

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: P1037185

Luminaire Tested: S122RDS-B485DB35-4F0-XX-W2A-F

Issue Date: 5/2/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1037185  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-24)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/2/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDS-B485DB35-4F0-XX-W2A-F  
Description: Define 2 Regressed Direct Surface with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}  
Light Source: -  
Ballast/Driver: -

**Summary**

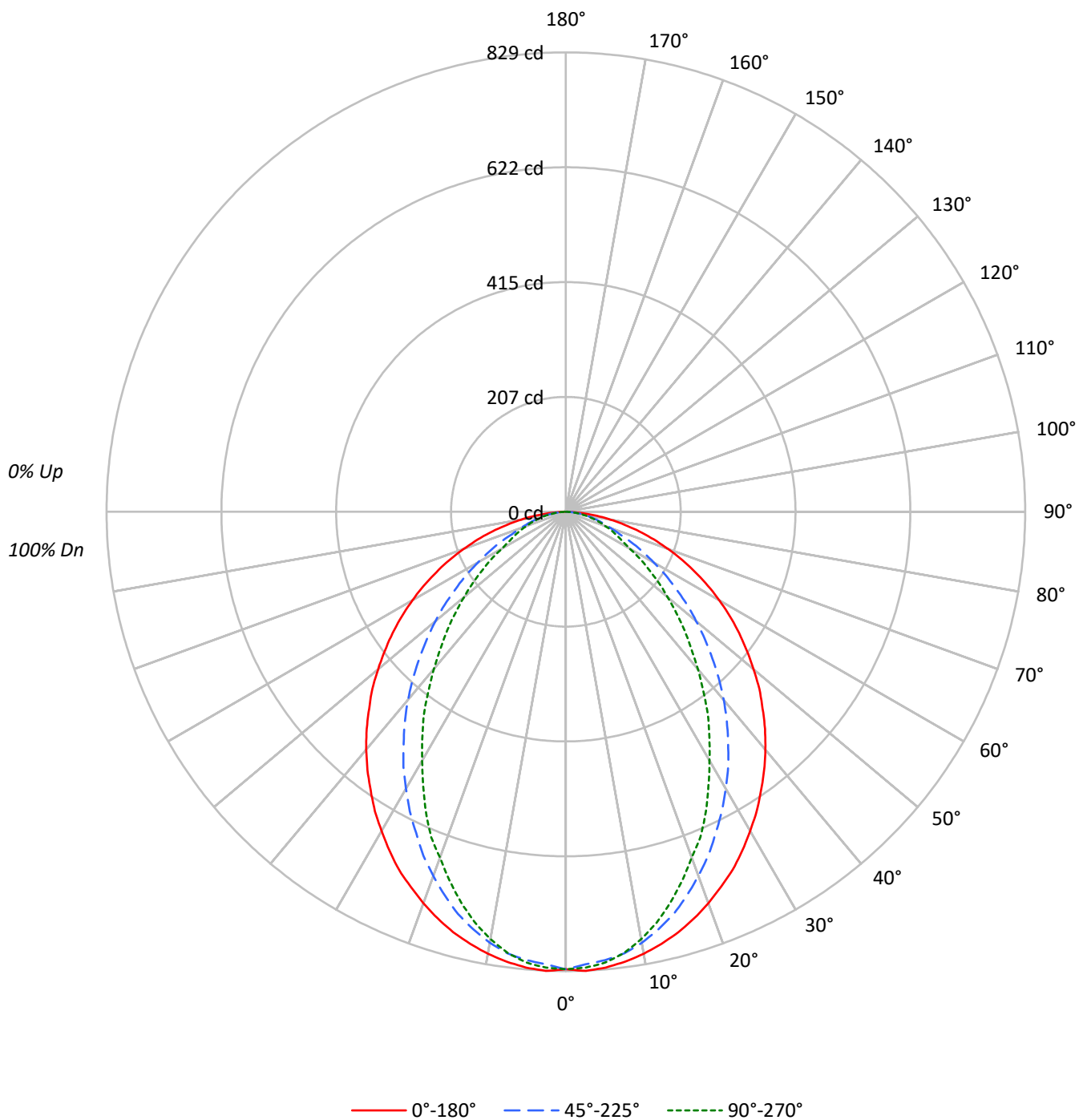
Lumens per Lamp: N/A  
Luminaire Lumens: 1698.0 lumens  
Efficiency: N/A  
Efficacy: 70.8 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 24  
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 | 106 | 102 | 98  | 107 | 103 | 100 | 97  | 99  | 96  | 94  |  | 95  | 93  | 91  |  | 92  |
| 2   | 101 | 94  | 87  | 82  | 98  | 92  | 86  | 81  | 88  | 83  | 79  |  | 85  | 81  | 78  |  | 82  |
| 3   | 93  | 83  | 76  | 70  | 90  | 82  | 75  | 69  | 79  | 73  | 68  |  | 76  | 71  | 67  |  | 74  |
| 4   | 86  | 75  | 66  | 60  | 83  | 73  | 66  | 60  | 71  | 64  | 59  |  | 69  | 63  | 58  |  | 66  |
| 5   | 79  | 67  | 59  | 53  | 77  | 66  | 58  | 52  | 64  | 57  | 52  |  | 62  | 56  | 51  |  | 60  |
| 6   | 74  | 61  | 53  | 47  | 72  | 60  | 52  | 46  | 58  | 51  | 46  |  | 57  | 50  | 46  |  | 55  |
| 7   | 68  | 56  | 47  | 42  | 67  | 55  | 47  | 42  | 53  | 46  | 41  |  | 52  | 46  | 41  |  | 51  |
| 8   | 64  | 51  | 43  | 38  | 62  | 51  | 43  | 37  | 49  | 42  | 37  |  | 48  | 42  | 37  |  | 47  |
| 9   | 60  | 47  | 39  | 34  | 59  | 47  | 39  | 34  | 46  | 39  | 34  |  | 44  | 38  | 34  |  | 44  |
| 10  | 56  | 44  | 36  | 31  | 55  | 43  | 36  | 31  | 42  | 36  | 31  |  | 41  | 35  | 31  |  | 41  |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 13069 | 13069 | 13069 |
| 5°  | 13119 | 12906 | 12977 |
| 10° | 13018 | 12695 | 12586 |
| 15° | 12869 | 12319 | 11963 |
| 20° | 12663 | 11782 | 11189 |
| 25° | 12450 | 11171 | 10439 |
| 30° | 12155 | 10543 | 9477  |
| 35° | 11869 | 9861  | 8634  |
| 40° | 11580 | 9156  | 7658  |
| 45° | 11240 | 8363  | 6774  |
| 50° | 10892 | 7563  | 5905  |
| 55° | 10537 | 6701  | 5072  |
| 60° | 10124 | 5797  | 4211  |
| 65° | 9656  | 4869  | 3835  |
| 70° | 9094  | 4013  | 3527  |
| 75° | 8409  | 3657  | 3290  |
| 80° | 7420  | 3273  | 2999  |
| 85° | 5830  | 2579  | 2579  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11240 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 77.4   | 4.6       |
| 10°-20°   | 212.4  | 12.5      |
| 20°-30°   | 298.2  | 17.6      |
| 30°-40°   | 325.1  | 19.1      |
| 40°-50°   | 298.8  | 17.6      |
| 50°-60°   | 234.7  | 13.8      |
| 60°-70°   | 152.7  | 9.0       |
| 70°-80°   | 78.6   | 4.6       |
| 80°-90°   | 20.1   | 1.2       |
| 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°    | 588.0  | 34.6      |
| 0°-40°    | 913.1  | 53.8      |
| 0°-60°    | 1446.5 | 85.2      |
| 0°-90°    | 1698.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1698.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 826 | 826   | 826 | 826   | 826 |      |
| 5°  | 826 | 822   | 812 | 819   | 817 | 78   |
| 15° | 785 | 777   | 752 | 738   | 730 | 221  |
| 25° | 713 | 689   | 640 | 609   | 598 | 328  |
| 35° | 614 | 576   | 510 | 463   | 447 | 384  |
| 45° | 502 | 452   | 374 | 320   | 303 | 388  |
| 55° | 382 | 324   | 243 | 198   | 184 | 341  |
| 65° | 258 | 197   | 130 | 105   | 102 | 256  |
| 75° | 138 | 85    | 60  | 54    | 54  | 145  |
| 85° | 32  | 16    | 14  | 14    | 14  | 39   |
| 90° | 0   | 0     | 0   | 0     | 0   |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 825.6 | 825.6 | 825.6 | 825.6 | 825.6 |
| 2.5°  | 829.4 | 825.6 | 817.4 | 824.9 | 823.4 |
| 5°    | 825.6 | 821.9 | 812.2 | 818.9 | 816.7 |
| 7.5°  | 818.9 | 814.4 | 804.0 | 806.9 | 803.2 |
| 10°   | 809.9 | 804.7 | 789.8 | 787.5 | 783.0 |
| 12.5° | 798.7 | 792.0 | 771.8 | 767.3 | 759.1 |
| 15°   | 785.3 | 777.1 | 751.7 | 737.5 | 730.0 |
| 17.5° | 769.6 | 757.6 | 726.2 | 709.8 | 697.9 |
| 20°   | 751.7 | 736.7 | 699.4 | 680.7 | 664.2 |
| 22.5° | 732.2 | 715.0 | 671.7 | 646.3 | 635.1 |
| 25°   | 712.8 | 688.9 | 639.6 | 608.9 | 597.7 |
| 27.5° | 689.6 | 664.2 | 609.7 | 574.6 | 557.4 |
| 30°   | 665.0 | 636.6 | 576.8 | 538.7 | 518.5 |
| 32.5° | 641.1 | 606.7 | 545.4 | 500.6 | 481.9 |
| 35°   | 614.2 | 576.1 | 510.3 | 463.2 | 446.8 |
| 37.5° | 588.0 | 546.9 | 477.4 | 425.9 | 407.2 |
| 40°   | 560.4 | 515.5 | 443.1 | 390.0 | 370.6 |
| 42.5° | 532.0 | 484.2 | 408.7 | 353.4 | 334.7 |
| 45°   | 502.1 | 452.0 | 373.6 | 320.5 | 302.6 |
| 47.5° | 473.7 | 420.7 | 340.0 | 286.9 | 270.5 |
| 50°   | 442.3 | 389.3 | 307.1 | 255.5 | 239.8 |
| 52.5° | 411.7 | 355.7 | 275.7 | 226.4 | 212.2 |
| 55°   | 381.8 | 323.5 | 242.8 | 198.0 | 183.8 |
| 57.5° | 351.2 | 291.4 | 213.7 | 171.8 | 159.9 |
| 60°   | 319.8 | 260.0 | 183.1 | 145.0 | 133.0 |
| 62.5° | 289.2 | 229.4 | 156.9 | 121.0 | 115.1 |
| 65°   | 257.8 | 197.3 | 130.0 | 104.6 | 102.4 |
| 67.5° | 227.9 | 167.4 | 104.6 | 91.9  | 89.7  |
| 70°   | 196.5 | 138.2 | 86.7  | 79.2  | 76.2  |
| 72.5° | 166.6 | 111.3 | 72.5  | 66.5  | 65.0  |
| 75°   | 137.5 | 85.2  | 59.8  | 54.5  | 53.8  |
| 77.5° | 108.3 | 60.5  | 47.1  | 44.1  | 42.6  |
| 80°   | 81.4  | 43.3  | 35.9  | 32.9  | 32.9  |
| 82.5° | 56.8  | 29.1  | 24.7  | 23.2  | 23.2  |
| 85°   | 32.1  | 16.4  | 14.2  | 14.2  | 14.2  |
| 87.5° | 12.0  | 6.0   | 6.0   | 5.2   | 5.2   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)