

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: P519509

Luminaire Tested: **SQ4-WB-125U-100D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519509
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-840-1D-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

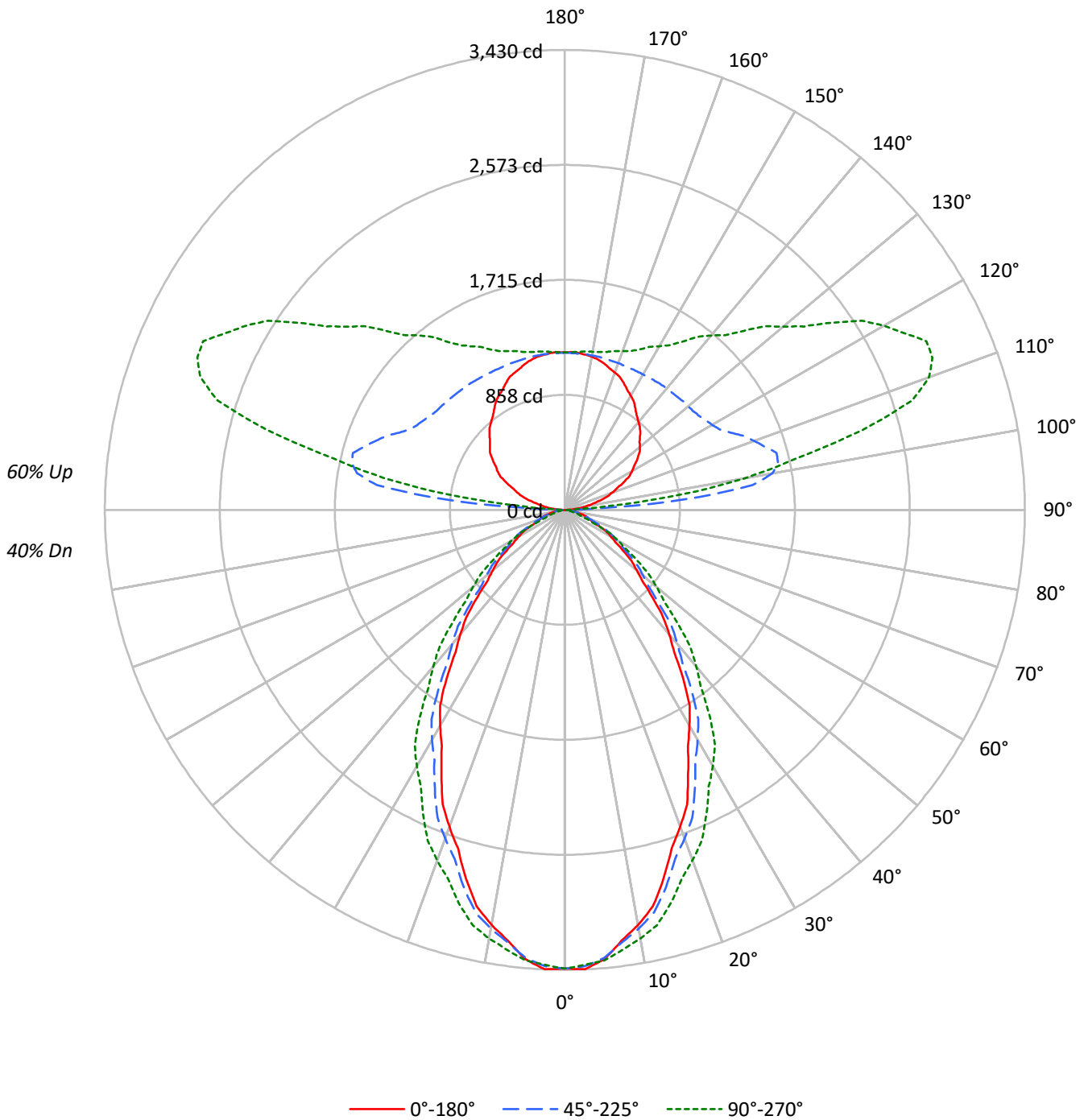
Lumens per Lamp: N/A
Luminaire Lumens: 12562.4 lumens
Efficiency: N/A
Efficacy: 122.2 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

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° | 21043 | 21043 | 21043 |
| 5° | 20780 | 20706 | 20827 |
| 10° | 19633 | 19811 | 20270 |
| 15° | 18124 | 18545 | 19377 |
| 20° | 16459 | 17077 | 18208 |
| 25° | 14762 | 15567 | 16963 |
| 30° | 13199 | 14063 | 15673 |
| 35° | 11542 | 12377 | 14146 |
| 40° | 9715 | 10486 | 12246 |
| 45° | 8017 | 8710 | 10224 |
| 50° | 6693 | 7297 | 8518 |
| 55° | 5682 | 6263 | 7035 |
| 60° | 4857 | 5429 | 5614 |
| 65° | 3867 | 4566 | 3627 |
| 70° | 3428 | 3564 | 2214 |
| 75° | 3175 | 2890 | 1355 |
| 80° | 2926 | 2660 | 1169 |
| 85° | 2646 | 2435 | 953 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 313.8 | 2.5 |
| 10°-20° | 816.2 | 6.5 |
| 20°-30° | 1057.2 | 8.4 |
| 30°-40° | 1035.3 | 8.2 |
| 40°-50° | 792.5 | 6.3 |
| 50°-60° | 528.1 | 4.2 |
| 60°-70° | 288.1 | 2.3 |
| 70°-80° | 120.1 | 1.0 |
| 80°-90° | 36.8 | 0.3 |
| 90°-100° | 548.9 | 4.4 |
| 100°-110° | 1478.5 | 11.8 |
| 110°-120° | 1551.7 | 12.4 |
| 120°-130° | 1259.2 | 10.0 |
| 130°-140° | 987.5 | 7.9 |
| 140°-150° | 758.2 | 6.0 |
| 150°-160° | 545.1 | 4.3 |
| 160°-170° | 333.0 | 2.7 |
| 170°-180° | 112.3 | 0.9 |
| 0°-30° | 2187.2 | 17.4 |
| 0°-40° | 3222.5 | 25.7 |
| 0°-60° | 4543.0 | 36.2 |
| 0°-90° | 4988.0 | 39.7 |
| 90°-120° | 3579.1 | 28.5 |
| 90°-150° | 6584.0 | 52.4 |
| 90°-180° | 7574.0 | 60.3 |
| 0°-180° | 12562.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 3421 | 3421 | 3421 | 3421 | 3421 | |
| 5° | 3366 | 3332 | 3354 | 3361 | 3373 | 313 |
| 15° | 2846 | 2836 | 2912 | 2992 | 3043 | 795 |
| 25° | 2175 | 2181 | 2294 | 2394 | 2499 | 1000 |
| 35° | 1537 | 1544 | 1648 | 1759 | 1884 | 956 |
| 45° | 922 | 939 | 1001 | 1077 | 1175 | 719 |
| 55° | 530 | 552 | 584 | 606 | 656 | 480 |
| 65° | 266 | 288 | 314 | 274 | 249 | 276 |
| 75° | 134 | 134 | 122 | 84 | 57 | 143 |
| 85° | 38 | 38 | 34 | 22 | 14 | 41 |
| 90° | 3 | 9 | 18 | 19 | 19 | 8 |
| 95° | 84 | 298 | 900 | 460 | 318 | 87 |
| 105° | 274 | 426 | 1635 | 2446 | 2296 | 288 |
| 115° | 483 | 591 | 1362 | 2631 | 2976 | 475 |
| 125° | 659 | 757 | 1223 | 2066 | 2432 | 589 |
| 135° | 794 | 886 | 1188 | 1667 | 1888 | 613 |
| 145° | 918 | 989 | 1173 | 1425 | 1530 | 576 |
| 155° | 1042 | 1080 | 1163 | 1279 | 1320 | 480 |
| 165° | 1130 | 1143 | 1167 | 1214 | 1220 | 319 |
| 175° | 1175 | 1173 | 1169 | 1185 | 1182 | 112 |
| 180° | 1173 | 1173 | 1173 | 1173 | 1173 | |

TEST NUMBER: P519509

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 3421.2 | 3421.2 | 3421.2 | 3421.2 | 3421.2 |
| 2.5° | 3429.6 | 3399.0 | 3406.7 | 3406.5 | 3397.1 |
| 5° | 3365.6 | 3331.9 | 3353.6 | 3361.4 | 3373.1 |
| 7.5° | 3240.7 | 3215.2 | 3254.8 | 3284.2 | 3308.0 |
| 10° | 3143.4 | 3121.4 | 3172.0 | 3214.7 | 3245.5 |
| 12.5° | 3030.6 | 3012.1 | 3074.7 | 3132.0 | 3172.3 |
| 15° | 2846.2 | 2835.9 | 2912.3 | 2991.5 | 3042.9 |
| 17.5° | 2649.0 | 2644.0 | 2731.5 | 2824.0 | 2889.7 |
| 20° | 2514.5 | 2513.0 | 2609.0 | 2705.3 | 2781.7 |
| 22.5° | 2378.7 | 2382.0 | 2482.9 | 2583.1 | 2670.0 |
| 25° | 2175.2 | 2181.1 | 2293.8 | 2393.8 | 2499.4 |
| 27.5° | 1986.9 | 1989.6 | 2106.1 | 2211.7 | 2324.4 |
| 30° | 1858.4 | 1865.8 | 1980.0 | 2089.3 | 2206.7 |
| 32.5° | 1729.9 | 1738.5 | 1850.3 | 1963.2 | 2083.0 |
| 35° | 1537.2 | 1544.5 | 1648.3 | 1759.2 | 1884.0 |
| 37.5° | 1338.4 | 1348.4 | 1440.5 | 1545.4 | 1668.1 |
| 40° | 1209.9 | 1224.6 | 1306.0 | 1404.8 | 1525.2 |
| 42.5° | 1086.2 | 1104.4 | 1179.9 | 1273.7 | 1382.3 |
| 45° | 921.7 | 939.3 | 1001.3 | 1077.1 | 1175.4 |
| 47.5° | 780.0 | 800.3 | 847.9 | 913.1 | 997.1 |
| 50° | 699.5 | 718.6 | 762.6 | 810.9 | 890.2 |
| 52.5° | 628.7 | 647.8 | 686.9 | 724.2 | 791.7 |
| 55° | 529.9 | 551.9 | 584.0 | 606.1 | 656.0 |
| 57.5° | 448.8 | 470.0 | 495.4 | 505.4 | 535.6 |
| 60° | 394.8 | 418.3 | 441.3 | 440.2 | 456.4 |
| 62.5° | 345.6 | 365.5 | 388.5 | 372.6 | 373.5 |
| 65° | 265.7 | 287.7 | 313.7 | 274.1 | 249.2 |
| 67.5° | 214.7 | 219.4 | 246.2 | 191.2 | 161.5 |
| 70° | 190.6 | 190.6 | 198.2 | 148.0 | 123.1 |
| 72.5° | 167.8 | 167.8 | 160.9 | 120.4 | 94.3 |
| 75° | 133.6 | 133.6 | 121.6 | 83.5 | 57.0 |
| 77.5° | 103.0 | 101.8 | 93.1 | 62.3 | 41.4 |
| 80° | 82.6 | 82.6 | 75.1 | 49.2 | 33.0 |
| 82.5° | 64.6 | 64.6 | 58.2 | 38.4 | 24.6 |
| 85° | 37.5 | 37.5 | 34.5 | 22.3 | 13.5 |
| 87.5° | 13.8 | 15.0 | 15.6 | 11.1 | 9.9 |
| 90° | 3.0 | 8.8 | 17.9 | 19.4 | 19.4 |
| 92.5° | 36.5 | 128.8 | 254.7 | 122.6 | 85.2 |
| 95° | 83.7 | 298.5 | 899.8 | 460.1 | 318.4 |
| 97.5° | 133.6 | 341.7 | 1411.3 | 1179.0 | 889.0 |
| 100° | 171.9 | 359.0 | 1573.9 | 1646.7 | 1366.1 |
| 102.5° | 209.0 | 383.2 | 1627.7 | 1997.0 | 1766.7 |
| 105° | 273.5 | 425.5 | 1635.2 | 2446.3 | 2295.8 |
| 107.5° | 334.5 | 470.1 | 1565.5 | 2677.2 | 2716.1 |
| 110° | 375.2 | 503.8 | 1502.1 | 2748.9 | 2890.7 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 418.2 | 537.5 | 1441.2 | 2733.1 | 2966.0 |
| 115° | 482.8 | 590.9 | 1361.6 | 2631.0 | 2975.9 |
| 117.5° | 541.7 | 643.1 | 1300.1 | 2468.1 | 2852.1 |
| 120° | 579.9 | 677.8 | 1269.0 | 2351.1 | 2745.7 |
| 122.5° | 613.4 | 710.2 | 1246.3 | 2231.5 | 2624.9 |
| 125° | 659.1 | 757.1 | 1222.6 | 2066.5 | 2431.8 |
| 127.5° | 703.1 | 799.5 | 1207.7 | 1920.9 | 2247.1 |
| 130° | 729.4 | 825.9 | 1201.7 | 1837.5 | 2123.9 |
| 132.5° | 755.7 | 851.0 | 1195.7 | 1764.0 | 2027.1 |
| 135° | 793.7 | 885.7 | 1188.3 | 1667.1 | 1887.8 |
| 137.5° | 829.8 | 918.1 | 1184.4 | 1584.9 | 1766.1 |
| 140° | 855.0 | 939.7 | 1180.8 | 1534.3 | 1697.9 |
| 142.5° | 881.3 | 960.2 | 1178.4 | 1487.0 | 1625.0 |
| 145° | 917.7 | 989.3 | 1173.3 | 1425.3 | 1530.5 |
| 147.5° | 957.2 | 1019.4 | 1168.2 | 1373.4 | 1456.1 |
| 150° | 983.5 | 1037.6 | 1165.8 | 1340.8 | 1409.5 |
| 152.5° | 1007.4 | 1054.5 | 1164.6 | 1314.2 | 1370.0 |
| 155° | 1041.8 | 1079.8 | 1162.9 | 1278.9 | 1319.8 |
| 157.5° | 1072.0 | 1101.5 | 1163.2 | 1254.1 | 1281.5 |
| 160° | 1091.1 | 1116.0 | 1164.3 | 1239.5 | 1260.0 |
| 162.5° | 1107.8 | 1128.0 | 1165.5 | 1227.5 | 1242.1 |
| 165° | 1130.0 | 1143.1 | 1167.3 | 1213.8 | 1219.7 |
| 167.5° | 1147.9 | 1155.5 | 1168.8 | 1203.3 | 1205.6 |
| 170° | 1159.9 | 1162.8 | 1168.8 | 1197.2 | 1197.2 |
| 172.5° | 1167.0 | 1167.6 | 1170.0 | 1191.3 | 1191.3 |
| 175° | 1174.8 | 1173.3 | 1168.8 | 1185.2 | 1182.3 |
| 177.5° | 1178.1 | 1175.8 | 1169.7 | 1179.2 | 1176.9 |
| 180° | 1173.3 | 1173.3 | 1173.3 | 1173.3 | 1173.3 |

(END OF REPORT)