

RF Exposure Requirements

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant: JAUTJA Inc.
Address of applicant: 5F, 342, Gangnam-daero, Gangnam-gu, Seoul, South Korea

Manufacturer: JAUTJA Inc.
Address of manufacturer: 5F, 342, Gangnam-daero, Gangnam-gu, Seoul, South Korea

General Description of EUT	
Product Name:	JAUTJA All Wireless Live Streaming Equipment Set
Brand Name:	/
Model No.:	JAUTJApqA
Adding Model(s):	/
Rated Voltage:	DC 5V
Battery Capacity:	/
Software Version:	/
Hardware Version:	/
Serial Number:	S01
FCC ID:	2A6QB-JAUT3

Technical Characteristics of EUT	
Bluetooth Version:	V5.0 BLE
Frequency Range:	2402-2480MHz
Data Rate:	1Mbps
Modulation:	GFSK
Quantity of Channels:	40
Channel Separation:	2MHz
Type of Antenna:	PCB
Antenna Gain:	1.7dBi

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: 5mm

Maximum Tune-up Conducted Output Power: 0.2dBm

RF channel transmit frequency: 2402MHz

Result: 0.32

Limit: 3.0

Result: $0.39 < 3.0$

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