Analysis Report

Report No.: 19070256HKG-002

The Equipment Under Test (EUT) is a 315MHz Battery Operated Wireless Transmitter. When the button of the EUT is activated, the corresponding 315MHz remote door bell receiver will sound. The EUT is powered by 12VDC (1 X 12V 23A battery).

315MHz portion:
Modulation Type: OOK (On-Off Keying)
Antenna Type: Integral, Internal
Frequency Range: 315MHz, single channel

Antenna gain: 0dBi
Nominal rated field strength: 80 dBμV/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 83 dBμV/m at 3m in frequency 315 MHz, thus;

The EIRP = [(FS*D) ^2*1000 / 30] = 0.06 mW

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

Conducted Power = 0.06 mW

The SAR Exclusion Threshold Level:
= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (0.315) mW
= 26.73 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.