

## MPE Test Report

**Report No.:** CGDX-ESH-P22101028B-2

**FCC ID:** 2AUB7-CKENC1R

**Product:** TWS earbuds

**Test Model:** CKENC1

**Received Date:** Oct.25, 2022

**Test Date:** Oct.25 to Nov.05, 2022

**Issued Date:** Nov.18, 2022

**Applicant:** Shenzhen BEB Electronics CO., Limited

**Address:** Xinhuiteng Technology  
Park, Baoan District, Shenzhen, 518102, Guangdong, China

**Manufacturer:** Shenzhen BEB Electronics CO., Limited

**Address:** Xinhuiteng Technology  
Park, Baoan District, Shenzhen, 518102, Guangdong, China

**Issued By:** BUREAU VERITAS ADT (Shanghai) Corporation

**Lab Address:** No. 829, Xinzhuan Road, Shanghai, P.R.China (201612)



This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at <http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/> and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.



## Table of Contents

Release Control Record .....	3
1 Certificate of Conformity .....	4
2 General Information .....	5
2.1 General Description of EUT .....	5
3 RF Exposure .....	6
3.1 Classification .....	6
3.2 SAR Test Exclusion Thresholds .....	6



### Release Control Record

Issue No.	Description	Date Issued
CGDX-ESH-P22101588B-2	Original release	Nov.18, 2022



## 2 General Information

### 2.1 General Description of EUT

Product	TWS earbuds
Brand	--
Test Model	CKENC1
Power Rating	Powered by USB 5Vdc or battery
Modulation Type	GFSK
Modulation Technology	Bluetooth Low Energy 5.0
Operating Frequency	2402MHz ~ 2480MHz
Number of Channel	40
Output Power	6.03 dBm
Antenna Type	Chip Antenna
Antenna Connector	--
Antenna Gain	1.95 dBi

Note:

1. For more details, please refer to the User's manual of the EUT.

### 3 RF Exposure

The corresponding SAR Exclusion Threshold condition, listed below:

1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$  for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR, 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 result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  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 is applied to determine SAR test exclusion.

2) At 100 MHz to 6 GHz and for test separation distances  $> 50$  mm, the SAR test exclusion threshold is determined according to the following:

a) [Threshold at 50 mm in step1) + (test separation distance - 50 mm) · (f(MHz)/150)] mW, at 100MHz to 1500 MHz

b) [Threshold at 50 mm in step1) + (test separation distance - 50 mm) · 10] mW at  $> 1500$  MHz and  $\leq 6$  GHz

3) At frequencies below 100 MHz, the following may be considered for SAR test exclusion.

a) The threshold at the corresponding test separation distance at 100 MHz in step 2) is multiplied by  $[1 + \log(100/f(\text{MHz}))]$  for test separation distances  $> 50$  mm and  $< 200$  mm.

b) The threshold determined by the equation in a) for 50 mm and 100 MHz is multiplied by  $\frac{1}{2}$  for test separation distances  $\leq 50$  mm.

c) SAR measurement procedures are not established below 100 MHz. When SAR test exclusion cannot be applied, a KDB inquiry is required to determine SAR evaluation requirements for any test results to be acceptable.

#### 3.1 Classification

The antenna of this product, under normal use condition, is at less than 20cm from the body of the user. So the device is classified as **Portable Device**.

#### 3.2 SAR Test Exclusion Thresholds

The tuned conducted Power (declared by client)

Mode	Frequency (MHz)	Target Power (dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
BT-EDR(FHSS)	2402-2480	5.1	$\pm 1$	4.1	6.1

The measured conducted Power

Mode	Frequency (MHz)	Max. Conducted Output power(dBm)
BT-EDR(FHSS)	2480	6.03

SAR Test Exclusion Thresholds

Frequency Band (MHz)	Max. Conducted output power(dBm)	Distance (mm)	Result of Eq. 1	Limit for 1-g SAR	Limit for 10-g Extremity SAR	Verdict
2402-2480	6.1	5	1.282	3	7.5	Exempt from SAR

#### Conclusion:

Therefore this device complies with FCC's RF radiation exposure limits for general population without SAR evaluation.

--- END ---