

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: P562948

Luminaire Tested: **SQ4-PC3-100U-100D-840-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P562948  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PC3-100U-100D-840-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PYRAMID CONTINUOUS LENS.  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

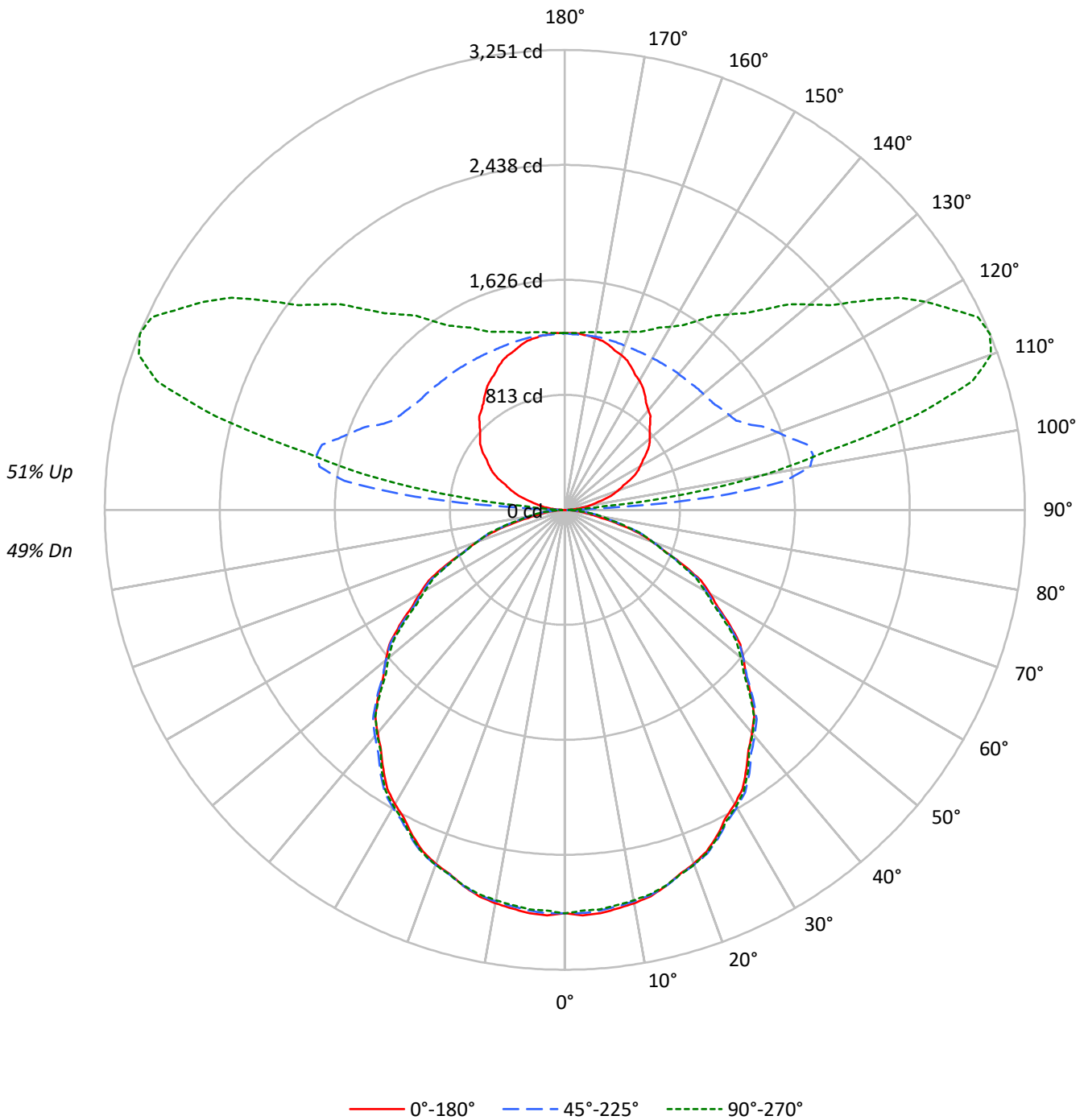
Lumens per Lamp: N/A  
Luminaire Lumens: 15901.6 lumens  
Efficiency: N/A  
Efficacy: 131.2 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 121.2  
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 | 98 | 98 | 98 | 98 | 83 | 83 | 83 | 68 | 68 | 68 | 55 | 55 | 55 | 49 |
| 1   | 98  | 93  | 89  | 86  | 90 | 86 | 83 | 80 | 73 | 70 | 68 | 60 | 59 | 57 | 49 | 48 | 47 | 41 |
| 2   | 89  | 81  | 75  | 70  | 82 | 75 | 70 | 66 | 64 | 60 | 56 | 53 | 50 | 48 | 43 | 41 | 39 | 35 |
| 3   | 81  | 72  | 64  | 58  | 74 | 66 | 60 | 55 | 56 | 51 | 47 | 47 | 43 | 40 | 38 | 36 | 33 | 29 |
| 4   | 74  | 63  | 55  | 49  | 68 | 59 | 52 | 46 | 50 | 45 | 40 | 42 | 38 | 34 | 34 | 31 | 29 | 25 |
| 5   | 68  | 56  | 48  | 42  | 62 | 52 | 45 | 40 | 45 | 39 | 35 | 37 | 33 | 30 | 31 | 28 | 25 | 22 |
| 6   | 63  | 51  | 42  | 37  | 57 | 47 | 40 | 34 | 40 | 34 | 30 | 34 | 29 | 26 | 28 | 24 | 22 | 19 |
| 7   | 58  | 46  | 38  | 32  | 53 | 42 | 35 | 30 | 36 | 31 | 27 | 31 | 26 | 23 | 25 | 22 | 20 | 17 |
| 8   | 54  | 41  | 34  | 28  | 49 | 38 | 32 | 27 | 33 | 28 | 24 | 28 | 24 | 20 | 23 | 20 | 17 | 15 |
| 9   | 50  | 38  | 30  | 25  | 46 | 35 | 28 | 24 | 30 | 25 | 21 | 26 | 21 | 18 | 21 | 18 | 16 | 14 |
| 10  | 47  | 35  | 27  | 23  | 43 | 32 | 26 | 21 | 28 | 23 | 19 | 24 | 20 | 17 | 20 | 17 | 14 | 12 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 13160 | 13160 | 13160 |
| 5°  | 13259 | 13173 | 13124 |
| 10° | 13226 | 13165 | 13128 |
| 15° | 13157 | 13157 | 13145 |
| 20° | 13071 | 13109 | 13109 |
| 25° | 12947 | 13041 | 13001 |
| 30° | 12790 | 12945 | 12888 |
| 35° | 12599 | 12793 | 12703 |
| 40° | 12391 | 12566 | 12438 |
| 45° | 12166 | 12252 | 12063 |
| 50° | 11848 | 11848 | 11658 |
| 55° | 11471 | 11323 | 11153 |
| 60° | 10917 | 10699 | 10528 |
| 65° | 10091 | 9889  | 9803  |
| 70° | 8836  | 8906  | 8871  |
| 75° | 7108  | 7862  | 7908  |
| 80° | 5053  | 6665  | 6737  |
| 85° | 3075  | 5595  | 5595  |



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 270.0   | 1.7       |
| 10°-20°   | 774.7   | 4.9       |
| 20°-30°   | 1173.3  | 7.4       |
| 30°-40°   | 1406.6  | 8.8       |
| 40°-50°   | 1434.2  | 9.0       |
| 50°-60°   | 1252.0  | 7.9       |
| 60°-70°   | 896.3   | 5.6       |
| 70°-80°   | 461.6   | 2.9       |
| 80°-90°   | 119.3   | 0.8       |
| 90°-100°  | 584.8   | 3.7       |
| 100°-110° | 1614.4  | 10.2      |
| 110°-120° | 1664.9  | 10.5      |
| 120°-130° | 1337.9  | 8.4       |
| 130°-140° | 1051.5  | 6.6       |
| 140°-150° | 806.4   | 5.1       |
| 150°-160° | 579.6   | 3.6       |
| 160°-170° | 354.4   | 2.2       |
| 170°-180° | 119.5   | 0.8       |
| 0°-30°    | 2218.0  | 13.9      |
| 0°-40°    | 3624.6  | 22.8      |
| 0°-60°    | 6310.8  | 39.7      |
| 0°-90°    | 7788.1  | 49.0      |
| 90°-120°  | 3864.1  | 24.3      |
| 90°-150°  | 7060.0  | 44.4      |
| 90°-180°  | 8113.0  | 51.0      |
| 0°-180°   | 15901.6 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 2853 | 2853  | 2853 | 2853  | 2853 |      |
| 5°   | 2863 | 2835  | 2845 | 2837  | 2834 | 272  |
| 15°  | 2755 | 2732  | 2755 | 2755  | 2752 | 777  |
| 25°  | 2544 | 2526  | 2562 | 2554  | 2554 | 1171 |
| 35°  | 2237 | 2232  | 2272 | 2256  | 2256 | 1399 |
| 45°  | 1865 | 1860  | 1878 | 1854  | 1849 | 1435 |
| 55°  | 1426 | 1408  | 1408 | 1387  | 1387 | 1271 |
| 65°  | 924  | 904   | 906  | 898   | 898  | 914  |
| 75°  | 399  | 417   | 441  | 444   | 444  | 431  |
| 85°  | 58   | 89    | 106  | 108   | 106  | 79   |
| 90°  | 4    | 8     | 16   | 18    | 20   | 8    |
| 95°  | 86   | 316   | 1061 | 436   | 284  | 92   |
| 105° | 288  | 444   | 1776 | 2712  | 2553 | 306  |
| 115° | 516  | 623   | 1430 | 2832  | 3221 | 507  |
| 125° | 707  | 805   | 1297 | 2194  | 2575 | 629  |
| 135° | 851  | 943   | 1261 | 1777  | 2004 | 659  |
| 145° | 987  | 1055  | 1245 | 1513  | 1628 | 618  |
| 155° | 1113 | 1150  | 1235 | 1358  | 1401 | 513  |
| 165° | 1205 | 1220  | 1241 | 1289  | 1299 | 340  |
| 175° | 1249 | 1251  | 1243 | 1261  | 1257 | 119  |
| 180° | 1249 | 1249  | 1249 | 1249  | 1249 |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 2852.7 | 2852.7 | 2852.7 | 2852.7 | 2852.7 |
| 2.5°   | 2869.6 | 2844.8 | 2852.7 | 2846.1 | 2835.8 |
| 5°     | 2863.2 | 2834.8 | 2844.8 | 2836.8 | 2834.2 |
| 7.5°   | 2842.6 | 2814.2 | 2827.3 | 2822.0 | 2819.4 |
| 10°    | 2823.6 | 2795.2 | 2810.4 | 2805.1 | 2802.5 |
| 12.5°  | 2798.3 | 2771.9 | 2789.3 | 2784.0 | 2783.5 |
| 15°    | 2754.9 | 2731.7 | 2754.9 | 2754.9 | 2752.3 |
| 17.5°  | 2700.5 | 2679.4 | 2704.2 | 2705.8 | 2704.2 |
| 20°    | 2662.5 | 2639.3 | 2670.4 | 2667.8 | 2670.4 |
| 22.5°  | 2616.0 | 2596.9 | 2630.3 | 2623.5 | 2626.0 |
| 25°    | 2543.6 | 2525.6 | 2562.1 | 2554.2 | 2554.2 |
| 27.5°  | 2458.1 | 2445.1 | 2485.0 | 2476.5 | 2476.5 |
| 30°    | 2401.0 | 2388.1 | 2430.1 | 2419.5 | 2419.5 |
| 32.5°  | 2337.6 | 2328.8 | 2368.8 | 2356.1 | 2356.1 |
| 35°    | 2237.2 | 2232.1 | 2271.6 | 2255.7 | 2255.7 |
| 37.5°  | 2133.7 | 2129.0 | 2164.9 | 2145.7 | 2139.5 |
| 40°    | 2057.6 | 2055.0 | 2086.7 | 2065.5 | 2065.5 |
| 42.5°  | 1981.6 | 1979.0 | 2006.4 | 1981.0 | 1981.0 |
| 45°    | 1864.8 | 1859.6 | 1878.0 | 1854.1 | 1849.0 |
| 47.5°  | 1737.5 | 1732.3 | 1743.8 | 1717.9 | 1715.3 |
| 50°    | 1650.9 | 1645.7 | 1650.9 | 1627.0 | 1624.4 |
| 52.5°  | 1562.1 | 1552.8 | 1553.7 | 1529.9 | 1529.4 |
| 55°    | 1426.3 | 1408.3 | 1407.8 | 1386.7 | 1386.7 |
| 57.5°  | 1282.6 | 1258.9 | 1261.0 | 1243.0 | 1240.4 |
| 60°    | 1183.3 | 1157.5 | 1159.6 | 1143.7 | 1141.1 |
| 62.5°  | 1086.1 | 1056.2 | 1062.4 | 1044.4 | 1043.9 |
| 65°    | 924.5  | 903.8  | 906.0  | 898.1  | 898.1  |
| 67.5°  | 769.2  | 750.1  | 763.9  | 757.5  | 757.0  |
| 70°    | 655.1  | 642.1  | 660.3  | 660.3  | 657.7  |
| 72.5°  | 549.4  | 548.9  | 571.6  | 571.6  | 573.2  |
| 75°    | 398.8  | 416.9  | 441.1  | 443.7  | 443.7  |
| 77.5°  | 266.2  | 298.3  | 324.9  | 325.9  | 325.4  |
| 80°    | 190.2  | 226.3  | 250.9  | 256.2  | 253.6  |
| 82.5°  | 128.9  | 167.1  | 187.5  | 192.8  | 190.2  |
| 85°    | 58.1   | 89.1   | 105.7  | 108.2  | 105.7  |
| 87.5°  | 17.7   | 37.1   | 45.5   | 45.8   | 42.0   |
| 90°    | 4.0    | 7.9    | 16.0   | 18.0   | 20.0   |
| 92.5°  | 36.0   | 149.3  | 266.9  | 97.4   | 75.9   |
| 95°    | 85.9   | 316.4  | 1060.9 | 436.1  | 283.7  |
| 97.5°  | 142.3  | 354.4  | 1571.6 | 1210.0 | 876.3  |
| 100°   | 183.8  | 377.2  | 1760.2 | 1772.6 | 1440.5 |
| 102.5° | 223.8  | 403.1  | 1796.9 | 2190.2 | 1875.3 |
| 105°   | 287.7  | 444.0  | 1776.2 | 2711.6 | 2553.4 |
| 107.5° | 355.6  | 494.7  | 1677.1 | 2963.1 | 3020.9 |
| 110°   | 403.6  | 528.6  | 1600.3 | 3017.1 | 3204.7 |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 446.7  | 567.1  | 1528.4 | 2974.4 | 3251.0 |
| 115°   | 515.5  | 622.9  | 1430.5 | 2831.9 | 3220.7 |
| 117.5° | 575.4  | 682.5  | 1366.2 | 2631.3 | 3073.6 |
| 120°   | 615.4  | 720.9  | 1340.6 | 2495.6 | 2941.0 |
| 122.5° | 653.7  | 754.5  | 1319.8 | 2368.8 | 2790.7 |
| 125°   | 707.3  | 804.9  | 1296.7 | 2194.4 | 2575.3 |
| 127.5° | 752.8  | 850.5  | 1283.1 | 2047.0 | 2375.5 |
| 130°   | 783.2  | 880.9  | 1276.7 | 1956.8 | 2255.7 |
| 132.5° | 812.0  | 904.9  | 1270.3 | 1881.0 | 2151.8 |
| 135°   | 851.1  | 942.9  | 1260.7 | 1777.3 | 2003.9 |
| 137.5° | 895.1  | 978.7  | 1255.9 | 1690.3 | 1883.7 |
| 140°   | 919.1  | 1001.1 | 1252.7 | 1632.2 | 1802.1 |
| 142.5° | 946.2  | 1022.0 | 1249.5 | 1580.6 | 1730.2 |
| 145°   | 987.0  | 1055.4 | 1244.7 | 1513.1 | 1628.3 |
| 147.5° | 1026.1 | 1085.9 | 1240.3 | 1456.1 | 1545.6 |
| 150°   | 1054.9 | 1103.7 | 1238.7 | 1422.2 | 1494.5 |
| 152.5° | 1077.3 | 1123.0 | 1237.1 | 1393.1 | 1452.9 |
| 155°   | 1112.9 | 1150.0 | 1234.7 | 1357.6 | 1400.6 |
| 157.5° | 1145.6 | 1174.1 | 1235.1 | 1331.7 | 1361.0 |
| 160°   | 1164.8 | 1190.2 | 1236.7 | 1317.1 | 1338.6 |
| 162.5° | 1180.8 | 1203.1 | 1238.3 | 1304.2 | 1321.0 |
| 165°   | 1204.8 | 1220.4 | 1240.7 | 1288.9 | 1298.7 |
| 167.5° | 1223.1 | 1232.5 | 1242.7 | 1279.5 | 1282.7 |
| 170°   | 1232.7 | 1240.5 | 1242.7 | 1274.7 | 1274.7 |
| 172.5° | 1240.7 | 1245.4 | 1242.7 | 1268.3 | 1266.7 |
| 175°   | 1248.7 | 1250.7 | 1242.7 | 1260.6 | 1256.7 |
| 177.5° | 1251.9 | 1250.3 | 1242.3 | 1253.4 | 1250.3 |
| 180°   | 1248.7 | 1248.7 | 1248.7 | 1248.7 | 1248.7 |

(END OF REPORT)