



深圳市凯普深通讯科技有限公司

Shenzhen cape deep communication technology co., LTD

天线调试报告

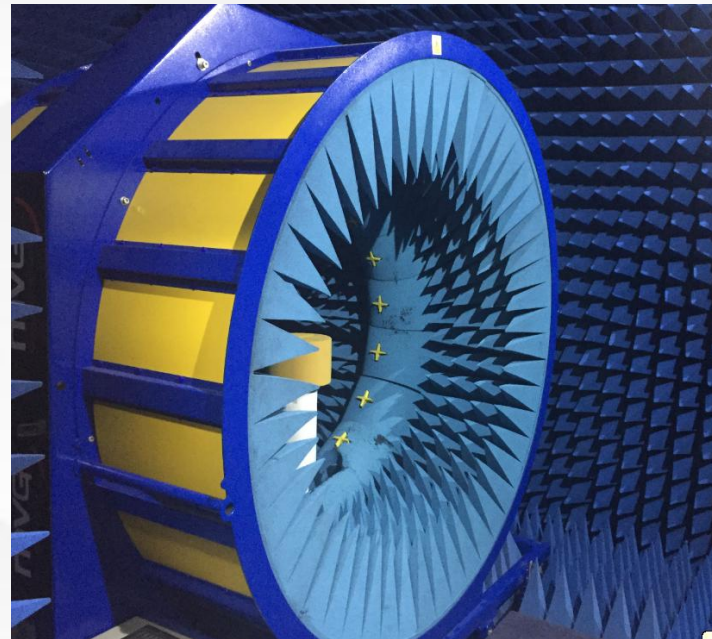
test report

客 户：顶设科技
项 目：TW500
射 频：陈工
日 期：2022.06.14



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实验室测试环境及设备



测试项目	测试设备
S11、S12、VSWR、LOSS	网络分析仪E5071B、E5062A
Efficiency、Gain 3D Radiation Pattern	Satimo SG16暗室、GP7*4*3暗室、E5071B
TRP、TIS	Satimo SG16暗室、GP7*4*3暗室、8960、 CMW500、MT8820C、E4438C、



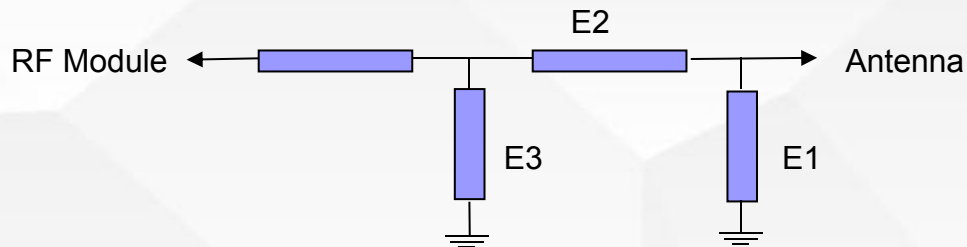
项目调试简介

整机类型	耳机		
		频段信息	天线形式
天线种类及频段信息	天线	2400-2480M	单集
天线材质	FPC		



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匹配电路



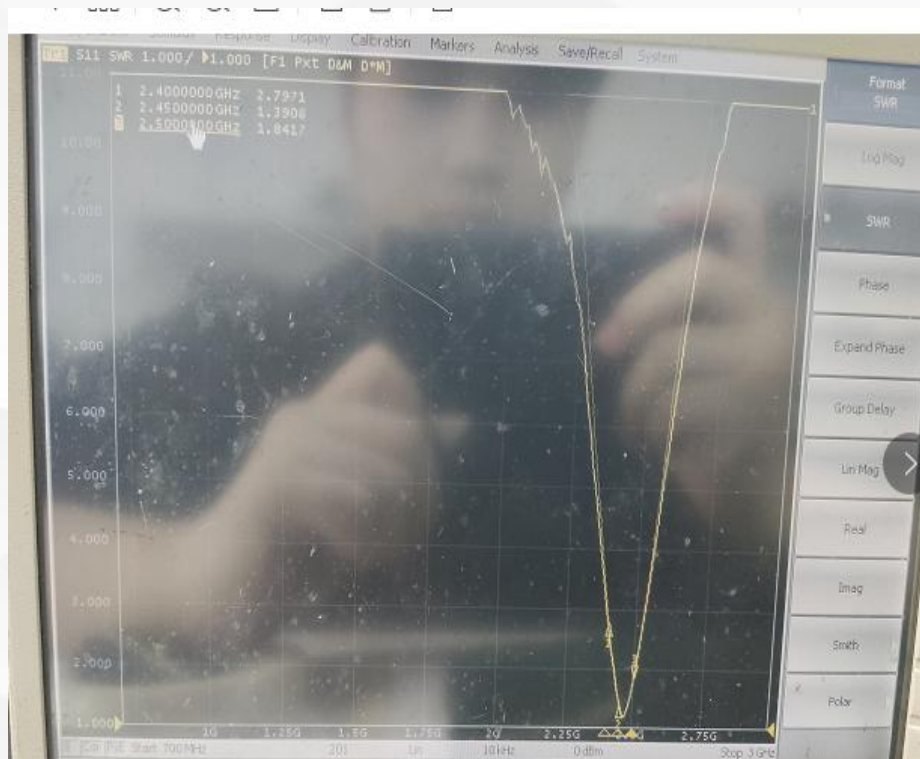
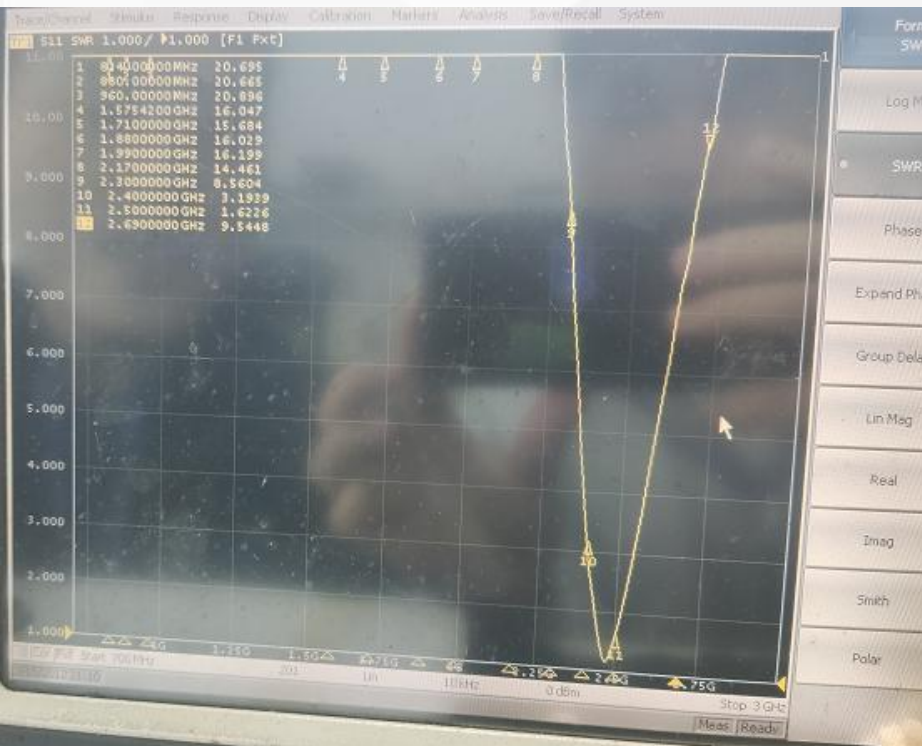
L	
E1	2.7PF
E2	0欧姆
E3	NC

R	
E1	2.7PF
E2	0欧姆
E3	NC



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耳机天线无源驻波图





蓝牙有源测试数据

自由空间

L

Channel	TRP(dBm)	TIS(dBm)
0	6.5	-87.2
39	7.5	-86.7
78	7.8	-86.5

R

Channel	TRP(dBm)	TIS(dBm)
0	7.1	-87.2
39	8.2	-87.5
78	8.5	-87.8



蓝牙有源测试数据

头模

L

Channel	TRP(dBm)	TIS(dBm)
0	2.3	-82.5
39	3.1	-83.1
78	3.3	-82.4

R

Channel	TRP(dBm)	TIS(dBm)
0	2.5	-82.2
39	3.3	-82.6
78	3.6	-83.1



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蓝牙无源测试数据

L

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	23.33	-6.32	-2.43
2410	23.78	-6.24	-2.49
2420	24.39	-6.13	-2.52
2430	25.05	-6.01	-2.56
2440	26.29	-5.8	-2.25
2450	25.8	-5.88	-2.28
2460	23.33	-6.32	-2.55
2470	21.72	-6.63	-2.84
2480	20.07	-6.98	-3.15
2490	19.16	-7.18	-3.2
2500	16.94	-7.71	-3.46

R

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	21.02	-6.77	-2.47
2410	22.22	-6.53	-2.21
2420	23.52	-6.29	-2.05
2430	24.9	-6.04	-2
2440	27.02	-5.68	-1.92
2450	27.16	-5.66	-2.1
2460	24.97	-6.03	-2.49
2470	23.62	-6.27	-2.73
2480	21.9	-6.6	-3.21
2490	20.82	-6.82	-3.45
2500	18.27	-7.38	-4.09

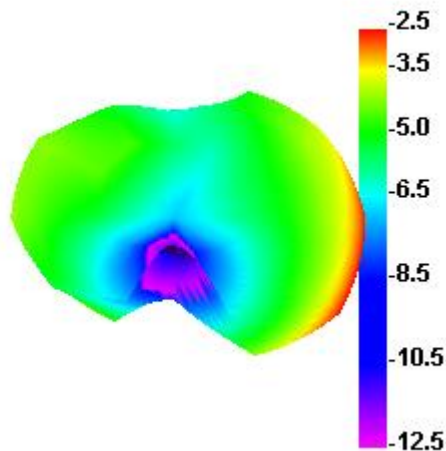


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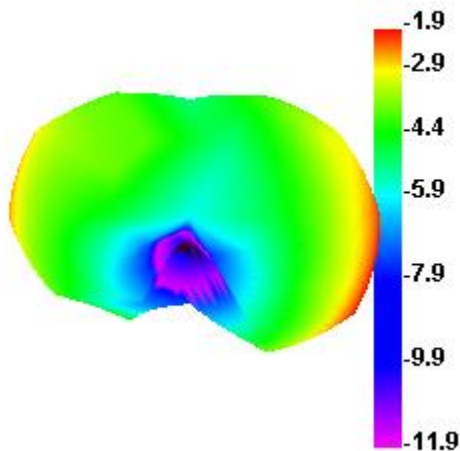
蓝牙无源测试 3D苹果图

R

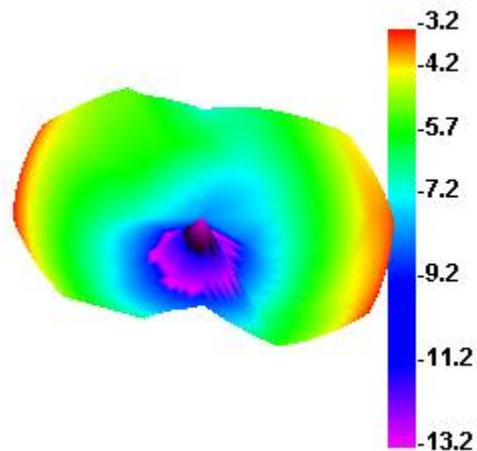
2400.000MHz



2440.000MHz



2480.000MHz



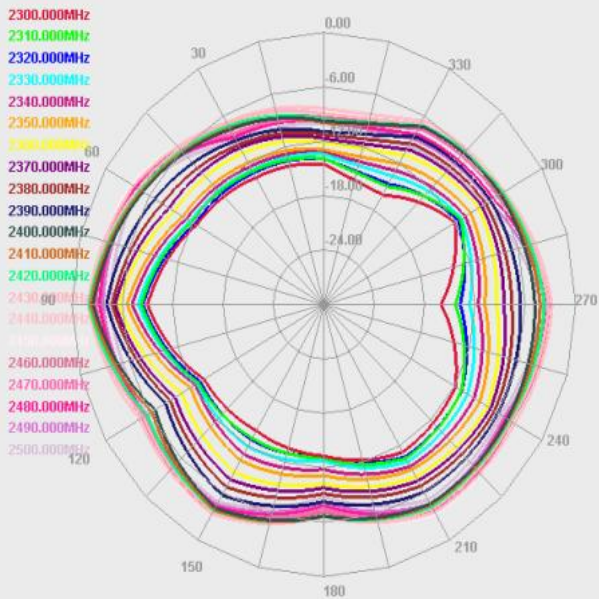


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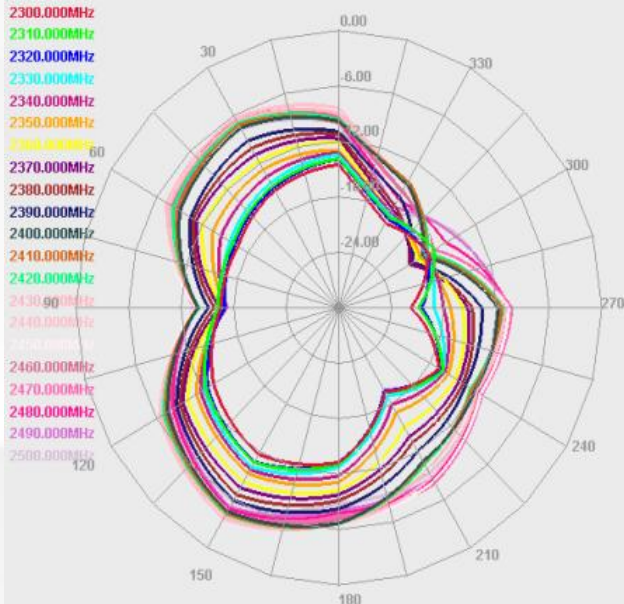
蓝牙无源测试 2D方向图

R

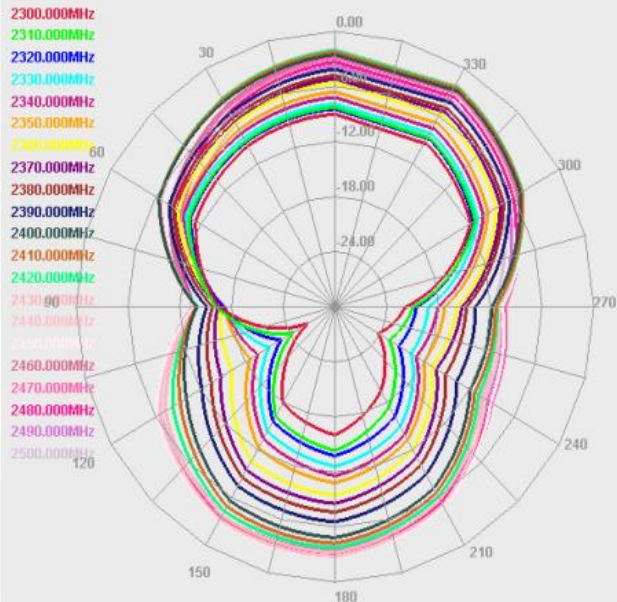
E1 Face



E2 Face



Horizontal



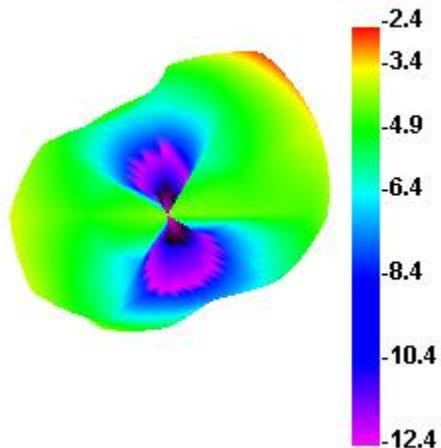


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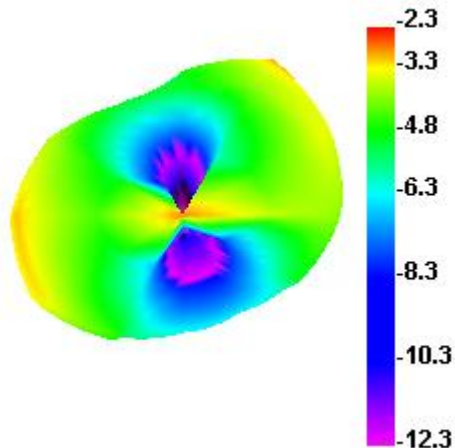
蓝牙无源测试 3D苹果图

L

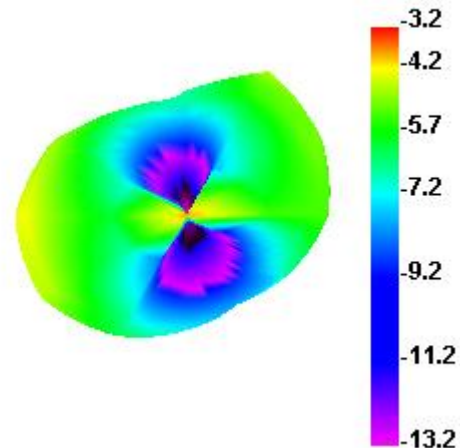
2400.000MHz



2440.000MHz



2480.000MHz



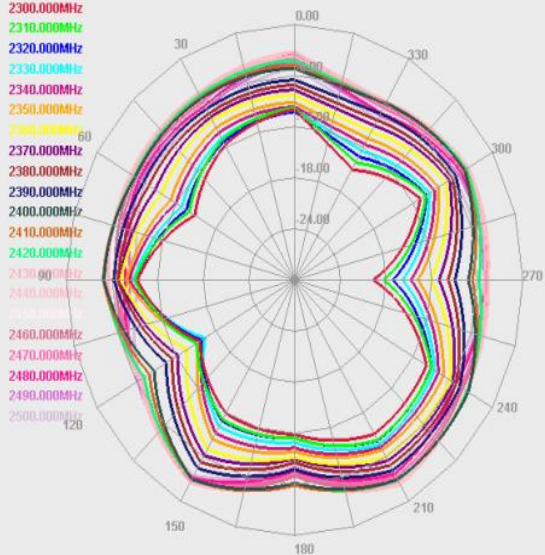


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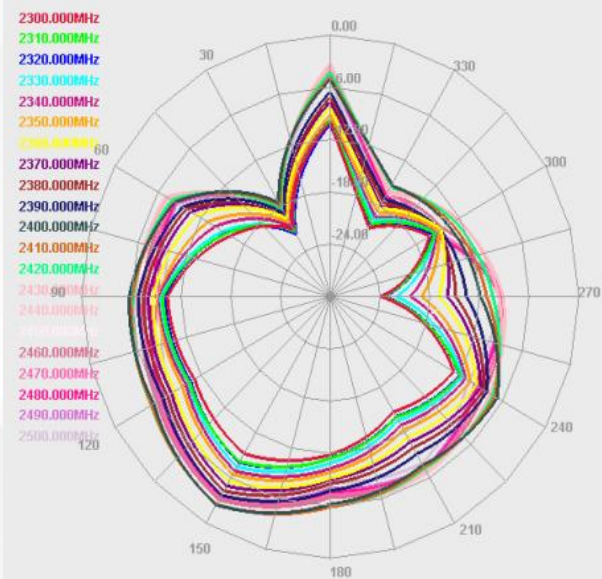
蓝牙无源测试 2D方向图

L

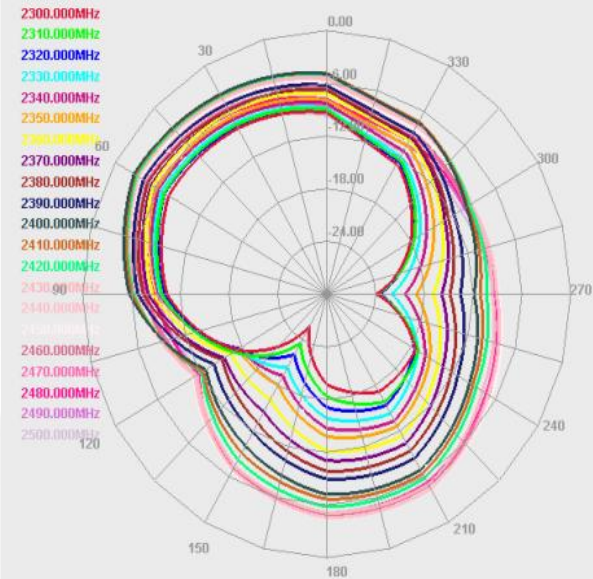
E1 Face



E2 Face



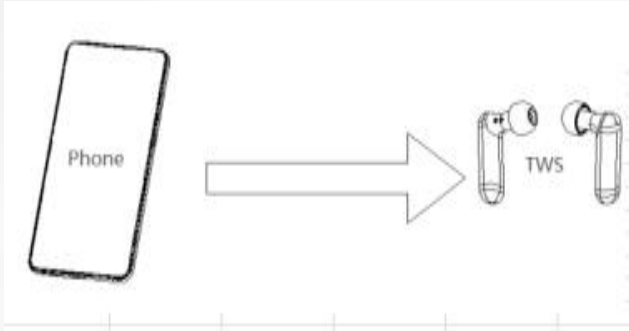
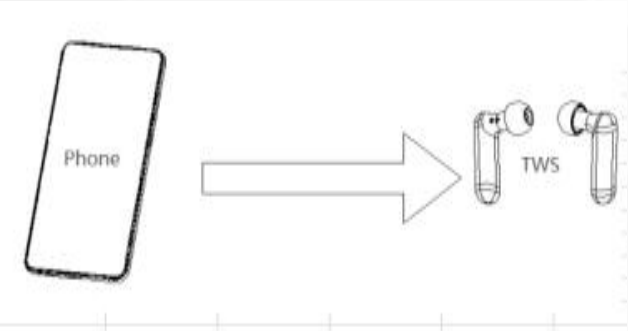
Horizontal



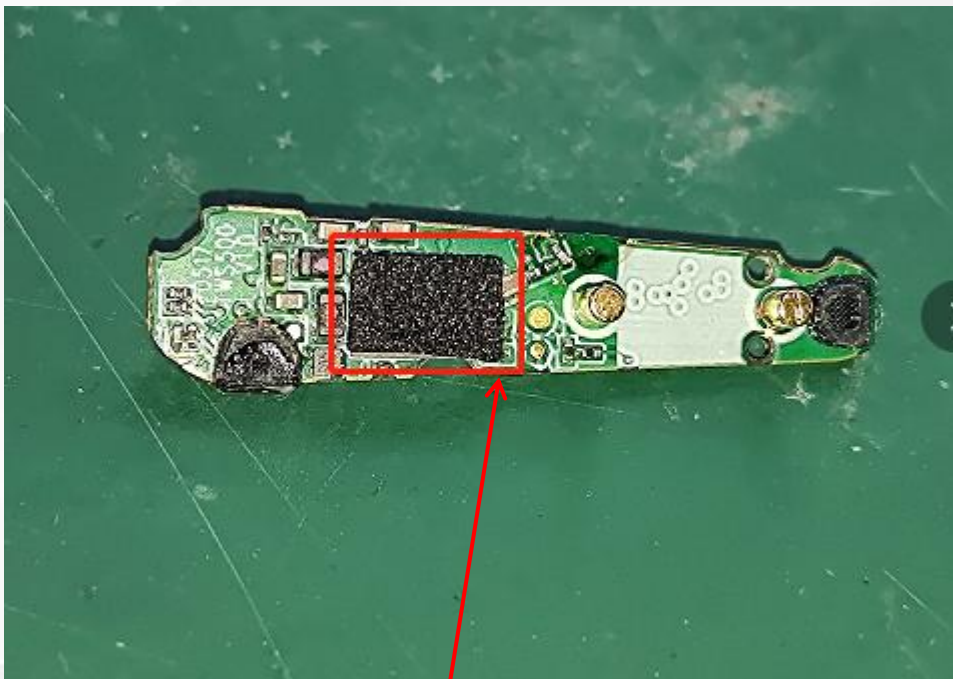


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实测数据

Phone	小米8				对比机TW300 (测试手机小米8)			
Direction								
	Front	Back	Left	Right	Front	Back	Left	Right
#1 Group	18M	18M	18M	18M	20M	19M	19M	19M
测试时每个方位左右转30度，取最小值。								

环境处理



如图，在芯片处贴一块0.5MM绝缘绵。



联系方式

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THE END

感谢您的宝贵意见！