

UL2407-22 TestReport

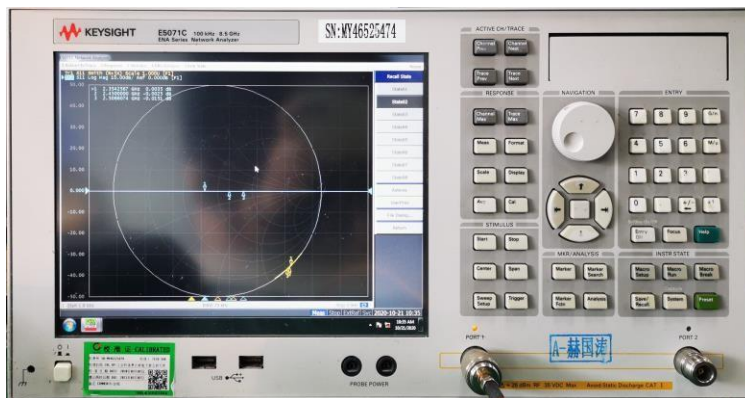
- Test conditions
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- Antenna S parameters
- Passive efficiency of antenna
- 3D radiation field pattern
- 2D radiation field type
- Antenna size

Applicant: Xthings Industry llc

Address: Address: 47703 Fremont Blvd, Fremont, CA 94538

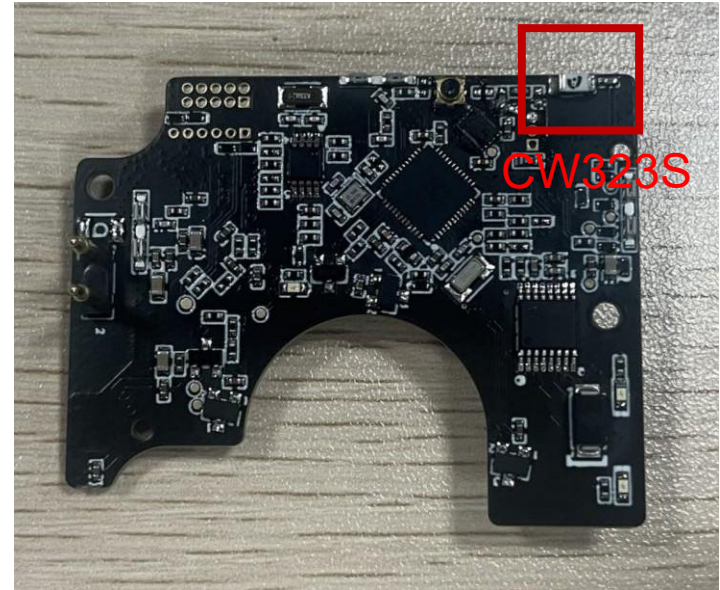
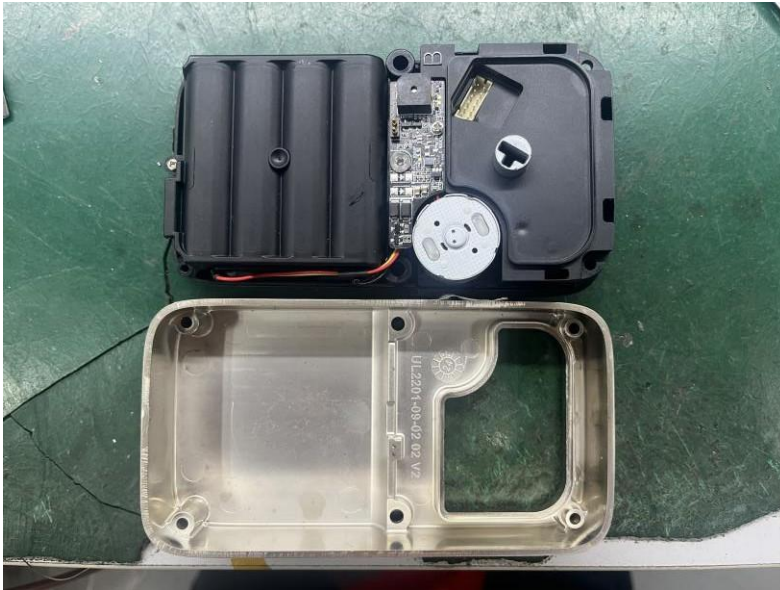
Test conditions

Test project	testing instrument	manufacturer
s-parameter	E5062A	Agilent
Passive efficiency	E5071C/RayZone1800	Keysight/GTS

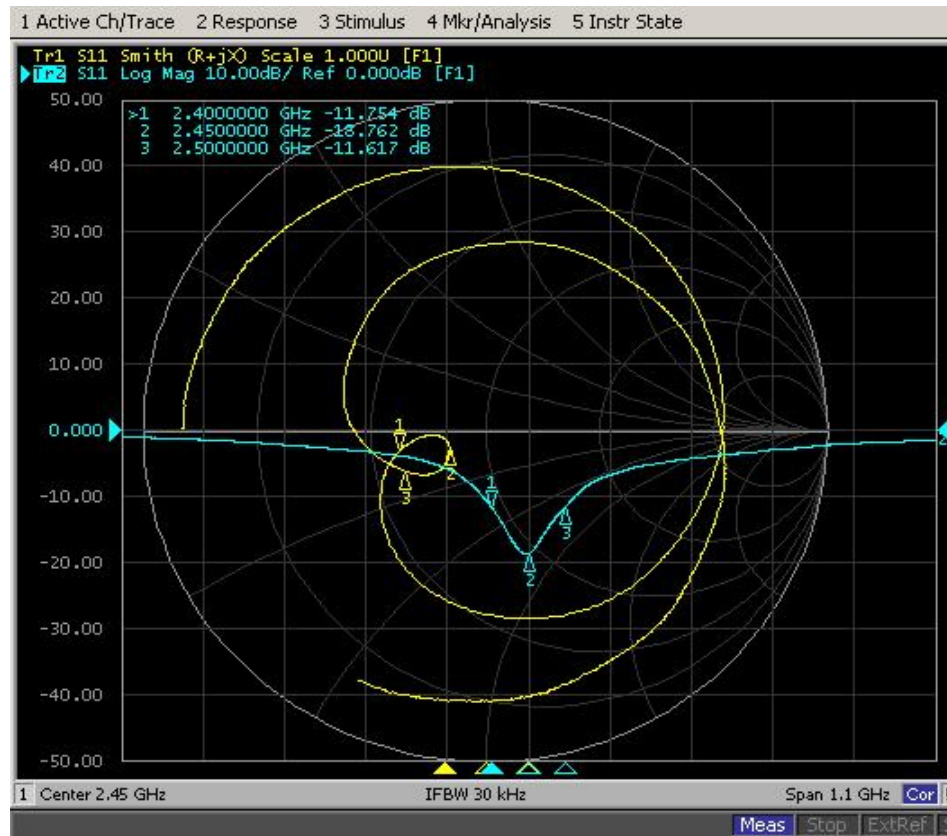


Prototype Appearance

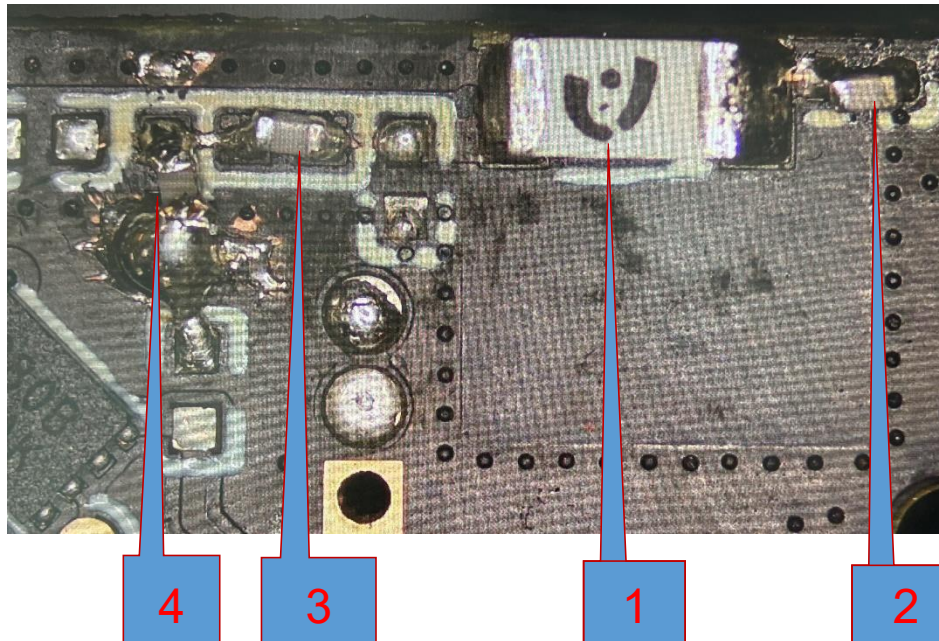
1. Prototype Appearance



Antenna S parameters



parameters



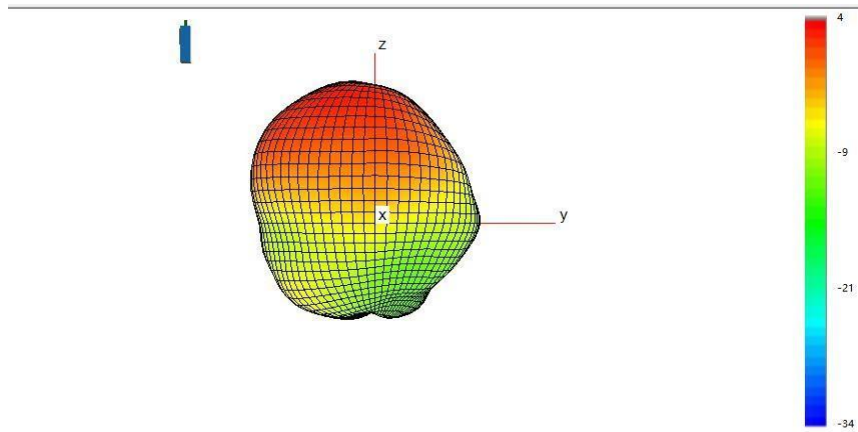
number	specifications	manufacturer	public errand	notes
1	CW323S	unictron		
2	C=1.8pF/0402	Murata	$\pm 0.1\text{pF}$	
3	C=10pF/0402	Murata	$\pm 0.1\text{pF}$	
4	C=2.5pF/0402	Murata	$\pm 0.1\text{pF}$	

Passive efficiency of antenna

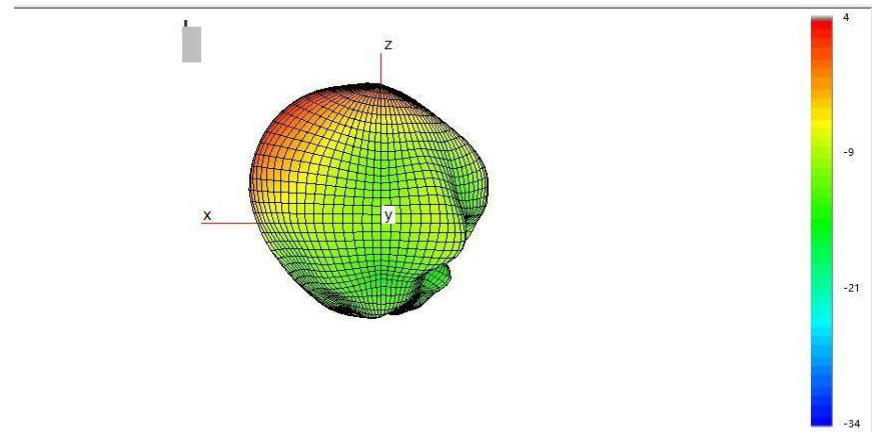
Freq (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency (%)
2400	2.99	-5.26	29.82
2410	3.24	-5.02	31.45
2420	3.26	-4.93	32.17
2430	3.28	-4.90	32.38
2440	3.30	-4.89	32.45
2450	3.11	-4.99	31.72
2460	2.99	-5.13	30.67
2470	2.72	-5.34	29.25
2480	2.74	-5.40	28.85
2490	2.63	-5.53	28.01
2500	2.67	-5.48	28.31

3D radiation field pattern_{2400-2500MHz}

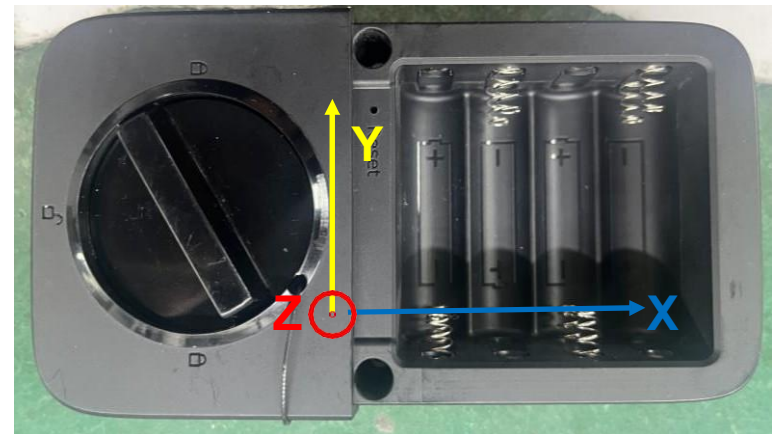
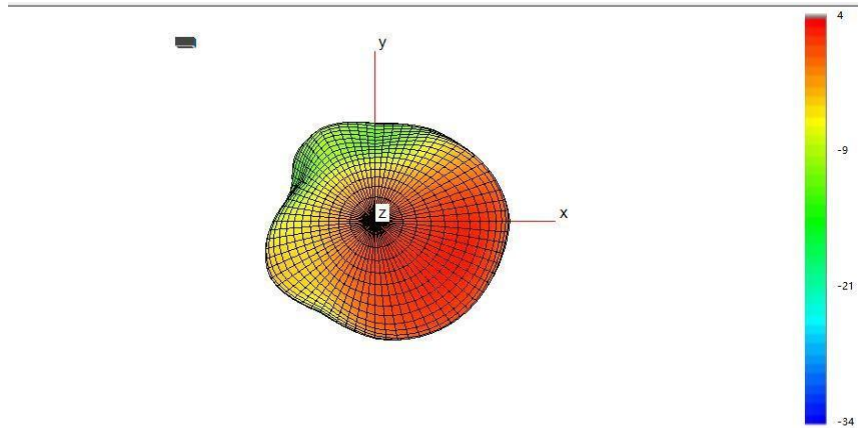
F: 2400MHz



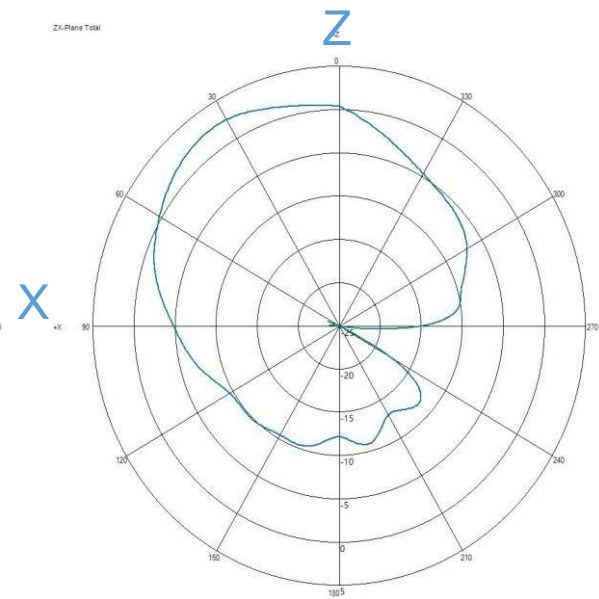
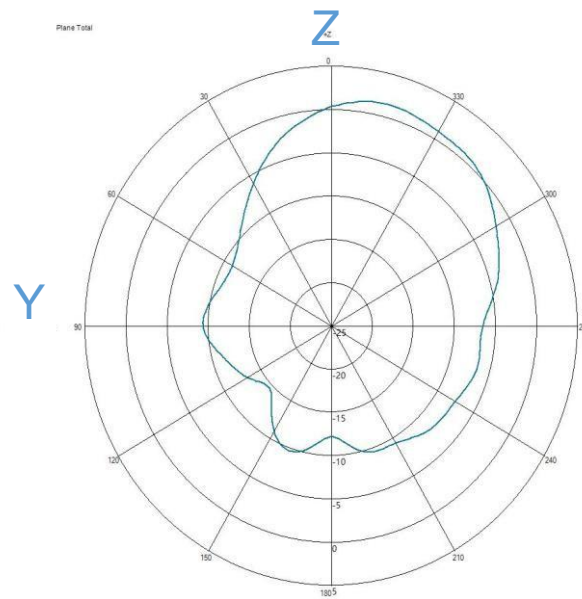
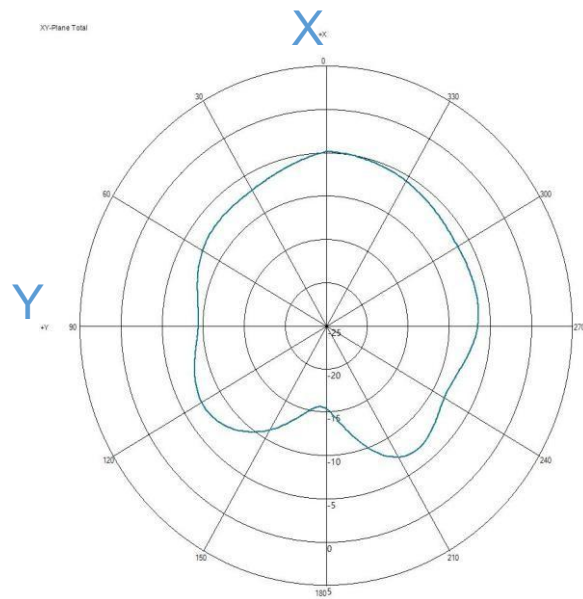
F: 2450MHz



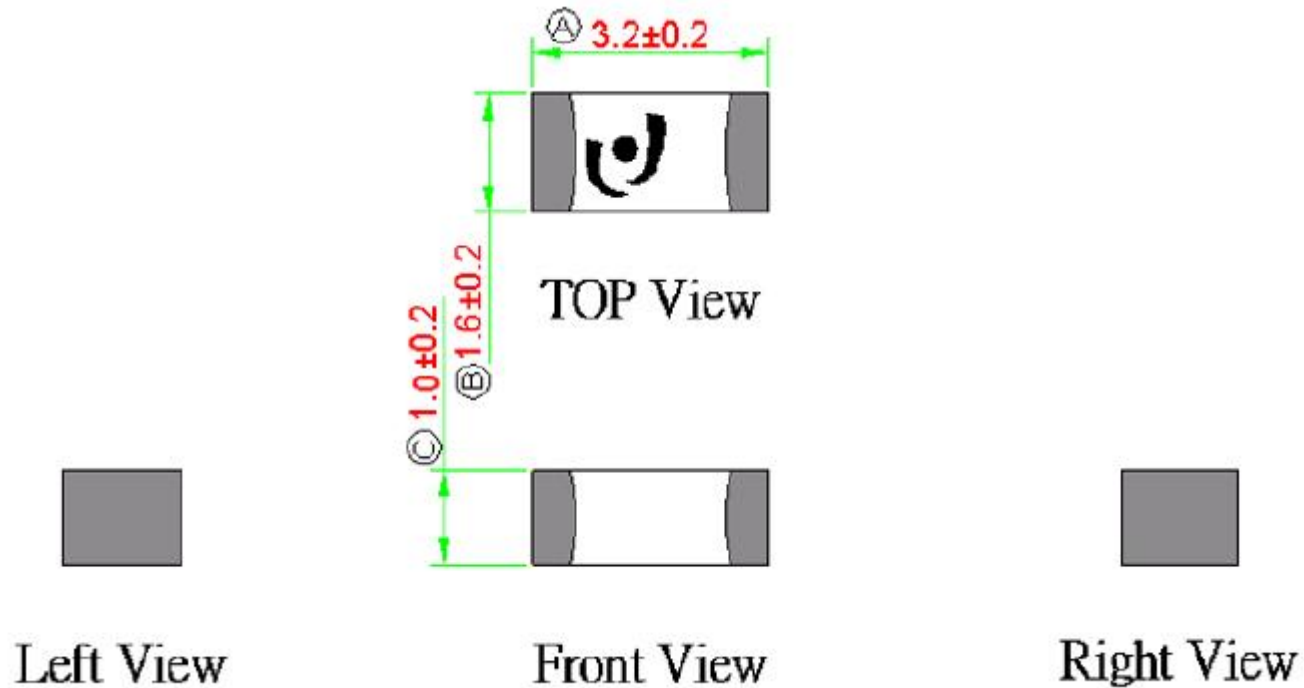
F: 2500MHz



2D radiation field type2400-2500MHz



Antenna size



Debugging completed, using antenna CW323S – new parameters, the overall passive efficiency of the

machine is 32%。

Thanks for Your Attention