

Signify Classified - Internal
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: P622017

Luminaire Tested: VLT-WB-M-050U-100D-940-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P622017
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2203-563-32)
Test Lab: INNOVATION CENTER
Issue Date: 10/28/2022
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: VLT-WB-M-050U-100D-940-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
WHITE BAFFLE WITH MEDIUM OPTIC
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

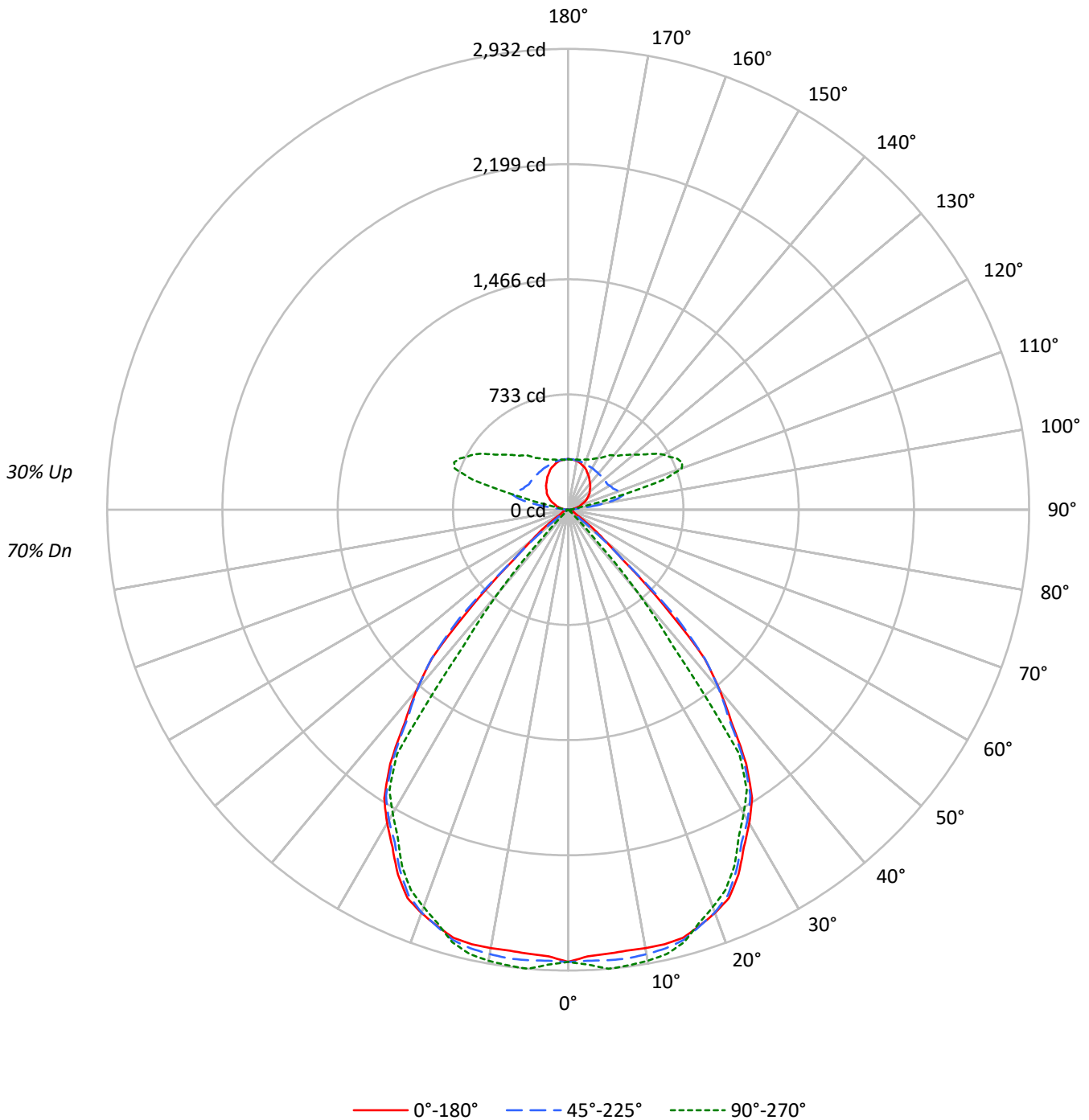
Lumens per Lamp: N/A
Luminaire Lumens: 5719.9 lumens
Efficiency: N/A
Efficacy: 105.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.16 / 1.14
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 54.5
Input Voltage (V): 120
Input Current (A_{in}): 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 | 0 |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 112 | 112 | 112 | 112 | 106 | 106 | 106 | 106 | 94 | 94 | 94 | 84 | 84 | 84 | 74 | 74 | 74 | 70 |
| 1 | 105 | 102 | 99 | 96 | 99 | 97 | 94 | 92 | 87 | 85 | 83 | 78 | 77 | 76 | 70 | 69 | 68 | 64 |
| 2 | 98 | 92 | 88 | 84 | 93 | 88 | 84 | 80 | 80 | 77 | 74 | 72 | 70 | 68 | 65 | 64 | 62 | 59 |
| 3 | 92 | 84 | 78 | 74 | 87 | 80 | 75 | 71 | 73 | 70 | 66 | 67 | 64 | 61 | 61 | 59 | 57 | 54 |
| 4 | 86 | 77 | 70 | 66 | 81 | 74 | 68 | 64 | 68 | 63 | 60 | 62 | 59 | 56 | 57 | 54 | 52 | 49 |
| 5 | 80 | 70 | 64 | 59 | 76 | 68 | 62 | 57 | 62 | 58 | 54 | 58 | 54 | 51 | 53 | 50 | 48 | 45 |
| 6 | 75 | 65 | 58 | 53 | 71 | 62 | 56 | 52 | 58 | 53 | 49 | 53 | 49 | 46 | 49 | 46 | 44 | 41 |
| 7 | 70 | 60 | 53 | 48 | 67 | 58 | 51 | 47 | 53 | 48 | 45 | 50 | 45 | 42 | 46 | 43 | 40 | 38 |
| 8 | 66 | 55 | 48 | 44 | 63 | 53 | 47 | 43 | 50 | 45 | 41 | 46 | 42 | 39 | 43 | 40 | 37 | 35 |
| 9 | 62 | 51 | 45 | 40 | 59 | 50 | 43 | 39 | 46 | 41 | 38 | 43 | 39 | 36 | 40 | 37 | 34 | 32 |
| 10 | 59 | 48 | 41 | 37 | 56 | 46 | 40 | 36 | 43 | 38 | 35 | 40 | 36 | 33 | 38 | 34 | 32 | 30 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 20645 | 20645 | 20645 |
| 5° | 20431 | 20724 | 21120 |
| 10° | 20637 | 20919 | 21231 |
| 15° | 20950 | 21056 | 21162 |
| 20° | 20851 | 20819 | 20540 |
| 25° | 20281 | 20039 | 19797 |
| 30° | 19081 | 18896 | 18491 |
| 35° | 17284 | 17034 | 16623 |
| 40° | 14057 | 13961 | 6599 |
| 45° | 8699 | 9918 | 455 |
| 50° | 3319 | 2659 | 272 |
| 55° | 1630 | 484 | 101 |
| 60° | 789 | 234 | 29 |
| 65° | 727 | 34 | 34 |
| 70° | 684 | 42 | 42 |
| 75° | 677 | 55 | 55 |
| 80° | 674 | 83 | 0 |
| 85° | 667 | 0 | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 9918 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 274.7 | 4.8 |
| 10°-20° | 797.0 | 13.9 |
| 20°-30° | 1158.9 | 20.3 |
| 30°-40° | 1153.3 | 20.2 |
| 40°-50° | 507.1 | 8.9 |
| 50°-60° | 74.9 | 1.3 |
| 60°-70° | 17.1 | 0.3 |
| 70°-80° | 6.3 | 0.1 |
| 80°-90° | 2.2 | 0.0 |
| 90°-100° | 39.6 | 0.7 |
| 100°-110° | 281.9 | 4.9 |
| 110°-120° | 382.7 | 6.7 |
| 120°-130° | 311.5 | 5.4 |
| 130°-140° | 250.5 | 4.4 |
| 140°-150° | 197.5 | 3.5 |
| 150°-160° | 144.4 | 2.5 |
| 160°-170° | 89.7 | 1.6 |
| 170°-180° | 30.6 | 0.5 |
| 0°-30° | 2230.7 | 39.0 |
| 0°-40° | 3383.9 | 59.2 |
| 0°-60° | 3965.9 | 69.3 |
| 0°-90° | 3991.5 | 69.8 |
| 90°-120° | 704.2 | 12.3 |
| 90°-150° | 1463.7 | 25.6 |
| 90°-180° | 1728.0 | 30.2 |
| 0°-180° | 5719.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 2877 | 2877 | 2877 | 2877 | 2877 | |
| 5° | 2836 | 2886 | 2877 | 2884 | 2932 | 271 |
| 15° | 2820 | 2880 | 2834 | 2807 | 2848 | 793 |
| 25° | 2561 | 2609 | 2531 | 2464 | 2500 | 1171 |
| 35° | 1973 | 1967 | 1944 | 1904 | 1898 | 1208 |
| 45° | 857 | 975 | 977 | 65 | 45 | 664 |
| 55° | 130 | 140 | 39 | 14 | 8 | 132 |
| 65° | 43 | 37 | 2 | 2 | 2 | 43 |
| 75° | 24 | 4 | 2 | 2 | 2 | 26 |
| 85° | 8 | 0 | 0 | 0 | 0 | 8 |
| 90° | 0 | 2 | 4 | 6 | 6 | 1 |
| 95° | 16 | 30 | 16 | 18 | 22 | 18 |
| 105° | 63 | 96 | 366 | 468 | 310 | 66 |
| 115° | 111 | 135 | 316 | 656 | 767 | 110 |
| 125° | 160 | 182 | 298 | 520 | 615 | 142 |
| 135° | 198 | 220 | 300 | 428 | 492 | 153 |
| 145° | 235 | 254 | 302 | 373 | 413 | 147 |
| 155° | 275 | 285 | 308 | 338 | 354 | 126 |
| 165° | 306 | 310 | 316 | 324 | 330 | 86 |
| 175° | 322 | 324 | 322 | 320 | 318 | 30 |
| 180° | 322 | 322 | 322 | 322 | 322 | |



TEST NUMBER: P622017

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 2877.0 | 2877.0 | 2877.0 | 2877.0 | 2877.0 |
| 2.5° | 2844.4 | 2887.4 | 2872.1 | 2871.1 | 2896.6 |
| 5° | 2836.3 | 2886.1 | 2877.0 | 2884.2 | 2932.0 |
| 7.5° | 2830.6 | 2880.8 | 2880.7 | 2877.3 | 2925.1 |
| 10° | 2832.2 | 2884.0 | 2870.9 | 2865.9 | 2913.7 |
| 12.5° | 2832.2 | 2887.2 | 2859.5 | 2846.4 | 2895.7 |
| 15° | 2820.0 | 2879.7 | 2834.3 | 2806.7 | 2848.5 |
| 17.5° | 2776.0 | 2840.9 | 2778.5 | 2724.7 | 2759.7 |
| 20° | 2730.4 | 2800.1 | 2726.3 | 2657.8 | 2689.7 |
| 22.5° | 2673.4 | 2735.1 | 2654.7 | 2582.9 | 2616.4 |
| 25° | 2561.4 | 2609.2 | 2530.9 | 2464.5 | 2500.3 |
| 27.5° | 2420.1 | 2446.4 | 2387.9 | 2324.1 | 2347.2 |
| 30° | 2302.8 | 2322.7 | 2280.4 | 2219.6 | 2231.6 |
| 32.5° | 2177.4 | 2190.9 | 2156.6 | 2103.9 | 2114.3 |
| 35° | 1973.0 | 1967.0 | 1944.5 | 1903.6 | 1897.6 |
| 37.5° | 1705.8 | 1695.5 | 1681.0 | 1523.0 | 1092.2 |
| 40° | 1500.6 | 1504.6 | 1490.4 | 931.4 | 704.5 |
| 42.5° | 1284.0 | 1308.7 | 1288.4 | 634.2 | 230.5 |
| 45° | 857.2 | 974.7 | 977.3 | 64.7 | 44.8 |
| 47.5° | 463.4 | 591.2 | 480.9 | 40.1 | 32.6 |
| 50° | 297.3 | 370.9 | 238.2 | 30.4 | 24.4 |
| 52.5° | 212.6 | 248.0 | 93.3 | 23.9 | 17.9 |
| 55° | 130.3 | 140.3 | 38.7 | 14.1 | 8.1 |
| 57.5° | 77.8 | 92.5 | 24.4 | 5.2 | 2.0 |
| 60° | 55.0 | 64.9 | 16.3 | 2.0 | 2.0 |
| 62.5° | 48.5 | 48.9 | 11.4 | 2.0 | 2.0 |
| 65° | 42.8 | 36.8 | 2.0 | 2.0 | 2.0 |
| 67.5° | 37.5 | 26.7 | 2.0 | 2.0 | 2.0 |
| 70° | 32.6 | 18.6 | 2.0 | 2.0 | 2.0 |
| 72.5° | 29.3 | 12.2 | 2.0 | 2.0 | 2.0 |
| 75° | 24.4 | 4.5 | 2.0 | 2.0 | 2.0 |
| 77.5° | 19.5 | 2.4 | 2.0 | 1.6 | 1.6 |
| 80° | 16.3 | 2.4 | 2.0 | 0.0 | 0.0 |
| 82.5° | 13.0 | 2.3 | 0.4 | 0.0 | 0.0 |
| 85° | 8.1 | 0.2 | 0.0 | 0.0 | 0.0 |
| 87.5° | 3.3 | 0.5 | 0.8 | 1.2 | 1.2 |
| 90° | 0.0 | 2.0 | 4.0 | 6.1 | 6.1 |
| 92.5° | 4.9 | 6.8 | 8.9 | 12.6 | 14.2 |
| 95° | 16.2 | 30.0 | 16.2 | 18.3 | 22.3 |
| 97.5° | 28.7 | 57.6 | 119.0 | 35.1 | 30.4 |
| 100° | 38.4 | 72.1 | 238.8 | 70.3 | 46.5 |
| 102.5° | 48.2 | 83.4 | 323.0 | 185.5 | 101.6 |
| 105° | 62.7 | 96.4 | 366.3 | 467.9 | 309.6 |
| 107.5° | 77.3 | 102.6 | 349.7 | 681.0 | 637.8 |
| 110° | 87.0 | 110.8 | 340.0 | 715.5 | 769.0 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 96.7 | 120.5 | 330.2 | 695.3 | 785.1 |
| 115° | 111.3 | 135.0 | 315.7 | 656.1 | 766.9 |
| 117.5° | 126.3 | 149.6 | 312.0 | 613.7 | 727.7 |
| 120° | 137.6 | 159.4 | 305.6 | 581.4 | 700.2 |
| 122.5° | 145.7 | 169.0 | 297.5 | 553.7 | 662.9 |
| 125° | 159.9 | 181.6 | 297.5 | 520.2 | 615.2 |
| 127.5° | 171.6 | 193.8 | 297.9 | 481.3 | 575.1 |
| 130° | 178.1 | 201.8 | 299.5 | 455.3 | 544.3 |
| 132.5° | 186.2 | 209.9 | 299.5 | 443.6 | 516.8 |
| 135° | 198.3 | 220.1 | 299.5 | 428.4 | 491.7 |
| 137.5° | 208.4 | 231.8 | 299.5 | 411.6 | 465.8 |
| 140° | 216.5 | 238.3 | 299.5 | 401.8 | 451.3 |
| 142.5° | 224.6 | 244.8 | 301.1 | 390.4 | 436.7 |
| 145° | 234.7 | 254.5 | 301.5 | 373.2 | 412.8 |
| 147.5° | 246.9 | 264.3 | 303.9 | 360.9 | 391.4 |
| 150° | 255.0 | 270.8 | 305.6 | 352.7 | 378.4 |
| 152.5° | 263.1 | 277.3 | 305.6 | 346.1 | 367.1 |
| 155° | 275.2 | 285.1 | 307.6 | 338.3 | 354.1 |
| 157.5° | 284.9 | 294.4 | 310.0 | 333.3 | 344.8 |
| 160° | 291.4 | 299.3 | 311.6 | 330.1 | 340.0 |
| 162.5° | 296.2 | 304.2 | 313.2 | 328.4 | 335.1 |
| 165° | 305.6 | 309.5 | 315.7 | 323.9 | 329.8 |
| 167.5° | 310.8 | 314.4 | 317.7 | 321.8 | 325.4 |
| 170° | 315.7 | 317.7 | 317.7 | 321.8 | 323.8 |
| 172.5° | 317.3 | 320.9 | 319.3 | 320.2 | 322.2 |
| 175° | 321.7 | 323.7 | 321.7 | 319.7 | 317.7 |
| 177.5° | 321.7 | 323.3 | 321.7 | 321.7 | 320.1 |
| 180° | 321.7 | 321.7 | 321.7 | 321.7 | 321.7 |



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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 | 4.26 | 5.06 | 5.07 | 5.85 | 6.83 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 3H | 4.71 | 5.41 | 5.53 | 6.22 | 7.22 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 4H | 4.87 | 5.52 | 5.71 | 6.34 | 7.36 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 6H | 5.05 | 5.66 | 5.90 | 6.48 | 7.51 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 8H | 5.14 | 5.71 | 6.00 | 6.55 | 7.58 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 12H | 5.21 | 5.75 | 6.07 | 6.58 | 7.63 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4H | 2H | 3.97 | 4.62 | 4.81 | 5.44 | 6.46 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 3H | 4.45 | 4.98 | 5.30 | 5.84 | 6.86 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 4H | 4.62 | 5.11 | 5.48 | 5.96 | 7.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 6H | 4.85 | 5.27 | 5.73 | 6.14 | 7.21 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 8H | 4.97 | 5.36 | 5.85 | 6.23 | 7.30 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 12H | 5.08 | 5.42 | 5.98 | 6.31 | 7.39 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8H | 4H | 4.45 | 4.84 | 5.33 | 5.70 | 6.77 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 6H | 4.68 | 5.00 | 5.59 | 5.91 | 6.98 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 8H | 4.82 | 5.09 | 5.73 | 6.00 | 7.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 12H | 4.95 | 5.20 | 5.87 | 6.09 | 7.24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 12H | 4H | 4.38 | 4.72 | 5.27 | 5.61 | 6.69 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 6H | 4.62 | 4.90 | 5.54 | 5.80 | 6.89 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 8H | 4.75 | 4.99 | 5.67 | 5.89 | 7.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |