

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: P1055155

Luminaire Tested: S122R3DR-S1005D927-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055155
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122R3DR-S1005D927-X4F0-XX-UDD-FLL-B
Description: DEFINE 2, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

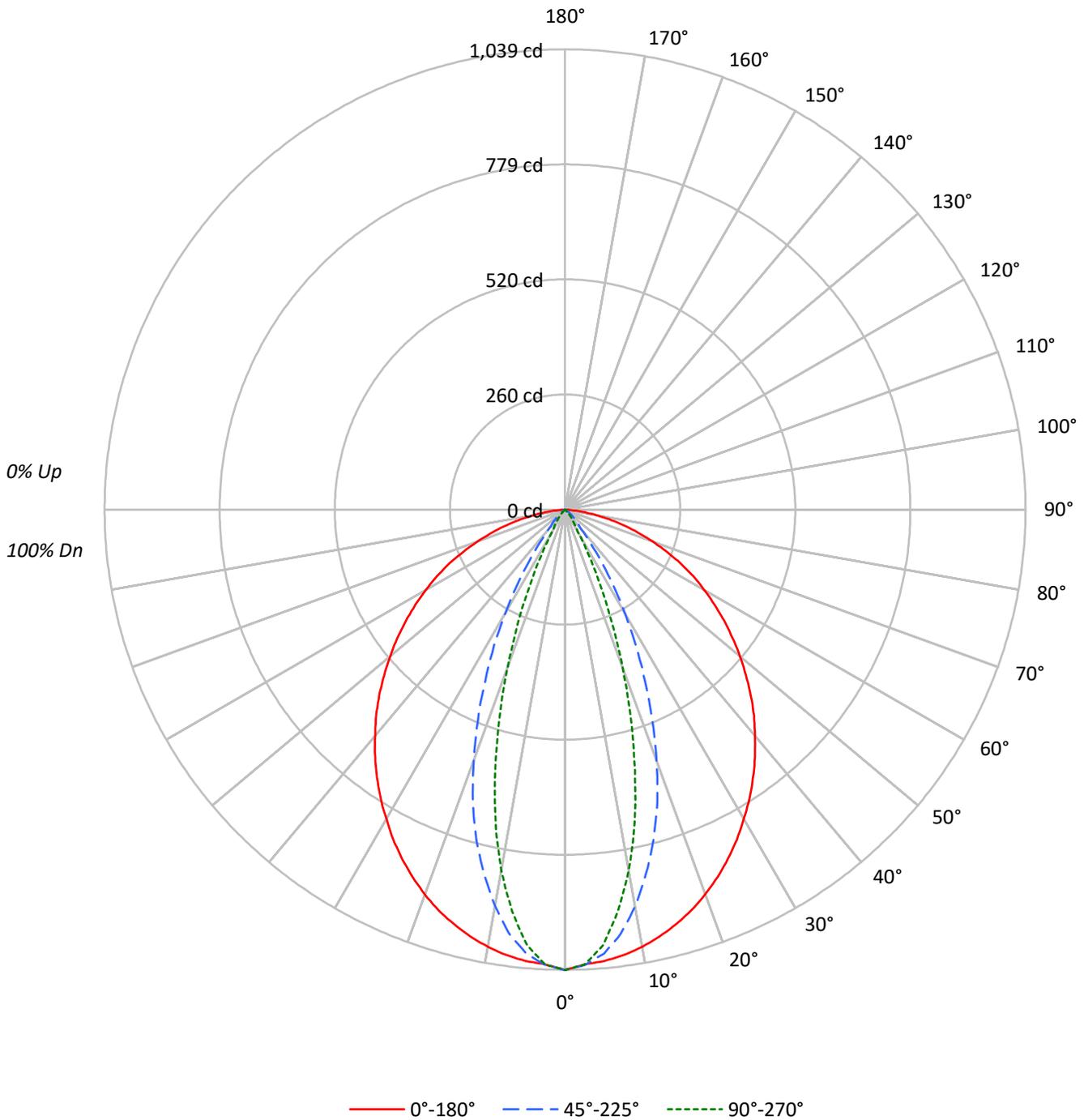
Lumens per Lamp: N/A
Luminaire Lumens: 945.7 lumens
Efficiency: N/A
Efficacy: 22.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.56 / 0.7
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 41.9
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

TEST NUMBER: P1055155

CATALOG NUMBER: S122R3DR-S1005D927-X4F0-XX-UDD-FLL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1055155

CATALOG NUMBER: S122R3DR-S1005D927-X4F0-XX-UDD-FLL-B

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|---|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|----|
| RF | 20 | | | | | | | | | 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 | 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 | 109 | 106 | 103 | 110 | 106 | 104 | 101 | 102 | 100 | 98 | 99 | 97 | 95 | 95 | 94 | 92 | 91 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 105 | 99 | 94 | 90 | 103 | 97 | 93 | 89 | 94 | 90 | 87 | 91 | 88 | 85 | 88 | 86 | 83 | 81 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 98 | 91 | 85 | 80 | 96 | 89 | 84 | 79 | 86 | 82 | 78 | 84 | 80 | 77 | 82 | 78 | 75 | 74 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 92 | 83 | 77 | 72 | 90 | 82 | 76 | 71 | 80 | 75 | 70 | 78 | 73 | 70 | 76 | 72 | 69 | 67 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 87 | 77 | 70 | 65 | 85 | 76 | 70 | 65 | 74 | 69 | 64 | 72 | 68 | 64 | 71 | 66 | 63 | 61 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 82 | 72 | 65 | 60 | 80 | 71 | 64 | 59 | 69 | 63 | 59 | 68 | 62 | 59 | 66 | 62 | 58 | 56 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | 77 | 67 | 60 | 55 | 76 | 66 | 59 | 55 | 65 | 59 | 55 | 63 | 58 | 54 | 62 | 57 | 54 | 52 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 73 | 62 | 56 | 51 | 72 | 62 | 55 | 51 | 61 | 55 | 51 | 60 | 54 | 50 | 59 | 54 | 50 | 49 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | 70 | 59 | 52 | 48 | 68 | 58 | 52 | 47 | 57 | 51 | 47 | 56 | 51 | 47 | 55 | 50 | 47 | 45 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 66 | 55 | 49 | 45 | 65 | 55 | 49 | 44 | 54 | 48 | 44 | 53 | 48 | 44 | 52 | 47 | 44 | 43 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 19692 | 19692 | 19692 |
| 5° | 19450 | 19132 | 18769 |
| 10° | 19284 | 17491 | 15929 |
| 15° | 19004 | 15138 | 11927 |
| 20° | 18644 | 12164 | 7635 |
| 25° | 18183 | 8916 | 3922 |
| 30° | 17641 | 5828 | 1280 |
| 35° | 17104 | 3233 | 747 |
| 40° | 16489 | 1301 | 413 |
| 45° | 15878 | 865 | 161 |
| 50° | 15176 | 492 | 71 |
| 55° | 14484 | 238 | 40 |
| 60° | 13717 | 91 | 0 |
| 65° | 12906 | 54 | 0 |
| 70° | 11583 | 66 | 0 |
| 75° | 9970 | 88 | 0 |
| 80° | 7561 | 0 | 0 |
| 85° | 3109 | 261 | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 15878 cd/sqm



TEST NUMBER: P1055155

CATALOG NUMBER: S122R3DR-S1005D927-X4F0-XX-UDD-FLL-B

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 93.2 | 9.9 |
| 10°-20° | 216.5 | 22.9 |
| 20°-30° | 219.8 | 23.2 |
| 30°-40° | 164.9 | 17.4 |
| 40°-50° | 115.5 | 12.2 |
| 50°-60° | 70.7 | 7.5 |
| 60°-70° | 42.1 | 4.5 |
| 70°-80° | 19.4 | 2.1 |
| 80°-90° | 3.5 | 0.4 |
| 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° | 529.5 | 56.0 |
| 0°-40° | 694.5 | 73.4 |
| 0°-60° | 880.7 | 93.1 |
| 0°-90° | 945.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 945.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1039 | 1039 | 1039 | 1039 | 1039 | |
| 5° | 1023 | 1032 | 1006 | 987 | 987 | 97 |
| 15° | 969 | 916 | 772 | 654 | 608 | 273 |
| 25° | 870 | 717 | 426 | 244 | 188 | 400 |
| 35° | 740 | 482 | 140 | 42 | 32 | 462 |
| 45° | 593 | 254 | 32 | 10 | 6 | 457 |
| 55° | 438 | 78 | 7 | 2 | 1 | 392 |
| 65° | 288 | 23 | 1 | 1 | 0 | 284 |
| 75° | 136 | 2 | 1 | 1 | 0 | 145 |
| 85° | 14 | 0 | 1 | 1 | 0 | 24 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1055155

CATALOG NUMBER: S122R3DR-S1005D927-X4F0-XX-UDD-FLL-B

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1039.4 | 1039.4 | 1039.4 | 1039.4 | 1039.4 |
| 2.5° | 1027.5 | 1043.0 | 1028.7 | 1026.3 | 1027.5 |
| 5° | 1022.7 | 1032.3 | 1006.0 | 986.9 | 986.9 |
| 7.5° | 1014.3 | 1014.3 | 965.3 | 925.9 | 914.0 |
| 10° | 1002.4 | 989.2 | 909.2 | 845.9 | 828.0 |
| 12.5° | 986.9 | 955.8 | 843.5 | 753.9 | 725.2 |
| 15° | 968.9 | 916.4 | 771.8 | 653.5 | 608.1 |
| 17.5° | 948.6 | 872.2 | 691.8 | 544.8 | 492.2 |
| 20° | 924.7 | 824.4 | 603.3 | 433.7 | 378.7 |
| 22.5° | 898.4 | 771.8 | 513.7 | 334.5 | 276.0 |
| 25° | 869.8 | 716.8 | 426.5 | 243.7 | 187.6 |
| 27.5° | 839.9 | 659.5 | 346.5 | 167.3 | 114.7 |
| 30° | 806.4 | 599.8 | 266.4 | 99.2 | 58.5 |
| 32.5° | 774.2 | 542.4 | 199.5 | 53.8 | 43.0 |
| 35° | 739.5 | 481.5 | 139.8 | 41.8 | 32.3 |
| 37.5° | 703.7 | 424.1 | 86.0 | 31.1 | 23.9 |
| 40° | 666.7 | 365.6 | 52.6 | 22.7 | 16.7 |
| 42.5° | 630.8 | 310.6 | 41.8 | 15.5 | 10.8 |
| 45° | 592.6 | 254.5 | 32.3 | 9.6 | 6.0 |
| 47.5° | 553.2 | 203.1 | 23.9 | 6.0 | 3.6 |
| 50° | 514.9 | 157.7 | 16.7 | 3.6 | 2.4 |
| 52.5° | 476.7 | 115.9 | 10.8 | 2.4 | 1.2 |
| 55° | 438.5 | 77.7 | 7.2 | 2.4 | 1.2 |
| 57.5° | 400.2 | 55.0 | 4.8 | 1.2 | 1.2 |
| 60° | 362.0 | 43.0 | 2.4 | 1.2 | 0.0 |
| 62.5° | 326.2 | 33.5 | 2.4 | 1.2 | 1.2 |
| 65° | 287.9 | 22.7 | 1.2 | 1.2 | 0.0 |
| 67.5° | 247.3 | 14.3 | 1.2 | 1.2 | 0.0 |
| 70° | 209.1 | 8.4 | 1.2 | 1.2 | 0.0 |
| 72.5° | 172.0 | 4.8 | 1.2 | 1.2 | 0.0 |
| 75° | 136.2 | 2.4 | 1.2 | 1.2 | 0.0 |
| 77.5° | 101.6 | 1.2 | 0.0 | 1.2 | 0.0 |
| 80° | 69.3 | 0.0 | 0.0 | 1.2 | 0.0 |
| 82.5° | 40.6 | 0.0 | 0.0 | 1.2 | 0.0 |
| 85° | 14.3 | 0.0 | 1.2 | 1.2 | 0.0 |
| 87.5° | 0.0 | 0.0 | 1.2 | 1.2 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)