

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: P564480

Luminaire Tested: **SQ4-PR1-150U-100D-835-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564480
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-PR1-150U-100D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

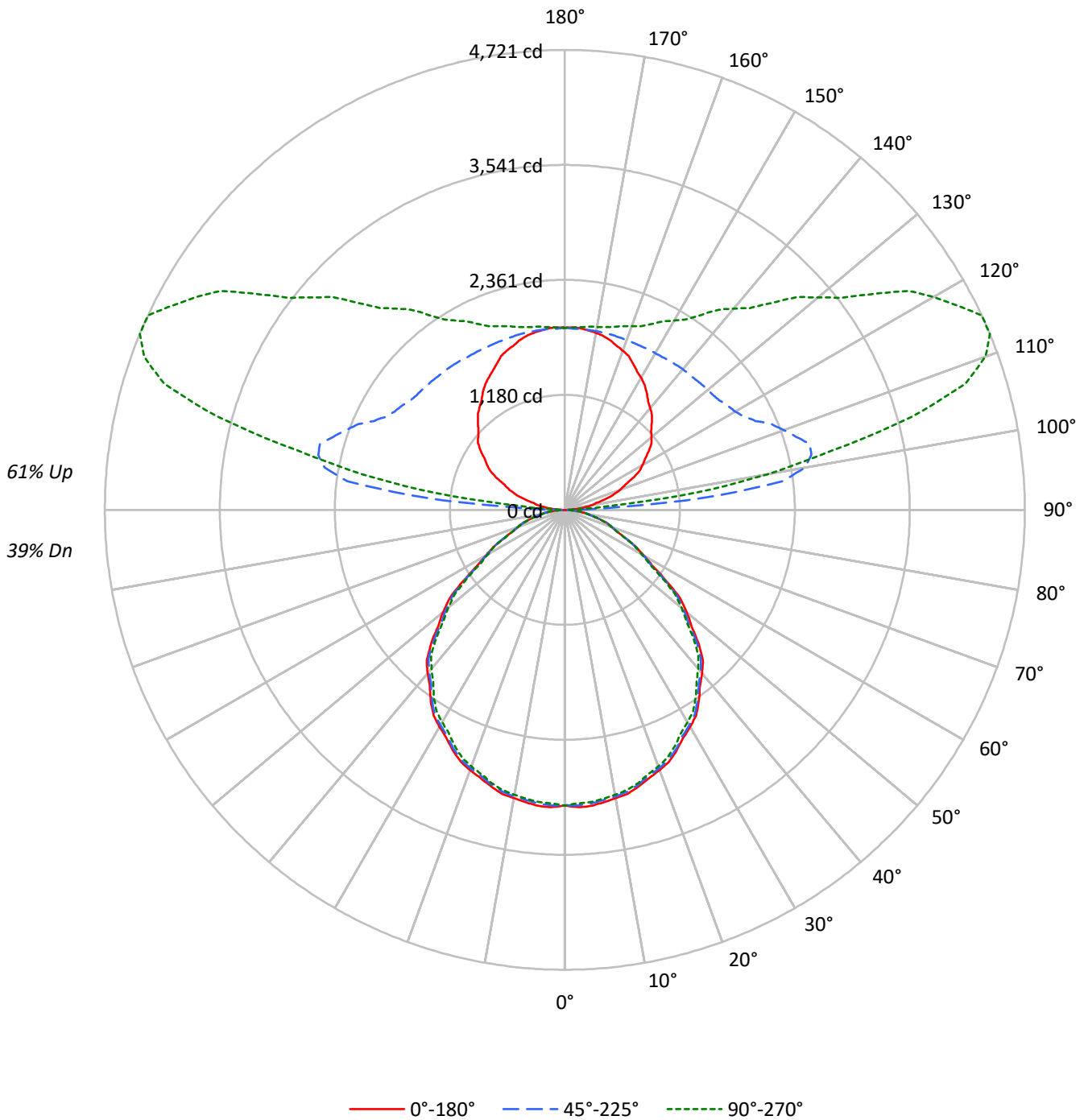
Lumens per Lamp: N/A
Luminaire Lumens: 19641.6 lumens
Efficiency: N/A
Efficacy: 132.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

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 | 88 | 84 | 87 | 83 | 80 | 77 | 68 | 66 | 64 | 54 | 52 | 51 | 41 | 40 | 39 | 33 |
| 2 | 87 | 80 | 74 | 69 | 79 | 73 | 68 | 64 | 60 | 56 | 53 | 47 | 45 | 43 | 36 | 35 | 33 | 28 |
| 3 | 80 | 70 | 63 | 58 | 72 | 64 | 58 | 53 | 53 | 48 | 45 | 42 | 39 | 36 | 32 | 30 | 28 | 24 |
| 4 | 73 | 62 | 55 | 49 | 66 | 57 | 50 | 45 | 47 | 42 | 38 | 38 | 34 | 31 | 29 | 27 | 25 | 21 |
| 5 | 67 | 56 | 48 | 42 | 61 | 51 | 44 | 39 | 42 | 37 | 33 | 34 | 30 | 27 | 26 | 24 | 22 | 18 |
| 6 | 62 | 50 | 42 | 36 | 56 | 46 | 39 | 34 | 38 | 33 | 29 | 31 | 27 | 24 | 24 | 21 | 19 | 16 |
| 7 | 57 | 45 | 37 | 32 | 52 | 41 | 34 | 30 | 34 | 29 | 25 | 28 | 24 | 21 | 22 | 19 | 17 | 14 |
| 8 | 53 | 41 | 33 | 28 | 48 | 37 | 31 | 26 | 31 | 26 | 22 | 25 | 22 | 19 | 20 | 17 | 15 | 13 |
| 9 | 49 | 37 | 30 | 25 | 45 | 34 | 28 | 23 | 29 | 24 | 20 | 23 | 20 | 17 | 18 | 16 | 14 | 11 |
| 10 | 46 | 34 | 27 | 22 | 42 | 31 | 25 | 21 | 26 | 21 | 18 | 21 | 18 | 15 | 17 | 14 | 12 | 10 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 14006 | 14006 | 14006 |
| 5° | 14132 | 14023 | 13950 |
| 10° | 14087 | 13989 | 13916 |
| 15° | 14025 | 13938 | 13863 |
| 20° | 13955 | 13864 | 13762 |
| 25° | 13856 | 13763 | 13604 |
| 30° | 13707 | 13609 | 13414 |
| 35° | 13504 | 13387 | 13195 |
| 40° | 13197 | 13055 | 12818 |
| 45° | 12659 | 12437 | 12181 |
| 50° | 11711 | 11430 | 11204 |
| 55° | 10221 | 9990 | 9780 |
| 60° | 8614 | 8541 | 8372 |
| 65° | 7450 | 7478 | 7421 |
| 70° | 6842 | 6877 | 6877 |
| 75° | 6572 | 6572 | 6618 |
| 80° | 6182 | 6254 | 6182 |
| 85° | 4981 | 5536 | 5536 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 287.1 | 1.5 |
| 10°-20° | 821.4 | 4.2 |
| 20°-30° | 1239.0 | 6.3 |
| 30°-40° | 1476.3 | 7.5 |
| 40°-50° | 1455.5 | 7.4 |
| 50°-60° | 1112.3 | 5.7 |
| 60°-70° | 688.3 | 3.5 |
| 70°-80° | 390.9 | 2.0 |
| 80°-90° | 122.8 | 0.6 |
| 90°-100° | 868.4 | 4.4 |
| 100°-110° | 2348.1 | 12.0 |
| 110°-120° | 2468.6 | 12.6 |
| 120°-130° | 2005.2 | 10.2 |
| 130°-140° | 1572.9 | 8.0 |
| 140°-150° | 1207.2 | 6.1 |
| 150°-160° | 868.2 | 4.4 |
| 160°-170° | 530.4 | 2.7 |
| 170°-180° | 178.8 | 0.9 |
| 0°-30° | 2347.5 | 12.0 |
| 0°-40° | 3823.8 | 19.5 |
| 0°-60° | 6391.6 | 32.5 |
| 0°-90° | 7593.7 | 38.7 |
| 90°-120° | 5685.1 | 28.9 |
| 90°-150° | 10470.5 | 53.3 |
| 90°-180° | 12048.0 | 61.3 |
| 0°-180° | 19641.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 3036 | 3036 | 3036 | 3036 | 3036 | |
| 5° | 3052 | 3018 | 3028 | 3018 | 3012 | 290 |
| 15° | 2937 | 2906 | 2918 | 2908 | 2903 | 829 |
| 25° | 2722 | 2689 | 2704 | 2675 | 2673 | 1253 |
| 35° | 2398 | 2370 | 2377 | 2346 | 2343 | 1497 |
| 45° | 1940 | 1915 | 1906 | 1872 | 1867 | 1487 |
| 55° | 1271 | 1250 | 1242 | 1221 | 1216 | 1139 |
| 65° | 682 | 677 | 685 | 680 | 680 | 691 |
| 75° | 369 | 369 | 369 | 371 | 371 | 389 |
| 85° | 94 | 99 | 105 | 105 | 105 | 109 |
| 90° | 4 | 12 | 26 | 28 | 26 | 13 |
| 95° | 135 | 473 | 1444 | 747 | 444 | 141 |
| 105° | 436 | 674 | 2605 | 3842 | 3685 | 460 |
| 115° | 768 | 940 | 2160 | 4182 | 4721 | 759 |
| 125° | 1052 | 1205 | 1947 | 3286 | 3860 | 938 |
| 135° | 1261 | 1411 | 1895 | 2653 | 3003 | 975 |
| 145° | 1466 | 1576 | 1869 | 2271 | 2444 | 917 |
| 155° | 1655 | 1720 | 1853 | 2037 | 2104 | 764 |
| 165° | 1802 | 1820 | 1861 | 1933 | 1943 | 508 |
| 175° | 1871 | 1869 | 1863 | 1887 | 1883 | 178 |
| 180° | 1869 | 1869 | 1869 | 1869 | 1869 | |



TEST NUMBER: P564480

CATALOG NUMBER: SQ4-PR1-150U-100D-835-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 3036.1 | 3036.1 | 3036.1 | 3036.1 | 3036.1 |
| 2.5° | 3054.9 | 3028.3 | 3036.1 | 3029.5 | 3015.1 |
| 5° | 3051.8 | 3018.5 | 3028.2 | 3017.6 | 3012.5 |
| 7.5° | 3028.2 | 2995.5 | 3005.2 | 2994.7 | 2991.6 |
| 10° | 3007.3 | 2976.6 | 2986.4 | 2975.8 | 2970.7 |
| 12.5° | 2984.3 | 2951.6 | 2963.4 | 2950.7 | 2945.6 |
| 15° | 2936.7 | 2906.0 | 2918.4 | 2907.8 | 2902.7 |
| 17.5° | 2884.4 | 2851.7 | 2864.0 | 2851.8 | 2845.2 |
| 20° | 2842.6 | 2811.9 | 2824.2 | 2805.9 | 2803.3 |
| 22.5° | 2796.5 | 2765.8 | 2778.2 | 2753.6 | 2753.1 |
| 25° | 2722.3 | 2689.0 | 2704.0 | 2675.1 | 2672.6 |
| 27.5° | 2633.9 | 2603.2 | 2615.6 | 2586.2 | 2583.1 |
| 30° | 2573.2 | 2542.5 | 2554.9 | 2523.4 | 2518.3 |
| 32.5° | 2504.2 | 2475.5 | 2485.9 | 2454.4 | 2451.3 |
| 35° | 2398.0 | 2369.9 | 2377.1 | 2345.6 | 2343.1 |
| 37.5° | 2277.2 | 2251.6 | 2255.7 | 2221.2 | 2218.6 |
| 40° | 2191.4 | 2165.8 | 2167.9 | 2131.2 | 2128.6 |
| 42.5° | 2097.3 | 2071.7 | 2069.5 | 2032.9 | 2030.3 |
| 45° | 1940.4 | 1914.8 | 1906.4 | 1872.3 | 1867.1 |
| 47.5° | 1761.5 | 1735.9 | 1720.2 | 1692.4 | 1688.8 |
| 50° | 1631.8 | 1606.2 | 1592.6 | 1568.9 | 1561.2 |
| 52.5° | 1491.6 | 1466.1 | 1454.5 | 1432.9 | 1425.2 |
| 55° | 1270.9 | 1250.5 | 1242.1 | 1221.1 | 1216.0 |
| 57.5° | 1061.2 | 1047.4 | 1045.0 | 1024.5 | 1022.5 |
| 60° | 933.6 | 925.9 | 925.7 | 907.4 | 907.4 |
| 62.5° | 824.8 | 819.2 | 823.2 | 811.1 | 809.1 |
| 65° | 682.5 | 677.4 | 685.1 | 679.9 | 679.9 |
| 67.5° | 570.1 | 570.1 | 574.8 | 572.7 | 572.7 |
| 70° | 507.3 | 507.3 | 509.9 | 509.9 | 509.9 |
| 72.5° | 450.8 | 448.8 | 455.5 | 455.5 | 453.4 |
| 75° | 368.7 | 368.7 | 368.7 | 371.3 | 371.3 |
| 77.5° | 287.1 | 287.6 | 289.7 | 289.2 | 287.1 |
| 80° | 232.7 | 235.3 | 235.4 | 232.7 | 232.7 |
| 82.5° | 178.3 | 180.9 | 181.0 | 180.4 | 178.3 |
| 85° | 94.1 | 99.3 | 104.6 | 104.6 | 104.6 |
| 87.5° | 28.0 | 37.8 | 47.1 | 47.4 | 45.0 |
| 90° | 4.0 | 11.9 | 26.1 | 28.1 | 26.1 |
| 92.5° | 57.1 | 208.2 | 410.7 | 178.3 | 129.1 |
| 95° | 134.8 | 473.1 | 1444.2 | 747.4 | 444.5 |
| 97.5° | 216.4 | 542.5 | 2251.2 | 1863.0 | 1368.2 |
| 100° | 277.6 | 570.6 | 2502.3 | 2609.6 | 2110.0 |
| 102.5° | 333.9 | 609.6 | 2590.8 | 3175.7 | 2802.0 |
| 105° | 436.5 | 674.5 | 2604.9 | 3842.4 | 3685.0 |
| 107.5° | 531.4 | 748.6 | 2491.0 | 4258.3 | 4310.6 |
| 110° | 605.5 | 802.1 | 2389.6 | 4369.9 | 4592.2 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 671.4 | 855.5 | 2296.3 | 4347.6 | 4720.9 |
| 115° | 768.4 | 939.5 | 2160.3 | 4182.0 | 4720.9 |
| 117.5° | 863.3 | 1023.8 | 2070.6 | 3929.0 | 4539.9 |
| 120° | 921.3 | 1078.6 | 2017.5 | 3747.5 | 4370.9 |
| 122.5° | 976.0 | 1130.2 | 1985.3 | 3552.9 | 4181.0 |
| 125° | 1052.0 | 1205.4 | 1947.1 | 3285.7 | 3860.0 |
| 127.5° | 1122.0 | 1272.7 | 1924.6 | 3067.7 | 3572.8 |
| 130° | 1160.6 | 1316.0 | 1914.9 | 2933.0 | 3389.3 |
| 132.5° | 1200.8 | 1354.6 | 1905.3 | 2811.5 | 3231.6 |
| 135° | 1261.2 | 1410.7 | 1894.8 | 2653.0 | 3003.1 |
| 137.5° | 1321.9 | 1463.2 | 1886.0 | 2524.4 | 2809.6 |
| 140° | 1363.8 | 1495.5 | 1882.7 | 2441.7 | 2695.4 |
| 142.5° | 1404.0 | 1527.9 | 1876.3 | 2366.9 | 2589.2 |
| 145° | 1466.4 | 1576.5 | 1868.7 | 2270.9 | 2443.9 |
| 147.5° | 1523.1 | 1620.6 | 1859.8 | 2183.9 | 2316.8 |
| 150° | 1564.9 | 1651.5 | 1856.6 | 2136.6 | 2242.8 |
| 152.5° | 1603.5 | 1679.1 | 1855.0 | 2092.7 | 2180.0 |
| 155° | 1655.4 | 1720.3 | 1852.6 | 2037.1 | 2104.0 |
| 157.5° | 1709.3 | 1754.6 | 1853.0 | 1998.4 | 2042.4 |
| 160° | 1739.9 | 1777.3 | 1854.6 | 1974.0 | 2005.4 |
| 162.5° | 1764.1 | 1795.1 | 1856.2 | 1954.5 | 1978.1 |
| 165° | 1802.3 | 1820.0 | 1860.6 | 1933.2 | 1943.1 |
| 167.5° | 1828.4 | 1840.6 | 1861.0 | 1915.0 | 1919.7 |
| 170° | 1844.5 | 1850.4 | 1862.6 | 1906.9 | 1906.9 |
| 172.5° | 1857.4 | 1858.6 | 1862.6 | 1897.2 | 1895.6 |
| 175° | 1870.7 | 1868.7 | 1862.6 | 1886.7 | 1882.7 |
| 177.5° | 1875.1 | 1870.4 | 1862.2 | 1878.2 | 1873.5 |
| 180° | 1868.7 | 1868.7 | 1868.7 | 1868.7 | 1868.7 |

(END OF REPORT)