

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: P1061995

Luminaire Tested: S125RDR-H1270D950-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061995
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-47)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H1270D950-X4F0-XX-UDD-SVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

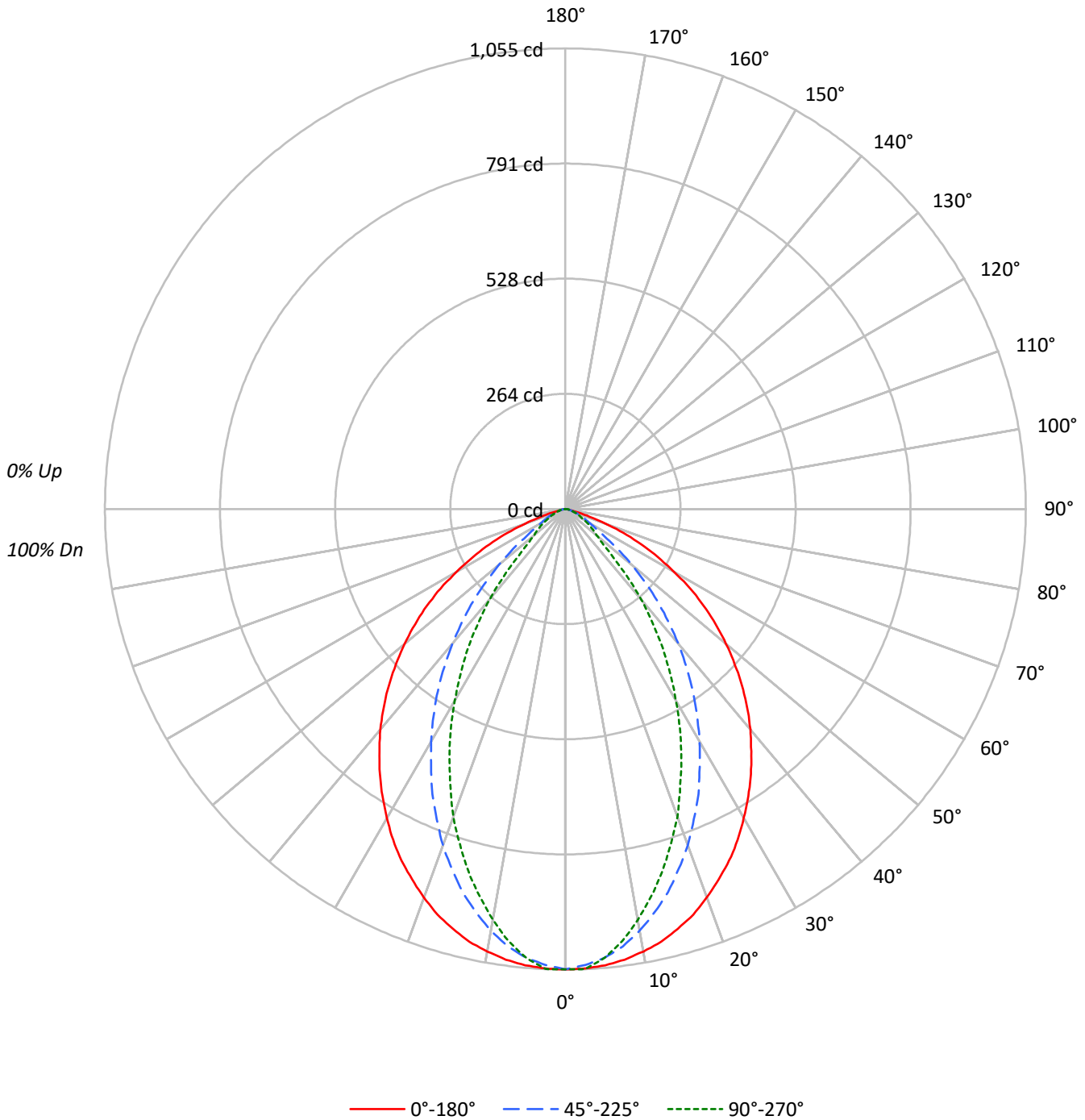
Lumens per Lamp: N/A
Luminaire Lumens: 1525.3 lumens
Efficiency: N/A
Efficacy: 41.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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 | | | | | 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 | | | | |
| 1 | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 101 | 102 | 100 | 97 | 98 | 96 | 95 | 95 | 93 | 92 | 90 | | | | |
| 2 | 104 | 98 | 93 | 88 | 102 | 96 | 91 | 87 | 93 | 89 | 85 | 90 | 86 | 83 | 87 | 84 | 82 | 80 | | | | |
| 3 | 97 | 89 | 82 | 77 | 95 | 87 | 81 | 77 | 84 | 79 | 75 | 82 | 78 | 74 | 79 | 76 | 73 | 71 | | | | |
| 4 | 90 | 81 | 74 | 68 | 88 | 79 | 73 | 68 | 77 | 71 | 67 | 75 | 70 | 66 | 73 | 69 | 65 | 63 | | | | |
| 5 | 84 | 74 | 66 | 61 | 82 | 73 | 66 | 61 | 71 | 65 | 60 | 69 | 64 | 59 | 67 | 63 | 59 | 57 | | | | |
| 6 | 79 | 68 | 60 | 55 | 77 | 67 | 60 | 55 | 65 | 59 | 54 | 64 | 58 | 54 | 62 | 57 | 53 | 52 | | | | |
| 7 | 74 | 62 | 55 | 50 | 72 | 62 | 55 | 50 | 60 | 54 | 49 | 59 | 53 | 49 | 58 | 53 | 49 | 47 | | | | |
| 8 | 69 | 58 | 50 | 45 | 68 | 57 | 50 | 45 | 56 | 50 | 45 | 55 | 49 | 45 | 54 | 48 | 45 | 43 | | | | |
| 9 | 65 | 54 | 47 | 42 | 64 | 53 | 46 | 42 | 52 | 46 | 41 | 51 | 45 | 41 | 50 | 45 | 41 | 39 | | | | |
| 10 | 62 | 50 | 43 | 38 | 61 | 50 | 43 | 38 | 49 | 43 | 38 | 48 | 42 | 38 | 47 | 42 | 38 | 36 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 7262 | 7262 | 7262 |
| 5° | 7252 | 7132 | 7132 |
| 10° | 7196 | 6859 | 6680 |
| 15° | 7097 | 6477 | 6123 |
| 20° | 6942 | 6010 | 5499 |
| 25° | 6750 | 5477 | 4775 |
| 30° | 6499 | 4890 | 4028 |
| 35° | 6229 | 4281 | 3266 |
| 40° | 5927 | 3613 | 2421 |
| 45° | 5572 | 2897 | 1462 |
| 50° | 5153 | 2124 | 1005 |
| 55° | 4649 | 1304 | 837 |
| 60° | 3949 | 885 | 664 |
| 65° | 3122 | 676 | 525 |
| 70° | 1969 | 485 | 431 |
| 75° | 641 | 356 | 356 |
| 80° | 214 | 266 | 317 |
| 85° | 103 | 213 | 213 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5572 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 97.6 | 6.4 |
| 10°-20° | 257.6 | 16.9 |
| 20°-30° | 338.8 | 22.2 |
| 30°-40° | 333.0 | 21.8 |
| 40°-50° | 251.9 | 16.5 |
| 50°-60° | 152.7 | 10.0 |
| 60°-70° | 72.1 | 4.7 |
| 70°-80° | 18.8 | 1.2 |
| 80°-90° | 2.8 | 0.2 |
| 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° | 694.0 | 45.5 |
| 0°-40° | 1027.0 | 67.3 |
| 0°-60° | 1431.6 | 93.9 |
| 0°-90° | 1525.3 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1525.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1055 | 1055 | 1055 | 1055 | 1055 | |
| 5° | 1049 | 1047 | 1032 | 1033 | 1032 | 100 |
| 15° | 996 | 969 | 909 | 874 | 859 | 280 |
| 25° | 888 | 822 | 721 | 654 | 628 | 408 |
| 35° | 741 | 642 | 509 | 420 | 389 | 463 |
| 45° | 572 | 450 | 298 | 189 | 150 | 441 |
| 55° | 387 | 265 | 109 | 74 | 70 | 345 |
| 65° | 192 | 98 | 42 | 35 | 32 | 189 |
| 75° | 24 | 16 | 13 | 13 | 13 | 37 |
| 85° | 1 | 1 | 3 | 3 | 3 | 2 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1054.7 | 1054.7 | 1054.7 | 1054.7 | 1054.7 |
| 2.5° | 1053.4 | 1053.4 | 1045.3 | 1054.7 | 1054.7 |
| 5° | 1049.3 | 1046.7 | 1031.9 | 1033.3 | 1031.9 |
| 7.5° | 1041.3 | 1035.9 | 1010.5 | 1003.8 | 998.4 |
| 10° | 1029.2 | 1018.5 | 981.0 | 964.9 | 955.5 |
| 12.5° | 1015.8 | 997.1 | 946.1 | 923.4 | 908.6 |
| 15° | 995.7 | 968.9 | 908.6 | 873.8 | 859.0 |
| 17.5° | 974.3 | 935.4 | 864.4 | 822.8 | 804.1 |
| 20° | 947.5 | 901.9 | 820.2 | 769.2 | 750.5 |
| 22.5° | 918.0 | 864.4 | 769.2 | 713.0 | 687.5 |
| 25° | 888.5 | 821.5 | 721.0 | 654.0 | 628.5 |
| 27.5° | 855.0 | 778.6 | 666.1 | 596.4 | 568.2 |
| 30° | 817.5 | 735.7 | 615.1 | 542.8 | 506.6 |
| 32.5° | 780.0 | 691.5 | 561.5 | 482.5 | 446.3 |
| 35° | 741.1 | 641.9 | 509.3 | 419.5 | 388.6 |
| 37.5° | 699.6 | 595.0 | 455.6 | 361.8 | 325.7 |
| 40° | 659.4 | 548.1 | 402.0 | 302.9 | 269.4 |
| 42.5° | 616.5 | 501.2 | 348.4 | 245.2 | 207.7 |
| 45° | 572.2 | 450.3 | 297.5 | 189.0 | 150.1 |
| 47.5° | 526.7 | 404.7 | 246.6 | 139.4 | 112.6 |
| 50° | 481.1 | 356.5 | 198.3 | 103.2 | 93.8 |
| 52.5° | 434.2 | 309.6 | 150.1 | 85.8 | 81.7 |
| 55° | 387.3 | 265.3 | 108.6 | 73.7 | 69.7 |
| 57.5° | 339.1 | 217.1 | 81.7 | 63.0 | 59.0 |
| 60° | 286.8 | 174.2 | 64.3 | 52.3 | 48.2 |
| 62.5° | 238.5 | 136.7 | 52.3 | 42.9 | 40.2 |
| 65° | 191.6 | 97.8 | 41.5 | 34.8 | 32.2 |
| 67.5° | 143.4 | 65.7 | 32.2 | 26.8 | 26.8 |
| 70° | 97.8 | 42.9 | 24.1 | 21.4 | 21.4 |
| 72.5° | 59.0 | 25.5 | 17.4 | 17.4 | 17.4 |
| 75° | 24.1 | 16.1 | 13.4 | 13.4 | 13.4 |
| 77.5° | 8.0 | 9.4 | 9.4 | 10.7 | 10.7 |
| 80° | 5.4 | 5.4 | 6.7 | 8.0 | 8.0 |
| 82.5° | 2.7 | 4.0 | 4.0 | 5.4 | 5.4 |
| 85° | 1.3 | 1.3 | 2.7 | 2.7 | 2.7 |
| 87.5° | 0.0 | 0.0 | 0.0 | 1.3 | 1.3 |
| 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 | 16.22 | 17.55 | 16.58 | 17.86 | 18.18 | 6.88 | 8.21 | 7.24 | 8.52 | 8.83 |
| | 3H | 16.92 | 18.10 | 17.30 | 18.43 | 18.80 | 7.65 | 8.83 | 8.03 | 9.16 | 9.53 |
| | 4H | 16.94 | 18.04 | 17.34 | 18.39 | 18.77 | 7.90 | 9.00 | 8.31 | 9.35 | 9.73 |
| | 6H | 16.87 | 17.88 | 17.29 | 18.25 | 18.64 | 8.08 | 9.09 | 8.50 | 9.46 | 9.85 |
| | 8H | 16.83 | 17.78 | 17.26 | 18.17 | 18.58 | 8.13 | 9.08 | 8.56 | 9.47 | 9.87 |
| | 12H | 16.79 | 17.70 | 17.22 | 18.08 | 18.51 | 8.13 | 9.04 | 8.57 | 9.43 | 9.86 |
| 4H | 2H | 16.05 | 17.14 | 16.45 | 17.50 | 17.88 | 7.36 | 8.46 | 7.76 | 8.81 | 9.19 |
| | 3H | 16.79 | 17.69 | 17.21 | 18.09 | 18.49 | 8.27 | 9.16 | 8.68 | 9.56 | 9.97 |
| | 4H | 16.81 | 17.61 | 17.25 | 18.03 | 18.47 | 8.58 | 9.37 | 9.01 | 9.79 | 10.24 |
| | 6H | 16.75 | 17.44 | 17.21 | 17.88 | 18.35 | 8.84 | 9.52 | 9.30 | 9.97 | 10.43 |
| | 8H | 16.70 | 17.34 | 17.17 | 17.79 | 18.26 | 8.90 | 9.54 | 9.37 | 9.99 | 10.46 |
| | 12H | 16.66 | 17.22 | 17.14 | 17.70 | 18.18 | 8.93 | 9.49 | 9.42 | 9.98 | 10.45 |
| 8H | 4H | 16.70 | 17.33 | 17.16 | 17.78 | 18.25 | 8.69 | 9.33 | 9.16 | 9.78 | 10.25 |
| | 6H | 16.62 | 17.14 | 17.12 | 17.64 | 18.12 | 9.01 | 9.53 | 9.51 | 10.02 | 10.51 |
| | 8H | 16.57 | 17.03 | 17.09 | 17.55 | 18.04 | 9.11 | 9.58 | 9.64 | 10.10 | 10.59 |
| | 12H | 16.53 | 16.94 | 17.04 | 17.43 | 18.00 | 9.18 | 9.59 | 9.69 | 10.08 | 10.66 |
| 12H | 4H | 16.65 | 17.21 | 17.14 | 17.70 | 18.17 | 8.66 | 9.23 | 9.15 | 9.71 | 10.18 |
| | 6H | 16.56 | 17.03 | 17.08 | 17.54 | 18.04 | 8.98 | 9.45 | 9.50 | 9.96 | 10.45 |
| | 8H | 16.53 | 16.94 | 17.04 | 17.43 | 18.01 | 9.12 | 9.53 | 9.64 | 10.03 | 10.60 |