

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: P563628

Luminaire Tested: **SQ4-PP3-100U-100D-935-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563628
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2103-172-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PP3-100U-100D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

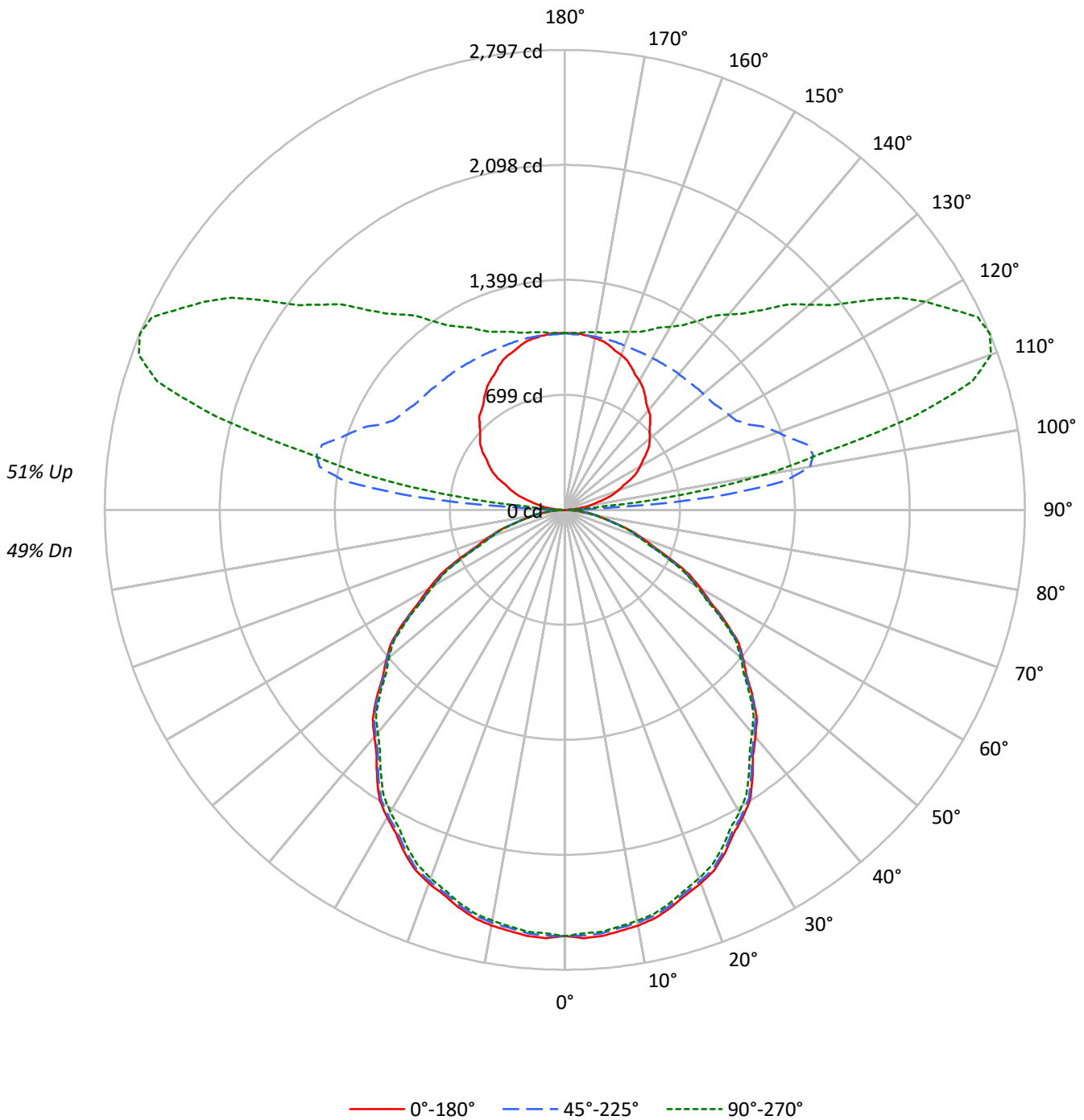
Lumens per Lamp: N/A
Luminaire Lumens: 13615.7 lumens
Efficiency: N/A
Efficacy: 112.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

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 | 90 | 86 | 90 | 86 | 83 | 80 | 73 | 70 | 68 | 60 | 59 | 57 | 49 | 48 | 47 | 41 |
| 2 | 89 | 82 | 76 | 71 | 82 | 76 | 70 | 66 | 64 | 60 | 57 | 53 | 50 | 48 | 43 | 41 | 40 | 35 |
| 3 | 81 | 72 | 65 | 59 | 75 | 67 | 60 | 55 | 57 | 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 | 46 | 40 | 45 | 40 | 35 | 38 | 34 | 30 | 31 | 28 | 26 | 22 |
| 6 | 63 | 51 | 43 | 37 | 58 | 47 | 40 | 35 | 41 | 35 | 31 | 34 | 30 | 27 | 28 | 25 | 23 | 20 |
| 7 | 58 | 46 | 38 | 33 | 54 | 43 | 36 | 31 | 37 | 31 | 27 | 31 | 27 | 24 | 26 | 22 | 20 | 17 |
| 8 | 54 | 42 | 34 | 29 | 50 | 39 | 32 | 27 | 34 | 28 | 24 | 28 | 24 | 21 | 24 | 20 | 18 | 16 |
| 9 | 50 | 38 | 31 | 26 | 46 | 36 | 29 | 24 | 31 | 25 | 22 | 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° | 11957 | 11957 | 11957 |
| 5° | 12045 | 11971 | 11929 |
| 10° | 12025 | 11939 | 11886 |
| 15° | 11945 | 11880 | 11814 |
| 20° | 11865 | 11799 | 11709 |
| 25° | 11725 | 11644 | 11528 |
| 30° | 11508 | 11447 | 11302 |
| 35° | 11207 | 11130 | 10989 |
| 40° | 10848 | 10780 | 10656 |
| 45° | 10552 | 10478 | 10374 |
| 50° | 10173 | 10108 | 10010 |
| 55° | 9646 | 9519 | 9445 |
| 60° | 8781 | 8531 | 8488 |
| 65° | 7737 | 7414 | 7390 |
| 70° | 6679 | 6404 | 6404 |
| 75° | 5750 | 5668 | 5588 |
| 80° | 5069 | 5130 | 5008 |
| 85° | 3970 | 4330 | 4330 |



TEST NUMBER: P563628

CATALOG NUMBER: SQ4-PP3-100U-100D-935-1D-UNV-STD-W-8

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 245.1 | 1.8 |
| 10°-20° | 699.8 | 5.1 |
| 20°-30° | 1048.2 | 7.7 |
| 30°-40° | 1229.5 | 9.0 |
| 40°-50° | 1233.4 | 9.1 |
| 50°-60° | 1052.2 | 7.7 |
| 60°-70° | 686.2 | 5.0 |
| 70°-80° | 344.3 | 2.5 |
| 80°-90° | 97.5 | 0.7 |
| 90°-100° | 503.0 | 3.7 |
| 100°-110° | 1388.8 | 10.2 |
| 110°-120° | 1432.3 | 10.5 |
| 120°-130° | 1150.9 | 8.5 |
| 130°-140° | 904.5 | 6.6 |
| 140°-150° | 693.7 | 5.1 |
| 150°-160° | 498.6 | 3.7 |
| 160°-170° | 304.9 | 2.2 |
| 170°-180° | 102.8 | 0.8 |
| 0°-30° | 1993.2 | 14.6 |
| 0°-40° | 3222.7 | 23.7 |
| 0°-60° | 5508.3 | 40.5 |
| 0°-90° | 6636.2 | 48.7 |
| 90°-120° | 3324.1 | 24.4 |
| 90°-150° | 6073.2 | 44.6 |
| 90°-180° | 6979.0 | 51.3 |
| 0°-180° | 13615.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 2592 | 2592 | 2592 | 2592 | 2592 | |
| 5° | 2601 | 2577 | 2585 | 2576 | 2576 | 247 |
| 15° | 2501 | 2477 | 2488 | 2478 | 2474 | 706 |
| 25° | 2304 | 2277 | 2288 | 2267 | 2265 | 1059 |
| 35° | 1990 | 1970 | 1976 | 1954 | 1951 | 1243 |
| 45° | 1617 | 1606 | 1606 | 1590 | 1590 | 1245 |
| 55° | 1199 | 1195 | 1184 | 1177 | 1174 | 1066 |
| 65° | 709 | 695 | 679 | 675 | 677 | 707 |
| 75° | 323 | 323 | 318 | 316 | 314 | 350 |
| 85° | 75 | 82 | 82 | 82 | 82 | 88 |
| 90° | 3 | 7 | 14 | 16 | 17 | 8 |
| 95° | 74 | 272 | 913 | 375 | 244 | 79 |
| 105° | 248 | 382 | 1528 | 2333 | 2196 | 263 |
| 115° | 443 | 536 | 1231 | 2436 | 2770 | 436 |
| 125° | 608 | 692 | 1115 | 1888 | 2215 | 541 |
| 135° | 732 | 811 | 1084 | 1529 | 1724 | 566 |
| 145° | 849 | 908 | 1071 | 1302 | 1401 | 532 |
| 155° | 957 | 989 | 1062 | 1168 | 1205 | 441 |
| 165° | 1036 | 1050 | 1067 | 1109 | 1117 | 292 |
| 175° | 1074 | 1076 | 1069 | 1084 | 1081 | 102 |
| 180° | 1074 | 1074 | 1074 | 1074 | 1074 | |

TEST NUMBER: P563628

CATALOG NUMBER: SQ4-PP3-100U-100D-935-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 2592.0 | 2592.0 | 2592.0 | 2592.0 | 2592.0 |
| 2.5° | 2608.3 | 2587.0 | 2592.0 | 2588.1 | 2577.4 |
| 5° | 2601.1 | 2576.6 | 2585.2 | 2576.1 | 2576.1 |
| 7.5° | 2583.3 | 2556.7 | 2565.2 | 2556.1 | 2555.6 |
| 10° | 2567.0 | 2540.3 | 2548.8 | 2539.7 | 2537.4 |
| 12.5° | 2543.4 | 2516.7 | 2527.0 | 2516.1 | 2515.6 |
| 15° | 2501.1 | 2476.7 | 2487.5 | 2478.3 | 2473.8 |
| 17.5° | 2453.4 | 2426.7 | 2439.8 | 2427.0 | 2425.2 |
| 20° | 2417.0 | 2390.4 | 2403.4 | 2385.2 | 2385.2 |
| 22.5° | 2373.4 | 2346.8 | 2361.6 | 2338.0 | 2338.0 |
| 25° | 2303.5 | 2276.8 | 2287.6 | 2267.1 | 2264.8 |
| 27.5° | 2220.3 | 2194.1 | 2205.3 | 2182.1 | 2181.7 |
| 30° | 2160.4 | 2135.9 | 2149.0 | 2124.0 | 2121.7 |
| 32.5° | 2094.9 | 2072.3 | 2081.8 | 2056.7 | 2054.5 |
| 35° | 1990.0 | 1970.0 | 1976.3 | 1953.6 | 1951.4 |
| 37.5° | 1879.6 | 1859.1 | 1866.4 | 1846.8 | 1846.0 |
| 40° | 1801.4 | 1788.1 | 1790.1 | 1774.1 | 1769.6 |
| 42.5° | 1728.7 | 1713.6 | 1715.6 | 1699.6 | 1698.7 |
| 45° | 1617.4 | 1606.3 | 1606.1 | 1590.2 | 1590.2 |
| 47.5° | 1499.3 | 1490.9 | 1488.4 | 1475.2 | 1474.8 |
| 50° | 1417.5 | 1410.9 | 1408.4 | 1397.0 | 1394.8 |
| 52.5° | 1332.1 | 1329.0 | 1321.2 | 1311.6 | 1311.2 |
| 55° | 1199.4 | 1195.0 | 1183.5 | 1176.7 | 1174.4 |
| 57.5° | 1055.4 | 1046.5 | 1033.6 | 1023.7 | 1025.4 |
| 60° | 951.8 | 942.9 | 924.6 | 920.0 | 920.0 |
| 62.5° | 851.9 | 841.2 | 822.8 | 816.5 | 820.1 |
| 65° | 708.8 | 695.4 | 679.2 | 674.7 | 677.0 |
| 67.5° | 578.8 | 566.8 | 549.3 | 549.2 | 547.5 |
| 70° | 495.2 | 488.6 | 474.8 | 474.8 | 474.8 |
| 72.5° | 420.7 | 417.6 | 407.5 | 407.5 | 405.7 |
| 75° | 322.6 | 322.6 | 318.0 | 315.7 | 313.5 |
| 77.5° | 241.7 | 242.6 | 240.3 | 238.0 | 234.0 |
| 80° | 190.8 | 195.3 | 193.1 | 190.8 | 188.5 |
| 82.5° | 143.6 | 148.0 | 147.7 | 143.6 | 143.1 |
| 85° | 75.0 | 81.6 | 81.8 | 81.8 | 81.8 |
| 87.5° | 20.7 | 28.5 | 31.8 | 32.2 | 34.3 |
| 90° | 3.4 | 6.8 | 13.7 | 15.5 | 17.2 |
| 92.5° | 30.9 | 128.4 | 229.6 | 83.8 | 65.3 |
| 95° | 73.9 | 272.2 | 912.6 | 375.1 | 244.1 |
| 97.5° | 122.4 | 304.9 | 1351.9 | 1040.9 | 753.8 |
| 100° | 158.1 | 324.5 | 1514.2 | 1524.9 | 1239.2 |
| 102.5° | 192.5 | 346.8 | 1545.8 | 1884.1 | 1613.2 |
| 105° | 247.5 | 381.9 | 1527.9 | 2332.6 | 2196.5 |
| 107.5° | 305.9 | 425.6 | 1442.7 | 2548.9 | 2598.7 |
| 110° | 347.2 | 454.7 | 1376.7 | 2595.5 | 2756.8 |

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CATALOG NUMBER: SQ4-PP3-100U-100D-935-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------------|--------------|---------------|---------------|---------------|
| 112.5° | <i>384.3</i> | <i>487.8</i> | <i>1314.8</i> | <i>2558.7</i> | <i>2796.7</i> |
| 115° | 443.4 | 535.9 | 1230.6 | 2436.1 | <i>2770.5</i> |
| 117.5° | 495.0 | 587.1 | 1175.2 | 2263.6 | <i>2644.0</i> |
| 120° | 529.4 | 620.1 | 1153.2 | 2146.8 | <i>2529.9</i> |
| 122.5° | 562.4 | 649.1 | 1135.4 | 2037.7 | <i>2400.7</i> |
| 125° | 608.4 | 692.4 | 1115.4 | 1887.7 | <i>2215.4</i> |
| 127.5° | 647.6 | 731.6 | 1103.7 | 1760.9 | <i>2043.5</i> |
| 130° | 673.7 | 757.8 | 1098.2 | 1683.3 | <i>1940.4</i> |
| 132.5° | 698.5 | 778.5 | 1092.7 | 1618.1 | <i>1851.0</i> |
| 135° | 732.2 | 811.1 | 1084.5 | 1528.9 | <i>1723.9</i> |
| 137.5° | 770.0 | 841.9 | 1080.4 | 1454.0 | <i>1620.4</i> |
| 140° | 790.6 | 861.2 | 1077.6 | 1404.1 | <i>1550.3</i> |
| 142.5° | 814.0 | 879.2 | 1074.9 | 1359.7 | <i>1488.4</i> |
| 145° | 849.0 | 907.9 | 1070.7 | 1301.6 | <i>1400.7</i> |
| 147.5° | 882.7 | 934.1 | 1067.0 | 1252.6 | <i>1329.6</i> |
| 150° | 907.5 | 949.5 | 1065.6 | 1223.4 | <i>1285.6</i> |
| 152.5° | 926.7 | 966.0 | 1064.2 | 1198.4 | <i>1249.8</i> |
| 155° | 957.3 | 989.2 | 1062.2 | 1167.8 | <i>1204.8</i> |
| 157.5° | 985.5 | 1010.0 | 1062.5 | 1145.6 | <i>1170.8</i> |
| 160° | 1002.0 | 1023.8 | 1063.9 | 1133.0 | <i>1151.5</i> |
| 162.5° | 1015.8 | 1034.9 | 1065.2 | 1122.0 | <i>1136.4</i> |
| 165° | 1036.4 | 1049.8 | 1067.3 | 1108.8 | <i>1117.2</i> |
| 167.5° | 1052.2 | 1060.3 | 1069.0 | 1100.7 | <i>1103.4</i> |
| 170° | 1060.4 | 1067.2 | 1069.0 | 1096.5 | <i>1096.5</i> |
| 172.5° | 1067.3 | 1071.3 | 1069.0 | 1091.0 | <i>1089.7</i> |
| 175° | 1074.2 | 1075.9 | 1069.0 | 1084.4 | <i>1081.1</i> |
| 177.5° | 1076.9 | 1075.6 | 1068.7 | 1078.2 | <i>1075.6</i> |
| 180° | 1074.2 | 1074.2 | 1074.2 | 1074.2 | <i>1074.2</i> |

(END OF REPORT)