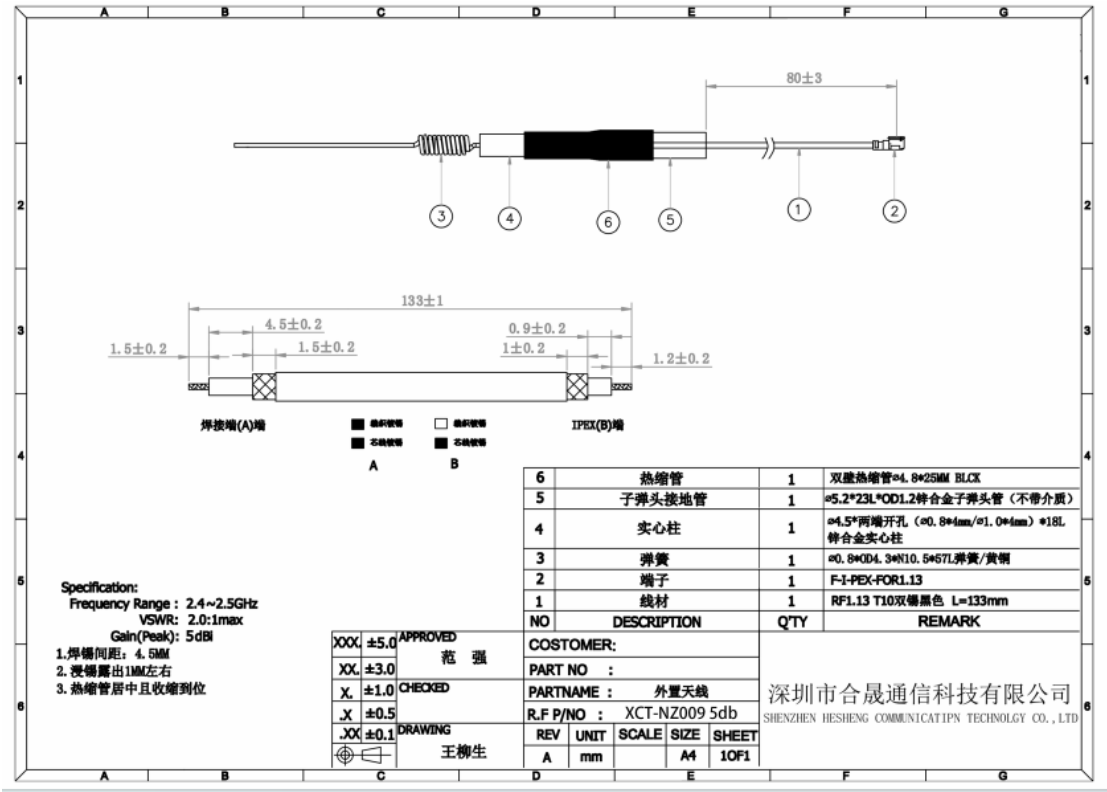


1. Antenna Description:

Antenna type	External antenna
Model	XCT-NZ009
Frequency range	2400-2500MHz
Manufacturer	SHENZHEN HESHENG COMMUNICATIPN TECHNOLOGY CO.,LTD
ANT Peak Gain	3.67 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

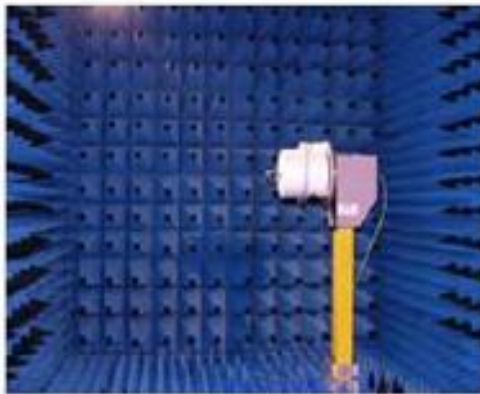
Dark room specifications: ETS-743

TD-SCDMA test equipment: StarPoint SP6010/Agilent 8960

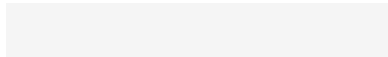
LTE-TDD/FDD-SCDMA test equipment: StarPoint SP8011/CMW500

WCDMA/GSM/CDMA test equipment: Agilent 8960

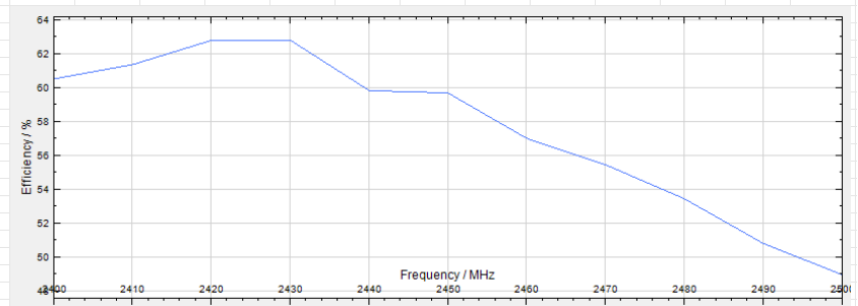
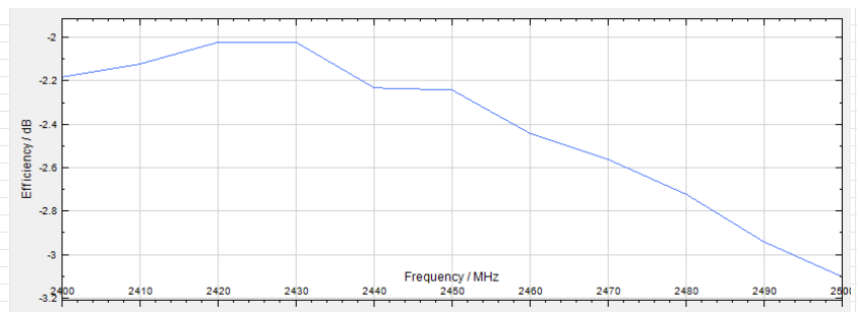
Passive efficiency testing equipment: Agilent Technologies E5071B



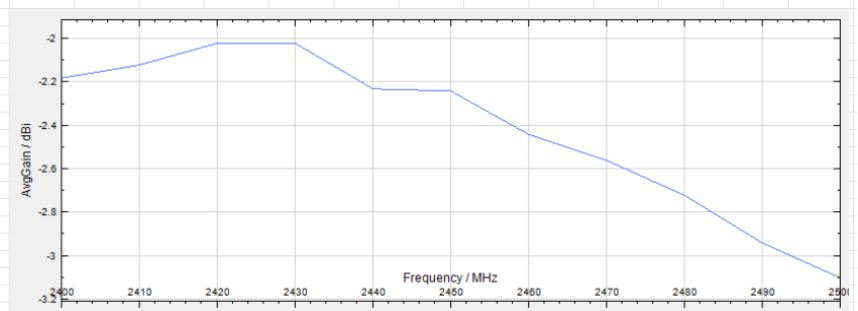
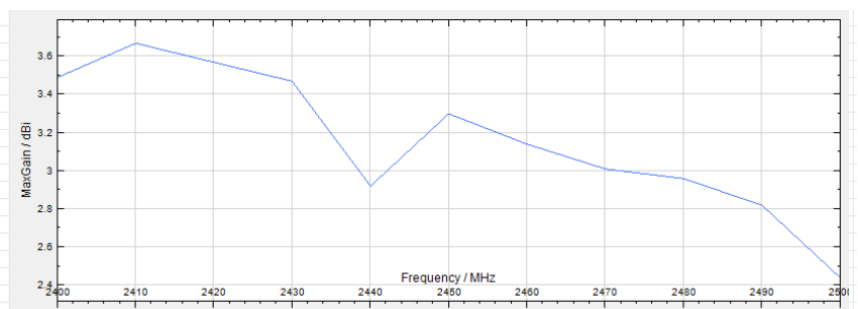
4 . Antenna Radiation Pattern



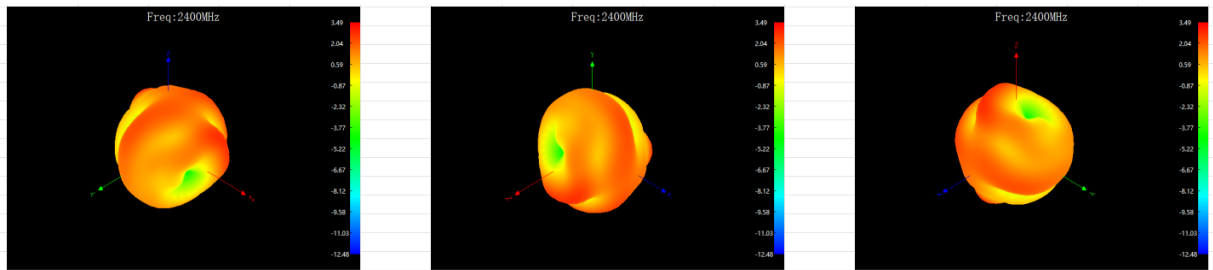
Frequency	Efficiency	Efficiency / %
2400	-2.18	60.53
2410	-2.12	61.38
2420	-2.02	62.81
2430	-2.02	62.81
2440	-2.23	59.84
2450	-2.24	59.7
2460	-2.44	57.02
2470	-2.56	55.46
2480	-2.72	53.46
2490	-2.94	50.82
2500	-3.1	48.98



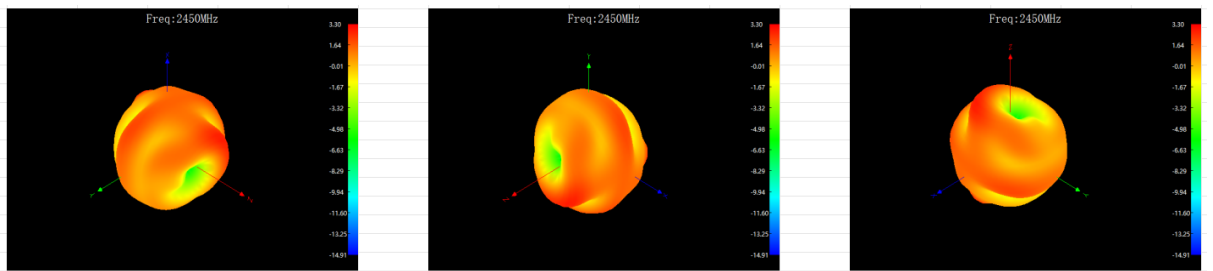
Frequency	MaxGain/c	AvgGain/dBi
2400	3.49	-2.18
2410	3.67	-2.12
2420	3.57	-2.02
2430	3.47	-2.02
2440	2.92	-2.23
2450	3.3	-2.24
2460	3.14	-2.44
2470	3.01	-2.56
2480	2.96	-2.72
2490	2.82	-2.94
2500	2.44	-3.1



2400MHz



2450MHz



2500MHz

