

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: P1004625

Luminaire Tested: S125DR-B610DB2750-4F0-XX-W2A-F\_4000K

Issue Date: 5/2/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1004625  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/2/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125DR-B610DB2750-4F0-XX-W2A-F\_4000K  
Description: Define 5 Direct Recessed with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}  
Light Source: -  
Ballast/Driver: -

**Summary**

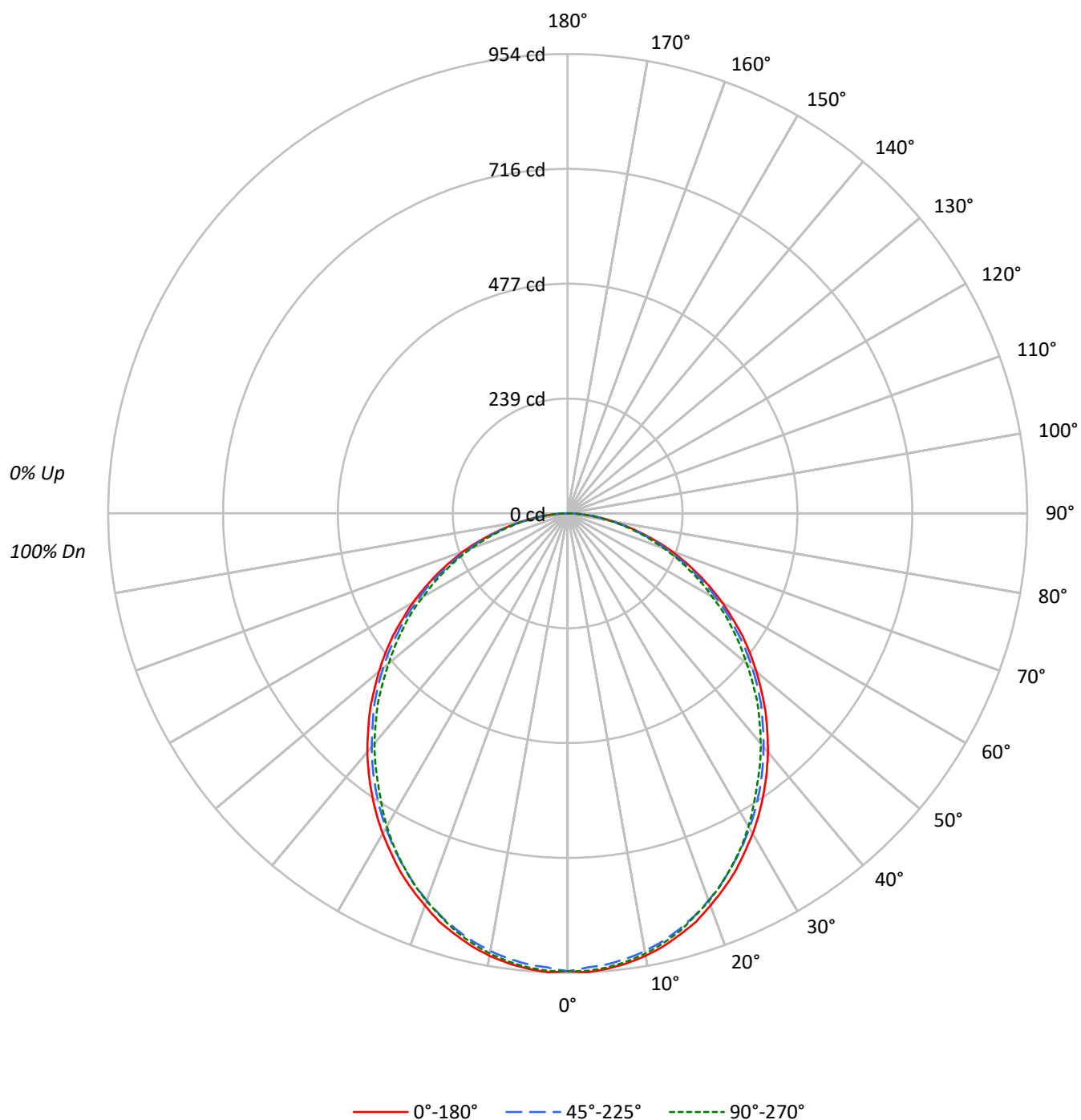
Lumens per Lamp: N/A  
Luminaire Lumens: 2475.0 lumens  
Efficiency: N/A  
Efficacy: 103.1 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 24  
Input Voltage (V):  
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



TEST NUMBER: P1004625

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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|-----|-----|-----|--|-----|
| RF  | 20  |     |     |     | 20  |     |     |     | 20  |     |     |  | 20  |     |     |  | 20  |
| RC  | 80  |     |     |     | 70  |     |     |     | 50  |     |     |  | 30  |     |     |  | 10  |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  |  | 50  | 30  | 10  |  | 50  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 |
| 1   | 109 | 104 | 100 | 96  | 106 | 102 | 98  | 95  | 98  | 94  | 92  |  | 94  | 91  | 89  |  | 90  |
| 2   | 99  | 91  | 84  | 79  | 97  | 89  | 83  | 78  | 86  | 80  | 76  |  | 82  | 78  | 74  |  | 79  |
| 3   | 91  | 80  | 72  | 66  | 88  | 79  | 71  | 65  | 76  | 69  | 64  |  | 73  | 67  | 63  |  | 70  |
| 4   | 83  | 71  | 62  | 56  | 81  | 70  | 62  | 55  | 67  | 60  | 55  |  | 65  | 59  | 54  |  | 63  |
| 5   | 76  | 64  | 55  | 48  | 74  | 63  | 54  | 48  | 60  | 53  | 47  |  | 58  | 52  | 47  |  | 57  |
| 6   | 71  | 57  | 49  | 42  | 69  | 56  | 48  | 42  | 55  | 47  | 42  |  | 53  | 46  | 41  |  | 51  |
| 7   | 66  | 52  | 43  | 37  | 64  | 51  | 43  | 37  | 50  | 42  | 37  |  | 48  | 42  | 37  |  | 47  |
| 8   | 61  | 48  | 39  | 33  | 60  | 47  | 39  | 33  | 46  | 38  | 33  |  | 44  | 38  | 33  |  | 43  |
| 9   | 57  | 44  | 36  | 30  | 56  | 43  | 35  | 30  | 42  | 35  | 30  |  | 41  | 34  | 30  |  | 40  |
| 10  | 54  | 40  | 33  | 27  | 52  | 40  | 32  | 27  | 39  | 32  | 27  |  | 38  | 32  | 27  |  | 37  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 6093 | 6093 | 6093 |
| 5°  | 6106 | 6048 | 6087 |
| 10° | 6069 | 6006 | 6039 |
| 15° | 6003 | 5933 | 5959 |
| 20° | 5909 | 5832 | 5843 |
| 25° | 5808 | 5712 | 5706 |
| 30° | 5683 | 5583 | 5555 |
| 35° | 5549 | 5443 | 5366 |
| 40° | 5411 | 5292 | 5217 |
| 45° | 5263 | 5153 | 5052 |
| 50° | 5099 | 4987 | 4836 |
| 55° | 4942 | 4799 | 4664 |
| 60° | 4753 | 4608 | 4444 |
| 65° | 4528 | 4380 | 4231 |
| 70° | 4312 | 4116 | 3975 |
| 75° | 3929 | 3800 | 3669 |
| 80° | 3498 | 3442 | 3358 |
| 85° | 3043 | 3095 | 2933 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5263 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 89.7   | 3.6       |
| 10°-20°   | 253.5  | 10.2      |
| 20°-30°   | 374.2  | 15.1      |
| 30°-40°   | 436.6  | 17.6      |
| 40°-50°   | 438.5  | 17.7      |
| 50°-60°   | 384.9  | 15.6      |
| 60°-70°   | 286.7  | 11.6      |
| 70°-80°   | 163.7  | 6.6       |
| 80°-90°   | 47.3   | 1.9       |
| 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°    | 717.4  | 29.0      |
| 0°-40°    | 1154.0 | 46.6      |
| 0°-60°    | 1977.3 | 79.9      |
| 0°-90°    | 2475.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2475.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 951 | 951   | 951 | 951   | 951 |      |
| 5°  | 949 | 948   | 940 | 947   | 946 | 90   |
| 15° | 905 | 903   | 894 | 898   | 898 | 255  |
| 25° | 822 | 818   | 808 | 810   | 807 | 378  |
| 35° | 709 | 706   | 696 | 692   | 686 | 444  |
| 45° | 581 | 578   | 569 | 560   | 558 | 447  |
| 55° | 442 | 440   | 430 | 423   | 418 | 395  |
| 65° | 299 | 297   | 289 | 282   | 279 | 296  |
| 75° | 159 | 157   | 154 | 151   | 148 | 169  |
| 85° | 41  | 42    | 42  | 41    | 40  | 48   |
| 90° | 0   | 0     | 0   | 0     | 0   |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 950.9 | 950.9 | 950.9 | 950.9 | 950.9 |
| 2.5°  | 953.9 | 951.7 | 944.1 | 951.7 | 950.9 |
| 5°    | 949.4 | 947.9 | 940.4 | 947.2 | 946.4 |
| 7.5°  | 942.6 | 941.1 | 932.9 | 939.6 | 938.9 |
| 10°   | 932.9 | 931.4 | 923.1 | 929.1 | 928.3 |
| 12.5° | 920.8 | 917.8 | 910.3 | 914.8 | 914.8 |
| 15°   | 905.0 | 902.8 | 894.5 | 898.3 | 898.3 |
| 17.5° | 888.5 | 884.7 | 876.4 | 881.0 | 877.2 |
| 20°   | 866.7 | 865.2 | 855.4 | 860.6 | 856.9 |
| 22.5° | 844.8 | 841.8 | 832.8 | 835.8 | 833.6 |
| 25°   | 821.5 | 817.8 | 808.0 | 809.5 | 807.2 |
| 27.5° | 794.4 | 792.2 | 782.4 | 783.2 | 780.9 |
| 30°   | 768.1 | 765.8 | 754.6 | 753.1 | 750.8 |
| 32.5° | 739.5 | 735.8 | 726.0 | 723.0 | 718.5 |
| 35°   | 709.4 | 706.4 | 695.9 | 692.1 | 686.1 |
| 37.5° | 678.6 | 674.8 | 665.0 | 659.8 | 656.0 |
| 40°   | 647.0 | 643.2 | 632.7 | 625.9 | 623.7 |
| 42.5° | 613.1 | 610.1 | 599.6 | 593.6 | 589.8 |
| 45°   | 580.8 | 577.8 | 568.7 | 559.7 | 557.5 |
| 47.5° | 545.4 | 546.2 | 534.9 | 525.9 | 520.6 |
| 50°   | 511.6 | 509.3 | 500.3 | 490.5 | 485.2 |
| 52.5° | 477.0 | 475.5 | 465.7 | 457.4 | 451.4 |
| 55°   | 442.4 | 440.1 | 429.6 | 422.8 | 417.5 |
| 57.5° | 405.5 | 404.7 | 395.7 | 386.7 | 384.4 |
| 60°   | 370.9 | 367.9 | 359.6 | 352.1 | 346.8 |
| 62.5° | 334.8 | 332.5 | 325.7 | 317.5 | 313.7 |
| 65°   | 298.7 | 297.2 | 288.9 | 282.1 | 279.1 |
| 67.5° | 263.3 | 260.3 | 254.3 | 248.3 | 246.8 |
| 70°   | 230.2 | 226.4 | 219.7 | 215.2 | 212.2 |
| 72.5° | 194.1 | 191.8 | 188.1 | 182.8 | 179.8 |
| 75°   | 158.7 | 157.2 | 153.5 | 151.2 | 148.2 |
| 77.5° | 125.6 | 124.9 | 122.6 | 121.1 | 118.9 |
| 80°   | 94.8  | 94.8  | 93.3  | 92.5  | 91.0  |
| 82.5° | 67.7  | 66.2  | 66.2  | 64.7  | 64.7  |
| 85°   | 41.4  | 42.1  | 42.1  | 41.4  | 39.9  |
| 87.5° | 20.3  | 20.3  | 19.6  | 19.6  | 18.1  |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)