

Product Specification Approval

Antenna Lab.
Shenzhen R&D
Center

Customer Name: Product Name: _____

_____ Camera-WIFI Material

Code _____:

Producer		Date: October 30, 2023
make	quality	R&D

Customer's side		Date: yea mo day r nth
conclusion	quality	R&D

Shenzhen Lingxuntong Technology Co., Ltd

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1. Purpose

Standardize the specifications and test methods of mobile communication terminal antennas produced by Shenzhen Lingxuntong Technology Co., Ltd. to avoid errors caused by different test conditions and methods.

2. Overview of product categories and product models

2.1 Categories

The WIFI antenna of this mobile communication terminal is: PIFA antenna ;

2.2 Product model overview

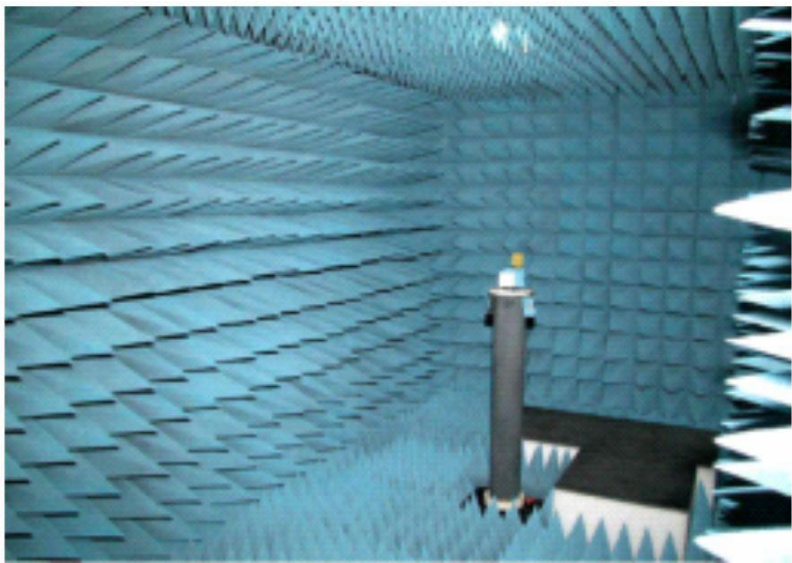
This report provides an overview of the electrical results of the antennas designed by the Camera-WIFI project. This antenna is designed for the 2400-2500 band.

3. Technical indicators and equipment

3.1 Technical Indicators

Electrical performance index of the product	
Operating frequency range	2400-2500MHz
VSWR	2400-2500MHz<3.0
Antenna gain	2400-2500MHz-1.5dBi±1dBi
Radiation efficiency	2400-2500MHz> 30%
impedance	50 ohm
Product Material Description	
FPC	ELECTROLYTIC COPPER + PI + 1.13*40MM COAXIAL WIRE + FIRST GENERATION
Product environmental description	
Operating temperature	- 30℃ ~ + 85 ℃
Storage temperature	- 30℃ ~ + 85 ℃

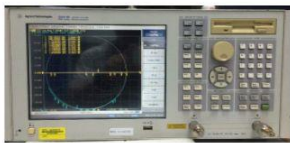
3.2 Instruments and equipment



ETS Chamber
天线测试暗室
L x W x H = 8x4x4M



R&S CMW500



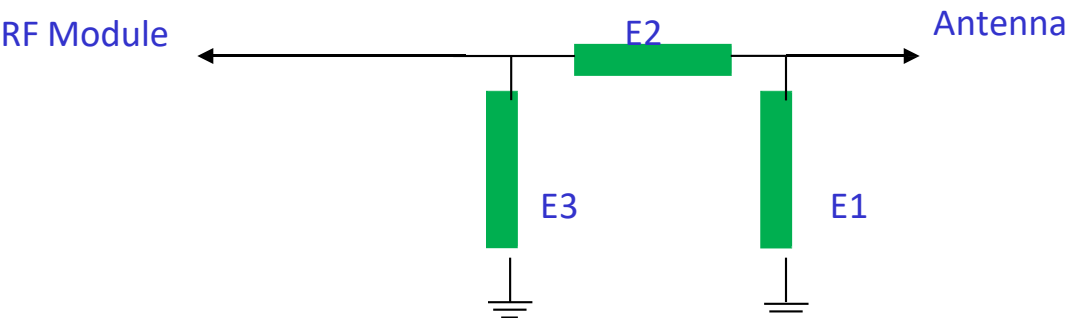
Agilent E5071B



Agilent 8960

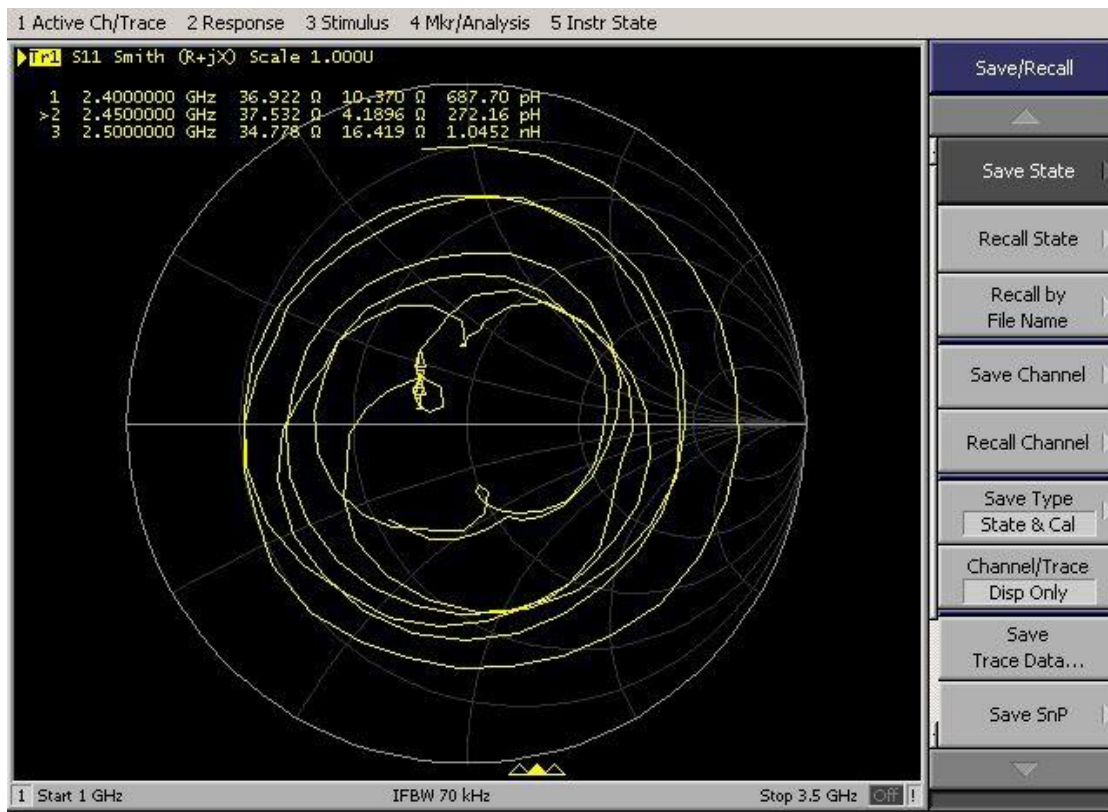
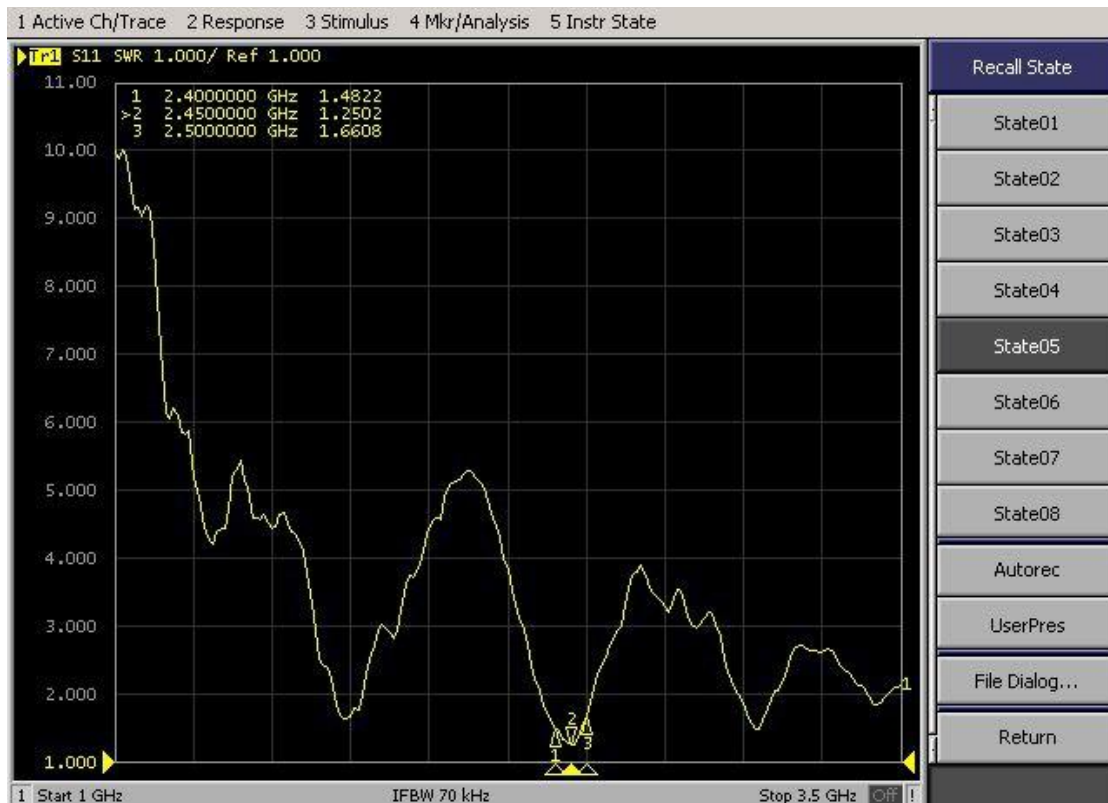
4. Matching circuit description:

Our company has not modified the original matching circuit of the WIFI antenna



Element	Value	Vender
E1(0201)		
E2(0201)		
E3(0201)		

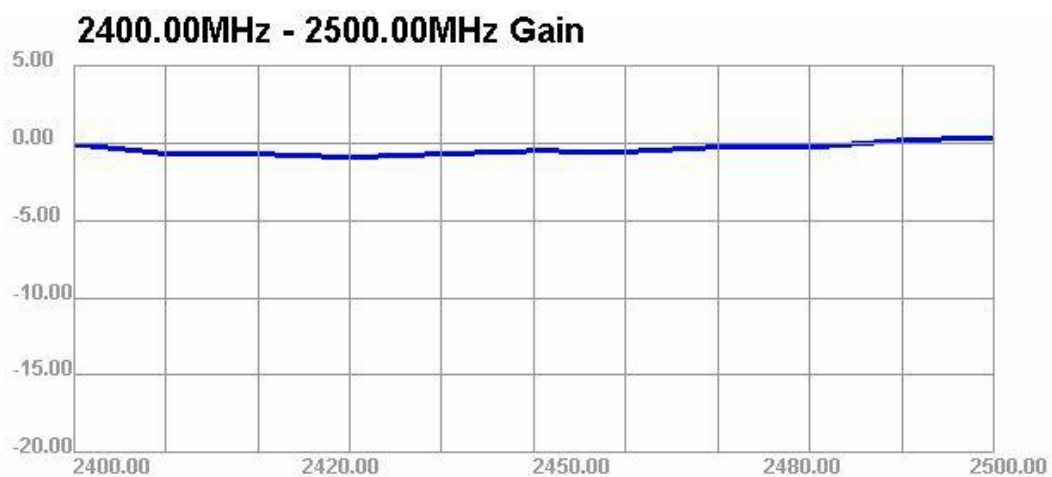
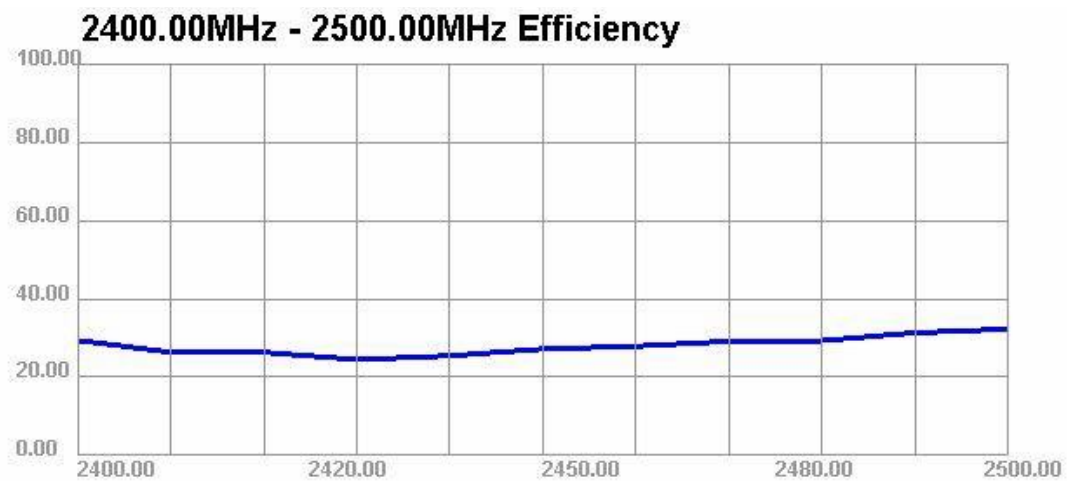
5. WIFI antenna passive standing wave diagram



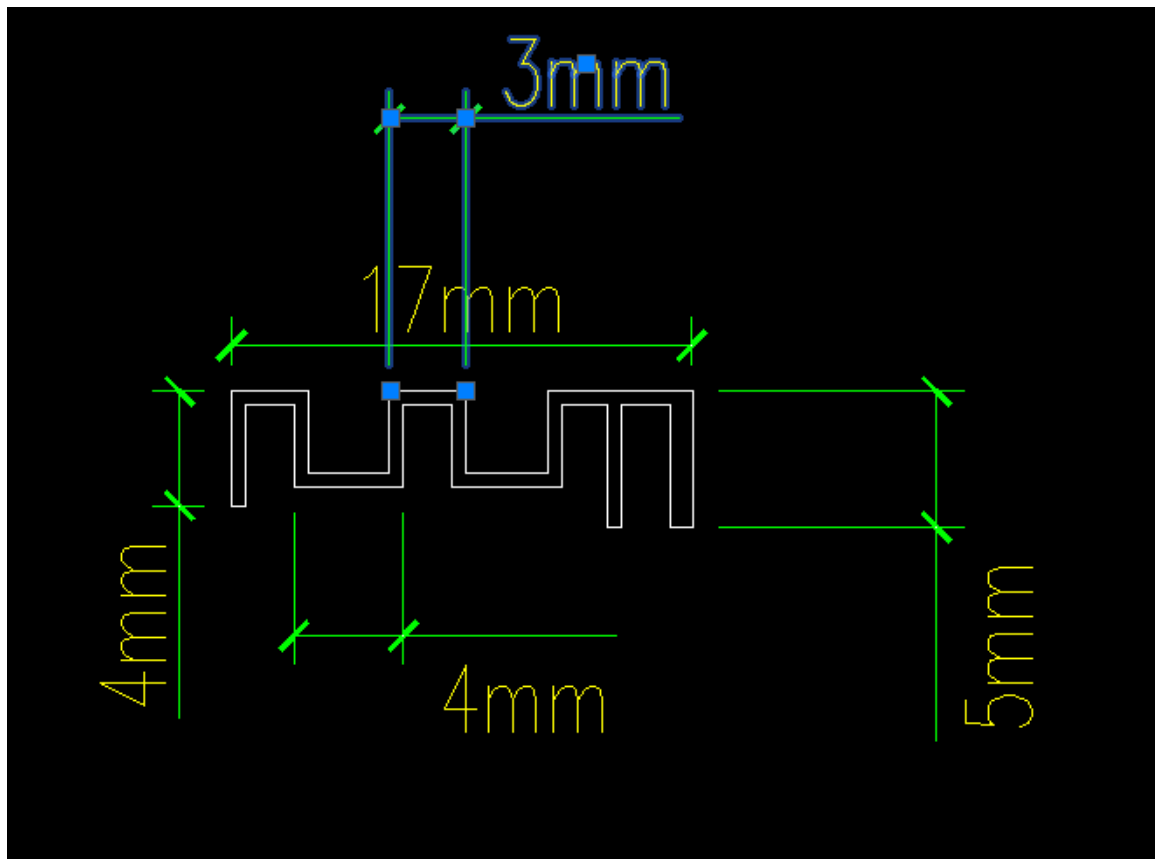
Shenzhen Lingxuntong Technology Co., Ltd

6. Passive gain and efficiency of WIFI antenna

Passive Test For 2.4G												
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)	Directivity (dBi)	Beamwidth h (3dB)	AttH (dB)	AttV (dB)
2400	29.4	-5.32	-0.08	-2.23	13.264	16.139	-0.08	-15.64	5.24	30	49.16	49.3
2410	26.36	-5.79	-0.69	-2.84	11.932	14.427	-0.69	-15.89	5.1	0	48.83	49.1
2420	26.36	-5.79	-0.71	-2.86	11.661	14.695	-0.71	-15.69	5.08	15	48.62	48.54
2430	24.49	-6.11	-0.93	-3.08	10.88	13.607	-0.93	-16.85	5.18	0	48.09	48.03
2440	25.47	-5.94	-0.71	-2.86	11.277	14.188	-0.71	-18.07	5.23	45	48.05	47.97
2450	27.21	-5.65	-0.51	-2.66	12.124	15.084	-0.51	-18.67	5.14	15	48	47.88
2460	27.91	-5.54	-0.58	-2.73	12.625	15.284	-0.58	-21.04	4.97	15	48.21	48.35
2470	29.17	-5.35	-0.26	-2.41	13.242	15.924	-0.26	-20.52	5.09	15	48.29	48.32
2480	29.34	-5.33	-0.29	-2.44	13.561	15.774	-0.29	-20.92	5.03	15	48.47	48.56
2490	31.35	-5.04	0.16	-1.99	14.59	16.759	0.16	-23.01	5.2	15	48.41	48.63
2500	32.29	-4.91	0.36	-1.79	15.311	16.976	0.36	-20.43	5.27	15	48.43	48.67



7. Product structure diagram:



8. Packing: bag, one bag 100PCS.