

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



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: P1058244

Luminaire Tested: S122RDR-H1005D930-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058244
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-56)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H1005D930-X4F0-XX-UDD-SVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

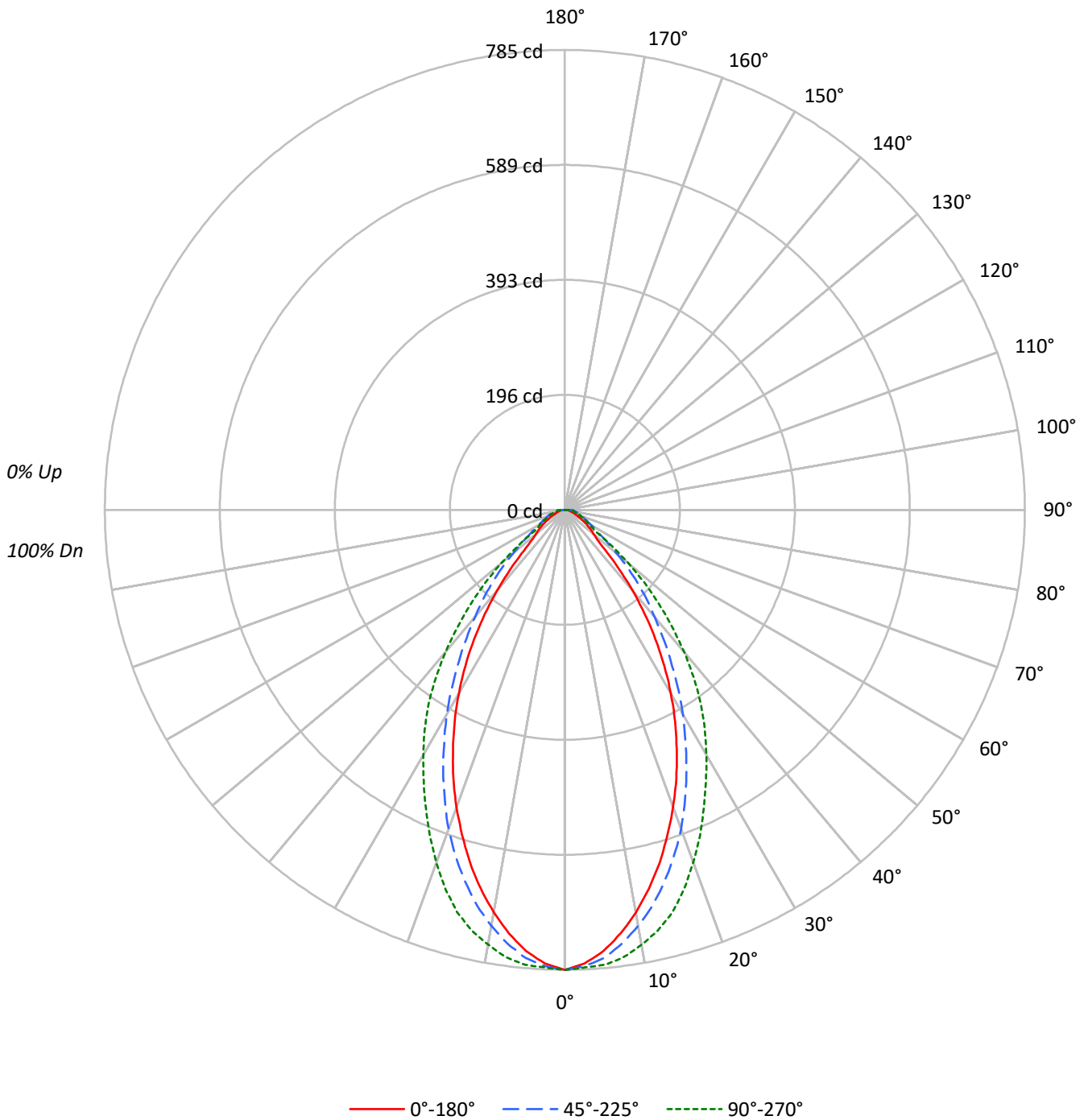
Lumens per Lamp: N/A
Luminaire Lumens: 952.5 lumens
Efficiency: N/A
Efficacy: 26.1 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.5
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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 111 | 108 | 105 | 102 | 109 | 106 | 103 | 100 | 102 | 99 | 97 | 98 | 96 | 94 | 94 | 93 | 91 | 89 |
| 2 | 104 | 98 | 93 | 88 | 102 | 96 | 91 | 87 | 93 | 89 | 85 | 90 | 86 | 84 | 87 | 84 | 82 | 80 |
| 3 | 97 | 89 | 83 | 78 | 95 | 88 | 82 | 77 | 85 | 80 | 76 | 83 | 78 | 75 | 80 | 77 | 74 | 72 |
| 4 | 91 | 82 | 75 | 70 | 89 | 81 | 74 | 69 | 78 | 73 | 68 | 76 | 71 | 68 | 74 | 70 | 67 | 65 |
| 5 | 86 | 75 | 68 | 63 | 84 | 74 | 68 | 63 | 72 | 67 | 62 | 71 | 65 | 61 | 69 | 64 | 61 | 59 |
| 6 | 80 | 70 | 62 | 57 | 79 | 69 | 62 | 57 | 67 | 61 | 57 | 66 | 60 | 56 | 64 | 59 | 56 | 54 |
| 7 | 76 | 65 | 57 | 52 | 74 | 64 | 57 | 52 | 62 | 56 | 52 | 61 | 56 | 52 | 60 | 55 | 51 | 50 |
| 8 | 71 | 60 | 53 | 48 | 70 | 59 | 53 | 48 | 58 | 52 | 48 | 57 | 52 | 48 | 56 | 51 | 47 | 46 |
| 9 | 67 | 56 | 49 | 45 | 66 | 56 | 49 | 45 | 55 | 49 | 44 | 54 | 48 | 44 | 53 | 48 | 44 | 42 |
| 10 | 64 | 53 | 46 | 41 | 63 | 52 | 46 | 41 | 51 | 45 | 41 | 50 | 45 | 41 | 50 | 45 | 41 | 39 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 14491 | 14491 | 14491 |
| 5° | 14005 | 14222 | 14437 |
| 10° | 13075 | 13511 | 14124 |
| 15° | 11924 | 12549 | 13575 |
| 20° | 10608 | 11387 | 12579 |
| 25° | 9195 | 10001 | 11426 |
| 30° | 7707 | 8578 | 10293 |
| 35° | 6071 | 7096 | 9121 |
| 40° | 4329 | 5733 | 7617 |
| 45° | 2557 | 4538 | 5908 |
| 50° | 1843 | 3281 | 4019 |
| 55° | 1538 | 2365 | 2027 |
| 60° | 1247 | 1893 | 1723 |
| 65° | 1017 | 1681 | 1581 |
| 70° | 879 | 1635 | 1511 |
| 75° | 834 | 1661 | 1497 |
| 80° | 871 | 1987 | 1615 |
| 85° | 1228 | 3218 | 1969 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5908 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 72.0 | 7.6 |
| 10°-20° | 185.0 | 19.4 |
| 20°-30° | 228.3 | 24.0 |
| 30°-40° | 203.0 | 21.3 |
| 40°-50° | 129.6 | 13.6 |
| 50°-60° | 62.2 | 6.5 |
| 60°-70° | 36.5 | 3.8 |
| 70°-80° | 23.3 | 2.4 |
| 80°-90° | 12.4 | 1.3 |
| 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° | 485.3 | 51.0 |
| 0°-40° | 688.4 | 72.3 |
| 0°-60° | 880.2 | 92.4 |
| 0°-90° | 952.5 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 952.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 785 | 785 | 785 | 785 | 785 | |
| 5° | 756 | 770 | 768 | 772 | 779 | 70 |
| 15° | 624 | 639 | 657 | 687 | 711 | 174 |
| 25° | 452 | 469 | 491 | 526 | 561 | 207 |
| 35° | 270 | 290 | 315 | 363 | 405 | 167 |
| 45° | 98 | 127 | 174 | 202 | 226 | 82 |
| 55° | 48 | 62 | 74 | 71 | 63 | 43 |
| 65° | 23 | 42 | 38 | 35 | 36 | 23 |
| 75° | 12 | 26 | 23 | 22 | 21 | 13 |
| 85° | 6 | 14 | 15 | 13 | 9 | 6 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 785.3 | 785.3 | 785.3 | 785.3 | 785.3 |
| 2.5° | 774.8 | 787.6 | 779.4 | 779.4 | 781.8 |
| 5° | 756.1 | 770.1 | 767.8 | 772.4 | 779.4 |
| 7.5° | 729.3 | 744.4 | 746.8 | 759.6 | 770.1 |
| 10° | 697.8 | 714.1 | 721.1 | 739.8 | 753.8 |
| 12.5° | 662.8 | 679.1 | 691.9 | 715.3 | 735.1 |
| 15° | 624.2 | 639.4 | 656.9 | 687.3 | 710.6 |
| 17.5° | 582.2 | 602.1 | 619.6 | 651.1 | 677.9 |
| 20° | 540.2 | 558.9 | 579.9 | 610.2 | 640.6 |
| 22.5° | 497.1 | 514.6 | 535.6 | 567.1 | 602.1 |
| 25° | 451.6 | 469.1 | 491.2 | 526.2 | 561.2 |
| 27.5° | 407.2 | 424.7 | 445.7 | 484.2 | 521.6 |
| 30° | 361.7 | 379.2 | 402.6 | 442.2 | 483.1 |
| 32.5° | 316.2 | 334.9 | 358.2 | 401.4 | 444.6 |
| 35° | 269.5 | 290.5 | 315.0 | 362.9 | 404.9 |
| 37.5° | 224.0 | 245.0 | 275.4 | 322.0 | 361.7 |
| 40° | 179.7 | 204.2 | 238.0 | 280.0 | 316.2 |
| 42.5° | 136.5 | 163.4 | 205.4 | 239.2 | 270.7 |
| 45° | 98.0 | 127.2 | 173.9 | 201.9 | 226.4 |
| 47.5° | 74.7 | 95.7 | 143.5 | 165.7 | 183.2 |
| 50° | 64.2 | 77.0 | 114.3 | 130.7 | 140.0 |
| 52.5° | 56.0 | 67.7 | 91.0 | 99.2 | 99.2 |
| 55° | 47.8 | 61.8 | 73.5 | 71.2 | 63.0 |
| 57.5° | 40.8 | 56.0 | 60.7 | 51.3 | 53.7 |
| 60° | 33.8 | 51.3 | 51.3 | 45.5 | 46.7 |
| 62.5° | 28.0 | 47.8 | 44.3 | 39.7 | 40.8 |
| 65° | 23.3 | 42.0 | 38.5 | 35.0 | 36.2 |
| 67.5° | 18.7 | 37.3 | 33.8 | 31.5 | 31.5 |
| 70° | 16.3 | 33.8 | 30.3 | 28.0 | 28.0 |
| 72.5° | 14.0 | 29.2 | 26.8 | 24.5 | 24.5 |
| 75° | 11.7 | 25.7 | 23.3 | 22.2 | 21.0 |
| 77.5° | 10.5 | 22.2 | 21.0 | 18.7 | 17.5 |
| 80° | 8.2 | 18.7 | 18.7 | 17.5 | 15.2 |
| 82.5° | 7.0 | 16.3 | 16.3 | 15.2 | 12.8 |
| 85° | 5.8 | 14.0 | 15.2 | 12.8 | 9.3 |
| 87.5° | 4.7 | 12.8 | 12.8 | 10.5 | 7.0 |
| 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 | 10.96 | 12.23 | 11.32 | 12.55 | 12.86 | 10.75 | 12.02 | 11.11 | 12.34 | 12.65 |
| | 3H | 12.19 | 13.32 | 12.57 | 13.65 | 14.02 | 12.34 | 13.48 | 12.72 | 13.81 | 14.17 |
| | 4H | 12.64 | 13.70 | 13.05 | 14.05 | 14.44 | 13.06 | 14.12 | 13.46 | 14.47 | 14.85 |
| | 6H | 13.02 | 14.00 | 13.44 | 14.37 | 14.76 | 13.71 | 14.68 | 14.13 | 15.06 | 15.45 |
| | 8H | 13.18 | 14.10 | 13.61 | 14.49 | 14.90 | 14.04 | 14.96 | 14.47 | 15.35 | 15.76 |
| | 12H | 13.34 | 14.22 | 13.77 | 14.60 | 15.03 | 14.34 | 15.22 | 14.77 | 15.60 | 16.03 |
| 4H | 2H | 11.51 | 12.57 | 11.91 | 12.92 | 13.30 | 11.34 | 12.40 | 11.74 | 12.75 | 13.13 |
| | 3H | 13.20 | 14.07 | 13.61 | 14.48 | 14.88 | 13.18 | 14.05 | 13.59 | 14.45 | 14.86 |
| | 4H | 14.00 | 14.78 | 14.43 | 15.20 | 15.64 | 14.05 | 14.83 | 14.49 | 15.25 | 15.70 |
| | 6H | 14.64 | 15.32 | 15.11 | 15.77 | 16.24 | 14.90 | 15.58 | 15.36 | 16.02 | 16.49 |
| | 8H | 14.89 | 15.53 | 15.36 | 15.97 | 16.45 | 15.32 | 15.96 | 15.79 | 16.40 | 16.88 |
| | 12H | 15.14 | 15.70 | 15.63 | 16.18 | 16.66 | 15.72 | 16.28 | 16.21 | 16.77 | 17.24 |
| 8H | 4H | 14.42 | 15.05 | 14.89 | 15.50 | 15.97 | 14.47 | 15.10 | 14.94 | 15.55 | 16.02 |
| | 6H | 15.40 | 15.92 | 15.90 | 16.41 | 16.89 | 15.56 | 16.08 | 16.06 | 16.57 | 17.06 |
| | 8H | 15.89 | 16.35 | 16.41 | 16.87 | 17.36 | 16.15 | 16.62 | 16.67 | 17.13 | 17.62 |
| | 12H | 16.39 | 16.80 | 16.90 | 17.30 | 17.87 | 16.75 | 17.16 | 17.26 | 17.66 | 18.23 |
| 12H | 4H | 14.48 | 15.04 | 14.97 | 15.53 | 16.00 | 14.55 | 15.11 | 15.03 | 15.59 | 16.06 |
| | 6H | 15.56 | 16.03 | 16.09 | 16.55 | 17.04 | 15.72 | 16.19 | 16.24 | 16.70 | 17.20 |
| | 8H | 16.20 | 16.61 | 16.72 | 17.11 | 17.68 | 16.43 | 16.85 | 16.95 | 17.34 | 17.91 |