

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: P1058408

Luminaire Tested: S122RDRP-H485D930-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058408
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-H485D930-X4F0-XX-UDD-WVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

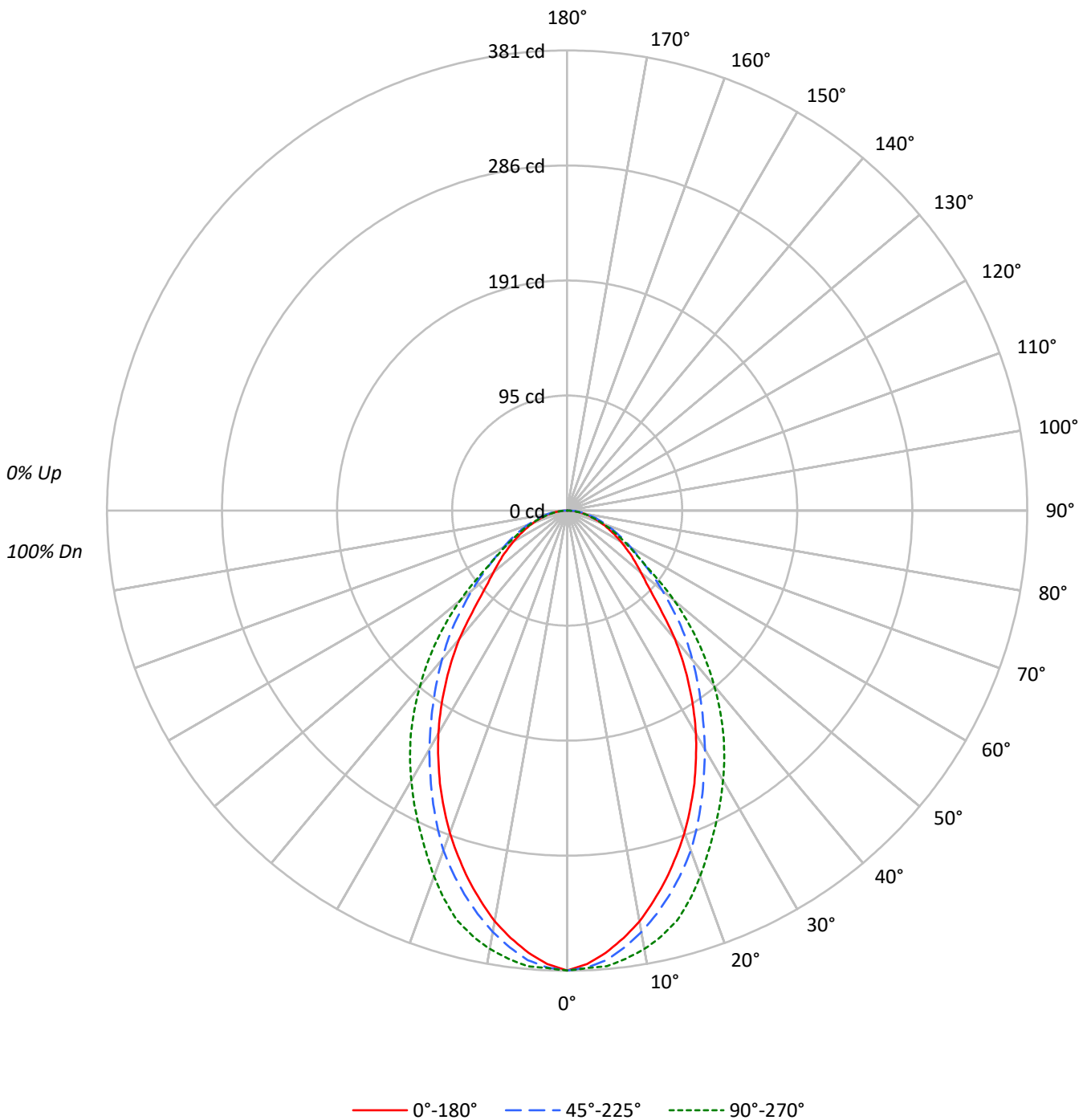
Lumens per Lamp: N/A
Luminaire Lumens: 620.0 lumens
Efficiency: N/A
Efficacy: 35.6 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.4
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

TEST NUMBER: P1058408

CATALOG NUMBER: S122RDRP-H485D930-X4F0-XX-UDD-WVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1058408

CATALOG NUMBER: S122RDRP-H485D930-X4F0-XX-UDD-WVL-S

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 | 103 | 99 | 108 | 104 | 101 | 98 | 100 | 97 | 95 | 96 | 94 | 92 | 93 | 91 | 89 | 87 |
| 2 | 102 | 95 | 89 | 84 | 100 | 93 | 88 | 83 | 90 | 85 | 81 | 87 | 83 | 79 | 84 | 80 | 78 | 76 |
| 3 | 94 | 85 | 78 | 73 | 92 | 84 | 77 | 72 | 81 | 75 | 71 | 78 | 73 | 69 | 76 | 72 | 68 | 66 |
| 4 | 88 | 77 | 69 | 63 | 85 | 76 | 69 | 63 | 73 | 67 | 62 | 71 | 66 | 61 | 69 | 64 | 61 | 59 |
| 5 | 81 | 70 | 62 | 56 | 79 | 69 | 61 | 56 | 67 | 60 | 55 | 65 | 59 | 55 | 63 | 58 | 54 | 52 |
| 6 | 76 | 64 | 56 | 50 | 74 | 63 | 56 | 50 | 61 | 55 | 50 | 60 | 54 | 49 | 58 | 53 | 49 | 47 |
| 7 | 71 | 59 | 51 | 45 | 69 | 58 | 51 | 45 | 57 | 50 | 45 | 55 | 49 | 45 | 54 | 49 | 44 | 43 |
| 8 | 67 | 54 | 47 | 41 | 65 | 54 | 46 | 41 | 52 | 46 | 41 | 51 | 45 | 41 | 50 | 45 | 41 | 39 |
| 9 | 63 | 50 | 43 | 38 | 61 | 50 | 43 | 38 | 49 | 42 | 38 | 48 | 42 | 37 | 47 | 41 | 37 | 36 |
| 10 | 59 | 47 | 40 | 35 | 58 | 46 | 39 | 35 | 45 | 39 | 35 | 45 | 39 | 34 | 44 | 38 | 34 | 33 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 7027 | 7027 | 7027 |
| 5° | 6807 | 6920 | 7013 |
| 10° | 6472 | 6637 | 6907 |
| 15° | 6039 | 6281 | 6715 |
| 20° | 5579 | 5881 | 6327 |
| 25° | 5074 | 5367 | 5896 |
| 30° | 4545 | 4862 | 5499 |
| 35° | 3958 | 4345 | 5080 |
| 40° | 3341 | 3888 | 4567 |
| 45° | 2654 | 3432 | 3995 |
| 50° | 2285 | 2951 | 3316 |
| 55° | 2081 | 2525 | 2542 |
| 60° | 1897 | 2244 | 2163 |
| 65° | 1738 | 2026 | 1908 |
| 70° | 1608 | 1878 | 1699 |
| 75° | 1497 | 1775 | 1497 |
| 80° | 1413 | 1700 | 1350 |
| 85° | 1397 | 1757 | 1164 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3995 cd/sqm



TEST NUMBER: P1058408

CATALOG NUMBER: S122RDRP-H485D930-X4F0-XX-UDD-WVL-S

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 35.1 | 5.7 |
| 10°-20° | 92.9 | 15.0 |
| 20°-30° | 122.3 | 19.7 |
| 30°-40° | 123.0 | 19.8 |
| 40°-50° | 99.7 | 16.1 |
| 50°-60° | 68.6 | 11.1 |
| 60°-70° | 44.9 | 7.2 |
| 70°-80° | 25.0 | 4.0 |
| 80°-90° | 8.5 | 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° | 250.3 | 40.4 |
| 0°-40° | 373.3 | 60.2 |
| 0°-60° | 541.6 | 87.4 |
| 0°-90° | 620.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 620.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 381 | 381 | 381 | 381 | 381 | |
| 5° | 368 | 375 | 374 | 375 | 379 | 34 |
| 15° | 316 | 324 | 329 | 341 | 352 | 89 |
| 25° | 249 | 256 | 264 | 275 | 290 | 114 |
| 35° | 176 | 184 | 193 | 210 | 226 | 110 |
| 45° | 102 | 113 | 132 | 143 | 153 | 80 |
| 55° | 65 | 72 | 78 | 80 | 79 | 58 |
| 65° | 40 | 48 | 46 | 44 | 44 | 40 |
| 75° | 21 | 26 | 25 | 22 | 21 | 22 |
| 85° | 7 | 9 | 8 | 7 | 6 | 7 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1058408

CATALOG NUMBER: S122RDRP-H485D930-X4F0-XX-UDD-WVL-S

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 380.8 | 380.8 | 380.8 | 380.8 | 380.8 |
| 2.5° | 375.8 | 382.4 | 378.6 | 378.6 | 379.1 |
| 5° | 367.5 | 374.7 | 373.6 | 375.2 | 378.6 |
| 7.5° | 357.0 | 364.7 | 364.7 | 369.7 | 374.1 |
| 10° | 345.4 | 353.1 | 354.2 | 362.0 | 368.6 |
| 12.5° | 331.0 | 338.8 | 342.1 | 352.0 | 360.9 |
| 15° | 316.1 | 323.9 | 328.8 | 341.0 | 351.5 |
| 17.5° | 300.1 | 307.8 | 314.5 | 327.2 | 337.7 |
| 20° | 284.1 | 291.2 | 299.5 | 310.6 | 322.2 |
| 22.5° | 266.4 | 274.1 | 281.8 | 292.3 | 305.6 |
| 25° | 249.2 | 255.9 | 263.6 | 275.2 | 289.6 |
| 27.5° | 231.0 | 238.2 | 245.4 | 259.2 | 274.1 |
| 30° | 213.3 | 220.5 | 228.2 | 242.6 | 258.1 |
| 32.5° | 194.5 | 202.3 | 210.0 | 226.0 | 242.1 |
| 35° | 175.7 | 184.0 | 192.9 | 210.0 | 225.5 |
| 37.5° | 157.5 | 166.3 | 176.8 | 194.5 | 207.8 |
| 40° | 138.7 | 148.1 | 161.4 | 176.8 | 189.6 |
| 42.5° | 118.8 | 130.4 | 146.5 | 159.7 | 171.3 |
| 45° | 101.7 | 113.3 | 131.5 | 143.1 | 153.1 |
| 47.5° | 89.0 | 98.4 | 116.1 | 126.0 | 134.3 |
| 50° | 79.6 | 86.8 | 102.8 | 110.0 | 115.5 |
| 52.5° | 71.8 | 79.0 | 90.1 | 95.1 | 96.7 |
| 55° | 64.7 | 71.8 | 78.5 | 80.1 | 79.0 |
| 57.5° | 57.5 | 65.2 | 69.1 | 67.4 | 67.4 |
| 60° | 51.4 | 59.7 | 60.8 | 58.6 | 58.6 |
| 62.5° | 45.3 | 53.6 | 53.6 | 50.8 | 50.8 |
| 65° | 39.8 | 47.5 | 46.4 | 44.2 | 43.7 |
| 67.5° | 34.8 | 42.0 | 40.3 | 38.1 | 37.6 |
| 70° | 29.8 | 36.5 | 34.8 | 32.1 | 31.5 |
| 72.5° | 25.4 | 31.5 | 29.3 | 27.1 | 26.0 |
| 75° | 21.0 | 26.0 | 24.9 | 22.1 | 21.0 |
| 77.5° | 17.1 | 21.0 | 19.9 | 17.7 | 16.6 |
| 80° | 13.3 | 16.6 | 16.0 | 13.8 | 12.7 |
| 82.5° | 9.9 | 12.7 | 12.2 | 10.5 | 8.8 |
| 85° | 6.6 | 8.8 | 8.3 | 7.2 | 5.5 |
| 87.5° | 3.3 | 6.1 | 5.5 | 5.0 | 2.8 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P1058408
 CATALOG NUMBER: S122RDRP-H485D930-X4F0-XX-UDD-WVL-S

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 | 13.50 | 14.94 | 13.87 | 15.26 | 15.57 | 13.86 | 15.30 | 14.23 | 15.61 | 15.93 |
| | 3H | 15.05 | 16.34 | 15.43 | 16.66 | 17.03 | 15.21 | 16.50 | 15.59 | 16.83 | 17.19 |
| | 4H | 15.62 | 16.83 | 16.02 | 17.18 | 17.56 | 15.69 | 16.90 | 16.09 | 17.25 | 17.63 |
| | 6H | 16.05 | 17.16 | 16.46 | 17.53 | 17.92 | 16.05 | 17.16 | 16.46 | 17.53 | 17.92 |
| | 8H | 16.20 | 17.26 | 16.63 | 17.65 | 18.05 | 16.16 | 17.22 | 16.59 | 17.61 | 18.01 |
| | 12H | 16.32 | 17.33 | 16.75 | 17.71 | 18.14 | 16.24 | 17.25 | 16.67 | 17.63 | 18.06 |
| 4H | 2H | 14.09 | 15.30 | 14.49 | 15.65 | 16.03 | 14.38 | 15.58 | 14.78 | 15.93 | 16.31 |
| | 3H | 15.91 | 16.91 | 16.32 | 17.31 | 17.71 | 15.95 | 16.95 | 16.36 | 17.35 | 17.75 |
| | 4H | 16.66 | 17.56 | 17.09 | 17.98 | 18.42 | 16.55 | 17.46 | 16.99 | 17.87 | 18.31 |
| | 6H | 17.25 | 18.03 | 17.70 | 18.47 | 18.93 | 17.04 | 17.82 | 17.50 | 18.26 | 18.72 |
| | 8H | 17.45 | 18.19 | 17.92 | 18.63 | 19.10 | 17.20 | 17.93 | 17.66 | 18.38 | 18.84 |
| | 12H | 17.62 | 18.27 | 18.10 | 18.75 | 19.22 | 17.32 | 17.97 | 17.80 | 18.45 | 18.92 |
| 8H | 4H | 16.94 | 17.67 | 17.41 | 18.12 | 18.59 | 16.86 | 17.59 | 17.32 | 18.03 | 18.50 |
| | 6H | 17.70 | 18.30 | 18.20 | 18.80 | 19.28 | 17.47 | 18.08 | 17.97 | 18.57 | 19.05 |
| | 8H | 18.02 | 18.57 | 18.54 | 19.08 | 19.57 | 17.72 | 18.26 | 18.24 | 18.78 | 19.26 |
| | 12H | 18.31 | 18.79 | 18.82 | 19.28 | 19.85 | 17.93 | 18.41 | 18.44 | 18.90 | 19.47 |
| 12H | 4H | 16.96 | 17.61 | 17.45 | 18.09 | 18.57 | 16.89 | 17.54 | 17.37 | 18.02 | 18.49 |
| | 6H | 17.76 | 18.30 | 18.28 | 18.81 | 19.30 | 17.55 | 18.09 | 18.07 | 18.61 | 19.09 |
| | 8H | 18.16 | 18.64 | 18.67 | 19.13 | 19.70 | 17.87 | 18.35 | 18.38 | 18.84 | 19.41 |