

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: P1061780

Luminaire Tested: S125RDRP-S850D840-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061780
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-86)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S850D840-X4F0-XX-UDD-SVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

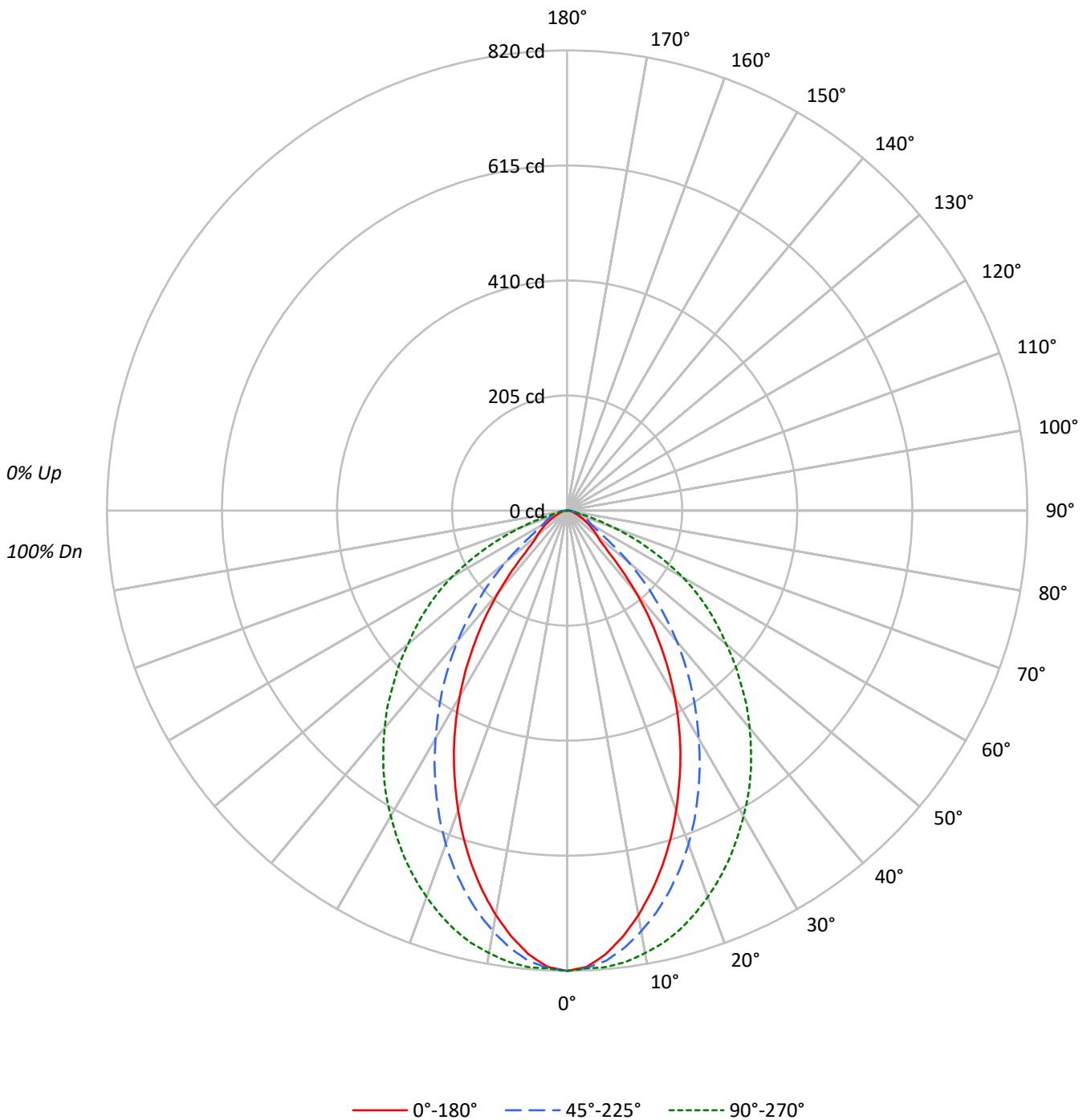
Lumens per Lamp: N/A
Luminaire Lumens: 1184.5 lumens
Efficiency: N/A
Efficacy: 45.9 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 111 | 108 | 104 | 101 | 109 | 106 | 103 | 100 | 101 | 99 | 97 | 98 | 96 | 94 | 94 | 93 | 91 | 89 |
| 2 | 104 | 97 | 92 | 87 | 101 | 95 | 91 | 86 | 92 | 88 | 84 | 89 | 86 | 83 | 86 | 83 | 81 | 79 |
| 3 | 96 | 88 | 81 | 76 | 94 | 87 | 80 | 76 | 84 | 79 | 74 | 81 | 77 | 73 | 79 | 75 | 72 | 70 |
| 4 | 90 | 80 | 73 | 67 | 88 | 79 | 72 | 67 | 76 | 71 | 66 | 74 | 69 | 65 | 72 | 68 | 64 | 63 |
| 5 | 84 | 73 | 66 | 60 | 82 | 72 | 65 | 60 | 70 | 64 | 59 | 68 | 63 | 59 | 67 | 62 | 58 | 56 |
| 6 | 78 | 67 | 60 | 54 | 77 | 66 | 59 | 54 | 65 | 58 | 53 | 63 | 57 | 53 | 62 | 57 | 53 | 51 |
| 7 | 73 | 62 | 54 | 49 | 72 | 61 | 54 | 49 | 60 | 53 | 49 | 58 | 53 | 48 | 57 | 52 | 48 | 46 |
| 8 | 69 | 57 | 50 | 45 | 68 | 57 | 50 | 45 | 55 | 49 | 44 | 54 | 48 | 44 | 53 | 48 | 44 | 42 |
| 9 | 65 | 53 | 46 | 41 | 64 | 53 | 46 | 41 | 52 | 45 | 41 | 51 | 45 | 41 | 50 | 44 | 41 | 39 |
| 10 | 61 | 50 | 43 | 38 | 60 | 49 | 42 | 38 | 48 | 42 | 38 | 47 | 42 | 38 | 47 | 41 | 38 | 36 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 5648 | 5648 | 5648 |
| 5° | 5482 | 5562 | 5643 |
| 10° | 5116 | 5320 | 5599 |
| 15° | 4668 | 5008 | 5514 |
| 20° | 4164 | 4634 | 5369 |
| 25° | 3630 | 4199 | 5197 |
| 30° | 3048 | 3729 | 4998 |
| 35° | 2405 | 3247 | 4793 |
| 40° | 1723 | 2729 | 4548 |
| 45° | 1014 | 2141 | 4264 |
| 50° | 751 | 1542 | 3961 |
| 55° | 630 | 934 | 3679 |
| 60° | 510 | 683 | 3283 |
| 65° | 396 | 650 | 2631 |
| 70° | 332 | 608 | 1782 |
| 75° | 311 | 543 | 777 |
| 80° | 309 | 539 | 500 |
| 85° | 387 | 695 | 537 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4264 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 75.6 | 6.4 |
| 10°-20° | 198.6 | 16.8 |
| 20°-30° | 259.5 | 21.9 |
| 30°-40° | 252.6 | 21.3 |
| 40°-50° | 188.8 | 15.9 |
| 50°-60° | 117.1 | 9.9 |
| 60°-70° | 61.5 | 5.2 |
| 70°-80° | 22.4 | 1.9 |
| 80°-90° | 8.5 | 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° | 533.6 | 45.1 |
| 0°-40° | 786.2 | 66.4 |
| 0°-60° | 1092.1 | 92.2 |
| 0°-90° | 1184.5 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1184.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 820 | 820 | 820 | 820 | 820 | |
| 5° | 793 | 804 | 805 | 810 | 816 | 74 |
| 15° | 655 | 674 | 703 | 745 | 774 | 183 |
| 25° | 478 | 502 | 553 | 628 | 684 | 218 |
| 35° | 286 | 317 | 386 | 490 | 570 | 178 |
| 45° | 104 | 136 | 220 | 344 | 438 | 88 |
| 55° | 52 | 56 | 78 | 202 | 306 | 47 |
| 65° | 24 | 26 | 40 | 86 | 162 | 25 |
| 75° | 12 | 14 | 20 | 22 | 29 | 13 |
| 85° | 5 | 9 | 9 | 9 | 7 | 5 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 820.3 | 820.3 | 820.3 | 820.3 | 820.3 |
| 2.5° | 813.5 | 820.3 | 815.4 | 815.4 | 816.4 |
| 5° | 793.1 | 803.8 | 804.7 | 809.6 | 816.4 |
| 7.5° | 764.8 | 777.5 | 785.3 | 799.9 | 810.6 |
| 10° | 731.7 | 746.3 | 760.9 | 785.3 | 800.8 |
| 12.5° | 694.8 | 712.3 | 733.7 | 766.8 | 789.2 |
| 15° | 654.9 | 674.3 | 702.6 | 745.4 | 773.6 |
| 17.5° | 613.0 | 633.5 | 668.5 | 720.1 | 754.1 |
| 20° | 568.3 | 590.7 | 632.5 | 690.9 | 732.7 |
| 22.5° | 522.5 | 547.8 | 593.6 | 659.7 | 709.4 |
| 25° | 477.8 | 502.1 | 552.7 | 627.6 | 684.1 |
| 27.5° | 431.1 | 456.4 | 511.8 | 594.5 | 656.8 |
| 30° | 383.4 | 410.6 | 469.0 | 560.5 | 628.6 |
| 32.5° | 335.7 | 363.9 | 427.2 | 525.5 | 600.4 |
| 35° | 286.1 | 317.2 | 386.3 | 489.5 | 570.2 |
| 37.5° | 239.4 | 272.5 | 344.5 | 452.5 | 538.1 |
| 40° | 191.7 | 225.8 | 303.6 | 416.5 | 506.0 |
| 42.5° | 145.0 | 180.0 | 261.8 | 379.5 | 473.9 |
| 45° | 104.1 | 136.2 | 219.9 | 343.5 | 437.9 |
| 47.5° | 79.8 | 98.3 | 181.0 | 306.5 | 405.8 |
| 50° | 70.1 | 75.9 | 144.0 | 270.5 | 369.8 |
| 52.5° | 61.3 | 65.2 | 107.0 | 235.5 | 338.6 |
| 55° | 52.5 | 55.5 | 77.8 | 202.4 | 306.5 |
| 57.5° | 44.8 | 47.7 | 59.4 | 172.2 | 273.4 |
| 60° | 37.0 | 39.9 | 49.6 | 142.1 | 238.4 |
| 62.5° | 31.1 | 32.1 | 44.8 | 113.8 | 199.5 |
| 65° | 24.3 | 26.3 | 39.9 | 85.6 | 161.5 |
| 67.5° | 20.4 | 21.4 | 35.0 | 61.3 | 124.6 |
| 70° | 16.5 | 17.5 | 30.2 | 42.8 | 88.5 |
| 72.5° | 14.6 | 14.6 | 25.3 | 31.1 | 56.4 |
| 75° | 11.7 | 13.6 | 20.4 | 22.4 | 29.2 |
| 77.5° | 9.7 | 13.6 | 17.5 | 16.5 | 15.6 |
| 80° | 7.8 | 12.6 | 13.6 | 13.6 | 12.6 |
| 82.5° | 6.8 | 10.7 | 11.7 | 10.7 | 9.7 |
| 85° | 4.9 | 8.8 | 8.8 | 8.8 | 6.8 |
| 87.5° | 3.9 | 7.8 | 6.8 | 6.8 | 4.9 |
| 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 | 5.80 | 7.15 | 6.17 | 7.47 | 7.78 | 15.51 | 16.86 | 15.87 | 17.17 | 17.48 |
| | 3H | 6.64 | 7.84 | 7.02 | 8.17 | 8.53 | 16.42 | 17.62 | 16.80 | 17.95 | 18.31 |
| | 4H | 7.00 | 8.12 | 7.40 | 8.47 | 8.85 | 16.52 | 17.63 | 16.92 | 17.98 | 18.37 |
| | 6H | 7.37 | 8.40 | 7.79 | 8.77 | 9.16 | 16.50 | 17.53 | 16.92 | 17.90 | 18.29 |
| | 8H | 7.55 | 8.53 | 7.98 | 8.92 | 9.32 | 16.49 | 17.46 | 16.92 | 17.85 | 18.26 |
| | 12H | 7.72 | 8.65 | 8.15 | 9.03 | 9.46 | 16.48 | 17.41 | 16.91 | 17.79 | 18.22 |
| 4H | 2H | 6.63 | 7.75 | 7.04 | 8.10 | 8.48 | 15.36 | 16.47 | 15.76 | 16.82 | 17.21 |
| | 3H | 7.69 | 8.60 | 8.10 | 9.01 | 9.41 | 16.35 | 17.26 | 16.76 | 17.66 | 18.07 |
| | 4H | 8.14 | 8.96 | 8.58 | 9.38 | 9.82 | 16.47 | 17.29 | 16.91 | 17.71 | 18.15 |
| | 6H | 8.70 | 9.41 | 9.16 | 9.85 | 10.32 | 16.51 | 17.21 | 16.97 | 17.66 | 18.12 |
| | 8H | 8.96 | 9.62 | 9.43 | 10.06 | 10.54 | 16.51 | 17.17 | 16.97 | 17.61 | 18.08 |
| | 12H | 9.20 | 9.79 | 9.69 | 10.27 | 10.74 | 16.51 | 17.10 | 17.00 | 17.58 | 18.05 |
| 8H | 4H | 8.70 | 9.36 | 9.17 | 9.80 | 10.27 | 16.40 | 17.06 | 16.87 | 17.50 | 17.98 |
| | 6H | 9.47 | 10.01 | 9.97 | 10.51 | 10.99 | 16.46 | 17.00 | 16.96 | 17.49 | 17.97 |
| | 8H | 9.89 | 10.37 | 10.41 | 10.89 | 11.38 | 16.49 | 16.97 | 17.01 | 17.49 | 17.98 |
| | 12H | 10.31 | 10.74 | 10.82 | 11.23 | 11.80 | 16.54 | 16.97 | 17.05 | 17.46 | 18.03 |
| 12H | 4H | 8.76 | 9.34 | 9.24 | 9.82 | 10.30 | 16.36 | 16.95 | 16.85 | 17.43 | 17.90 |
| | 6H | 9.62 | 10.10 | 10.14 | 10.62 | 11.11 | 16.42 | 16.91 | 16.94 | 17.42 | 17.92 |
| | 8H | 10.15 | 10.57 | 10.66 | 11.07 | 11.64 | 16.49 | 16.92 | 17.00 | 17.41 | 17.98 |