

**Shenzhen 3Good Wireless Communication
Co.,Ltd.**

Antenna Test Report

Client Name: YUNJI

Project Name: P12

**FrequencyBand:G2/3/5/8+W1/2/4/5/8+FDD1/2/3/4/5/7/8/12/17/20/25
/26/28+TDD34/38/39/40/41/66**

RF: FAN MAO LONG

DATE: 2023-09-23

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 Test Environment: Anechoic Chamber

2. Test Equipment

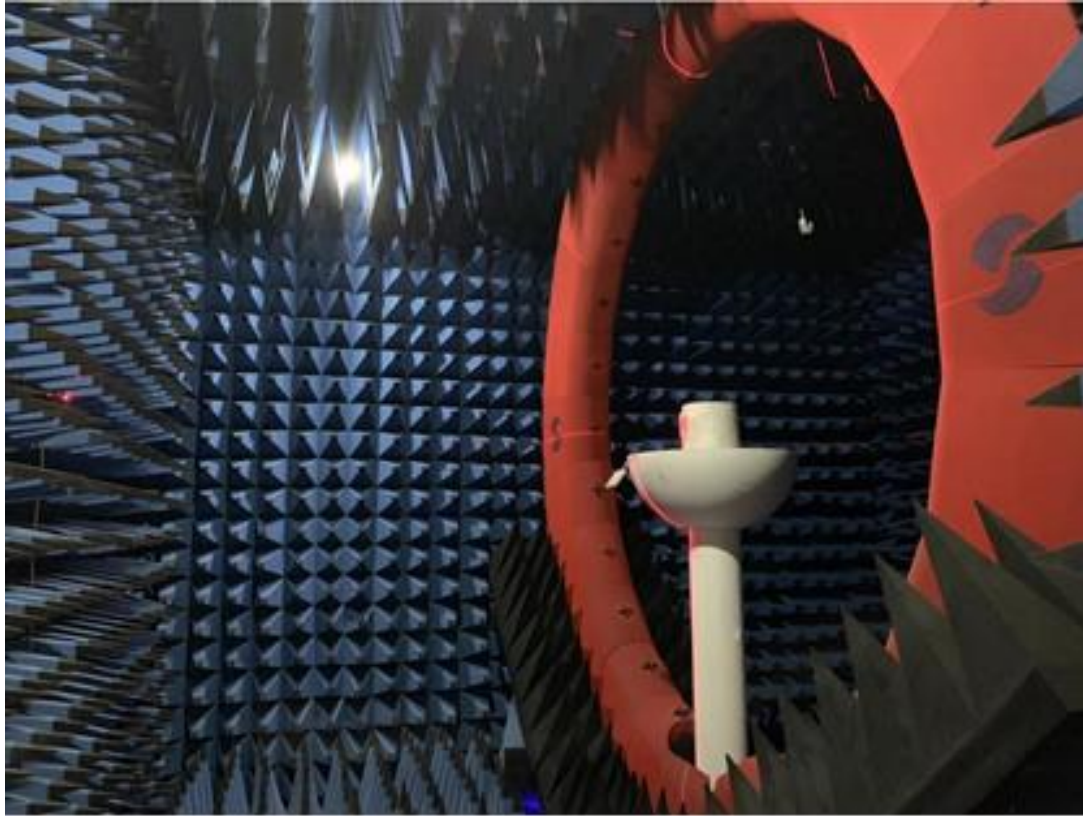


Agilent 5071B (S Parameter (RL/VSWR) Test Equipment)



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

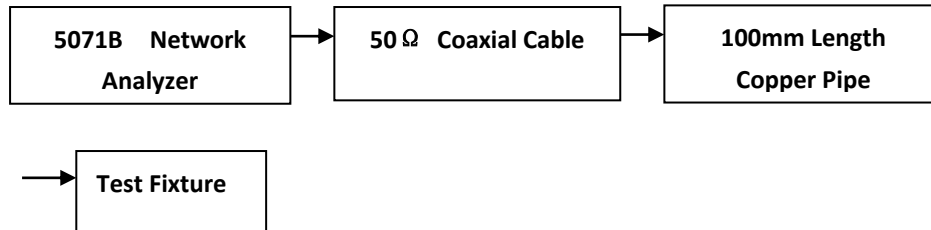
3. TestEnvironment



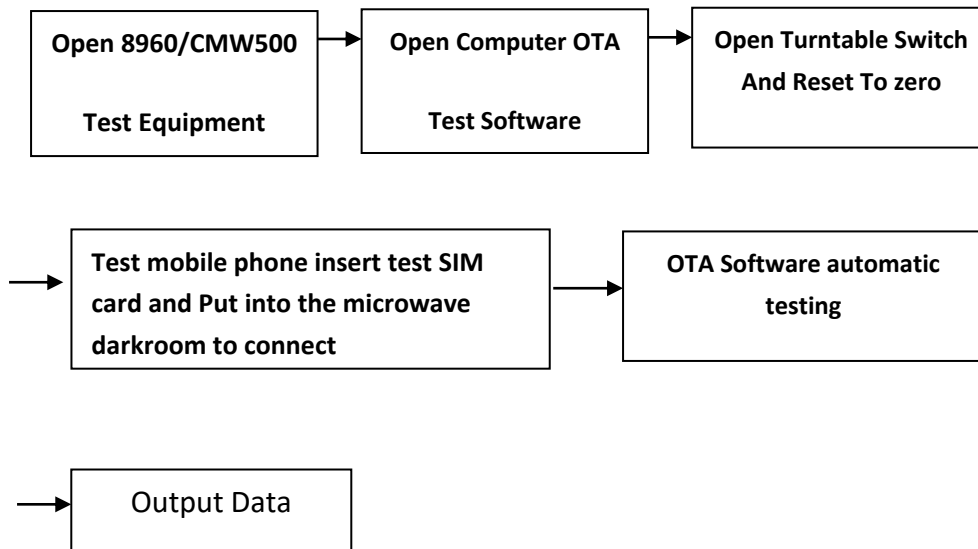
Microwave Anechoic Chamber

4. Test Steps

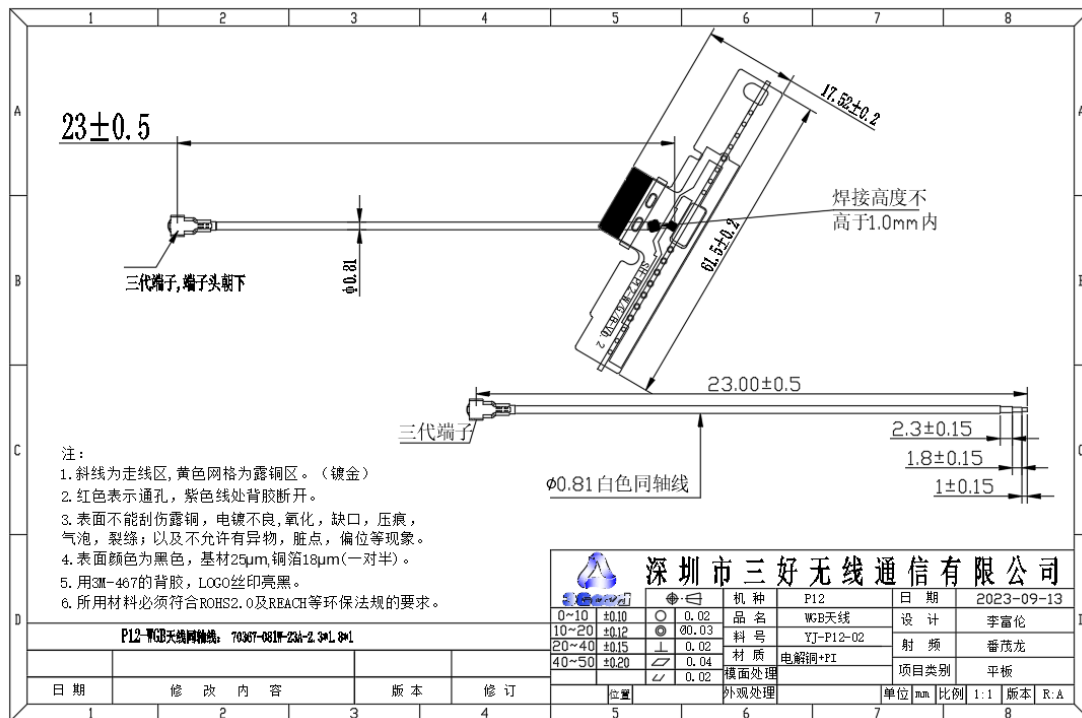
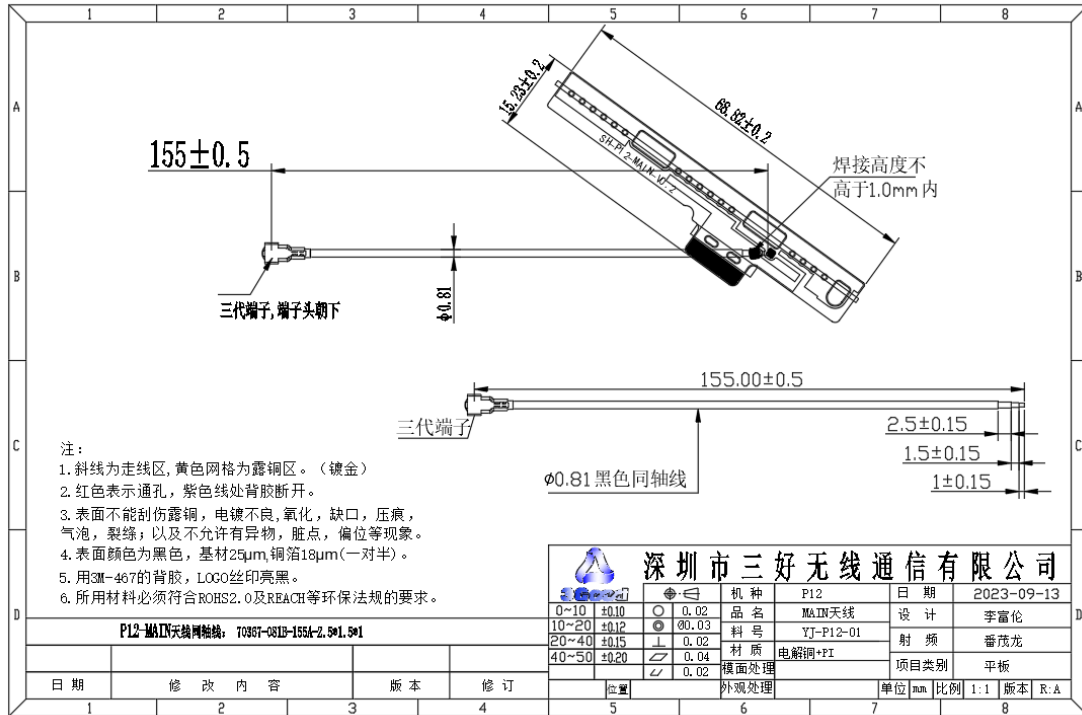
Passive VSWR/RL Test Steps:



Active TRP/TIS Test Steps:



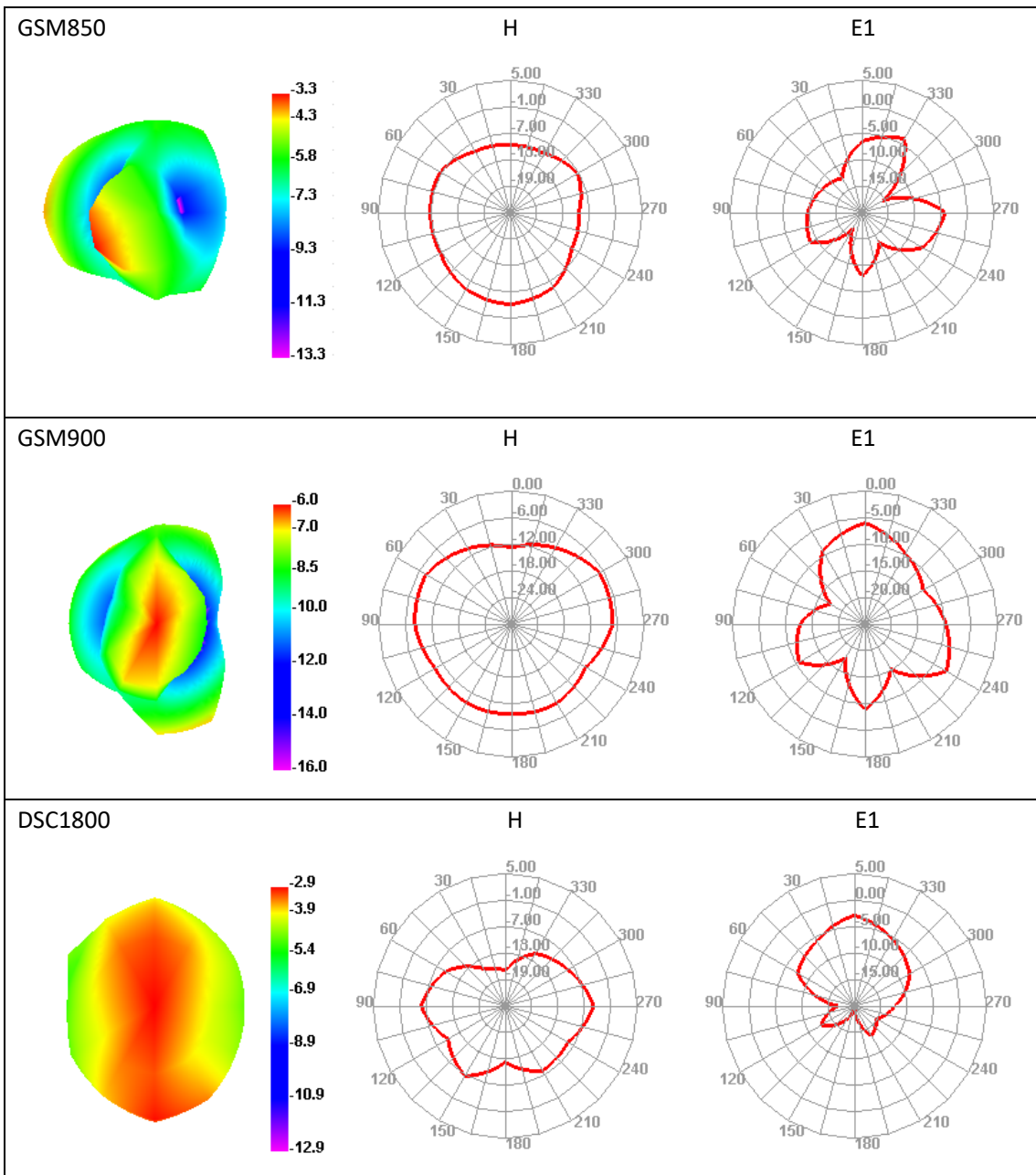
5. Antenna Dimensions



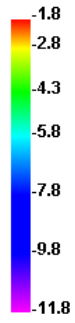
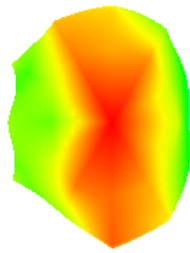
6. Antenna Gain

Band	Max Gain	Efficiency
GSM850	-3.31	16%
GSM900	-6.05	12%
DCS1800	-2.92	17%
PCS1900	-1.83	23%
WCDMA2100	-1.58	25%
WCDMA1900	-1.83	23%
WCDMA1700	-3.87	14%
WCDMA850	-3.31	16%
WCDMA900	-6.05	12%
BAND 1	-1.58	25%
BAND 2	-1.83	23%
BAND 3	-2.92	17%
BAND 4	-1.83	23%
BAND 5	-3.31	16%
BAND 7	-1.7	23%
BAND 8	-6.05	12%
BAND 12	-5.73	12%
BAND 17	-5.73	12%
BAND 20	-3.31	16%
BAND 25	-3.31	16%
BAND 26	-1.8	16%
BAND 28	-5.73	12%
BAND 34	-2.27	21%
BAND 38	-1.03	31%
BAND 39	-2.13	23%
BAND 40	-2.13	18%
BAND 41	-1.03	31%
BAND 66	-1.8	22%
Bluetooth	-0.04	39%
WIFI-2.4G	-0.04	39%
WIFI-5.8G	1.87	38%
GPS	-1.04	34%

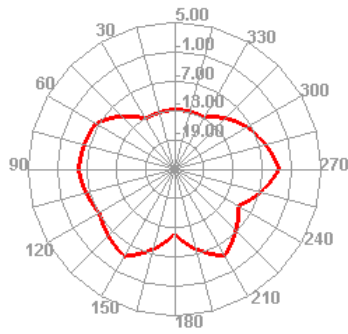
7.3D Lobe Diagram



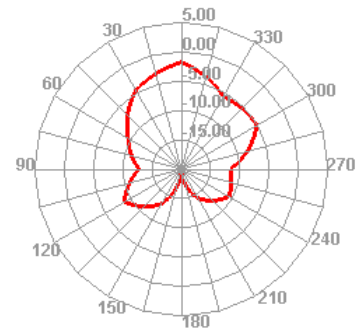
PCS1900



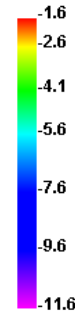
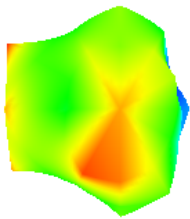
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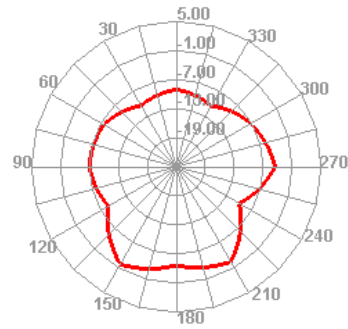
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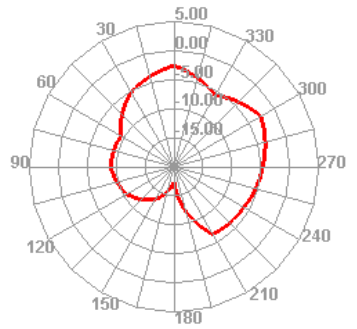
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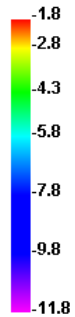
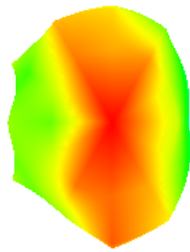
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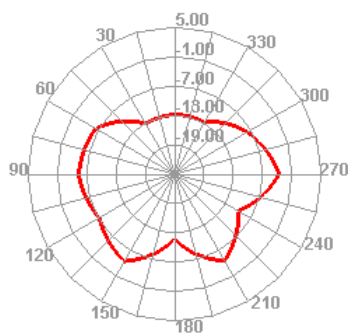
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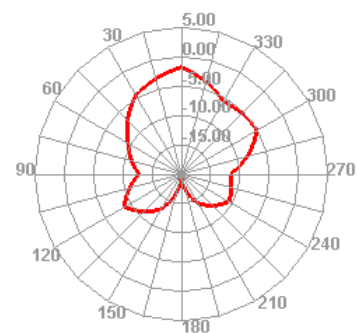
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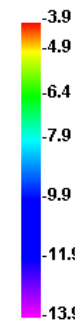
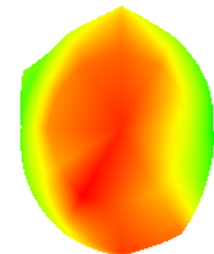
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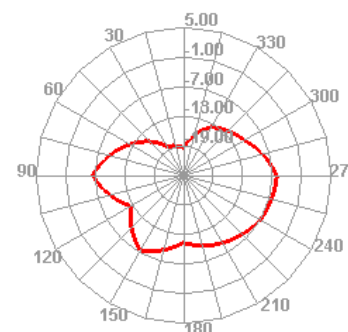
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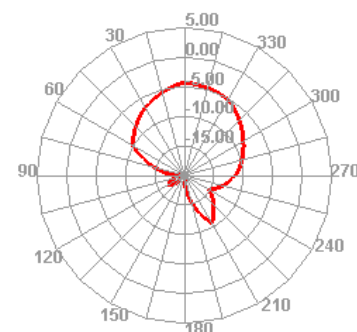
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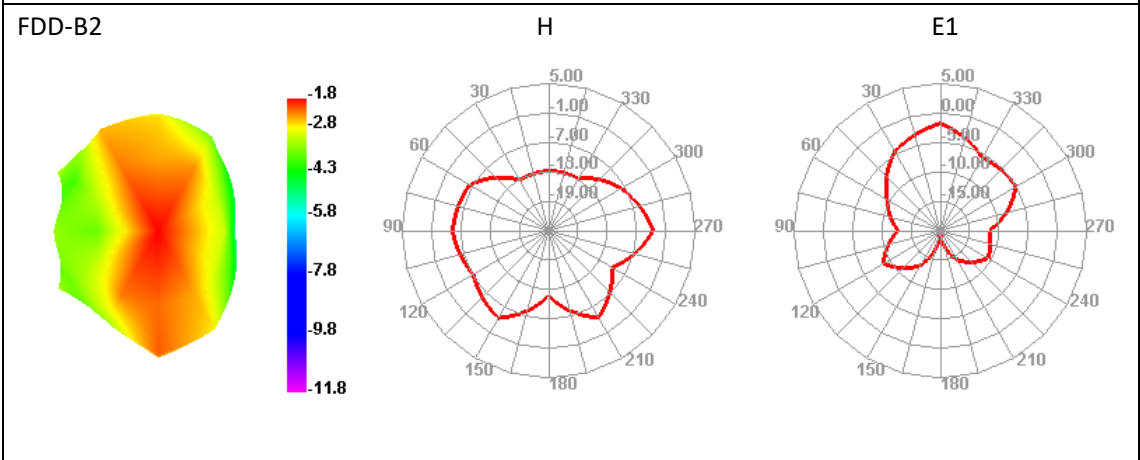
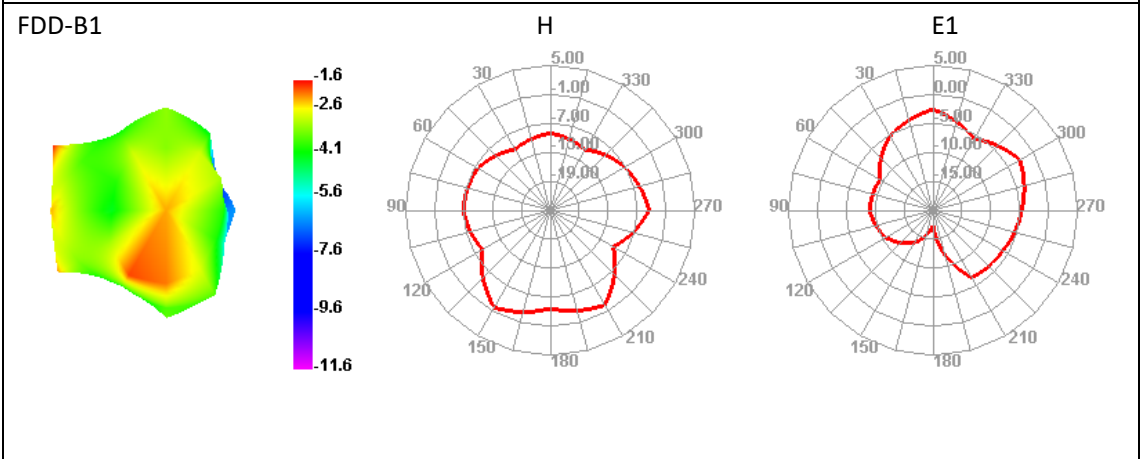
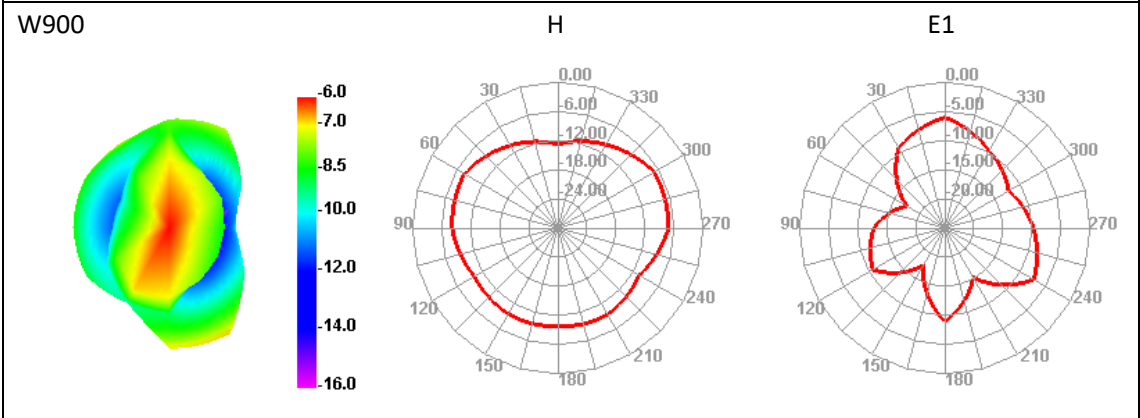
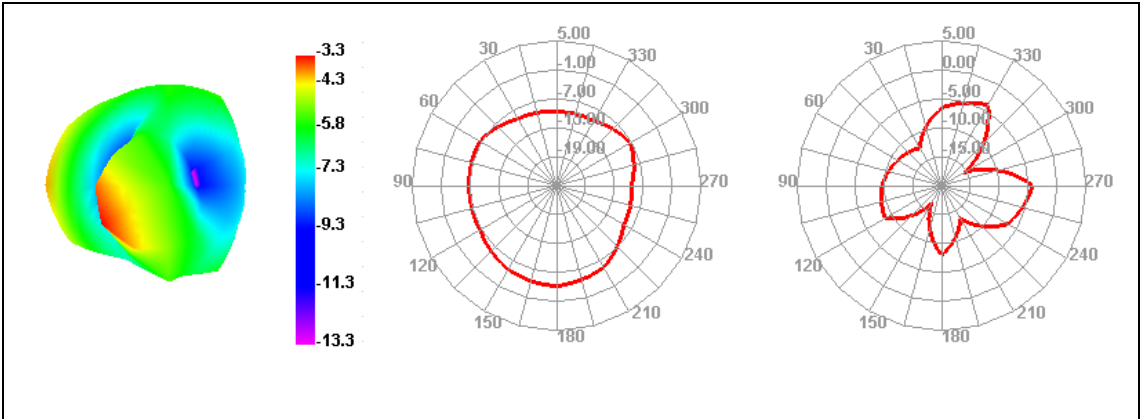
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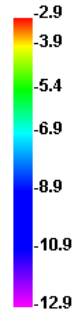
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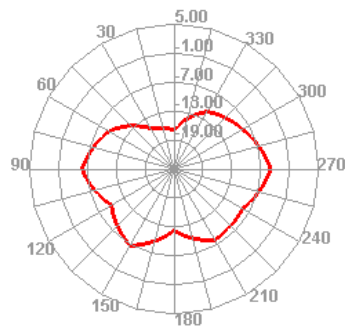
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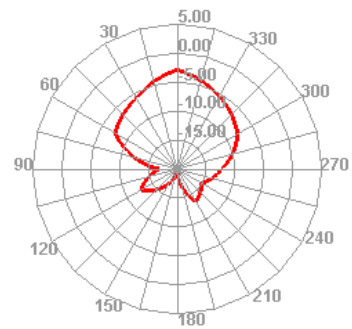
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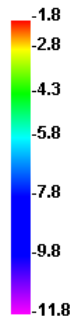
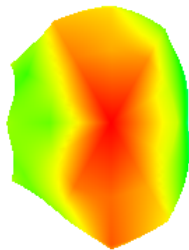
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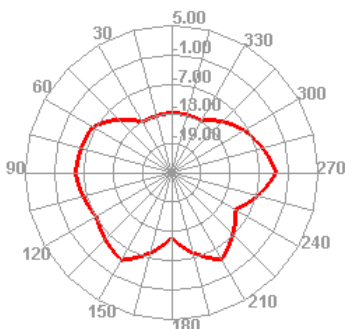
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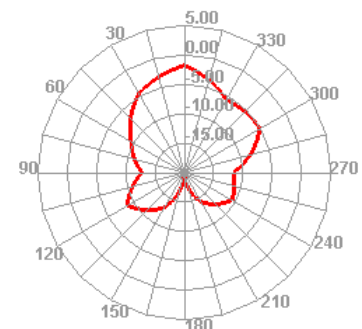
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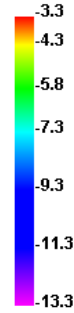
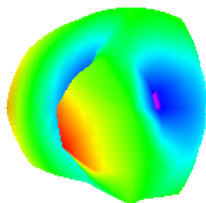
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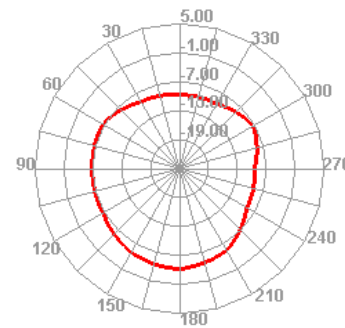
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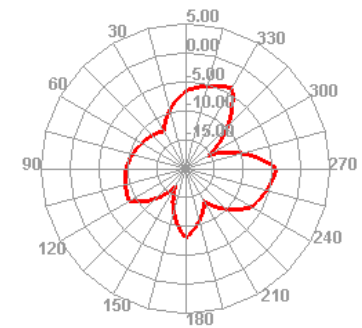
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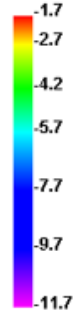
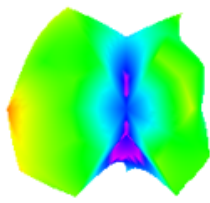
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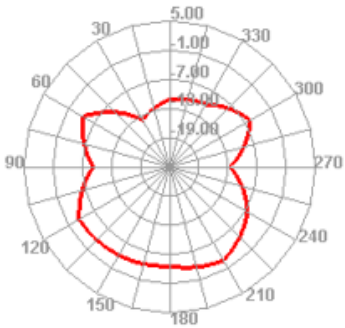
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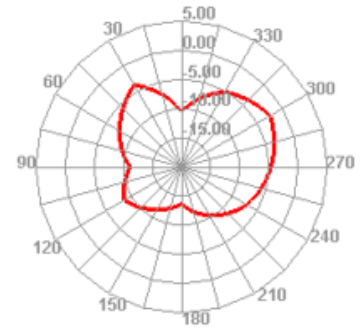
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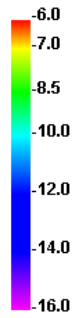
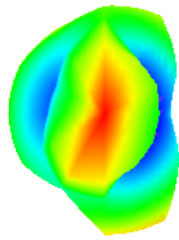
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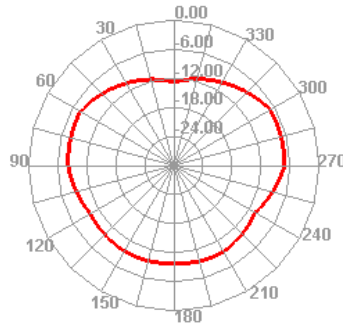
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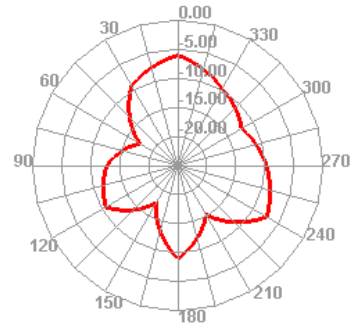
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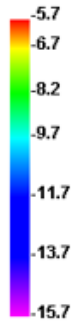
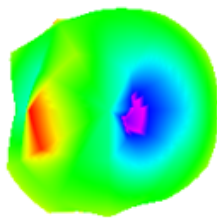
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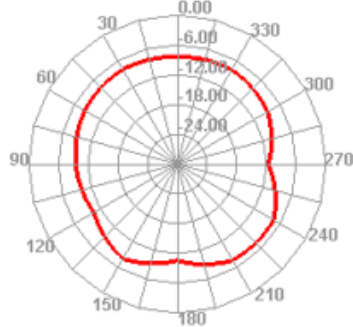
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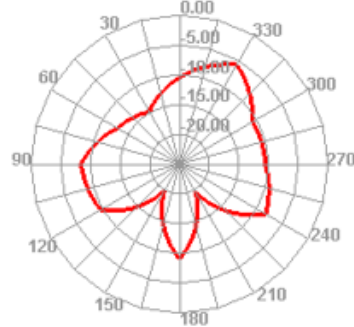
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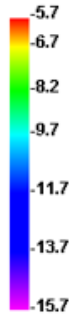
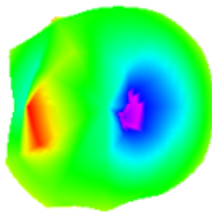
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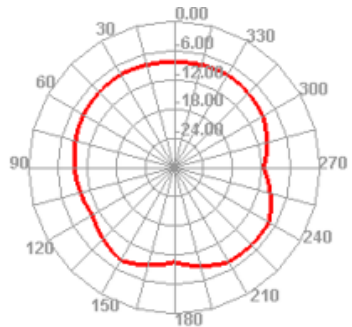
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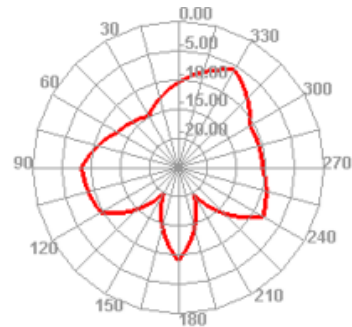
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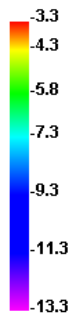
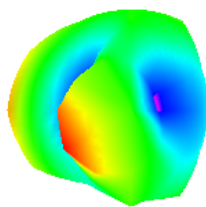
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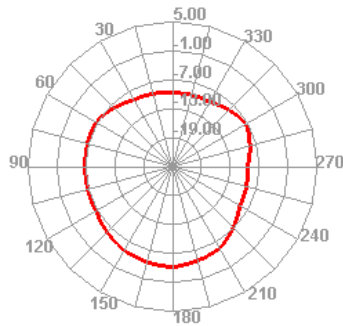
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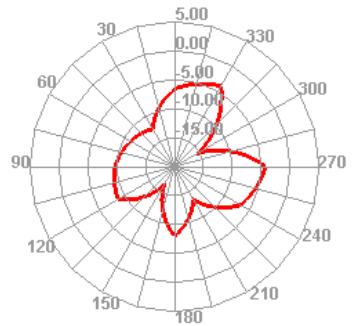
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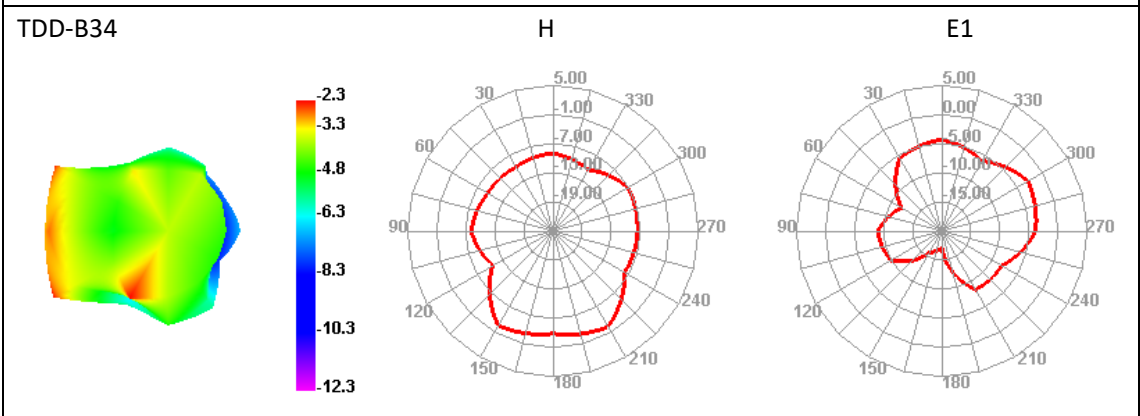
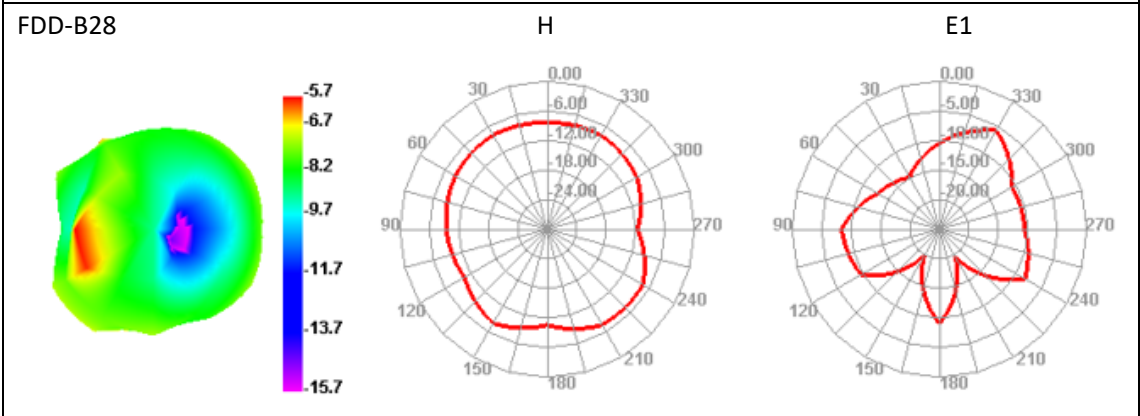
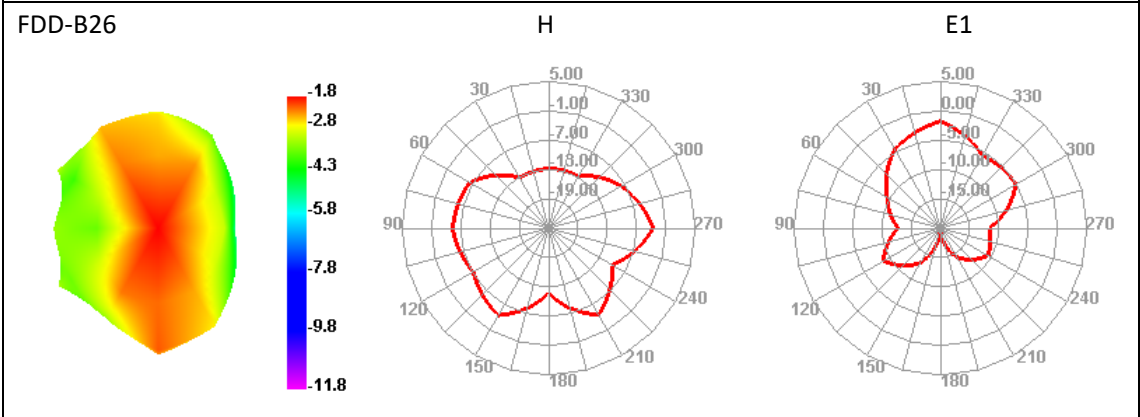
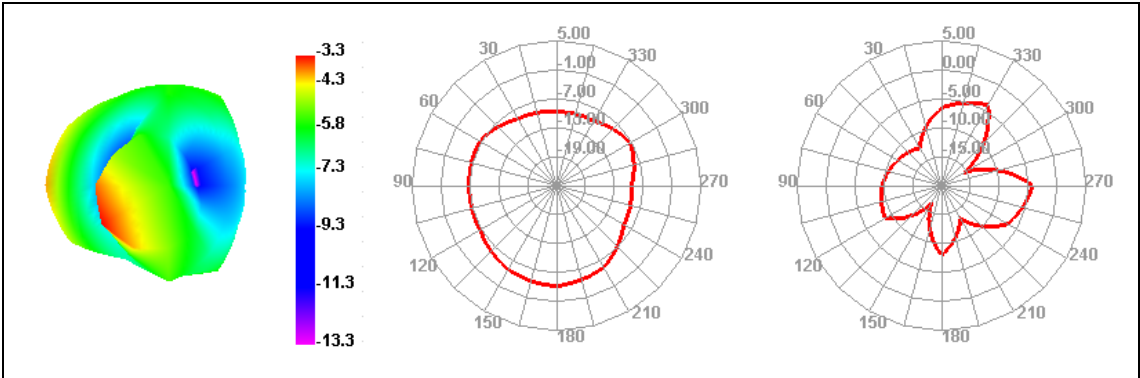
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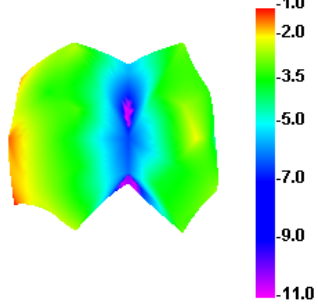
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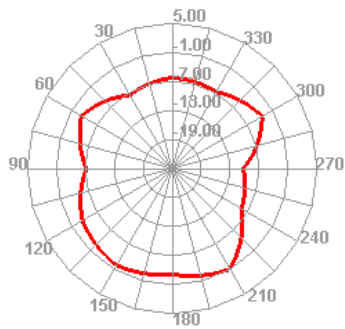
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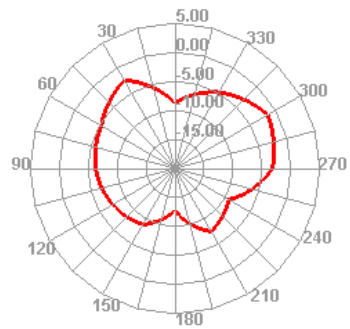
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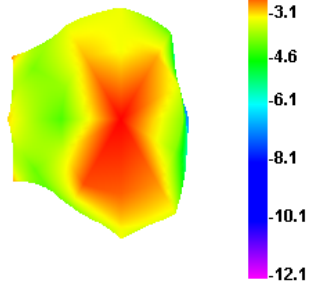
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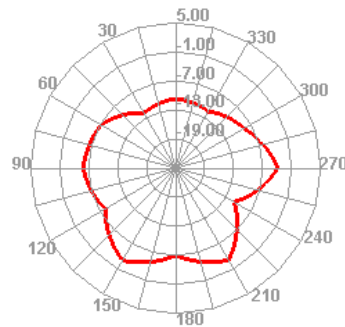
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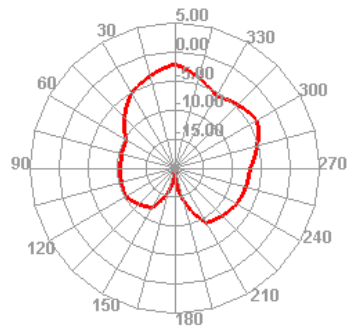
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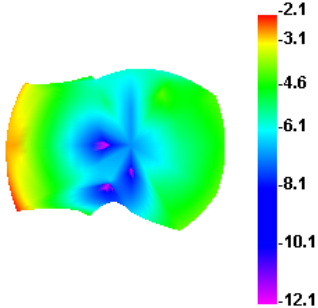
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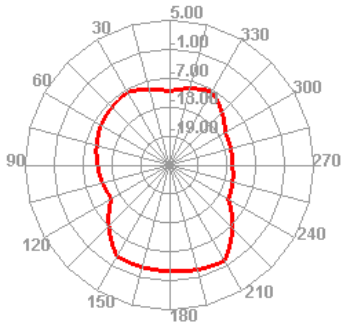
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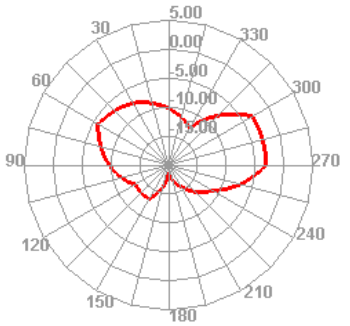
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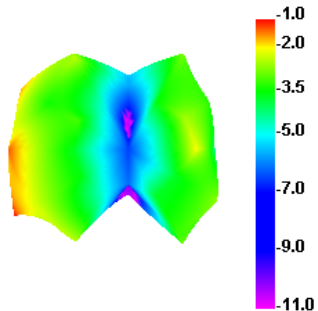
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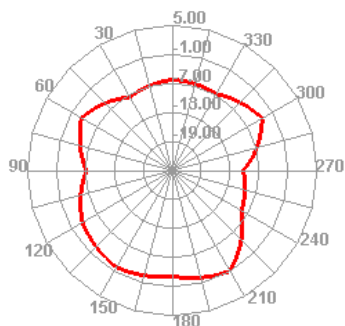
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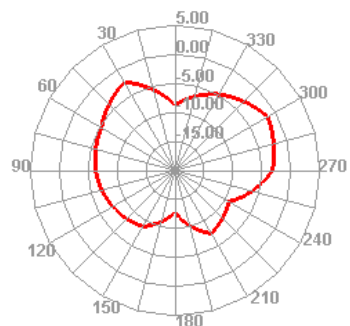
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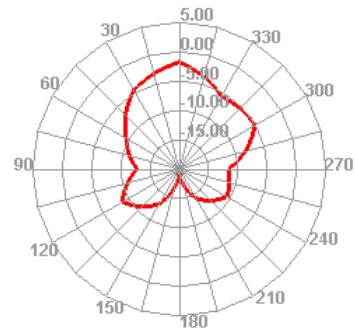
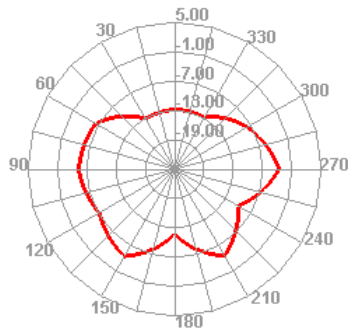
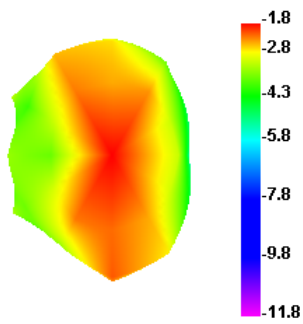
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E1



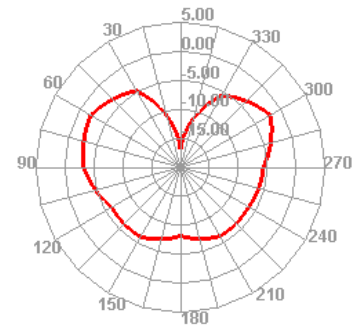
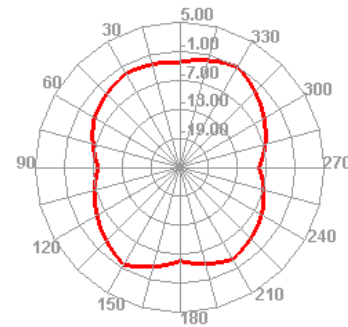
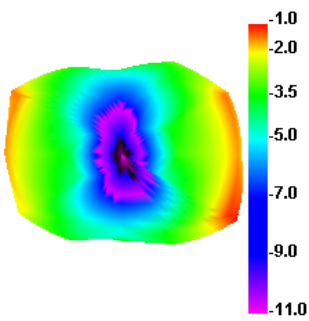
TDD-B66



GPS

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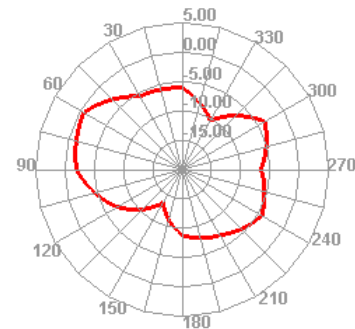
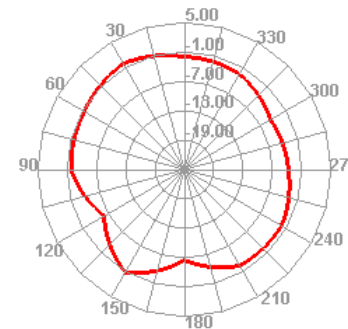
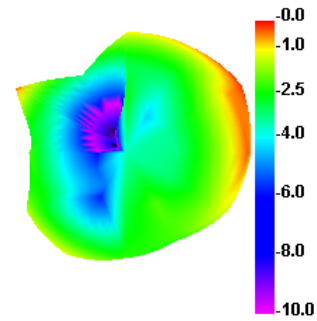
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BT

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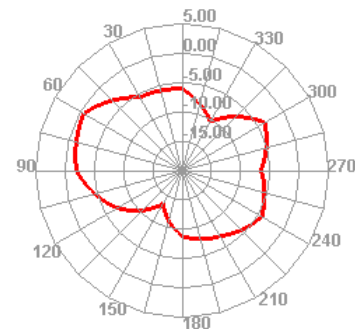
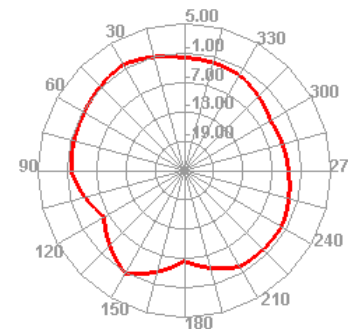
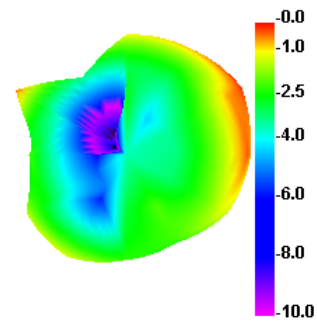
E1

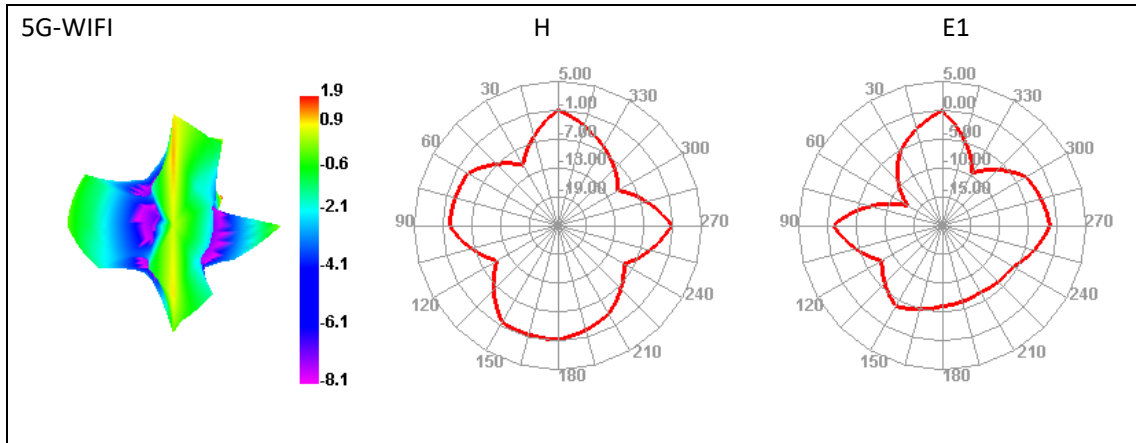


2.4G-WIFI

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E1





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)	26.85	27.90	27.52	25.05	24.47	23.45	23.48	23.00	23.49
TIS(dBm)	-99.36	-99.58	-99.28	-97.95	-97.84	-97.79	-102.36	-102.64	-101.66
BAND	PCS1900 测量数值			WCDMA2100 测量数值			WCDMA1900 测量数值		
CHANNEL	L	M	H	L	M	H	L	M	H
TRP(dBm)	24.51	24.81	25.08	19.09	16.37	15.94	19.54	17.85	19.33
TIS(dBm)	-103.55	-102.71	-102.04	-107.25	-105.91	-106.15	-105.26	-104.76	-104.57
BAND	WCDMA1700 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)	14.69	14.37	15.17	18.36	18.99	17.02	14.62	14.02	13.02
TIS(dBm)	-105.44	-106.29	-105.96	-104.87	-103.44	-103.33	-99.79	-99.46	-99.74
BAND	FDD-B1 测量数值			FDD-B2 测量数值			FDD-B3 测量数值		
CHANNEL	L	M	H	L	M	H	L	M	H
TRP(dBm)	17.38	16.67	16.27	18.32	18.19	17.66	15.04	15.74	16.68
TIS(dBm)	-94.69	-93.70	-93.18	-91.69	-91.84	-91.70	-92.36	-92.10	-91.89
BAND	FDD-B5 测量数值			FDD-B7 测量数值			FDD-B8 测量数值		
CHANNEL	L	M	H	L	M	H	L	M	H

TRP(dBm)	17.24	17.09	16.72	15.00	15.74	16.48	14.76	14.10	13.28
TIS(dBm)	-92.74	-92.36	-91.56	-91.65	-90.81	-90.74	-86.24	-85.91	-85.74
BAND	FDD-B12 测量数值			FDD-B17 测量数值			FDD-B20 测量数值		
CHANNEL	L	M	H	L	M	H	L	M	H
TRP(dBm)	12.21	12.08	13.04	13.11	13.67	14.04	17.06	16.59	16.66
TIS(dBm)	-89.77	-89.89	-89.84	-88.25	-87.16	-87.38	-92.36	-92.03	-91.61
BAND	FDD-B25 测量数值			FDD-B26 测量数值			FDD-B28 测量数值		
CHANNEL	L	M	H	L	M	H	L	M	H
TRP(dBm)	17.85	17.28	16.57	17.86	17.29	16.59	13.29	14.72	15.51
TIS(dBm)	-93.81	-93.12	-93.05	-93.85	-93.17	-93.09	-92.88	-92.64	-92.58
BAND	TDD-B34 测量数值			TDD-B38 测量数值			TDD-B39 测量数值		
CHANNEL	L	M	H	L	M	H	L	M	H
TRP(dBm)	14.63	14.61	14.58	15.83	15.92	15.71	18.34	18.08	18.09
TIS(dBm)	-92.30	-91.49	-91.17	-88.24	-87.96	-87.74	-89.36	-89.17	-88.94
BAND	TDD-B40 测量数值			TDD-B41 测量数值			TDD-B66 测量数值		
CHANNEL	L	M	H	L	M	H	L	M	H
TRP(dBm)	15.77	15.04	14.79	16.33	16.77	15.92	18.32	18.19	17.66
TIS(dBm)	-86.69	-87.10	-86.71	-87.22	-86.93	-86.89	-91.69	-91.84	-91.70

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	60s	8 颗以上	47
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