OPERATIONAL DESCRIPTION

The equipment under test (EUT) is a transmitter of 2.402-2.480GHz Bluetooth speaker. It supports Bluetooth and FM function.

A major technical description of EUT is described as following

Operation Frequency	2.402 GHz to 2.480GHz
RF Output Power	1.55dBm(Max)
Bluetooth Version	V4.0
Modulation	GFSK, π /4-DQPSK, 8DPSK
Number of channels	79 for traditional BT 40 for BLE
Hardware Version	V1.0
Software Version	V1.0
Antenna Designation	PCB Antenna and FM Antenna (Met 15.203 Antenna requirement)
Antenna Gain	0dBi
Power Supply	DC 3.7V by battery

For Bluetooth:

After the product has been connected to DC 3.7V, product will start to work through XTAL 40MHz (YB2) vibration. During transmitting, transceiver (UB2:RTL8761AT) will output low-power signals to the PA (Power Amplifier), and then eradiate signals to the space through Antenna network. During receiving signal, antenna will send electromagnetic wave signal to the Low Noise Amplifier for enlarging, and then signal will be sent to transceiver to demodulate.

For FM:

After the product has been connected to DC 3.7V, product will start to work through XTAL 32.768KHz (Y1) vibration. During receiving signal, antenna will send electromagnetic wave signal to the Low Noise Amplifier for enlarging, and then signal will be sent to Receiver to demodulate.