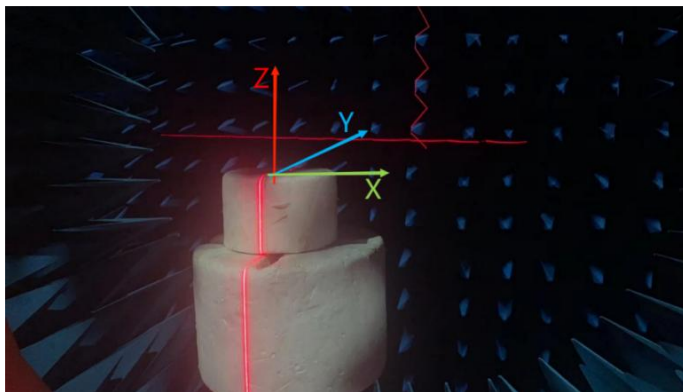


端口设备 WIFI 天线测试数据报告

一、天线及测试环境图



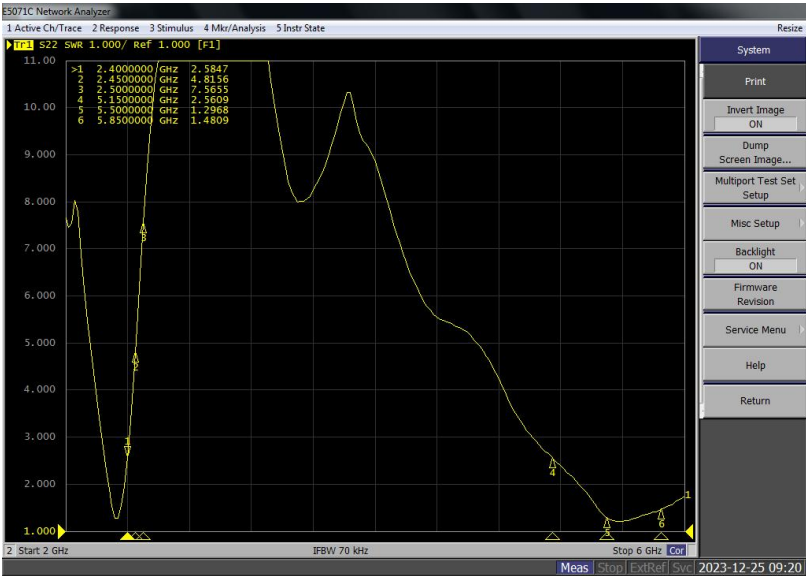
Model :SMB.308.05_ANT

Antenna manufacturer: Shenzhen All Things Connected Communications Co.,

Ltd. Address: Room 1101, Building T4, Fangdacheng, Longzhu 4th Road, Taoyuan Street,
Nanshan District, Shenzhen

二、天线驻波比

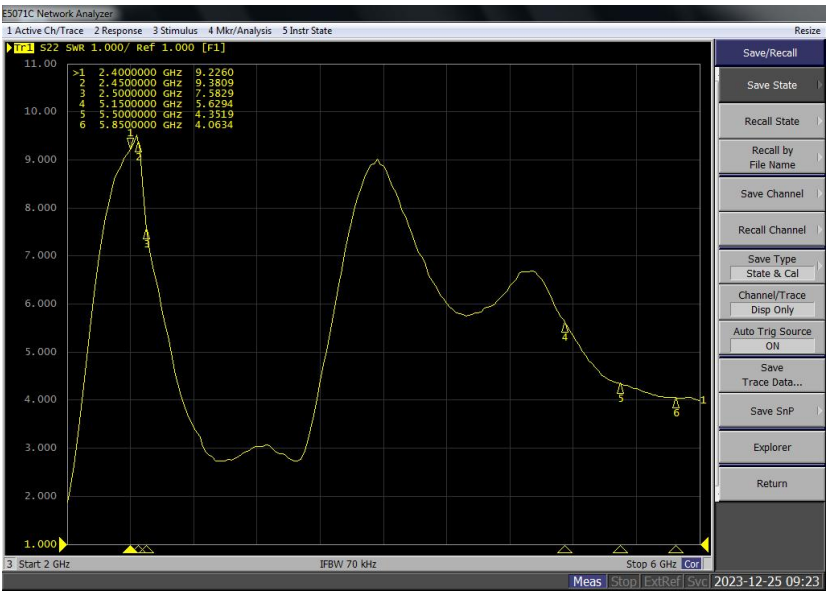
ANT1



V.S.W.R

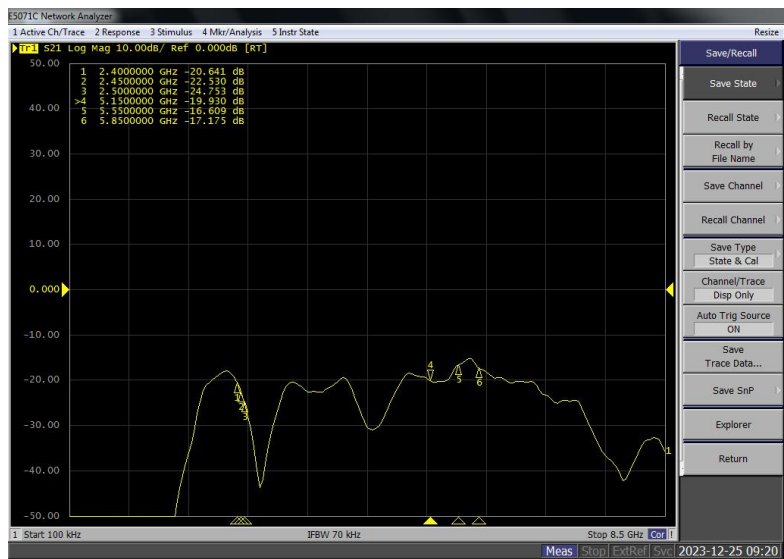
Freq/GHz	2.4	2.45	2.5	5.15	5.5	5.85
VSWR	2.5	4.8	7.5	2.5	1.2	1.4

ANT2



V.S.W.R

Freq/GHz	2.4	2.45	2.5	5.15	5.5	5.85
VSWR	9.2	9.3	7.5	5.6	4.3	4.0



隔离度

Freq/GHz	2.4	2.45	2.5	5.15	5.5	5.85
VSWR	-20.6	-22.5	-24.7	-19.9	-16.6	-17.1

三、无源效率

ANT1

Gain&Efficiency 增益和效率					
frequency 频率(MHz)	gain 增益(dBi)	mingain 最小增益 (dBi)		efficiency 效率(dB)	efficiency 效率(%)
2400	-2.2	-20.74		-5.44	28.55
2410	-2.31	-20.08		-5.57	27.72
2420	-2.67	-19.64		-5.85	25.99
2430	-3	-20.17		-6.14	24.33
2440	-3.28	-19.07		-6.32	23.32
2450	-3.49	-19.82		-6.47	22.56
2460	-3.67	-20.99		-6.59	21.91
2470	-4.01	-20.84		-6.89	20.47
2480	-4.35	-22.49		-7.21	19.02
2490	-4.87	-22.14		-7.71	16.93

2500	-5.57	-23.38	0	0	-8.48	14.19
Gain&Efficiency 增益和效率						
frequency 频率(MHz)	gain 增益(dBi)	mingain 最小增益 (dBi)			efficiency 效率(dB)	efficiency 效率(%)
5150	0.12	-26.45			-3.03	49.76
5200	-0.12	-33.97			-3.06	49.43
5250	0.08	-32.31			-2.88	51.48
5300	0.07	-27.6			-2.82	52.23
5350	0.12	-28.03			-2.77	52.88
5400	0.25	-27.95			-2.69	53.84
5450	0.28	-31.56			-2.69	53.8
5500	0.29	-27.15			-2.69	53.78
5550	0.29	-27.58			-2.76	52.97
5600	0.39	-27.08			-2.72	53.45
5650	0.57	-27.72			-2.68	53.99
5700	0.66	-26.05			-2.71	53.6
5750	0.72	-28.01			-2.80	52.45
5800	0.99	-30.41			-2.76	52.96
5850	0.73	-28.14			-3.13	48.6

ANT2

Gain&Efficiency 增益和效率						
frequency 频率(MHz)	gain 增益(dBi)	mingain 最小增益 (dBi)			efficiency 效率(dB)	efficiency 效率(%)
2400	-4.44	-25.78			-9.45	11.36
2410	-3.75	-25.92			-8.75	13.35
2420	-3.42	-25.87			-8.33	14.68
2430	-3.07	-27.33			-7.95	16.03

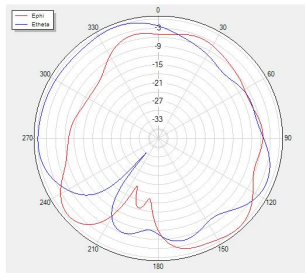
2440	-2.7	-26.36		-7.53	17.68
2450	-2.3	-28.13		-7.09	19.54
2460	-1.91	-27.35		-6.69	21.43
2470	-1.72	-27.79		-6.46	22.58
2480	-1.6	-28.96		-6.24	23.75
2490	-1.68	-27.73		-6.24	23.76
2500	-2.1	-27.95		-6.43	22.73

Gain&Efficiency 增益和效率						
frequency 频率(MHz)	gain 增益(dBi)	mingain 最小增益 (dBi)			efficiency 效率(dB)	efficiency 效率(%)
5150	-3.93	-28.84			-4.91	32.32
5200	-3.86	-30.28			-4.83	32.91
5250	-3.92	-28.93			-4.85	32.73
5300	-3.78	-31.57			-4.78	33.27
5350	-3.98	-35.89			-4.86	32.68
5400	-4.11	-36.02			-4.87	32.55
5450	-3.72	-28.45			-4.68	34.03
5500	-3.65	-25.79			-4.64	34.33
5550	-3.85	-22.93			-4.74	33.59
5600	-3.55	-25.36			-4.62	34.5
5650	-2.94	-26.63			-4.34	36.85
5700	-2.96	-23.99			-4.35	36.75
5750	-3.01	-25.22			-4.44	35.97
5800	-2.53	-33.09			-4.22	37.84
5850	-3.55	-35.73			-4.88	32.54

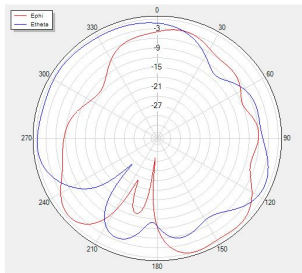
四、2D3D 方向图

ANT1

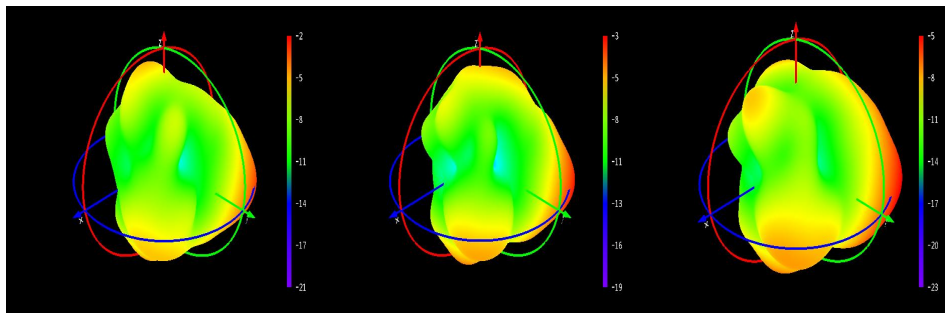
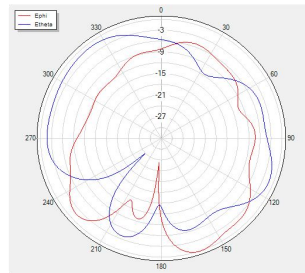
Phi=90 freq=2400MHz



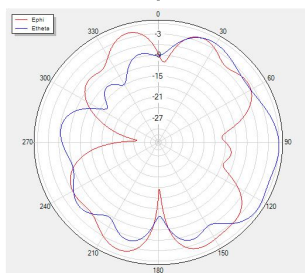
Phi=90 freq=2450MHz



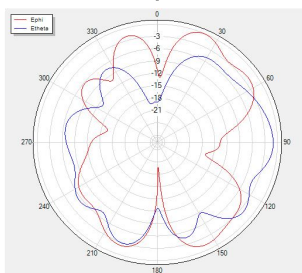
Phi=90 freq=2500MHz



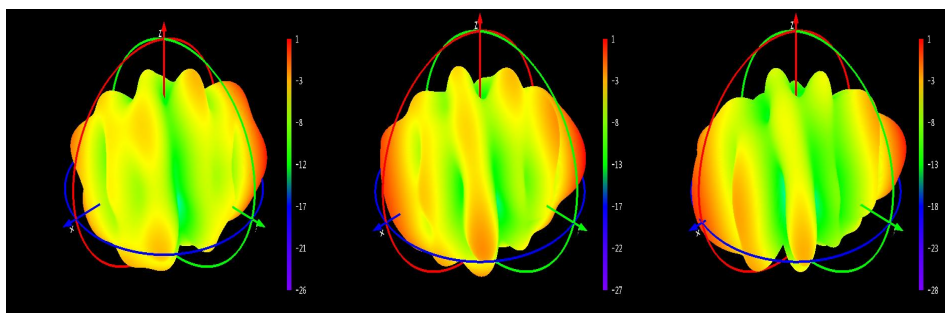
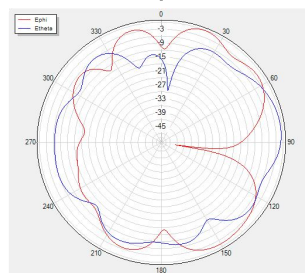
Phi=90 freq=5150MHz



Phi=90 freq=5500MHz

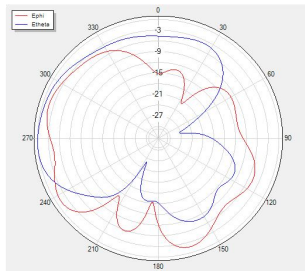


Phi=90 freq=5850MHz

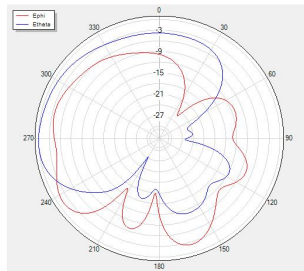


ANT2

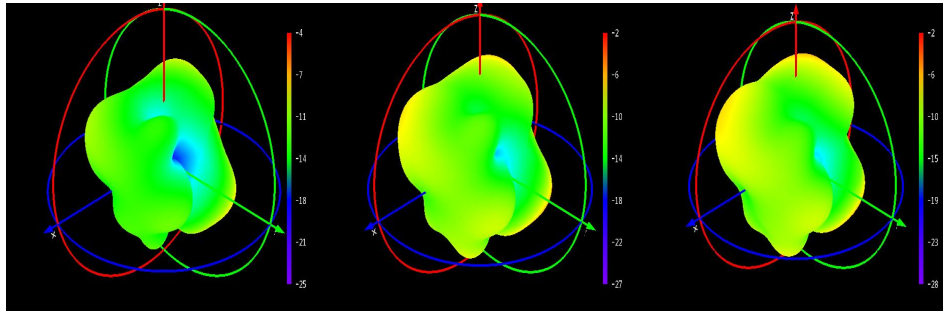
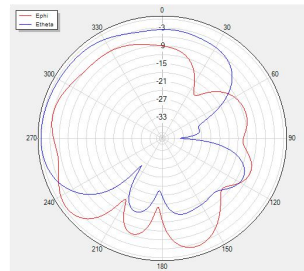
Phi=90 freq=2400MHz



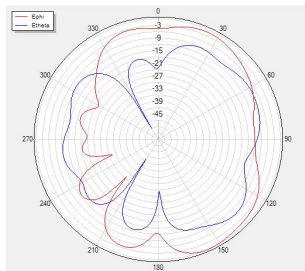
Phi=90 freq=2450MHz



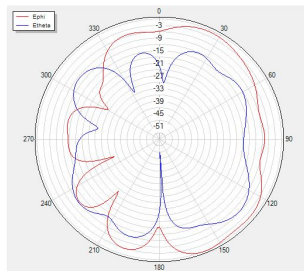
Phi=90 freq=2500MHz



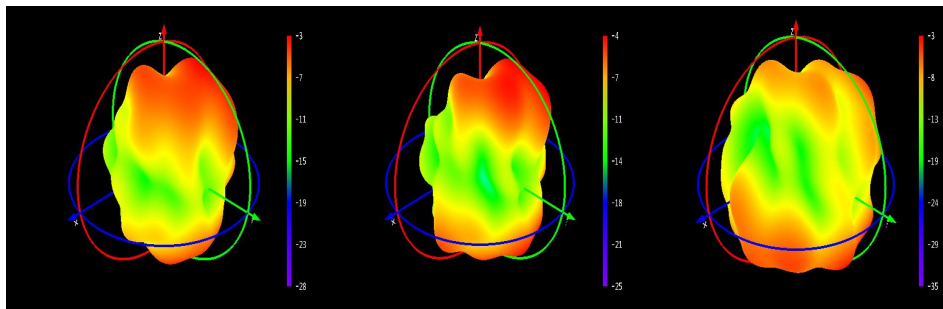
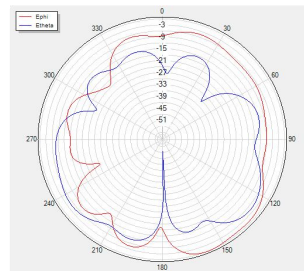
Phi=90 freq=5150MHz



Phi=90 freq=5500MHz



Phi=90 freq=5850MHz



五、有源数据

Test	Wifi 2G TRP				Test	Wifi 2G TIS		
CH	1	6	13		CH	1	6	13
Frequency (MHz)	2412	2437	2472		Frequency (MHz)	2412	2437	2472
TRP(dBm)	8.98	7.83	6.3		TIS(dBm)	-79.22		

Test mode: 802.11a 54Mbps BW 20M

Test	Wifi 5G TRP				Test	Wifi 5G TIS		
CH	36	100	165		CH	36	100	165
Frequency (MHz)	5180	5500	5825		Frequency (MHz)	5180	5500	5825
TRP(dBm)	10.06	12.49	16.06		TIS(dBm)	-77.75		

深圳市万物相连通讯有限公司
2023.12.25