

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: P1004539

Luminaire Tested: S125DR-B1090DB30-4F0-XX-W2A-F

Issue Date: 5/2/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1004539  
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-B1090DB30-4F0-XX-W2A-F  
Description: Define 5 Direct Recessed with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}  
Light Source: -  
Ballast/Driver: -

**Summary**

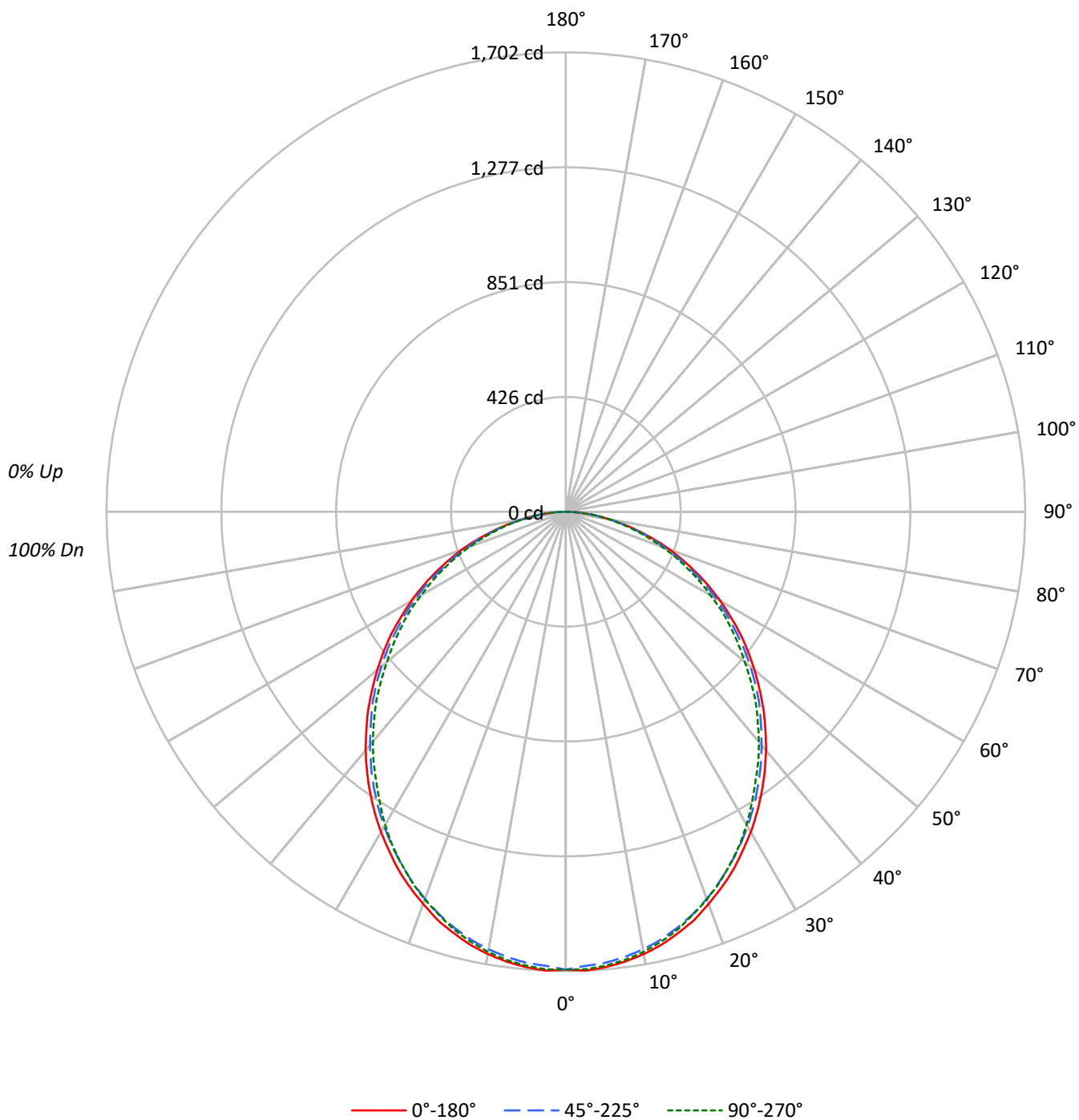
Lumens per Lamp: N/A  
Luminaire Lumens: 4415.0 lumens  
Efficiency: N/A  
Efficacy: 94.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 46.8  
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



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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°  | 10868 | 10868 | 10868 |
| 5°  | 10893 | 10789 | 10858 |
| 10° | 10827 | 10713 | 10774 |
| 15° | 10708 | 10584 | 10628 |
| 20° | 10541 | 10403 | 10422 |
| 25° | 10360 | 10189 | 10180 |
| 30° | 10137 | 9958  | 9909  |
| 35° | 9898  | 9709  | 9573  |
| 40° | 9653  | 9439  | 9305  |
| 45° | 9387  | 9192  | 9010  |
| 50° | 9096  | 8895  | 8628  |
| 55° | 8815  | 8560  | 8320  |
| 60° | 8478  | 8220  | 7928  |
| 65° | 8077  | 7812  | 7548  |
| 70° | 7694  | 7341  | 7089  |
| 75° | 7011  | 6778  | 6545  |
| 80° | 6239  | 6140  | 5992  |
| 85° | 5425  | 5528  | 5227  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9387 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 160.1  | 3.6       |
| 10°-20°   | 452.1  | 10.2      |
| 20°-30°   | 667.5  | 15.1      |
| 30°-40°   | 778.8  | 17.6      |
| 40°-50°   | 782.2  | 17.7      |
| 50°-60°   | 686.6  | 15.6      |
| 60°-70°   | 511.4  | 11.6      |
| 70°-80°   | 292.1  | 6.6       |
| 80°-90°   | 84.3   | 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°    | 1279.7 | 29.0      |
| 0°-40°    | 2058.4 | 46.6      |
| 0°-60°    | 3527.2 | 79.9      |
| 0°-90°    | 4415.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4415.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1696 | 1696  | 1696 | 1696  | 1696 |      |
| 5°  | 1694 | 1691  | 1678 | 1690  | 1688 | 161  |
| 15° | 1614 | 1610  | 1596 | 1602  | 1602 | 455  |
| 25° | 1466 | 1459  | 1441 | 1444  | 1440 | 674  |
| 35° | 1266 | 1260  | 1241 | 1235  | 1224 | 792  |
| 45° | 1036 | 1031  | 1014 | 998   | 994  | 798  |
| 55° | 789  | 785   | 766  | 754   | 745  | 704  |
| 65° | 533  | 530   | 515  | 503   | 498  | 528  |
| 75° | 283  | 280   | 274  | 270   | 264  | 301  |
| 85° | 74   | 75    | 75   | 74    | 71   | 86   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1696.3 | 1696.3 | 1696.3 | 1696.3 | 1696.3 |
| 2.5°  | 1701.6 | 1697.6 | 1684.2 | 1697.6 | 1696.3 |
| 5°    | 1693.6 | 1690.9 | 1677.5 | 1689.6 | 1688.2 |
| 7.5°  | 1681.5 | 1678.8 | 1664.1 | 1676.2 | 1674.8 |
| 10°   | 1664.1 | 1661.4 | 1646.6 | 1657.4 | 1656.0 |
| 12.5° | 1642.6 | 1637.2 | 1623.8 | 1631.9 | 1631.9 |
| 15°   | 1614.4 | 1610.4 | 1595.6 | 1602.3 | 1602.3 |
| 17.5° | 1584.9 | 1578.2 | 1563.4 | 1571.5 | 1564.8 |
| 20°   | 1546.0 | 1543.3 | 1525.8 | 1535.2 | 1528.5 |
| 22.5° | 1507.1 | 1501.7 | 1485.6 | 1491.0 | 1486.9 |
| 25°   | 1465.5 | 1458.7 | 1441.3 | 1444.0 | 1440.0 |
| 27.5° | 1417.1 | 1413.1 | 1395.7 | 1397.0 | 1393.0 |
| 30°   | 1370.2 | 1366.1 | 1346.0 | 1343.3 | 1339.3 |
| 32.5° | 1319.2 | 1312.5 | 1295.0 | 1289.7 | 1281.6 |
| 35°   | 1265.5 | 1260.1 | 1241.3 | 1234.6 | 1223.9 |
| 37.5° | 1210.5 | 1203.8 | 1186.3 | 1176.9 | 1170.2 |
| 40°   | 1154.1 | 1147.4 | 1128.6 | 1116.5 | 1112.5 |
| 42.5° | 1093.7 | 1088.4 | 1069.6 | 1058.8 | 1052.1 |
| 45°   | 1036.0 | 1030.7 | 1014.5 | 998.4  | 994.4  |
| 47.5° | 972.9  | 974.3  | 954.2  | 938.1  | 928.7  |
| 50°   | 912.6  | 908.5  | 892.4  | 875.0  | 865.6  |
| 52.5° | 850.8  | 848.1  | 830.7  | 815.9  | 805.2  |
| 55°   | 789.1  | 785.1  | 766.3  | 754.2  | 744.8  |
| 57.5° | 723.3  | 722.0  | 705.9  | 689.8  | 685.8  |
| 60°   | 661.6  | 656.2  | 641.5  | 628.1  | 618.7  |
| 62.5° | 597.2  | 593.2  | 581.1  | 566.3  | 559.6  |
| 65°   | 532.8  | 530.1  | 515.3  | 503.2  | 497.9  |
| 67.5° | 469.7  | 464.3  | 453.6  | 442.9  | 440.2  |
| 70°   | 410.7  | 403.9  | 391.9  | 383.8  | 378.4  |
| 72.5° | 346.2  | 342.2  | 335.5  | 326.1  | 320.7  |
| 75°   | 283.2  | 280.5  | 273.8  | 269.7  | 264.4  |
| 77.5° | 224.1  | 222.8  | 218.7  | 216.1  | 212.0  |
| 80°   | 169.1  | 169.1  | 166.4  | 165.1  | 162.4  |
| 82.5° | 120.8  | 118.1  | 118.1  | 115.4  | 115.4  |
| 85°   | 73.8   | 75.2   | 75.2   | 73.8   | 71.1   |
| 87.5° | 36.2   | 36.2   | 34.9   | 34.9   | 32.2   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)