 | 579.4 | 570.3 | 568.8 | 557.2 | 553.9 |
| 40° | 538.8 | 542.9 | 552.6 | 553.8 | 559.0 | 550.7 | 548.3 | 537.6 | 533.4 |
| 42.5° | 518.3 | 522.5 | 532.2 | 533.3 | 538.5 | 531.0 | 527.0 | 517.1 | 511.3 |
| 45° | 484.5 | 489.7 | 499.4 | 502.7 | 506.8 | 499.5 | 495.1 | 483.3 | 479.1 |
| 47.5° | 452.1 | 456.3 | 466.1 | 471.5 | 473.4 | 468.4 | 462.7 | 450.1 | 445.7 |
| 50° | 429.1 | 433.3 | 444.0 | 449.3 | 450.4 | 446.2 | 439.7 | 427.9 | 422.7 |
| 52.5° | 405.2 | 409.4 | 421.0 | 426.3 | 427.4 | 423.2 | 416.7 | 404.9 | 399.7 |
| 55° | 370.5 | 374.7 | 383.3 | 391.8 | 391.8 | 389.7 | 382.2 | 369.4 | 365.2 |
| 57.5° | 333.5 | 337.4 | 348.2 | 355.6 | 355.8 | 352.9 | 345.2 | 333.4 | 329.2 |
| 60° | 308.8 | 311.9 | 322.6 | 330.1 | 331.1 | 329.1 | 320.5 | 308.7 | 304.5 |
| 62.5° | 281.5 | 285.5 | 296.2 | 304.6 | 306.4 | 303.5 | 294.1 | 283.1 | 277.3 |
| 65° | 243.8 | 245.9 | 255.5 | 264.1 | 266.2 | 263.1 | 254.5 | 243.8 | 240.6 |
| 67.5° | 206.8 | 208.0 | 217.2 | 225.8 | 228.1 | 224.7 | 216.1 | 208.8 | 203.8 |
| 70° | 182.1 | 184.2 | 191.7 | 200.2 | 203.4 | 199.2 | 190.6 | 184.1 | 179.9 |
| 72.5° | 157.4 | 159.5 | 167.0 | 174.7 | 177.8 | 174.5 | 166.7 | 160.3 | 156.1 |
| 75° | 121.4 | 122.4 | 129.9 | 137.4 | 139.5 | 136.4 | 129.9 | 124.5 | 120.3 |
| 77.5° | 87.3 | 88.3 | 96.3 | 100.8 | 102.6 | 100.8 | 95.6 | 90.4 | 87.5 |
| 80° | 66.0 | 67.1 | 72.4 | 77.7 | 78.8 | 77.7 | 73.5 | 69.2 | 67.1 |
| 82.5° | 45.6 | 46.6 | 52.8 | 56.4 | 56.6 | 57.3 | 53.9 | 50.4 | 47.5 |
| 85° | 19.2 | 20.2 | 25.6 | 28.7 | 26.6 | 29.7 | 27.7 | 24.4 | 22.4 |
| 87.5° | 2.8 | 2.8 | 5.3 | 7.7 | 7.7 | 8.5 | 7.0 | 6.1 | 4.7 |
| 90° | 1.1 | 1.1 | 1.1 | 0.0 | 0.0 | 0.0 | 1.1 | 1.1 | 2.1 |
| 92.5° | 1.1 | 1.9 | 1.1 | 1.7 | 1.7 | 4.2 | 3.6 | 2.8 | 3.0 |
| 95° | 3.2 | 3.2 | 3.2 | 7.5 | 7.5 | 10.7 | 12.9 | 11.8 | 10.7 |
| 97.5° | 4.7 | 4.7 | 6.2 | 21.2 | 16.7 | 14.2 | 20.0 | 20.6 | 20.6 |
| 100° | 6.4 | 6.4 | 9.7 | 33.1 | 23.6 | 19.4 | 22.5 | 25.8 | 25.8 |
| 102.5° | 8.2 | 9.0 | 14.8 | 51.7 | 33.1 | 23.8 | 26.0 | 28.4 | 29.2 |
| 105° | 11.8 | 12.9 | 29.0 | 88.2 | 50.5 | 32.6 | 33.3 | 34.4 | 35.4 |
| 107.5° | 17.6 | 21.8 | 72.8 | 126.1 | 71.5 | 42.1 | 44.4 | 42.5 | 42.5 |
| 110° | 23.6 | 32.0 | 123.5 | 149.9 | 87.0 | 49.2 | 50.5 | 49.4 | 49.4 |



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CATALOG NUMBER: SQW-F-025U-050D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|-------|-------|-------|-------|-------|--------|-------|--------|-------|
| 112.5° | 37.4 | 62.5 | 184.4 | 169.6 | 102.4 | 57.9 | 55.6 | 57.9 | 56.3 |
| 115° | 99.8 | 162.8 | 253.3 | 196.9 | 124.5 | 72.0 | 62.3 | 66.6 | 67.6 |
| 117.5° | 237.9 | 284.7 | 287.3 | 219.9 | 147.3 | 87.9 | 67.6 | 72.6 | 74.7 |
| 120° | 326.3 | 333.7 | 302.7 | 234.5 | 161.0 | 99.1 | 71.9 | 75.2 | 77.3 |
| 122.5° | 359.8 | 352.9 | 316.5 | 248.2 | 174.8 | 112.0 | 78.8 | 78.6 | 80.7 |
| 125° | 387.5 | 372.8 | 334.9 | 268.9 | 196.4 | 132.4 | 92.3 | 83.8 | 84.8 |
| 127.5° | 401.3 | 386.6 | 350.2 | 285.9 | 216.8 | 154.1 | 109.3 | 91.0 | 90.2 |
| 130° | 409.0 | 394.3 | 359.6 | 298.0 | 229.7 | 167.8 | 121.3 | 98.7 | 94.5 |
| 132.5° | 415.9 | 402.0 | 368.2 | 307.5 | 242.6 | 180.7 | 134.2 | 108.1 | 102.2 |
| 135° | 424.0 | 410.4 | 378.9 | 321.7 | 259.8 | 201.0 | 153.5 | 125.4 | 117.0 |
| 137.5° | 431.3 | 418.7 | 388.8 | 334.5 | 277.8 | 219.2 | 173.0 | 145.8 | 136.5 |
| 140° | 434.8 | 422.2 | 394.0 | 342.3 | 289.8 | 232.1 | 186.8 | 158.7 | 150.3 |
| 142.5° | 438.2 | 426.4 | 399.1 | 350.1 | 300.1 | 244.9 | 200.5 | 172.4 | 164.0 |
| 145° | 441.2 | 430.7 | 406.9 | 360.7 | 315.6 | 263.1 | 222.2 | 193.0 | 184.6 |
| 147.5° | 444.4 | 433.3 | 411.8 | 369.8 | 328.3 | 281.0 | 241.7 | 213.7 | 205.5 |
| 150° | 444.4 | 435.0 | 414.4 | 375.9 | 336.0 | 293.0 | 255.5 | 227.4 | 220.1 |
| 152.5° | 445.3 | 435.0 | 416.9 | 381.1 | 344.6 | 304.1 | 268.4 | 241.2 | 234.7 |
| 155° | 444.4 | 435.0 | 419.7 | 387.8 | 354.3 | 318.6 | 287.7 | 261.8 | 255.5 |
| 157.5° | 440.6 | 434.5 | 419.7 | 391.8 | 364.1 | 331.4 | 304.4 | 284.1 | 275.2 |
| 160° | 438.0 | 432.7 | 419.7 | 394.5 | 369.3 | 339.9 | 315.6 | 296.1 | 289.8 |
| 162.5° | 435.4 | 430.2 | 418.9 | 397.1 | 374.4 | 347.6 | 325.1 | 306.5 | 301.9 |
| 165° | 429.4 | 425.2 | 416.5 | 398.9 | 381.1 | 358.0 | 339.2 | 323.0 | 318.8 |
| 167.5° | 422.7 | 419.8 | 412.6 | 400.1 | 386.0 | 368.0 | 351.7 | 339.1 | 334.3 |
| 170° | 417.6 | 415.5 | 410.1 | 400.1 | 388.6 | 373.9 | 358.5 | 347.7 | 344.6 |
| 172.5° | 410.7 | 409.5 | 406.6 | 398.5 | 390.3 | 378.1 | 366.3 | 356.3 | 353.2 |
| 175° | 400.4 | 400.4 | 400.4 | 397.1 | 392.9 | 384.5 | 375.7 | 368.2 | 366.1 |
| 177.5° | 392.3 | 393.1 | 394.0 | 393.1 | 393.1 | 388.9 | 384.5 | 380.2 | 381.1 |
| 180° | 389.7 | 389.7 | 389.7 | 389.7 | 389.7 | 389.7 | 389.7 | 389.7 | 389.7 |

(END OF REPORT)