

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: P1058183

Luminaire Tested: S122RDR-S865D940-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058183  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S865D940-X4F0-XX-UDD-WVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

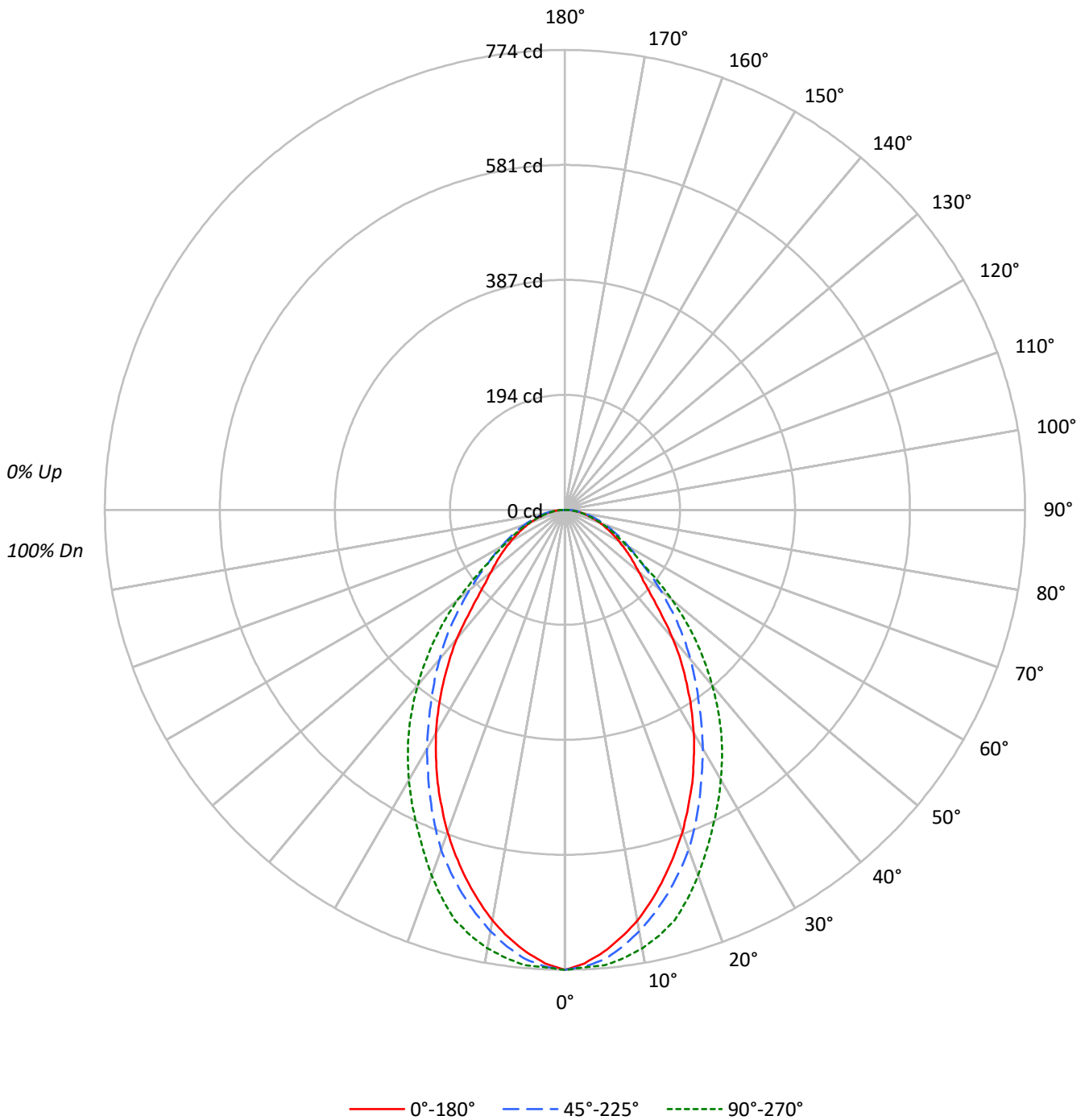
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1260.3 lumens  
Efficiency: N/A  
Efficacy: 36.0 lumens/watt  
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05  
Luminous Opening: Rectangular (W 0.15' 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  | 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   | 110 | 106 | 103 | 99  | 108 | 104 | 101 | 98  | 100 | 97  | 95  | 96  | 94  | 92  | 93  | 91  | 89  | 87  |    |    |    | 87  |
| 2   | 102 | 95  | 89  | 84  | 100 | 93  | 88  | 83  | 90  | 85  | 81  | 87  | 83  | 79  | 84  | 80  | 78  | 76  |    |    |    | 76  |
| 3   | 94  | 85  | 78  | 73  | 92  | 84  | 77  | 72  | 81  | 75  | 71  | 78  | 73  | 69  | 76  | 72  | 68  | 66  |    |    |    | 66  |
| 4   | 88  | 77  | 69  | 63  | 85  | 76  | 69  | 63  | 73  | 67  | 62  | 71  | 66  | 61  | 69  | 64  | 61  | 59  |    |    |    | 59  |
| 5   | 81  | 70  | 62  | 56  | 79  | 69  | 61  | 56  | 67  | 60  | 55  | 65  | 59  | 55  | 63  | 58  | 54  | 52  |    |    |    | 52  |
| 6   | 76  | 64  | 56  | 50  | 74  | 63  | 56  | 50  | 61  | 55  | 50  | 60  | 54  | 49  | 58  | 53  | 49  | 47  |    |    |    | 47  |
| 7   | 71  | 59  | 51  | 45  | 69  | 58  | 51  | 45  | 57  | 50  | 45  | 55  | 49  | 45  | 54  | 49  | 44  | 43  |    |    |    | 43  |
| 8   | 67  | 54  | 47  | 41  | 65  | 54  | 46  | 41  | 52  | 46  | 41  | 51  | 45  | 41  | 50  | 45  | 41  | 39  |    |    |    | 39  |
| 9   | 63  | 50  | 43  | 38  | 61  | 50  | 43  | 38  | 49  | 42  | 38  | 48  | 42  | 37  | 47  | 41  | 37  | 36  |    |    |    | 36  |
| 10  | 59  | 47  | 40  | 35  | 58  | 46  | 39  | 35  | 45  | 39  | 35  | 45  | 39  | 34  | 44  | 38  | 34  | 33  |    |    |    | 33  |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 14282 | 14282 | 14282 |
| 5°  | 13837 | 14066 | 14253 |
| 10° | 13155 | 13493 | 14040 |
| 15° | 12276 | 12769 | 13649 |
| 20° | 11338 | 11957 | 12860 |
| 25° | 10314 | 10909 | 11984 |
| 30° | 9239  | 9884  | 11178 |
| 35° | 8046  | 8833  | 10324 |
| 40° | 6793  | 7901  | 9281  |
| 45° | 5394  | 6978  | 8121  |
| 50° | 4645  | 5997  | 6740  |
| 55° | 4227  | 5131  | 5167  |
| 60° | 3857  | 4561  | 4395  |
| 65° | 3532  | 4122  | 3873  |
| 70° | 3275  | 3820  | 3453  |
| 75° | 3044  | 3608  | 3044  |
| 80° | 2869  | 3464  | 2742  |
| 85° | 2858  | 3578  | 2371  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8121 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 71.4   | 5.7       |
| 10°-20°   | 188.9  | 15.0      |
| 20°-30°   | 248.6  | 19.7      |
| 30°-40°   | 249.9  | 19.8      |
| 40°-50°   | 202.6  | 16.1      |
| 50°-60°   | 139.5  | 11.1      |
| 60°-70°   | 91.3   | 7.2       |
| 70°-80°   | 50.9   | 4.0       |
| 80°-90°   | 17.2   | 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°    | 508.9  | 40.4      |
| 0°-40°    | 758.8  | 60.2      |
| 0°-60°    | 1100.9 | 87.4      |
| 0°-90°    | 1260.3 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1260.3 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 774 | 774   | 774 | 774   | 774 |      |
| 5°  | 747 | 762   | 759 | 763   | 770 | 70   |
| 15° | 643 | 658   | 668 | 693   | 714 | 180  |
| 25° | 507 | 520   | 536 | 559   | 589 | 232  |
| 35° | 357 | 374   | 392 | 427   | 458 | 223  |
| 45° | 207 | 230   | 267 | 291   | 311 | 163  |
| 55° | 131 | 146   | 160 | 163   | 161 | 118  |
| 65° | 81  | 97    | 94  | 90    | 89  | 81   |
| 75° | 43  | 53    | 51  | 45    | 43  | 46   |
| 85° | 14  | 18    | 17  | 15    | 11  | 15   |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 774.0 | 774.0 | 774.0 | 774.0 | 774.0 |
| 2.5°  | 763.9 | 777.4 | 769.5 | 769.5 | 770.6 |
| 5°    | 747.0 | 761.6 | 759.4 | 762.8 | 769.5 |
| 7.5°  | 725.7 | 741.4 | 741.4 | 751.5 | 760.5 |
| 10°   | 702.1 | 717.8 | 720.1 | 735.8 | 749.3 |
| 12.5° | 672.9 | 688.6 | 695.4 | 715.6 | 733.6 |
| 15°   | 642.6 | 658.3 | 668.4 | 693.1 | 714.5 |
| 17.5° | 610.0 | 625.7 | 639.2 | 665.0 | 686.4 |
| 20°   | 577.4 | 592.0 | 608.9 | 631.3 | 654.9 |
| 22.5° | 541.5 | 557.2 | 572.9 | 594.3 | 621.2 |
| 25°   | 506.6 | 520.1 | 535.8 | 559.4 | 588.6 |
| 27.5° | 469.6 | 484.2 | 498.8 | 526.9 | 557.2 |
| 30°   | 433.6 | 448.2 | 463.9 | 493.2 | 524.6 |
| 32.5° | 395.4 | 411.1 | 426.9 | 459.5 | 492.0 |
| 35°   | 357.2 | 374.1 | 392.1 | 426.9 | 458.3 |
| 37.5° | 320.2 | 338.1 | 359.5 | 395.4 | 422.4 |
| 40°   | 282.0 | 301.1 | 328.0 | 359.5 | 385.3 |
| 42.5° | 241.5 | 265.1 | 297.7 | 324.7 | 348.2 |
| 45°   | 206.7 | 230.3 | 267.4 | 290.9 | 311.2 |
| 47.5° | 180.9 | 200.0 | 235.9 | 256.1 | 273.0 |
| 50°   | 161.8 | 176.4 | 208.9 | 223.5 | 234.8 |
| 52.5° | 146.0 | 160.6 | 183.1 | 193.2 | 196.6 |
| 55°   | 131.4 | 146.0 | 159.5 | 162.9 | 160.6 |
| 57.5° | 116.8 | 132.6 | 140.4 | 137.0 | 137.0 |
| 60°   | 104.5 | 121.3 | 123.6 | 119.1 | 119.1 |
| 62.5° | 92.1  | 109.0 | 109.0 | 103.3 | 103.3 |
| 65°   | 80.9  | 96.6  | 94.4  | 89.9  | 88.7  |
| 67.5° | 70.8  | 85.4  | 82.0  | 77.5  | 76.4  |
| 70°   | 60.7  | 74.1  | 70.8  | 65.2  | 64.0  |
| 72.5° | 51.7  | 64.0  | 59.5  | 55.0  | 52.8  |
| 75°   | 42.7  | 52.8  | 50.6  | 44.9  | 42.7  |
| 77.5° | 34.8  | 42.7  | 40.4  | 35.9  | 33.7  |
| 80°   | 27.0  | 33.7  | 32.6  | 28.1  | 25.8  |
| 82.5° | 20.2  | 25.8  | 24.7  | 21.3  | 18.0  |
| 85°   | 13.5  | 18.0  | 16.9  | 14.6  | 11.2  |
| 87.5° | 6.7   | 12.4  | 11.2  | 10.1  | 5.6   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)