

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

Brand: CORELITE

Report Number: P521912

Luminaire Tested: SQ4-WB-100U-050D-92765-1D-UNV-STD-W-4_2700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521912
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-100U-050D-92765-1D-UNV-STD-W-4_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5851.0 lumens
Efficiency: N/A
Efficacy: 110.6 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

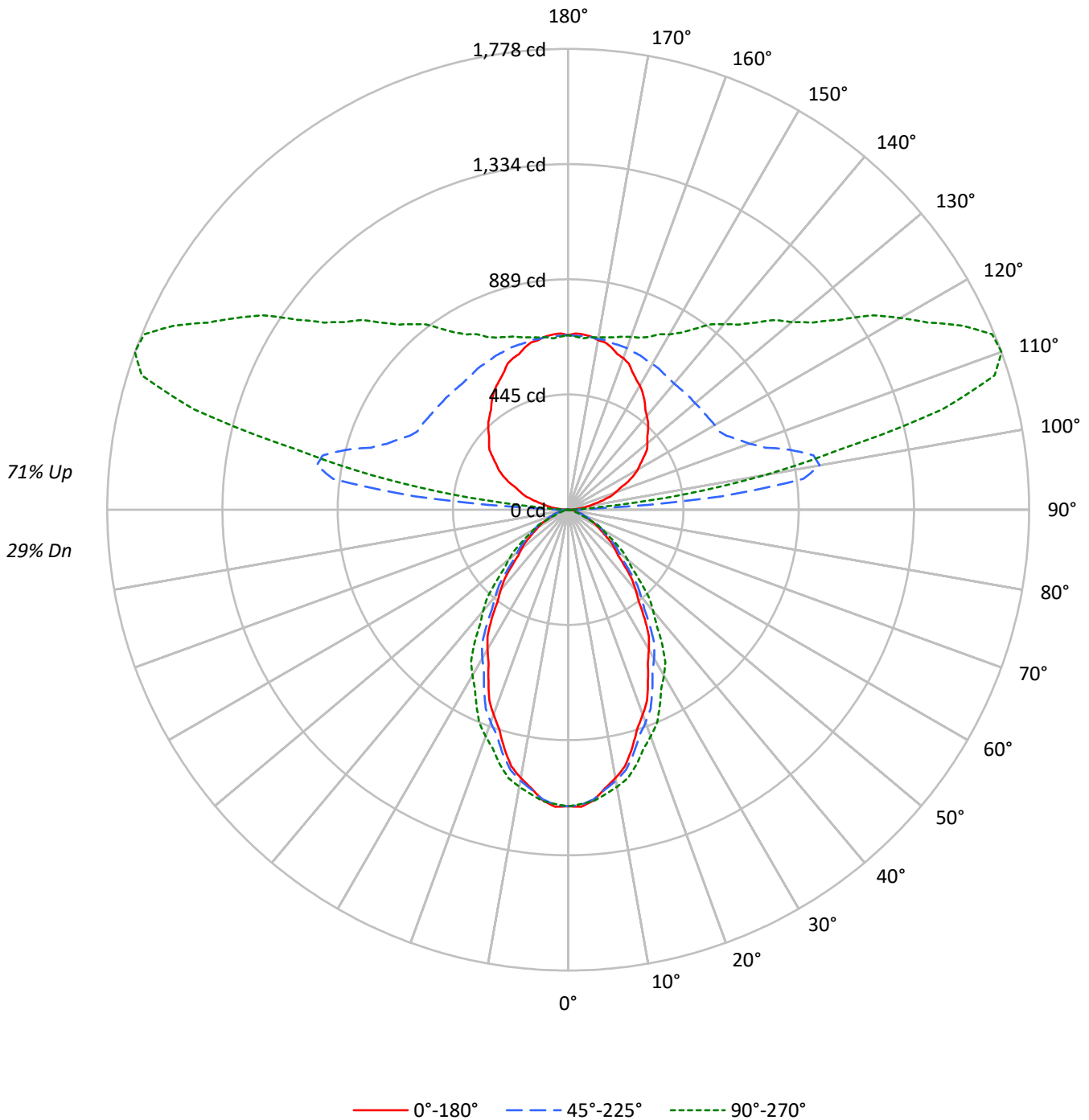
Input Watts (W): 52.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P521912

CATALOG NUMBER: SQ4-WB-100U-050D-92765-1D-UNV-STD-W-4_2700K

Luminous Intensity Polar Plot



TEST NUMBER: P521912

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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 | 50 | 30 | 10 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 102 | 102 | 102 | 102 | 91 | 91 | 91 | 91 | 71 | 71 | 71 | 53 | 53 | 53 | 36 | 36 | 36 | 29 | | | | |
| 1 | 94 | 90 | 86 | 83 | 84 | 81 | 78 | 75 | 63 | 61 | 60 | 48 | 46 | 45 | 33 | 32 | 32 | 25 | | | | |
| 2 | 86 | 79 | 74 | 69 | 77 | 71 | 67 | 63 | 56 | 53 | 50 | 43 | 41 | 39 | 30 | 29 | 28 | 22 | | | | |
| 3 | 79 | 70 | 63 | 58 | 70 | 63 | 58 | 53 | 50 | 46 | 43 | 38 | 36 | 34 | 27 | 26 | 25 | 20 | | | | |
| 4 | 72 | 62 | 55 | 50 | 65 | 56 | 50 | 45 | 45 | 41 | 37 | 35 | 32 | 29 | 25 | 23 | 22 | 18 | | | | |
| 5 | 66 | 56 | 48 | 43 | 60 | 51 | 44 | 39 | 41 | 36 | 33 | 31 | 28 | 26 | 23 | 21 | 19 | 16 | | | | |
| 6 | 61 | 50 | 43 | 37 | 55 | 46 | 39 | 34 | 37 | 32 | 29 | 28 | 25 | 23 | 21 | 19 | 17 | 14 | | | | |
| 7 | 57 | 45 | 38 | 33 | 51 | 41 | 35 | 30 | 33 | 29 | 25 | 26 | 23 | 21 | 19 | 17 | 16 | 13 | | | | |
| 8 | 53 | 41 | 34 | 29 | 47 | 38 | 31 | 27 | 31 | 26 | 23 | 24 | 21 | 19 | 18 | 16 | 14 | 12 | | | | |
| 9 | 49 | 38 | 31 | 26 | 44 | 34 | 28 | 24 | 28 | 24 | 20 | 22 | 19 | 17 | 17 | 15 | 13 | 11 | | | | |
| 10 | 46 | 35 | 28 | 23 | 41 | 32 | 26 | 22 | 26 | 22 | 19 | 21 | 17 | 15 | 15 | 13 | 12 | 10 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 10558 | 10558 | 10558 |
| 5° | 10427 | 10389 | 10451 |
| 10° | 9851 | 9941 | 10171 |
| 15° | 9094 | 9305 | 9723 |
| 20° | 8258 | 8569 | 9136 |
| 25° | 7407 | 7811 | 8511 |
| 30° | 6623 | 7057 | 7864 |
| 35° | 5791 | 6210 | 7098 |
| 40° | 4874 | 5262 | 6145 |
| 45° | 4023 | 4370 | 5130 |
| 50° | 3359 | 3662 | 4274 |
| 55° | 2852 | 3141 | 3529 |
| 60° | 2438 | 2724 | 2818 |
| 65° | 1941 | 2292 | 1821 |
| 70° | 1721 | 1788 | 1111 |
| 75° | 1593 | 1451 | 681 |
| 80° | 1466 | 1334 | 584 |
| 85° | 1334 | 1217 | 476 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5130 cd/sqm

TEST NUMBER: P521912

CATALOG NUMBER: SQ4-WB-100U-050D-92765-1D-UNV-STD-W-4_2700K

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 105.0 | 1.8 |
| 10°-20° | 273.0 | 4.7 |
| 20°-30° | 353.7 | 6.0 |
| 30°-40° | 346.3 | 5.9 |
| 40°-50° | 265.1 | 4.5 |
| 50°-60° | 176.6 | 3.0 |
| 60°-70° | 96.4 | 1.6 |
| 70°-80° | 40.2 | 0.7 |
| 80°-90° | 11.4 | 0.2 |
| 90°-100° | 306.9 | 5.2 |
| 100°-110° | 873.2 | 14.9 |
| 110°-120° | 836.6 | 14.3 |
| 120°-130° | 662.1 | 11.3 |
| 130°-140° | 531.5 | 9.1 |
| 140°-150° | 416.1 | 7.1 |
| 150°-160° | 304.4 | 5.2 |
| 160°-170° | 188.6 | 3.2 |
| 170°-180° | 64.0 | 1.1 |
| 0°-30° | 731.7 | 12.5 |
| 0°-40° | 1078.0 | 18.4 |
| 0°-60° | 1519.7 | 26.0 |
| 0°-90° | 1667.7 | 28.5 |
| 90°-120° | 2016.7 | 34.5 |
| 90°-150° | 3626.3 | 62.0 |
| 90°-180° | 4183.0 | 71.5 |
| 0°-180° | 5851.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1144 | 1144 | 1144 | 1144 | 1144 | |
| 5° | 1126 | 1115 | 1122 | 1124 | 1128 | 105 |
| 15° | 952 | 949 | 974 | 1001 | 1018 | 266 |
| 25° | 728 | 730 | 767 | 801 | 836 | 335 |
| 35° | 514 | 517 | 551 | 588 | 630 | 320 |
| 45° | 308 | 314 | 335 | 360 | 393 | 240 |
| 55° | 177 | 185 | 195 | 203 | 219 | 161 |
| 65° | 89 | 96 | 105 | 92 | 83 | 92 |
| 75° | 45 | 45 | 41 | 28 | 19 | 48 |
| 85° | 13 | 13 | 12 | 8 | 4 | 14 |
| 90° | 0 | 0 | 0 | 0 | 0 | 2 |
| 95° | 33 | 132 | 594 | 206 | 127 | 38 |
| 105° | 136 | 206 | 890 | 1572 | 1494 | 144 |
| 115° | 252 | 305 | 675 | 1429 | 1678 | 248 |
| 125° | 356 | 395 | 644 | 1069 | 1278 | 319 |
| 135° | 435 | 472 | 636 | 903 | 1020 | 336 |
| 145° | 513 | 540 | 642 | 781 | 851 | 321 |
| 155° | 586 | 600 | 657 | 706 | 735 | 271 |
| 165° | 648 | 650 | 664 | 679 | 689 | 182 |
| 175° | 679 | 675 | 672 | 668 | 663 | 64 |
| 180° | 674 | 674 | 674 | 674 | 674 | |

TEST NUMBER: P521912

CATALOG NUMBER: SQ4-WB-100U-050D-92765-1D-UNV-STD-W-4_2700K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1144.4 | 1144.4 | 1144.4 | 1144.4 | 1144.4 |
| 2.5° | 1147.3 | 1137.0 | 1139.6 | 1139.5 | 1136.4 |
| 5° | 1125.9 | 1114.6 | 1121.8 | 1124.4 | 1128.4 |
| 7.5° | 1084.1 | 1075.5 | 1088.8 | 1098.6 | 1106.6 |
| 10° | 1051.5 | 1044.2 | 1061.1 | 1075.4 | 1085.7 |
| 12.5° | 1013.8 | 1007.6 | 1028.5 | 1047.7 | 1061.2 |
| 15° | 952.1 | 948.7 | 974.2 | 1000.7 | 1017.9 |
| 17.5° | 886.1 | 884.5 | 913.7 | 944.7 | 966.7 |
| 20° | 841.1 | 840.6 | 872.8 | 905.0 | 930.5 |
| 22.5° | 795.7 | 796.8 | 830.6 | 864.1 | 893.2 |
| 25° | 727.6 | 729.6 | 767.3 | 800.8 | 836.1 |
| 27.5° | 664.7 | 665.6 | 704.5 | 739.8 | 777.6 |
| 30° | 621.7 | 624.1 | 662.4 | 698.9 | 738.2 |
| 32.5° | 578.7 | 581.5 | 619.0 | 656.7 | 696.8 |
| 35° | 514.2 | 516.7 | 551.4 | 588.5 | 630.2 |
| 37.5° | 447.7 | 451.1 | 481.9 | 517.0 | 558.0 |
| 40° | 404.7 | 409.7 | 436.9 | 469.9 | 510.2 |
| 42.5° | 363.4 | 369.5 | 394.7 | 426.1 | 462.4 |
| 45° | 308.3 | 314.2 | 334.9 | 360.3 | 393.2 |
| 47.5° | 260.9 | 267.7 | 283.6 | 305.5 | 333.5 |
| 50° | 234.0 | 240.4 | 255.1 | 271.3 | 297.8 |
| 52.5° | 210.3 | 216.7 | 229.8 | 242.3 | 264.8 |
| 55° | 177.3 | 184.6 | 195.3 | 202.8 | 219.4 |
| 57.5° | 150.1 | 157.2 | 165.7 | 169.1 | 179.2 |
| 60° | 132.1 | 139.9 | 147.6 | 147.3 | 152.7 |
| 62.5° | 115.6 | 122.3 | 130.0 | 124.6 | 124.9 |
| 65° | 88.9 | 96.2 | 105.0 | 91.7 | 83.4 |
| 67.5° | 71.8 | 73.4 | 82.4 | 64.0 | 54.0 |
| 70° | 63.8 | 63.8 | 66.3 | 49.5 | 41.2 |
| 72.5° | 56.1 | 56.1 | 53.8 | 40.3 | 31.5 |
| 75° | 44.7 | 44.7 | 40.7 | 27.9 | 19.1 |
| 77.5° | 34.4 | 34.1 | 31.1 | 20.8 | 13.9 |
| 80° | 27.6 | 27.6 | 25.1 | 16.4 | 11.0 |
| 82.5° | 21.6 | 21.6 | 19.5 | 12.9 | 8.2 |
| 85° | 12.6 | 12.6 | 11.5 | 7.5 | 4.5 |
| 87.5° | 4.4 | 4.4 | 4.0 | 2.4 | 2.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 10.2 | 54.3 | 126.0 | 36.7 | 27.7 |
| 95° | 33.3 | 132.2 | 594.1 | 205.6 | 126.8 |
| 97.5° | 61.2 | 154.8 | 914.9 | 654.7 | 448.6 |
| 100° | 80.7 | 168.3 | 984.6 | 997.3 | 768.2 |
| 102.5° | 102.2 | 182.8 | 969.2 | 1276.6 | 1076.5 |
| 105° | 135.7 | 205.8 | 889.8 | 1571.8 | 1494.2 |
| 107.5° | 169.8 | 232.6 | 797.1 | 1655.0 | 1724.1 |
| 110° | 193.3 | 252.2 | 743.9 | 1623.2 | 1778.4 |

TEST NUMBER: P521912

CATALOG NUMBER: SQ4-WB-100U-050D-92765-1D-UNV-STD-W-4_2700K

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 215.9 | 271.7 | 708.0 | 1547.9 | 1769.2 |
| 115° | 252.2 | 304.8 | 674.7 | 1429.4 | 1678.5 |
| 117.5° | 284.2 | 333.6 | 655.0 | 1299.9 | 1563.8 |
| 120° | 309.8 | 351.2 | 653.0 | 1225.9 | 1478.8 |
| 122.5° | 330.3 | 371.6 | 647.9 | 1161.0 | 1395.8 |
| 125° | 355.9 | 394.7 | 644.0 | 1068.7 | 1277.8 |
| 127.5° | 383.8 | 420.2 | 642.0 | 1013.6 | 1185.9 |
| 130° | 398.2 | 434.5 | 638.9 | 975.2 | 1125.4 |
| 132.5° | 413.6 | 448.9 | 638.9 | 945.2 | 1083.4 |
| 135° | 435.3 | 471.6 | 636.3 | 902.8 | 1020.4 |
| 137.5° | 455.8 | 491.1 | 636.1 | 866.8 | 968.5 |
| 140° | 471.2 | 507.5 | 635.1 | 837.0 | 934.7 |
| 142.5° | 488.6 | 518.9 | 638.1 | 813.2 | 900.9 |
| 145° | 513.4 | 539.7 | 641.5 | 781.3 | 851.4 |
| 147.5° | 534.7 | 560.2 | 647.1 | 749.1 | 809.7 |
| 150° | 553.1 | 570.6 | 649.1 | 738.5 | 781.0 |
| 152.5° | 567.5 | 586.0 | 651.2 | 724.0 | 763.6 |
| 155° | 586.4 | 600.2 | 656.8 | 706.1 | 734.9 |
| 157.5° | 610.0 | 618.2 | 658.1 | 698.0 | 718.5 |
| 160° | 622.3 | 628.5 | 663.2 | 691.8 | 709.3 |
| 162.5° | 629.4 | 636.7 | 664.2 | 686.6 | 700.1 |
| 165° | 647.9 | 650.4 | 664.5 | 678.8 | 688.8 |
| 167.5° | 660.4 | 658.2 | 670.4 | 676.9 | 680.9 |
| 170° | 664.5 | 663.3 | 668.3 | 669.7 | 674.7 |
| 172.5° | 673.7 | 669.5 | 671.4 | 667.7 | 671.7 |
| 175° | 678.6 | 674.8 | 672.2 | 668.2 | 663.2 |
| 177.5° | 680.6 | 674.6 | 671.4 | 667.3 | 668.3 |
| 180° | 673.5 | 673.5 | 673.5 | 673.5 | 673.5 |

(END OF REPORT)