DV8919-KAT BT Ant Passive Test Report

Record for version modification

Date	Revision	Modify Content	Author
2023-3-21	V1.0	1st Version	Leon_Wu

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1 Test Summary

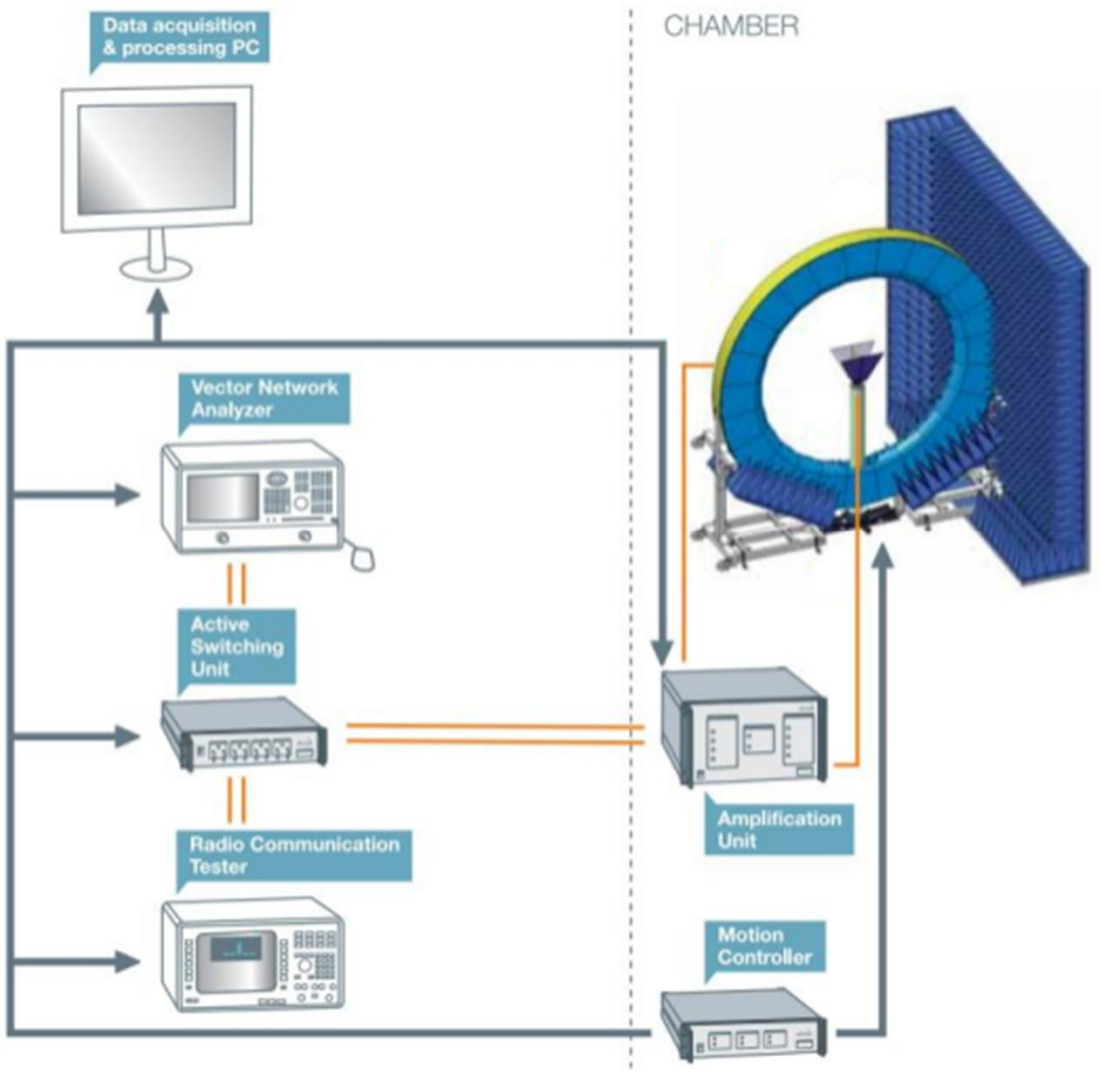
No.	Sample Name	Test item	Conclusion
1	DV8919-KAT	VSWR	Pass
3		Efficiency & Gain	Pass
4		2D & 3D Radiation Pattern	Pass

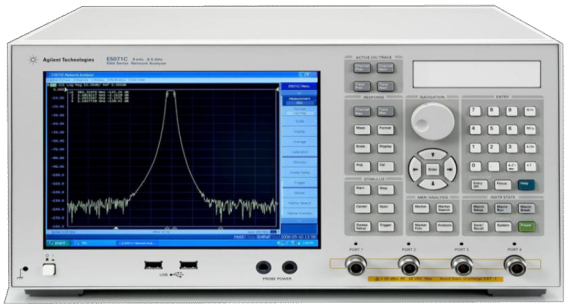
2 Test Information

Model No.	DVXXXX
HW Version	MB.XXX.X
SW Version	BaseLine-v11.1.1.1
CPU	Amlogic XXXX
DDR	XXXXXXXXX
Wi-Fi Module	XXXX/Manufacturer
Tester	XXX
Reviewer	XXX
Approver	XXX
Date	2023.XX.XX

3 Testing Environment

Chamber	XH Chamber
Wireless Communication Tester	R&S CMW500
Vector Network Analyzer	KEYSIGHT E5071C
Temperature	25±2℃
Humidity	50±20%Rh





R&S CMW500

Wireless Communication Tester

●GSM/3G/4G

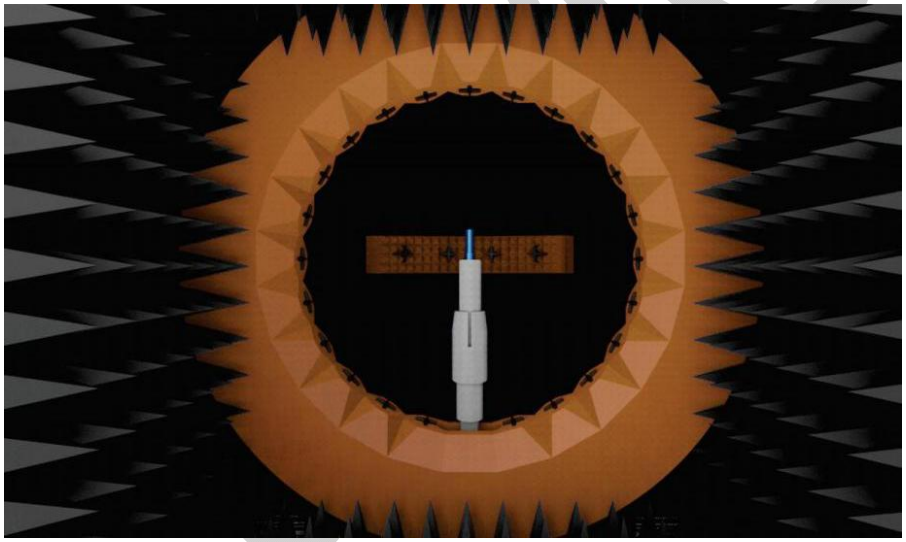
●Wi-Fi/ BT

●NB-IoT

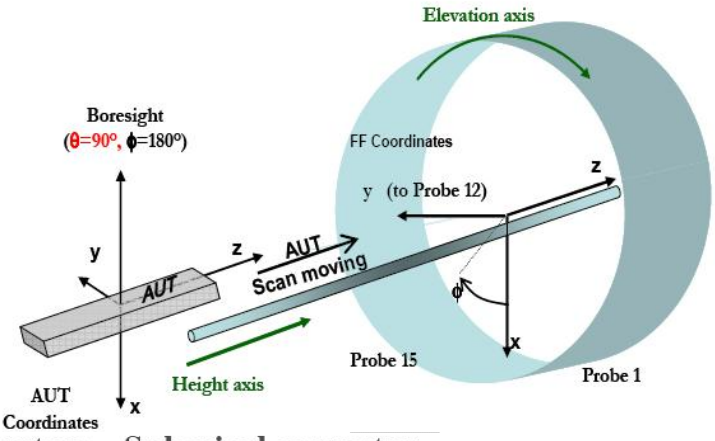
KEYSIGHT E5071C

Vector Network Analyzer

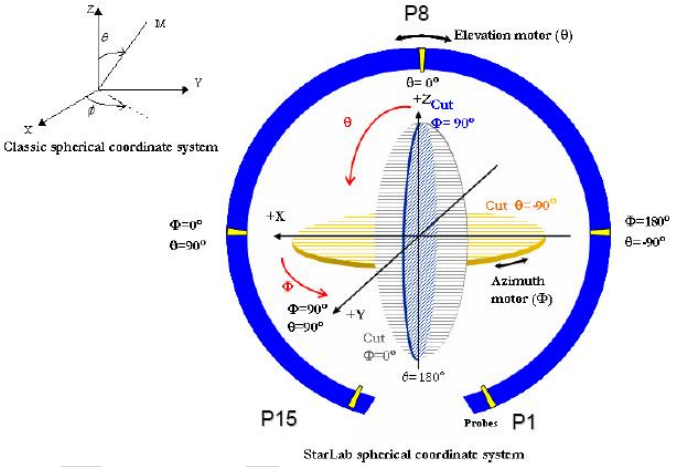
●Frequency:100 kHz~8.5GHz



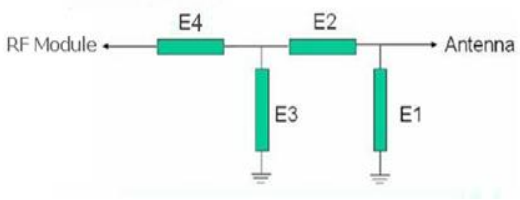
Coordinate system – Cylindrical geometry



Coordinate system – Spherical geometry



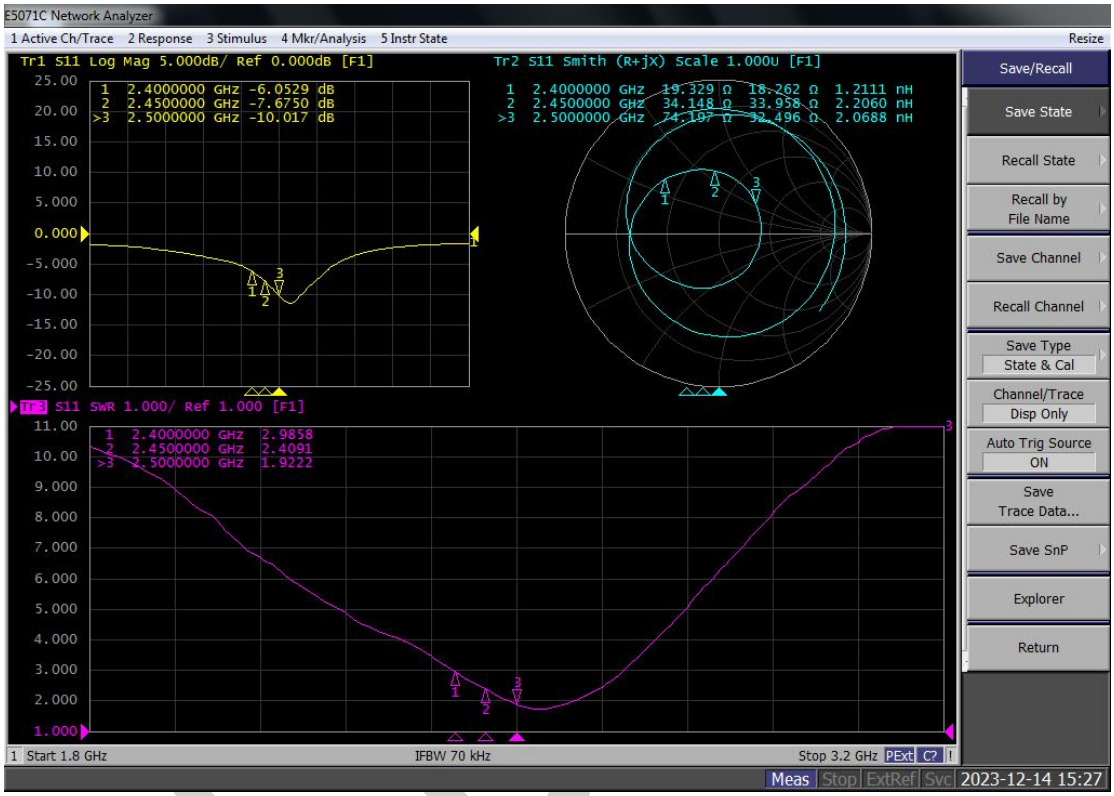
4 Matching Circuit Description



Element	Value
E1	N/A
E2	N/A
E3	N/A
E4	N/A

5 Passive Parameter Test

5.1 VSWR

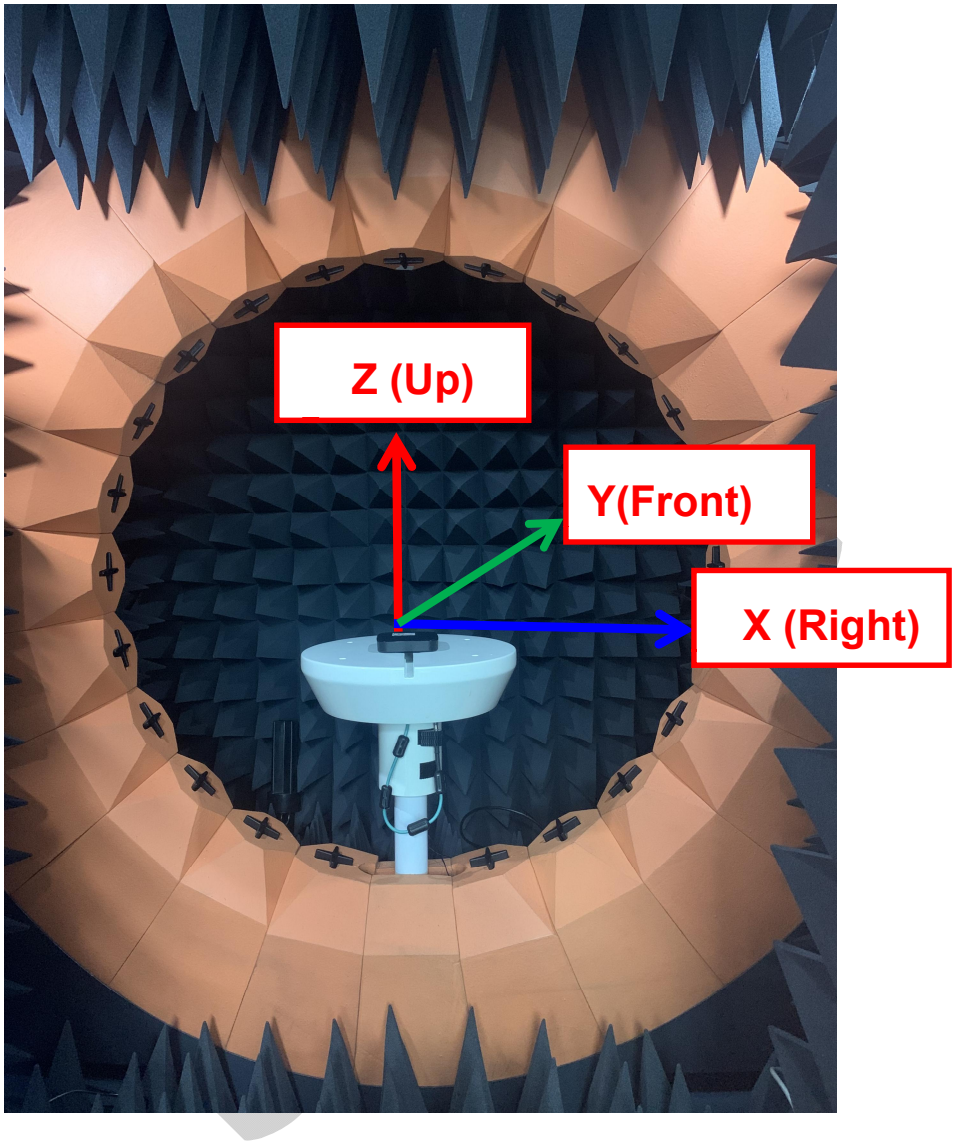


Freq/GHz	2.4	2.45	2.5
VSWR	2.9	2.4	1.9

5.2 Efficiency & Gain

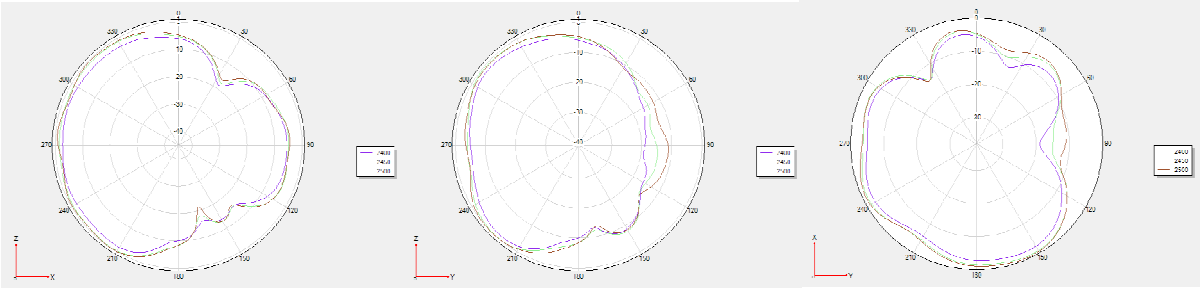
Efficiency & Gain of BT Ant		
Frequency (MHz)	**Gain (dBi)**	**Efficiency (%)**
2400	-1.03	39.9
2410	-0.47	45.5
2420	-0.81	43.85
2430	-0.32	48.98
2440	0.24	47.53
2450	0.29	54.33
2460	0.56	53.21
2470	0.58	54.45
2480	1.23	54.2
2490	0.47	52.6
2500	0.75	52.97

5.3 Reference Coordinate System

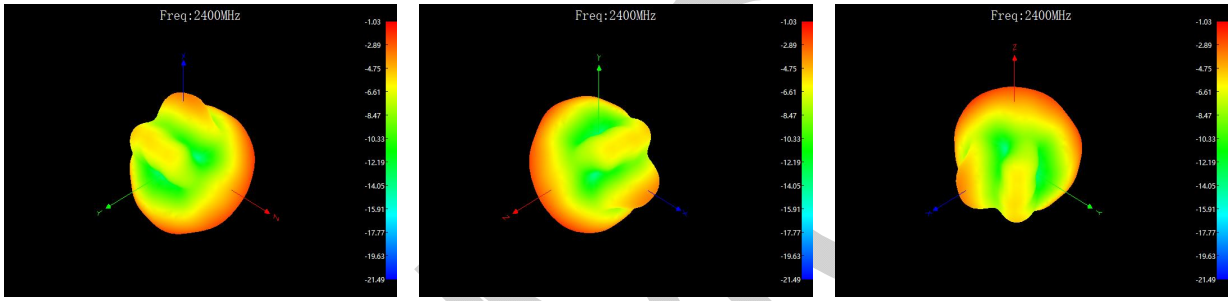


	XY	XZ	YZ
0°	Right	Up	Up
90°	Front	Right	Front
180°	Left	Down	Down
270°	Back	Left	Back

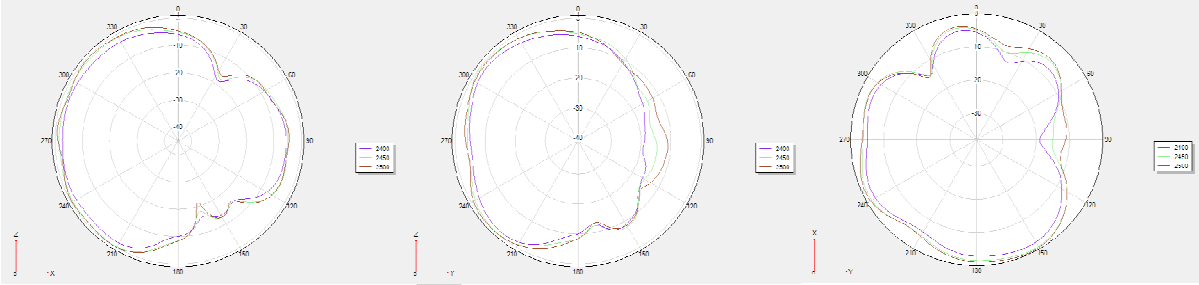
5.4 2D & 3D Radiation Pattern



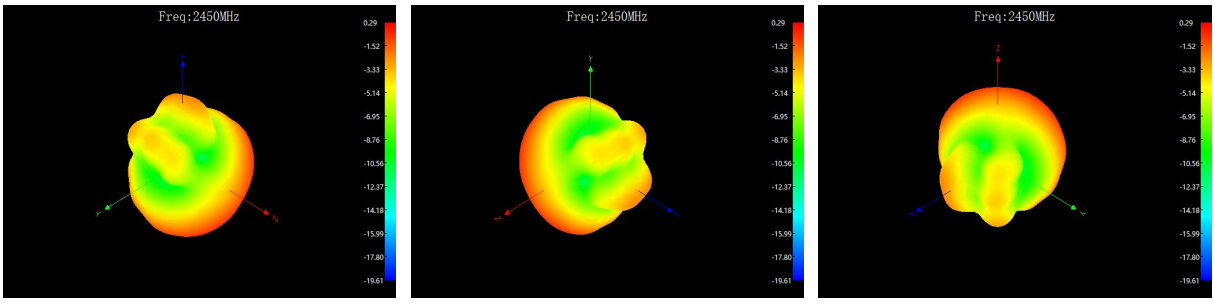
Phi =0 freq=2400MHz Phi =90 freq=2400MHz Theta =90 freq=2400



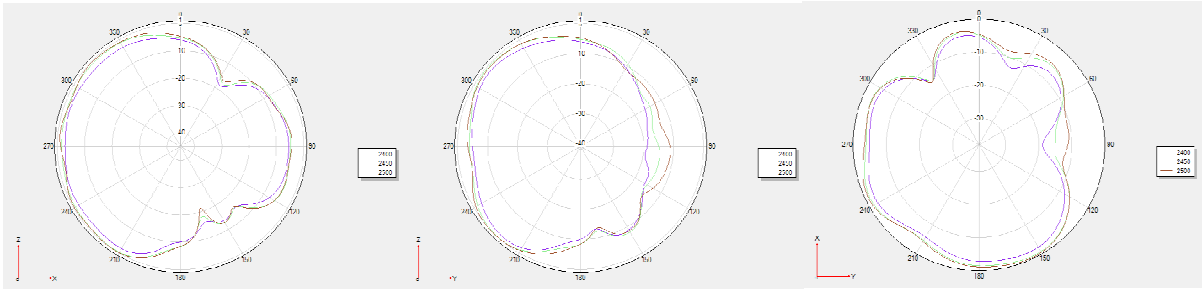
ZXY face @2400MHz XYZ face @2400MHz YZX face @2400MHz



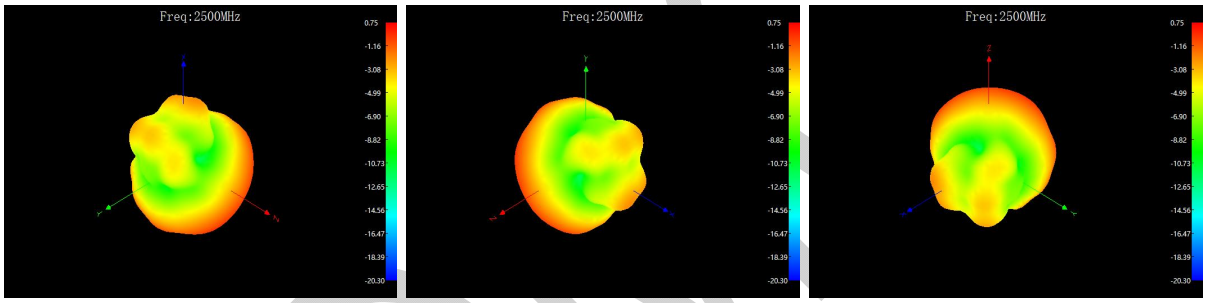
Phi =0 freq=2450MHz Phi =90 freq=2450MHz Theta =90 freq=2450MHz



ZXY face @2450MHz XYZ face @2450MHz YZX face @2450MHz



Phi =0 freq=2500MHz　　Phi =90 freq=2500MHz　　Theta =90 freq=2500MHz



ZXY face @2500MHz　　XYZ face @2500MHz　　YZX face @2500MHz

Drawing 产品结构图(BT Antenna**)**