

The Main Antenna Sample Confirmation

Customer			
Project Name	CS-KP1		Date2025-11-21
Project NO.	SN1492-03	Notes	coaxial line+ FPC
Frequency Range	2400MHz-2500MHz		
Designed By	RF Engineer	Structural Engineer	
Checked By	Engineering Manager		
Client' s Approval			

Manufacturer: SINAWELL Electronics(Shenzhen) Co., Ltd.

Add: 712-717, Block A Jinfulai Building,49-1 Dabao Road,Xinan 28th area,Baoan District,Shenzhen,China

Table of Contents

1. Specification description.....	1
2. Summary of specifications	2
3. Appearance	3
3. Electrical performance.....	3
3.1. Antenna band.....	3
3.2. Matching circuit	3
3.3. Return Loss.....	4
4. Appearance structure.....	5
4.1. WIFI antenna passive test data.....	6
5 Field intensity pattern.....	7、8

1. Specification description

This specification describes the status of the CS-KP1 internal antenna with a frequency band of 2400MHz-2500MHz.

2. Antenna appearance



3. Electrical performance

3.1. Antenna band

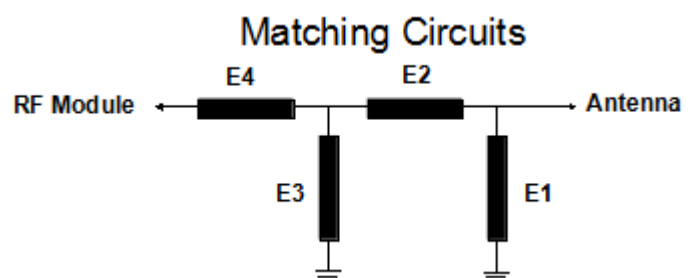
	WIFI
Transmitting band(MHz)	2400MHz-2500MHz

3.2. Matching Circuit

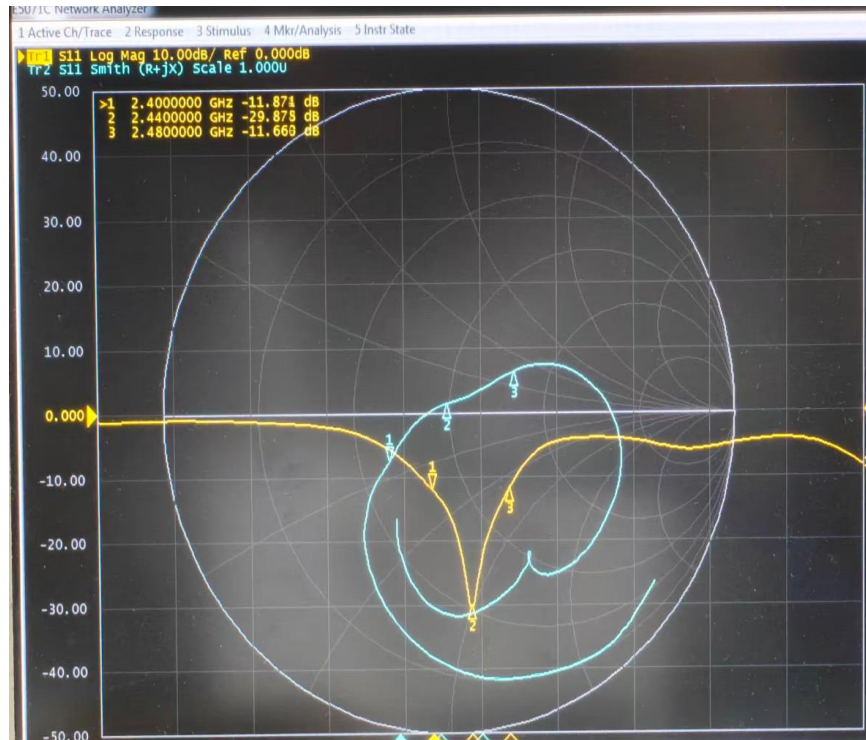
After the test point is at the antenna connector (RF test port), see the figure below.

1. WIFI antenna matching。

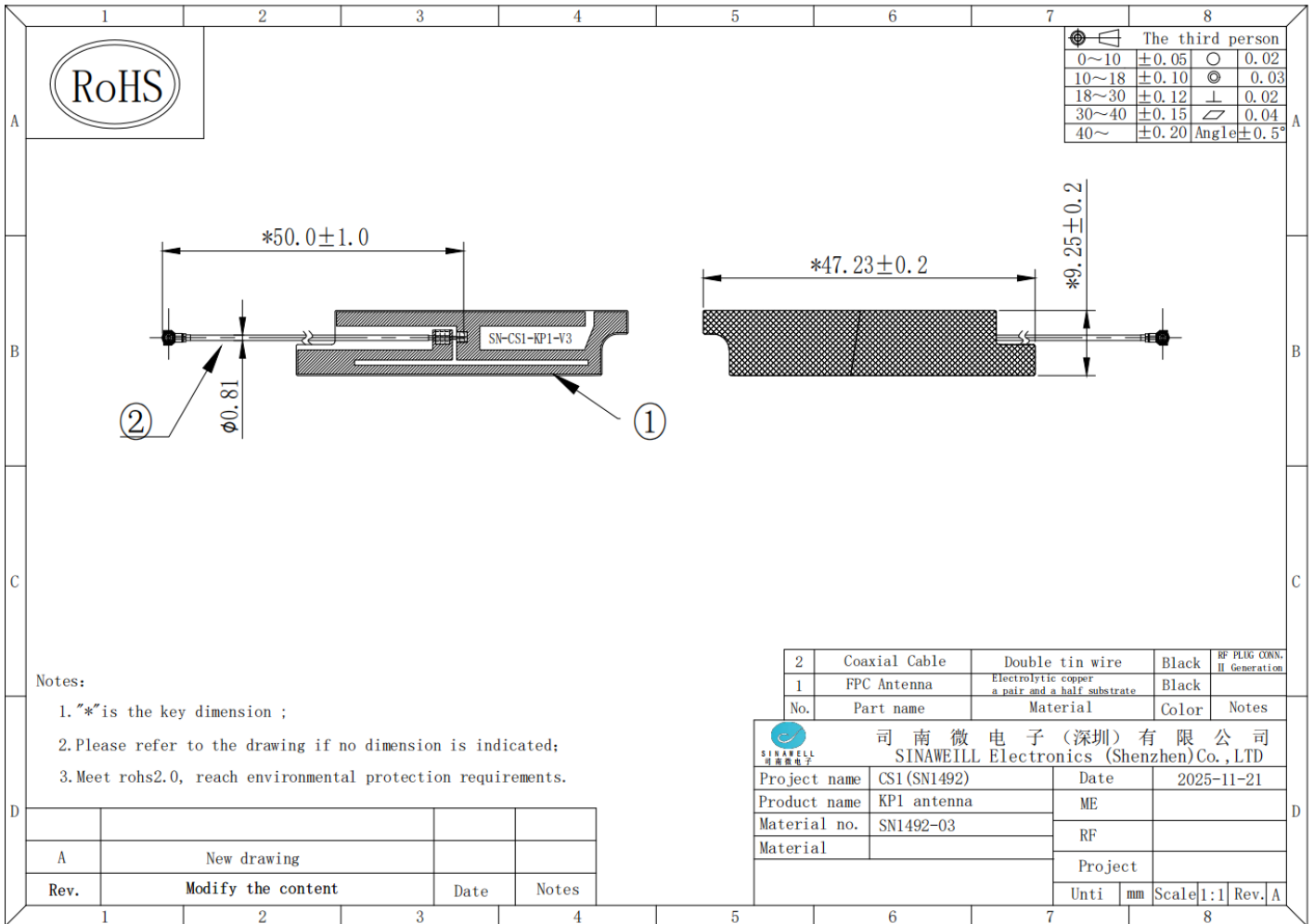
Element	Value
E1(0201)	NC
E2(0201)	0 Ω
E3(0201)	NC
E4	0 Ω



3.3. Return Loss



Appendix 1: Structural Drawing

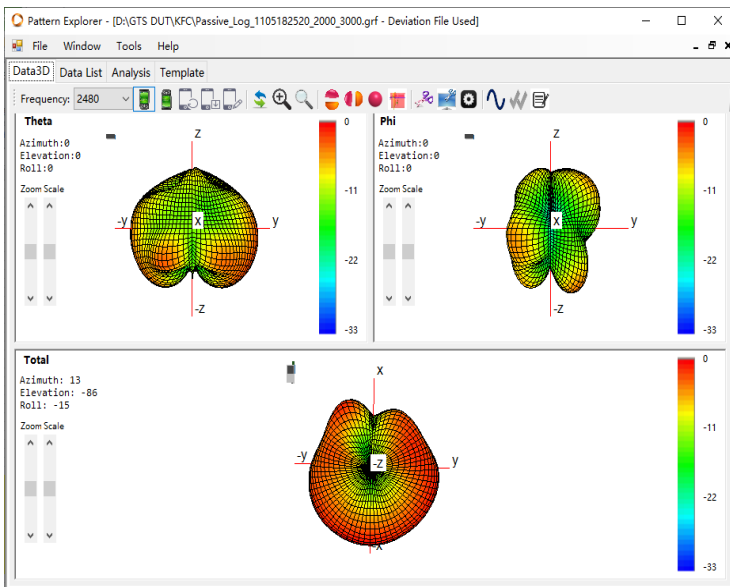
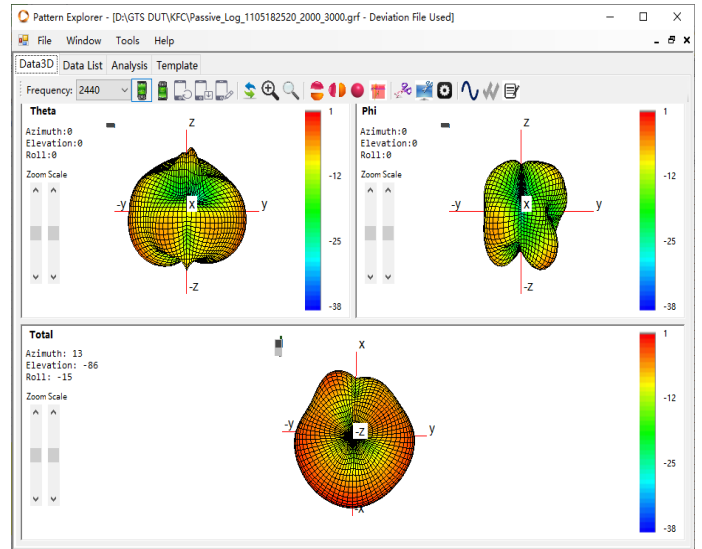
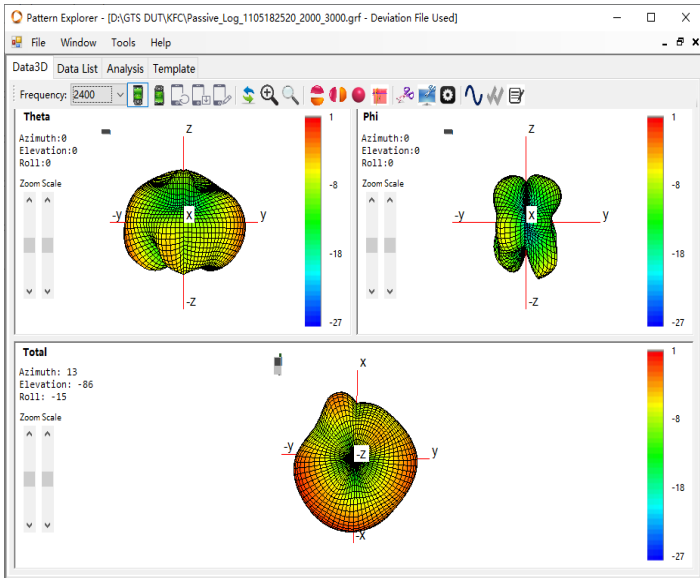


WIFI antenna passive test data

Freq (MHz)	Gain (dBi)	Effi (dB)	Effi (%)
2400	0.56	-4.03	39.5
2410	0.56	-4.02	39.63
2420	0.36	-4.22	37.84
2430	0.45	-4.19	38.07
2440	0.65	-4.07	39.16
2450	0.79	-3.92	40.57
2460	0.63	-3.92	40.51
2470	0.29	-3.94	40.35
2480	-0.04	-3.93	40.45
2490	-0.21	-3.89	40.8
2500	-0.37	-3.85	41.19

Field intensity pattern

3D



2D

