

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: P1061743

Luminaire Tested: S125RDRP-S610D940-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061743
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: S125RDRP-S610D940-X4F0-XX-UDD-SVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

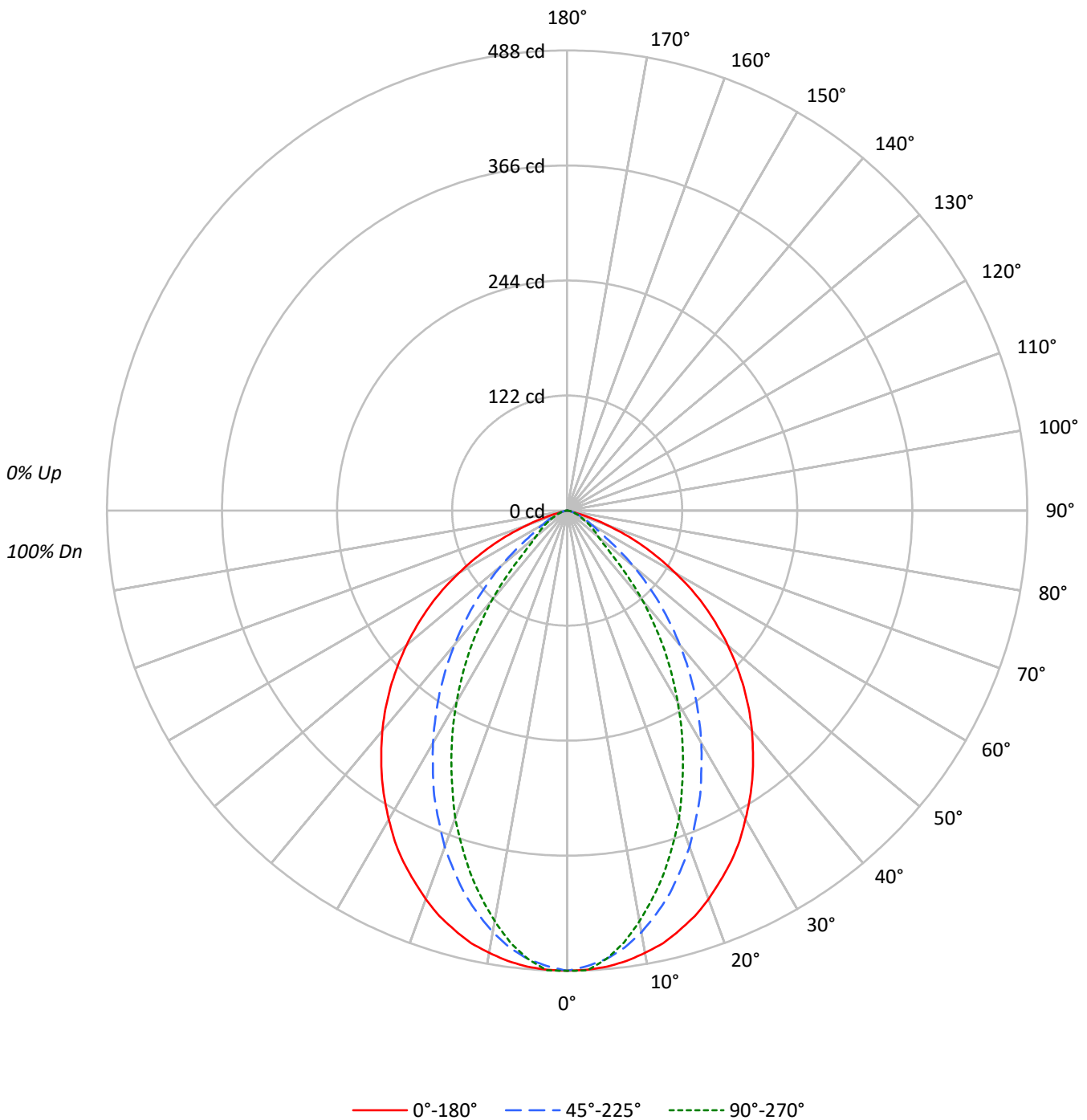
Lumens per Lamp: N/A
Luminaire Lumens: 705.7 lumens
Efficiency: N/A
Efficacy: 36.0 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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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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 | 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° | 3360 | 3360 | 3360 |
| 5° | 3356 | 3300 | 3300 |
| 10° | 3329 | 3173 | 3091 |
| 15° | 3284 | 2997 | 2833 |
| 20° | 3212 | 2781 | 2544 |
| 25° | 3123 | 2534 | 2209 |
| 30° | 3007 | 2263 | 1864 |
| 35° | 2882 | 1980 | 1511 |
| 40° | 2742 | 1672 | 1120 |
| 45° | 2578 | 1341 | 676 |
| 50° | 2384 | 983 | 465 |
| 55° | 2151 | 603 | 387 |
| 60° | 1827 | 410 | 307 |
| 65° | 1445 | 313 | 243 |
| 70° | 912 | 225 | 199 |
| 75° | 298 | 165 | 165 |
| 80° | 99 | 123 | 147 |
| 85° | 47 | 95 | 95 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2578 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 45.1 | 6.4 |
| 10°-20° | 119.2 | 16.9 |
| 20°-30° | 156.8 | 22.2 |
| 30°-40° | 154.0 | 21.8 |
| 40°-50° | 116.5 | 16.5 |
| 50°-60° | 70.7 | 10.0 |
| 60°-70° | 33.4 | 4.7 |
| 70°-80° | 8.7 | 1.2 |
| 80°-90° | 1.3 | 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° | 321.1 | 45.5 |
| 0°-40° | 475.1 | 67.3 |
| 0°-60° | 662.3 | 93.9 |
| 0°-90° | 705.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 705.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 488 | 488 | 488 | 488 | 488 | |
| 5° | 486 | 484 | 477 | 478 | 477 | 46 |
| 15° | 461 | 448 | 420 | 404 | 398 | 130 |
| 25° | 411 | 380 | 334 | 303 | 291 | 189 |
| 35° | 343 | 297 | 236 | 194 | 180 | 214 |
| 45° | 265 | 208 | 138 | 87 | 69 | 204 |
| 55° | 179 | 123 | 50 | 34 | 32 | 160 |
| 65° | 89 | 45 | 19 | 16 | 15 | 87 |
| 75° | 11 | 7 | 6 | 6 | 6 | 17 |
| 85° | 1 | 1 | 1 | 1 | 1 | 1 |
| 90° | 0 | 0 | 0 | 0 | 0 | |

TEST NUMBER: P1061743

CATALOG NUMBER: S125RDRP-S610D940-X4F0-XX-UDD-SVL-B

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 488.0 | 488.0 | 488.0 | 488.0 | 488.0 |
| 2.5° | 487.4 | 487.4 | 483.6 | 488.0 | 488.0 |
| 5° | 485.5 | 484.3 | 477.4 | 478.1 | 477.4 |
| 7.5° | 481.8 | 479.3 | 467.5 | 464.4 | 461.9 |
| 10° | 476.2 | 471.2 | 453.9 | 446.4 | 442.1 |
| 12.5° | 470.0 | 461.3 | 437.8 | 427.2 | 420.4 |
| 15° | 460.7 | 448.3 | 420.4 | 404.3 | 397.5 |
| 17.5° | 450.8 | 432.8 | 399.9 | 380.7 | 372.0 |
| 20° | 438.4 | 417.3 | 379.5 | 355.9 | 347.2 |
| 22.5° | 424.7 | 399.9 | 355.9 | 329.9 | 318.1 |
| 25° | 411.1 | 380.1 | 333.6 | 302.6 | 290.8 |
| 27.5° | 395.6 | 360.3 | 308.2 | 275.9 | 262.9 |
| 30° | 378.2 | 340.4 | 284.6 | 251.1 | 234.4 |
| 32.5° | 360.9 | 319.9 | 259.8 | 223.2 | 206.5 |
| 35° | 342.9 | 297.0 | 235.6 | 194.1 | 179.8 |
| 37.5° | 323.7 | 275.3 | 210.8 | 167.4 | 150.7 |
| 40° | 305.1 | 253.6 | 186.0 | 140.1 | 124.6 |
| 42.5° | 285.2 | 231.9 | 161.2 | 113.5 | 96.1 |
| 45° | 264.8 | 208.3 | 137.7 | 87.4 | 69.4 |
| 47.5° | 243.7 | 187.3 | 114.1 | 64.5 | 52.1 |
| 50° | 222.6 | 164.9 | 91.8 | 47.7 | 43.4 |
| 52.5° | 200.9 | 143.2 | 69.4 | 39.7 | 37.8 |
| 55° | 179.2 | 122.8 | 50.2 | 34.1 | 32.2 |
| 57.5° | 156.9 | 100.4 | 37.8 | 29.1 | 27.3 |
| 60° | 132.7 | 80.6 | 29.8 | 24.2 | 22.3 |
| 62.5° | 110.4 | 63.2 | 24.2 | 19.8 | 18.6 |
| 65° | 88.7 | 45.3 | 19.2 | 16.1 | 14.9 |
| 67.5° | 66.3 | 30.4 | 14.9 | 12.4 | 12.4 |
| 70° | 45.3 | 19.8 | 11.2 | 9.9 | 9.9 |
| 72.5° | 27.3 | 11.8 | 8.1 | 8.1 | 8.1 |
| 75° | 11.2 | 7.4 | 6.2 | 6.2 | 6.2 |
| 77.5° | 3.7 | 4.3 | 4.3 | 5.0 | 5.0 |
| 80° | 2.5 | 2.5 | 3.1 | 3.7 | 3.7 |
| 82.5° | 1.2 | 1.9 | 1.9 | 2.5 | 2.5 |
| 85° | 0.6 | 0.6 | 1.2 | 1.2 | 1.2 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.6 | 0.6 |
| 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 | 13.54 | 14.87 | 13.90 | 15.18 | 15.50 | 4.19 | 5.52 | 4.55 | 5.83 | 6.15 |
| | 3H | 14.24 | 15.42 | 14.62 | 15.75 | 16.12 | 4.97 | 6.15 | 5.35 | 6.48 | 6.84 |
| | 4H | 14.26 | 15.36 | 14.66 | 15.71 | 16.09 | 5.22 | 6.32 | 5.62 | 6.67 | 7.05 |
| | 6H | 14.19 | 15.20 | 14.61 | 15.57 | 15.96 | 5.40 | 6.41 | 5.82 | 6.78 | 7.17 |
| | 8H | 14.15 | 15.10 | 14.58 | 15.49 | 15.90 | 5.45 | 6.40 | 5.88 | 6.79 | 7.19 |
| | 12H | 14.11 | 15.02 | 14.54 | 15.40 | 15.83 | 5.45 | 6.36 | 5.89 | 6.75 | 7.18 |
| 4H | 2H | 13.37 | 14.46 | 13.77 | 14.82 | 15.20 | 4.68 | 5.77 | 5.08 | 6.12 | 6.51 |
| | 3H | 14.11 | 15.01 | 14.53 | 15.41 | 15.81 | 5.58 | 6.48 | 6.00 | 6.88 | 7.28 |
| | 4H | 14.13 | 14.93 | 14.57 | 15.35 | 15.79 | 5.90 | 6.69 | 6.33 | 7.11 | 7.56 |
| | 6H | 14.07 | 14.76 | 14.53 | 15.20 | 15.67 | 6.16 | 6.85 | 6.62 | 7.29 | 7.76 |
| | 8H | 14.02 | 14.66 | 14.49 | 15.11 | 15.58 | 6.23 | 6.87 | 6.70 | 7.31 | 7.78 |
| | 12H | 13.98 | 14.54 | 14.46 | 15.02 | 15.50 | 6.25 | 6.81 | 6.74 | 7.30 | 7.77 |
| 8H | 4H | 14.02 | 14.65 | 14.48 | 15.10 | 15.57 | 6.01 | 6.65 | 6.48 | 7.10 | 7.57 |
| | 6H | 13.94 | 14.46 | 14.44 | 14.96 | 15.44 | 6.33 | 6.85 | 6.83 | 7.35 | 7.83 |
| | 8H | 13.89 | 14.35 | 14.41 | 14.87 | 15.36 | 6.44 | 6.90 | 6.96 | 7.42 | 7.91 |
| | 12H | 13.85 | 14.26 | 14.36 | 14.75 | 15.32 | 6.50 | 6.91 | 7.01 | 7.40 | 7.98 |
| 12H | 4H | 13.97 | 14.53 | 14.46 | 15.02 | 15.49 | 5.98 | 6.55 | 6.47 | 7.03 | 7.50 |
| | 6H | 13.88 | 14.35 | 14.40 | 14.86 | 15.36 | 6.30 | 6.77 | 6.83 | 7.29 | 7.78 |
| | 8H | 13.85 | 14.26 | 14.36 | 14.75 | 15.33 | 6.44 | 6.86 | 6.96 | 7.35 | 7.92 |