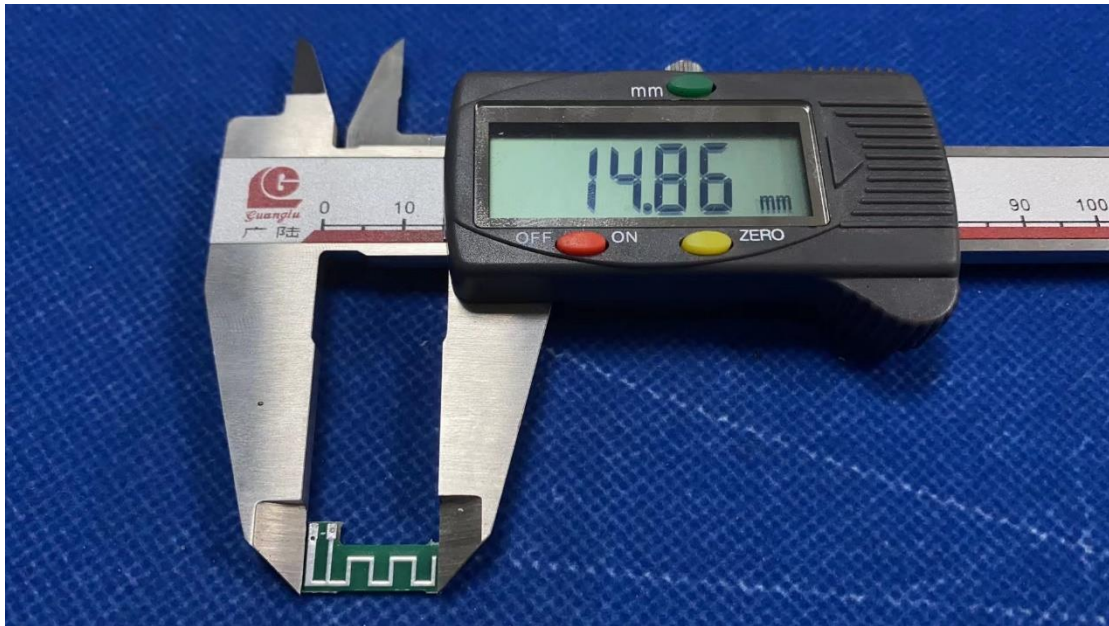


1. Antenna Description:

Antenna type	PCB antenna
Model	HRD-A320
Frequency range	2400-2500MHz
Manufacturer	Shenzhen Hanrongda Electronic Co., Ltd.
ANT Peak Gain	1.54 dBi

2. Antenna Photo:

Length :14.86mm
Width:7.44mm





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

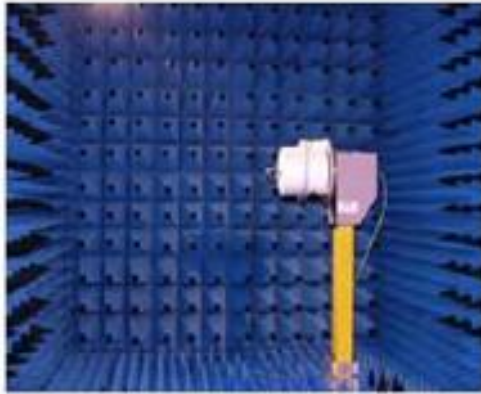
Dark room specifications: ETS-743

TD-SCDMA test equipment: StarPoint SP6010/Agilent 8960

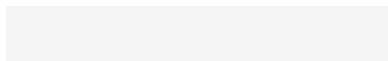
LTE-TDD/FDD-SCDMA test equipment: StarPoint SP8011/CMW500

WCDMA/GSM/CDMA test equipment: Agilent 8960

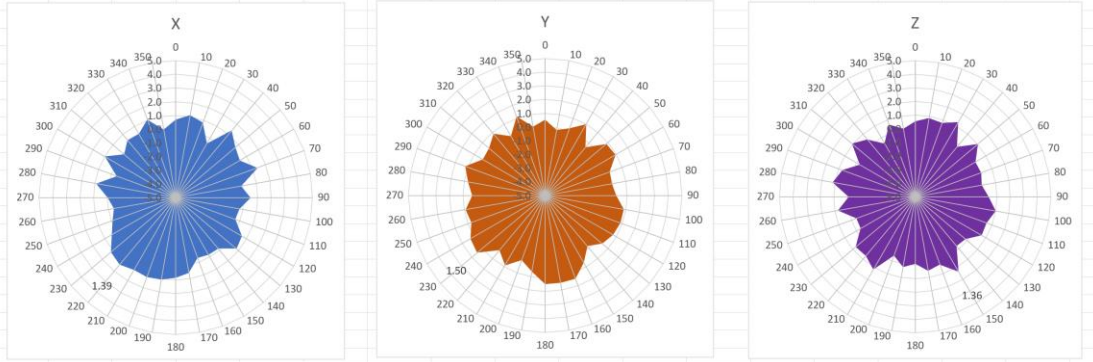
Passive efficiency testing equipment: Agilent Technologies E5071B



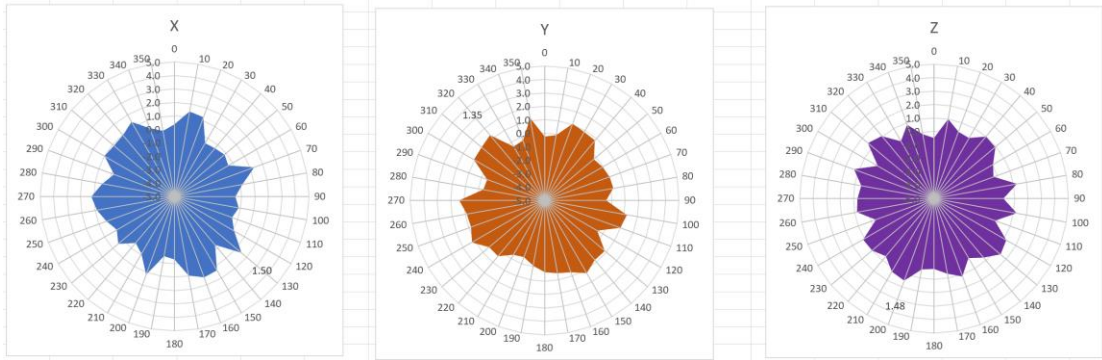
4 . Antenna Radiation Pattern



2400MHz



2450MHz



2500MHz

