

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: P564624

Luminaire Tested: **SQ4-PW1-050U-050D-835-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564624  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2106-289-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PW1-050U-050D-835-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

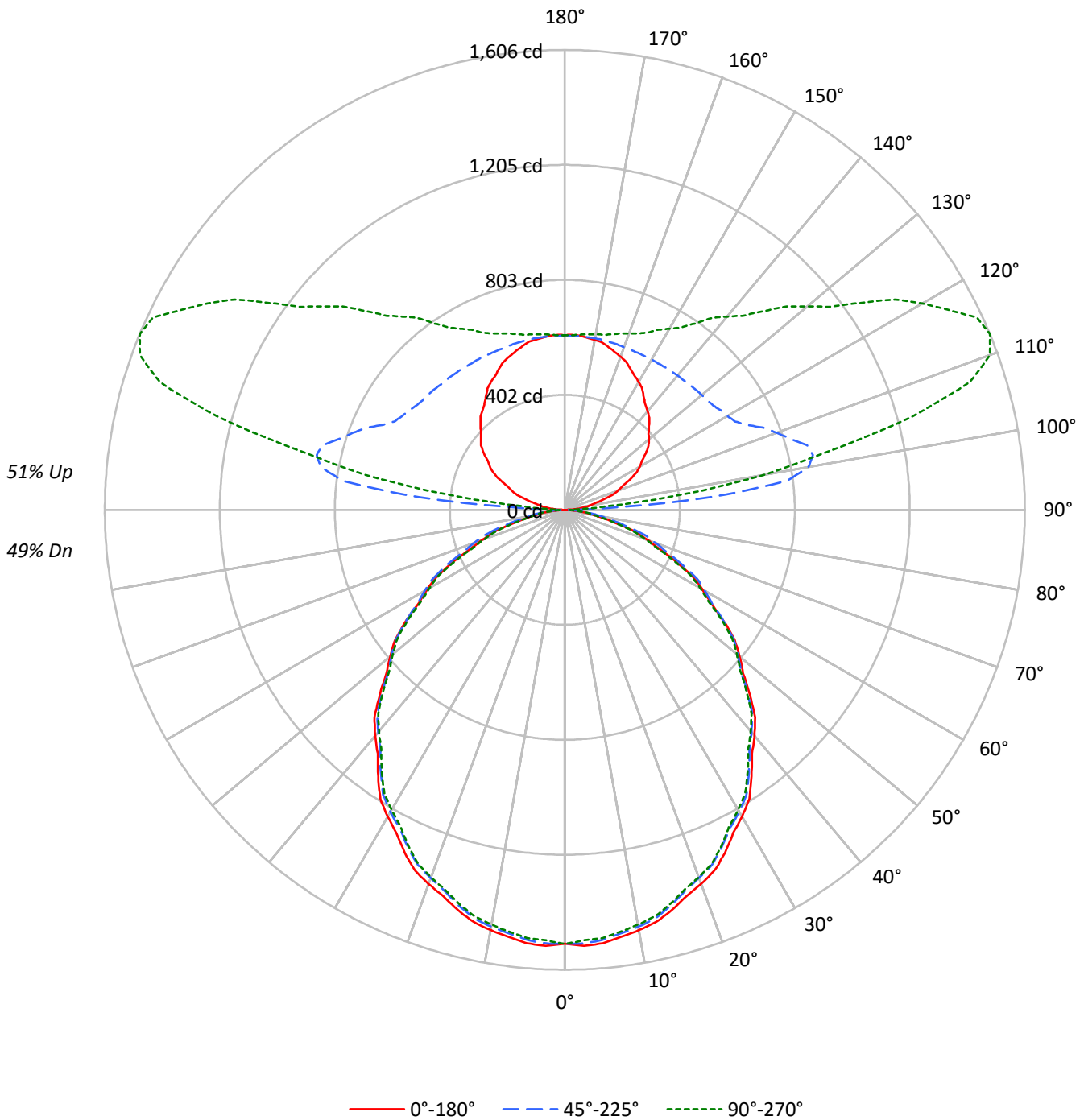
Lumens per Lamp: N/A  
Luminaire Lumens: 7842.2 lumens  
Efficiency: N/A  
Efficacy: 133.1 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 58.9  
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 | 83 | 83 | 83 | 69 | 69 | 69 | 55 | 55 | 55 | 49 |
| 1   | 98  | 93  | 90  | 86  | 90 | 86 | 83 | 80 | 73 | 70 | 68 | 60 | 59 | 57 | 49 | 48 | 47 | 42 |
| 2   | 89  | 82  | 76  | 70  | 82 | 75 | 70 | 66 | 64 | 60 | 57 | 53 | 50 | 48 | 43 | 41 | 40 | 35 |
| 3   | 81  | 72  | 65  | 59  | 75 | 66 | 60 | 55 | 56 | 52 | 48 | 47 | 44 | 41 | 38 | 36 | 34 | 30 |
| 4   | 74  | 64  | 56  | 50  | 68 | 59 | 52 | 47 | 50 | 45 | 41 | 42 | 38 | 35 | 34 | 32 | 29 | 26 |
| 5   | 68  | 57  | 49  | 43  | 63 | 53 | 45 | 40 | 45 | 39 | 35 | 38 | 33 | 30 | 31 | 28 | 25 | 22 |
| 6   | 63  | 51  | 43  | 37  | 58 | 47 | 40 | 35 | 40 | 35 | 31 | 34 | 30 | 26 | 28 | 25 | 22 | 19 |
| 7   | 58  | 46  | 38  | 32  | 53 | 43 | 36 | 31 | 37 | 31 | 27 | 31 | 27 | 23 | 26 | 22 | 20 | 17 |
| 8   | 54  | 42  | 34  | 29  | 50 | 39 | 32 | 27 | 33 | 28 | 24 | 28 | 24 | 21 | 24 | 20 | 18 | 15 |
| 9   | 50  | 38  | 31  | 26  | 46 | 35 | 29 | 24 | 31 | 25 | 21 | 26 | 22 | 19 | 22 | 19 | 16 | 14 |
| 10  | 47  | 35  | 28  | 23  | 43 | 33 | 26 | 22 | 28 | 23 | 19 | 24 | 20 | 17 | 20 | 17 | 15 | 13 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 6992 | 6992 | 6992 |
| 5°  | 7037 | 6981 | 6950 |
| 10° | 6980 | 6924 | 6887 |
| 15° | 6907 | 6830 | 6805 |
| 20° | 6824 | 6719 | 6706 |
| 25° | 6729 | 6606 | 6586 |
| 30° | 6587 | 6487 | 6444 |
| 35° | 6400 | 6309 | 6272 |
| 40° | 6200 | 6103 | 6079 |
| 45° | 5959 | 5880 | 5854 |
| 50° | 5712 | 5664 | 5625 |
| 55° | 5445 | 5445 | 5359 |
| 60° | 5113 | 5211 | 5026 |
| 65° | 4678 | 4912 | 4563 |
| 70° | 4125 | 4521 | 4017 |
| 75° | 3522 | 4046 | 3427 |
| 80° | 2731 | 3406 | 2768 |
| 85° | 1768 | 2615 | 2334 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 142.7  | 1.8       |
| 10°-20°   | 402.9  | 5.1       |
| 20°-30°   | 597.7  | 7.6       |
| 30°-40°   | 699.3  | 8.9       |
| 40°-50°   | 696.2  | 8.9       |
| 50°-60°   | 601.2  | 7.7       |
| 60°-70°   | 432.8  | 5.5       |
| 70°-80°   | 226.9  | 2.9       |
| 80°-90°   | 58.6   | 0.7       |
| 90°-100°  | 292.9  | 3.7       |
| 100°-110° | 795.7  | 10.1      |
| 110°-120° | 818.1  | 10.4      |
| 120°-130° | 654.1  | 8.3       |
| 130°-140° | 513.9  | 6.6       |
| 140°-150° | 394.1  | 5.0       |
| 150°-160° | 283.4  | 3.6       |
| 160°-170° | 173.3  | 2.2       |
| 170°-180° | 58.4   | 0.7       |
| 0°-30°    | 1143.3 | 14.6      |
| 0°-40°    | 1842.7 | 23.5      |
| 0°-60°    | 3140.1 | 40.0      |
| 0°-90°    | 3858.4 | 49.2      |
| 90°-120°  | 1906.7 | 24.3      |
| 90°-150°  | 3468.7 | 44.2      |
| 90°-180°  | 3984.0 | 50.8      |
| 0°-180°   | 7842.2 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1516 | 1516  | 1516 | 1516  | 1516 |      |
| 5°   | 1520 | 1503  | 1508 | 1504  | 1501 | 144  |
| 15°  | 1446 | 1428  | 1430 | 1427  | 1425 | 408  |
| 25°  | 1322 | 1300  | 1298 | 1290  | 1294 | 608  |
| 35°  | 1136 | 1121  | 1120 | 1110  | 1114 | 710  |
| 45°  | 913  | 906   | 901  | 899   | 897  | 705  |
| 55°  | 677  | 676   | 677  | 668   | 666  | 604  |
| 65°  | 429  | 442   | 450  | 432   | 418  | 425  |
| 75°  | 198  | 216   | 227  | 212   | 192  | 212  |
| 85°  | 33   | 44    | 49   | 47    | 44   | 44   |
| 90°  | 2    | 8     | 14   | 18    | 18   | 4    |
| 95°  | 43   | 160   | 510  | 222   | 149  | 46   |
| 105° | 141  | 220   | 875  | 1332  | 1254 | 150  |
| 115° | 251  | 305   | 700  | 1393  | 1587 | 248  |
| 125° | 345  | 393   | 634  | 1068  | 1260 | 308  |
| 135° | 416  | 462   | 616  | 870   | 981  | 322  |
| 145° | 481  | 515   | 608  | 739   | 795  | 302  |
| 155° | 543  | 563   | 604  | 664   | 683  | 251  |
| 165° | 589  | 596   | 606  | 632   | 634  | 166  |
| 175° | 610  | 612   | 608  | 616   | 614  | 58   |
| 180° | 610  | 610   | 610  | 610   | 610  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1515.6 | 1515.6 | 1515.6 | 1515.6 | 1515.6 |
| 2.5°   | 1524.1 | 1511.6 | 1515.6 | 1512.2 | 1504.9 |
| 5°     | 1519.6 | 1502.6 | 1507.6 | 1503.5 | 1500.9 |
| 7.5°   | 1504.1 | 1488.5 | 1492.1 | 1487.8 | 1486.2 |
| 10°    | 1490.2 | 1474.6 | 1478.2 | 1472.8 | 1470.2 |
| 12.5°  | 1474.2 | 1457.5 | 1461.1 | 1455.7 | 1454.2 |
| 15°    | 1446.2 | 1427.9 | 1430.1 | 1427.4 | 1424.8 |
| 17.5°  | 1413.6 | 1395.0 | 1395.4 | 1391.1 | 1390.6 |
| 20°    | 1390.1 | 1370.5 | 1368.7 | 1363.4 | 1366.0 |
| 22.5°  | 1364.4 | 1343.8 | 1342.0 | 1334.6 | 1338.3 |
| 25°    | 1322.0 | 1299.8 | 1297.9 | 1290.0 | 1293.9 |
| 27.5°  | 1272.8 | 1250.9 | 1250.9 | 1239.8 | 1244.0 |
| 30°    | 1236.5 | 1215.6 | 1217.8 | 1204.6 | 1209.8 |
| 32.5°  | 1198.1 | 1179.3 | 1180.4 | 1167.2 | 1172.4 |
| 35°    | 1136.4 | 1120.7 | 1120.3 | 1109.8 | 1113.7 |
| 37.5°  | 1073.3 | 1059.5 | 1057.3 | 1051.2 | 1052.2 |
| 40°    | 1029.5 | 1017.8 | 1013.5 | 1009.5 | 1009.5 |
| 42.5°  | 983.6  | 972.9  | 968.7  | 965.7  | 964.6  |
| 45°    | 913.4  | 905.5  | 901.3  | 898.6  | 897.3  |
| 47.5°  | 843.9  | 836.6  | 833.0  | 831.1  | 829.8  |
| 50°    | 795.9  | 790.6  | 789.2  | 785.1  | 783.8  |
| 52.5°  | 747.8  | 744.7  | 743.2  | 738.1  | 736.8  |
| 55°    | 677.0  | 675.7  | 677.0  | 667.6  | 666.3  |
| 57.5°  | 603.3  | 605.4  | 609.7  | 597.1  | 594.0  |
| 60°    | 554.2  | 559.4  | 564.8  | 550.0  | 544.8  |
| 62.5°  | 504.0  | 512.3  | 520.0  | 503.0  | 495.7  |
| 65°    | 428.6  | 441.7  | 450.0  | 432.3  | 418.0  |
| 67.5°  | 356.0  | 372.2  | 382.2  | 363.1  | 346.9  |
| 70°    | 305.8  | 324.1  | 335.2  | 316.1  | 297.8  |
| 72.5°  | 262.0  | 282.4  | 291.4  | 273.3  | 255.0  |
| 75°    | 197.6  | 215.9  | 227.0  | 211.9  | 192.3  |
| 77.5°  | 140.2  | 157.4  | 166.6  | 153.5  | 137.3  |
| 80°    | 102.8  | 121.1  | 128.2  | 117.2  | 104.2  |
| 82.5°  | 72.9   | 88.1   | 92.9   | 86.3   | 77.4   |
| 85°    | 33.4   | 43.8   | 49.4   | 46.7   | 44.1   |
| 87.5°  | 8.9    | 17.4   | 23.0   | 23.9   | 24.9   |
| 90°    | 2.0    | 7.7    | 13.7   | 17.7   | 17.7   |
| 92.5°  | 17.7   | 80.2   | 139.3  | 59.8   | 50.6   |
| 95°    | 43.2   | 160.2  | 510.1  | 222.0  | 149.1  |
| 97.5°  | 71.4   | 176.9  | 782.0  | 608.4  | 427.3  |
| 100°   | 90.2   | 188.1  | 865.2  | 877.1  | 708.2  |
| 102.5° | 109.1  | 199.2  | 887.2  | 1084.7 | 935.8  |
| 105°   | 141.3  | 219.9  | 875.0  | 1332.3 | 1253.6 |
| 107.5° | 174.6  | 244.1  | 824.4  | 1460.1 | 1482.0 |
| 110°   | 198.2  | 261.5  | 786.7  | 1485.3 | 1579.3 |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5°  | 90°    |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 218.6 | 278.8 | 749.1 | 1464.4 | 1606.0 |
| 115°   | 251.1 | 304.8 | 700.4 | 1393.4 | 1587.2 |
| 117.5° | 281.7 | 333.1 | 669.4 | 1292.7 | 1511.0 |
| 120°   | 302.1 | 352.0 | 655.3 | 1225.2 | 1442.0 |
| 122.5° | 319.4 | 369.3 | 645.9 | 1157.6 | 1366.7 |
| 125°   | 345.3 | 393.3 | 633.7 | 1067.7 | 1259.5 |
| 127.5° | 368.4 | 416.0 | 627.0 | 999.6  | 1164.2 |
| 130°   | 382.6 | 428.6 | 623.9 | 956.8  | 1104.5 |
| 132.5° | 396.7 | 442.7 | 620.7 | 920.4  | 1051.2 |
| 135°   | 415.9 | 462.0 | 616.0 | 869.7  | 980.9  |
| 137.5° | 436.7 | 478.5 | 613.7 | 824.9  | 918.6  |
| 140°   | 449.3 | 489.6 | 612.1 | 796.5  | 880.9  |
| 142.5° | 461.8 | 499.0 | 610.5 | 774.2  | 844.8  |
| 145°   | 480.7 | 515.2 | 608.2 | 738.9  | 794.6  |
| 147.5° | 501.9 | 531.4 | 606.2 | 711.2  | 754.9  |
| 150°   | 516.0 | 540.9 | 606.2 | 695.3  | 729.8  |
| 152.5° | 527.0 | 548.8 | 604.7 | 681.0  | 709.4  |
| 155°   | 543.4 | 562.6 | 604.3 | 663.6  | 682.7  |
| 157.5° | 559.5 | 574.5 | 604.3 | 651.7  | 666.3  |
| 160°   | 568.9 | 582.4 | 604.3 | 643.8  | 655.3  |
| 162.5° | 578.4 | 588.7 | 605.8 | 637.4  | 645.9  |
| 165°   | 588.6 | 596.2 | 606.2 | 631.8  | 633.7  |
| 167.5° | 599.2 | 603.0 | 608.2 | 625.1  | 626.6  |
| 170°   | 602.3 | 606.1 | 608.2 | 621.9  | 621.9  |
| 172.5° | 605.4 | 607.7 | 608.2 | 618.8  | 618.8  |
| 175°   | 610.1 | 612.1 | 608.2 | 616.0  | 614.1  |
| 177.5° | 611.7 | 611.7 | 607.0 | 613.2  | 610.1  |
| 180°   | 610.1 | 610.1 | 610.1 | 610.1  | 610.1  |

(END OF REPORT)