

深圳市安威无线科技有限公司

Shenzhen Anwei Wireless Technology Co., Ltd

		规格型号 Specs	CT80	
安威料号 Part Number	AW006-CT80-021-A0 AW006-CT80-022-A0 AW006-CT80-023-A0	频 段 Frequency Band	2G	GSM2/3/5/8
			3G	WCDMA1/2/5/8
			4G	TDD34/38/39/40/41/ FDD1/2/3/5/7/8
颜 色 Color	绿色 green	版 本 Edition	REV:A0	
销 售 Salesperson	林星星 Lin xing xing	类 型 Type	PIFA 天线	
结 构 Structure	覃云林 Qin yun lin	确 认 Confirm	吴希 Wu xi	
日 期 Date	2024.4.7	签字日期 Signing Date		

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1.Product Specifications:

The report mainly provides parameter tests of the performance of the CT80 antenna. The CT80 antenna is a 4G antenna. (as shown in Figure 1 below)

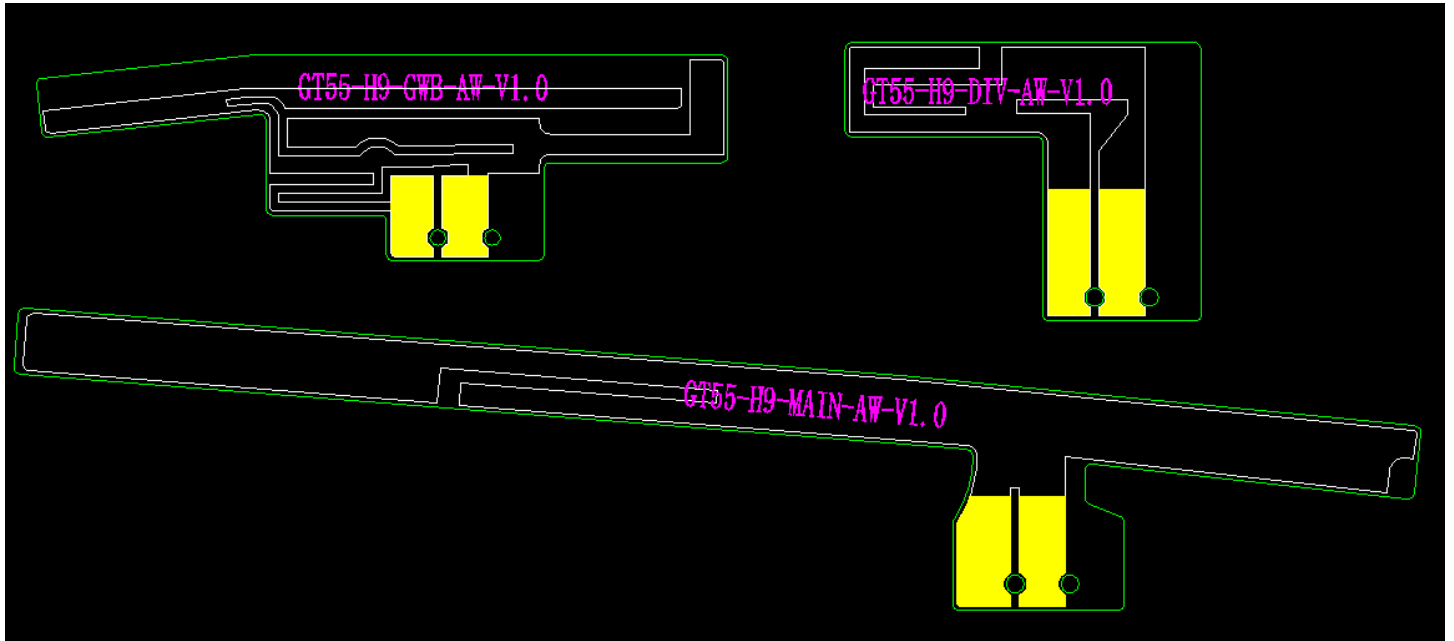


Figure 1 CT80 antenna

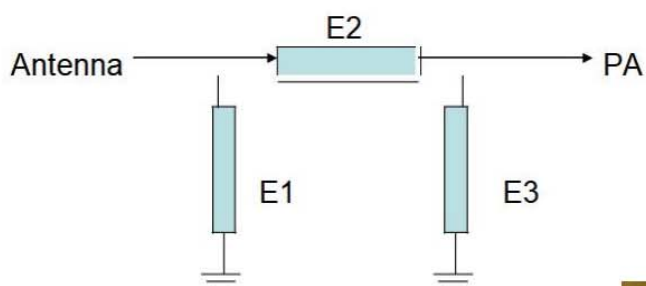
Second, the performance of electrical appliances

1. Specifications and standards

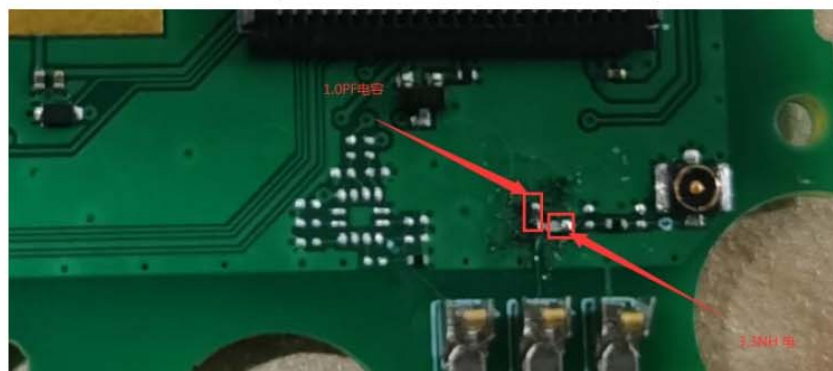
The CT80 antenna operates in the frequency band of 824-2690mhz, which produces resonance in this frequency band.

2. Matching circuit of the antenna

The structure of the antenna: FPC



Element	Value
E1	1pf
E2	3.3NH
E3	N/A
E4	0 Ω



Matching circuit

3. Parameter testing

1. Test settings

The VSWR test setups are connected sequentially as follows:

The E5071B Network Analyzer → 50 ohm coaxial cable → 110mm copper tube → test fixture

Handling of test fixtures:

From the 50 ohm test point of the antenna on the PCB of the mobile phone, a hard cable is used to lead out the SMA-J connector, connect with the copper tube with a choke, and then connect other devices in turn

2. Test results

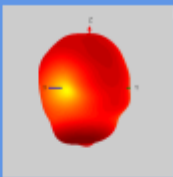
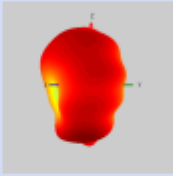
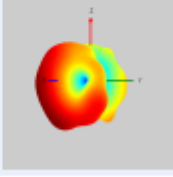
Fourth, the setting of active testing

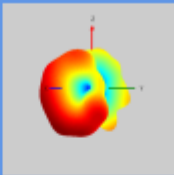
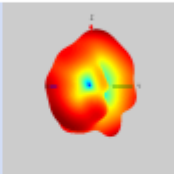
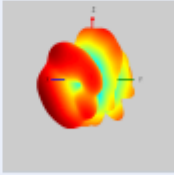
	Channel	TRP (dBm)	TIS (dBm)								Channel	TRP (dBm)	TIS (dBm)	
FDD B1	LOW	17.37			TDD B34	LOW	17.49		GSM 900	1	27.35		-102.64	
	medium	17.8				medium	17.2			62	27.64			
	high	17.18	-90.09			high	17.26	-90.35		124	27.45			
FDD B2	LOW	16.44			TDD B38	LOW	15.54		DCS 1800	512	23.31		-103.0	
	medium	16.74				medium	16.54			698	22.54			
	high	15.29	-90.28			high	15.35	-87.35		885	23.02			
FDD B3	LOW	16.2			TDD B39	LOW	16.54		GSM 850	128	21.24		-103.6	
	medium	16.47				medium	16.43			190	22.34			
	high	15.4	-90.64			high	16.2	-89		251	24.35			
FDD B5	LOW	15.18			TDD B40	LOW	16.8		PCS 1900	512	24.35		-103.5	
	medium	15.74				medium	17.35			661	24.47			
	high	16.19	-91.0			high	17.65	-88.02		810	24.56			
FDD B7	LOW	16.21			TDD B41	LOW			W 1	LOW	17.35		-104.5	
	medium	16.32				medium	15.03	-88.3		medium	17.46			
	high	15.76	-89.54			high				high	17.35			
FDD B8	LOW	17.65							W 2	LOW	16.0		-103.5	
	medium	17.35								medium	16.24			
	high	17.09	-90.5							high	16.62			
									W 5	LOW	15.09		-103.65	
								medium		15.34				
								high		16.44				
								W 8	LOW	17.68		-103.0		
									medium	17.64				
									high	17.76				

Antenna efficiency

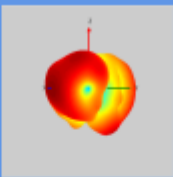
		frequency 频率(MHz)	efficiency 效率(%)	frequency 频率(MHz)	efficiency 效率(%)	frequency 频率(MHz)	efficiency 效率(%)
		1700	26.82	2020	39.45	2340	35.93
		1720	28.95	2040	33.30	2360	37.80
		1740	29.92	2060	35.78	2380	31.50
		1760	30.01	2080	37.35	2400	37.40
		1780	31.52	2100	36.81	2420	31.56
		1800	31.62	2120	31.74	2440	29.79
		1820	33.72	2140	35.95	2460	27.39
		1840	33.58	2160	36.63	2480	29.39
		1860	32.79	2180	33.28	2500	27.12
		1880	29.16	2200	41.42	2520	30.91
		1900	30.08	2220	44.16	2540	27.88
		1920	29.98	2240	42.41	2560	25.65
		1940	32.83	2260	45.42	2580	23.60
		1960	36.18	2280	42.92	2600	24.98
		1980	35.81	2300	36.74	2620	25.78
		2000	33.24	2320	38.96	2640	26.62
						2660	26.72
						2680	25.83
						2700	26.10

frequency 频率(MHz)	efficiency 效率(%)
820	24.10
840	25.96
860	27.51
880	28.32
900	29.12
920	30.75
940	29.22
960	29.19
980	28.23

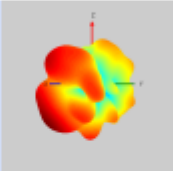
GSM900/FDD B8/WCDMA B8	
GSM850/FDD B5/WCDMA B5	
FDD B3 DCS1800	

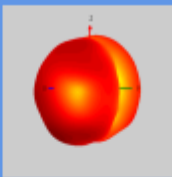
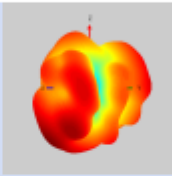
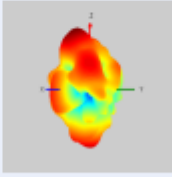
PCS1900/FDD B2/WCDMA B2 TDD B34/B39	
FDD B1/WCDMA B1	
TDD B40	

TDD B38/B41



FDD B7



GPS	
2.4GWIFI/BT	
5GWIFI	

WIFI

BAND	2.4GWIFI			5GWIFI		
CHANNEL	low	medium	high	low	medium	high
TRP (dBm)	9.54	9.40	9.15	11.2	11.42	11.13
TIS (dBm)	-81.5	-81.2	-81.6	-70.2	-71.5	-71.35

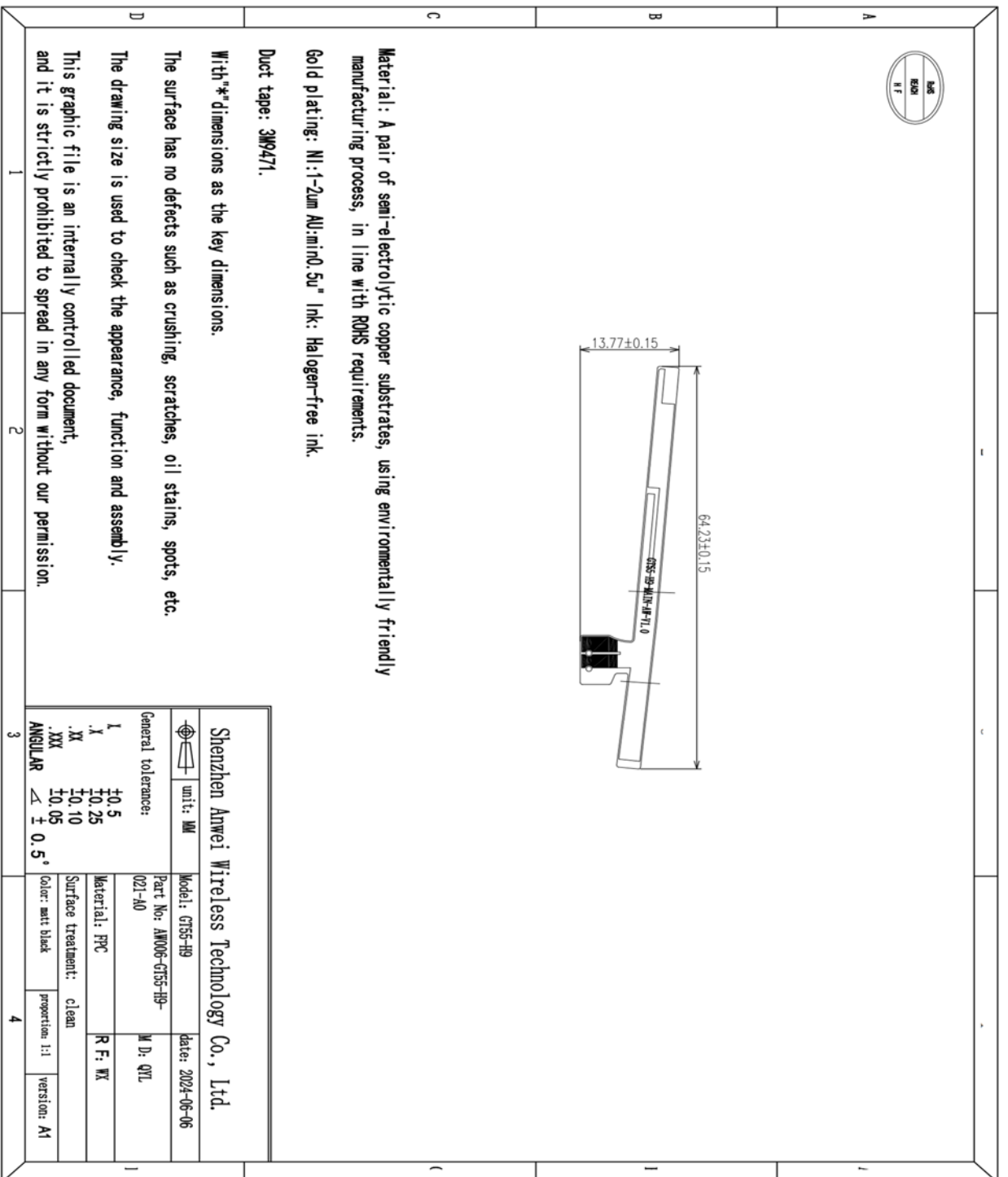
GPS

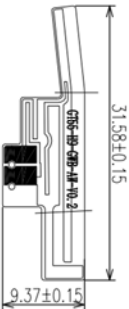


V. Recommendations and Conclusions

This report is based on the performance of the antenna electrical appliances measured by the machine provided by the customer, please check it carefully.

6. Structural drawings





Material: A pair of semi-electrolytic copper substrates, using environmentally friendly manufacturing process, in line with ROHS requirements.

Gold plating: NI:1-2um AU:min0.5u" Ink: Halogen-free ink.

Duct tape: 3M9471.

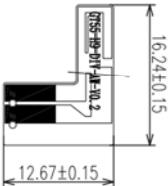
With "*" dimensions as the key dimensions.

The surface has no defects such as crushing, scratches, oil stains, spots, etc.

The drawing size is used to check the appearance, function and assembly.

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Shenzhen Anwei Wireless Technology Co., Ltd.					
	unit: MM	Model: GT55-H9	date: 2024-06-06		
General tolerance:		Part No: AM006-GT55-H9-022-A0	M D: QTL		
L	±0.5	Material: FPC	R F: WX		
.X	±0.25	Surface treatment: clean			
.XX	±0.10	Color: matt black	proportion: 1:1	version: A1	
.XXX	±0.05				
ANGULAR	± 0.5°				



Material: A pair of semi-electrolytic copper substrates, using environmentally friendly manufacturing process, in line with ROHS requirements.

Gold plating: NI:1-2um AU:min0.5u" Ink: Halogen-free ink.

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Shenzhen Anwei Wireless Technology Co., Ltd.			
	unit: MM	Model: GT55-H9	date: 2024-06-06
General tolerance:		Part No: AM006-GT55-H9-023-A0	M D: QYL
L	±0.5	Material: FPC	
.X	±0.25		
.XX	±0.10		
.XXX	±0.05		
ANGULAR	± 0.5°	Surface treatment: clean	R F: WX
Color: matt black		proportion 1:1	version: A1