

# Analysis Report

## FCC ID: 2AIQN-MB3P

The Equipment-Under-Test (EUT) iCRW – MB3P is a Bluetooth Speaker. The EUT contains a Bluetooth 2.1 radio. The EUT can accept wireless audio signal via Bluetooth devices. The EUT has internal power amplifier and loudspeaker. It is powered by USB port (5VDC) which is for charging the internal 3.7V rechargeable battery.

Antenna Type: Internal, Integral

Antenna Gain: 0dBi

| Operating mode | Nominal<br>Radiated<br>Field Strength | Production<br>Tolerance | Modulation<br>Type |
|----------------|---------------------------------------|-------------------------|--------------------|
| Bluetooth      | 81.2 dBμV/m at 3m                     | +/- 3dB                 | GFSK               |

According to the KDB 447498:

### For Bluetooth:

Based on the Maximum allowed field strength of production tolerance was 84.2dBμV/m at 3m in frequency 2.480GHz, thus;

$$\text{The EIRP} = [(FS \cdot D)^2 \cdot 1000 / 30] = 0.08\text{mW}$$

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 0.08mW.

The SAR Exclusion Threshold Level:

$$= 3.0 \cdot (\text{min. test separation distance, mm}) / \sqrt{\text{freq. in GHz}}$$

$$= 3.0 \cdot 5 / \sqrt{2.480} \text{ mW}$$

$$= 9.53 \text{ mW}$$

Since the above conducted output power is well below the SAR Exclusion threshold level, so the EUT is considered to comply with SAR requirement without testing.