TEST REPORT

Applicant:	Shenzhen Feelstorm Technology Co., Ltd.
Address:	Floor 5th, Building C, Huawan Industrial Park, Gushu, Xixiang Street, Bao'an District, Shenzhen, China.
Equipment Type:	Baby Monitor
Model Name:	ANT-BM922
Brand Name:	N/A
Test Standard:	IEEE Std 149-2021
Sample Arrival Date:	Feb. 01, 2023
Test Date:	Feb. 01, 2023
Date of Issue:	Feb. 09, 2023

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

Tested by: Mai Jintian **Checked by:** Zou Liu **Approved by:** Tolan Tu (Testing Director)

Revision History

Version	Issue Date	Revisions
Rev. 01	Feb. 09, 2023	Initial Issue

TABLE OF CONTENTS

1 GENERAL INFORMATION 3

1.1 Test Laboratory 3

1.2 Test Location 3

2 PRODUCT INFORMATION 4

2.1 Applicant Information 4

2.2 Manufacturer Information 4

2.3 Factory Information 4

2.4 General Description for Equipment under Test (EUT) 4

2.5 Ancillary Equipment 4

2.6 Technical Information 4

3 SUMMARY OF TEST RESULTS 5

3.1 Test Standards 5

3.2 Test Verdict 5

3.3 Test Uncertainty 5

4 GENERAL TEST CONFIGURATIONS 6

4.1 Test Condition 6

4.2 Test Equipment List 6

4.3 Test Setup 7

ANNEX A TEST RESULTS 8

A.1 Gain and Efficiency 8

A.2 VSWR and Input Impedance 9

ANNEX B RADIATION PATTERN 10

ANNEX C TEST SETUP PHOTO 14

ANNEX D EUT PHOTO 16

1 GENERAL INFORMATION

1.1 Test Laboratory

Name	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Phone Number	+86 755 6685 0100

1.2 Test Location

Name	Shenzhen BALUN Technology Co., Ltd.
Location	☑ Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
	☐ 1/F, Building B, Ganghongji High-tech Intelligent Industrial Park, No. 1008, Songbai Road, Yangguang Community, Xili Sub-district, Nanshan District, Shenzhen, Guangdong Province, P. R. China

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	Shenzhen Feelstorm Technology Co., Ltd.
Address	Floor 5th, Building C, Huawan Industrial Park, Gushu, Xixiang Street, Bao'an District, Shenzhen, China.

2.2 Manufacturer Information

Manufacturer	Shenzhen Feelstorm Technology Co., Ltd.
Address	Floor 5th, Building C, Huawan Industrial Park, Gushu, Xixiang Street, Bao'an District, Shenzhen, China.

2.3 Factory Information

Factory	N/A
Address	N/A

2.4 General Description for Equipment under Test (EUT)

EUT Name	Baby Monitor
Model Name Under Test	ANT-BM922
Antenna Type	PCB Antenna
Dimensions	52*10mm

2.5 Ancillary Equipment

Note: Not applicable.

2.6 Technical Information

Frequency Range	2400MHz ~ 2483.5MHz
Test Frequencies	2400MHz, 2402MHz, 2404MHz, 2406MHz, 2408MHz, 2410MHz, 2412MHz, 2414MHz, 2416MHz, 2418MHz, 2420MHz, 2422MHz, 2424MHz, 2426MHz, 2428MHz, 2430MHz, 2432MHz, 2434MHz, 2436MHz, 2438MHz, 2440MHz, 2442MHz, 2444MHz, 2446MHz, 2448MHz, 2450MHz, 2452MHz, 2454MHz, 2456MHz, 2458MHz, 2460MHz, 2462MHz, 2464MHz, 2466MHz, 2468MHz, 2470MHz, 2472MHz, 2474MHz, 2476MHz, 2478MHz, 2480MHz, 2482MHz, 2483.5MHz.

3 SUMMARY OF TEST RESULTS

3.1 Test Standards

No.	Identity	Document Title
1	IEEE Std 149-2021	IEEE Standard Test Procedures for Antennas

3.2 Test Verdict

Report Section	Description	Remark
ANNEX A.1	Gain and Efficiency	--
ANNEX A.2	VSWR	--

3.3 Test Uncertainty

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in Measurement" (GUM) published by ISO.

Item	Uncertainty
VSWR(S11)	±0.61
Gain	±1.92dB

4 GENERAL TEST CONFIGURATIONS

4.1 Test Condition

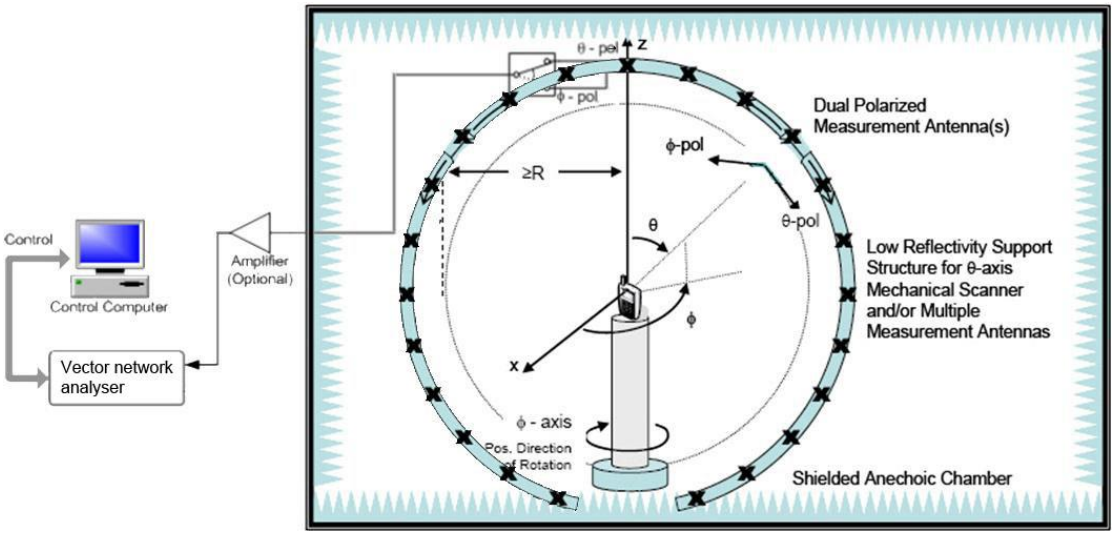
Environment Parameter	Selected Values During Tests			
	Ambient Pressure(KPa)	Temperature(℃)	Voltage	Relative Humidity (%)
Normal Temperature, Normal Voltage (NTNV)	101	22.4	N/A	38

4.2 Test Equipment List

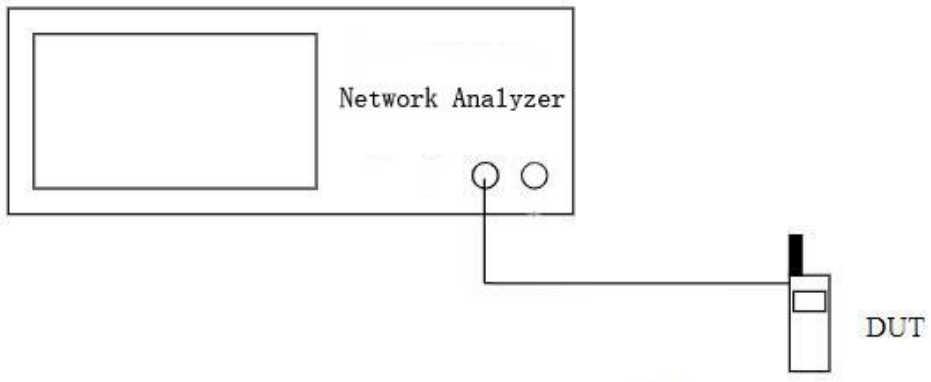
Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
SG24 Multi-probe Antenna Measurement System	SATIMO	SG24-L	1101855-0001	2021.11.12	2024.11.11
Vector Network Analyzer	Agilent	E5071B	MY42404001	2022.04.02	2023.04.01
Description	Manufacturer	Name		Version	
Test Software	MVG	SPM		V 1.8	

4.3 Test Setup

4.3.1 Antenna gain, efficiency and radiation pattern test setup



4.3.2 S11 parameter test setup



ANNEX A TEST RESULTS

A.1 Gain and Efficiency

Frequency	Gain (dBi)	Efficiency (%)
2400MHz	3.86	53%
2402MHz	3.86	53%
2404MHz	3.84	53%
2406MHz	**3.90**	**53%**
2408MHz	3.86	53%
2410MHz	3.83	52%
2412MHz	3.77	52%
2414MHz	3.70	51%
2416MHz	3.63	51%
2418MHz	3.63	51%
2420MHz	3.57	50%
2422MHz	3.51	50%
2424MHz	3.50	49%
2426MHz	3.54	50%
2428MHz	3.49	49%
2430MHz	3.45	49%
2432MHz	3.45	49%
2434MHz	3.47	49%
2436MHz	3.45	50%
2438MHz	3.42	50%
2440MHz	3.47	50%
2442MHz	3.52	50%
2444MHz	3.58	51%
2446MHz	3.54	50%
2448MHz	3.54	50%
2450MHz	3.53	50%
2452MHz	3.53	50%
2454MHz	3.50	49%
2456MHz	3.54	49%
2458MHz	3.56	49%
2460MHz	3.56	49%
2462MHz	3.53	48%
2464MHz	3.52	48%
2466MHz	3.54	48%
2468MHz	3.55	48%
2470MHz	3.53	48%
2472MHz	3.53	48%
2474MHz	3.56	48%

2476MHz	3.48	48%
2478MHz	3.48	49%
2480MHz	3.47	49%
2482MHz	3.47	49%
2483.5MHz	3.47	49%

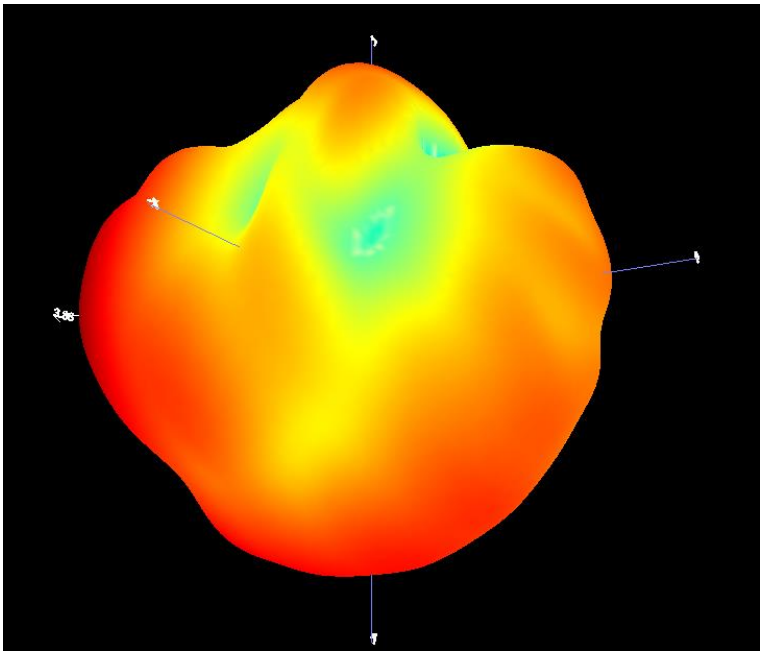
A.2 VSWR and Input Impedance

Frequency	VSWR
2402MHz	1.84
2440MHz	1.89
2480MHz	1.94

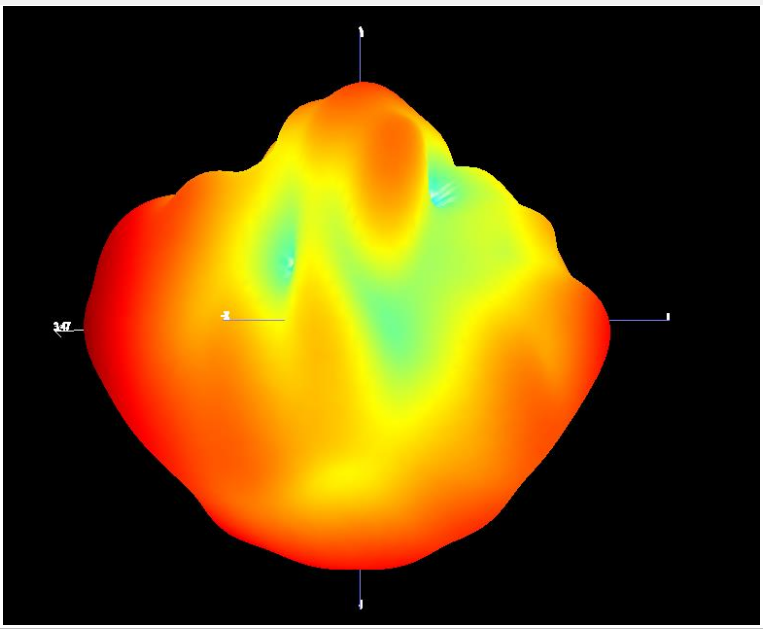
ANNEX B RADIATION PATTERN

B.1 3D Pattern

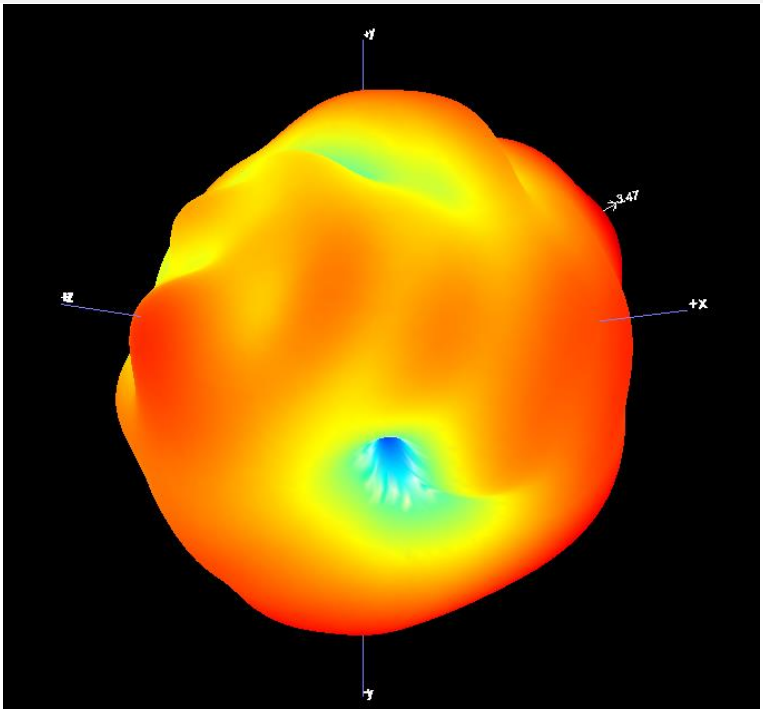
B1.1 3D Pattern for 2402MHz



B1.2 3D Pattern for 2440MHz

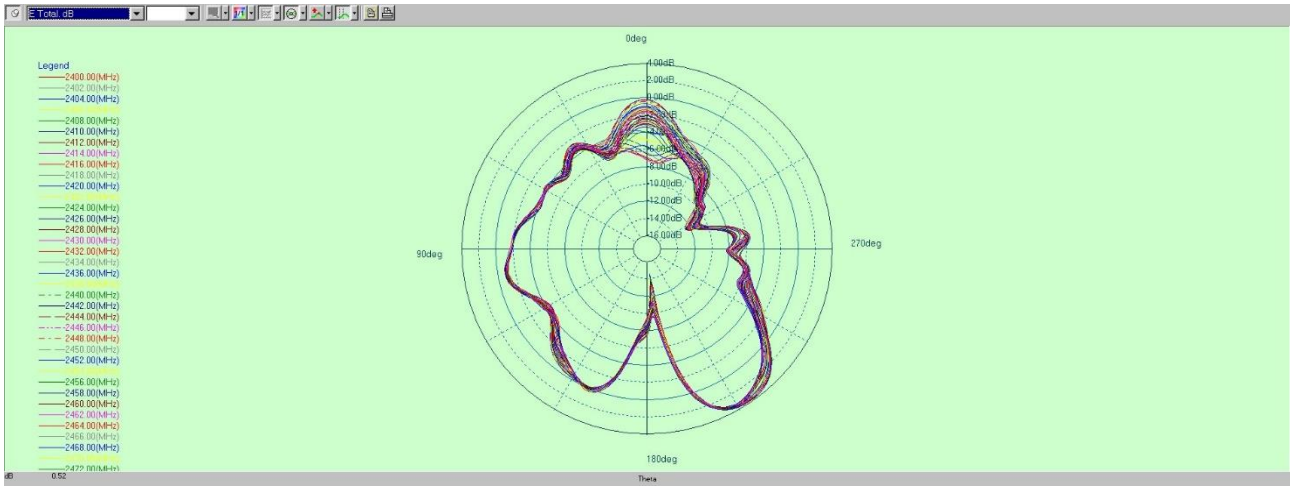


B1.3 3D Pattern for 2480MHz

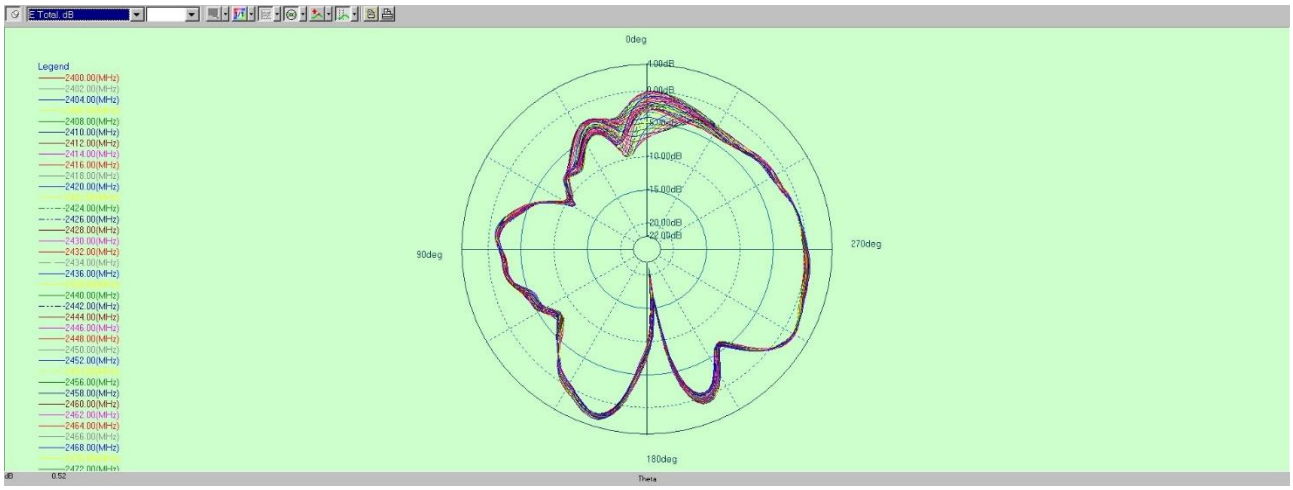


B.2 1D Radiation Pattern

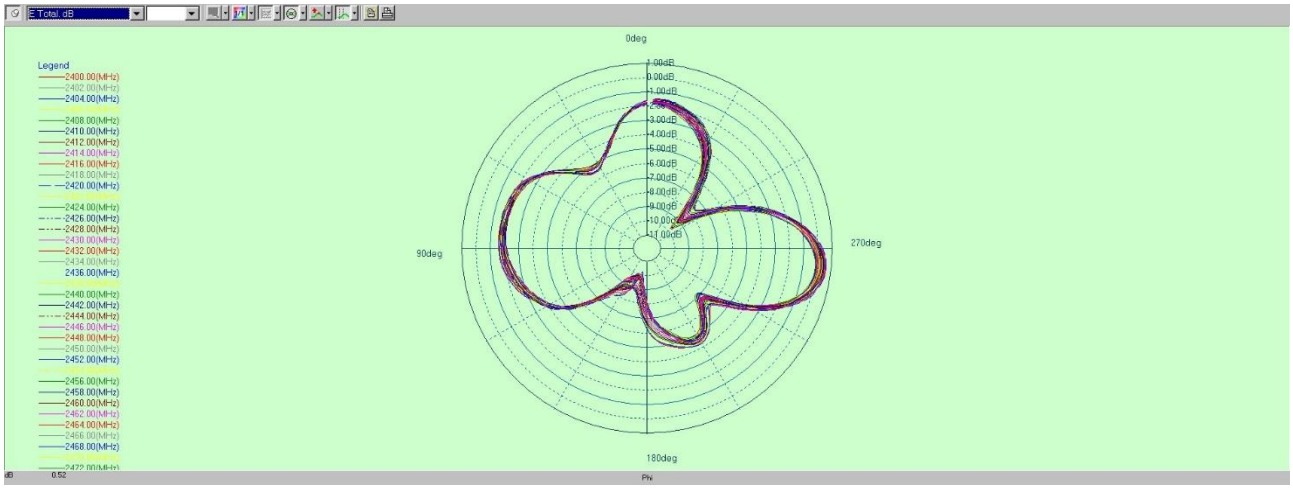
B2.1 PHI=0



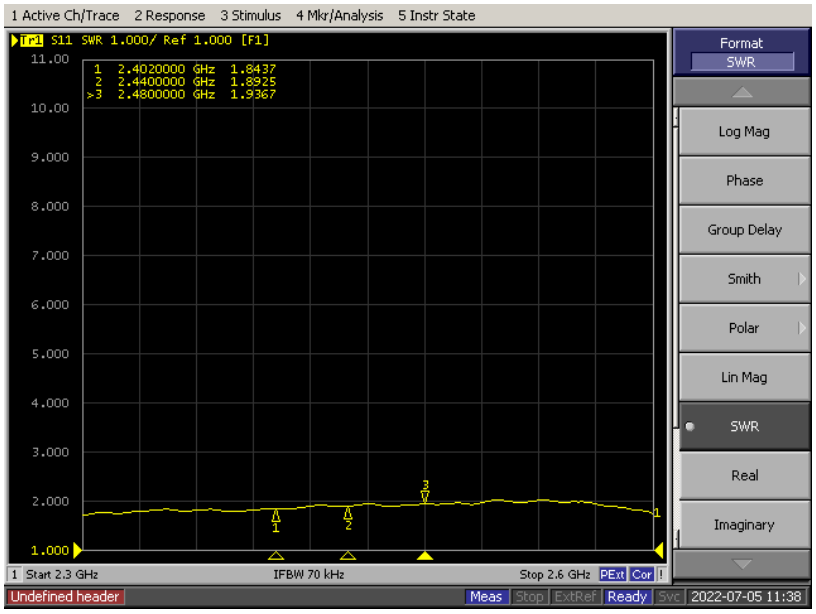
B2.2 PHI=90



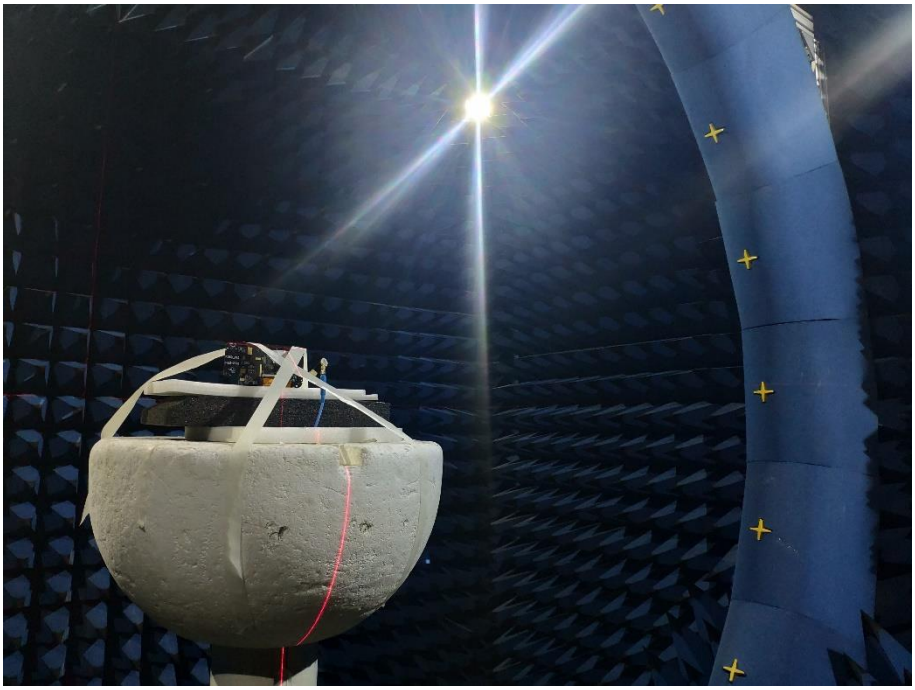
B2.3 THETA=90

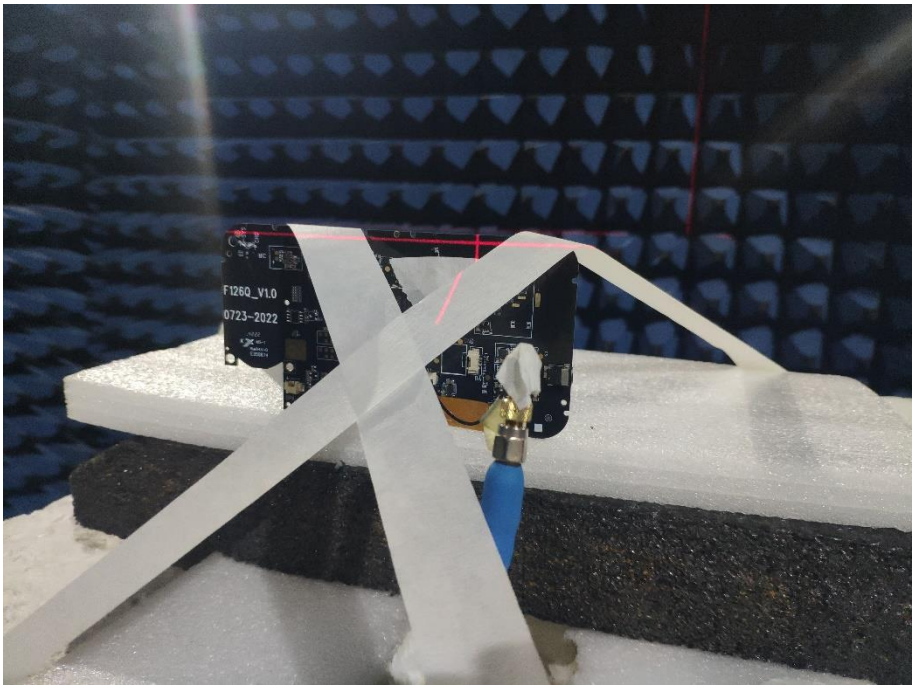


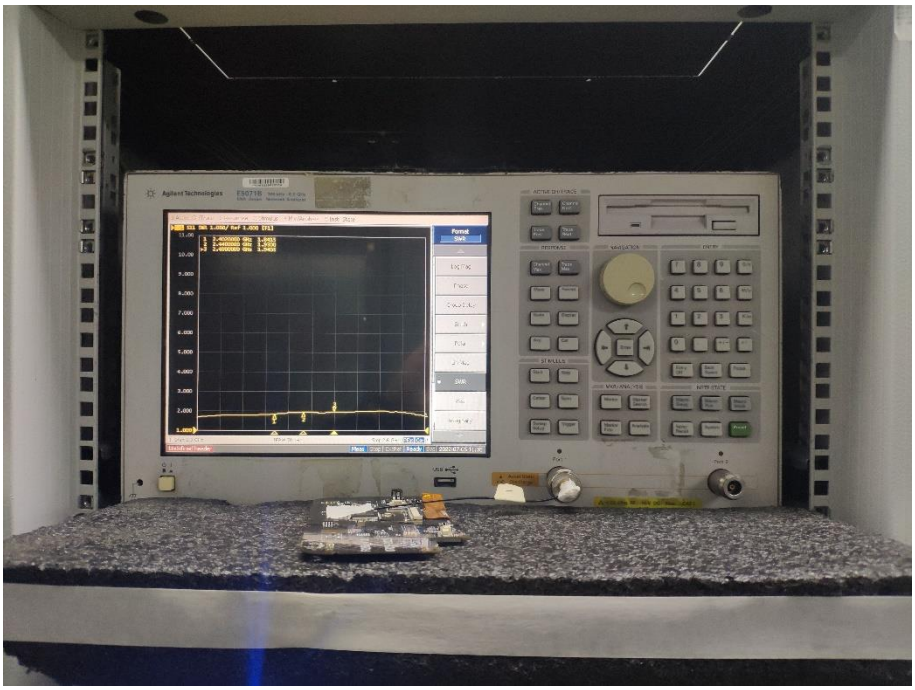
B2.4 VSWR


1 Active Ch/Trace 2 Response 3 Stimulus 4 Mkr/Analysis 5 Instr State
Tr1 S11 SWR 1.000/ Ref 1.000 [F1]
1 2.4020000 GHz 1.8437
2 2.4400000 GHz 1.8925
>3 2.4800000 GHz 1.9367
11.00
10.00
9.000
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000
1 Start 2.3 GHz
IFBW 70 kHz
Stop 2.6 GHz
PExt Cor
Undefined header
Meas Stop ExtRef Ready Svc
2022-07-05 11:38
Format
SWR
Log Mag
Phase
Group Delay
Smith
Polar
Lin Mag
SWR
Real
Imaginary

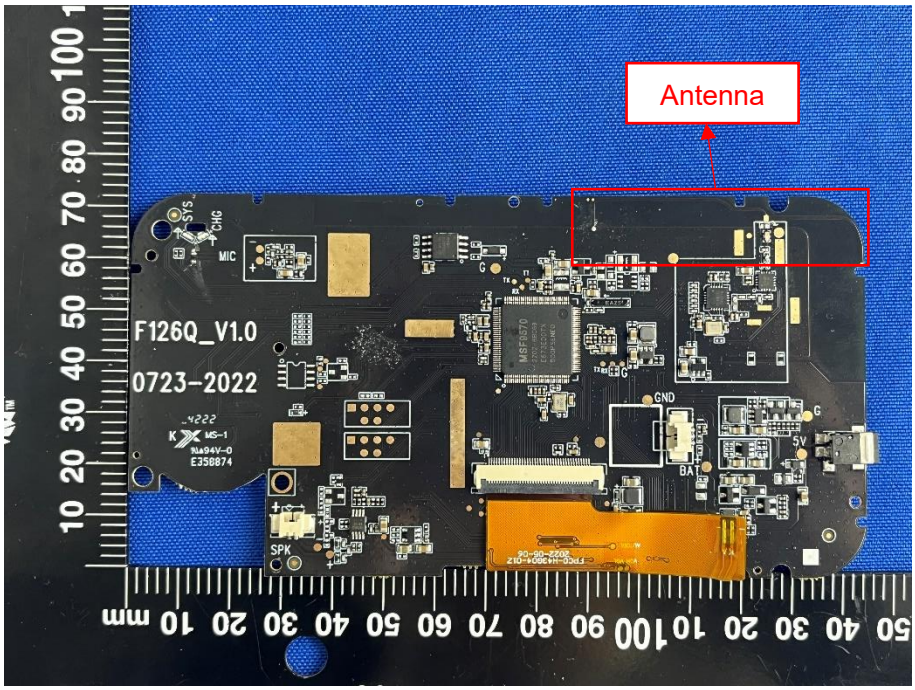
ANNEX C TEST SETUP PHOTO







ANNEX D EUT PHOTO



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--END OF REPORT--