

Antenna Test Report

SHENZHEN KURUIJIE

Customer: 财富
Project: WS607

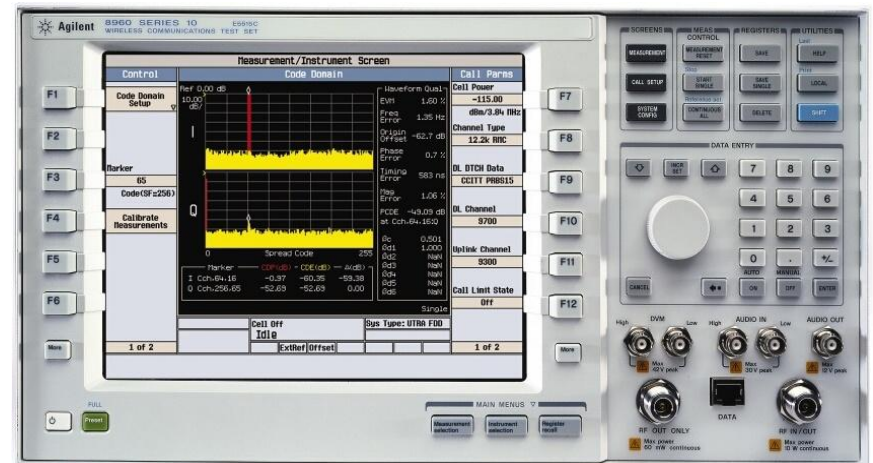
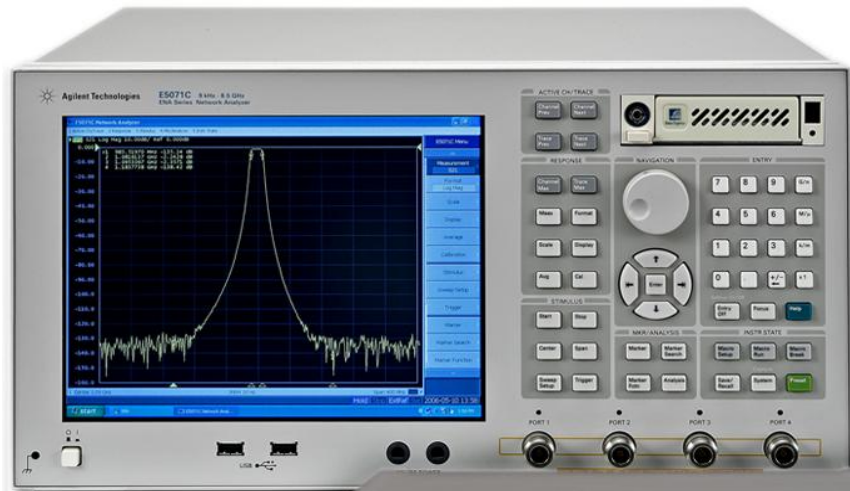
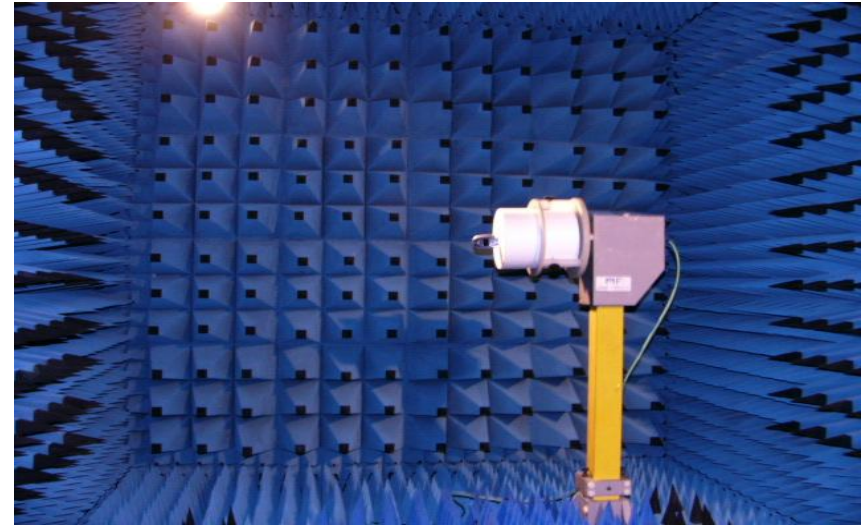
RF Engineer: 安增侠
Testing Date: 2023.10.09

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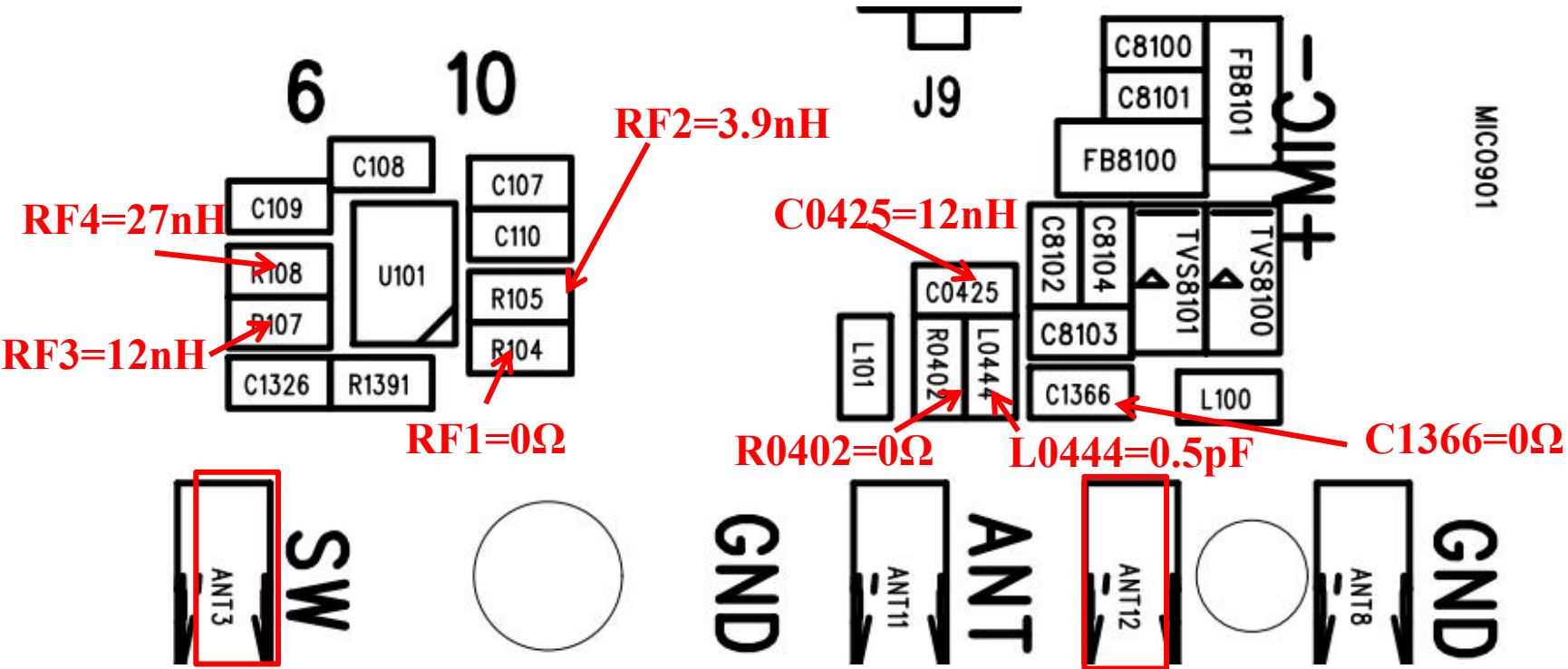
- 1. Testing Item & Equipments**
- 2. Matching Circuits**
- 3. Environmental Disposal**
- 4. Test Data**

1. The Equipment of Active Test

- 1: Anechoic Chamber 7x4x3 m (3D)
- 2: Rohde & Schwarz CMW500
- 3: AGILENT 8960 5515C
- 4: Network Analyzer-AGILENT ENA5071B

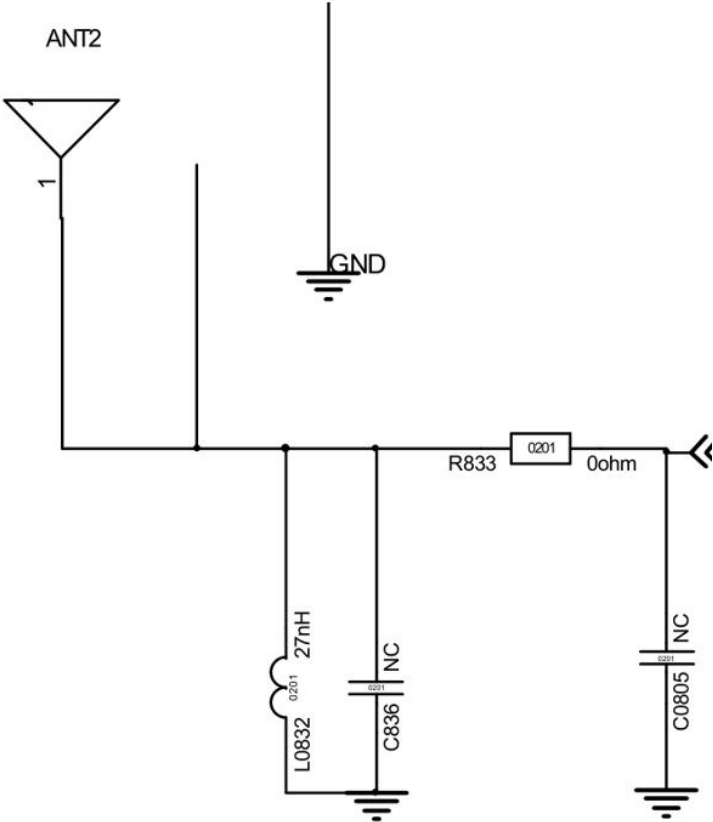
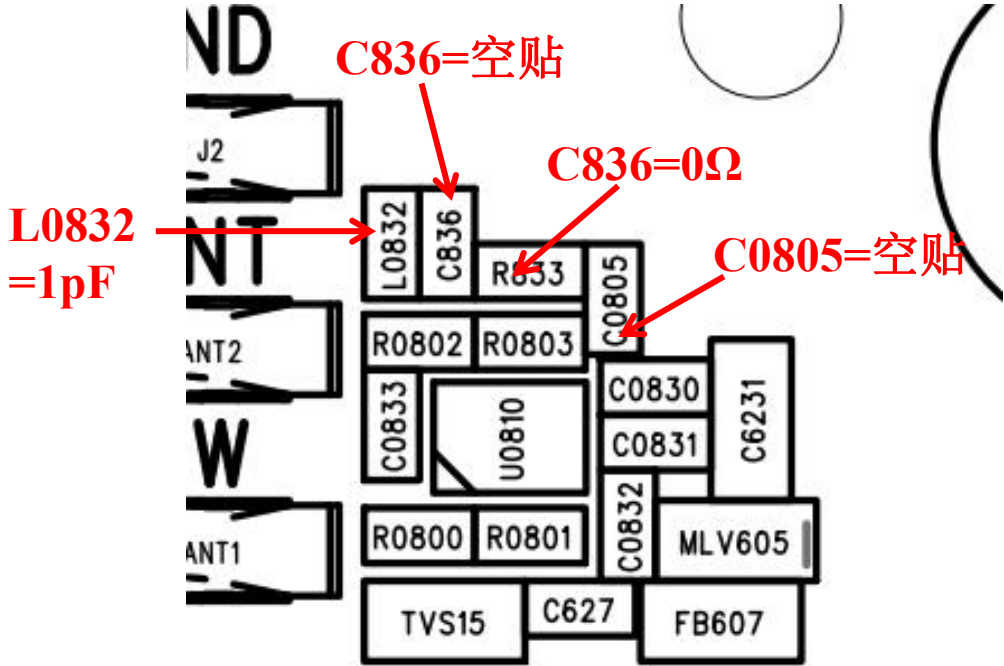


2. Matching Circuits-下天线



下天线开关匹配逻辑	开关路径	匹配值	2G频率	3G频率	4G频率
	RF1=R104	0Ω	900	W8	B8
	RF2=R105	3.9nH	850	W5	B5
	RF3=R107	12nH			B12/17
	RF4=R108	27nH			B71

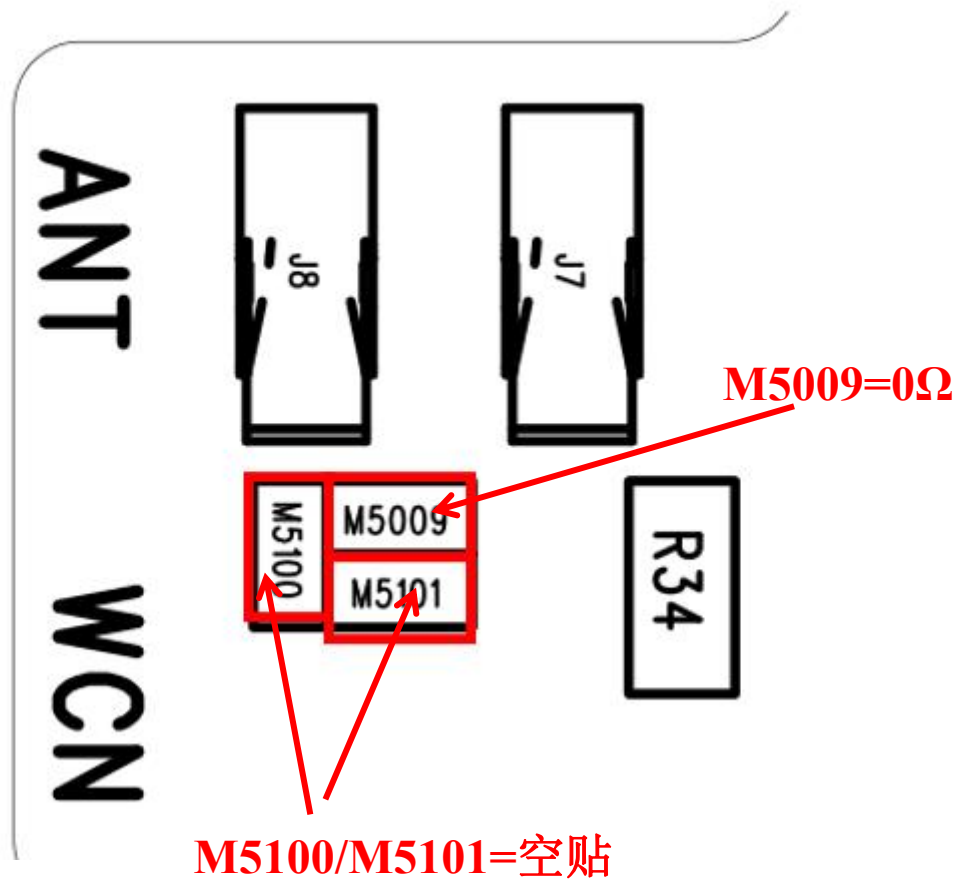
3. Matching Circuits-上天线



主天线在上天线 频段	2G	GSM1800/1900
	3G	W2
	4G	B2/4/66/41

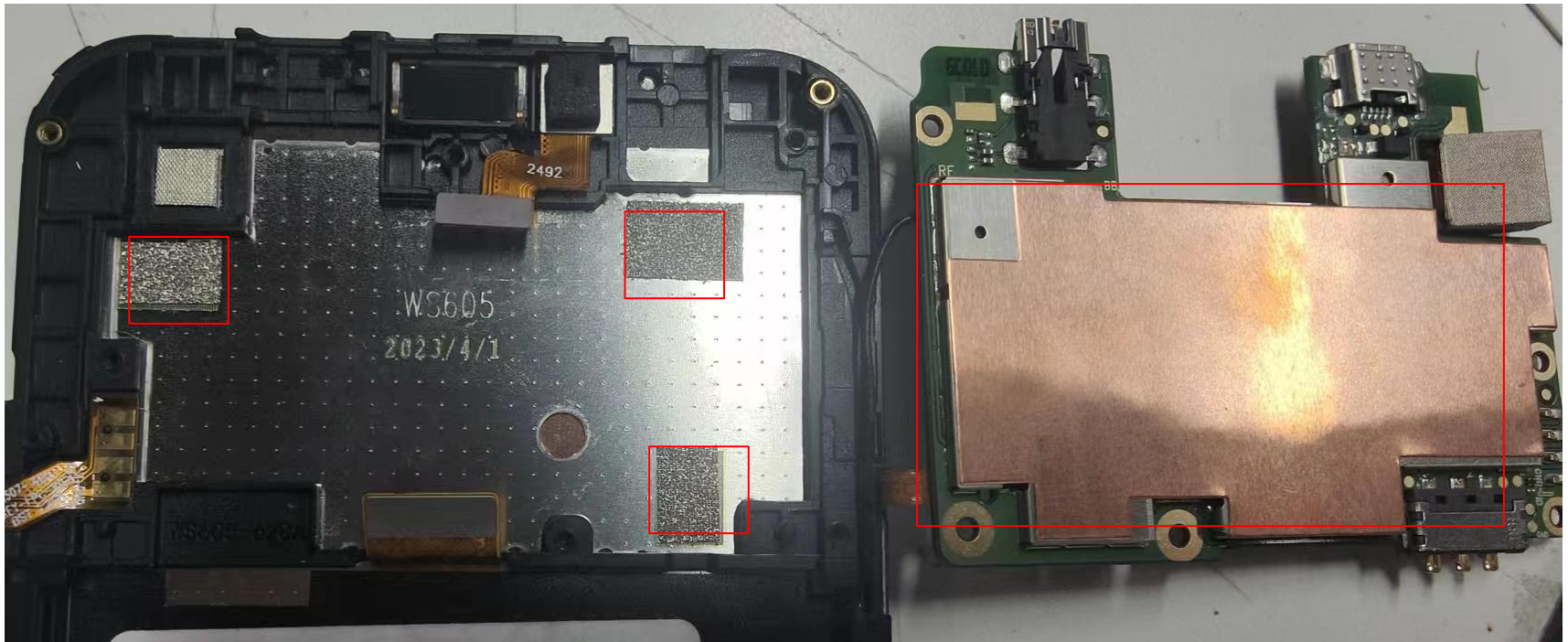
主天线在上天线时，分集在下天线RF1端口

4. Matching Circuits-三合一天线

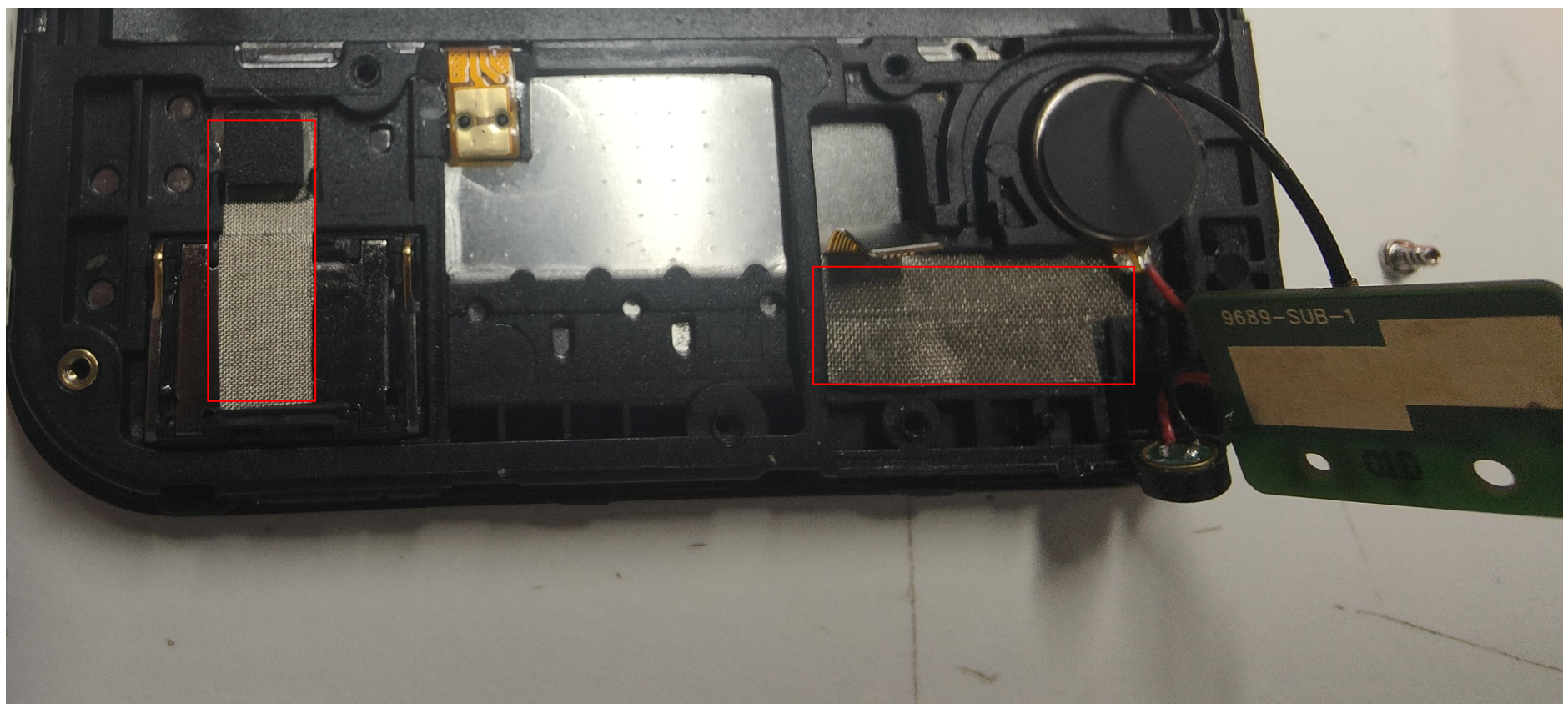


5. Environmental Disposal

原整机接地不变



原整机接地不变



6. Test Data 1#机器

	GSM850			GSM900		
	CH128	CH190	CH251	CH1	CH62	CH124
TRP	26.9	27.4	28.1	26.8	27.0	27.2
TIS(红色为亮屏TIS)			-104.1 -103.0			-102.3 -101.1
	DCS1800			PCS1900		
	CH512	CH698	CH885	CH512	CH661	CH810
TRP	25.1	25.3	25.5	25.4	25.5	25.7
TIS(红色为亮屏TIS)			-105.2 -104.8			-105.4 -104.7

	WCDMA 2			WCDMA 5		
	9662	9800	9938	4357	4408	4458
TRP	17.7	18.0	18.2	17.8	17.4	17.0
TIS(红色为亮屏TIS)			-105.8 -105.1			-103.5 -102.2

	WCDMA 8		
	2712	2788	2863
TRP	17.5	16.7	17.0
TIS(红色为亮屏TIS)			-103.5 -102.1

	Band2			Band4		
	18650	18900	19150	20000	20175	20350
TRP	17.6	17.7	17.8	17.8	17.9	18.0
TIS(红色为亮屏TIS)			-92.5 -92.1			-92.7 -92.3

	LTE Band5			LTE Band12		
	20450	20525	20600	23060	23095	23130
TRP	18.2	18.3	17.8	17.6	17.8	17.9
TIS(红色为亮屏TIS)			-92.0 -90.8			-93.1 -91.9

	LTE Band17			LTE Band 66 (10M)		
	23780	23790	23800	132022	132322	132622
TRP	17.7	17.8	18.0	18.3	18.1	17.8
TIS(红色为亮屏TIS)			-93.0 -91.7			-92.5 -92.1

	LTE Band71 (20M)			LTE Band41 (20M)		
	133172	133297	133422	40340	40620	41140
TRP	16.8	17.0	17.1	21.6	21.2	21.0
TIS(红色为亮屏TIS)			-90.4 -89.0		-90.7 -89.9	

6. Test Data 2#机器

	GSM850			GSM900		
	CH128	CH190	CH251	CH1	CH62	CH124
TRP	26.8	27.3	28.1	26.4	26.8	27.0
TIS(红色为亮屏TIS)			-104.2			-102.4
	DCS1800			PCS1900		
	CH512	CH698	CH885	CH512	CH661	CH810
TRP	25.0	25.2	25.5	25.7	25.43	25.2
TIS(红色为亮屏TIS)			-104.9			-105.3
	WCDMA 2			WCDMA 5		
	9662	9800	9938	4357	4408	4458
TRP	17.9	18.1	18.2	17.2	17.2	17.4
TIS(红色为亮屏TIS)			-105.5			-103.5

	WCDMA 8		
	2712	2788	2863
TRP	17.2	17.1	17.3
TIS(红色为亮屏TIS)			-103.3

	Band2			Band4		
	18650	18900	19150	20000	20175	20350
TRP	17.7	17.65	17.6	18.2	18.1	17.8
TIS(红色为亮屏TIS)			-92.4			-92.4

	LTE Band5			LTE Band12		
	20450	20525	20600	23060	23095	23130
TRP	18.4	18.1	17.5	17.8	17.8	18.1
TIS(红色为亮屏TIS)			-91.8			-92.8

	LTE Band17			LTE Band 66 (10M)		
	23780	23790	23800	132022	132322	132622
TRP	18.2	18.1	17.8	18.5	18.3	17.9
TIS(红色为亮屏TIS)			-92.7			-92.8

	LTE Band71 (20M)			LTE Band41 (20M)		
	133172	133297	133422	40340	40620	41140
TRP	17.0	17.2	17.4	21.4	21.2	21.1
TIS(红色为亮屏TIS)			-90.3		-90.1	

7. GPS / WIFI / BT

GPS实测报告

位 置	测试结果
我司2楼	冷启动 60 秒定位,最大 CN 值 43

	WIFI2.4(B/11M)		
	1	7	13
TRP	12.4	12.3	12.6
TIS	-81.18	-80.1	-81.32
	WIFI5G(A/54M)		
	36	64	165
TRP	11.82	10.28	12.01
TIS	-71.02	-71.34	-71.77

SAT ELL ITES CNR	SAT ELL ITES LOC	IN FOR MAT ION	N MEA LOG	GPS TES T	MPE STA TUS
G:GPS R:GLN B:BD E:GAL Q:QZS L:L1S:I:IRNSS S:SBAS					
Average CNR					
G:39.3/-/-/-/- R:39.8/-/-/-/- B:-/-/-/-/- E:33.5/-/-/-/- Q:34.0/-/-/-/- L:-/-/-/-/- I:-/-/-/-/- S:36.0/-/-/-/-					
☐ Show in single page					
SVID	Fq	CNR	Elevatio n	Azimuth	
 26 L1		40.0	74.00	323.00	
 27 L1		32.9	0.00	0.00	
 31 L1		43.2	49.00	3.00	
 32 L1		40.9	45.00	128.00	
 68 L1		42.5	38.00	162.00	
 69 L1		40.0	82.00	274.00	
 70 L1		0.0	2.00	1.00	
 73 L1		0.0	5.00	248.00	
 78 L1		0.0	3.00	43.00	
 79 L1		34.1	40.00	5.00	

8.天线增益

WS607 antenna info.			
RF antenna	Band	Frequency (MHZ)	Max Gain (Dbi)
	GSM850	824-894	0.2
	GSM900	880-960	0.2
	DCS1800	1710-1880	0.8
	PCS1900	1850-1990	0.8
	W1900	1850-1990	0.8
	W900	880-960	0.2
	W850	824-894	0.2
	LTE-B2	1850-1990	0.8
	LTE-B4	1710-2155	0.8
	LTE-B5	824-894	0.2
	LTE-B12	699-746	-0.3
	LTE-B17	704-746	-0.3
	LTE-B41	2496-2690	1.0
	LTE-B66	1710-2200	0.8
	LTE-B71	663-698	-0.5
WIFI/BT/GPS antenna	WIFI2. 4G/BT	2400-2500	0.8
	WIFI5. 8G	5150-5850	1.0
	GPS	1575	0.7