Analysis Report

FCC ID: RQU-TT938PCBT

The Equipment Under Test (EUT) is a 3-Speed Stereo Turntable with Bluetooth, Stereo Speaker and Speed Adjustment. 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 external stereo passive loudspeakers. The EUT also has USB audio recording feature (PC connectivity) and headphone output. It is powered by 120VAC only.

2.4GHz Bluetooth Module:
Modulation Type: GFSK
Antenna Type: Integral, Internal (PCB Trace)
Frequency Range: 2402MHz - 2480MHz, 1MHz channel spacing, 79 channels

Nominal field strength is 90.6 dBµV/m @ 3m
Production Tolerance of field strength is +/- 3dB
Antenna gain is 0dBi

According to the KDB 447498:

For Bluetooth:
Based on the Maximum allowed field strength of production tolerance was 93.6 dBµV/m at 3m in frequency 2.480GHz, thus;

The EIRP = [(FS*D) ^2*1000 / 30] = 0.687mW

Conducted power = Radiated Power (EIRP) – Antenna Gain
So;
Conducted Power = 0.687mW.

The SAR Exclusion Threshold Level:
= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (2.480) mW
= 9.53 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.