Antenna Specification

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Update Date： 2023/09/06

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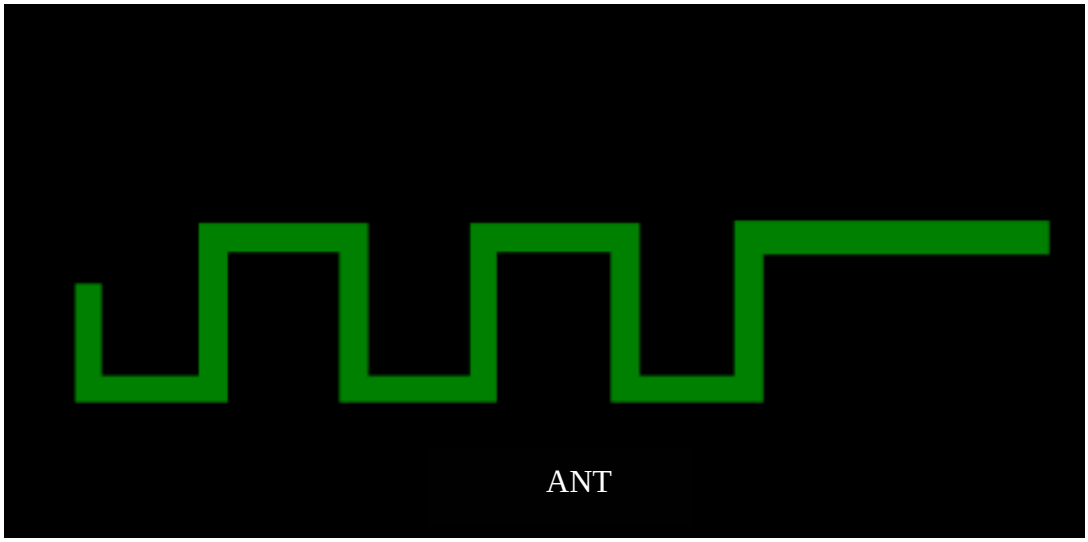
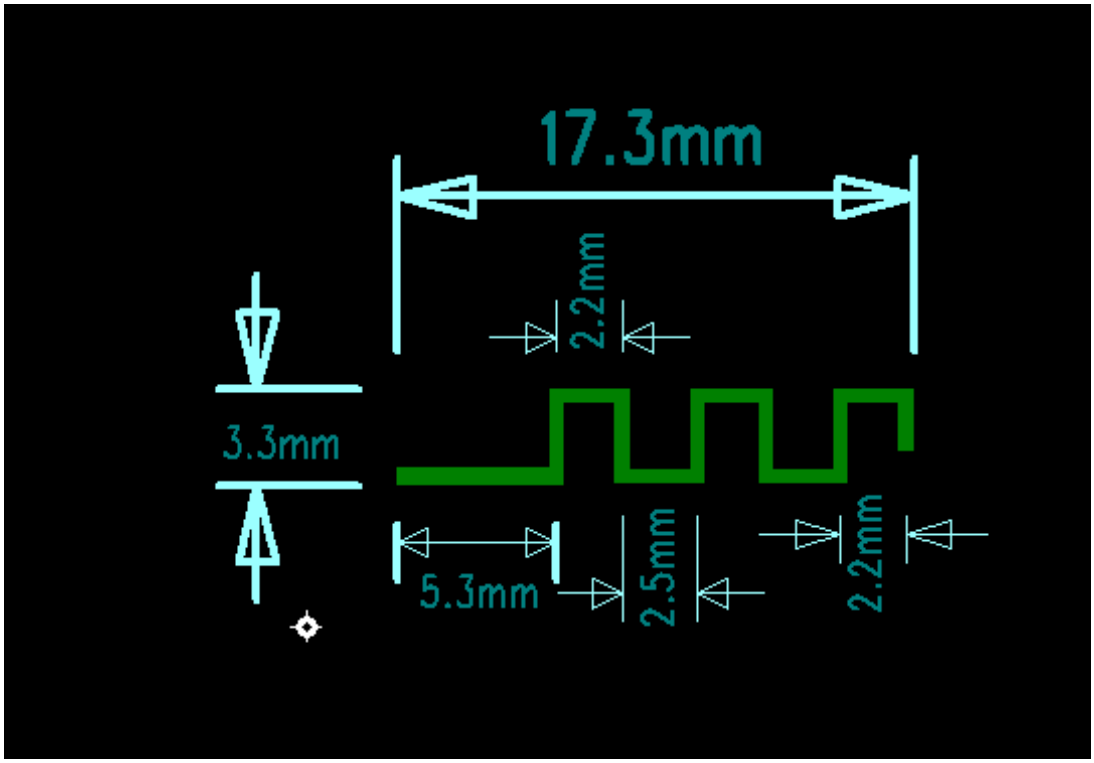
1 、Antenna Size（size unit is mm）





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2 、Antenna Specifications

serial number	parameter term	explanation
1	Center operating frequency	2441MHz
2	Working Bandwidth	2400---2480Mhz
3	data transmission rate	1Mbps
4	Antenna Type	On-Board PCB Antennas（default)
5	Antenna Gain	-1.0dBi
6	Impedance	50ohm
7	Modulation Type	GFSK

3 、Test Conditions

Engineer:	Jesse Guan
Tell:	18975824147
E-mail:	Jesse.guan@unictron.com
Approval:	Joy Zhu
Date:	2023/9/5

Test Condition

Test Project	Test Instrument	Manufacturer	Calibration time
S parameter	E5062A	Agilent	2023.3.27
Passive efficiency	E5071C/RayZone 1800	Keysight/GTS	2023.3.10

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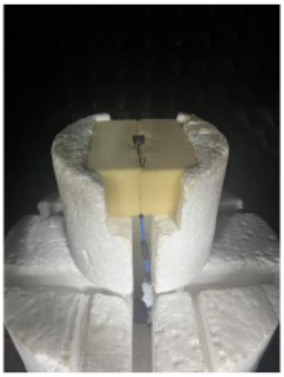
4 、Test Environments

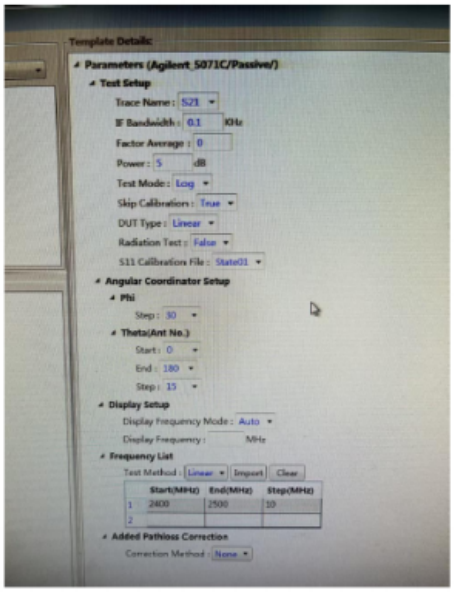
Test setup and environment

1.Test environment diagram



Test setup and environment

2. Test setup diagram



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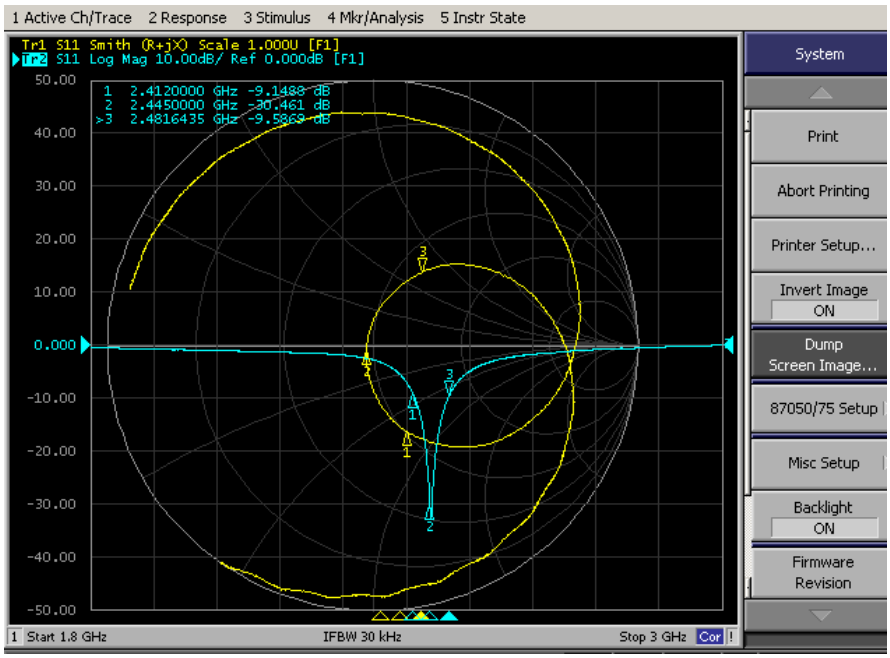
5 Antenna Network Analyzer Debug Frequency



The antenna frequency at 2.445GHz has a return loss of -30dB and an impedance of around 50. Bandwidth 80m

6 、Antenna Test Efficiency

passive test for 2.4g			
Freq(MHz)	Gain(dB)	Efficiency(dB)	Efficiency(%)
2400	-2.125670268	-6.512982178	22.32039018
2410	-1.839793728	-6.350555158	23.17098436
2420	-1.64029678	-6.246810655	23.7311582
2430	-1.328848956	-5.925152964	25.5555189
2440	-1.132319256	-5.799553085	26.30538676
2450	-1.087960046	-5.849299265	26.00579133
2460	-1.316358881	-6.006721723	25.08001707
2470	-1.579335991	-6.245067499	23.74068524
2480	-1.962892418	-6.454212193	22.62448909
2490	-2.50538583	-6.753449407	21.11811056
2500	-3.031894388	-7.252236224	18.8267943

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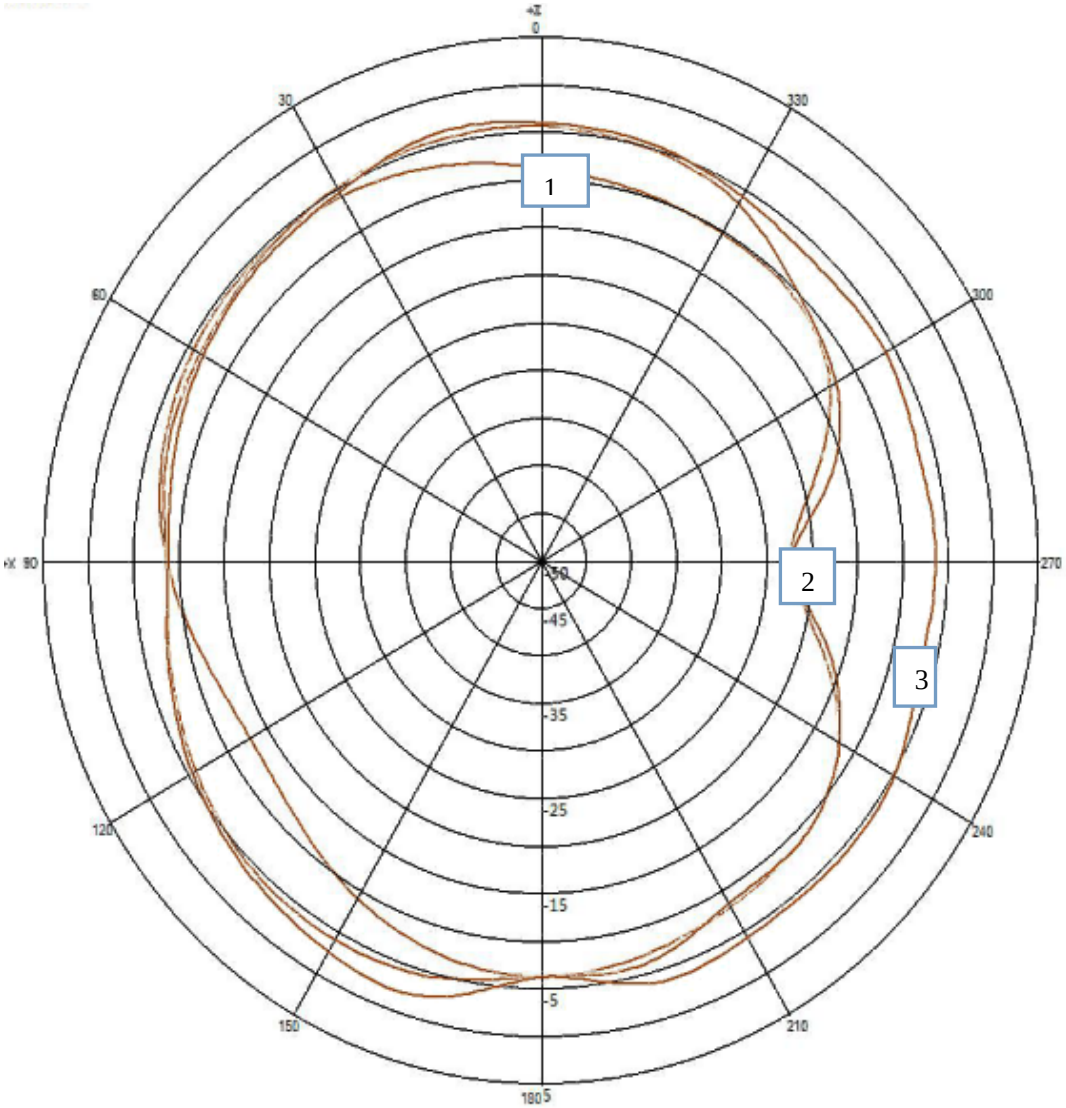
7 、2D Drawing

（1）XY-Plane
（2）ZY-Plane
（3）ZX-Plane



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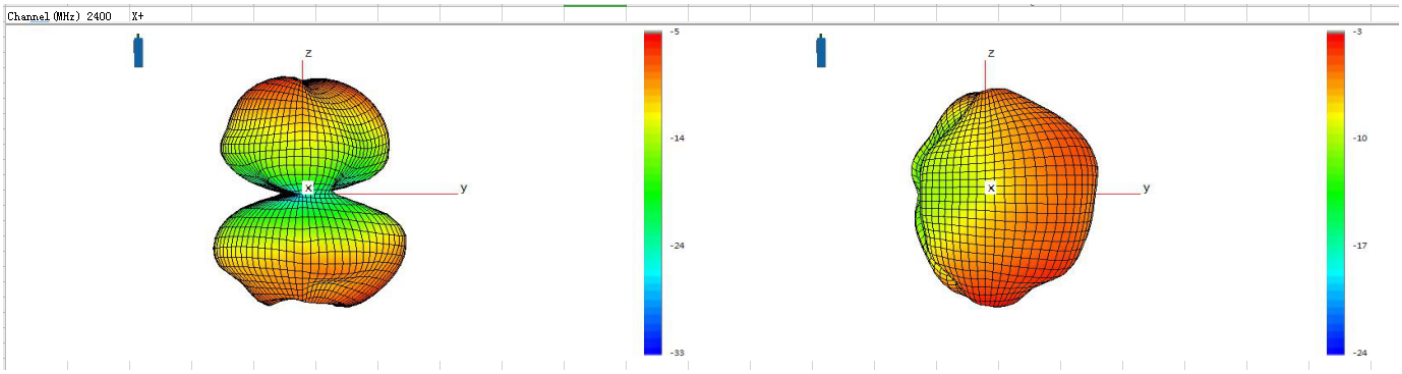
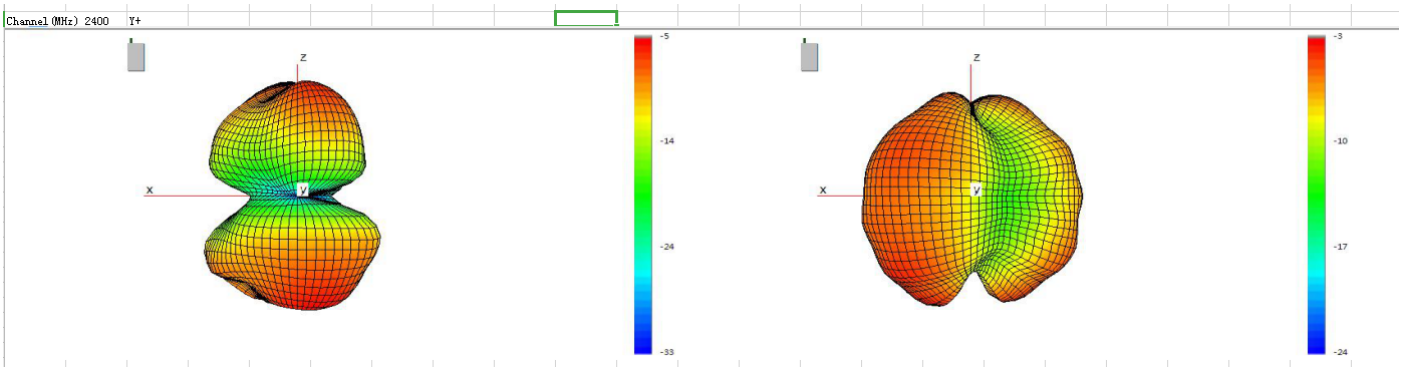
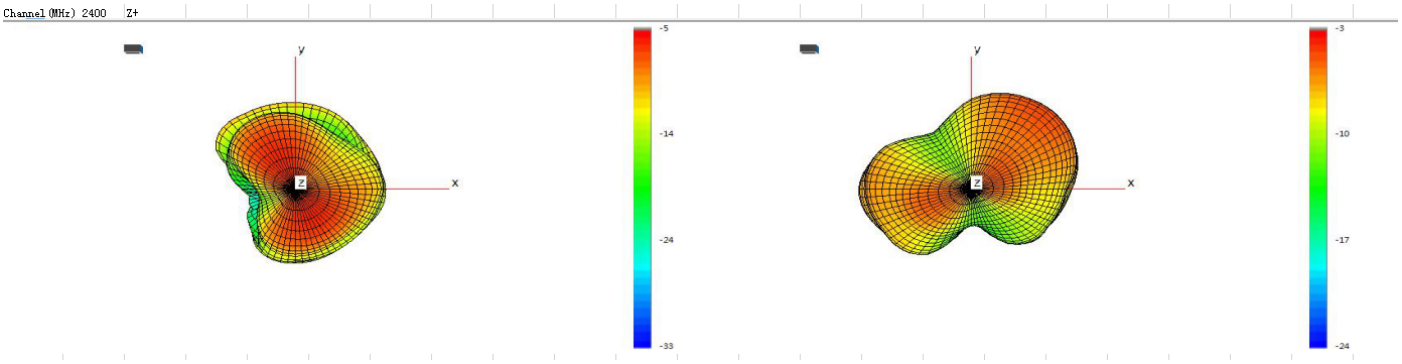
8 、3D Drawing







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