



Antenna Approval Sheet

For **P200** Project

Customer	华芯智影	Project	P200
Band	WiFi 2.4GHZ		
ZC PN	HA012-CA-93		
Version	R:A	Data	2023-3-2

RF		ME	
Checked By			
Confirmed By			
Cust Confirm			



1. Summary of the DUT

Antenna Picture



Antenna Picture



2. Electrical Specification:

Antenna types	Built-in wi fi 2.4GHZ antenna
Frequency	2400-2500 MHz
Impedance	50 Ω
VSWR	< 2.0
Gain	2.4GHZ 2.88 dbi
Efficiency	>40 %
Antenna Material	FPC+同轴线
Connector Type	1.13 MHF-1-Plug



3. Test Condition

3.1	测试项目	测试设备和型号	备注
1.有源测试	1.TRP 2.TIS	1. 3D microwave darkroom (Satimo SG24) 2. Comprehensive test instrument (CMW500) 3. Agilent 8960 E5515C	
2.无源测试	1. Antenna Gain 2. S.W.R 3. Return Loss 4. Radiation Pattern	1. Network analyzer (R&S ZVL6) 2. Network analyzer (HP 8753D)	

3.2 Matching Circuit The matching circuit was Default

3.3Antenna installation diagram:



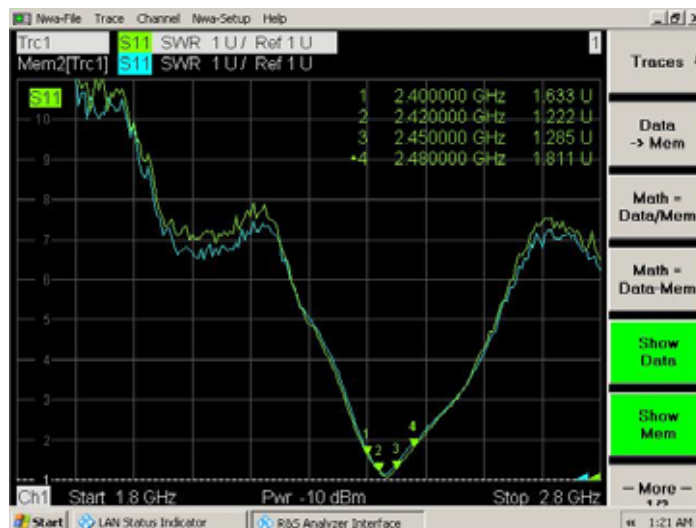
4. RF Performance

4.1 Passive parameters

Freq. (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain (dBi)	1.67	1.8	2.13	2.56	2.53	2.85	2.88	2.45	1.99	1.98	1.95

4.2 S Parameter

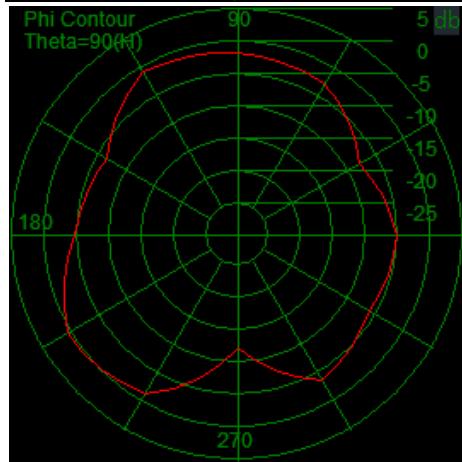
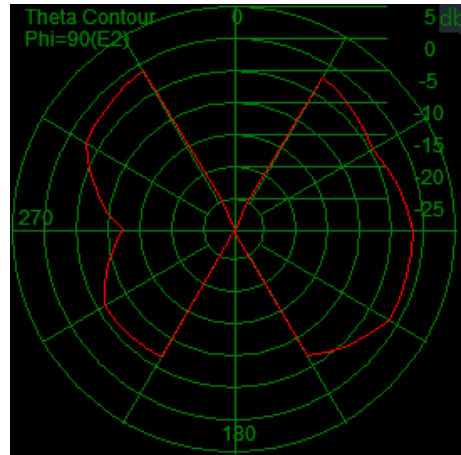
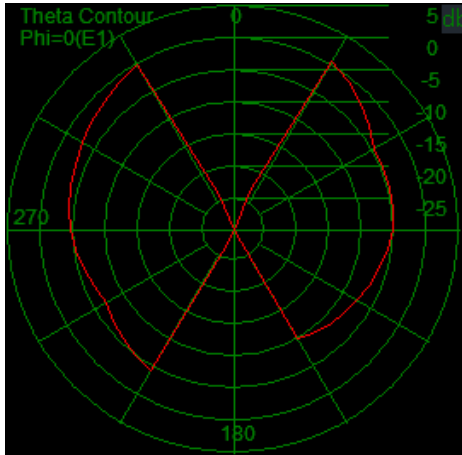
Frequency (MHz)	Return Loss (dB)	VSWR
2400	-20.58	1.63
2450	-22.74	1.28
2480	-15.39	1.81



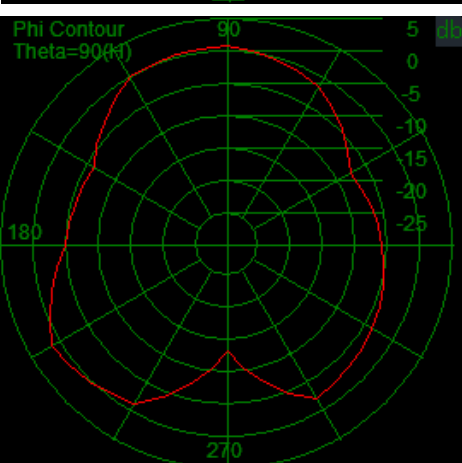
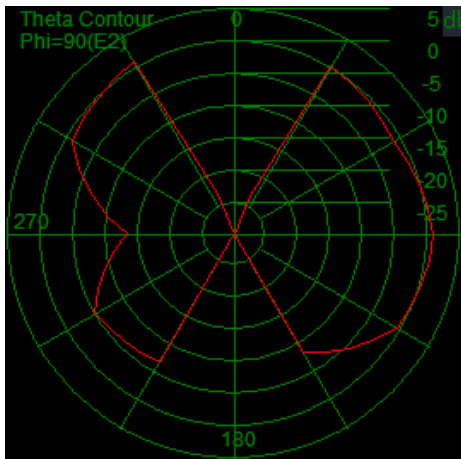
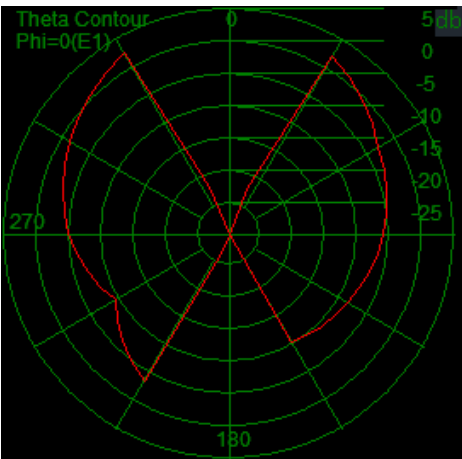


4.4 Radiation Pattern

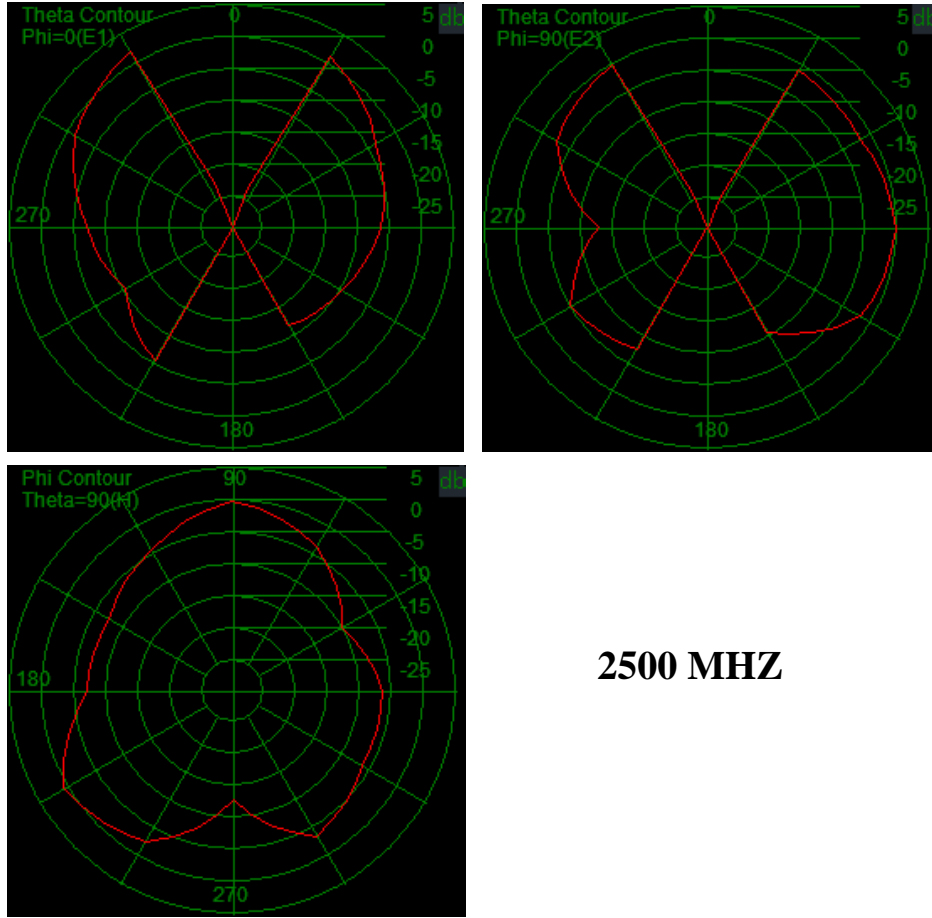
4.4.1 Antenna 2D Radiation Pattern



2400MHZ

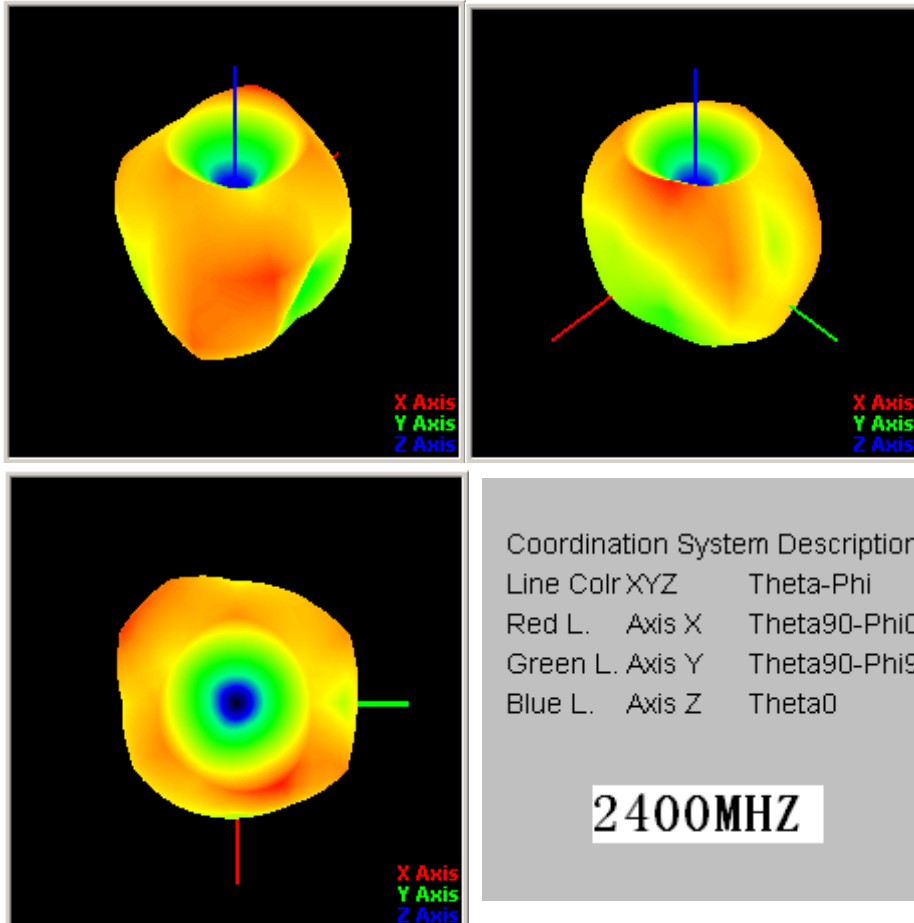


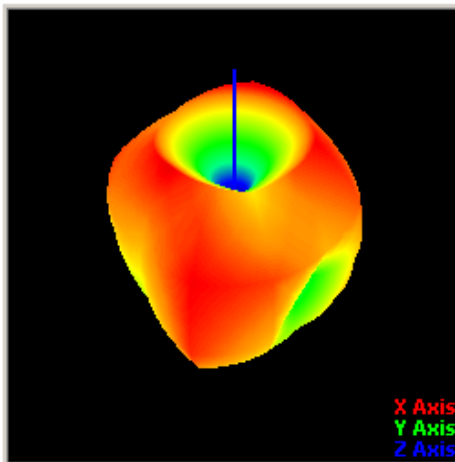
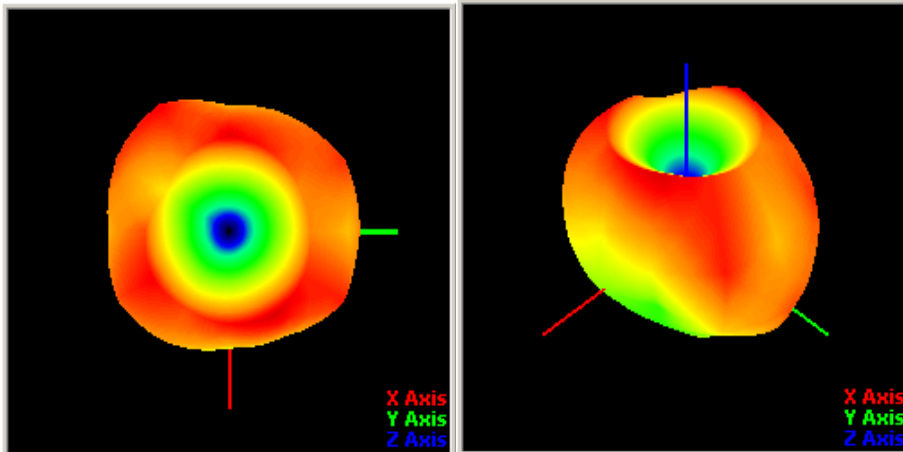
2460MHZ



2500 MHZ

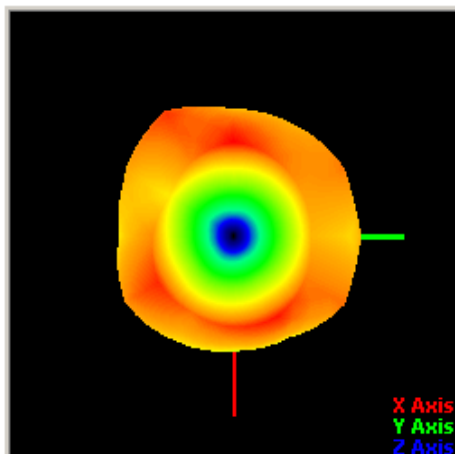
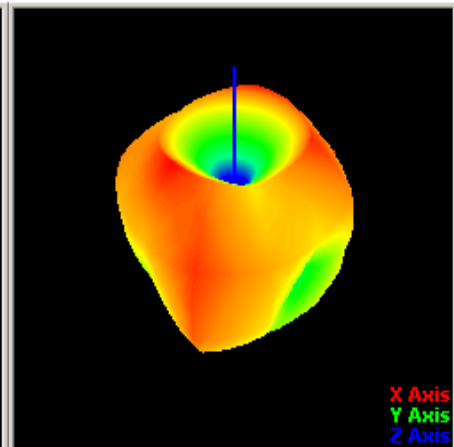
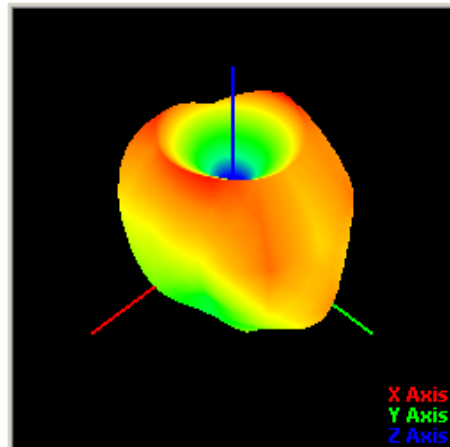
4.4.2 Antenna 3D Radiation Pattern





Coordination System Description:
Line Colr XYZ Theta-Phi
Red L. Axis X Theta90-Phi0
Green L. Axis Y Theta90-Phi90
Blue L. Axis Z Theta0

2460MHZ



Coordination System Description:
Line Colr XYZ Theta-Phi
Red L. Axis X Theta90-Phi0
Green L. Axis Y Theta90-Phi90
Blue L. Axis Z Theta0

2500MHZ



5. ME Drawing for the antenna

