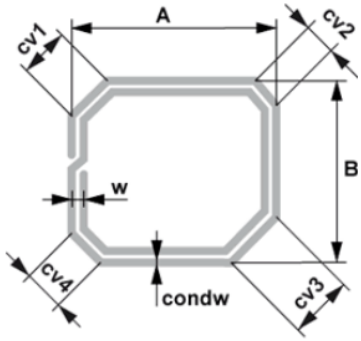
# Q8SSAFFIREEVO antenna photo


Saffire EVO LZ-D & Saffire EVO LZ-I antenna impedance design.

**Step 1.2: Dimension Rectangle Geometry**

1. Specify the antenna geometry:




Please refer to the document Reader Antenna Design LA-23-950 for shielding dimensions.

| | | | | | |
|---|---|---|---|---|---|
| Number of layers with identical windings, connected in series | $N_L$ = | 1 | | | [1 ... 4] |
| Number of windings per layer | N = | 3 | | | [2 ... 8] |
| Length | A = | 48.1 | | | [10 mm ... 120 mm] |
| Width | B = | 51.1 | | | [10 mm ... 120 mm] |
| Edge chamfers (45° each) | Cv1 = | 2.5 | Cv2 = | 2.5 | [0 mm ... 85 mm] |
| | Cv3 = | 2.5 | Cv4 = | 2.5 | |
| Winding distance | w = | 0.55 | | | [condw ... min. (A,B)/18] |
| PCB conductor width | condw = | 0.3 | | | [0.1 mm ... min. (2 mm, A/25, B/25)] |

Calculate

**Antenna Inductance L**
With the specified antenna geometry the following inductance will result:

**L = 1'384.48 nH**