

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: P1058163

Luminaire Tested: S122RDRP-S865D930-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058163
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: S122RDRP-S865D930-X4F0-XX-UDD-SVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

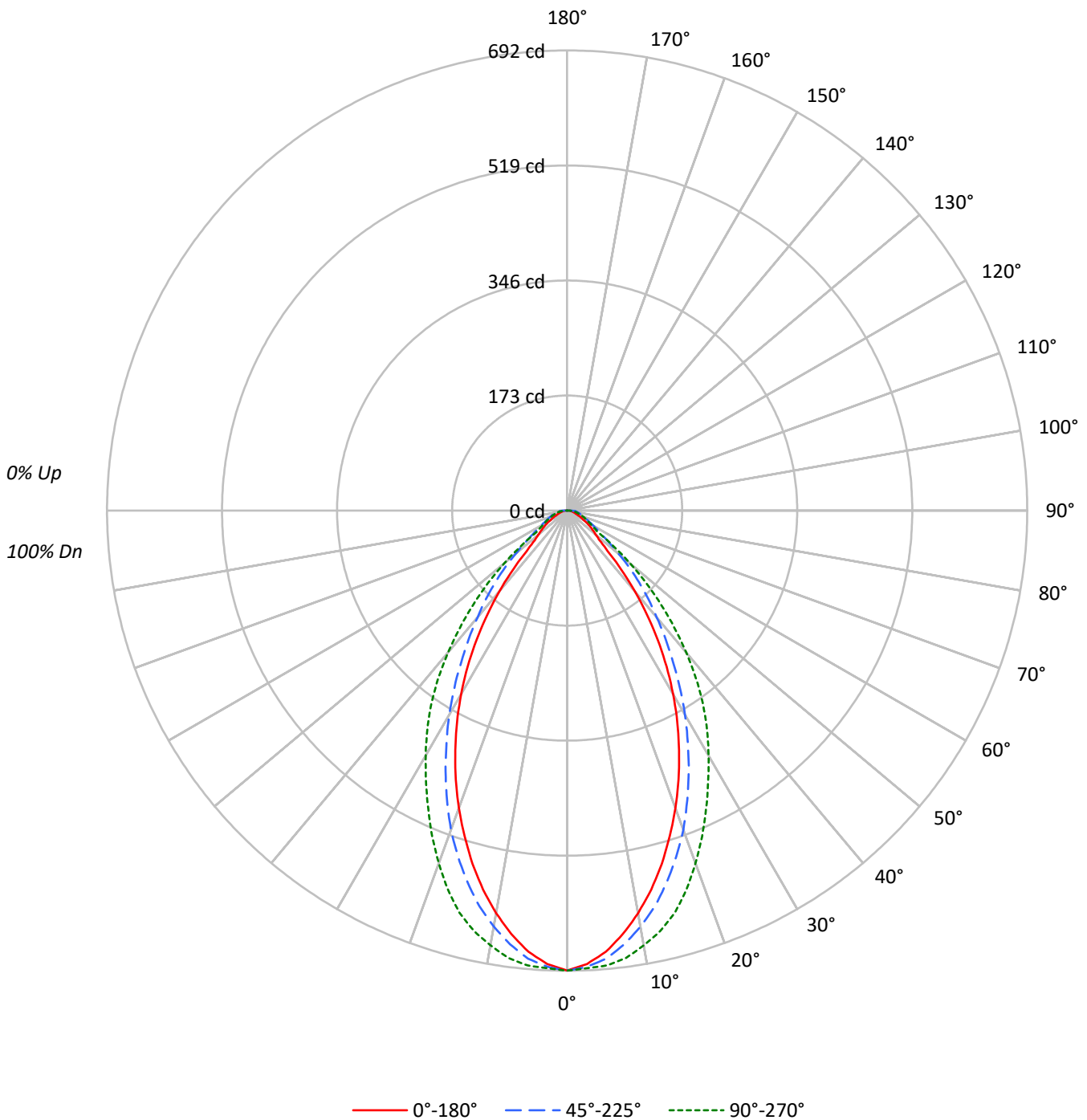
Lumens per Lamp: N/A
Luminaire Lumens: 839.0 lumens
Efficiency: N/A
Efficacy: 24.0 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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 | 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 | 102 | 99 | 97 | 98 | 96 | 94 | 94 | 93 | 91 | 89 | | | | 89 |
| 2 | 104 | 98 | 93 | 88 | 102 | 96 | 91 | 87 | 93 | 89 | 85 | 90 | 86 | 84 | 87 | 84 | 82 | 80 | | | | 80 |
| 3 | 97 | 89 | 83 | 78 | 95 | 88 | 82 | 77 | 85 | 80 | 76 | 83 | 78 | 75 | 80 | 77 | 74 | 72 | | | | 72 |
| 4 | 91 | 82 | 75 | 70 | 89 | 81 | 74 | 69 | 78 | 73 | 68 | 76 | 71 | 68 | 74 | 70 | 67 | 65 | | | | 65 |
| 5 | 86 | 75 | 68 | 63 | 84 | 74 | 68 | 63 | 72 | 67 | 62 | 71 | 65 | 61 | 69 | 64 | 61 | 59 | | | | 59 |
| 6 | 80 | 70 | 62 | 57 | 79 | 69 | 62 | 57 | 67 | 61 | 57 | 66 | 60 | 56 | 64 | 59 | 56 | 54 | | | | 54 |
| 7 | 76 | 65 | 57 | 52 | 74 | 64 | 57 | 52 | 62 | 56 | 52 | 61 | 56 | 52 | 60 | 55 | 51 | 50 | | | | 50 |
| 8 | 71 | 60 | 53 | 48 | 70 | 59 | 53 | 48 | 58 | 52 | 48 | 57 | 52 | 48 | 56 | 51 | 47 | 46 | | | | 46 |
| 9 | 67 | 56 | 49 | 45 | 66 | 56 | 49 | 45 | 55 | 49 | 44 | 54 | 48 | 44 | 53 | 48 | 44 | 42 | | | | 42 |
| 10 | 64 | 53 | 46 | 41 | 63 | 52 | 46 | 41 | 51 | 45 | 41 | 50 | 45 | 41 | 50 | 45 | 41 | 39 | | | | 39 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 12764 | 12764 | 12764 |
| 5° | 12336 | 12527 | 12718 |
| 10° | 11516 | 11902 | 12441 |
| 15° | 10505 | 11055 | 11957 |
| 20° | 9345 | 10030 | 11081 |
| 25° | 8099 | 8810 | 10066 |
| 30° | 6788 | 7555 | 9066 |
| 35° | 5348 | 6251 | 8033 |
| 40° | 3813 | 5051 | 6709 |
| 45° | 2252 | 3995 | 5203 |
| 50° | 1622 | 2891 | 3540 |
| 55° | 1354 | 2085 | 1785 |
| 60° | 1100 | 1668 | 1517 |
| 65° | 899 | 1480 | 1393 |
| 70° | 777 | 1441 | 1333 |
| 75° | 734 | 1469 | 1319 |
| 80° | 765 | 1743 | 1424 |
| 85° | 1080 | 2837 | 1736 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5203 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 63.4 | 7.6 |
| 10°-20° | 163.0 | 19.4 |
| 20°-30° | 201.1 | 24.0 |
| 30°-40° | 178.8 | 21.3 |
| 40°-50° | 114.2 | 13.6 |
| 50°-60° | 54.8 | 6.5 |
| 60°-70° | 32.2 | 3.8 |
| 70°-80° | 20.5 | 2.4 |
| 80°-90° | 11.0 | 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° | 427.5 | 51.0 |
| 0°-40° | 606.3 | 72.3 |
| 0°-60° | 775.3 | 92.4 |
| 0°-90° | 839.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 839.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 692 | 692 | 692 | 692 | 692 | |
| 5° | 666 | 678 | 676 | 680 | 687 | 62 |
| 15° | 550 | 563 | 579 | 605 | 626 | 153 |
| 25° | 398 | 413 | 433 | 464 | 494 | 182 |
| 35° | 237 | 256 | 278 | 320 | 357 | 147 |
| 45° | 86 | 112 | 153 | 178 | 199 | 72 |
| 55° | 42 | 54 | 65 | 63 | 56 | 38 |
| 65° | 21 | 37 | 34 | 31 | 32 | 21 |
| 75° | 10 | 23 | 21 | 20 | 18 | 11 |
| 85° | 5 | 12 | 13 | 11 | 8 | 5 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 691.7 | 691.7 | 691.7 | 691.7 | 691.7 |
| 2.5° | 682.5 | 693.8 | 686.6 | 686.6 | 688.6 |
| 5° | 666.0 | 678.3 | 676.3 | 680.4 | 686.6 |
| 7.5° | 642.4 | 655.7 | 657.8 | 669.1 | 678.3 |
| 10° | 614.6 | 629.0 | 635.2 | 651.6 | 664.0 |
| 12.5° | 583.8 | 598.2 | 609.5 | 630.0 | 647.5 |
| 15° | 549.9 | 563.2 | 578.7 | 605.4 | 625.9 |
| 17.5° | 512.9 | 530.3 | 545.8 | 573.5 | 597.2 |
| 20° | 475.9 | 492.3 | 510.8 | 537.5 | 564.3 |
| 22.5° | 437.8 | 453.3 | 471.8 | 499.5 | 530.3 |
| 25° | 397.8 | 413.2 | 432.7 | 463.5 | 494.4 |
| 27.5° | 358.7 | 374.1 | 392.6 | 426.5 | 459.4 |
| 30° | 318.6 | 334.0 | 354.6 | 389.5 | 425.5 |
| 32.5° | 278.5 | 295.0 | 315.5 | 353.6 | 391.6 |
| 35° | 237.4 | 255.9 | 277.5 | 319.6 | 356.6 |
| 37.5° | 197.3 | 215.8 | 242.6 | 283.7 | 318.6 |
| 40° | 158.3 | 179.9 | 209.7 | 246.7 | 278.5 |
| 42.5° | 120.3 | 143.9 | 180.9 | 210.7 | 238.4 |
| 45° | 86.3 | 112.0 | 153.1 | 177.8 | 199.4 |
| 47.5° | 65.8 | 84.3 | 126.4 | 145.9 | 161.4 |
| 50° | 56.5 | 67.8 | 100.7 | 115.1 | 123.3 |
| 52.5° | 49.3 | 59.6 | 80.2 | 87.4 | 87.4 |
| 55° | 42.1 | 54.5 | 64.8 | 62.7 | 55.5 |
| 57.5° | 36.0 | 49.3 | 53.4 | 45.2 | 47.3 |
| 60° | 29.8 | 45.2 | 45.2 | 40.1 | 41.1 |
| 62.5° | 24.7 | 42.1 | 39.1 | 34.9 | 36.0 |
| 65° | 20.6 | 37.0 | 33.9 | 30.8 | 31.9 |
| 67.5° | 16.4 | 32.9 | 29.8 | 27.8 | 27.8 |
| 70° | 14.4 | 29.8 | 26.7 | 24.7 | 24.7 |
| 72.5° | 12.3 | 25.7 | 23.6 | 21.6 | 21.6 |
| 75° | 10.3 | 22.6 | 20.6 | 19.5 | 18.5 |
| 77.5° | 9.3 | 19.5 | 18.5 | 16.4 | 15.4 |
| 80° | 7.2 | 16.4 | 16.4 | 15.4 | 13.4 |
| 82.5° | 6.2 | 14.4 | 14.4 | 13.4 | 11.3 |
| 85° | 5.1 | 12.3 | 13.4 | 11.3 | 8.2 |
| 87.5° | 4.1 | 11.3 | 11.3 | 9.3 | 6.2 |
| 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 | 10.52 | 11.79 | 10.88 | 12.11 | 12.42 | 10.31 | 11.58 | 10.67 | 11.90 | 12.21 |
| | 3H | 11.75 | 12.88 | 12.13 | 13.21 | 13.58 | 11.91 | 13.04 | 12.29 | 13.37 | 13.74 |
| | 4H | 12.20 | 13.26 | 12.60 | 13.61 | 13.99 | 12.62 | 13.68 | 13.02 | 14.03 | 14.41 |
| | 6H | 12.58 | 13.56 | 13.00 | 13.93 | 14.32 | 13.27 | 14.25 | 13.69 | 14.62 | 15.01 |
| | 8H | 12.74 | 13.66 | 13.17 | 14.05 | 14.46 | 13.60 | 14.52 | 14.03 | 14.92 | 15.32 |
| | 12H | 12.89 | 13.78 | 13.33 | 14.16 | 14.59 | 13.90 | 14.78 | 14.33 | 15.16 | 15.59 |
| 4H | 2H | 11.07 | 12.12 | 11.47 | 12.47 | 12.86 | 10.90 | 11.96 | 11.30 | 12.31 | 12.69 |
| | 3H | 12.76 | 13.63 | 13.17 | 14.04 | 14.44 | 12.74 | 13.61 | 13.15 | 14.02 | 14.42 |
| | 4H | 13.56 | 14.34 | 13.99 | 14.76 | 15.20 | 13.61 | 14.40 | 14.05 | 14.82 | 15.26 |
| | 6H | 14.20 | 14.88 | 14.66 | 15.32 | 15.79 | 14.46 | 15.13 | 14.92 | 15.58 | 16.05 |
| | 8H | 14.45 | 15.08 | 14.92 | 15.53 | 16.00 | 14.88 | 15.52 | 15.35 | 15.96 | 16.43 |
| | 12H | 14.70 | 15.26 | 15.18 | 15.74 | 16.21 | 15.28 | 15.84 | 15.77 | 16.33 | 16.80 |
| 8H | 4H | 13.97 | 14.61 | 14.44 | 15.05 | 15.53 | 14.03 | 14.66 | 14.50 | 15.11 | 15.58 |
| | 6H | 14.95 | 15.47 | 15.45 | 15.97 | 16.45 | 15.11 | 15.63 | 15.62 | 16.13 | 16.61 |
| | 8H | 15.44 | 15.91 | 15.97 | 16.43 | 16.92 | 15.71 | 16.18 | 16.23 | 16.69 | 17.18 |
| | 12H | 15.94 | 16.36 | 16.46 | 16.85 | 17.42 | 16.31 | 16.72 | 16.83 | 17.22 | 17.79 |
| 12H | 4H | 14.04 | 14.60 | 14.53 | 15.08 | 15.56 | 14.11 | 14.67 | 14.59 | 15.15 | 15.62 |
| | 6H | 15.12 | 15.59 | 15.64 | 16.10 | 16.59 | 15.28 | 15.75 | 15.80 | 16.26 | 16.75 |
| | 8H | 15.76 | 16.17 | 16.27 | 16.66 | 17.24 | 15.99 | 16.41 | 16.51 | 16.90 | 17.47 |