

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: P1060510

Luminaire Tested: S124RDR-S575D930-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060510
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-38)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S575D930-X4F0-XX-UDD-SVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

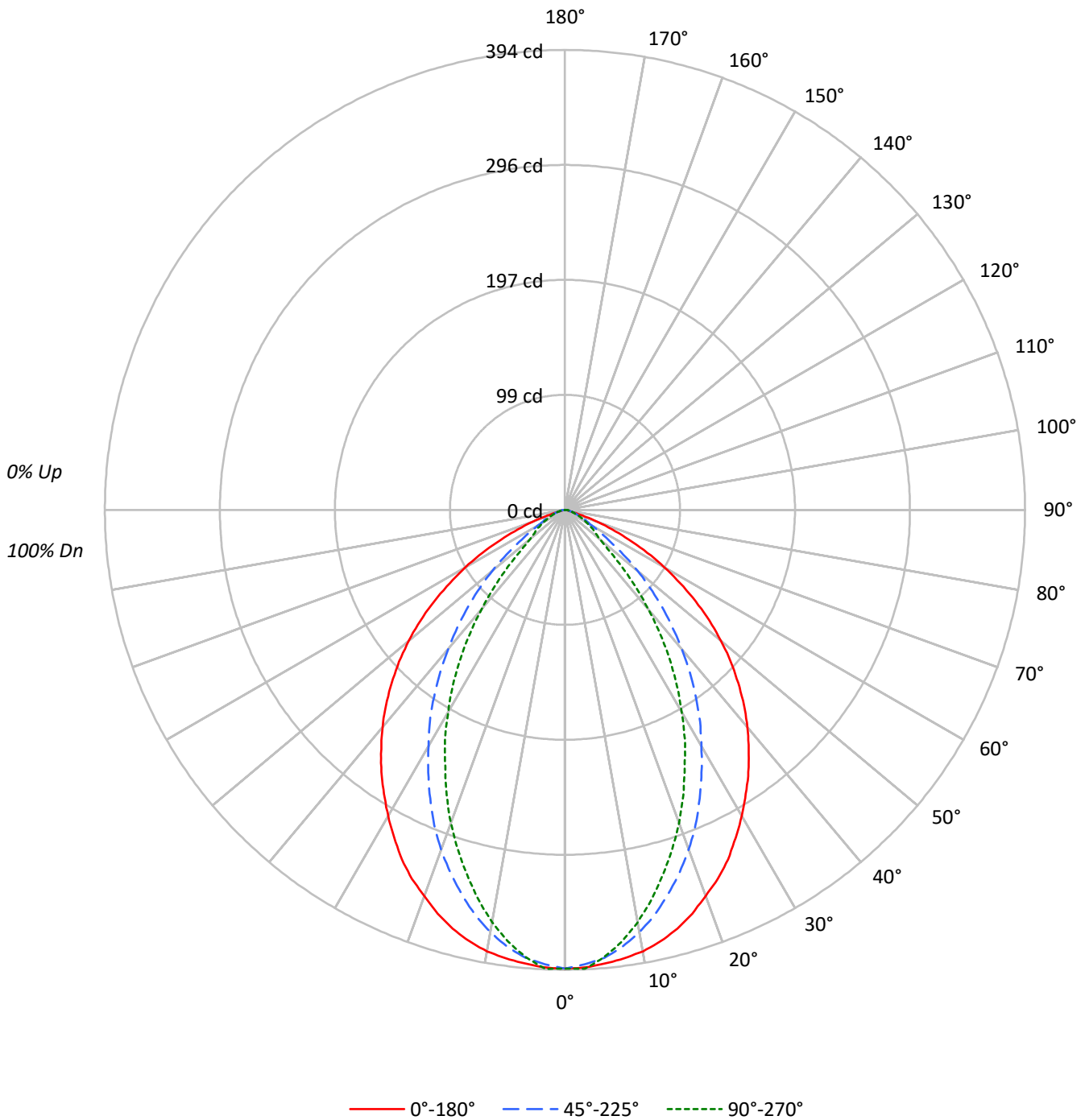
Lumens per Lamp: N/A
Luminaire Lumens: 579.4 lumens
Efficiency: N/A
Efficacy: 29.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

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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 | 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 | 94 | 95 | 93 | 92 | 90 |
| 2 | 104 | 98 | 93 | 88 | 102 | 96 | 91 | 87 | 93 | 89 | 85 | 90 | 86 | 83 | 87 | 84 | 82 | 80 |
| 3 | 97 | 89 | 82 | 77 | 95 | 87 | 81 | 76 | 84 | 79 | 75 | 82 | 78 | 74 | 79 | 76 | 73 | 71 |
| 4 | 90 | 81 | 74 | 68 | 88 | 79 | 73 | 68 | 77 | 71 | 67 | 75 | 70 | 66 | 73 | 69 | 65 | 63 |
| 5 | 84 | 74 | 66 | 61 | 82 | 73 | 66 | 60 | 71 | 65 | 60 | 69 | 63 | 59 | 67 | 62 | 59 | 57 |
| 6 | 79 | 68 | 60 | 55 | 77 | 67 | 60 | 54 | 65 | 59 | 54 | 63 | 58 | 54 | 62 | 57 | 53 | 51 |
| 7 | 74 | 62 | 55 | 50 | 72 | 62 | 54 | 49 | 60 | 54 | 49 | 59 | 53 | 49 | 58 | 52 | 48 | 47 |
| 8 | 69 | 58 | 50 | 45 | 68 | 57 | 50 | 45 | 56 | 49 | 45 | 55 | 49 | 45 | 54 | 48 | 44 | 43 |
| 9 | 65 | 53 | 46 | 41 | 64 | 53 | 46 | 41 | 52 | 46 | 41 | 51 | 45 | 41 | 50 | 45 | 41 | 39 |
| 10 | 62 | 50 | 43 | 38 | 60 | 49 | 43 | 38 | 48 | 42 | 38 | 48 | 42 | 38 | 47 | 42 | 38 | 36 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 3384 | 3384 | 3384 |
| 5° | 3373 | 3331 | 3325 |
| 10° | 3359 | 3213 | 3136 |
| 15° | 3311 | 3040 | 2887 |
| 20° | 3226 | 2841 | 2617 |
| 25° | 3140 | 2593 | 2303 |
| 30° | 3011 | 2323 | 1987 |
| 35° | 2880 | 2054 | 1641 |
| 40° | 2732 | 1748 | 1244 |
| 45° | 2555 | 1428 | 835 |
| 50° | 2336 | 1082 | 518 |
| 55° | 2052 | 715 | 440 |
| 60° | 1696 | 439 | 362 |
| 65° | 1229 | 338 | 293 |
| 70° | 670 | 252 | 224 |
| 75° | 146 | 183 | 203 |
| 80° | 109 | 139 | 164 |
| 85° | 109 | 109 | 168 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2555 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 36.4 | 6.3 |
| 10°-20° | 96.7 | 16.7 |
| 20°-30° | 128.1 | 22.1 |
| 30°-40° | 127.2 | 21.9 |
| 40°-50° | 97.8 | 16.9 |
| 50°-60° | 58.3 | 10.1 |
| 60°-70° | 26.5 | 4.6 |
| 70°-80° | 6.9 | 1.2 |
| 80°-90° | 1.5 | 0.3 |
| 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° | 261.2 | 45.1 |
| 0°-40° | 388.4 | 67.0 |
| 0°-60° | 544.5 | 94.0 |
| 0°-90° | 579.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 579.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 393 | 393 | 393 | 393 | 393 | |
| 5° | 390 | 391 | 385 | 385 | 385 | 37 |
| 15° | 371 | 362 | 341 | 329 | 324 | 104 |
| 25° | 330 | 307 | 273 | 250 | 242 | 152 |
| 35° | 274 | 240 | 195 | 166 | 156 | 171 |
| 45° | 210 | 169 | 117 | 82 | 69 | 162 |
| 55° | 137 | 97 | 48 | 30 | 29 | 122 |
| 65° | 60 | 36 | 17 | 14 | 14 | 61 |
| 75° | 4 | 6 | 6 | 6 | 6 | 9 |
| 85° | 1 | 1 | 1 | 2 | 2 | 1 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1060510

CATALOG NUMBER: S124RDR-S575D930-X4F0-XX-UDD-SVL-B

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 393.0 | 393.0 | 393.0 | 393.0 | 393.0 |
| 2.5° | 392.4 | 393.0 | 389.7 | 392.4 | 393.6 |
| 5° | 390.2 | 390.8 | 385.3 | 385.3 | 384.7 |
| 7.5° | 387.5 | 386.4 | 377.5 | 374.2 | 373.1 |
| 10° | 384.1 | 380.3 | 367.5 | 360.9 | 358.7 |
| 12.5° | 378.6 | 372.5 | 355.4 | 346.0 | 342.1 |
| 15° | 371.4 | 362.0 | 341.0 | 329.3 | 323.8 |
| 17.5° | 362.6 | 350.9 | 326.0 | 311.1 | 305.0 |
| 20° | 352.0 | 336.5 | 310.0 | 291.2 | 285.6 |
| 22.5° | 342.1 | 322.7 | 292.3 | 270.7 | 264.6 |
| 25° | 330.5 | 306.7 | 272.9 | 250.2 | 242.4 |
| 27.5° | 316.6 | 291.2 | 253.5 | 230.3 | 222.5 |
| 30° | 302.8 | 274.5 | 233.6 | 209.2 | 199.8 |
| 32.5° | 288.4 | 257.4 | 215.3 | 187.6 | 178.8 |
| 35° | 274.0 | 239.7 | 195.4 | 165.5 | 156.1 |
| 37.5° | 258.5 | 222.0 | 175.5 | 144.5 | 134.0 |
| 40° | 243.0 | 204.8 | 155.5 | 124.0 | 110.7 |
| 42.5° | 226.9 | 187.1 | 136.2 | 103.0 | 89.7 |
| 45° | 209.8 | 168.8 | 117.3 | 81.9 | 68.6 |
| 47.5° | 192.6 | 151.7 | 98.5 | 61.4 | 49.3 |
| 50° | 174.4 | 133.4 | 80.8 | 44.8 | 38.7 |
| 52.5° | 156.1 | 115.7 | 63.1 | 34.9 | 33.2 |
| 55° | 136.7 | 97.4 | 47.6 | 29.9 | 29.3 |
| 57.5° | 116.8 | 80.8 | 34.3 | 26.0 | 24.9 |
| 60° | 98.5 | 65.3 | 25.5 | 22.1 | 21.0 |
| 62.5° | 79.7 | 49.3 | 21.0 | 18.3 | 17.2 |
| 65° | 60.3 | 36.0 | 16.6 | 14.4 | 14.4 |
| 67.5° | 43.7 | 24.4 | 13.3 | 11.6 | 11.1 |
| 70° | 26.6 | 14.9 | 10.0 | 9.4 | 8.9 |
| 72.5° | 13.3 | 8.9 | 7.7 | 7.2 | 7.2 |
| 75° | 4.4 | 5.5 | 5.5 | 6.1 | 6.1 |
| 77.5° | 3.3 | 3.9 | 3.9 | 4.4 | 4.4 |
| 80° | 2.2 | 2.8 | 2.8 | 3.3 | 3.3 |
| 82.5° | 1.7 | 1.7 | 2.2 | 2.2 | 2.8 |
| 85° | 1.1 | 1.1 | 1.1 | 1.7 | 1.7 |
| 87.5° | 0.6 | 0.6 | 0.6 | 1.1 | 1.1 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)