

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: P519373

Luminaire Tested: **SQ4-WB-100U-050D-935-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519373
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-100U-050D-935-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

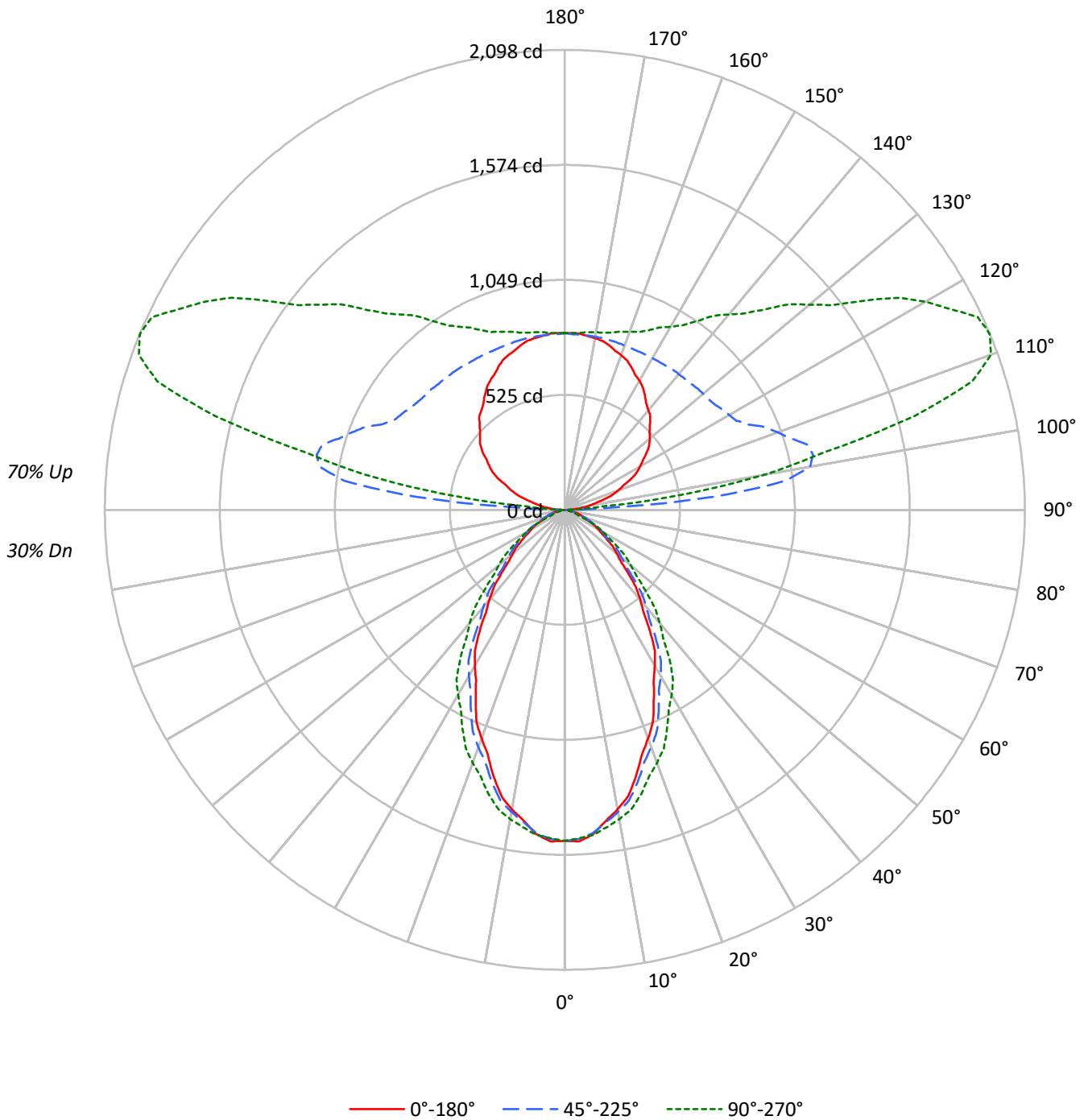
Lumens per Lamp: N/A
Luminaire Lumens: 7436.7 lumens
Efficiency: N/A
Efficacy: 115.7 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 64.3
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





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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 | 102 | 102 | 102 | 102 | 92 | 92 | 92 | 92 | 72 | 72 | 72 | 54 | 54 | 54 | 37 | 37 | 37 | 30 |
| 1 | 94 | 90 | 86 | 83 | 84 | 81 | 78 | 75 | 64 | 62 | 60 | 48 | 47 | 46 | 34 | 33 | 33 | 26 |
| 2 | 86 | 79 | 74 | 69 | 77 | 72 | 67 | 63 | 57 | 54 | 51 | 43 | 41 | 40 | 31 | 30 | 29 | 23 |
| 3 | 79 | 70 | 64 | 58 | 71 | 64 | 58 | 53 | 51 | 47 | 44 | 39 | 36 | 34 | 28 | 27 | 25 | 20 |
| 4 | 72 | 63 | 55 | 50 | 65 | 57 | 51 | 46 | 46 | 41 | 38 | 35 | 32 | 30 | 25 | 24 | 22 | 18 |
| 5 | 67 | 56 | 49 | 43 | 60 | 51 | 44 | 40 | 41 | 36 | 33 | 32 | 29 | 26 | 23 | 21 | 20 | 16 |
| 6 | 62 | 50 | 43 | 38 | 55 | 46 | 39 | 35 | 37 | 33 | 29 | 29 | 26 | 23 | 21 | 19 | 18 | 15 |
| 7 | 57 | 46 | 38 | 33 | 51 | 42 | 35 | 31 | 34 | 29 | 26 | 27 | 23 | 21 | 20 | 18 | 16 | 13 |
| 8 | 53 | 42 | 34 | 29 | 48 | 38 | 32 | 27 | 31 | 26 | 23 | 24 | 21 | 19 | 18 | 16 | 15 | 12 |
| 9 | 49 | 38 | 31 | 26 | 44 | 35 | 29 | 24 | 28 | 24 | 21 | 23 | 19 | 17 | 17 | 15 | 14 | 11 |
| 10 | 46 | 35 | 28 | 24 | 42 | 32 | 26 | 22 | 26 | 22 | 19 | 21 | 18 | 16 | 16 | 14 | 12 | 10 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 9288 | 9288 | 9288 |
| 5° | 9172 | 9139 | 9193 |
| 10° | 8666 | 8745 | 8947 |
| 15° | 8000 | 8185 | 8553 |
| 20° | 7264 | 7538 | 8037 |
| 25° | 6516 | 6871 | 7487 |
| 30° | 5826 | 6207 | 6918 |
| 35° | 5095 | 5463 | 6244 |
| 40° | 4288 | 4629 | 5405 |
| 45° | 3539 | 3845 | 4513 |
| 50° | 2955 | 3221 | 3760 |
| 55° | 2508 | 2765 | 3106 |
| 60° | 2144 | 2396 | 2478 |
| 65° | 1707 | 2016 | 1601 |
| 70° | 1512 | 1574 | 977 |
| 75° | 1402 | 1276 | 599 |
| 80° | 1289 | 1172 | 517 |
| 85° | 1172 | 1073 | 423 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 138.5 | 1.9 |
| 10°-20° | 360.3 | 4.8 |
| 20°-30° | 466.6 | 6.3 |
| 30°-40° | 457.0 | 6.1 |
| 40°-50° | 349.8 | 4.7 |
| 50°-60° | 233.1 | 3.1 |
| 60°-70° | 127.2 | 1.7 |
| 70°-80° | 53.0 | 0.7 |
| 80°-90° | 16.7 | 0.2 |
| 90°-100° | 377.3 | 5.1 |
| 100°-110° | 1041.6 | 14.0 |
| 110°-120° | 1074.2 | 14.4 |
| 120°-130° | 863.2 | 11.6 |
| 130°-140° | 678.4 | 9.1 |
| 140°-150° | 520.3 | 7.0 |
| 150°-160° | 373.9 | 5.0 |
| 160°-170° | 228.7 | 3.1 |
| 170°-180° | 77.1 | 1.0 |
| 0°-30° | 965.4 | 13.0 |
| 0°-40° | 1422.4 | 19.1 |
| 0°-60° | 2005.2 | 27.0 |
| 0°-90° | 2202.1 | 29.6 |
| 90°-120° | 2493.0 | 33.5 |
| 90°-150° | 4554.9 | 61.2 |
| 90°-180° | 5235.0 | 70.4 |
| 0°-180° | 7436.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1510 | 1510 | 1510 | 1510 | 1510 | |
| 5° | 1486 | 1471 | 1480 | 1484 | 1489 | 138 |
| 15° | 1256 | 1252 | 1285 | 1320 | 1343 | 351 |
| 25° | 960 | 963 | 1012 | 1057 | 1103 | 442 |
| 35° | 678 | 682 | 728 | 776 | 832 | 422 |
| 45° | 407 | 415 | 442 | 475 | 519 | 317 |
| 55° | 234 | 244 | 258 | 268 | 290 | 212 |
| 65° | 117 | 127 | 138 | 121 | 110 | 122 |
| 75° | 59 | 59 | 54 | 37 | 25 | 63 |
| 85° | 17 | 17 | 15 | 10 | 6 | 18 |
| 90° | 3 | 5 | 10 | 12 | 13 | 5 |
| 95° | 55 | 204 | 684 | 281 | 183 | 59 |
| 105° | 186 | 286 | 1146 | 1750 | 1647 | 197 |
| 115° | 333 | 402 | 923 | 1827 | 2078 | 327 |
| 125° | 456 | 519 | 837 | 1416 | 1662 | 406 |
| 135° | 549 | 608 | 813 | 1147 | 1293 | 425 |
| 145° | 637 | 681 | 803 | 976 | 1051 | 399 |
| 155° | 718 | 742 | 797 | 876 | 904 | 331 |
| 165° | 777 | 787 | 800 | 832 | 838 | 219 |
| 175° | 806 | 807 | 802 | 813 | 811 | 77 |
| 180° | 806 | 806 | 806 | 806 | 806 | |

TEST NUMBER: P519373

CATALOG NUMBER: SQ4-WB-100U-050D-935-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1510.1 | 1510.1 | 1510.1 | 1510.1 | 1510.1 |
| 2.5° | 1513.8 | 1500.3 | 1503.7 | 1503.6 | 1499.5 |
| 5° | 1485.5 | 1470.6 | 1480.2 | 1483.7 | 1488.9 |
| 7.5° | 1430.4 | 1419.1 | 1436.6 | 1449.6 | 1460.1 |
| 10° | 1387.5 | 1377.8 | 1400.1 | 1418.9 | 1432.5 |
| 12.5° | 1337.7 | 1329.5 | 1357.1 | 1382.4 | 1400.2 |
| 15° | 1256.3 | 1251.7 | 1285.4 | 1320.4 | 1343.1 |
| 17.5° | 1169.2 | 1167.0 | 1205.7 | 1246.5 | 1275.5 |
| 20° | 1109.8 | 1109.2 | 1151.6 | 1194.1 | 1227.8 |
| 22.5° | 1050.0 | 1051.4 | 1095.9 | 1140.1 | 1178.5 |
| 25° | 960.1 | 962.7 | 1012.4 | 1056.6 | 1103.2 |
| 27.5° | 877.0 | 878.2 | 929.6 | 976.2 | 1026.0 |
| 30° | 820.3 | 823.5 | 874.0 | 922.2 | 974.0 |
| 32.5° | 763.6 | 767.3 | 816.7 | 866.6 | 919.4 |
| 35° | 678.5 | 681.7 | 727.5 | 776.5 | 831.6 |
| 37.5° | 590.8 | 595.2 | 635.8 | 682.1 | 736.3 |
| 40° | 534.1 | 540.5 | 576.5 | 620.1 | 673.2 |
| 42.5° | 479.5 | 487.5 | 520.8 | 562.2 | 610.1 |
| 45° | 406.8 | 414.6 | 442.0 | 475.4 | 518.8 |
| 47.5° | 344.3 | 353.2 | 374.2 | 403.0 | 440.1 |
| 50° | 308.8 | 317.2 | 336.6 | 357.9 | 392.9 |
| 52.5° | 277.5 | 285.9 | 303.2 | 319.7 | 349.5 |
| 55° | 233.9 | 243.6 | 257.8 | 267.5 | 289.6 |
| 57.5° | 198.1 | 207.4 | 218.7 | 223.1 | 236.4 |
| 60° | 174.3 | 184.6 | 194.8 | 194.3 | 201.4 |
| 62.5° | 152.5 | 161.3 | 171.5 | 164.5 | 164.9 |
| 65° | 117.3 | 127.0 | 138.5 | 121.0 | 110.0 |
| 67.5° | 94.8 | 96.8 | 108.7 | 84.4 | 71.3 |
| 70° | 84.1 | 84.1 | 87.5 | 65.3 | 54.3 |
| 72.5° | 74.1 | 74.1 | 71.0 | 53.1 | 41.6 |
| 75° | 59.0 | 59.0 | 53.7 | 36.8 | 25.2 |
| 77.5° | 45.5 | 44.9 | 41.1 | 27.5 | 18.3 |
| 80° | 36.4 | 36.4 | 33.1 | 21.7 | 14.6 |
| 82.5° | 28.5 | 28.5 | 25.7 | 17.0 | 10.9 |
| 85° | 16.6 | 16.6 | 15.2 | 9.9 | 6.0 |
| 87.5° | 6.3 | 6.9 | 7.4 | 5.5 | 5.2 |
| 90° | 2.6 | 5.1 | 10.3 | 11.6 | 12.9 |
| 92.5° | 23.2 | 96.3 | 172.2 | 62.8 | 49.0 |
| 95° | 55.4 | 204.2 | 684.5 | 281.4 | 183.0 |
| 97.5° | 91.8 | 228.7 | 1013.9 | 780.6 | 565.4 |
| 100° | 118.6 | 243.4 | 1135.6 | 1143.7 | 929.4 |
| 102.5° | 144.4 | 260.1 | 1159.3 | 1413.1 | 1209.9 |
| 105° | 185.6 | 286.4 | 1145.9 | 1749.5 | 1647.4 |
| 107.5° | 229.4 | 319.2 | 1082.0 | 1911.7 | 1949.0 |
| 110° | 260.4 | 341.0 | 1032.5 | 1946.6 | 2067.6 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 288.2 | 365.9 | 986.1 | 1919.0 | 2097.5 |
| 115° | 332.6 | 401.9 | 922.9 | 1827.1 | 2077.9 |
| 117.5° | 371.2 | 440.3 | 881.4 | 1697.7 | 1983.0 |
| 120° | 397.0 | 465.1 | 864.9 | 1610.1 | 1897.4 |
| 122.5° | 421.8 | 486.8 | 851.5 | 1528.3 | 1800.5 |
| 125° | 456.3 | 519.3 | 836.6 | 1415.8 | 1661.6 |
| 127.5° | 485.7 | 548.7 | 827.8 | 1320.7 | 1532.6 |
| 130° | 505.3 | 568.3 | 823.7 | 1262.5 | 1455.3 |
| 132.5° | 523.9 | 583.9 | 819.6 | 1213.6 | 1388.3 |
| 135° | 549.1 | 608.4 | 813.4 | 1146.7 | 1292.9 |
| 137.5° | 577.5 | 631.4 | 810.3 | 1090.5 | 1215.3 |
| 140° | 593.0 | 645.9 | 808.2 | 1053.0 | 1162.7 |
| 142.5° | 610.5 | 659.4 | 806.2 | 1019.7 | 1116.3 |
| 145° | 636.8 | 680.9 | 803.1 | 976.2 | 1050.6 |
| 147.5° | 662.0 | 700.6 | 800.2 | 939.5 | 997.2 |
| 150° | 680.6 | 712.1 | 799.2 | 917.6 | 964.2 |
| 152.5° | 695.0 | 724.5 | 798.2 | 898.8 | 937.4 |
| 155° | 718.0 | 741.9 | 796.6 | 875.9 | 903.6 |
| 157.5° | 739.1 | 757.5 | 796.9 | 859.2 | 878.1 |
| 160° | 751.5 | 767.9 | 797.9 | 849.8 | 863.6 |
| 162.5° | 761.8 | 776.2 | 798.9 | 841.5 | 852.3 |
| 165° | 777.3 | 787.4 | 800.5 | 831.6 | 837.9 |
| 167.5° | 789.1 | 795.2 | 801.8 | 825.5 | 827.6 |
| 170° | 795.3 | 800.4 | 801.8 | 822.4 | 822.4 |
| 172.5° | 800.5 | 803.5 | 801.8 | 818.2 | 817.2 |
| 175° | 805.6 | 806.9 | 801.8 | 813.3 | 810.8 |
| 177.5° | 807.7 | 806.7 | 801.5 | 808.7 | 806.7 |
| 180° | 805.6 | 805.6 | 805.6 | 805.6 | 805.6 |

(END OF REPORT)