

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: P1175374

Luminaire Tested: S125RDRP-S610D830-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2024
Report Number: P1175374
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-82)
Test Lab: INNOVATION CENTER
Issue Date: 8/18/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S610D830-X4F0-XX-UDD-WVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

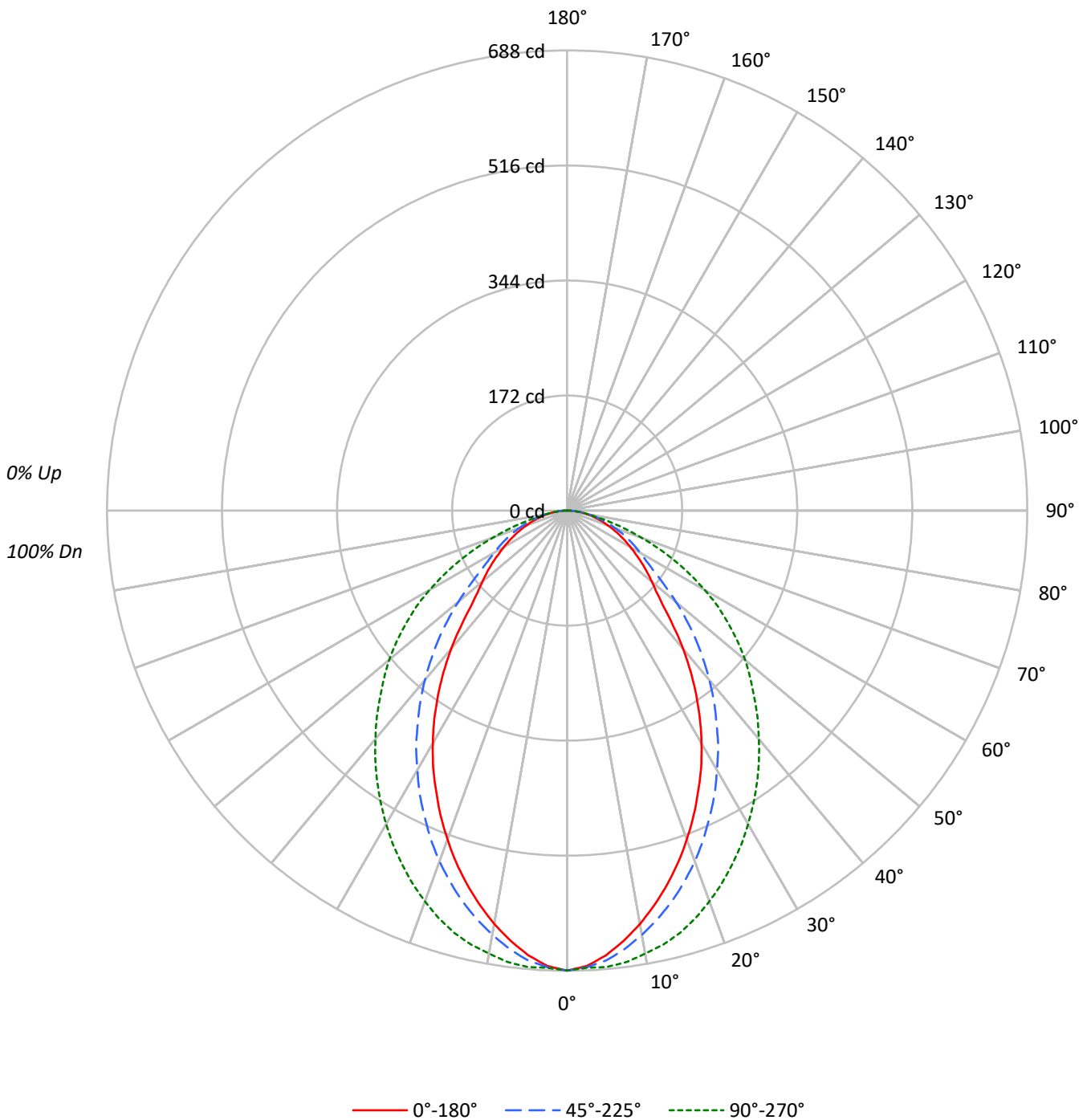
Lumens per Lamp: N/A
Luminaire Lumens: 1295.6 lumens
Efficiency: N/A
Efficacy: 66.1 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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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CATALOG NUMBER: S125RDRP-S610D830-X4F0-XX-UDD-WVL-W

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 | 0 | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | | | 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 | 73 | 69 | 77 | 72 | 68 | 74 | 70 | 66 | | | | | 64 | | | | |
| 4 | 86 | 75 | 67 | 61 | 84 | 74 | 66 | 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 | 47 | 59 | 52 | 47 | 58 | 51 | 47 | 56 | 51 | 46 | | | | | 44 | | | | |
| 7 | 69 | 57 | 48 | 43 | 68 | 56 | 48 | 43 | 54 | 47 | 42 | 53 | 47 | 42 | 52 | 46 | 42 | | | | | 40 | | | | |
| 8 | 65 | 52 | 44 | 39 | 63 | 51 | 44 | 39 | 50 | 43 | 38 | 49 | 43 | 38 | 48 | 42 | 38 | | | | | 36 | | | | |
| 9 | 61 | 48 | 40 | 35 | 59 | 48 | 40 | 35 | 46 | 40 | 35 | 45 | 39 | 35 | 44 | 39 | 35 | | | | | 33 | | | | |
| 10 | 57 | 45 | 37 | 32 | 56 | 44 | 37 | 32 | 43 | 37 | 32 | 42 | 36 | 32 | 41 | 36 | 32 | | | | | 30 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 4735 | 4735 | 4735 |
| 5° | 4612 | 4665 | 4733 |
| 10° | 4388 | 4502 | 4702 |
| 15° | 4124 | 4311 | 4657 |
| 20° | 3833 | 4089 | 4556 |
| 25° | 3521 | 3832 | 4435 |
| 30° | 3194 | 3560 | 4303 |
| 35° | 2827 | 3273 | 4161 |
| 40° | 2424 | 2975 | 4009 |
| 45° | 1989 | 2649 | 3854 |
| 50° | 1770 | 2276 | 3721 |
| 55° | 1633 | 1906 | 3532 |
| 60° | 1504 | 1736 | 3272 |
| 65° | 1398 | 1636 | 2892 |
| 70° | 1304 | 1528 | 2361 |
| 75° | 1226 | 1413 | 1772 |
| 80° | 1158 | 1297 | 1273 |
| 85° | 1059 | 1288 | 1059 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3854 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 63.7 | 4.9 |
| 10°-20° | 171.6 | 13.2 |
| 20°-30° | 236.1 | 18.2 |
| 30°-40° | 250.4 | 19.3 |
| 40°-50° | 219.2 | 16.9 |
| 50°-60° | 168.2 | 13.0 |
| 60°-70° | 112.0 | 8.6 |
| 70°-80° | 57.4 | 4.4 |
| 80°-90° | 17.0 | 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° | 471.4 | 36.4 |
| 0°-40° | 721.8 | 55.7 |
| 0°-60° | 1109.1 | 85.6 |
| 0°-90° | 1295.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1295.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 688 | 688 | 688 | 688 | 688 | |
| 5° | 667 | 676 | 675 | 680 | 685 | 62 |
| 15° | 579 | 592 | 605 | 633 | 653 | 162 |
| 25° | 464 | 479 | 504 | 547 | 584 | 213 |
| 35° | 336 | 352 | 389 | 447 | 495 | 210 |
| 45° | 204 | 221 | 272 | 340 | 396 | 161 |
| 55° | 136 | 139 | 159 | 236 | 294 | 122 |
| 65° | 86 | 86 | 100 | 132 | 178 | 85 |
| 75° | 46 | 49 | 53 | 56 | 67 | 49 |
| 85° | 13 | 15 | 16 | 16 | 13 | 15 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CATALOG NUMBER: S125RDRP-S610D830-X4F0-XX-UDD-WVL-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 687.7 | 687.7 | 687.7 | 687.7 | 687.7 |
| 2.5° | 681.3 | 688.3 | 683.1 | 683.6 | 684.2 |
| 5° | 667.3 | 676.1 | 674.9 | 679.6 | 684.8 |
| 7.5° | 648.6 | 658.0 | 660.9 | 672.6 | 680.7 |
| 10° | 627.6 | 638.1 | 643.9 | 661.5 | 672.6 |
| 12.5° | 603.7 | 615.9 | 625.3 | 648.0 | 664.4 |
| 15° | 578.6 | 592.0 | 604.8 | 633.4 | 653.3 |
| 17.5° | 551.7 | 565.1 | 582.1 | 614.8 | 638.7 |
| 20° | 523.1 | 537.7 | 558.1 | 593.2 | 621.8 |
| 22.5° | 493.9 | 509.1 | 532.4 | 571.0 | 603.7 |
| 25° | 463.5 | 479.3 | 504.4 | 547.0 | 583.8 |
| 27.5° | 433.8 | 448.4 | 477.6 | 523.1 | 563.4 |
| 30° | 401.7 | 416.8 | 447.8 | 498.0 | 541.2 |
| 32.5° | 369.6 | 384.7 | 420.3 | 472.9 | 518.4 |
| 35° | 336.3 | 352.0 | 389.4 | 446.6 | 495.1 |
| 37.5° | 303.0 | 319.3 | 360.8 | 419.8 | 471.1 |
| 40° | 269.7 | 287.2 | 331.0 | 392.9 | 446.0 |
| 42.5° | 235.9 | 254.5 | 300.7 | 366.6 | 421.5 |
| 45° | 204.3 | 221.3 | 272.1 | 339.8 | 395.8 |
| 47.5° | 181.6 | 191.5 | 241.7 | 312.3 | 371.3 |
| 50° | 165.2 | 169.9 | 212.5 | 286.1 | 347.4 |
| 52.5° | 150.6 | 153.5 | 183.9 | 261.5 | 321.1 |
| 55° | 136.0 | 138.9 | 158.8 | 235.9 | 294.2 |
| 57.5° | 122.0 | 123.8 | 140.1 | 210.2 | 267.4 |
| 60° | 109.2 | 110.3 | 126.1 | 184.5 | 237.6 |
| 62.5° | 97.5 | 98.1 | 112.7 | 158.2 | 207.8 |
| 65° | 85.8 | 86.4 | 100.4 | 131.9 | 177.5 |
| 67.5° | 75.3 | 75.3 | 88.7 | 108.0 | 148.3 |
| 70° | 64.8 | 64.8 | 75.9 | 87.6 | 117.3 |
| 72.5° | 55.5 | 56.6 | 64.2 | 70.6 | 91.7 |
| 75° | 46.1 | 49.0 | 53.1 | 56.0 | 66.6 |
| 77.5° | 37.4 | 40.9 | 42.6 | 43.8 | 44.4 |
| 80° | 29.2 | 31.5 | 32.7 | 33.3 | 32.1 |
| 82.5° | 21.6 | 23.4 | 23.9 | 23.9 | 22.2 |
| 85° | 13.4 | 15.2 | 16.3 | 15.8 | 13.4 |
| 87.5° | 6.4 | 8.8 | 9.3 | 8.2 | 6.4 |
| 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 | 12.02 | 13.52 | 12.38 | 13.83 | 14.15 | 16.04 | 17.54 | 16.41 | 17.86 | 18.17 |
| | 3H | 13.61 | 14.95 | 13.98 | 15.28 | 15.64 | 17.43 | 18.78 | 17.81 | 19.10 | 19.47 |
| | 4H | 14.25 | 15.51 | 14.65 | 15.86 | 16.24 | 17.84 | 19.10 | 18.24 | 19.45 | 19.83 |
| | 6H | 14.76 | 15.92 | 15.17 | 16.29 | 16.68 | 18.04 | 19.21 | 18.46 | 19.57 | 19.97 |
| | 8H | 14.94 | 16.05 | 15.37 | 16.44 | 16.84 | 18.10 | 19.21 | 18.53 | 19.60 | 20.00 |
| | 12H | 15.06 | 16.13 | 15.50 | 16.51 | 16.94 | 18.13 | 19.19 | 18.56 | 19.58 | 20.01 |
| 4H | 2H | 12.79 | 14.05 | 13.19 | 14.40 | 14.78 | 16.17 | 17.43 | 16.57 | 17.78 | 18.16 |
| | 3H | 14.57 | 15.62 | 14.98 | 16.02 | 16.42 | 17.74 | 18.79 | 18.15 | 19.19 | 19.59 |
| | 4H | 15.34 | 16.28 | 15.77 | 16.69 | 17.13 | 18.25 | 19.19 | 18.69 | 19.61 | 20.05 |
| | 6H | 15.98 | 16.80 | 16.44 | 17.24 | 17.70 | 18.58 | 19.40 | 19.04 | 19.84 | 20.30 |
| | 8H | 16.21 | 16.97 | 16.67 | 17.42 | 17.88 | 18.68 | 19.44 | 19.14 | 19.89 | 20.36 |
| | 12H | 16.38 | 17.06 | 16.86 | 17.54 | 18.01 | 18.75 | 19.43 | 19.23 | 19.91 | 20.38 |
| 8H | 4H | 15.72 | 16.49 | 16.18 | 16.93 | 17.40 | 18.35 | 19.12 | 18.82 | 19.56 | 20.03 |
| | 6H | 16.50 | 17.13 | 17.00 | 17.62 | 18.10 | 18.77 | 19.40 | 19.27 | 19.90 | 20.37 |
| | 8H | 16.82 | 17.38 | 17.33 | 17.89 | 18.38 | 18.93 | 19.50 | 19.45 | 20.01 | 20.50 |
| | 12H | 17.08 | 17.58 | 17.59 | 18.07 | 18.64 | 19.07 | 19.57 | 19.58 | 20.06 | 20.63 |
| 12H | 4H | 15.76 | 16.44 | 16.24 | 16.92 | 17.39 | 18.35 | 19.03 | 18.83 | 19.51 | 19.98 |
| | 6H | 16.57 | 17.14 | 17.09 | 17.65 | 18.14 | 18.78 | 19.35 | 19.30 | 19.86 | 20.35 |
| | 8H | 16.96 | 17.46 | 17.47 | 17.95 | 18.52 | 18.99 | 19.50 | 19.50 | 19.99 | 20.55 |