

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: P1175368

Luminaire Tested: S125RDR-S375D850-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1175368  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-82)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/18/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-S375D850-X4F0-XX-UDD-WVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

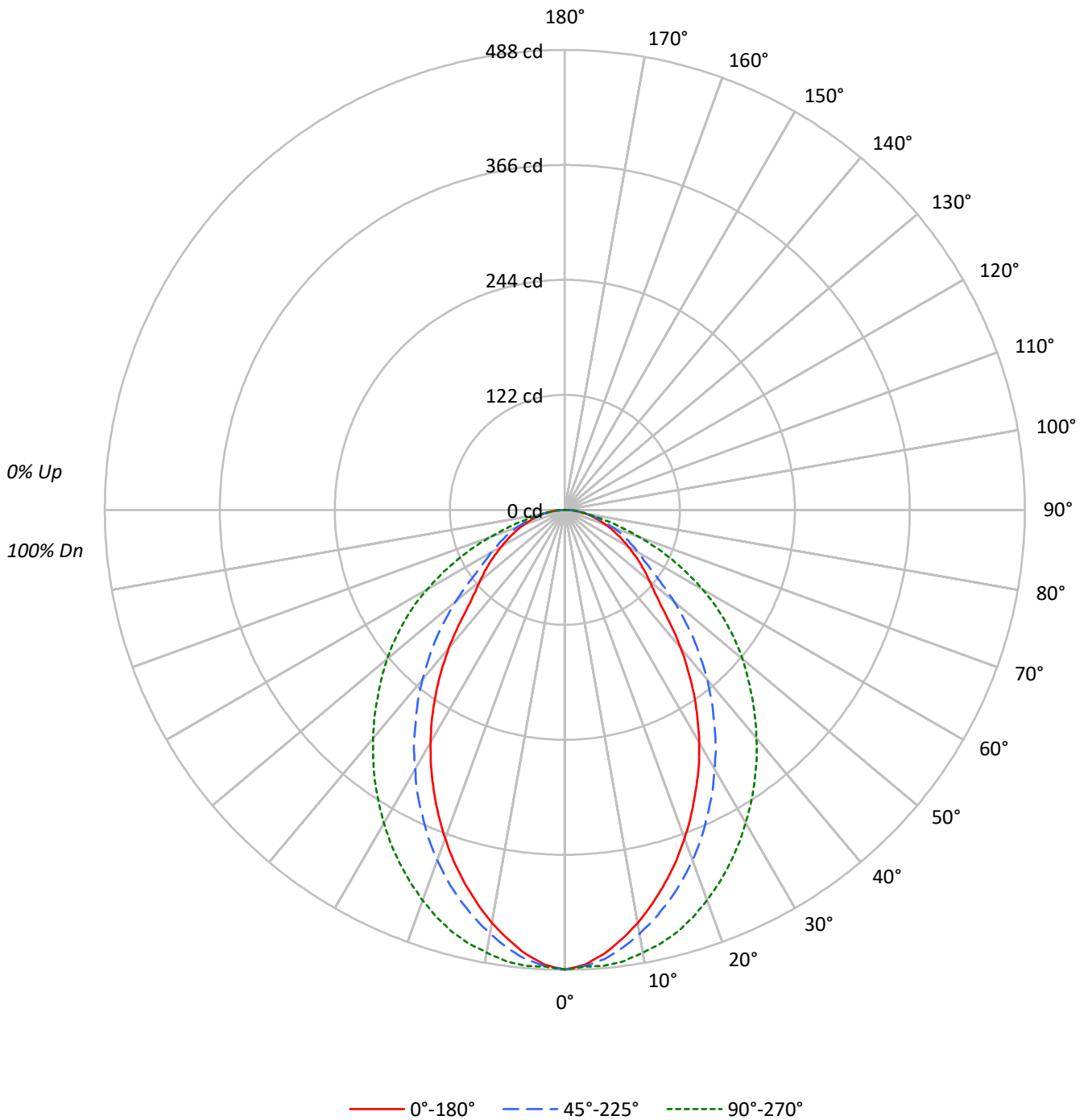
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 918.9 lumens  
Efficiency: N/A  
Efficacy: 73.5 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12  
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 |    |    |    |   |
| 1   | 110 | 106 | 102 | 99  | 107 | 104 | 100 | 97  | 99  | 97  | 94  | 96  | 93  | 91  | 92  | 90  | 88  | 86  |    |    |    |   |
| 2   | 101 | 94  | 88  | 83  | 99  | 92  | 86  | 82  | 89  | 84  | 80  | 85  | 81  | 78  | 82  | 79  | 76  | 74  |    |    |    |   |
| 3   | 93  | 84  | 76  | 71  | 91  | 82  | 75  | 70  | 79  | 73  | 69  | 77  | 72  | 68  | 74  | 70  | 66  | 64  |    |    |    |   |
| 4   | 86  | 75  | 67  | 61  | 84  | 74  | 66  | 61  | 72  | 65  | 60  | 69  | 64  | 59  | 67  | 62  | 58  | 56  |    |    |    |   |
| 5   | 80  | 68  | 60  | 54  | 78  | 67  | 59  | 53  | 65  | 58  | 53  | 63  | 57  | 52  | 61  | 56  | 52  | 50  |    |    |    |   |
| 6   | 74  | 62  | 54  | 48  | 72  | 61  | 53  | 47  | 59  | 52  | 47  | 58  | 51  | 47  | 56  | 51  | 46  | 44  |    |    |    |   |
| 7   | 69  | 57  | 48  | 43  | 68  | 56  | 48  | 43  | 54  | 47  | 42  | 53  | 47  | 42  | 52  | 46  | 42  | 40  |    |    |    |   |
| 8   | 65  | 52  | 44  | 39  | 63  | 51  | 44  | 39  | 50  | 43  | 38  | 49  | 43  | 38  | 48  | 42  | 38  | 36  |    |    |    |   |
| 9   | 61  | 48  | 40  | 35  | 59  | 48  | 40  | 35  | 46  | 40  | 35  | 45  | 39  | 35  | 44  | 39  | 35  | 33  |    |    |    |   |
| 10  | 57  | 45  | 37  | 32  | 56  | 44  | 37  | 32  | 43  | 37  | 32  | 42  | 36  | 32  | 41  | 36  | 32  | 30  |    |    |    |   |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 3358 | 3358 | 3358 |
| 5°  | 3271 | 3308 | 3357 |
| 10° | 3112 | 3193 | 3335 |
| 15° | 2925 | 3057 | 3302 |
| 20° | 2718 | 2900 | 3231 |
| 25° | 2497 | 2717 | 3145 |
| 30° | 2265 | 2525 | 3051 |
| 35° | 2005 | 2322 | 2951 |
| 40° | 1719 | 2110 | 2843 |
| 45° | 1411 | 1878 | 2733 |
| 50° | 1255 | 1614 | 2638 |
| 55° | 1158 | 1352 | 2505 |
| 60° | 1066 | 1231 | 2320 |
| 65° | 992  | 1160 | 2051 |
| 70° | 926  | 1083 | 1675 |
| 75° | 870  | 1003 | 1256 |
| 80° | 821  | 920  | 904  |
| 85° | 750  | 916  | 750  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2733 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 45.2   | 4.9       |
| 10°-20°   | 121.7  | 13.2      |
| 20°-30°   | 167.4  | 18.2      |
| 30°-40°   | 177.6  | 19.3      |
| 40°-50°   | 155.4  | 16.9      |
| 50°-60°   | 119.3  | 13.0      |
| 60°-70°   | 79.4   | 8.6       |
| 70°-80°   | 40.7   | 4.4       |
| 80°-90°   | 12.1   | 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°    | 334.3  | 36.4      |
| 0°-40°    | 511.9  | 55.7      |
| 0°-60°    | 786.6  | 85.6      |
| 0°-90°    | 918.9  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 918.9  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 488 | 488   | 488 | 488   | 488 |      |
| 5°  | 473 | 479   | 479 | 482   | 486 | 44   |
| 15° | 410 | 420   | 429 | 449   | 463 | 115  |
| 25° | 329 | 340   | 358 | 388   | 414 | 151  |
| 35° | 238 | 250   | 276 | 317   | 351 | 149  |
| 45° | 145 | 157   | 193 | 241   | 281 | 114  |
| 55° | 96  | 98    | 113 | 167   | 209 | 86   |
| 65° | 61  | 61    | 71  | 94    | 126 | 61   |
| 75° | 33  | 35    | 38  | 40    | 47  | 35   |
| 85° | 10  | 11    | 12  | 11    | 10  | 11   |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 487.7 | 487.7 | 487.7 | 487.7 | 487.7 |
| 2.5°  | 483.2 | 488.1 | 484.4 | 484.8 | 485.2 |
| 5°    | 473.2 | 479.4 | 478.6 | 481.9 | 485.7 |
| 7.5°  | 460.0 | 466.6 | 468.7 | 477.0 | 482.8 |
| 10°   | 445.1 | 452.5 | 456.7 | 469.1 | 477.0 |
| 12.5° | 428.1 | 436.8 | 443.4 | 459.6 | 471.2 |
| 15°   | 410.3 | 419.8 | 428.9 | 449.2 | 463.3 |
| 17.5° | 391.3 | 400.8 | 412.8 | 436.0 | 452.9 |
| 20°   | 371.0 | 381.3 | 395.8 | 420.7 | 440.9 |
| 22.5° | 350.3 | 361.0 | 377.6 | 404.9 | 428.1 |
| 25°   | 328.7 | 339.9 | 357.7 | 387.9 | 414.0 |
| 27.5° | 307.6 | 318.0 | 338.7 | 371.0 | 399.5 |
| 30°   | 284.9 | 295.6 | 317.6 | 353.2 | 383.8 |
| 32.5° | 262.1 | 272.8 | 298.1 | 335.4 | 367.7 |
| 35°   | 238.5 | 249.7 | 276.2 | 316.7 | 351.1 |
| 37.5° | 214.9 | 226.5 | 255.9 | 297.7 | 334.1 |
| 40°   | 191.3 | 203.7 | 234.8 | 278.6 | 316.3 |
| 42.5° | 167.3 | 180.5 | 213.2 | 260.0 | 298.9 |
| 45°   | 144.9 | 156.9 | 192.9 | 241.0 | 280.7 |
| 47.5° | 128.8 | 135.8 | 171.4 | 221.5 | 263.3 |
| 50°   | 117.2 | 120.5 | 150.7 | 202.9 | 246.3 |
| 52.5° | 106.8 | 108.9 | 130.4 | 185.5 | 227.7 |
| 55°   | 96.5  | 98.5  | 112.6 | 167.3 | 208.7 |
| 57.5° | 86.5  | 87.8  | 99.4  | 149.0 | 189.6 |
| 60°   | 77.4  | 78.3  | 89.4  | 130.8 | 168.5 |
| 62.5° | 69.1  | 69.6  | 79.9  | 112.2 | 147.4 |
| 65°   | 60.9  | 61.3  | 71.2  | 93.6  | 125.9 |
| 67.5° | 53.4  | 53.4  | 62.9  | 76.6  | 105.2 |
| 70°   | 46.0  | 46.0  | 53.8  | 62.1  | 83.2  |
| 72.5° | 39.3  | 40.2  | 45.5  | 50.1  | 65.0  |
| 75°   | 32.7  | 34.8  | 37.7  | 39.7  | 47.2  |
| 77.5° | 26.5  | 29.0  | 30.2  | 31.1  | 31.5  |
| 80°   | 20.7  | 22.4  | 23.2  | 23.6  | 22.8  |
| 82.5° | 15.3  | 16.6  | 17.0  | 17.0  | 15.7  |
| 85°   | 9.5   | 10.8  | 11.6  | 11.2  | 9.5   |
| 87.5° | 4.6   | 6.2   | 6.6   | 5.8   | 4.6   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)