



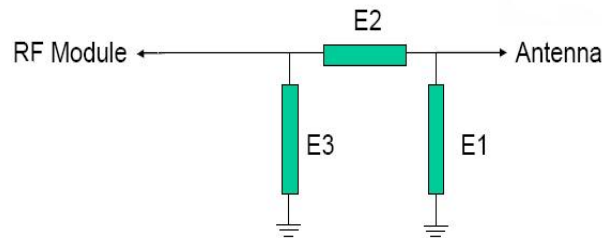
Antenna Test Report

SHENZHEN.ETERNITY.TECHNOLOGY.CO.,.LTD
A2,.Yingzhan.Industrial.Park,.Longtian,.Pingshan,.Shenzhen,.China

1.The Equipment of Active Test

1. ETS Chamber 7×4×3(m)(3D 暗室)
2. 矢量网络分析仪(无源测试仪)
3. Network analyzer-8960/LTE CMW500/8820 支持 2G、3G、4G 网络. (有源测试仪)

2.Matching Circuit 主天线 (匹配有更改)



Element	匹配值
E1(0201)	
E2(0201)	0 欧姆
E3(0201)	



3.0: 天线测试

OTA 测试数据:

Model:				天线实现方式 :FPC						单位: dBm		
信道	GSM850			GSM900			DCS1800			PCS1900		
	CH128	CH192	CH251	CH1	CH62	CH124	CH512	CH698	CH885	CH512	CH661	CH810
TRP	26.57	27.20	27.35	28.08	27.31	25.81	26.2	26.45	27.21	26.32	27.62	27.9
TIS			-104.45			-99.32			-103.56			-104.53
信道	WCDMA-850			WCDMA-1900			WCDMA-1700					
	CH4357	CH4408	CH4458	CH9662	CH9800	CH9938	CH1537	CH1637	CH1738			
TRP	18.06	18.66	18.7	19.02	19.05	19.11	19.01	19.05	19.35			
TIS			-104.42			-104.88			-103.01			

4G: FDD

信道	2			4			5					
	18650	18900	19150	20000	20175	20350	20450	20525	20600			
TRP	19.61	19.72	18.88	19.65	19.37	19.24	18.24	18.36	19.54			
TIS			-94.01			-89.87			-93.21			
信道	12			17			66			71		
	23060	23095	23130	23780	23790	23800	132022	132322	132622	133712	133297	133422
TRP	18.88	18.62	18.98	18.76	18.62	18.34	19.02	19.42	18.91	16.1	16.32	16.61
TIS			-91.55			-90.57			-90.01			-88.46

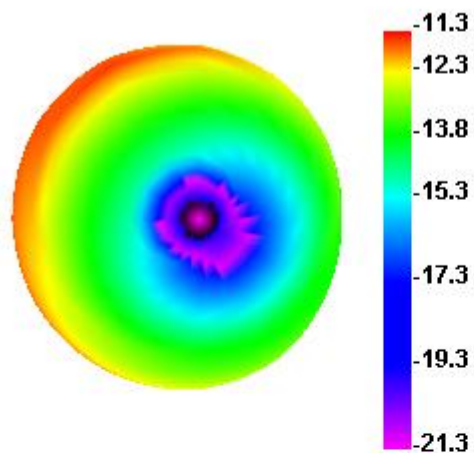
主天线开关逻辑:

- RF1 路用一个 0 欧电阻,控制 2G 频段 850/900/1800/1900。3G 频段 W2/4/5 4G 频段的 B2/4/5/66
- RF2 路并联一个 18 电感对地,控制 4G 频段的 B12/B17/B71.

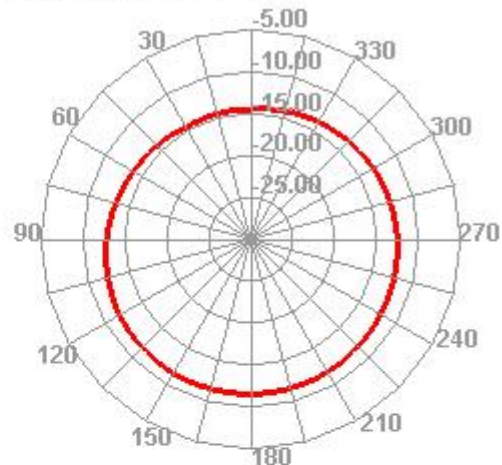
4. Gain/Efficiency

Passive Test For 800-960		
Freq (MHz)	Effi (%)	Gain (dBi)
720	21.15	01.2
740	22.36	0.14
760	22.68	0.14
780	23.35	0.17
800	23.45	0.31
880	31.36	0.34
820	23.89	0.34
840	26.03	0.33
860	27.86	0.38
880	31.78	0.34
900	38.06	0.39
920	41.68	0.41
940	42.62	0.40
960	44.55	0.41

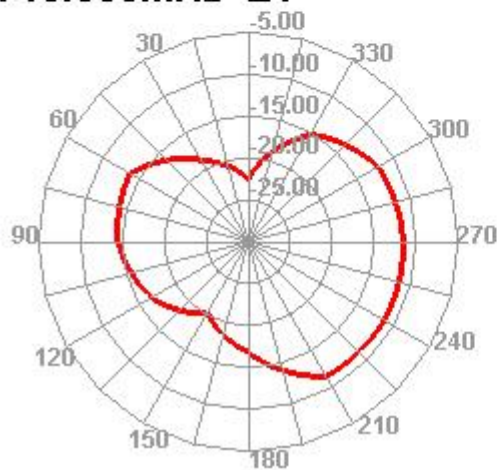
710.000MHz



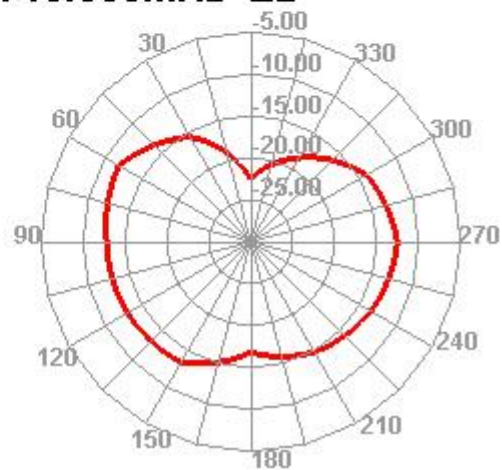
710.000MHz H



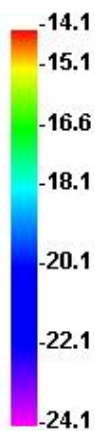
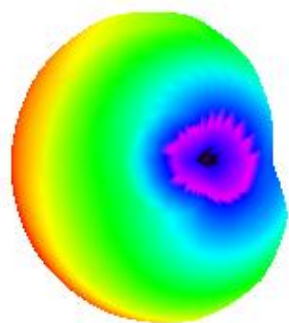
710.000MHz E1



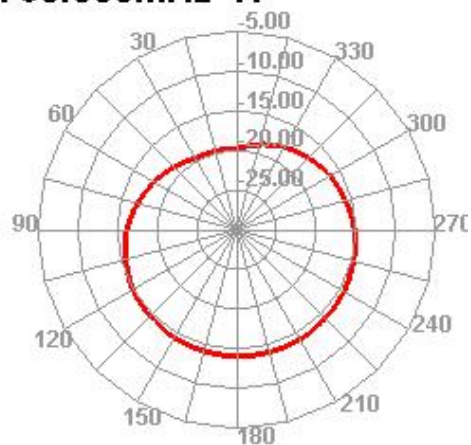
710.000MHz E2



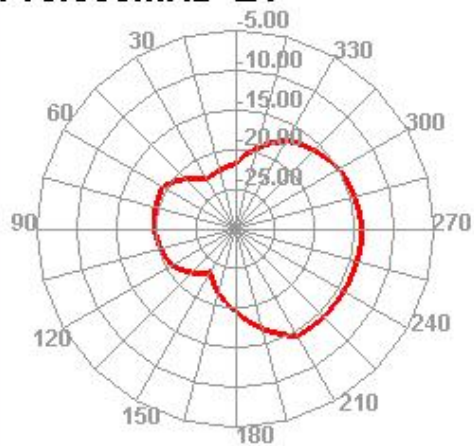
760.000MHz



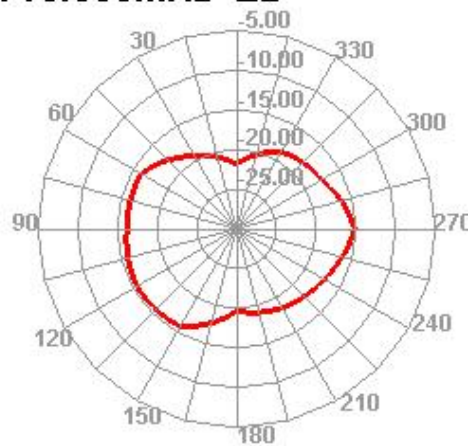
760.000MHz H



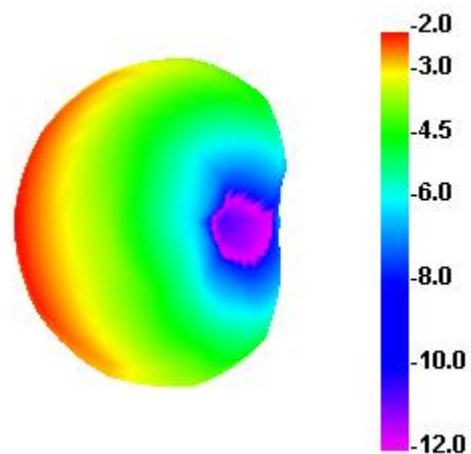
760.000MHz E1



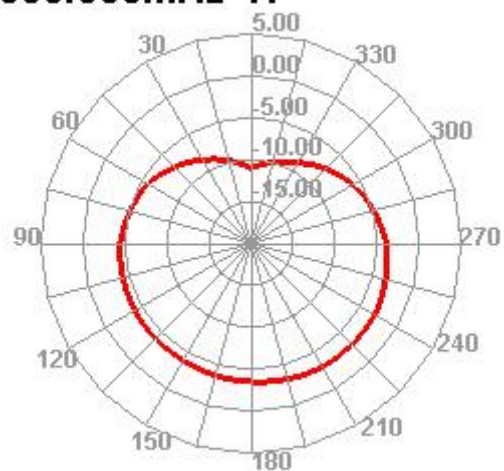
760.000MHz E2



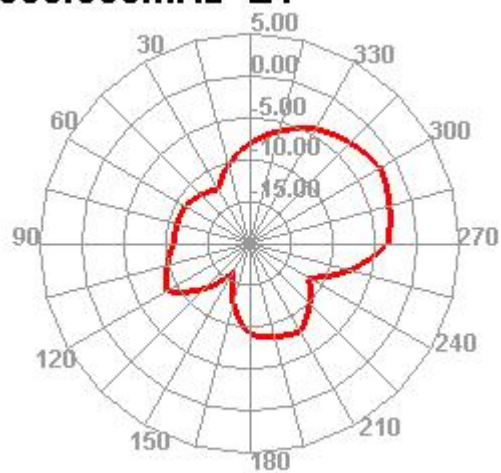
800.000MHz



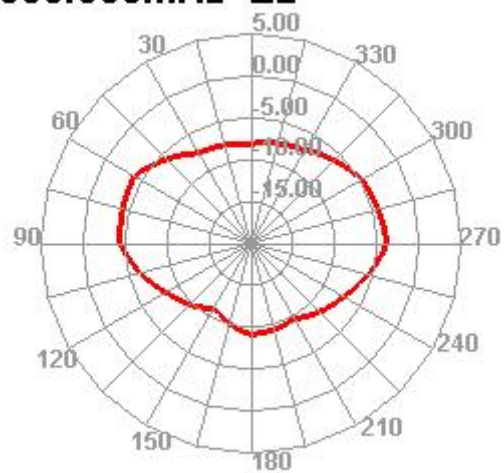
800.000MHz H



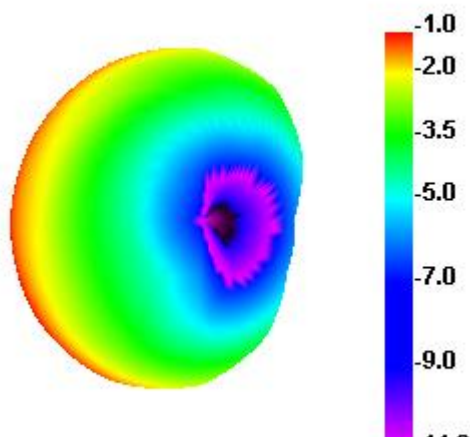
800.000MHz E1



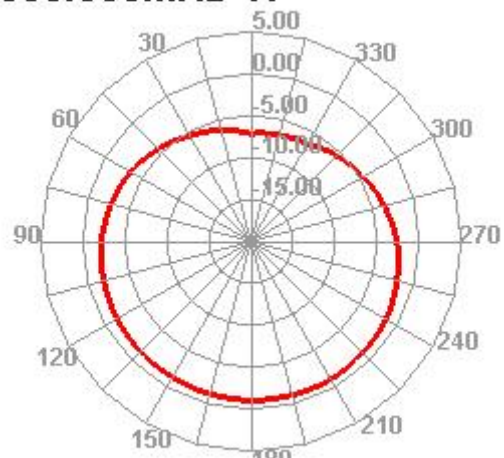
800.000MHz E2



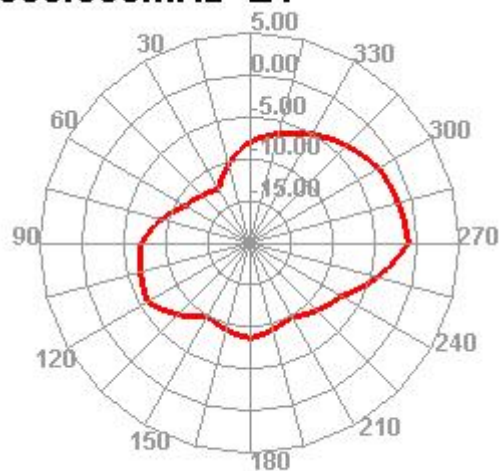
880.000MHz



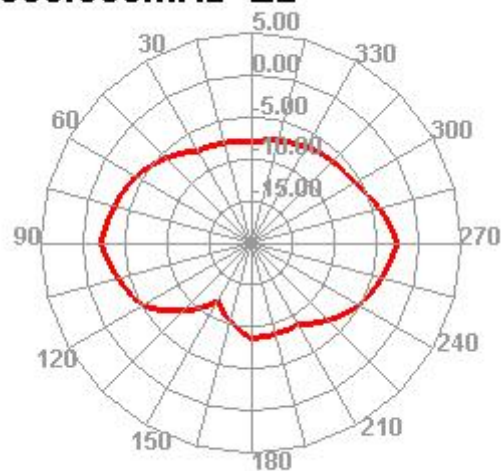
880.000MHz H



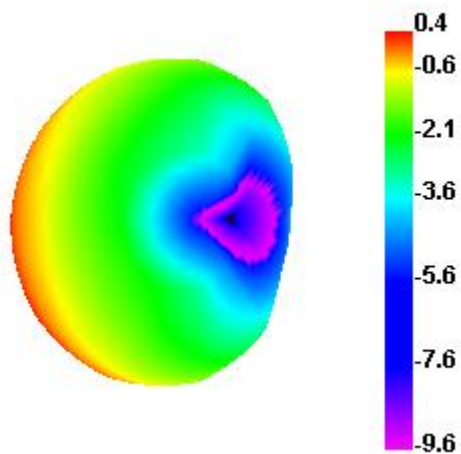
880.000MHz E1



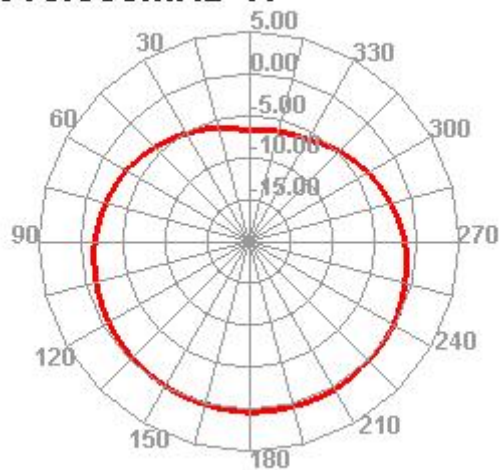
880.000MHz E2



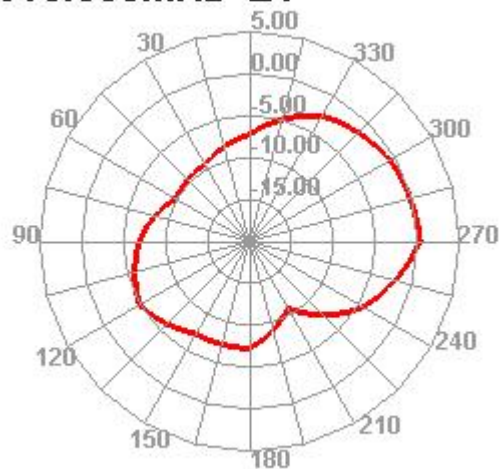
960.000MHz



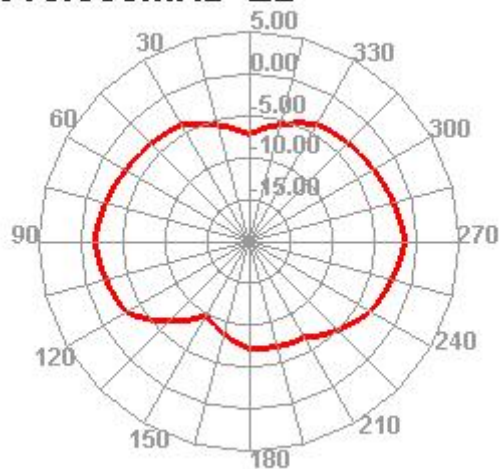
960.000MHz H



960.000MHz E1

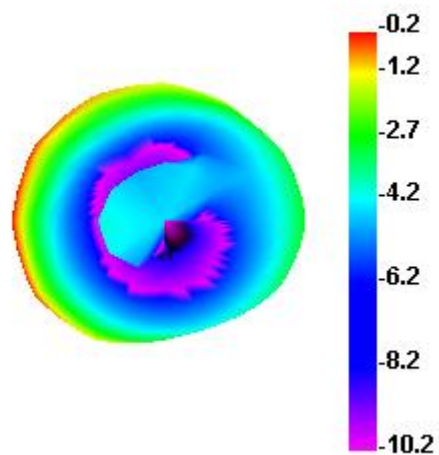


960.000MHz E2

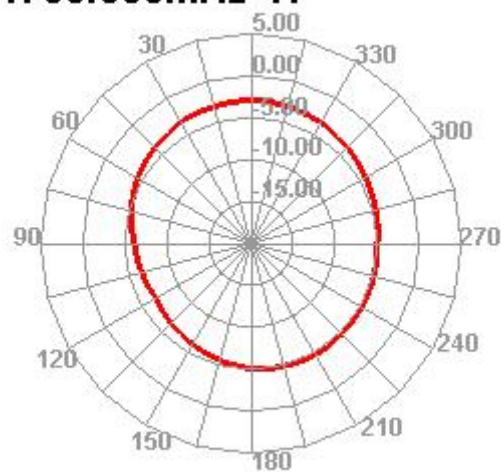


Passive Test For 1700-2700		
Freq (MHz)	Effi (%)	Gain (dBi)
1700	39.37	0.59
1750	45.84	0.62
1800	54.63	0.63
1850	61.22	0.61
1900	52.14	0.58
1950	49.75	0.59
2000	42.93	0.59
2050	42.96	0.53
2100	42.07	0.72
2150	32.35	0.75
2200	41.74	0.69
2250	50.64	0.72
2300	48.33	0.71
2350	46.73	0.7
2400	33.96	0.73
2450	30.67	0.72
2500	56.31	0.71
2550	46.54	0.67
2600	46.16	0.72
2650	50.66	0.72
2700	51.68	0.69

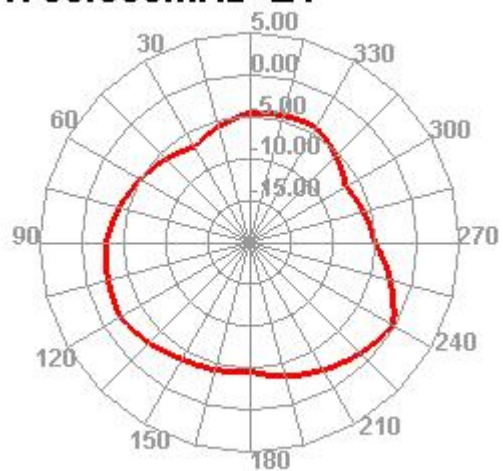
1700.000MHz



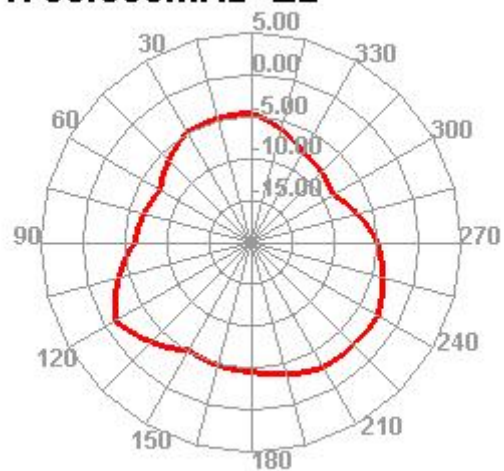
1700.000MHz H



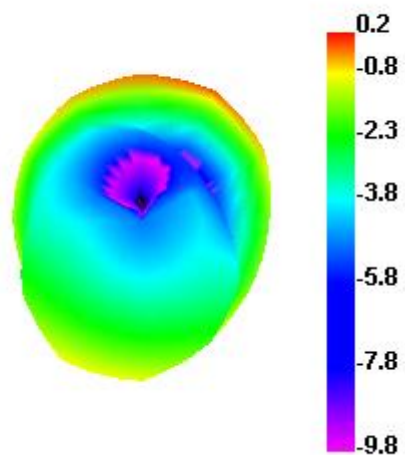
1700.000MHz E1



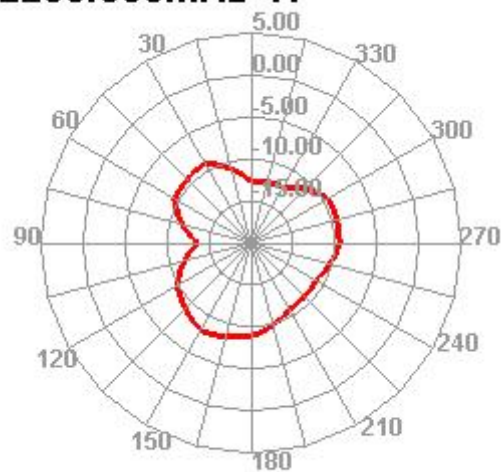
1700.000MHz E2



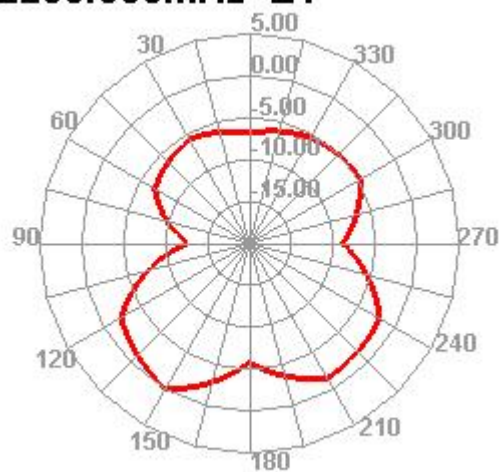
2200.000MHz



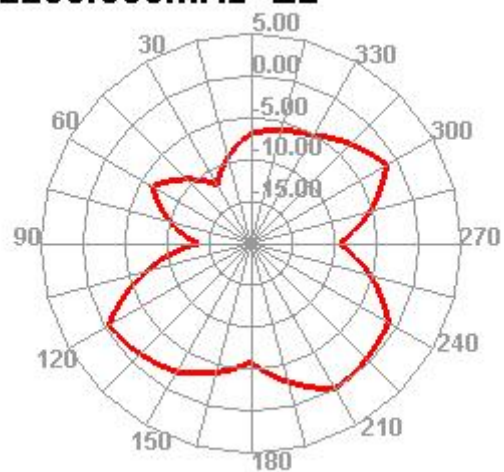
2200.000MHz H



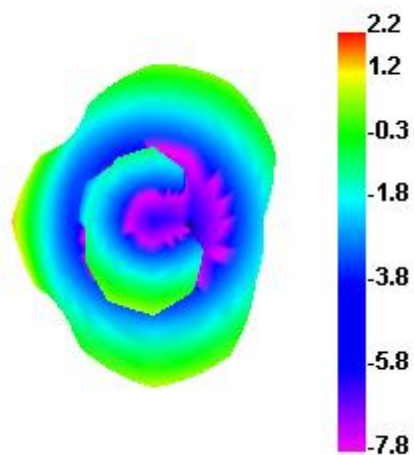
2200.000MHz E1



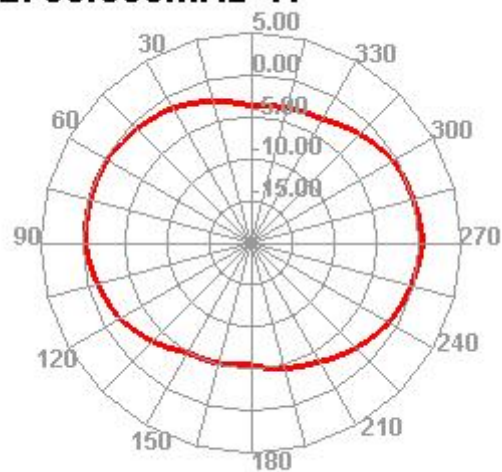
2200.000MHz E2



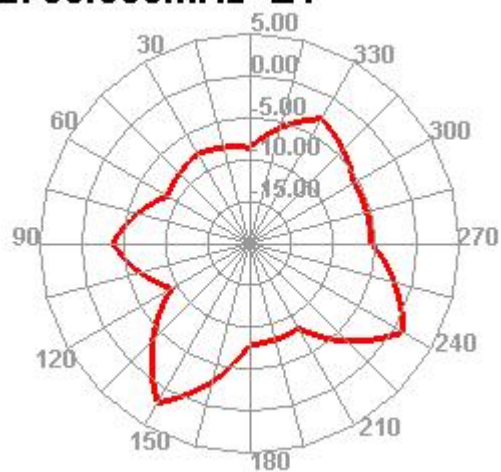
2700.000MHz



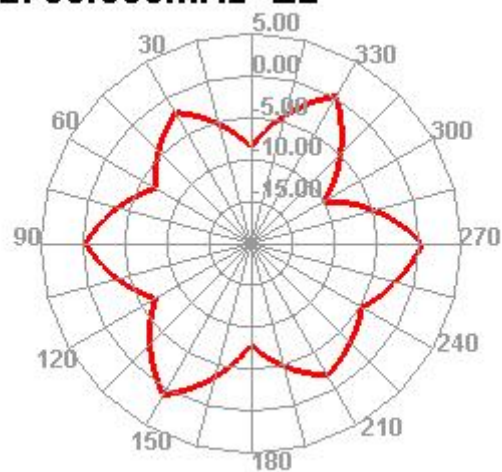
2700.000MHz H



2700.000MHz E1



2700.000MHz E2

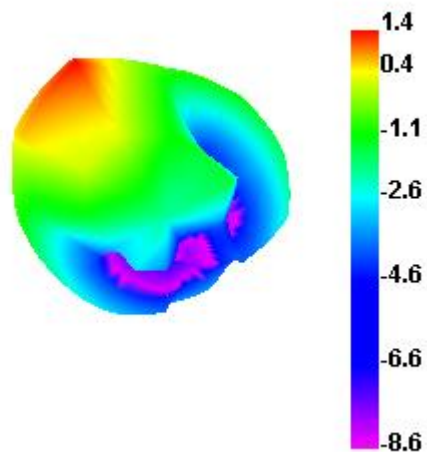


4. WIFI Gain/Efficiency

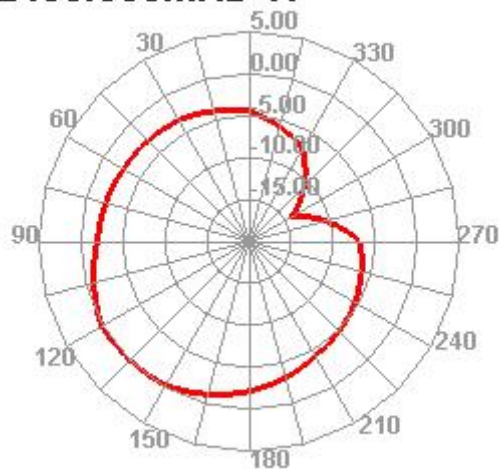
Passive Test For 800-960		
Freq (MHz)	Effi (%)	Gain (dBi)
2400	34.85	1.25
2450	35.74	1.32
2500	36.68	1.44
5150	23.35	0.93
5200	23.45	0.91
5250	31.36	1.02
5300	23.89	1.14
5350	36.03	1.23
5400	37.86	1.38
5450	31.78	1.34
5500	38.06	1.39
5550	41.18	1.41
5600	42.72	1.26
5650	40.23	1.19
5700	38.75	1.08
5750	36.53	10.02
5800	36.12	0.95
5850	35.36	0.96

2.4G WIFI

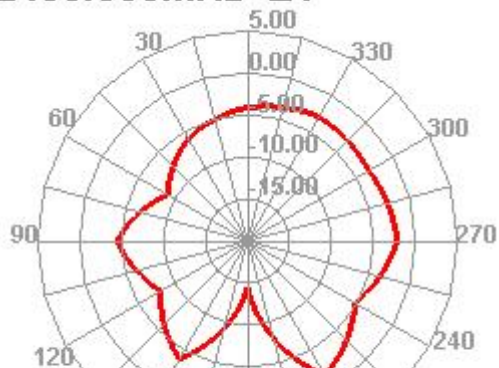
2400.000MHz



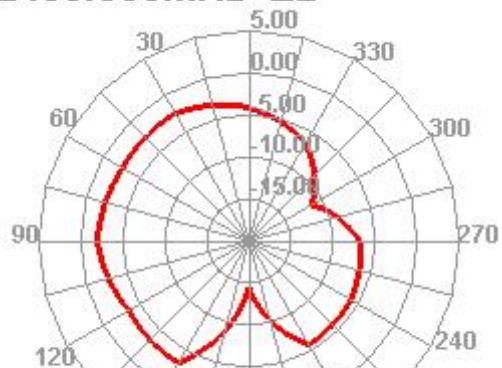
2400.000MHz H



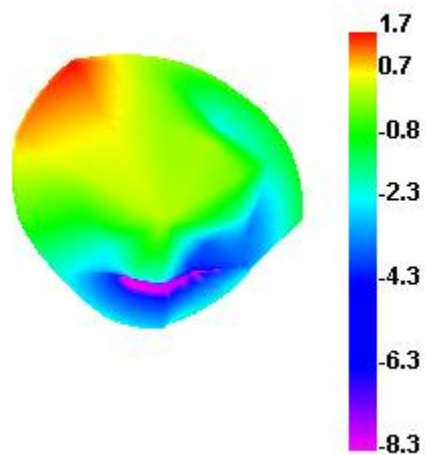
2400.000MHz E1



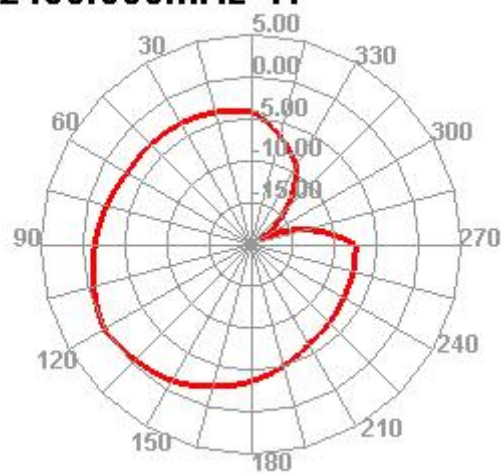
2400.000MHz E2



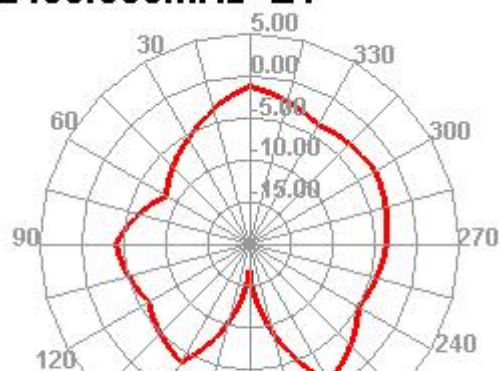
2450.000MHz



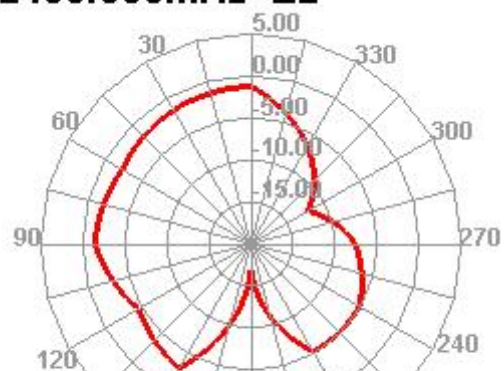
2450.000MHz H



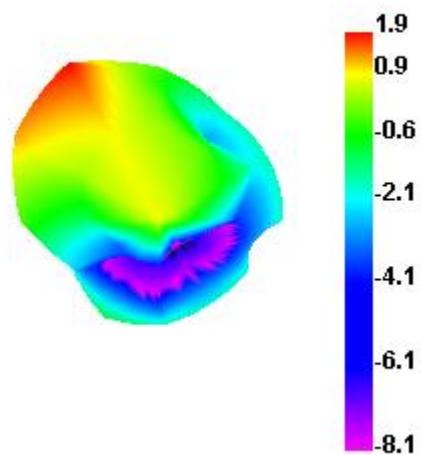
2450.000MHz E1



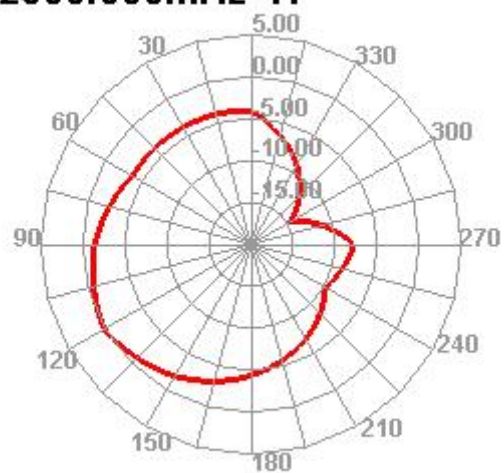
2450.000MHz E2



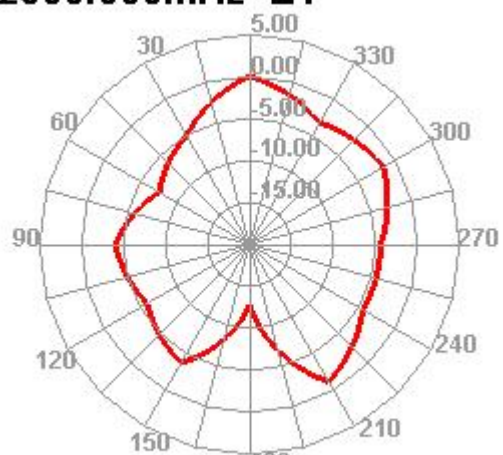
2500.000MHz



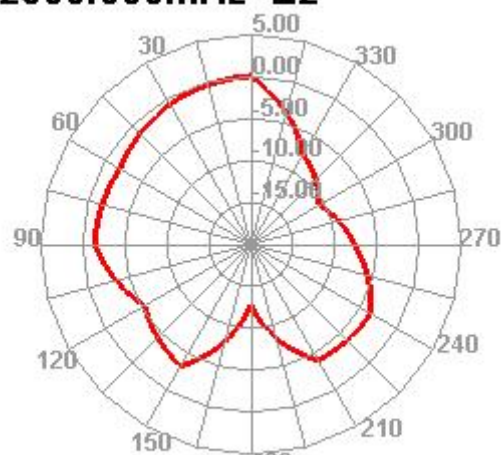
2500.000MHz H



2500.000MHz E1

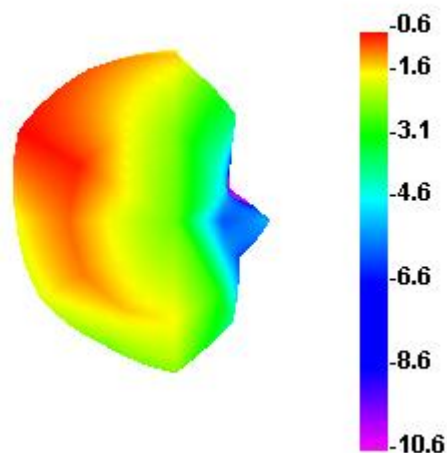


2500.000MHz E2

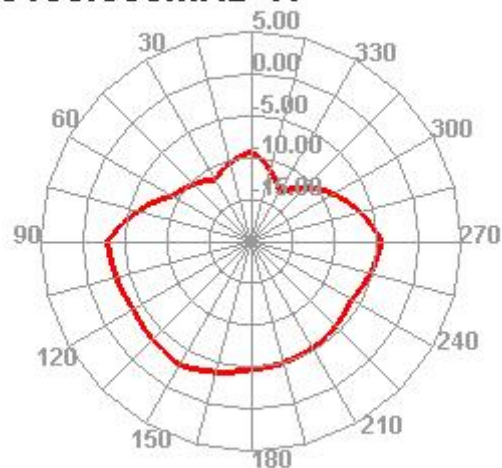


5.8G WIFI

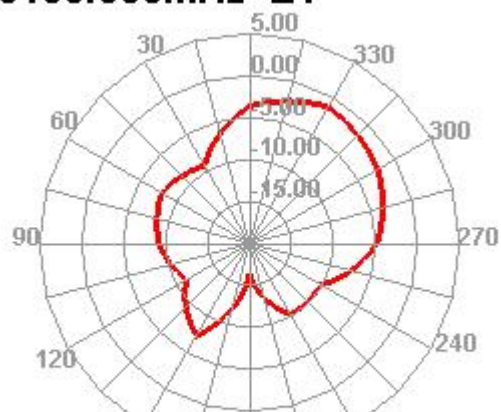
5150.000MHz



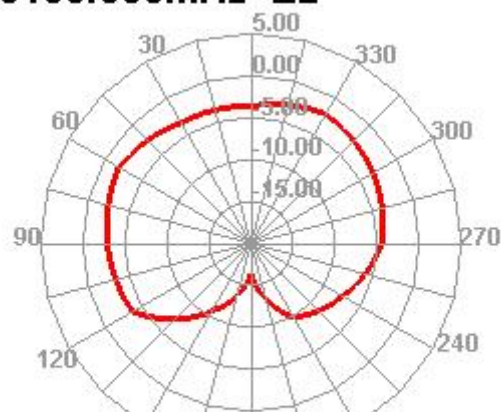
5150.000MHz H



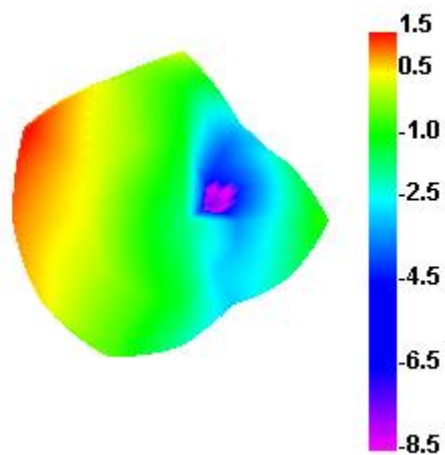
5150.000MHz E1



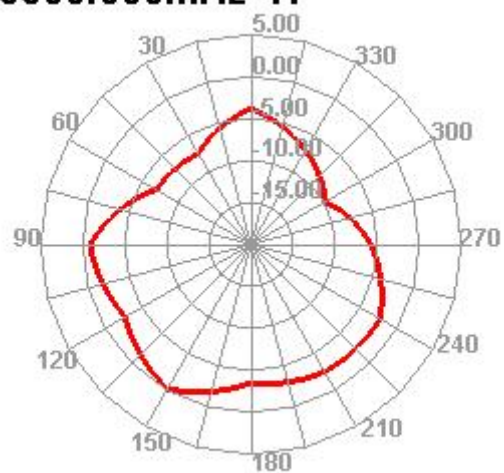
5150.000MHz E2



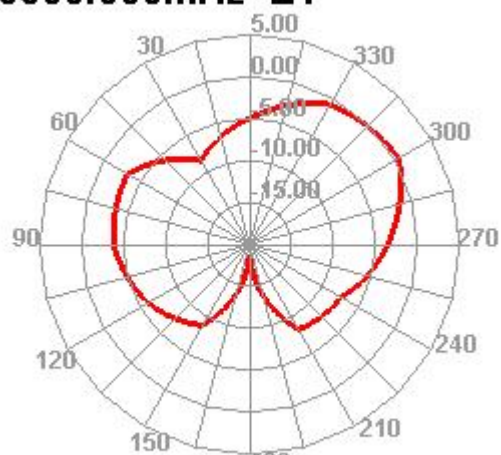
5500.000MHz



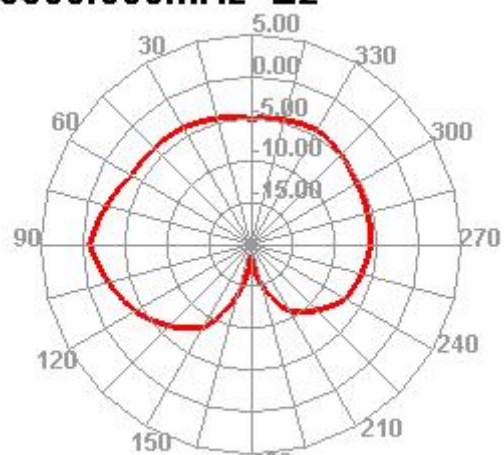
5500.000MHz H



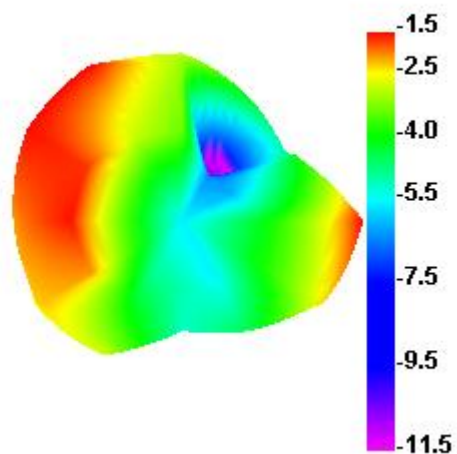
5500.000MHz E1



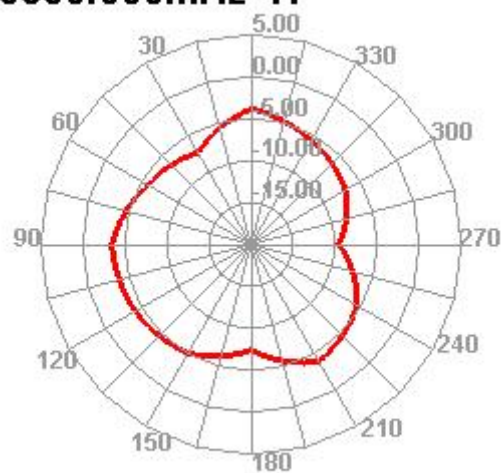
5500.000MHz E2



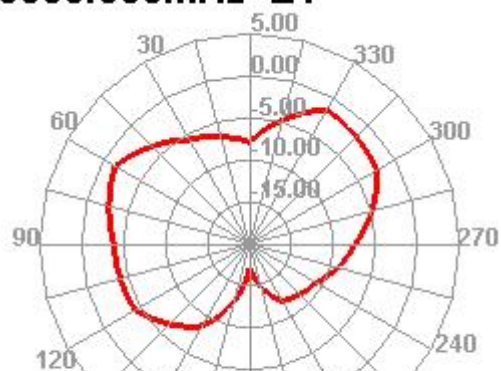
5850.000MHz



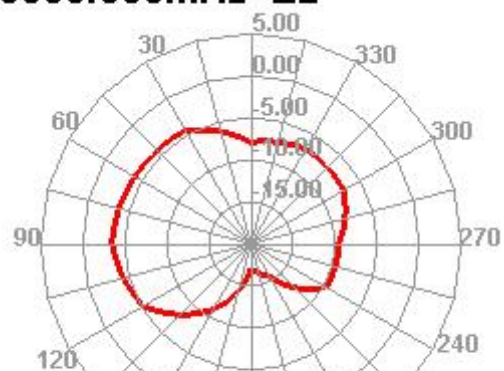
5850.000MHz H



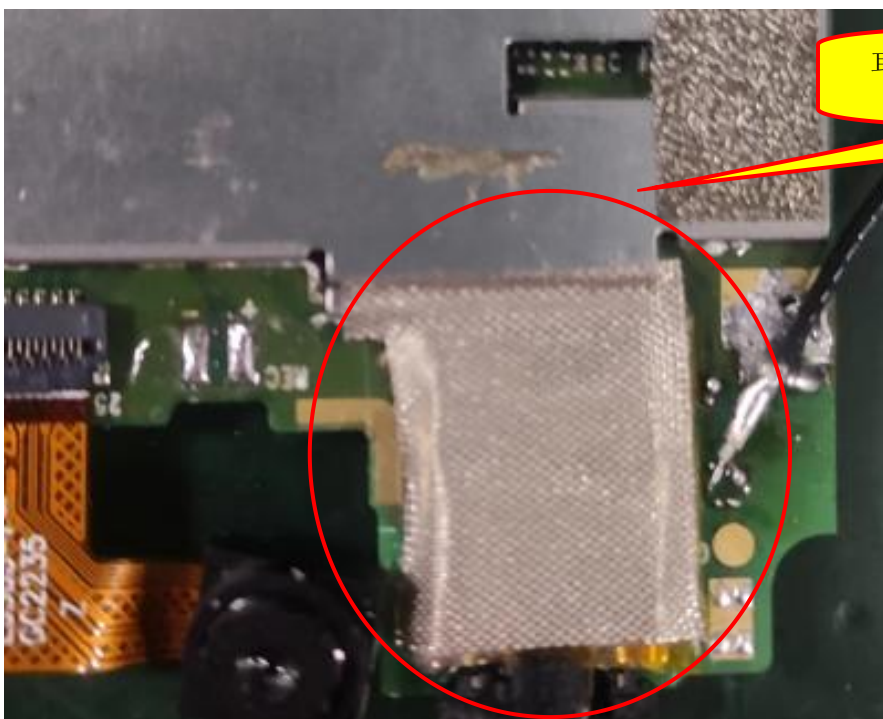
5850.000MHz E1



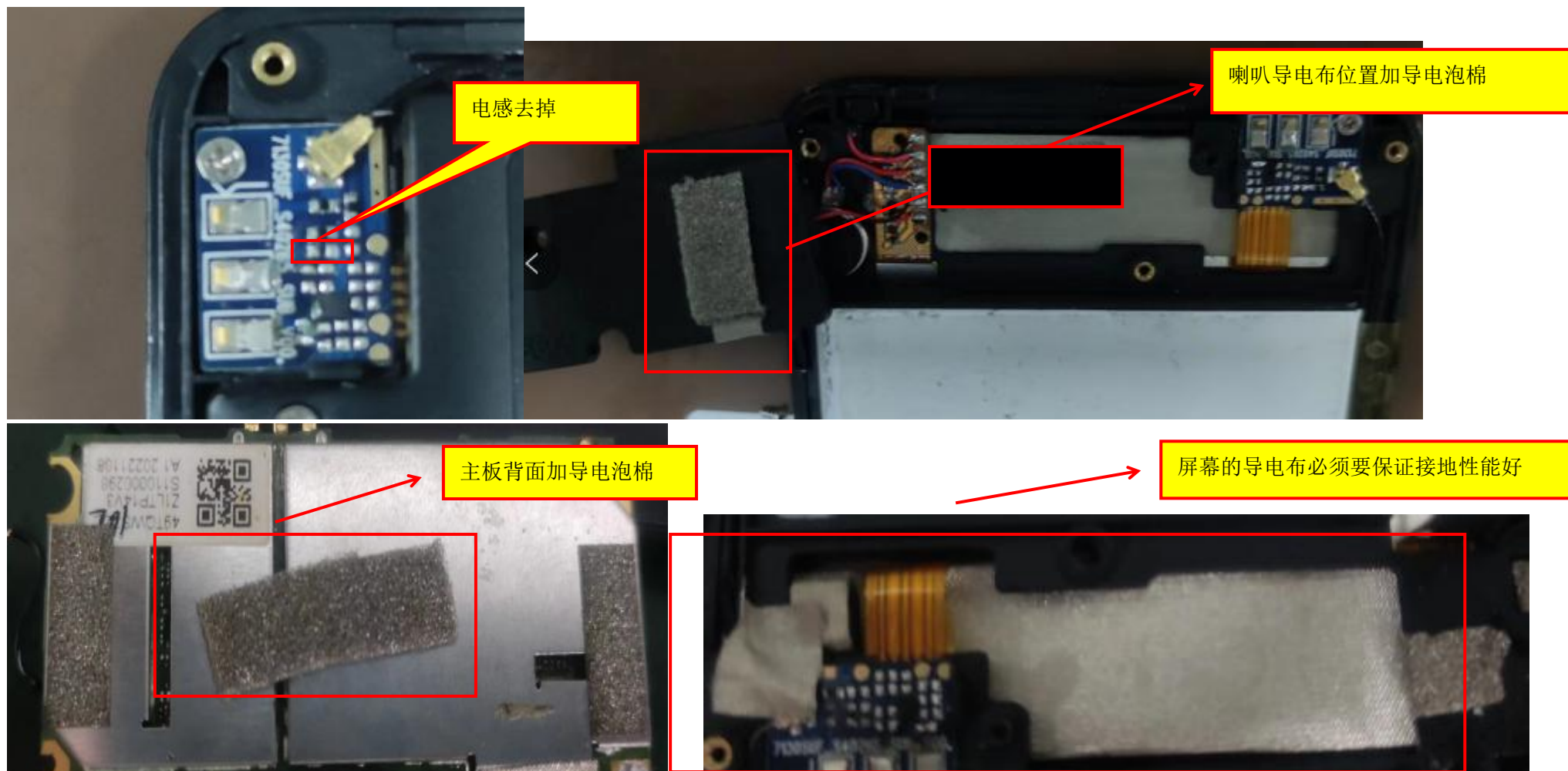
5850.000MHz E2



5. 环境处理



耳机座底部先用麦拉绝缘起来，然后包导电布接地屏蔽干扰。





同轴线座子跟屏幕接地。



马达底下贴导电泡棉跟屏幕
接地。

屏幕导电布需要贴大一点，把屏幕 APC 在包住一些。

