

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: P1061818

Luminaire Tested: S125RDR-S850D935-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061818
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-S850D935-X4F0-XX-UDD-WVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

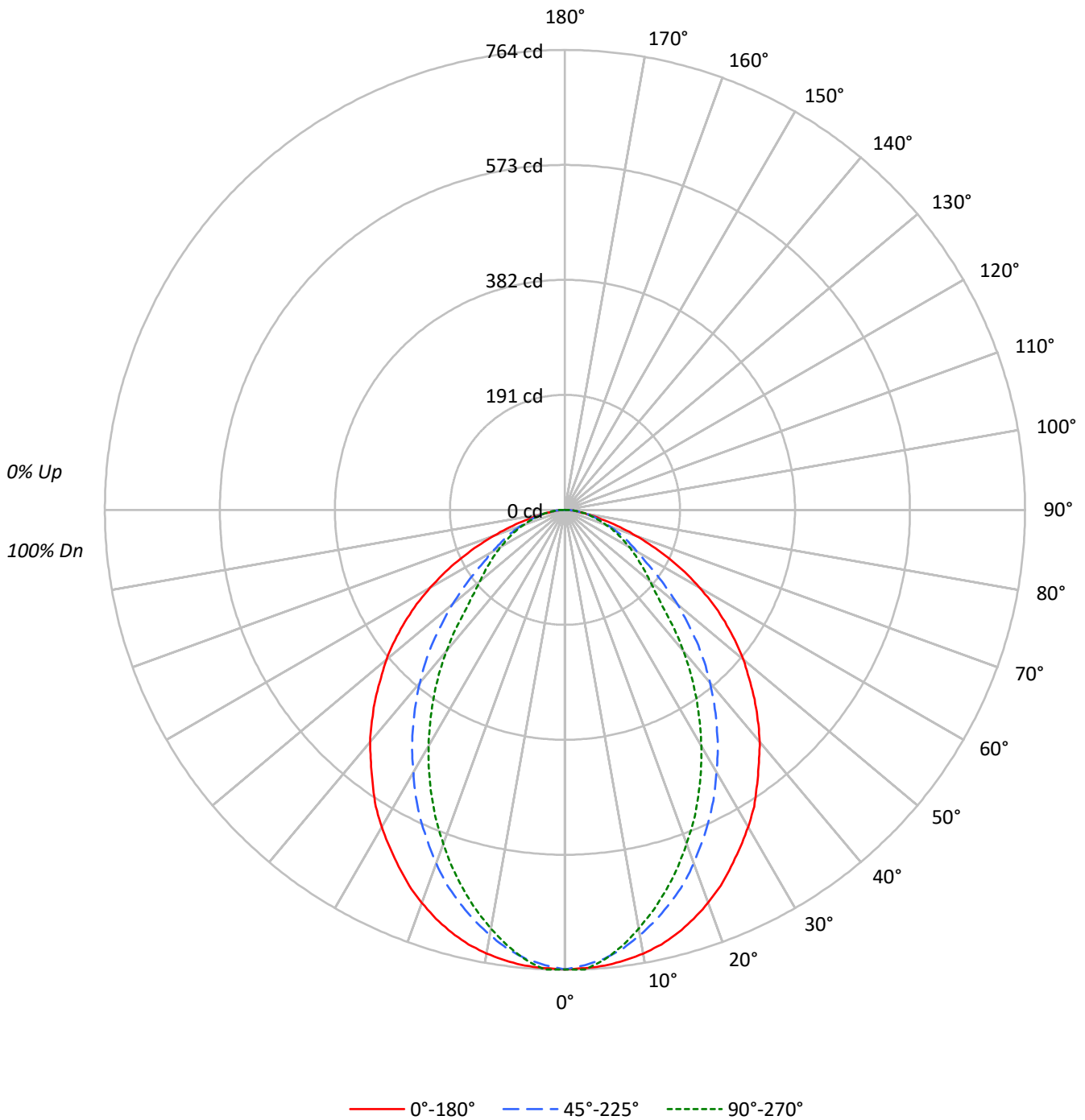
Lumens per Lamp: N/A
Luminaire Lumens: 1446.4 lumens
Efficiency: N/A
Efficacy: 56.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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 | 50 | 30 | 10 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | | 100 |
| 1 | 110 | 106 | 102 | 99 | 108 | 104 | 100 | 97 | 100 | 97 | 94 | 96 | 93 | 91 | 92 | 90 | 89 | 87 | | | | 87 |
| 2 | 101 | 94 | 88 | 83 | 99 | 92 | 87 | 82 | 89 | 84 | 80 | 86 | 82 | 78 | 83 | 80 | 77 | 75 | | | | 75 |
| 3 | 93 | 84 | 77 | 71 | 91 | 82 | 76 | 70 | 80 | 74 | 69 | 77 | 72 | 68 | 74 | 70 | 67 | 65 | | | | 65 |
| 4 | 86 | 76 | 68 | 61 | 84 | 74 | 67 | 61 | 72 | 65 | 60 | 70 | 64 | 59 | 67 | 63 | 59 | 57 | | | | 57 |
| 5 | 80 | 68 | 60 | 54 | 78 | 67 | 59 | 54 | 65 | 58 | 53 | 63 | 57 | 53 | 61 | 56 | 52 | 50 | | | | 50 |
| 6 | 74 | 62 | 54 | 48 | 73 | 61 | 53 | 48 | 59 | 53 | 47 | 58 | 52 | 47 | 56 | 51 | 47 | 45 | | | | 45 |
| 7 | 69 | 57 | 49 | 43 | 68 | 56 | 48 | 43 | 55 | 48 | 43 | 53 | 47 | 42 | 52 | 46 | 42 | 40 | | | | 40 |
| 8 | 65 | 52 | 44 | 39 | 63 | 52 | 44 | 39 | 50 | 43 | 39 | 49 | 43 | 38 | 48 | 42 | 38 | 36 | | | | 36 |
| 9 | 61 | 48 | 41 | 35 | 60 | 48 | 40 | 35 | 47 | 40 | 35 | 46 | 39 | 35 | 45 | 39 | 35 | 33 | | | | 33 |
| 10 | 57 | 45 | 37 | 32 | 56 | 44 | 37 | 32 | 43 | 37 | 32 | 42 | 36 | 32 | 42 | 36 | 32 | 30 | | | | 30 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 5257 | 5257 | 5257 |
| 5° | 5254 | 5174 | 5186 |
| 10° | 5234 | 5014 | 4938 |
| 15° | 5183 | 4816 | 4651 |
| 20° | 5090 | 4580 | 4325 |
| 25° | 4963 | 4308 | 3980 |
| 30° | 4838 | 4001 | 3599 |
| 35° | 4676 | 3693 | 3192 |
| 40° | 4523 | 3368 | 2749 |
| 45° | 4335 | 3011 | 2252 |
| 50° | 4148 | 2610 | 1971 |
| 55° | 3892 | 2180 | 1821 |
| 60° | 3550 | 1906 | 1701 |
| 65° | 3107 | 1742 | 1580 |
| 70° | 2520 | 1568 | 1470 |
| 75° | 1809 | 1434 | 1367 |
| 80° | 1249 | 1281 | 1281 |
| 85° | 916 | 1114 | 1177 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4335 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 71.0 | 4.9 |
| 10°-20° | 192.0 | 13.3 |
| 20°-30° | 265.4 | 18.3 |
| 30°-40° | 282.7 | 19.5 |
| 40°-50° | 248.3 | 17.2 |
| 50°-60° | 188.3 | 13.0 |
| 60°-70° | 122.3 | 8.5 |
| 70°-80° | 60.6 | 4.2 |
| 80°-90° | 15.9 | 1.1 |
| 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° | 528.4 | 36.5 |
| 0°-40° | 811.1 | 56.1 |
| 0°-60° | 1247.7 | 86.3 |
| 0°-90° | 1446.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1446.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 764 | 764 | 764 | 764 | 764 | |
| 5° | 760 | 759 | 749 | 751 | 750 | 72 |
| 15° | 727 | 710 | 676 | 660 | 652 | 205 |
| 25° | 653 | 618 | 567 | 538 | 524 | 301 |
| 35° | 556 | 505 | 439 | 400 | 380 | 348 |
| 45° | 445 | 383 | 309 | 254 | 231 | 343 |
| 55° | 324 | 260 | 182 | 157 | 152 | 289 |
| 65° | 191 | 142 | 107 | 99 | 97 | 188 |
| 75° | 68 | 60 | 54 | 52 | 51 | 76 |
| 85° | 12 | 13 | 14 | 14 | 15 | 14 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 763.5 | 763.5 | 763.5 | 763.5 | 763.5 |
| 2.5° | 761.9 | 763.5 | 756.9 | 762.7 | 764.4 |
| 5° | 760.2 | 758.6 | 748.6 | 751.1 | 750.3 |
| 7.5° | 755.3 | 751.9 | 735.4 | 733.7 | 730.4 |
| 10° | 748.6 | 740.3 | 717.1 | 711.3 | 706.3 |
| 12.5° | 739.5 | 726.2 | 698.0 | 686.4 | 680.6 |
| 15° | 727.1 | 710.5 | 675.7 | 659.9 | 652.5 |
| 17.5° | 712.1 | 688.9 | 652.5 | 630.9 | 622.6 |
| 20° | 694.7 | 667.4 | 625.1 | 600.2 | 590.3 |
| 22.5° | 675.7 | 643.3 | 596.1 | 569.5 | 558.8 |
| 25° | 653.3 | 617.6 | 567.1 | 538.0 | 523.9 |
| 27.5° | 630.9 | 591.1 | 536.4 | 504.1 | 489.1 |
| 30° | 608.5 | 562.9 | 503.2 | 468.4 | 452.7 |
| 32.5° | 584.5 | 533.9 | 472.5 | 434.4 | 416.2 |
| 35° | 556.3 | 504.9 | 439.4 | 399.6 | 379.7 |
| 37.5° | 528.9 | 474.2 | 407.1 | 362.3 | 343.2 |
| 40° | 503.2 | 445.2 | 374.7 | 325.8 | 305.9 |
| 42.5° | 474.2 | 414.5 | 342.4 | 291.0 | 268.6 |
| 45° | 445.2 | 383.0 | 309.2 | 253.7 | 231.3 |
| 47.5° | 414.5 | 353.2 | 274.4 | 219.7 | 204.8 |
| 50° | 387.2 | 322.5 | 243.7 | 194.0 | 184.0 |
| 52.5° | 355.7 | 292.6 | 212.2 | 174.1 | 167.5 |
| 55° | 324.2 | 260.3 | 181.6 | 156.7 | 151.7 |
| 57.5° | 291.8 | 231.3 | 157.5 | 141.8 | 136.8 |
| 60° | 257.8 | 201.5 | 138.4 | 126.0 | 123.5 |
| 62.5° | 223.8 | 170.8 | 121.9 | 112.7 | 109.4 |
| 65° | 190.7 | 141.8 | 106.9 | 98.7 | 97.0 |
| 67.5° | 156.7 | 115.2 | 92.0 | 86.2 | 85.4 |
| 70° | 125.2 | 93.7 | 77.9 | 74.6 | 73.0 |
| 72.5° | 96.2 | 74.6 | 65.5 | 63.0 | 62.2 |
| 75° | 68.0 | 59.7 | 53.9 | 52.2 | 51.4 |
| 77.5° | 45.6 | 45.6 | 43.1 | 41.5 | 42.3 |
| 80° | 31.5 | 33.2 | 32.3 | 32.3 | 32.3 |
| 82.5° | 20.7 | 22.4 | 23.2 | 23.2 | 23.2 |
| 85° | 11.6 | 13.3 | 14.1 | 14.1 | 14.9 |
| 87.5° | 4.1 | 5.0 | 5.8 | 6.6 | 6.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)