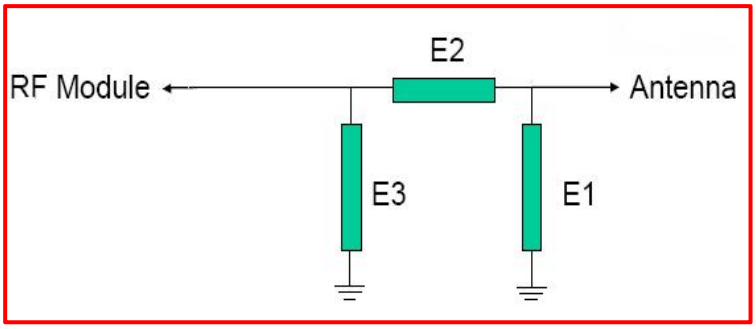
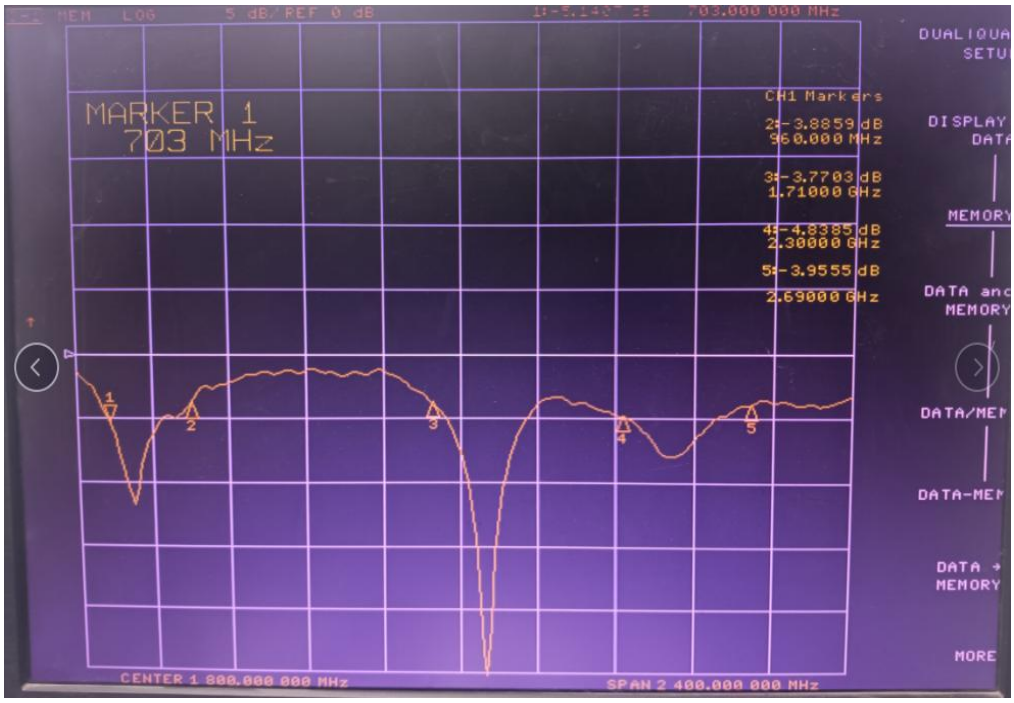
Customer: Duoke
Project: TAB7Pro
ME: Xiao Xiang-13316888409
RF: Long Yaobin - 15874137313
Date: November 8, 2022
Report Type:
Version No.: V6.0
Status: T2
Frequency band:
GSM:B2/B3/B5/B8
WCDMA:B1/B8
FDD-LTE: B1/B3/B7/B8/B19/B20/B28A/B28B
TDD-LTE: B40
GPS Satellite positioning antenna
2.4G/5G WIFI
BT
Antenna matching circuit:



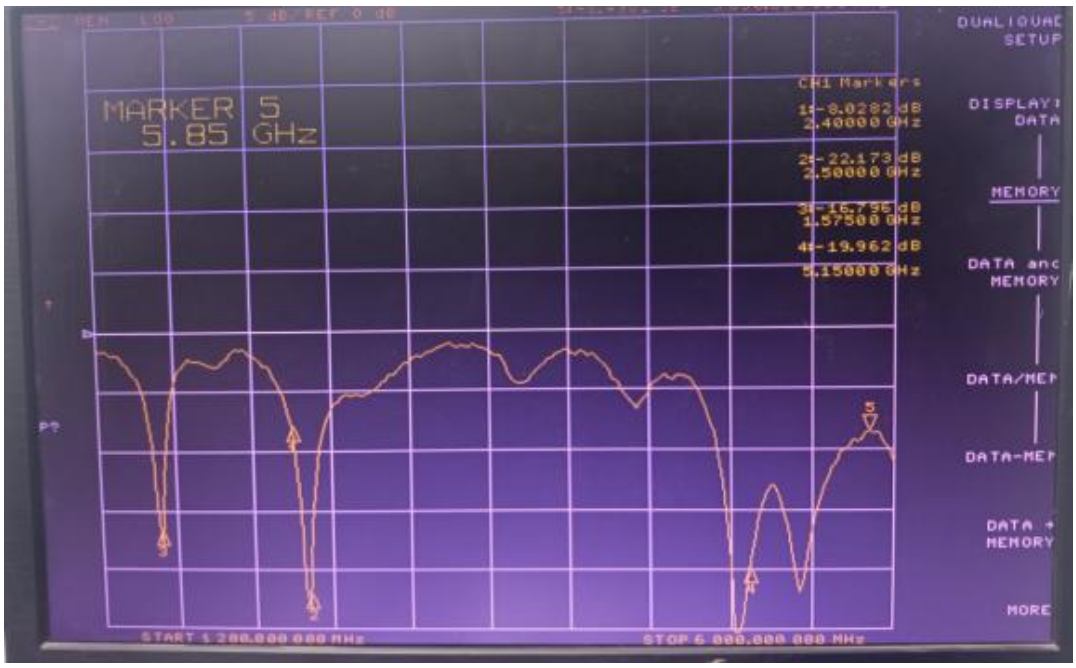
0201 Specifications		
Element	Value	Tag No
E1(0201)	22nH	
E2(0201)	3pF	
E3(0201)	nothing	

Passive main antenna LOG MAG：

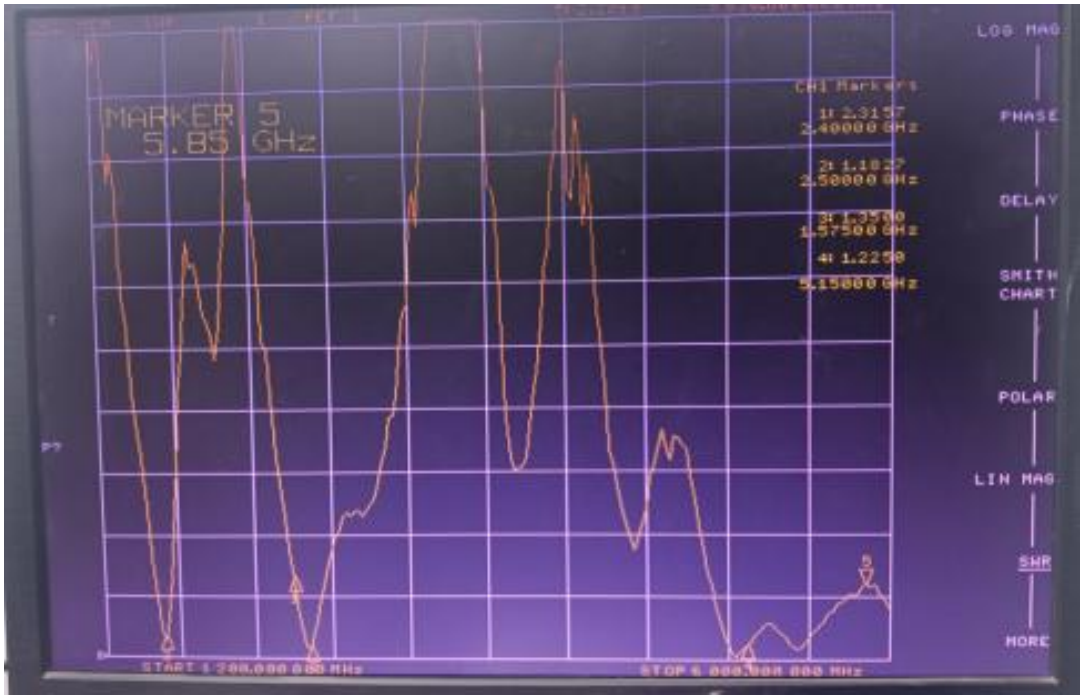


Passive main antenna SWR：

GPS/Wifi/BT antenna LOG MAG：

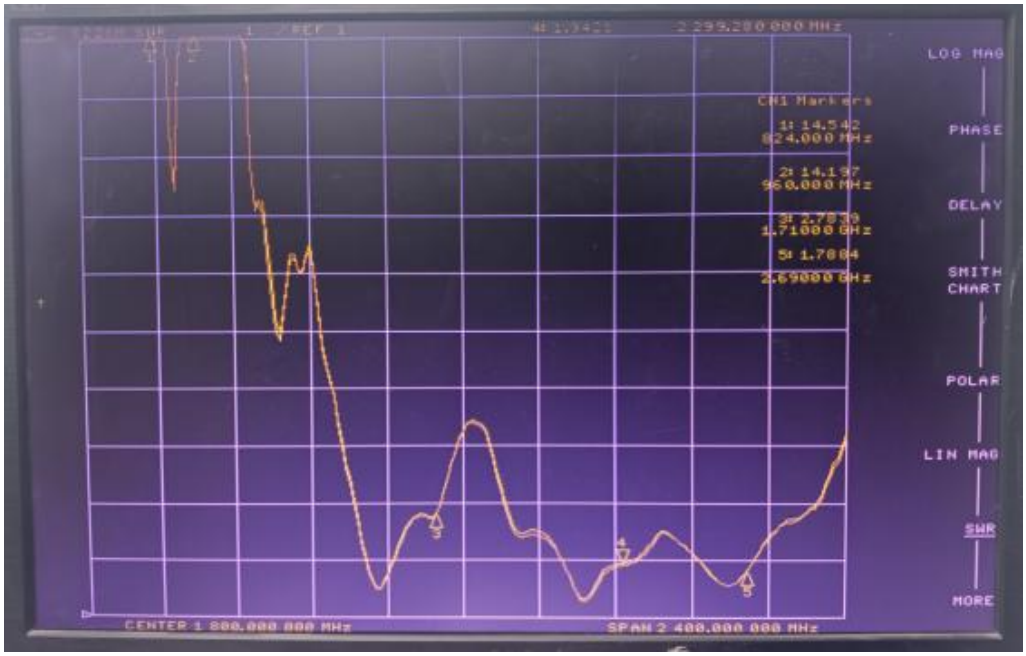


GPS/Wifi/BT antenna SWR：



Diversity antenna LOG MAG：

Diversity antenna SWR：



Antenna gain:

Frequency（MHZ)	Average Gain(dBi）	Peak Gain(dBi）
GSM850	-6.5	-3.1
GSM900	-8.9	-2.3
DCS1800	-4.5	1.2
PCS1900	-4.4	1.4
WCDMA B1	-5.2	1.5
WCDMA B8	-8.2	-2.3
LTE B1	-5.2	1.5
LTE B3	-4.5	1.2
LTE B7	-4.1	1.5
LTE B8	-8.2	-2.3
LTE B19	-6.0	-2.2
LTE B20	-6.0	-2.1
LTE B28	-8.5	-3.0
LTE B40	-4.4	1.7
GPS	-4.1	1.7
WIFI 2.4G/BT	-4.2	1.5
WIFI 5G	-5.5	1.5

Main antenna OTA:

Band	Channel	TRP	Dark TIS	Bright TIS
GSM 850	128	25.7	-102.1	-100.1
	190	26.1	-102.8	-101.2
	251	26.4	-101.7	-99.9
EGSM	1	25.1	-102.4	-100.9
	62	24.6	-101.8	-100.7
	124	24.5	-100.9	-99.5
DCS	512	24.2	-106.7	-106.3
	698	25.2	-106.1	-105.8
	885	25.5	-106.9	-106.7
PCS	512	25.5	-107.4	-106.9
	661	25.1	-106	-105.8
	810	25.3	-104.3	-103.8
WCDMA Band1	10562	18.9		
	10700	18.2		
	10838	17.4	-105.3	-104.8
WCDMA Band8	2937	14.8		
	3013	14.7		
	3088	14.3	-105.2	-104

Main antenna OTA:

Band		Channel	TRP	Dark TIS	Bright TIS
FDD-LTE (10M)	B1	50	19.1		
		300	18.3		
		550	18.4	-94.9	-94.4
	B3	1250	18.2		
		1575	19.1		
		1900	19.5	-95.4	-94.9
	B7	2800	18.6		
		3100	19.3		
		3400	19.5	-95.6	-95.4
	B8	3500	16.1		
		3625	16.2		
		3750	15.8	-90.9	-89.7
	B19	6000	15.3		
		6075	15.1		
		6149	15.2	-91.7	-89.9

Main antenna OTA:

Band		Channel	TRP	Dark TIS	Bright TIS
FDD-LTE (10M)	B20	**6200**	16.9		
		6300	16.9		
		6400	15.8	-89.5	-87.2
	B28A	**9310**	14.1		
		9360	14.3		
		9410	14.4	-89.9	-88.7
	B28B	**9460**	14.6		
		9510	15.3		
		9560	16.2	-90.1	-88.1

Main antenna OTA:

Band		Channel	TRP	Dark TIS	Bright TIS
TDD-LTE (20M)	B40	**38750**	18.1		
		39150	18.4		
		39550	18.2	-90.3	-90

WIFI OTA				
	Band	Channel	TRP	TIS
2.4G	b（11M）	1	12.4	-82.6
		6	13.1	-83.6
		13	13.2	-83.6
	g（54M）	1	11.7	-71.5
		6	11.7	-72.7
		13	11.8	-72.2
	n（MCS7）	1	11.6	-66.6
		6	11.9	-67.5
		13	11.9	-67.3
5G	a（54M）	36	11.6	-72.8
		56	11.2	-73.3
		165	12.2	-72.7
	n（MCS7）	36	11.5	-66.7
		56	11.4	-67.2
		165	11.8	-67.5

GPS Test:

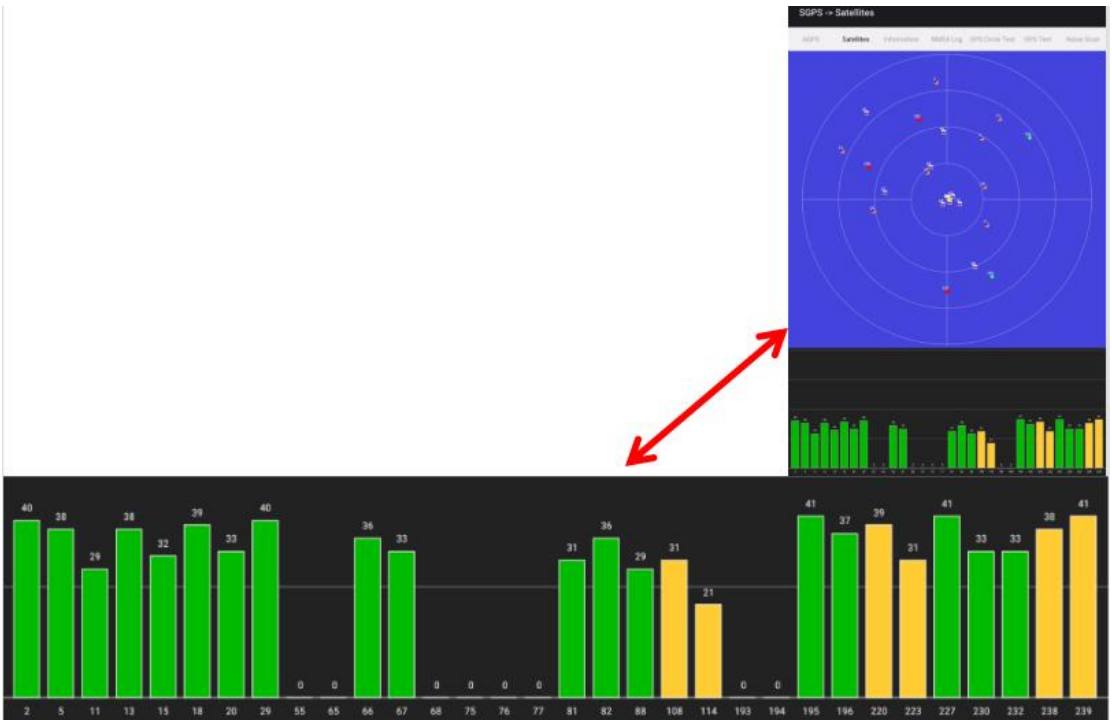
Measured site:Ping'an Rd

Weather:Sunny

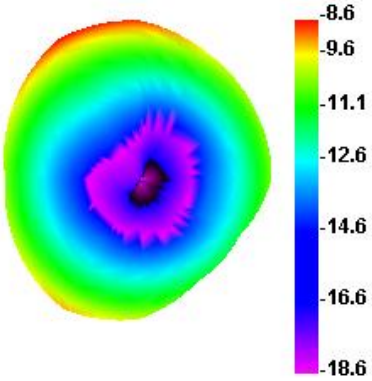
Max S/N :41

Stars:24

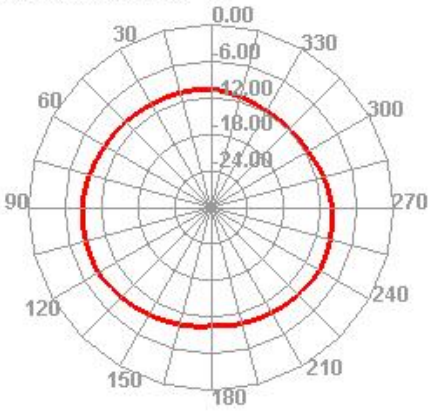
Positioning time:55s



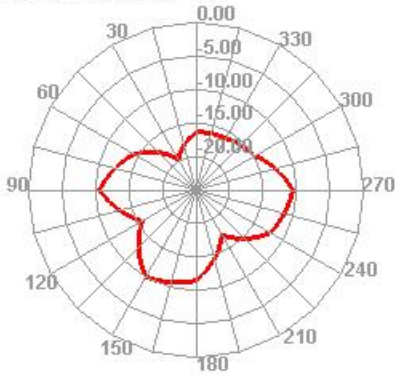
690.000MHz



690.000MHz H



690.000MHz E1



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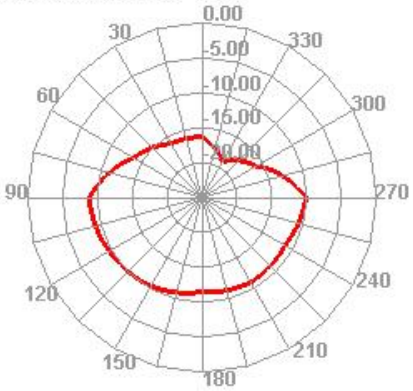
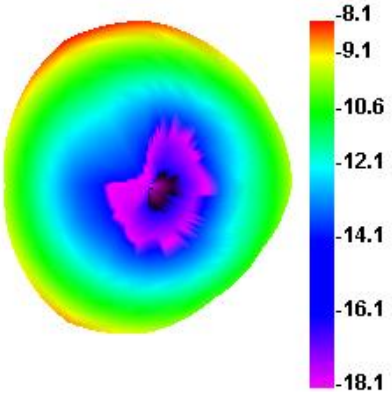
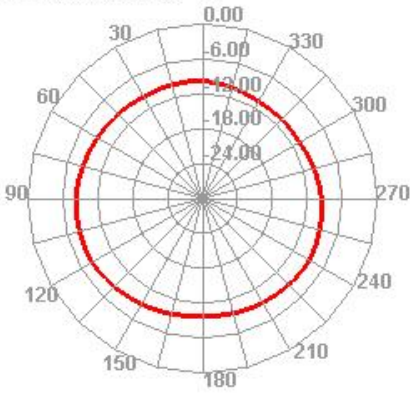


700.000MHz



700.000MHz H



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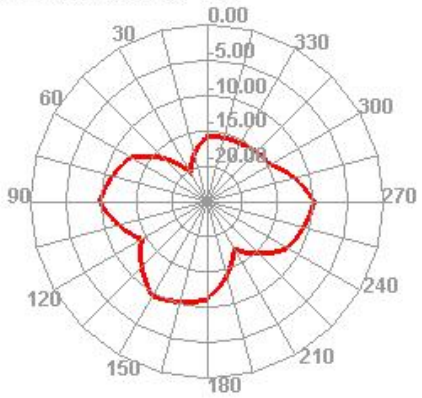
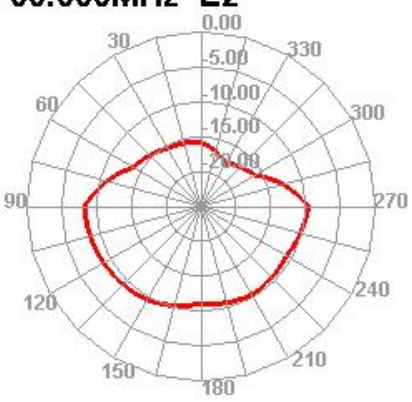


700.000MHz E2



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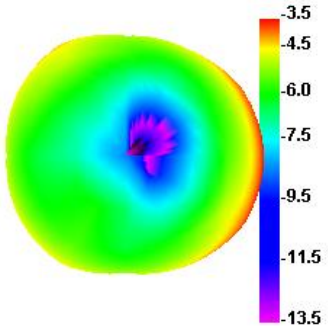

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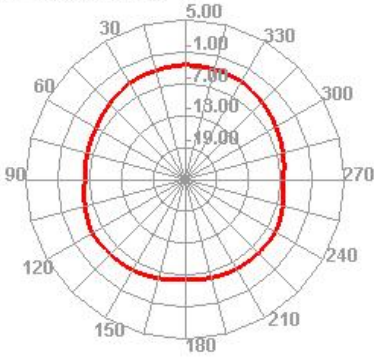
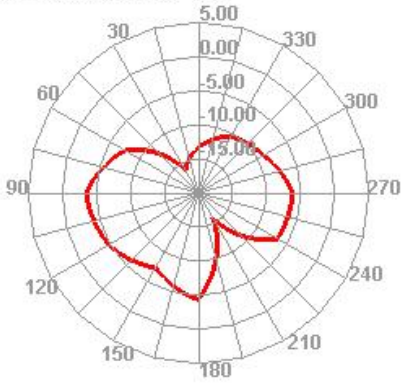


800.000MHz E1



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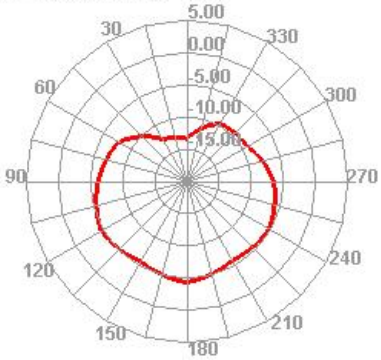
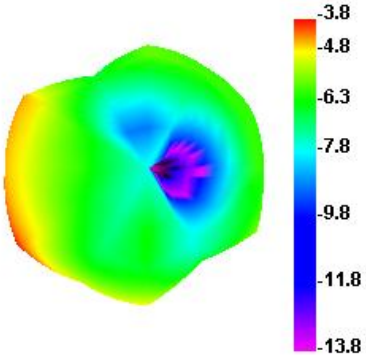


1705.000MHz



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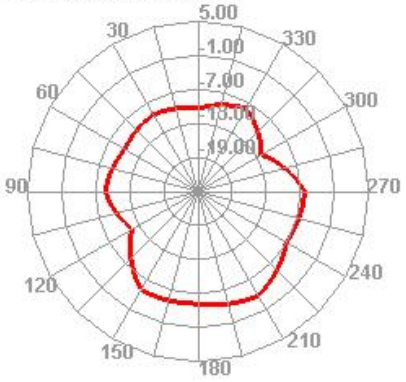

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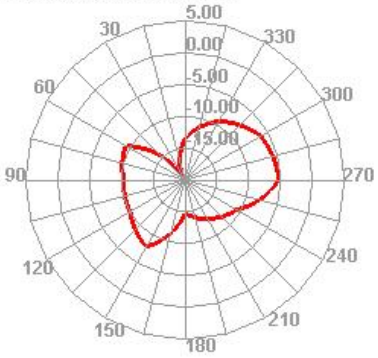

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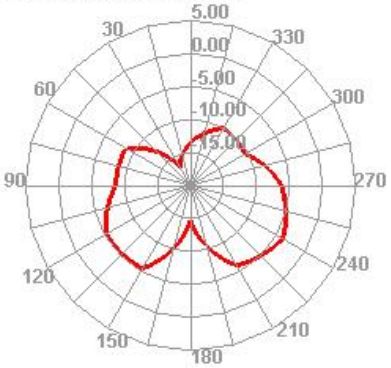
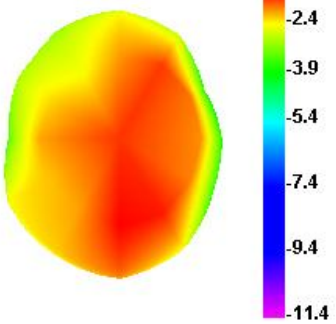


2110.000MHz



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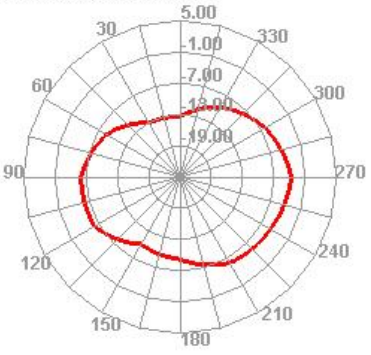

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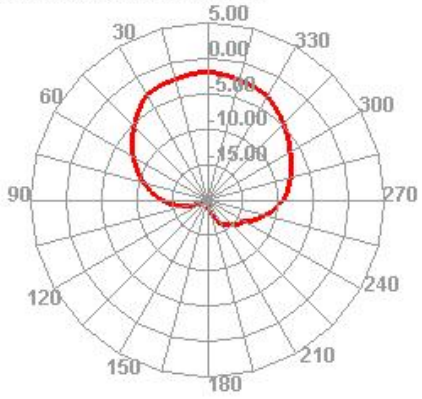

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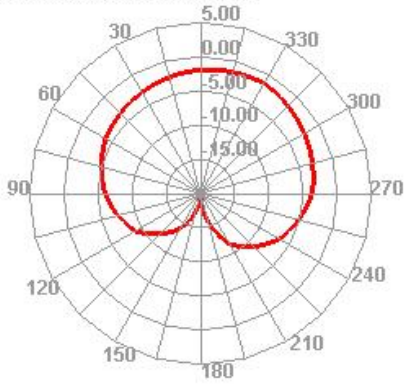

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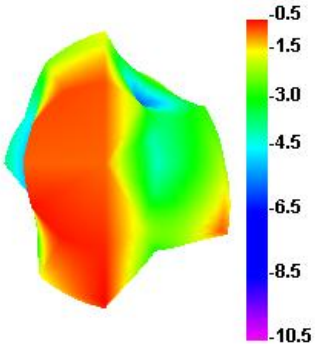

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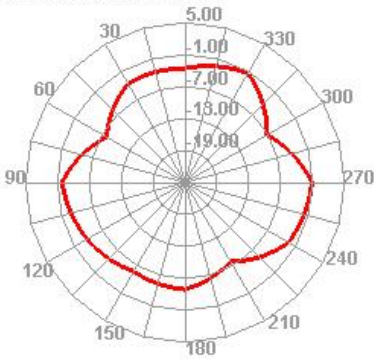

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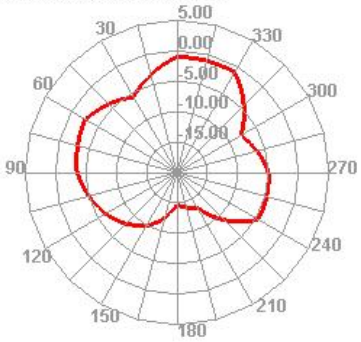
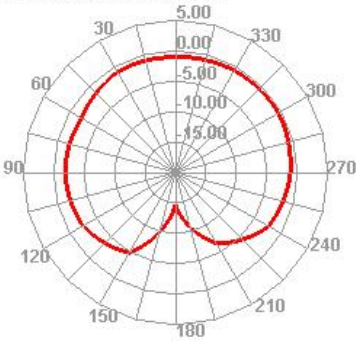
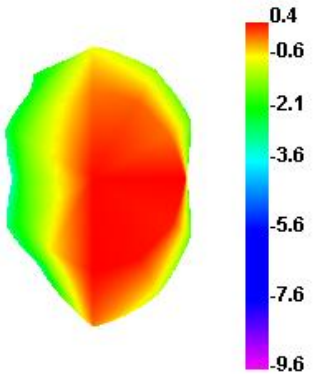


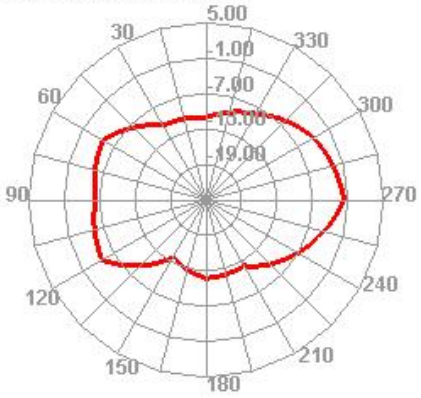
2400.000MHz E2



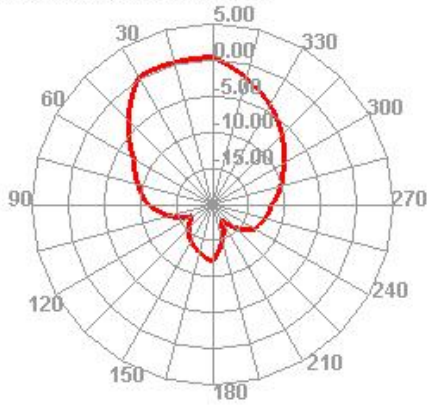
5100.000MHz



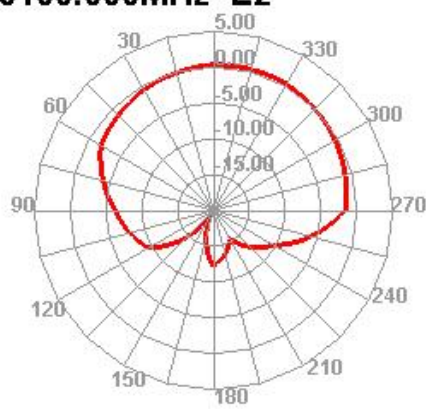
5100.000MHz H



5100.000MHz E1

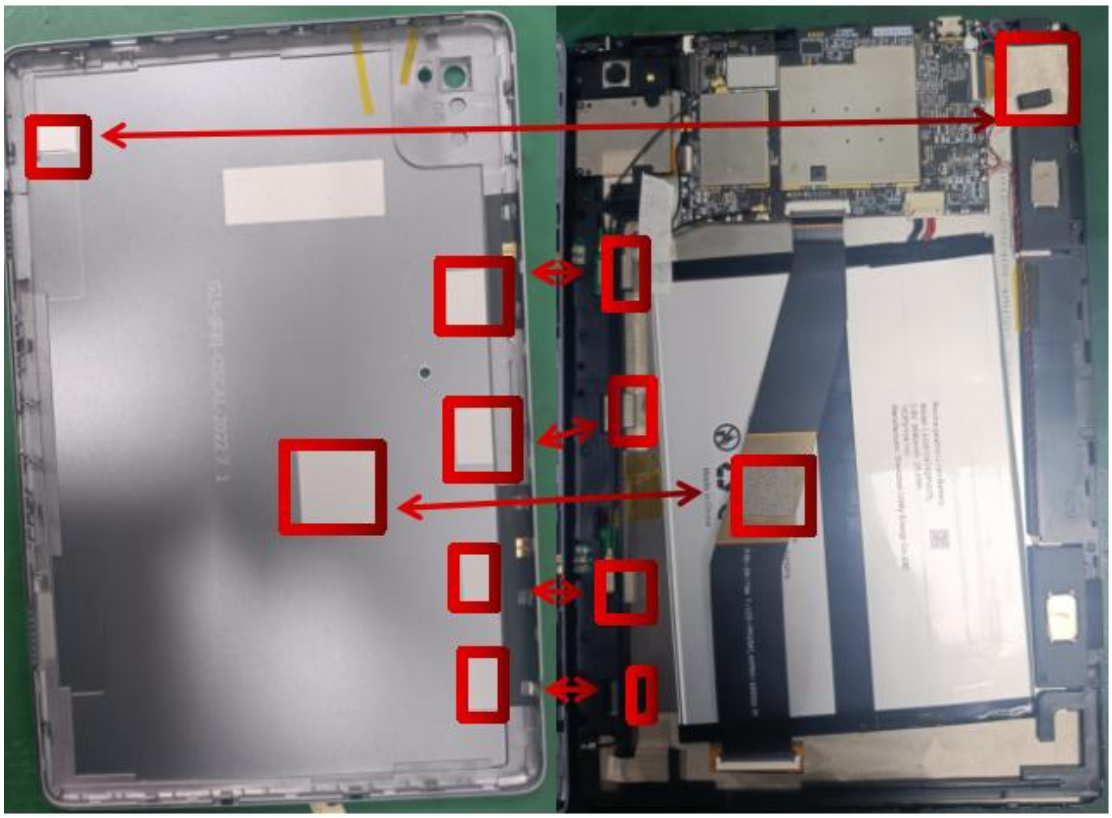


5100.000MHz E2

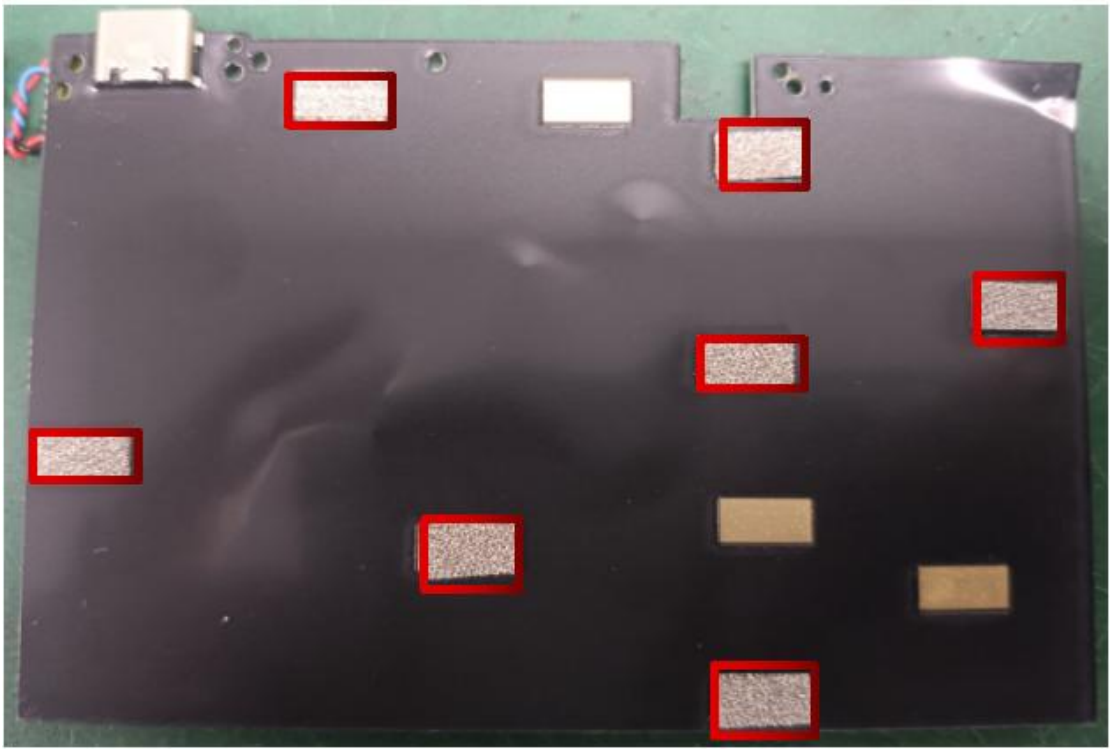


Environmental treatment

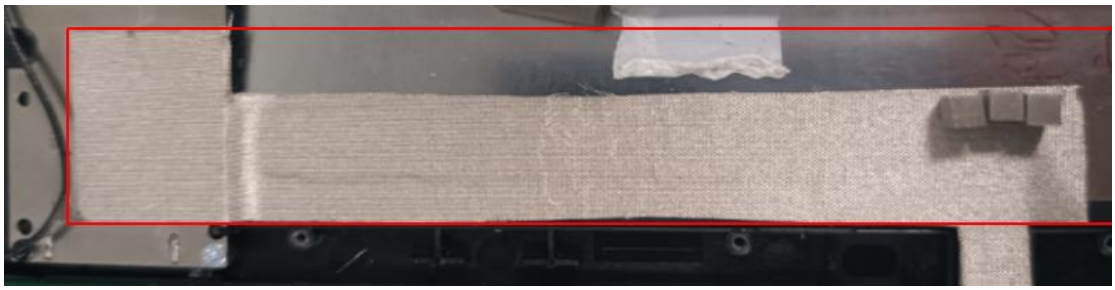
As shown in the figure: add conductive foam at the corresponding position of the red arrow to ground the battery back cover



As shown in the figure, conductive sponge is pasted in the red box to fully ground the main board and screen metal frame

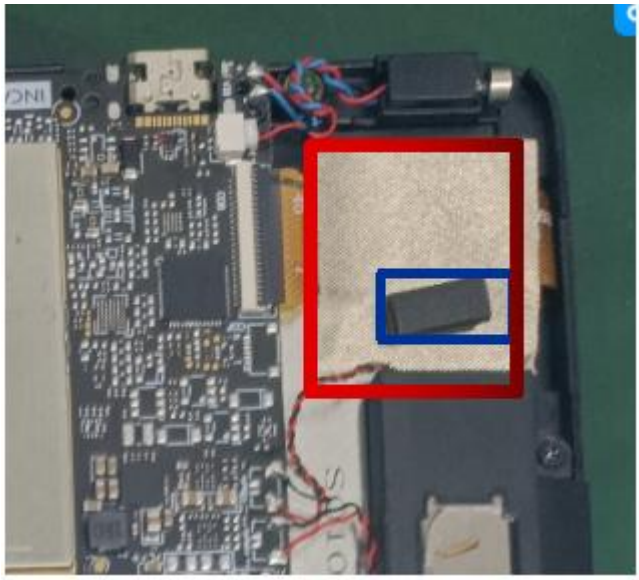


As shown in the red box below: connect conductive cloth from the SIM card slot to the screen metal to cover the camera FPC flat cable for grounding

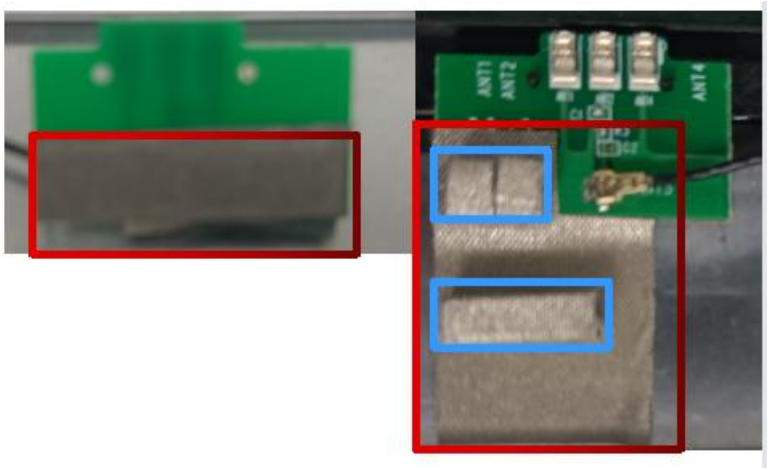


As shown in the figure, conductive cloth is used to ground the flat wire below the screen in the red box

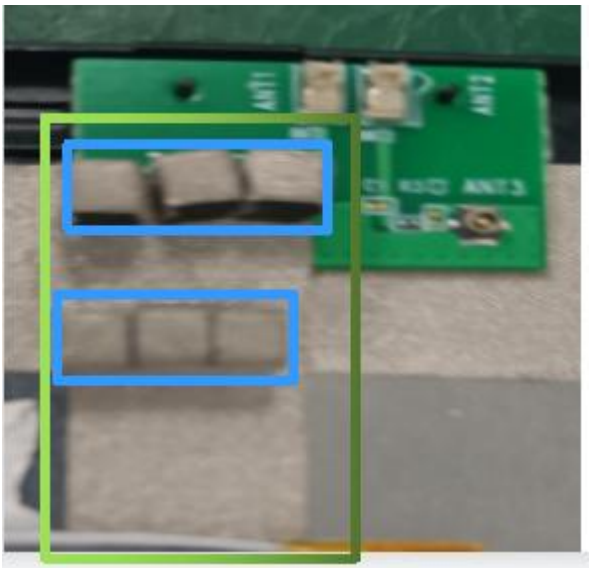
As shown in the figure, a conductive cloth is pasted on the FPC cable at the upper right corner of the main board and a conductive foam is pasted inside the screen metal grounding blue box to ground the battery back cover



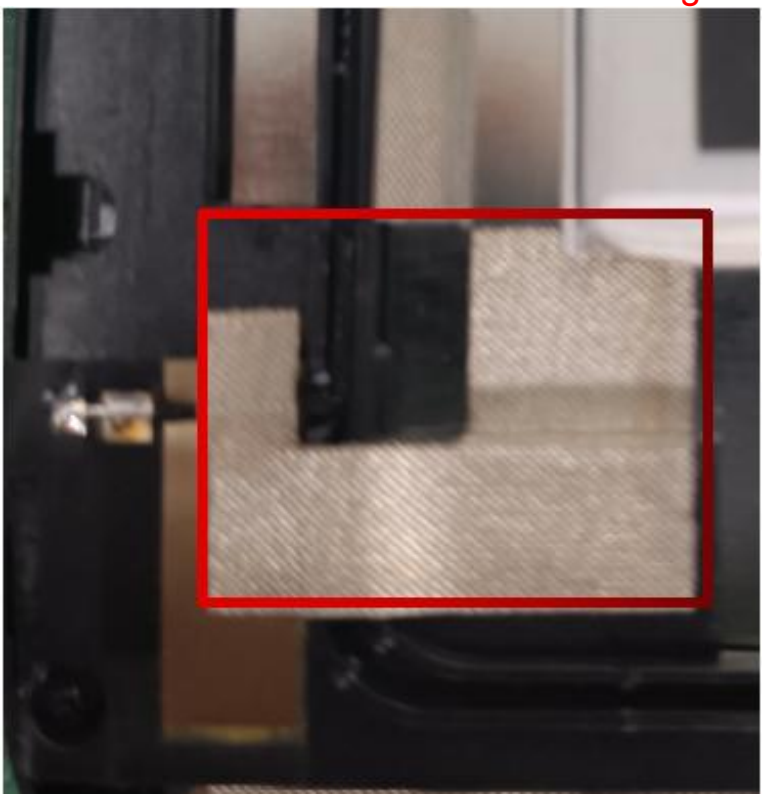
As shown in the red box of the figure, double-sided conductive cloth is pasted on the back of the small board of the main antenna to ground the screen metal, and conductive cloth is pasted on the exposed copper part of the small board of the main antenna to extend to the grounding of the screen metal. The conductive foam pasted in the blue box is grounded with the battery back cover



As shown in the figure below, the conductive cloth is pasted at the exposed copper part of the three in one small plate in the green box, and extended to the grounding at the metal part of the screen. The conductive foam is pasted in the blue box and grounded with the battery back cover。



As shown in the figure, the copper exposed point of diversity antenna shall be pasted with conductive cloth and extended to the screen metal for grounding



As shown in the red box of the figure, the screen flat cable has a great impact on the sensitivity of the bright screen. Pull a large piece of conductive cloth at the shielding cover of the main board to extend to the metal of the screen to cover the interface between the main board and the flat cable to shield interference.