



Antenna Approval Sheet

For **R6** Project

Customer	CONVERGE BEAUTY LIMITED	Project	R6
Band	WiFi 2.4G		
ZC PN	T21-025		
Version	R:A	Data	2022-12-14

RF	
Checked By	
Confirmed By	
Cust Confirm	

1. Summary of the DUT

R6 Picture



Antenna Picture



2. Electrical Specification:

Antenna types	Built-in wifi 2.4GHZ antenna
Frequency	2400-2500 MHz
Impedance	50 Ω
VSWR	< 2.0
Gain	2.99dBi
Efficiency	>40%
Antenna Material	Copper tube + coaxial cable
Connector Type	1.13 MHF-1-Plug



3. Test Condition

3.1	Test items	Test equipment and models	Remark
1.active test	1.TRP 2.TIS	1. 3D microwave darkroom (Satimo SG24) 2. Comprehensive test instrument (CMW500) 3. Agilent 8960 E5515C	
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)	

3.2 Matching Circuit The matching circuit was Default

3.3Antenna installation diagram:



4. RF Performance

4.1 Active test data

Item	Standard	Band	Channel	Frequency	Max. power	Minimum sensitivity	TRP	TIS
1	WIFI (AP)	WIFI_B (11M)	1	2412	24.55	-90.21	18.13	-83.79
2	WIFI (AP)	WIFI_B (11M)	6	2437	24.89	-87.4	18.98	-81.46
3	WIFI (AP)	WIFI_B (11M)	11	2462	24.44	-89.54	18.52	-83.57

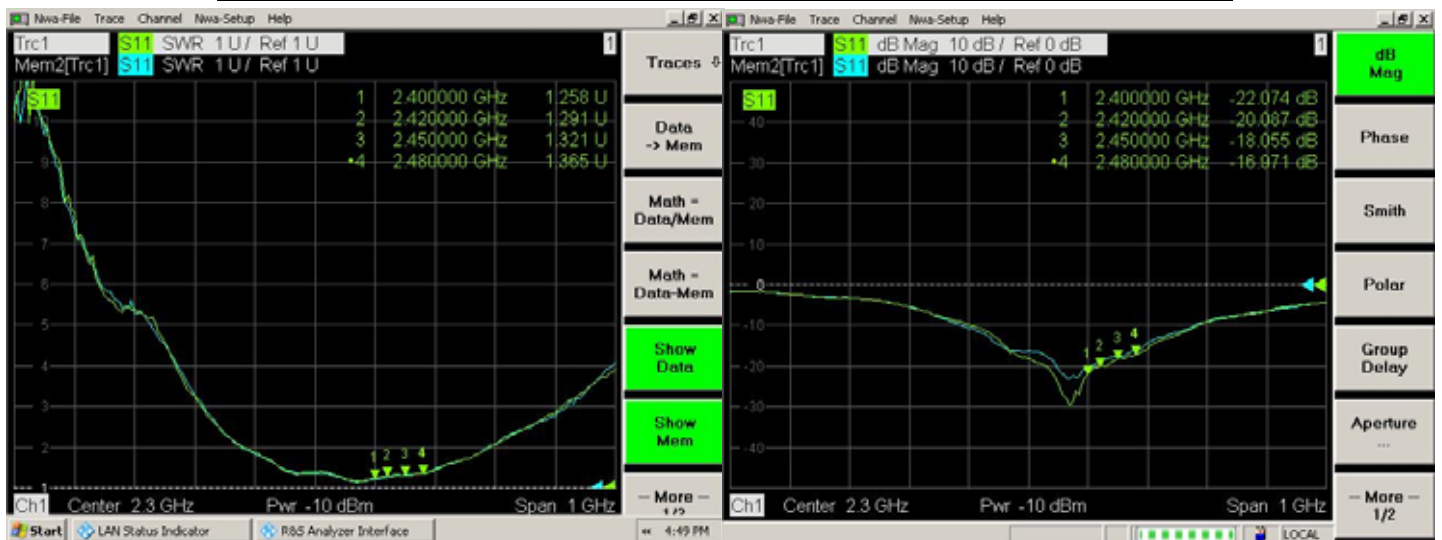


4.2 Passive parameters

Freq. (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain (dBi)	2.63	2.68	2.71	2.99	2.6	2.23	2.6	2.49	1.96	1.77	1.7

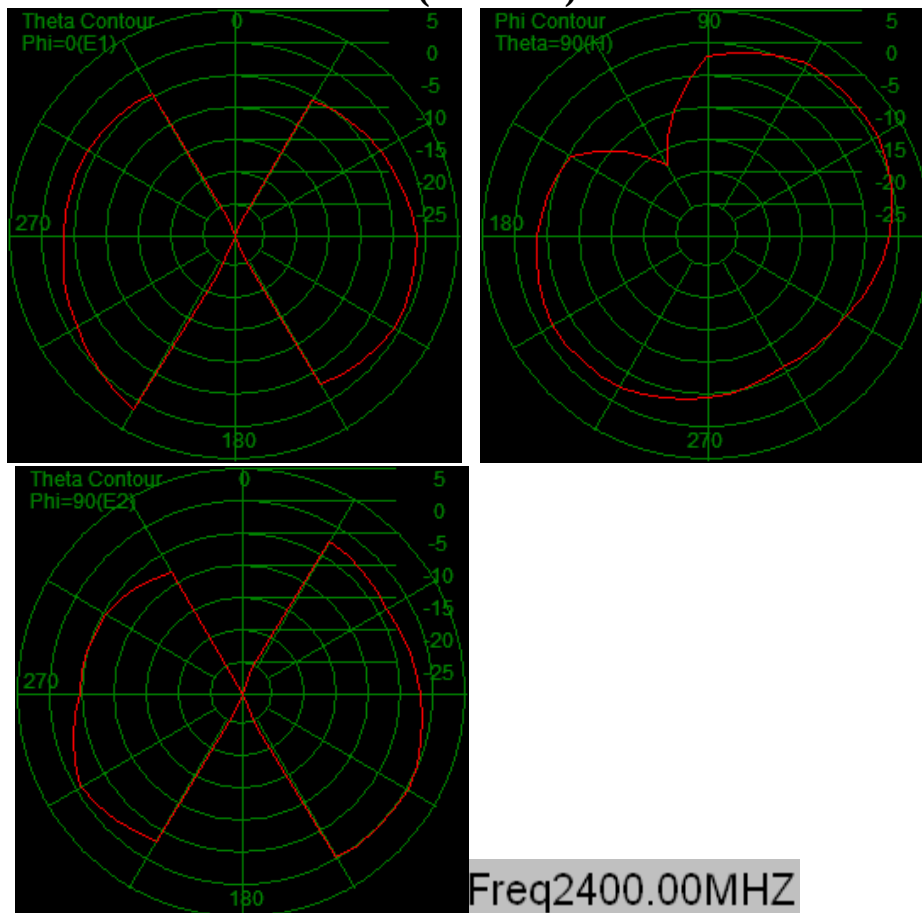
4.3 S Parameter

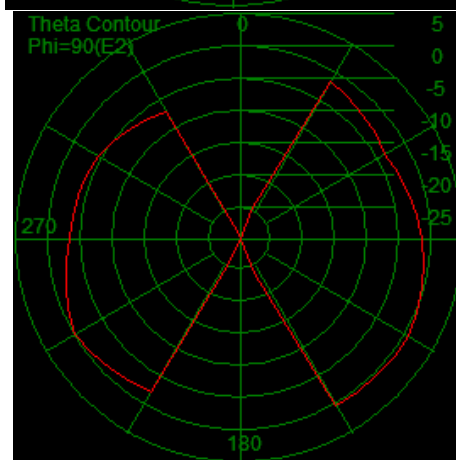
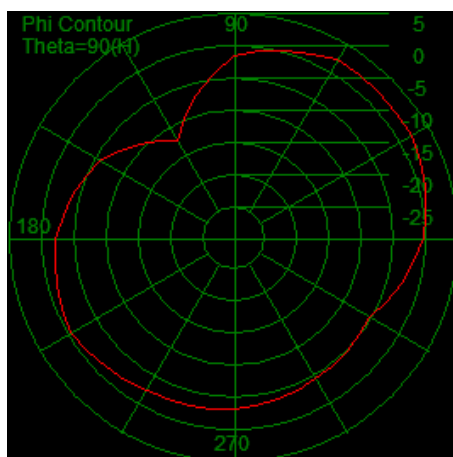
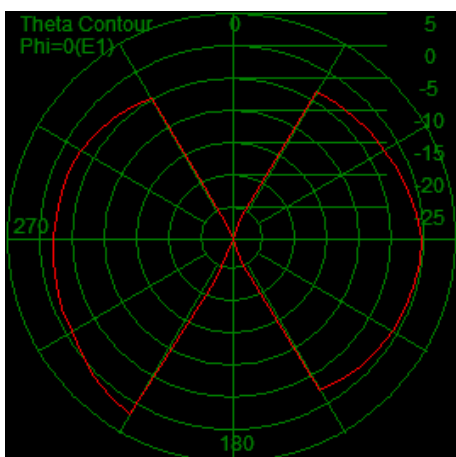
Frequency (MHz)	2400	2450	2480
Return Loss(dB)	-22	-18	-16.9
VSWR	1.25	1.32	1.36



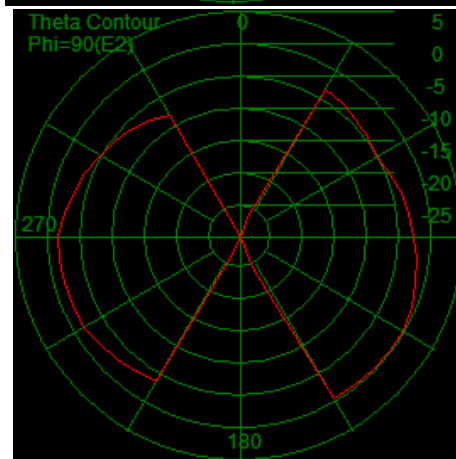
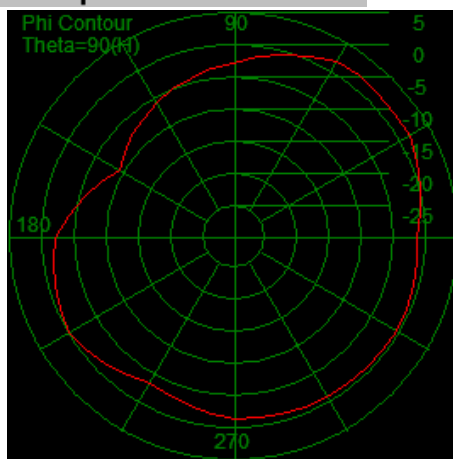
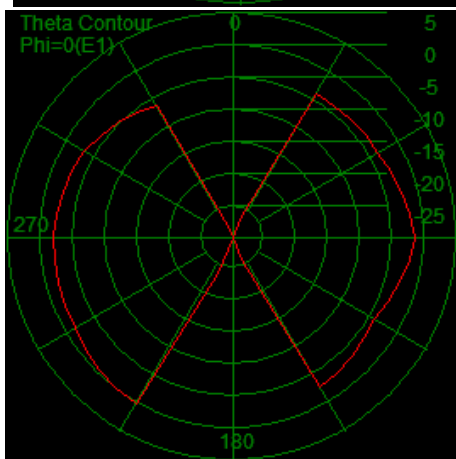
4.4 Radiation Pattern

4.4.1 Antenna 2D Radiation Pattern (Unit:dbi)





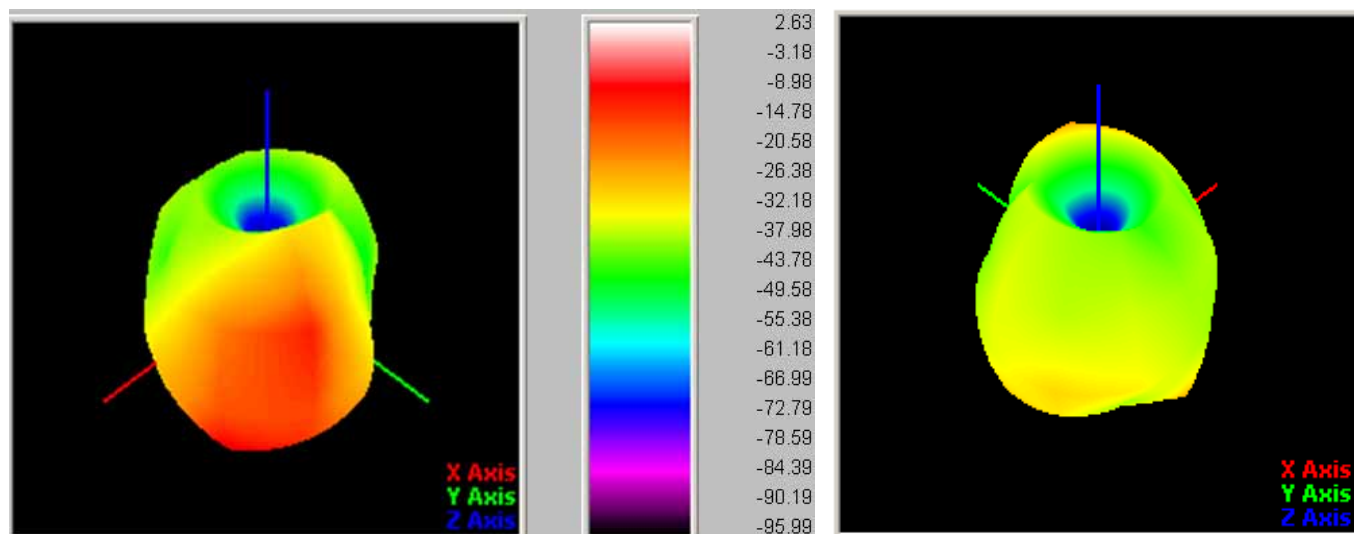
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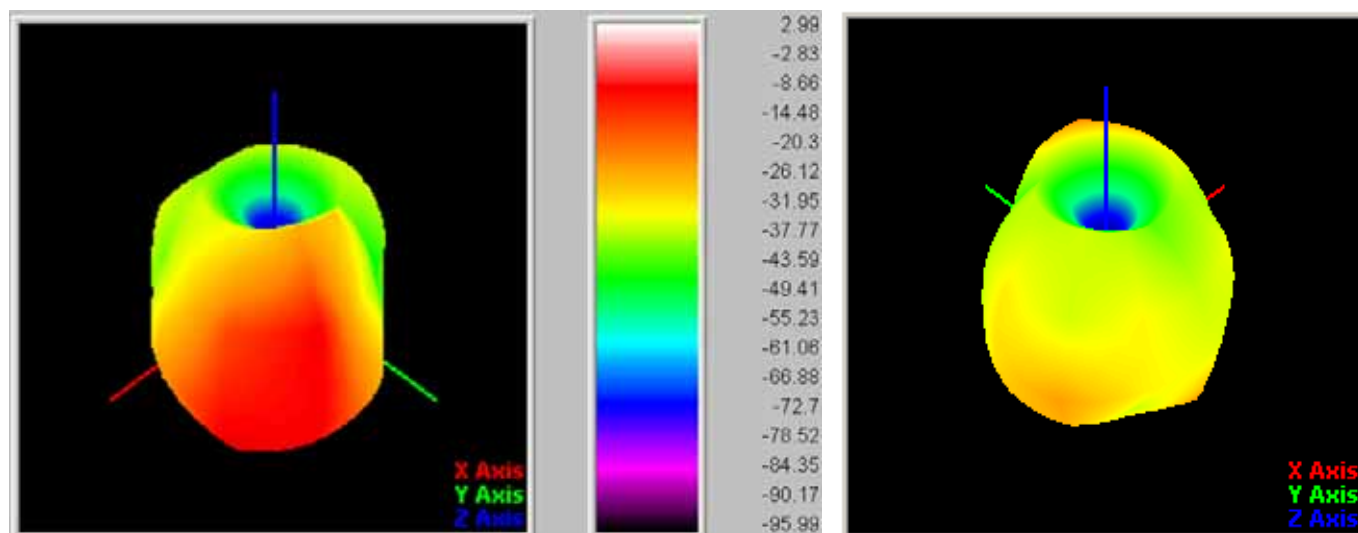
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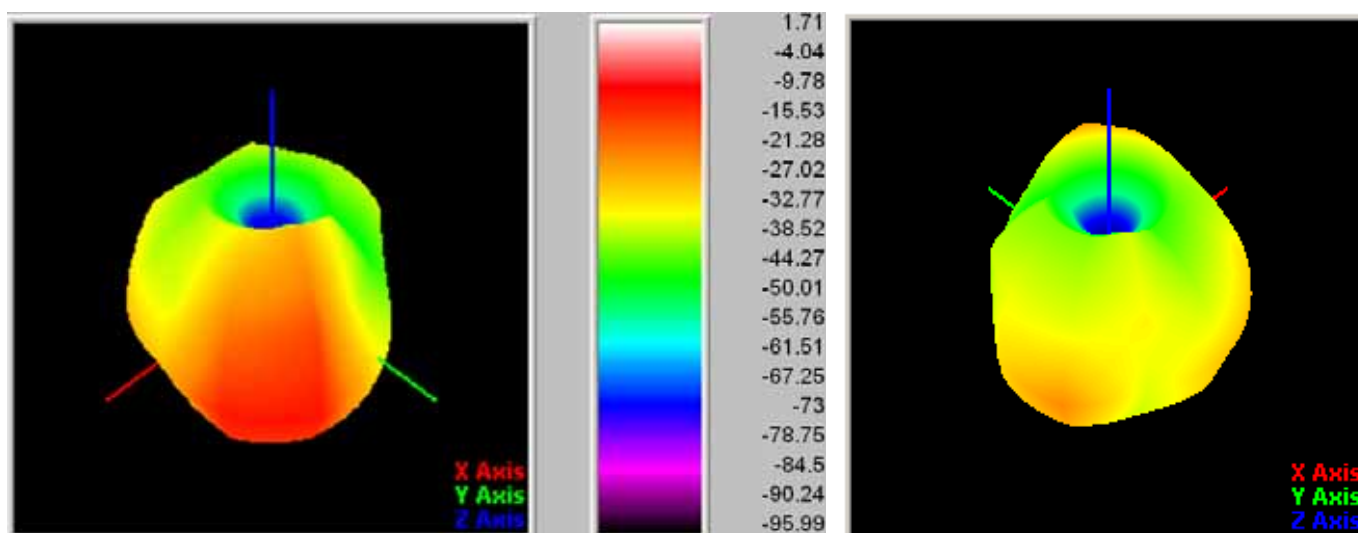
4.4.2 Antenna 3D Radiation Pattern (Unit:dbi)



Freq2400.00MHZ



Freq2430.00MHZ



Freq2500.00MHZ

4. ME Drawing for the antenna

