

RF Exposure Requirements

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant: HEALTH DEVICES CORPORATION DBA DOC JOHNSON ENTERPRISES
Address of applicant: 11933 VOSE STREET, NORTH HOLLYWOOD CA 91605

Manufacturer: Hong Kong Passkey Industry Co. Limited
Address of manufacturer: 2/F, Block #6, Hua Feng Industry Park, Datianyang, Dongfang, SonggangTown, Bao'An District, Shenzhen, China, 518105

General Description of EUT	
Product Name:	MERCI - FUCKING MACHINES - POWER BANGER
Brand Name:	/
Model No.:	I-MX-2403-15
Adding Model(s):	/
Rated Voltage:	Input: DC 3V from battery
Battery Capacity:	/
Software Version:	/
Hardware Version:	/
Serial Number:	S01
FCC ID:	2BA40I-MX-2403-15

Technical Characteristics of EUT	
Frequency Range:	433.92MHz
Modulation:	FSK
Antenna Type:	PCB
Antenna Gain:	0dBi

1.2 Standard Applicable

According to §1.1307(b)(1) and KDB 447498 D01 General RF Exposure Guidance v06, the following RF exposure evaluation shall demonstrate RF exposure compliance.

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$$

Where

- $f(\text{GHz})$ is the RF channel transmit frequency in GHz

-Power and distance are rounded to the nearest mW and mm before calculation

-The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm, and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 4.1 f) is applied to determine SAR test exclusion.

1.3 Calculation Method

Tx frequency range: 433.92MHz

Min. test separation distance: 5mm

Max. Field Strength: 76.45dBuV/m

Max Power: -18.85

RF channel transmit frequency: 433.92MHz

Result: 0.0017

Limit: 3.0

So the transmitter complies with the RF exposure requirements and the SAR is not required.

Remark: EIRP (dBm) = E (dBuV/m) - 95.3