

Yuande Electronics (Shenzhen) Co., LTD

SAMPLE APPROVAL SHEET

(Customer)	Guangzhou Panyu huge car audio equipment Co., LTD
(Material Description)	VX968 BT antenna
(Customer's Part number)	
(Specifications)	FPC(L40*W18mm) + black coaxial line (ϕ 1.13*180mm) + welded
(Supplier's Part number)	136-VX968-10A
(Date)	2024-1-11

This report mainly provides the test status of various electrical and structural performance parameters of antenna VX968 BT antenna

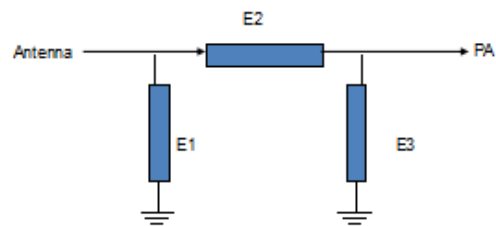


Figure 1 Sky line

The antenna operates on a frequency band 2400-2480MHz 。 The following table is the electrical performance index of our antenna design.

antenna	VX968 BT antenna
Frequency band	2400-2480MHz
Standing-wave ratio	< 2
efficiency	> 50%
impedance	50 ohm
Polarization mode	Linear polarization

1.1.2 Match the circuit diagram

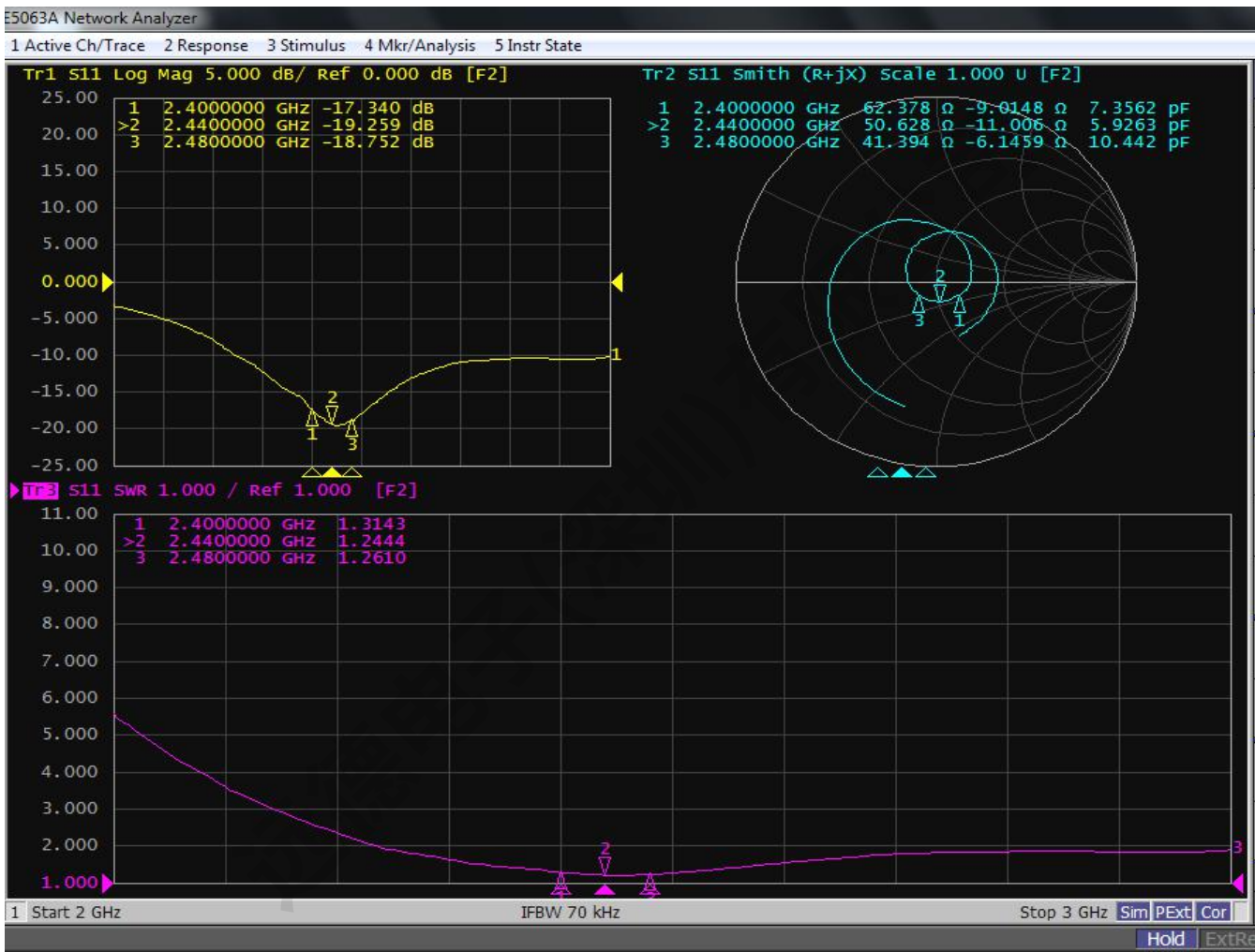


Element	Value
E1(0402)	N/A
E2(0402)	0R
E3(0402)	N/A

2.1.2 S11

The following table shows the value of standing wave ratio at the edge frequency of the antenna operating band. The Return Loss and VSWR related waveforms obtained from the test are shown in the figure below. 。

(MHz)	2400	2440	2480
VSWR	1.31	1.24	1.26
Return Loss	-17.34	-19.25	-18.75



2.2 Gain and efficiency test

2.2.1 Test site

Yuande microwave darkroom: Test frequency range of

400MHz - 6GHz 2.2.2 test instrument

Network analyzer, standard horn antenna, multi-probe near-field antenna test system, test computer, etc.

2.2.3 Test result

In the microwave darkroom, the values related to efficiency and gain tested are shown in the table below

Frequency (MHz)	Gain (dBi)	Efficiency (%)
2400	1.73	54.56
2410	2.03	55.40
2420	2.32	56.22
2430	2.48	57.84
2440	2.54	59.33
2450	2.56	61.26
2460	2.63	63.42
2470	2.68	65.84
2480	2.85	64.22
2490	2.91	61.78
2500	2.27	55.52

2.2.4 Passive radiation pattern

