

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: P1059333

Luminaire Tested: S123RDR-S775D830-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059333
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-65)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S775D830-X4F0-XX-UDD-SVL-W
Description: DEFINE 3 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

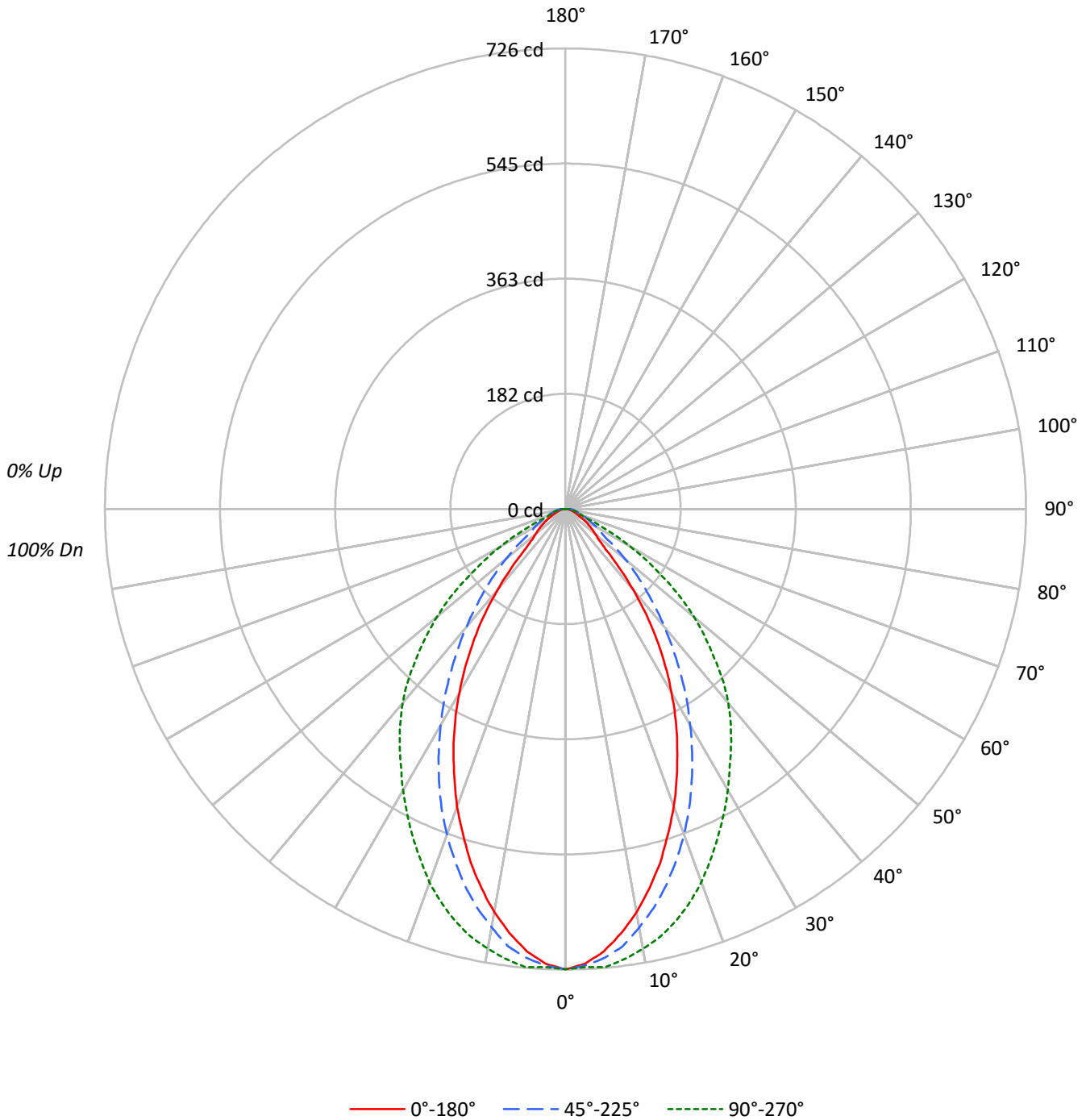
Lumens per Lamp: N/A
Luminaire Lumens: 974.0 lumens
Efficiency: N/A
Efficacy: 37.8 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.08 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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 | | | | |
| 1 | 111 | 108 | 105 | 102 | 109 | 106 | 103 | 100 | 102 | 99 | 97 | 98 | 96 | 94 | 94 | 93 | 91 | 89 | | | | |
| 2 | 104 | 98 | 92 | 88 | 102 | 96 | 91 | 87 | 92 | 88 | 85 | 89 | 86 | 83 | 86 | 84 | 81 | 79 | | | | |
| 3 | 97 | 89 | 82 | 77 | 95 | 87 | 81 | 77 | 84 | 79 | 75 | 82 | 78 | 74 | 79 | 76 | 73 | 71 | | | | |
| 4 | 90 | 81 | 74 | 68 | 88 | 80 | 73 | 68 | 77 | 72 | 67 | 75 | 70 | 66 | 73 | 69 | 66 | 64 | | | | |
| 5 | 85 | 74 | 67 | 61 | 83 | 73 | 66 | 61 | 71 | 65 | 60 | 69 | 64 | 60 | 68 | 63 | 59 | 58 | | | | |
| 6 | 79 | 68 | 61 | 55 | 78 | 67 | 60 | 55 | 66 | 59 | 55 | 64 | 59 | 54 | 63 | 58 | 54 | 52 | | | | |
| 7 | 74 | 63 | 56 | 51 | 73 | 62 | 55 | 50 | 61 | 55 | 50 | 60 | 54 | 50 | 58 | 53 | 49 | 48 | | | | |
| 8 | 70 | 58 | 51 | 46 | 69 | 58 | 51 | 46 | 57 | 50 | 46 | 55 | 50 | 46 | 54 | 49 | 45 | 44 | | | | |
| 9 | 66 | 54 | 47 | 43 | 65 | 54 | 47 | 43 | 53 | 47 | 42 | 52 | 46 | 42 | 51 | 46 | 42 | 40 | | | | |
| 10 | 62 | 51 | 44 | 39 | 61 | 50 | 44 | 39 | 49 | 43 | 39 | 49 | 43 | 39 | 48 | 43 | 39 | 37 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 8520 | 8520 | 8520 |
| 5° | 8245 | 8373 | 8542 |
| 10° | 7695 | 7985 | 8394 |
| 15° | 7013 | 7462 | 8174 |
| 20° | 6241 | 6825 | 7829 |
| 25° | 5407 | 6108 | 7381 |
| 30° | 4534 | 5329 | 6942 |
| 35° | 3592 | 4536 | 6525 |
| 40° | 2543 | 3731 | 6121 |
| 45° | 1496 | 2949 | 5508 |
| 50° | 1120 | 2240 | 4825 |
| 55° | 942 | 1513 | 3875 |
| 60° | 761 | 1292 | 2752 |
| 65° | 600 | 1103 | 1453 |
| 70° | 525 | 958 | 896 |
| 75° | 490 | 898 | 857 |
| 80° | 487 | 974 | 852 |
| 85° | 606 | 1455 | 1091 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5508 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 66.8 | 6.9 |
| 10°-20° | 173.6 | 17.8 |
| 20°-30° | 221.0 | 22.7 |
| 30°-40° | 207.9 | 21.3 |
| 40°-50° | 149.7 | 15.4 |
| 50°-60° | 86.5 | 8.9 |
| 60°-70° | 39.5 | 4.1 |
| 70°-80° | 19.7 | 2.0 |
| 80°-90° | 9.3 | 1.0 |
| 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° | 461.3 | 47.4 |
| 0°-40° | 669.2 | 68.7 |
| 0°-60° | 905.5 | 93.0 |
| 0°-90° | 974.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 974.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 726 | 726 | 726 | 726 | 726 | |
| 5° | 700 | 711 | 710 | 718 | 725 | 65 |
| 15° | 577 | 598 | 614 | 648 | 672 | 161 |
| 25° | 417 | 439 | 471 | 524 | 570 | 191 |
| 35° | 251 | 272 | 316 | 389 | 455 | 155 |
| 45° | 90 | 113 | 178 | 267 | 332 | 76 |
| 55° | 46 | 48 | 74 | 141 | 189 | 41 |
| 65° | 22 | 31 | 40 | 44 | 52 | 22 |
| 75° | 11 | 21 | 20 | 19 | 19 | 12 |
| 85° | 4 | 10 | 11 | 10 | 8 | 5 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 725.6 | 725.6 | 725.6 | 725.6 | 725.6 |
| 2.5° | 717.5 | 726.5 | 720.2 | 721.1 | 722.9 |
| 5° | 699.5 | 711.2 | 710.3 | 717.5 | 724.7 |
| 7.5° | 674.2 | 687.7 | 695.0 | 705.8 | 715.7 |
| 10° | 645.4 | 660.7 | 669.7 | 689.6 | 704.0 |
| 12.5° | 612.0 | 631.9 | 643.6 | 669.7 | 690.5 |
| 15° | 576.9 | 597.6 | 613.8 | 648.1 | 672.4 |
| 17.5° | 537.2 | 559.8 | 580.5 | 621.0 | 650.8 |
| 20° | 499.4 | 521.0 | 546.2 | 590.4 | 626.5 |
| 22.5° | 457.9 | 481.3 | 510.2 | 557.0 | 597.6 |
| 25° | 417.3 | 439.0 | 471.4 | 523.7 | 569.7 |
| 27.5° | 376.8 | 398.4 | 432.7 | 490.3 | 540.8 |
| 30° | 334.4 | 356.9 | 393.0 | 457.0 | 512.0 |
| 32.5° | 292.9 | 314.6 | 355.1 | 424.5 | 482.2 |
| 35° | 250.6 | 272.2 | 316.4 | 389.4 | 455.2 |
| 37.5° | 209.1 | 231.7 | 278.5 | 360.5 | 428.2 |
| 40° | 165.9 | 190.2 | 243.4 | 330.8 | 399.3 |
| 42.5° | 125.3 | 151.4 | 208.2 | 300.2 | 367.8 |
| 45° | 90.1 | 112.7 | 177.6 | 266.8 | 331.7 |
| 47.5° | 70.3 | 82.0 | 149.6 | 232.6 | 298.4 |
| 50° | 61.3 | 63.1 | 122.6 | 201.0 | 264.1 |
| 52.5° | 53.2 | 55.0 | 96.4 | 171.3 | 228.0 |
| 55° | 46.0 | 47.8 | 73.9 | 140.6 | 189.3 |
| 57.5° | 38.8 | 41.5 | 61.3 | 111.8 | 152.3 |
| 60° | 32.4 | 36.1 | 55.0 | 85.6 | 117.2 |
| 62.5° | 26.1 | 32.4 | 46.9 | 63.1 | 83.8 |
| 65° | 21.6 | 30.6 | 39.7 | 44.2 | 52.3 |
| 67.5° | 18.0 | 27.9 | 33.4 | 31.5 | 30.6 |
| 70° | 15.3 | 25.2 | 27.9 | 25.2 | 26.1 |
| 72.5° | 12.6 | 23.4 | 23.4 | 21.6 | 21.6 |
| 75° | 10.8 | 20.7 | 19.8 | 18.9 | 18.9 |
| 77.5° | 9.0 | 18.0 | 17.1 | 16.2 | 15.3 |
| 80° | 7.2 | 14.4 | 14.4 | 13.5 | 12.6 |
| 82.5° | 6.3 | 11.7 | 11.7 | 11.7 | 9.9 |
| 85° | 4.5 | 9.9 | 10.8 | 9.9 | 8.1 |
| 87.5° | 3.6 | 9.0 | 9.0 | 8.1 | 5.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)