

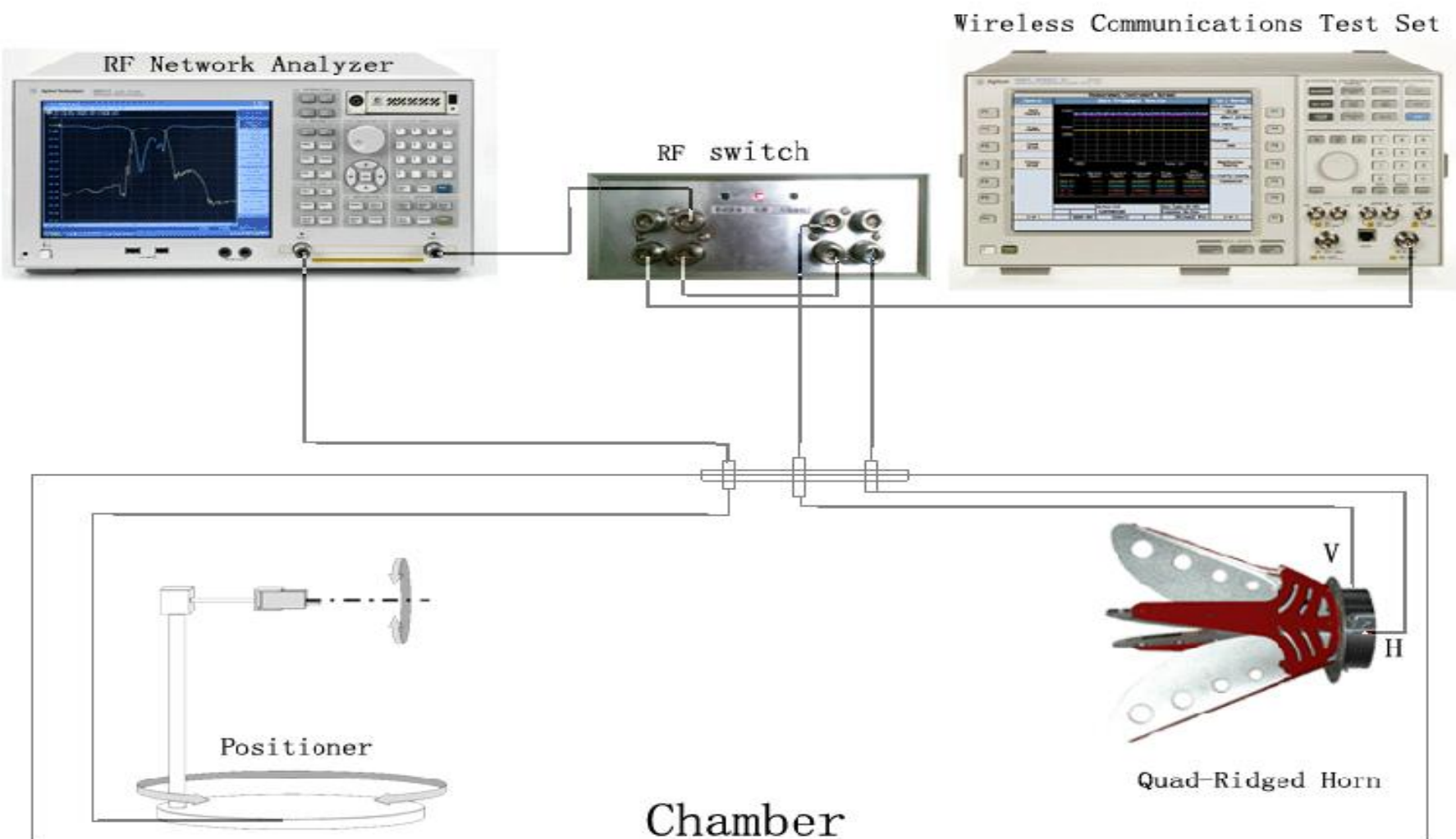
Shenzhen Atno Communication Equipment Co., Ltd.

客户:	畅达星	项目	D116	日期	2024. 10. 26
频段	2. 4G-2. 48G				
报告版本号	V1. 0				
天线结构	FPC贴后盖(单极天线, 天线版本: D116-V1)				

地址 Address: 504-505, Xia Valley, Longchang Road, Xin'an
Street, Bao'an District, Shenzhen City

电话 Phone: 0755-29308863 传真 Fax: 0755-29308861

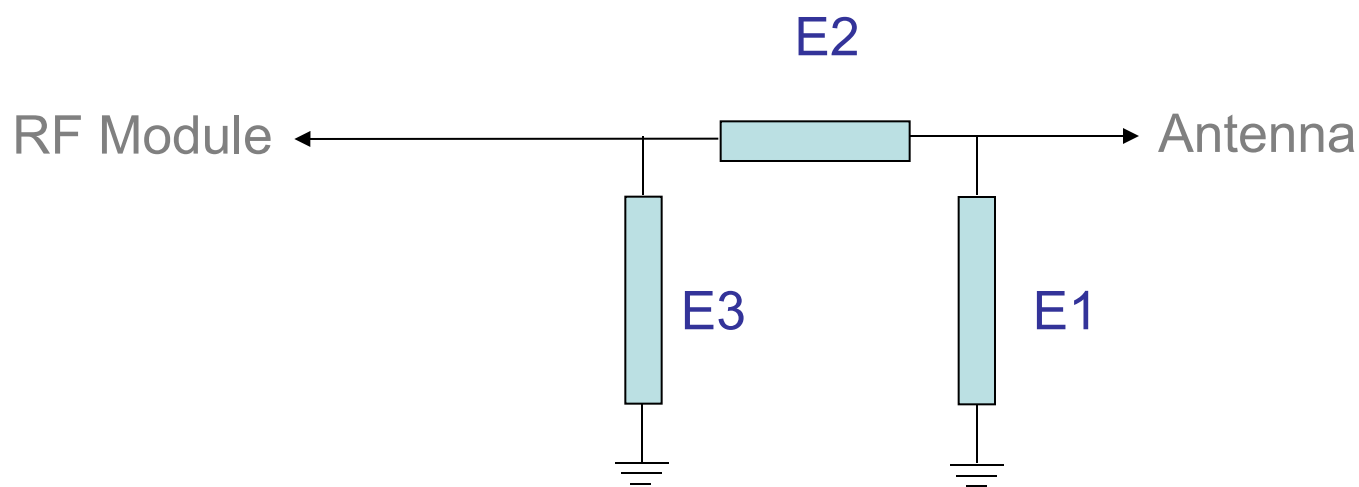
Test system



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- 1、匹配电路
- 2、无源测试数据
- 3、OTA测试数据
- 4、装配要求
- 5、实用距离测试

1.1、天线匹配电路 Antenna matching circuit



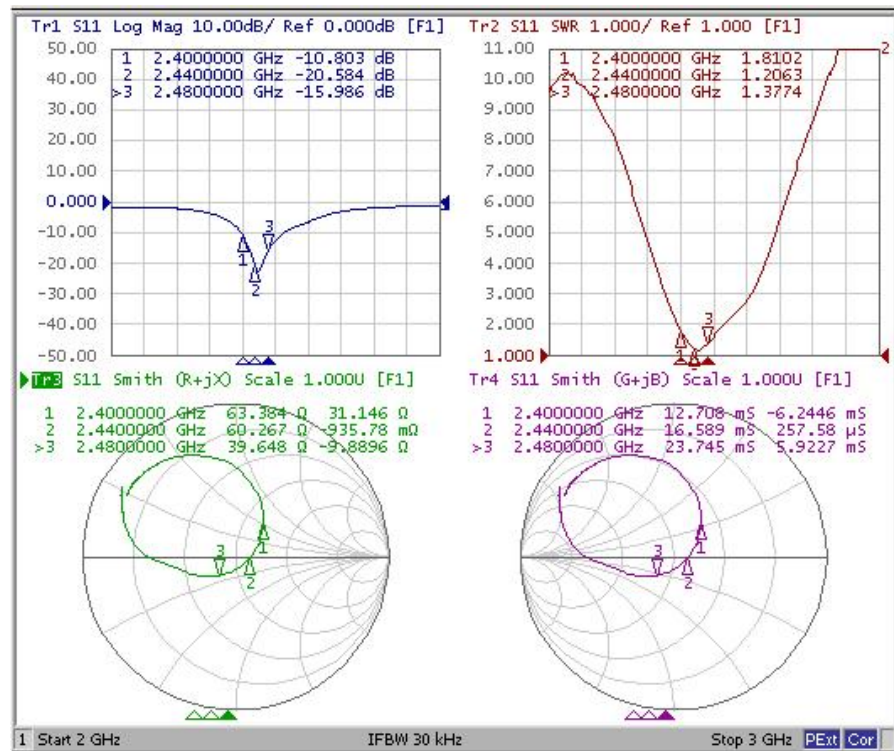
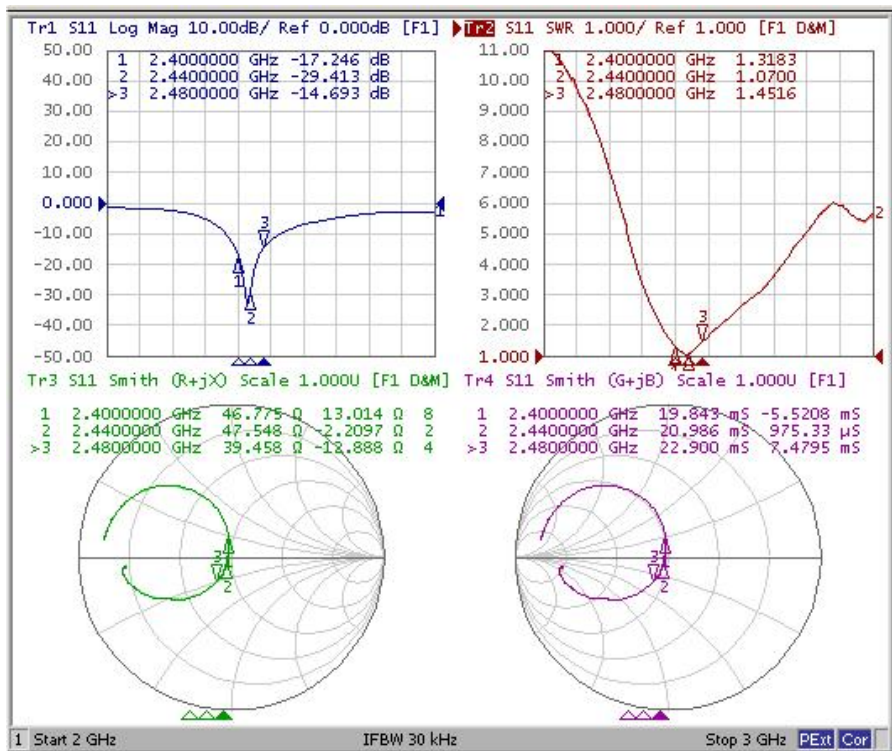
Element	Value
E1(0201)	NC
E2(0201)	0Ω
E3(0201)	1.8pF
L/R匹配相同	

2. 无源数据 Passive data

2.1. S11 Parameter

L

R



2.2 Gain & Efficiency

L

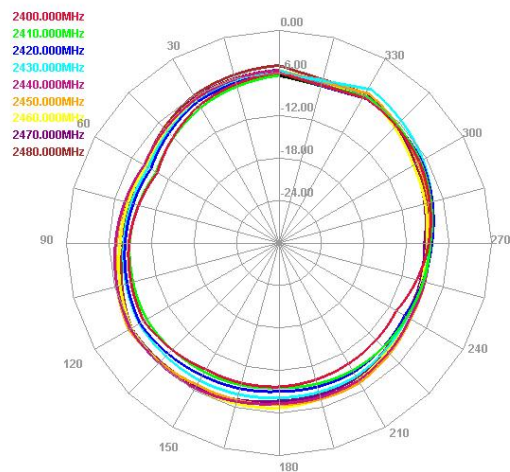
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	17.13	-7.66	-3.28
2410	16.34	-7.87	-3.55
2420	16.5	-7.82	-3.56
2430	17	-7.69	-3.94
2440	19.23	-7.16	-3.23
2450	20.88	-6.8	-2.74
2460	19.78	-7.04	-2.91
2470	20.58	-6.87	-2.51
2480	20.11	-6.97	-2.53

R

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	13.25	-8.78	-4.79
2410	13.82	-8.6	-4.1
2420	13.58	-8.67	-4.31
2430	13.82	-8.6	-4.41
2440	15.39	-8.13	-4.29
2450	17.4	-7.59	-3.97
2460	17.71	-7.52	-3.81
2470	18.38	-7.36	-3.55
2480	17.78	-7.5	-3.9

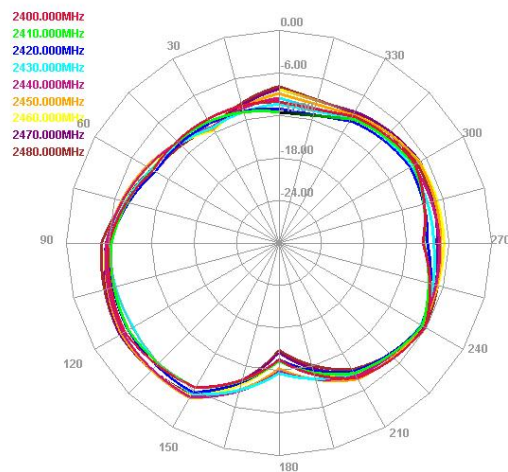
2.3 Radiation pattern(L)

Horizontal



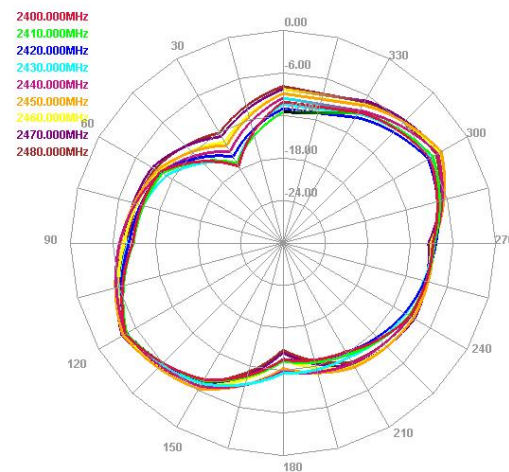
2400.000MHz

E1 Face

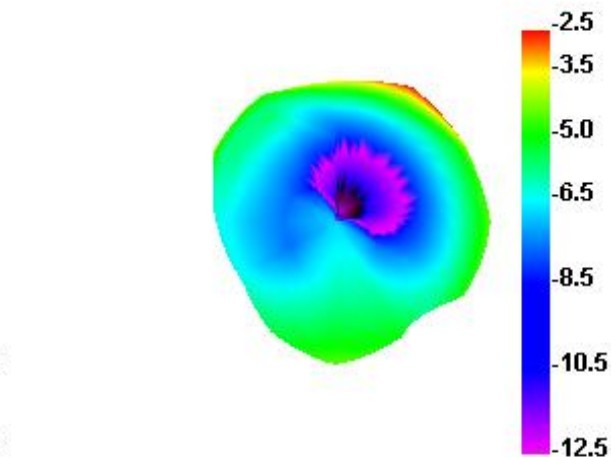
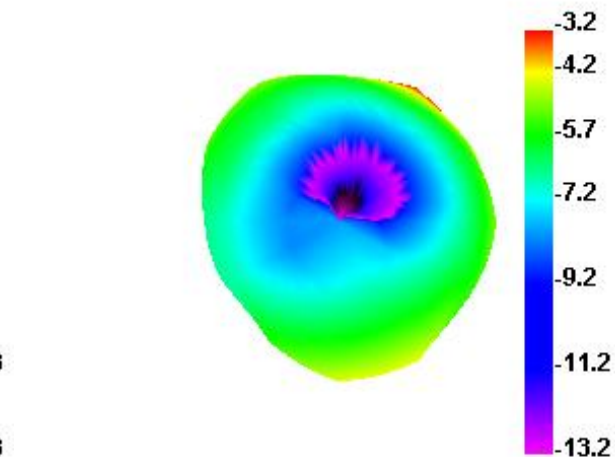
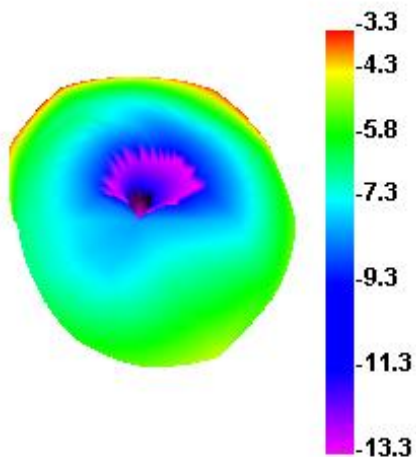


2440.000MHz

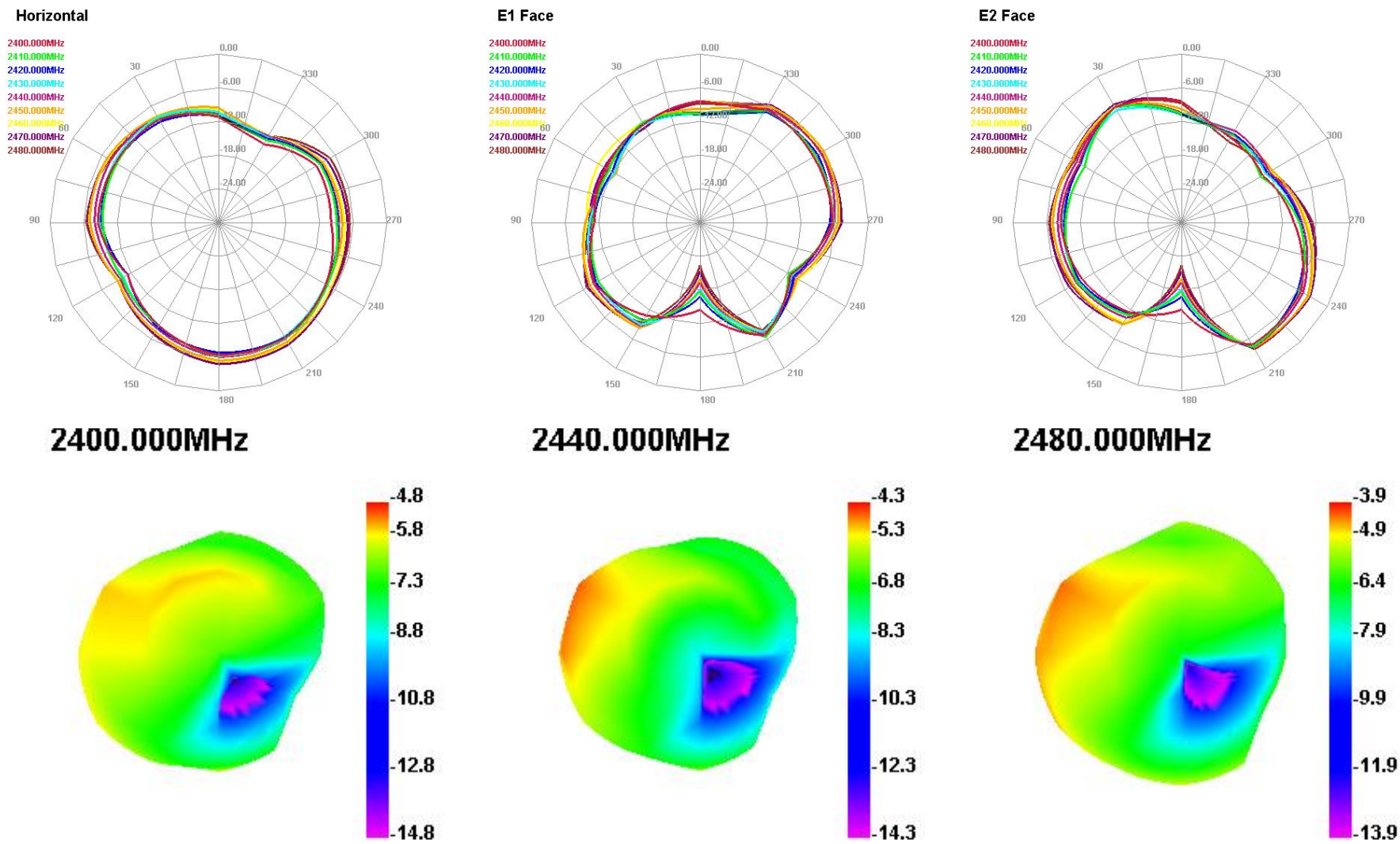
E2 Face



2480.000MHz



2.3 Radiation pattern(R)

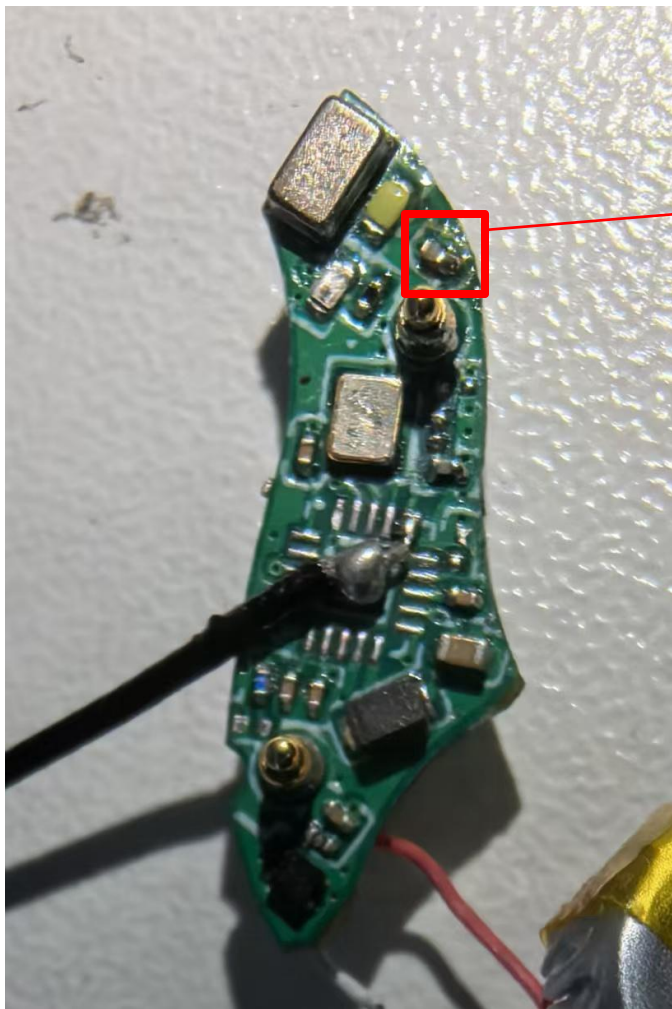


3. OTA测试数据 Test data

band	channel	TRP (dBm)	TIS (dBm)
Bluetooth BR (L) 头模	0	-2.2	-81.6
	39	-1.2	-82.5
	78	-1.6	-80.8

band	channel	TRP (dBm)	TIS (dBm)
Bluetooth BR (R) 头模	0	-4.3	-78.6
	39	-2.9	-80.7
	78	-2.6	-81.4

4、装配要求



1、5V+并10pF, 或者贴结电容大于10pF的静电管

2、喇叭线长度剪短至12mm



5、实测距离

测试地点：美生创谷南门隆昌路

测试手机	三星S8
听音乐全向（m）	14