

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: P1061435

Luminaire Tested: S125RDR-S1090D830-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061435
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-87)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-S1090D830-X4F0-XX-UDD-BVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

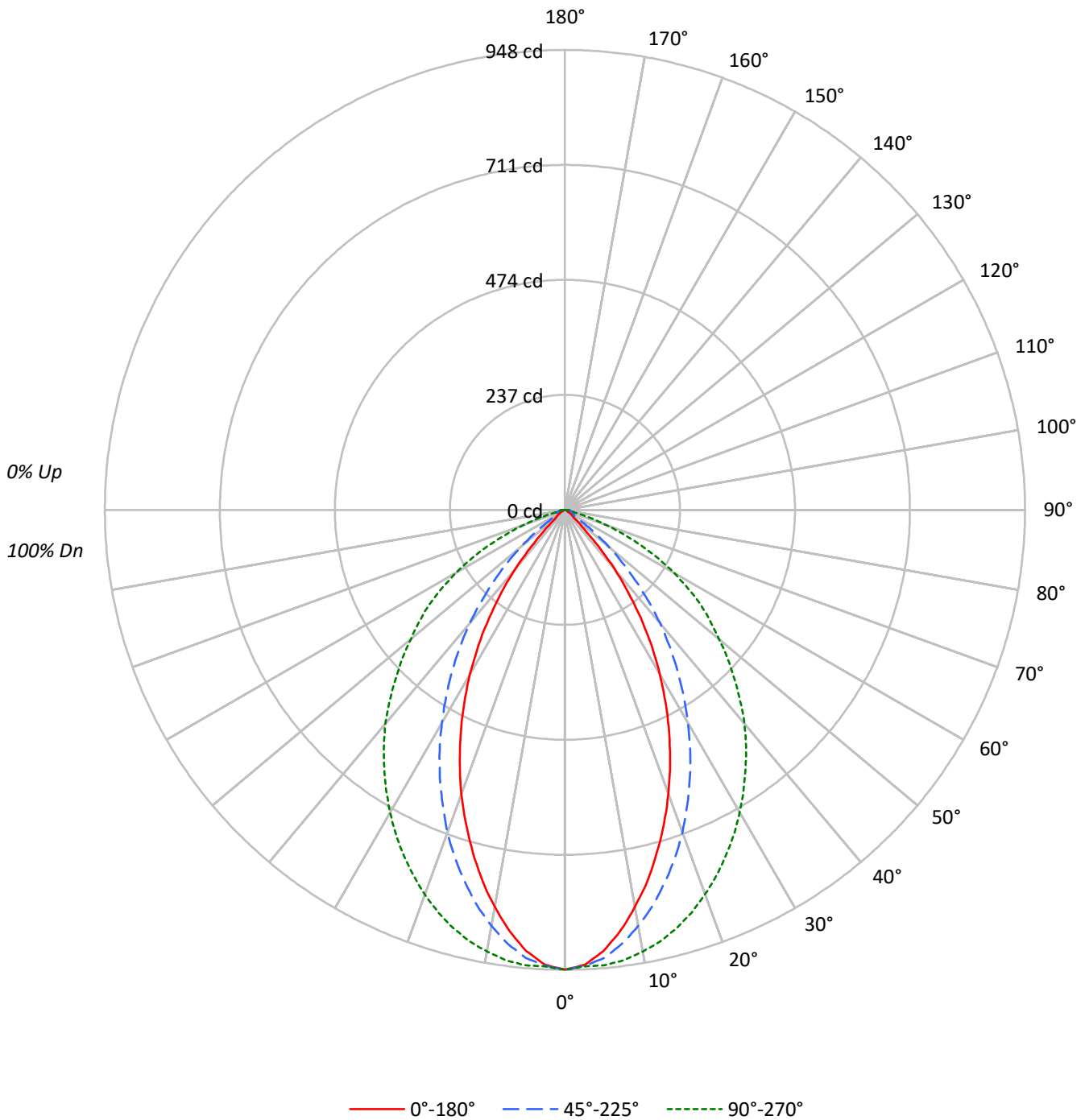
Lumens per Lamp: N/A
Luminaire Lumens: 1219.1 lumens
Efficiency: N/A
Efficacy: 34.8 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 101 | 102 | 100 | 98 | 98 | 96 | 95 | 95 | 93 | 92 | 90 |
| 2 | 105 | 98 | 93 | 89 | 102 | 97 | 92 | 88 | 93 | 89 | 86 | 90 | 87 | 84 | 87 | 85 | 82 | 81 |
| 3 | 98 | 90 | 83 | 78 | 95 | 88 | 82 | 78 | 85 | 80 | 76 | 83 | 79 | 75 | 80 | 77 | 74 | 72 |
| 4 | 91 | 82 | 75 | 70 | 89 | 81 | 74 | 69 | 78 | 73 | 68 | 76 | 71 | 68 | 74 | 70 | 67 | 65 |
| 5 | 85 | 75 | 68 | 63 | 84 | 74 | 67 | 62 | 72 | 66 | 62 | 70 | 65 | 61 | 69 | 64 | 61 | 59 |
| 6 | 80 | 69 | 62 | 57 | 78 | 68 | 62 | 57 | 67 | 61 | 56 | 65 | 60 | 56 | 64 | 59 | 55 | 54 |
| 7 | 75 | 64 | 57 | 52 | 74 | 63 | 56 | 52 | 62 | 56 | 51 | 61 | 55 | 51 | 59 | 54 | 51 | 49 |
| 8 | 71 | 60 | 52 | 47 | 69 | 59 | 52 | 47 | 58 | 52 | 47 | 57 | 51 | 47 | 55 | 50 | 47 | 45 |
| 9 | 67 | 55 | 48 | 44 | 66 | 55 | 48 | 44 | 54 | 48 | 44 | 53 | 47 | 43 | 52 | 47 | 43 | 42 |
| 10 | 63 | 52 | 45 | 41 | 62 | 51 | 45 | 40 | 50 | 44 | 40 | 50 | 44 | 40 | 49 | 44 | 40 | 39 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 6526 | 6526 | 6526 |
| 5° | 6309 | 6406 | 6511 |
| 10° | 5811 | 6088 | 6464 |
| 15° | 5217 | 5666 | 6357 |
| 20° | 4567 | 5183 | 6183 |
| 25° | 3858 | 4629 | 5968 |
| 30° | 3109 | 4028 | 5726 |
| 35° | 2286 | 3395 | 5455 |
| 40° | 1427 | 2739 | 5173 |
| 45° | 535 | 2000 | 4808 |
| 50° | 250 | 1250 | 4439 |
| 55° | 182 | 519 | 4105 |
| 60° | 128 | 273 | 3553 |
| 65° | 77 | 323 | 2815 |
| 70° | 70 | 376 | 1786 |
| 75° | 93 | 372 | 559 |
| 80° | 139 | 464 | 416 |
| 85° | 276 | 735 | 553 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4808 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 86.9 | 7.1 |
| 10°-20° | 225.0 | 18.5 |
| 20°-30° | 286.6 | 23.5 |
| 30°-40° | 266.8 | 21.9 |
| 40°-50° | 182.8 | 15.0 |
| 50°-60° | 100.7 | 8.3 |
| 60°-70° | 47.6 | 3.9 |
| 70°-80° | 15.0 | 1.2 |
| 80°-90° | 7.7 | 0.6 |
| 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° | 598.6 | 49.1 |
| 0°-40° | 865.4 | 71.0 |
| 0°-60° | 1148.8 | 94.2 |
| 0°-90° | 1219.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1219.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 948 | 948 | 948 | 948 | 948 | |
| 5° | 913 | 924 | 927 | 934 | 942 | 85 |
| 15° | 732 | 755 | 795 | 854 | 892 | 204 |
| 25° | 508 | 539 | 609 | 707 | 786 | 232 |
| 35° | 272 | 310 | 404 | 537 | 649 | 169 |
| 45° | 55 | 92 | 205 | 364 | 494 | 52 |
| 55° | 15 | 18 | 43 | 203 | 342 | 14 |
| 65° | 5 | 6 | 20 | 75 | 173 | 5 |
| 75° | 4 | 6 | 14 | 15 | 21 | 4 |
| 85° | 4 | 8 | 9 | 8 | 7 | 3 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 947.8 | 947.8 | 947.8 | 947.8 | 947.8 |
| 2.5° | 938.5 | 947.8 | 940.8 | 940.8 | 942.0 |
| 5° | 912.8 | 924.5 | 926.8 | 933.8 | 942.0 |
| 7.5° | 875.5 | 890.6 | 902.3 | 922.2 | 936.2 |
| 10° | 831.1 | 849.8 | 870.8 | 903.5 | 924.5 |
| 12.5° | 784.4 | 804.3 | 835.8 | 881.3 | 910.5 |
| 15° | 731.9 | 755.2 | 794.9 | 854.5 | 891.8 |
| 17.5° | 678.2 | 703.9 | 752.9 | 822.9 | 869.6 |
| 20° | 623.3 | 650.2 | 707.4 | 785.6 | 843.9 |
| 22.5° | 566.1 | 595.3 | 658.3 | 747.1 | 815.9 |
| 25° | 507.8 | 539.3 | 609.3 | 707.4 | 785.6 |
| 27.5° | 449.4 | 482.1 | 559.1 | 666.5 | 754.1 |
| 30° | 391.0 | 424.9 | 506.6 | 624.5 | 720.2 |
| 32.5° | 331.5 | 368.9 | 455.2 | 582.5 | 685.2 |
| 35° | 272.0 | 310.5 | 403.9 | 537.0 | 649.0 |
| 37.5° | 213.6 | 253.3 | 353.7 | 493.8 | 612.8 |
| 40° | 158.8 | 198.4 | 304.7 | 450.6 | 575.5 |
| 42.5° | 102.7 | 144.7 | 253.3 | 406.2 | 534.6 |
| 45° | 54.9 | 92.2 | 205.4 | 364.2 | 493.8 |
| 47.5° | 29.2 | 49.0 | 159.9 | 322.2 | 455.2 |
| 50° | 23.3 | 26.8 | 116.7 | 280.1 | 414.4 |
| 52.5° | 18.7 | 21.0 | 74.7 | 237.0 | 378.2 |
| 55° | 15.2 | 17.5 | 43.2 | 203.1 | 342.0 |
| 57.5° | 11.7 | 14.0 | 24.5 | 169.3 | 300.0 |
| 60° | 9.3 | 10.5 | 19.8 | 135.4 | 258.0 |
| 62.5° | 5.8 | 8.2 | 19.8 | 105.1 | 215.9 |
| 65° | 4.7 | 5.8 | 19.8 | 74.7 | 172.8 |
| 67.5° | 4.7 | 4.7 | 19.8 | 49.0 | 129.6 |
| 70° | 3.5 | 3.5 | 18.7 | 31.5 | 88.7 |
| 72.5° | 3.5 | 3.5 | 16.3 | 21.0 | 51.4 |
| 75° | 3.5 | 5.8 | 14.0 | 15.2 | 21.0 |
| 77.5° | 3.5 | 9.3 | 12.8 | 12.8 | 11.7 |
| 80° | 3.5 | 9.3 | 11.7 | 10.5 | 10.5 |
| 82.5° | 3.5 | 9.3 | 9.3 | 9.3 | 8.2 |
| 85° | 3.5 | 8.2 | 9.3 | 8.2 | 7.0 |
| 87.5° | 3.5 | 8.2 | 8.2 | 8.2 | 4.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)