

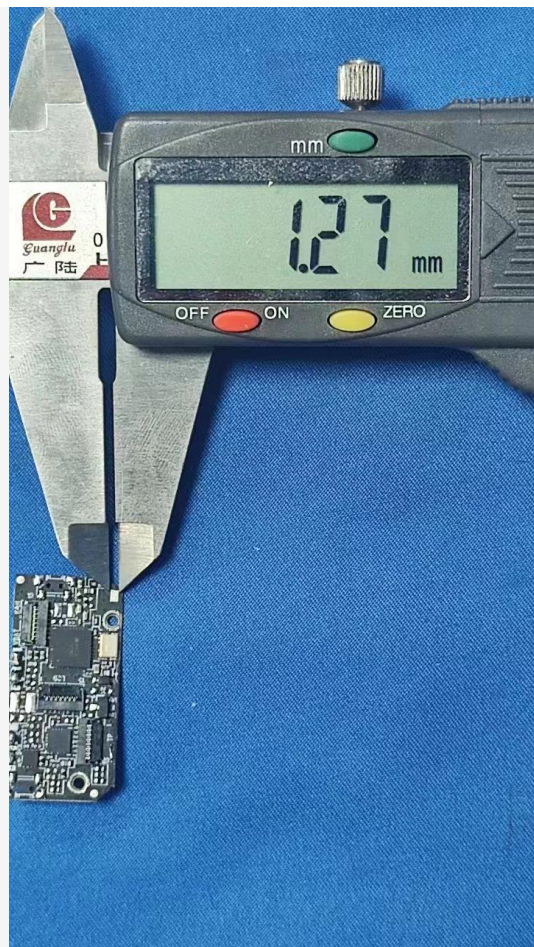
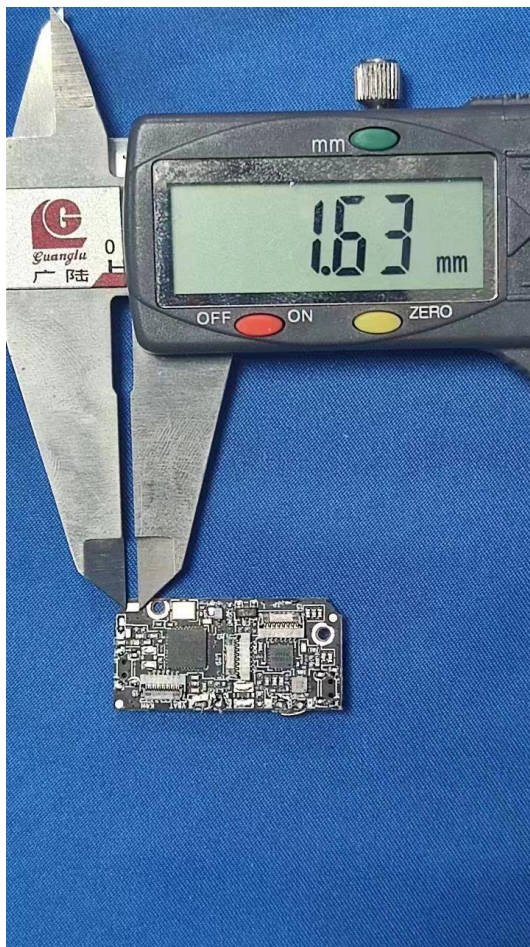
1. Antenna Description:

Antenna type	Internal antenna
Model	HB13 Mini
Frequency range	2400-2500MHz
Manufacturer	Dongguan Langchen Technology Co.,Ltd.
ANT Peak Gain	1.65 dBi

2. Antenna Photo:

Length: 1.55mm

Width: 1.02mm



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

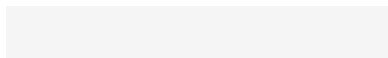
LTE-TDD/FDD-SCDMA test equipment: StarPoint SP8011/CMW500

WCDMA/GSM/CDMA test equipment: Agilent 8960

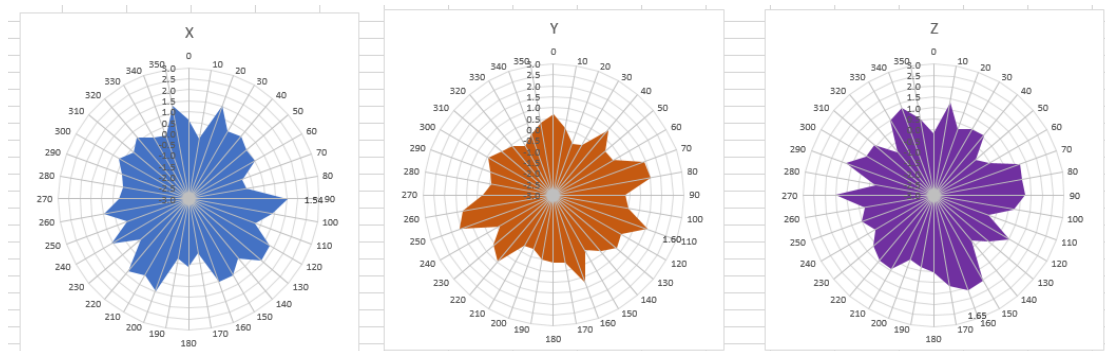
Passive efficiency testing equipment: Agilent Technologies E5071B



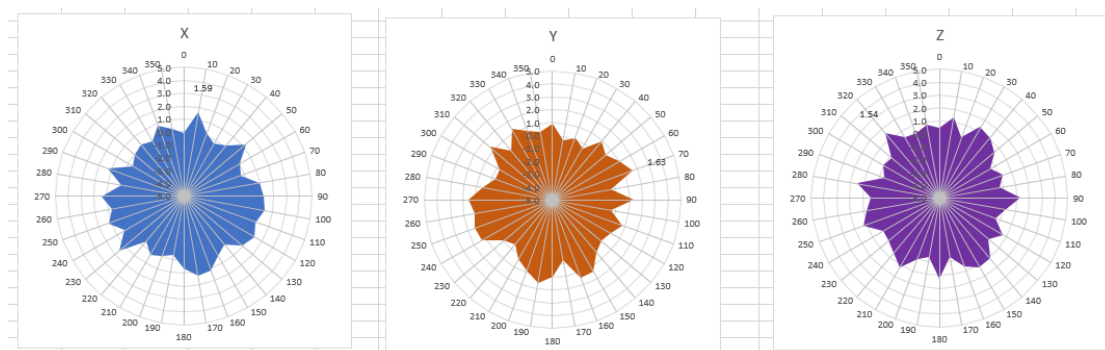
4 . Antenna Radiation Pattern



2400MHz



2450MHz



2500MHz

