

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: P564944

Luminaire Tested: **SQ4-PW1-100U-075D-930-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564944  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-PW1-100U-075D-930-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

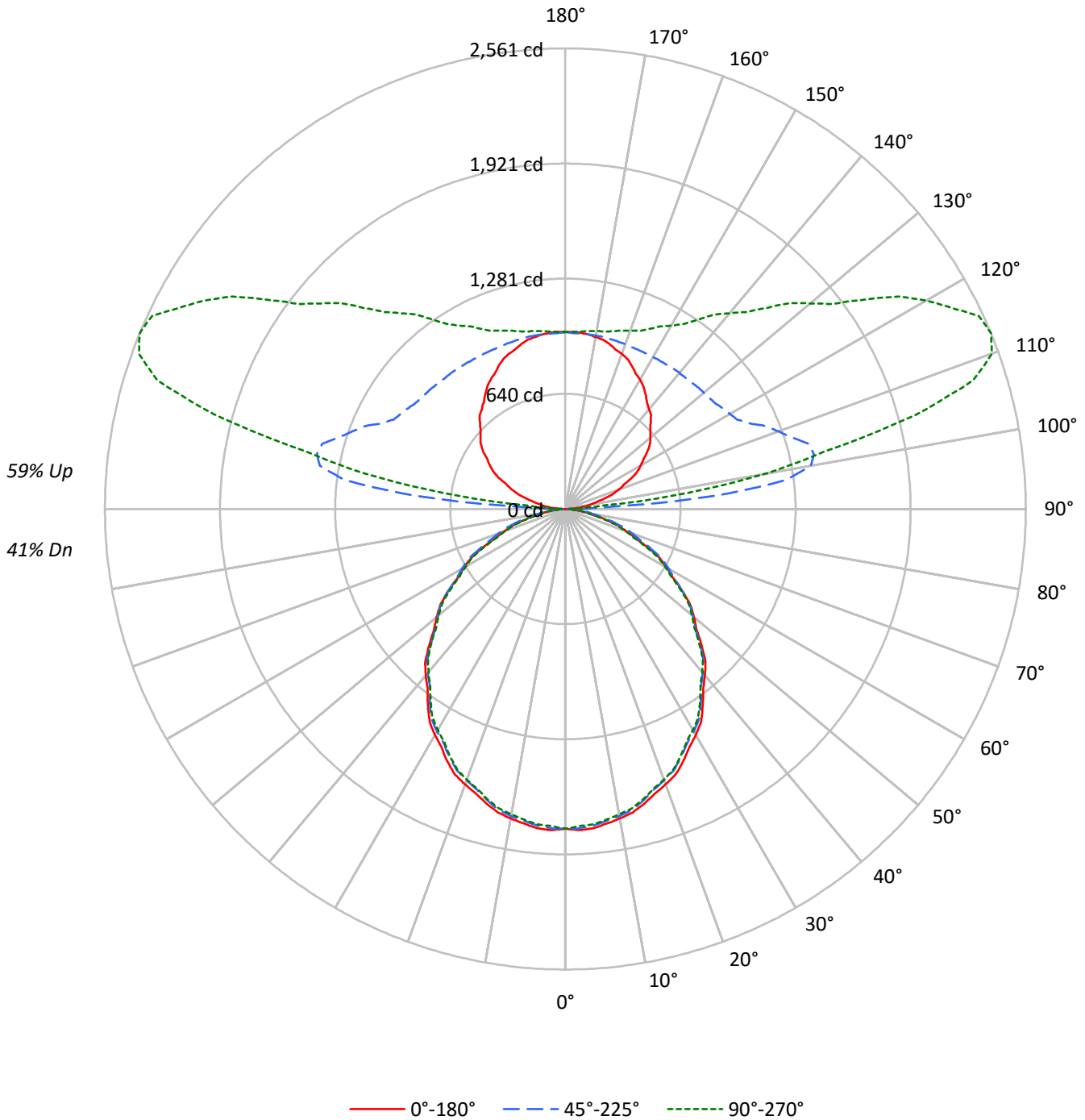
Lumens per Lamp: N/A  
Luminaire Lumens: 10916.6 lumens  
Efficiency: N/A  
Efficacy: 105.1 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 103.9  
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   | 105 | 105 | 105 | 105 | 96 | 96 | 96 | 96 | 79 | 79 | 79 | 63 | 63 | 63 | 48 | 48 | 48 | 41 |
| 1   | 96  | 92  | 88  | 85  | 87 | 84 | 81 | 78 | 69 | 67 | 65 | 55 | 54 | 52 | 43 | 42 | 41 | 35 |
| 2   | 87  | 80  | 74  | 69  | 79 | 73 | 68 | 64 | 60 | 57 | 54 | 49 | 46 | 44 | 38 | 36 | 35 | 30 |
| 3   | 80  | 70  | 63  | 58  | 72 | 65 | 58 | 53 | 53 | 49 | 45 | 43 | 40 | 37 | 33 | 31 | 29 | 25 |
| 4   | 73  | 62  | 55  | 49  | 66 | 57 | 50 | 45 | 47 | 42 | 38 | 38 | 35 | 32 | 30 | 27 | 25 | 22 |
| 5   | 67  | 55  | 48  | 42  | 61 | 51 | 44 | 39 | 42 | 37 | 33 | 34 | 31 | 28 | 27 | 24 | 22 | 19 |
| 6   | 62  | 50  | 42  | 36  | 56 | 46 | 39 | 34 | 38 | 33 | 29 | 31 | 27 | 24 | 24 | 22 | 19 | 16 |
| 7   | 57  | 45  | 37  | 32  | 52 | 41 | 34 | 29 | 35 | 29 | 25 | 28 | 24 | 21 | 22 | 19 | 17 | 15 |
| 8   | 53  | 41  | 33  | 28  | 48 | 37 | 31 | 26 | 31 | 26 | 22 | 26 | 22 | 19 | 20 | 18 | 15 | 13 |
| 9   | 49  | 37  | 30  | 25  | 45 | 34 | 28 | 23 | 29 | 24 | 20 | 24 | 20 | 17 | 19 | 16 | 14 | 12 |
| 10  | 46  | 34  | 27  | 22  | 42 | 31 | 25 | 21 | 26 | 21 | 18 | 22 | 18 | 15 | 18 | 15 | 13 | 11 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 8200 | 8200 | 8200 |
| 5°  | 8253 | 8188 | 8151 |
| 10° | 8187 | 8121 | 8077 |
| 15° | 8100 | 8011 | 7981 |
| 20° | 8004 | 7881 | 7865 |
| 25° | 7892 | 7748 | 7725 |
| 30° | 7725 | 7608 | 7558 |
| 35° | 7506 | 7400 | 7356 |
| 40° | 7272 | 7158 | 7130 |
| 45° | 6988 | 6896 | 6866 |
| 50° | 6699 | 6643 | 6598 |
| 55° | 6386 | 6386 | 6285 |
| 60° | 5997 | 6112 | 5896 |
| 65° | 5487 | 5761 | 5351 |
| 70° | 4837 | 5302 | 4711 |
| 75° | 4132 | 4745 | 4019 |
| 80° | 3204 | 3993 | 3246 |
| 85° | 2075 | 3065 | 2736 |



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 167.4   | 1.5       |
| 10°-20°   | 472.6   | 4.3       |
| 20°-30°   | 701.0   | 6.4       |
| 30°-40°   | 820.2   | 7.5       |
| 40°-50°   | 816.6   | 7.5       |
| 50°-60°   | 705.1   | 6.5       |
| 60°-70°   | 507.6   | 4.6       |
| 70°-80°   | 266.2   | 2.4       |
| 80°-90°   | 68.0    | 0.6       |
| 90°-100°  | 460.7   | 4.2       |
| 100°-110° | 1271.9  | 11.7      |
| 110°-120° | 1311.7  | 12.0      |
| 120°-130° | 1054.1  | 9.7       |
| 130°-140° | 828.4   | 7.6       |
| 140°-150° | 635.3   | 5.8       |
| 150°-160° | 456.6   | 4.2       |
| 160°-170° | 279.2   | 2.6       |
| 170°-180° | 94.1    | 0.9       |
| 0°-30°    | 1341.0  | 12.3      |
| 0°-40°    | 2161.2  | 19.8      |
| 0°-60°    | 3682.9  | 33.7      |
| 0°-90°    | 4524.6  | 41.4      |
| 90°-120°  | 3044.3  | 27.9      |
| 90°-150°  | 5562.0  | 50.9      |
| 90°-180°  | 6392.0  | 58.6      |
| 0°-180°   | 10916.6 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1778 | 1778  | 1778 | 1778  | 1778 |      |
| 5°   | 1782 | 1762  | 1768 | 1763  | 1760 | 169  |
| 15°  | 1696 | 1675  | 1677 | 1674  | 1671 | 478  |
| 25°  | 1550 | 1524  | 1522 | 1513  | 1518 | 713  |
| 35°  | 1333 | 1314  | 1314 | 1302  | 1306 | 833  |
| 45°  | 1071 | 1062  | 1057 | 1054  | 1052 | 827  |
| 55°  | 794  | 792   | 794  | 783   | 782  | 708  |
| 65°  | 503  | 518   | 528  | 507   | 490  | 498  |
| 75°  | 232  | 253   | 266  | 248   | 226  | 248  |
| 85°  | 39   | 51    | 58   | 55    | 52   | 52   |
| 90°  | 3    | 6     | 13   | 14    | 16   | 6    |
| 95°  | 68   | 249   | 836  | 344   | 224  | 72   |
| 105° | 227  | 350   | 1399 | 2136  | 2012 | 241  |
| 115° | 406  | 491   | 1127 | 2231  | 2537 | 399  |
| 125° | 557  | 634   | 1022 | 1729  | 2029 | 496  |
| 135° | 670  | 743   | 993  | 1400  | 1579 | 519  |
| 145° | 778  | 831   | 981  | 1192  | 1283 | 487  |
| 155° | 877  | 906   | 973  | 1070  | 1103 | 404  |
| 165° | 949  | 962   | 978  | 1015  | 1023 | 268  |
| 175° | 984  | 985   | 979  | 993   | 990  | 93   |
| 180° | 984  | 984   | 984  | 984   | 984  |      |



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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1777.6 | 1777.6 | 1777.6 | 1777.6 | 1777.6 |
| 2.5°   | 1787.6 | 1772.9 | 1777.6 | 1773.6 | 1765.0 |
| 5°     | 1782.3 | 1762.4 | 1768.2 | 1763.4 | 1760.3 |
| 7.5°   | 1764.1 | 1745.7 | 1750.0 | 1745.0 | 1743.1 |
| 10°    | 1747.8 | 1729.4 | 1733.7 | 1727.4 | 1724.3 |
| 12.5°  | 1729.0 | 1709.4 | 1713.7 | 1707.4 | 1705.5 |
| 15°    | 1696.1 | 1674.7 | 1677.3 | 1674.1 | 1671.1 |
| 17.5°  | 1657.9 | 1636.2 | 1636.6 | 1631.6 | 1631.0 |
| 20°    | 1630.4 | 1607.4 | 1605.3 | 1599.1 | 1602.2 |
| 22.5°  | 1600.3 | 1576.1 | 1574.0 | 1565.3 | 1569.6 |
| 25°    | 1550.5 | 1524.5 | 1522.3 | 1513.0 | 1517.6 |
| 27.5°  | 1492.9 | 1467.1 | 1467.2 | 1454.1 | 1459.0 |
| 30°    | 1450.3 | 1425.7 | 1428.3 | 1412.8 | 1418.9 |
| 32.5°  | 1405.1 | 1383.1 | 1384.5 | 1369.0 | 1375.1 |
| 35°    | 1332.8 | 1314.4 | 1314.0 | 1301.6 | 1306.2 |
| 37.5°  | 1258.9 | 1242.6 | 1240.1 | 1232.9 | 1234.1 |
| 40°    | 1207.5 | 1193.7 | 1188.7 | 1184.0 | 1184.0 |
| 42.5°  | 1153.6 | 1141.1 | 1136.1 | 1132.6 | 1131.4 |
| 45°    | 1071.2 | 1062.1 | 1057.1 | 1054.0 | 1052.4 |
| 47.5°  | 989.8  | 981.2  | 977.0  | 974.7  | 973.2  |
| 50°    | 933.4  | 927.3  | 925.6  | 920.9  | 919.3  |
| 52.5°  | 877.0  | 873.4  | 871.7  | 865.7  | 864.2  |
| 55°    | 794.0  | 792.5  | 794.0  | 783.0  | 781.5  |
| 57.5°  | 707.6  | 710.0  | 715.1  | 700.3  | 696.6  |
| 60°    | 650.0  | 656.1  | 662.5  | 645.1  | 639.0  |
| 62.5°  | 591.1  | 600.9  | 609.9  | 589.9  | 581.4  |
| 65°    | 502.7  | 518.0  | 527.8  | 507.0  | 490.2  |
| 67.5°  | 417.5  | 436.5  | 448.2  | 425.9  | 406.9  |
| 70°    | 358.6  | 380.1  | 393.1  | 370.7  | 349.3  |
| 72.5°  | 307.3  | 331.2  | 341.7  | 320.6  | 299.1  |
| 75°    | 231.8  | 253.2  | 266.2  | 248.5  | 225.5  |
| 77.5°  | 164.4  | 184.7  | 195.5  | 180.0  | 161.0  |
| 80°    | 120.6  | 142.0  | 150.3  | 137.5  | 122.2  |
| 82.5°  | 85.5   | 103.3  | 109.0  | 101.2  | 90.8   |
| 85°    | 39.2   | 51.4   | 57.9   | 54.7   | 51.7   |
| 87.5°  | 10.7   | 19.8   | 26.3   | 26.7   | 28.2   |
| 90°    | 3.1    | 6.2    | 12.6   | 14.2   | 15.7   |
| 92.5°  | 28.3   | 117.6  | 210.3  | 76.7   | 59.8   |
| 95°    | 67.7   | 249.3  | 835.8  | 343.6  | 223.5  |
| 97.5°  | 112.1  | 279.2  | 1238.1 | 953.2  | 690.4  |
| 100°   | 144.8  | 297.2  | 1386.7 | 1396.5 | 1134.9 |
| 102.5° | 176.3  | 317.6  | 1415.7 | 1725.5 | 1477.4 |
| 105°   | 226.7  | 349.8  | 1399.3 | 2136.3 | 2011.6 |
| 107.5° | 280.2  | 389.8  | 1321.2 | 2334.4 | 2379.9 |
| 110°   | 318.0  | 416.5  | 1260.8 | 2377.0 | 2524.7 |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°    | 67.5°  | 90°    |
|--------|-------|-------|--------|--------|--------|
| 112.5° | 352.0 | 446.8 | 1204.1 | 2343.3 | 2561.3 |
| 115°   | 406.1 | 490.7 | 1127.0 | 2231.1 | 2537.3 |
| 117.5° | 453.3 | 537.7 | 1076.3 | 2073.0 | 2421.5 |
| 120°   | 484.8 | 567.9 | 1056.2 | 1966.1 | 2317.0 |
| 122.5° | 515.0 | 594.4 | 1039.8 | 1866.2 | 2198.6 |
| 125°   | 557.2 | 634.2 | 1021.5 | 1728.8 | 2028.9 |
| 127.5° | 593.1 | 670.0 | 1010.8 | 1612.7 | 1871.5 |
| 130°   | 617.0 | 694.0 | 1005.8 | 1541.6 | 1777.1 |
| 132.5° | 639.7 | 712.9 | 1000.8 | 1481.9 | 1695.2 |
| 135°   | 670.5 | 742.9 | 993.2  | 1400.2 | 1578.8 |
| 137.5° | 705.2 | 771.0 | 989.4  | 1331.6 | 1484.0 |
| 140°   | 724.1 | 788.7 | 986.9  | 1285.9 | 1419.8 |
| 142.5° | 745.5 | 805.2 | 984.4  | 1245.2 | 1363.1 |
| 145°   | 777.6 | 831.4 | 980.6  | 1192.0 | 1282.8 |
| 147.5° | 808.4 | 855.5 | 977.2  | 1147.2 | 1217.7 |
| 150°   | 831.1 | 869.6 | 975.9  | 1120.4 | 1177.4 |
| 152.5° | 848.7 | 884.7 | 974.6  | 1097.5 | 1144.6 |
| 155°   | 876.7 | 906.0 | 972.7  | 1069.5 | 1103.4 |
| 157.5° | 902.5 | 925.0 | 973.1  | 1049.1 | 1072.2 |
| 160°   | 917.7 | 937.7 | 974.3  | 1037.7 | 1054.6 |
| 162.5° | 930.3 | 947.8 | 975.6  | 1027.5 | 1040.7 |
| 165°   | 949.1 | 961.5 | 977.5  | 1015.4 | 1023.1 |
| 167.5° | 963.6 | 971.0 | 979.0  | 1008.1 | 1010.5 |
| 170°   | 971.2 | 977.3 | 979.0  | 1004.2 | 1004.2 |
| 172.5° | 977.5 | 981.2 | 979.0  | 999.2  | 997.9  |
| 175°   | 983.8 | 985.3 | 979.0  | 993.1  | 990.1  |
| 177.5° | 986.3 | 985.1 | 978.7  | 987.5  | 985.0  |
| 180°   | 983.8 | 983.8 | 983.8  | 983.8  | 983.8  |

(END OF REPORT)