

The main purpose of this report is to verify and test the performance of FPC sample antenna

The main conclusion of this report: the performance test of the whole antenna is normal, and the antenna indicators meet the requirements

Key notes in this report: Pay attention to the assembly detail requirements

Manufacturer:Hong Ji Wireless Communication (Shen Zhen) Co. , Ltd

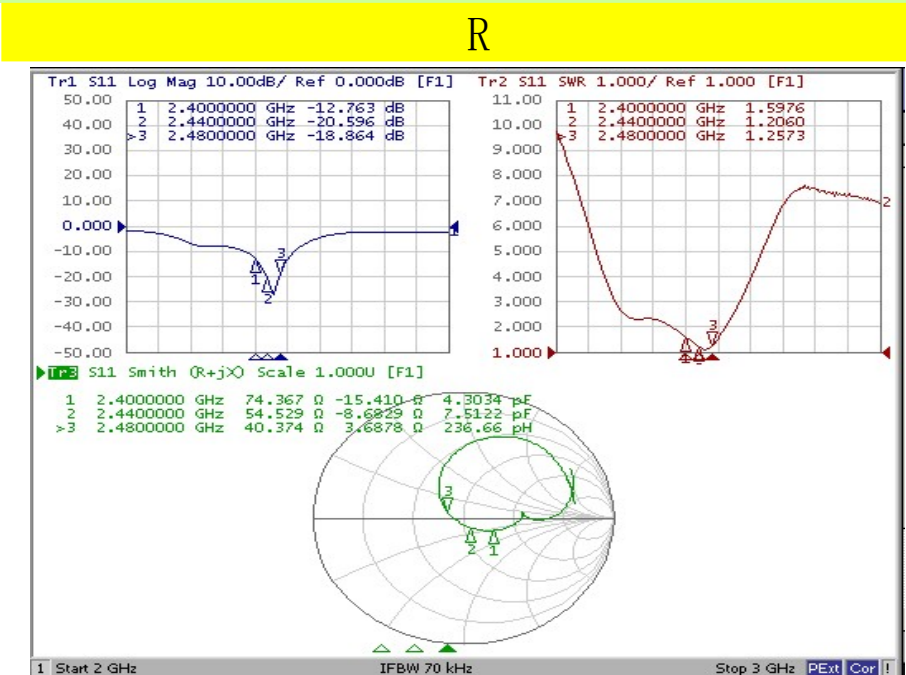
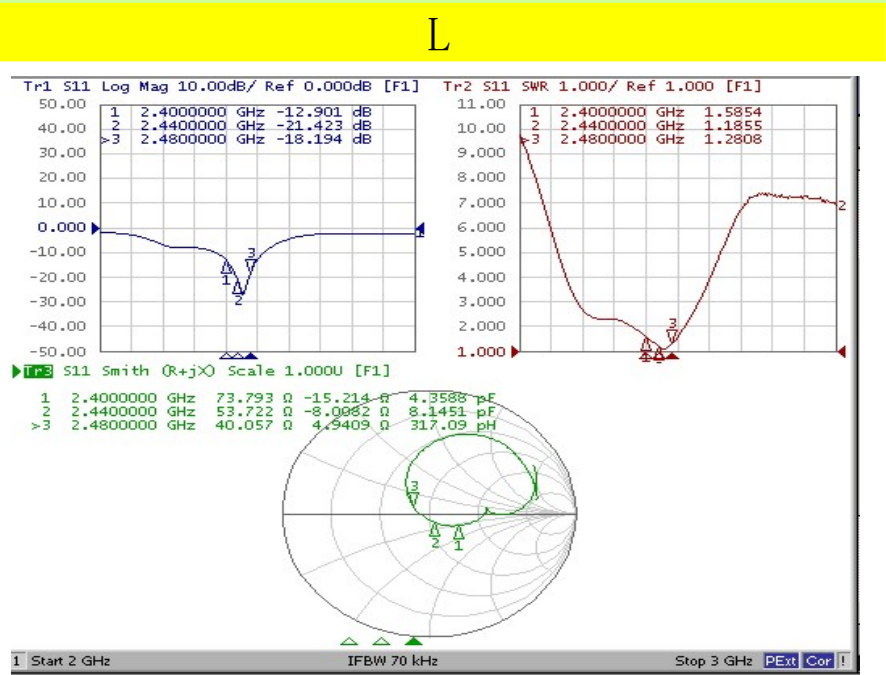
Address:Shenzhen Guangming District Huaqiang Creative Industry Park, Building 8B West, 12th Floor

PCBA RF conduct Power

L		
Channel	Power	Sensitivity
0	7	-93
39	7.5	-93
78	7.8	-93

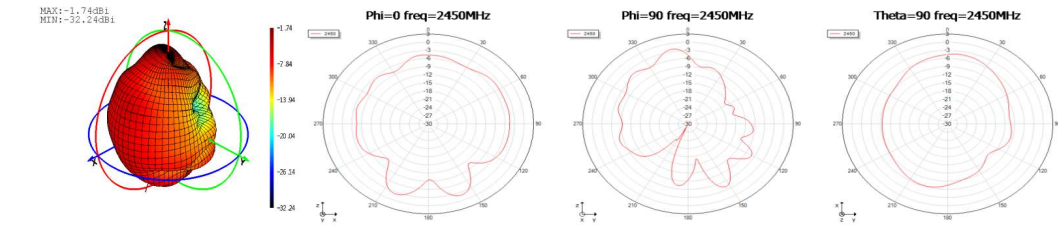
R		
Channel	Power	Sensitivity
0	7.2	-93
39	7.8	-93
78	8	-93

Antenna impedance parameter test status

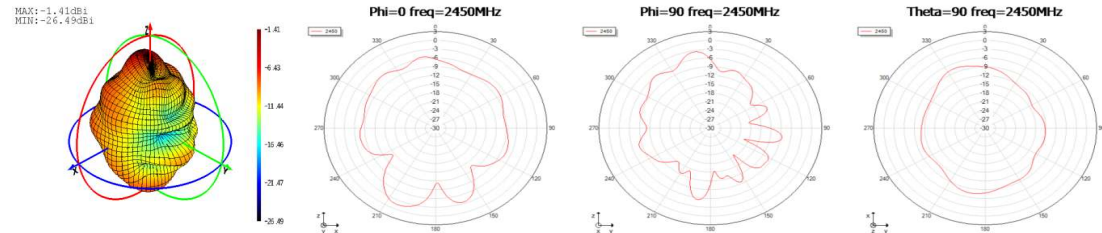


Test of passive efficiency of antenna (with 3D&2D direction charts)

L				
	FS		head&ear	
频点MHz	Gain(dBi)	Effi (%)	Gain(dBi)	Effi (%)
2400	-2.26	28.88	-3.75	22.55
2410	-2.02	29.86	-3.52	23.92
2420	-2.04	30.27	-3.51	24.42
2430	-1.89	30.52	-3.42	24.58
2440	-1.82	31.84	-3.41	25.06
2450	-1.74	31.84	-3.32	25.18
2460	-1.65	30.75	-3.15	24.92
2470	-1.27	30.86	-3.23	24.78
2480	-1.95	29.19	-3.35	24.26
2490	-1.93	29.35	-3.49	23.78
2500	-2.09	29.33	-3.55	23.41
AVG	-1.85	30.45	-3.41	24.41

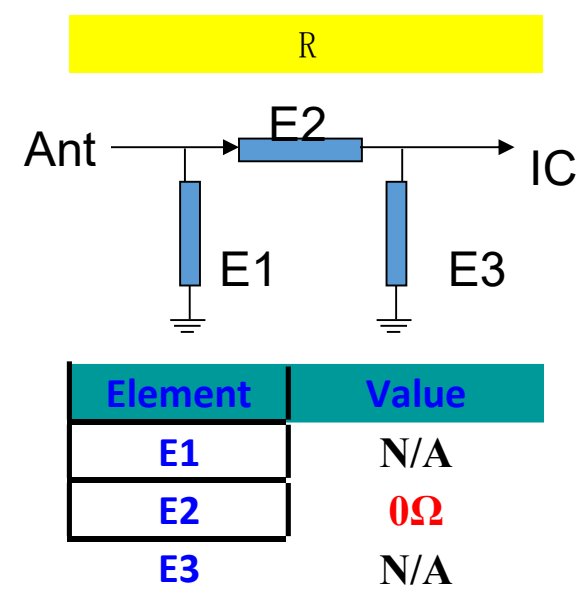
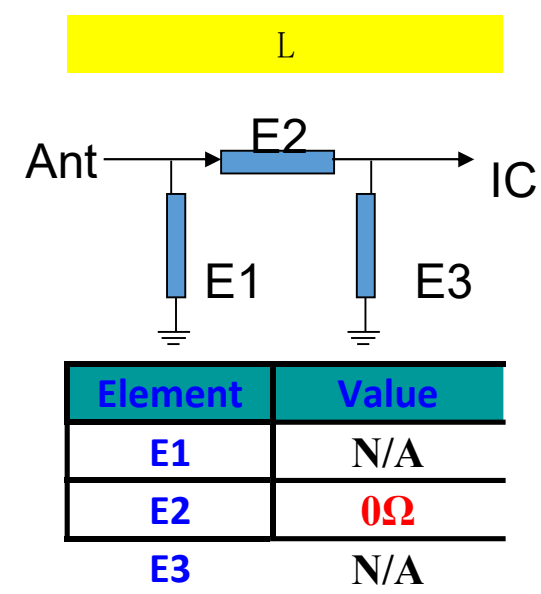


R				
	FS		head&ear	
频点MHz	Gain(dBi)	Effi (%)	Gain(dBi)	Effi (%)
2400	-1.91	29.17	-3.82	23.05
2410	-1.87	29.85	-3.74	24.55
2420	-1.69	30.49	-3.59	24.62
2430	-1.57	30.55	-3.45	24.42
2440	-1.45	30.51	-3.53	25.88
2450	-1.41	31.27	-3.37	25.11
2460	-1.63	30.11	-3.33	24.52
2470	-1.59	29.94	-3.49	24.91
2480	-1.69	29.57	-3.52	23.86
2490	-2.02	28.78	-3.68	23.42
2500	-2.37	28.55	-3.87	22.17
AVG	-1.65	30.16	-3.54	24.55



Active test data of the whole machine							
L				R			
Free state	Channel	TRP (dBm)	TIS (dBm)	Free state	Channel	TRP (dBm)	TIS (dBm)
L	CH 0	0.78	-85.74	R	CH 0	1.42	-84.99
	CH 39	1.62	-87.52		CH 39	2.18	-86.42
	CH 78	1.19	-86.88		CH 78	1.88	-86.74
Head Model	Channel	TRP (dBm)	TIS (dBm)	Head Model	Channel	TRP (dBm)	TIS (dBm)
L	CH 0	-6.11	-80.16	R	CH 0	-6.22	-79.13
	CH 39	-6.08	-80.96		CH 39	-5.88	-80.25
	CH 78	-6.24	-80.24		CH 78	-6.16	-80.07

Antenna matching circuit



Installation attention to detail

The horn cable and battery cable are twisted 4-5 times each

Place the battery cable and speaker cable separately, do not cross

Measured effect	
Test cell phone	Samsung S6/ Apple 6S
distance	Samsung S6 > 15m Apple 6S > 25m
Test site	sidewalk
tester	peng
summarize	

The antenna performance test of the whole machine is normal, the field measurement saw can meet the performance indicators of the whole machine antenna.