

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: P996139

Luminaire Tested: S123DRP-B1165DB35-4F0-XX-W2A-F

Issue Date: 5/2/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P996139  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/2/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123DRP-B1165DB35-4F0-XX-W2A-F  
Description: Define 3 Direct Perimeter with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}  
Light Source: -  
Ballast/Driver: -

**Summary**

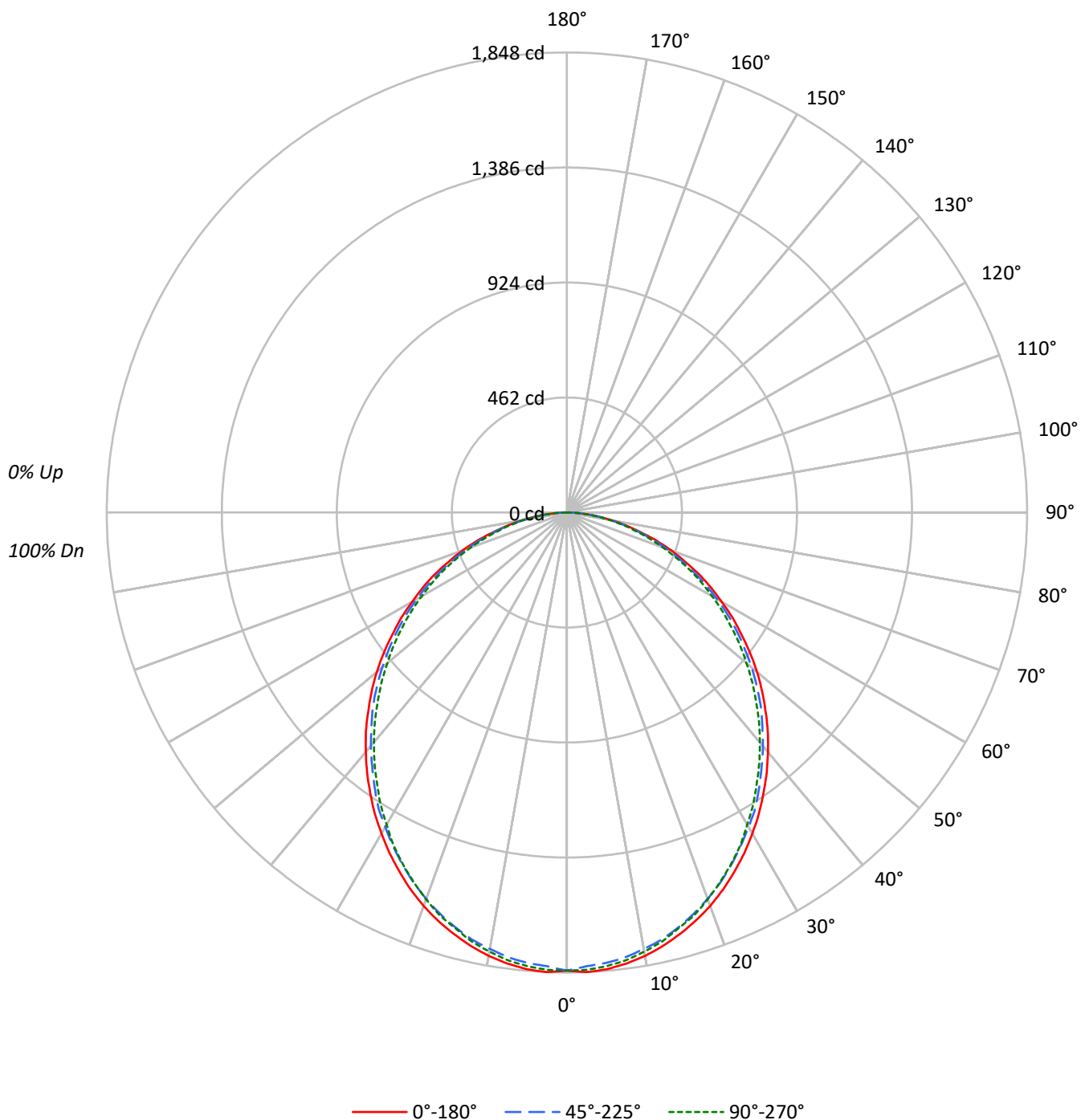
Lumens per Lamp: N/A  
Luminaire Lumens: 4789.0 lumens  
Efficiency: N/A  
Efficacy: 78.1 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3  
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')  
CIE Type: Direct

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   | 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°  | 19807 | 19807 | 19807 |
| 5°  | 19900 | 19626 | 19762 |
| 10° | 19767 | 19455 | 19577 |
| 15° | 19536 | 19236 | 19272 |
| 20° | 19266 | 18921 | 18939 |
| 25° | 18904 | 18547 | 18510 |
| 30° | 18506 | 18132 | 17994 |
| 35° | 18088 | 17693 | 17465 |
| 40° | 17653 | 17207 | 16940 |
| 45° | 17172 | 16763 | 16354 |
| 50° | 16692 | 16215 | 15764 |
| 55° | 16064 | 15647 | 15173 |
| 60° | 15429 | 14988 | 14510 |
| 65° | 14869 | 14266 | 13822 |
| 70° | 14043 | 13445 | 12847 |
| 75° | 12830 | 12373 | 11844 |
| 80° | 11573 | 11083 | 10984 |
| 85° | 10164 | 9769  | 9374  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 17172 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 173.5  | 3.6       |
| 10°-20°   | 489.8  | 10.2      |
| 20°-30°   | 723.4  | 15.1      |
| 30°-40°   | 844.9  | 17.6      |
| 40°-50°   | 849.4  | 17.7      |
| 50°-60°   | 746.1  | 15.6      |
| 60°-70°   | 555.7  | 11.6      |
| 70°-80°   | 316.2  | 6.6       |
| 80°-90°   | 89.9   | 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°    | 1386.7 | 29.0      |
| 0°-40°    | 2231.6 | 46.6      |
| 0°-60°    | 3827.2 | 79.9      |
| 0°-90°    | 4789.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4789.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1840 | 1840  | 1840 | 1840  | 1840 |      |
| 5°  | 1842 | 1834  | 1816 | 1832  | 1829 | 175  |
| 15° | 1753 | 1747  | 1726 | 1739  | 1729 | 494  |
| 25° | 1592 | 1582  | 1562 | 1563  | 1558 | 733  |
| 35° | 1376 | 1367  | 1346 | 1337  | 1329 | 861  |
| 45° | 1128 | 1122  | 1101 | 1082  | 1074 | 871  |
| 55° | 856  | 854   | 834  | 816   | 808  | 767  |
| 65° | 584  | 576   | 560  | 547   | 543  | 576  |
| 75° | 308  | 302   | 298  | 290   | 285  | 330  |
| 85° | 82   | 79    | 79   | 76    | 76   | 94   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1840.1 | 1840.1 | 1840.1 | 1840.1 | 1840.1 |
| 2.5°  | 1848.0 | 1841.7 | 1824.3 | 1840.1 | 1838.5 |
| 5°    | 1841.7 | 1833.8 | 1816.4 | 1832.2 | 1829.0 |
| 7.5°  | 1827.5 | 1819.5 | 1802.1 | 1816.4 | 1814.8 |
| 10°   | 1808.5 | 1800.6 | 1780.0 | 1794.2 | 1791.1 |
| 12.5° | 1783.2 | 1776.8 | 1757.8 | 1767.3 | 1765.7 |
| 15°   | 1753.1 | 1746.8 | 1726.2 | 1738.9 | 1729.4 |
| 17.5° | 1719.9 | 1712.0 | 1691.4 | 1700.9 | 1697.7 |
| 20°   | 1681.9 | 1672.4 | 1651.8 | 1658.2 | 1653.4 |
| 22.5° | 1639.2 | 1629.7 | 1609.1 | 1613.9 | 1607.5 |
| 25°   | 1591.7 | 1582.2 | 1561.6 | 1563.2 | 1558.5 |
| 27.5° | 1542.7 | 1533.2 | 1511.0 | 1512.6 | 1507.8 |
| 30°   | 1488.9 | 1481.0 | 1458.8 | 1458.8 | 1447.7 |
| 32.5° | 1435.1 | 1424.0 | 1408.2 | 1397.1 | 1392.3 |
| 35°   | 1376.5 | 1367.0 | 1346.5 | 1337.0 | 1329.1 |
| 37.5° | 1318.0 | 1305.3 | 1284.8 | 1273.7 | 1268.9 |
| 40°   | 1256.3 | 1246.8 | 1224.6 | 1212.0 | 1205.6 |
| 42.5° | 1194.6 | 1183.5 | 1161.3 | 1148.7 | 1142.4 |
| 45°   | 1128.1 | 1121.8 | 1101.2 | 1082.2 | 1074.3 |
| 47.5° | 1063.2 | 1053.8 | 1034.8 | 1015.8 | 1009.5 |
| 50°   | 996.8  | 988.9  | 968.3  | 950.9  | 941.4  |
| 52.5° | 927.2  | 922.4  | 900.3  | 886.0  | 876.5  |
| 55°   | 856.0  | 854.4  | 833.8  | 816.4  | 808.5  |
| 57.5° | 789.5  | 783.2  | 767.4  | 751.6  | 742.1  |
| 60°   | 716.7  | 715.2  | 696.2  | 681.9  | 674.0  |
| 62.5° | 651.9  | 647.1  | 628.1  | 613.9  | 609.2  |
| 65°   | 583.8  | 575.9  | 560.1  | 547.4  | 542.7  |
| 67.5° | 511.1  | 504.7  | 492.1  | 481.0  | 474.7  |
| 70°   | 446.2  | 436.7  | 427.2  | 416.1  | 408.2  |
| 72.5° | 378.1  | 371.8  | 360.7  | 351.3  | 348.1  |
| 75°   | 308.5  | 302.2  | 297.5  | 289.5  | 284.8  |
| 77.5° | 246.8  | 243.7  | 237.3  | 231.0  | 231.0  |
| 80°   | 186.7  | 182.0  | 178.8  | 177.2  | 177.2  |
| 82.5° | 128.2  | 128.2  | 128.2  | 125.0  | 123.4  |
| 85°   | 82.3   | 79.1   | 79.1   | 75.9   | 75.9   |
| 87.5° | 41.1   | 36.4   | 34.8   | 33.2   | 33.2   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)