

## Sward Antenna Report

Customer: 奥尼

Project: D135

Report Date: 2022. 08. 26

## Project contact information

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# Project Introduction

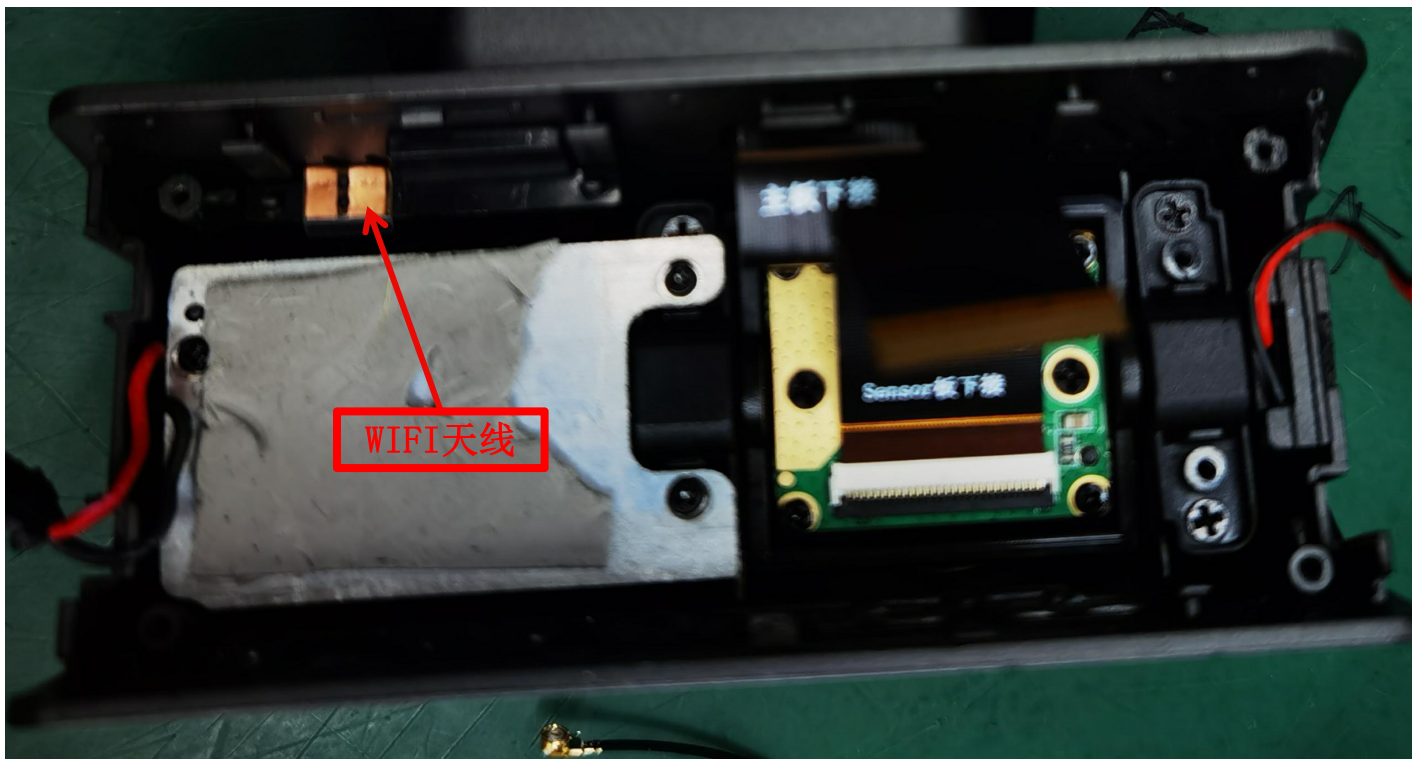
## 1.Resume

Antennas	Type
1	WIFI hidden recorder
Shell Material: 8-Inch-Plastic	

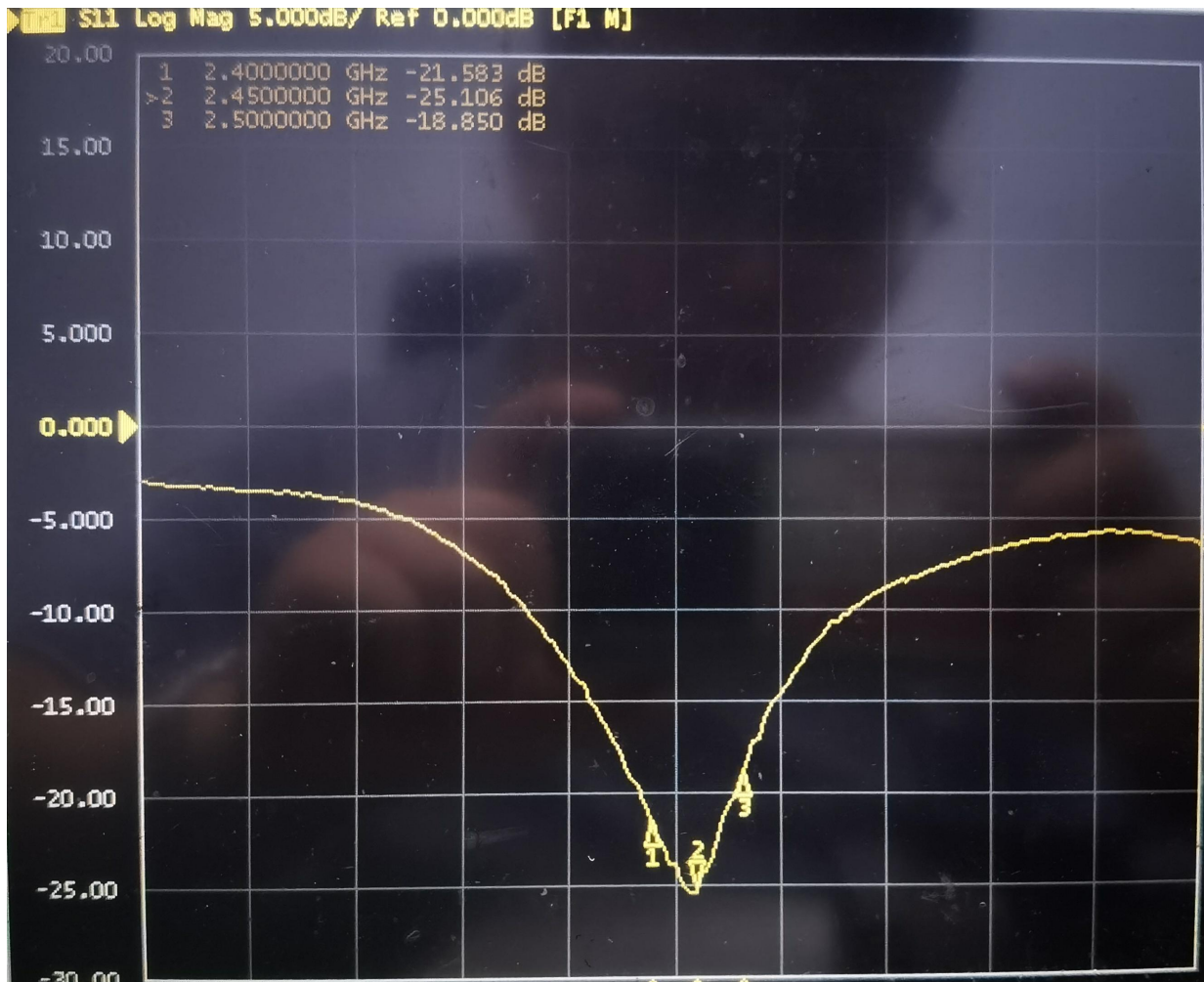
## 2.Description

Num.	Function	Frequency Band / MHz	Material / Structure
1	WIFI	2400MHz/2500MHz	FPC

## Antenna Position



## WIFI Antenna S11

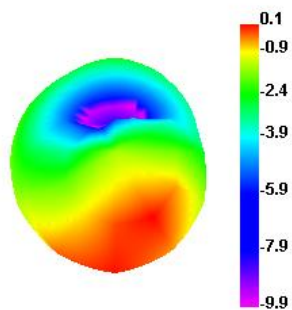


A, floor 4, building 13, rundongsheng Industrial Zone, Xixiang street, Bao'an District, Shenzhen City, Guangdong Province

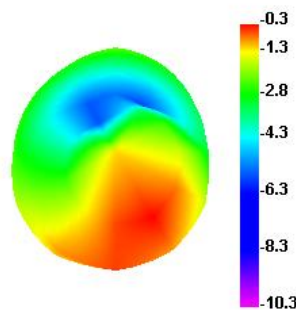
## Antenna Efficiency

Passive Test For 2.4G-WiFi-BT										
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHIS (%)	Max (dB)	Min (dB)	Directivity (dBi)	Beamwidth (3dB)
2400	43.13	-3.65	0.1	-2.05	24.248	18.878	0.1	-12.74	3.75	240
2410	41.9	-3.78	-0.07	-2.22	23.461	18.435	-0.07	-13.79	3.71	240
2420	41.77	-3.79	-0.05	-2.2	23.299	18.468	-0.05	-14.56	3.74	240
2430	39.66	-4.02	-0.29	-2.44	22.093	17.571	-0.29	-15.25	3.72	90
2440	39.23	-4.06	-0.23	-2.38	21.878	17.347	-0.23	-15.67	3.83	90
2450	39.17	-4.07	-0.29	-2.44	21.793	17.373	-0.29	-15.41	3.78	60
2460	38.66	-4.13	-0.35	-2.5	21.45	17.215	-0.35	-15.59	3.78	60
2470	38.23	-4.18	-0.52	-2.67	21.059	17.168	-0.52	-14.6	3.65	60
2480	39.43	-4.04	-0.5	-2.65	21.553	17.877	-0.5	-13.2	3.54	60
2490	40.22	-3.96	-0.7	-2.85	21.83	18.394	-0.7	-11.76	3.26	60
2500	37.75	-4.23	-1.03	-3.18	20.398	17.351	-1.03	-11.93	3.2	60

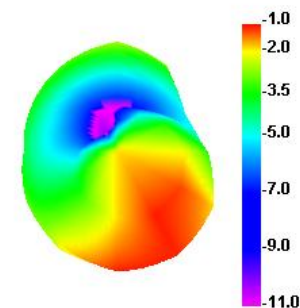
2400.000MHz



2450.000MHz



2500.000MHz

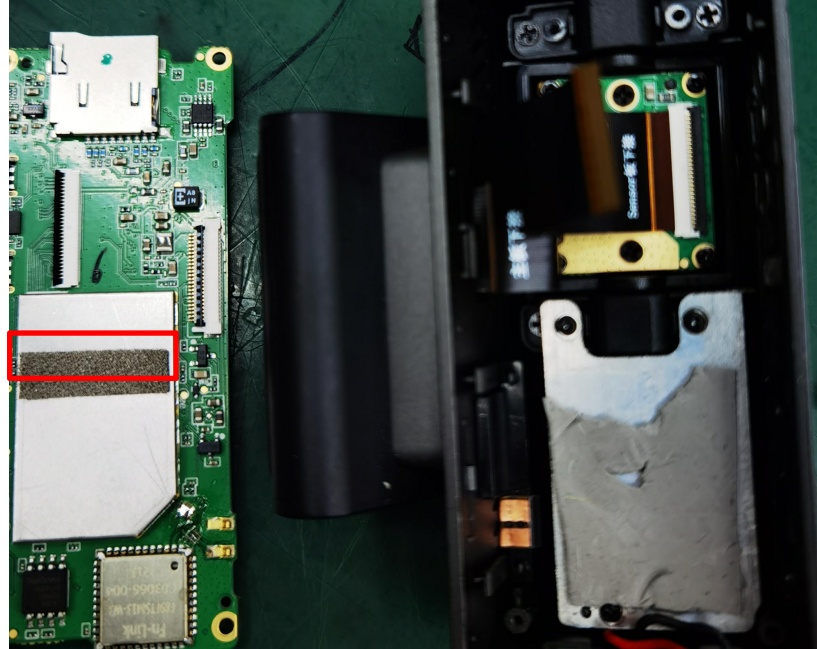


## WIFI active data

802.11b : 11Mbps		
1	6	11
2412	2437	2462
15.71	14.19	14.68
-78.3	-80.46	-80.16
802.11g : 54Mbps		
1	6	11
2412	2437	2462
12.48	11.85	12.4
-66.74	-66.67	-66.64
802.11n : MCS7		
1	6	11
2412	2437	2462
12.64	11.71	11.58
-63.07	-63.58	-63.36



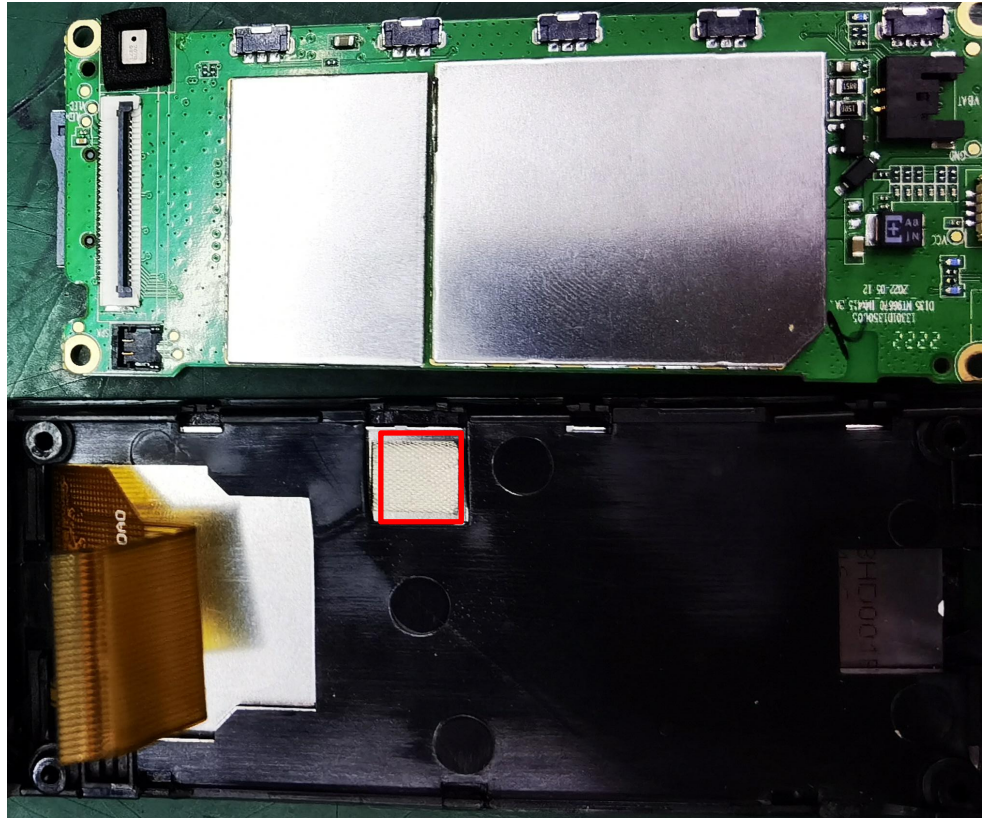
# Environmental Handling and Assembly Instructions



1. The main board shield cover is pasted with conductive sponge and the heat sink is grounded



## Environmental Handling and Assembly Instructions



**2. The screen paste conductive foam and the shielding cover are grounded**

**Notes:**

1. This report is based on the actual commissioning and testing of the commissioning prototype, including the assembly instructions, antenna position and assembly position of each device. **It cannot be changed at will;**
2. If there is **any change** in the materials used in the prototype, it is necessary to timely feed back to our company for **re-verification;**
3. List of sensitive devices:
  - TP** (material, coating, wiring, etc.)
  - Screen** (amplification circuit, led, cable layout design, etc.)
  - Shell material** (antenna assembly method, structural interference, shell material, antenna position height and area, etc.)
  - Mainboard** (mainboard conduction, RF circuit matching, PA, duplex, filter, LNA, power circuit, etc.)
  - Camera, battery, motor, MIC, fingerprint identification module, etc.**
4. Due to the small number or only one sample adjusting machine, some probabilistic problems cannot be completely found. **It is recommended to Check the problem points in small batch trial production before mass production**( screen flashes , horn noise, TP jump point, black screen OR crash, signal diving, etc.).