



Shenzhen xingtong wireless technology co.,
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Address: 3/F, Building A1, Qiangrongdong Industrial Zone,
Jiuwei, Xixiang, Baoan District, Shenzhen

Product specification

Product number: X701-WIFI-2.4GHZ

Product name: X701-FPC-WIFI-ANT

Product item number:

Producer	Audit	Date
Huangjiajun	Wu Yanlong	2024-04-25

Customer confirmation:

Customer name: Shenzhen Bonuo Technology Co., Ltd
Approval :
Date :
Notes :

Please accept your signature and seal and return one copy to our company for filing. Thank you for your cooperation!

 Shenzhen Xingtong Wieress Technology Co., Ltd		Date	2024-04-25
		Version	A0
		File number	XT-YF-004
Product model	2.4G-WIFI antenna	Product number	

1.Product Constrution:

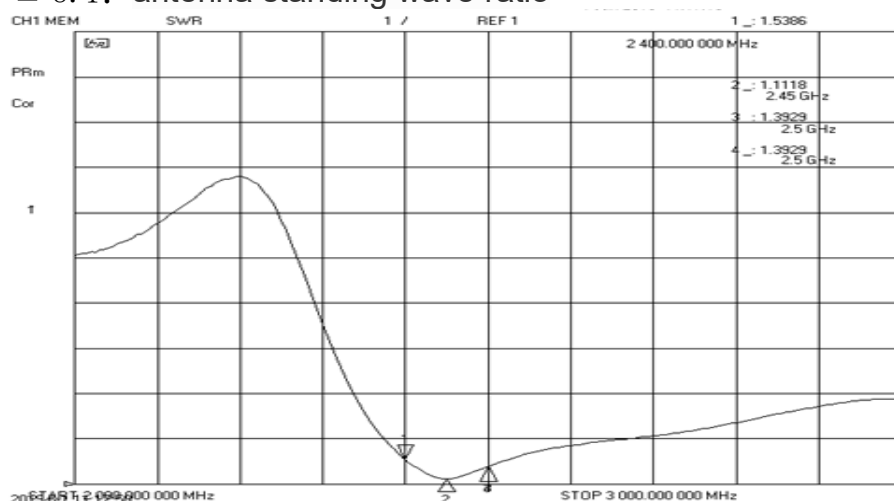
- 1. Antenna material: FPC
- 2. Adhesive tvne: 3M9471
- 3. Antenna size: 21*10 (Tolerance+0.2)
- 4. Coaxial line size: Standard 1.13 coaxial 120mm (line length/tolerance ± 1.0 MM can be customized according to specifications)

2. parameters

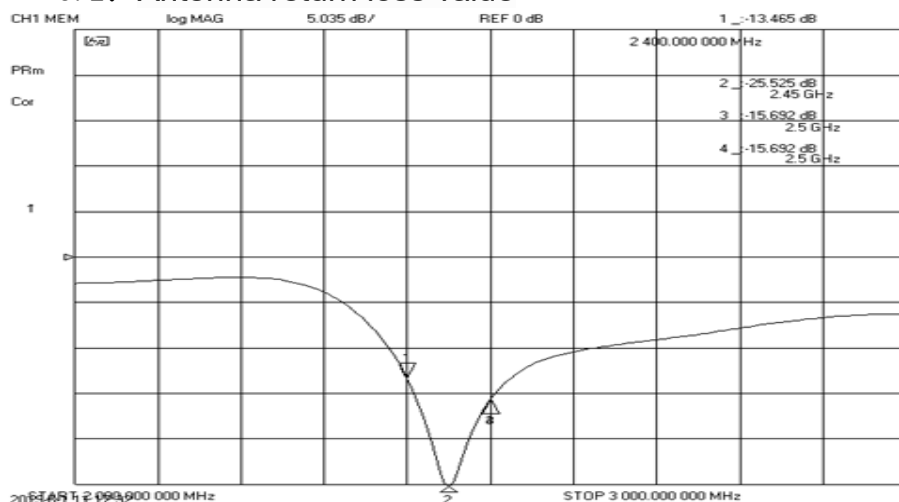
- Scope of use: customer-supplied machines
- Antenna frequencv: 2.4-2.5Ghz
- Antenna free space gain: 2.4 $\geq$ 2.0dbi
- Installation mode: terminal wire is welded to motherboard OUT
- Packing method: use PE bag+packing box

3.S11 value of antenna (S11)

- 3.1: antenna standing wave ratio



- 3.2: Antenna return loss value



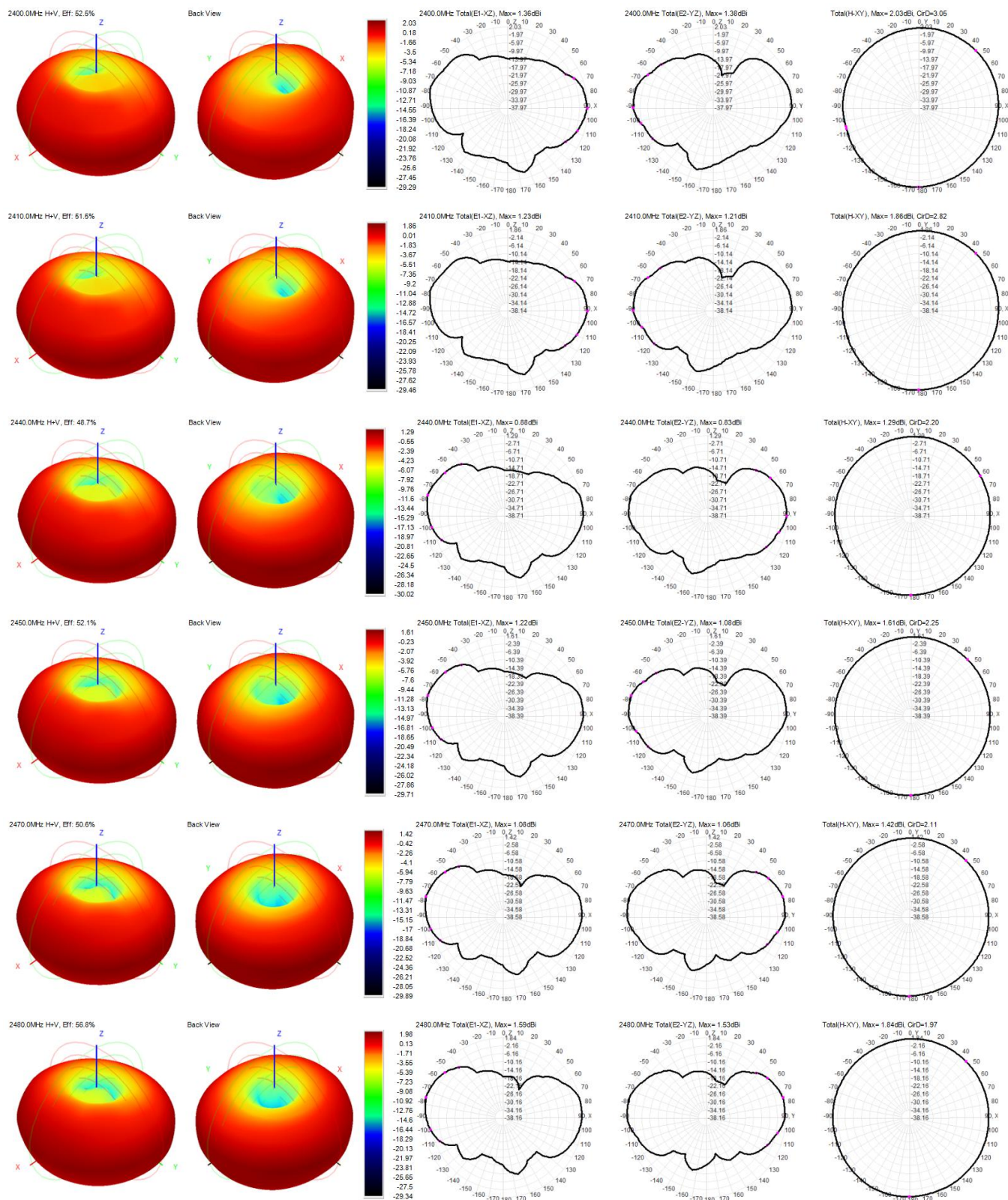
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4. Antenna performance (OTA)

- 4.1: Antenna matching recommendations
Vector impedance modulation can be performed.
- 4.2: Antenna OTA/ efficiency/gain (test instruments: network analyzer, oscilloscope, customer engineering prototype, various standard cards, etc.)

FETUKEJI											
Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Point Values											
Ant. Port Input Pwr. (dBm)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tot. Rad. Pwr. (dBm)	-3.79	-3.55	-3.09	-3.02	-2.89	-2.81	-2.90	-3.03	-3.05	-3.13	-3.22
Peak EIRP (dBm)	-0.82	-1.52	-0.94	-0.74	0.45	-1.04	-0.62	-1.41	-0.75	-0.66	-0.52
Directivity (dBi)	1.32	1.52	1.74	1.84	2.15	2.14	2.12	1.81	1.75	1.66	1.52
Efficiency (dB)	-3.79	-3.55	-3.09	-3.02	-2.89	-2.81	-2.90	-3.03	-3.05	-3.13	-3.22
Efficiency (%)	41.80	44.20	49.10	49.90	51.36	52.39	51.23	49.80	49.51	48.69	47.68
Gain (dBi)	1.32	1.52	1.74	1.84	2.15	2.14	2.12	1.81	1.75	1.66	1.52
NHPRP ±Pi/4 (dBm)	-7.48	-8.33	-7.74	-7.44	-6.15	-7.43	-6.69	-7.23	-6.32	-5.98	-5.71
NHPRP ±Pi/6 (dBm)	-9.44	-10.27	-9.66	-9.36	-8.06	-9.34	-8.59	-9.13	-8.21	-7.85	-7.58
NHPRP ±Pi/8 (dBm)	-13.10	-13.87	-13.20	-12.86	-11.55	-12.82	-12.06	-12.57	-11.62	-11.22	-10.91
Upper Hem. PRP (dBm)	-6.87	-7.72	-7.13	-6.61	-5.54	-6.76	-6.09	-6.77	-5.98	-5.68	-5.30
Lower Hem. PRP (dBm)	-6.73	-7.62	-7.06	-6.56	-5.51	-6.78	-6.12	-6.82	-6.10	-5.88	-5.57
Upper Hem. PRP (%)	-6.18										-16.45
Lower Hem. PRP (%)	-5.32										-15.37

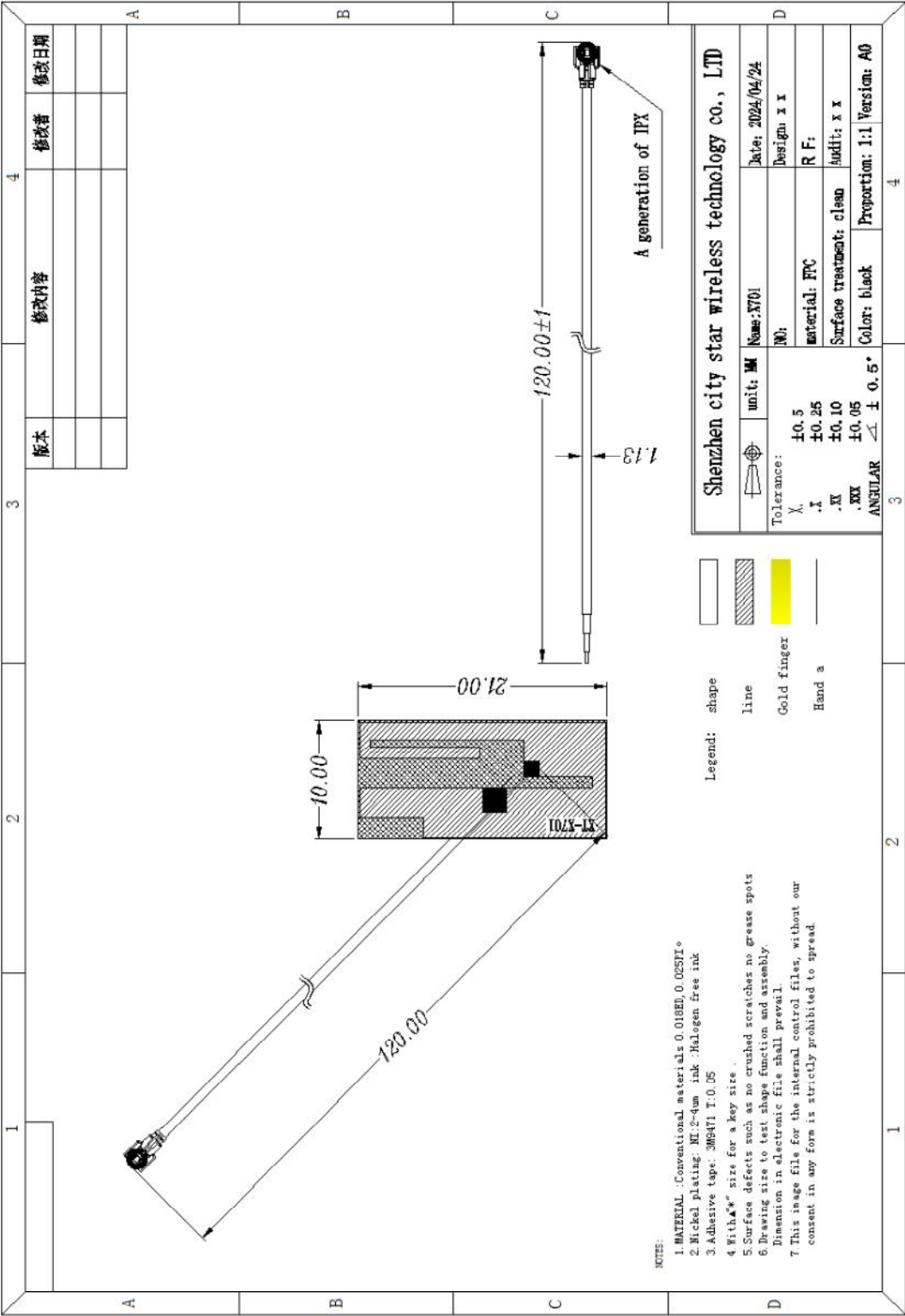
4.3: Antenna OTA-2.4G directional pattern



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5. 附图:

5.1: Finished antenna drawing



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7. Reliability test:

Serialnumber	test item	Test requirements	testing tool	test result
1	Resistance to tin melting	288℃, 10S, no delamination, no foaming	Tin furnace	Ok
2	weldability	245℃, 5s, smooth tin surface, solder surface积≥95%	Tin furnace	Ok
3	Pulling force	N/A	tautness meter	Ok
4	Reverse pulling force	N/A	tautness meter	Ok
5	Peel strength (covering film)	≥0.35kg/cm	peel strength	Ok
6	Peel strength (copper foil)	≥0.8kg/cm	peel strength	Ok
7	Hot melt adhesive	0.1~0.15	/	Ok

8. Matters needing attention:

After opening, please carefully check whether the goods are complete. If there is any damage, please contact us immediately.