

Specification

for

2.4–5.8 GHz FPC Antenna

Customer Item Number

Company Part Number

YX-2. 4–5. 8G-FPC-80MM-IPEX1

prepared by: Zeng Xiaofeng; reviewed by: Li Ming

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Shenzhen Yixin Electronic Technology Co., Ltd.

Unit 201, Building 2, Nantai Yunchuanggu Industrial Park, Guangming District, Shenzhen City, Guangdong Province

postbox: 1791995010@qq.com

Phone: 178984589923

Catalogue

Specification 1

Shenzhen Yixin Electronic Technology Co., Ltd..... Error! Bookmark not defined.

Catalogue 2

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1. Both Parties Confirm.

1.1 Customer Confirmation Signature

client:

Customer Department/Position	Confirming Party's Signature	Confirmation Date
Hardware/Radio Frequency		
Structure		
Project manager		
Business/Procurement		
Examine and verify		

1.2 Yixin Electronics – Confirmation and Signature

Department/Position	Signatory's signature	Confirmation Date
Antenna Engineer		
Construction engineer		
Project manager		
QA		
Examine and verify		

2. General Matters

2.1 Scope of Application

2.4G–5.8G WiFi Antenna

2.2 Operating Temperature Range

This product is suitable for use within a temperature range of -20°C to +65°C.

2.3 Storage Temperature Range

This product should be stored at temperatures ranging from -30°C to +75°C.

3. Product General Specifications

NO.	ITEMS	DETAILS
1	Type	2.4G-5.8G WIFI
2	Frequency range	2400-2500MHZ 5100-5900MHZ
3	VSWR	≤2.08
6	Impedance	50 Ω
7	Antenna type	Dipole
8	Antenna implementation form	FPC+CABLE
9	Antenna image	

4. Product Specification Details

4.1 Product Structural Parameters

4.11 Product Material Composition:

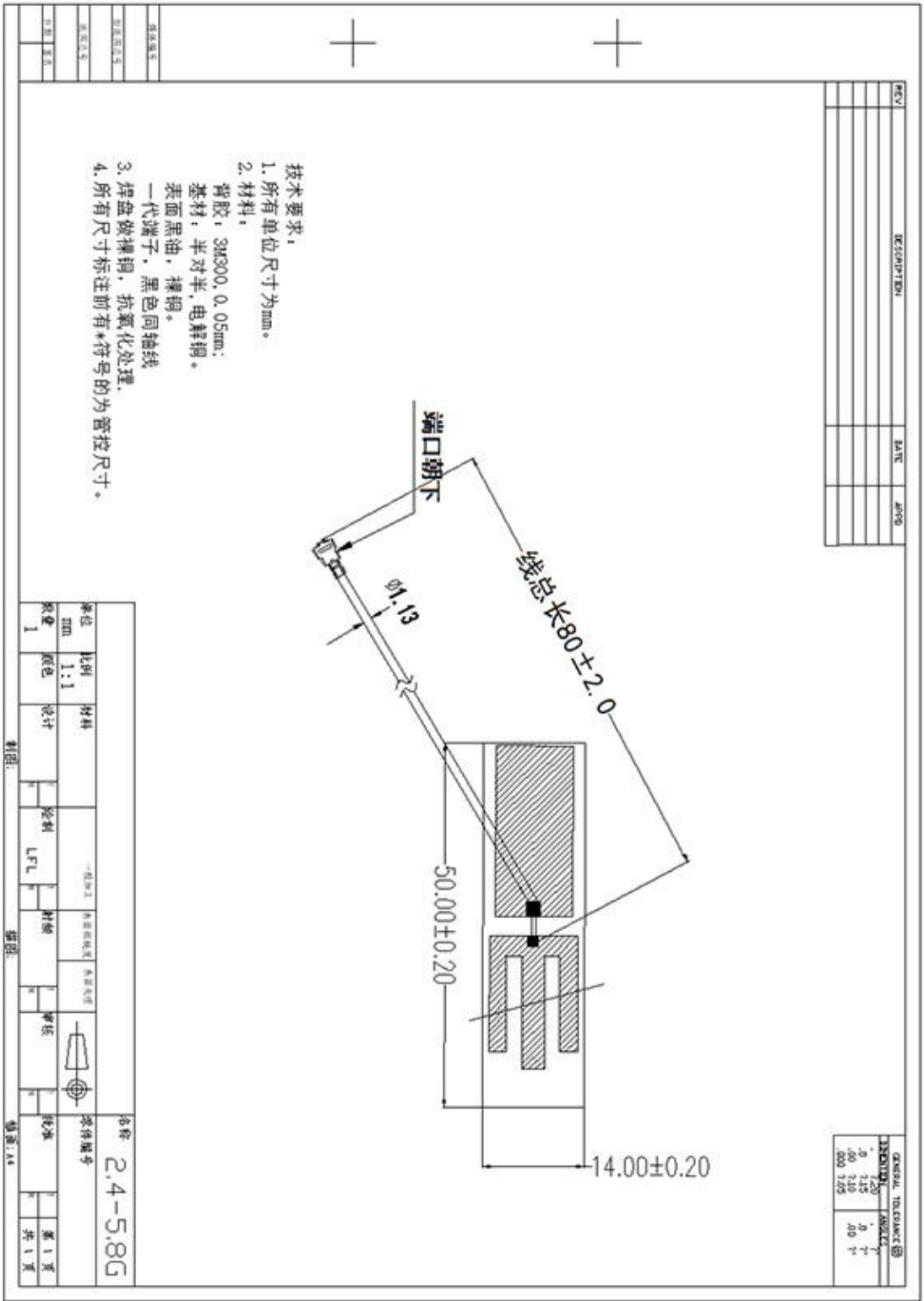
Order number	Material	Specifications(MM)
1	FPC	50*14 – Black
2	Coaxial cable	Single-terminal connector, Ø1.13 mm, wire length: 70 mm, black

4.12 Surface

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

4.13 Structure Size

product drawing:



4. 2 Product Electrical Performance Test Data

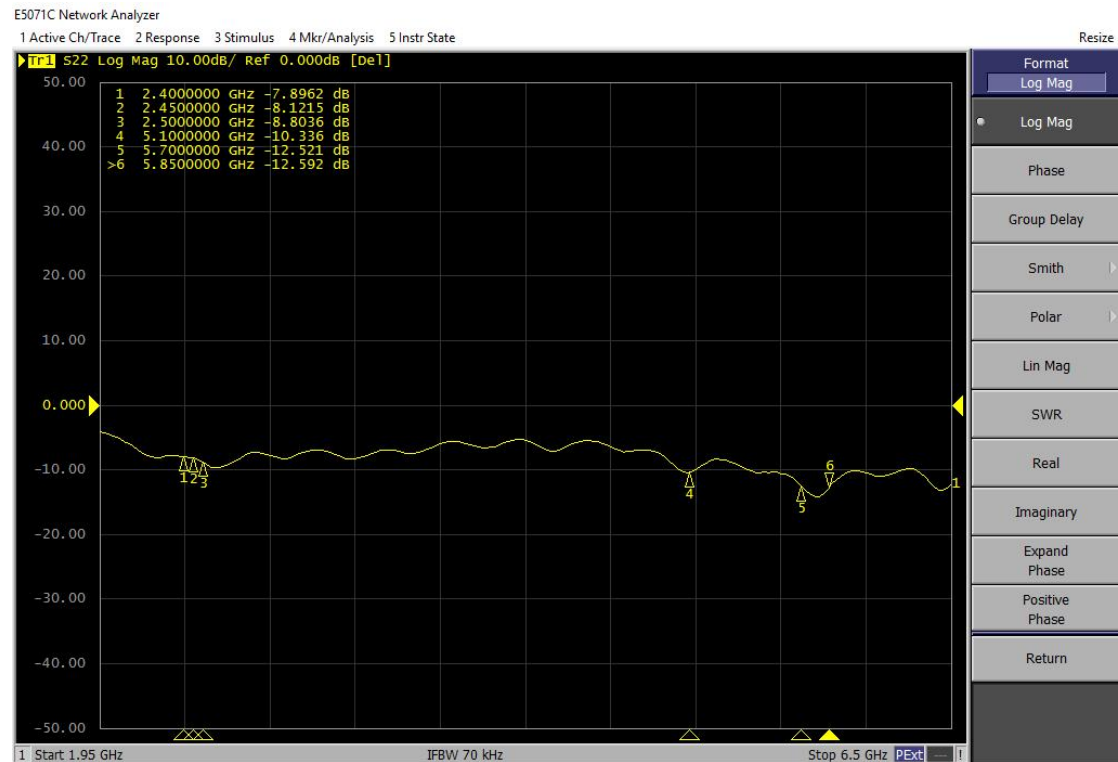
4.21 Test Environment and Instrumentation

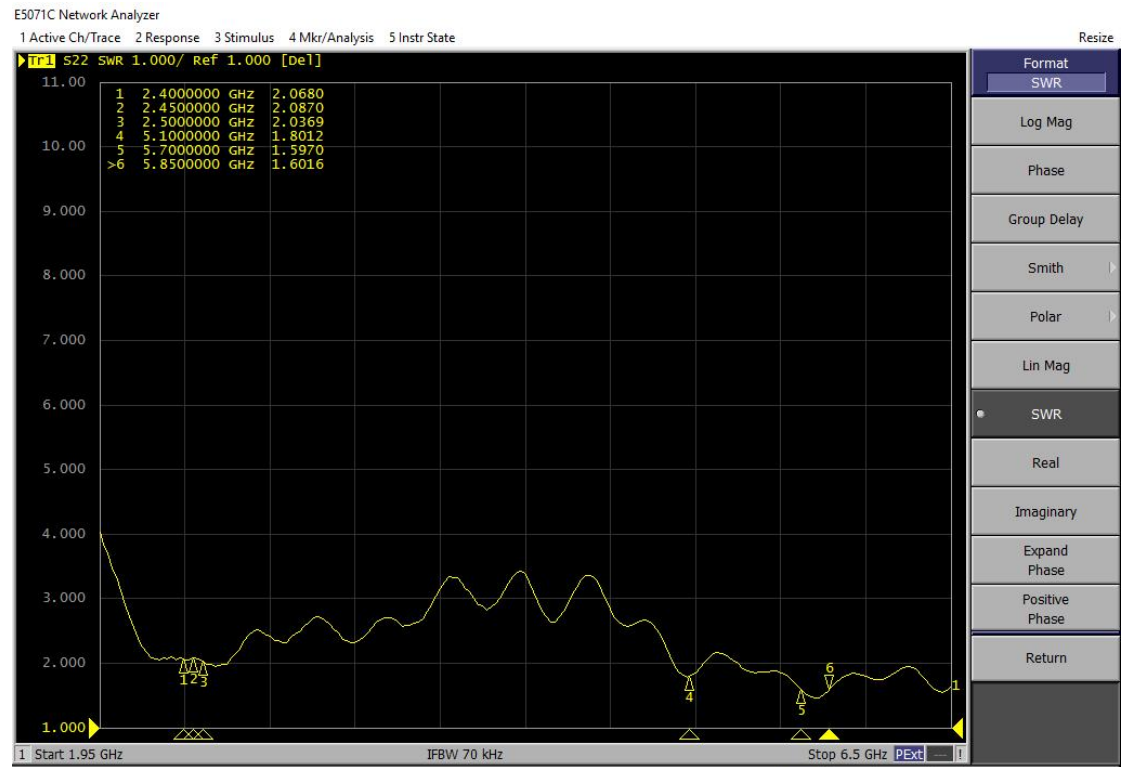
Testing environment:	Testing facility:
Temperature:10°C——+30°C	Network analyzer
Relative humidity: ≤80% (at +40°C)	KEYSIGHT E5071C
Atmospheric pressure: 750 mmHg ± 30 mmHg	Multi-probe microwave anechoic chamber

4.22.1 Product Electrical Performance Test Data:

Antenna S11 plot:

Marker	2400MHz	2500MHz	5700Mhz	5850Mhz
Returnloss	-7. 89	-8. 80	-12. 52	-12. 59
VSWR	2. 03	2. 08	1. 59	1. 60





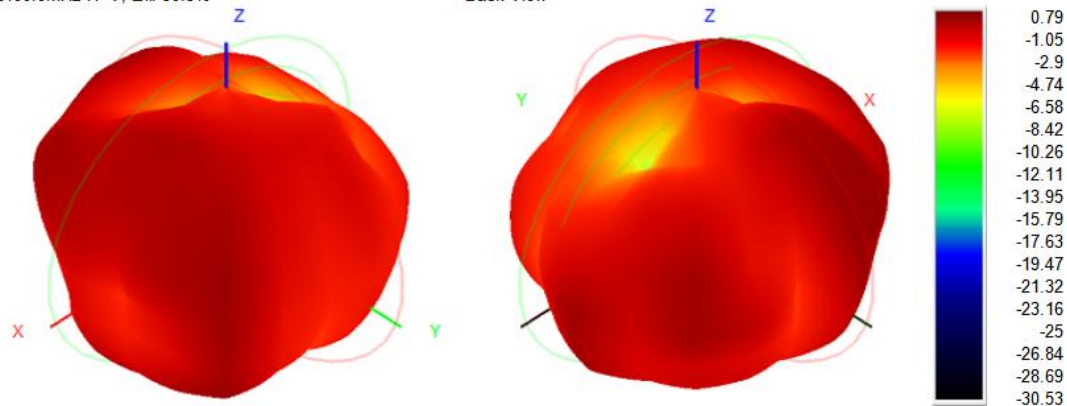
4.22.2 Antenna Gain Efficiency:

Frequency(MHz)	Gain (dBi)	Efficiency (%)
2400	0.79	50.53
2450	1.50	51.55
2500	1.60	50.35
5000	2.79	46.97
5800	1.46	41.13
5900	1.34	41.63

4.22.3 Antenna Radiation Pattern:

2400.0MHz H+V, Eff. 50.5%

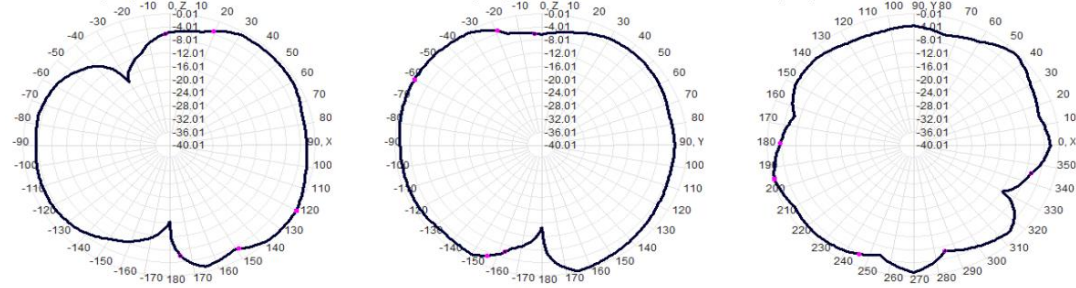
Back View



2400.0MHz Total(E1-XZ), Max= -0.12dBi

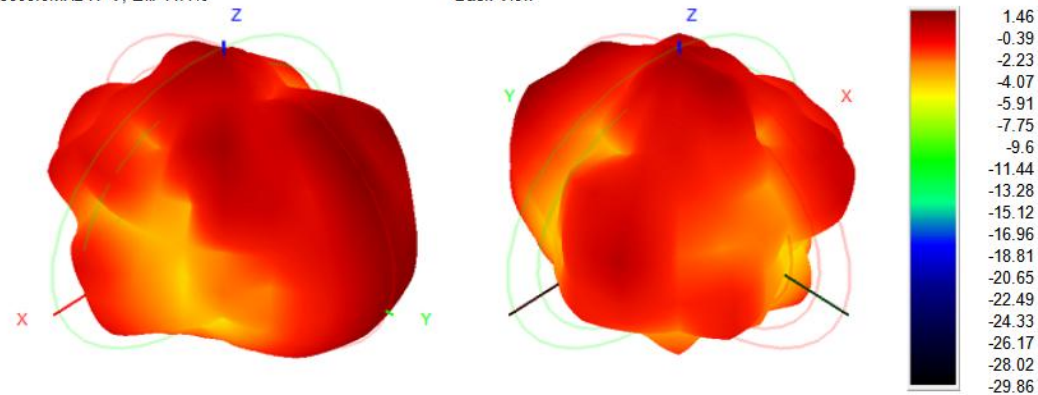
2400.0MHz Total(E2-YZ), Max= -0.01dBi

Total(H+V), Max= -0.67dBi, CirD=11.27



5800.0MHz H+V, Eff. 41.1%

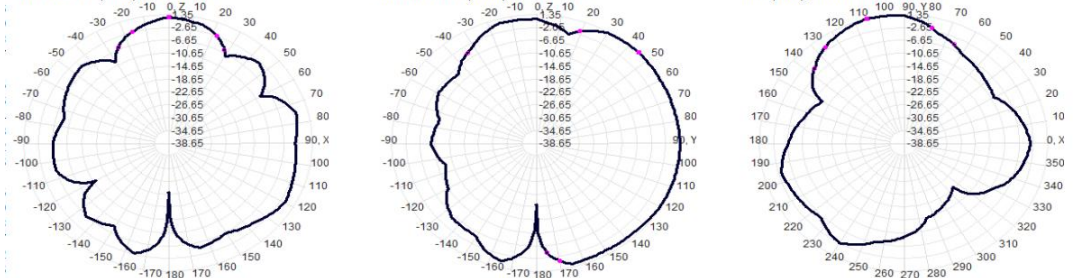
Back View



5800.0MHz Total(E1-XZ), Max= 0.51dBi

5800.0MHz Total(E2-YZ), Max= 1.35dBi

Total(H+V), Max= 1.32dBi, CirD=20.92



5. Product Packaging Method

manner of packing:

Self-sealing bag packaging; 200 pieces per bag.

6. Document History

Document number Document No.	
Date Release Date	2026/05/23
Author	Hungjie
Review	WH

Document Version History Table

Revised History

Date	Version	Revised Record
2026/05/23	1. 00	New Project