Dongguan KeXun Electronics Co., LTD

Sample acknowledgment

Parts Approval Sheet

Manufacturer: Kexun Electronics_____

Supplier

Part name: dual frequency PCB antenna 3dBi-478-1 37RF gray length 180, no buckle, KX__

Parts Name

Model/specification: Customer material number:_____

Type/ Spec Parts No .

Brand: Sample quantity: 10 pcs _____ _____

Brand Quantity

Sample date: 2024.9.19 Document number:_____ _____

Send out Date Document No.

Date of acknowledgement: Version:_____

Approve Date Version

Supplier		Customer	
Approved By	Prepared By	Engineering Dept.	Quality Dept.

Specifications catalogue

1. Electrical parameters

frequency range	2.4-2.5GHz
characteristic impedance	50Ω
voltage standing-wave ratio	≤2:1
gain	2.5+/-1dB
power capacity	2W
Polarization form	horizontal
radiation direction	omnidirectional

2. Mechanical parameters

See the line leader	180±5mm
coax	1.37 Gray line

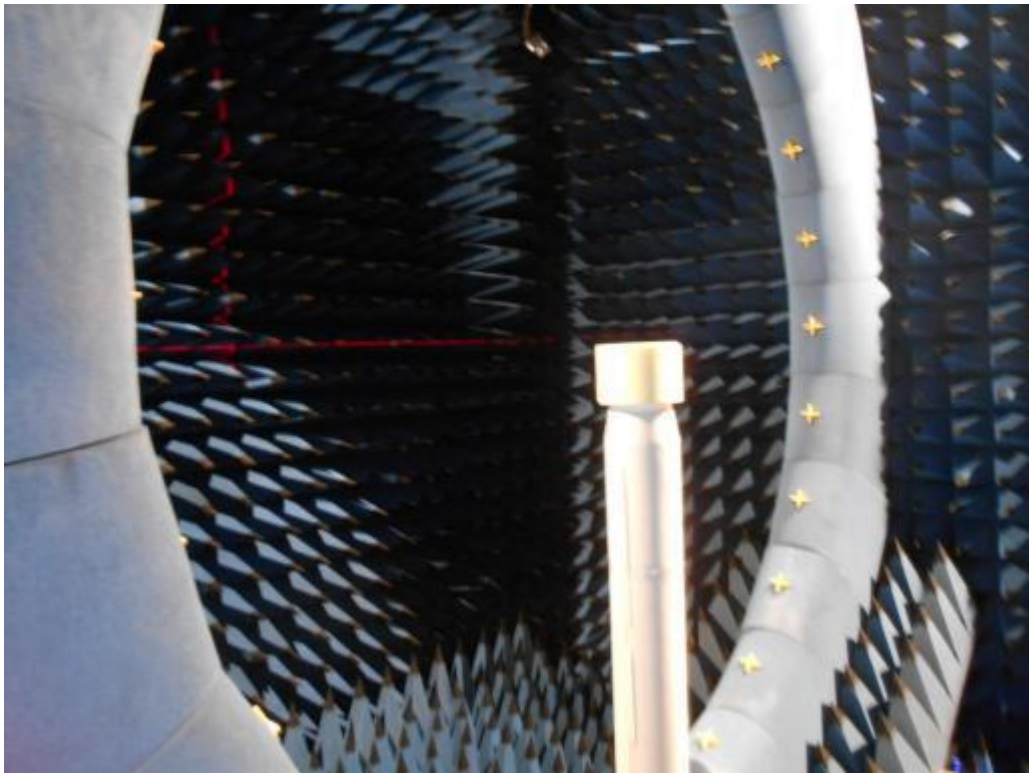
3. Working/storage temperature

working temperature	-30℃~65℃
storage temperature	-30℃~75℃

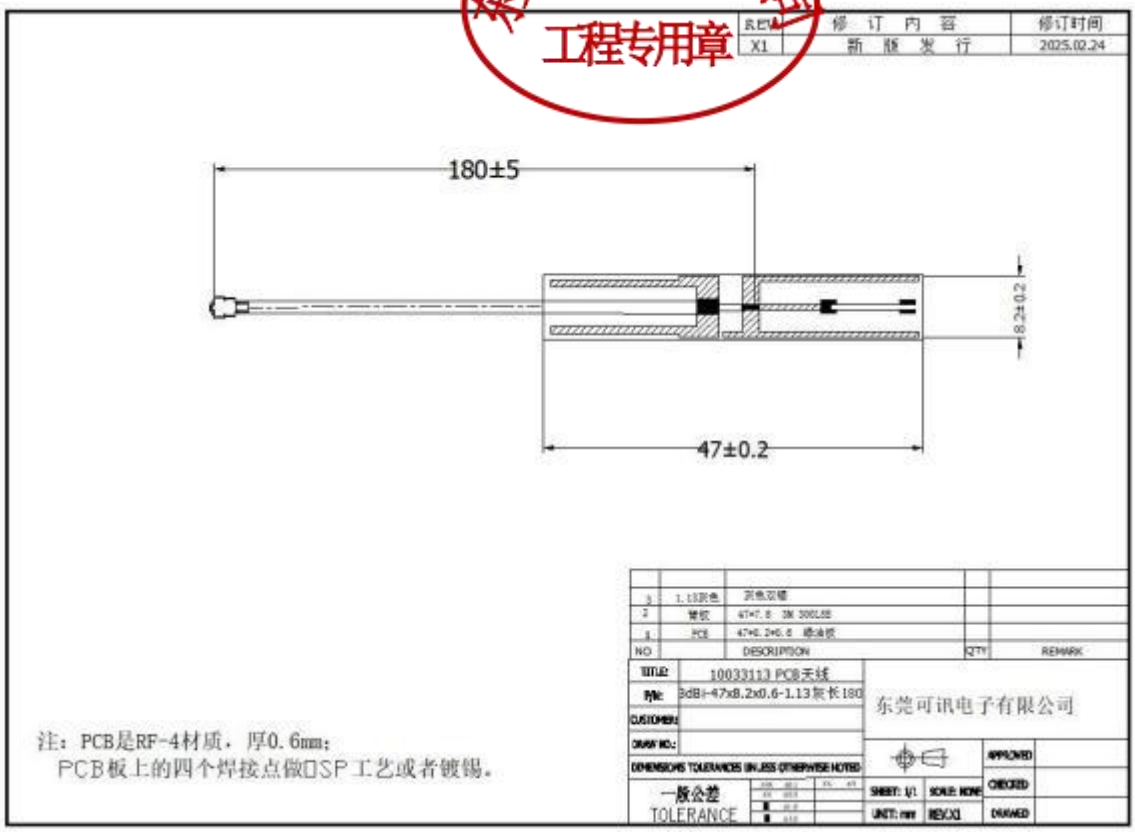
东莞[illegible]电子有限公司
工程专用章

Iv. Test equipment:

SATIMO 24SG



5. Structural dimension diagram



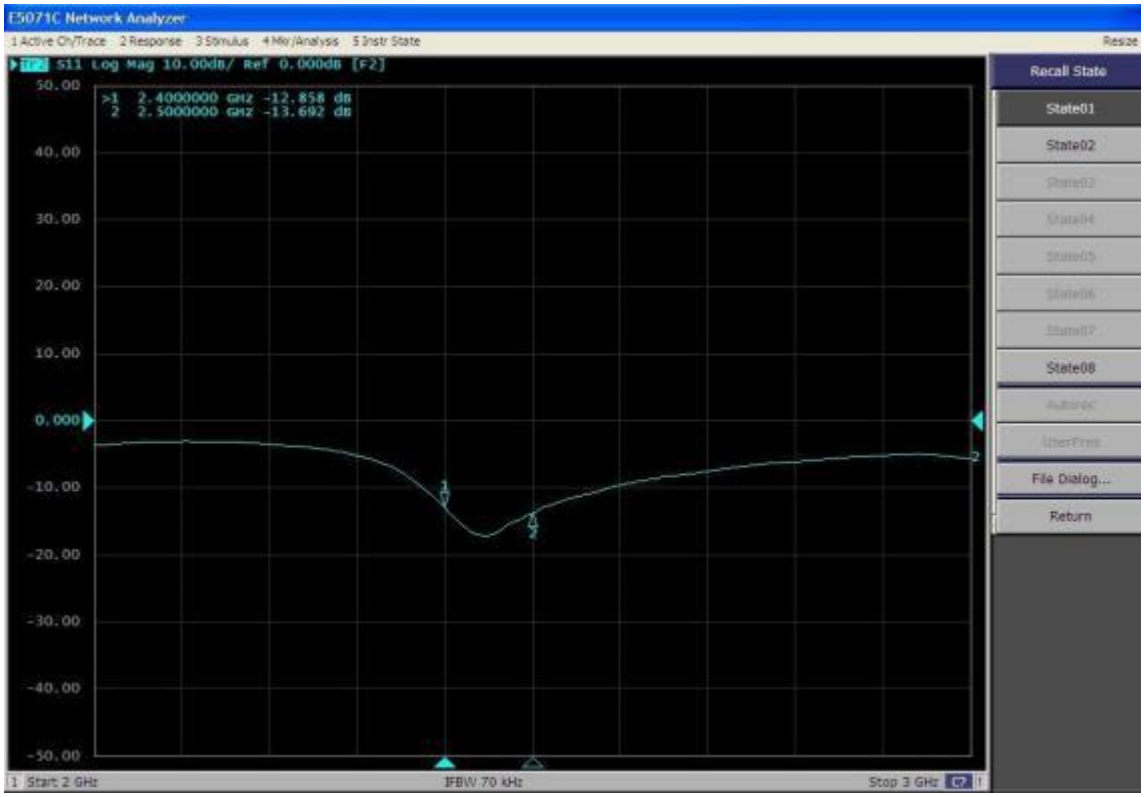
6. Precautions: None

Vii. Environmental and reliability tests

project	experiment condition	performance requirement	Test equipment
Cold storage	Temperature-30℃±2℃/humidity 0%/RH/time 48H	There was no effect on appearance and function after the test	Constant temperature and humidity test machine
High temperature and humidity storage	Temperature-70℃, humidity 90~95%/RH time 48H	There was no effect on appearance and function after the test	Constant temperature and humidity test machine
temperature ictus	Product environment: -35℃ for 2H, then transferred to 80℃ for 2H, a total of 12 cycles for 48H	There was no effect on appearance and function after the test	Hot and cold impact testing machine

Viii. Test data

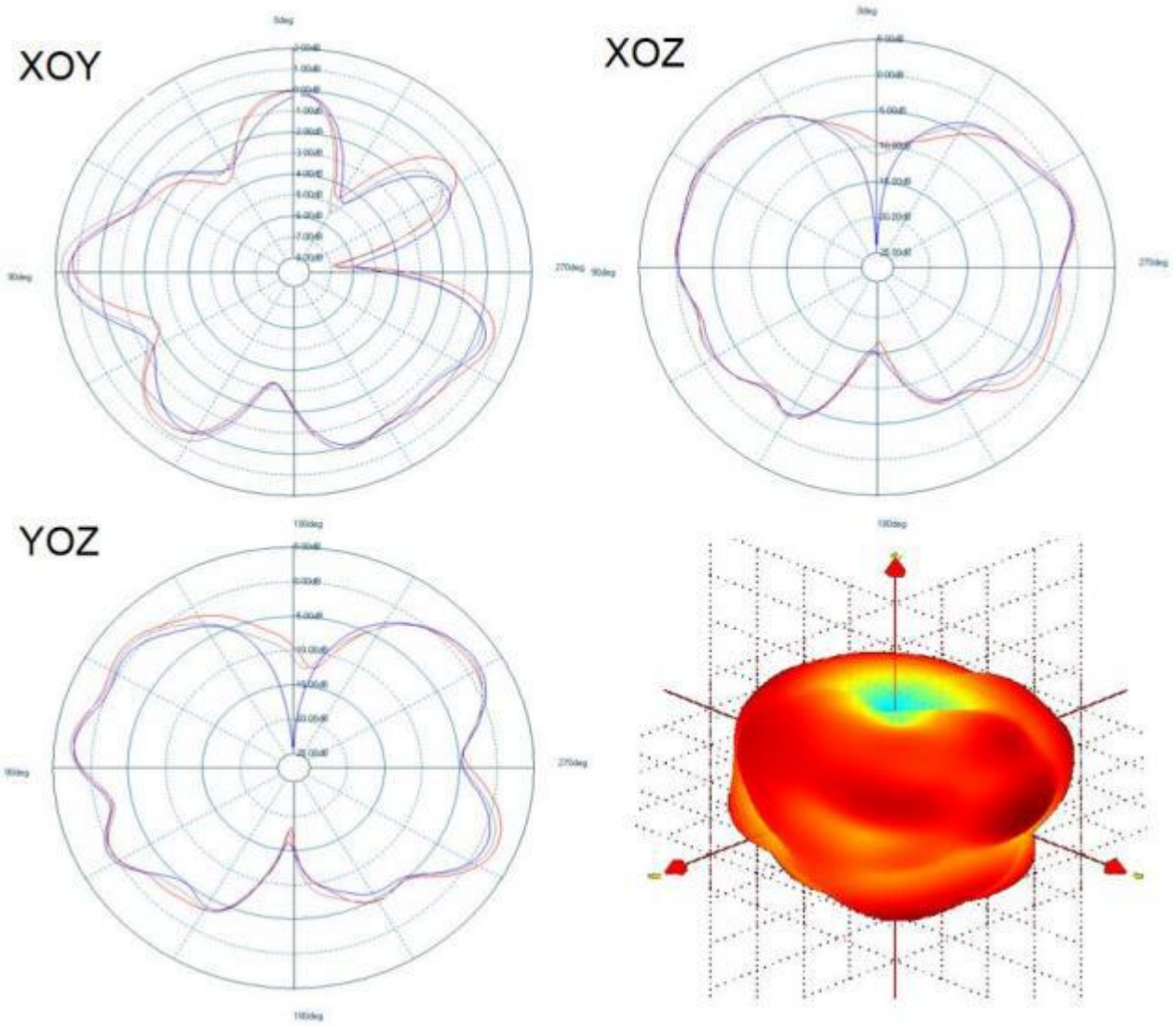
1. Return loss and standing wave ratio (2 GHz)



2. Benefits and gains

Frequency	X-Z plane		Y-Z plane		X-Y plane		E-total	Efficiency
	Phi=0		Phi=90		theta=90			
(MHz)	Peak Gain	Average Gain	Peak Gain	Average Gain	Peak Gain	Average Gain	(dBi)	(%)
2400	2.01	-2.39	2.42	-2.25	1.96	2.03	2.19	51%
2450	2.09	-2.11	2.17	-2.17	1.90	2.09	2.22	60%
2500	2.16	-2.19	2.36	-2.18	2.03	1.96	1.89	53%

3 2D/3D Radiation Pattern Results



Dongguan Kexun Electronics Co., Ltd

Sample acknowledgment

Parts Approval Sheet

Manufacturer: Ketex Electronics
Supplier

Part name: dual-frequency PCB antenna 3 dBi-478-137RF gray length 180 without buckle, KX
Parts Name

Model / Specification:— Customer No.:

Type/Spec Parts No.

brand:
Brand

Sample quantity: 10 pcs
Quantity

Sample delivery date: September 19,2024 document number:

Send out Date Document No.

Admit date: edition:

Approve Date Version

东莞可讯电子有限公司 工程专用章

Supplier		Customer	
Approved By	Prepared By	Engineering Dept.	Quality Dept.
Liang Xing	Wang Li		

Specification catalogue

东莞可讯电子有限公司
工程专用章

I. Electrical parameters

Frequency range	2.4-2.5GHz
Characteristic impedance	50Ω
Voltage standing-wave ratio	≤2:1
Gain	2.5+/-1dB
Power capacity	2W
Polarized form	Horizontal
Radiation direction	Omnidirectional

2. Mechanical parameters

See line long	180±5mm
Coax	1.37 Gray line

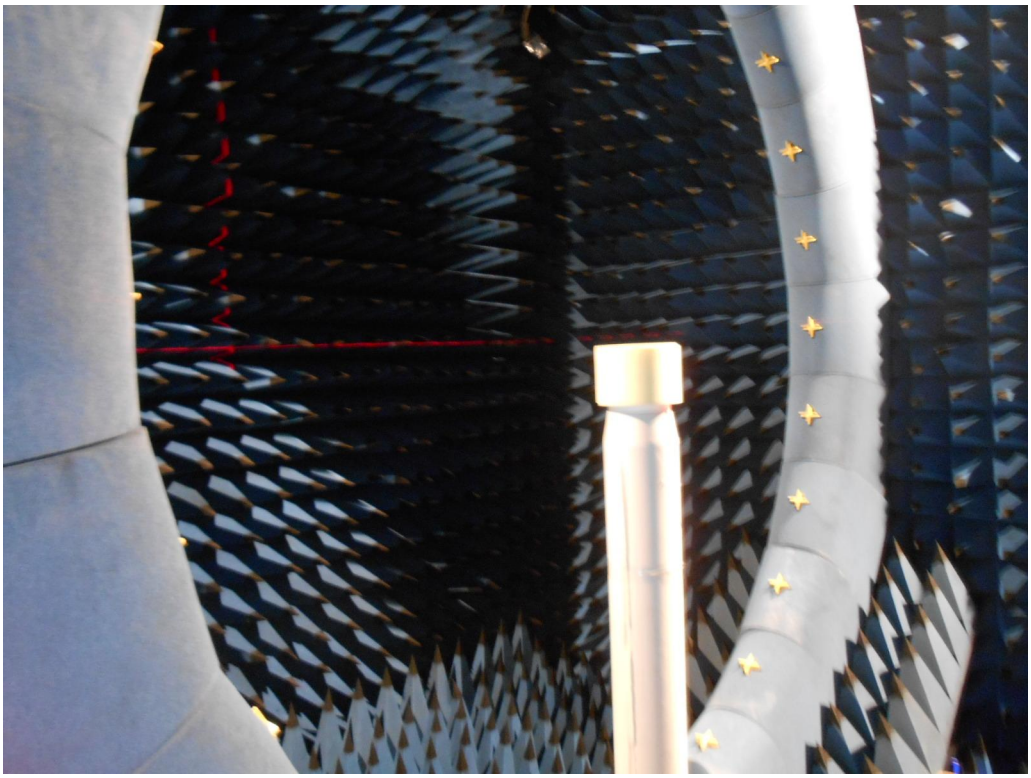
III. Working / storage temperature

Working temperature	-30℃～65℃
Storage temperature	-30℃～75℃

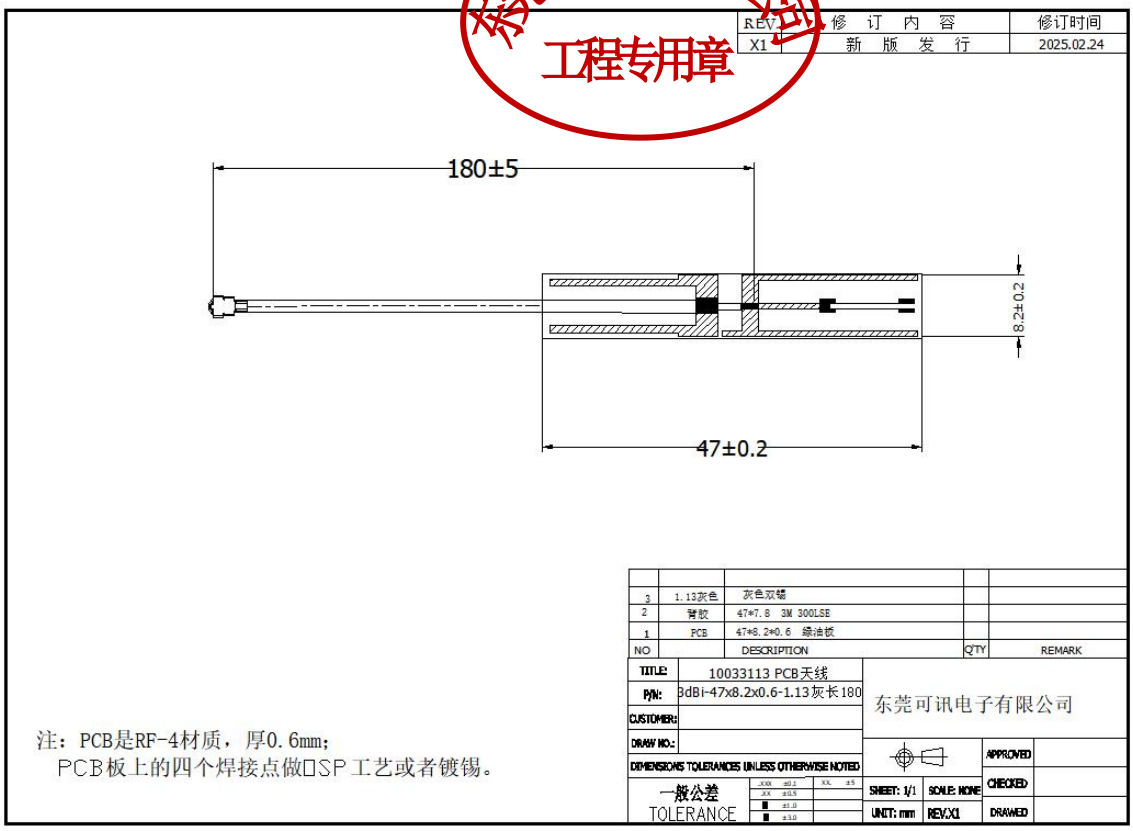
东莞[illegible]电子有限公司 工程专用章

Iv. Test equipment:

SATIMO 24SG



V. Structural size diagram



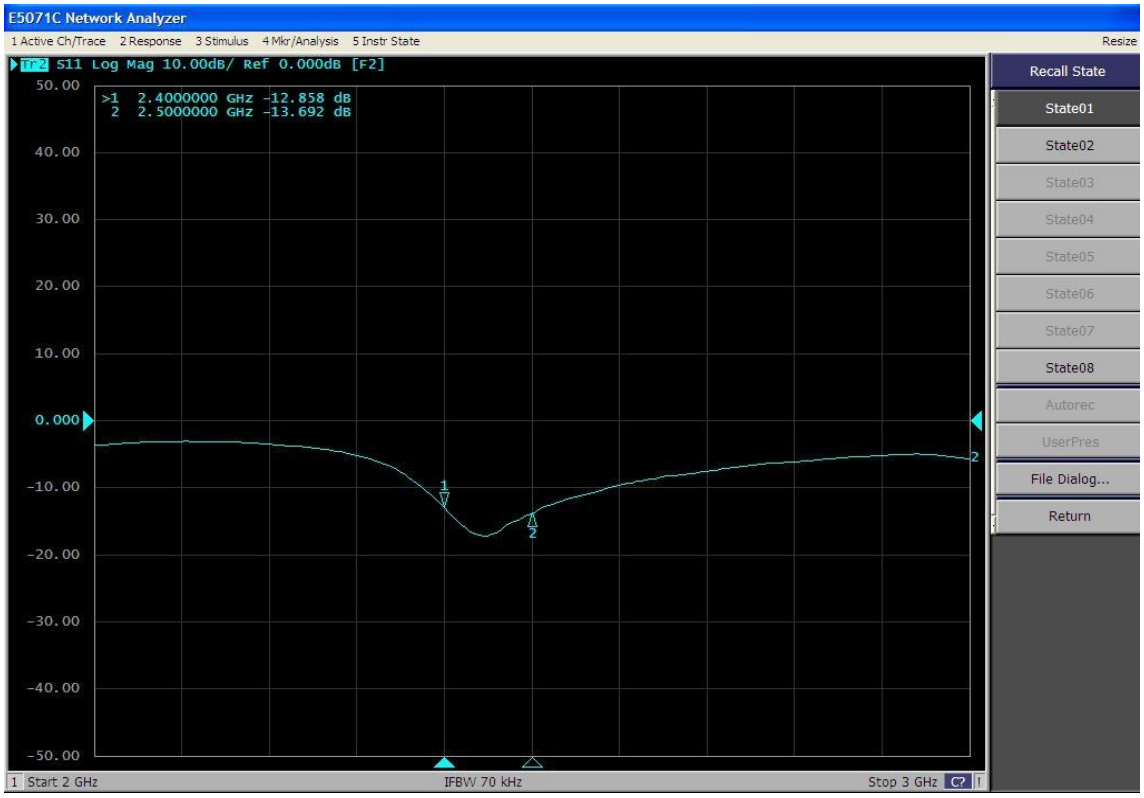
Vi. Notes for use: No

Vii. Environment and reliability experiment

Project	Experiment condition	Performance requirement	Test / test the equipment
Low temperature storage	Temperature-30℃± 2℃ / humidity 0% / RH / time 48H	No impact on the appearance and functional tests after the test	Constant temperature and humidity testing machine
High temperature and high humidity storage	Temperature-70℃, humidity 90~95% / RH time 48H	No impact on the appearance and functional tests after the test	Constant temperature and humidity testing machine
Temperature ictus	Product environment: -35℃ for 2H to 80℃ for 2H for 12 cycles of 48H	No impact on the appearance and functional tests after the test	Cold and hot shock test machine

VIII. Test data

1、 Echo loss to standing wave ratio (2GHz)



2、 Benefit and gain

Frequency	X-Z plane		Y-Z plane		X-Y plane		E-total	Efficiency
	Phi=0		Phi=90		theta=90			
(MHz)	Peak Gain	Average Gain	Peak Gain	Average Gain	Peak Gain	Average Gain	(dBi)	(%)
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2500	2.16	-2.19	2.36	-2.18	2.03	1.96	1.89	53%

3 2D/3D Radiation Pattern Results