

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: P521625

Luminaire Tested: **SQ4-F-125U-075D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521625  
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-075D-93050-1D-UNV-STD-W-4 (5000K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

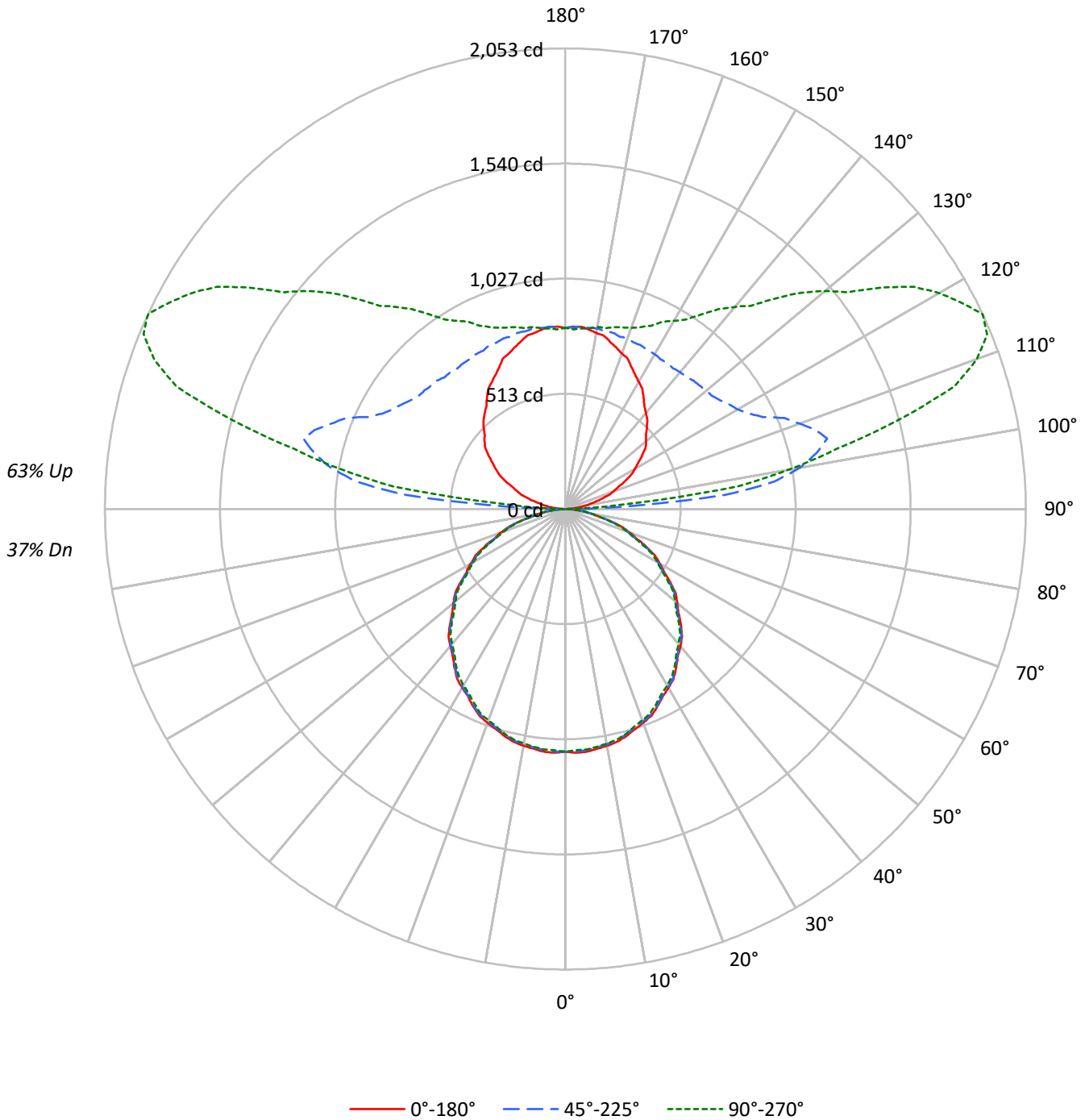
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8312.3 lumens  
Efficiency: N/A  
Efficacy: 114.3 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: Semi-Indirect

Input Watts (W): 72.7  
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

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### Luminous Intensity Polar Plot





TEST NUMBER: P521625

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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   | 104 | 104 | 104 | 104 | 94 | 94 | 94 | 94 | 76 | 76 | 76 | 60 | 60 | 60 | 44 | 44 | 44 | 37 |
| 1   | 95  | 91  | 87  | 83  | 86 | 82 | 79 | 76 | 67 | 64 | 62 | 52 | 51 | 49 | 39 | 38 | 37 | 31 |
| 2   | 86  | 79  | 73  | 68  | 78 | 72 | 66 | 62 | 58 | 54 | 51 | 46 | 43 | 41 | 34 | 33 | 31 | 26 |
| 3   | 79  | 69  | 62  | 56  | 71 | 63 | 57 | 52 | 51 | 47 | 43 | 40 | 37 | 34 | 30 | 28 | 26 | 22 |
| 4   | 72  | 61  | 53  | 47  | 65 | 56 | 49 | 44 | 45 | 40 | 36 | 36 | 32 | 29 | 27 | 24 | 23 | 18 |
| 5   | 66  | 54  | 46  | 40  | 59 | 49 | 42 | 37 | 40 | 35 | 31 | 32 | 28 | 25 | 24 | 22 | 20 | 16 |
| 6   | 60  | 48  | 40  | 35  | 55 | 44 | 37 | 32 | 36 | 31 | 27 | 29 | 25 | 22 | 22 | 19 | 17 | 14 |
| 7   | 56  | 44  | 36  | 30  | 50 | 40 | 33 | 28 | 33 | 28 | 24 | 26 | 22 | 19 | 20 | 17 | 15 | 12 |
| 8   | 52  | 39  | 32  | 27  | 47 | 36 | 29 | 25 | 30 | 25 | 21 | 24 | 20 | 17 | 18 | 15 | 13 | 11 |
| 9   | 48  | 36  | 29  | 24  | 43 | 33 | 26 | 22 | 27 | 22 | 19 | 22 | 18 | 15 | 17 | 14 | 12 | 10 |
| 10  | 45  | 33  | 26  | 21  | 41 | 30 | 24 | 20 | 25 | 20 | 17 | 20 | 16 | 14 | 15 | 13 | 11 | 9  |

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

|     | 0°    | 45°  | 90°  |
|-----|-------|------|------|
| 0°  | 9984  | 9984 | 9984 |
| 5°  | 10060 | 9993 | 9965 |
| 10° | 10042 | 9984 | 9946 |
| 15° | 10013 | 9944 | 9925 |
| 20° | 9961  | 9911 | 9850 |
| 25° | 9889  | 9847 | 9764 |
| 30° | 9803  | 9770 | 9672 |
| 35° | 9707  | 9660 | 9579 |
| 40° | 9615  | 9552 | 9453 |
| 45° | 9507  | 9426 | 9333 |
| 50° | 9354  | 9281 | 9163 |
| 55° | 9198  | 9082 | 8966 |
| 60° | 8981  | 8829 | 8735 |
| 65° | 8702  | 8479 | 8366 |
| 70° | 8182  | 7961 | 7877 |
| 75° | 7304  | 7158 | 7051 |
| 80° | 6041  | 6100 | 6041 |
| 85° | 4340  | 4880 | 5102 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 102.4  | 1.2       |
| 10°-20°   | 293.3  | 3.5       |
| 20°-30°   | 443.6  | 5.3       |
| 30°-40°   | 534.1  | 6.4       |
| 40°-50°   | 554.8  | 6.7       |
| 50°-60°   | 503.4  | 6.1       |
| 60°-70°   | 383.9  | 4.6       |
| 70°-80°   | 213.9  | 2.6       |
| 80°-90°   | 56.2   | 0.7       |
| 90°-100°  | 416.1  | 5.0       |
| 100°-110° | 1005.7 | 12.1      |
| 110°-120° | 1072.6 | 12.9      |
| 120°-130° | 868.8  | 10.5      |
| 130°-140° | 672.6  | 8.1       |
| 140°-150° | 513.1  | 6.2       |
| 150°-160° | 371.4  | 4.5       |
| 160°-170° | 228.8  | 2.8       |
| 170°-180° | 77.5   | 0.9       |
| 0°-30°    | 839.4  | 10.1      |
| 0°-40°    | 1373.5 | 16.5      |
| 0°-60°    | 2431.7 | 29.3      |
| 0°-90°    | 3085.7 | 37.1      |
| 90°-120°  | 2494.5 | 30.0      |
| 90°-150°  | 4548.9 | 54.7      |
| 90°-180°  | 5227.0 | 62.9      |
| 0°-180°   | 8312.3 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1082 | 1082  | 1082 | 1082  | 1082 |      |
| 5°   | 1086 | 1076  | 1079 | 1077  | 1076 | 103  |
| 15°  | 1048 | 1036  | 1041 | 1039  | 1039 | 296  |
| 25°  | 971  | 961   | 967  | 958   | 959  | 447  |
| 35°  | 862  | 856   | 858  | 848   | 850  | 539  |
| 45°  | 729  | 722   | 722  | 713   | 715  | 561  |
| 55°  | 572  | 569   | 565  | 557   | 557  | 510  |
| 65°  | 399  | 395   | 388  | 382   | 383  | 393  |
| 75°  | 205  | 204   | 201  | 199   | 198  | 218  |
| 85°  | 41   | 46    | 46   | 48    | 48   | 50   |
| 90°  | 0    | 0     | 0    | 0     | 0    | 3    |
| 95°  | 41   | 208   | 713  | 464   | 325  | 46   |
| 105° | 161  | 278   | 1209 | 1564  | 1544 | 170  |
| 115° | 294  | 376   | 971  | 1841  | 2053 | 291  |
| 125° | 419  | 482   | 843  | 1464  | 1720 | 374  |
| 135° | 515  | 575   | 809  | 1155  | 1328 | 397  |
| 145° | 609  | 654   | 793  | 981   | 1058 | 380  |
| 155° | 698  | 728   | 804  | 869   | 901  | 322  |
| 165° | 771  | 783   | 814  | 826   | 838  | 218  |
| 175° | 816  | 812   | 816  | 809   | 807  | 77   |
| 180° | 807  | 807   | 807  | 807   | 807  |      |

TEST NUMBER: P521625

CATALOG NUMBER: SQ4-F-125U-075D-93050-1D-UNV-STD-W-4 (5000K)

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1082.1 | 1082.1 | 1082.1 | 1082.1 | 1082.1 |
| 2.5°   | 1087.8 | 1079.8 | 1082.9 | 1080.4 | 1076.4 |
| 5°     | 1086.2 | 1076.2 | 1079.0 | 1077.0 | 1076.0 |
| 7.5°   | 1078.4 | 1068.4 | 1072.3 | 1069.2 | 1069.0 |
| 10°    | 1071.9 | 1061.8 | 1065.7 | 1062.6 | 1061.6 |
| 12.5°  | 1063.7 | 1052.8 | 1056.7 | 1053.6 | 1053.4 |
| 15°    | 1048.3 | 1036.3 | 1041.1 | 1039.1 | 1039.1 |
| 17.5°  | 1029.2 | 1017.4 | 1023.3 | 1019.6 | 1018.0 |
| 20°    | 1014.5 | 1003.5 | 1009.4 | 1003.2 | 1003.2 |
| 22.5°  | 998.9  | 987.9  | 993.0  | 986.0  | 986.0  |
| 25°    | 971.4  | 961.4  | 967.3  | 958.1  | 959.1  |
| 27.5°  | 941.5  | 932.5  | 937.6  | 928.8  | 929.2  |
| 30°    | 920.2  | 911.2  | 917.1  | 905.9  | 907.9  |
| 32.5°  | 898.1  | 889.9  | 893.4  | 883.7  | 884.1  |
| 35°    | 861.8  | 855.8  | 857.7  | 848.5  | 850.5  |
| 37.5°  | 824.5  | 817.5  | 819.4  | 810.0  | 812.0  |
| 40°    | 798.3  | 791.2  | 793.1  | 782.9  | 784.9  |
| 42.5°  | 770.4  | 764.2  | 765.3  | 755.1  | 757.9  |
| 45°    | 728.6  | 721.6  | 722.4  | 713.3  | 715.3  |
| 47.5°  | 683.7  | 678.1  | 676.9  | 668.6  | 670.4  |
| 50°    | 651.7  | 647.7  | 646.6  | 637.4  | 638.4  |
| 52.5°  | 619.8  | 616.5  | 613.8  | 605.5  | 608.1  |
| 55°    | 571.8  | 568.8  | 564.6  | 557.4  | 557.4  |
| 57.5°  | 522.0  | 519.0  | 513.8  | 506.7  | 508.7  |
| 60°    | 486.7  | 483.7  | 478.5  | 471.4  | 473.4  |
| 62.5°  | 451.5  | 448.5  | 442.5  | 436.1  | 437.4  |
| 65°    | 398.6  | 394.6  | 388.4  | 382.2  | 383.2  |
| 67.5°  | 341.8  | 338.0  | 332.8  | 326.9  | 328.1  |
| 70°    | 303.3  | 300.3  | 295.1  | 290.0  | 292.0  |
| 72.5°  | 263.1  | 260.1  | 255.8  | 253.1  | 252.7  |
| 75°    | 204.9  | 203.9  | 200.8  | 198.8  | 197.8  |
| 77.5°  | 149.8  | 151.2  | 147.6  | 146.7  | 146.5  |
| 80°    | 113.7  | 116.8  | 114.8  | 114.7  | 113.7  |
| 82.5°  | 81.8   | 86.4   | 85.3   | 85.3   | 85.1   |
| 85°    | 41.0   | 46.0   | 46.1   | 48.2   | 48.2   |
| 87.5°  | 11.5   | 16.3   | 18.9   | 19.7   | 19.7   |
| 90°    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 92.5°  | 13.7   | 112.6  | 265.3  | 129.0  | 87.5   |
| 95°    | 41.0   | 208.2  | 712.9  | 463.6  | 324.8  |
| 97.5°  | 72.8   | 230.6  | 939.0  | 904.6  | 776.5  |
| 100°   | 97.5   | 244.6  | 1063.4 | 1122.6 | 1017.3 |
| 102.5° | 120.7  | 257.1  | 1145.5 | 1304.1 | 1241.6 |
| 105°   | 160.7  | 277.7  | 1208.8 | 1563.9 | 1543.9 |
| 107.5° | 200.0  | 302.0  | 1171.5 | 1772.3 | 1819.5 |
| 110°   | 227.4  | 322.7  | 1111.3 | 1862.2 | 1950.8 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°    | 67.5°  | 90°    |
|--------|-------|-------|--------|--------|--------|
| 112.5° | 254.7 | 343.3 | 1058.0 | 1884.1 | 2035.6 |
| 115°   | 294.1 | 376.0 | 971.1  | 1841.0 | 2053.3 |
| 117.5° | 333.0 | 410.3 | 920.2  | 1742.0 | 1990.8 |
| 120°   | 359.0 | 430.9 | 887.3  | 1664.3 | 1925.1 |
| 122.5° | 386.4 | 452.9 | 866.8  | 1584.9 | 1841.7 |
| 125°   | 418.9 | 482.4 | 842.9  | 1464.2 | 1720.0 |
| 127.5° | 451.0 | 510.9 | 826.1  | 1361.9 | 1586.6 |
| 130°   | 470.2 | 528.7 | 820.7  | 1290.7 | 1511.4 |
| 132.5° | 487.9 | 549.1 | 812.4  | 1239.3 | 1426.6 |
| 135°   | 514.6 | 574.8 | 808.7  | 1154.6 | 1328.4 |
| 137.5° | 539.9 | 600.4 | 796.7  | 1097.2 | 1228.2 |
| 140°   | 559.1 | 614.2 | 796.7  | 1055.9 | 1176.3 |
| 142.5° | 578.2 | 633.4 | 789.9  | 1019.9 | 1121.6 |
| 145°   | 608.7 | 653.8 | 793.3  | 981.4  | 1058.3 |
| 147.5° | 637.0 | 680.8 | 791.2  | 937.0  | 1000.5 |
| 150°   | 654.8 | 693.3 | 796.7  | 917.5  | 967.7  |
| 152.5° | 674.0 | 711.1 | 795.4  | 896.9  | 941.7  |
| 155°   | 697.6 | 727.6 | 803.6  | 869.2  | 901.0  |
| 157.5° | 725.9 | 751.7 | 801.8  | 858.7  | 877.4  |
| 160°   | 736.9 | 758.6 | 808.7  | 844.9  | 858.3  |
| 162.5° | 754.7 | 773.7 | 806.0  | 840.7  | 848.7  |
| 165°   | 771.1 | 782.8 | 813.8  | 826.0  | 837.8  |
| 167.5° | 791.2 | 798.9 | 811.8  | 825.1  | 825.4  |
| 170°   | 796.7 | 801.7 | 817.2  | 815.7  | 824.1  |
| 172.5° | 806.3 | 810.0 | 813.1  | 816.8  | 811.8  |
| 175°   | 815.5 | 812.2 | 815.5  | 808.6  | 807.0  |
| 177.5° | 813.8 | 813.8 | 811.1  | 808.2  | 801.5  |
| 180°   | 807.0 | 807.0 | 807.0  | 807.0  | 807.0  |

(END OF REPORT)