

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: P854382

Luminaire Tested: SQ2-WBM-100U-100D-930-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854382  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-12, G3-2104-222-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-WBM-100U-100D-930-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

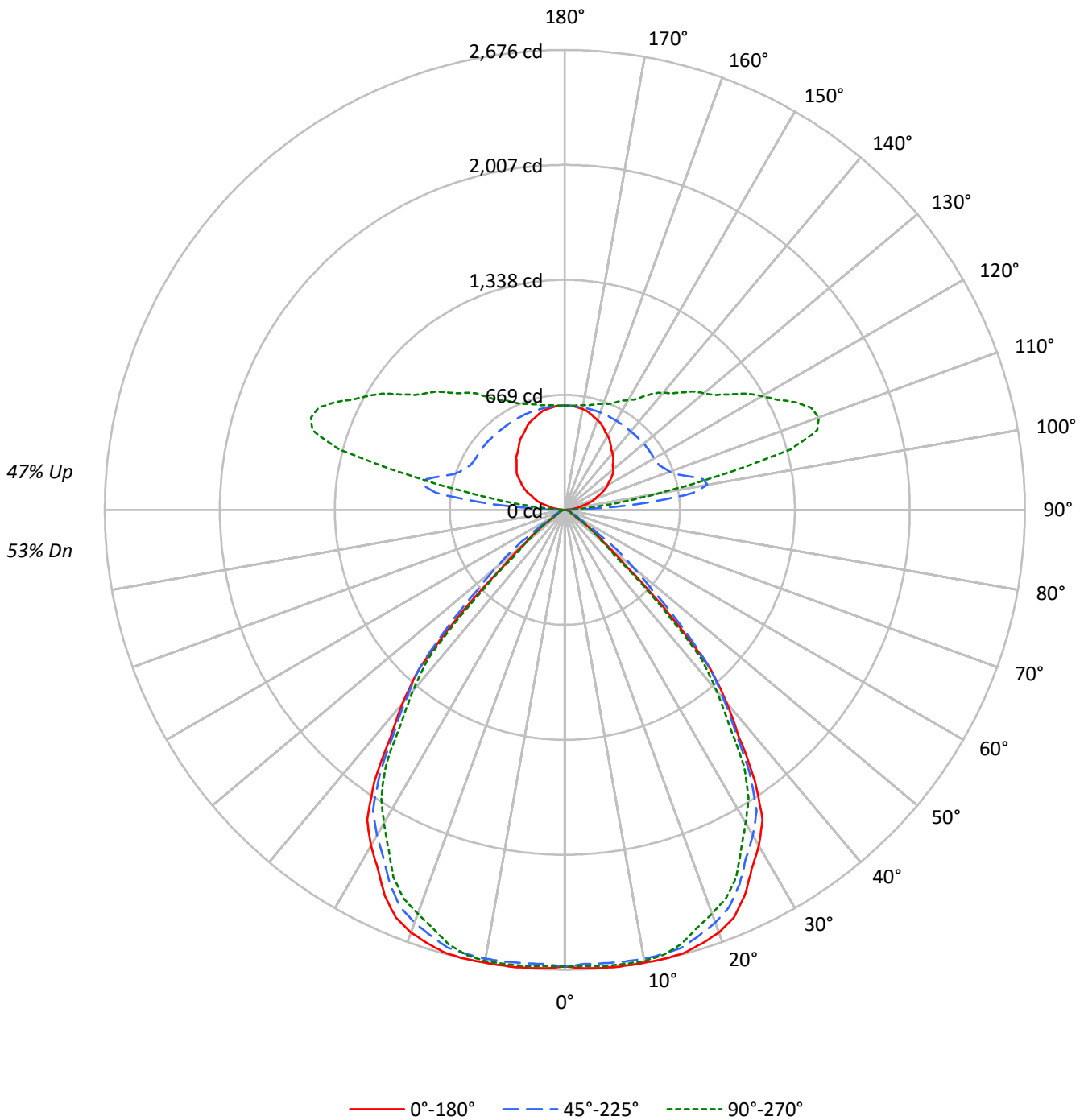
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7971.6 lumens  
Efficiency: N/A  
Efficacy: 112.8 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.18 / 1.17  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: General Diffuse  
  
Input Watts (W): 70.7  
Input Voltage (V): 120  
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

TEST NUMBER: P854382

CATALOG NUMBER: SQ2-WBM-100U-100D-930-UNV-STD-W-4

### Luminous Intensity Polar Plot



TEST NUMBER: P854382

CATALOG NUMBER: SQ2-WBM-100U-100D-930-UNV-STD-W-4

**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 | 50 | 30 | 10 | 0  |   |
| RCR |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |   |
| 0   | 108 | 108 | 108 | 108 | 100 | 100 | 100 | 100 | 85 | 85 | 85 | 71 | 71 | 71 | 59 | 59 | 59 | 53 |    |    |    |   |
| 1   | 100 | 97  | 93  | 91  | 93  | 90  | 87  | 85  | 77 | 75 | 73 | 65 | 64 | 63 | 55 | 54 | 53 | 48 |    |    |    |   |
| 2   | 93  | 87  | 82  | 77  | 86  | 81  | 76  | 73  | 70 | 67 | 64 | 60 | 58 | 56 | 51 | 49 | 48 | 44 |    |    |    |   |
| 3   | 86  | 78  | 72  | 67  | 80  | 73  | 68  | 63  | 64 | 60 | 56 | 55 | 52 | 50 | 47 | 45 | 43 | 39 |    |    |    |   |
| 4   | 80  | 71  | 64  | 59  | 74  | 66  | 60  | 56  | 58 | 53 | 50 | 50 | 47 | 44 | 43 | 41 | 39 | 36 |    |    |    |   |
| 5   | 74  | 64  | 57  | 52  | 69  | 60  | 54  | 49  | 53 | 48 | 44 | 46 | 43 | 40 | 40 | 37 | 35 | 32 |    |    |    |   |
| 6   | 69  | 58  | 51  | 46  | 64  | 55  | 49  | 44  | 49 | 44 | 40 | 43 | 39 | 36 | 37 | 34 | 32 | 30 |    |    |    |   |
| 7   | 64  | 53  | 46  | 41  | 60  | 50  | 44  | 39  | 45 | 40 | 36 | 39 | 35 | 33 | 34 | 32 | 29 | 27 |    |    |    |   |
| 8   | 60  | 49  | 42  | 37  | 56  | 46  | 40  | 36  | 41 | 36 | 33 | 36 | 33 | 30 | 32 | 29 | 27 | 25 |    |    |    |   |
| 9   | 56  | 45  | 38  | 34  | 52  | 43  | 36  | 32  | 38 | 33 | 30 | 34 | 30 | 27 | 30 | 27 | 25 | 23 |    |    |    |   |
| 10  | 53  | 42  | 35  | 31  | 49  | 39  | 33  | 29  | 35 | 31 | 27 | 32 | 28 | 25 | 28 | 25 | 23 | 21 |    |    |    |   |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 42899 | 42899 | 42899 |
| 5°  | 43358 | 42908 | 43188 |
| 10° | 43860 | 43466 | 43702 |
| 15° | 44637 | 44058 | 43721 |
| 20° | 44974 | 43934 | 42959 |
| 25° | 44113 | 42829 | 42006 |
| 30° | 42041 | 40768 | 39209 |
| 35° | 38041 | 36941 | 35784 |
| 40° | 30888 | 30260 | 28922 |
| 45° | 19783 | 21980 | 17785 |
| 50° | 7754  | 13019 | 6980  |
| 55° | 3654  | 5956  | 3654  |
| 60° | 1741  | 2887  | 1582  |
| 65° | 1578  | 1654  | 1471  |
| 70° | 1496  | 1544  | 1407  |
| 75° | 1497  | 1497  | 1379  |
| 80° | 1432  | 1432  | 1339  |
| 85° | 1241  | 1241  | 1241  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 22124 cd/sqm



TEST NUMBER: P854382

CATALOG NUMBER: SQ2-WBM-100U-100D-930-UNV-STD-W-4

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 254.5  | 3.2       |
| 10°-20°   | 745.9  | 9.4       |
| 20°-30°   | 1107.0 | 13.9      |
| 30°-40°   | 1149.8 | 14.4      |
| 40°-50°   | 691.9  | 8.7       |
| 50°-60°   | 165.9  | 2.1       |
| 60°-70°   | 45.0   | 0.6       |
| 70°-80°   | 25.2   | 0.3       |
| 80°-90°   | 9.0    | 0.1       |
| 90°-100°  | 253.5  | 3.2       |
| 100°-110° | 766.7  | 9.6       |
| 110°-120° | 748.4  | 9.4       |
| 120°-130° | 611.6  | 7.7       |
| 130°-140° | 499.2  | 6.3       |
| 140°-150° | 388.6  | 4.9       |
| 150°-160° | 280.2  | 3.5       |
| 160°-170° | 171.5  | 2.2       |
| 170°-180° | 57.9   | 0.7       |
| 0°-30°    | 2107.3 | 26.4      |
| 0°-40°    | 3257.1 | 40.9      |
| 0°-60°    | 4114.9 | 51.6      |
| 0°-90°    | 4194.1 | 52.6      |
| 90°-120°  | 1768.6 | 22.2      |
| 90°-150°  | 3268.0 | 41.0      |
| 90°-180°  | 3778.0 | 47.4      |
| 0°-180°   | 7971.6 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 2657 | 2657  | 2657 | 2657  | 2657 |      |
| 5°   | 2675 | 2669  | 2647 | 2675  | 2665 | 255  |
| 15°  | 2670 | 2689  | 2636 | 2634  | 2616 | 753  |
| 25°  | 2476 | 2493  | 2404 | 2372  | 2358 | 1133 |
| 35°  | 1930 | 1912  | 1874 | 1836  | 1816 | 1182 |
| 45°  | 866  | 969   | 963  | 916   | 779  | 662  |
| 55°  | 130  | 147   | 212  | 141   | 130  | 134  |
| 65°  | 41   | 42    | 43   | 41    | 38   | 41   |
| 75°  | 24   | 25    | 24   | 23    | 22   | 25   |
| 85°  | 7    | 8     | 7    | 7     | 7    | 8    |
| 90°  | 0    | 2     | 11   | 7     | 6    | 2    |
| 95°  | 31   | 100   | 478  | 177   | 112  | 37   |
| 105° | 133  | 187   | 753  | 1430  | 1359 | 140  |
| 115° | 237  | 283   | 609  | 1260  | 1480 | 235  |
| 125° | 332  | 368   | 600  | 995   | 1171 | 295  |
| 135° | 397  | 439   | 596  | 858   | 965  | 308  |
| 145° | 464  | 498   | 596  | 738   | 807  | 291  |
| 155° | 529  | 546   | 600  | 662   | 687  | 243  |
| 165° | 578  | 585   | 603  | 626   | 634  | 163  |
| 175° | 605  | 605   | 606  | 611   | 609  | 57   |
| 180° | 607  | 607   | 607  | 607   | 607  |      |



TEST NUMBER: P854382

CATALOG NUMBER: SQ2-WBM-100U-100D-930-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 2657.0 | 2657.0 | 2657.0 | 2657.0 | 2657.0 |
| 2.5°   | 2670.1 | 2664.0 | 2644.7 | 2666.0 | 2657.0 |
| 5°     | 2675.2 | 2668.7 | 2647.4 | 2675.0 | 2664.7 |
| 7.5°   | 2676.0 | 2676.4 | 2651.2 | 2675.6 | 2664.1 |
| 10°    | 2675.2 | 2680.9 | 2651.2 | 2674.1 | 2665.6 |
| 12.5°  | 2676.0 | 2685.4 | 2648.1 | 2664.8 | 2651.8 |
| 15°    | 2670.4 | 2689.2 | 2635.8 | 2634.4 | 2615.6 |
| 17.5°  | 2646.0 | 2669.3 | 2597.0 | 2574.7 | 2552.5 |
| 20°    | 2617.5 | 2640.1 | 2557.0 | 2524.7 | 2500.2 |
| 22.5°  | 2568.3 | 2591.6 | 2500.0 | 2465.6 | 2447.9 |
| 25°    | 2476.2 | 2493.1 | 2404.1 | 2372.0 | 2357.9 |
| 27.5°  | 2355.0 | 2360.5 | 2282.9 | 2245.6 | 2221.5 |
| 30°    | 2255.0 | 2259.7 | 2186.7 | 2144.4 | 2103.1 |
| 32.5°  | 2140.4 | 2132.3 | 2076.7 | 2030.6 | 1987.7 |
| 35°    | 1930.0 | 1912.1 | 1874.2 | 1836.2 | 1815.5 |
| 37.5°  | 1663.2 | 1658.7 | 1631.1 | 1585.5 | 1560.7 |
| 40°    | 1465.5 | 1480.6 | 1435.7 | 1402.3 | 1372.2 |
| 42.5°  | 1254.0 | 1290.8 | 1251.8 | 1204.7 | 1179.1 |
| 45°    | 866.4  | 968.9  | 962.6  | 916.2  | 778.9  |
| 47.5°  | 481.8  | 610.8  | 688.3  | 539.9  | 399.5  |
| 50°    | 308.7  | 397.1  | 518.3  | 325.9  | 277.9  |
| 52.5°  | 216.4  | 264.9  | 382.9  | 231.0  | 204.8  |
| 55°    | 129.8  | 146.7  | 211.6  | 141.1  | 129.8  |
| 57.5°  | 78.5   | 94.8   | 120.2  | 94.6   | 76.7   |
| 60°    | 53.9   | 68.0   | 89.4   | 63.1   | 49.0   |
| 62.5°  | 46.9   | 52.0   | 69.4   | 49.5   | 44.4   |
| 65°    | 41.3   | 42.3   | 43.3   | 41.3   | 38.5   |
| 67.5°  | 35.6   | 37.5   | 36.5   | 35.7   | 33.7   |
| 70°    | 31.7   | 33.6   | 32.7   | 32.6   | 29.8   |
| 72.5°  | 28.7   | 30.5   | 29.6   | 28.8   | 26.7   |
| 75°    | 24.0   | 25.0   | 24.0   | 23.1   | 22.1   |
| 77.5°  | 18.5   | 19.4   | 19.2   | 18.4   | 17.5   |
| 80°    | 15.4   | 16.3   | 15.4   | 15.4   | 14.4   |
| 82.5°  | 12.3   | 12.5   | 12.3   | 11.5   | 11.3   |
| 85°    | 6.7    | 7.7    | 6.7    | 6.7    | 6.7    |
| 87.5°  | 2.3    | 2.7    | 4.6    | 3.6    | 3.5    |
| 90°    | 0.0    | 1.9    | 11.4   | 6.6    | 5.7    |
| 92.5°  | 10.7   | 43.1   | 154.7  | 51.3   | 37.0   |
| 95°    | 31.4   | 99.5   | 478.3  | 176.7  | 111.5  |
| 97.5°  | 60.8   | 126.6  | 753.9  | 498.9  | 303.8  |
| 100°   | 79.1   | 143.4  | 842.3  | 814.3  | 546.9  |
| 102.5° | 99.7   | 161.7  | 824.0  | 1142.2 | 910.5  |
| 105°   | 133.4  | 187.4  | 752.8  | 1429.6 | 1358.8 |
| 107.5° | 165.4  | 217.0  | 684.1  | 1458.0 | 1540.0 |
| 110°   | 186.8  | 236.1  | 649.8  | 1422.2 | 1571.2 |



TEST NUMBER: P854382

CATALOG NUMBER: SQ2-WBM-100U-100D-930-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5°  | 90°    |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 207.3 | 255.2 | 629.3 | 1362.1 | 1550.7 |
| 115°   | 237.3 | 282.9 | 608.9 | 1259.9 | 1479.8 |
| 117.5° | 267.0 | 310.2 | 601.6 | 1164.2 | 1389.3 |
| 120°   | 286.8 | 327.8 | 599.3 | 1108.3 | 1324.5 |
| 122.5° | 305.1 | 343.9 | 599.3 | 1059.2 | 1258.9 |
| 125°   | 331.6 | 367.9 | 600.3 | 995.0  | 1171.1 |
| 127.5° | 353.1 | 390.8 | 599.3 | 946.5  | 1096.7 |
| 130°   | 366.8 | 406.0 | 599.3 | 918.8  | 1054.8 |
| 132.5° | 379.0 | 418.9 | 598.6 | 893.4  | 1019.0 |
| 135°   | 397.3 | 439.3 | 596.5 | 858.1  | 965.2  |
| 137.5° | 417.7 | 457.6 | 596.5 | 820.4  | 919.7  |
| 140°   | 430.7 | 469.8 | 596.5 | 795.9  | 890.0  |
| 142.5° | 443.6 | 481.3 | 595.7 | 773.5  | 855.7  |
| 145°   | 464.0 | 498.5 | 596.5 | 738.1  | 807.1  |
| 147.5° | 484.4 | 513.7 | 597.6 | 709.0  | 761.9  |
| 150°   | 497.4 | 524.4 | 598.4 | 692.8  | 737.5  |
| 152.5° | 509.6 | 533.6 | 599.2 | 678.9  | 715.4  |
| 155°   | 528.8 | 546.5 | 600.3 | 661.8  | 687.0  |
| 157.5° | 545.6 | 559.9 | 601.4 | 649.3  | 666.8  |
| 160°   | 555.5 | 567.6 | 602.2 | 641.6  | 654.6  |
| 162.5° | 565.4 | 574.6 | 603.0 | 634.7  | 645.5  |
| 165°   | 578.4 | 584.9 | 603.2 | 626.2  | 633.6  |
| 167.5° | 589.4 | 592.8 | 604.3 | 619.6  | 622.8  |
| 170°   | 595.5 | 597.4 | 605.1 | 616.5  | 617.4  |
| 172.5° | 599.3 | 600.5 | 605.1 | 613.4  | 613.6  |
| 175°   | 605.1 | 605.1 | 606.0 | 610.7  | 608.9  |
| 177.5° | 607.7 | 607.0 | 606.2 | 608.5  | 607.0  |
| 180°   | 607.0 | 607.0 | 607.0 | 607.0  | 607.0  |

-----



TEST NUMBER: P854382

CATALOG NUMBER: SQ2-WBM-100U-100D-930-UNV-STD-W-4

**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 | 6.19             | 6.92 | 7.16 | 7.88 | 9.13  | 5.91           | 6.64 | 6.87 | 7.60 | 8.84  |
|                 | 3H   | 6.70             | 7.35 | 7.68 | 8.32 | 9.59  | 6.41           | 7.06 | 7.39 | 8.03 | 9.29  |
|                 | 4H   | 6.96             | 7.58 | 7.96 | 8.55 | 9.83  | 6.65           | 7.26 | 7.64 | 8.23 | 9.51  |
|                 | 6H   | 7.20             | 7.76 | 8.20 | 8.73 | 10.02 | 6.87           | 7.43 | 7.87 | 8.40 | 9.69  |
|                 | 8H   | 7.27             | 7.80 | 8.27 | 8.79 | 10.08 | 6.93           | 7.47 | 7.94 | 8.46 | 9.74  |
|                 | 12H  | 7.30             | 7.81 | 8.31 | 8.79 | 10.10 | 6.97           | 7.48 | 7.98 | 8.46 | 9.77  |
| 4H              | 2H   | 6.20             | 6.81 | 7.20 | 7.78 | 9.06  | 5.94           | 6.55 | 6.94 | 7.52 | 8.80  |
|                 | 3H   | 6.92             | 7.42 | 7.92 | 8.42 | 9.71  | 6.66           | 7.16 | 7.66 | 8.16 | 9.45  |
|                 | 4H   | 7.33             | 7.79 | 8.34 | 8.78 | 10.09 | 7.03           | 7.49 | 8.04 | 8.49 | 9.80  |
|                 | 6H   | 7.70             | 8.09 | 8.72 | 9.11 | 10.43 | 7.39           | 7.78 | 8.41 | 8.80 | 10.11 |
|                 | 8H   | 7.84             | 8.20 | 8.86 | 9.21 | 10.54 | 7.51           | 7.88 | 8.54 | 8.89 | 10.21 |
|                 | 12H  | 7.91             | 8.24 | 8.95 | 9.26 | 10.59 | 7.59           | 7.92 | 8.63 | 8.94 | 10.27 |
| 8H              | 4H   | 7.41             | 7.78 | 8.43 | 8.79 | 10.11 | 7.14           | 7.50 | 8.16 | 8.51 | 9.84  |
|                 | 6H   | 7.91             | 8.21 | 8.96 | 9.27 | 10.59 | 7.62           | 7.92 | 8.66 | 8.97 | 10.30 |
|                 | 8H   | 8.13             | 8.39 | 9.18 | 9.43 | 10.78 | 7.83           | 8.09 | 8.88 | 9.13 | 10.47 |
|                 | 12H  | 8.29             | 8.52 | 9.34 | 9.55 | 10.94 | 7.97           | 8.21 | 9.03 | 9.24 | 10.63 |
| 12H             | 4H   | 7.38             | 7.71 | 8.42 | 8.74 | 10.06 | 7.12           | 7.44 | 8.15 | 8.47 | 9.80  |
|                 | 6H   | 7.93             | 8.20 | 8.99 | 9.24 | 10.58 | 7.65           | 7.91 | 8.70 | 8.95 | 10.29 |
|                 | 8H   | 8.18             | 8.41 | 9.23 | 9.44 | 10.83 | 7.88           | 8.11 | 8.93 | 9.15 | 10.53 |