

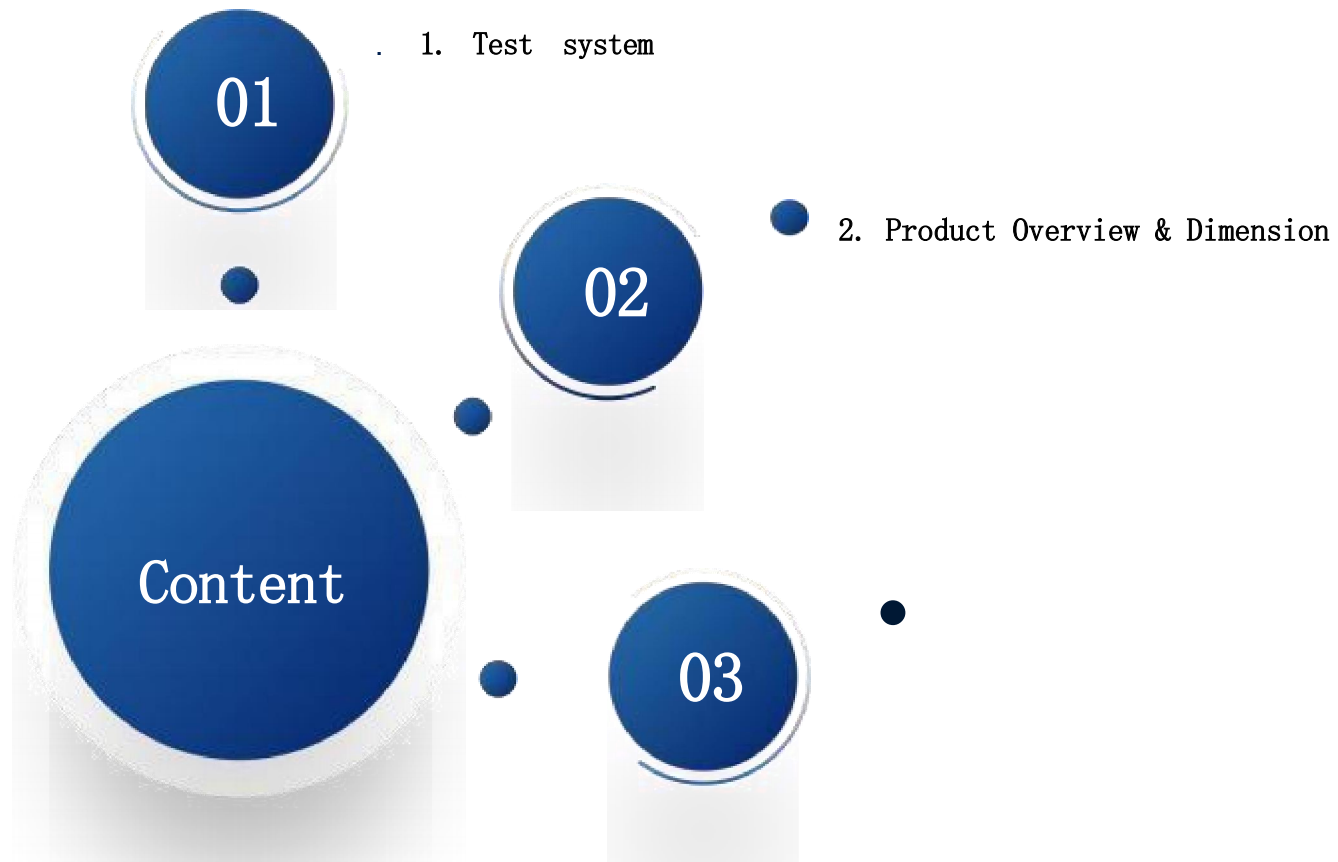


深圳合翊讯科技有限公司
Shenzhen Heyixun Technology Co., Ltd.

Customer	ZHIZE
Project	CM912
Antenna Revision	A0
Prepared by	15993920520
Checked by	17279710721
Date	2025-10-29

Purpose

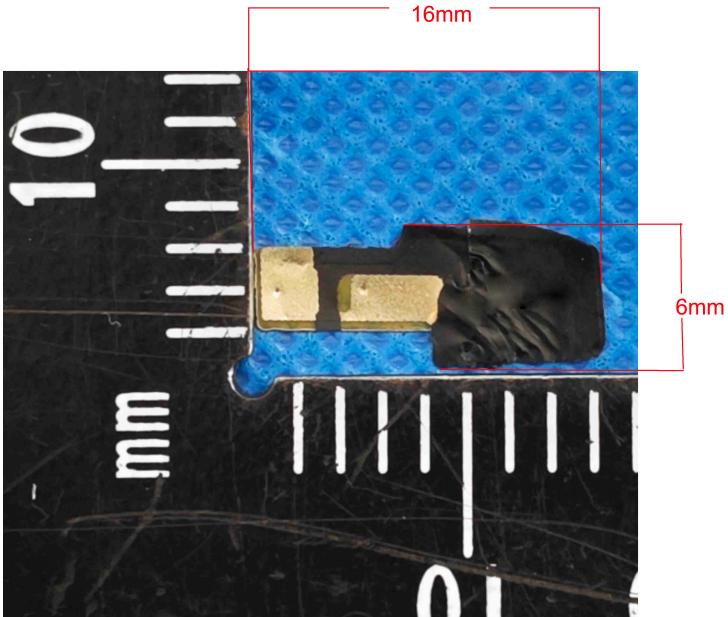
This report is to measure the performance of antenna for **CM912** The antenna operating frequency at 2400-2500MHz All test data are showed as below.



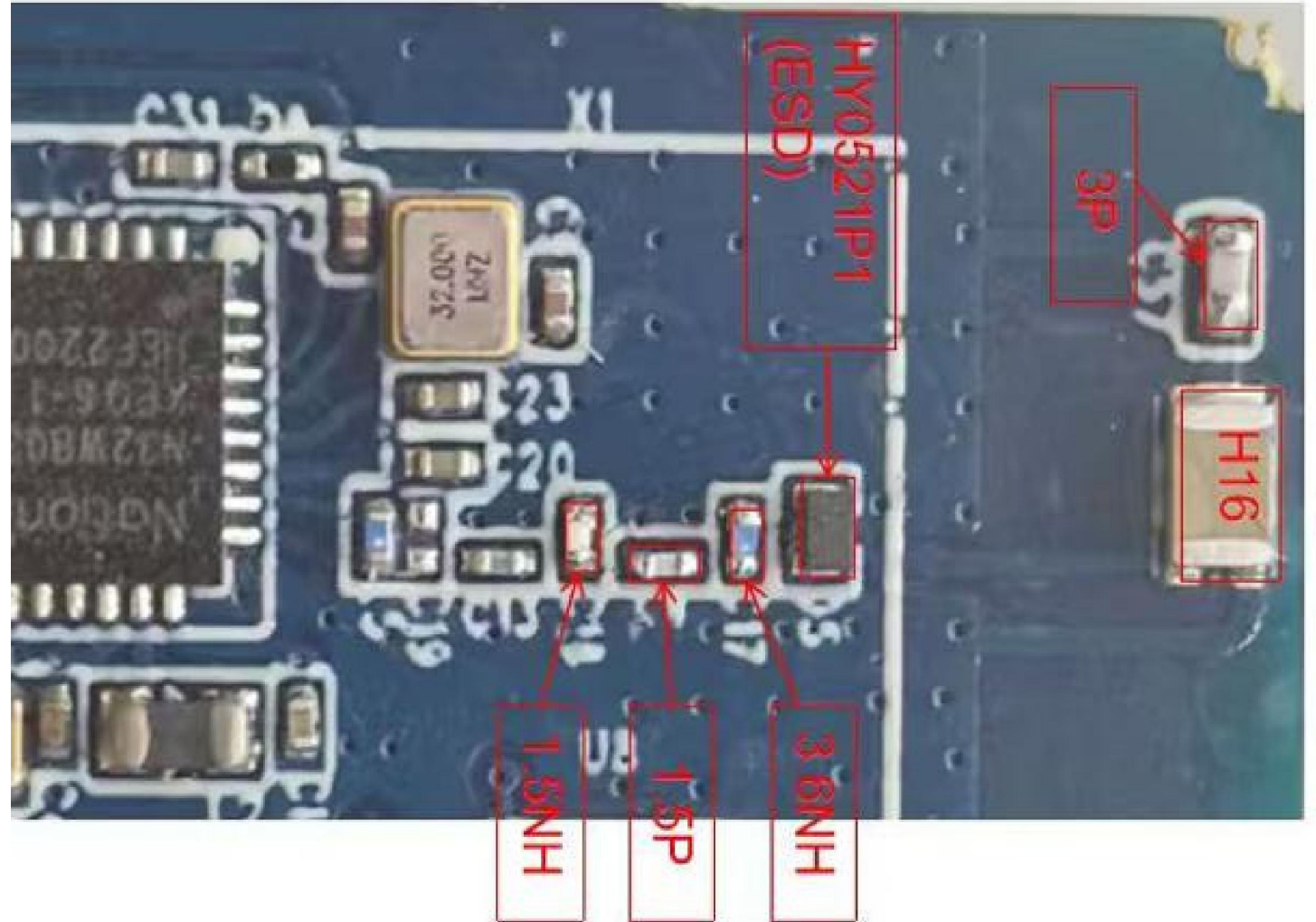
1.TestSystem

Sequence Number	Test Item	equipment
S parameter	VSWR	Agilent 5071C & Agilent 5071B
OTA Test	TRP& TIS	Agilent 8960 & CMW500 STIMO
Gain & Efficiency	Gain & Efficiency	SATIMO Agilent 5071C

FPCB



Matching circuit (no modification to the FPC antenna matching circuit)



2.1 Test Result VSWR&Log Mag&Smith(Ω) FPC antenna



Frequency (MHz)	2400	2450	2480	2500
Log Mag	-8.95	-17.10	-9.01	-6.42
Smith(Ω)	34.13	56.96	32.89	21.90
VSWR	2.10	1.32	2.09	2.82

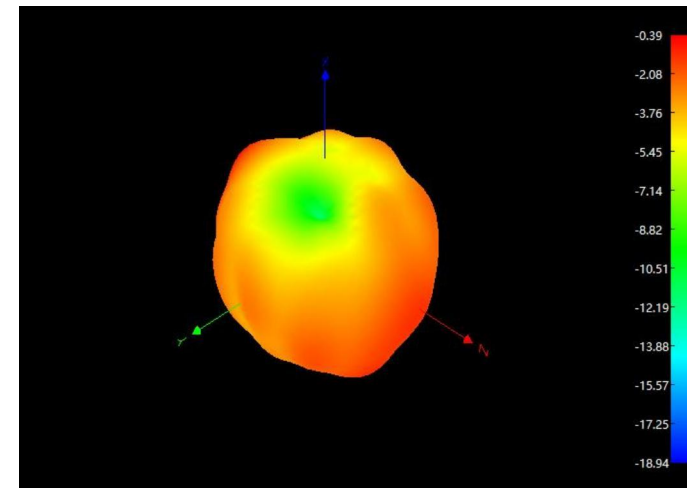
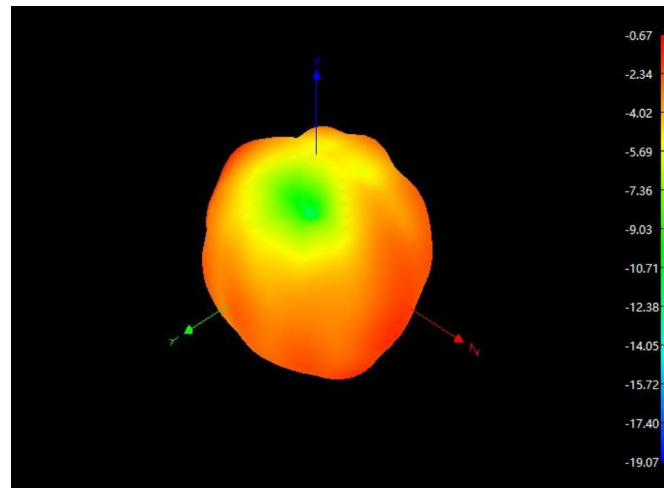
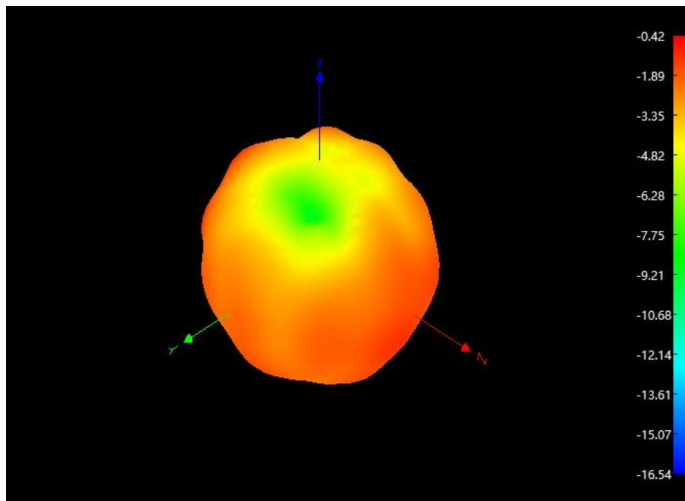
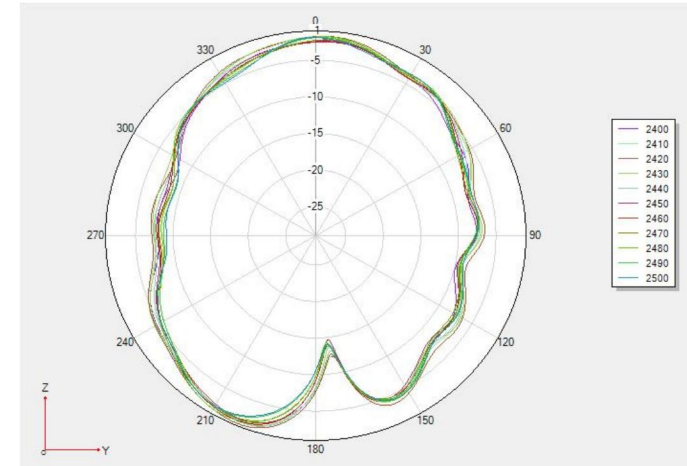
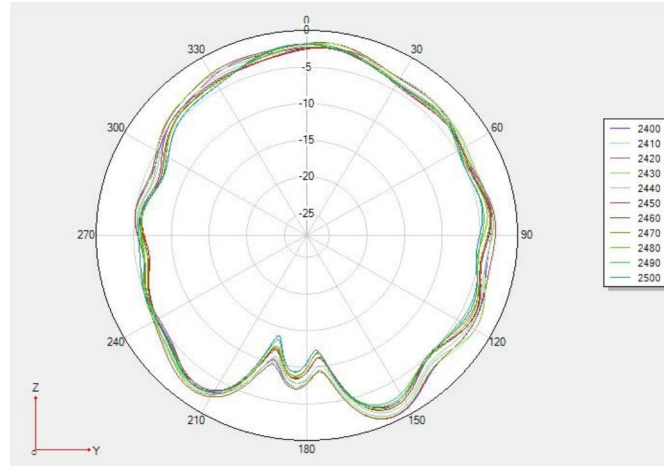
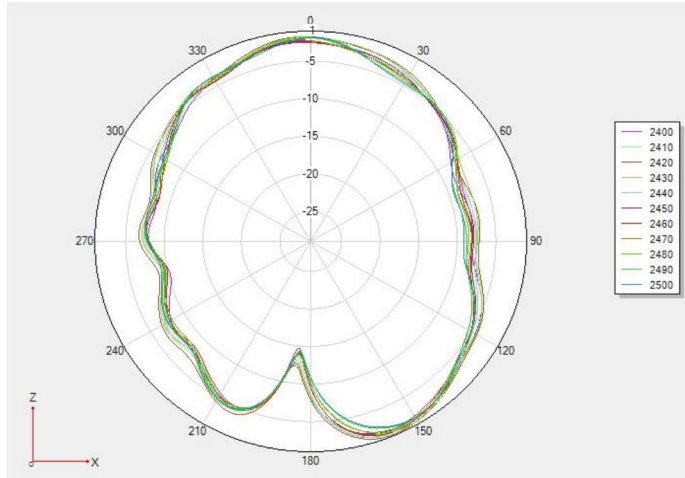
2.2 Test Result FPC antenna

Frequency (MHz)	Efficiency (%)	Max GAIN (dBi)
2400	43.75	-0.42
2410	43.05	-0.43
2420	43.75	-0.26
2430	43.75	-0.45
2440	44.36	-0.38
2450	44.77	-0.67
2460	44.67	-0.27
2470	44.36	-0.69
2480	43.85	-0.39
2490	42.66	-1
2500	42.66	-0.86

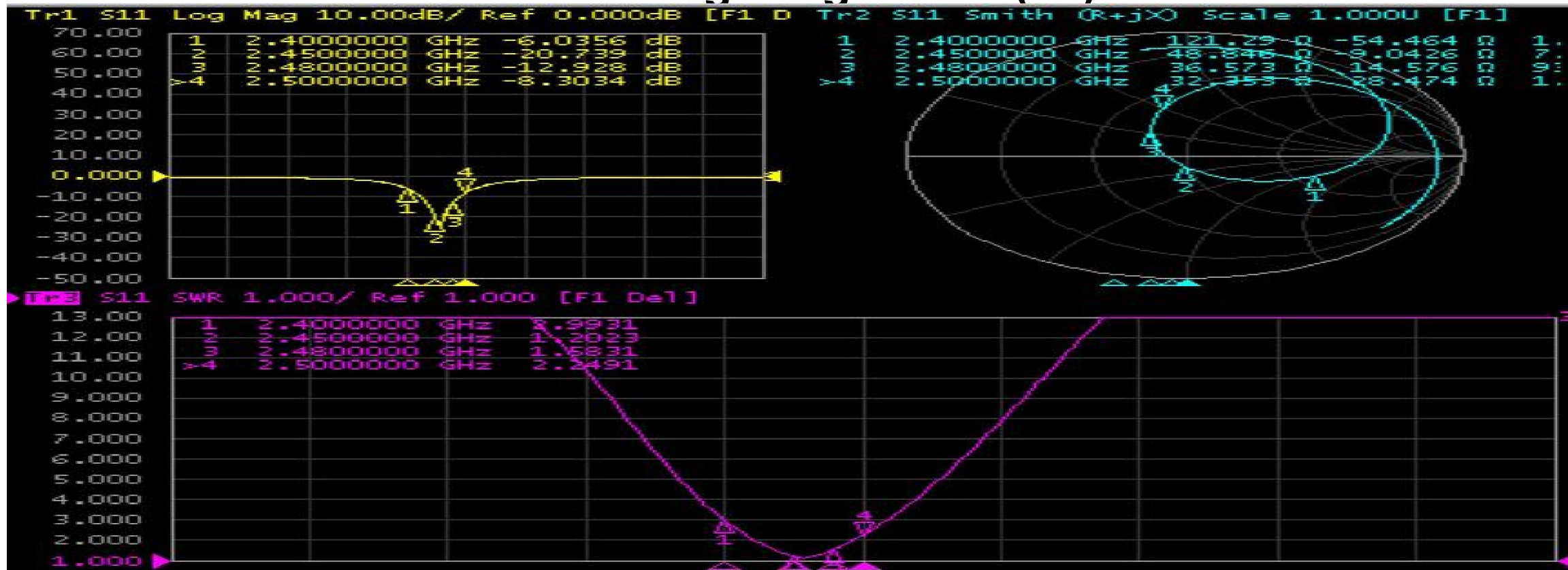
2.3 Test Result

FPC antenna2.3

2D Pattern——BTANT



2. Test Result VSWR&Log Mag&Smith(Ω) ceramic



Frequency (MHz)	2400	2450	2480	2500
Log Mag	-6.03	-20.73	-12.92	-8.30
Smith(Ω)	121.29	48.84	36.57	32.35
VSWR	2.99	1.20	1.58	2.24

3. Test Result ceramic antenna

Frequency (MHz)	Efficiency (%)	Max GAIN (dBi)
2400	20.75	-2.67
2410	21.93	-2.71
2420	22.86	-2.21
2430	22.81	-2.49
2440	23.01	-2.43
2450	22.44	-2.29
2460	21.18	-2.26
2470	20.36	-2.95
2480	20.99	-3.58

3. Test Result ceramic antenna

3.1 2D Pattern—BTANT

