

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



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: P384084

Luminaire Tested: **14ID-55-L840-CFD1**

Issue Date: 2/25/2020

Test Information

Test Method: LM-79-08
Report Number: P384084
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1911-572-67)
Test Lab: INNOVATION CENTER (G2)
Issue Date: 2/25/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: 14ID-55-L840-CFD1
Description: 1X4 IN DEPTH TROFFER WITH 1INCH DROP CUBE LENS

Light Source: -
Ballast/Driver: -

Summary

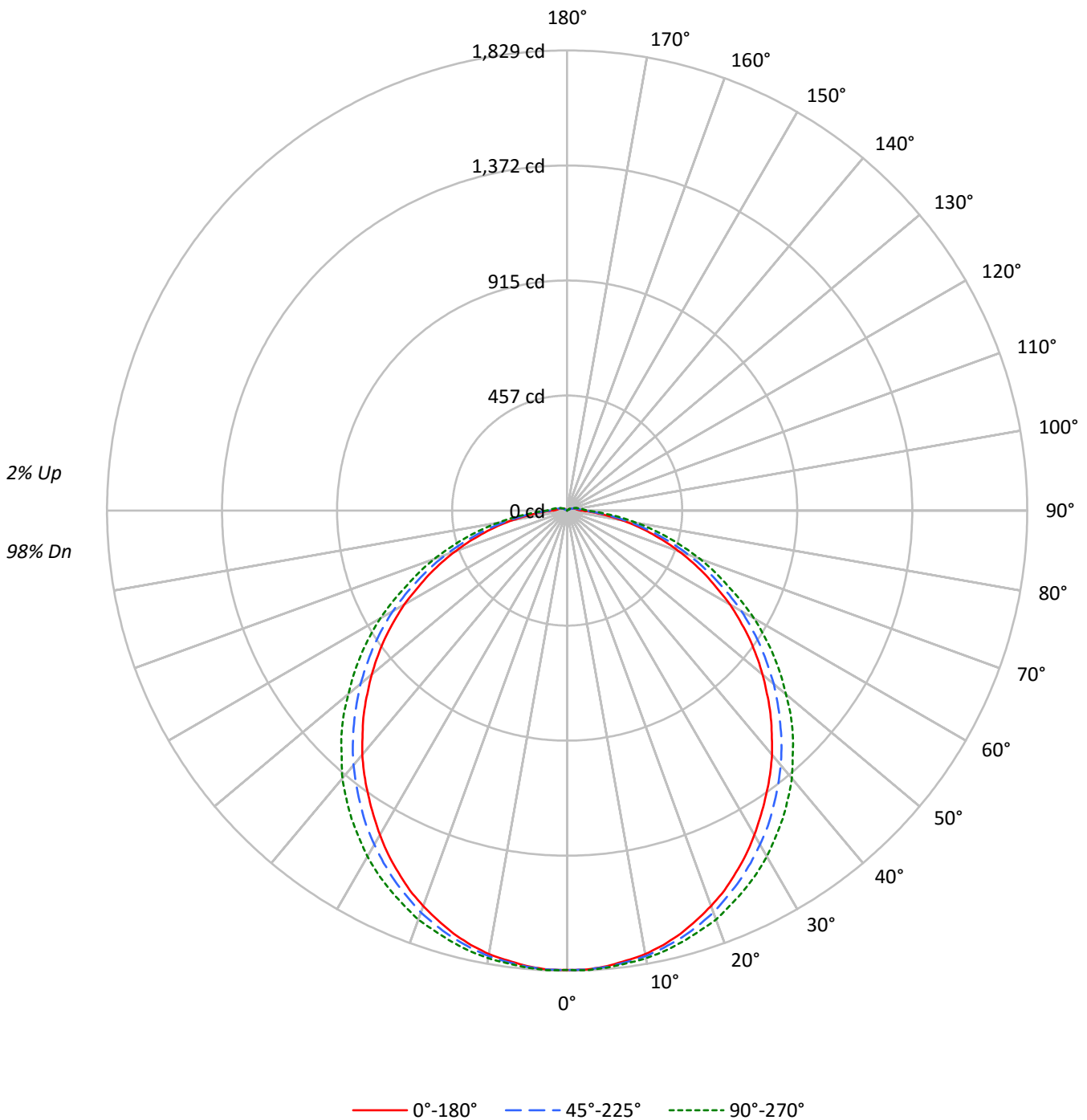
Lumens per Lamp: N/A
Luminaire Lumens: 5407.8 lumens
Efficiency: N/A
Efficacy: 112.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.29 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.08')
CIE Type: Direct

Input Watts (W): 48.2
Input Voltage (V): NR
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: 25 FT



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CATALOG NUMBER: 14ID-55-L840-CFD1

Luminous Intensity Polar Plot





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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 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 110 | 110 | 110 | 105 | 105 | 105 | 100 | 100 | 100 | 98 |
| 1 | 108 | 103 | 98 | 94 | 105 | 100 | 96 | 92 | 96 | 92 | 89 | 91 | 88 | 86 | 87 | 85 | 83 | 81 |
| 2 | 98 | 89 | 82 | 76 | 95 | 87 | 81 | 75 | 83 | 78 | 73 | 80 | 75 | 71 | 76 | 73 | 69 | 67 |
| 3 | 89 | 78 | 70 | 63 | 86 | 76 | 69 | 63 | 73 | 67 | 61 | 70 | 64 | 60 | 67 | 62 | 58 | 56 |
| 4 | 81 | 69 | 60 | 53 | 79 | 68 | 59 | 53 | 65 | 58 | 52 | 62 | 56 | 51 | 60 | 55 | 50 | 48 |
| 5 | 75 | 62 | 53 | 46 | 73 | 61 | 52 | 46 | 58 | 51 | 45 | 56 | 49 | 44 | 54 | 48 | 44 | 41 |
| 6 | 69 | 56 | 47 | 40 | 67 | 55 | 46 | 40 | 52 | 45 | 39 | 51 | 44 | 39 | 49 | 43 | 38 | 36 |
| 7 | 64 | 50 | 42 | 35 | 62 | 49 | 41 | 35 | 48 | 40 | 35 | 46 | 39 | 34 | 45 | 39 | 34 | 32 |
| 8 | 60 | 46 | 37 | 32 | 58 | 45 | 37 | 31 | 44 | 36 | 31 | 42 | 36 | 31 | 41 | 35 | 30 | 28 |
| 9 | 56 | 42 | 34 | 28 | 54 | 41 | 34 | 28 | 40 | 33 | 28 | 39 | 32 | 28 | 38 | 32 | 27 | 26 |
| 10 | 52 | 39 | 31 | 26 | 51 | 38 | 31 | 26 | 37 | 30 | 25 | 36 | 30 | 25 | 35 | 29 | 25 | 23 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 4913 | 4913 | 4913 |
| 5° | 4901 | 4886 | 4889 |
| 10° | 4874 | 4851 | 4865 |
| 15° | 4823 | 4801 | 4834 |
| 20° | 4753 | 4741 | 4808 |
| 25° | 4668 | 4659 | 4757 |
| 30° | 4571 | 4568 | 4706 |
| 35° | 4465 | 4471 | 4638 |
| 40° | 4373 | 4372 | 4564 |
| 45° | 4262 | 4247 | 4459 |
| 50° | 4144 | 4126 | 4322 |
| 55° | 4022 | 3980 | 4196 |
| 60° | 3888 | 3821 | 4036 |
| 65° | 3710 | 3588 | 3792 |
| 70° | 3510 | 3355 | 3598 |
| 75° | 3280 | 3041 | 3305 |
| 80° | 3039 | 2667 | 2943 |
| 85° | 2940 | 2299 | 2515 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 172.9 | 3.2 |
| 10°-20° | 495.7 | 9.2 |
| 20°-30° | 748.4 | 13.8 |
| 30°-40° | 896.7 | 16.6 |
| 40°-50° | 927.1 | 17.1 |
| 50°-60° | 839.6 | 15.5 |
| 60°-70° | 649.7 | 12.0 |
| 70°-80° | 399.1 | 7.4 |
| 80°-90° | 158.6 | 2.9 |
| 90°-100° | 57.8 | 1.1 |
| 100°-110° | 35.6 | 0.7 |
| 110°-120° | 18.3 | 0.3 |
| 120°-130° | 7.8 | 0.1 |
| 130°-140° | 0.5 | 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° | 1417.1 | 26.2 |
| 0°-40° | 2313.8 | 42.8 |
| 0°-60° | 4080.5 | 75.5 |
| 0°-90° | 5287.8 | 97.8 |
| 90°-120° | 111.7 | 2.1 |
| 90°-150° | 120.0 | 2.2 |
| 90°-180° | 120.0 | 2.2 |
| 0°-180° | 5407.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1826 | 1826 | 1826 | 1826 | 1826 | |
| 5° | 1818 | 1818 | 1820 | 1820 | 1823 | 173 |
| 15° | 1741 | 1744 | 1757 | 1768 | 1774 | 491 |
| 25° | 1587 | 1598 | 1623 | 1650 | 1664 | 731 |
| 35° | 1379 | 1396 | 1431 | 1470 | 1494 | 863 |
| 45° | 1143 | 1157 | 1198 | 1247 | 1269 | 881 |
| 55° | 883 | 902 | 938 | 979 | 1001 | 789 |
| 65° | 609 | 622 | 652 | 685 | 702 | 602 |
| 75° | 340 | 356 | 373 | 398 | 417 | 362 |
| 85° | 118 | 126 | 137 | 151 | 159 | 117 |
| 90° | 55 | 63 | 68 | 77 | 82 | 32 |
| 95° | 41 | 47 | 52 | 58 | 63 | 33 |
| 105° | 30 | 30 | 33 | 36 | 38 | 32 |
| 115° | 19 | 16 | 16 | 19 | 22 | 19 |
| 125° | 11 | 8 | 6 | 8 | 11 | 10 |
| 135° | 0 | 0 | 0 | 0 | 0 | 1 |
| 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 | 0 |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1825.9 | 1825.9 | 1825.9 | 1825.9 | 1825.9 |
| 2.5° | 1825.9 | 1823.2 | 1825.9 | 1825.9 | 1828.7 |
| 5° | 1817.7 | 1817.7 | 1820.4 | 1820.4 | 1823.2 |
| 7.5° | 1804.0 | 1804.0 | 1809.5 | 1812.2 | 1815.0 |
| 10° | 1790.3 | 1790.3 | 1798.5 | 1801.2 | 1806.7 |
| 12.5° | 1768.3 | 1771.1 | 1779.3 | 1787.5 | 1793.0 |
| 15° | 1740.9 | 1743.7 | 1757.4 | 1768.3 | 1773.8 |
| 17.5° | 1708.0 | 1713.5 | 1730.0 | 1746.4 | 1751.9 |
| 20° | 1672.4 | 1680.6 | 1699.8 | 1719.0 | 1730.0 |
| 22.5° | 1634.0 | 1639.5 | 1661.4 | 1686.1 | 1697.1 |
| 25° | 1587.4 | 1598.4 | 1623.0 | 1650.5 | 1664.2 |
| 27.5° | 1540.8 | 1551.8 | 1579.2 | 1612.1 | 1628.5 |
| 30° | 1488.7 | 1499.7 | 1532.6 | 1568.2 | 1587.4 |
| 32.5° | 1433.9 | 1447.6 | 1486.0 | 1521.6 | 1540.8 |
| 35° | 1379.0 | 1395.5 | 1431.1 | 1469.5 | 1494.2 |
| 37.5° | 1324.2 | 1337.9 | 1376.3 | 1417.4 | 1442.1 |
| 40° | 1266.6 | 1280.3 | 1321.5 | 1362.6 | 1390.0 |
| 42.5° | 1203.6 | 1220.0 | 1261.1 | 1305.0 | 1326.9 |
| 45° | 1143.3 | 1157.0 | 1198.1 | 1247.4 | 1269.4 |
| 47.5° | 1077.5 | 1096.6 | 1135.0 | 1181.6 | 1206.3 |
| 50° | 1014.4 | 1030.9 | 1072.0 | 1115.8 | 1135.0 |
| 52.5° | 948.6 | 965.1 | 1003.4 | 1047.3 | 1069.2 |
| 55° | 882.8 | 902.0 | 937.6 | 978.8 | 1000.7 |
| 57.5° | 814.3 | 833.5 | 869.1 | 904.7 | 929.4 |
| 60° | 748.5 | 767.7 | 800.6 | 836.2 | 858.1 |
| 62.5° | 674.4 | 690.9 | 726.5 | 764.9 | 781.4 |
| 65° | 608.6 | 622.3 | 652.5 | 685.4 | 701.9 |
| 67.5° | 540.1 | 556.5 | 584.0 | 614.1 | 633.3 |
| 70° | 471.6 | 490.8 | 512.7 | 540.1 | 562.0 |
| 72.5° | 405.8 | 422.2 | 441.4 | 468.8 | 488.0 |
| 75° | 340.0 | 356.4 | 372.9 | 397.5 | 416.7 |
| 77.5° | 282.4 | 290.6 | 307.1 | 329.0 | 348.2 |
| 80° | 219.3 | 230.3 | 244.0 | 265.9 | 279.6 |
| 82.5° | 164.5 | 175.5 | 186.4 | 202.9 | 216.6 |
| 85° | 117.9 | 126.1 | 137.1 | 150.8 | 159.0 |
| 87.5° | 79.5 | 87.7 | 96.0 | 106.9 | 115.1 |
| 90° | 54.8 | 63.1 | 68.5 | 76.8 | 82.2 |
| 92.5° | 46.6 | 52.1 | 57.6 | 63.1 | 68.5 |
| 95° | 41.1 | 46.6 | 52.1 | 57.6 | 63.1 |
| 97.5° | 38.4 | 41.1 | 46.6 | 52.1 | 54.8 |
| 100° | 35.6 | 38.4 | 41.1 | 46.6 | 49.3 |
| 102.5° | 32.9 | 32.9 | 38.4 | 41.1 | 43.9 |
| 105° | 30.2 | 30.2 | 32.9 | 35.6 | 38.4 |
| 107.5° | 27.4 | 27.4 | 30.2 | 30.2 | 35.6 |
| 110° | 24.7 | 21.9 | 24.7 | 24.7 | 30.2 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|------|-------|------|-------|------|
| 112.5° | 21.9 | 19.2 | 21.9 | 21.9 | 24.7 |
| 115° | 19.2 | 16.4 | 16.4 | 19.2 | 21.9 |
| 117.5° | 16.4 | 13.7 | 13.7 | 13.7 | 19.2 |
| 120° | 16.4 | 13.7 | 11.0 | 11.0 | 16.4 |
| 122.5° | 13.7 | 11.0 | 8.2 | 11.0 | 13.7 |
| 125° | 11.0 | 8.2 | 5.5 | 8.2 | 11.0 |
| 127.5° | 8.2 | 8.2 | 2.7 | 5.5 | 8.2 |
| 130° | 8.2 | 5.5 | 2.7 | 5.5 | 5.5 |
| 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 | 16.33 | 17.93 | 16.72 | 18.29 | 18.66 | 17.16 | 18.76 | 17.56 | 19.12 | 19.49 |
| | 3H | 18.06 | 19.51 | 18.47 | 19.88 | 20.30 | 19.08 | 20.54 | 19.50 | 20.91 | 21.32 |
| | 4H | 18.70 | 20.07 | 19.13 | 20.46 | 20.89 | 19.86 | 21.23 | 20.29 | 21.62 | 22.05 |
| | 6H | 19.18 | 20.46 | 19.63 | 20.86 | 21.31 | 20.50 | 21.77 | 20.94 | 22.18 | 22.63 |
| | 8H | 19.34 | 20.56 | 19.80 | 20.99 | 21.44 | 20.75 | 21.96 | 21.20 | 22.40 | 22.85 |
| | 12H | 19.46 | 20.62 | 19.92 | 21.05 | 21.53 | 20.96 | 22.12 | 21.42 | 22.55 | 23.03 |
| 4H | 2H | 17.02 | 18.40 | 17.46 | 18.79 | 19.22 | 17.68 | 19.05 | 18.12 | 19.45 | 19.88 |
| | 3H | 18.98 | 20.13 | 19.42 | 20.57 | 21.03 | 19.83 | 20.99 | 20.27 | 21.43 | 21.88 |
| | 4H | 19.75 | 20.80 | 20.21 | 21.25 | 21.74 | 20.74 | 21.79 | 21.21 | 22.24 | 22.73 |
| | 6H | 20.35 | 21.27 | 20.84 | 21.75 | 22.26 | 21.52 | 22.44 | 22.01 | 22.93 | 23.43 |
| | 8H | 20.56 | 21.42 | 21.05 | 21.90 | 22.42 | 21.83 | 22.70 | 22.33 | 23.18 | 23.70 |
| | 12H | 20.72 | 21.50 | 21.23 | 22.01 | 22.53 | 22.11 | 22.89 | 22.63 | 23.41 | 23.93 |
| 8H | 4H | 20.12 | 20.98 | 20.61 | 21.47 | 21.98 | 21.00 | 21.86 | 21.49 | 22.34 | 22.86 |
| | 6H | 20.85 | 21.58 | 21.38 | 22.10 | 22.63 | 21.91 | 22.63 | 22.44 | 23.16 | 23.68 |
| | 8H | 21.14 | 21.79 | 21.68 | 22.33 | 22.87 | 22.31 | 22.96 | 22.85 | 23.50 | 24.04 |
| | 12H | 21.38 | 21.96 | 21.92 | 22.49 | 23.10 | 22.70 | 23.27 | 23.24 | 23.80 | 24.41 |
| 12H | 4H | 20.18 | 20.95 | 20.69 | 21.47 | 21.99 | 21.02 | 21.80 | 21.54 | 22.31 | 22.84 |
| | 6H | 20.94 | 21.59 | 21.48 | 22.14 | 22.67 | 21.95 | 22.61 | 22.50 | 23.15 | 23.68 |
| | 8H | 21.29 | 21.87 | 21.83 | 22.40 | 23.00 | 22.41 | 22.99 | 22.95 | 23.52 | 24.13 |