

Antenna Specifications

CUSTOMER		飞傲	
CS P/N		M21	
HX P/N		A23-022-M21	
Checked by(RF)	Checked by(ME)	Checked by(QA)	Approval led by
Customer Approval			

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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 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.

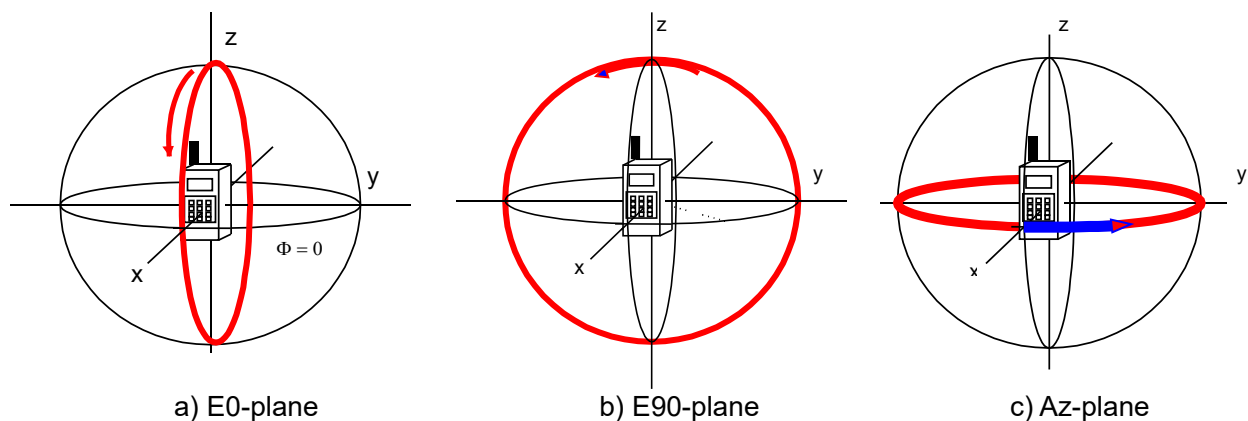


Figure 1-1 The coordinate system for the phone

2. Specifications

This report mainly provides the testing conditions of various electric and structural performance parameters for cell phone antenna --M21 Figure 2-1 shows the antenna designed by HX & The fixturing of M21

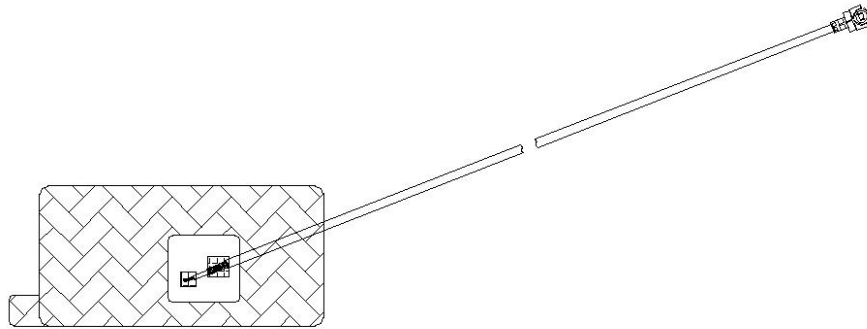


Figure 2-1 The antenna designed by HX & The fixturing of M21

2.1 Antenna frequency band and switching logic

网络模式	频段
WIFI	2.4G /5G

2.2 Impedance

2.2.1 Nominal

Nominal Impedance(including matching circuit) : 50 ohms

2.2.2 Matching Circuit

匹配未更改

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

2.3 Passive Measurements

2.3.1 Passive efficiency of antenna

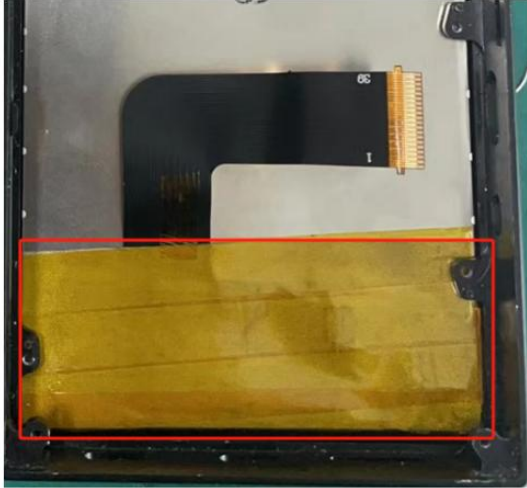
WIFI antenna							
(MHz)	Ave Gain (dB)	Peak Gain (dBi)	Effi (%)	(MHz)	Ave Gain (dB)	Peak Gain (dBi)	Effi (%)
2400	-6.12	1.17	27.92	5400	-3.58	3.17	38.8
2410	-6.15	1.28	27.79	5420	-3.88	2.54	35.91
2420	-6.05	1.4	28.36	5440	-4.15	1.98	33.48
2430	-5.97	1.54	28.81	5460	-4.34	2.24	31.8
2440	-5.92	1.62	29.08	5480	-4.29	1.93	32.2
2450	-5.82	1.74	29.66	5500	-4.11	2.77	33.83
2460	-5.98	1.82	28.71	5520	-4.17	2.45	33.29
2470	-6.13	1.6	27.9	5540	-4.16	2.75	33.41
2480	-6.12	1.77	27.96	5560	-4.26	2.66	32.53
2490	-6.28	1.39	27.06	5580	-3.91	3.22	35.66
2500	-6.46	1.25	26.1	5600	-3.88	3.13	35.91
2400	-6.12	1.17	27.92	5620	-3.57	3.27	38.95
2410	-6.15	1.28	27.79	5640	-3.71	3.14	37.57
				5660	-3.65	2.98	38.11
5180	-2.95	3.84	45.73	5680	-3.57	3.15	38.95
5200	-2.86	3.74	46.7	5700	-3.48	3.2	39.87
5220	-2.64	4.06	49.5	5720	-3.33	3.58	41.44
5240	-2.8	3.84	47.42	5740	-3.09	3.64	44.1
5260	-3.02	3.56	44.91	5760	-3.44	3.56	40.27
5280	-2.97	3.67	45.5	5780	-3.41	3.68	40.55
5300	-3.27	3.56	42.1	5800	-3.35	3.84	41.21
5320	-3.24	3.46	42.4	5820	-3.15	3.84	43.42
5340	-3.36	3.25	41.17	5840	-3.32	3.63	41.55
5360	-3.83	2.66	36.42	5860	-3.46	3.63	40.08
5380	-3.47	3.1	39.96	5880	-3.49	3.46	39.8

2.4 Active Measurements

	WIFI (亮)			
	测试带宽	channel	TRP	TIS
2.4G	11b : 11Mbps	1	10.12	-81.9
		7	10.46	-81.79
		13	11.9	-80.08
5G	11a : 54Mbps	36	11.42	-62.98
		64	12.43	-70.1
		165	9.92	-67.05

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

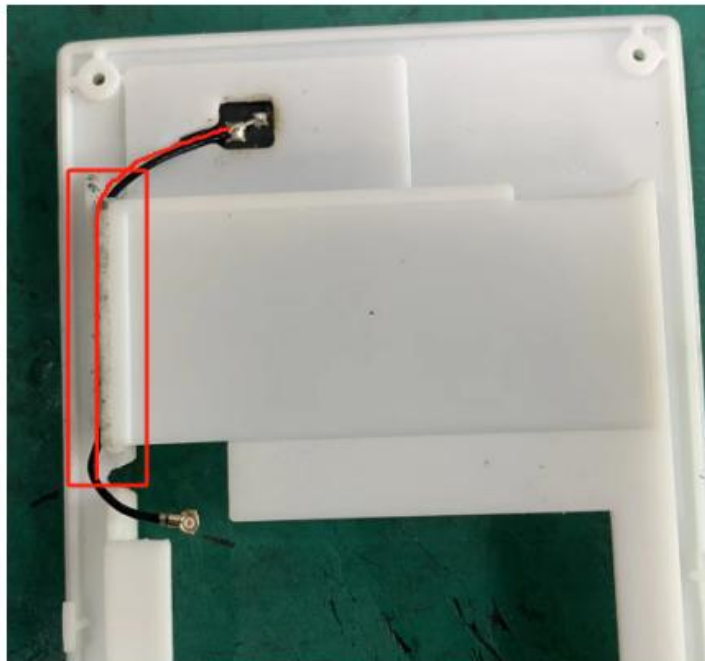
3. Environmental treatment of the whole machine



如图:红色框内屏排线用导电布粘贴做接地处理
上方用绝缘胶粘贴避免导电布接触主板元器件导致主板短路



如图:主板屏蔽罩用导电泡棉粘贴与背屏做接地处理



同轴线走线方式如图所示

4. Mechanical Properties

4.1 Specifications Drawings

3代端子 端子朝上焊接

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	A23-022-T	CU	HXT 深圳市恒祥通天线技术有限公司 深圳市宝安区西乡街道阳光社区松白路1008号金航科技园研发产业园E栋606 Tel: (0755) 27657751 Fax: (0755) 27599500 Postal Code: 518126		产品名称	PRODUCT NAME	组装图	客户 customers 材质 material 数量 QTY.	
①	FPC	A23-022-F	PI+CU			产品编号	ITEM NO.	A23-022		
序号	名称	编号	材质			产品编号	ITEM NO.	A23-022		
						产品编号	ITEM NO.	A23-022		
						客户	customers	材质		
						数量	QTY.	01		
						见附表				
						批准	APPROVED BY			
						审核	CHECKED BY			
						绘图	DRAWN BY	2024.12.28		
						0~10	±0.05	○		
						10~18	±0.06	◎		
						18~30	±0.08	⊥		
						30~40	±0.09	∇		
						40~	±0.10	Angle		
								±0.5°		
								Third Angle		

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5. 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