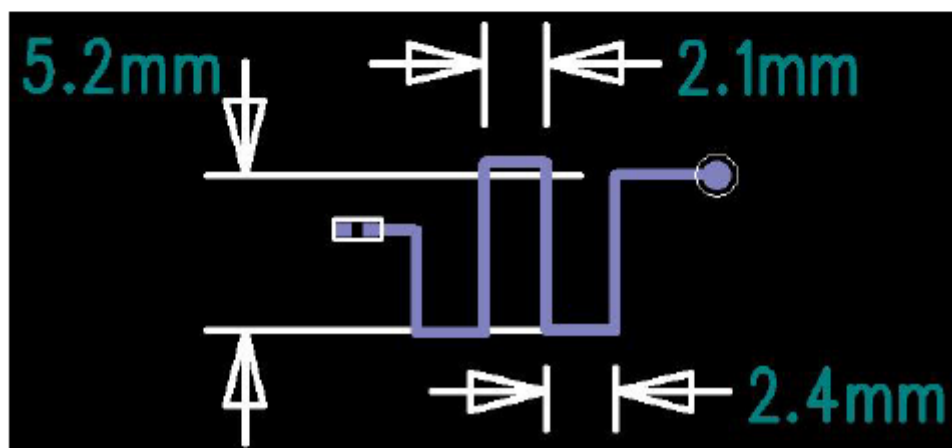


Antenna describe

1.Antenna describe:	
Anetenna plate	PCB antenna
Make name/model name	2. 4G_PCB_SPP220
Anetenna gain	0.52dBi
frequency range	2.4GHz-2.5GHz
Connector type	direct
Location of mearement(company name)	SHENZHEN HAIJIXING TECHNOLOGY CO., LTD

2、 External view drawing:

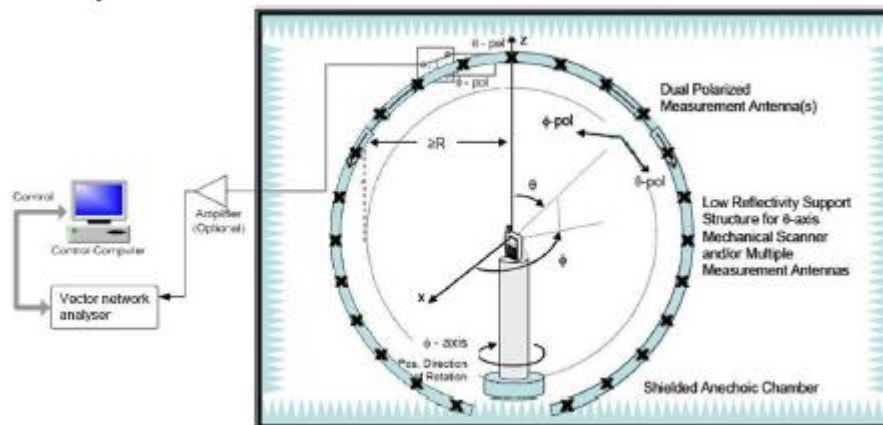
Picture of antenna



Test Equipment List

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Vector Network Analyzer	Agilent	E5071C	MY46103472	2014.09.07	2015.09.06
5*5*5 Full Anechoic Chamber	SATIMO	5*5*5	N/A	2014.09.05	2015.09.04
SG24 Multi-probe Antenna Measurement System	SATIMO	SG24-L	1101855-0001	2014.10.25	2015.10.24

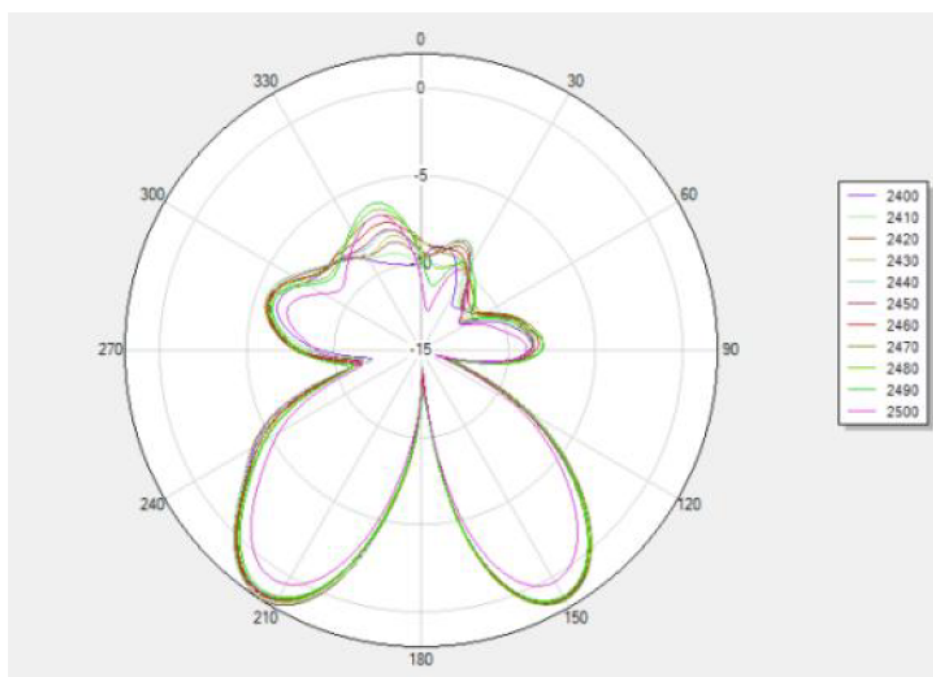
Test Setup



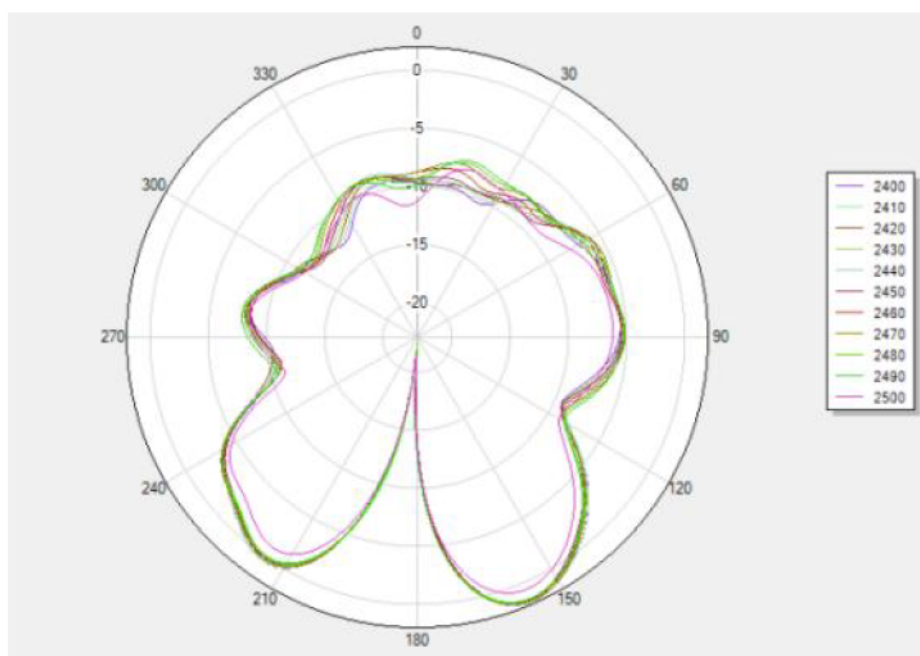
Gain and Efficiency

Passive Test 2.4GHz											
Fre.(MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Effi(%)	33.81	33.16	32.76	34.69	35.31	32.09	31.14	30.46	28.50	26.28	25.48
Gain(dBi)	0.07	-0.07	-0.14	0.52	0.00	-0.22	-0.54	-0.56	-0.83	-0.99	-1.08

Phi 0 2D



Phi 90 2D



Theta 90 2D

