

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: P1058093

Luminaire Tested: S122RDRP-S675D935-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058093
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-S675D935-X4F0-XX-UDD-WVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

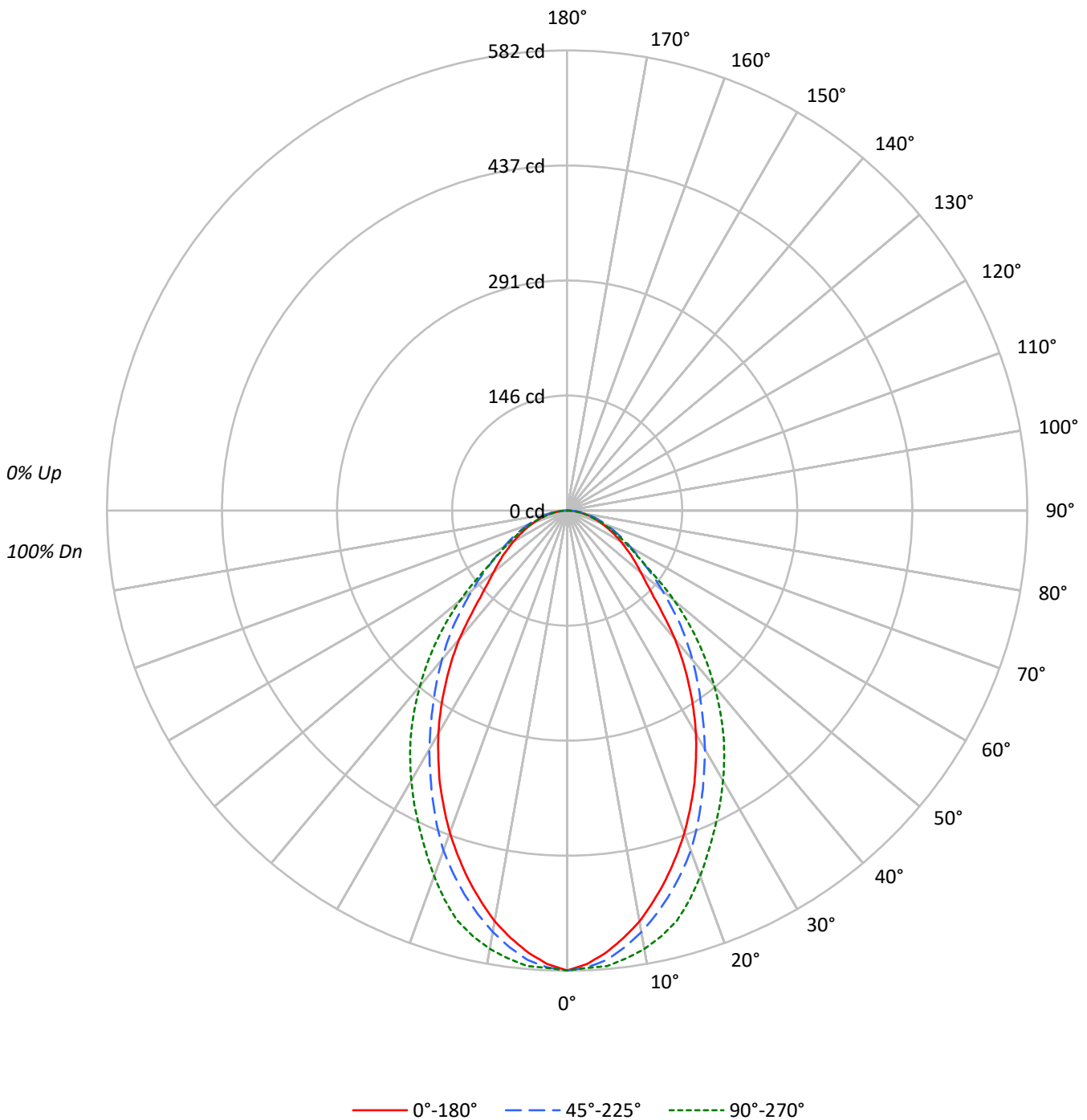
Lumens per Lamp: N/A
Luminaire Lumens: 947.0 lumens
Efficiency: N/A
Efficacy: 36.7 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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 | 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° | 10732 | 10732 | 10732 |
| 5° | 10397 | 10569 | 10710 |
| 10° | 9884 | 10137 | 10549 |
| 15° | 9223 | 9594 | 10255 |
| 20° | 8518 | 8984 | 9663 |
| 25° | 7751 | 8197 | 9005 |
| 30° | 6942 | 7428 | 8399 |
| 35° | 6046 | 6636 | 7758 |
| 40° | 5104 | 5938 | 6973 |
| 45° | 4053 | 5243 | 6101 |
| 50° | 3488 | 4507 | 5064 |
| 55° | 3178 | 3857 | 3883 |
| 60° | 2897 | 3425 | 3303 |
| 65° | 2655 | 3096 | 2912 |
| 70° | 2460 | 2870 | 2595 |
| 75° | 2289 | 2709 | 2289 |
| 80° | 2157 | 2603 | 2062 |
| 85° | 2138 | 2689 | 1778 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6101 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 53.7 | 5.7 |
| 10°-20° | 141.9 | 15.0 |
| 20°-30° | 186.8 | 19.7 |
| 30°-40° | 187.8 | 19.8 |
| 40°-50° | 152.2 | 16.1 |
| 50°-60° | 104.8 | 11.1 |
| 60°-70° | 68.6 | 7.2 |
| 70°-80° | 38.2 | 4.0 |
| 80°-90° | 12.9 | 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° | 382.4 | 40.4 |
| 0°-40° | 570.2 | 60.2 |
| 0°-60° | 827.2 | 87.3 |
| 0°-90° | 947.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 947.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 582 | 582 | 582 | 582 | 582 | |
| 5° | 561 | 572 | 571 | 573 | 578 | 53 |
| 15° | 483 | 495 | 502 | 521 | 537 | 135 |
| 25° | 381 | 391 | 403 | 420 | 442 | 174 |
| 35° | 268 | 281 | 295 | 321 | 344 | 167 |
| 45° | 155 | 173 | 201 | 219 | 234 | 123 |
| 55° | 99 | 110 | 120 | 122 | 121 | 89 |
| 65° | 61 | 73 | 71 | 68 | 67 | 61 |
| 75° | 32 | 40 | 38 | 34 | 32 | 34 |
| 85° | 10 | 14 | 13 | 11 | 8 | 11 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 581.6 | 581.6 | 581.6 | 581.6 | 581.6 |
| 2.5° | 574.0 | 584.1 | 578.2 | 578.2 | 579.0 |
| 5° | 561.3 | 572.3 | 570.6 | 573.1 | 578.2 |
| 7.5° | 545.3 | 557.1 | 557.1 | 564.7 | 571.4 |
| 10° | 527.5 | 539.4 | 541.0 | 552.9 | 563.0 |
| 12.5° | 505.6 | 517.4 | 522.5 | 537.7 | 551.2 |
| 15° | 482.8 | 494.6 | 502.2 | 520.8 | 536.8 |
| 17.5° | 458.3 | 470.1 | 480.3 | 499.7 | 515.7 |
| 20° | 433.8 | 444.8 | 457.5 | 474.4 | 492.1 |
| 22.5° | 406.8 | 418.7 | 430.5 | 446.5 | 466.8 |
| 25° | 380.7 | 390.8 | 402.6 | 420.3 | 442.3 |
| 27.5° | 352.8 | 363.8 | 374.8 | 395.9 | 418.7 |
| 30° | 325.8 | 336.8 | 348.6 | 370.5 | 394.2 |
| 32.5° | 297.1 | 308.9 | 320.7 | 345.2 | 369.7 |
| 35° | 268.4 | 281.1 | 294.6 | 320.7 | 344.4 |
| 37.5° | 240.6 | 254.1 | 270.1 | 297.1 | 317.4 |
| 40° | 211.9 | 226.2 | 246.5 | 270.1 | 289.5 |
| 42.5° | 181.5 | 199.2 | 223.7 | 243.9 | 261.7 |
| 45° | 155.3 | 173.0 | 200.9 | 218.6 | 233.8 |
| 47.5° | 135.9 | 150.2 | 177.3 | 192.4 | 205.1 |
| 50° | 121.5 | 132.5 | 157.0 | 168.0 | 176.4 |
| 52.5° | 109.7 | 120.7 | 137.6 | 145.2 | 147.7 |
| 55° | 98.8 | 109.7 | 119.9 | 122.4 | 120.7 |
| 57.5° | 87.8 | 99.6 | 105.5 | 103.0 | 103.0 |
| 60° | 78.5 | 91.2 | 92.8 | 89.5 | 89.5 |
| 62.5° | 69.2 | 81.9 | 81.9 | 77.7 | 77.7 |
| 65° | 60.8 | 72.6 | 70.9 | 67.5 | 66.7 |
| 67.5° | 53.2 | 64.1 | 61.6 | 58.2 | 57.4 |
| 70° | 45.6 | 55.7 | 53.2 | 49.0 | 48.1 |
| 72.5° | 38.8 | 48.1 | 44.7 | 41.4 | 39.7 |
| 75° | 32.1 | 39.7 | 38.0 | 33.8 | 32.1 |
| 77.5° | 26.2 | 32.1 | 30.4 | 27.0 | 25.3 |
| 80° | 20.3 | 25.3 | 24.5 | 21.1 | 19.4 |
| 82.5° | 15.2 | 19.4 | 18.6 | 16.0 | 13.5 |
| 85° | 10.1 | 13.5 | 12.7 | 11.0 | 8.4 |
| 87.5° | 5.1 | 9.3 | 8.4 | 7.6 | 4.2 |
| 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 | 14.97 | 16.42 | 15.34 | 16.73 | 17.04 | 15.34 | 16.78 | 15.70 | 17.09 | 17.40 |
| | 3H | 16.52 | 17.81 | 16.90 | 18.14 | 18.50 | 16.68 | 17.97 | 17.06 | 18.30 | 18.66 |
| | 4H | 17.09 | 18.30 | 17.49 | 18.65 | 19.03 | 17.16 | 18.37 | 17.57 | 18.72 | 19.10 |
| | 6H | 17.52 | 18.64 | 17.94 | 19.00 | 19.40 | 17.52 | 18.63 | 17.93 | 19.00 | 19.39 |
| | 8H | 17.68 | 18.74 | 18.10 | 19.13 | 19.53 | 17.63 | 18.69 | 18.06 | 19.08 | 19.49 |
| | 12H | 17.79 | 18.80 | 18.22 | 19.19 | 19.62 | 17.71 | 18.72 | 18.14 | 19.11 | 19.54 |
| 4H | 2H | 15.56 | 16.77 | 15.96 | 17.12 | 17.50 | 15.85 | 17.06 | 16.25 | 17.41 | 17.79 |
| | 3H | 17.38 | 18.38 | 17.79 | 18.78 | 19.19 | 17.42 | 18.42 | 17.83 | 18.83 | 19.23 |
| | 4H | 18.13 | 19.03 | 18.56 | 19.45 | 19.89 | 18.03 | 18.93 | 18.46 | 19.35 | 19.79 |
| | 6H | 18.72 | 19.50 | 19.18 | 19.94 | 20.41 | 18.51 | 19.29 | 18.97 | 19.74 | 20.20 |
| | 8H | 18.93 | 19.66 | 19.39 | 20.10 | 20.57 | 18.67 | 19.40 | 19.14 | 19.85 | 20.32 |
| | 12H | 19.10 | 19.75 | 19.58 | 20.23 | 20.70 | 18.79 | 19.45 | 19.28 | 19.93 | 20.40 |
| 8H | 4H | 18.41 | 19.15 | 18.88 | 19.59 | 20.06 | 18.33 | 19.06 | 18.79 | 19.51 | 19.97 |
| | 6H | 19.17 | 19.78 | 19.67 | 20.27 | 20.75 | 18.95 | 19.55 | 19.44 | 20.04 | 20.52 |
| | 8H | 19.50 | 20.04 | 20.01 | 20.55 | 21.04 | 19.19 | 19.74 | 19.71 | 20.25 | 20.74 |
| | 12H | 19.78 | 20.26 | 20.29 | 20.75 | 21.32 | 19.40 | 19.88 | 19.92 | 20.38 | 20.94 |
| 12H | 4H | 18.43 | 19.09 | 18.92 | 19.57 | 20.04 | 18.36 | 19.02 | 18.85 | 19.50 | 19.97 |
| | 6H | 19.23 | 19.78 | 19.75 | 20.29 | 20.78 | 19.02 | 19.57 | 19.54 | 20.08 | 20.57 |
| | 8H | 19.63 | 20.11 | 20.14 | 20.60 | 21.17 | 19.34 | 19.82 | 19.85 | 20.31 | 20.88 |