

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: P1057837

Luminaire Tested: S122RDRP-S1005D930-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057837
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S1005D930-X4F0-XX-UDD-SVL-B
Description: DEFINE 2 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

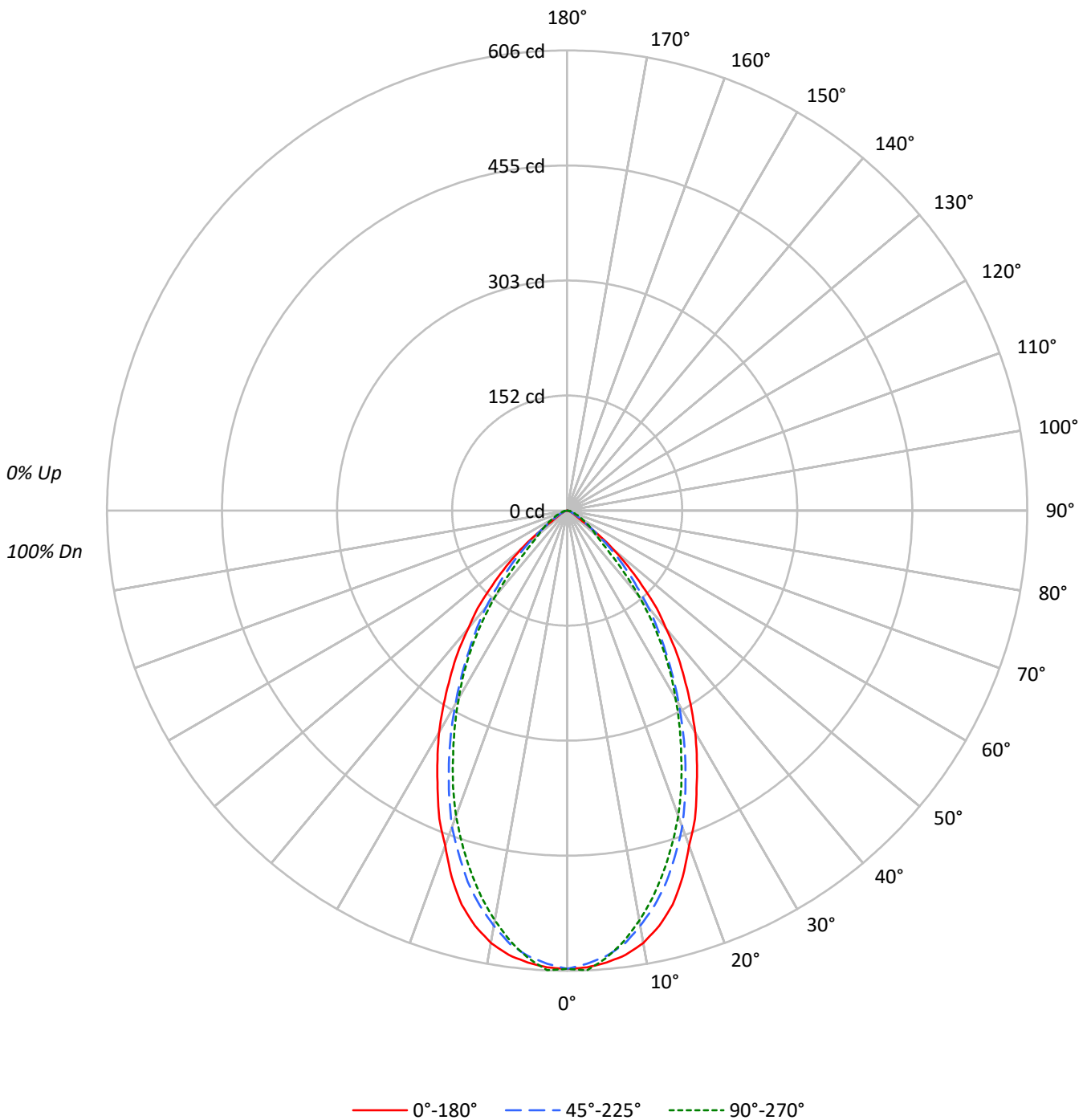
Lumens per Lamp: N/A
Luminaire Lumens: 648.9 lumens
Efficiency: N/A
Efficacy: 15.5 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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

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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 | 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 | 113 | 110 | 107 | 104 | 110 | 107 | 105 | 103 | 103 | 101 | 99 | 100 | 98 | 96 | 96 | 95 | 94 | 92 | | | | | | | | | | | | | | | | | | | 92 | | | | | | | | | |
| 2 | 106 | 101 | 96 | 92 | 104 | 99 | 95 | 91 | 96 | 92 | 89 | 93 | 90 | 87 | 90 | 87 | 85 | 84 | | | | | | | | | | | | | | | | | | | 84 | | | | | | | | | |
| 3 | 100 | 93 | 87 | 82 | 98 | 91 | 86 | 82 | 88 | 84 | 80 | 86 | 82 | 79 | 84 | 80 | 78 | 76 | | | | | | | | | | | | | | | | | | | 76 | | | | | | | | | |
| 4 | 94 | 85 | 79 | 74 | 92 | 84 | 78 | 74 | 82 | 77 | 73 | 80 | 76 | 72 | 78 | 74 | 71 | 70 | | | | | | | | | | | | | | | | | | | 70 | | | | | | | | | |
| 5 | 88 | 79 | 72 | 68 | 87 | 78 | 72 | 67 | 76 | 71 | 67 | 74 | 70 | 66 | 73 | 69 | 65 | 64 | | | | | | | | | | | | | | | | | | | 64 | | | | | | | | | |
| 6 | 83 | 73 | 67 | 62 | 82 | 72 | 66 | 62 | 71 | 65 | 61 | 69 | 64 | 61 | 68 | 64 | 60 | 59 | | | | | | | | | | | | | | | | | | | 59 | | | | | | | | | |
| 7 | 79 | 68 | 62 | 57 | 77 | 68 | 61 | 57 | 66 | 60 | 56 | 65 | 60 | 56 | 64 | 59 | 56 | 54 | | | | | | | | | | | | | | | | | | | 54 | | | | | | | | | |
| 8 | 74 | 64 | 57 | 53 | 73 | 63 | 57 | 52 | 62 | 56 | 52 | 61 | 56 | 52 | 60 | 55 | 52 | 50 | | | | | | | | | | | | | | | | | | | 50 | | | | | | | | | |
| 9 | 70 | 60 | 53 | 49 | 69 | 59 | 53 | 49 | 58 | 52 | 48 | 57 | 52 | 48 | 56 | 52 | 48 | 47 | | | | | | | | | | | | | | | | | | | 47 | | | | | | | | | |
| 10 | 67 | 56 | 50 | 45 | 66 | 56 | 49 | 45 | 55 | 49 | 45 | 54 | 49 | 45 | 53 | 48 | 45 | 44 | | | | | | | | | | | | | | | | | | | 44 | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 11134 | 11134 | 11134 |
| 5° | 11066 | 10910 | 10954 |
| 10° | 10832 | 10405 | 10268 |
| 15° | 10262 | 9664 | 9387 |
| 20° | 9223 | 8703 | 8397 |
| 25° | 8215 | 7505 | 7234 |
| 30° | 7185 | 6262 | 6083 |
| 35° | 6051 | 5073 | 4911 |
| 40° | 4873 | 4003 | 3539 |
| 45° | 3646 | 2891 | 2106 |
| 50° | 2282 | 1866 | 1384 |
| 55° | 775 | 1007 | 1123 |
| 60° | 443 | 624 | 889 |
| 65° | 314 | 419 | 685 |
| 70° | 259 | 324 | 518 |
| 75° | 171 | 257 | 428 |
| 80° | 128 | 255 | 383 |
| 85° | 0 | 0 | 254 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3646 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 55.6 | 8.6 |
| 10°-20° | 142.4 | 21.9 |
| 20°-30° | 171.4 | 26.4 |
| 30°-40° | 146.5 | 22.6 |
| 40°-50° | 85.8 | 13.2 |
| 50°-60° | 31.1 | 4.8 |
| 60°-70° | 11.0 | 1.7 |
| 70°-80° | 4.4 | 0.7 |
| 80°-90° | 0.8 | 0.1 |
| 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° | 369.4 | 56.9 |
| 0°-40° | 515.9 | 79.5 |
| 0°-60° | 632.8 | 97.5 |
| 0°-90° | 648.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 648.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 603 | 603 | 603 | 603 | 603 | |
| 5° | 597 | 599 | 589 | 591 | 591 | 56 |
| 15° | 537 | 529 | 506 | 496 | 491 | 149 |
| 25° | 404 | 387 | 369 | 362 | 355 | 185 |
| 35° | 269 | 248 | 225 | 223 | 218 | 168 |
| 45° | 140 | 125 | 111 | 93 | 81 | 108 |
| 55° | 24 | 34 | 31 | 32 | 35 | 30 |
| 65° | 7 | 8 | 10 | 13 | 16 | 8 |
| 75° | 2 | 4 | 4 | 5 | 6 | 3 |
| 85° | 0 | 0 | 0 | 1 | 1 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 603.4 | 603.4 | 603.4 | 603.4 | 603.4 |
| 2.5° | 602.2 | 603.4 | 597.4 | 603.4 | 605.8 |
| 5° | 597.4 | 598.6 | 589.0 | 591.4 | 591.4 |
| 7.5° | 590.2 | 589.0 | 575.7 | 573.3 | 572.1 |
| 10° | 578.1 | 574.5 | 555.3 | 551.6 | 548.0 |
| 12.5° | 560.1 | 552.8 | 532.4 | 526.3 | 521.5 |
| 15° | 537.2 | 528.8 | 505.9 | 496.2 | 491.4 |
| 17.5° | 505.9 | 496.2 | 474.6 | 464.9 | 460.1 |
| 20° | 469.7 | 460.1 | 443.2 | 432.4 | 427.6 |
| 22.5° | 439.6 | 424.0 | 405.9 | 398.7 | 392.7 |
| 25° | 403.5 | 386.6 | 368.6 | 362.5 | 355.3 |
| 27.5° | 369.8 | 349.3 | 331.2 | 326.4 | 320.4 |
| 30° | 337.2 | 315.6 | 293.9 | 293.9 | 285.5 |
| 32.5° | 302.3 | 281.8 | 259.0 | 257.8 | 252.9 |
| 35° | 268.6 | 248.1 | 225.2 | 222.8 | 218.0 |
| 37.5° | 237.3 | 216.8 | 195.1 | 187.9 | 181.9 |
| 40° | 202.3 | 184.3 | 166.2 | 154.2 | 146.9 |
| 42.5° | 174.6 | 154.2 | 136.1 | 121.6 | 112.0 |
| 45° | 139.7 | 125.3 | 110.8 | 92.7 | 80.7 |
| 47.5° | 108.4 | 98.8 | 86.7 | 66.2 | 60.2 |
| 50° | 79.5 | 74.7 | 65.0 | 49.4 | 48.2 |
| 52.5° | 50.6 | 53.0 | 47.0 | 38.5 | 42.2 |
| 55° | 24.1 | 33.7 | 31.3 | 32.5 | 34.9 |
| 57.5° | 15.7 | 16.9 | 22.9 | 26.5 | 28.9 |
| 60° | 12.0 | 12.0 | 16.9 | 21.7 | 24.1 |
| 62.5° | 9.6 | 9.6 | 13.2 | 18.1 | 19.3 |
| 65° | 7.2 | 8.4 | 9.6 | 13.2 | 15.7 |
| 67.5° | 6.0 | 6.0 | 7.2 | 10.8 | 12.0 |
| 70° | 4.8 | 4.8 | 6.0 | 8.4 | 9.6 |
| 72.5° | 3.6 | 3.6 | 4.8 | 7.2 | 7.2 |
| 75° | 2.4 | 3.6 | 3.6 | 4.8 | 6.0 |
| 77.5° | 2.4 | 2.4 | 2.4 | 3.6 | 4.8 |
| 80° | 1.2 | 1.2 | 2.4 | 2.4 | 3.6 |
| 82.5° | 1.2 | 1.2 | 1.2 | 1.2 | 2.4 |
| 85° | 0.0 | 0.0 | 0.0 | 1.2 | 1.2 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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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 | 4.27 | 5.43 | 4.64 | 5.75 | 6.06 | 7.65 | 8.82 | 8.02 | 9.13 | 9.44 |
| | 3H | 4.78 | 5.81 | 5.17 | 6.14 | 6.50 | 8.38 | 9.40 | 8.76 | 9.73 | 10.10 |
| | 4H | 4.92 | 5.86 | 5.32 | 6.22 | 6.60 | 8.59 | 9.54 | 9.00 | 9.89 | 10.28 |
| | 6H | 4.99 | 5.86 | 5.41 | 6.23 | 6.62 | 8.74 | 9.61 | 9.16 | 9.98 | 10.38 |
| | 8H | 4.99 | 5.81 | 5.43 | 6.20 | 6.61 | 8.77 | 9.59 | 9.21 | 9.98 | 10.39 |
| | 12H | 4.96 | 5.74 | 5.39 | 6.12 | 6.55 | 8.77 | 9.55 | 9.21 | 9.94 | 10.37 |
| 4H | 2H | 4.57 | 5.52 | 4.98 | 5.87 | 6.26 | 7.62 | 8.57 | 8.02 | 8.92 | 9.31 |
| | 3H | 5.23 | 5.99 | 5.64 | 6.40 | 6.81 | 8.49 | 9.26 | 8.90 | 9.66 | 10.07 |
| | 4H | 5.46 | 6.15 | 5.90 | 6.57 | 7.02 | 8.77 | 9.45 | 9.20 | 9.87 | 10.32 |
| | 6H | 5.58 | 6.17 | 6.05 | 6.62 | 7.09 | 8.99 | 9.58 | 9.46 | 10.03 | 10.50 |
| | 8H | 5.60 | 6.14 | 6.07 | 6.59 | 7.07 | 9.04 | 9.58 | 9.51 | 10.03 | 10.50 |
| | 12H | 5.56 | 6.04 | 6.05 | 6.53 | 7.00 | 9.06 | 9.53 | 9.54 | 10.02 | 10.50 |
| 8H | 4H | 5.57 | 6.12 | 6.04 | 6.56 | 7.04 | 8.70 | 9.24 | 9.17 | 9.69 | 10.17 |
| | 6H | 5.73 | 6.18 | 6.24 | 6.68 | 7.16 | 8.96 | 9.40 | 9.46 | 9.90 | 10.38 |
| | 8H | 5.78 | 6.17 | 6.31 | 6.69 | 7.19 | 9.02 | 9.41 | 9.54 | 9.93 | 10.43 |
| | 12H | 5.76 | 6.10 | 6.27 | 6.60 | 7.18 | 9.08 | 9.42 | 9.60 | 9.92 | 10.50 |
| 12H | 4H | 5.55 | 6.03 | 6.04 | 6.52 | 6.99 | 8.65 | 9.13 | 9.14 | 9.61 | 10.09 |
| | 6H | 5.73 | 6.13 | 6.26 | 6.65 | 7.14 | 8.91 | 9.30 | 9.43 | 9.82 | 10.32 |
| | 8H | 5.80 | 6.15 | 6.32 | 6.65 | 7.22 | 8.99 | 9.34 | 9.51 | 9.84 | 10.41 |