

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: P519501

Luminaire Tested: **SQ4-WB-125U-100D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519501
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-125U-100D-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

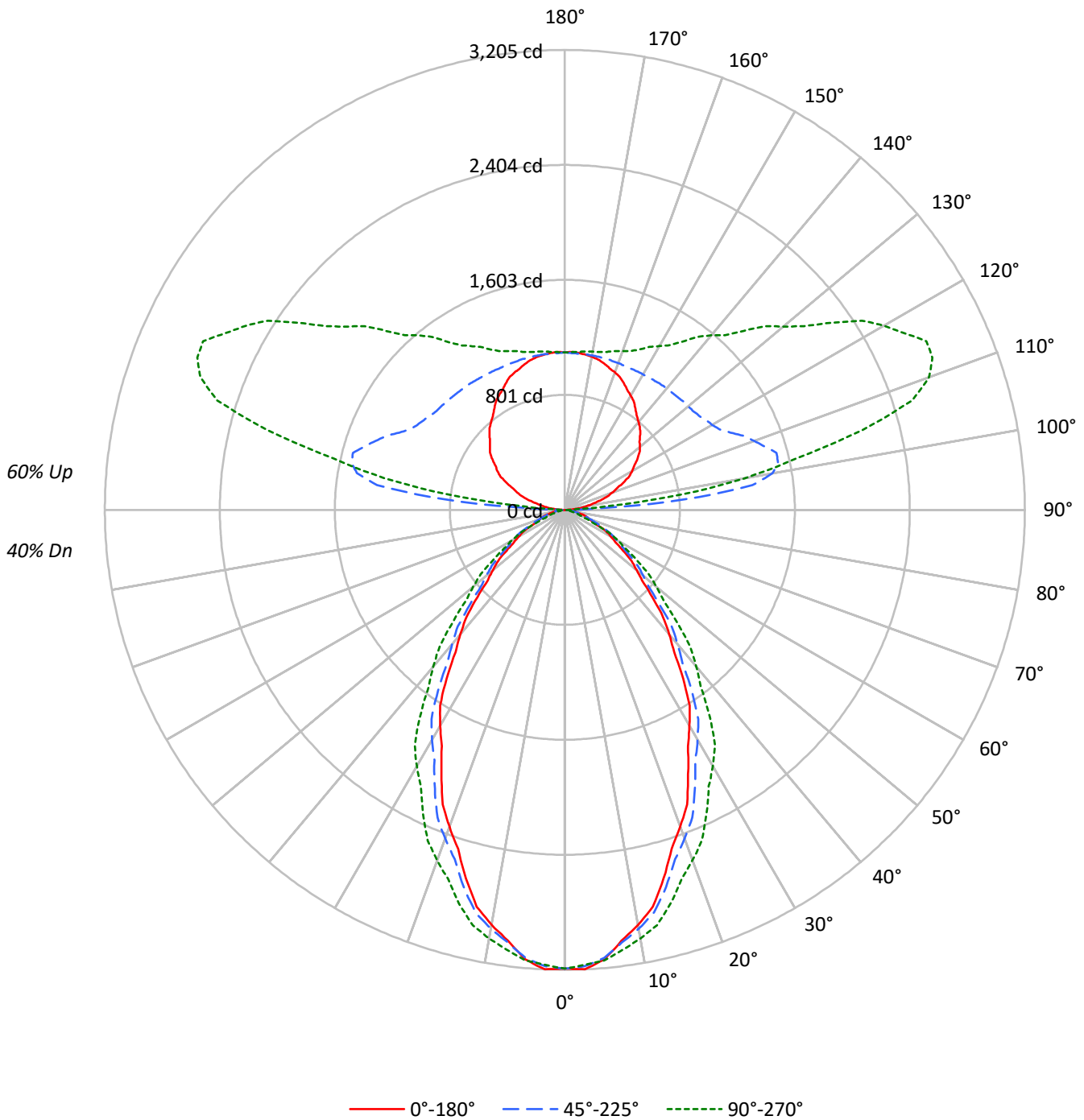
Lumens per Lamp: N/A
Luminaire Lumens: 11739.5 lumens
Efficiency: N/A
Efficacy: 114.2 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 102.8
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 | 105 | 105 | 105 | 105 | 95 | 95 | 95 | 95 | 78 | 78 | 78 | 61 | 61 | 61 | 47 | 47 | 47 | 40 |
| 1 | 96 | 92 | 89 | 86 | 88 | 84 | 81 | 79 | 69 | 67 | 65 | 55 | 54 | 53 | 43 | 42 | 41 | 35 |
| 2 | 88 | 82 | 76 | 72 | 80 | 75 | 70 | 66 | 62 | 59 | 56 | 50 | 48 | 46 | 39 | 37 | 36 | 31 |
| 3 | 81 | 73 | 66 | 61 | 74 | 67 | 61 | 56 | 55 | 51 | 48 | 45 | 42 | 40 | 35 | 33 | 32 | 27 |
| 4 | 75 | 65 | 58 | 52 | 68 | 60 | 54 | 49 | 50 | 45 | 42 | 41 | 37 | 35 | 32 | 30 | 28 | 24 |
| 5 | 69 | 58 | 51 | 45 | 63 | 54 | 47 | 42 | 45 | 40 | 37 | 37 | 34 | 31 | 29 | 27 | 25 | 22 |
| 6 | 64 | 53 | 45 | 40 | 58 | 49 | 42 | 37 | 41 | 36 | 32 | 34 | 30 | 28 | 27 | 25 | 23 | 20 |
| 7 | 59 | 48 | 40 | 35 | 54 | 44 | 38 | 33 | 37 | 33 | 29 | 31 | 27 | 25 | 25 | 23 | 21 | 18 |
| 8 | 55 | 44 | 36 | 32 | 50 | 40 | 34 | 30 | 34 | 29 | 26 | 29 | 25 | 22 | 23 | 21 | 19 | 16 |
| 9 | 52 | 40 | 33 | 28 | 47 | 37 | 31 | 27 | 32 | 27 | 24 | 26 | 23 | 20 | 22 | 19 | 17 | 15 |
| 10 | 48 | 37 | 30 | 26 | 44 | 34 | 28 | 24 | 29 | 25 | 21 | 25 | 21 | 19 | 20 | 18 | 16 | 14 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 19664 | 19664 | 19664 |
| 5° | 19419 | 19350 | 19462 |
| 10° | 18347 | 18513 | 18943 |
| 15° | 16937 | 17330 | 18107 |
| 20° | 15380 | 15959 | 17014 |
| 25° | 13795 | 14547 | 15852 |
| 30° | 12335 | 13141 | 14646 |
| 35° | 10786 | 11566 | 13219 |
| 40° | 9079 | 9800 | 11444 |
| 45° | 7492 | 8139 | 9554 |
| 50° | 6255 | 6819 | 7960 |
| 55° | 5310 | 5852 | 6574 |
| 60° | 4538 | 5073 | 5247 |
| 65° | 3614 | 4267 | 3390 |
| 70° | 3205 | 3331 | 2068 |
| 75° | 2968 | 2700 | 1267 |
| 80° | 2735 | 2483 | 1095 |
| 85° | 2477 | 2279 | 889 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 293.2 | 2.5 |
| 10°-20° | 762.7 | 6.5 |
| 20°-30° | 988.0 | 8.4 |
| 30°-40° | 967.5 | 8.2 |
| 40°-50° | 740.5 | 6.3 |
| 50°-60° | 493.5 | 4.2 |
| 60°-70° | 269.3 | 2.3 |
| 70°-80° | 112.2 | 1.0 |
| 80°-90° | 34.4 | 0.3 |
| 90°-100° | 512.9 | 4.4 |
| 100°-110° | 1381.7 | 11.8 |
| 110°-120° | 1450.0 | 12.4 |
| 120°-130° | 1176.7 | 10.0 |
| 130°-140° | 922.8 | 7.9 |
| 140°-150° | 708.5 | 6.0 |
| 150°-160° | 509.4 | 4.3 |
| 160°-170° | 311.2 | 2.7 |
| 170°-180° | 105.0 | 0.9 |
| 0°-30° | 2043.9 | 17.4 |
| 0°-40° | 3011.4 | 25.7 |
| 0°-60° | 4245.4 | 36.2 |
| 0°-90° | 4661.3 | 39.7 |
| 90°-120° | 3344.6 | 28.5 |
| 90°-150° | 6152.6 | 52.4 |
| 90°-180° | 7078.0 | 60.3 |
| 0°-180° | 11739.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 3197 | 3197 | 3197 | 3197 | 3197 | |
| 5° | 3145 | 3114 | 3134 | 3141 | 3152 | 293 |
| 15° | 2660 | 2650 | 2722 | 2796 | 2844 | 743 |
| 25° | 2033 | 2038 | 2144 | 2237 | 2336 | 935 |
| 35° | 1436 | 1443 | 1540 | 1644 | 1760 | 893 |
| 45° | 861 | 878 | 936 | 1006 | 1098 | 672 |
| 55° | 495 | 516 | 546 | 566 | 613 | 449 |
| 65° | 248 | 269 | 293 | 256 | 233 | 258 |
| 75° | 125 | 125 | 114 | 78 | 53 | 133 |
| 85° | 35 | 35 | 32 | 21 | 13 | 38 |
| 90° | 3 | 8 | 17 | 18 | 18 | 7 |
| 95° | 78 | 279 | 841 | 430 | 298 | 82 |
| 105° | 256 | 398 | 1528 | 2286 | 2145 | 269 |
| 115° | 451 | 552 | 1272 | 2459 | 2781 | 444 |
| 125° | 616 | 708 | 1142 | 1931 | 2272 | 550 |
| 135° | 742 | 828 | 1110 | 1558 | 1764 | 572 |
| 145° | 858 | 924 | 1096 | 1332 | 1430 | 538 |
| 155° | 974 | 1009 | 1087 | 1195 | 1233 | 448 |
| 165° | 1056 | 1068 | 1091 | 1134 | 1140 | 298 |
| 175° | 1098 | 1096 | 1092 | 1108 | 1105 | 104 |
| 180° | 1096 | 1096 | 1096 | 1096 | 1096 | |

TEST NUMBER: P519501

CATALOG NUMBER: SQ4-WB-125U-100D-830-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 3197.0 | 3197.0 | 3197.0 | 3197.0 | 3197.0 |
| 2.5° | 3204.9 | 3176.4 | 3183.6 | 3183.4 | 3174.6 |
| 5° | 3145.1 | 3113.6 | 3133.9 | 3141.2 | 3152.1 |
| 7.5° | 3028.4 | 3004.5 | 3041.6 | 3069.0 | 3091.3 |
| 10° | 2937.5 | 2916.9 | 2964.2 | 3004.1 | 3032.9 |
| 12.5° | 2832.0 | 2814.7 | 2873.3 | 2926.9 | 2964.4 |
| 15° | 2659.8 | 2650.1 | 2721.5 | 2795.5 | 2843.5 |
| 17.5° | 2475.4 | 2470.8 | 2552.6 | 2639.0 | 2700.4 |
| 20° | 2349.7 | 2348.4 | 2438.1 | 2528.1 | 2599.4 |
| 22.5° | 2222.9 | 2225.9 | 2320.3 | 2413.9 | 2495.1 |
| 25° | 2032.7 | 2038.2 | 2143.5 | 2236.9 | 2335.7 |
| 27.5° | 1856.8 | 1859.2 | 1968.2 | 2066.8 | 2172.1 |
| 30° | 1736.7 | 1743.6 | 1850.3 | 1952.4 | 2062.1 |
| 32.5° | 1616.6 | 1624.6 | 1729.1 | 1834.6 | 1946.6 |
| 35° | 1436.5 | 1443.3 | 1540.3 | 1644.0 | 1760.5 |
| 37.5° | 1250.8 | 1260.1 | 1346.1 | 1444.1 | 1558.8 |
| 40° | 1130.7 | 1144.4 | 1220.5 | 1312.8 | 1425.3 |
| 42.5° | 1015.1 | 1032.1 | 1102.6 | 1190.2 | 1291.7 |
| 45° | 861.3 | 877.8 | 935.7 | 1006.5 | 1098.4 |
| 47.5° | 728.9 | 747.8 | 792.3 | 853.3 | 931.8 |
| 50° | 653.7 | 671.5 | 712.6 | 757.8 | 831.9 |
| 52.5° | 587.5 | 605.3 | 641.9 | 676.8 | 739.8 |
| 55° | 495.2 | 515.8 | 545.7 | 566.4 | 613.0 |
| 57.5° | 419.4 | 439.2 | 462.9 | 472.3 | 500.5 |
| 60° | 368.9 | 390.9 | 412.4 | 411.4 | 426.5 |
| 62.5° | 322.9 | 341.6 | 363.1 | 348.2 | 349.0 |
| 65° | 248.3 | 268.9 | 293.2 | 256.2 | 232.9 |
| 67.5° | 200.6 | 205.0 | 230.1 | 178.7 | 150.9 |
| 70° | 178.2 | 178.2 | 185.2 | 138.3 | 115.0 |
| 72.5° | 156.8 | 156.8 | 150.4 | 112.5 | 88.1 |
| 75° | 124.9 | 124.9 | 113.6 | 78.0 | 53.3 |
| 77.5° | 96.2 | 95.1 | 87.0 | 58.2 | 38.7 |
| 80° | 77.2 | 77.2 | 70.1 | 46.0 | 30.9 |
| 82.5° | 60.3 | 60.3 | 54.4 | 35.9 | 23.0 |
| 85° | 35.1 | 35.1 | 32.3 | 20.9 | 12.6 |
| 87.5° | 12.9 | 14.0 | 14.6 | 10.3 | 9.2 |
| 90° | 2.8 | 8.3 | 16.8 | 18.2 | 18.2 |
| 92.5° | 34.1 | 120.4 | 238.0 | 114.6 | 79.6 |
| 95° | 78.2 | 279.0 | 840.8 | 430.0 | 297.5 |
| 97.5° | 124.9 | 319.3 | 1318.8 | 1101.7 | 830.8 |
| 100° | 160.6 | 335.4 | 1470.8 | 1538.8 | 1276.6 |
| 102.5° | 195.3 | 358.1 | 1521.1 | 1866.2 | 1651.0 |
| 105° | 255.6 | 397.6 | 1528.0 | 2286.1 | 2145.4 |
| 107.5° | 312.6 | 439.3 | 1463.0 | 2501.9 | 2538.2 |
| 110° | 350.6 | 470.8 | 1403.7 | 2568.8 | 2701.3 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 390.8 | 502.3 | 1346.7 | 2554.0 | 2771.7 |
| 115° | 451.2 | 552.2 | 1272.4 | 2458.6 | 2780.9 |
| 117.5° | 506.2 | 601.0 | 1214.9 | 2306.4 | 2665.3 |
| 120° | 541.9 | 633.4 | 1185.8 | 2197.1 | 2565.8 |
| 122.5° | 573.2 | 663.6 | 1164.6 | 2085.3 | 2453.0 |
| 125° | 616.0 | 707.5 | 1142.5 | 1931.1 | 2272.5 |
| 127.5° | 657.0 | 747.2 | 1128.6 | 1795.1 | 2099.9 |
| 130° | 681.6 | 771.8 | 1123.0 | 1717.1 | 1984.8 |
| 132.5° | 706.2 | 795.2 | 1117.4 | 1648.4 | 1894.3 |
| 135° | 741.7 | 827.7 | 1110.4 | 1557.9 | 1764.1 |
| 137.5° | 775.5 | 858.0 | 1106.8 | 1481.1 | 1650.4 |
| 140° | 798.9 | 878.2 | 1103.4 | 1433.8 | 1586.7 |
| 142.5° | 823.5 | 897.3 | 1101.2 | 1389.6 | 1518.5 |
| 145° | 857.6 | 924.5 | 1096.5 | 1331.9 | 1430.3 |
| 147.5° | 894.5 | 952.7 | 1091.7 | 1283.4 | 1360.7 |
| 150° | 919.1 | 969.6 | 1089.5 | 1252.9 | 1317.1 |
| 152.5° | 941.4 | 985.4 | 1088.3 | 1228.1 | 1280.3 |
| 155° | 973.5 | 1009.0 | 1086.7 | 1195.1 | 1233.3 |
| 157.5° | 1001.8 | 1029.3 | 1087.0 | 1171.9 | 1197.6 |
| 160° | 1019.6 | 1042.8 | 1088.1 | 1158.3 | 1177.5 |
| 162.5° | 1035.3 | 1054.1 | 1089.2 | 1147.0 | 1160.7 |
| 165° | 1055.9 | 1068.2 | 1090.9 | 1134.3 | 1139.8 |
| 167.5° | 1072.7 | 1079.8 | 1092.3 | 1124.4 | 1126.6 |
| 170° | 1083.9 | 1086.6 | 1092.3 | 1118.8 | 1118.8 |
| 172.5° | 1090.6 | 1091.1 | 1093.4 | 1113.2 | 1113.2 |
| 175° | 1097.8 | 1096.5 | 1092.3 | 1107.6 | 1104.8 |
| 177.5° | 1100.9 | 1098.7 | 1093.1 | 1102.0 | 1099.8 |
| 180° | 1096.5 | 1096.5 | 1096.5 | 1096.5 | 1096.5 |

(END OF REPORT)