



Antenna Approval Sheet

For **MX3-BT** Project

Customer	禄弘	Project	MX3-BT
Band	BT 2.4GHZ		
ZC PN	LK002-CA-93		
Version	R:A	Data	2026.4.17

Tester	Thor	Test Date	2026. 4. 17
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1.Manufacturer information

Company name: Shenzhen Zhongcheng communication products Co., Ltd

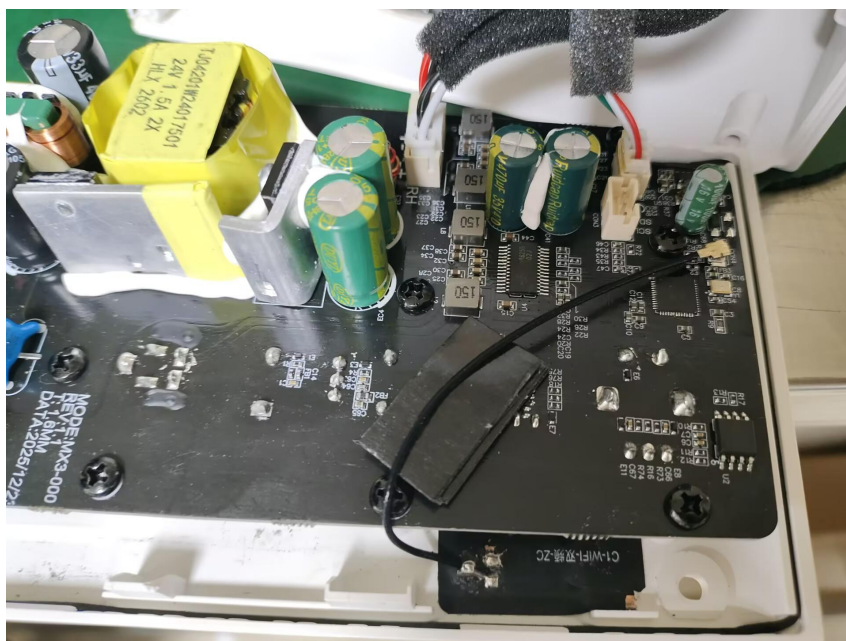
Address: 5th floor, building C, Huafeng Industrial Zone, Liuxian Road, 71 District, Bao' an, Shenzhen

2. Summary of the DUT

MX3-BT Picture



Antenna Assembly Position



3. Electrical Specification:

Antenna types	FPC
Frequency	2400-2500 MHz
Impedance	50 Ω
VSWR	< 2.0
Gain Peak	2.0 dBi
Efficiency	>40 %



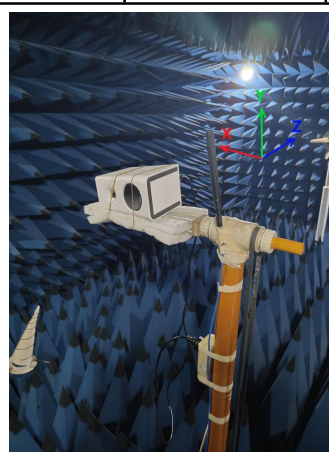
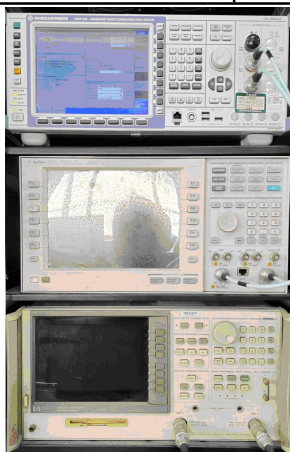
4. Test Condition

4.1	Test Project	Test Equipment and Model	Remark
1. Active Testing	1. TRP 2. TIS	1. 3D microwave darkroom (FTU AnTestPro99) 2. Comprehensive test instrument (CMW500)	
2. Passive Testing	1. Antenna Gain 2. S.W.R 3. Return Loss 4. Radiation Pattern	1. Network analyzer (R&S ZVL6) 2. Network analyzer (HP 8753D)	

4.2 Instrument list and calibration date

Equipment	Manufacturer	Model No.	Last Cal.	Cal.Due Date
Network Analyzer	Rohde & Schwarz	R&S ZVL6	2026.1.5	2027.1.5
Comprehensive test instrument	Rohde & Schwarz	CMW500	2026.1.5	2027.1.5
3D microwave darkroom	Tianjin Feitu Technology	FTU AnTestPro99	2026.1.5	2027.1.5

4.3



5. RF Performance

5.1 Active test data

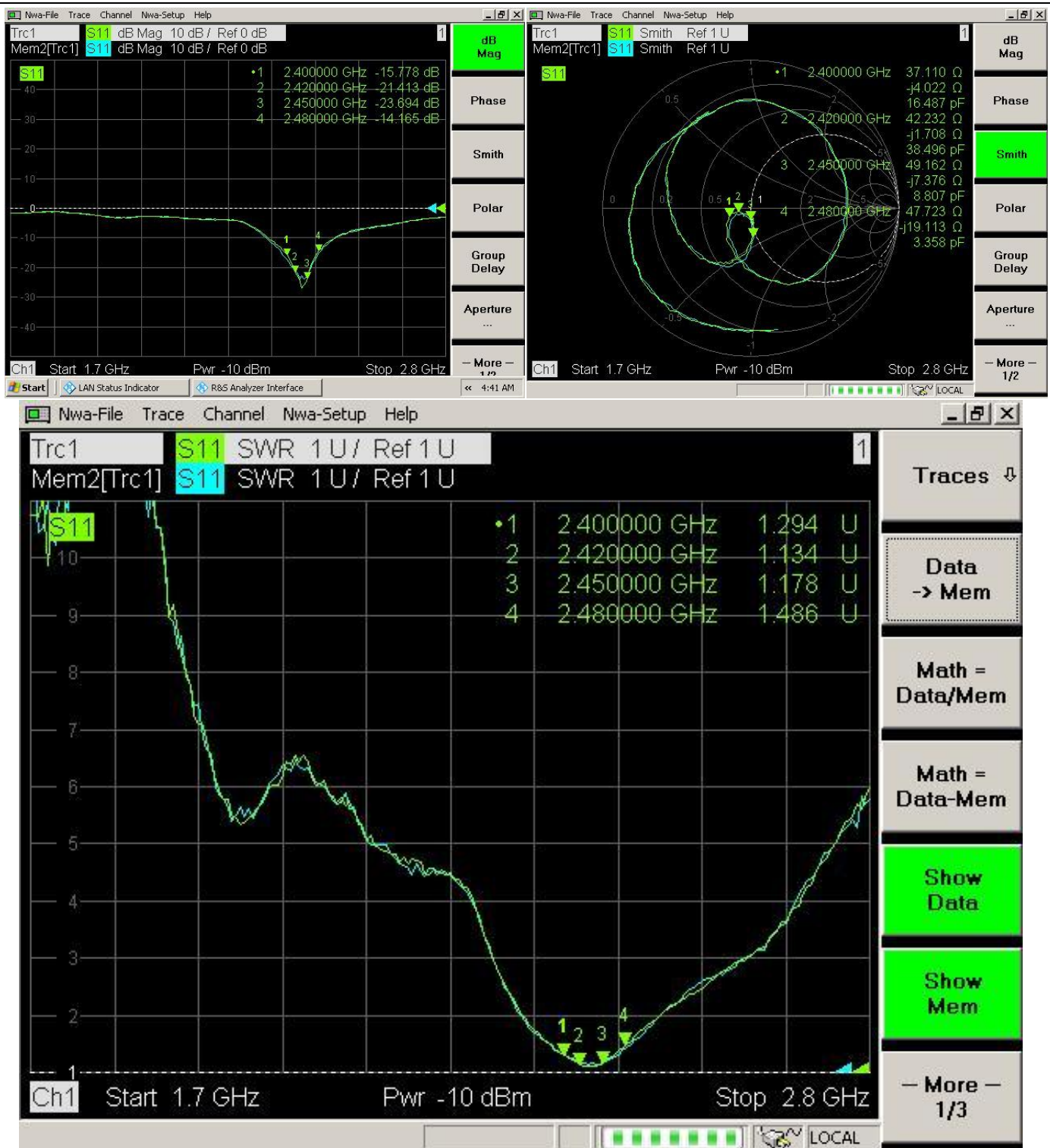
Item	Standard	Channel	Frequency	TRP	TIS
1	BT(BR/EDR)	0	2402	4.16	-79.42
2	BT(BR/EDR)	39	2441	2.82	-80.47
3	BT(BR/EDR)	78	2480	2.98	-81.06

5.2 Passive parameters

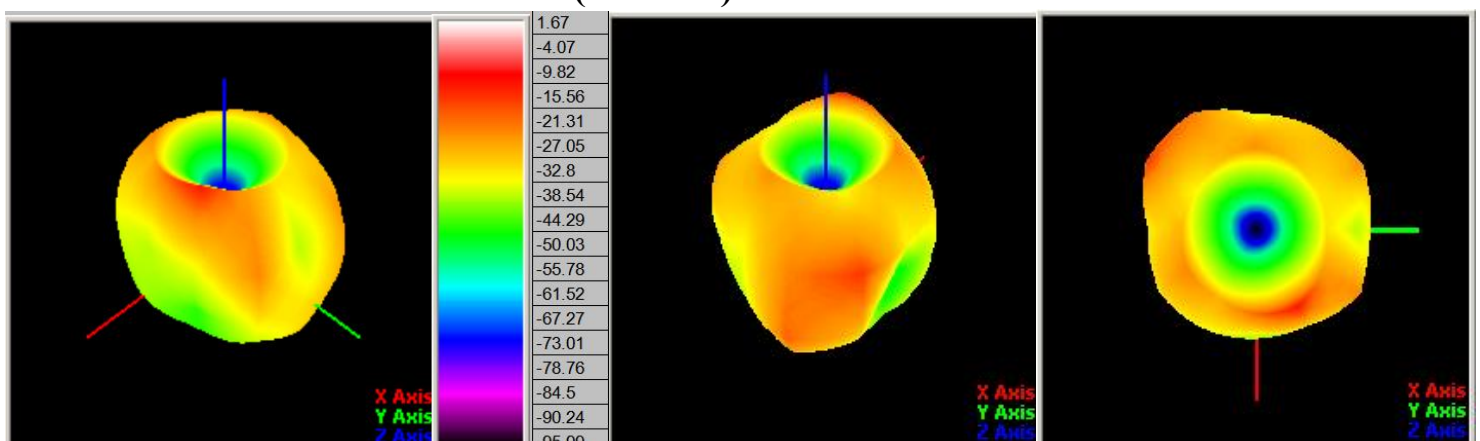
Freq. (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain (dBi)	1.68	1.51	1.34	1.57	2.0	1.57	1.74	0.92	1.42	1.41	1.81

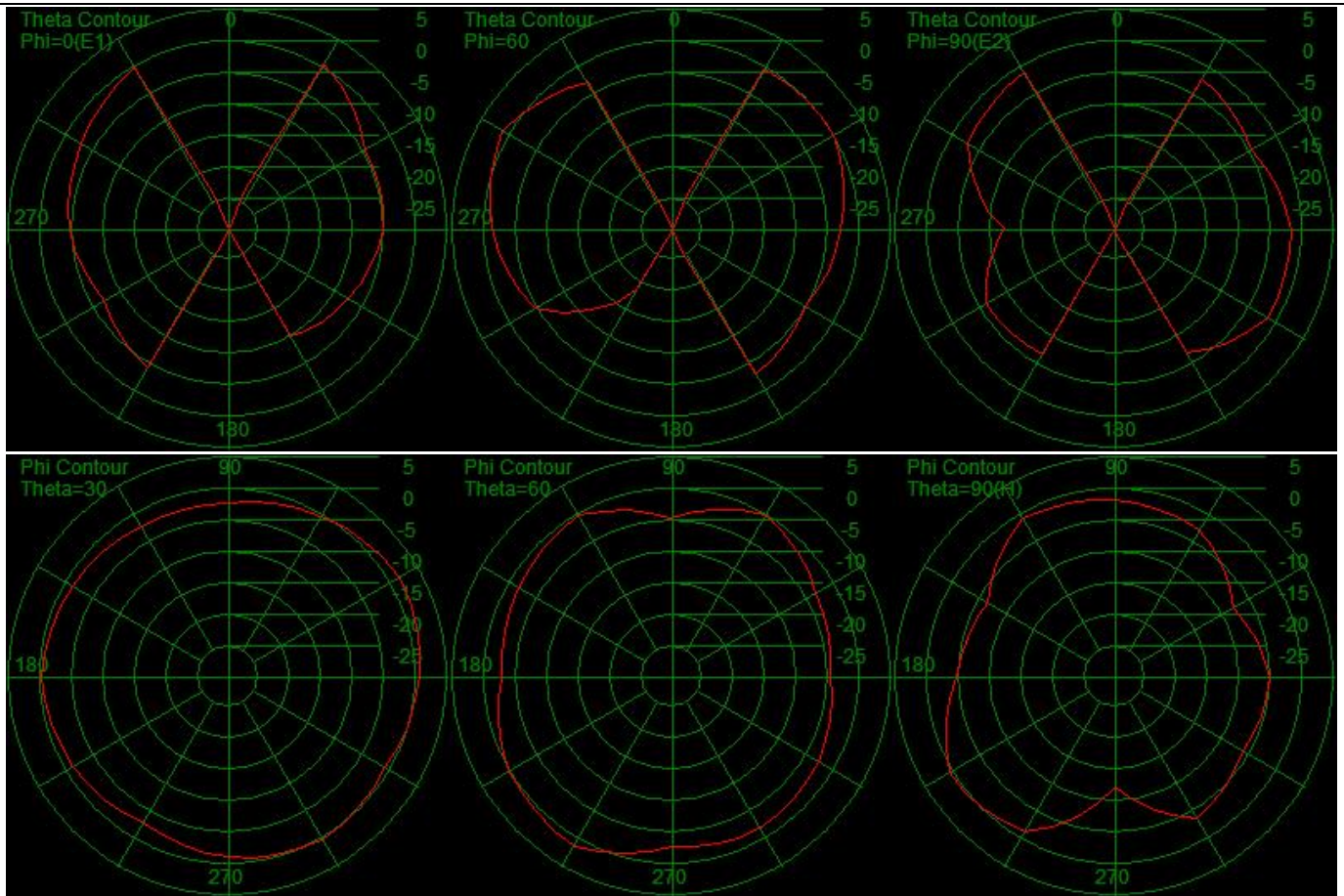
5.3 S Parameter

Frequency (MHz)	2400	2450	2480
Return Loss (dB)	-15.77	-23.69	-14.16
VSWR (dB)	1.29	1.17	1.48



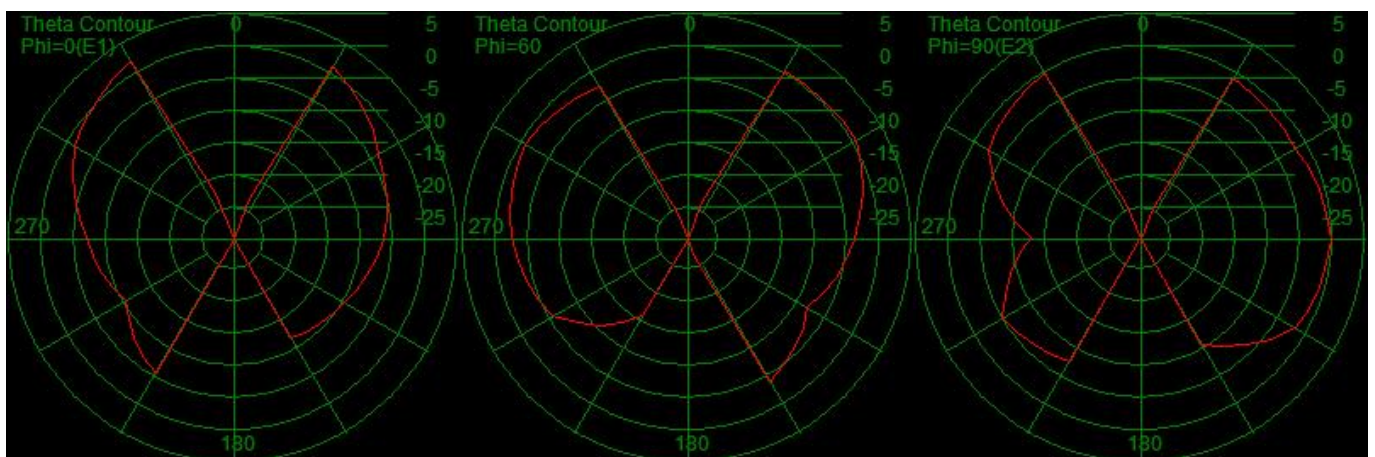
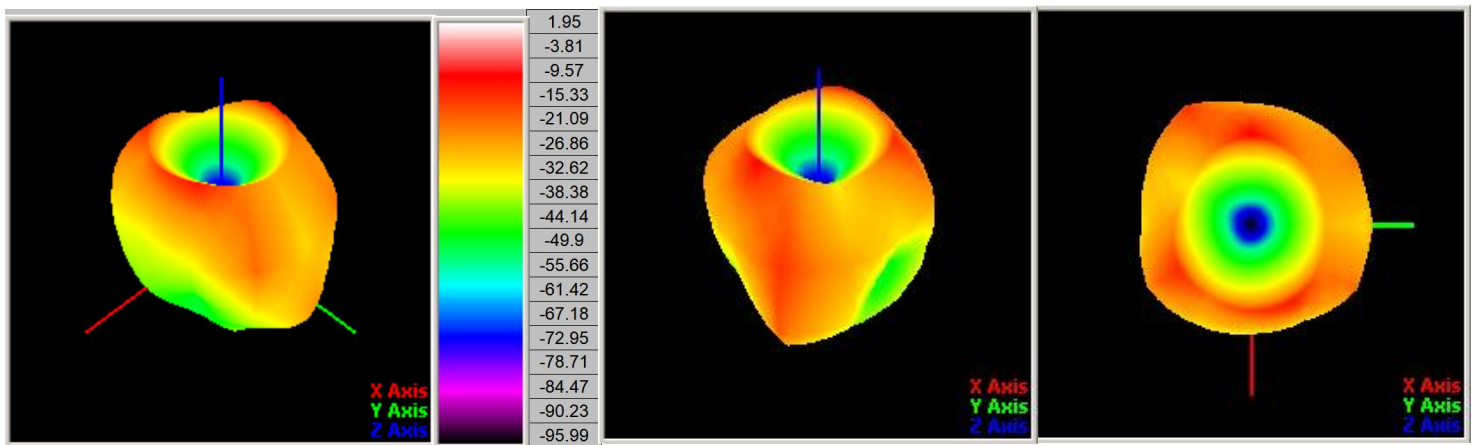
5.4 Antenna Radiation Pattern (Unit:dbi)

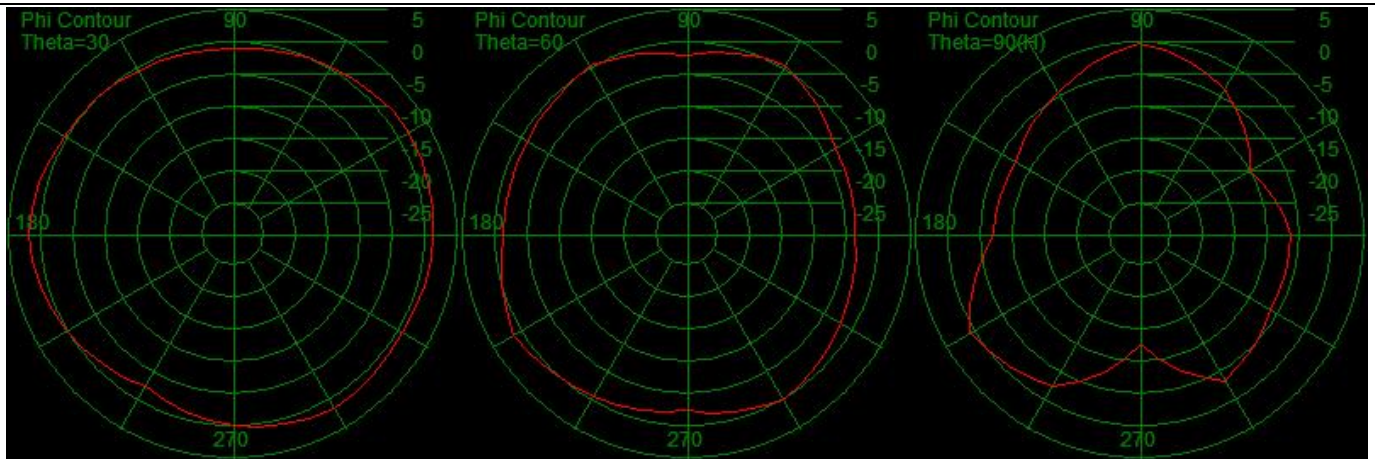




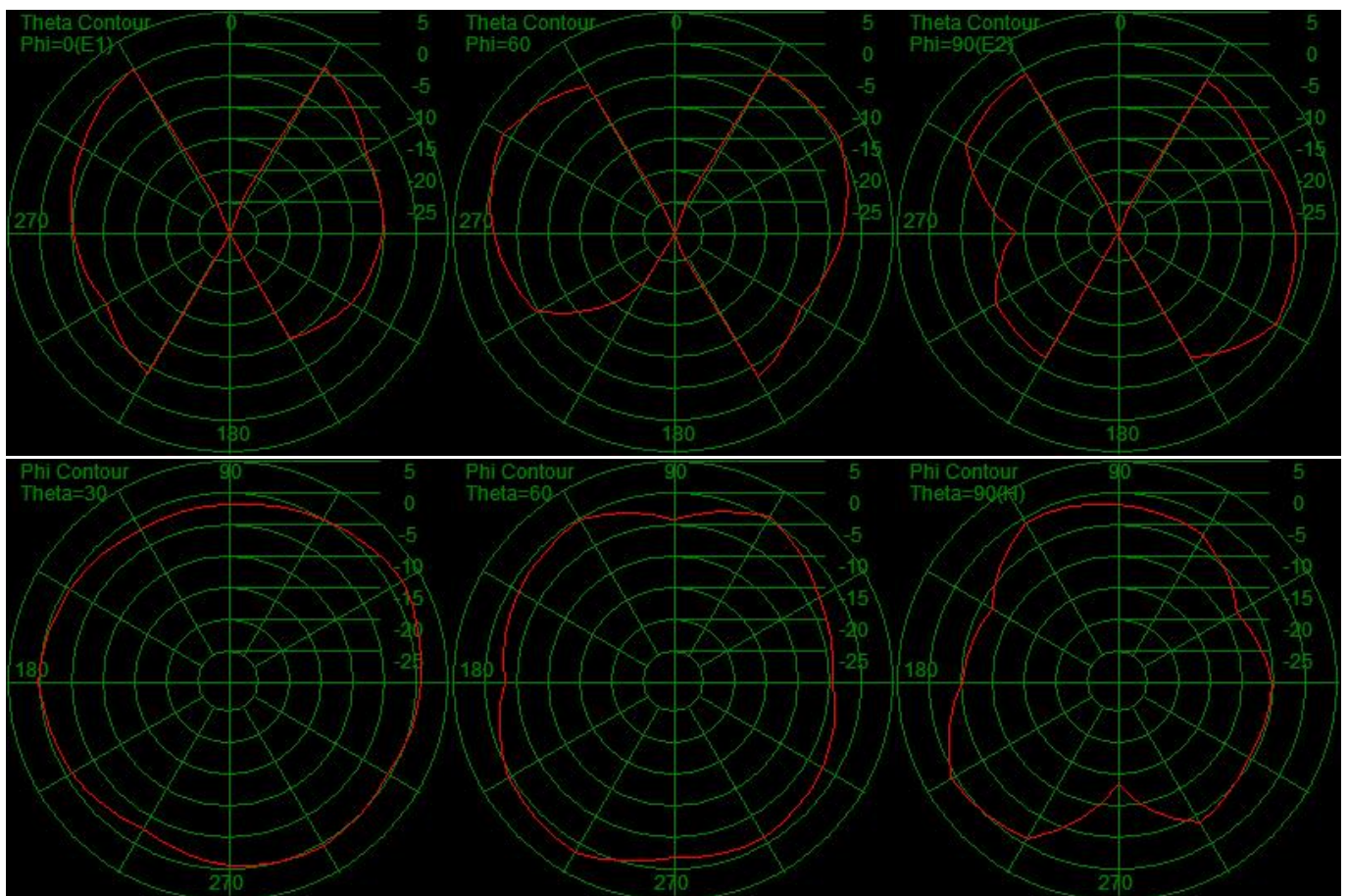
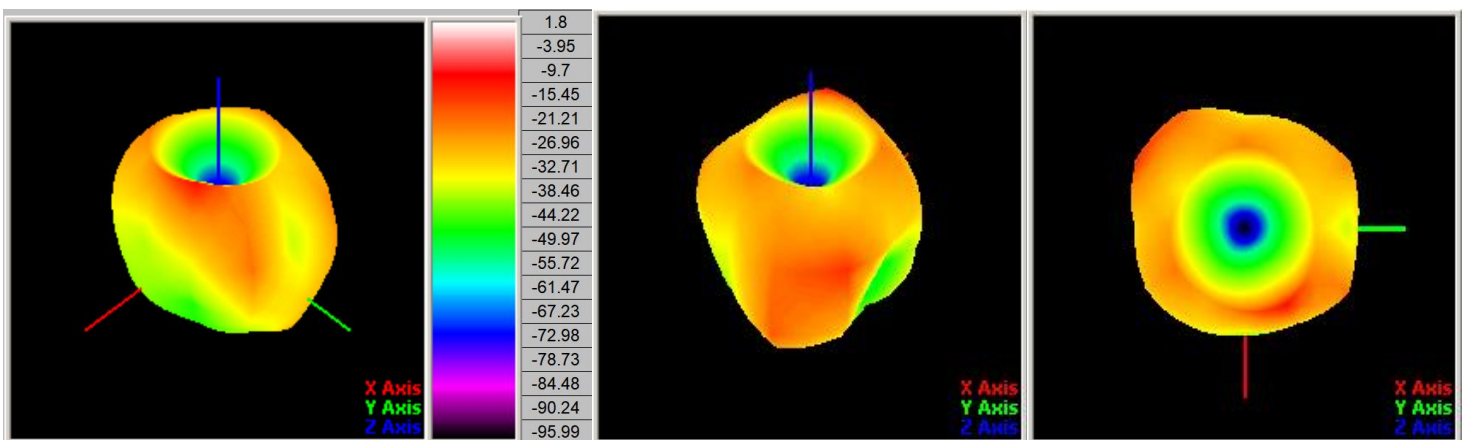
Passive -Freq2400.00MHZ

Gain: 1.68(dBi)





Passive -Freq2440.00MHZ Gain: 2.0(dBi)



Passive -Freq2500.00MHZ Gain: 1.81(dBi)



6. 成品图

