



REPORT No. : SZ18100080E01

TEST REPORT

Applicant : Dongguan Kingsheng Electronics & Technology Co., Ltd

PRODUCT NAME : PS3/PC/Switch/Android/IOS wireless controller

MODEL NAME : SL-9109

TRADE NAME : N/A

BRAND NAME : N/A

STANDARD(S) : IEEE Std 149-1979

TEST DATE : 2018-10-17

ISSUE DATE : 2018-10-17

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MORLAB

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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
Annex C Photographs	12
Annex D General Information	17

Change History		
Issue	Date	Reason for change
1.0	2018-10-17	First edition

1. Technical Information

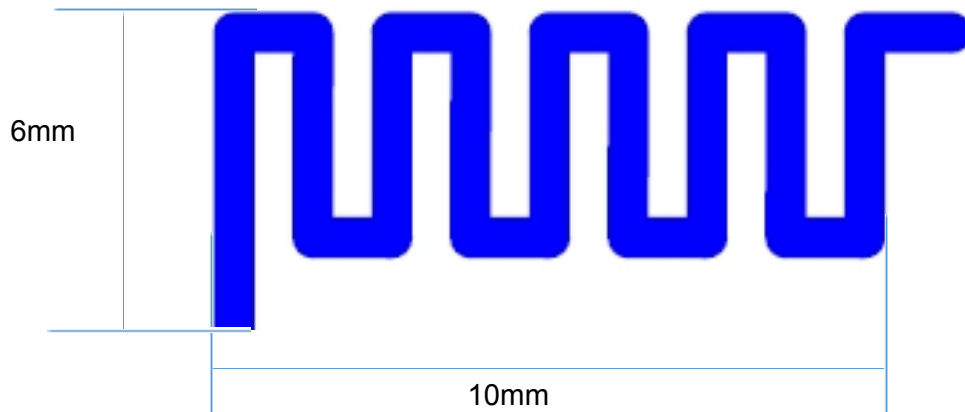
Note: Provide by manufacturer.

1.1. Manufacturer and Factory Information

Applicant:	Dongguan Kingsheng Electronics & Technology Co., Ltd
Applicant Address:	Building 39, Arising Sun Industrial, Lincun Village, Tangxia Town, Dongguan, Guangdong, China
Manufacturer:	Dongguan Kingsheng Electronics & Technology Co., Ltd
Manufacturer Address:	Building 39, Arising Sun Industrial, Lincun Village, Tangxia Town, Dongguan, Guangdong, China

1.2. Equipment Under Test (EUT) Description

Wireless Type	N/A
Hardware Version	N/A
Software Version	N/A



2. Test Results

2.1. Applied Reference Documents

Leading reference documents for testing:

No.	Identity	Document Title
1	IEEE Std 149-1979	IEEE Standard Test Procedures for Antennas

2.2. Test Conditions

Test Environment Conditions:

Relative Humidity:	15 ... 75 %
Temperature:	+10 °C to +30 °C

2.3. Test Results lists

2.3.1. Gain and Efficiency

Frequency	Gain(dBi)	Efficiency
2400MHz	-1.60	23.03%
2410MHz	-2.38	18.97%
2420MHz	-0.10	26.47%
2430MHz	-2.06	26.23%
2440MHz	0.13	22.21%
2450MHz	-2.09	22.85%
2460MHz	-1.73	18.53%
2470MHz	-1.47	19.63%
2480MHz	-2.13	21.26%
2490MHz	-2.48	16.05%
2500MHz	-2.87	14.90%

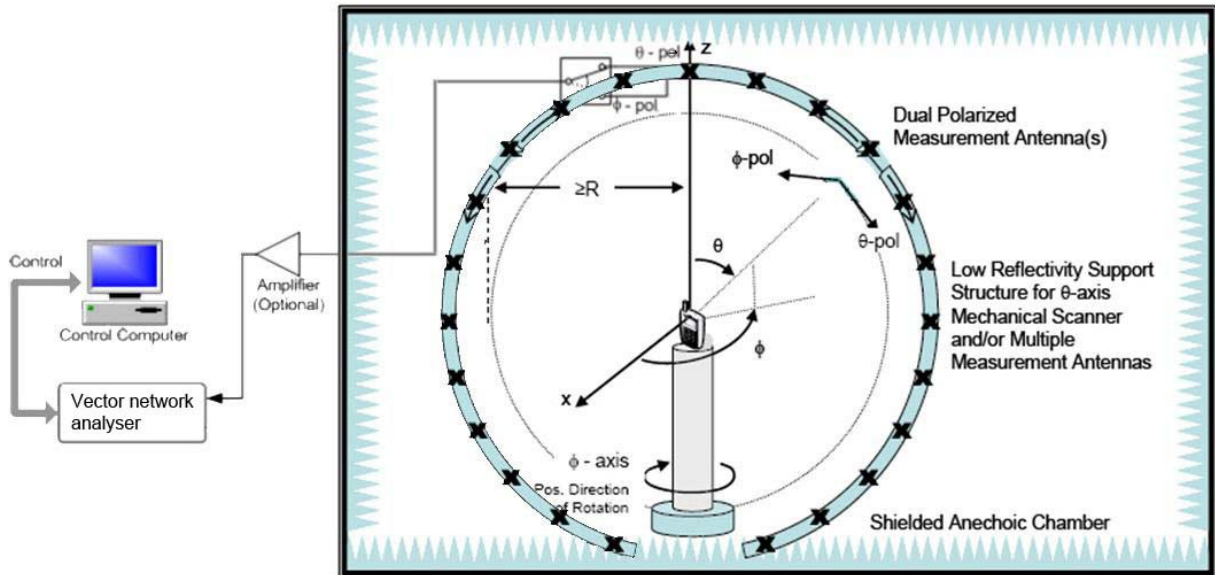


2.3.2.Return Loss;Impedance;VSWR

Frequency	Return Loss (dB)	Impedance(Ω)	VSWR
2400MHz	-3.34	25.82	5.27
2450MHz	-3.00	39.16	5.86
2500MHz	-2.71	69.44	6.47

Annex A Photographs

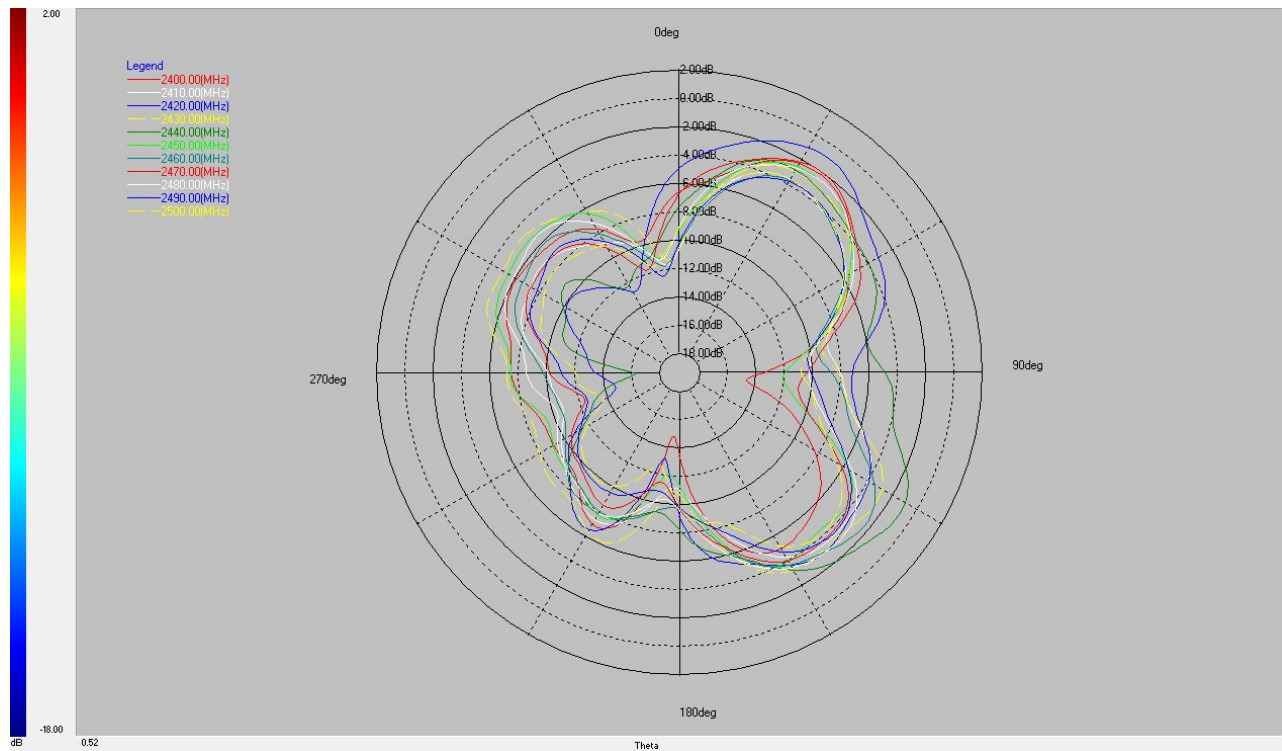
1. Test Setup



Annex B Figures

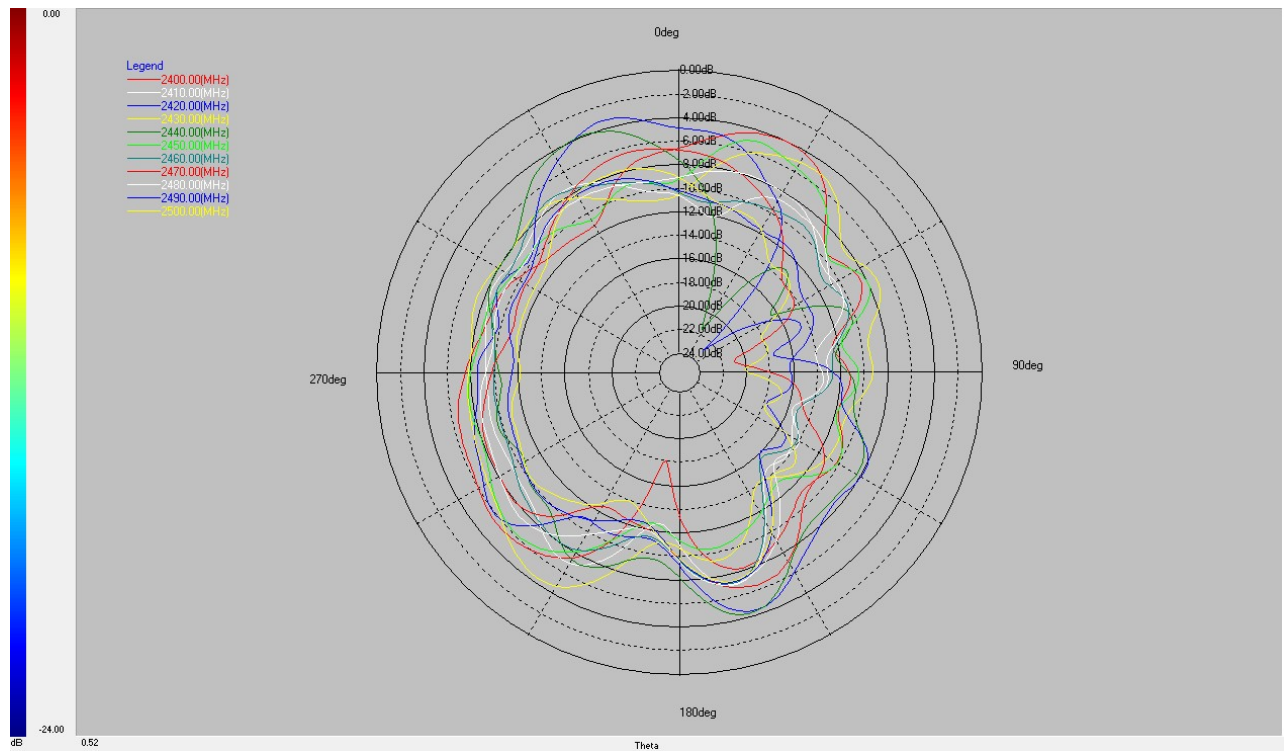
1. 2D Radiation Pattern

Phi=0°

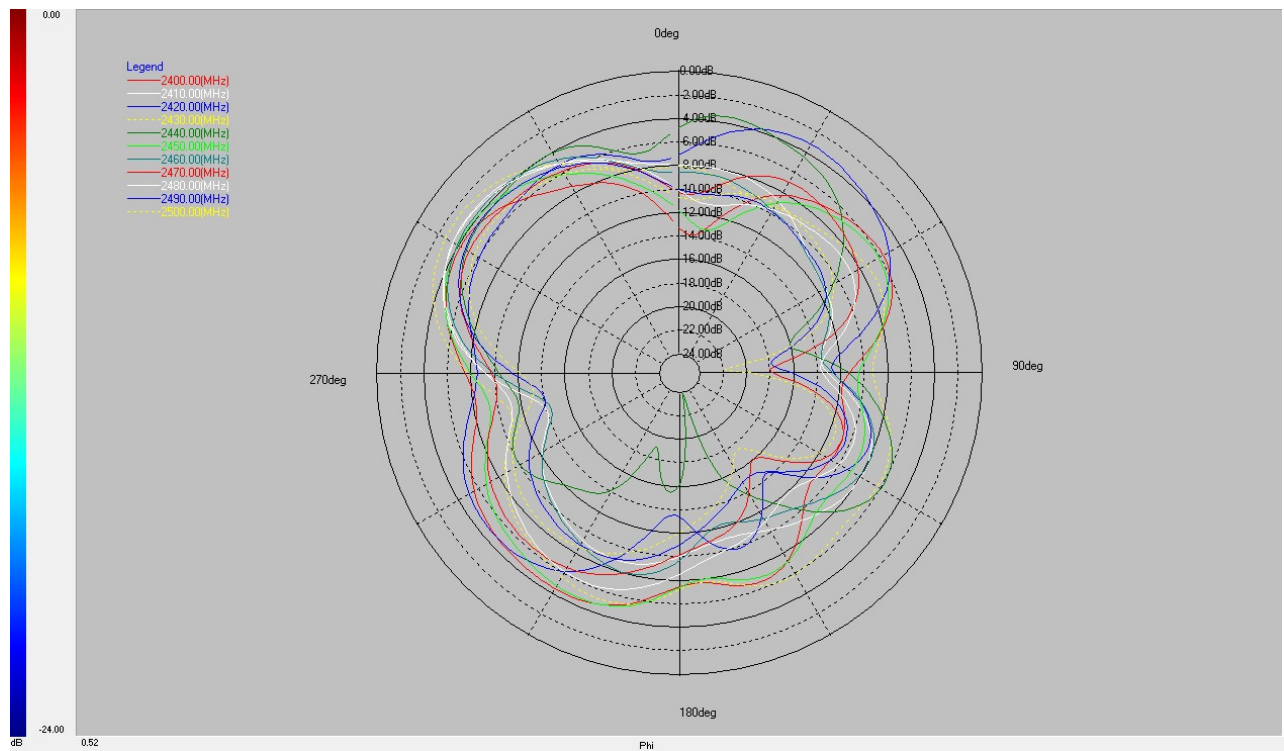




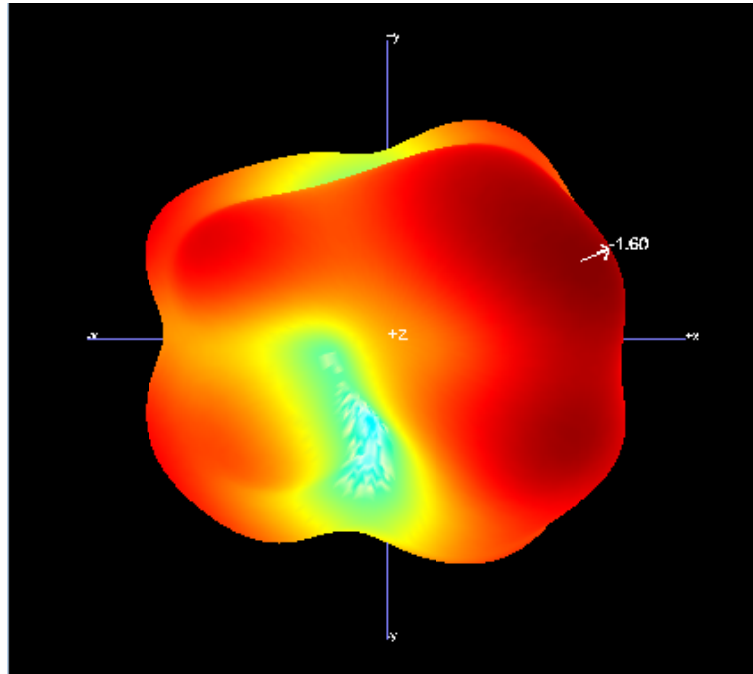
Phi=90°



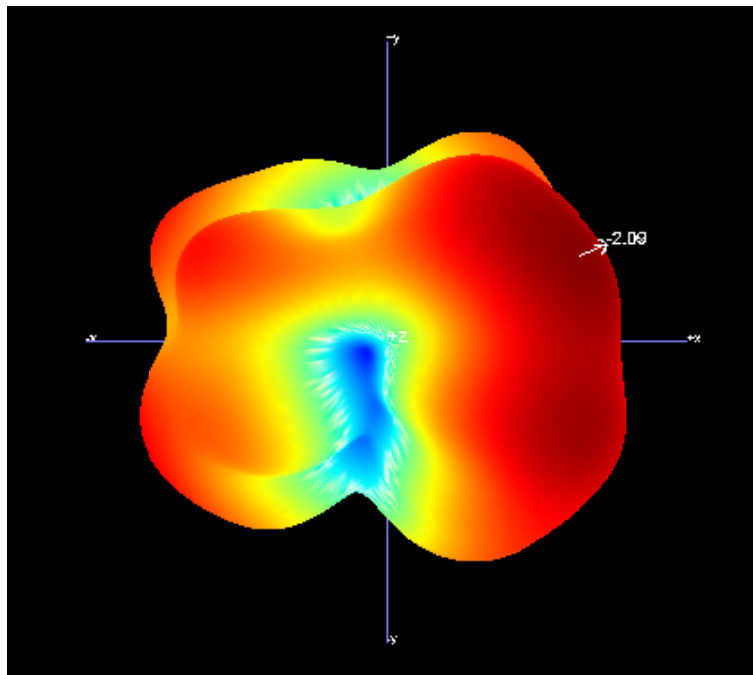
Theta=90°



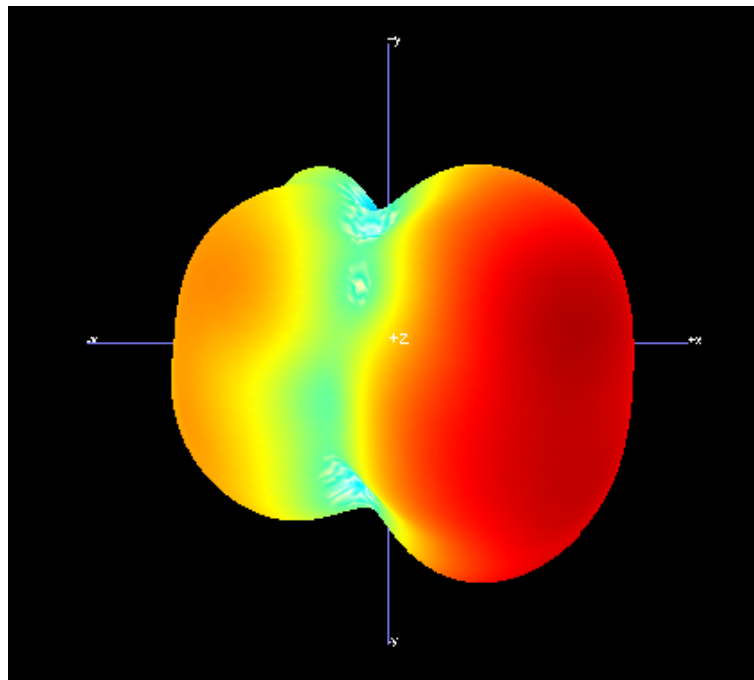
2. 3D Radiation Pattern



2400MHz

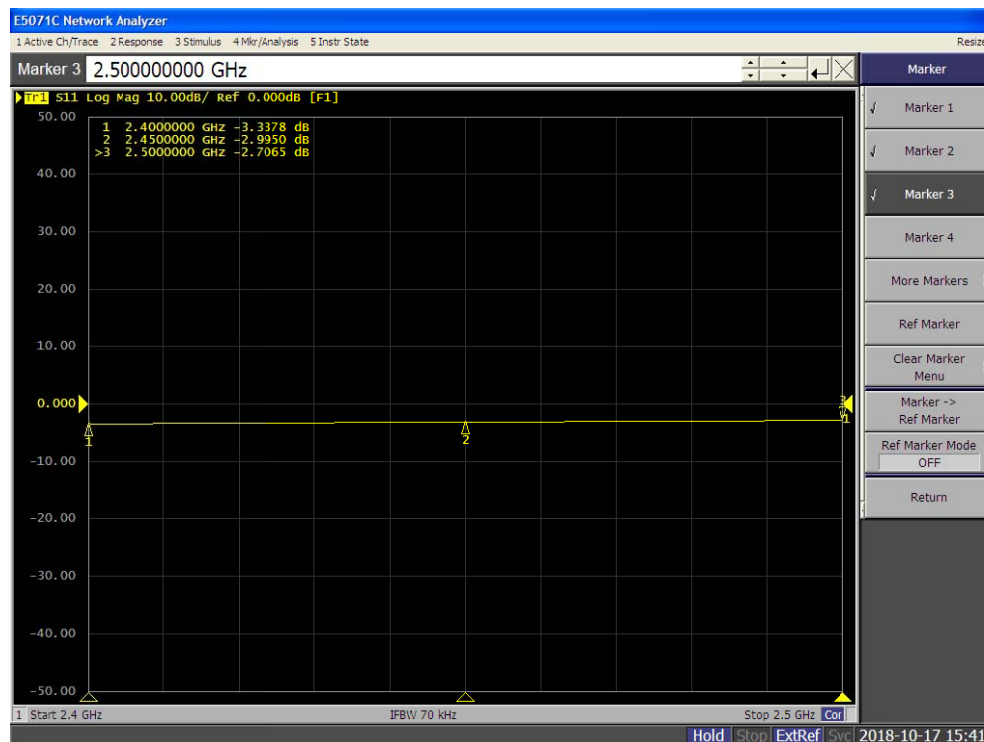


2450MHz



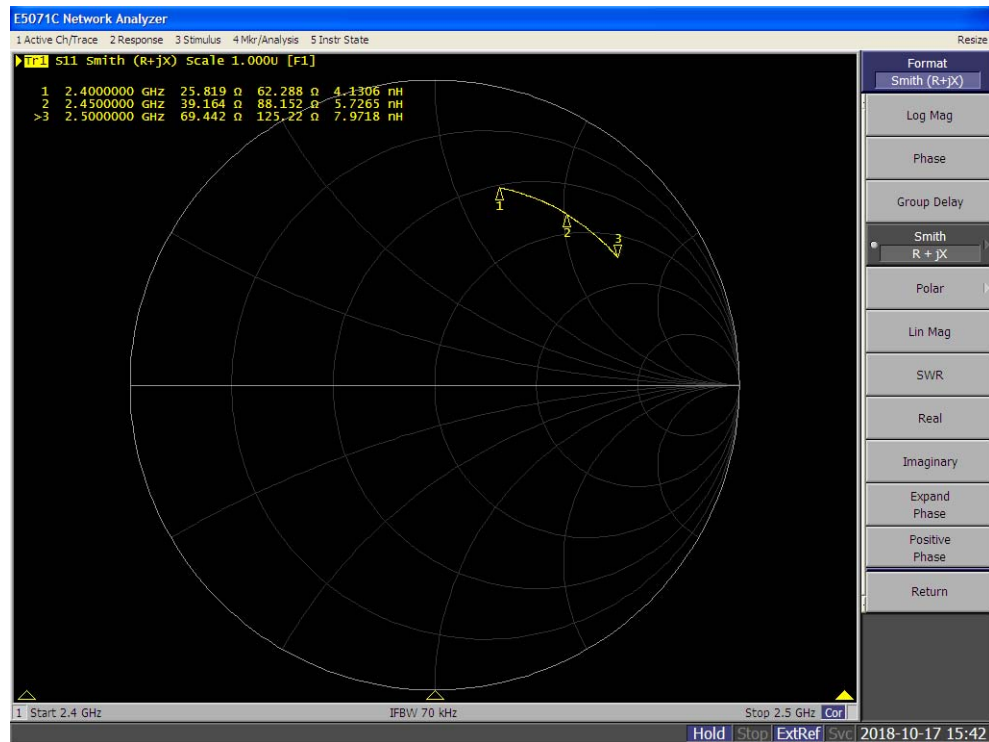
2500MHz

3. Return Loss

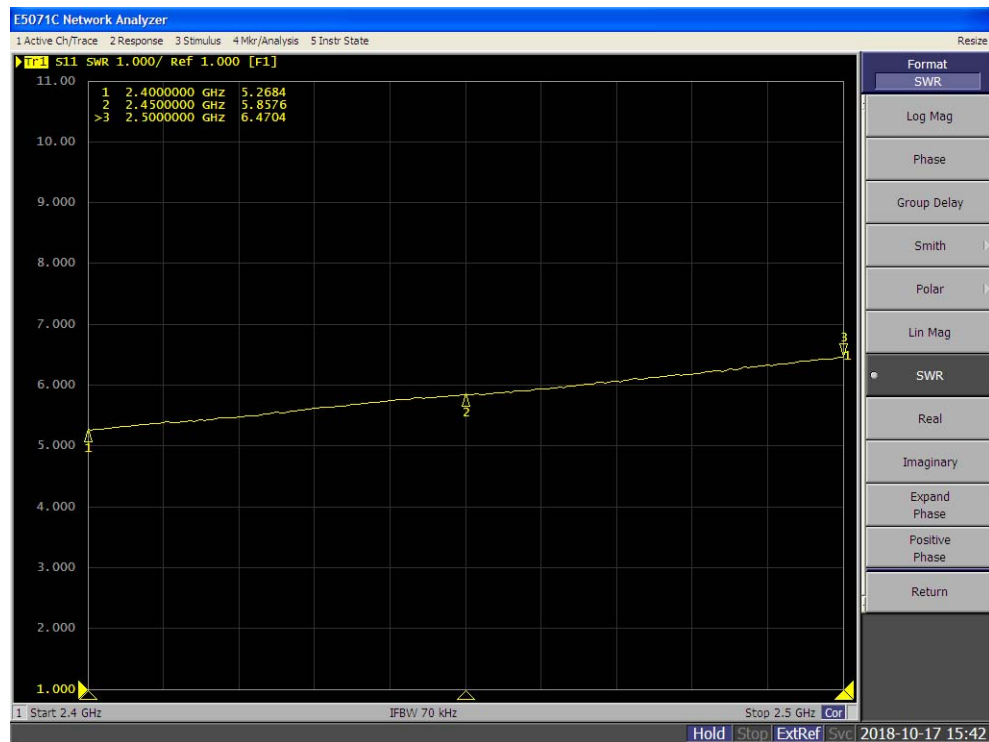




4. Impedance



5. VSWR





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
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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

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