

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: P511725

Luminaire Tested: **SQW-F-025U-050D-830-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511725
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-830-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

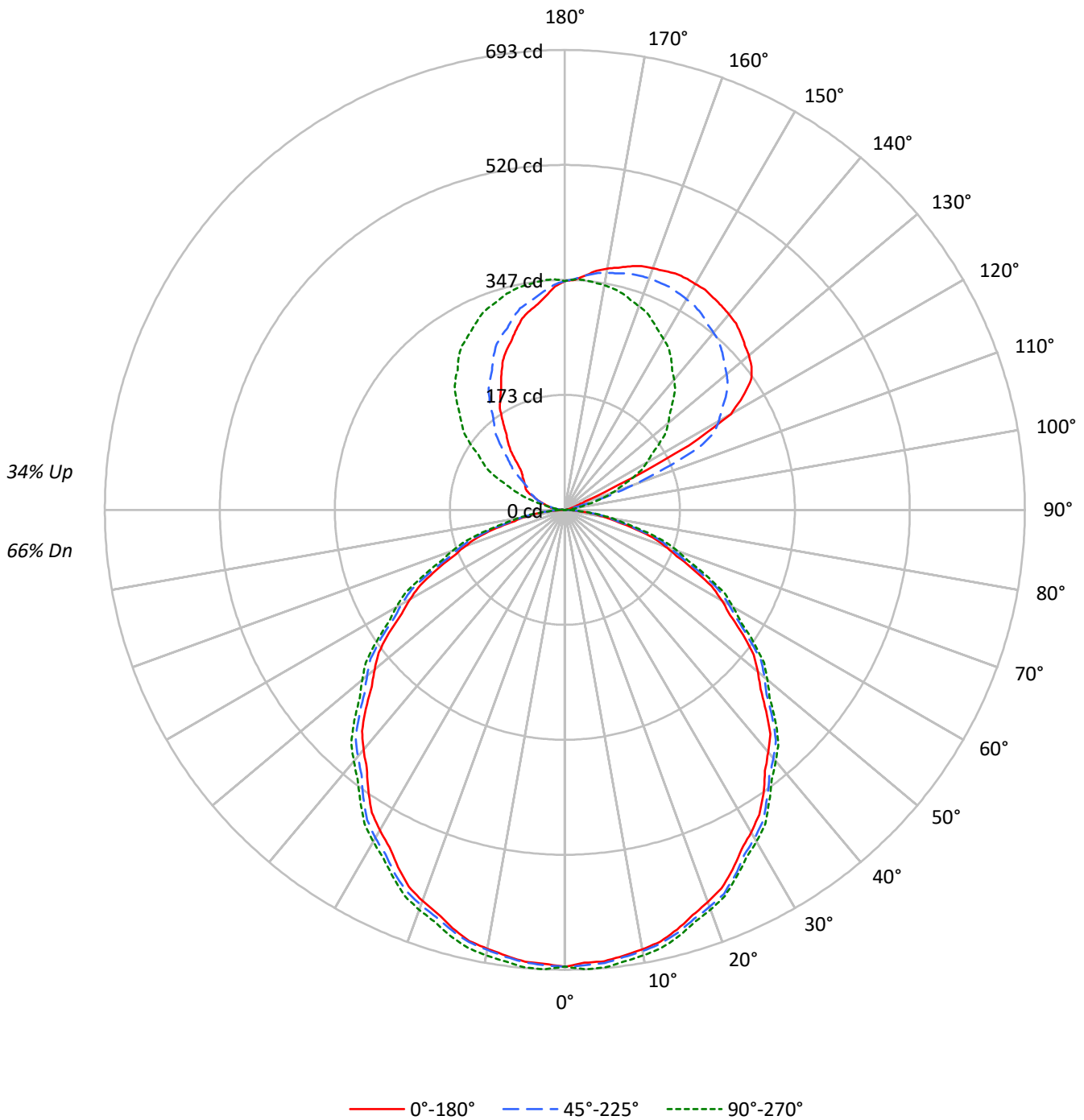
Lumens per Lamp: N/A
Luminaire Lumens: 2823.7 lumens
Efficiency: N/A
Efficacy: 114.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: Semi-Direct

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: P511725
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Luminous Intensity Polar Plot





TEST NUMBER: P511725

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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° | 22230 | 22230 | 22230 |
| 5° | 22133 | 22438 | 22162 |
| 10° | 22048 | 22356 | 22019 |
| 15° | 21881 | 22228 | 21817 |
| 20° | 21619 | 22038 | 21553 |
| 25° | 21307 | 21777 | 21171 |
| 30° | 20929 | 21526 | 20788 |
| 35° | 20566 | 21161 | 20345 |
| 40° | 20086 | 20841 | 19888 |
| 45° | 19569 | 20473 | 19354 |
| 50° | 19065 | 20015 | 18784 |
| 55° | 18449 | 19513 | 18185 |
| 60° | 17638 | 18917 | 17392 |
| 65° | 16481 | 17987 | 16260 |
| 70° | 15201 | 16985 | 15031 |
| 75° | 13400 | 15396 | 13275 |
| 80° | 10860 | 12962 | 11028 |
| 85° | 6299 | 8707 | 7336 |



TEST NUMBER: P511725

CATALOG NUMBER: SQW-F-025U-050D-830-1D-UNV-STD-W-4

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 65.0 | 2.3 |
| 10°-20° | 185.2 | 6.6 |
| 20°-30° | 277.5 | 9.8 |
| 30°-40° | 329.9 | 11.7 |
| 40°-50° | 337.6 | 12.0 |
| 50°-60° | 301.1 | 10.7 |
| 60°-70° | 223.4 | 7.9 |
| 70°-80° | 122.3 | 4.3 |
| 80°-90° | 29.1 | 1.0 |
| 90°-100° | 8.4 | 0.3 |
| 100°-110° | 38.6 | 1.4 |
| 110°-120° | 112.1 | 4.0 |
| 120°-130° | 169.2 | 6.0 |
| 130°-140° | 181.1 | 6.4 |
| 140°-150° | 173.1 | 6.1 |
| 150°-160° | 143.3 | 5.1 |
| 160°-170° | 94.1 | 3.3 |
| 170°-180° | 32.6 | 1.2 |
| 0°-30° | 527.8 | 18.7 |
| 0°-40° | 857.6 | 30.4 |
| 0°-60° | 1496.3 | 53.0 |
| 0°-90° | 1871.1 | 66.3 |
| 90°-120° | 159.2 | 5.6 |
| 90°-150° | 682.6 | 24.2 |
| 90°-180° | 953.0 | 33.7 |
| 0°-180° | 2823.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|------|-----|-----|-----|------|------|------|
| 0° | 688 | 688 | 688 | 688 | 688 | |
| 5° | 683 | 686 | 692 | 685 | 684 | 65 |
| 15° | 654 | 659 | 665 | 656 | 653 | 184 |
| 25° | 598 | 607 | 611 | 606 | 594 | 275 |
| 35° | 522 | 531 | 537 | 529 | 516 | 326 |
| 45° | 428 | 442 | 448 | 438 | 424 | 331 |
| 55° | 328 | 339 | 347 | 338 | 323 | 292 |
| 65° | 216 | 226 | 235 | 225 | 213 | 214 |
| 75° | 107 | 115 | 123 | 115 | 106 | 114 |
| 85° | 17 | 23 | 24 | 24 | 20 | 24 |
| 90° | 1 | 1 | 0 | 1 | 2 | 1 |
| 95° | 3 | 3 | 7 | 11 | 10 | 3 |
| 105° | 10 | 26 | 45 | 29 | 31 | 12 |
| 115° | 88 | 224 | 110 | 55 | 60 | 119 |
| 125° | 343 | 296 | 174 | 82 | 75 | 300 |
| 135° | 375 | 335 | 230 | 136 | 104 | 290 |
| 145° | 390 | 360 | 279 | 196 | 163 | 245 |
| 155° | 393 | 371 | 313 | 254 | 226 | 181 |
| 165° | 380 | 368 | 337 | 300 | 282 | 108 |
| 175° | 354 | 354 | 348 | 332 | 324 | 34 |
| 180° | 345 | 345 | 345 | 345 | 345 | |



TEST NUMBER: P511725

CATALOG NUMBER: SQW-F-025U-050D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|-------|-------|-------|-------|-------|--------|-------|--------|-------|
| 0° | 688.4 | 688.4 | 688.4 | 688.4 | 688.4 | 688.4 | 688.4 | 688.4 | 688.4 |
| 2.5° | 683.1 | 686.1 | 686.9 | 686.3 | 692.9 | 687.0 | 686.9 | 686.1 | 684.6 |
| 5° | 682.8 | 683.7 | 685.6 | 683.9 | 692.2 | 683.9 | 684.6 | 682.8 | 683.7 |
| 7.5° | 677.7 | 678.6 | 679.8 | 678.8 | 686.3 | 678.8 | 679.4 | 677.5 | 677.5 |
| 10° | 672.4 | 673.3 | 675.2 | 673.5 | 681.8 | 673.5 | 673.3 | 671.5 | 671.5 |
| 12.5° | 666.4 | 667.3 | 669.2 | 667.5 | 675.8 | 667.5 | 667.3 | 664.7 | 665.4 |
| 15° | 654.5 | 657.3 | 659.2 | 656.6 | 664.9 | 656.6 | 656.4 | 654.5 | 652.6 |
| 17.5° | 640.4 | 643.1 | 646.4 | 643.6 | 651.1 | 642.7 | 643.6 | 639.4 | 637.7 |
| 20° | 629.1 | 631.8 | 636.6 | 633.0 | 641.3 | 632.1 | 633.8 | 628.1 | 627.2 |
| 22.5° | 617.0 | 619.1 | 626.1 | 622.5 | 630.0 | 621.6 | 622.5 | 615.3 | 614.4 |
| 25° | 598.0 | 599.8 | 607.4 | 604.7 | 611.2 | 602.9 | 605.5 | 595.2 | 594.2 |
| 27.5° | 576.3 | 579.1 | 586.0 | 584.2 | 591.6 | 582.4 | 585.0 | 574.2 | 572.6 |
| 30° | 561.3 | 564.0 | 571.6 | 569.9 | 577.3 | 568.1 | 570.7 | 558.4 | 557.5 |
| 32.5° | 544.7 | 548.9 | 555.8 | 555.6 | 561.5 | 553.0 | 554.1 | 542.6 | 540.9 |
| 35° | 521.7 | 524.5 | 531.1 | 531.3 | 536.8 | 529.4 | 529.3 | 517.9 | 516.1 |
| 37.5° | 495.4 | 499.0 | 506.1 | 507.2 | 512.5 | 504.4 | 503.1 | 492.8 | 489.9 |
| 40° | 476.5 | 480.2 | 488.8 | 489.8 | 494.4 | 487.0 | 485.0 | 475.5 | 471.8 |
| 42.5° | 458.4 | 462.1 | 470.7 | 471.7 | 476.3 | 469.7 | 466.2 | 457.4 | 452.2 |
| 45° | 428.5 | 433.1 | 441.7 | 444.6 | 448.3 | 441.8 | 437.9 | 427.5 | 423.8 |
| 47.5° | 399.9 | 403.5 | 412.3 | 417.0 | 418.7 | 414.3 | 409.3 | 398.1 | 394.2 |
| 50° | 379.5 | 383.2 | 392.7 | 397.4 | 398.4 | 394.7 | 388.9 | 378.5 | 373.9 |
| 52.5° | 358.4 | 362.1 | 372.4 | 377.1 | 378.0 | 374.3 | 368.6 | 358.1 | 353.5 |
| 55° | 327.7 | 331.4 | 339.0 | 346.6 | 346.6 | 344.7 | 338.1 | 326.7 | 323.0 |
| 57.5° | 295.0 | 298.5 | 308.0 | 314.5 | 314.7 | 312.2 | 305.3 | 294.9 | 291.2 |
| 60° | 273.1 | 275.9 | 285.3 | 292.0 | 292.9 | 291.0 | 283.5 | 273.0 | 269.3 |
| 62.5° | 249.0 | 252.5 | 262.0 | 269.4 | 271.0 | 268.5 | 260.1 | 250.4 | 245.2 |
| 65° | 215.7 | 217.5 | 226.0 | 233.6 | 235.4 | 232.7 | 225.1 | 215.6 | 212.8 |
| 67.5° | 182.9 | 184.0 | 192.1 | 199.7 | 201.7 | 198.8 | 191.2 | 184.7 | 180.2 |
| 70° | 161.0 | 162.9 | 169.5 | 177.1 | 179.9 | 176.2 | 168.6 | 162.8 | 159.2 |
| 72.5° | 139.2 | 141.0 | 147.7 | 154.5 | 157.3 | 154.3 | 147.5 | 141.7 | 138.1 |
| 75° | 107.4 | 108.3 | 114.9 | 121.5 | 123.4 | 120.6 | 114.9 | 110.1 | 106.4 |
| 77.5° | 77.2 | 78.1 | 85.1 | 89.1 | 90.8 | 89.1 | 84.6 | 80.0 | 77.4 |
| 80° | 58.4 | 59.3 | 64.0 | 68.8 | 69.7 | 68.8 | 65.0 | 61.2 | 59.3 |
| 82.5° | 40.3 | 41.2 | 46.7 | 49.9 | 50.1 | 50.7 | 47.7 | 44.6 | 42.0 |
| 85° | 17.0 | 17.9 | 22.6 | 25.4 | 23.5 | 26.3 | 24.5 | 21.6 | 19.8 |
| 87.5° | 2.5 | 2.5 | 4.7 | 6.8 | 6.8 | 7.5 | 6.2 | 5.4 | 4.1 |
| 90° | 0.9 | 0.9 | 0.9 | 0.0 | 0.0 | 0.0 | 0.9 | 1.0 | 1.9 |
| 92.5° | 0.9 | 1.7 | 0.9 | 1.5 | 1.5 | 3.7 | 3.2 | 2.5 | 2.7 |
| 95° | 2.8 | 2.8 | 2.8 | 6.6 | 6.6 | 9.4 | 11.4 | 10.4 | 9.5 |
| 97.5° | 4.2 | 4.2 | 5.5 | 18.7 | 14.8 | 12.6 | 17.7 | 18.2 | 18.2 |
| 100° | 5.7 | 5.7 | 8.5 | 29.2 | 20.9 | 17.2 | 19.9 | 22.8 | 22.8 |
| 102.5° | 7.2 | 8.0 | 13.1 | 45.8 | 29.2 | 21.1 | 23.0 | 25.1 | 25.8 |
| 105° | 10.4 | 11.4 | 25.6 | 78.0 | 44.6 | 28.8 | 29.4 | 30.4 | 31.3 |
| 107.5° | 15.6 | 19.3 | 64.4 | 111.5 | 63.2 | 37.2 | 39.3 | 37.6 | 37.6 |
| 110° | 20.9 | 28.3 | 109.2 | 132.6 | 76.9 | 43.5 | 44.6 | 43.7 | 43.7 |

TEST NUMBER: P511725

CATALOG NUMBER: SQW-F-025U-050D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|-------|-------|-------|-------|-------|--------|-------|--------|-------|
| 112.5° | 33.0 | 55.3 | 163.1 | 150.0 | 90.6 | 51.2 | 49.2 | 51.2 | 49.8 |
| 115° | 88.3 | 144.0 | 224.1 | 174.2 | 110.1 | 63.7 | 55.1 | 58.9 | 59.8 |
| 117.5° | 210.4 | 251.8 | 254.1 | 194.5 | 130.3 | 77.7 | 59.8 | 64.2 | 66.1 |
| 120° | 288.6 | 295.1 | 267.8 | 207.4 | 142.4 | 87.6 | 63.6 | 66.5 | 68.4 |
| 122.5° | 318.3 | 312.1 | 279.9 | 219.6 | 154.6 | 99.1 | 69.7 | 69.5 | 71.4 |
| 125° | 342.8 | 329.8 | 296.2 | 237.8 | 173.8 | 117.1 | 81.7 | 74.1 | 75.0 |
| 127.5° | 354.9 | 341.9 | 309.7 | 252.9 | 191.8 | 136.3 | 96.7 | 80.5 | 79.8 |
| 130° | 361.8 | 348.8 | 318.1 | 263.5 | 203.2 | 148.4 | 107.3 | 87.3 | 83.6 |
| 132.5° | 367.8 | 355.6 | 325.7 | 272.0 | 214.6 | 159.8 | 118.7 | 95.6 | 90.4 |
| 135° | 375.0 | 363.0 | 335.2 | 284.5 | 229.8 | 177.8 | 135.8 | 110.9 | 103.5 |
| 137.5° | 381.5 | 370.4 | 343.9 | 295.9 | 245.7 | 193.9 | 153.1 | 128.9 | 120.8 |
| 140° | 384.5 | 373.4 | 348.5 | 302.8 | 256.4 | 205.3 | 165.2 | 140.4 | 132.9 |
| 142.5° | 387.6 | 377.2 | 353.0 | 309.7 | 265.5 | 216.6 | 177.4 | 152.5 | 145.1 |
| 145° | 390.2 | 381.0 | 359.9 | 319.1 | 279.1 | 232.7 | 196.5 | 170.7 | 163.3 |
| 147.5° | 393.1 | 383.2 | 364.2 | 327.1 | 290.4 | 248.6 | 213.8 | 189.0 | 181.7 |
| 150° | 393.1 | 384.7 | 366.5 | 332.5 | 297.2 | 259.1 | 226.0 | 201.1 | 194.6 |
| 152.5° | 393.8 | 384.7 | 368.8 | 337.1 | 304.8 | 268.9 | 237.4 | 213.3 | 207.6 |
| 155° | 393.1 | 384.7 | 371.2 | 343.0 | 313.3 | 281.8 | 254.5 | 231.5 | 226.0 |
| 157.5° | 389.7 | 384.3 | 371.2 | 346.6 | 322.1 | 293.1 | 269.3 | 251.2 | 243.4 |
| 160° | 387.4 | 382.7 | 371.2 | 348.9 | 326.6 | 300.6 | 279.1 | 261.9 | 256.4 |
| 162.5° | 385.1 | 380.5 | 370.5 | 351.2 | 331.2 | 307.4 | 287.5 | 271.1 | 267.0 |
| 165° | 379.8 | 376.1 | 368.4 | 352.8 | 337.1 | 316.6 | 300.0 | 285.7 | 282.0 |
| 167.5° | 373.9 | 371.3 | 365.0 | 353.9 | 341.4 | 325.5 | 311.0 | 299.9 | 295.7 |
| 170° | 369.3 | 367.5 | 362.7 | 353.9 | 343.7 | 330.7 | 317.1 | 307.6 | 304.8 |
| 172.5° | 363.3 | 362.2 | 359.7 | 352.5 | 345.2 | 334.5 | 324.0 | 315.2 | 312.4 |
| 175° | 354.2 | 354.2 | 354.2 | 351.2 | 347.5 | 340.1 | 332.3 | 325.6 | 323.8 |
| 177.5° | 346.9 | 347.7 | 348.5 | 347.7 | 347.7 | 344.0 | 340.1 | 336.3 | 337.1 |
| 180° | 344.7 | 344.7 | 344.7 | 344.7 | 344.7 | 344.7 | 344.7 | 344.7 | 344.7 |

(END OF REPORT)