

# LSN50V3-NB

## Product Specifications for Approval

Customer name: Shenzhen letter transfer

communication technology Co., LTD

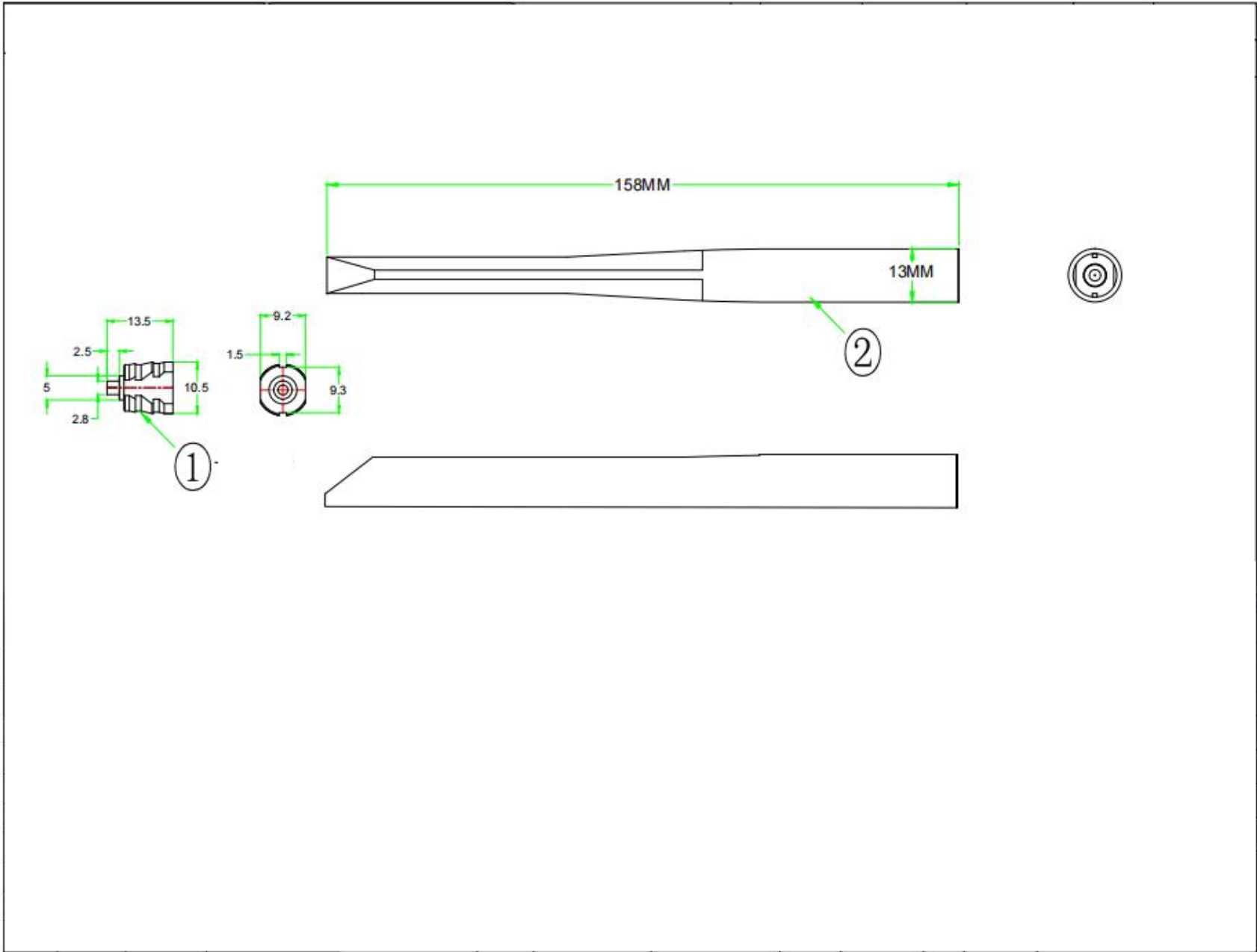
Antenna band: 698-960MHz 1710-2690MHz

Edition: A1

Date of manufacture: 2024-04-29

ID: FS-487

<b>Developed by Feisheng Electronics Co., LTD</b>			
<b>Structure:</b>	<u>Xu Long</u>	<b>Radio frequency:</b>	<u>Guo Xi</u>
<b>Examin:</b>	<u>Li Sheng</u>	<b>Give permission to:</b>	<u>Li Sheng</u>
<b>Customer confirmation</b>			



# Product characteristic specification sheet

Product type: Glue stick antenna -NB- Knife type glue stick - SMA male female needle - 178 thread - double tin - Brown -L=158MM

DESCRIPTION	VALUE
Frequency range	698-960MHz 1710-2690MHz
Impedance	50 $\Omega$
V.S.W.R	Contrast sample waveform
Gain	0.45 DBi
Radiation	Omni-directional
Polarization	linear Vertical
Admitted power	1W
Connector	SMA
Operating temp	-45°C~+85°C
Storage temp	-45°C~+85°C

## 1. Summary :

This report to account for the measurement setup and result of the Antenna. The measurement setup includes s-parameter, The measured data for Antenna are presented and analysis.

## 2. S-Parameter Measurement S :

A. Reflection coefficient :

(a) Instrument: Network Analyzer .(b) Setup :

(1) Calibrate the Network Analyzer by one port calibration using O.S.L. calibration kits.

(2) Connect the antenna under test to the Network Analyzer.

(3) Measure the S11(reflection coefficient) shown in Fig. 1.

(4) Generally, the S11 is less than  $-10\text{dB}$  to ensure the 90% VSWR 2.0:1 power into antenna and only less than 10% power back to system.

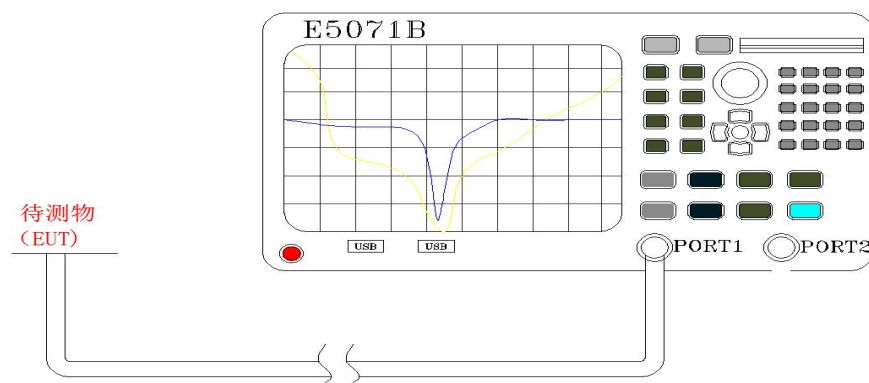


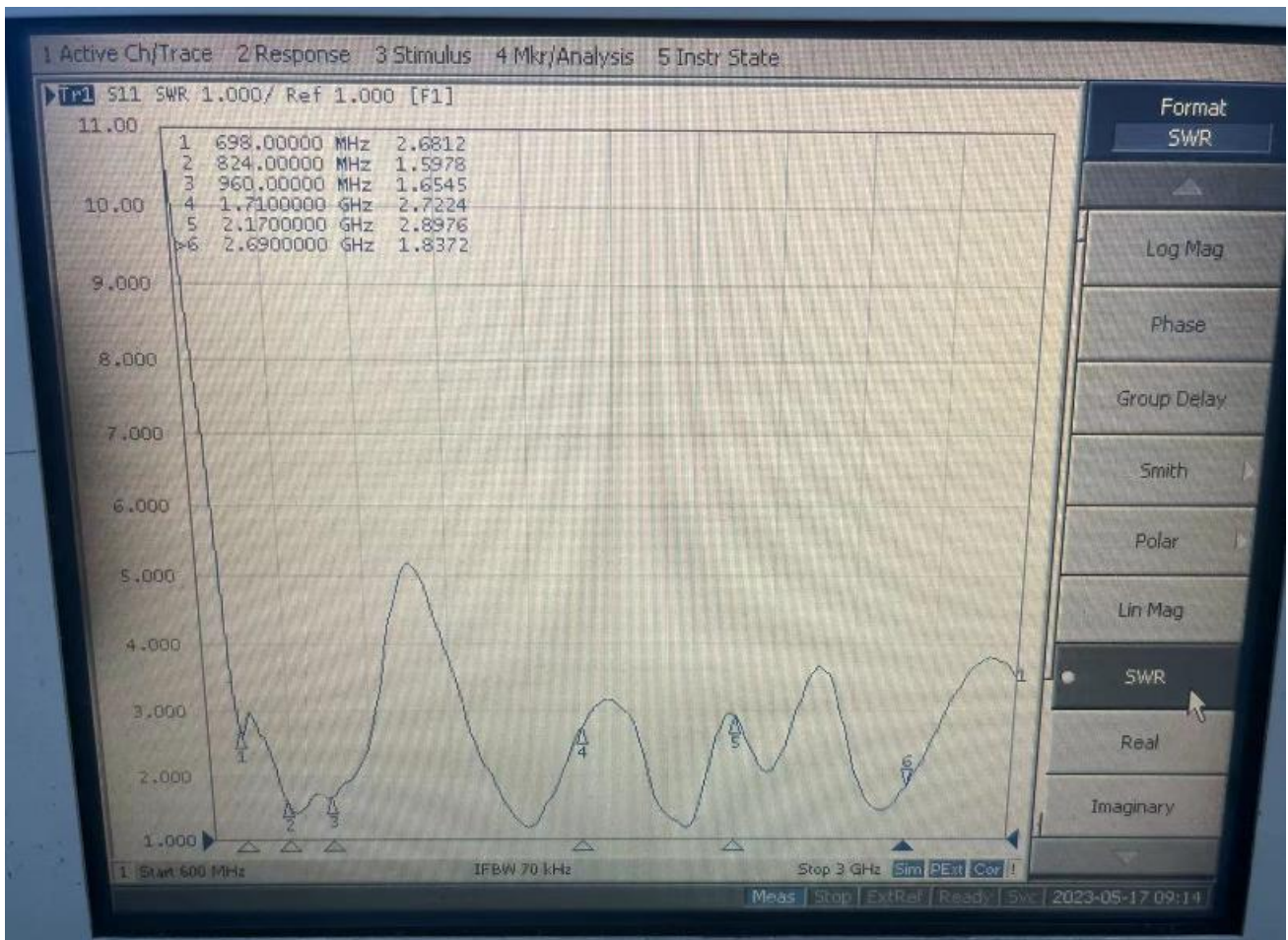
Fig.1 Antenna measured in Network Analyzer

### 3. S-Parameter Measurement Result S :

S-Parameter test data S-:

Frequency MHz	698	824	960	1710	2170	2690
V.S.W.R	2.68	1.59	1.65	2.72	2.89	1.83

S-Parameter test image S-



Antenna configuration:

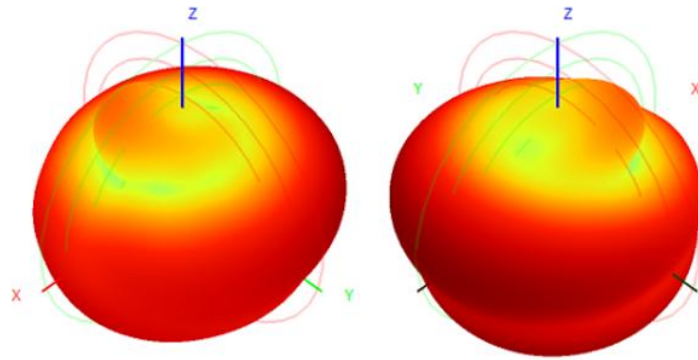


Passive value:

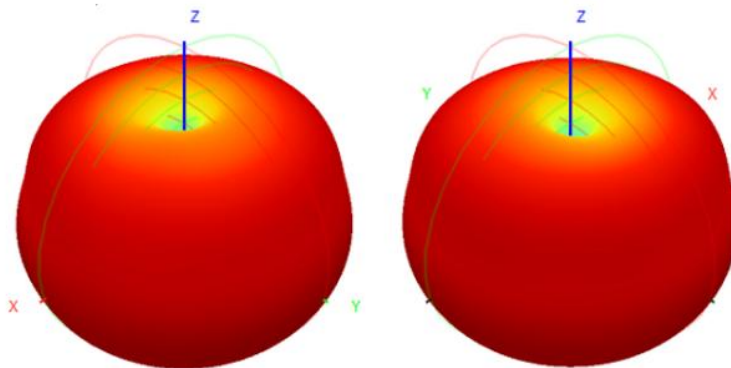
Frequency (MHz) (工作频段)	Efficiency (%) (效率)	Peak GAIN (dBi) (增益)
698	15.30	0.23
824	58.06	0.18
960	43.94	0.52
1710	39.47	0.45
2170	24.76	0.21
2690	51.70	0.42

### 3D:

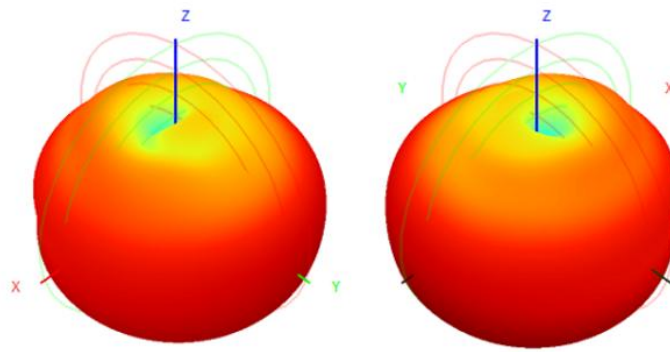
698MHz



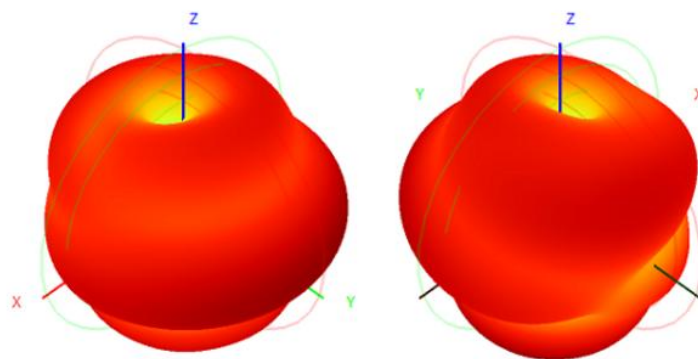
824MHz



960MHz

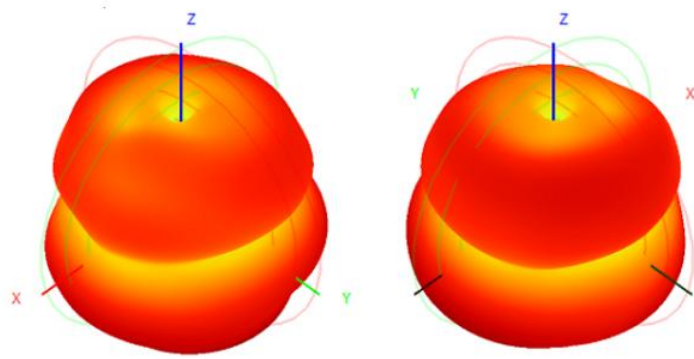


1710MHz





2170MHz



2690MHz

