

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-PC3-125U-100D-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-PC3-125U-100D-927-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

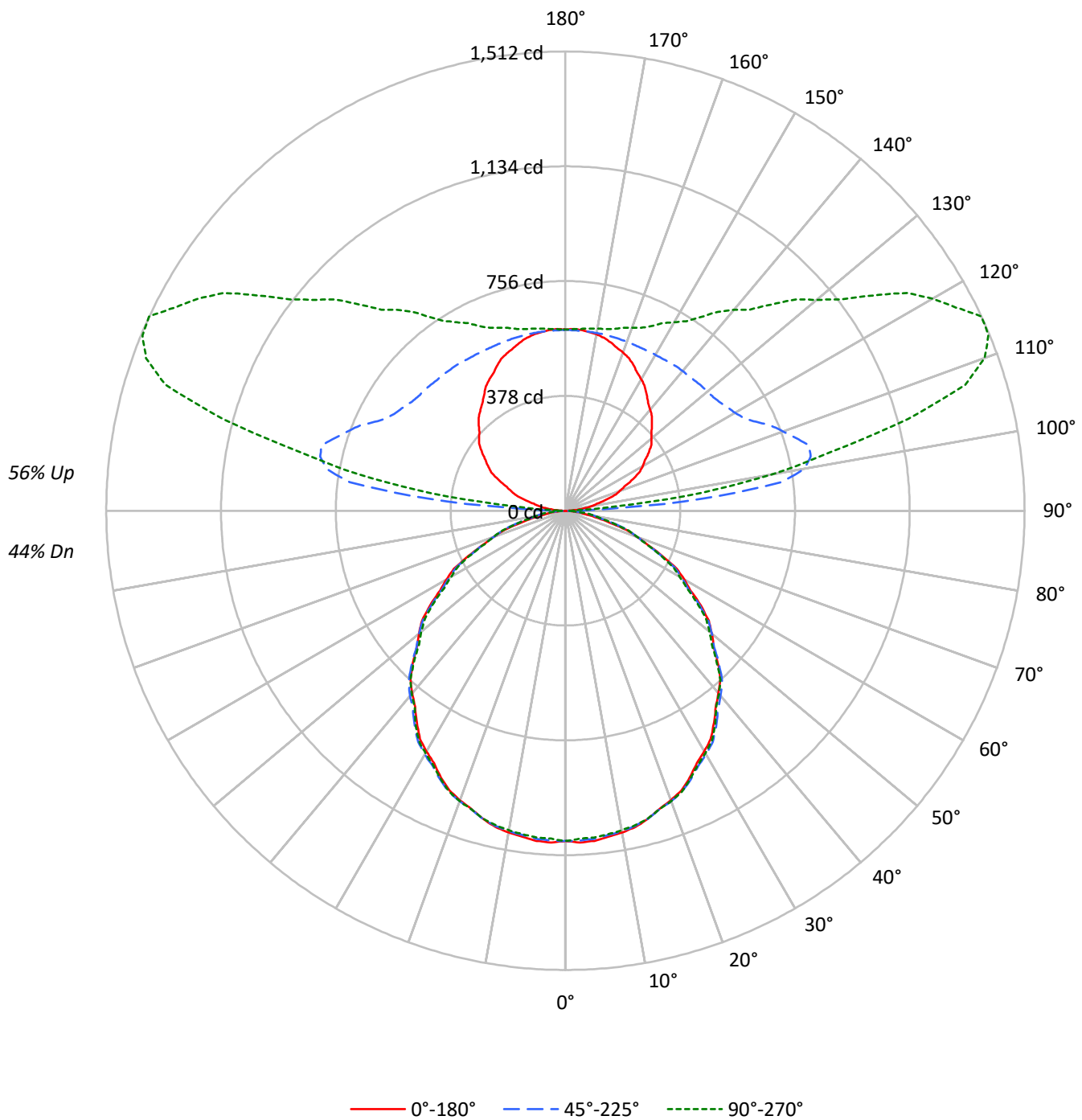
Lumens per Lamp: N/A  
Luminaire Lumens: 6817.9 lumens  
Efficiency: N/A  
Efficacy: 105.7 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 64.5  
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:

CATALOG NUMBER: SQ4-PC3-125U-100D-927-1D-UNV-STD-W-4

### Luminous Intensity Polar Plot



TEST NUMBER:

CATALOG NUMBER: SQ4-PC3-125U-100D-927-1D-UNV-STD-W-4

**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   | 106 | 106 | 106 | 106 | 97 | 97 | 97 | 97 | 80 | 80 | 80 | 64 | 64 | 64 | 50 | 50 | 50 |
| 1   | 96  | 92  | 88  | 85  | 88 | 84 | 81 | 78 | 70 | 68 | 66 | 57 | 55 | 54 | 44 | 43 | 42 |
| 2   | 88  | 80  | 74  | 69  | 80 | 74 | 69 | 64 | 61 | 58 | 54 | 50 | 47 | 45 | 39 | 37 | 36 |
| 3   | 80  | 71  | 63  | 58  | 73 | 65 | 59 | 54 | 54 | 49 | 46 | 44 | 41 | 38 | 35 | 32 | 30 |
| 4   | 73  | 62  | 55  | 49  | 67 | 57 | 51 | 45 | 48 | 43 | 39 | 39 | 35 | 32 | 31 | 28 | 26 |
| 5   | 67  | 56  | 48  | 42  | 61 | 51 | 44 | 39 | 43 | 37 | 33 | 35 | 31 | 28 | 28 | 25 | 23 |
| 6   | 62  | 50  | 42  | 36  | 56 | 46 | 39 | 34 | 39 | 33 | 29 | 32 | 28 | 24 | 25 | 22 | 20 |
| 7   | 57  | 45  | 37  | 31  | 52 | 41 | 34 | 29 | 35 | 29 | 25 | 29 | 25 | 22 | 23 | 20 | 18 |
| 8   | 53  | 41  | 33  | 28  | 48 | 38 | 31 | 26 | 32 | 26 | 23 | 26 | 22 | 19 | 21 | 18 | 16 |
| 9   | 49  | 37  | 30  | 25  | 45 | 34 | 28 | 23 | 29 | 24 | 20 | 24 | 20 | 17 | 19 | 16 | 14 |
| 10  | 46  | 34  | 27  | 22  | 42 | 31 | 25 | 21 | 27 | 22 | 18 | 22 | 18 | 15 | 18 | 15 | 13 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 10030 | 10030 | 10030 |
| 5°  | 10106 | 10040 | 10003 |
| 10° | 10081 | 10034 | 10006 |
| 15° | 10028 | 10028 | 10019 |
| 20° | 9963  | 9992  | 9992  |
| 25° | 9868  | 9940  | 9909  |
| 30° | 9748  | 9866  | 9824  |
| 35° | 9603  | 9750  | 9683  |
| 40° | 9445  | 9577  | 9481  |
| 45° | 9273  | 9338  | 9193  |
| 50° | 9030  | 9030  | 8886  |
| 55° | 8744  | 8630  | 8501  |
| 60° | 8322  | 8154  | 8025  |
| 65° | 7691  | 7538  | 7471  |
| 70° | 6733  | 6790  | 6760  |
| 75° | 5418  | 5992  | 6028  |
| 80° | 3852  | 5079  | 5133  |
| 85° | 2339  | 4266  | 4266  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 9338 cd/sqm

TEST NUMBER:

CATALOG NUMBER: SQ4-PC3-125U-100D-927-1D-UNV-STD-W-4

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 102.9  | 1.5       |
| 10°-20°   | 295.3  | 4.3       |
| 20°-30°   | 447.1  | 6.6       |
| 30°-40°   | 536.0  | 7.9       |
| 40°-50°   | 546.6  | 8.0       |
| 50°-60°   | 477.1  | 7.0       |
| 60°-70°   | 341.6  | 5.0       |
| 70°-80°   | 175.9  | 2.6       |
| 80°-90°   | 45.9   | 0.7       |
| 90°-100°  | 278.9  | 4.1       |
| 100°-110° | 751.4  | 11.0      |
| 110°-120° | 788.6  | 11.6      |
| 120°-130° | 639.9  | 9.4       |
| 130°-140° | 501.9  | 7.4       |
| 140°-150° | 385.3  | 5.7       |
| 150°-160° | 277.0  | 4.1       |
| 160°-170° | 169.3  | 2.5       |
| 170°-180° | 57.1   | 0.8       |
| 0°-30°    | 845.3  | 12.4      |
| 0°-40°    | 1381.3 | 20.3      |
| 0°-60°    | 2405.0 | 35.3      |
| 0°-90°    | 2968.4 | 43.5      |
| 90°-120°  | 1819.0 | 26.7      |
| 90°-150°  | 3346.1 | 49.1      |
| 90°-180°  | 3849.0 | 56.5      |
| 0°-180°   | 6817.9 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1087 | 1087  | 1087 | 1087  | 1087 |      |
| 5°   | 1091 | 1080  | 1084 | 1081  | 1080 | 104  |
| 15°  | 1050 | 1041  | 1050 | 1050  | 1049 | 296  |
| 25°  | 969  | 962   | 976  | 973   | 973  | 446  |
| 35°  | 853  | 851   | 866  | 860   | 860  | 533  |
| 45°  | 711  | 709   | 716  | 707   | 705  | 547  |
| 55°  | 544  | 537   | 536  | 528   | 528  | 485  |
| 65°  | 352  | 344   | 345  | 342   | 342  | 348  |
| 75°  | 152  | 159   | 168  | 169   | 169  | 164  |
| 85°  | 22   | 34    | 40   | 41    | 40   | 30   |
| 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-PC3-125U-100D-927-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1087.1 | 1087.1 | 1087.1 | 1087.1 | 1087.1 |
| 2.5°   | 1093.6 | 1084.1 | 1087.1 | 1084.6 | 1080.7 |
| 5°     | 1091.2 | 1080.3 | 1084.1 | 1081.1 | 1080.1 |
| 7.5°   | 1083.3 | 1072.5 | 1077.5 | 1075.4 | 1074.5 |
| 10°    | 1076.1 | 1065.2 | 1071.0 | 1069.0 | 1068.0 |
| 12.5°  | 1066.4 | 1056.4 | 1063.0 | 1061.0 | 1060.8 |
| 15°    | 1049.9 | 1041.0 | 1049.9 | 1049.9 | 1048.9 |
| 17.5°  | 1029.2 | 1021.1 | 1030.6 | 1031.2 | 1030.6 |
| 20°    | 1014.7 | 1005.8 | 1017.7 | 1016.7 | 1017.7 |
| 22.5°  | 997.0  | 989.7  | 1002.4 | 999.8  | 1000.8 |
| 25°    | 969.4  | 962.5  | 976.4  | 973.4  | 973.4  |
| 27.5°  | 936.8  | 931.8  | 947.0  | 943.8  | 943.8  |
| 30°    | 915.0  | 910.1  | 926.1  | 922.1  | 922.1  |
| 32.5°  | 890.9  | 887.5  | 902.7  | 897.9  | 897.9  |
| 35°    | 852.6  | 850.6  | 865.7  | 859.7  | 859.7  |
| 37.5°  | 813.1  | 811.4  | 825.0  | 817.7  | 815.4  |
| 40°    | 784.2  | 783.2  | 795.2  | 787.2  | 787.2  |
| 42.5°  | 755.2  | 754.2  | 764.6  | 755.0  | 755.0  |
| 45°    | 710.7  | 708.7  | 715.7  | 706.6  | 704.6  |
| 47.5°  | 662.2  | 660.2  | 664.6  | 654.7  | 653.7  |
| 50°    | 629.1  | 627.2  | 629.1  | 620.1  | 619.1  |
| 52.5°  | 595.3  | 591.8  | 592.1  | 583.0  | 582.8  |
| 55°    | 543.6  | 536.7  | 536.5  | 528.5  | 528.5  |
| 57.5°  | 488.8  | 479.8  | 480.6  | 473.7  | 472.7  |
| 60°    | 451.0  | 441.1  | 441.9  | 435.8  | 434.9  |
| 62.5°  | 413.9  | 402.5  | 404.9  | 398.0  | 397.8  |
| 65°    | 352.3  | 344.4  | 345.3  | 342.2  | 342.2  |
| 67.5°  | 293.1  | 285.8  | 291.1  | 288.7  | 288.5  |
| 70°    | 249.6  | 244.7  | 251.7  | 251.6  | 250.6  |
| 72.5°  | 209.4  | 209.2  | 217.8  | 217.8  | 218.4  |
| 75°    | 152.0  | 158.9  | 168.1  | 169.1  | 169.1  |
| 77.5°  | 101.5  | 113.7  | 123.8  | 124.2  | 124.0  |
| 80°    | 72.5   | 86.3   | 95.6   | 97.6   | 96.6   |
| 82.5°  | 49.1   | 63.7   | 71.5   | 73.5   | 72.5   |
| 85°    | 22.1   | 34.0   | 40.3   | 41.2   | 40.3   |
| 87.5°  | 6.7    | 14.4   | 17.9   | 18.0   | 16.5   |
| 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:

CATALOG NUMBER: SQ4-PC3-125U-100D-927-1D-UNV-STD-W-4

**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)