



# TEST REPORT

**Applicant** : SHANGHAI MOUNTAIN VIEW SILICON CO., LTD  
**PRODUCT NAME** : MV\_BP10xx PCB Antenna  
**MODEL NAME** : MV\_BP10  
**TRADE NAME** : MVSILICON  
**BRAND NAME** : MVSILICON  
**STANDARD(S)** : ANSI/IEEE Std 149-2008  
**RECEIPT DATE** : 2019-08-30  
**TEST DATE** : 2019-09-02  
**ISSUE DATE** : 2019-09-03

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Andy Yeh(Technical Director)

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Change History		
Issue	Date	Reason for change
1.0	2019-09-03	First edition



# 1. Technical Information

**Note:** Provide by manufacturer.

## 1.1. Manufacturer and Factory Information

<b>Applicant:</b>	SHANGHAI MOUNTAIN VIEW SILICON CO., LTD
<b>Applicant Address:</b>	Suite 4C, Building 3, 1238 Zhangjiang Road, Pudong New District, Shanghai, China
<b>Manufacturer:</b>	SHANGHAI MOUNTAIN VIEW SILICON CO., LTD
<b>Manufacturer Address:</b>	Suite 4C, Building 3, 1238 Zhangjiang Road, Pudong New District, Shanghai, China

## 1.2. Equipment Under Test (EUT) Description

Wireless Type	N/A
Frequency	N/A

## 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

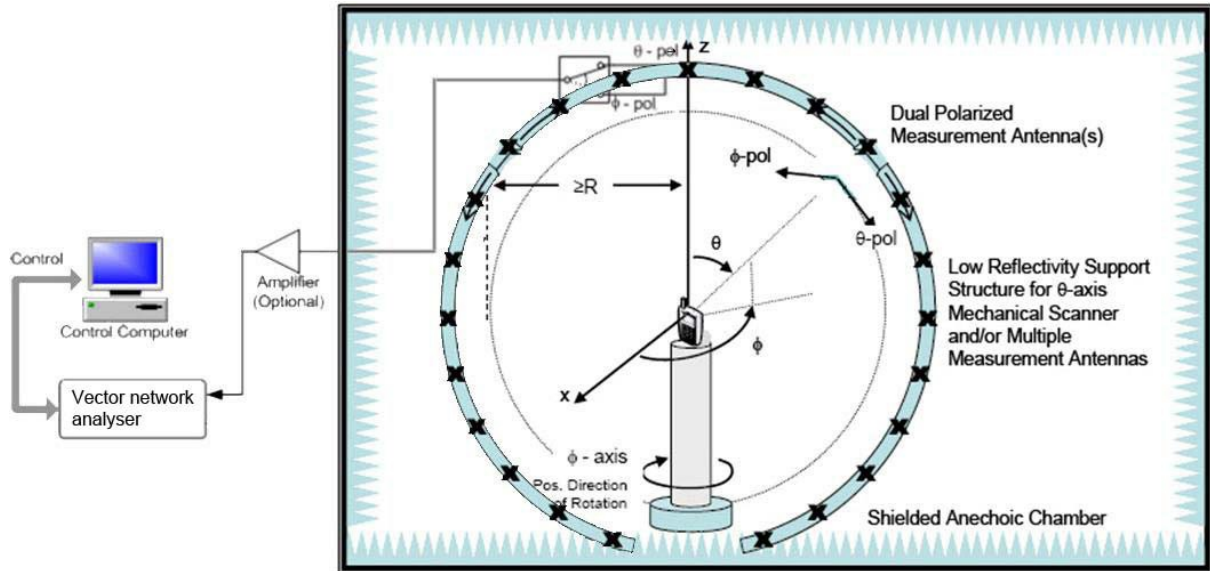


### 2.3.2. Return Loss/VSWR/Input Impedance

Frequency	Return Loss (dB)	VSWR	Input Impedance( $\Omega$ )
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

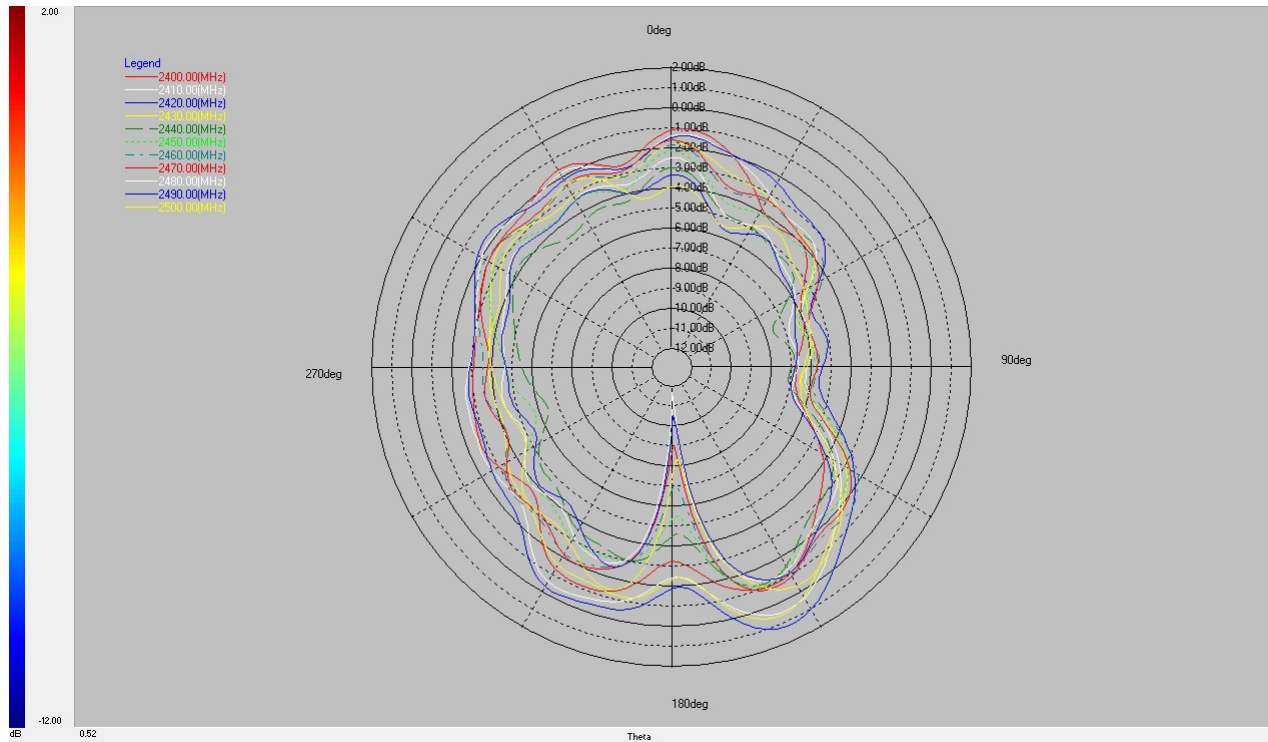
### 1. Test Setup



## Annex B Figures

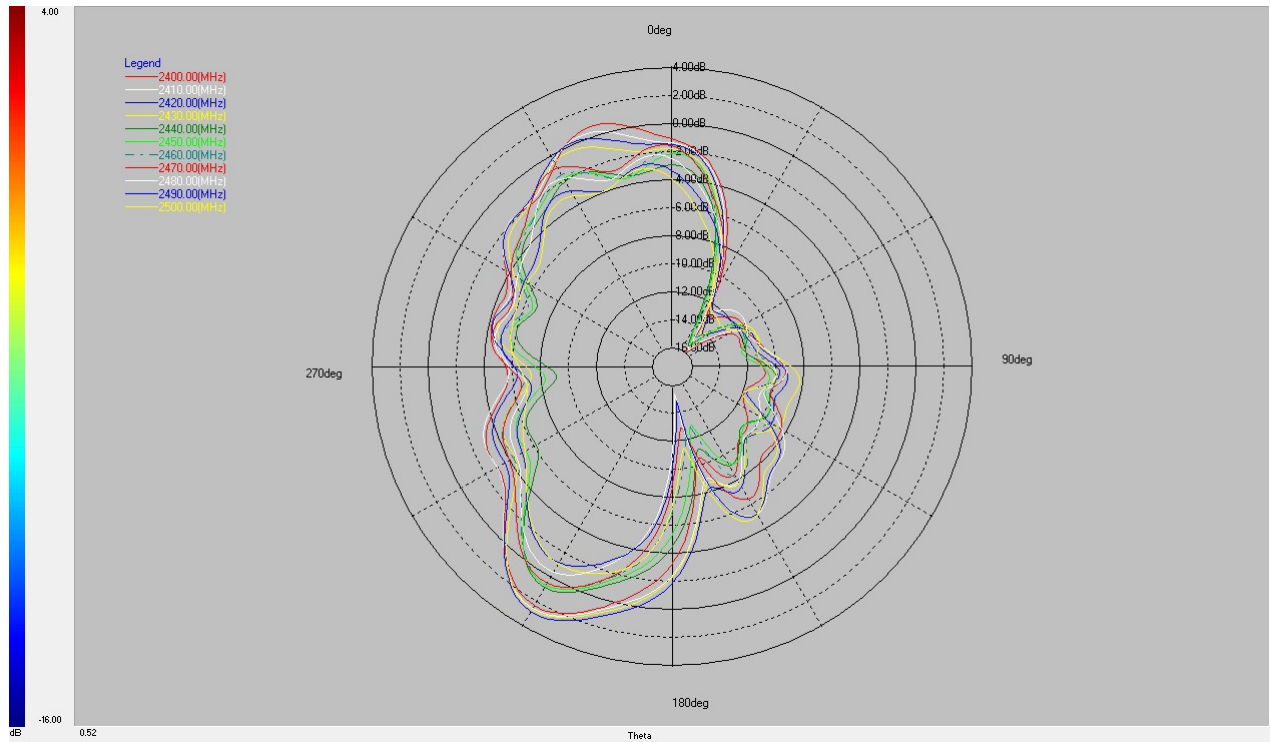
### 1. 2D Radiation Pattern

Phi=0°

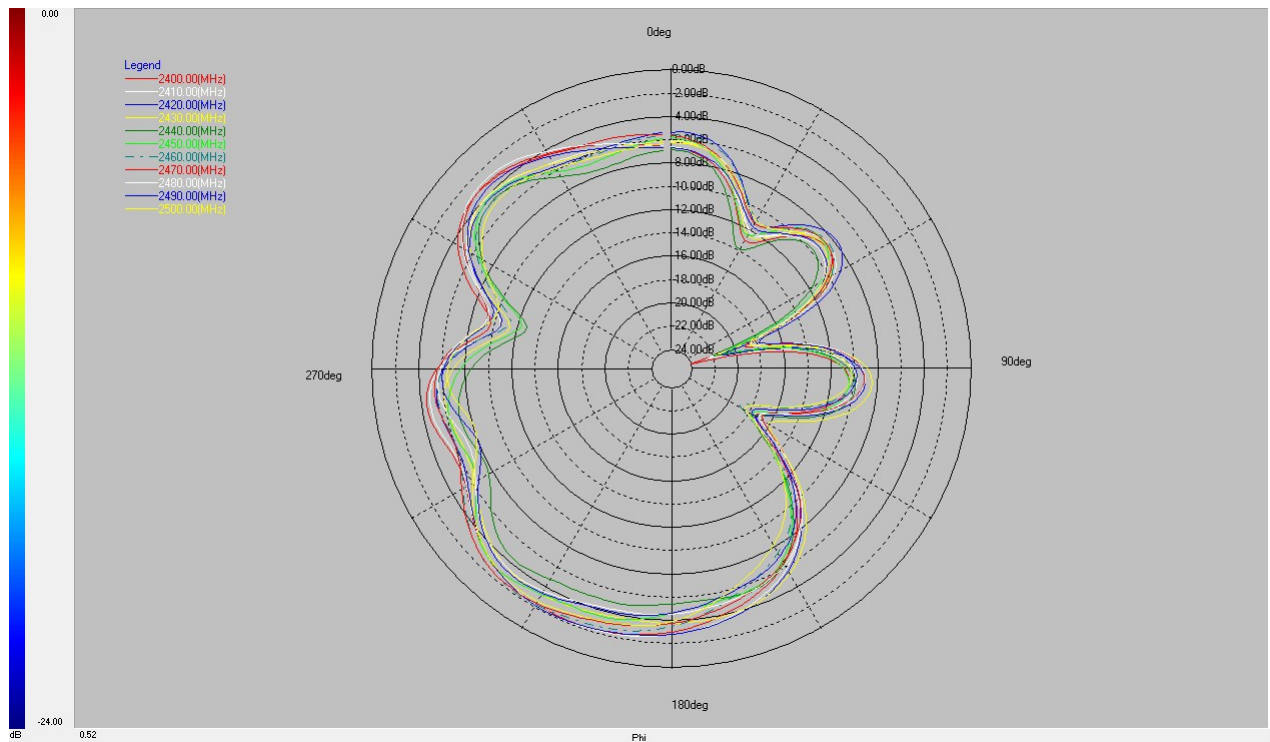




Phi=90°

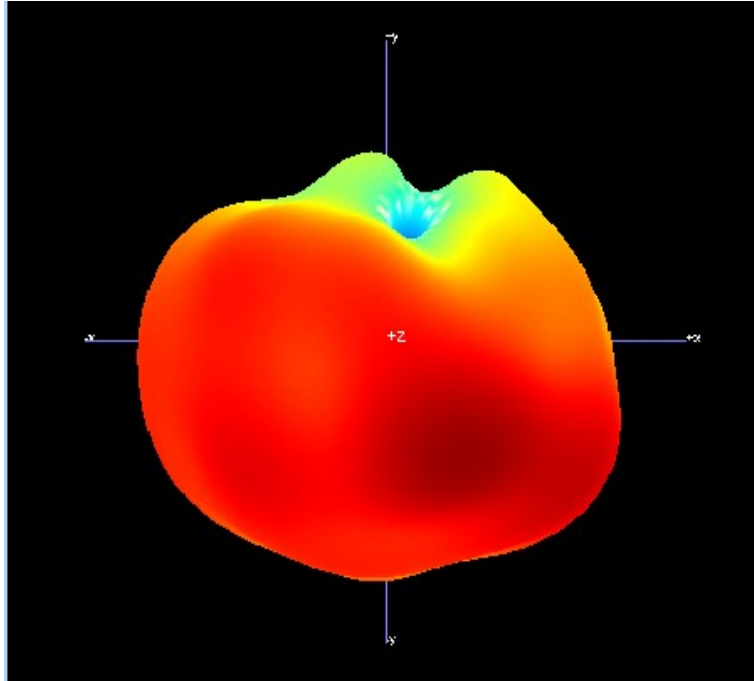


Theta=90°

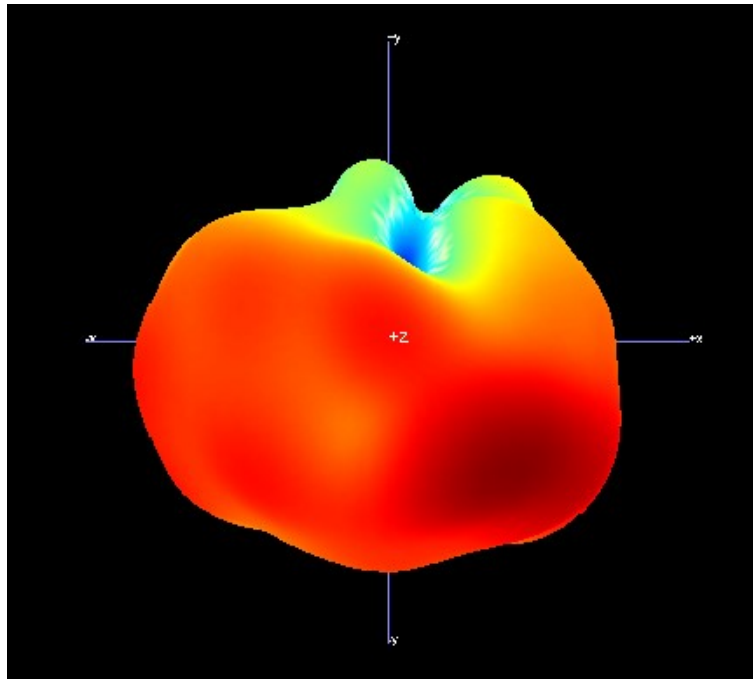




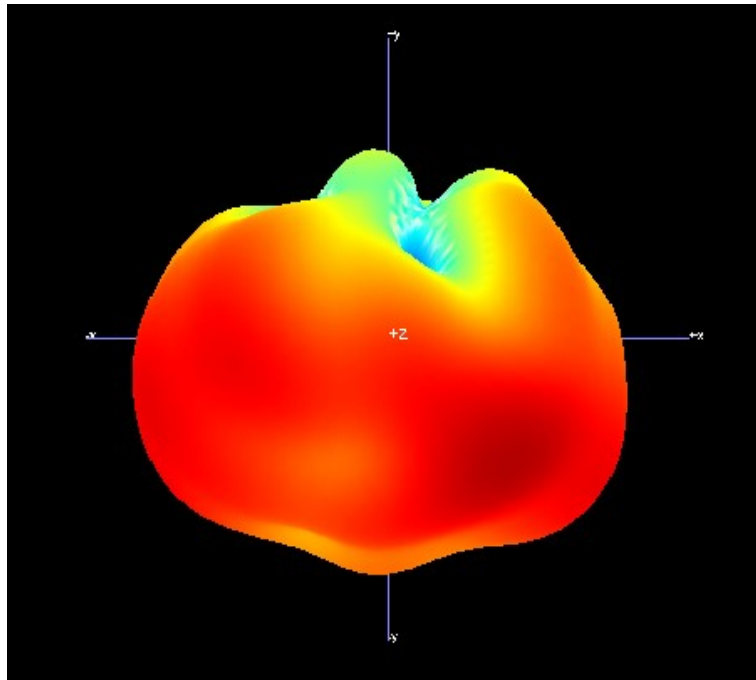
## 2. 3D Radiation Pattern



2400MHz

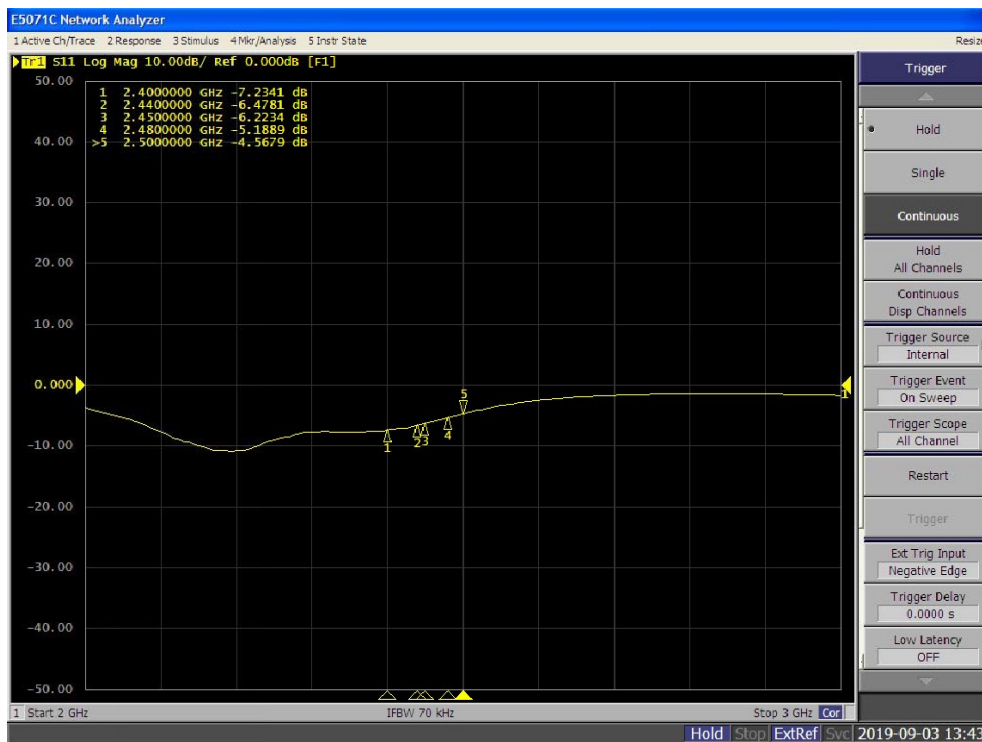


2450MHz

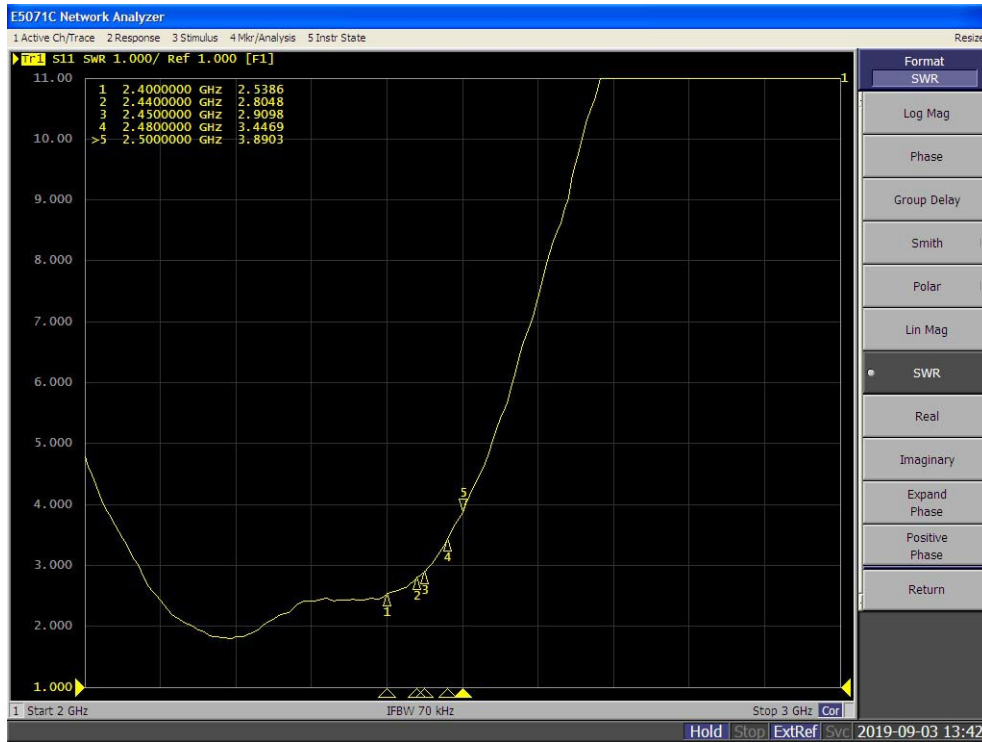


2500MHz

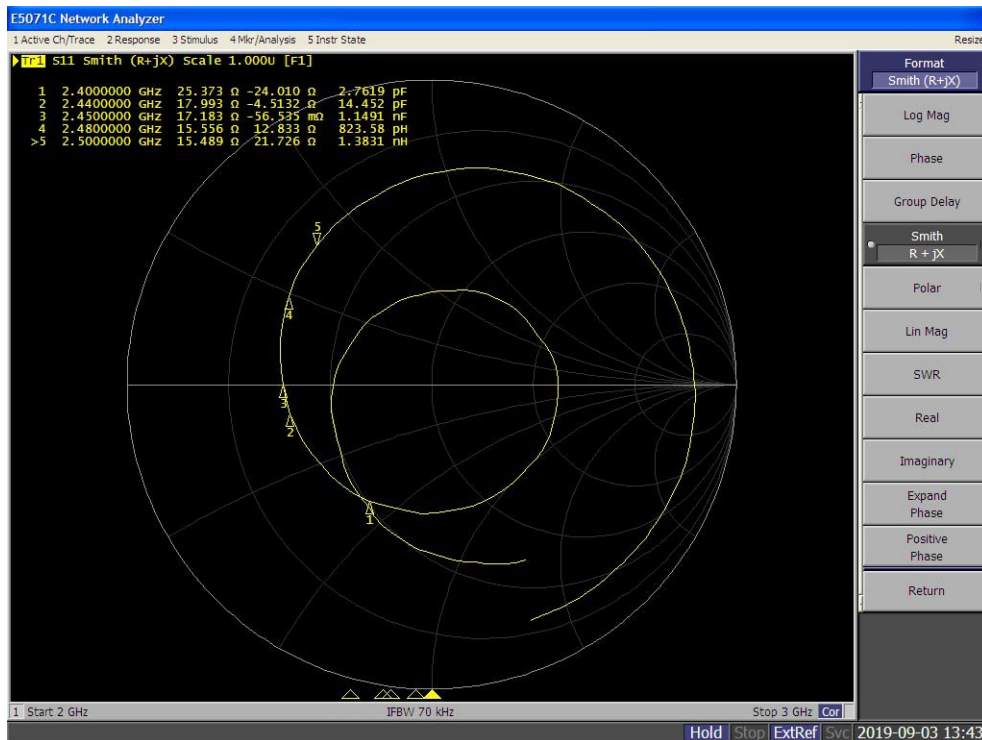
### 3. Return Loss



### 4. VSWR

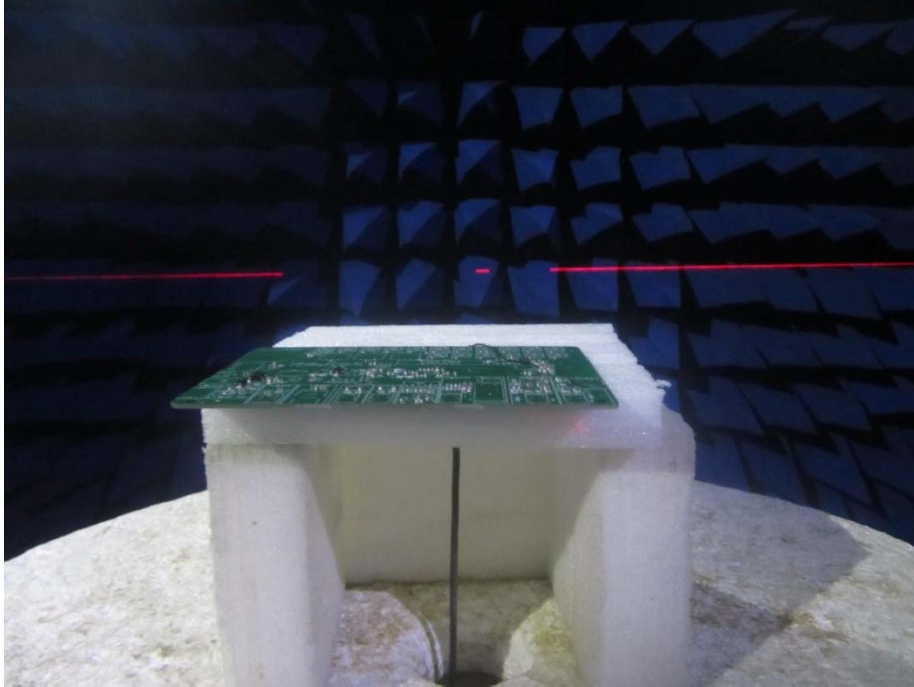


### 5. Input Impedance

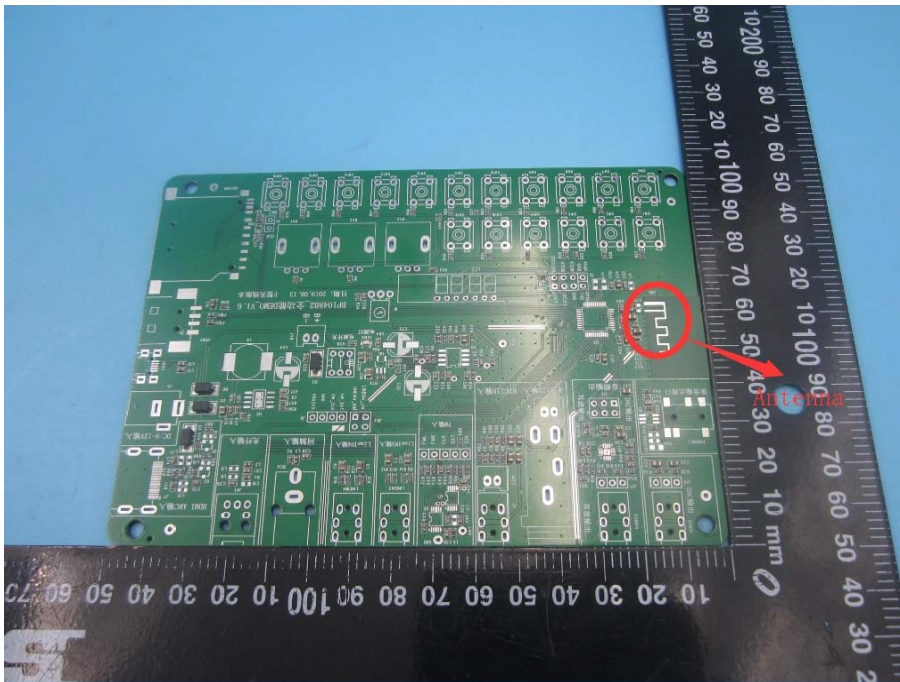


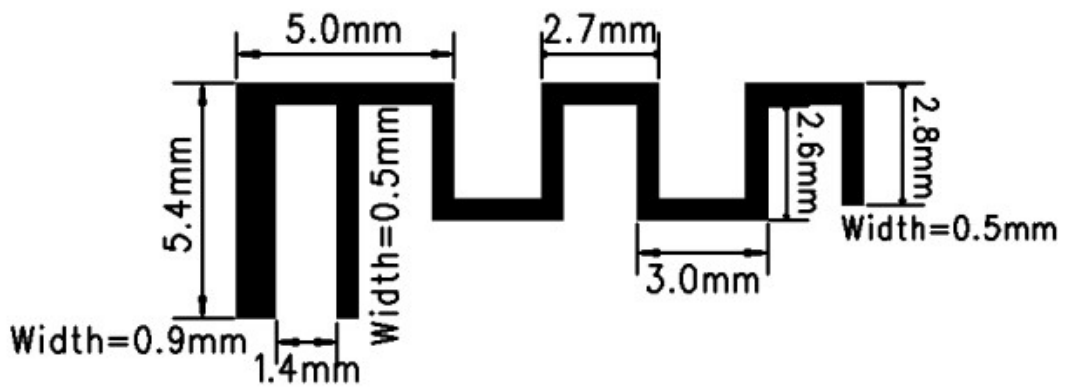
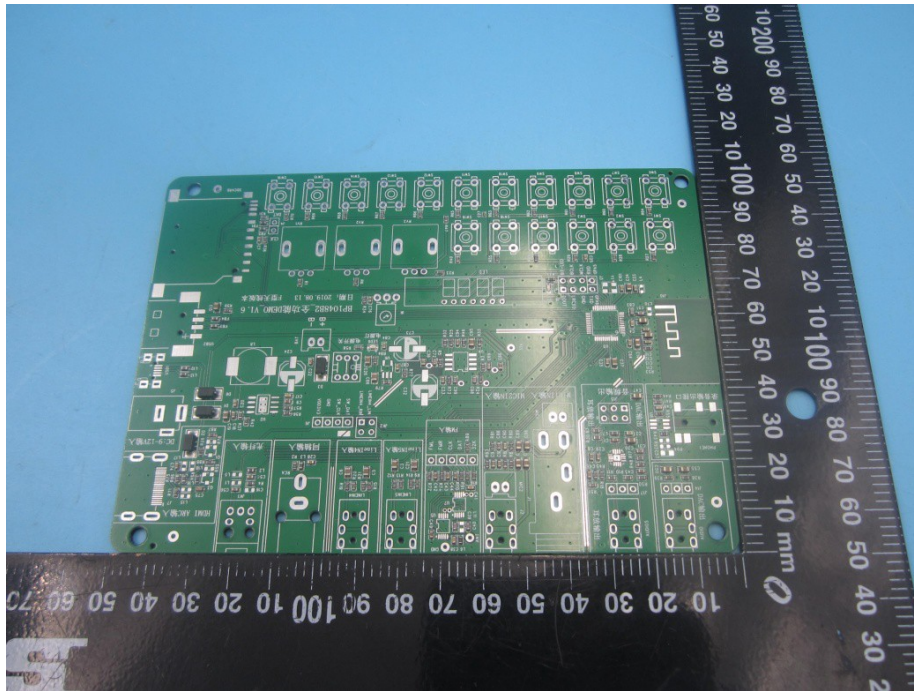
## Annex C Photographs

### 1. Test environment



### 2. EUT





Actual Size



## Annex D General Information

### 1.1 Identification of the Responsible Testing Laboratory

Company Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Department:	Morlab Laboratory
Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
Responsible Test Lab Manager:	Mr. Su Feng
Telephone:	+86 755 36698555
Facsimile:	+86 755 36698525

### 1.2 Identification of the Responsible Testing Location

Name:	Shenzhen Morlab Communications Technology Co., Ltd. Morlab Laboratory
Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China

### 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 —————