

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: P996015

Luminaire Tested: S122RDRP-B290DB2750-4F0-XX-W2A-F\_3000K

Issue Date: 5/2/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P996015  
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: S122RDRP-B290DB2750-4F0-XX-W2A-F\_3000K  
Description: Define 2 Regressed Direct Perimeter with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}  
Light Source: -  
Ballast/Driver: -

**Summary**

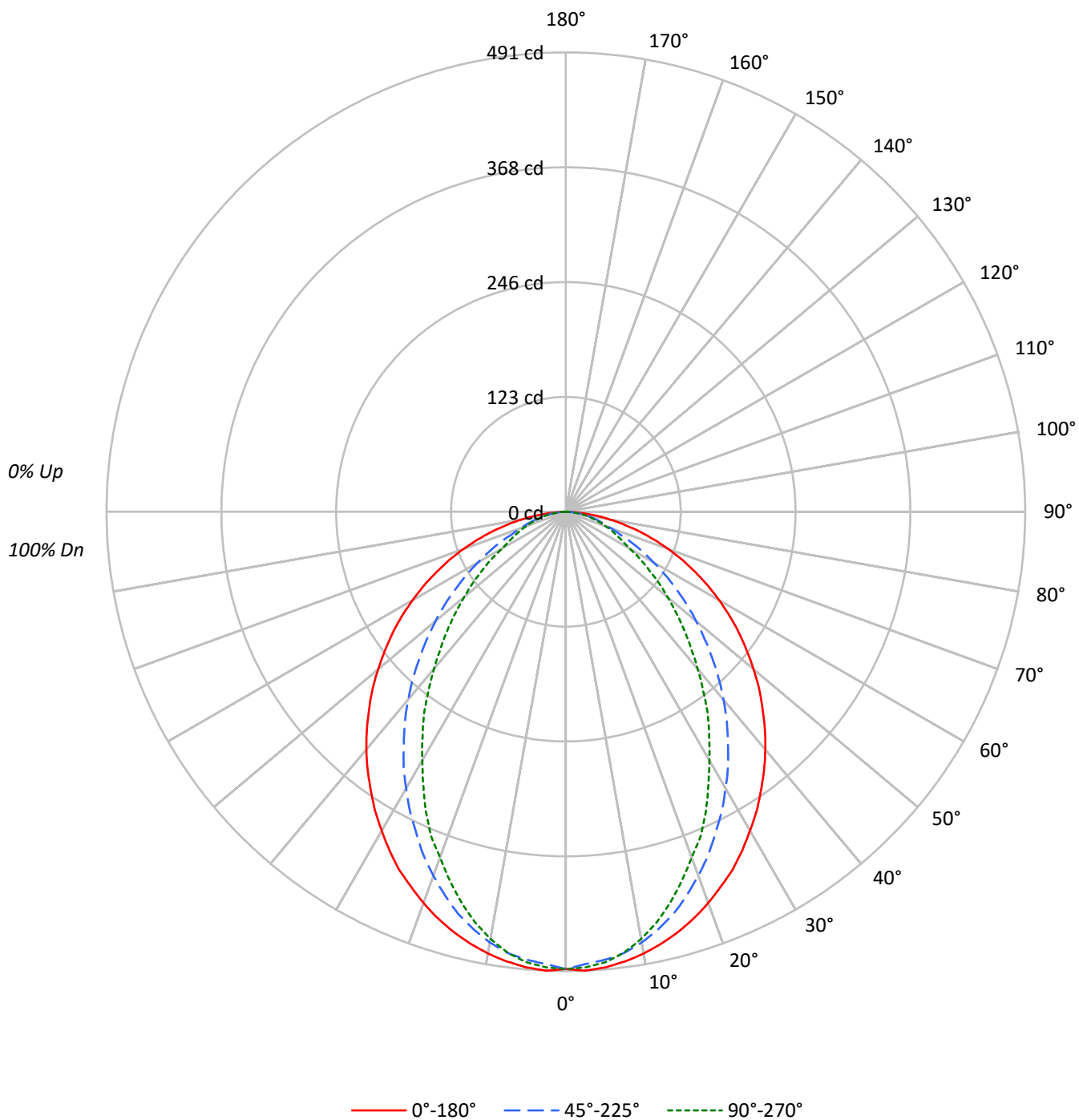
Lumens per Lamp: N/A  
Luminaire Lumens: 1005.0 lumens  
Efficiency: N/A  
Efficacy: 77.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 13  
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  | 30  | 10  | 50  | 30  | 10  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 102 | 102 | 100 |
| 1   | 110 | 106 | 102 | 98  | 107 | 103 | 100 | 97  | 99  | 96  | 94  | 95  | 93  | 91  | 92  | 90  | 88  | 88  | 88  | 86  |
| 2   | 101 | 94  | 87  | 82  | 98  | 92  | 86  | 81  | 88  | 83  | 79  | 85  | 81  | 78  | 82  | 79  | 76  | 76  | 76  | 74  |
| 3   | 93  | 83  | 76  | 70  | 90  | 82  | 75  | 69  | 79  | 73  | 68  | 76  | 71  | 67  | 74  | 69  | 66  | 66  | 66  | 64  |
| 4   | 86  | 75  | 66  | 60  | 83  | 73  | 66  | 60  | 71  | 64  | 59  | 69  | 63  | 58  | 66  | 62  | 57  | 57  | 57  | 55  |
| 5   | 79  | 67  | 59  | 53  | 77  | 66  | 58  | 52  | 64  | 57  | 52  | 62  | 56  | 51  | 60  | 55  | 51  | 51  | 51  | 49  |
| 6   | 74  | 61  | 53  | 47  | 72  | 60  | 52  | 46  | 58  | 51  | 46  | 57  | 50  | 46  | 55  | 50  | 45  | 45  | 45  | 43  |
| 7   | 68  | 56  | 47  | 42  | 67  | 55  | 47  | 42  | 53  | 46  | 41  | 52  | 46  | 41  | 51  | 45  | 41  | 41  | 41  | 39  |
| 8   | 64  | 51  | 43  | 38  | 62  | 51  | 43  | 37  | 49  | 42  | 37  | 48  | 42  | 37  | 47  | 41  | 37  | 37  | 37  | 35  |
| 9   | 60  | 47  | 39  | 34  | 59  | 47  | 39  | 34  | 46  | 39  | 34  | 44  | 38  | 34  | 44  | 38  | 34  | 34  | 34  | 32  |
| 10  | 56  | 44  | 36  | 31  | 55  | 43  | 36  | 31  | 42  | 36  | 31  | 41  | 35  | 31  | 41  | 35  | 31  | 31  | 31  | 29  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 7736 | 7736 | 7736 |
| 5°  | 7765 | 7638 | 7681 |
| 10° | 7706 | 7513 | 7450 |
| 15° | 7617 | 7291 | 7081 |
| 20° | 7494 | 6972 | 6622 |
| 25° | 7369 | 6611 | 6179 |
| 30° | 7194 | 6240 | 5610 |
| 35° | 7024 | 5836 | 5111 |
| 40° | 6854 | 5418 | 4532 |
| 45° | 6653 | 4950 | 4009 |
| 50° | 6447 | 4477 | 3497 |
| 55° | 6237 | 3966 | 3003 |
| 60° | 5993 | 3429 | 2492 |
| 65° | 5716 | 2880 | 2270 |
| 70° | 5383 | 2374 | 2087 |
| 75° | 4978 | 2165 | 1945 |
| 80° | 4394 | 1933 | 1778 |
| 85° | 3451 | 1526 | 1526 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6653 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 45.8   | 4.6       |
| 10°-20°   | 125.7  | 12.5      |
| 20°-30°   | 176.5  | 17.6      |
| 30°-40°   | 192.4  | 19.1      |
| 40°-50°   | 176.8  | 17.6      |
| 50°-60°   | 138.9  | 13.8      |
| 60°-70°   | 90.4   | 9.0       |
| 70°-80°   | 46.5   | 4.6       |
| 80°-90°   | 11.9   | 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°    | 348.0  | 34.6      |
| 0°-40°    | 540.4  | 53.8      |
| 0°-60°    | 856.2  | 85.2      |
| 0°-90°    | 1005.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1005.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 489 | 489   | 489 | 489   | 489 |      |
| 5°  | 489 | 486   | 481 | 485   | 483 | 46   |
| 15° | 465 | 460   | 445 | 436   | 432 | 131  |
| 25° | 422 | 408   | 378 | 360   | 354 | 194  |
| 35° | 364 | 341   | 302 | 274   | 264 | 228  |
| 45° | 297 | 268   | 221 | 190   | 179 | 230  |
| 55° | 226 | 192   | 144 | 117   | 109 | 202  |
| 65° | 153 | 117   | 77  | 62    | 61  | 151  |
| 75° | 81  | 50    | 35  | 32    | 32  | 86   |
| 85° | 19  | 10    | 8   | 8     | 8   | 23   |
| 90° | 0   | 0     | 0   | 0     | 0   |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 488.7 | 488.7 | 488.7 | 488.7 | 488.7 |
| 2.5°  | 490.9 | 488.7 | 483.8 | 488.2 | 487.3 |
| 5°    | 488.7 | 486.5 | 480.7 | 484.7 | 483.4 |
| 7.5°  | 484.7 | 482.0 | 475.8 | 477.6 | 475.4 |
| 10°   | 479.4 | 476.3 | 467.4 | 466.1 | 463.5 |
| 12.5° | 472.7 | 468.8 | 456.8 | 454.2 | 449.3 |
| 15°   | 464.8 | 459.9 | 444.9 | 436.5 | 432.1 |
| 17.5° | 455.5 | 448.4 | 429.8 | 420.1 | 413.0 |
| 20°   | 444.9 | 436.0 | 413.9 | 402.9 | 393.1 |
| 22.5° | 433.4 | 423.2 | 397.6 | 382.5 | 375.9 |
| 25°   | 421.9 | 407.7 | 378.5 | 360.4 | 353.8 |
| 27.5° | 408.2 | 393.1 | 360.9 | 340.1 | 329.9 |
| 30°   | 393.6 | 376.8 | 341.4 | 318.8 | 306.9 |
| 32.5° | 379.4 | 359.1 | 322.8 | 296.3 | 285.2 |
| 35°   | 363.5 | 341.0 | 302.0 | 274.2 | 264.5 |
| 37.5° | 348.0 | 323.7 | 282.6 | 252.1 | 241.0 |
| 40°   | 331.7 | 305.1 | 262.2 | 230.8 | 219.3 |
| 42.5° | 314.9 | 286.6 | 241.9 | 209.2 | 198.1 |
| 45°   | 297.2 | 267.5 | 221.1 | 189.7 | 179.1 |
| 47.5° | 280.4 | 249.0 | 201.2 | 169.8 | 160.1 |
| 50°   | 261.8 | 230.4 | 181.8 | 151.2 | 142.0 |
| 52.5° | 243.7 | 210.5 | 163.2 | 134.0 | 125.6 |
| 55°   | 226.0 | 191.5 | 143.7 | 117.2 | 108.8 |
| 57.5° | 207.8 | 172.5 | 126.5 | 101.7 | 94.6  |
| 60°   | 189.3 | 153.9 | 108.3 | 85.8  | 78.7  |
| 62.5° | 171.1 | 135.8 | 92.9  | 71.6  | 68.1  |
| 65°   | 152.6 | 116.7 | 76.9  | 61.9  | 60.6  |
| 67.5° | 134.9 | 99.1  | 61.9  | 54.4  | 53.1  |
| 70°   | 116.3 | 81.8  | 51.3  | 46.9  | 45.1  |
| 72.5° | 98.6  | 65.9  | 42.9  | 39.4  | 38.5  |
| 75°   | 81.4  | 50.4  | 35.4  | 32.3  | 31.8  |
| 77.5° | 64.1  | 35.8  | 27.9  | 26.1  | 25.2  |
| 80°   | 48.2  | 25.6  | 21.2  | 19.5  | 19.5  |
| 82.5° | 33.6  | 17.2  | 14.6  | 13.7  | 13.7  |
| 85°   | 19.0  | 9.7   | 8.4   | 8.4   | 8.4   |
| 87.5° | 7.1   | 3.5   | 3.5   | 3.1   | 3.1   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)