

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: P987714

Luminaire Tested: S122DW-B865DB40-4F0-XX-W2A-F

Issue Date: 5/2/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P987714  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/2/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122DW-B865DB40-4F0-XX-W2A-F  
Description: Define 2 Direct Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}  
Light Source: -  
Ballast/Driver: -

**Summary**

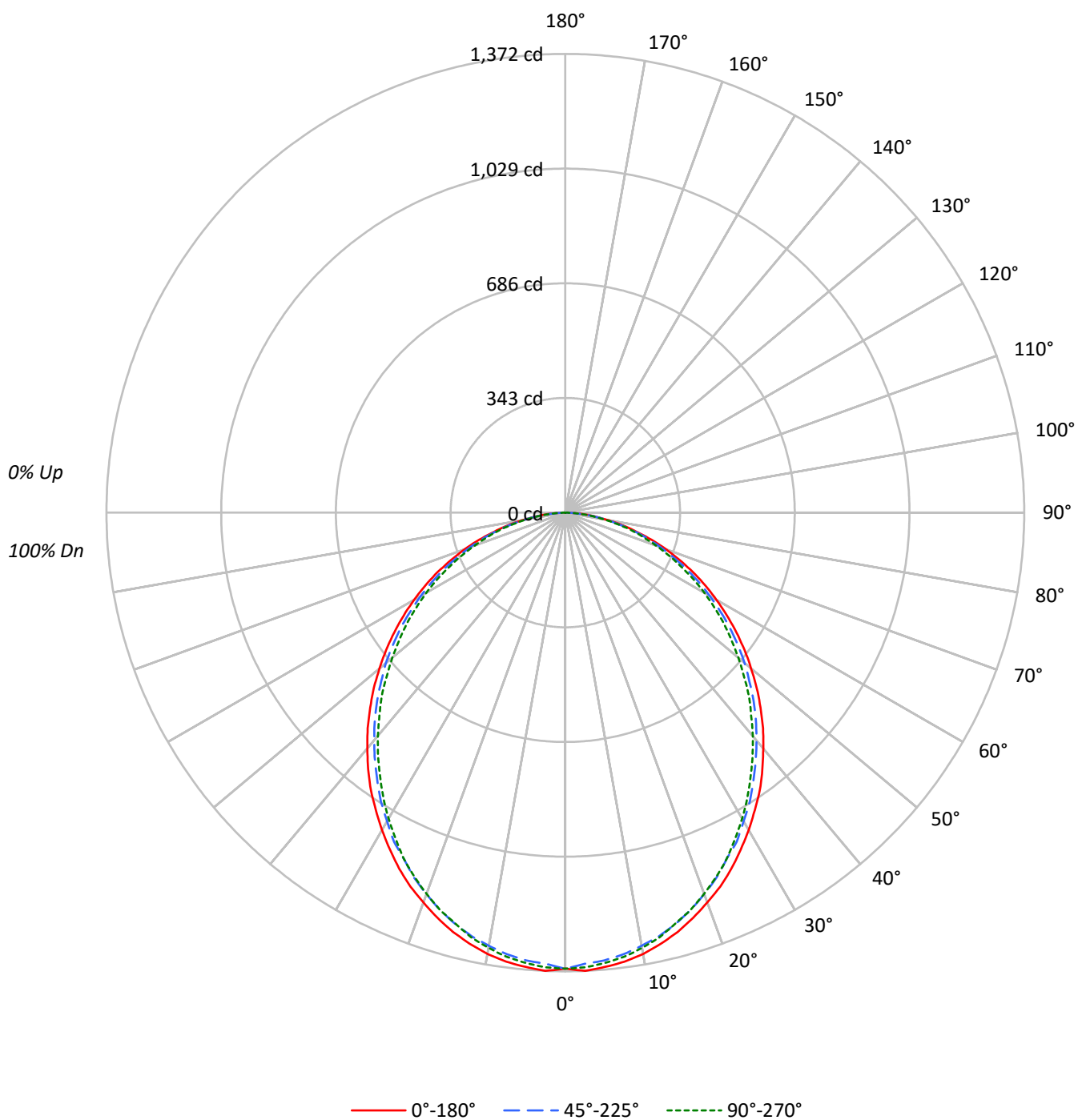
Lumens per Lamp: N/A  
Luminaire Lumens: 3470.0 lumens  
Efficiency: N/A  
Efficacy: 74.1 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 46.8  
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  | 85  | 79  | 97  | 89  | 83  | 78  | 86  | 81  | 76  |  | 83  | 78  | 74  |  | 80  |
| 3   | 91  | 80  | 72  | 66  | 88  | 79  | 71  | 65  | 76  | 69  | 64  |  | 73  | 68  | 63  |  | 71  |
| 4   | 83  | 71  | 63  | 56  | 81  | 70  | 62  | 56  | 68  | 61  | 55  |  | 65  | 59  | 54  |  | 63  |
| 5   | 77  | 64  | 55  | 49  | 75  | 63  | 55  | 48  | 61  | 53  | 48  |  | 59  | 52  | 47  |  | 57  |
| 6   | 71  | 58  | 49  | 43  | 69  | 57  | 48  | 42  | 55  | 48  | 42  |  | 53  | 47  | 42  |  | 52  |
| 7   | 66  | 52  | 44  | 38  | 64  | 52  | 43  | 38  | 50  | 43  | 37  |  | 49  | 42  | 37  |  | 47  |
| 8   | 61  | 48  | 40  | 34  | 60  | 47  | 39  | 34  | 46  | 39  | 33  |  | 45  | 38  | 33  |  | 44  |
| 9   | 57  | 44  | 36  | 30  | 56  | 43  | 36  | 30  | 42  | 35  | 30  |  | 41  | 35  | 30  |  | 40  |
| 10  | 54  | 41  | 33  | 28  | 53  | 40  | 33  | 28  | 39  | 32  | 27  |  | 38  | 32  | 27  |  | 37  |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 21590 | 21590 | 21590 |
| 5°  | 21672 | 21359 | 21485 |
| 10° | 21543 | 21143 | 21248 |
| 15° | 21276 | 20868 | 20847 |
| 20° | 20898 | 20457 | 20435 |
| 25° | 20524 | 19951 | 19951 |
| 30° | 20040 | 19488 | 19320 |
| 35° | 19591 | 18932 | 18652 |
| 40° | 19023 | 18374 | 18021 |
| 45° | 18466 | 17821 | 17380 |
| 50° | 17859 | 17246 | 16632 |
| 55° | 17229 | 16575 | 15960 |
| 60° | 16526 | 15779 | 15196 |
| 65° | 15769 | 14982 | 14293 |
| 70° | 14810 | 14019 | 13352 |
| 75° | 13473 | 12911 | 12593 |
| 80° | 11951 | 11595 | 11003 |
| 85° | 9771  | 9281  | 8336  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 18466 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 128.4  | 3.7       |
| 10°-20°   | 361.2  | 10.4      |
| 20°-30°   | 530.8  | 15.3      |
| 30°-40°   | 616.5  | 17.8      |
| 40°-50°   | 615.7  | 17.7      |
| 50°-60°   | 536.9  | 15.5      |
| 60°-70°   | 396.9  | 11.4      |
| 70°-80°   | 224.5  | 6.5       |
| 80°-90°   | 59.3   | 1.7       |
| 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°    | 1020.3 | 29.4      |
| 0°-40°    | 1636.8 | 47.2      |
| 0°-60°    | 2789.4 | 80.4      |
| 0°-90°    | 3470.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3470.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1364 | 1364  | 1364 | 1364  | 1364 |      |
| 5°  | 1364 | 1359  | 1344 | 1355  | 1352 | 129  |
| 15° | 1298 | 1290  | 1273 | 1279  | 1272 | 366  |
| 25° | 1175 | 1165  | 1142 | 1145  | 1142 | 541  |
| 35° | 1014 | 1001  | 980  | 972   | 965  | 633  |
| 45° | 825  | 816   | 796  | 782   | 776  | 637  |
| 55° | 624  | 616   | 601  | 585   | 578  | 558  |
| 65° | 421  | 413   | 400  | 388   | 382  | 416  |
| 75° | 220  | 218   | 211  | 203   | 206  | 235  |
| 85° | 54   | 52    | 51   | 47    | 46   | 63   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1363.9 | 1363.9 | 1363.9 | 1363.9 | 1363.9 |
| 2.5°  | 1371.8 | 1365.2 | 1350.8 | 1363.9 | 1361.3 |
| 5°    | 1363.9 | 1358.7 | 1344.2 | 1354.7 | 1352.1 |
| 7.5°  | 1354.7 | 1346.9 | 1332.4 | 1342.9 | 1340.3 |
| 10°   | 1340.3 | 1331.1 | 1315.4 | 1325.9 | 1321.9 |
| 12.5° | 1320.6 | 1312.8 | 1297.0 | 1303.6 | 1301.0 |
| 15°   | 1298.3 | 1290.5 | 1273.4 | 1278.7 | 1272.1 |
| 17.5° | 1270.8 | 1262.9 | 1245.9 | 1252.4 | 1245.9 |
| 20°   | 1240.6 | 1232.8 | 1214.4 | 1218.3 | 1213.1 |
| 22.5° | 1210.5 | 1198.7 | 1181.6 | 1181.6 | 1179.0 |
| 25°   | 1175.1 | 1164.6 | 1142.3 | 1144.9 | 1142.3 |
| 27.5° | 1135.7 | 1126.5 | 1109.5 | 1105.6 | 1099.0 |
| 30°   | 1096.4 | 1085.9 | 1066.2 | 1062.3 | 1057.0 |
| 32.5° | 1054.4 | 1046.5 | 1025.6 | 1017.7 | 1012.4 |
| 35°   | 1013.8 | 1000.6 | 979.7  | 971.8  | 965.2  |
| 37.5° | 967.9  | 956.0  | 935.1  | 925.9  | 919.3  |
| 40°   | 920.6  | 910.1  | 889.2  | 877.4  | 872.1  |
| 42.5° | 874.7  | 864.2  | 843.3  | 830.1  | 822.3  |
| 45°   | 824.9  | 815.7  | 796.1  | 781.6  | 776.4  |
| 47.5° | 776.4  | 767.2  | 746.2  | 731.8  | 723.9  |
| 50°   | 725.2  | 718.7  | 700.3  | 682.0  | 675.4  |
| 52.5° | 675.4  | 666.2  | 649.2  | 634.7  | 625.6  |
| 55°   | 624.3  | 616.4  | 600.6  | 584.9  | 578.3  |
| 57.5° | 573.1  | 566.5  | 549.5  | 533.8  | 528.5  |
| 60°   | 522.0  | 516.7  | 498.4  | 483.9  | 480.0  |
| 62.5° | 472.1  | 462.9  | 449.8  | 436.7  | 431.5  |
| 65°   | 421.0  | 413.1  | 400.0  | 388.2  | 381.6  |
| 67.5° | 368.5  | 362.0  | 350.2  | 341.0  | 335.7  |
| 70°   | 320.0  | 314.7  | 302.9  | 293.8  | 288.5  |
| 72.5° | 270.2  | 264.9  | 258.4  | 249.2  | 245.2  |
| 75°   | 220.3  | 217.7  | 211.1  | 203.3  | 205.9  |
| 77.5° | 175.7  | 170.5  | 167.9  | 163.9  | 160.0  |
| 80°   | 131.1  | 129.8  | 127.2  | 123.3  | 120.7  |
| 82.5° | 89.2   | 89.2   | 87.9   | 82.6   | 82.6   |
| 85°   | 53.8   | 52.5   | 51.1   | 47.2   | 45.9   |
| 87.5° | 23.6   | 21.0   | 18.4   | 14.4   | 13.1   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)