APPLICANT: Ubang Indutry (HK) Limited

FCC ID: 2ADBS-YB801

The theory of **Bluetooth Speaker** (Model: **YB-801**):

The Bluetooth modulation provided by CSR8635(<u>U1</u>). And type is frequency modulation. The <u>26MHZ</u> crystal oscillator drives the base of <u>U1</u> (CSR8635).

The Bluetooth frequency is 2402-2480MHz, 40 Channels, Ver. 4.0 (BLE). The Bluetooth transmitter's output power is 0.616mW.

## Antenna, Ground and Power Source

The Bluetooth antenna consists of a 2.4GHz Single dipole antenna coil PCB antenna. The NFC antenna is on the PCB, and use a loop antenna.

There is no external ground connection. The ground is only that of the printed circuit board. Electric current is supplied by a 3.7 Volt primary battery

## **Operation Descriptions**

The bluetooth transmitter is a <u>RADIO</u> operating at <u>2400-2.483.5MHz</u> band. The transmitter is powered by a <u>3.7V</u> battery and the transmitting frequency is crystal controlled. The operation is achieved by different combinations of form frequency modulating signal on the <u>2400MHz</u> carrier frequency.

NFC transmitter is operating at <u>13.56MHz</u>. NFC Module can identify the other equipment.

## Remarks:

The transmitter is a trigger button transmitter. The EUT continues to transmit while button is being pressed. It is button transmitter, Modulation by IC; and type is frequency modulation.