

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: P1058043

Luminaire Tested: S122RDR-S675D835-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058043
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S675D835-X4F0-XX-UDD-BVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

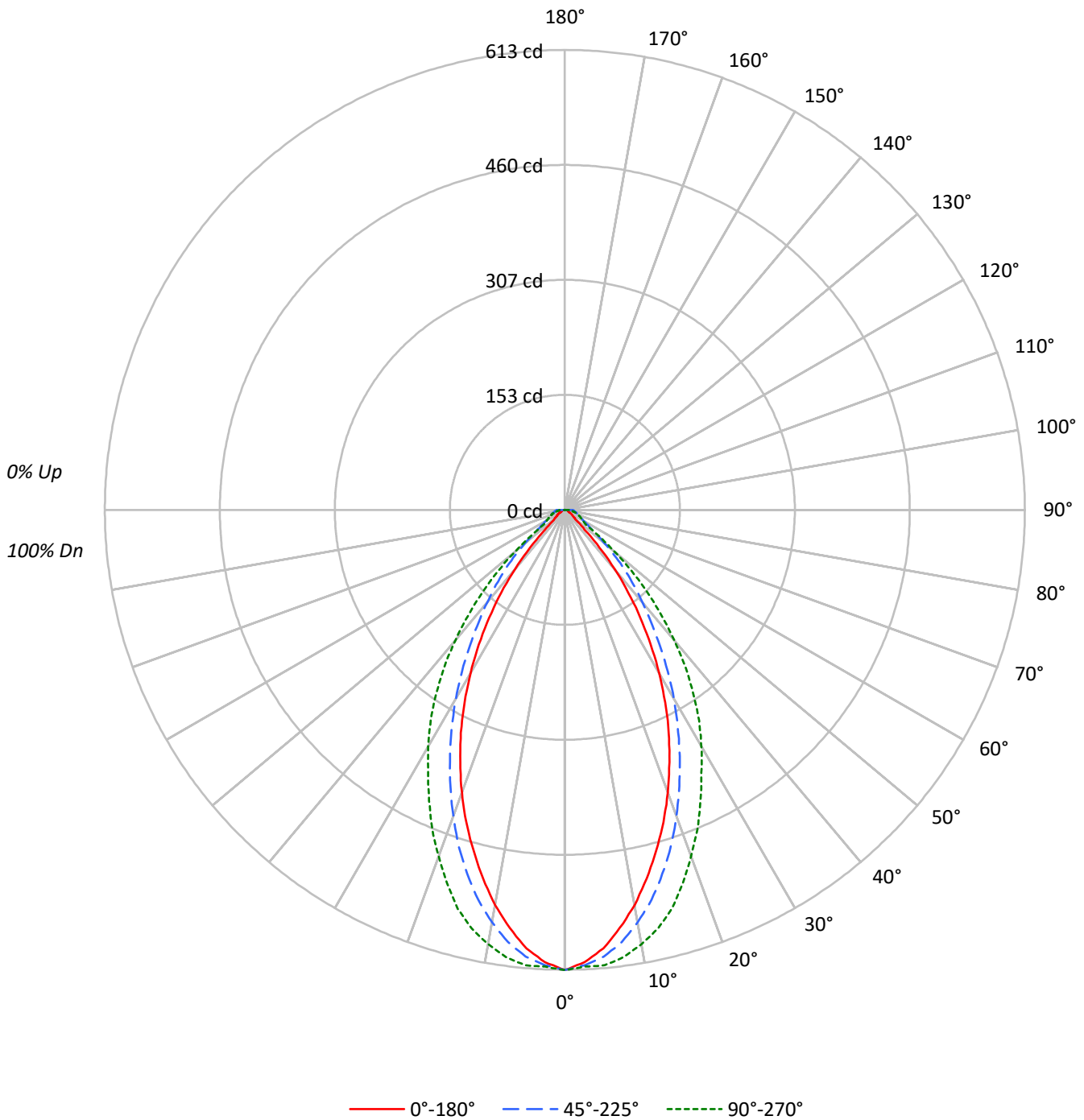
Lumens per Lamp: N/A
Luminaire Lumens: 667.5 lumens
Efficiency: N/A
Efficacy: 25.9 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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





TEST NUMBER: P1058043

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|---|--|--|--|----|--|--|--|--|--|--|--|--|----|---|
| RF | 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 | 0 | | | | | | | | | | | | | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | | | | | | | | | | | | | | | | | | |
| 1 | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 101 | 102 | 100 | 97 | 98 | 96 | 95 | 95 | 93 | 92 | 90 | | | | | | | | | | | | | | | | | | | | |
| 2 | 105 | 99 | 94 | 90 | 102 | 97 | 92 | 89 | 94 | 90 | 87 | 91 | 87 | 85 | 88 | 85 | 83 | 81 | | | | | | | | | | | | | | | | | | | | |
| 3 | 98 | 91 | 85 | 80 | 96 | 89 | 84 | 79 | 86 | 82 | 78 | 84 | 80 | 76 | 81 | 78 | 75 | 74 | | | | | | | | | | | | | | | | | | | | |
| 4 | 92 | 83 | 77 | 72 | 90 | 82 | 76 | 71 | 80 | 75 | 70 | 78 | 73 | 70 | 76 | 72 | 69 | 67 | | | | | | | | | | | | | | | | | | | | |
| 5 | 87 | 77 | 70 | 65 | 85 | 76 | 70 | 65 | 74 | 69 | 64 | 72 | 67 | 64 | 71 | 66 | 63 | 61 | | | | | | | | | | | | | | | | | | | | |
| 6 | 82 | 72 | 65 | 60 | 80 | 71 | 64 | 59 | 69 | 63 | 59 | 68 | 62 | 58 | 66 | 62 | 58 | 56 | | | | | | | | | | | | | | | | | | | | |
| 7 | 77 | 67 | 60 | 55 | 76 | 66 | 59 | 55 | 64 | 59 | 54 | 63 | 58 | 54 | 62 | 57 | 54 | 52 | | | | | | | | | | | | | | | | | | | | |
| 8 | 73 | 62 | 55 | 51 | 72 | 62 | 55 | 51 | 60 | 54 | 50 | 59 | 54 | 50 | 58 | 53 | 50 | 48 | | | | | | | | | | | | | | | | | | | | |
| 9 | 69 | 58 | 52 | 47 | 68 | 58 | 51 | 47 | 57 | 51 | 47 | 56 | 50 | 47 | 55 | 50 | 46 | 45 | | | | | | | | | | | | | | | | | | | | |
| 10 | 66 | 55 | 48 | 44 | 64 | 54 | 48 | 44 | 53 | 48 | 44 | 53 | 47 | 43 | 52 | 47 | 43 | 42 | | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 11317 | 11317 | 11317 |
| 5° | 10869 | 11069 | 11286 |
| 10° | 10021 | 10461 | 11012 |
| 15° | 8979 | 9598 | 10516 |
| 20° | 7880 | 8536 | 9653 |
| 25° | 6672 | 7372 | 8710 |
| 30° | 5352 | 6188 | 7756 |
| 35° | 3956 | 4951 | 6720 |
| 40° | 2481 | 3876 | 5461 |
| 45° | 973 | 2920 | 4045 |
| 50° | 479 | 1972 | 2477 |
| 55° | 380 | 1293 | 1103 |
| 60° | 288 | 1052 | 1015 |
| 65° | 214 | 987 | 987 |
| 70° | 264 | 1003 | 1003 |
| 75° | 278 | 1119 | 1048 |
| 80° | 414 | 1456 | 1148 |
| 85° | 826 | 2498 | 1651 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 4569 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 56.0 | 8.4 |
| 10°-20° | 141.6 | 21.2 |
| 20°-30° | 169.4 | 25.4 |
| 30°-40° | 142.6 | 21.4 |
| 40°-50° | 81.2 | 12.2 |
| 50°-60° | 32.0 | 4.8 |
| 60°-70° | 20.2 | 3.0 |
| 70°-80° | 15.0 | 2.2 |
| 80°-90° | 9.5 | 1.4 |
| 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° | 367.0 | 55.0 |
| 0°-40° | 509.6 | 76.3 |
| 0°-60° | 622.8 | 93.3 |
| 0°-90° | 667.5 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 667.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 613 | 613 | 613 | 613 | 613 | |
| 5° | 587 | 600 | 598 | 604 | 609 | 54 |
| 15° | 470 | 487 | 502 | 532 | 550 | 131 |
| 25° | 328 | 342 | 362 | 399 | 428 | 149 |
| 35° | 176 | 191 | 220 | 267 | 298 | 109 |
| 45° | 37 | 66 | 112 | 140 | 155 | 35 |
| 55° | 12 | 26 | 40 | 41 | 34 | 11 |
| 65° | 5 | 23 | 23 | 22 | 23 | 5 |
| 75° | 4 | 16 | 16 | 15 | 15 | 4 |
| 85° | 4 | 11 | 12 | 11 | 8 | 3 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1058043

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 613.3 | 613.3 | 613.3 | 613.3 | 613.3 |
| 2.5° | 603.4 | 614.2 | 607.4 | 608.3 | 609.3 |
| 5° | 586.8 | 599.5 | 597.6 | 604.4 | 609.3 |
| 7.5° | 562.2 | 576.0 | 580.9 | 592.7 | 601.5 |
| 10° | 534.8 | 550.5 | 558.3 | 577.0 | 587.7 |
| 12.5° | 503.4 | 521.0 | 532.8 | 556.3 | 572.0 |
| 15° | 470.0 | 486.7 | 502.4 | 531.8 | 550.5 |
| 17.5° | 436.6 | 453.3 | 470.0 | 502.4 | 522.0 |
| 20° | 401.3 | 417.0 | 434.7 | 469.0 | 491.6 |
| 22.5° | 364.0 | 380.7 | 398.4 | 433.7 | 461.2 |
| 25° | 327.7 | 342.4 | 362.1 | 399.4 | 427.8 |
| 27.5° | 289.5 | 304.2 | 325.8 | 364.0 | 394.4 |
| 30° | 251.2 | 265.9 | 290.4 | 329.7 | 364.0 |
| 32.5° | 212.9 | 228.6 | 255.1 | 298.3 | 332.6 |
| 35° | 175.6 | 191.3 | 219.8 | 266.9 | 298.3 |
| 37.5° | 139.3 | 157.0 | 188.4 | 234.5 | 263.9 |
| 40° | 103.0 | 123.6 | 160.9 | 202.1 | 226.7 |
| 42.5° | 68.7 | 94.2 | 135.4 | 169.7 | 190.4 |
| 45° | 37.3 | 65.7 | 111.9 | 140.3 | 155.0 |
| 47.5° | 20.6 | 42.2 | 89.3 | 111.9 | 120.7 |
| 50° | 16.7 | 29.4 | 68.7 | 85.4 | 86.3 |
| 52.5° | 13.7 | 26.5 | 51.0 | 60.8 | 55.9 |
| 55° | 11.8 | 25.5 | 40.2 | 41.2 | 34.3 |
| 57.5° | 9.8 | 24.5 | 33.4 | 29.4 | 29.4 |
| 60° | 7.8 | 24.5 | 28.5 | 26.5 | 27.5 |
| 62.5° | 5.9 | 24.5 | 25.5 | 23.5 | 24.5 |
| 65° | 4.9 | 22.6 | 22.6 | 21.6 | 22.6 |
| 67.5° | 4.9 | 20.6 | 20.6 | 19.6 | 20.6 |
| 70° | 4.9 | 19.6 | 18.6 | 18.6 | 18.6 |
| 72.5° | 3.9 | 17.7 | 17.7 | 16.7 | 16.7 |
| 75° | 3.9 | 15.7 | 15.7 | 14.7 | 14.7 |
| 77.5° | 3.9 | 14.7 | 14.7 | 13.7 | 12.8 |
| 80° | 3.9 | 12.8 | 13.7 | 12.8 | 10.8 |
| 82.5° | 3.9 | 11.8 | 12.8 | 11.8 | 8.8 |
| 85° | 3.9 | 10.8 | 11.8 | 10.8 | 7.8 |
| 87.5° | 2.9 | 10.8 | 10.8 | 8.8 | 5.9 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)