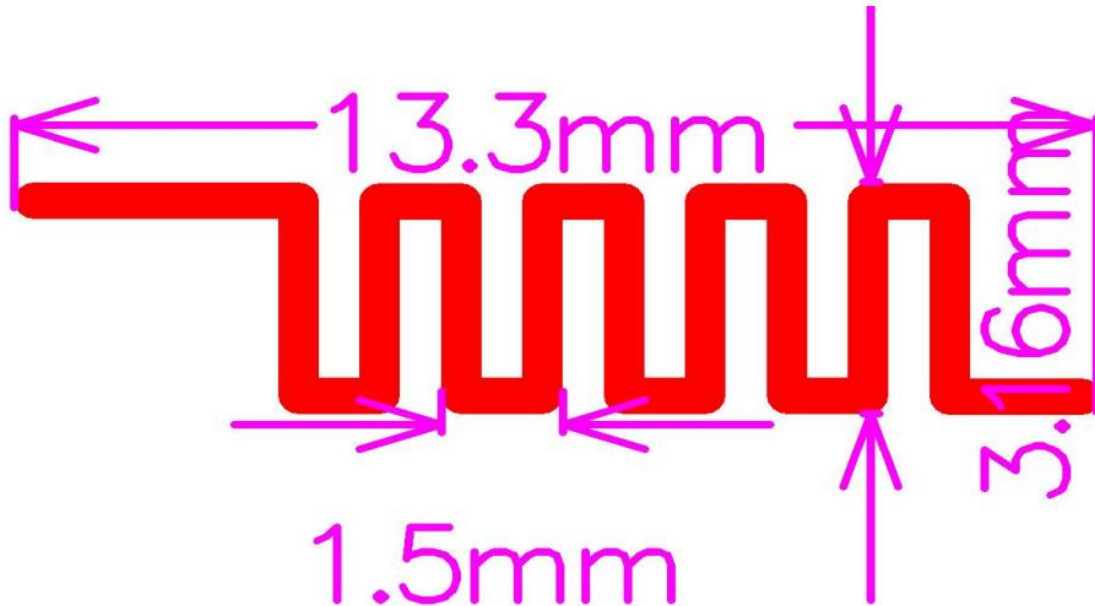


1. Antenna Description:

Antenna type	PCB antenna
Model	ZX-K301
Frequency range	2400-2500MHz
Manufacturer	Zhongxin Electronic Technology Co. , Ltd.
ANT Peak Gain	2.03 dBi

2. Antenna Photo:



3. Test Equipment & Conditions

3.1 Test instrument

VSWR is tested using Agilent E5071B connected to a hand mechanism, and the status is free space.

3.2 Test environment and methods

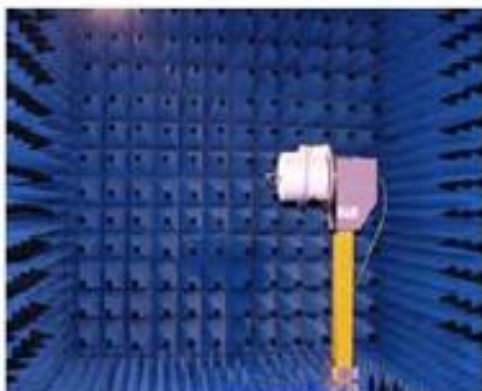
Dark room specifications: ETS-743

TD-SCDMA test equipment: StarPoint SP6010/Agilent 8960

LTE-TDD/FDD-SCDMA test equipment: StarPoint SP8011/CMW500

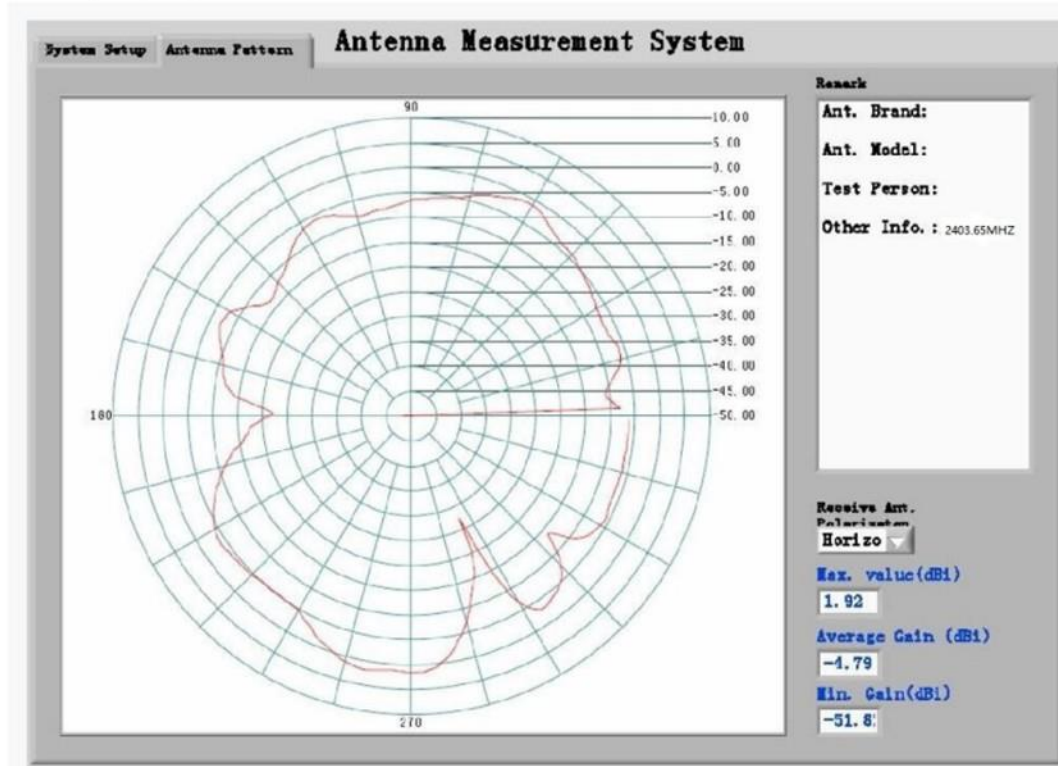
WCDMA/GSM/CDMA test equipment: Agilent 8960

Passive efficiency testing equipment: Agilent Technologies E5071B

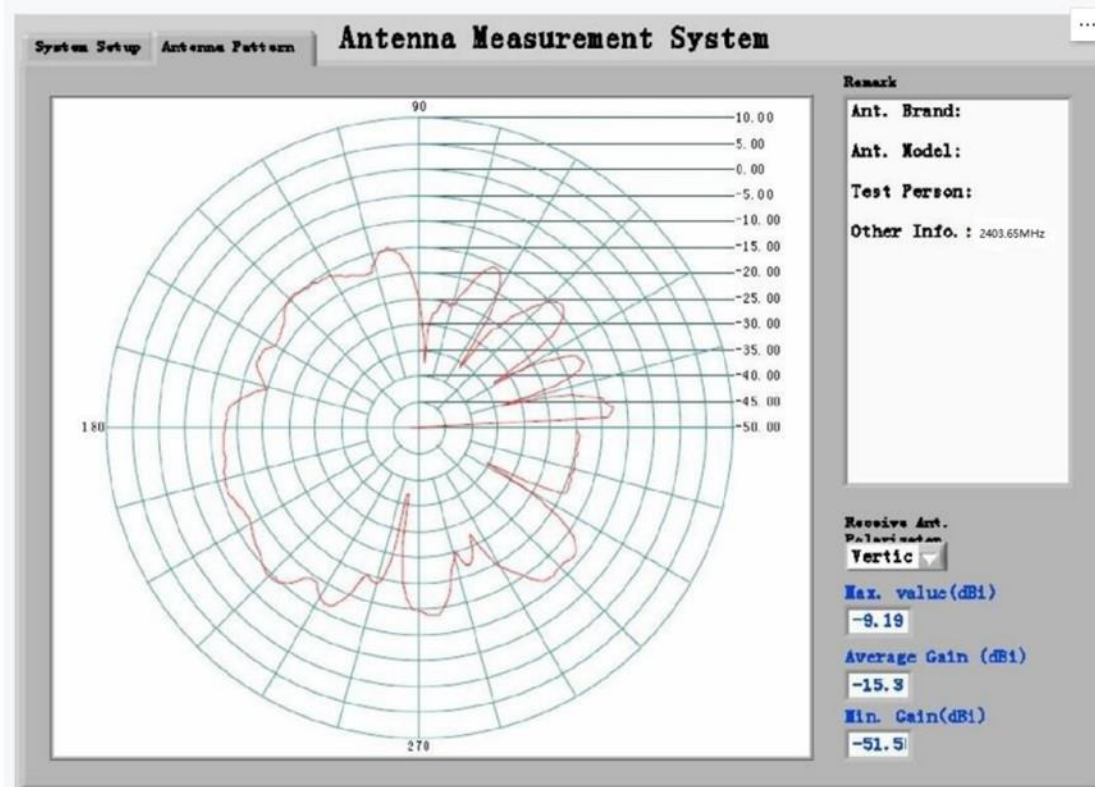


4 . Antenna Radiation Pattern

Main antenna : 2403.65 MHz
Horizontal

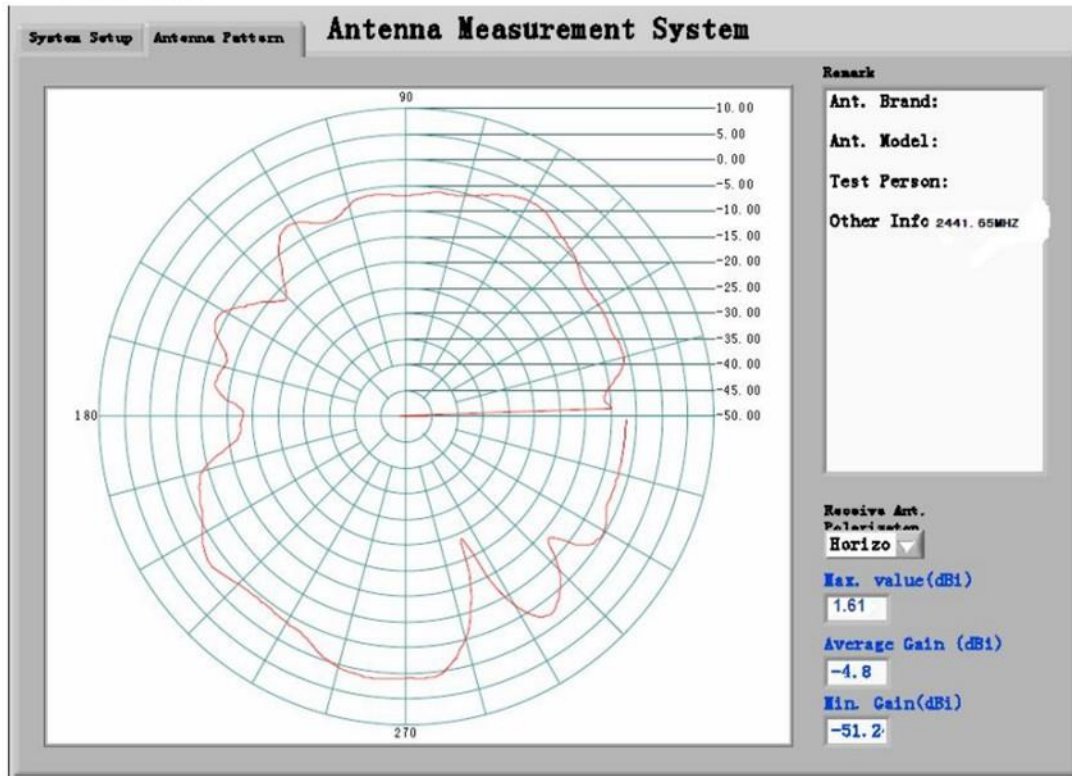


Vertical

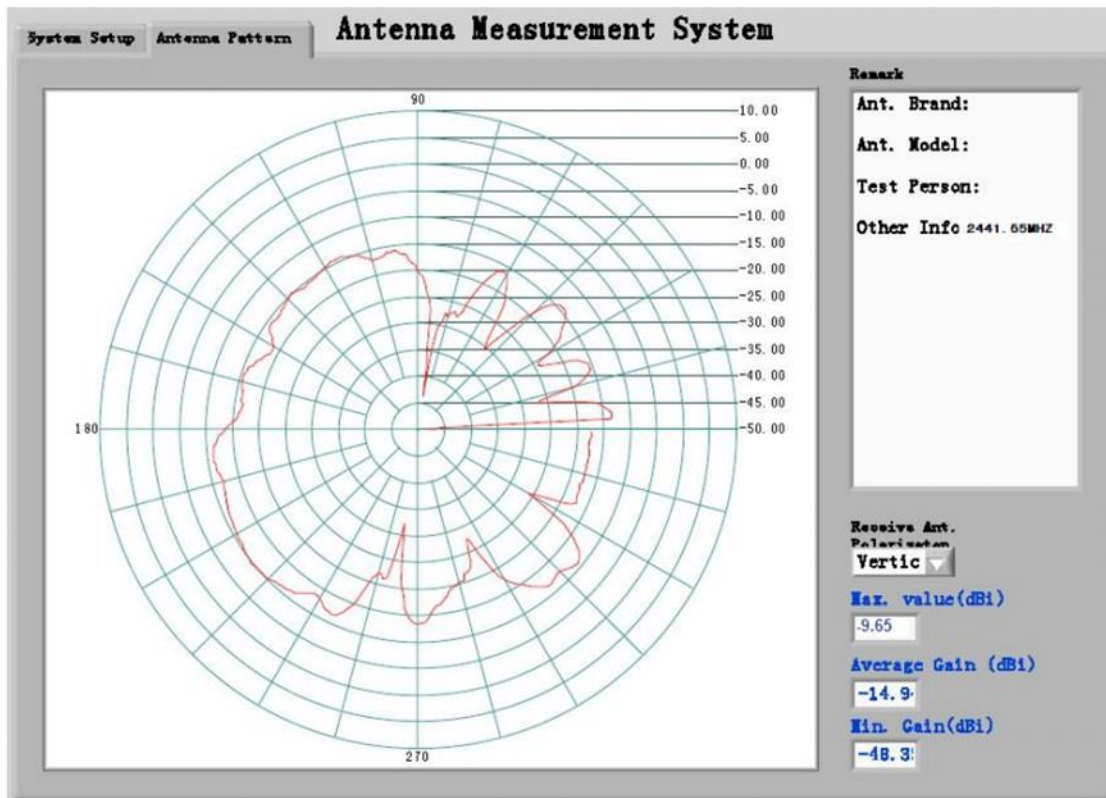


Main antenna : 2441.65 MHz

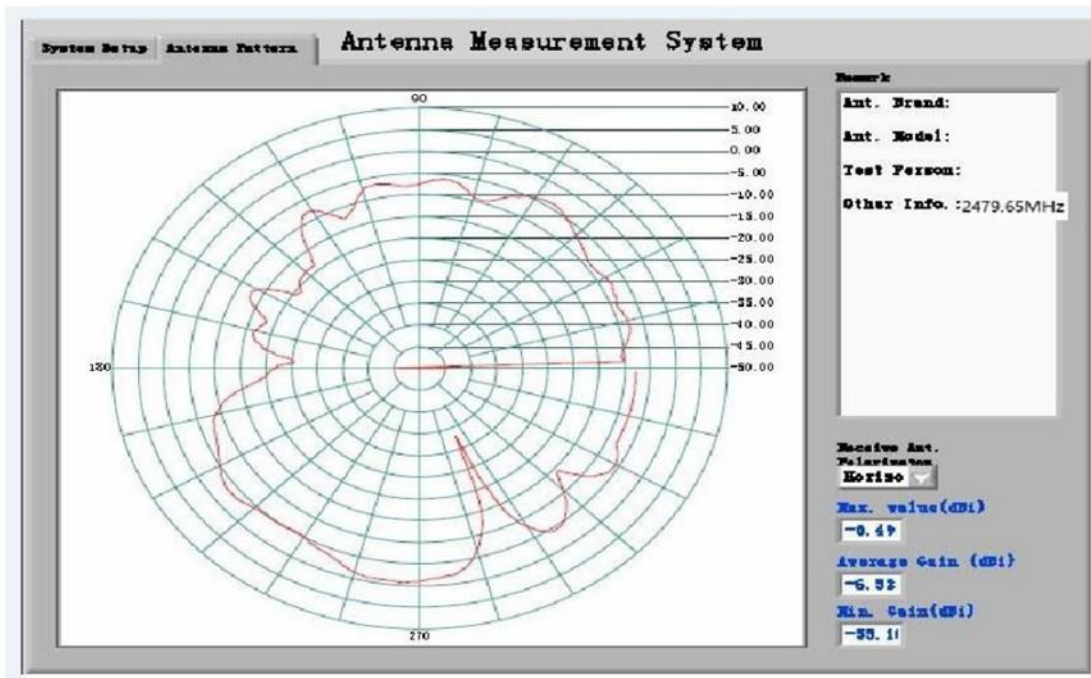
Horizontal



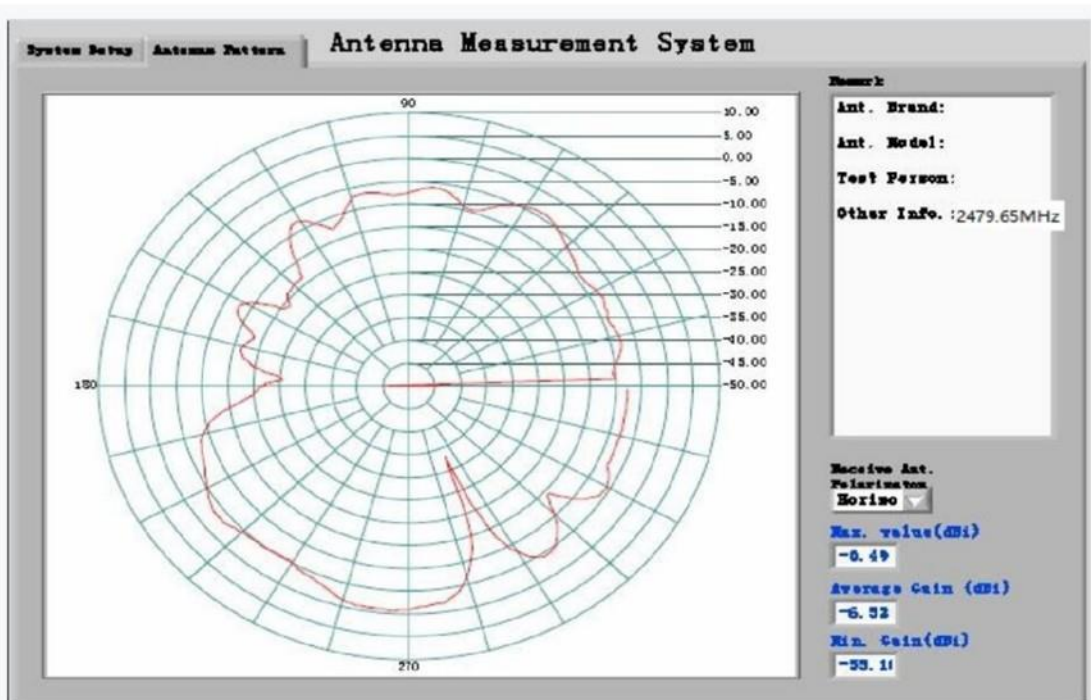
Vertical



Main antenna : 2479.65 MHz
Horizontal



Vertical



Result

Center Frequency		Maximum Ant Gain
2403.65 MHz	H	2.03 dBi
	V	-9.24 dBi
2441.65 MHz	H	1.61 dBi
	V	-9.65 dBi
2479.65 MHz	H	0.49 dBi
	V	-11.45 dBi