

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: P996148

Luminaire Tested: S123DRP-B340DB27-4F0-XX-W2A-F

Issue Date: 5/2/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P996148  
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-B340DB27-4F0-XX-W2A-F  
Description: Define 3 Direct Perimeter with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}  
Light Source: -  
Ballast/Driver: -

**Summary**

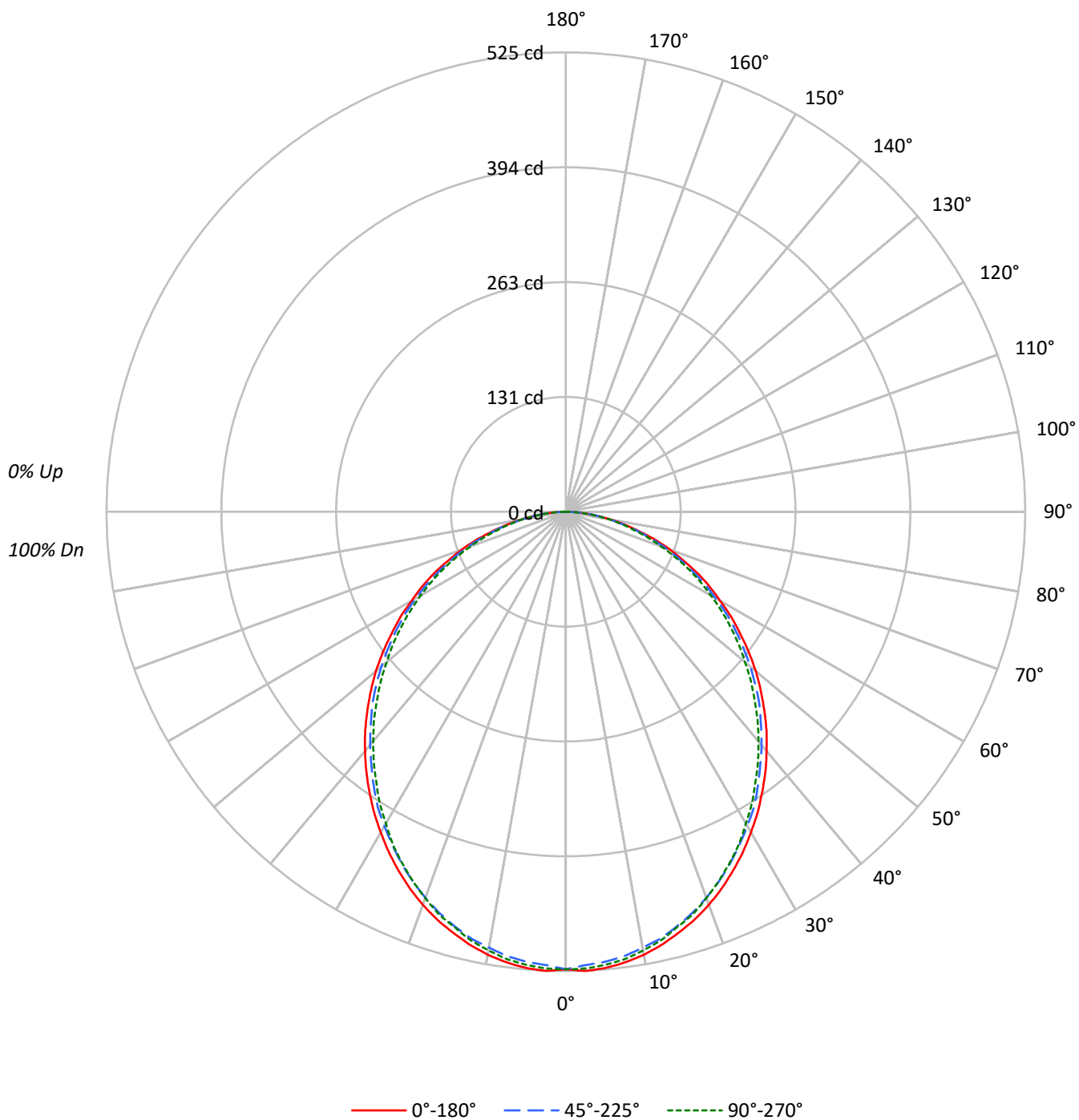
Lumens per Lamp: N/A  
Luminaire Lumens: 1361.0 lumens  
Efficiency: N/A  
Efficacy: 104.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3  
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 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  |     |     | 0   |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  |  | 50  | 30  | 10  |  | 50  | 30  | 10  | 0   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 | 102 | 102 | 100 |
| 1   | 109 | 104 | 100 | 96  | 106 | 102 | 98  | 95  | 98  | 94  | 92  |  | 94  | 91  | 89  |  | 90  | 88  | 86  | 84  |
| 2   | 99  | 91  | 84  | 79  | 97  | 89  | 83  | 78  | 86  | 80  | 76  |  | 82  | 78  | 74  |  | 79  | 76  | 72  | 70  |
| 3   | 91  | 80  | 72  | 66  | 88  | 79  | 71  | 65  | 76  | 69  | 64  |  | 73  | 67  | 63  |  | 70  | 66  | 62  | 59  |
| 4   | 83  | 71  | 62  | 56  | 81  | 70  | 62  | 55  | 67  | 60  | 55  |  | 65  | 59  | 54  |  | 63  | 58  | 53  | 51  |
| 5   | 76  | 64  | 55  | 48  | 74  | 63  | 54  | 48  | 60  | 53  | 47  |  | 58  | 52  | 47  |  | 57  | 51  | 46  | 44  |
| 6   | 71  | 57  | 49  | 42  | 69  | 56  | 48  | 42  | 55  | 47  | 42  |  | 53  | 46  | 41  |  | 51  | 46  | 41  | 39  |
| 7   | 66  | 52  | 43  | 37  | 64  | 51  | 43  | 37  | 50  | 42  | 37  |  | 48  | 42  | 37  |  | 47  | 41  | 36  | 34  |
| 8   | 61  | 48  | 39  | 33  | 60  | 47  | 39  | 33  | 46  | 38  | 33  |  | 44  | 38  | 33  |  | 43  | 37  | 33  | 31  |
| 9   | 57  | 44  | 36  | 30  | 56  | 43  | 35  | 30  | 42  | 35  | 30  |  | 41  | 34  | 30  |  | 40  | 34  | 30  | 28  |
| 10  | 54  | 40  | 33  | 27  | 52  | 40  | 32  | 27  | 39  | 32  | 27  |  | 38  | 32  | 27  |  | 37  | 31  | 27  | 25  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 5628 | 5628 | 5628 |
| 5°  | 5655 | 5578 | 5616 |
| 10° | 5618 | 5529 | 5563 |
| 15° | 5552 | 5467 | 5477 |
| 20° | 5475 | 5377 | 5383 |
| 25° | 5373 | 5271 | 5260 |
| 30° | 5259 | 5153 | 5113 |
| 35° | 5140 | 5029 | 4963 |
| 40° | 5016 | 4890 | 4814 |
| 45° | 4880 | 4765 | 4647 |
| 50° | 4744 | 4608 | 4479 |
| 55° | 4566 | 4448 | 4312 |
| 60° | 4385 | 4258 | 4125 |
| 65° | 4225 | 4055 | 3927 |
| 70° | 3991 | 3821 | 3651 |
| 75° | 3647 | 3514 | 3365 |
| 80° | 3292 | 3149 | 3124 |
| 85° | 2890 | 2779 | 2668 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4880 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 49.3   | 3.6       |
| 10°-20°   | 139.2  | 10.2      |
| 20°-30°   | 205.6  | 15.1      |
| 30°-40°   | 240.1  | 17.6      |
| 40°-50°   | 241.4  | 17.7      |
| 50°-60°   | 212.1  | 15.6      |
| 60°-70°   | 157.9  | 11.6      |
| 70°-80°   | 89.9   | 6.6       |
| 80°-90°   | 25.5   | 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°    | 394.1  | 29.0      |
| 0°-40°    | 634.2  | 46.6      |
| 0°-60°    | 1087.7 | 79.9      |
| 0°-90°    | 1361.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1361.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 523 | 523   | 523 | 523   | 523 |      |
| 5°  | 523 | 521   | 516 | 521   | 520 | 50   |
| 15° | 498 | 496   | 491 | 494   | 492 | 140  |
| 25° | 452 | 450   | 444 | 444   | 443 | 208  |
| 35° | 391 | 388   | 383 | 380   | 378 | 245  |
| 45° | 321 | 319   | 313 | 308   | 305 | 248  |
| 55° | 243 | 243   | 237 | 232   | 230 | 218  |
| 65° | 166 | 164   | 159 | 156   | 154 | 164  |
| 75° | 88  | 86    | 84  | 82    | 81  | 94   |
| 85° | 23  | 22    | 22  | 22    | 22  | 27   |
| 90° | 0   | 0     | 0   | 0     | 0   |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 522.9 | 522.9 | 522.9 | 522.9 | 522.9 |
| 2.5°  | 525.2 | 523.4 | 518.5 | 522.9 | 522.5 |
| 5°    | 523.4 | 521.1 | 516.2 | 520.7 | 519.8 |
| 7.5°  | 519.4 | 517.1 | 512.2 | 516.2 | 515.8 |
| 10°   | 514.0 | 511.7 | 505.9 | 509.9 | 509.0 |
| 12.5° | 506.8 | 505.0 | 499.6 | 502.3 | 501.8 |
| 15°   | 498.2 | 496.4 | 490.6 | 494.2 | 491.5 |
| 17.5° | 488.8 | 486.5 | 480.7 | 483.4 | 482.5 |
| 20°   | 478.0 | 475.3 | 469.4 | 471.2 | 469.9 |
| 22.5° | 465.8 | 463.1 | 457.3 | 458.6 | 456.8 |
| 25°   | 452.4 | 449.7 | 443.8 | 444.3 | 442.9 |
| 27.5° | 438.4 | 435.7 | 429.4 | 429.9 | 428.5 |
| 30°   | 423.1 | 420.9 | 414.6 | 414.6 | 411.4 |
| 32.5° | 407.8 | 404.7 | 400.2 | 397.0 | 395.7 |
| 35°   | 391.2 | 388.5 | 382.7 | 380.0 | 377.7 |
| 37.5° | 374.6 | 371.0 | 365.1 | 362.0 | 360.6 |
| 40°   | 357.0 | 354.3 | 348.0 | 344.4 | 342.6 |
| 42.5° | 339.5 | 336.3 | 330.0 | 326.4 | 324.6 |
| 45°   | 320.6 | 318.8 | 313.0 | 307.6 | 305.3 |
| 47.5° | 302.2 | 299.5 | 294.1 | 288.7 | 286.9 |
| 50°   | 283.3 | 281.0 | 275.2 | 270.2 | 267.5 |
| 52.5° | 263.5 | 262.1 | 255.9 | 251.8 | 249.1 |
| 55°   | 243.3 | 242.8 | 237.0 | 232.0 | 229.8 |
| 57.5° | 224.4 | 222.6 | 218.1 | 213.6 | 210.9 |
| 60°   | 203.7 | 203.2 | 197.8 | 193.8 | 191.6 |
| 62.5° | 185.3 | 183.9 | 178.5 | 174.5 | 173.1 |
| 65°   | 165.9 | 163.7 | 159.2 | 155.6 | 154.2 |
| 67.5° | 145.2 | 143.4 | 139.8 | 136.7 | 134.9 |
| 70°   | 126.8 | 124.1 | 121.4 | 118.3 | 116.0 |
| 72.5° | 107.5 | 105.7 | 102.5 | 99.8  | 98.9  |
| 75°   | 87.7  | 85.9  | 84.5  | 82.3  | 80.9  |
| 77.5° | 70.1  | 69.2  | 67.4  | 65.6  | 65.6  |
| 80°   | 53.1  | 51.7  | 50.8  | 50.4  | 50.4  |
| 82.5° | 36.4  | 36.4  | 36.4  | 35.5  | 35.1  |
| 85°   | 23.4  | 22.5  | 22.5  | 21.6  | 21.6  |
| 87.5° | 11.7  | 10.3  | 9.9   | 9.4   | 9.4   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)