



Korea Technology Institute Co., Ltd.

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Test Report

Test Report No.:	KT119EF06002		
Registration No.:	KR0023		
Applicant:	247KOREA		
Applicant Address:	3F,KNN Tower, Centum seo-ro, Haeundae-gu, Busan		
Product:	Bluetooth		
FCC ID:	2AT6F-TENZ-NZ-247	Model No.	TENZ-NZ-247 TENZ-BL-247
Receipt No.:	KT119EK06002	Date of Incoming:	Jun, 24, 2019
Date of Issue:	Jun, 26, 2019		
Testing location	Korea Technology Institute Co., Ltd. 51-19, Sanglim-3ri, Docheok-Myun, Gwangju-Shi, Kyeongki-Do, Korea		
Test Standards:	FCC PART 15 SUBPART C Section 15.247		
Rule Parts: FCC	ANSI C63.10: 2013		
Method of Measurement	KDB 447498 D01 General RF Exposure Guidance v06		
Test Result:	The above-mentioned product has been tested with compliance.		

Tested by: W. J. Yun.
/ Engineer

Signature Date Jun, 26, 2019

Approved by: S. H. Song
/Technical Manager

Signature Date Jun, 26, 2019

Other Aspects:	
Abbreviations:	* OK, Pass=passed * Fail=failed * N/A=not applicable



- This test report is not permitted to copy partly without our permission.
- This test result is dependent on only equipment to be used.
- This test result is based on a single evaluation of one sample of the above mentioned.
- We certify this test report has been based on the measurement standards that is traceable to the national or international standards.

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1. Verification of compliance

Applicant : 247KOREA

Address : 3F,KNN Tower, Centum seo-ro, Haeundae-gu, Busan

FCC ID : 2AT6F-TENZ-NZ-247

Model Name : TENZ-NZ-247



Brand Name :

Serial Number : N/A

Test Date : Jun, 25, 2019

Equipment Class	DTS – DIGITAL TRNSMISSION SYSTEM
Kind of Equipment	Bluetooth
Measurement Procedures	ANSI C63.10: 2013
Type of Equipment Tested	Pre-Production
Kind of Equipment Authorization Requested	Certification
Equipment Will Be Operated Under FCC Rules Part(s)	FCC PART 15 SUBPART C Section 15.247
Modifications On The Equipment To Achieve Compliance	None
Final Test was Conducted On	10m Open area test site

- The above equipment was tested by Korea Technology Institute Co., Ltd. for compliance with the requirement set forth in the FCC Rules and Regulations. This said equipment in the configuration described in this report, shows the maximum emission levels emanation from equipment are within the compliance requirements.



2. General Information

2.1 Product Description

TENZ-NZ-247 (referred to in this report as EUT) is used as a self defense

The product specification described herein was obtained from product data sheet or user's manual.

Equipment Name	self defense
Operating Frequency	2402 MHz ~ 2480 MHz
RF Output Power	-8.32 dBm
Number of Channel	40 Channels
Modulation Type	GFSK
Antenna Type / Gain	Chip Antenna / 2.83 dBi (Max)
List of Each OSC. Or Crystal. Freq.	16 MHz
Rated Supply Voltage	DC 3.7 V

Alternative type(s)/model(s); also covered by this test report.

- None

3. EUT MODIFICATIONS

- None



4. MAXIMUM PERMISSIBLE EXPOSURE

RF Exposure Calculation

According to the FCC rule §1.1310, the limit for General Population/Uncontrolled exposure is 1 mW/cm² for the device operating 1 500 ~ 100 000 MHz.

EUT Description

Kind of EUT	self defense
Operating Frequency Band	☐ Wireless Microphone: 494.000 MHz ~ 501.000 MHz and 498.200 MHz ~ 505.200 MHz ☐ WLAN: 2 412 MHz ~ 2 462 MHz ☐ WLAN: 5 180 MHz ~ 5 240 MHz ☐ WLAN: 5 745 MHz ~ 5 825 MHz ☐ Bluetooth: 2 402 MHz ~ 2 480 MHz ☒ Bluetooth BLE: 2 402 MHz ~ 2 480 MHz
MAX. RF OUTPUT	-8.32 dBm
Antenna Gain	2.83 dBi
Exposure Evaluation Applied	☐ MPE ☐ SAR ☒ N/A

Test Result

According to the procedure, KDB 447498 D01, the standalone SAR test exclusion threshold is

$$[(\text{Max. Power of channel, including tune-up tolerance, mW})/(\text{Mim. test separation distance, mm})] \times [\sqrt{f(\text{GHz})}] < 3$$

$$= (0.15/5) \times \sqrt{2.402} = 0.37$$

Conclusion: The SAR test exclusion threshold is less than 3, so the device meets the RF Exposure Requirement and excluded SAR Test.

	Frequency (MHz)	Target Power W/tolerance (dBm)	Max tune up power (dBm)	Max tune up power (mW)	Separation distance (mm)	RF exposure
BLE (GFSK)	2 402	1.0 ± 1.0	-8.32	0.15	5	0.05