

Antenna Test Report

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M/N: M4

Project Name: M4

Author: YangYongCheng

Update: 2022-10-27

OverView

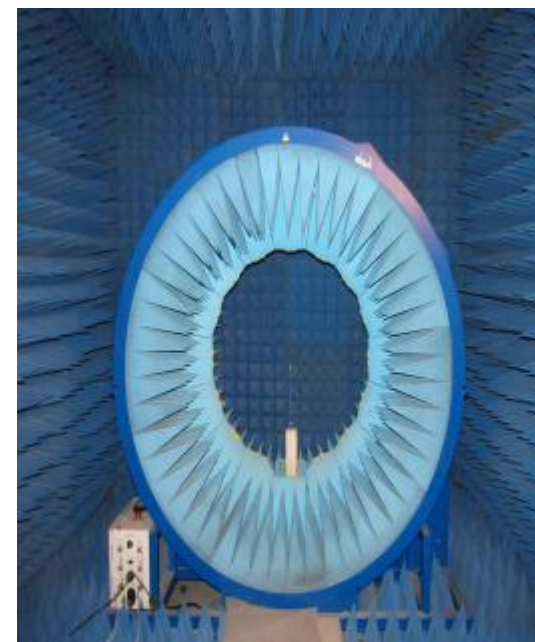
CUSTOMER NAME	MOKO TECHNOLOGY LIMITED	PROJECT NAME	M4
Items		Details	
• FREQUENCY		2400MHz-2500MHz	
• PROJECT TYPE			
• ANTENNA SPACE			
• FEED & GROUND PAD			
• SENSITIVE ELEMENTS			
• ANTENNA TYPE			
• PCB			
• OTHERS			

Revision History

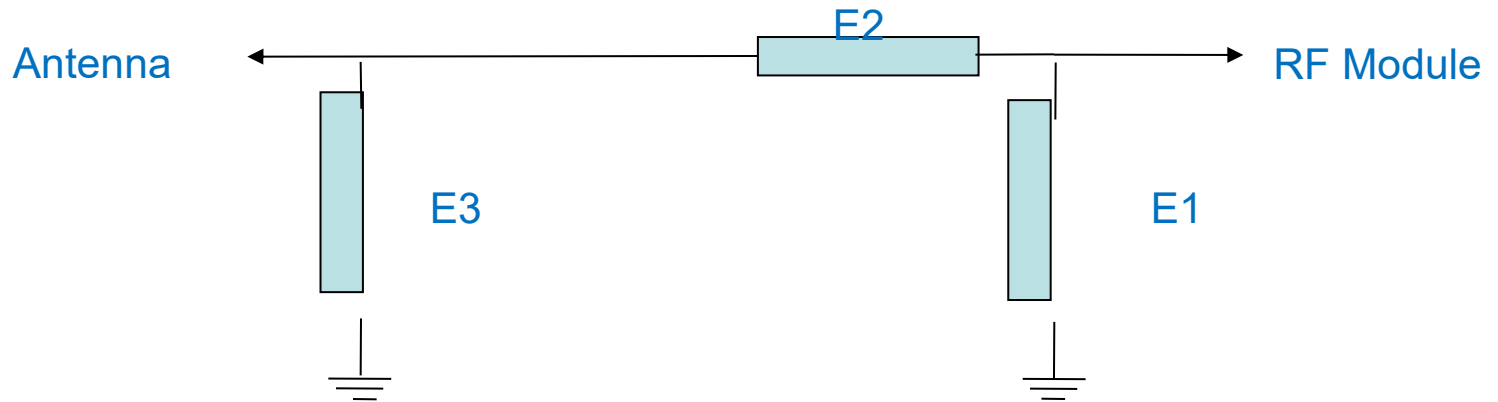
Date	Revision	Author	Description of changes
20221027	A	YangYongCheng	Passive Antenna Test

Test Item & Equipment

List	Test Item	Equipment	
1.S Parameter	VSWR, Return Loss	Agilent VNA	
2.Active Test	TRP, TIS	Agilent 8960	RayZone1800
3.Passive Test	Gain, Efficiency, Pattern	Agilent E5071C	

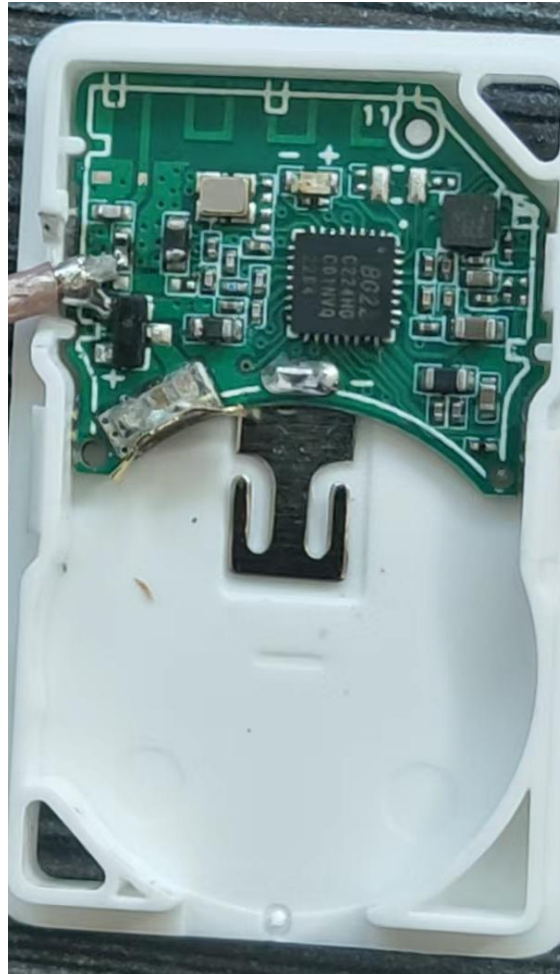


Matching Circuit



Element	Value
E1(0402)	NC
E2(0402)	4.7NH
E3(0402)	0.3PF

Antenna

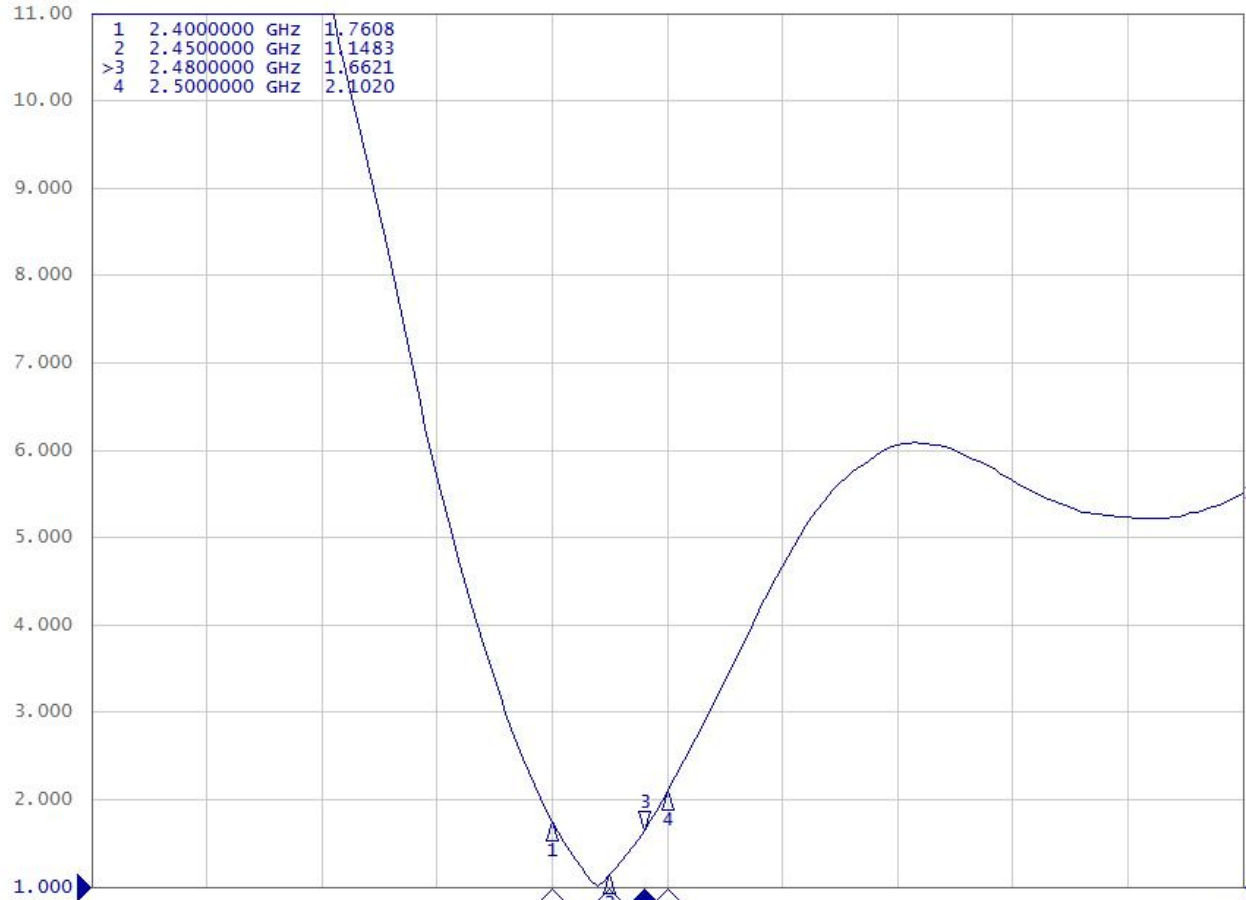


VSWR

E5071C Network Analyzer

1 Active Ch/Trace 2 Response 3 Stimulus 4 Mkr/Analysis 5 Instr State

► F1 S11 SWR 1.000/ Ref 1.000 [F1]



1 Start 2 GHz

IFBW 70 kHz

Stop 3 GHz

Meas Stop ExtRef Svc 2022-10-27 20:13

Resize

System

Print

Invert Image

ON

Dump
Screen Image...

Multipoint Test Set
Setup

Misc Setup

Backlight

ON

Firmware
Revision

Service Menu

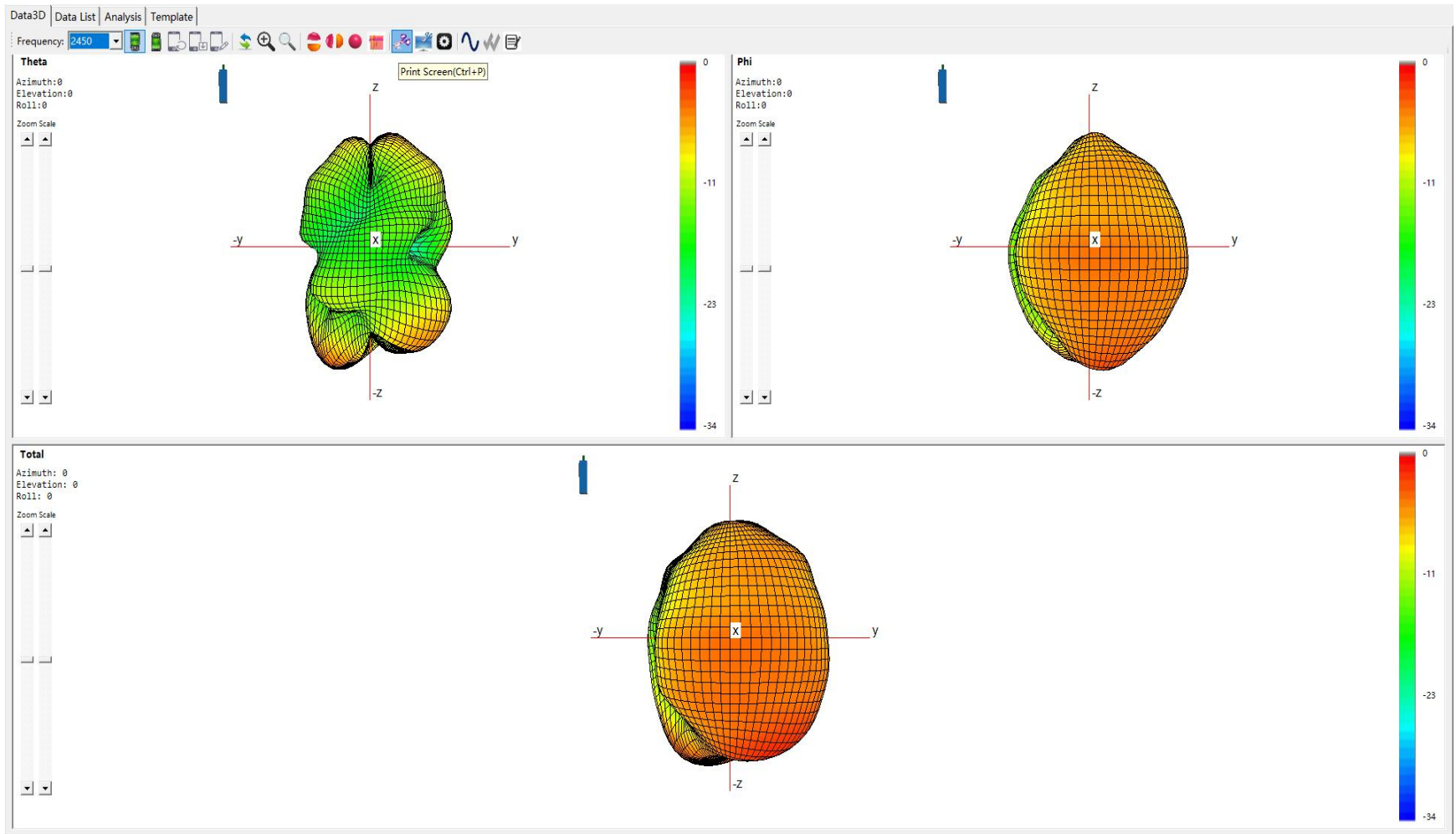
Help

Return

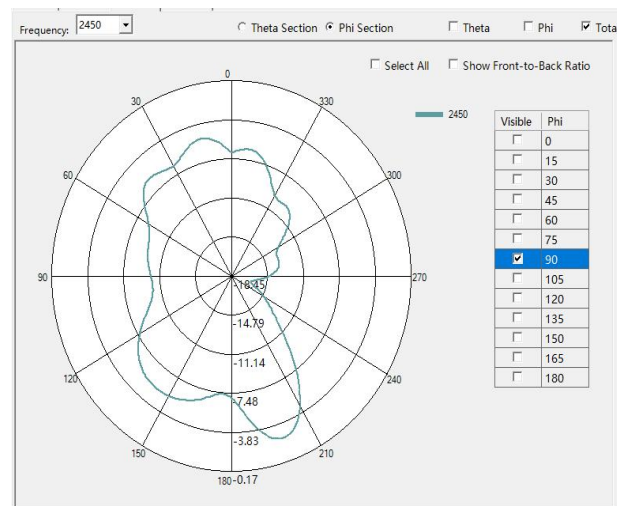
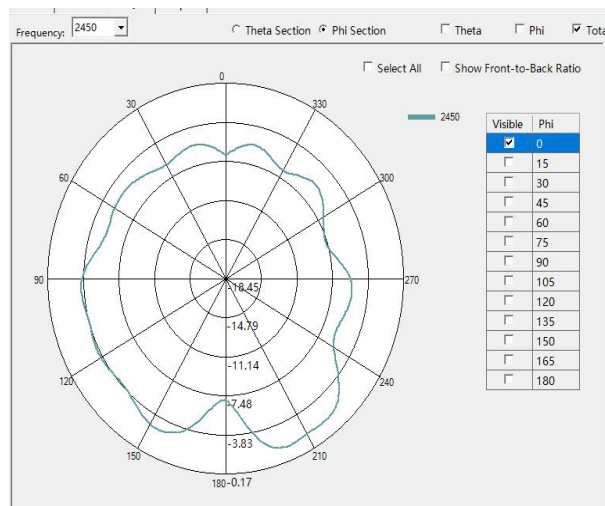
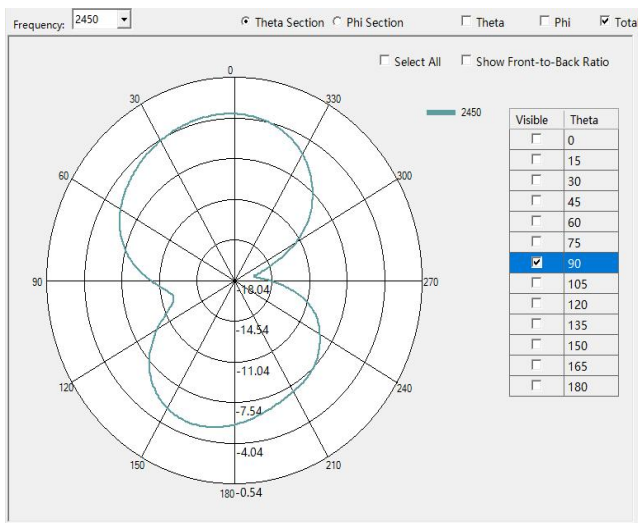
Passive Antenna Test

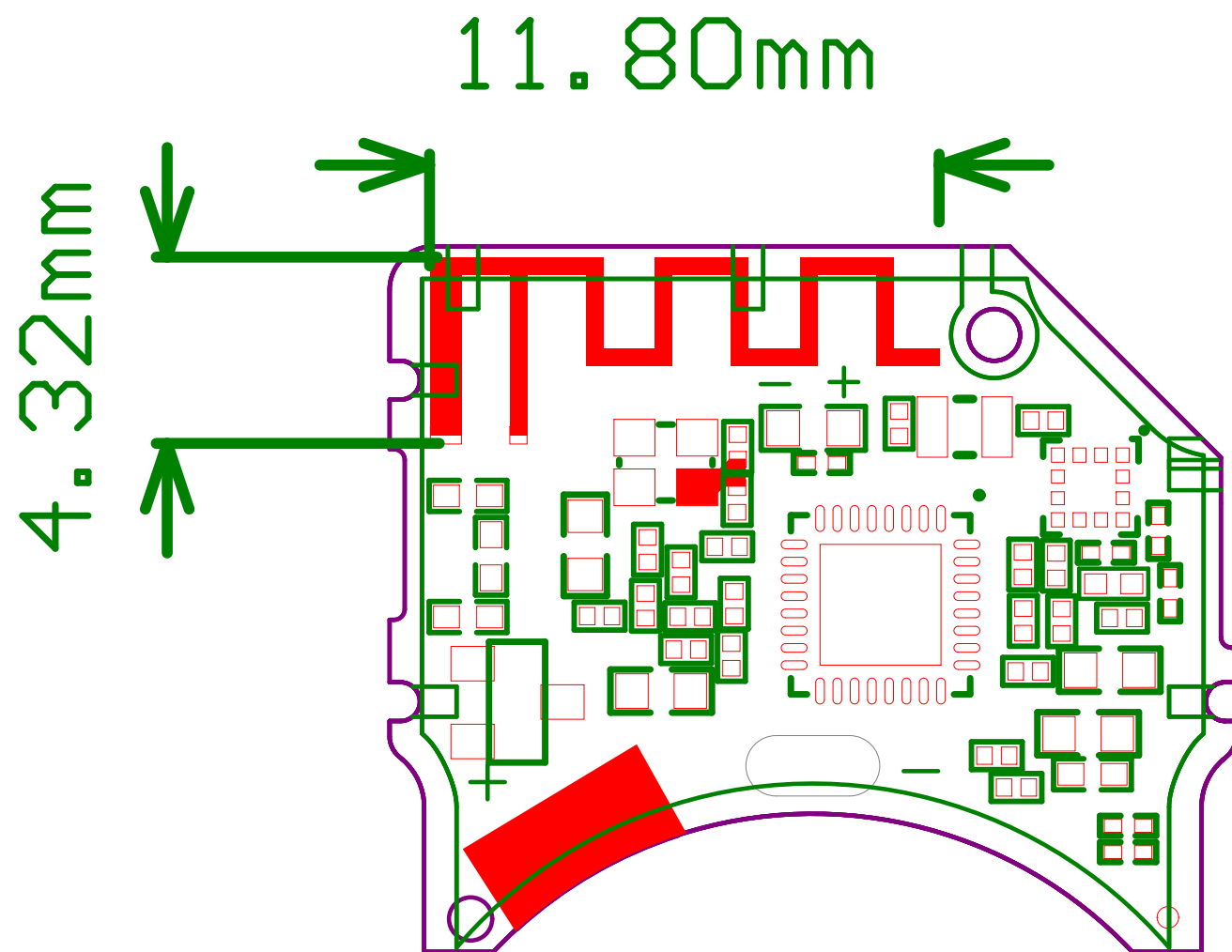
Freq (MHz)	Gain (dBi)	Efficiency (%)
2400	0.52	29.69
2410	0.69	30.62
2420	0.27	28.92
2430	0.07	28.20
2440	-0.29	26.61
2450	-0.58	25.04
2460	-0.55	25.09
2470	-0.55	24.92
2480	-0.62	24.07
2490	-0.56	24.07
2500	-0.62	23.85

3D Antenna Radiation Pattern (2450MHz)



2D Antenna Radiation Pattern (2450MHz)





2.4G_4.3*11.8