# 承认书

## APPROVAL SHEET

产品品名/product Model No: VIC-UF9-23061/23062				
发行日期/Issue Date :2024-06-14				
承认日期/Approved Date:				
Approved by customer: (signing or stamping here)				

#### Antenna specifications:

This report mainly provides testing of various electrical performance parameters of our company's antennas. The VIC-UF9-23061/23062 antenna is a set of built-in antennas, which are the transmitting antenna and the receiving antenna, respectively

The antenna is composed of an FPC+RF coaxial line as a whole. (As shown in Figure 1 below)

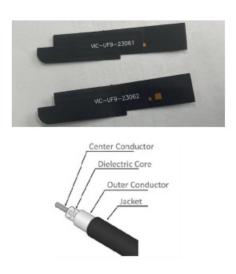
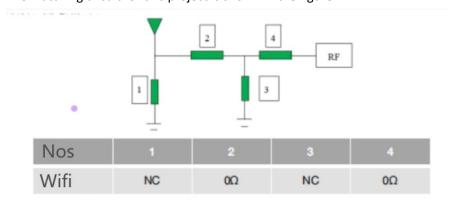


Figure 1 Antenna and Coaxial Welding Structure

#### Antenna electrical performance:

Matching circuit of WIFI antenna

The matching circuit for this project is shown in the figure.



#### Antenna electrical performance:

Testing of standing wave ratio/efficiency

Antenna electrical performance

Test settings

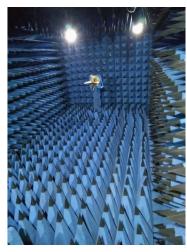
The VSWR testing device is sequentially connected as follows: Agilent E5071B network analyzer ® 50 ohm coaxial

120mm long copper tube with Cable ® Test fixture

Treatment of testing fixture: Use a hard cable to lead out SMA-J from the 50 ohm test point of the antenna on the flat PCB

Connect the connector to the copper pipe with a choke ring, and then connect other devices in sequence.





■Vic Semi reserves the right to change or uprate, without notice, any information contained in this specification.

### Antenna electrical performance

### The measured antenna is shown in the figure:



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频率 (MHZ)	594-605
回波损耗(Return Loss)	-15至-25

频率 (MHz)	效率(%)	dBi
594	18.23	0.23
600	18.93	0.28
605	20.02	0.3

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频率 (MHz)	效率(%)	₫Bi
594	13.7	0.31
600	15.56	0.34
605	16.01	0.43

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#### Antenna installation recommendations

Reference suggestions

Antennas should not be too close to metal objects, such as batteries, chips, etc., and should not be in contact with batteries

Wait for objects to overlap. Pay attention to internal cables (such as power cables, ribbon cables, etc.) and it is best not to be too close to the antenna

Try not to use metal shells or plastic shells with metal around the antenna. Matching antennas in the final product solution can reduce adjustment cycles and maximize performance effect.