

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: P564983

Luminaire Tested: **SQ4-PW1-100U-125D-835-1D-UNV-STD-W-6**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564983
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-100U-125D-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

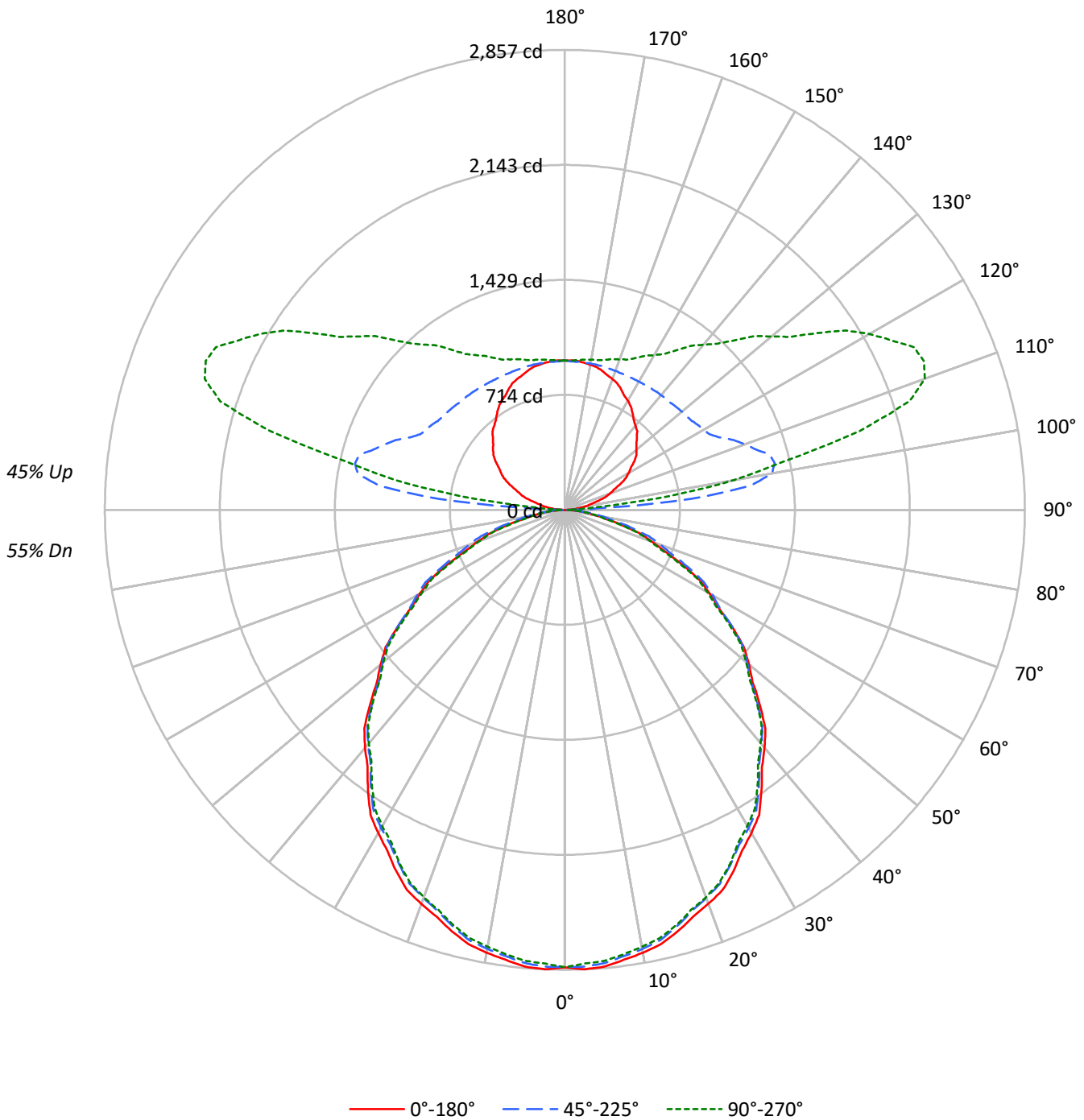
Lumens per Lamp: N/A
Luminaire Lumens: 13254.0 lumens
Efficiency: N/A
Efficacy: 123.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 107.3
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 | 108 | 108 | 108 | 108 | 100 | 100 | 100 | 100 | 86 | 86 | 86 | 73 | 73 | 73 | 60 | 60 | 60 | 55 |
| 1 | 99 | 95 | 91 | 87 | 92 | 88 | 85 | 82 | 76 | 73 | 71 | 64 | 62 | 61 | 53 | 52 | 51 | 46 |
| 2 | 90 | 83 | 77 | 71 | 83 | 77 | 72 | 67 | 66 | 62 | 59 | 56 | 53 | 51 | 47 | 45 | 43 | 39 |
| 3 | 82 | 73 | 65 | 60 | 76 | 68 | 61 | 56 | 59 | 54 | 49 | 50 | 46 | 43 | 42 | 39 | 37 | 33 |
| 4 | 75 | 64 | 57 | 50 | 70 | 60 | 53 | 48 | 52 | 47 | 42 | 44 | 40 | 37 | 37 | 34 | 32 | 28 |
| 5 | 69 | 57 | 49 | 43 | 64 | 54 | 46 | 41 | 47 | 41 | 36 | 40 | 36 | 32 | 34 | 30 | 28 | 25 |
| 6 | 64 | 52 | 43 | 38 | 59 | 48 | 41 | 36 | 42 | 36 | 32 | 36 | 32 | 28 | 31 | 27 | 24 | 22 |
| 7 | 59 | 47 | 39 | 33 | 55 | 44 | 36 | 31 | 38 | 32 | 28 | 33 | 28 | 25 | 28 | 24 | 22 | 19 |
| 8 | 55 | 42 | 35 | 29 | 51 | 40 | 33 | 28 | 35 | 29 | 25 | 30 | 26 | 22 | 26 | 22 | 19 | 17 |
| 9 | 51 | 39 | 31 | 26 | 47 | 36 | 30 | 25 | 32 | 26 | 22 | 28 | 23 | 20 | 24 | 20 | 18 | 15 |
| 10 | 48 | 36 | 28 | 23 | 44 | 33 | 27 | 22 | 29 | 24 | 20 | 26 | 21 | 18 | 22 | 19 | 16 | 14 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 17473 | 17473 | 17473 |
| 5° | 17586 | 17447 | 17370 |
| 10° | 17445 | 17305 | 17211 |
| 15° | 17261 | 17069 | 17006 |
| 20° | 17054 | 16792 | 16759 |
| 25° | 16816 | 16511 | 16460 |
| 30° | 16461 | 16212 | 16105 |
| 35° | 15993 | 15768 | 15674 |
| 40° | 15494 | 15253 | 15193 |
| 45° | 14892 | 14695 | 14630 |
| 50° | 14274 | 14154 | 14059 |
| 55° | 13608 | 13608 | 13393 |
| 60° | 12778 | 13024 | 12562 |
| 65° | 11693 | 12276 | 11402 |
| 70° | 10308 | 11297 | 10037 |
| 75° | 8803 | 10112 | 8565 |
| 80° | 6826 | 8512 | 6914 |
| 85° | 4418 | 6535 | 5829 |



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CATALOG NUMBER: SQ4-PW1-100U-125D-835-1D-UNV-STD-W-6

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 267.5 | 2.0 |
| 10°-20° | 755.2 | 5.7 |
| 20°-30° | 1120.3 | 8.5 |
| 30°-40° | 1310.8 | 9.9 |
| 40°-50° | 1305.0 | 9.8 |
| 50°-60° | 1126.9 | 8.5 |
| 60°-70° | 811.2 | 6.1 |
| 70°-80° | 425.4 | 3.2 |
| 80°-90° | 107.4 | 0.8 |
| 90°-100° | 434.2 | 3.3 |
| 100°-110° | 1198.7 | 9.0 |
| 110°-120° | 1236.3 | 9.3 |
| 120°-130° | 993.5 | 7.5 |
| 130°-140° | 780.8 | 5.9 |
| 140°-150° | 598.8 | 4.5 |
| 150°-160° | 430.4 | 3.2 |
| 160°-170° | 263.2 | 2.0 |
| 170°-180° | 88.7 | 0.7 |
| 0°-30° | 2143.0 | 16.2 |
| 0°-40° | 3453.8 | 26.1 |
| 0°-60° | 5885.6 | 44.4 |
| 0°-90° | 7229.5 | 54.5 |
| 90°-120° | 2869.2 | 21.6 |
| 90°-150° | 5242.2 | 39.6 |
| 90°-180° | 6024.0 | 45.5 |
| 0°-180° | 13254.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 2841 | 2841 | 2841 | 2841 | 2841 | |
| 5° | 2848 | 2816 | 2826 | 2818 | 2813 | 270 |
| 15° | 2711 | 2676 | 2681 | 2676 | 2671 | 764 |
| 25° | 2478 | 2436 | 2433 | 2418 | 2425 | 1139 |
| 35° | 2130 | 2101 | 2100 | 2080 | 2087 | 1332 |
| 45° | 1712 | 1697 | 1689 | 1684 | 1682 | 1321 |
| 55° | 1269 | 1266 | 1269 | 1251 | 1249 | 1132 |
| 65° | 803 | 828 | 844 | 810 | 783 | 796 |
| 75° | 370 | 405 | 426 | 397 | 360 | 397 |
| 85° | 63 | 82 | 93 | 88 | 83 | 83 |
| 90° | 3 | 6 | 12 | 13 | 15 | 7 |
| 95° | 64 | 235 | 788 | 324 | 211 | 68 |
| 105° | 214 | 330 | 1319 | 2013 | 1896 | 227 |
| 115° | 383 | 462 | 1062 | 2103 | 2391 | 376 |
| 125° | 525 | 598 | 963 | 1629 | 1912 | 467 |
| 135° | 632 | 700 | 936 | 1320 | 1488 | 489 |
| 145° | 733 | 784 | 924 | 1124 | 1209 | 459 |
| 155° | 826 | 854 | 917 | 1008 | 1040 | 381 |
| 165° | 895 | 906 | 921 | 957 | 964 | 252 |
| 175° | 927 | 929 | 923 | 936 | 933 | 88 |
| 180° | 927 | 927 | 927 | 927 | 927 | |

TEST NUMBER: P564983

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 2840.8 | 2840.8 | 2840.8 | 2840.8 | 2840.8 |
| 2.5° | 2856.8 | 2833.3 | 2840.8 | 2834.4 | 2820.7 |
| 5° | 2848.3 | 2816.5 | 2825.7 | 2818.1 | 2813.2 |
| 7.5° | 2819.2 | 2789.9 | 2796.7 | 2788.6 | 2785.7 |
| 10° | 2793.2 | 2763.8 | 2770.7 | 2760.6 | 2755.7 |
| 12.5° | 2763.2 | 2731.8 | 2738.6 | 2728.6 | 2725.6 |
| 15° | 2710.6 | 2676.3 | 2680.6 | 2675.5 | 2670.6 |
| 17.5° | 2649.5 | 2614.8 | 2615.5 | 2607.5 | 2606.5 |
| 20° | 2605.5 | 2568.8 | 2565.4 | 2555.5 | 2560.4 |
| 22.5° | 2557.4 | 2518.8 | 2515.4 | 2501.5 | 2508.4 |
| 25° | 2477.8 | 2436.2 | 2432.8 | 2417.9 | 2425.3 |
| 27.5° | 2385.7 | 2344.6 | 2344.7 | 2323.8 | 2331.7 |
| 30° | 2317.7 | 2278.5 | 2282.6 | 2257.8 | 2267.6 |
| 32.5° | 2245.6 | 2210.3 | 2212.5 | 2187.7 | 2197.5 |
| 35° | 2129.9 | 2100.6 | 2099.9 | 2080.1 | 2087.4 |
| 37.5° | 2011.8 | 1985.9 | 1981.8 | 1970.3 | 1972.3 |
| 40° | 1929.7 | 1907.7 | 1899.7 | 1892.2 | 1892.2 |
| 42.5° | 1843.6 | 1823.5 | 1815.6 | 1810.0 | 1808.1 |
| 45° | 1712.0 | 1697.3 | 1689.4 | 1684.4 | 1681.9 |
| 47.5° | 1581.8 | 1568.1 | 1561.3 | 1557.7 | 1555.3 |
| 50° | 1491.7 | 1481.9 | 1479.2 | 1471.6 | 1469.2 |
| 52.5° | 1401.6 | 1395.7 | 1393.1 | 1383.5 | 1381.1 |
| 55° | 1269.0 | 1266.5 | 1269.0 | 1251.4 | 1248.9 |
| 57.5° | 1130.8 | 1134.7 | 1142.8 | 1119.1 | 1113.3 |
| 60° | 1038.7 | 1048.5 | 1058.7 | 1031.0 | 1021.2 |
| 62.5° | 944.6 | 960.2 | 974.6 | 942.8 | 929.1 |
| 65° | 803.4 | 827.9 | 843.5 | 810.3 | 783.4 |
| 67.5° | 667.3 | 697.6 | 716.3 | 680.6 | 650.2 |
| 70° | 573.2 | 607.4 | 628.2 | 592.4 | 558.1 |
| 72.5° | 491.1 | 529.2 | 546.1 | 512.3 | 478.0 |
| 75° | 370.4 | 404.7 | 425.5 | 397.1 | 360.4 |
| 77.5° | 262.8 | 295.1 | 312.4 | 287.6 | 257.3 |
| 80° | 192.7 | 227.0 | 240.3 | 219.7 | 195.2 |
| 82.5° | 136.7 | 165.0 | 174.2 | 161.8 | 145.2 |
| 85° | 62.6 | 82.1 | 92.6 | 87.5 | 82.6 |
| 87.5° | 16.6 | 30.9 | 40.4 | 40.8 | 43.0 |
| 90° | 3.0 | 5.9 | 11.9 | 13.4 | 14.8 |
| 92.5° | 26.7 | 110.8 | 198.2 | 72.3 | 56.4 |
| 95° | 63.8 | 235.0 | 787.8 | 323.8 | 210.7 |
| 97.5° | 105.6 | 263.2 | 1166.9 | 898.4 | 650.7 |
| 100° | 136.5 | 280.1 | 1307.0 | 1316.2 | 1069.6 |
| 102.5° | 166.2 | 299.3 | 1334.3 | 1626.3 | 1392.4 |
| 105° | 213.6 | 329.7 | 1318.9 | 2013.4 | 1895.9 |
| 107.5° | 264.1 | 367.3 | 1245.3 | 2200.2 | 2243.1 |
| 110° | 299.7 | 392.5 | 1188.3 | 2240.3 | 2379.6 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|--------|--------|--------|
| 112.5° | 331.7 | 421.1 | 1134.9 | 2208.6 | 2414.0 |
| 115° | 382.7 | 462.5 | 1062.2 | 2102.8 | 2391.4 |
| 117.5° | 427.3 | 506.7 | 1014.4 | 1953.8 | 2282.3 |
| 120° | 456.9 | 535.3 | 995.4 | 1853.0 | 2183.7 |
| 122.5° | 485.4 | 560.3 | 980.0 | 1758.9 | 2072.2 |
| 125° | 525.2 | 597.7 | 962.8 | 1629.4 | 1912.3 |
| 127.5° | 559.0 | 631.5 | 952.7 | 1519.9 | 1763.9 |
| 130° | 581.5 | 654.1 | 948.0 | 1453.0 | 1674.9 |
| 132.5° | 602.9 | 672.0 | 943.2 | 1396.7 | 1597.8 |
| 135° | 632.0 | 700.2 | 936.1 | 1319.7 | 1488.0 |
| 137.5° | 664.6 | 726.7 | 932.5 | 1255.1 | 1398.7 |
| 140° | 682.4 | 743.3 | 930.2 | 1211.9 | 1338.1 |
| 142.5° | 702.6 | 758.9 | 927.8 | 1173.6 | 1284.7 |
| 145° | 732.9 | 783.6 | 924.2 | 1123.5 | 1209.1 |
| 147.5° | 761.9 | 806.3 | 921.0 | 1081.2 | 1147.7 |
| 150° | 783.3 | 819.6 | 919.8 | 1056.0 | 1109.7 |
| 152.5° | 799.9 | 833.9 | 918.6 | 1034.4 | 1078.8 |
| 155° | 826.3 | 853.9 | 916.8 | 1008.0 | 1040.0 |
| 157.5° | 850.7 | 871.8 | 917.1 | 988.8 | 1010.6 |
| 160° | 864.9 | 883.8 | 918.3 | 978.0 | 994.0 |
| 162.5° | 876.8 | 893.3 | 919.5 | 968.4 | 980.9 |
| 165° | 894.6 | 906.2 | 921.3 | 957.0 | 964.3 |
| 167.5° | 908.2 | 915.2 | 922.8 | 950.1 | 952.4 |
| 170° | 915.3 | 921.1 | 922.8 | 946.5 | 946.5 |
| 172.5° | 921.3 | 924.7 | 922.8 | 941.7 | 940.6 |
| 175° | 927.2 | 928.7 | 922.8 | 936.0 | 933.1 |
| 177.5° | 929.6 | 928.4 | 922.5 | 930.7 | 928.4 |
| 180° | 927.2 | 927.2 | 927.2 | 927.2 | 927.2 |

(END OF REPORT)