

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 WCDMA1/2/5/8
			3G	
			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)

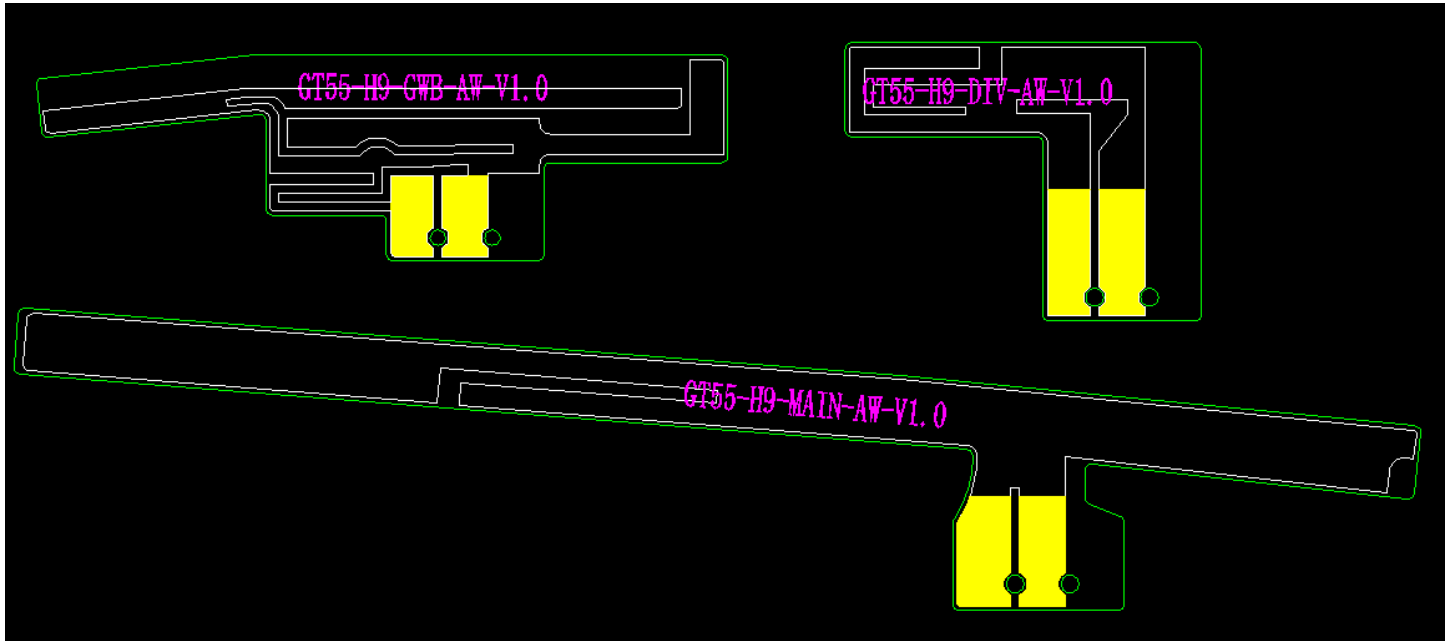


Figure 1 CT80 antenna

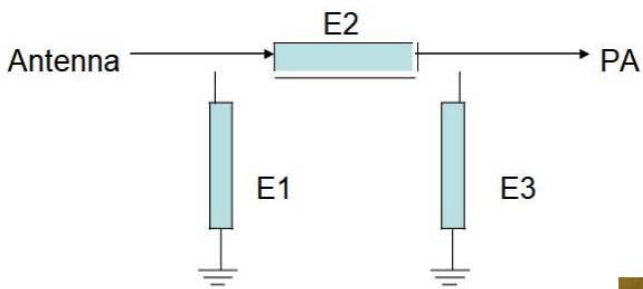
Second, the performance of electrical appliances

1. Specifications and standards

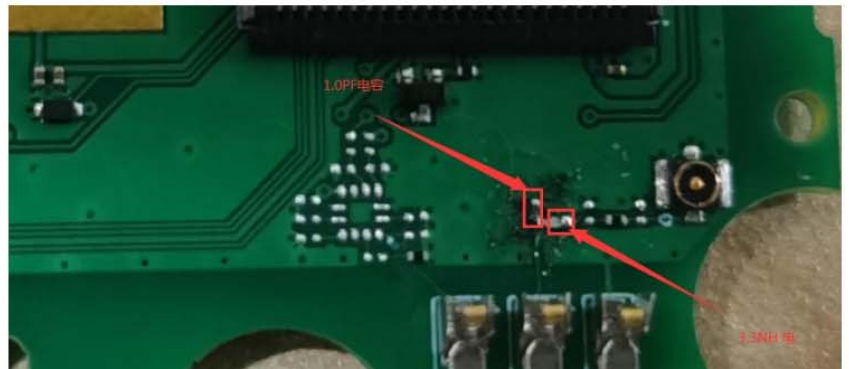
The CT80 antenna operates in the frequency band of 824-2690mhz, which produces resonance in this frequency band.

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

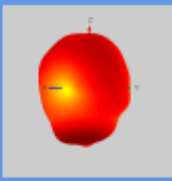
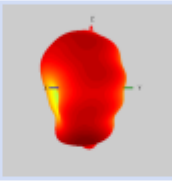
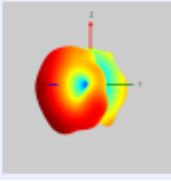
2. Test results

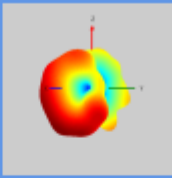
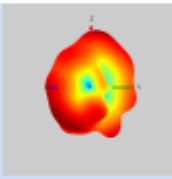
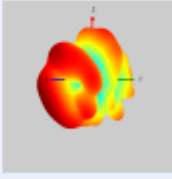
Fourth, the setting of active testing

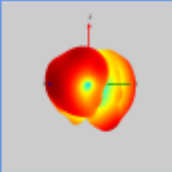
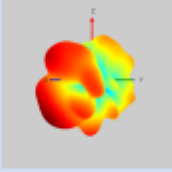
	Channel	TRP (dBm)	TIS (dBm)						Channel	TRP (dBm)	TIS (dBm)
FDD E1	LOW	17.37		TDD E34	LOW	17.49		GSM 900	1	27.35	
	medium	17.8			medium	17.2			62	27.64	
	high	17.18	-90.09		high	17.26	-90.35		124	27.45	-102.64
FDD E2	LOW	16.44		TDD E38	LOW	15.54		DCS 1800	512	23.31	
	medium	16.74			medium	16.54			698	22.54	
	high	15.29	-90.28		high	15.35	-87.35		885	23.02	-103.0
FDD E3	LOW	16.2		TDD E39	LOW	16.54		GSM 850	128	21.24	
	medium	16.47			medium	16.43			190	22.34	
	high	15.4	-90.64		high	16.2	-89		251	24.35	-103.6
FDD E5	LOW	15.18		TDD E40	LOW	16.8		PCS 1900	512	24.35	
	medium	15.74			medium	17.35			661	24.47	
	high	16.19	-91.0		high	17.65	-88.02		810	24.56	-103.5
FDD E7	LOW	16.21		TDD E41	LOW			W 1	LOW	17.35	
	medium	16.32			medium	15.03	-88.3		medium	17.46	
	high	15.76	-89.54		high				high	17.35	-104.5
FDD E8	LOW	17.65						W 2	LOW	16.0	
	medium	17.35							medium	16.24	
	high	17.09	-90.5						high	16.62	-103.5
								W 5	LOW	15.09	
									medium	15.34	
									high	16.44	-103.65
								W 8	LOW	17.68	
									medium	17.64	
									high	17.76	-103.0

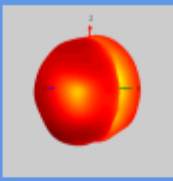
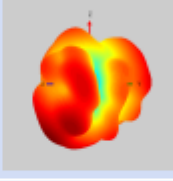
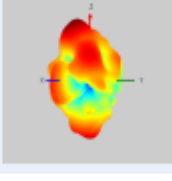
Antenna efficiency

frequency 频率(MHz)	efficiency 效率(%)	frequency 频率(MHz)	efficiency 效率(%)	frequency 频率(MHz)	efficiency 效率(%)
820	24.10	1700	26.82	2020	39.45
840	25.96	1720	28.95	2040	33.30
860	27.51	1740	29.92	2060	35.78
880	28.32	1760	30.01	2080	37.35
900	29.12	1780	31.52	2100	36.81
920	30.75	1800	31.62	2120	31.74
940	29.22	1820	33.72	2140	35.95
960	29.19	1840	33.58	2160	36.63
980	28.23	1860	32.79	2180	33.28
		1880	29.16	2200	41.42
		1900	30.08	2220	44.16
		1920	29.98	2240	42.41
		1940	32.83	2260	45.42
		1960	36.18	2280	42.92
		1980	35.81	2300	36.74
		2000	33.24	2320	38.96
				2340	35.93
				2360	37.80
				2380	31.50
				2400	37.40
				2420	31.56
				2440	29.79
				2460	27.39
				2480	29.39
				2500	27.12
				2520	30.91
				2540	27.88
				2560	25.65
				2580	23.60
				2600	24.98
				2620	25.78
				2640	26.62
				2660	26.72
				2680	25.83
				2700	26.10

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 E38/B41	 A 3D radiation pattern plot for TDD E38/B41. It shows a main lobe pointing upwards and slightly to the right, with a smaller lobe pointing downwards and to the left. The plot is color-coded from red (high gain) to yellow (medium gain) to blue (low gain). A coordinate system with x, y, and z axes is visible.
FDD B7	 A 3D radiation pattern plot for FDD B7. It shows a main lobe pointing upwards and to the right, with a smaller lobe pointing downwards and to the left. The plot is color-coded from red (high gain) to yellow (medium gain) to blue (low gain). A coordinate system with x, y, and z axes is visible.

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

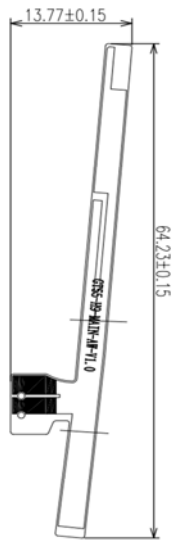


V. Recommendations and Conclusions

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 Al:mini0.5u" Ink: Halogen-free ink.


Duct tape: 3M9471.

With "*" dimensions as the key dimensions.

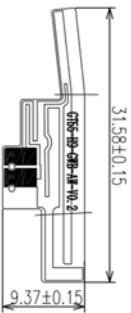
The surface has no defects such as crushing, scratches, oil stains, spots, etc.

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: GT55-119	date: 2024-06-06
Part No: AN006-GT55-119-021-A0	M D: QTL
Material: PPC	R F: WX
Surface treatment: clean	
color: matt black	proportion: 1:1
	version: A1

1
2
3
4



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

Gold plating: NI:1-2um AU:mirn0.5u" Ink: Halogen-free ink.

Duct tape: 3M9471.

With "*" dimensions as the key dimensions.

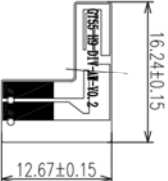
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A	B	C	D
1	1	1	1

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



A

B

C

D

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.

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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
I	±0.5	Material: FPC	R F: WX
.X	±0.25	Surface treatment: clean	
.XX	±0.10	Color: matt black	proportion: 1:1
.XXX	±0.05		version: A1
ANGULAR	± 0.5°		