

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: P1057946

Luminaire Tested: S122RDR-S290D950-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057946  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-59)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S290D950-X4F0-XX-UDD-SVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

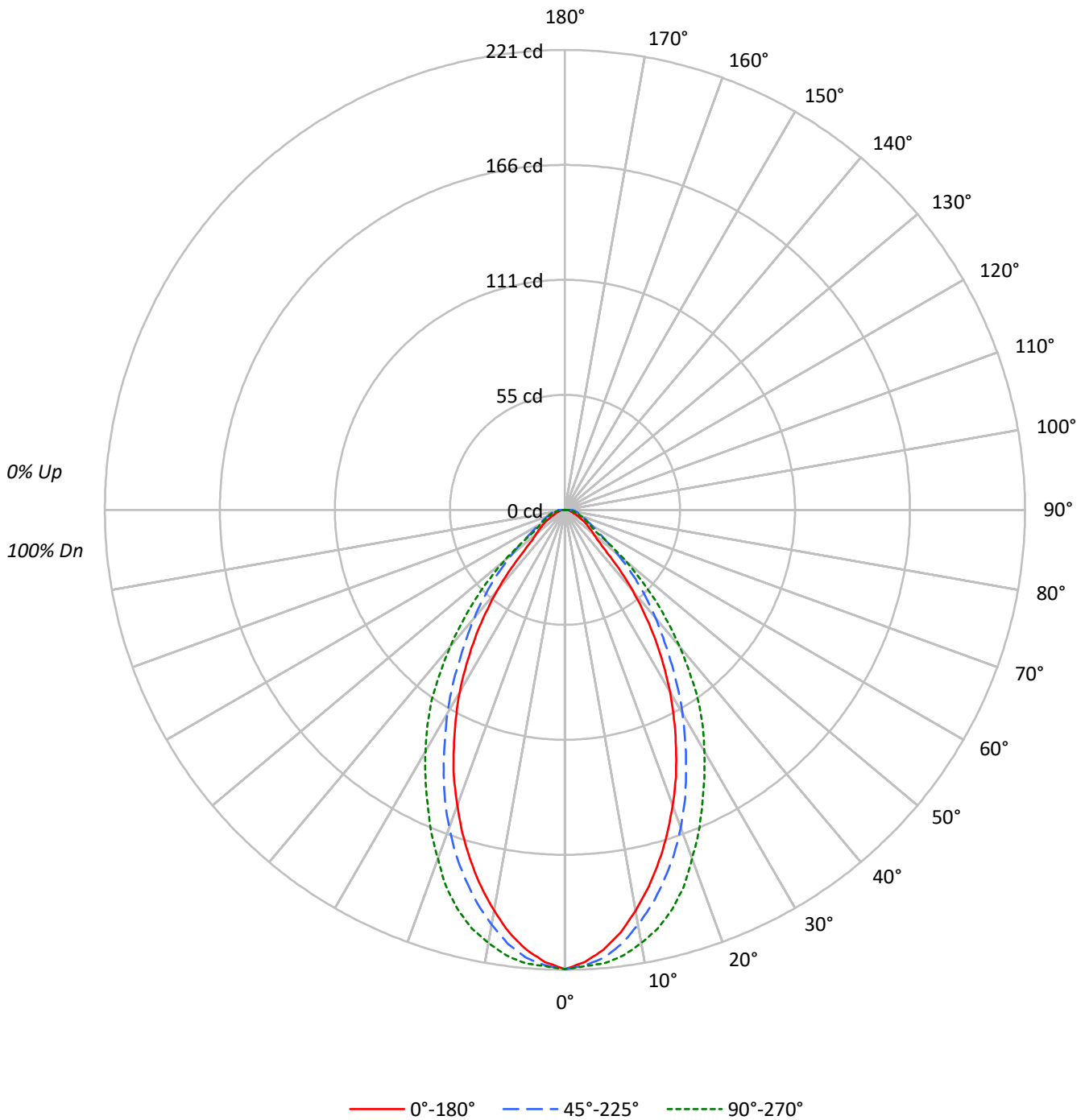
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 266.3 lumens  
Efficiency: N/A  
Efficacy: 21.3 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 0.97 / 0.94  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 12.5  
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  |     |     |    |    | 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 | 105 | 102 | 109 | 106 | 103 | 100 | 101 | 99  | 97  | 98  | 96  | 94  | 94  | 93  | 91  | 89  |    |    |    | 89  |
| 2   | 104 | 98  | 93  | 88  | 102 | 96  | 91  | 87  | 93  | 89  | 85  | 90  | 86  | 83  | 87  | 84  | 82  | 80  |    |    |    | 80  |
| 3   | 97  | 89  | 83  | 78  | 95  | 88  | 82  | 77  | 85  | 80  | 76  | 82  | 78  | 75  | 80  | 77  | 74  | 72  |    |    |    | 72  |
| 4   | 91  | 82  | 75  | 70  | 89  | 81  | 74  | 69  | 78  | 73  | 68  | 76  | 71  | 68  | 74  | 70  | 67  | 65  |    |    |    | 65  |
| 5   | 86  | 75  | 68  | 63  | 84  | 74  | 68  | 63  | 72  | 66  | 62  | 71  | 65  | 61  | 69  | 64  | 61  | 59  |    |    |    | 59  |
| 6   | 80  | 70  | 62  | 57  | 79  | 69  | 62  | 57  | 67  | 61  | 57  | 66  | 60  | 56  | 64  | 59  | 56  | 54  |    |    |    | 54  |
| 7   | 76  | 65  | 57  | 52  | 74  | 64  | 57  | 52  | 62  | 56  | 52  | 61  | 56  | 52  | 60  | 55  | 51  | 50  |    |    |    | 50  |
| 8   | 71  | 60  | 53  | 48  | 70  | 59  | 53  | 48  | 58  | 52  | 48  | 57  | 52  | 48  | 56  | 51  | 47  | 46  |    |    |    | 46  |
| 9   | 67  | 56  | 49  | 45  | 66  | 56  | 49  | 44  | 55  | 49  | 44  | 54  | 48  | 44  | 53  | 48  | 44  | 42  |    |    |    | 42  |
| 10  | 64  | 53  | 46  | 41  | 63  | 52  | 46  | 41  | 51  | 45  | 41  | 50  | 45  | 41  | 50  | 45  | 41  | 39  |    |    |    | 39  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 4072 | 4072 | 4072 |
| 5°  | 3931 | 3999 | 4051 |
| 10° | 3663 | 3792 | 3961 |
| 15° | 3337 | 3517 | 3798 |
| 20° | 2967 | 3191 | 3503 |
| 25° | 2571 | 2804 | 3176 |
| 30° | 2152 | 2403 | 2855 |
| 35° | 1696 | 1991 | 2514 |
| 40° | 1216 | 1628 | 2060 |
| 45° | 712  | 1287 | 1594 |
| 50° | 514  | 936  | 1077 |
| 55° | 431  | 669  | 563  |
| 60° | 347  | 543  | 480  |
| 65° | 284  | 480  | 445  |
| 70° | 243  | 464  | 415  |
| 75° | 235  | 492  | 406  |
| 80° | 255  | 606  | 436  |
| 85° | 423  | 953  | 614  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 1594 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 20.2   | 7.6       |
| 10°-20°   | 51.8   | 19.5      |
| 20°-30°   | 63.7   | 23.9      |
| 30°-40°   | 56.3   | 21.1      |
| 40°-50°   | 35.9   | 13.5      |
| 50°-60°   | 17.5   | 6.6       |
| 60°-70°   | 10.4   | 3.9       |
| 70°-80°   | 6.7    | 2.5       |
| 80°-90°   | 3.7    | 1.4       |
| 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°    | 135.7  | 51.0      |
| 0°-40°    | 192.0  | 72.1      |
| 0°-60°    | 245.5  | 92.2      |
| 0°-90°    | 266.3  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 266.3  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 221 | 221   | 221 | 221   | 221 |      |
| 5°  | 212 | 217   | 216 | 217   | 219 | 20   |
| 15° | 175 | 180   | 184 | 192   | 199 | 49   |
| 25° | 126 | 131   | 138 | 146   | 156 | 58   |
| 35° | 75  | 79    | 88  | 101   | 112 | 47   |
| 45° | 27  | 35    | 49  | 55    | 61  | 23   |
| 55° | 13  | 18    | 21  | 20    | 18  | 12   |
| 65° | 6   | 12    | 11  | 10    | 10  | 7    |
| 75° | 3   | 7     | 7   | 6     | 6   | 4    |
| 85° | 2   | 4     | 4   | 4     | 3   | 2    |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 220.7 | 220.7 | 220.7 | 220.7 | 220.7 |
| 2.5°  | 217.5 | 221.6 | 219.1 | 219.1 | 219.5 |
| 5°    | 212.2 | 216.7 | 215.9 | 216.7 | 218.7 |
| 7.5°  | 204.9 | 209.3 | 210.2 | 213.4 | 215.9 |
| 10°   | 195.5 | 200.0 | 202.4 | 207.7 | 211.4 |
| 12.5° | 185.7 | 190.2 | 193.9 | 200.8 | 206.1 |
| 15°   | 174.7 | 179.6 | 184.1 | 192.2 | 198.8 |
| 17.5° | 163.3 | 168.2 | 173.9 | 182.1 | 189.8 |
| 20°   | 151.1 | 155.6 | 162.5 | 170.2 | 178.4 |
| 22.5° | 139.3 | 143.4 | 150.7 | 158.0 | 167.8 |
| 25°   | 126.3 | 130.7 | 137.7 | 146.2 | 156.0 |
| 27.5° | 113.6 | 118.1 | 125.0 | 134.8 | 145.0 |
| 30°   | 101.0 | 105.1 | 112.8 | 123.0 | 134.0 |
| 32.5° | 88.0  | 92.0  | 100.6 | 111.6 | 123.0 |
| 35°   | 75.3  | 79.4  | 88.4  | 100.6 | 111.6 |
| 37.5° | 62.7  | 67.2  | 77.4  | 88.8  | 98.2  |
| 40°   | 50.5  | 55.8  | 67.6  | 77.4  | 85.5  |
| 42.5° | 38.3  | 45.6  | 58.2  | 66.4  | 72.9  |
| 45°   | 27.3  | 35.0  | 49.3  | 55.4  | 61.1  |
| 47.5° | 20.8  | 26.9  | 40.7  | 45.2  | 48.9  |
| 50°   | 17.9  | 22.0  | 32.6  | 35.8  | 37.5  |
| 52.5° | 15.5  | 19.5  | 26.1  | 27.3  | 26.5  |
| 55°   | 13.4  | 17.9  | 20.8  | 19.5  | 17.5  |
| 57.5° | 11.4  | 16.7  | 17.1  | 14.7  | 15.1  |
| 60°   | 9.4   | 15.1  | 14.7  | 12.6  | 13.0  |
| 62.5° | 7.7   | 13.8  | 12.6  | 11.4  | 11.4  |
| 65°   | 6.5   | 12.2  | 11.0  | 10.2  | 10.2  |
| 67.5° | 5.3   | 11.0  | 9.8   | 9.0   | 9.0   |
| 70°   | 4.5   | 9.8   | 8.6   | 7.7   | 7.7   |
| 72.5° | 4.1   | 8.6   | 7.7   | 6.9   | 6.9   |
| 75°   | 3.3   | 7.3   | 6.9   | 6.1   | 5.7   |
| 77.5° | 2.9   | 6.1   | 6.1   | 5.7   | 4.9   |
| 80°   | 2.4   | 5.3   | 5.7   | 4.9   | 4.1   |
| 82.5° | 2.4   | 4.9   | 4.9   | 4.5   | 3.3   |
| 85°   | 2.0   | 4.1   | 4.5   | 4.1   | 2.9   |
| 87.5° | 1.2   | 3.7   | 3.7   | 3.3   | 2.0   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)