

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: P564400

Luminaire Tested: **SQ4-PR1-125U-100D-940-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564400
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PR1-125U-100D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

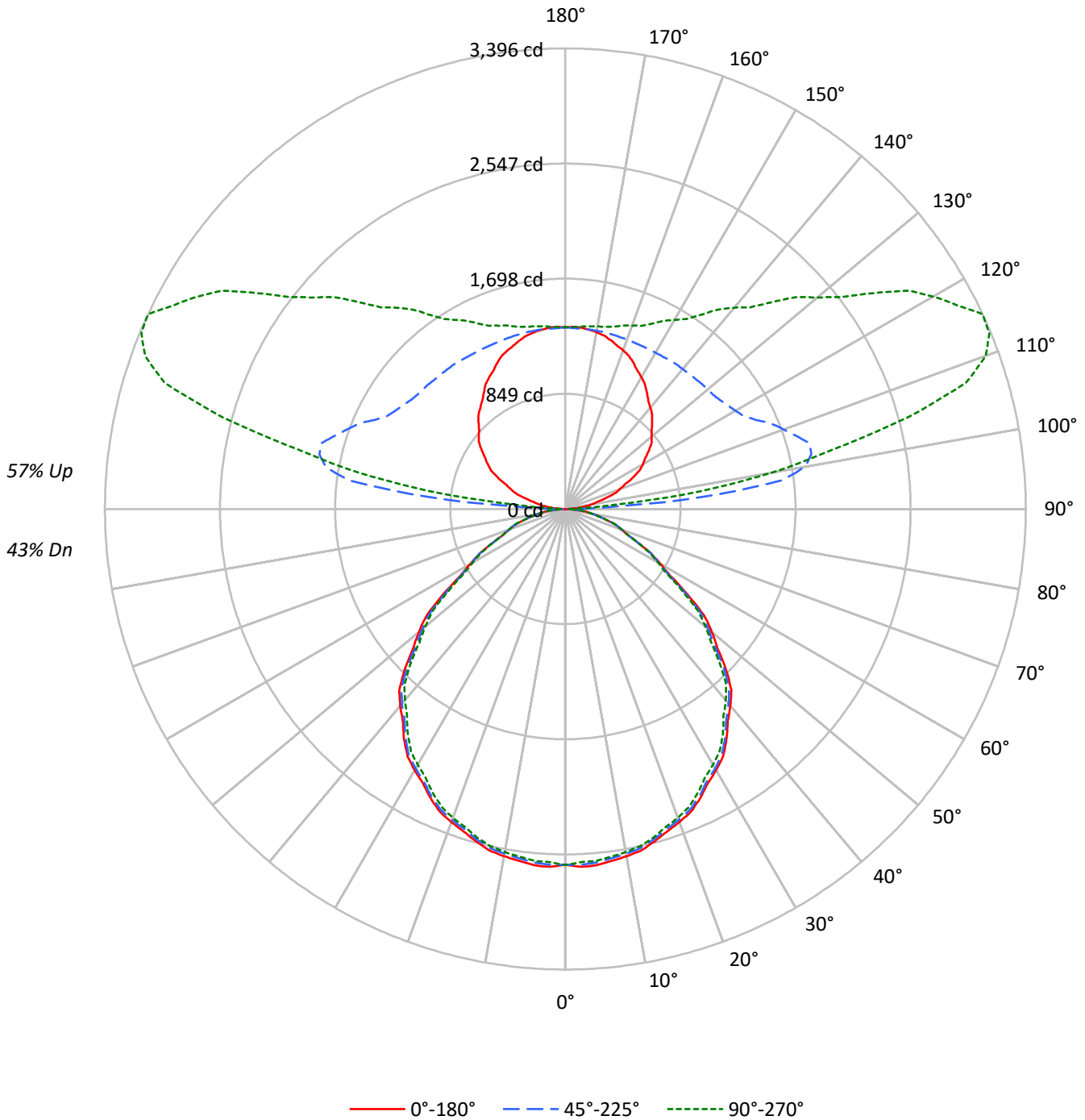
Lumens per Lamp: N/A
Luminaire Lumens: 15208.0 lumens
Efficiency: N/A
Efficacy: 114.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 133.3
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 | 96 | 96 | 96 | 96 | 80 | 80 | 80 | 64 | 64 | 64 | 50 | 50 | 50 | 43 |
| 1 | 96 | 92 | 89 | 85 | 88 | 85 | 81 | 78 | 70 | 68 | 66 | 57 | 55 | 54 | 44 | 43 | 43 | 37 |
| 2 | 88 | 81 | 75 | 70 | 80 | 74 | 69 | 65 | 62 | 58 | 55 | 50 | 48 | 45 | 39 | 38 | 36 | 31 |
| 3 | 80 | 71 | 64 | 59 | 73 | 65 | 59 | 54 | 55 | 50 | 46 | 44 | 41 | 39 | 35 | 33 | 31 | 27 |
| 4 | 74 | 63 | 55 | 50 | 67 | 58 | 51 | 46 | 49 | 44 | 40 | 40 | 36 | 33 | 31 | 29 | 27 | 23 |
| 5 | 68 | 56 | 48 | 43 | 62 | 52 | 45 | 40 | 44 | 38 | 34 | 36 | 32 | 29 | 28 | 26 | 24 | 20 |
| 6 | 62 | 51 | 43 | 37 | 57 | 47 | 40 | 35 | 39 | 34 | 30 | 32 | 28 | 25 | 26 | 23 | 21 | 18 |
| 7 | 58 | 46 | 38 | 32 | 53 | 42 | 35 | 30 | 36 | 30 | 26 | 29 | 25 | 22 | 24 | 21 | 19 | 16 |
| 8 | 53 | 41 | 34 | 29 | 49 | 38 | 32 | 27 | 32 | 27 | 23 | 27 | 23 | 20 | 22 | 19 | 17 | 14 |
| 9 | 50 | 38 | 30 | 25 | 45 | 35 | 28 | 24 | 30 | 25 | 21 | 25 | 21 | 18 | 20 | 17 | 15 | 13 |
| 10 | 46 | 35 | 27 | 23 | 42 | 32 | 26 | 21 | 27 | 22 | 19 | 23 | 19 | 16 | 19 | 16 | 14 | 12 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 12108 | 12108 | 12108 |
| 5° | 12217 | 12122 | 12060 |
| 10° | 12178 | 12093 | 12030 |
| 15° | 12124 | 12049 | 11984 |
| 20° | 12063 | 11986 | 11897 |
| 25° | 11978 | 11898 | 11760 |
| 30° | 11849 | 11765 | 11596 |
| 35° | 11674 | 11572 | 11407 |
| 40° | 11408 | 11286 | 11082 |
| 45° | 10943 | 10751 | 10530 |
| 50° | 10124 | 9880 | 9686 |
| 55° | 8837 | 8636 | 8454 |
| 60° | 7446 | 7384 | 7237 |
| 65° | 6440 | 6465 | 6416 |
| 70° | 5916 | 5945 | 5945 |
| 75° | 5682 | 5682 | 5721 |
| 80° | 5345 | 5406 | 5345 |
| 85° | 4308 | 4785 | 4785 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 248.2 | 1.6 |
| 10°-20° | 710.1 | 4.7 |
| 20°-30° | 1071.1 | 7.0 |
| 30°-40° | 1276.2 | 8.4 |
| 40°-50° | 1258.2 | 8.3 |
| 50°-60° | 961.6 | 6.3 |
| 60°-70° | 595.1 | 3.9 |
| 70°-80° | 338.0 | 2.2 |
| 80°-90° | 106.0 | 0.7 |
| 90°-100° | 626.4 | 4.1 |
| 100°-110° | 1687.3 | 11.1 |
| 110°-120° | 1770.7 | 11.6 |
| 120°-130° | 1436.9 | 9.4 |
| 130°-140° | 1126.9 | 7.4 |
| 140°-150° | 865.2 | 5.7 |
| 150°-160° | 622.1 | 4.1 |
| 160°-170° | 380.0 | 2.5 |
| 170°-180° | 128.2 | 0.8 |
| 0°-30° | 2029.4 | 13.3 |
| 0°-40° | 3305.6 | 21.7 |
| 0°-60° | 5525.4 | 36.3 |
| 0°-90° | 6564.4 | 43.2 |
| 90°-120° | 4084.4 | 26.9 |
| 90°-150° | 7513.4 | 49.4 |
| 90°-180° | 8644.0 | 56.8 |
| 0°-180° | 15208.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 2625 | 2625 | 2625 | 2625 | 2625 | |
| 5° | 2638 | 2610 | 2618 | 2609 | 2604 | 250 |
| 15° | 2539 | 2512 | 2523 | 2514 | 2509 | 716 |
| 25° | 2353 | 2325 | 2338 | 2313 | 2310 | 1083 |
| 35° | 2073 | 2049 | 2055 | 2028 | 2026 | 1294 |
| 45° | 1677 | 1655 | 1648 | 1618 | 1614 | 1285 |
| 55° | 1099 | 1081 | 1074 | 1056 | 1051 | 984 |
| 65° | 590 | 586 | 592 | 588 | 588 | 598 |
| 75° | 319 | 319 | 319 | 321 | 321 | 337 |
| 85° | 81 | 86 | 90 | 90 | 90 | 95 |
| 90° | 3 | 10 | 20 | 22 | 22 | 10 |
| 95° | 96 | 341 | 1027 | 525 | 363 | 100 |
| 105° | 312 | 486 | 1866 | 2792 | 2620 | 328 |
| 115° | 551 | 674 | 1554 | 3002 | 3396 | 542 |
| 125° | 752 | 864 | 1395 | 2358 | 2775 | 672 |
| 135° | 906 | 1011 | 1356 | 1902 | 2154 | 699 |
| 145° | 1047 | 1129 | 1339 | 1626 | 1747 | 657 |
| 155° | 1189 | 1232 | 1327 | 1459 | 1506 | 547 |
| 165° | 1290 | 1304 | 1332 | 1385 | 1392 | 364 |
| 175° | 1341 | 1339 | 1334 | 1352 | 1349 | 127 |
| 180° | 1339 | 1339 | 1339 | 1339 | 1339 | |

TEST NUMBER: P564400

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 2624.6 | 2624.6 | 2624.6 | 2624.6 | 2624.6 |
| 2.5° | 2640.9 | 2617.9 | 2624.6 | 2618.9 | 2606.5 |
| 5° | 2638.2 | 2609.5 | 2617.8 | 2608.7 | 2604.3 |
| 7.5° | 2617.8 | 2589.5 | 2597.9 | 2588.8 | 2586.2 |
| 10° | 2599.8 | 2573.2 | 2581.7 | 2572.5 | 2568.1 |
| 12.5° | 2579.9 | 2551.6 | 2561.8 | 2550.8 | 2546.4 |
| 15° | 2538.7 | 2512.2 | 2522.9 | 2513.8 | 2509.3 |
| 17.5° | 2493.5 | 2465.2 | 2475.9 | 2465.3 | 2459.6 |
| 20° | 2457.3 | 2430.8 | 2441.5 | 2425.6 | 2423.4 |
| 22.5° | 2417.5 | 2391.0 | 2401.7 | 2380.5 | 2380.0 |
| 25° | 2353.3 | 2324.6 | 2337.5 | 2312.6 | 2310.4 |
| 27.5° | 2276.9 | 2250.4 | 2261.1 | 2235.7 | 2233.1 |
| 30° | 2224.5 | 2198.0 | 2208.7 | 2181.4 | 2177.0 |
| 32.5° | 2164.8 | 2140.0 | 2149.0 | 2121.8 | 2119.1 |
| 35° | 2073.0 | 2048.7 | 2054.9 | 2027.8 | 2025.5 |
| 37.5° | 1968.6 | 1946.5 | 1950.0 | 1920.2 | 1917.9 |
| 40° | 1894.4 | 1872.3 | 1874.1 | 1842.4 | 1840.2 |
| 42.5° | 1813.0 | 1790.9 | 1789.1 | 1757.4 | 1755.2 |
| 45° | 1677.4 | 1655.3 | 1648.0 | 1618.5 | 1614.1 |
| 47.5° | 1522.8 | 1500.7 | 1487.1 | 1463.0 | 1459.9 |
| 50° | 1410.7 | 1388.5 | 1376.7 | 1356.2 | 1349.6 |
| 52.5° | 1289.5 | 1267.4 | 1257.4 | 1238.7 | 1232.1 |
| 55° | 1098.7 | 1081.0 | 1073.8 | 1055.6 | 1051.2 |
| 57.5° | 917.4 | 905.4 | 903.4 | 885.7 | 883.9 |
| 60° | 807.1 | 800.4 | 800.3 | 784.4 | 784.4 |
| 62.5° | 713.0 | 708.1 | 711.7 | 701.2 | 699.4 |
| 65° | 590.0 | 585.6 | 592.3 | 587.8 | 587.8 |
| 67.5° | 492.8 | 492.8 | 496.9 | 495.1 | 495.1 |
| 70° | 438.6 | 438.6 | 440.8 | 440.8 | 440.8 |
| 72.5° | 389.7 | 388.0 | 393.8 | 393.8 | 392.0 |
| 75° | 318.8 | 318.8 | 318.8 | 321.0 | 321.0 |
| 77.5° | 248.2 | 248.7 | 250.5 | 250.0 | 248.2 |
| 80° | 201.2 | 203.4 | 203.5 | 201.2 | 201.2 |
| 82.5° | 154.2 | 156.4 | 156.4 | 155.9 | 154.2 |
| 85° | 81.4 | 85.8 | 90.4 | 90.4 | 90.4 |
| 87.5° | 24.2 | 32.6 | 40.3 | 40.6 | 38.8 |
| 90° | 3.4 | 10.1 | 20.5 | 22.2 | 22.2 |
| 92.5° | 41.6 | 147.0 | 290.6 | 139.9 | 97.2 |
| 95° | 95.5 | 340.7 | 1026.8 | 525.1 | 363.3 |
| 97.5° | 152.5 | 390.0 | 1610.5 | 1345.4 | 1014.5 |
| 100° | 196.2 | 409.6 | 1796.1 | 1879.2 | 1559.0 |
| 102.5° | 238.5 | 437.2 | 1857.5 | 2278.9 | 2016.1 |
| 105° | 312.1 | 485.6 | 1866.0 | 2791.7 | 2619.9 |
| 107.5° | 381.7 | 536.5 | 1786.5 | 3055.2 | 3099.5 |
| 110° | 428.1 | 574.9 | 1714.2 | 3137.0 | 3298.7 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 477.2 | 613.3 | 1644.6 | 3118.9 | 3384.7 |
| 115° | 550.9 | 674.3 | 1553.9 | 3002.4 | 3396.0 |
| 117.5° | 618.1 | 733.9 | 1483.6 | 2816.4 | 3254.7 |
| 120° | 661.8 | 773.5 | 1448.1 | 2683.0 | 3133.3 |
| 122.5° | 700.0 | 810.4 | 1422.2 | 2546.5 | 2995.5 |
| 125° | 752.2 | 863.9 | 1395.2 | 2358.2 | 2775.1 |
| 127.5° | 802.3 | 912.4 | 1378.2 | 2192.0 | 2564.3 |
| 130° | 832.4 | 942.4 | 1371.3 | 2096.9 | 2423.7 |
| 132.5° | 862.4 | 971.1 | 1364.5 | 2013.0 | 2313.2 |
| 135° | 905.7 | 1010.8 | 1356.0 | 1902.4 | 2154.2 |
| 137.5° | 947.0 | 1047.7 | 1351.6 | 1808.6 | 2015.4 |
| 140° | 975.6 | 1072.4 | 1347.5 | 1750.8 | 1937.6 |
| 142.5° | 1005.7 | 1095.7 | 1344.7 | 1697.0 | 1854.4 |
| 145° | 1047.3 | 1129.0 | 1338.9 | 1626.5 | 1746.6 |
| 147.5° | 1092.3 | 1163.3 | 1333.1 | 1567.3 | 1661.6 |
| 150° | 1122.3 | 1184.0 | 1330.4 | 1530.0 | 1608.4 |
| 152.5° | 1149.6 | 1203.3 | 1329.0 | 1499.7 | 1563.4 |
| 155° | 1188.8 | 1232.2 | 1327.0 | 1459.4 | 1506.1 |
| 157.5° | 1223.3 | 1257.0 | 1327.3 | 1431.1 | 1462.4 |
| 160° | 1245.1 | 1273.5 | 1328.7 | 1414.5 | 1437.9 |
| 162.5° | 1264.2 | 1287.2 | 1330.1 | 1400.7 | 1417.4 |
| 165° | 1289.5 | 1304.5 | 1332.1 | 1385.1 | 1391.8 |
| 167.5° | 1309.9 | 1318.6 | 1333.8 | 1373.1 | 1375.8 |
| 170° | 1323.6 | 1326.9 | 1333.8 | 1366.2 | 1366.2 |
| 172.5° | 1331.8 | 1332.4 | 1335.2 | 1359.4 | 1359.4 |
| 175° | 1340.6 | 1339.0 | 1333.8 | 1352.5 | 1349.2 |
| 177.5° | 1344.4 | 1341.7 | 1334.8 | 1345.7 | 1343.0 |
| 180° | 1338.9 | 1338.9 | 1338.9 | 1338.9 | 1338.9 |

(END OF REPORT)