

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: P1061434

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061434
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-S1090D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

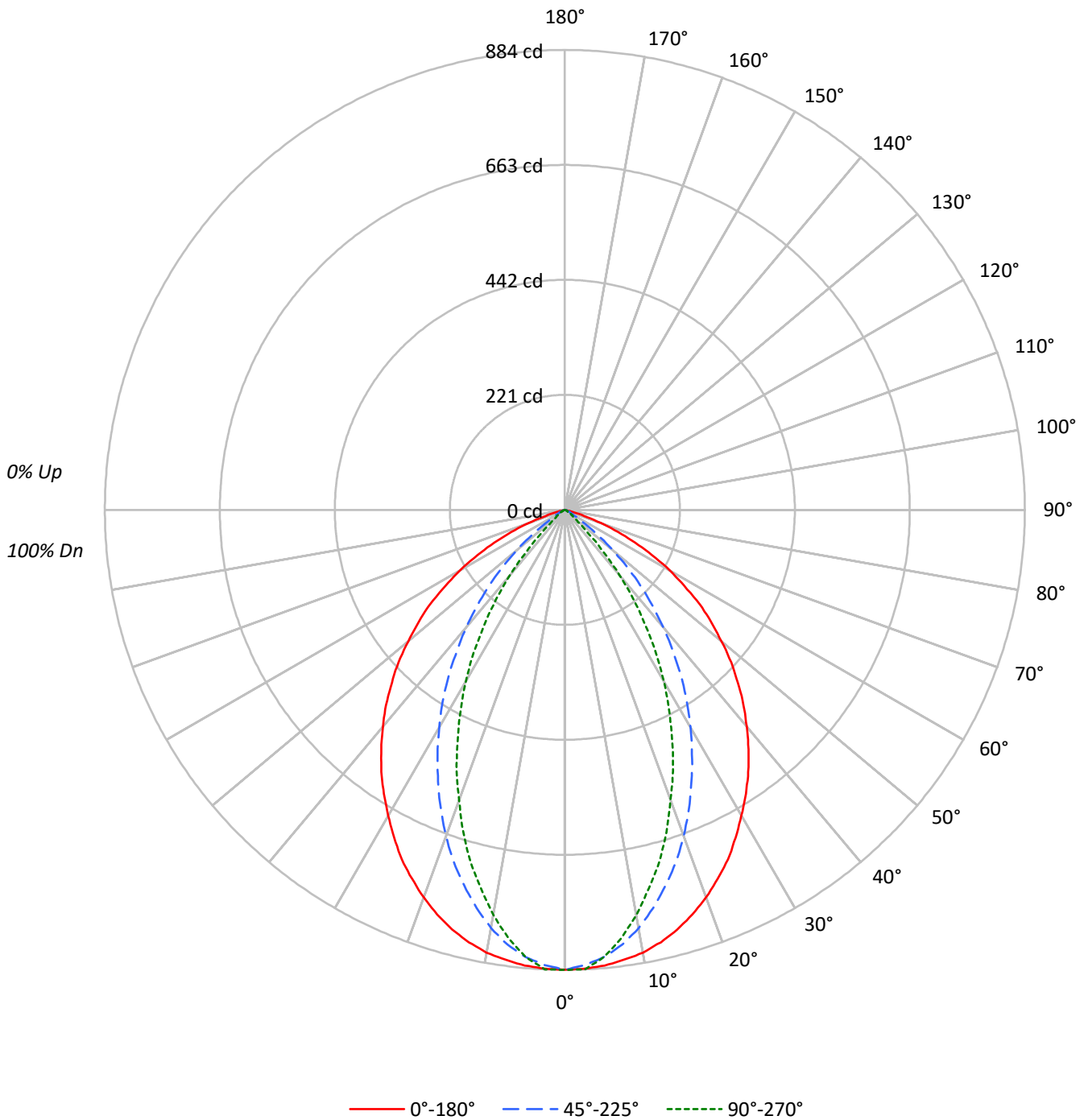
Lumens per Lamp: N/A
Luminaire Lumens: 1142.0 lumens
Efficiency: N/A
Efficacy: 32.6 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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 | 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° | 6087 | 6087 | 6087 |
| 5° | 6077 | 5965 | 5965 |
| 10° | 6042 | 5708 | 5528 |
| 15° | 5952 | 5328 | 4996 |
| 20° | 5810 | 4888 | 4349 |
| 25° | 5635 | 4377 | 3704 |
| 30° | 5396 | 3838 | 3023 |
| 35° | 5166 | 3274 | 2264 |
| 40° | 4885 | 2642 | 1468 |
| 45° | 4576 | 1999 | 636 |
| 50° | 4210 | 1275 | 238 |
| 55° | 3793 | 559 | 168 |
| 60° | 3211 | 241 | 113 |
| 65° | 2432 | 152 | 57 |
| 70° | 1480 | 70 | 24 |
| 75° | 311 | 32 | 32 |
| 80° | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4576 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 81.5 | 7.1 |
| 10°-20° | 212.4 | 18.6 |
| 20°-30° | 272.7 | 23.9 |
| 30°-40° | 256.8 | 22.5 |
| 40°-50° | 179.5 | 15.7 |
| 50°-60° | 95.9 | 8.4 |
| 60°-70° | 38.2 | 3.3 |
| 70°-80° | 5.0 | 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° | 566.7 | 49.6 |
| 0°-40° | 823.4 | 72.1 |
| 0°-60° | 1098.8 | 96.2 |
| 0°-90° | 1142.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1142.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 884 | 884 | 884 | 884 | 884 | |
| 5° | 879 | 877 | 863 | 865 | 863 | 83 |
| 15° | 835 | 808 | 748 | 713 | 701 | 235 |
| 25° | 742 | 676 | 576 | 513 | 488 | 340 |
| 35° | 615 | 517 | 390 | 301 | 269 | 384 |
| 45° | 470 | 352 | 205 | 99 | 65 | 363 |
| 55° | 316 | 194 | 47 | 16 | 14 | 280 |
| 65° | 149 | 60 | 9 | 5 | 4 | 148 |
| 75° | 12 | 4 | 1 | 1 | 1 | 23 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1061434

CATALOG NUMBER: S125RDR-S1090D830-X4F0-XX-UDD-BVL-B

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 884.0 | 884.0 | 884.0 | 884.0 | 884.0 |
| 2.5° | 882.8 | 884.0 | 875.8 | 882.8 | 884.0 |
| 5° | 879.3 | 877.0 | 863.0 | 865.3 | 863.0 |
| 7.5° | 872.3 | 866.5 | 843.2 | 835.0 | 830.3 |
| 10° | 864.2 | 851.3 | 816.4 | 798.9 | 790.7 |
| 12.5° | 851.3 | 832.7 | 783.7 | 756.9 | 745.2 |
| 15° | 835.0 | 808.2 | 747.5 | 712.6 | 700.9 |
| 17.5° | 815.2 | 780.2 | 710.2 | 667.1 | 649.6 |
| 20° | 793.0 | 746.4 | 667.1 | 615.8 | 593.6 |
| 22.5° | 767.4 | 713.7 | 622.8 | 565.6 | 543.5 |
| 25° | 741.7 | 676.4 | 576.1 | 513.1 | 487.5 |
| 27.5° | 710.2 | 637.9 | 529.5 | 461.8 | 433.8 |
| 30° | 678.7 | 599.4 | 482.8 | 409.3 | 380.2 |
| 32.5° | 647.3 | 558.6 | 436.2 | 354.5 | 325.4 |
| 35° | 614.6 | 516.6 | 389.5 | 300.9 | 269.4 |
| 37.5° | 579.6 | 474.7 | 339.4 | 249.6 | 216.9 |
| 40° | 543.5 | 433.8 | 293.9 | 199.4 | 163.3 |
| 42.5° | 508.5 | 393.0 | 248.4 | 150.4 | 110.8 |
| 45° | 470.0 | 352.2 | 205.3 | 99.1 | 65.3 |
| 47.5° | 433.8 | 312.5 | 160.9 | 57.1 | 33.8 |
| 50° | 393.0 | 271.7 | 119.0 | 30.3 | 22.2 |
| 52.5° | 354.5 | 232.1 | 79.3 | 19.8 | 17.5 |
| 55° | 316.0 | 193.6 | 46.6 | 16.3 | 14.0 |
| 57.5° | 271.7 | 156.3 | 25.7 | 12.8 | 10.5 |
| 60° | 233.2 | 122.5 | 17.5 | 9.3 | 8.2 |
| 62.5° | 188.9 | 89.8 | 12.8 | 7.0 | 5.8 |
| 65° | 149.3 | 59.5 | 9.3 | 4.7 | 3.5 |
| 67.5° | 110.8 | 35.0 | 5.8 | 2.3 | 2.3 |
| 70° | 73.5 | 18.7 | 3.5 | 1.2 | 1.2 |
| 72.5° | 38.5 | 8.2 | 2.3 | 1.2 | 1.2 |
| 75° | 11.7 | 3.5 | 1.2 | 1.2 | 1.2 |
| 77.5° | 0.0 | 1.2 | 0.0 | 0.0 | 1.2 |
| 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)