

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: P1059206

Luminaire Tested: S123RDR-S340D927-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059206
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-68)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S340D927-X4F0-XX-UDD-SVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

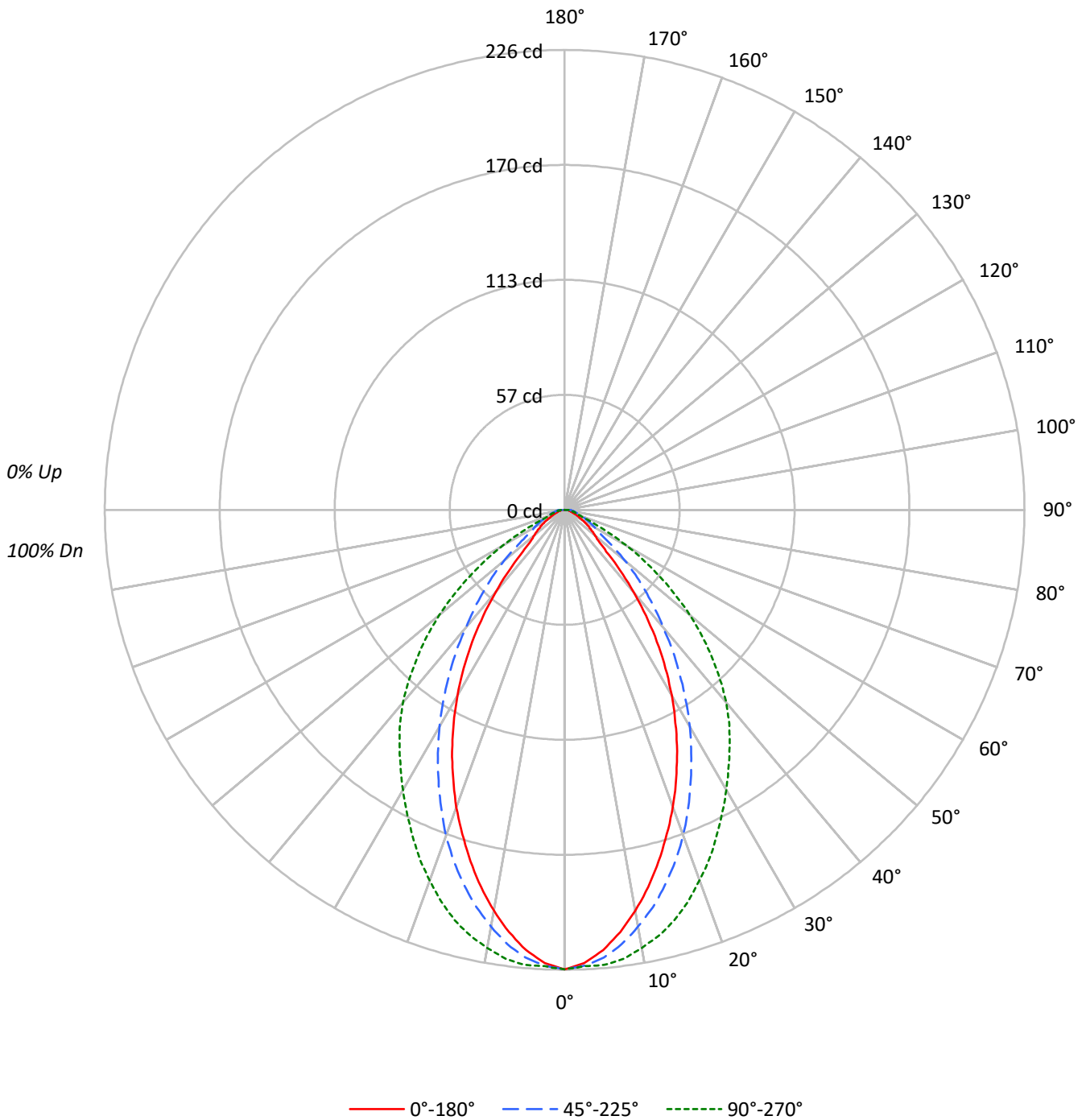
Lumens per Lamp: N/A
Luminaire Lumens: 302.4 lumens
Efficiency: N/A
Efficacy: 24.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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 | 111 | 108 | 105 | 102 | 109 | 106 | 103 | 100 | 101 | 99 | 97 | 98 | 96 | 94 | 94 | 93 | 91 | 89 | | | | 89 |
| 2 | 104 | 98 | 92 | 88 | 102 | 96 | 91 | 87 | 92 | 88 | 85 | 89 | 86 | 83 | 86 | 84 | 81 | 79 | | | | 79 |
| 3 | 97 | 89 | 82 | 77 | 95 | 87 | 81 | 77 | 84 | 79 | 75 | 82 | 78 | 74 | 79 | 76 | 73 | 71 | | | | 71 |
| 4 | 91 | 81 | 74 | 69 | 88 | 80 | 73 | 68 | 77 | 72 | 67 | 75 | 70 | 66 | 73 | 69 | 66 | 64 | | | | 64 |
| 5 | 85 | 74 | 67 | 61 | 83 | 73 | 66 | 61 | 71 | 65 | 61 | 69 | 64 | 60 | 68 | 63 | 59 | 58 | | | | 58 |
| 6 | 79 | 68 | 61 | 56 | 78 | 67 | 60 | 55 | 66 | 60 | 55 | 64 | 59 | 54 | 63 | 58 | 54 | 52 | | | | 52 |
| 7 | 74 | 63 | 56 | 51 | 73 | 62 | 55 | 50 | 61 | 55 | 50 | 60 | 54 | 50 | 58 | 53 | 49 | 48 | | | | 48 |
| 8 | 70 | 58 | 51 | 46 | 69 | 58 | 51 | 46 | 57 | 50 | 46 | 56 | 50 | 46 | 54 | 49 | 45 | 44 | | | | 44 |
| 9 | 66 | 54 | 47 | 43 | 65 | 54 | 47 | 43 | 53 | 47 | 42 | 52 | 46 | 42 | 51 | 46 | 42 | 40 | | | | 40 |
| 10 | 62 | 51 | 44 | 39 | 61 | 50 | 44 | 39 | 50 | 43 | 39 | 49 | 43 | 39 | 48 | 43 | 39 | 37 | | | | 37 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2651 | 2651 | 2651 |
| 5° | 2560 | 2604 | 2646 |
| 10° | 2386 | 2480 | 2606 |
| 15° | 2172 | 2321 | 2537 |
| 20° | 1944 | 2129 | 2422 |
| 25° | 1696 | 1901 | 2289 |
| 30° | 1426 | 1668 | 2155 |
| 35° | 1134 | 1413 | 2027 |
| 40° | 808 | 1153 | 1895 |
| 45° | 482 | 925 | 1697 |
| 50° | 356 | 705 | 1469 |
| 55° | 297 | 479 | 1167 |
| 60° | 240 | 395 | 820 |
| 65° | 192 | 339 | 439 |
| 70° | 158 | 295 | 271 |
| 75° | 150 | 286 | 254 |
| 80° | 156 | 311 | 243 |
| 85° | 216 | 445 | 310 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1697 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 20.7 | 6.9 |
| 10°-20° | 53.9 | 17.8 |
| 20°-30° | 68.7 | 22.7 |
| 30°-40° | 64.7 | 21.4 |
| 40°-50° | 46.5 | 15.4 |
| 50°-60° | 26.6 | 8.8 |
| 60°-70° | 12.2 | 4.0 |
| 70°-80° | 6.1 | 2.0 |
| 80°-90° | 3.0 | 1.0 |
| 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° | 143.4 | 47.4 |
| 0°-40° | 208.0 | 68.8 |
| 0°-60° | 281.1 | 93.0 |
| 0°-90° | 302.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 302.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 226 | 226 | 226 | 226 | 226 | |
| 5° | 217 | 222 | 221 | 222 | 224 | 20 |
| 15° | 179 | 185 | 191 | 201 | 209 | 50 |
| 25° | 131 | 137 | 147 | 162 | 177 | 60 |
| 35° | 79 | 85 | 99 | 121 | 141 | 49 |
| 45° | 29 | 35 | 56 | 82 | 102 | 24 |
| 55° | 14 | 15 | 23 | 43 | 57 | 13 |
| 65° | 7 | 10 | 12 | 14 | 16 | 7 |
| 75° | 3 | 7 | 6 | 6 | 6 | 4 |
| 85° | 2 | 3 | 3 | 3 | 2 | 2 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1059206

CATALOG NUMBER: S123RDR-S340D927-X4F0-XX-UDD-SVL-S

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 225.8 | 225.8 | 225.8 | 225.8 | 225.8 |
| 2.5° | 222.9 | 226.1 | 224.2 | 224.2 | 224.5 |
| 5° | 217.2 | 221.5 | 220.9 | 222.5 | 224.5 |
| 7.5° | 209.3 | 214.0 | 215.3 | 219.2 | 222.5 |
| 10° | 200.1 | 205.4 | 208.0 | 214.3 | 218.6 |
| 12.5° | 189.9 | 195.8 | 200.1 | 208.0 | 214.3 |
| 15° | 178.7 | 184.9 | 190.9 | 201.1 | 208.7 |
| 17.5° | 167.1 | 173.4 | 181.0 | 192.9 | 201.8 |
| 20° | 155.6 | 161.9 | 170.4 | 183.0 | 193.8 |
| 22.5° | 143.1 | 149.3 | 158.6 | 172.7 | 185.9 |
| 25° | 130.9 | 136.8 | 146.7 | 162.5 | 176.7 |
| 27.5° | 118.0 | 124.0 | 134.8 | 152.0 | 167.8 |
| 30° | 105.2 | 111.1 | 123.0 | 141.4 | 158.9 |
| 32.5° | 92.3 | 97.9 | 110.8 | 131.2 | 150.0 |
| 35° | 79.1 | 84.7 | 98.6 | 121.0 | 141.4 |
| 37.5° | 65.6 | 71.2 | 87.4 | 111.8 | 132.9 |
| 40° | 52.7 | 59.0 | 75.2 | 102.5 | 123.6 |
| 42.5° | 40.2 | 46.8 | 65.3 | 92.6 | 113.1 |
| 45° | 29.0 | 35.3 | 55.7 | 82.1 | 102.2 |
| 47.5° | 22.1 | 25.4 | 47.1 | 71.5 | 91.6 |
| 50° | 19.5 | 19.8 | 38.6 | 62.0 | 80.4 |
| 52.5° | 16.8 | 17.1 | 30.0 | 52.7 | 68.6 |
| 55° | 14.5 | 14.8 | 23.4 | 43.2 | 57.0 |
| 57.5° | 12.2 | 12.9 | 19.1 | 34.3 | 45.8 |
| 60° | 10.2 | 11.5 | 16.8 | 26.0 | 34.9 |
| 62.5° | 8.2 | 10.5 | 14.5 | 19.1 | 25.1 |
| 65° | 6.9 | 9.6 | 12.2 | 13.5 | 15.8 |
| 67.5° | 5.6 | 8.9 | 10.2 | 9.6 | 9.6 |
| 70° | 4.6 | 7.9 | 8.6 | 7.9 | 7.9 |
| 72.5° | 4.0 | 7.6 | 7.3 | 6.6 | 6.6 |
| 75° | 3.3 | 6.6 | 6.3 | 5.6 | 5.6 |
| 77.5° | 3.0 | 5.6 | 5.3 | 4.9 | 4.6 |
| 80° | 2.3 | 4.6 | 4.6 | 4.3 | 3.6 |
| 82.5° | 2.0 | 4.0 | 4.0 | 3.6 | 3.0 |
| 85° | 1.6 | 3.3 | 3.3 | 3.0 | 2.3 |
| 87.5° | 1.3 | 3.0 | 3.0 | 2.6 | 1.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)