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Antenna test report

Customer: Gongxin	Project model: M1	Date: 20240720
Debugging version: V1.0	Radio frequency: Peng Biao	Structure: Qiao Kai ge
Debugging: BT		



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Catalogue

1	testing equipment
2	Debugging version record
3	matching circuit
4	Motherboard conduction data
5	Active testing
6	GPS/wi fi /btu
7	Environmental treatment
8	Summary explanation

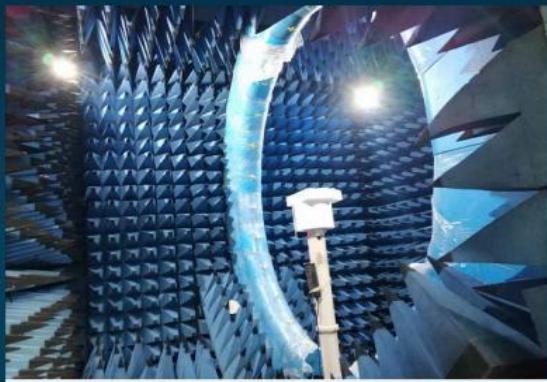


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1. Test equipment

Test equipment

SG24



GTS



Agilent 8960



CMW 500



Agilent E5071B

Test system	Test environment	Active testing	Passive testing
SG24 GTS	temperature: $22^{\circ}\text{C} \pm 3^{\circ}\text{C}$ humidity: $50\% \pm 15\%$	BT/WIFI/GPS	600MHZ—6G



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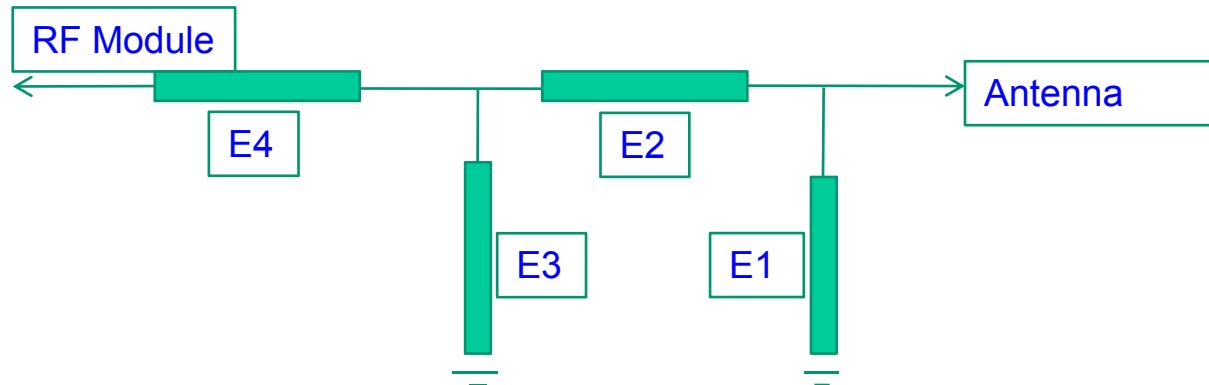
2. Debugging version record

version	date	summary
V1	6.3	Wire sample data
V2		
V3		
V4		
V5		
V6		



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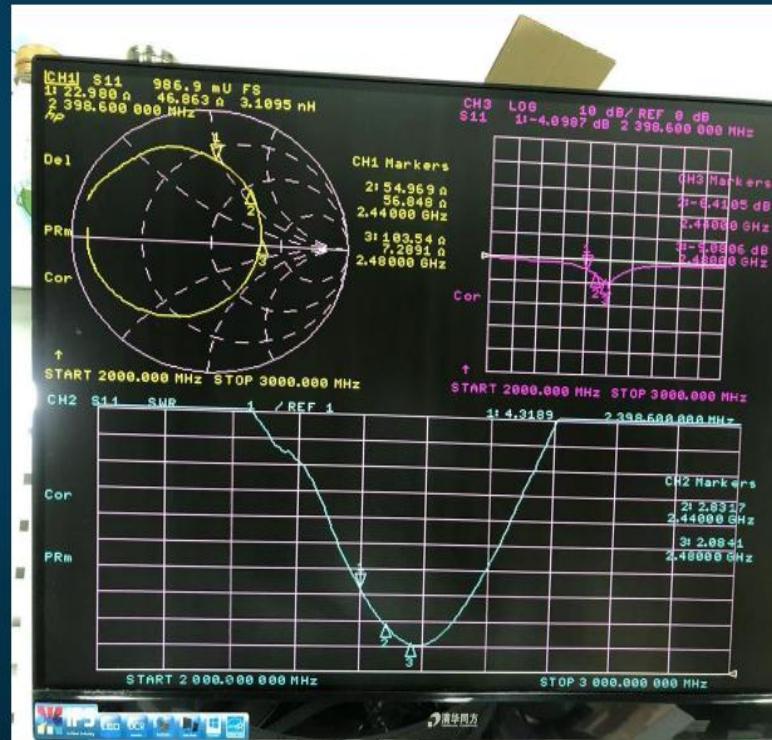
3. matching circuit



Modify matching: No.



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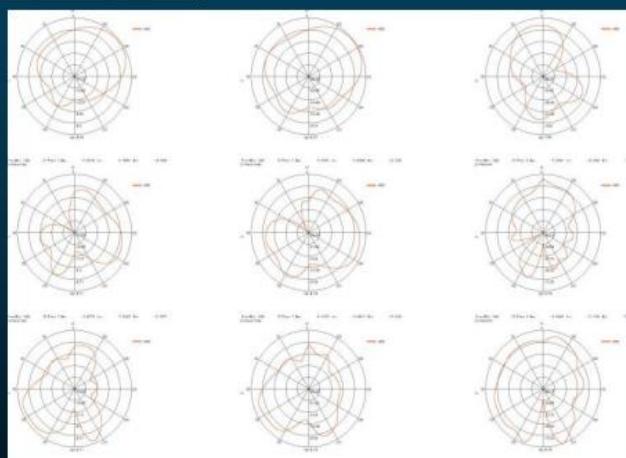
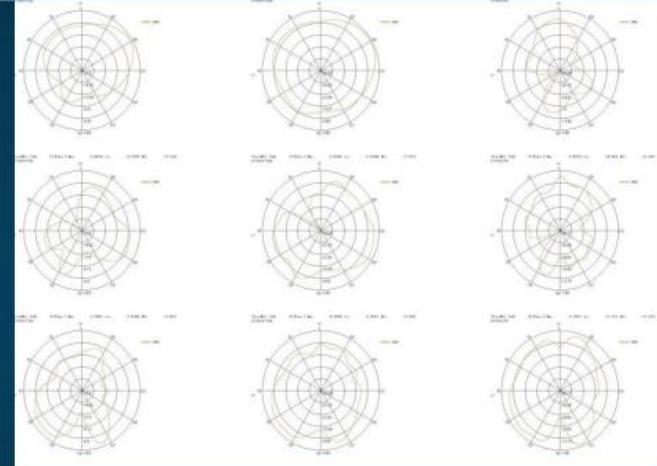
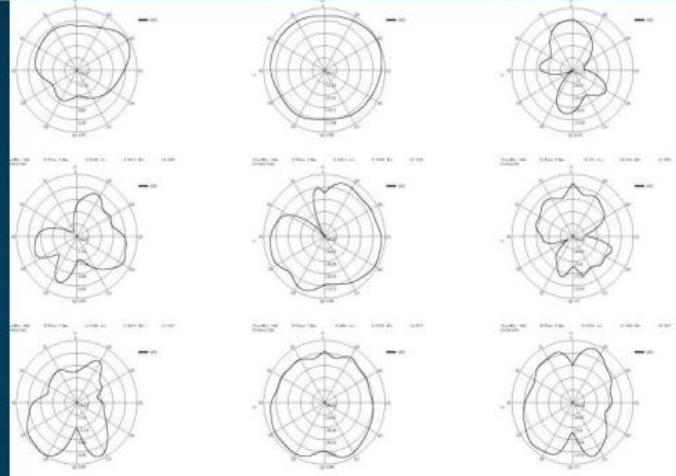
GAIN & Efficiency

Frequency (MHz)	Gain (dB)	Efficiency (%)
2400	-2.67	10.66
2410	-2.41	10.88
2420	-2.23	11.2
2430	-2.17	11.24
2440	-1.85	11.61
2450	-1.63	12.28
2460	-1.37	12.69
2470	-1.13	13.39
2480	-1.1	13.87
2490	-1	14.15
2500	-1.15	14.11



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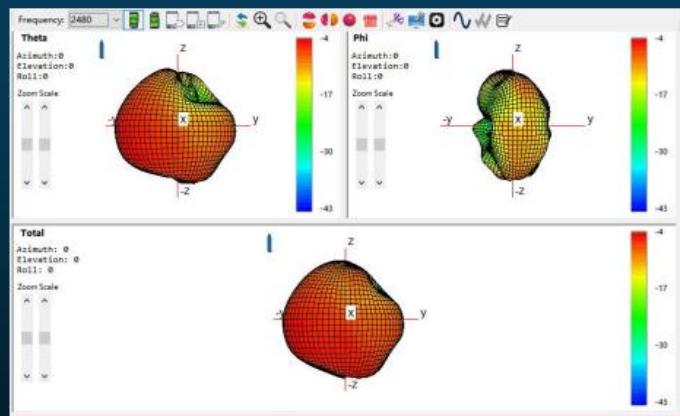
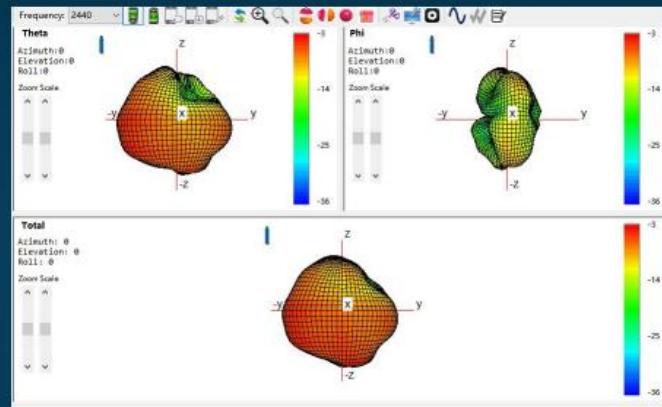
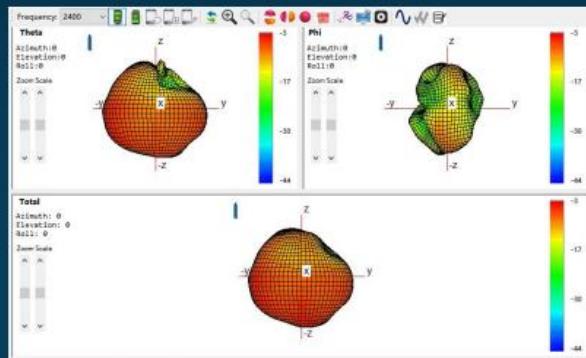
2D Radiation Pattern





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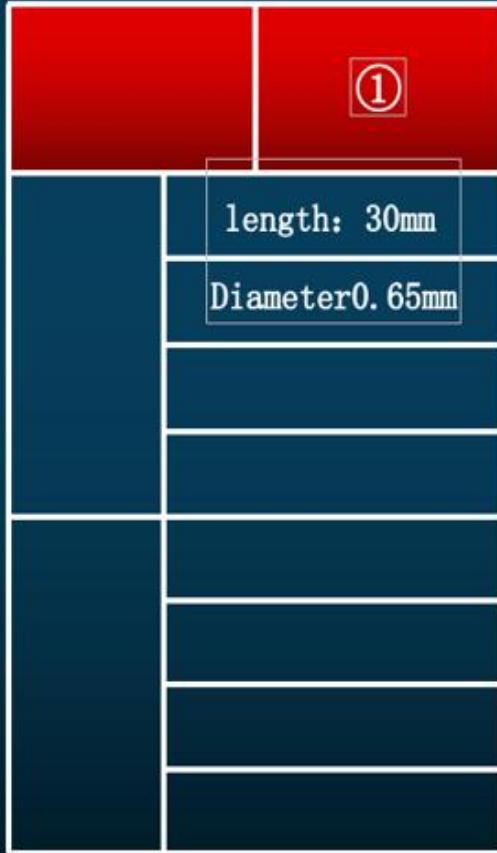
3D Radiation Pattern





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Antenna position and size





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12. Summary explanation

1. Please pay attention to whether the matching in the report is changed and whether the environmental treatment is feasible; This will directly affect the antenna performance. If you have any objection, please contact our company in time.
2. If your machine has changed materials, updated software, environmental treatment, etc., you must provide the latest state machine to our company for verification in time;
3. If your company's machines need to be sent to a third party for verification or inspection, please provide them to our company for testing and verification before sending them (because the consistency of motherboard, environmental treatment and antenna assembly will affect the antenna deviation).