

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: P1060604

Luminaire Tested: S124RDR-S795D935-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060604
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-76)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S795D935-X4F0-XX-UDD-WVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

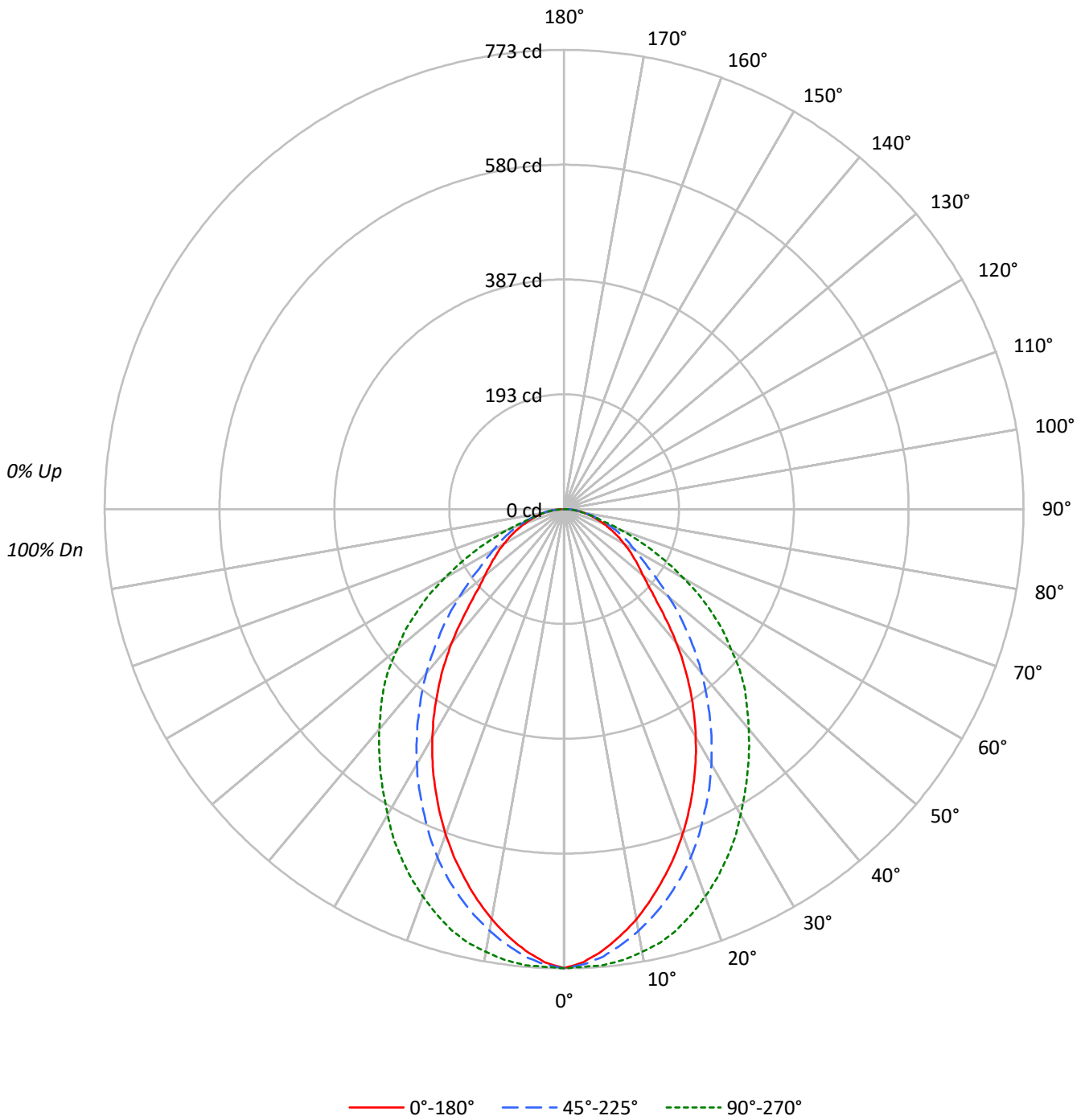
Lumens per Lamp: N/A
Luminaire Lumens: 1406.7 lumens
Efficiency: N/A
Efficacy: 54.5 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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





TEST NUMBER: P1060604

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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 | 110 | 106 | 102 | 99 | 108 | 104 | 100 | 97 | 100 | 97 | 94 | 96 | 93 | 91 | 92 | 90 | 89 | 87 | | | | |
| 2 | 102 | 94 | 88 | 83 | 99 | 92 | 87 | 82 | 89 | 84 | 80 | 86 | 82 | 79 | 83 | 80 | 77 | 75 | | | | |
| 3 | 94 | 84 | 77 | 71 | 91 | 83 | 76 | 71 | 80 | 74 | 69 | 77 | 72 | 68 | 75 | 71 | 67 | 65 | | | | |
| 4 | 87 | 76 | 68 | 62 | 84 | 74 | 67 | 61 | 72 | 66 | 61 | 70 | 64 | 60 | 68 | 63 | 59 | 57 | | | | |
| 5 | 80 | 69 | 60 | 54 | 78 | 68 | 60 | 54 | 65 | 59 | 54 | 64 | 58 | 53 | 62 | 57 | 52 | 50 | | | | |
| 6 | 75 | 62 | 54 | 48 | 73 | 62 | 54 | 48 | 60 | 53 | 48 | 58 | 52 | 47 | 57 | 51 | 47 | 45 | | | | |
| 7 | 70 | 57 | 49 | 43 | 68 | 56 | 49 | 43 | 55 | 48 | 43 | 54 | 47 | 43 | 52 | 47 | 42 | 41 | | | | |
| 8 | 65 | 53 | 45 | 39 | 64 | 52 | 44 | 39 | 51 | 44 | 39 | 50 | 43 | 39 | 48 | 43 | 39 | 37 | | | | |
| 9 | 61 | 49 | 41 | 36 | 60 | 48 | 41 | 36 | 47 | 40 | 36 | 46 | 40 | 35 | 45 | 39 | 35 | 34 | | | | |
| 10 | 58 | 45 | 38 | 33 | 56 | 45 | 38 | 33 | 44 | 37 | 33 | 43 | 37 | 33 | 42 | 36 | 32 | 31 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 6654 | 6654 | 6654 |
| 5° | 6448 | 6532 | 6658 |
| 10° | 6126 | 6303 | 6615 |
| 15° | 5747 | 6029 | 6535 |
| 20° | 5336 | 5715 | 6361 |
| 25° | 4887 | 5325 | 6156 |
| 30° | 4405 | 4929 | 5903 |
| 35° | 3882 | 4495 | 5662 |
| 40° | 3305 | 4051 | 5435 |
| 45° | 2683 | 3580 | 5238 |
| 50° | 2322 | 3081 | 4904 |
| 55° | 2153 | 2614 | 4547 |
| 60° | 2008 | 2358 | 3989 |
| 65° | 1881 | 2211 | 3317 |
| 70° | 1755 | 2039 | 2508 |
| 75° | 1670 | 1886 | 1807 |
| 80° | 1567 | 1726 | 1527 |
| 85° | 1443 | 1601 | 1196 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5238 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 71.3 | 5.1 |
| 10°-20° | 191.7 | 13.6 |
| 20°-30° | 261.8 | 18.6 |
| 30°-40° | 274.3 | 19.5 |
| 40°-50° | 237.4 | 16.9 |
| 50°-60° | 178.4 | 12.7 |
| 60°-70° | 115.0 | 8.2 |
| 70°-80° | 59.0 | 4.2 |
| 80°-90° | 17.6 | 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° | 524.9 | 37.3 |
| 0°-40° | 799.2 | 56.8 |
| 0°-60° | 1215.0 | 86.4 |
| 0°-90° | 1406.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1406.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 773 | 773 | 773 | 773 | 773 | |
| 5° | 746 | 757 | 756 | 761 | 770 | 70 |
| 15° | 645 | 661 | 676 | 707 | 733 | 181 |
| 25° | 514 | 534 | 560 | 604 | 648 | 236 |
| 35° | 369 | 390 | 428 | 484 | 539 | 230 |
| 45° | 220 | 243 | 294 | 366 | 430 | 174 |
| 55° | 143 | 148 | 174 | 249 | 303 | 129 |
| 65° | 92 | 94 | 108 | 131 | 163 | 92 |
| 75° | 50 | 56 | 57 | 56 | 54 | 53 |
| 85° | 15 | 17 | 16 | 15 | 12 | 17 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1060604

CATALOG NUMBER: S124RDR-S795D935-X4F0-XX-UDD-WVL-S

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 772.7 | 772.7 | 772.7 | 772.7 | 772.7 |
| 2.5° | 762.9 | 772.7 | 767.0 | 768.6 | 771.0 |
| 5° | 745.9 | 757.3 | 755.7 | 761.3 | 770.2 |
| 7.5° | 724.9 | 737.0 | 739.5 | 752.4 | 765.4 |
| 10° | 700.6 | 714.4 | 720.8 | 740.3 | 756.5 |
| 12.5° | 673.9 | 688.4 | 699.8 | 724.1 | 747.6 |
| 15° | 644.7 | 660.9 | 676.3 | 707.1 | 733.0 |
| 17.5° | 614.7 | 630.9 | 651.2 | 685.2 | 714.4 |
| 20° | 582.3 | 600.2 | 623.6 | 659.3 | 694.1 |
| 22.5° | 549.1 | 567.8 | 592.9 | 631.7 | 672.2 |
| 25° | 514.3 | 533.7 | 560.5 | 604.2 | 647.9 |
| 27.5° | 479.5 | 498.9 | 528.9 | 575.0 | 622.8 |
| 30° | 443.0 | 463.3 | 495.7 | 545.9 | 593.7 |
| 32.5° | 406.6 | 428.4 | 461.7 | 515.1 | 566.1 |
| 35° | 369.3 | 390.4 | 427.6 | 484.3 | 538.6 |
| 37.5° | 332.1 | 353.9 | 393.6 | 454.4 | 511.1 |
| 40° | 294.0 | 316.7 | 360.4 | 424.4 | 483.5 |
| 42.5° | 255.9 | 280.2 | 326.4 | 393.6 | 456.0 |
| 45° | 220.3 | 243.0 | 294.0 | 366.1 | 430.1 |
| 47.5° | 193.6 | 209.0 | 261.6 | 339.4 | 400.9 |
| 50° | 173.3 | 181.4 | 230.0 | 310.2 | 366.1 |
| 52.5° | 157.9 | 163.6 | 200.9 | 278.6 | 337.7 |
| 55° | 143.4 | 148.2 | 174.1 | 248.6 | 302.9 |
| 57.5° | 130.4 | 132.8 | 153.9 | 219.5 | 269.7 |
| 60° | 116.6 | 119.1 | 136.9 | 187.9 | 231.6 |
| 62.5° | 104.5 | 106.1 | 123.1 | 157.9 | 196.8 |
| 65° | 92.3 | 94.0 | 108.5 | 131.2 | 162.8 |
| 67.5° | 81.0 | 83.4 | 94.8 | 106.9 | 129.6 |
| 70° | 69.7 | 74.5 | 81.0 | 86.7 | 99.6 |
| 72.5° | 59.9 | 64.8 | 68.0 | 69.7 | 70.5 |
| 75° | 50.2 | 55.9 | 56.7 | 55.9 | 54.3 |
| 77.5° | 40.5 | 45.4 | 45.4 | 43.7 | 42.1 |
| 80° | 31.6 | 35.6 | 34.8 | 33.2 | 30.8 |
| 82.5° | 23.5 | 25.9 | 25.1 | 23.5 | 21.1 |
| 85° | 14.6 | 17.0 | 16.2 | 15.4 | 12.1 |
| 87.5° | 7.3 | 9.7 | 8.9 | 8.1 | 4.9 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)