



Antenna Design & Test Report

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

1.Basic Information

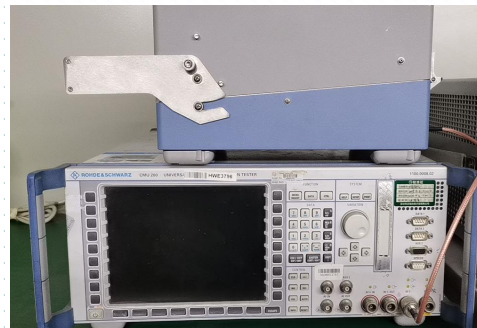
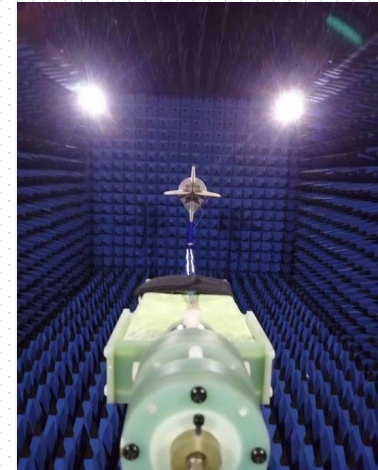
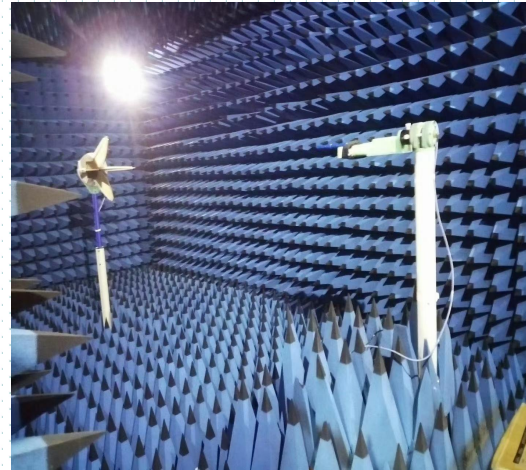
Main Antenna

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

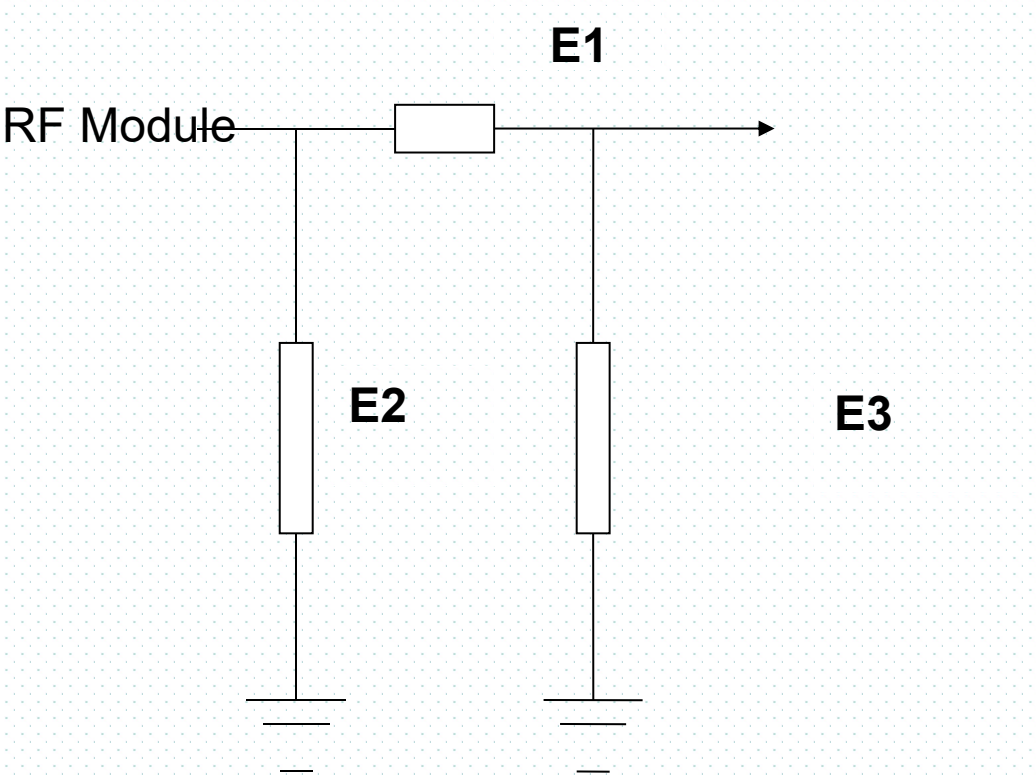


2022-11-7



3.Antenna matching circuit

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



Matching circuit

4. Antenna radiation test

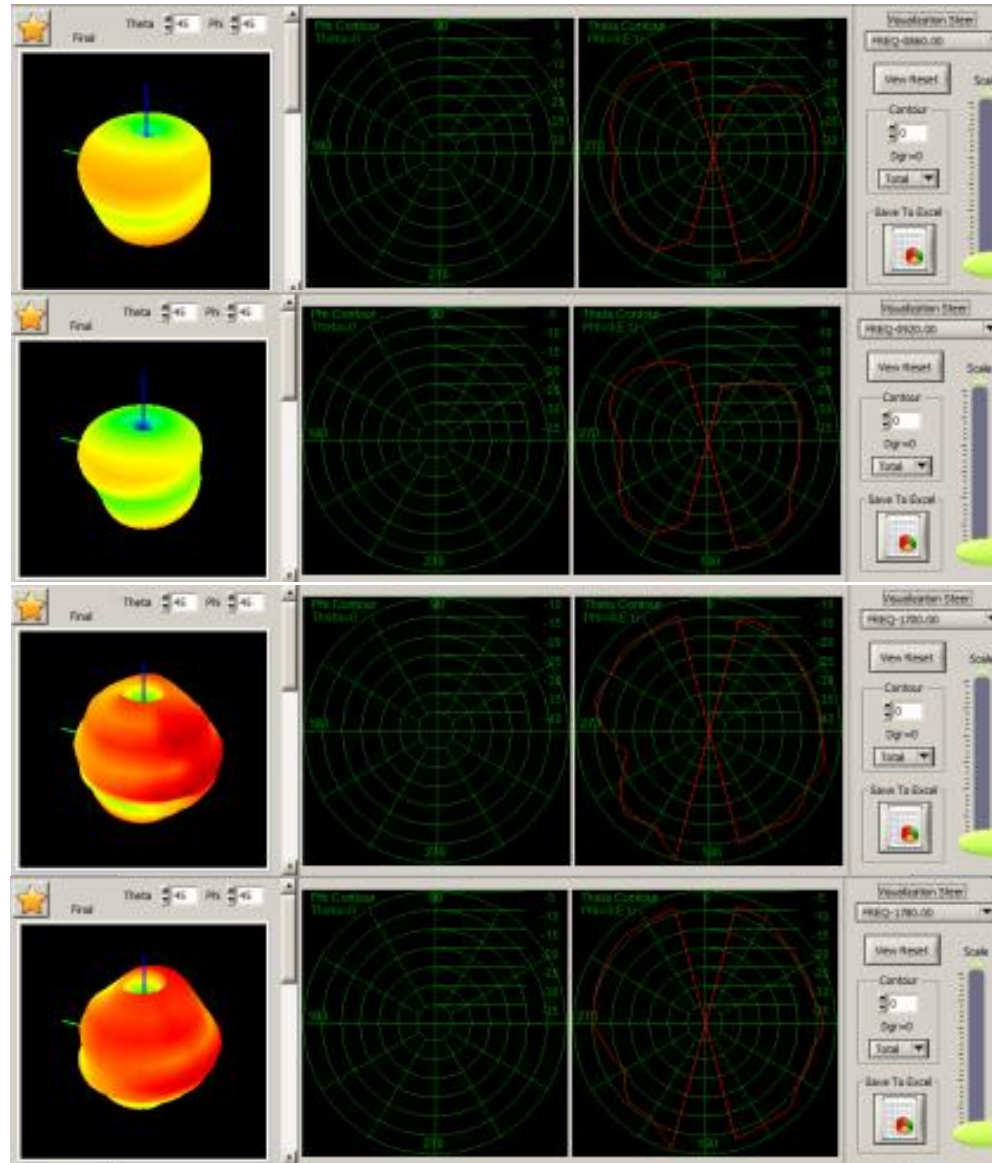
Mold antenna

	850			900			1800			1900		
	128	190	251	1	62	124	512	698	885	512	651	810
TRP	26.7	27.2	27.1	25.6	24.6	24.1	12.1	14.1	17.0	23.1	23.7	22.0
MAX	29.3	30.1	30.0	28.0	27.4	26.8	16.8	18.7	21.3	26.7	27.2	25.6
TIS	-102.8	-101.1	-101.0	-98.5	-97.5	-97.3	-102.2	-104.7	-103.1	-101.9	-100.9	-100.1
MAX	-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

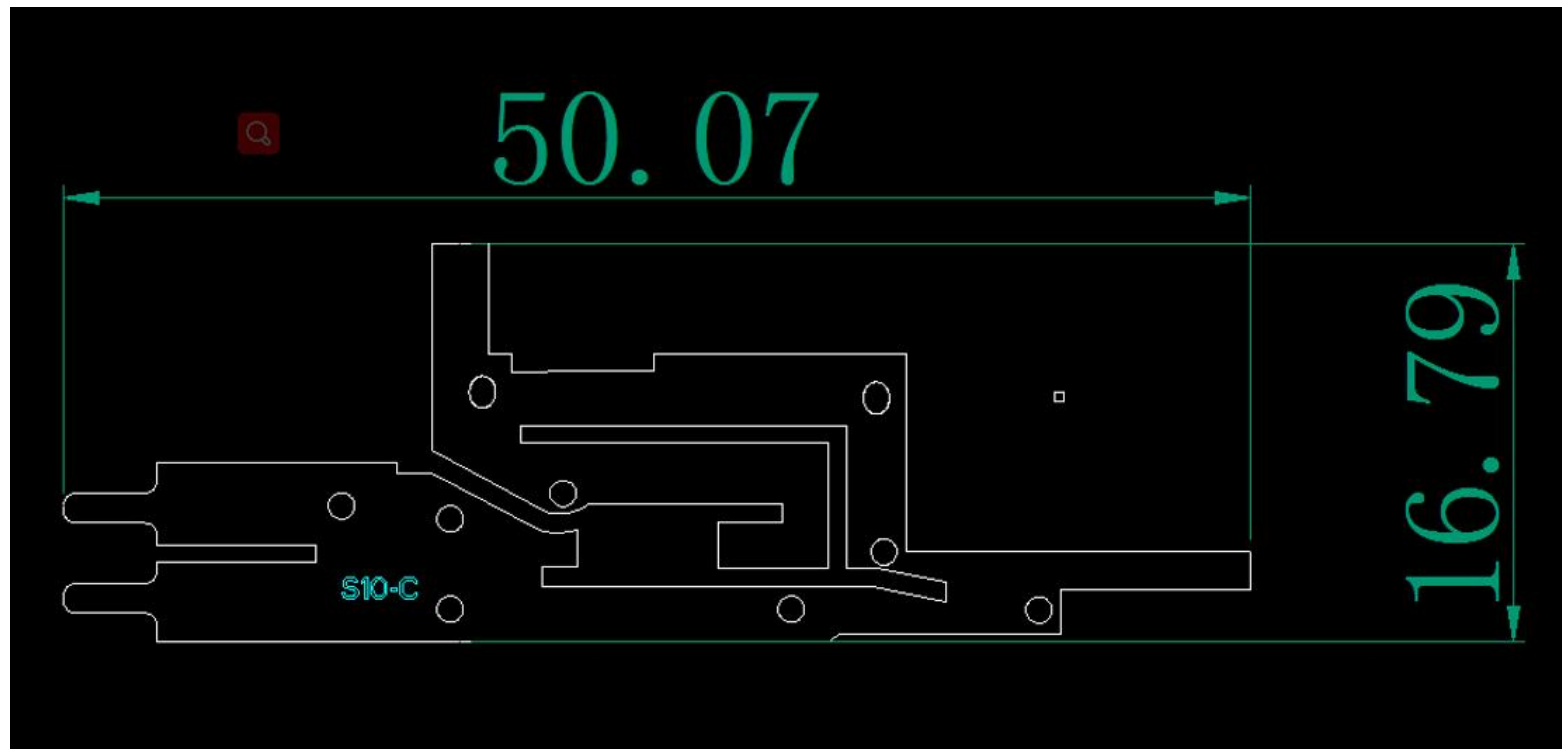
Frequency (MHz)	Average Gain(dB)	Peak Gain(dBi)
GSM850	1.13	1.31
GSM900	0.43	0.62
DCS1800	-1.23	-1.06
PCS1900	0.62	-0.83
BT	0.22	0.31

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