

Antenna Test Report

Manufacture:

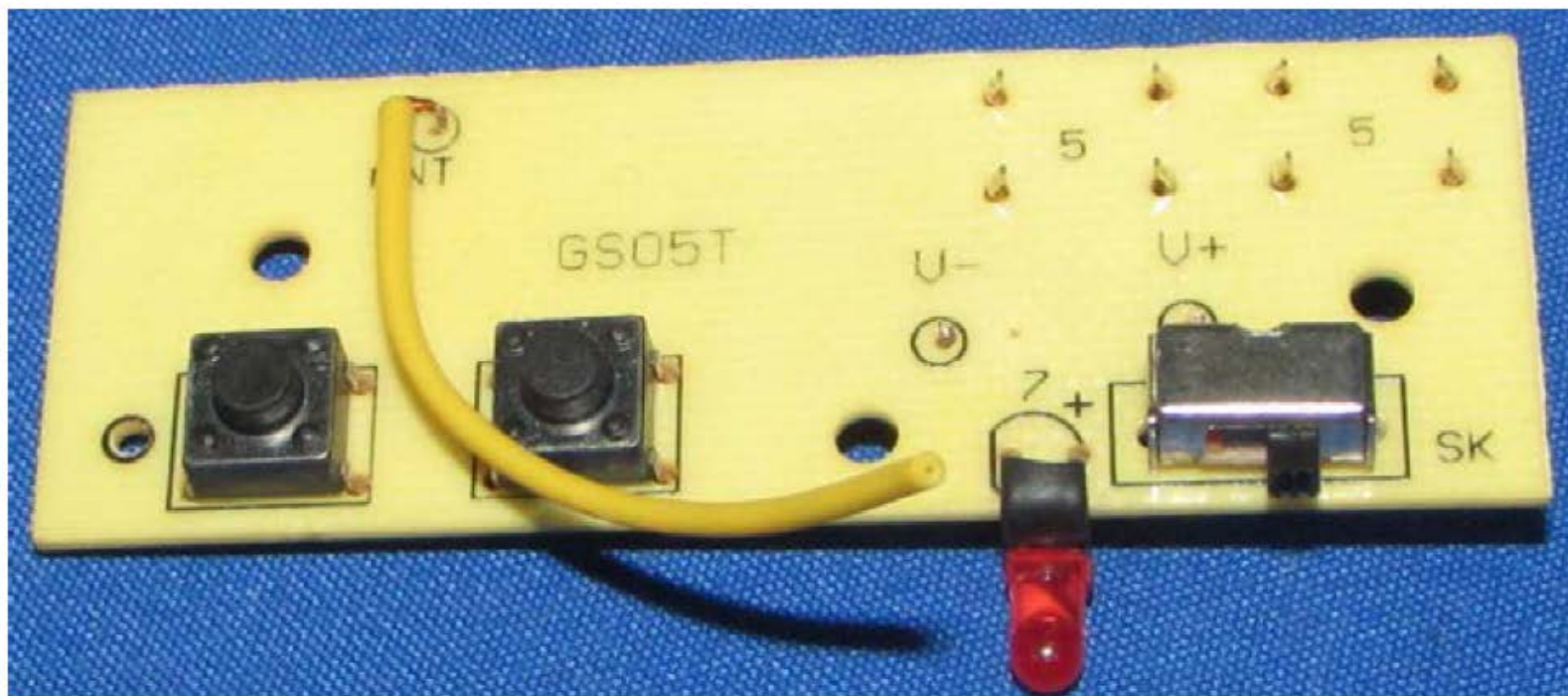
Product Name : XL9

Antenna Type:IM antenna

Test Date:2025/03/05

Tested by: Li Xin

Approved by:Yan rong cheng



Note: 2.4G antenna specification is 7 core 0.14 copper diameter bare copper wire
outer wire diameter 1.3MM wire, white, length of 35MM, wire head peeling 3MM tin.
Meet the environmental protection standards: EU EN 71 (19E), ROHS, PAHS, 6P ~ 16P,
Europe and America
CPSIA 、HR 4040。

1.General Description

Manufacturer	Tianyutong Electronic Technology Co., Ltd
Address	
Test Location	212 Tairan Industrial and Trade Park, Futian District, Shenzhen City, Guangdong Province
Product Name	XL9
Antenna Type	IM antenna
test Items	GAIN;Efficiency;Radiation Pattern
Test Frequency	824-1990MHz

2. Test Configuration

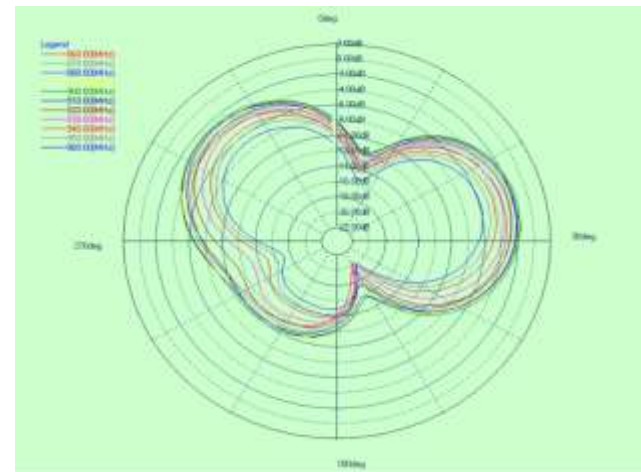
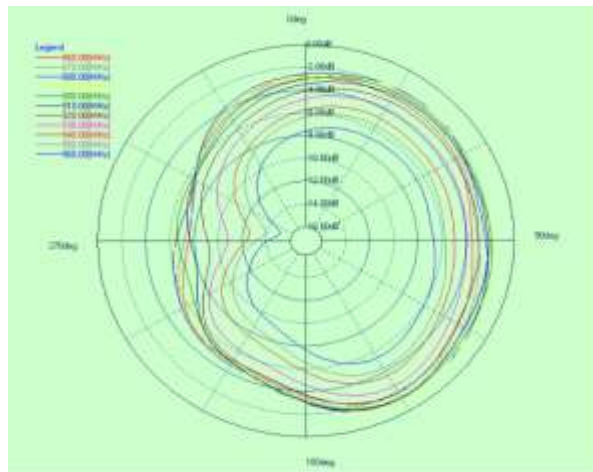
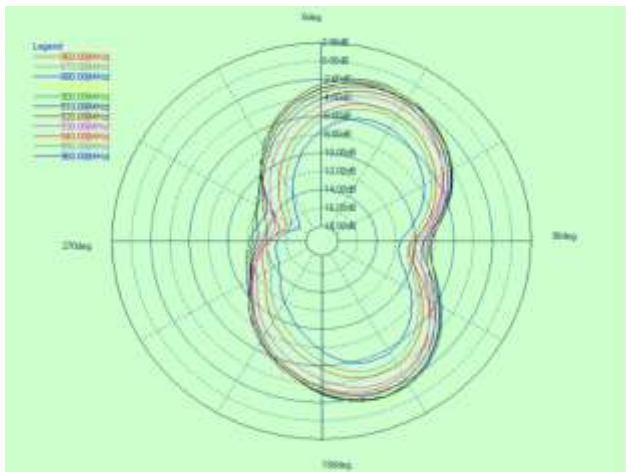
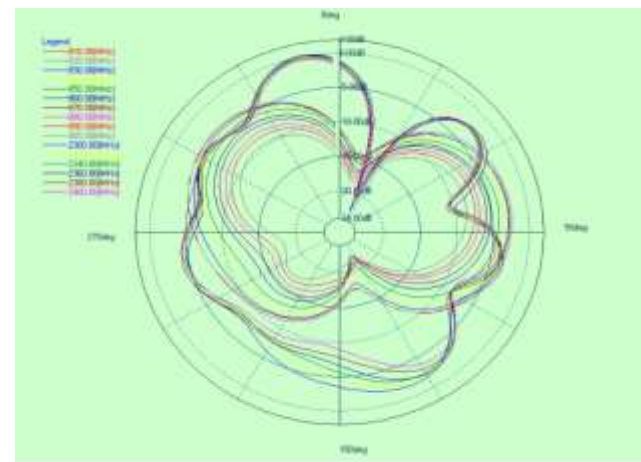
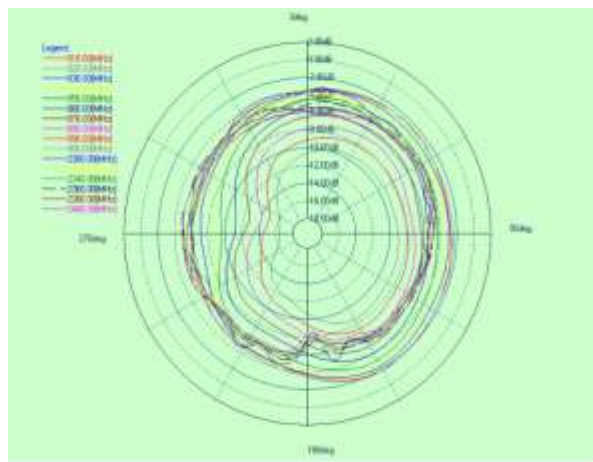
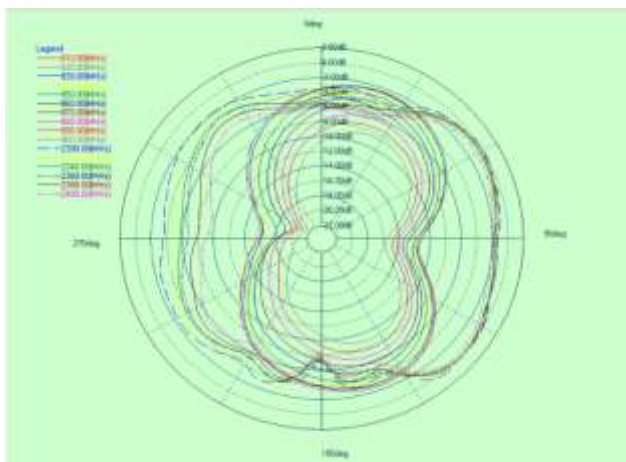
Test Environment

Temperature (°C)	25.9
Humidity (%RH)	61
Atmospheric Pressure(kpa)	101.3

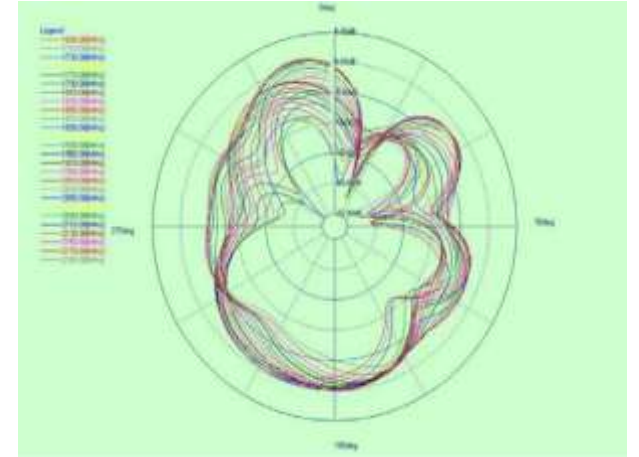
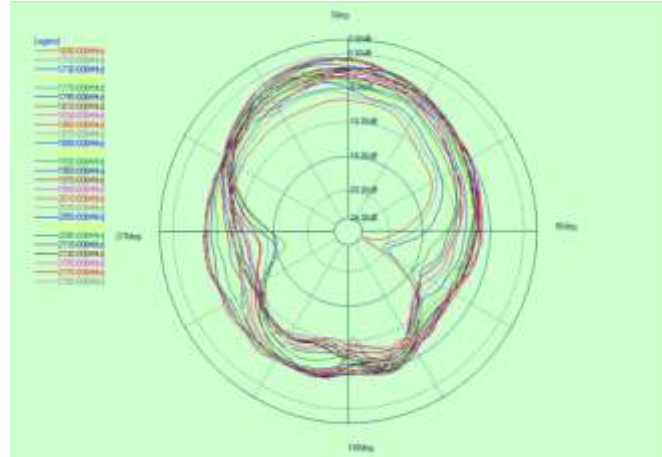
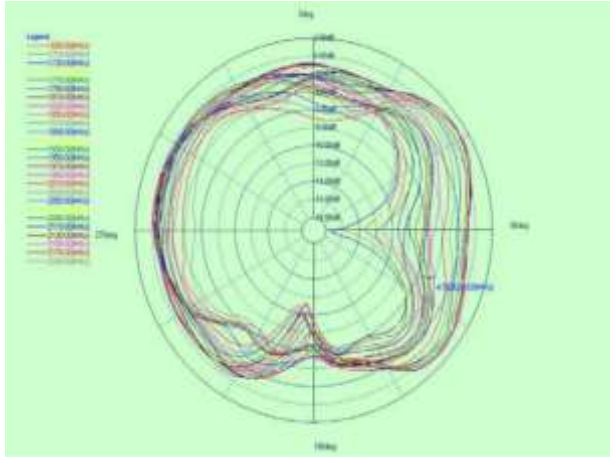
Test Equipment

Test Instrument	R&S ZNB8
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3 Main Antenna

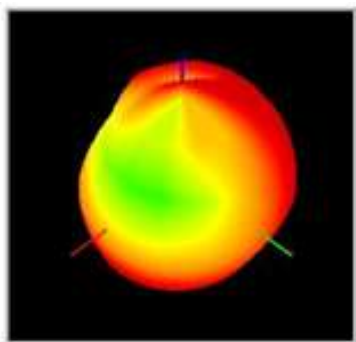


3 Main Antenna

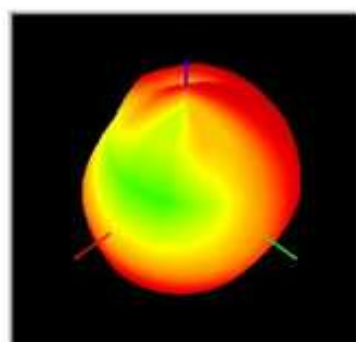


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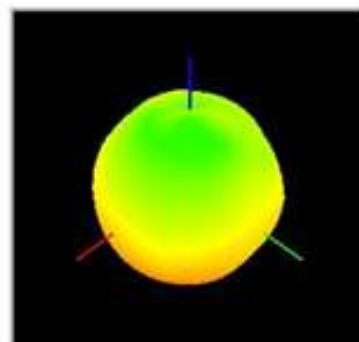
3D方向图



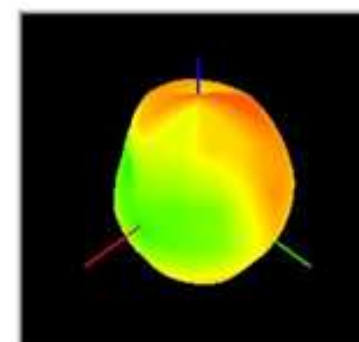
GSM850



GSM900



DCS1800



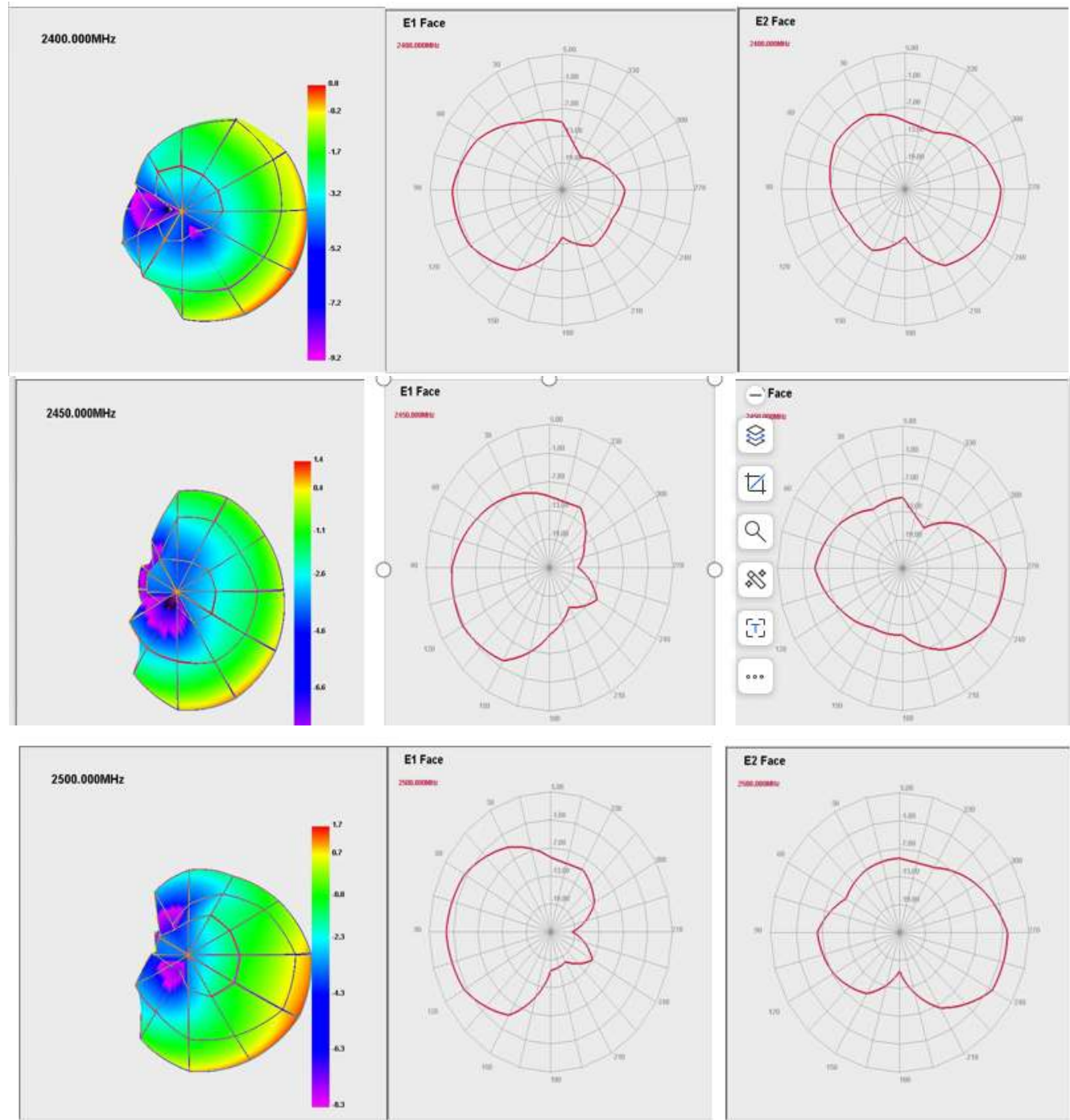
PCS1800

Antenna gain

2G AVG Gain(dbi)	850	900	1800	1900	BT
	0.3	-1.5	-1.1	0.9	1.1

5 2.4G BT Antenna gain

Freq (MHz)	<u>Effi</u> (%)	<u>Effi</u> (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHIS (%)	Max (dB)	Min (dB)	Attenut Hor	Attenut Ver
2400	34.31	-4.65	0.81	-1.34	15.415	18.89	0.81	-19.85	52.57	52.52
2410	35.16	-4.54	0.76	-1.39	14.929	20.234	0.76	-19.06	52.61	52.56
2420	31.03	-5.08	0.3	-1.85	12.193	18.832	0.3	-16.99	52.49	52.49
2430	33.49	-4.75	0.11	-1.04	12.234	21.258	0.11	-19.47	52.55	52.52
2440	35.25	-4.53	0.65	-0.56	12.305	22.941	0.65	-20.3	52.69	52.57
2450	33.57	-4.74	0.52	-0.76	11.846	21.727	0.52	-20.47	52.92	52.78
2460	33.52	-4.75	0.45	-0.87	12.482	21.039	0.45	-23.49	52.79	52.62
2470	29.95	-5.24	0.58	-1.57	11.921	18.024	0.58	-26.3	52.83	52.65
2480	34.69	-4.6	0.53	-1.23	14.699	19.988	0.53	-23.39	52.81	52.65
2490	35.98	-4.44	0.11	-0.98	15.883	20.098	0.11	-21.58	53	52.81
2500	38.93	-4.1	1.1	-0.48	17.436	21.492	1.1	-19.77	53.02	52.84



6 2G Test report

	EGSM900			Remarks	DCS1800			Remarks
Channel	1	62	120		512	698	885	
Power	28.5	28.7	29.1		26.5	27.8	28.2	
Level	45	44	41		48	48	47	
MaxSensitivity(dBm)	-104	-103	-102		-106	-105	104	
	EGSM850			Remarks	PCS1900			Remarks
Channel	128	192	251		512	661	810	
Power	21.8	22.6	23.5		26.5	25.3	24.2	
Level	45	46	45		43	40	40	
MaxSensitivity(dBm)	-104	-104	-103		-102	-100	-100	

7 环境处理



Grounding with conductive blanket