

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: P621927

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

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621927
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2203-563-26)
Test Lab: INNOVATION CENTER
Issue Date: 10/28/2022
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: VLT-BB-M-050U-050D-940-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
BLACK BAFFLE WITH MEDIUM OPTIC
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

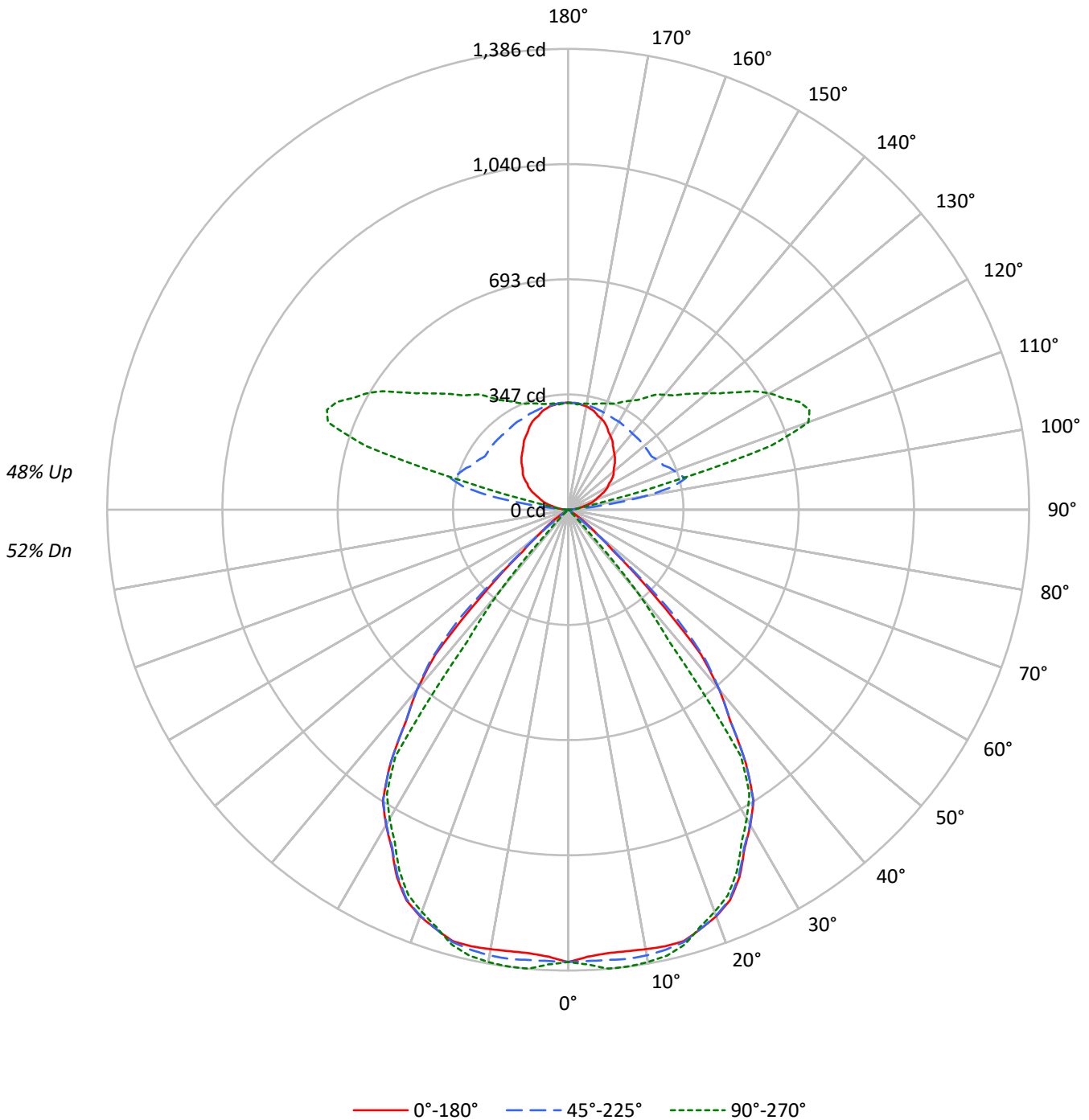
Lumens per Lamp: N/A
Luminaire Lumens: 3601.9 lumens
Efficiency: N/A
Efficacy: 104.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.14
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 34.4
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





TEST NUMBER: P621927

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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 | 108 | 108 | 108 | 108 | 100 | 100 | 100 | 100 | 84 | 84 | 84 | 71 | 71 | 71 | 58 | 58 | 58 | 52 |
| 1 | 100 | 97 | 94 | 91 | 93 | 90 | 87 | 85 | 77 | 75 | 74 | 65 | 64 | 63 | 55 | 54 | 53 | 48 |
| 2 | 93 | 87 | 82 | 78 | 87 | 81 | 77 | 74 | 70 | 67 | 65 | 60 | 58 | 56 | 51 | 50 | 48 | 44 |
| 3 | 87 | 79 | 73 | 68 | 81 | 74 | 69 | 65 | 64 | 61 | 57 | 56 | 53 | 51 | 47 | 46 | 44 | 40 |
| 4 | 81 | 72 | 65 | 60 | 75 | 67 | 62 | 57 | 59 | 55 | 51 | 51 | 48 | 46 | 44 | 42 | 40 | 37 |
| 5 | 75 | 65 | 58 | 53 | 70 | 61 | 55 | 51 | 54 | 50 | 46 | 47 | 44 | 41 | 41 | 39 | 37 | 34 |
| 6 | 70 | 60 | 53 | 48 | 65 | 56 | 50 | 46 | 50 | 45 | 42 | 44 | 40 | 38 | 38 | 36 | 34 | 31 |
| 7 | 65 | 55 | 48 | 43 | 61 | 52 | 46 | 41 | 46 | 41 | 38 | 41 | 37 | 34 | 36 | 33 | 31 | 29 |
| 8 | 61 | 50 | 44 | 39 | 57 | 48 | 42 | 37 | 43 | 38 | 34 | 38 | 34 | 31 | 33 | 31 | 29 | 26 |
| 9 | 57 | 47 | 40 | 35 | 54 | 44 | 38 | 34 | 40 | 35 | 32 | 35 | 32 | 29 | 31 | 28 | 26 | 24 |
| 10 | 54 | 43 | 37 | 32 | 51 | 41 | 35 | 31 | 37 | 32 | 29 | 33 | 29 | 27 | 29 | 27 | 25 | 23 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|-------|-------|
| 0° | 9761 | 9761 | 9761 |
| 5° | 9645 | 9791 | 9980 |
| 10° | 9778 | 9919 | 10066 |
| 15° | 9977 | 10000 | 10060 |
| 20° | 9938 | 9922 | 9830 |
| 25° | 9653 | 9613 | 9501 |
| 30° | 9077 | 9060 | 8892 |
| 35° | 8157 | 8165 | 7935 |
| 40° | 6623 | 6623 | 3031 |
| 45° | 3809 | 4632 | 62 |
| 50° | 1200 | 1110 | 57 |
| 55° | 419 | 89 | 51 |
| 60° | 29 | 59 | 59 |
| 65° | 17 | 51 | 51 |
| 70° | 21 | 63 | 63 |
| 75° | 0 | 55 | 55 |
| 80° | 0 | 83 | 83 |
| 85° | 0 | 82 | 82 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 4632 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 130.0 | 3.6 |
| 10°-20° | 379.3 | 10.5 |
| 20°-30° | 554.0 | 15.4 |
| 30°-40° | 548.7 | 15.2 |
| 40°-50° | 229.7 | 6.4 |
| 50°-60° | 24.6 | 0.7 |
| 60°-70° | 3.4 | 0.1 |
| 70°-80° | 2.1 | 0.1 |
| 80°-90° | 1.7 | 0.0 |
| 90°-100° | 39.6 | 1.1 |
| 100°-110° | 281.9 | 7.8 |
| 110°-120° | 382.7 | 10.6 |
| 120°-130° | 311.5 | 8.6 |
| 130°-140° | 250.5 | 7.0 |
| 140°-150° | 197.5 | 5.5 |
| 150°-160° | 144.4 | 4.0 |
| 160°-170° | 89.7 | 2.5 |
| 170°-180° | 30.6 | 0.8 |
| 0°-30° | 1063.3 | 29.5 |
| 0°-40° | 1612.0 | 44.8 |
| 0°-60° | 1866.3 | 51.8 |
| 0°-90° | 1873.5 | 52.0 |
| 90°-120° | 704.2 | 19.5 |
| 90°-150° | 1463.7 | 40.6 |
| 90°-180° | 1728.0 | 48.0 |
| 0°-180° | 3601.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1360 | 1360 | 1360 | 1360 | 1360 | |
| 5° | 1339 | 1363 | 1359 | 1363 | 1386 | 128 |
| 15° | 1343 | 1371 | 1346 | 1336 | 1354 | 377 |
| 25° | 1219 | 1240 | 1214 | 1185 | 1200 | 557 |
| 35° | 931 | 933 | 932 | 914 | 906 | 571 |
| 45° | 375 | 446 | 456 | 9 | 6 | 294 |
| 55° | 34 | 44 | 7 | 5 | 4 | 38 |
| 65° | 1 | 4 | 3 | 3 | 3 | 1 |
| 75° | 0 | 2 | 2 | 2 | 2 | 0 |
| 85° | 0 | 1 | 1 | 1 | 1 | 0 |
| 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: P621927

CATALOG NUMBER: VLT-BB-M-050U-050D-940-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1360.2 | 1360.2 | 1360.2 | 1360.2 | 1360.2 |
| 2.5° | 1345.6 | 1364.6 | 1358.6 | 1357.2 | 1369.1 |
| 5° | 1338.9 | 1362.7 | 1359.2 | 1362.7 | 1385.5 |
| 7.5° | 1339.5 | 1361.5 | 1362.8 | 1362.7 | 1385.5 |
| 10° | 1341.9 | 1364.7 | 1361.2 | 1358.7 | 1381.5 |
| 12.5° | 1345.2 | 1368.8 | 1355.5 | 1351.3 | 1373.4 |
| 15° | 1342.9 | 1370.7 | 1346.0 | 1336.2 | 1354.1 |
| 17.5° | 1322.4 | 1354.6 | 1322.0 | 1303.3 | 1316.4 |
| 20° | 1301.4 | 1335.1 | 1299.3 | 1273.3 | 1287.2 |
| 22.5° | 1271.3 | 1302.7 | 1268.5 | 1238.4 | 1254.7 |
| 25° | 1219.2 | 1240.0 | 1214.1 | 1185.0 | 1199.9 |
| 27.5° | 1148.2 | 1160.1 | 1145.4 | 1119.2 | 1128.3 |
| 30° | 1095.4 | 1103.4 | 1093.4 | 1067.2 | 1073.1 |
| 32.5° | 1037.0 | 1041.0 | 1035.0 | 1011.1 | 1013.9 |
| 35° | 931.1 | 933.1 | 932.1 | 913.7 | 905.8 |
| 37.5° | 800.3 | 804.3 | 801.9 | 721.8 | 498.0 |
| 40° | 707.0 | 710.9 | 707.0 | 422.7 | 323.6 |
| 42.5° | 590.1 | 615.5 | 608.8 | 288.3 | 92.3 |
| 45° | 375.3 | 445.7 | 456.4 | 9.1 | 6.1 |
| 47.5° | 185.4 | 261.4 | 214.6 | 5.9 | 5.9 |
| 50° | 107.5 | 154.1 | 99.4 | 5.1 | 5.1 |
| 52.5° | 71.8 | 93.8 | 28.8 | 5.1 | 5.1 |
| 55° | 33.5 | 44.4 | 7.1 | 5.0 | 4.1 |
| 57.5° | 11.8 | 22.3 | 4.9 | 4.1 | 4.1 |
| 60° | 2.0 | 11.0 | 4.1 | 4.1 | 4.1 |
| 62.5° | 1.2 | 6.2 | 4.1 | 3.3 | 4.1 |
| 65° | 1.0 | 4.0 | 3.0 | 3.0 | 3.0 |
| 67.5° | 1.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| 70° | 1.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| 72.5° | 0.2 | 2.2 | 2.2 | 2.2 | 3.0 |
| 75° | 0.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| 77.5° | 0.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| 80° | 0.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| 82.5° | 0.0 | 1.2 | 1.2 | 1.2 | 2.0 |
| 85° | 0.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 87.5° | 0.0 | 1.2 | 1.6 | 2.0 | 2.0 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 3H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 4H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 6H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 8H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 12H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4H | 2H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 3H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 4H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 6H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 8H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 12H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8H | 4H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 6H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 8H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 12H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 12H | 4H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 6H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 8H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |