

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: P1059053

Luminaire Tested: S123RDR-S1000D930-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059053  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-68)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S1000D930-X4F0-XX-UDD-SVL-S  
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

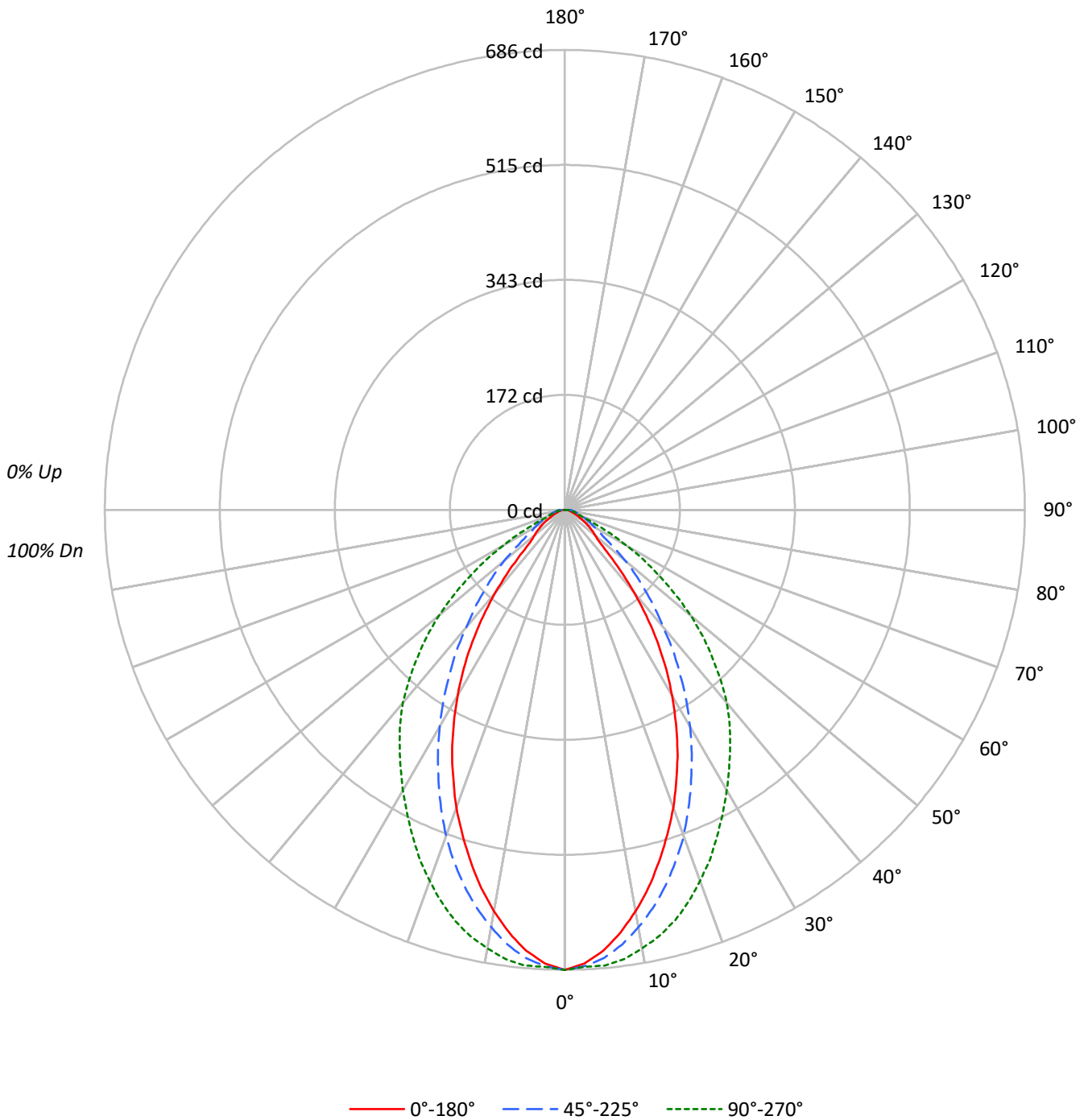
Lumens per Lamp: N/A  
Luminaire Lumens: 918.9 lumens  
Efficiency: N/A  
Efficacy: 26.3 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98  
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 35  
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  |     |
| 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 | 105 | 102 | 109 | 106 | 103 | 100 | 101 | 99  | 97  | 98  | 96  | 94  | 94  | 93  | 91  | 89  |
| 2   | 104 | 98  | 92  | 88  | 102 | 96  | 91  | 87  | 92  | 88  | 85  | 89  | 86  | 83  | 86  | 84  | 81  | 79  |
| 3   | 97  | 89  | 82  | 77  | 95  | 87  | 81  | 77  | 84  | 79  | 75  | 82  | 78  | 74  | 79  | 76  | 73  | 71  |
| 4   | 91  | 81  | 74  | 69  | 88  | 80  | 73  | 68  | 77  | 72  | 67  | 75  | 70  | 66  | 73  | 69  | 66  | 64  |
| 5   | 85  | 74  | 67  | 61  | 83  | 73  | 66  | 61  | 71  | 65  | 61  | 69  | 64  | 60  | 68  | 63  | 59  | 58  |
| 6   | 79  | 68  | 61  | 56  | 78  | 67  | 60  | 55  | 66  | 60  | 55  | 64  | 59  | 54  | 63  | 58  | 54  | 52  |
| 7   | 74  | 63  | 56  | 51  | 73  | 62  | 55  | 50  | 61  | 55  | 50  | 60  | 54  | 50  | 58  | 53  | 49  | 48  |
| 8   | 70  | 59  | 51  | 46  | 69  | 58  | 51  | 46  | 57  | 50  | 46  | 56  | 50  | 46  | 54  | 49  | 45  | 44  |
| 9   | 66  | 54  | 47  | 43  | 65  | 54  | 47  | 43  | 53  | 47  | 42  | 52  | 46  | 42  | 51  | 46  | 42  | 40  |
| 10  | 62  | 51  | 44  | 39  | 61  | 50  | 44  | 39  | 50  | 43  | 39  | 49  | 43  | 39  | 48  | 43  | 39  | 37  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 8058 | 8058 | 8058 |
| 5°  | 7781 | 7910 | 8041 |
| 10° | 7250 | 7537 | 7918 |
| 15° | 6600 | 7051 | 7709 |
| 20° | 5908 | 6472 | 7360 |
| 25° | 5153 | 5776 | 6956 |
| 30° | 4332 | 5066 | 6546 |
| 35° | 3446 | 4293 | 6160 |
| 40° | 2457 | 3501 | 5757 |
| 45° | 1465 | 2811 | 5156 |
| 50° | 1080 | 2141 | 4465 |
| 55° | 903  | 1456 | 3548 |
| 60° | 730  | 1200 | 2494 |
| 65° | 583  | 1031 | 1336 |
| 70° | 481  | 893  | 824  |
| 75° | 454  | 862  | 771  |
| 80° | 473  | 947  | 744  |
| 85° | 674  | 1347 | 943  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5156 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 63.0   | 6.9       |
| 10°-20°   | 163.7  | 17.8      |
| 20°-30°   | 208.9  | 22.7      |
| 30°-40°   | 196.5  | 21.4      |
| 40°-50°   | 141.2  | 15.4      |
| 50°-60°   | 81.0   | 8.8       |
| 60°-70°   | 37.0   | 4.0       |
| 70°-80°   | 18.6   | 2.0       |
| 80°-90°   | 9.1    | 1.0       |
| 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°    | 435.6  | 47.4      |
| 0°-40°    | 632.1  | 68.8      |
| 0°-60°    | 854.3  | 93.0      |
| 0°-90°    | 918.9  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 918.9  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 686 | 686   | 686 | 686   | 686 |      |
| 5°  | 660 | 673   | 671 | 676   | 682 | 61   |
| 15° | 543 | 562   | 580 | 611   | 634 | 152  |
| 25° | 398 | 416   | 446 | 494   | 537 | 182  |
| 35° | 240 | 257   | 300 | 368   | 430 | 149  |
| 45° | 88  | 107   | 169 | 249   | 310 | 74   |
| 55° | 44  | 45    | 71  | 131   | 173 | 40   |
| 65° | 21  | 29    | 37  | 41    | 48  | 21   |
| 75° | 10  | 20    | 19  | 17    | 17  | 11   |
| 85° | 5   | 10    | 10  | 9     | 7   | 5    |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 686.2 | 686.2 | 686.2 | 686.2 | 686.2 |
| 2.5°  | 677.2 | 687.2 | 681.2 | 681.2 | 682.2 |
| 5°    | 660.1 | 673.1 | 671.1 | 676.2 | 682.2 |
| 7.5°  | 636.1 | 650.1 | 654.1 | 666.1 | 676.2 |
| 10°   | 608.0 | 624.1 | 632.1 | 651.1 | 664.1 |
| 12.5° | 577.0 | 595.0 | 608.0 | 632.1 | 651.1 |
| 15°   | 542.9 | 562.0 | 580.0 | 611.0 | 634.1 |
| 17.5° | 507.9 | 526.9 | 549.9 | 586.0 | 613.0 |
| 20°   | 472.8 | 491.8 | 517.9 | 555.9 | 589.0 |
| 22.5° | 434.7 | 453.8 | 481.8 | 524.9 | 565.0 |
| 25°   | 397.7 | 415.7 | 445.8 | 493.8 | 536.9 |
| 27.5° | 358.6 | 376.6 | 409.7 | 461.8 | 509.9 |
| 30°   | 319.5 | 337.6 | 373.6 | 429.7 | 482.8 |
| 32.5° | 280.5 | 297.5 | 336.6 | 398.7 | 455.8 |
| 35°   | 240.4 | 257.4 | 299.5 | 367.6 | 429.7 |
| 37.5° | 199.3 | 216.4 | 265.5 | 339.6 | 403.7 |
| 40°   | 160.3 | 179.3 | 228.4 | 311.5 | 375.6 |
| 42.5° | 122.2 | 142.2 | 198.3 | 281.5 | 343.6 |
| 45°   | 88.2  | 107.2 | 169.3 | 249.4 | 310.5 |
| 47.5° | 67.1  | 77.1  | 143.2 | 217.4 | 278.5 |
| 50°   | 59.1  | 60.1  | 117.2 | 188.3 | 244.4 |
| 52.5° | 51.1  | 52.1  | 91.2  | 160.3 | 208.4 |
| 55°   | 44.1  | 45.1  | 71.1  | 131.2 | 173.3 |
| 57.5° | 37.1  | 39.1  | 58.1  | 104.2 | 139.2 |
| 60°   | 31.1  | 35.1  | 51.1  | 79.1  | 106.2 |
| 62.5° | 25.0  | 32.1  | 44.1  | 58.1  | 76.1  |
| 65°   | 21.0  | 29.0  | 37.1  | 41.1  | 48.1  |
| 67.5° | 17.0  | 27.0  | 31.1  | 29.0  | 29.0  |
| 70°   | 14.0  | 24.0  | 26.0  | 24.0  | 24.0  |
| 72.5° | 12.0  | 23.0  | 22.0  | 20.0  | 20.0  |
| 75°   | 10.0  | 20.0  | 19.0  | 17.0  | 17.0  |
| 77.5° | 9.0   | 17.0  | 16.0  | 15.0  | 14.0  |
| 80°   | 7.0   | 14.0  | 14.0  | 13.0  | 11.0  |
| 82.5° | 6.0   | 12.0  | 12.0  | 11.0  | 9.0   |
| 85°   | 5.0   | 10.0  | 10.0  | 9.0   | 7.0   |
| 87.5° | 4.0   | 9.0   | 9.0   | 8.0   | 5.0   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)