

RF Exposure Requirements

1.1 Product Description for Equipment Under Test (EUT)

Applicant: Shenzhen Yueshidai Technology Co., Ltd.

Address of applicant: 601, No. 161 Songming Avenue, Hongxing Community, Songgang Street, Bao'an District, Shenzhen City, Guangdong Province, China

Manufacturer: Shenzhen Yueshidai Technology Co., Ltd.

Address of manufacturer: 601, No. 161 Songming Avenue, Hongxing Community, Songgang Street, Bao'an District, Shenzhen City, Guangdong Province, China

Client Information

General Description of EUT	
Product Name:	Electric simulation massager
Brand Name:	/
Model No.:	YSD-CQ01
Adding Model(s):	YSD-CQ02, YSD-CQ03, YSD-CQ04
Rated Voltage:	DC3V
Power Adapter:	/
Software Version:	/
Hardware Version:	/
Serial Number:	3.0
FCC ID:	2BLTQ-YSD-CQ01

Technical Characteristics of EUT	
Frequency Range:	433MHz
Max. Field Strength:	433MHz: 99.29dBuV/m(3m)
Data Rate:	/
Modulation:	FSK
Antenna Type:	PCB Antenna
Antenna Gain:	1.58 dBi

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

Bluetooth

Tx frequency range: 2402~2480MHz

Min. test separation distance: 20cm

Maximum Conducted Output Power: 3.68dBm

RF channel transmit frequency: 2402MHz

Result: 0.11

Limit: 3.0

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