

# Analysis Report

FCC ID: RQU-TT-933BPC  
15060062HKG-001

The Equipment Under Test (EUT) is a Bluetooth 3-Speed Stereo Turntable with Metal Tone Arm. It can accept input sources such as analog Aux-in (3.5mm phone jack), Phono (Long-Play Record) and wireless Bluetooth device. The Bluetooth module in the EUT is operating in the frequency range from 2402MHz to 2480MHz (79 channels with 1MHz channel spacing). The audio signal is amplified and fed to the built-in stereo loudspeakers. The EUT has an analog line-out (RCA) and headphone output (3.5mm phone jack). The EUT also equipped audio recording feature via USB port. The EUT is powered by 120VAC only.

Bluetooth 3.0:  
2402MHz – 2480MHz, 79 channels, 1MHz spacing

Antenna Type: Internal integral antenna  
Antenna Gain: 0dBi

Operating mode	Nominal Radiated Field Strength	Production Tolerance	Modulation Type
Bluetooth 3.0	90.8 dB $\mu$ V/m at 3m	+3/-3dB	GFSK

According to the KDB 447498:

For Bluetooth:

Based on the Maximum allowed field strength of production tolerance was 93.8dB $\mu$ V/m at 3m in frequency 2.480GHz, thus;

$$\text{The EIRP} = [(FS^2 * D) / 30] = 0.72\text{mW}$$

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

$$\text{Conducted Power} = 0.72\text{mW}.$$

The SAR Exclusion Threshold Level:

$$\begin{aligned} &= 3.0 * (\text{min. test separation distance, mm}) / \sqrt{\text{freq. in GHz}} \\ &= 3.0 * 5 / \sqrt{2.480} \text{ mW} \\ &= 9.53 \text{ mW} \end{aligned}$$

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.