

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: P563820

Luminaire Tested: **SQ4-PP3-150U-100D-935-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563820
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-PP3-150U-100D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

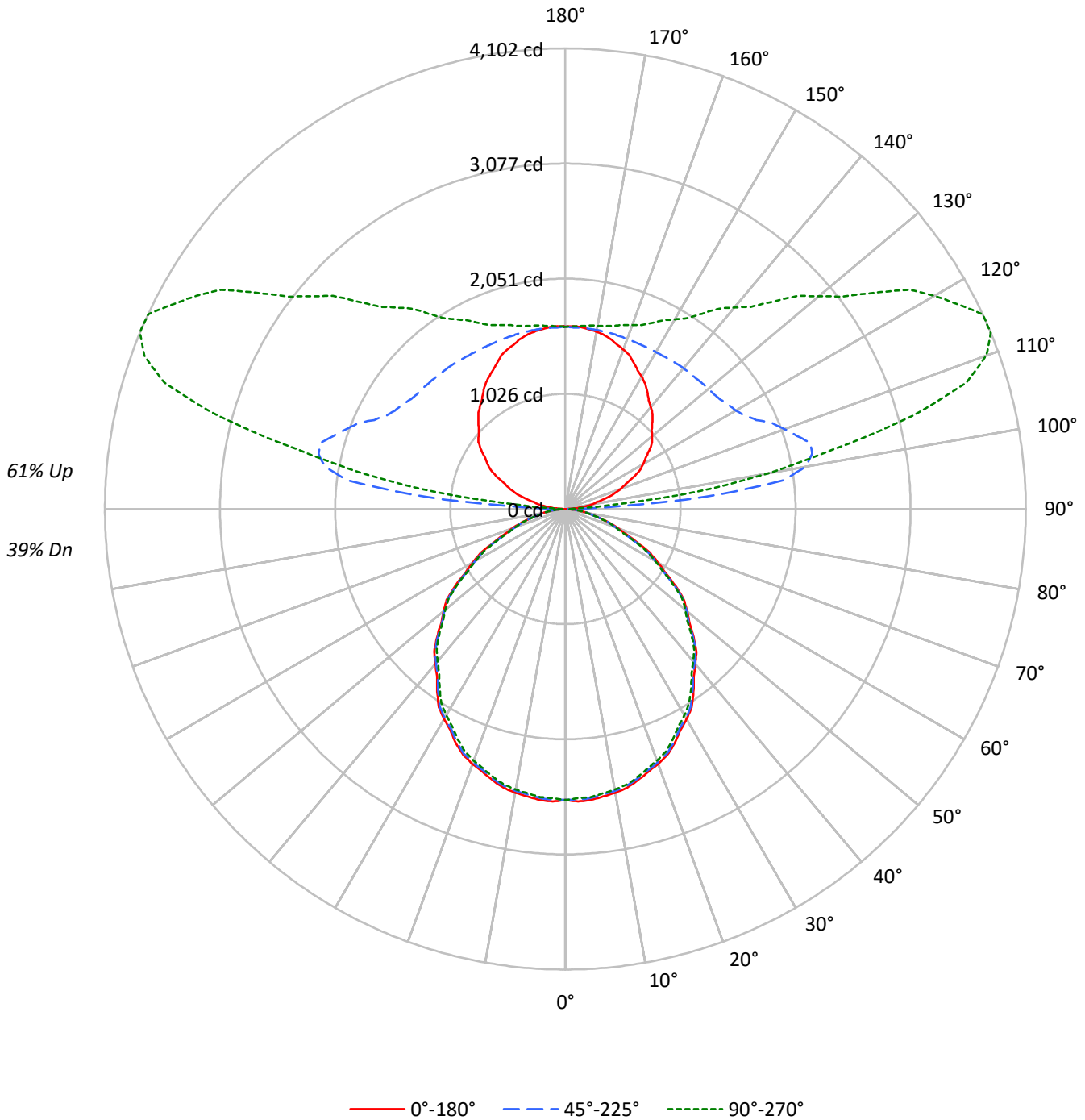
Lumens per Lamp: N/A
Luminaire Lumens: 17105.7 lumens
Efficiency: N/A
Efficacy: 115.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 148.4
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 | 104 | 104 | 104 | 104 | 95 | 95 | 95 | 95 | 77 | 77 | 77 | 61 | 61 | 61 | 46 | 46 | 46 | 39 |
| 1 | 95 | 91 | 87 | 84 | 87 | 83 | 80 | 77 | 68 | 66 | 64 | 54 | 52 | 51 | 41 | 40 | 39 | 33 |
| 2 | 87 | 80 | 74 | 69 | 79 | 73 | 68 | 63 | 60 | 56 | 53 | 47 | 45 | 43 | 36 | 34 | 33 | 28 |
| 3 | 79 | 70 | 63 | 57 | 72 | 64 | 58 | 53 | 53 | 48 | 44 | 42 | 39 | 36 | 32 | 30 | 28 | 24 |
| 4 | 73 | 62 | 54 | 49 | 66 | 57 | 50 | 45 | 47 | 42 | 38 | 37 | 34 | 31 | 29 | 26 | 24 | 20 |
| 5 | 67 | 55 | 47 | 42 | 60 | 51 | 44 | 39 | 42 | 37 | 33 | 33 | 30 | 27 | 26 | 23 | 21 | 18 |
| 6 | 61 | 50 | 42 | 36 | 56 | 45 | 38 | 33 | 38 | 32 | 28 | 30 | 26 | 24 | 23 | 21 | 19 | 16 |
| 7 | 57 | 45 | 37 | 31 | 51 | 41 | 34 | 29 | 34 | 29 | 25 | 27 | 24 | 21 | 21 | 19 | 17 | 14 |
| 8 | 52 | 40 | 33 | 28 | 48 | 37 | 30 | 26 | 31 | 26 | 22 | 25 | 21 | 18 | 20 | 17 | 15 | 12 |
| 9 | 49 | 37 | 30 | 25 | 44 | 34 | 27 | 23 | 28 | 23 | 20 | 23 | 19 | 17 | 18 | 15 | 13 | 11 |
| 10 | 46 | 34 | 27 | 22 | 41 | 31 | 25 | 21 | 26 | 21 | 18 | 21 | 18 | 15 | 17 | 14 | 12 | 10 |

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 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 245.1 | 1.4 |
| 10°-20° | 699.8 | 4.1 |
| 20°-30° | 1048.2 | 6.1 |
| 30°-40° | 1229.5 | 7.2 |
| 40°-50° | 1233.4 | 7.2 |
| 50°-60° | 1052.2 | 6.2 |
| 60°-70° | 686.2 | 4.0 |
| 70°-80° | 344.3 | 2.0 |
| 80°-90° | 98.7 | 0.6 |
| 90°-100° | 754.6 | 4.4 |
| 100°-110° | 2040.2 | 11.9 |
| 110°-120° | 2145.0 | 12.5 |
| 120°-130° | 1742.3 | 10.2 |
| 130°-140° | 1366.7 | 8.0 |
| 140°-150° | 1049.0 | 6.1 |
| 150°-160° | 754.4 | 4.4 |
| 160°-170° | 460.8 | 2.7 |
| 170°-180° | 155.4 | 0.9 |
| 0°-30° | 1993.2 | 11.7 |
| 0°-40° | 3222.7 | 18.8 |
| 0°-60° | 5508.3 | 32.2 |
| 0°-90° | 6637.4 | 38.8 |
| 90°-120° | 4939.8 | 28.9 |
| 90°-150° | 9097.7 | 53.2 |
| 90°-180° | 10468.0 | 61.2 |
| 0°-180° | 17105.7 | 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° | 4 | 10 | 23 | 24 | 23 | 11 |
| 95° | 117 | 411 | 1255 | 649 | 386 | 123 |
| 105° | 379 | 586 | 2263 | 3339 | 3202 | 399 |
| 115° | 668 | 816 | 1877 | 3634 | 4102 | 659 |
| 125° | 914 | 1047 | 1692 | 2855 | 3354 | 815 |
| 135° | 1096 | 1226 | 1646 | 2305 | 2609 | 847 |
| 145° | 1274 | 1370 | 1624 | 1973 | 2124 | 797 |
| 155° | 1438 | 1495 | 1610 | 1770 | 1828 | 663 |
| 165° | 1566 | 1581 | 1617 | 1680 | 1688 | 441 |
| 175° | 1625 | 1624 | 1618 | 1639 | 1636 | 154 |
| 180° | 1624 | 1624 | 1624 | 1624 | 1624 | |

TEST NUMBER: P563820

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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 | 29.2 | 33.6 | 34.0 | 35.4 |
| 90° | 3.5 | 10.3 | 22.7 | 24.4 | 22.7 |
| 92.5° | 49.6 | 180.9 | 356.9 | 154.9 | 112.2 |
| 95° | 117.1 | 411.0 | 1254.9 | 649.4 | 386.3 |
| 97.5° | 188.1 | 471.4 | 1956.1 | 1618.8 | 1188.8 |
| 100° | 241.2 | 495.8 | 2174.2 | 2267.5 | 1833.4 |
| 102.5° | 290.1 | 529.7 | 2251.1 | 2759.3 | 2434.6 |
| 105° | 379.3 | 586.0 | 2263.3 | 3338.6 | 3201.9 |
| 107.5° | 461.8 | 650.4 | 2164.4 | 3700.0 | 3745.4 |
| 110° | 526.1 | 697.0 | 2076.3 | 3797.0 | 3990.1 |

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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 583.4 | 743.4 | 1995.2 | 3777.6 | 4102.0 |
| 115° | 667.6 | 816.3 | 1877.1 | 3633.7 | 4102.0 |
| 117.5° | 750.1 | 889.6 | 1799.1 | 3413.9 | 3944.7 |
| 120° | 800.5 | 937.2 | 1753.0 | 3256.1 | 3797.9 |
| 122.5° | 848.0 | 982.0 | 1725.0 | 3087.0 | 3632.9 |
| 125° | 914.1 | 1047.4 | 1691.8 | 2854.9 | 3353.9 |
| 127.5° | 974.9 | 1105.8 | 1672.2 | 2665.5 | 3104.4 |
| 130° | 1008.5 | 1143.5 | 1663.9 | 2548.5 | 2945.0 |
| 132.5° | 1043.4 | 1177.0 | 1655.5 | 2442.9 | 2807.9 |
| 135° | 1095.8 | 1225.7 | 1646.4 | 2305.2 | 2609.4 |
| 137.5° | 1148.6 | 1271.3 | 1638.7 | 2193.5 | 2441.3 |
| 140° | 1185.0 | 1299.5 | 1635.9 | 2121.5 | 2342.0 |
| 142.5° | 1219.9 | 1327.6 | 1630.3 | 2056.6 | 2249.7 |
| 145° | 1274.1 | 1369.8 | 1623.7 | 1973.1 | 2123.5 |
| 147.5° | 1323.4 | 1408.2 | 1616.0 | 1897.5 | 2013.1 |
| 150° | 1359.7 | 1434.9 | 1613.2 | 1856.5 | 1948.7 |
| 152.5° | 1393.3 | 1458.9 | 1611.8 | 1818.3 | 1894.2 |
| 155° | 1438.4 | 1494.8 | 1609.7 | 1770.0 | 1828.1 |
| 157.5° | 1485.2 | 1524.5 | 1610.0 | 1736.4 | 1774.7 |
| 160° | 1511.8 | 1544.3 | 1611.4 | 1715.2 | 1742.5 |
| 162.5° | 1532.8 | 1559.8 | 1612.8 | 1698.2 | 1718.7 |
| 165° | 1566.0 | 1581.4 | 1616.7 | 1679.8 | 1688.3 |
| 167.5° | 1588.7 | 1599.3 | 1617.0 | 1664.0 | 1668.1 |
| 170° | 1602.7 | 1607.8 | 1618.4 | 1656.9 | 1656.9 |
| 172.5° | 1613.9 | 1614.9 | 1618.4 | 1648.4 | 1647.1 |
| 175° | 1625.4 | 1623.7 | 1618.4 | 1639.3 | 1635.9 |
| 177.5° | 1629.3 | 1625.2 | 1618.1 | 1632.0 | 1627.9 |
| 180° | 1623.7 | 1623.7 | 1623.7 | 1623.7 | 1623.7 |

(END OF REPORT)