

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: P1061992

Luminaire Tested: S125RDR-H1270D950-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061992  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-48)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-H1270D950-X4F0-XX-UDD-BVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

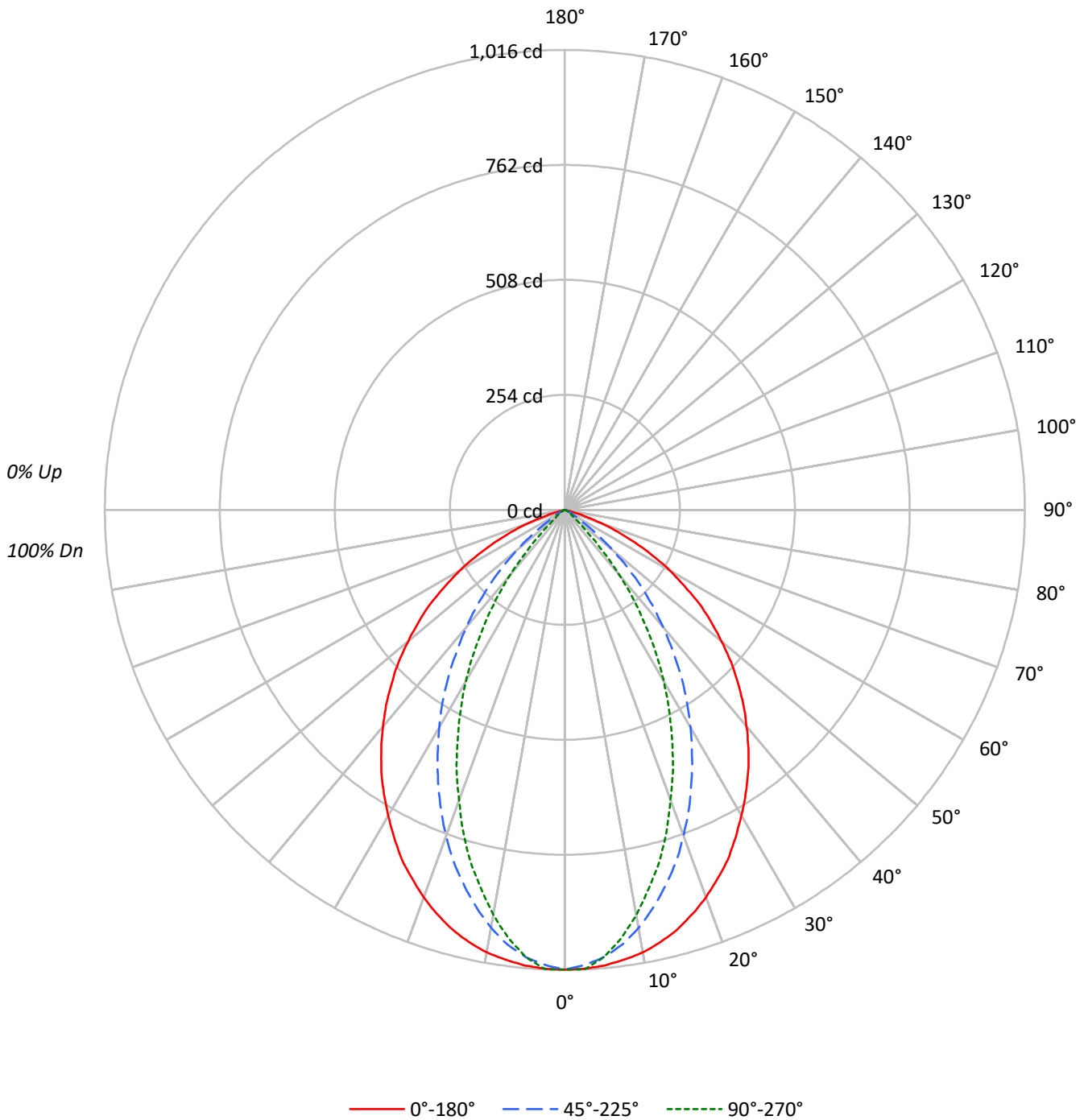
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1312.2 lumens  
Efficiency: N/A  
Efficacy: 36.0 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 36.5  
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 |    |   |  |  |  |  |  |  | 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  | 50  | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |    |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |    |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |    |
| 1   | 112 | 109 | 106 | 103 | 110 | 107 | 104 | 102 | 103 | 101 | 99  | 99  | 97  | 96  | 95  | 94  | 93  | 91  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |    |
| 2   | 105 | 99  | 94  | 90  | 103 | 97  | 93  | 89  | 94  | 90  | 87  | 91  | 88  | 85  | 88  | 86  | 83  | 82  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |    |
| 3   | 98  | 90  | 84  | 80  | 96  | 89  | 83  | 79  | 86  | 82  | 78  | 84  | 80  | 76  | 81  | 78  | 75  | 73  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |    |
| 4   | 92  | 83  | 76  | 71  | 90  | 82  | 75  | 70  | 79  | 74  | 70  | 77  | 72  | 69  | 75  | 71  | 68  | 66  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |    |
| 5   | 86  | 76  | 69  | 64  | 84  | 75  | 68  | 63  | 73  | 67  | 63  | 71  | 66  | 62  | 70  | 65  | 62  | 60  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |    |
| 6   | 81  | 70  | 63  | 58  | 79  | 69  | 62  | 57  | 67  | 61  | 57  | 66  | 61  | 57  | 65  | 60  | 56  | 54  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |    |
| 7   | 76  | 65  | 58  | 53  | 74  | 64  | 57  | 52  | 63  | 56  | 52  | 61  | 56  | 52  | 60  | 55  | 51  | 50  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |    |
| 8   | 71  | 60  | 53  | 48  | 70  | 59  | 53  | 48  | 58  | 52  | 48  | 57  | 52  | 48  | 56  | 51  | 47  | 46  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |    |
| 9   | 67  | 56  | 49  | 44  | 66  | 55  | 49  | 44  | 54  | 48  | 44  | 53  | 48  | 44  | 52  | 47  | 44  | 42  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |    |
| 10  | 64  | 52  | 46  | 41  | 62  | 52  | 45  | 41  | 51  | 45  | 41  | 50  | 45  | 41  | 49  | 44  | 41  | 39  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |    |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 6994 | 6994 | 6994 |
| 5°  | 6983 | 6853 | 6853 |
| 10° | 6943 | 6558 | 6352 |
| 15° | 6839 | 6123 | 5741 |
| 20° | 6676 | 5616 | 4998 |
| 25° | 6475 | 5029 | 4255 |
| 30° | 6201 | 4411 | 3474 |
| 35° | 5936 | 3762 | 2602 |
| 40° | 5613 | 3035 | 1686 |
| 45° | 5258 | 2297 | 730  |
| 50° | 4837 | 1464 | 273  |
| 55° | 4360 | 643  | 193  |
| 60° | 3690 | 277  | 129  |
| 65° | 2794 | 174  | 65   |
| 70° | 1699 | 81   | 26   |
| 75° | 356  | 35   | 35   |
| 80° | 0    | 0    | 0    |
| 85° | 0    | 0    | 0    |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5258 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 93.6   | 7.1       |
| 10°-20°   | 244.1  | 18.6      |
| 20°-30°   | 313.4  | 23.9      |
| 30°-40°   | 295.0  | 22.5      |
| 40°-50°   | 206.3  | 15.7      |
| 50°-60°   | 110.2  | 8.4       |
| 60°-70°   | 43.9   | 3.3       |
| 70°-80°   | 5.7    | 0.4       |
| 80°-90°   | 0.0    | 0.0       |
| 90°-100°  | 0.0    | 0.0       |
| 100°-110° | 0.0    | 0.0       |
| 110°-120° | 0.0    | 0.0       |
| 120°-130° | 0.0    | 0.0       |
| 130°-140° | 0.0    | 0.0       |
| 140°-150° | 0.0    | 0.0       |
| 150°-160° | 0.0    | 0.0       |
| 160°-170° | 0.0    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-30°    | 651.1  | 49.6      |
| 0°-40°    | 946.2  | 72.1      |
| 0°-60°    | 1262.6 | 96.2      |
| 0°-90°    | 1312.2 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1312.2 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1016 | 1016  | 1016 | 1016  | 1016 |      |
| 5°  | 1010 | 1008  | 992  | 994   | 992  | 96   |
| 15° | 960  | 929   | 859  | 819   | 805  | 270  |
| 25° | 852  | 777   | 662  | 590   | 560  | 391  |
| 35° | 706  | 594   | 448  | 346   | 310  | 441  |
| 45° | 540  | 405   | 236  | 114   | 75   | 417  |
| 55° | 363  | 222   | 54   | 19    | 16   | 322  |
| 65° | 172  | 68    | 11   | 5     | 4    | 171  |
| 75° | 13   | 4     | 1    | 1     | 1    | 26   |
| 85° | 0    | 0     | 0    | 0     | 0    | 0    |
| 90° | 0    | 0     | 0    | 0     | 0    | 0    |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1015.8 | 1015.8 | 1015.8 | 1015.8 | 1015.8 |
| 2.5°  | 1014.4 | 1015.8 | 1006.4 | 1014.4 | 1015.8 |
| 5°    | 1010.4 | 1007.7 | 991.6  | 994.3  | 991.6  |
| 7.5°  | 1002.4 | 995.7  | 968.9  | 959.5  | 954.1  |
| 10°   | 993.0  | 978.2  | 938.0  | 917.9  | 908.6  |
| 12.5° | 978.2  | 956.8  | 900.5  | 869.7  | 856.3  |
| 15°   | 959.5  | 928.7  | 859.0  | 818.8  | 805.4  |
| 17.5° | 936.7  | 896.5  | 816.1  | 766.5  | 746.4  |
| 20°   | 911.2  | 857.6  | 766.5  | 707.6  | 682.1  |
| 22.5° | 881.8  | 820.1  | 715.6  | 649.9  | 624.5  |
| 25°   | 852.3  | 777.2  | 662.0  | 589.6  | 560.1  |
| 27.5° | 816.1  | 733.0  | 608.4  | 530.7  | 498.5  |
| 30°   | 779.9  | 688.8  | 554.8  | 470.4  | 436.9  |
| 32.5° | 743.7  | 641.9  | 501.2  | 407.4  | 373.9  |
| 35°   | 706.2  | 593.6  | 447.6  | 345.7  | 309.6  |
| 37.5° | 666.0  | 545.4  | 390.0  | 286.8  | 249.3  |
| 40°   | 624.5  | 498.5  | 337.7  | 229.1  | 187.6  |
| 42.5° | 584.3  | 451.6  | 285.4  | 172.9  | 127.3  |
| 45°   | 540.0  | 404.7  | 235.9  | 113.9  | 75.0   |
| 47.5° | 498.5  | 359.1  | 184.9  | 65.7   | 38.9   |
| 50°   | 451.6  | 312.2  | 136.7  | 34.8   | 25.5   |
| 52.5° | 407.4  | 266.7  | 91.1   | 22.8   | 20.1   |
| 55°   | 363.2  | 222.4  | 53.6   | 18.8   | 16.1   |
| 57.5° | 312.2  | 179.6  | 29.5   | 14.7   | 12.1   |
| 60°   | 268.0  | 140.7  | 20.1   | 10.7   | 9.4    |
| 62.5° | 217.1  | 103.2  | 14.7   | 8.0    | 6.7    |
| 65°   | 171.5  | 68.3   | 10.7   | 5.4    | 4.0    |
| 67.5° | 127.3  | 40.2   | 6.7    | 2.7    | 2.7    |
| 70°   | 84.4   | 21.4   | 4.0    | 1.3    | 1.3    |
| 72.5° | 44.2   | 9.4    | 2.7    | 1.3    | 1.3    |
| 75°   | 13.4   | 4.0    | 1.3    | 1.3    | 1.3    |
| 77.5° | 0.0    | 1.3    | 0.0    | 0.0    | 1.3    |
| 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°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



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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 | 15.70            | 16.97 | 16.07 | 17.28 | 17.59 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 3H   | 16.29            | 17.40 | 16.67 | 17.73 | 18.09 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 4H   | 16.25            | 17.28 | 16.65 | 17.63 | 18.02 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 6H   | 16.16            | 17.11 | 16.58 | 17.48 | 17.88 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 8H   | 16.12            | 17.01 | 16.55 | 17.40 | 17.81 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 12H  | 16.07            | 16.92 | 16.51 | 17.31 | 17.74 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
| 4H              | 2H   | 15.48            | 16.51 | 15.88 | 16.86 | 17.24 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 3H   | 16.07            | 16.90 | 16.48 | 17.31 | 17.71 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 4H   | 16.02            | 16.76 | 16.45 | 17.18 | 17.62 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 6H   | 15.93            | 16.57 | 16.39 | 17.01 | 17.48 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 8H   | 15.87            | 16.46 | 16.34 | 16.91 | 17.38 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 12H  | 15.82            | 16.34 | 16.31 | 16.82 | 17.30 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
| 8H              | 4H   | 15.87            | 16.46 | 16.34 | 16.91 | 17.38 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 6H   | 15.76            | 16.24 | 16.27 | 16.74 | 17.22 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 8H   | 15.70            | 16.13 | 16.22 | 16.64 | 17.14 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 12H  | 15.65            | 16.03 | 16.16 | 16.52 | 17.10 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
| 12H             | 4H   | 15.82            | 16.34 | 16.31 | 16.82 | 17.30 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 6H   | 15.70            | 16.13 | 16.22 | 16.64 | 17.14 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 8H   | 15.65            | 16.03 | 16.16 | 16.52 | 17.10 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |