

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P1062076

Luminaire Tested: S125RDR-H375D950-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062076
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: S125RDR-H375D950-X4F0-XX-UDD-SVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

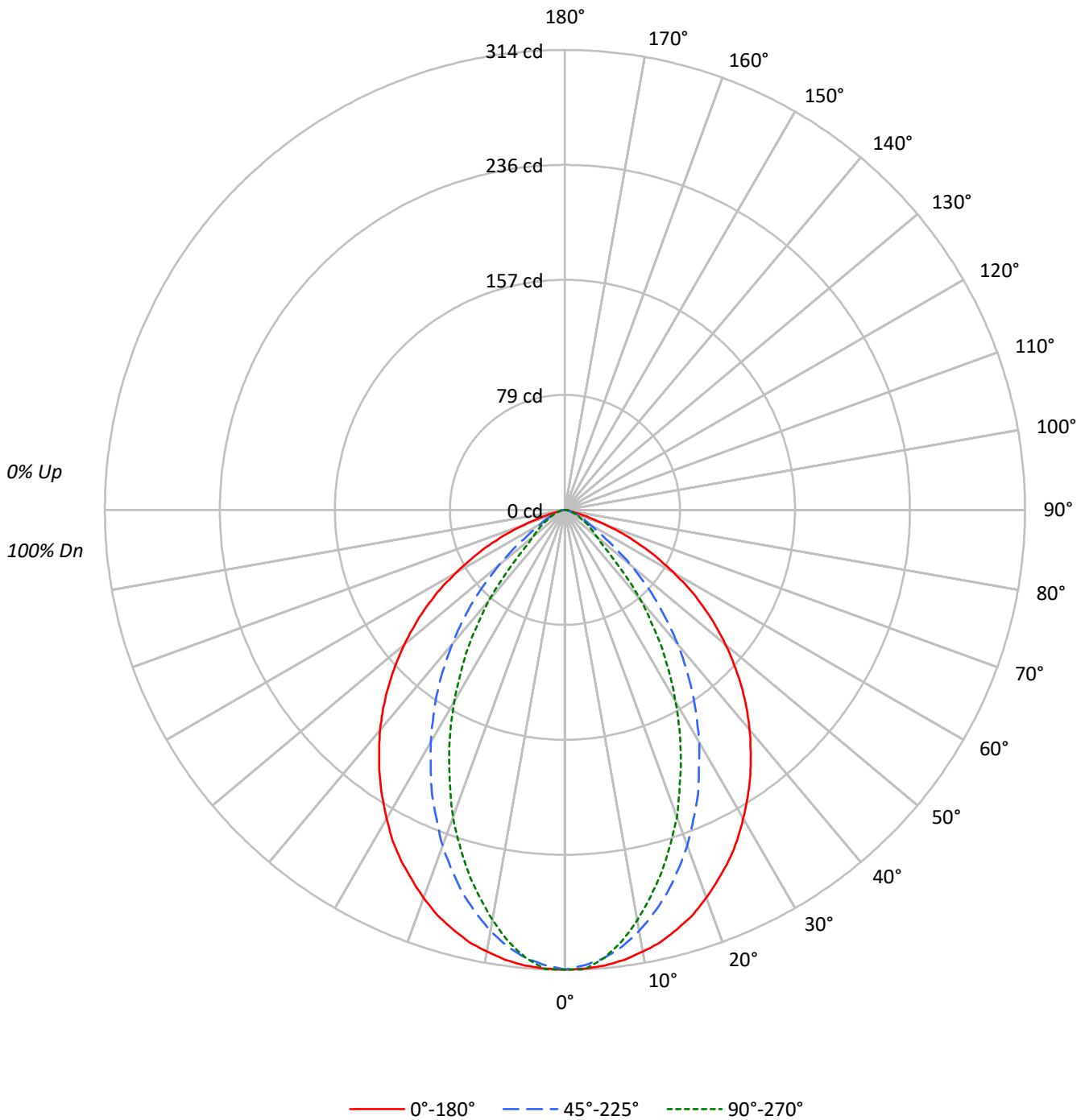
Lumens per Lamp: N/A
Luminaire Lumens: 454.0 lumens
Efficiency: N/A
Efficacy: 38.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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 | 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° | 2161 | 2161 | 2161 |
| 5° | 2158 | 2123 | 2123 |
| 10° | 2141 | 2042 | 1988 |
| 15° | 2112 | 1927 | 1823 |
| 20° | 2066 | 1789 | 1637 |
| 25° | 2009 | 1630 | 1421 |
| 30° | 1934 | 1456 | 1199 |
| 35° | 1854 | 1274 | 972 |
| 40° | 1763 | 1076 | 721 |
| 45° | 1658 | 862 | 435 |
| 50° | 1534 | 632 | 299 |
| 55° | 1384 | 388 | 248 |
| 60° | 1176 | 263 | 198 |
| 65° | 929 | 202 | 156 |
| 70° | 586 | 145 | 129 |
| 75° | 192 | 106 | 106 |
| 80° | 63 | 79 | 95 |
| 85° | 32 | 63 | 63 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1658 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 29.0 | 6.4 |
| 10°-20° | 76.7 | 16.9 |
| 20°-30° | 100.8 | 22.2 |
| 30°-40° | 99.1 | 21.8 |
| 40°-50° | 75.0 | 16.5 |
| 50°-60° | 45.4 | 10.0 |
| 60°-70° | 21.5 | 4.7 |
| 70°-80° | 5.6 | 1.2 |
| 80°-90° | 0.8 | 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° | 206.5 | 45.5 |
| 0°-40° | 305.6 | 67.3 |
| 0°-60° | 426.1 | 93.8 |
| 0°-90° | 454.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 454.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 314 | 314 | 314 | 314 | 314 | |
| 5° | 312 | 312 | 307 | 308 | 307 | 30 |
| 15° | 296 | 288 | 270 | 260 | 256 | 83 |
| 25° | 264 | 244 | 215 | 195 | 187 | 122 |
| 35° | 221 | 191 | 152 | 125 | 116 | 138 |
| 45° | 170 | 134 | 88 | 56 | 45 | 131 |
| 55° | 115 | 79 | 32 | 22 | 21 | 103 |
| 65° | 57 | 29 | 12 | 10 | 10 | 56 |
| 75° | 7 | 5 | 4 | 4 | 4 | 11 |
| 85° | 0 | 0 | 1 | 1 | 1 | 1 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 313.9 | 313.9 | 313.9 | 313.9 | 313.9 |
| 2.5° | 313.5 | 313.5 | 311.1 | 313.9 | 313.9 |
| 5° | 312.3 | 311.5 | 307.1 | 307.5 | 307.1 |
| 7.5° | 309.9 | 308.3 | 300.7 | 298.7 | 297.1 |
| 10° | 306.3 | 303.1 | 292.0 | 287.2 | 284.4 |
| 12.5° | 302.3 | 296.7 | 281.6 | 274.8 | 270.4 |
| 15° | 296.3 | 288.4 | 270.4 | 260.1 | 255.7 |
| 17.5° | 290.0 | 278.4 | 257.3 | 244.9 | 239.3 |
| 20° | 282.0 | 268.4 | 244.1 | 228.9 | 223.4 |
| 22.5° | 273.2 | 257.3 | 228.9 | 212.2 | 204.6 |
| 25° | 264.4 | 244.5 | 214.6 | 194.6 | 187.1 |
| 27.5° | 254.5 | 231.7 | 198.2 | 177.5 | 169.1 |
| 30° | 243.3 | 219.0 | 183.1 | 161.5 | 150.8 |
| 32.5° | 232.1 | 205.8 | 167.1 | 143.6 | 132.8 |
| 35° | 220.6 | 191.1 | 151.6 | 124.8 | 115.7 |
| 37.5° | 208.2 | 177.1 | 135.6 | 107.7 | 96.9 |
| 40° | 196.2 | 163.1 | 119.7 | 90.1 | 80.2 |
| 42.5° | 183.5 | 149.2 | 103.7 | 73.0 | 61.8 |
| 45° | 170.3 | 134.0 | 88.5 | 56.2 | 44.7 |
| 47.5° | 156.7 | 120.5 | 73.4 | 41.5 | 33.5 |
| 50° | 143.2 | 106.1 | 59.0 | 30.7 | 27.9 |
| 52.5° | 129.2 | 92.1 | 44.7 | 25.5 | 24.3 |
| 55° | 115.3 | 79.0 | 32.3 | 21.9 | 20.7 |
| 57.5° | 100.9 | 64.6 | 24.3 | 18.7 | 17.5 |
| 60° | 85.4 | 51.9 | 19.1 | 15.6 | 14.4 |
| 62.5° | 71.0 | 40.7 | 15.6 | 12.8 | 12.0 |
| 65° | 57.0 | 29.1 | 12.4 | 10.4 | 9.6 |
| 67.5° | 42.7 | 19.5 | 9.6 | 8.0 | 8.0 |
| 70° | 29.1 | 12.8 | 7.2 | 6.4 | 6.4 |
| 72.5° | 17.5 | 7.6 | 5.2 | 5.2 | 5.2 |
| 75° | 7.2 | 4.8 | 4.0 | 4.0 | 4.0 |
| 77.5° | 2.4 | 2.8 | 2.8 | 3.2 | 3.2 |
| 80° | 1.6 | 1.6 | 2.0 | 2.4 | 2.4 |
| 82.5° | 0.8 | 1.2 | 1.2 | 1.6 | 1.6 |
| 85° | 0.4 | 0.4 | 0.8 | 0.8 | 0.8 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.4 | 0.4 |
| 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 | 12.01 | 13.34 | 12.37 | 13.65 | 13.96 | 2.65 | 3.98 | 3.01 | 4.29 | 4.61 |
| | 3H | 12.71 | 13.89 | 13.09 | 14.22 | 14.58 | 3.44 | 4.61 | 3.82 | 4.94 | 5.31 |
| | 4H | 12.73 | 13.82 | 13.13 | 14.18 | 14.56 | 3.69 | 4.78 | 4.09 | 5.13 | 5.52 |
| | 6H | 12.66 | 13.66 | 13.07 | 14.03 | 14.43 | 3.87 | 4.87 | 4.28 | 5.24 | 5.64 |
| | 8H | 12.62 | 13.57 | 13.05 | 13.96 | 14.37 | 3.91 | 4.87 | 4.34 | 5.26 | 5.66 |
| | 12H | 12.58 | 13.49 | 13.01 | 13.87 | 14.30 | 3.92 | 4.83 | 4.35 | 5.21 | 5.64 |
| 4H | 2H | 11.84 | 12.93 | 12.24 | 13.28 | 13.67 | 3.14 | 4.24 | 3.54 | 4.59 | 4.97 |
| | 3H | 12.58 | 13.48 | 13.00 | 13.88 | 14.28 | 4.06 | 4.95 | 4.47 | 5.35 | 5.75 |
| | 4H | 12.60 | 13.40 | 13.04 | 13.82 | 14.26 | 4.37 | 5.17 | 4.81 | 5.59 | 6.03 |
| | 6H | 12.54 | 13.22 | 13.00 | 13.67 | 14.14 | 4.63 | 5.32 | 5.10 | 5.76 | 6.23 |
| | 8H | 12.49 | 13.13 | 12.96 | 13.57 | 14.05 | 4.70 | 5.34 | 5.17 | 5.78 | 6.26 |
| | 12H | 12.45 | 13.01 | 12.93 | 13.49 | 13.97 | 4.72 | 5.29 | 5.21 | 5.77 | 6.24 |
| 8H | 4H | 12.48 | 13.12 | 12.95 | 13.57 | 14.04 | 4.49 | 5.12 | 4.95 | 5.57 | 6.04 |
| | 6H | 12.41 | 12.93 | 12.91 | 13.43 | 13.91 | 4.81 | 5.32 | 5.31 | 5.82 | 6.30 |
| | 8H | 12.36 | 12.82 | 12.88 | 13.34 | 13.83 | 4.91 | 5.38 | 5.43 | 5.89 | 6.38 |
| | 12H | 12.32 | 12.73 | 12.83 | 13.22 | 13.79 | 4.97 | 5.39 | 5.49 | 5.88 | 6.45 |
| 12H | 4H | 12.44 | 13.00 | 12.93 | 13.49 | 13.96 | 4.46 | 5.02 | 4.94 | 5.50 | 5.98 |
| | 6H | 12.35 | 12.82 | 12.87 | 13.33 | 13.83 | 4.78 | 5.24 | 5.30 | 5.76 | 6.25 |
| | 8H | 12.32 | 12.73 | 12.83 | 13.22 | 13.80 | 4.92 | 5.33 | 5.43 | 5.82 | 6.39 |