

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: P1061987

Luminaire Tested: S125RDR-H1270D940-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061987  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-86)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-H1270D940-X4F0-XX-UDD-SVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

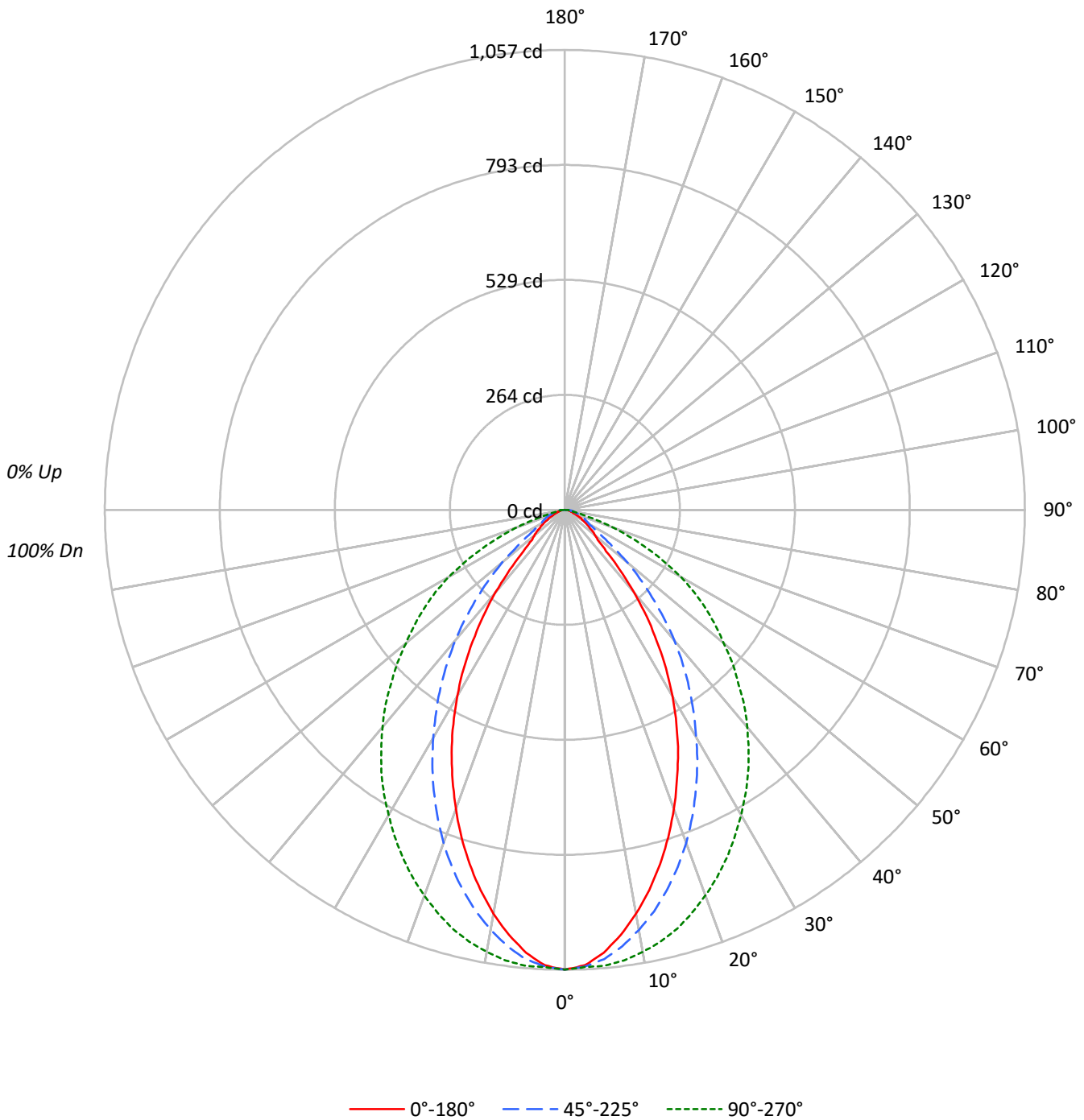
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1525.8 lumens  
Efficiency: N/A  
Efficacy: 41.8 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02  
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 |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 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   | 111 | 108 | 104 | 101 | 109 | 106 | 103 | 100 | 101 | 99  | 97  | 98  | 96  | 94  | 94  | 93  | 91  | 89  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 104 | 97  | 92  | 87  | 101 | 95  | 91  | 86  | 92  | 88  | 84  | 89  | 86  | 83  | 86  | 83  | 81  | 79  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 96  | 88  | 81  | 76  | 94  | 87  | 80  | 76  | 84  | 79  | 74  | 81  | 77  | 73  | 79  | 75  | 72  | 70  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 90  | 80  | 73  | 67  | 88  | 79  | 72  | 67  | 76  | 71  | 66  | 74  | 69  | 65  | 72  | 68  | 64  | 63  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 84  | 73  | 66  | 60  | 82  | 72  | 65  | 60  | 70  | 64  | 59  | 68  | 63  | 59  | 67  | 62  | 58  | 56  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 78  | 67  | 60  | 54  | 77  | 66  | 59  | 54  | 65  | 58  | 53  | 63  | 57  | 53  | 62  | 57  | 53  | 51  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 73  | 62  | 54  | 49  | 72  | 61  | 54  | 49  | 60  | 53  | 49  | 58  | 53  | 48  | 57  | 52  | 48  | 46  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 69  | 57  | 50  | 45  | 68  | 57  | 50  | 45  | 55  | 49  | 44  | 54  | 48  | 44  | 53  | 48  | 44  | 42  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 65  | 53  | 46  | 41  | 64  | 53  | 46  | 41  | 52  | 45  | 41  | 51  | 45  | 41  | 50  | 44  | 41  | 39  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 61  | 50  | 43  | 38  | 60  | 49  | 42  | 38  | 48  | 42  | 38  | 47  | 42  | 38  | 47  | 41  | 38  | 36  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 7276 | 7276 | 7276 |
| 5°  | 7061 | 7165 | 7269 |
| 10° | 6590 | 6853 | 7212 |
| 15° | 6013 | 6451 | 7103 |
| 20° | 5363 | 5970 | 6916 |
| 25° | 4676 | 5409 | 6694 |
| 30° | 3927 | 4804 | 6438 |
| 35° | 3097 | 4182 | 6175 |
| 40° | 2219 | 3515 | 5858 |
| 45° | 1306 | 2759 | 5493 |
| 50° | 967  | 1987 | 5102 |
| 55° | 813  | 1204 | 4740 |
| 60° | 655  | 880  | 4229 |
| 65° | 510  | 837  | 3390 |
| 70° | 429  | 783  | 2297 |
| 75° | 399  | 700  | 1000 |
| 80° | 397  | 694  | 646  |
| 85° | 498  | 893  | 695  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5493 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 97.4   | 6.4       |
| 10°-20°   | 255.8  | 16.8      |
| 20°-30°   | 334.3  | 21.9      |
| 30°-40°   | 325.4  | 21.3      |
| 40°-50°   | 243.2  | 15.9      |
| 50°-60°   | 150.8  | 9.9       |
| 60°-70°   | 79.2   | 5.2       |
| 70°-80°   | 28.9   | 1.9       |
| 80°-90°   | 10.9   | 0.7       |
| 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°    | 687.4  | 45.1      |
| 0°-40°    | 1012.8 | 66.4      |
| 0°-60°    | 1406.8 | 92.2      |
| 0°-90°    | 1525.8 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1525.8 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1057 | 1057  | 1057 | 1057  | 1057 |      |
| 5°  | 1022 | 1035  | 1037 | 1043  | 1052 | 95   |
| 15° | 844  | 869   | 905  | 960   | 996  | 235  |
| 25° | 616  | 647   | 712  | 808   | 881  | 281  |
| 35° | 368  | 409   | 498  | 630   | 735  | 229  |
| 45° | 134  | 176   | 283  | 442   | 564  | 113  |
| 55° | 68   | 71    | 100  | 261   | 395  | 61   |
| 65° | 31   | 34    | 51   | 110   | 208  | 33   |
| 75° | 15   | 18    | 26   | 29    | 38   | 16   |
| 85° | 6    | 11    | 11   | 11    | 9    | 7    |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1056.7 | 1056.7 | 1056.7 | 1056.7 | 1056.7 |
| 2.5°  | 1047.9 | 1056.7 | 1050.4 | 1050.4 | 1051.7 |
| 5°    | 1021.6 | 1035.4 | 1036.6 | 1042.9 | 1051.7 |
| 7.5°  | 985.3  | 1001.5 | 1011.6 | 1030.4 | 1044.2 |
| 10°   | 942.6  | 961.4  | 980.2  | 1011.6 | 1031.6 |
| 12.5° | 895.0  | 917.6  | 945.1  | 987.8  | 1016.6 |
| 15°   | 843.6  | 868.7  | 905.0  | 960.2  | 996.5  |
| 17.5° | 789.7  | 816.0  | 861.2  | 927.6  | 971.5  |
| 20°   | 732.0  | 760.9  | 814.8  | 890.0  | 943.9  |
| 22.5° | 673.1  | 705.7  | 764.6  | 849.9  | 913.8  |
| 25°   | 615.5  | 646.8  | 712.0  | 808.5  | 881.2  |
| 27.5° | 555.3  | 587.9  | 659.3  | 765.9  | 846.1  |
| 30°   | 493.9  | 529.0  | 604.2  | 722.0  | 809.8  |
| 32.5° | 432.5  | 468.8  | 550.3  | 676.9  | 773.4  |
| 35°   | 368.5  | 408.6  | 497.6  | 630.5  | 734.6  |
| 37.5° | 308.4  | 351.0  | 443.7  | 582.9  | 693.2  |
| 40°   | 246.9  | 290.8  | 391.1  | 536.5  | 651.8  |
| 42.5° | 186.8  | 231.9  | 337.2  | 488.9  | 610.5  |
| 45°   | 134.1  | 175.5  | 283.3  | 442.5  | 564.1  |
| 47.5° | 102.8  | 126.6  | 233.2  | 394.9  | 522.7  |
| 50°   | 90.3   | 97.8   | 185.5  | 348.5  | 476.3  |
| 52.5° | 79.0   | 84.0   | 137.9  | 303.3  | 436.2  |
| 55°   | 67.7   | 71.4   | 100.3  | 260.7  | 394.9  |
| 57.5° | 57.7   | 61.4   | 76.5   | 221.9  | 352.2  |
| 60°   | 47.6   | 51.4   | 63.9   | 183.0  | 307.1  |
| 62.5° | 40.1   | 41.4   | 57.7   | 146.7  | 257.0  |
| 65°   | 31.3   | 33.8   | 51.4   | 110.3  | 208.1  |
| 67.5° | 26.3   | 27.6   | 45.1   | 79.0   | 160.4  |
| 70°   | 21.3   | 22.6   | 38.9   | 55.2   | 114.1  |
| 72.5° | 18.8   | 18.8   | 32.6   | 40.1   | 72.7   |
| 75°   | 15.0   | 17.5   | 26.3   | 28.8   | 37.6   |
| 77.5° | 12.5   | 17.5   | 22.6   | 21.3   | 20.1   |
| 80°   | 10.0   | 16.3   | 17.5   | 17.5   | 16.3   |
| 82.5° | 8.8    | 13.8   | 15.0   | 13.8   | 12.5   |
| 85°   | 6.3    | 11.3   | 11.3   | 11.3   | 8.8    |
| 87.5° | 5.0    | 10.0   | 8.8    | 8.8    | 6.3    |
| 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 | 6.68             | 8.03  | 7.05  | 8.34  | 8.66  | 16.39          | 17.74 | 16.75 | 18.05 | 18.36 |
|                 | 3H   | 7.52             | 8.72  | 7.90  | 9.05  | 9.41  | 17.30          | 18.50 | 17.68 | 18.83 | 19.19 |
|                 | 4H   | 7.88             | 9.00  | 8.28  | 9.35  | 9.73  | 17.40          | 18.51 | 17.80 | 18.86 | 19.25 |
|                 | 6H   | 8.25             | 9.28  | 8.66  | 9.65  | 10.04 | 17.38          | 18.41 | 17.80 | 18.78 | 19.17 |
|                 | 8H   | 8.43             | 9.40  | 8.86  | 9.79  | 10.20 | 17.37          | 18.34 | 17.80 | 18.73 | 19.14 |
|                 | 12H  | 8.60             | 9.53  | 9.03  | 9.91  | 10.34 | 17.36          | 18.29 | 17.79 | 18.67 | 19.10 |
| 4H              | 2H   | 7.51             | 8.63  | 7.91  | 8.98  | 9.36  | 16.24          | 17.35 | 16.64 | 17.70 | 18.09 |
|                 | 3H   | 8.57             | 9.48  | 8.98  | 9.89  | 10.29 | 17.23          | 18.14 | 17.64 | 18.54 | 18.95 |
|                 | 4H   | 9.02             | 9.84  | 9.46  | 10.26 | 10.70 | 17.35          | 18.17 | 17.79 | 18.59 | 19.03 |
|                 | 6H   | 9.58             | 10.28 | 10.04 | 10.73 | 11.20 | 17.39          | 18.09 | 17.85 | 18.54 | 19.00 |
|                 | 8H   | 9.84             | 10.50 | 10.31 | 10.94 | 11.42 | 17.39          | 18.05 | 17.86 | 18.49 | 18.96 |
|                 | 12H  | 10.08            | 10.67 | 10.57 | 11.15 | 11.62 | 17.40          | 17.98 | 17.88 | 18.46 | 18.94 |
| 8H              | 4H   | 9.58             | 10.24 | 10.05 | 10.68 | 11.15 | 17.28          | 17.94 | 17.75 | 18.39 | 18.86 |
|                 | 6H   | 10.35            | 10.89 | 10.86 | 11.39 | 11.87 | 17.34          | 17.88 | 17.84 | 18.37 | 18.86 |
|                 | 8H   | 10.77            | 11.26 | 11.29 | 11.77 | 12.26 | 17.37          | 17.85 | 17.89 | 18.37 | 18.86 |
|                 | 12H  | 11.19            | 11.62 | 11.70 | 12.11 | 12.68 | 17.42          | 17.85 | 17.94 | 18.34 | 18.92 |
| 12H             | 4H   | 9.64             | 10.22 | 10.12 | 10.70 | 11.18 | 17.25          | 17.83 | 17.73 | 18.31 | 18.79 |
|                 | 6H   | 10.50            | 10.98 | 11.02 | 11.50 | 11.99 | 17.31          | 17.79 | 17.83 | 18.30 | 18.80 |
|                 | 8H   | 11.03            | 11.45 | 11.54 | 11.95 | 12.52 | 17.37          | 17.80 | 17.88 | 18.29 | 18.86 |