

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: P1058024

Luminaire Tested: S122RDR-S485D950-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058024
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S485D950-X4F0-XX-UDD-BVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

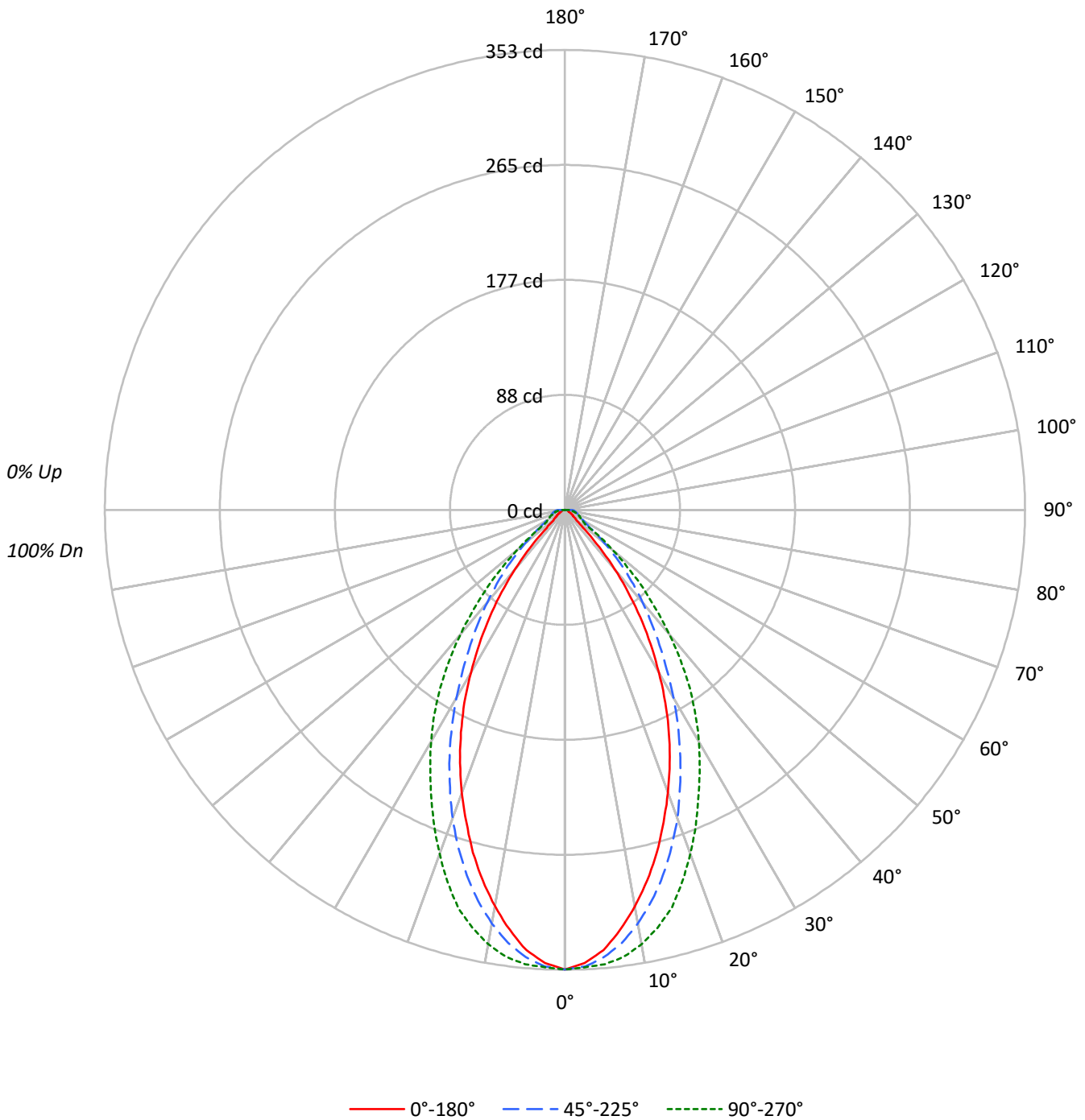
Lumens per Lamp: N/A
Luminaire Lumens: 380.3 lumens
Efficiency: N/A
Efficacy: 19.4 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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





TEST NUMBER: P1058024

CATALOG NUMBER: S122RDR-S485D950-X4F0-XX-UDD-BVL-S

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|---|--|--|--|----|--|--|--|--|--|--|--|--|----|---|
| RF | 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 | 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 | 97 | 98 | 96 | 95 | 95 | 93 | 92 | 90 | | | | | | | | | | | | | | | | | | | | |
| 2 | 105 | 99 | 94 | 90 | 102 | 97 | 92 | 89 | 94 | 90 | 87 | 91 | 87 | 85 | 88 | 85 | 83 | 81 | | | | | | | | | | | | | | | | | | | | |
| 3 | 98 | 91 | 85 | 80 | 96 | 89 | 84 | 79 | 86 | 82 | 78 | 84 | 80 | 77 | 82 | 78 | 75 | 74 | | | | | | | | | | | | | | | | | | | | |
| 4 | 92 | 83 | 77 | 72 | 90 | 82 | 76 | 71 | 80 | 75 | 70 | 78 | 73 | 70 | 76 | 72 | 69 | 67 | | | | | | | | | | | | | | | | | | | | |
| 5 | 87 | 77 | 70 | 65 | 85 | 76 | 70 | 65 | 74 | 69 | 64 | 72 | 68 | 64 | 71 | 67 | 63 | 61 | | | | | | | | | | | | | | | | | | | | |
| 6 | 82 | 72 | 65 | 60 | 80 | 71 | 64 | 59 | 69 | 63 | 59 | 68 | 63 | 59 | 66 | 62 | 58 | 57 | | | | | | | | | | | | | | | | | | | | |
| 7 | 77 | 67 | 60 | 55 | 76 | 66 | 59 | 55 | 65 | 59 | 54 | 63 | 58 | 54 | 62 | 57 | 54 | 52 | | | | | | | | | | | | | | | | | | | | |
| 8 | 73 | 62 | 55 | 51 | 72 | 62 | 55 | 51 | 61 | 55 | 50 | 59 | 54 | 50 | 58 | 54 | 50 | 48 | | | | | | | | | | | | | | | | | | | | |
| 9 | 69 | 58 | 52 | 47 | 68 | 58 | 51 | 47 | 57 | 51 | 47 | 56 | 51 | 47 | 55 | 50 | 47 | 45 | | | | | | | | | | | | | | | | | | | | |
| 10 | 66 | 55 | 48 | 44 | 65 | 54 | 48 | 44 | 54 | 48 | 44 | 53 | 47 | 44 | 52 | 47 | 44 | 42 | | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 6510 | 6510 | 6510 |
| 5° | 6285 | 6385 | 6485 |
| 10° | 5788 | 6041 | 6344 |
| 15° | 5204 | 5551 | 6042 |
| 20° | 4538 | 4950 | 5520 |
| 25° | 3840 | 4265 | 4939 |
| 30° | 3068 | 3543 | 4379 |
| 35° | 2268 | 2847 | 3760 |
| 40° | 1433 | 2231 | 2997 |
| 45° | 564 | 1675 | 2205 |
| 50° | 290 | 1125 | 1358 |
| 55° | 238 | 740 | 608 |
| 60° | 173 | 598 | 550 |
| 65° | 148 | 559 | 559 |
| 70° | 146 | 583 | 545 |
| 75° | 192 | 677 | 577 |
| 80° | 287 | 861 | 648 |
| 85° | 423 | 1440 | 868 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 2877 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 32.3 | 8.5 |
| 10°-20° | 81.5 | 21.4 |
| 20°-30° | 96.9 | 25.5 |
| 30°-40° | 80.6 | 21.2 |
| 40°-50° | 45.0 | 11.8 |
| 50°-60° | 18.2 | 4.8 |
| 60°-70° | 11.6 | 3.1 |
| 70°-80° | 8.7 | 2.3 |
| 80°-90° | 5.6 | 1.5 |
| 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° | 210.6 | 55.4 |
| 0°-40° | 291.2 | 76.6 |
| 0°-60° | 354.4 | 93.2 |
| 0°-90° | 380.3 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 380.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 353 | 353 | 353 | 353 | 353 | |
| 5° | 339 | 345 | 345 | 347 | 350 | 31 |
| 15° | 272 | 280 | 291 | 306 | 316 | 76 |
| 25° | 189 | 196 | 210 | 226 | 243 | 86 |
| 35° | 101 | 110 | 126 | 147 | 167 | 62 |
| 45° | 22 | 36 | 64 | 75 | 84 | 20 |
| 55° | 7 | 16 | 23 | 22 | 19 | 6 |
| 65° | 3 | 14 | 13 | 12 | 13 | 3 |
| 75° | 3 | 10 | 10 | 9 | 8 | 3 |
| 85° | 2 | 6 | 7 | 6 | 4 | 2 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1058024

CATALOG NUMBER: S122RDR-S485D950-X4F0-XX-UDD-BVL-S

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 352.8 | 352.8 | 352.8 | 352.8 | 352.8 |
| 2.5° | 348.1 | 353.5 | 350.8 | 350.8 | 351.4 |
| 5° | 339.3 | 345.4 | 344.7 | 347.4 | 350.1 |
| 7.5° | 325.1 | 331.8 | 335.2 | 341.3 | 346.0 |
| 10° | 308.9 | 316.3 | 322.4 | 331.8 | 338.6 |
| 12.5° | 291.3 | 298.7 | 307.5 | 319.7 | 328.5 |
| 15° | 272.4 | 280.5 | 290.6 | 305.5 | 316.3 |
| 17.5° | 251.4 | 260.2 | 271.7 | 287.9 | 299.4 |
| 20° | 231.1 | 239.9 | 252.1 | 268.3 | 281.1 |
| 22.5° | 210.2 | 217.6 | 230.5 | 246.7 | 262.2 |
| 25° | 188.6 | 196.0 | 209.5 | 225.7 | 242.6 |
| 27.5° | 166.9 | 174.4 | 187.9 | 204.8 | 223.7 |
| 30° | 144.0 | 152.1 | 166.3 | 185.2 | 205.5 |
| 32.5° | 122.3 | 130.4 | 145.3 | 166.3 | 186.5 |
| 35° | 100.7 | 110.2 | 126.4 | 147.3 | 166.9 |
| 37.5° | 79.7 | 90.6 | 108.8 | 128.4 | 146.0 |
| 40° | 59.5 | 71.0 | 92.6 | 109.5 | 124.4 |
| 42.5° | 39.2 | 52.7 | 77.7 | 91.9 | 103.4 |
| 45° | 21.6 | 36.5 | 64.2 | 75.0 | 84.5 |
| 47.5° | 12.2 | 23.7 | 50.7 | 59.5 | 64.9 |
| 50° | 10.1 | 17.6 | 39.2 | 45.3 | 47.3 |
| 52.5° | 8.1 | 16.2 | 29.7 | 33.1 | 31.8 |
| 55° | 7.4 | 15.5 | 23.0 | 22.3 | 18.9 |
| 57.5° | 6.1 | 15.5 | 18.2 | 16.2 | 16.2 |
| 60° | 4.7 | 14.9 | 16.2 | 14.2 | 14.9 |
| 62.5° | 4.1 | 14.2 | 14.9 | 13.5 | 13.5 |
| 65° | 3.4 | 13.5 | 12.8 | 12.2 | 12.8 |
| 67.5° | 2.7 | 12.2 | 12.2 | 11.5 | 11.5 |
| 70° | 2.7 | 11.5 | 10.8 | 10.1 | 10.1 |
| 72.5° | 2.7 | 10.1 | 10.1 | 9.5 | 9.5 |
| 75° | 2.7 | 9.5 | 9.5 | 8.8 | 8.1 |
| 77.5° | 2.7 | 8.1 | 8.8 | 8.1 | 7.4 |
| 80° | 2.7 | 7.4 | 8.1 | 7.4 | 6.1 |
| 82.5° | 2.7 | 6.8 | 7.4 | 6.8 | 5.4 |
| 85° | 2.0 | 6.1 | 6.8 | 6.1 | 4.1 |
| 87.5° | 2.0 | 6.1 | 6.8 | 5.4 | 3.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)