

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: P1000366

Luminaire Tested: SA4XXDP-B575DB2750-4F0-XX-W2A-F\_5000K

Issue Date: 5/2/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1000366  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/2/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: SA4XXDP-B575DB2750-4F0-XX-W2A-F\_5000K  
Description: Define 4 Direct Recessed with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

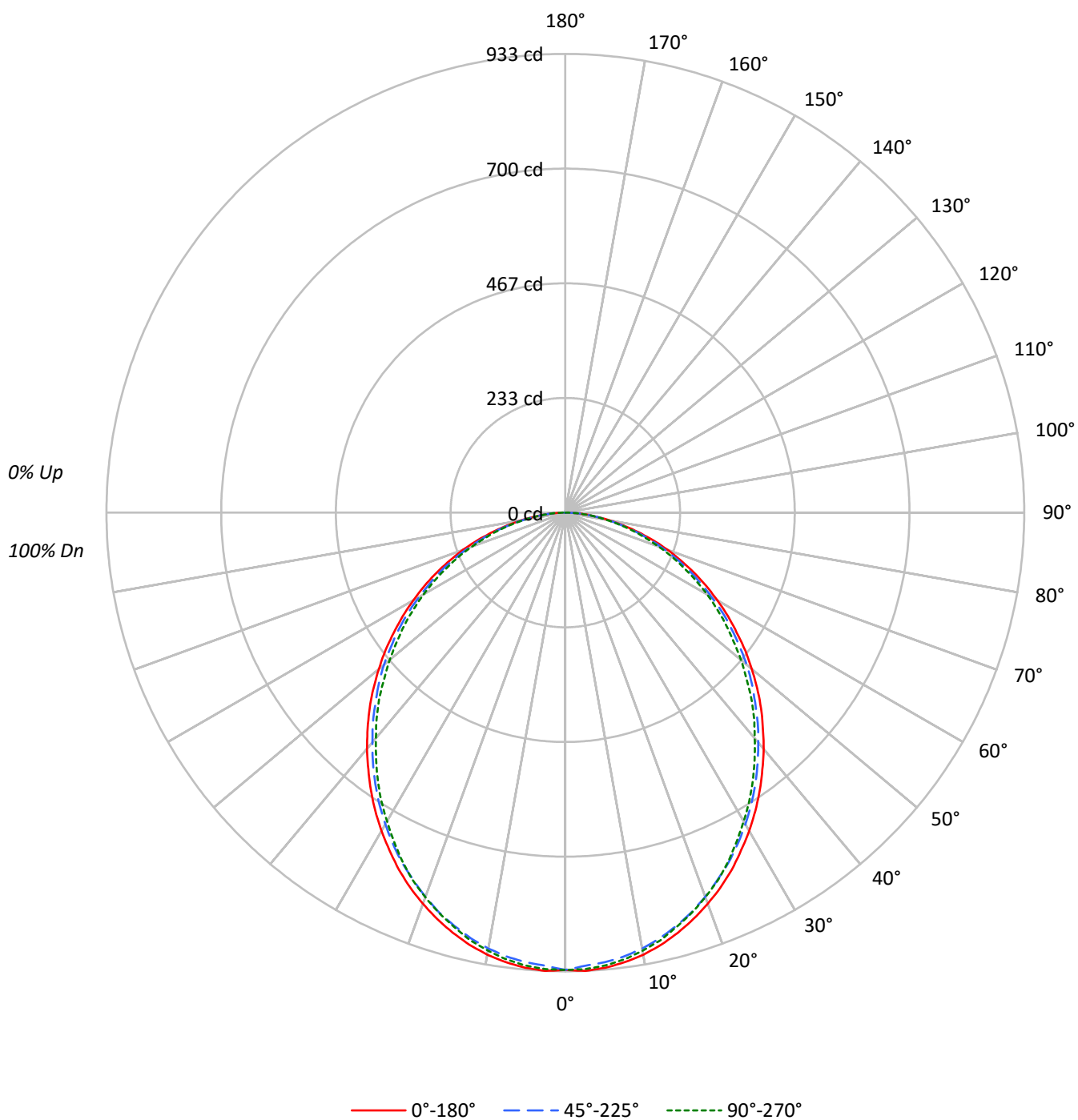
Lumens per Lamp: N/A  
Luminaire Lumens: 2387.0 lumens  
Efficiency: N/A  
Efficacy: 99.5 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29  
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')  
CIE Type: Direct

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  |     |    |    | 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  | 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  | 95  | 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  | 73  | 70  |    |    |    |
| 3   | 91  | 80  | 72  | 66  | 88  | 79  | 71  | 65  | 76  | 69  | 64  | 73  | 67  | 63  | 70  | 66  | 62  | 60  |    |    |    |
| 4   | 83  | 71  | 63  | 56  | 81  | 70  | 62  | 56  | 67  | 60  | 55  | 65  | 59  | 54  | 63  | 58  | 53  | 51  |    |    |    |
| 5   | 77  | 64  | 55  | 48  | 74  | 63  | 54  | 48  | 61  | 53  | 48  | 59  | 52  | 47  | 57  | 51  | 47  | 44  |    |    |    |
| 6   | 71  | 58  | 49  | 42  | 69  | 57  | 48  | 42  | 55  | 47  | 42  | 53  | 47  | 41  | 52  | 46  | 41  | 39  |    |    |    |
| 7   | 66  | 52  | 44  | 38  | 64  | 52  | 43  | 37  | 50  | 43  | 37  | 49  | 42  | 37  | 47  | 41  | 37  | 35  |    |    |    |
| 8   | 61  | 48  | 39  | 34  | 60  | 47  | 39  | 34  | 46  | 39  | 33  | 45  | 38  | 33  | 43  | 37  | 33  | 31  |    |    |    |
| 9   | 57  | 44  | 36  | 30  | 56  | 43  | 36  | 30  | 42  | 35  | 30  | 41  | 35  | 30  | 40  | 34  | 30  | 28  |    |    |    |
| 10  | 54  | 41  | 33  | 28  | 52  | 40  | 33  | 28  | 39  | 32  | 27  | 38  | 32  | 27  | 37  | 31  | 27  | 25  |    |    |    |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 7584 | 7584 | 7584 |
| 5°  | 7606 | 7515 | 7570 |
| 10° | 7559 | 7454 | 7491 |
| 15° | 7467 | 7348 | 7367 |
| 20° | 7346 | 7216 | 7223 |
| 25° | 7208 | 7067 | 7047 |
| 30° | 7038 | 6891 | 6828 |
| 35° | 6862 | 6706 | 6617 |
| 40° | 6679 | 6497 | 6377 |
| 45° | 6488 | 6291 | 6170 |
| 50° | 6277 | 6107 | 5918 |
| 55° | 6049 | 5869 | 5678 |
| 60° | 5821 | 5602 | 5433 |
| 65° | 5565 | 5349 | 5133 |
| 70° | 5276 | 5009 | 4814 |
| 75° | 4836 | 4603 | 4483 |
| 80° | 4306 | 4128 | 4024 |
| 85° | 3761 | 3621 | 3555 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
Vertical Angle: 45°  
Luminance: 6488 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 87.7   | 3.7       |
| 10°-20°   | 247.0  | 10.3      |
| 20°-30°   | 363.4  | 15.2      |
| 30°-40°   | 422.5  | 17.7      |
| 40°-50°   | 422.5  | 17.7      |
| 50°-60°   | 369.5  | 15.5      |
| 60°-70°   | 274.3  | 11.5      |
| 70°-80°   | 155.6  | 6.5       |
| 80°-90°   | 44.6   | 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°    | 698.1  | 29.2      |
| 0°-40°    | 1120.5 | 46.9      |
| 0°-60°    | 1912.5 | 80.1      |
| 0°-90°    | 2387.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2387.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 930 | 930   | 930 | 930   | 930 |      |
| 5°  | 929 | 926   | 918 | 926   | 925 | 88   |
| 15° | 884 | 882   | 870 | 875   | 873 | 249  |
| 25° | 801 | 796   | 785 | 786   | 783 | 369  |
| 35° | 689 | 684   | 674 | 668   | 665 | 431  |
| 45° | 563 | 557   | 546 | 537   | 535 | 434  |
| 55° | 426 | 423   | 413 | 404   | 399 | 381  |
| 65° | 288 | 285   | 277 | 270   | 266 | 285  |
| 75° | 154 | 150   | 146 | 143   | 142 | 163  |
| 85° | 40  | 40    | 39  | 39    | 38  | 46   |
| 90° | 0   | 0     | 0   | 0     | 0   |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 930.0 | 930.0 | 930.0 | 930.0 | 930.0 |
| 2.5°  | 933.0 | 930.7 | 922.5 | 930.0 | 929.2 |
| 5°    | 929.2 | 926.3 | 918.1 | 926.3 | 924.8 |
| 7.5°  | 922.5 | 919.6 | 910.6 | 917.3 | 916.6 |
| 10°   | 912.9 | 909.9 | 900.2 | 906.1 | 904.7 |
| 12.5° | 900.2 | 897.2 | 886.8 | 893.5 | 891.2 |
| 15°   | 884.5 | 881.6 | 870.4 | 874.8 | 872.6 |
| 17.5° | 866.6 | 862.9 | 852.5 | 855.5 | 854.0 |
| 20°   | 846.5 | 842.8 | 831.6 | 833.9 | 832.4 |
| 22.5° | 824.9 | 819.7 | 808.5 | 813.0 | 810.0 |
| 25°   | 801.1 | 795.9 | 785.4 | 786.2 | 783.2 |
| 27.5° | 774.2 | 769.0 | 759.3 | 757.9 | 754.1 |
| 30°   | 747.4 | 741.5 | 731.8 | 728.8 | 725.1 |
| 32.5° | 719.1 | 713.9 | 703.5 | 699.7 | 696.0 |
| 35°   | 689.3 | 684.1 | 673.6 | 668.4 | 664.7 |
| 37.5° | 658.0 | 653.5 | 642.3 | 637.1 | 631.9 |
| 40°   | 627.4 | 621.5 | 610.3 | 602.9 | 599.1 |
| 42.5° | 594.7 | 591.7 | 579.0 | 570.1 | 567.8 |
| 45°   | 562.6 | 557.4 | 545.5 | 537.3 | 535.0 |
| 47.5° | 529.1 | 525.4 | 514.2 | 505.2 | 499.3 |
| 50°   | 494.8 | 491.8 | 481.4 | 471.0 | 466.5 |
| 52.5° | 461.3 | 457.5 | 446.4 | 437.4 | 431.5 |
| 55°   | 425.5 | 423.3 | 412.8 | 403.9 | 399.4 |
| 57.5° | 392.0 | 389.7 | 379.3 | 370.4 | 365.9 |
| 60°   | 356.9 | 353.2 | 343.5 | 336.8 | 333.1 |
| 62.5° | 322.7 | 319.7 | 309.3 | 303.3 | 299.6 |
| 65°   | 288.4 | 284.7 | 277.2 | 269.8 | 266.0 |
| 67.5° | 253.4 | 250.4 | 242.9 | 235.5 | 234.7 |
| 70°   | 221.3 | 216.1 | 210.1 | 204.2 | 201.9 |
| 72.5° | 187.0 | 181.8 | 177.4 | 172.9 | 170.6 |
| 75°   | 153.5 | 149.8 | 146.1 | 143.1 | 142.3 |
| 77.5° | 120.7 | 119.2 | 115.5 | 114.8 | 112.5 |
| 80°   | 91.7  | 89.4  | 87.9  | 86.4  | 85.7  |
| 82.5° | 63.3  | 62.6  | 62.6  | 61.9  | 61.1  |
| 85°   | 40.2  | 40.2  | 38.7  | 38.7  | 38.0  |
| 87.5° | 19.4  | 18.6  | 17.9  | 17.9  | 17.9  |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)