

Specification of JT10A FPC Antenna

Project	JT10A ear support		Frequency Band	BT(2400-2500) MHz	
P/N	F-2V-7Z-0001-001-K0		Version	S01	
Date	2023/11/01				
SPEED					
Checked by	RF	Ruliang Zhang	Design by	RF	Yu Wang
	ME	Kevin Wang		ME	Rui Wang
			Remark		
Customer					
Date					
Confirmed by	RF				
	ME				
Remark					

Manufacturer: Huizhou Speed Communication Technology Co.,Ltd.
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Hi-Tech Zone, Huizhou, China

1 Introduction

The antenna covers the band:BT(2400MHz-2500MHz)

Antenna properties were measured in the actual environment plane.

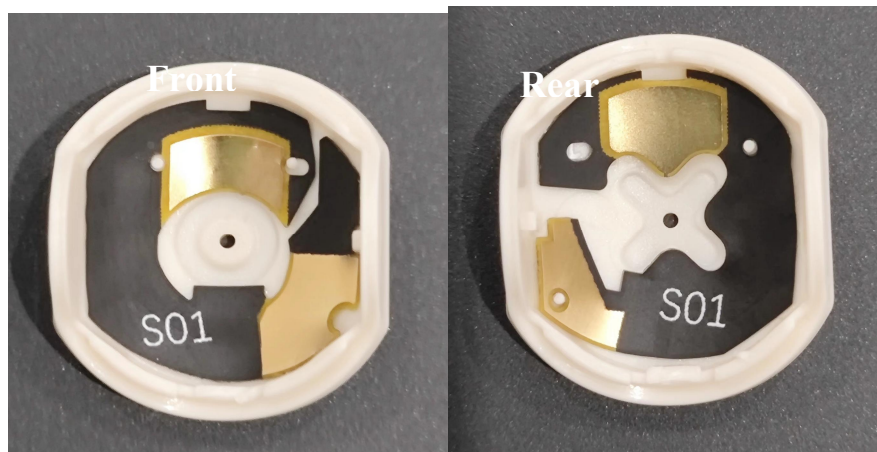


Figure 1: FPC Antenna

2 Electrical Performance

2.1 Specification

Antenna Passive Performance		
Antenna Bands		
1	Operation Frequency (MHz)	2400-2500
2	Return Loss (dB)	-15
3	Zenith Gain(dBi)	Peak gain :-2.6
4	Efficiency (%)	11
5	Polarization	Vertical polarization
6	Impedance	50Ω

2.2 Test Set-up

The return loss and VSWR were measured with Agilent E5071C.

The efficiency and gain were measured in ETS-Lindgren Chamber as shown by picture2.

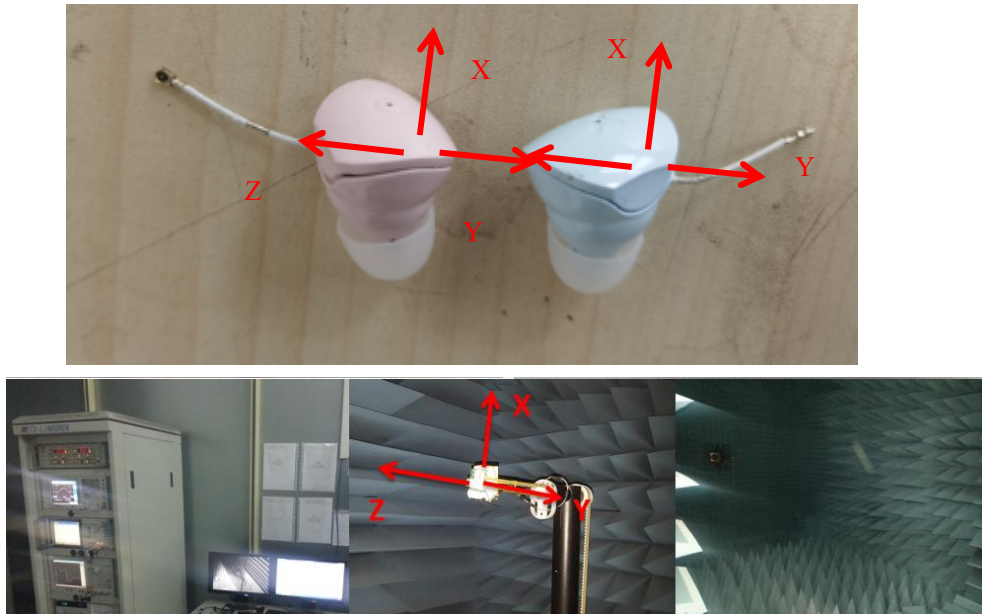
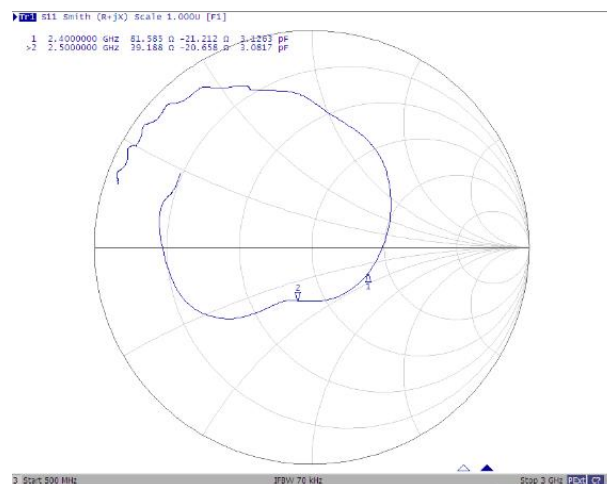
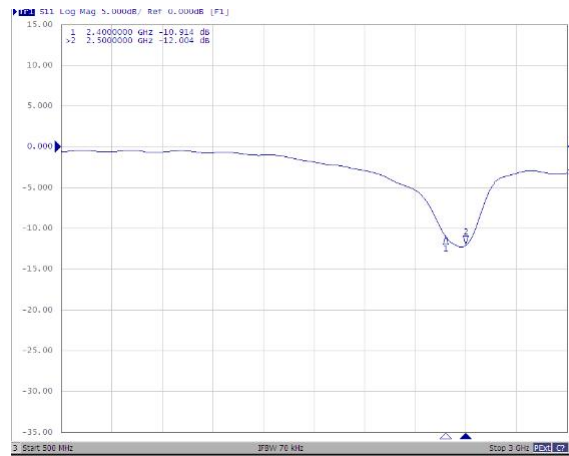


Figure 2: ETS chamber and measurement system

2.3 Smith Chart & Return Loss & VSWR



Smith

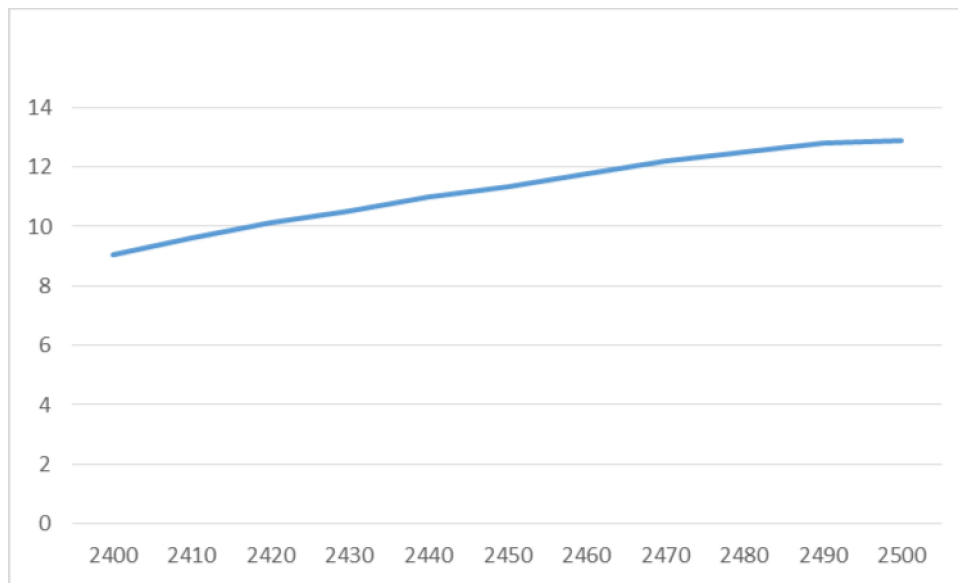


Return Loss

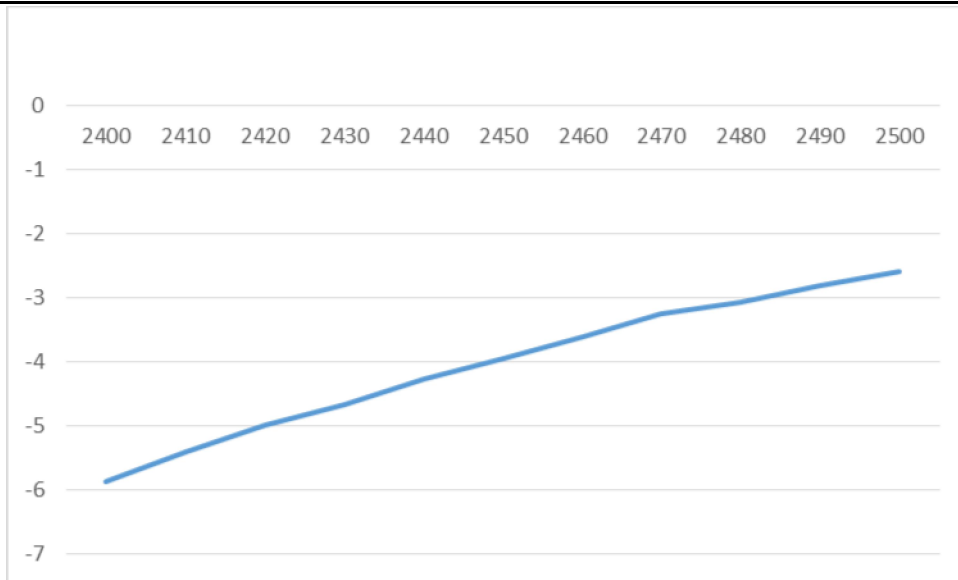


VSWR

2.4 Efficiency and Gain

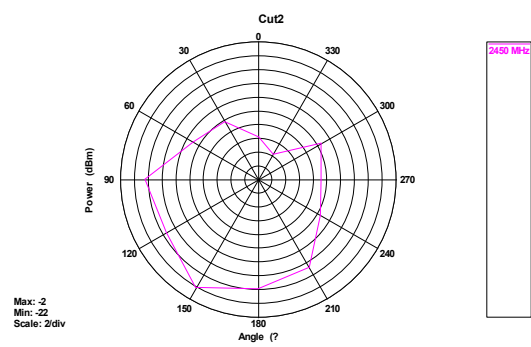
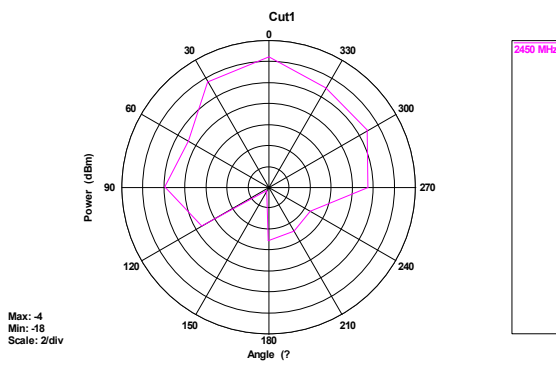


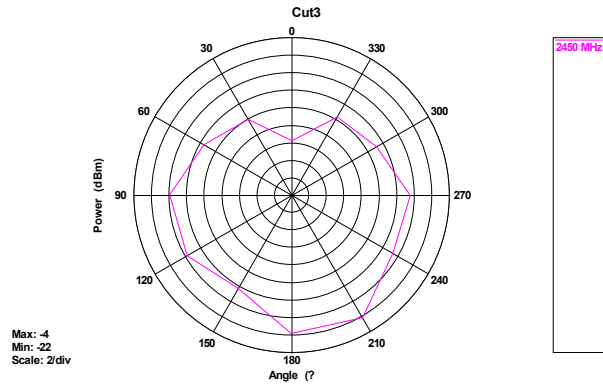
Efficiency



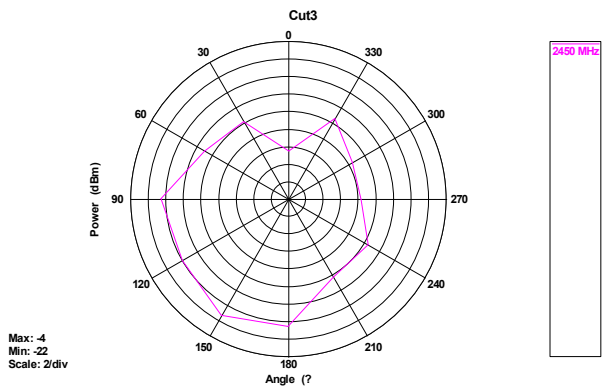
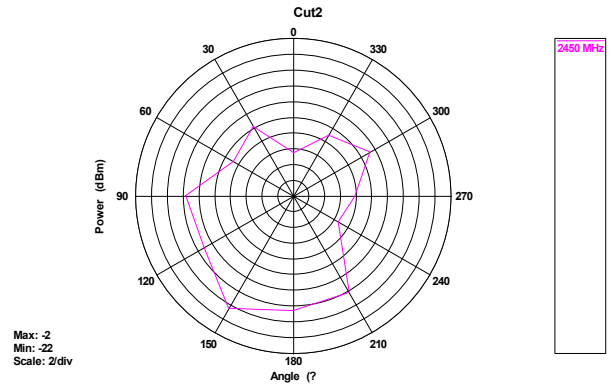
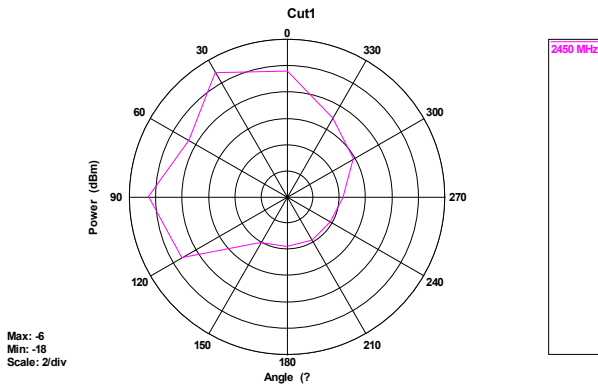
Peak Gain

2.5 Gain and Radiation Pattern

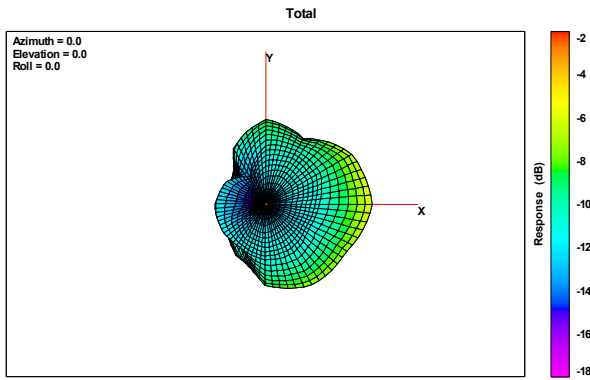




2D pattern



2D pattern



3D radiation pattern

3 Mechanical Drawing (Units: mm)

