

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: P1061882

Luminaire Tested: S125RDRP-H1090D927-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061882
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-85)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-H1090D927-X4F0-XX-UDD-WVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

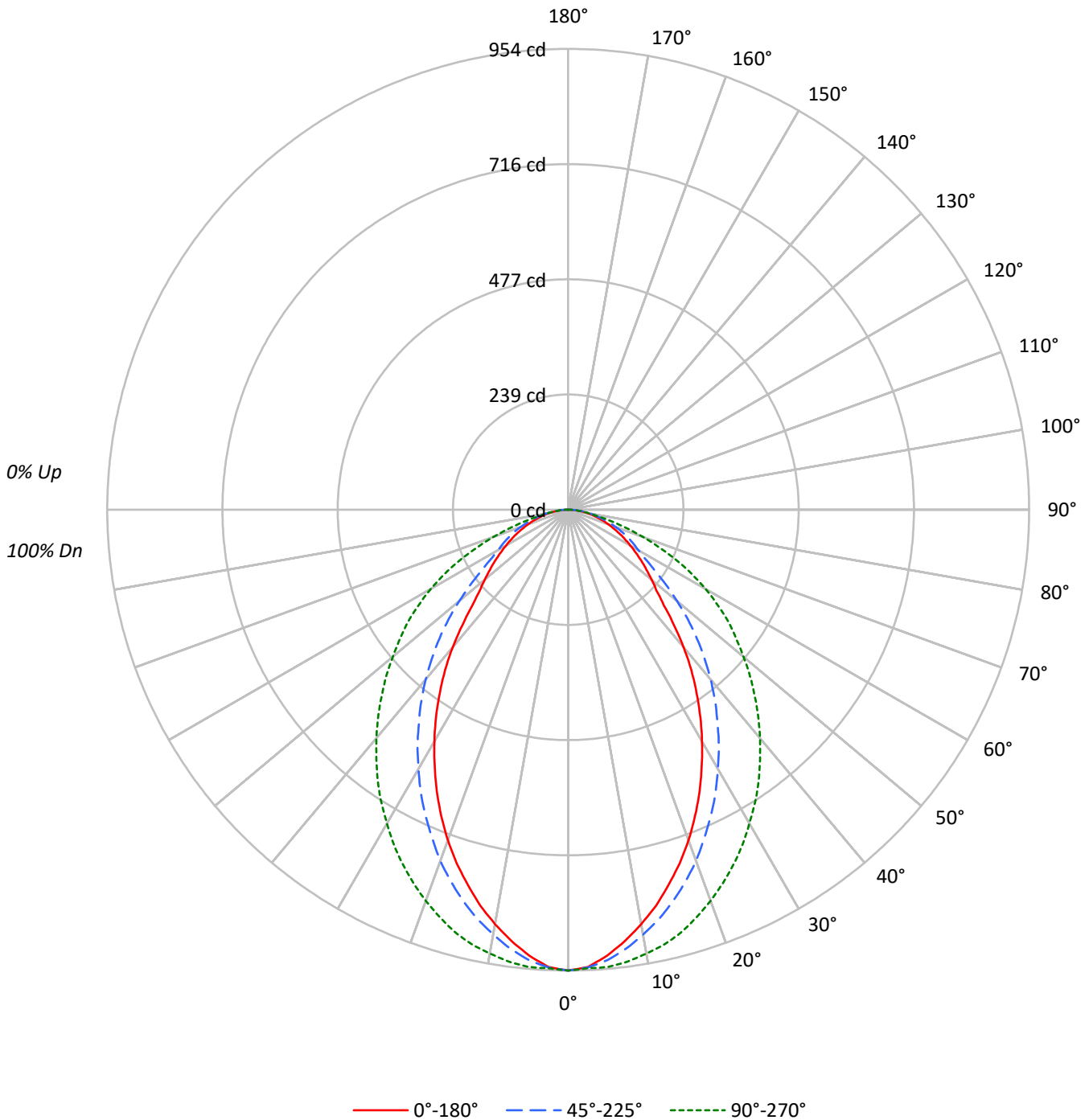
Lumens per Lamp: N/A
Luminaire Lumens: 1788.4 lumens
Efficiency: N/A
Efficacy: 57.3 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
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 | 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 | 110 | 106 | 102 | 99 | 107 | 104 | 100 | 97 | 99 | 97 | 94 | 96 | 93 | 91 | 92 | 90 | 88 | 86 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 101 | 94 | 88 | 83 | 99 | 92 | 86 | 82 | 89 | 84 | 80 | 85 | 81 | 78 | 82 | 79 | 76 | 74 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 93 | 84 | 76 | 71 | 91 | 82 | 75 | 70 | 79 | 74 | 69 | 77 | 72 | 68 | 74 | 70 | 66 | 64 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 86 | 75 | 67 | 61 | 84 | 74 | 67 | 61 | 72 | 65 | 60 | 69 | 64 | 59 | 67 | 62 | 58 | 56 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 80 | 68 | 60 | 54 | 78 | 67 | 59 | 53 | 65 | 58 | 53 | 63 | 57 | 52 | 61 | 56 | 52 | 50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 74 | 62 | 54 | 48 | 72 | 61 | 53 | 48 | 59 | 52 | 47 | 58 | 52 | 47 | 56 | 51 | 46 | 44 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | 69 | 57 | 49 | 43 | 68 | 56 | 48 | 43 | 54 | 47 | 42 | 53 | 47 | 42 | 52 | 46 | 42 | 40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 65 | 52 | 44 | 39 | 63 | 52 | 44 | 39 | 50 | 43 | 38 | 49 | 43 | 38 | 48 | 42 | 38 | 36 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | 61 | 48 | 41 | 35 | 59 | 48 | 40 | 35 | 47 | 40 | 35 | 46 | 39 | 35 | 45 | 39 | 35 | 33 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 57 | 45 | 37 | 32 | 56 | 44 | 37 | 32 | 43 | 37 | 32 | 42 | 36 | 32 | 42 | 36 | 32 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 6569 | 6569 | 6569 |
| 5° | 6403 | 6469 | 6567 |
| 10° | 6090 | 6243 | 6523 |
| 15° | 5727 | 5978 | 6454 |
| 20° | 5335 | 5670 | 6312 |
| 25° | 4887 | 5307 | 6154 |
| 30° | 4402 | 4925 | 5963 |
| 35° | 3893 | 4526 | 5775 |
| 40° | 3341 | 4120 | 5551 |
| 45° | 2728 | 3665 | 5317 |
| 50° | 2420 | 3144 | 5074 |
| 55° | 2220 | 2608 | 4862 |
| 60° | 2048 | 2309 | 4528 |
| 65° | 1909 | 2221 | 4037 |
| 70° | 1784 | 2110 | 3299 |
| 75° | 1647 | 1977 | 2434 |
| 80° | 1550 | 1852 | 1776 |
| 85° | 1430 | 1809 | 1509 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5317 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 88.3 | 4.9 |
| 10°-20° | 237.8 | 13.3 |
| 20°-30° | 326.8 | 18.3 |
| 30°-40° | 346.4 | 19.4 |
| 40°-50° | 302.3 | 16.9 |
| 50°-60° | 229.7 | 12.8 |
| 60°-70° | 153.9 | 8.6 |
| 70°-80° | 79.3 | 4.4 |
| 80°-90° | 23.8 | 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° | 652.9 | 36.5 |
| 0°-40° | 999.3 | 55.9 |
| 0°-60° | 1531.3 | 85.6 |
| 0°-90° | 1788.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1788.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 954 | 954 | 954 | 954 | 954 | |
| 5° | 926 | 936 | 936 | 943 | 950 | 87 |
| 15° | 803 | 819 | 839 | 876 | 905 | 225 |
| 25° | 643 | 663 | 699 | 757 | 810 | 295 |
| 35° | 463 | 490 | 538 | 615 | 687 | 289 |
| 45° | 280 | 308 | 376 | 466 | 546 | 221 |
| 55° | 185 | 191 | 217 | 319 | 405 | 166 |
| 65° | 117 | 120 | 136 | 182 | 248 | 116 |
| 75° | 62 | 66 | 74 | 79 | 92 | 66 |
| 85° | 18 | 23 | 23 | 21 | 19 | 20 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 954.0 | 954.0 | 954.0 | 954.0 | 954.0 |
| 2.5° | 947.3 | 954.0 | 948.3 | 948.3 | 950.2 |
| 5° | 926.4 | 935.9 | 935.9 | 942.6 | 950.2 |
| 7.5° | 900.6 | 911.1 | 916.8 | 932.1 | 943.5 |
| 10° | 871.1 | 882.5 | 893.0 | 915.9 | 933.0 |
| 12.5° | 839.6 | 852.0 | 868.2 | 897.8 | 921.6 |
| 15° | 803.4 | 818.7 | 838.7 | 875.8 | 905.4 |
| 17.5° | 767.2 | 782.4 | 807.2 | 851.1 | 884.4 |
| 20° | 728.1 | 744.3 | 773.9 | 821.5 | 861.5 |
| 22.5° | 686.2 | 704.3 | 735.7 | 790.1 | 836.8 |
| 25° | 643.3 | 663.3 | 698.6 | 756.7 | 810.1 |
| 27.5° | 598.5 | 622.3 | 660.5 | 722.4 | 781.5 |
| 30° | 553.7 | 577.5 | 619.5 | 687.1 | 750.0 |
| 32.5° | 508.9 | 534.7 | 580.4 | 651.9 | 719.5 |
| 35° | 463.2 | 489.9 | 538.5 | 614.7 | 687.1 |
| 37.5° | 418.4 | 445.1 | 499.4 | 578.5 | 651.9 |
| 40° | 371.7 | 399.3 | 458.4 | 541.3 | 617.6 |
| 42.5° | 324.0 | 353.6 | 417.4 | 503.2 | 582.3 |
| 45° | 280.2 | 307.8 | 376.4 | 466.0 | 546.1 |
| 47.5° | 247.8 | 265.9 | 335.5 | 427.9 | 510.8 |
| 50° | 225.9 | 235.4 | 293.5 | 390.7 | 473.7 |
| 52.5° | 204.0 | 211.6 | 254.5 | 352.6 | 438.4 |
| 55° | 184.9 | 190.6 | 217.3 | 319.3 | 405.0 |
| 57.5° | 165.8 | 171.5 | 188.7 | 285.9 | 366.0 |
| 60° | 148.7 | 153.4 | 167.7 | 250.6 | 328.8 |
| 62.5° | 132.5 | 136.3 | 151.5 | 217.3 | 288.8 |
| 65° | 117.2 | 120.1 | 136.3 | 182.0 | 247.8 |
| 67.5° | 102.0 | 104.8 | 121.0 | 148.7 | 204.0 |
| 70° | 88.6 | 89.6 | 104.8 | 121.0 | 163.9 |
| 72.5° | 75.3 | 76.2 | 88.6 | 98.2 | 125.8 |
| 75° | 61.9 | 65.8 | 74.3 | 79.1 | 91.5 |
| 77.5° | 50.5 | 55.3 | 60.0 | 61.9 | 61.9 |
| 80° | 39.1 | 44.8 | 46.7 | 46.7 | 44.8 |
| 82.5° | 28.6 | 33.4 | 34.3 | 32.4 | 30.5 |
| 85° | 18.1 | 22.9 | 22.9 | 21.0 | 19.1 |
| 87.5° | 8.6 | 12.4 | 12.4 | 11.4 | 8.6 |
| 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 | 13.14 | 14.64 | 13.51 | 14.95 | 15.27 | 17.07 | 18.57 | 17.44 | 18.88 | 19.20 |
| | 3H | 14.72 | 16.06 | 15.09 | 16.39 | 16.75 | 18.50 | 19.84 | 18.87 | 20.17 | 20.53 |
| | 4H | 15.33 | 16.59 | 15.73 | 16.94 | 17.32 | 18.91 | 20.17 | 19.31 | 20.52 | 20.90 |
| | 6H | 15.83 | 16.99 | 16.24 | 17.35 | 17.75 | 19.13 | 20.29 | 19.54 | 20.66 | 21.05 |
| | 8H | 16.00 | 17.11 | 16.43 | 17.50 | 17.90 | 19.19 | 20.29 | 19.61 | 20.68 | 21.08 |
| | 12H | 16.12 | 17.18 | 16.55 | 17.56 | 17.99 | 19.22 | 20.28 | 19.65 | 20.66 | 21.09 |
| 4H | 2H | 13.88 | 15.14 | 14.28 | 15.49 | 15.87 | 17.20 | 18.46 | 17.60 | 18.81 | 19.19 |
| | 3H | 15.66 | 16.71 | 16.07 | 17.11 | 17.51 | 18.81 | 19.85 | 19.22 | 20.25 | 20.66 |
| | 4H | 16.40 | 17.34 | 16.83 | 17.75 | 18.19 | 19.34 | 20.28 | 19.77 | 20.69 | 21.13 |
| | 6H | 17.03 | 17.85 | 17.49 | 18.29 | 18.76 | 19.68 | 20.50 | 20.14 | 20.94 | 21.40 |
| | 8H | 17.26 | 18.03 | 17.73 | 18.47 | 18.94 | 19.78 | 20.54 | 20.24 | 20.99 | 21.46 |
| | 12H | 17.44 | 18.12 | 17.92 | 18.60 | 19.07 | 19.85 | 20.53 | 20.33 | 21.01 | 21.48 |
| 8H | 4H | 16.80 | 17.56 | 17.26 | 18.01 | 18.47 | 19.44 | 20.21 | 19.91 | 20.65 | 21.12 |
| | 6H | 17.58 | 18.22 | 18.08 | 18.71 | 19.19 | 19.88 | 20.51 | 20.38 | 21.01 | 21.48 |
| | 8H | 17.91 | 18.48 | 18.42 | 18.99 | 19.47 | 20.04 | 20.61 | 20.55 | 21.12 | 21.61 |
| | 12H | 18.18 | 18.69 | 18.69 | 19.18 | 19.74 | 20.18 | 20.68 | 20.69 | 21.17 | 21.73 |
| 12H | 4H | 16.84 | 17.52 | 17.32 | 18.00 | 18.47 | 19.44 | 20.13 | 19.93 | 20.61 | 21.08 |
| | 6H | 17.67 | 18.24 | 18.18 | 18.75 | 19.23 | 19.90 | 20.47 | 20.41 | 20.98 | 21.46 |
| | 8H | 18.06 | 18.57 | 18.57 | 19.06 | 19.62 | 20.11 | 20.61 | 20.62 | 21.10 | 21.67 |