
**CR95HF NFC / RFID reader antenna tuning circuit with EMI filter
calculation tool**

Data Brief**Features**

- CR95HF antenna tuning calculation tool including EMI filter
- Tuning circuit input impedance curve drawing
- Tuning circuit voltages curves calculation and drawing
- Theoretical magnetic field strength calculation and drawing

Description

In combination with the application note AN4327 “CR95HF RF transceiver board tuning circuit with EMI filter”, STSW-95HF worksheet helps customers to calculate and adjust the antenna tuning circuit for the CR95HF NFC / RFID reader.

STSW-95HF003 allows to estimates the theoretical circuit component values to achieve the desired input impedance of the tuning circuit.

From chosen and calculated component values, the input impedance curve is given as a function of the frequency for comparison and adjustment of component values on the application board.

STSW-95HF003 also estimates the voltages at different location of the circuit.

An estimation of the magnetic field strength generated by the reader at various distance (free space, reader not loaded by any tag) is also provided.

Revision history

Table 1. Document revision history

Date	Revision	Changes
05-Jan-2016	1	Initial release.

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