

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1060906

Luminaire Tested: S124RDRP-H575D927-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060906
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: S124RDRP-H575D927-X4F0-XX-UDD-SVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

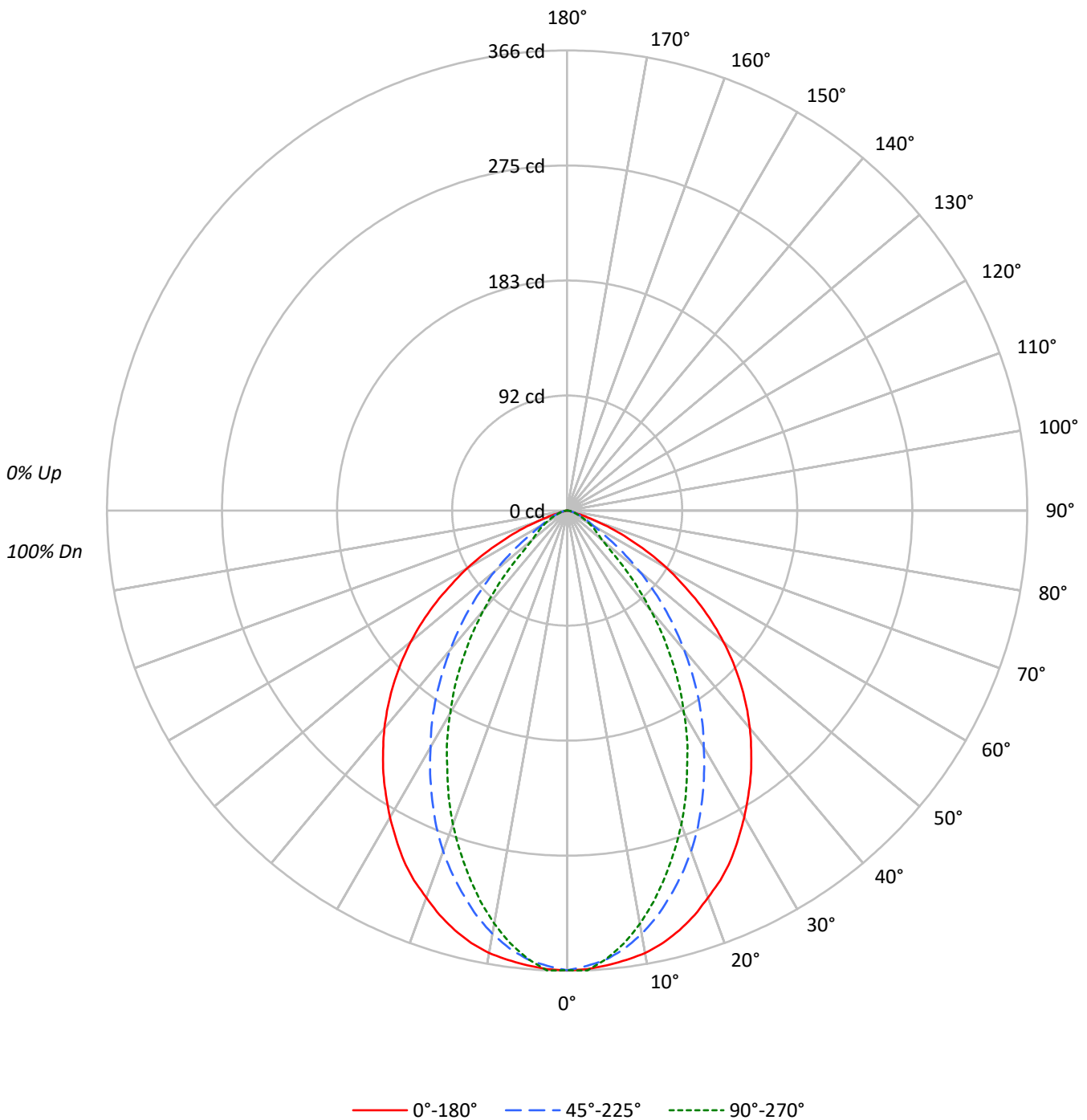
Lumens per Lamp: N/A
Luminaire Lumens: 539.1 lumens
Efficiency: N/A
Efficacy: 31.0 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.4
Input Voltage (V): 120
Input Current (A_{in}): 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: P1060906

CATALOG NUMBER: S124RDRP-H575D927-X4F0-XX-UDD-SVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1060906

CATALOG NUMBER: S124RDRP-H575D927-X4F0-XX-UDD-SVL-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 | 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° | 3148 | 3148 | 3148 |
| 5° | 3139 | 3098 | 3094 |
| 10° | 3125 | 2990 | 2918 |
| 15° | 3080 | 2828 | 2686 |
| 20° | 3001 | 2643 | 2435 |
| 25° | 2921 | 2412 | 2144 |
| 30° | 2801 | 2161 | 1848 |
| 35° | 2680 | 1911 | 1526 |
| 40° | 2542 | 1627 | 1158 |
| 45° | 2377 | 1330 | 778 |
| 50° | 2173 | 1007 | 482 |
| 55° | 1910 | 665 | 410 |
| 60° | 1579 | 408 | 338 |
| 65° | 1143 | 314 | 273 |
| 70° | 622 | 234 | 206 |
| 75° | 136 | 170 | 190 |
| 80° | 104 | 129 | 154 |
| 85° | 99 | 99 | 148 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2377 cd/sqm

TEST NUMBER: P1060906

CATALOG NUMBER: S124RDRP-H575D927-X4F0-XX-UDD-SVL-B

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 33.9 | 6.3 |
| 10°-20° | 90.0 | 16.7 |
| 20°-30° | 119.2 | 22.1 |
| 30°-40° | 118.3 | 21.9 |
| 40°-50° | 91.0 | 16.9 |
| 50°-60° | 54.3 | 10.1 |
| 60°-70° | 24.7 | 4.6 |
| 70°-80° | 6.4 | 1.2 |
| 80°-90° | 1.4 | 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° | 243.0 | 45.1 |
| 0°-40° | 361.3 | 67.0 |
| 0°-60° | 506.6 | 94.0 |
| 0°-90° | 539.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 539.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 366 | 366 | 366 | 366 | 366 | |
| 5° | 363 | 364 | 358 | 358 | 358 | 34 |
| 15° | 346 | 337 | 317 | 306 | 301 | 97 |
| 25° | 307 | 285 | 254 | 233 | 226 | 141 |
| 35° | 255 | 223 | 182 | 154 | 145 | 159 |
| 45° | 195 | 157 | 109 | 76 | 64 | 150 |
| 55° | 127 | 91 | 44 | 28 | 27 | 113 |
| 65° | 56 | 34 | 15 | 13 | 13 | 56 |
| 75° | 4 | 5 | 5 | 6 | 6 | 9 |
| 85° | 1 | 1 | 1 | 2 | 2 | 1 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1060906

CATALOG NUMBER: S124RDRP-H575D927-X4F0-XX-UDD-SVL-B

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 365.6 | 365.6 | 365.6 | 365.6 | 365.6 |
| 2.5° | 365.1 | 365.6 | 362.5 | 365.1 | 366.1 |
| 5° | 363.1 | 363.6 | 358.4 | 358.4 | 357.9 |
| 7.5° | 360.5 | 359.4 | 351.2 | 348.1 | 347.1 |
| 10° | 357.4 | 353.8 | 341.9 | 335.8 | 333.7 |
| 12.5° | 352.2 | 346.6 | 330.6 | 321.9 | 318.3 |
| 15° | 345.5 | 336.8 | 317.2 | 306.4 | 301.3 |
| 17.5° | 337.3 | 326.5 | 303.3 | 289.4 | 283.7 |
| 20° | 327.5 | 313.1 | 288.4 | 270.9 | 265.7 |
| 22.5° | 318.3 | 300.2 | 271.9 | 251.8 | 246.2 |
| 25° | 307.4 | 285.3 | 253.9 | 232.8 | 225.6 |
| 27.5° | 294.6 | 270.9 | 235.9 | 214.2 | 207.0 |
| 30° | 281.7 | 255.4 | 217.3 | 194.7 | 185.9 |
| 32.5° | 268.3 | 239.5 | 200.3 | 174.6 | 166.3 |
| 35° | 254.9 | 223.0 | 181.8 | 154.0 | 145.2 |
| 37.5° | 240.5 | 206.5 | 163.2 | 134.4 | 124.6 |
| 40° | 226.1 | 190.5 | 144.7 | 115.4 | 103.0 |
| 42.5° | 211.1 | 174.1 | 126.7 | 95.8 | 83.4 |
| 45° | 195.2 | 157.1 | 109.2 | 76.2 | 63.9 |
| 47.5° | 179.2 | 141.1 | 91.7 | 57.2 | 45.8 |
| 50° | 162.2 | 124.1 | 75.2 | 41.7 | 36.0 |
| 52.5° | 145.2 | 107.6 | 58.7 | 32.4 | 30.9 |
| 55° | 127.2 | 90.6 | 44.3 | 27.8 | 27.3 |
| 57.5° | 108.7 | 75.2 | 31.9 | 24.2 | 23.2 |
| 60° | 91.7 | 60.8 | 23.7 | 20.6 | 19.6 |
| 62.5° | 74.2 | 45.8 | 19.6 | 17.0 | 16.0 |
| 65° | 56.1 | 33.5 | 15.4 | 13.4 | 13.4 |
| 67.5° | 40.7 | 22.7 | 12.4 | 10.8 | 10.3 |
| 70° | 24.7 | 13.9 | 9.3 | 8.8 | 8.2 |
| 72.5° | 12.4 | 8.2 | 7.2 | 6.7 | 6.7 |
| 75° | 4.1 | 5.1 | 5.1 | 5.7 | 5.7 |
| 77.5° | 3.1 | 3.6 | 3.6 | 4.1 | 4.1 |
| 80° | 2.1 | 2.6 | 2.6 | 3.1 | 3.1 |
| 82.5° | 1.5 | 1.5 | 2.1 | 2.1 | 2.6 |
| 85° | 1.0 | 1.0 | 1.0 | 1.5 | 1.5 |
| 87.5° | 0.5 | 0.5 | 0.5 | 1.0 | 1.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P1060906
 CATALOG NUMBER: S124RDRP-H575D927-X4F0-XX-UDD-SVL-B

CIE UGR TABLE:

| Reflectances: | | | | | | | | | | | |
|-----------------|------|------------------|-------|-------|-------|-------|----------------|------|------|------|------|
| Ceiling | | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 |
| Wall | | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 |
| Reference plane | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Room dimensions | | Viewed crosswise | | | | | Viewed endwise | | | | |
| X=2H | Y=2H | 13.11 | 14.44 | 13.47 | 14.75 | 15.07 | 4.65 | 5.99 | 5.02 | 6.30 | 6.62 |
| | 3H | 13.61 | 14.80 | 13.99 | 15.13 | 15.49 | 5.47 | 6.65 | 5.85 | 6.98 | 7.34 |
| | 4H | 13.58 | 14.68 | 13.98 | 15.03 | 15.41 | 5.76 | 6.85 | 6.16 | 7.20 | 7.59 |
| | 6H | 13.52 | 14.52 | 13.93 | 14.89 | 15.29 | 5.93 | 6.93 | 6.34 | 7.30 | 7.70 |
| | 8H | 13.48 | 14.43 | 13.91 | 14.82 | 15.23 | 5.99 | 6.95 | 6.42 | 7.34 | 7.74 |
| | 12H | 13.44 | 14.35 | 13.87 | 14.73 | 15.16 | 6.04 | 6.95 | 6.47 | 7.33 | 7.76 |
| 4H | 2H | 12.95 | 14.05 | 13.35 | 14.40 | 14.78 | 5.09 | 6.19 | 5.49 | 6.54 | 6.92 |
| | 3H | 13.50 | 14.40 | 13.91 | 14.80 | 15.20 | 6.06 | 6.95 | 6.47 | 7.36 | 7.76 |
| | 4H | 13.47 | 14.27 | 13.90 | 14.69 | 15.13 | 6.43 | 7.22 | 6.86 | 7.64 | 8.08 |
| | 6H | 13.42 | 14.10 | 13.88 | 14.55 | 15.02 | 6.68 | 7.36 | 7.14 | 7.81 | 8.27 |
| | 8H | 13.37 | 14.01 | 13.84 | 14.46 | 14.93 | 6.77 | 7.41 | 7.24 | 7.85 | 8.32 |
| | 12H | 13.33 | 13.90 | 13.82 | 14.38 | 14.85 | 6.84 | 7.40 | 7.33 | 7.89 | 8.36 |
| 8H | 4H | 13.36 | 14.00 | 13.83 | 14.45 | 14.92 | 6.51 | 7.15 | 6.98 | 7.60 | 8.07 |
| | 6H | 13.30 | 13.82 | 13.80 | 14.32 | 14.80 | 6.82 | 7.35 | 7.33 | 7.84 | 8.32 |
| | 8H | 13.25 | 13.72 | 13.77 | 14.23 | 14.73 | 6.96 | 7.43 | 7.48 | 7.94 | 8.43 |
| | 12H | 13.22 | 13.63 | 13.73 | 14.13 | 14.70 | 7.09 | 7.50 | 7.61 | 8.00 | 8.57 |
| 12H | 4H | 13.32 | 13.88 | 13.80 | 14.36 | 14.84 | 6.49 | 7.05 | 6.97 | 7.53 | 8.01 |
| | 6H | 13.24 | 13.71 | 13.76 | 14.23 | 14.72 | 6.80 | 7.27 | 7.33 | 7.79 | 8.28 |
| | 8H | 13.22 | 13.63 | 13.73 | 14.12 | 14.70 | 6.98 | 7.39 | 7.49 | 7.89 | 8.46 |