

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: P1001190

Luminaire Tested: S124RDW-B575DB2750-4F0-XX-W2A-F\_5000K

Issue Date: 5/2/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1001190  
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: S124RDW-B575DB2750-4F0-XX-W2A-F\_5000K  
Description: Define 4 Regressed Direct Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

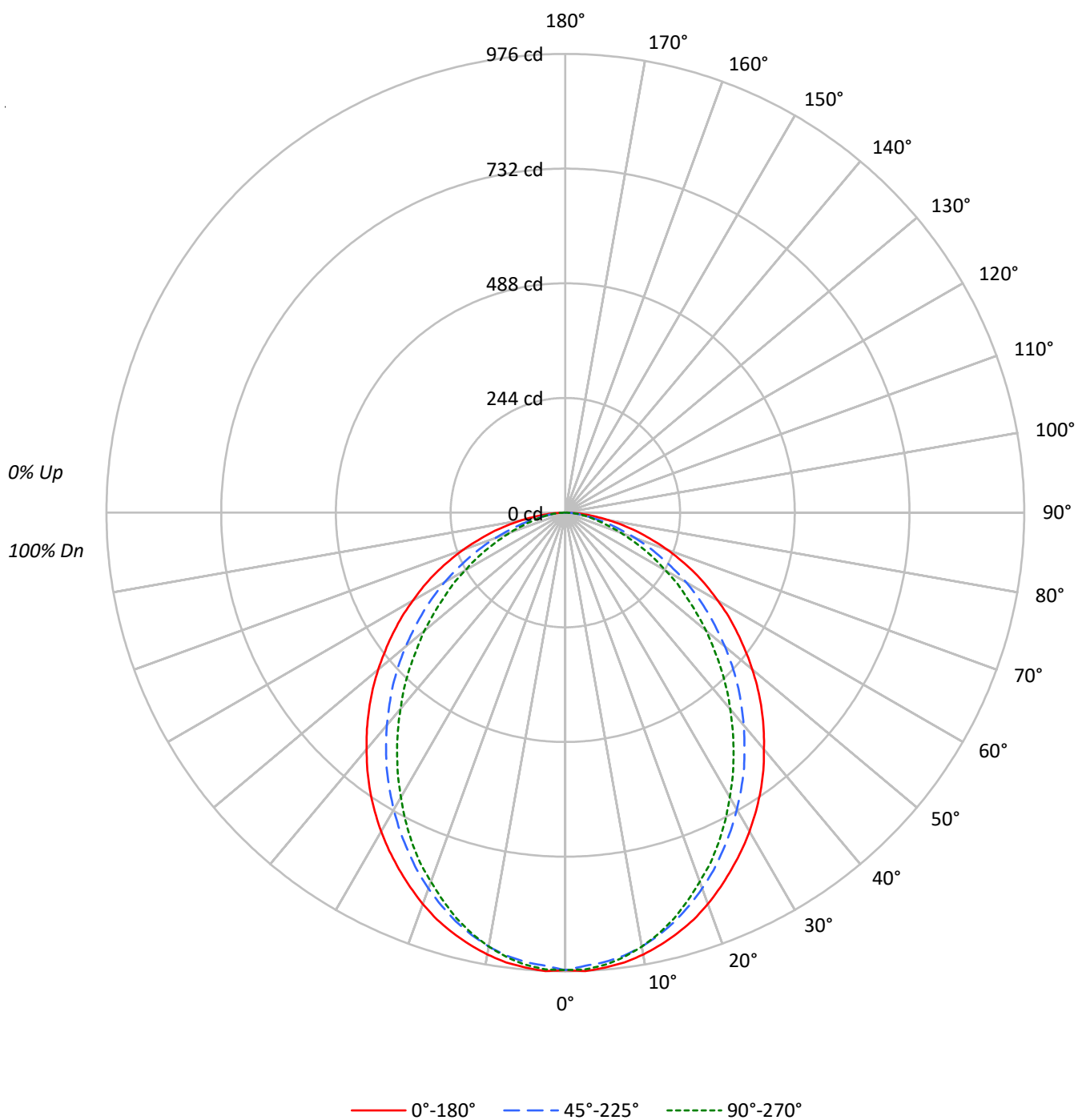
Lumens per Lamp: N/A  
Luminaire Lumens: 2249.0 lumens  
Efficiency: N/A  
Efficacy: 93.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24  
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 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  |  | 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°  | 7937 | 7937 | 7937 |
| 5°  | 7955 | 7857 | 7906 |
| 10° | 7905 | 7764 | 7764 |
| 15° | 7814 | 7600 | 7544 |
| 20° | 7689 | 7386 | 7250 |
| 25° | 7531 | 7135 | 6954 |
| 30° | 7376 | 6870 | 6583 |
| 35° | 7204 | 6596 | 6210 |
| 40° | 6997 | 6284 | 5807 |
| 45° | 6807 | 5974 | 5397 |
| 50° | 6590 | 5616 | 4964 |
| 55° | 6358 | 5245 | 4493 |
| 60° | 6101 | 4837 | 4010 |
| 65° | 5868 | 4328 | 3537 |
| 70° | 5527 | 3767 | 3004 |
| 75° | 5095 | 3122 | 2442 |
| 80° | 4447 | 2381 | 2240 |
| 85° | 3761 | 2161 | 2021 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6807 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 91.5   | 4.1       |
| 10°-20°   | 255.2  | 11.3      |
| 20°-30°   | 368.4  | 16.4      |
| 30°-40°   | 417.6  | 18.6      |
| 40°-50°   | 403.2  | 17.9      |
| 50°-60°   | 335.2  | 14.9      |
| 60°-70°   | 231.3  | 10.3      |
| 70°-80°   | 116.9  | 5.2       |
| 80°-90°   | 29.7   | 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°    | 715.2  | 31.8      |
| 0°-40°    | 1132.7 | 50.4      |
| 0°-60°    | 1871.1 | 83.2      |
| 0°-90°    | 2249.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2249.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 973 | 973   | 973 | 973   | 973 |      |
| 5°  | 972 | 969   | 960 | 967   | 966 | 92   |
| 15° | 926 | 919   | 900 | 899   | 894 | 261  |
| 25° | 837 | 824   | 793 | 780   | 773 | 386  |
| 35° | 724 | 700   | 663 | 637   | 624 | 452  |
| 45° | 590 | 563   | 518 | 482   | 468 | 455  |
| 55° | 447 | 417   | 369 | 330   | 316 | 400  |
| 65° | 304 | 272   | 224 | 192   | 183 | 300  |
| 75° | 162 | 134   | 99  | 82    | 78  | 171  |
| 85° | 40  | 25    | 23  | 22    | 22  | 47   |
| 90° | 0   | 0     | 0   | 0     | 0   |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 973.3 | 973.3 | 973.3 | 973.3 | 973.3 |
| 2.5°  | 976.3 | 973.3 | 965.1 | 973.3 | 972.6 |
| 5°    | 971.8 | 968.9 | 959.9 | 967.4 | 965.9 |
| 7.5°  | 965.1 | 962.2 | 951.0 | 956.2 | 954.0 |
| 10°   | 954.7 | 951.0 | 937.6 | 940.5 | 937.6 |
| 12.5° | 941.3 | 936.8 | 920.4 | 921.9 | 917.4 |
| 15°   | 925.6 | 918.9 | 900.3 | 898.8 | 893.6 |
| 17.5° | 907.8 | 898.1 | 876.5 | 872.7 | 865.3 |
| 20°   | 886.1 | 876.5 | 851.1 | 845.1 | 835.5 |
| 22.5° | 862.3 | 851.1 | 823.5 | 813.8 | 806.4 |
| 25°   | 837.0 | 823.5 | 793.0 | 780.3 | 772.9 |
| 27.5° | 810.9 | 794.5 | 762.4 | 747.5 | 737.1 |
| 30°   | 783.3 | 764.7 | 729.6 | 711.0 | 699.1 |
| 32.5° | 754.2 | 732.6 | 696.1 | 673.7 | 662.6 |
| 35°   | 723.7 | 699.8 | 662.6 | 637.2 | 623.8 |
| 37.5° | 691.6 | 667.0 | 626.0 | 598.5 | 585.0 |
| 40°   | 657.3 | 632.7 | 590.3 | 559.0 | 545.5 |
| 42.5° | 624.5 | 598.5 | 553.7 | 521.7 | 507.5 |
| 45°   | 590.3 | 562.7 | 518.0 | 481.5 | 468.0 |
| 47.5° | 555.2 | 526.9 | 480.7 | 442.7 | 427.8 |
| 50°   | 519.5 | 490.4 | 442.7 | 405.4 | 391.3 |
| 52.5° | 482.9 | 454.6 | 405.4 | 367.4 | 352.5 |
| 55°   | 447.2 | 417.4 | 368.9 | 330.2 | 316.0 |
| 57.5° | 412.1 | 380.8 | 333.1 | 293.6 | 283.2 |
| 60°   | 374.1 | 344.3 | 296.6 | 257.9 | 245.9 |
| 62.5° | 339.8 | 308.5 | 259.4 | 224.3 | 215.4 |
| 65°   | 304.1 | 272.0 | 224.3 | 192.3 | 183.3 |
| 67.5° | 266.8 | 236.3 | 191.5 | 163.2 | 152.8 |
| 70°   | 231.8 | 200.5 | 158.0 | 133.4 | 126.0 |
| 72.5° | 194.5 | 166.9 | 127.4 | 107.3 | 100.6 |
| 75°   | 161.7 | 134.2 | 99.1  | 82.0  | 77.5  |
| 77.5° | 127.4 | 103.6 | 73.8  | 61.9  | 60.4  |
| 80°   | 94.7  | 73.0  | 50.7  | 48.4  | 47.7  |
| 82.5° | 66.3  | 47.0  | 36.5  | 35.0  | 34.3  |
| 85°   | 40.2  | 25.3  | 23.1  | 21.6  | 21.6  |
| 87.5° | 17.1  | 11.2  | 10.4  | 9.7   | 10.4  |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)