

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

(formerly Eaton)

Brand: CORELITE

Report Number: P520332

Luminaire Tested: **SQ4-F-125U-100D-935-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520332  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, G3-1910-536-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-125U-100D-935-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

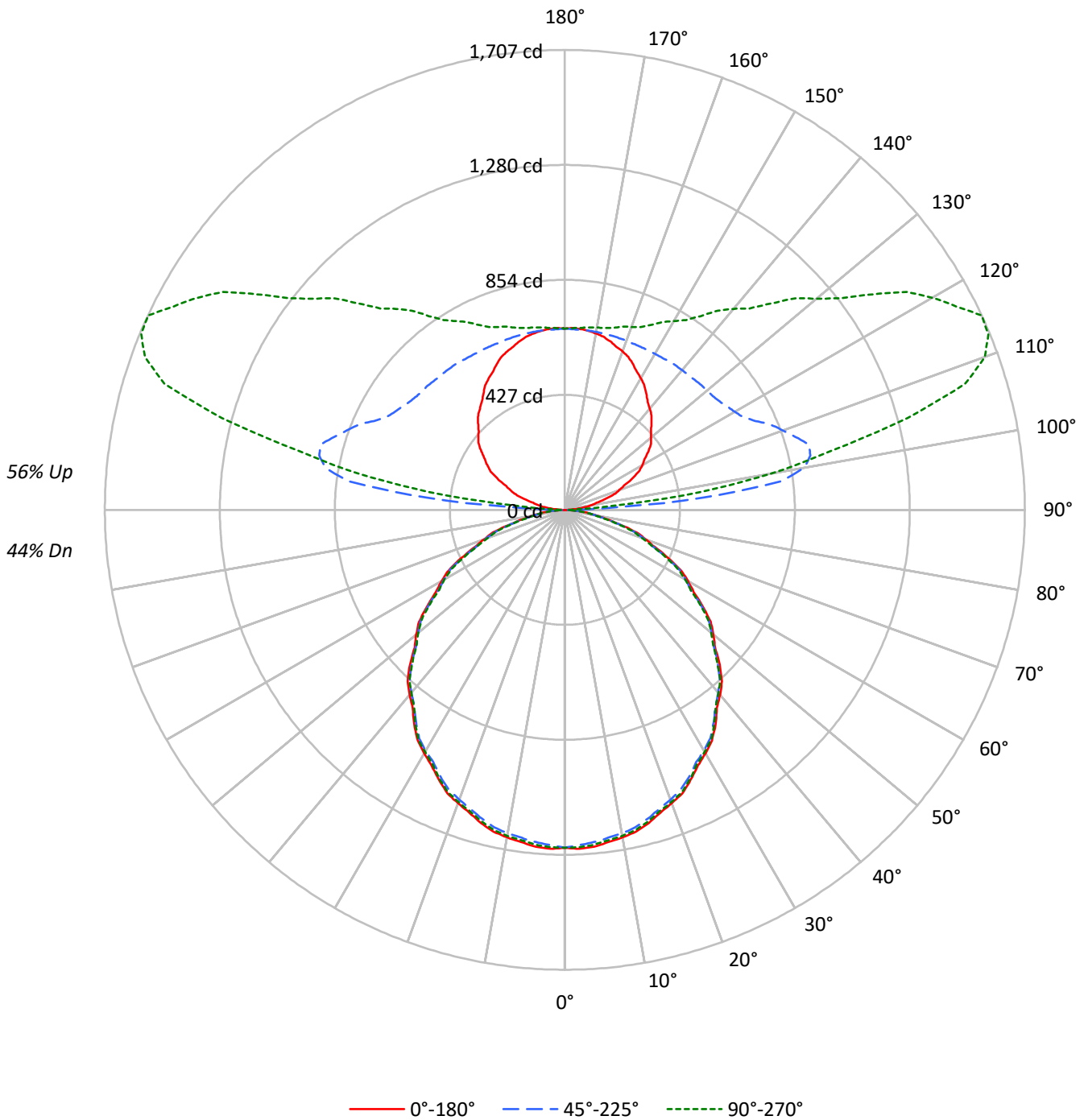
Lumens per Lamp: N/A  
Luminaire Lumens: 7766.6 lumens  
Efficiency: N/A  
Efficacy: 120.4 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

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



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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 | 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 | 51 | 51 | 51 | 44 |
| 1   | 96  | 92  | 88  | 85  | 88 | 84 | 81 | 78 | 70 | 68 | 66 | 57 | 55 | 54 | 45 | 44 | 43 | 37 |
| 2   | 88  | 80  | 74  | 69  | 80 | 74 | 69 | 64 | 61 | 58 | 54 | 50 | 47 | 45 | 39 | 38 | 36 | 31 |
| 3   | 80  | 71  | 63  | 57  | 73 | 65 | 59 | 53 | 54 | 49 | 45 | 44 | 41 | 38 | 35 | 32 | 30 | 26 |
| 4   | 73  | 62  | 54  | 48  | 67 | 57 | 50 | 45 | 48 | 43 | 39 | 39 | 35 | 32 | 31 | 28 | 26 | 22 |
| 5   | 67  | 55  | 47  | 41  | 61 | 51 | 44 | 39 | 43 | 37 | 33 | 35 | 31 | 28 | 28 | 25 | 23 | 19 |
| 6   | 62  | 50  | 42  | 36  | 56 | 46 | 39 | 33 | 38 | 33 | 29 | 32 | 28 | 24 | 25 | 22 | 20 | 17 |
| 7   | 57  | 45  | 37  | 31  | 52 | 41 | 34 | 29 | 35 | 29 | 25 | 29 | 25 | 21 | 23 | 20 | 18 | 15 |
| 8   | 53  | 41  | 33  | 28  | 48 | 38 | 31 | 26 | 32 | 26 | 22 | 26 | 22 | 19 | 21 | 18 | 16 | 13 |
| 9   | 49  | 37  | 30  | 24  | 45 | 34 | 28 | 23 | 29 | 24 | 20 | 24 | 20 | 17 | 19 | 16 | 14 | 12 |
| 10  | 46  | 34  | 27  | 22  | 42 | 31 | 25 | 21 | 27 | 22 | 18 | 22 | 18 | 15 | 18 | 15 | 13 | 11 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 11573 | 11573 | 11573 |
| 5°  | 11625 | 11466 | 11553 |
| 10° | 11566 | 11421 | 11509 |
| 15° | 11496 | 11340 | 11430 |
| 20° | 11377 | 11242 | 11335 |
| 25° | 11254 | 11122 | 11209 |
| 30° | 11116 | 10997 | 11052 |
| 35° | 10977 | 10841 | 10898 |
| 40° | 10794 | 10670 | 10681 |
| 45° | 10604 | 10458 | 10424 |
| 50° | 10330 | 10207 | 10182 |
| 55° | 10026 | 9915  | 9846  |
| 60° | 9723  | 9547  | 9516  |
| 65° | 9248  | 9040  | 8966  |
| 70° | 8592  | 8384  | 8222  |
| 75° | 7671  | 7429  | 7272  |
| 80° | 6312  | 6084  | 5807  |
| 85° | 3737  | 4097  | 4192  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 118.4  | 1.5       |
| 10°-20°   | 337.1  | 4.3       |
| 20°-30°   | 506.3  | 6.5       |
| 30°-40°   | 604.2  | 7.8       |
| 40°-50°   | 619.3  | 8.0       |
| 50°-60°   | 551.5  | 7.1       |
| 60°-70°   | 411.1  | 5.3       |
| 70°-80°   | 222.6  | 2.9       |
| 80°-90°   | 52.2   | 0.7       |
| 90°-100°  | 314.8  | 4.1       |
| 100°-110° | 847.9  | 10.9      |
| 110°-120° | 889.9  | 11.5      |
| 120°-130° | 722.1  | 9.3       |
| 130°-140° | 566.3  | 7.3       |
| 140°-150° | 434.8  | 5.6       |
| 150°-160° | 312.6  | 4.0       |
| 160°-170° | 191.0  | 2.5       |
| 170°-180° | 64.4   | 0.8       |
| 0°-30°    | 961.8  | 12.4      |
| 0°-40°    | 1566.0 | 20.2      |
| 0°-60°    | 2736.8 | 35.2      |
| 0°-90°    | 3422.8 | 44.1      |
| 90°-120°  | 2052.6 | 26.4      |
| 90°-150°  | 3775.8 | 48.6      |
| 90°-180°  | 4344.0 | 55.9      |
| 0°-180°   | 7766.6 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1254 | 1254  | 1254 | 1254  | 1254 |      |
| 5°   | 1255 | 1253  | 1238 | 1249  | 1247 | 119  |
| 15°  | 1204 | 1199  | 1187 | 1197  | 1197 | 339  |
| 25°  | 1106 | 1103  | 1092 | 1099  | 1101 | 509  |
| 35°  | 975  | 970   | 962  | 964   | 968  | 608  |
| 45°  | 813  | 808   | 802  | 797   | 799  | 625  |
| 55°  | 623  | 624   | 616  | 610   | 612  | 558  |
| 65°  | 424  | 422   | 414  | 410   | 411  | 419  |
| 75°  | 215  | 213   | 208  | 204   | 204  | 229  |
| 85°  | 35   | 39    | 39   | 40    | 40   | 49   |
| 90°  | 2    | 5     | 10   | 11    | 11   | 4    |
| 95°  | 48   | 171   | 516  | 264   | 182  | 50   |
| 105° | 157  | 244   | 938  | 1403  | 1317 | 165  |
| 115° | 277  | 339   | 781  | 1509  | 1707 | 272  |
| 125° | 378  | 434   | 701  | 1185  | 1395 | 338  |
| 135° | 455  | 508   | 681  | 956   | 1083 | 351  |
| 145° | 526  | 567   | 673  | 817   | 878  | 330  |
| 155° | 598  | 619   | 667  | 733   | 757  | 275  |
| 165° | 648  | 656   | 670  | 696   | 700  | 183  |
| 175° | 674  | 673   | 670  | 680   | 678  | 64   |
| 180° | 673  | 673   | 673  | 673   | 673  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1254.4 | 1254.4 | 1254.4 | 1254.4 | 1254.4 |
| 2.5°   | 1259.1 | 1256.5 | 1245.4 | 1254.3 | 1253.0 |
| 5°     | 1255.2 | 1252.7 | 1238.0 | 1249.1 | 1247.4 |
| 7.5°   | 1243.5 | 1241.0 | 1228.0 | 1238.3 | 1236.8 |
| 10°    | 1234.6 | 1232.0 | 1219.1 | 1229.4 | 1228.5 |
| 12.5°  | 1222.9 | 1220.3 | 1207.3 | 1217.6 | 1216.8 |
| 15°    | 1203.6 | 1199.4 | 1187.2 | 1196.7 | 1196.7 |
| 17.5°  | 1178.1 | 1174.9 | 1163.6 | 1171.5 | 1171.7 |
| 20°    | 1158.8 | 1156.3 | 1145.0 | 1153.6 | 1154.5 |
| 22.5°  | 1139.5 | 1137.0 | 1124.4 | 1132.3 | 1133.8 |
| 25°    | 1105.5 | 1102.9 | 1092.5 | 1098.6 | 1101.1 |
| 27.5°  | 1070.3 | 1066.6 | 1056.3 | 1061.8 | 1063.5 |
| 30°    | 1043.4 | 1041.8 | 1032.2 | 1034.9 | 1037.4 |
| 32.5°  | 1015.2 | 1013.5 | 1005.4 | 1006.7 | 1011.2 |
| 35°    | 974.6  | 970.3  | 962.5  | 964.3  | 967.6  |
| 37.5°  | 926.5  | 924.5  | 916.9  | 915.9  | 919.1  |
| 40°    | 896.2  | 892.8  | 885.9  | 884.2  | 886.8  |
| 42.5°  | 863.2  | 859.8  | 851.4  | 849.8  | 853.0  |
| 45°    | 812.7  | 808.5  | 801.5  | 797.2  | 798.9  |
| 47.5°  | 756.2  | 756.2  | 749.0  | 744.1  | 746.6  |
| 50°    | 719.7  | 719.7  | 711.1  | 706.9  | 709.4  |
| 52.5°  | 681.9  | 682.5  | 673.3  | 671.0  | 670.1  |
| 55°    | 623.3  | 624.1  | 616.4  | 610.4  | 612.1  |
| 57.5°  | 566.8  | 565.0  | 556.0  | 552.1  | 552.9  |
| 60°    | 526.9  | 524.3  | 517.4  | 511.5  | 515.7  |
| 62.5°  | 486.3  | 485.1  | 478.2  | 471.4  | 470.9  |
| 65°    | 423.6  | 421.9  | 414.1  | 409.8  | 410.7  |
| 67.5°  | 361.3  | 359.2  | 352.1  | 346.0  | 348.2  |
| 70°    | 318.5  | 318.5  | 310.8  | 307.3  | 304.8  |
| 72.5°  | 279.3  | 275.9  | 270.2  | 265.3  | 263.5  |
| 75°    | 215.2  | 212.7  | 208.4  | 204.0  | 204.0  |
| 77.5°  | 156.6  | 154.5  | 151.7  | 148.7  | 147.9  |
| 80°    | 118.8  | 118.0  | 114.5  | 113.5  | 109.3  |
| 82.5°  | 83.7   | 83.5   | 81.4   | 79.2   | 79.1   |
| 85°    | 35.3   | 38.6   | 38.7   | 39.6   | 39.6   |
| 87.5°  | 6.5    | 11.3   | 11.7   | 10.5   | 10.5   |
| 90°    | 1.7    | 5.0    | 10.3   | 11.1   | 11.1   |
| 92.5°  | 20.9   | 73.9   | 146.0  | 70.4   | 48.8   |
| 95°    | 48.0   | 171.2  | 516.1  | 263.8  | 182.5  |
| 97.5°  | 76.7   | 196.0  | 809.3  | 676.1  | 509.8  |
| 100°   | 98.6   | 205.8  | 902.6  | 944.4  | 783.5  |
| 102.5° | 119.8  | 219.7  | 933.4  | 1145.3 | 1013.2 |
| 105°   | 156.9  | 244.0  | 937.8  | 1402.9 | 1316.7 |
| 107.5° | 191.8  | 269.6  | 897.8  | 1535.3 | 1557.6 |
| 110°   | 215.1  | 288.9  | 861.5  | 1576.5 | 1657.8 |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5°  | 90°    |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 239.9 | 308.3 | 826.5 | 1567.4 | 1701.0 |
| 115°   | 276.9 | 338.9 | 780.9 | 1508.9 | 1706.6 |
| 117.5° | 310.6 | 368.8 | 745.6 | 1415.4 | 1635.7 |
| 120°   | 332.6 | 388.8 | 727.7 | 1348.3 | 1574.6 |
| 122.5° | 351.8 | 407.3 | 714.7 | 1279.8 | 1505.3 |
| 125°   | 378.0 | 434.2 | 701.2 | 1185.1 | 1394.6 |
| 127.5° | 403.2 | 458.5 | 692.6 | 1101.6 | 1288.7 |
| 130°   | 418.3 | 473.6 | 689.2 | 1053.8 | 1218.1 |
| 132.5° | 433.4 | 488.0 | 685.8 | 1011.7 | 1162.5 |
| 135°   | 455.2 | 508.0 | 681.4 | 956.0  | 1082.6 |
| 137.5° | 475.9 | 526.5 | 679.3 | 909.0  | 1012.9 |
| 140°   | 490.3 | 538.9 | 677.2 | 879.9  | 973.8  |
| 142.5° | 505.4 | 550.7 | 675.8 | 852.8  | 932.0  |
| 145°   | 526.3 | 567.4 | 672.8 | 817.4  | 877.8  |
| 147.5° | 548.9 | 584.6 | 670.0 | 787.6  | 835.1  |
| 150°   | 564.0 | 595.0 | 668.6 | 768.9  | 808.3  |
| 152.5° | 577.7 | 604.8 | 667.9 | 753.7  | 785.7  |
| 155°   | 597.5 | 619.3 | 666.9 | 733.4  | 756.9  |
| 157.5° | 614.7 | 631.7 | 667.0 | 719.2  | 734.9  |
| 160°   | 625.8 | 640.0 | 667.7 | 710.8  | 722.6  |
| 162.5° | 635.3 | 646.9 | 668.4 | 703.9  | 712.3  |
| 165°   | 648.1 | 655.6 | 669.5 | 696.1  | 699.5  |
| 167.5° | 658.3 | 662.7 | 670.3 | 690.1  | 691.4  |
| 170°   | 665.1 | 666.8 | 670.3 | 686.6  | 686.6  |
| 172.5° | 669.3 | 669.6 | 671.0 | 683.2  | 683.2  |
| 175°   | 673.7 | 672.9 | 670.3 | 679.7  | 678.1  |
| 177.5° | 675.6 | 674.3 | 670.9 | 676.3  | 674.9  |
| 180°   | 672.8 | 672.8 | 672.8 | 672.8  | 672.8  |

(END OF REPORT)