

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: P521963

Luminaire Tested: **SQ4-WB-100U-125D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521963  
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-WB-100U-125D-93050-1D-UNV-STD-W-4 (5000K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

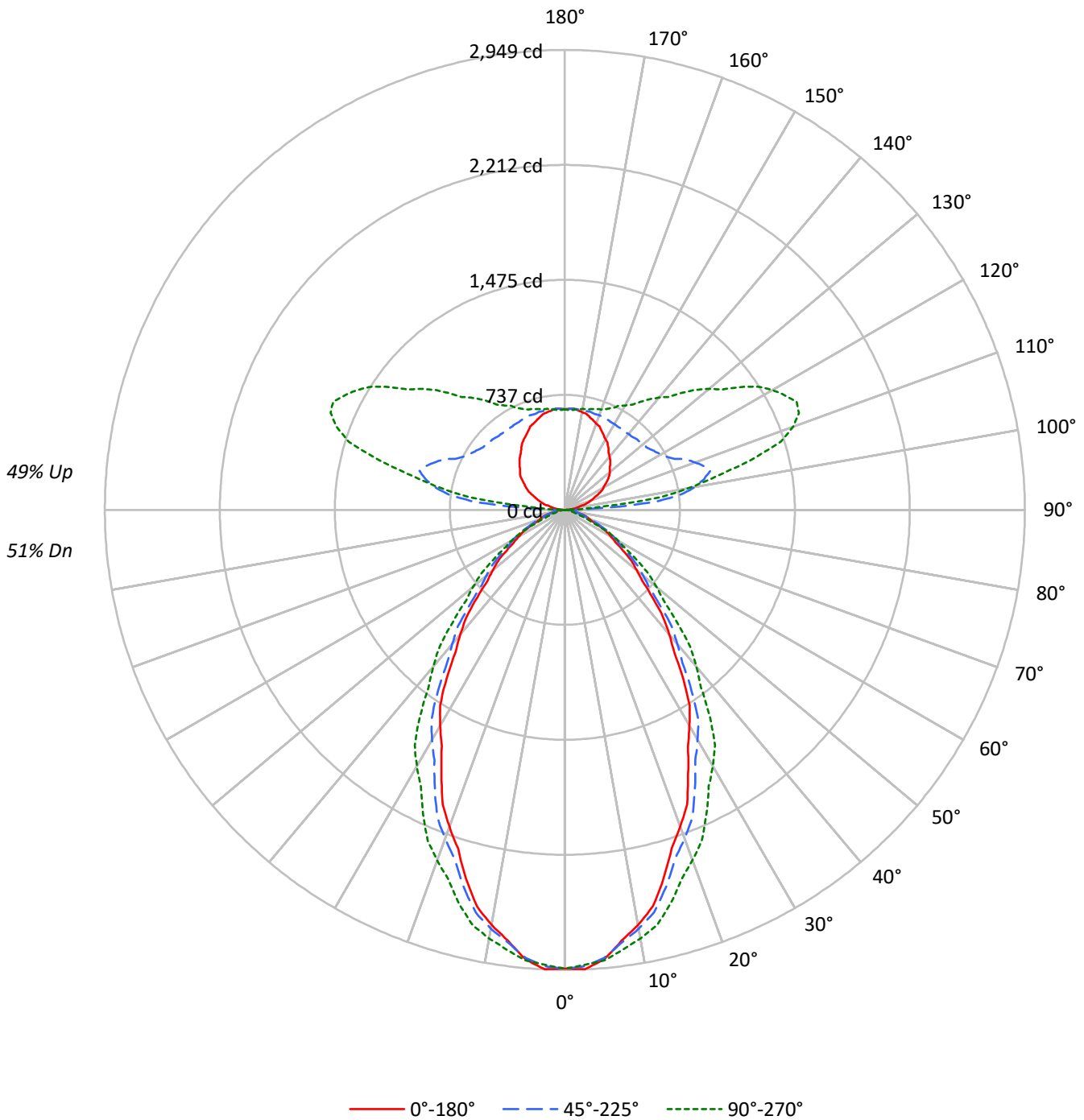
Lumens per Lamp: N/A  
Luminaire Lumens: 8458.8 lumens  
Efficiency: N/A  
Efficacy: 96.5 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 87.7  
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





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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   | 107 | 107 | 107 | 107 | 99 | 99 | 99 | 99 | 84 | 84 | 84 | 70 | 70 | 70 | 57 | 57 | 57 | 51 |
| 1   | 99  | 95  | 92  | 89  | 91 | 88 | 85 | 83 | 75 | 73 | 71 | 63 | 62 | 60 | 52 | 51 | 50 | 45 |
| 2   | 91  | 85  | 79  | 74  | 84 | 79 | 74 | 70 | 67 | 64 | 61 | 57 | 54 | 52 | 47 | 46 | 44 | 40 |
| 3   | 84  | 75  | 69  | 63  | 78 | 70 | 64 | 60 | 60 | 56 | 53 | 51 | 48 | 46 | 43 | 41 | 39 | 35 |
| 4   | 78  | 68  | 60  | 55  | 72 | 63 | 57 | 52 | 55 | 50 | 46 | 47 | 43 | 40 | 39 | 37 | 35 | 31 |
| 5   | 72  | 61  | 53  | 48  | 66 | 57 | 50 | 45 | 49 | 44 | 41 | 43 | 39 | 36 | 36 | 33 | 31 | 28 |
| 6   | 66  | 55  | 48  | 42  | 61 | 52 | 45 | 40 | 45 | 40 | 36 | 39 | 35 | 32 | 33 | 30 | 28 | 25 |
| 7   | 62  | 50  | 43  | 38  | 57 | 47 | 41 | 36 | 41 | 36 | 32 | 36 | 32 | 29 | 31 | 28 | 25 | 23 |
| 8   | 58  | 46  | 39  | 34  | 53 | 43 | 37 | 32 | 38 | 33 | 29 | 33 | 29 | 26 | 29 | 26 | 23 | 21 |
| 9   | 54  | 42  | 35  | 31  | 50 | 40 | 34 | 29 | 35 | 30 | 27 | 31 | 27 | 24 | 27 | 24 | 21 | 19 |
| 10  | 51  | 39  | 32  | 28  | 47 | 37 | 31 | 27 | 33 | 28 | 24 | 29 | 25 | 22 | 25 | 22 | 20 | 18 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 27138 | 27138 | 27138 |
| 5°  | 26799 | 26704 | 26859 |
| 10° | 25319 | 25549 | 26142 |
| 15° | 23374 | 23915 | 24988 |
| 20° | 21225 | 22023 | 23481 |
| 25° | 19038 | 20076 | 21876 |
| 30° | 17022 | 18137 | 20212 |
| 35° | 14885 | 15961 | 18244 |
| 40° | 12529 | 13524 | 15793 |
| 45° | 10340 | 11233 | 13186 |
| 50° | 8632  | 9410  | 10986 |
| 55° | 7329  | 8076  | 9072  |
| 60° | 6263  | 7001  | 7241  |
| 65° | 4986  | 5888  | 4676  |
| 70° | 4421  | 4597  | 2854  |
| 75° | 4096  | 3725  | 1747  |
| 80° | 3772  | 3427  | 1509  |
| 85° | 3419  | 3144  | 1228  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 269.8  | 3.2       |
| 10°-20°   | 701.7  | 8.3       |
| 20°-30°   | 909.0  | 10.7      |
| 30°-40°   | 890.1  | 10.5      |
| 40°-50°   | 681.3  | 8.1       |
| 50°-60°   | 454.0  | 5.4       |
| 60°-70°   | 247.7  | 2.9       |
| 70°-80°   | 103.2  | 1.2       |
| 80°-90°   | 29.2   | 0.3       |
| 90°-100°  | 332.2  | 3.9       |
| 100°-110° | 802.9  | 9.5       |
| 110°-120° | 856.3  | 10.1      |
| 120°-130° | 693.6  | 8.2       |
| 130°-140° | 537.0  | 6.3       |
| 140°-150° | 409.7  | 4.8       |
| 150°-160° | 296.5  | 3.5       |
| 160°-170° | 182.6  | 2.2       |
| 170°-180° | 61.8   | 0.7       |
| 0°-30°    | 1880.5 | 22.2      |
| 0°-40°    | 2770.6 | 32.8      |
| 0°-60°    | 3905.9 | 46.2      |
| 0°-90°    | 4286.1 | 50.7      |
| 90°-120°  | 1991.5 | 23.5      |
| 90°-150°  | 3631.7 | 42.9      |
| 90°-180°  | 4173.0 | 49.3      |
| 0°-180°   | 8458.8 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 2941 | 2941  | 2941 | 2941  | 2941 |      |
| 5°   | 2894 | 2865  | 2883 | 2890  | 2900 | 269  |
| 15°  | 2447 | 2438  | 2504 | 2572  | 2616 | 683  |
| 25°  | 1870 | 1875  | 1972 | 2058  | 2149 | 860  |
| 35°  | 1322 | 1328  | 1417 | 1512  | 1620 | 822  |
| 45°  | 792  | 808   | 861  | 926   | 1011 | 618  |
| 55°  | 456  | 474   | 502  | 521   | 564  | 413  |
| 65°  | 228  | 247   | 270  | 236   | 214  | 237  |
| 75°  | 115  | 115   | 104  | 72    | 49   | 123  |
| 85°  | 32   | 32    | 30   | 19    | 12   | 35   |
| 90°  | 0    | 0     | 0    | 0     | 0    | 3    |
| 95°  | 33   | 166   | 569  | 370   | 259  | 37   |
| 105° | 128  | 222   | 965  | 1249  | 1233 | 136  |
| 115° | 235  | 300   | 775  | 1470  | 1639 | 232  |
| 125° | 334  | 385   | 673  | 1169  | 1373 | 298  |
| 135° | 411  | 459   | 646  | 922   | 1061 | 317  |
| 145° | 486  | 522   | 633  | 784   | 845  | 304  |
| 155° | 557  | 581   | 642  | 694   | 719  | 257  |
| 165° | 616  | 625   | 650  | 660   | 669  | 174  |
| 175° | 651  | 648   | 651  | 646   | 644  | 62   |
| 180° | 644  | 644   | 644  | 644   | 644  |      |



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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 2941.4 | 2941.4 | 2941.4 | 2941.4 | 2941.4 |
| 2.5°   | 2948.6 | 2922.4 | 2929.0 | 2928.8 | 2920.7 |
| 5°     | 2893.6 | 2864.6 | 2883.3 | 2890.0 | 2900.1 |
| 7.5°   | 2786.2 | 2764.3 | 2798.4 | 2823.6 | 2844.1 |
| 10°    | 2702.6 | 2683.7 | 2727.1 | 2763.9 | 2790.4 |
| 12.5°  | 2605.5 | 2589.6 | 2643.5 | 2692.8 | 2727.4 |
| 15°    | 2447.1 | 2438.2 | 2503.8 | 2572.0 | 2616.1 |
| 17.5°  | 2277.5 | 2273.2 | 2348.5 | 2428.0 | 2484.5 |
| 20°    | 2161.8 | 2160.6 | 2243.1 | 2325.9 | 2391.6 |
| 22.5°  | 2045.2 | 2047.9 | 2134.7 | 2220.8 | 2295.5 |
| 25°    | 1870.1 | 1875.2 | 1972.1 | 2058.1 | 2148.9 |
| 27.5°  | 1708.3 | 1710.6 | 1810.8 | 1901.5 | 1998.4 |
| 30°    | 1597.8 | 1604.1 | 1702.4 | 1796.3 | 1897.2 |
| 32.5°  | 1487.3 | 1494.7 | 1590.8 | 1687.9 | 1790.9 |
| 35°    | 1321.6 | 1327.9 | 1417.1 | 1512.5 | 1619.8 |
| 37.5°  | 1150.7 | 1159.3 | 1238.5 | 1328.7 | 1434.2 |
| 40°    | 1040.3 | 1052.9 | 1122.9 | 1207.8 | 1311.3 |
| 42.5°  | 933.9  | 949.6  | 1014.4 | 1095.0 | 1188.4 |
| 45°    | 792.5  | 807.6  | 860.9  | 926.0  | 1010.6 |
| 47.5°  | 670.6  | 688.0  | 729.0  | 785.1  | 857.2  |
| 50°    | 601.4  | 617.8  | 655.6  | 697.2  | 765.4  |
| 52.5°  | 540.5  | 556.9  | 590.6  | 622.6  | 680.7  |
| 55°    | 455.6  | 474.5  | 502.1  | 521.1  | 564.0  |
| 57.5°  | 385.9  | 404.1  | 425.9  | 434.5  | 460.5  |
| 60°    | 339.4  | 359.6  | 379.4  | 378.5  | 392.4  |
| 62.5°  | 297.1  | 314.3  | 334.0  | 320.4  | 321.1  |
| 65°    | 228.4  | 247.4  | 269.7  | 235.7  | 214.2  |
| 67.5°  | 184.6  | 188.6  | 211.7  | 164.4  | 138.9  |
| 70°    | 163.9  | 163.9  | 170.4  | 127.3  | 105.8  |
| 72.5°  | 144.3  | 144.3  | 138.4  | 103.5  | 81.1   |
| 75°    | 114.9  | 114.9  | 104.5  | 71.8   | 49.0   |
| 77.5°  | 88.5   | 87.5   | 80.0   | 53.5   | 35.6   |
| 80°    | 71.0   | 71.0   | 64.5   | 42.3   | 28.4   |
| 82.5°  | 55.5   | 55.5   | 50.1   | 33.0   | 21.2   |
| 85°    | 32.3   | 32.3   | 29.7   | 19.2   | 11.6   |
| 87.5°  | 11.4   | 11.4   | 10.3   | 6.2    | 5.2    |
| 90°    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 92.5°  | 10.9   | 89.9   | 211.8  | 103.0  | 69.9   |
| 95°    | 32.8   | 166.2  | 569.2  | 370.1  | 259.3  |
| 97.5°  | 58.1   | 184.1  | 749.6  | 722.2  | 620.0  |
| 100°   | 77.8   | 195.2  | 849.0  | 896.2  | 812.1  |
| 102.5° | 96.4   | 205.3  | 914.5  | 1041.1 | 991.2  |
| 105°   | 128.3  | 221.7  | 965.0  | 1248.6 | 1232.6 |
| 107.5° | 159.7  | 241.1  | 935.3  | 1414.9 | 1452.6 |
| 110°   | 181.5  | 257.6  | 887.2  | 1486.7 | 1557.4 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5°  | 90°    |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 203.4 | 274.1 | 844.6 | 1504.2 | 1625.1 |
| 115°   | 234.8 | 300.2 | 775.3 | 1469.8 | 1639.3 |
| 117.5° | 265.9 | 327.6 | 734.6 | 1390.8 | 1589.3 |
| 120°   | 286.6 | 344.0 | 708.4 | 1328.7 | 1536.9 |
| 122.5° | 308.5 | 361.6 | 692.0 | 1265.3 | 1470.3 |
| 125°   | 334.4 | 385.1 | 672.9 | 1168.9 | 1373.1 |
| 127.5° | 360.1 | 407.9 | 659.5 | 1087.3 | 1266.7 |
| 130°   | 375.4 | 422.1 | 655.2 | 1030.4 | 1206.6 |
| 132.5° | 389.6 | 438.4 | 648.6 | 989.4  | 1138.9 |
| 135°   | 410.9 | 458.9 | 645.6 | 921.8  | 1060.6 |
| 137.5° | 431.1 | 479.4 | 636.1 | 875.9  | 980.6  |
| 140°   | 446.3 | 490.4 | 636.1 | 843.0  | 939.1  |
| 142.5° | 461.6 | 505.7 | 630.6 | 814.3  | 895.4  |
| 145°   | 485.9 | 522.0 | 633.3 | 783.5  | 844.9  |
| 147.5° | 508.6 | 543.5 | 631.7 | 748.1  | 798.8  |
| 150°   | 522.8 | 553.5 | 636.1 | 732.5  | 772.6  |
| 152.5° | 538.1 | 567.7 | 635.0 | 716.0  | 751.8  |
| 155°   | 556.9 | 580.9 | 641.5 | 694.0  | 719.3  |
| 157.5° | 579.6 | 600.1 | 640.2 | 685.5  | 700.5  |
| 160°   | 588.3 | 605.6 | 645.6 | 674.5  | 685.2  |
| 162.5° | 602.5 | 617.7 | 643.4 | 671.2  | 677.6  |
| 165°   | 615.6 | 624.9 | 649.7 | 659.5  | 668.8  |
| 167.5° | 631.7 | 637.8 | 648.1 | 658.7  | 659.0  |
| 170°   | 636.1 | 640.1 | 652.4 | 651.2  | 657.9  |
| 172.5° | 643.7 | 646.6 | 649.2 | 652.1  | 648.1  |
| 175°   | 651.1 | 648.4 | 651.1 | 645.6  | 644.3  |
| 177.5° | 649.7 | 649.7 | 647.5 | 645.2  | 639.9  |
| 180°   | 644.3 | 644.3 | 644.3 | 644.3  | 644.3  |

(END OF REPORT)