

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: P1061993

Luminaire Tested: S125RDR-H1270D950-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061993
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-87)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H1270D950-X4F0-XX-UDD-BVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

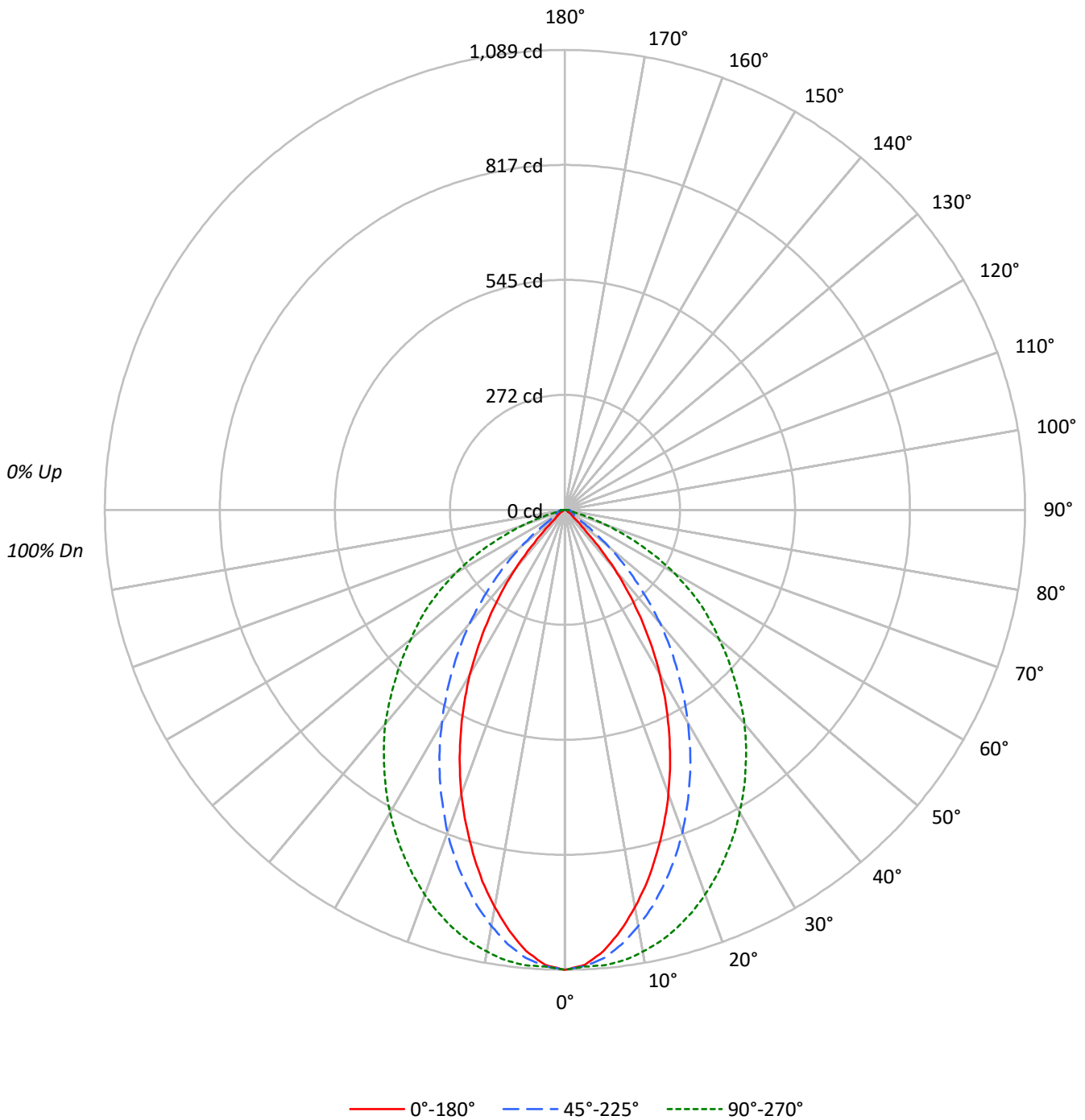
Lumens per Lamp: N/A
Luminaire Lumens: 1400.8 lumens
Efficiency: N/A
Efficacy: 38.4 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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 | | | | | | | | | | |
| 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 | 0 | | | | | | | | | | | | | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | | | | 100 | | | | | | | | | | | | | | |
| 1 | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 101 | 102 | 100 | 98 | 98 | 96 | 95 | 95 | 93 | 92 | 90 | | | | | | 90 | | | | | | | | | | | | | | |
| 2 | 105 | 98 | 93 | 89 | 102 | 97 | 92 | 88 | 93 | 89 | 86 | 90 | 87 | 84 | 87 | 85 | 82 | 81 | | | | | | 81 | | | | | | | | | | | | | | |
| 3 | 98 | 90 | 83 | 78 | 95 | 88 | 82 | 78 | 85 | 80 | 76 | 83 | 79 | 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 | 85 | 75 | 68 | 63 | 84 | 74 | 67 | 62 | 72 | 66 | 62 | 70 | 65 | 61 | 69 | 64 | 61 | 59 | | | | | | 59 | | | | | | | | | | | | | | |
| 6 | 80 | 69 | 62 | 57 | 78 | 68 | 62 | 57 | 67 | 61 | 56 | 65 | 60 | 56 | 64 | 59 | 55 | 54 | | | | | | 54 | | | | | | | | | | | | | | |
| 7 | 75 | 64 | 57 | 52 | 74 | 63 | 56 | 52 | 62 | 56 | 51 | 61 | 55 | 51 | 59 | 54 | 51 | 49 | | | | | | 49 | | | | | | | | | | | | | | |
| 8 | 71 | 60 | 52 | 47 | 69 | 59 | 52 | 47 | 58 | 52 | 47 | 57 | 51 | 47 | 55 | 50 | 47 | 45 | | | | | | 45 | | | | | | | | | | | | | | |
| 9 | 67 | 55 | 48 | 44 | 66 | 55 | 48 | 44 | 54 | 48 | 44 | 53 | 47 | 43 | 52 | 47 | 43 | 42 | | | | | | 42 | | | | | | | | | | | | | | |
| 10 | 63 | 52 | 45 | 41 | 62 | 51 | 45 | 40 | 50 | 44 | 40 | 50 | 44 | 40 | 49 | 44 | 40 | 39 | | | | | | 39 | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 7499 | 7499 | 7499 |
| 5° | 7250 | 7361 | 7481 |
| 10° | 6677 | 6996 | 7427 |
| 15° | 5995 | 6511 | 7304 |
| 20° | 5248 | 5955 | 7105 |
| 25° | 4433 | 5319 | 6858 |
| 30° | 3572 | 4628 | 6580 |
| 35° | 2627 | 3901 | 6269 |
| 40° | 1639 | 3147 | 5944 |
| 45° | 613 | 2299 | 5525 |
| 50° | 287 | 1436 | 5101 |
| 55° | 209 | 595 | 4718 |
| 60° | 147 | 314 | 4082 |
| 65° | 88 | 371 | 3234 |
| 70° | 81 | 433 | 2051 |
| 75° | 106 | 428 | 641 |
| 80° | 159 | 531 | 480 |
| 85° | 316 | 845 | 632 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5525 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 99.9 | 7.1 |
| 10°-20° | 258.5 | 18.5 |
| 20°-30° | 329.4 | 23.5 |
| 30°-40° | 306.6 | 21.9 |
| 40°-50° | 210.0 | 15.0 |
| 50°-60° | 115.7 | 8.3 |
| 60°-70° | 54.8 | 3.9 |
| 70°-80° | 17.2 | 1.2 |
| 80°-90° | 8.8 | 0.6 |
| 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° | 687.8 | 49.1 |
| 0°-40° | 994.3 | 71.0 |
| 0°-60° | 1320.1 | 94.2 |
| 0°-90° | 1400.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1400.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1089 | 1089 | 1089 | 1089 | 1089 | |
| 5° | 1049 | 1062 | 1065 | 1073 | 1082 | 97 |
| 15° | 841 | 868 | 913 | 982 | 1025 | 234 |
| 25° | 584 | 620 | 700 | 813 | 903 | 266 |
| 35° | 312 | 357 | 464 | 617 | 746 | 194 |
| 45° | 63 | 106 | 236 | 418 | 567 | 60 |
| 55° | 17 | 20 | 50 | 233 | 393 | 16 |
| 65° | 5 | 7 | 23 | 86 | 198 | 6 |
| 75° | 4 | 7 | 16 | 17 | 24 | 4 |
| 85° | 4 | 9 | 11 | 9 | 8 | 4 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1061993

CATALOG NUMBER: S125RDR-H1270D950-X4F0-XX-UDD-BVL-S

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1089.1 | 1089.1 | 1089.1 | 1089.1 | 1089.1 |
| 2.5° | 1078.4 | 1089.1 | 1081.1 | 1081.1 | 1082.4 |
| 5° | 1048.9 | 1062.3 | 1065.0 | 1073.0 | 1082.4 |
| 7.5° | 1006.0 | 1023.4 | 1036.8 | 1059.6 | 1075.7 |
| 10° | 955.0 | 976.5 | 1000.6 | 1038.2 | 1062.3 |
| 12.5° | 901.3 | 924.1 | 960.4 | 1012.7 | 1046.2 |
| 15° | 841.0 | 867.8 | 913.4 | 981.8 | 1024.7 |
| 17.5° | 779.3 | 808.8 | 865.1 | 945.6 | 999.3 |
| 20° | 716.2 | 747.1 | 812.8 | 902.7 | 969.7 |
| 22.5° | 650.5 | 684.1 | 756.5 | 858.4 | 937.6 |
| 25° | 583.5 | 619.7 | 700.1 | 812.8 | 902.7 |
| 27.5° | 516.4 | 553.9 | 642.5 | 765.9 | 866.5 |
| 30° | 449.3 | 488.2 | 582.1 | 717.6 | 827.6 |
| 32.5° | 380.9 | 423.8 | 523.1 | 669.3 | 787.3 |
| 35° | 312.5 | 356.8 | 464.1 | 617.0 | 745.8 |
| 37.5° | 245.5 | 291.1 | 406.4 | 567.4 | 704.2 |
| 40° | 182.4 | 228.0 | 350.1 | 517.7 | 661.3 |
| 42.5° | 118.0 | 166.3 | 291.1 | 466.8 | 614.3 |
| 45° | 63.0 | 106.0 | 236.1 | 418.5 | 567.4 |
| 47.5° | 33.5 | 56.3 | 183.8 | 370.2 | 523.1 |
| 50° | 26.8 | 30.8 | 134.1 | 321.9 | 476.2 |
| 52.5° | 21.5 | 24.1 | 85.8 | 272.3 | 434.6 |
| 55° | 17.4 | 20.1 | 49.6 | 233.4 | 393.0 |
| 57.5° | 13.4 | 16.1 | 28.2 | 194.5 | 344.7 |
| 60° | 10.7 | 12.1 | 22.8 | 155.6 | 296.4 |
| 62.5° | 6.7 | 9.4 | 22.8 | 120.7 | 248.1 |
| 65° | 5.4 | 6.7 | 22.8 | 85.8 | 198.5 |
| 67.5° | 5.4 | 5.4 | 22.8 | 56.3 | 148.9 |
| 70° | 4.0 | 4.0 | 21.5 | 36.2 | 101.9 |
| 72.5° | 4.0 | 4.0 | 18.8 | 24.1 | 59.0 |
| 75° | 4.0 | 6.7 | 16.1 | 17.4 | 24.1 |
| 77.5° | 4.0 | 10.7 | 14.8 | 14.8 | 13.4 |
| 80° | 4.0 | 10.7 | 13.4 | 12.1 | 12.1 |
| 82.5° | 4.0 | 10.7 | 10.7 | 10.7 | 9.4 |
| 85° | 4.0 | 9.4 | 10.7 | 9.4 | 8.0 |
| 87.5° | 4.0 | 9.4 | 9.4 | 9.4 | 5.4 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 16.05 | 17.33 | 16.41 | 17.64 | 17.96 |
| | 3H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 16.83 | 17.97 | 17.21 | 18.30 | 18.66 |
| | 4H | 0.00 | 0.00 | 0.00 | 0.00 | 0.30 | 16.86 | 17.92 | 17.26 | 18.27 | 18.65 |
| | 6H | 0.00 | 0.70 | 0.14 | 1.07 | 1.46 | 16.81 | 17.79 | 17.23 | 18.16 | 18.55 |
| | 8H | 0.40 | 1.32 | 0.83 | 1.71 | 2.11 | 16.79 | 17.71 | 17.22 | 18.10 | 18.51 |
| | 12H | 1.14 | 2.02 | 1.57 | 2.40 | 2.83 | 16.77 | 17.65 | 17.20 | 18.03 | 18.46 |
| 4H | 2H | 0.00 | 0.88 | 0.23 | 1.24 | 1.62 | 15.83 | 16.89 | 16.23 | 17.24 | 17.62 |
| | 3H | 0.70 | 1.56 | 1.11 | 1.97 | 2.37 | 16.66 | 17.52 | 17.07 | 17.92 | 18.33 |
| | 4H | 1.29 | 2.06 | 1.73 | 2.48 | 2.93 | 16.69 | 17.46 | 17.13 | 17.88 | 18.32 |
| | 6H | 2.78 | 3.45 | 3.25 | 3.89 | 4.36 | 16.68 | 17.34 | 17.14 | 17.79 | 18.26 |
| | 8H | 3.52 | 4.14 | 3.99 | 4.59 | 5.06 | 16.66 | 17.28 | 17.13 | 17.73 | 18.20 |
| | 12H | 4.26 | 4.81 | 4.75 | 5.29 | 5.76 | 16.66 | 17.21 | 17.15 | 17.69 | 18.17 |
| 8H | 4H | 3.34 | 3.96 | 3.81 | 4.40 | 4.88 | 16.58 | 17.20 | 17.05 | 17.64 | 18.11 |
| | 6H | 5.08 | 5.58 | 5.58 | 6.08 | 6.56 | 16.58 | 17.08 | 17.08 | 17.58 | 18.06 |
| | 8H | 6.02 | 6.48 | 6.55 | 6.99 | 7.49 | 16.58 | 17.04 | 17.11 | 17.55 | 18.05 |
| | 12H | 6.96 | 7.36 | 7.47 | 7.85 | 8.43 | 16.63 | 17.03 | 17.15 | 17.53 | 18.10 |
| 12H | 4H | 3.64 | 4.19 | 4.13 | 4.67 | 5.14 | 16.53 | 17.08 | 17.02 | 17.56 | 18.04 |
| | 6H | 5.53 | 5.99 | 6.06 | 6.50 | 7.00 | 16.53 | 16.99 | 17.06 | 17.50 | 18.00 |
| | 8H | 6.66 | 7.06 | 7.18 | 7.56 | 8.13 | 16.57 | 16.97 | 17.09 | 17.47 | 18.04 |