

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-050D-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-050D-927-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
DIRECT ONLY  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

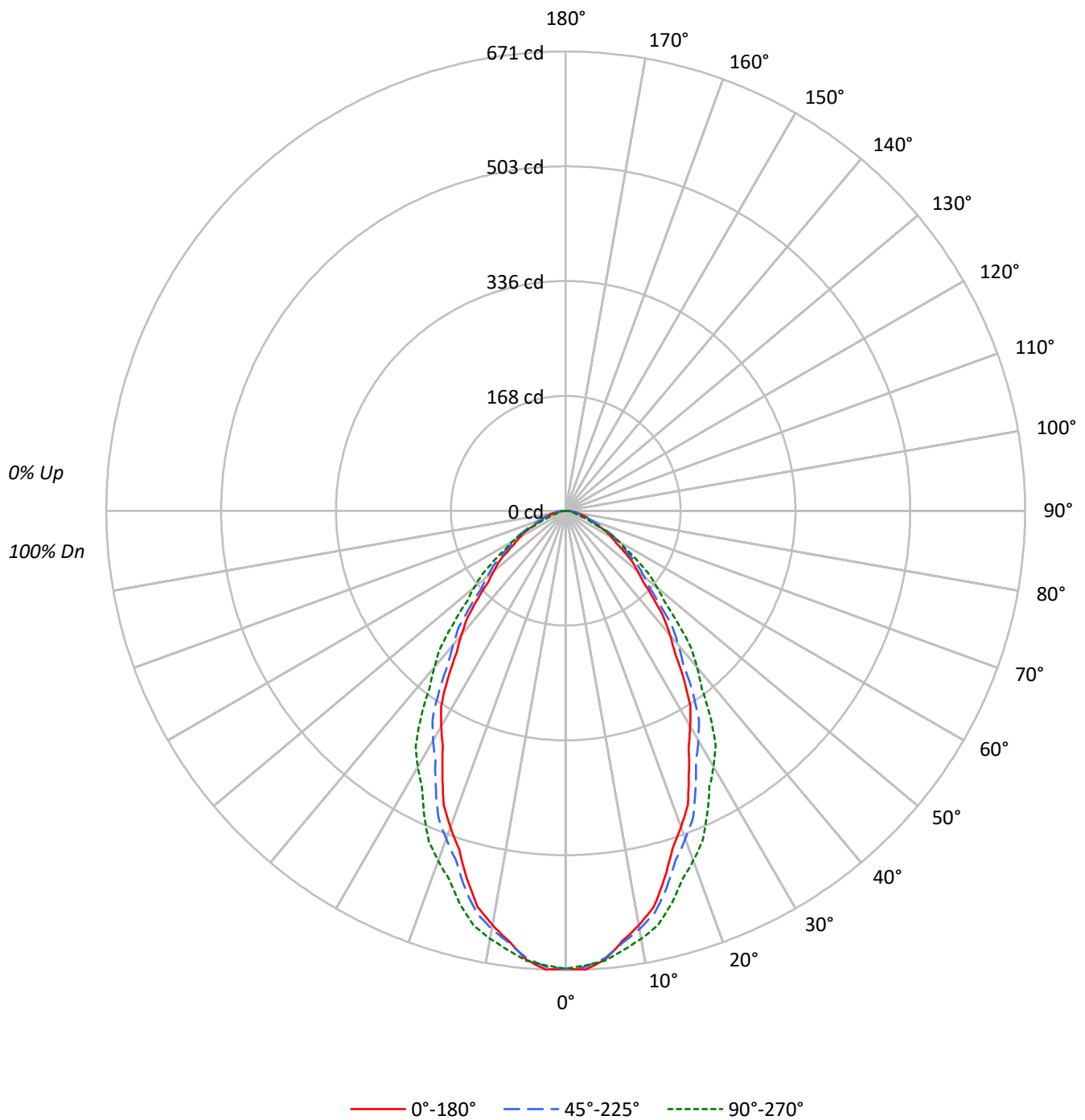
Lumens per Lamp: N/A  
Luminaire Lumens: 975.4 lumens  
Efficiency: N/A  
Efficacy: 36.5 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Direct

Input Watts (W): 26.7  
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°  | 4117 | 4117 | 4117 |
| 5°  | 4066 | 4052 | 4075 |
| 10° | 3842 | 3876 | 3966 |
| 15° | 3546 | 3628 | 3791 |
| 20° | 3220 | 3342 | 3563 |
| 25° | 2888 | 3046 | 3319 |
| 30° | 2582 | 2751 | 3067 |
| 35° | 2259 | 2422 | 2768 |
| 40° | 1901 | 2051 | 2396 |
| 45° | 1568 | 1704 | 2001 |
| 50° | 1310 | 1428 | 1667 |
| 55° | 1112 | 1226 | 1377 |
| 60° | 950  | 1063 | 1099 |
| 65° | 757  | 894  | 710  |
| 70° | 671  | 698  | 433  |
| 75° | 620  | 566  | 266  |
| 80° | 574  | 521  | 230  |
| 85° | 515  | 480  | 183  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 2001 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 61.4   | 6.3       |
| 10°-20°   | 159.7  | 16.4      |
| 20°-30°   | 206.9  | 21.2      |
| 30°-40°   | 202.6  | 20.8      |
| 40°-50°   | 155.1  | 15.9      |
| 50°-60°   | 103.3  | 10.6      |
| 60°-70°   | 56.4   | 5.8       |
| 70°-80°   | 23.5   | 2.4       |
| 80°-90°   | 6.6    | 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°    | 428.0  | 43.9      |
| 0°-40°    | 630.5  | 64.6      |
| 0°-60°    | 888.9  | 91.1      |
| 0°-90°    | 975.4  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 975.4  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 669 | 669   | 669 | 669   | 669 |      |
| 5°  | 658 | 652   | 656 | 658   | 660 | 61   |
| 15° | 557 | 555   | 570 | 585   | 595 | 156  |
| 25° | 426 | 427   | 449 | 468   | 489 | 196  |
| 35° | 301 | 302   | 322 | 344   | 369 | 187  |
| 45° | 180 | 184   | 196 | 211   | 230 | 141  |
| 55° | 104 | 108   | 114 | 119   | 128 | 94   |
| 65° | 52  | 56    | 61  | 54    | 49  | 54   |
| 75° | 26  | 26    | 24  | 16    | 11  | 28   |
| 85° | 7   | 7     | 7   | 4     | 3   | 8    |
| 90° | 0   | 0     | 0   | 0     | 0   |      |

TEST NUMBER:

CATALOG NUMBER: SQ4-WB-0U-050D-927-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 669.4 | 669.4 | 669.4 | 669.4 | 669.4 |
| 2.5°  | 671.0 | 665.1 | 666.6 | 666.5 | 664.7 |
| 5°    | 658.5 | 651.9 | 656.2 | 657.7 | 660.0 |
| 7.5°  | 634.1 | 629.1 | 636.8 | 642.6 | 647.2 |
| 10°   | 615.1 | 610.7 | 620.6 | 629.0 | 635.0 |
| 12.5° | 593.0 | 589.3 | 601.6 | 612.8 | 620.7 |
| 15°   | 556.9 | 554.9 | 569.8 | 585.3 | 595.4 |
| 17.5° | 518.3 | 517.3 | 534.5 | 552.5 | 565.4 |
| 20°   | 492.0 | 491.7 | 510.5 | 529.3 | 544.3 |
| 22.5° | 465.4 | 466.1 | 485.8 | 505.4 | 522.4 |
| 25°   | 425.6 | 426.8 | 448.8 | 468.4 | 489.0 |
| 27.5° | 388.8 | 389.3 | 412.1 | 432.7 | 454.8 |
| 30°   | 363.6 | 365.1 | 387.4 | 408.8 | 431.8 |
| 32.5° | 338.5 | 340.2 | 362.0 | 384.1 | 407.6 |
| 35°   | 300.8 | 302.2 | 322.5 | 344.2 | 368.6 |
| 37.5° | 261.9 | 263.8 | 281.9 | 302.4 | 326.4 |
| 40°   | 236.7 | 239.6 | 255.5 | 274.9 | 298.4 |
| 42.5° | 212.5 | 216.1 | 230.9 | 249.2 | 270.5 |
| 45°   | 180.3 | 183.8 | 195.9 | 210.7 | 230.0 |
| 47.5° | 152.6 | 156.6 | 165.9 | 178.7 | 195.1 |
| 50°   | 136.9 | 140.6 | 149.2 | 158.7 | 174.2 |
| 52.5° | 123.0 | 126.7 | 134.4 | 141.7 | 154.9 |
| 55°   | 103.7 | 108.0 | 114.3 | 118.6 | 128.4 |
| 57.5° | 87.8  | 92.0  | 96.9  | 98.9  | 104.8 |
| 60°   | 77.2  | 81.8  | 86.4  | 86.1  | 89.3  |
| 62.5° | 67.6  | 71.5  | 76.0  | 72.9  | 73.1  |
| 65°   | 52.0  | 56.3  | 61.4  | 53.6  | 48.8  |
| 67.5° | 42.0  | 42.9  | 48.2  | 37.4  | 31.6  |
| 70°   | 37.3  | 37.3  | 38.8  | 29.0  | 24.1  |
| 72.5° | 32.8  | 32.8  | 31.5  | 23.6  | 18.4  |
| 75°   | 26.1  | 26.1  | 23.8  | 16.3  | 11.2  |
| 77.5° | 20.1  | 19.9  | 18.2  | 12.2  | 8.1   |
| 80°   | 16.2  | 16.2  | 14.7  | 9.6   | 6.5   |
| 82.5° | 12.6  | 12.6  | 11.4  | 7.5   | 4.8   |
| 85°   | 7.3   | 7.3   | 6.8   | 4.4   | 2.6   |
| 87.5° | 2.6   | 2.6   | 2.3   | 1.4   | 1.2   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)