

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: CORELITE

Report Number: P995617

Luminaire Tested: 24D3X-LP-WD-50-L850.ies

Issue Date: 12/21/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P995617  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2305-008-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 12/21/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: 24D3X-LP-WD-50-L850.ies  
Description: 2x4 D3X-LP AT 5000LM 5000K 80CRI  
Light Source: -  
Ballast/Driver: -

**Summary**

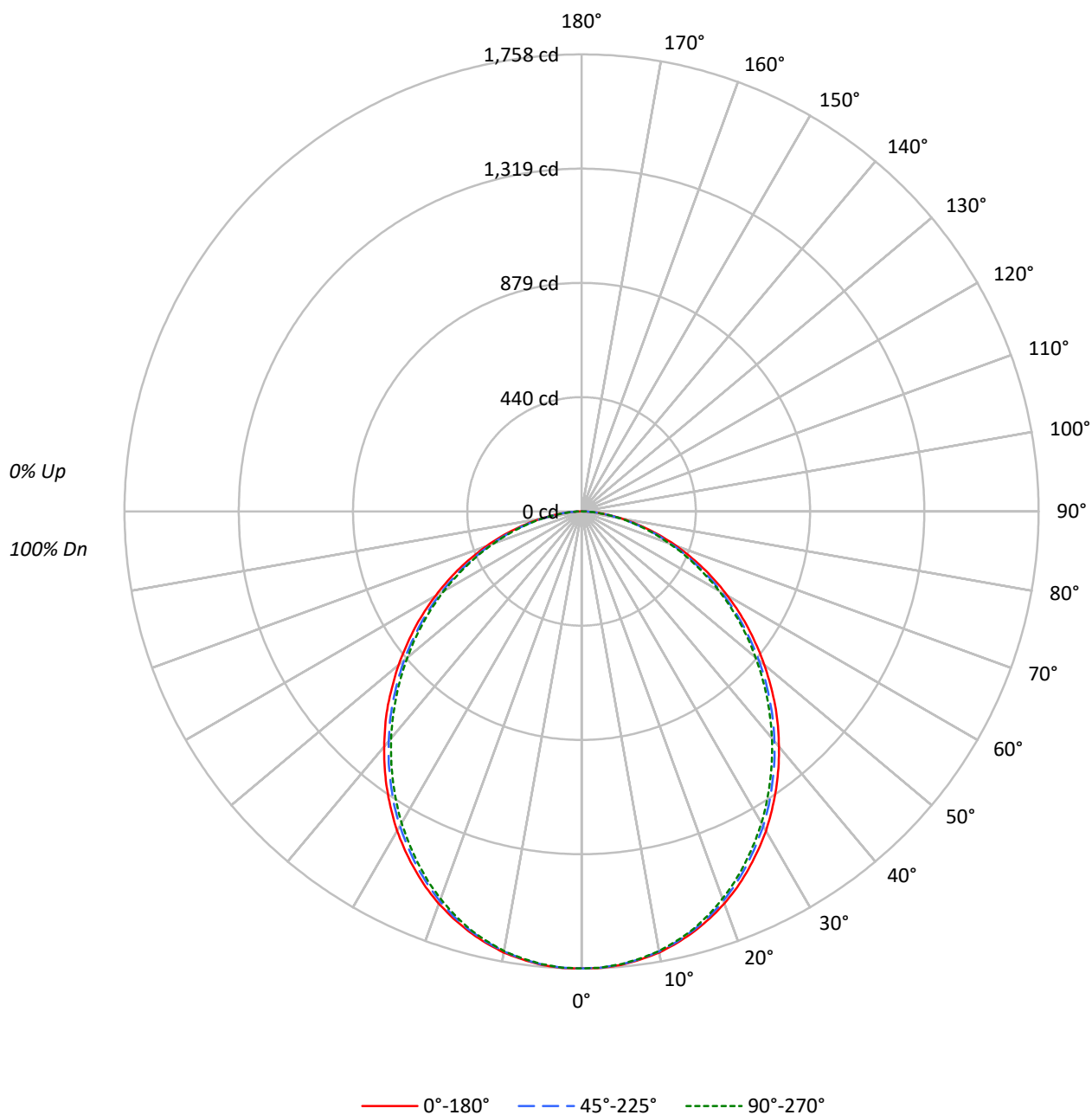
Lumens per Lamp: N/A  
Luminaire Lumens: 4432.0 lumens  
Efficiency: N/A  
Efficacy: 119.8 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.29  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 37  
Input Voltage (V): 120  
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  |     |     |     |    | 0   |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30 | 0   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    | 100 |
| 1   | 109 | 105 | 100 | 97  | 106 | 102 | 99  | 95  | 98  | 95  | 92  | 94  | 92  | 89  | 91  | 89  | 87  | 85  |    | 85  |
| 2   | 100 | 92  | 85  | 79  | 97  | 90  | 84  | 78  | 86  | 81  | 77  | 83  | 79  | 75  | 80  | 76  | 73  | 71  |    | 71  |
| 3   | 91  | 81  | 73  | 67  | 89  | 79  | 72  | 66  | 76  | 70  | 65  | 74  | 68  | 64  | 71  | 66  | 63  | 60  |    | 60  |
| 4   | 84  | 72  | 63  | 57  | 81  | 71  | 63  | 56  | 68  | 61  | 56  | 66  | 60  | 55  | 64  | 58  | 54  | 52  |    | 52  |
| 5   | 77  | 64  | 56  | 49  | 75  | 63  | 55  | 49  | 61  | 54  | 48  | 59  | 53  | 48  | 57  | 52  | 47  | 45  |    | 45  |
| 6   | 71  | 58  | 49  | 43  | 69  | 57  | 49  | 43  | 55  | 48  | 43  | 54  | 47  | 42  | 52  | 46  | 42  | 40  |    | 40  |
| 7   | 66  | 53  | 44  | 38  | 64  | 52  | 44  | 38  | 51  | 43  | 38  | 49  | 42  | 38  | 48  | 42  | 37  | 35  |    | 35  |
| 8   | 62  | 48  | 40  | 34  | 60  | 48  | 40  | 34  | 46  | 39  | 34  | 45  | 39  | 34  | 44  | 38  | 33  | 32  |    | 32  |
| 9   | 58  | 44  | 36  | 31  | 56  | 44  | 36  | 31  | 43  | 36  | 31  | 42  | 35  | 30  | 41  | 35  | 30  | 29  |    | 29  |
| 10  | 54  | 41  | 33  | 28  | 53  | 41  | 33  | 28  | 40  | 33  | 28  | 39  | 32  | 28  | 38  | 32  | 28  | 26  |    | 26  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 2365 | 2365 | 2365 |
| 5°  | 2365 | 2363 | 2361 |
| 10° | 2354 | 2348 | 2346 |
| 15° | 2330 | 2322 | 2316 |
| 20° | 2299 | 2283 | 2270 |
| 25° | 2255 | 2230 | 2213 |
| 30° | 2205 | 2171 | 2150 |
| 35° | 2142 | 2101 | 2078 |
| 40° | 2074 | 2026 | 2001 |
| 45° | 2003 | 1946 | 1918 |
| 50° | 1922 | 1862 | 1829 |
| 55° | 1837 | 1773 | 1739 |
| 60° | 1742 | 1673 | 1641 |
| 65° | 1640 | 1563 | 1531 |
| 70° | 1526 | 1444 | 1408 |
| 75° | 1384 | 1306 | 1285 |
| 80° | 1199 | 1135 | 1141 |
| 85° | 990  | 977  | 912  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2003 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 166.0  | 3.7       |
| 10°-20°   | 469.8  | 10.6      |
| 20°-30°   | 692.4  | 15.6      |
| 30°-40°   | 801.6  | 18.1      |
| 40°-50°   | 791.4  | 17.9      |
| 50°-60°   | 677.8  | 15.3      |
| 60°-70°   | 490.1  | 11.1      |
| 70°-80°   | 270.1  | 6.1       |
| 80°-90°   | 72.8   | 1.6       |
| 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°    | 1328.3 | 30.0      |
| 0°-40°    | 2129.8 | 48.1      |
| 0°-60°    | 3599.1 | 81.2      |
| 0°-90°    | 4432.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4432.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1758 | 1758  | 1758 | 1758  | 1758 |      |
| 5°  | 1751 | 1750  | 1749 | 1748  | 1748 | 166  |
| 15° | 1673 | 1671  | 1667 | 1664  | 1663 | 472  |
| 25° | 1519 | 1515  | 1502 | 1495  | 1491 | 699  |
| 35° | 1304 | 1296  | 1279 | 1268  | 1265 | 815  |
| 45° | 1053 | 1039  | 1023 | 1013  | 1008 | 811  |
| 55° | 783  | 768   | 756  | 745   | 742  | 700  |
| 65° | 515  | 504   | 491  | 484   | 481  | 511  |
| 75° | 266  | 258   | 251  | 250   | 247  | 283  |
| 85° | 64   | 64    | 63   | 59    | 59   | 75   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1757.7 | 1757.7 | 1757.7 | 1757.7 | 1757.7 |
| 2.5°  | 1757.7 | 1757.7 | 1756.1 | 1756.1 | 1756.1 |
| 5°    | 1751.1 | 1750.3 | 1749.4 | 1747.8 | 1747.8 |
| 7.5°  | 1738.6 | 1738.6 | 1736.1 | 1736.1 | 1734.4 |
| 10°   | 1722.8 | 1721.1 | 1718.6 | 1718.6 | 1717.0 |
| 12.5° | 1700.3 | 1698.6 | 1695.3 | 1694.5 | 1692.0 |
| 15°   | 1672.8 | 1671.2 | 1667.0 | 1664.5 | 1662.9 |
| 17.5° | 1641.2 | 1638.7 | 1633.7 | 1629.6 | 1626.2 |
| 20°   | 1605.4 | 1602.1 | 1594.6 | 1589.6 | 1585.5 |
| 22.5° | 1564.7 | 1561.3 | 1550.5 | 1544.7 | 1540.5 |
| 25°   | 1518.9 | 1514.7 | 1502.2 | 1494.7 | 1490.6 |
| 27.5° | 1469.8 | 1464.8 | 1450.6 | 1442.3 | 1438.2 |
| 30°   | 1419.0 | 1411.5 | 1397.4 | 1387.4 | 1384.1 |
| 32.5° | 1362.4 | 1354.9 | 1340.8 | 1329.1 | 1325.8 |
| 35°   | 1304.2 | 1295.8 | 1279.2 | 1268.4 | 1265.0 |
| 37.5° | 1244.2 | 1233.4 | 1218.4 | 1207.6 | 1202.6 |
| 40°   | 1181.0 | 1170.2 | 1153.5 | 1141.9 | 1139.4 |
| 42.5° | 1117.7 | 1104.4 | 1090.3 | 1078.6 | 1073.6 |
| 45°   | 1052.8 | 1038.7 | 1022.9 | 1012.9 | 1007.9 |
| 47.5° | 984.6  | 971.3  | 957.1  | 945.5  | 941.3  |
| 50°   | 918.0  | 903.8  | 889.7  | 878.9  | 873.9  |
| 52.5° | 849.7  | 835.6  | 822.3  | 813.1  | 808.1  |
| 55°   | 783.2  | 768.2  | 755.7  | 744.9  | 741.5  |
| 57.5° | 715.7  | 702.4  | 688.3  | 678.3  | 675.8  |
| 60°   | 647.5  | 635.8  | 621.7  | 612.5  | 610.0  |
| 62.5° | 581.8  | 570.1  | 556.8  | 547.6  | 543.5  |
| 65°   | 515.2  | 503.5  | 491.0  | 483.5  | 481.0  |
| 67.5° | 450.3  | 439.4  | 428.6  | 421.1  | 419.5  |
| 70°   | 387.8  | 377.0  | 367.0  | 360.4  | 357.9  |
| 72.5° | 325.4  | 317.9  | 307.9  | 303.8  | 301.3  |
| 75°   | 266.3  | 258.0  | 251.3  | 250.5  | 247.2  |
| 77.5° | 208.9  | 208.1  | 197.2  | 195.6  | 195.6  |
| 80°   | 154.8  | 152.3  | 146.5  | 144.8  | 147.3  |
| 82.5° | 106.5  | 104.9  | 101.5  | 100.7  | 99.9   |
| 85°   | 64.1   | 64.1   | 63.3   | 59.1   | 59.1   |
| 87.5° | 29.1   | 28.3   | 27.5   | 28.3   | 30.8   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)