

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: P519923

Luminaire Tested: **SQ4-F-050U-075D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519923
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G3-1910-536-18)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-050U-075D-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

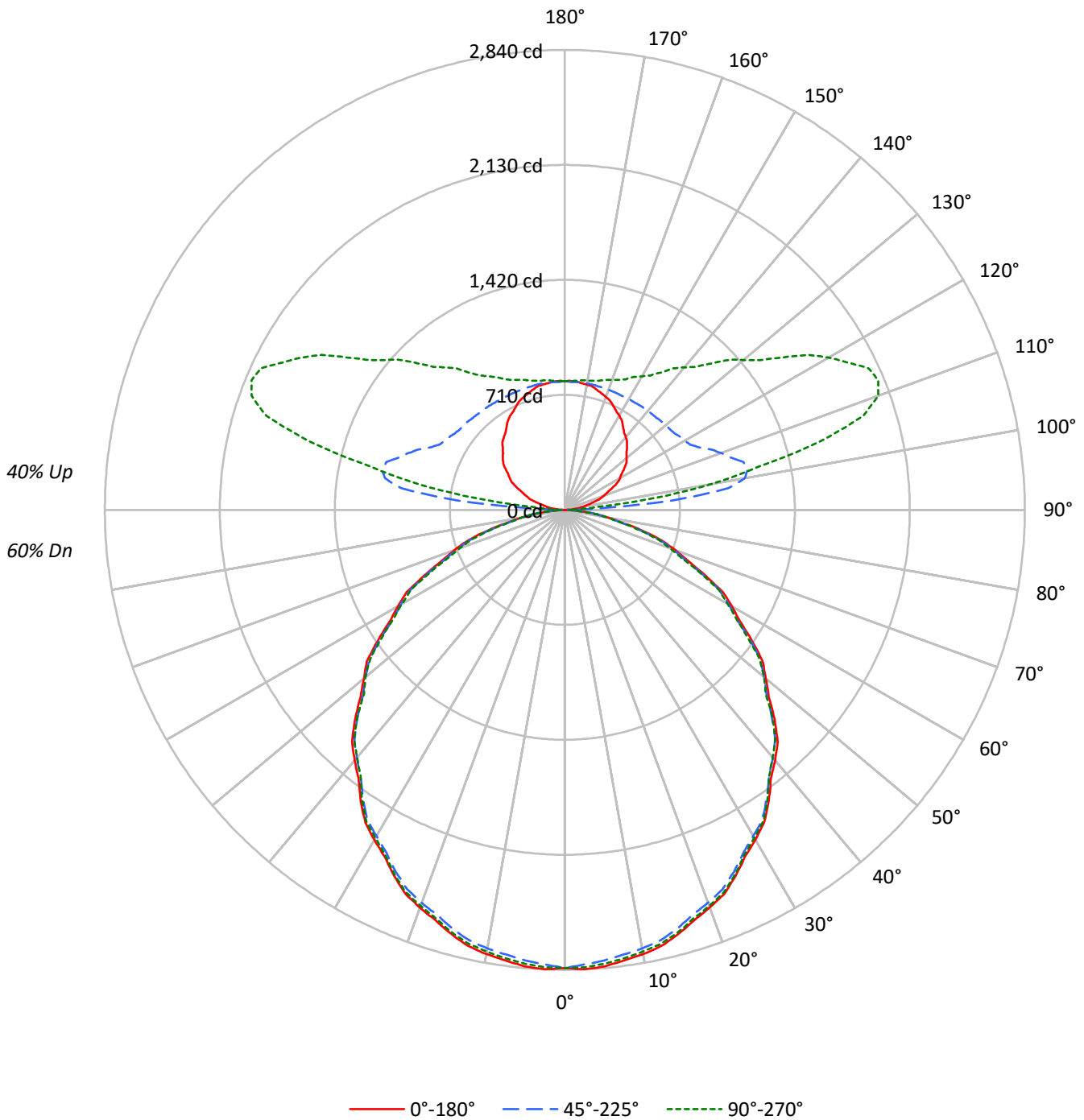
Lumens per Lamp: N/A
Luminaire Lumens: 12919.2 lumens
Efficiency: N/A
Efficacy: 113.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 114.3
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





TEST NUMBER: P519923

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|--|--|
| RF | 20 | | | | | 20 | | | | | 20 | | | | | 20 | | | | |
| RC | 80 | | | | | 70 | | | | | 50 | | | | | 30 | | | | |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | | |
| RCR | | | | | | | | | | | | | | | | | | | | |
| 0 | 109 | 109 | 109 | 109 | 102 | 102 | 102 | 102 | 89 | 89 | 89 | 76 | 76 | 76 | 65 | 65 | 65 | 60 | | |
| 1 | 100 | 96 | 92 | 88 | 93 | 89 | 86 | 83 | 78 | 75 | 73 | 67 | 65 | 64 | 58 | 56 | 55 | 50 | | |
| 2 | 91 | 83 | 77 | 72 | 85 | 78 | 73 | 68 | 68 | 64 | 60 | 59 | 56 | 53 | 51 | 48 | 46 | 42 | | |
| 3 | 83 | 73 | 66 | 60 | 77 | 69 | 62 | 57 | 60 | 55 | 51 | 52 | 48 | 45 | 45 | 42 | 39 | 35 | | |
| 4 | 76 | 65 | 57 | 50 | 71 | 61 | 54 | 48 | 53 | 48 | 43 | 46 | 42 | 38 | 40 | 36 | 34 | 30 | | |
| 5 | 70 | 58 | 49 | 43 | 65 | 54 | 47 | 41 | 48 | 42 | 37 | 42 | 37 | 33 | 36 | 32 | 29 | 26 | | |
| 6 | 64 | 52 | 43 | 37 | 60 | 49 | 41 | 36 | 43 | 37 | 32 | 38 | 33 | 29 | 32 | 29 | 26 | 23 | | |
| 7 | 59 | 47 | 39 | 33 | 55 | 44 | 37 | 31 | 39 | 33 | 28 | 34 | 29 | 26 | 30 | 26 | 23 | 20 | | |
| 8 | 55 | 42 | 35 | 29 | 51 | 40 | 33 | 28 | 35 | 30 | 25 | 31 | 26 | 23 | 27 | 23 | 20 | 18 | | |
| 9 | 51 | 39 | 31 | 26 | 48 | 37 | 30 | 25 | 33 | 27 | 23 | 29 | 24 | 21 | 25 | 21 | 18 | 16 | | |
| 10 | 48 | 36 | 28 | 23 | 45 | 34 | 27 | 22 | 30 | 24 | 20 | 27 | 22 | 19 | 23 | 19 | 17 | 15 | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 8702 | 8702 | 8702 |
| 5° | 8735 | 8624 | 8687 |
| 10° | 8700 | 8588 | 8651 |
| 15° | 8633 | 8526 | 8600 |
| 20° | 8555 | 8454 | 8521 |
| 25° | 8461 | 8373 | 8434 |
| 30° | 8353 | 8262 | 8308 |
| 35° | 8243 | 8157 | 8195 |
| 40° | 8105 | 8022 | 8012 |
| 45° | 7966 | 7865 | 7887 |
| 50° | 7744 | 7683 | 7683 |
| 55° | 7564 | 7468 | 7399 |
| 60° | 7321 | 7195 | 7131 |
| 65° | 6926 | 6795 | 6701 |
| 70° | 6505 | 6343 | 6182 |
| 75° | 5852 | 5638 | 5517 |
| 80° | 4679 | 4589 | 4543 |
| 85° | 2805 | 3165 | 3257 |



TEST NUMBER: P519923

CATALOG NUMBER: SQ4-F-050U-075D-935-1D-UNV-STD-W-12

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 267.1 | 2.1 |
| 10°-20° | 760.3 | 5.9 |
| 20°-30° | 1142.3 | 8.8 |
| 30°-40° | 1363.0 | 10.5 |
| 40°-50° | 1397.8 | 10.8 |
| 50°-60° | 1245.5 | 9.6 |
| 60°-70° | 928.7 | 7.2 |
| 70°-80° | 503.6 | 3.9 |
| 80°-90° | 118.8 | 0.9 |
| 90°-100° | 381.8 | 3.0 |
| 100°-110° | 1037.0 | 8.0 |
| 110°-120° | 1066.3 | 8.3 |
| 120°-130° | 852.5 | 6.6 |
| 130°-140° | 669.8 | 5.2 |
| 140°-150° | 513.6 | 4.0 |
| 150°-160° | 369.4 | 2.9 |
| 160°-170° | 225.9 | 1.7 |
| 170°-180° | 76.1 | 0.6 |
| 0°-30° | 2169.6 | 16.8 |
| 0°-40° | 3532.6 | 27.3 |
| 0°-60° | 6175.9 | 47.8 |
| 0°-90° | 7726.9 | 59.8 |
| 90°-120° | 2485.0 | 19.2 |
| 90°-150° | 4521.0 | 35.0 |
| 90°-180° | 5192.0 | 40.2 |
| 0°-180° | 12919.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 2829 | 2829 | 2829 | 2829 | 2829 | |
| 5° | 2829 | 2824 | 2794 | 2816 | 2814 | 268 |
| 15° | 2711 | 2706 | 2678 | 2699 | 2701 | 765 |
| 25° | 2493 | 2491 | 2468 | 2481 | 2486 | 1148 |
| 35° | 2196 | 2191 | 2173 | 2173 | 2183 | 1372 |
| 45° | 1832 | 1824 | 1808 | 1808 | 1814 | 1410 |
| 55° | 1411 | 1408 | 1393 | 1380 | 1380 | 1260 |
| 65° | 952 | 952 | 934 | 923 | 921 | 947 |
| 75° | 492 | 482 | 474 | 467 | 464 | 517 |
| 85° | 80 | 84 | 90 | 90 | 92 | 110 |
| 90° | 3 | 10 | 18 | 23 | 23 | 6 |
| 95° | 56 | 209 | 665 | 289 | 194 | 60 |
| 105° | 184 | 287 | 1140 | 1736 | 1634 | 196 |
| 115° | 327 | 397 | 913 | 1816 | 2069 | 323 |
| 125° | 450 | 512 | 826 | 1392 | 1642 | 401 |
| 135° | 542 | 602 | 803 | 1134 | 1278 | 419 |
| 145° | 626 | 672 | 793 | 963 | 1036 | 393 |
| 155° | 708 | 733 | 788 | 865 | 890 | 327 |
| 165° | 767 | 777 | 790 | 823 | 826 | 217 |
| 175° | 795 | 798 | 793 | 803 | 800 | 76 |
| 180° | 795 | 795 | 795 | 795 | 795 | |

TEST NUMBER: P519923

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 2829.4 | 2829.4 | 2829.4 | 2829.4 | 2829.4 |
| 2.5° | 2839.6 | 2833.6 | 2808.8 | 2829.3 | 2827.3 |
| 5° | 2829.4 | 2824.4 | 2793.5 | 2816.5 | 2813.9 |
| 7.5° | 2806.2 | 2800.7 | 2770.3 | 2793.5 | 2793.0 |
| 10° | 2785.8 | 2778.2 | 2749.9 | 2772.9 | 2770.3 |
| 12.5° | 2759.0 | 2751.5 | 2723.2 | 2746.2 | 2743.7 |
| 15° | 2711.4 | 2706.4 | 2678.0 | 2698.6 | 2701.1 |
| 17.5° | 2657.0 | 2647.4 | 2622.0 | 2642.1 | 2644.7 |
| 20° | 2613.9 | 2606.4 | 2583.1 | 2601.1 | 2603.6 |
| 22.5° | 2568.7 | 2561.2 | 2538.0 | 2556.0 | 2558.5 |
| 25° | 2493.3 | 2490.8 | 2467.6 | 2480.6 | 2485.6 |
| 27.5° | 2411.7 | 2404.8 | 2386.1 | 2396.0 | 2401.0 |
| 30° | 2352.2 | 2347.2 | 2326.6 | 2334.4 | 2339.4 |
| 32.5° | 2290.7 | 2287.6 | 2269.1 | 2272.9 | 2279.9 |
| 35° | 2195.7 | 2190.7 | 2172.7 | 2172.9 | 2182.9 |
| 37.5° | 2090.5 | 2085.0 | 2070.1 | 2067.6 | 2071.6 |
| 40° | 2018.8 | 2011.2 | 1998.2 | 1995.7 | 1995.7 |
| 42.5° | 1944.9 | 1939.4 | 1922.3 | 1917.8 | 1923.8 |
| 45° | 1831.5 | 1824.0 | 1808.4 | 1808.5 | 1813.5 |
| 47.5° | 1708.9 | 1705.9 | 1687.9 | 1679.7 | 1681.7 |
| 50° | 1618.6 | 1623.6 | 1605.8 | 1595.8 | 1605.8 |
| 52.5° | 1540.6 | 1537.6 | 1521.7 | 1511.4 | 1515.5 |
| 55° | 1410.8 | 1408.3 | 1392.8 | 1380.0 | 1380.0 |
| 57.5° | 1280.6 | 1274.0 | 1257.9 | 1248.4 | 1255.9 |
| 60° | 1190.2 | 1187.8 | 1169.7 | 1151.9 | 1159.4 |
| 62.5° | 1099.9 | 1095.5 | 1077.4 | 1065.6 | 1071.2 |
| 65° | 951.7 | 951.7 | 933.7 | 923.3 | 920.9 |
| 67.5° | 821.9 | 809.8 | 799.8 | 787.4 | 783.9 |
| 70° | 723.4 | 713.3 | 705.4 | 694.9 | 687.5 |
| 72.5° | 626.9 | 620.9 | 608.9 | 598.7 | 597.1 |
| 75° | 492.5 | 482.5 | 474.5 | 466.8 | 464.3 |
| 77.5° | 350.4 | 348.4 | 341.2 | 337.1 | 338.6 |
| 80° | 264.2 | 264.2 | 259.1 | 259.0 | 256.5 |
| 82.5° | 186.2 | 188.3 | 187.3 | 183.1 | 182.6 |
| 85° | 79.5 | 84.5 | 89.7 | 89.8 | 92.3 |
| 87.5° | 14.9 | 26.4 | 26.2 | 27.2 | 27.2 |
| 90° | 2.6 | 10.0 | 17.9 | 23.1 | 23.1 |
| 92.5° | 23.1 | 104.5 | 181.5 | 78.0 | 65.9 |
| 95° | 56.2 | 208.7 | 664.8 | 289.4 | 194.3 |
| 97.5° | 93.1 | 230.6 | 1019.3 | 793.0 | 556.9 |
| 100° | 117.7 | 245.1 | 1127.6 | 1143.1 | 923.1 |
| 102.5° | 142.2 | 259.6 | 1156.2 | 1413.7 | 1219.7 |
| 105° | 184.1 | 286.6 | 1140.5 | 1736.5 | 1633.9 |
| 107.5° | 227.6 | 318.0 | 1074.4 | 1903.1 | 1931.6 |
| 110° | 258.3 | 340.8 | 1025.3 | 1935.9 | 2058.4 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 284.9 | 363.4 | 976.3 | 1908.7 | 2093.2 |
| 115° | 327.3 | 397.3 | 912.9 | 1816.1 | 2068.6 |
| 117.5° | 367.2 | 434.2 | 872.5 | 1684.9 | 1969.4 |
| 120° | 393.8 | 458.8 | 854.0 | 1596.8 | 1879.4 |
| 122.5° | 416.3 | 481.3 | 841.7 | 1508.7 | 1781.2 |
| 125° | 450.0 | 512.5 | 825.9 | 1391.6 | 1641.6 |
| 127.5° | 480.2 | 542.3 | 817.2 | 1302.9 | 1517.4 |
| 130° | 498.6 | 558.6 | 813.1 | 1247.1 | 1439.6 |
| 132.5° | 517.0 | 577.0 | 809.1 | 1199.5 | 1370.1 |
| 135° | 542.1 | 602.1 | 802.9 | 1133.5 | 1278.5 |
| 137.5° | 569.1 | 623.7 | 799.8 | 1075.2 | 1197.2 |
| 140° | 585.5 | 638.0 | 797.8 | 1038.1 | 1148.1 |
| 142.5° | 601.9 | 650.4 | 795.7 | 1009.1 | 1101.0 |
| 145° | 626.5 | 671.5 | 792.7 | 963.1 | 1035.6 |
| 147.5° | 654.1 | 692.6 | 790.1 | 926.9 | 983.9 |
| 150° | 672.5 | 705.0 | 790.1 | 906.2 | 951.2 |
| 152.5° | 686.8 | 715.4 | 788.1 | 887.6 | 924.6 |
| 155° | 708.3 | 733.3 | 787.6 | 864.8 | 889.8 |
| 157.5° | 729.3 | 748.7 | 787.6 | 849.4 | 868.3 |
| 160° | 741.6 | 759.0 | 787.6 | 839.0 | 854.0 |
| 162.5° | 753.8 | 767.3 | 789.6 | 830.8 | 841.7 |
| 165° | 767.1 | 777.1 | 790.1 | 823.4 | 825.9 |
| 167.5° | 780.9 | 785.9 | 792.7 | 814.7 | 816.7 |
| 170° | 785.0 | 790.0 | 792.7 | 810.5 | 810.5 |
| 172.5° | 789.1 | 792.1 | 792.7 | 806.5 | 806.5 |
| 175° | 795.2 | 797.7 | 792.7 | 802.9 | 800.3 |
| 177.5° | 797.3 | 797.3 | 791.1 | 799.3 | 795.2 |
| 180° | 795.2 | 795.2 | 795.2 | 795.2 | 795.2 |

(END OF REPORT)