

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521635

Luminaire Tested: **SQ4-F-125U-100D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521635  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,  
Test Lab: INNOVATION CENTER  
Issue Date: 5/5/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-125U-100D-93050-1D-UNV-STD-W-4 (3500K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

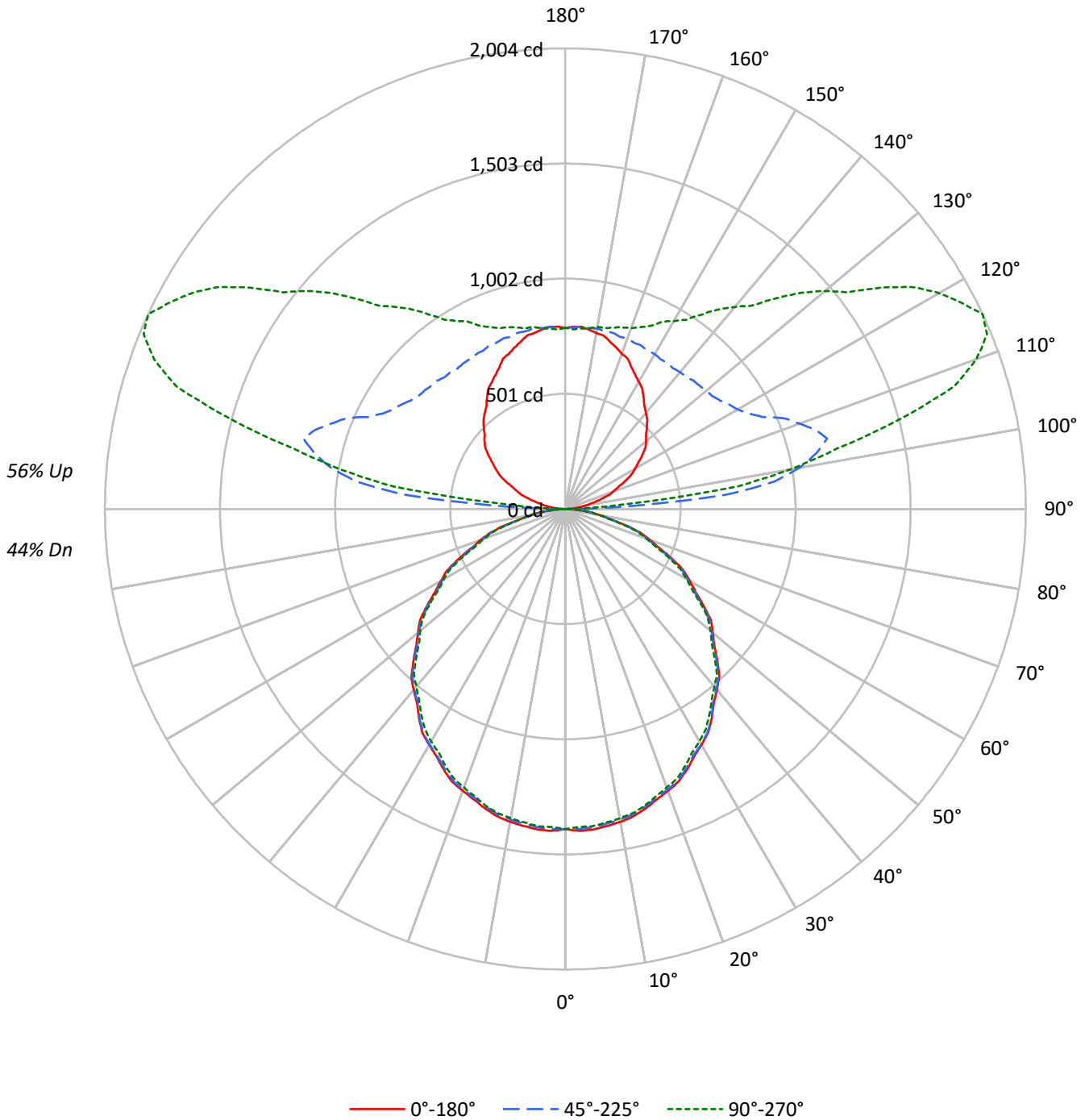
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9076.0 lumens  
Efficiency: N/A  
Efficacy: 108.3 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 83.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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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CATALOG NUMBER: SQ4-F-125U-100D-93050-1D-UNV-STD-W-4 (3500K)

### Luminous Intensity Polar Plot





TEST NUMBER: P521635

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

|     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| RF  | 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   | 106 | 106 | 106 | 106 | 97 | 97 | 97 | 97 | 80 | 80 | 80 | 65 | 65 | 65 | 50 | 50 | 50 | 44 |
| 1   | 96  | 92  | 88  | 85  | 88 | 84 | 81 | 78 | 70 | 67 | 65 | 57 | 55 | 53 | 44 | 43 | 42 | 37 |
| 2   | 88  | 80  | 74  | 69  | 80 | 73 | 68 | 64 | 61 | 57 | 54 | 49 | 47 | 44 | 39 | 37 | 35 | 30 |
| 3   | 80  | 70  | 63  | 57  | 73 | 64 | 58 | 53 | 54 | 49 | 45 | 44 | 40 | 37 | 34 | 32 | 30 | 26 |
| 4   | 73  | 62  | 54  | 48  | 66 | 57 | 50 | 45 | 48 | 42 | 38 | 39 | 35 | 32 | 31 | 28 | 26 | 22 |
| 5   | 67  | 55  | 47  | 41  | 61 | 51 | 44 | 38 | 42 | 37 | 33 | 35 | 31 | 27 | 27 | 25 | 22 | 19 |
| 6   | 61  | 49  | 41  | 35  | 56 | 45 | 38 | 33 | 38 | 33 | 28 | 31 | 27 | 24 | 25 | 22 | 19 | 16 |
| 7   | 57  | 44  | 36  | 31  | 52 | 41 | 34 | 29 | 34 | 29 | 25 | 28 | 24 | 21 | 23 | 20 | 17 | 15 |
| 8   | 53  | 40  | 33  | 27  | 48 | 37 | 30 | 25 | 31 | 26 | 22 | 26 | 22 | 19 | 21 | 18 | 15 | 13 |
| 9   | 49  | 37  | 29  | 24  | 45 | 34 | 27 | 23 | 29 | 23 | 20 | 24 | 20 | 17 | 19 | 16 | 14 | 12 |
| 10  | 46  | 34  | 26  | 22  | 42 | 31 | 25 | 20 | 26 | 21 | 18 | 22 | 18 | 15 | 18 | 15 | 13 | 11 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 12852 | 12852 | 12852 |
| 5°  | 12966 | 12873 | 12827 |
| 10° | 12947 | 12854 | 12797 |
| 15° | 12885 | 12809 | 12771 |
| 20° | 12823 | 12764 | 12666 |
| 25° | 12745 | 12674 | 12562 |
| 30° | 12624 | 12592 | 12443 |
| 35° | 12513 | 12468 | 12311 |
| 40° | 12369 | 12309 | 12140 |
| 45° | 12213 | 12148 | 11978 |
| 50° | 12014 | 11942 | 11827 |
| 55° | 11807 | 11694 | 11565 |
| 60° | 11533 | 11404 | 11238 |
| 65° | 11156 | 10937 | 10741 |
| 70° | 10520 | 10278 | 10089 |
| 75° | 9589  | 9268  | 9090  |
| 80° | 7863  | 7863  | 7863  |
| 85° | 5611  | 6352  | 6669  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 131.9  | 1.5       |
| 10°-20°   | 377.7  | 4.2       |
| 20°-30°   | 571.3  | 6.3       |
| 30°-40°   | 688.1  | 7.6       |
| 40°-50°   | 714.6  | 7.9       |
| 50°-60°   | 648.5  | 7.1       |
| 60°-70°   | 494.8  | 5.5       |
| 70°-80°   | 276.6  | 3.0       |
| 80°-90°   | 72.0   | 0.8       |
| 90°-100°  | 406.1  | 4.5       |
| 100°-110° | 981.4  | 10.8      |
| 110°-120° | 1046.8 | 11.5      |
| 120°-130° | 847.8  | 9.3       |
| 130°-140° | 656.4  | 7.2       |
| 140°-150° | 500.7  | 5.5       |
| 150°-160° | 362.5  | 4.0       |
| 160°-170° | 223.3  | 2.5       |
| 170°-180° | 75.6   | 0.8       |
| 0°-30°    | 1080.9 | 11.9      |
| 0°-40°    | 1768.9 | 19.5      |
| 0°-60°    | 3132.0 | 34.5      |
| 0°-90°    | 3975.4 | 43.8      |
| 90°-120°  | 2434.3 | 26.8      |
| 90°-150°  | 4439.2 | 48.9      |
| 90°-180°  | 5101.0 | 56.2      |
| 0°-180°   | 9076.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1393 | 1393  | 1393 | 1393  | 1393 |      |
| 5°   | 1400 | 1385  | 1390 | 1387  | 1385 | 133  |
| 15°  | 1349 | 1335  | 1341 | 1337  | 1337 | 381  |
| 25°  | 1252 | 1239  | 1245 | 1234  | 1234 | 576  |
| 35°  | 1111 | 1101  | 1107 | 1093  | 1093 | 694  |
| 45°  | 936  | 929   | 931  | 918   | 918  | 722  |
| 55°  | 734  | 732   | 727  | 719   | 719  | 657  |
| 65°  | 511  | 507   | 501  | 494   | 492  | 504  |
| 75°  | 269  | 265   | 260  | 256   | 255  | 283  |
| 85°  | 53   | 58    | 60   | 61    | 63   | 66   |
| 90°  | 0    | 0     | 0    | 0     | 0    | 4    |
| 95°  | 40   | 203   | 696  | 452   | 317  | 45   |
| 105° | 157  | 271   | 1180 | 1526  | 1507 | 166  |
| 115° | 287  | 367   | 948  | 1797  | 2004 | 284  |
| 125° | 409  | 471   | 822  | 1429  | 1678 | 365  |
| 135° | 502  | 561   | 789  | 1127  | 1296 | 388  |
| 145° | 594  | 638   | 774  | 958   | 1033 | 371  |
| 155° | 681  | 710   | 784  | 848   | 879  | 314  |
| 165° | 752  | 764   | 794  | 806   | 818  | 212  |
| 175° | 796  | 793   | 796  | 789   | 788  | 75   |
| 180° | 788  | 788   | 788  | 788   | 788  |      |

TEST NUMBER: P521635

CATALOG NUMBER: SQ4-F-125U-100D-93050-1D-UNV-STD-W-4 (3500K)

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1393.0 | 1393.0 | 1393.0 | 1393.0 | 1393.0 |
| 2.5°   | 1401.8 | 1390.1 | 1393.8 | 1392.0 | 1385.0 |
| 5°     | 1400.0 | 1385.3 | 1390.0 | 1387.0 | 1385.0 |
| 7.5°   | 1390.8 | 1376.1 | 1380.8 | 1376.8 | 1375.6 |
| 10°    | 1382.0 | 1367.3 | 1372.0 | 1368.0 | 1366.0 |
| 12.5°  | 1370.0 | 1356.1 | 1360.8 | 1356.0 | 1355.6 |
| 15°    | 1349.0 | 1335.3 | 1341.0 | 1337.0 | 1337.0 |
| 17.5°  | 1324.4 | 1311.7 | 1317.6 | 1311.8 | 1310.8 |
| 20°    | 1306.0 | 1293.3 | 1300.0 | 1291.0 | 1290.0 |
| 22.5°  | 1285.2 | 1273.3 | 1279.2 | 1268.6 | 1269.2 |
| 25°    | 1252.0 | 1239.3 | 1245.0 | 1234.0 | 1234.0 |
| 27.5°  | 1213.8 | 1201.3 | 1208.4 | 1195.2 | 1194.4 |
| 30°    | 1185.0 | 1173.3 | 1182.0 | 1168.0 | 1168.0 |
| 32.5°  | 1156.2 | 1146.0 | 1152.4 | 1139.1 | 1136.8 |
| 35°    | 1111.0 | 1101.2 | 1107.0 | 1093.0 | 1093.0 |
| 37.5°  | 1061.4 | 1053.4 | 1056.4 | 1043.5 | 1046.4 |
| 40°    | 1027.0 | 1018.2 | 1022.0 | 1009.0 | 1008.0 |
| 42.5°  | 991.8  | 983.8  | 986.8  | 973.9  | 976.8  |
| 45°    | 936.0  | 929.2  | 931.0  | 918.0  | 918.0  |
| 47.5°  | 879.4  | 874.3  | 872.8  | 861.2  | 863.2  |
| 50°    | 837.0  | 835.0  | 832.0  | 822.0  | 824.0  |
| 52.5°  | 798.6  | 794.3  | 790.4  | 781.2  | 782.4  |
| 55°    | 734.0  | 732.0  | 727.0  | 719.0  | 719.0  |
| 57.5°  | 672.2  | 667.9  | 662.0  | 653.8  | 653.8  |
| 60°    | 625.0  | 623.0  | 618.0  | 609.0  | 609.0  |
| 62.5°  | 580.2  | 577.5  | 571.6  | 563.4  | 562.6  |
| 65°    | 511.0  | 507.1  | 501.0  | 494.0  | 492.0  |
| 67.5°  | 438.8  | 434.7  | 429.8  | 423.2  | 422.0  |
| 70°    | 390.0  | 385.1  | 381.0  | 376.0  | 374.0  |
| 72.5°  | 340.4  | 337.9  | 333.0  | 328.0  | 326.8  |
| 75°    | 269.0  | 265.1  | 260.0  | 256.0  | 255.0  |
| 77.5°  | 193.6  | 193.0  | 191.2  | 188.6  | 189.6  |
| 80°    | 148.0  | 149.0  | 148.0  | 147.0  | 148.0  |
| 82.5°  | 107.2  | 109.7  | 109.6  | 109.4  | 110.4  |
| 85°    | 53.0   | 57.9   | 60.0   | 61.0   | 63.0   |
| 87.5°  | 15.2   | 19.9   | 24.0   | 24.8   | 25.6   |
| 90°    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 92.5°  | 13.3   | 109.9  | 258.9  | 125.9  | 85.4   |
| 95°    | 40.0   | 203.2  | 695.7  | 452.4  | 317.0  |
| 97.5°  | 71.1   | 225.1  | 916.3  | 882.8  | 757.8  |
| 100°   | 95.1   | 238.7  | 1037.8 | 1095.5 | 992.7  |
| 102.5° | 117.8  | 250.9  | 1117.9 | 1272.6 | 1211.6 |
| 105°   | 156.8  | 271.0  | 1179.6 | 1526.2 | 1506.6 |
| 107.5° | 195.2  | 294.7  | 1143.2 | 1729.6 | 1775.6 |
| 110°   | 221.9  | 314.9  | 1084.5 | 1817.2 | 1903.7 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°    | 67.5°  | 90°    |
|--------|-------|-------|--------|--------|--------|
| 112.5° | 248.6 | 335.1 | 1032.4 | 1838.7 | 1986.5 |
| 115°   | 287.0 | 366.9 | 947.7  | 1796.6 | 2003.8 |
| 117.5° | 325.0 | 400.4 | 898.0  | 1700.0 | 1942.7 |
| 120°   | 350.4 | 420.5 | 865.9  | 1624.2 | 1878.7 |
| 122.5° | 377.1 | 442.0 | 845.9  | 1546.7 | 1797.3 |
| 125°   | 408.8 | 470.8 | 822.5  | 1428.9 | 1678.5 |
| 127.5° | 440.1 | 498.5 | 806.2  | 1329.1 | 1548.3 |
| 130°   | 458.8 | 515.9 | 800.9  | 1259.6 | 1474.9 |
| 132.5° | 476.2 | 535.9 | 792.8  | 1209.4 | 1392.2 |
| 135°   | 502.2 | 560.9 | 789.2  | 1126.7 | 1296.4 |
| 137.5° | 526.9 | 586.0 | 777.5  | 1070.7 | 1198.6 |
| 140°   | 545.6 | 599.4 | 777.5  | 1030.4 | 1147.9 |
| 142.5° | 564.3 | 618.1 | 770.8  | 995.3  | 1094.5 |
| 145°   | 594.0 | 638.0 | 774.2  | 957.7  | 1032.8 |
| 147.5° | 621.7 | 664.4 | 772.2  | 914.4  | 976.4  |
| 150°   | 639.0 | 676.5 | 777.5  | 895.4  | 944.3  |
| 152.5° | 657.7 | 693.9 | 776.2  | 875.3  | 919.0  |
| 155°   | 680.7 | 710.1 | 784.2  | 848.3  | 879.3  |
| 157.5° | 708.4 | 733.5 | 782.5  | 838.0  | 856.2  |
| 160°   | 719.1 | 740.3 | 789.2  | 824.5  | 837.6  |
| 162.5° | 736.5 | 755.0 | 786.5  | 820.4  | 828.2  |
| 165°   | 752.5 | 763.9 | 794.2  | 806.1  | 817.5  |
| 167.5° | 772.2 | 779.7 | 792.2  | 805.2  | 805.5  |
| 170°   | 777.5 | 782.4 | 797.5  | 796.0  | 804.2  |
| 172.5° | 786.8 | 790.4 | 793.5  | 797.1  | 792.2  |
| 175°   | 795.8 | 792.6 | 795.8  | 789.1  | 787.5  |
| 177.5° | 794.2 | 794.2 | 791.5  | 788.7  | 782.2  |
| 180°   | 787.5 | 787.5 | 787.5  | 787.5  | 787.5  |

(END OF REPORT)