

**ShenZhen QiXinTongDa Technology Co.,Ltd.**

## **Antenna Test Report**

**Project Name:** S6518

**Frequency Band:**

G2/3/5/8+W1/4/5/8+

FDD2/3/4/5/7/12/17/28AB/66/71

**DATE:** 2024-05-23

**ADDRESS:** Room503-505,Building211,

Tairan IndustrialandTradePark,Chegongmiao,FutianDistrict,Shenzhen

# 1.Test Project

	Test Project	Equipment
1. S Parameter	<ol style="list-style-type: none"><li>1. Return Loss (RL)</li><li>2. VSWR</li></ol>	Network Analyzer:  Agilent 5071B
2. RF Test  (2G+3G+4G)	<ol style="list-style-type: none"><li>1. power</li><li>2. level</li><li>3. TRP/TIS</li></ol>	Comprehensive Test:  CMW500/8960  Test Environment:  Anechoic Chamber

## 2. Test Equipment



Agilent 5071B (S Parameter (RL/VSWR) Test Equipment)

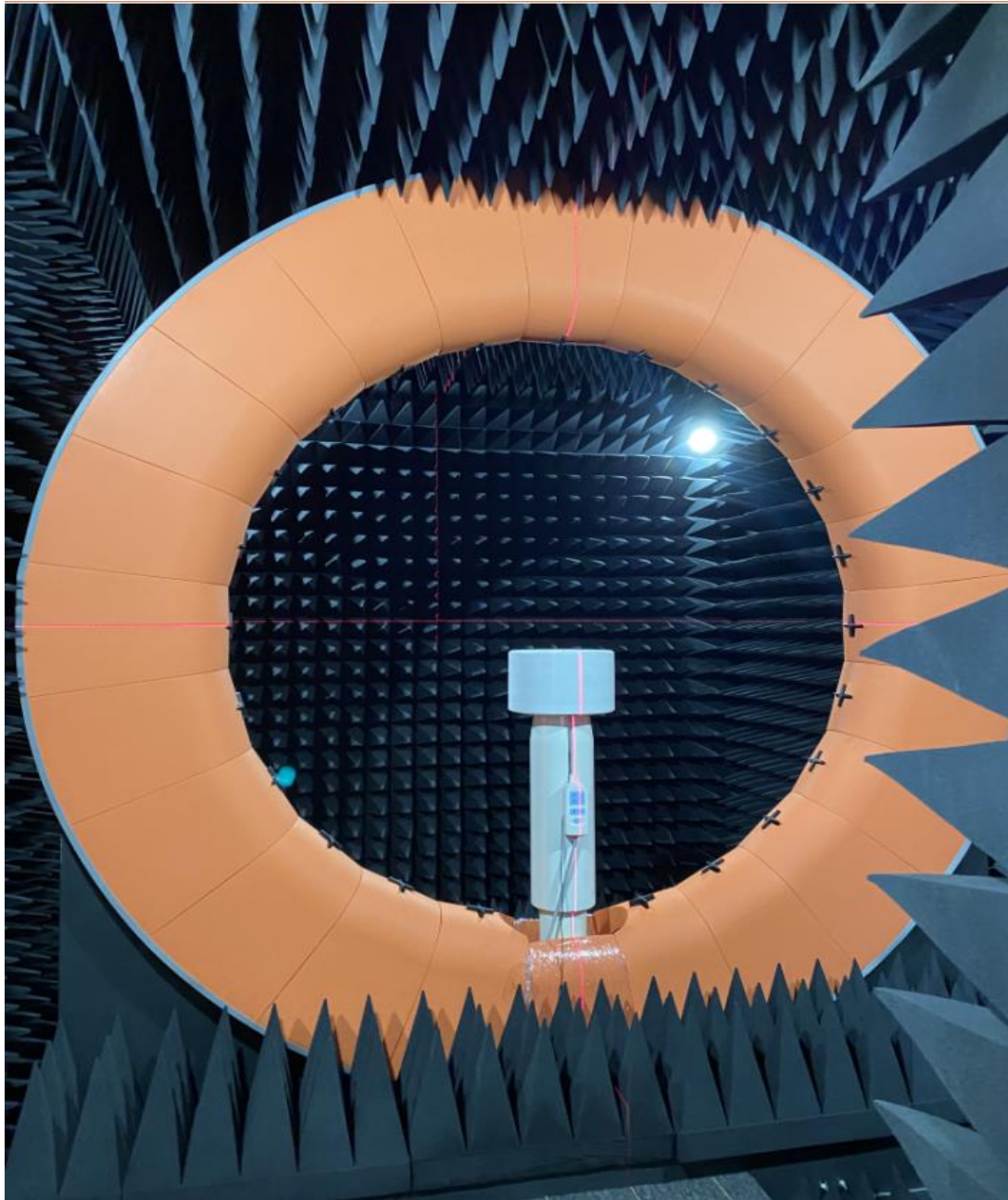


Agilent 8960 (2G/3G Test Equipment)



CMW 500 (2G/3G/4G Test Equipment)

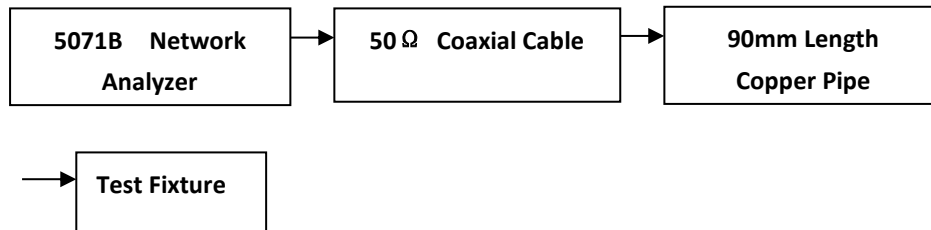
### 3. TestEnvironment



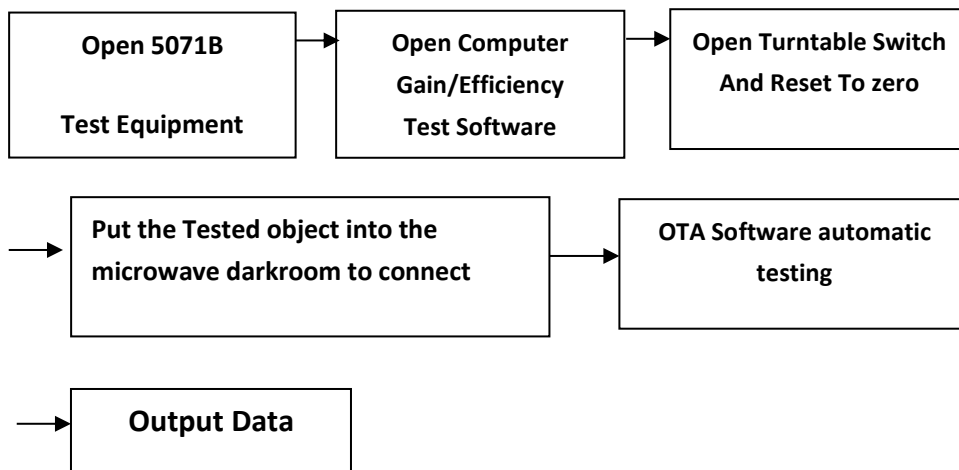
Microwave Anechoic Chamber

## 4. Test Steps

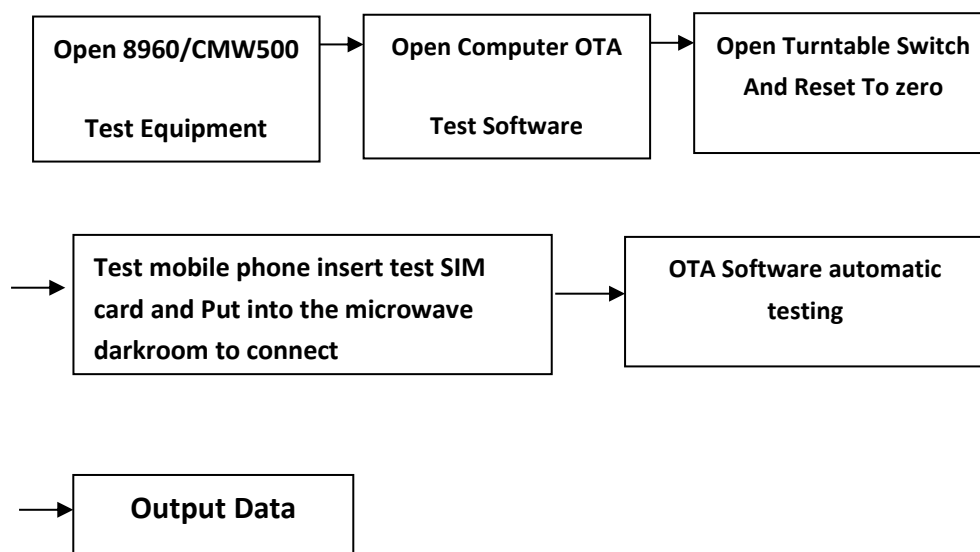
### Passive VSWR/RL Test Steps:



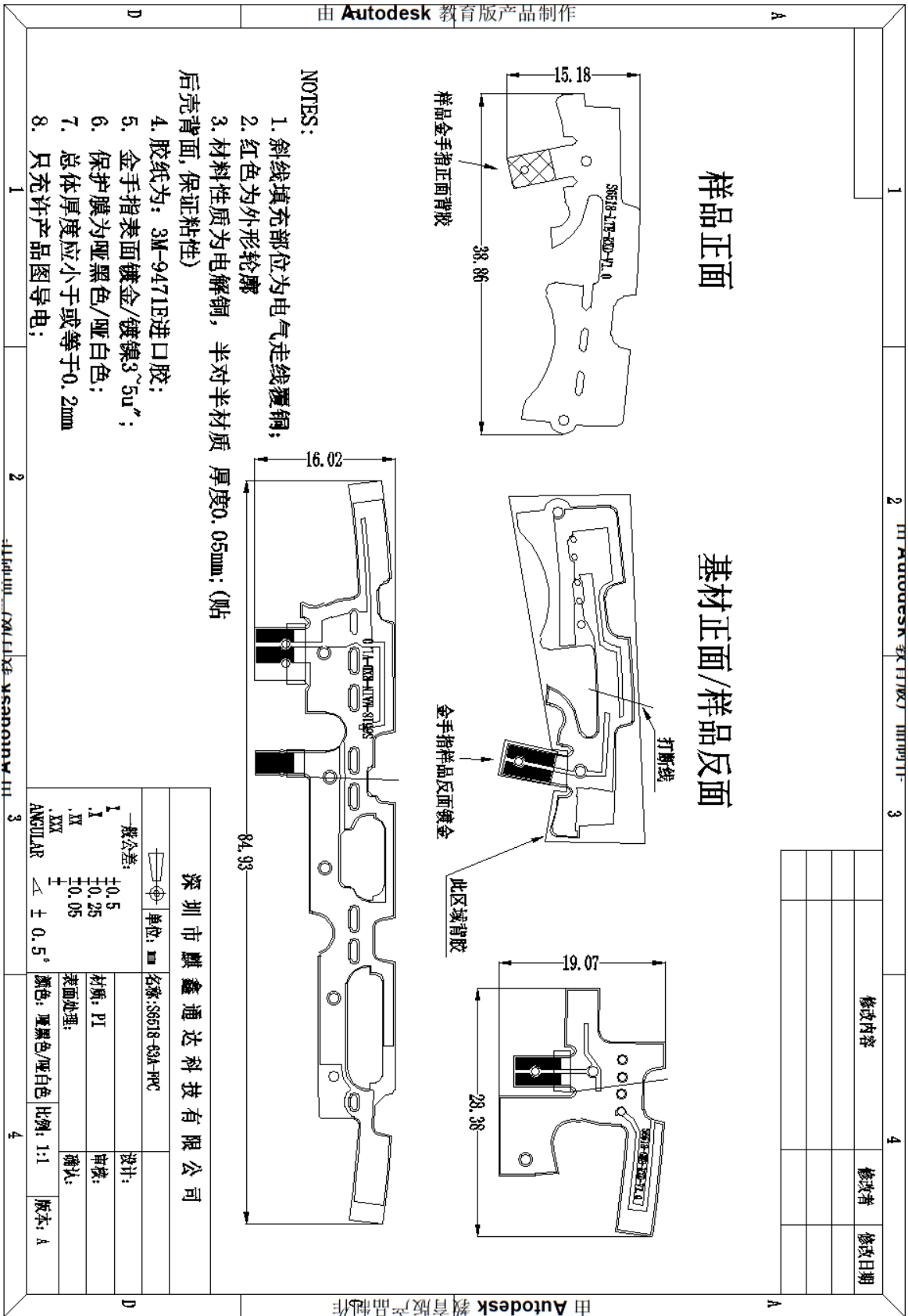
### Gain/Efficiency Test Steps:



### Active TRP/TIS Test Steps:



# 5. Antenna Dimensions



由 Autodesk 教育版产品制作

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## 6.Introduction to Antenna Information

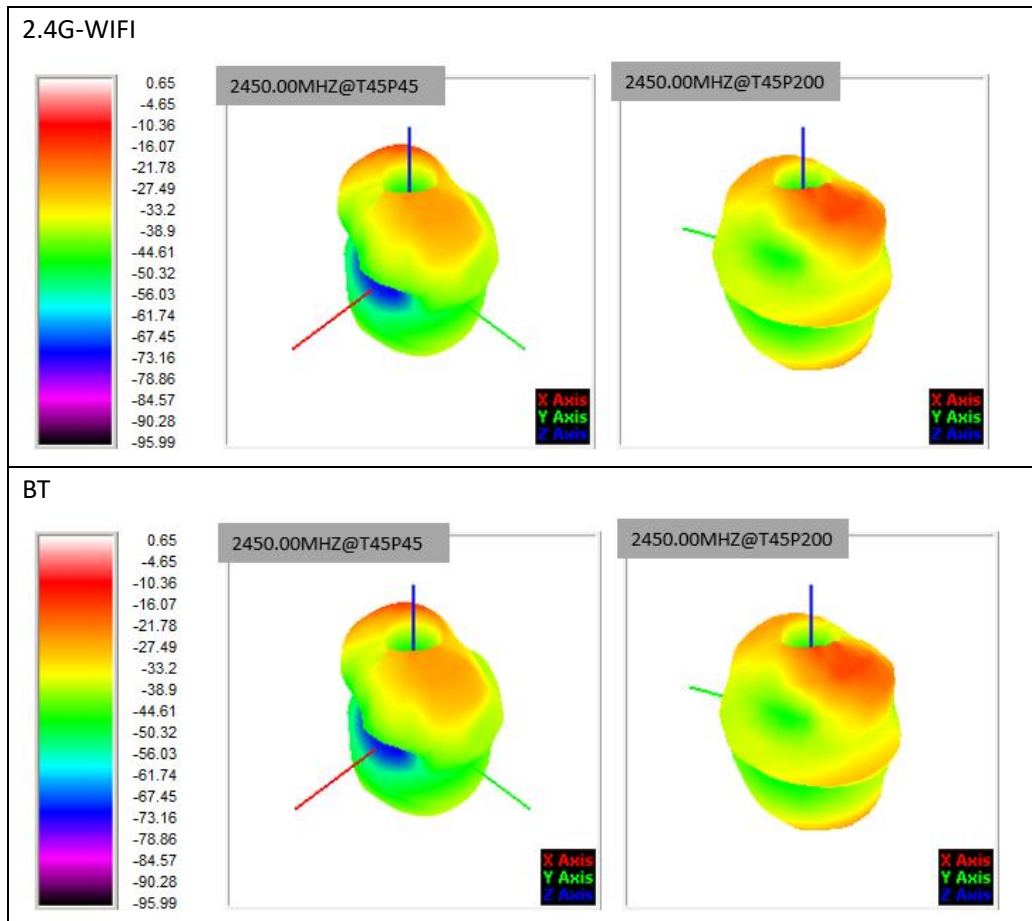
S6518	
Antenna type and frequency band	MAIN ANTENNA(PIFA):2G/3G/4G  25.058601001  DIV ANTENNA(PIFA):2G/3G/4G  25.058601003  GPS/WIFI/BT ANTENNA(PIFA):L1/2.4GWIFI/BT  25.058601002
Antenna materia	FPCB

## 7.Antenna Gain

Band	Max Gain	Efficiency
GSM850	-2.75dBi	30.3%
GSM900	-2.07dBi	31.4%
DCS1800	1.06dBi	36.9%
PCS1900	-0.31dBi	32.1%
WCDMA2100	-0.53dBi	26.6%
WCDMA1900	-0.31dBi	32.1%
WCDMA1700	1.06dBi	36.9%
WCDMA850	-2.75dBi	30.3%
WCDMA900	-2.07dBi	31.4%
BAND 2	-0.31dBi	32.1%
BAND 3	1.06dBi	36.9%
BAND 4	1.06dBi	36.9%
BAND 5	-2.75dBi	30.3%
BAND 7	-0.66dBi	30.6%
BAND 12	-2.32dBi	32.3%
BAND 17	-2.32dBi	32.3%
BAND 28	-2.35dBi	32.5%

<b>BAND 66</b>	1.06dBi	36.9%
<b>BAND 71</b>	-2.89dBi	28.7%
<b>GPS</b>	0.3dBi	33.6%
<b>2.4GWIFI</b>	0.65dBi	35%

## 8.3D Lobe Diagram



## 9. Antenna OTA

S6518-FS-OTA											
BAND	CHN	TRP	TIS	BAND	CHN	TRP	TIS	BAND	CHN	TRP	TIS
GSM850	L	26.61		GSM900	L	26.09		DCS1800	L	27.48	
	M	27.01	-102.37		M	26.18	-102.45		M	27.13	-104.7
	H				H	26.3			H		
PCS1900	L	25.84		W-2100	L	19.16		W-1700	L	18.04	
	M	26.2	-102.73		M	18.76	-105.24		M	18.59	-104.8
	H				H				H		



W-850	L	17.34		W-900	L	16.84		FDD-B2	L	20.18	
	M	17.73	-102.82		M	17.42	-104.1		M	20.23	-95.94
	H				H				H		
FDD-B3	L	19.94		FDD-B4	L	18.88		FDD-B5	L	18.04	
	M	20.36	-93.72		M	19.05	-93.47		M	18.11	-92.42
	H				H				H		
FDD-B7	L	18.29		FDD-B12	L	18.16		FDD-B17	L	18.15	
	M	17.02	-90.7		M	18.48	-92.15		M	18.44	-92.24
	H				H				H		
FDD-B28	L	18.64		FDD-B66	L	19.39		FDD-B71	L	17.09	
	M	19.0	-89.29		M	19.83	-94.49		M	18.02	-90.46
	H				H				H		