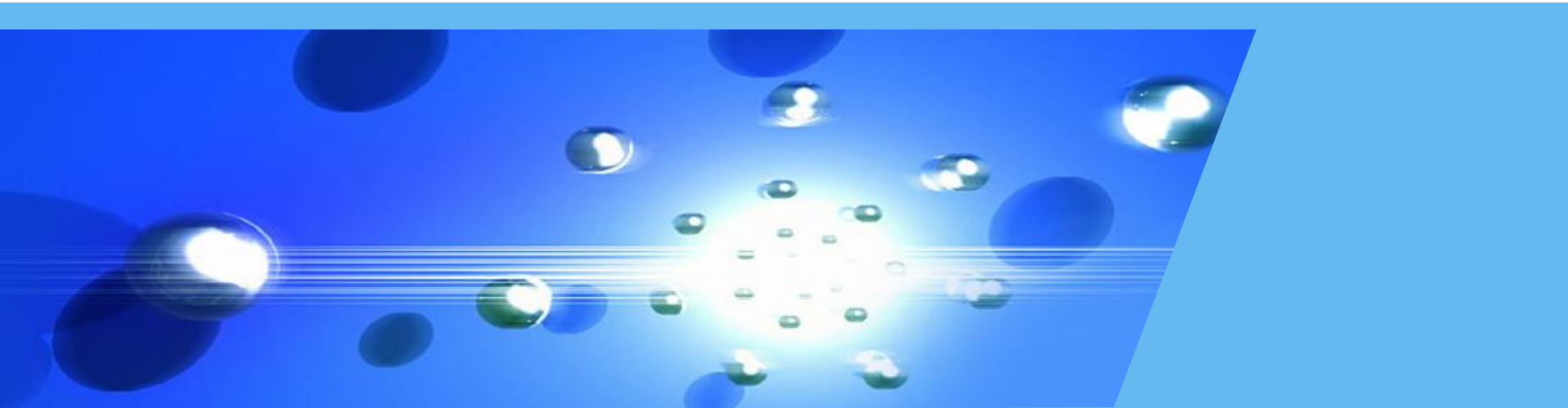




Shenzhen Deweima Communication Equipment Co., LTD

Antenna Test Report

**Address: 3rd Floor, Building 1, Friendship Building, Chuangye 2nd Road, Bao 'an District 23, Shenzhen City
(Behind Ping An Bank, Exit B of Honglang North Metro Station)**

Item information

1

clientele: Qian Chuang Wei

2

Project: VM02

3

Test frequency: 5000~5800MHZ

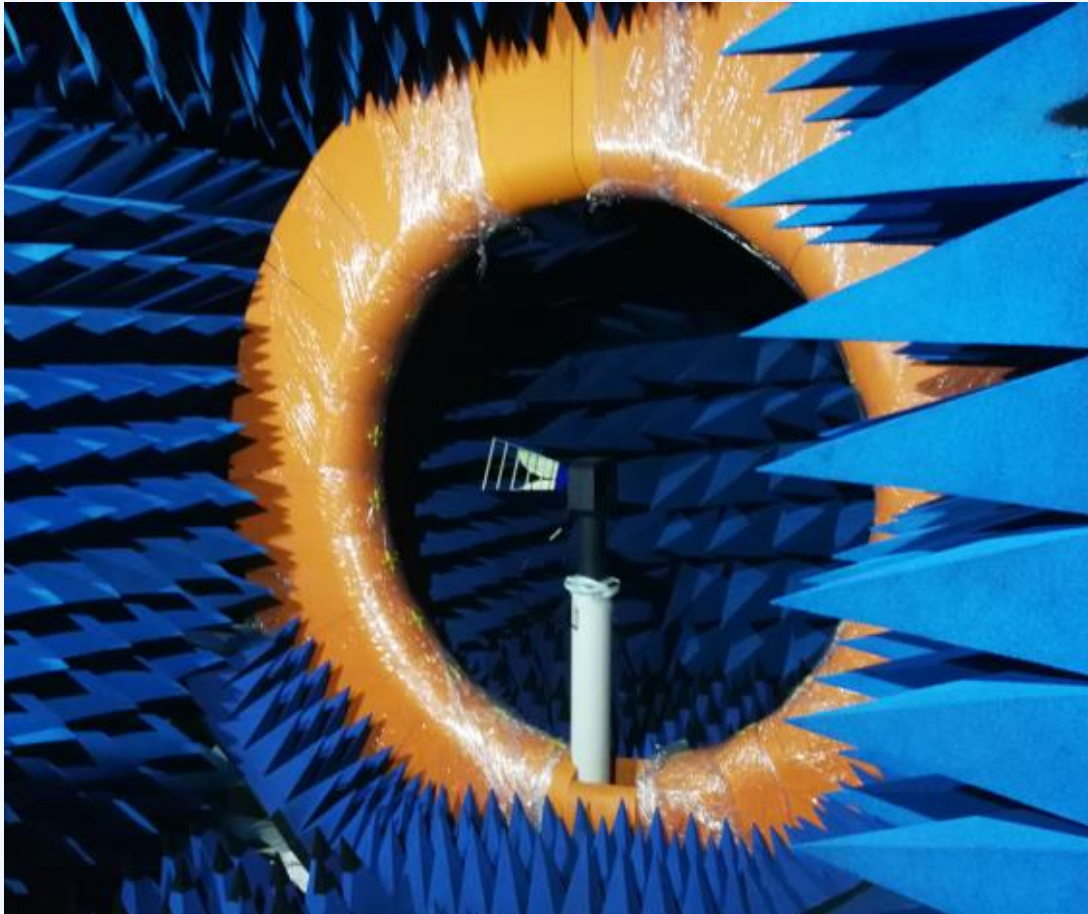
4

Engineering: Mr.Chen(**18588265188**)

5

Date: **2025.9.12**

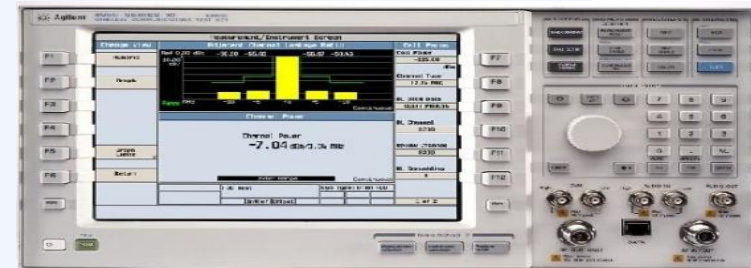
Testing instruments and equipment



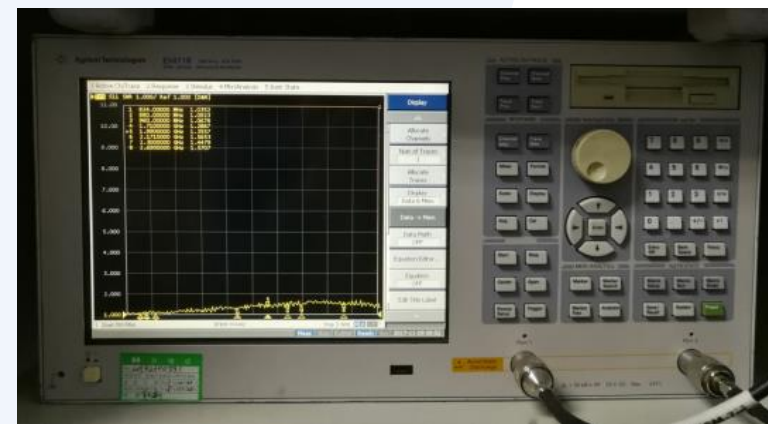
A 24-probe microwave chamber



R&S CMW500



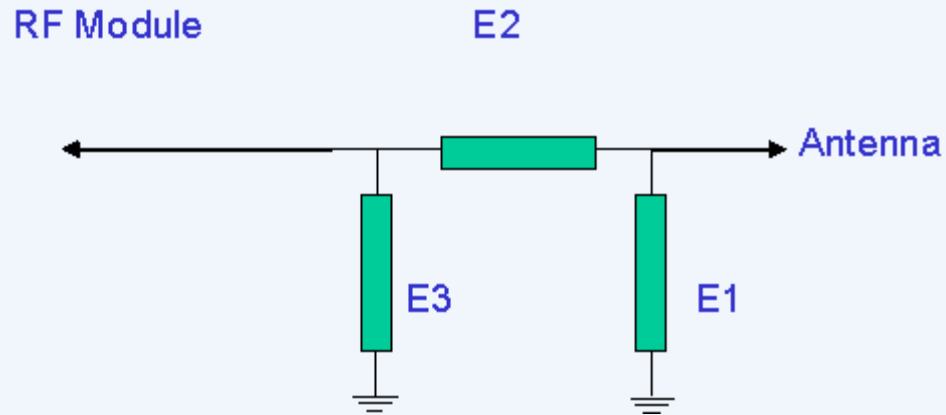
Agilent E5515C



Agilent Technologies E5071B

Antenna switch and matching circuit description

Antenna matching circuit(WIFI)

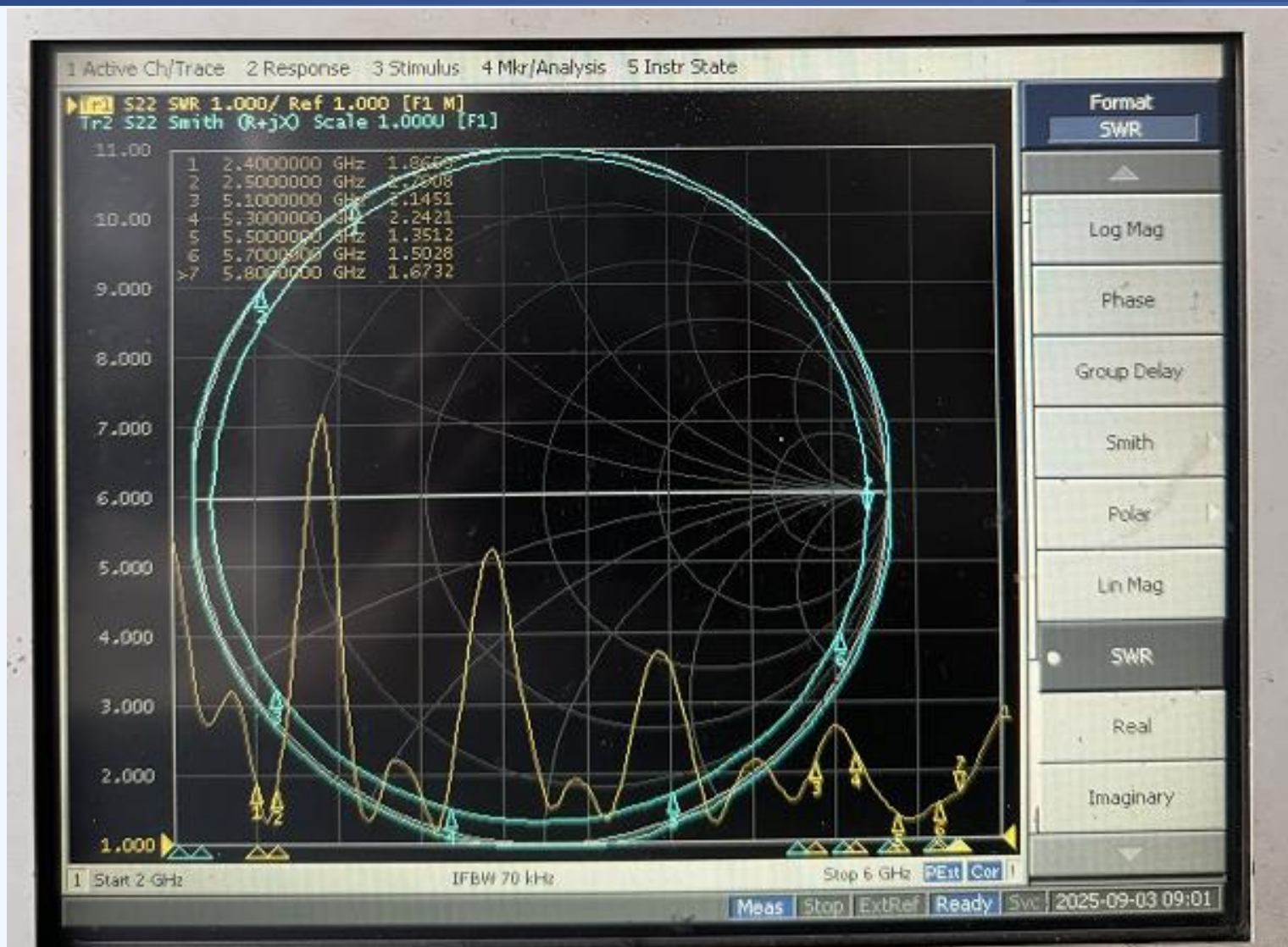


Antenna Photo & Length (mm): (35mm*22mm)

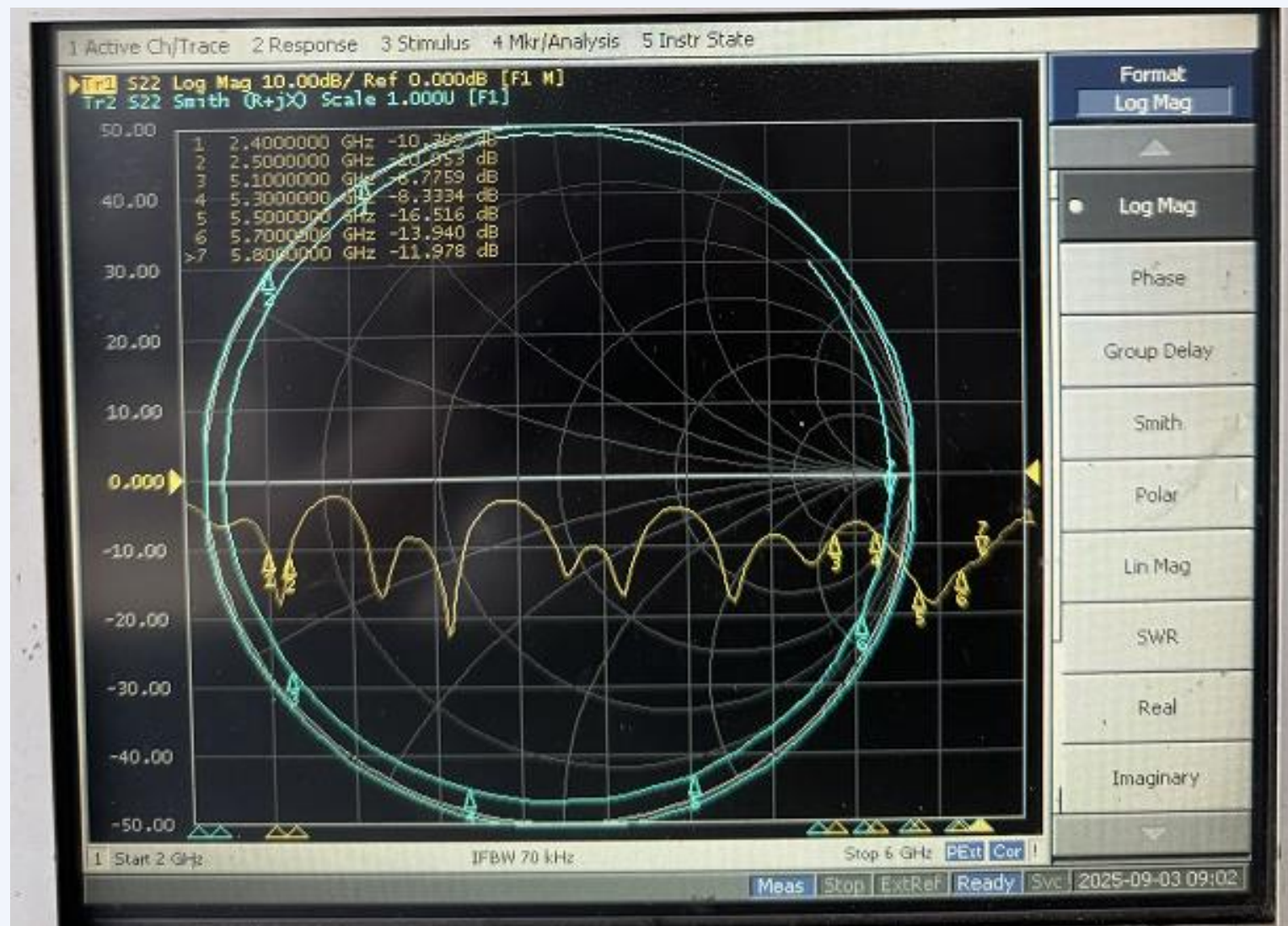
Antenna structure: WiFi FPCB Stick the front cover



Passive standing wave diagram of antenna



Antenna passive return loss



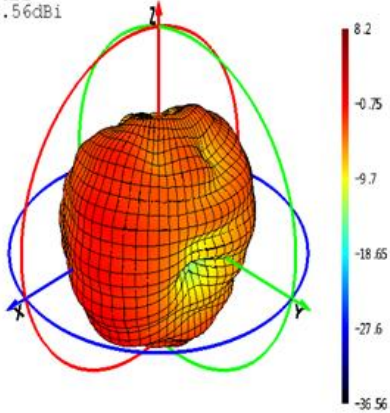
Antenna passive gain efficiency

Frequency 频率(MHz)	Gain 增益(dBi)	Efficiency 效率(%)	Frequency 频率(MHz)	Gain 增益(dBi)	Efficiency 效率(%)
2400.00	2.20	40.90	5000.00	2.47	35.31
2410.00	2.19	41.35	5050.00	2.68	35.85
2420.00	2.28	42.63	5100.00	4.24	42.86
2430.00	2.40	40.18	5150.00	4.07	43.14
2440.00	2.62	41.57	5200.00	4.27	47.18
2450.00	2.82	43.70	5250.00	3.53	47.39
2460.00	2.49	45.97	5300.00	5.02	51.29
2470.00	2.47	46.99	5350.00	3.50	37.53
2480.00	2.26	46.97	5400.00	4.07	37.33
2490.00	2.00	44.98	5450.00	3.15	40.31
2500.00	1.64	42.01	5500.00	2.34	35.18
			5550.00	3.87	39.89
			5600.00	3.57	35.68
			5650.00	4.06	34.68
			5700.00	4.71	38.70
			5750.00	5.62	37.04
			5800.00	5.97	42.83
			5850.00	4.76	35.27

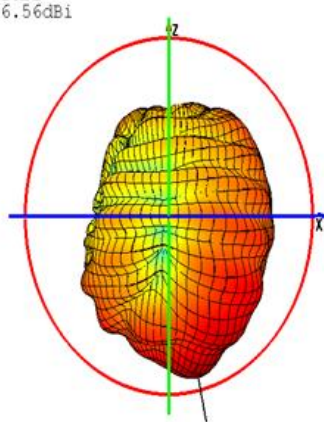
Antenna passive apple image

2400MHz

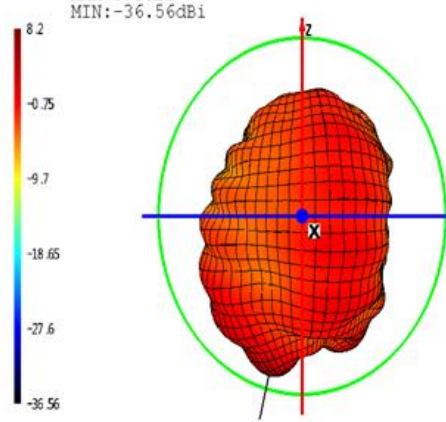
MAX:8.2dBi
MIN:-36.56dBi



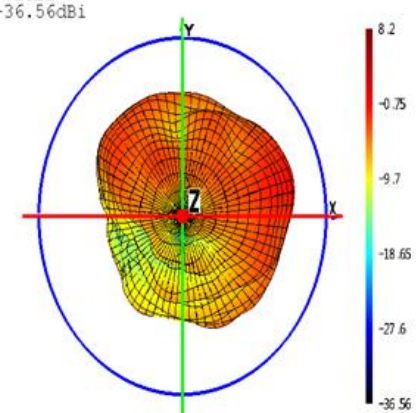
MAX:8.2dBi
MIN:-36.56dBi



MAX:8.2dBi
MIN:-36.56dBi

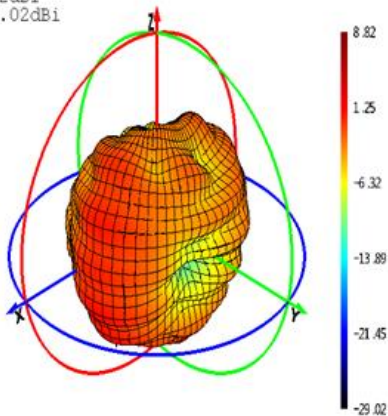


MAX:8.2dBi
MIN:-36.56dBi

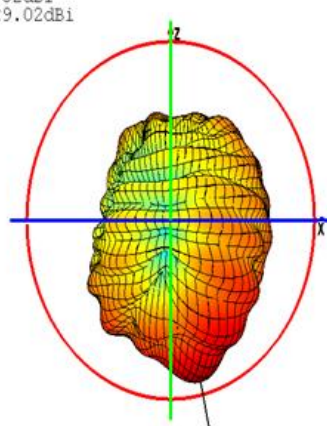


2450MHz

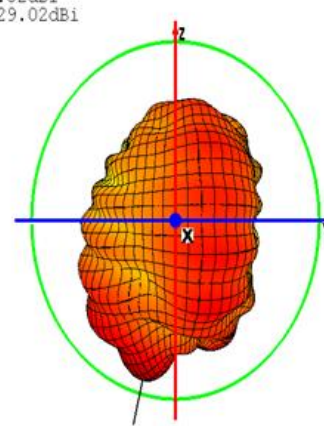
MAX:8.82dBi
MIN:-29.02dBi



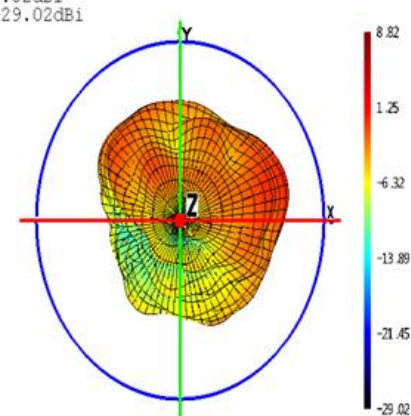
MAX:8.82dBi
MIN:-29.02dBi



MAX:8.82dBi
MIN:-29.02dBi



MAX:8.82dBi
MIN:-29.02dBi



Antenna passive apple image

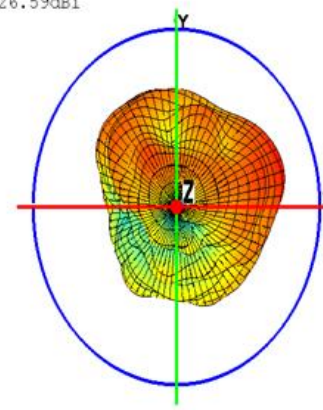
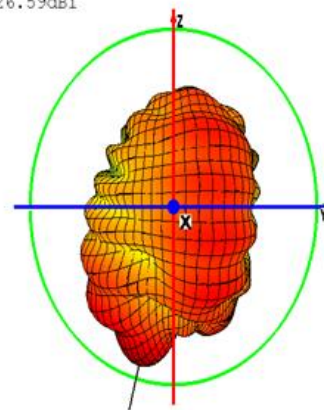
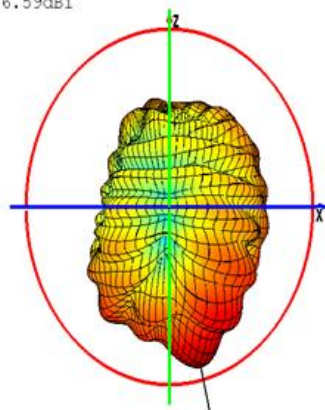
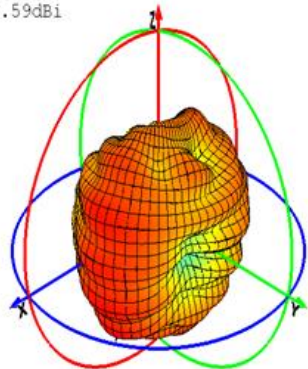
2500MHz

MAX:7.64dBi
MIN:-26.59dBi

MAX:7.64dBi
MIN:-26.59dBi

MAX:7.64dBi
MIN:-26.59dBi

MAX:7.64dBi
MIN:-26.59dBi



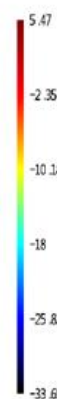
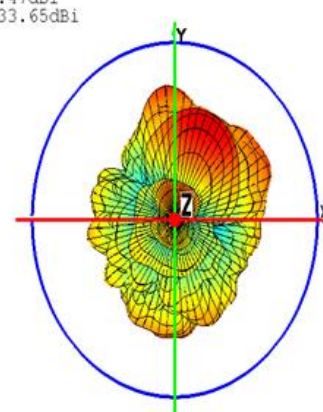
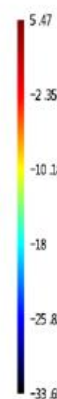
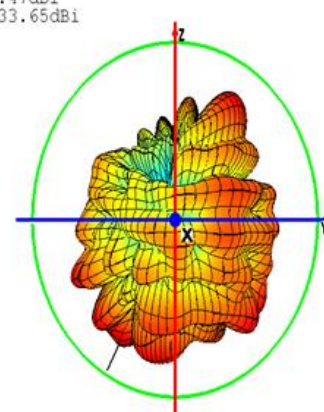
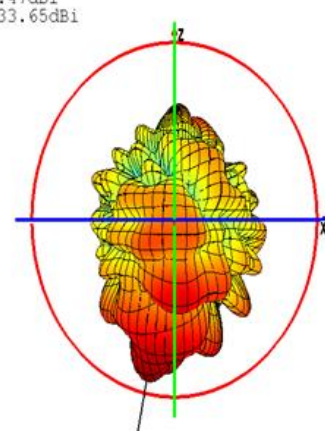
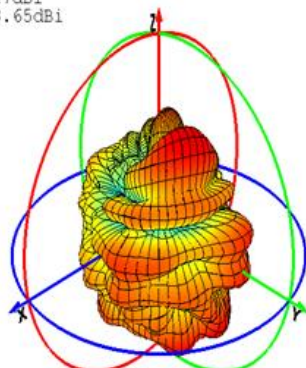
5000MHz

MAX:5.47dBi
MIN:-33.65dBi

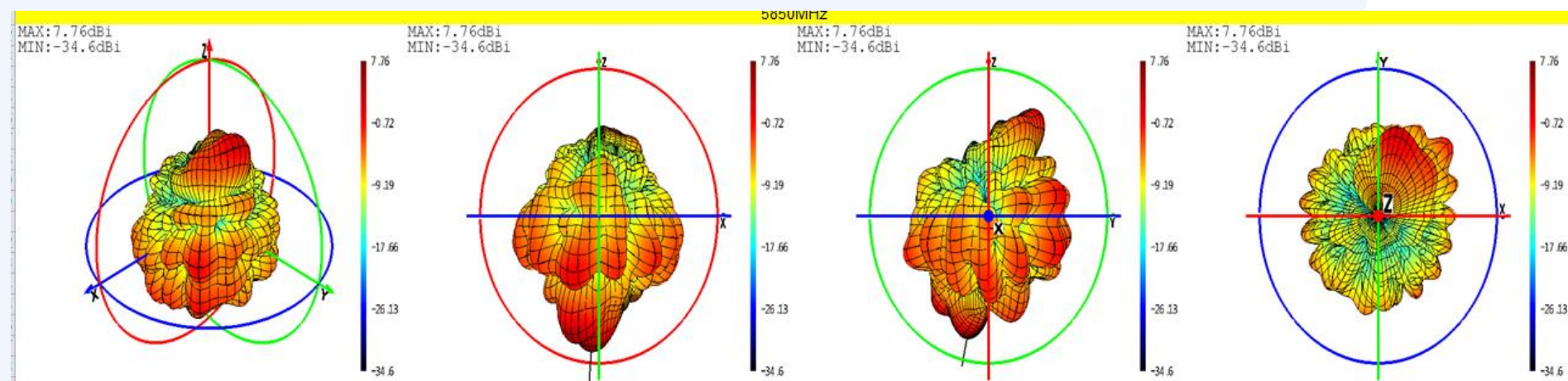
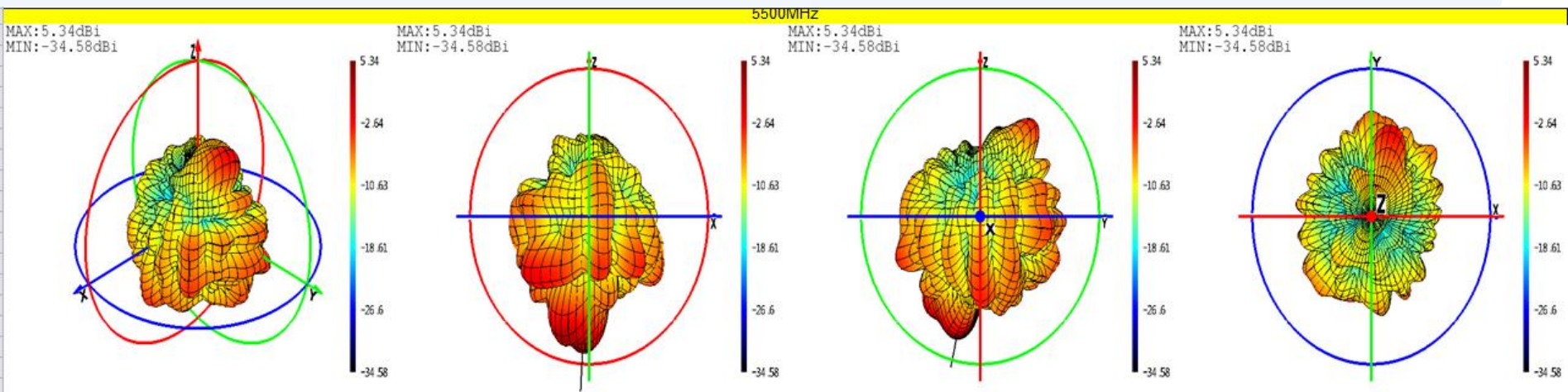
MAX:5.47dBi
MIN:-33.65dBi

MAX:5.47dBi
MIN:-33.65dBi

MAX:5.47dBi
MIN:-33.65dBi



Antenna passive apple image



Passive standing wave diagram of the fixture at the chip end



Antenna passive gain efficiency

频率 (MHz)	增益 (dBi)	效率 (dB)	效率 (%)
2400	0.27	-8.75	13.33
2410	0.60	-8.24	15.00
2420	1.07	-7.65	17.18
2430	1.97	-6.74	21.20
2440	3.03	-5.59	27.61
2450	3.32	-5.19	30.29
2460	2.57	-5.38	28.94
2470	2.16	-5.68	27.03
2480	1.60	-6.13	24.40
2490	1.30	-6.42	22.80
2500	1.44	-6.23	23.83

频率 (MHz)	增益 (dBi)	效率 (dB)	效率 (%)
5000	-13.03	-23.82	0.41
5050	-17.34	-26.64	0.22
5100	-15.00	-25.38	0.29
5150	-13.23	-23.15	0.48
5200	-16.26	-25.29	0.30
5250	-14.34	-23.16	0.48
5300	-14.73	-22.47	0.57
5350	-15.31	-23.55	0.44
5400	-15.73	-24.17	0.38
5450	-12.22	-21.86	0.65
5500	-18.91	-27.25	0.19
5550	-11.24	-20.47	0.90
5600	-19.34	-27.33	0.18
5650	-14.06	-22.95	0.51
5700	-15.28	-24.28	0.37
5750	-14.53	-23.14	0.49
5800	-12.73	-22.07	0.62

天线位置图



环境处理





Thank You !

Address: 3rd Floor, Building 1, Friendship Building, Chuangye 2nd Road, Bao 'an District 23, Shenzhen City (Behind Ping An Bank, Exit B of Honglang North Metro Station)