

Shenzhen SKYLink Technology Co.,Ltd

Antenna Specification

NO. : SLS0A2021030801

Client's Name: dongguanshiounadianzishangwuyouxiangongsi

Project Name: WiFi Hitch Camera

Product Description: FPC welding 1.13mm black coaxial cable, cable length 80mm,
1st generation terminal

Part Number: WF03A.C113.80B.1

Version: V1.0

Date: 2021-3-8

Client:

NO MODIFICATION

Project	Purchasing	Admit

R&D	Project	Examine

● Specification

Electrical Characteristics	
Frequency	2400MHz ~2500MHz
Return Loss	<-10
Efficiency	>45%
Gain	2.5db
Impedance	50 Ω
Polarization Mode	Linear polarization
Materials and Mechanical Properties	
Material	FPC
Wire Type	Wire diameter 1.13mm
Terminal Type	Generation Terminal
Drawing Size	See drawing
Silk Screen Method	White lettering on a black background
Environmental Characteristics	
Storage Temperature	- 30 °C ~ + 85 °C
Soldering Temperature	280±5°C Immersion time: 10 seconds
RF Wire Soldering Temperature	320±5°C 2-3 seconds

● Test equipment and conditions

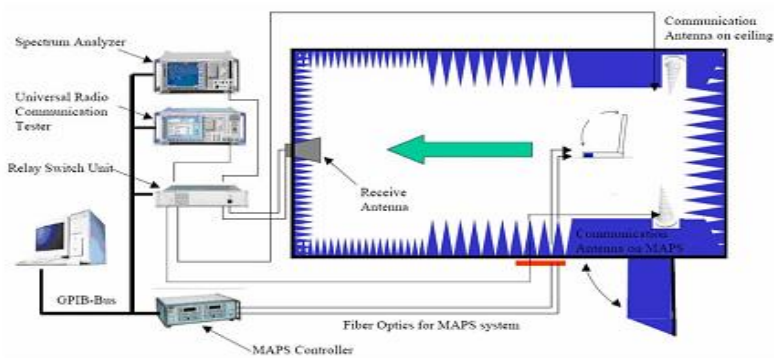
1. Network Analyzer :

Agilent 8753D Agilent 5071B

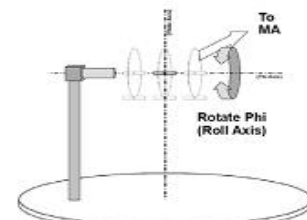
Communication Test Equipment:

Agilent E5515C R&S CMW500

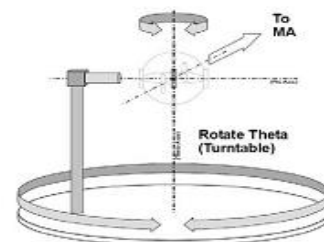
2. 3D Test System



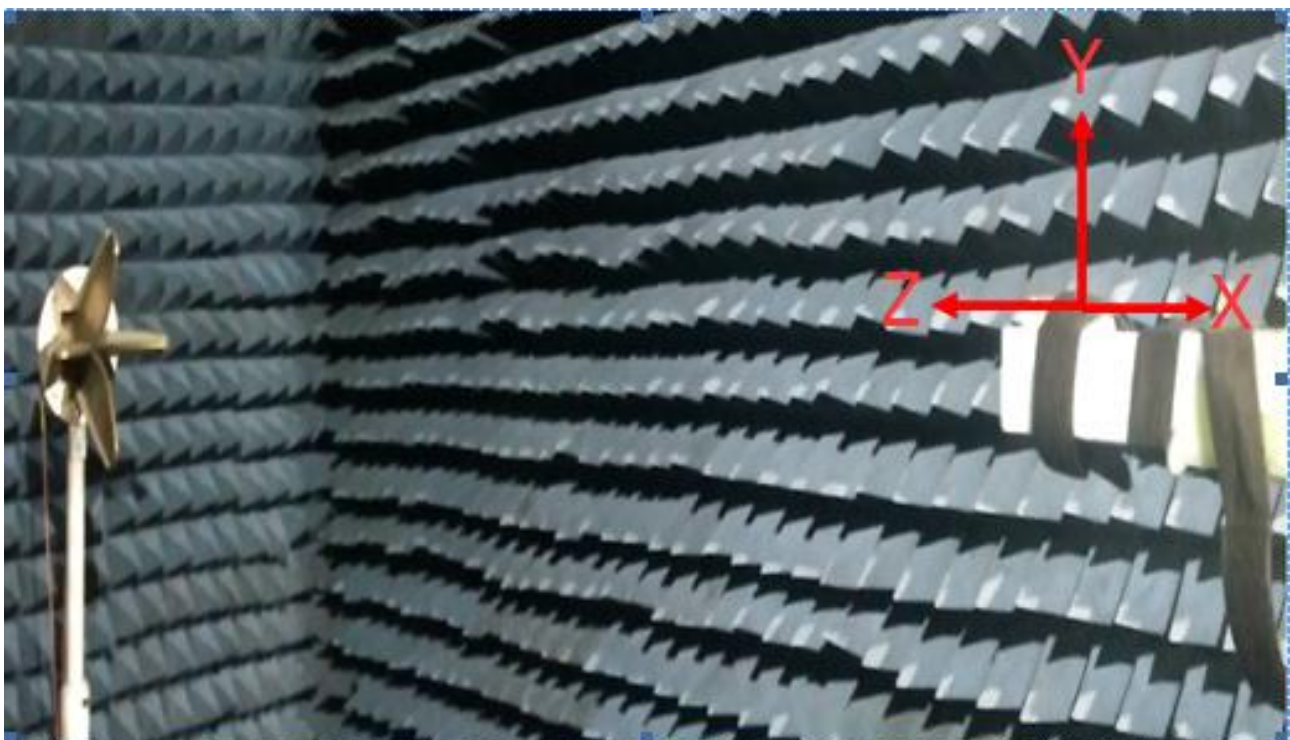
(Testing by 3D anechoic chamber)



Phi axis test

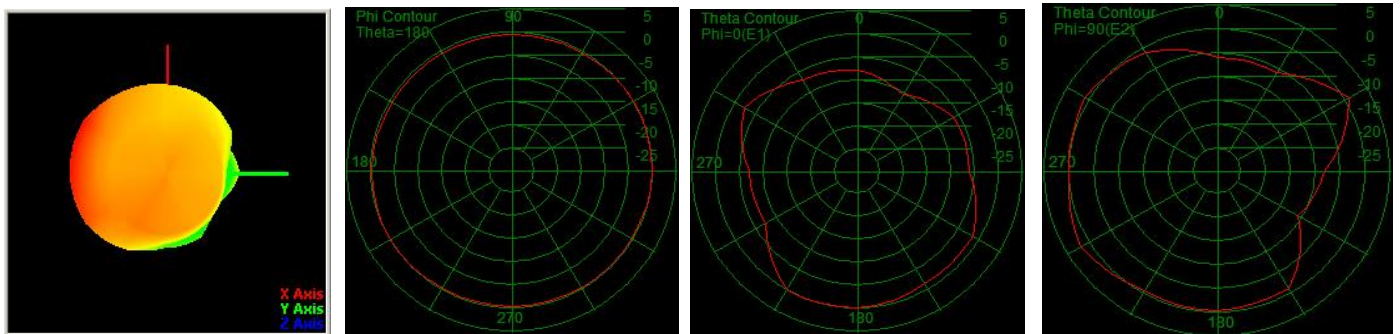


Theta axis test

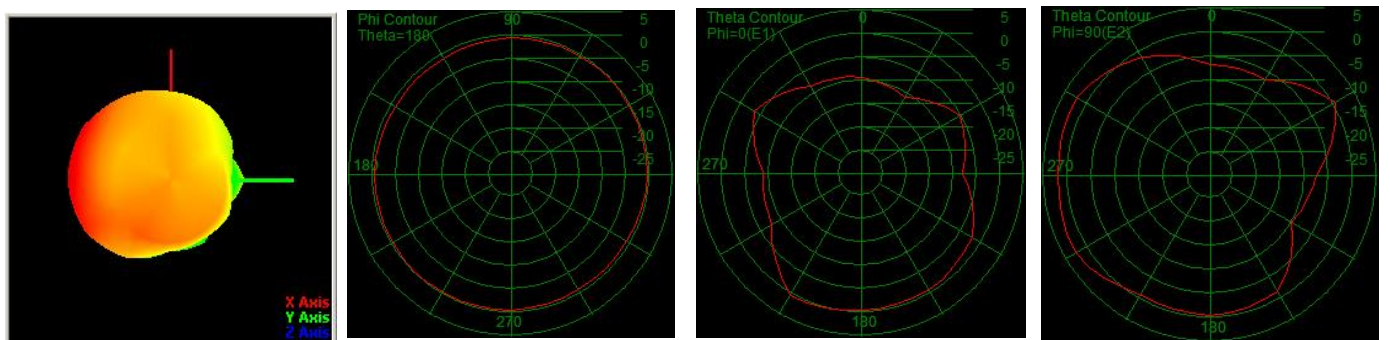


Test Point ID	Freq. (MHz)	TRP (dBm)	Gain (dBi)	Directivity (dBi)	Efficiency (%)
1	2400.0	2400.00	1.79	4.66	51.6%
2	2405.0	2405.00	1.85	4.72	51.6%
3	2410.0	2410.00	2.13	4.85	53.5%
4	2415.0	2415.00	2.24	4.91	54.1%
5	2420.0	2420.00	2.50	5.03	53.8%
6	2425.0	2425.00	2.26	5.09	52.1%
7	2430.0	2430.00	2.36	5.12	53.0%
8	2435.0	2435.00	2.45	5.17	53.6%
9	2440.0	2440.00	2.45	5.22	52.8%
10	2445.0	2445.00	1.85	5.23	53.8%
11	2450.0	2450.00	2.36	5.27	54.3%
12	2455.0	2455.00	2.50	5.26	54.5%
13	2460.0	2460.00	2.34	5.29	55.3%
14	2465.0	2465.00	2.12	5.30	55.3%
16	2470.0	2470.00	2.31	5.40	53.9%
16	2475.0	2475.00	1.80	5.48	53.9%
17	2480.0	2480.00	1.97	5.60	54.6%
18	2485.0	2485.00	2.02	5.70	53.9%
19	2490.0	2490.00	2.11	5.79	54.0%
20	2495.0	2495.00	2.45	5.90	56.9%
21	2500.0	2500.00	2.12	5.96	56.9%

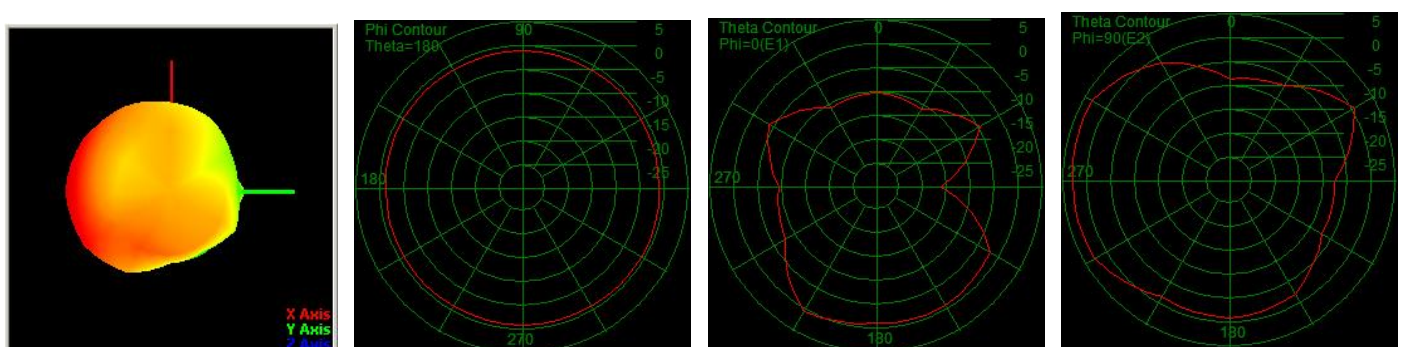
2400MHZ:



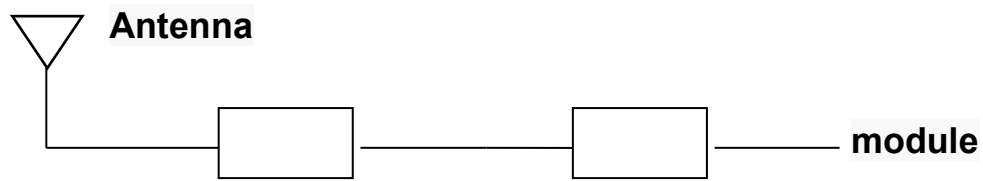
2450MHZ:



2500MHZ:



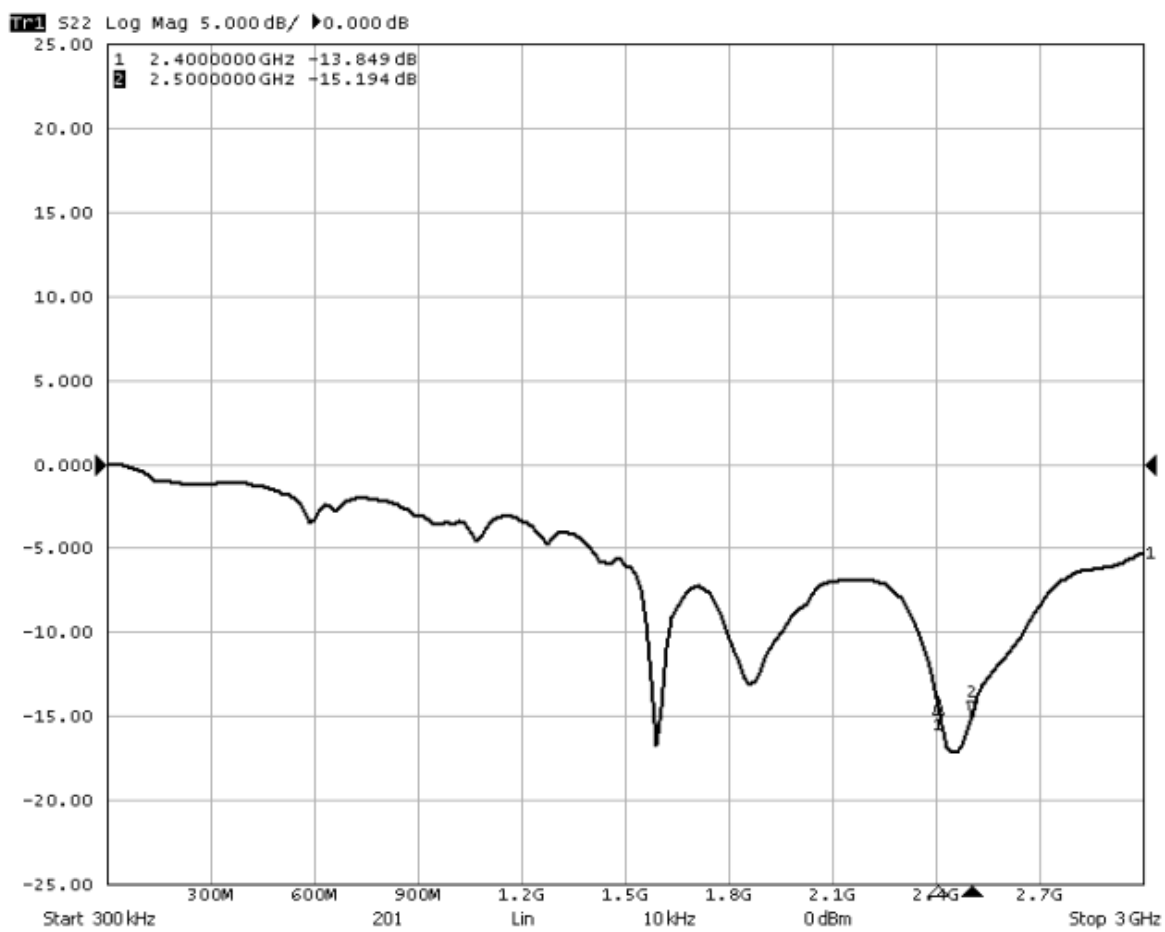
● Matching Circuit



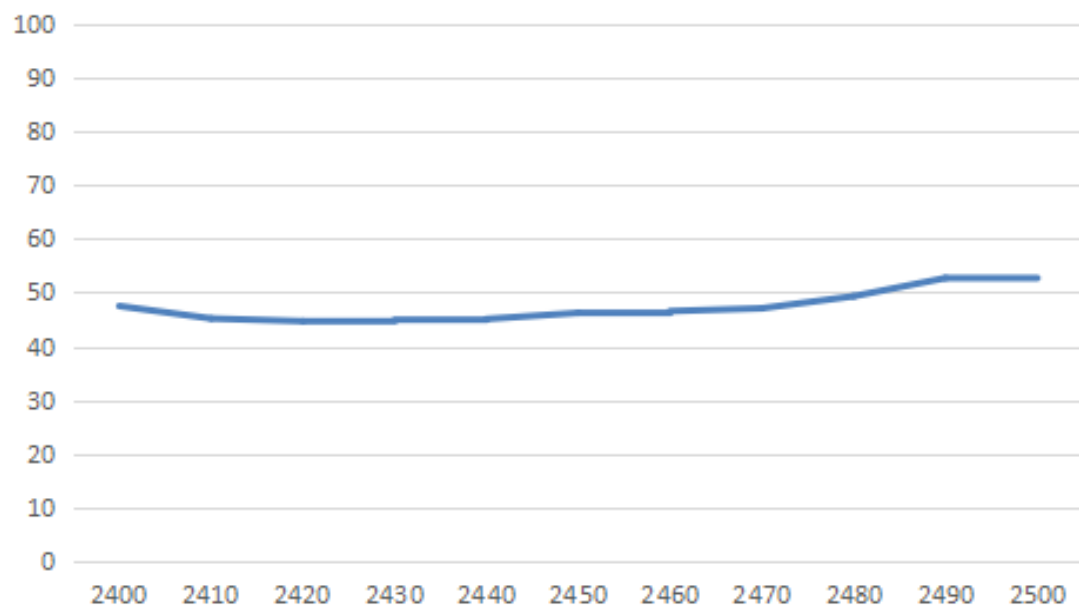
The original motherboard matching circuit remains unchanged.

● Passive Test Report

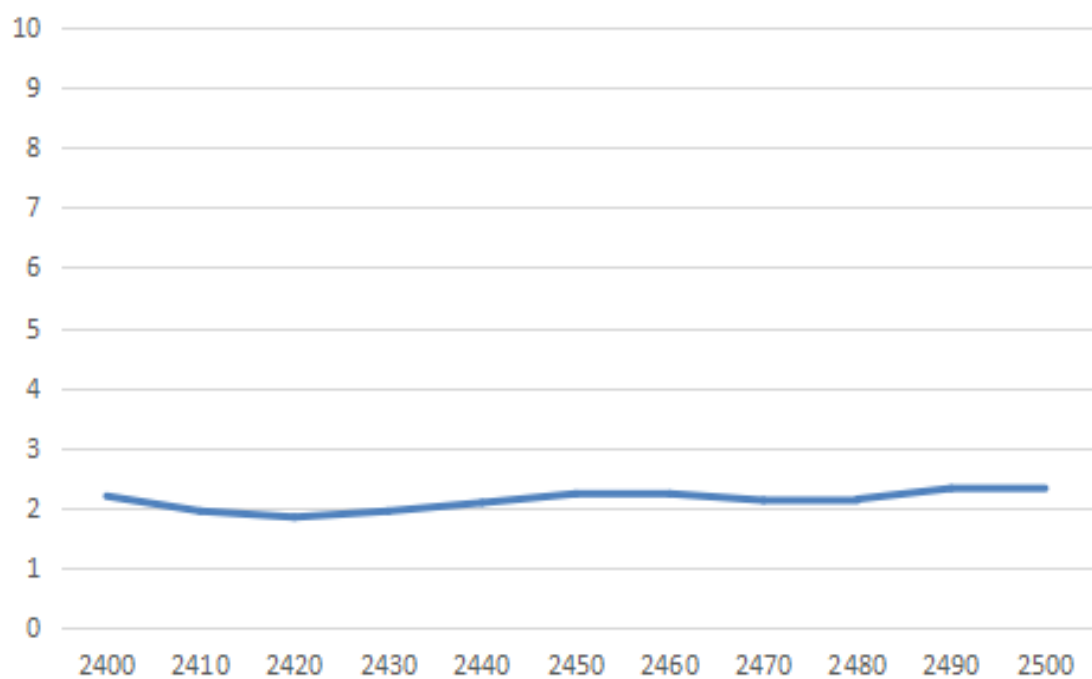
Return Loss Graph



◆ Efficiency



◆ Gain



- **Antenna Assembly Method (full picture of the whole machine, detailed picture)**

