

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: P1060516

Luminaire Tested: S124RDR-S575D935-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060516  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-39)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S575D935-X4F0-XX-UDD-BVL-B  
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

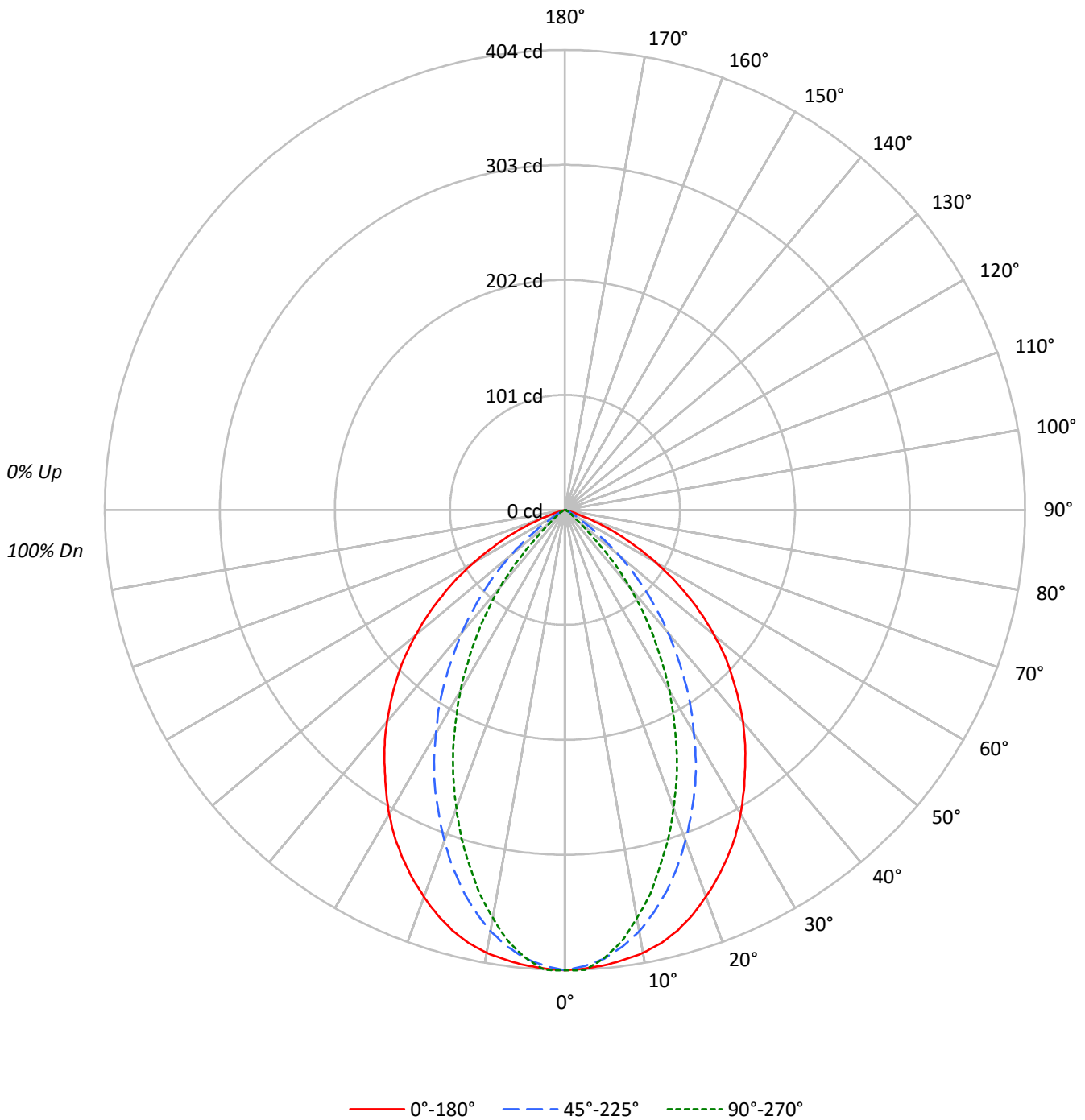
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 528.2 lumens  
Efficiency: N/A  
Efficacy: 26.9 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98  
Luminous Opening: Rectangular (W 0.31' 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

TEST NUMBER: P1060516

CATALOG NUMBER: S124RDR-S575D935-X4F0-XX-UDD-BVL-B

### Luminous Intensity Polar Plot



TEST NUMBER: P1060516

CATALOG NUMBER: S124RDR-S575D935-X4F0-XX-UDD-BVL-B

**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   | 112 | 109 | 106 | 103 | 110 | 107 | 104 | 102 | 103 | 101 | 99  | 99  | 97  | 96  | 96  | 94  | 93  | 91  |
| 2   | 105 | 99  | 95  | 90  | 103 | 98  | 93  | 89  | 94  | 91  | 87  | 91  | 88  | 86  | 88  | 86  | 84  | 82  |
| 3   | 98  | 91  | 85  | 80  | 96  | 89  | 84  | 79  | 86  | 82  | 78  | 84  | 80  | 77  | 82  | 78  | 75  | 74  |
| 4   | 92  | 83  | 76  | 71  | 90  | 82  | 76  | 71  | 79  | 74  | 70  | 77  | 73  | 69  | 75  | 71  | 68  | 66  |
| 5   | 86  | 76  | 69  | 64  | 84  | 75  | 69  | 64  | 73  | 67  | 63  | 71  | 66  | 62  | 70  | 65  | 62  | 60  |
| 6   | 81  | 70  | 63  | 58  | 79  | 69  | 63  | 58  | 68  | 62  | 57  | 66  | 61  | 57  | 65  | 60  | 56  | 55  |
| 7   | 76  | 65  | 58  | 53  | 74  | 64  | 57  | 53  | 63  | 57  | 52  | 61  | 56  | 52  | 60  | 55  | 52  | 50  |
| 8   | 71  | 60  | 53  | 48  | 70  | 60  | 53  | 48  | 58  | 52  | 48  | 57  | 52  | 48  | 56  | 51  | 47  | 46  |
| 9   | 67  | 56  | 49  | 44  | 66  | 56  | 49  | 44  | 54  | 48  | 44  | 54  | 48  | 44  | 53  | 48  | 44  | 42  |
| 10  | 64  | 52  | 46  | 41  | 63  | 52  | 45  | 41  | 51  | 45  | 41  | 50  | 45  | 41  | 49  | 44  | 41  | 39  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 3483 | 3483 | 3483 |
| 5°  | 3471 | 3420 | 3416 |
| 10° | 3456 | 3287 | 3185 |
| 15° | 3408 | 3085 | 2882 |
| 20° | 3315 | 2833 | 2555 |
| 25° | 3205 | 2566 | 2205 |
| 30° | 3068 | 2249 | 1826 |
| 35° | 2900 | 1930 | 1419 |
| 40° | 2734 | 1584 | 993  |
| 45° | 2534 | 1218 | 491  |
| 50° | 2287 | 823  | 165  |
| 55° | 1974 | 422  | 114  |
| 60° | 1581 | 152  | 81   |
| 65° | 1084 | 84   | 37   |
| 70° | 486  | 45   | 30   |
| 75° | 0    | 20   | 20   |
| 80° | 0    | 0    | 0    |
| 85° | 0    | 0    | 0    |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2534 cd/sqm



TEST NUMBER: P1060516

CATALOG NUMBER: S124RDR-S575D935-X4F0-XX-UDD-BVL-B

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 37.4   | 7.1       |
| 10°-20°   | 97.9   | 18.5      |
| 20°-30°   | 126.8  | 24.0      |
| 30°-40°   | 120.4  | 22.8      |
| 40°-50°   | 85.3   | 16.1      |
| 50°-60°   | 43.8   | 8.3       |
| 60°-70°   | 15.3   | 2.9       |
| 70°-80°   | 1.3    | 0.3       |
| 80°-90°   | 0.0    | 0.0       |
| 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°    | 262.0  | 49.6      |
| 0°-40°    | 382.5  | 72.4      |
| 0°-60°    | 511.6  | 96.8      |
| 0°-90°    | 528.2  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 528.2  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 404 | 404   | 404 | 404   | 404 |      |
| 5°  | 402 | 402   | 396 | 396   | 395 | 38   |
| 15° | 382 | 371   | 346 | 330   | 323 | 107  |
| 25° | 337 | 311   | 270 | 241   | 232 | 155  |
| 35° | 276 | 236   | 184 | 148   | 135 | 173  |
| 45° | 208 | 160   | 100 | 57    | 40  | 160  |
| 55° | 132 | 86    | 28  | 8     | 8   | 118  |
| 65° | 53  | 26    | 4   | 2     | 2   | 53   |
| 75° | 0   | 1     | 1   | 1     | 1   | 4    |
| 85° | 0   | 0     | 0   | 0     | 0   | 0    |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



TEST NUMBER: P1060516

CATALOG NUMBER: S124RDR-S575D935-X4F0-XX-UDD-BVL-B

**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 404.5 | 404.5 | 404.5 | 404.5 | 404.5 |
| 2.5°  | 403.3 | 404.5 | 401.0 | 403.9 | 404.5 |
| 5°    | 401.6 | 402.2 | 395.7 | 395.7 | 395.2 |
| 7.5°  | 398.7 | 397.5 | 387.0 | 382.9 | 382.3 |
| 10°   | 395.2 | 391.1 | 375.9 | 367.1 | 364.2 |
| 12.5° | 389.9 | 382.3 | 361.8 | 349.0 | 345.5 |
| 15°   | 382.3 | 370.6 | 346.1 | 329.7 | 323.3 |
| 17.5° | 372.9 | 357.7 | 328.5 | 308.6 | 302.2 |
| 20°   | 361.8 | 342.5 | 309.2 | 287.0 | 278.8 |
| 22.5° | 350.1 | 327.9 | 289.4 | 264.2 | 256.0 |
| 25°   | 337.3 | 311.0 | 270.1 | 241.4 | 232.1 |
| 27.5° | 323.8 | 292.9 | 249.0 | 219.2 | 206.9 |
| 30°   | 308.6 | 274.7 | 226.2 | 195.2 | 183.6 |
| 32.5° | 292.3 | 254.9 | 205.8 | 172.4 | 158.4 |
| 35°   | 275.9 | 235.6 | 183.6 | 147.9 | 135.0 |
| 37.5° | 260.1 | 217.5 | 161.3 | 123.9 | 111.7 |
| 40°   | 243.2 | 197.6 | 140.9 | 102.3 | 88.3  |
| 42.5° | 225.6 | 178.3 | 119.8 | 80.1  | 64.9  |
| 45°   | 208.1 | 160.2 | 100.0 | 57.3  | 40.3  |
| 47.5° | 190.6 | 140.9 | 80.7  | 36.2  | 21.6  |
| 50°   | 170.7 | 122.2 | 61.4  | 19.3  | 12.3  |
| 52.5° | 152.0 | 104.6 | 43.8  | 11.1  | 9.4   |
| 55°   | 131.5 | 86.5  | 28.1  | 8.2   | 7.6   |
| 57.5° | 112.2 | 69.0  | 15.8  | 6.4   | 5.8   |
| 60°   | 91.8  | 53.2  | 8.8   | 5.3   | 4.7   |
| 62.5° | 71.3  | 38.6  | 5.8   | 3.5   | 2.9   |
| 65°   | 53.2  | 25.7  | 4.1   | 2.3   | 1.8   |
| 67.5° | 35.1  | 14.6  | 2.9   | 1.2   | 1.2   |
| 70°   | 19.3  | 7.0   | 1.8   | 1.2   | 1.2   |
| 72.5° | 7.0   | 2.3   | 1.2   | 0.6   | 0.6   |
| 75°   | 0.0   | 0.6   | 0.6   | 0.6   | 0.6   |
| 77.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.6   |
| 80°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 82.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 85°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)