Analysis Report

Report No.: 14061132HKG-001

The Equipment Under Test (EUT) is a 2.4GHz transceiver for a Vibrasonic Walkie Talkie. The EUT is powered by 3.0V (1.5V X 2) 'AAA' batteries. It is designed to operate 16 frequency hopping channels of frequency hopping systems in the 2410-2473 MHz. It has a Power On Button, a Pair Button a Mute Switch and a Microphone. When the EUT is powered on, the Walkie Units can be paired by pressing the Pair Buttons one by one. The performance can be heard by pressing Vibrasonic sound transmitter button.

16 frequency hopping channels are shown as below;

2410MHz	2415MHz	2420MHz	2425MHz	2429MHz	2430MHz
2434MHz	2435MHz	2439MHz	2445MHz	2449MHz	2454MHz
2459MHz	2464MHz	2469MHz	2473MHz		

Antenna Gain: 0dBi
Nominal rated field strength: 93dBμV/m at 3m
Maximum allowed field strength of production tolerance: +/- 3dB

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 96dBμV/m at 3m in frequency 2.4GHz, thus;

The EIRP = [(FS*D) ^2*1000 / 30] = 1.194mW

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

Conducted Power = 1.194mW.

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.