



REPORT No.: SZ19080340E01

Antenna data sheet

Applicant : Shenzhen Lihua Industrial Co., Ltd

PRODUCT NAME : MV_BP10xx PCB Antenna

MODEL NAME : MV_BP10

STANDARD(S) : ANSI/IEEE Std 149-2008

RECEIPT DATE : 2019-08-30

TEST DATE : 2019-09-02

ISSUE DATE : 2019-09-03

Manufacturer : SHENZHEN MORLAB COMMUNICATIONS TECHNOLOGY Co., Ltd.

Address : FL1-3, Building A, FeiYang Science Park, No.8 LongChang Road,
Block67, BaoAn District, ShenZhen , GuangDong Province,
P. R. China



Edited by:

Fang Jinshan

Fang Jinshan(Rapporteur)

Approved by:

Chi Shide

Chi Shide(Supervisor)

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MORLAB

SHENZHEN MORLAB COMMUNICATIONS TECHNOLOGY Co., Ltd.
FL1-3, Building A, FeiYang Science Park, No.8 LongChang Road,
Block67, BaoAn District, ShenZhen , GuangDong Province, P. R. China

Tel: 86-755-36698555
Http://www.morlab.cn

Fax: 86-755-36698525
E-mail: service@morlab.cn





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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. 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

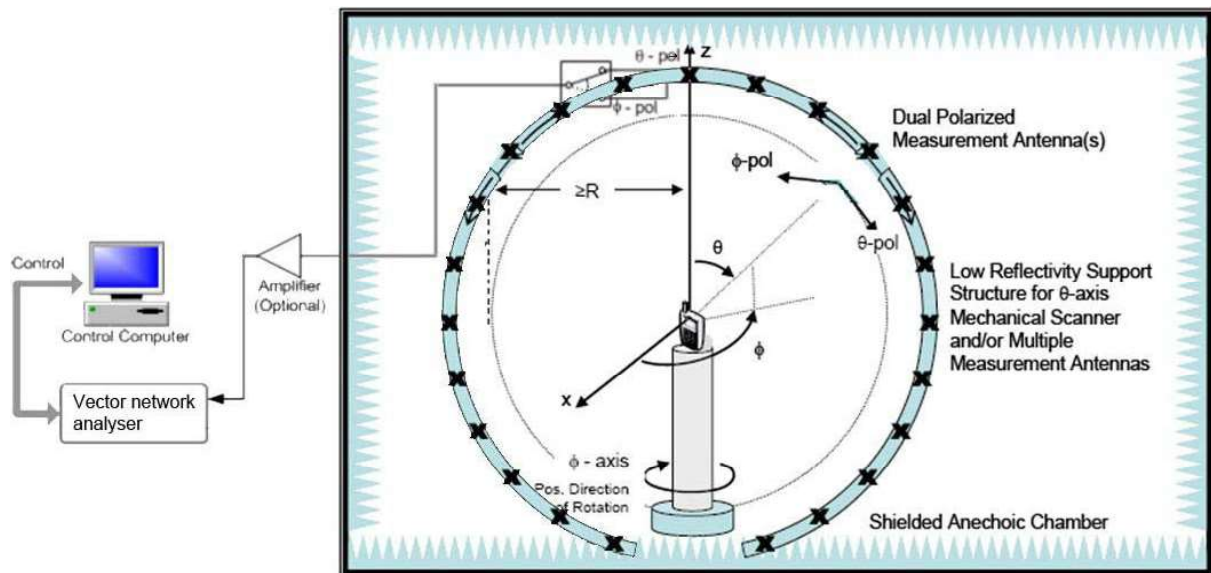


2.3.2. Return Loss/VSWR/Input Impedance

Frequency	Return Loss (dB)	VSWR	Input Impedance(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

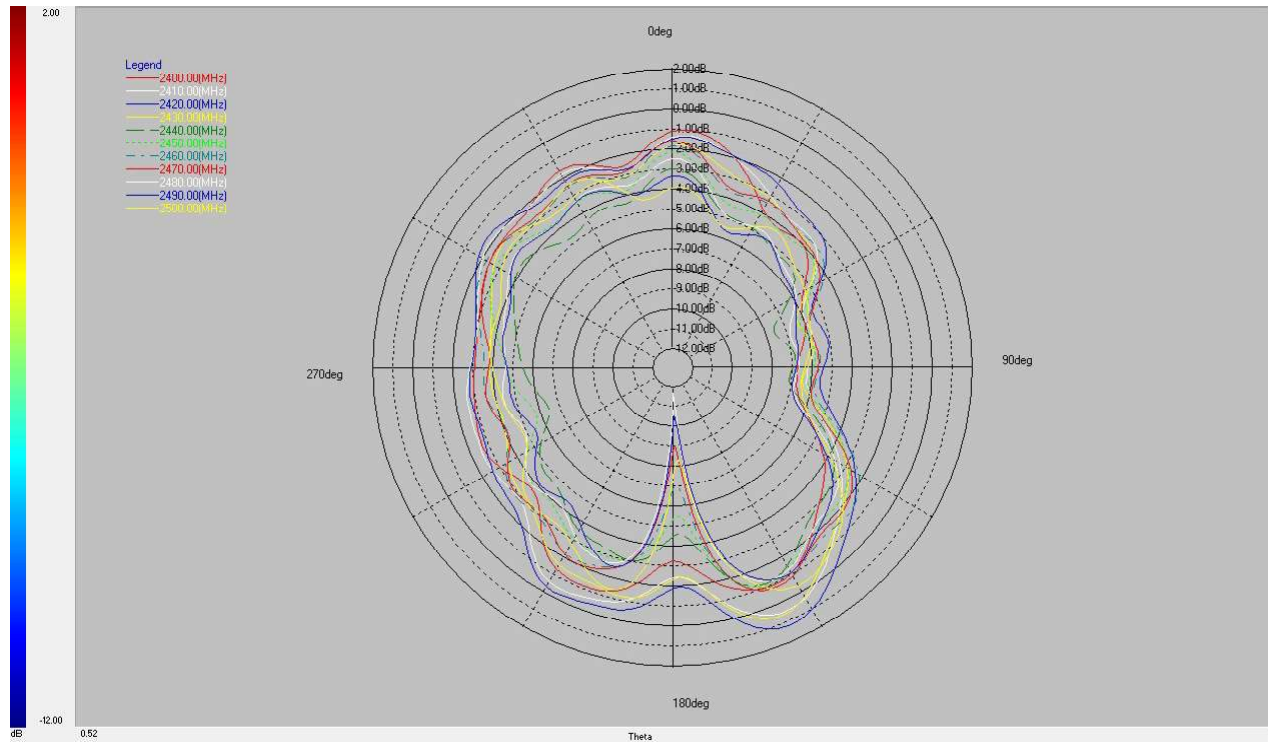
1. Test Setup



Annex B Figures

1. 2D Radiation Pattern

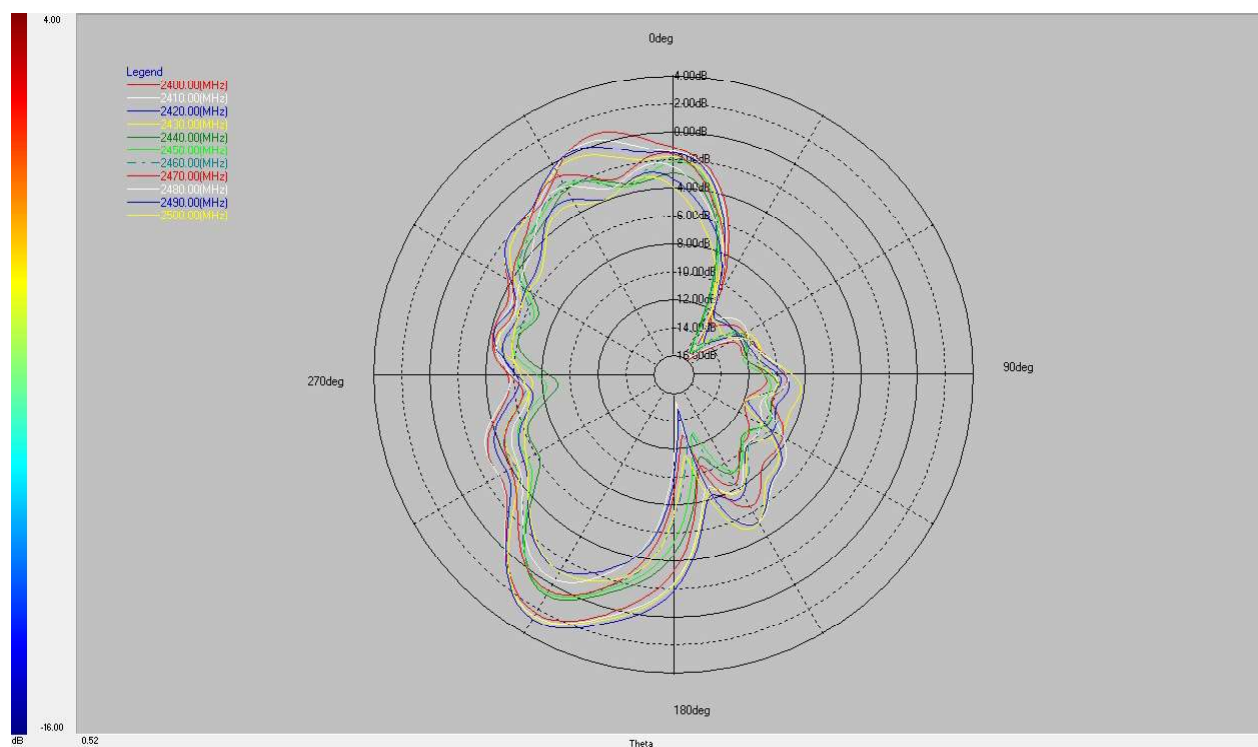
Phi=0°



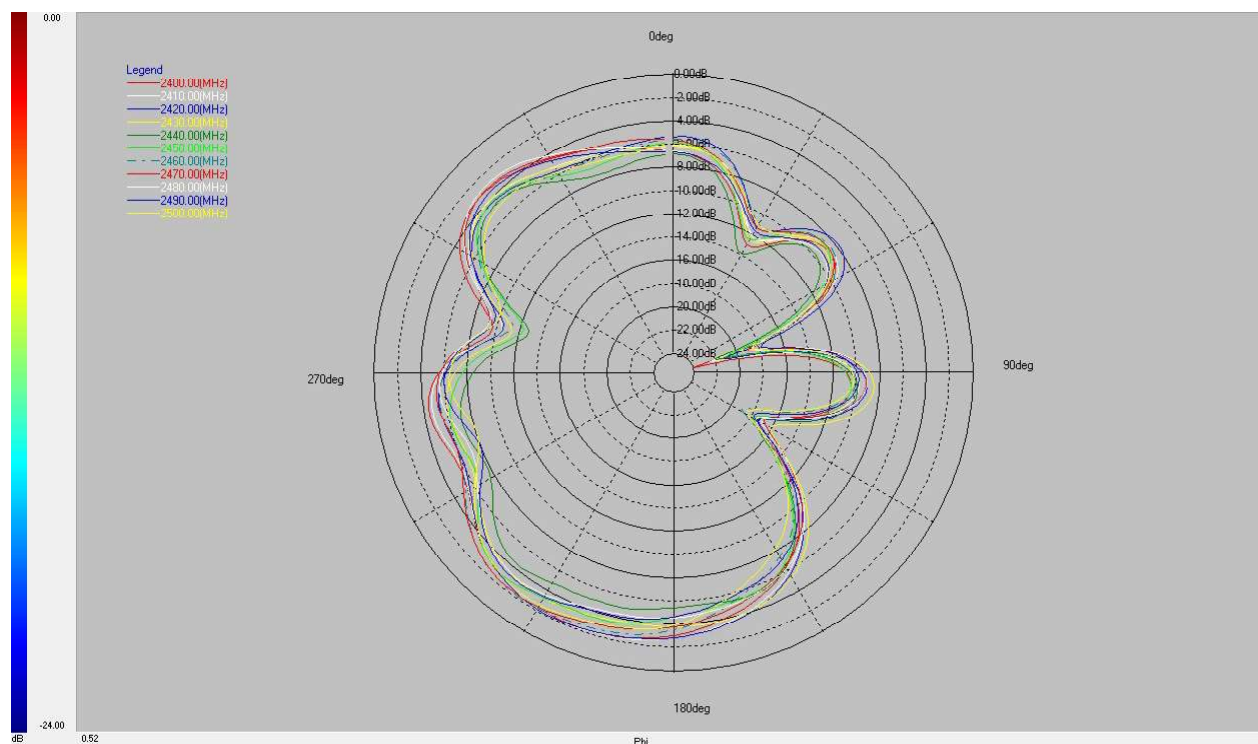


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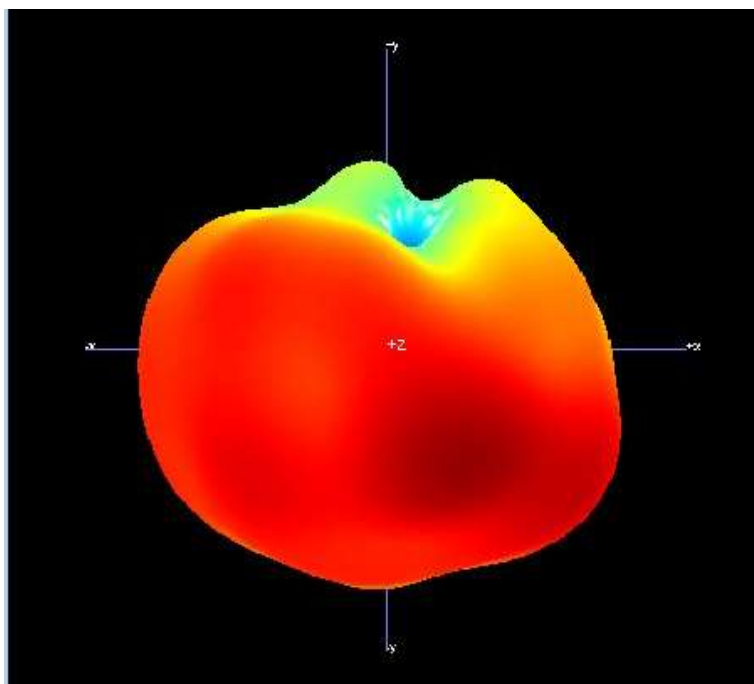
Phi=90°



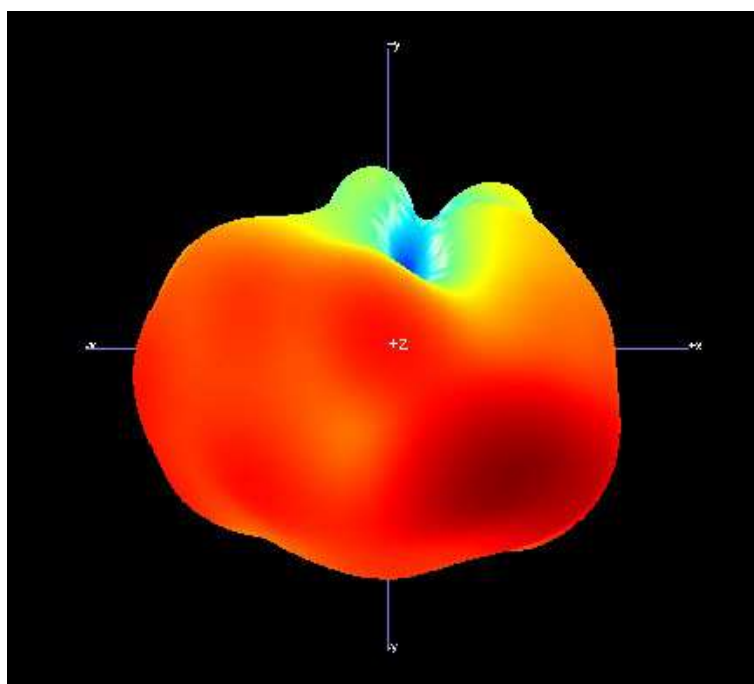
Theta=90°



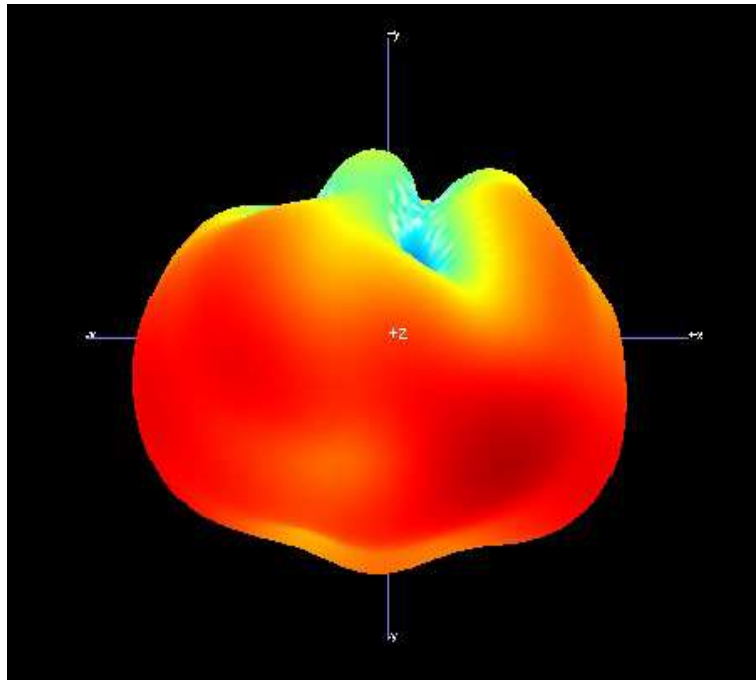
2. 3D Radiation Pattern



2400MHz

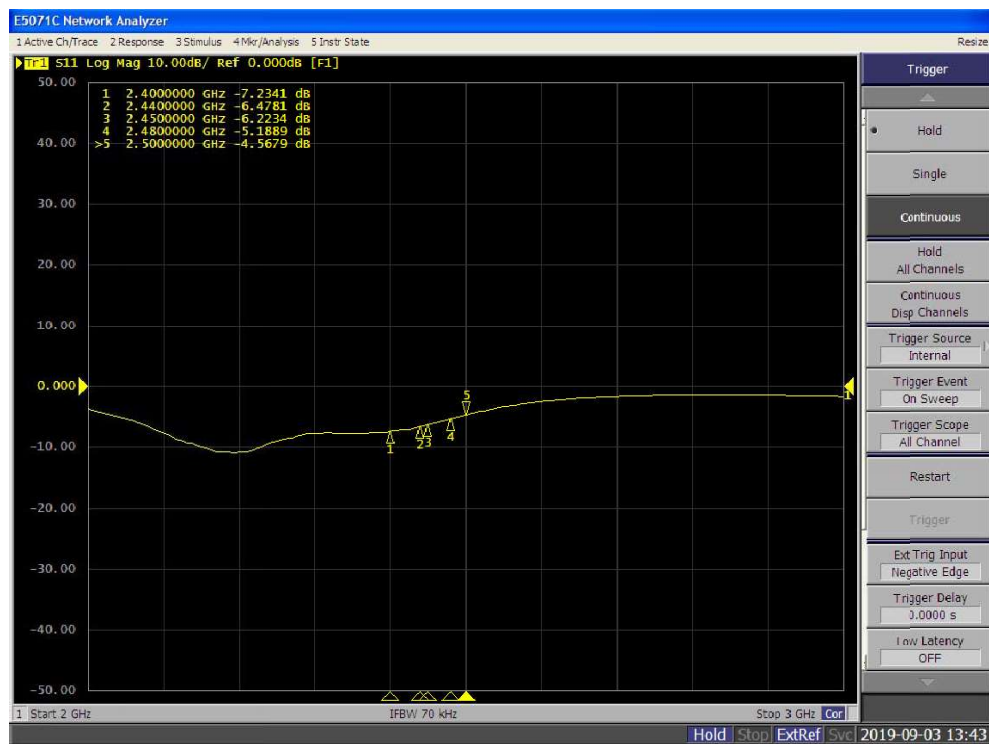


2450MHz



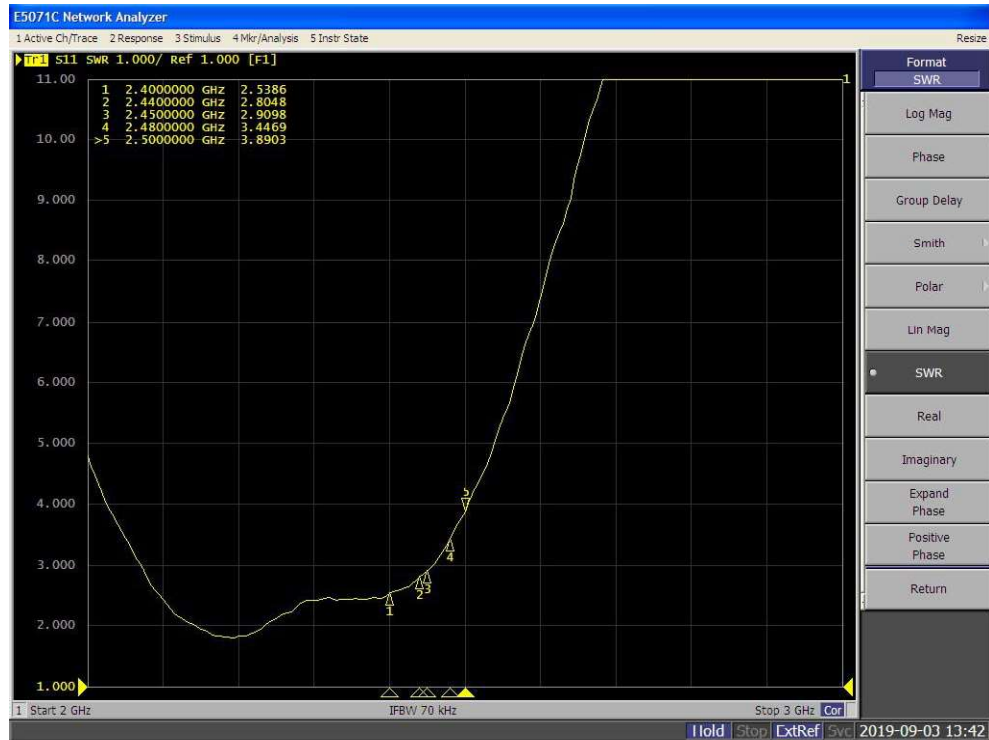
2500MHz

3. Return Loss

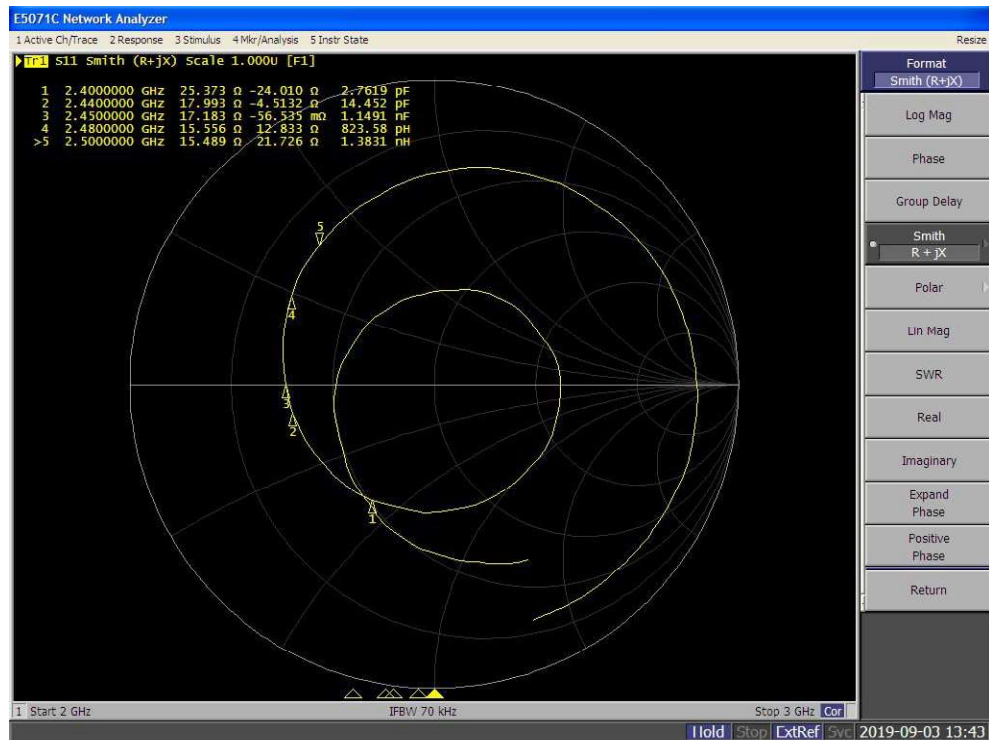




4. VSWR

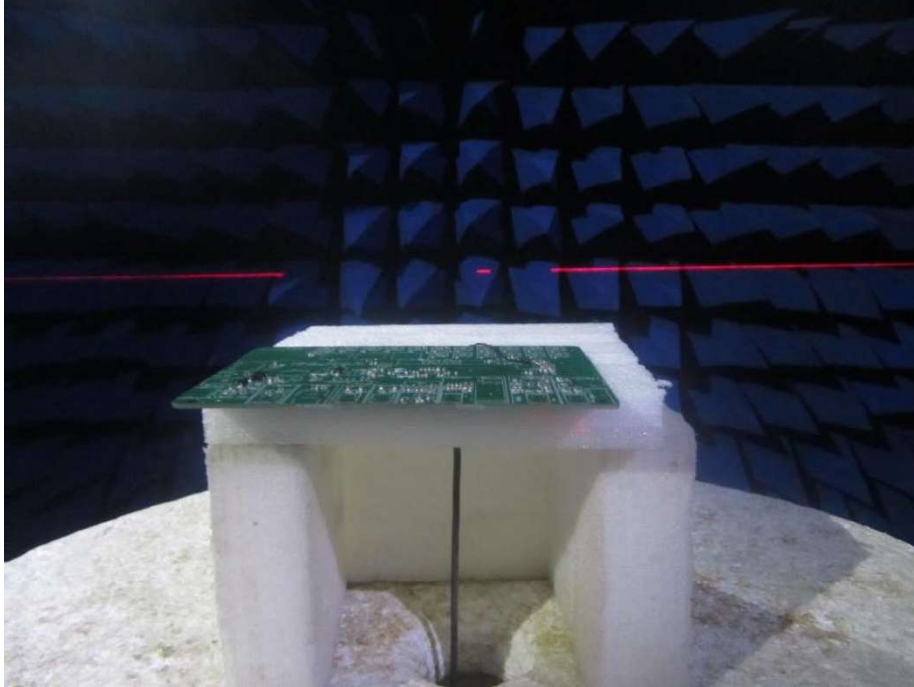


5. Input Impedance

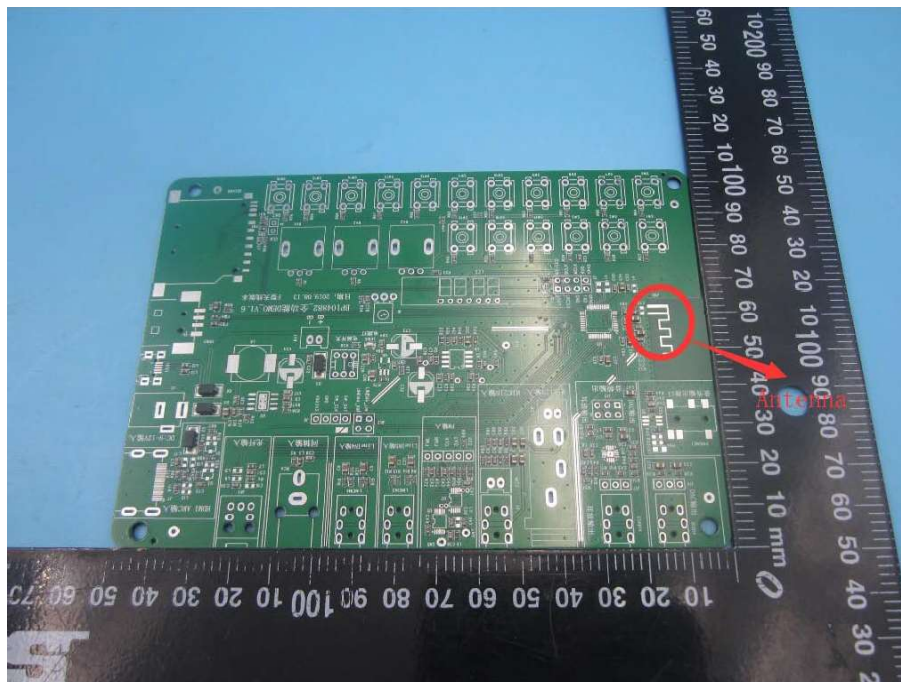


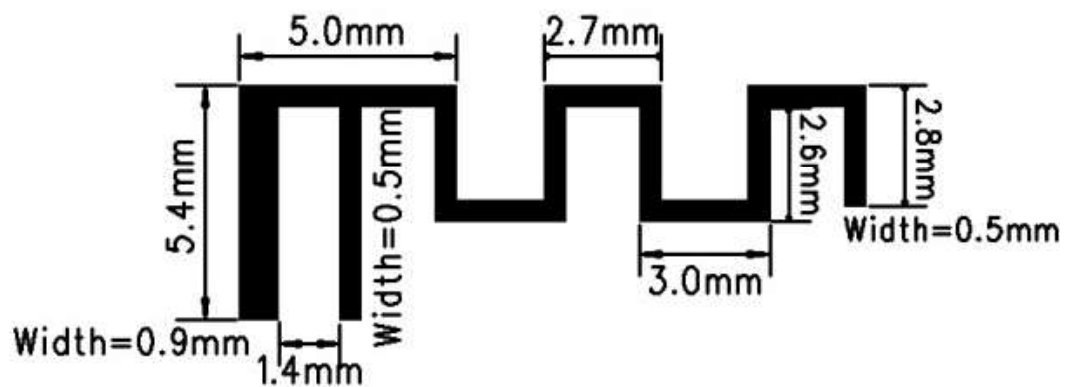
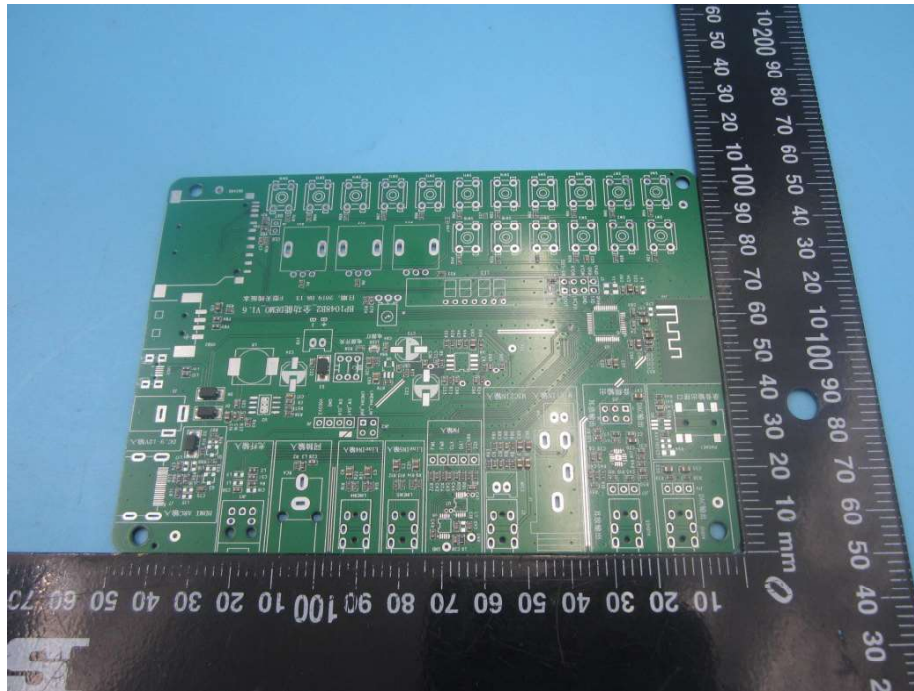
Annex C Photographs

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 —————