

SHENZHEN XIN LINGKE TECHNOLOGY CO.,LTD

SPECIFICATION FOR APPROVAL

Customer: zhongbai

Description: X7

P/N:	WIFI 1 : 2-17-00407 WIFI 2 : 2-17-00408	SENDING DATE	2023.05.15
SUPPLIERS P/N		APPROVED NO.	
Customer hardware		Client project	X7
customer structure		Customer quality	
RF Engineer		Structural engineer	

SHENZHEN XIN LINGKE TECHNOLOGY CO.,LTD

Project: X7	Written by: Zhang_hai dong	X7-antenna Specification for Approval
Date:: 2023.05.15		
Revision V1.0	Supervised by: LI peng	
Mould		
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1 Summary

This report describes the characteristics of antenna for the zhongbai by Shenzhen xin lingke Technology Co., Ltd. The phablet model is X7 and the range of frequency is frequency/2.4G+5G WIFI+BT , The Antenna gain:2.4G:1.98dbi ,5G:1.99dbi. The antenna model is PIFA and located inside the handset.

1.1 Match circuit

No change.

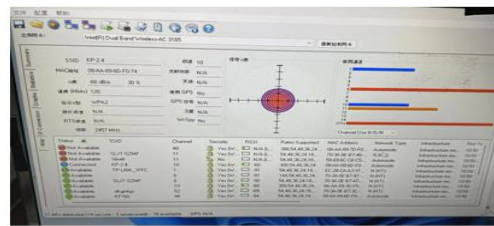
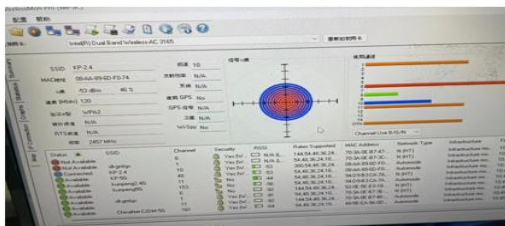
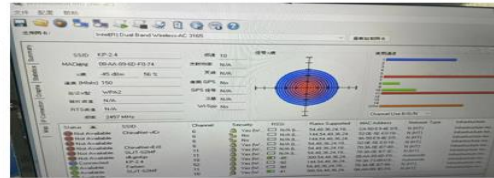
2 Configuring settings

TX Power and RX Sensitivity The data of TX Power and Rx Sensitivity is 3D result measured in microwave anechoic chamber by the Anritsu8820c.

TRP、TIS

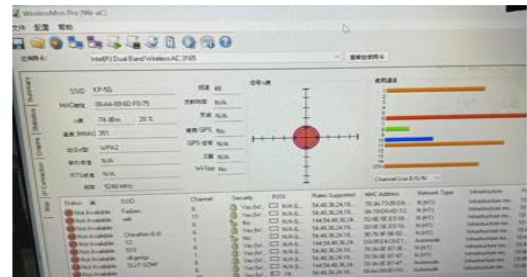
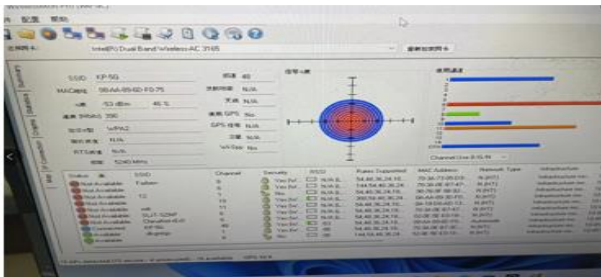
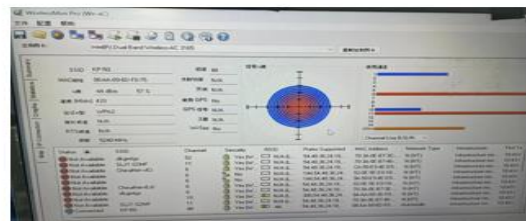
测试数据 2.4GWIFI

WirelessMon信号 (dbm)	
1米 (dbm)	-45
5米 (dbm)	-53
10米隔墙 (dbm)	-66



测试数据 5GWIFI

WirelessMon信号 (dbm)	
1米 (dbm)	-44
5米 (dbm)	-53
10米隔墙 (dbm)	-74



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2.4GWiFi

SPEEDTEST 测速		
1米	下载	126.64mb
	上传	62.57mb
5米	下载	62.96mb
	上传	22.84mb
10米隔墙	下载	30.66mb
	上传	4.92mb



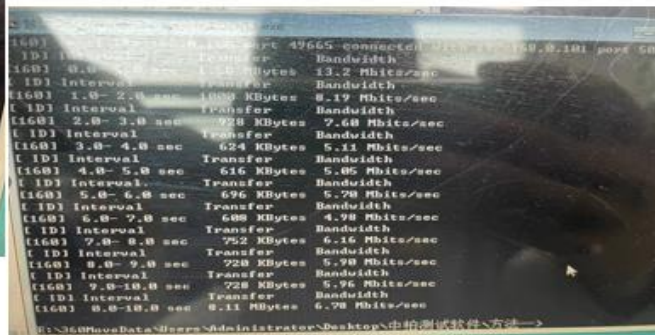
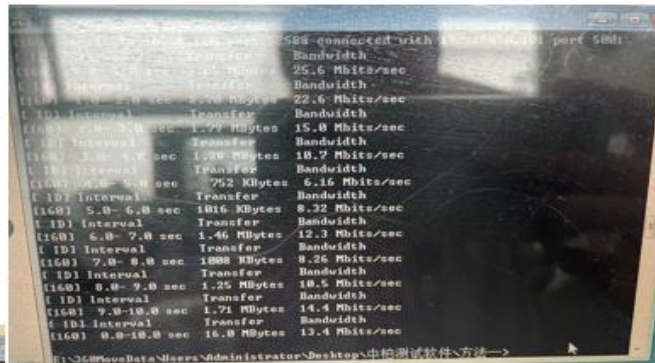
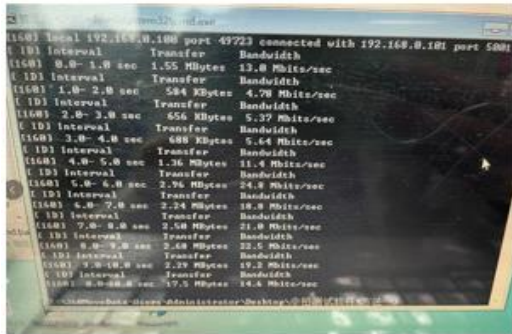
5GWiFi

SPEEDTEST 测速		
1米	下载	292.27mb
	上传	76.64mb
5米	下载	110mb
	上传	70.92mb
10米隔墙	下载	28.78mb
	上传	18.19mb



2.4GWiFi

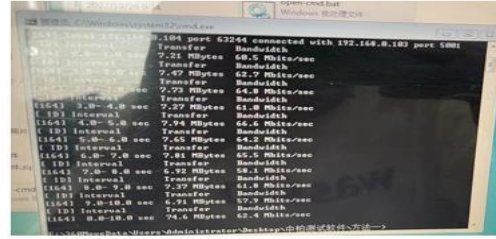
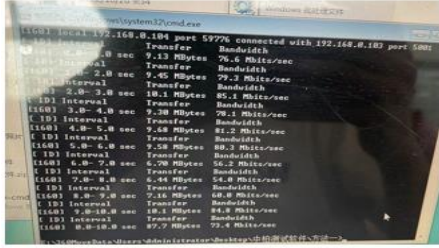
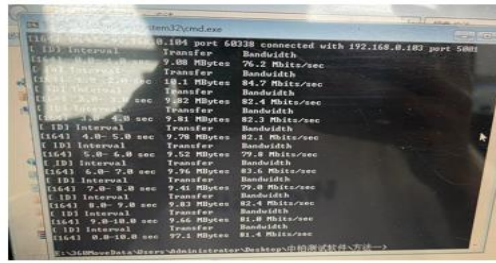
吞吐量测试	
1米(mb/s)	14.6mb/s
5米(mb/s)	13.4 mb/s
10米隔墙(mb/s)	6.78mb/s



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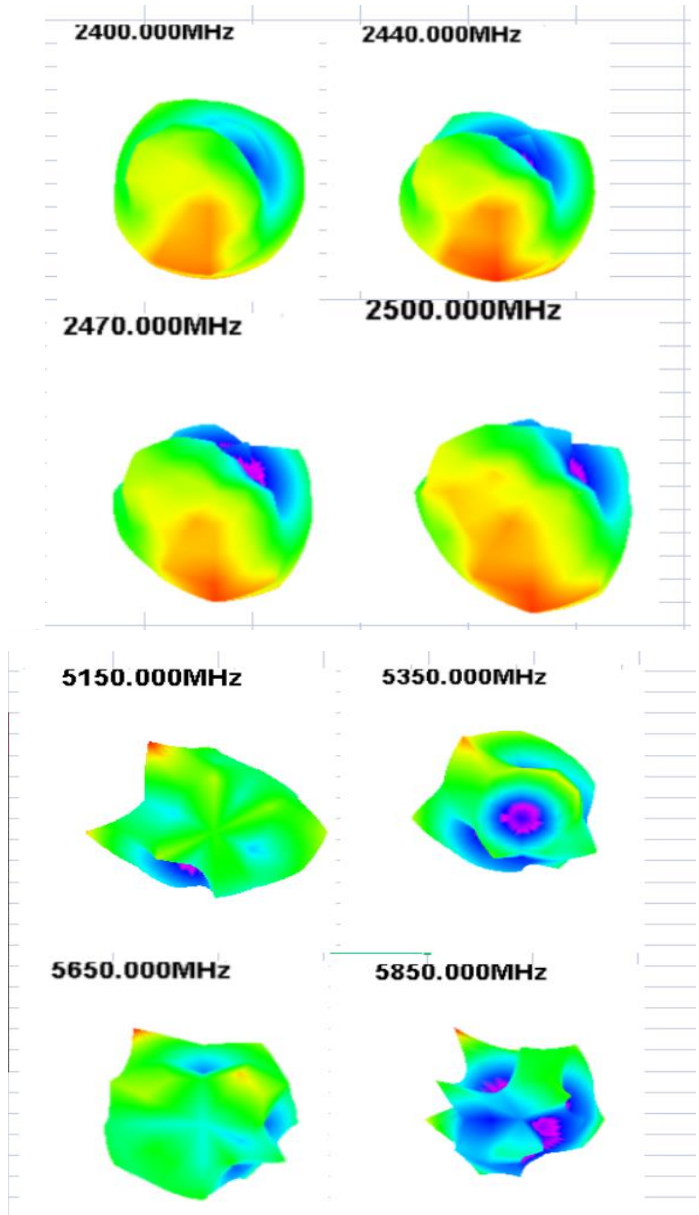
5GWiFi

吞吐量测试	
1米(mb/s)	81.4 mb/s
5米(mb/s)	73.4 mb/s
10米隔墙(mb/s)	62.4 mb/s



3. Gain(2.4G 1.98dbi, 5G 1.99dbi)

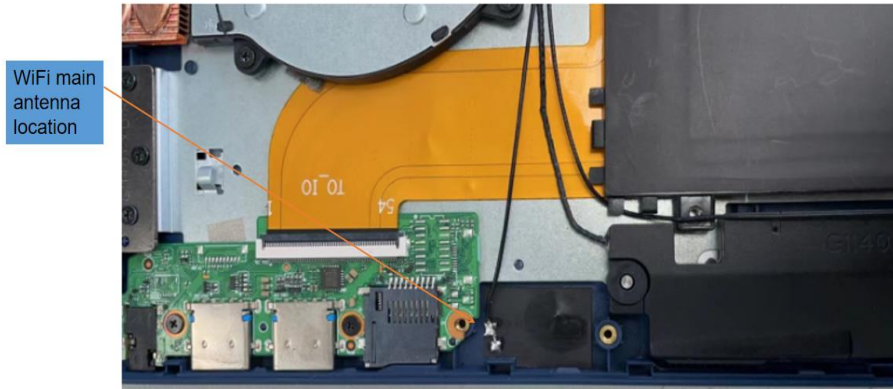
Freq (MHz)	Effi(%)	Gain (dBi)
2400	48.75	1.26
2450	42.27	1.98
2500	43.05	1.83
5150	52.77	1.29
5350	54.20	1.49
5500	50.12	1.54
5650	51.88	1.02
5750	46.89	1.99
5850	53.05	1.42



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4. Environmental treatment

Antenna position



5. Assembling picture

WiFi/BT antenna

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WIFI 1 material number: 2-17-00407

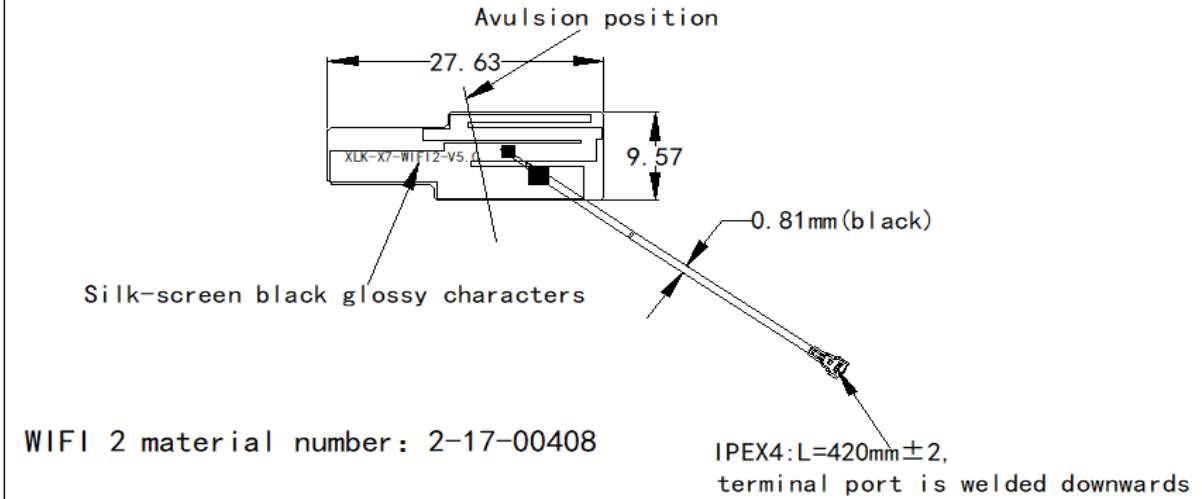
technical requirements:

1. The material is electrolytic copper with a thickness of 0.05mm;
2. Back glue : 3M9471;
3. Anti oxidation treatment for gold finger surface;
4. Protective film for Black oil;
5. Overall thickness should be less than or equal to 0.15mm;
6. Accurate tolerance range: 0.1mm;
7. Only the product diagram is allowed to conduct electricity;
8. Where A stands for adhesive and B is FPC;
9. Please refer to the drawing for dimensions not specified.

Shenzhen NEW LINKE Technology Co., Ltd			
Third perspective	entry name:	Date	2022-11-26
⊕ 0.03	X7	Design	Zsb
⊙ 0.03	Product name:	examine	MD
⊗ 0.02	WIFI1 antenna	RF	
⊥ 0.02	Material code:	approval	
▱ 0.05	2-17-00407	unit:mm	ratio:FIT
	Material Science:		
	FPC+IPEX 4 Coaxial line		

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Shenzhen NEW LINKE Technology Co., Ltd			
Third perspective	entry name:	Date	2022-11-26
⊕ 0.03	X7	Design	Zsb
○ 0.03	Product name:	examine	MD
⊙ 0.02	WIFI 2 antenna		RF
⊥ 0.02	Material code:	approval	
▭ 0.05	2-17-00408	unit:mm	ratio:FIT
	Material Science:		
	FPC+IPEX 4 Coaxial line		

6. Antenna tested Report with all dimension Salt Fog Test Report

Handset Model	X7			Tested Quantity	5PCS		
Standard	GB2423. 18			Product material	FPC		
Tested Items	Required Standard	Actual value	Result	Tested Items	Required Standard	Actual value	Result
Tester Model	KD-60	KD-60	OK	Tested Period	24H	24H	OK
Salt Fog Test Type	NSS Neutral NSS	NSS Neutral NSS	OK	Salt Fog Box Temperature	35° C	35°C	OK
Salt PH	6.5-7.2	6.8	OK	amount of precipitation of Salt fog (H. 80C)	1-2ml	1.8ml	OK

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Fog spit type	Continued fog	Continued fog	OK	Material	FPC	FPC	OK
Volume of salt	5%/NaCL	5%/NaCL	OK	Compressed air pressure	1±0.1KG/CM2	1	OK
saturated temperature	47° C	47°C	OK	Sample location angel	90°	90°	OK
Observed Period	Observed phenomenon						
4H	NA						
12H	NA						
24H	NA						
Judged Standard: Judged by the method of GB5944-86, over Level 9 is qualified.							
Final Tested Result	Qualified ✓			Unqualified			
Tested by	Benyuan He	Supervised by	Aibing Wang	Approved by			
Remark: normal salt fog tested methods is NSS, AASS and CASS.							

7. Shipment Mode

Material Type	Package Mode	
FPC	1、 full page package for shipment 2、 Release paper+ PET plastics bags packed 3、 100sheets/bag	

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