

Antenna Specifications

CUSTOMER		星辰	
CS P/N		TB 摇杆	
HX P/N		<u>A72-003-30</u>	
Checked by(RF)	Checked by(ME)	Checked by(QA)	Approval led by
Customer Approval			

星辰料号： E-RF1822001-F



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1. General Description

This document provides the antenna specifications on electric, mechanic and reliability. The testing conditions and related pictures are also included.

1.1 Print Acceptance

Samples and Antenna Specifications are to be sent to customer. When they are approved, the approval form should be completed, signed, and sent back to Hengxiangtong before further mass production batches can be delivered.

1.2 Coordinate System

The coordinate system for the phone is defined as follows:

- Origin in center of gravity.
- Positive X axis is perpendicular to, and directed from, front plane.
- Positive Y axis is perpendicular to, and directed from, right side plane (as seen from front).
- Positive Z axis is perpendicular to, and directed from, top plane.

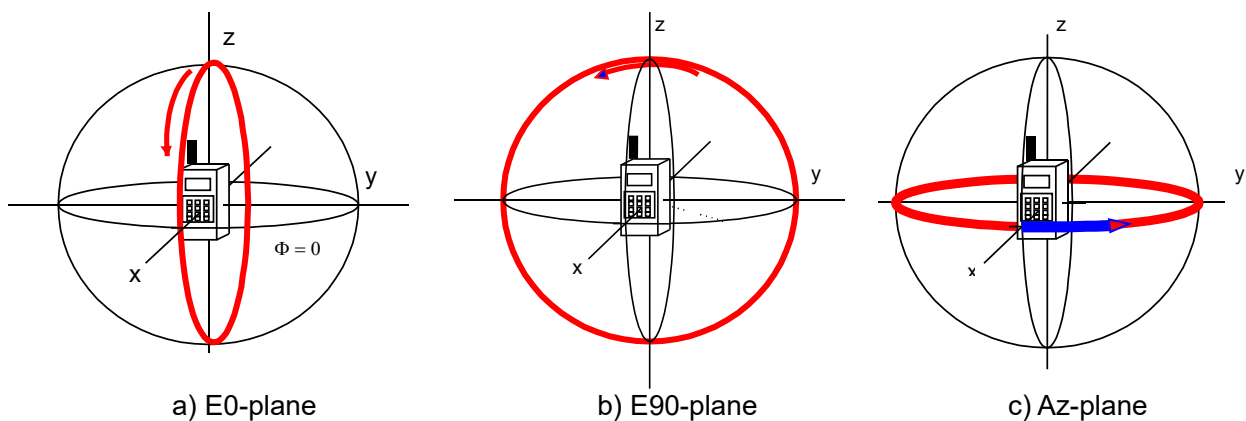


Figure 1-1 The coordinate system for the phone



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2. Specifications

This report mainly provides the testing conditions of various electric and structural performance parameters for cell phone antenna ---- TB 摇杆. Figure 2-1 shows the antenna designed by HX & The fixturing of TB 摇杆



Figure 2-1 The antenna designed by HX & The fixturing of TB 摇杆



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2.1 Frequency Band

Band	Frequency(MHz)
2.4G	2400-2500

2.2 Impedance

2.2.1 Nominal

Nominal Impedance(including matching circuit) : 50 ohms

2.2.2 Matching Circuit

The matching circuit is as Figure 2-2.

无

Figure 2-2: Matching circuit

2.3 Passive Measurements

2.3.1 VSWR & Gain Specifications

VSWR		GAIN	
Freq. Band	SPEC	Freq. Band	SPEC
2400-2500MHz	≤ 2.0	2400-2500	$\geq 2\text{dBi}$

2.3.2 S11 of the Typical Sample

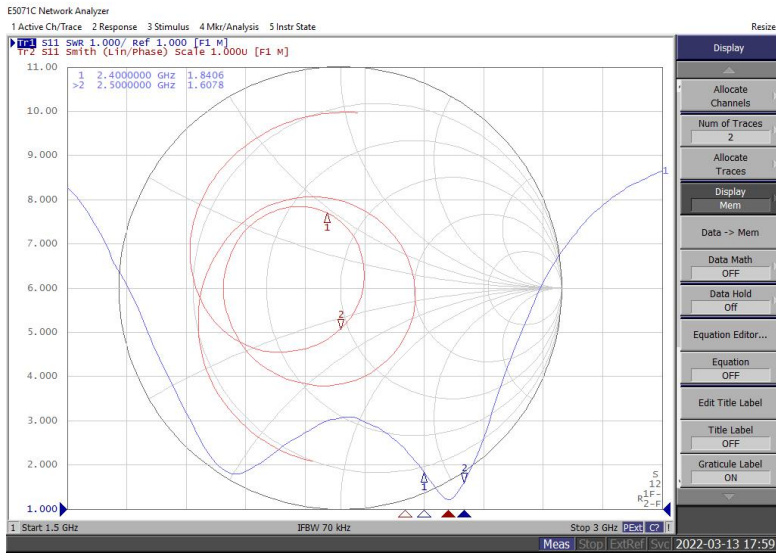
Freq (MHz)	2400	2450	2500
RL	-11.9	-13.4	-10.8
VSWR	1.7	1.3	1.8



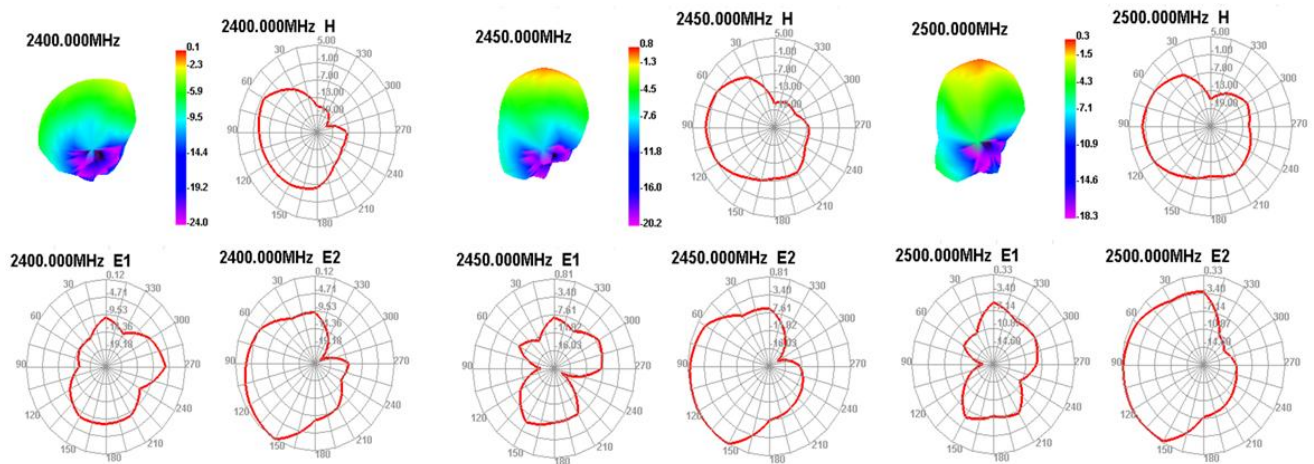
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2.3.3 Gain Effi. & Ratiation Pattern of the Typical Sample



Passive Test For 2.4-2.5G		
Freq (MHz)	Effi (%)	Gain (dBi)
2400	45.77	2.14
2410	42.21	2.33
2420	43.78	2.38
2430	44.88	2.38
2440	45.55	2.23
2450	47.16	2.81
2460	47.2	2.74
2470	48.4	2.7
2480	47.69	2.47
2490	48.98	2.52
2500	48.77	2.33



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3. Mechanical Properties

3.1 Specifications Drawin



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4. Environmental Characteristic

Test Item	Test description
1. Low Temperature	Temp.: -20 °C Time: 24 hours
2. High Temperature	Temp.: 80°C Time: 24 hours
3. Salt Fog	5±0.1% Nad salt fog PH Value: 6.5-7.2 Temp: 35±1°C Time:24 hours