

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: P1061674

Luminaire Tested: S125RDRP-S375D950-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061674
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S375D950-X4F0-XX-UDD-WVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

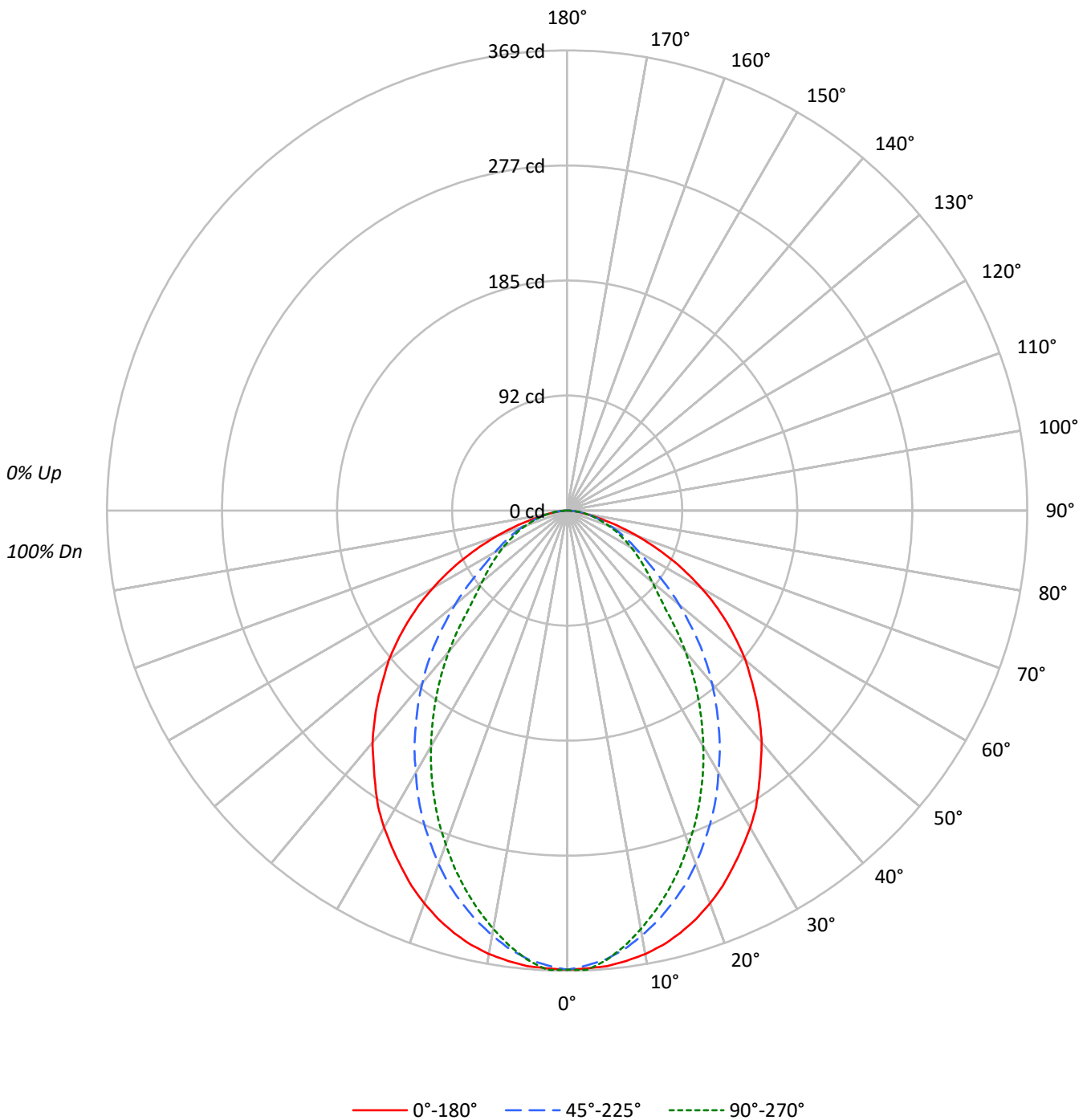
Lumens per Lamp: N/A
Luminaire Lumens: 697.6 lumens
Efficiency: N/A
Efficacy: 55.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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 | 110 | 106 | 102 | 99 | 108 | 104 | 100 | 97 | 100 | 97 | 94 | 96 | 93 | 91 | 92 | 90 | 89 | 87 |
| 2 | 101 | 94 | 88 | 83 | 99 | 92 | 87 | 82 | 89 | 84 | 80 | 86 | 82 | 78 | 83 | 80 | 77 | 75 |
| 3 | 93 | 84 | 77 | 71 | 91 | 82 | 76 | 70 | 80 | 74 | 69 | 77 | 72 | 68 | 74 | 70 | 67 | 65 |
| 4 | 86 | 75 | 68 | 61 | 84 | 74 | 67 | 61 | 72 | 65 | 60 | 70 | 64 | 59 | 67 | 63 | 59 | 57 |
| 5 | 80 | 68 | 60 | 54 | 78 | 67 | 59 | 54 | 65 | 58 | 53 | 63 | 57 | 53 | 61 | 56 | 52 | 50 |
| 6 | 74 | 62 | 54 | 48 | 73 | 61 | 53 | 48 | 59 | 53 | 47 | 58 | 52 | 47 | 56 | 51 | 47 | 45 |
| 7 | 69 | 57 | 49 | 43 | 68 | 56 | 48 | 43 | 55 | 48 | 43 | 53 | 47 | 42 | 52 | 46 | 42 | 40 |
| 8 | 65 | 52 | 44 | 39 | 63 | 52 | 44 | 39 | 50 | 43 | 39 | 49 | 43 | 38 | 48 | 42 | 38 | 36 |
| 9 | 61 | 48 | 41 | 35 | 60 | 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° | 2535 | 2535 | 2535 |
| 5° | 2534 | 2495 | 2501 |
| 10° | 2524 | 2418 | 2381 |
| 15° | 2499 | 2323 | 2243 |
| 20° | 2455 | 2209 | 2086 |
| 25° | 2394 | 2078 | 1920 |
| 30° | 2333 | 1930 | 1736 |
| 35° | 2255 | 1781 | 1539 |
| 40° | 2181 | 1624 | 1326 |
| 45° | 2091 | 1452 | 1087 |
| 50° | 2000 | 1259 | 951 |
| 55° | 1876 | 1052 | 879 |
| 60° | 1712 | 920 | 821 |
| 65° | 1499 | 841 | 762 |
| 70° | 1216 | 757 | 709 |
| 75° | 873 | 692 | 660 |
| 80° | 603 | 619 | 619 |
| 85° | 442 | 537 | 569 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2091 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 34.2 | 4.9 |
| 10°-20° | 92.6 | 13.3 |
| 20°-30° | 128.0 | 18.3 |
| 30°-40° | 136.3 | 19.5 |
| 40°-50° | 119.8 | 17.2 |
| 50°-60° | 90.8 | 13.0 |
| 60°-70° | 59.0 | 8.5 |
| 70°-80° | 29.2 | 4.2 |
| 80°-90° | 7.7 | 1.1 |
| 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° | 254.8 | 36.5 |
| 0°-40° | 391.2 | 56.1 |
| 0°-60° | 601.8 | 86.3 |
| 0°-90° | 697.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 697.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 368 | 368 | 368 | 368 | 368 | |
| 5° | 367 | 366 | 361 | 362 | 362 | 35 |
| 15° | 351 | 343 | 326 | 318 | 315 | 99 |
| 25° | 315 | 298 | 274 | 260 | 253 | 145 |
| 35° | 268 | 244 | 212 | 193 | 183 | 168 |
| 45° | 215 | 185 | 149 | 122 | 112 | 166 |
| 55° | 156 | 126 | 88 | 76 | 73 | 139 |
| 65° | 92 | 68 | 52 | 48 | 47 | 91 |
| 75° | 33 | 29 | 26 | 25 | 25 | 37 |
| 85° | 6 | 6 | 7 | 7 | 7 | 7 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1061674

CATALOG NUMBER: S125RDRP-S375D950-X4F0-XX-UDD-WVL-B

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 368.2 | 368.2 | 368.2 | 368.2 | 368.2 |
| 2.5° | 367.4 | 368.2 | 365.0 | 367.8 | 368.6 |
| 5° | 366.6 | 365.8 | 361.0 | 362.2 | 361.8 |
| 7.5° | 364.2 | 362.6 | 354.6 | 353.8 | 352.2 |
| 10° | 361.0 | 357.0 | 345.8 | 343.0 | 340.6 |
| 12.5° | 356.6 | 350.2 | 336.6 | 331.1 | 328.3 |
| 15° | 350.6 | 342.6 | 325.9 | 318.3 | 314.7 |
| 17.5° | 343.4 | 332.3 | 314.7 | 304.3 | 300.3 |
| 20° | 335.1 | 321.9 | 301.5 | 289.5 | 284.7 |
| 22.5° | 325.9 | 310.3 | 287.5 | 274.7 | 269.5 |
| 25° | 315.1 | 297.9 | 273.5 | 259.5 | 252.7 |
| 27.5° | 304.3 | 285.1 | 258.7 | 243.1 | 235.9 |
| 30° | 293.5 | 271.5 | 242.7 | 225.9 | 218.3 |
| 32.5° | 281.9 | 257.5 | 227.9 | 209.5 | 200.7 |
| 35° | 268.3 | 243.5 | 211.9 | 192.7 | 183.1 |
| 37.5° | 255.1 | 228.7 | 196.3 | 174.7 | 165.5 |
| 40° | 242.7 | 214.7 | 180.7 | 157.1 | 147.5 |
| 42.5° | 228.7 | 199.9 | 165.1 | 140.3 | 129.5 |
| 45° | 214.7 | 184.7 | 149.1 | 122.3 | 111.6 |
| 47.5° | 199.9 | 170.3 | 132.3 | 106.0 | 98.8 |
| 50° | 186.7 | 155.5 | 117.5 | 93.6 | 88.8 |
| 52.5° | 171.5 | 141.1 | 102.4 | 84.0 | 80.8 |
| 55° | 156.3 | 125.5 | 87.6 | 75.6 | 73.2 |
| 57.5° | 140.7 | 111.6 | 76.0 | 68.4 | 66.0 |
| 60° | 124.3 | 97.2 | 66.8 | 60.8 | 59.6 |
| 62.5° | 108.0 | 82.4 | 58.8 | 54.4 | 52.8 |
| 65° | 92.0 | 68.4 | 51.6 | 47.6 | 46.8 |
| 67.5° | 75.6 | 55.6 | 44.4 | 41.6 | 41.2 |
| 70° | 60.4 | 45.2 | 37.6 | 36.0 | 35.2 |
| 72.5° | 46.4 | 36.0 | 31.6 | 30.4 | 30.0 |
| 75° | 32.8 | 28.8 | 26.0 | 25.2 | 24.8 |
| 77.5° | 22.0 | 22.0 | 20.8 | 20.0 | 20.4 |
| 80° | 15.2 | 16.0 | 15.6 | 15.6 | 15.6 |
| 82.5° | 10.0 | 10.8 | 11.2 | 11.2 | 11.2 |
| 85° | 5.6 | 6.4 | 6.8 | 6.8 | 7.2 |
| 87.5° | 2.0 | 2.4 | 2.8 | 3.2 | 3.2 |
| 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 | 13.79 | 15.28 | 14.15 | 15.59 | 15.91 | 10.03 | 11.52 | 10.39 | 11.84 | 12.15 |
| | 3H | 15.10 | 16.44 | 15.48 | 16.76 | 17.13 | 11.61 | 12.95 | 11.99 | 13.28 | 13.64 |
| | 4H | 15.47 | 16.72 | 15.87 | 17.07 | 17.45 | 12.22 | 13.47 | 12.62 | 13.82 | 14.20 |
| | 6H | 15.64 | 16.80 | 16.06 | 17.17 | 17.56 | 12.69 | 13.84 | 13.10 | 14.21 | 14.60 |
| | 8H | 15.68 | 16.78 | 16.11 | 17.17 | 17.57 | 12.85 | 13.95 | 13.27 | 14.34 | 14.74 |
| | 12H | 15.69 | 16.75 | 16.12 | 17.13 | 17.56 | 12.96 | 14.01 | 13.39 | 14.39 | 14.82 |
| 4H | 2H | 13.90 | 15.15 | 14.30 | 15.50 | 15.88 | 10.69 | 11.94 | 11.09 | 12.29 | 12.67 |
| | 3H | 15.39 | 16.42 | 15.80 | 16.83 | 17.23 | 12.47 | 13.51 | 12.88 | 13.91 | 14.31 |
| | 4H | 15.86 | 16.80 | 16.30 | 17.21 | 17.65 | 13.19 | 14.12 | 13.62 | 14.54 | 14.98 |
| | 6H | 16.15 | 16.96 | 16.61 | 17.40 | 17.86 | 13.78 | 14.59 | 14.24 | 15.03 | 15.49 |
| | 8H | 16.22 | 16.97 | 16.68 | 17.42 | 17.89 | 13.98 | 14.74 | 14.45 | 15.19 | 15.65 |
| | 12H | 16.26 | 16.93 | 16.74 | 17.41 | 17.88 | 14.14 | 14.82 | 14.62 | 15.29 | 15.77 |
| 8H | 4H | 15.95 | 16.70 | 16.41 | 17.15 | 17.62 | 13.50 | 14.26 | 13.97 | 14.70 | 15.17 |
| | 6H | 16.31 | 16.93 | 16.81 | 17.43 | 17.90 | 14.21 | 14.83 | 14.71 | 15.33 | 15.80 |
| | 8H | 16.42 | 16.99 | 16.94 | 17.50 | 17.98 | 14.49 | 15.05 | 15.00 | 15.56 | 16.05 |
| | 12H | 16.51 | 17.01 | 17.02 | 17.50 | 18.07 | 14.72 | 15.21 | 15.23 | 15.71 | 16.27 |
| 12H | 4H | 15.94 | 16.62 | 16.42 | 17.09 | 17.57 | 13.53 | 14.20 | 14.01 | 14.68 | 15.15 |
| | 6H | 16.31 | 16.87 | 16.83 | 17.38 | 17.87 | 14.26 | 14.82 | 14.77 | 15.33 | 15.82 |
| | 8H | 16.47 | 16.97 | 16.98 | 17.46 | 18.02 | 14.60 | 15.09 | 15.11 | 15.58 | 16.15 |