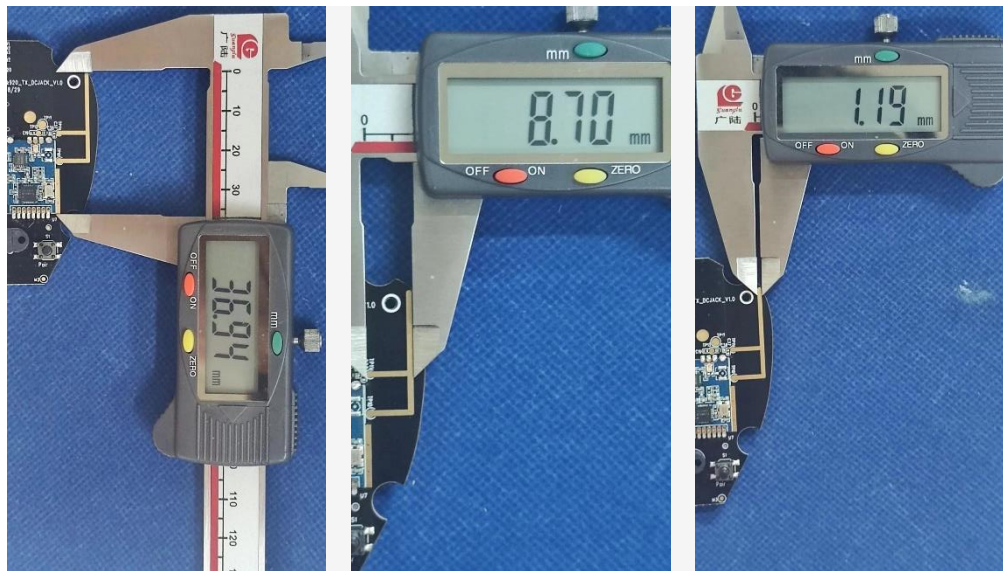


1. Antenna Description:

Antenna type	PCB antenna
Model	SP218
Frequency range	2400-2500MHz
Manufacturer	SHENZHEN SHIBAOJIA ELECTRONICS CO.,LTD
ANT Peak Gain	4.82 dBi

2. Antenna Photo:



3. Test Equipment & Conditions

3.1 Test instrument

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

3.2 Test environment and methods

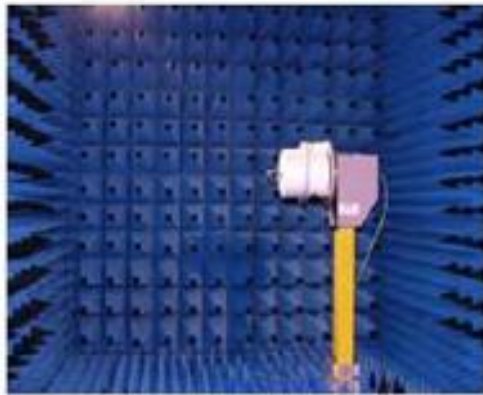
Dark room specifications: ETS-743

TD-SCDMA test equipment: StarPoint SP6010/Agilent 8960

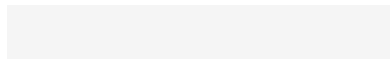
LTE-TDD/FDD-SCDMA test equipment: StarPoint SP8011/CMW500

WCDMA/GSM/CDMA test equipment: Agilent 8960

Passive efficiency testing equipment: Agilent Technologies E5071B

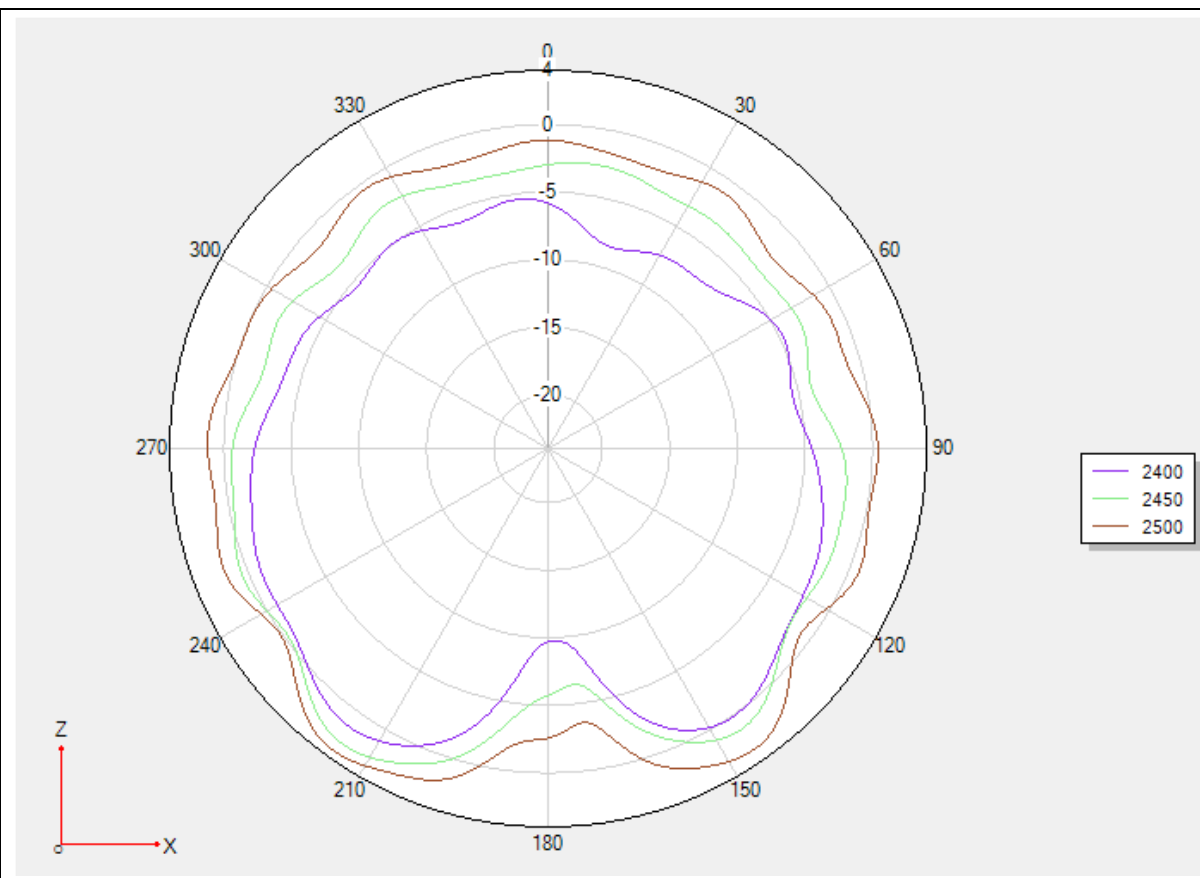


4 . Antenna Radiation Pattern



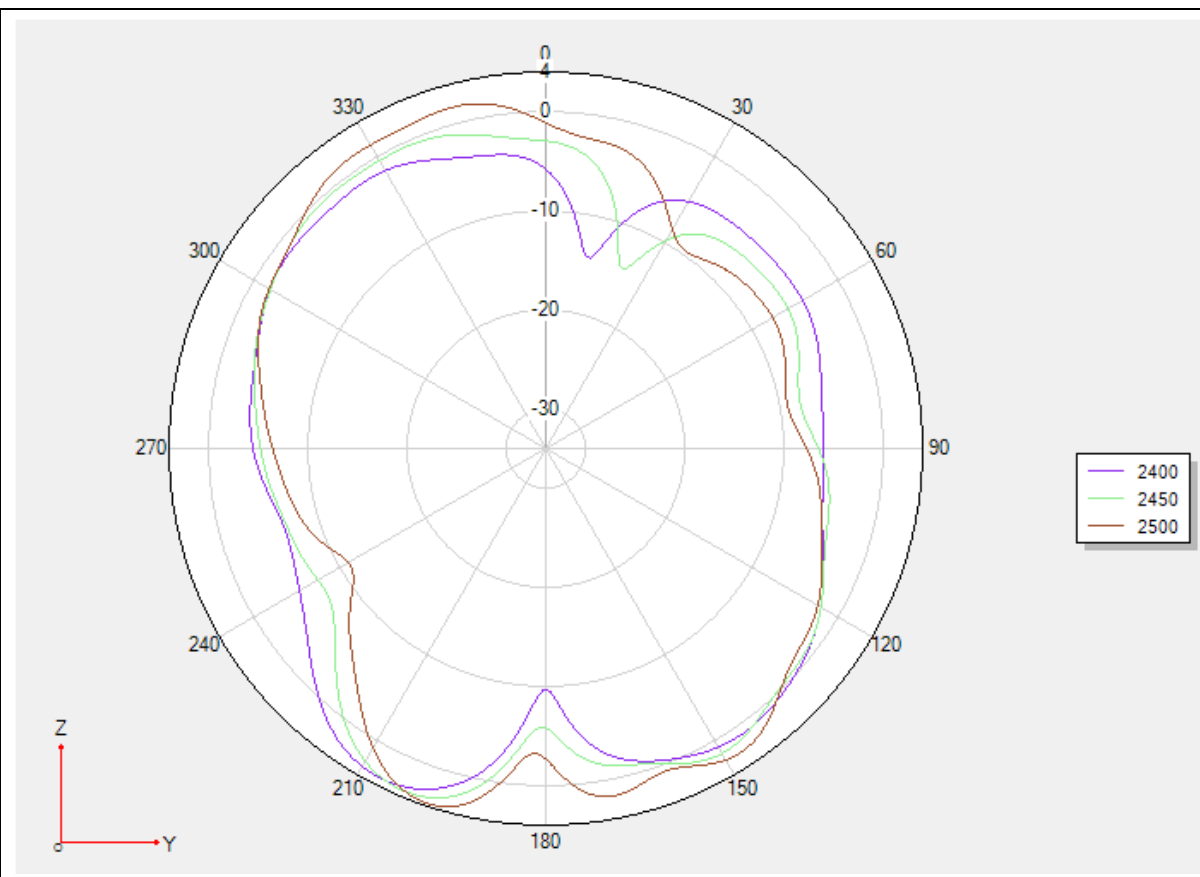
Phi0

2D 方向图
(2D
Pattern)



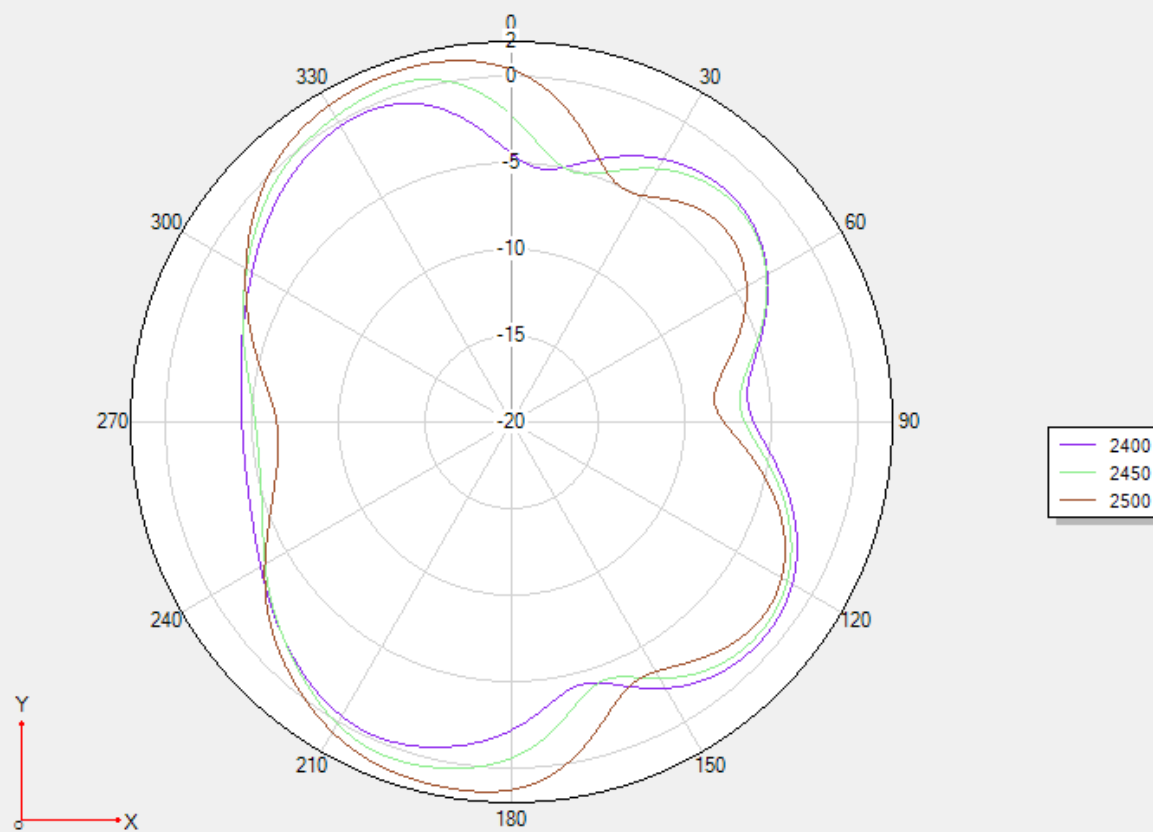
Phi90

2D 方向图
(2D
Pattern)

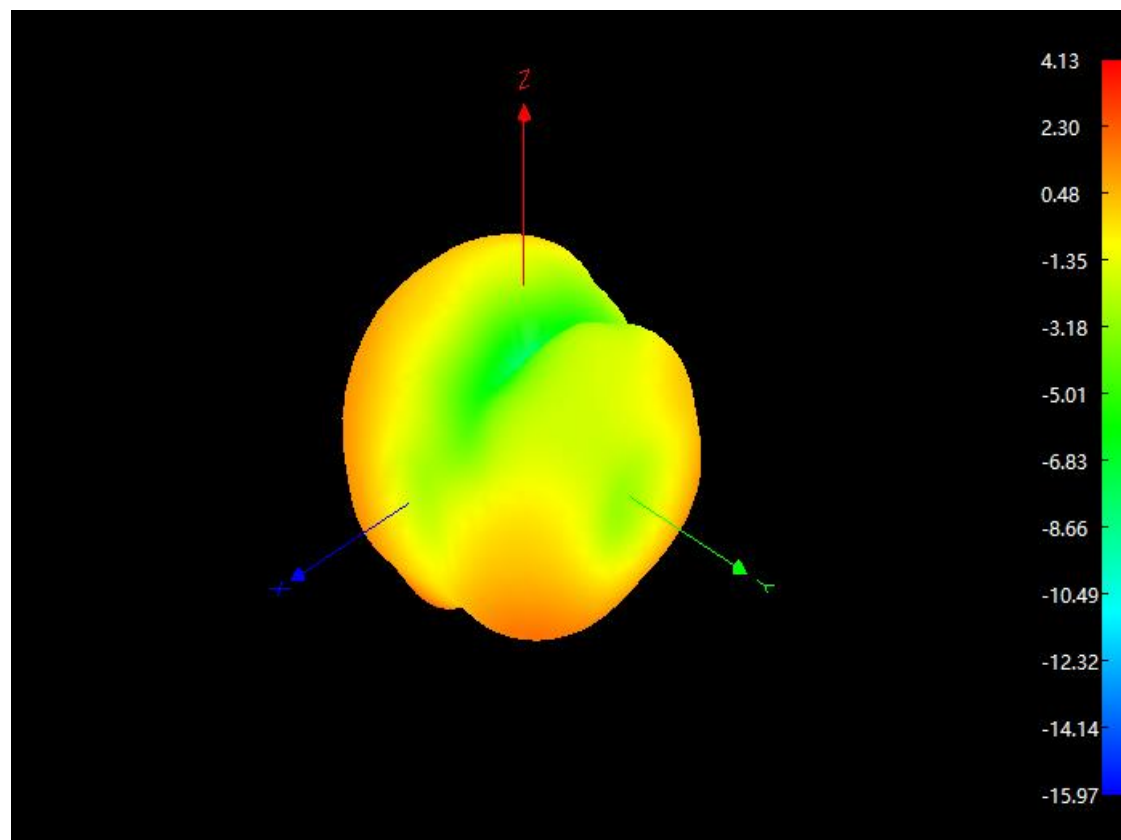


Theta90

2D 方向图
(2D
Pattern)



3D 方向图
(3D
Pattern)



效率与增益 (Efficiency&Gain)				
	Frequency / MHz	Efficiency / dB	Efficiency / %	Gain/ dBi
	2400	-2.53	55.85	4.13
	2410	-2.75	53.09	3.8
	2420	-2.38	57.81	4.42
	2430	-2.15	60.95	4.55
	2440	-2.2	60.26	4.02
	2450	-1.97	63.53	4.2
	2460	-1.72	67.3	4.55
	2470	-1.85	65.31	4.31
	2480	-1.74	66.99	4.46
	2490	-1.47	71.29	4.82
	2500	-1.49	70.96	4.52