

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-PR1-0U-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-PR1-0U-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**

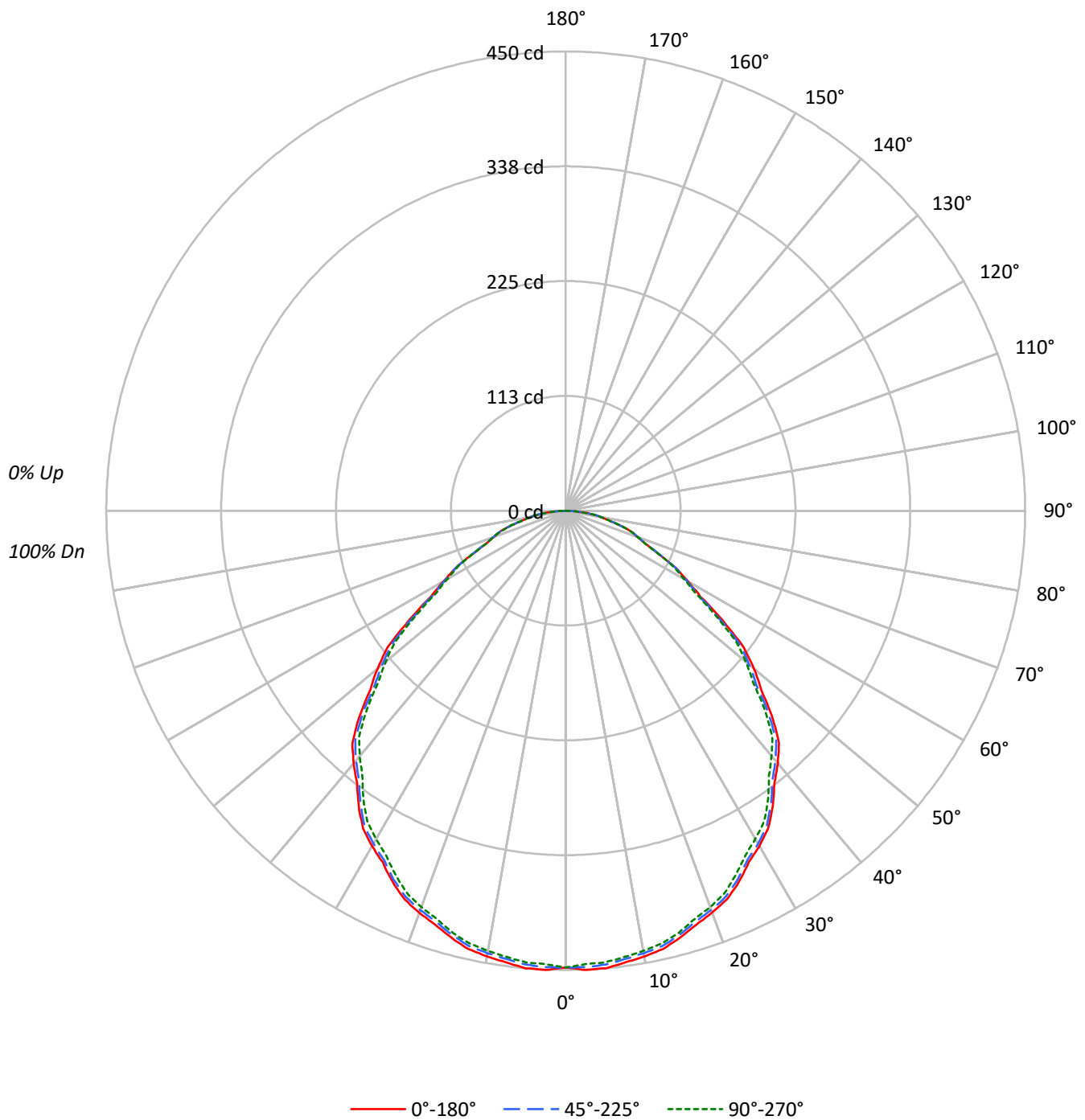
Lumens per Lamp: N/A  
Luminaire Lumens: 1119.1 lumens  
Efficiency: N/A  
Efficacy: 41.9 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Direct

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



TEST NUMBER:

CATALOG NUMBER: SQ4-PR1-OU-050D-927-1D-UNV-STD-W-6

**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  | 30  | 10  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 |
| 1   | 110 | 105 | 101 | 98  | 107 | 103 | 99  | 96  | 99  | 96  | 93  | 95  | 92  | 90  | 91  | 89  | 87  |
| 2   | 100 | 93  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 82  | 78  | 84  | 80  | 76  | 81  | 78  | 75  |
| 3   | 92  | 82  | 74  | 68  | 90  | 80  | 73  | 68  | 78  | 71  | 66  | 75  | 70  | 65  | 72  | 68  | 64  |
| 4   | 85  | 73  | 65  | 58  | 82  | 72  | 64  | 58  | 69  | 63  | 57  | 67  | 61  | 56  | 65  | 60  | 56  |
| 5   | 78  | 66  | 57  | 51  | 76  | 65  | 57  | 50  | 63  | 55  | 50  | 61  | 54  | 49  | 59  | 53  | 49  |
| 6   | 72  | 59  | 51  | 45  | 70  | 58  | 50  | 44  | 57  | 49  | 44  | 55  | 49  | 44  | 53  | 48  | 43  |
| 7   | 67  | 54  | 46  | 40  | 65  | 53  | 45  | 39  | 52  | 44  | 39  | 50  | 44  | 39  | 49  | 43  | 39  |
| 8   | 63  | 49  | 41  | 35  | 61  | 49  | 41  | 35  | 47  | 40  | 35  | 46  | 40  | 35  | 45  | 39  | 35  |
| 9   | 58  | 45  | 37  | 32  | 57  | 45  | 37  | 32  | 44  | 37  | 32  | 43  | 36  | 32  | 42  | 36  | 31  |
| 10  | 55  | 42  | 34  | 29  | 54  | 41  | 34  | 29  | 40  | 34  | 29  | 40  | 33  | 29  | 39  | 33  | 29  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 2753 | 2753 | 2753 |
| 5°  | 2778 | 2757 | 2743 |
| 10° | 2769 | 2750 | 2736 |
| 15° | 2757 | 2740 | 2725 |
| 20° | 2743 | 2726 | 2705 |
| 25° | 2724 | 2706 | 2674 |
| 30° | 2695 | 2675 | 2637 |
| 35° | 2655 | 2632 | 2594 |
| 40° | 2594 | 2566 | 2520 |
| 45° | 2489 | 2445 | 2395 |
| 50° | 2302 | 2247 | 2203 |
| 55° | 2010 | 1963 | 1923 |
| 60° | 1693 | 1679 | 1646 |
| 65° | 1464 | 1470 | 1458 |
| 70° | 1345 | 1352 | 1352 |
| 75° | 1293 | 1293 | 1302 |
| 80° | 1215 | 1229 | 1215 |
| 85° | 981  | 1087 | 1087 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2489 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 42.3   | 3.8       |
| 10°-20°   | 121.1  | 10.8      |
| 20°-30°   | 182.7  | 16.3      |
| 30°-40°   | 217.7  | 19.5      |
| 40°-50°   | 214.6  | 19.2      |
| 50°-60°   | 164.0  | 14.7      |
| 60°-70°   | 101.5  | 9.1       |
| 70°-80°   | 57.7   | 5.2       |
| 80°-90°   | 17.5   | 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°    | 346.1  | 30.9      |
| 0°-40°    | 563.8  | 50.4      |
| 0°-60°    | 942.4  | 84.2      |
| 0°-90°    | 1119.1 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1119.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 448 | 448   | 448 | 448   | 448 |      |
| 5°  | 450 | 445   | 446 | 445   | 444 | 43   |
| 15° | 433 | 428   | 430 | 429   | 428 | 122  |
| 25° | 401 | 396   | 399 | 394   | 394 | 185  |
| 35° | 354 | 349   | 350 | 346   | 346 | 221  |
| 45° | 286 | 282   | 281 | 276   | 275 | 219  |
| 55° | 187 | 184   | 183 | 180   | 179 | 168  |
| 65° | 101 | 100   | 101 | 100   | 100 | 102  |
| 75° | 54  | 54    | 54  | 55    | 55  | 57   |
| 85° | 14  | 15    | 15  | 15    | 15  | 17   |
| 90° | 0   | 0     | 0   | 0     | 0   |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 447.6 | 447.6 | 447.6 | 447.6 | 447.6 |
| 2.5°  | 450.4 | 446.5 | 447.6 | 446.7 | 444.6 |
| 5°    | 450.0 | 445.1 | 446.5 | 444.9 | 444.2 |
| 7.5°  | 446.5 | 441.7 | 443.1 | 441.5 | 441.1 |
| 10°   | 443.4 | 438.9 | 440.3 | 438.8 | 438.0 |
| 12.5° | 440.0 | 435.2 | 436.9 | 435.1 | 434.3 |
| 15°   | 433.0 | 428.5 | 430.3 | 428.7 | 428.0 |
| 17.5° | 425.3 | 420.5 | 422.3 | 420.5 | 419.5 |
| 20°   | 419.1 | 414.6 | 416.4 | 413.7 | 413.3 |
| 22.5° | 412.3 | 407.8 | 409.6 | 406.0 | 405.9 |
| 25°   | 401.4 | 396.5 | 398.7 | 394.4 | 394.0 |
| 27.5° | 388.3 | 383.8 | 385.6 | 381.3 | 380.9 |
| 30°   | 379.4 | 374.9 | 376.7 | 372.1 | 371.3 |
| 32.5° | 369.2 | 365.0 | 366.5 | 361.9 | 361.4 |
| 35°   | 353.6 | 349.4 | 350.5 | 345.8 | 345.5 |
| 37.5° | 335.8 | 332.0 | 332.6 | 327.5 | 327.1 |
| 40°   | 323.1 | 319.3 | 319.6 | 314.2 | 313.8 |
| 42.5° | 309.2 | 305.5 | 305.1 | 299.7 | 299.4 |
| 45°   | 286.1 | 282.3 | 281.1 | 276.0 | 275.3 |
| 47.5° | 259.7 | 255.9 | 253.6 | 249.5 | 249.0 |
| 50°   | 240.6 | 236.8 | 234.8 | 231.3 | 230.2 |
| 52.5° | 219.9 | 216.2 | 214.5 | 211.3 | 210.1 |
| 55°   | 187.4 | 184.4 | 183.1 | 180.0 | 179.3 |
| 57.5° | 156.5 | 154.4 | 154.1 | 151.1 | 150.8 |
| 60°   | 137.6 | 136.5 | 136.5 | 133.8 | 133.8 |
| 62.5° | 121.6 | 120.8 | 121.4 | 119.6 | 119.3 |
| 65°   | 100.6 | 99.9  | 101.0 | 100.2 | 100.2 |
| 67.5° | 84.1  | 84.1  | 84.7  | 84.4  | 84.4  |
| 70°   | 74.8  | 74.8  | 75.2  | 75.2  | 75.2  |
| 72.5° | 66.5  | 66.2  | 67.2  | 67.2  | 66.9  |
| 75°   | 54.4  | 54.4  | 54.4  | 54.8  | 54.8  |
| 77.5° | 42.3  | 42.4  | 42.7  | 42.6  | 42.3  |
| 80°   | 34.3  | 34.7  | 34.7  | 34.3  | 34.3  |
| 82.5° | 26.3  | 26.7  | 26.7  | 26.6  | 26.3  |
| 85°   | 13.9  | 14.6  | 15.4  | 15.4  | 15.4  |
| 87.5° | 4.0   | 5.2   | 6.2   | 6.2   | 5.9   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)