ShenZhen Cicent Comunication Technology CO. Ltd

样品规格书

客户：	瀛通
项目名称：	EPA243
物料类别：	BT Internal Antenna
版本：	V1.0
日期：	2021.07.14

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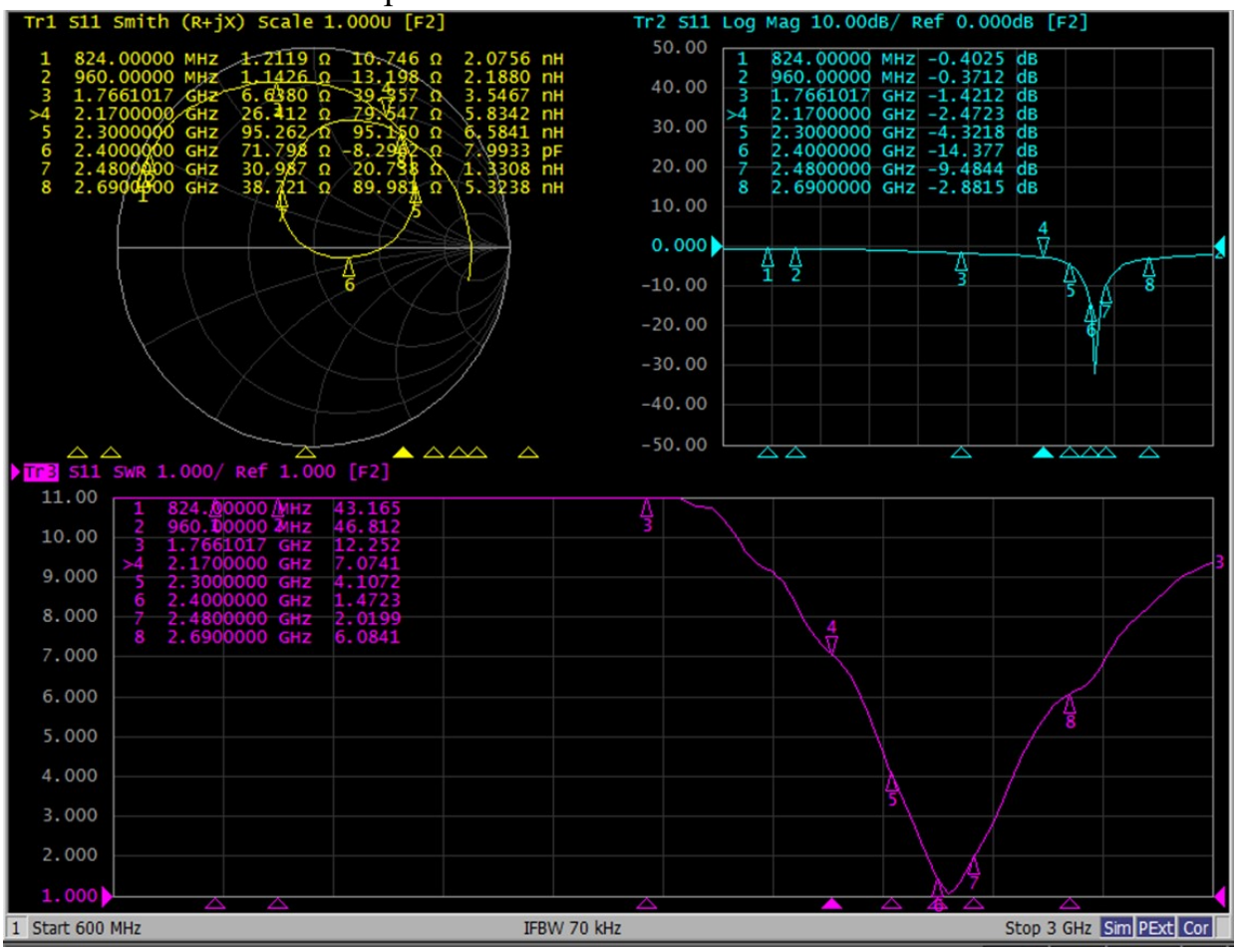
变更记录栏			
编制/变更日期	变更理由	变更内容	版本
2021.07.14	初版发行	初版发行	V1.0

一：无源测试报告

Angilent E5071C

Left ear BT antenna S11 parameters

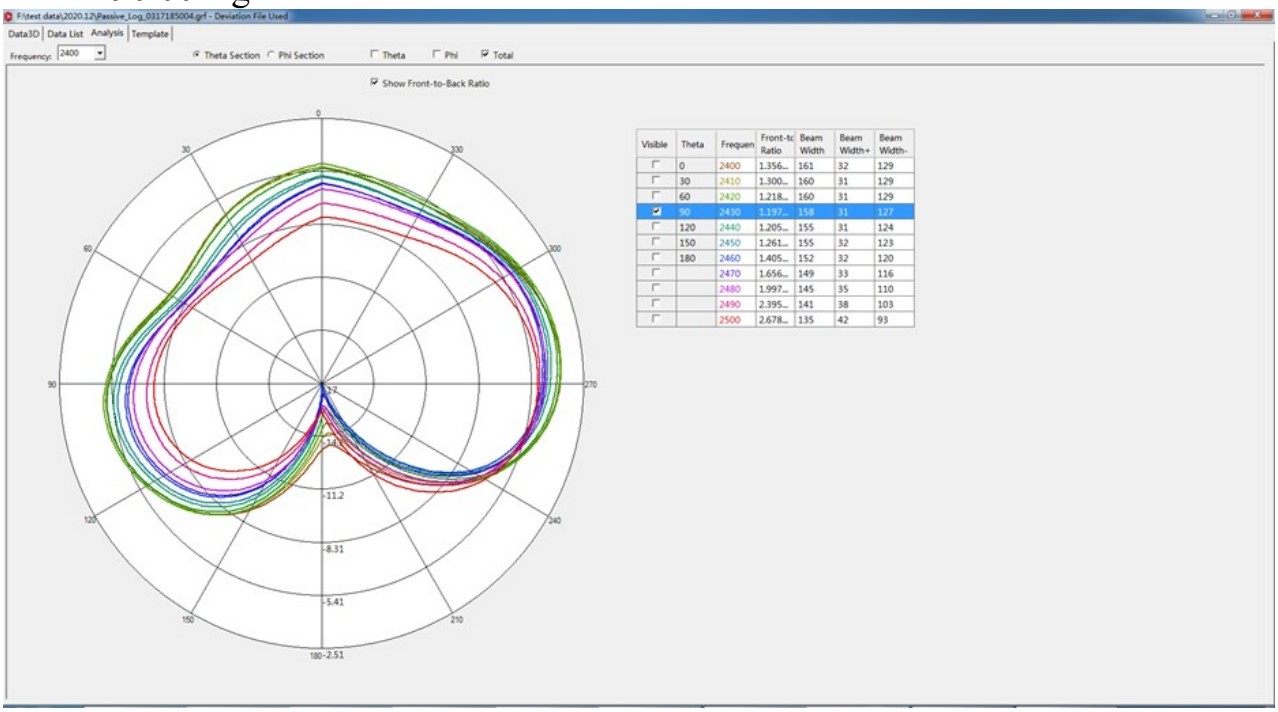


Efficiency and gain of left ear BT antenna：

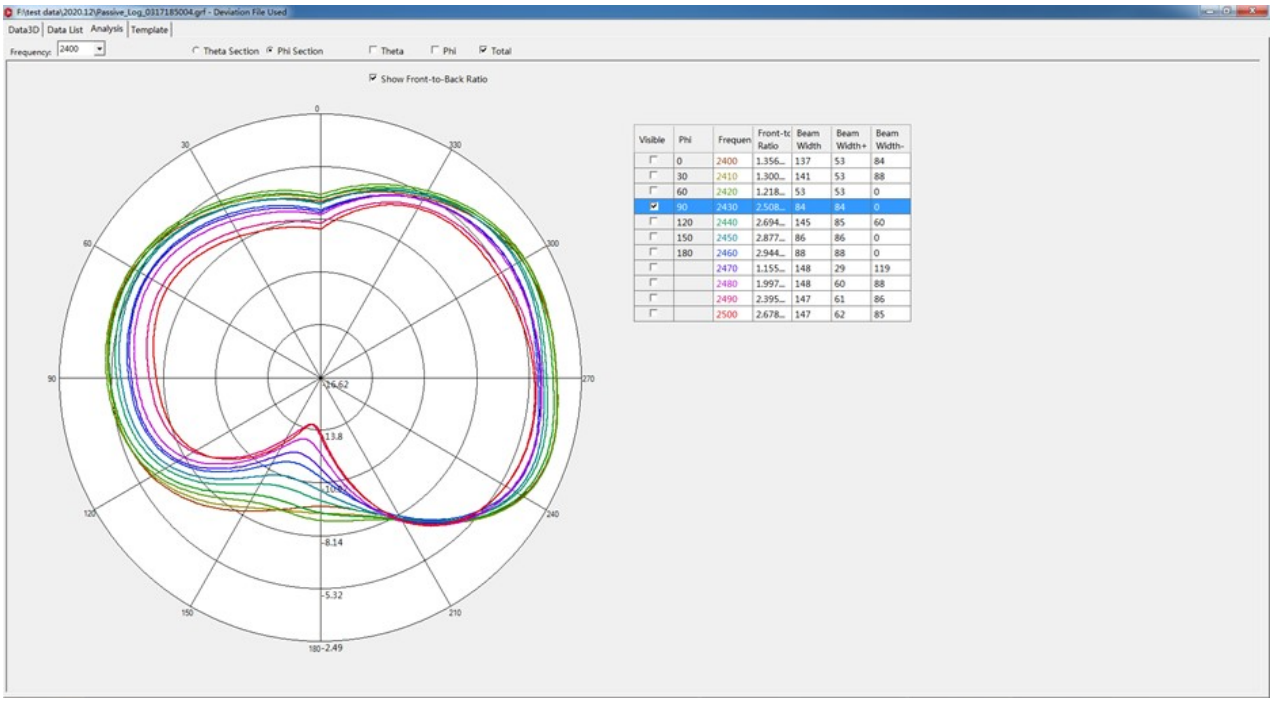
Left ear			
Frequency MHz	Efficient%	Efficient(dB)	Gain(dBi)
2400	29.0%	-5.3	-2.6
2410	30.0%	-5.2	-2.6
2420	31.0%	-5.0	-2.7
2430	31.0%	-5.1	-3.0
2440	30.0%	-5.2	-3.4
2450	31.0%	-5.0	-3.6
2460	31.0%	-5.0	-4.1
2470	29.3%	-5.3	-4.2
2480	28.0%	-5.5	-4.5
平均值	30.3%	-5.2	-3.4

Left ear antenna passive direction diagram：

Theta=90.00deg

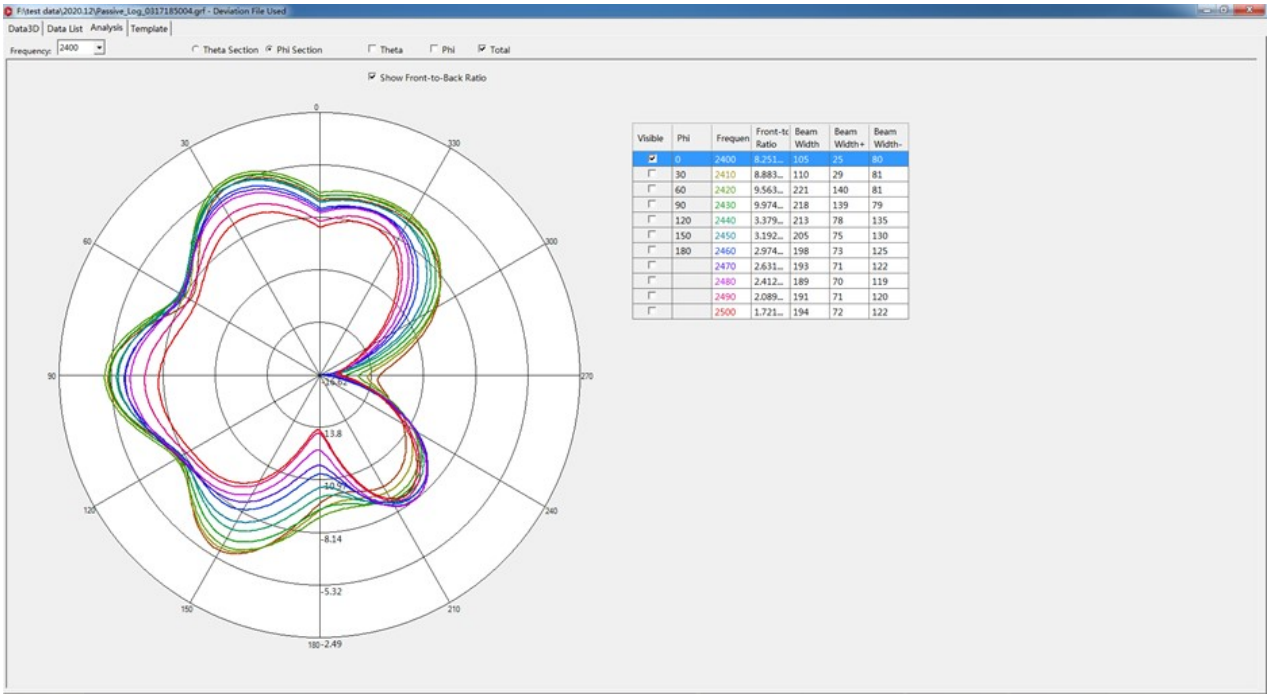


Phi=90.00deg



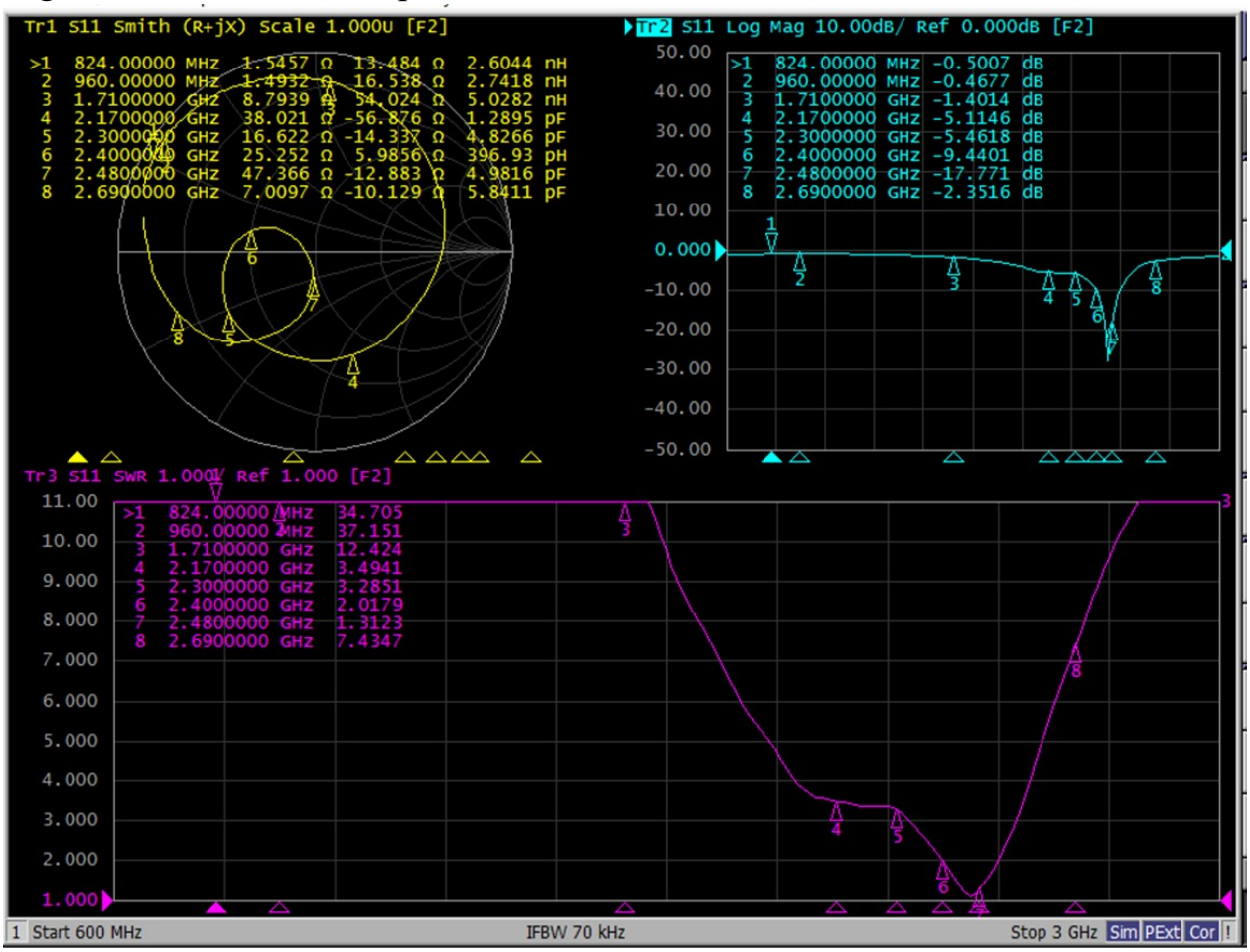
Visible	Phi	Frequen	Front-to Ratio	Beam Width	Beam Width+	Beam Width-
☐	0	2400	1.356...	137	53	84
☐	30	2410	1.300...	141	53	88
☐	60	2420	1.218...	53	53	0
☑	90	2430	2.508...	84	84	0
☐	120	2440	2.694...	145	85	60
☐	150	2450	2.877...	86	86	0
☐	180	2460	2.944...	88	88	0
☐		2470	1.155...	148	29	119
☐		2480	1.997...	148	60	88
☐		2490	2.395...	147	61	86
☐		2500	2.678...	147	62	85

Phi=0.00deg



Visible	Phi	Frequen	Front-to Ratio	Beam Width	Beam Width+	Beam Width-
☑	0	2400	8.251...	105	25	80
☐	30	2410	8.883...	110	29	81
☐	60	2420	9.563...	221	140	81
☐	90	2430	9.974...	218	139	79
☐	120	2440	3.379...	213	78	135
☐	150	2450	3.192...	205	75	130
☐	180	2460	2.974...	198	73	125
☐		2470	2.631...	193	71	122
☐		2480	2.412...	189	70	119
☐		2490	2.089...	191	71	120
☐		2500	1.721...	194	72	122

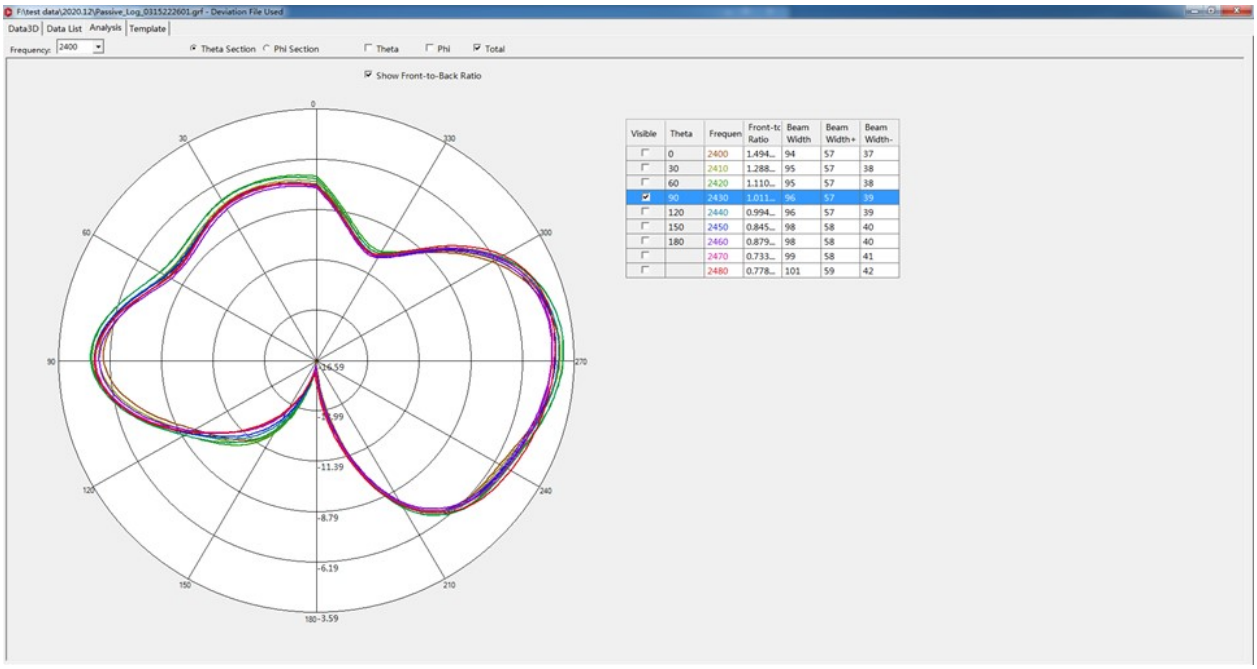
Right ear BT antenna S11 parameters



Efficiency and gain of right ear BT antenna：

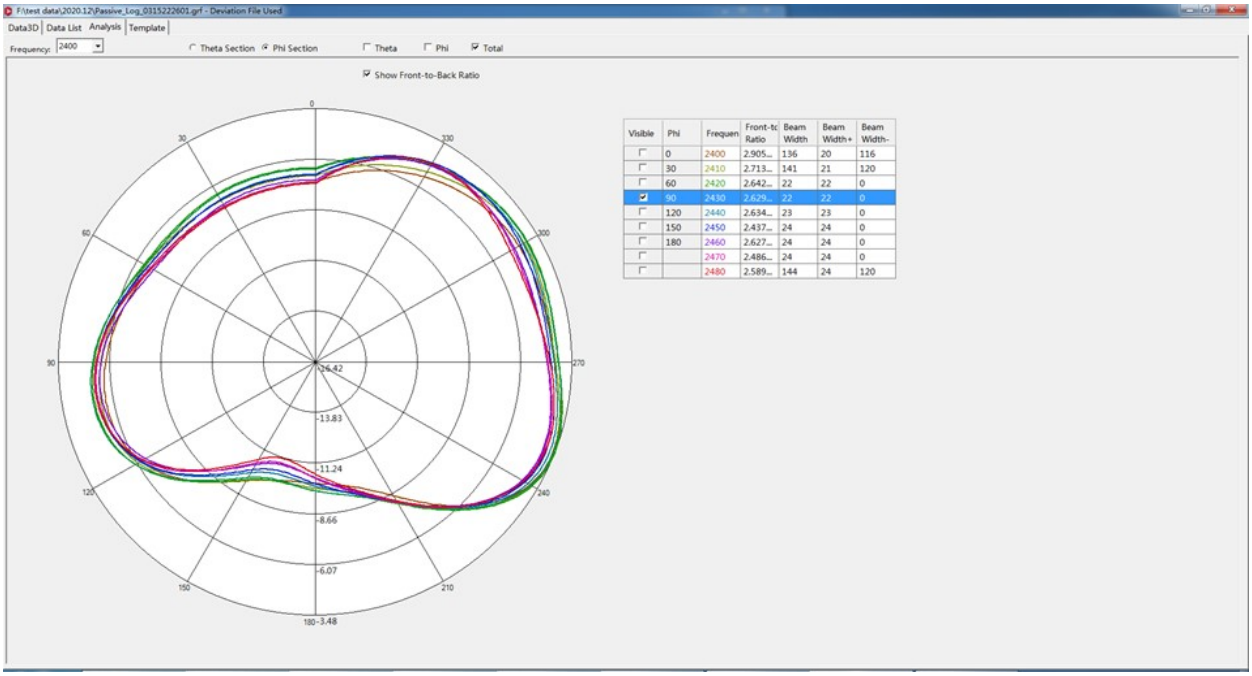
Right			
Frequency MHz	Efficiency%	Efficiency(dB)	Gain(dBi)
2400	27.9%	-5.6	-3.9
2410	29.5%	-5.3	-3.8
2420	31.0%	-5.1	-3.8
2430	30.9%	-5.1	-3.9
2440	29.8%	-5.3	-4.0
2450	30.1%	-5.2	-4.1
2460	29.8%	-5.3	-4.3
2470	31.5%	-5.0	-4.3
2480	31.3%	-5.1	-4.3
平均值	30.2%	-5.2	-4.0

Right ear antenna passive direction diagram Theta=90.00deg



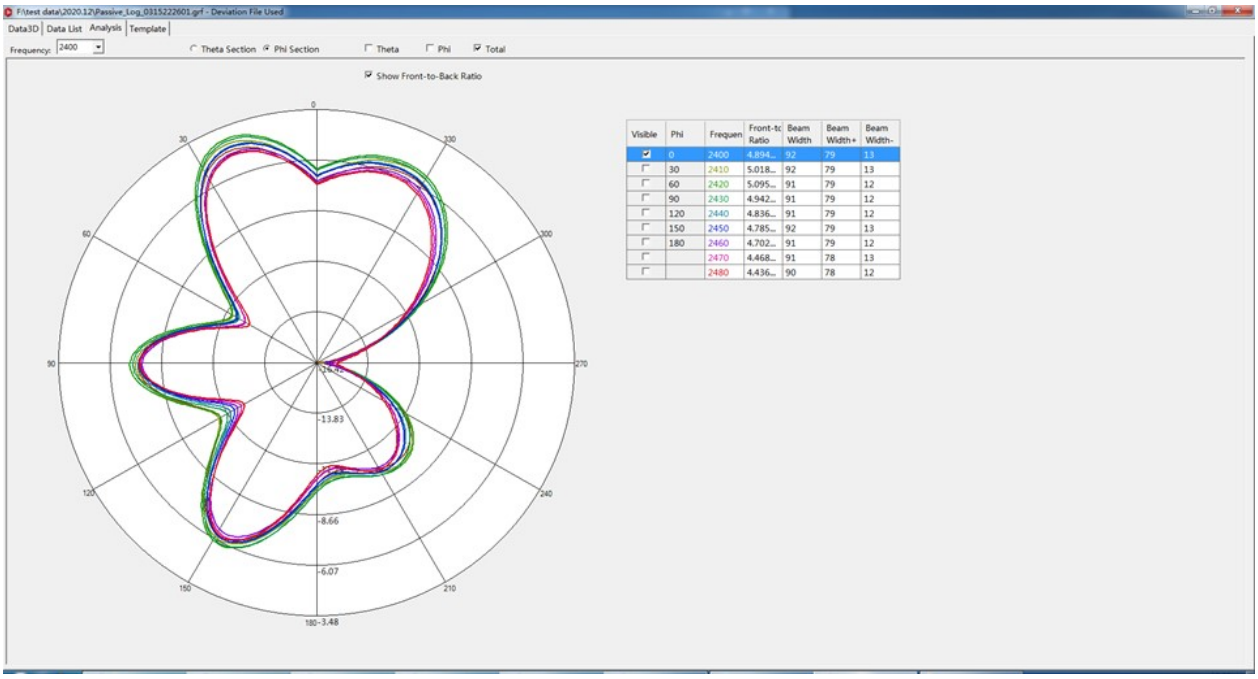
Visible	Theta	Frequen	Front-to Ratio	Beam Width	Beam Width+	Beam Width-
☐	0	2400	1.494...	94	57	37
☐	30	2410	1.288...	95	57	38
☐	60	2420	1.110...	95	57	38
☑	90	2430	1.011...	96	57	39
☐	120	2440	0.994...	96	57	39
☐	150	2450	0.845...	98	58	40
☐	180	2460	0.879...	98	58	40
☐		2470	0.733...	99	58	41
☐		2480	0.778...	101	59	42

Phi=90.00deg



Visible	Phi	Frequen	Front-to Ratio	Beam Width	Beam Width+	Beam Width-
☐	0	2400	2.905...	136	20	116
☐	30	2410	2.713...	141	21	120
☐	60	2420	2.642...	22	22	0
☑	90	2430	2.629...	22	22	0
☐	120	2440	2.634...	23	23	0
☐	150	2450	2.437...	24	24	0
☐	180	2460	2.627...	24	24	0
☐		2470	2.486...	24	24	0
☐		2480	2.589...	144	24	120

Phi=0.00deg



二：BT 天线 3D 暗室数据

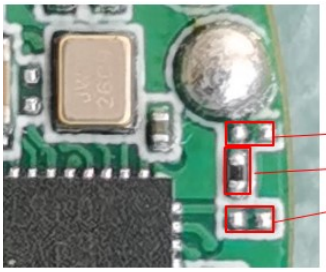
	Channel	TRP（dBm）	TIS（dBm）
L	CH 0	4.0	-89.9
	CH 39	4.7	-89.9
	CH 78	4.6	-89.6

	Channel	TRP（dBm）	TIS（dBm）
R	CH 0	4.6	-89.5
	CH 39	5.0	-90.0
	CH 78	4.0	-89.8

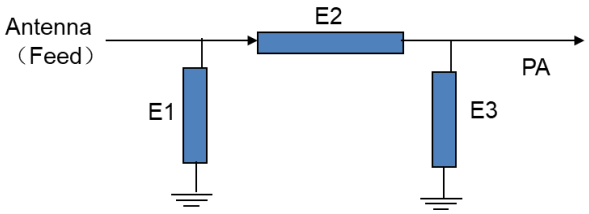
OTA Standard Chamber

三：匹配电路

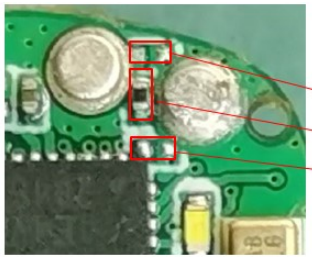
左耳匹配电路：



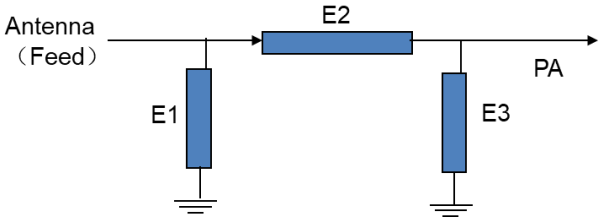
Element	Value
E1(0201)	1.2pF
E2(0201)	0Ω
E3(0201)	N/A



右耳匹配电路：

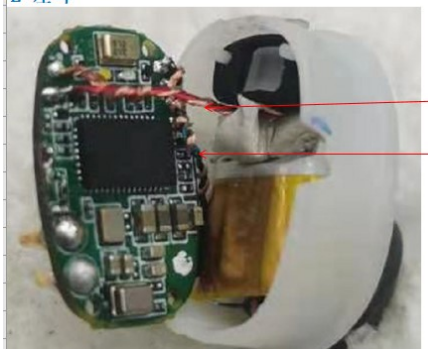


Element	Value
E1(0201)	1.8pF
E2(0201)	0Ω
E3(0201)	N/A



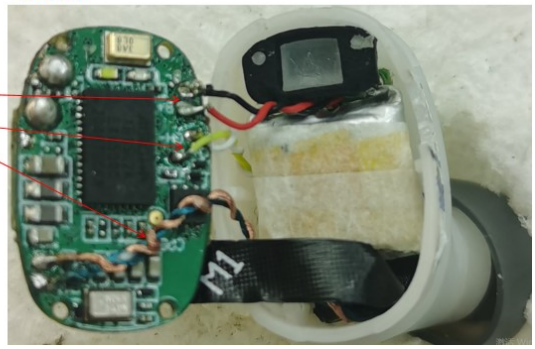
四：环境处理注意事项

L 左耳



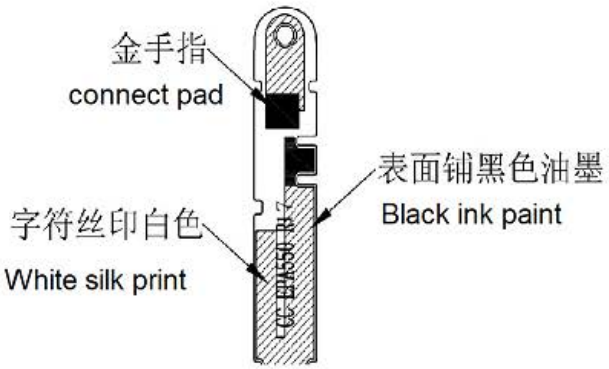
1、电池线保持原长度18mm左右；
2、充电线保持原长度19mm左右；
3、喇叭线保持原长度31.5mm左右；
4、将各线都进行绞线处理；
5、装机时电池有字的一面朝下，
并按图示进行装机。

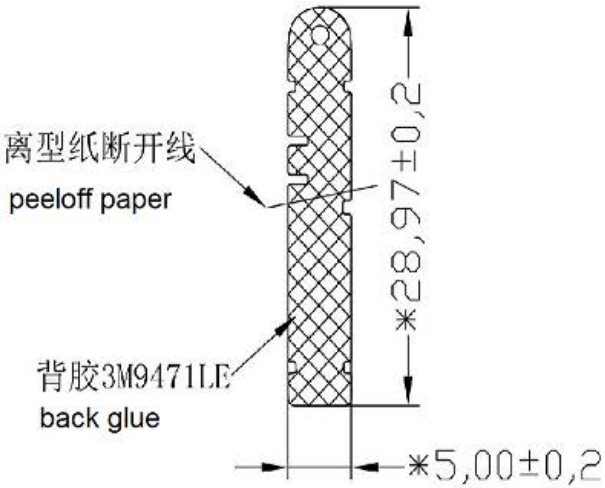
R 右耳

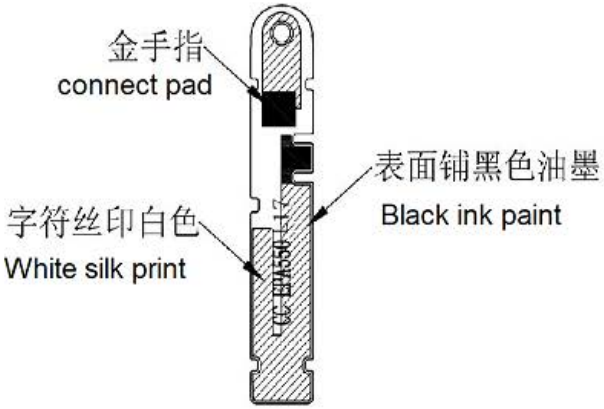


五结构图档

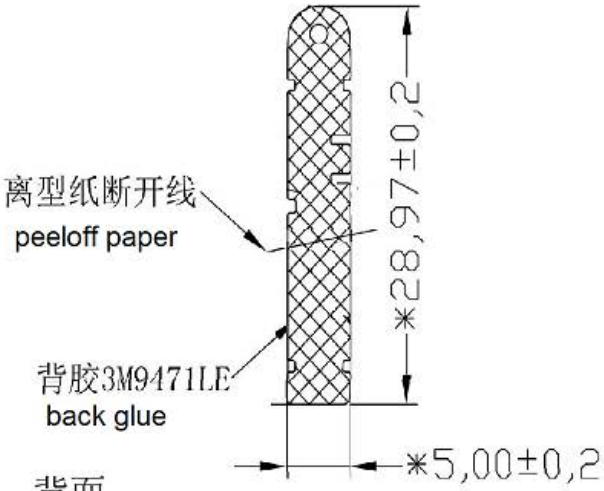
单位 (Unit):mm







正面



背面

注:

1、打*为必测尺寸，未标尺寸参考2D图纸。

2、基材25μm，铜泊18μm，镀金厚度为0.5-1.0U"，走线面除焊盘外其它区域需铺黑油。

3、▨ 区域为走线区域，■ 区域为焊盘区域（镀金），▩ 区域为附胶区域(3M300LSE(3M9471LE))，背胶需均匀。

Cicent 思讯通信	深圳市思讯通信技术有限公司 ShenZhen Cicent Communication Technology CO.,Ltd								
第三角法				料号		机种	EPA550		
未注公差参见标准		○	0.02			品名	R耳天线-FPC		D
线路公差	±0.10	◎	0.03	日期	2023-03-27	页码	1/1		
外形公差	±0.20	⊥	0.02	设计	张意	审核	THQ		
		▱	0.04						
		⌓	0.02	材质					
请勿实测纸质图纸				单位	mm	比例	FIT	版本	T:A

1 2 3 4 5 6 7 8