

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: P1061494

Luminaire Tested: S125RDR-S1090D935-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061494  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-S1090D935-X4F0-XX-UDD-WVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

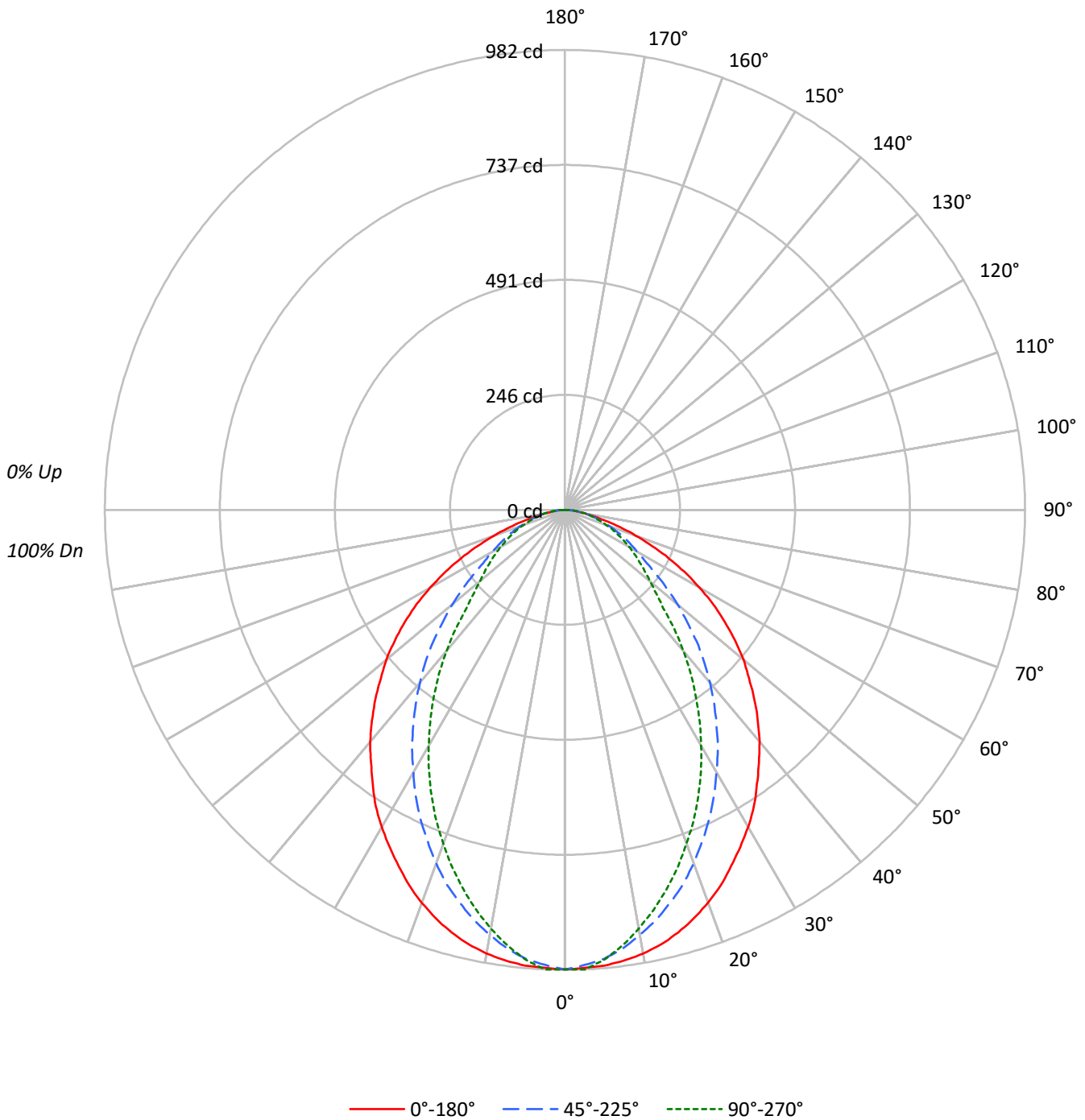
Lumens per Lamp: N/A  
Luminaire Lumens: 1858.7 lumens  
Efficiency: N/A  
Efficacy: 53.1 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 35  
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   | 110 | 106 | 102 | 99  | 108 | 104 | 100 | 97  | 100 | 97  | 94  | 96  | 93  | 91  | 92  | 90  | 89  | 87  |    |    |    | 87  |
| 2   | 101 | 94  | 88  | 83  | 99  | 92  | 87  | 82  | 89  | 84  | 80  | 86  | 82  | 78  | 83  | 80  | 77  | 75  |    |    |    | 75  |
| 3   | 93  | 84  | 77  | 71  | 91  | 82  | 76  | 70  | 80  | 74  | 69  | 77  | 72  | 68  | 74  | 70  | 67  | 65  |    |    |    | 65  |
| 4   | 86  | 76  | 68  | 61  | 84  | 74  | 67  | 61  | 72  | 65  | 60  | 70  | 64  | 59  | 67  | 63  | 59  | 57  |    |    |    | 57  |
| 5   | 80  | 68  | 60  | 54  | 78  | 67  | 59  | 54  | 65  | 58  | 53  | 63  | 57  | 53  | 61  | 56  | 52  | 50  |    |    |    | 50  |
| 6   | 74  | 62  | 54  | 48  | 73  | 61  | 53  | 48  | 59  | 53  | 47  | 58  | 52  | 47  | 56  | 51  | 47  | 45  |    |    |    | 45  |
| 7   | 69  | 57  | 49  | 43  | 68  | 56  | 48  | 43  | 55  | 48  | 43  | 53  | 47  | 42  | 52  | 46  | 42  | 40  |    |    |    | 40  |
| 8   | 65  | 52  | 44  | 39  | 63  | 52  | 44  | 39  | 50  | 43  | 39  | 49  | 43  | 38  | 48  | 42  | 38  | 36  |    |    |    | 36  |
| 9   | 61  | 48  | 41  | 35  | 60  | 48  | 40  | 35  | 47  | 40  | 35  | 46  | 39  | 35  | 45  | 39  | 35  | 33  |    |    |    | 33  |
| 10  | 57  | 45  | 37  | 32  | 56  | 44  | 37  | 32  | 43  | 37  | 32  | 42  | 36  | 32  | 42  | 36  | 32  | 30  |    |    |    | 30  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 6756 | 6756 | 6756 |
| 5°  | 6752 | 6649 | 6664 |
| 10° | 6726 | 6443 | 6346 |
| 15° | 6660 | 6189 | 5976 |
| 20° | 6542 | 5886 | 5558 |
| 25° | 6378 | 5536 | 5115 |
| 30° | 6217 | 5142 | 4625 |
| 35° | 6009 | 4746 | 4101 |
| 40° | 5813 | 4328 | 3533 |
| 45° | 5571 | 3870 | 2894 |
| 50° | 5329 | 3355 | 2533 |
| 55° | 5001 | 2801 | 2341 |
| 60° | 4562 | 2450 | 2185 |
| 65° | 3992 | 2239 | 2030 |
| 70° | 3239 | 2015 | 1888 |
| 75° | 2325 | 1841 | 1758 |
| 80° | 1606 | 1645 | 1645 |
| 85° | 1177 | 1430 | 1517 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5571 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 91.2   | 4.9       |
| 10°-20°   | 246.8  | 13.3      |
| 20°-30°   | 341.1  | 18.3      |
| 30°-40°   | 363.3  | 19.5      |
| 40°-50°   | 319.1  | 17.2      |
| 50°-60°   | 242.0  | 13.0      |
| 60°-70°   | 157.1  | 8.5       |
| 70°-80°   | 77.9   | 4.2       |
| 80°-90°   | 20.4   | 1.1       |
| 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°    | 679.0  | 36.5      |
| 0°-40°    | 1042.3 | 56.1      |
| 0°-60°    | 1603.4 | 86.3      |
| 0°-90°    | 1858.7 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1858.7 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 981 | 981   | 981 | 981   | 981 |      |
| 5°  | 977 | 975   | 962 | 965   | 964 | 93   |
| 15° | 934 | 913   | 868 | 848   | 838 | 263  |
| 25° | 840 | 794   | 729 | 691   | 673 | 387  |
| 35° | 715 | 649   | 565 | 514   | 488 | 447  |
| 45° | 572 | 492   | 397 | 326   | 297 | 441  |
| 55° | 417 | 334   | 233 | 201   | 195 | 372  |
| 65° | 245 | 182   | 137 | 127   | 125 | 242  |
| 75° | 87  | 77    | 69  | 67    | 66  | 97   |
| 85° | 15  | 17    | 18  | 18    | 19  | 18   |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 981.2 | 981.2 | 981.2 | 981.2 | 981.2 |
| 2.5°  | 979.1 | 981.2 | 972.7 | 980.1 | 982.3 |
| 5°    | 976.9 | 974.8 | 962.0 | 965.2 | 964.2 |
| 7.5°  | 970.5 | 966.3 | 945.0 | 942.8 | 938.6 |
| 10°   | 962.0 | 951.4 | 921.5 | 914.1 | 907.7 |
| 12.5° | 950.3 | 933.3 | 897.0 | 882.1 | 874.7 |
| 15°   | 934.3 | 913.0 | 868.3 | 848.0 | 838.4 |
| 17.5° | 915.1 | 885.3 | 838.4 | 810.7 | 800.1 |
| 20°   | 892.8 | 857.6 | 803.3 | 771.3 | 758.5 |
| 22.5° | 868.3 | 826.7 | 766.0 | 731.9 | 718.1 |
| 25°   | 839.5 | 793.7 | 728.7 | 691.4 | 673.3 |
| 27.5° | 810.7 | 759.6 | 689.3 | 647.7 | 628.6 |
| 30°   | 782.0 | 723.4 | 646.7 | 601.9 | 581.7 |
| 32.5° | 751.1 | 686.1 | 607.3 | 558.3 | 534.8 |
| 35°   | 714.9 | 648.8 | 564.6 | 513.5 | 487.9 |
| 37.5° | 679.7 | 609.4 | 523.1 | 465.6 | 441.1 |
| 40°   | 646.7 | 572.1 | 481.5 | 418.7 | 393.1 |
| 42.5° | 609.4 | 532.7 | 440.0 | 373.9 | 345.2 |
| 45°   | 572.1 | 492.2 | 397.4 | 326.0 | 297.2 |
| 47.5° | 532.7 | 453.8 | 352.6 | 282.3 | 263.1 |
| 50°   | 497.5 | 414.4 | 313.2 | 249.3 | 236.5 |
| 52.5° | 457.0 | 376.1 | 272.7 | 223.7 | 215.2 |
| 55°   | 416.6 | 334.5 | 233.3 | 201.4 | 195.0 |
| 57.5° | 375.0 | 297.2 | 202.4 | 182.2 | 175.8 |
| 60°   | 331.3 | 258.9 | 177.9 | 161.9 | 158.7 |
| 62.5° | 287.6 | 219.5 | 156.6 | 144.9 | 140.6 |
| 65°   | 245.0 | 182.2 | 137.4 | 126.8 | 124.6 |
| 67.5° | 201.4 | 148.1 | 118.3 | 110.8 | 109.7 |
| 70°   | 160.9 | 120.4 | 100.1 | 95.9  | 93.8  |
| 72.5° | 123.6 | 95.9  | 84.2  | 81.0  | 79.9  |
| 75°   | 87.4  | 76.7  | 69.2  | 67.1  | 66.1  |
| 77.5° | 58.6  | 58.6  | 55.4  | 53.3  | 54.3  |
| 80°   | 40.5  | 42.6  | 41.5  | 41.5  | 41.5  |
| 82.5° | 26.6  | 28.8  | 29.8  | 29.8  | 29.8  |
| 85°   | 14.9  | 17.0  | 18.1  | 18.1  | 19.2  |
| 87.5° | 5.3   | 6.4   | 7.5   | 8.5   | 8.5   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)