

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: P621534

Luminaire Tested: VLT-F-125U-050D-940-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621534
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2203-563-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/2/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: VLT-F-125U-050D-940-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

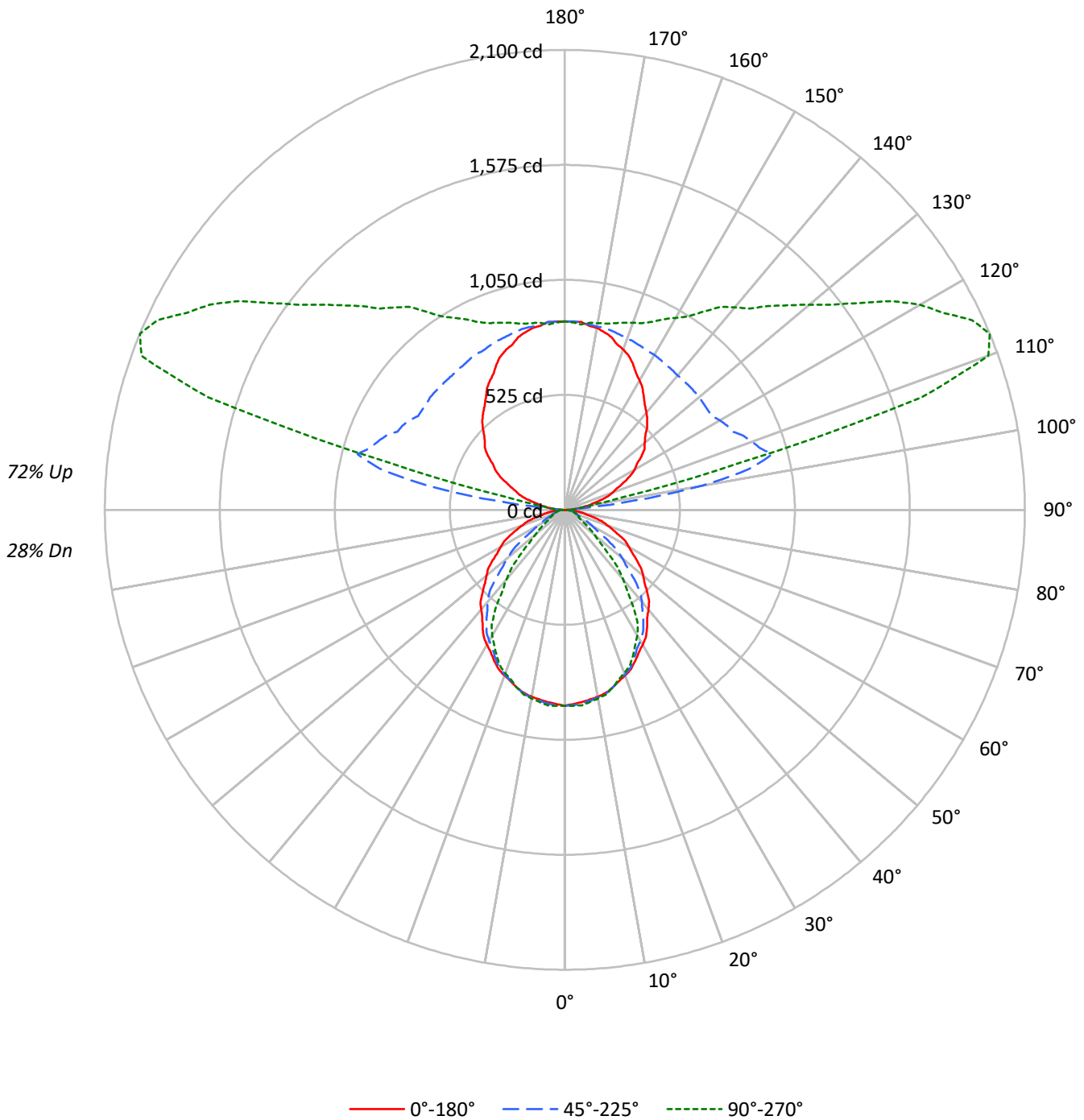
Lumens per Lamp: N/A
Luminaire Lumens: 6448.3 lumens
Efficiency: N/A
Efficacy: 122.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 52.6
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



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | |
|-----|----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|
| RF | 20 | | | | | 20 | | | | | 20 | | | | | 20 | | | | |
| RC | 80 | | | | | 70 | | | | | 50 | | | | | 30 | | | | |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | | |
| RCR | 0 | 102 | 102 | 102 | 102 | 91 | 91 | 91 | 91 | 71 | 71 | 71 | 53 | 53 | 53 | 36 | 36 | 36 | 28 | |
| | 1 | 93 | 89 | 86 | 82 | 83 | 80 | 77 | 74 | 63 | 61 | 59 | 47 | 46 | 45 | 33 | 32 | 31 | 25 | |
| | 2 | 85 | 78 | 73 | 68 | 76 | 70 | 66 | 62 | 56 | 52 | 50 | 42 | 40 | 38 | 29 | 28 | 27 | 21 | |
| | 3 | 78 | 69 | 62 | 57 | 70 | 62 | 57 | 52 | 49 | 45 | 42 | 37 | 35 | 33 | 26 | 25 | 23 | 19 | |
| | 4 | 71 | 61 | 54 | 48 | 64 | 55 | 49 | 44 | 44 | 40 | 36 | 33 | 31 | 28 | 24 | 22 | 20 | 16 | |
| | 5 | 66 | 55 | 47 | 42 | 59 | 49 | 43 | 38 | 39 | 35 | 31 | 30 | 27 | 25 | 21 | 20 | 18 | 14 | |
| | 6 | 60 | 49 | 42 | 36 | 54 | 44 | 38 | 33 | 36 | 31 | 27 | 27 | 24 | 22 | 20 | 18 | 16 | 13 | |
| | 7 | 56 | 44 | 37 | 32 | 50 | 40 | 34 | 29 | 32 | 28 | 24 | 25 | 22 | 19 | 18 | 16 | 14 | 12 | |
| | 8 | 52 | 40 | 33 | 28 | 46 | 36 | 30 | 26 | 29 | 25 | 21 | 23 | 20 | 17 | 17 | 14 | 13 | 10 | |
| | 9 | 48 | 37 | 30 | 25 | 43 | 33 | 27 | 23 | 27 | 22 | 19 | 21 | 18 | 15 | 15 | 13 | 12 | 9 | |
| | 10 | 45 | 34 | 27 | 22 | 40 | 31 | 25 | 20 | 25 | 20 | 17 | 19 | 16 | 14 | 14 | 12 | 11 | 9 | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 6420 | 6420 | 6420 |
| 5° | 6351 | 6397 | 6451 |
| 10° | 6317 | 6344 | 6377 |
| 15° | 6248 | 6255 | 6255 |
| 20° | 6147 | 6119 | 6063 |
| 25° | 6029 | 5927 | 5824 |
| 30° | 5889 | 5721 | 5490 |
| 35° | 5732 | 5473 | 4817 |
| 40° | 5566 | 5125 | 3878 |
| 45° | 5393 | 4539 | 2814 |
| 50° | 5210 | 3797 | 1950 |
| 55° | 5029 | 2890 | 1456 |
| 60° | 4841 | 2002 | 1101 |
| 65° | 4629 | 1428 | 1129 |
| 70° | 4324 | 1202 | 1164 |
| 75° | 3998 | 1231 | 1178 |
| 80° | 3475 | 1298 | 1223 |
| 85° | 2816 | 1449 | 1219 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5393 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 84.3 | 1.3 |
| 10°-20° | 237.1 | 3.7 |
| 20°-30° | 344.8 | 5.3 |
| 30°-40° | 381.5 | 5.9 |
| 40°-50° | 327.5 | 5.1 |
| 50°-60° | 226.8 | 3.5 |
| 60°-70° | 135.1 | 2.1 |
| 70°-80° | 66.6 | 1.0 |
| 80°-90° | 22.5 | 0.3 |
| 90°-100° | 105.8 | 1.6 |
| 100°-110° | 753.9 | 11.7 |
| 110°-120° | 1023.4 | 15.9 |
| 120°-130° | 833.0 | 12.9 |
| 130°-140° | 670.0 | 10.4 |
| 140°-150° | 528.2 | 8.2 |
| 150°-160° | 386.2 | 6.0 |
| 160°-170° | 239.9 | 3.7 |
| 170°-180° | 81.8 | 1.3 |
| 0°-30° | 666.2 | 10.3 |
| 0°-40° | 1047.6 | 16.2 |
| 0°-60° | 1601.9 | 24.8 |
| 0°-90° | 1826.1 | 28.3 |
| 90°-120° | 1883.1 | 29.2 |
| 90°-150° | 3914.2 | 60.7 |
| 90°-180° | 4622.0 | 71.7 |
| 0°-180° | 6448.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|------|------|
| 0° | 895 | 895 | 895 | 895 | 895 | |
| 5° | 882 | 895 | 888 | 887 | 896 | 84 |
| 15° | 841 | 852 | 842 | 837 | 842 | 237 |
| 25° | 762 | 767 | 749 | 736 | 736 | 350 |
| 35° | 654 | 652 | 625 | 574 | 550 | 409 |
| 45° | 531 | 522 | 447 | 323 | 277 | 410 |
| 55° | 402 | 385 | 231 | 133 | 116 | 359 |
| 65° | 273 | 219 | 84 | 67 | 66 | 270 |
| 75° | 144 | 63 | 44 | 43 | 42 | 152 |
| 85° | 34 | 17 | 18 | 16 | 15 | 40 |
| 90° | 0 | 5 | 11 | 16 | 16 | 3 |
| 95° | 43 | 80 | 43 | 49 | 60 | 48 |
| 105° | 168 | 258 | 980 | 1251 | 828 | 177 |
| 115° | 298 | 361 | 844 | 1755 | 2051 | 295 |
| 125° | 428 | 486 | 796 | 1391 | 1645 | 380 |
| 135° | 530 | 588 | 801 | 1146 | 1315 | 408 |
| 145° | 628 | 681 | 806 | 998 | 1104 | 394 |
| 155° | 736 | 762 | 823 | 905 | 947 | 338 |
| 165° | 817 | 828 | 844 | 866 | 882 | 229 |
| 175° | 860 | 866 | 860 | 855 | 850 | 81 |
| 180° | 860 | 860 | 860 | 860 | 860 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 0° | 894.6 | 894.6 | 894.6 | 894.6 | 894.6 |
| 2.5° | 887.2 | 897.3 | 892.4 | 892.5 | 896.1 |
| 5° | 881.7 | 895.2 | 888.1 | 887.4 | 895.5 |
| 7.5° | 873.5 | 886.0 | 878.7 | 877.8 | 884.8 |
| 10° | 866.9 | 878.6 | 870.6 | 868.9 | 875.2 |
| 12.5° | 857.3 | 869.0 | 860.2 | 857.0 | 863.4 |
| 15° | 841.0 | 851.8 | 841.9 | 837.4 | 841.9 |
| 17.5° | 820.5 | 829.5 | 818.3 | 811.1 | 813.8 |
| 20° | 805.0 | 814.0 | 801.3 | 791.2 | 793.9 |
| 22.5° | 787.9 | 795.5 | 781.3 | 769.7 | 771.7 |
| 25° | 761.5 | 766.9 | 748.6 | 735.6 | 735.6 |
| 27.5° | 732.1 | 735.4 | 714.0 | 700.4 | 696.6 |
| 30° | 710.7 | 712.5 | 690.4 | 674.4 | 662.6 |
| 32.5° | 688.5 | 689.6 | 664.5 | 638.7 | 620.5 |
| 35° | 654.3 | 652.5 | 624.7 | 574.3 | 549.9 |
| 37.5° | 617.9 | 613.9 | 581.1 | 504.3 | 468.0 |
| 40° | 594.2 | 588.8 | 547.1 | 454.7 | 414.0 |
| 42.5° | 569.8 | 562.3 | 509.4 | 403.6 | 358.6 |
| 45° | 531.4 | 522.4 | 447.3 | 323.3 | 277.3 |
| 47.5° | 493.3 | 481.4 | 383.7 | 250.5 | 210.9 |
| 50° | 466.7 | 454.1 | 340.1 | 206.3 | 174.7 |
| 52.5° | 440.1 | 427.4 | 295.7 | 173.2 | 148.1 |
| 55° | 402.0 | 384.8 | 231.0 | 132.7 | 116.4 |
| 57.5° | 363.2 | 338.6 | 172.1 | 103.4 | 90.8 |
| 60° | 337.3 | 304.8 | 139.5 | 85.7 | 76.7 |
| 62.5° | 312.2 | 271.0 | 114.4 | 74.8 | 73.0 |
| 65° | 272.6 | 219.3 | 84.1 | 67.4 | 66.5 |
| 67.5° | 234.9 | 167.3 | 62.5 | 60.8 | 59.9 |
| 70° | 206.1 | 132.0 | 57.3 | 56.4 | 55.5 |
| 72.5° | 180.2 | 101.1 | 52.1 | 51.2 | 50.3 |
| 75° | 144.2 | 62.8 | 44.4 | 43.4 | 42.5 |
| 77.5° | 107.8 | 39.6 | 36.6 | 35.7 | 34.7 |
| 80° | 84.1 | 32.6 | 31.4 | 30.5 | 29.6 |
| 82.5° | 63.4 | 26.3 | 25.5 | 24.6 | 23.7 |
| 85° | 34.2 | 17.0 | 17.6 | 15.7 | 14.8 |
| 87.5° | 11.8 | 9.3 | 10.3 | 9.9 | 9.2 |
| 90° | 0.0 | 5.3 | 10.8 | 16.2 | 16.2 |
| 92.5° | 13.0 | 18.3 | 23.8 | 33.6 | 37.9 |
| 95° | 43.3 | 80.3 | 43.3 | 48.9 | 59.5 |
| 97.5° | 76.8 | 154.1 | 318.2 | 93.9 | 81.2 |
| 100° | 102.8 | 192.8 | 638.6 | 188.0 | 124.5 |
| 102.5° | 128.8 | 223.0 | 863.7 | 496.0 | 271.7 |
| 105° | 167.8 | 257.7 | 979.5 | 1251.3 | 828.0 |
| 107.5° | 206.7 | 274.5 | 935.1 | 1821.1 | 1705.8 |
| 110° | 232.7 | 296.2 | 909.2 | 1913.6 | 2056.4 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 258.7 | 322.2 | 883.2 | 1859.5 | 2099.7 |
| 115° | 297.6 | 361.1 | 844.2 | 1754.7 | 2051.0 |
| 117.5° | 337.7 | 400.1 | 834.5 | 1641.2 | 1946.0 |
| 120° | 368.0 | 426.2 | 817.2 | 1554.9 | 1872.4 |
| 122.5° | 389.6 | 452.1 | 795.5 | 1480.8 | 1772.9 |
| 125° | 427.5 | 485.7 | 795.5 | 1391.2 | 1645.1 |
| 127.5° | 458.9 | 518.2 | 796.6 | 1287.2 | 1538.0 |
| 130° | 476.2 | 539.7 | 800.9 | 1217.6 | 1455.7 |
| 132.5° | 497.9 | 561.4 | 800.9 | 1186.4 | 1382.1 |
| 135° | 530.3 | 588.5 | 800.9 | 1145.7 | 1315.0 |
| 137.5° | 557.4 | 619.8 | 800.9 | 1100.8 | 1245.8 |
| 140° | 579.0 | 637.3 | 800.9 | 1074.5 | 1206.8 |
| 142.5° | 600.7 | 654.7 | 805.3 | 1044.0 | 1167.8 |
| 145° | 627.8 | 680.7 | 806.3 | 998.1 | 1104.0 |
| 147.5° | 660.2 | 706.8 | 812.8 | 965.1 | 1046.6 |
| 150° | 681.9 | 724.2 | 817.2 | 943.2 | 1012.0 |
| 152.5° | 703.5 | 741.6 | 817.2 | 925.6 | 981.7 |
| 155° | 736.0 | 762.4 | 822.6 | 904.7 | 947.0 |
| 157.5° | 762.0 | 787.4 | 829.1 | 891.5 | 922.1 |
| 160° | 779.3 | 800.4 | 833.4 | 882.7 | 909.2 |
| 162.5° | 792.3 | 813.4 | 837.7 | 878.2 | 896.2 |
| 165° | 817.2 | 827.7 | 844.2 | 866.2 | 882.1 |
| 167.5° | 831.2 | 840.8 | 849.6 | 860.7 | 870.2 |
| 170° | 844.2 | 849.5 | 849.6 | 860.6 | 865.9 |
| 172.5° | 848.5 | 858.1 | 854.0 | 856.2 | 861.5 |
| 175° | 860.5 | 865.7 | 860.5 | 854.9 | 849.6 |
| 177.5° | 860.5 | 864.7 | 860.5 | 860.4 | 856.1 |
| 180° | 860.5 | 860.5 | 860.5 | 860.5 | 860.5 |



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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 | 11.60 | 12.27 | 12.73 | 13.39 | 14.94 | 3.83 | 4.51 | 4.97 | 5.62 | 7.18 |
| | 3H | 13.08 | 13.68 | 14.22 | 14.81 | 16.38 | 5.18 | 5.77 | 6.31 | 6.90 | 8.47 |
| | 4H | 13.59 | 14.16 | 14.73 | 15.28 | 16.86 | 5.82 | 6.39 | 6.97 | 7.52 | 9.09 |
| | 6H | 13.97 | 14.50 | 15.13 | 15.63 | 17.21 | 6.40 | 6.92 | 7.56 | 8.05 | 9.64 |
| | 8H | 14.10 | 14.60 | 15.26 | 15.74 | 17.32 | 6.62 | 7.12 | 7.78 | 8.26 | 9.84 |
| | 12H | 14.18 | 14.65 | 15.34 | 15.78 | 17.38 | 6.78 | 7.25 | 7.94 | 8.39 | 9.99 |
| 4H | 2H | 11.41 | 11.98 | 12.56 | 13.10 | 14.68 | 4.43 | 5.00 | 5.58 | 6.12 | 7.70 |
| | 3H | 13.03 | 13.50 | 14.19 | 14.65 | 16.24 | 5.97 | 6.44 | 7.13 | 7.59 | 9.18 |
| | 4H | 13.61 | 14.05 | 14.77 | 15.19 | 16.79 | 6.75 | 7.19 | 7.92 | 8.33 | 9.94 |
| | 6H | 14.10 | 14.47 | 15.26 | 15.63 | 17.23 | 7.48 | 7.86 | 8.65 | 9.02 | 10.62 |
| | 8H | 14.28 | 14.63 | 15.45 | 15.78 | 17.39 | 7.77 | 8.12 | 8.94 | 9.28 | 10.89 |
| | 12H | 14.40 | 14.71 | 15.58 | 15.88 | 17.50 | 7.98 | 8.30 | 9.17 | 9.46 | 11.08 |
| 8H | 4H | 13.52 | 13.86 | 14.68 | 15.02 | 16.63 | 7.20 | 7.54 | 8.36 | 8.70 | 10.31 |
| | 6H | 14.05 | 14.33 | 15.23 | 15.53 | 17.14 | 8.07 | 8.36 | 9.26 | 9.56 | 11.16 |
| | 8H | 14.28 | 14.53 | 15.47 | 15.71 | 17.33 | 8.47 | 8.72 | 9.66 | 9.89 | 11.52 |
| | 12H | 14.46 | 14.68 | 15.66 | 15.85 | 17.52 | 8.78 | 9.00 | 9.98 | 10.17 | 11.84 |
| 12H | 4H | 13.46 | 13.77 | 14.64 | 14.94 | 16.56 | 7.24 | 7.55 | 8.42 | 8.72 | 10.33 |
| | 6H | 14.02 | 14.27 | 15.21 | 15.44 | 17.07 | 8.19 | 8.44 | 9.38 | 9.61 | 11.24 |
| | 8H | 14.25 | 14.47 | 15.45 | 15.64 | 17.31 | 8.62 | 8.84 | 9.82 | 10.01 | 11.68 |