

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: P572082

Luminaire Tested: 22ID-80-L850-DBD

Issue Date: 10/5/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P572082  
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-80-L850-DBD  
Description: 8000 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: 8444.0 lumens  
Efficiency: N/A  
Efficacy: 119.3 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

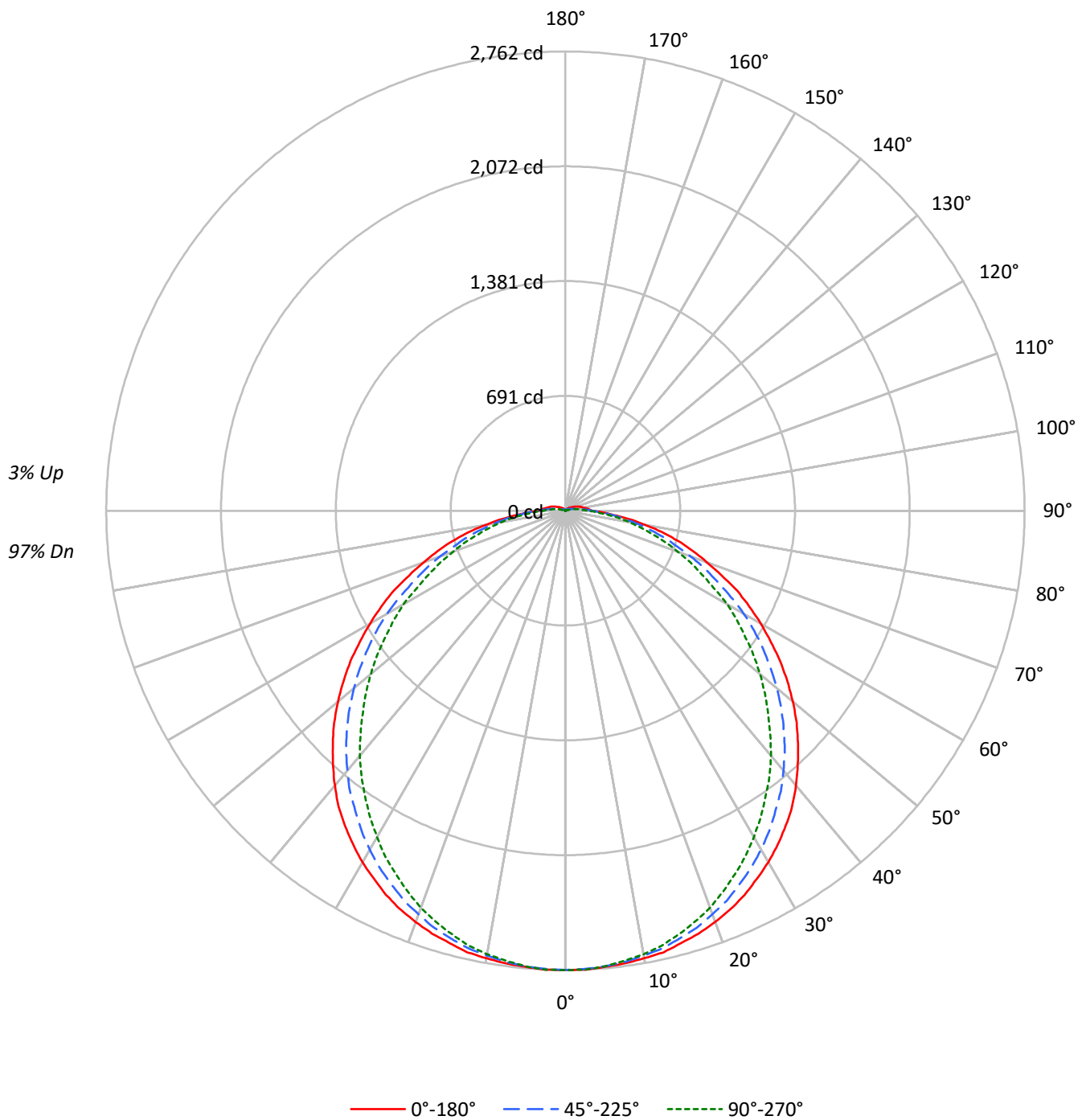
Input Watts (W): 70.8  
Input Voltage (V):  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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CATALOG NUMBER: 22ID-80-L850-DBD

### 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°  | 7434 | 7434 | 7434 |
| 5°  | 7386 | 7353 | 7375 |
| 10° | 7361 | 7272 | 7293 |
| 15° | 7335 | 7190 | 7187 |
| 20° | 7318 | 7093 | 7063 |
| 25° | 7287 | 6976 | 6894 |
| 30° | 7237 | 6847 | 6718 |
| 35° | 7176 | 6686 | 6515 |
| 40° | 7083 | 6523 | 6316 |
| 45° | 6948 | 6322 | 6054 |
| 50° | 6801 | 6096 | 5816 |
| 55° | 6613 | 5831 | 5529 |
| 60° | 6378 | 5539 | 5279 |
| 65° | 6154 | 5112 | 4891 |
| 70° | 5797 | 4762 | 4595 |
| 75° | 5560 | 4369 | 4269 |
| 80° | 5137 | 3992 | 4040 |
| 85° | 4619 | 3622 | 3826 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6948 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 261.6  | 3.1       |
| 10°-20°   | 752.2  | 8.9       |
| 20°-30°   | 1143.0 | 13.5      |
| 30°-40°   | 1380.0 | 16.3      |
| 40°-50°   | 1431.2 | 16.9      |
| 50°-60°   | 1297.4 | 15.4      |
| 60°-70°   | 1006.9 | 11.9      |
| 70°-80°   | 648.3  | 7.7       |
| 80°-90°   | 306.2  | 3.6       |
| 90°-100°  | 118.8  | 1.4       |
| 100°-110° | 52.4   | 0.6       |
| 110°-120° | 25.7   | 0.3       |
| 120°-130° | 12.9   | 0.2       |
| 130°-140° | 5.6    | 0.1       |
| 140°-150° | 1.5    | 0.0       |
| 150°-160° | 0.0    | 0.0       |
| 160°-170° | 0.1    | 0.0       |
| 170°-180° | 0.1    | 0.0       |
| <hr/>     |        |           |
| 0°-30°    | 2156.8 | 25.5      |
| 0°-40°    | 3536.8 | 41.9      |
| 0°-60°    | 6265.3 | 74.2      |
| 0°-90°    | 8226.8 | 97.4      |
| 90°-120°  | 197.0  | 2.3       |
| 90°-150°  | 217.0  | 2.6       |
| 90°-180°  | 217.0  | 2.6       |
| 0°-180°   | 8444.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 2762 | 2762  | 2762 | 2762  | 2762 |      |
| 5°   | 2754 | 2754  | 2750 | 2746  | 2750 | 262  |
| 15°  | 2692 | 2683  | 2662 | 2646  | 2637 | 761  |
| 25°  | 2550 | 2529  | 2479 | 2433  | 2412 | 1175 |
| 35°  | 2312 | 2278  | 2203 | 2132  | 2099 | 1446 |
| 45°  | 1978 | 1945  | 1857 | 1765  | 1723 | 1527 |
| 55°  | 1577 | 1540  | 1452 | 1360  | 1319 | 1408 |
| 65°  | 1139 | 1089  | 1006 | 939   | 906  | 1123 |
| 75°  | 701  | 655   | 605  | 563   | 538  | 738  |
| 85°  | 292  | 292   | 275  | 259   | 242  | 280  |
| 90°  | 163  | 171   | 163  | 146   | 134  | 94   |
| 95°  | 134  | 113   | 104  | 96    | 88   | 104  |
| 105° | 92   | 71    | 38   | 25    | 21   | 96   |
| 115° | 54   | 46    | 25   | 4     | 0    | 56   |
| 125° | 33   | 25    | 12   | 0     | 0    | 30   |
| 135° | 17   | 12    | 4    | 0     | 0    | 13   |
| 145° | 8    | 4     | 0    | 0     | 0    | 5    |
| 155° | 0    | 0     | 0    | 0     | 0    | 0    |
| 165° | 0    | 0     | 0    | 4     | 4    | 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°     | 2762.5 | 2762.5 | 2762.5 | 2762.5 | 2762.5 |
| 2.5°   | 2762.5 | 2758.3 | 2758.3 | 2758.3 | 2762.5 |
| 5°     | 2754.2 | 2754.2 | 2750.0 | 2745.8 | 2750.0 |
| 7.5°   | 2745.8 | 2741.6 | 2737.5 | 2733.3 | 2729.1 |
| 10°    | 2733.3 | 2729.1 | 2716.6 | 2708.3 | 2708.3 |
| 12.5°  | 2720.8 | 2708.3 | 2695.7 | 2683.2 | 2679.0 |
| 15°    | 2691.6 | 2683.2 | 2662.4 | 2645.7 | 2637.3 |
| 17.5°  | 2666.5 | 2654.0 | 2629.0 | 2603.9 | 2591.4 |
| 20°    | 2633.1 | 2616.5 | 2583.1 | 2553.9 | 2541.3 |
| 22.5°  | 2595.6 | 2574.7 | 2537.2 | 2495.4 | 2478.7 |
| 25°    | 2549.7 | 2528.8 | 2478.7 | 2432.8 | 2412.0 |
| 27.5°  | 2495.4 | 2474.6 | 2420.3 | 2361.9 | 2345.2 |
| 30°    | 2441.2 | 2416.1 | 2353.6 | 2291.0 | 2265.9 |
| 32.5°  | 2378.6 | 2349.4 | 2282.6 | 2211.7 | 2186.6 |
| 35°    | 2311.8 | 2278.4 | 2203.3 | 2132.4 | 2099.0 |
| 37.5°  | 2240.9 | 2207.5 | 2128.2 | 2048.9 | 2015.5 |
| 40°    | 2157.4 | 2124.0 | 2040.6 | 1952.9 | 1923.7 |
| 42.5°  | 2069.8 | 2036.4 | 1952.9 | 1861.1 | 1823.6 |
| 45°    | 1978.0 | 1944.6 | 1857.0 | 1765.2 | 1723.4 |
| 47.5°  | 1886.2 | 1852.8 | 1761.0 | 1669.2 | 1627.5 |
| 50°    | 1786.0 | 1752.6 | 1660.8 | 1564.9 | 1527.3 |
| 52.5°  | 1681.7 | 1648.3 | 1556.5 | 1464.7 | 1427.2 |
| 55°    | 1577.4 | 1539.8 | 1452.2 | 1360.4 | 1318.7 |
| 57.5°  | 1464.7 | 1431.3 | 1347.9 | 1260.2 | 1222.7 |
| 60°    | 1356.2 | 1318.7 | 1239.4 | 1155.9 | 1122.5 |
| 62.5°  | 1247.7 | 1206.0 | 1122.5 | 1039.1 | 1005.7 |
| 65°    | 1139.2 | 1089.1 | 1005.7 | 938.9  | 905.5  |
| 67.5°  | 1018.2 | 972.3  | 905.5  | 838.8  | 813.7  |
| 70°    | 905.5  | 868.0  | 801.2  | 747.0  | 717.8  |
| 72.5°  | 805.4  | 759.5  | 696.9  | 655.2  | 630.1  |
| 75°    | 701.1  | 655.2  | 605.1  | 563.4  | 538.3  |
| 77.5°  | 592.6  | 555.0  | 513.3  | 484.1  | 459.0  |
| 80°    | 488.2  | 459.0  | 429.8  | 400.6  | 383.9  |
| 82.5°  | 383.9  | 367.2  | 350.5  | 329.7  | 313.0  |
| 85°    | 292.1  | 292.1  | 275.4  | 258.7  | 242.0  |
| 87.5°  | 217.0  | 221.2  | 212.8  | 196.1  | 183.6  |
| 90°    | 162.7  | 171.1  | 162.7  | 146.1  | 133.5  |
| 92.5°  | 146.1  | 137.7  | 129.4  | 121.0  | 108.5  |
| 95°    | 133.5  | 112.7  | 104.3  | 96.0   | 87.6   |
| 97.5°  | 121.0  | 96.0   | 83.5   | 75.1   | 66.8   |
| 100°   | 108.5  | 83.5   | 62.6   | 54.2   | 50.1   |
| 102.5° | 100.2  | 79.3   | 50.1   | 37.6   | 37.6   |
| 105°   | 91.8   | 70.9   | 37.6   | 25.0   | 20.9   |
| 107.5° | 79.3   | 62.6   | 33.4   | 16.7   | 12.5   |
| 110°   | 70.9   | 58.4   | 29.2   | 8.3    | 4.2    |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°   | 22.5° | 45°  | 67.5° | 90° |
|--------|------|-------|------|-------|-----|
| 112.5° | 62.6 | 50.1  | 29.2 | 8.3   | 0.0 |
| 115°   | 54.2 | 45.9  | 25.0 | 4.2   | 0.0 |
| 117.5° | 50.1 | 37.6  | 20.9 | 4.2   | 0.0 |
| 120°   | 41.7 | 33.4  | 16.7 | 4.2   | 0.0 |
| 122.5° | 37.6 | 29.2  | 16.7 | 4.2   | 0.0 |
| 125°   | 33.4 | 25.0  | 12.5 | 0.0   | 0.0 |
| 127.5° | 29.2 | 20.9  | 12.5 | 0.0   | 0.0 |
| 130°   | 25.0 | 20.9  | 8.3  | 0.0   | 0.0 |
| 132.5° | 20.9 | 16.7  | 8.3  | 0.0   | 0.0 |
| 135°   | 16.7 | 12.5  | 4.2  | 0.0   | 0.0 |
| 137.5° | 12.5 | 12.5  | 4.2  | 0.0   | 0.0 |
| 140°   | 12.5 | 8.3   | 4.2  | 0.0   | 0.0 |
| 142.5° | 8.3  | 8.3   | 0.0  | 0.0   | 0.0 |
| 145°   | 8.3  | 4.2   | 0.0  | 0.0   | 0.0 |
| 147.5° | 4.2  | 4.2   | 0.0  | 0.0   | 0.0 |
| 150°   | 4.2  | 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  | 4.2   | 4.2 |
| 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   | 4.2 |
| 175°   | 0.0  | 0.0   | 0.0  | 0.0   | 0.0 |
| 177.5° | 0.0  | 0.0   | 4.2  | 4.2   | 4.2 |
| 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 | 18.47            | 20.08 | 18.88 | 20.45 | 20.83 | 17.52          | 19.12 | 17.92 | 19.49 | 19.87 |
|                 | 3H   | 20.36            | 21.82 | 20.78 | 22.20 | 22.62 | 19.26          | 20.71 | 19.67 | 21.09 | 21.52 |
|                 | 4H   | 21.14            | 22.52 | 21.58 | 22.92 | 23.36 | 19.95          | 21.33 | 20.39 | 21.73 | 22.17 |
|                 | 6H   | 21.79            | 23.07 | 22.25 | 23.49 | 23.94 | 20.54          | 21.82 | 20.99 | 22.24 | 22.69 |
|                 | 8H   | 22.04            | 23.27 | 22.51 | 23.71 | 24.17 | 20.78          | 22.00 | 21.24 | 22.44 | 22.90 |
|                 | 12H  | 22.25            | 23.42 | 22.72 | 23.85 | 24.34 | 20.98          | 22.16 | 21.45 | 22.59 | 23.08 |
| 4H              | 2H   | 18.97            | 20.35 | 19.41 | 20.75 | 21.18 | 18.21          | 19.59 | 18.65 | 19.99 | 20.42 |
|                 | 3H   | 21.09            | 22.25 | 21.54 | 22.70 | 23.16 | 20.17          | 21.33 | 20.62 | 21.78 | 22.24 |
|                 | 4H   | 22.01            | 23.07 | 22.48 | 23.53 | 24.03 | 20.99          | 22.05 | 21.47 | 22.52 | 23.01 |
|                 | 6H   | 22.81            | 23.75 | 23.31 | 24.23 | 24.75 | 21.72          | 22.66 | 22.22 | 23.14 | 23.66 |
|                 | 8H   | 23.13            | 24.00 | 23.63 | 24.49 | 25.02 | 22.02          | 22.90 | 22.52 | 23.39 | 23.91 |
|                 | 12H  | 23.41            | 24.20 | 23.93 | 24.72 | 25.25 | 22.29          | 23.08 | 22.81 | 23.60 | 24.13 |
| 8H              | 4H   | 22.28            | 23.16 | 22.78 | 23.64 | 24.17 | 21.39          | 22.26 | 21.89 | 22.75 | 23.27 |
|                 | 6H   | 23.22            | 23.96 | 23.75 | 24.49 | 25.02 | 22.26          | 23.00 | 22.80 | 23.53 | 24.06 |
|                 | 8H   | 23.63            | 24.30 | 24.18 | 24.84 | 25.39 | 22.66          | 23.32 | 23.21 | 23.87 | 24.42 |
|                 | 12H  | 24.03            | 24.62 | 24.57 | 25.15 | 25.76 | 23.04          | 23.63 | 23.59 | 24.16 | 24.78 |
| 12H             | 4H   | 22.31            | 23.10 | 22.83 | 23.62 | 24.15 | 21.45          | 22.24 | 21.97 | 22.76 | 23.29 |
|                 | 6H   | 23.28            | 23.95 | 23.83 | 24.50 | 25.04 | 22.37          | 23.03 | 22.91 | 23.58 | 24.12 |
|                 | 8H   | 23.76            | 24.35 | 24.31 | 24.89 | 25.50 | 22.84          | 23.43 | 23.38 | 23.96 | 24.58 |