

Antenna Specifications

CUSTOMER		优爱康	
CS P/N		W93	
HX P/N		A16-103-W93	
Checked by(RF)	Checked by(ME)	Checked by(QA)	Approval led by
Customer Approval			

Index

1. General Description	3
1.1 Print Acceptance	3
1.2 Coordinate System	3
2. Specifications	4
2.1 Frequency Band	5
2.2 Impedance	5
2.2.1 Nominal	5
2.2.2 Matching Circuit	5
2.3 Passive Measurements	5
2.3.1 S11 of the Typical Sample	5
2.3.2 Passive efficiency of antenna	6
3. Specifications Drawings	7
4. Environmental Characteristic	8

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 HX 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.

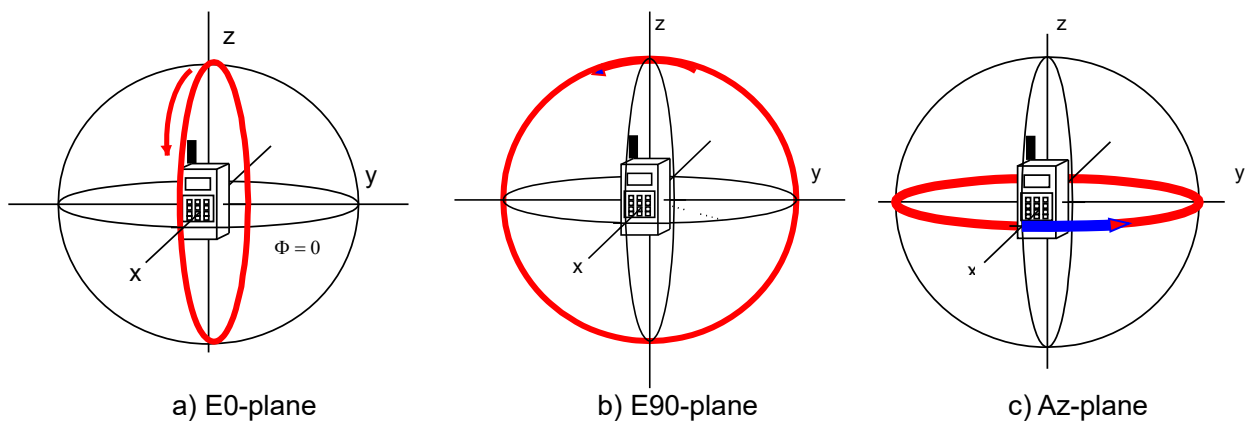


Figure 1-1 The coordinate system for the phone

2. Specifications

This report mainly provides the testing conditions of various electric and structural performance parameters for cell phone antenna ---W93 Figure 2-1 shows the antenna designed by HX & The fixturing of W93



Figure 2-1 The antenna designed by HX & The fixturing of W93

2.1 Frequency Band

	Band
BT antenna	2400MHz~2500MHz

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.

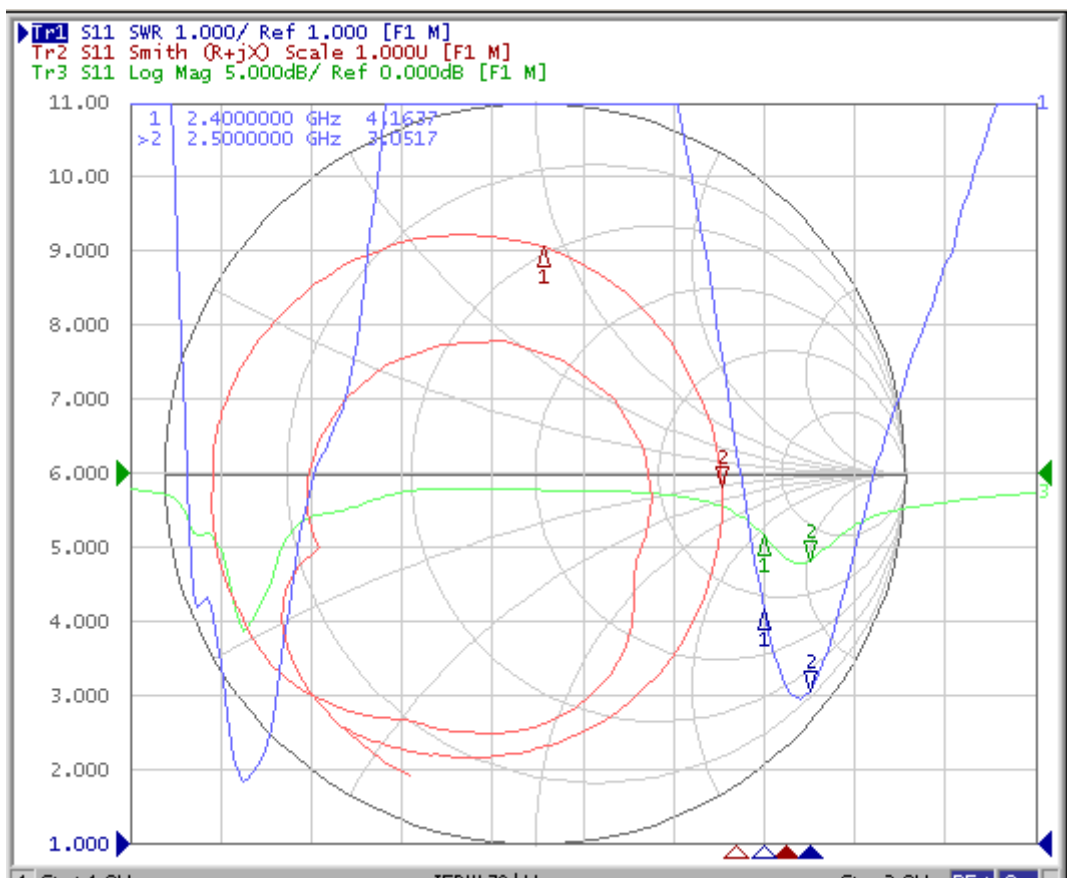
匹配无变更

Figure 2-2: Matching circuit

2.3 Passive Measurements

2.3.1 S11 of the Typical Sample

BT antenna



Add: 606, Building E, Enterprise Aviation Technology Innovation Research and Development Industrial Park, No. 1008, Songbai Road, Sunshine Community, Xili Street, Nanshan District, Shenzhen

Tel. +86-755-27657751 Fax +86-755-27599500

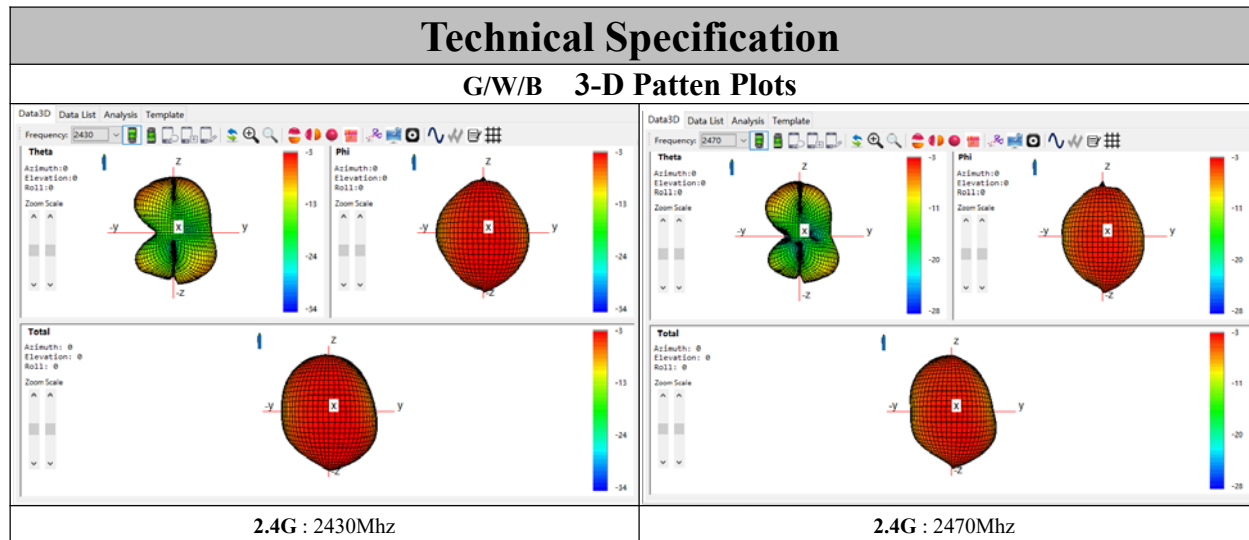
HXT **Antenna Specifications**
SHENZHEN HENGXIANGTONG ANTENNA TECHNOLOGY CO., LTD.

2.3.2 Passive efficiency of antenna

BT antenna

BT (2400MHz~2500MHz)			
(MHz)	Ave Gain	Peak Gain	Effi
	(dB)	(dBi)	(%)
2400	-6.82	-3.56	20.8
2410	-6.67	-3.51	21.54
2420	-6.61	-3.56	21.82
2430	-6.51	-3.24	22.35
2440	-6.51	-3.18	22.33
2450	-6.44	-3.55	22.7
2460	-6.33	-3.16	23.28
2470	-6.11	-2.97	24.51
2480	-6.09	-3.08	24.59
2490	-5.92	-2.77	25.56
2500	-5.85	-2.51	26.01

Technical Specification							
Band		Mode	Name	Frequency	Antenna Type	Antenna Max Gain	
BT	☒ Bluetooth			2400-2500	PIFA	-3.24	dBi



Add: 606, Building E, Enterprise Aviation Technology Innovation Research and Development Industrial Park, No. 1008, Songbai Road, Sunshine Community, Xili Street, Nanshan District, Shenzhen
 Tel. +86-755-27657751 Fax +86-755-27599500

3. Specifications Drawings

技术要求

1. FPC是否有色差，露铜，表面脏污等不良；

2. 不能有锡尖，假焊，漏焊等不良；

3. 符合ROHS标准.

②

同轴线

A16-103-T

CU

①

FPC

A16-103-F

PI+CU

深圳市飞讯无线技术有限公司

产品名称
PRODUCT NAME

产品编号
ITEM NO.

组装图

A16-103

客户
Customers

材料
Material

数量
QTY.

见附表

01

绘图
DRAW BY

审核
CHECKED BY

批准
APPROVED BY

2K

2025.12.01

1

2

27,19

9,53

30

Ø0.81

HXT-F93-RT-F1

Third Angle

0~10

10~18

18~30

30~40

40~

±0.05

±0.06

±0.08

±0.09

±0.10

○

◎

⊥

▽

Angle

0.02

0.03

0.02

0.04

±0.5°

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