

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: P845389

Luminaire Tested: **SQ4P-WB-150U-075D-B50-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P845389
REPORT IS A COMBINATION OF REPORTS P700156 AND P700248
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-WB-150U-075D-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1500 LUMENS PER FOOT UPLIGHT, 750 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

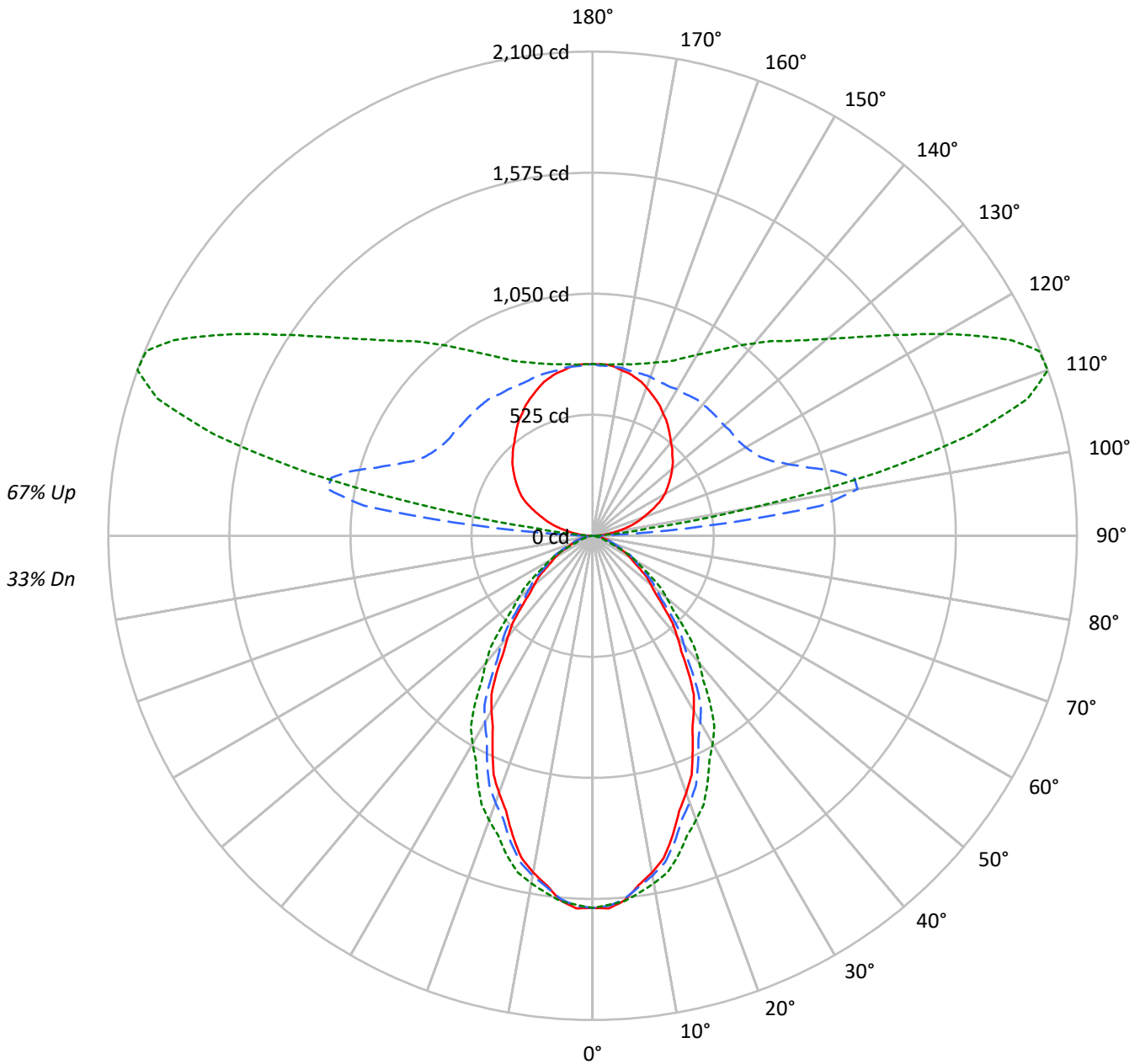
Lumens per Lamp: N/A
Luminaire Lumens: 7185.5 lumens
Efficiency: N/A
Efficacy: 104.7 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 68.6
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: P845389

CATALOG NUMBER: SQ4P-WB-150U-075D-B50-1D-UNV

Luminous Intensity Polar Plot





TEST NUMBER: P845389

CATALOG NUMBER: SQ4P-WB-150U-075D-B50-1D-UNV

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | |
| RC | 80 | | | | | | | | | 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 | 103 | 103 | 103 | 103 | 93 | 93 | 93 | 93 | 74 | 74 | 74 | 56 | 56 | 56 | 40 | 40 | 40 | 33 | | | | | | | | | | | | | | | | | | | |
| 1 | 95 | 91 | 87 | 84 | 85 | 82 | 79 | 76 | 66 | 64 | 62 | 51 | 49 | 48 | 37 | 36 | 35 | 29 | | | | | | | | | | | | | | | | | | | |
| 2 | 87 | 80 | 75 | 70 | 78 | 73 | 68 | 64 | 58 | 55 | 52 | 45 | 43 | 41 | 33 | 32 | 31 | 26 | | | | | | | | | | | | | | | | | | | |
| 3 | 80 | 71 | 64 | 59 | 72 | 65 | 59 | 54 | 52 | 48 | 45 | 41 | 38 | 36 | 30 | 29 | 27 | 23 | | | | | | | | | | | | | | | | | | | |
| 4 | 73 | 63 | 56 | 51 | 66 | 58 | 51 | 47 | 47 | 42 | 39 | 37 | 34 | 32 | 28 | 26 | 24 | 20 | | | | | | | | | | | | | | | | | | | |
| 5 | 67 | 57 | 49 | 44 | 61 | 52 | 45 | 41 | 42 | 38 | 34 | 33 | 30 | 28 | 25 | 23 | 22 | 18 | | | | | | | | | | | | | | | | | | | |
| 6 | 62 | 51 | 44 | 38 | 56 | 47 | 40 | 36 | 38 | 34 | 30 | 30 | 27 | 25 | 23 | 21 | 19 | 16 | | | | | | | | | | | | | | | | | | | |
| 7 | 58 | 46 | 39 | 34 | 52 | 42 | 36 | 31 | 35 | 30 | 27 | 28 | 25 | 22 | 21 | 19 | 18 | 15 | | | | | | | | | | | | | | | | | | | |
| 8 | 54 | 42 | 35 | 30 | 49 | 39 | 32 | 28 | 32 | 27 | 24 | 26 | 22 | 20 | 20 | 18 | 16 | 14 | | | | | | | | | | | | | | | | | | | |
| 9 | 50 | 39 | 32 | 27 | 45 | 35 | 29 | 25 | 29 | 25 | 22 | 24 | 20 | 18 | 18 | 16 | 15 | 12 | | | | | | | | | | | | | | | | | | | |
| 10 | 47 | 36 | 29 | 24 | 42 | 33 | 27 | 23 | 27 | 23 | 20 | 22 | 19 | 17 | 17 | 15 | 14 | 12 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 14888 | 14888 | 14888 |
| 5° | 14703 | 14650 | 14736 |
| 10° | 13892 | 14017 | 14342 |
| 15° | 12823 | 13122 | 13710 |
| 20° | 11645 | 12082 | 12882 |
| 25° | 10446 | 11015 | 12002 |
| 30° | 9339 | 9949 | 11088 |
| 35° | 8167 | 8756 | 10010 |
| 40° | 6872 | 7420 | 8664 |
| 45° | 5672 | 6161 | 7235 |
| 50° | 4735 | 5163 | 6026 |
| 55° | 4020 | 4430 | 4977 |
| 60° | 3438 | 3842 | 3973 |
| 65° | 2738 | 3229 | 2565 |
| 70° | 2428 | 2522 | 1567 |
| 75° | 2246 | 2046 | 959 |
| 80° | 2067 | 1881 | 824 |
| 85° | 1863 | 1736 | 677 |



TEST NUMBER: P845389

CATALOG NUMBER: SQ4P-WB-150U-075D-B50-1D-UNV

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 148.0 | 2.1 |
| 10°-20° | 385.0 | 5.4 |
| 20°-30° | 498.7 | 6.9 |
| 30°-40° | 488.3 | 6.8 |
| 40°-50° | 373.8 | 5.2 |
| 50°-60° | 249.1 | 3.5 |
| 60°-70° | 135.9 | 1.9 |
| 70°-80° | 56.6 | 0.8 |
| 80°-90° | 17.8 | 0.2 |
| 90°-100° | 296.3 | 4.1 |
| 100°-110° | 1031.0 | 14.3 |
| 110°-120° | 998.8 | 13.9 |
| 120°-130° | 783.5 | 10.9 |
| 130°-140° | 620.1 | 8.6 |
| 140°-150° | 478.6 | 6.7 |
| 150°-160° | 343.1 | 4.8 |
| 160°-170° | 209.8 | 2.9 |
| 170°-180° | 71.0 | 1.0 |
| 0°-30° | 1031.7 | 14.4 |
| 0°-40° | 1520.0 | 21.2 |
| 0°-60° | 2142.9 | 29.8 |
| 0°-90° | 2353.3 | 32.8 |
| 90°-120° | 2326.1 | 32.4 |
| 90°-150° | 4208.3 | 58.6 |
| 90°-180° | 4832.0 | 67.2 |
| 0°-180° | 7185.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1614 | 1614 | 1614 | 1614 | 1614 | |
| 5° | 1588 | 1572 | 1582 | 1586 | 1591 | 148 |
| 15° | 1342 | 1338 | 1374 | 1411 | 1435 | 375 |
| 25° | 1026 | 1029 | 1082 | 1129 | 1179 | 472 |
| 35° | 725 | 729 | 777 | 830 | 889 | 451 |
| 45° | 435 | 443 | 472 | 508 | 554 | 339 |
| 55° | 250 | 260 | 275 | 286 | 309 | 227 |
| 65° | 125 | 136 | 148 | 129 | 118 | 130 |
| 75° | 63 | 63 | 57 | 39 | 27 | 67 |
| 85° | 18 | 18 | 16 | 11 | 6 | 19 |
| 90° | 11 | 17 | 17 | 11 | 6 | 8 |
| 95° | 50 | 172 | 500 | 128 | 78 | 53 |
| 105° | 172 | 244 | 1084 | 1828 | 1700 | 181 |
| 115° | 300 | 361 | 806 | 1700 | 2006 | 296 |
| 125° | 406 | 500 | 750 | 1267 | 1511 | 363 |
| 135° | 489 | 550 | 745 | 1056 | 1195 | 379 |
| 145° | 572 | 611 | 739 | 911 | 989 | 358 |
| 155° | 650 | 672 | 728 | 811 | 839 | 300 |
| 165° | 711 | 717 | 733 | 767 | 772 | 201 |
| 175° | 745 | 745 | 739 | 750 | 745 | 71 |
| 180° | 745 | 745 | 745 | 745 | 745 | |



TEST NUMBER: P845389

CATALOG NUMBER: SQ4P-WB-150U-075D-B50-1D-UNV

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1613.7 | 1613.7 | 1613.7 | 1613.7 | 1613.7 |
| 2.5° | 1617.7 | 1603.3 | 1607.0 | 1606.8 | 1602.4 |
| 5° | 1587.6 | 1571.5 | 1581.8 | 1585.5 | 1591.1 |
| 7.5° | 1528.6 | 1516.6 | 1535.3 | 1549.1 | 1560.4 |
| 10° | 1482.8 | 1472.3 | 1496.2 | 1516.4 | 1530.9 |
| 12.5° | 1429.6 | 1420.7 | 1450.4 | 1477.3 | 1496.4 |
| 15° | 1342.5 | 1337.7 | 1373.8 | 1411.1 | 1435.3 |
| 17.5° | 1249.5 | 1247.2 | 1288.5 | 1332.1 | 1363.0 |
| 20° | 1186.0 | 1185.4 | 1230.6 | 1276.1 | 1312.0 |
| 22.5° | 1122.1 | 1123.5 | 1171.1 | 1218.4 | 1259.4 |
| 25° | 1026.1 | 1028.8 | 1082.0 | 1129.1 | 1179.0 |
| 27.5° | 937.3 | 938.5 | 993.3 | 1043.2 | 1096.4 |
| 30° | 876.6 | 880.1 | 933.9 | 985.5 | 1040.8 |
| 32.5° | 816.1 | 820.1 | 872.8 | 926.0 | 982.5 |
| 35° | 725.1 | 728.6 | 777.4 | 829.9 | 888.7 |
| 37.5° | 631.3 | 636.0 | 679.5 | 728.9 | 786.9 |
| 40° | 570.6 | 577.7 | 616.1 | 662.7 | 719.4 |
| 42.5° | 512.3 | 520.9 | 556.6 | 600.8 | 651.9 |
| 45° | 434.7 | 443.1 | 472.2 | 508.0 | 554.5 |
| 47.5° | 367.9 | 377.5 | 399.9 | 430.7 | 470.3 |
| 50° | 329.9 | 339.0 | 359.7 | 382.4 | 419.8 |
| 52.5° | 296.6 | 305.5 | 324.0 | 341.6 | 373.5 |
| 55° | 249.9 | 260.3 | 275.4 | 286.0 | 309.4 |
| 57.5° | 211.7 | 221.7 | 233.7 | 238.4 | 252.7 |
| 60° | 186.3 | 197.4 | 208.2 | 207.5 | 215.3 |
| 62.5° | 163.0 | 172.5 | 183.3 | 175.6 | 176.1 |
| 65° | 125.4 | 135.8 | 147.9 | 129.4 | 117.5 |
| 67.5° | 101.3 | 103.4 | 116.1 | 90.3 | 76.2 |
| 70° | 90.0 | 90.0 | 93.5 | 69.9 | 58.1 |
| 72.5° | 79.2 | 79.2 | 76.0 | 56.7 | 44.4 |
| 75° | 63.0 | 63.0 | 57.4 | 39.4 | 26.9 |
| 77.5° | 48.6 | 48.1 | 43.9 | 29.3 | 19.5 |
| 80° | 38.9 | 38.9 | 35.4 | 23.2 | 15.5 |
| 82.5° | 30.5 | 30.5 | 27.4 | 18.1 | 11.5 |
| 85° | 17.6 | 17.6 | 16.4 | 10.6 | 6.4 |
| 87.5° | 6.3 | 6.3 | 5.6 | 3.3 | 2.9 |
| 90° | 11.1 | 16.7 | 16.7 | 11.1 | 5.5 |
| 92.5° | 27.8 | 83.3 | 77.8 | 33.3 | 27.8 |
| 95° | 50.0 | 172.2 | 500.1 | 127.8 | 77.8 |
| 97.5° | 77.8 | 194.5 | 1000.2 | 455.6 | 244.5 |
| 100° | 105.6 | 205.5 | 1166.9 | 1094.6 | 705.6 |
| 102.5° | 138.9 | 222.3 | 1161.3 | 1539.1 | 1266.9 |
| 105° | 172.2 | 244.5 | 1083.5 | 1828.1 | 1700.3 |



TEST NUMBER: P845389

CATALOG NUMBER: SQ4P-WB-150U-075D-B50-1D-UNV

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 266.7 | 327.9 | 844.5 | 1839.2 | 2094.7 |
| 115° | 300.1 | 361.2 | 805.7 | 1700.3 | 2005.9 |
| 117.5° | 333.4 | 400.0 | 783.4 | 1572.5 | 1878.1 |
| 120° | 361.2 | 433.4 | 766.8 | 1450.2 | 1750.3 |
| 122.5° | 383.4 | 466.8 | 755.7 | 1350.3 | 1622.4 |
| 125° | 405.7 | 500.1 | 750.1 | 1266.9 | 1511.3 |
| 127.5° | 427.8 | 522.3 | 750.1 | 1205.7 | 1411.4 |
| 130° | 450.1 | 533.4 | 744.6 | 1144.6 | 1328.0 |
| 132.5° | 472.3 | 538.9 | 744.6 | 1100.2 | 1255.7 |
| 135° | 489.0 | 550.1 | 744.6 | 1055.7 | 1194.6 |
| 137.5° | 511.2 | 561.2 | 744.6 | 1016.9 | 1144.6 |
| 140° | 527.9 | 577.9 | 744.6 | 977.9 | 1089.0 |
| 142.5° | 550.1 | 594.5 | 744.6 | 939.1 | 1039.0 |
| 145° | 572.4 | 611.2 | 739.0 | 911.3 | 989.1 |
| 147.5° | 594.5 | 627.9 | 733.4 | 883.5 | 944.6 |
| 150° | 611.2 | 644.5 | 733.4 | 855.7 | 905.7 |
| 152.5° | 633.5 | 661.2 | 727.9 | 827.9 | 872.3 |
| 155° | 650.1 | 672.3 | 727.9 | 811.2 | 839.0 |
| 157.5° | 666.8 | 689.0 | 727.9 | 794.6 | 816.8 |
| 160° | 683.5 | 700.1 | 733.4 | 783.4 | 800.1 |
| 162.5° | 700.1 | 711.3 | 733.4 | 772.4 | 783.4 |
| 165° | 711.3 | 716.8 | 733.4 | 766.8 | 772.4 |
| 167.5° | 722.3 | 727.9 | 733.4 | 761.2 | 761.2 |
| 170° | 727.9 | 733.4 | 739.0 | 755.7 | 755.7 |
| 172.5° | 739.0 | 739.0 | 739.0 | 750.1 | 750.1 |
| 175° | 744.6 | 744.6 | 739.0 | 750.1 | 744.6 |
| 177.5° | 744.6 | 744.6 | 739.0 | 750.1 | 744.6 |
| 180° | 744.6 | 744.6 | 744.6 | 744.6 | 744.6 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|-------|-------|-------|--------|--------|
| 107.5° | 205.5 | 272.3 | 983.5 | 1955.8 | 1978.1 |
| 110° | 233.3 | 300.1 | 905.7 | 1939.2 | 2100.4 |



(END OF REPORT)