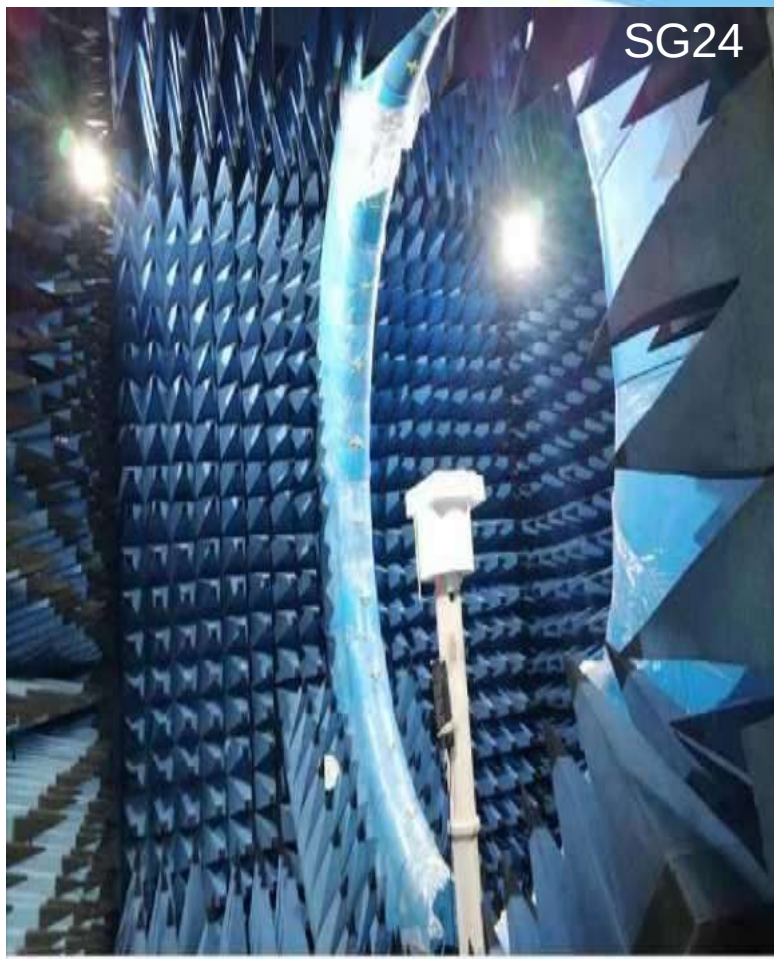


Antenna Test Report

Customer	铠硕达
Agent	钜恒电子
Project name	眼镜5S
Model. IC	炬芯
Model. ANT	TS2012E245C04
Manufacturer	钜恒电子
Manufacturer address	A303, Hongshan A & Huasui B, Bldg 47, Xicheng Ind Zone, Longteng, Xixiang, Bao'an , Shenzhen, China
Antenna Type	Ceramic Antenna

Test Equipment



Agilent E5071B



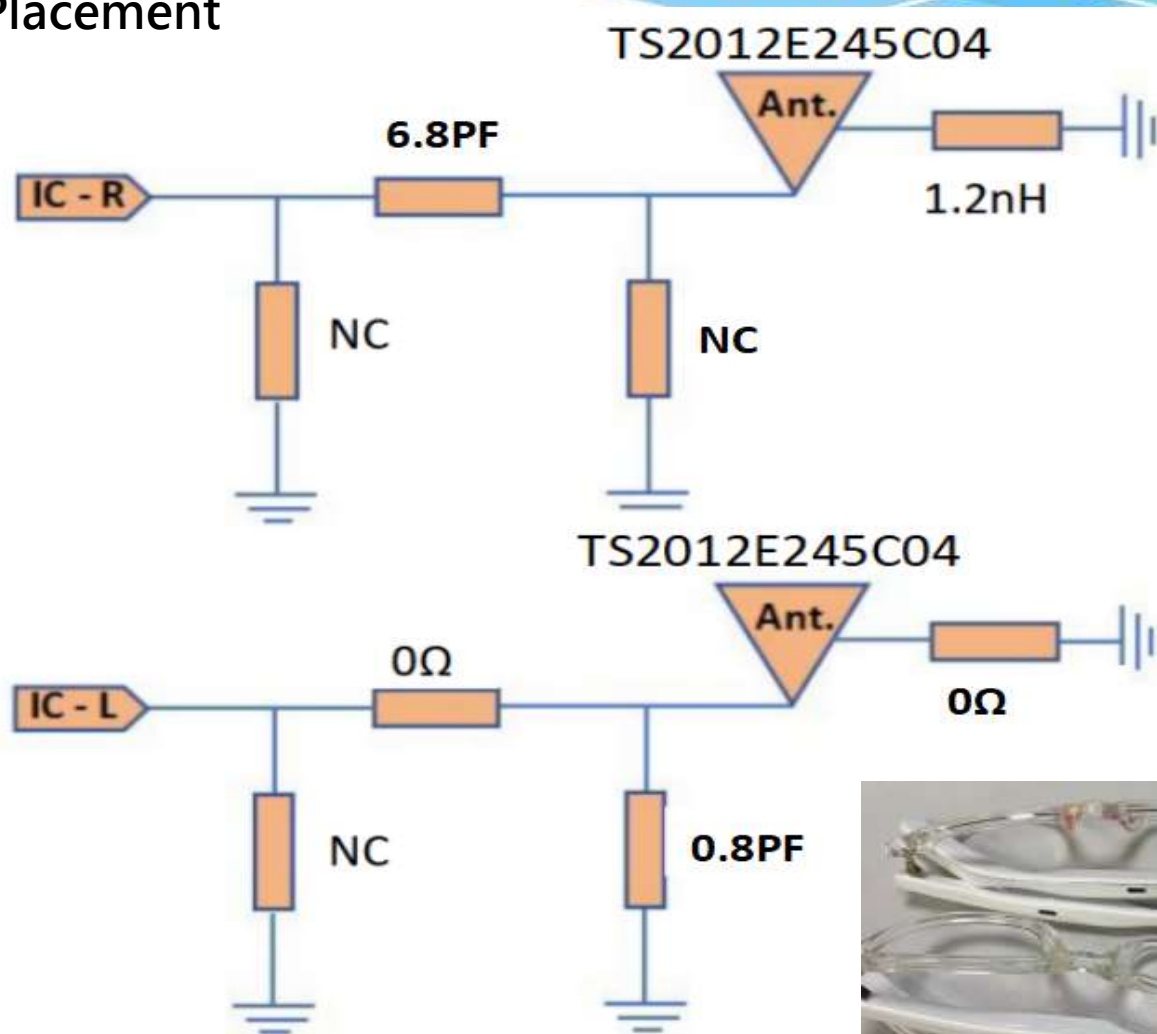
CMW 500



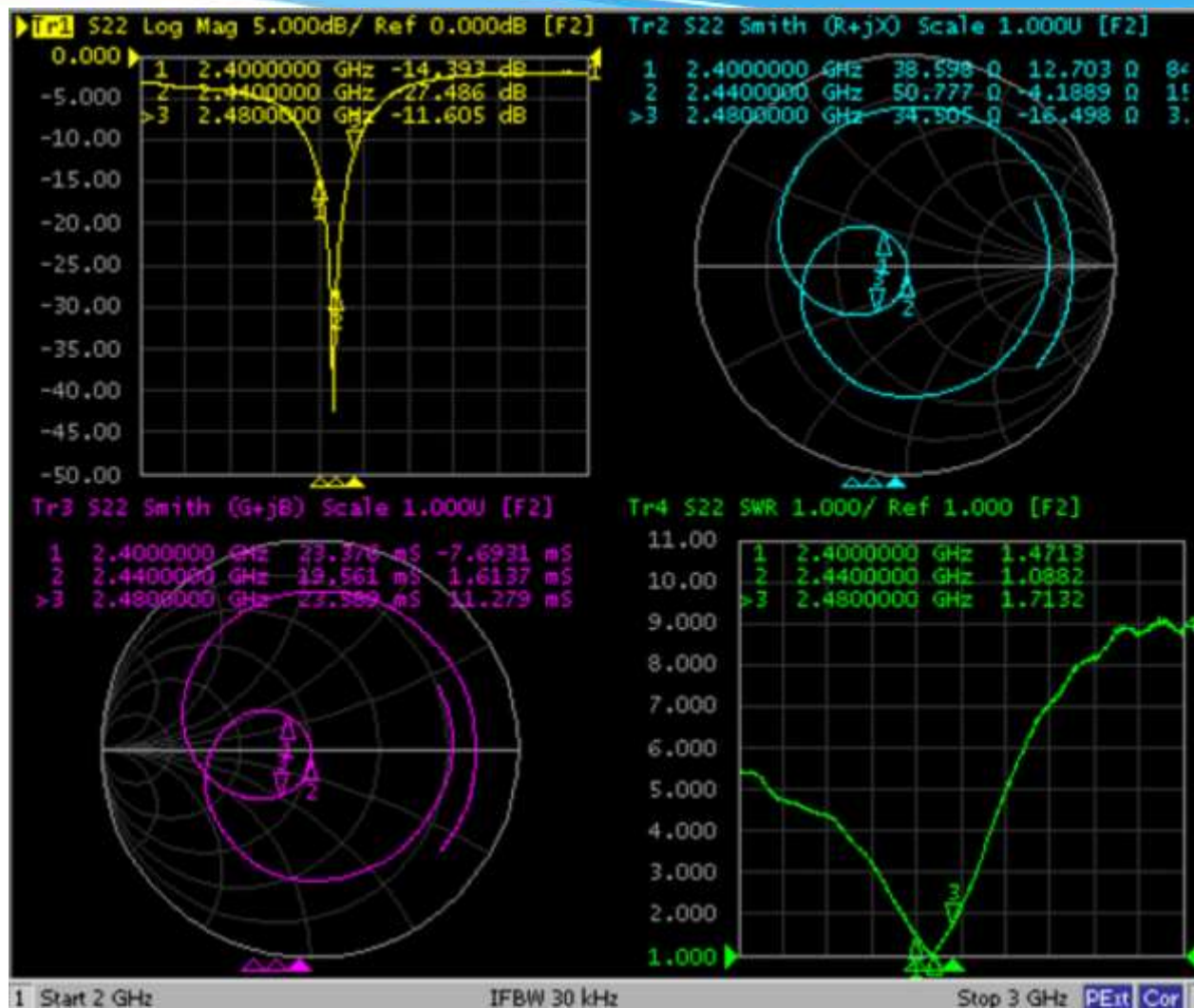
Agilent 8960

Ant. Matching

- Antenna Placement

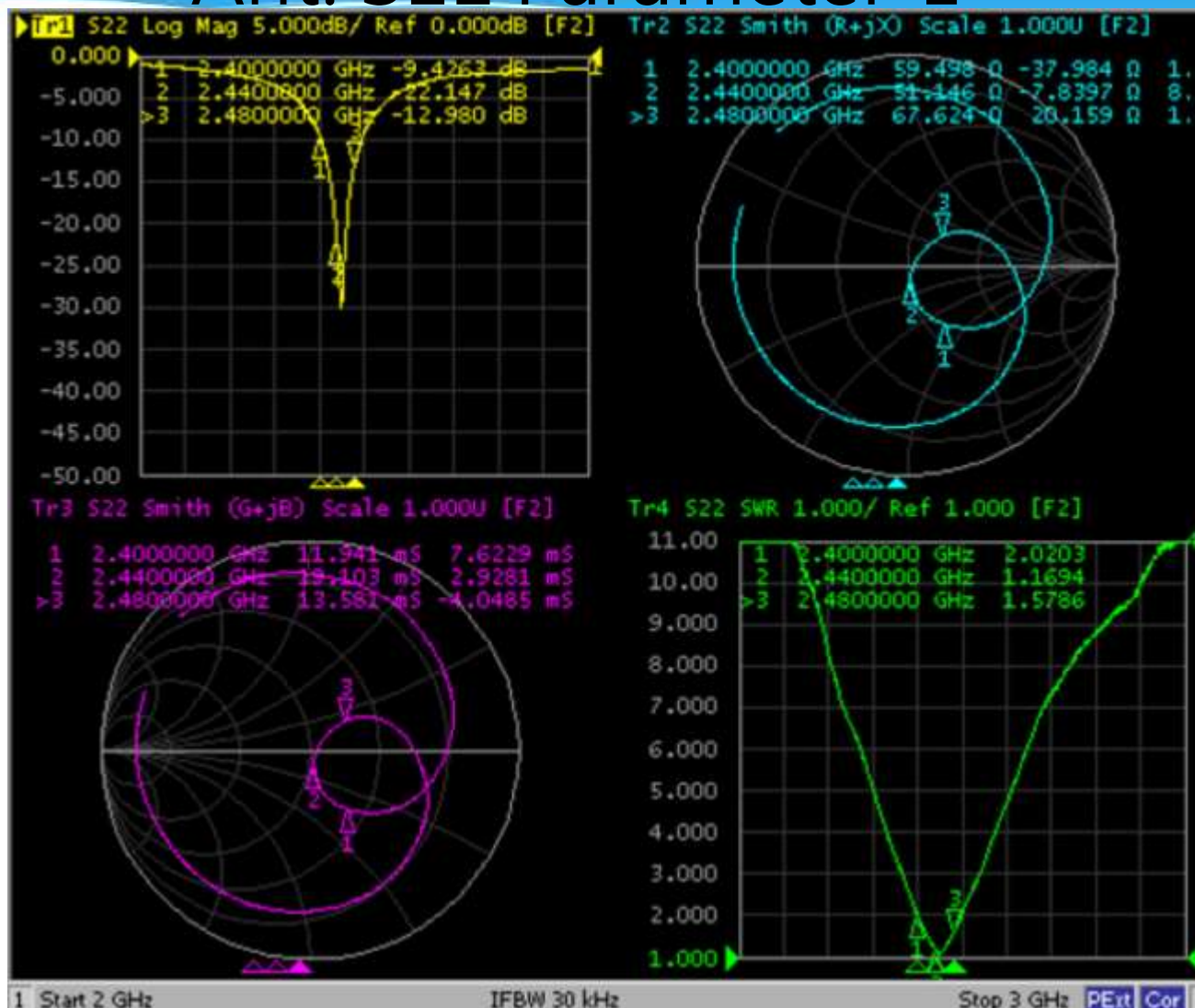


Ant. S11 Parameter-R



Fre.(MHz)	2400	2440	2480
S11(dB)	-14.3	-27.4	-11.6

Ant. S11 Parameter-L



Fre.(MHz)	2400	2440	2480
S11(dB)	-9.4	-22.1	-12.9

Ant. Gain Pattern@2.45GHz (无源)

- Free Space R

天线效率和增益： (2.4G-自由)

Antenna efficiency and gain: (2.4G-Free)

2. 4G			
频点 frequency (MHz)	效率 efficiency (dB)	增益 gain (dBi)	效率 efficiency (%)
2400	-3.6	2.70	43.7
2410	-3.7	2.62	43.1
2420	-3.7	2.34	42.7
2430	-3.7	2.25	42.3
2440	-3.7	2.18	42.5
2450	-3.8	2.37	42.2
2460	-3.8	2.58	41.7
2470	-3.9	2.55	40.8
2480	-4.0	2.70	39.9
平均值 AVG	-3.76	0.42	42.08

Ant. Gain Pattern@2.45GHz (有源)

- Active Test R

	Result	Frequency	TRP(dBm)
Bluetooth TRP	0	2402	3.99
	39	2441	4.01
	78	2480	2.64

	Result	Frequency	TIS(dBm)
Bluetooth TIS	0	2402	-87.4
	39	2441	-87
	78	2480	-84.76

Ant. Gain Pattern@2.45GHz (有源)

- Active Test L

	Result	Frequency	TRP(dBm)
Bluetooth TRP	0	2402	3.06
	39	2441	3.96
	78	2480	3.28

	Result	Frequency	TIS(dBm)
Bluetooth TIS	0	2402	-87.24
	39	2441	-87.69
	78	2480	-85.86