

Antenna data sheet

Antenna Type : PCB antenna

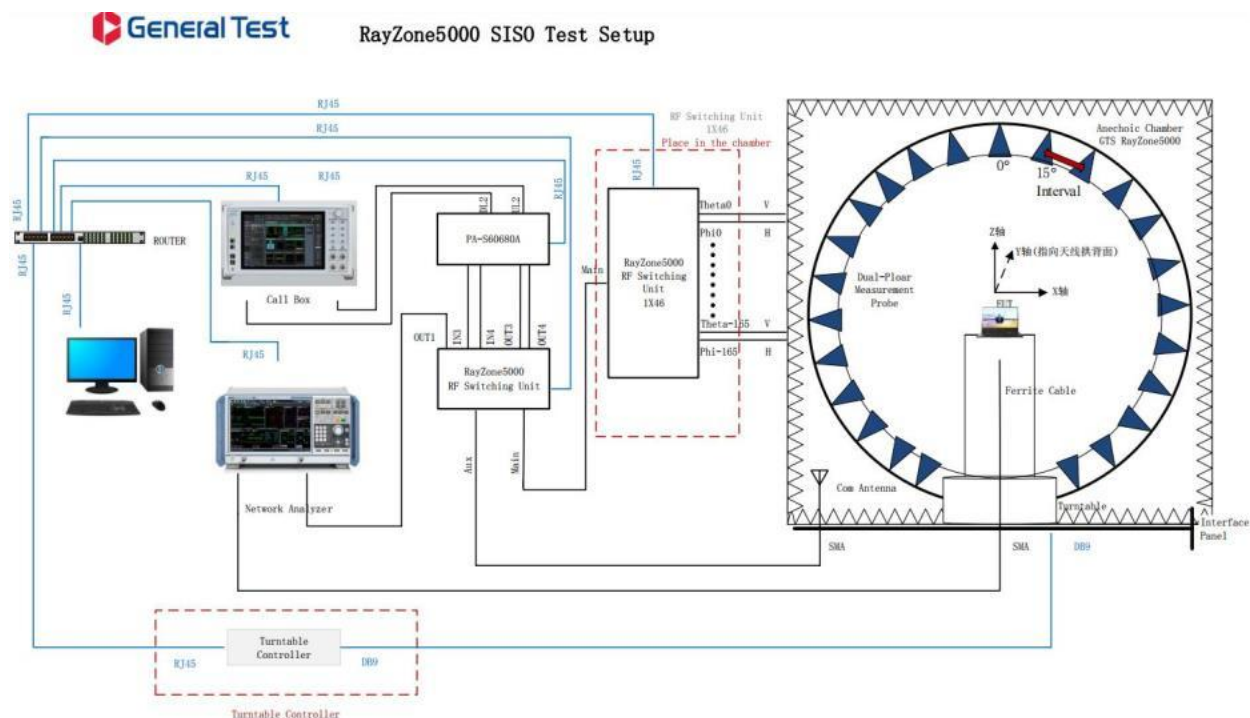
Antenna Model : 2.4G ANT

Peak Gain : 2.88dBi

Manufacturer : Shenzhen Shanwan Technology Co., LTD
Address : 5th Floor, Building 33, Chentian Industrial Zone, Chentian Community, Xixiang Sub-district, Bao'an District, Shenzhen City, China

1、 Basic Information

1.1 Test Principle



1.2 Test equipment

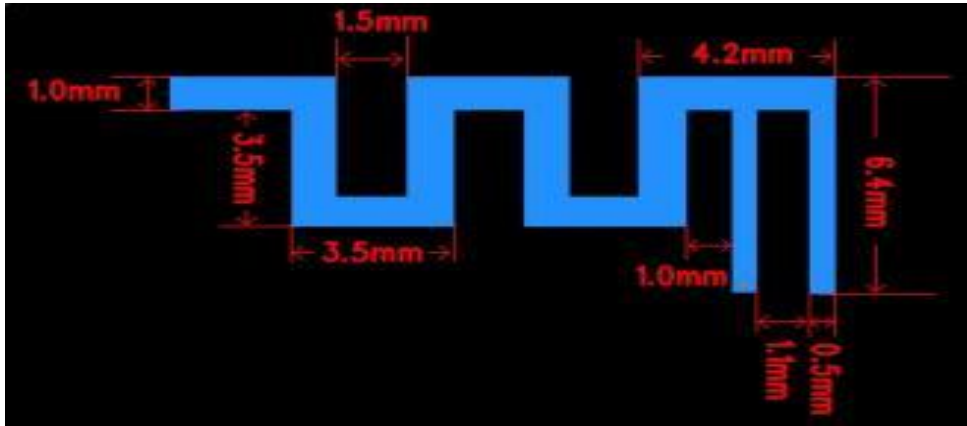
name	model	equipment number	manufact urer	calibratin	
OTA	RayZone-5000	RFI-LAB-RF-D00	GTS	2021.3.22	2023.3.21
network	E5071C	RFI-LAB-RF-C02	KEYSIGHT	2022.5.13	2023.5.12
analyzer	E5071C	RFI-LAB-RF-D01	KEYSIGHT	2022.5.13	2023.5.12

1.3 Test Environment

temperature,	23.7℃
relative humidity,	58%RH
atmospheri pressure	100.14kPa

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2. Physical sample pictures



3. Sample placement diagram for actual measurement



3. Test results

3.1 Testing Basis

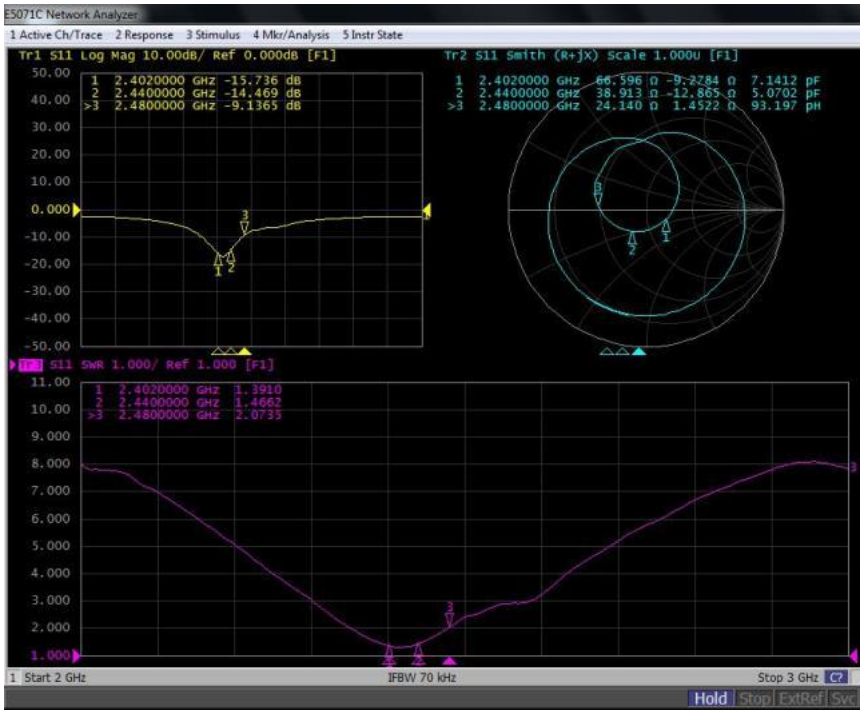
Object name	Name of parameter	public string function name	According to the standard number
Mobile communicaton antenna	Antenna gain	General Technical Specification for Mobile Communication Antennas	GB/T 9410-2008
	Voltage standing wave ratio		
	Roundness of the direction map		
	Gain and directionally		
Antenna	Radiant efficiency	IEEE Standard procedure for antenna testing	ANSI/IEEE Std 149-1979
	Impedamce		

3.2 Test Uncertainty

project	uncertainty
standing-wave ratio	±0.3
Gain, efficiency	±0.72dB

3.3 Test Data

3.3.1 Network Analyzer Testing



3.3.2 Standing Boby

frequency/MHz	2402	2440	2480
voltage standing wave ratio	1.3910	1.4662	2.0735

3.3.3 Gain and Efficiency

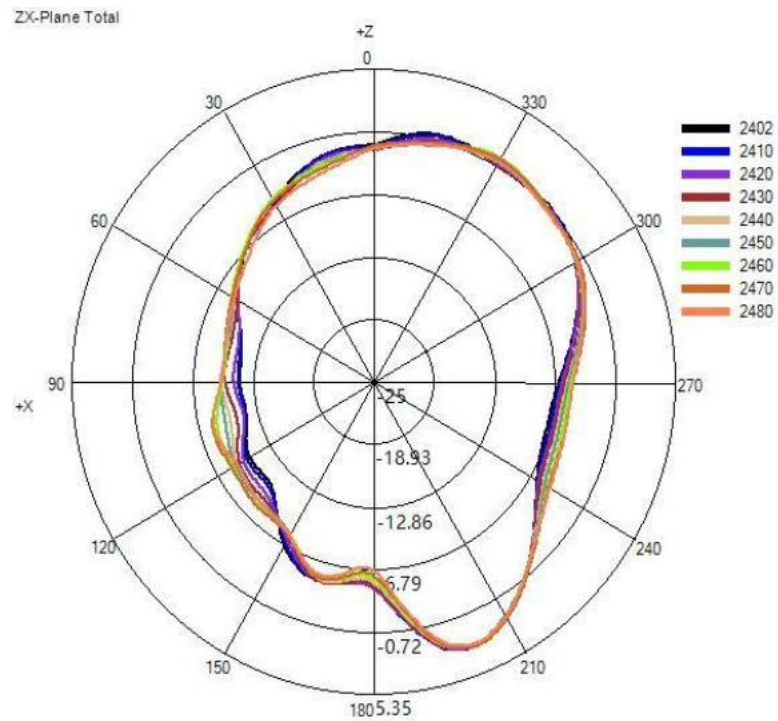
frequency/MHz	2402	2410	2420	2430	2440	2450	2460	2470	2480
peak gain/dBi	2.85	2.88	2.79	2.77	2.69	2.52	2.46	2.41	2.03
efficiency/%	44.98	45.34	44.93	45.74	46.00	45.14	45.56	44.49	40.81

3.3.4 Roundness of the histogram

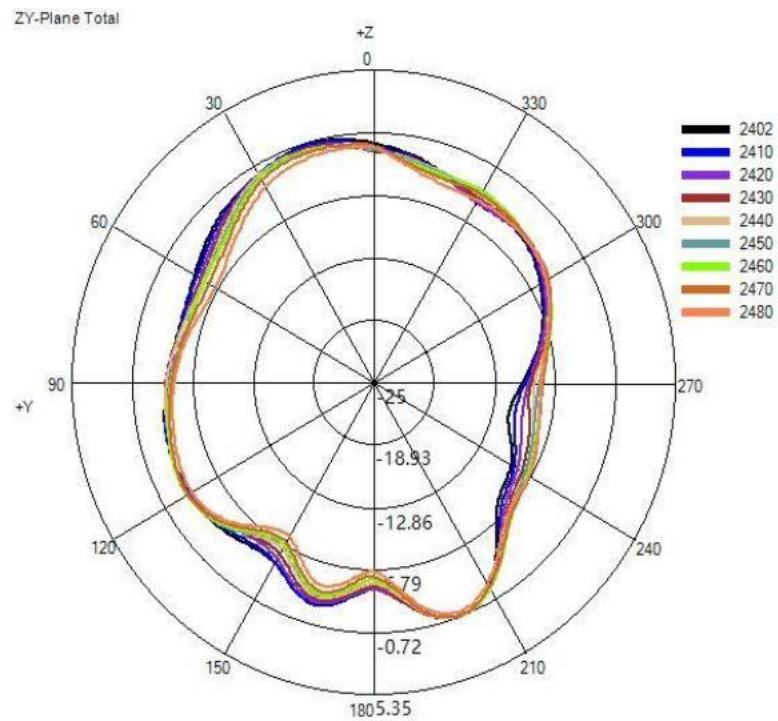
frequency/MHz	2402	2410	2420	2430	2440	2450	2460	2470	2480
H Theta=90/dB	14.22	14.43	14.31	13.68	13.38	13.30	13.18	13.31	13.58

3.3.5 Direction diagram

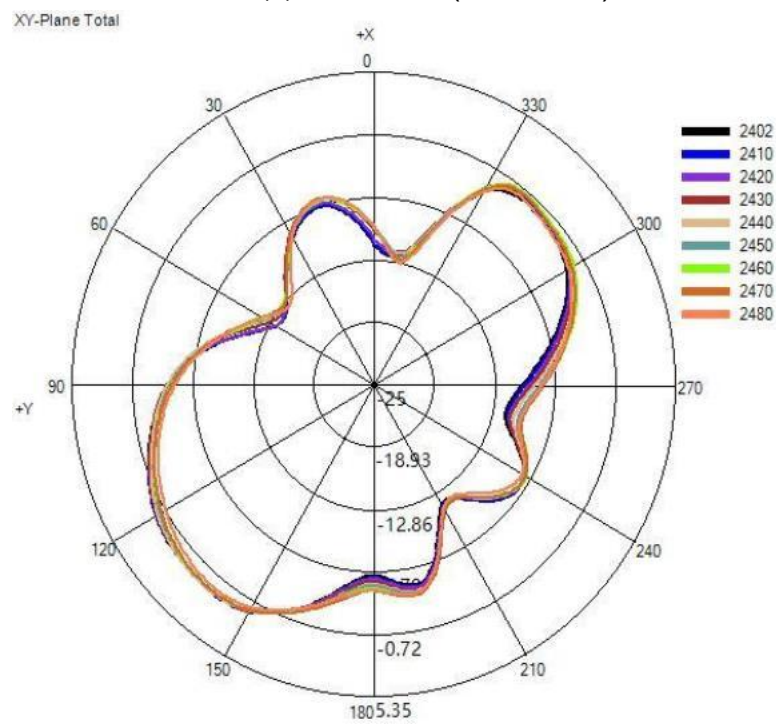
(1) X-Z Panel (Unit: dBi):



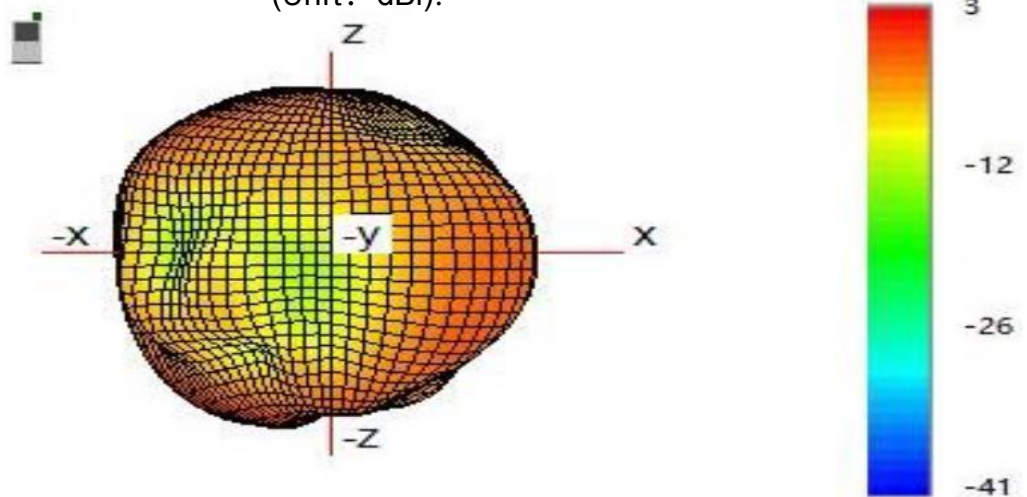
(2) Y-Z Panel (Unit: dBi):



(3) X-Y Panel (Unit: dBi):



(4) 2410MHz 3D Directional diagram
(Unit: dBi):



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