



Shenzhen Shuodian Electronic Technology Co.,Ltd
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specification

for

OSC-KVS indoor unit **WIFI**

Customer Item Number

Company Material Code

WA-OSC-KVS indoor unit **WIFI -RF1-FPC- φ 0.81-
CABLE-120MM**

Author: 曾小凤 Review: 李明

date: 2026.05.27

Shenzhen Shuodian Electronics Technology Co., Ltd.

Unit 201, Building 2, Nantai Yunchuanggu Industrial Park, Tangwei Community, Fenghuang Subdistrict,
Guangming District, Shenzhen City, Guangdong Province

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1.Both parties confirm

1.1 Customer Confirmation Signature

customer:

Customer Department/Position	Signer	Confirmation Date
Hardware RF		
structure		
project manager		
Business Procurement		
Review		

1.2 Shuodian Technology Confirm and Sign

Customer Department/Position	Signer	Confirmation Date
Antenna Engineer		
construction engineer		
project manager		
QA		
Review		



2.General Matters

2.1 scope of application

This antenna is designed for use with the OSC-KVS indoor unit (WIFI).

2.2 Operating temperature range

Operating temperature range-20 ~ +65 °C

2.3 Storage Temperature Range

This product should be stored in-30 ~ +75 °C

3.Product General Specifications

NO.	ITEMS	DETAILS
1	type	OSC-KVS indoor unit WIFI
2	frequency range	2400MHz-2500MHz
3	VSWR	≤2.0
4	Gain	2.0dBi
5	impedance	50 Ω
6	Antenna type	Dipole
7	Antenna image	



4.Product Specification Details

4.1 Product structural parameters

4.11 Product Material Composition:

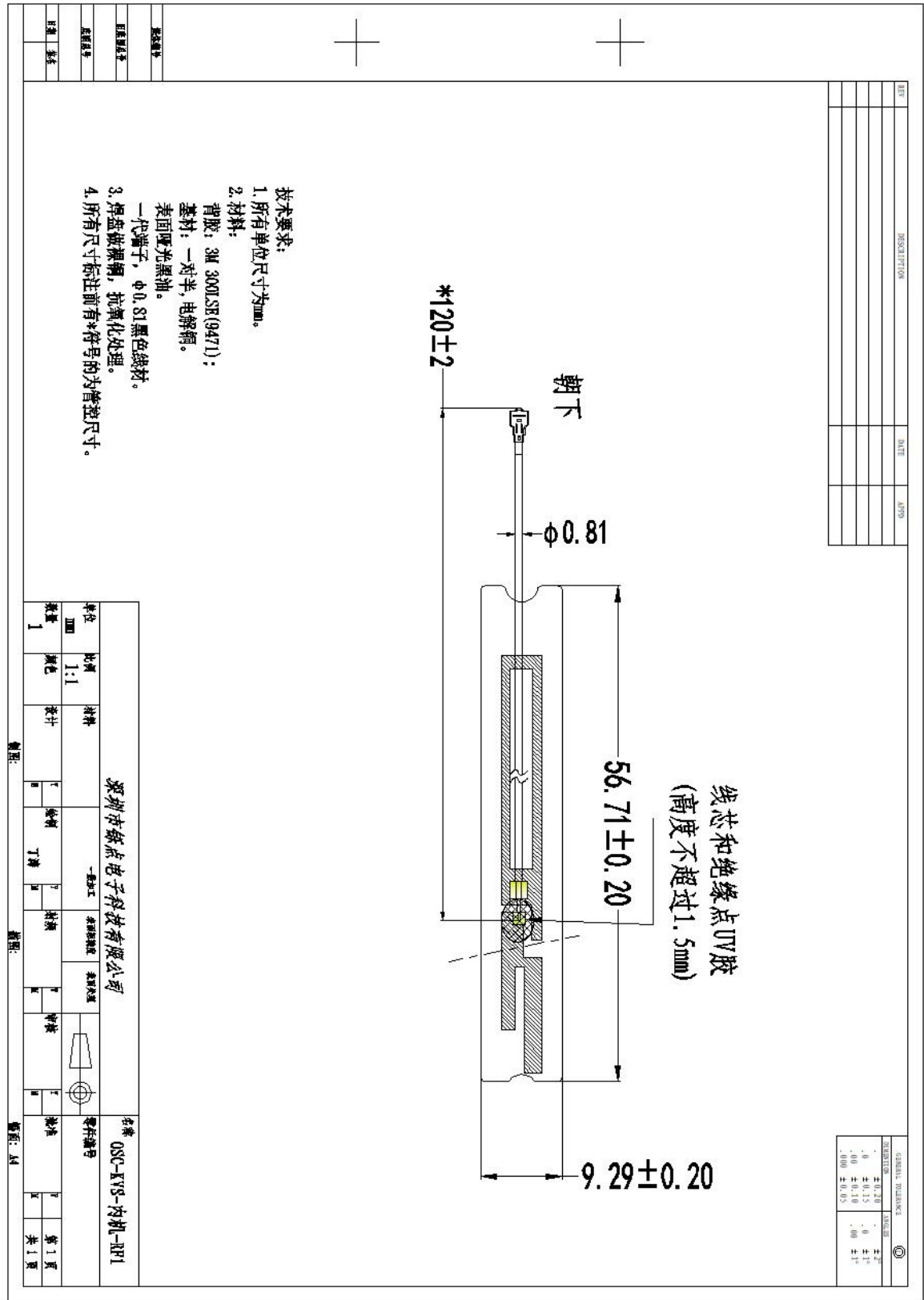
order number	makings	specifications (MM)
1	FPC	56.71*9.29 black
2	coaxial cable	Standard terminal block; wire diameter $\phi 0.81$; black wire; length: 120 mm

4.11 Appearance

The product has a good appearance with no defects that would significantly affect its visual appearance, such as scratches, sweat stains, or protrusions.

4.12 structure size

product drawing:





4.2 Product electrical performance test data

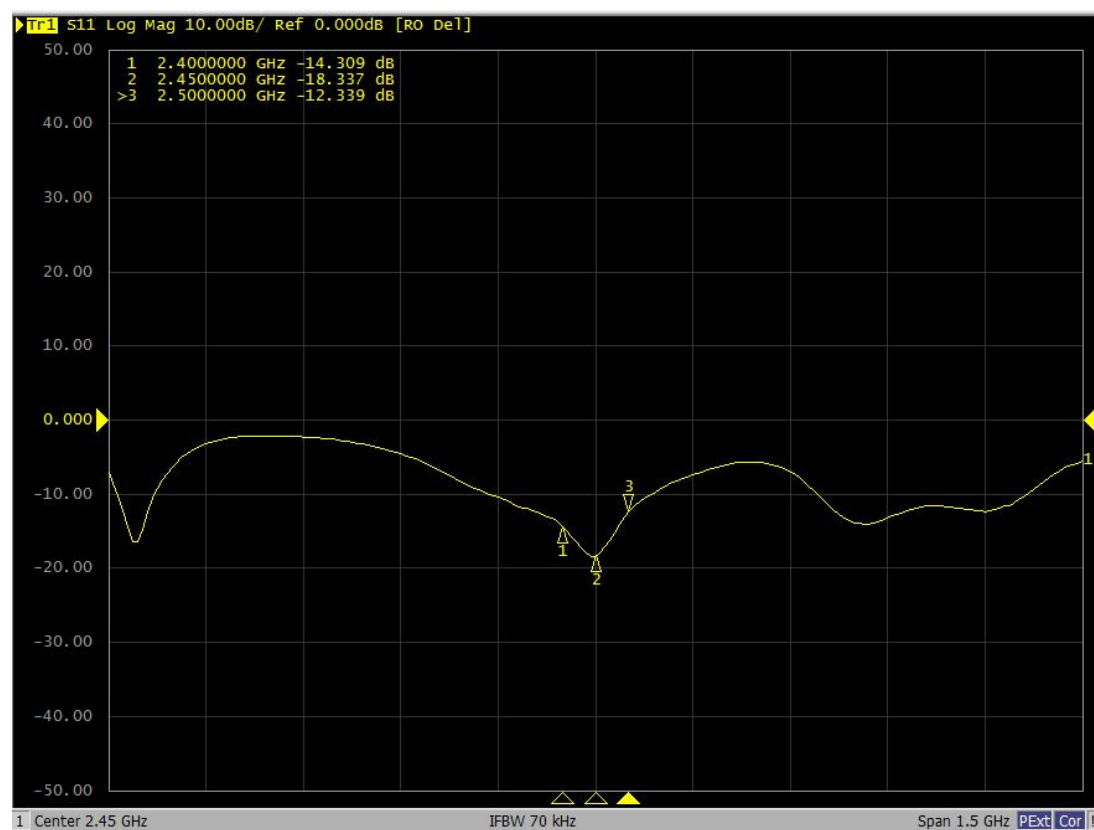
4.21 Test Environment and Instrumentation

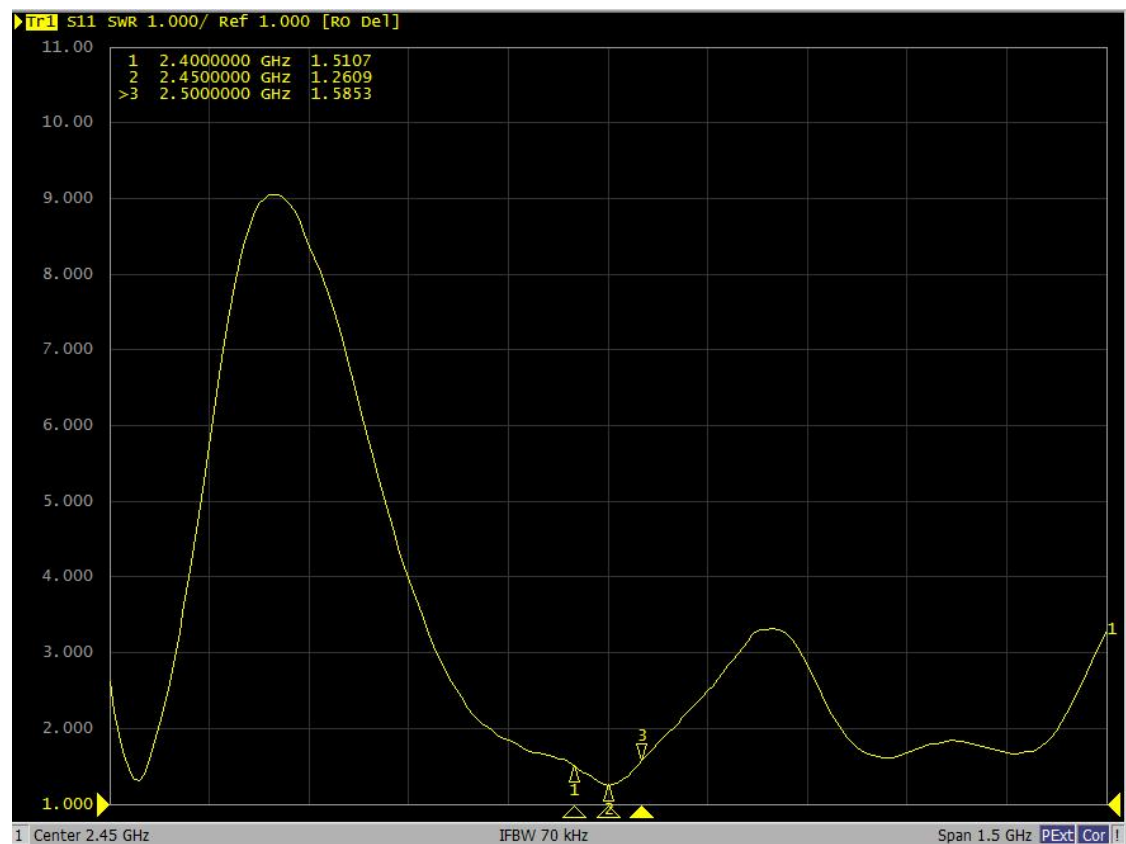
Test Environment: Temperature: 10℃——+30℃ relative humidity: ≤80% (+40℃) barometric : 750mmkg±30mmkg	instrumentation: network analyzer KEYSIGHT E5071C Multi-probe microwave anechoic chamber
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4.22 Product electrical performance test data:

4.22.1 Product S11 Diagram:

Marker (MHz)	2400	2450	2500
Return Loss	-14.30	-18.33	-12.33
VSWR	1.51	1.26	1.58





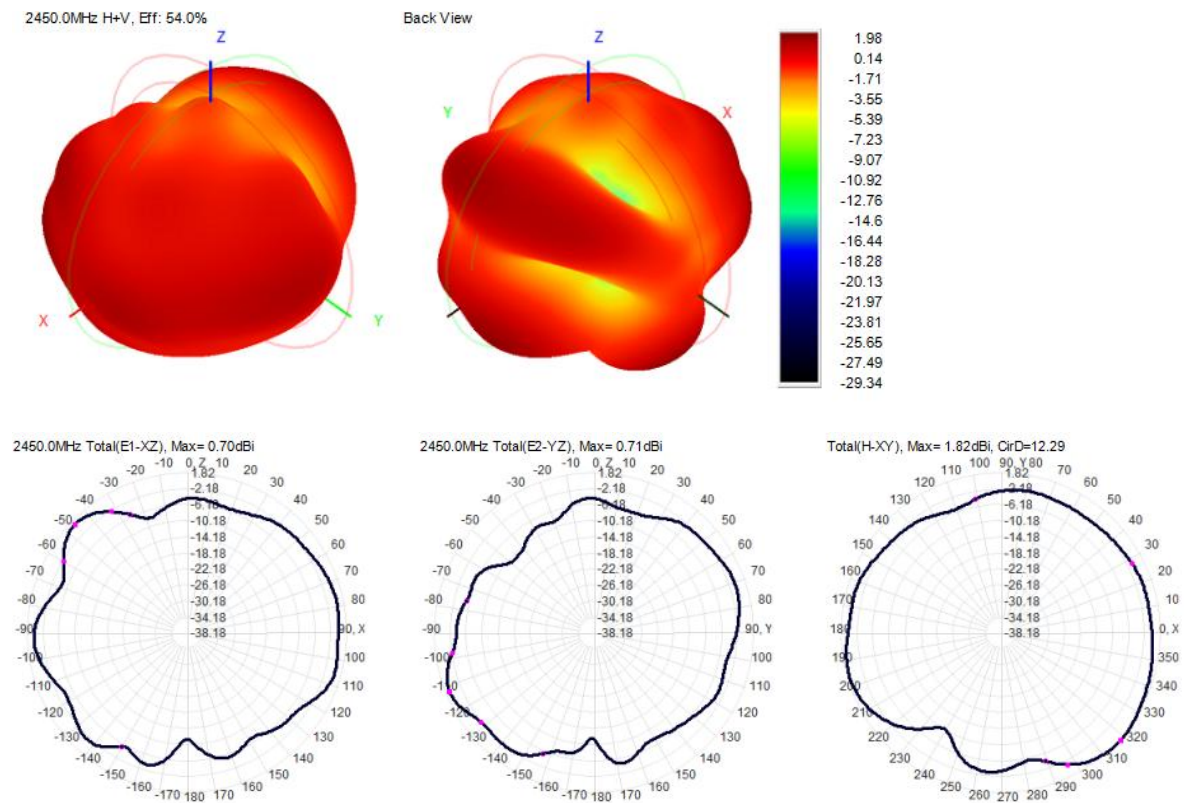
4.22.2 Antenna gain efficiency and radiation pattern

Antenna gain efficiency:

Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain (dBi)	2.09	2.06	2.07	1.93	1.97	1.98	2.06	1.97	1.66	1.51	1.76
Efficiency (%)	50.16	51.60	52.19	52.56	53.54	54.04	54.53	54.76	53.73	54.17	53.58

directivity diagram:

2450MHz:



5. Product Packaging

manner of packing:

Self-sealing bag packaging; one bag per package 200PCS.



6. Document History

文件编号/Document No.	
日期/Release Date	2026/05/27
编制/Author	Hungjie
复核/Review	WH

文件历次表

Revised History

Date	Version	Revised Record
2026/05/27	1.00	New Project



Shenzhen Shuodian Electronic Technology Co.,Ltd
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specification

for

OSC-KVS Indoor Unit **WIFI**

Customer Item Number

Company Material Code

WA-OSC-KVS Indoor Unit **WIFI -RF2-FPC- ϕ 0.81-**
CABLE-180MM

Author: 曾小凤 Review: 李明

date : 2026.05.27

Shenzhen Shuodian Electronics Technology Co., Ltd.

Unit 201, Building 2, Nantai Yunchuanggu Industrial Park, Tangwei Community, Fenghuang Subdistrict,
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1. Both parties confirm

1.1 Customer Confirmation Signature

customer:

客户部门/职位	确认人签字	确认日期
硬件/射频		
结构		
项目经理		
商务/采购		
审核		

1.2 铄点科技确认签字

部门/职位	确认人签字	确认日期
天线工程师		
结构工程师		
项目经理		
QA		
审核		



2. General Matters

2.1 scope of application

This antenna is designed for use with the OSC-KVS indoor unit (WIFI).

2.2 Operating temperature range

Operating temperature range-20 ~ +65 °C

2.3 Storage Temperature Range

This product should be stored in-30 ~ +75 °C

3.Product General Specifications

NO .	ITEMS	DETAILS
1	type	OSC-KVS indoor unit WIFI
2	frequency range	2400MHz-2500MHz
3	VSWR	≤2.0
4	Gain	3.0dBi
5	impedance	50 Ω
6	Antenna type	Dipole
7	Antenna image	



4. Product Specification Details

4.1 Product structural parameters

4.1.1 Product Material Composition:

order number	makings	specifications (MM)
1	FPC	56.71*9.29 black
2	coaxial cable	Single-terminal connector; wire diameter: $\phi 0.81$; black wire; length: 180 mm

4.1.1 Appearance

The product has a good appearance with no defects that would significantly affect its visual appearance, such as scratches, sweat stains, or protrusions.

4.1.2 structure size

product drawing:



4.2 Product electrical performance test data

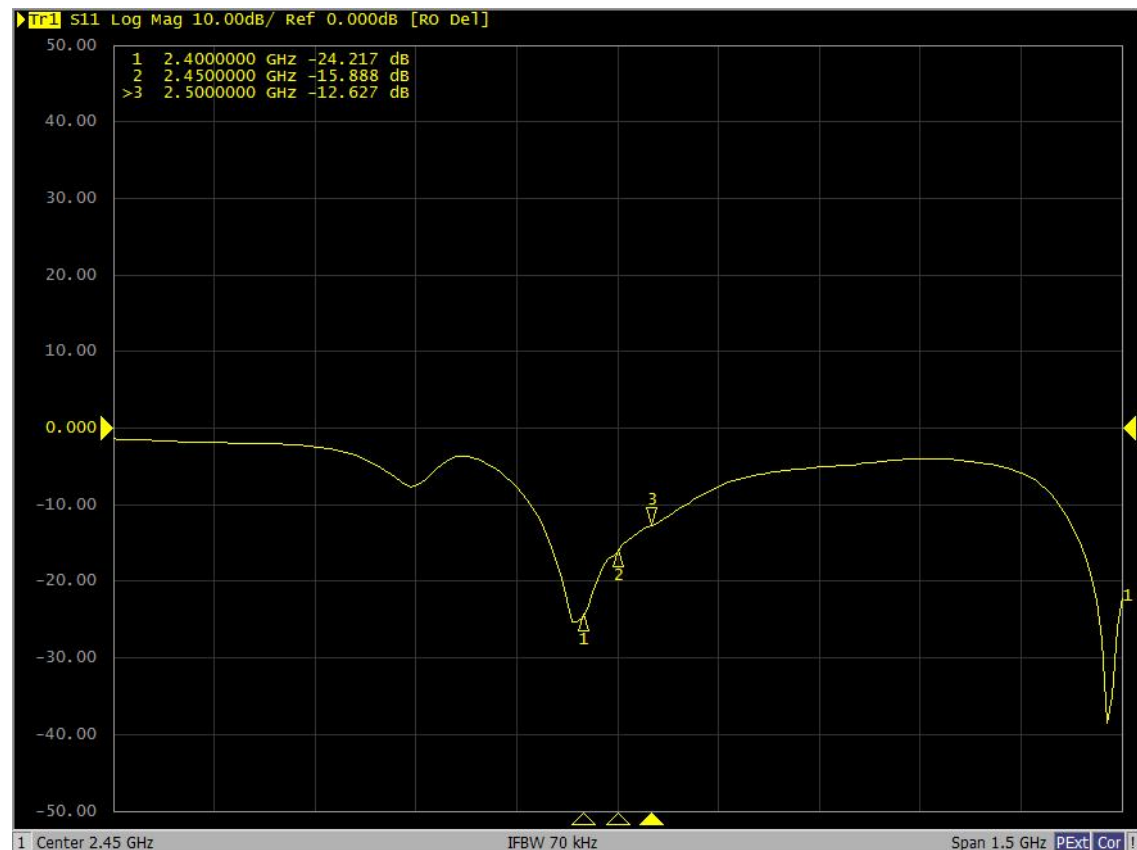
4.21 Test Environment and Instrumentation

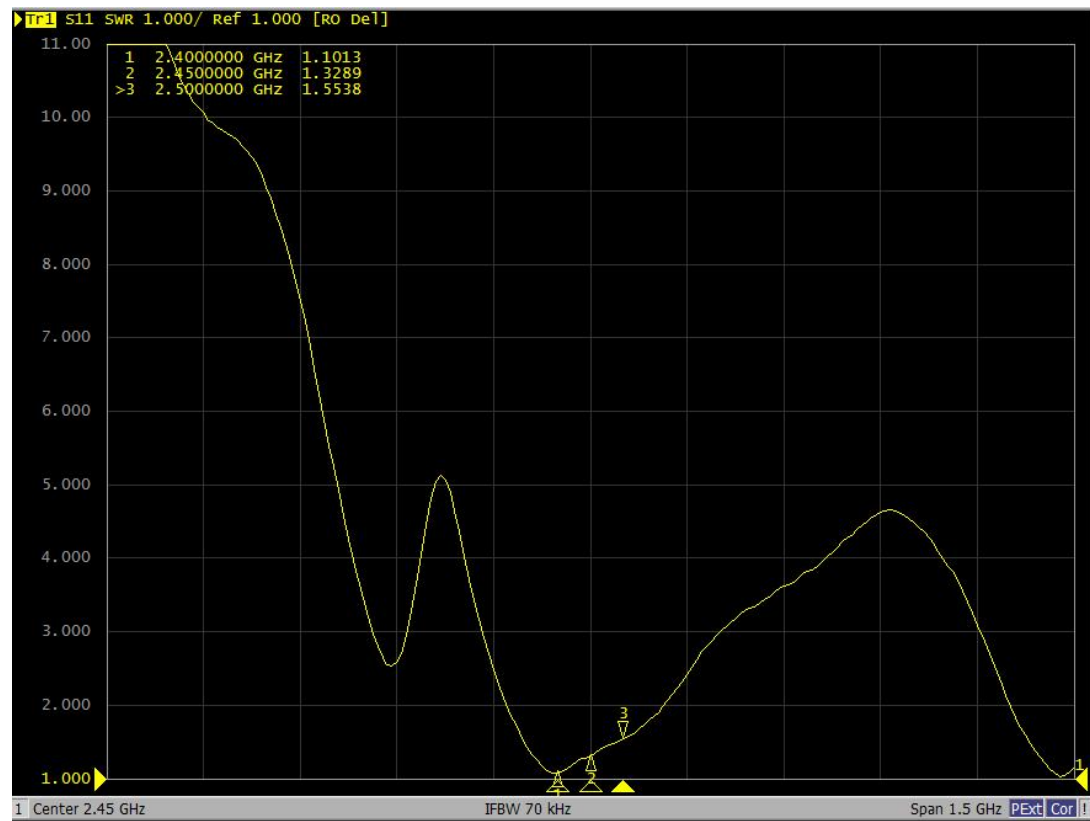
Test Environment:	instrumentation:
Temperature: 10℃——+30℃	network analyzer
relative humidity: ≤80% (+40℃)	KEYSIGHT E5071C
barometric : 750mmkg±30mmkg	Multi-probe microwave anechoic chamber

4.22 Product electrical performance test data:

4.22.1 Product S11 Diagram:

Marker (MHz)	2400	2450	2500
Return Loss	-24.21	-15.88	-12.62
VSWR	1.10	1.32	1.55





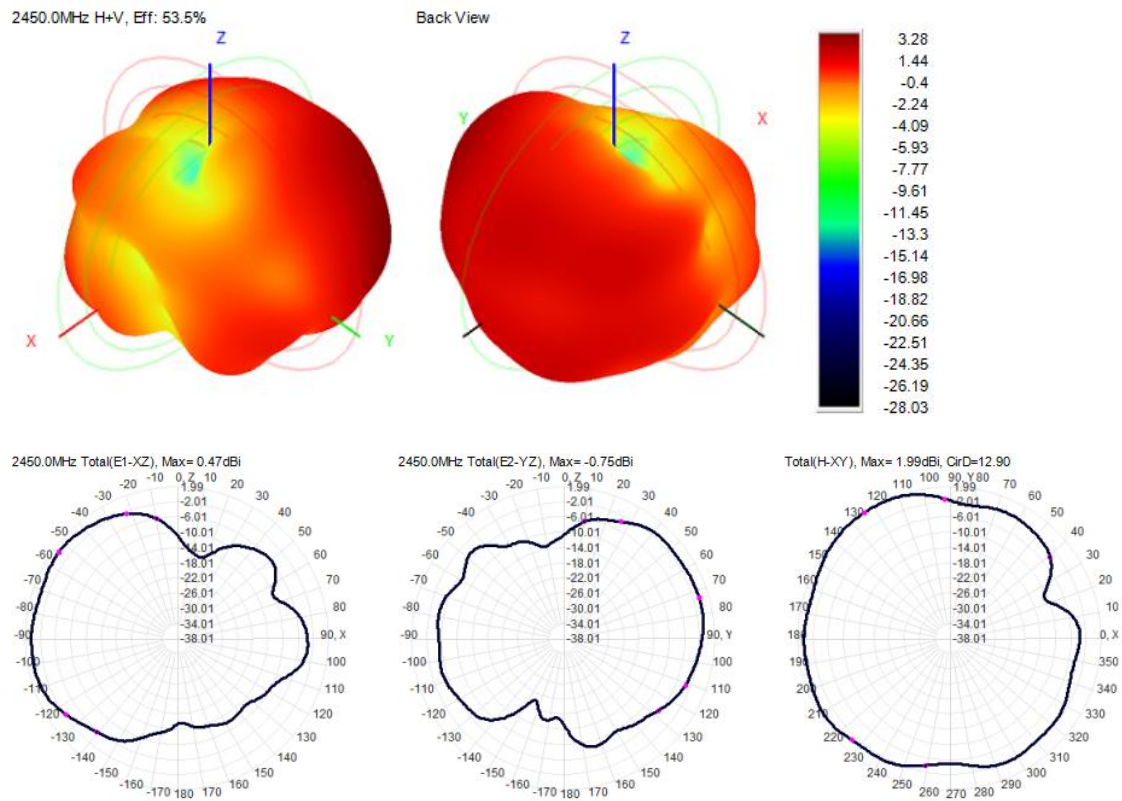
4.22.2Antenna gain efficiency and radiation pattern

Antenna gain efficiency:

Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain (dBi)	3.77	3.73	3.45	3.14	3.10	3.28	3.35	3.22	3.02	3.00	3.00
Efficiency (%)	54.54	54.52	53.87	52.96	53.68	53.52	52.99	52.25	49.86	50.17	49.38

directivity diagram:

2450MHz:



5. Product Packaging

manner of packing:

Self-sealing bag packaging; one bag per package 200PCS.



6. Document History

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编制/Author	Hungjie
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