

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: P982706

Luminaire Tested: S122IW-B1440UB50-4F0-XX-W2A-1

Issue Date: 5/2/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P982706  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/2/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122IW-B1440UB50-4F0-XX-W2A-1  
Description: Define 2 Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

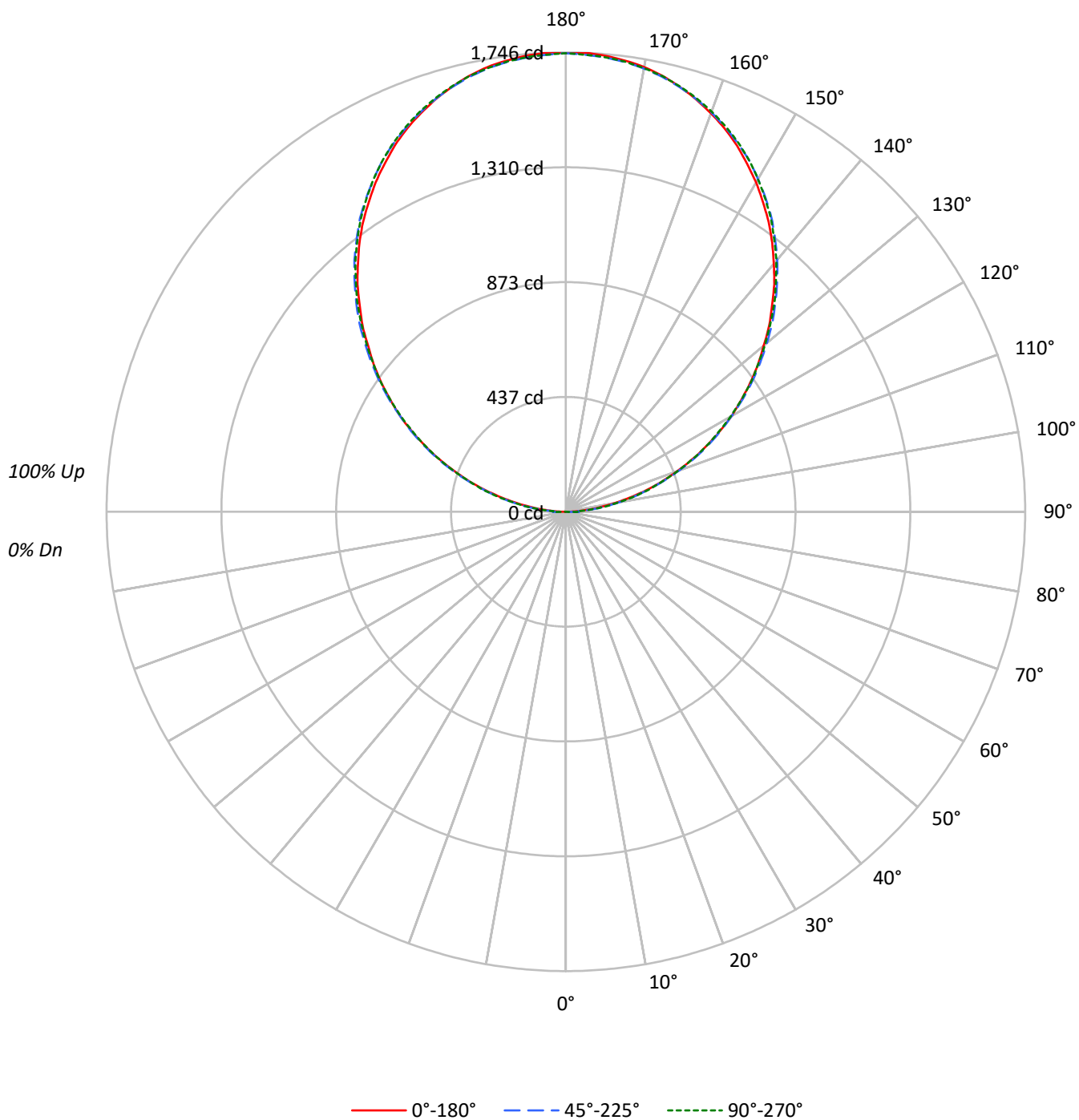
Lumens per Lamp: N/A  
Luminaire Lumens: 4878.0 lumens  
Efficiency: N/A  
Efficacy: 93.4 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Indirect

Input Watts (W): 52.2  
Input Voltage (V):  
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 |    |    |    | 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°   | 5.0    | 0.1       |
| 90°-100°  | 107.8  | 2.2       |
| 100°-110° | 342.8  | 7.0       |
| 110°-120° | 586.5  | 12.0      |
| 120°-130° | 771.4  | 15.8      |
| 130°-140° | 865.8  | 17.7      |
| 140°-150° | 849.1  | 17.4      |
| 150°-160° | 712.2  | 14.6      |
| 160°-170° | 472.4  | 9.7       |
| 170°-180° | 165.1  | 3.4       |
| 0°-30°    | 0.0    | 0.0       |
| 0°-40°    | 0.0    | 0.0       |
| 0°-60°    | 0.0    | 0.0       |
| 0°-90°    | 5.0    | 0.1       |
| 90°-120°  | 1037.1 | 21.3      |
| 90°-150°  | 3523.4 | 72.2      |
| 90°-180°  | 4873.0 | 99.9      |
| 0°-180°   | 4878.0 | 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°  | 2    | 19    | 52   | 48    | 50   | 5    |
| 95°  | 76   | 91    | 94   | 94    | 91   | 85   |
| 105° | 316  | 321   | 324  | 326   | 326  | 334  |
| 115° | 588  | 597   | 594  | 593   | 588  | 582  |
| 125° | 856  | 869   | 865  | 860   | 859  | 765  |
| 135° | 1108 | 1124  | 1127 | 1125  | 1121 | 856  |
| 145° | 1344 | 1355  | 1364 | 1365  | 1359 | 840  |
| 155° | 1537 | 1542  | 1546 | 1553  | 1549 | 708  |
| 165° | 1672 | 1671  | 1671 | 1681  | 1674 | 472  |
| 175° | 1740 | 1736  | 1733 | 1743  | 1734 | 165  |
| 180° | 1743 | 1743  | 1743 | 1743  | 1743 |      |

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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°    | 1.5   | 19.1  | 51.5  | 48.5  | 50.0  |
| 92.5°  | 32.4  | 44.1  | 45.6  | 47.1  | 47.1  |
| 95°    | 76.5  | 91.2  | 94.1  | 94.1  | 91.2  |
| 97.5°  | 128.0 | 141.2 | 147.1 | 147.1 | 147.1 |
| 100°   | 186.8 | 198.6 | 203.0 | 203.0 | 201.5 |
| 102.5° | 248.6 | 257.4 | 263.3 | 264.8 | 263.3 |
| 105°   | 316.2 | 320.6 | 323.6 | 326.5 | 326.5 |
| 107.5° | 383.9 | 389.8 | 389.8 | 391.3 | 383.9 |
| 110°   | 448.6 | 457.4 | 457.4 | 457.4 | 453.0 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 519.2  | 528.0  | 526.6  | 522.2  | 519.2  |
| 115°   | 588.3  | 597.2  | 594.2  | 592.8  | 588.3  |
| 117.5° | 657.5  | 669.2  | 661.9  | 657.5  | 653.1  |
| 120°   | 726.6  | 738.4  | 726.6  | 726.6  | 722.2  |
| 122.5° | 789.9  | 804.6  | 797.2  | 792.8  | 789.9  |
| 125°   | 856.0  | 869.3  | 864.9  | 860.5  | 859.0  |
| 127.5° | 920.8  | 936.9  | 931.1  | 925.2  | 920.8  |
| 130°   | 981.1  | 1000.2 | 997.2  | 994.3  | 988.4  |
| 132.5° | 1048.7 | 1063.4 | 1064.9 | 1057.6 | 1053.1 |
| 135°   | 1107.6 | 1123.7 | 1126.7 | 1125.2 | 1120.8 |
| 137.5° | 1172.3 | 1185.5 | 1188.5 | 1187.0 | 1181.1 |
| 140°   | 1229.6 | 1242.9 | 1250.2 | 1250.2 | 1244.4 |
| 142.5° | 1288.5 | 1301.7 | 1306.1 | 1307.6 | 1301.7 |
| 145°   | 1344.4 | 1354.7 | 1363.5 | 1365.0 | 1359.1 |
| 147.5° | 1394.4 | 1407.6 | 1413.5 | 1416.4 | 1410.6 |
| 150°   | 1445.9 | 1454.7 | 1460.6 | 1465.0 | 1460.6 |
| 152.5° | 1491.5 | 1500.3 | 1507.6 | 1513.5 | 1507.6 |
| 155°   | 1537.1 | 1541.5 | 1545.9 | 1553.2 | 1548.8 |
| 157.5° | 1576.8 | 1579.7 | 1582.7 | 1593.0 | 1585.6 |
| 160°   | 1612.1 | 1615.0 | 1616.5 | 1625.3 | 1619.4 |
| 162.5° | 1644.4 | 1644.4 | 1645.9 | 1656.2 | 1648.8 |
| 165°   | 1672.4 | 1670.9 | 1670.9 | 1681.2 | 1673.8 |
| 167.5° | 1697.4 | 1693.0 | 1693.0 | 1703.3 | 1695.9 |
| 170°   | 1716.5 | 1712.1 | 1710.6 | 1720.9 | 1712.1 |
| 172.5° | 1729.7 | 1725.3 | 1723.9 | 1734.2 | 1725.3 |
| 175°   | 1740.0 | 1735.6 | 1732.7 | 1743.0 | 1734.2 |
| 177.5° | 1745.9 | 1741.5 | 1738.6 | 1747.4 | 1738.6 |
| 180°   | 1743.0 | 1743.0 | 1743.0 | 1743.0 | 1743.0 |



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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