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	:	2019-10-15

Edited by: Chi Shide(Rapporteur)

Approved by: Andy Yeh(Technical Director)

NOTE: This document is issued by MORLAB, the test report shall not be reproduced except in full without prior written permission of the company. The test results apply only to the particular sample(s) tested and to the specific tests carried out which is available on request for validation and information confirmed at our website.

DIRECTORY

1. Technical Information 3
1.1. Manufacturer and Factory Information 3
1.2. Equipment Under Test (EUT) Description 3
2. Test Results 4
2.1. Applied Reference Documents 4
2.2. Test Conditions 4
2.3. Test Results lists 4
Annex A Photographs 6
Annex B Figures 7
1. 2D Radiation Pattern 7
2. 3D Radiation Pattern 9
3. Return Loss 10
4. VSWR 11
5. Input Impedance 11
Annex C Photographs 12
Annex D General Information 14
1.1 Identification of the Responsible Testing Laboratory 14
1.2 Identification of the Responsible Testing Location 14
1.3 Test Equipments Utilized 14

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

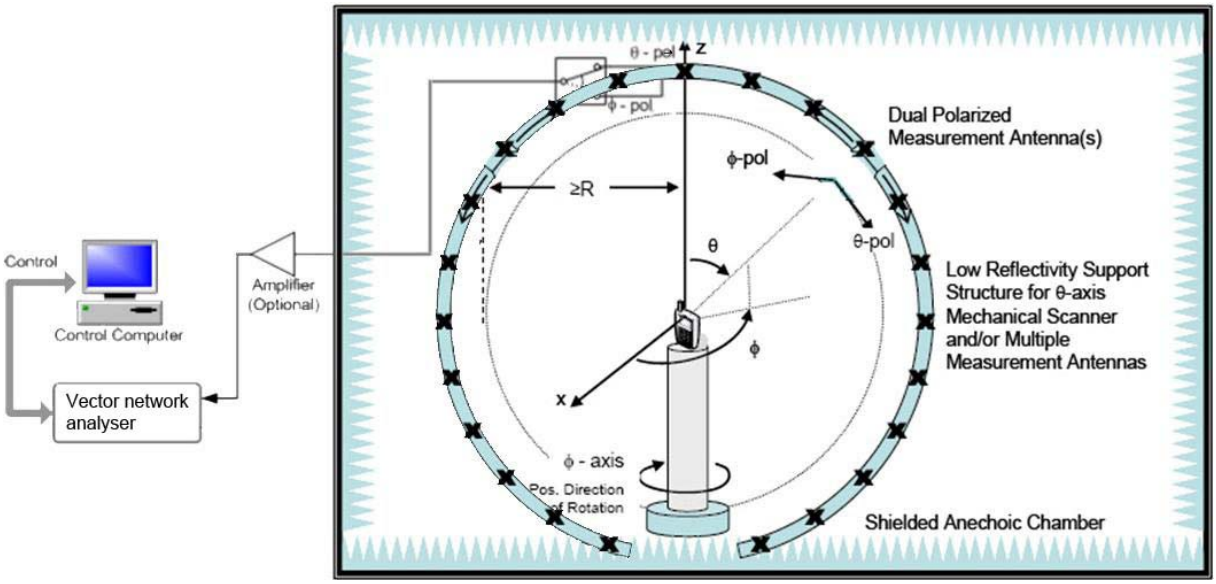
Frequency	Gain(dBi)
2400MHz	2.81
2410MHz	2.74
2420MHz	3.38
2430MHz	2.73
2440MHz	1.01
2450MHz	1.26
2460MHz	1.50
2470MHz	1.49
2480MHz	1.42
2490MHz	0.36
2500MHz	0.33

2.3.2.Return Loss/VSWR/Input Impedance

Frequency	Return Loss (dB)	VSWR	Input Impedance(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

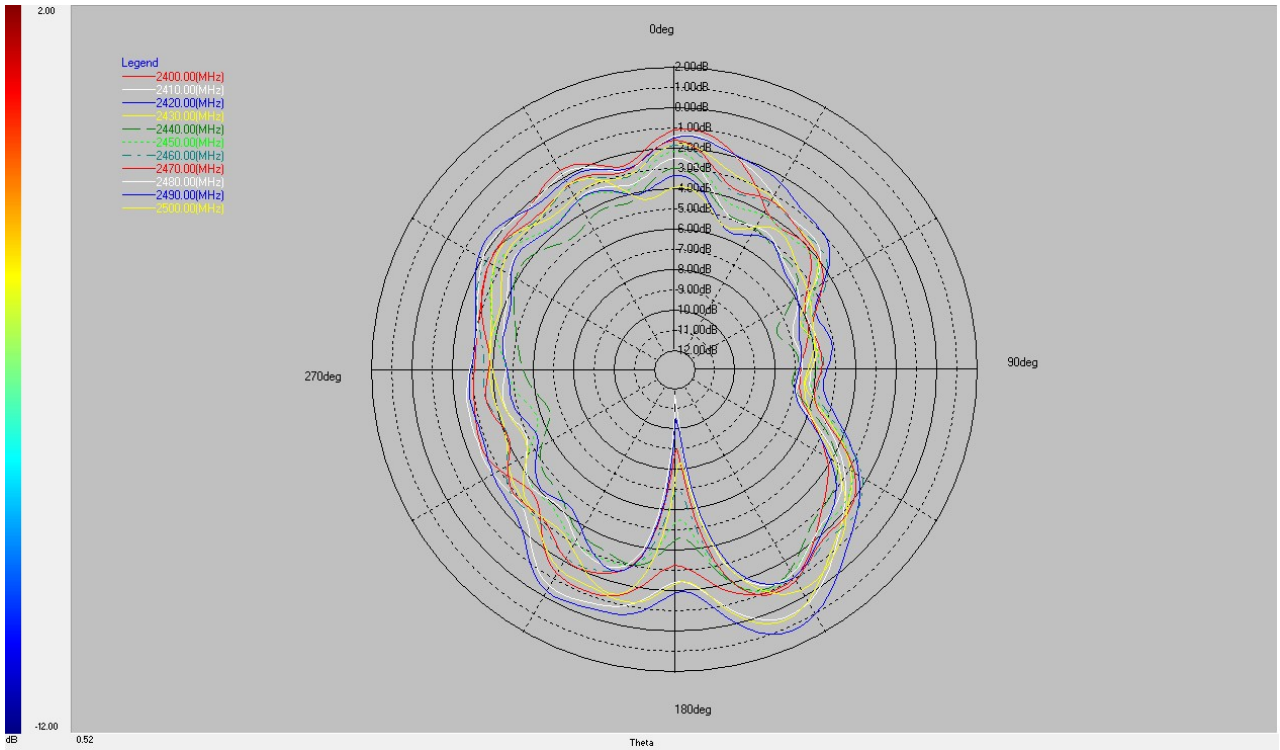
1. Test Setup



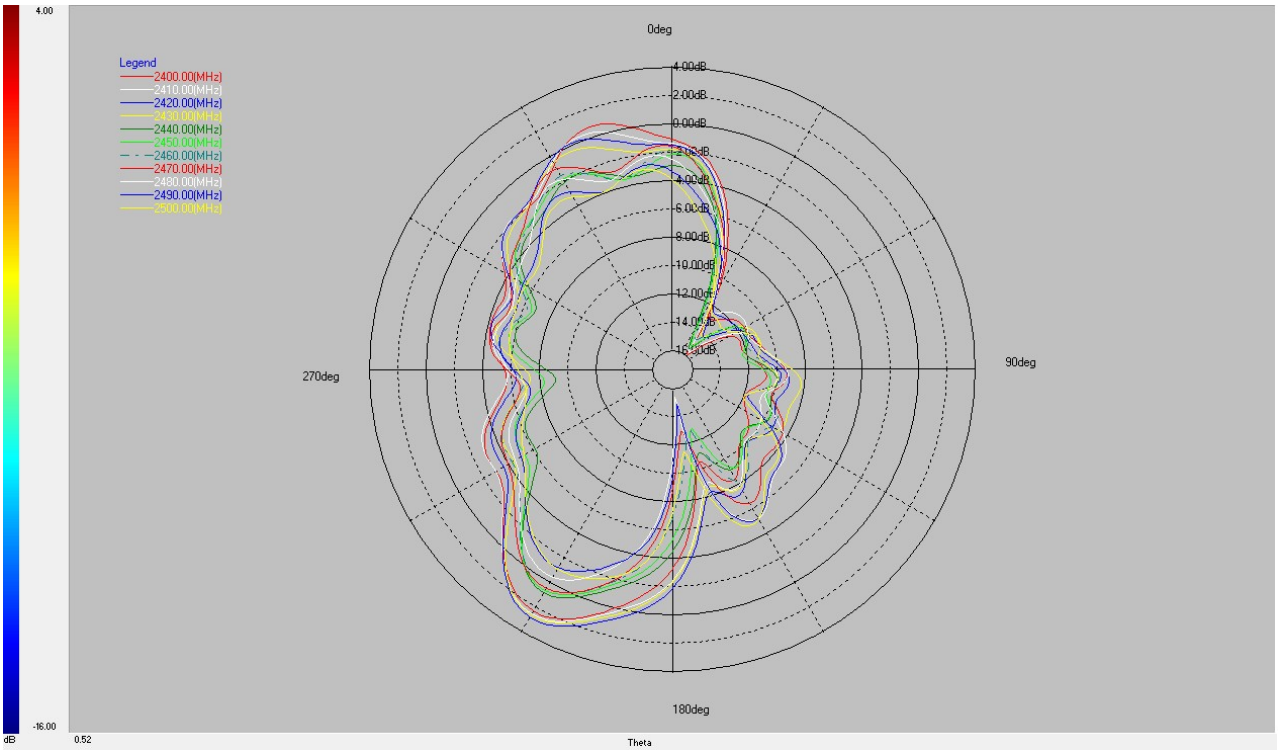
Annex B Figures

1. 2D Radiation Pattern

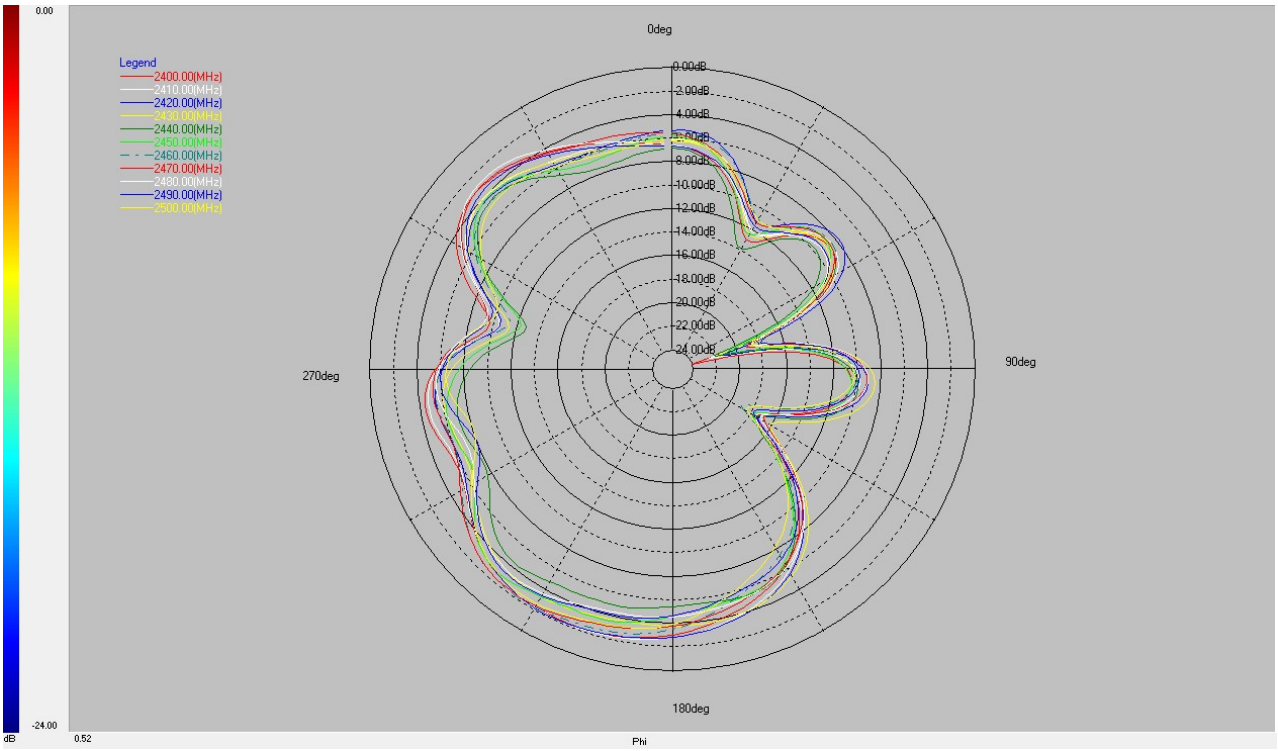
Phi=0°



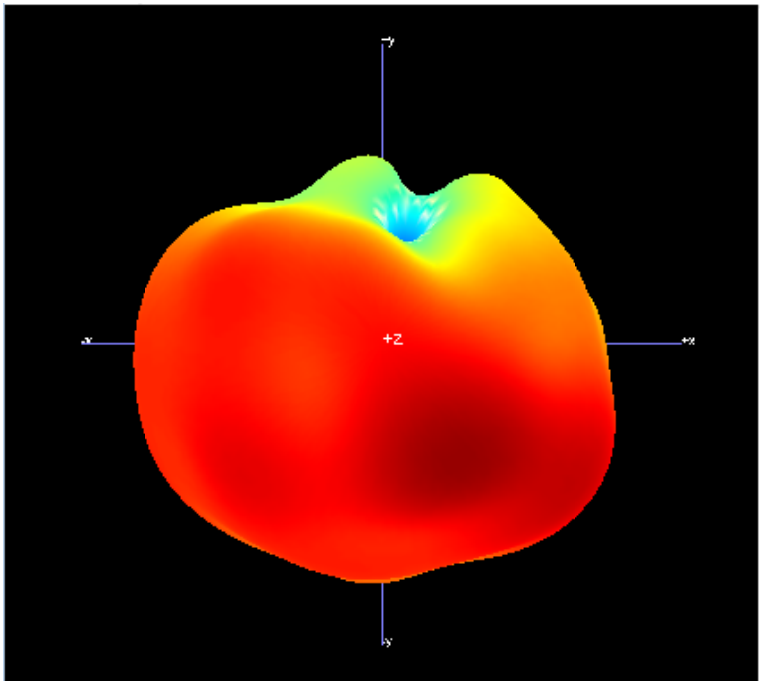
Phi=90°



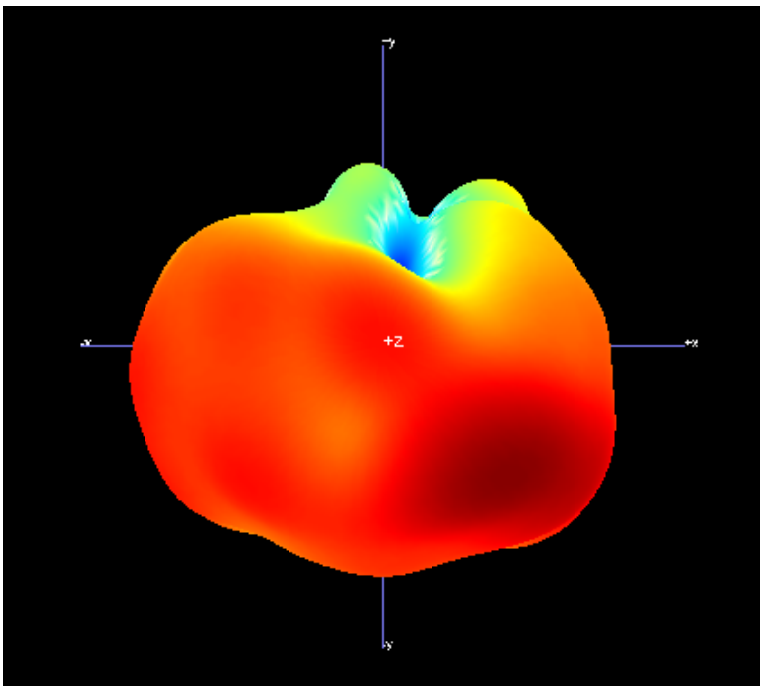
Theta=90°



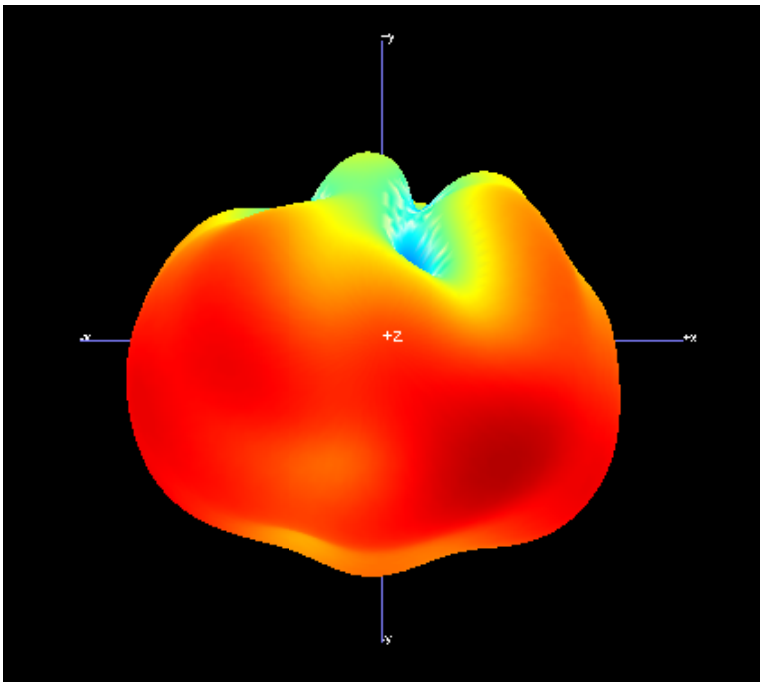
2. 3D Radiation Pattern



2400MHz

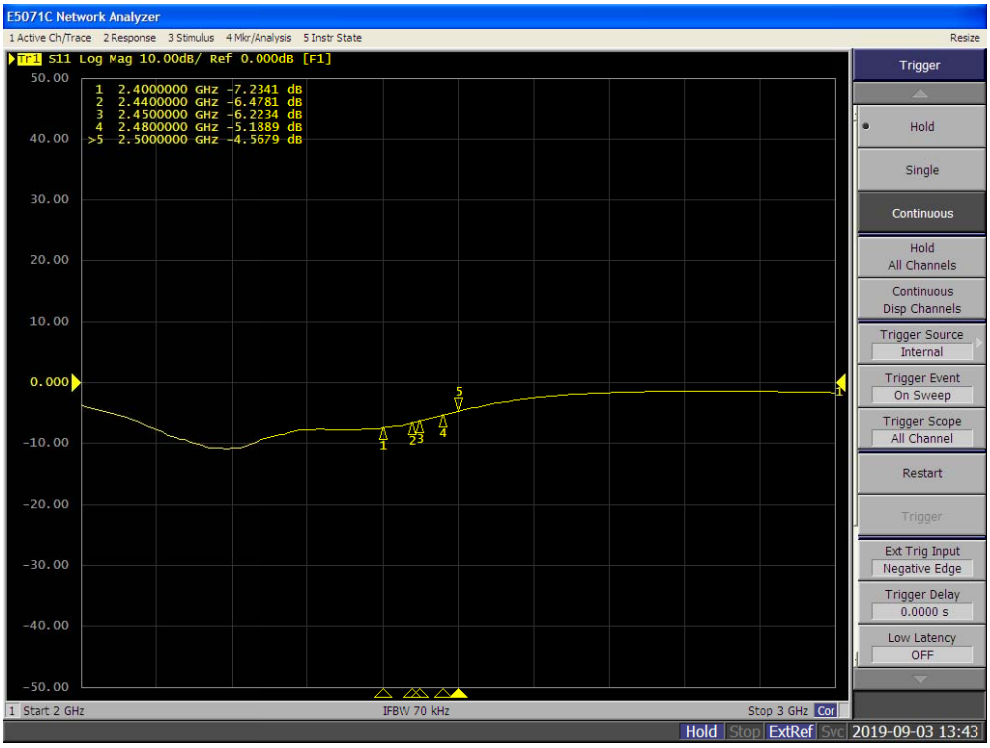


2450MHz

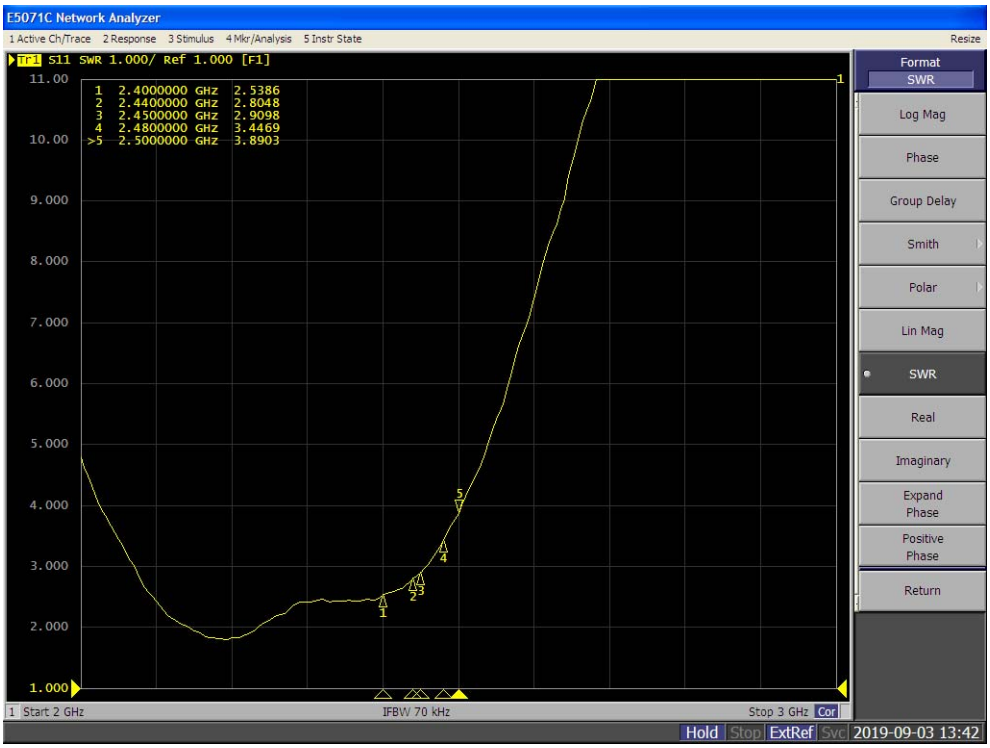


2500MHz

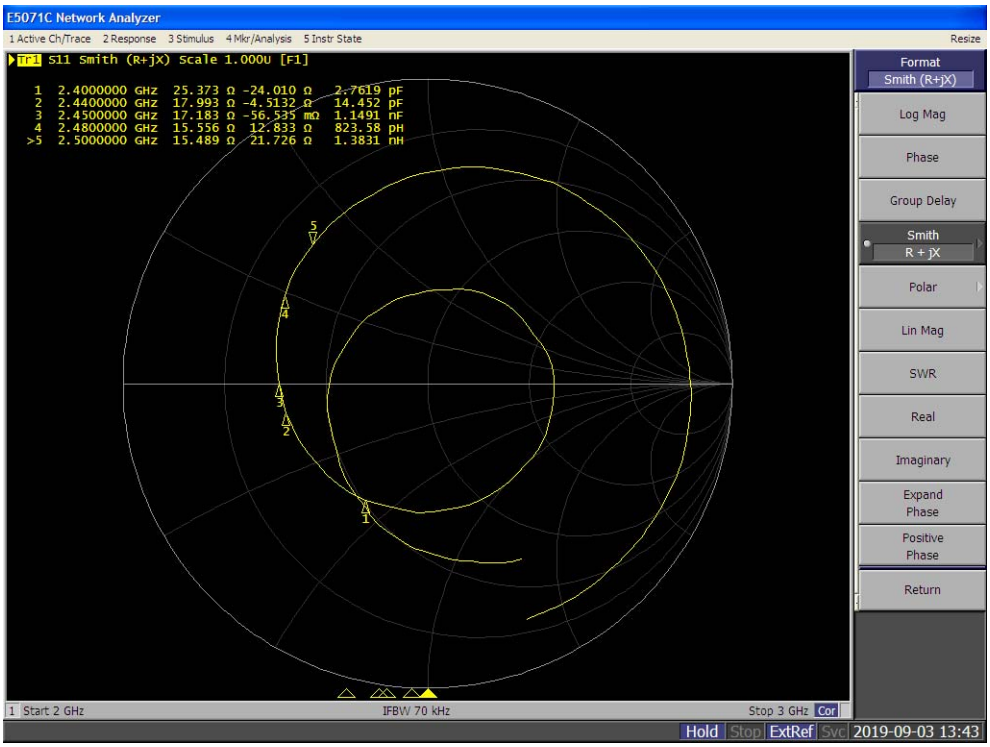
3. Return Loss



4. VSWR

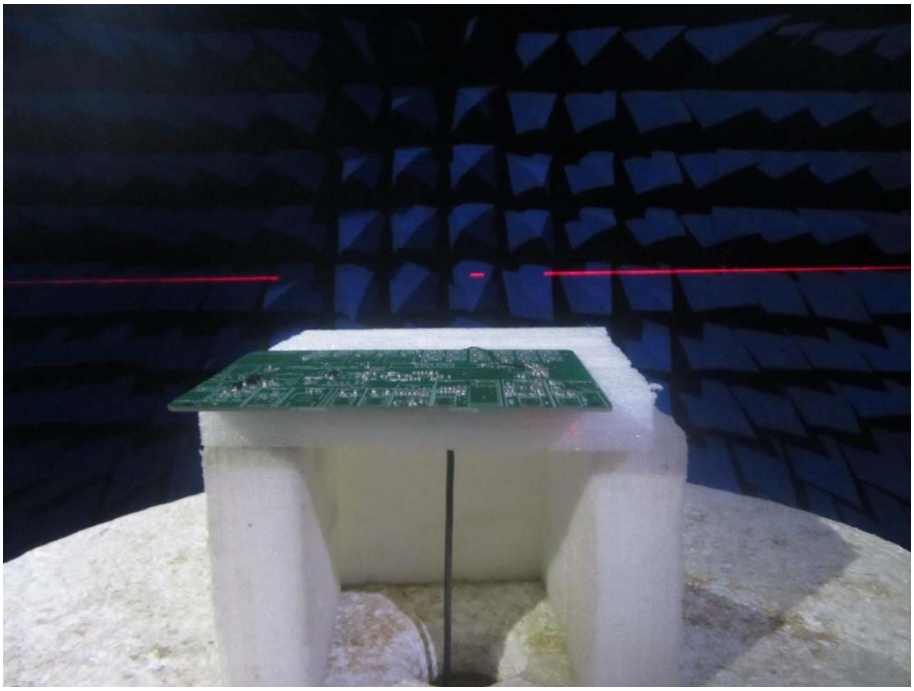


5. Input Impedance

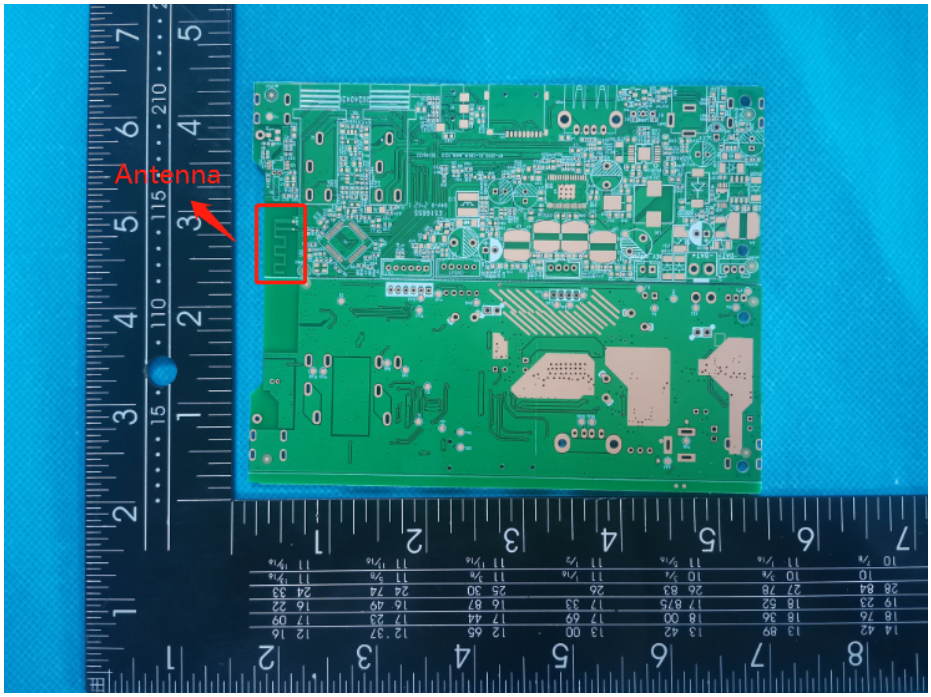


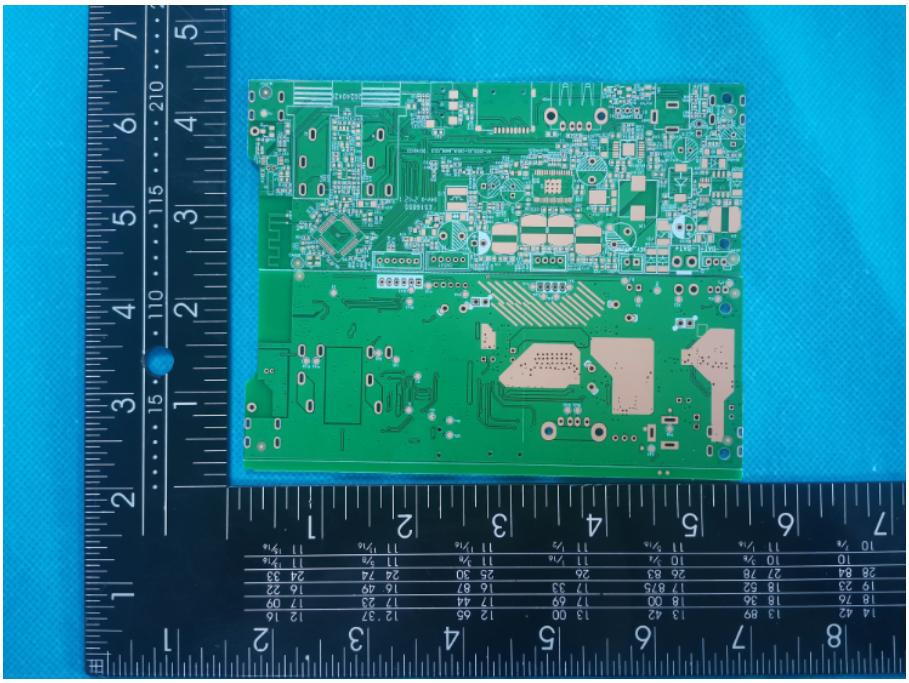
Annex C Photographs

1. Test environment



2. EUT





Annex D General Information

1.1 Identification of the Responsible Testing Laboratory

Laboratory Name:	Shenzhen Morlab Communications Technology Co., Ltd. Morlab Laboratory
Laboratory Address:	FL1-3, Building A, FeiYang Science Park, No.8 LongChang Road, Block67, BaoAn District, ShenZhen , GuangDong Province, P. R. China
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:	FL1-3, Building A, FeiYang Science Park, No.8 LongChang Road, Block67, 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