Analysis Report

Report No.: 14041841HKG-001
Model: 78425

The equipment under test (EUT) is a 13MHz RFID for control panel (RFID toy reader) operating at 13.560MHz which is controlled by a crystal. The EUT is powered by 4 x AA size batteries. This product consists of a control panel (RFID tag reader) and six Hero Figures (passive type powered tags). The EUT has an ON/OFF switch and a RFID tag sensor on the control panel. It can also connect to the TV monitor for game playing. After switched on the EUT, the monitor can show the game mode while the Hero Figure (passive tags) was placed on it.

Antenna Type: Internal integral antenna
Antenna Gain: 0dBi
Nominal rated field strength: 67.3dBµV/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 70.3 dBµV/m at 3m in frequency 2.4GHz, thus;

The EIRP = [(FS*D) ^2*1000 / 30] = 0.003mW

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

Conducted Power = 0.003mW.

The SAR Exclusion Threshold Level for 13.56MHz when the minimum test separation distance is < 50mm:
= [474 * (1 + log100/f(MHz))]/2
= 442.7mW

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.