Analysis Report

Report No.: 14051357HKG-001

The equipment under test (EUT) is a transceiver for a toy PTT type Walkie Talkie operating at 49.860MHz which is controlled by a crystal. The EUT is powered by a 9V battery. After switched ON the EUT, the user can transmit voice to other side by pressing the push-to-talk button and speaking to the microphone, and release the push-to-talk button to listen voice from the speaker.

Antenna Type: External integral antenna
Antenna Gain: 0dBi
Nominal rated field strength: 44.5dBμV/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 47.5dBμV/m at 3m in frequency 49.860MHz, thus;

The EIRP = [(FS*D) ^2*1000 / 30] = 0.0000169mW
Thus;

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

Conducted Power = 0.0000169mW.

The SAR Exclusion Threshold Level for 49.860MHz when the minimum test separation distance is < 50mm:
= [474 * (1 + log100/f(MHz))]/2
= 308.6mW

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.