



深圳市千目通讯科技有限公司

Shenzhen Qianmu Communication Technology Co., Ltd.

Applicant: PEICHENG TECHNOLOGY CO., LTD

program: AT71K

date: 2023-5-18

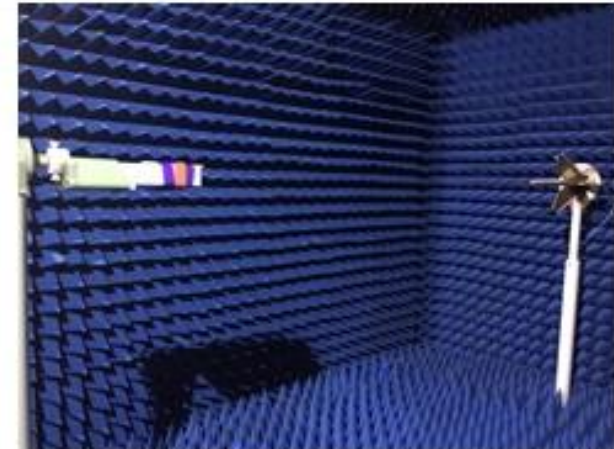
ver: A1

test: ZHENG LI GUO



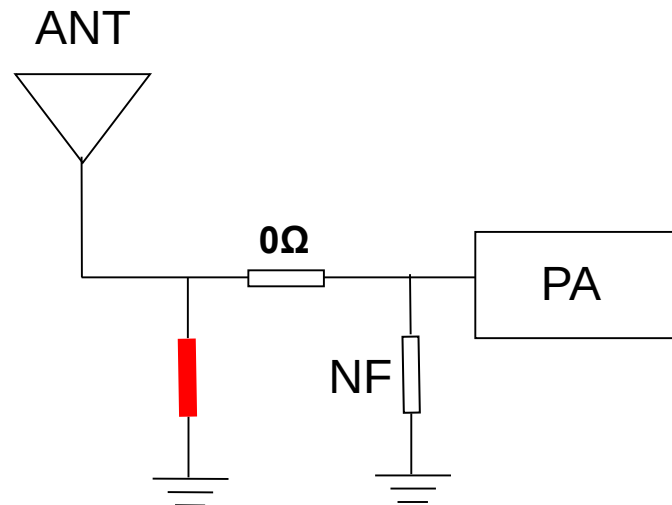
测试环境

	item	equipment
1. S-parameter)	1. Return Loss) 2. VSWR)	Agilent E5071B HP 8753D
2. Active	1. TRP 2. TIS	ETS 7x4x3 m (3D) Chamber ETS 5x3x3 m (3D) Chamber Agilent 8960 E5515B × 2 StarPoint SP6011
3. Passive	1. Gain 2. Efficiency	ETS 7x4x3 m (3D) Chamber ETS 5x3x3 m (3D) Chamber Agilent E5071B HP 8753D





matching circuit –WIFI ANT



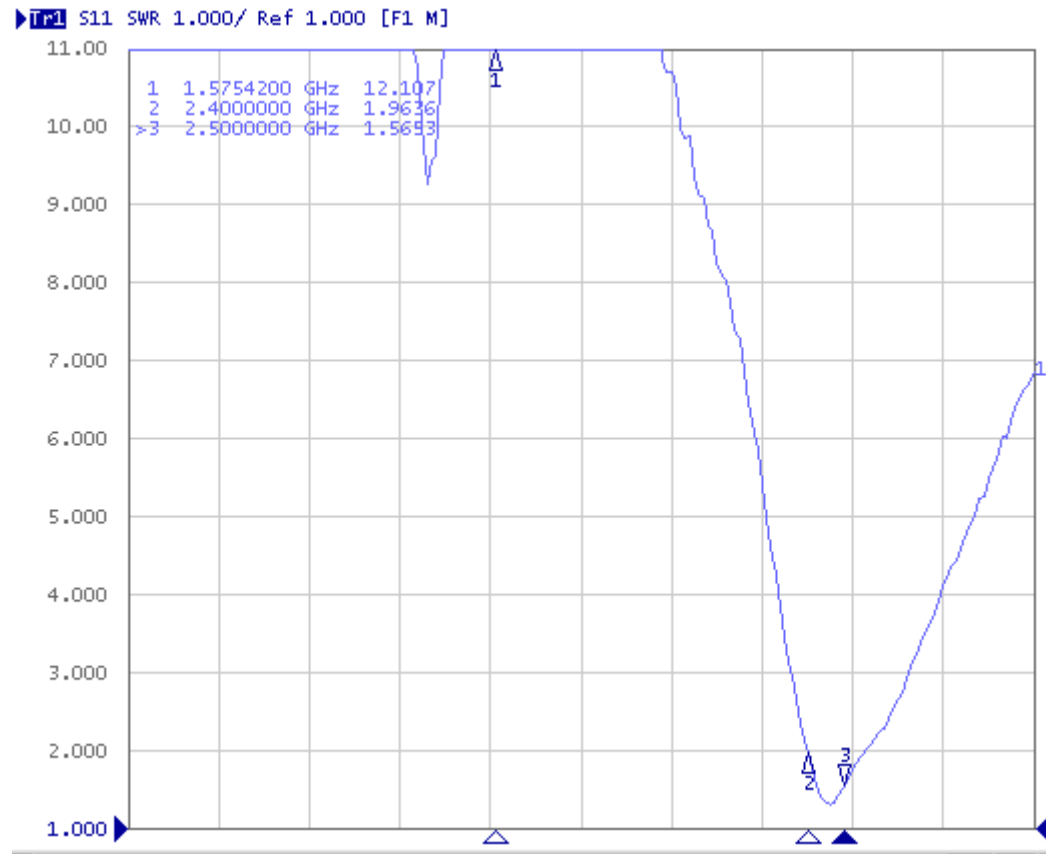


WIFI antenna 2400-2500Mz active data

	FPC		
	WIFI2400~2500Mz 802.11b 11Mbps		
Channel	1	6	11
TRP	13.91	13.35	13.82
TIS	-79.52	-80.57	-79.69



S11 passive parameters :





WiFi antenna efficiency and gain :

FEITUKEJI											
Frequency ID	7	8	9	10	11	12	13	14	15	16	17
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Point Values											
Ant. Port Input Pwr. (dBm)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tot. Rad. Pwr. (dBm)	-5.43	-5.39	-5.30	-5.00	-5.06	-4.66	-4.80	-4.88	-4.85	-4.58	-4.56
Peak EIRP (dBm)	0.39	0.49	0.51	0.68	0.50	0.77	0.50	0.44	0.45	0.65	0.57
Directivity (dBi)	5.82	5.89	5.81	5.68	5.56	5.43	5.30	5.33	5.30	5.23	5.14
Efficiency (dB)	-5.43	-5.39	-5.30	-5.00	-5.06	-4.66	-4.80	-4.88	-4.85	-4.58	-4.56
Efficiency (%)	28.60	28.90	29.50	31.60	31.20	34.20	33.10	32.50	32.70	34.80	35.00
Gain (dBi)	0.39	0.49	0.51	0.68	0.50	0.63	0.50	0.44	0.45	0.65	0.57
NHPRP $\pm\pi/4$ (dBm)	-6.80	-6.73	-6.61	-6.30	-6.35	-5.96	-6.09	-6.17	-6.15	-5.90	-5.90
NHPRP $\pm\pi/6$ (dBm)	-8.39	-8.30	-8.17	-7.83	-7.88	-7.47	-7.60	-7.67	-7.65	-7.40	-7.41
NHPRP $\pm\pi/8$ (dBm)	-9.69	-9.61	-9.46	-9.10	-9.13	-8.72	-8.83	-8.89	-8.85	-8.60	-8.61
Upper Hem. PRP (dBm)	-7.65	-7.65	-7.59	-7.34	-7.48	-7.18	-7.42	-7.60	-7.63	-7.40	-7.37
Lower Hem. PRP (dBm)	-9.42	-9.32	-9.17	-8.81	-8.75	-8.23	-8.23	-8.21	-8.11	-7.79	-7.79
Upper Hem. PRP (%)	17.19	17.18	17.42	18.47	17.86	19.15	18.10	17.39	17.26	18.20	18.33
Lower Hem. PRP (%)	11.44	11.70	12.10	13.16	13.33	15.02	15.04	15.10	15.45	16.62	16.63



WiFi antenna evaluation diagram:

