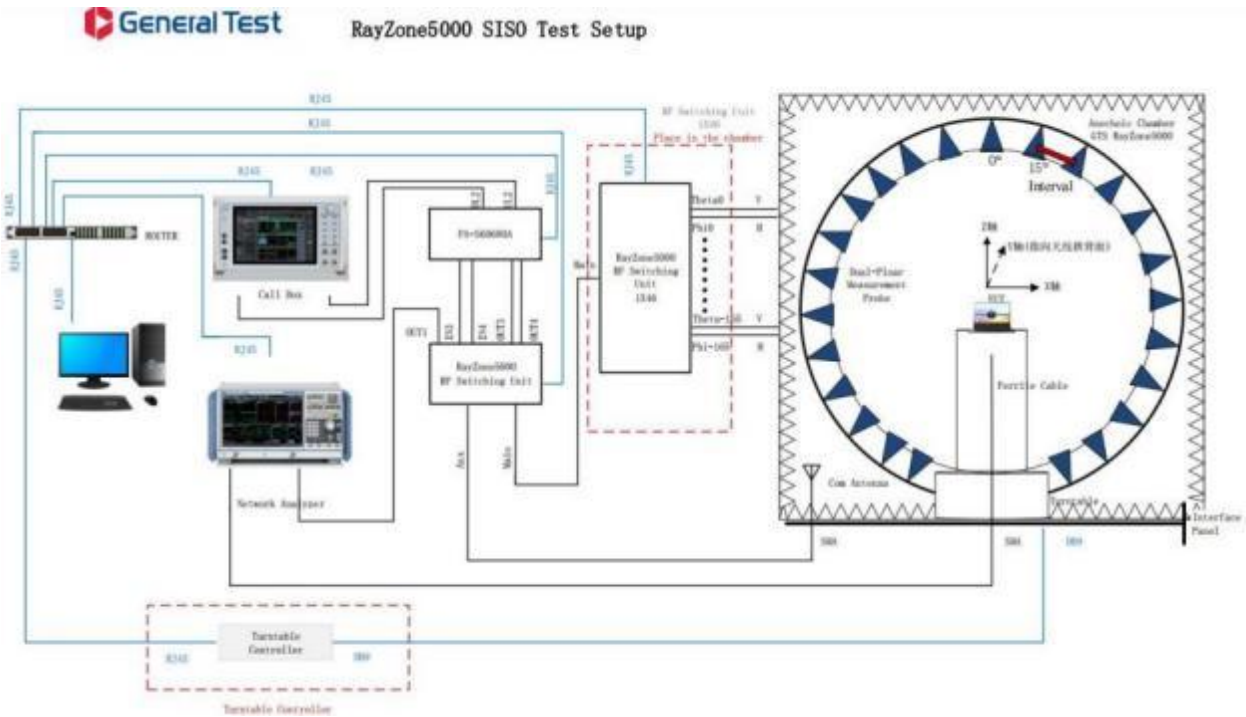
ShanWan

Shenzhen YLW Technology Co.,Ltd

Antenna report

1. Basic information

1.1 Test principle



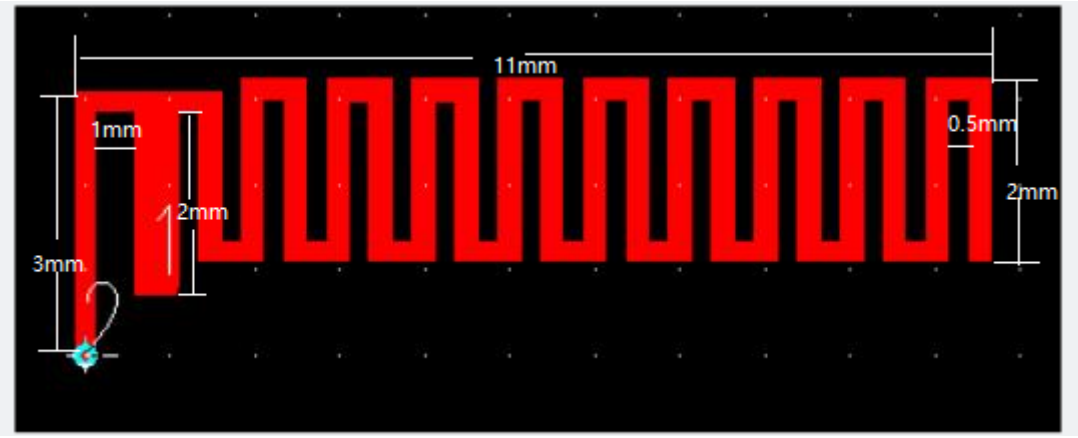
1.2 Test the equipment

name	mode	equipmen	Vturer	Calibration date	next time
OTA test	RayZone-5000	RFI-LAB-RF-D00		2021.3.22	2023.3.21
network	E5071C	RFI-LAB-RF-C02	KEYSIGHT	2022.5.13	2023.5.12
network	E5071C		KEYSIGHT	2022.5.13	2023.5.12

1.3 Test environment

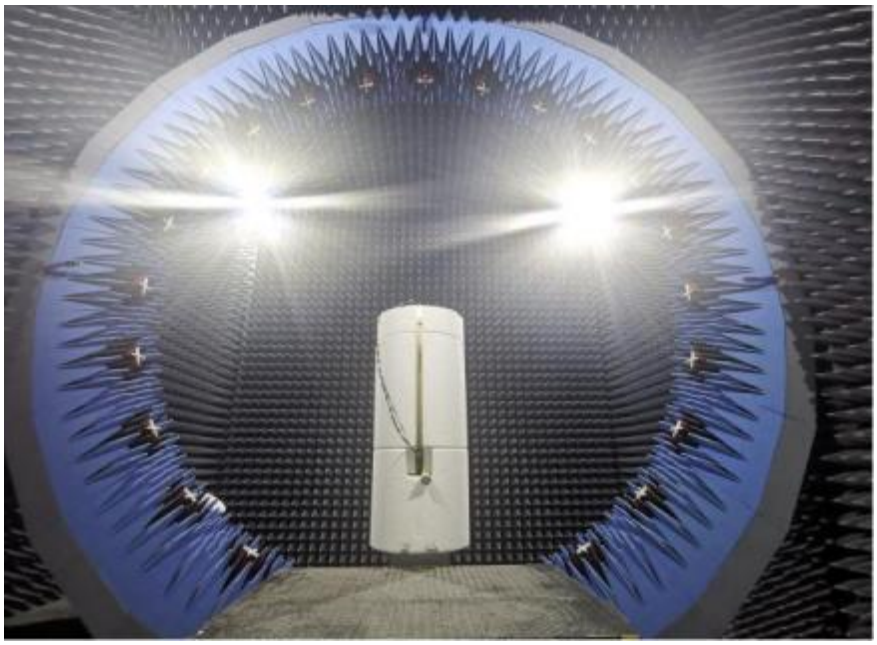
ambient temperature	23.7℃
relative humidity	58%RH
atmospheric pressure	100.14kPa

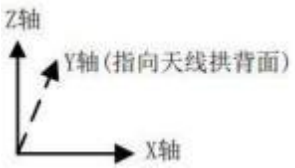
2. Physical drawing of the samples



3. Actual measured placement drawing of the samples

front view





3. Test results

3.1 Test Basis

Object name	The parameter name	Method name	According to the standard number
Mobile communication antenna	antenna pattern	General technical specifications for mobile communication antenna	GB/T 9410-2008
	antenna gain		
	voltage standing-wave ratio		
	Direction diagram		

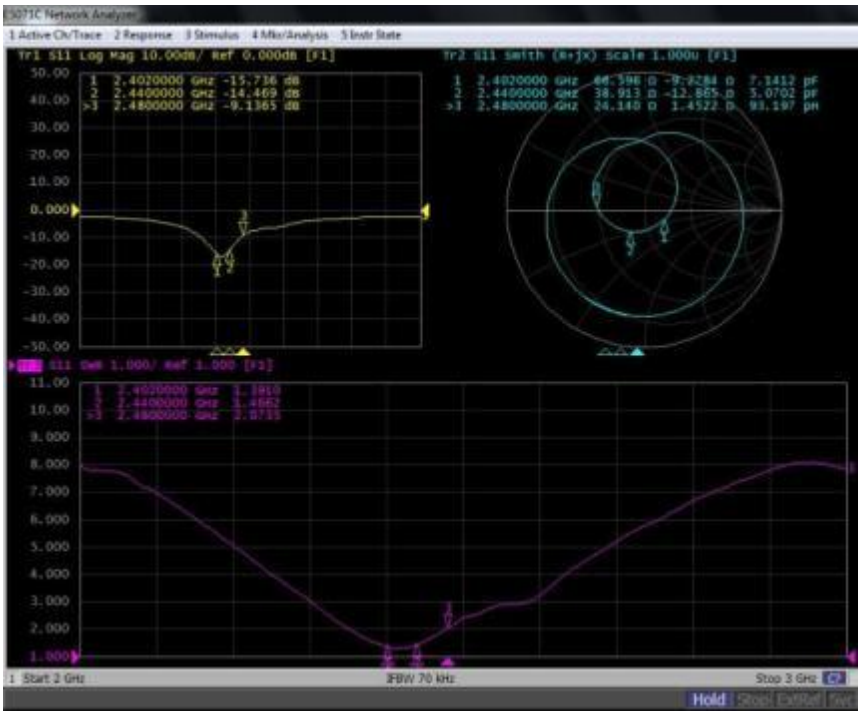
3.2 Test Uncertainty

The calculation of the uncertainty is based on the ISO release "Guide to the Expression of Uncertainty in Measurement" (GUM), using the inclusion factor of K=2 and the 95% confidence level to represent the extended uncertainty.

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

3.3 test data

3.3.1 Network analyzer test



3.3.2 Resident bbi

frequency /MHz	2402	2440	2480
voltage standing -wave ratio	1.391	1.466	2.0735

3.3.3 Gain and efficiency

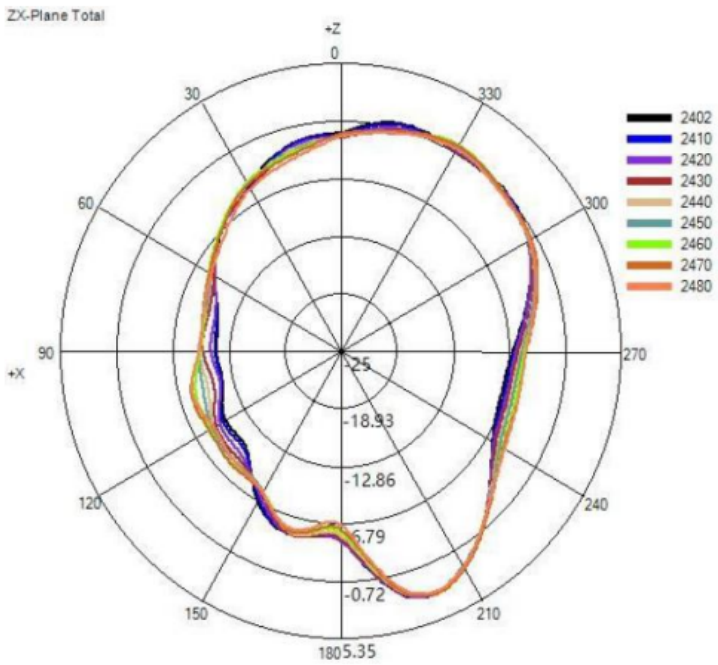
frequency /MHz	2402	2410	2420	2430	2440	2450	2460	2470	2480
maximum gain /dBi	2.85	2.88	2.79	2.77	2.69	2.52	2.46	2.41	2.03
productiveness /%	44.98	45.34	44.93	45.74	46.00	45.14	45.56	44.49	40.81

3.3.4 Dimension of the directional graph

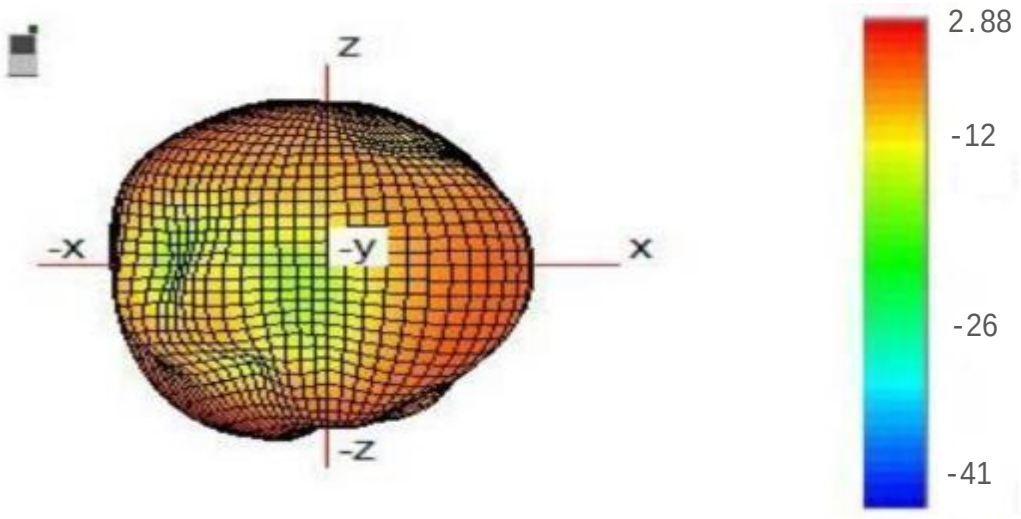
frequency /MHz	2402	2410	2420	2430	2440	2450	2460	2470	2480
H Theta=90/dB	14.2	14.4	14.3	13.6	13.3	13.3	13.1	13.3	13.5

3.3.5 Direction diagram

(1) X-Z面(单位：dBi)：



(4) 3D orientation diagram of 2410 MHz (unit: dBi):



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