

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: P1057992

Luminaire Tested: S122RDR-S485D927-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057992  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-56)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S485D927-X4F0-XX-UDD-SVL-W  
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

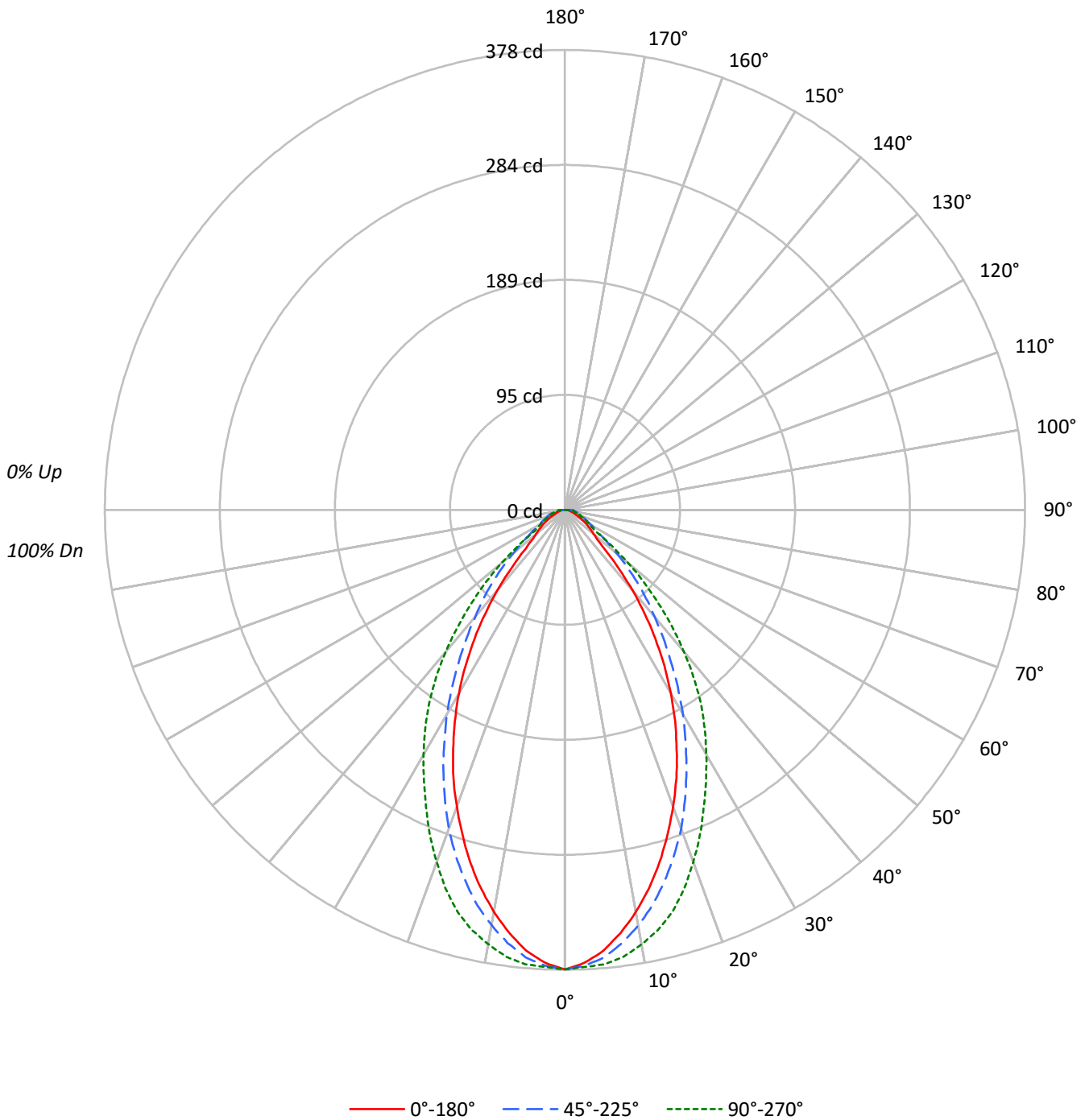
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 458.1 lumens  
Efficiency: N/A  
Efficacy: 23.4 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.6  
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 | 102 | 99  | 97  | 98  | 96  | 94  | 94  | 93  | 91  | 89  |    |    |    | 89  |
| 2   | 104 | 98  | 93  | 88  | 102 | 96  | 91  | 87  | 93  | 89  | 85  | 90  | 86  | 84  | 87  | 84  | 82  | 80  |    |    |    | 80  |
| 3   | 97  | 89  | 83  | 78  | 95  | 88  | 82  | 77  | 85  | 80  | 76  | 83  | 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  | 67  | 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  | 45  | 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°  | 6969 | 6969 | 6969 |
| 5°  | 6737 | 6841 | 6944 |
| 10° | 6288 | 6498 | 6792 |
| 15° | 5735 | 6037 | 6530 |
| 20° | 5102 | 5477 | 6050 |
| 25° | 4422 | 4811 | 5495 |
| 30° | 3707 | 4125 | 4950 |
| 35° | 2919 | 3413 | 4386 |
| 40° | 2081 | 2758 | 3664 |
| 45° | 1229 | 2182 | 2842 |
| 50° | 887  | 1579 | 1932 |
| 55° | 740  | 1139 | 975  |
| 60° | 602  | 912  | 827  |
| 65° | 489  | 808  | 760  |
| 70° | 426  | 788  | 728  |
| 75° | 399  | 799  | 720  |
| 80° | 414  | 956  | 776  |
| 85° | 593  | 1546 | 953  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2842 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 34.6   | 7.6       |
| 10°-20°   | 89.0   | 19.4      |
| 20°-30°   | 109.8  | 24.0      |
| 30°-40°   | 97.7   | 21.3      |
| 40°-50°   | 62.3   | 13.6      |
| 50°-60°   | 29.9   | 6.5       |
| 60°-70°   | 17.6   | 3.8       |
| 70°-80°   | 11.2   | 2.5       |
| 80°-90°   | 6.0    | 1.3       |
| 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°    | 233.4  | 51.0      |
| 0°-40°    | 331.1  | 72.3      |
| 0°-60°    | 423.3  | 92.4      |
| 0°-90°    | 458.1  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 458.1  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 378 | 378   | 378 | 378   | 378 |      |
| 5°  | 364 | 370   | 369 | 372   | 375 | 34   |
| 15° | 300 | 308   | 316 | 330   | 342 | 84   |
| 25° | 217 | 226   | 236 | 253   | 270 | 99   |
| 35° | 130 | 140   | 152 | 174   | 195 | 81   |
| 45° | 47  | 61    | 84  | 97    | 109 | 40   |
| 55° | 23  | 30    | 35  | 34    | 30  | 21   |
| 65° | 11  | 20    | 18  | 17    | 17  | 11   |
| 75° | 6   | 12    | 11  | 11    | 10  | 6    |
| 85° | 3   | 7     | 7   | 6     | 4   | 3    |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 377.7 | 377.7 | 377.7 | 377.7 | 377.7 |
| 2.5°  | 372.6 | 378.8 | 374.9 | 374.9 | 376.0 |
| 5°    | 363.7 | 370.4 | 369.3 | 371.5 | 374.9 |
| 7.5°  | 350.7 | 358.0 | 359.2 | 365.3 | 370.4 |
| 10°   | 335.6 | 343.5 | 346.8 | 355.8 | 362.5 |
| 12.5° | 318.8 | 326.6 | 332.8 | 344.0 | 353.6 |
| 15°   | 300.2 | 307.5 | 316.0 | 330.5 | 341.8 |
| 17.5° | 280.0 | 289.6 | 298.0 | 313.1 | 326.1 |
| 20°   | 259.8 | 268.8 | 278.9 | 293.5 | 308.1 |
| 22.5° | 239.1 | 247.5 | 257.6 | 272.7 | 289.6 |
| 25°   | 217.2 | 225.6 | 236.3 | 253.1 | 269.9 |
| 27.5° | 195.9 | 204.3 | 214.4 | 232.9 | 250.9 |
| 30°   | 174.0 | 182.4 | 193.6 | 212.7 | 232.3 |
| 32.5° | 152.1 | 161.1 | 172.3 | 193.1 | 213.8 |
| 35°   | 129.6 | 139.7 | 151.5 | 174.5 | 194.7 |
| 37.5° | 107.7 | 117.9 | 132.4 | 154.9 | 174.0 |
| 40°   | 86.4  | 98.2  | 114.5 | 134.7 | 152.1 |
| 42.5° | 65.7  | 78.6  | 98.8  | 115.0 | 130.2 |
| 45°   | 47.1  | 61.2  | 83.6  | 97.1  | 108.9 |
| 47.5° | 35.9  | 46.0  | 69.0  | 79.7  | 88.1  |
| 50°   | 30.9  | 37.0  | 55.0  | 62.9  | 67.3  |
| 52.5° | 26.9  | 32.5  | 43.8  | 47.7  | 47.7  |
| 55°   | 23.0  | 29.7  | 35.4  | 34.2  | 30.3  |
| 57.5° | 19.6  | 26.9  | 29.2  | 24.7  | 25.8  |
| 60°   | 16.3  | 24.7  | 24.7  | 21.9  | 22.4  |
| 62.5° | 13.5  | 23.0  | 21.3  | 19.1  | 19.6  |
| 65°   | 11.2  | 20.2  | 18.5  | 16.8  | 17.4  |
| 67.5° | 9.0   | 18.0  | 16.3  | 15.2  | 15.2  |
| 70°   | 7.9   | 16.3  | 14.6  | 13.5  | 13.5  |
| 72.5° | 6.7   | 14.0  | 12.9  | 11.8  | 11.8  |
| 75°   | 5.6   | 12.3  | 11.2  | 10.7  | 10.1  |
| 77.5° | 5.1   | 10.7  | 10.1  | 9.0   | 8.4   |
| 80°   | 3.9   | 9.0   | 9.0   | 8.4   | 7.3   |
| 82.5° | 3.4   | 7.9   | 7.9   | 7.3   | 6.2   |
| 85°   | 2.8   | 6.7   | 7.3   | 6.2   | 4.5   |
| 87.5° | 2.2   | 6.2   | 6.2   | 5.1   | 3.4   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)