

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:

Luminaire Tested: SQ4-WB-0U-100D-927-1D-UNV-STD-W-6

Issue Date: 8/1/2024

**Test Information**

Test Method: LM-79-2019  
Report Number:  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA ()  
Test Lab: INNOVATION CENTER  
Issue Date: 8/1/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-WB-0U-100D-927-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
DIRECT ONLY  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

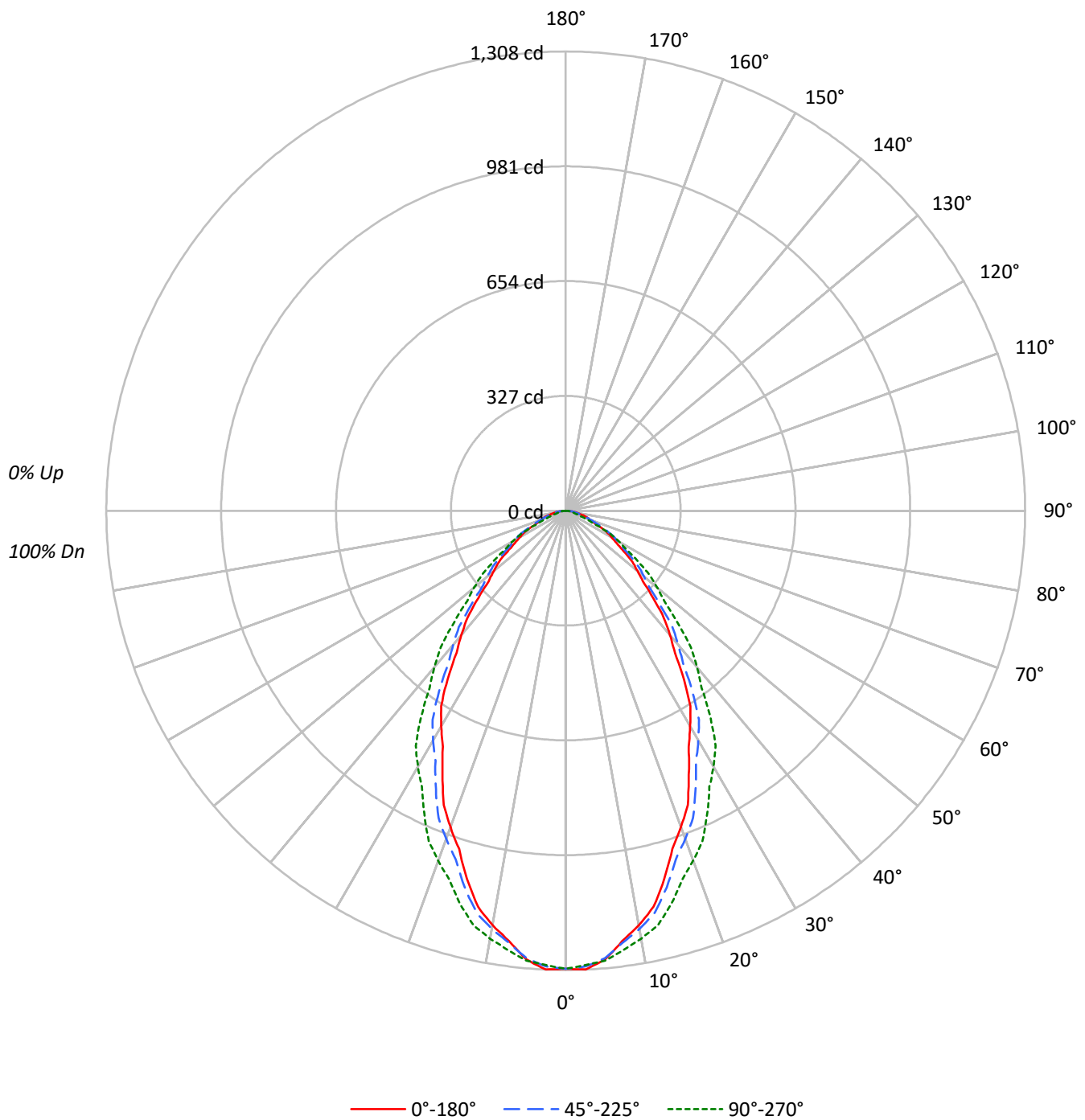
Lumens per Lamp: N/A  
Luminaire Lumens: 1901.0 lumens  
Efficiency: N/A  
Efficacy: 34.4 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Direct

Input Watts (W): 55.3  
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

TEST NUMBER:

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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   | 111 | 107 | 104 | 101 | 109 | 105 | 102 | 99  | 101 | 99  | 96  |  | 97  | 95  | 93  |  | 94  |
| 2   | 103 | 97  | 91  | 87  | 101 | 95  | 90  | 86  | 92  | 87  | 84  |  | 88  | 85  | 82  |  | 85  |
| 3   | 96  | 87  | 81  | 75  | 94  | 86  | 80  | 75  | 83  | 78  | 73  |  | 80  | 76  | 72  |  | 78  |
| 4   | 89  | 79  | 72  | 66  | 87  | 78  | 71  | 66  | 76  | 70  | 65  |  | 74  | 68  | 64  |  | 71  |
| 5   | 83  | 72  | 65  | 59  | 81  | 71  | 64  | 59  | 69  | 63  | 58  |  | 67  | 62  | 58  |  | 66  |
| 6   | 78  | 66  | 59  | 53  | 76  | 65  | 58  | 53  | 64  | 57  | 53  |  | 62  | 56  | 52  |  | 61  |
| 7   | 73  | 61  | 53  | 48  | 71  | 60  | 53  | 48  | 59  | 52  | 48  |  | 58  | 52  | 47  |  | 56  |
| 8   | 68  | 57  | 49  | 44  | 67  | 56  | 49  | 44  | 55  | 48  | 44  |  | 53  | 48  | 43  |  | 52  |
| 9   | 64  | 53  | 45  | 40  | 63  | 52  | 45  | 40  | 51  | 45  | 40  |  | 50  | 44  | 40  |  | 49  |
| 10  | 61  | 49  | 42  | 37  | 60  | 48  | 42  | 37  | 48  | 41  | 37  |  | 47  | 41  | 37  |  | 46  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 8024 | 8024 | 8024 |
| 5°  | 7924 | 7896 | 7942 |
| 10° | 7487 | 7555 | 7730 |
| 15° | 6911 | 7071 | 7389 |
| 20° | 6276 | 6512 | 6943 |
| 25° | 5630 | 5936 | 6468 |
| 30° | 5033 | 5362 | 5977 |
| 35° | 4402 | 4719 | 5394 |
| 40° | 3705 | 3999 | 4670 |
| 45° | 3058 | 3321 | 3899 |
| 50° | 2553 | 2783 | 3249 |
| 55° | 2167 | 2388 | 2683 |
| 60° | 1851 | 2070 | 2140 |
| 65° | 1474 | 1741 | 1383 |
| 70° | 1307 | 1360 | 843  |
| 75° | 1210 | 1103 | 518  |
| 80° | 1116 | 1013 | 446  |
| 85° | 1009 | 932  | 367  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 3899 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 119.7  | 6.3       |
| 10°-20°   | 311.2  | 16.4      |
| 20°-30°   | 403.2  | 21.2      |
| 30°-40°   | 394.8  | 20.8      |
| 40°-50°   | 302.2  | 15.9      |
| 50°-60°   | 201.4  | 10.6      |
| 60°-70°   | 109.9  | 5.8       |
| 70°-80°   | 45.8   | 2.4       |
| 80°-90°   | 13.0   | 0.7       |
| 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°    | 834.1  | 43.9      |
| 0°-40°    | 1228.8 | 64.6      |
| 0°-60°    | 1732.4 | 91.1      |
| 0°-90°    | 1901.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1901.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1305 | 1305  | 1305 | 1305  | 1305 |      |
| 5°  | 1283 | 1270  | 1279 | 1282  | 1286 | 119  |
| 15° | 1085 | 1081  | 1110 | 1141  | 1160 | 303  |
| 25° | 830  | 832   | 875  | 913   | 953  | 381  |
| 35° | 586  | 589   | 628  | 671   | 718  | 364  |
| 45° | 352  | 358   | 382  | 411   | 448  | 274  |
| 55° | 202  | 210   | 223  | 231   | 250  | 183  |
| 65° | 101  | 110   | 120  | 104   | 95   | 105  |
| 75° | 51   | 51    | 46   | 32    | 22   | 54   |
| 85° | 14   | 14    | 13   | 8     | 5    | 16   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1304.6 | 1304.6 | 1304.6 | 1304.6 | 1304.6 |
| 2.5°  | 1307.8 | 1296.1 | 1299.1 | 1299.0 | 1295.4 |
| 5°    | 1283.4 | 1270.5 | 1278.8 | 1281.8 | 1286.3 |
| 7.5°  | 1235.8 | 1226.0 | 1241.1 | 1252.3 | 1261.4 |
| 10°   | 1198.7 | 1190.3 | 1209.6 | 1225.8 | 1237.6 |
| 12.5° | 1155.6 | 1148.6 | 1172.5 | 1194.3 | 1209.7 |
| 15°   | 1085.3 | 1081.4 | 1110.5 | 1140.7 | 1160.3 |
| 17.5° | 1010.1 | 1008.2 | 1041.6 | 1076.9 | 1101.9 |
| 20°   | 958.8  | 958.3  | 994.9  | 1031.6 | 1060.7 |
| 22.5° | 907.1  | 908.3  | 946.8  | 985.0  | 1018.1 |
| 25°   | 829.5  | 831.7  | 874.7  | 912.8  | 953.1  |
| 27.5° | 757.7  | 758.7  | 803.1  | 843.4  | 886.4  |
| 30°   | 708.7  | 711.5  | 755.0  | 796.7  | 841.5  |
| 32.5° | 659.7  | 662.9  | 705.6  | 748.6  | 794.3  |
| 35°   | 586.2  | 589.0  | 628.5  | 670.8  | 718.4  |
| 37.5° | 510.4  | 514.2  | 549.3  | 589.3  | 636.1  |
| 40°   | 461.4  | 467.0  | 498.0  | 535.7  | 581.6  |
| 42.5° | 414.2  | 421.2  | 449.9  | 485.7  | 527.1  |
| 45°   | 351.5  | 358.2  | 381.8  | 410.7  | 448.2  |
| 47.5° | 297.4  | 305.2  | 323.3  | 348.2  | 380.2  |
| 50°   | 266.8  | 274.0  | 290.8  | 309.2  | 339.5  |
| 52.5° | 239.7  | 247.0  | 261.9  | 276.2  | 301.9  |
| 55°   | 202.1  | 210.5  | 222.7  | 231.1  | 250.2  |
| 57.5° | 171.2  | 179.2  | 188.9  | 192.7  | 204.2  |
| 60°   | 150.5  | 159.5  | 168.3  | 167.9  | 174.0  |
| 62.5° | 131.8  | 139.4  | 148.1  | 142.1  | 142.4  |
| 65°   | 101.3  | 109.7  | 119.6  | 104.5  | 95.0   |
| 67.5° | 81.9   | 83.6   | 93.9   | 72.9   | 61.6   |
| 70°   | 72.7   | 72.7   | 75.6   | 56.5   | 46.9   |
| 72.5° | 64.0   | 64.0   | 61.4   | 45.9   | 35.9   |
| 75°   | 50.9   | 50.9   | 46.4   | 31.8   | 21.8   |
| 77.5° | 39.3   | 38.8   | 35.5   | 23.7   | 15.8   |
| 80°   | 31.5   | 31.5   | 28.6   | 18.8   | 12.6   |
| 82.5° | 24.6   | 24.6   | 22.2   | 14.6   | 9.4    |
| 85°   | 14.3   | 14.3   | 13.2   | 8.5    | 5.2    |
| 87.5° | 5.0    | 5.0    | 4.6    | 2.7    | 2.3    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)