

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: P1000393

Luminaire Tested: SA4XXDP-B795DB2750-4F0-XX-W2A-F\_3000K

Issue Date: 5/2/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1000393  
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-B795DB2750-4F0-XX-W2A-F\_3000K  
Description: Define 4 Direct Recessed with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}  
Light Source: -  
Ballast/Driver: -

**Summary**

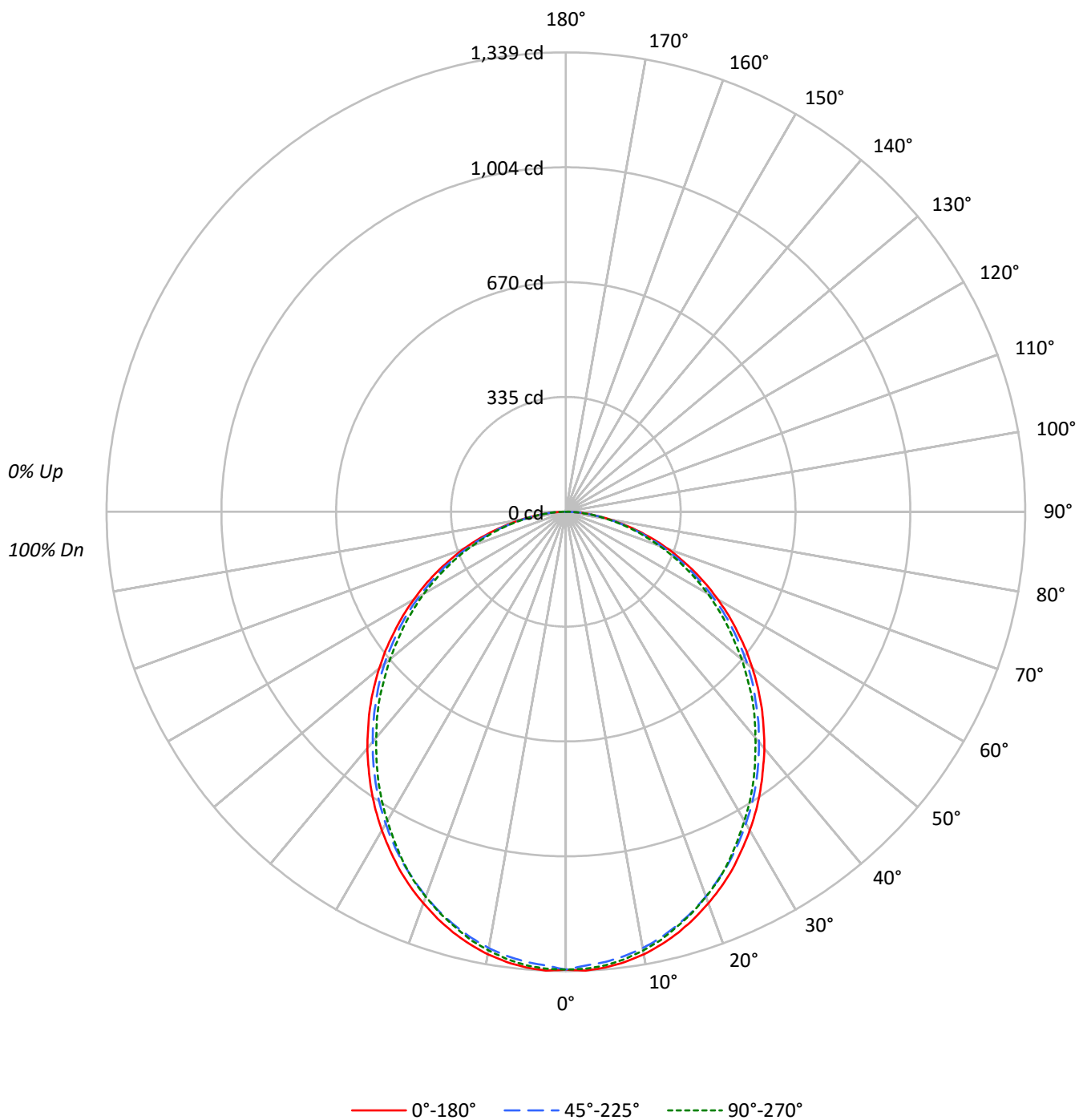
Lumens per Lamp: N/A  
Luminaire Lumens: 3425.0 lumens  
Efficiency: N/A  
Efficacy: 95.4 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29  
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 35.9  
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   | 109 | 104 | 100 | 96  | 106 | 102 | 98  | 95  | 98  | 95  | 92  |  | 94  | 91  | 89  |  | 90  |
| 2   | 99  | 91  | 84  | 79  | 97  | 89  | 83  | 78  | 86  | 80  | 76  |  | 82  | 78  | 74  |  | 79  |
| 3   | 91  | 80  | 72  | 66  | 88  | 79  | 71  | 65  | 76  | 69  | 64  |  | 73  | 67  | 63  |  | 70  |
| 4   | 83  | 71  | 63  | 56  | 81  | 70  | 62  | 56  | 67  | 60  | 55  |  | 65  | 59  | 54  |  | 63  |
| 5   | 77  | 64  | 55  | 48  | 74  | 63  | 54  | 48  | 61  | 53  | 48  |  | 59  | 52  | 47  |  | 57  |
| 6   | 71  | 58  | 49  | 42  | 69  | 57  | 48  | 42  | 55  | 47  | 42  |  | 53  | 47  | 41  |  | 52  |
| 7   | 66  | 52  | 44  | 38  | 64  | 52  | 43  | 37  | 50  | 43  | 37  |  | 49  | 42  | 37  |  | 47  |
| 8   | 61  | 48  | 39  | 34  | 60  | 47  | 39  | 34  | 46  | 39  | 33  |  | 45  | 38  | 33  |  | 43  |
| 9   | 57  | 44  | 36  | 30  | 56  | 43  | 36  | 30  | 42  | 35  | 30  |  | 41  | 35  | 30  |  | 40  |
| 10  | 54  | 41  | 33  | 28  | 52  | 40  | 33  | 28  | 39  | 32  | 27  |  | 38  | 32  | 27  |  | 37  |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 10881 | 10881 | 10881 |
| 5°  | 10914 | 10783 | 10862 |
| 10° | 10846 | 10695 | 10748 |
| 15° | 10715 | 10543 | 10570 |
| 20° | 10540 | 10355 | 10364 |
| 25° | 10342 | 10140 | 10111 |
| 30° | 10098 | 9887  | 9796  |
| 35° | 9845  | 9622  | 9495  |
| 40° | 9584  | 9322  | 9151  |
| 45° | 9310  | 9026  | 8853  |
| 50° | 9007  | 8762  | 8491  |
| 55° | 8679  | 8422  | 8148  |
| 60° | 8353  | 8039  | 7794  |
| 65° | 7984  | 7676  | 7365  |
| 70° | 7572  | 7188  | 6909  |
| 75° | 6941  | 6604  | 6434  |
| 80° | 6175  | 5926  | 5776  |
| 85° | 5399  | 5202  | 5099  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9310 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 125.8  | 3.7       |
| 10°-20°   | 354.3  | 10.3      |
| 20°-30°   | 521.5  | 15.2      |
| 30°-40°   | 606.2  | 17.7      |
| 40°-50°   | 606.2  | 17.7      |
| 50°-60°   | 530.2  | 15.5      |
| 60°-70°   | 393.6  | 11.5      |
| 70°-80°   | 223.3  | 6.5       |
| 80°-90°   | 64.0   | 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°    | 1001.6 | 29.2      |
| 0°-40°    | 1607.8 | 46.9      |
| 0°-60°    | 2744.1 | 80.1      |
| 0°-90°    | 3425.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3425.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1334 | 1334  | 1334 | 1334  | 1334 |      |
| 5°  | 1333 | 1329  | 1317 | 1329  | 1327 | 127  |
| 15° | 1269 | 1265  | 1249 | 1255  | 1252 | 358  |
| 25° | 1149 | 1142  | 1127 | 1128  | 1124 | 529  |
| 35° | 989  | 982   | 967  | 959   | 954  | 618  |
| 45° | 807  | 800   | 783  | 771   | 768  | 622  |
| 55° | 610  | 607   | 592  | 580   | 573  | 547  |
| 65° | 414  | 408   | 398  | 387   | 382  | 410  |
| 75° | 220  | 215   | 210  | 205   | 204  | 234  |
| 85° | 58   | 58    | 56   | 56    | 54   | 66   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1334.4 | 1334.4 | 1334.4 | 1334.4 | 1334.4 |
| 2.5°  | 1338.7 | 1335.5 | 1323.7 | 1334.4 | 1333.3 |
| 5°    | 1333.3 | 1329.1 | 1317.3 | 1329.1 | 1326.9 |
| 7.5°  | 1323.7 | 1319.4 | 1306.6 | 1316.2 | 1315.2 |
| 10°   | 1309.8 | 1305.5 | 1291.6 | 1300.2 | 1298.0 |
| 12.5° | 1291.6 | 1287.4 | 1272.4 | 1282.0 | 1278.8 |
| 15°   | 1269.2 | 1264.9 | 1248.9 | 1255.3 | 1252.1 |
| 17.5° | 1243.5 | 1238.2 | 1223.2 | 1227.5 | 1225.3 |
| 20°   | 1214.6 | 1209.3 | 1193.3 | 1196.5 | 1194.3 |
| 22.5° | 1183.6 | 1176.2 | 1160.1 | 1166.5 | 1162.3 |
| 25°   | 1149.4 | 1141.9 | 1127.0 | 1128.0 | 1123.8 |
| 27.5° | 1110.9 | 1103.4 | 1089.5 | 1087.4 | 1082.1 |
| 30°   | 1072.4 | 1063.9 | 1050.0 | 1045.7 | 1040.4 |
| 32.5° | 1031.8 | 1024.3 | 1009.4 | 1004.0 | 998.7  |
| 35°   | 989.0  | 981.6  | 966.6  | 959.1  | 953.8  |
| 37.5° | 944.1  | 937.7  | 921.7  | 914.2  | 906.7  |
| 40°   | 900.3  | 891.7  | 875.7  | 865.0  | 859.7  |
| 42.5° | 853.2  | 849.0  | 830.8  | 818.0  | 814.8  |
| 45°   | 807.3  | 799.8  | 782.7  | 770.9  | 767.7  |
| 47.5° | 759.2  | 753.8  | 737.8  | 724.9  | 716.4  |
| 50°   | 710.0  | 705.7  | 690.7  | 675.8  | 669.3  |
| 52.5° | 661.9  | 656.5  | 640.5  | 627.6  | 619.1  |
| 55°   | 610.5  | 607.3  | 592.4  | 579.5  | 573.1  |
| 57.5° | 562.4  | 559.2  | 544.2  | 531.4  | 525.0  |
| 60°   | 512.2  | 506.8  | 492.9  | 483.3  | 477.9  |
| 62.5° | 463.0  | 458.7  | 443.7  | 435.2  | 429.8  |
| 65°   | 413.8  | 408.4  | 397.8  | 387.1  | 381.7  |
| 67.5° | 363.5  | 359.3  | 348.6  | 337.9  | 336.8  |
| 70°   | 317.6  | 310.1  | 301.5  | 293.0  | 289.8  |
| 72.5° | 268.4  | 260.9  | 254.5  | 248.1  | 244.9  |
| 75°   | 220.3  | 214.9  | 209.6  | 205.3  | 204.2  |
| 77.5° | 173.2  | 171.1  | 165.7  | 164.7  | 161.5  |
| 80°   | 131.5  | 128.3  | 126.2  | 124.0  | 123.0  |
| 82.5° | 90.9   | 89.8   | 89.8   | 88.7   | 87.7   |
| 85°   | 57.7   | 57.7   | 55.6   | 55.6   | 54.5   |
| 87.5° | 27.8   | 26.7   | 25.7   | 25.7   | 25.7   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)