SPECIFICATION

Shenzhen Feixin Wireless Communication Co., Ltd.

2.4G/5.8 FPC antenna

Product specification

Customer		**Frequency**	2400MHz——2500MHz
R F design	XIAO BIN	**Version**	**A1**
Technical director	**ANDY**	**date**	**2023-12-14**

Customer confirmation:
Whether the assembly meets your company's requirements：☐OK ☐NG

Confidentiality requirements
Our company already possesses the proprietary technology provided, and these proprietary information should be strictly kept confidential. Without the prior written consent of Shenzhen Feixin Wireless Communication Co., Ltd., it is not allowed to be disclosed to anyone or the company.

Directory

Cover **1**

1、Directory..... **2**

2、Product pictures **3**

3、S11 data **4**

4、Antenna test data (gain, efficiency, apple chart)..... **4**

5、Product structure drawing..... **7**

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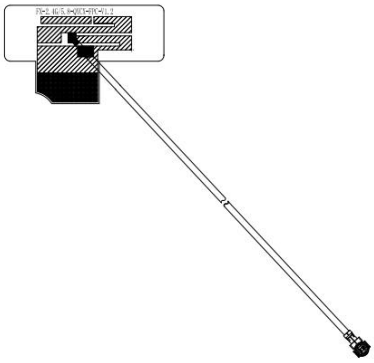
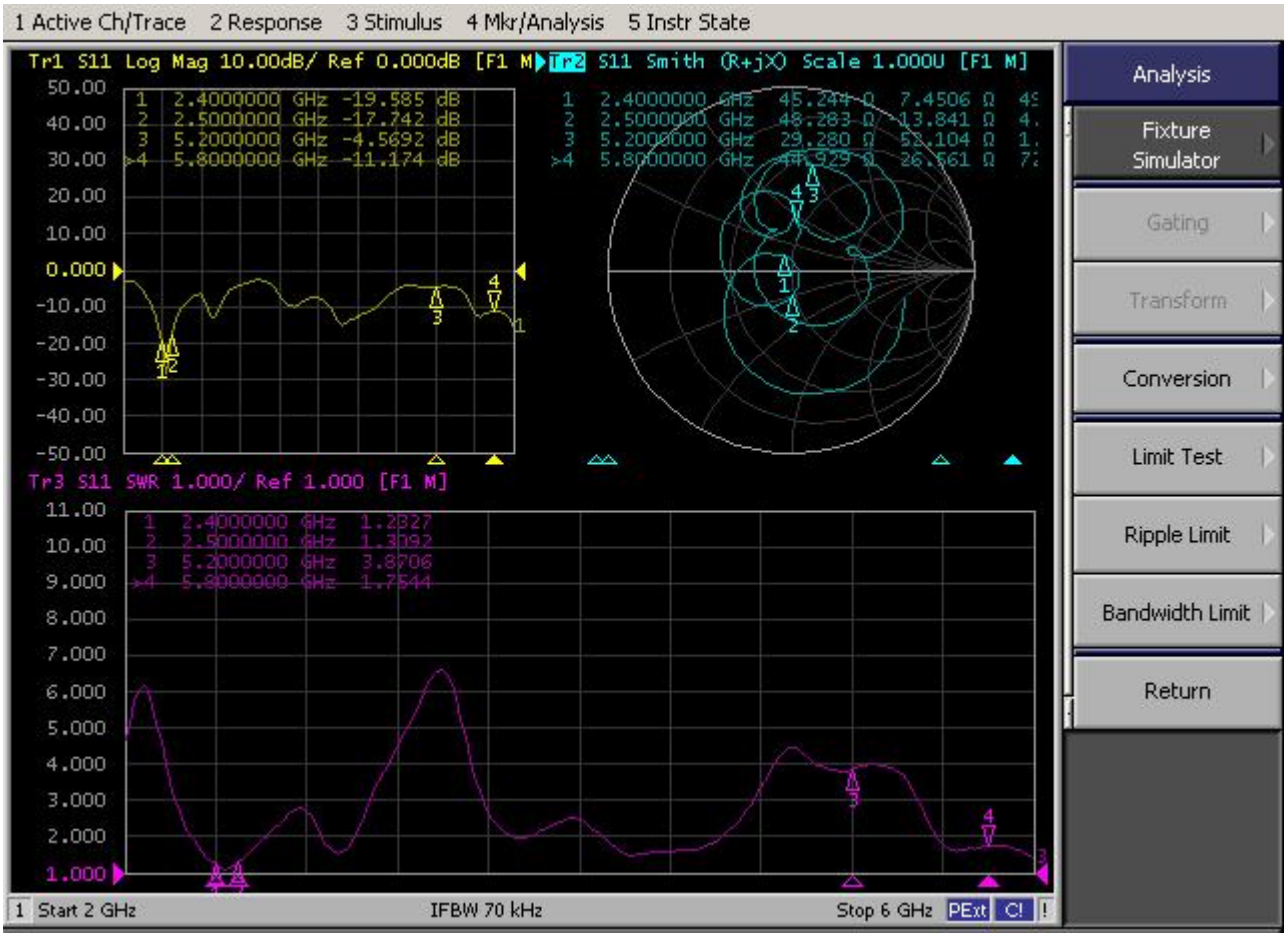
1、Product pictures



2、Product parameters

Product testing parameters			
产品名称**(Name)**	**2.4G WIFI**	产品型号**(Model Type)**	FX-2.4/5.8-QYCX-FPC-V1.2
电 性 能 指 标 (Electrical Specifications)			
频率范围 **(Frenquency Range)**	2400-2500MHZ 5200-5800MHz	极化方式 （**Polarization**）	vertical
输入阻抗**(Impedance)**	50 Ω	辐射方向	Omnidirectional
驻波比（**VSWR**）	≦3.0	功率容量**(Power)**	50W
增益**(Gain)**	2.74dBi	带宽 **(Bandwidth**	100/600MHz
机 械 指 标 (Mechanical Specifications)			
尺寸 **(Dimensions)**	29.6*10.4±0.15 mm	外壳颜色**(ANT Color)**	black
连接器型号 **(Connector)**	IPEX 4	引线长度**(Cable Length)**	110±3 mm
外壳材料 **Radome Material**	FPC		
工作温度 **(Working Temperature)**	-40℃-+85℃	存放温度 **(Limit Temperature)**	-40℃-+85℃

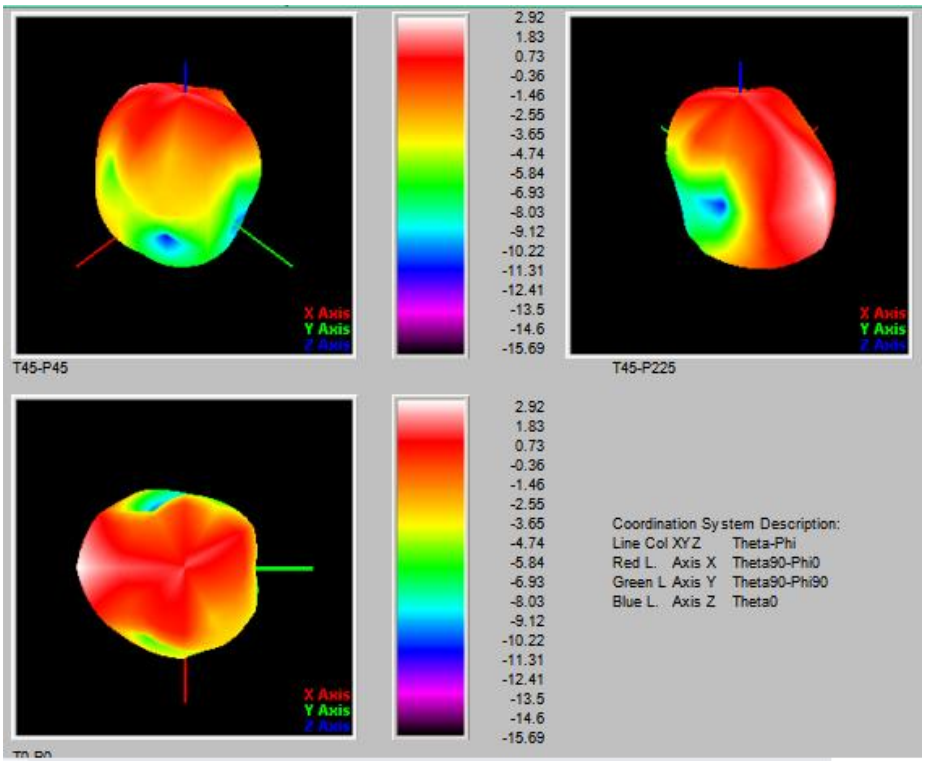
3. VSWR, Return loss and Smith data

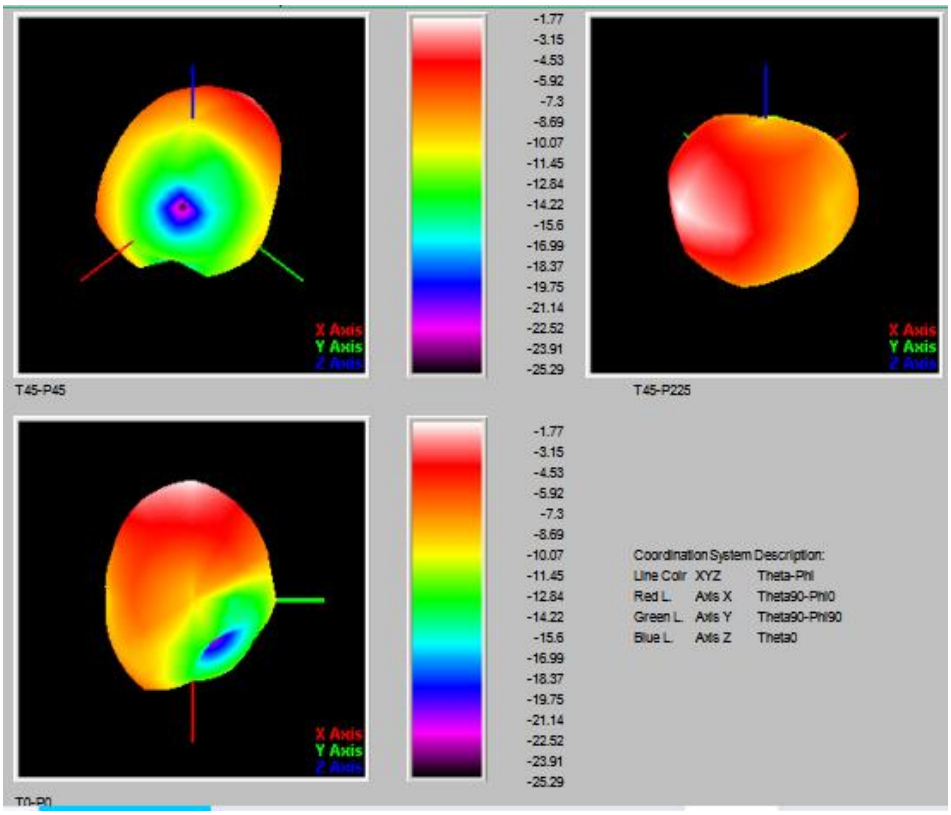


4、Antenna test data (gain, efficiency, apple chart)

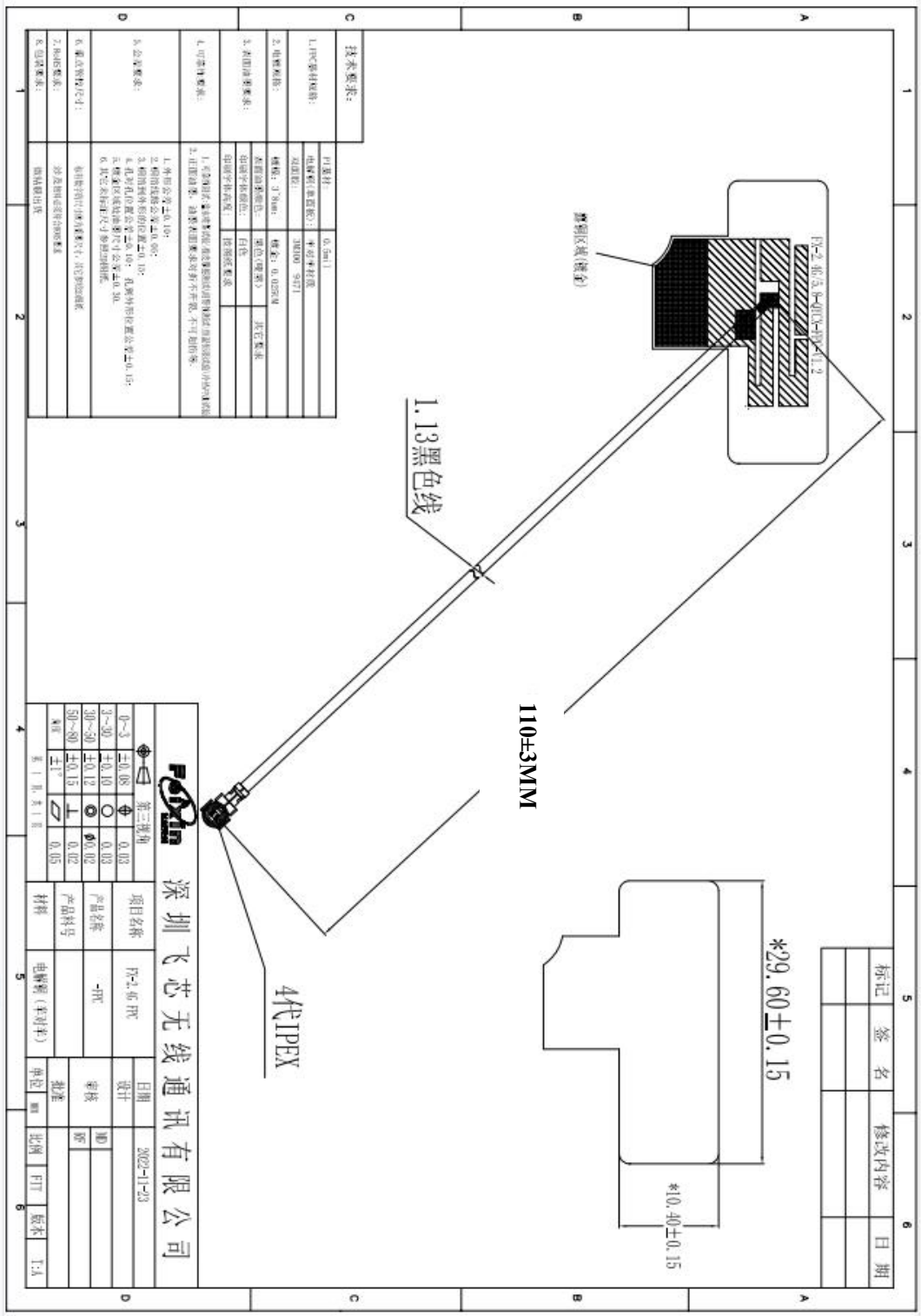
Test Point ID	Freq. (MHz)	TRP (dBm)	Gain (dBi)	Directivity (dBi)	Efficiency (%)
1	2400.0	2400.00	-2.59	4.90	24.8%
2	2410.0	2410.00	-2.11	5.22	25.5%
3	2420.0	2420.00	-2.00	4.98	26.1%
4	2430.0	2430.00	-1.96	5.12	27.6%
5	2440.0	2440.00	-1.72	5.09	28.8%
6	2450.0	2450.00	-1.72	5.05	30.0%
7	2460.0	2460.00	-1.52	5.33	31.6%
8	2470.0	2470.00	-1.84	5.45	28.7%
9	2480.0	2480.00	-1.43	5.94	27.3%
10	2490.0	2490.00	-1.33	6.06	26.2%
11	2500.0	2500.00	-0.69	6.60	26.7%

Test Point ID	Freq. (MHz)	TRP (dBm)	Gain (dBi)	Directivity (dBi)	Efficiency (%)
1	5200.0	5200.00	0.75	8.23	25.9%
2	5225.0	5225.00	0.52	7.91	26.3%
3	5250.0	5250.00	0.79	8.11	28.5%
4	5275.0	5275.00	0.53	7.70	29.2%
5	5300.0	5300.00	0.05	7.08	29.8%
6	5325.0	5325.00	0.31	6.63	30.3%
7	5350.0	5350.00	-0.26	6.06	25.3%
8	5375.0	5375.00	-0.59	5.06	26.2%
9	5400.0	5400.00	-0.39	5.16	25.8%
10	5425.0	5425.00	0.05	5.10	31.2%
11	5450.0	5450.00	0.51	5.27	33.4%
12	5475.0	5475.00	0.76	5.47	33.8%
13	5500.0	5500.00	1.13	5.76	34.5%
14	5525.0	5525.00	1.04	6.01	31.8%
15	5550.0	5550.00	0.96	5.99	31.4%
16	5575.0	5575.00	0.79	6.28	28.3%
17	5600.0	5600.00	0.61	6.24	27.4%
18	5625.0	5625.00	1.36	6.52	30.5%
19	5650.0	5650.00	1.65	6.59	32.1%
20	5675.0	5675.00	1.77	6.19	36.1%
21	5700.0	5700.00	1.69	6.06	36.6%
22	5725.0	5725.00	1.84	5.92	39.1%
23	5750.0	5750.00	1.73	6.28	35.1%
24	5775.0	5775.00	1.90	6.51	34.6%
25	5800.0	5800.00	2.74	7.08	36.8%


2.92
1.83
0.73
-0.36
-1.46
-2.55
-3.65
-4.74
-5.84
-6.93
-8.03
-9.12
-10.22
-11.31
-12.41
-13.5
-14.6
-15.69
X Axis
Y Axis
Z Axis
T45-P45
T45-P225
T0-P0
Coordination System Description:
Line Col XYZ Theta-Phi
Red L. Axis X Theta90-Phi0
Green L Axis Y Theta90-Phi90
Blue L. Axis Z Theta0


-1.77
-3.15
-4.53
-5.92
-7.3
-8.69
-10.07
-11.45
-12.84
-14.22
-15.6
-16.99
-18.37
-19.75
-21.14
-22.52
-23.91
-25.29
X Axis
Y Axis
Z Axis
T45-P45
T45-P225
T0-P0
Coordination System Description:
Line Colr XYZ Theta-Phi
Red L. Axis X Theta90-Phi0
Green L. Axis Y Theta90-Phi90
Blue L. Axis Z Theta0

5、Product structure drawing



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