



福贝特国际（香港）有限公司

客 户：奥尼
机 型：C109
芯 片：

制作人：Andy
日 期：2023.8.31



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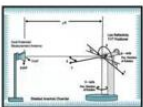
测试仪器与环境

OTA LAB

拥有 OTA 实验室 5m * 3m*3m 单探头一座，频率范围 400MHz-6GHz，支持无源，GSM,CDMA,WCDMA,TD,LTE,BT,WIFI,GPS,NB-IOT等有源测试，拥有模拟人头手测试设备。

微波暗室测量系统

我司微波暗室是全球最先进的3D测量系统之一。它可以完成无源天线方向图、增益、效率以及有源整机的3D/2D TRP&TIS的精确测量。测试适用范围：OTA 有源测试：BT/GPS/WIFI/2G/3G/LTE，无源测试：0.4GHz-6GHz。能同时满足被测天线有源与无源性能测量。符合OTA性能测量规范。



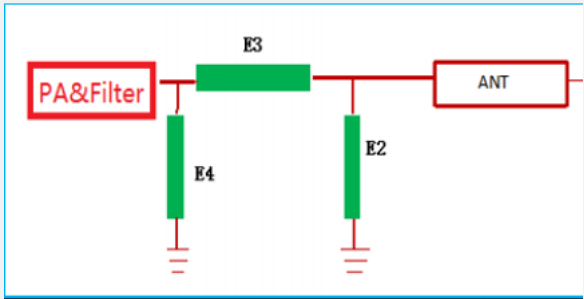
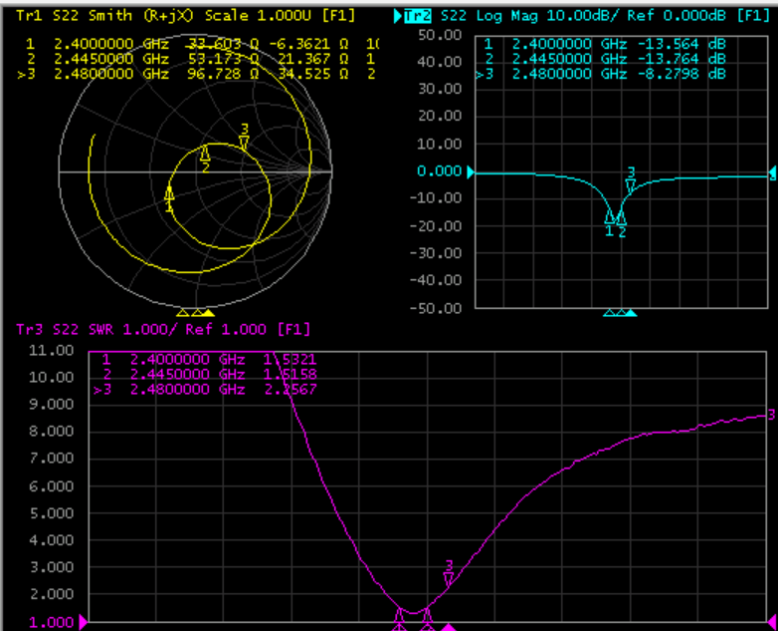
Microwave darkroom measurement system
The microwave anechoic chamber is the most advanced 3D measurement system in the world. Which can measure passive antenna pattern, gain, efficiency and active 3D/2D TRP&TIS accurately. Test scope of application: OTA Active: BT/GPS/WIFI/2G/3G/LTE, Passive: 0.4GHz-6GHz. The chamber is compliant to OTA performance measurement specifications, which is designed for both active and passive test.



报告版本提纲

机型类别	TWS耳机	
调试频段及材质需求	BT	2.4GHz
	材质	FPC
调试性能要求	以客户实际体验及暗室数据为准	
版本	V1.0	

接收器天线参数（兀型电路）

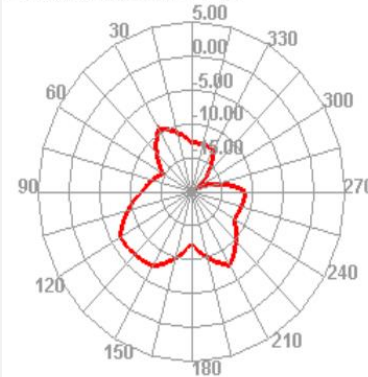


Element	parameter value
ANT	FPC
E2	0.8PF
E3	1PF
E4	NC

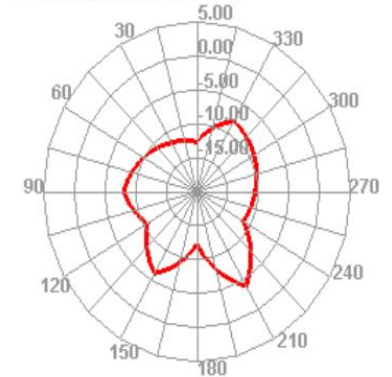
接收器天线效率

Passive Test For BT			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	12.75	-8.3	-3.53
2410	13.15	-8.15	-3.49
2420	14.59	-8.75	-4.26
2430	15.4	-8.43	-4.1
2440	16.83	-8.65	-4.54
2450	15.06	-8.19	-4.12
2460	15.73	-8.7	-4.74
2470	14.22	-8.5	-4.65
2480	12.79	-9.09	-5.26

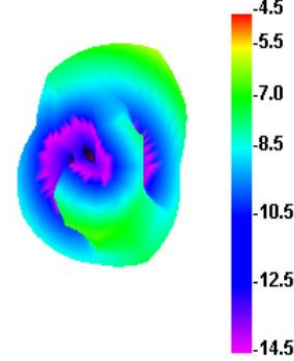
2400.000MHz E1



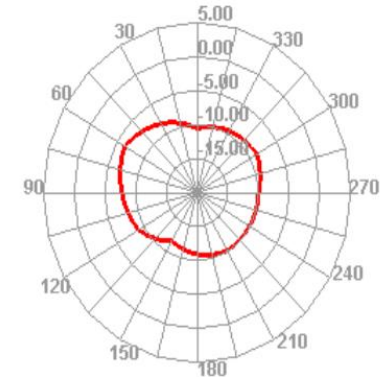
2400.000MHz E2



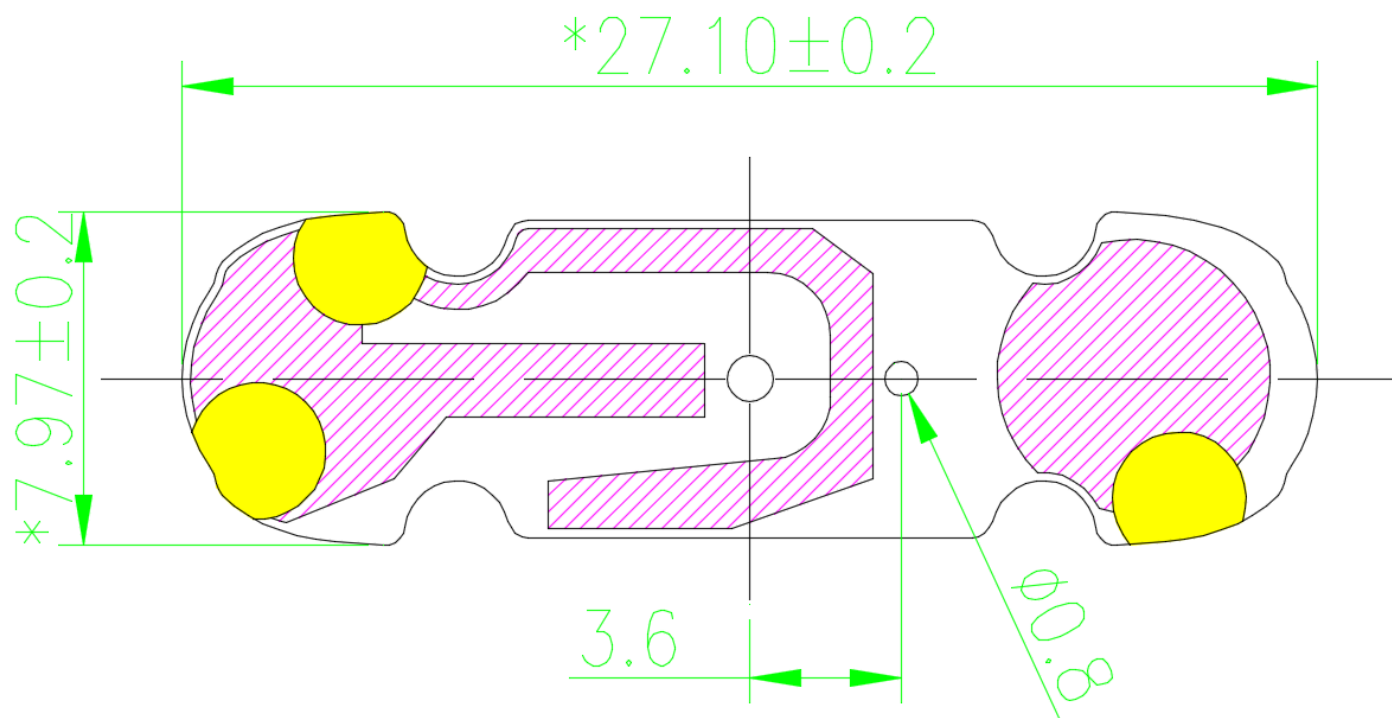
2440.000MHz



2440.000MHz H



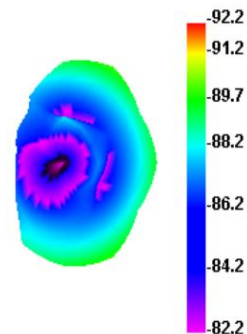
接收器天线效率



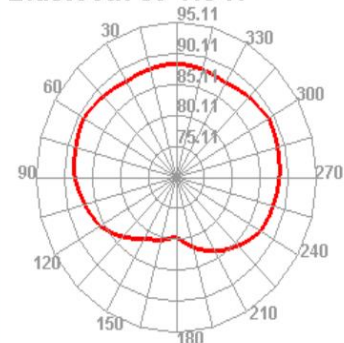
接收器有源

R			
Test	Bluetooth TIS		
Result	0	39	78
Frequency (MHz)	2402	2441	2480
TRP (dBm)	14.96	15.19	14.87
TIS (dBm)	-89.58	-88.42	-90.77

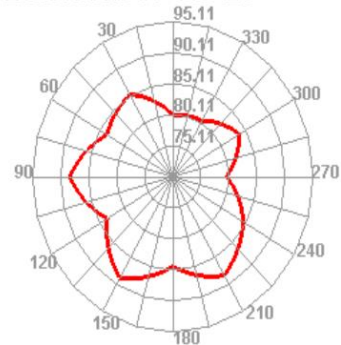
Bluetooth 39 TIS



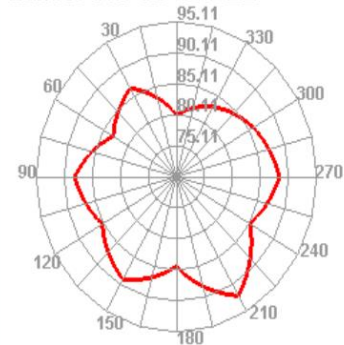
Bluetooth 39 TIS H



Bluetooth 39 TIS E1



Bluetooth 39 TIS E2





谢谢，合作愉快！

Thank You!

The Concepts National Income And National Product Have Roughly
The Same Value And Can Be Used Interchangeably If Our Interest Is In
Their



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