

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: P992591

Luminaire Tested: S123DW-B775DB27-4F0-XX-W2A-F

Issue Date: 5/2/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P992591  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/2/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123DW-B775DB27-4F0-XX-W2A-F  
Description: Define 3 Direct Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}  
Light Source: -  
Ballast/Driver: -

**Summary**

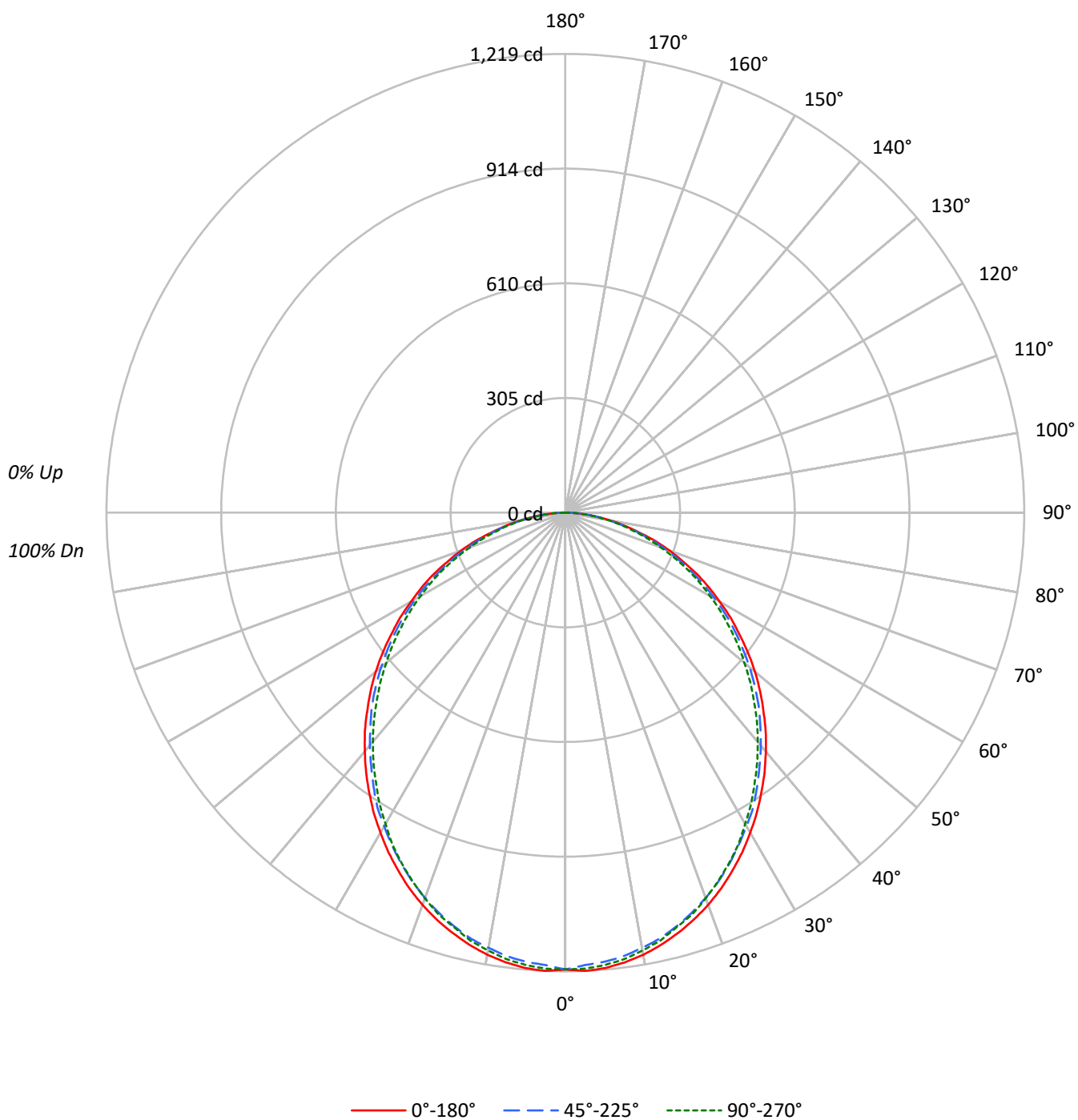
Lumens per Lamp: N/A  
Luminaire Lumens: 3159.0 lumens  
Efficiency: N/A  
Efficacy: 88.0 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3  
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')  
CIE Type: Direct

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  | 94  | 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  | 62  | 56  | 81  | 70  | 62  | 55  | 67  | 60  | 55  |  | 65  | 59  | 54  |  | 63  |
| 5   | 76  | 64  | 55  | 48  | 74  | 63  | 54  | 48  | 60  | 53  | 47  |  | 58  | 52  | 47  |  | 57  |
| 6   | 71  | 57  | 49  | 42  | 69  | 56  | 48  | 42  | 55  | 47  | 42  |  | 53  | 46  | 41  |  | 51  |
| 7   | 66  | 52  | 43  | 37  | 64  | 51  | 43  | 37  | 50  | 42  | 37  |  | 48  | 42  | 37  |  | 47  |
| 8   | 61  | 48  | 39  | 33  | 60  | 47  | 39  | 33  | 46  | 38  | 33  |  | 44  | 38  | 33  |  | 43  |
| 9   | 57  | 44  | 36  | 30  | 56  | 43  | 35  | 30  | 42  | 35  | 30  |  | 41  | 34  | 30  |  | 40  |
| 10  | 54  | 40  | 33  | 27  | 52  | 40  | 32  | 27  | 39  | 32  | 27  |  | 38  | 32  | 27  |  | 37  |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 13065 | 13065 | 13065 |
| 5°  | 13126 | 12947 | 13036 |
| 10° | 13038 | 12833 | 12914 |
| 15° | 12886 | 12689 | 12712 |
| 20° | 12708 | 12481 | 12494 |
| 25° | 12469 | 12234 | 12209 |
| 30° | 12207 | 11961 | 11870 |
| 35° | 11931 | 11671 | 11520 |
| 40° | 11644 | 11351 | 11175 |
| 45° | 11327 | 11058 | 10788 |
| 50° | 11010 | 10695 | 10399 |
| 55° | 10595 | 10321 | 10008 |
| 60° | 10178 | 9886  | 9571  |
| 65° | 9808  | 9411  | 9118  |
| 70° | 9262  | 8869  | 8475  |
| 75° | 8463  | 8160  | 7814  |
| 80° | 7637  | 7308  | 7246  |
| 85° | 6706  | 6447  | 6187  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11327 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 114.4  | 3.6       |
| 10°-20°   | 323.1  | 10.2      |
| 20°-30°   | 477.2  | 15.1      |
| 30°-40°   | 557.3  | 17.6      |
| 40°-50°   | 560.3  | 17.7      |
| 50°-60°   | 492.2  | 15.6      |
| 60°-70°   | 366.6  | 11.6      |
| 70°-80°   | 208.6  | 6.6       |
| 80°-90°   | 59.3   | 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°    | 914.7  | 29.0      |
| 0°-40°    | 1472.1 | 46.6      |
| 0°-60°    | 2524.5 | 79.9      |
| 0°-90°    | 3159.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3159.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1214 | 1214  | 1214 | 1214  | 1214 |      |
| 5°  | 1215 | 1210  | 1198 | 1209  | 1206 | 115  |
| 15° | 1156 | 1152  | 1139 | 1147  | 1141 | 326  |
| 25° | 1050 | 1044  | 1030 | 1031  | 1028 | 484  |
| 35° | 908  | 902   | 888  | 882   | 877  | 568  |
| 45° | 744  | 740   | 726  | 714   | 709  | 574  |
| 55° | 565  | 564   | 550  | 538   | 533  | 506  |
| 65° | 385  | 380   | 370  | 361   | 358  | 380  |
| 75° | 204  | 199   | 196  | 191   | 188  | 217  |
| 85° | 54   | 52    | 52   | 50    | 50   | 62   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1213.8 | 1213.8 | 1213.8 | 1213.8 | 1213.8 |
| 2.5°  | 1219.0 | 1214.8 | 1203.4 | 1213.8 | 1212.8 |
| 5°    | 1214.8 | 1209.6 | 1198.2 | 1208.6 | 1206.5 |
| 7.5°  | 1205.5 | 1200.2 | 1188.8 | 1198.2 | 1197.1 |
| 10°   | 1192.9 | 1187.7 | 1174.1 | 1183.5 | 1181.5 |
| 12.5° | 1176.2 | 1172.1 | 1159.5 | 1165.8 | 1164.8 |
| 15°   | 1156.4 | 1152.2 | 1138.7 | 1147.0 | 1140.7 |
| 17.5° | 1134.5 | 1129.3 | 1115.7 | 1122.0 | 1119.9 |
| 20°   | 1109.4 | 1103.2 | 1089.6 | 1093.8 | 1090.7 |
| 22.5° | 1081.3 | 1075.0 | 1061.4 | 1064.6 | 1060.4 |
| 25°   | 1049.9 | 1043.7 | 1030.1 | 1031.2 | 1028.0 |
| 27.5° | 1017.6 | 1011.3 | 996.7  | 997.8  | 994.6  |
| 30°   | 982.1  | 976.9  | 962.3  | 962.3  | 955.0  |
| 32.5° | 946.6  | 939.3  | 928.9  | 921.6  | 918.4  |
| 35°   | 908.0  | 901.7  | 888.2  | 881.9  | 876.7  |
| 37.5° | 869.4  | 861.0  | 847.5  | 840.2  | 837.0  |
| 40°   | 828.7  | 822.4  | 807.8  | 799.5  | 795.3  |
| 42.5° | 788.0  | 780.7  | 766.1  | 757.7  | 753.5  |
| 45°   | 744.1  | 740.0  | 726.4  | 713.9  | 708.7  |
| 47.5° | 701.4  | 695.1  | 682.6  | 670.0  | 665.9  |
| 50°   | 657.5  | 652.3  | 638.7  | 627.3  | 621.0  |
| 52.5° | 611.6  | 608.5  | 593.9  | 584.5  | 578.2  |
| 55°   | 564.6  | 563.6  | 550.0  | 538.5  | 533.3  |
| 57.5° | 520.8  | 516.6  | 506.2  | 495.8  | 489.5  |
| 60°   | 472.8  | 471.7  | 459.2  | 449.8  | 444.6  |
| 62.5° | 430.0  | 426.9  | 414.3  | 404.9  | 401.8  |
| 65°   | 385.1  | 379.9  | 369.5  | 361.1  | 358.0  |
| 67.5° | 337.1  | 332.9  | 324.6  | 317.3  | 313.1  |
| 70°   | 294.3  | 288.1  | 281.8  | 274.5  | 269.3  |
| 72.5° | 249.4  | 245.3  | 238.0  | 231.7  | 229.6  |
| 75°   | 203.5  | 199.3  | 196.2  | 191.0  | 187.9  |
| 77.5° | 162.8  | 160.7  | 156.6  | 152.4  | 152.4  |
| 80°   | 123.2  | 120.0  | 117.9  | 116.9  | 116.9  |
| 82.5° | 84.5   | 84.5   | 84.5   | 82.5   | 81.4   |
| 85°   | 54.3   | 52.2   | 52.2   | 50.1   | 50.1   |
| 87.5° | 27.1   | 24.0   | 23.0   | 21.9   | 21.9   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)