



# 深圳市凯普深通讯科技有限公司

Shenzhen Kaipushen Communication Technology Co., Ltd

## 天线调试报告

Antenna debugging report

客 户customer: 图高

项目名project: T1

射 频RF: Jiang Gong

日 期Date: 2023.12.7

版 本Edition: 03 试产机器真空镀

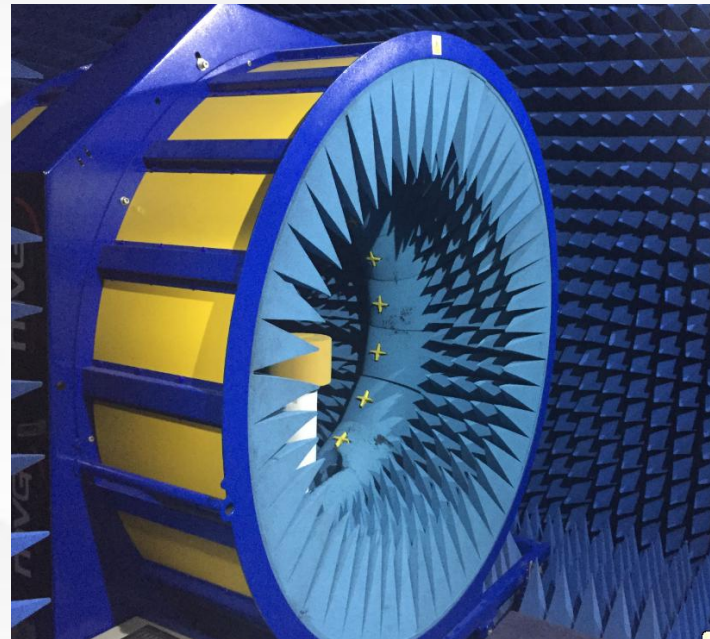
Trial production machine vacuum plating



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# 实验室测试环境及设备

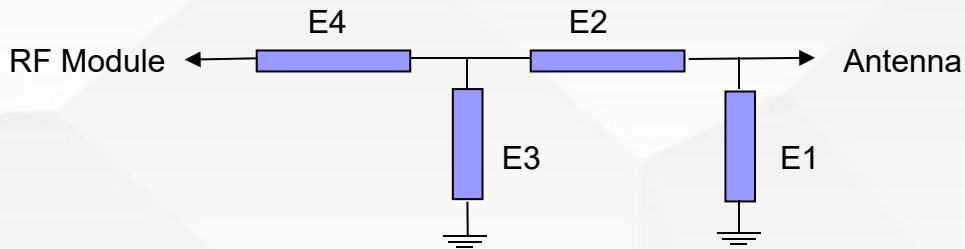
## Laboratory testing environment and equipment



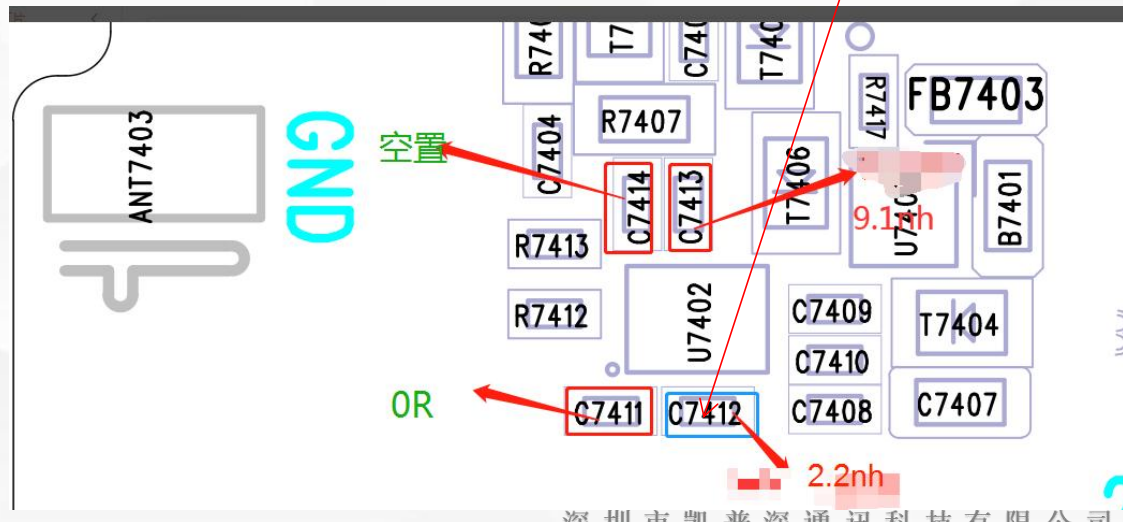
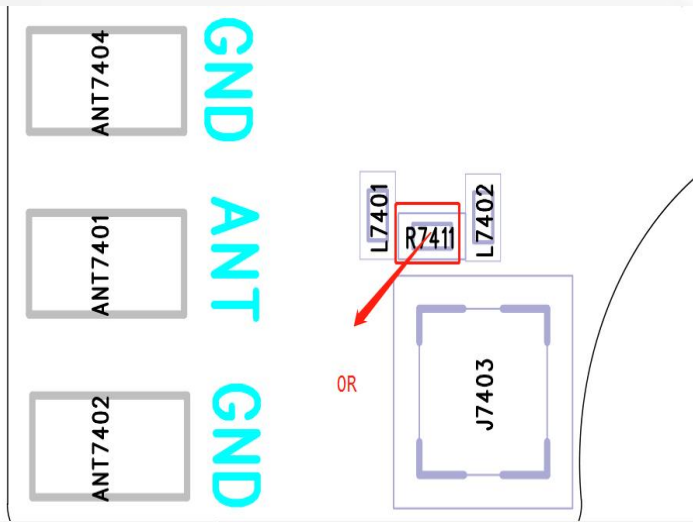
测试项目Test items	测试设备Test equipment
S11、S12、VSWR、LOSS	网络分析仪network analyzer E5071B、E5062A
Efficiency、Gain 3D Radiation Pattern	Satimo SG16暗室darkroom、GP7*4*3暗室 darkroom、E5071B
TRP、TIS	Satimo SG16暗室darkroom、GP7*4*3暗室 darkroom、8960、CMW500、MT8820C、 E4438C、

# 主天线匹配电路

## Main antenna matching circuit



此处有更改





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# 主天线测试数据 Main antenna test data

Frequency band	Channel	TRP(dBm)	TIS(dBm)	Frequency band	Channel	TRP(dBm)	TIS(dBm)
EGSM 900	Low	27.5		DCS 1800	Low	25.7	
	Mid	26.8			Mid	26.2	
	Hig	25.8	-101.2		Hig	26.1	-104.8
GSM 850	Low	25.6		PCS 1900	Low	24.3	
	Mid	25.2			Mid	26.1	
	Hig	25.5	-101.3		Hig	26.3	-103.4
WCDMA 1	Low	18.9		WCDMA 900	Low	17.5	
	Mid	18.8			Mid	17.5	
	Hig	18.1	-103.1		Hig	17.1	-103.8
WCDMA2	Low	17.4		WCDMA5	Low	17.2	
	Mid	19.2			Mid	16.8	
	Hig	18.8	-102.8		Hig	16.8	-105.8



# 天线测试数据Antenna test data

Frequency band	Channel	TRP(dBm)	TIS(dBm)	Frequency band	Channel	TRP(dBm)	TIS(dBm)
LTE B1	Low	19.3		LTE B3	Low	19.4	
	Mid	18.8			Mid	19.1	
	Hig	18.1	-92		Hig	19.1	-96.3
LTE B5	Low	17.2		LTE B7	Low	17.1	
	Mid	17.4			Mid	17.1	
	Hig	17.1	-93.1		Hig	17.1	-91.4
LTE B8	Low	18.1		LTE B20	Low	17.7	
	Mid	18.1			Mid	17.2	
	Hig	18.3	-90.4		Hig	17.0	-92.6
LTE28A	Low	17.6		LTE28B	Low	18.3	
	Mid	18.5			Mid	18.5	
	Hig	18.5	-90.9		Hig	18.8	-91.3



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# 天线测试数据Antenna test data

Frequency band	Channel	TRP(dBm)	TIS(dBm)	Frequency band	Channel	TRP(dBm)	TIS(dBm)
LTE B66	Low	19.5		LTE 38	Low	19.5	
	Mid	18.2			Mid	18.8	
	Hig	18.8	-92.3		Hig	17.6	-90.2
LTE 39	Low	19.2		LTE 40	Low	18.9	
	Mid	18.8			Mid	18.5	
	Hig	18.9	-93.5		Hig	18.1	-92.5
LTE 41	Low	18.8					
	Mid	18.1					
	Hig	16.7	-91.1				



# GPS 天线实测效果

The actual measurement effect of GPS antenna





# 天线测试数据 Antenna test data

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FS	Channel	TRP	TIS
2.4G WIFI	L	11.6	
	M	11.3	
	H	10.1	-79.1

	Channel	TRP	TIS
5.8G WIFI	L	8.6	
	M	8.3	
	H	6.9	-67.7





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# 增益测试数据GAIN test data

Frequency band	AVG Gain(dB)	Frequency band	AVG Gain(dBI)	Frequency band	AVG Gain(dBI)
GSM 850	-3.75	DCS1800	-2.89	WCDMA1	-2.72
EGSM 900	-3.63	PCS1900	-2.76	WCDMA2	-2.76
WIFI	-2.84	BT	-2.84	WCDMA5	-3.78
GPS	-2.69	5.8G	-3.75	WCMA8	-3.63



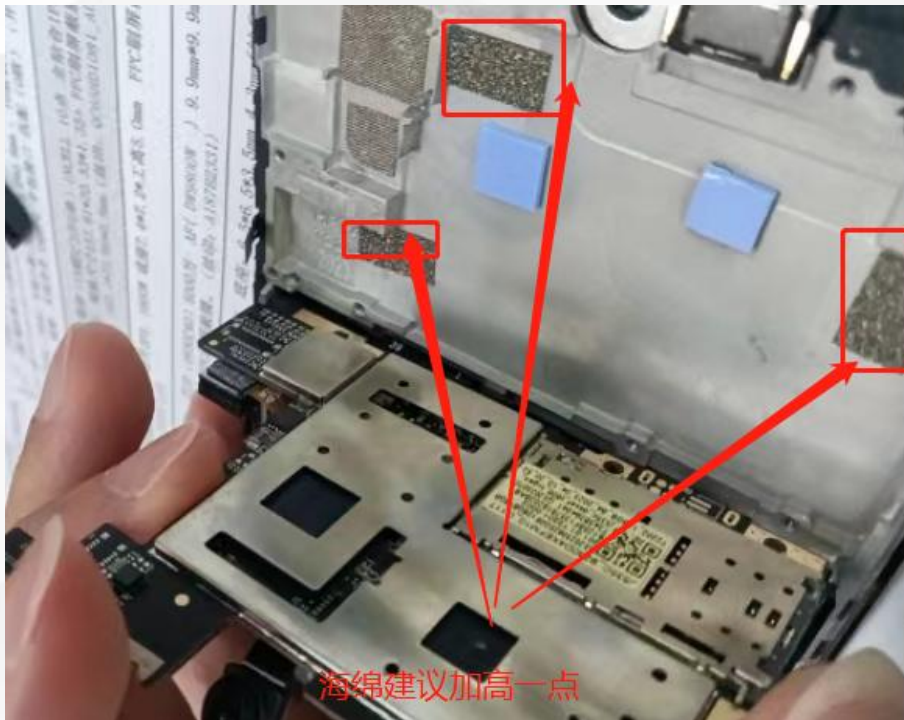
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# 增益测试数据 GAIN test data

Frequency band	AVG Gain(dB)	Frequency band	AVG Gain(dBI)	Frequency band	AVG Gain(dBI)
LTE1	-2.72	LTE8	-3.65	LTE38	-3.56
LTE3	-2.89	LTE20	-3.92	LTE39	-2.63
LTE5	-3.75	LTE28A	-3.68	LTE40	-2.89
LTE7	-3.03	LTE28B	-3.57	LTE41	-3.49
LTE66	-2.76				

# 改善建议

## Recommendations for improvement



The sponge suggests a little more height



# 联系方式

## Contact information

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**THE END**

**感谢您的宝贵意见！  
Thank you for your  
valuable feedback !**