

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: P1058099

Luminaire Tested: S122RDRP-S675D940-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058099
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-59)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S675D940-X4F0-XX-UDD-SVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

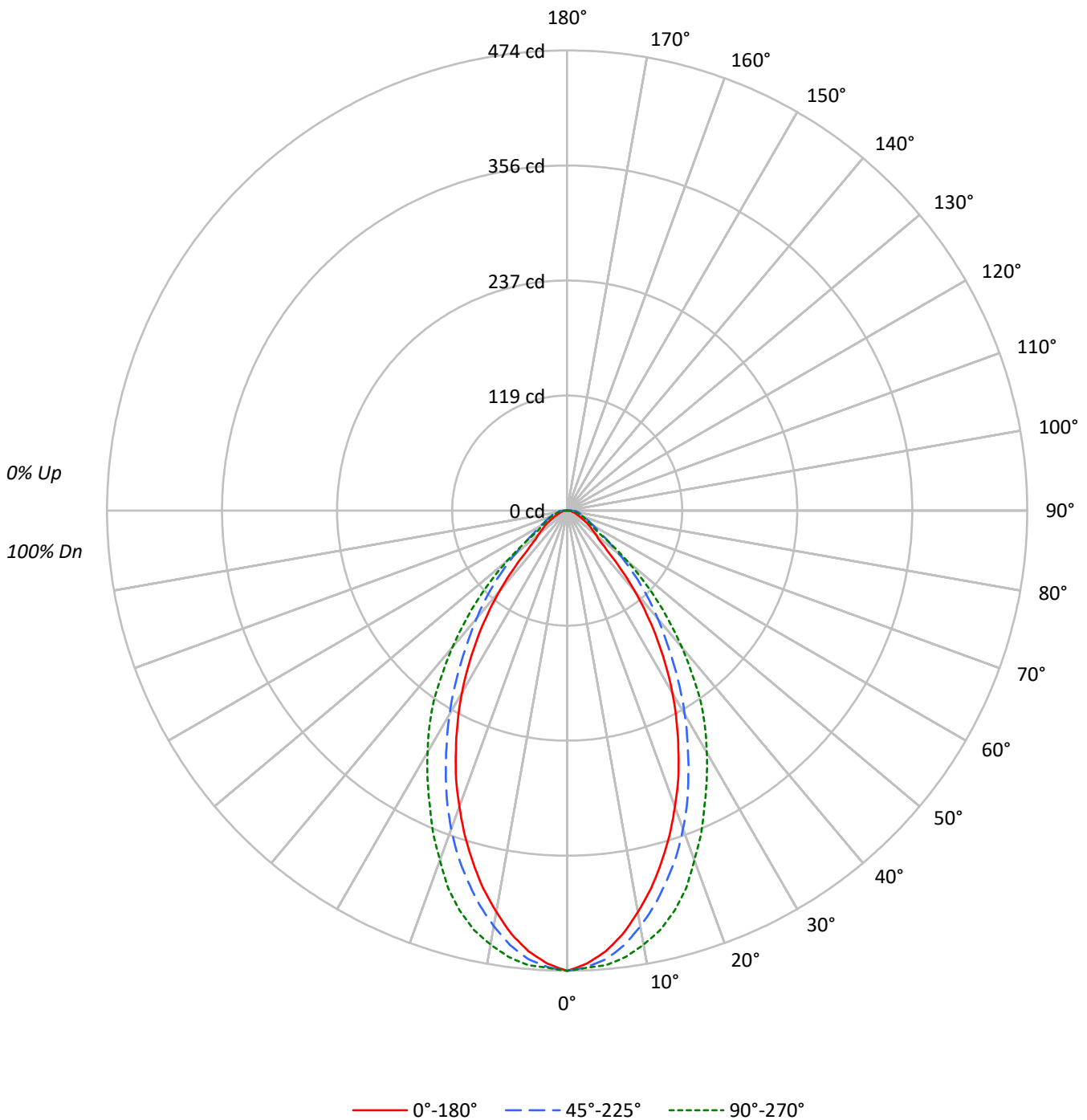
Lumens per Lamp: N/A
Luminaire Lumens: 571.9 lumens
Efficiency: N/A
Efficacy: 22.2 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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 | 111 | 108 | 105 | 102 | 109 | 106 | 103 | 100 | 101 | 99 | 97 | 98 | 96 | 94 | 94 | 93 | 91 | 89 |
| 2 | 104 | 98 | 93 | 88 | 102 | 96 | 91 | 87 | 93 | 89 | 85 | 90 | 86 | 83 | 87 | 84 | 82 | 80 |
| 3 | 97 | 89 | 83 | 78 | 95 | 88 | 82 | 77 | 85 | 80 | 76 | 82 | 78 | 75 | 80 | 77 | 74 | 72 |
| 4 | 91 | 82 | 75 | 70 | 89 | 81 | 74 | 69 | 78 | 73 | 68 | 76 | 71 | 68 | 74 | 70 | 67 | 65 |
| 5 | 86 | 75 | 68 | 63 | 84 | 74 | 68 | 63 | 72 | 66 | 62 | 71 | 65 | 61 | 69 | 64 | 61 | 59 |
| 6 | 80 | 70 | 62 | 57 | 79 | 69 | 62 | 57 | 67 | 61 | 57 | 66 | 60 | 56 | 64 | 59 | 56 | 54 |
| 7 | 76 | 65 | 57 | 52 | 74 | 64 | 57 | 52 | 62 | 56 | 52 | 61 | 56 | 52 | 60 | 55 | 51 | 50 |
| 8 | 71 | 60 | 53 | 48 | 70 | 59 | 53 | 48 | 58 | 52 | 48 | 57 | 52 | 48 | 56 | 51 | 47 | 46 |
| 9 | 67 | 56 | 49 | 45 | 66 | 56 | 49 | 44 | 55 | 49 | 44 | 54 | 48 | 44 | 53 | 48 | 44 | 42 |
| 10 | 64 | 53 | 46 | 41 | 63 | 52 | 46 | 41 | 51 | 45 | 41 | 50 | 45 | 41 | 50 | 45 | 41 | 39 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 8748 | 8748 | 8748 |
| 5° | 8441 | 8587 | 8700 |
| 10° | 7866 | 8145 | 8505 |
| 15° | 7168 | 7552 | 8153 |
| 20° | 6372 | 6853 | 7523 |
| 25° | 5520 | 6018 | 6821 |
| 30° | 4622 | 5163 | 6132 |
| 35° | 3645 | 4275 | 5400 |
| 40° | 2614 | 3498 | 4425 |
| 45° | 1529 | 2761 | 3424 |
| 50° | 1105 | 2009 | 2311 |
| 55° | 930 | 1435 | 1210 |
| 60° | 742 | 1163 | 1033 |
| 65° | 611 | 1030 | 956 |
| 70° | 518 | 993 | 896 |
| 75° | 499 | 1062 | 870 |
| 80° | 553 | 1296 | 924 |
| 85° | 932 | 2032 | 1291 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3424 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 43.4 | 7.6 |
| 10°-20° | 111.3 | 19.5 |
| 20°-30° | 136.8 | 23.9 |
| 30°-40° | 120.9 | 21.1 |
| 40°-50° | 77.2 | 13.5 |
| 50°-60° | 37.7 | 6.6 |
| 60°-70° | 22.4 | 3.9 |
| 70°-80° | 14.3 | 2.5 |
| 80°-90° | 7.9 | 1.4 |
| 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° | 291.5 | 51.0 |
| 0°-40° | 412.4 | 72.1 |
| 0°-60° | 527.3 | 92.2 |
| 0°-90° | 571.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 571.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 474 | 474 | 474 | 474 | 474 | |
| 5° | 456 | 465 | 464 | 465 | 470 | 42 |
| 15° | 375 | 386 | 395 | 413 | 427 | 105 |
| 25° | 271 | 281 | 296 | 314 | 335 | 124 |
| 35° | 162 | 171 | 190 | 216 | 240 | 100 |
| 45° | 59 | 75 | 106 | 119 | 131 | 49 |
| 55° | 29 | 38 | 45 | 42 | 38 | 26 |
| 65° | 14 | 26 | 24 | 22 | 22 | 14 |
| 75° | 7 | 16 | 15 | 13 | 12 | 8 |
| 85° | 4 | 9 | 10 | 9 | 6 | 4 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CATALOG NUMBER: S122RDRP-S675D940-X4F0-XX-UDD-SVL-S

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 474.1 | 474.1 | 474.1 | 474.1 | 474.1 |
| 2.5° | 467.1 | 475.8 | 470.6 | 470.6 | 471.4 |
| 5° | 455.7 | 465.3 | 463.6 | 465.3 | 469.7 |
| 7.5° | 439.9 | 449.6 | 451.3 | 458.3 | 463.6 |
| 10° | 419.8 | 429.4 | 434.7 | 446.1 | 453.9 |
| 12.5° | 398.8 | 408.5 | 416.3 | 431.2 | 442.6 |
| 15° | 375.2 | 385.7 | 395.3 | 412.8 | 426.8 |
| 17.5° | 350.7 | 361.2 | 373.5 | 391.0 | 407.6 |
| 20° | 324.5 | 334.1 | 349.0 | 365.6 | 383.1 |
| 22.5° | 299.1 | 307.9 | 323.6 | 339.4 | 360.4 |
| 25° | 271.1 | 280.8 | 295.6 | 314.0 | 335.0 |
| 27.5° | 244.0 | 253.6 | 268.5 | 289.5 | 311.4 |
| 30° | 216.9 | 225.7 | 242.3 | 264.1 | 287.8 |
| 32.5° | 188.9 | 197.7 | 216.0 | 239.7 | 264.1 |
| 35° | 161.8 | 170.6 | 189.8 | 216.0 | 239.7 |
| 37.5° | 134.7 | 144.3 | 166.2 | 190.7 | 210.8 |
| 40° | 108.5 | 119.8 | 145.2 | 166.2 | 183.7 |
| 42.5° | 82.2 | 98.0 | 125.1 | 142.6 | 156.6 |
| 45° | 58.6 | 75.2 | 105.8 | 119.0 | 131.2 |
| 47.5° | 44.6 | 57.7 | 87.5 | 97.1 | 105.0 |
| 50° | 38.5 | 47.2 | 70.0 | 77.0 | 80.5 |
| 52.5° | 33.2 | 42.0 | 56.0 | 58.6 | 56.9 |
| 55° | 28.9 | 38.5 | 44.6 | 42.0 | 37.6 |
| 57.5° | 24.5 | 35.9 | 36.7 | 31.5 | 32.4 |
| 60° | 20.1 | 32.4 | 31.5 | 27.1 | 28.0 |
| 62.5° | 16.6 | 29.7 | 27.1 | 24.5 | 24.5 |
| 65° | 14.0 | 26.2 | 23.6 | 21.9 | 21.9 |
| 67.5° | 11.4 | 23.6 | 21.0 | 19.2 | 19.2 |
| 70° | 9.6 | 21.0 | 18.4 | 16.6 | 16.6 |
| 72.5° | 8.7 | 18.4 | 16.6 | 14.9 | 14.9 |
| 75° | 7.0 | 15.7 | 14.9 | 13.1 | 12.2 |
| 77.5° | 6.1 | 13.1 | 13.1 | 12.2 | 10.5 |
| 80° | 5.2 | 11.4 | 12.2 | 10.5 | 8.7 |
| 82.5° | 5.2 | 10.5 | 10.5 | 9.6 | 7.0 |
| 85° | 4.4 | 8.7 | 9.6 | 8.7 | 6.1 |
| 87.5° | 2.6 | 7.9 | 7.9 | 7.0 | 4.4 |
| 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 | 9.57 | 10.85 | 9.94 | 11.16 | 11.48 | 9.09 | 10.37 | 9.46 | 10.68 | 11.00 |
| | 3H | 10.74 | 11.88 | 11.12 | 12.21 | 12.58 | 10.65 | 11.79 | 11.03 | 12.12 | 12.48 |
| | 4H | 11.17 | 12.23 | 11.57 | 12.58 | 12.97 | 11.33 | 12.39 | 11.73 | 12.74 | 13.13 |
| | 6H | 11.51 | 12.49 | 11.93 | 12.86 | 13.26 | 11.98 | 12.95 | 12.39 | 13.32 | 13.72 |
| | 8H | 11.71 | 12.63 | 12.14 | 13.02 | 13.43 | 12.26 | 13.19 | 12.70 | 13.58 | 13.99 |
| | 12H | 11.93 | 12.81 | 12.36 | 13.19 | 13.62 | 12.58 | 13.47 | 13.01 | 13.85 | 14.28 |
| 4H | 2H | 10.07 | 11.13 | 10.47 | 11.48 | 11.87 | 9.69 | 10.75 | 10.09 | 11.10 | 11.49 |
| | 3H | 11.71 | 12.59 | 12.13 | 12.99 | 13.40 | 11.49 | 12.36 | 11.90 | 12.77 | 13.17 |
| | 4H | 12.47 | 13.26 | 12.91 | 13.68 | 14.12 | 12.33 | 13.11 | 12.76 | 13.53 | 13.97 |
| | 6H | 13.07 | 13.75 | 13.54 | 14.20 | 14.67 | 13.18 | 13.86 | 13.64 | 14.31 | 14.77 |
| | 8H | 13.37 | 14.01 | 13.84 | 14.45 | 14.93 | 13.57 | 14.21 | 14.04 | 14.65 | 15.12 |
| | 12H | 13.68 | 14.25 | 14.17 | 14.73 | 15.21 | 14.00 | 14.57 | 14.49 | 15.05 | 15.52 |
| 8H | 4H | 12.89 | 13.53 | 13.36 | 13.98 | 14.45 | 12.78 | 13.42 | 13.25 | 13.87 | 14.34 |
| | 6H | 13.84 | 14.36 | 14.34 | 14.86 | 15.34 | 13.89 | 14.41 | 14.39 | 14.91 | 15.39 |
| | 8H | 14.38 | 14.85 | 14.91 | 15.37 | 15.86 | 14.47 | 14.94 | 14.99 | 15.45 | 15.94 |
| | 12H | 14.95 | 15.36 | 15.46 | 15.86 | 16.43 | 15.13 | 15.55 | 15.65 | 16.04 | 16.62 |
| 12H | 4H | 12.96 | 13.52 | 13.45 | 14.01 | 14.48 | 12.87 | 13.43 | 13.35 | 13.91 | 14.39 |
| | 6H | 14.02 | 14.49 | 14.54 | 15.01 | 15.50 | 14.07 | 14.54 | 14.60 | 15.06 | 15.55 |
| | 8H | 14.71 | 15.13 | 15.23 | 15.62 | 16.20 | 14.78 | 15.20 | 15.30 | 15.69 | 16.27 |