

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: P520136

Luminaire Tested: **SQ4-F-0U-100D-930-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520136
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-0U-100D-930-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

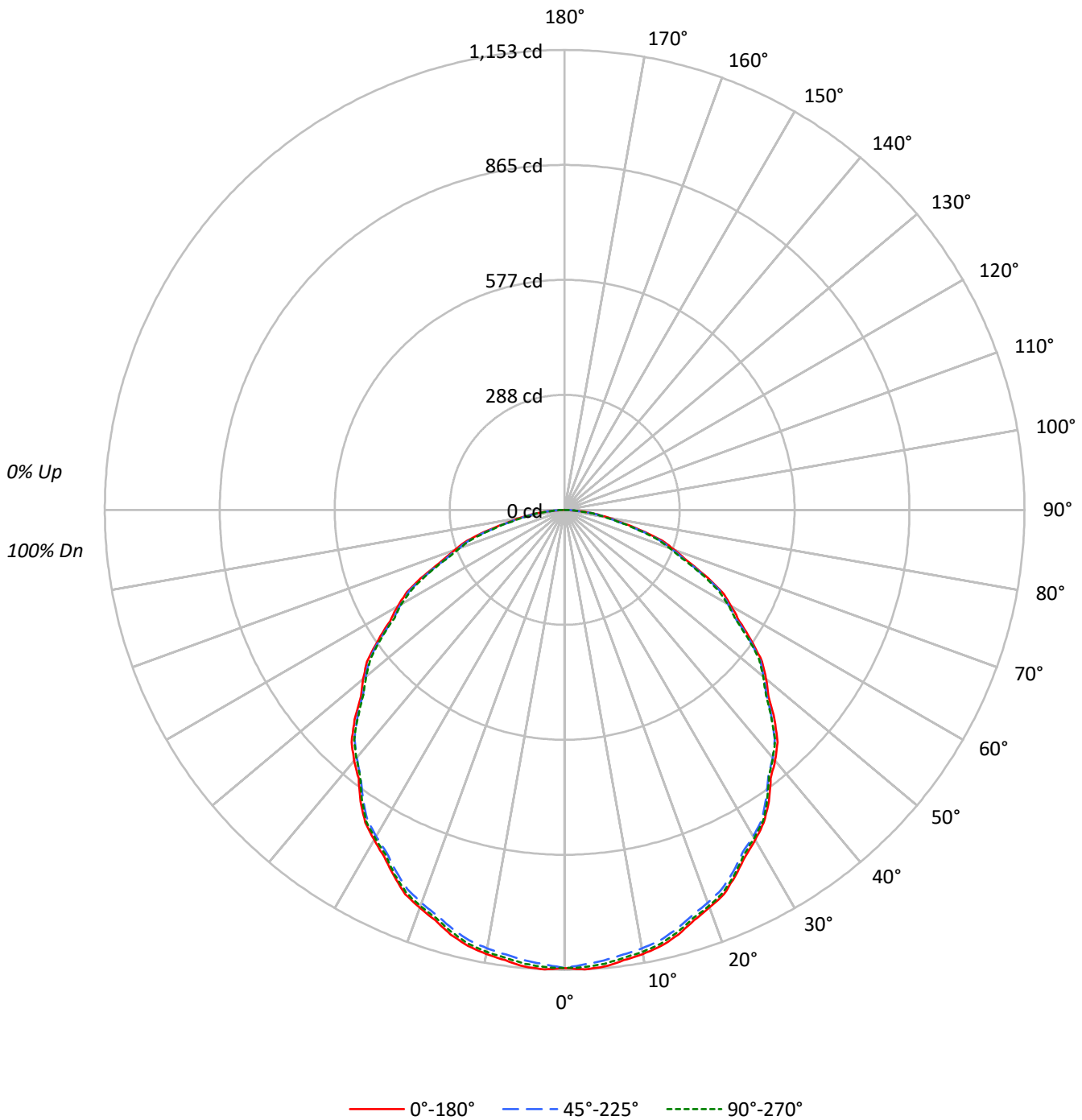
Lumens per Lamp: N/A
Luminaire Lumens: 3133.2 lumens
Efficiency: N/A
Efficacy: 95.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 32.8
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 | 95 | 98 | 95 | 92 | 94 | 91 | 89 | 90 | 88 | 86 | 84 |
| 2 | 99 | 91 | 84 | 79 | 97 | 89 | 83 | 78 | 86 | 80 | 76 | 82 | 78 | 74 | 79 | 76 | 72 | 70 |
| 3 | 90 | 80 | 72 | 65 | 88 | 78 | 71 | 65 | 75 | 69 | 64 | 73 | 67 | 63 | 70 | 65 | 62 | 59 |
| 4 | 83 | 71 | 62 | 56 | 81 | 70 | 61 | 55 | 67 | 60 | 54 | 65 | 59 | 54 | 63 | 57 | 53 | 51 |
| 5 | 76 | 63 | 54 | 48 | 74 | 62 | 54 | 48 | 60 | 53 | 47 | 58 | 52 | 47 | 56 | 51 | 46 | 44 |
| 6 | 70 | 57 | 48 | 42 | 68 | 56 | 48 | 42 | 54 | 47 | 41 | 53 | 46 | 41 | 51 | 45 | 40 | 38 |
| 7 | 65 | 52 | 43 | 37 | 64 | 51 | 43 | 37 | 49 | 42 | 37 | 48 | 41 | 36 | 47 | 41 | 36 | 34 |
| 8 | 61 | 47 | 39 | 33 | 59 | 47 | 38 | 33 | 45 | 38 | 33 | 44 | 37 | 32 | 43 | 37 | 32 | 30 |
| 9 | 57 | 43 | 35 | 30 | 55 | 43 | 35 | 30 | 42 | 34 | 29 | 41 | 34 | 29 | 40 | 34 | 29 | 27 |
| 10 | 53 | 40 | 32 | 27 | 52 | 40 | 32 | 27 | 39 | 32 | 27 | 38 | 31 | 27 | 37 | 31 | 26 | 25 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 10599 | 10599 | 10599 |
| 5° | 10647 | 10501 | 10580 |
| 10° | 10592 | 10460 | 10541 |
| 15° | 10529 | 10385 | 10468 |
| 20° | 10420 | 10296 | 10381 |
| 25° | 10305 | 10185 | 10267 |
| 30° | 10180 | 10071 | 10122 |
| 35° | 10052 | 9928 | 9981 |
| 40° | 9886 | 9771 | 9781 |
| 45° | 9711 | 9577 | 9547 |
| 50° | 9462 | 9348 | 9325 |
| 55° | 9182 | 9082 | 9017 |
| 60° | 8903 | 8743 | 8715 |
| 65° | 8468 | 8281 | 8211 |
| 70° | 7869 | 7680 | 7529 |
| 75° | 7026 | 6802 | 6662 |
| 80° | 5781 | 5568 | 5324 |
| 85° | 3419 | 3758 | 3843 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 108.4 | 3.5 |
| 10°-20° | 308.8 | 9.9 |
| 20°-30° | 463.7 | 14.8 |
| 30°-40° | 553.3 | 17.7 |
| 40°-50° | 567.2 | 18.1 |
| 50°-60° | 505.1 | 16.1 |
| 60°-70° | 376.5 | 12.0 |
| 70°-80° | 203.8 | 6.5 |
| 80°-90° | 46.4 | 1.5 |
| 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° | 880.9 | 28.1 |
| 0°-40° | 1434.2 | 45.8 |
| 0°-60° | 2506.5 | 80.0 |
| 0°-90° | 3133.2 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3133.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1149 | 1149 | 1149 | 1149 | 1149 | |
| 5° | 1150 | 1147 | 1134 | 1144 | 1142 | 109 |
| 15° | 1102 | 1098 | 1087 | 1096 | 1096 | 311 |
| 25° | 1012 | 1010 | 1000 | 1006 | 1008 | 466 |
| 35° | 892 | 889 | 882 | 883 | 886 | 557 |
| 45° | 744 | 740 | 734 | 730 | 732 | 573 |
| 55° | 571 | 572 | 565 | 559 | 561 | 511 |
| 65° | 388 | 386 | 379 | 375 | 376 | 384 |
| 75° | 197 | 195 | 191 | 187 | 187 | 210 |
| 85° | 32 | 35 | 36 | 36 | 36 | 46 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1148.8 | 1148.8 | 1148.8 | 1148.8 | 1148.8 |
| 2.5° | 1153.2 | 1150.7 | 1140.5 | 1148.8 | 1147.5 |
| 5° | 1149.6 | 1147.3 | 1133.8 | 1144.0 | 1142.4 |
| 7.5° | 1138.9 | 1136.6 | 1124.7 | 1134.1 | 1132.7 |
| 10° | 1130.6 | 1128.3 | 1116.5 | 1125.9 | 1125.1 |
| 12.5° | 1119.9 | 1117.6 | 1105.8 | 1115.2 | 1114.4 |
| 15° | 1102.3 | 1098.4 | 1087.2 | 1095.9 | 1095.9 |
| 17.5° | 1078.9 | 1076.0 | 1065.6 | 1073.0 | 1073.1 |
| 20° | 1061.3 | 1059.0 | 1048.7 | 1056.5 | 1057.3 |
| 22.5° | 1043.6 | 1041.3 | 1029.8 | 1037.0 | 1038.4 |
| 25° | 1012.3 | 1010.0 | 1000.5 | 1006.1 | 1008.5 |
| 27.5° | 980.2 | 976.9 | 967.4 | 972.4 | 974.1 |
| 30° | 955.6 | 954.1 | 945.3 | 947.8 | 950.1 |
| 32.5° | 929.8 | 928.2 | 920.8 | 922.0 | 926.1 |
| 35° | 892.5 | 888.7 | 881.5 | 883.1 | 886.2 |
| 37.5° | 848.5 | 846.7 | 839.7 | 838.8 | 841.7 |
| 40° | 820.8 | 817.7 | 811.3 | 809.8 | 812.1 |
| 42.5° | 790.5 | 787.4 | 779.8 | 778.3 | 781.2 |
| 45° | 744.3 | 740.4 | 734.0 | 730.1 | 731.7 |
| 47.5° | 692.6 | 692.6 | 685.9 | 681.4 | 683.8 |
| 50° | 659.2 | 659.2 | 651.3 | 647.4 | 649.7 |
| 52.5° | 624.4 | 625.1 | 616.6 | 614.5 | 613.7 |
| 55° | 570.8 | 571.6 | 564.6 | 559.0 | 560.6 |
| 57.5° | 519.1 | 517.4 | 509.2 | 505.6 | 506.3 |
| 60° | 482.5 | 480.3 | 473.8 | 468.5 | 472.3 |
| 62.5° | 445.3 | 444.3 | 437.9 | 431.7 | 431.3 |
| 65° | 387.9 | 386.4 | 379.3 | 375.3 | 376.1 |
| 67.5° | 330.8 | 329.0 | 322.5 | 316.9 | 318.8 |
| 70° | 291.7 | 291.7 | 284.7 | 281.4 | 279.1 |
| 72.5° | 255.7 | 252.7 | 247.4 | 242.9 | 241.3 |
| 75° | 197.1 | 194.8 | 190.8 | 186.9 | 186.9 |
| 77.5° | 143.5 | 141.5 | 138.9 | 136.2 | 135.4 |
| 80° | 108.8 | 108.0 | 104.8 | 104.0 | 100.2 |
| 82.5° | 76.6 | 76.5 | 74.6 | 72.5 | 72.4 |
| 85° | 32.3 | 35.4 | 35.5 | 36.3 | 36.3 |
| 87.5° | 5.6 | 9.4 | 8.8 | 7.5 | 7.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)