

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: P521603

Luminaire Tested: SQ4-F-125U-050D-92765-1D-UNV-STD-W-4\_4000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521603  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-36)  
Test Lab: INNOVATION CENTER  
Issue Date: 5-5-2021  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-F-125U-050D-92765-1D-UNV-STD-W-4\_4000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

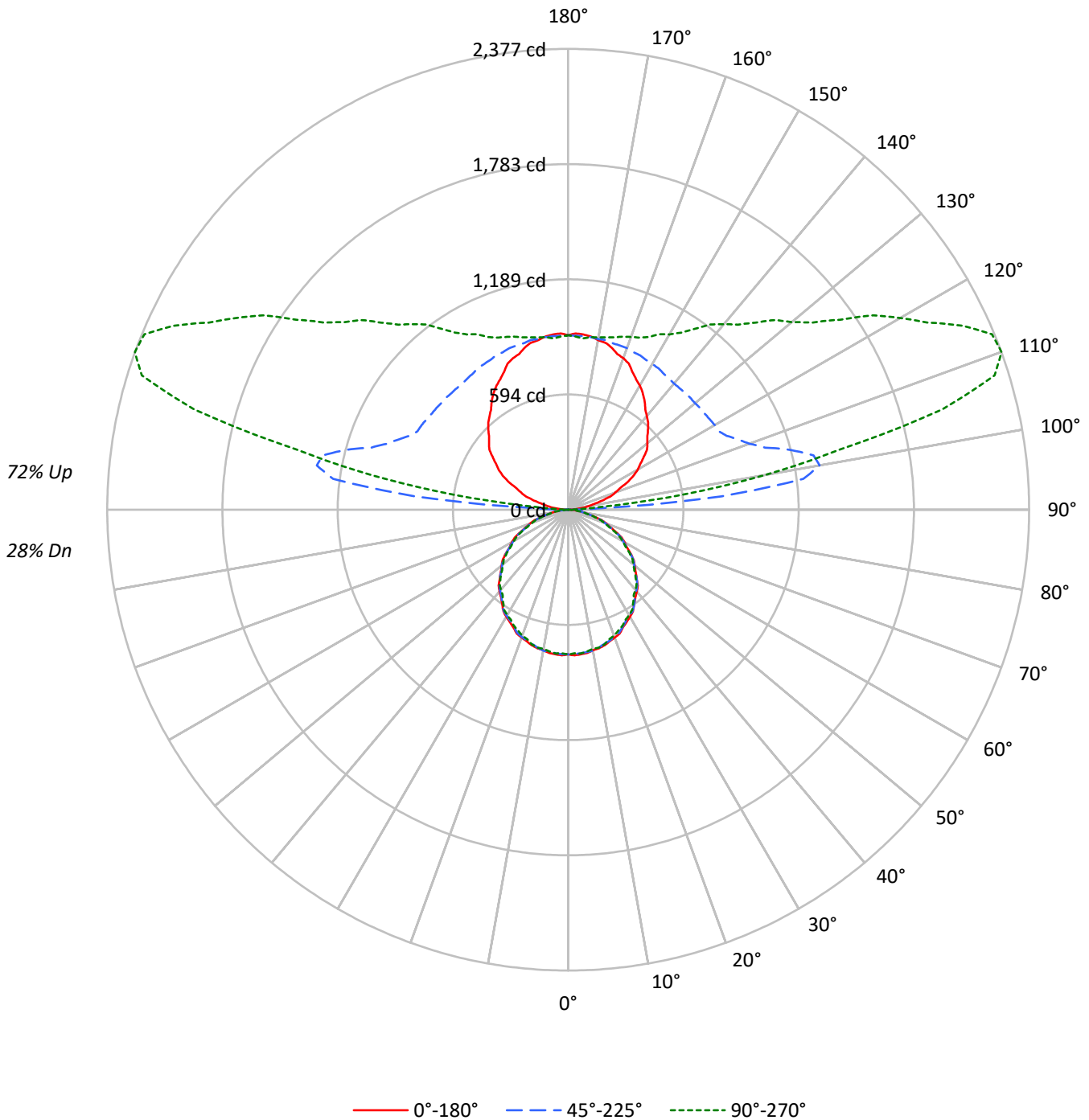
Lumens per Lamp: N/A  
Luminaire Lumens: 7715.7 lumens  
Efficiency: N/A  
Efficacy: 124.0 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.38  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 62.2  
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



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### Luminous Intensity Polar Plot



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| RF  | 20  |     |     |     | 20 |    |    |    | 20 |    |    | 20 |    |    | 20 |    |    | 20 |
| RC  | 80  |     |     |     | 70 |    |    |    | 50 |    |    | 30 |    |    | 10 |    |    | 0  |
| RW  | 70  | 50  | 30  | 10  | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0  |
| RCR |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 0   | 102 | 102 | 102 | 102 | 91 | 91 | 91 | 91 | 71 | 71 | 71 | 52 | 52 | 52 | 35 | 35 | 35 | 28 |
| 1   | 93  | 88  | 85  | 81  | 83 | 79 | 76 | 73 | 62 | 60 | 58 | 46 | 45 | 43 | 31 | 30 | 30 | 23 |
| 2   | 84  | 77  | 71  | 66  | 75 | 69 | 64 | 60 | 54 | 51 | 48 | 40 | 38 | 36 | 27 | 26 | 25 | 19 |
| 3   | 77  | 68  | 61  | 55  | 68 | 61 | 55 | 50 | 48 | 43 | 40 | 35 | 33 | 30 | 24 | 22 | 21 | 16 |
| 4   | 70  | 60  | 52  | 46  | 62 | 54 | 47 | 42 | 42 | 37 | 34 | 31 | 28 | 26 | 21 | 20 | 18 | 14 |
| 5   | 64  | 53  | 45  | 39  | 57 | 48 | 41 | 36 | 37 | 33 | 29 | 28 | 25 | 22 | 19 | 17 | 16 | 12 |
| 6   | 59  | 47  | 39  | 34  | 52 | 43 | 36 | 31 | 34 | 29 | 25 | 25 | 22 | 19 | 17 | 15 | 14 | 10 |
| 7   | 54  | 43  | 35  | 29  | 48 | 38 | 32 | 27 | 30 | 25 | 22 | 23 | 19 | 17 | 16 | 14 | 12 | 9  |
| 8   | 50  | 38  | 31  | 26  | 45 | 35 | 28 | 24 | 28 | 23 | 19 | 21 | 17 | 15 | 14 | 12 | 11 | 8  |
| 9   | 47  | 35  | 28  | 23  | 42 | 32 | 25 | 21 | 25 | 20 | 17 | 19 | 16 | 13 | 13 | 11 | 10 | 7  |
| 10  | 44  | 32  | 25  | 20  | 39 | 29 | 23 | 19 | 23 | 18 | 15 | 18 | 14 | 12 | 12 | 10 | 9  | 7  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 6886 | 6886 | 6886 |
| 5°  | 6931 | 6885 | 6894 |
| 10° | 6897 | 6917 | 6831 |
| 15° | 6915 | 6848 | 6876 |
| 20° | 6889 | 6858 | 6788 |
| 25° | 6810 | 6769 | 6728 |
| 30° | 6792 | 6748 | 6683 |
| 35° | 6687 | 6687 | 6583 |
| 40° | 6635 | 6574 | 6488 |
| 45° | 6511 | 6511 | 6417 |
| 50° | 6430 | 6387 | 6300 |
| 55° | 6323 | 6257 | 6159 |
| 60° | 6182 | 6069 | 5975 |
| 65° | 5936 | 5803 | 5691 |
| 70° | 5659 | 5465 | 5328 |
| 75° | 5044 | 4902 | 4827 |
| 80° | 4166 | 4112 | 4059 |
| 85° | 3017 | 3345 | 3345 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6511 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 70.7   | 0.9       |
| 10°-20°   | 202.5  | 2.6       |
| 20°-30°   | 305.9  | 4.0       |
| 30°-40°   | 368.4  | 4.8       |
| 40°-50°   | 382.0  | 5.0       |
| 50°-60°   | 346.3  | 4.5       |
| 60°-70°   | 263.3  | 3.4       |
| 70°-80°   | 146.6  | 1.9       |
| 80°-90°   | 37.8   | 0.5       |
| 90°-100°  | 410.2  | 5.3       |
| 100°-110° | 1167.3 | 15.1      |
| 110°-120° | 1118.4 | 14.5      |
| 120°-130° | 885.2  | 11.5      |
| 130°-140° | 710.5  | 9.2       |
| 140°-150° | 556.2  | 7.2       |
| 150°-160° | 407.0  | 5.3       |
| 160°-170° | 252.1  | 3.3       |
| 170°-180° | 85.5   | 1.1       |
| 0°-30°    | 579.0  | 7.5       |
| 0°-40°    | 947.4  | 12.3      |
| 0°-60°    | 1675.8 | 21.7      |
| 0°-90°    | 2123.4 | 27.5      |
| 90°-120°  | 2695.9 | 34.9      |
| 90°-150°  | 4847.7 | 62.8      |
| 90°-180°  | 5592.0 | 72.5      |
| 0°-180°   | 7715.7 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|-----|-------|------|-------|------|------|
| 0°   | 746 | 746   | 746  | 746   | 746  |      |
| 5°   | 748 | 740   | 743  | 744   | 744  | 71   |
| 15°  | 724 | 717   | 717  | 717   | 720  | 204  |
| 25°  | 669 | 664   | 665  | 661   | 661  | 310  |
| 35°  | 594 | 588   | 594  | 586   | 584  | 372  |
| 45°  | 499 | 496   | 499  | 490   | 492  | 386  |
| 55°  | 393 | 392   | 389  | 385   | 383  | 351  |
| 65°  | 272 | 271   | 266  | 263   | 261  | 269  |
| 75°  | 142 | 140   | 138  | 135   | 135  | 151  |
| 85°  | 28  | 30    | 32   | 33    | 32   | 35   |
| 90°  | 0   | 0     | 0    | 0     | 0    | 3    |
| 95°  | 44  | 177   | 794  | 275   | 169  | 51   |
| 105° | 181 | 275   | 1190 | 2101  | 1997 | 192  |
| 115° | 337 | 408   | 902  | 1911  | 2244 | 332  |
| 125° | 476 | 528   | 861  | 1429  | 1708 | 426  |
| 135° | 582 | 630   | 851  | 1207  | 1364 | 449  |
| 145° | 686 | 722   | 858  | 1044  | 1138 | 429  |
| 155° | 784 | 802   | 878  | 944   | 982  | 362  |
| 165° | 866 | 869   | 888  | 907   | 921  | 244  |
| 175° | 907 | 902   | 899  | 893   | 887  | 86   |
| 180° | 900 | 900   | 900  | 900   | 900  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°    | 67.5°  | 90°    |
|--------|-------|-------|--------|--------|--------|
| 0°     | 746.4 | 746.4 | 746.4  | 746.4  | 746.4  |
| 2.5°   | 752.1 | 744.1 | 745.6  | 746.3  | 740.7  |
| 5°     | 748.4 | 739.5 | 743.4  | 744.4  | 744.4  |
| 7.5°   | 745.2 | 738.2 | 740.7  | 737.6  | 737.2  |
| 10°    | 736.2 | 733.2 | 738.3  | 731.1  | 729.1  |
| 12.5°  | 732.2 | 727.6 | 728.5  | 727.1  | 729.1  |
| 15°    | 724.0 | 717.0 | 716.9  | 716.9  | 719.9  |
| 17.5°  | 711.4 | 702.4 | 708.3  | 702.0  | 701.2  |
| 20°    | 701.6 | 692.6 | 698.5  | 691.4  | 691.4  |
| 22.5°  | 691.8 | 681.3 | 687.1  | 677.5  | 675.1  |
| 25°    | 669.0 | 664.0 | 664.9  | 660.9  | 660.9  |
| 27.5°  | 652.9 | 642.0 | 645.6  | 639.9  | 640.3  |
| 30°    | 637.5 | 626.5 | 633.4  | 625.3  | 627.3  |
| 32.5°  | 622.0 | 615.0 | 618.7  | 609.8  | 613.4  |
| 35°    | 593.7 | 587.7 | 593.7  | 586.5  | 584.5  |
| 37.5°  | 568.8 | 562.6 | 564.5  | 559.9  | 555.0  |
| 40°    | 550.9 | 543.9 | 545.8  | 539.7  | 538.7  |
| 42.5°  | 531.3 | 526.8 | 527.1  | 521.8  | 522.4  |
| 45°    | 499.0 | 496.0 | 499.0  | 489.8  | 491.8  |
| 47.5°  | 470.0 | 466.5 | 466.2  | 460.1  | 462.5  |
| 50°    | 448.0 | 446.1 | 445.0  | 438.9  | 438.9  |
| 52.5°  | 425.2 | 423.2 | 422.2  | 417.7  | 416.9  |
| 55°    | 393.1 | 392.1 | 389.0  | 384.9  | 382.9  |
| 57.5°  | 357.8 | 355.8 | 354.2  | 349.8  | 348.3  |
| 60°    | 335.0 | 333.0 | 328.9  | 323.8  | 323.8  |
| 62.5°  | 309.8 | 307.8 | 302.8  | 300.9  | 297.7  |
| 65°    | 271.9 | 270.9 | 265.8  | 262.7  | 260.7  |
| 67.5°  | 234.2 | 231.0 | 228.7  | 224.8  | 222.8  |
| 70°    | 209.8 | 205.8 | 202.6  | 199.5  | 197.5  |
| 72.5°  | 182.9 | 179.7 | 176.6  | 175.1  | 172.3  |
| 75°    | 141.5 | 139.6 | 137.5  | 135.4  | 135.4  |
| 77.5°  | 102.8 | 102.3 | 100.2  | 100.2  | 99.2   |
| 80°    | 78.4  | 79.4  | 77.4   | 77.4   | 76.4   |
| 82.5°  | 56.4  | 57.4  | 57.0   | 57.8   | 56.8   |
| 85°    | 28.5  | 30.5  | 31.6   | 32.6   | 31.6   |
| 87.5°  | 8.1   | 10.5  | 12.2   | 13.0   | 13.0   |
| 90°    | 0.0   | 0.0   | 0.0    | 0.0    | 0.0    |
| 92.5°  | 13.7  | 72.6  | 168.4  | 49.0   | 37.0   |
| 95°    | 44.5  | 176.7 | 794.2  | 274.9  | 169.4  |
| 97.5°  | 81.8  | 207.0 | 1223.1 | 875.2  | 599.7  |
| 100°   | 107.8 | 225.0 | 1316.2 | 1333.2 | 1026.9 |
| 102.5° | 136.6 | 244.4 | 1295.7 | 1706.5 | 1439.1 |
| 105°   | 181.4 | 275.1 | 1189.5 | 2101.2 | 1997.4 |
| 107.5° | 227.0 | 311.0 | 1065.6 | 2212.4 | 2304.8 |
| 110°   | 258.4 | 337.1 | 994.4  | 2169.9 | 2377.4 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5°  | 90°    |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 288.6 | 363.2 | 946.5 | 2069.2 | 2365.0 |
| 115°   | 337.2 | 407.5 | 902.0 | 1910.8 | 2243.9 |
| 117.5° | 380.0 | 445.9 | 875.6 | 1737.7 | 2090.5 |
| 120°   | 414.2 | 469.4 | 872.9 | 1638.8 | 1976.9 |
| 122.5° | 441.6 | 496.8 | 866.1 | 1552.0 | 1866.0 |
| 125°   | 475.8 | 527.7 | 860.9 | 1428.7 | 1708.1 |
| 127.5° | 513.1 | 561.7 | 858.2 | 1355.0 | 1585.3 |
| 130°   | 532.3 | 580.8 | 854.1 | 1303.6 | 1504.5 |
| 132.5° | 552.8 | 600.0 | 854.1 | 1263.6 | 1448.3 |
| 135°   | 581.9 | 630.5 | 850.7 | 1206.8 | 1364.1 |
| 137.5° | 609.3 | 656.5 | 850.3 | 1158.7 | 1294.6 |
| 140°   | 629.9 | 678.4 | 848.9 | 1118.9 | 1249.4 |
| 142.5° | 653.1 | 693.6 | 853.0 | 1087.1 | 1204.3 |
| 145°   | 686.3 | 721.5 | 857.5 | 1044.5 | 1138.2 |
| 147.5° | 714.8 | 748.9 | 865.0 | 1001.4 | 1082.4 |
| 150°   | 739.4 | 762.8 | 867.8 | 987.2  | 1044.1 |
| 152.5° | 758.6 | 783.3 | 870.5 | 967.9  | 1020.8 |
| 155°   | 783.9 | 802.3 | 878.0 | 943.9  | 982.4  |
| 157.5° | 815.4 | 826.4 | 879.7 | 933.1  | 960.5  |
| 160°   | 831.8 | 840.2 | 886.6 | 924.8  | 948.2  |
| 162.5° | 841.4 | 851.1 | 888.0 | 917.8  | 935.9  |
| 165°   | 866.1 | 869.4 | 888.3 | 907.4  | 920.8  |
| 167.5° | 882.8 | 879.8 | 896.2 | 904.9  | 910.2  |
| 170°   | 888.3 | 886.6 | 893.4 | 895.3  | 902.0  |
| 172.5° | 900.6 | 894.9 | 897.5 | 892.5  | 897.9  |
| 175°   | 907.1 | 902.1 | 898.6 | 893.3  | 886.6  |
| 177.5° | 909.9 | 901.8 | 897.5 | 892.1  | 893.4  |
| 180°   | 900.3 | 900.3 | 900.3 | 900.3  | 900.3  |

(END OF REPORT)