

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: P1061608

Luminaire Tested: S125RDRP-S375D835-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061608
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-S375D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

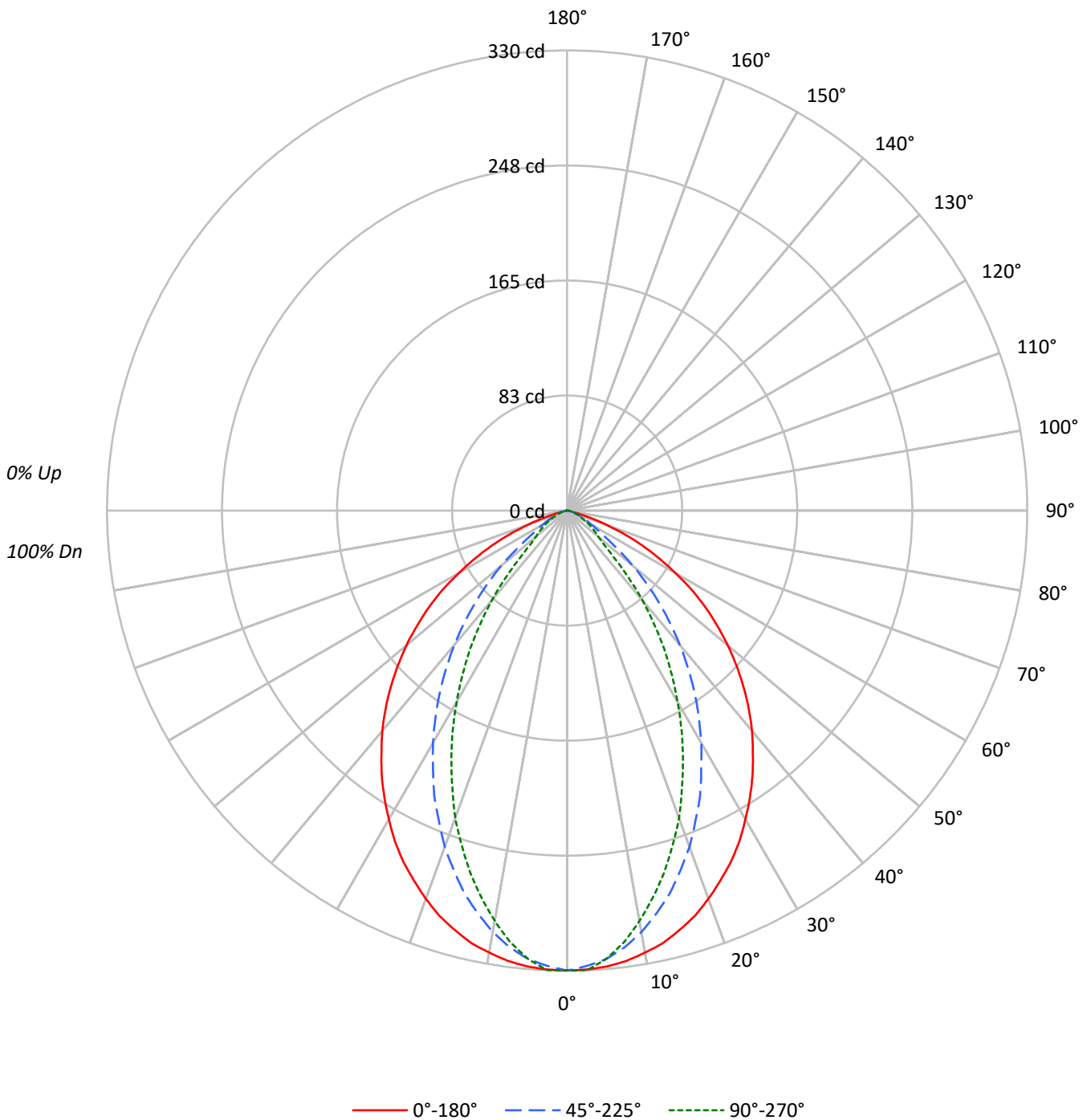
Lumens per Lamp: N/A
Luminaire Lumens: 477.0 lumens
Efficiency: N/A
Efficacy: 38.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
Input Voltage (V): 120
Input Current (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° | 2271 | 2271 | 2271 |
| 5° | 2268 | 2230 | 2230 |
| 10° | 2251 | 2145 | 2089 |
| 15° | 2220 | 2026 | 1915 |
| 20° | 2171 | 1879 | 1720 |
| 25° | 2111 | 1713 | 1494 |
| 30° | 2033 | 1530 | 1259 |
| 35° | 1948 | 1339 | 1021 |
| 40° | 1853 | 1130 | 757 |
| 45° | 1743 | 906 | 457 |
| 50° | 1612 | 664 | 314 |
| 55° | 1454 | 407 | 262 |
| 60° | 1235 | 277 | 208 |
| 65° | 976 | 212 | 165 |
| 70° | 616 | 151 | 135 |
| 75° | 200 | 112 | 112 |
| 80° | 67 | 83 | 99 |
| 85° | 32 | 63 | 63 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1743 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 30.5 | 6.4 |
| 10°-20° | 80.6 | 16.9 |
| 20°-30° | 106.0 | 22.2 |
| 30°-40° | 104.1 | 21.8 |
| 40°-50° | 78.8 | 16.5 |
| 50°-60° | 47.8 | 10.0 |
| 60°-70° | 22.5 | 4.7 |
| 70°-80° | 5.9 | 1.2 |
| 80°-90° | 0.9 | 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° | 217.0 | 45.5 |
| 0°-40° | 321.2 | 67.3 |
| 0°-60° | 447.7 | 93.9 |
| 0°-90° | 477.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 477.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 330 | 330 | 330 | 330 | 330 | |
| 5° | 328 | 327 | 323 | 323 | 323 | 31 |
| 15° | 311 | 303 | 284 | 273 | 269 | 88 |
| 25° | 278 | 257 | 226 | 204 | 197 | 128 |
| 35° | 232 | 201 | 159 | 131 | 122 | 145 |
| 45° | 179 | 141 | 93 | 59 | 47 | 138 |
| 55° | 121 | 83 | 34 | 23 | 22 | 108 |
| 65° | 60 | 31 | 13 | 11 | 10 | 59 |
| 75° | 8 | 5 | 4 | 4 | 4 | 12 |
| 85° | 0 | 0 | 1 | 1 | 1 | 1 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CATALOG NUMBER: S125RDRP-S375D835-X4F0-XX-UDD-SVL-B

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 329.8 | 329.8 | 329.8 | 329.8 | 329.8 |
| 2.5° | 329.4 | 329.4 | 326.9 | 329.8 | 329.8 |
| 5° | 328.2 | 327.3 | 322.7 | 323.1 | 322.7 |
| 7.5° | 325.7 | 324.0 | 316.0 | 313.9 | 312.2 |
| 10° | 321.9 | 318.5 | 306.8 | 301.8 | 298.8 |
| 12.5° | 317.7 | 311.8 | 295.9 | 288.8 | 284.2 |
| 15° | 311.4 | 303.0 | 284.2 | 273.3 | 268.7 |
| 17.5° | 304.7 | 292.5 | 270.3 | 257.3 | 251.5 |
| 20° | 296.3 | 282.1 | 256.5 | 240.6 | 234.7 |
| 22.5° | 287.1 | 270.3 | 240.6 | 223.0 | 215.0 |
| 25° | 277.9 | 256.9 | 225.5 | 204.5 | 196.6 |
| 27.5° | 267.4 | 243.5 | 208.3 | 186.5 | 177.7 |
| 30° | 255.7 | 230.1 | 192.4 | 169.7 | 158.4 |
| 32.5° | 243.9 | 216.3 | 175.6 | 150.9 | 139.6 |
| 35° | 231.8 | 200.8 | 159.3 | 131.2 | 121.5 |
| 37.5° | 218.8 | 186.1 | 142.5 | 113.2 | 101.8 |
| 40° | 206.2 | 171.4 | 125.7 | 94.7 | 84.2 |
| 42.5° | 192.8 | 156.7 | 109.0 | 76.7 | 65.0 |
| 45° | 179.0 | 140.8 | 93.0 | 59.1 | 46.9 |
| 47.5° | 164.7 | 126.6 | 77.1 | 43.6 | 35.2 |
| 50° | 150.5 | 111.5 | 62.0 | 32.3 | 29.3 |
| 52.5° | 135.8 | 96.8 | 46.9 | 26.8 | 25.6 |
| 55° | 121.1 | 83.0 | 33.9 | 23.1 | 21.8 |
| 57.5° | 106.0 | 67.9 | 25.6 | 19.7 | 18.4 |
| 60° | 89.7 | 54.5 | 20.1 | 16.3 | 15.1 |
| 62.5° | 74.6 | 42.7 | 16.3 | 13.4 | 12.6 |
| 65° | 59.9 | 30.6 | 13.0 | 10.9 | 10.1 |
| 67.5° | 44.8 | 20.5 | 10.1 | 8.4 | 8.4 |
| 70° | 30.6 | 13.4 | 7.5 | 6.7 | 6.7 |
| 72.5° | 18.4 | 8.0 | 5.4 | 5.4 | 5.4 |
| 75° | 7.5 | 5.0 | 4.2 | 4.2 | 4.2 |
| 77.5° | 2.5 | 2.9 | 2.9 | 3.4 | 3.4 |
| 80° | 1.7 | 1.7 | 2.1 | 2.5 | 2.5 |
| 82.5° | 0.8 | 1.3 | 1.3 | 1.7 | 1.7 |
| 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 | 12.18 | 13.51 | 12.54 | 13.82 | 14.14 | 2.83 | 4.16 | 3.20 | 4.48 | 4.79 |
| | 3H | 12.88 | 14.06 | 13.26 | 14.39 | 14.76 | 3.61 | 4.79 | 3.99 | 5.12 | 5.49 |
| | 4H | 12.90 | 14.00 | 13.30 | 14.35 | 14.73 | 3.86 | 4.96 | 4.27 | 5.31 | 5.69 |
| | 6H | 12.83 | 13.84 | 13.24 | 14.21 | 14.60 | 4.05 | 5.05 | 4.46 | 5.42 | 5.82 |
| | 8H | 12.79 | 13.74 | 13.22 | 14.13 | 14.54 | 4.09 | 5.04 | 4.52 | 5.43 | 5.84 |
| | 12H | 12.75 | 13.66 | 13.18 | 14.04 | 14.47 | 4.10 | 5.01 | 4.53 | 5.39 | 5.82 |
| 4H | 2H | 12.01 | 13.11 | 12.41 | 13.46 | 13.84 | 3.32 | 4.42 | 3.72 | 4.77 | 5.15 |
| | 3H | 12.75 | 13.65 | 13.17 | 14.05 | 14.45 | 4.23 | 5.12 | 4.64 | 5.52 | 5.93 |
| | 4H | 12.77 | 13.57 | 13.21 | 13.99 | 14.43 | 4.54 | 5.33 | 4.97 | 5.75 | 6.20 |
| | 6H | 12.71 | 13.39 | 13.17 | 13.84 | 14.31 | 4.80 | 5.49 | 5.27 | 5.93 | 6.40 |
| | 8H | 12.66 | 13.30 | 13.13 | 13.74 | 14.22 | 4.87 | 5.51 | 5.34 | 5.96 | 6.43 |
| | 12H | 12.62 | 13.18 | 13.10 | 13.66 | 14.14 | 4.89 | 5.46 | 5.38 | 5.94 | 6.41 |
| 8H | 4H | 12.65 | 13.29 | 13.12 | 13.74 | 14.21 | 4.65 | 5.29 | 5.12 | 5.74 | 6.21 |
| | 6H | 12.58 | 13.10 | 13.08 | 13.60 | 14.08 | 4.97 | 5.49 | 5.48 | 5.99 | 6.47 |
| | 8H | 12.53 | 12.99 | 13.05 | 13.51 | 14.00 | 5.08 | 5.55 | 5.60 | 6.06 | 6.56 |
| | 12H | 12.48 | 12.90 | 13.00 | 13.39 | 13.96 | 5.14 | 5.55 | 5.66 | 6.05 | 6.62 |
| 12H | 4H | 12.61 | 13.17 | 13.10 | 13.66 | 14.13 | 4.62 | 5.19 | 5.11 | 5.67 | 6.14 |
| | 6H | 12.52 | 12.99 | 13.04 | 13.50 | 14.00 | 4.95 | 5.41 | 5.47 | 5.93 | 6.42 |
| | 8H | 12.49 | 12.90 | 13.00 | 13.39 | 13.97 | 5.09 | 5.50 | 5.60 | 5.99 | 6.57 |