# RF EXPOSURE REPORT

| | |
|---|---|
| Applicant | Shenzhen BEB Electronics CO., Limited |
| Address | Xinhuiteng Technology Park, Baoan District, Shenzhen, 518102, Guangdong, China |

| | |
|---|---|
| Manufacturer or Supplier | Shenzhen BEB Electronics CO., Limited |
| Address | Xinhuiteng Technology Park, Baoan District, Shenzhen, 518102, Guangdong, China |
| Product | TWS Earbuds |
| Brand Name | N/A |
| Model | CKWENC1R |
| Additional Model & Model Difference | CKWEENC1R; see items 1 |
| Date of tests | Jan. 03, 2023 ~ Feb. 10, 2023 |

☒ **FCC Part 2 (Section 2.1093)**

☒ **KDB 447498 D01**

☒ **IEEE C95.1**

**CONCLUSION: The submitted sample was found to COMPLY with the test requirement**

| Tested by Lucas Chen<br>Project Engineer / EMC Department | Approved by Glyn He<br>Assistant Manager / EMC Department |
|---|---|
|  |  <br>Date: Feb. 15, 2023 |



**Bureau Veritas Shenzhen Co., Ltd. Dongguan Branch**

No. 96, Guantai Road (Houjie Section), Houjie Town, Dongguan City, Guangdong Province. 523942. People's Republic of China.

Tel: +86 769 8998 2098
Fax: +86 769 8593 1080
Email: customerservice.dg@bureauveritas.com

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# RELEASE CONTROL RECORD

| ISSUE NO. | REASON FOR CHANGE | DATE ISSUED |
|---|---|---|
| FM2212WDG0231-1 | Original release | Feb. 15, 2023 |

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# 1. CERTIFICATION

| | |
|---|---|
| **FCC ID:** | 2AUB7-CKWENC1R |
| **PRODUCT:** | TWS Earbuds |
| **BRAND NAME:** | N/A |
| **MODEL NO.:** | CKWENC1R |
| **ADDITIONAL NO.:** | CKWEENC1R |
| **TEST SAMPLE:** | Engineering Sample |
| **APPLICANT:** | Shenzhen BEB Electronics CO., Limited |
| **STANDARDS:** | FCC Part 2 (Section 2.1093) |
| | KDB 447498 D01 |
| | IEEE C95.1 |

**NOTE**:

1. Additional model CKWEENC1R is identical with the test model CKWENC1R except the model name for trading purpose.

## 2. RF EXPOSURE DEFINE

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 ≤ 50 mm are determined by:
[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] ·[√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR,16 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 result is rounded to one decimal place for comparison

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 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 step 1) + (test separation distance - 50 mm)·( f(MHz)/150)] mW, at 100MHz to 1500 MHz
   b) [Threshold at 50 mm in step 1) + (test separation distance - 50 mm)·10] mW at > 1500 MHz and ≤ 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(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 ½ for test separation distances ≤ 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. CLASSIFICATION

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

# 4. SAR TEST EXCLUSION THRESHOLDS

The tuned conducted Average Power (declared by client)

| Mode | Frequency (MHz) | Target Power (dBm) | Tolerance (dBm) | Lower Tolerance (dBm) | Upper Tolerance (dBm) |
|---|---|---|---|---|---|
| GFSK | 2402-2480 | -6 | +-2 | -8 | -4 |
| 8DPSK | 2402-2480 | -7 | +-2 | -9 | -5 |
| BLE 1Mbps | 2402-2480 | -6 | +-2 | -8 | -4 |
| BLE 2Mbps | 2402-2480 | -6 | +-2 | -8 | -4 |

The measured conducted Average Power

| Mode | Frequency (MHz) | Averaged Power (dBm) |
|---|---|---|
| GFSK | 2402 | -5.86 |
| 8DPSK | 2402 | -6.04 |
| BLE 1Mbps | 2402 | -5.79 |
| BLE 2Mbps | 2402 | -5.78 |

**SAR Test Exclusion Thresholds**

| Frequency (MHz) | Maximum source-based time averaged conducted output power (dBm) | Minimum separation distance (mm) | Result of Eq. 1 | Limit for 1-g SAR | Verdict |
|---|---|---|---|---|---|
| 2402-2480 | -4 | 5 | 0.124 | 3.0 | Exempt from SAR |

**Conclusion**

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