



# Antenna test report

Customer: DOKE COMMUNICATION (HK) LIMITED

Item: TAB7-WIFI

Customer: Xiao-13316888409

RF: Long-15874137313

Data: 2022-8-18



# Antenna test report

Report

Version: V2.0

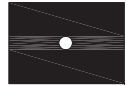
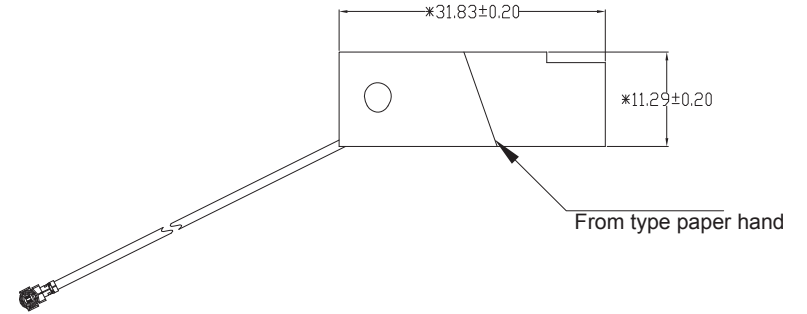
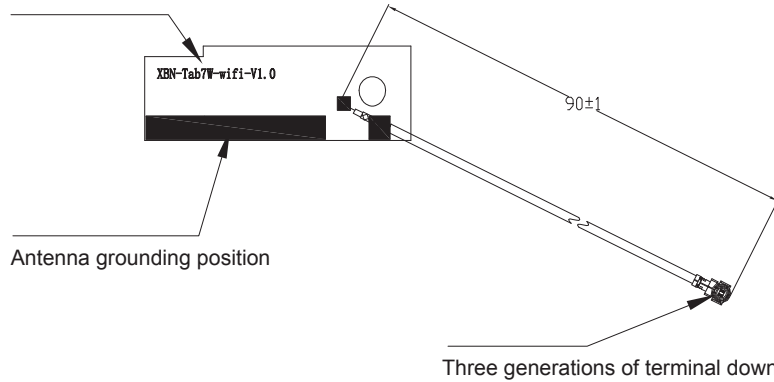
Machine status: T1 machine

**Frequency range:**

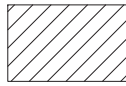
2.4G/5G WIFI

Character icon on the screen  
printing color requirement:  
silk screen with the light color  
characters

Screen printing black light characters



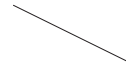
Positioning hole to play



Positioning hole to play



Gold-plated surface



Where rip it off by hand



Product appearance



Don't back glue box constituency.

### The technical requirements

1. Material FPC(single panel, black, white, half and half electrolytic copper), T&lt; 0.125mm; Reverse adhesive type: 3M-300LSE(viscosity needs to be overheated impact test);
2. Marked with "\*" is the key control size, and the tolerance without annotation is controlled according to the free tolerance in the drawing frame; The size not injected shall be subject to film inspection (the electrical performance shall be tested OK);
3. The thickness of gold plating is 2~3U", it is not easy to break and fall off after gold plating, poor conductivity, circuit partial breakage and other defects;
4. The FPC surface ink should be uniform, no contaminants, scratches, black spots, wrinkles, poor gold plating and other phenomena;
5. Products meet ROHS standards

## Return loss

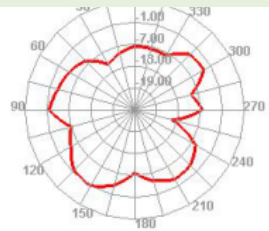
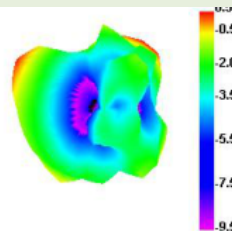


## VSWR

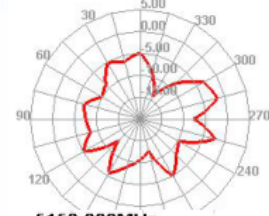


# 1#Antenna test data

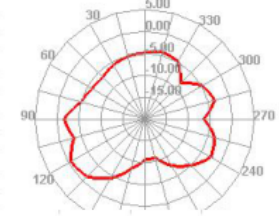
(MHz)	(%)	(dB)	(dBi)
2400	49.8	-3.02	0.45
2410	50.7	-2.94	0.49
2420	49.3	-3.07	0.48
2430	49.2	-3.08	0.48
2440	48.7	-3.12	0.52
2450	50.1	-3	0.67
2460	50.2	-2.99	0.61
2470	48.8	-3.11	0.63
2480	48.2	-3.16	0.51
2490	47.3	-3.25	0.53
2500	46.5	-3.32	0.52
5100	39.5	-4.03	1.67
5200	39.2	-4.06	1.72
5300	40.1	-3.96	1.86
5400	40.3	-3.94	1.89
5500	40.1	-3.96	1.93
5600	39.7	-4.01	1.95
5700	39.5	-4.03	1.94
5800	38.8	-4.11	1.92
5900	38.2	-4.17	1.94



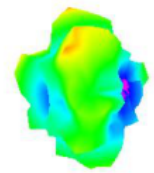
2400.000MHz E1



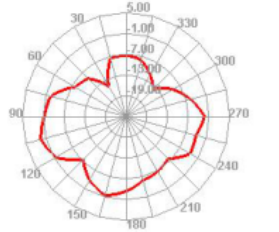
2400.000MHz E2



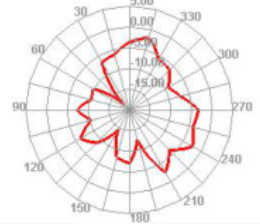
5150.000MHz



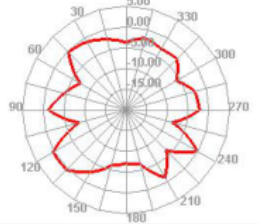
5150.000MHz H



5150.000MHz E1



5150.000MHz E2



深圳市信必诺通讯科技有限公司



# 1#Antenna test data

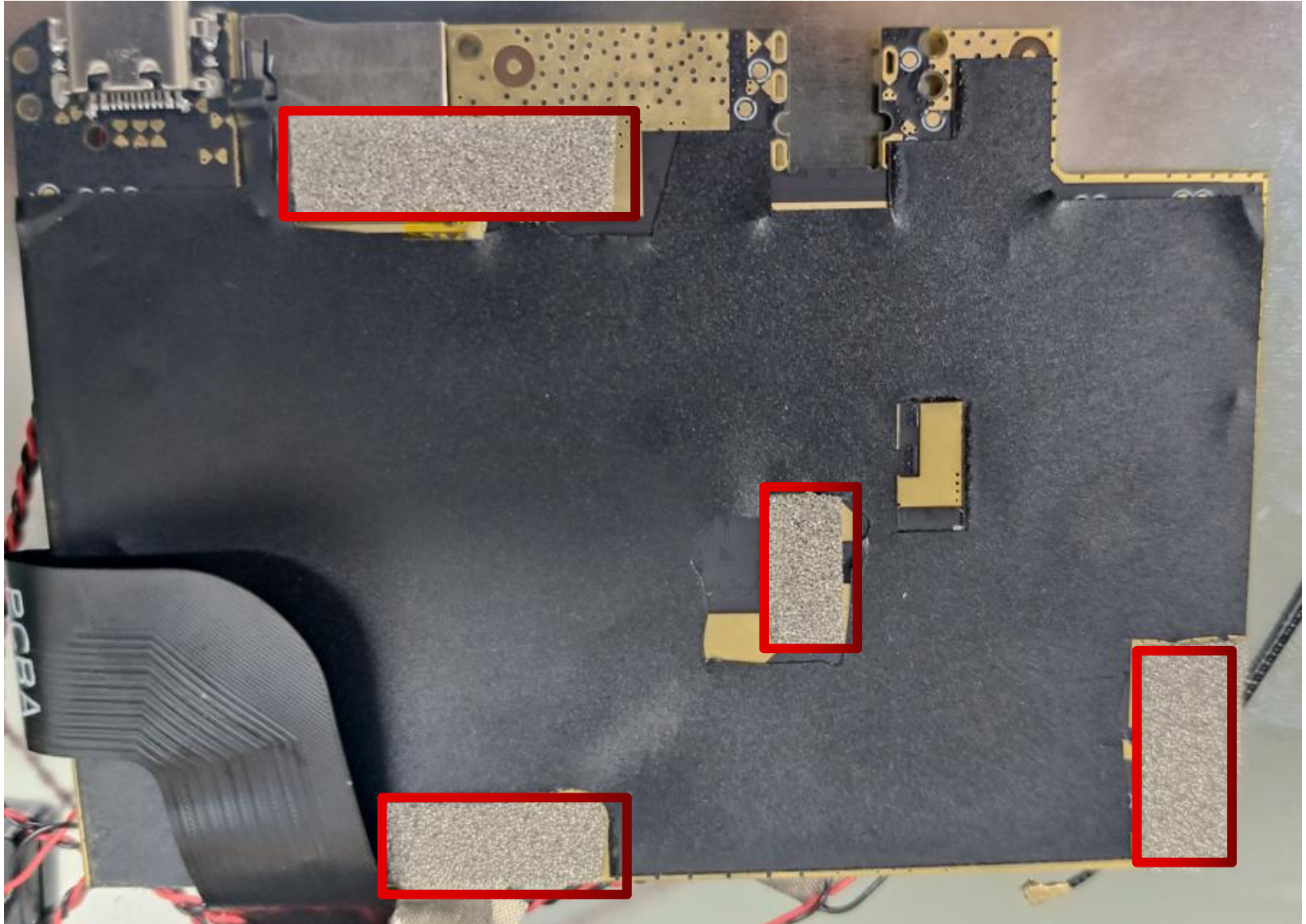
WIFI OTA				
	Band	Channel	TRP	TIS
2.4G	b (11M)	1	12.5	-84.3
		6	12.6	-83.7
		13	11.5	-82.3
	g (54M)	1	12.7	-70.9
		6	12.4	-70.8
		13	11.8	-70.2
	n (MCS7)	1	12.2	-67.2
		6	11.7	-66.7
		13	11.6	-65.6
5G	a (54M)	36	9.7	-70.5
		56	10.1	-70.8
		165	11.3	-70.3
	n (MCS7)	36	9.3	-67.4
		56	9.9	-65.9
		165	10.9	-65.1

无源效率												
WIFI (2.4G)/ BT	Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
	FS-(%)	50.8	51.2	50.3	49.9	49.7	50.2	50.7	49.6	48.3	47.5	46.9
WIFI (5G)	Frequency (MHz)	5100	5200	5300	5400	5500	5600	5700	5800	5900		
	FS-(%)	35.5	37.2	38.5	38.3	40.1	41.2	39.7	38.8	39.2		

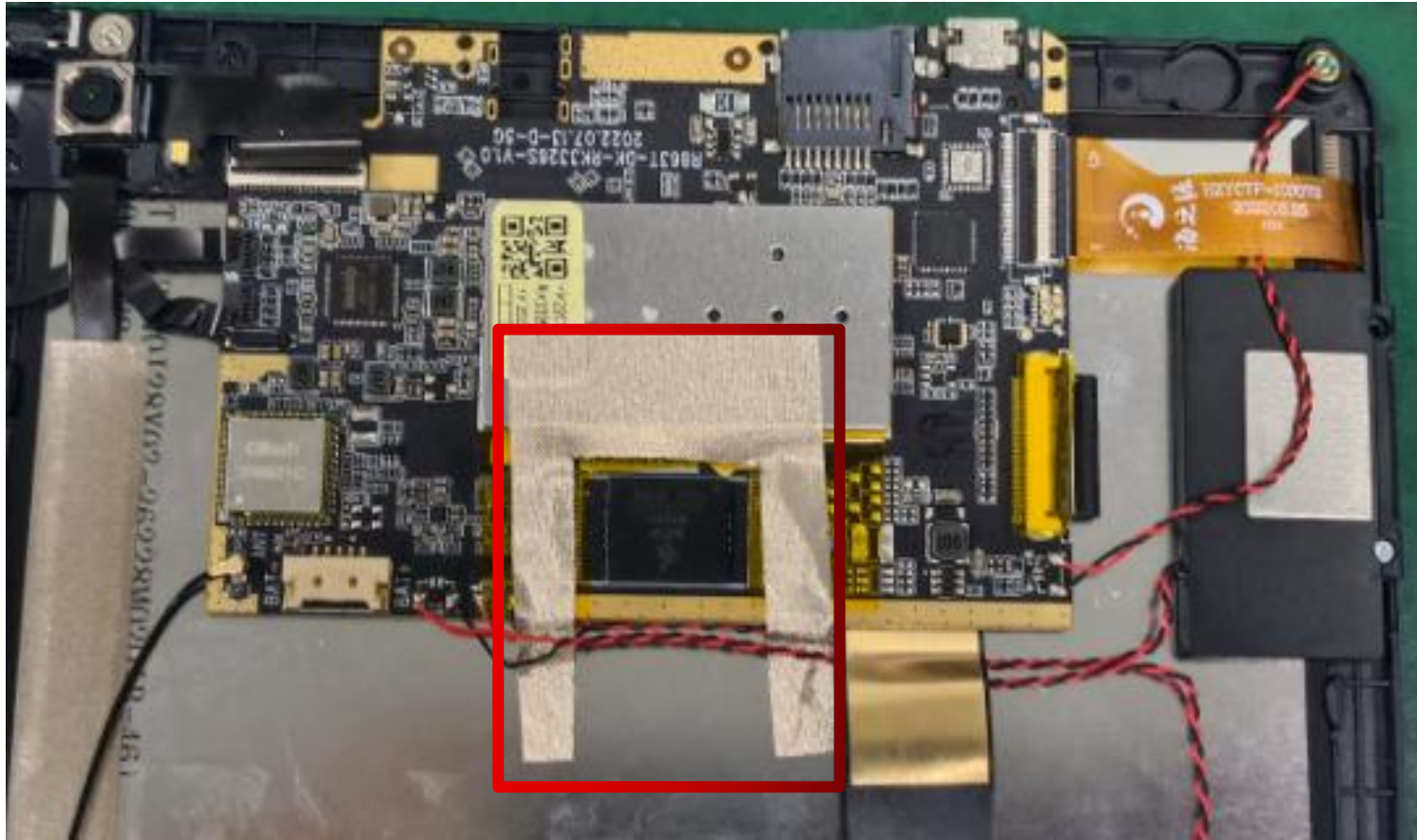


WIFI OTA				
	Band	Channel	TRP	TIS
2.4G	b (11M)	1	12.8	-83.5
		6	12.7	-83.8
		13	12.1	-82.5
	g (54M)	1	12.5	-71.5
		6	12.3	-70.9
		13	11.7	-70.5
	n (MCS7)	1	12.4	-67.5
		6	11.9	-66.4
		13	11.7	-65.1
5G	a (54M)	36	9.8	-70.5
		56	10.4	-71.3
		165	11.2	-71.5
	n (MCS7)	36	9.5	-66.9
		56	10.2	-66.2
		165	11.1	-64.8

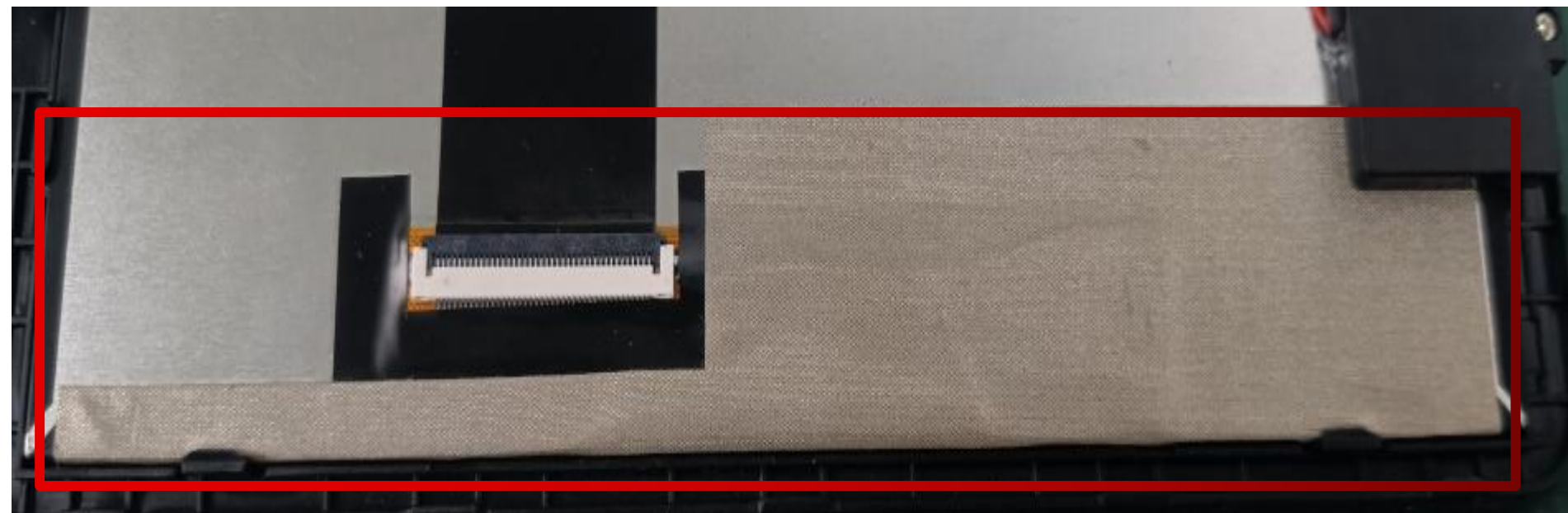
As shown in the red box, the conductive sponge is attached to the back of the motherboard and the metal of the screen is grounded



As shown in the red box in the figure, the conductive cloth is drawn on the shielding cover of the motherboard to extend to the screen. The metal ground is attached to the motherboard to prevent the motherboard from warping and affecting the antenna sensitivity

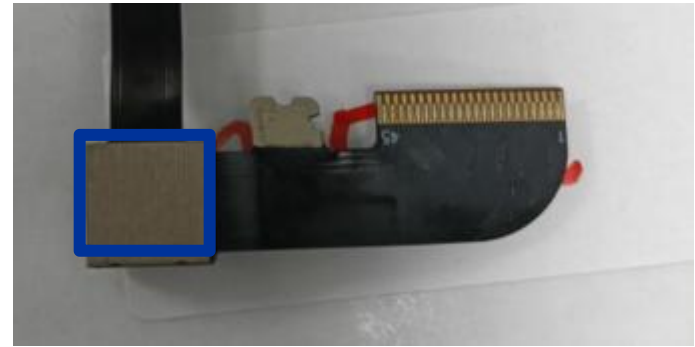


As shown in the red box, a conductive cloth is attached to the IC of the screen for grounding



As shown in the red box in the figure, a conductive cloth is placed above the camera cable to shield the interference from the antenna.

A double-sided conductive cloth is attached to the metal on the back of the camera in the blue box and is grounded to the metal on the screen



As shown in the red box in the figure, a conductive cloth is attached to the copper exposed spot of the antenna and is extended to the metal of the screen for grounding.

