

LDV antenna report

Item	Description
FCC ID	2AMK2- RM02AA
Manufacture	Huizhou SPEED Wireless Technology Co., Ltd.
Manufacturer Address	No. SX-01-02, Shangxia District, Dongjiang High-Tech Zone, Huizhou City, Guangdong Province
Test Environment	ETS-Lindgren AMS-8500 Antenna Measurement System
Test Equipment	Key-sight E5071C
Test Software	ETS-Lindgren EM-Quest Data Acquisition and Analysis Software V1.12 build 1470
Calibration date	Dec. 11th 2023
Test date	Dec. 13th 2023
Test engineer	Edward Ou
DUT antenna type	Wi-Fi/BT: Monopole antenna

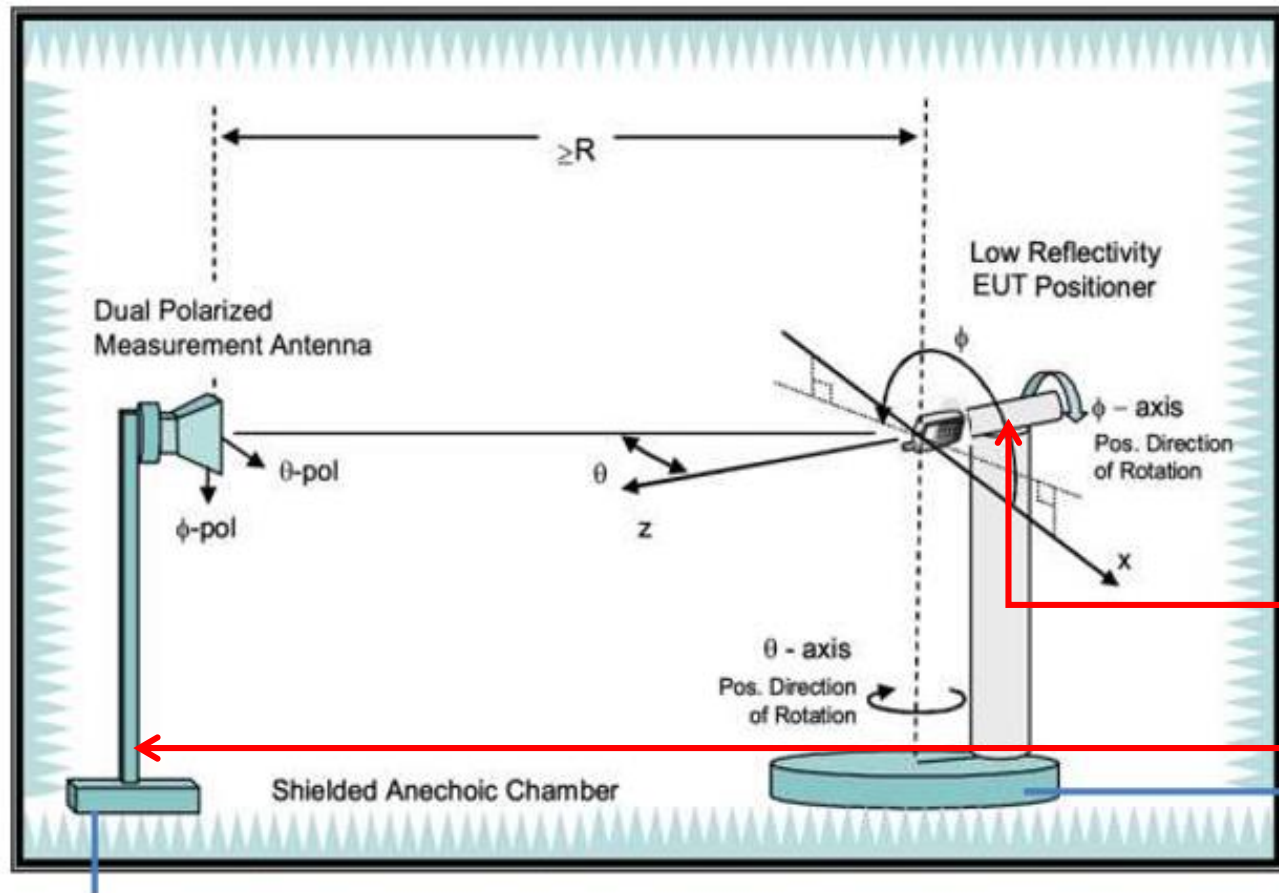
Outline

- 1. Wi-Fi/BT antennaTest method
- 2. Wi-Fi/BT antenna gain
- 3. Wi-Fi/BT Radiation pattern
- 4. Wi-Fi/BT Test setup
- 5. NFC antenna

1. Wi-Fi/BT antenna Test method

The antenna gains are obtained through measurements in a fully anechoic OTA chamber with a 3D positioner.

Measurements are taken in discrete steps in theta and phi direction, data is being recorded using the spectrum analyzer (active) or network analyzer (passive) for both theta and phi polarizations at each position resulting in a 3D gain pattern. Step size is $< 30^\circ$ along both axes. Gain is either derived directly through spatial averaging of VNA S21 measurements (passive measurement) or by the ratio of spatial averaging of 3D EIRP/TRP measurements vs the conducted power (active measurement).

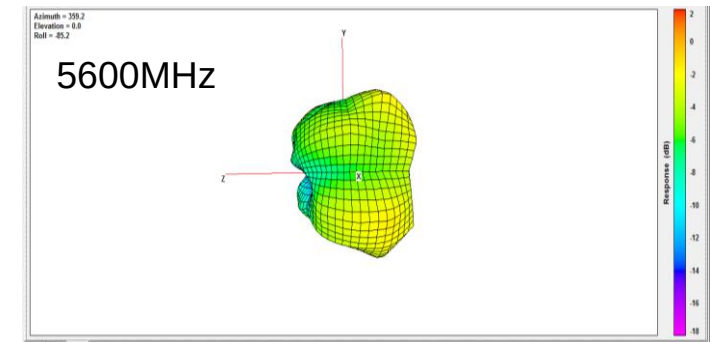
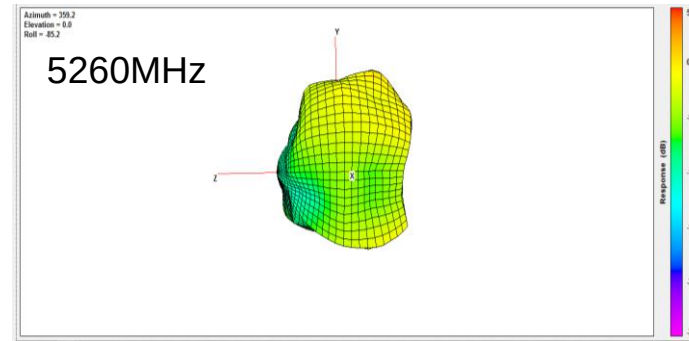
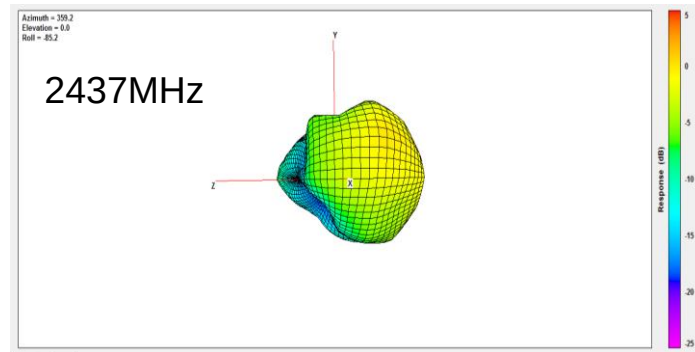


2. Wi-Fi/BT Antenna gain

Wi-Fi/BT TX

Frequency(MHz)	2400	2440	2480	2490	2500	5150	5370	5500	5720	5850	5895
Antenna gain(dBi)	0.6	0.6	1.6	1.9	2.2	0.6	2.4	1.3	-1.2	-0.8	0.4

3. Wi-Fi/BT Radiation pattern



5. Antenna – RFID, 13.56MHz

Dimension	53.06 mm x 23.04 mm, thickness: 2.88 mm
Type	Coil
Photo	