

Antenna Test Report

SHENZHEN KURUIJIE

Customer: 图高
Project: X2

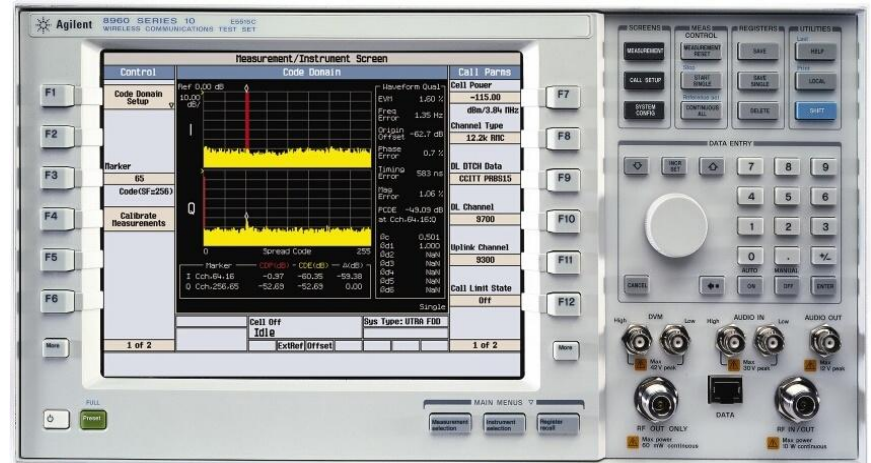
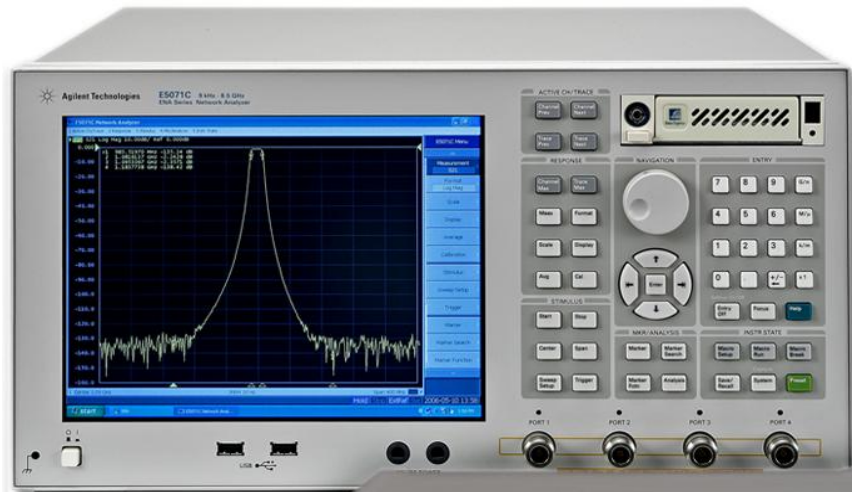
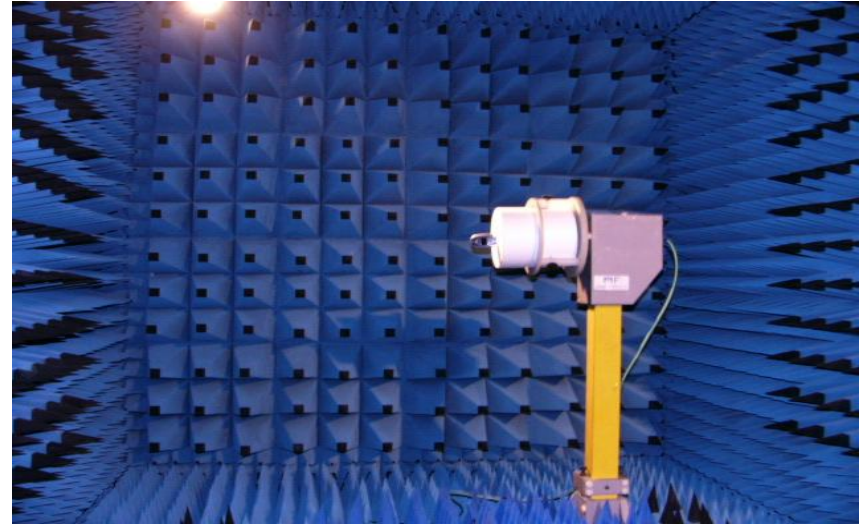
RF Engineer: 安增侠
Testing Date: 2024.2.20

Index:

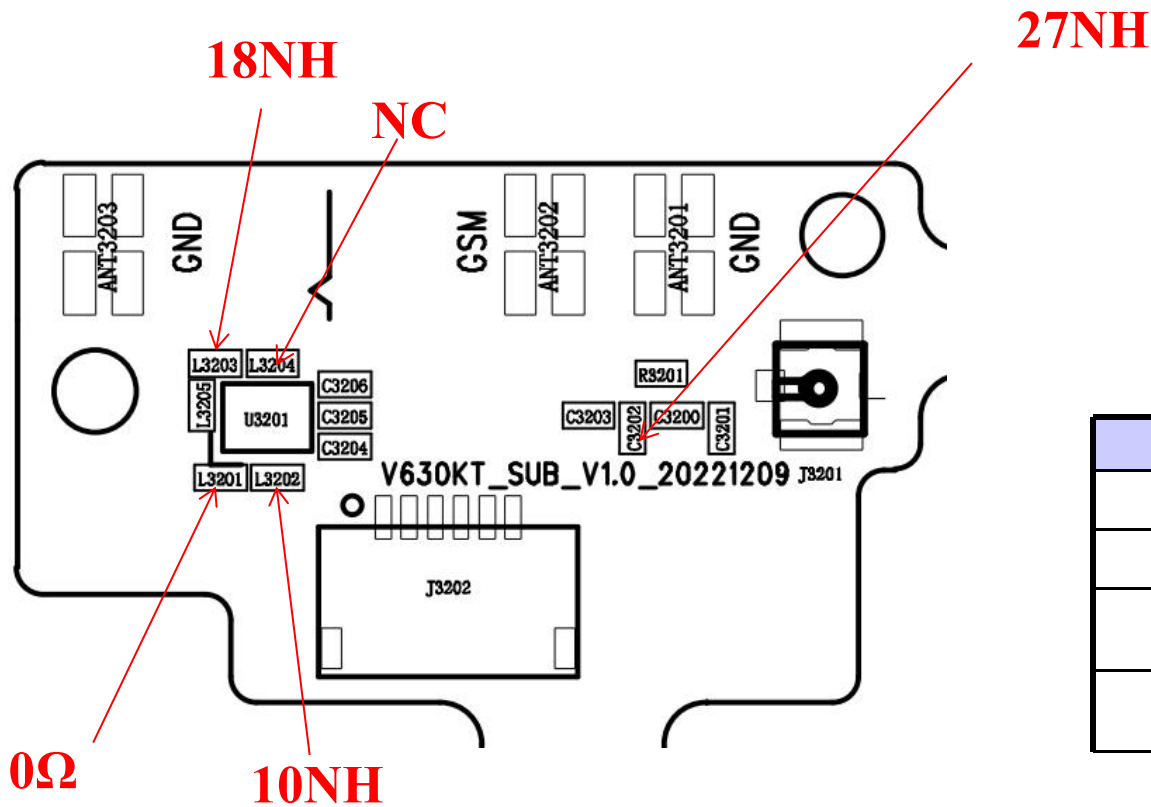
- 1. Testing Item & Equipments**
- 2. Matching Circuits**
- 3. Antenna Conditions**
- 4. Test Data**
- 5. GPS / WIFI / BT Test**
- 6. GPS / WIFI / BT PASSIVE DATA**

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--主天线匹配



Element	Value
C3202	27NH

开关匹配逻辑	开关路径	匹配值	2G频率	3G频率	4G频率
	RF1=L3201	0Ω	850/900/1800/1900	W2/4/5	B2/4/5/7/66
	RF2=L3202	10NH			B12/17/28AB
	RF3=L3203	18NH			B71
	RF4=L3204	NC			B41

2. Matching Circuits-三合一天线匹配



此处改为NC

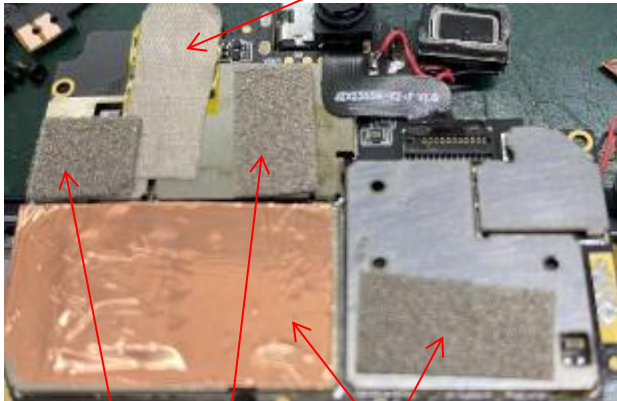
串 0Ω

2. Matching Circuits-分集天线匹配

分集天线匹配无改动

3. Antenna Conditions

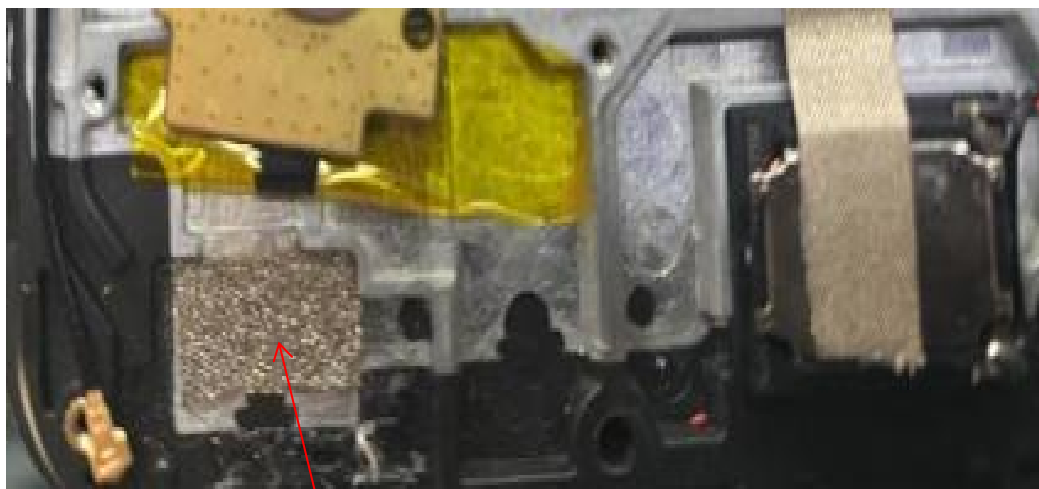
耳机座接地处理
(导电布需完全盖住耳机座)



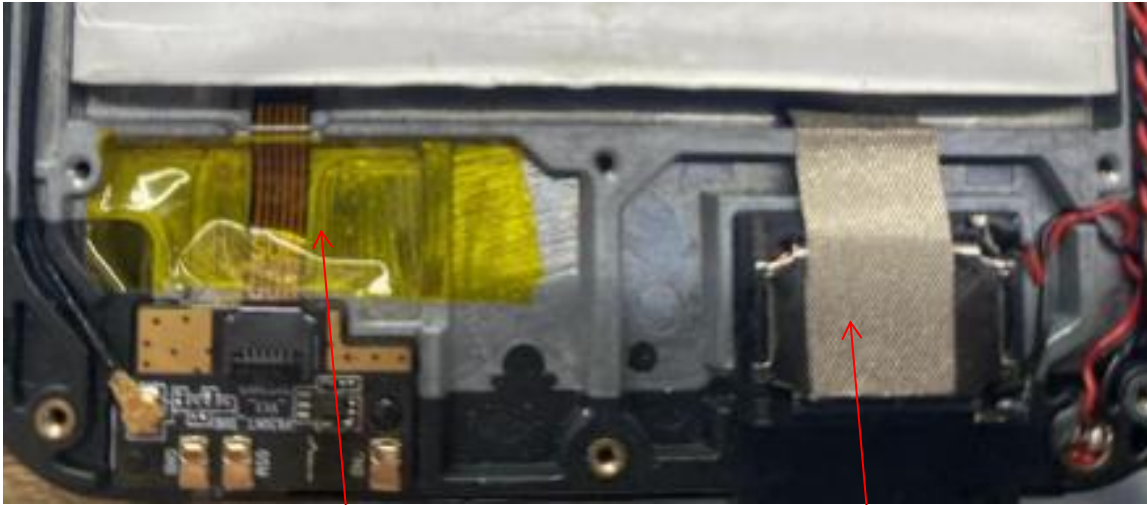
屏蔽盖必须封孔，不然对低频灵敏度影响有5DB左右干扰！！

主板使用导电泡棉接地

屏蔽盖使用铜箔封孔处理



小板使用导电泡棉接地处理



小板排线使用绝缘胶纸贴住，
防止翘起来影响中频灵敏度

喇叭需用导电布接地

4. Test Data

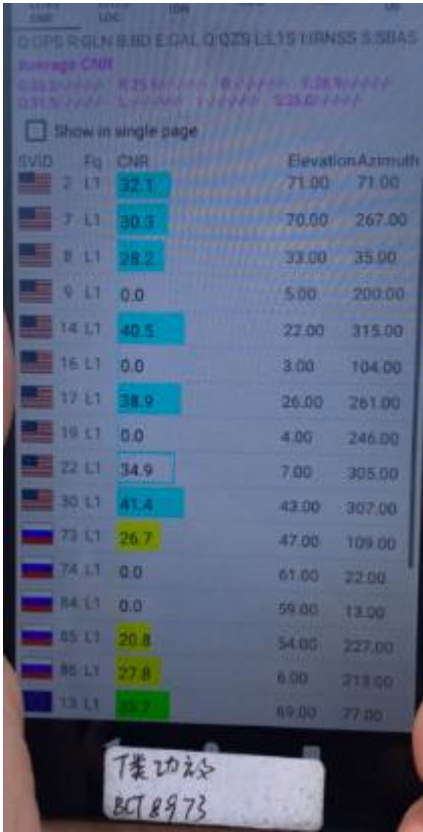
2G/3G	TRP	TIS（灭）	TIS（亮）	4G	TRP	TIS（灭）	TIS（亮）	4G	TRP	TIS（灭）	TIS（亮）
GSM850	26.2			LTEB2	17.15			LTEB66	18.09		
	26.74	-102.38	-101.68		17.29	-91.26	-90.98		18.18	-91.17	-90.53
GSM900	25.33			LTEB4	18.32			LTEB71	16.15		
	23.22	-97.4	-96.22		18.54	-91.74	-90.85		17.32	-89.59	-88.05
DCS1800	24.6			LTEB5	17.23			LTEB41 （10M）	20.81		
	25.15	-103.52	-103.1		18.34	-91.14	-90.59		21.33	-90.21	-89.17
PCS1900	25.2			LTEB7	17.93						
	25.1	-102.34	-101.68		17.95	-90.45	-89.72				
WCDMAB2	17.22			LTEB12	17.18						
	17.28	-103.43	-102.91		17.21	-90.91	-89.33				
WCDMAB4	18.31			LTEB17	17.15						
	18.55	-103.43	-103.43		17.35	-90.96	-89.52				
WCDMAB5	17.17			LTEB28AB	17.19						
	17.38	-103.26	-102.16		18.02	-91.44	-90.06				
					18.22						
					18.36	-90.12	-89.16				

5. GPS / WIFI / BT

GPS实测报告

位 置	测试结果
我司楼顶	冷启动80秒定位,最大CN值41,可使用星数5颗以上

	Wifi 2.4G b/11M		
	1	6	11
TRP	11.14	12.35	11.48
TIS	-82.35	-81.46	-81.64
	Wifi 5G a/54M		
	36	165	
TRP	12.33	10.12	
TIS	-71.34	-70.69	

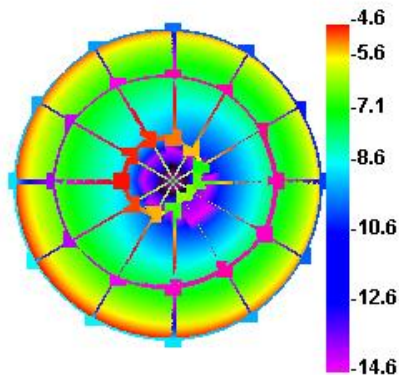


6. 天线增益

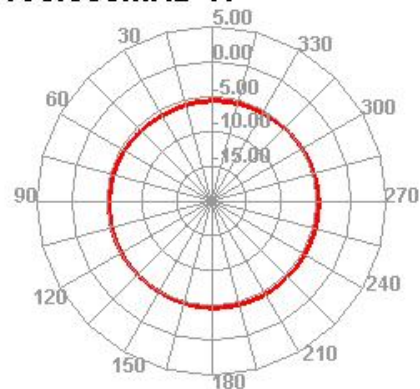
主天线	频率段	增益值（dBi）
B2/WCDMAII/GSM1900	1850-1900MHZ	1.0
B4/WCDMA IV	1710-2155	1.5
B5/WCDMA V/GSM850/GSM900	824-894MHZ	-1.3
B7	2500-2600MHZ	1.1
B12	699-746MHZ	-3.0
B17	704-746MHZ	-3.0
B28AB	703-803MHZ	-3.0
B66	1710-2200MHZ	1.5
B41	2496-2690MHZ	1.1
B71	663-652MHZ	-3.8
GSM1800	1710-1880MHZ	1.5

小天线	频率段	增益值（dBi）
wifi2.4/ BT	2400-2500MHZ	1.0
wifi5.8/ BT	51500-5850MHZ	0.5
GPS	1575.42MHZ	0.3

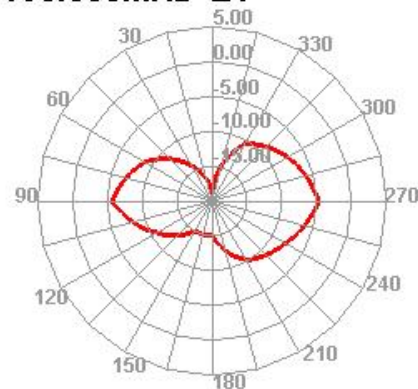
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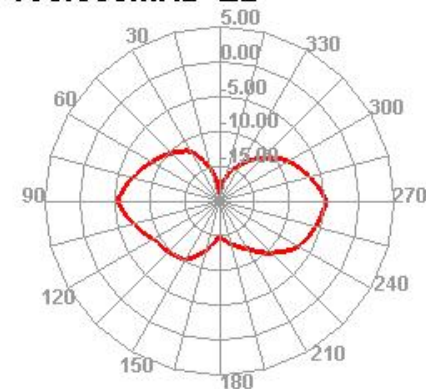
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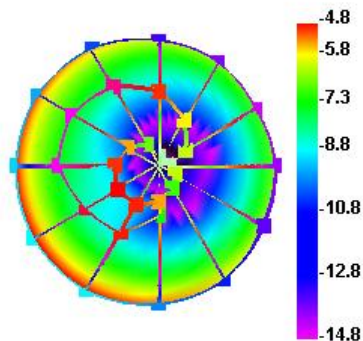
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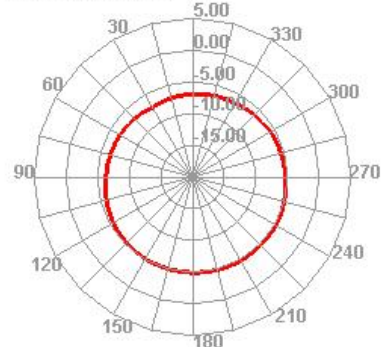
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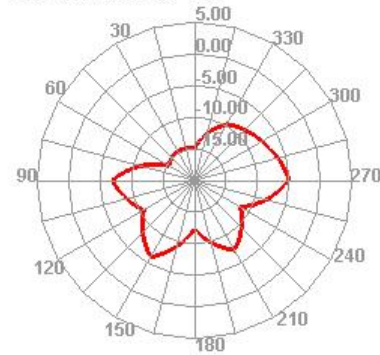
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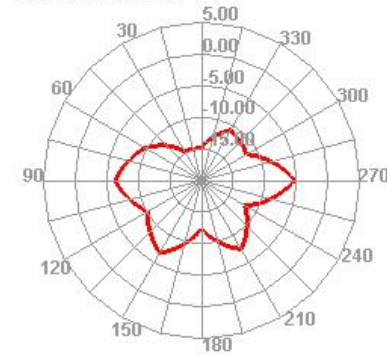
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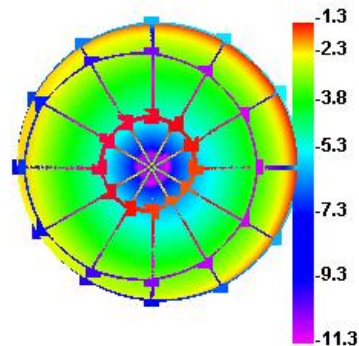
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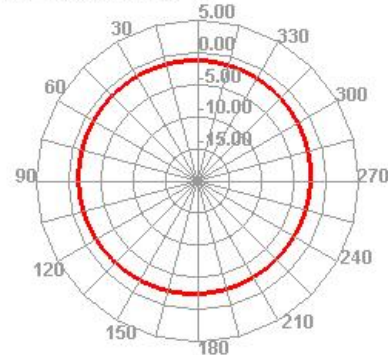
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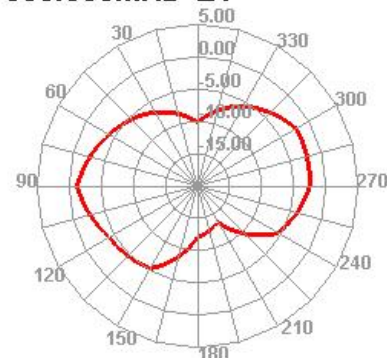
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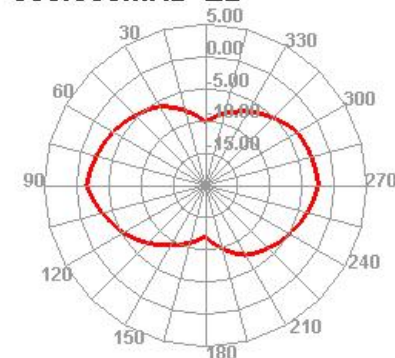
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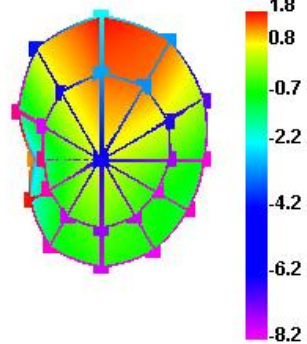
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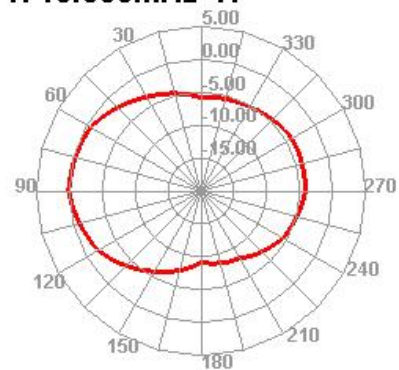
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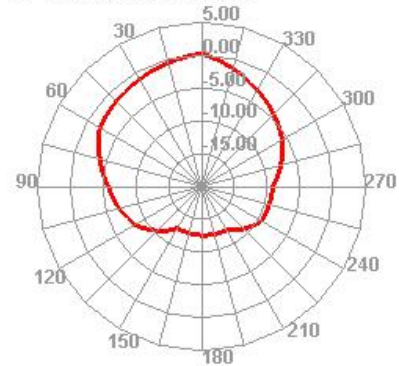
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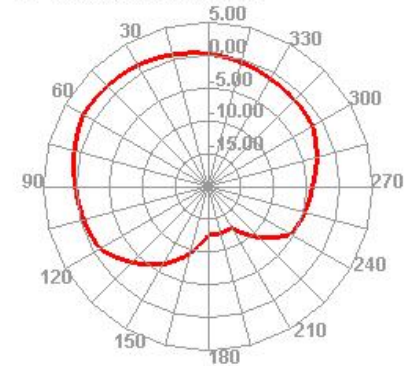
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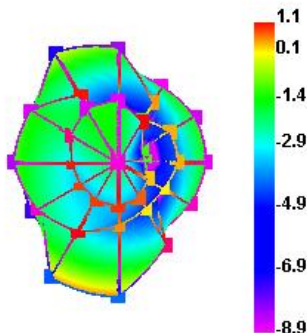
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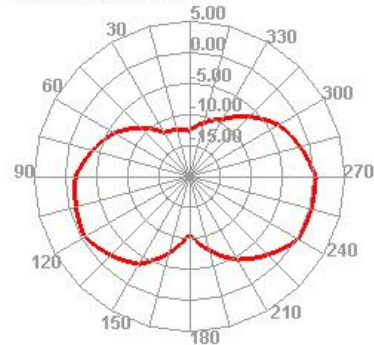
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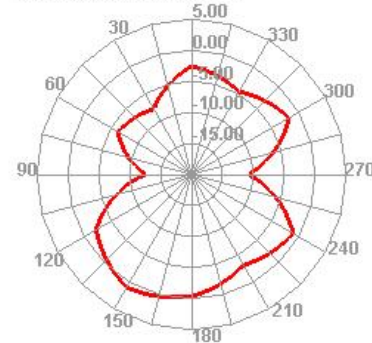
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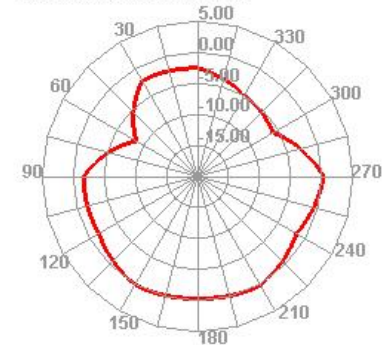
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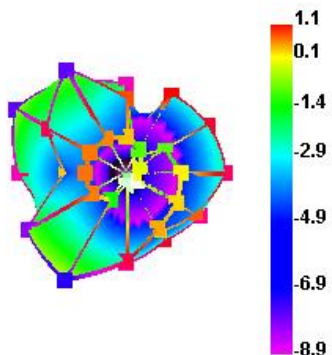
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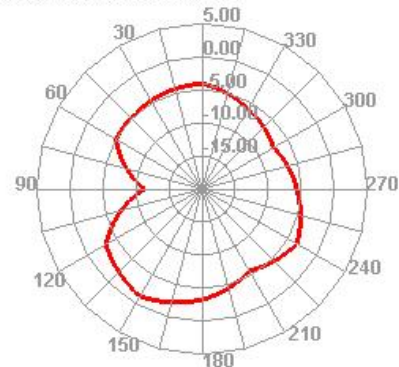
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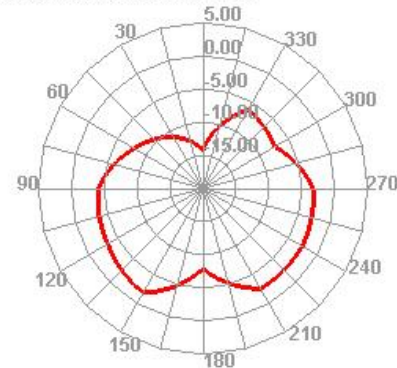
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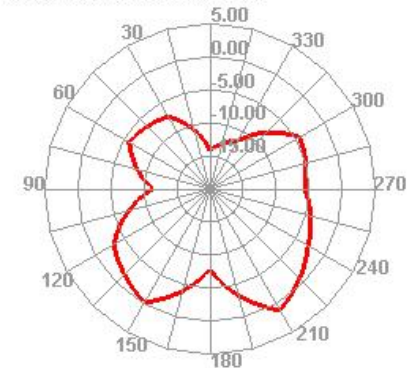
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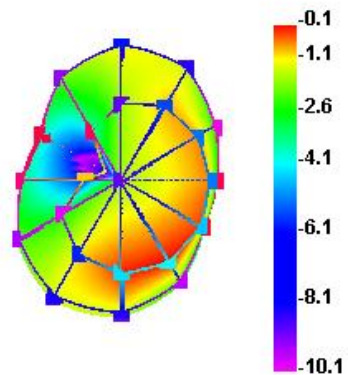
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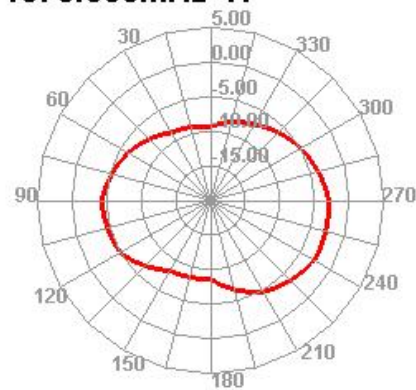
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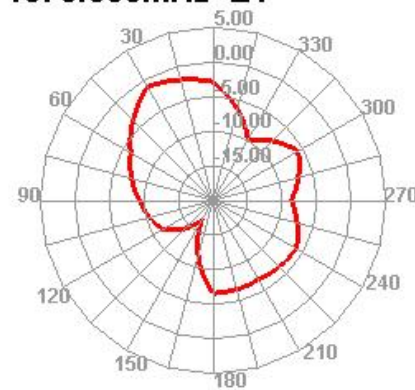
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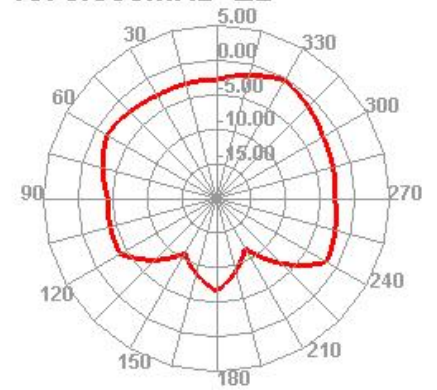
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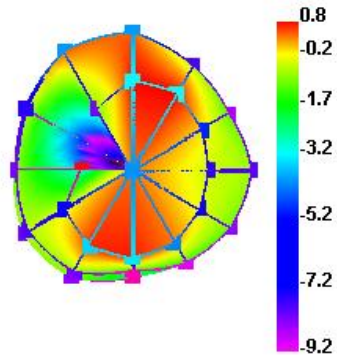
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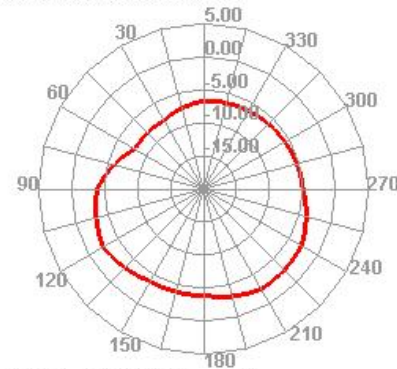
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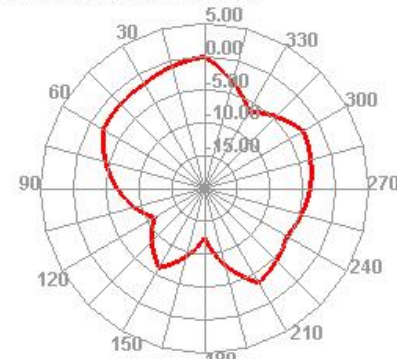
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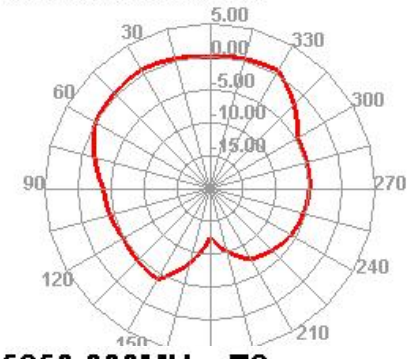
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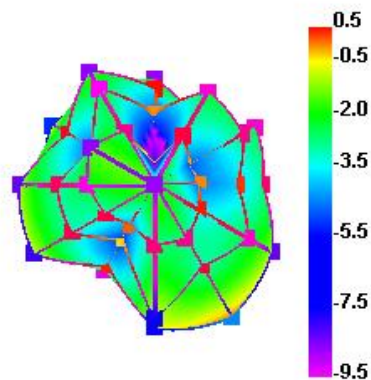
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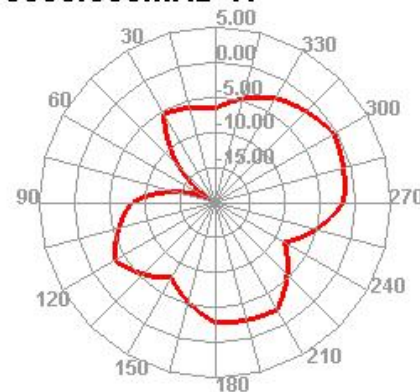
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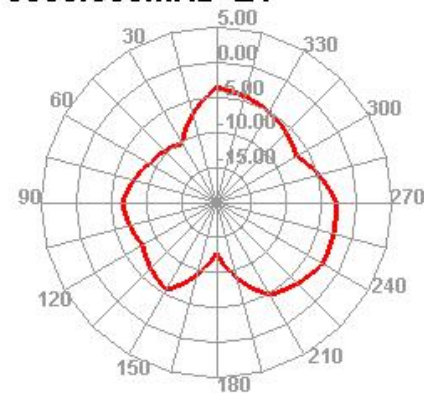
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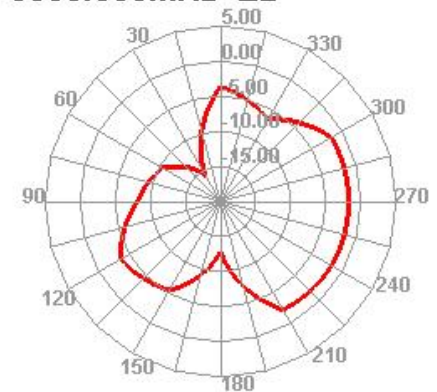
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5850.000MHz E1

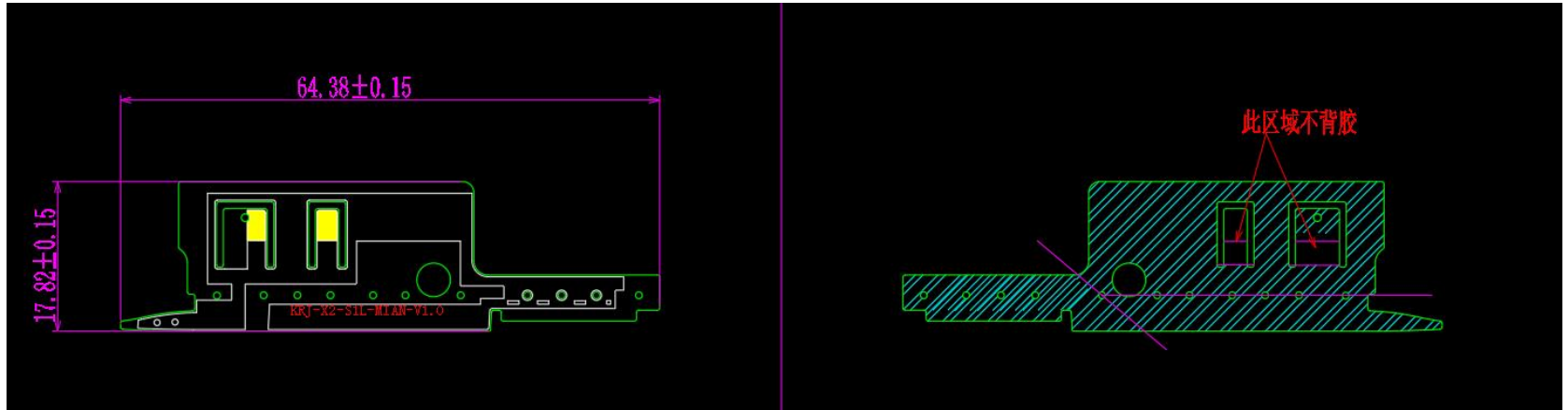


5850.000MHz E2

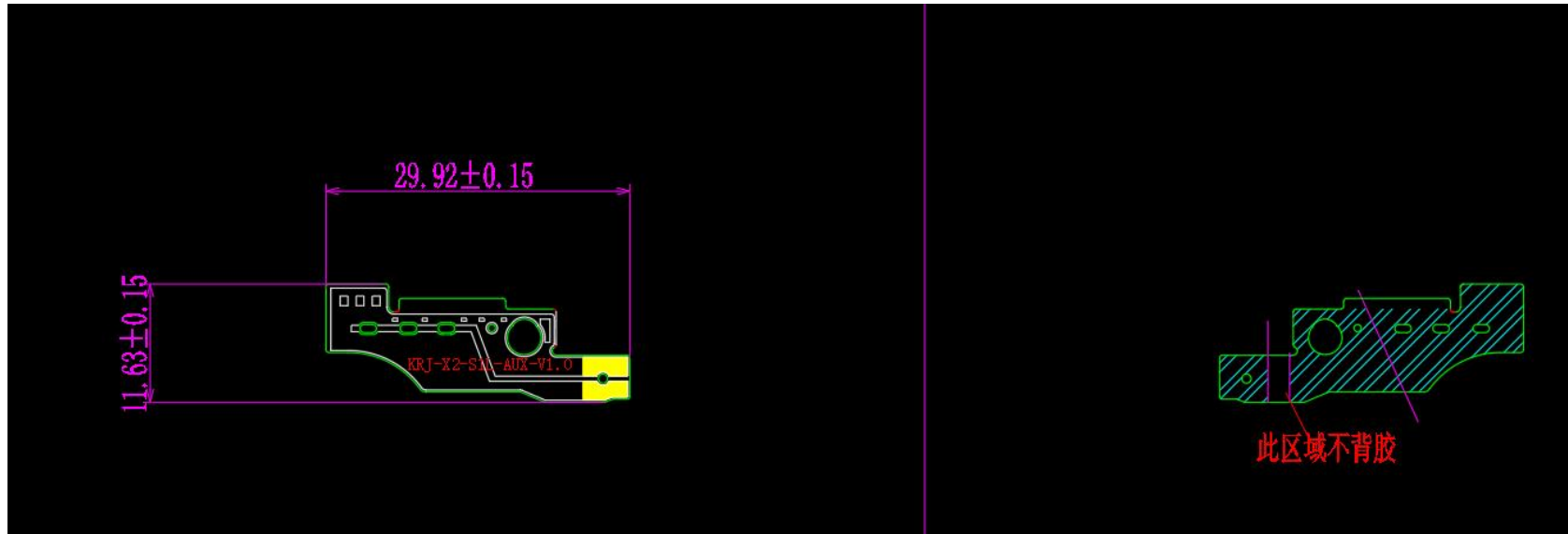


6.drawing sheet

主天线



分集天线



三合一天线

