

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P844971

Luminaire Tested: **SQ4P-F-150U-100D-B40-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P844971
REPORT IS A COMBINATION OF REPORTS P700137 AND P700248
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-F-150U-100D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1500 LUMENS PER FOOT
UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

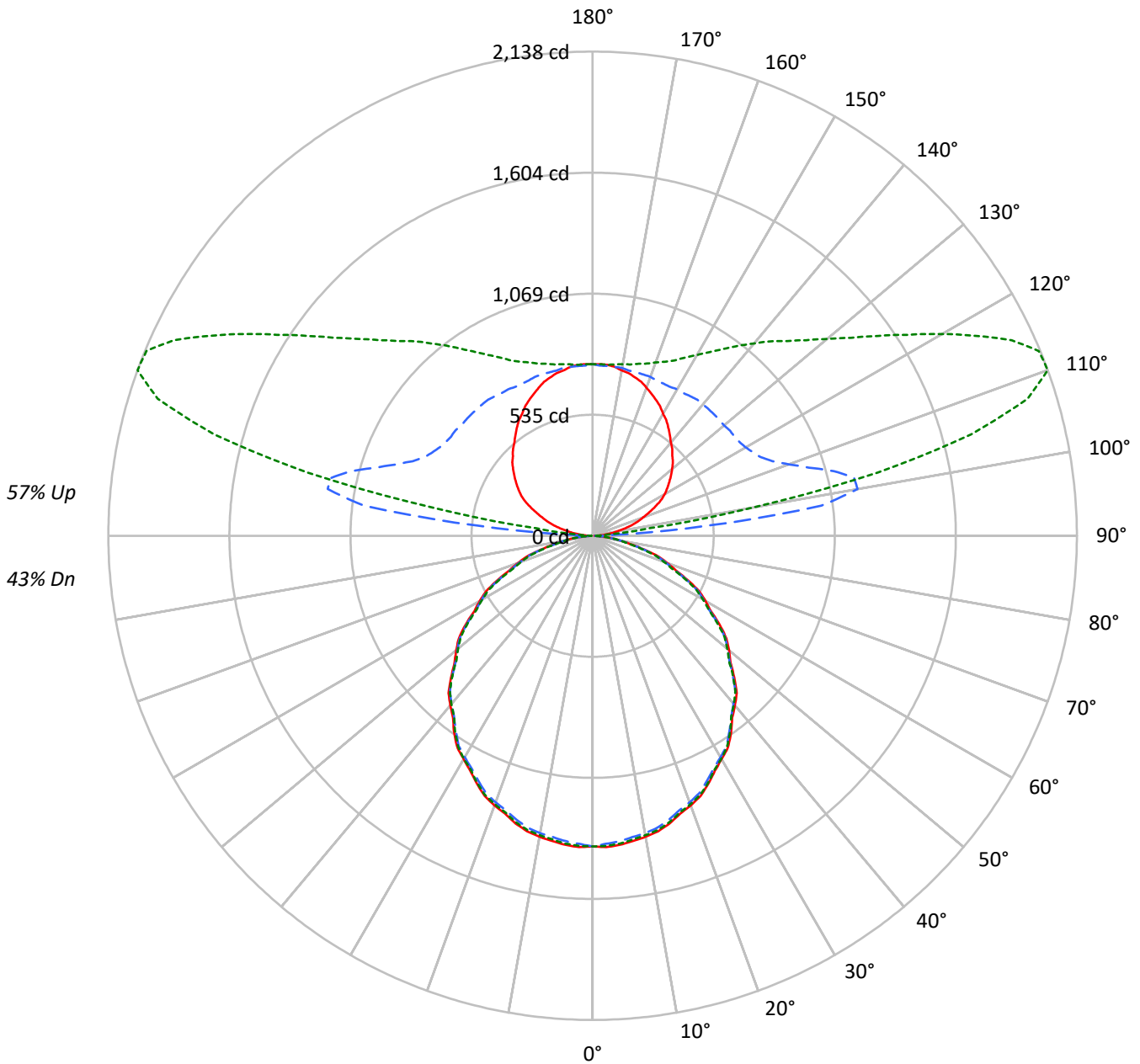
Lumens per Lamp: N/A
Luminaire Lumens: 8664.9 lumens
Efficiency: N/A
Efficacy: 111.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 77.9
Input Voltage (V): NR
Input Current (A_{in}): 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: 25 FT

TEST NUMBER: P844971

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Luminous Intensity Polar Plot





TEST NUMBER: P844971

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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 | 50 | 30 | 10 | 0 | | | | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 106 | 106 | 106 | 106 | 96 | 96 | 96 | 96 | 80 | 80 | 80 | 64 | 64 | 64 | 50 | 50 | 50 | 43 | | | | | | | | |
| 1 | 96 | 92 | 88 | 85 | 88 | 84 | 81 | 78 | 70 | 67 | 65 | 56 | 55 | 53 | 44 | 43 | 42 | 36 | | | | | | | | |
| 2 | 88 | 80 | 74 | 69 | 80 | 74 | 68 | 64 | 61 | 57 | 54 | 49 | 47 | 44 | 39 | 37 | 35 | 30 | | | | | | | | |
| 3 | 80 | 70 | 63 | 57 | 73 | 65 | 58 | 53 | 54 | 49 | 45 | 44 | 40 | 37 | 34 | 32 | 30 | 26 | | | | | | | | |
| 4 | 73 | 62 | 54 | 48 | 66 | 57 | 50 | 45 | 48 | 42 | 38 | 39 | 35 | 32 | 31 | 28 | 26 | 22 | | | | | | | | |
| 5 | 67 | 55 | 47 | 41 | 61 | 51 | 44 | 39 | 43 | 37 | 33 | 35 | 31 | 28 | 27 | 25 | 22 | 19 | | | | | | | | |
| 6 | 62 | 50 | 41 | 36 | 56 | 46 | 39 | 33 | 38 | 33 | 29 | 31 | 27 | 24 | 25 | 22 | 20 | 17 | | | | | | | | |
| 7 | 57 | 45 | 37 | 31 | 52 | 41 | 34 | 29 | 35 | 29 | 25 | 28 | 24 | 21 | 23 | 20 | 17 | 15 | | | | | | | | |
| 8 | 53 | 40 | 33 | 27 | 48 | 37 | 31 | 26 | 31 | 26 | 22 | 26 | 22 | 19 | 21 | 18 | 16 | 13 | | | | | | | | |
| 9 | 49 | 37 | 29 | 24 | 45 | 34 | 27 | 23 | 29 | 24 | 20 | 24 | 20 | 17 | 19 | 16 | 14 | 12 | | | | | | | | |
| 10 | 46 | 34 | 27 | 22 | 42 | 31 | 25 | 20 | 26 | 21 | 18 | 22 | 18 | 15 | 18 | 15 | 13 | 11 | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 12657 | 12657 | 12657 |
| 5° | 12690 | 12537 | 12638 |
| 10° | 12646 | 12491 | 12577 |
| 15° | 12559 | 12402 | 12508 |
| 20° | 12440 | 12297 | 12388 |
| 25° | 12300 | 12153 | 12266 |
| 30° | 12130 | 12032 | 12111 |
| 35° | 12000 | 11854 | 11914 |
| 40° | 11771 | 11656 | 11679 |
| 45° | 11526 | 11431 | 11431 |
| 50° | 11283 | 11177 | 11127 |
| 55° | 11020 | 10872 | 10813 |
| 60° | 10608 | 10439 | 10372 |
| 65° | 10103 | 9903 | 9780 |
| 70° | 9414 | 9212 | 9015 |
| 75° | 8441 | 8185 | 7985 |
| 80° | 6833 | 6742 | 6540 |
| 85° | 4065 | 4679 | 4848 |



TEST NUMBER: P844971

CATALOG NUMBER: SQ4P-F-150U-100D-B40-1D-UNV

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 129.4 | 1.5 |
| 10°-20° | 368.6 | 4.3 |
| 20°-30° | 553.7 | 6.4 |
| 30°-40° | 660.9 | 7.6 |
| 40°-50° | 677.3 | 7.8 |
| 50°-60° | 604.0 | 7.0 |
| 60°-70° | 449.8 | 5.2 |
| 70°-80° | 244.2 | 2.8 |
| 80°-90° | 58.4 | 0.7 |
| 90°-100° | 301.6 | 3.5 |
| 100°-110° | 1049.5 | 12.1 |
| 110°-120° | 1016.6 | 11.7 |
| 120°-130° | 797.5 | 9.2 |
| 130°-140° | 631.2 | 7.3 |
| 140°-150° | 487.1 | 5.6 |
| 150°-160° | 349.2 | 4.0 |
| 160°-170° | 213.6 | 2.5 |
| 170°-180° | 72.2 | 0.8 |
| 0°-30° | 1051.7 | 12.1 |
| 0°-40° | 1712.6 | 19.8 |
| 0°-60° | 2993.9 | 34.6 |
| 0°-90° | 3746.3 | 43.2 |
| 90°-120° | 2367.8 | 27.3 |
| 90°-150° | 4283.6 | 49.4 |
| 90°-180° | 4919.0 | 56.8 |
| 0°-180° | 8664.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1372 | 1372 | 1372 | 1372 | 1372 | |
| 5° | 1370 | 1368 | 1354 | 1366 | 1365 | 130 |
| 15° | 1315 | 1311 | 1298 | 1310 | 1310 | 370 |
| 25° | 1208 | 1205 | 1194 | 1201 | 1205 | 556 |
| 35° | 1065 | 1062 | 1052 | 1052 | 1058 | 665 |
| 45° | 883 | 885 | 876 | 874 | 876 | 682 |
| 55° | 685 | 685 | 676 | 670 | 672 | 610 |
| 65° | 463 | 461 | 454 | 448 | 448 | 458 |
| 75° | 237 | 235 | 230 | 226 | 224 | 250 |
| 85° | 38 | 42 | 44 | 46 | 46 | 54 |
| 90° | 11 | 17 | 17 | 11 | 6 | 8 |
| 95° | 51 | 175 | 509 | 130 | 79 | 54 |
| 105° | 175 | 249 | 1103 | 1861 | 1731 | 184 |
| 115° | 305 | 368 | 820 | 1731 | 2042 | 302 |
| 125° | 413 | 509 | 764 | 1290 | 1538 | 370 |
| 135° | 498 | 560 | 758 | 1075 | 1216 | 386 |
| 145° | 583 | 622 | 752 | 928 | 1007 | 364 |
| 155° | 662 | 684 | 741 | 826 | 854 | 305 |
| 165° | 724 | 730 | 747 | 780 | 786 | 204 |
| 175° | 758 | 758 | 752 | 764 | 758 | 72 |
| 180° | 758 | 758 | 758 | 758 | 758 | |



TEST NUMBER: P844971

CATALOG NUMBER: SQ4P-F-150U-100D-B40-1D-UNV

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1371.9 | 1371.9 | 1371.9 | 1371.9 | 1371.9 |
| 2.5° | 1376.2 | 1373.5 | 1361.6 | 1371.9 | 1370.6 |
| 5° | 1370.2 | 1368.3 | 1353.7 | 1366.4 | 1364.6 |
| 7.5° | 1360.1 | 1356.7 | 1342.2 | 1354.8 | 1352.8 |
| 10° | 1349.8 | 1346.2 | 1333.3 | 1344.3 | 1342.5 |
| 12.5° | 1336.7 | 1334.6 | 1320.3 | 1331.2 | 1330.7 |
| 15° | 1314.9 | 1311.2 | 1298.4 | 1309.5 | 1309.5 |
| 17.5° | 1286.4 | 1284.2 | 1271.6 | 1282.1 | 1281.0 |
| 20° | 1267.0 | 1263.7 | 1252.5 | 1261.7 | 1261.7 |
| 22.5° | 1243.7 | 1241.6 | 1230.6 | 1238.2 | 1239.6 |
| 25° | 1208.3 | 1204.9 | 1193.8 | 1201.3 | 1204.9 |
| 27.5° | 1169.6 | 1166.8 | 1157.5 | 1162.3 | 1164.8 |
| 30° | 1138.6 | 1138.6 | 1129.4 | 1131.4 | 1136.8 |
| 32.5° | 1110.8 | 1110.8 | 1100.1 | 1102.0 | 1104.6 |
| 35° | 1065.4 | 1061.7 | 1052.5 | 1052.5 | 1057.8 |
| 37.5° | 1012.2 | 1010.5 | 1004.7 | 1003.7 | 1005.1 |
| 40° | 977.3 | 975.4 | 967.8 | 969.7 | 969.7 |
| 42.5° | 941.9 | 940.0 | 932.4 | 930.1 | 932.9 |
| 45° | 883.4 | 885.3 | 876.1 | 874.2 | 876.1 |
| 47.5° | 825.9 | 825.9 | 818.5 | 813.3 | 816.0 |
| 50° | 786.1 | 786.1 | 778.7 | 775.2 | 775.2 |
| 52.5° | 744.9 | 746.4 | 737.4 | 732.5 | 734.0 |
| 55° | 685.1 | 685.1 | 675.9 | 670.5 | 672.2 |
| 57.5° | 618.8 | 618.8 | 609.8 | 604.3 | 607.5 |
| 60° | 574.9 | 574.9 | 565.7 | 560.1 | 562.1 |
| 62.5° | 530.8 | 530.8 | 521.7 | 516.2 | 516.4 |
| 65° | 462.8 | 461.1 | 453.6 | 448.0 | 448.0 |
| 67.5° | 397.4 | 392.7 | 387.1 | 379.9 | 379.9 |
| 70° | 349.0 | 347.0 | 341.5 | 334.2 | 334.2 |
| 72.5° | 304.9 | 301.6 | 296.0 | 290.2 | 290.2 |
| 75° | 236.8 | 234.9 | 229.6 | 226.0 | 224.0 |
| 77.5° | 169.8 | 168.2 | 167.8 | 162.7 | 164.2 |
| 80° | 128.6 | 128.6 | 126.9 | 123.1 | 123.1 |
| 82.5° | 91.8 | 93.2 | 90.0 | 89.2 | 87.7 |
| 85° | 38.4 | 42.1 | 44.2 | 45.8 | 45.8 |
| 87.5° | 7.5 | 11.5 | 10.3 | 11.8 | 11.8 |
| 90° | 11.3 | 17.0 | 17.0 | 11.3 | 5.6 |
| 92.5° | 28.3 | 84.8 | 79.2 | 33.9 | 28.3 |
| 95° | 50.9 | 175.3 | 509.0 | 130.0 | 79.2 |
| 97.5° | 79.2 | 198.0 | 1018.1 | 463.8 | 248.9 |
| 100° | 107.5 | 209.2 | 1187.8 | 1114.2 | 718.3 |
| 102.5° | 141.4 | 226.3 | 1182.1 | 1566.7 | 1289.5 |
| 105° | 175.3 | 248.9 | 1102.9 | 1860.8 | 1730.7 |



TEST NUMBER: P844971

CATALOG NUMBER: SQ4P-F-150U-100D-B40-1D-UNV

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 271.4 | 333.7 | 859.7 | 1872.1 | 2132.2 |
| 115° | 305.4 | 367.7 | 820.1 | 1730.7 | 2041.8 |
| 117.5° | 339.4 | 407.2 | 797.4 | 1600.6 | 1911.7 |
| 120° | 367.7 | 441.1 | 780.5 | 1476.2 | 1781.6 |
| 122.5° | 390.2 | 475.1 | 769.2 | 1374.4 | 1651.5 |
| 125° | 412.9 | 509.0 | 763.5 | 1289.5 | 1538.4 |
| 127.5° | 435.5 | 531.6 | 763.5 | 1227.3 | 1436.6 |
| 130° | 458.2 | 543.0 | 757.9 | 1165.1 | 1351.7 |
| 132.5° | 480.8 | 548.6 | 757.9 | 1119.8 | 1278.2 |
| 135° | 497.7 | 559.9 | 757.9 | 1074.6 | 1216.0 |
| 137.5° | 520.4 | 571.3 | 757.9 | 1035.1 | 1165.1 |
| 140° | 537.3 | 588.2 | 757.9 | 995.4 | 1108.5 |
| 142.5° | 559.9 | 605.2 | 757.9 | 955.9 | 1057.6 |
| 145° | 582.6 | 622.1 | 752.2 | 927.6 | 1006.8 |
| 147.5° | 605.2 | 639.1 | 746.6 | 899.3 | 961.5 |
| 150° | 622.1 | 656.1 | 746.6 | 871.0 | 921.9 |
| 152.5° | 644.8 | 673.0 | 740.9 | 842.7 | 888.0 |
| 155° | 661.8 | 684.4 | 740.9 | 825.7 | 854.0 |
| 157.5° | 678.7 | 701.3 | 740.9 | 808.8 | 831.5 |
| 160° | 695.7 | 712.6 | 746.6 | 797.4 | 814.4 |
| 162.5° | 712.6 | 724.0 | 746.6 | 786.2 | 797.4 |
| 165° | 724.0 | 729.6 | 746.6 | 780.5 | 786.2 |
| 167.5° | 735.2 | 740.9 | 746.6 | 774.9 | 774.9 |
| 170° | 740.9 | 746.6 | 752.2 | 769.2 | 769.2 |
| 172.5° | 752.2 | 752.2 | 752.2 | 763.5 | 763.5 |
| 175° | 757.9 | 757.9 | 752.2 | 763.5 | 757.9 |
| 177.5° | 757.9 | 757.9 | 752.2 | 763.5 | 757.9 |
| 180° | 757.9 | 757.9 | 757.9 | 757.9 | 757.9 |



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180° - - 45°-225° - - - - 90°-270°







| | | | | | |
|--------|-------|-------|--------|--------|--------|
| 107.5° | 209.2 | 277.2 | 1001.1 | 1990.8 | 2013.5 |
| 110° | 237.5 | 305.4 | 921.9 | 1973.9 | 2137.9 |



(END OF REPORT)