

# *Antenna Test Report*

*SHENZHEN KURUIJIE*

*Customer: 忆博通*  
*Project: C67B2*

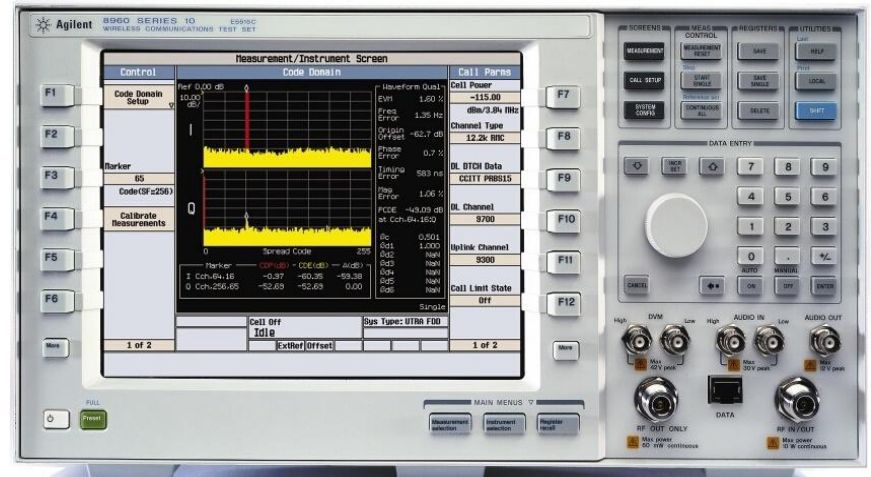
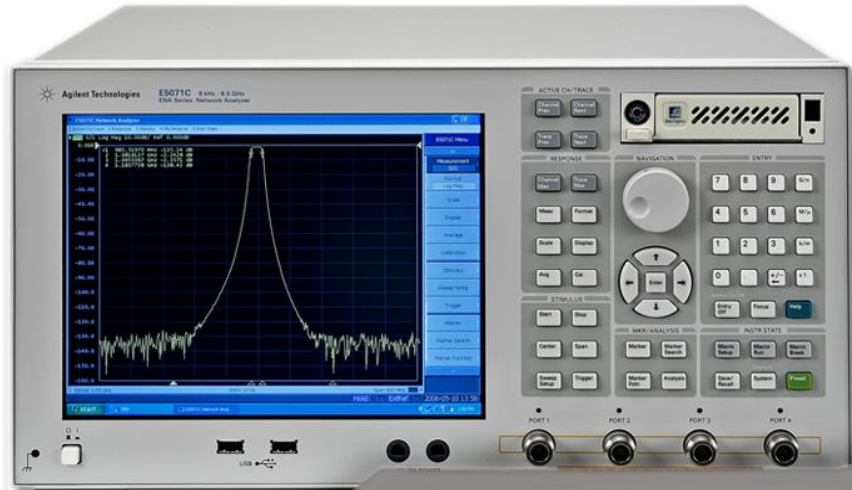
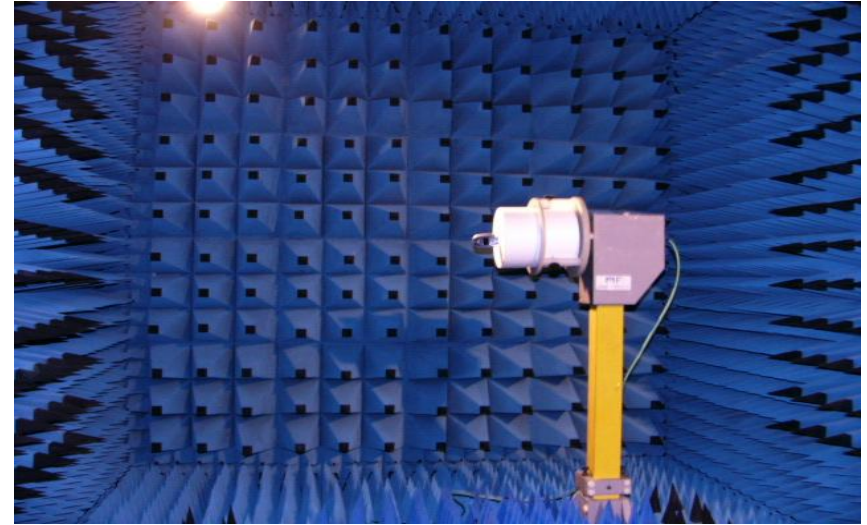
*RF Engineer: 安增侠*  
*Testing Date: 2024.08.26*

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- 2. Test Data**

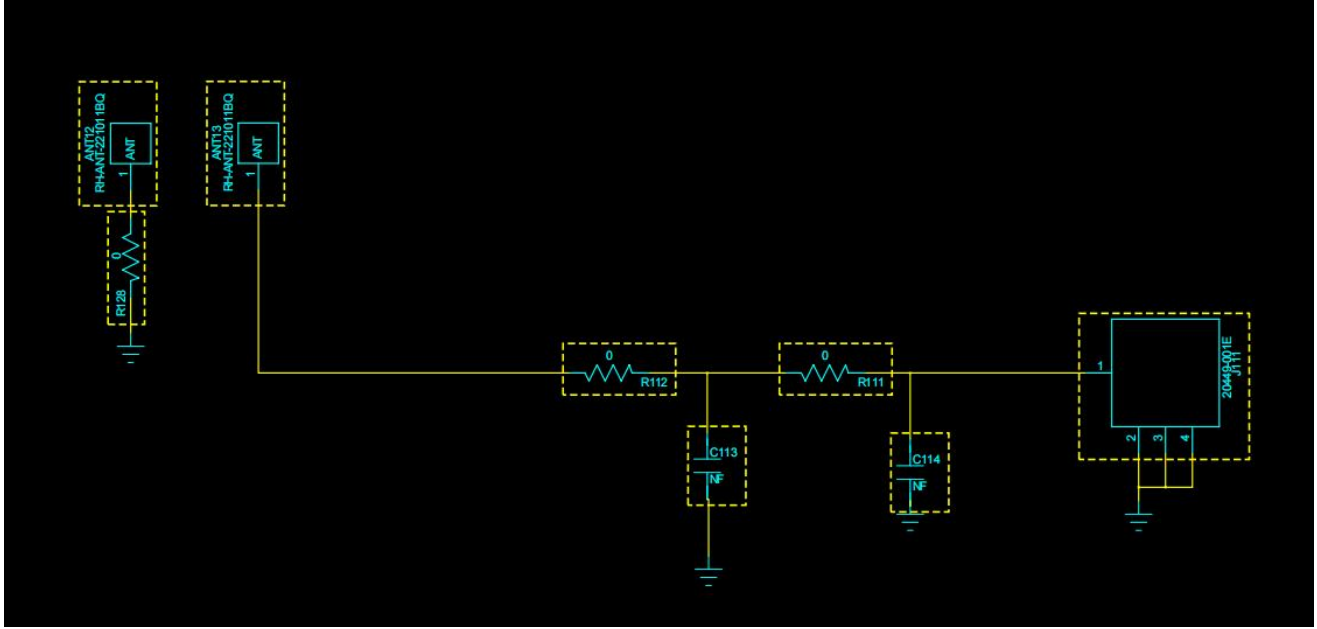
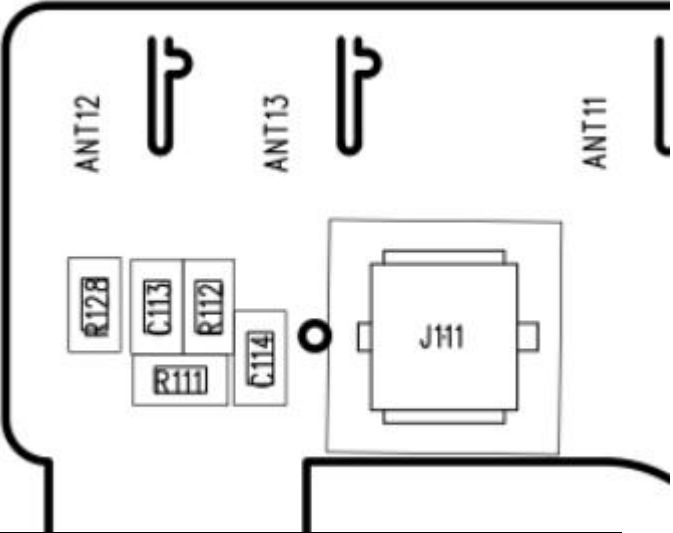
# 1. The Equipment of Active Test

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

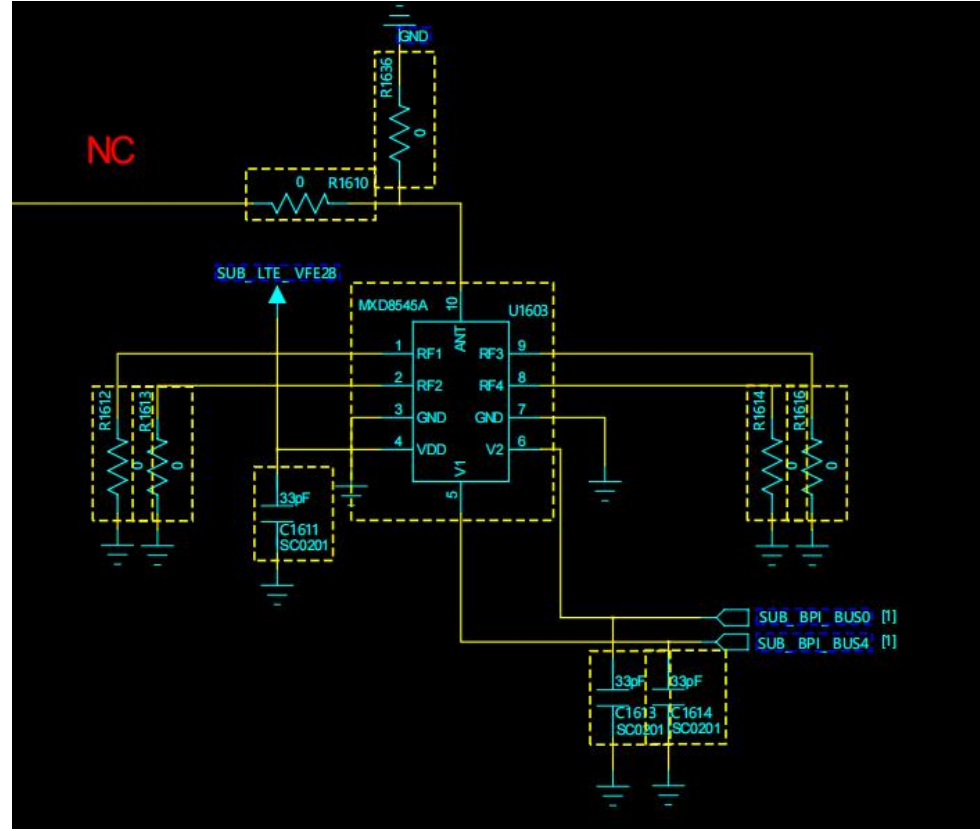
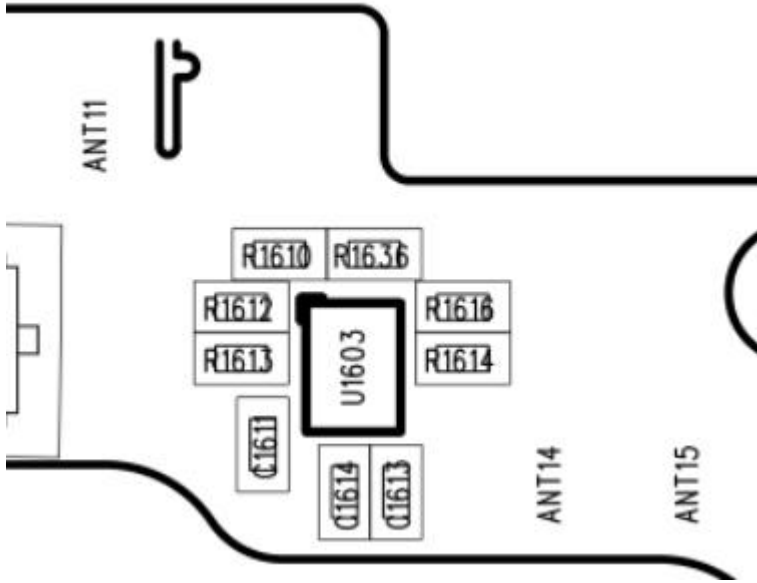


# 2. Matching Circuits 主天线

Element	Value
R128/R112	0Ω
C113	15nH
R111	1.5nH
C114	NC



# 3. Matching Circuits 开关逻辑

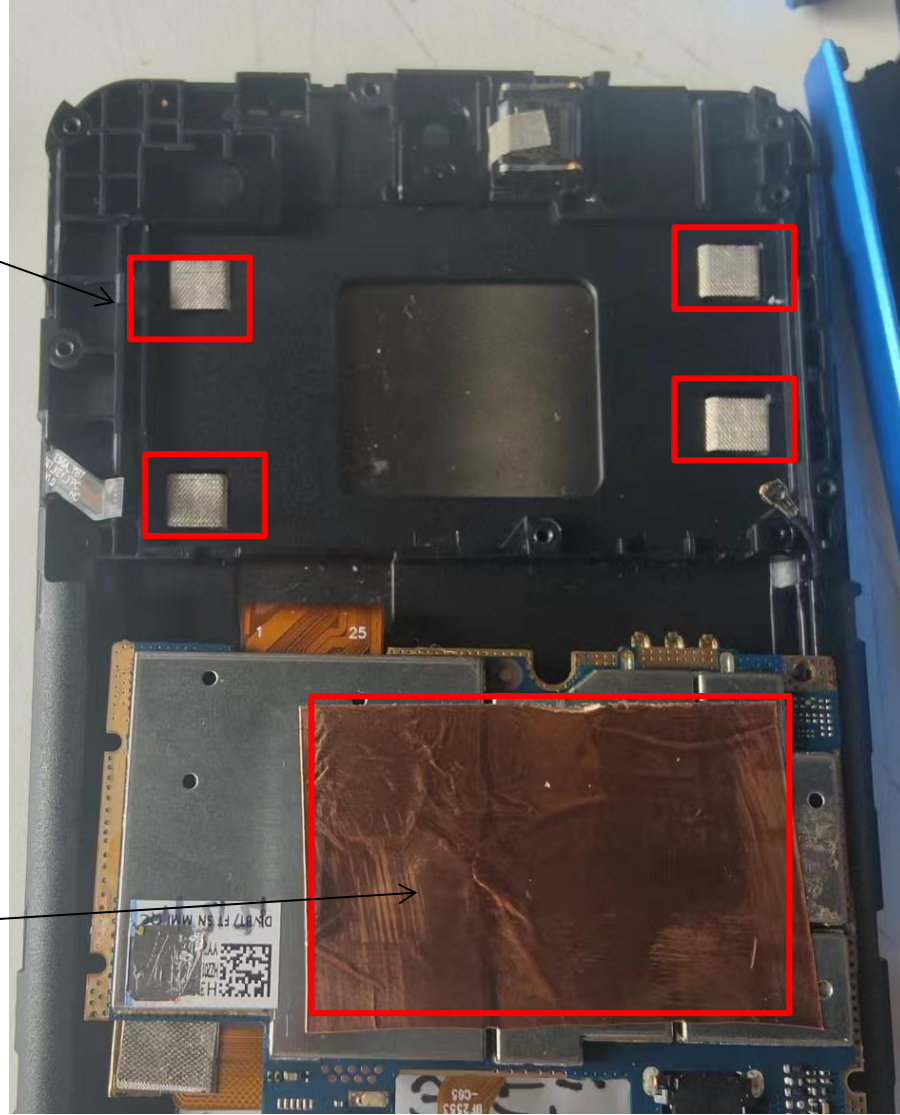


开关路径	匹配值	2G频率	3G频率	4G频率
RF1-R1612	8.2pF	900	W8	B8
RF2-R1613	0Ω	850/1800/1900	W2/4/5	B2/3/4/5/7/66/38/41
RF3-R1616	33nH			B71
RF4-R1614	12nH			B12/17/28AB

开关匹配逻辑

# 4. Environmental Disposal

主板接地位置



屏蔽罩开口需要做屏蔽



USB加接地海绵



马达接地

喇叭接地

小板接地泡棉

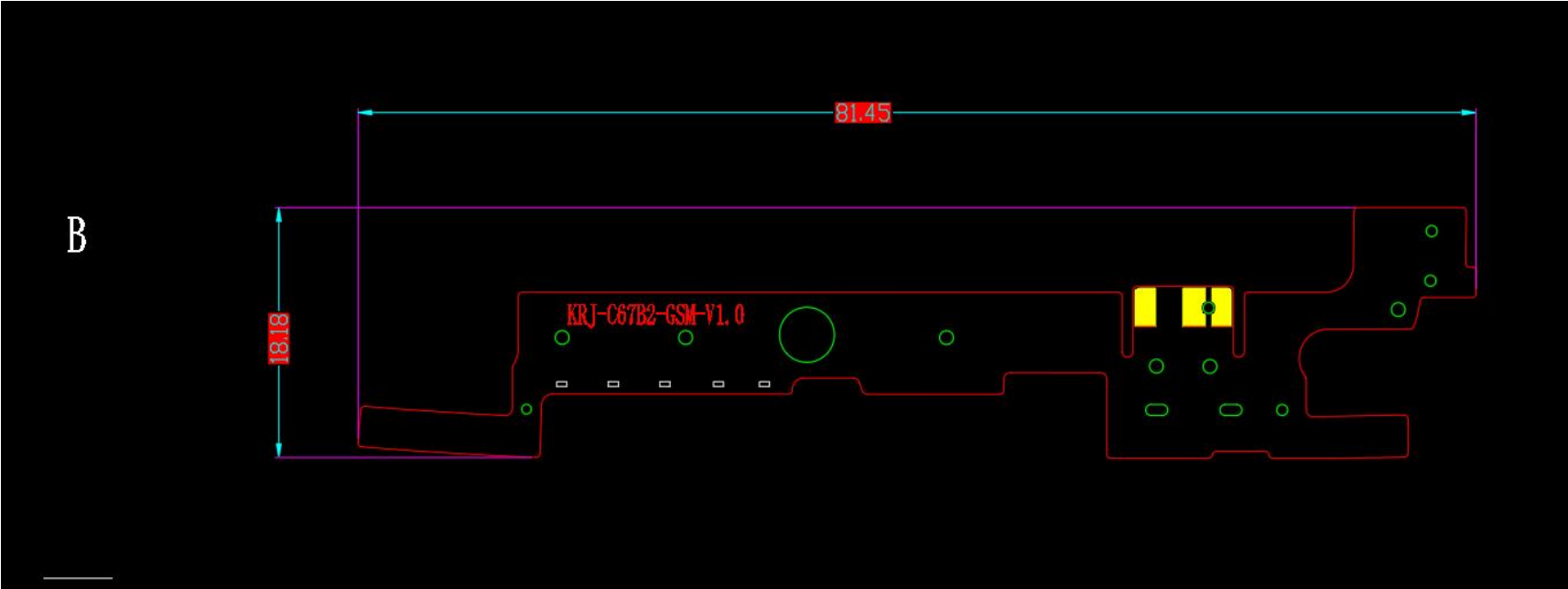
散热膜不能压到天线



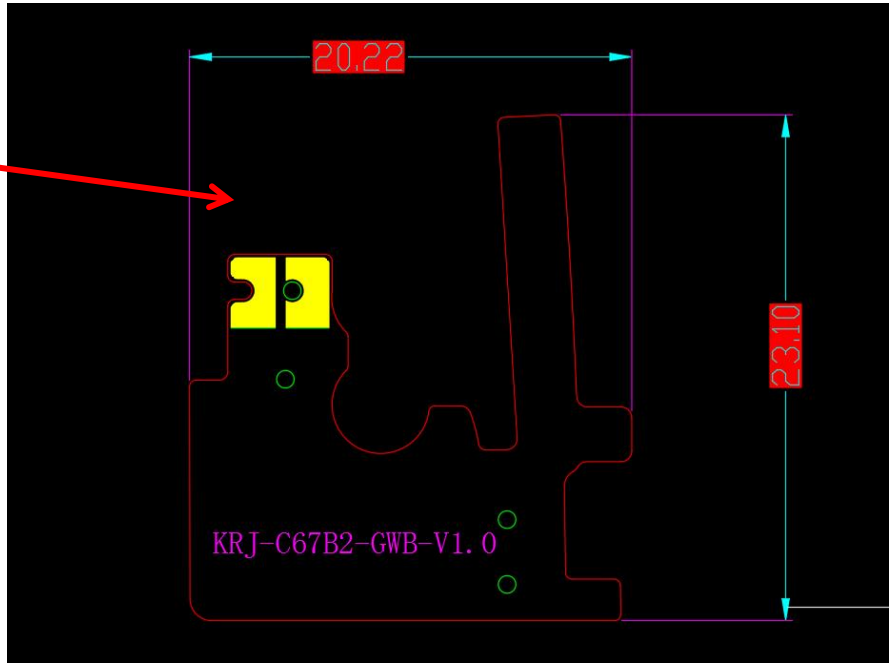


# 5.天线尺寸图

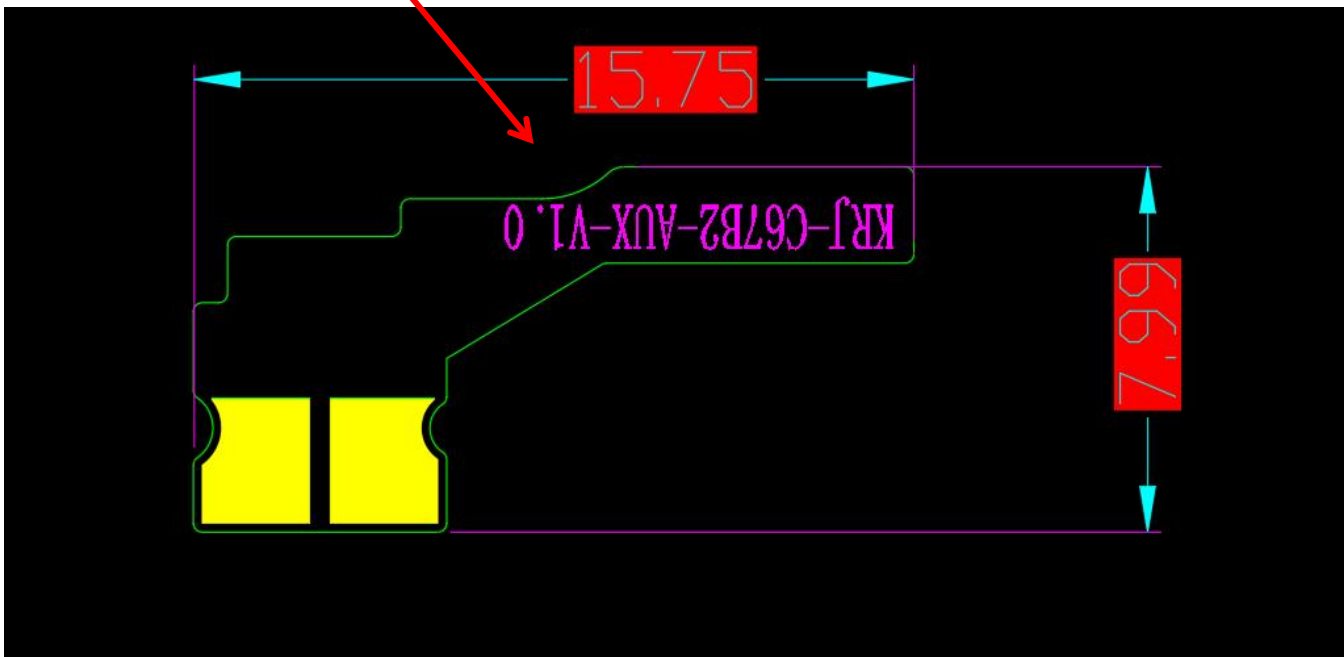
## 主天线



# GPS/WIFI/BT天线



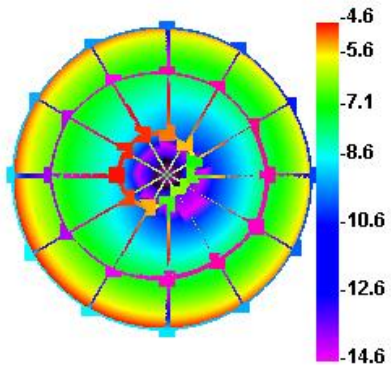
# 分集天线



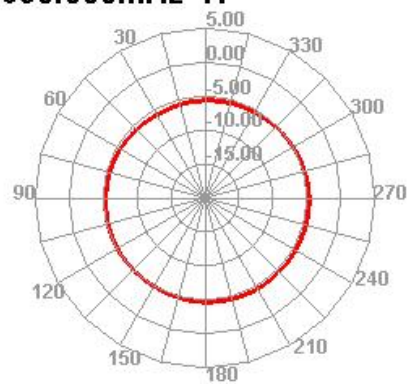
## 6.主天线增益（IPA天线）

主天线	频率段	增益值（dBi）
B28/12/17	699-746MHZ	-3.0
GSM850 WCDMA-W5 LTE-B5	790-880MHZ	-1.0
GSM900 WCDMA-W8 LTE-B8	880-960MHZ	-1.4
GSM1800/1900 WCDMA-W2/4 LTE-B2/3/4/66	1710-2200MHZ	1.1
B71	634-698MHZ	-3.5
B7/38/41	2500-2690MHZ	0.8

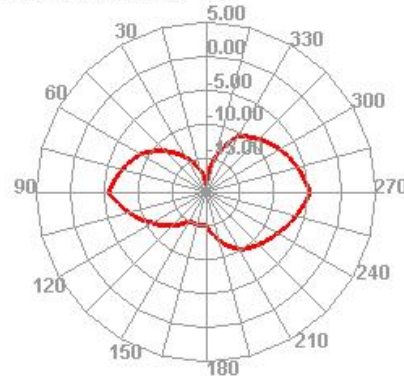
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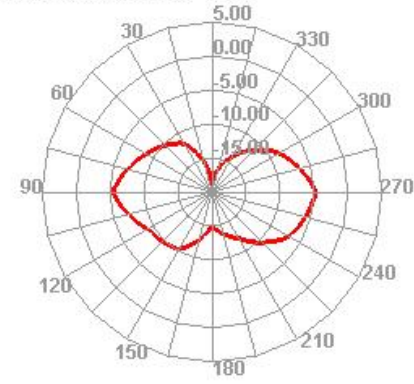
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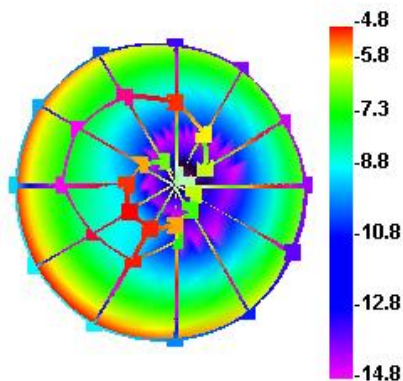
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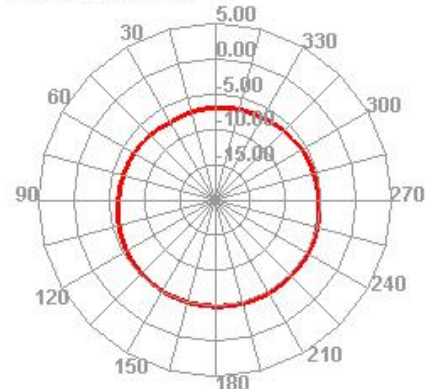
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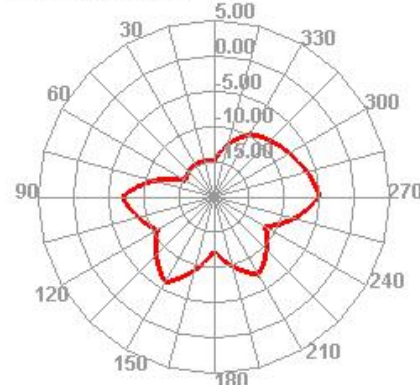
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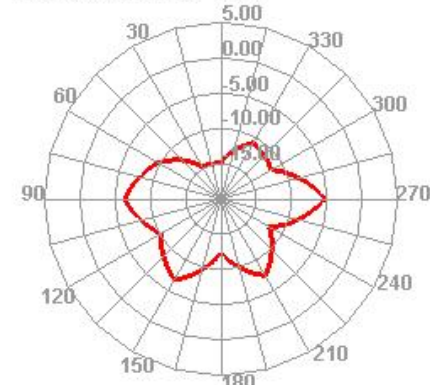
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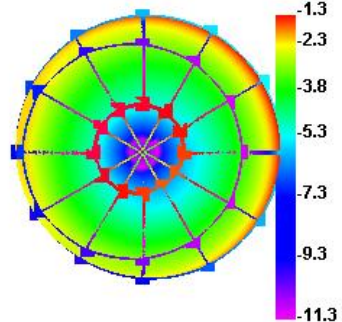
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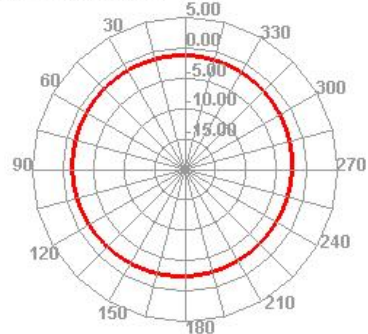
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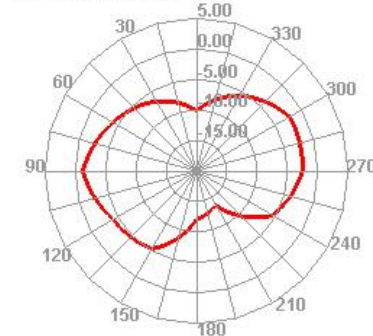
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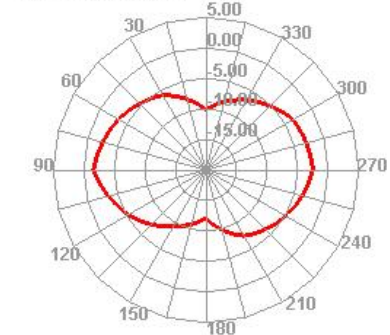
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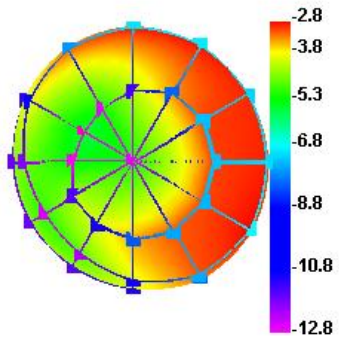
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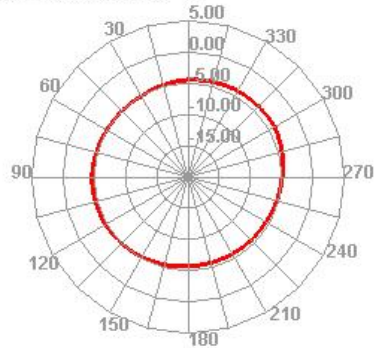
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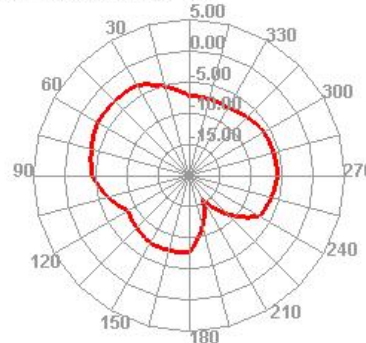
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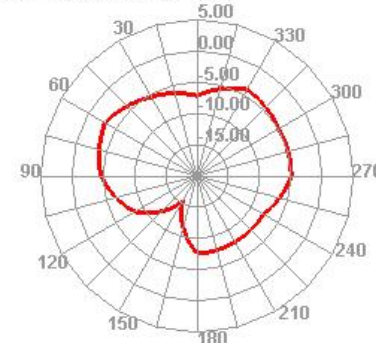
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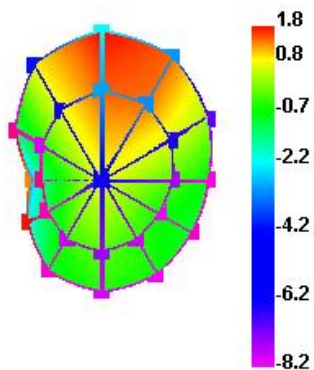
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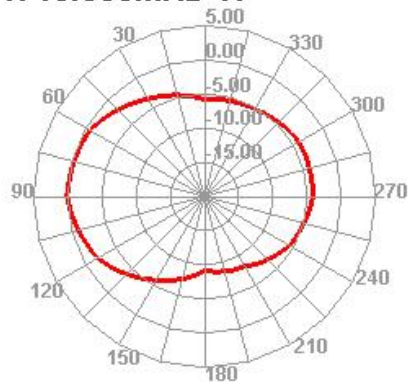
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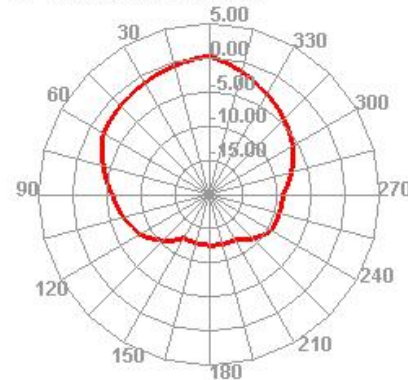
1710.000MHz



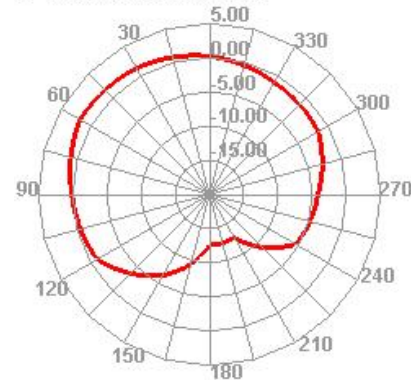
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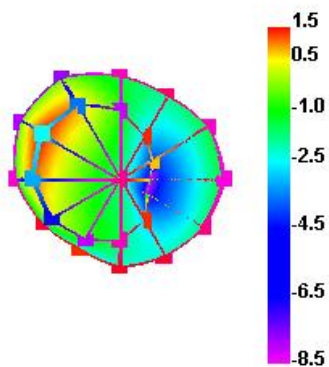
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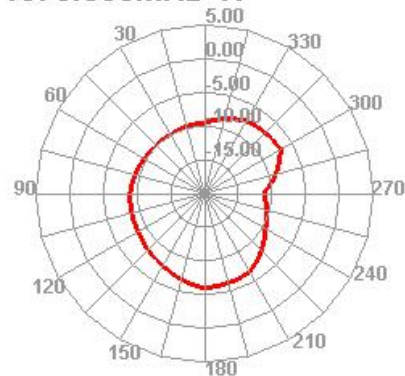
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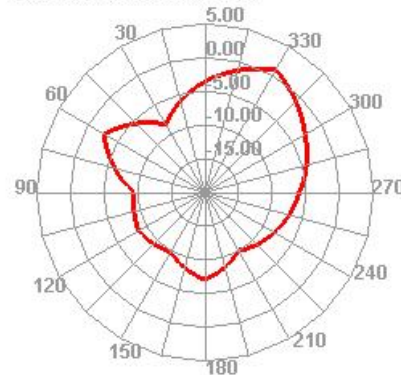
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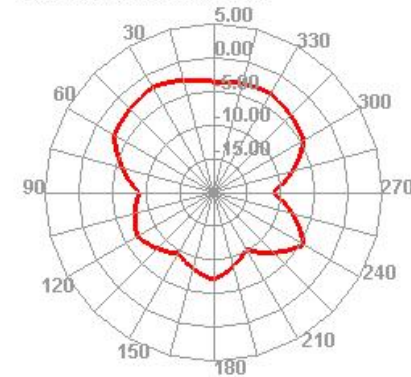
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1870.000MHz E1

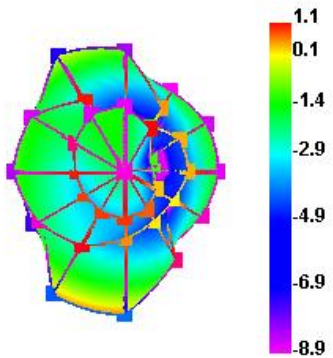


1870.000MHz E2

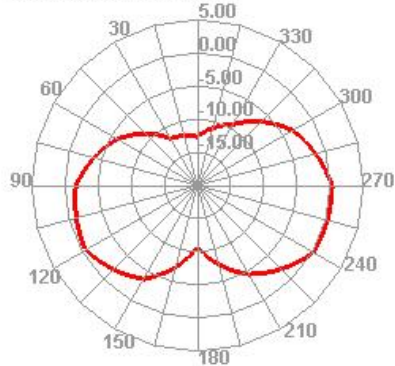




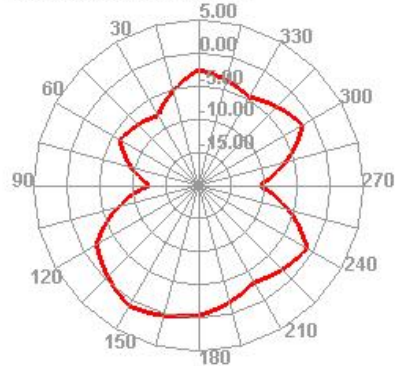
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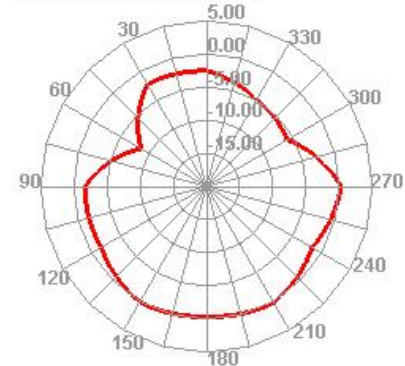
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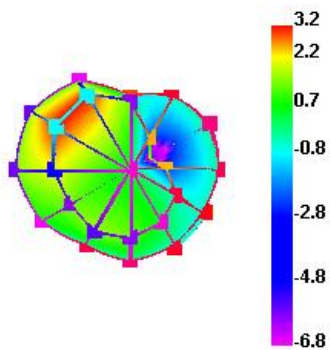
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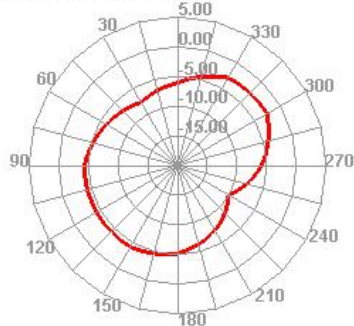
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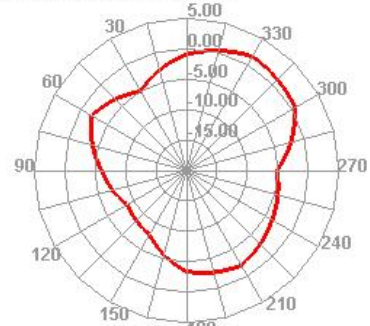
2040.000MHz



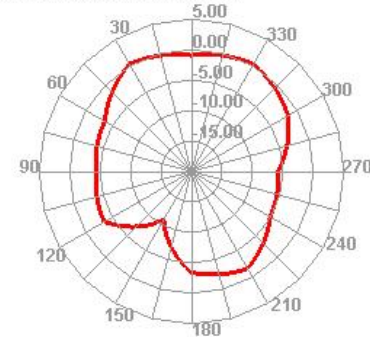
2040.000MHz H



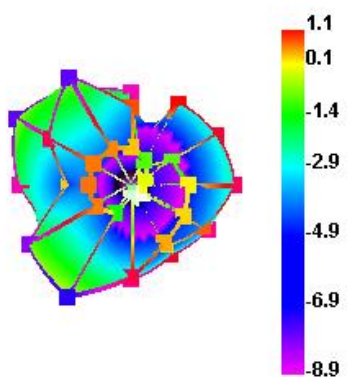
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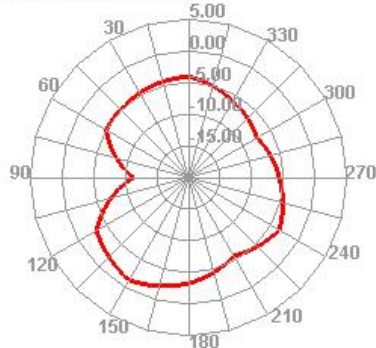
2040.000MHz E2



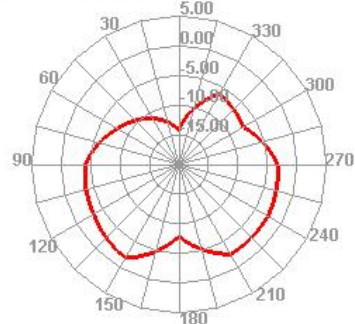
2550.000MHz



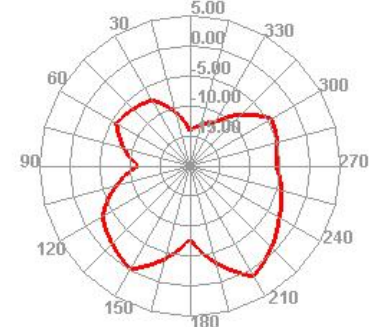
2550.000MHz H



2550.000MHz E1



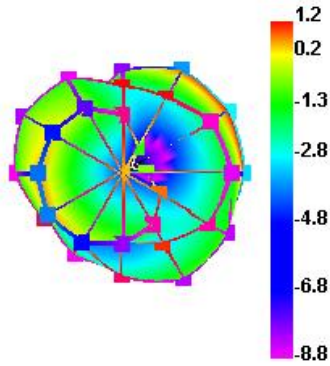
2550.000MHz E2



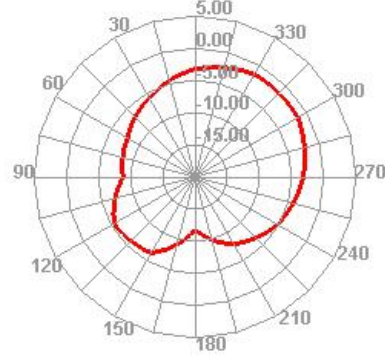
# GPS/WIFI/BT天线增益（IPA天线）

GPS/WIFI天线	频率段	增益值（dBi）
wifi2.4G/BT	2400-2500MHZ	0.8
wifi5G	5150-5850MHZ	0.5
GPS	1575.42MHZ	0.8

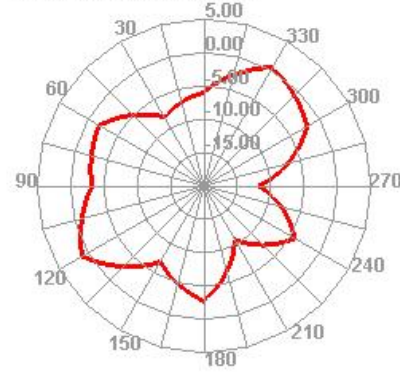
1575.000MHz



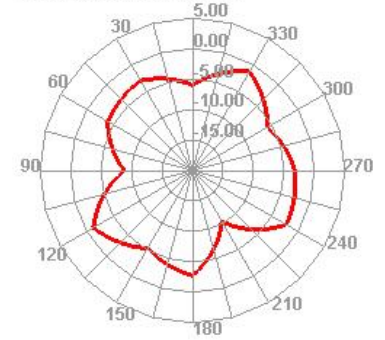
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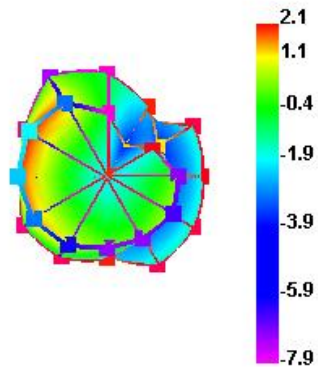
1575.000MHz E1



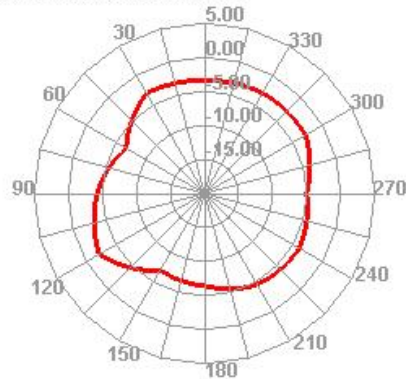
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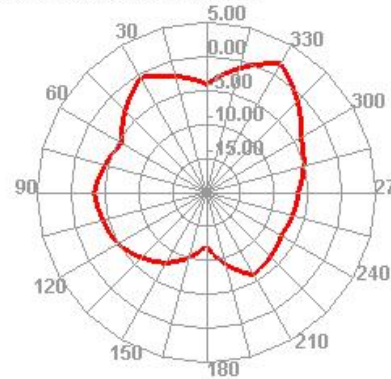
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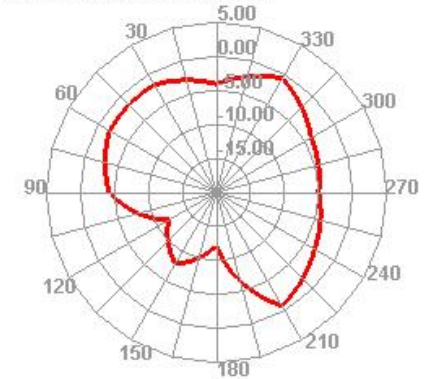
2450.000MHz H



2450.000MHz E1

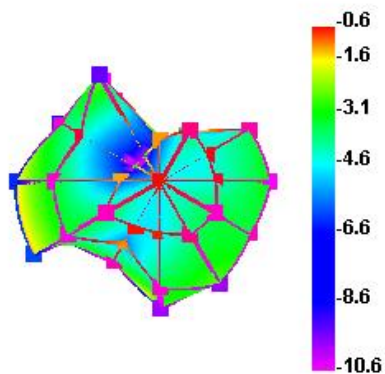


2450.000MHz E2

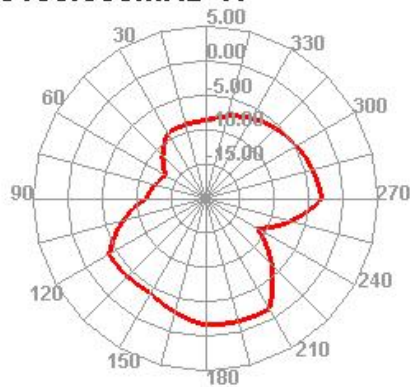




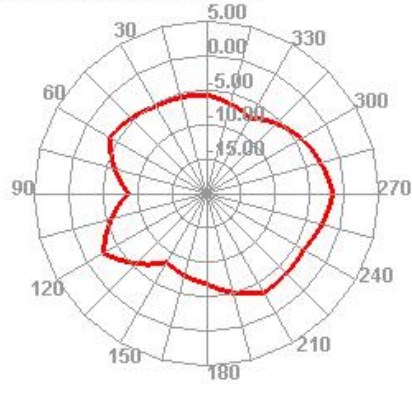
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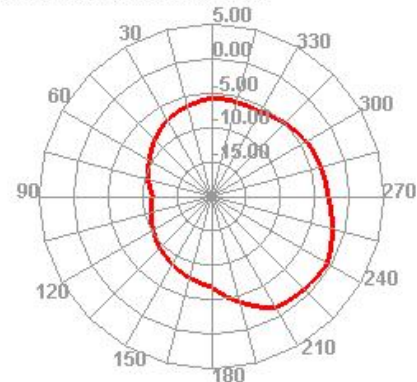
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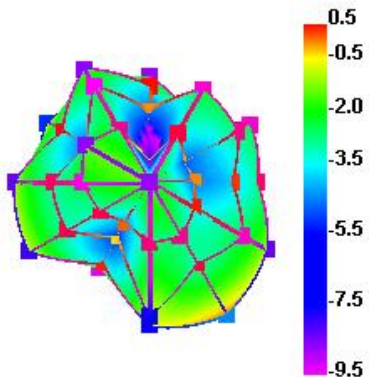
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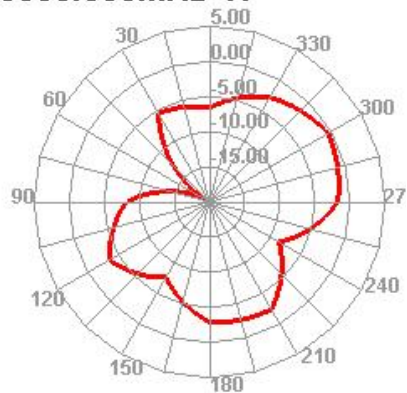
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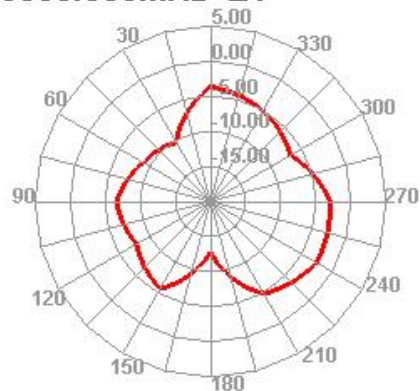
5850.000MHz



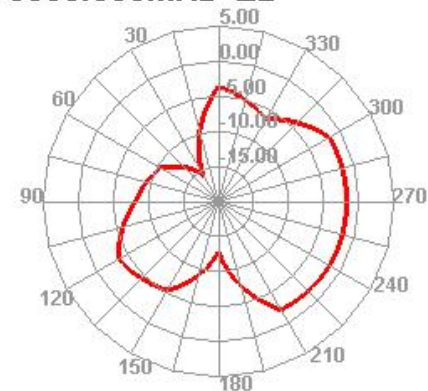
5850.000MHz H



5850.000MHz E1



5850.000MHz E2



# 7. 主板传导 (不加线损)

Band	功率		Band	功率	
FDD_B2	22.0		FDD_B28	22.5	
FDD_B3	22.0		FDD_B66	22.0	
FDD_B4	22.0		FDD_B71	22.3	
FDD_B5	22.5		FDD_B38	22.0	
FDD_B7	22.2		FDD_B41	22.0	
FDD_B8	22.5				
FDD_B12	22.4				
FDD_B17	22.4				



# 8. Test Data 试产机子

Band	TRP	TIS	Band	TRP	TIS	Band	TRP	TIS
GSM850	25.1		FDD_B2	17.1		FDD_B28	18.0	
	26.8	-102.0		17.3	-90.6		18.8	-90.2
GSM900	24.7		FDD_B3	16.8		FDD_B66	16.8	
	25.0	-96.0		17.1	-90.0		17.1	-89.8
DCS1800	23.0		FDD_B4	16.8		FDD_B71	17.0	
	23.0	-102.6		17.0	-91.0		17.5	-88.7
PCS1900	24.1		FDD_B5	19.0		FDD_B38	17.8	
	23.5	-103.0		18.5	-91.1		18.0	-90.1
WCDMA_B2	17.5		FDD_B7	14.3		FDD_B41	17.0	
	17.2	-104.8		18.3	-89.8		17.4	-90.5
WCDMA_B4	16.7		FDD_B8	16.5				
	17.0	-103.6		16.2	-85.8			
WCDMA_B5	18.9		FDD_B12	18.3				
	18.2	-104.8		17.8	-91.3			
WCDMA_B8	15.7		FDD_B17	18.0				
	17.1	-97.0		17.6	-91.4			

# 9. GPS / WIFI / BT

## GPS实测报告

位置	测试结果
我司窗台	冷启动58秒定位, 最大CN值42

	Wifi 2.4G b/11M		
	1	7	13
<b>TRP</b>	14.1	14.8	14.0
<b>TIS</b>	-81.1	-81.3	-81.0

	Wifi 5.8G a/54M		
	36		165
<b>TRP</b>	12.0		13.1
<b>TIS</b>	-71.1		-71.6

