

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: P1061709

Luminaire Tested: S125RDR-S610D850-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061709
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: S125RDR-S610D850-X4F0-XX-UDD-SVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

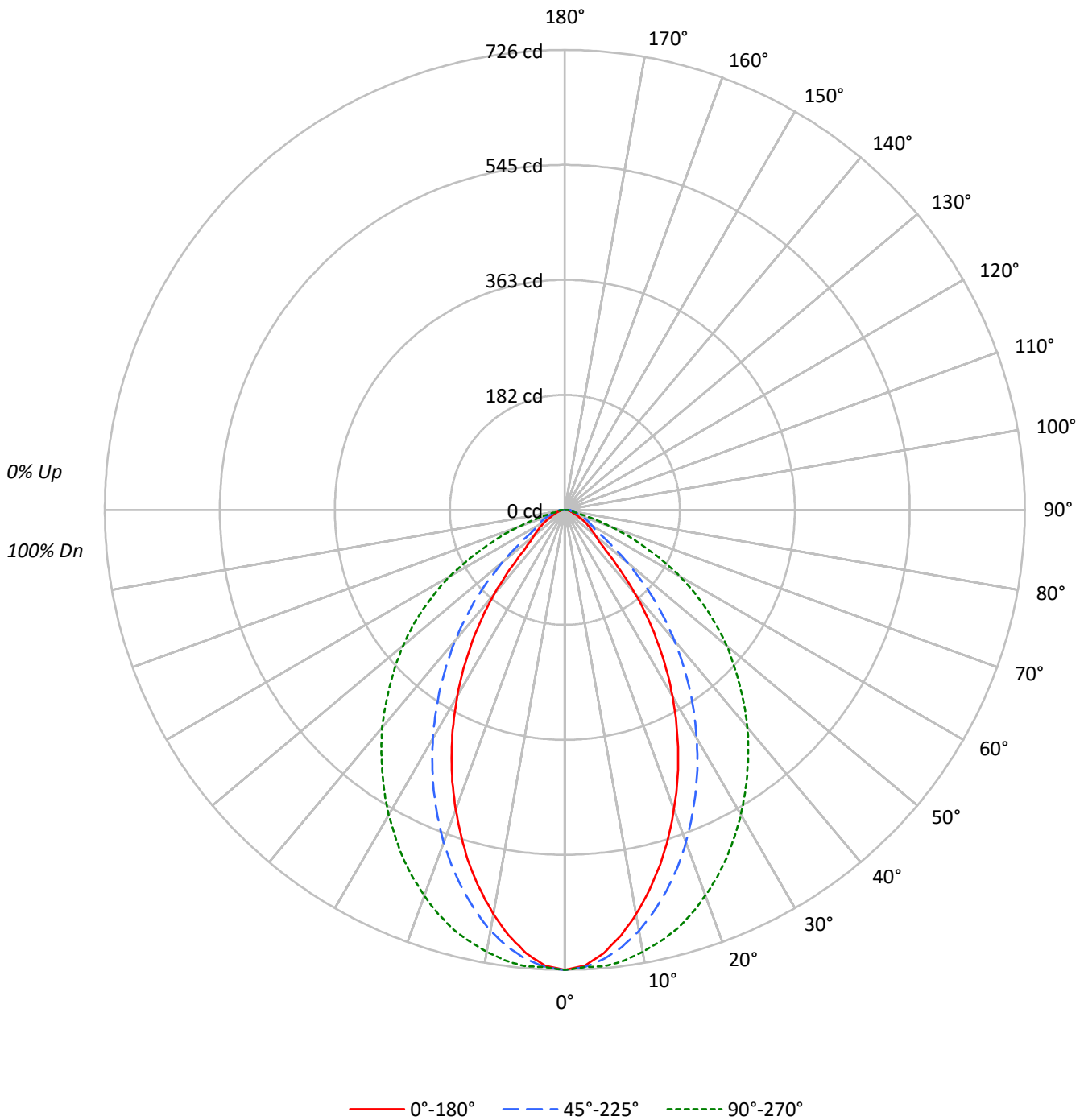
Lumens per Lamp: N/A
Luminaire Lumens: 1052.0 lumens
Efficiency: N/A
Efficacy: 53.7 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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 | | | | 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° | 5001 | 5001 | 5001 |
| 5° | 4854 | 4918 | 4998 |
| 10° | 4533 | 4716 | 4953 |
| 15° | 4137 | 4429 | 4880 |
| 20° | 3687 | 4094 | 4750 |
| 25° | 3213 | 3717 | 4597 |
| 30° | 2700 | 3307 | 4418 |
| 35° | 2148 | 2874 | 4223 |
| 40° | 1547 | 2414 | 4030 |
| 45° | 917 | 1916 | 3796 |
| 50° | 678 | 1364 | 3571 |
| 55° | 575 | 843 | 3270 |
| 60° | 468 | 680 | 2881 |
| 65° | 365 | 629 | 2276 |
| 70° | 310 | 544 | 1522 |
| 75° | 287 | 474 | 617 |
| 80° | 305 | 488 | 428 |
| 85° | 363 | 735 | 490 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3796 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 66.9 | 6.4 |
| 10°-20° | 175.8 | 16.7 |
| 20°-30° | 229.8 | 21.8 |
| 30°-40° | 223.8 | 21.3 |
| 40°-50° | 167.9 | 16.0 |
| 50°-60° | 105.3 | 10.0 |
| 60°-70° | 54.8 | 5.2 |
| 70°-80° | 19.8 | 1.9 |
| 80°-90° | 7.8 | 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° | 472.5 | 44.9 |
| 0°-40° | 696.4 | 66.2 |
| 0°-60° | 969.5 | 92.2 |
| 0°-90° | 1052.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1052.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 726 | 726 | 726 | 726 | 726 | |
| 5° | 702 | 712 | 712 | 717 | 723 | 65 |
| 15° | 580 | 597 | 621 | 660 | 685 | 162 |
| 25° | 423 | 446 | 489 | 556 | 605 | 193 |
| 35° | 256 | 282 | 342 | 433 | 502 | 159 |
| 45° | 94 | 122 | 197 | 304 | 390 | 79 |
| 55° | 48 | 50 | 70 | 184 | 272 | 43 |
| 65° | 22 | 24 | 39 | 74 | 140 | 23 |
| 75° | 11 | 15 | 18 | 18 | 23 | 12 |
| 85° | 5 | 8 | 9 | 8 | 6 | 5 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CATALOG NUMBER: S125RDR-S610D850-X4F0-XX-UDD-SVL-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 726.3 | 726.3 | 726.3 | 726.3 | 726.3 |
| 2.5° | 720.1 | 727.0 | 722.4 | 722.4 | 722.4 |
| 5° | 702.3 | 711.6 | 711.6 | 717.0 | 723.2 |
| 7.5° | 677.6 | 688.4 | 695.4 | 708.5 | 717.8 |
| 10° | 648.3 | 661.4 | 674.6 | 696.2 | 708.5 |
| 12.5° | 615.1 | 630.6 | 649.1 | 679.2 | 697.7 |
| 15° | 580.4 | 597.4 | 621.3 | 659.9 | 684.6 |
| 17.5° | 542.6 | 562.6 | 591.2 | 637.5 | 667.6 |
| 20° | 503.2 | 523.3 | 558.8 | 611.3 | 648.3 |
| 22.5° | 463.9 | 485.5 | 524.1 | 583.5 | 627.5 |
| 25° | 422.9 | 446.1 | 489.3 | 555.7 | 605.1 |
| 27.5° | 381.3 | 405.2 | 453.0 | 527.1 | 580.4 |
| 30° | 339.6 | 364.3 | 416.0 | 496.3 | 555.7 |
| 32.5° | 297.9 | 324.2 | 379.0 | 464.6 | 529.5 |
| 35° | 255.5 | 282.5 | 341.9 | 433.0 | 502.4 |
| 37.5° | 214.6 | 241.6 | 304.9 | 400.6 | 475.4 |
| 40° | 172.1 | 201.4 | 268.6 | 368.1 | 448.4 |
| 42.5° | 130.4 | 160.5 | 232.3 | 335.7 | 419.1 |
| 45° | 94.2 | 121.9 | 196.8 | 304.1 | 389.8 |
| 47.5° | 72.5 | 88.0 | 160.5 | 271.7 | 361.2 |
| 50° | 63.3 | 67.9 | 127.3 | 241.6 | 333.4 |
| 52.5° | 54.8 | 57.9 | 95.7 | 213.8 | 303.3 |
| 55° | 47.9 | 50.2 | 70.2 | 183.7 | 272.4 |
| 57.5° | 40.1 | 43.2 | 55.6 | 154.4 | 240.8 |
| 60° | 34.0 | 35.5 | 49.4 | 127.3 | 209.2 |
| 62.5° | 27.8 | 29.3 | 44.0 | 100.3 | 173.7 |
| 65° | 22.4 | 23.9 | 38.6 | 74.1 | 139.7 |
| 67.5° | 18.5 | 19.3 | 32.4 | 52.5 | 107.3 |
| 70° | 15.4 | 16.2 | 27.0 | 36.3 | 75.6 |
| 72.5° | 13.1 | 15.4 | 21.6 | 26.2 | 47.9 |
| 75° | 10.8 | 14.7 | 17.8 | 18.5 | 23.2 |
| 77.5° | 9.3 | 13.9 | 14.7 | 14.7 | 13.1 |
| 80° | 7.7 | 11.6 | 12.3 | 11.6 | 10.8 |
| 82.5° | 6.2 | 9.3 | 10.0 | 10.0 | 8.5 |
| 85° | 4.6 | 7.7 | 9.3 | 8.5 | 6.2 |
| 87.5° | 3.1 | 6.9 | 7.7 | 6.9 | 4.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)