

Analysis Report

Report No.: 15070333HKG-002

The equipment under test (EUT) is a transmitter of chime extender for Remote landline telephone 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 test buttons and the EUT can be connected to a Mobile phone sensor, a Contact Mat, a Landline telephone or a Magnetic Switch. Use the mobile phone to call the landline telephone, the landline telephone rings, the receiver lights up with a telephone symbol and indicates with sound, lights or vibrations. For Mobile Phone Sensor/ Magnetic Switch portion, the transmitter will cease transmission within 5 seconds after activation. For test button/Contact Mat, 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: 90.5dB 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 93.5dB μ V/m at 3m in frequency 433.92MHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / 30] = 0.672\text{mW}$

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 0.672mW

The SAR Exclusion Threshold Level:

= $3.0 \cdot (\text{min. test separation distance, mm}) / \text{sqrt}(\text{freq. in GHz})$

= $3.0 \cdot 5 / \text{sqrt}(0.43392) \text{ mW}$

= 22.77 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.