

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: NEO-RAY

Report Number: P982765

Luminaire Tested: S122IW-B970UB40-4F0-XX-W2A

Issue Date: 5/2/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P982765  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/2/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122IW-B970UB40-4F0-XX-W2A  
Description: Define 2 Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}  
Light Source: -  
Ballast/Driver: -

**Summary**

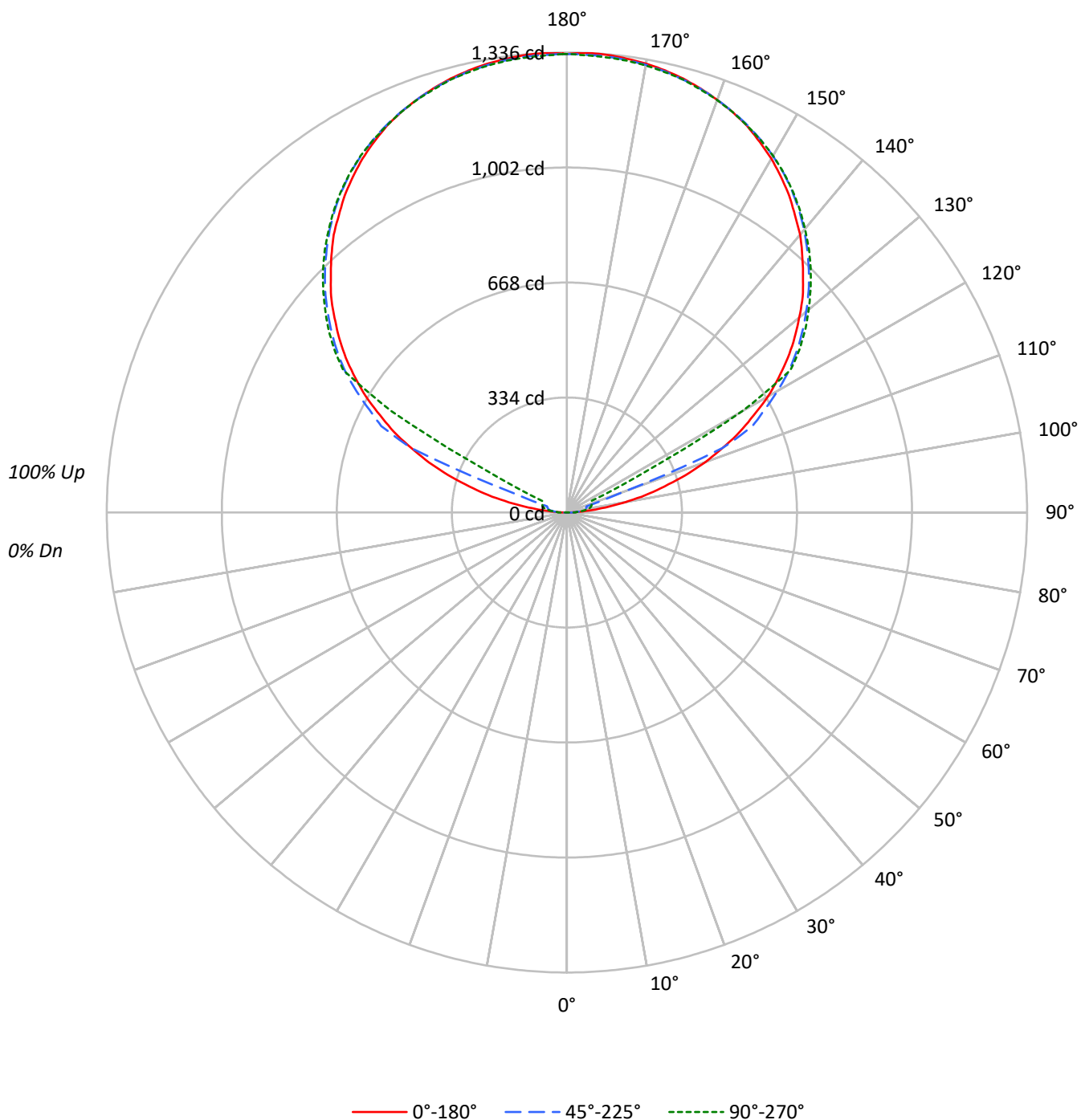
Lumens per Lamp: N/A  
Luminaire Lumens: 3906.0 lumens  
Efficiency: N/A  
Efficacy: 124.0 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Indirect

Input Watts (W): 31.5  
Input Voltage (V):  
Input Current (A<sub>in</sub>): 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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CATALOG NUMBER: S122IW-B970UB40-4F0-XX-W2A

### 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 | 30 | 10 |
| RCR |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 0   | 95 | 95 | 95 | 95 | 81 | 81 | 81 | 81 | 56 | 56 | 56 | 32 | 32 | 32 | 10 | 10 | 10 |
| 1   | 87 | 83 | 79 | 76 | 74 | 71 | 68 | 65 | 48 | 47 | 45 | 28 | 27 | 26 | 9  | 9  | 8  |
| 2   | 79 | 72 | 66 | 62 | 67 | 62 | 57 | 53 | 42 | 40 | 37 | 24 | 23 | 22 | 8  | 7  | 7  |
| 3   | 72 | 63 | 56 | 51 | 61 | 54 | 49 | 44 | 37 | 34 | 31 | 21 | 20 | 18 | 7  | 6  | 6  |
| 4   | 65 | 56 | 48 | 43 | 56 | 48 | 42 | 37 | 33 | 29 | 26 | 19 | 17 | 16 | 6  | 6  | 5  |
| 5   | 60 | 49 | 42 | 36 | 51 | 42 | 36 | 32 | 29 | 25 | 22 | 17 | 15 | 13 | 5  | 5  | 4  |
| 6   | 55 | 44 | 36 | 31 | 47 | 38 | 32 | 27 | 26 | 22 | 19 | 15 | 13 | 11 | 5  | 4  | 4  |
| 7   | 50 | 39 | 32 | 27 | 43 | 34 | 28 | 23 | 23 | 19 | 17 | 14 | 11 | 10 | 4  | 4  | 3  |
| 8   | 47 | 35 | 28 | 23 | 40 | 30 | 24 | 20 | 21 | 17 | 14 | 12 | 10 | 9  | 4  | 3  | 3  |
| 9   | 43 | 32 | 25 | 20 | 37 | 27 | 22 | 18 | 19 | 15 | 13 | 11 | 9  | 8  | 4  | 3  | 3  |
| 10  | 40 | 29 | 22 | 18 | 34 | 25 | 19 | 16 | 17 | 14 | 11 | 10 | 8  | 7  | 3  | 3  | 2  |

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

|     | 0° | 45° | 90° |
|-----|----|-----|-----|
| 0°  | 0  | 0   | 0   |
| 5°  | 0  | 0   | 0   |
| 10° | 0  | 0   | 0   |
| 15° | 0  | 0   | 0   |
| 20° | 0  | 0   | 0   |
| 25° | 0  | 0   | 0   |
| 30° | 0  | 0   | 0   |
| 35° | 0  | 0   | 0   |
| 40° | 0  | 0   | 0   |
| 45° | 0  | 0   | 0   |
| 50° | 0  | 0   | 0   |
| 55° | 0  | 0   | 0   |
| 60° | 0  | 0   | 0   |
| 65° | 0  | 0   | 0   |
| 70° | 0  | 0   | 0   |
| 75° | 0  | 0   | 0   |
| 80° | 0  | 0   | 0   |
| 85° | 0  | 0   | 0   |

**MAXIMUM LUMINANCE 45°-90°:**

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

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 0.0    | 0.0       |
| 10°-20°   | 0.0    | 0.0       |
| 20°-30°   | 0.0    | 0.0       |
| 30°-40°   | 0.0    | 0.0       |
| 40°-50°   | 0.0    | 0.0       |
| 50°-60°   | 0.0    | 0.0       |
| 60°-70°   | 0.0    | 0.0       |
| 70°-80°   | 0.0    | 0.0       |
| 80°-90°   | 2.3    | 0.1       |
| 90°-100°  | 43.9   | 1.1       |
| 100°-110° | 163.7  | 4.2       |
| 110°-120° | 434.1  | 11.1      |
| 120°-130° | 720.0  | 18.4      |
| 130°-140° | 764.8  | 19.6      |
| 140°-150° | 710.8  | 18.2      |
| 150°-160° | 571.4  | 14.6      |
| 160°-170° | 368.2  | 9.4       |
| 170°-180° | 126.7  | 3.2       |
| 0°-30°    | 0.0    | 0.0       |
| 0°-40°    | 0.0    | 0.0       |
| 0°-60°    | 0.0    | 0.0       |
| 0°-90°    | 2.3    | 0.1       |
| 90°-120°  | 641.7  | 16.4      |
| 90°-150°  | 2837.2 | 72.6      |
| 90°-180°  | 3904.0 | 99.9      |
| 0°-180°   | 3906.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 0    | 0     | 0    | 0     | 0    |      |
| 5°   | 0    | 0     | 0    | 0     | 0    | 0    |
| 15°  | 0    | 0     | 0    | 0     | 0    | 0    |
| 25°  | 0    | 0     | 0    | 0     | 0    | 0    |
| 35°  | 0    | 0     | 0    | 0     | 0    | 0    |
| 45°  | 0    | 0     | 0    | 0     | 0    | 0    |
| 55°  | 0    | 0     | 0    | 0     | 0    | 0    |
| 65°  | 0    | 0     | 0    | 0     | 0    | 0    |
| 75°  | 0    | 0     | 0    | 0     | 0    | 0    |
| 85°  | 0    | 0     | 0    | 0     | 0    | 0    |
| 90°  | 1    | 12    | 19   | 24    | 26   | 4    |
| 95°  | 63   | 31    | 38   | 42    | 41   | 74   |
| 105° | 293  | 322   | 59   | 69    | 73   | 313  |
| 115° | 554  | 570   | 594  | 148   | 79   | 545  |
| 125° | 783  | 796   | 814  | 821   | 824  | 699  |
| 135° | 969  | 985   | 993  | 1003  | 1001 | 749  |
| 145° | 1124 | 1123  | 1140 | 1147  | 1142 | 703  |
| 155° | 1238 | 1229  | 1241 | 1247  | 1239 | 571  |
| 165° | 1305 | 1299  | 1302 | 1308  | 1302 | 369  |
| 175° | 1334 | 1328  | 1330 | 1336  | 1327 | 127  |
| 180° | 1332 | 1332  | 1332 | 1332  | 1332 |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°  |
|--------|-------|-------|-------|-------|------|
| 0°     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 2.5°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 5°     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 7.5°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 10°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 12.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 15°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 17.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 20°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 22.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 25°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 27.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 30°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 32.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 35°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 37.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 40°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 42.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 45°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 47.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 50°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 52.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 55°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 57.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 60°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 62.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 65°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 67.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 70°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 72.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 75°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 77.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 80°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 82.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 85°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 87.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 90°    | 1.0   | 11.6  | 19.3  | 24.1  | 26.0 |
| 92.5°  | 24.1  | 20.2  | 23.1  | 25.1  | 26.0 |
| 95°    | 62.6  | 30.8  | 37.6  | 42.4  | 41.4 |
| 97.5°  | 112.7 | 33.7  | 49.1  | 52.0  | 53.0 |
| 100°   | 170.5 | 38.5  | 54.9  | 62.6  | 64.6 |
| 102.5° | 234.1 | 232.2 | 56.8  | 67.4  | 70.3 |
| 105°   | 292.9 | 321.8 | 58.8  | 69.4  | 73.2 |
| 107.5° | 361.3 | 385.4 | 60.7  | 71.3  | 75.2 |
| 110°   | 426.8 | 447.1 | 168.6 | 72.3  | 76.1 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 488.5  | 505.8  | 489.5  | 74.2   | 77.1   |
| 115°   | 554.0  | 570.4  | 594.5  | 148.4  | 79.0   |
| 117.5° | 610.9  | 630.1  | 646.5  | 508.7  | 256.3  |
| 120°   | 674.4  | 688.9  | 706.2  | 717.8  | 587.7  |
| 122.5° | 728.4  | 743.8  | 763.1  | 768.9  | 769.8  |
| 125°   | 783.3  | 795.9  | 814.2  | 820.9  | 823.8  |
| 127.5° | 833.4  | 846.9  | 861.4  | 871.0  | 872.0  |
| 130°   | 880.6  | 896.1  | 906.7  | 917.3  | 916.3  |
| 132.5° | 928.8  | 941.3  | 951.9  | 960.6  | 959.6  |
| 135°   | 969.3  | 984.7  | 993.4  | 1003.0 | 1001.1 |
| 137.5° | 1011.7 | 1023.2 | 1032.9 | 1042.5 | 1039.6 |
| 140°   | 1053.1 | 1060.8 | 1071.4 | 1080.1 | 1075.3 |
| 142.5° | 1087.8 | 1094.5 | 1107.1 | 1114.8 | 1110.0 |
| 145°   | 1124.4 | 1123.4 | 1139.8 | 1146.6 | 1141.7 |
| 147.5° | 1156.2 | 1153.3 | 1169.7 | 1174.5 | 1170.7 |
| 150°   | 1187.0 | 1180.3 | 1195.7 | 1201.5 | 1196.7 |
| 152.5° | 1213.0 | 1205.3 | 1219.8 | 1225.6 | 1218.8 |
| 155°   | 1238.1 | 1229.4 | 1241.0 | 1246.8 | 1239.1 |
| 157.5° | 1258.3 | 1250.6 | 1259.3 | 1266.0 | 1258.3 |
| 160°   | 1275.7 | 1269.9 | 1275.7 | 1281.5 | 1274.7 |
| 162.5° | 1291.1 | 1285.3 | 1290.1 | 1296.9 | 1288.2 |
| 165°   | 1304.6 | 1298.8 | 1301.7 | 1308.4 | 1301.7 |
| 167.5° | 1315.2 | 1309.4 | 1312.3 | 1319.0 | 1310.4 |
| 170°   | 1323.8 | 1318.1 | 1320.0 | 1326.7 | 1318.1 |
| 172.5° | 1329.6 | 1323.8 | 1325.8 | 1332.5 | 1323.8 |
| 175°   | 1334.4 | 1327.7 | 1329.6 | 1336.4 | 1326.7 |
| 177.5° | 1336.4 | 1329.6 | 1330.6 | 1337.3 | 1328.7 |
| 180°   | 1331.6 | 1331.6 | 1331.6 | 1331.6 | 1331.6 |



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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 |

END OF REPORT