



Streamlight PSL 3 RF Remote Antenna Specification

Document number: PD_AZC826 PSL_3_RF_Remote_Antenna_Spesification
Issue: 1v01

DOCUMENT CHANGE DETAIL:

Ver	Date	Description	Section nr
1v00	2025-02-24	Original	
1v01	2026-06-08	Update antenna type.	1, Table 1

1. ANTENNA DESCRIPTION

The product uses an onboard PCB antenna. The resonant frequency is optimized with matching components for 433MHz. The antenna design shown in Figure 3. The antenna as implemented on the final product.

The S11 parameters for the antenna as measured using a Lite VNA antenna analyser are shown in Figure 4. The main antenna parameters are shown in Table 1.

The Mechanical dimensions of the antenna layout are shown in Figure 3.

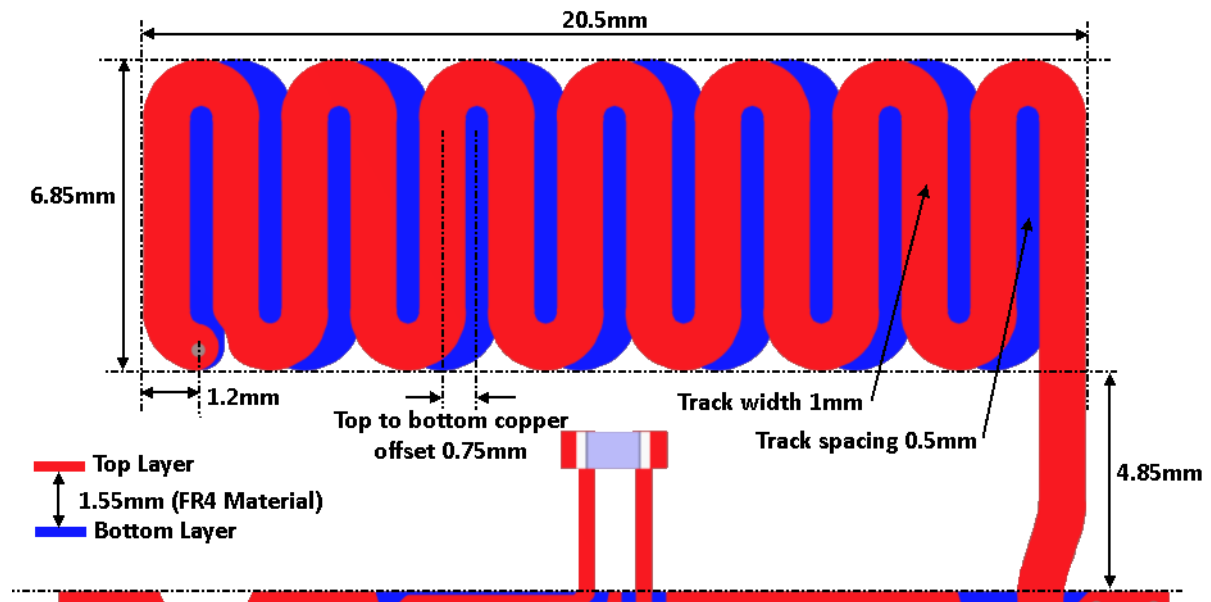


Figure 3: Antenna mechanical dimensions.

Operating Frequency	433.9MHz
Maximum Gain	-5dBi
Type	PCB antenna
Bandwidth	50MHz
VSWR	$\leq 1.5 : 1$, Maximum
Nominal Impedance	50 ohms
Connectors	PCB track direct connect
Dimensions (area on PCB)	20.5×6.85 mm
PCB material and thickness	1.55mm FR4
Approximate antenna track length	181mm

Table 1: Antenna main parameters.

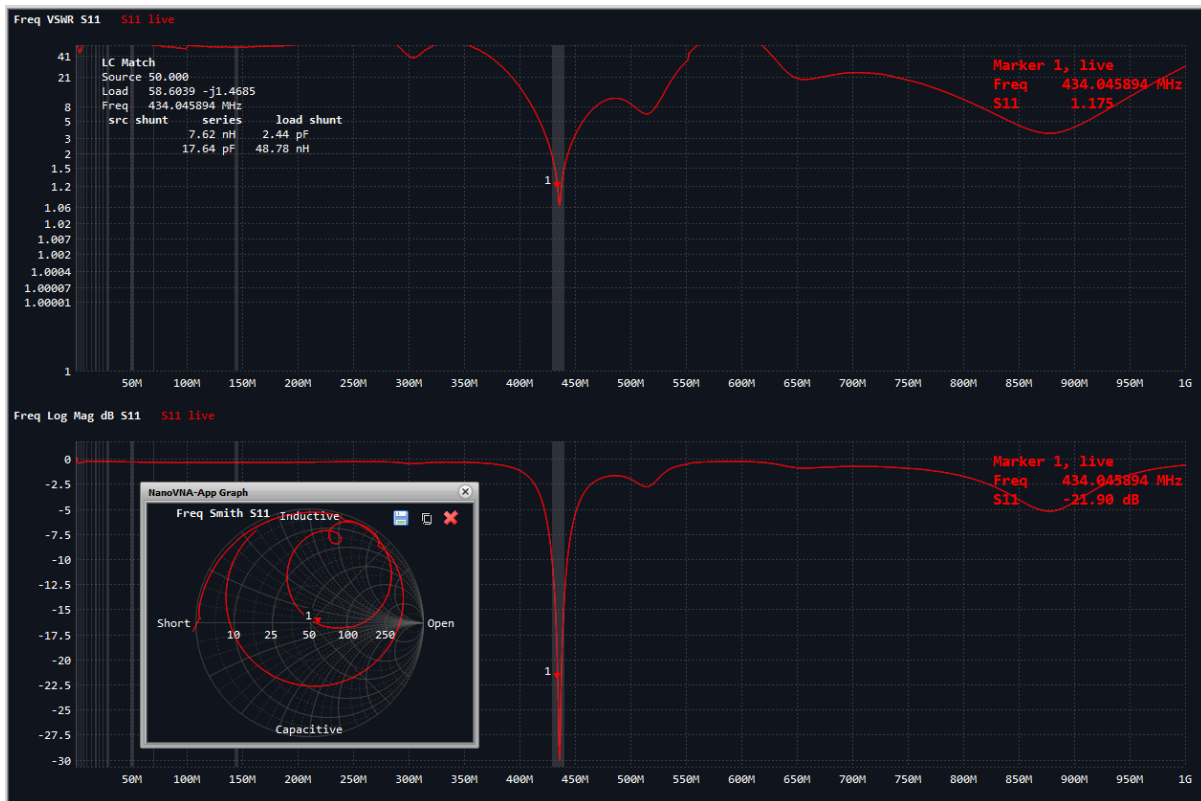


Figure 4: Frequency response for S11 Parameters of Antenna*.

* Parameters tested using LiteVNA antenna network analyser after component matching elements added.