

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: P563784

Luminaire Tested: **SQ4-PP3-150U-075D-835-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563784
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-075D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS.
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

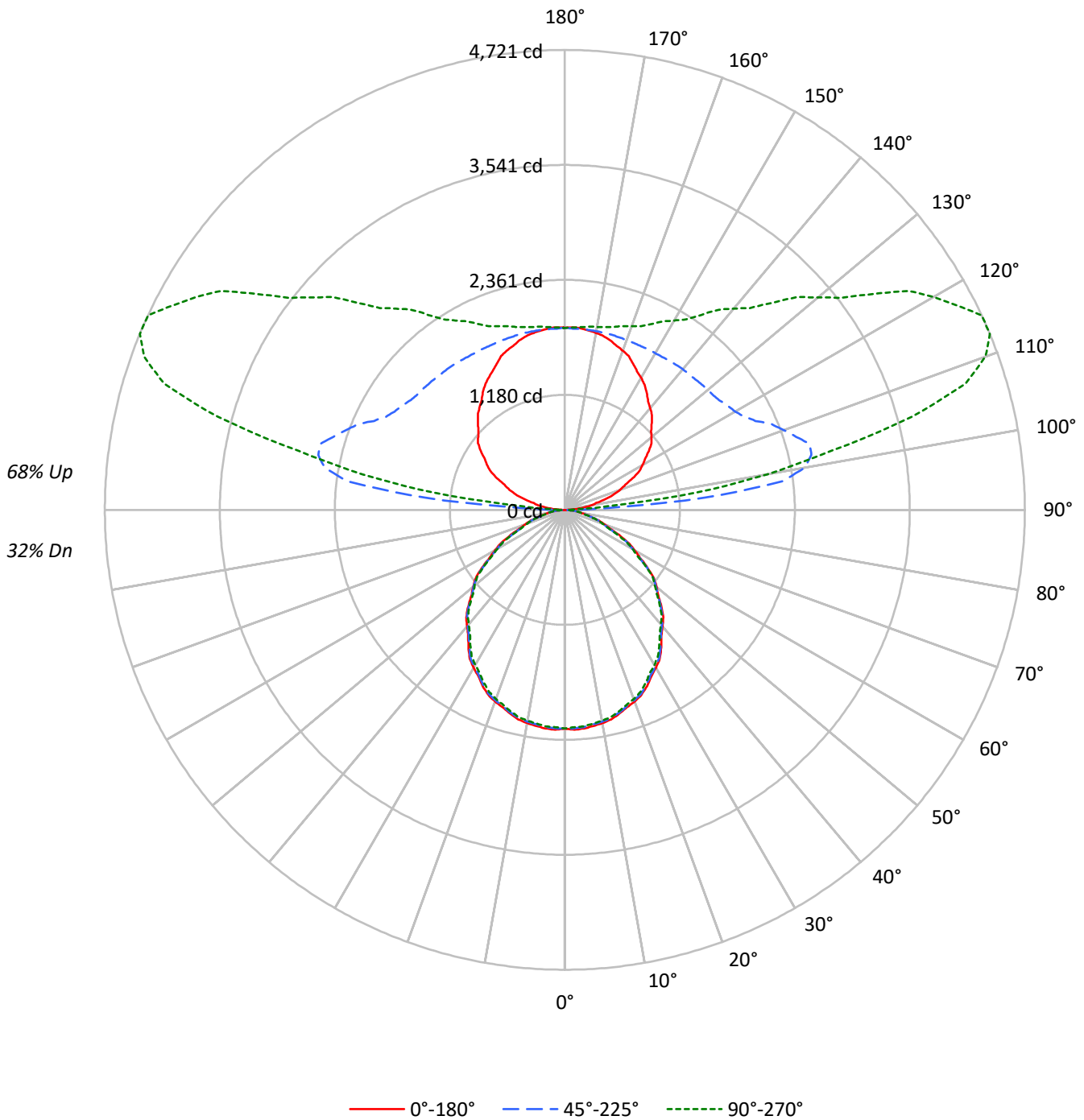
Lumens per Lamp: N/A
Luminaire Lumens: 17798.0 lumens
Efficiency: N/A
Efficacy: 135.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 131.1
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 | 103 | 103 | 103 | 103 | 93 | 93 | 93 | 93 | 74 | 74 | 74 | 56 | 56 | 56 | 40 | 40 | 40 | 32 |
| 1 | 94 | 90 | 86 | 83 | 84 | 81 | 78 | 75 | 65 | 62 | 60 | 49 | 48 | 47 | 35 | 35 | 34 | 27 |
| 2 | 86 | 79 | 73 | 68 | 77 | 71 | 66 | 62 | 57 | 53 | 50 | 43 | 41 | 39 | 31 | 30 | 29 | 23 |
| 3 | 78 | 69 | 62 | 56 | 70 | 62 | 56 | 52 | 50 | 46 | 42 | 38 | 36 | 33 | 28 | 26 | 25 | 20 |
| 4 | 71 | 61 | 53 | 48 | 64 | 55 | 49 | 44 | 44 | 40 | 36 | 34 | 31 | 28 | 25 | 23 | 21 | 17 |
| 5 | 65 | 54 | 46 | 41 | 59 | 49 | 42 | 37 | 40 | 35 | 31 | 31 | 27 | 25 | 22 | 20 | 18 | 15 |
| 6 | 60 | 49 | 41 | 35 | 54 | 44 | 37 | 32 | 36 | 31 | 27 | 28 | 24 | 21 | 20 | 18 | 16 | 13 |
| 7 | 56 | 44 | 36 | 31 | 50 | 40 | 33 | 28 | 32 | 27 | 24 | 25 | 22 | 19 | 19 | 16 | 14 | 12 |
| 8 | 51 | 40 | 32 | 27 | 46 | 36 | 29 | 25 | 29 | 24 | 21 | 23 | 19 | 17 | 17 | 15 | 13 | 10 |
| 9 | 48 | 36 | 29 | 24 | 43 | 33 | 26 | 22 | 27 | 22 | 19 | 21 | 18 | 15 | 16 | 13 | 12 | 9 |
| 10 | 45 | 33 | 26 | 21 | 40 | 30 | 24 | 20 | 25 | 20 | 17 | 19 | 16 | 14 | 14 | 12 | 10 | 8 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 10357 | 10357 | 10357 |
| 5° | 10433 | 10369 | 10333 |
| 10° | 10415 | 10341 | 10296 |
| 15° | 10346 | 10290 | 10234 |
| 20° | 10278 | 10220 | 10142 |
| 25° | 10156 | 10085 | 9986 |
| 30° | 9967 | 9915 | 9790 |
| 35° | 9707 | 9641 | 9518 |
| 40° | 9397 | 9337 | 9230 |
| 45° | 9140 | 9075 | 8986 |
| 50° | 8812 | 8755 | 8670 |
| 55° | 8356 | 8245 | 8182 |
| 60° | 7606 | 7388 | 7352 |
| 65° | 6701 | 6422 | 6401 |
| 70° | 5785 | 5546 | 5546 |
| 75° | 4980 | 4910 | 4839 |
| 80° | 4391 | 4444 | 4338 |
| 85° | 3435 | 3747 | 3747 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 212.3 | 1.2 |
| 10°-20° | 606.2 | 3.4 |
| 20°-30° | 908.0 | 5.1 |
| 30°-40° | 1065.0 | 6.0 |
| 40°-50° | 1068.3 | 6.0 |
| 50°-60° | 911.4 | 5.1 |
| 60°-70° | 594.4 | 3.3 |
| 70°-80° | 298.2 | 1.7 |
| 80°-90° | 86.4 | 0.5 |
| 90°-100° | 868.4 | 4.9 |
| 100°-110° | 2348.1 | 13.2 |
| 110°-120° | 2468.6 | 13.9 |
| 120°-130° | 2005.2 | 11.3 |
| 130°-140° | 1572.9 | 8.8 |
| 140°-150° | 1207.2 | 6.8 |
| 150°-160° | 868.2 | 4.9 |
| 160°-170° | 530.4 | 3.0 |
| 170°-180° | 178.8 | 1.0 |
| 0°-30° | 1726.4 | 9.7 |
| 0°-40° | 2791.4 | 15.7 |
| 0°-60° | 4771.1 | 26.8 |
| 0°-90° | 5750.1 | 32.3 |
| 90°-120° | 5685.1 | 31.9 |
| 90°-150° | 10470.5 | 58.8 |
| 90°-180° | 12048.0 | 67.7 |
| 0°-180° | 17798.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 2245 | 2245 | 2245 | 2245 | 2245 | |
| 5° | 2253 | 2232 | 2239 | 2231 | 2231 | 214 |
| 15° | 2166 | 2145 | 2155 | 2147 | 2143 | 611 |
| 25° | 1995 | 1972 | 1981 | 1964 | 1962 | 917 |
| 35° | 1724 | 1706 | 1712 | 1692 | 1690 | 1077 |
| 45° | 1401 | 1391 | 1391 | 1377 | 1377 | 1079 |
| 55° | 1039 | 1035 | 1025 | 1019 | 1017 | 923 |
| 65° | 614 | 602 | 588 | 584 | 586 | 613 |
| 75° | 279 | 279 | 276 | 274 | 272 | 303 |
| 85° | 65 | 71 | 71 | 71 | 71 | 76 |
| 90° | 4 | 12 | 26 | 28 | 26 | 11 |
| 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: P563784

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 2245.1 | 2245.1 | 2245.1 | 2245.1 | 2245.1 |
| 2.5° | 2259.3 | 2240.8 | 2245.1 | 2241.7 | 2232.5 |
| 5° | 2253.0 | 2231.8 | 2239.2 | 2231.3 | 2231.3 |
| 7.5° | 2237.6 | 2214.5 | 2221.9 | 2214.0 | 2213.6 |
| 10° | 2223.5 | 2200.4 | 2207.7 | 2199.8 | 2197.9 |
| 12.5° | 2203.0 | 2179.9 | 2188.8 | 2179.4 | 2179.0 |
| 15° | 2166.4 | 2145.2 | 2154.6 | 2146.6 | 2142.8 |
| 17.5° | 2125.1 | 2102.0 | 2113.3 | 2102.2 | 2100.7 |
| 20° | 2093.6 | 2070.5 | 2081.8 | 2066.0 | 2066.0 |
| 22.5° | 2055.8 | 2032.7 | 2045.6 | 2025.1 | 2025.1 |
| 25° | 1995.2 | 1972.1 | 1981.4 | 1963.7 | 1961.8 |
| 27.5° | 1923.2 | 1900.5 | 1910.2 | 1890.1 | 1889.7 |
| 30° | 1871.2 | 1850.1 | 1861.4 | 1839.7 | 1837.8 |
| 32.5° | 1814.6 | 1795.0 | 1803.2 | 1781.5 | 1779.5 |
| 35° | 1723.7 | 1706.4 | 1711.9 | 1692.1 | 1690.2 |
| 37.5° | 1628.0 | 1610.3 | 1616.6 | 1599.7 | 1598.9 |
| 40° | 1560.4 | 1548.8 | 1550.5 | 1536.7 | 1532.8 |
| 42.5° | 1497.4 | 1484.3 | 1486.0 | 1472.2 | 1471.4 |
| 45° | 1401.0 | 1391.4 | 1391.1 | 1377.4 | 1377.4 |
| 47.5° | 1298.7 | 1291.3 | 1289.2 | 1277.8 | 1277.4 |
| 50° | 1227.8 | 1222.0 | 1219.9 | 1210.1 | 1208.1 |
| 52.5° | 1153.8 | 1151.1 | 1144.4 | 1136.1 | 1135.7 |
| 55° | 1038.9 | 1035.1 | 1025.1 | 1019.2 | 1017.3 |
| 57.5° | 914.2 | 906.5 | 895.3 | 886.7 | 888.2 |
| 60° | 824.4 | 816.8 | 800.8 | 796.9 | 796.9 |
| 62.5° | 737.9 | 728.6 | 712.7 | 707.2 | 710.3 |
| 65° | 613.9 | 602.4 | 588.3 | 584.4 | 586.4 |
| 67.5° | 501.4 | 491.0 | 475.8 | 475.7 | 474.2 |
| 70° | 428.9 | 423.2 | 411.2 | 411.2 | 411.2 |
| 72.5° | 364.4 | 361.7 | 353.0 | 353.0 | 351.4 |
| 75° | 279.4 | 279.4 | 275.5 | 273.5 | 271.5 |
| 77.5° | 209.4 | 210.1 | 208.2 | 206.1 | 202.7 |
| 80° | 165.3 | 169.1 | 167.3 | 165.2 | 163.3 |
| 82.5° | 124.4 | 128.2 | 127.9 | 124.3 | 124.0 |
| 85° | 64.9 | 70.7 | 70.8 | 70.8 | 70.8 |
| 87.5° | 18.1 | 25.8 | 30.4 | 30.8 | 32.0 |
| 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)