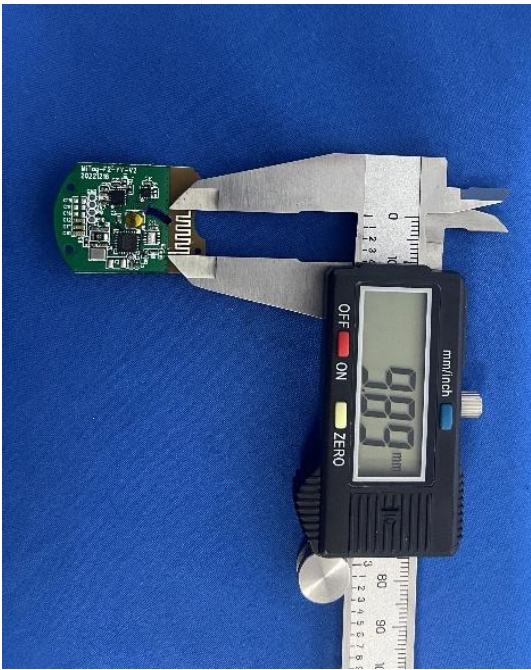


1. Antenna Description:

Antenna type	PCB antenna
Model	HD-P16-3
Frequency range	2400-2500MHz
Manufacturer	Shenzhen Hongju Industrial Development Co., Ltd.
Address	B401, Building 1, No. 63 Longhu Road, Longdong Community, Baolong Subdistrict, Longgang District, Shenzhen, Guangdong Province, China
ANT Peak Gain	0.11 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

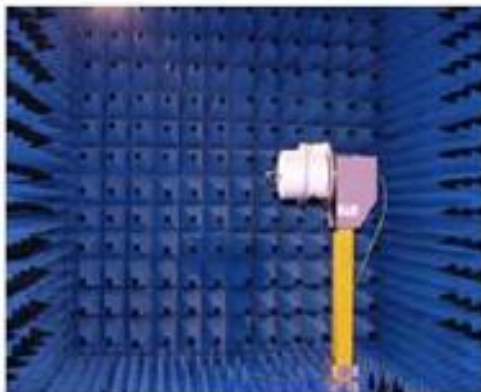
Dark room specifications: ETS-743

TD-SCDMA test equipment: StarPoint SP6010/Agilent 8960

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

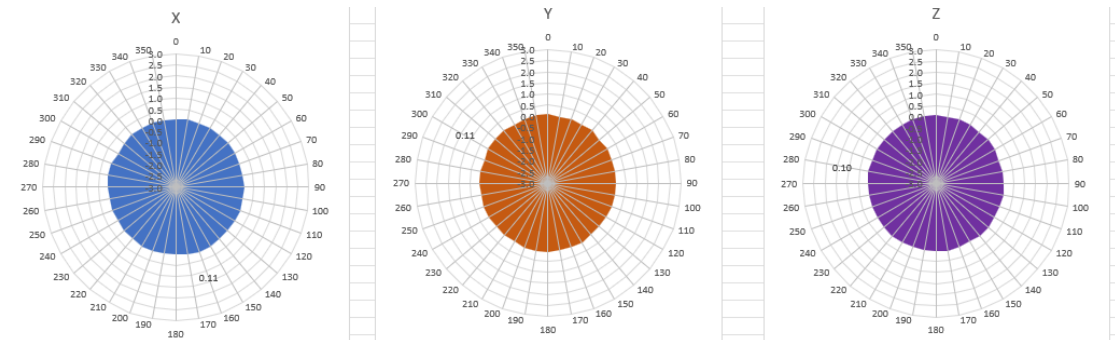
WCDMA/GSM/CDMA test equipment: Agilent 8960

Passive efficiency testing equipment: Agilent Technologies E5071B

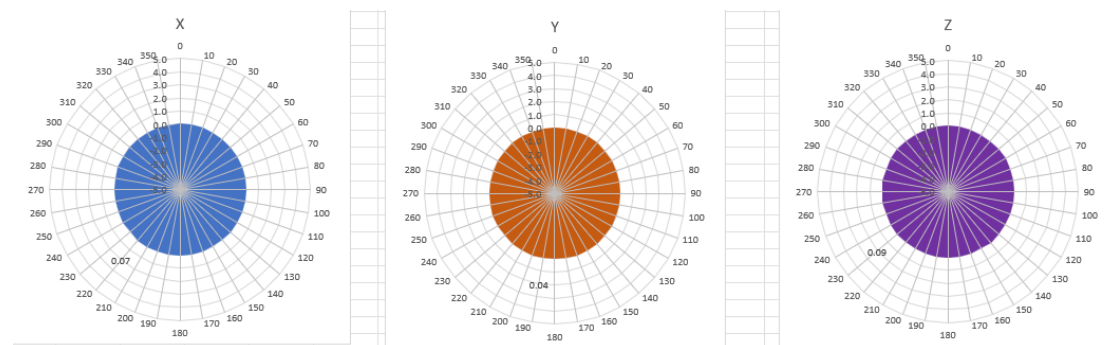


4 . Antenna Radiation Pattern

2400MHz



2450MHz



2500MHz

