

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: P996315

Luminaire Tested: S123R3DRP-B560DB50-4F0-XX-W2A-F

Issue Date: 5/2/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P996315  
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: S123R3DRP-B560DB50-4F0-XX-W2A-F  
Description: Define 3 3in Regressed Direct Perimeter with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.11}  
Light Source: -  
Ballast/Driver: -

**Summary**

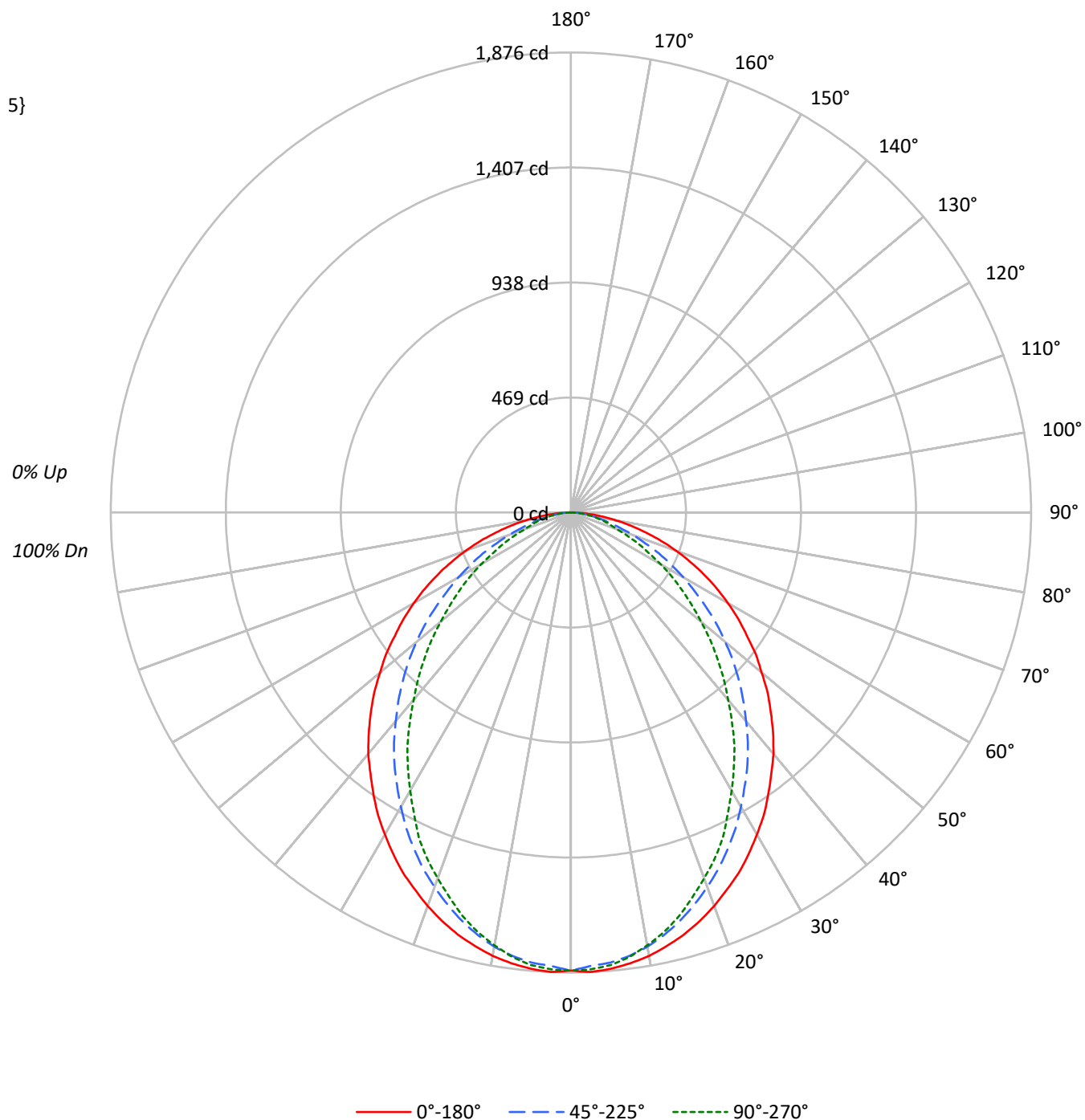
Lumens per Lamp: N/A  
Luminaire Lumens: 4220.0 lumens  
Efficiency: N/A  
Efficacy: 68.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22  
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')  
CIE Type: Direct

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°  | 20106 | 20106 | 20106 |
| 5°  | 20183 | 19905 | 20020 |
| 10° | 20069 | 19654 | 19589 |
| 15° | 19853 | 19195 | 18992 |
| 20° | 19558 | 18620 | 18187 |
| 25° | 19252 | 17974 | 17399 |
| 30° | 18849 | 17229 | 16287 |
| 35° | 18433 | 16483 | 15269 |
| 40° | 18052 | 15604 | 14006 |
| 45° | 17550 | 14737 | 12868 |
| 50° | 16997 | 13750 | 11593 |
| 55° | 16432 | 12622 | 10406 |
| 60° | 15916 | 11414 | 9100  |
| 65° | 15241 | 10109 | 7794  |
| 70° | 14398 | 8488  | 6294  |
| 75° | 13167 | 6679  | 5922  |
| 80° | 11740 | 5914  | 5449  |
| 85° | 9917  | 5236  | 4866  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 17550 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 175.6  | 4.2       |
| 10°-20°   | 488.5  | 11.6      |
| 20°-30°   | 703.3  | 16.7      |
| 30°-40°   | 792.1  | 18.8      |
| 40°-50°   | 757.6  | 18.0      |
| 50°-60°   | 620.2  | 14.7      |
| 60°-70°   | 418.1  | 9.9       |
| 70°-80°   | 209.7  | 5.0       |
| 80°-90°   | 54.8   | 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°    | 1367.4 | 32.4      |
| 0°-40°    | 2159.5 | 51.2      |
| 0°-60°    | 3537.3 | 83.8      |
| 0°-90°    | 4220.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4220.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1868 | 1868  | 1868 | 1868  | 1868 |      |
| 5°  | 1868 | 1860  | 1842 | 1856  | 1853 | 177  |
| 15° | 1782 | 1765  | 1722 | 1715  | 1704 | 502  |
| 25° | 1621 | 1583  | 1513 | 1482  | 1465 | 746  |
| 35° | 1403 | 1348  | 1254 | 1189  | 1162 | 878  |
| 45° | 1153 | 1085  | 968  | 882   | 845  | 890  |
| 55° | 876  | 801   | 673  | 585   | 554  | 785  |
| 65° | 598  | 515   | 397  | 323   | 306  | 592  |
| 75° | 317  | 244   | 161  | 145   | 142  | 337  |
| 85° | 80   | 47    | 42   | 39    | 39   | 93   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1867.9 | 1867.9 | 1867.9 | 1867.9 | 1867.9 |
| 2.5°  | 1875.5 | 1869.5 | 1851.3 | 1867.9 | 1864.9 |
| 5°    | 1867.9 | 1860.4 | 1842.2 | 1855.8 | 1852.8 |
| 7.5°  | 1854.3 | 1846.7 | 1824.0 | 1833.1 | 1828.5 |
| 10°   | 1836.1 | 1825.5 | 1798.2 | 1799.8 | 1792.2 |
| 12.5° | 1810.4 | 1798.2 | 1763.4 | 1761.9 | 1752.8 |
| 15°   | 1781.6 | 1764.9 | 1722.5 | 1714.9 | 1704.3 |
| 17.5° | 1746.7 | 1728.6 | 1675.5 | 1660.4 | 1645.2 |
| 20°   | 1707.4 | 1683.1 | 1625.5 | 1605.8 | 1587.7 |
| 22.5° | 1663.4 | 1634.6 | 1572.5 | 1546.8 | 1530.1 |
| 25°   | 1621.0 | 1583.1 | 1513.4 | 1481.6 | 1465.0 |
| 27.5° | 1569.5 | 1528.6 | 1452.8 | 1410.4 | 1384.7 |
| 30°   | 1516.5 | 1471.0 | 1386.2 | 1334.7 | 1310.4 |
| 32.5° | 1463.4 | 1410.4 | 1319.5 | 1262.0 | 1236.2 |
| 35°   | 1402.8 | 1348.3 | 1254.4 | 1189.2 | 1162.0 |
| 37.5° | 1342.2 | 1283.2 | 1184.7 | 1112.0 | 1078.6 |
| 40°   | 1284.7 | 1218.0 | 1110.5 | 1031.7 | 996.8  |
| 42.5° | 1219.5 | 1152.9 | 1040.8 | 952.9  | 922.6  |
| 45°   | 1152.9 | 1084.7 | 968.1  | 881.7  | 845.3  |
| 47.5° | 1087.7 | 1012.0 | 896.9  | 802.9  | 771.1  |
| 50°   | 1015.0 | 943.8  | 821.1  | 727.2  | 692.3  |
| 52.5° | 949.9  | 871.1  | 749.9  | 651.4  | 621.1  |
| 55°   | 875.6  | 801.4  | 672.6  | 584.8  | 554.5  |
| 57.5° | 809.0  | 728.7  | 598.4  | 515.1  | 489.3  |
| 60°   | 739.3  | 656.0  | 530.2  | 448.4  | 422.7  |
| 62.5° | 669.6  | 586.3  | 460.5  | 384.8  | 357.5  |
| 65°   | 598.4  | 515.1  | 396.9  | 322.7  | 306.0  |
| 67.5° | 527.2  | 442.4  | 327.2  | 271.2  | 253.0  |
| 70°   | 457.5  | 375.7  | 269.7  | 216.6  | 200.0  |
| 72.5° | 387.8  | 307.5  | 213.6  | 172.7  | 168.2  |
| 75°   | 316.6  | 243.9  | 160.6  | 145.4  | 142.4  |
| 77.5° | 251.5  | 184.8  | 125.7  | 116.7  | 113.6  |
| 80°   | 189.4  | 127.3  | 95.4   | 90.9   | 87.9   |
| 82.5° | 130.3  | 78.8   | 68.2   | 63.6   | 63.6   |
| 85°   | 80.3   | 47.0   | 42.4   | 39.4   | 39.4   |
| 87.5° | 36.4   | 19.7   | 19.7   | 18.2   | 16.7   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)