

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: P572134

Luminaire Tested: 24ID-30-L830-DBR

Issue Date: 10/5/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P572134  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2109-397-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/5/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: 24ID-30-L830-DBR  
Description: 3000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 3000K, 80 CRI LEDS  
Light Source: -  
Ballast/Driver: -

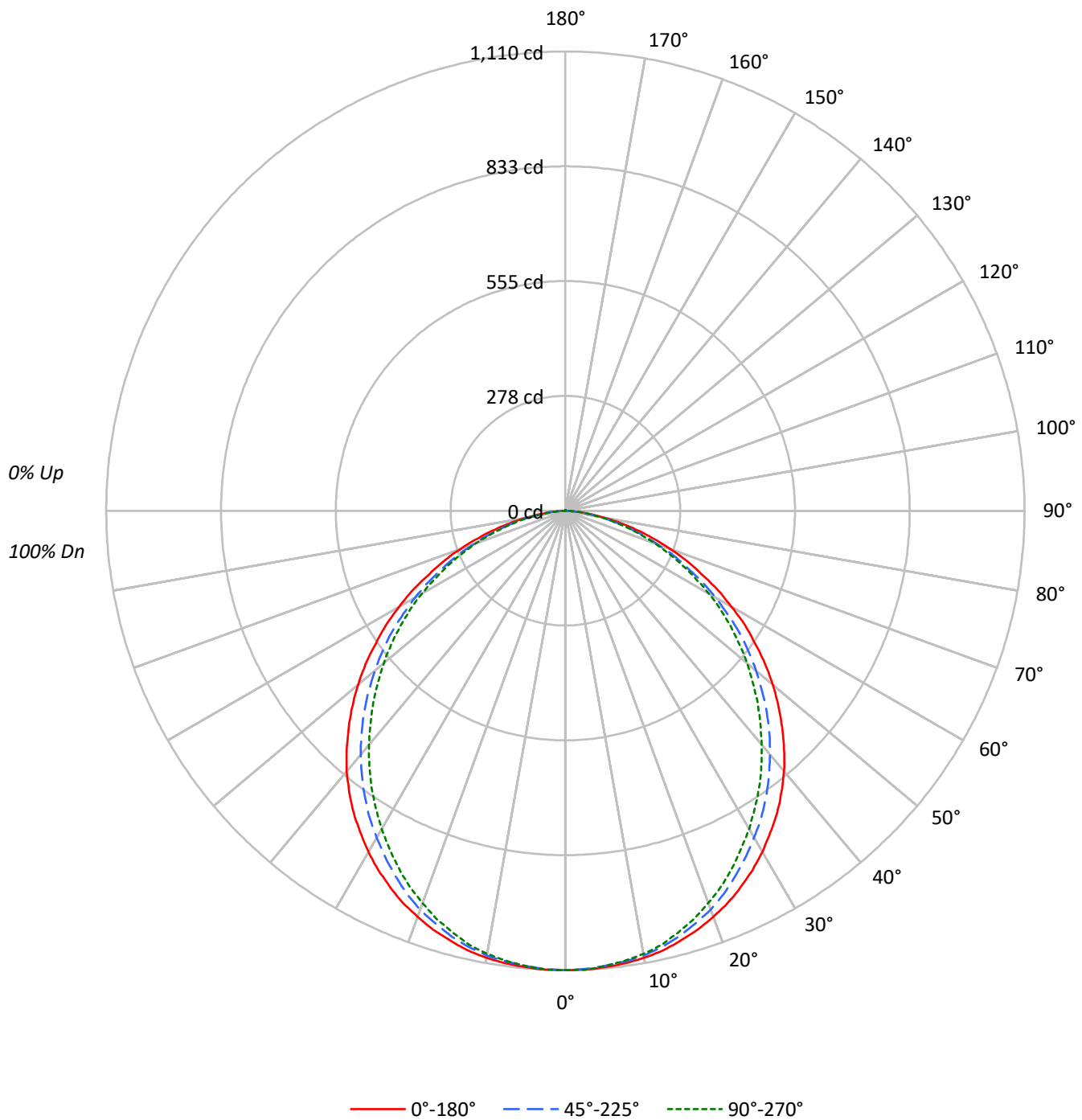
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2918.0 lumens  
Efficiency: N/A  
Efficacy: 113.1 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.19 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 25.8  
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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### 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  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 |
| 1   | 109 | 105 | 101 | 97  | 107 | 103 | 99  | 95  | 98  | 95  | 92  |  | 94  | 92  | 90  |  | 91  |
| 2   | 100 | 92  | 85  | 80  | 97  | 90  | 84  | 79  | 86  | 81  | 77  |  | 83  | 79  | 75  |  | 80  |
| 3   | 91  | 81  | 73  | 67  | 89  | 79  | 72  | 66  | 76  | 70  | 65  |  | 74  | 68  | 64  |  | 71  |
| 4   | 84  | 72  | 63  | 57  | 81  | 71  | 63  | 56  | 68  | 61  | 56  |  | 66  | 60  | 55  |  | 64  |
| 5   | 77  | 64  | 56  | 49  | 75  | 63  | 55  | 49  | 61  | 54  | 48  |  | 59  | 53  | 48  |  | 57  |
| 6   | 71  | 58  | 49  | 43  | 69  | 57  | 49  | 43  | 55  | 48  | 42  |  | 54  | 47  | 42  |  | 52  |
| 7   | 66  | 53  | 44  | 38  | 64  | 52  | 44  | 38  | 50  | 43  | 38  |  | 49  | 42  | 37  |  | 48  |
| 8   | 61  | 48  | 40  | 34  | 60  | 47  | 39  | 34  | 46  | 39  | 34  |  | 45  | 38  | 33  |  | 44  |
| 9   | 57  | 44  | 36  | 31  | 56  | 44  | 36  | 31  | 42  | 35  | 30  |  | 41  | 35  | 30  |  | 40  |
| 10  | 54  | 41  | 33  | 28  | 53  | 40  | 33  | 28  | 39  | 32  | 28  |  | 38  | 32  | 27  |  | 37  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 1494 | 1494 | 1494 |
| 5°  | 1496 | 1492 | 1492 |
| 10° | 1499 | 1492 | 1486 |
| 15° | 1499 | 1483 | 1469 |
| 20° | 1496 | 1469 | 1445 |
| 25° | 1490 | 1445 | 1416 |
| 30° | 1479 | 1417 | 1379 |
| 35° | 1465 | 1388 | 1341 |
| 40° | 1444 | 1352 | 1297 |
| 45° | 1410 | 1310 | 1250 |
| 50° | 1369 | 1259 | 1199 |
| 55° | 1314 | 1204 | 1143 |
| 60° | 1246 | 1128 | 1078 |
| 65° | 1157 | 1035 | 994  |
| 70° | 1060 | 931  | 903  |
| 75° | 919  | 800  | 778  |
| 80° | 740  | 629  | 629  |
| 85° | 374  | 397  | 374  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1410 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 105.0  | 3.6       |
| 10°-20°   | 300.3  | 10.3      |
| 20°-30°   | 449.6  | 15.4      |
| 30°-40°   | 531.4  | 18.2      |
| 40°-50°   | 534.9  | 18.3      |
| 50°-60°   | 462.8  | 15.9      |
| 60°-70°   | 329.6  | 11.3      |
| 70°-80°   | 169.2  | 5.8       |
| 80°-90°   | 35.0   | 1.2       |
| 90°-100°  | 0.0    | 0.0       |
| 100°-110° | 0.0    | 0.0       |
| 110°-120° | 0.0    | 0.0       |
| 120°-130° | 0.0    | 0.0       |
| 130°-140° | 0.0    | 0.0       |
| 140°-150° | 0.0    | 0.0       |
| 150°-160° | 0.0    | 0.0       |
| 160°-170° | 0.1    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-30°    | 854.9  | 29.3      |
| 0°-40°    | 1386.3 | 47.5      |
| 0°-60°    | 2384.0 | 81.7      |
| 0°-90°    | 2917.9 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2918.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1110 | 1110  | 1110 | 1110  | 1110 |      |
| 5°   | 1107 | 1106  | 1105 | 1103  | 1105 | 105  |
| 15°  | 1076 | 1072  | 1065 | 1056  | 1055 | 304  |
| 25°  | 1003 | 995   | 974  | 958   | 954  | 462  |
| 35°  | 892  | 878   | 845  | 824   | 817  | 557  |
| 45°  | 741  | 726   | 688  | 664   | 657  | 571  |
| 55°  | 560  | 544   | 513  | 492   | 487  | 501  |
| 65°  | 363  | 351   | 325  | 314   | 312  | 362  |
| 75°  | 177  | 168   | 154  | 148   | 150  | 189  |
| 85°  | 24   | 24    | 26   | 26    | 24   | 36   |
| 90°  | 0    | 0     | 0    | 0     | 0    | 1    |
| 95°  | 0    | 0     | 0    | 0     | 0    | 0    |
| 105° | 0    | 0     | 0    | 0     | 0    | 0    |
| 115° | 0    | 0     | 0    | 0     | 0    | 0    |
| 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     | 1    | 0    |
| 180° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1110.3 | 1110.3 | 1110.3 | 1110.3 | 1110.3 |
| 2.5°   | 1110.3 | 1108.9 | 1108.9 | 1107.4 | 1110.3 |
| 5°     | 1107.4 | 1106.0 | 1104.6 | 1103.2 | 1104.6 |
| 7.5°   | 1103.2 | 1100.3 | 1098.9 | 1096.0 | 1097.5 |
| 10°    | 1097.5 | 1094.6 | 1091.8 | 1087.5 | 1087.5 |
| 12.5°  | 1088.9 | 1086.1 | 1080.4 | 1074.7 | 1074.7 |
| 15°    | 1076.1 | 1071.8 | 1064.7 | 1056.1 | 1054.7 |
| 17.5°  | 1061.8 | 1056.1 | 1046.1 | 1036.2 | 1034.7 |
| 20°    | 1044.7 | 1039.0 | 1026.2 | 1013.4 | 1009.1 |
| 22.5°  | 1026.2 | 1019.1 | 1002.0 | 987.7  | 983.4  |
| 25°    | 1003.4 | 994.8  | 973.5  | 957.8  | 953.5  |
| 27.5°  | 979.2  | 967.8  | 943.5  | 926.4  | 920.7  |
| 30°    | 952.1  | 940.7  | 912.2  | 895.1  | 887.9  |
| 32.5°  | 922.2  | 909.3  | 880.8  | 859.4  | 852.3  |
| 35°    | 892.2  | 878.0  | 845.2  | 823.8  | 816.7  |
| 37.5°  | 858.0  | 842.3  | 808.1  | 785.3  | 778.2  |
| 40°    | 822.4  | 806.7  | 769.6  | 746.8  | 738.3  |
| 42.5°  | 782.5  | 766.8  | 729.7  | 705.5  | 697.0  |
| 45°    | 741.1  | 725.5  | 688.4  | 664.2  | 657.1  |
| 47.5°  | 698.4  | 679.9  | 644.2  | 621.4  | 614.3  |
| 50°    | 654.2  | 635.7  | 601.5  | 578.7  | 573.0  |
| 52.5°  | 608.6  | 590.1  | 557.3  | 534.5  | 530.2  |
| 55°    | 560.1  | 544.5  | 513.1  | 491.7  | 487.4  |
| 57.5°  | 514.5  | 497.4  | 464.6  | 449.0  | 444.7  |
| 60°    | 463.2  | 449.0  | 419.0  | 404.8  | 400.5  |
| 62.5°  | 416.2  | 401.9  | 372.0  | 356.3  | 354.9  |
| 65°    | 363.4  | 350.6  | 325.0  | 313.6  | 312.1  |
| 67.5°  | 317.8  | 303.6  | 282.2  | 270.8  | 270.8  |
| 70°    | 269.4  | 256.5  | 236.6  | 229.5  | 229.5  |
| 72.5°  | 220.9  | 212.4  | 195.3  | 188.1  | 189.6  |
| 75°    | 176.7  | 168.2  | 153.9  | 148.2  | 149.7  |
| 77.5°  | 135.4  | 125.4  | 116.9  | 112.6  | 114.0  |
| 80°    | 95.5   | 88.4   | 81.2   | 79.8   | 81.2   |
| 82.5°  | 57.0   | 52.7   | 51.3   | 51.3   | 51.3   |
| 85°    | 24.2   | 24.2   | 25.7   | 25.7   | 24.2   |
| 87.5°  | 10.0   | 8.6    | 8.6    | 10.0   | 10.0   |
| 90°    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 92.5°  | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 95°    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 97.5°  | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 100°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 102.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 105°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 107.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 110°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°  | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-----|-------|-----|
| 112.5° | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |
| 115°   | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |
| 117.5° | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |
| 120°   | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |
| 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° | 1.4 | 0.0   | 1.4 | 1.4   | 1.4 |
| 165°   | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |
| 167.5° | 0.0 | 0.0   | 0.0 | 1.4   | 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   | 1.4 |
| 177.5° | 0.0 | 0.0   | 1.4 | 1.4   | 1.4 |
| 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 | 13.12            | 14.73 | 13.49 | 15.04 | 15.35 | 12.36          | 13.96 | 12.72 | 14.27 | 14.59 |
|                 | 3H   | 14.75            | 16.19 | 15.12 | 16.52 | 16.88 | 13.91          | 15.35 | 14.29 | 15.68 | 16.04 |
|                 | 4H   | 15.30            | 16.66 | 15.70 | 17.00 | 17.38 | 14.43          | 15.79 | 14.83 | 16.14 | 16.51 |
|                 | 6H   | 15.65            | 16.91 | 16.06 | 17.27 | 17.66 | 14.76          | 16.02 | 15.17 | 16.38 | 16.77 |
|                 | 8H   | 15.73            | 16.93 | 16.15 | 17.32 | 17.72 | 14.84          | 16.04 | 15.27 | 16.43 | 16.83 |
|                 | 12H  | 15.75            | 16.90 | 16.18 | 17.28 | 17.71 | 14.87          | 16.02 | 15.30 | 16.40 | 16.83 |
| 4H              | 2H   | 13.59            | 14.94 | 13.99 | 15.29 | 15.67 | 12.96          | 14.32 | 13.36 | 14.67 | 15.05 |
|                 | 3H   | 15.42            | 16.55 | 15.83 | 16.95 | 17.35 | 14.71          | 15.85 | 15.12 | 16.24 | 16.64 |
|                 | 4H   | 16.09            | 17.11 | 16.52 | 17.52 | 17.96 | 15.33          | 16.35 | 15.77 | 16.77 | 17.21 |
|                 | 6H   | 16.55            | 17.43 | 17.00 | 17.88 | 18.33 | 15.76          | 16.65 | 16.22 | 17.09 | 17.55 |
|                 | 8H   | 16.65            | 17.48 | 17.11 | 17.93 | 18.39 | 15.87          | 16.70 | 16.33 | 17.15 | 17.61 |
|                 | 12H  | 16.70            | 17.44 | 17.18 | 17.92 | 18.39 | 15.93          | 16.67 | 16.41 | 17.15 | 17.62 |
| 8H              | 4H   | 16.28            | 17.11 | 16.74 | 17.55 | 18.02 | 15.59          | 16.43 | 16.06 | 16.87 | 17.33 |
|                 | 6H   | 16.81            | 17.50 | 17.30 | 17.99 | 18.46 | 16.10          | 16.79 | 16.60 | 17.28 | 17.76 |
|                 | 8H   | 16.96            | 17.57 | 17.47 | 18.08 | 18.57 | 16.26          | 16.88 | 16.77 | 17.38 | 17.87 |
|                 | 12H  | 17.03            | 17.58 | 17.54 | 18.07 | 18.63 | 16.35          | 16.90 | 16.86 | 17.39 | 17.95 |
| 12H             | 4H   | 16.28            | 17.03 | 16.76 | 17.50 | 17.97 | 15.61          | 16.36 | 16.09 | 16.83 | 17.30 |
|                 | 6H   | 16.82            | 17.44 | 17.33 | 17.94 | 18.43 | 16.13          | 16.75 | 16.64 | 17.25 | 17.74 |
|                 | 8H   | 17.00            | 17.55 | 17.51 | 18.04 | 18.60 | 16.33          | 16.87 | 16.83 | 17.36 | 17.92 |