

# RF Exposure Evaluation

## FCC ID: 2ARUI-XFIVE21SQ

### 1. Client Information

Applicant	:	American Exchange Time LLC
Address	:	NO.1441 Broadway 27th Floor, New York, NY 10018
Manufacturer	:	ShenZhen KY Technology Co., Ltd
Address	:	No:4~5 floor 4A building, Anle industry Baoan, 518126, ShenZhen, Guangdong Province, China

### 2. General Description of EUT

EUT Name	:	X-Five Smartwatch	
Model(s) No.	:	900191, 900192, 900193, 900194	
Model Different	:	All modles are based on the same circuit and structure, the differences are Appearance shape.	
Sample ID	:	TBBJ-20210127-09-1# & TBBJ-20210127-09-2#	
Product Description	Operation Frequency:	Bluetooth 5.0(BLE): 2402MHz~2480MHz	
	Number of Channel:	Bluetooth 5.0(BLE): 40 channels	
	RF Output Power:	6.970 dBm (Max)	
	Antenna Gain:	1.62 dBi Wire Antenna	
	Modulation Type:	GFSK	
	Bit Rate of Transmitter:	1Mbps	
Power Rating	:	Input: DC 5V DC 3.7V by 170mAh Li-ion battery	
Software Version	:	N/A	
Hardware Version	:	M80063.02	
Connecting I/O Port(S)	:	Please refer to the User's Manual	
<b>Remark:</b> The antenna gain provided by the applicant, the adapter and verified for the RF conduction test and adapter provided by TOBY test lab.			

**Note:** More test information about the EUT please refer the RF Test Report.

[TB-RF-074-1.0](#)

## SAR Test Exclusion Calculations

1. FCC: According to KDB 447498 D01 Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies v06.
  - (1) Clause 4.3: General SAR test reduction and exclusion guidance  
Sub clause 4.31: Standalone SAR test exclusion considerations
    - 1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6GHz at test separation distance  $\leq 5$  mm are determined by:  
$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation, mm})] * [\sqrt{f_{(\text{GHz})}}] \leq 3.0 \text{ for 1-g SAR}$$
$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation, mm})] * [\sqrt{f_{(\text{GHz})}}] \leq 7.5.0 \text{ for 10-g SAR}$$

**2. Calculation:**

Test separation: 5mm						
BLE Mode (1Mbps)						
Frequency (GHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (dBm)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.402	6.97	6±1	7	5.012	1.554	3.0
2.442	6.74	6±1	7	5.012	1.566	3.0
2.480	6.041	6±1	7	5.012	1.579	3.0

**Conclusion:**

The measurement results comply with the FCC Limit per 47 CFR 2.1093 for the uncontrolled RF Exposure and SAR Exclusion Threshold per KDB 447498 v06.

-----END OF REPORT-----