

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: P1057965

Luminaire Tested: S122RDR-S485D835-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057965
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-56)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S485D835-X4F0-XX-UDD-SVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

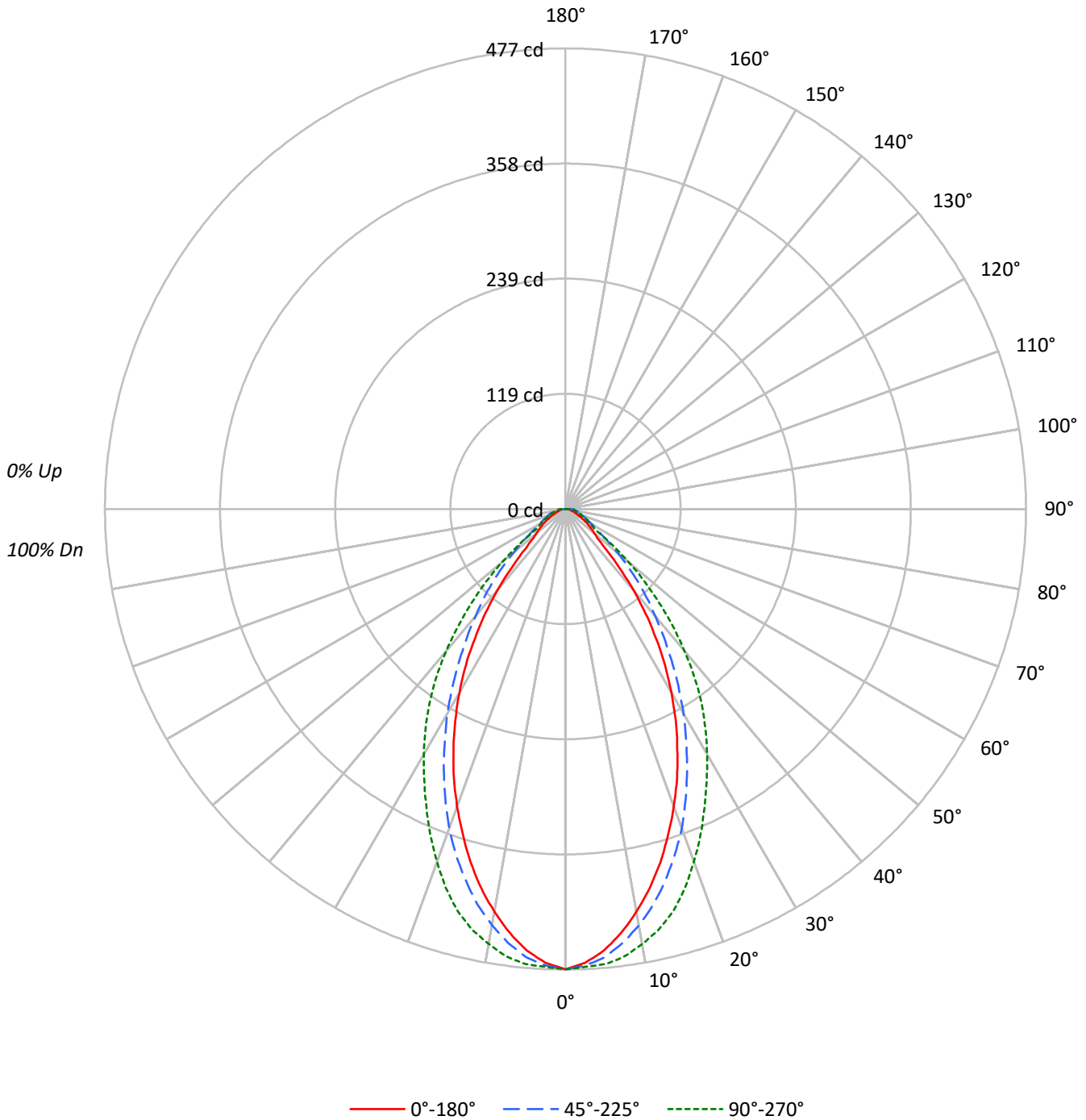
Lumens per Lamp: N/A
Luminaire Lumens: 578.3 lumens
Efficiency: N/A
Efficacy: 29.5 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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 | 111 | 108 | 105 | 102 | 109 | 106 | 103 | 100 | 102 | 99 | 97 | 98 | 96 | 94 | 94 | 93 | 91 | 89 | | | 89 | |
| 2 | 104 | 98 | 93 | 88 | 102 | 96 | 91 | 87 | 93 | 89 | 85 | 90 | 86 | 84 | 87 | 84 | 82 | 80 | | | 80 | |
| 3 | 97 | 89 | 83 | 78 | 95 | 88 | 82 | 77 | 85 | 80 | 76 | 83 | 78 | 75 | 80 | 77 | 74 | 72 | | | 72 | |
| 4 | 91 | 82 | 75 | 70 | 89 | 81 | 74 | 69 | 78 | 73 | 68 | 76 | 71 | 68 | 74 | 70 | 67 | 65 | | | 65 | |
| 5 | 86 | 75 | 68 | 63 | 84 | 74 | 68 | 63 | 72 | 67 | 62 | 71 | 65 | 61 | 69 | 64 | 61 | 59 | | | 59 | |
| 6 | 80 | 70 | 62 | 57 | 79 | 69 | 62 | 57 | 67 | 61 | 57 | 66 | 60 | 56 | 64 | 59 | 56 | 54 | | | 54 | |
| 7 | 76 | 65 | 57 | 52 | 74 | 64 | 57 | 52 | 62 | 56 | 52 | 61 | 56 | 52 | 60 | 55 | 51 | 50 | | | 50 | |
| 8 | 71 | 60 | 53 | 48 | 70 | 59 | 53 | 48 | 58 | 52 | 48 | 57 | 52 | 48 | 56 | 51 | 47 | 46 | | | 46 | |
| 9 | 67 | 56 | 49 | 45 | 66 | 56 | 49 | 45 | 55 | 49 | 44 | 54 | 48 | 44 | 53 | 48 | 44 | 42 | | | 42 | |
| 10 | 64 | 53 | 46 | 41 | 63 | 52 | 46 | 41 | 51 | 45 | 41 | 50 | 45 | 41 | 50 | 45 | 41 | 39 | | | 39 | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 8798 | 8798 | 8798 |
| 5° | 8504 | 8634 | 8765 |
| 10° | 7937 | 8203 | 8574 |
| 15° | 7240 | 7618 | 8241 |
| 20° | 6441 | 6914 | 7637 |
| 25° | 5583 | 6071 | 6937 |
| 30° | 4679 | 5207 | 6249 |
| 35° | 3685 | 4309 | 5537 |
| 40° | 2628 | 3481 | 4625 |
| 45° | 1553 | 2756 | 3586 |
| 50° | 1120 | 1992 | 2440 |
| 55° | 933 | 1435 | 1232 |
| 60° | 757 | 1151 | 1044 |
| 65° | 620 | 1022 | 961 |
| 70° | 534 | 993 | 917 |
| 75° | 506 | 1012 | 913 |
| 80° | 531 | 1201 | 978 |
| 85° | 741 | 1948 | 1207 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3586 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 43.7 | 7.6 |
| 10°-20° | 112.3 | 19.4 |
| 20°-30° | 138.6 | 24.0 |
| 30°-40° | 123.3 | 21.3 |
| 40°-50° | 78.7 | 13.6 |
| 50°-60° | 37.8 | 6.5 |
| 60°-70° | 22.2 | 3.8 |
| 70°-80° | 14.2 | 2.5 |
| 80°-90° | 7.5 | 1.3 |
| 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° | 294.7 | 51.0 |
| 0°-40° | 417.9 | 72.3 |
| 0°-60° | 534.4 | 92.4 |
| 0°-90° | 578.3 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 578.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 477 | 477 | 477 | 477 | 477 | |
| 5° | 459 | 468 | 466 | 469 | 473 | 43 |
| 15° | 379 | 388 | 399 | 417 | 431 | 106 |
| 25° | 274 | 285 | 298 | 320 | 341 | 125 |
| 35° | 164 | 176 | 191 | 220 | 246 | 102 |
| 45° | 60 | 77 | 106 | 123 | 137 | 50 |
| 55° | 29 | 38 | 45 | 43 | 38 | 26 |
| 65° | 14 | 26 | 23 | 21 | 22 | 14 |
| 75° | 7 | 16 | 14 | 14 | 13 | 8 |
| 85° | 4 | 8 | 9 | 8 | 6 | 4 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CATALOG NUMBER: S122RDR-S485D835-X4F0-XX-UDD-SVL-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 476.8 | 476.8 | 476.8 | 476.8 | 476.8 |
| 2.5° | 470.4 | 478.2 | 473.2 | 473.2 | 474.6 |
| 5° | 459.1 | 467.6 | 466.1 | 469.0 | 473.2 |
| 7.5° | 442.8 | 452.0 | 453.4 | 461.2 | 467.6 |
| 10° | 423.6 | 433.6 | 437.8 | 449.1 | 457.6 |
| 12.5° | 402.4 | 412.3 | 420.1 | 434.3 | 446.3 |
| 15° | 379.0 | 388.2 | 398.8 | 417.3 | 431.4 |
| 17.5° | 353.5 | 365.5 | 376.2 | 395.3 | 411.6 |
| 20° | 328.0 | 339.3 | 352.1 | 370.5 | 388.9 |
| 22.5° | 301.8 | 312.4 | 325.2 | 344.3 | 365.5 |
| 25° | 274.2 | 284.8 | 298.2 | 319.5 | 340.7 |
| 27.5° | 247.2 | 257.9 | 270.6 | 294.0 | 316.7 |
| 30° | 219.6 | 230.2 | 244.4 | 268.5 | 293.3 |
| 32.5° | 192.0 | 203.3 | 217.5 | 243.7 | 269.9 |
| 35° | 163.6 | 176.4 | 191.3 | 220.3 | 245.8 |
| 37.5° | 136.0 | 148.8 | 167.2 | 195.5 | 219.6 |
| 40° | 109.1 | 124.0 | 144.5 | 170.0 | 192.0 |
| 42.5° | 82.9 | 99.2 | 124.7 | 145.2 | 164.4 |
| 45° | 59.5 | 77.2 | 105.6 | 122.6 | 137.4 |
| 47.5° | 45.3 | 58.1 | 87.1 | 100.6 | 111.2 |
| 50° | 39.0 | 46.8 | 69.4 | 79.3 | 85.0 |
| 52.5° | 34.0 | 41.1 | 55.3 | 60.2 | 60.2 |
| 55° | 29.0 | 37.5 | 44.6 | 43.2 | 38.3 |
| 57.5° | 24.8 | 34.0 | 36.8 | 31.2 | 32.6 |
| 60° | 20.5 | 31.2 | 31.2 | 27.6 | 28.3 |
| 62.5° | 17.0 | 29.0 | 26.9 | 24.1 | 24.8 |
| 65° | 14.2 | 25.5 | 23.4 | 21.3 | 22.0 |
| 67.5° | 11.3 | 22.7 | 20.5 | 19.1 | 19.1 |
| 70° | 9.9 | 20.5 | 18.4 | 17.0 | 17.0 |
| 72.5° | 8.5 | 17.7 | 16.3 | 14.9 | 14.9 |
| 75° | 7.1 | 15.6 | 14.2 | 13.5 | 12.8 |
| 77.5° | 6.4 | 13.5 | 12.8 | 11.3 | 10.6 |
| 80° | 5.0 | 11.3 | 11.3 | 10.6 | 9.2 |
| 82.5° | 4.3 | 9.9 | 9.9 | 9.2 | 7.8 |
| 85° | 3.5 | 8.5 | 9.2 | 7.8 | 5.7 |
| 87.5° | 2.8 | 7.8 | 7.8 | 6.4 | 4.3 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)