

PRODUCT SPECIFICATION

Customer Name: BOE

Product Name: TC452-WIFI antenna component

Customer Material Number: 81805-00339

Zhong Tianxun material number: 1.22.00734

Versions: A0

Authorizer	Check	Compile
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2025.09.19	2025.09.19	2025.09.19

Manufacturer: Shenzhen ZTX Communication Technology Co.,

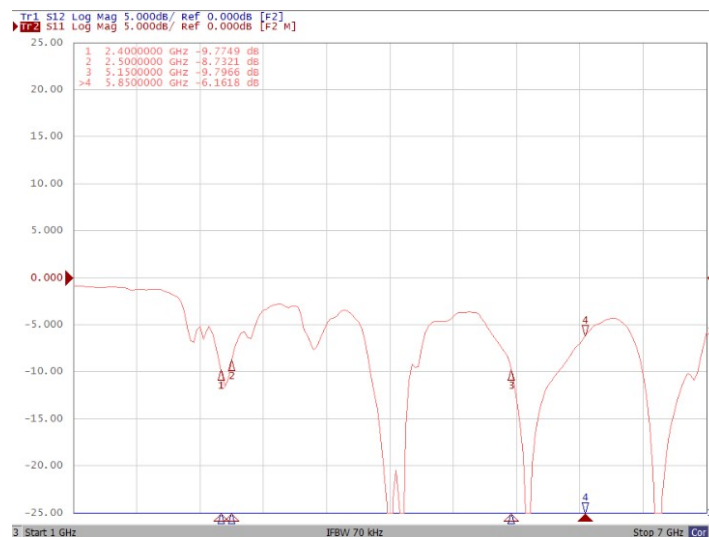
LTDAddress: No.34 Shilong Avenue, Shiyan Town, Baoan District,
Shenzhen (Tengda Industrial Park)

1. Antenna specification

Antenna Type	Cavity antenna
Frequency	2400MHz~2500MHz&5150MHz~5850MHz
VSWR	3.0 Max
Impedance	50Ω
Polarization	Linear
Radiation pattern	Omni-directional
Antenna size (mm)	48.80*17.85
Antenna Gain(2.4Gdbi)	-0.5
Antenna Gain(5.8Gdbi)	0.5
Working Temperature (℃)	-20~65
Storage Temperature (℃)	-20~85

3. Antenna Return loss

The Return loss test device is connected as follows: E5071B network analyzer → 50 ohm coaxial Cable → test fixture



4. Antenna OTA

Band	Chnnel	TRP	TIS (Screen light on)
		11M	11M
11B	1	13.1	-82.0
	7	13.2	-81.9
	13	13.4	-81.8
Band	Chnnel	TRP	TIS (Screen light on)
		6M	54M
11G	1	11.7	-69.8
	7	11.6	-69.7
	13	11.4	-69.6
Band	Chnnel	TRP	TIS (Screen light on)
		MCS0 6.5M	MCS7 65M
11N	1	11.8	-65.5
	7	11.6	-65.4
	13	11.3	-65.4
Band	Chnnel	TRP	TIS (Screen light on)
		6M	54M
11A	36	11.8	-70.7
	64	11.6	-70.0
	165	9.3	-68.4
Band	Chnnel	TRP	TIS (Screen light on)
		6M	54M
11AN	36	10.82	-66.5
	64	10.34	-66.4
	165	8.2	-63.8

5. Antenna Efficiency

Frequency (MHz)	Efficiency . dB	Gain. dBi
2400	-4.39	-0.72
2410	-4.50	-0.61
2420	-4.35	-0.68
2430	-4.14	-0.57
2440	-4.19	-0.5
2450	-4.25	-0.62
2460	-4.27	-0.79
2470	-4.27	-0.68
2480	-4.17	-0.53
2490	-4.18	-0.67
2500	-4.22	-0.73
5150	-4.60	0.35
5200	-4.39	0.42
5250	-4.38	0.47
5300	-4.50	0.41
5350	-4.36	0.50
5400	-4.38	0.48
5450	-4.45	0.32
5500	-4.49	0.31
5550	-4.48	0.28
5600	-4.35	0.39
5650	-4.37	0.41
5700	-4.46	0.34
5750	-4.52	0.27
5800	-4.46	0.32
5850	-4.75	0.33

6. Antenna Radiation Pattern

2450MHz

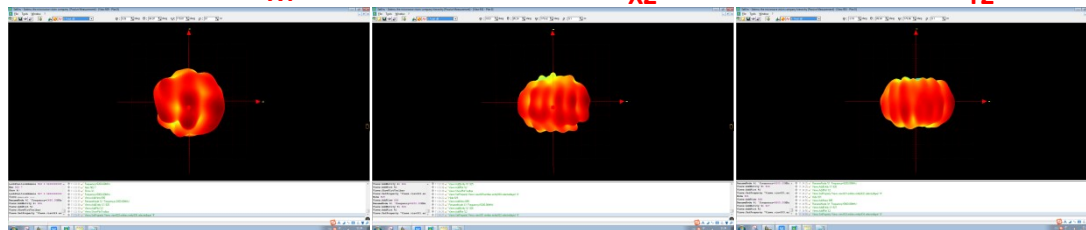
XY

5200MHz

XZ

5800MHz

YZ

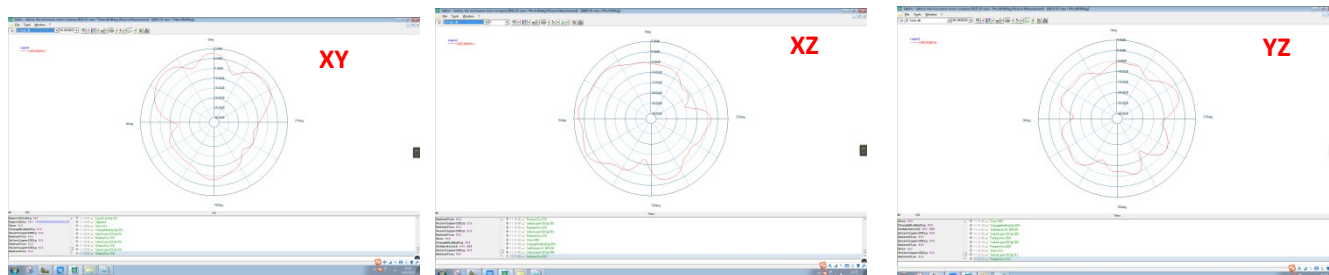


2450MHz

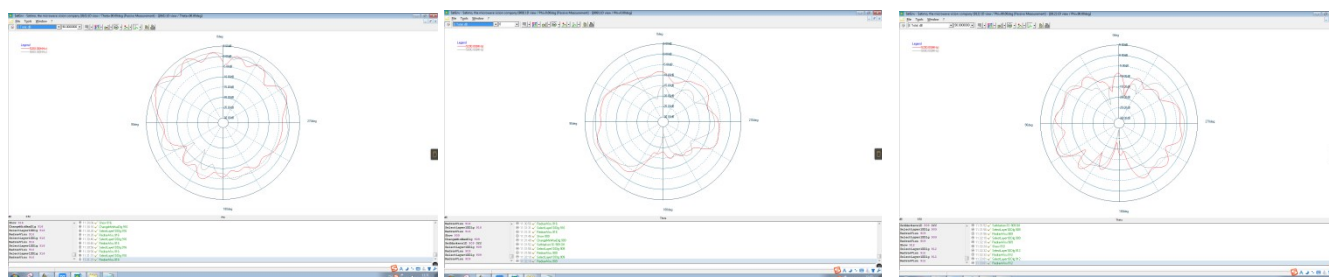
XY

XZ

YZ



5200MHz&5800MHz



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