

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: P1062213

Luminaire Tested: S125RDRP-H850D930-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1062213
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-83)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-H850D930-X4F0-XX-UDD-SVL-W
Description: DEFINE 5 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

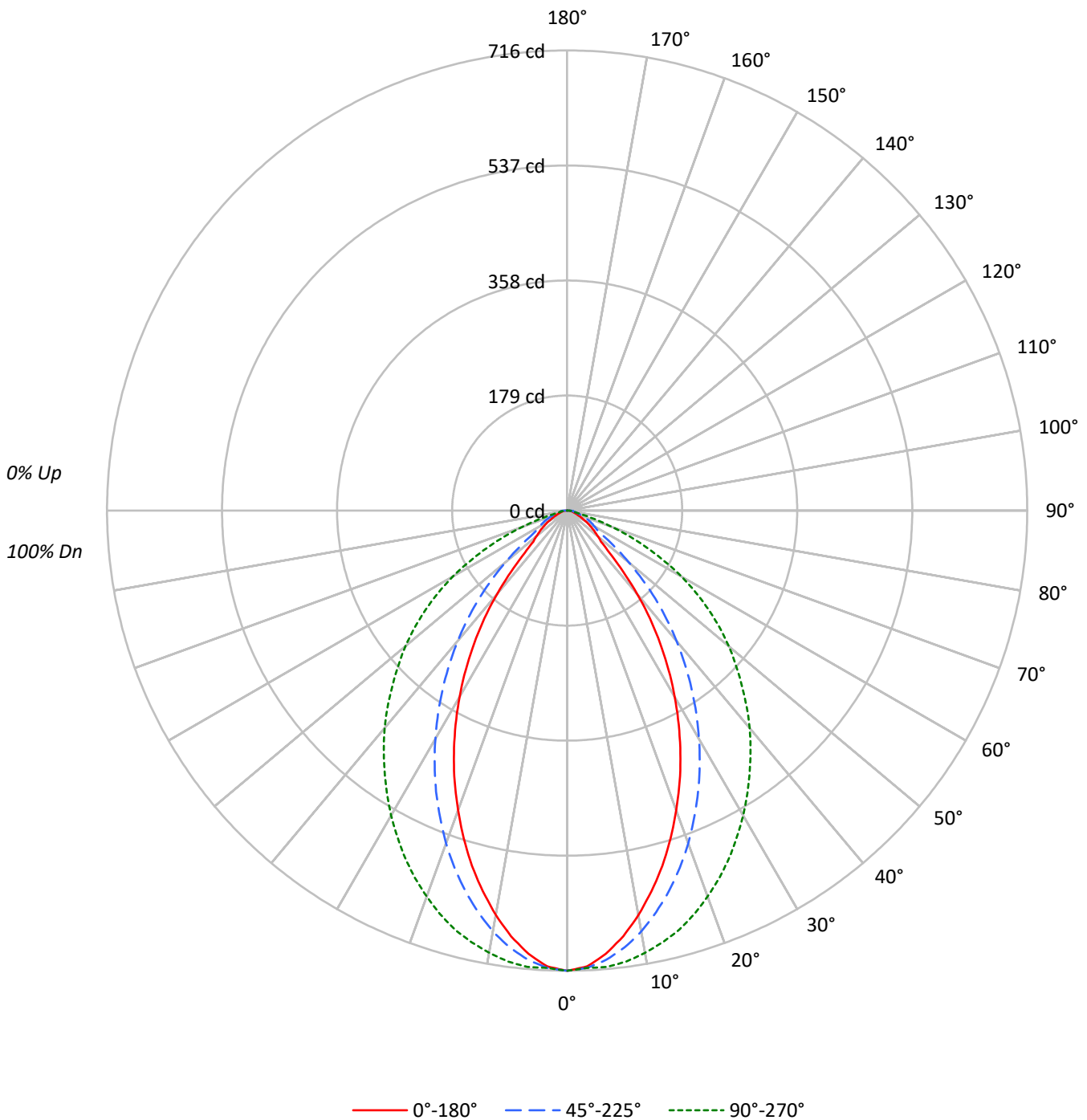
Lumens per Lamp: N/A
Luminaire Lumens: 1037.1 lumens
Efficiency: N/A
Efficacy: 44.1 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
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 | 104 | 101 | 109 | 105 | 103 | 100 | 101 | 99 | 97 | 98 | 96 | 94 | 94 | 92 | 91 | 89 | | | | 89 |
| 2 | 104 | 97 | 92 | 87 | 101 | 95 | 90 | 86 | 92 | 88 | 84 | 89 | 85 | 82 | 86 | 83 | 81 | 79 | | | | 79 |
| 3 | 96 | 88 | 81 | 76 | 94 | 86 | 80 | 76 | 84 | 79 | 74 | 81 | 77 | 73 | 79 | 75 | 72 | 70 | | | | 70 |
| 4 | 90 | 80 | 73 | 67 | 88 | 79 | 72 | 67 | 76 | 71 | 66 | 74 | 69 | 65 | 72 | 68 | 64 | 62 | | | | 62 |
| 5 | 84 | 73 | 66 | 60 | 82 | 72 | 65 | 60 | 70 | 64 | 59 | 68 | 63 | 59 | 66 | 62 | 58 | 56 | | | | 56 |
| 6 | 78 | 67 | 59 | 54 | 77 | 66 | 59 | 54 | 64 | 58 | 53 | 63 | 57 | 53 | 61 | 56 | 53 | 51 | | | | 51 |
| 7 | 73 | 62 | 54 | 49 | 72 | 61 | 54 | 49 | 60 | 53 | 49 | 58 | 53 | 48 | 57 | 52 | 48 | 46 | | | | 46 |
| 8 | 69 | 57 | 50 | 45 | 68 | 57 | 50 | 45 | 55 | 49 | 44 | 54 | 48 | 44 | 53 | 48 | 44 | 42 | | | | 42 |
| 9 | 65 | 53 | 46 | 41 | 64 | 53 | 46 | 41 | 52 | 45 | 41 | 51 | 45 | 41 | 50 | 44 | 40 | 39 | | | | 39 |
| 10 | 61 | 50 | 43 | 38 | 60 | 49 | 42 | 38 | 48 | 42 | 38 | 47 | 42 | 38 | 46 | 41 | 37 | 36 | | | | 36 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 4930 | 4930 | 4930 |
| 5° | 4786 | 4848 | 4927 |
| 10° | 4468 | 4649 | 4884 |
| 15° | 4079 | 4366 | 4811 |
| 20° | 3635 | 4037 | 4683 |
| 25° | 3168 | 3665 | 4532 |
| 30° | 2662 | 3260 | 4355 |
| 35° | 2116 | 2833 | 4163 |
| 40° | 1525 | 2380 | 3974 |
| 45° | 904 | 1889 | 3741 |
| 50° | 668 | 1344 | 3521 |
| 55° | 567 | 831 | 3224 |
| 60° | 461 | 671 | 2839 |
| 65° | 360 | 619 | 2243 |
| 70° | 306 | 535 | 1502 |
| 75° | 285 | 466 | 607 |
| 80° | 301 | 484 | 424 |
| 85° | 363 | 719 | 482 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3741 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 66.0 | 6.4 |
| 10°-20° | 173.3 | 16.7 |
| 20°-30° | 226.5 | 21.8 |
| 30°-40° | 220.7 | 21.3 |
| 40°-50° | 165.5 | 16.0 |
| 50°-60° | 103.8 | 10.0 |
| 60°-70° | 54.0 | 5.2 |
| 70°-80° | 19.6 | 1.9 |
| 80°-90° | 7.7 | 0.7 |
| 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° | 465.8 | 44.9 |
| 0°-40° | 686.5 | 66.2 |
| 0°-60° | 955.8 | 92.2 |
| 0°-90° | 1037.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1037.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 716 | 716 | 716 | 716 | 716 | |
| 5° | 692 | 702 | 702 | 707 | 713 | 64 |
| 15° | 572 | 589 | 612 | 650 | 675 | 160 |
| 25° | 417 | 440 | 482 | 548 | 596 | 191 |
| 35° | 252 | 278 | 337 | 427 | 495 | 156 |
| 45° | 93 | 120 | 194 | 300 | 384 | 78 |
| 55° | 47 | 50 | 69 | 181 | 269 | 42 |
| 65° | 22 | 24 | 38 | 73 | 138 | 23 |
| 75° | 11 | 14 | 18 | 18 | 23 | 12 |
| 85° | 5 | 8 | 9 | 8 | 6 | 5 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CATALOG NUMBER: S125RDRP-H850D930-X4F0-XX-UDD-SVL-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 716.0 | 716.0 | 716.0 | 716.0 | 716.0 |
| 2.5° | 709.9 | 716.7 | 712.2 | 712.2 | 712.2 |
| 5° | 692.4 | 701.5 | 701.5 | 706.8 | 712.9 |
| 7.5° | 668.0 | 678.7 | 685.5 | 698.5 | 707.6 |
| 10° | 639.1 | 652.1 | 665.0 | 686.3 | 698.5 |
| 12.5° | 606.4 | 621.6 | 639.9 | 669.6 | 687.8 |
| 15° | 572.2 | 588.9 | 612.5 | 650.5 | 674.9 |
| 17.5° | 534.9 | 554.7 | 582.8 | 628.5 | 658.2 |
| 20° | 496.1 | 515.9 | 550.9 | 602.6 | 639.1 |
| 22.5° | 457.3 | 478.6 | 516.6 | 575.2 | 618.6 |
| 25° | 417.0 | 439.8 | 482.4 | 547.8 | 596.5 |
| 27.5° | 375.9 | 399.5 | 446.6 | 519.7 | 572.2 |
| 30° | 334.8 | 359.1 | 410.1 | 489.2 | 547.8 |
| 32.5° | 293.7 | 319.6 | 373.6 | 458.0 | 522.0 |
| 35° | 251.8 | 278.5 | 337.1 | 426.8 | 495.3 |
| 37.5° | 211.5 | 238.2 | 300.5 | 394.9 | 468.7 |
| 40° | 169.7 | 198.6 | 264.8 | 362.9 | 442.1 |
| 42.5° | 128.6 | 158.3 | 229.0 | 331.0 | 413.2 |
| 45° | 92.8 | 120.2 | 194.0 | 299.8 | 384.2 |
| 47.5° | 71.5 | 86.7 | 158.3 | 267.8 | 356.1 |
| 50° | 62.4 | 67.0 | 125.5 | 238.2 | 328.7 |
| 52.5° | 54.0 | 57.1 | 94.3 | 210.8 | 299.0 |
| 55° | 47.2 | 49.5 | 69.2 | 181.1 | 268.6 |
| 57.5° | 39.6 | 42.6 | 54.8 | 152.2 | 237.4 |
| 60° | 33.5 | 35.0 | 48.7 | 125.5 | 206.2 |
| 62.5° | 27.4 | 28.9 | 43.4 | 98.9 | 171.2 |
| 65° | 22.1 | 23.6 | 38.0 | 73.0 | 137.7 |
| 67.5° | 18.3 | 19.0 | 32.0 | 51.7 | 105.8 |
| 70° | 15.2 | 16.0 | 26.6 | 35.8 | 74.6 |
| 72.5° | 12.9 | 15.2 | 21.3 | 25.9 | 47.2 |
| 75° | 10.7 | 14.5 | 17.5 | 18.3 | 22.8 |
| 77.5° | 9.1 | 13.7 | 14.5 | 14.5 | 12.9 |
| 80° | 7.6 | 11.4 | 12.2 | 11.4 | 10.7 |
| 82.5° | 6.1 | 9.1 | 9.9 | 9.9 | 8.4 |
| 85° | 4.6 | 7.6 | 9.1 | 8.4 | 6.1 |
| 87.5° | 3.0 | 6.8 | 7.6 | 6.8 | 4.6 |
| 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 | 5.46 | 6.81 | 5.83 | 7.13 | 7.44 | 15.07 | 16.43 | 15.44 | 16.74 | 17.05 |
| | 3H | 6.32 | 7.52 | 6.70 | 7.85 | 8.21 | 15.91 | 17.11 | 16.29 | 17.44 | 17.81 |
| | 4H | 6.74 | 7.86 | 7.15 | 8.21 | 8.60 | 15.99 | 17.11 | 16.39 | 17.46 | 17.84 |
| | 6H | 7.17 | 8.20 | 7.58 | 8.57 | 8.96 | 15.97 | 17.00 | 16.39 | 17.37 | 17.76 |
| | 8H | 7.35 | 8.32 | 7.78 | 8.71 | 9.12 | 15.96 | 16.94 | 16.39 | 17.33 | 17.73 |
| | 12H | 7.51 | 8.45 | 7.94 | 8.83 | 9.26 | 15.95 | 16.88 | 16.38 | 17.26 | 17.69 |
| 4H | 2H | 6.42 | 7.54 | 6.82 | 7.89 | 8.27 | 14.94 | 16.06 | 15.34 | 16.41 | 16.79 |
| | 3H | 7.47 | 8.39 | 7.89 | 8.79 | 9.20 | 15.85 | 16.76 | 16.26 | 17.17 | 17.57 |
| | 4H | 8.04 | 8.86 | 8.47 | 9.28 | 9.72 | 15.95 | 16.77 | 16.38 | 17.19 | 17.63 |
| | 6H | 8.64 | 9.35 | 9.10 | 9.79 | 10.26 | 15.98 | 16.69 | 16.44 | 17.13 | 17.60 |
| | 8H | 8.88 | 9.54 | 9.34 | 9.98 | 10.45 | 15.98 | 16.64 | 16.45 | 17.09 | 17.56 |
| | 12H | 9.10 | 9.69 | 9.59 | 10.17 | 10.64 | 15.99 | 16.58 | 16.48 | 17.06 | 17.53 |
| 8H | 4H | 8.51 | 9.17 | 8.98 | 9.62 | 10.09 | 15.87 | 16.54 | 16.34 | 16.98 | 17.45 |
| | 6H | 9.32 | 9.86 | 9.82 | 10.36 | 10.84 | 15.93 | 16.47 | 16.43 | 16.97 | 17.45 |
| | 8H | 9.70 | 10.19 | 10.22 | 10.70 | 11.19 | 15.96 | 16.45 | 16.48 | 16.96 | 17.45 |
| | 12H | 10.10 | 10.52 | 10.61 | 11.02 | 11.59 | 16.03 | 16.46 | 16.54 | 16.95 | 17.52 |
| 12H | 4H | 8.56 | 9.15 | 9.05 | 9.63 | 10.10 | 15.84 | 16.43 | 16.33 | 16.91 | 17.38 |
| | 6H | 9.45 | 9.93 | 9.97 | 10.45 | 10.94 | 15.90 | 16.38 | 16.42 | 16.90 | 17.39 |
| | 8H | 9.93 | 10.36 | 10.45 | 10.86 | 11.43 | 15.97 | 16.40 | 16.48 | 16.89 | 17.46 |