

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: P1058103

Luminaire Tested: S122RDR-S675D940-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058103
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-55)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S675D940-X4F0-XX-UDD-WVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

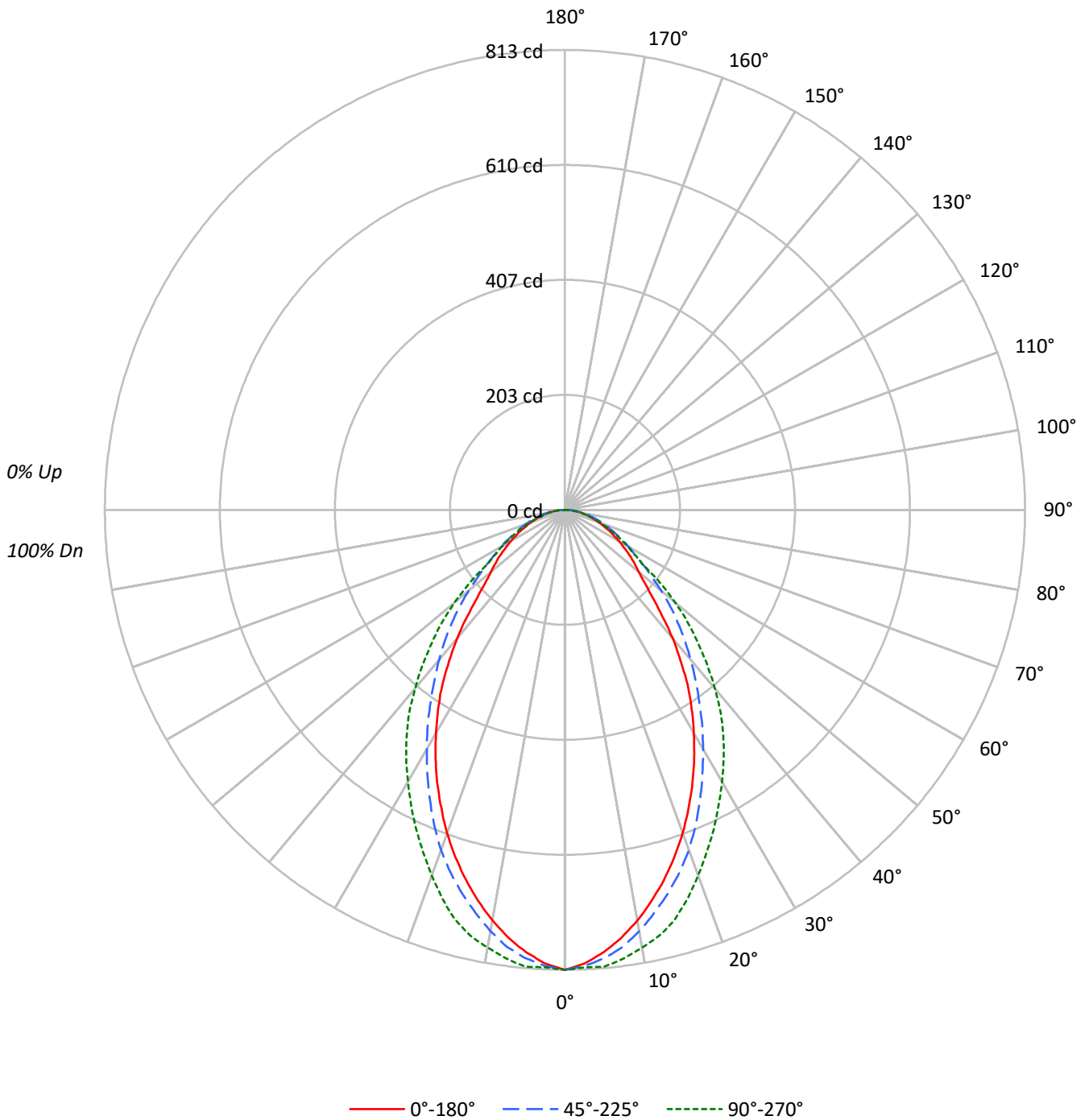
Lumens per Lamp: N/A
Luminaire Lumens: 1325.4 lumens
Efficiency: N/A
Efficacy: 51.4 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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 | 110 | 106 | 103 | 99 | 108 | 104 | 101 | 98 | 100 | 97 | 95 | 96 | 94 | 92 | 93 | 91 | 89 | 87 | | | | |
| 2 | 102 | 95 | 89 | 84 | 100 | 93 | 88 | 83 | 90 | 85 | 81 | 87 | 83 | 80 | 84 | 81 | 78 | 76 | | | | |
| 3 | 94 | 85 | 78 | 73 | 92 | 84 | 77 | 72 | 81 | 75 | 71 | 78 | 74 | 70 | 76 | 72 | 68 | 67 | | | | |
| 4 | 88 | 77 | 69 | 64 | 85 | 76 | 69 | 63 | 73 | 67 | 62 | 71 | 66 | 62 | 69 | 65 | 61 | 59 | | | | |
| 5 | 81 | 70 | 62 | 56 | 80 | 69 | 62 | 56 | 67 | 60 | 55 | 65 | 59 | 55 | 63 | 58 | 54 | 52 | | | | |
| 6 | 76 | 64 | 56 | 50 | 74 | 63 | 56 | 50 | 61 | 55 | 50 | 60 | 54 | 49 | 58 | 53 | 49 | 47 | | | | |
| 7 | 71 | 59 | 51 | 46 | 69 | 58 | 51 | 45 | 57 | 50 | 45 | 55 | 49 | 45 | 54 | 49 | 44 | 43 | | | | |
| 8 | 67 | 54 | 47 | 41 | 65 | 54 | 46 | 41 | 52 | 46 | 41 | 51 | 45 | 41 | 50 | 45 | 41 | 39 | | | | |
| 9 | 63 | 50 | 43 | 38 | 61 | 50 | 43 | 38 | 49 | 42 | 38 | 48 | 42 | 37 | 47 | 41 | 37 | 36 | | | | |
| 10 | 59 | 47 | 40 | 35 | 58 | 46 | 40 | 35 | 46 | 39 | 35 | 45 | 39 | 35 | 44 | 38 | 34 | 33 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 15002 | 15002 | 15002 |
| 5° | 14541 | 14735 | 15011 |
| 10° | 13809 | 14169 | 14726 |
| 15° | 12925 | 13411 | 14329 |
| 20° | 11949 | 12566 | 13510 |
| 25° | 10858 | 11497 | 12672 |
| 30° | 9705 | 10394 | 11828 |
| 35° | 8508 | 9315 | 10988 |
| 40° | 7118 | 8318 | 9919 |
| 45° | 5705 | 7369 | 8669 |
| 50° | 4895 | 6350 | 7277 |
| 55° | 4472 | 5398 | 5373 |
| 60° | 4067 | 4775 | 4680 |
| 65° | 3703 | 4275 | 4082 |
| 70° | 3394 | 3917 | 3631 |
| 75° | 3180 | 3615 | 3180 |
| 80° | 2975 | 3347 | 2784 |
| 85° | 2964 | 3515 | 2414 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8669 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 75.0 | 5.7 |
| 10°-20° | 198.7 | 15.0 |
| 20°-30° | 262.1 | 19.8 |
| 30°-40° | 263.9 | 19.9 |
| 40°-50° | 214.8 | 16.2 |
| 50°-60° | 146.4 | 11.0 |
| 60°-70° | 95.1 | 7.2 |
| 70°-80° | 52.4 | 3.9 |
| 80°-90° | 17.1 | 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° | 535.8 | 40.4 |
| 0°-40° | 799.7 | 60.3 |
| 0°-60° | 1161.0 | 87.6 |
| 0°-90° | 1325.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1325.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 813 | 813 | 813 | 813 | 813 | |
| 5° | 785 | 800 | 796 | 802 | 810 | 73 |
| 15° | 677 | 694 | 702 | 731 | 750 | 190 |
| 25° | 533 | 551 | 565 | 590 | 622 | 245 |
| 35° | 378 | 397 | 414 | 449 | 488 | 235 |
| 45° | 219 | 246 | 282 | 307 | 332 | 172 |
| 55° | 139 | 153 | 168 | 169 | 167 | 124 |
| 65° | 85 | 100 | 98 | 93 | 94 | 84 |
| 75° | 45 | 55 | 51 | 46 | 45 | 47 |
| 85° | 14 | 18 | 17 | 13 | 11 | 15 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1058103

CATALOG NUMBER: S122RDR-S675D940-X4F0-XX-UDD-WVL-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 813.0 | 813.0 | 813.0 | 813.0 | 813.0 |
| 2.5° | 802.5 | 815.6 | 806.9 | 807.8 | 809.5 |
| 5° | 785.0 | 799.9 | 795.5 | 802.5 | 810.4 |
| 7.5° | 763.2 | 778.1 | 779.8 | 790.3 | 799.9 |
| 10° | 737.0 | 753.6 | 756.2 | 771.9 | 785.9 |
| 12.5° | 708.1 | 726.5 | 730.0 | 752.7 | 771.1 |
| 15° | 676.6 | 694.1 | 702.0 | 730.8 | 750.1 |
| 17.5° | 643.4 | 660.0 | 672.3 | 698.5 | 720.4 |
| 20° | 608.5 | 624.2 | 639.9 | 663.5 | 688.0 |
| 22.5° | 570.9 | 588.3 | 603.2 | 626.8 | 654.8 |
| 25° | 533.3 | 550.8 | 564.7 | 590.1 | 622.4 |
| 27.5° | 494.8 | 512.3 | 526.3 | 553.4 | 588.3 |
| 30° | 455.5 | 473.8 | 487.8 | 518.4 | 555.1 |
| 32.5° | 417.0 | 435.4 | 451.1 | 483.4 | 521.9 |
| 35° | 377.7 | 396.9 | 413.5 | 449.3 | 487.8 |
| 37.5° | 335.7 | 357.6 | 378.5 | 414.4 | 452.0 |
| 40° | 295.5 | 320.0 | 345.3 | 378.5 | 411.8 |
| 42.5° | 255.3 | 282.4 | 313.8 | 341.8 | 372.4 |
| 45° | 218.6 | 245.7 | 282.4 | 306.8 | 332.2 |
| 47.5° | 189.7 | 212.4 | 251.8 | 271.9 | 294.6 |
| 50° | 170.5 | 186.2 | 221.2 | 236.9 | 253.5 |
| 52.5° | 154.7 | 167.8 | 192.3 | 202.8 | 211.6 |
| 55° | 139.0 | 153.0 | 167.8 | 168.7 | 167.0 |
| 57.5° | 123.3 | 139.0 | 146.9 | 140.7 | 144.2 |
| 60° | 110.2 | 125.9 | 129.4 | 123.3 | 126.8 |
| 62.5° | 96.2 | 113.6 | 113.6 | 107.5 | 109.3 |
| 65° | 84.8 | 100.5 | 97.9 | 92.7 | 93.5 |
| 67.5° | 73.4 | 89.2 | 84.8 | 79.6 | 79.6 |
| 70° | 62.9 | 77.8 | 72.6 | 67.3 | 67.3 |
| 72.5° | 53.3 | 65.6 | 62.1 | 55.9 | 55.1 |
| 75° | 44.6 | 55.1 | 50.7 | 45.5 | 44.6 |
| 77.5° | 35.8 | 44.6 | 41.1 | 36.7 | 35.0 |
| 80° | 28.0 | 35.8 | 31.5 | 28.0 | 26.2 |
| 82.5° | 21.0 | 27.1 | 23.6 | 20.1 | 18.4 |
| 85° | 14.0 | 18.4 | 16.6 | 13.1 | 11.4 |
| 87.5° | 7.0 | 12.2 | 10.5 | 8.7 | 7.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)