Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled data based on original data using

LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: METALUX

Report Number: P1559214

Luminaire Tested: 4NWS3C5-4500-High

Issue Date: 9/2/2026

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1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

**Test Information**

| | |
|---|---|
| Test Method: | LM-79-2019 |
| Report Number: | P1559214 |
| | TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2607-872-8) |
| Test Lab: | INNOVATION CENTER |
| Issue Date: | 9/2/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | METALUX |
| Catalog Number: | 4NWS3C5-4500-High |
| Description: | 4ft WRAP High Lumen 5 CCT SEL NUV 0-10V DIM 4500K |
| Light Source: | |
| Ballast/Driver: | - |

**Summary**

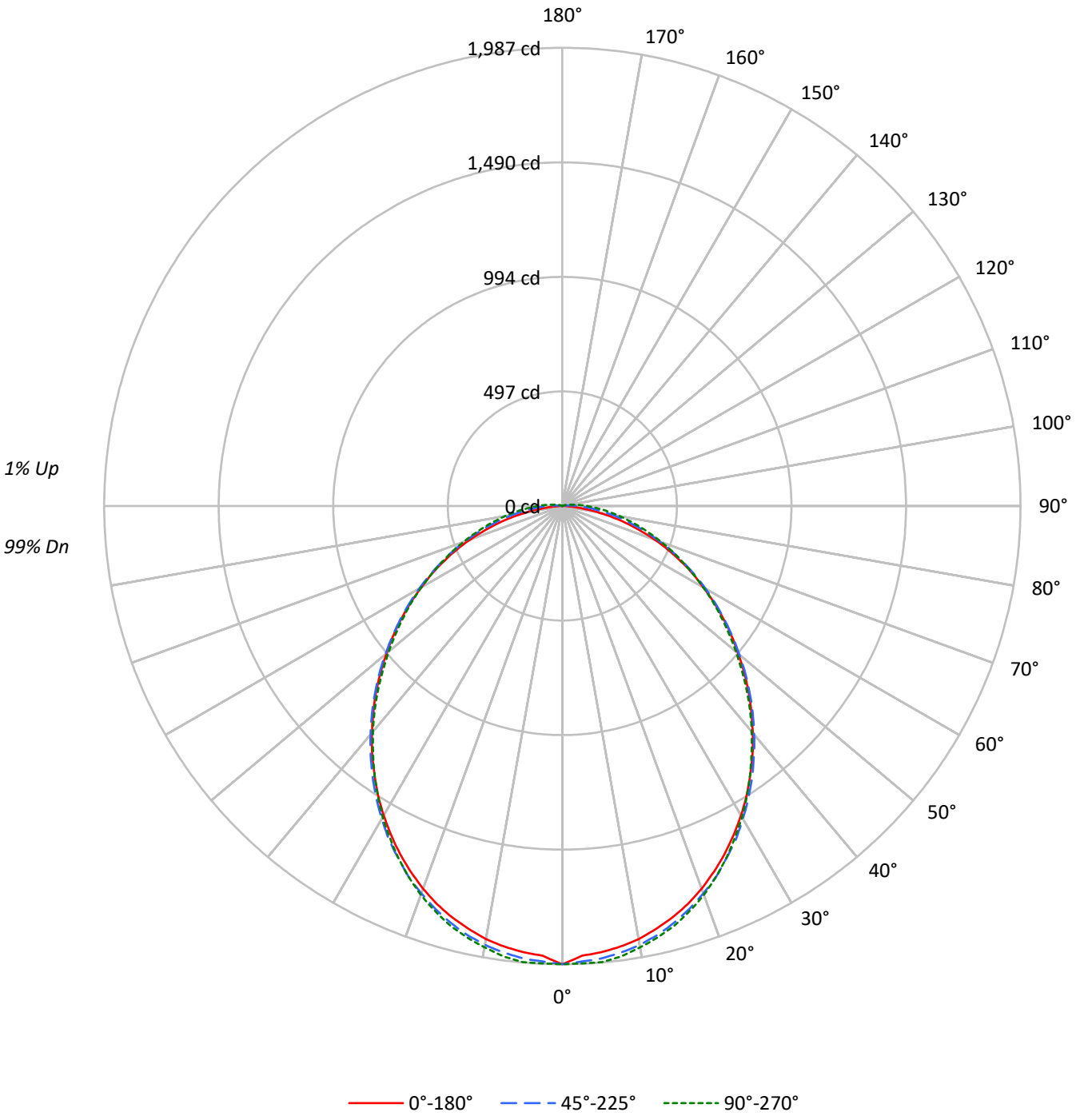
| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 5157.4 lumens |
| Efficiency: | N/A |
| Efficacy: | 134.7 lumens/watt |
| Spacing Criteria (0/90/45): | 1.17 / 1.17 / 1.29 |
| Luminous Opening: | Rectangular (W 0.33' x L: 4' x H: 0') |
| CIE Type: | Direct |
| Input Watts (W): | 38.3 |
| Input Voltage (V): | |
| Input Current (Ain): | NR |
| Voltage Rise (V): | NR |
| Power Factor: | |
| Total Harmonic Distortion (THDi): | |
| Frequency (hertz): | 60 |
| Stabilization Time: | HR |
| Operation Time: | HR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 24 FT |

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## Luminous Intensity Polar Plot



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## COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| RF | 20 | | | | 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 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 101 | 101 | 101 | 99 |
| 1 | 108 | 104 | 99 | 95 | 106 | 101 | 97 | 94 | 97 | 94 | 91 | 93 | 90 | 88 | 89 | 87 | 85 | 83 |
| 2 | 99 | 90 | 84 | 78 | 96 | 89 | 82 | 77 | 85 | 80 | 75 | 81 | 77 | 73 | 78 | 75 | 71 | 69 |
| 3 | 90 | 80 | 72 | 65 | 88 | 78 | 71 | 64 | 75 | 69 | 63 | 72 | 67 | 62 | 69 | 65 | 61 | 59 |
| 4 | 83 | 71 | 62 | 55 | 80 | 69 | 61 | 55 | 67 | 60 | 54 | 64 | 58 | 53 | 62 | 57 | 52 | 50 |
| 5 | 76 | 63 | 55 | 48 | 74 | 62 | 54 | 48 | 60 | 53 | 47 | 58 | 52 | 46 | 56 | 50 | 46 | 44 |
| 6 | 70 | 57 | 48 | 42 | 69 | 56 | 48 | 42 | 54 | 47 | 41 | 53 | 46 | 41 | 51 | 45 | 41 | 38 |
| 7 | 65 | 52 | 43 | 37 | 64 | 51 | 43 | 37 | 50 | 42 | 37 | 48 | 41 | 36 | 47 | 41 | 36 | 34 |
| 8 | 61 | 48 | 39 | 33 | 59 | 47 | 39 | 33 | 45 | 38 | 33 | 44 | 38 | 33 | 43 | 37 | 32 | 31 |
| 9 | 57 | 44 | 36 | 30 | 56 | 43 | 35 | 30 | 42 | 35 | 30 | 41 | 34 | 30 | 40 | 34 | 29 | 28 |
| 10 | 54 | 40 | 33 | 27 | 52 | 40 | 32 | 27 | 39 | 32 | 27 | 38 | 31 | 27 | 37 | 31 | 27 | 25 |

## AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|---|---|---|---|
| 0° | 16204 | 16204 | 16204 |
| 5° | 15899 | 16119 | 16250 |
| 10° | 15794 | 16000 | 16091 |
| 15° | 15589 | 15799 | 15892 |
| 20° | 15323 | 15513 | 15574 |
| 25° | 14982 | 15161 | 15143 |
| 30° | 14589 | 14749 | 14674 |
| 35° | 14144 | 14283 | 14134 |
| 40° | 13681 | 13777 | 13596 |
| 45° | 13177 | 13257 | 13039 |
| 50° | 12637 | 12711 | 12459 |
| 55° | 12120 | 12191 | 11949 |
| 60° | 11529 | 11692 | 11512 |
| 65° | 10927 | 11178 | 11120 |
| 70° | 10126 | 10722 | 10889 |
| 75° | 9017 | 10240 | 10933 |
| 80° | 7302 | 10162 | 11801 |
| 85° | 4762 | 12219 | 15952 |

## MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
Vertical Angle: 87.5°
Luminance: 25350 cd/sqm

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**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 187.4 | 3.6 |
| 10°-20° | 529.1 | 10.3 |
| 20°-30° | 778.0 | 15.1 |
| 30°-40° | 898.9 | 17.4 |
| 40°-50° | 888.3 | 17.2 |
| 50°-60° | 768.8 | 14.9 |
| 60°-70° | 575.5 | 11.2 |
| 70°-80° | 344.5 | 6.7 |
| 80°-90° | 139.3 | 2.7 |
| 90°-100° | 36.1 | 0.7 |
| 100°-110° | 9.1 | 0.2 |
| 110°-120° | 2.3 | 0.0 |
| 120°-130° | 0.1 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 1494.5 | 29.0 |
| 0°-40° | 2393.4 | 46.4 |
| 0°-60° | 4050.4 | 78.5 |
| 0°-90° | 5109.7 | 99.1 |
| 90°-120° | 47.6 | 0.9 |
| 90°-150° | 47.7 | 0.9 |
| 90°-180° | 48.0 | 0.9 |
| 0°-180° | 5157.4 | 100.0 |

**CANDELA DISTRIBUTION:**

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|---|---|---|---|---|---|---|
| 0° | 1987 | 1987 | 1987 | 1987 | 1987 | |
| 5° | 1942 | 2006 | 1969 | 1964 | 1985 | 184 |
| 15° | 1847 | 1906 | 1872 | 1872 | 1882 | 520 |
| 25° | 1665 | 1720 | 1685 | 1682 | 1683 | 766 |
| 35° | 1421 | 1466 | 1435 | 1431 | 1420 | 889 |
| 45° | 1143 | 1176 | 1150 | 1144 | 1131 | 881 |
| 55° | 852 | 877 | 858 | 854 | 840 | 762 |
| 65° | 566 | 582 | 579 | 586 | 576 | 561 |
| 75° | 286 | 305 | 325 | 349 | 347 | 302 |
| 85° | 51 | 84 | 131 | 166 | 170 | 64 |
| 90° | 0 | 25 | 67 | 100 | 107 | 2 |
| 95° | 1 | 6 | 29 | 55 | 61 | 1 |
| 105° | 1 | 1 | 7 | 15 | 18 | 1 |
| 115° | 2 | 1 | 2 | 3 | 4 | 2 |
| 125° | 0 | 0 | 0 | 0 | 0 | 0 |
| 135° | 0 | 0 | 0 | 0 | 0 | 0 |
| 145° | 0 | 0 | 0 | 0 | 0 | 0 |
| 155° | 0 | 0 | 0 | 0 | 0 | 0 |
| 165° | 0 | 0 | 0 | 0 | 0 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | |

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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 22.5° | 45° | 67.5° | 90° |
|---|---|---|---|---|---|
| 0° | 1987.1 | *1987.1* | 1987.1 | 1987.1 | 1987.1 |
| 2.5° | *1952.2* | *2014.1* | *1977.2* | *1973.2* | *1985.2* |
| 5° | 1942.3 | *2006.1* | 1969.2 | 1964.2 | 1985.2 |
| 7.5° | 1927.3 | *1991.1* | 1953.2 | 1948.3 | 1969.2 |
| 10° | 1907.4 | *1969.2* | 1932.3 | 1928.3 | 1943.3 |
| 12.5° | 1878.5 | *1942.3* | 1905.4 | 1901.4 | 1915.4 |
| 15° | 1846.6 | *1906.4* | 1871.5 | 1872.5 | 1882.5 |
| 17.5° | 1809.7 | *1866.5* | 1831.6 | 1832.6 | 1840.6 |
| 20° | 1765.8 | *1822.6* | 1787.7 | 1785.7 | 1794.7 |
| 22.5° | 1716.9 | *1773.8* | 1740.9 | 1734.9 | 1740.9 |
| 25° | 1665.1 | *1719.9* | 1685.0 | 1682.0 | 1683.0 |
| 27.5° | 1608.3 | *1661.1* | 1629.2 | 1624.2 | 1621.2 |
| 30° | 1549.4 | *1599.3* | 1566.4 | 1561.4 | 1558.4 |
| 32.5° | 1487.6 | *1533.5* | 1501.6 | 1496.6 | 1489.6 |
| 35° | 1420.8 | *1465.7* | 1434.8 | 1430.8 | 1419.8 |
| 37.5° | 1355.0 | *1394.9* | 1365.0 | 1362.0 | 1348.0 |
| 40° | 1285.2 | *1323.1* | 1294.2 | 1289.2 | 1277.2 |
| 42.5° | 1213.4 | *1250.3* | 1222.4 | 1216.4 | 1204.5 |
| 45° | 1142.6 | *1175.5* | 1149.6 | 1143.6 | 1130.7 |
| 47.5° | 1068.9 | *1100.8* | 1076.8 | 1070.8 | 1054.9 |
| 50° | 996.1 | *1028.0* | 1002.0 | 997.1 | 982.1 |
| 52.5° | 925.3 | *952.2* | 929.3 | 925.3 | 911.3 |
| 55° | 852.5 | *877.4* | 857.5 | 854.5 | 840.5 |
| 57.5° | 779.7 | *801.6* | 786.7 | 785.7 | 773.7 |
| 60° | 706.9 | *728.9* | 716.9 | 716.9 | 705.9 |
| 62.5° | 639.1 | *656.1* | 647.1 | 652.1 | 640.1 |
| 65° | 566.3 | *582.3* | 579.3 | 586.3 | 576.3 |
| 67.5° | 495.5 | *512.5* | 513.5 | 525.5 | 516.5 |
| 70° | 424.7 | *441.7* | 449.7 | 462.6 | 456.7 |
| 72.5° | 354.0 | *371.9* | 386.9 | 404.8 | 399.8 |
| 75° | 286.2 | *305.1* | 325.0 | 349.0 | 347.0 |
| 77.5° | 217.4 | *241.3* | 269.2 | 297.1 | 297.1 |
| 80° | 155.5 | *182.5* | 216.4 | 249.3 | 251.3 |
| 82.5° | 98.7 | *128.6* | 170.5 | 205.4 | 208.4 |
| 85° | 50.9 | *83.8* | 130.6 | 165.5 | 170.5 |
| 87.5° | 16.0 | *48.9* | 94.7 | 129.6 | 135.6 |
| 90° | 0.0 | *24.9* | 66.8 | 99.7 | 106.7 |
| 92.5° | 0.0 | *12.0* | 44.9 | 74.8 | 81.8 |
| 95° | 1.0 | *6.0* | 28.9 | 54.8 | 60.8 |
| 97.5° | 1.0 | *3.0* | 18.9 | 38.9 | 44.9 |
| 100° | 1.0 | *2.0* | 13.0 | 27.9 | 32.9 |
| 102.5° | 1.0 | *1.0* | 9.0 | 19.9 | 23.9 |
| 105° | 1.0 | *1.0* | 7.0 | 15.0 | 17.9 |
| 107.5° | 2.0 | *1.0* | 4.0 | 11.0 | 13.0 |
| 110° | 2.0 | *1.0* | 2.0 | 8.0 | 10.0 |

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**CANDELA DISTRIBUTION (continued):**

| | 0° | 22.5° | 45° | 67.5° | 90° |
|---|---|---|---|---|---|
| 112.5° | 2.0 | *1.0* | 1.0 | 5.0 | 7.0 |
| 115° | 2.0 | *1.0* | 2.0 | 3.0 | 4.0 |
| 117.5° | 2.0 | *1.0* | 2.0 | 1.0 | 2.0 |
| 120° | 2.0 | *1.0* | 1.0 | 1.0 | 1.0 |
| 122.5° | 0.0 | *0.0* | 0.0 | 0.0 | 0.0 |
| 125° | 0.0 | *0.0* | 0.0 | 0.0 | 0.0 |
| 127.5° | 0.0 | *0.0* | 0.0 | 0.0 | 0.0 |
| 130° | 0.0 | *0.0* | 0.0 | 0.0 | 0.0 |
| 132.5° | 0.0 | *0.0* | 0.0 | 0.0 | 0.0 |
| 135° | 0.0 | *0.0* | 0.0 | 0.0 | 0.0 |
| 137.5° | 0.0 | *0.0* | 0.0 | 0.0 | 0.0 |
| 140° | 0.0 | *0.0* | 0.0 | 0.0 | 0.0 |
| 142.5° | 0.0 | *0.0* | 0.0 | 0.0 | 0.0 |
| 145° | 0.0 | *0.0* | 0.0 | 0.0 | 0.0 |
| 147.5° | 0.0 | *0.0* | 0.0 | 0.0 | 0.0 |
| 150° | 0.0 | *0.0* | 0.0 | 0.0 | 0.0 |
| 152.5° | 0.0 | *0.0* | 0.0 | 0.0 | 0.0 |
| 155° | 0.0 | *0.0* | 0.0 | 0.0 | 0.0 |
| 157.5° | 0.0 | *0.0* | 0.0 | 0.0 | 0.0 |
| 160° | 0.0 | *0.0* | 0.0 | 0.0 | 0.0 |
| 162.5° | 0.0 | *0.0* | 0.0 | 0.0 | 0.0 |
| 165° | 0.0 | *0.0* | 0.0 | 0.0 | 0.0 |
| 167.5° | 0.0 | *0.0* | 0.0 | 0.0 | 0.0 |
| 170° | 0.0 | *0.0* | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | *0.0* | 0.0 | 0.0 | 0.0 |
| 175° | 0.0 | *0.0* | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | *0.0* | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | *0.0* | 0.0 | 0.0 | 0.0 |

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**CIE UGR TABLE:**

| Reflectances: | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ceiling | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 |
| | Wall | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 |
| | Reference plane | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Room dimensions | | Viewed crosswise | | | | | Viewed endwise | | | | |
| X=2H | Y=2H | 20.59 | 22.19 | 20.97 | 22.52 | 22.86 | 20.47 | 22.07 | 20.85 | 22.40 | 22.74 |
| | 3H | 22.28 | 23.72 | 22.67 | 24.07 | 24.45 | 22.33 | 23.78 | 22.73 | 24.12 | 24.51 |
| | 4H | 22.87 | 24.23 | 23.29 | 24.60 | 25.00 | 23.12 | 24.48 | 23.53 | 24.85 | 25.25 |
| | 6H | 23.26 | 24.52 | 23.69 | 24.91 | 25.32 | 23.84 | 25.11 | 24.27 | 25.49 | 25.90 |
| | 8H | 23.36 | 24.57 | 23.80 | 24.98 | 25.40 | 24.18 | 25.38 | 24.62 | 25.79 | 26.21 |
| | 12H | 23.41 | 24.57 | 23.85 | 24.97 | 25.42 | 24.53 | 25.68 | 24.97 | 26.08 | 26.53 |
| 4H | 2H | 21.19 | 22.55 | 21.60 | 22.92 | 23.32 | 21.09 | 22.45 | 21.51 | 22.82 | 23.22 |
| | 3H | 23.11 | 24.26 | 23.54 | 24.67 | 25.10 | 23.20 | 24.34 | 23.62 | 24.76 | 25.18 |
| | 4H | 23.85 | 24.88 | 24.29 | 25.32 | 25.77 | 24.14 | 25.18 | 24.59 | 25.61 | 26.07 |
| | 6H | 24.37 | 25.28 | 24.84 | 25.74 | 26.21 | 25.04 | 25.94 | 25.50 | 26.40 | 26.88 |
| | 8H | 24.51 | 25.37 | 24.99 | 25.83 | 26.31 | 25.45 | 26.30 | 25.93 | 26.76 | 27.25 |
| | 12H | 24.60 | 25.37 | 25.09 | 25.86 | 26.35 | 25.90 | 26.66 | 26.39 | 27.16 | 27.65 |
| 8H | 4H | 24.20 | 25.06 | 24.68 | 25.52 | 26.00 | 24.47 | 25.32 | 24.94 | 25.78 | 26.26 |
| | 6H | 24.87 | 25.58 | 25.38 | 26.09 | 26.58 | 25.54 | 26.25 | 26.04 | 26.75 | 27.25 |
| | 8H | 25.10 | 25.74 | 25.62 | 26.26 | 26.77 | 26.09 | 26.73 | 26.61 | 27.25 | 27.76 |
| | 12H | 25.26 | 25.82 | 25.78 | 26.33 | 26.91 | 26.71 | 27.27 | 27.23 | 27.78 | 28.36 |
| 12H | 4H | 24.27 | 25.04 | 24.77 | 25.53 | 26.02 | 24.50 | 25.27 | 24.99 | 25.76 | 26.25 |
| | 6H | 24.98 | 25.62 | 25.51 | 26.15 | 26.65 | 25.61 | 26.25 | 26.13 | 26.77 | 27.28 |
| | 8H | 25.29 | 25.85 | 25.81 | 26.36 | 26.94 | 26.24 | 26.81 | 26.76 | 27.32 | 27.90 |

END OF REPORT