

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: P1061616

Luminaire Tested: S125RDR-S375D840-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061616
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-S375D840-X4F0-XX-UDD-BVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

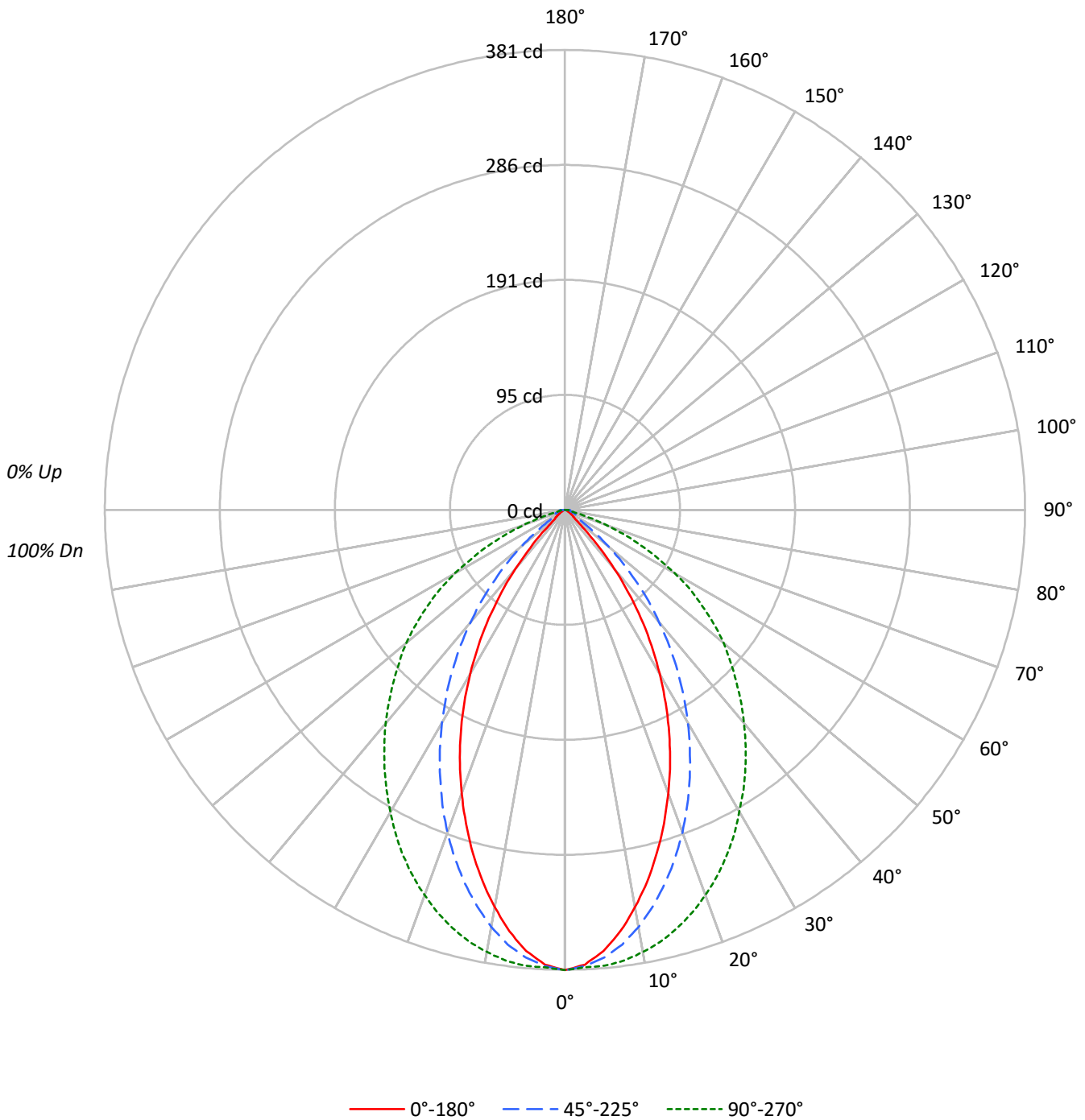
Lumens per Lamp: N/A
Luminaire Lumens: 493.3 lumens
Efficiency: N/A
Efficacy: 39.5 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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 | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 101 | 102 | 100 | 98 | 98 | 96 | 95 | 95 | 93 | 92 | 90 | | | | 90 |
| 2 | 104 | 98 | 93 | 89 | 102 | 97 | 92 | 88 | 93 | 89 | 86 | 90 | 87 | 84 | 87 | 85 | 82 | 80 | | | | 80 |
| 3 | 98 | 89 | 83 | 78 | 95 | 88 | 82 | 78 | 85 | 80 | 76 | 83 | 79 | 75 | 80 | 77 | 74 | 72 | | | | 72 |
| 4 | 91 | 82 | 75 | 70 | 89 | 81 | 74 | 69 | 78 | 73 | 68 | 76 | 71 | 67 | 74 | 70 | 67 | 65 | | | | 65 |
| 5 | 85 | 75 | 68 | 63 | 83 | 74 | 67 | 62 | 72 | 66 | 62 | 70 | 65 | 61 | 69 | 64 | 60 | 59 | | | | 59 |
| 6 | 80 | 69 | 62 | 57 | 78 | 68 | 61 | 56 | 67 | 60 | 56 | 65 | 60 | 56 | 64 | 59 | 55 | 53 | | | | 53 |
| 7 | 75 | 64 | 57 | 52 | 74 | 63 | 56 | 51 | 62 | 56 | 51 | 60 | 55 | 51 | 59 | 54 | 50 | 49 | | | | 49 |
| 8 | 71 | 59 | 52 | 47 | 69 | 59 | 52 | 47 | 58 | 51 | 47 | 56 | 51 | 47 | 55 | 50 | 46 | 45 | | | | 45 |
| 9 | 67 | 55 | 48 | 44 | 65 | 55 | 48 | 44 | 54 | 48 | 43 | 53 | 47 | 43 | 52 | 47 | 43 | 41 | | | | 41 |
| 10 | 63 | 52 | 45 | 40 | 62 | 51 | 45 | 40 | 50 | 44 | 40 | 49 | 44 | 40 | 49 | 44 | 40 | 38 | | | | 38 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2625 | 2625 | 2625 |
| 5° | 2536 | 2574 | 2621 |
| 10° | 2337 | 2453 | 2601 |
| 15° | 2099 | 2283 | 2558 |
| 20° | 1832 | 2083 | 2490 |
| 25° | 1551 | 1857 | 2404 |
| 30° | 1247 | 1617 | 2297 |
| 35° | 922 | 1364 | 2190 |
| 40° | 572 | 1089 | 2075 |
| 45° | 223 | 797 | 1951 |
| 50° | 104 | 499 | 1838 |
| 55° | 77 | 214 | 1669 |
| 60° | 52 | 151 | 1447 |
| 65° | 34 | 158 | 1126 |
| 70° | 34 | 145 | 709 |
| 75° | 45 | 146 | 226 |
| 80° | 67 | 167 | 151 |
| 85° | 103 | 332 | 237 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1951 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 35.0 | 7.1 |
| 10°-20° | 90.6 | 18.4 |
| 20°-30° | 115.4 | 23.4 |
| 30°-40° | 107.4 | 21.8 |
| 40°-50° | 73.9 | 15.0 |
| 50°-60° | 41.9 | 8.5 |
| 60°-70° | 19.8 | 4.0 |
| 70°-80° | 6.2 | 1.3 |
| 80°-90° | 3.2 | 0.7 |
| 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° | 241.0 | 48.8 |
| 0°-40° | 348.4 | 70.6 |
| 0°-60° | 464.2 | 94.1 |
| 0°-90° | 493.3 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 493.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 381 | 381 | 381 | 381 | 381 | |
| 5° | 367 | 372 | 372 | 376 | 379 | 34 |
| 15° | 294 | 304 | 320 | 344 | 359 | 82 |
| 25° | 204 | 217 | 244 | 286 | 316 | 93 |
| 35° | 110 | 125 | 162 | 218 | 261 | 68 |
| 45° | 23 | 36 | 82 | 148 | 200 | 22 |
| 55° | 6 | 7 | 18 | 85 | 139 | 6 |
| 65° | 2 | 2 | 10 | 30 | 69 | 2 |
| 75° | 2 | 4 | 6 | 6 | 8 | 2 |
| 85° | 1 | 3 | 4 | 4 | 3 | 1 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1061616

CATALOG NUMBER: S125RDR-S375D840-X4F0-XX-UDD-BVL-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 381.3 | 381.3 | 381.3 | 381.3 | 381.3 |
| 2.5° | 377.1 | 380.9 | 378.3 | 378.8 | 379.2 |
| 5° | 366.9 | 372.0 | 372.4 | 375.8 | 379.2 |
| 7.5° | 352.1 | 358.4 | 363.1 | 371.1 | 376.6 |
| 10° | 334.3 | 341.9 | 350.8 | 363.9 | 372.0 |
| 12.5° | 315.2 | 324.1 | 336.4 | 355.0 | 366.5 |
| 15° | 294.4 | 304.2 | 320.3 | 344.4 | 358.8 |
| 17.5° | 272.4 | 283.4 | 302.9 | 331.7 | 350.0 |
| 20° | 250.0 | 261.8 | 284.3 | 317.3 | 339.8 |
| 22.5° | 227.5 | 239.8 | 264.8 | 301.7 | 328.8 |
| 25° | 204.2 | 217.3 | 244.5 | 285.6 | 316.5 |
| 27.5° | 180.5 | 194.0 | 224.1 | 269.0 | 303.3 |
| 30° | 156.8 | 171.2 | 203.4 | 252.1 | 288.9 |
| 32.5° | 133.5 | 147.9 | 183.0 | 235.1 | 275.0 |
| 35° | 109.7 | 125.0 | 162.3 | 217.8 | 260.6 |
| 37.5° | 86.0 | 102.5 | 141.9 | 200.0 | 245.7 |
| 40° | 63.6 | 79.2 | 121.2 | 182.6 | 230.9 |
| 42.5° | 42.4 | 57.6 | 102.5 | 165.2 | 215.6 |
| 45° | 22.9 | 36.4 | 81.8 | 147.9 | 200.4 |
| 47.5° | 12.3 | 19.5 | 64.0 | 130.9 | 185.6 |
| 50° | 9.7 | 11.0 | 46.6 | 115.2 | 171.6 |
| 52.5° | 8.0 | 8.9 | 30.5 | 100.4 | 155.5 |
| 55° | 6.4 | 7.2 | 17.8 | 85.2 | 139.0 |
| 57.5° | 5.1 | 5.9 | 11.4 | 70.8 | 122.9 |
| 60° | 3.8 | 4.7 | 11.0 | 56.8 | 105.1 |
| 62.5° | 3.0 | 3.4 | 10.2 | 43.6 | 86.4 |
| 65° | 2.1 | 2.5 | 9.7 | 30.5 | 69.1 |
| 67.5° | 1.7 | 2.1 | 8.9 | 19.5 | 51.7 |
| 70° | 1.7 | 1.7 | 7.2 | 12.7 | 35.2 |
| 72.5° | 1.7 | 3.0 | 6.4 | 8.5 | 21.2 |
| 75° | 1.7 | 3.8 | 5.5 | 5.9 | 8.5 |
| 77.5° | 1.7 | 4.2 | 4.7 | 4.7 | 4.7 |
| 80° | 1.7 | 3.8 | 4.2 | 4.2 | 3.8 |
| 82.5° | 1.7 | 3.4 | 3.8 | 4.2 | 3.4 |
| 85° | 1.3 | 3.4 | 4.2 | 3.8 | 3.0 |
| 87.5° | 1.3 | 3.4 | 3.8 | 3.4 | 2.1 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)