

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: P701275

Luminaire Tested: SQ4P-WB-125U-050D-B50-1D-UNV-

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P701275  
REPORT IS A COMBINATION OF REPORTS P700127 AND P700247  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4P-WB-125U-050D-B50-1D-UNV-  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1250 LUMENS PER FOOT UPLIGHT, 500 LU  
FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

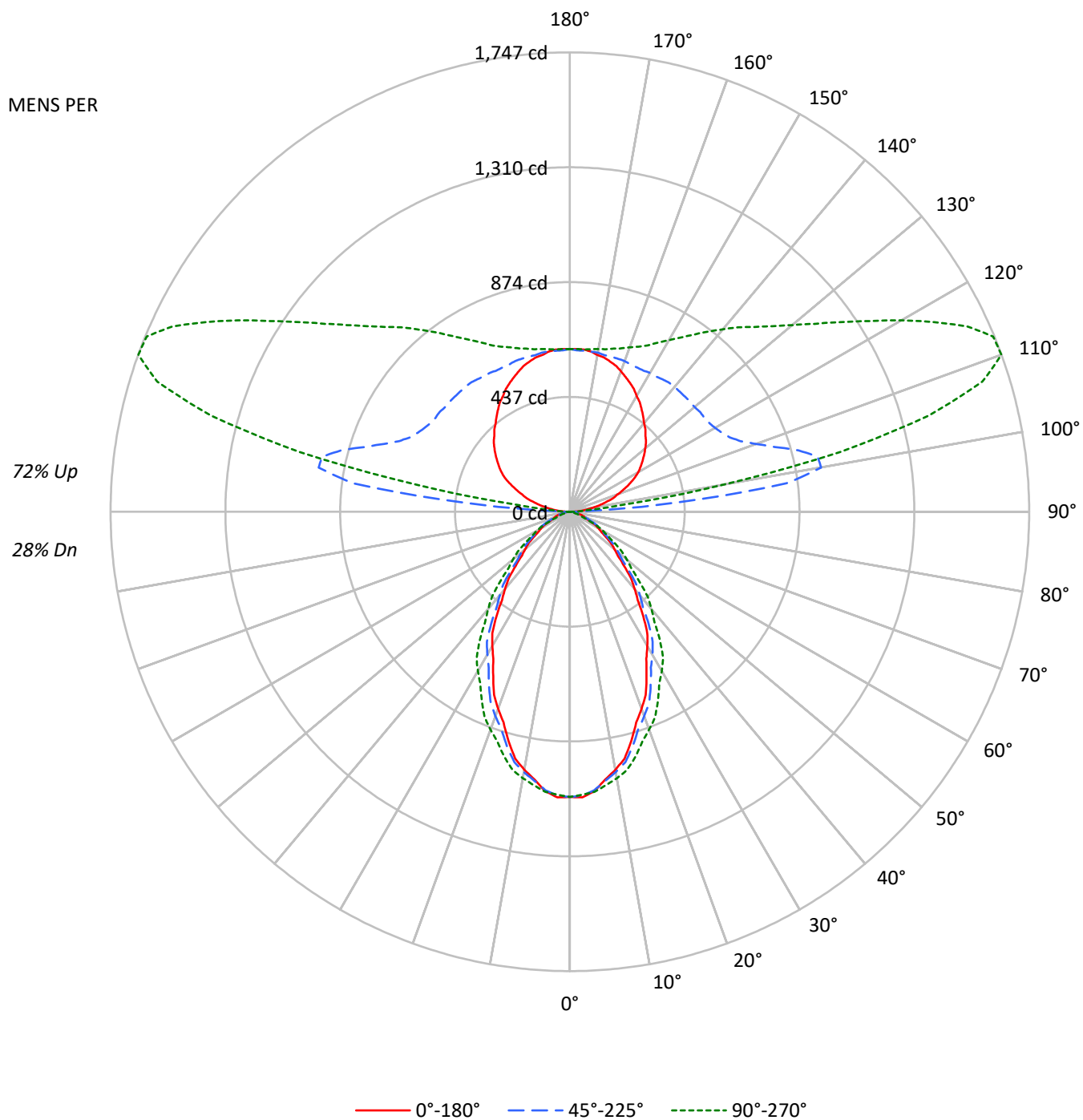
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5600.2 lumens  
Efficiency: N/A  
Efficacy: 110.2 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: Semi-Indirect  
  
Input Watts (W): 50.8  
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 | 30 | 10 |
| RCR |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 0   | 102 | 102 | 102 | 102 | 91 | 91 | 91 | 91 | 71 | 71 | 71 | 53 | 53 | 53 | 36 | 36 | 36 |
| 1   | 94  | 90  | 86  | 83  | 84 | 80 | 78 | 75 | 63 | 61 | 60 | 47 | 46 | 45 | 33 | 32 | 32 |
| 2   | 86  | 79  | 73  | 69  | 77 | 71 | 66 | 62 | 56 | 53 | 50 | 42 | 40 | 39 | 30 | 29 | 28 |
| 3   | 79  | 70  | 63  | 58  | 70 | 63 | 57 | 53 | 50 | 46 | 43 | 38 | 36 | 34 | 27 | 26 | 24 |
| 4   | 72  | 62  | 55  | 50  | 65 | 56 | 50 | 45 | 45 | 41 | 37 | 34 | 32 | 29 | 25 | 23 | 22 |
| 5   | 66  | 56  | 48  | 43  | 59 | 50 | 44 | 39 | 40 | 36 | 32 | 31 | 28 | 26 | 22 | 21 | 19 |
| 6   | 61  | 50  | 43  | 37  | 55 | 45 | 39 | 34 | 37 | 32 | 29 | 28 | 25 | 23 | 21 | 19 | 17 |
| 7   | 57  | 45  | 38  | 33  | 51 | 41 | 35 | 30 | 33 | 29 | 25 | 26 | 23 | 20 | 19 | 17 | 16 |
| 8   | 53  | 41  | 34  | 29  | 47 | 38 | 31 | 27 | 31 | 26 | 23 | 24 | 21 | 18 | 18 | 16 | 14 |
| 9   | 49  | 38  | 31  | 26  | 44 | 34 | 28 | 24 | 28 | 24 | 20 | 22 | 19 | 17 | 16 | 14 | 13 |
| 10  | 46  | 35  | 28  | 23  | 41 | 32 | 26 | 22 | 26 | 21 | 18 | 20 | 17 | 15 | 15 | 13 | 12 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 10006 | 10006 | 10006 |
| 5°  | 9881  | 9846  | 9903  |
| 10° | 9336  | 9420  | 9639  |
| 15° | 8618  | 8819  | 9214  |
| 20° | 7826  | 8120  | 8658  |
| 25° | 7020  | 7403  | 8067  |
| 30° | 6277  | 6687  | 7452  |
| 35° | 5487  | 5885  | 6727  |
| 40° | 4619  | 4986  | 5823  |
| 45° | 3813  | 4141  | 4862  |
| 50° | 3182  | 3469  | 4051  |
| 55° | 2701  | 2977  | 3344  |
| 60° | 2310  | 2581  | 2670  |
| 65° | 1840  | 2170  | 1722  |
| 70° | 1632  | 1694  | 1052  |
| 75° | 1511  | 1376  | 645   |
| 80° | 1392  | 1265  | 558   |
| 85° | 1249  | 1154  | 455   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 4862 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 99.5   | 1.8       |
| 10°-20°   | 258.8  | 4.6       |
| 20°-30°   | 335.1  | 6.0       |
| 30°-40°   | 328.2  | 5.9       |
| 40°-50°   | 251.2  | 4.5       |
| 50°-60°   | 167.4  | 3.0       |
| 60°-70°   | 91.3   | 1.6       |
| 70°-80°   | 38.1   | 0.7       |
| 80°-90°   | 12.3   | 0.2       |
| 90°-100°  | 246.4  | 4.4       |
| 100°-110° | 857.4  | 15.3      |
| 110°-120° | 830.6  | 14.8      |
| 120°-130° | 651.5  | 11.6      |
| 130°-140° | 515.7  | 9.2       |
| 140°-150° | 398.0  | 7.1       |
| 150°-160° | 285.3  | 5.1       |
| 160°-170° | 174.5  | 3.1       |
| 170°-180° | 59.0   | 1.1       |
| 0°-30°    | 693.4  | 12.4      |
| 0°-40°    | 1021.6 | 18.2      |
| 0°-60°    | 1440.2 | 25.7      |
| 0°-90°    | 1581.9 | 28.2      |
| 90°-120°  | 1934.4 | 34.5      |
| 90°-150°  | 3499.5 | 62.5      |
| 90°-180°  | 4018.0 | 71.7      |
| 0°-180°   | 5600.2 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1084 | 1084  | 1084 | 1084  | 1084 |      |
| 5°   | 1067 | 1056  | 1063 | 1066  | 1069 | 99   |
| 15°  | 902  | 899   | 923  | 948   | 965  | 252  |
| 25°  | 690  | 692   | 727  | 759   | 792  | 317  |
| 35°  | 487  | 490   | 522  | 558   | 597  | 303  |
| 45°  | 292  | 298   | 317  | 341   | 373  | 228  |
| 55°  | 168  | 175   | 185  | 192   | 208  | 152  |
| 65°  | 84   | 91    | 99   | 87    | 79   | 88   |
| 75°  | 42   | 42    | 39   | 26    | 18   | 45   |
| 85°  | 12   | 12    | 11   | 7     | 4    | 13   |
| 90°  | 9    | 14    | 14   | 9     | 5    | 6    |
| 95°  | 42   | 143   | 416  | 106   | 65   | 44   |
| 105° | 143  | 203   | 901  | 1520  | 1414 | 151  |
| 115° | 250  | 300   | 670  | 1414  | 1668 | 246  |
| 125° | 337  | 416   | 624  | 1054  | 1257 | 302  |
| 135° | 407  | 457   | 619  | 878   | 993  | 315  |
| 145° | 476  | 508   | 614  | 758   | 822  | 298  |
| 155° | 541  | 559   | 605  | 675   | 698  | 249  |
| 165° | 592  | 596   | 610  | 638   | 642  | 167  |
| 175° | 619  | 619   | 614  | 624   | 619  | 59   |
| 180° | 619  | 619   | 619  | 619   | 619  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1084.5 | 1084.5 | 1084.5 | 1084.5 | 1084.5 |
| 2.5°   | 1087.2 | 1077.5 | 1080.0 | 1079.9 | 1076.8 |
| 5°     | 1066.9 | 1056.2 | 1063.1 | 1065.6 | 1069.3 |
| 7.5°   | 1027.3 | 1019.2 | 1031.8 | 1041.1 | 1048.7 |
| 10°    | 996.5  | 989.5  | 1005.5 | 1019.1 | 1028.9 |
| 12.5°  | 960.8  | 954.8  | 974.8  | 992.9  | 1005.6 |
| 15°    | 902.2  | 899.0  | 923.3  | 948.3  | 964.6  |
| 17.5°  | 839.8  | 838.2  | 866.0  | 895.3  | 916.0  |
| 20°    | 797.1  | 796.7  | 827.0  | 857.7  | 881.8  |
| 22.5°  | 754.1  | 755.1  | 787.0  | 818.8  | 846.4  |
| 25°    | 689.6  | 691.5  | 727.2  | 758.9  | 792.4  |
| 27.5°  | 629.9  | 630.7  | 667.6  | 701.1  | 736.9  |
| 30°    | 589.2  | 591.4  | 627.7  | 662.3  | 699.5  |
| 32.5°  | 548.5  | 551.1  | 586.6  | 622.3  | 660.3  |
| 35°    | 487.2  | 489.6  | 522.5  | 557.7  | 597.3  |
| 37.5°  | 424.2  | 427.5  | 456.7  | 489.8  | 528.8  |
| 40°    | 383.5  | 388.2  | 414.0  | 445.4  | 483.5  |
| 42.5°  | 344.3  | 350.2  | 374.1  | 403.8  | 438.1  |
| 45°    | 292.2  | 297.8  | 317.4  | 341.4  | 372.6  |
| 47.5°  | 247.2  | 253.7  | 268.8  | 289.5  | 316.1  |
| 50°    | 221.7  | 227.8  | 241.7  | 257.0  | 282.2  |
| 52.5°  | 199.3  | 205.4  | 217.7  | 229.5  | 251.0  |
| 55°    | 167.9  | 175.0  | 185.1  | 192.2  | 207.9  |
| 57.5°  | 142.3  | 149.0  | 157.1  | 160.2  | 169.7  |
| 60°    | 125.2  | 132.6  | 139.9  | 139.5  | 144.7  |
| 62.5°  | 109.6  | 116.0  | 123.1  | 118.1  | 118.4  |
| 65°    | 84.3   | 91.2   | 99.4   | 86.9   | 78.9   |
| 67.5°  | 68.1   | 69.5   | 78.0   | 60.6   | 51.2   |
| 70°    | 60.5   | 60.5   | 62.8   | 46.9   | 39.0   |
| 72.5°  | 53.2   | 53.2   | 51.0   | 38.2   | 29.8   |
| 75°    | 42.4   | 42.4   | 38.6   | 26.5   | 18.1   |
| 77.5°  | 32.7   | 32.3   | 29.5   | 19.7   | 13.1   |
| 80°    | 26.2   | 26.2   | 23.8   | 15.6   | 10.5   |
| 82.5°  | 20.5   | 20.5   | 18.5   | 12.2   | 7.7    |
| 85°    | 11.8   | 11.8   | 10.9   | 7.1    | 4.3    |
| 87.5°  | 4.2    | 4.2    | 3.8    | 2.3    | 1.9    |
| 90°    | 9.2    | 13.9   | 13.9   | 9.2    | 4.7    |
| 92.5°  | 23.1   | 69.3   | 64.6   | 27.7   | 23.1   |
| 95°    | 41.6   | 143.3  | 415.8  | 106.2  | 64.6   |
| 97.5°  | 64.6   | 161.7  | 831.7  | 378.9  | 203.4  |
| 100°   | 87.8   | 171.0  | 970.3  | 910.2  | 586.8  |
| 102.5° | 115.5  | 184.8  | 965.7  | 1279.9 | 1053.5 |
| 105°   | 143.3  | 203.4  | 901.0  | 1520.2 | 1413.9 |
| 107.5° | 171.0  | 226.4  | 817.9  | 1626.4 | 1645.0 |
| 110°   | 194.0  | 249.5  | 753.1  | 1612.6 | 1746.6 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5°  | 90°    |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 221.8 | 272.7 | 702.3 | 1529.4 | 1742.0 |
| 115°   | 249.5 | 300.4 | 670.0 | 1413.9 | 1668.0 |
| 117.5° | 277.2 | 332.7 | 651.5 | 1307.7 | 1561.8 |
| 120°   | 300.4 | 360.4 | 637.7 | 1206.0 | 1455.6 |
| 122.5° | 318.8 | 388.1 | 628.4 | 1122.8 | 1349.2 |
| 125°   | 337.3 | 415.8 | 623.8 | 1053.5 | 1256.9 |
| 127.5° | 355.8 | 434.3 | 623.8 | 1002.7 | 1173.7 |
| 130°   | 374.2 | 443.5 | 619.2 | 951.8  | 1104.3 |
| 132.5° | 392.8 | 448.2 | 619.2 | 914.9  | 1044.3 |
| 135°   | 406.6 | 457.4 | 619.2 | 878.0  | 993.4  |
| 137.5° | 425.1 | 466.7 | 619.2 | 845.6  | 951.8  |
| 140°   | 439.0 | 480.6 | 619.2 | 813.2  | 905.7  |
| 142.5° | 457.4 | 494.4 | 619.2 | 780.9  | 864.1  |
| 145°   | 475.9 | 508.3 | 614.5 | 757.8  | 822.5  |
| 147.5° | 494.4 | 522.1 | 610.0 | 734.7  | 785.5  |
| 150°   | 508.3 | 536.0 | 610.0 | 711.5  | 753.1  |
| 152.5° | 526.8 | 549.9 | 605.3 | 688.5  | 725.4  |
| 155°   | 540.7 | 559.1 | 605.3 | 674.6  | 697.7  |
| 157.5° | 554.5 | 572.9 | 605.3 | 660.8  | 679.3  |
| 160°   | 568.4 | 582.2 | 610.0 | 651.5  | 665.4  |
| 162.5° | 582.2 | 591.5 | 610.0 | 642.2  | 651.5  |
| 165°   | 591.5 | 596.1 | 610.0 | 637.7  | 642.2  |
| 167.5° | 600.7 | 605.3 | 610.0 | 633.0  | 633.0  |
| 170°   | 605.3 | 610.0 | 614.5 | 628.4  | 628.4  |
| 172.5° | 614.5 | 614.5 | 614.5 | 623.8  | 623.8  |
| 175°   | 619.2 | 619.2 | 614.5 | 623.8  | 619.2  |
| 177.5° | 619.2 | 619.2 | 614.5 | 623.8  | 619.2  |
| 180°   | 619.2 | 619.2 | 619.2 | 619.2  | 619.2  |

(END OF REPORT)