Analysis Report

Report No.: 13100032HKG-001

The equipment under test (EUT) is a portable 2.4GHz RF transmitter, which is operating in the frequency range 2433.200MHz to 2479.988MHz (235 channels with 199.951172kHz channel spacing). The EUT is powered by 1 x 3.0 V CR2330 battery. When the EUT taps the top of the corresponding receiver, the EUT will transfer recorded data to the receiver.

Antenna Type: Internal integral antenna
Antenna Gain: 0dBi
Nominal rated field strength: 85.5dBμV/m at 3m
Maximum allowed field strength of production tolerance: +/- 4dB

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 89.5dBμV/m at 3m in frequency 2.4GHz, thus;

The EIRP = [(FS*D) ^2*1000 / 30] = 0.267mW

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

Conducted Power = 0.267mW.

The SAR Exclusion Threshold Level:
= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (2.479988) 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.