

ShenZhen QiXinTongDa Technology Co.,Ltd.

Antenna Test Report

Client Name: OUQI

Project Name: S109

FrequencyBand:

G2/3/5/8+W1/2/4/5/8+FDD1/2/3/4/5/7/8/12/13/17/18/19/20/25/

26/28/66+TDD38/39/40/41

RF: FU LIANG CHENG (137 6016 7811)

DATE: 2022-09-16

1.Test Project

	Test Project	Equipment
1. S Parameter	1. Return Loss (RL) 2. VSWR	Network Analyzer: Agilent 5071B
2. RF Test (2G+3G+4G)	1. power 2. level 3. TRP/TIS	Comprehensive Test: CMW500/8960 Test Environment: Anechoic Chamber

2. Test Equipment



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

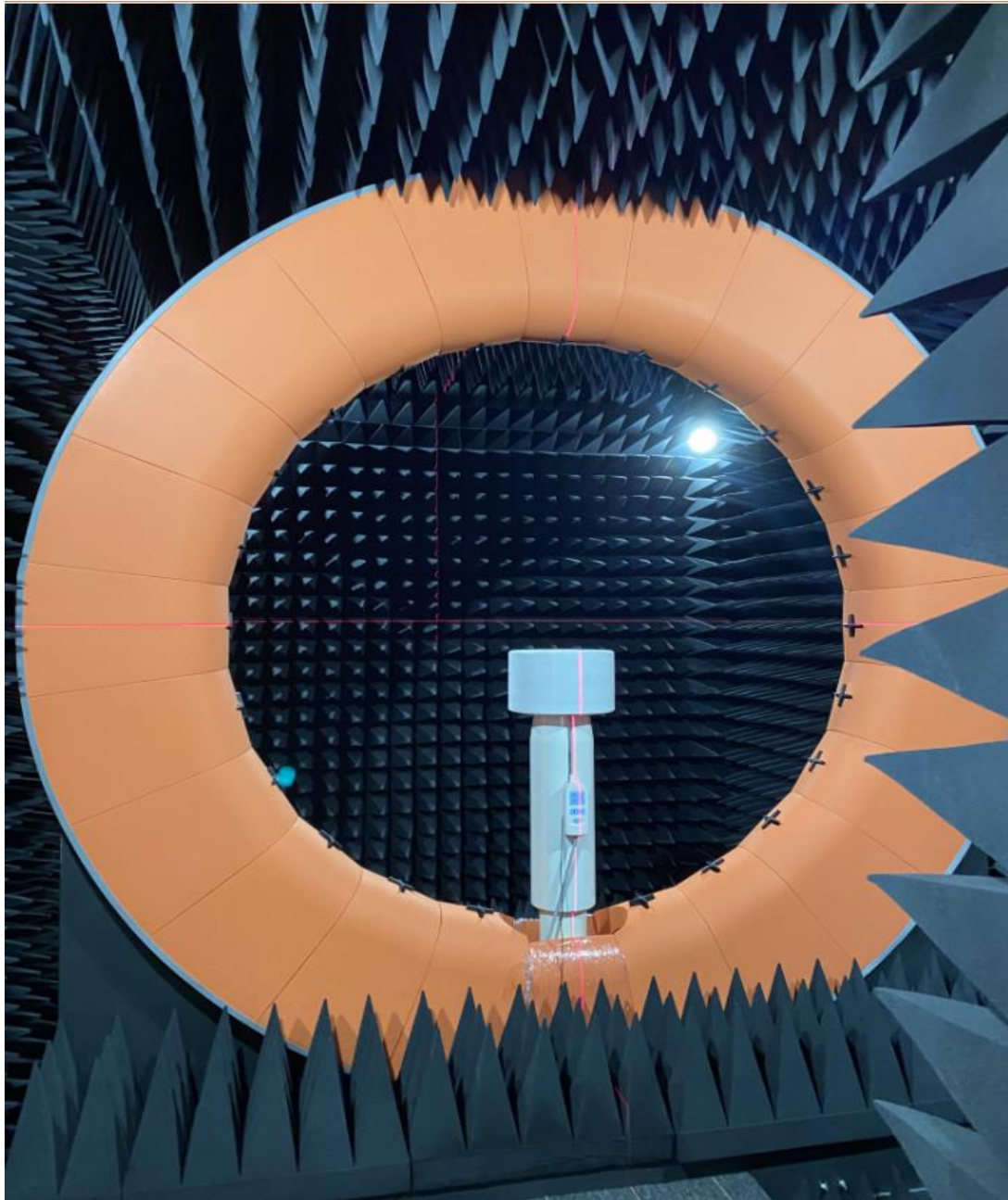


Agilent 8960 (2G/3G Test Equipment)



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

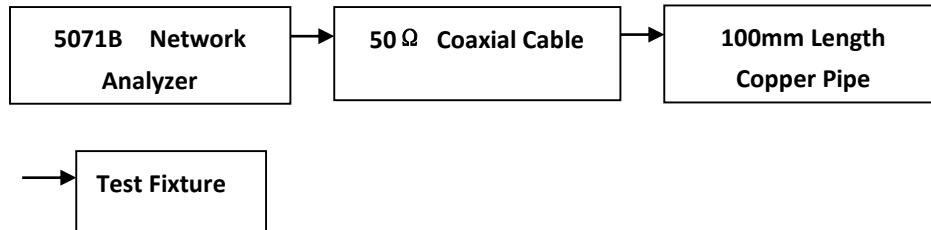
3. TestEnvironment



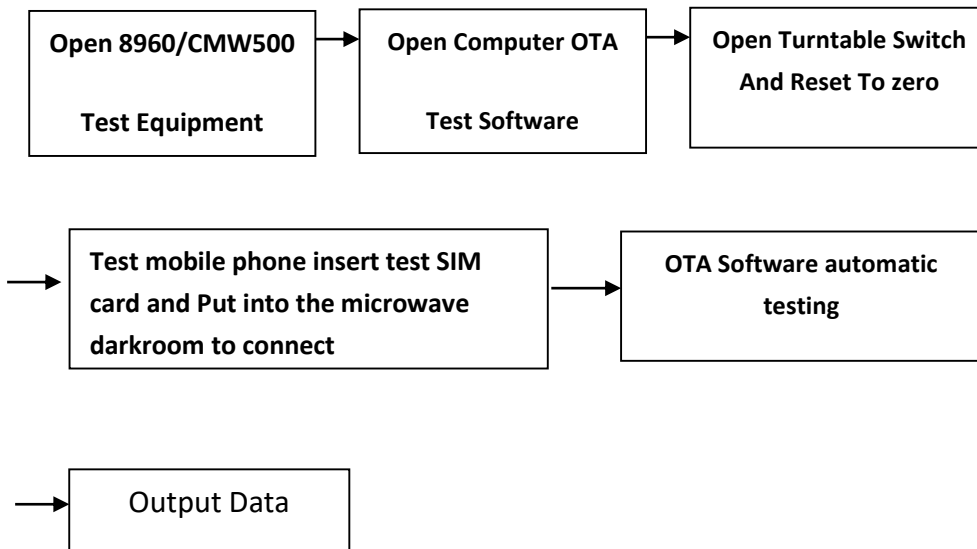
Microwave Anechoic Chamber

4. Test Steps

Passive VSWR/RL Test Steps:



Active TRP/TIS Test Steps:



5. Antenna Dimensions

由 Autodesk 教育版产品制作

NOTES:

1. 铜线填充部位为电气走线覆铜;
2. 红色为外形轮廓, 注意边缘尺寸
3. 材料性质为电解铜, 半对半材质, 厚度0.05mm; (贴后完背面, 保证粘性)
4. 胶纸为: 3M-9471B进口胶;
5. 金手指表面镀金/镀镍 $5\sim 5\mu$;
6. 保护膜为哑黑色/哑白色;
7. 总体厚度应小于或等于0.2mm
8. 只允许产品图导电;

修改内容	修改者	修改日期

深圳市麒鑫通达科技有限公司

名称: SI09 FPC	单位: mm	设计:	版本: A
材料: PI	表面处理:	审核:	
颜色: 哑黑色/哑白色	比例: 1:1	确认:	

一般公差:

I	±0.5	II	±0.25
III	±0.05	IV	±0.05
V	±	VI	± 0.5°
VII	±	VIII	±

Autodesk 教育版产品制作

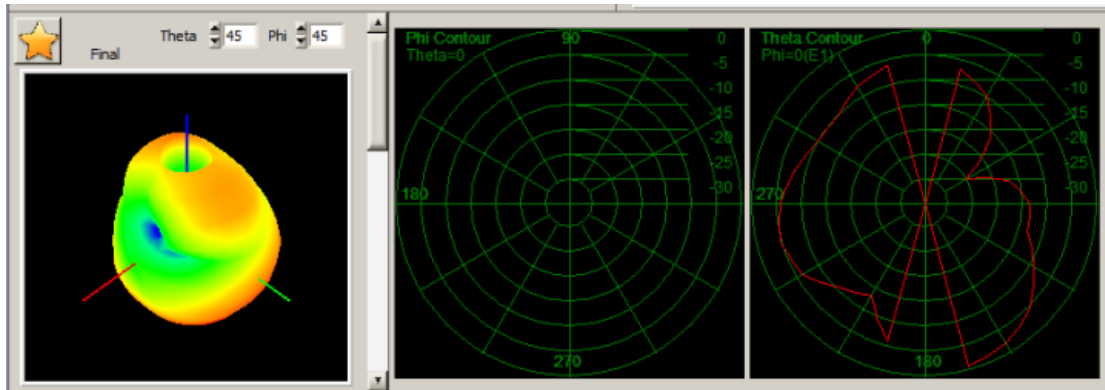
6. Antenna Gain

Band	Max Gain	Efficiency
GSM850	-0.18	32%
GSM900	-0.12	33%
DCS1800	0.05	35%
PCS1900	0.1	36%
WCDMA2100	0.06	35%
WCDMA1900	0.1	36%
WCDMA1700	0.06	35%
WCDMA850	-0.18	32%
WCDMA900	-0.12	33%
BAND 1	0.06	35%
BAND 2	0.1	36%
BAND 3	0.05	35%
BAND 4	0.06	35%
BAND 5	-0.18	33%
BAND 7	0.23	38%
BAND 8	-0.12	33%
BAND 12	-0.42	21%
BAND 13	-0.36	23%
BAND 17	-0.42	21%
BAND 18	-0.18	32%
BAND 19	-0.18	32%
BAND 20	-0.18	32%
BAND 25	0.03	35%
BAND 26	-0.18	32%
BAND 28	-0.42	21%
BAND 66	0.06	35%

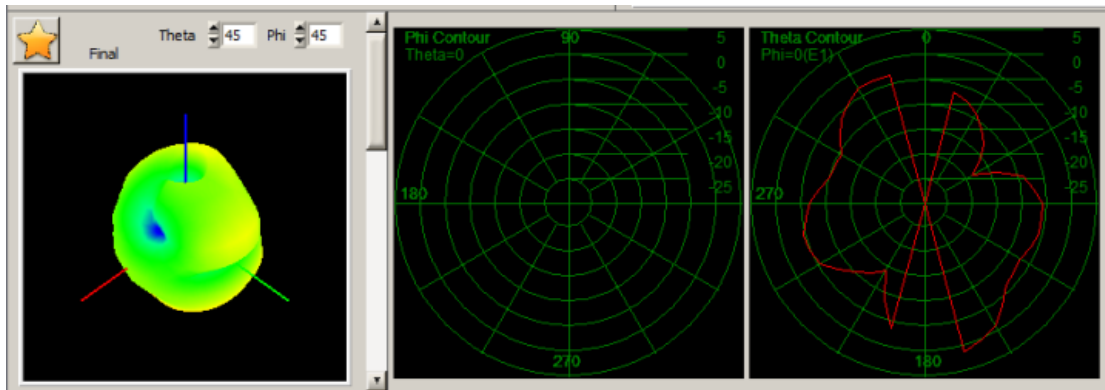
BAND 38	0.23	38%
BAND 39	0.1	36%
BAND 40	0.3	39%
BAND 41	0.23	38%
Bluetooth	0.2	37%
WIFI-2.4G	0.2	37%
WIFI-5.8G	-0.12	28%
GPS	0.1	36%

7.3D Lobe Diagram

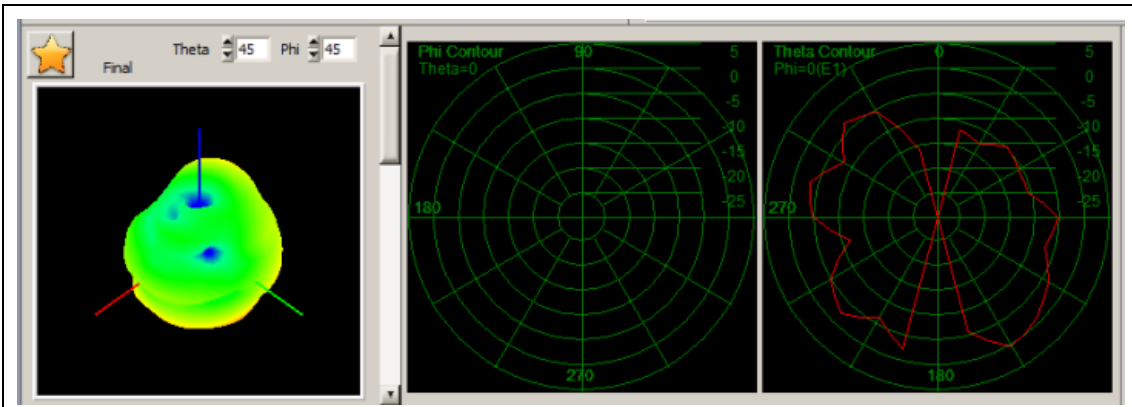
GSM850



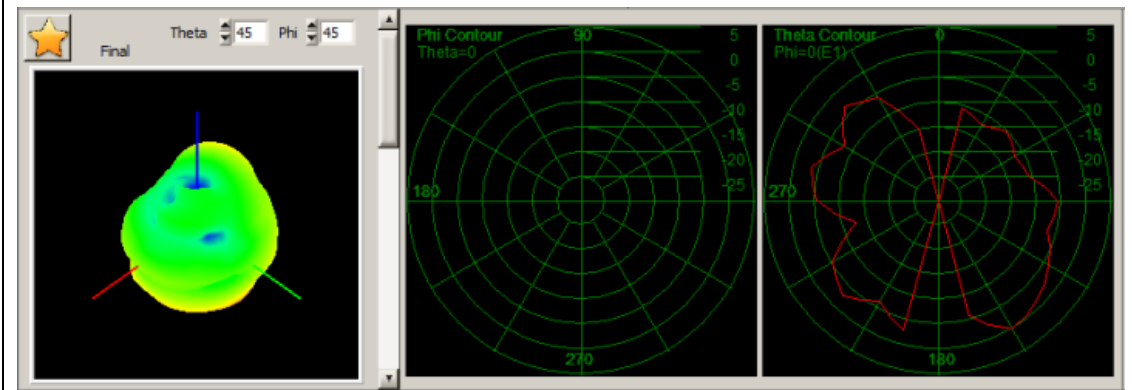
GSM900



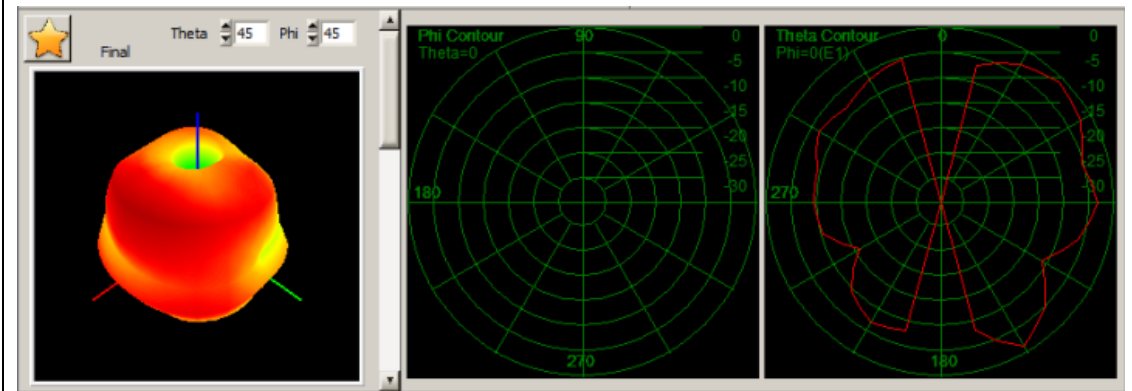
DSC1800



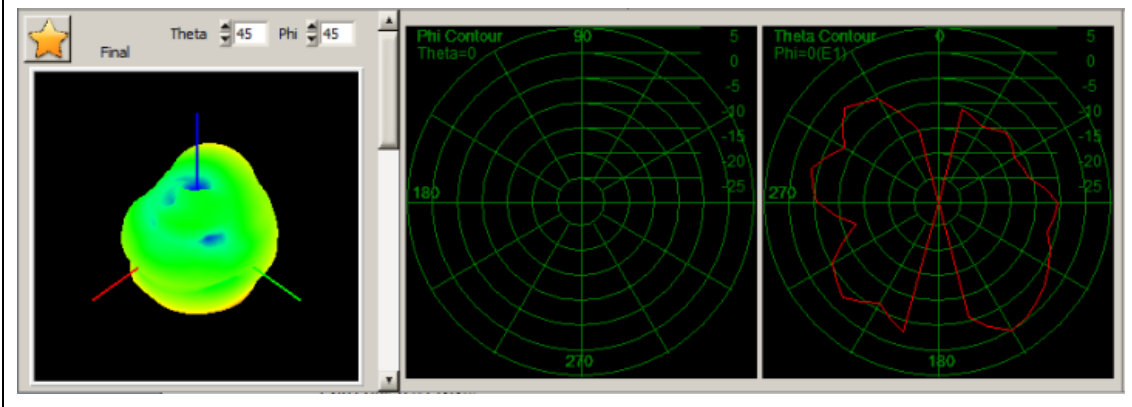
PCS1900



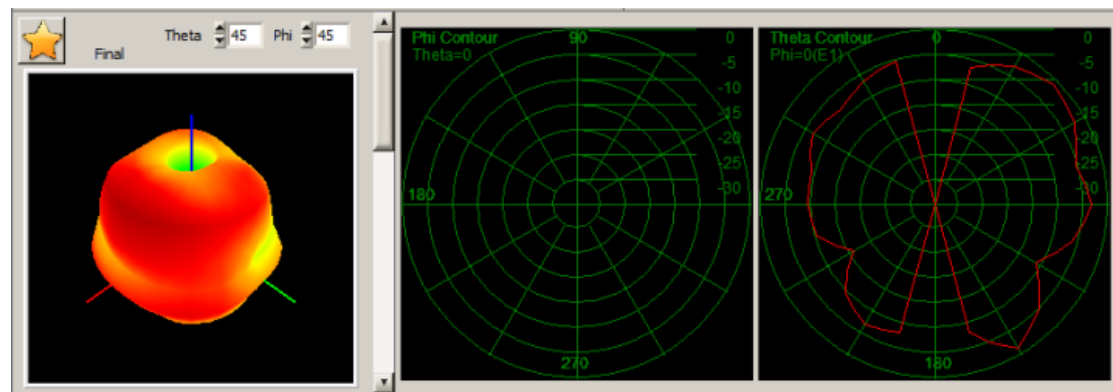
W2100



W1900



W1700



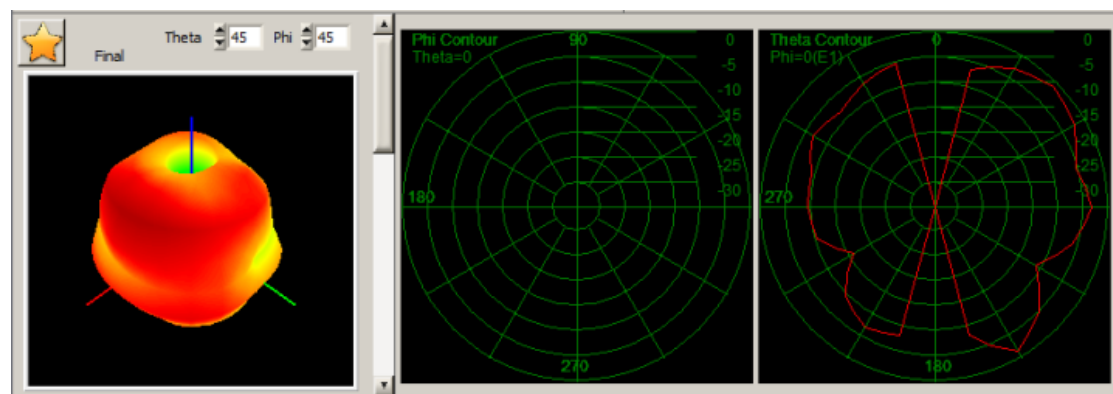
W850



W900



FDD-B1



FDD-B2



FDD-B3



FDD-B4



FDD-B5



FDD-B7



FDD-B8



FDD-B12



FDD-B13



FDD-B17



FDD-B18



FDD-B19



FDD-B20



FDD-B25



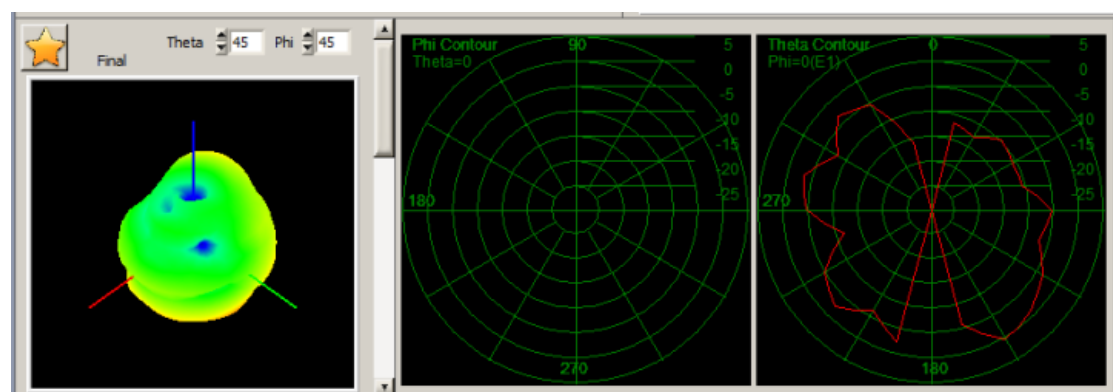
FDD-B26



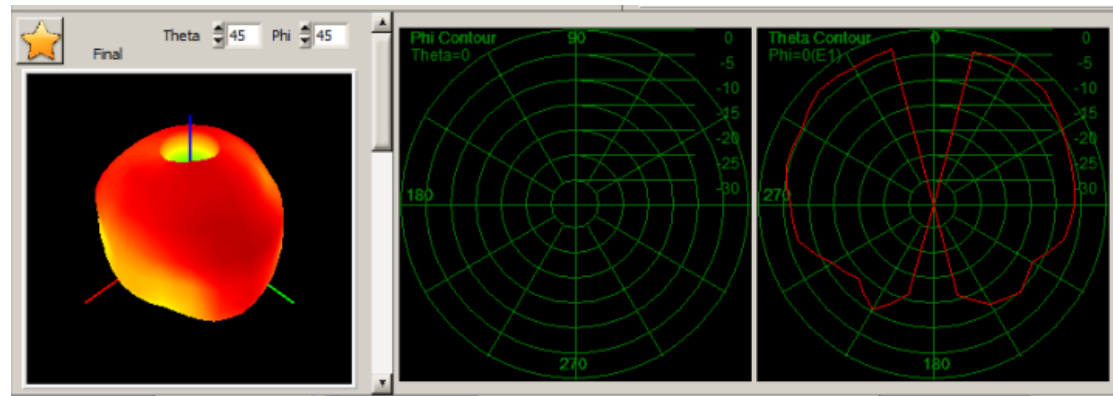
FDD-B28



FDD-B66



TDD-B38



TDD-B39



TDD-B40



TDD-B41



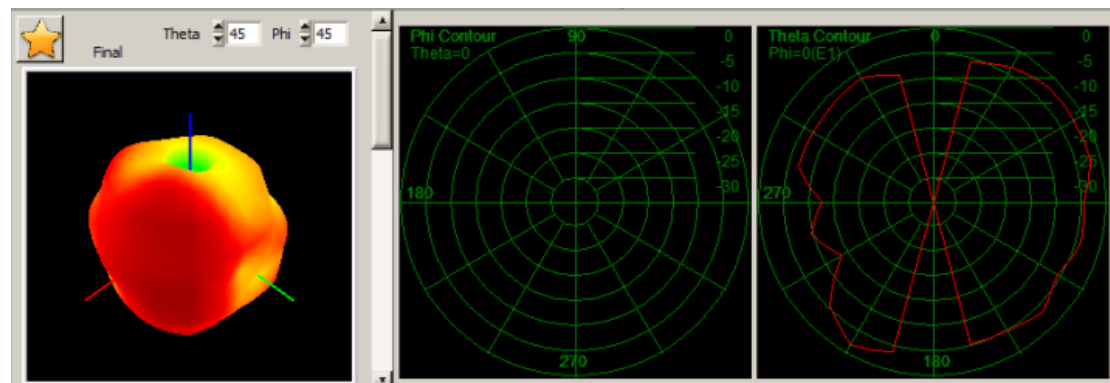
GPS



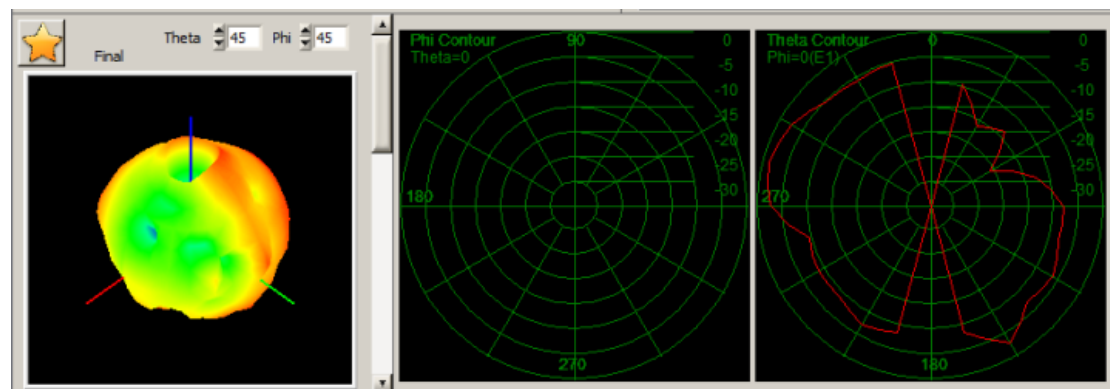
BT



2.4G-WIFI



5G-WIFI



8. Antenna OTA

FS-OTA									
BAND	GSM850 测量数值			GSM900 测量数值			DCS1800 测量数值		
CHANNEL	L	M	H	L	M	H	L	M	H
TRP(dBm)	25.6	26.1	26.6	26.5	26.5	26.8	23.5	24.1	24.5
TIS(dBm)	-102.6	-102.3	-102.2	-101.3	-101.0	-100.5	-103.6	-103.3	-103.2
BAND	PCS1900 测量数值			WCDMA850 测量数值			WCDMA900 测量数值		
CHANNEL	L	M	H	L	M	H	L	M	H
TRP(dBm)	24.6	24.8	25.0	17.3	17.3	17.5	17.3	17.5	17.6
TIS(dBm)	-103.5	-103.6	-103.8	-103.1	-102.9	-102.6	-102.3	-102.2	-101.8
BAND	WCDMA1700 测量数值			WCDMA1900 测量数值			WCDMA2100 测量数值		
CHANNEL	L	M	H	L	M	H	L	M	H
TRP(dBm)	16.3	16.5	16.8	18.3	18.5	18.6	18.6	18.5	18.5
TIS(dBm)	-103.2	-103.1	-102.3	-106.3	-106.1	-106.0	-103.5	-103.2	-102.6

BAND	TDD-B38 测量数值			TDD-B39 测量数值			TDD-B40 测量数值		
CHANNEL	L	M	H	L	M	H	L	M	H
TRP(dBm)	16.3	16.2	16.2	18.3	18.2	18.1	17.3	17.8	18.5
TIS(dBm)	-88.1	-87.8	-87.5	-90.1	-90.0	-89.8	-90.5	-90.2	-89.6
BAND	TDD-B41 测量数值			FDD-B1 测量数值			FDD-B2 测量数值		
CHANNEL	L	M	H	L	M	H	L	M	H
TRP(dBm)	16.2	16.0	15.8	18.3	18.2	18.1	17.2	17.6	18.2
TIS(dBm)	-87.6	-87.3	-87.1	-91.0	-90.8	-90.2	-93.1	-92.8	-92.6

FS-OTA									
BAND	FDD-B3 测量数值			FDD-B4 测量数值			FDD-B5 测量数值		
CHANNEL	L	M	H	L	M	H	L	M	H
TRP(dBm)	16.5	16.8	17.3	15.8	16.0	16.3	17.2	17.3	17.2
TIS(dBm)	-92.5	-92.3	-92.1	-91.6	-91.1	-90.5	-91.5	-91.3	-90.8
BAND	FDD-B7 测量数值			FDD-B8 测量数值			FDD-B12 测量数值		
CHANNEL	L	M	H	L	M	H	L	M	H
TRP(dBm)	16.1	16.2	16.2	17.3	16.8	16.6	16.5	16.6	16.9
TIS(dBm)	-90.3	-89.8	-89.3	-91.3	-91.1	-91.0	-90.1	-89.8	-89.6
BAND	FDD-B13 测量数值			FDD-B17 测量数值			FDD-B18 测量数值		
CHANNEL	L	M	H	L	M	H	L	M	H
TRP(dBm)	18.1	18.2	18.2	16.3	16.5	16.7	17.3	17.2	17.1
TIS(dBm)	-89.3	-89.1	-89.0	-89.2	-88.9	-88.5	-88.9	-88.6	-88.5
BAND	FDD-B19 测量数值			FDD-B20 测量数值			FDD-B25 测量数值		

CHANNEL	L	M	H	L	M	H	L	M	H
TRP(dBm)	17.1	17.2	17.2	17.5	17.0	16.6	16.6	16.8	17.1
TIS(dBm)	-88.9	-88.7	-88.5	-91.5	-91.2	-90.5	-92.5	-92.3	-92.0
BAND	FDD-B26 测量数值			FDD-B28 测量数值			FDD-B66 测量数值		
CHANNEL	L	M	H	L	M	H	L	M	H
TRP(dBm)	17.1	17.2	17.0	16.1	16.2	16.8	16.6	16.8	17.0
TIS(dBm)	-88.6	-88.3	-88.2	-91.3	-91.5	-91.1	-91.8	-91.5	-91.3

GPS/WIFI/BT

测试项目	测试环境	冷启动定位时间	定位星个数	最高 CN 值
GPS	天台	81s	6 颗以上	43
测试项目	测试环境	热点数量	信号强度	高清视频播放质量
WIFI	办公室	18	≥-50dBm 热点 7 个以上	高清视频播放无卡顿
测试项目	测试环境	最大匹配距离	蓝牙耳机正常通话距离	蓝牙音箱音乐播放流畅距离
BT	办公室	11m	7m	8m