

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-PW1-125U-075D-927-1D-UNV-STD-W-4

Issue Date: 8/1/2024

**Test Information**

Test Method: LM-79-2019  
Report Number:  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/1/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-PW1-125U-075D-927-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

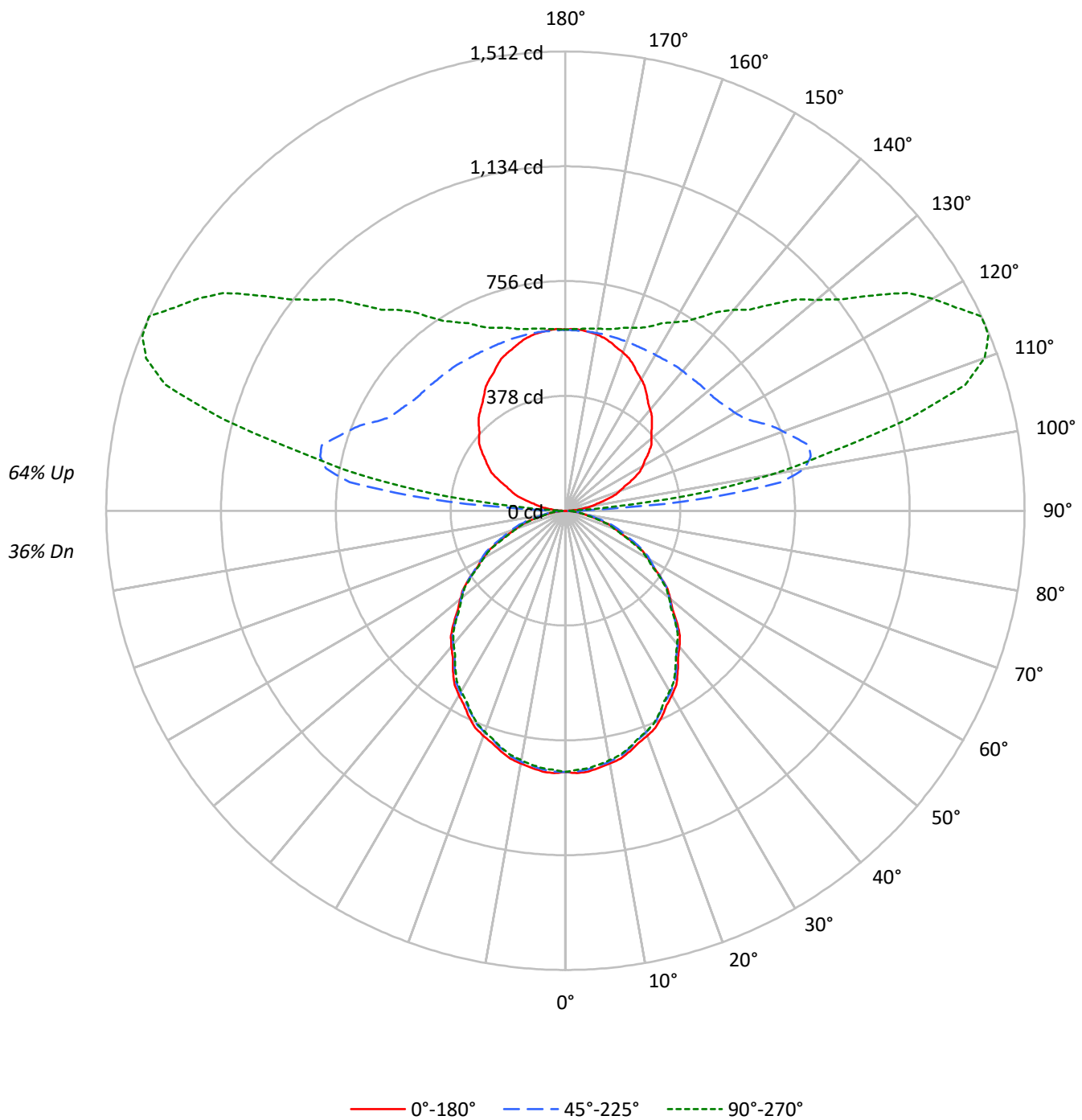
Lumens per Lamp: N/A  
Luminaire Lumens: 6038.6 lumens  
Efficiency: N/A  
Efficacy: 108.4 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 55.7  
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:

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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 | 30 | 10 |
| RCR |     |     |     |     |  |    |    |    |    |  |    |    |    |  |    |    |    |  |    |    |    |
| 0   | 104 | 104 | 104 | 104 |  | 94 | 94 | 94 | 94 |  | 76 | 76 | 76 |  | 59 | 59 | 59 |  | 43 | 43 | 43 |
| 1   | 95  | 91  | 87  | 83  |  | 86 | 82 | 79 | 76 |  | 66 | 64 | 62 |  | 52 | 50 | 49 |  | 39 | 38 | 37 |
| 2   | 86  | 79  | 73  | 68  |  | 78 | 72 | 67 | 62 |  | 58 | 55 | 52 |  | 46 | 43 | 41 |  | 34 | 32 | 31 |
| 3   | 79  | 70  | 62  | 57  |  | 71 | 63 | 57 | 52 |  | 51 | 47 | 43 |  | 40 | 37 | 35 |  | 30 | 28 | 27 |
| 4   | 72  | 61  | 54  | 48  |  | 65 | 56 | 49 | 44 |  | 46 | 41 | 37 |  | 36 | 33 | 30 |  | 27 | 25 | 23 |
| 5   | 66  | 55  | 47  | 41  |  | 60 | 50 | 43 | 38 |  | 41 | 36 | 32 |  | 32 | 29 | 26 |  | 24 | 22 | 20 |
| 6   | 61  | 49  | 41  | 35  |  | 55 | 45 | 38 | 33 |  | 37 | 31 | 28 |  | 29 | 25 | 23 |  | 22 | 19 | 18 |
| 7   | 56  | 44  | 36  | 31  |  | 51 | 40 | 34 | 29 |  | 33 | 28 | 24 |  | 26 | 23 | 20 |  | 20 | 17 | 16 |
| 8   | 52  | 40  | 32  | 27  |  | 47 | 37 | 30 | 25 |  | 30 | 25 | 21 |  | 24 | 20 | 18 |  | 18 | 16 | 14 |
| 9   | 48  | 36  | 29  | 24  |  | 44 | 33 | 27 | 22 |  | 28 | 23 | 19 |  | 22 | 18 | 16 |  | 17 | 14 | 13 |
| 10  | 45  | 33  | 26  | 22  |  | 41 | 31 | 24 | 20 |  | 25 | 20 | 17 |  | 20 | 17 | 14 |  | 16 | 13 | 11 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 7934 | 7934 | 7934 |
| 5°  | 7984 | 7921 | 7886 |
| 10° | 7921 | 7856 | 7814 |
| 15° | 7837 | 7750 | 7721 |
| 20° | 7743 | 7624 | 7609 |
| 25° | 7635 | 7497 | 7473 |
| 30° | 7473 | 7361 | 7313 |
| 35° | 7261 | 7159 | 7116 |
| 40° | 7035 | 6925 | 6898 |
| 45° | 6761 | 6673 | 6643 |
| 50° | 6481 | 6426 | 6383 |
| 55° | 6178 | 6178 | 6080 |
| 60° | 5801 | 5914 | 5704 |
| 65° | 5309 | 5573 | 5176 |
| 70° | 4680 | 5131 | 4556 |
| 75° | 3996 | 4591 | 3889 |
| 80° | 3098 | 3863 | 3140 |
| 85° | 2001 | 2964 | 2646 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6761 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 81.0   | 1.3       |
| 10°-20°   | 228.6  | 3.8       |
| 20°-30°   | 339.1  | 5.6       |
| 30°-40°   | 396.8  | 6.6       |
| 40°-50°   | 395.0  | 6.5       |
| 50°-60°   | 341.1  | 5.6       |
| 60°-70°   | 245.5  | 4.1       |
| 70°-80°   | 128.8  | 2.1       |
| 80°-90°   | 33.3   | 0.6       |
| 90°-100°  | 278.9  | 4.6       |
| 100°-110° | 751.4  | 12.4      |
| 110°-120° | 788.6  | 13.1      |
| 120°-130° | 639.9  | 10.6      |
| 130°-140° | 501.9  | 8.3       |
| 140°-150° | 385.3  | 6.4       |
| 150°-160° | 277.0  | 4.6       |
| 160°-170° | 169.3  | 2.8       |
| 170°-180° | 57.1   | 0.9       |
| 0°-30°    | 648.7  | 10.7      |
| 0°-40°    | 1045.4 | 17.3      |
| 0°-60°    | 1781.5 | 29.5      |
| 0°-90°    | 2189.1 | 36.3      |
| 90°-120°  | 1819.0 | 30.1      |
| 90°-150°  | 3346.1 | 55.4      |
| 90°-180°  | 3849.0 | 63.7      |
| 0°-180°   | 6038.6 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90°  | Flux |
|------|-----|-------|-----|-------|------|------|
| 0°   | 860 | 860   | 860 | 860   | 860  |      |
| 5°   | 862 | 852   | 855 | 853   | 852  | 82   |
| 15°  | 820 | 810   | 811 | 810   | 808  | 231  |
| 25°  | 750 | 737   | 736 | 732   | 734  | 345  |
| 35°  | 645 | 636   | 636 | 630   | 632  | 403  |
| 45°  | 518 | 514   | 511 | 510   | 509  | 400  |
| 55°  | 384 | 383   | 384 | 379   | 378  | 343  |
| 65°  | 243 | 251   | 255 | 245   | 237  | 241  |
| 75°  | 112 | 122   | 129 | 120   | 109  | 120  |
| 85°  | 19  | 25    | 28  | 26    | 25   | 25   |
| 90°  | 2   | 4     | 9   | 10    | 10   | 4    |
| 95°  | 42  | 152   | 457 | 234   | 162  | 44   |
| 105° | 139 | 216   | 831 | 1243  | 1167 | 146  |
| 115° | 245 | 300   | 692 | 1337  | 1512 | 241  |
| 125° | 335 | 385   | 621 | 1050  | 1236 | 299  |
| 135° | 403 | 450   | 604 | 847   | 959  | 311  |
| 145° | 466 | 503   | 596 | 724   | 778  | 293  |
| 155° | 530 | 549   | 591 | 650   | 671  | 244  |
| 165° | 574 | 581   | 593 | 617   | 620  | 162  |
| 175° | 597 | 596   | 594 | 602   | 601  | 57   |
| 180° | 596 | 596   | 596 | 596   | 596  |      |

TEST NUMBER:

CATALOG NUMBER: SQ4-PW1-125U-075D-927-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5°  | 90°    |
|--------|-------|-------|-------|--------|--------|
| 0°     | 859.9 | 859.9 | 859.9 | 859.9  | 859.9  |
| 2.5°   | 864.7 | 857.6 | 859.9 | 857.9  | 853.8  |
| 5°     | 862.1 | 852.5 | 855.3 | 853.0  | 851.5  |
| 7.5°   | 853.3 | 844.5 | 846.5 | 844.1  | 843.2  |
| 10°    | 845.5 | 836.6 | 838.6 | 835.6  | 834.1  |
| 12.5°  | 836.4 | 826.9 | 828.9 | 825.9  | 825.0  |
| 15°    | 820.5 | 810.1 | 811.4 | 809.8  | 808.3  |
| 17.5°  | 802.0 | 791.5 | 791.7 | 789.2  | 788.9  |
| 20°    | 788.6 | 777.5 | 776.5 | 773.5  | 775.0  |
| 22.5°  | 774.1 | 762.4 | 761.4 | 757.2  | 759.3  |
| 25°    | 750.0 | 737.4 | 736.4 | 731.9  | 734.1  |
| 27.5°  | 722.1 | 709.7 | 709.7 | 703.4  | 705.8  |
| 30°    | 701.5 | 689.7 | 690.9 | 683.4  | 686.4  |
| 32.5°  | 679.7 | 669.0 | 669.7 | 662.2  | 665.2  |
| 35°    | 644.7 | 635.8 | 635.6 | 629.6  | 631.8  |
| 37.5°  | 608.9 | 601.1 | 599.9 | 596.4  | 597.0  |
| 40°    | 584.1 | 577.4 | 575.0 | 572.7  | 572.7  |
| 42.5°  | 558.0 | 552.0 | 549.6 | 547.9  | 547.3  |
| 45°    | 518.2 | 513.7 | 511.4 | 509.8  | 509.1  |
| 47.5°  | 478.8 | 474.6 | 472.6 | 471.5  | 470.8  |
| 50°    | 451.5 | 448.6 | 447.7 | 445.4  | 444.7  |
| 52.5°  | 424.2 | 422.5 | 421.7 | 418.8  | 418.0  |
| 55°    | 384.1 | 383.4 | 384.1 | 378.8  | 378.0  |
| 57.5°  | 342.3 | 343.5 | 345.9 | 338.8  | 337.0  |
| 60°    | 314.4 | 317.4 | 320.5 | 312.1  | 309.1  |
| 62.5°  | 285.9 | 290.7 | 295.0 | 285.4  | 281.2  |
| 65°    | 243.2 | 250.6 | 255.3 | 245.3  | 237.1  |
| 67.5°  | 202.0 | 211.2 | 216.8 | 206.0  | 196.8  |
| 70°    | 173.5 | 183.9 | 190.2 | 179.3  | 168.9  |
| 72.5°  | 148.6 | 160.2 | 165.3 | 155.1  | 144.7  |
| 75°    | 112.1 | 122.5 | 128.8 | 120.2  | 109.1  |
| 77.5°  | 79.5  | 89.3  | 94.5  | 87.1   | 77.9   |
| 80°    | 58.3  | 68.7  | 72.7  | 66.5   | 59.1   |
| 82.5°  | 41.4  | 50.0  | 52.7  | 49.0   | 43.9   |
| 85°    | 18.9  | 24.9  | 28.0  | 26.5   | 25.0   |
| 87.5°  | 5.2   | 9.9   | 13.3  | 13.5   | 14.1   |
| 90°    | 1.5   | 4.5   | 9.1   | 9.9    | 9.9    |
| 92.5°  | 18.5  | 65.5  | 129.4 | 62.3   | 43.3   |
| 95°    | 42.5  | 151.7 | 457.3 | 233.8  | 161.8  |
| 97.5°  | 67.9  | 173.7 | 717.2 | 599.2  | 451.8  |
| 100°   | 87.4  | 182.4 | 799.9 | 836.9  | 694.3  |
| 102.5° | 106.2 | 194.7 | 827.2 | 1014.9 | 897.9  |
| 105°   | 139.0 | 216.3 | 831.0 | 1243.3 | 1166.8 |
| 107.5° | 170.0 | 238.9 | 795.6 | 1360.6 | 1380.4 |
| 110°   | 190.7 | 256.0 | 763.4 | 1397.1 | 1469.1 |

TEST NUMBER:

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5°  | 90°    |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 212.5 | 273.1 | 732.4 | 1389.0 | 1507.4 |
| 115°   | 245.4 | 300.3 | 692.0 | 1337.1 | 1512.4 |
| 117.5° | 275.3 | 326.8 | 660.7 | 1254.3 | 1449.5 |
| 120°   | 294.7 | 344.5 | 644.9 | 1194.9 | 1395.4 |
| 122.5° | 311.7 | 360.9 | 633.4 | 1134.1 | 1334.0 |
| 125°   | 335.0 | 384.8 | 621.4 | 1050.2 | 1235.9 |
| 127.5° | 357.3 | 406.3 | 613.8 | 976.2  | 1142.0 |
| 130°   | 370.7 | 419.7 | 610.7 | 933.8  | 1079.4 |
| 132.5° | 384.1 | 432.5 | 607.7 | 896.5  | 1030.2 |
| 135°   | 403.4 | 450.2 | 603.9 | 847.2  | 959.4  |
| 137.5° | 421.7 | 466.6 | 601.9 | 805.5  | 897.6  |
| 140°   | 434.5 | 477.6 | 600.1 | 779.7  | 862.9  |
| 142.5° | 447.9 | 488.0 | 598.9 | 755.7  | 825.9  |
| 145°   | 466.4 | 502.8 | 596.3 | 724.4  | 777.8  |
| 147.5° | 486.5 | 518.1 | 593.7 | 698.0  | 740.0  |
| 150°   | 499.8 | 527.3 | 592.5 | 681.4  | 716.3  |
| 152.5° | 512.0 | 535.9 | 591.9 | 667.9  | 696.3  |
| 155°   | 529.5 | 548.8 | 591.0 | 649.9  | 670.7  |
| 157.5° | 544.8 | 559.8 | 591.1 | 637.3  | 651.3  |
| 160°   | 554.5 | 567.1 | 591.7 | 630.0  | 640.4  |
| 162.5° | 563.0 | 573.3 | 592.4 | 623.8  | 631.2  |
| 165°   | 574.3 | 581.0 | 593.3 | 616.9  | 619.8  |
| 167.5° | 583.4 | 587.2 | 594.0 | 611.5  | 612.7  |
| 170°   | 589.5 | 590.9 | 594.0 | 608.5  | 608.5  |
| 172.5° | 593.1 | 593.4 | 594.6 | 605.4  | 605.4  |
| 175°   | 597.1 | 596.3 | 594.0 | 602.3  | 600.9  |
| 177.5° | 598.7 | 597.5 | 594.5 | 599.3  | 598.1  |
| 180°   | 596.3 | 596.3 | 596.3 | 596.3  | 596.3  |

(END OF REPORT)