

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: P1056421

Luminaire Tested: S125R3DR-S375D850-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056421
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-11)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125R3DR-S375D850-X4F0-XX-UDD-FLL-B
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

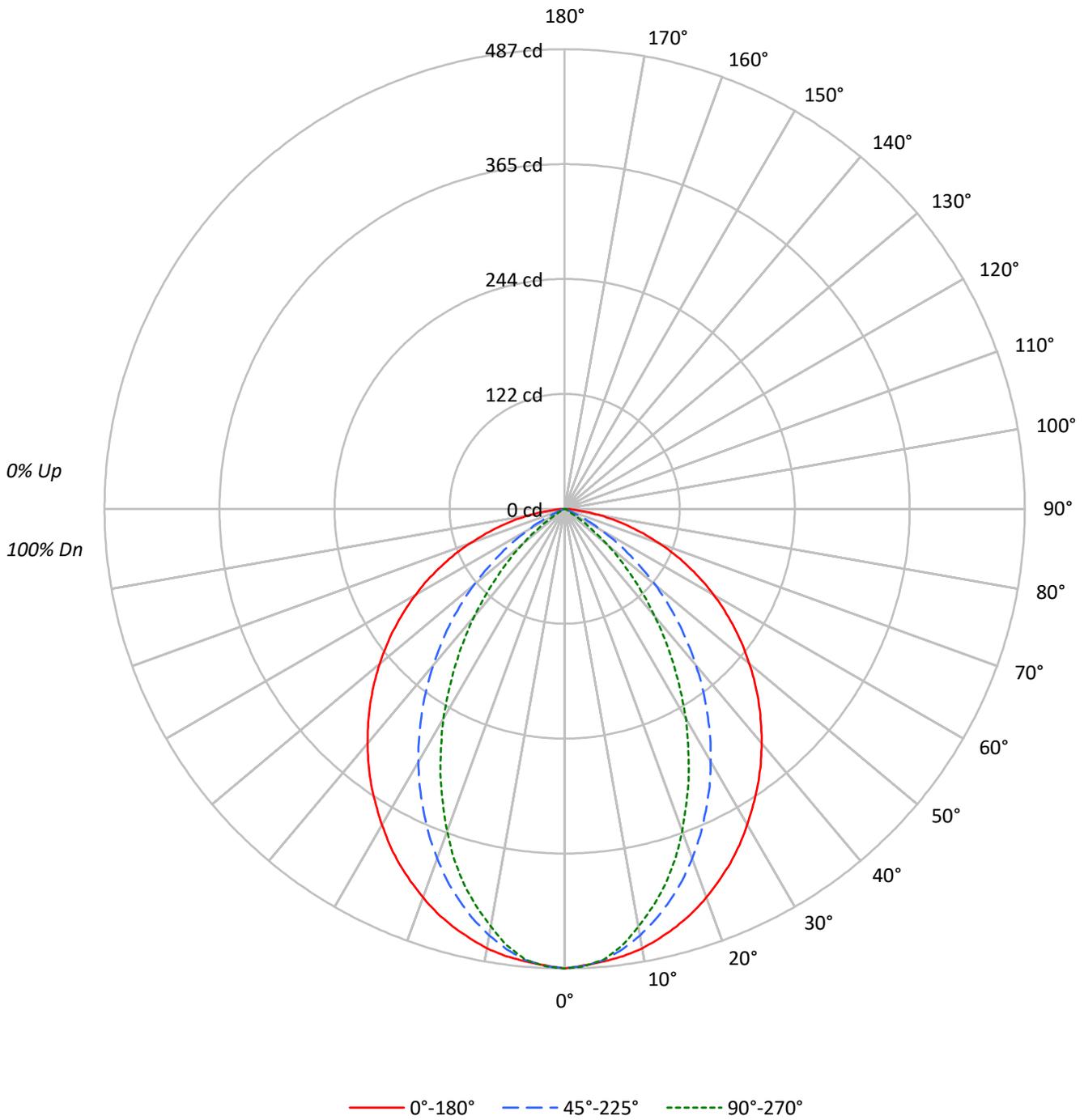
Lumens per Lamp: N/A
Luminaire Lumens: 789.4 lumens
Efficiency: N/A
Efficacy: 62.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.89 / 1.07
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 12.6
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 | 111 | 108 | 104 | 101 | 109 | 106 | 103 | 100 | 101 | 99 | 97 | 98 | 96 | 94 | 94 | 93 | 91 | 89 | | | | 89 |
| 2 | 103 | 97 | 91 | 87 | 101 | 95 | 90 | 86 | 92 | 88 | 84 | 89 | 85 | 82 | 86 | 83 | 80 | 78 | | | | 78 |
| 3 | 96 | 87 | 81 | 75 | 94 | 86 | 80 | 75 | 83 | 78 | 74 | 80 | 76 | 72 | 78 | 74 | 71 | 69 | | | | 69 |
| 4 | 89 | 79 | 72 | 66 | 87 | 78 | 71 | 66 | 76 | 70 | 65 | 73 | 68 | 64 | 71 | 67 | 63 | 61 | | | | 61 |
| 5 | 83 | 72 | 64 | 59 | 81 | 71 | 64 | 58 | 69 | 63 | 58 | 67 | 62 | 57 | 65 | 61 | 57 | 55 | | | | 55 |
| 6 | 77 | 66 | 58 | 53 | 76 | 65 | 58 | 52 | 63 | 57 | 52 | 62 | 56 | 52 | 60 | 55 | 51 | 49 | | | | 49 |
| 7 | 72 | 61 | 53 | 47 | 71 | 60 | 52 | 47 | 58 | 52 | 47 | 57 | 51 | 47 | 56 | 50 | 46 | 45 | | | | 45 |
| 8 | 68 | 56 | 48 | 43 | 66 | 55 | 48 | 43 | 54 | 47 | 43 | 53 | 47 | 43 | 52 | 46 | 42 | 41 | | | | 41 |
| 9 | 64 | 52 | 44 | 39 | 62 | 51 | 44 | 39 | 50 | 44 | 39 | 49 | 43 | 39 | 48 | 43 | 39 | 37 | | | | 37 |
| 10 | 60 | 48 | 41 | 36 | 59 | 48 | 41 | 36 | 47 | 40 | 36 | 46 | 40 | 36 | 45 | 40 | 36 | 34 | | | | 34 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 3443 | 3443 | 3443 |
| 5° | 3415 | 3405 | 3401 |
| 10° | 3395 | 3296 | 3226 |
| 15° | 3353 | 3148 | 3013 |
| 20° | 3297 | 2967 | 2735 |
| 25° | 3234 | 2756 | 2425 |
| 30° | 3156 | 2526 | 2096 |
| 35° | 3078 | 2271 | 1733 |
| 40° | 2994 | 1996 | 1372 |
| 45° | 2905 | 1704 | 994 |
| 50° | 2808 | 1375 | 642 |
| 55° | 2700 | 1006 | 286 |
| 60° | 2573 | 621 | 82 |
| 65° | 2414 | 226 | 49 |
| 70° | 2185 | 81 | 21 |
| 75° | 1898 | 27 | 14 |
| 80° | 1453 | 20 | 0 |
| 85° | 665 | 0 | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2905 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 45.2 | 5.7 |
| 10°-20° | 121.5 | 15.4 |
| 20°-30° | 164.3 | 20.8 |
| 30°-40° | 168.8 | 21.4 |
| 40°-50° | 139.9 | 17.7 |
| 50°-60° | 89.8 | 11.4 |
| 60°-70° | 43.4 | 5.5 |
| 70°-80° | 14.7 | 1.9 |
| 80°-90° | 1.9 | 0.2 |
| 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° | 331.0 | 41.9 |
| 0°-40° | 499.8 | 63.3 |
| 0°-60° | 729.5 | 92.4 |
| 0°-90° | 789.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 789.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 487 | 487 | 487 | 487 | 487 | |
| 5° | 481 | 485 | 480 | 477 | 479 | 46 |
| 15° | 458 | 452 | 430 | 415 | 412 | 129 |
| 25° | 415 | 394 | 353 | 322 | 311 | 191 |
| 35° | 357 | 322 | 263 | 217 | 201 | 223 |
| 45° | 291 | 243 | 170 | 118 | 99 | 224 |
| 55° | 219 | 161 | 82 | 36 | 23 | 196 |
| 65° | 144 | 80 | 14 | 4 | 3 | 143 |
| 75° | 70 | 15 | 1 | 0 | 0 | 74 |
| 85° | 8 | 0 | 0 | 0 | 0 | 13 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1056421

CATALOG NUMBER: S125R3DR-S375D850-X4F0-XX-UDD-FLL-B

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 487.0 | 487.0 | 487.0 | 487.0 | 487.0 |
| 2.5° | 484.2 | 488.0 | 484.6 | 484.2 | 485.1 |
| 5° | 481.3 | 485.1 | 479.8 | 476.9 | 479.3 |
| 7.5° | 477.9 | 479.8 | 470.6 | 465.8 | 466.8 |
| 10° | 473.0 | 472.6 | 459.1 | 450.8 | 449.4 |
| 12.5° | 465.8 | 463.4 | 445.5 | 433.9 | 431.5 |
| 15° | 458.1 | 452.3 | 430.1 | 415.1 | 411.7 |
| 17.5° | 448.9 | 439.7 | 413.2 | 393.9 | 389.1 |
| 20° | 438.3 | 425.7 | 394.4 | 370.7 | 363.5 |
| 22.5° | 426.7 | 410.8 | 374.6 | 346.6 | 336.9 |
| 25° | 414.6 | 394.4 | 353.3 | 321.5 | 310.9 |
| 27.5° | 401.1 | 377.5 | 332.1 | 295.9 | 282.9 |
| 30° | 386.6 | 359.6 | 309.4 | 269.8 | 256.8 |
| 32.5° | 371.7 | 341.8 | 286.7 | 243.8 | 227.8 |
| 35° | 356.7 | 322.4 | 263.1 | 217.2 | 200.8 |
| 37.5° | 340.8 | 303.1 | 239.9 | 192.1 | 174.3 |
| 40° | 324.4 | 283.3 | 216.3 | 166.0 | 148.7 |
| 42.5° | 307.5 | 263.1 | 192.6 | 141.4 | 123.6 |
| 45° | 290.6 | 242.8 | 170.4 | 117.8 | 99.4 |
| 47.5° | 273.2 | 222.0 | 147.2 | 94.6 | 78.7 |
| 50° | 255.3 | 201.8 | 125.0 | 73.9 | 58.4 |
| 52.5° | 237.5 | 181.0 | 102.3 | 53.6 | 39.6 |
| 55° | 219.1 | 160.7 | 81.6 | 35.7 | 23.2 |
| 57.5° | 200.8 | 140.0 | 62.3 | 19.8 | 8.7 |
| 60° | 182.0 | 120.2 | 43.9 | 6.8 | 5.8 |
| 62.5° | 163.6 | 99.0 | 27.5 | 5.3 | 4.3 |
| 65° | 144.3 | 79.6 | 13.5 | 3.9 | 2.9 |
| 67.5° | 125.5 | 61.3 | 5.8 | 2.4 | 1.4 |
| 70° | 105.7 | 44.4 | 3.9 | 1.4 | 1.0 |
| 72.5° | 87.4 | 28.5 | 2.4 | 1.0 | 0.5 |
| 75° | 69.5 | 15.0 | 1.0 | 0.5 | 0.5 |
| 77.5° | 52.1 | 6.3 | 0.5 | 0.5 | 0.5 |
| 80° | 35.7 | 2.9 | 0.5 | 0.5 | 0.0 |
| 82.5° | 21.2 | 1.0 | 0.5 | 0.5 | 0.0 |
| 85° | 8.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)