



## Antenna Design & Test Report

<b>Project</b>	<b>R5</b>
<b>PCB Version</b>	<b>M3201 V2.0</b>
<b>Engineer</b>	<b>Deng en</b>
<b>Test Date</b>	<b>2022-09-21</b>

# 1. Basic Information

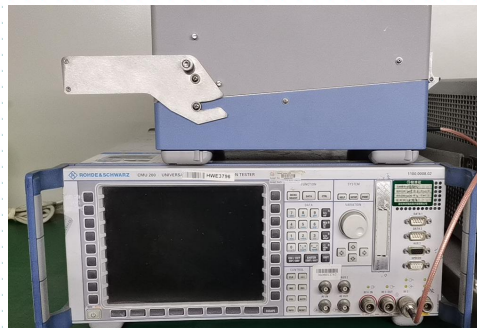
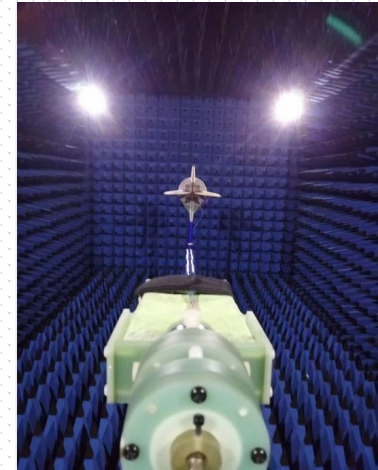
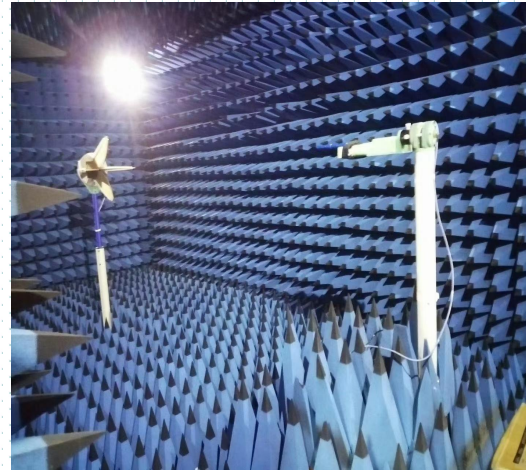
## Main Antenna

2G	850/900/1800/1900
3G	
4G	



# 2. Testing facility

testing facility	MT8820C Agilent 8960 CMU200 8753E
darkroom	ETS-743
Test temperature	23°C
ambient humidity	58%
Quality Testing Engineer	Deng en

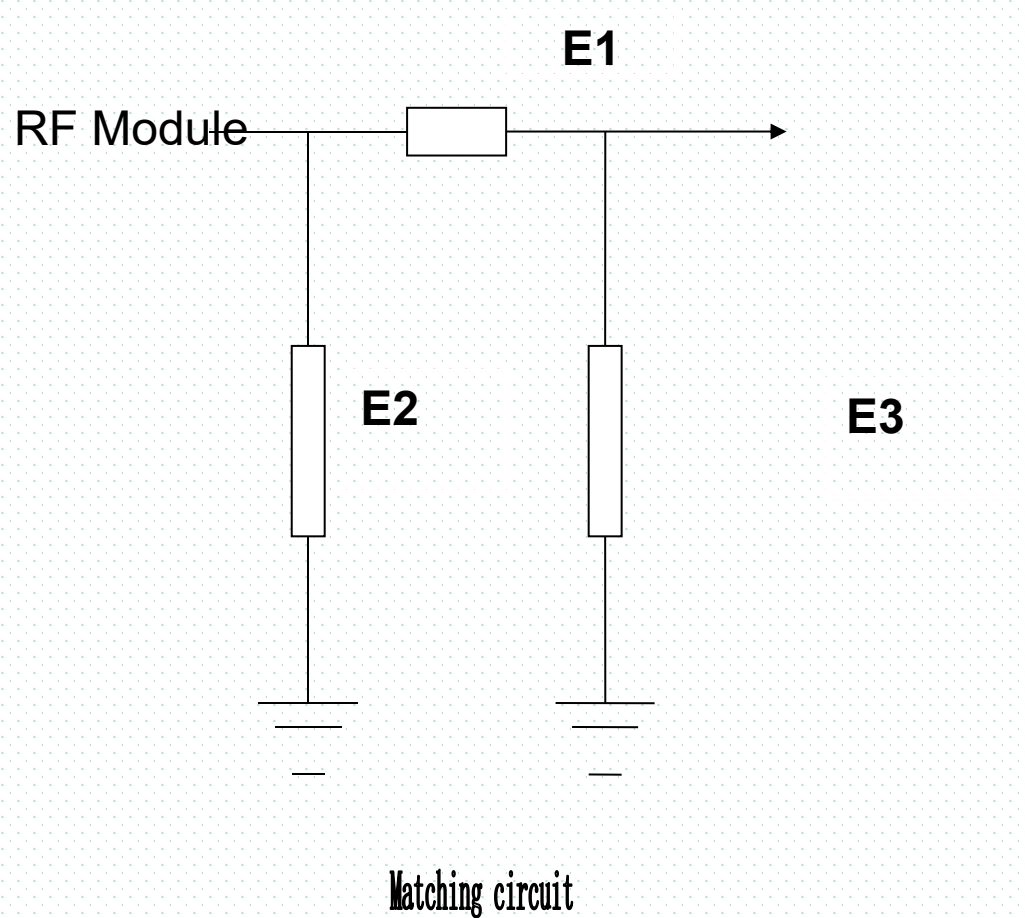


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### 3. Antenna matching circuit

Element	Value
E1(0402)	
E2(0402)	
E3(0402)	



## 4. Antenna radiation test

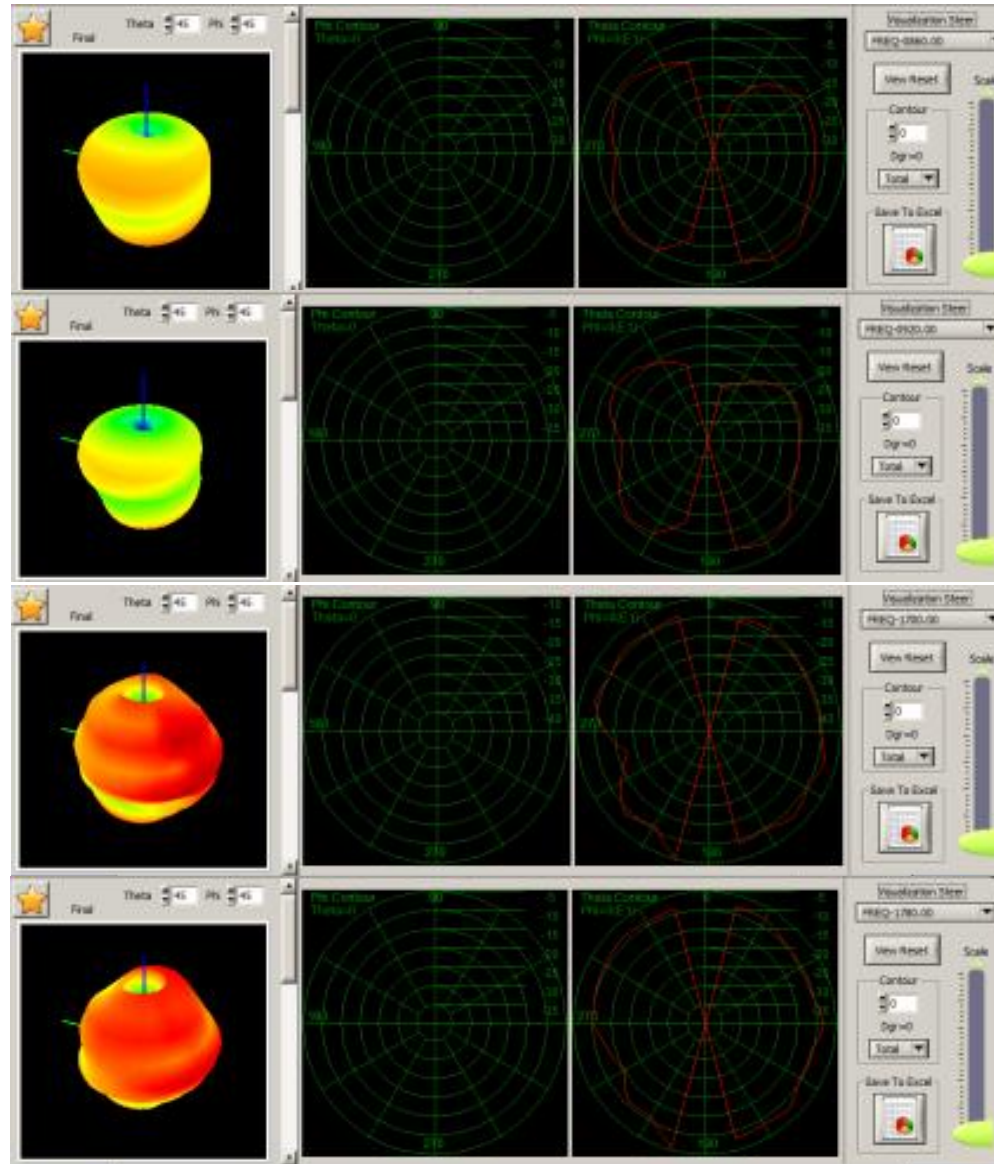
Mold antenna

	850			900			1800			1900		
	128	190	251	1	62	124	512	698	885	512	651	810
<b>TRP</b>	26.7	27.2	27.1	25.6	24.6	24.1	12.1	14.1	17.0	23.1	23.7	22.0
<b>MAX</b>	29.3	30.1	30.0	28.0	27.4	26.8	16.8	18.7	21.3	26.7	27.2	25.6
<b>TIS</b>	-102.8	-101.1	-101.0	-98.5	-97.5	-97.3	-102.2	-104.7	-103.1	-101.9	-100.9	-100.1
<b>MAX</b>	-105.3	-103.8	-103.4	-101.1	-100.3	-100.1	-105.1	-108.3	-107.1	-105.2	-103.7	-102.9

## 5. Antenna gain

Frequency (MHz)	Average Gain(dB)	Peak Gain(dBi)
GSM850	1.13	1.31
GSM900	0.43	0.62
DCS1800	-1.23	-1.06
PCS1900	0.62	-0.83
BT	0.22	0.31

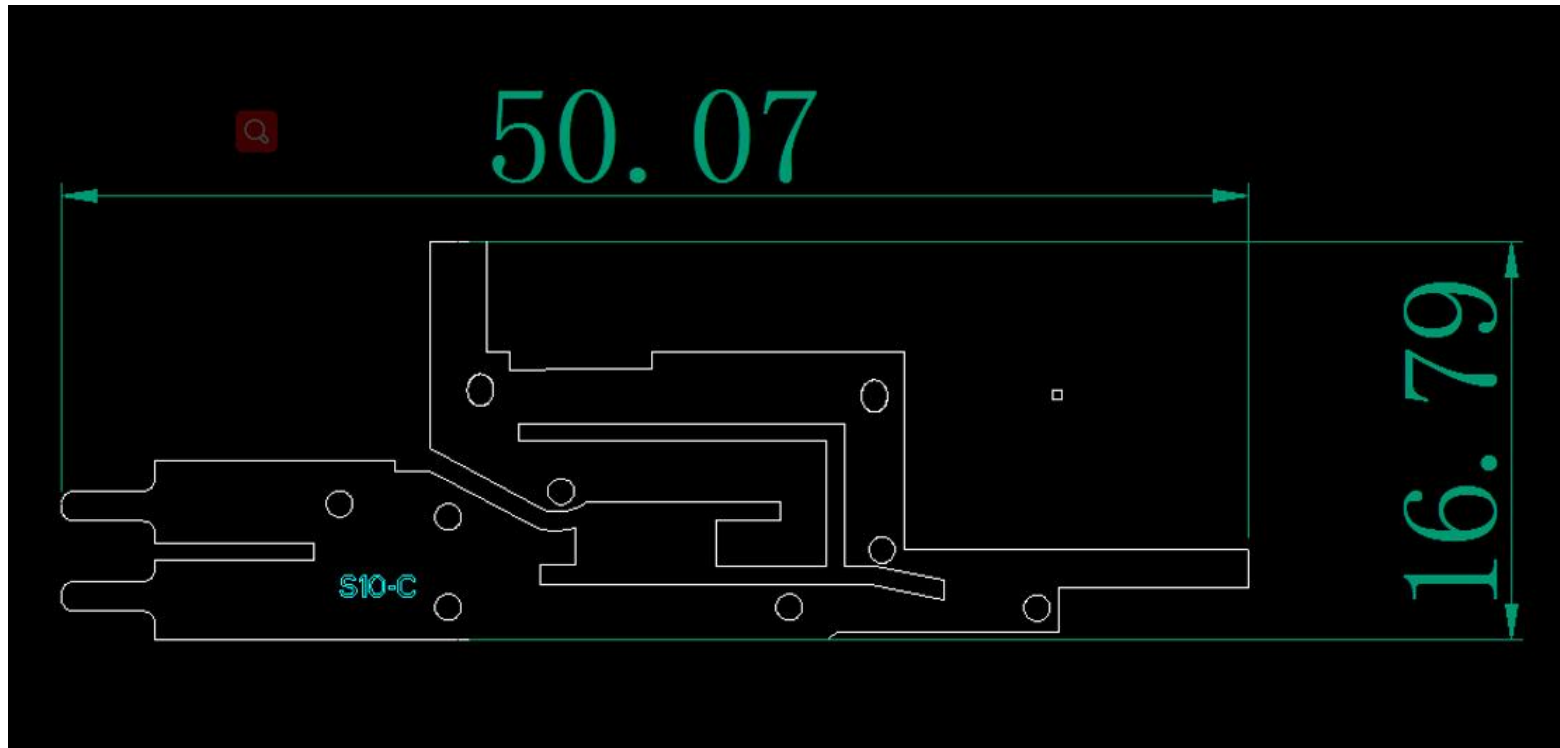
# Antenna gain



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## 5. Antenna structure diagram





# 6.Environmental treatment and description

1.PCB needs to be extended processing

2.

3.



## 7.Remark:

①Antenna performance test is based on the current prototype, such as the material change needs to provide a prototype for retest;

The End