

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: P563953

Luminaire Tested: **SQ4-PR1-050U-050D-840-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P563953  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-PR1-050U-050D-840-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

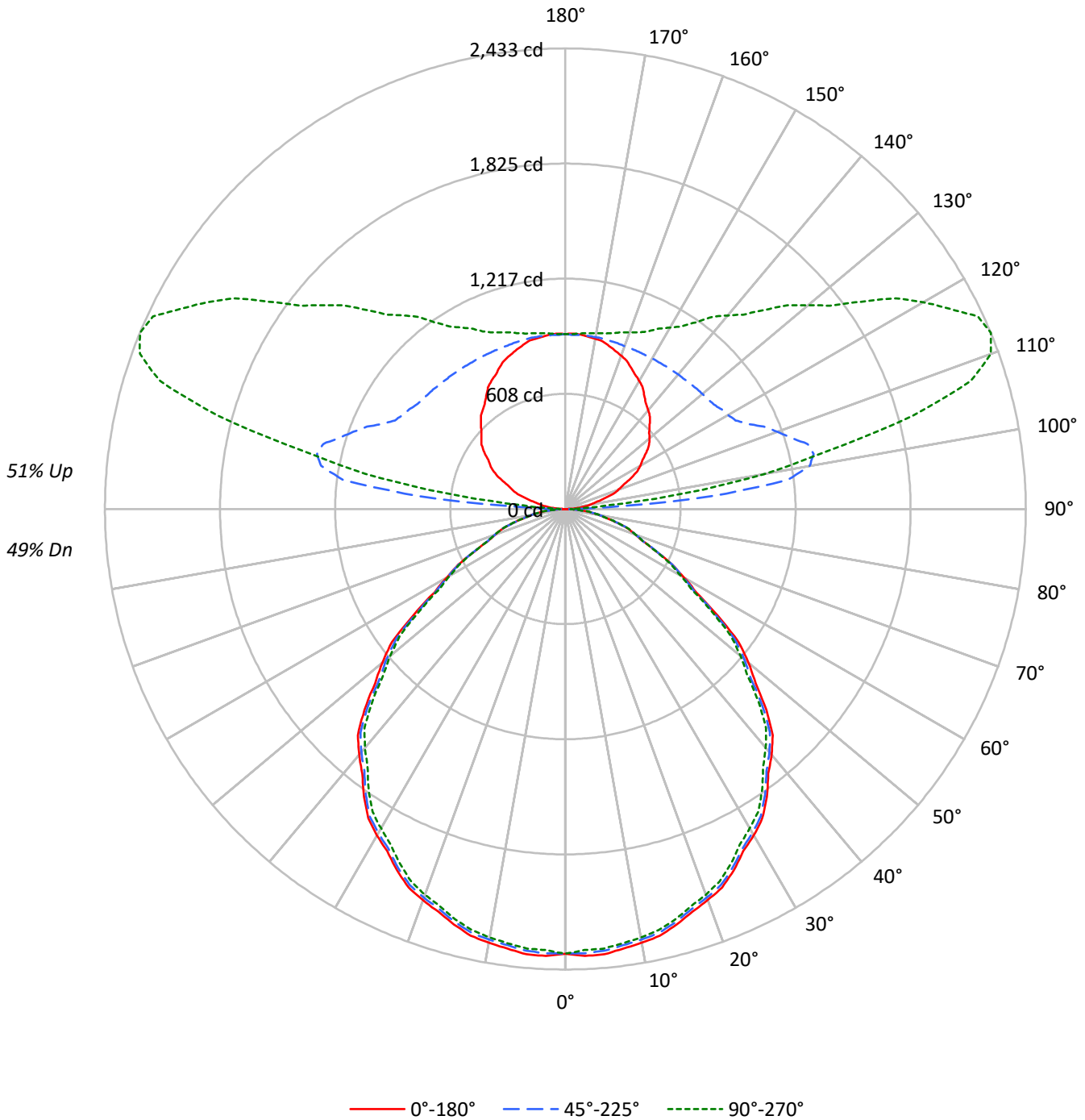
Lumens per Lamp: N/A  
Luminaire Lumens: 11911.4 lumens  
Efficiency: N/A  
Efficacy: 149.6 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 79.6  
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 | 99 | 99 | 99 | 99 | 83 | 83 | 83 | 69 | 69 | 69 | 56 | 56 | 56 | 49 |
| 1   | 98  | 94  | 90  | 86  | 90 | 87 | 83 | 80 | 73 | 71 | 69 | 61 | 59 | 58 | 49 | 48 | 47 | 42 |
| 2   | 89  | 82  | 76  | 71  | 82 | 76 | 71 | 66 | 64 | 61 | 57 | 54 | 51 | 49 | 44 | 42 | 40 | 36 |
| 3   | 82  | 72  | 65  | 60  | 75 | 67 | 61 | 56 | 57 | 52 | 48 | 48 | 44 | 41 | 39 | 37 | 35 | 31 |
| 4   | 75  | 64  | 56  | 51  | 69 | 60 | 53 | 48 | 51 | 46 | 42 | 43 | 39 | 36 | 35 | 32 | 30 | 26 |
| 5   | 69  | 57  | 49  | 43  | 63 | 53 | 46 | 41 | 46 | 40 | 36 | 38 | 34 | 31 | 32 | 29 | 26 | 23 |
| 6   | 63  | 51  | 43  | 38  | 58 | 48 | 41 | 36 | 41 | 36 | 31 | 35 | 31 | 27 | 29 | 26 | 23 | 20 |
| 7   | 59  | 47  | 39  | 33  | 54 | 43 | 36 | 31 | 37 | 32 | 28 | 32 | 27 | 24 | 26 | 23 | 21 | 18 |
| 8   | 54  | 42  | 35  | 29  | 50 | 39 | 33 | 28 | 34 | 29 | 25 | 29 | 25 | 22 | 24 | 21 | 19 | 16 |
| 9   | 51  | 39  | 31  | 26  | 47 | 36 | 29 | 25 | 31 | 26 | 22 | 27 | 22 | 19 | 22 | 19 | 17 | 15 |
| 10  | 47  | 35  | 28  | 23  | 44 | 33 | 27 | 22 | 29 | 24 | 20 | 25 | 20 | 18 | 21 | 18 | 15 | 13 |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 7224 | 7224 | 7224 |
| 5°  | 7289 | 7233 | 7195 |
| 10° | 7266 | 7215 | 7177 |
| 15° | 7234 | 7189 | 7150 |
| 20° | 7197 | 7151 | 7098 |
| 25° | 7147 | 7099 | 7016 |
| 30° | 7070 | 7019 | 6919 |
| 35° | 6965 | 6904 | 6806 |
| 40° | 6806 | 6733 | 6611 |
| 45° | 6529 | 6415 | 6283 |
| 50° | 6040 | 5895 | 5779 |
| 55° | 5272 | 5153 | 5044 |
| 60° | 4443 | 4405 | 4318 |
| 65° | 3842 | 3858 | 3828 |
| 70° | 3529 | 3547 | 3547 |
| 75° | 3390 | 3390 | 3414 |
| 80° | 3190 | 3225 | 3190 |
| 85° | 2569 | 2855 | 2855 |



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 222.1   | 1.9       |
| 10°-20°   | 635.5   | 5.3       |
| 20°-30°   | 958.6   | 8.0       |
| 30°-40°   | 1142.1  | 9.6       |
| 40°-50°   | 1126.0  | 9.5       |
| 50°-60°   | 860.6   | 7.2       |
| 60°-70°   | 532.5   | 4.5       |
| 70°-80°   | 302.5   | 2.5       |
| 80°-90°   | 95.6    | 0.8       |
| 90°-100°  | 443.8   | 3.7       |
| 100°-110° | 1205.5  | 10.1      |
| 110°-120° | 1239.5  | 10.4      |
| 120°-130° | 991.0   | 8.3       |
| 130°-140° | 778.7   | 6.5       |
| 140°-150° | 597.1   | 5.0       |
| 150°-160° | 429.4   | 3.6       |
| 160°-170° | 262.6   | 2.2       |
| 170°-180° | 88.5    | 0.7       |
| 0°-30°    | 1816.2  | 15.2      |
| 0°-40°    | 2958.3  | 24.8      |
| 0°-60°    | 4944.9  | 41.5      |
| 0°-90°    | 5875.5  | 49.3      |
| 90°-120°  | 2888.8  | 24.3      |
| 90°-150°  | 5255.5  | 44.1      |
| 90°-180°  | 6036.0  | 50.7      |
| 0°-180°   | 11911.4 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 2349 | 2349  | 2349 | 2349  | 2349 |      |
| 5°   | 2361 | 2335  | 2343 | 2335  | 2331 | 224  |
| 15°  | 2272 | 2248  | 2258 | 2250  | 2246 | 641  |
| 25°  | 2106 | 2080  | 2092 | 2070  | 2068 | 969  |
| 35°  | 1855 | 1834  | 1839 | 1815  | 1813 | 1158 |
| 45°  | 1501 | 1481  | 1475 | 1448  | 1444 | 1150 |
| 55°  | 983  | 967   | 961  | 945   | 941  | 881  |
| 65°  | 528  | 524   | 530  | 526   | 526  | 535  |
| 75°  | 285  | 285   | 285  | 287   | 287  | 301  |
| 85°  | 73   | 77    | 81   | 81    | 81   | 85   |
| 90°  | 3    | 12    | 21   | 27    | 27   | 7    |
| 95°  | 65   | 243   | 773  | 336   | 226  | 69   |
| 105° | 214  | 333   | 1326 | 2019  | 1899 | 227  |
| 115° | 380  | 462   | 1061 | 2111  | 2405 | 375  |
| 125° | 523  | 596   | 960  | 1618  | 1908 | 466  |
| 135° | 630  | 700   | 933  | 1318  | 1486 | 487  |
| 145° | 728  | 781   | 922  | 1120  | 1204 | 457  |
| 155° | 823  | 852   | 916  | 1005  | 1034 | 380  |
| 165° | 892  | 903   | 918  | 957   | 960  | 252  |
| 175° | 924  | 927   | 922  | 933   | 930  | 88   |
| 180° | 924  | 924   | 924  | 924   | 924  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 2348.9 | 2348.9 | 2348.9 | 2348.9 | 2348.9 |
| 2.5°   | 2363.4 | 2342.9 | 2348.9 | 2343.8 | 2332.7 |
| 5°     | 2361.0 | 2335.3 | 2342.8 | 2334.6 | 2330.7 |
| 7.5°   | 2342.8 | 2317.5 | 2325.0 | 2316.9 | 2314.5 |
| 10°    | 2326.6 | 2302.9 | 2310.4 | 2302.3 | 2298.3 |
| 12.5°  | 2308.8 | 2283.5 | 2292.6 | 2282.8 | 2278.9 |
| 15°    | 2272.0 | 2248.3 | 2257.8 | 2249.7 | 2245.7 |
| 17.5°  | 2231.5 | 2206.2 | 2215.8 | 2206.3 | 2201.2 |
| 20°    | 2199.2 | 2175.4 | 2185.0 | 2170.8 | 2168.8 |
| 22.5°  | 2163.6 | 2139.8 | 2149.4 | 2130.4 | 2130.0 |
| 25°    | 2106.1 | 2080.4 | 2091.9 | 2069.6 | 2067.7 |
| 27.5°  | 2037.7 | 2014.0 | 2023.6 | 2000.8 | 1998.5 |
| 30°    | 1990.8 | 1967.0 | 1976.6 | 1952.2 | 1948.3 |
| 32.5°  | 1937.4 | 1915.2 | 1923.2 | 1898.9 | 1896.5 |
| 35°    | 1855.2 | 1833.5 | 1839.0 | 1814.7 | 1812.7 |
| 37.5°  | 1761.8 | 1742.0 | 1745.2 | 1718.4 | 1716.4 |
| 40°    | 1695.4 | 1675.6 | 1677.2 | 1648.8 | 1646.8 |
| 42.5°  | 1622.6 | 1602.8 | 1601.1 | 1572.8 | 1570.8 |
| 45°    | 1501.2 | 1481.4 | 1474.9 | 1448.5 | 1444.5 |
| 47.5°  | 1362.8 | 1343.0 | 1330.8 | 1309.3 | 1306.5 |
| 50°    | 1262.4 | 1242.7 | 1232.1 | 1213.8 | 1207.8 |
| 52.5°  | 1154.0 | 1134.2 | 1125.3 | 1108.6 | 1102.6 |
| 55°    | 983.3  | 967.4  | 961.0  | 944.7  | 940.8  |
| 57.5°  | 821.0  | 810.3  | 808.5  | 792.6  | 791.1  |
| 60°    | 722.3  | 716.3  | 716.2  | 702.0  | 702.0  |
| 62.5°  | 638.1  | 633.7  | 636.9  | 627.5  | 626.0  |
| 65°    | 528.0  | 524.1  | 530.1  | 526.0  | 526.0  |
| 67.5°  | 441.0  | 441.0  | 444.7  | 443.1  | 443.1  |
| 70°    | 392.5  | 392.5  | 394.5  | 394.5  | 394.5  |
| 72.5°  | 348.8  | 347.2  | 352.4  | 352.4  | 350.8  |
| 75°    | 285.3  | 285.3  | 285.3  | 287.3  | 287.3  |
| 77.5°  | 222.1  | 222.5  | 224.2  | 223.7  | 222.1  |
| 80°    | 180.1  | 182.0  | 182.1  | 180.1  | 180.1  |
| 82.5°  | 138.0  | 140.0  | 140.0  | 139.6  | 138.0  |
| 85°    | 72.8   | 76.8   | 80.9   | 80.9   | 80.9   |
| 87.5°  | 21.6   | 29.7   | 36.5   | 37.7   | 36.1   |
| 90°    | 3.0    | 11.7   | 20.8   | 26.8   | 26.8   |
| 92.5°  | 26.8   | 121.5  | 211.0  | 90.6   | 76.7   |
| 95°    | 65.4   | 242.7  | 772.8  | 336.3  | 225.9  |
| 97.5°  | 108.2  | 268.0  | 1184.8 | 921.8  | 647.4  |
| 100°   | 136.7  | 285.0  | 1310.9 | 1328.8 | 1073.1 |
| 102.5° | 165.3  | 301.9  | 1344.1 | 1643.4 | 1417.9 |
| 105°   | 214.0  | 333.2  | 1325.7 | 2018.6 | 1899.4 |
| 107.5° | 264.5  | 369.8  | 1249.0 | 2212.3 | 2245.4 |
| 110°   | 300.2  | 396.1  | 1192.0 | 2250.4 | 2392.8 |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°    | 67.5°  | 90°    |
|--------|-------|-------|--------|--------|--------|
| 112.5° | 331.1 | 422.4 | 1134.9 | 2218.8 | 2433.2 |
| 115°   | 380.5 | 461.9 | 1061.2 | 2111.2 | 2404.7 |
| 117.5° | 426.8 | 504.7 | 1014.2 | 1958.6 | 2289.4 |
| 120°   | 457.8 | 533.3 | 992.8  | 1856.3 | 2184.8 |
| 122.5° | 483.9 | 559.5 | 978.5  | 1753.8 | 2070.6 |
| 125°   | 523.2 | 595.8 | 960.1  | 1617.7 | 1908.3 |
| 127.5° | 558.2 | 630.3 | 950.0  | 1514.5 | 1763.9 |
| 130°   | 579.6 | 649.4 | 945.2  | 1449.7 | 1673.5 |
| 132.5° | 601.0 | 670.8 | 940.5  | 1394.4 | 1592.6 |
| 135°   | 630.2 | 699.9 | 933.4  | 1317.7 | 1486.2 |
| 137.5° | 661.7 | 725.0 | 929.8  | 1249.9 | 1391.7 |
| 140°   | 680.7 | 741.7 | 927.4  | 1206.7 | 1334.6 |
| 142.5° | 699.7 | 756.1 | 925.0  | 1173.0 | 1279.9 |
| 145°   | 728.3 | 780.6 | 921.5  | 1119.6 | 1203.8 |
| 147.5° | 760.4 | 805.1 | 918.5  | 1077.5 | 1143.8 |
| 150°   | 781.8 | 819.5 | 918.5  | 1053.4 | 1105.8 |
| 152.5° | 798.4 | 831.5 | 916.1  | 1031.8 | 1074.8 |
| 155°   | 823.4 | 852.4 | 915.5  | 1005.3 | 1034.4 |
| 157.5° | 847.7 | 870.4 | 915.5  | 987.4  | 1009.4 |
| 160°   | 862.0 | 882.4 | 915.5  | 975.4  | 992.8  |
| 162.5° | 876.3 | 892.0 | 917.9  | 965.7  | 978.5  |
| 165°   | 891.7 | 903.4 | 918.5  | 957.2  | 960.1  |
| 167.5° | 907.8 | 913.6 | 921.5  | 947.1  | 949.4  |
| 170°   | 912.5 | 918.4 | 921.5  | 942.3  | 942.3  |
| 172.5° | 917.3 | 920.8 | 921.5  | 937.5  | 937.5  |
| 175°   | 924.4 | 927.3 | 921.5  | 933.3  | 930.4  |
| 177.5° | 926.8 | 926.8 | 919.7  | 929.1  | 924.4  |
| 180°   | 924.4 | 924.4 | 924.4  | 924.4  | 924.4  |

(END OF REPORT)