

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: P1000464

Luminaire Tested: SA4XXRDP-B350DB35-4F0-XX-W2A-F

Issue Date: 5/2/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1000464  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-26)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/2/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: SA4XXRDP-B350DB35-4F0-XX-W2A-F  
Description: Define 4 Regressed Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}  
Light Source: -  
Ballast/Driver: -

**Summary**

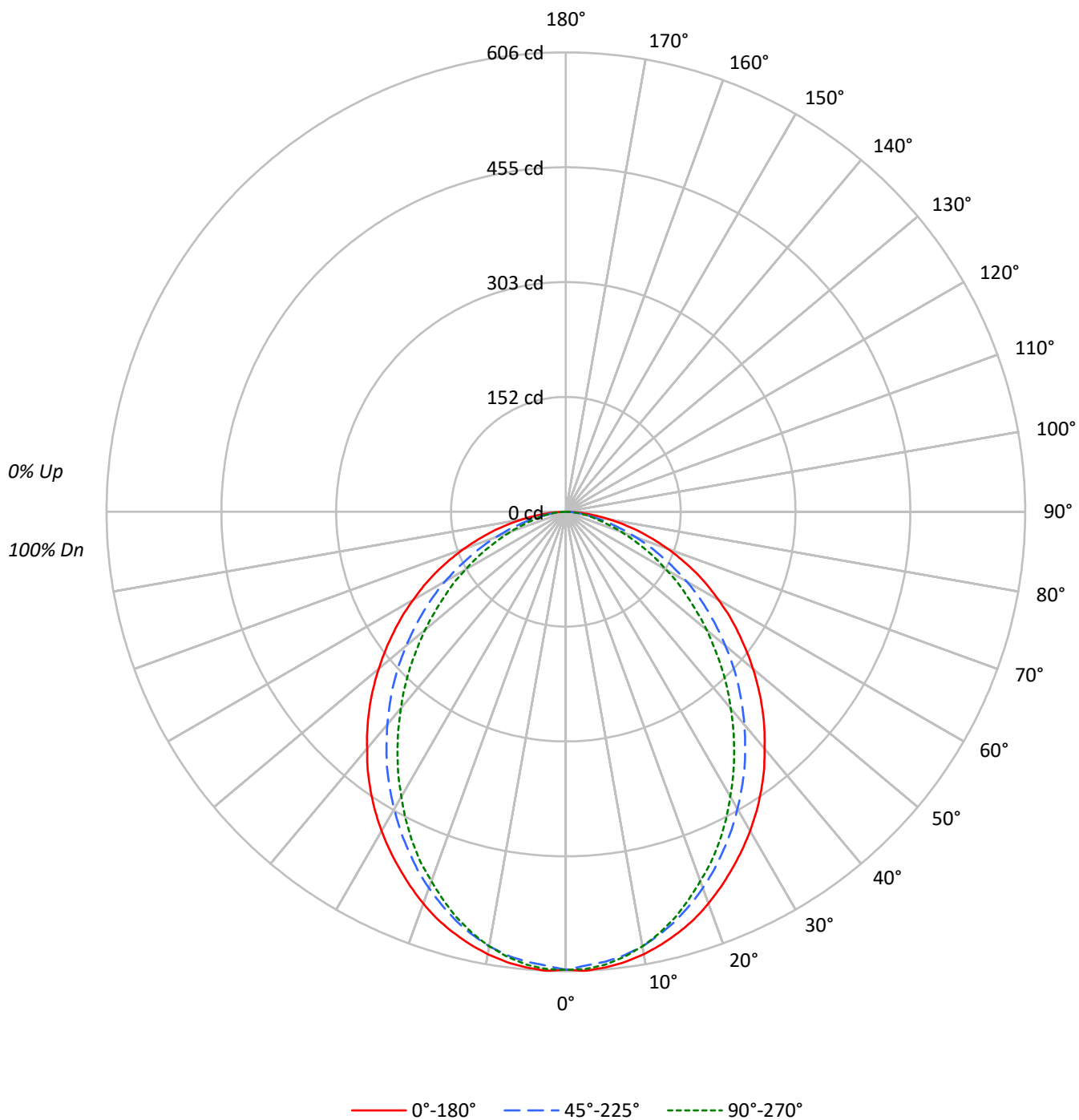
Lumens per Lamp: N/A  
Luminaire Lumens: 1396.0 lumens  
Efficiency: N/A  
Efficacy: 107.4 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24  
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')  
CIE Type: Direct

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

TEST NUMBER: P1000464

CATALOG NUMBER: SA4XXRDP-B350DB35-4F0-XX-W2A-F

### Luminous Intensity Polar Plot



TEST NUMBER: P1000464

CATALOG NUMBER: SA4XXRDP-B350DB35-4F0-XX-W2A-F

**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   | 110 | 105 | 101 | 98  | 107 | 103 | 99  | 96  | 99  | 96  | 93  |  | 95  | 92  | 90  |  | 91  | 89  | 87  | 85  |
| 2   | 100 | 93  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 82  | 78  |  | 84  | 80  | 76  |  | 81  | 78  | 74  | 72  |
| 3   | 92  | 82  | 74  | 68  | 89  | 80  | 73  | 67  | 77  | 71  | 66  |  | 75  | 69  | 65  |  | 72  | 68  | 64  | 62  |
| 4   | 84  | 73  | 65  | 58  | 82  | 72  | 64  | 58  | 69  | 62  | 57  |  | 67  | 61  | 56  |  | 65  | 60  | 56  | 54  |
| 5   | 78  | 66  | 57  | 51  | 76  | 65  | 56  | 50  | 62  | 55  | 50  |  | 61  | 54  | 49  |  | 59  | 53  | 49  | 47  |
| 6   | 72  | 59  | 51  | 45  | 70  | 58  | 50  | 44  | 57  | 49  | 44  |  | 55  | 49  | 44  |  | 53  | 48  | 43  | 41  |
| 7   | 67  | 54  | 46  | 40  | 65  | 53  | 45  | 40  | 52  | 45  | 39  |  | 50  | 44  | 39  |  | 49  | 43  | 39  | 37  |
| 8   | 63  | 50  | 41  | 36  | 61  | 49  | 41  | 36  | 48  | 40  | 35  |  | 46  | 40  | 35  |  | 45  | 39  | 35  | 33  |
| 9   | 59  | 46  | 38  | 32  | 57  | 45  | 37  | 32  | 44  | 37  | 32  |  | 43  | 36  | 32  |  | 42  | 36  | 32  | 30  |
| 10  | 55  | 42  | 35  | 29  | 54  | 42  | 34  | 29  | 41  | 34  | 29  |  | 40  | 33  | 29  |  | 39  | 33  | 29  | 27  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 4927 | 4927 | 4927 |
| 5°  | 4938 | 4877 | 4907 |
| 10° | 4907 | 4819 | 4819 |
| 15° | 4851 | 4717 | 4683 |
| 20° | 4773 | 4584 | 4500 |
| 25° | 4674 | 4429 | 4316 |
| 30° | 4578 | 4264 | 4086 |
| 35° | 4472 | 4094 | 3854 |
| 40° | 4343 | 3900 | 3604 |
| 45° | 4225 | 3708 | 3350 |
| 50° | 4090 | 3486 | 3081 |
| 55° | 3947 | 3256 | 2788 |
| 60° | 3787 | 3002 | 2490 |
| 65° | 3641 | 2686 | 2196 |
| 70° | 3431 | 2339 | 1864 |
| 75° | 3163 | 1938 | 1515 |
| 80° | 2761 | 1479 | 1390 |
| 85° | 2339 | 1338 | 1254 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4225 cd/sqm

TEST NUMBER: P1000464

CATALOG NUMBER: SA4XXRDP-B350DB35-4F0-XX-W2A-F

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 56.8   | 4.1       |
| 10°-20°   | 158.4  | 11.3      |
| 20°-30°   | 228.7  | 16.4      |
| 30°-40°   | 259.2  | 18.6      |
| 40°-50°   | 250.3  | 17.9      |
| 50°-60°   | 208.1  | 14.9      |
| 60°-70°   | 143.6  | 10.3      |
| 70°-80°   | 72.6   | 5.2       |
| 80°-90°   | 18.4   | 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°    | 443.9  | 31.8      |
| 0°-40°    | 703.1  | 50.4      |
| 0°-60°    | 1161.4 | 83.2      |
| 0°-90°    | 1396.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1396.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 604 | 604   | 604 | 604   | 604 |      |
| 5°  | 603 | 601   | 596 | 600   | 600 | 57   |
| 15° | 575 | 570   | 559 | 558   | 555 | 162  |
| 25° | 520 | 511   | 492 | 484   | 480 | 239  |
| 35° | 449 | 434   | 411 | 396   | 387 | 281  |
| 45° | 366 | 349   | 322 | 299   | 290 | 283  |
| 55° | 278 | 259   | 229 | 205   | 196 | 248  |
| 65° | 189 | 169   | 139 | 119   | 114 | 186  |
| 75° | 100 | 83    | 62  | 51    | 48  | 106  |
| 85° | 25  | 16    | 14  | 13    | 13  | 29   |
| 90° | 0   | 0     | 0   | 0     | 0   |      |

TEST NUMBER: P1000464

CATALOG NUMBER: SA4XXRDP-B350DB35-4F0-XX-W2A-F

**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 604.2 | 604.2 | 604.2 | 604.2 | 604.2 |
| 2.5°  | 606.0 | 604.2 | 599.1 | 604.2 | 603.7 |
| 5°    | 603.2 | 601.4 | 595.8 | 600.5 | 599.5 |
| 7.5°  | 599.1 | 597.2 | 590.3 | 593.5 | 592.1 |
| 10°   | 592.6 | 590.3 | 582.0 | 583.8 | 582.0 |
| 12.5° | 584.3 | 581.5 | 571.3 | 572.3 | 569.5 |
| 15°   | 574.6 | 570.4 | 558.8 | 557.9 | 554.7 |
| 17.5° | 563.5 | 557.4 | 544.0 | 541.7 | 537.1 |
| 20°   | 550.0 | 544.0 | 528.3 | 524.6 | 518.6 |
| 22.5° | 535.2 | 528.3 | 511.2 | 505.2 | 500.5 |
| 25°   | 519.5 | 511.2 | 492.2 | 484.4 | 479.7 |
| 27.5° | 503.3 | 493.1 | 473.3 | 464.0 | 457.5 |
| 30°   | 486.2 | 474.6 | 452.9 | 441.3 | 433.9 |
| 32.5° | 468.2 | 454.7 | 432.1 | 418.2 | 411.3 |
| 35°   | 449.2 | 434.4 | 411.3 | 395.5 | 387.2 |
| 37.5° | 429.3 | 414.0 | 388.6 | 371.5 | 363.1 |
| 40°   | 408.0 | 392.8 | 366.4 | 347.0 | 338.6 |
| 42.5° | 387.7 | 371.5 | 343.7 | 323.8 | 315.0 |
| 45°   | 366.4 | 349.3 | 321.5 | 298.8 | 290.5 |
| 47.5° | 344.6 | 327.1 | 298.4 | 274.8 | 265.5 |
| 50°   | 322.4 | 304.4 | 274.8 | 251.7 | 242.9 |
| 52.5° | 299.8 | 282.2 | 251.7 | 228.1 | 218.8 |
| 55°   | 277.6 | 259.1 | 229.0 | 204.9 | 196.1 |
| 57.5° | 255.8 | 236.4 | 206.8 | 182.3 | 175.8 |
| 60°   | 232.2 | 213.7 | 184.1 | 160.1 | 152.7 |
| 62.5° | 211.0 | 191.5 | 161.0 | 139.2 | 133.7 |
| 65°   | 188.7 | 168.9 | 139.2 | 119.4 | 113.8 |
| 67.5° | 165.6 | 146.6 | 118.9 | 101.3 | 94.8  |
| 70°   | 143.9 | 124.4 | 98.1  | 82.8  | 78.2  |
| 72.5° | 120.7 | 103.6 | 79.1  | 66.6  | 62.5  |
| 75°   | 100.4 | 83.3  | 61.5  | 50.9  | 48.1  |
| 77.5° | 79.1  | 64.3  | 45.8  | 38.4  | 37.5  |
| 80°   | 58.8  | 45.3  | 31.5  | 30.1  | 29.6  |
| 82.5° | 41.2  | 29.1  | 22.7  | 21.7  | 21.3  |
| 85°   | 25.0  | 15.7  | 14.3  | 13.4  | 13.4  |
| 87.5° | 10.6  | 6.9   | 6.5   | 6.0   | 6.5   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)