

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: P1062107

Luminaire Tested: S125RDRP-H610D840-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1062107
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-H610D840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

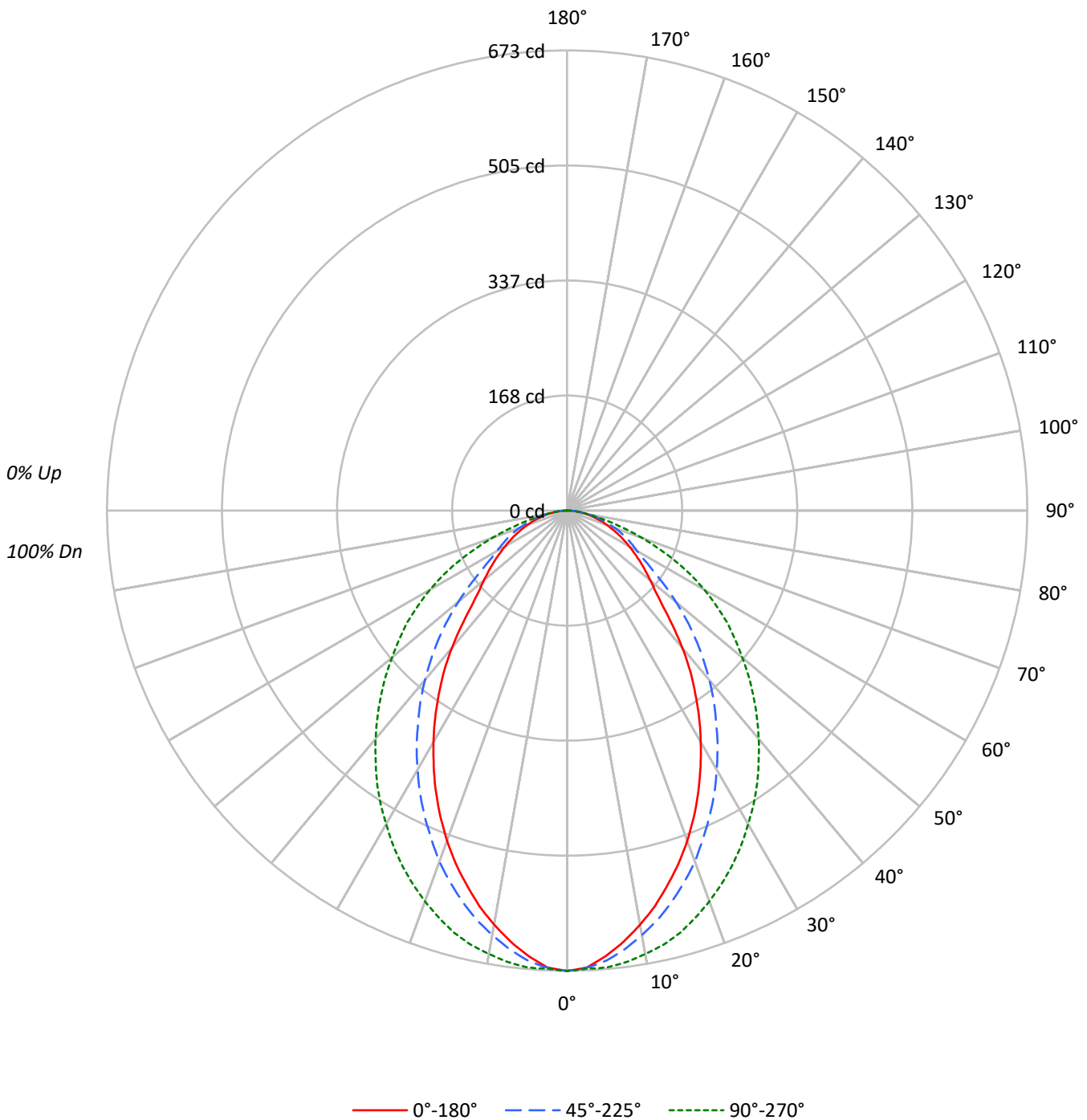
Lumens per Lamp: N/A
Luminaire Lumens: 1262.3 lumens
Efficiency: N/A
Efficacy: 72.5 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.4
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 | | | | | | | | | | | | | | | | | | | 100 | | | | | | | | | |
| 1 | 110 | 106 | 102 | 99 | 107 | 104 | 100 | 97 | 99 | 97 | 94 | 96 | 93 | 91 | 92 | 90 | 88 | 86 | | | | | | | | | | | | | | | | | | | 86 | | | | | | | | | |
| 2 | 101 | 94 | 88 | 83 | 99 | 92 | 86 | 82 | 89 | 84 | 80 | 85 | 81 | 78 | 82 | 79 | 76 | 74 | | | | | | | | | | | | | | | | | | | 74 | | | | | | | | | |
| 3 | 93 | 84 | 76 | 71 | 91 | 82 | 75 | 70 | 79 | 74 | 69 | 77 | 72 | 68 | 74 | 70 | 66 | 64 | | | | | | | | | | | | | | | | | | | 64 | | | | | | | | | |
| 4 | 86 | 75 | 67 | 61 | 84 | 74 | 67 | 61 | 72 | 65 | 60 | 69 | 64 | 59 | 67 | 62 | 58 | 56 | | | | | | | | | | | | | | | | | | | 56 | | | | | | | | | |
| 5 | 80 | 68 | 60 | 54 | 78 | 67 | 59 | 53 | 65 | 58 | 53 | 63 | 57 | 52 | 61 | 56 | 52 | 50 | | | | | | | | | | | | | | | | | | | 50 | | | | | | | | | |
| 6 | 74 | 62 | 54 | 48 | 72 | 61 | 53 | 48 | 59 | 52 | 47 | 58 | 52 | 47 | 56 | 51 | 46 | 44 | | | | | | | | | | | | | | | | | | | 44 | | | | | | | | | |
| 7 | 69 | 57 | 49 | 43 | 68 | 56 | 48 | 43 | 54 | 47 | 42 | 53 | 47 | 42 | 52 | 46 | 42 | 40 | | | | | | | | | | | | | | | | | | | 40 | | | | | | | | | |
| 8 | 65 | 52 | 44 | 39 | 63 | 52 | 44 | 39 | 50 | 43 | 38 | 49 | 43 | 38 | 48 | 42 | 38 | 36 | | | | | | | | | | | | | | | | | | | 36 | | | | | | | | | |
| 9 | 61 | 48 | 41 | 35 | 59 | 48 | 40 | 35 | 47 | 40 | 35 | 46 | 39 | 35 | 45 | 39 | 35 | 33 | | | | | | | | | | | | | | | | | | | 33 | | | | | | | | | |
| 10 | 57 | 45 | 37 | 32 | 56 | 44 | 37 | 32 | 43 | 37 | 32 | 42 | 36 | 32 | 42 | 36 | 32 | 30 | | | | | | | | | | | | | | | | | | | 30 | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 4636 | 4636 | 4636 |
| 5° | 4519 | 4566 | 4636 |
| 10° | 4298 | 4407 | 4604 |
| 15° | 4042 | 4219 | 4555 |
| 20° | 3765 | 4002 | 4456 |
| 25° | 3450 | 3746 | 4344 |
| 30° | 3107 | 3476 | 4209 |
| 35° | 2748 | 3195 | 4077 |
| 40° | 2358 | 2909 | 3918 |
| 45° | 1926 | 2587 | 3753 |
| 50° | 1707 | 2219 | 3581 |
| 55° | 1567 | 1841 | 3432 |
| 60° | 1445 | 1630 | 3196 |
| 65° | 1347 | 1567 | 2849 |
| 70° | 1260 | 1490 | 2329 |
| 75° | 1163 | 1397 | 1719 |
| 80° | 1094 | 1308 | 1253 |
| 85° | 1011 | 1272 | 1066 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3753 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 62.3 | 4.9 |
| 10°-20° | 167.9 | 13.3 |
| 20°-30° | 230.7 | 18.3 |
| 30°-40° | 244.5 | 19.4 |
| 40°-50° | 213.4 | 16.9 |
| 50°-60° | 162.1 | 12.8 |
| 60°-70° | 108.6 | 8.6 |
| 70°-80° | 56.0 | 4.4 |
| 80°-90° | 16.8 | 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° | 460.8 | 36.5 |
| 0°-40° | 705.3 | 55.9 |
| 0°-60° | 1080.9 | 85.6 |
| 0°-90° | 1262.3 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1262.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 673 | 673 | 673 | 673 | 673 | |
| 5° | 654 | 661 | 661 | 665 | 671 | 61 |
| 15° | 567 | 578 | 592 | 618 | 639 | 159 |
| 25° | 454 | 468 | 493 | 534 | 572 | 208 |
| 35° | 327 | 346 | 380 | 434 | 485 | 204 |
| 45° | 198 | 217 | 266 | 329 | 385 | 156 |
| 55° | 130 | 134 | 153 | 225 | 286 | 117 |
| 65° | 83 | 85 | 96 | 128 | 175 | 82 |
| 75° | 44 | 46 | 52 | 56 | 65 | 47 |
| 85° | 13 | 16 | 16 | 15 | 14 | 14 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 673.3 | 673.3 | 673.3 | 673.3 | 673.3 |
| 2.5° | 668.6 | 673.3 | 669.3 | 669.3 | 670.7 |
| 5° | 653.8 | 660.6 | 660.6 | 665.3 | 670.7 |
| 7.5° | 635.7 | 643.1 | 647.1 | 657.9 | 665.9 |
| 10° | 614.8 | 622.9 | 630.3 | 646.4 | 658.5 |
| 12.5° | 592.6 | 601.4 | 612.8 | 633.7 | 650.5 |
| 15° | 567.1 | 577.8 | 591.9 | 618.2 | 639.0 |
| 17.5° | 541.5 | 552.3 | 569.8 | 600.7 | 624.2 |
| 20° | 513.9 | 525.4 | 546.2 | 579.8 | 608.1 |
| 22.5° | 484.3 | 497.1 | 519.3 | 557.6 | 590.6 |
| 25° | 454.1 | 468.2 | 493.1 | 534.1 | 571.8 |
| 27.5° | 422.4 | 439.3 | 466.2 | 509.9 | 551.6 |
| 30° | 390.8 | 407.6 | 437.2 | 485.0 | 529.4 |
| 32.5° | 359.2 | 377.4 | 409.7 | 460.1 | 507.9 |
| 35° | 326.9 | 345.8 | 380.1 | 433.9 | 485.0 |
| 37.5° | 295.3 | 314.1 | 352.5 | 408.3 | 460.1 |
| 40° | 262.3 | 281.8 | 323.6 | 382.1 | 435.9 |
| 42.5° | 228.7 | 249.6 | 294.6 | 355.2 | 411.0 |
| 45° | 197.8 | 217.3 | 265.7 | 328.9 | 385.4 |
| 47.5° | 174.9 | 187.7 | 236.8 | 302.0 | 360.6 |
| 50° | 159.4 | 166.1 | 207.2 | 275.8 | 334.3 |
| 52.5° | 144.0 | 149.3 | 179.6 | 248.9 | 309.4 |
| 55° | 130.5 | 134.5 | 153.4 | 225.3 | 285.9 |
| 57.5° | 117.0 | 121.1 | 133.2 | 201.8 | 258.3 |
| 60° | 104.9 | 108.3 | 118.4 | 176.9 | 232.1 |
| 62.5° | 93.5 | 96.2 | 107.0 | 153.4 | 203.8 |
| 65° | 82.7 | 84.8 | 96.2 | 128.5 | 174.9 |
| 67.5° | 72.0 | 74.0 | 85.4 | 104.9 | 144.0 |
| 70° | 62.6 | 63.2 | 74.0 | 85.4 | 115.7 |
| 72.5° | 53.1 | 53.8 | 62.6 | 69.3 | 88.8 |
| 75° | 43.7 | 46.4 | 52.5 | 55.8 | 64.6 |
| 77.5° | 35.7 | 39.0 | 42.4 | 43.7 | 43.7 |
| 80° | 27.6 | 31.6 | 33.0 | 33.0 | 31.6 |
| 82.5° | 20.2 | 23.5 | 24.2 | 22.9 | 21.5 |
| 85° | 12.8 | 16.1 | 16.1 | 14.8 | 13.5 |
| 87.5° | 6.1 | 8.7 | 8.7 | 8.1 | 6.1 |
| 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 | 11.94 | 13.43 | 12.30 | 13.75 | 14.06 | 15.86 | 17.36 | 16.23 | 17.67 | 17.99 |
| | 3H | 13.51 | 14.85 | 13.89 | 15.18 | 15.54 | 17.29 | 18.63 | 17.66 | 18.96 | 19.32 |
| | 4H | 14.12 | 15.38 | 14.52 | 15.73 | 16.11 | 17.70 | 18.96 | 18.10 | 19.31 | 19.69 |
| | 6H | 14.62 | 15.78 | 15.03 | 16.15 | 16.54 | 17.92 | 19.08 | 18.33 | 19.45 | 19.84 |
| | 8H | 14.79 | 15.90 | 15.22 | 16.29 | 16.69 | 17.98 | 19.08 | 18.40 | 19.47 | 19.87 |
| | 12H | 14.91 | 15.97 | 15.34 | 16.35 | 16.78 | 18.01 | 19.07 | 18.44 | 19.45 | 19.88 |
| 4H | 2H | 12.67 | 13.93 | 13.07 | 14.28 | 14.66 | 15.99 | 17.25 | 16.39 | 17.60 | 17.98 |
| | 3H | 14.45 | 15.50 | 14.86 | 15.90 | 16.30 | 17.60 | 18.64 | 18.01 | 19.04 | 19.45 |
| | 4H | 15.19 | 16.13 | 15.62 | 16.54 | 16.98 | 18.13 | 19.07 | 18.56 | 19.48 | 19.92 |
| | 6H | 15.82 | 16.64 | 16.28 | 17.08 | 17.55 | 18.47 | 19.29 | 18.93 | 19.73 | 20.19 |
| | 8H | 16.05 | 16.82 | 16.52 | 17.26 | 17.73 | 18.57 | 19.33 | 19.03 | 19.78 | 20.24 |
| | 12H | 16.23 | 16.91 | 16.71 | 17.39 | 17.86 | 18.64 | 19.32 | 19.12 | 19.80 | 20.27 |
| 8H | 4H | 15.59 | 16.35 | 16.05 | 16.80 | 17.26 | 18.23 | 19.00 | 18.70 | 19.44 | 19.91 |
| | 6H | 16.38 | 17.01 | 16.87 | 17.50 | 17.98 | 18.67 | 19.30 | 19.17 | 19.80 | 20.27 |
| | 8H | 16.70 | 17.27 | 17.21 | 17.78 | 18.26 | 18.83 | 19.40 | 19.34 | 19.91 | 20.40 |
| | 12H | 16.97 | 17.47 | 17.48 | 17.97 | 18.53 | 18.97 | 19.47 | 19.48 | 19.96 | 20.52 |
| 12H | 4H | 15.63 | 16.31 | 16.11 | 16.79 | 17.26 | 18.23 | 18.92 | 18.72 | 19.39 | 19.87 |
| | 6H | 16.46 | 17.03 | 16.97 | 17.54 | 18.02 | 18.69 | 19.26 | 19.20 | 19.77 | 20.25 |
| | 8H | 16.85 | 17.35 | 17.36 | 17.85 | 18.41 | 18.90 | 19.40 | 19.41 | 19.89 | 20.46 |