

Analysis Report

The equipment under test (EUT) is a transmitter for Remote door bell operating at 315MHz which is operated by a crystal. The EUT is powered by 1 x 12V alkaline new battery. The EUT has one control key, press the control key on the EUT in order to control the desired doorbell receiver. This manually transmitter will automatically deactivate the transmitter within not more than 5 seconds of being released.

Antenna Type: Internal antenna

Antenna Gain: 0dBi

Nominal rated field strength: 87.5 dB μ V/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 90.5dB μ V/m at 3m in frequency 315MHz, thus;

The EIRP = $[(FS * D)^2 * 1000 / 30] = 0.337mW$

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 0.337mW.

The SAR Exclusion Threshold Level:

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

= $3.0 * 5 / \text{sqrt}(0.315)$ mW

= 26.7 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.