

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: P1061745

Luminaire Tested: S125RDRP-S610D940-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061745  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-83)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S610D940-X4F0-XX-UDD-SVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

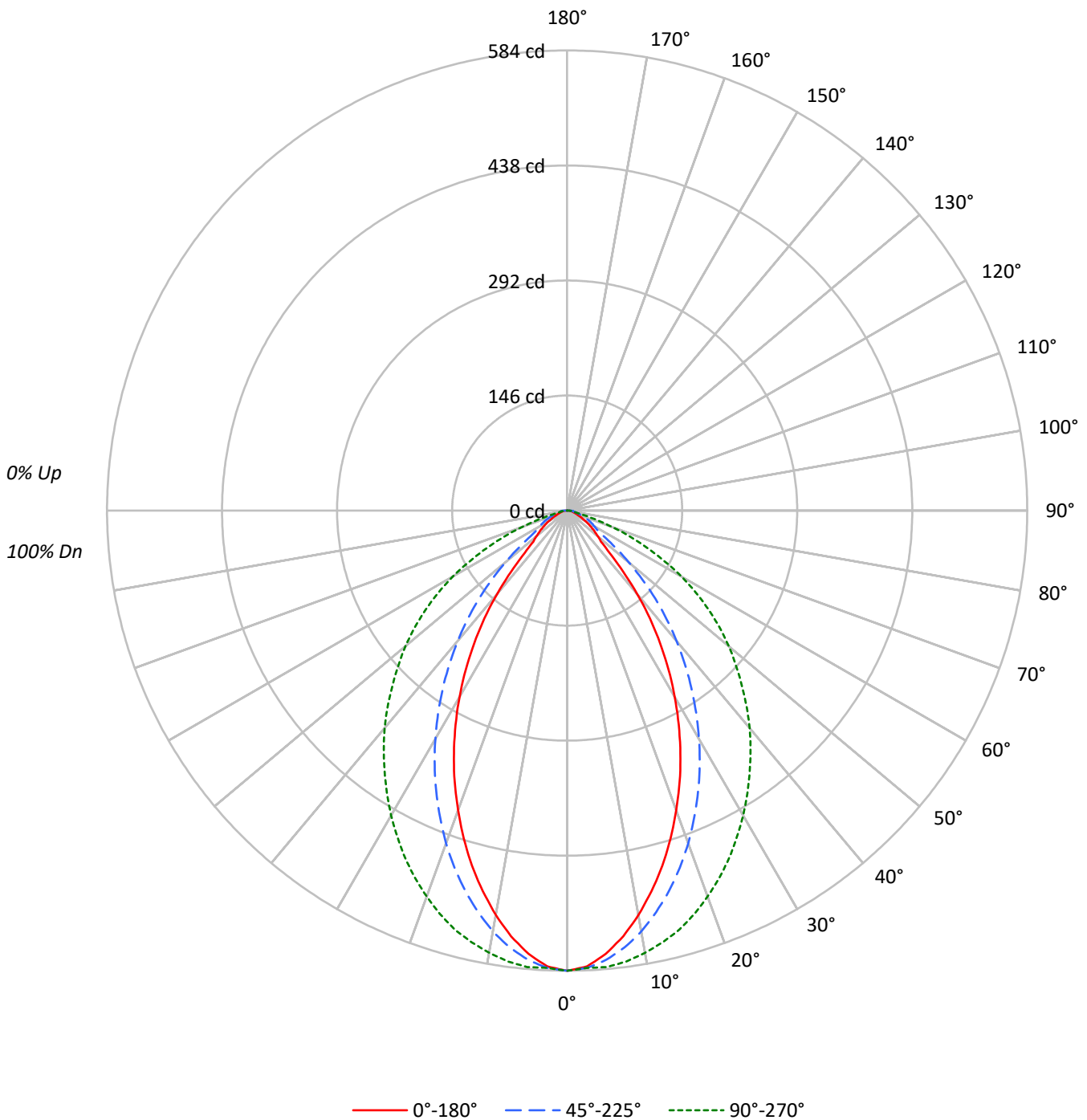
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 845.9 lumens  
Efficiency: N/A  
Efficacy: 43.2 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): 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  | 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 | 105 | 103 | 100 | 101 | 99  | 97  | 98  | 96  | 94  | 94  | 92  | 91  | 89  |
| 2   | 104 | 97  | 92  | 87  | 101 | 95  | 90  | 86  | 92  | 88  | 84  | 89  | 85  | 82  | 86  | 83  | 81  | 79  |
| 3   | 96  | 88  | 81  | 76  | 94  | 86  | 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  | 62  |
| 5   | 84  | 73  | 66  | 60  | 82  | 72  | 65  | 60  | 70  | 64  | 59  | 68  | 63  | 59  | 66  | 62  | 58  | 56  |
| 6   | 78  | 67  | 59  | 54  | 77  | 66  | 59  | 54  | 64  | 58  | 53  | 63  | 57  | 53  | 61  | 56  | 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  | 40  | 39  |
| 10  | 61  | 50  | 43  | 38  | 60  | 49  | 42  | 38  | 48  | 42  | 38  | 47  | 42  | 38  | 46  | 41  | 37  | 36  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 4021 | 4021 | 4021 |
| 5°  | 3903 | 3955 | 4019 |
| 10° | 3645 | 3792 | 3983 |
| 15° | 3327 | 3561 | 3924 |
| 20° | 2965 | 3292 | 3820 |
| 25° | 2584 | 2989 | 3696 |
| 30° | 2171 | 2659 | 3552 |
| 35° | 1726 | 2311 | 3396 |
| 40° | 1244 | 1941 | 3241 |
| 45° | 737  | 1540 | 3052 |
| 50° | 545  | 1097 | 2872 |
| 55° | 462  | 678  | 2630 |
| 60° | 376  | 547  | 2316 |
| 65° | 293  | 505  | 1830 |
| 70° | 250  | 437  | 1224 |
| 75° | 231  | 380  | 495  |
| 80° | 246  | 393  | 345  |
| 85° | 292  | 585  | 395  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3052 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 53.8   | 6.4       |
| 10°-20°   | 141.4  | 16.7      |
| 20°-30°   | 184.8  | 21.8      |
| 30°-40°   | 180.0  | 21.3      |
| 40°-50°   | 135.0  | 16.0      |
| 50°-60°   | 84.6   | 10.0      |
| 60°-70°   | 44.1   | 5.2       |
| 70°-80°   | 15.9   | 1.9       |
| 80°-90°   | 6.3    | 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°    | 379.9  | 44.9      |
| 0°-40°    | 559.9  | 66.2      |
| 0°-60°    | 779.5  | 92.2      |
| 0°-90°    | 845.9  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 845.9  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 584 | 584   | 584 | 584   | 584 |      |
| 5°  | 565 | 572   | 572 | 576   | 582 | 53   |
| 15° | 467 | 480   | 500 | 531   | 550 | 130  |
| 25° | 340 | 359   | 393 | 447   | 486 | 155  |
| 35° | 205 | 227   | 275 | 348   | 404 | 128  |
| 45° | 76  | 98    | 158 | 244   | 313 | 64   |
| 55° | 38  | 40    | 56  | 148   | 219 | 34   |
| 65° | 18  | 19    | 31  | 60    | 112 | 19   |
| 75° | 9   | 12    | 14  | 15    | 19  | 9    |
| 85° | 4   | 6     | 7   | 7     | 5   | 4    |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 584.0 | 584.0 | 584.0 | 584.0 | 584.0 |
| 2.5°  | 579.0 | 584.6 | 580.9 | 580.9 | 580.9 |
| 5°    | 564.7 | 572.2 | 572.2 | 576.5 | 581.5 |
| 7.5°  | 544.9 | 553.6 | 559.1 | 569.7 | 577.1 |
| 10°   | 521.3 | 531.8 | 542.4 | 559.8 | 569.7 |
| 12.5° | 494.6 | 507.0 | 521.9 | 546.1 | 561.0 |
| 15°   | 466.7 | 480.3 | 499.6 | 530.6 | 550.5 |
| 17.5° | 436.3 | 452.4 | 475.4 | 512.6 | 536.8 |
| 20°   | 404.6 | 420.8 | 449.3 | 491.5 | 521.3 |
| 22.5° | 373.0 | 390.3 | 421.4 | 469.2 | 504.5 |
| 25°   | 340.1 | 358.7 | 393.4 | 446.8 | 486.5 |
| 27.5° | 306.6 | 325.8 | 364.3 | 423.9 | 466.7 |
| 30°   | 273.1 | 292.9 | 334.5 | 399.0 | 446.8 |
| 32.5° | 239.5 | 260.6 | 304.7 | 373.6 | 425.7 |
| 35°   | 205.4 | 227.1 | 274.9 | 348.1 | 404.0 |
| 37.5° | 172.5 | 194.2 | 245.1 | 322.1 | 382.3 |
| 40°   | 138.4 | 162.0 | 216.0 | 296.0 | 360.6 |
| 42.5° | 104.9 | 129.1 | 186.8 | 270.0 | 337.0 |
| 45°   | 75.7  | 98.1  | 158.2 | 244.5 | 313.4 |
| 47.5° | 58.3  | 70.7  | 129.1 | 218.4 | 290.4 |
| 50°   | 50.9  | 54.6  | 102.4 | 194.2 | 268.1 |
| 52.5° | 44.1  | 46.5  | 77.0  | 171.9 | 243.9 |
| 55°   | 38.5  | 40.3  | 56.5  | 147.7 | 219.1 |
| 57.5° | 32.3  | 34.8  | 44.7  | 124.1 | 193.6 |
| 60°   | 27.3  | 28.5  | 39.7  | 102.4 | 168.2 |
| 62.5° | 22.3  | 23.6  | 35.4  | 80.7  | 139.6 |
| 65°   | 18.0  | 19.2  | 31.0  | 59.6  | 112.3 |
| 67.5° | 14.9  | 15.5  | 26.1  | 42.2  | 86.3  |
| 70°   | 12.4  | 13.0  | 21.7  | 29.2  | 60.8  |
| 72.5° | 10.5  | 12.4  | 17.4  | 21.1  | 38.5  |
| 75°   | 8.7   | 11.8  | 14.3  | 14.9  | 18.6  |
| 77.5° | 7.4   | 11.2  | 11.8  | 11.8  | 10.5  |
| 80°   | 6.2   | 9.3   | 9.9   | 9.3   | 8.7   |
| 82.5° | 5.0   | 7.4   | 8.1   | 8.1   | 6.8   |
| 85°   | 3.7   | 6.2   | 7.4   | 6.8   | 5.0   |
| 87.5° | 2.5   | 5.6   | 6.2   | 5.6   | 3.7   |
| 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 | 4.76             | 6.11 | 5.13 | 6.43  | 6.74  | 14.36          | 15.72 | 14.73 | 16.03 | 16.34 |
|                 | 3H   | 5.61             | 6.81 | 5.99 | 7.14  | 7.51  | 15.21          | 16.41 | 15.58 | 16.74 | 17.10 |
|                 | 4H   | 6.04             | 7.16 | 6.44 | 7.51  | 7.89  | 15.28          | 16.40 | 15.68 | 16.75 | 17.13 |
|                 | 6H   | 6.46             | 7.49 | 6.88 | 7.86  | 8.25  | 15.26          | 16.29 | 15.68 | 16.66 | 17.05 |
|                 | 8H   | 6.64             | 7.62 | 7.07 | 8.01  | 8.41  | 15.25          | 16.23 | 15.68 | 16.62 | 17.02 |
|                 | 12H  | 6.80             | 7.74 | 7.24 | 8.12  | 8.55  | 15.24          | 16.17 | 15.67 | 16.55 | 16.98 |
| 4H              | 2H   | 5.72             | 6.84 | 6.12 | 7.19  | 7.57  | 14.23          | 15.35 | 14.63 | 15.70 | 16.08 |
|                 | 3H   | 6.77             | 7.69 | 7.18 | 8.09  | 8.49  | 15.14          | 16.06 | 15.55 | 16.46 | 16.86 |
|                 | 4H   | 7.33             | 8.15 | 7.77 | 8.57  | 9.01  | 15.24          | 16.06 | 15.67 | 16.48 | 16.92 |
|                 | 6H   | 7.93             | 8.64 | 8.39 | 9.08  | 9.55  | 15.27          | 15.98 | 15.73 | 16.42 | 16.89 |
|                 | 8H   | 8.17             | 8.83 | 8.64 | 9.28  | 9.75  | 15.27          | 15.93 | 15.74 | 16.38 | 16.85 |
|                 | 12H  | 8.39             | 8.98 | 8.88 | 9.46  | 9.93  | 15.28          | 15.87 | 15.77 | 16.35 | 16.82 |
| 8H              | 4H   | 7.80             | 8.46 | 8.27 | 8.91  | 9.38  | 15.17          | 15.83 | 15.63 | 16.27 | 16.74 |
|                 | 6H   | 8.61             | 9.16 | 9.12 | 9.65  | 10.13 | 15.22          | 15.76 | 15.72 | 16.26 | 16.74 |
|                 | 8H   | 8.99             | 9.48 | 9.51 | 9.99  | 10.48 | 15.25          | 15.74 | 15.77 | 16.25 | 16.74 |
|                 | 12H  | 9.38             | 9.81 | 9.90 | 10.31 | 10.88 | 15.32          | 15.75 | 15.83 | 16.24 | 16.81 |
| 12H             | 4H   | 7.85             | 8.44 | 8.34 | 8.92  | 9.40  | 15.13          | 15.72 | 15.62 | 16.20 | 16.67 |
|                 | 6H   | 8.74             | 9.22 | 9.26 | 9.74  | 10.23 | 15.19          | 15.67 | 15.71 | 16.19 | 16.68 |
|                 | 8H   | 9.22             | 9.65 | 9.74 | 10.15 | 10.72 | 15.26          | 15.69 | 15.77 | 16.18 | 16.75 |