

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: P1061700

Luminaire Tested: S125RDRP-S610D840-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061700  
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-S610D840-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, 80 CRI LEDS  
Ballast/Driver: -

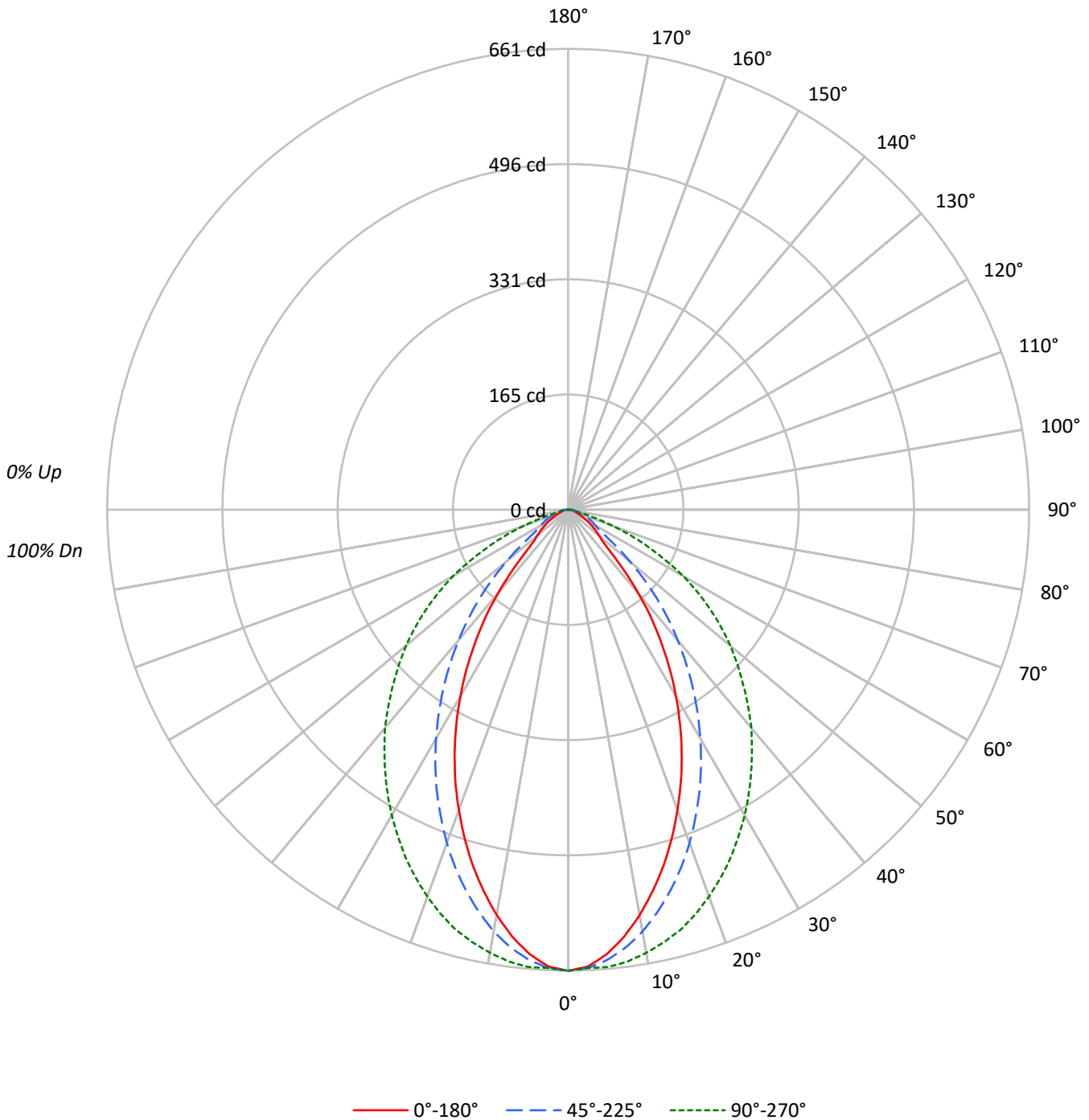
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 957.9 lumens  
Efficiency: N/A  
Efficacy: 48.9 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  | 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   | 111 | 108 | 104 | 101 | 109 | 105 | 103 | 100 | 101 | 99  | 97  | 98  | 96  | 94  | 94  | 92  | 91  | 89  |    |    |    | 89  |
| 2   | 104 | 97  | 92  | 87  | 101 | 95  | 90  | 86  | 92  | 88  | 84  | 89  | 85  | 82  | 86  | 83  | 81  | 79  |    |    |    | 79  |
| 3   | 96  | 88  | 81  | 76  | 94  | 86  | 80  | 76  | 84  | 79  | 74  | 81  | 77  | 73  | 79  | 75  | 72  | 70  |    |    |    | 70  |
| 4   | 90  | 80  | 73  | 67  | 88  | 79  | 72  | 67  | 76  | 71  | 66  | 74  | 69  | 65  | 72  | 68  | 64  | 62  |    |    |    | 62  |
| 5   | 84  | 73  | 66  | 60  | 82  | 72  | 65  | 60  | 70  | 64  | 59  | 68  | 63  | 59  | 66  | 62  | 58  | 56  |    |    |    | 56  |
| 6   | 78  | 67  | 59  | 54  | 77  | 66  | 59  | 54  | 64  | 58  | 53  | 63  | 57  | 53  | 61  | 56  | 53  | 51  |    |    |    | 51  |
| 7   | 73  | 62  | 54  | 49  | 72  | 61  | 54  | 49  | 60  | 53  | 49  | 58  | 53  | 48  | 57  | 52  | 48  | 46  |    |    |    | 46  |
| 8   | 69  | 57  | 50  | 45  | 68  | 57  | 50  | 45  | 55  | 49  | 44  | 54  | 48  | 44  | 53  | 48  | 44  | 42  |    |    |    | 42  |
| 9   | 65  | 53  | 46  | 41  | 64  | 53  | 46  | 41  | 52  | 45  | 41  | 51  | 45  | 41  | 50  | 44  | 40  | 39  |    |    |    | 39  |
| 10  | 61  | 50  | 43  | 38  | 60  | 49  | 42  | 38  | 48  | 42  | 38  | 47  | 42  | 38  | 46  | 41  | 37  | 36  |    |    |    | 36  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 4553 | 4553 | 4553 |
| 5°  | 4421 | 4479 | 4551 |
| 10° | 4128 | 4295 | 4511 |
| 15° | 3767 | 4033 | 4444 |
| 20° | 3357 | 3728 | 4326 |
| 25° | 2926 | 3385 | 4186 |
| 30° | 2458 | 3012 | 4023 |
| 35° | 1955 | 2617 | 3845 |
| 40° | 1408 | 2198 | 3670 |
| 45° | 834  | 1745 | 3456 |
| 50° | 617  | 1243 | 3252 |
| 55° | 523  | 768  | 2978 |
| 60° | 426  | 620  | 2623 |
| 65° | 332  | 572  | 2072 |
| 70° | 284  | 495  | 1387 |
| 75° | 261  | 431  | 561  |
| 80° | 278  | 444  | 389  |
| 85° | 332  | 664  | 442  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3456 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 61.0   | 6.4       |
| 10°-20°   | 160.1  | 16.7      |
| 20°-30°   | 209.2  | 21.8      |
| 30°-40°   | 203.8  | 21.3      |
| 40°-50°   | 152.9  | 16.0      |
| 50°-60°   | 95.9   | 10.0      |
| 60°-70°   | 49.9   | 5.2       |
| 70°-80°   | 18.1   | 1.9       |
| 80°-90°   | 7.1    | 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°    | 430.3  | 44.9      |
| 0°-40°    | 634.1  | 66.2      |
| 0°-60°    | 882.8  | 92.2      |
| 0°-90°    | 957.9  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 957.9  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 661 | 661   | 661 | 661   | 661 |      |
| 5°  | 640 | 648   | 648 | 653   | 658 | 59   |
| 15° | 528 | 544   | 566 | 601   | 623 | 147  |
| 25° | 385 | 406   | 446 | 506   | 551 | 176  |
| 35° | 233 | 257   | 311 | 394   | 458 | 145  |
| 45° | 86  | 111   | 179 | 277   | 355 | 72   |
| 55° | 44  | 46    | 64  | 167   | 248 | 39   |
| 65° | 20  | 22    | 35  | 68    | 127 | 21   |
| 75° | 10  | 13    | 16  | 17    | 21  | 11   |
| 85° | 4   | 7     | 8   | 8     | 6   | 4    |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 661.3 | 661.3 | 661.3 | 661.3 | 661.3 |
| 2.5°  | 655.7 | 662.0 | 657.8 | 657.8 | 657.8 |
| 5°    | 639.6 | 648.0 | 648.0 | 652.9 | 658.5 |
| 7.5°  | 617.1 | 626.9 | 633.2 | 645.2 | 653.6 |
| 10°   | 590.4 | 602.3 | 614.3 | 633.9 | 645.2 |
| 12.5° | 560.1 | 574.2 | 591.1 | 618.5 | 635.3 |
| 15°   | 528.5 | 544.0 | 565.8 | 600.9 | 623.4 |
| 17.5° | 494.1 | 512.3 | 538.4 | 580.5 | 607.9 |
| 20°   | 458.2 | 476.5 | 508.8 | 556.6 | 590.4 |
| 22.5° | 422.4 | 442.1 | 477.2 | 531.3 | 571.4 |
| 25°   | 385.1 | 406.2 | 445.6 | 506.0 | 551.0 |
| 27.5° | 347.2 | 369.0 | 412.5 | 480.0 | 528.5 |
| 30°   | 309.2 | 331.7 | 378.8 | 451.9 | 506.0 |
| 32.5° | 271.3 | 295.2 | 345.1 | 423.1 | 482.1 |
| 35°   | 232.6 | 257.2 | 311.3 | 394.3 | 457.5 |
| 37.5° | 195.4 | 220.0 | 277.6 | 364.8 | 432.9 |
| 40°   | 156.7 | 183.4 | 244.6 | 335.2 | 408.3 |
| 42.5° | 118.8 | 146.2 | 211.5 | 305.7 | 381.6 |
| 45°   | 85.7  | 111.0 | 179.2 | 276.9 | 354.9 |
| 47.5° | 66.1  | 80.1  | 146.2 | 247.4 | 328.9 |
| 50°   | 57.6  | 61.8  | 116.0 | 220.0 | 303.6 |
| 52.5° | 49.9  | 52.7  | 87.1  | 194.7 | 276.2 |
| 55°   | 43.6  | 45.7  | 64.0  | 167.3 | 248.1 |
| 57.5° | 36.5  | 39.4  | 50.6  | 140.6 | 219.3 |
| 60°   | 30.9  | 32.3  | 45.0  | 116.0 | 190.5 |
| 62.5° | 25.3  | 26.7  | 40.1  | 91.4  | 158.1 |
| 65°   | 20.4  | 21.8  | 35.1  | 67.5  | 127.2 |
| 67.5° | 16.9  | 17.6  | 29.5  | 47.8  | 97.7  |
| 70°   | 14.1  | 14.8  | 24.6  | 33.0  | 68.9  |
| 72.5° | 11.9  | 14.1  | 19.7  | 23.9  | 43.6  |
| 75°   | 9.8   | 13.4  | 16.2  | 16.9  | 21.1  |
| 77.5° | 8.4   | 12.7  | 13.4  | 13.4  | 11.9  |
| 80°   | 7.0   | 10.5  | 11.2  | 10.5  | 9.8   |
| 82.5° | 5.6   | 8.4   | 9.1   | 9.1   | 7.7   |
| 85°   | 4.2   | 7.0   | 8.4   | 7.7   | 5.6   |
| 87.5° | 2.8   | 6.3   | 7.0   | 6.3   | 4.2   |
| 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 | 5.19             | 6.54  | 5.55  | 6.85  | 7.17  | 14.80          | 16.15 | 15.16 | 16.46 | 16.78 |
|                 | 3H   | 6.05             | 7.25  | 6.43  | 7.58  | 7.94  | 15.64          | 16.84 | 16.02 | 17.17 | 17.53 |
|                 | 4H   | 6.47             | 7.59  | 6.87  | 7.94  | 8.32  | 15.71          | 16.83 | 16.12 | 17.18 | 17.57 |
|                 | 6H   | 6.90             | 7.93  | 7.31  | 8.30  | 8.69  | 15.70          | 16.73 | 16.11 | 17.10 | 17.49 |
|                 | 8H   | 7.07             | 8.05  | 7.50  | 8.44  | 8.84  | 15.68          | 16.66 | 16.11 | 17.05 | 17.45 |
|                 | 12H  | 7.23             | 8.17  | 7.67  | 8.55  | 8.98  | 15.67          | 16.60 | 16.10 | 16.99 | 17.42 |
| 4H              | 2H   | 6.15             | 7.27  | 6.55  | 7.62  | 8.00  | 14.66          | 15.78 | 15.06 | 16.13 | 16.51 |
|                 | 3H   | 7.20             | 8.12  | 7.62  | 8.52  | 8.93  | 15.57          | 16.49 | 15.98 | 16.89 | 17.29 |
|                 | 4H   | 7.77             | 8.59  | 8.20  | 9.01  | 9.45  | 15.67          | 16.49 | 16.11 | 16.91 | 17.36 |
|                 | 6H   | 8.36             | 9.07  | 8.83  | 9.52  | 9.98  | 15.70          | 16.41 | 16.16 | 16.85 | 17.32 |
|                 | 8H   | 8.60             | 9.26  | 9.07  | 9.71  | 10.18 | 15.70          | 16.36 | 16.17 | 16.81 | 17.28 |
|                 | 12H  | 8.82             | 9.41  | 9.31  | 9.89  | 10.37 | 15.71          | 16.30 | 16.20 | 16.78 | 17.25 |
| 8H              | 4H   | 8.24             | 8.90  | 8.71  | 9.35  | 9.82  | 15.60          | 16.26 | 16.07 | 16.71 | 17.18 |
|                 | 6H   | 9.05             | 9.59  | 9.55  | 10.09 | 10.57 | 15.65          | 16.19 | 16.15 | 16.69 | 17.17 |
|                 | 8H   | 9.43             | 9.91  | 9.95  | 10.43 | 10.92 | 15.69          | 16.17 | 16.21 | 16.69 | 17.18 |
|                 | 12H  | 9.81             | 10.24 | 10.33 | 10.74 | 11.31 | 15.75          | 16.18 | 16.26 | 16.67 | 17.24 |
| 12H             | 4H   | 8.29             | 8.88  | 8.78  | 9.36  | 9.83  | 15.57          | 16.15 | 16.05 | 16.63 | 17.11 |
|                 | 6H   | 9.17             | 9.66  | 9.69  | 10.17 | 10.66 | 15.62          | 16.11 | 16.14 | 16.62 | 17.11 |
|                 | 8H   | 9.66             | 10.08 | 10.17 | 10.58 | 11.15 | 15.69          | 16.12 | 16.20 | 16.61 | 17.18 |