

ANALYSIS REPORT

Report No.: 102497759BOX-001

The equipment under test (EUT) is a wireless keypad, upon valid entry, that can transmit a RF signal to operate a gate or garage door opener. The wireless keypad is operating at 433.92 MHz \pm 1 MHz which is controlled by a SAW resonator. The EUT is powered by DC 3.0V (2 x 1.5V C-Cell batteries). The EUT has two (2) groups of buttons, numerical keys and special function keys. The numerical keys allow the user to enter the 4-digit access PINs. If the PINs entered is matched to one of the saved PINs the EUT then send a signal to the gate/garage door opener to perform various function such as open, close stop, etc.

The special function keys, if pressed before the PINs number, will send a 'specific' command such as 'stay open' or 'stay closed' to the gate/garage door opener.

The EUT can only transmit at 433.92MHz frequency with Ghost Controls encoding scheme.

Antenna Type: Helical internal integral antenna

Antenna FGain: 0 dBi

Nominal Rated Field Strength: 84.0 dB μ V/m @ 3m

Maximum allowed field strength of production tolerance: \pm 3dB

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 87.0 dB μ V/m at 3m at 433.92 MHz frequency, thus;

The EIRP= $[(FS \cdot D)^2 \cdot 1000 / 30] = 0.290\text{mW}$

Conducted Power = 0.290 mW

The SAR Exclusion Threshold Level:

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

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

= 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.

Sincerely Yours,



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