

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1061679

Luminaire Tested: S125RDRP-S610D830-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061679  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S610D830-X4F0-XX-UDD-BVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

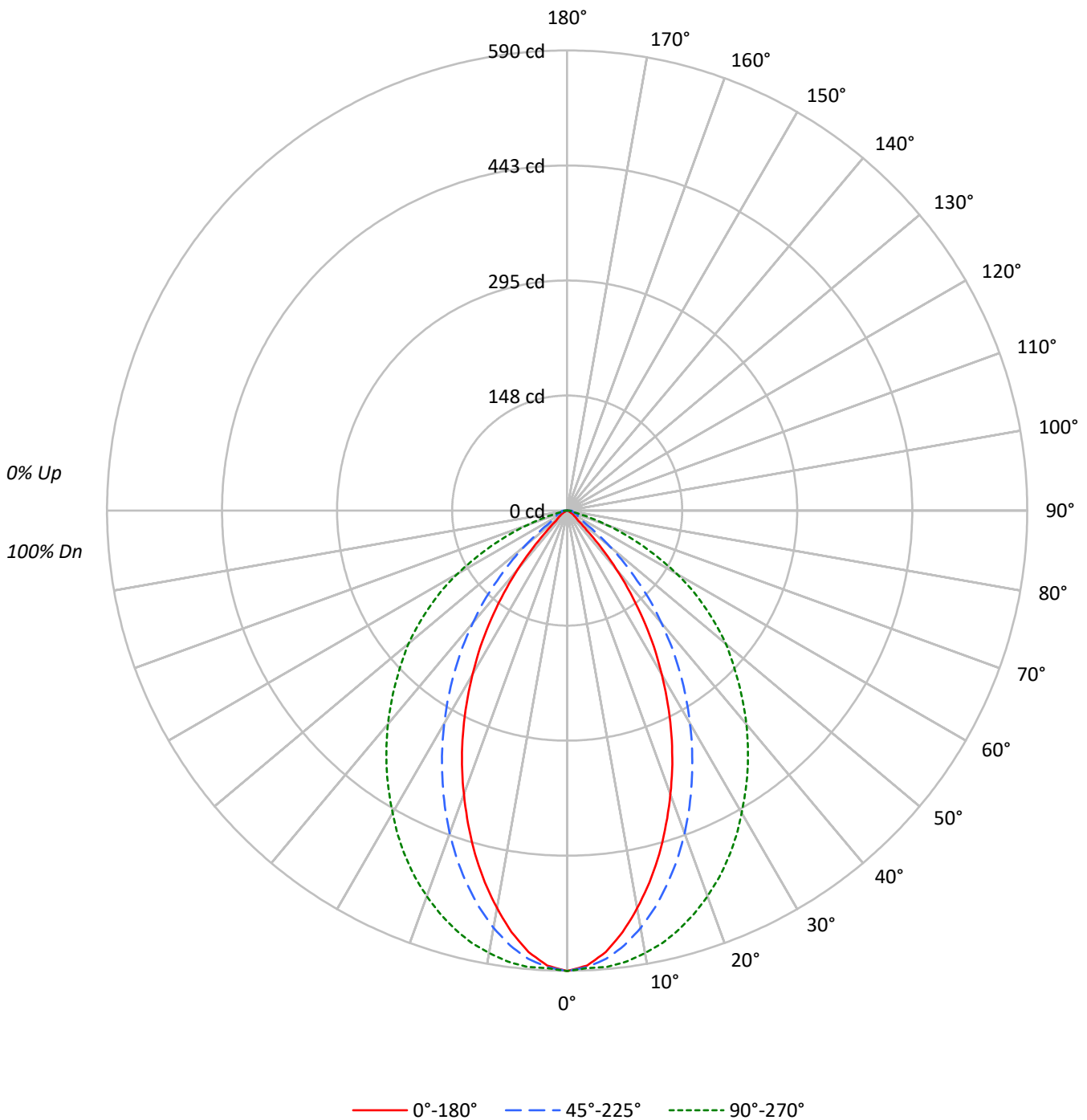
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 763.9 lumens  
Efficiency: N/A  
Efficacy: 39.0 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.6  
Input Voltage (V): 120  
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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### 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 |  |  |  |  |  |  |  |  | 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 |    |    |    |    |    |    |    |    |    |    |    |   | 100 |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 1   | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 101 | 102 | 100 | 98  | 98  | 96  | 95  | 95  | 93  | 92  | 90  |    |    |    |    |    |    |    |    |    |    |    |   | 90  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 104 | 98  | 93  | 89  | 102 | 97  | 92  | 88  | 93  | 89  | 86  | 90  | 87  | 84  | 87  | 85  | 82  | 80  |    |    |    |    |    |    |    |    |    |    |    |   | 80  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 98  | 89  | 83  | 78  | 95  | 88  | 82  | 78  | 85  | 80  | 76  | 83  | 79  | 75  | 80  | 77  | 74  | 72  |    |    |    |    |    |    |    |    |    |    |    |   | 72  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 91  | 82  | 75  | 70  | 89  | 81  | 74  | 69  | 78  | 73  | 68  | 76  | 71  | 67  | 74  | 70  | 67  | 65  |    |    |    |    |    |    |    |    |    |    |    |   | 65  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 85  | 75  | 68  | 63  | 83  | 74  | 67  | 62  | 72  | 66  | 62  | 70  | 65  | 61  | 69  | 64  | 60  | 59  |    |    |    |    |    |    |    |    |    |    |    |   | 59  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 80  | 69  | 62  | 57  | 78  | 68  | 61  | 56  | 67  | 60  | 56  | 65  | 60  | 56  | 64  | 59  | 55  | 53  |    |    |    |    |    |    |    |    |    |    |    |   | 53  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 75  | 64  | 57  | 52  | 74  | 63  | 56  | 51  | 62  | 56  | 51  | 60  | 55  | 51  | 59  | 54  | 50  | 49  |    |    |    |    |    |    |    |    |    |    |    |   | 49  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 71  | 59  | 52  | 47  | 69  | 59  | 52  | 47  | 58  | 51  | 47  | 56  | 51  | 47  | 55  | 50  | 46  | 45  |    |    |    |    |    |    |    |    |    |    |    |   | 45  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 67  | 55  | 48  | 44  | 65  | 55  | 48  | 44  | 54  | 48  | 43  | 53  | 47  | 43  | 52  | 47  | 43  | 41  |    |    |    |    |    |    |    |    |    |    |    |   | 41  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 63  | 52  | 45  | 40  | 62  | 51  | 45  | 40  | 50  | 44  | 40  | 49  | 44  | 40  | 49  | 44  | 40  | 38  |    |    |    |    |    |    |    |    |    |    |    |   | 38  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 4065 | 4065 | 4065 |
| 5°  | 3926 | 3986 | 4058 |
| 10° | 3619 | 3798 | 4027 |
| 15° | 3250 | 3536 | 3961 |
| 20° | 2836 | 3225 | 3856 |
| 25° | 2402 | 2875 | 3723 |
| 30° | 1930 | 2504 | 3557 |
| 35° | 1428 | 2112 | 3392 |
| 40° | 884  | 1686 | 3213 |
| 45° | 345  | 1233 | 3021 |
| 50° | 162  | 773  | 2846 |
| 55° | 118  | 331  | 2583 |
| 60° | 81   | 235  | 2240 |
| 65° | 54   | 246  | 1742 |
| 70° | 52   | 225  | 1097 |
| 75° | 69   | 226  | 348  |
| 80° | 103  | 262  | 234  |
| 85° | 158  | 521  | 363  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3021 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 54.1   | 7.1       |
| 10°-20°   | 140.3  | 18.4      |
| 20°-30°   | 178.7  | 23.4      |
| 30°-40°   | 166.3  | 21.8      |
| 40°-50°   | 114.5  | 15.0      |
| 50°-60°   | 64.8   | 8.5       |
| 60°-70°   | 30.6   | 4.0       |
| 70°-80°   | 9.6    | 1.3       |
| 80°-90°   | 5.0    | 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°    | 373.1  | 48.8      |
| 0°-40°    | 539.5  | 70.6      |
| 0°-60°    | 718.8  | 94.1      |
| 0°-90°    | 763.9  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 763.9  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 590 | 590   | 590 | 590   | 590 |      |
| 5°  | 568 | 576   | 577 | 582   | 587 | 53   |
| 15° | 456 | 471   | 496 | 533   | 556 | 127  |
| 25° | 316 | 337   | 378 | 442   | 490 | 144  |
| 35° | 170 | 194   | 251 | 337   | 404 | 105  |
| 45° | 35  | 56    | 127 | 229   | 310 | 33   |
| 55° | 10  | 11    | 28  | 132   | 215 | 9    |
| 65° | 3   | 4     | 15  | 47    | 107 | 4    |
| 75° | 3   | 6     | 8   | 9     | 13  | 3    |
| 85° | 2   | 5     | 7   | 6     | 5   | 2    |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 590.4 | 590.4 | 590.4 | 590.4 | 590.4 |
| 2.5°  | 583.9 | 589.8 | 585.9 | 586.5 | 587.2 |
| 5°    | 568.1 | 576.0 | 576.7 | 581.9 | 587.2 |
| 7.5°  | 545.2 | 555.0 | 562.2 | 574.7 | 583.2 |
| 10°   | 517.6 | 529.4 | 543.2 | 563.6 | 576.0 |
| 12.5° | 488.1 | 501.9 | 520.9 | 549.8 | 567.5 |
| 15°   | 456.0 | 471.0 | 496.0 | 533.4 | 555.7 |
| 17.5° | 421.8 | 438.9 | 469.1 | 513.7 | 541.9 |
| 20°   | 387.1 | 405.4 | 440.2 | 491.4 | 526.2 |
| 22.5° | 352.3 | 371.3 | 410.0 | 467.1 | 509.1 |
| 25°   | 316.2 | 336.6 | 378.5 | 442.2 | 490.1 |
| 27.5° | 279.5 | 300.5 | 347.1 | 416.6 | 469.7 |
| 30°   | 242.7 | 265.0 | 314.9 | 390.4 | 447.4 |
| 32.5° | 206.7 | 229.0 | 283.4 | 364.1 | 425.8 |
| 35°   | 169.9 | 193.5 | 251.3 | 337.2 | 403.5 |
| 37.5° | 133.2 | 158.8 | 219.8 | 309.7 | 380.5 |
| 40°   | 98.4  | 122.7 | 187.6 | 282.8 | 357.5 |
| 42.5° | 65.6  | 89.2  | 158.8 | 255.9 | 333.9 |
| 45°   | 35.4  | 56.4  | 126.6 | 229.0 | 310.3 |
| 47.5° | 19.0  | 30.2  | 99.1  | 202.7 | 287.4 |
| 50°   | 15.1  | 17.1  | 72.2  | 178.4 | 265.7 |
| 52.5° | 12.5  | 13.8  | 47.2  | 155.5 | 240.8 |
| 55°   | 9.8   | 11.2  | 27.6  | 131.9 | 215.2 |
| 57.5° | 7.9   | 9.2   | 17.7  | 109.6 | 190.3 |
| 60°   | 5.9   | 7.2   | 17.1  | 87.9  | 162.7 |
| 62.5° | 4.6   | 5.2   | 15.7  | 67.6  | 133.8 |
| 65°   | 3.3   | 3.9   | 15.1  | 47.2  | 106.9 |
| 67.5° | 2.6   | 3.3   | 13.8  | 30.2  | 80.0  |
| 70°   | 2.6   | 2.6   | 11.2  | 19.7  | 54.5  |
| 72.5° | 2.6   | 4.6   | 9.8   | 13.1  | 32.8  |
| 75°   | 2.6   | 5.9   | 8.5   | 9.2   | 13.1  |
| 77.5° | 2.6   | 6.6   | 7.2   | 7.2   | 7.2   |
| 80°   | 2.6   | 5.9   | 6.6   | 6.6   | 5.9   |
| 82.5° | 2.6   | 5.2   | 5.9   | 6.6   | 5.2   |
| 85°   | 2.0   | 5.2   | 6.6   | 5.9   | 4.6   |
| 87.5° | 2.0   | 5.2   | 5.9   | 5.2   | 3.3   |
| 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 | 0.00             | 0.00 | 0.00 | 0.00 | 0.00 | 14.12          | 15.41 | 14.48 | 15.72 | 16.04 |
|                 | 3H   | 0.00             | 0.00 | 0.00 | 0.00 | 0.00 | 14.84          | 15.98 | 15.22 | 16.31 | 16.68 |
|                 | 4H   | 0.00             | 0.00 | 0.00 | 0.00 | 0.00 | 14.86          | 15.93 | 15.27 | 16.28 | 16.66 |
|                 | 6H   | 0.00             | 0.00 | 0.00 | 0.00 | 0.18 | 14.81          | 15.79 | 15.23 | 16.16 | 16.55 |
|                 | 8H   | 0.00             | 0.00 | 0.00 | 0.39 | 0.80 | 14.79          | 15.71 | 15.22 | 16.10 | 16.51 |
|                 | 12H  | 0.00             | 0.55 | 0.10 | 0.94 | 1.37 | 14.77          | 15.66 | 15.21 | 16.04 | 16.47 |
| 4H              | 2H   | 0.00             | 0.00 | 0.00 | 0.05 | 0.43 | 13.91          | 14.97 | 14.31 | 15.32 | 15.71 |
|                 | 3H   | 0.00             | 0.31 | 0.00 | 0.71 | 1.12 | 14.67          | 15.53 | 15.08 | 15.94 | 16.34 |
|                 | 4H   | 0.45             | 1.22 | 0.88 | 1.64 | 2.09 | 14.70          | 15.47 | 15.13 | 15.89 | 16.33 |
|                 | 6H   | 1.73             | 2.39 | 2.19 | 2.84 | 3.31 | 14.67          | 15.34 | 15.14 | 15.79 | 16.26 |
|                 | 8H   | 2.30             | 2.92 | 2.77 | 3.37 | 3.84 | 14.66          | 15.28 | 15.13 | 15.73 | 16.20 |
|                 | 12H  | 2.86             | 3.41 | 3.35 | 3.89 | 4.37 | 14.67          | 15.22 | 15.15 | 15.70 | 16.17 |
| 8H              | 4H   | 1.86             | 2.48 | 2.33 | 2.93 | 3.40 | 14.58          | 15.20 | 15.05 | 15.65 | 16.12 |
|                 | 6H   | 3.42             | 3.93 | 3.93 | 4.43 | 4.91 | 14.57          | 15.08 | 15.07 | 15.57 | 16.06 |
|                 | 8H   | 4.21             | 4.66 | 4.73 | 5.18 | 5.67 | 14.58          | 15.04 | 15.10 | 15.55 | 16.05 |
|                 | 12H  | 5.04             | 5.44 | 5.56 | 5.94 | 6.51 | 14.64          | 15.04 | 15.16 | 15.54 | 16.11 |
| 12H             | 4H   | 2.08             | 2.63 | 2.57 | 3.12 | 3.59 | 14.54          | 15.09 | 15.02 | 15.57 | 16.04 |
|                 | 6H   | 3.80             | 4.25 | 4.32 | 4.77 | 5.26 | 14.52          | 14.98 | 15.05 | 15.50 | 15.99 |
|                 | 8H   | 4.78             | 5.18 | 5.29 | 5.67 | 6.25 | 14.57          | 14.97 | 15.09 | 15.47 | 16.04 |