

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: P1060581

Luminaire Tested: S124RDR-S795D927-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060581  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-75)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S795D927-X4F0-XX-UDD-BVL-W  
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

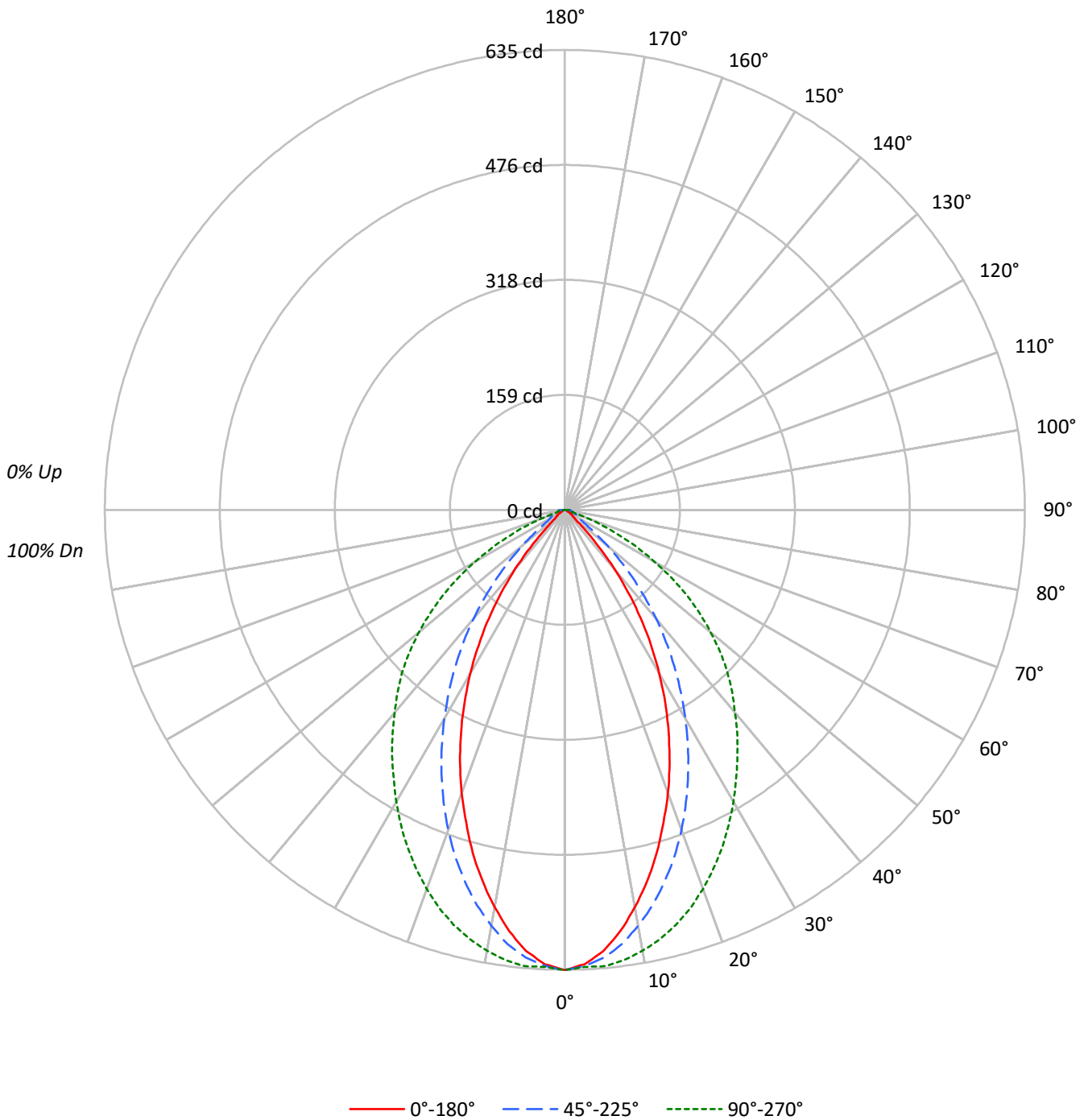
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 800.8 lumens  
Efficiency: N/A  
Efficacy: 31.0 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.96  
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 25.8  
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 |    |    |    |   |
| 1   | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 101 | 102 | 100 | 98  | 98  | 96  | 95  | 95  | 93  | 92  | 90  |    |    |    |   |
| 2   | 105 | 98  | 93  | 89  | 102 | 97  | 92  | 88  | 93  | 89  | 86  | 90  | 87  | 84  | 87  | 85  | 82  | 81  |    |    |    |   |
| 3   | 98  | 90  | 84  | 79  | 96  | 88  | 83  | 78  | 86  | 81  | 77  | 83  | 79  | 75  | 81  | 77  | 74  | 72  |    |    |    |   |
| 4   | 91  | 82  | 75  | 70  | 89  | 81  | 75  | 70  | 79  | 73  | 69  | 76  | 72  | 68  | 74  | 70  | 67  | 65  |    |    |    |   |
| 5   | 86  | 75  | 68  | 63  | 84  | 74  | 68  | 63  | 72  | 67  | 62  | 71  | 66  | 62  | 69  | 65  | 61  | 59  |    |    |    |   |
| 6   | 80  | 70  | 62  | 57  | 79  | 69  | 62  | 57  | 67  | 61  | 56  | 66  | 60  | 56  | 64  | 59  | 56  | 54  |    |    |    |   |
| 7   | 75  | 64  | 57  | 52  | 74  | 64  | 57  | 52  | 62  | 56  | 52  | 61  | 55  | 51  | 60  | 55  | 51  | 49  |    |    |    |   |
| 8   | 71  | 60  | 53  | 48  | 70  | 59  | 52  | 48  | 58  | 52  | 48  | 57  | 51  | 47  | 56  | 51  | 47  | 45  |    |    |    |   |
| 9   | 67  | 56  | 49  | 44  | 66  | 55  | 49  | 44  | 54  | 48  | 44  | 53  | 48  | 44  | 52  | 47  | 44  | 42  |    |    |    |   |
| 10  | 63  | 52  | 45  | 41  | 62  | 52  | 45  | 41  | 51  | 45  | 41  | 50  | 44  | 41  | 49  | 44  | 40  | 39  |    |    |    |   |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 5472 | 5472 | 5472 |
| 5°  | 5286 | 5364 | 5466 |
| 10° | 4871 | 5099 | 5406 |
| 15° | 4375 | 4740 | 5286 |
| 20° | 3813 | 4312 | 5105 |
| 25° | 3217 | 3826 | 4882 |
| 30° | 2595 | 3307 | 4627 |
| 35° | 1921 | 2767 | 4367 |
| 40° | 1190 | 2204 | 4107 |
| 45° | 473  | 1607 | 3869 |
| 50° | 210  | 1009 | 3517 |
| 55° | 168  | 525  | 3079 |
| 60° | 115  | 398  | 2452 |
| 65° | 75   | 395  | 1687 |
| 70° | 76   | 358  | 788  |
| 75° | 100  | 346  | 346  |
| 80° | 149  | 407  | 407  |
| 85° | 296  | 810  | 593  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3869 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 58.3   | 7.3       |
| 10°-20°   | 150.4  | 18.8      |
| 20°-30°   | 189.9  | 23.7      |
| 30°-40°   | 174.2  | 21.8      |
| 40°-50°   | 118.6  | 14.8      |
| 50°-60°   | 64.6   | 8.1       |
| 60°-70°   | 28.0   | 3.5       |
| 70°-80°   | 10.2   | 1.3       |
| 80°-90°   | 6.6    | 0.8       |
| 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°    | 398.6  | 49.8      |
| 0°-40°    | 572.8  | 71.5      |
| 0°-60°    | 756.0  | 94.4      |
| 0°-90°    | 800.8  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 800.8  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 635 | 635   | 635 | 635   | 635 |      |
| 5°  | 612 | 620   | 620 | 627   | 632 | 57   |
| 15° | 491 | 508   | 532 | 570   | 593 | 136  |
| 25° | 339 | 362   | 403 | 467   | 514 | 155  |
| 35° | 183 | 210   | 263 | 347   | 415 | 113  |
| 45° | 39  | 65    | 132 | 234   | 318 | 36   |
| 55° | 11  | 12    | 35  | 129   | 205 | 10   |
| 65° | 4   | 5     | 19  | 40    | 83  | 4    |
| 75° | 3   | 10    | 10  | 10    | 10  | 3    |
| 85° | 3   | 7     | 8   | 8     | 6   | 3    |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 635.4 | 635.4 | 635.4 | 635.4 | 635.4 |
| 2.5°  | 627.9 | 635.4 | 630.2 | 631.6 | 631.6 |
| 5°    | 611.5 | 619.7 | 620.5 | 627.2 | 632.4 |
| 7.5°  | 586.9 | 598.8 | 604.8 | 618.2 | 627.2 |
| 10°   | 557.1 | 571.2 | 583.2 | 606.3 | 618.2 |
| 12.5° | 525.0 | 541.4 | 559.3 | 589.9 | 607.0 |
| 15°   | 490.7 | 507.9 | 531.7 | 569.7 | 592.9 |
| 17.5° | 452.7 | 473.5 | 502.6 | 548.1 | 576.5 |
| 20°   | 416.1 | 437.0 | 470.6 | 522.0 | 557.1 |
| 22.5° | 378.1 | 399.7 | 437.0 | 494.4 | 536.2 |
| 25°   | 338.6 | 362.4 | 402.7 | 466.8 | 513.8 |
| 27.5° | 299.8 | 325.1 | 367.7 | 437.8 | 490.0 |
| 30°   | 261.0 | 286.4 | 332.6 | 407.9 | 465.3 |
| 32.5° | 221.5 | 247.6 | 297.6 | 376.6 | 440.0 |
| 35°   | 182.7 | 209.6 | 263.2 | 346.8 | 415.4 |
| 37.5° | 143.2 | 171.5 | 228.9 | 317.7 | 390.8 |
| 40°   | 105.9 | 134.2 | 196.1 | 288.6 | 365.4 |
| 42.5° | 70.8  | 99.2  | 162.6 | 260.3 | 341.6 |
| 45°   | 38.8  | 64.9  | 132.0 | 234.2 | 317.7 |
| 47.5° | 20.9  | 35.8  | 102.2 | 208.8 | 290.8 |
| 50°   | 15.7  | 19.4  | 75.3  | 182.0 | 262.5 |
| 52.5° | 13.4  | 14.9  | 52.2  | 153.6 | 234.2 |
| 55°   | 11.2  | 11.9  | 35.0  | 129.0 | 205.1 |
| 57.5° | 8.9   | 9.7   | 26.1  | 104.4 | 173.8 |
| 60°   | 6.7   | 8.2   | 23.1  | 80.5  | 142.4 |
| 62.5° | 5.2   | 6.7   | 21.6  | 58.9  | 112.6 |
| 65°   | 3.7   | 5.2   | 19.4  | 40.3  | 82.8  |
| 67.5° | 3.7   | 6.0   | 16.4  | 26.1  | 55.9  |
| 70°   | 3.0   | 8.2   | 14.2  | 17.2  | 31.3  |
| 72.5° | 3.0   | 8.9   | 11.9  | 11.9  | 11.9  |
| 75°   | 3.0   | 9.7   | 10.4  | 10.4  | 10.4  |
| 77.5° | 3.0   | 8.9   | 9.7   | 8.9   | 8.9   |
| 80°   | 3.0   | 8.2   | 8.2   | 8.2   | 8.2   |
| 82.5° | 3.0   | 7.5   | 8.2   | 8.2   | 6.7   |
| 85°   | 3.0   | 6.7   | 8.2   | 8.2   | 6.0   |
| 87.5° | 2.2   | 6.7   | 7.5   | 7.5   | 4.5   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)