

Shenzhen Saiwei Communication Technology Co., Ltd



Customer Name: Tai Lefeng

Project name: S33-4G

Reporting time: 20250408



Catalogue

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- △ Report version feed
- △ Test environment
- △ Main antenna matching circuit
- △ Main antenna dark room data
- △ Additional instructions



Introduction to project debugging

Туре	Smart phone							
Plate type		Motherboard						
		F	requency band		Premature line status	Yao line form	Design area	Matching changes
Antenna	Main antenna	2G		0/900				
Overview			1800	0/1900		PIFA		
		3G	B1/2	2/4/5/8				
		4G	/12/17	4/5/7/8/ /20/25/2 /28B/38/ 41/66	FPC			
		BT/WIFI	2.4	G/5G				
	Other antennas	GPS	1.	575G		PIFA		
		Episodes				PIFA		
Prototype status				nvironment treatment				

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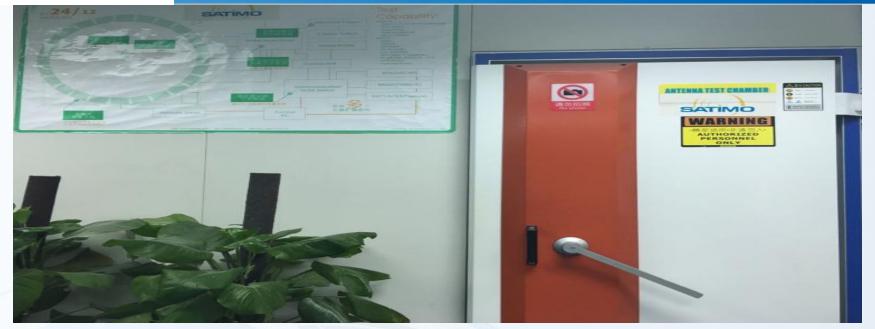


Report version feed

Edition	Date	Overview of meat
V1	20250408	Test data

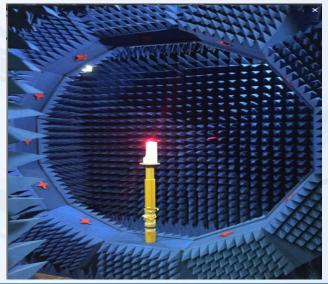


Test environment





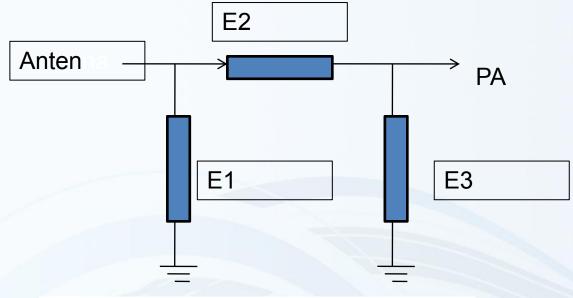




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Main antenna matching circuit



Element	Value
E1 (0402)	N/A
E2 (0402)	N/A
E3 (0402)	N/A



2G	Channel	TRP (dBm)	TIS (dBm)
	L	20. 3	
850	W	21.6	
	Н	20.8	-100. 3
	L	22. 2	
900	W	22.9	
	Н	22.3	-96. 7
	L	20.3	
1800	W	20. 4	
	Н	20.8	-99.8
1000	L	20.6	
1900	W	20. 3	
	Н	20. 2	-96.8



3G	Channel	TRP (dBm)	TIS (dBm)
	L	15. 3	
W1	W	14. 7	
	Н	14. 2	-98.6
	L	13.9	
W2	W	14. 2	
	Н	14. 7	-102. 2
	L	13. 2	
W4	W	13.6	
	Н	13. 1	-100.6
	L	14. 1	
W 5	W	13.8	
	Н	13. 4	-103. 2
	L	15. 1	
W8	W	15. 2	
	Н	15. 7	-100.6



4G	Channel	TRP (dBm)	TIS (dBm)	4G	Channel	TRP (dBm)	TIS (dBm)
	L 15. 1		L	14. 1			
B1	W	15. 2		В7	W	14. 1	
	Н	15. 2	-84. 1		Н	14.6	-88.9
	L	13.8			L	15. 1	
B2	W	14. 6		В8	W	15. 5	
	Н	14. 7	-88. 1		Н	15. 6	-84. 2
	L	12.7			L	10.6	
В3	W	12.3		B12	W	10.9	
	Н	13. 7	-83.8		Н	10.6	-80.6
	L	13. 1			L	10.9	
B4	W	13.6		B17	W	10.9	
	Н	12. 7	-86. 5		Н	10.5	-80. 2
	L 13. 6		L	14. 1			
B5	W	14. 1		B20	W	14.6	
	Н	14. 3	-86.6		Н	14.5	-87.6



4G	Channel	TRP (dBm)	TIS (dBm)
	L	13. 2	
B25	W	13. 7	
	Н	14.6	-82.3
	L	13.5	
B26	W	14. 1	
	Н	14. 4	-86. 5
	L	10.6	
B28A	W	10.2	
	Н	10. 2	-87. 2
	L	10. 1	
B28B	W	10.8	
	Н	10. 1	-88. 2
	L	16. 1	
B38	W	16.8	
	Н	17. 1	-85. 5

4 G	Channel	TRP (dBm)	TIS (dBm)
	L	14. 5	
B39	W	14.6	
	Н	14. 5	-86. 1
	L	14. 1	
B40	W	14. 4	
	Н	14. 5	-84.3
	L	15. 4	
B41	W	16. 2	
	Н	16. 5	-83. 9
	L	12.5	
B66	W	12.6	
	Н	12.6	-82.6



Antenna gain

Standard	Band	Gain(dbi)	Standard	Band	Gain(dbi)
LTE	B1	0.16	LTE	B26	-0.06
LTE	B2	-0.12	LTE	B28A	-0.26
LTE	В3	-0.18	LTE	B28B	-0.28
LTE	B4	-0.16	LTE	B38	0.37
LTE	B5	-0.02	LTE	B39	0.11
LTE	В7	0.06	LTE	B40	0.13
LTE	В8	0.22	LTE	B41	0.24
LTE	B12	-0.22	LTE	B66	-0.11
LTE	B17	-0.26			
LTE	B20	-0.09			
LTE	B25	-0.04			

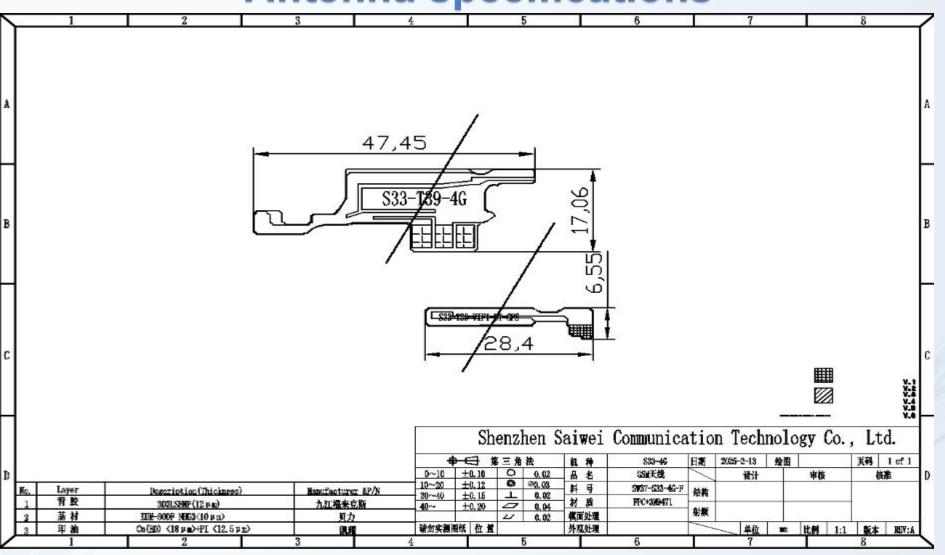


Antenna gain

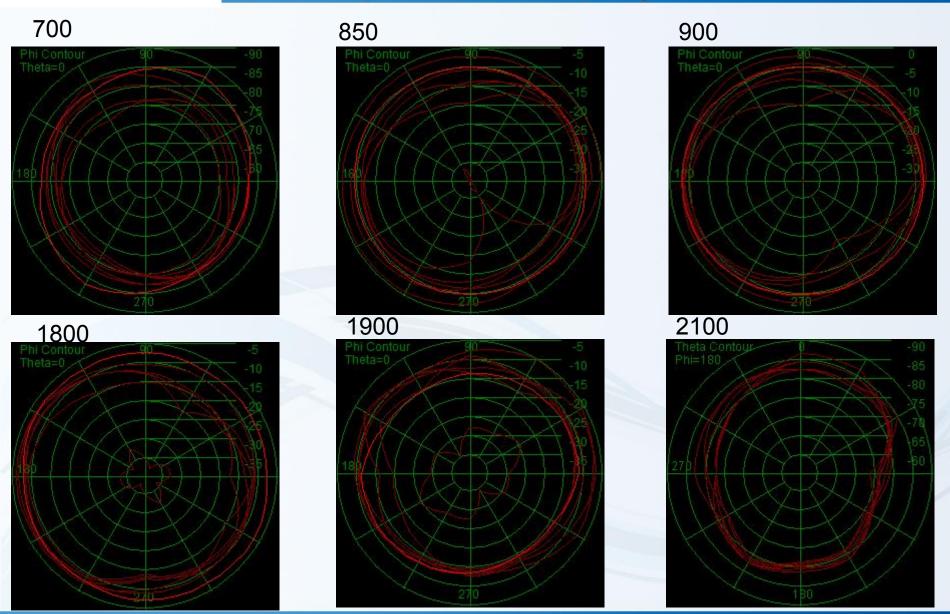
Standard	Band	Gain(dbi)
GSM	850	0.22
GSM	900	0.19
GSM	1800	-0.06
GSM	1900	-0.17
WCDMA	W1	0.51
WCDMA	W2	0.28
WCDMA	W4	0.26
WCDMA	W5	0.27
WCDMA	W8	0.22
WIFI	2.4G	0.77
WIFI	5G	0.82
ВТ	2.4G	0.77
GPS	1.575G	0.29



Antenna specifications



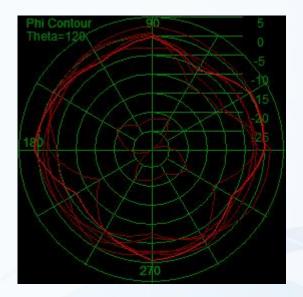




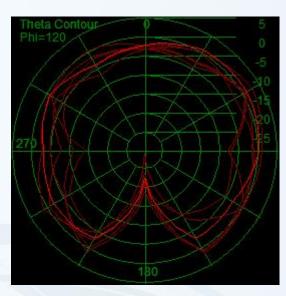
Saiwei - Sai is far away, and Wei is eternal!



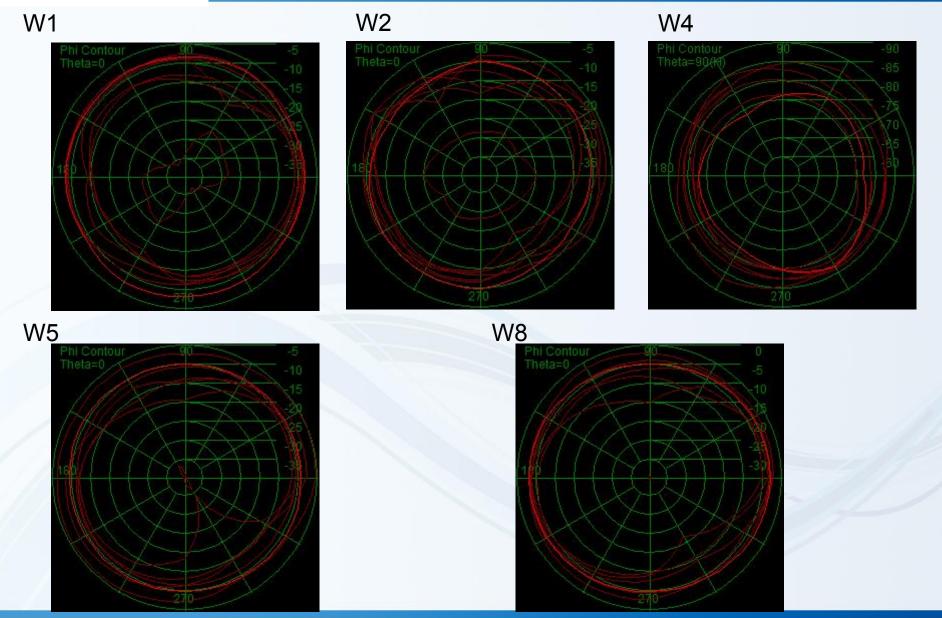
2100



2600



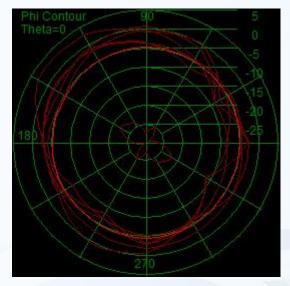




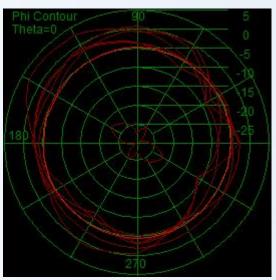
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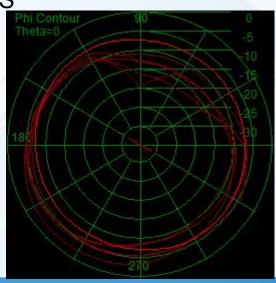




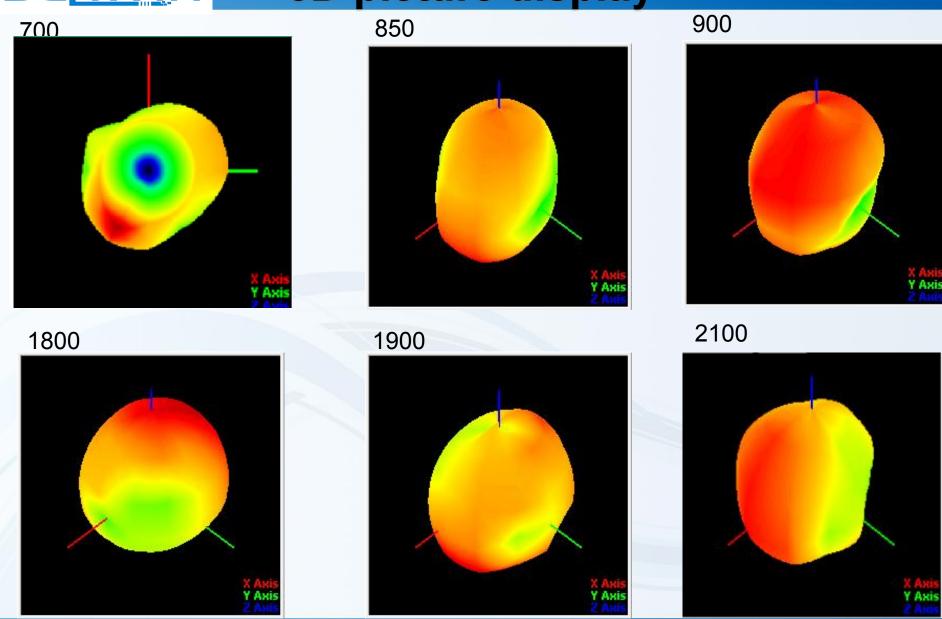
BT



GPS



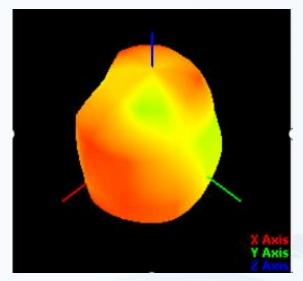




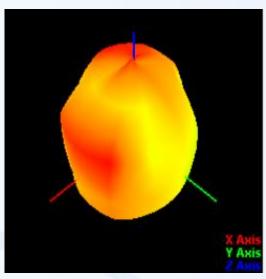
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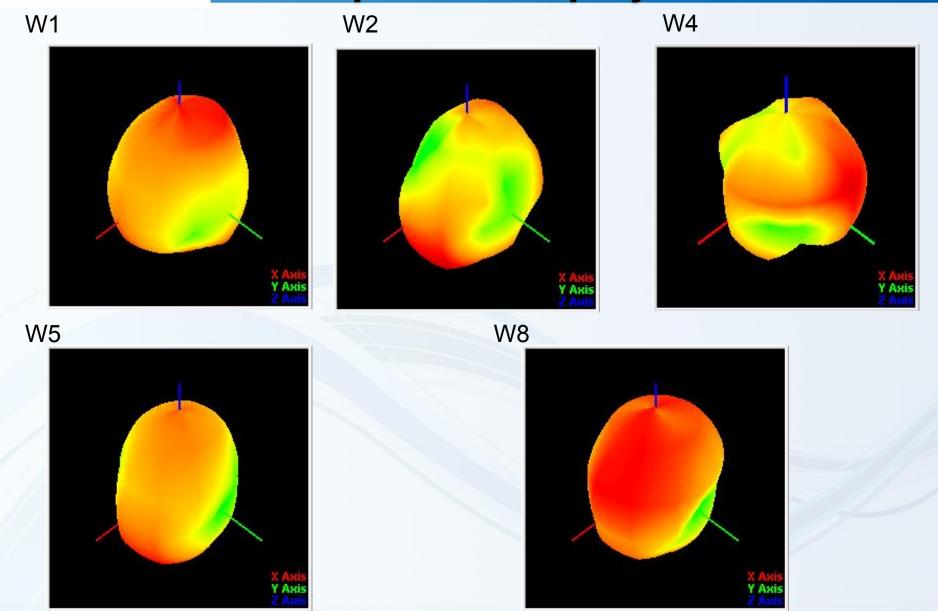
2300



2600

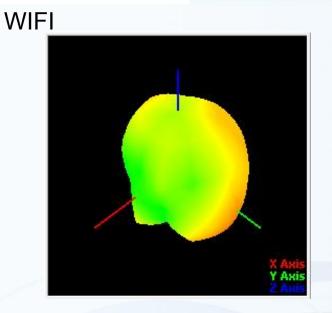


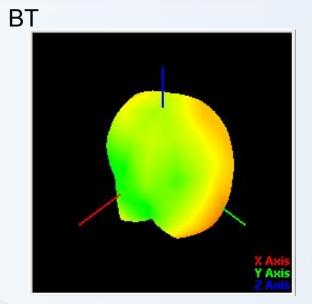


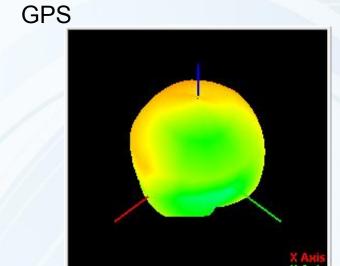


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Additional instructions

- △ Please carefully confirm whether the matching circuit mentioned in the report is modified and whether the environmental processing is conductive, which will directly affect the antenna performance.
- △ The parameters provided in this report are only for the reference given by customers to our demo.
- ☐ If your company has a prototype with the latest trial production or update status (replacement of materials, update software, replacement of environment processing, etc.), please submit it to our company for verification as soon as possible to confirm whether the antenna performance has been affected. ○
- ☐ If you need to send it to a third party for retest or send it to the customer for testing, please be sure to hand over the machine that needs to be tested by our company for testing and confirmation, because of the consistency of the motherboard, the consistency of assembly, and the difference in antenna assembly, etc.All factors may lead to the deviation of antenna parameters.





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