Analysis Report

Report No.: 17070351HKG-002

The Equipment Under Test (EUT) is a 433.92MHz transmitter. The EUT is powered by 12.0VDC (1 x 12.0V Alkaline A23 battery). After pressing the button on the EUT, it will transmit a signal to turn on the receiver (LED Deck Light) and change the light colour.

Antenna Type: Internal integral antenna
Antenna Gain: 0dBi
Nominal rated field strength: 70.6dBμV/m at 3m
Maximum allowed field strength of production tolerance: +3dB / - 3dB

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 73.6dBμV/m at 3m in frequency 433MHz, thus;

The EIRP = [(FS*D) ^2*1000 / 30] = 0.007mW

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

Conducted Power = 0.007mW

The SAR Exclusion Threshold Level:
= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (0.433) mW
= 22.8 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.