

Analysis Report

FCC ID: RQU-HF630PB

The Equipment Under Test (EUT) is a Stereo 3CD Mini Hi-Fi System that equipped with PLL Radio Bluetooth and USB Charging. The EUT can accept audio sources including CD, FM Tuner, analog line-in and Bluetooth devices. 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 supplied passive external stereo loudspeakers. The EUT contains a USB port (charging only). The EUT is powered by 120VAC.

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 = $[(FS \cdot D)^2 \cdot 1000 / 30] = 0.687\text{mW}$

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 0.687mW.

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 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.