

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: P521516

Luminaire Tested: SQ4-F-0U-075D-92765-1D-UNV-STD-W-4_6500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521516
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-37)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-0U-075D-92765-1D-UNV-STD-W-4_6500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3345.1 lumens
Efficiency: N/A
Efficacy: 105.5 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

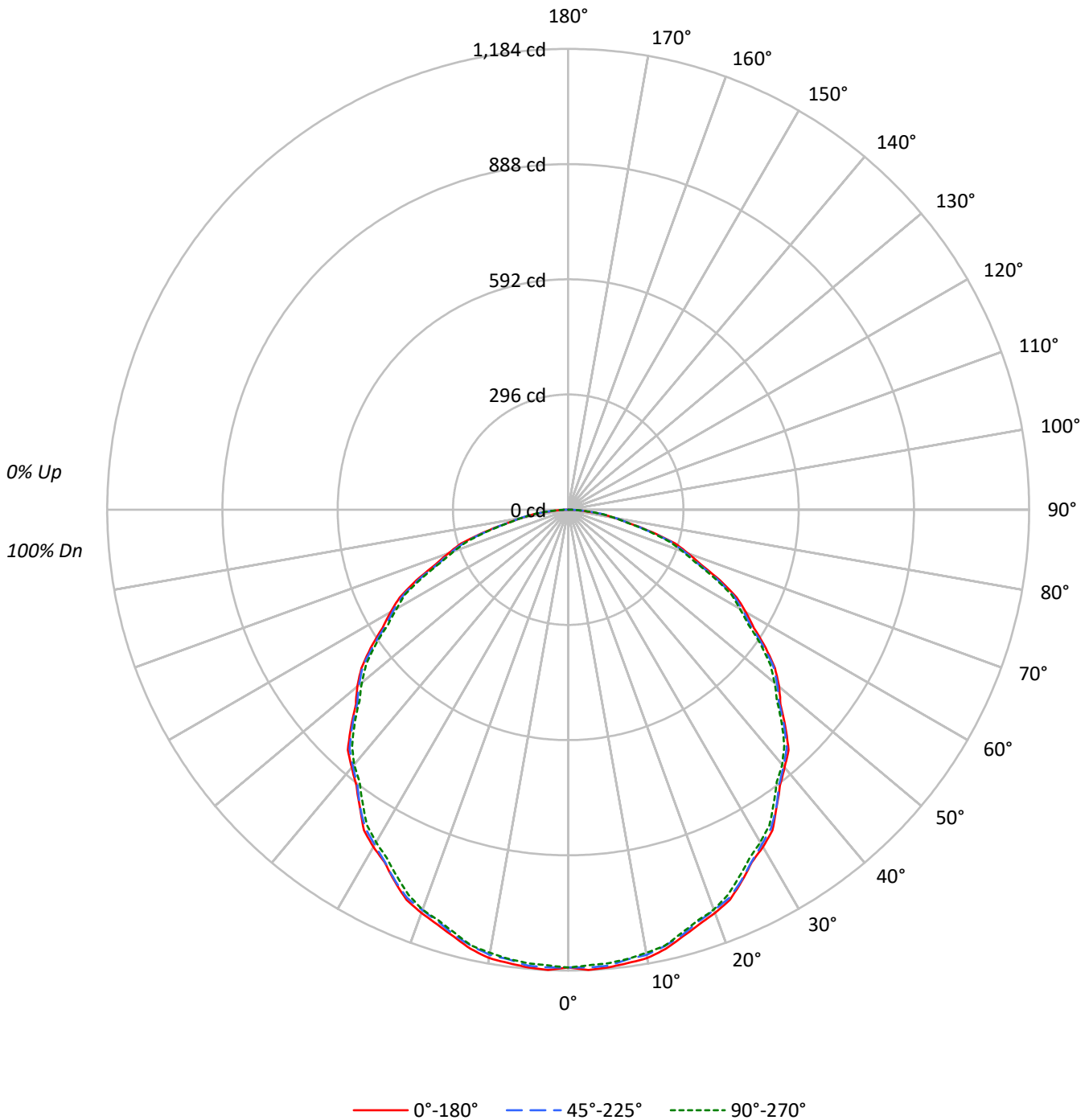
Input Watts (W): 31.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | | 106 | 106 | 106 | | 102 | 102 | 102 | 100 |
| 1 | 109 | 104 | 100 | 96 | 106 | 102 | 98 | 94 | 97 | 94 | 91 | | 94 | 91 | 88 | | 90 | 88 | 86 | 84 |
| 2 | 99 | 91 | 84 | 78 | 96 | 89 | 82 | 77 | 85 | 80 | 75 | | 82 | 77 | 73 | | 79 | 75 | 72 | 70 |
| 3 | 90 | 79 | 71 | 65 | 88 | 78 | 70 | 64 | 75 | 68 | 63 | | 72 | 66 | 62 | | 69 | 65 | 61 | 59 |
| 4 | 82 | 70 | 61 | 55 | 80 | 69 | 61 | 54 | 66 | 59 | 54 | | 64 | 58 | 53 | | 62 | 57 | 52 | 50 |
| 5 | 76 | 63 | 54 | 47 | 74 | 62 | 53 | 47 | 60 | 52 | 46 | | 58 | 51 | 46 | | 56 | 50 | 45 | 43 |
| 6 | 70 | 56 | 47 | 41 | 68 | 56 | 47 | 41 | 54 | 46 | 40 | | 52 | 45 | 40 | | 50 | 44 | 40 | 38 |
| 7 | 65 | 51 | 42 | 36 | 63 | 50 | 42 | 36 | 49 | 41 | 36 | | 47 | 41 | 36 | | 46 | 40 | 35 | 33 |
| 8 | 60 | 47 | 38 | 32 | 59 | 46 | 38 | 32 | 45 | 37 | 32 | | 43 | 37 | 32 | | 42 | 36 | 32 | 30 |
| 9 | 56 | 43 | 35 | 29 | 55 | 42 | 34 | 29 | 41 | 34 | 29 | | 40 | 33 | 29 | | 39 | 33 | 28 | 27 |
| 10 | 53 | 40 | 32 | 26 | 52 | 39 | 31 | 26 | 38 | 31 | 26 | | 37 | 31 | 26 | | 36 | 30 | 26 | 24 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 10851 | 10851 | 10851 |
| 5° | 10932 | 10892 | 10833 |
| 10° | 10958 | 10878 | 10828 |
| 15° | 10845 | 10804 | 10753 |
| 20° | 10822 | 10748 | 10737 |
| 25° | 10730 | 10708 | 10588 |
| 30° | 10658 | 10590 | 10510 |
| 35° | 10508 | 10496 | 10363 |
| 40° | 10411 | 10359 | 10295 |
| 45° | 10287 | 10231 | 10119 |
| 50° | 10146 | 10070 | 9933 |
| 55° | 9958 | 9838 | 9699 |
| 60° | 9724 | 9566 | 9389 |
| 65° | 9400 | 9191 | 9027 |
| 70° | 8813 | 8611 | 8408 |
| 75° | 7942 | 7714 | 7600 |
| 80° | 6487 | 6546 | 6429 |
| 85° | 4647 | 5325 | 5325 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10287 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 111.4 | 3.3 |
| 10°-20° | 318.7 | 9.5 |
| 20°-30° | 482.2 | 14.4 |
| 30°-40° | 580.0 | 17.3 |
| 40°-50° | 602.2 | 18.0 |
| 50°-60° | 545.5 | 16.3 |
| 60°-70° | 415.0 | 12.4 |
| 70°-80° | 230.6 | 6.9 |
| 80°-90° | 59.4 | 1.8 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 912.4 | 27.3 |
| 0°-40° | 1492.4 | 44.6 |
| 0°-60° | 2640.1 | 78.9 |
| 0°-90° | 3345.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3345.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1176 | 1176 | 1176 | 1176 | 1176 | |
| 5° | 1180 | 1170 | 1176 | 1171 | 1170 | 112 |
| 15° | 1135 | 1126 | 1131 | 1130 | 1126 | 321 |
| 25° | 1054 | 1045 | 1052 | 1041 | 1040 | 486 |
| 35° | 933 | 929 | 932 | 921 | 920 | 585 |
| 45° | 788 | 783 | 784 | 776 | 776 | 608 |
| 55° | 619 | 618 | 612 | 606 | 603 | 553 |
| 65° | 431 | 424 | 421 | 414 | 414 | 424 |
| 75° | 223 | 220 | 216 | 214 | 213 | 236 |
| 85° | 44 | 47 | 50 | 50 | 50 | 56 |
| 90° | 0 | 0 | 0 | 0 | 0 | |

TEST NUMBER: P521516

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1176.1 | 1176.1 | 1176.1 | 1176.1 | 1176.1 |
| 2.5° | 1183.8 | 1173.8 | 1177.0 | 1174.3 | 1171.8 |
| 5° | 1180.4 | 1169.9 | 1176.1 | 1170.7 | 1169.7 |
| 7.5° | 1174.8 | 1162.5 | 1165.4 | 1164.3 | 1164.3 |
| 10° | 1169.7 | 1154.0 | 1161.1 | 1155.8 | 1155.8 |
| 12.5° | 1156.0 | 1142.8 | 1148.3 | 1145.5 | 1147.2 |
| 15° | 1135.4 | 1126.0 | 1131.1 | 1130.0 | 1125.8 |
| 17.5° | 1117.6 | 1106.3 | 1110.1 | 1108.2 | 1106.5 |
| 20° | 1102.2 | 1091.7 | 1094.7 | 1089.4 | 1093.6 |
| 22.5° | 1085.1 | 1074.6 | 1080.1 | 1071.3 | 1071.3 |
| 25° | 1054.0 | 1044.6 | 1051.9 | 1041.1 | 1040.1 |
| 27.5° | 1021.0 | 1014.9 | 1019.7 | 1011.7 | 1008.8 |
| 30° | 1000.4 | 991.0 | 994.0 | 988.6 | 986.5 |
| 32.5° | 976.4 | 967.0 | 970.0 | 960.4 | 961.7 |
| 35° | 933.0 | 928.8 | 931.9 | 921.2 | 920.1 |
| 37.5° | 893.5 | 885.2 | 890.1 | 881.3 | 880.5 |
| 40° | 864.4 | 856.0 | 860.1 | 854.8 | 854.8 |
| 42.5° | 837.8 | 828.6 | 831.0 | 823.9 | 821.3 |
| 45° | 788.4 | 783.1 | 784.1 | 775.5 | 775.5 |
| 47.5° | 739.5 | 735.7 | 734.2 | 725.4 | 727.1 |
| 50° | 706.9 | 700.7 | 701.6 | 692.0 | 692.0 |
| 52.5° | 669.2 | 669.7 | 665.6 | 659.3 | 654.2 |
| 55° | 619.1 | 618.1 | 611.6 | 606.2 | 603.0 |
| 57.5° | 565.6 | 560.7 | 556.1 | 548.8 | 548.2 |
| 60° | 527.0 | 523.9 | 518.4 | 511.9 | 508.8 |
| 62.5° | 487.6 | 484.4 | 479.0 | 473.4 | 472.8 |
| 65° | 430.6 | 424.3 | 421.0 | 414.5 | 413.5 |
| 67.5° | 368.7 | 363.7 | 359.5 | 354.3 | 353.7 |
| 70° | 326.7 | 322.5 | 319.2 | 314.8 | 311.7 |
| 72.5° | 288.1 | 281.4 | 278.1 | 274.6 | 272.3 |
| 75° | 222.8 | 219.7 | 216.4 | 214.2 | 213.2 |
| 77.5° | 159.8 | 160.0 | 160.0 | 157.2 | 156.2 |
| 80° | 122.1 | 123.2 | 123.2 | 122.1 | 121.0 |
| 82.5° | 88.7 | 90.6 | 91.5 | 90.4 | 90.2 |
| 85° | 43.9 | 47.1 | 50.3 | 50.3 | 50.3 |
| 87.5° | 12.0 | 16.2 | 19.7 | 20.5 | 19.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)