

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: P519446

Luminaire Tested: **SQ4-WB-100U-125D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519446
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-125D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

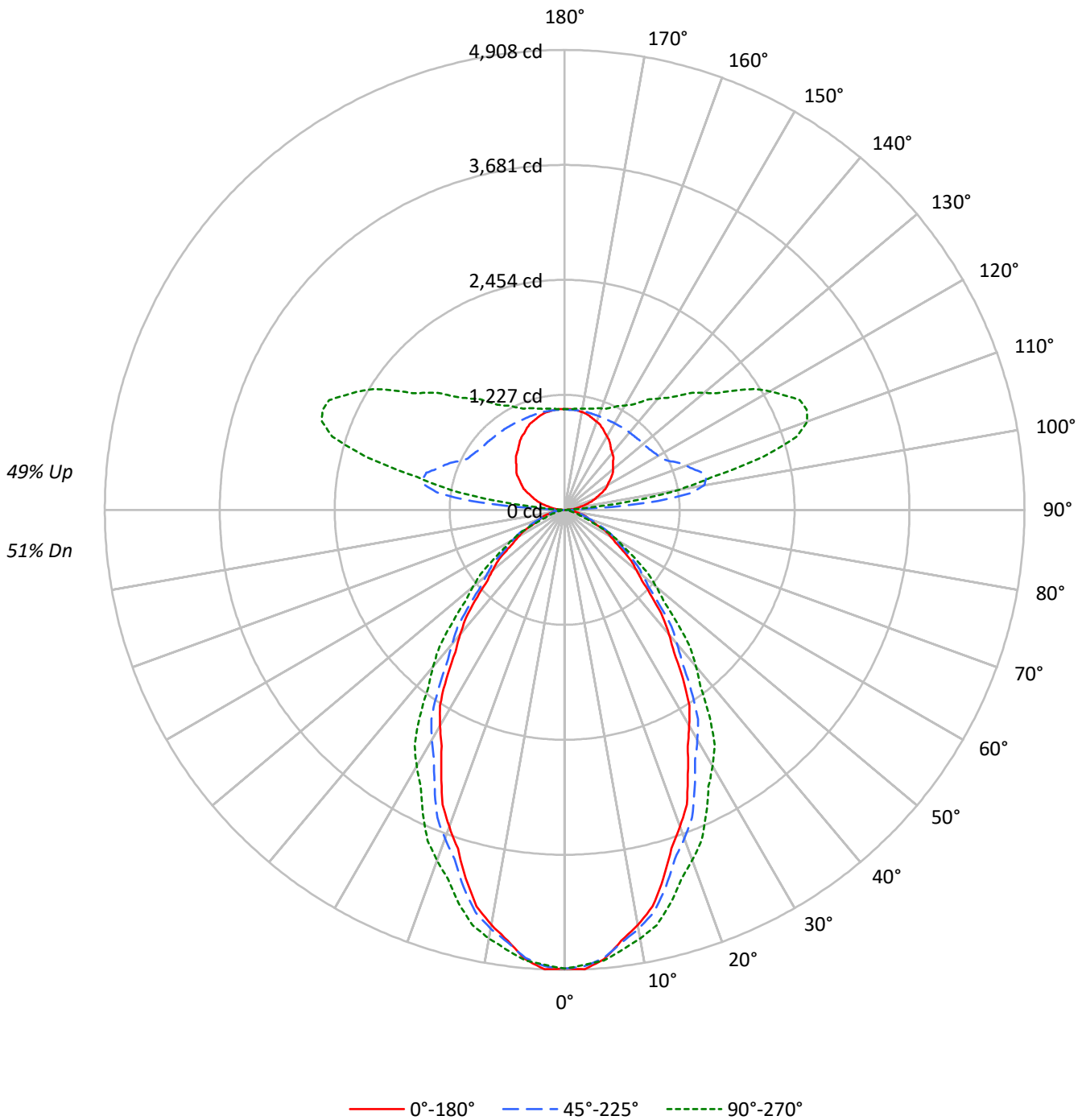
Lumens per Lamp: N/A
Luminaire Lumens: 14115.2 lumens
Efficiency: N/A
Efficacy: 100.4 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 140.6
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 | 107 | 107 | 107 | 107 | 99 | 99 | 99 | 99 | 84 | 84 | 84 | 70 | 70 | 70 | 57 | 57 | 57 | 51 |
| 1 | 99 | 95 | 92 | 89 | 91 | 88 | 85 | 83 | 75 | 73 | 71 | 63 | 62 | 60 | 52 | 51 | 50 | 45 |
| 2 | 91 | 84 | 79 | 74 | 84 | 78 | 74 | 70 | 67 | 64 | 61 | 57 | 54 | 52 | 47 | 45 | 44 | 40 |
| 3 | 84 | 75 | 69 | 63 | 78 | 70 | 64 | 60 | 60 | 56 | 53 | 51 | 48 | 46 | 43 | 41 | 39 | 35 |
| 4 | 77 | 68 | 60 | 55 | 72 | 63 | 57 | 52 | 54 | 50 | 46 | 47 | 43 | 40 | 39 | 37 | 35 | 31 |
| 5 | 72 | 61 | 53 | 48 | 66 | 57 | 50 | 45 | 49 | 44 | 40 | 42 | 39 | 36 | 36 | 33 | 31 | 28 |
| 6 | 66 | 55 | 48 | 42 | 61 | 52 | 45 | 40 | 45 | 40 | 36 | 39 | 35 | 32 | 33 | 30 | 28 | 25 |
| 7 | 62 | 50 | 43 | 38 | 57 | 47 | 41 | 36 | 41 | 36 | 32 | 36 | 32 | 29 | 31 | 28 | 25 | 23 |
| 8 | 58 | 46 | 39 | 34 | 53 | 43 | 37 | 32 | 38 | 33 | 29 | 33 | 29 | 26 | 28 | 25 | 23 | 21 |
| 9 | 54 | 42 | 35 | 30 | 50 | 40 | 33 | 29 | 35 | 30 | 27 | 31 | 27 | 24 | 27 | 24 | 21 | 19 |
| 10 | 50 | 39 | 32 | 28 | 47 | 37 | 31 | 27 | 33 | 28 | 24 | 29 | 25 | 22 | 25 | 22 | 20 | 18 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 22583 | 22583 | 22583 |
| 5° | 22301 | 22222 | 22351 |
| 10° | 21070 | 21261 | 21754 |
| 15° | 19451 | 19902 | 20794 |
| 20° | 17663 | 18327 | 19540 |
| 25° | 15843 | 16706 | 18204 |
| 30° | 14165 | 15092 | 16820 |
| 35° | 12387 | 13283 | 15182 |
| 40° | 10426 | 11254 | 13142 |
| 45° | 8604 | 9347 | 10973 |
| 50° | 7184 | 7831 | 9142 |
| 55° | 6099 | 6720 | 7550 |
| 60° | 5212 | 5826 | 6025 |
| 65° | 4150 | 4900 | 3892 |
| 70° | 3679 | 3824 | 2375 |
| 75° | 3408 | 3101 | 1454 |
| 80° | 3137 | 2853 | 1257 |
| 85° | 2842 | 2615 | 1022 |



TEST NUMBER: P519446

CATALOG NUMBER: SQ4-WB-100U-125D-935-1D-UNV-STD-W-8

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 449.0 | 3.2 |
| 10°-20° | 1167.9 | 8.3 |
| 20°-30° | 1512.8 | 10.7 |
| 30°-40° | 1481.4 | 10.5 |
| 40°-50° | 1133.9 | 8.0 |
| 50°-60° | 755.6 | 5.4 |
| 60°-70° | 412.3 | 2.9 |
| 70°-80° | 171.8 | 1.2 |
| 80°-90° | 50.9 | 0.4 |
| 90°-100° | 503.0 | 3.6 |
| 100°-110° | 1388.8 | 9.8 |
| 110°-120° | 1432.3 | 10.1 |
| 120°-130° | 1150.9 | 8.2 |
| 130°-140° | 904.5 | 6.4 |
| 140°-150° | 693.7 | 4.9 |
| 150°-160° | 498.6 | 3.5 |
| 160°-170° | 304.9 | 2.2 |
| 170°-180° | 102.8 | 0.7 |
| 0°-30° | 3129.8 | 22.2 |
| 0°-40° | 4611.2 | 32.7 |
| 0°-60° | 6500.7 | 46.1 |
| 0°-90° | 7135.7 | 50.6 |
| 90°-120° | 3324.1 | 23.5 |
| 90°-150° | 6073.2 | 43.0 |
| 90°-180° | 6979.0 | 49.4 |
| 0°-180° | 14115.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 4895 | 4895 | 4895 | 4895 | 4895 | |
| 5° | 4816 | 4768 | 4799 | 4810 | 4827 | 448 |
| 15° | 4073 | 4058 | 4167 | 4281 | 4354 | 1137 |
| 25° | 3112 | 3121 | 3282 | 3425 | 3576 | 1431 |
| 35° | 2200 | 2210 | 2359 | 2517 | 2696 | 1367 |
| 45° | 1319 | 1344 | 1433 | 1541 | 1682 | 1029 |
| 55° | 758 | 790 | 836 | 867 | 939 | 688 |
| 65° | 380 | 412 | 449 | 392 | 357 | 395 |
| 75° | 191 | 191 | 174 | 119 | 82 | 204 |
| 85° | 54 | 54 | 49 | 32 | 19 | 58 |
| 90° | 3 | 7 | 14 | 16 | 17 | 8 |
| 95° | 74 | 272 | 913 | 375 | 244 | 79 |
| 105° | 248 | 382 | 1528 | 2333 | 2196 | 263 |
| 115° | 443 | 536 | 1231 | 2436 | 2770 | 436 |
| 125° | 608 | 692 | 1115 | 1888 | 2215 | 541 |
| 135° | 732 | 811 | 1084 | 1529 | 1724 | 566 |
| 145° | 849 | 908 | 1071 | 1302 | 1401 | 532 |
| 155° | 957 | 989 | 1062 | 1168 | 1205 | 441 |
| 165° | 1036 | 1050 | 1067 | 1109 | 1117 | 292 |
| 175° | 1074 | 1076 | 1069 | 1084 | 1081 | 102 |
| 180° | 1074 | 1074 | 1074 | 1074 | 1074 | |

TEST NUMBER: P519446

CATALOG NUMBER: SQ4-WB-100U-125D-935-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 4895.4 | 4895.4 | 4895.4 | 4895.4 | 4895.4 |
| 2.5° | 4907.5 | 4863.8 | 4874.8 | 4874.5 | 4861.1 |
| 5° | 4815.9 | 4767.6 | 4798.8 | 4809.9 | 4826.7 |
| 7.5° | 4637.2 | 4600.7 | 4657.4 | 4699.4 | 4733.5 |
| 10° | 4498.0 | 4466.5 | 4538.8 | 4600.0 | 4644.1 |
| 12.5° | 4336.5 | 4310.0 | 4399.7 | 4481.7 | 4539.3 |
| 15° | 4072.7 | 4058.0 | 4167.2 | 4280.6 | 4354.1 |
| 17.5° | 3790.5 | 3783.3 | 3908.6 | 4040.9 | 4135.0 |
| 20° | 3598.0 | 3595.9 | 3733.3 | 3871.1 | 3980.4 |
| 22.5° | 3403.8 | 3408.4 | 3552.9 | 3696.2 | 3820.5 |
| 25° | 3112.5 | 3120.9 | 3282.2 | 3425.3 | 3576.5 |
| 27.5° | 2843.2 | 2846.9 | 3013.7 | 3164.7 | 3326.1 |
| 30° | 2659.3 | 2669.8 | 2833.3 | 2989.6 | 3157.6 |
| 32.5° | 2475.4 | 2487.6 | 2647.7 | 2809.3 | 2980.6 |
| 35° | 2199.6 | 2210.1 | 2358.6 | 2517.3 | 2695.8 |
| 37.5° | 1915.2 | 1929.5 | 2061.3 | 2211.3 | 2386.9 |
| 40° | 1731.3 | 1752.3 | 1868.8 | 2010.2 | 2182.4 |
| 42.5° | 1554.3 | 1580.4 | 1688.4 | 1822.5 | 1977.9 |
| 45° | 1318.9 | 1344.1 | 1432.8 | 1541.2 | 1681.9 |
| 47.5° | 1116.1 | 1145.1 | 1213.2 | 1306.6 | 1426.7 |
| 50° | 1001.0 | 1028.3 | 1091.2 | 1160.4 | 1273.8 |
| 52.5° | 899.6 | 926.9 | 983.0 | 1036.3 | 1132.9 |
| 55° | 758.3 | 789.8 | 835.6 | 867.3 | 938.7 |
| 57.5° | 642.3 | 672.5 | 708.9 | 723.2 | 766.4 |
| 60° | 564.9 | 598.5 | 631.5 | 629.9 | 653.0 |
| 62.5° | 494.5 | 523.0 | 555.9 | 533.2 | 534.4 |
| 65° | 380.2 | 411.7 | 448.9 | 392.3 | 356.6 |
| 67.5° | 307.2 | 313.9 | 352.3 | 273.6 | 231.1 |
| 70° | 272.8 | 272.8 | 283.5 | 211.8 | 176.1 |
| 72.5° | 240.2 | 240.2 | 230.3 | 172.3 | 134.9 |
| 75° | 191.2 | 191.2 | 174.0 | 119.4 | 81.6 |
| 77.5° | 147.4 | 145.7 | 133.2 | 89.1 | 59.3 |
| 80° | 118.1 | 118.1 | 107.4 | 70.4 | 47.3 |
| 82.5° | 92.4 | 92.4 | 83.3 | 55.0 | 35.2 |
| 85° | 53.7 | 53.7 | 49.4 | 31.9 | 19.3 |
| 87.5° | 19.6 | 20.3 | 19.9 | 13.4 | 12.0 |
| 90° | 3.4 | 6.8 | 13.7 | 15.5 | 17.2 |
| 92.5° | 30.9 | 128.4 | 229.6 | 83.8 | 65.3 |
| 95° | 73.9 | 272.2 | 912.6 | 375.1 | 244.1 |
| 97.5° | 122.4 | 304.9 | 1351.9 | 1040.9 | 753.8 |
| 100° | 158.1 | 324.5 | 1514.2 | 1524.9 | 1239.2 |
| 102.5° | 192.5 | 346.8 | 1545.8 | 1884.1 | 1613.2 |
| 105° | 247.5 | 381.9 | 1527.9 | 2332.6 | 2196.5 |
| 107.5° | 305.9 | 425.6 | 1442.7 | 2548.9 | 2598.7 |
| 110° | 347.2 | 454.7 | 1376.7 | 2595.5 | 2756.8 |

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CATALOG NUMBER: SQ4-WB-100U-125D-935-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 384.3 | 487.8 | 1314.8 | 2558.7 | 2796.7 |
| 115° | 443.4 | 535.9 | 1230.6 | 2436.1 | 2770.5 |
| 117.5° | 495.0 | 587.1 | 1175.2 | 2263.6 | 2644.0 |
| 120° | 529.4 | 620.1 | 1153.2 | 2146.8 | 2529.9 |
| 122.5° | 562.4 | 649.1 | 1135.4 | 2037.7 | 2400.7 |
| 125° | 608.4 | 692.4 | 1115.4 | 1887.7 | 2215.4 |
| 127.5° | 647.6 | 731.6 | 1103.7 | 1760.9 | 2043.5 |
| 130° | 673.7 | 757.8 | 1098.2 | 1683.3 | 1940.4 |
| 132.5° | 698.5 | 778.5 | 1092.7 | 1618.1 | 1851.0 |
| 135° | 732.2 | 811.1 | 1084.5 | 1528.9 | 1723.9 |
| 137.5° | 770.0 | 841.9 | 1080.4 | 1454.0 | 1620.4 |
| 140° | 790.6 | 861.2 | 1077.6 | 1404.1 | 1550.3 |
| 142.5° | 814.0 | 879.2 | 1074.9 | 1359.7 | 1488.4 |
| 145° | 849.0 | 907.9 | 1070.7 | 1301.6 | 1400.7 |
| 147.5° | 882.7 | 934.1 | 1067.0 | 1252.6 | 1329.6 |
| 150° | 907.5 | 949.5 | 1065.6 | 1223.4 | 1285.6 |
| 152.5° | 926.7 | 966.0 | 1064.2 | 1198.4 | 1249.8 |
| 155° | 957.3 | 989.2 | 1062.2 | 1167.8 | 1204.8 |
| 157.5° | 985.5 | 1010.0 | 1062.5 | 1145.6 | 1170.8 |
| 160° | 1002.0 | 1023.8 | 1063.9 | 1133.0 | 1151.5 |
| 162.5° | 1015.8 | 1034.9 | 1065.2 | 1122.0 | 1136.4 |
| 165° | 1036.4 | 1049.8 | 1067.3 | 1108.8 | 1117.2 |
| 167.5° | 1052.2 | 1060.3 | 1069.0 | 1100.7 | 1103.4 |
| 170° | 1060.4 | 1067.2 | 1069.0 | 1096.5 | 1096.5 |
| 172.5° | 1067.3 | 1071.3 | 1069.0 | 1091.0 | 1089.7 |
| 175° | 1074.2 | 1075.9 | 1069.0 | 1084.4 | 1081.1 |
| 177.5° | 1076.9 | 1075.6 | 1068.7 | 1078.2 | 1075.6 |
| 180° | 1074.2 | 1074.2 | 1074.2 | 1074.2 | 1074.2 |

(END OF REPORT)