

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: P1059382

Luminaire Tested: S123RDR-S775D935-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059382
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-30)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S775D935-X4F0-XX-UDD-BVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

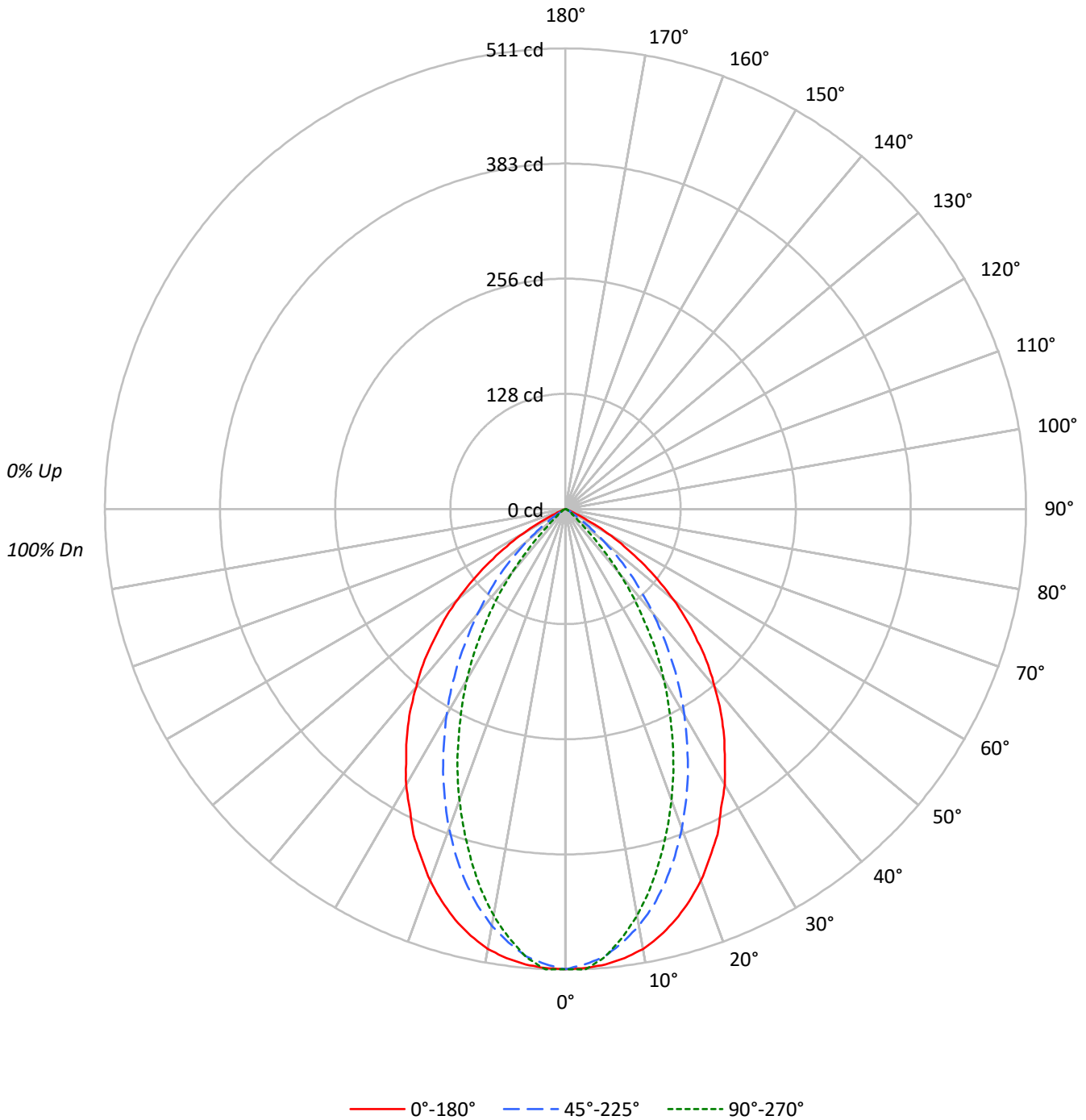
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 582.7 lumens
Efficiency: N/A
Efficacy: 22.6 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 0.81 / 0.94
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 | | | | 100 |
| 1 | 113 | 110 | 107 | 104 | 110 | 107 | 105 | 103 | 103 | 101 | 100 | 100 | 98 | 97 | 96 | 95 | 94 | 92 | | | | 92 |
| 2 | 106 | 101 | 96 | 92 | 104 | 99 | 95 | 91 | 96 | 92 | 89 | 93 | 90 | 87 | 90 | 87 | 85 | 84 | | | | 84 |
| 3 | 100 | 92 | 87 | 82 | 98 | 91 | 86 | 82 | 88 | 84 | 80 | 86 | 82 | 79 | 83 | 80 | 78 | 76 | | | | 76 |
| 4 | 94 | 85 | 79 | 74 | 92 | 84 | 78 | 74 | 82 | 77 | 73 | 80 | 75 | 72 | 78 | 74 | 71 | 69 | | | | 69 |
| 5 | 88 | 79 | 72 | 67 | 86 | 78 | 71 | 67 | 76 | 70 | 66 | 74 | 69 | 65 | 72 | 68 | 65 | 63 | | | | 63 |
| 6 | 83 | 73 | 66 | 61 | 81 | 72 | 66 | 61 | 70 | 65 | 60 | 69 | 64 | 60 | 67 | 63 | 60 | 58 | | | | 58 |
| 7 | 78 | 68 | 61 | 56 | 77 | 67 | 60 | 56 | 66 | 60 | 56 | 64 | 59 | 55 | 63 | 58 | 55 | 53 | | | | 53 |
| 8 | 74 | 63 | 56 | 52 | 72 | 62 | 56 | 51 | 61 | 55 | 51 | 60 | 55 | 51 | 59 | 54 | 51 | 49 | | | | 49 |
| 9 | 70 | 59 | 52 | 48 | 68 | 58 | 52 | 48 | 57 | 52 | 47 | 56 | 51 | 47 | 55 | 51 | 47 | 46 | | | | 46 |
| 10 | 66 | 55 | 49 | 44 | 65 | 55 | 48 | 44 | 54 | 48 | 44 | 53 | 48 | 44 | 52 | 47 | 44 | 42 | | | | 42 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 5996 | 5996 | 5996 |
| 5° | 5980 | 5874 | 5883 |
| 10° | 5912 | 5598 | 5461 |
| 15° | 5738 | 5208 | 4908 |
| 20° | 5487 | 4716 | 4295 |
| 25° | 5167 | 4165 | 3633 |
| 30° | 4794 | 3578 | 2965 |
| 35° | 4397 | 2959 | 2205 |
| 40° | 3946 | 2319 | 1412 |
| 45° | 3441 | 1694 | 588 |
| 50° | 2853 | 1007 | 225 |
| 55° | 2105 | 422 | 168 |
| 60° | 1275 | 155 | 96 |
| 65° | 342 | 92 | 44 |
| 70° | 0 | 27 | 27 |
| 75° | 0 | 0 | 36 |
| 80° | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3441 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 47.0 | 8.1 |
| 10°-20° | 121.3 | 20.8 |
| 20°-30° | 151.2 | 25.9 |
| 30°-40° | 135.2 | 23.2 |
| 40°-50° | 85.3 | 14.6 |
| 50°-60° | 35.7 | 6.1 |
| 60°-70° | 6.7 | 1.1 |
| 70°-80° | 0.2 | 0.0 |
| 80°-90° | 0.0 | 0.0 |
| 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° | 319.5 | 54.8 |
| 0°-40° | 454.7 | 78.0 |
| 0°-60° | 575.7 | 98.8 |
| 0°-90° | 582.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 582.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 511 | 511 | 511 | 511 | 511 | |
| 5° | 507 | 506 | 498 | 500 | 499 | 48 |
| 15° | 472 | 460 | 428 | 410 | 404 | 132 |
| 25° | 399 | 367 | 322 | 294 | 280 | 183 |
| 35° | 307 | 262 | 206 | 169 | 154 | 191 |
| 45° | 207 | 161 | 102 | 54 | 35 | 160 |
| 55° | 103 | 71 | 21 | 8 | 8 | 92 |
| 65° | 12 | 9 | 3 | 2 | 2 | 17 |
| 75° | 0 | 0 | 0 | 0 | 1 | 0 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1059382

CATALOG NUMBER: S123RDR-S775D935-X4F0-XX-UDD-BVL-B

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 510.6 | 510.6 | 510.6 | 510.6 | 510.6 |
| 2.5° | 509.8 | 510.6 | 505.7 | 510.6 | 511.4 |
| 5° | 507.3 | 506.5 | 498.3 | 499.9 | 499.1 |
| 7.5° | 502.4 | 499.9 | 485.1 | 481.8 | 480.2 |
| 10° | 495.8 | 489.2 | 469.5 | 461.3 | 458.0 |
| 12.5° | 485.1 | 476.1 | 450.6 | 437.4 | 432.5 |
| 15° | 472.0 | 460.5 | 428.4 | 410.3 | 403.7 |
| 17.5° | 456.4 | 439.9 | 403.7 | 384.0 | 374.1 |
| 20° | 439.1 | 416.1 | 377.4 | 353.6 | 343.7 |
| 22.5° | 418.5 | 393.0 | 349.5 | 324.0 | 313.3 |
| 25° | 398.8 | 366.7 | 321.5 | 293.5 | 280.4 |
| 27.5° | 374.1 | 340.4 | 291.9 | 263.1 | 249.1 |
| 30° | 353.6 | 314.9 | 263.9 | 231.9 | 218.7 |
| 32.5° | 328.9 | 288.6 | 235.2 | 199.8 | 187.5 |
| 35° | 306.7 | 262.3 | 206.4 | 169.4 | 153.8 |
| 37.5° | 282.9 | 236.8 | 177.6 | 139.0 | 124.2 |
| 40° | 257.4 | 211.3 | 151.3 | 108.5 | 92.1 |
| 42.5° | 234.3 | 185.8 | 125.0 | 80.6 | 64.1 |
| 45° | 207.2 | 161.2 | 102.0 | 54.3 | 35.4 |
| 47.5° | 182.5 | 138.1 | 77.3 | 30.4 | 18.9 |
| 50° | 156.2 | 114.3 | 55.1 | 15.6 | 12.3 |
| 52.5° | 129.1 | 91.3 | 36.2 | 10.7 | 9.9 |
| 55° | 102.8 | 70.7 | 20.6 | 8.2 | 8.2 |
| 57.5° | 77.3 | 51.0 | 10.7 | 6.6 | 5.8 |
| 60° | 54.3 | 33.7 | 6.6 | 4.9 | 4.1 |
| 62.5° | 31.2 | 19.7 | 4.9 | 3.3 | 3.3 |
| 65° | 12.3 | 9.0 | 3.3 | 1.6 | 1.6 |
| 67.5° | 0.8 | 2.5 | 1.6 | 0.8 | 0.8 |
| 70° | 0.0 | 0.0 | 0.8 | 0.8 | 0.8 |
| 72.5° | 0.0 | 0.0 | 0.8 | 0.8 | 0.8 |
| 75° | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 |
| 77.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)