

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: P701270

Luminaire Tested: SQ4P-WB-0U-125D-B50-1D-UNV-

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P701270  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P519276)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4P-WB-0U-125D-B50-1D-UNV-  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1250 LUMENS PER FOOT DC

Light Source: -  
Ballast/Driver: -

**Summary**

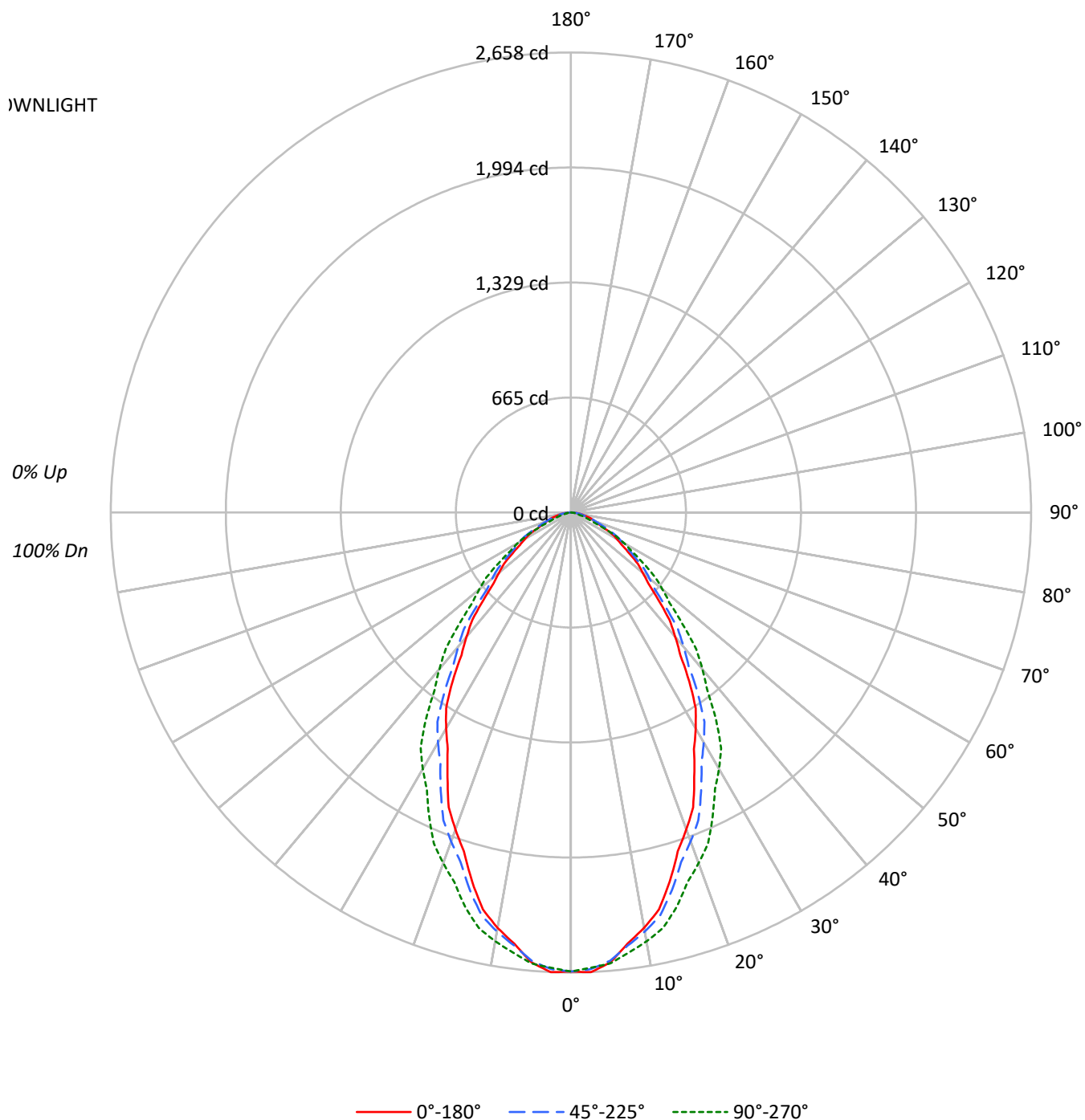
Lumens per Lamp: N/A  
Luminaire Lumens: 3864.2 lumens  
Efficiency: N/A  
Efficacy: 84.4 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 45.8  
Input Voltage (V): NR  
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   | 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°  | 24467 | 24467 | 24467 |
| 5°  | 24162 | 24074 | 24216 |
| 10° | 22827 | 23035 | 23567 |
| 15° | 21072 | 21563 | 22529 |
| 20° | 19137 | 19856 | 21169 |
| 25° | 17164 | 18101 | 19724 |
| 30° | 15347 | 16350 | 18222 |
| 35° | 13420 | 14390 | 16449 |
| 40° | 11294 | 12192 | 14238 |
| 45° | 9321  | 10125 | 11889 |
| 50° | 7781  | 8484  | 9902  |
| 55° | 6606  | 7280  | 8178  |
| 60° | 5648  | 6314  | 6528  |
| 65° | 4497  | 5307  | 4216  |
| 70° | 3987  | 4143  | 2573  |
| 75° | 3689  | 3362  | 1579  |
| 80° | 3400  | 3092  | 1355  |
| 85° | 3059  | 2837  | 1122  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 11889 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 243.2  | 6.3       |
| 10°-20°   | 632.7  | 16.4      |
| 20°-30°   | 819.5  | 21.2      |
| 30°-40°   | 802.5  | 20.8      |
| 40°-50°   | 614.2  | 15.9      |
| 50°-60°   | 409.3  | 10.6      |
| 60°-70°   | 223.4  | 5.8       |
| 70°-80°   | 93.1   | 2.4       |
| 80°-90°   | 26.3   | 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°    | 1695.4 | 43.9      |
| 0°-40°    | 2497.9 | 64.6      |
| 0°-60°    | 3521.5 | 91.1      |
| 0°-90°    | 3864.2 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3864.2 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 2652 | 2652  | 2652 | 2652  | 2652 |      |
| 5°  | 2609 | 2583  | 2599 | 2606  | 2615 | 243  |
| 15° | 2206 | 2198  | 2258 | 2319  | 2359 | 616  |
| 25° | 1686 | 1691  | 1778 | 1856  | 1938 | 775  |
| 35° | 1192 | 1197  | 1278 | 1364  | 1460 | 741  |
| 45° | 714  | 728   | 776  | 835   | 911  | 557  |
| 55° | 411  | 428   | 453  | 470   | 508  | 372  |
| 65° | 206  | 223   | 243  | 213   | 193  | 214  |
| 75° | 104  | 104   | 94   | 65    | 44   | 111  |
| 85° | 29   | 29    | 27   | 17    | 11   | 33   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 2651.9 | 2651.9 | 2651.9 | 2651.9 | 2651.9 |
| 2.5°  | 2658.4 | 2634.7 | 2640.8 | 2640.5 | 2633.1 |
| 5°    | 2608.9 | 2582.6 | 2599.4 | 2605.5 | 2614.7 |
| 7.5°  | 2512.0 | 2492.2 | 2523.1 | 2545.7 | 2564.1 |
| 10°   | 2436.6 | 2419.5 | 2458.8 | 2491.9 | 2515.6 |
| 12.5° | 2349.2 | 2334.7 | 2383.4 | 2427.7 | 2459.0 |
| 15°   | 2206.1 | 2198.2 | 2257.5 | 2318.8 | 2358.6 |
| 17.5° | 2053.3 | 2049.4 | 2117.4 | 2189.0 | 2239.8 |
| 20°   | 1949.1 | 1948.0 | 2022.3 | 2097.1 | 2156.1 |
| 22.5° | 1844.0 | 1846.3 | 1924.5 | 2002.3 | 2069.7 |
| 25°   | 1686.1 | 1690.6 | 1778.1 | 1855.5 | 1937.5 |
| 27.5° | 1540.2 | 1542.3 | 1632.4 | 1714.3 | 1801.8 |
| 30°   | 1440.6 | 1446.2 | 1534.7 | 1619.5 | 1710.4 |
| 32.5° | 1341.0 | 1347.7 | 1434.3 | 1521.8 | 1614.5 |
| 35°   | 1191.5 | 1197.3 | 1277.6 | 1363.7 | 1460.4 |
| 37.5° | 1037.3 | 1045.2 | 1116.6 | 1197.7 | 1293.1 |
| 40°   | 937.7  | 949.4  | 1012.3 | 1089.0 | 1182.2 |
| 42.5° | 841.9  | 856.2  | 914.6  | 987.2  | 1071.3 |
| 45°   | 714.4  | 728.1  | 776.0  | 834.7  | 911.2  |
| 47.5° | 604.5  | 620.3  | 657.3  | 707.8  | 772.9  |
| 50°   | 542.1  | 557.1  | 591.1  | 628.5  | 689.9  |
| 52.5° | 487.3  | 502.1  | 532.4  | 561.3  | 613.8  |
| 55°   | 410.7  | 427.8  | 452.6  | 469.9  | 508.4  |
| 57.5° | 348.0  | 364.3  | 384.0  | 391.7  | 415.2  |
| 60°   | 306.1  | 324.3  | 342.2  | 341.1  | 353.8  |
| 62.5° | 267.9  | 283.4  | 301.1  | 288.7  | 289.5  |
| 65°   | 206.0  | 223.2  | 243.1  | 212.6  | 193.1  |
| 67.5° | 166.5  | 169.9  | 190.7  | 148.3  | 125.1  |
| 70°   | 147.8  | 147.8  | 153.6  | 114.8  | 95.4   |
| 72.5° | 130.1  | 130.1  | 124.9  | 93.2   | 72.9   |
| 75°   | 103.5  | 103.5  | 94.3   | 64.8   | 44.3   |
| 77.5° | 79.8   | 79.0   | 72.2   | 48.2   | 32.2   |
| 80°   | 64.0   | 64.0   | 58.2   | 38.2   | 25.5   |
| 82.5° | 50.1   | 50.1   | 45.0   | 29.8   | 18.9   |
| 85°   | 28.9   | 28.9   | 26.8   | 17.4   | 10.6   |
| 87.5° | 10.3   | 10.3   | 9.2    | 5.5    | 4.8    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)