

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: P1061470

Luminaire Tested: S125RDR-S1090D927-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061470
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-48)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-S1090D927-X4F0-XX-UDD-BVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

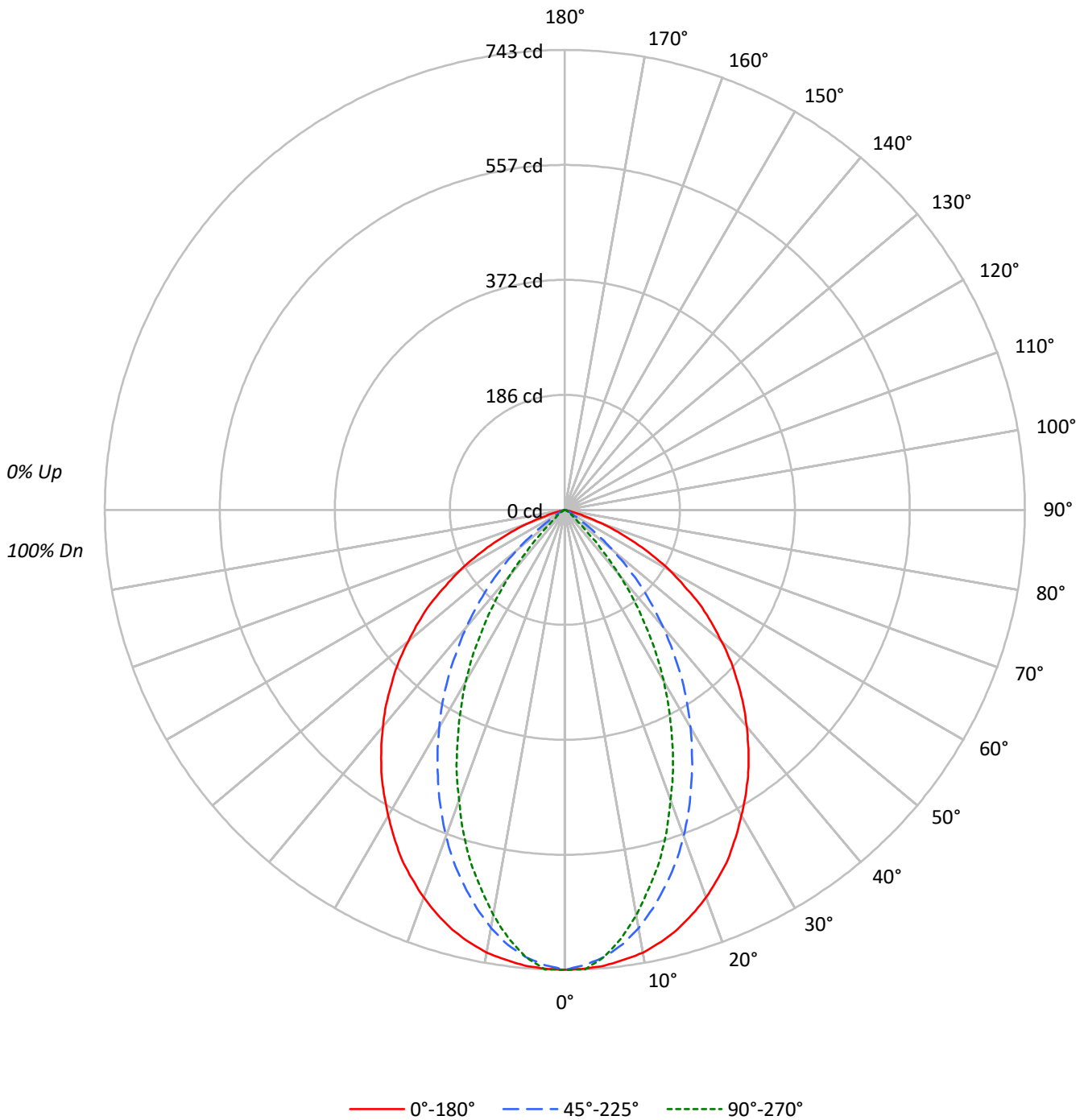
Lumens per Lamp: N/A
Luminaire Lumens: 959.8 lumens
Efficiency: N/A
Efficacy: 27.4 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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 | 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 | 107 | 104 | 102 | 103 | 101 | 99 | 99 | 97 | 96 | 95 | 94 | 93 | 91 | | | | |
| 2 | 105 | 99 | 94 | 90 | 103 | 97 | 93 | 89 | 94 | 90 | 87 | 91 | 88 | 85 | 88 | 86 | 83 | 82 | | | | |
| 3 | 98 | 90 | 84 | 80 | 96 | 89 | 83 | 79 | 86 | 82 | 78 | 84 | 80 | 76 | 81 | 78 | 75 | 73 | | | | |
| 4 | 92 | 83 | 76 | 71 | 90 | 82 | 75 | 70 | 79 | 74 | 70 | 77 | 72 | 69 | 75 | 71 | 68 | 66 | | | | |
| 5 | 86 | 76 | 69 | 64 | 84 | 75 | 68 | 63 | 73 | 67 | 63 | 71 | 66 | 62 | 70 | 65 | 62 | 60 | | | | |
| 6 | 81 | 70 | 63 | 58 | 79 | 69 | 62 | 57 | 67 | 61 | 57 | 66 | 61 | 57 | 65 | 60 | 56 | 54 | | | | |
| 7 | 76 | 65 | 58 | 53 | 74 | 64 | 57 | 52 | 63 | 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 | 44 | 66 | 55 | 49 | 44 | 54 | 48 | 44 | 53 | 48 | 44 | 52 | 47 | 44 | 42 | | | | |
| 10 | 64 | 52 | 46 | 41 | 62 | 52 | 45 | 41 | 51 | 45 | 41 | 50 | 45 | 41 | 49 | 44 | 41 | 39 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 5116 | 5116 | 5116 |
| 5° | 5108 | 5013 | 5013 |
| 10° | 5078 | 4797 | 4647 |
| 15° | 5003 | 4479 | 4199 |
| 20° | 4884 | 4108 | 3655 |
| 25° | 4736 | 3678 | 3112 |
| 30° | 4536 | 3226 | 2540 |
| 35° | 4342 | 2752 | 1903 |
| 40° | 4106 | 2220 | 1233 |
| 45° | 3846 | 1680 | 535 |
| 50° | 3538 | 1071 | 199 |
| 55° | 3188 | 471 | 142 |
| 60° | 2699 | 202 | 95 |
| 65° | 2045 | 127 | 47 |
| 70° | 1244 | 58 | 20 |
| 75° | 261 | 27 | 27 |
| 80° | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3846 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 68.5 | 7.1 |
| 10°-20° | 178.5 | 18.6 |
| 20°-30° | 229.2 | 23.9 |
| 30°-40° | 215.8 | 22.5 |
| 40°-50° | 150.9 | 15.7 |
| 50°-60° | 80.6 | 8.4 |
| 60°-70° | 32.1 | 3.3 |
| 70°-80° | 4.2 | 0.4 |
| 80°-90° | 0.0 | 0.0 |
| 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° | 476.3 | 49.6 |
| 0°-40° | 692.1 | 72.1 |
| 0°-60° | 923.5 | 96.2 |
| 0°-90° | 959.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 959.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 743 | 743 | 743 | 743 | 743 | |
| 5° | 739 | 737 | 725 | 727 | 725 | 70 |
| 15° | 702 | 679 | 628 | 599 | 589 | 197 |
| 25° | 623 | 568 | 484 | 431 | 410 | 286 |
| 35° | 517 | 434 | 327 | 253 | 226 | 322 |
| 45° | 395 | 296 | 172 | 83 | 55 | 305 |
| 55° | 266 | 163 | 39 | 14 | 12 | 235 |
| 65° | 126 | 50 | 8 | 4 | 3 | 125 |
| 75° | 10 | 3 | 1 | 1 | 1 | 19 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CATALOG NUMBER: S125RDR-S1090D927-X4F0-XX-UDD-BVL-B

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 743.0 | 743.0 | 743.0 | 743.0 | 743.0 |
| 2.5° | 742.0 | 743.0 | 736.1 | 742.0 | 743.0 |
| 5° | 739.1 | 737.1 | 725.3 | 727.3 | 725.3 |
| 7.5° | 733.2 | 728.3 | 708.7 | 701.8 | 697.9 |
| 10° | 726.3 | 715.5 | 686.1 | 671.4 | 664.6 |
| 12.5° | 715.5 | 699.8 | 658.7 | 636.1 | 626.3 |
| 15° | 701.8 | 679.3 | 628.3 | 598.9 | 589.1 |
| 17.5° | 685.1 | 655.7 | 596.9 | 560.7 | 546.0 |
| 20° | 666.5 | 627.3 | 560.7 | 517.5 | 498.9 |
| 22.5° | 645.0 | 599.9 | 523.4 | 475.4 | 456.8 |
| 25° | 623.4 | 568.5 | 484.2 | 431.3 | 409.7 |
| 27.5° | 596.9 | 536.2 | 445.0 | 388.1 | 364.6 |
| 30° | 570.5 | 503.8 | 405.8 | 344.0 | 319.5 |
| 32.5° | 544.0 | 469.5 | 366.6 | 298.0 | 273.5 |
| 35° | 516.6 | 434.2 | 327.4 | 252.9 | 226.4 |
| 37.5° | 487.1 | 398.9 | 285.2 | 209.8 | 182.3 |
| 40° | 456.8 | 364.6 | 247.0 | 167.6 | 137.2 |
| 42.5° | 427.4 | 330.3 | 208.8 | 126.4 | 93.1 |
| 45° | 395.0 | 296.0 | 172.5 | 83.3 | 54.9 |
| 47.5° | 364.6 | 262.7 | 135.3 | 48.0 | 28.4 |
| 50° | 330.3 | 228.4 | 100.0 | 25.5 | 18.6 |
| 52.5° | 298.0 | 195.1 | 66.7 | 16.7 | 14.7 |
| 55° | 265.6 | 162.7 | 39.2 | 13.7 | 11.8 |
| 57.5° | 228.4 | 131.3 | 21.6 | 10.8 | 8.8 |
| 60° | 196.0 | 102.9 | 14.7 | 7.8 | 6.9 |
| 62.5° | 158.8 | 75.5 | 10.8 | 5.9 | 4.9 |
| 65° | 125.5 | 50.0 | 7.8 | 3.9 | 2.9 |
| 67.5° | 93.1 | 29.4 | 4.9 | 2.0 | 2.0 |
| 70° | 61.8 | 15.7 | 2.9 | 1.0 | 1.0 |
| 72.5° | 32.3 | 6.9 | 2.0 | 1.0 | 1.0 |
| 75° | 9.8 | 2.9 | 1.0 | 1.0 | 1.0 |
| 77.5° | 0.0 | 1.0 | 0.0 | 0.0 | 1.0 |
| 80° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)