

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: P995040

Luminaire Tested: S123RDW-B1165DB27-4F0-XX-W2A-F

Issue Date: 5/2/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P995040  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/2/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDW-B1165DB27-4F0-XX-W2A-F  
Description: Define 3 Regressed Direct Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}  
Light Source: -  
Ballast/Driver: -

**Summary**

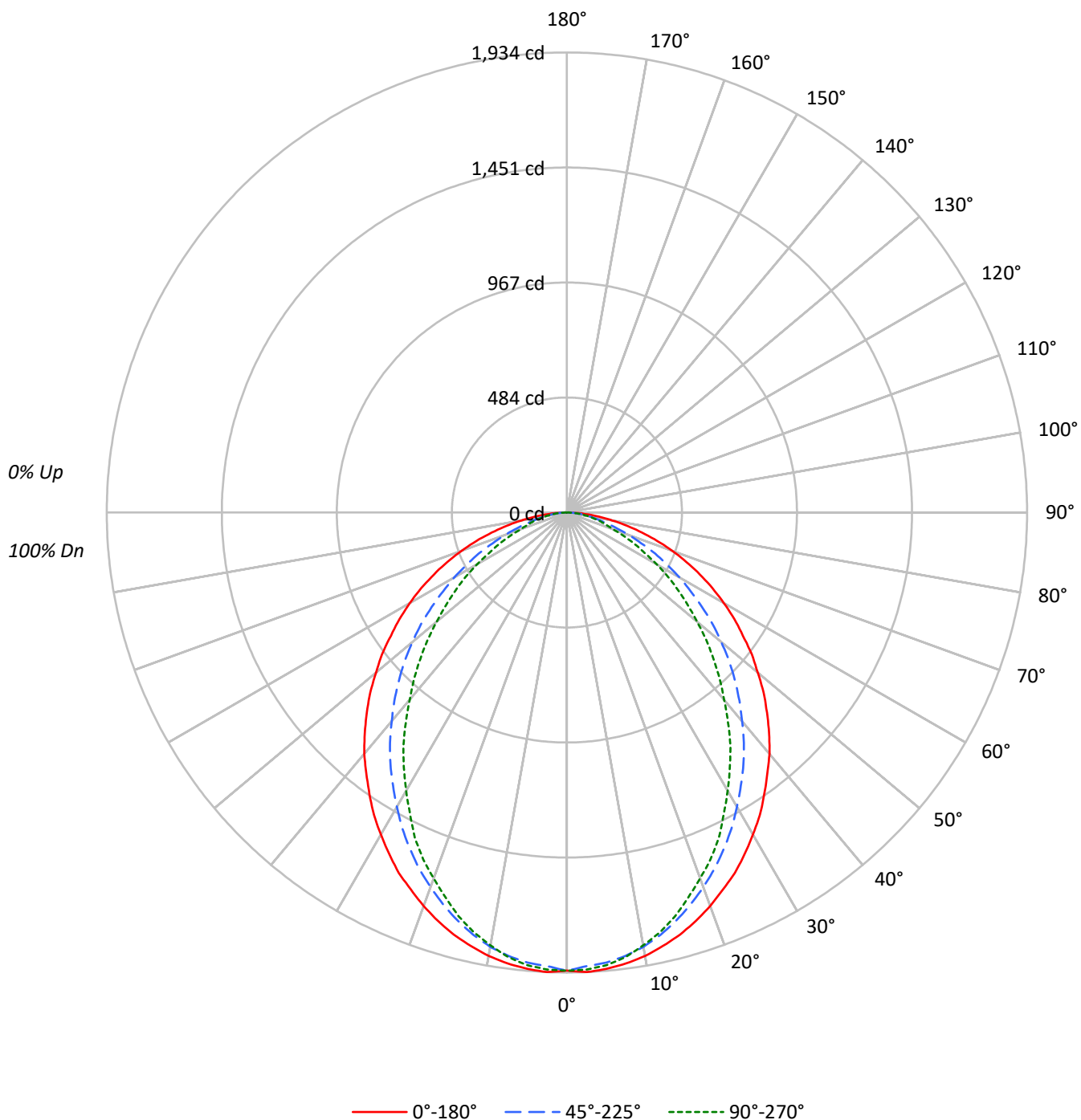
Lumens per Lamp: N/A  
Luminaire Lumens: 4351.0 lumens  
Efficiency: N/A  
Efficacy: 71.0 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22  
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')  
CIE Type: Direct

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   | 110 | 105 | 101 | 98  | 107 | 103 | 99  | 96  | 99  | 96  | 93  |  | 95  | 93  | 90  |  | 91  |
| 2   | 100 | 93  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 83  | 78  |  | 84  | 80  | 77  |  | 81  |
| 3   | 92  | 82  | 75  | 68  | 90  | 81  | 74  | 68  | 78  | 72  | 67  |  | 75  | 70  | 66  |  | 73  |
| 4   | 85  | 73  | 65  | 59  | 83  | 72  | 64  | 58  | 70  | 63  | 58  |  | 67  | 62  | 57  |  | 65  |
| 5   | 78  | 66  | 57  | 51  | 76  | 65  | 57  | 51  | 63  | 56  | 50  |  | 61  | 55  | 50  |  | 59  |
| 6   | 73  | 60  | 51  | 45  | 71  | 59  | 51  | 45  | 57  | 50  | 45  |  | 55  | 49  | 44  |  | 54  |
| 7   | 67  | 54  | 46  | 40  | 66  | 54  | 46  | 40  | 52  | 45  | 40  |  | 51  | 44  | 39  |  | 49  |
| 8   | 63  | 50  | 42  | 36  | 61  | 49  | 41  | 36  | 48  | 41  | 36  |  | 47  | 40  | 36  |  | 46  |
| 9   | 59  | 46  | 38  | 33  | 58  | 45  | 38  | 33  | 44  | 37  | 32  |  | 43  | 37  | 32  |  | 42  |
| 10  | 55  | 43  | 35  | 30  | 54  | 42  | 35  | 30  | 41  | 34  | 30  |  | 40  | 34  | 29  |  | 39  |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 20730 | 20730 | 20730 |
| 5°  | 20809 | 20523 | 20641 |
| 10° | 20692 | 20265 | 20196 |
| 15° | 20470 | 19791 | 19582 |
| 20° | 20165 | 19198 | 18751 |
| 25° | 19849 | 18532 | 17939 |
| 30° | 19433 | 17764 | 16793 |
| 35° | 19006 | 16994 | 15742 |
| 40° | 18612 | 16087 | 14442 |
| 45° | 18095 | 15194 | 13268 |
| 50° | 17524 | 14177 | 11953 |
| 55° | 16942 | 13014 | 10729 |
| 60° | 16409 | 11769 | 9382  |
| 65° | 15715 | 10422 | 8036  |
| 70° | 14845 | 8749  | 6489  |
| 75° | 13579 | 6887  | 6105  |
| 80° | 12100 | 6100  | 5616  |
| 85° | 10226 | 5397  | 5014  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 18095 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 181.0  | 4.2       |
| 10°-20°   | 503.7  | 11.6      |
| 20°-30°   | 725.2  | 16.7      |
| 30°-40°   | 816.6  | 18.8      |
| 40°-50°   | 781.2  | 18.0      |
| 50°-60°   | 639.4  | 14.7      |
| 60°-70°   | 431.1  | 9.9       |
| 70°-80°   | 216.2  | 5.0       |
| 80°-90°   | 56.5   | 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°    | 1409.9 | 32.4      |
| 0°-40°    | 2226.5 | 51.2      |
| 0°-60°    | 3647.1 | 83.8      |
| 0°-90°    | 4351.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4351.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1926 | 1926  | 1926 | 1926  | 1926 |      |
| 5°  | 1926 | 1918  | 1899 | 1913  | 1910 | 183  |
| 15° | 1837 | 1820  | 1776 | 1768  | 1757 | 518  |
| 25° | 1671 | 1632  | 1560 | 1528  | 1510 | 769  |
| 35° | 1446 | 1390  | 1293 | 1226  | 1198 | 905  |
| 45° | 1189 | 1118  | 998  | 909   | 872  | 917  |
| 55° | 903  | 826   | 694  | 603   | 572  | 810  |
| 65° | 617  | 531   | 409  | 333   | 316  | 611  |
| 75° | 326  | 252   | 166  | 150   | 147  | 348  |
| 85° | 83   | 48    | 44   | 41    | 41   | 96   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1925.9 | 1925.9 | 1925.9 | 1925.9 | 1925.9 |
| 2.5°  | 1933.7 | 1927.5 | 1908.7 | 1925.9 | 1922.8 |
| 5°    | 1925.9 | 1918.1 | 1899.4 | 1913.4 | 1910.3 |
| 7.5°  | 1911.9 | 1904.1 | 1880.6 | 1890.0 | 1885.3 |
| 10°   | 1893.1 | 1882.2 | 1854.1 | 1855.6 | 1847.8 |
| 12.5° | 1866.6 | 1854.1 | 1818.1 | 1816.6 | 1807.2 |
| 15°   | 1836.9 | 1819.7 | 1776.0 | 1768.2 | 1757.2 |
| 17.5° | 1801.0 | 1782.2 | 1727.6 | 1711.9 | 1696.3 |
| 20°   | 1760.4 | 1735.4 | 1676.0 | 1655.7 | 1637.0 |
| 22.5° | 1715.1 | 1685.4 | 1621.3 | 1594.8 | 1577.6 |
| 25°   | 1671.3 | 1632.3 | 1560.4 | 1527.6 | 1510.4 |
| 27.5° | 1618.2 | 1576.0 | 1497.9 | 1454.2 | 1427.7 |
| 30°   | 1563.5 | 1516.7 | 1429.2 | 1376.1 | 1351.1 |
| 32.5° | 1508.9 | 1454.2 | 1360.5 | 1301.1 | 1274.6 |
| 35°   | 1446.4 | 1390.2 | 1293.3 | 1226.2 | 1198.0 |
| 37.5° | 1383.9 | 1323.0 | 1221.5 | 1146.5 | 1112.1 |
| 40°   | 1324.6 | 1255.8 | 1144.9 | 1063.7 | 1027.8 |
| 42.5° | 1257.4 | 1188.7 | 1073.1 | 982.5  | 951.2  |
| 45°   | 1188.7 | 1118.4 | 998.1  | 909.1  | 871.6  |
| 47.5° | 1121.5 | 1043.4 | 924.7  | 827.8  | 795.0  |
| 50°   | 1046.5 | 973.1  | 846.6  | 749.8  | 713.8  |
| 52.5° | 979.4  | 898.1  | 773.2  | 671.7  | 640.4  |
| 55°   | 902.8  | 826.3  | 693.5  | 602.9  | 571.7  |
| 57.5° | 834.1  | 751.3  | 617.0  | 531.1  | 504.5  |
| 60°   | 762.2  | 676.3  | 546.7  | 462.3  | 435.8  |
| 62.5° | 690.4  | 604.5  | 474.8  | 396.7  | 368.6  |
| 65°   | 617.0  | 531.1  | 409.2  | 332.7  | 315.5  |
| 67.5° | 543.6  | 456.1  | 337.4  | 279.6  | 260.9  |
| 70°   | 471.7  | 387.4  | 278.0  | 223.4  | 206.2  |
| 72.5° | 399.9  | 317.1  | 220.2  | 178.1  | 173.4  |
| 75°   | 326.5  | 251.5  | 165.6  | 150.0  | 146.8  |
| 77.5° | 259.3  | 190.6  | 129.6  | 120.3  | 117.1  |
| 80°   | 195.2  | 131.2  | 98.4   | 93.7   | 90.6   |
| 82.5° | 134.3  | 81.2   | 70.3   | 65.6   | 65.6   |
| 85°   | 82.8   | 48.4   | 43.7   | 40.6   | 40.6   |
| 87.5° | 37.5   | 20.3   | 20.3   | 18.7   | 17.2   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)