

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: P1061763

Luminaire Tested: S125RDR-S850D830-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061763
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-83)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-S850D830-X4F0-XX-UDD-SVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

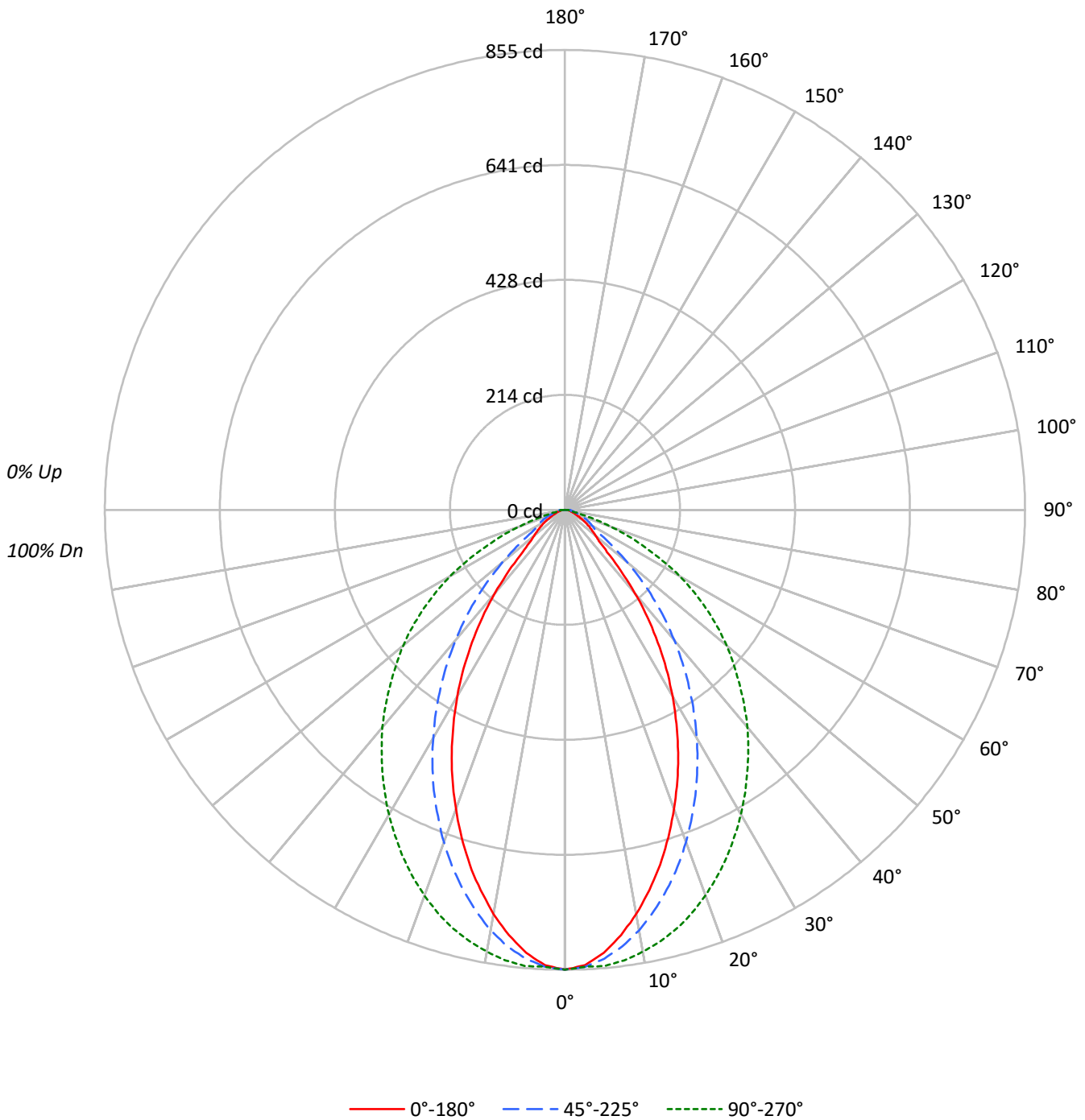
Lumens per Lamp: N/A
Luminaire Lumens: 1238.1 lumens
Efficiency: N/A
Efficacy: 48.0 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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





TEST NUMBER: P1061763

CATALOG NUMBER: S125RDR-S850D830-X4F0-XX-UDD-SVL-W

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 | | | | | | | | | | | | | 100 | | | | | | | | | | | | | | | |
| 1 | 111 | 108 | 104 | 101 | 109 | 105 | 103 | 100 | 101 | 99 | 97 | 98 | 96 | 94 | 94 | 92 | 91 | 89 | | | | | | | | | | | | | 89 | | | | | | | | | | | | | | | |
| 2 | 104 | 97 | 92 | 87 | 101 | 95 | 90 | 86 | 92 | 88 | 84 | 89 | 85 | 82 | 86 | 83 | 81 | 79 | | | | | | | | | | | | | 79 | | | | | | | | | | | | | | | |
| 3 | 96 | 88 | 81 | 76 | 94 | 86 | 80 | 76 | 84 | 79 | 74 | 81 | 77 | 73 | 79 | 75 | 72 | 70 | | | | | | | | | | | | | 70 | | | | | | | | | | | | | | | |
| 4 | 90 | 80 | 73 | 67 | 88 | 79 | 72 | 67 | 76 | 71 | 66 | 74 | 69 | 65 | 72 | 68 | 64 | 62 | | | | | | | | | | | | | 62 | | | | | | | | | | | | | | | |
| 5 | 84 | 73 | 66 | 60 | 82 | 72 | 65 | 60 | 70 | 64 | 59 | 68 | 63 | 59 | 66 | 62 | 58 | 56 | | | | | | | | | | | | | 56 | | | | | | | | | | | | | | | |
| 6 | 78 | 67 | 59 | 54 | 77 | 66 | 59 | 54 | 64 | 58 | 53 | 63 | 57 | 53 | 61 | 56 | 53 | 51 | | | | | | | | | | | | | 51 | | | | | | | | | | | | | | | |
| 7 | 73 | 62 | 54 | 49 | 72 | 61 | 54 | 49 | 60 | 53 | 49 | 58 | 53 | 48 | 57 | 52 | 48 | 46 | | | | | | | | | | | | | 46 | | | | | | | | | | | | | | | |
| 8 | 69 | 57 | 50 | 45 | 68 | 57 | 50 | 45 | 55 | 49 | 44 | 54 | 48 | 44 | 53 | 48 | 44 | 42 | | | | | | | | | | | | | 42 | | | | | | | | | | | | | | | |
| 9 | 65 | 53 | 46 | 41 | 64 | 53 | 46 | 41 | 52 | 45 | 41 | 51 | 45 | 41 | 50 | 44 | 40 | 39 | | | | | | | | | | | | | 39 | | | | | | | | | | | | | | | |
| 10 | 61 | 50 | 43 | 38 | 60 | 49 | 42 | 38 | 48 | 42 | 38 | 47 | 42 | 38 | 46 | 41 | 37 | 36 | | | | | | | | | | | | | 36 | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 5886 | 5886 | 5886 |
| 5° | 5713 | 5788 | 5882 |
| 10° | 5334 | 5551 | 5830 |
| 15° | 4869 | 5212 | 5743 |
| 20° | 4339 | 4818 | 5591 |
| 25° | 3782 | 4375 | 5410 |
| 30° | 3178 | 3893 | 5200 |
| 35° | 2527 | 3382 | 4970 |
| 40° | 1821 | 2841 | 4744 |
| 45° | 1079 | 2255 | 4466 |
| 50° | 798 | 1606 | 4203 |
| 55° | 676 | 993 | 3848 |
| 60° | 551 | 800 | 3390 |
| 65° | 428 | 740 | 2678 |
| 70° | 366 | 640 | 1792 |
| 75° | 338 | 556 | 726 |
| 80° | 361 | 575 | 504 |
| 85° | 434 | 861 | 577 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4466 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 78.8 | 6.4 |
| 10°-20° | 206.9 | 16.7 |
| 20°-30° | 270.4 | 21.8 |
| 30°-40° | 263.4 | 21.3 |
| 40°-50° | 197.6 | 16.0 |
| 50°-60° | 123.9 | 10.0 |
| 60°-70° | 64.5 | 5.2 |
| 70°-80° | 23.3 | 1.9 |
| 80°-90° | 9.3 | 0.7 |
| 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° | 556.1 | 44.9 |
| 0°-40° | 819.6 | 66.2 |
| 0°-60° | 1141.0 | 92.2 |
| 0°-90° | 1238.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1238.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 855 | 855 | 855 | 855 | 855 | |
| 5° | 827 | 838 | 838 | 844 | 851 | 77 |
| 15° | 683 | 703 | 731 | 777 | 806 | 191 |
| 25° | 498 | 525 | 576 | 654 | 712 | 227 |
| 35° | 301 | 332 | 402 | 510 | 591 | 187 |
| 45° | 111 | 144 | 232 | 358 | 459 | 93 |
| 55° | 56 | 59 | 83 | 216 | 321 | 50 |
| 65° | 26 | 28 | 45 | 87 | 164 | 27 |
| 75° | 13 | 17 | 21 | 22 | 27 | 14 |
| 85° | 6 | 9 | 11 | 10 | 7 | 6 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1061763

CATALOG NUMBER: S125RDR-S850D830-X4F0-XX-UDD-SVL-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 854.8 | 854.8 | 854.8 | 854.8 | 854.8 |
| 2.5° | 847.5 | 855.7 | 850.2 | 850.2 | 850.2 |
| 5° | 826.6 | 837.5 | 837.5 | 843.9 | 851.1 |
| 7.5° | 797.5 | 810.2 | 818.4 | 833.9 | 844.8 |
| 10° | 763.0 | 778.5 | 793.9 | 819.3 | 833.9 |
| 12.5° | 724.0 | 742.1 | 763.9 | 799.3 | 821.1 |
| 15° | 683.1 | 703.1 | 731.2 | 776.6 | 805.7 |
| 17.5° | 638.6 | 662.2 | 695.8 | 750.3 | 785.7 |
| 20° | 592.2 | 615.9 | 657.6 | 719.4 | 763.0 |
| 22.5° | 545.9 | 571.4 | 616.8 | 686.7 | 738.5 |
| 25° | 497.8 | 525.0 | 575.9 | 654.0 | 712.1 |
| 27.5° | 448.7 | 476.9 | 533.2 | 620.4 | 683.1 |
| 30° | 399.7 | 428.7 | 489.6 | 584.1 | 654.0 |
| 32.5° | 350.6 | 381.5 | 446.0 | 546.8 | 623.1 |
| 35° | 300.7 | 332.5 | 402.4 | 509.6 | 591.3 |
| 37.5° | 252.5 | 284.3 | 358.8 | 471.4 | 559.5 |
| 40° | 202.6 | 237.1 | 316.1 | 433.3 | 527.8 |
| 42.5° | 153.5 | 188.9 | 273.4 | 395.1 | 493.2 |
| 45° | 110.8 | 143.5 | 231.6 | 357.9 | 458.7 |
| 47.5° | 85.4 | 103.6 | 188.9 | 319.7 | 425.1 |
| 50° | 74.5 | 79.9 | 149.9 | 284.3 | 392.4 |
| 52.5° | 64.5 | 68.1 | 112.6 | 251.6 | 357.0 |
| 55° | 56.3 | 59.0 | 82.7 | 216.2 | 320.6 |
| 57.5° | 47.2 | 50.9 | 65.4 | 181.7 | 283.4 |
| 60° | 40.0 | 41.8 | 58.1 | 149.9 | 246.2 |
| 62.5° | 32.7 | 34.5 | 51.8 | 118.1 | 204.4 |
| 65° | 26.3 | 28.2 | 45.4 | 87.2 | 164.4 |
| 67.5° | 21.8 | 22.7 | 38.2 | 61.8 | 126.3 |
| 70° | 18.2 | 19.1 | 31.8 | 42.7 | 89.0 |
| 72.5° | 15.4 | 18.2 | 25.4 | 30.9 | 56.3 |
| 75° | 12.7 | 17.3 | 20.9 | 21.8 | 27.3 |
| 77.5° | 10.9 | 16.4 | 17.3 | 17.3 | 15.4 |
| 80° | 9.1 | 13.6 | 14.5 | 13.6 | 12.7 |
| 82.5° | 7.3 | 10.9 | 11.8 | 11.8 | 10.0 |
| 85° | 5.5 | 9.1 | 10.9 | 10.0 | 7.3 |
| 87.5° | 3.6 | 8.2 | 9.1 | 8.2 | 5.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)