

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: P1061599

Luminaire Tested: S125RDRP-S375D830-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061599
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-S375D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

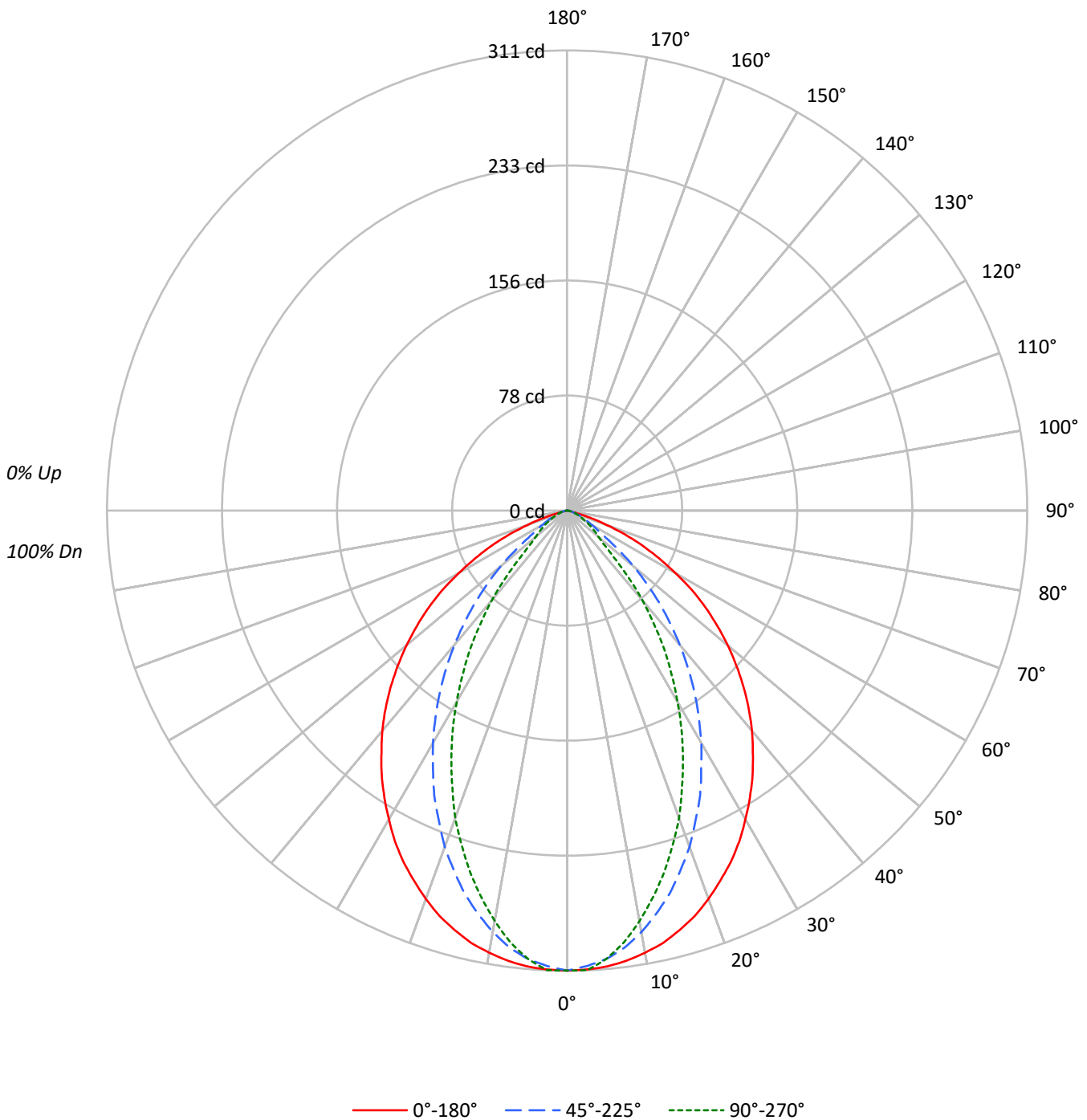
Lumens per Lamp: N/A
Luminaire Lumens: 449.6 lumens
Efficiency: N/A
Efficacy: 36.0 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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 | 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° | 2141 | 2141 | 2141 |
| 5° | 2138 | 2102 | 2102 |
| 10° | 2121 | 2022 | 1969 |
| 15° | 2092 | 1909 | 1805 |
| 20° | 2046 | 1772 | 1621 |
| 25° | 1990 | 1614 | 1408 |
| 30° | 1916 | 1441 | 1187 |
| 35° | 1837 | 1262 | 963 |
| 40° | 1747 | 1065 | 714 |
| 45° | 1643 | 854 | 430 |
| 50° | 1519 | 627 | 297 |
| 55° | 1371 | 384 | 246 |
| 60° | 1164 | 262 | 196 |
| 65° | 920 | 199 | 155 |
| 70° | 580 | 143 | 127 |
| 75° | 189 | 106 | 106 |
| 80° | 63 | 79 | 95 |
| 85° | 32 | 63 | 63 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1643 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 28.8 | 6.4 |
| 10°-20° | 75.9 | 16.9 |
| 20°-30° | 99.9 | 22.2 |
| 30°-40° | 98.1 | 21.8 |
| 40°-50° | 74.2 | 16.5 |
| 50°-60° | 45.0 | 10.0 |
| 60°-70° | 21.3 | 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° | 204.6 | 45.5 |
| 0°-40° | 302.7 | 67.3 |
| 0°-60° | 422.0 | 93.8 |
| 0°-90° | 449.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 449.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 311 | 311 | 311 | 311 | 311 | |
| 5° | 309 | 308 | 304 | 305 | 304 | 29 |
| 15° | 294 | 286 | 268 | 258 | 253 | 83 |
| 25° | 262 | 242 | 212 | 193 | 185 | 120 |
| 35° | 218 | 189 | 150 | 124 | 115 | 136 |
| 45° | 169 | 133 | 88 | 56 | 44 | 130 |
| 55° | 114 | 78 | 32 | 22 | 20 | 102 |
| 65° | 56 | 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 | |



TEST NUMBER: P1061599

CATALOG NUMBER: S125RDRP-S375D830-X4F0-XX-UDD-SVL-B

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 310.9 | 310.9 | 310.9 | 310.9 | 310.9 |
| 2.5° | 310.5 | 310.5 | 308.1 | 310.9 | 310.9 |
| 5° | 309.3 | 308.5 | 304.2 | 304.6 | 304.2 |
| 7.5° | 306.9 | 305.4 | 297.9 | 295.9 | 294.3 |
| 10° | 303.4 | 300.2 | 289.2 | 284.4 | 281.7 |
| 12.5° | 299.4 | 293.9 | 278.9 | 272.2 | 267.8 |
| 15° | 293.5 | 285.6 | 267.8 | 257.6 | 253.2 |
| 17.5° | 287.2 | 275.7 | 254.8 | 242.5 | 237.0 |
| 20° | 279.3 | 265.9 | 241.8 | 226.7 | 221.2 |
| 22.5° | 270.6 | 254.8 | 226.7 | 210.2 | 202.7 |
| 25° | 261.9 | 242.2 | 212.5 | 192.8 | 185.3 |
| 27.5° | 252.0 | 229.5 | 196.3 | 175.8 | 167.5 |
| 30° | 241.0 | 216.9 | 181.3 | 160.0 | 149.3 |
| 32.5° | 229.9 | 203.8 | 165.5 | 142.2 | 131.5 |
| 35° | 218.5 | 189.2 | 150.1 | 123.6 | 114.6 |
| 37.5° | 206.2 | 175.4 | 134.3 | 106.7 | 96.0 |
| 40° | 194.4 | 161.6 | 118.5 | 89.3 | 79.4 |
| 42.5° | 181.7 | 147.7 | 102.7 | 72.3 | 61.2 |
| 45° | 168.7 | 132.7 | 87.7 | 55.7 | 44.2 |
| 47.5° | 155.2 | 119.3 | 72.7 | 41.1 | 33.2 |
| 50° | 141.8 | 105.1 | 58.5 | 30.4 | 27.7 |
| 52.5° | 128.0 | 91.3 | 44.2 | 25.3 | 24.1 |
| 55° | 114.2 | 78.2 | 32.0 | 21.7 | 20.5 |
| 57.5° | 99.9 | 64.0 | 24.1 | 18.6 | 17.4 |
| 60° | 84.5 | 51.4 | 19.0 | 15.4 | 14.2 |
| 62.5° | 70.3 | 40.3 | 15.4 | 12.6 | 11.9 |
| 65° | 56.5 | 28.8 | 12.2 | 10.3 | 9.5 |
| 67.5° | 42.3 | 19.4 | 9.5 | 7.9 | 7.9 |
| 70° | 28.8 | 12.6 | 7.1 | 6.3 | 6.3 |
| 72.5° | 17.4 | 7.5 | 5.1 | 5.1 | 5.1 |
| 75° | 7.1 | 4.7 | 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 | 11.97 | 13.30 | 12.34 | 13.62 | 13.93 | 2.64 | 3.97 | 3.00 | 4.28 | 4.60 |
| | 3H | 12.68 | 13.86 | 13.06 | 14.19 | 14.55 | 3.42 | 4.59 | 3.80 | 4.92 | 5.29 |
| | 4H | 12.70 | 13.79 | 13.10 | 14.14 | 14.53 | 3.67 | 4.76 | 4.07 | 5.11 | 5.50 |
| | 6H | 12.63 | 13.63 | 13.04 | 14.00 | 14.40 | 3.85 | 4.86 | 4.27 | 5.23 | 5.62 |
| | 8H | 12.59 | 13.54 | 13.02 | 13.93 | 14.33 | 3.90 | 4.85 | 4.33 | 5.24 | 5.65 |
| | 12H | 12.54 | 13.45 | 12.98 | 13.84 | 14.27 | 3.91 | 4.82 | 4.34 | 5.20 | 5.63 |
| 4H | 2H | 11.80 | 12.90 | 12.21 | 13.25 | 13.63 | 3.12 | 4.22 | 3.52 | 4.57 | 4.95 |
| | 3H | 12.55 | 13.44 | 12.96 | 13.85 | 14.25 | 4.02 | 4.91 | 4.44 | 5.32 | 5.72 |
| | 4H | 12.57 | 13.36 | 13.00 | 13.78 | 14.22 | 4.34 | 5.14 | 4.78 | 5.56 | 6.00 |
| | 6H | 12.51 | 13.19 | 12.97 | 13.64 | 14.10 | 4.61 | 5.29 | 5.07 | 5.74 | 6.21 |
| | 8H | 12.46 | 13.09 | 12.92 | 13.54 | 14.01 | 4.68 | 5.32 | 5.15 | 5.76 | 6.23 |
| | 12H | 12.41 | 12.97 | 12.90 | 13.46 | 13.93 | 4.70 | 5.27 | 5.19 | 5.75 | 6.22 |
| 8H | 4H | 12.45 | 13.09 | 12.92 | 13.54 | 14.01 | 4.46 | 5.09 | 4.93 | 5.54 | 6.01 |
| | 6H | 12.38 | 12.90 | 12.88 | 13.39 | 13.87 | 4.78 | 5.30 | 5.29 | 5.80 | 6.28 |
| | 8H | 12.32 | 12.79 | 12.84 | 13.30 | 13.80 | 4.89 | 5.36 | 5.41 | 5.87 | 6.37 |
| | 12H | 12.28 | 12.69 | 12.80 | 13.19 | 13.76 | 4.96 | 5.37 | 5.47 | 5.86 | 6.43 |
| 12H | 4H | 12.41 | 12.97 | 12.89 | 13.45 | 13.93 | 4.43 | 4.99 | 4.91 | 5.47 | 5.95 |
| | 6H | 12.32 | 12.78 | 12.84 | 13.30 | 13.79 | 4.76 | 5.22 | 5.28 | 5.74 | 6.23 |
| | 8H | 12.28 | 12.69 | 12.80 | 13.19 | 13.76 | 4.90 | 5.31 | 5.41 | 5.80 | 6.38 |