

ShenZhen QiXinTongDa Technology Co.,Ltd.

Antenna Test Report

Project Name: L5049

Frequency Band:

G2/3/5/8+W1/2/4/5/8+

FDD2/3/4/5/7/17/28AB+TDD38

DATE: 2023-08-29

ADDRESS: Room503-505,Building211,

Tairan IndustrialandTradePark,Chegongmiao,FutianDistrict,Shenzhen

1.Test Project

	Test Project	Equipment
1. S Parameter	<ol style="list-style-type: none">1. Return Loss (RL)2. VSWR	Network Analyzer: Agilent 5071B
2. RF Test (2G+3G+4G)	<ol style="list-style-type: none">1. power2. level3. TRP/TIS	Comprehensive Test: CMW500/8960 Test Environment: Anechoic Chamber

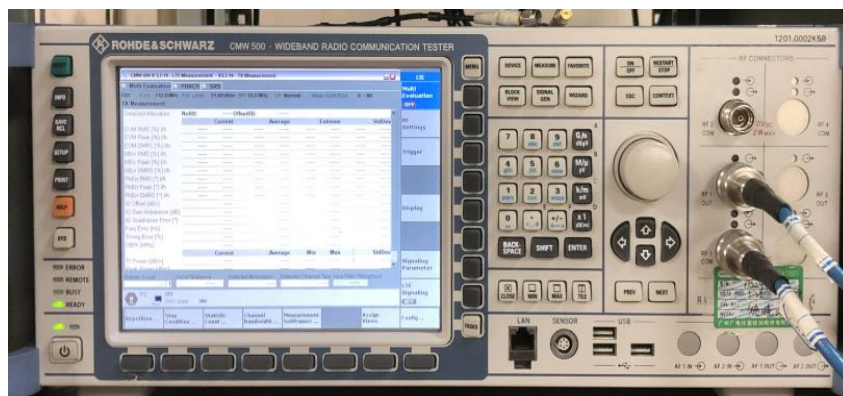
2. Test Equipment



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

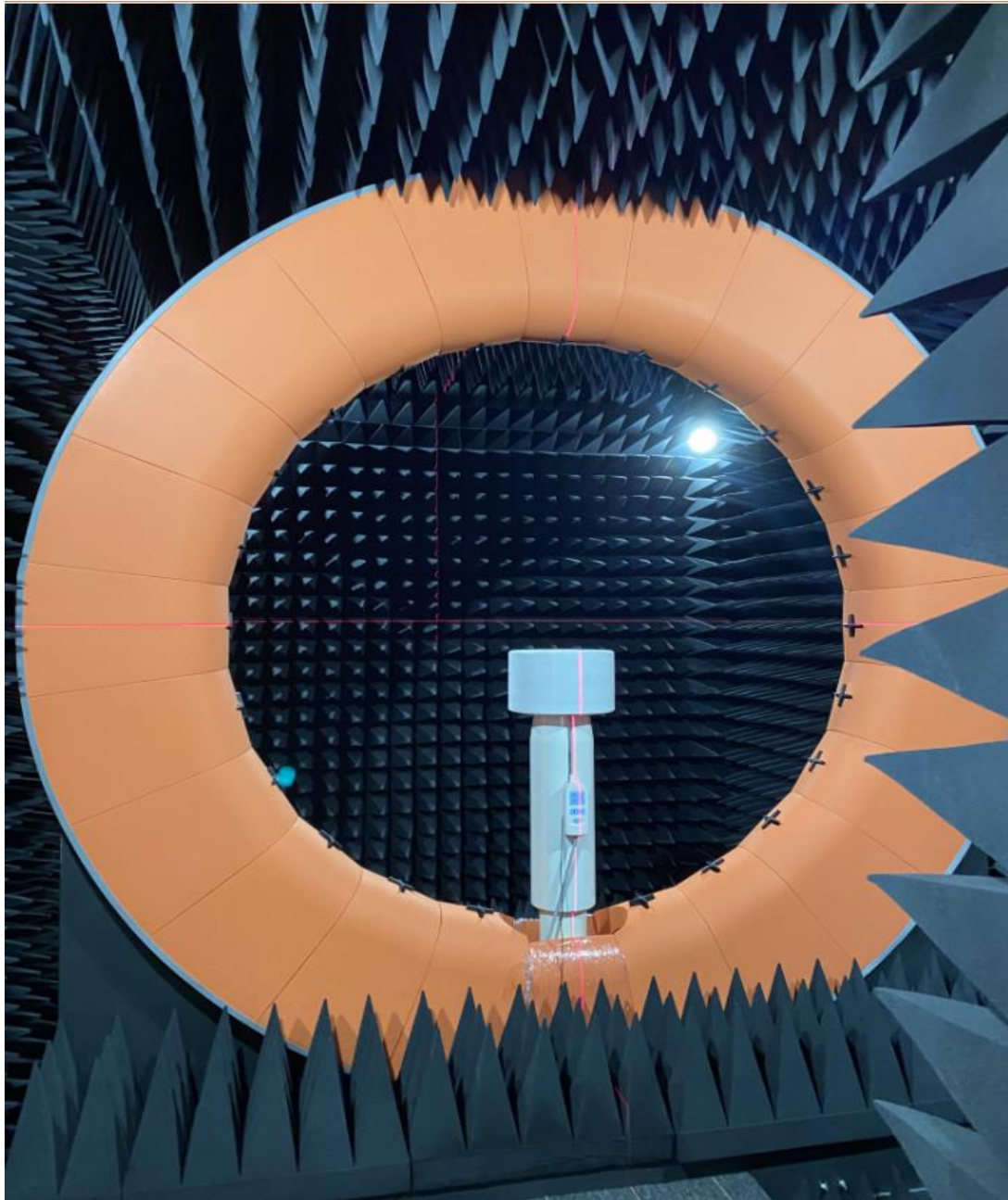


Agilent 8960 (2G/3G Test Equipment)



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

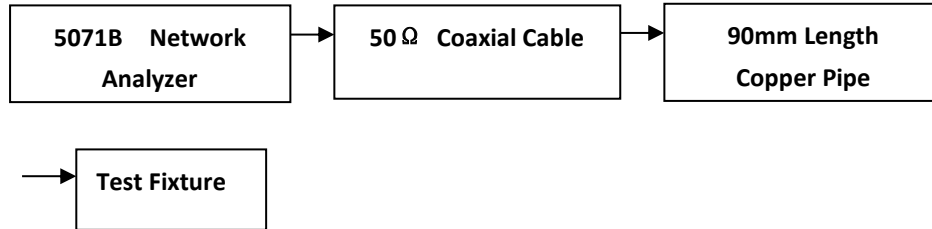
3. TestEnvironment



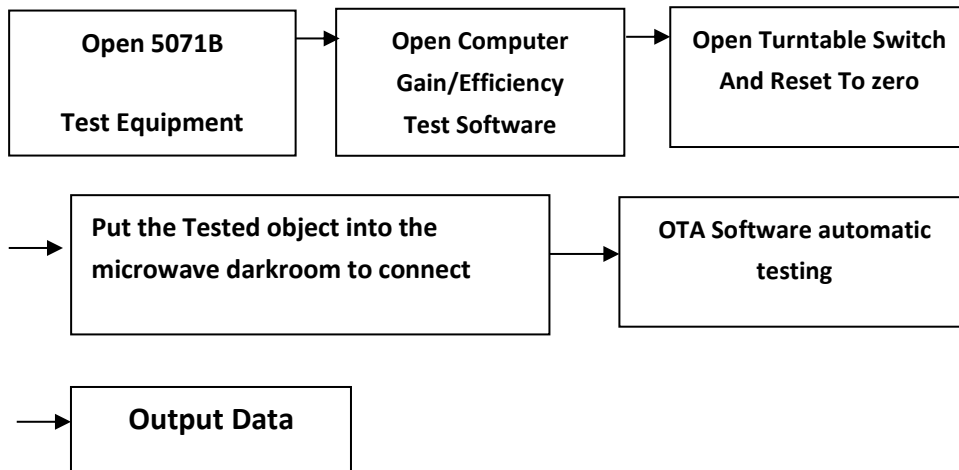
Microwave Anechoic Chamber

4. Test Steps

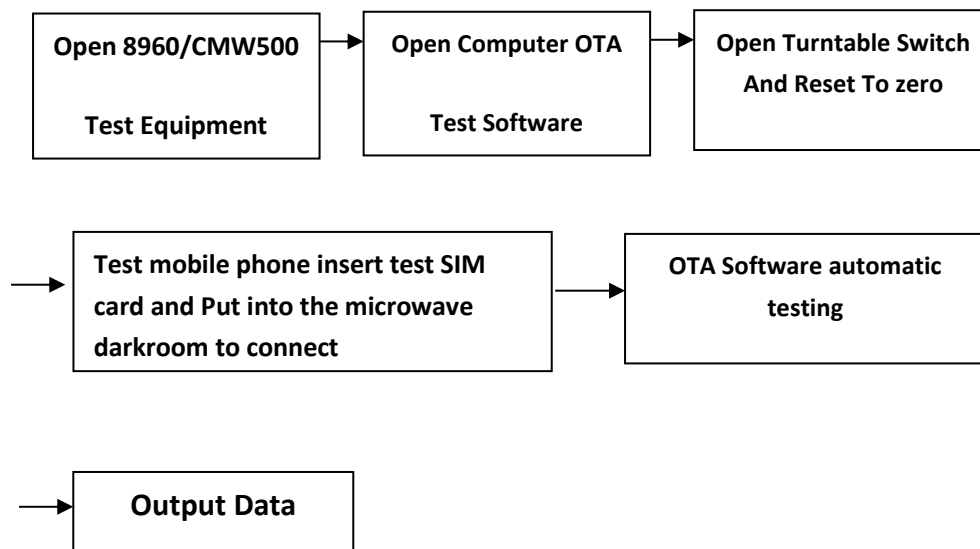
Passive VSWR/RL Test Steps:



Gain/Efficiency Test Steps:



Active TRP/TIS Test Steps:



6.Introduction to Antenna Information

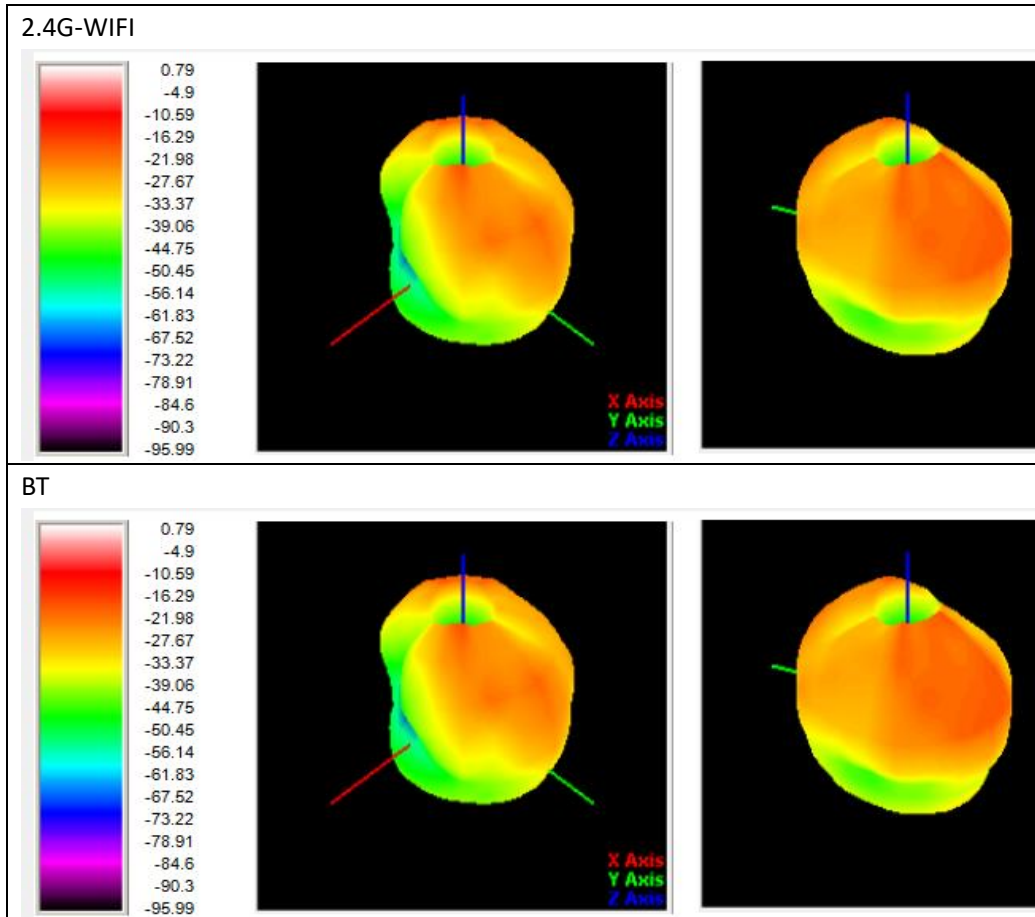
L5049-32EA	
Antenna type and frequency band	<p>MAIN ANTENNA(PIFA):2G/3G/4G</p> <p>Model: 25.058601001</p> <p>DIV ANTENNA(PIFA):2G/3G/4G</p> <p>Model: 25.058601003</p> <p>GPS/WIFI/BT ANTENNA(PIFA):L1/2.4GWIFI/BT</p> <p>Model: 25.058601002</p>
Antenna materia	FPCB

7.Antenna Gain

Band	Max Gain	Efficiency
GSM850	-3.25dBi	25.7%
GSM900	-2.47dBi	26.4%
DCS1800	0.78dBi	36.7%
PCS1900	-0.15dBi	37.6%
WCDMA2100	-0.45dBi	26.8%
WCDMA1900	-0.15dBi	37.6%
WCDMA1700	-0.45dBi	26.8%
WCDMA850	-3.25dBi	25.7%
WCDMA900	-2.47dBi	26.4%
BAND 2	-0.15dBi	37.6%
BAND 3	0.78dBi	36.7%
BAND 4	-0.45dBi	26.8%
BAND 5	-3.25dBi	25.7%
BAND 7	2.32dBi	32.9%
BAND 17	-3.98dBi	22.6%

BAND 28	-3.98dBi	22.6%
BAND 38	2.32dBi	32.9%
GPS	0.20dBi	35.6%
2.4GWIFI	0.79dBi	39%
BT	0.79dBi	39%

8.3D Lobe Diagram



9. Antenna OTA

L5049-32EA-FS-OTA											
BAND	CHN	TRP	TIS	BAND	CHN	TRP	TIS	BAND	CHN	TRP	TIS
GSM850	L	28.5		GSM900	L	27.5		DCS1800	L	26.3	
	M	28.0	-102.9		M	26.9	-102.1		M	26.9	-105.7
	H	27.9			H	26.3			H	26.9	
PCS1900	L	26.5		W-2100	L	19.8		W-1900	L	20.6	
	M	26.4	-103.7		M	19.5	-107.0		M	20.6	-106.6
	H	26.2			H	19.5			H	20.5	

W-1700	L	18.4		W-850	L	19.2		W-900	L	17.4	
	M	19.0	-106.4		M	19.0	-104.3		M	16.9	-103.3
	H	19.3			H	18.6			H	16.3	
FDD-B2	L	21.0		FDD-B3	L	19.4		FDD-B4	L	19.7	
	M	20.9	-95.0		M	20.0	-96.7		M	19.8	-96.6
	H	20.6			H	20.3			H	20.1	
FDD-B5	L	20.1		FDD-B7	L	18.8		FDD-B17	L	17.8	
	M	19.3	-93.2		M	19.0	-93.2		M	18.8	-94.9
	H	18.8			H	19.1			H	18.9	
FDD-B28A	L	17.3		FDD-B28B	L	18.6		TDD-B38	L	19.8	
	M	18.3	-93.8		M	18.8	-94.3		M	20.1	-90.1
	H	18.6			H	19.3			H	20.2	