

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: P511720

Luminaire Tested: **SQW-F-025U-025D-835-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511720
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-025D-835-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 250 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

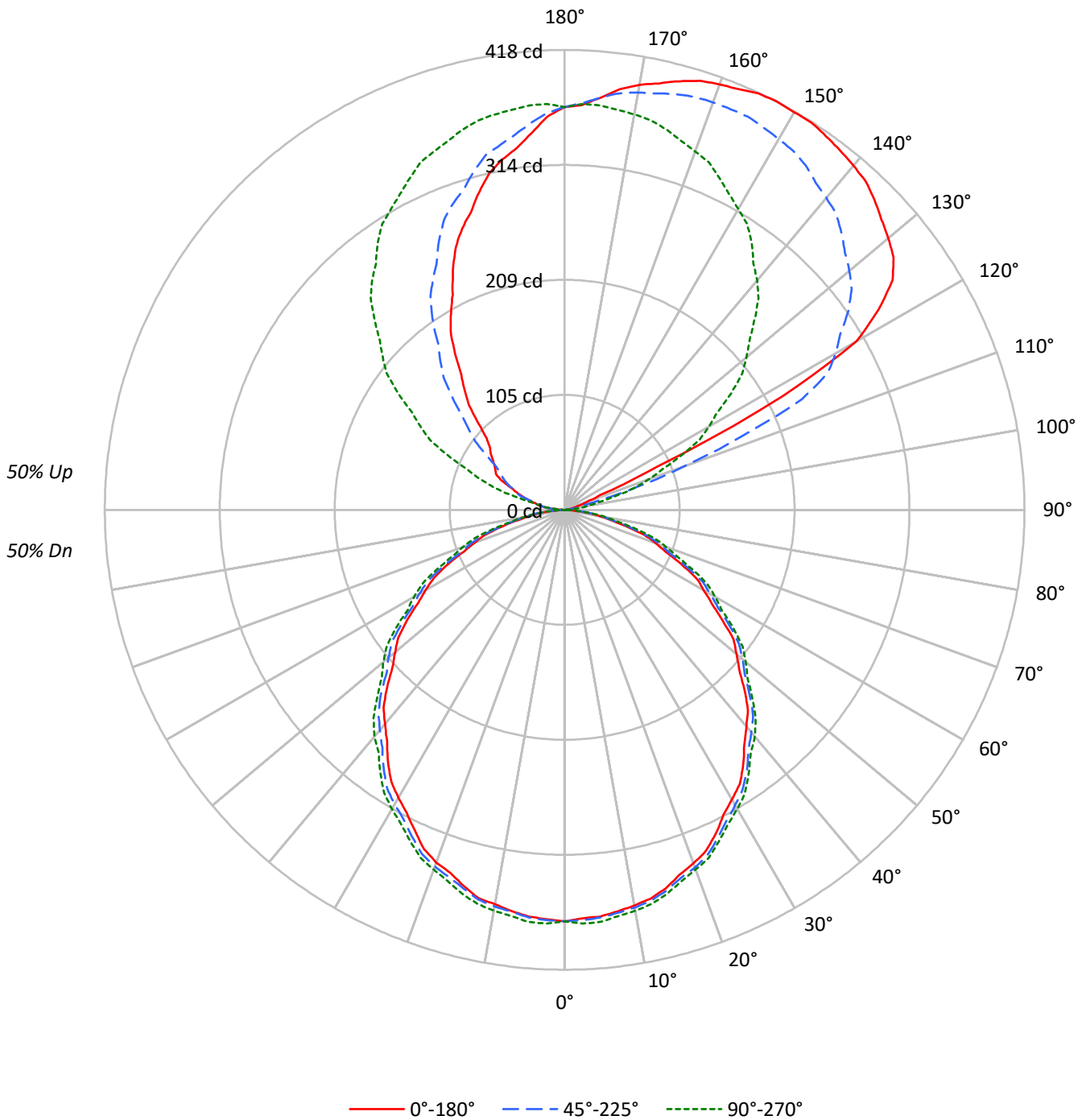
Lumens per Lamp: N/A
Luminaire Lumens: 2024.2 lumens
Efficiency: N/A
Efficacy: 124.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 16.3
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: P511720
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Luminous Intensity Polar Plot





TEST NUMBER: P511720

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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 | 90 | 86 | 90 | 86 | 83 | 80 | 73 | 71 | 68 | 61 | 59 | 58 | 50 | 48 | 47 | 42 |
| 2 | 89 | 82 | 75 | 70 | 82 | 75 | 70 | 66 | 64 | 60 | 57 | 53 | 50 | 48 | 44 | 42 | 40 | 35 |
| 3 | 81 | 72 | 64 | 58 | 75 | 66 | 60 | 55 | 56 | 51 | 47 | 47 | 44 | 40 | 39 | 36 | 34 | 30 |
| 4 | 74 | 63 | 55 | 49 | 68 | 59 | 52 | 46 | 50 | 45 | 40 | 42 | 38 | 35 | 34 | 31 | 29 | 25 |
| 5 | 68 | 56 | 48 | 42 | 62 | 52 | 45 | 40 | 45 | 39 | 35 | 38 | 33 | 30 | 31 | 28 | 25 | 22 |
| 6 | 63 | 50 | 42 | 36 | 58 | 47 | 40 | 34 | 40 | 34 | 30 | 34 | 30 | 26 | 28 | 25 | 22 | 19 |
| 7 | 58 | 46 | 38 | 32 | 53 | 42 | 35 | 30 | 36 | 31 | 27 | 31 | 26 | 23 | 26 | 22 | 20 | 17 |
| 8 | 54 | 41 | 34 | 28 | 49 | 39 | 32 | 27 | 33 | 28 | 24 | 28 | 24 | 21 | 23 | 20 | 18 | 15 |
| 9 | 50 | 38 | 30 | 25 | 46 | 35 | 28 | 24 | 30 | 25 | 21 | 26 | 22 | 18 | 22 | 18 | 16 | 14 |
| 10 | 47 | 35 | 27 | 22 | 43 | 32 | 26 | 21 | 28 | 23 | 19 | 24 | 20 | 17 | 20 | 17 | 14 | 12 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|-------|-------|-------|
| 0° | 12077 | 12077 | 12077 |
| 5° | 12026 | 12188 | 12026 |
| 10° | 11968 | 12132 | 11936 |
| 15° | 11901 | 12069 | 11835 |
| 20° | 11753 | 11959 | 11718 |
| 25° | 11580 | 11829 | 11473 |
| 30° | 11335 | 11708 | 11261 |
| 35° | 11156 | 11511 | 11038 |
| 40° | 10834 | 11339 | 10707 |
| 45° | 10549 | 11006 | 10412 |
| 50° | 10248 | 10801 | 10098 |
| 55° | 9852 | 10528 | 9852 |
| 60° | 9429 | 10204 | 9429 |
| 65° | 8940 | 9780 | 8940 |
| 70° | 8309 | 9253 | 8214 |
| 75° | 7236 | 8359 | 7361 |
| 80° | 5951 | 6881 | 6137 |
| 85° | 3335 | 4817 | 4076 |



TEST NUMBER: P511720

CATALOG NUMBER: SQW-F-025U-025D-835-1D-UNV-STD-W-4

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 35.3 | 1.7 |
| 10°-20° | 100.6 | 5.0 |
| 20°-30° | 150.7 | 7.4 |
| 30°-40° | 178.9 | 8.8 |
| 40°-50° | 181.8 | 9.0 |
| 50°-60° | 162.0 | 8.0 |
| 60°-70° | 120.9 | 6.0 |
| 70°-80° | 66.5 | 3.3 |
| 80°-90° | 15.9 | 0.8 |
| 90°-100° | 9.0 | 0.4 |
| 100°-110° | 41.0 | 2.0 |
| 110°-120° | 119.0 | 5.9 |
| 120°-130° | 179.6 | 8.9 |
| 130°-140° | 192.3 | 9.5 |
| 140°-150° | 183.8 | 9.1 |
| 150°-160° | 152.2 | 7.5 |
| 160°-170° | 99.9 | 4.9 |
| 170°-180° | 34.7 | 1.7 |
| 0°-30° | 286.7 | 14.2 |
| 0°-40° | 465.6 | 23.0 |
| 0°-60° | 809.3 | 40.0 |
| 0°-90° | 1012.6 | 50.0 |
| 90°-120° | 169.0 | 8.4 |
| 90°-150° | 724.8 | 35.8 |
| 90°-180° | 1012.0 | 50.0 |
| 0°-180° | 2024.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|------|-----|-----|-----|------|------|------|
| 0° | 374 | 374 | 374 | 374 | 374 | |
| 5° | 371 | 372 | 376 | 372 | 371 | 35 |
| 15° | 356 | 358 | 361 | 356 | 354 | 100 |
| 25° | 325 | 329 | 332 | 328 | 322 | 149 |
| 35° | 283 | 289 | 292 | 287 | 280 | 176 |
| 45° | 231 | 238 | 241 | 236 | 228 | 178 |
| 55° | 175 | 183 | 187 | 181 | 175 | 157 |
| 65° | 117 | 122 | 128 | 122 | 117 | 116 |
| 75° | 58 | 62 | 67 | 62 | 59 | 62 |
| 85° | 9 | 12 | 13 | 13 | 11 | 13 |
| 90° | 1 | 1 | 0 | 1 | 2 | 1 |
| 95° | 3 | 3 | 7 | 12 | 10 | 3 |
| 105° | 11 | 27 | 47 | 31 | 33 | 13 |
| 115° | 94 | 238 | 117 | 58 | 64 | 126 |
| 125° | 364 | 315 | 184 | 87 | 80 | 319 |
| 135° | 398 | 356 | 244 | 144 | 110 | 308 |
| 145° | 414 | 382 | 296 | 209 | 173 | 260 |
| 155° | 417 | 394 | 333 | 270 | 240 | 193 |
| 165° | 403 | 391 | 358 | 319 | 299 | 114 |
| 175° | 376 | 376 | 369 | 353 | 344 | 36 |
| 180° | 366 | 366 | 366 | 366 | 366 | |



TEST NUMBER: P511720

CATALOG NUMBER: SQW-F-025U-025D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|-------|-------|-------|-------|-------|--------|-------|--------|-------|
| 0° | 374.0 | 374.0 | 374.0 | 374.0 | 374.0 | 374.0 | 374.0 | 374.0 | 374.0 |
| 2.5° | 371.6 | 373.2 | 373.2 | 373.3 | 376.4 | 373.3 | 373.2 | 373.2 | 372.4 |
| 5° | 371.0 | 371.0 | 372.0 | 372.1 | 376.0 | 372.1 | 372.0 | 371.0 | 371.0 |
| 7.5° | 368.2 | 368.4 | 369.4 | 369.3 | 372.4 | 368.3 | 368.4 | 368.2 | 368.0 |
| 10° | 365.0 | 366.0 | 367.0 | 366.1 | 370.0 | 365.1 | 366.0 | 365.0 | 364.0 |
| 12.5° | 361.8 | 362.8 | 363.8 | 362.9 | 366.8 | 362.7 | 362.8 | 361.8 | 361.6 |
| 15° | 356.0 | 357.0 | 358.0 | 357.1 | 361.0 | 356.1 | 356.0 | 355.0 | 354.0 |
| 17.5° | 347.6 | 349.4 | 350.8 | 349.9 | 353.6 | 348.9 | 349.8 | 347.4 | 345.8 |
| 20° | 342.0 | 343.0 | 346.0 | 345.1 | 348.0 | 344.1 | 345.0 | 341.0 | 341.0 |
| 22.5° | 335.6 | 336.6 | 339.6 | 338.7 | 342.4 | 337.7 | 338.6 | 334.6 | 333.8 |
| 25° | 325.0 | 326.0 | 329.0 | 328.1 | 332.0 | 327.1 | 328.0 | 323.0 | 322.0 |
| 27.5° | 312.8 | 314.0 | 318.8 | 317.9 | 322.0 | 316.1 | 317.0 | 312.0 | 310.8 |
| 30° | 304.0 | 306.0 | 310.0 | 309.1 | 314.0 | 308.1 | 309.0 | 304.0 | 302.0 |
| 32.5° | 296.0 | 298.0 | 301.2 | 301.9 | 305.2 | 300.1 | 300.2 | 295.2 | 293.2 |
| 35° | 283.0 | 285.0 | 289.0 | 289.1 | 292.0 | 287.1 | 287.0 | 282.0 | 280.0 |
| 37.5° | 268.2 | 270.0 | 274.4 | 275.6 | 277.8 | 273.3 | 272.2 | 267.2 | 265.2 |
| 40° | 257.0 | 258.0 | 264.0 | 266.1 | 269.0 | 262.2 | 261.0 | 256.0 | 254.0 |
| 42.5° | 246.6 | 248.4 | 253.6 | 254.8 | 257.0 | 252.5 | 250.6 | 245.6 | 243.6 |
| 45° | 231.0 | 233.0 | 238.0 | 240.0 | 241.0 | 237.1 | 236.0 | 230.9 | 228.0 |
| 47.5° | 215.2 | 217.2 | 222.2 | 224.4 | 225.4 | 222.5 | 219.4 | 215.1 | 212.2 |
| 50° | 204.0 | 206.0 | 211.0 | 214.0 | 215.0 | 212.1 | 209.0 | 203.9 | 201.0 |
| 52.5° | 193.6 | 194.8 | 199.8 | 203.6 | 203.8 | 201.6 | 197.8 | 192.8 | 190.6 |
| 55° | 175.0 | 177.9 | 183.0 | 187.0 | 187.0 | 185.0 | 181.0 | 176.0 | 175.0 |
| 57.5° | 158.8 | 160.0 | 165.0 | 169.0 | 169.2 | 168.0 | 164.0 | 159.0 | 158.0 |
| 60° | 146.0 | 148.0 | 153.0 | 157.0 | 158.0 | 156.0 | 152.0 | 147.0 | 146.0 |
| 62.5° | 135.6 | 136.0 | 141.0 | 145.0 | 146.0 | 144.0 | 140.0 | 135.8 | 134.0 |
| 65° | 117.0 | 118.0 | 122.0 | 127.0 | 128.0 | 126.0 | 122.0 | 118.0 | 117.0 |
| 67.5° | 99.2 | 100.2 | 104.0 | 108.8 | 110.0 | 108.0 | 103.0 | 100.0 | 99.0 |
| 70° | 88.0 | 89.0 | 92.0 | 96.0 | 98.0 | 96.0 | 91.0 | 88.0 | 87.0 |
| 72.5° | 76.0 | 77.0 | 80.0 | 84.0 | 85.2 | 83.2 | 79.0 | 76.8 | 75.8 |
| 75° | 58.0 | 60.0 | 62.0 | 66.0 | 67.0 | 66.0 | 62.0 | 60.0 | 59.0 |
| 77.5° | 42.4 | 43.4 | 45.4 | 48.2 | 49.0 | 48.2 | 46.4 | 43.4 | 43.4 |
| 80° | 32.0 | 33.0 | 35.0 | 37.0 | 37.0 | 37.0 | 36.0 | 33.0 | 33.0 |
| 82.5° | 22.4 | 23.4 | 24.6 | 27.4 | 26.6 | 27.4 | 26.4 | 24.2 | 23.4 |
| 85° | 9.0 | 10.0 | 12.0 | 14.0 | 13.0 | 14.0 | 13.0 | 11.0 | 11.0 |
| 87.5° | 1.0 | 1.8 | 1.8 | 4.0 | 4.0 | 4.8 | 3.4 | 2.6 | 2.8 |
| 90° | 1.0 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | 1.0 | 1.0 | 2.0 |
| 92.5° | 1.0 | 1.8 | 1.0 | 1.6 | 1.6 | 4.0 | 3.4 | 2.6 | 2.8 |
| 95° | 3.0 | 3.0 | 3.0 | 7.1 | 7.1 | 10.0 | 12.1 | 11.1 | 10.1 |
| 97.5° | 4.4 | 4.4 | 5.8 | 19.9 | 15.7 | 13.4 | 18.8 | 19.4 | 19.4 |
| 100° | 6.0 | 6.0 | 9.1 | 31.1 | 22.2 | 18.2 | 21.2 | 24.2 | 24.2 |
| 102.5° | 7.7 | 8.5 | 13.9 | 48.6 | 31.1 | 22.4 | 24.4 | 26.6 | 27.4 |
| 105° | 11.1 | 12.1 | 27.2 | 82.9 | 47.4 | 30.6 | 31.3 | 32.3 | 33.3 |
| 107.5° | 16.5 | 20.5 | 68.4 | 118.4 | 67.1 | 39.5 | 41.7 | 39.9 | 39.9 |
| 110° | 22.2 | 30.1 | 115.9 | 140.8 | 81.7 | 46.2 | 47.4 | 46.4 | 46.4 |

TEST NUMBER: P511720

CATALOG NUMBER: SQW-F-025U-025D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|-------|-------|-------|-------|-------|--------|-------|--------|-------|
| 112.5° | 35.1 | 58.7 | 173.2 | 159.3 | 96.2 | 54.4 | 52.2 | 54.4 | 52.8 |
| 115° | 93.8 | 152.9 | 237.9 | 185.0 | 117.0 | 67.7 | 58.5 | 62.5 | 63.5 |
| 117.5° | 223.4 | 267.4 | 269.8 | 206.5 | 138.3 | 82.5 | 63.5 | 68.2 | 70.2 |
| 120° | 306.5 | 313.4 | 284.3 | 220.2 | 151.2 | 93.1 | 67.6 | 70.6 | 72.6 |
| 122.5° | 338.0 | 331.4 | 297.2 | 233.1 | 164.1 | 105.2 | 74.0 | 73.8 | 75.8 |
| 125° | 364.0 | 350.2 | 314.6 | 252.5 | 184.5 | 124.4 | 86.7 | 78.7 | 79.6 |
| 127.5° | 376.9 | 363.1 | 328.9 | 268.5 | 203.7 | 144.7 | 102.6 | 85.5 | 84.7 |
| 130° | 384.1 | 370.3 | 337.8 | 279.8 | 215.8 | 157.6 | 113.9 | 92.7 | 88.7 |
| 132.5° | 390.6 | 377.6 | 345.8 | 288.8 | 227.9 | 169.7 | 126.0 | 101.5 | 96.0 |
| 135° | 398.2 | 385.4 | 355.9 | 302.2 | 244.0 | 188.8 | 144.2 | 117.8 | 109.9 |
| 137.5° | 405.1 | 393.3 | 365.2 | 314.2 | 260.9 | 205.9 | 162.5 | 136.9 | 128.2 |
| 140° | 408.3 | 396.5 | 370.0 | 321.5 | 272.2 | 218.0 | 175.4 | 149.0 | 141.2 |
| 142.5° | 411.6 | 400.5 | 374.9 | 328.8 | 281.9 | 230.0 | 188.3 | 161.9 | 154.1 |
| 145° | 414.4 | 404.5 | 382.1 | 338.8 | 296.4 | 247.1 | 208.7 | 181.3 | 173.4 |
| 147.5° | 417.4 | 407.0 | 386.8 | 347.4 | 308.3 | 264.0 | 227.1 | 200.7 | 193.0 |
| 150° | 417.4 | 408.5 | 389.2 | 353.0 | 315.6 | 275.2 | 240.0 | 213.6 | 206.7 |
| 152.5° | 418.2 | 408.5 | 391.6 | 357.9 | 323.6 | 285.6 | 252.1 | 226.5 | 220.4 |
| 155° | 417.4 | 408.5 | 394.2 | 364.3 | 332.7 | 299.2 | 270.2 | 245.9 | 240.0 |
| 157.5° | 413.8 | 408.1 | 394.2 | 368.0 | 342.0 | 311.2 | 285.9 | 266.8 | 258.5 |
| 160° | 411.4 | 406.4 | 394.2 | 370.5 | 346.8 | 319.2 | 296.4 | 278.1 | 272.2 |
| 162.5° | 408.9 | 404.0 | 393.4 | 373.0 | 351.7 | 326.4 | 305.3 | 287.8 | 283.5 |
| 165° | 403.3 | 399.3 | 391.2 | 374.7 | 357.9 | 336.2 | 318.6 | 303.4 | 299.4 |
| 167.5° | 397.0 | 394.3 | 387.6 | 375.8 | 362.6 | 345.6 | 330.3 | 318.5 | 314.0 |
| 170° | 392.2 | 390.2 | 385.1 | 375.8 | 365.0 | 351.2 | 336.7 | 326.6 | 323.6 |
| 172.5° | 385.7 | 384.6 | 381.9 | 374.3 | 366.6 | 355.2 | 344.0 | 334.7 | 331.7 |
| 175° | 376.1 | 376.1 | 376.1 | 373.0 | 369.0 | 361.1 | 352.9 | 345.8 | 343.8 |
| 177.5° | 368.4 | 369.2 | 370.0 | 369.2 | 369.2 | 365.3 | 361.1 | 357.1 | 357.9 |
| 180° | 366.0 | 366.0 | 366.0 | 366.0 | 366.0 | 366.0 | 366.0 | 366.0 | 366.0 |

(END OF REPORT)