

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1057859

Luminaire Tested: S122RDR-S1005D940-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057859
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: S122RDR-S1005D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

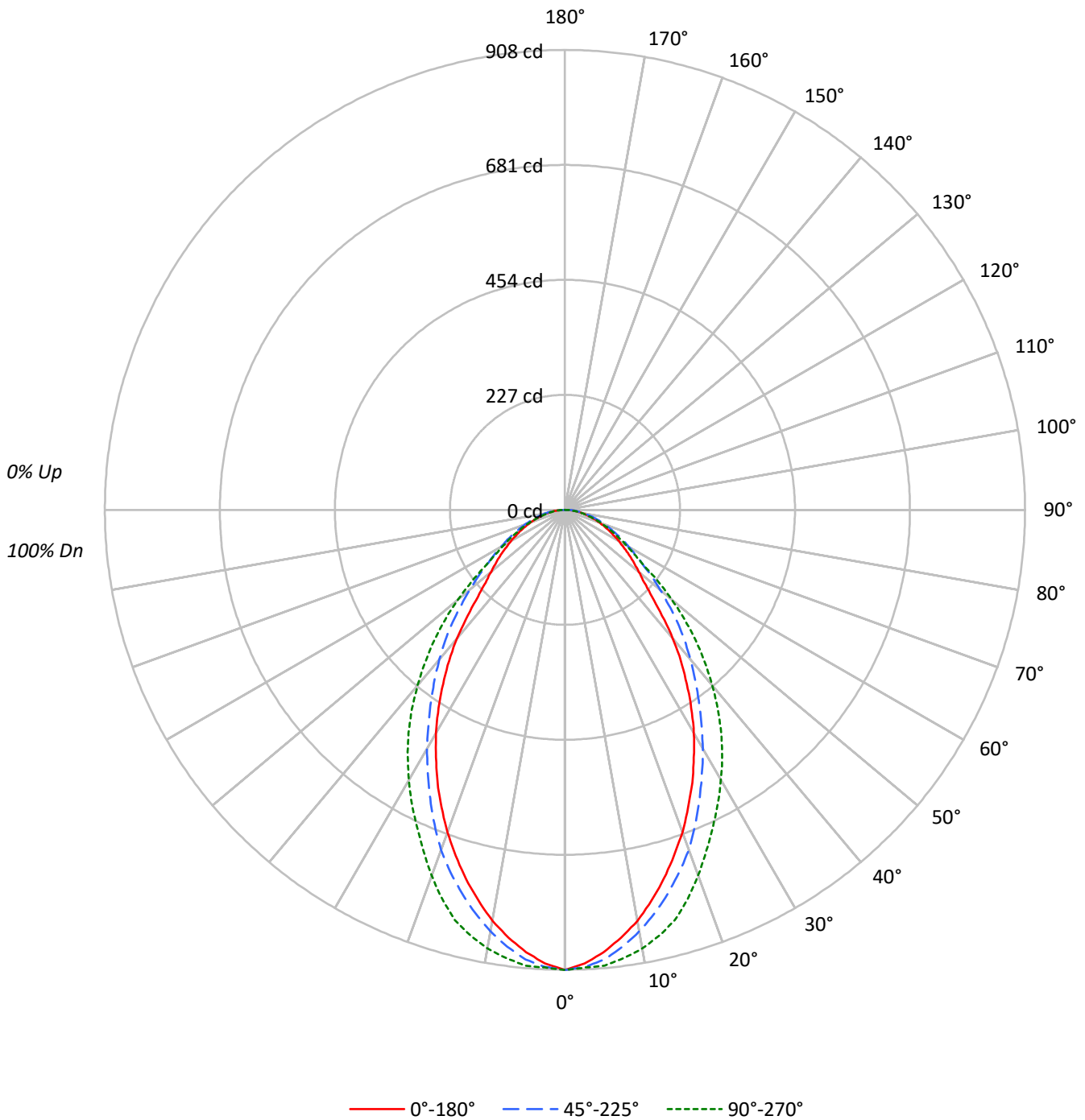
Lumens per Lamp: N/A
Luminaire Lumens: 1479.2 lumens
Efficiency: N/A
Efficacy: 35.4 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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 | 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° | 16762 | 16762 | 16762 |
| 5° | 16239 | 16508 | 16728 |
| 10° | 15439 | 15835 | 16477 |
| 15° | 14406 | 14985 | 16018 |
| 20° | 13306 | 14032 | 15093 |
| 25° | 12106 | 12804 | 14065 |
| 30° | 10843 | 11602 | 13119 |
| 35° | 9443 | 10364 | 12117 |
| 40° | 7971 | 9274 | 10893 |
| 45° | 6331 | 8189 | 9530 |
| 50° | 5449 | 7039 | 7909 |
| 55° | 4961 | 6022 | 6064 |
| 60° | 4525 | 5351 | 5156 |
| 65° | 4144 | 4833 | 4550 |
| 70° | 3841 | 4483 | 4052 |
| 75° | 3572 | 4228 | 3572 |
| 80° | 3358 | 4059 | 3220 |
| 85° | 3345 | 4192 | 2795 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9530 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 83.8 | 5.7 |
| 10°-20° | 221.7 | 15.0 |
| 20°-30° | 291.7 | 19.7 |
| 30°-40° | 293.3 | 19.8 |
| 40°-50° | 237.7 | 16.1 |
| 50°-60° | 163.7 | 11.1 |
| 60°-70° | 107.2 | 7.2 |
| 70°-80° | 59.7 | 4.0 |
| 80°-90° | 20.2 | 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° | 597.2 | 40.4 |
| 0°-40° | 890.6 | 60.2 |
| 0°-60° | 1292.1 | 87.4 |
| 0°-90° | 1479.2 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1479.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 908 | 908 | 908 | 908 | 908 | |
| 5° | 877 | 894 | 891 | 895 | 903 | 82 |
| 15° | 754 | 773 | 784 | 813 | 838 | 211 |
| 25° | 595 | 610 | 629 | 656 | 691 | 272 |
| 35° | 419 | 439 | 460 | 501 | 538 | 261 |
| 45° | 243 | 270 | 314 | 342 | 365 | 192 |
| 55° | 154 | 171 | 187 | 191 | 188 | 138 |
| 65° | 95 | 113 | 111 | 106 | 104 | 95 |
| 75° | 50 | 62 | 59 | 53 | 50 | 54 |
| 85° | 16 | 21 | 20 | 17 | 13 | 17 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1057859

CATALOG NUMBER: S122RDR-S1005D940-X4F0-XX-UDD-WVL-S

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 908.4 | 908.4 | 908.4 | 908.4 | 908.4 |
| 2.5° | 896.5 | 912.3 | 903.1 | 903.1 | 904.4 |
| 5° | 876.7 | 893.9 | 891.2 | 895.2 | 903.1 |
| 7.5° | 851.7 | 870.1 | 870.1 | 882.0 | 892.5 |
| 10° | 824.0 | 842.4 | 845.1 | 863.5 | 879.4 |
| 12.5° | 789.7 | 808.2 | 816.1 | 839.8 | 860.9 |
| 15° | 754.1 | 772.6 | 784.4 | 813.4 | 838.5 |
| 17.5° | 715.9 | 734.3 | 750.2 | 780.5 | 805.5 |
| 20° | 677.6 | 694.8 | 714.6 | 740.9 | 768.6 |
| 22.5° | 635.5 | 653.9 | 672.4 | 697.4 | 729.1 |
| 25° | 594.6 | 610.4 | 628.9 | 656.5 | 690.8 |
| 27.5° | 551.1 | 568.2 | 585.4 | 618.3 | 653.9 |
| 30° | 508.9 | 526.0 | 544.5 | 578.8 | 615.7 |
| 32.5° | 464.1 | 482.5 | 501.0 | 539.2 | 577.4 |
| 35° | 419.2 | 439.0 | 460.1 | 501.0 | 537.9 |
| 37.5° | 375.7 | 396.8 | 421.9 | 464.1 | 495.7 |
| 40° | 330.9 | 353.3 | 385.0 | 421.9 | 452.2 |
| 42.5° | 283.5 | 311.1 | 349.4 | 381.0 | 408.7 |
| 45° | 242.6 | 270.3 | 313.8 | 341.5 | 365.2 |
| 47.5° | 212.3 | 234.7 | 276.9 | 300.6 | 320.4 |
| 50° | 189.8 | 207.0 | 245.2 | 262.4 | 275.5 |
| 52.5° | 171.4 | 188.5 | 214.9 | 226.8 | 230.7 |
| 55° | 154.2 | 171.4 | 187.2 | 191.2 | 188.5 |
| 57.5° | 137.1 | 155.6 | 164.8 | 160.8 | 160.8 |
| 60° | 122.6 | 142.4 | 145.0 | 139.7 | 139.7 |
| 62.5° | 108.1 | 127.9 | 127.9 | 121.3 | 121.3 |
| 65° | 94.9 | 113.4 | 110.7 | 105.5 | 104.2 |
| 67.5° | 83.1 | 100.2 | 96.2 | 91.0 | 89.6 |
| 70° | 71.2 | 87.0 | 83.1 | 76.5 | 75.1 |
| 72.5° | 60.6 | 75.1 | 69.9 | 64.6 | 62.0 |
| 75° | 50.1 | 62.0 | 59.3 | 52.7 | 50.1 |
| 77.5° | 40.9 | 50.1 | 47.5 | 42.2 | 39.6 |
| 80° | 31.6 | 39.6 | 38.2 | 33.0 | 30.3 |
| 82.5° | 23.7 | 30.3 | 29.0 | 25.0 | 21.1 |
| 85° | 15.8 | 21.1 | 19.8 | 17.1 | 13.2 |
| 87.5° | 7.9 | 14.5 | 13.2 | 11.9 | 6.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)