

Analysis Report

Report No.: 15070330HKG-002

The equipment under test (EUT) is a transmitter of chime extender for Remote door bell operating at 433.92MHz which is operated by a crystal. The EUT is powered by DC3.0V (2 x 1.5V AA batteries). There are a test button and a microphone inside the EUT. The transmitter will be activated and then transmit a control signal to corresponding door bell receiver once either the microphone can be received the chime sound from other door bell or the test button is pressed by the user. For internal/ external microphone portion, the transmitter will cease transmission within 5 seconds after activation. For test button, the manually operated transmitter will automatically deactivate the transmitter within not more than 5 seconds of being released.

Antenna Type: Internal integral antenna

Antenna Gain: 0dBi

Nominal rated field strength: 89.5dB μ V/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 92.5dB μ V/m at 3m in frequency 433.92MHz, thus;

The EIRP = [(FS*D) ^2*1000 / 30] = 0.533mW

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 0.533mW

The SAR Exclusion Threshold Level:

= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)

= 3.0 * 5 / sqrt (0.43392) mW

= 22.78 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.