

深圳市亿圣邦科技有限公司

The Holy bond Electronics Co., Ltd. Antenna Test Report

Customer: 亿莱顿

Project: SW2195(R136主板)

WIFI 1: SLK-YLD-T3010C-L-260I-B

WIFI 2: SLK-YLD-T3011-L-320I-G

Product: WIFI Antenna

Report date: 2024.05.18

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Checked by : Eason Huang

Approved by :



Purpose

This report is to measure the performance of SLK for Master Antenna on 亿莱顿. All measure data are showed below.

Content

1. Product Overview

2. Test Result

2.1 VSWR/S11

2.2 Antenna Parameters

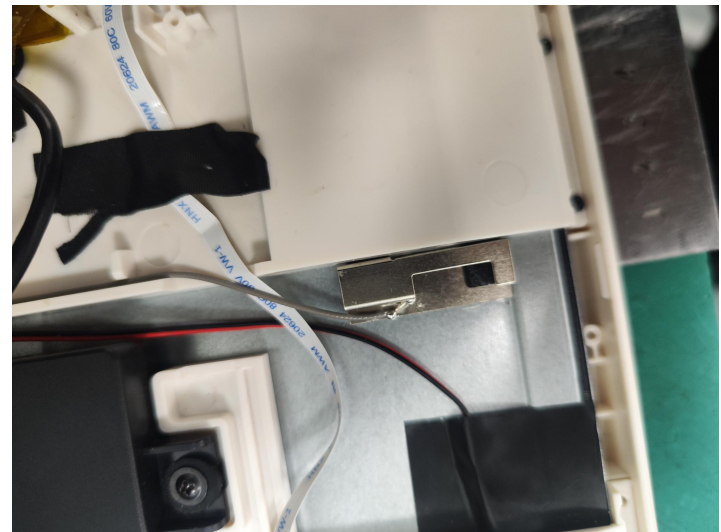
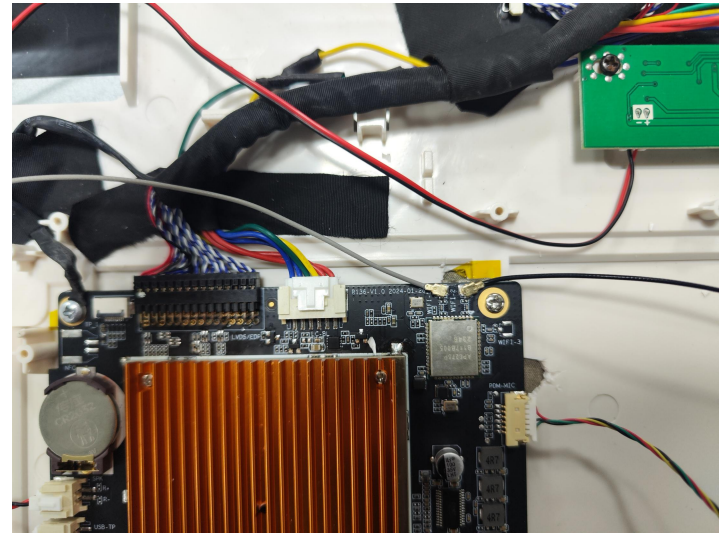
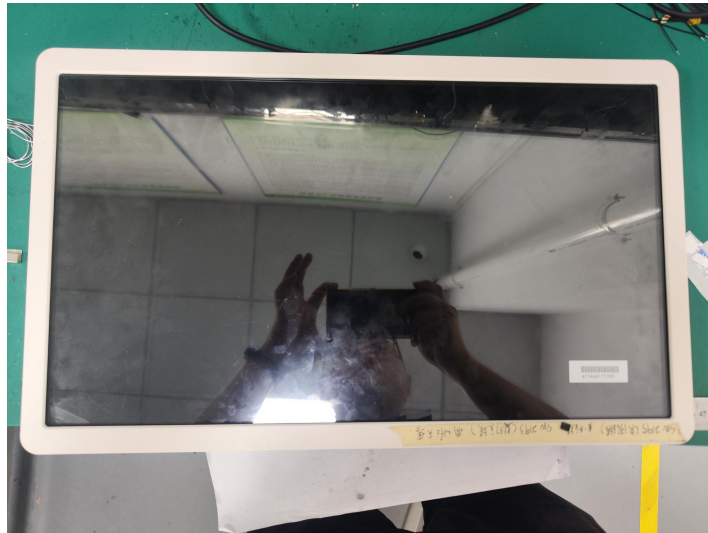
2.3 WIFI Antenna TRP/TIS

2.4 WIFI Antenna Gain/Efficiency/3D DATA

2.5 Environmental Treatment

3. Conclusions

1. Product Overview



2. Test Result

2.1 VSWR/S11

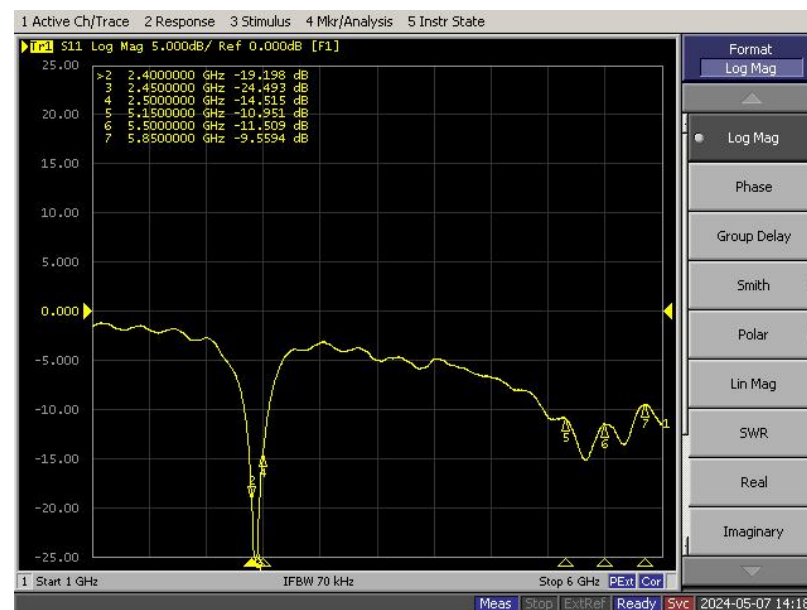
WIFI 1



2. Test Result

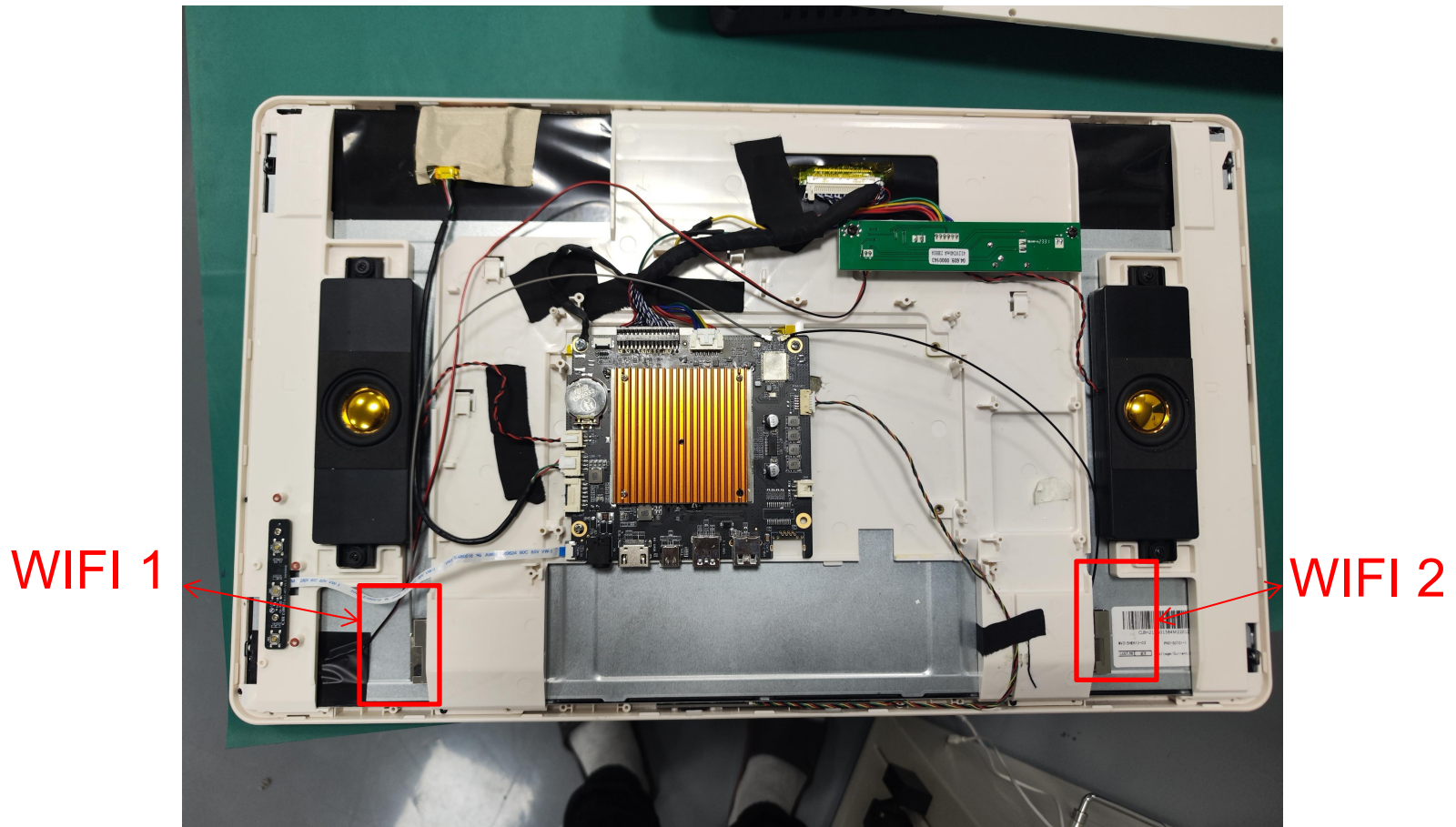
2.1 VSWR/S11

WIFI 2



2. Test Result

2.2 Antenna Parameters



2. Test Result

2.3 WIFI Antenna TRP/TIS

WIFI	CH	功率 (54M)	灵敏度 (54M)	A级标准 值	WIFI	CH	功率 (54M)	灵敏度 (54M)	A级标准 值
802.11a	36	13.59	-71.94	≥10 ≤-63	802.11g	1	14.5	-72.46	≥11 ≤-63
	149	13.55	-72.85			6	14.98	-72.05	
	165	13.33	-71.81			11	14.32	-72.54	
WIFI	CH	功率 (11M)	灵敏度 (11M)	A级标准 值	WIFI	CH	功率 (MCS7)	灵敏度 (MCS7)	A级标准 值
802.11b	1	13.15	-81.21	≥12 ≤-78	802.11n	1	14.58	-71.74	≥10 ≤-63
	6	14.13	-81.35			6	15.09	-71.24	
	11	14.69	-78.72			11	15.54	-70.84	

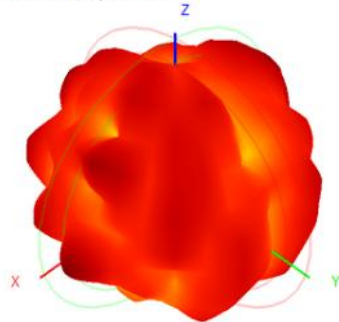
2. Test Result

2.4 WIFI Antenna Gain/Efficiency/3D DATA

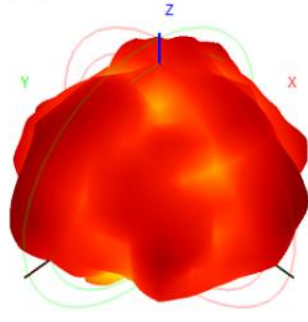
WIFI 1

Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0	5150.0	5350.0	5500.0	5650.0	5850.0
Efficiency (dBi)	-3.82	-3.54	-3.39	-3.15	-3.16	-3.25	-3.27	-3.15	-3.16	-3.44	-3.54	-3.69	-3.56	-3.60	-3.69	-3.47
Gain (dBi)	1.16	1.55	1.59	1.61	1.59	1.67	1.77	2.05	2.08	1.57	1.17	2.67	2.31	2.40	2.13	2.65
Efficiency (%)	41.45	44.24	45.80	48.31	48.26	47.26	47.02	48.33	48.28	45.22	44.20	42.74	44.04	43.57	42.70	44.92

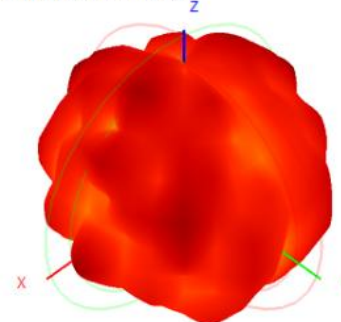
2400.0MHz H+V, Eff: 41.4%



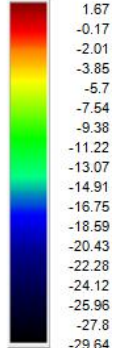
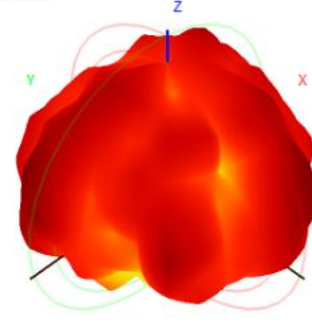
Back View



2450.0MHz H+V, Eff: 47.3%



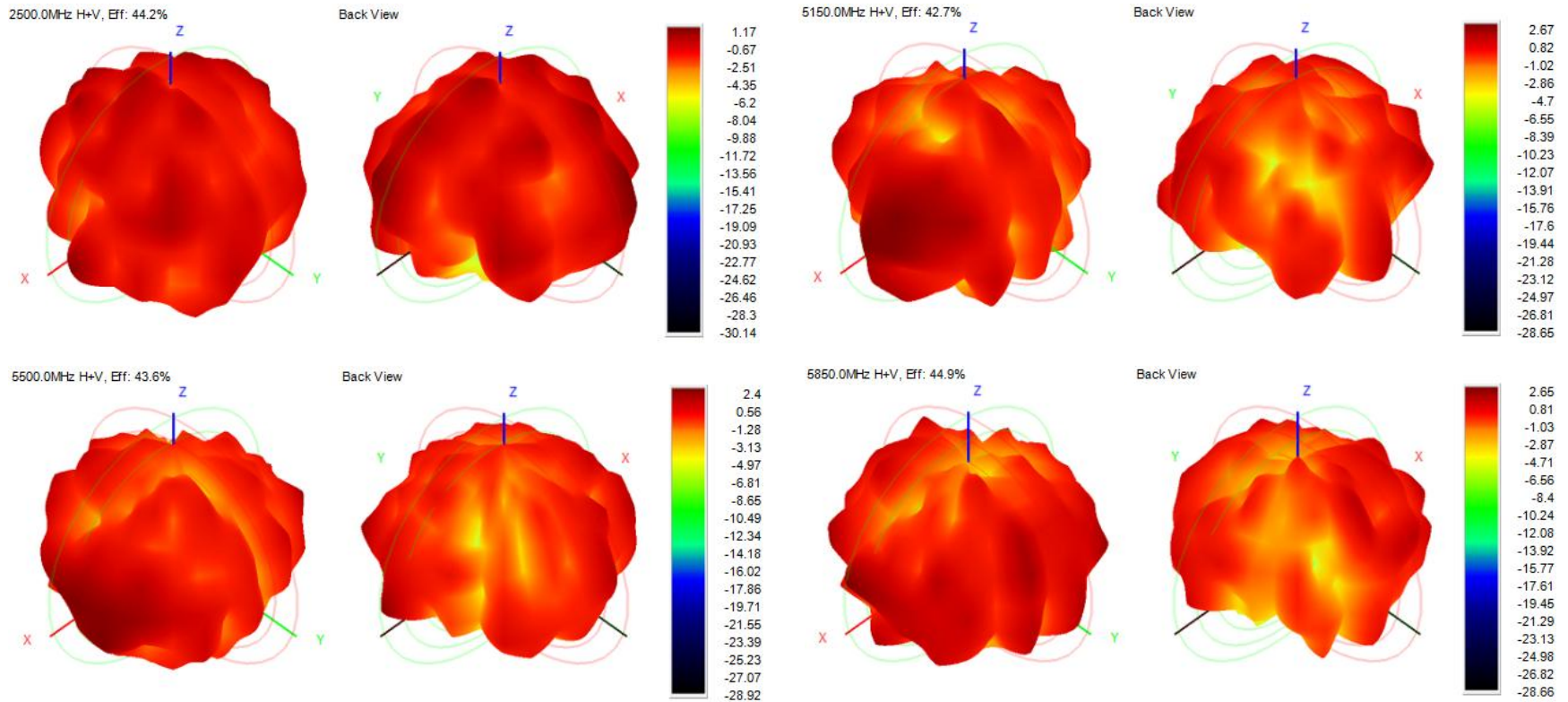
Back View



2. Test Result

2.4 WIFI Antenna Gain/Efficiency/3D DATA

WIFI 1



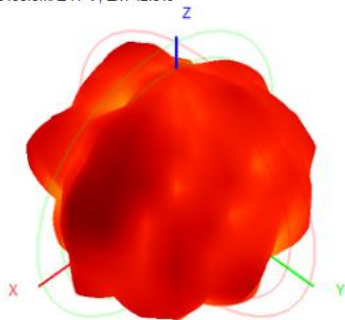
2. Test Result

2.4 WIFI Antenna Gain/Efficiency/3D DATA

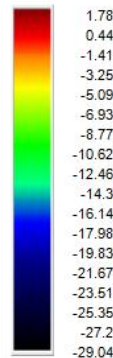
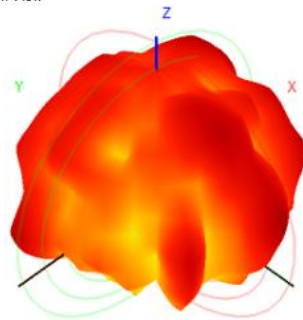
WIFI 2

Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0	5150.0	5350.0	5500.0	5650.0	5850.0
Efficiency (dBi)	-3.68	-3.26	-3.23	-3.18	-3.09	-3.07	-3.11	-3.09	-3.06	-3.09	-3.30	-3.84	-3.66	-3.86	-3.89	-3.47
Gain (dBi)	1.78	2.53	2.66	2.45	2.75	2.81	2.74	2.57	2.60	2.54	2.18	2.25	2.45	2.47	2.12	2.67
Efficiency (%)	42.85	47.12	47.51	47.99	48.99	49.21	48.75	49.00	49.37	48.99	46.77	41.29	42.96	41.11	40.74	44.91

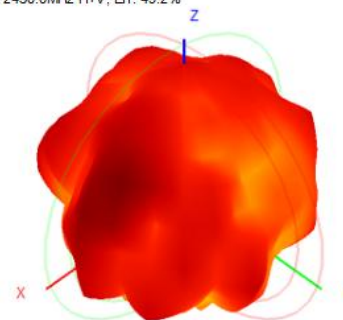
2400.0MHz H+V, Eff: 42.9%



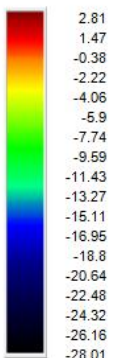
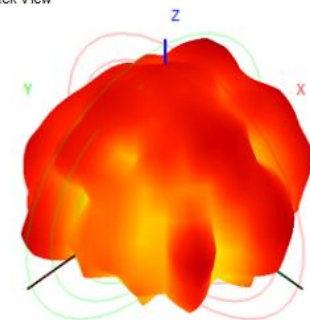
Back View



2450.0MHz H+V, Eff: 49.2%



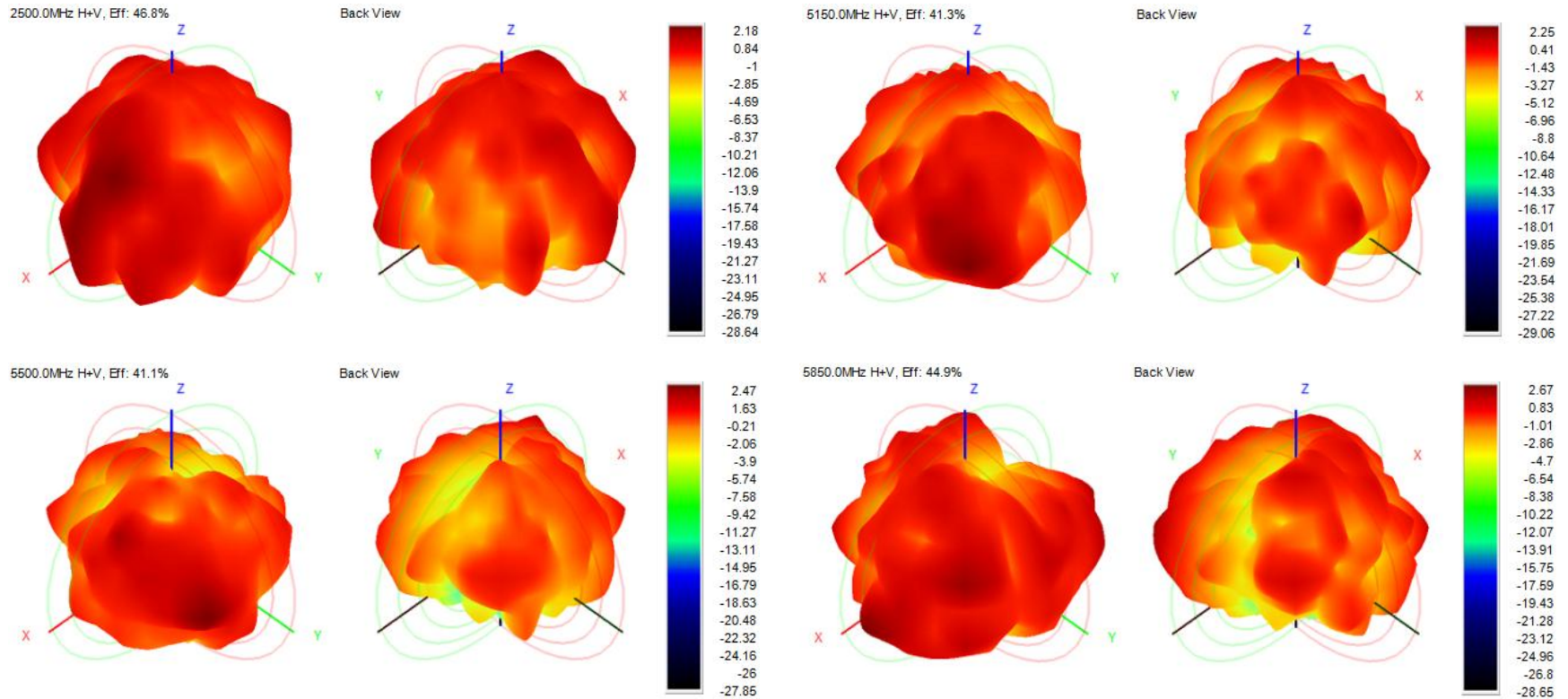
Back View



2. Test Result

2.4 WIFI Antenna Gain/Efficiency/3D DATA

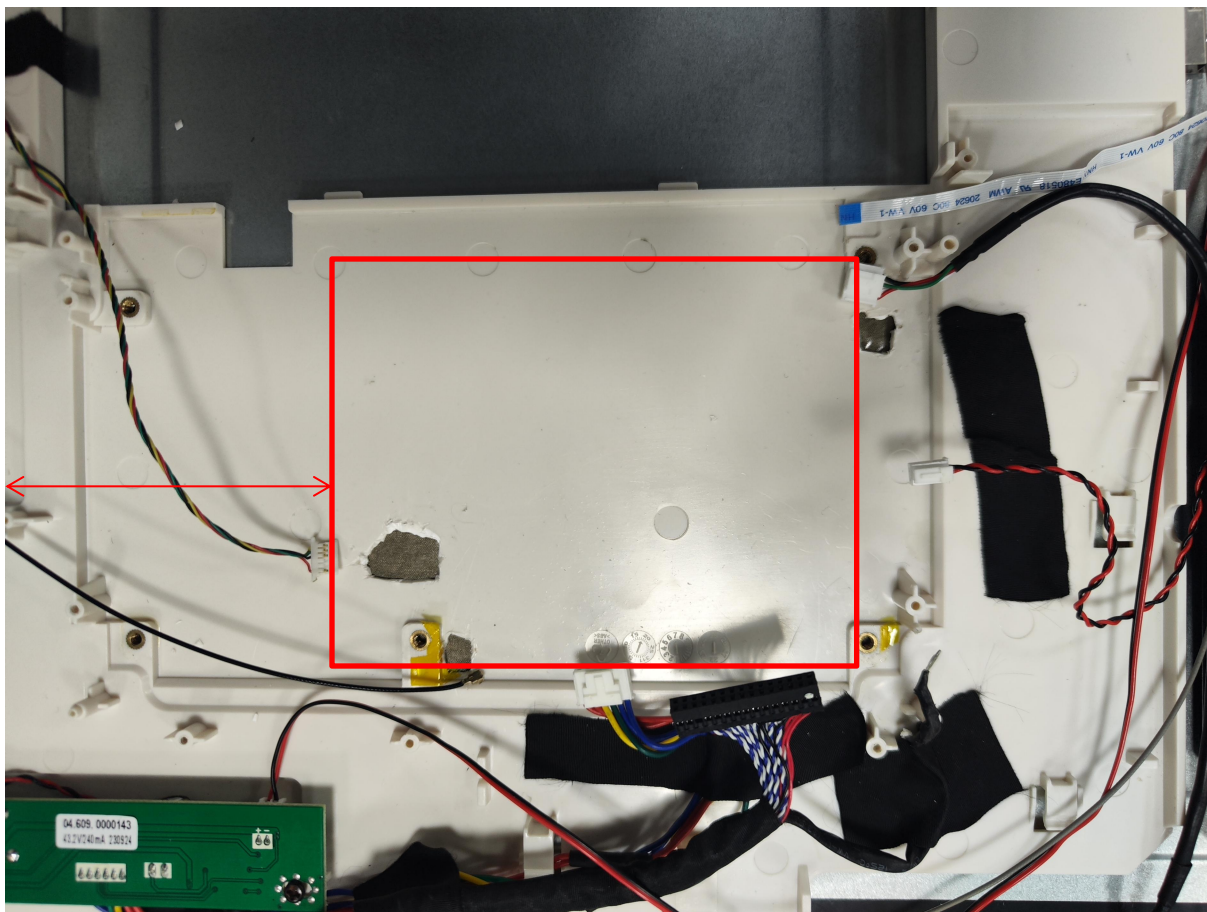
WIFI 2



2. Test Result

2.5 Environmental Treatment

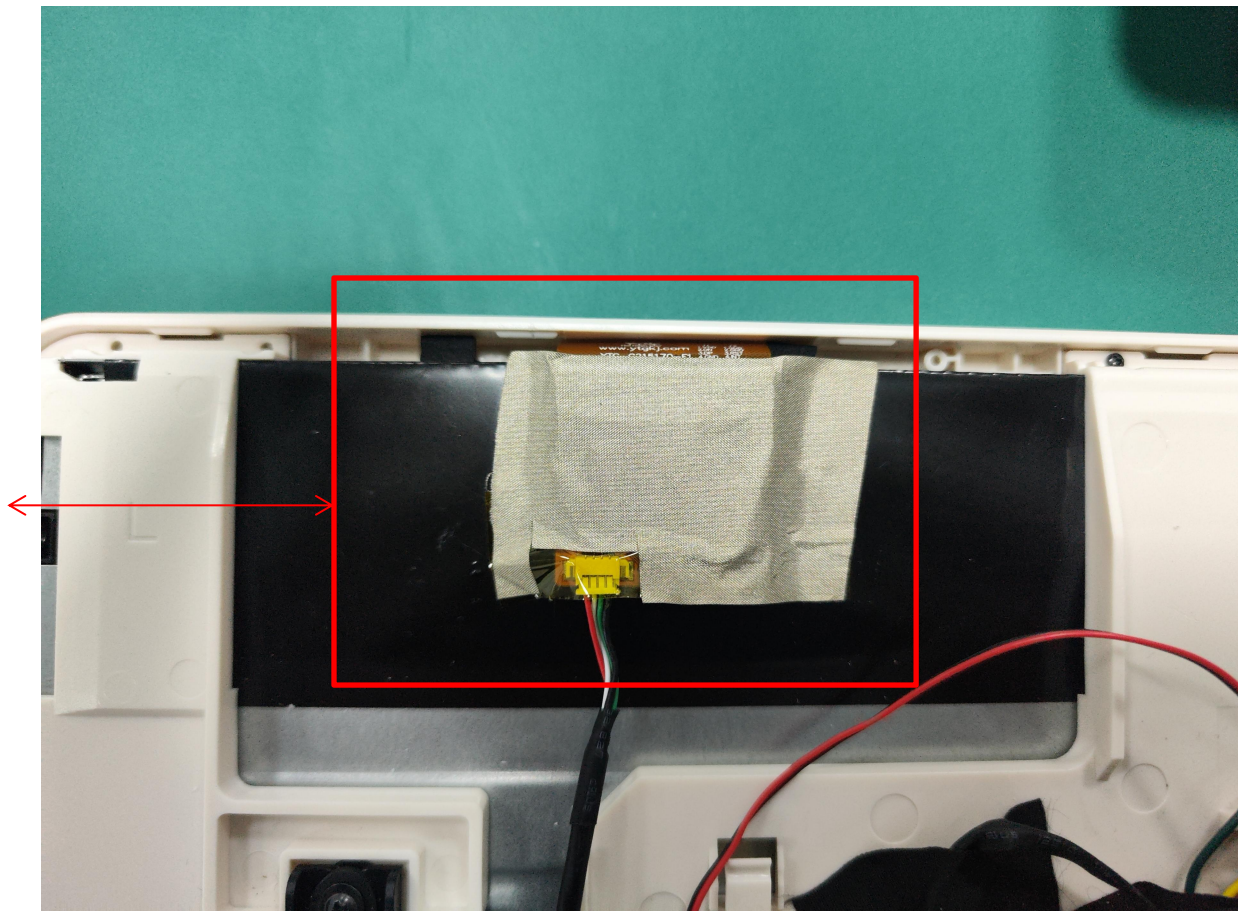
主板塑胶
下方贴导
电布做
EMI屏蔽
处理



2. Test Result

2.5 Environmental Treatment

TP排线
贴导电
布减少
干扰





3. Conclusions

Thank you