

Shenzhen New Link Technology Co.

Antenna Test Report

Model: M9-4-YJ-SL730A

Date: 05 August 2023

CONTENT

01 Project overview and

physical photographs

Report version record

Company Profile and Test

Environment Introduction

Environmental testing

Matching Circuit

Antenna Related Data

Three-in-one related data

08 Antenna Location Map

01. Project Overview and Physical Photos - Project Overview



RF Engineer	孔工	inbox	2532625702@qq.com
		telephones	18477016343
Antenna Overview			
prototype status	entire machine	Project name	M9-4-YJ-SL730A
Antenna type	PIFA	structural form	FPC+4 Generation Terminal Coaxial Cable
primary antenna	4g:b2 b3 b4 b5 b7 b8 b20 b28a b40 3G (850/1900) 2G (850/900/1800/1900)		
Other antennas	subset Three in one		

01. Project Overview and Physical Photos - Physical Photos



Front photo



Reverse Photo



www.kpantenna.com

Integrity ·

02. Report version record



releases	Reporting time	Commissioning Overview
A0	2023.08.02	Antenna Test Report
A1	2023.08.05	Optimising the main antenna test report
A2		
A3		
A4		
A5		
A6		
A7		
A8		
A9		
A10		

03. Company Profile and Test Environment Introduction-- Company Profile

Company experience

Ltd. has 15 years of experience in R&D and production of various types of antennas for mobile communication terminals, and has established RF device labs in cooperation with many universities. The company is proficient in mobile communication terminal antenna technology under various communication standards, and has a good understanding of the

antenna technology of 5G NSA and SA, ultra-book mobile phone, Internet of Things NB-IoT/eMTC, base station antenna technology, and the antenna technology of base station, as well as the antenna technology of base station.

We have rich experience in research and development and

production.

Product Coverage

Our products cover all types of antennas such as IOT, smart home, car networking, smart wearable, mobile phone, tablet, plate antenna, exhaust antenna, omni-directional FRP antenna and so on.

Core Corporate Priorities

We are always committed to enhance our long-term competitiveness by providing a full set of RF solutions. The company insists on taking the customer's demand as the core, and the operation of engineering R&D department, production department, quality control department

and other departments all take meeting the customer's demand as the first task.

www.kpantenna.com

Gratitude

+



+

Integrity

03 . Introduction to the company and test environment - Introduction to the test environment

The company has several OTA darkrooms with frequency bands covering 400MHz~8.5GHz.

- Can provide the whole machine OTA test: including 5GNSA and SA test (TRP/TIS), WIFI active test (support

11b/11g/11n/11ax mode).
Bluetooth/GPS Active Test Item

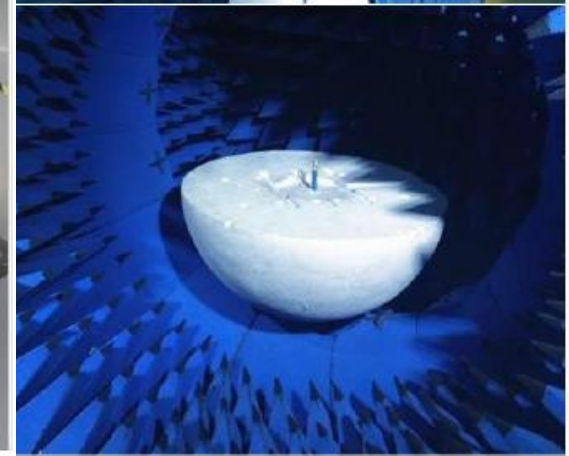
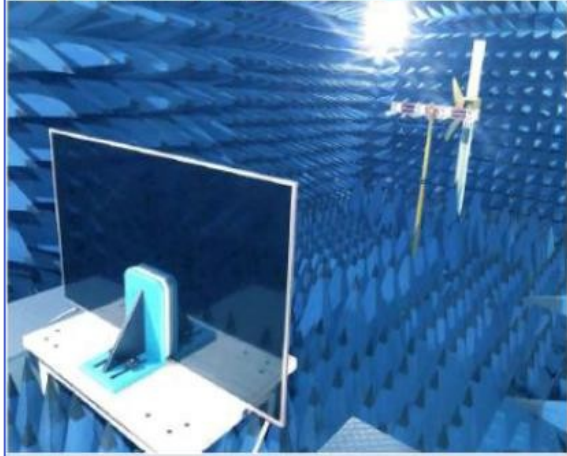
- Can provide antenna gain and efficiency
- 2D directional/apple chart analysis and upper and

- lower hemisphere efficiency values are available
- Interference correlation coefficient test items are available



www.kpantenna.com
Gratitude

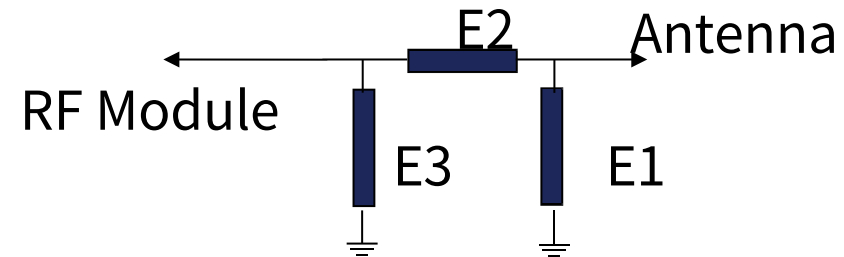
Integrity



05. Matching Circuit



Element	Value
E1 (0402)	
E2(0402)	
E3(0402)	



Match uncha

06. Antenna Related Data



Master Antenna Active Data

Band	Channel	TRP	TIS
B2	L	17.3	
	M	17.2	
	H	17.1	-90.7
B3	L	17.1	
	M	17.6	
	H	17.1	-91.6
B4	L	17.1	
	M	17.2	
	H	17.1	-90.4
B5	L	12.2	
	M	12.1	
	H	11.3	-82.1

Band	Channel	TRP	TIS
B7	L	12.1	
	M	12.6	
	H	14.1	-88.9
B8	L	10.2	
	M	9.5	
	H	8.5	-78.5
B28	L	13.4	
	H	13.7	-83.8
B40	L	12.6	
	M	13.1	
	H	13.1	-84

7. WIFI active data

2.4G WIFI Active Data

2.4GWIFI	802.11b (11M)		
channel	1	7	13
TRP	6.2	9.7	9.7
TIS			-74.1

5G WIFI Active Data

5GWIFI	802.11a (54M)		
channel	36	149	165
TRP	8.5	5.7	3.9
TIS			-65.6



Antenna

passive data

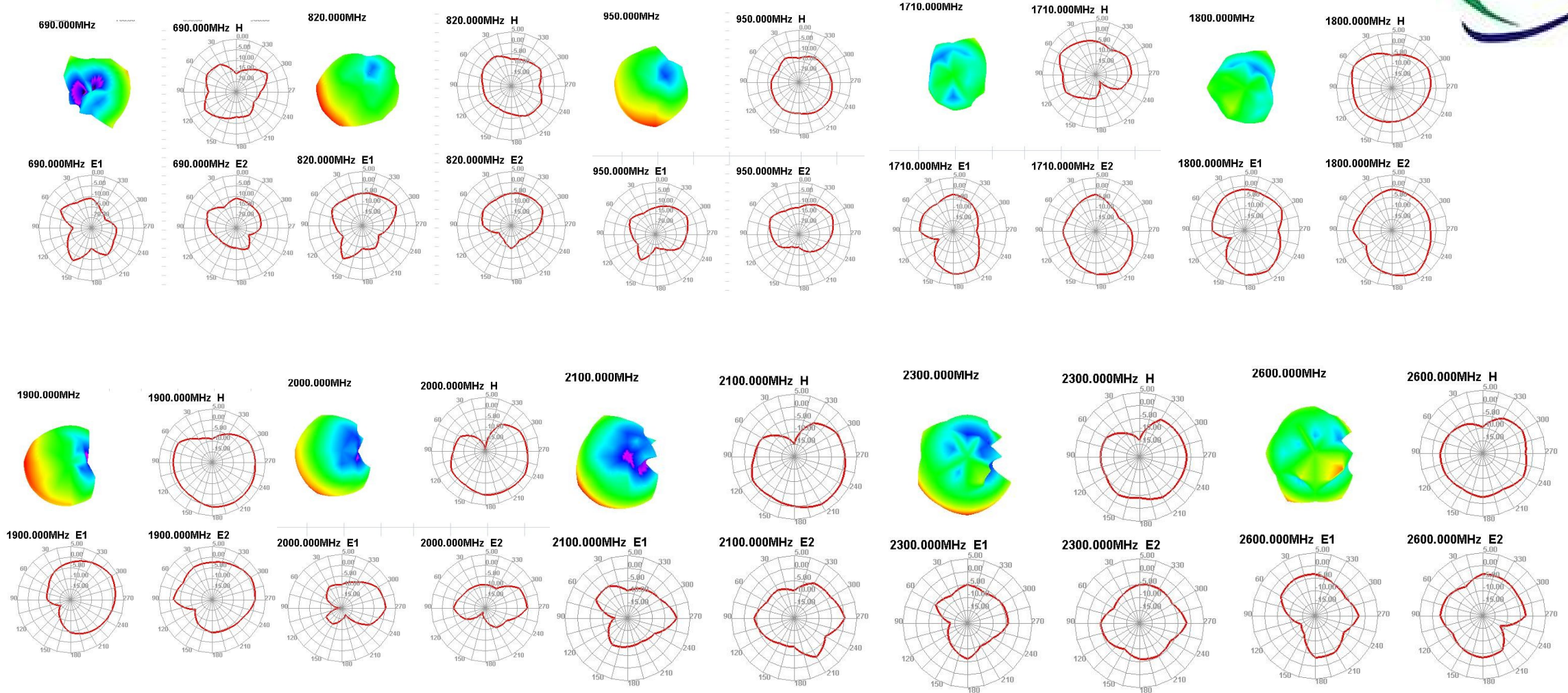
4G Main Antenn



Passive Test For		Passive Test For					
Freq (MHz)	Gain (dBi)	Freq (MHz)	Gain (dBi)				
690	-2.74	1700	-1.68	1980	-2.34	2580	-0.71
700	-2.09	1710	-1.41	1990	-1.68	2590	-0.55
710	-2.98	1720	-1.71	2000	-1.91	2600	-0.39
720	-2.74	1730	-1.91	2010	-1.51	2610	0.85
730	-2.24	1740	-1.87	2020	-2.86	2620	-0.33
740	-2.1	1750	-1.91	2030	-2.25	2630	-1.11
750	-2.41	1760	-1.81	2040	-2.01	2640	-0.23
760	-2.33	1770	-1.88	2050	-2.28	2650	-0.4
770	-2.26	1780	-1.86	2060	-2.04		
780	-3.05	1790	-1.7	2070	-1.92		
790	-3.13	1800	-0.33	2080	-2.96		
800	-3.27	1810	-0.47	2090	-2.67		
810	-3.32	1820	-0.43	2300	-1.79		
820	-3.32	1830	-0.16	2310	-1.31		
830	-3.43	1840	0.6	2320	-2.58		
840	-3.51	1850	0.27	2330	-2.31		
850	-3.56	1860	-0.32	2340	-1.86		
860	-3.55	1870	-0.25	2350	-1.87		
870	-3.62	1880	0.67	2360	-1.97		
880	-3.77	1890	0.02	2370	-1.78		
890	-3.77	1900	-0.67	2380	-1.96		
900	-3.79	1910	-0.9	2390	-1.76		
910	-3.81	1920	-0.66	2400	-1.62		
920	-3.93	1930	-0.92	2500	-1.81		
930	-3.95	1940	-1.29	2510	-1.24		
940	-4.02	1950	-1.12	2520	-1.28		
950	-4.12	1960	-1.27	2530	-0.68		
960	-4.54	1970	-2.13	2540	-1.14		
				2550	-0.99		
				2560	-0.2		
				2570	-0.36		

Antenna Related Data

4G 主天线



www.kpantenna.com

Integrity

Antenna

passive data

3-in-1 Antenna C

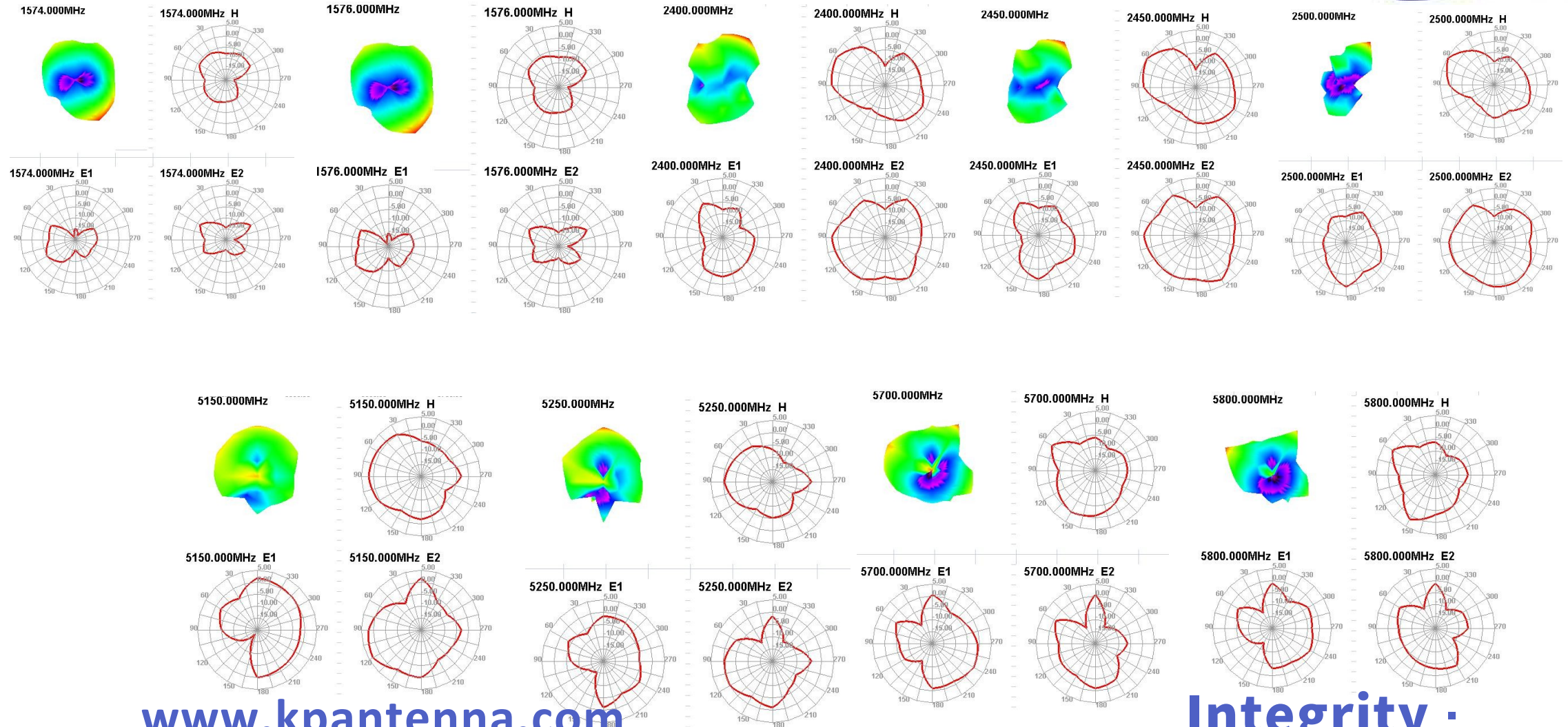


Passive Test For		Passive Test For	
Freq (MHz)	Gain (dBi)	Freq (MHz)	Gain (dBi)
1564	-1.77	2400	-0.91
1566	-1.72	2410	-0.65
1568	-1.74	2420	-1.07
1570	-1.81	2430	-1.16
1572	-1.73	2440	-0.91
1574	-1.63	2450	-0.52
1576	-1.49	2460	-0.94
1578	-1.32	2470	-1.31
1580	-1.15	2480	-0.96
1582	-1.07	2490	-1.46
1584	-1.02	2500	-1.57

Passive Test For	
Freq (MHz)	Gain (dBi)
5150	0.67
5200	0.53
5250	-0.93
5300	-1.93
5350	-0.47
5400	-1.09
5450	-1.62
5500	-2.11
5550	-2.11
5600	-2.32
5650	-3.49
5700	-1.67
5750	-2.3
5800	-1.67
5850	-1.1

Antenna Related Data

WiFi1 Antenna E



www.kpantenna.com

Integrity

7. GPS/BT/measurement data



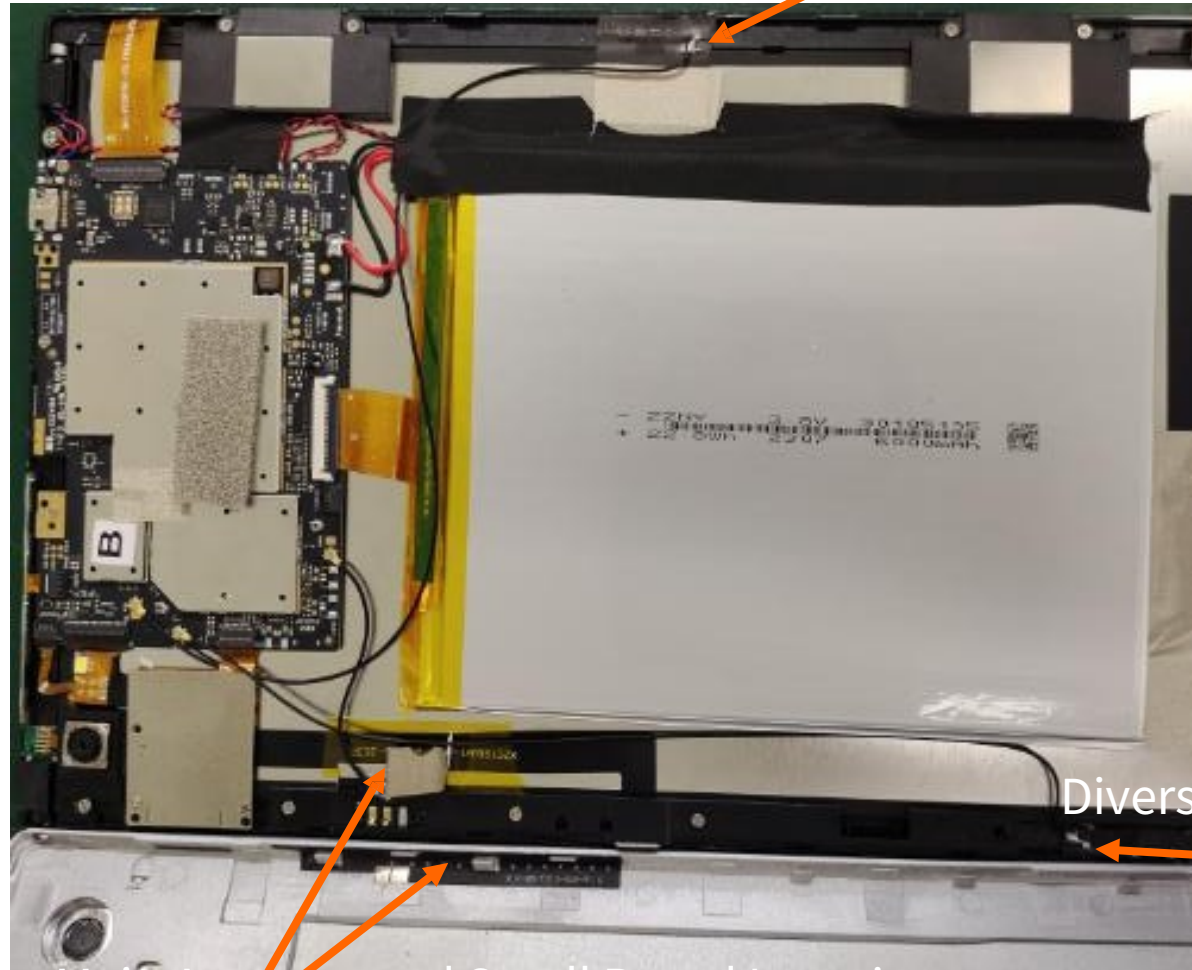
GPS search on the roof of the fifth floor of our company, the positioning time **1** Minutes. Bluetooth unobstructed **12** metres for smooth listening.

www.kpantenna.com

Integrity .

08. Antenna Location Diagram

三合一天线位置

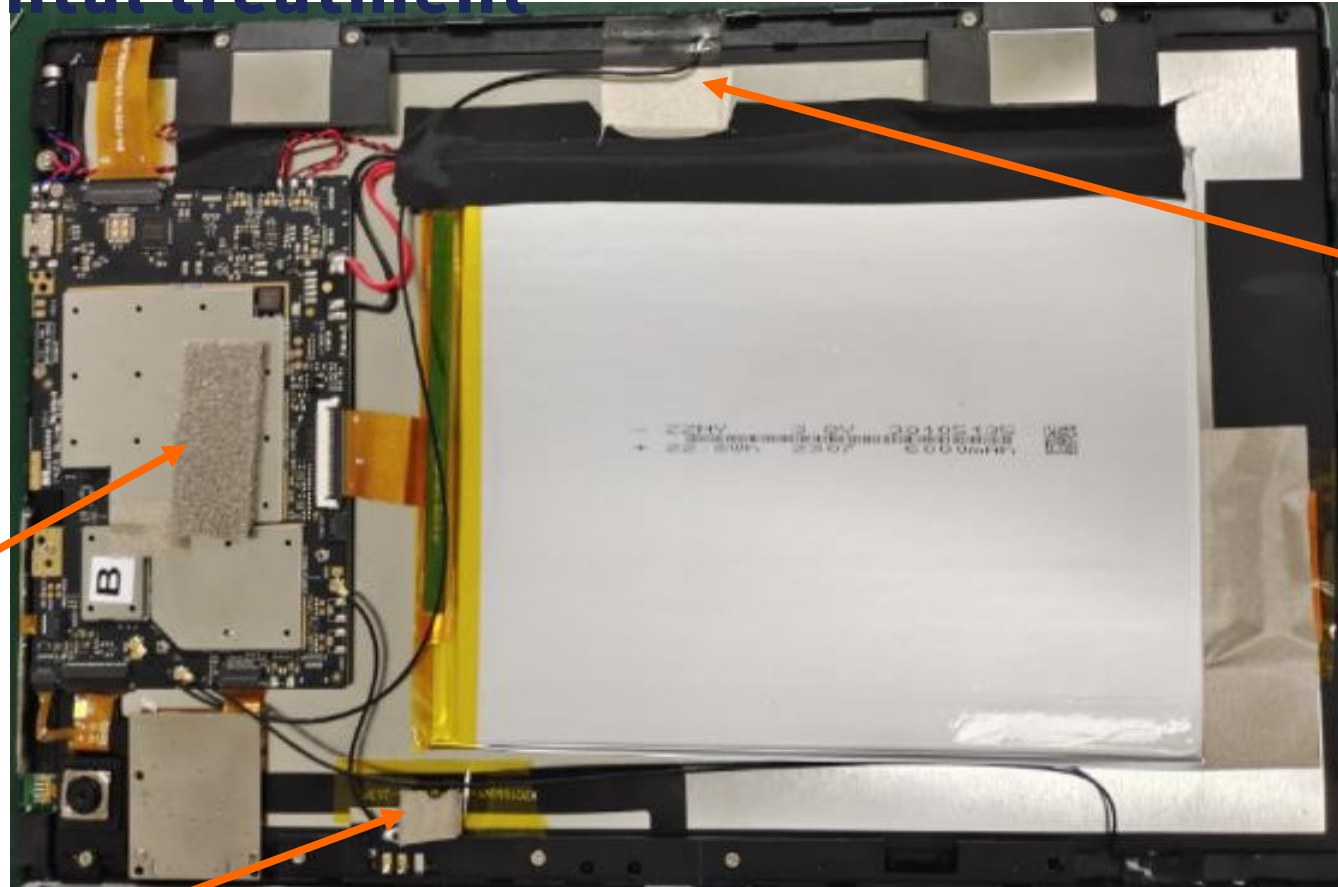


Diversi

www.kpantenna.com

Integrity

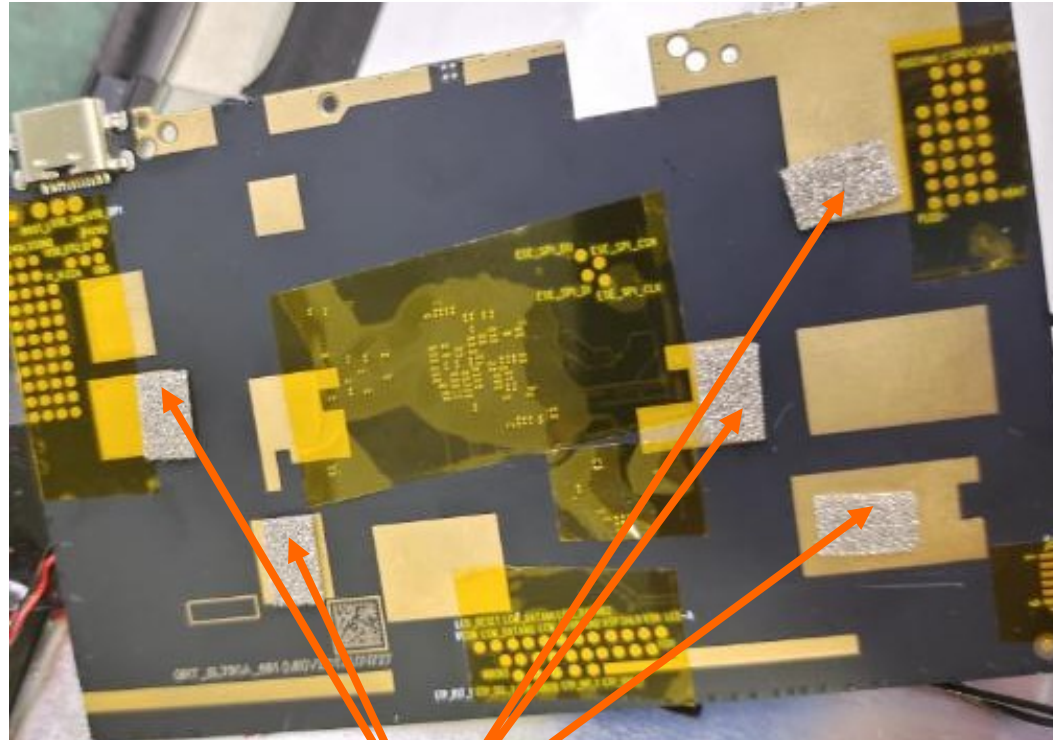
09. Environmental treatment



Three-in-one
small board
paste

Sponge and
chassis
rounding

09. Environmental treatment



ard and screen

www.kpantenna.com

Integrity ·

**谢谢！
期待进一步合作！**

Shenzhen New Link Technology Co.

www.kpantenna.com

Integrity ·