RF Exposure Requirements

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant:	Guangzhou Chenfeng Technology Co., Ltd.
Address of applicant:	E112, No.16, No.14-8, No. 8, Shigang Road, Haizhu District, Guangzhou
Manufacturer:	Guangzhou Chenfeng Technology Co., Ltd.
Address of manufacturer:	E112, No.16, No.14-8, No. 8, Shigang Road, Haizhu District, Guangzhou

General Description of EUT	
Product Name:	Bluetooth headset
Brand Name:	/
Model No.:	M-01
Adding Model(s):	/
Rated Voltage:	Input: DC 3.7V from battery
Power Adapter:	/
Software Version:	/
Hardware Version:	/
Serial Number:	2002IJ
FCC ID:	2A8SLM-01

Technical Characteristics of EUT	
Bluetooth Version:	V5.3 BLE
Frequency Range:	2402-2480MHz
RF Output Power:	-2.51dBm
Data Rate:	1Mbps
Modulation:	GFSK
Quantity of Channels:	40
Channel Separation:	2MHz
Type of Antenna:	Integral
Antenna Gain:	2.67dBi

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 to demonstrate RF exposure compliance.

[(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)] · [√f(GHz)] ≤ 3.0

Where

-f(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: 5mm
Maximum Conducted Output Power: -2.51dBm
Maximum Tune-up Conducted Output Power: -2dBm
RF channel transmit frequency: 2440MHz
Result: 0.1753
Limit: 3.0

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