

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: P1037988

Luminaire Tested: S125DS-B1270DB50-4F0-XX-W2A-F

Issue Date: 5/2/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1037988  
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: S125DS-B1270DB50-4F0-XX-W2A-F  
Description: Define 5 Direct Surface with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

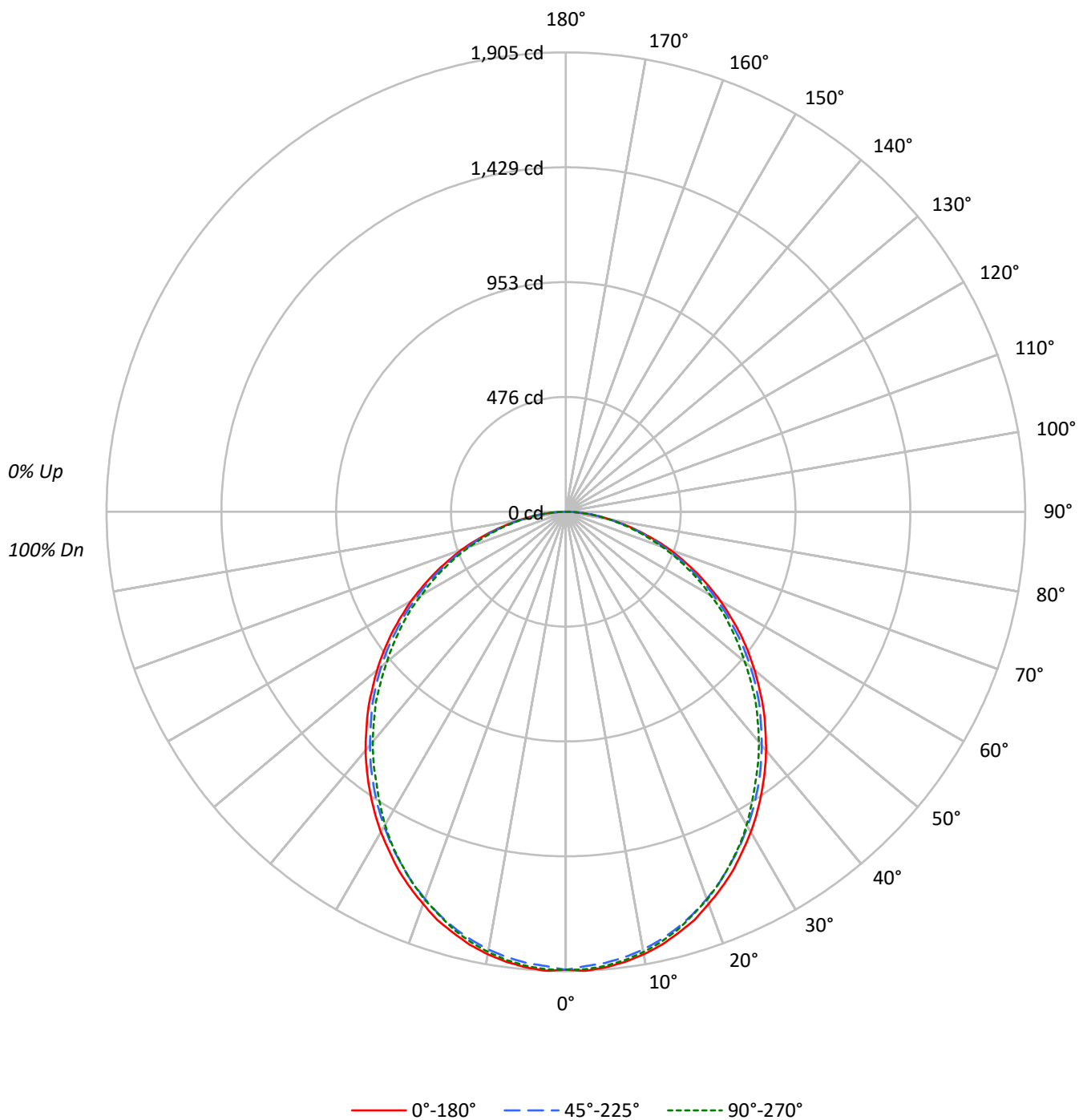
Lumens per Lamp: N/A  
Luminaire Lumens: 4943.0 lumens  
Efficiency: N/A  
Efficacy: 80.6 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 61.3  
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°  | 12168 | 12168 | 12168 |
| 5°  | 12195 | 12079 | 12156 |
| 10° | 12121 | 11994 | 12063 |
| 15° | 11989 | 11850 | 11900 |
| 20° | 11802 | 11648 | 11668 |
| 25° | 11599 | 11408 | 11397 |
| 30° | 11349 | 11149 | 11094 |
| 35° | 11082 | 10870 | 10718 |
| 40° | 10807 | 10569 | 10418 |
| 45° | 10510 | 10292 | 10088 |
| 50° | 10184 | 9960  | 9660  |
| 55° | 9869  | 9583  | 9315  |
| 60° | 9491  | 9203  | 8875  |
| 65° | 9043  | 8748  | 8450  |
| 70° | 8613  | 8218  | 7937  |
| 75° | 7847  | 7587  | 7328  |
| 80° | 6985  | 6874  | 6708  |
| 85° | 6072  | 6182  | 5852  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10510 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 179.2  | 3.6       |
| 10°-20°   | 506.2  | 10.2      |
| 20°-30°   | 747.3  | 15.1      |
| 30°-40°   | 871.9  | 17.6      |
| 40°-50°   | 875.7  | 17.7      |
| 50°-60°   | 768.7  | 15.6      |
| 60°-70°   | 572.6  | 11.6      |
| 70°-80°   | 327.0  | 6.6       |
| 80°-90°   | 94.4   | 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°    | 1432.7 | 29.0      |
| 0°-40°    | 2304.6 | 46.6      |
| 0°-60°    | 3949.0 | 79.9      |
| 0°-90°    | 4943.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4943.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1899 | 1899  | 1899 | 1899  | 1899 |      |
| 5°  | 1896 | 1893  | 1878 | 1892  | 1890 | 180  |
| 15° | 1808 | 1803  | 1786 | 1794  | 1794 | 510  |
| 25° | 1641 | 1633  | 1614 | 1617  | 1612 | 755  |
| 35° | 1417 | 1411  | 1390 | 1382  | 1370 | 886  |
| 45° | 1160 | 1154  | 1136 | 1118  | 1113 | 894  |
| 55° | 884  | 879   | 858  | 844   | 834  | 789  |
| 65° | 596  | 594   | 577  | 563   | 557  | 592  |
| 75° | 317  | 314   | 306  | 302   | 296  | 337  |
| 85° | 83   | 84    | 84   | 83    | 80   | 96   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1899.1 | 1899.1 | 1899.1 | 1899.1 | 1899.1 |
| 2.5°  | 1905.2 | 1900.6 | 1885.6 | 1900.6 | 1899.1 |
| 5°    | 1896.1 | 1893.1 | 1878.1 | 1891.6 | 1890.1 |
| 7.5°  | 1882.6 | 1879.6 | 1863.1 | 1876.6 | 1875.1 |
| 10°   | 1863.1 | 1860.1 | 1843.6 | 1855.6 | 1854.1 |
| 12.5° | 1839.0 | 1833.0 | 1818.0 | 1827.0 | 1827.0 |
| 15°   | 1807.5 | 1803.0 | 1786.5 | 1794.0 | 1794.0 |
| 17.5° | 1774.4 | 1766.9 | 1750.4 | 1759.4 | 1751.9 |
| 20°   | 1730.9 | 1727.9 | 1708.3 | 1718.8 | 1711.3 |
| 22.5° | 1687.3 | 1681.3 | 1663.3 | 1669.3 | 1664.8 |
| 25°   | 1640.7 | 1633.2 | 1613.7 | 1616.7 | 1612.2 |
| 27.5° | 1586.6 | 1582.1 | 1562.6 | 1564.1 | 1559.6 |
| 30°   | 1534.0 | 1529.5 | 1507.0 | 1504.0 | 1499.5 |
| 32.5° | 1476.9 | 1469.4 | 1449.9 | 1443.9 | 1434.9 |
| 35°   | 1416.8 | 1410.8 | 1389.8 | 1382.3 | 1370.3 |
| 37.5° | 1355.2 | 1347.7 | 1328.2 | 1317.7 | 1310.2 |
| 40°   | 1292.1 | 1284.6 | 1263.6 | 1250.1 | 1245.6 |
| 42.5° | 1224.5 | 1218.5 | 1197.5 | 1185.5 | 1177.9 |
| 45°   | 1159.9 | 1153.9 | 1135.9 | 1117.8 | 1113.3 |
| 47.5° | 1089.3 | 1090.8 | 1068.3 | 1050.2 | 1039.7 |
| 50°   | 1021.7 | 1017.2 | 999.2  | 979.6  | 969.1  |
| 52.5° | 952.6  | 949.6  | 930.0  | 913.5  | 901.5  |
| 55°   | 883.5  | 879.0  | 857.9  | 844.4  | 833.9  |
| 57.5° | 809.8  | 808.3  | 790.3  | 772.3  | 767.8  |
| 60°   | 740.7  | 734.7  | 718.2  | 703.2  | 692.6  |
| 62.5° | 668.6  | 664.1  | 650.6  | 634.0  | 626.5  |
| 65°   | 596.5  | 593.5  | 577.0  | 563.4  | 557.4  |
| 67.5° | 525.9  | 519.9  | 507.8  | 495.8  | 492.8  |
| 70°   | 459.8  | 452.2  | 438.7  | 429.7  | 423.7  |
| 72.5° | 387.6  | 383.1  | 375.6  | 365.1  | 359.1  |
| 75°   | 317.0  | 314.0  | 306.5  | 302.0  | 296.0  |
| 77.5° | 250.9  | 249.4  | 244.9  | 241.9  | 237.4  |
| 80°   | 189.3  | 189.3  | 186.3  | 184.8  | 181.8  |
| 82.5° | 135.2  | 132.2  | 132.2  | 129.2  | 129.2  |
| 85°   | 82.6   | 84.1   | 84.1   | 82.6   | 79.6   |
| 87.5° | 40.6   | 40.6   | 39.1   | 39.1   | 36.1   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)