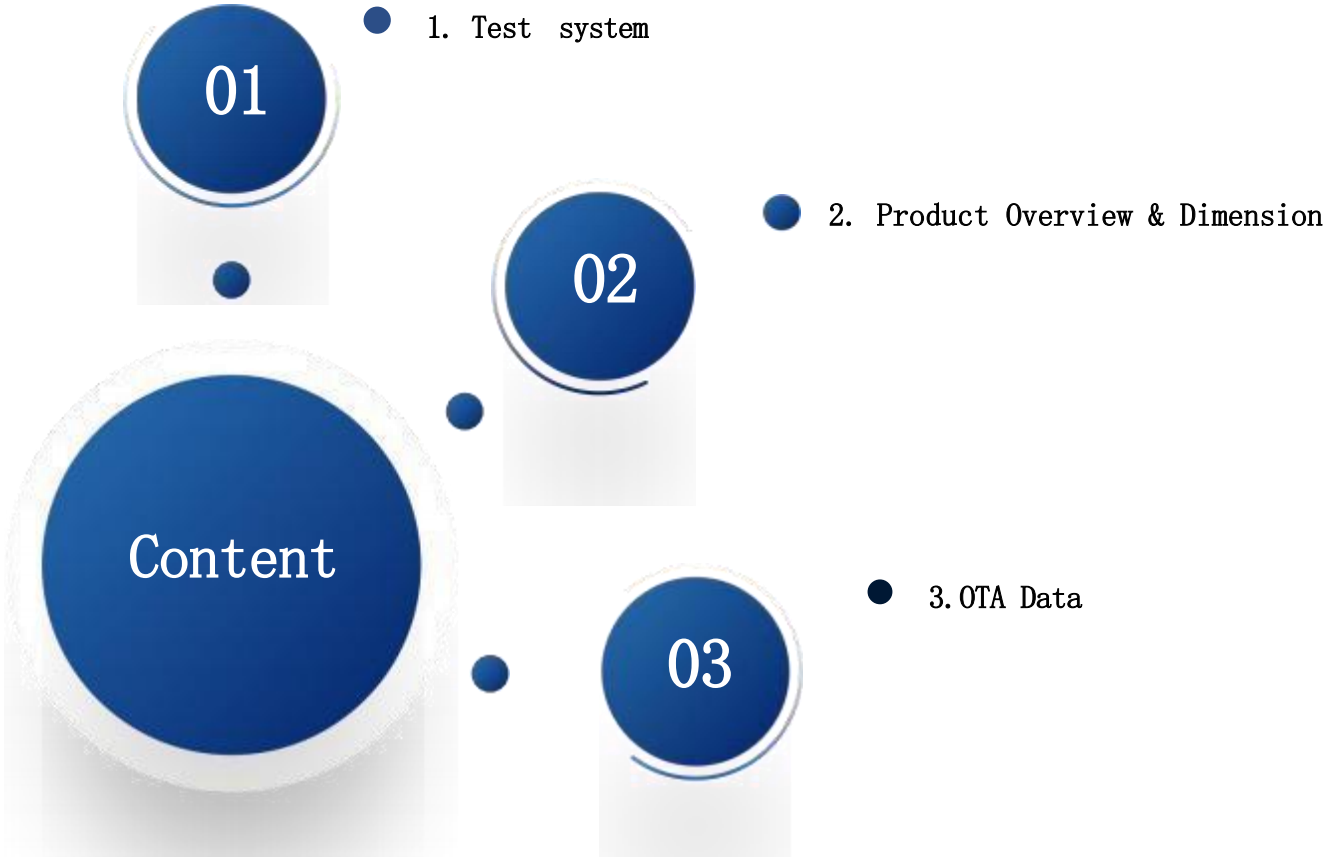
Customer	博威
Project	G223
Antenna Revision	A3
Prepared by	15993920520
Checked by	17279710721
Date	2025.6.18

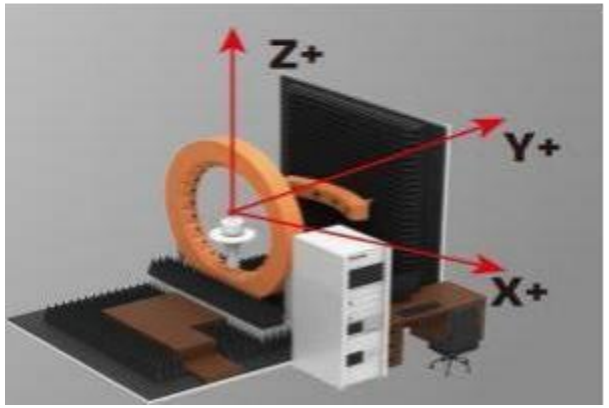
Purpose

This report is to measure the performance of antenna for G223 The antenna operating frequency at 2400-2500MHz All test data are showed as below.



1.TestSystem

Sequence Number	Test Item	equipment
S parameter	VSWR	Agilent 5071C & Agilent 5071B
OTA Test	TRP& TIS	Agilent 8960 & CMW500 STIMO
Gain & Efficiency	Gain & Efficiency	SATIMO Agilent 5071C



R

德立电感

2P(村田1%）

H8

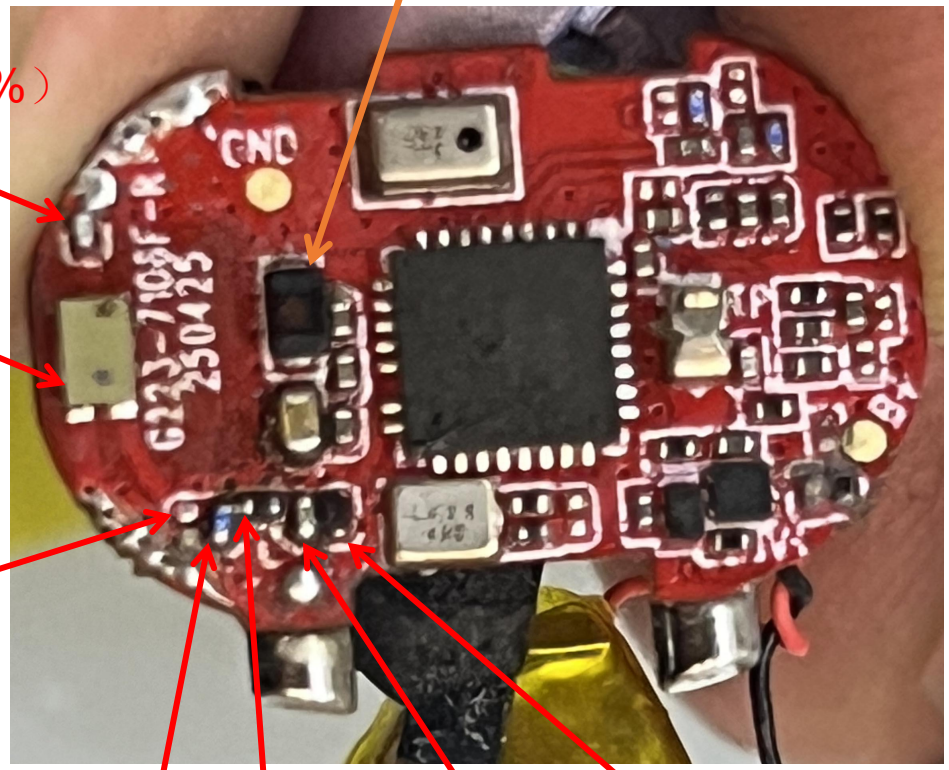
NC

1NH(村田1%）

0R(村田1%)

1.8P(村田1%)

HY0521P0



德立电感

L

3.9P(村田1%）

H16

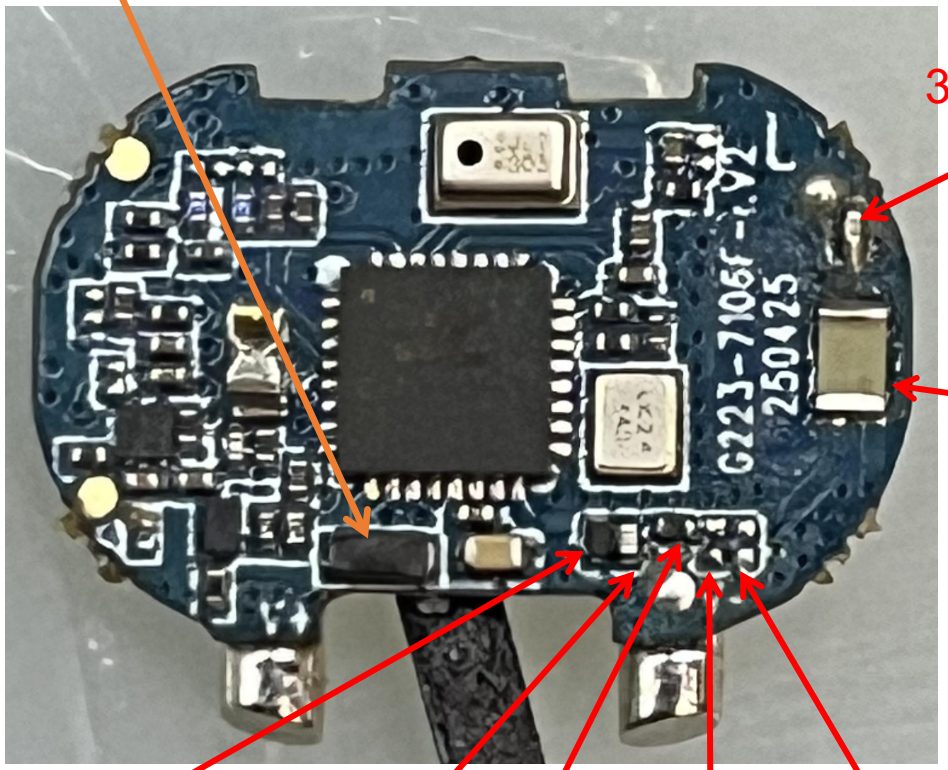
HY0521P0

1.5P(村田1%）

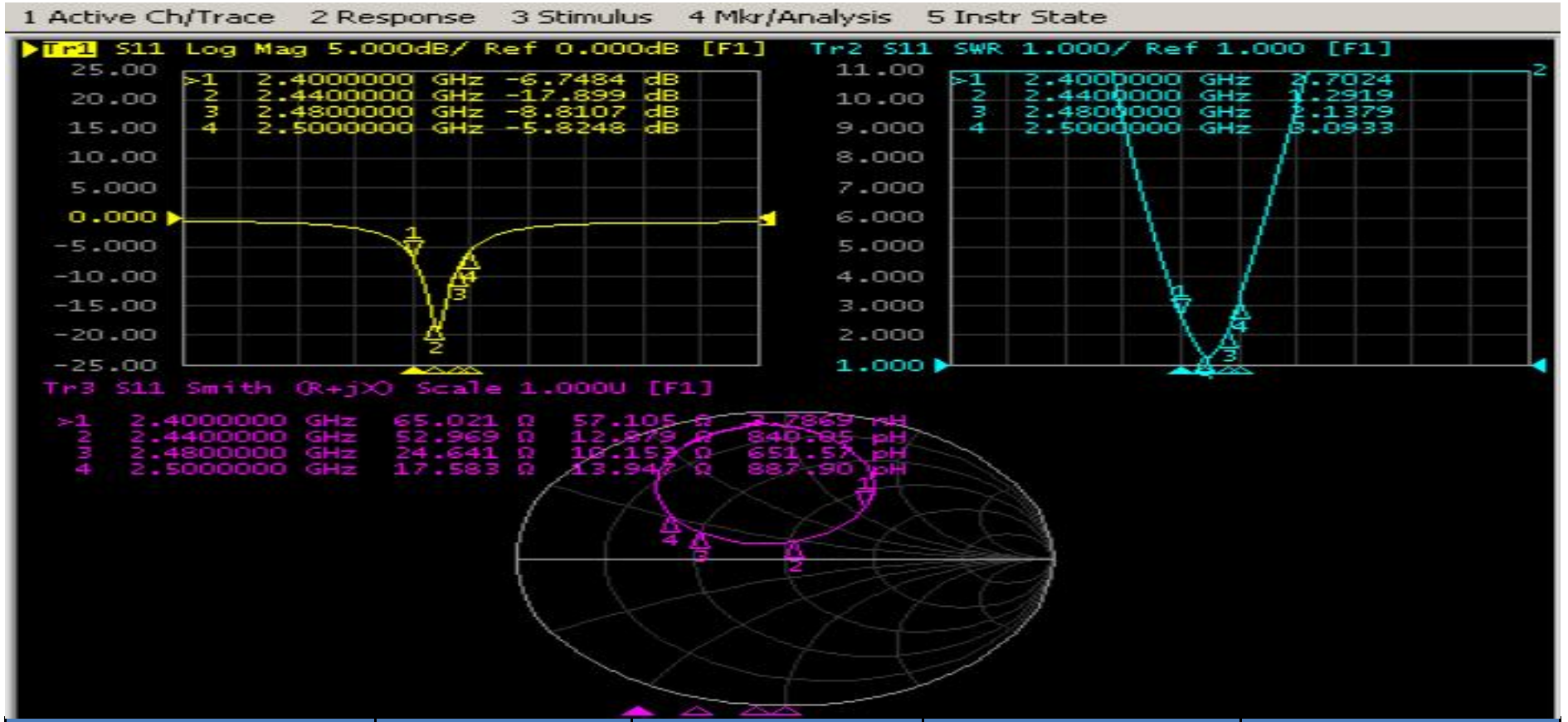
0R(村田1%）

NC

NC



3 Test Result VSWR&Log Mag&Smith(Ω) L



Frequency (MHz)	2400	2440	2480	2500
Log Mag	-6.74	-17.89	-8.81	-5.82
Smith(Ω)	65.02	52.96	24.64	17.58
VSWR	2.70	1.29	2.13	3.09

L

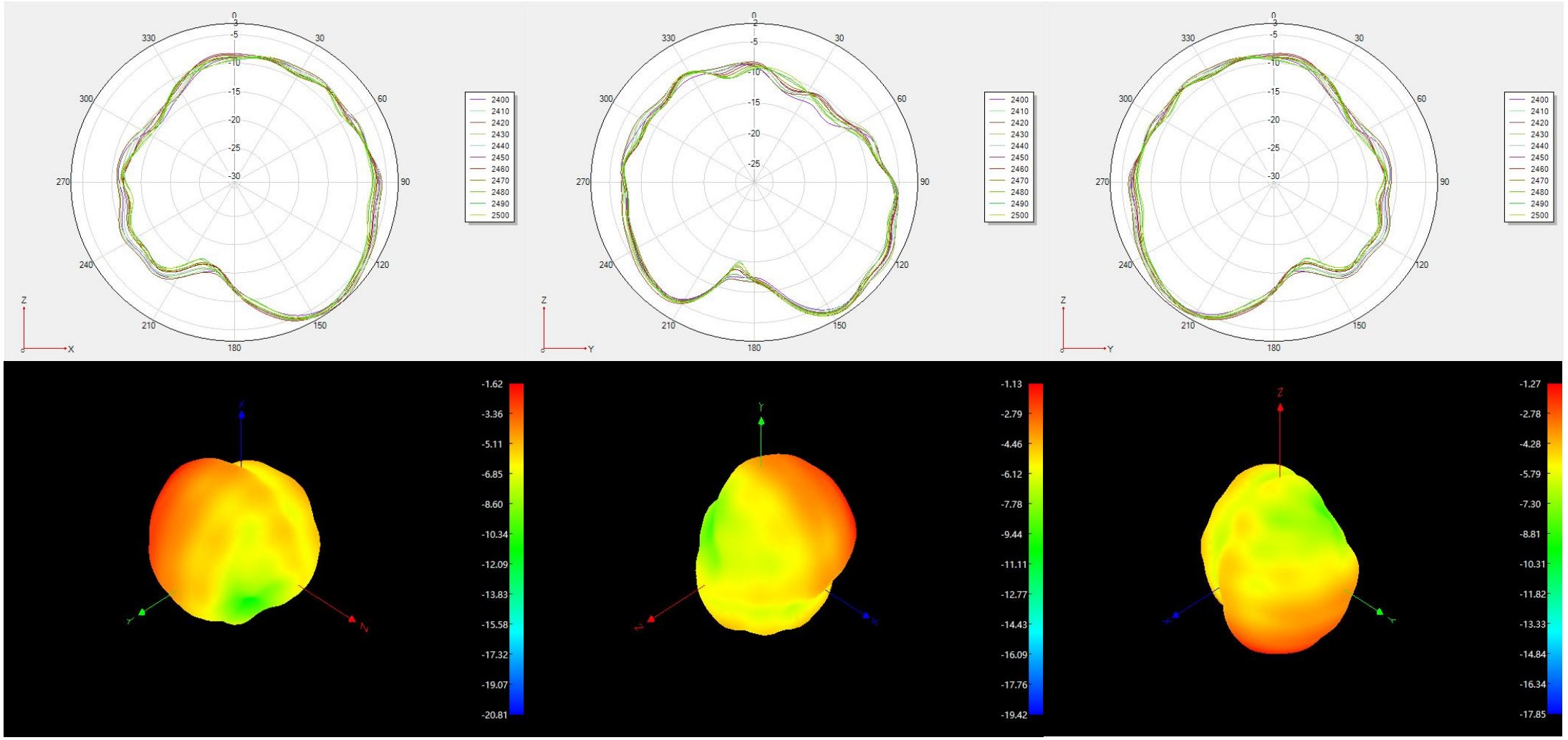
4. Test Result

4.1 Gain & Efficiency——ANT

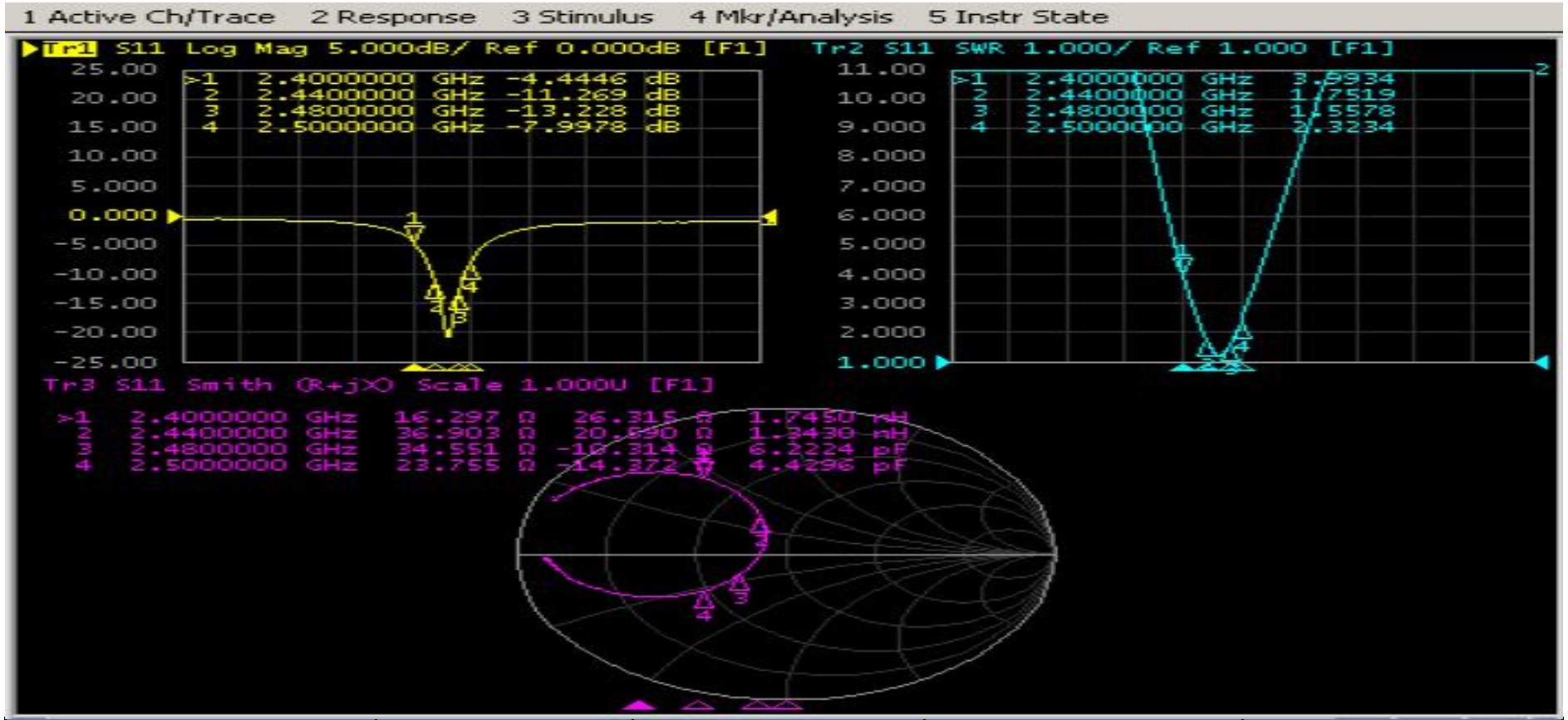
Frequency (MHz)	Efficiency (%)	Max GAIN (dBi)
2400	20.17	-1.62
2410	21.33	-1.49
2420	21.74	-1.05
2430	22.88	-1.39
2440	23.89	-1.13
2450	23.06	-1.6
2460	23.12	-1.15
2470	22.04	-1.62
2480	22.1	-1.27

4. Test Result

4.2 2D Pattern——BTANT



3 Test Result VSWR&Log Mag&Smith(Ω) R



Frequency (MHz)	2400	2440	2480	2500
Log Mag	-4.44	-11.26	-13.22	-7.99
Smith(Ω)	16.29	36.90	34.55	23.75
VSWR	3.99	1.75	1.55	2.32

R

4. Test Result

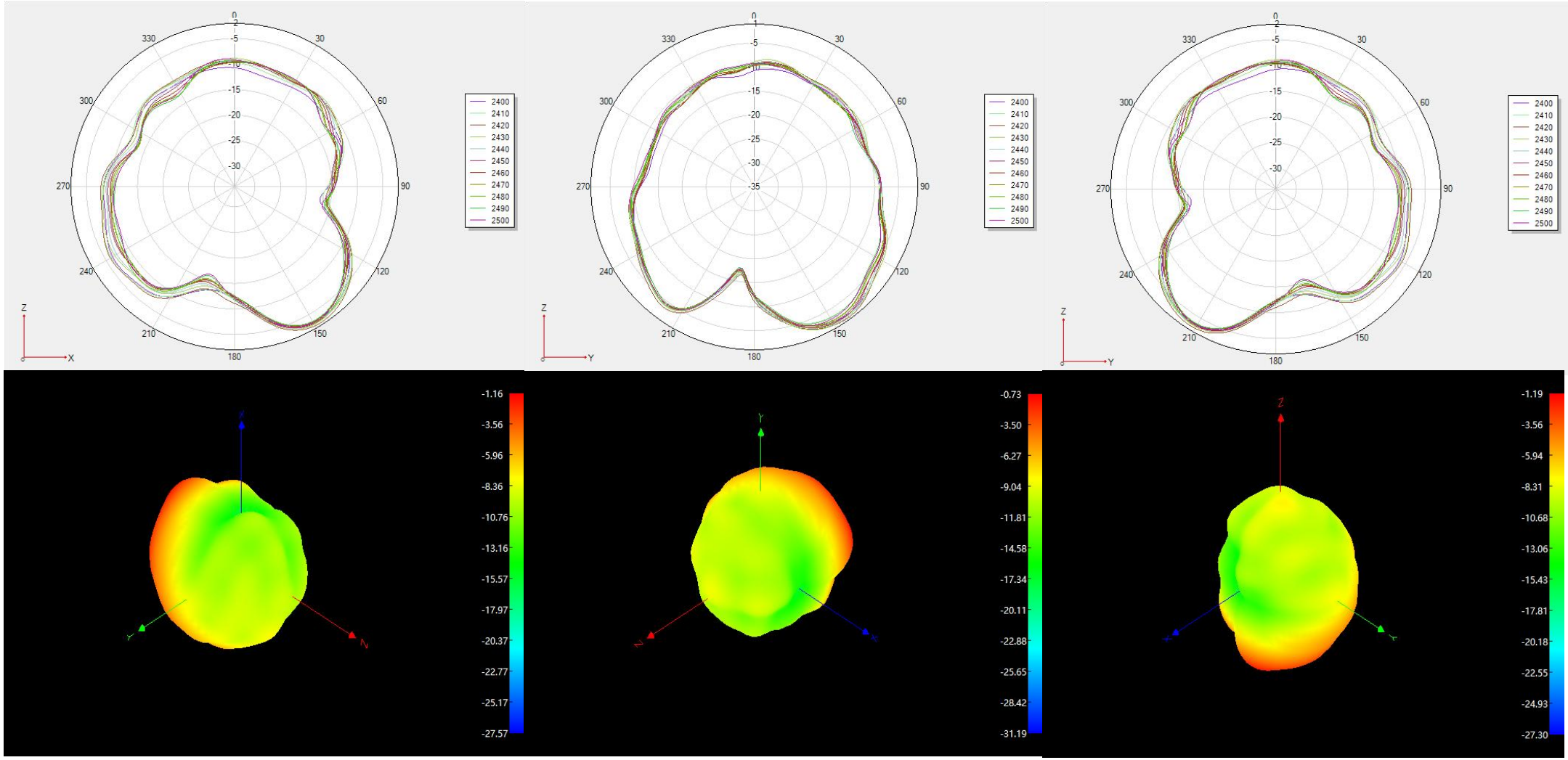
4.1 Gain & Efficiency——ANT

Frequency (MHz)	Efficiency (%)	Max GAIN (dBi)
2400	21.53	-1.16
2410	22.73	-0.96
2420	24.28	-0.48
2430	24.23	-0.61
2440	24.49	-0.73
2450	23.98	-1.18
2460	21.98	-0.87
2470	20.65	-1.41
2480	20.28	-1.19

R

4. Test Result

4.2 2D Pattern——BTANT



2.OTA Data

自由数据-1#

Test Equipment：	R&S CMW500			
Test Condition：	3D chamber			
Band		Channel	TRP(dBm)	TIS(dBm)
BT	L	0	0.17	-84.89
		39	1.97	-85.66
		78	1.94	-85.44
	R	0	-1.65	-83.87
		39	-0.56	-85.58
		78	-1.08	-84.93

2.OTA Data

头模数据-1#

Test Equipment：	R&S CMW500			
Test Condition：	3D chamber			
Band		Channel	TRP(dBm)	TIS(dBm)
BT	L	0	-3.97	-80.82
		39	-2.85	-80.23
		78	-2.76	-80.97
	R	0	-4.8	-80.08
		39	-3.59	-80.16
		78	-3.49	-80.56

2.OTA Data

自由数据-2#

Test Equipment：	R&S CMW500			
Test Condition：	3D chamber			
Band		Channel	TRP(dBm)	TIS(dBm)
BT	L	0	-0.51	-84.51
		39	1.25	-85.54
		78	1.97	-85.48
	R	0	-1.93	-84.43
		39	-0.87	-87.33
		78	-0.59	-85.66

2.OTA Data

头模数据-2#

Test Equipment：	R&S CMW500			
Test Condition：	3D chamber			
Band		Channel	TRP(dBm)	TIS(dBm)
BT	L	0	-4.12	-80.33
		39	-3.42	-80.31
		78	-3.06	-80.61
	R	0	-4.76	-80.21
		39	-3.82	-81.77
		78	-3.77	-80.72

装配方式

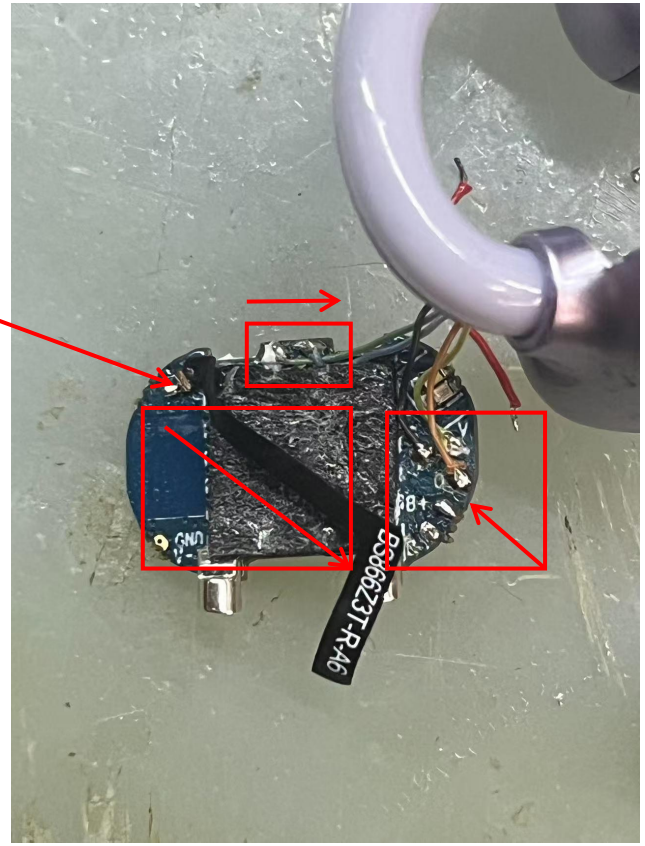


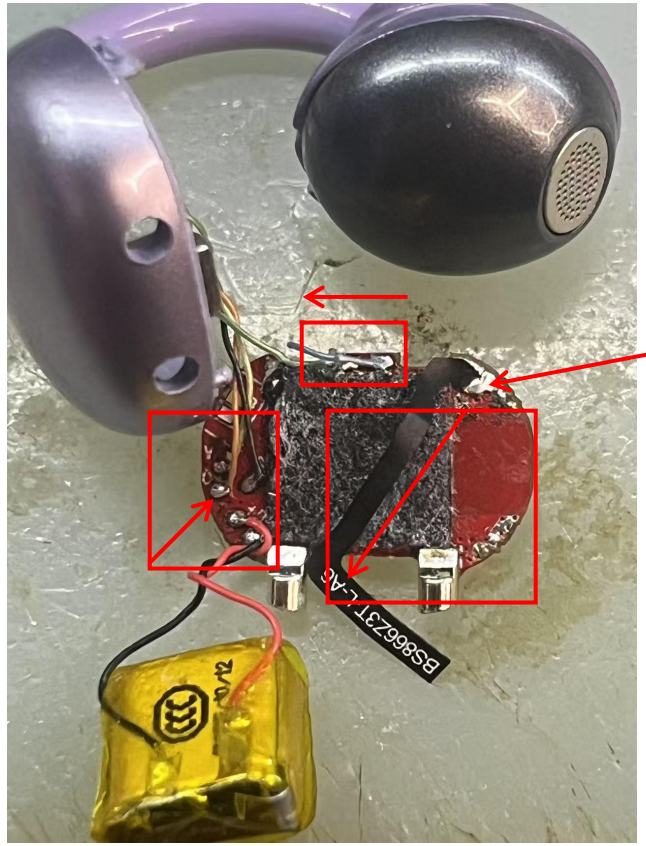
1： 电池线长度改为20MM,从电池两侧出线
2： C桥靠近耳机板长度20MM,喇叭端18MM

装配方式

L

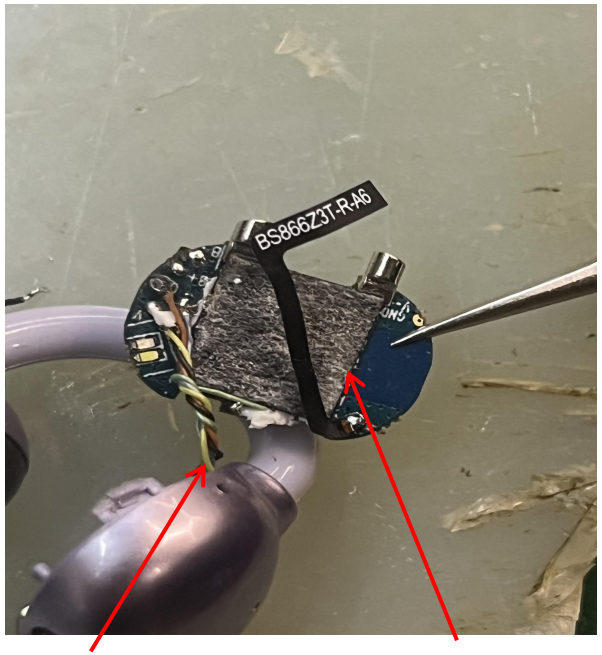
R





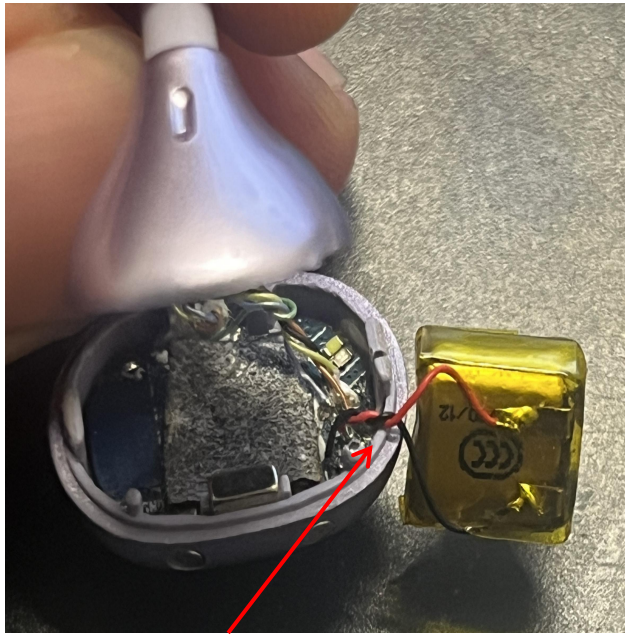
延长地及喇叭电池线焊接方向如上图所示

装配方式 L



喇叭线绕线

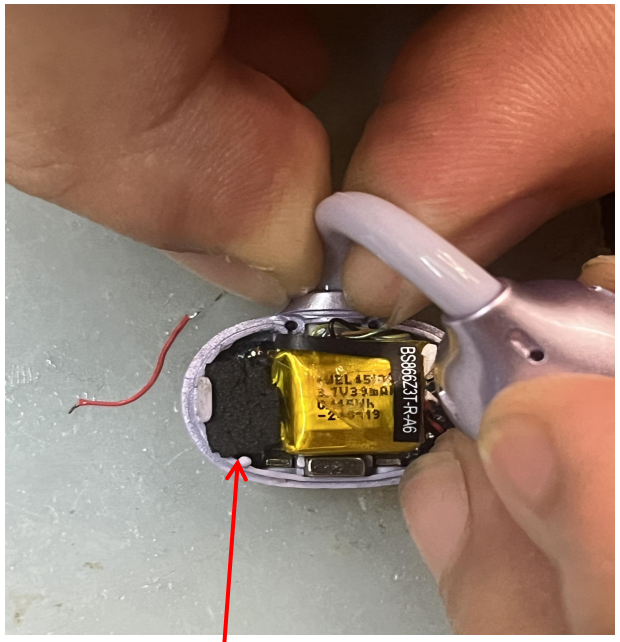
9*9*0.5MM
EVA棉



电池线绕线

喇叭线摆放位置

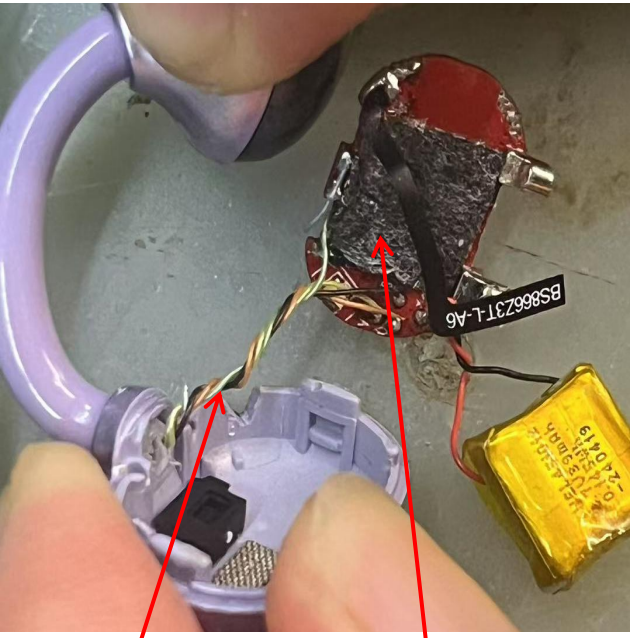
延长地摆放方向



8*5*5MM,EVA棉

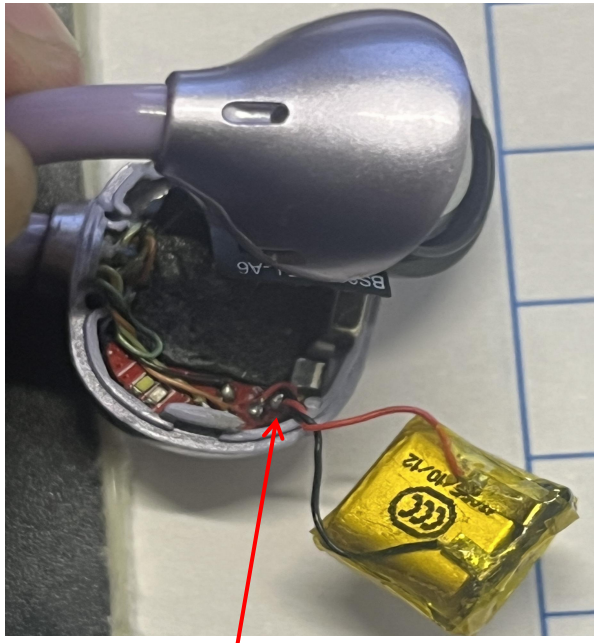
1：电池下方贴9*9*0.5MM的EVA棉把电池与主板隔开，天线净空区域贴8*5*5MM的EVA棉防止电池搭在天线净空区内
2：电池线,喇叭线顺时针方向绕线3圈（360度为一圈）直至绕紧，电池极耳朝主板方向装配
3：喇叭线及延长地的摆放如上图红框所示

装配方式 R

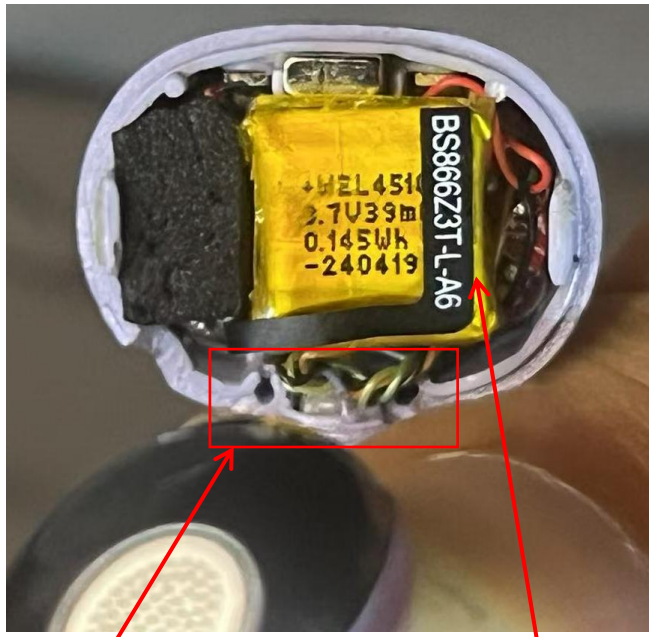


喇叭线绕线

9*9*0.5MM
EVA棉

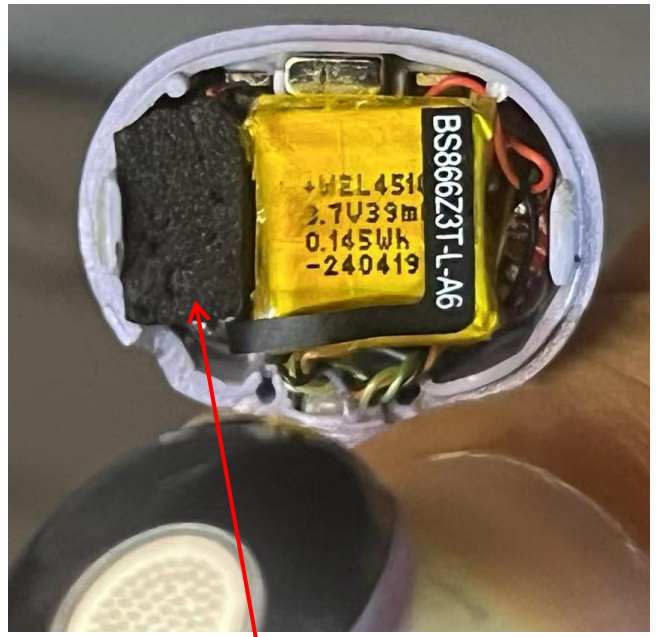


电池线线绕线



喇叭线摆放位置

延长地摆放方向



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3：喇叭线及延长地的摆放如上图红框所示

WORK REPORT

谢谢观看