

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: CORELITE

Report Number: P572002

Luminaire Tested: 22ID-55-L850-DBD

Issue Date: 10/5/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P572002  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2109-397-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/5/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: 22ID-55-L850-DBD  
Description: 5500 LUMEN, 2X2 INDEPTH TROFFER WITH 2IN DROPPED DOUBLE BARRELL LENS AND 5000K, 80 CRI LEDS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5869.0 lumens  
Efficiency: N/A  
Efficacy: 127.9 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.22 / 1.38  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 2' x H: 0.17')  
CIE Type: Direct

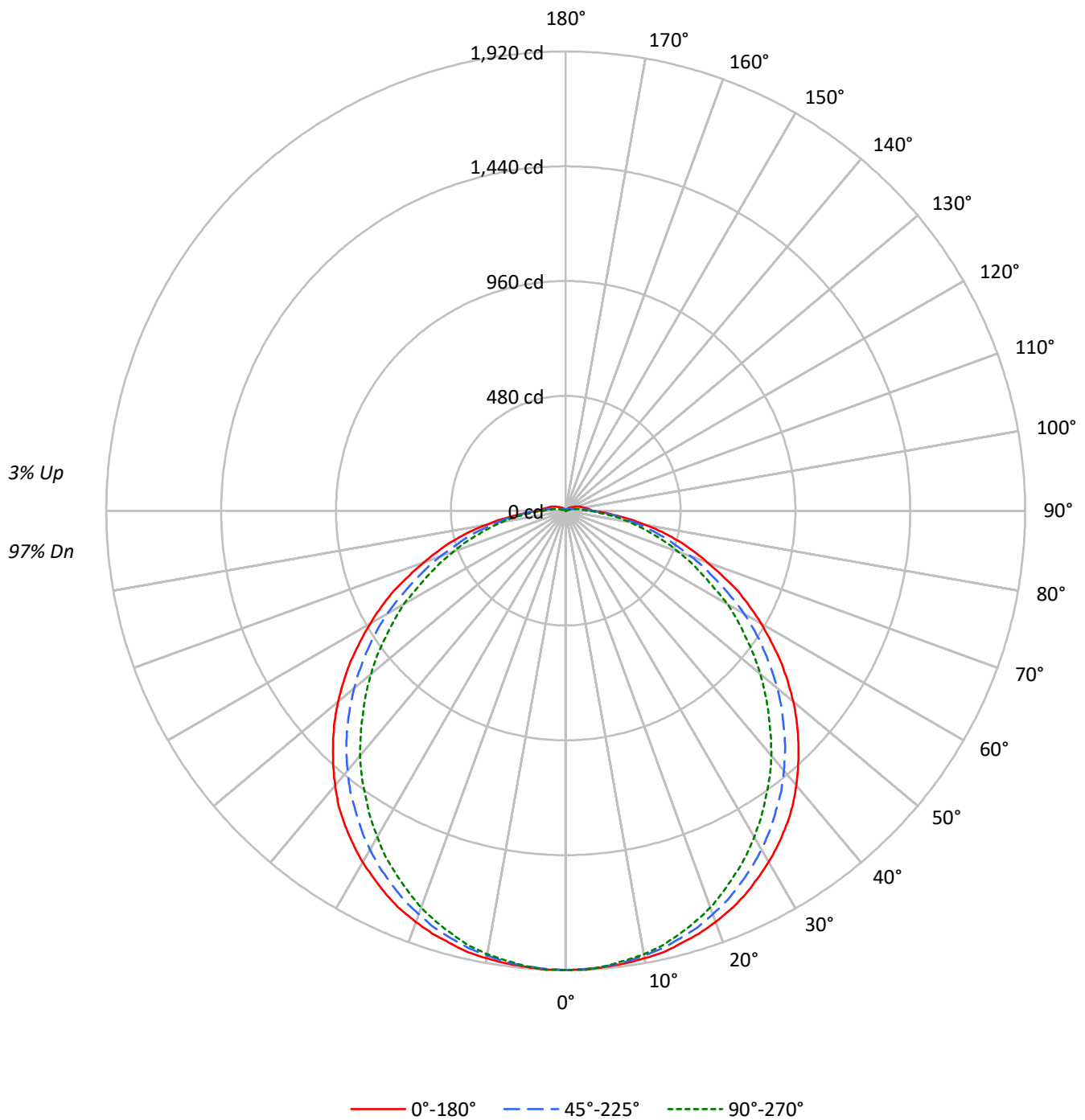
Input Watts (W): 45.9  
Input Voltage (V):  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### 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  |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 118 | 118 | 118 | 118 | 115 | 115 | 115 | 115 | 110 | 110 | 110 | 104 | 104 | 104 | 100 | 100 | 100 |
| 1   | 107 | 102 | 98  | 93  | 104 | 100 | 95  | 92  | 95  | 91  | 88  | 90  | 88  | 85  | 86  | 84  | 82  |
| 2   | 97  | 89  | 81  | 75  | 94  | 87  | 80  | 74  | 82  | 77  | 72  | 79  | 74  | 70  | 75  | 72  | 68  |
| 3   | 89  | 78  | 69  | 62  | 86  | 76  | 68  | 62  | 72  | 66  | 60  | 69  | 64  | 59  | 66  | 62  | 58  |
| 4   | 81  | 69  | 60  | 53  | 78  | 67  | 59  | 52  | 64  | 57  | 51  | 62  | 55  | 50  | 59  | 54  | 49  |
| 5   | 74  | 61  | 52  | 45  | 72  | 60  | 51  | 45  | 58  | 50  | 44  | 55  | 49  | 43  | 53  | 47  | 43  |
| 6   | 69  | 55  | 46  | 39  | 67  | 54  | 45  | 39  | 52  | 44  | 39  | 50  | 43  | 38  | 48  | 42  | 38  |
| 7   | 64  | 50  | 41  | 35  | 62  | 49  | 41  | 35  | 47  | 40  | 34  | 46  | 39  | 34  | 44  | 38  | 33  |
| 8   | 59  | 46  | 37  | 31  | 57  | 45  | 37  | 31  | 43  | 36  | 30  | 42  | 35  | 30  | 40  | 34  | 30  |
| 9   | 55  | 42  | 33  | 28  | 54  | 41  | 33  | 28  | 40  | 32  | 27  | 38  | 32  | 27  | 37  | 31  | 27  |
| 10  | 52  | 39  | 31  | 25  | 50  | 38  | 30  | 25  | 37  | 30  | 25  | 36  | 29  | 25  | 35  | 29  | 24  |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 5167 | 5167 | 5167 |
| 5°  | 5134 | 5110 | 5126 |
| 10° | 5116 | 5054 | 5069 |
| 15° | 5098 | 4997 | 4995 |
| 20° | 5087 | 4930 | 4909 |
| 25° | 5065 | 4849 | 4791 |
| 30° | 5030 | 4759 | 4669 |
| 35° | 4987 | 4647 | 4528 |
| 40° | 4923 | 4534 | 4390 |
| 45° | 4829 | 4394 | 4208 |
| 50° | 4727 | 4238 | 4043 |
| 55° | 4597 | 4053 | 3842 |
| 60° | 4433 | 3850 | 3669 |
| 65° | 4277 | 3553 | 3400 |
| 70° | 4029 | 3310 | 3194 |
| 75° | 3864 | 3037 | 2968 |
| 80° | 3570 | 2774 | 2807 |
| 85° | 3210 | 2518 | 2660 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
Vertical Angle: 45°  
Luminance: 4829 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 181.8  | 3.1       |
| 10°-20°   | 522.8  | 8.9       |
| 20°-30°   | 794.5  | 13.5      |
| 30°-40°   | 959.2  | 16.3      |
| 40°-50°   | 994.8  | 16.9      |
| 50°-60°   | 901.7  | 15.4      |
| 60°-70°   | 699.8  | 11.9      |
| 70°-80°   | 450.6  | 7.7       |
| 80°-90°   | 212.8  | 3.6       |
| 90°-100°  | 82.6   | 1.4       |
| 100°-110° | 36.4   | 0.6       |
| 110°-120° | 17.9   | 0.3       |
| 120°-130° | 9.0    | 0.2       |
| 130°-140° | 3.9    | 0.1       |
| 140°-150° | 1.1    | 0.0       |
| 150°-160° | 0.0    | 0.0       |
| 160°-170° | 0.1    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| <hr/>     |        |           |
| 0°-30°    | 1499.1 | 25.5      |
| 0°-40°    | 2458.2 | 41.9      |
| 0°-60°    | 4354.7 | 74.2      |
| 0°-90°    | 5718.0 | 97.4      |
| 90°-120°  | 136.9  | 2.3       |
| 90°-150°  | 150.8  | 2.6       |
| 90°-180°  | 151.0  | 2.6       |
| 0°-180°   | 5869.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1920 | 1920  | 1920 | 1920  | 1920 |      |
| 5°   | 1914 | 1914  | 1911 | 1908  | 1911 | 182  |
| 15°  | 1871 | 1865  | 1850 | 1839  | 1833 | 529  |
| 25°  | 1772 | 1758  | 1723 | 1691  | 1676 | 817  |
| 35°  | 1607 | 1584  | 1531 | 1482  | 1459 | 1005 |
| 45°  | 1375 | 1352  | 1291 | 1227  | 1198 | 1061 |
| 55°  | 1096 | 1070  | 1009 | 946   | 916  | 979  |
| 65°  | 792  | 757   | 699  | 653   | 629  | 780  |
| 75°  | 487  | 455   | 421  | 392   | 374  | 513  |
| 85°  | 203  | 203   | 191  | 180   | 168  | 195  |
| 90°  | 113  | 119   | 113  | 102   | 93   | 66   |
| 95°  | 93   | 78    | 72   | 67    | 61   | 72   |
| 105° | 64   | 49    | 26   | 17    | 14   | 66   |
| 115° | 38   | 32    | 17   | 3     | 0    | 39   |
| 125° | 23   | 17    | 9    | 0     | 0    | 21   |
| 135° | 12   | 9     | 3    | 0     | 0    | 9    |
| 145° | 6    | 3     | 0    | 0     | 0    | 3    |
| 155° | 0    | 0     | 0    | 0     | 0    | 0    |
| 165° | 0    | 0     | 0    | 3     | 3    | 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°     | 1920.1 | 1920.1 | 1920.1 | 1920.1 | 1920.1 |
| 2.5°   | 1920.1 | 1917.2 | 1917.2 | 1917.2 | 1920.1 |
| 5°     | 1914.3 | 1914.3 | 1911.4 | 1908.5 | 1911.4 |
| 7.5°   | 1908.5 | 1905.6 | 1902.7 | 1899.8 | 1896.9 |
| 10°    | 1899.8 | 1896.9 | 1888.2 | 1882.4 | 1882.4 |
| 12.5°  | 1891.1 | 1882.4 | 1873.7 | 1865.0 | 1862.1 |
| 15°    | 1870.8 | 1865.0 | 1850.5 | 1838.9 | 1833.1 |
| 17.5°  | 1853.4 | 1844.7 | 1827.3 | 1809.9 | 1801.2 |
| 20°    | 1830.2 | 1818.6 | 1795.4 | 1775.1 | 1766.4 |
| 22.5°  | 1804.1 | 1789.6 | 1763.5 | 1734.5 | 1722.9 |
| 25°    | 1772.2 | 1757.7 | 1722.9 | 1690.9 | 1676.4 |
| 27.5°  | 1734.5 | 1719.9 | 1682.2 | 1641.6 | 1630.0 |
| 30°    | 1696.7 | 1679.3 | 1635.8 | 1592.3 | 1574.9 |
| 32.5°  | 1653.2 | 1632.9 | 1586.5 | 1537.2 | 1519.8 |
| 35°    | 1606.8 | 1583.6 | 1531.4 | 1482.1 | 1458.9 |
| 37.5°  | 1557.5 | 1534.3 | 1479.2 | 1424.1 | 1400.9 |
| 40°    | 1499.5 | 1476.3 | 1418.3 | 1357.4 | 1337.1 |
| 42.5°  | 1438.6 | 1415.4 | 1357.4 | 1293.6 | 1267.5 |
| 45°    | 1374.8 | 1351.6 | 1290.7 | 1226.9 | 1197.9 |
| 47.5°  | 1311.0 | 1287.8 | 1224.0 | 1160.2 | 1131.2 |
| 50°    | 1241.4 | 1218.2 | 1154.4 | 1087.7 | 1061.6 |
| 52.5°  | 1168.9 | 1145.7 | 1081.9 | 1018.0 | 991.9  |
| 55°    | 1096.4 | 1070.3 | 1009.3 | 945.5  | 916.5  |
| 57.5°  | 1018.0 | 994.8  | 936.8  | 875.9  | 849.8  |
| 60°    | 942.6  | 916.5  | 861.4  | 803.4  | 780.2  |
| 62.5°  | 867.2  | 838.2  | 780.2  | 722.2  | 699.0  |
| 65°    | 791.8  | 757.0  | 699.0  | 652.6  | 629.4  |
| 67.5°  | 707.7  | 675.8  | 629.4  | 583.0  | 565.6  |
| 70°    | 629.4  | 603.3  | 556.9  | 519.2  | 498.9  |
| 72.5°  | 559.8  | 527.9  | 484.4  | 455.4  | 438.0  |
| 75°    | 487.3  | 455.4  | 420.6  | 391.6  | 374.2  |
| 77.5°  | 411.9  | 385.8  | 356.8  | 336.4  | 319.0  |
| 80°    | 339.3  | 319.0  | 298.7  | 278.4  | 266.8  |
| 82.5°  | 266.8  | 255.2  | 243.6  | 229.1  | 217.5  |
| 85°    | 203.0  | 203.0  | 191.4  | 179.8  | 168.2  |
| 87.5°  | 150.8  | 153.7  | 147.9  | 136.3  | 127.6  |
| 90°    | 113.1  | 118.9  | 113.1  | 101.5  | 92.8   |
| 92.5°  | 101.5  | 95.7   | 89.9   | 84.1   | 75.4   |
| 95°    | 92.8   | 78.3   | 72.5   | 66.7   | 60.9   |
| 97.5°  | 84.1   | 66.7   | 58.0   | 52.2   | 46.4   |
| 100°   | 75.4   | 58.0   | 43.5   | 37.7   | 34.8   |
| 102.5° | 69.6   | 55.1   | 34.8   | 26.1   | 26.1   |
| 105°   | 63.8   | 49.3   | 26.1   | 17.4   | 14.5   |
| 107.5° | 55.1   | 43.5   | 23.2   | 11.6   | 8.7    |
| 110°   | 49.3   | 40.6   | 20.3   | 5.8    | 2.9    |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°   | 22.5° | 45°  | 67.5° | 90° |
|--------|------|-------|------|-------|-----|
| 112.5° | 43.5 | 34.8  | 20.3 | 5.8   | 0.0 |
| 115°   | 37.7 | 31.9  | 17.4 | 2.9   | 0.0 |
| 117.5° | 34.8 | 26.1  | 14.5 | 2.9   | 0.0 |
| 120°   | 29.0 | 23.2  | 11.6 | 2.9   | 0.0 |
| 122.5° | 26.1 | 20.3  | 11.6 | 2.9   | 0.0 |
| 125°   | 23.2 | 17.4  | 8.7  | 0.0   | 0.0 |
| 127.5° | 20.3 | 14.5  | 8.7  | 0.0   | 0.0 |
| 130°   | 17.4 | 14.5  | 5.8  | 0.0   | 0.0 |
| 132.5° | 14.5 | 11.6  | 5.8  | 0.0   | 0.0 |
| 135°   | 11.6 | 8.7   | 2.9  | 0.0   | 0.0 |
| 137.5° | 8.7  | 8.7   | 2.9  | 0.0   | 0.0 |
| 140°   | 8.7  | 5.8   | 2.9  | 0.0   | 0.0 |
| 142.5° | 5.8  | 5.8   | 0.0  | 0.0   | 0.0 |
| 145°   | 5.8  | 2.9   | 0.0  | 0.0   | 0.0 |
| 147.5° | 2.9  | 2.9   | 0.0  | 0.0   | 0.0 |
| 150°   | 2.9  | 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  | 2.9   | 2.9 |
| 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   | 2.9 |
| 175°   | 0.0  | 0.0   | 0.0  | 0.0   | 0.0 |
| 177.5° | 0.0  | 0.0   | 2.9  | 2.9   | 2.9 |
| 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 | 17.21            | 18.81 | 17.61 | 19.18 | 19.56 | 16.25          | 17.86 | 16.66 | 18.23 | 18.61 |
|                 | 3H   | 19.10            | 20.55 | 19.51 | 20.94 | 21.36 | 17.99          | 19.45 | 18.41 | 19.83 | 20.25 |
|                 | 4H   | 19.88            | 21.26 | 20.32 | 21.66 | 22.10 | 18.69          | 20.07 | 19.13 | 20.47 | 20.90 |
|                 | 6H   | 20.53            | 21.81 | 20.98 | 22.23 | 22.68 | 19.28          | 20.56 | 19.73 | 20.97 | 21.43 |
|                 | 8H   | 20.78            | 22.00 | 21.24 | 22.44 | 22.90 | 19.52          | 20.74 | 19.98 | 21.18 | 21.64 |
|                 | 12H  | 20.98            | 22.16 | 21.45 | 22.59 | 23.08 | 19.72          | 20.89 | 20.19 | 21.33 | 21.82 |
| 4H              | 2H   | 17.70            | 19.08 | 18.14 | 19.48 | 19.92 | 16.94          | 18.32 | 17.38 | 18.72 | 19.16 |
|                 | 3H   | 19.82            | 20.99 | 20.27 | 21.44 | 21.90 | 18.90          | 20.07 | 19.36 | 20.52 | 20.98 |
|                 | 4H   | 20.75            | 21.81 | 21.22 | 22.27 | 22.76 | 19.73          | 20.79 | 20.20 | 21.25 | 21.75 |
|                 | 6H   | 21.55            | 22.48 | 22.04 | 22.97 | 23.48 | 20.46          | 21.39 | 20.95 | 21.88 | 22.39 |
|                 | 8H   | 21.87            | 22.74 | 22.36 | 23.23 | 23.75 | 20.76          | 21.63 | 21.26 | 22.12 | 22.65 |
|                 | 12H  | 22.14            | 22.93 | 22.66 | 23.45 | 23.98 | 21.03          | 21.82 | 21.55 | 22.34 | 22.87 |
| 8H              | 4H   | 21.02            | 21.89 | 21.52 | 22.38 | 22.90 | 20.12          | 21.00 | 20.62 | 21.49 | 22.01 |
|                 | 6H   | 21.96            | 22.69 | 22.49 | 23.23 | 23.76 | 21.00          | 21.74 | 21.53 | 22.27 | 22.80 |
|                 | 8H   | 22.37            | 23.03 | 22.92 | 23.58 | 24.12 | 21.40          | 22.06 | 21.94 | 22.61 | 23.15 |
|                 | 12H  | 22.76            | 23.35 | 23.31 | 23.89 | 24.50 | 21.78          | 22.37 | 22.32 | 22.90 | 23.51 |
| 12H             | 4H   | 21.05            | 21.84 | 21.57 | 22.36 | 22.89 | 20.19          | 20.98 | 20.71 | 21.50 | 22.03 |
|                 | 6H   | 22.02            | 22.68 | 22.57 | 23.23 | 23.77 | 21.10          | 21.77 | 21.65 | 22.32 | 22.86 |
|                 | 8H   | 22.50            | 23.09 | 23.04 | 23.62 | 24.24 | 21.57          | 22.16 | 22.12 | 22.70 | 23.31 |