

SHENZHEN XIN LINGKE TECHNOLOGY CO.,LTD

SPECIFICATION FOR APPROVAL

Customer:zhongbai

Description: DNB20

P/N:	WIFI main antenna : 2-17-00479 WIFI sub-antenna : 2-17-00480	SENDING DATE	2023.05.15
SUPPLIERS P/N		APPROVED NO.	
Customer hardware		Client project	DNB20
customer structure		Customer quality	
RF Engineer		Structural engineer	

SHENZHEN XIN LINGKE TECHNOLOGY CO.,LTD

Project: DNB20		Written by: Zhang_hai dong	DNB20-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 DNB20 and the range of frequency is frequency/2.4G+5G WIFI+BT , The Antenna gain:2.4G:0.8dbi ,5G:1.1dbi.The antenna model is PIFA and located inside the handset.

1.1 Match circuit

No change.

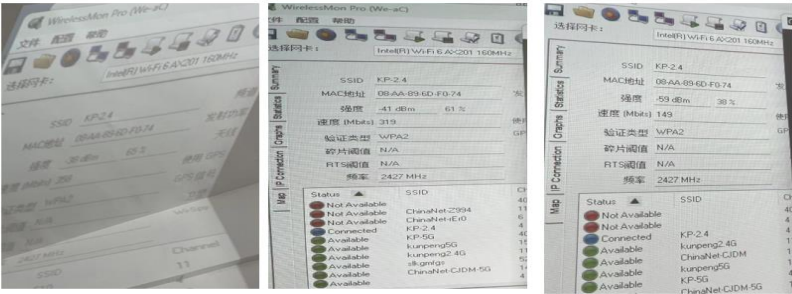
2 Configuring settings

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

TRP、TIS

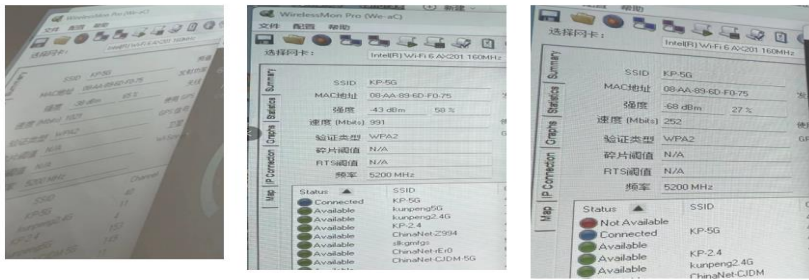
Test data
2.4GWIFI

WirelessMon信号 (dbm)	
1米 (dbm)	-38
5米 (dbm)	-41
10米隔墙 (dbm)	-59



5GWIFI

WirelessMon信号 (dbm)	
1米 (dbm)	-38
5米 (dbm)	-43
10米隔墙 (dbm)	-68



2.4GWiFi

SPEEDTEST 测速		
1米	下载	66.84mb
	上传	73.11mb
5米	下载	58.35mb
	上传	74.62mb
10米隔墙	下载	35.86mb
	上传	40.66mb



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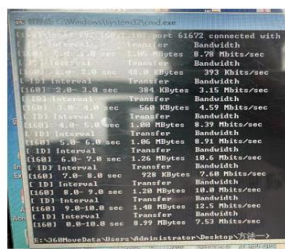
5GWIFI

SPEEDTEST 测速		
1米	下载	182.74mb
	上传	60.49mb
5米	下载	192.12mb
	上传	68.88mb
10米隔墙	下载	54.98mb
	上传	66.06mb



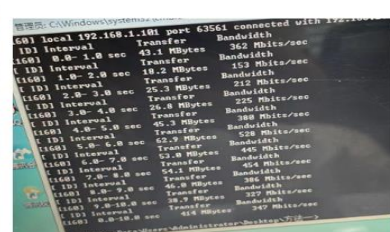
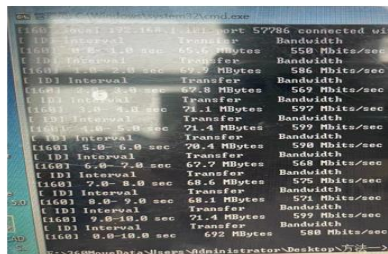
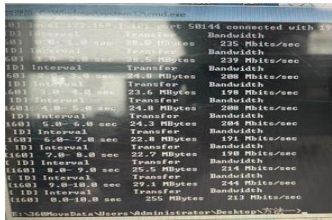
2.4GWiFi

吞吐量测试	
1米(mb/s)	88.8mb/s
5米(mb/s)	78.0mb/s
10米隔墙(mb/s)	7.53mb/s



5GWIFI

吞吐量测试	
1米(mb/s)	580 mb/s
5米(mb/s)	347mb/s
10米隔墙(mb/s)	213mb/s



Bluetooth measurement

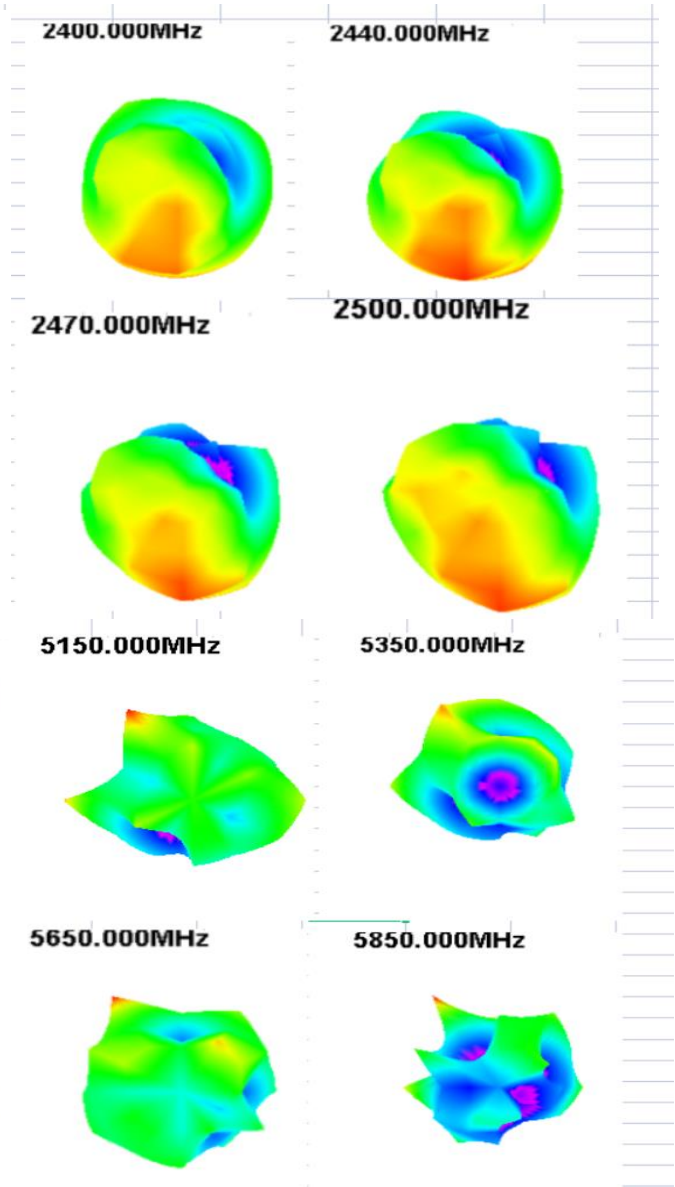
Bluetooth measured 12 meters play video sound smooth no lag



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3. Gain(2. 4G 2. 00dbi, 5G 2. 00dbi)

Freq (MHz)	Effi (%)	Gmin (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



4. Environmental
Antenna position



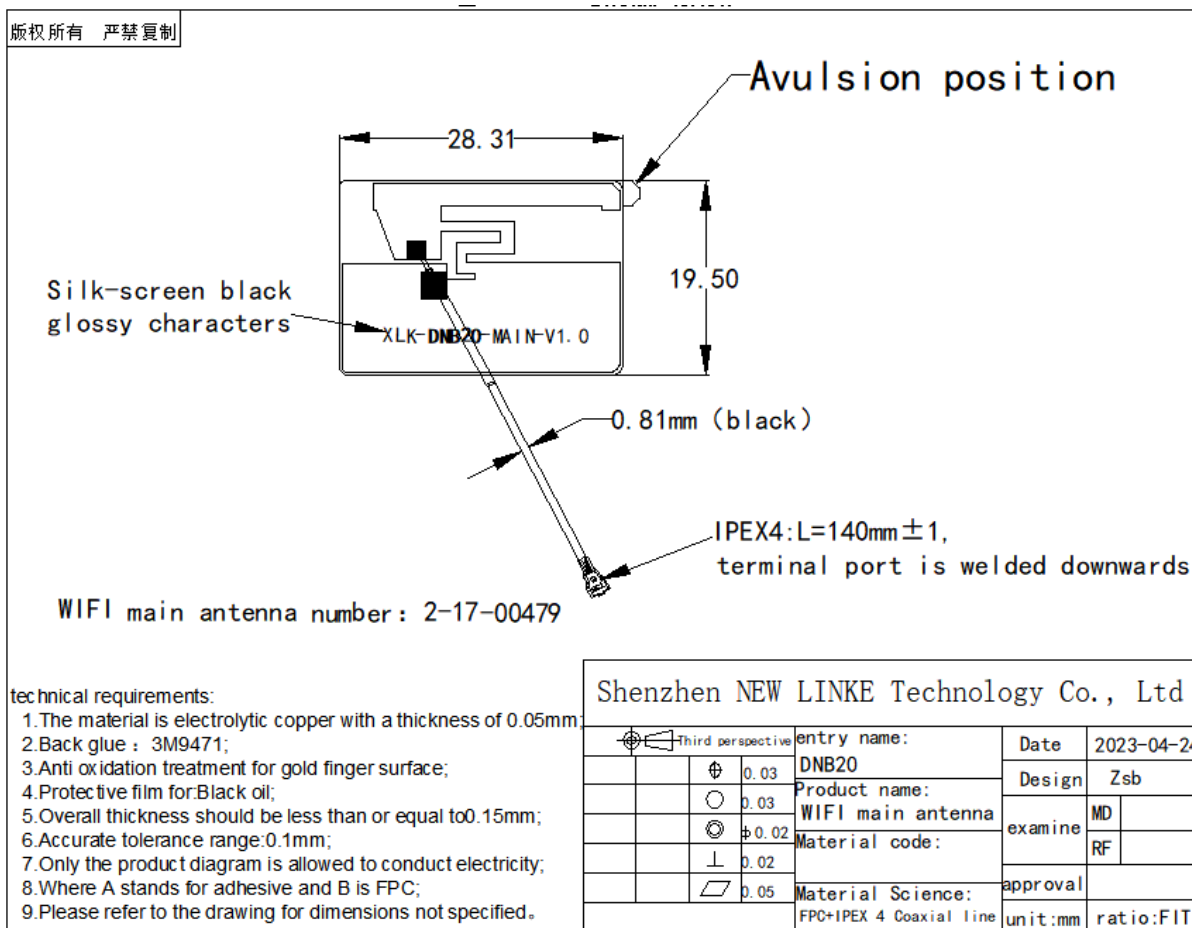
WiFi main antenna
location,Locate at
this position

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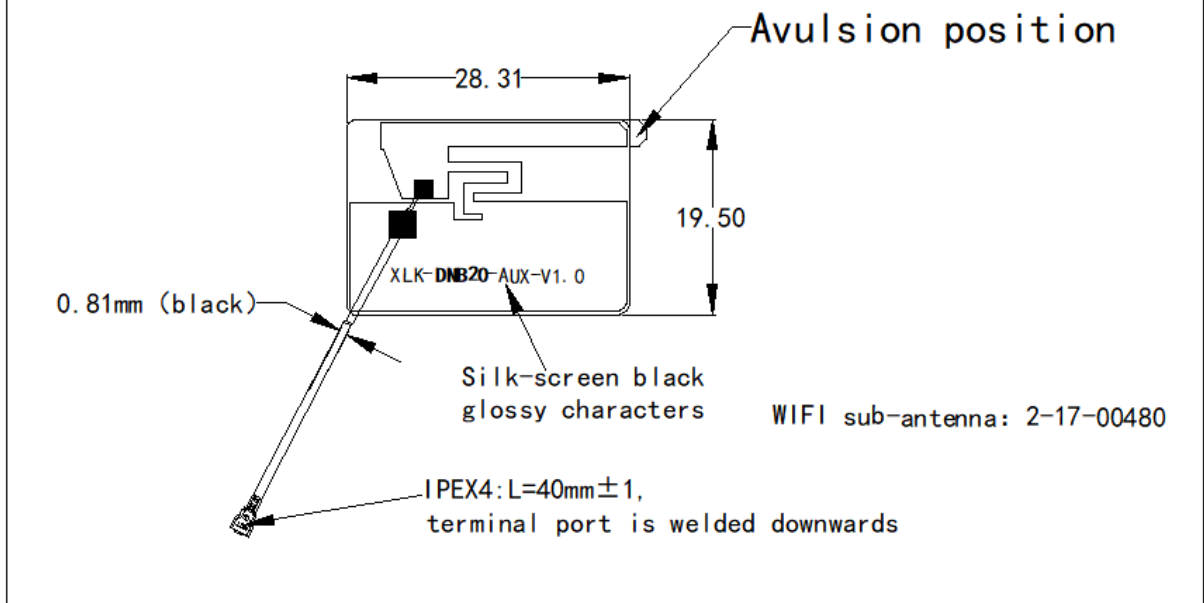


WiFi AUX antenna location, Locate at this position

5. Assembling picture WIFI/BT antenna



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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	0.03	entry name:	Date	2023-04-24
		DNB20	Design	Zsb
0.03	0.03	Product name:	examine	MD
		WIFI sub-antenna		RF
0.02	0.02	Material code:	approval	
0.05	0.05	Material Science:	unit:mm	ratio:FIT
		FPC+IPEX 4 Coaxial line		

6. Antenna tested Report with all dimension

Salt Fog Test Report

Handset Model	DNB20			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	1-2ml	1.8ml	OK

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				Salt fog (H. 80C)			
Fog spit type	Continue d fog	Continue d 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℃	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	Supervi sed 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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