

TEST REPORT

Applicant : Signal Transmission

PRODUCT NAME : CWDP125D_PCB Antenna

MODEL NAME : CWDP125D

TRADE NAME : Coolwave Commnunication co., ltd

BRAND NAME : Coolwave

STANDARD(S) :

RECEIPT DATE :

TEST DATE :

ISSUE DATE :

DIRECTORY

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Change History		
Version	Date	Reason for change
1.0	2019-10-15	First edition

1. Technical Information

Note: Provide by manufacturer.

1.1. Manufacturer and Factory Information

Applicant:	Coolwave Communication co., ltd
Applicant Address:	www.coolwaveasia.com
Manufacturer:	Coolwave Communication co., ltd
Manufacturer Address:	www.coolwaveasia.com

1.2. Equipment Under Test (EUT) Description

Wireless Type	PCB antenna
Frequency	ISM band 2.4G

2. Test Results

2.1. Applied Reference Documents

Leading reference documents for testing:

No.	Identity	Document Title
1	ANSI/IEEE Std 149-2008	IEEE Standard Test Procedures for Antennas

2.2. Test Conditions

Test Environment Conditions:

Relative Humidity:	25 ... 75 %
Temperature:	+10 °C to +30 °C

2.3. Test Results lists

2.3.1. Gain

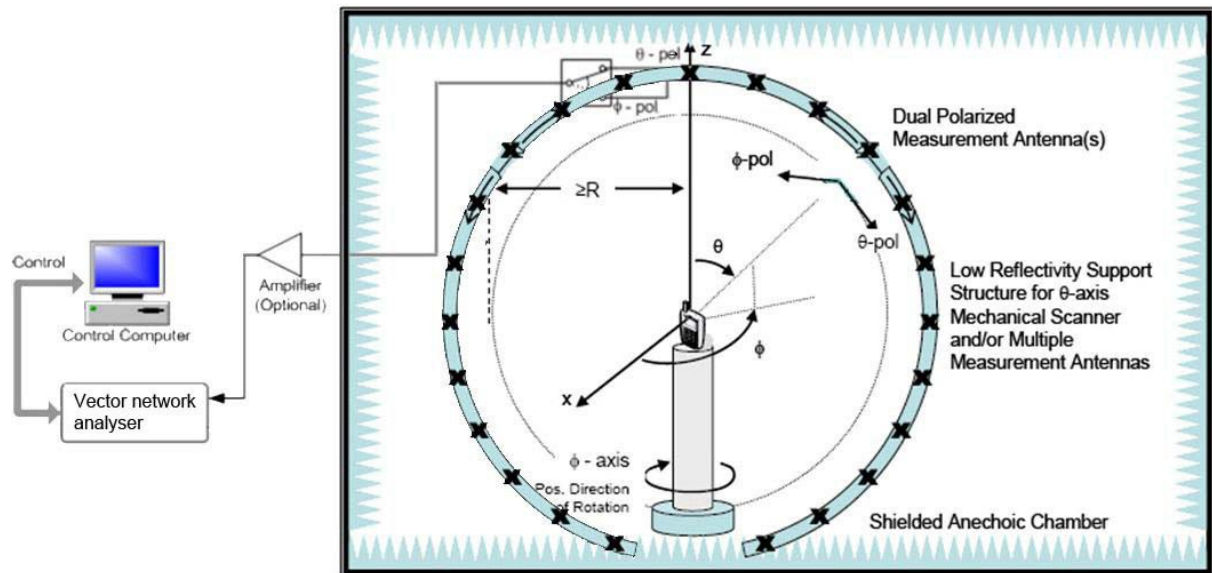
Frequency	Gain(dBi)
2400MHz	2.81
2410MHz	2.74
2420MHz	3.38
2430MHz	2.73
2440MHz	1.01
2450MHz	1.26
2460MHz	1.50
2470MHz	1.49
2480MHz	1.42
2490MHz	0.36
2500MHz	0.33

2.3.2. Return Loss/VSWR/Input Impedance

Frequency	Return Loss (dB)	VSWR	Input Impedance(Ω)
2400MHz	-7.23	2.53	25.37
2440MHz	-6.47	2.80	17.99
2450MHz	-6.22	2.90	17.18
2480MHz	-5.18	3.44	15.55
2500MHz	-4.56	3.89	15.48

Annex A Photographs

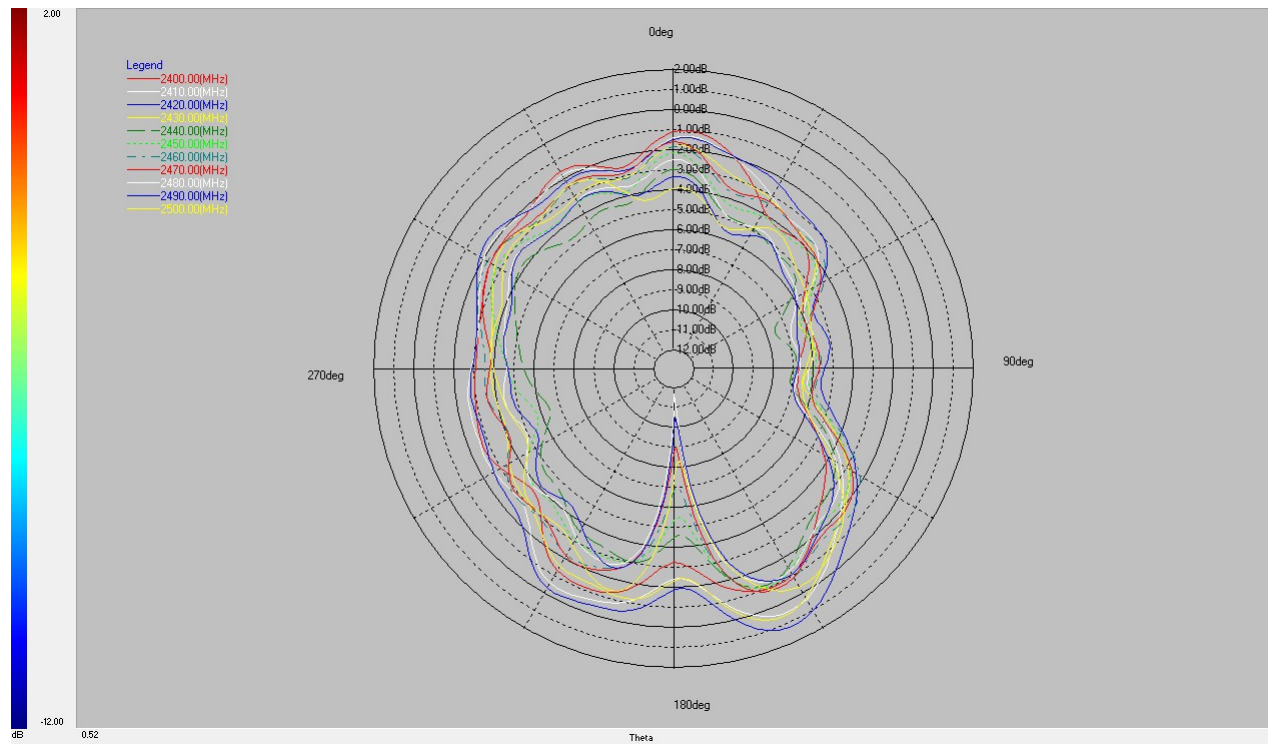
1. Test Setup



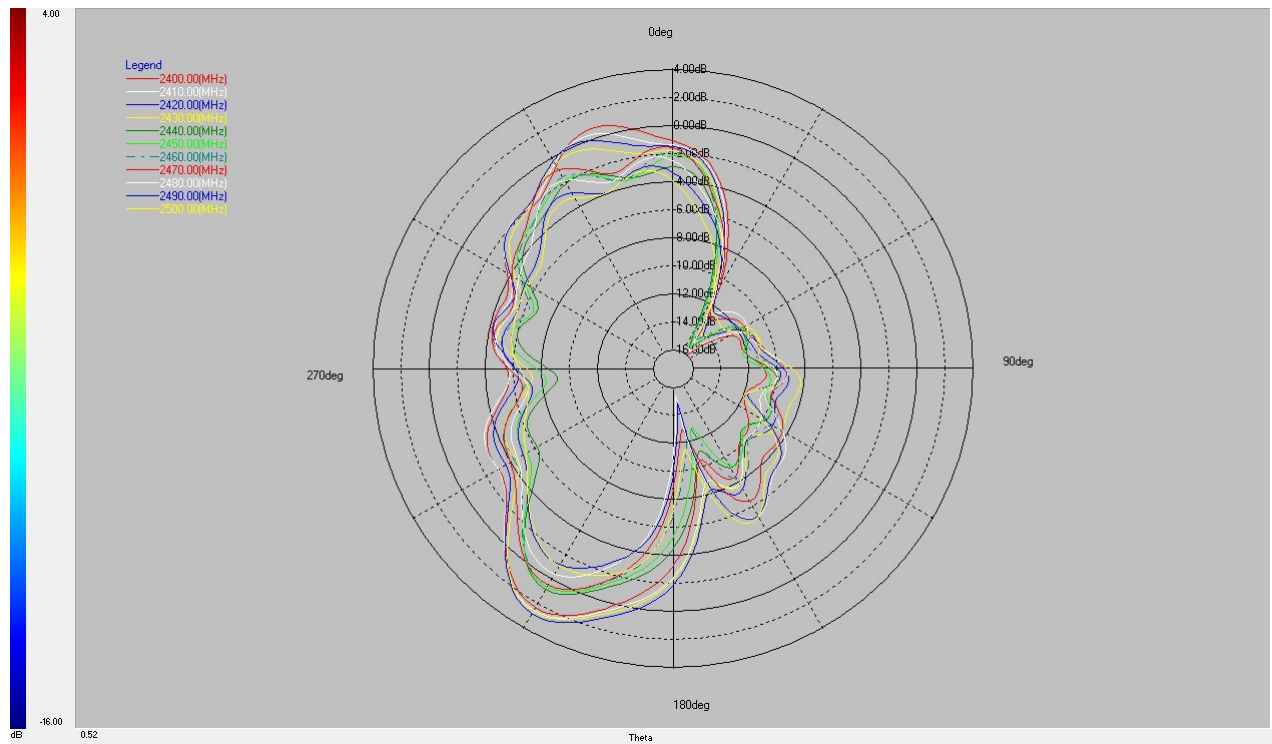
Annex B Figures

1. 2D Radiation Pattern

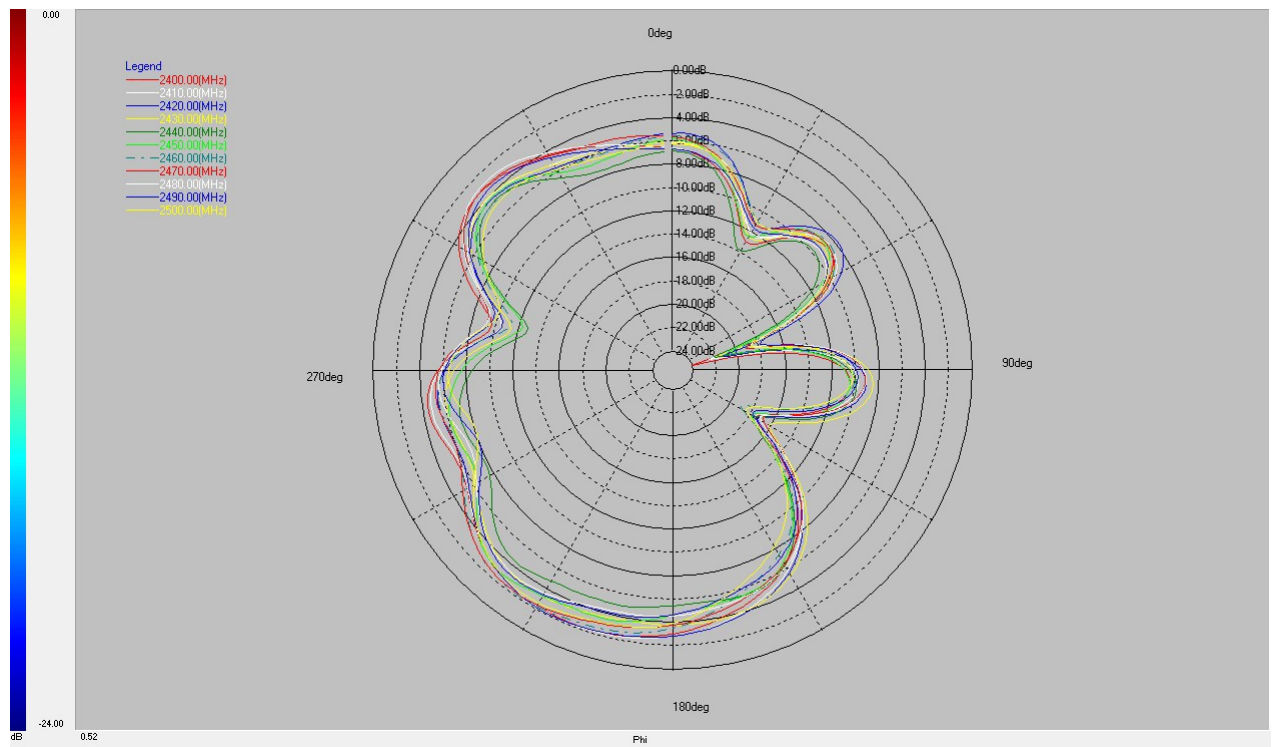
Phi=0°



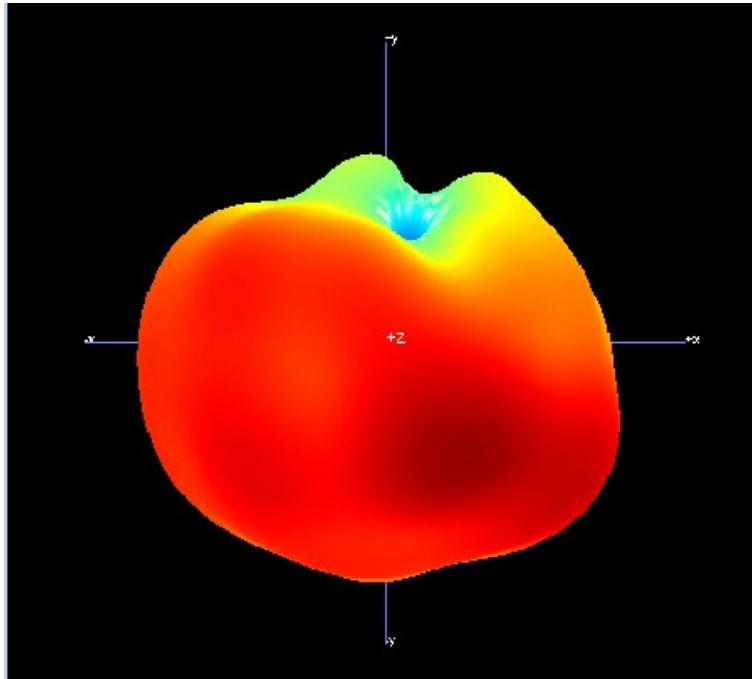
Phi=90°



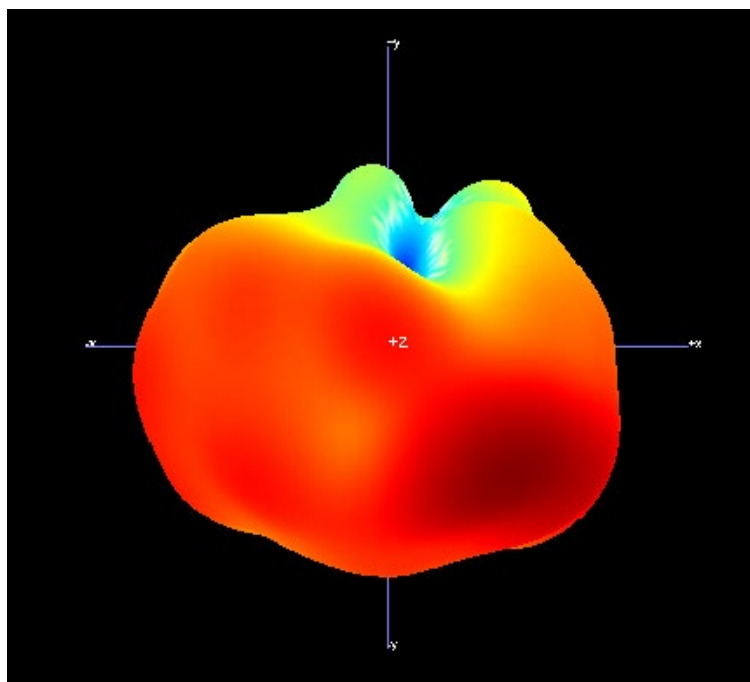
Theta=90°



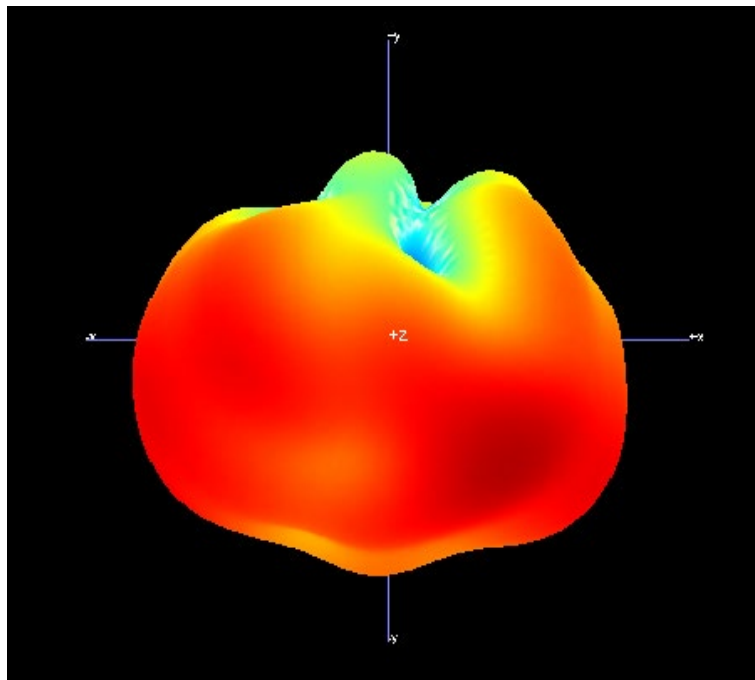
2. 3D Radiation Pattern



2400MHz

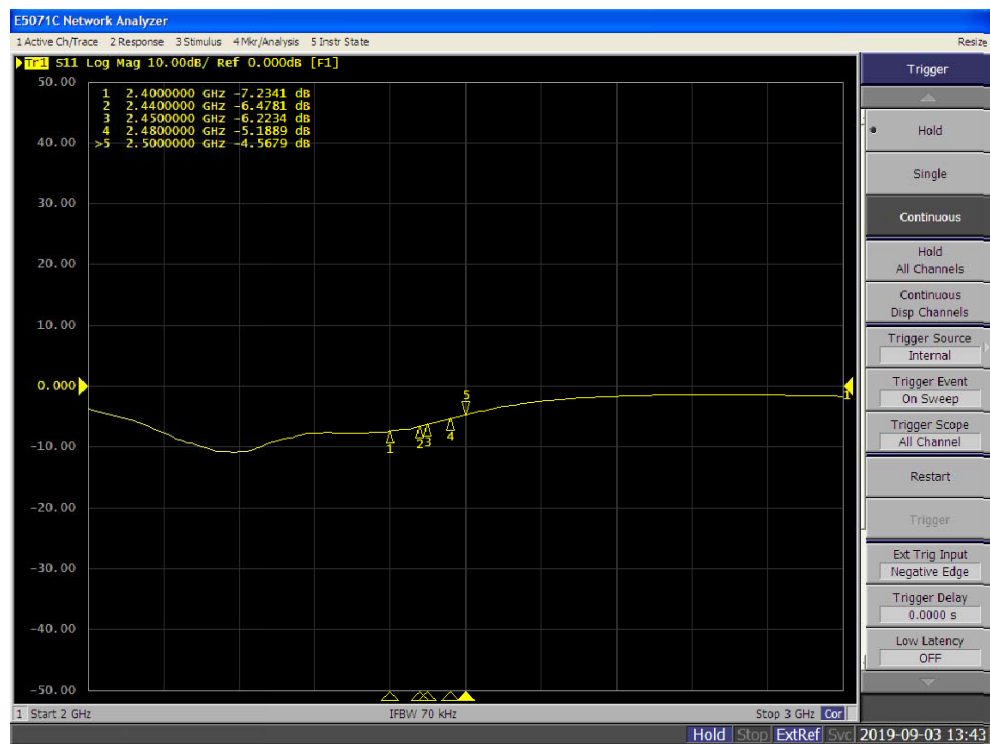


2450MHz

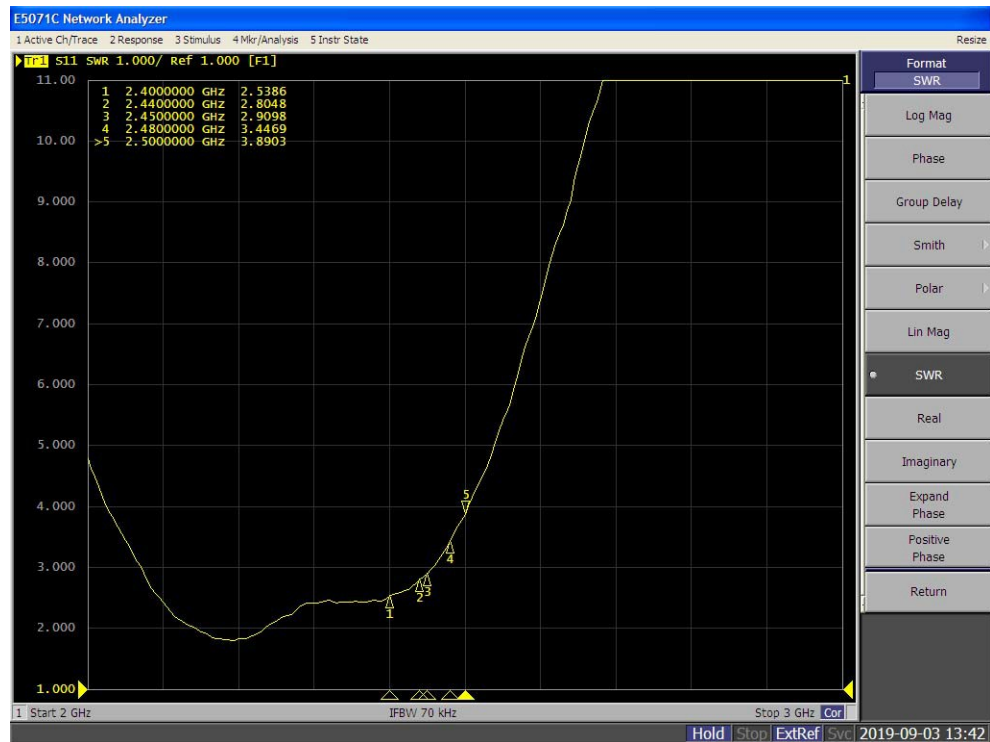


2500MHz

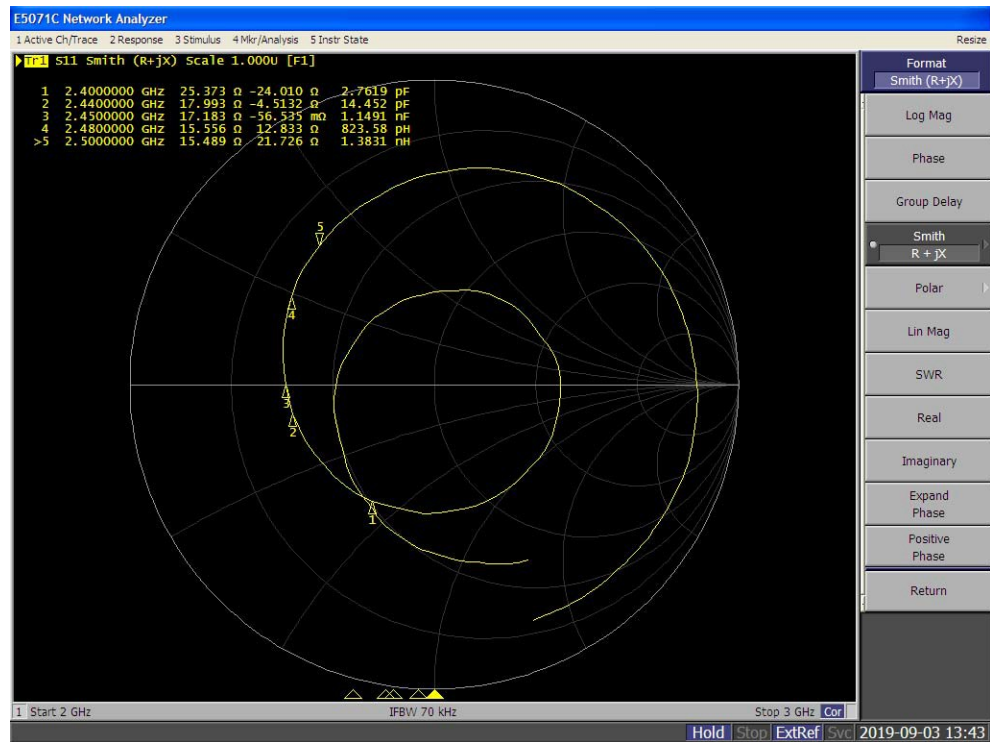
3. Return Loss



4. VSWR

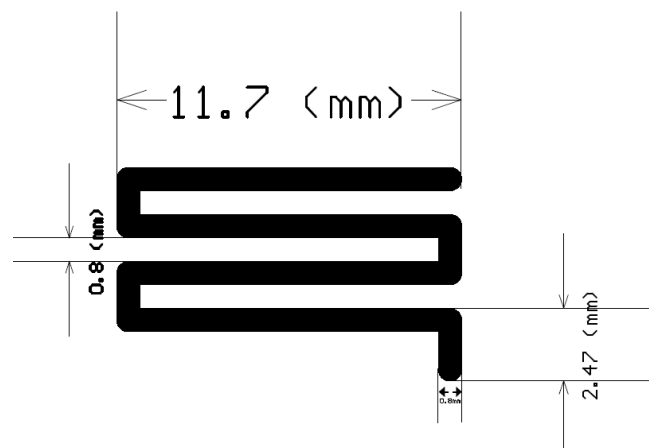
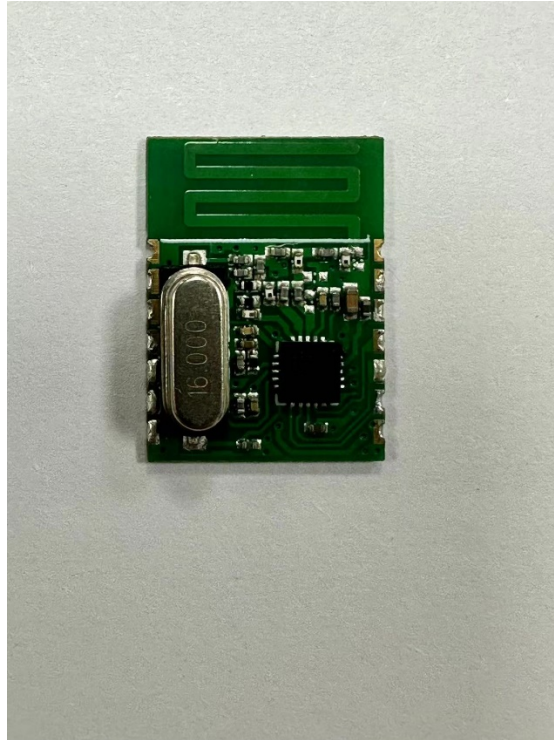


5. Input Impedance



Annex C Photographs

1. EUT



Annex D General Information

1.1 Identification of the Responsible Testing Laboratory

Laboratory Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Laboratory Address:	
Telephone:	
Facsimile:	

1.2 Identification of the Responsible Testing Location

Name:	
Address:	

1.3 Test Equipments Utilized

1.3.1 List of Test Equipment

No.	Type	Specification
1	E5071C Vector Network Analyzer	Manufacturer: Agilent
2	4*4*4 Full Anechoic Chamber	Manufacturer: Satimo
3	SG24 Multi-probe Antenna Measurement System	Manufacturer: Satimo

————— END OF REPORT —————

