SHENZHEN XĪN LINGKE TECHNOLOGY CO.,LTD

SPECIFICATION FOR APPROVAL

Customer:ChenZhan

Description: IDC-15

P/N:		SENDING DATE	2023.06.19
SUPPLIERS P/N	Xin Lingke	APPROVED NO.	
Customer hardware		Client project	IDC-15
customer structure		Customer quality	
RF Engineer	Kongxianghua	Structural engineer	Zhanghaidong

SHENZHEN XĪN LINGKE TECHNOLOGY CO.,LTD

1 Summary

This report describes the characteristics of antenna for the ChenZhan by Shenzhen xin lingke Technology Co., Ltd. The phablet model is IDC-15 and the range of frequency is frequency/2.4GWIFI，5GWIFI+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 Agilent8960.

3.1 TRP、TIS

WIFI active data

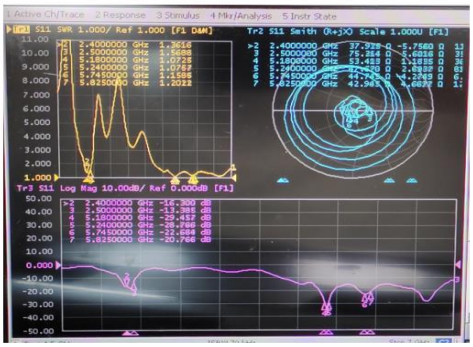
2.4GWIFI	802.11b (11M)		
channel	1	7	13
TRP	13.2dbm	13.5dbm	13.3dbm
TIS	-80.6dbm	-80.7dbm	-80.5dbm

5GWIFI	802.11a (54M)		
channel	36	149	165
TRP	11.2dbm	7.3dbm	7.2dbm
TIS	-70.5dbm	-70.8dbm	-70.4dbm

Antenna passive data

WiFi 1

WiFi 2



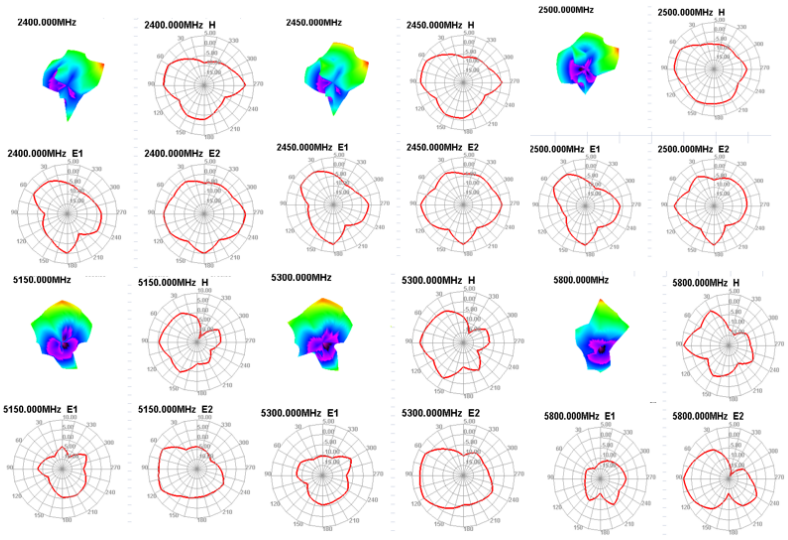
BT antenna

WiFi antenna passive data

WiFi antenna 1

Passive Test For WIFI2.4		
Freq (MHz)	Effi (%)	Gain (dBi)
2400	45.1	1.72
2410	42.22	2.45
2420	47.38	2.18
2430	45.89	2.27
2440	44.76	2.81
2450	44.49	2.89
2460	45.2	2.59
2470	43.27	2.81
2480	42.44	2.54
2490	44.77	2.78
2500	43.73	2.83

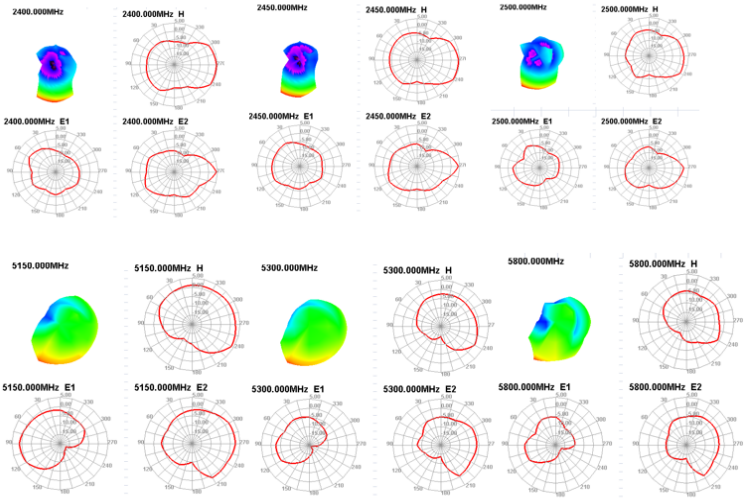
Passive Test For WIFI5.8		
Freq (MHz)	Effi (%)	Gain (dBi)
5150	39.71	1.39
5200	40.5	0.67
5250	36.53	-0.56
5300	35.11	-0.7
5350	38.64	-0.02
5400	37.74	-0.12
5450	36.47	0.73
5500	37.42	1.28
5550	38.45	1.28
5600	36.13	1.06
5650	39.26	1.85
5700	37.93	3.35
5750	36.07	1.93
5800	35.97	2.02
5850	36.88	2.21



WiFi antenna 2

Passive Test For WIFI2.4		
Freq (MHz)	Effi (%)	Gain (dBi)
2400	51.35	2.29
2410	54.28	2.68
2420	49.19	2.38
2430	47.5	2.19
2440	48.44	2.19
2450	51.01	2.14
2460	45.18	1.66
2470	38.24	0.95
2480	43.73	1.52
2490	38.15	0.89
2500	35.91	0.53

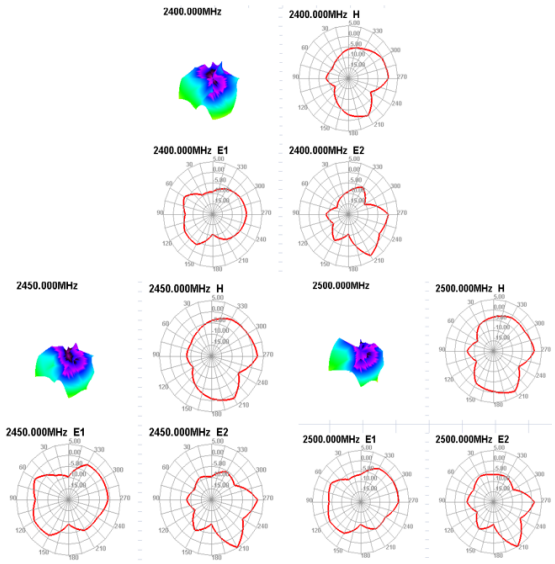
Passive Test For WIFI5.8		
Freq (MHz)	Effi (%)	Gain (dBi)
5150	40.47	0.82
5200	41.96	1.15
5250	36.02	0.59
5300	33.48	0.35
5350	38.06	1.06
5400	30.64	-0.07
5450	31.48	-0.07
5500	30.85	-0.26
5550	30.15	-0.9
5600	30.25	-1.24
5650	30.08	-0.77
5700	34.87	0.29
5750	29.86	-1.13
5800	29.75	-0.97
5850	30.38	-0.32



BT antenna passive data

BT antenna

Passive Test For WIFI2.4		
Freq (MHz)	Effi (%)	Gain (dBi)
2400	33.2	0.42
2410	37.32	1.12
2420	38.77	1.48
2430	40.47	1.59
2440	46.76	2.18
2450	51.76	2.56
2460	51.16	2.54
2470	49.35	2.4
2480	53.14	2.93
2490	50.66	2.69
2500	51.94	2.79



Gain

WIFI 1

WIFI 1	2.4G WIFI	5G WIFI
Maximum gain	2.89 dbi	3.35 dbi
Mean value	2.53 dbi	1.09 dbi

WIFI 2

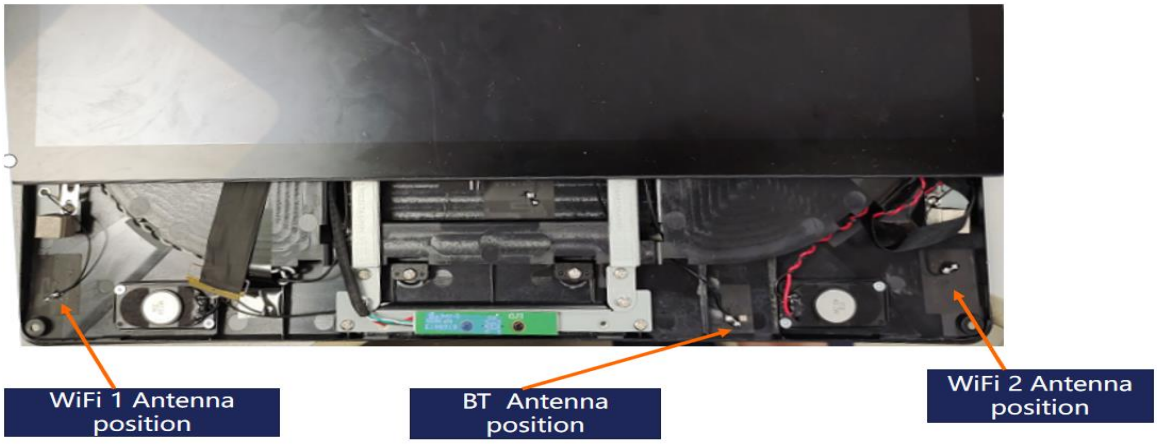
WIFI 2	2.4G WIFI	5G WIFI
Maximum gain	2.68 dbi	1.15 dbi
Mean value	1.77 dbi	-0.1dbi

BT

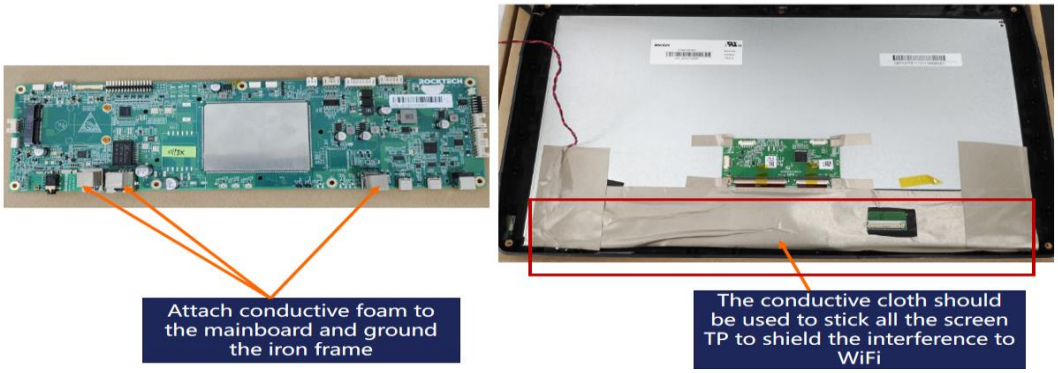
BT	Maximum gain	Mean value
	2.93 dbi	2.06 dbi

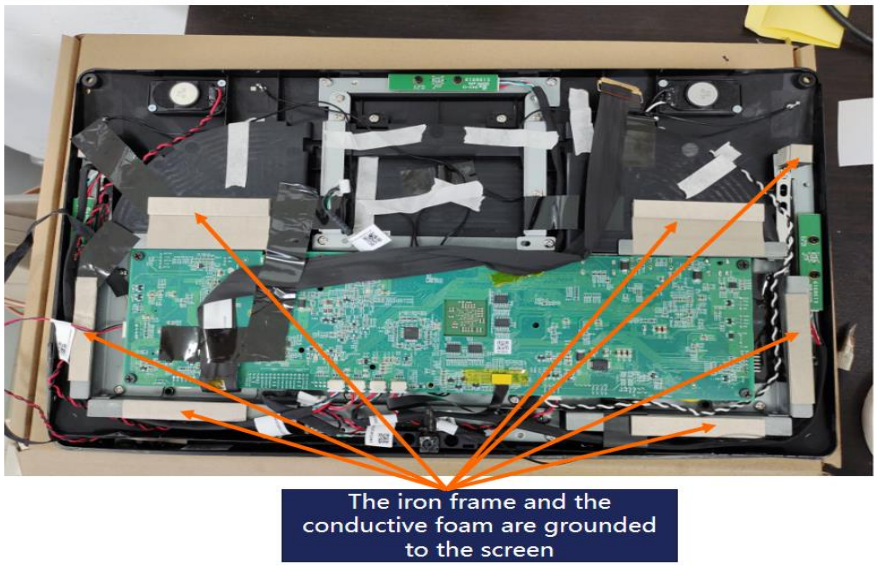
4. Environmental treatment

Antenna position

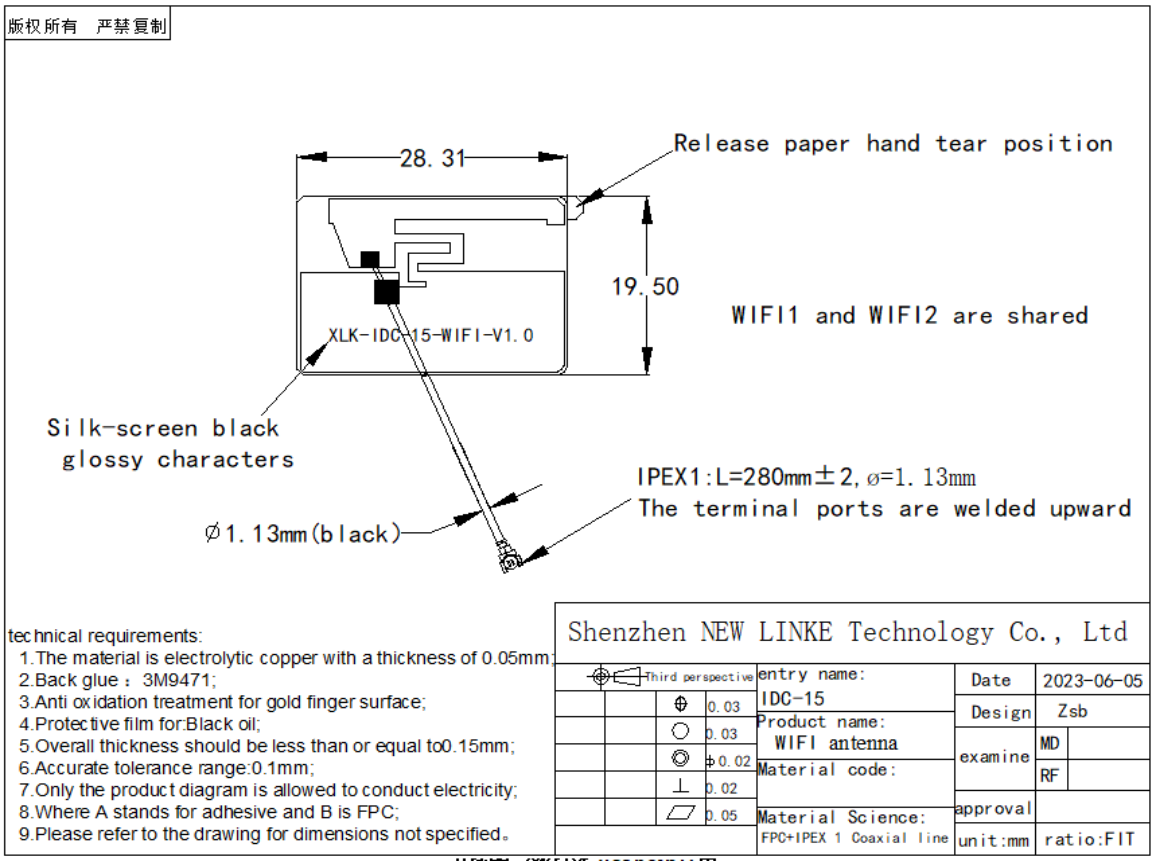


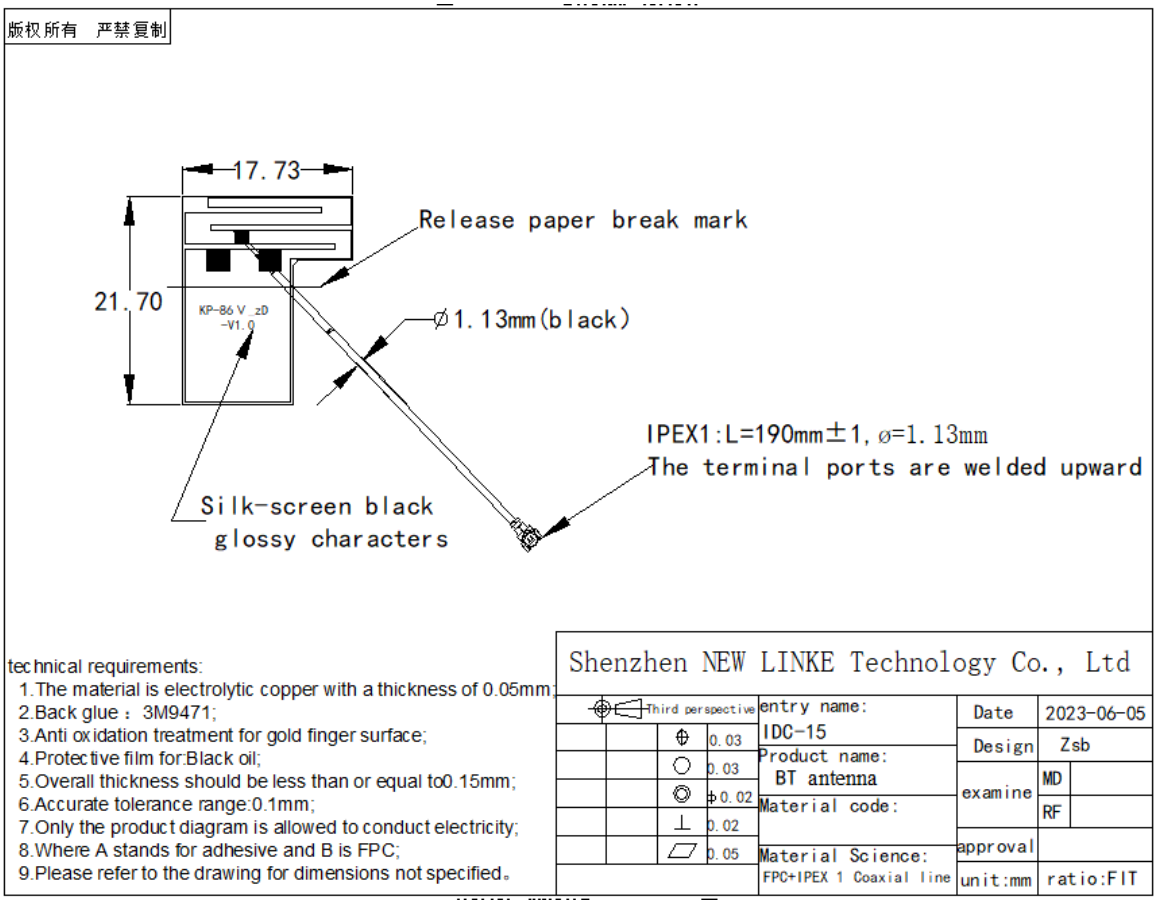
Complete environment treatment





5. Antenna structure diagram





6. Antenna tested Report with all dimension

Salt Fog Test Report

Handset Model	IDC-15			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℃	OK
Salt PH	6.5-7.2	6.8	OK	amount of precipitation of Salt fog (H.80C)	1-2ml	1.8ml	OK

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℃	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	