**Shenzhen Most Technology Service Co., Ltd.**
No.5, 2nd Langshan Road, North District, Hi-tech Industrial Park, Nanshan, Shenzhen, Guangdong, China.

# RF Exposure Evaluation Report

| | | |
|---|---|---|
| **Report Reference No.....** : | **MTEB25030240-H** | |
| **FCC ID..... :** | **2APU9-HRD-700** | |
| Compiled by ( position+printed name+signature).. : | File administrators Alisa Luo |  |
| Supervised by ( position+printed name+signature).. : | Test Engineer Sunny Deng |  |
| Approved by ( position+printed name+signature).. : | Manager Yvette Zhou |  |
| Date of issue.....: | **Mar.20,2025** | |
| **Representative Laboratory Name. :** | **Shenzhen Most Technology Service Co., Ltd.** | |
| Address..... : | No.5, 2nd Langshan Road, North District, Hi-tech Industrial Park, Nanshan, Shenzhen, Guangdong, China. | |
| **Applicant's name**.....: | **Shenzhen Hanrongda Electronic Co., Ltd.** | |
| Address..... : | No.21, LiYuanxia,Xin Li Road, Ping Hu Town, Long Gang District, Shenzhen | |
| **Test specification/** Standard.....**:** | **47 CFR Part 1.1307**<br>**47 CFR Part 2.1093** | |
| TRF Originator.....: | Shenzhen Most Technology Service Co., Ltd. | |



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|---|---|
| **Test item description.....:** | RADIO.BT.MUSIC PLAYER |
| Trade Mark.....: | HanRongDa |
| Model/Type reference..... : | HRD-700 |
| Listed Models ..... : | ZWS-700 |
| Modulation Type..... : | GFSK, π/4DQPSK,8DPSK |
| Operation Frequency..... : | From 2402MHz to 2480MHz |
| Hardware Version..... | V1.0 |
| Software Version..... | V1.0 |
| Rating.....: | DC 3.7V by Battery<br>DC 5V by USB Port |
| Result.....: | PASS |

# T E S T  R E P O R T

| | | |
|---|---|---|
| Equipment under Test | : | RADIO.BT.MUSIC PLAYER |
| Model /Type | : | HRD-700 |
| Listed Models | : | ZWS-700 |
| Remark | | Only the model “HRD-700” was tested, Their electrical circuit design, layout, components used and internal wiring are identical, Only the model name and Appearance color is different. |
| Applicant | : | Shenzhen Hanrongda Electronic Co., Ltd. |
| Address | : | No.21, LiYuanxia,Xin Li Road, Ping Hu Town, Long Gang District, Shenzhen |
| Manufacturer | : | Shenzhen Hanrongda Electronic Co., Ltd. |
| Address | : | No.21, LiYuanxia,Xin Li Road, Ping Hu Town, Long Gang District, Shenzhen |

| **Test Result**: | **PASS** |
|---|---|

The test report merely corresponds to the test sample.
It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

# 1. Revision History

| Revision | Issue Date | Revisions | Revised By |
|---|---|---|---|
| 00 | 2025.03.20 | Initial Issue | Alisa Luo |
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| | | | |

# 2. SAR Evaluation

## 2.1 RF Exposure Compliance Requirement

### 2.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06
4.3.1. Standalone SAR test exclusion considerations
Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

### 2.1.2 Limits

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, where

f(GHz) is the RF channel transmit frequency in GHz
Power and distance are rounded to the nearest mW and mm before calculation[17]
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

### 2.1.3 EUT RF Exposure

Measurement Data

BLE

| GFSK | | | |
|---|---|---|---|
| Test channel | Peak Output Power (dBm) | Tune up tolerance (dBm) | Maximum tune-up Power (dBm) |
| Lowest(2402MHz) | 1.375 | 1.375±1 | 2.375 |
| Middle(2440MHz) | 0.196 | 0.196±1 | 1.196 |
| Highest(2480MHz) | 0.312 | 0.312±1 | 1.312 |

| Worst case: GFSK | | | | | | |
|---|---|---|---|---|---|---|
| Channel | Maximum Peak Conducted Output Power (dBm) | Maximum tune-up Power | | Calculated value | Exclusion threshold | SAR Test Exclusion |
| | | (dBm) | (mW) | | | |
| Lowest(2402MHz) | 1.375 | 2.375 | 1.73 | 0.53 | 3.0 | Yes |

EDR

| GFSK | | | |
|---|---|---|---|
| Test channel | Peak Output Power (dBm) | Tune up tolerance (dBm) | Maximum tune-up Power (dBm) |
| Lowest(2402MHz) | 1.741 | 1.741±1 | 2.741 |
| Middle(2441MHz) | 1.145 | 1.145±1 | 2.145 |
| Highest(2480MHz) | 1.028 | 1.028±1 | 2.028 |

| π/4DQPSK | | | |
|---|---|---|---|
| Test channel | Peak Output Power (dBm) | Tune up tolerance (dBm) | Maximum tune-up Power (dBm) |
| Lowest(2402MHz) | 2.629 | 2.629±1 | 3.629 |
| Middle(2441MHz) | 2.059 | 2.059±1 | 3.059 |
| Highest(2480MHz) | 1.924 | 1.924±1 | 2.924 |

| 8DPSK | | | |
|---|---|---|---|
| Test channel | Peak Output Power (dBm) | Tune up tolerance (dBm) | Maximum tune-up Power (dBm) |
| Lowest(2402MHz) | 3.057 | 3.057±1 | 4.057 |
| Middle(2441MHz) | -0.675 | -0.675±1 | 0.325 |
| Highest(2480MHz) | -0.819 | -0.819±1 | 0.181 |

| Worst case: 8DPSK | | | | | | |
|---|---|---|---|---|---|---|
| Channel | Maximum Peak Conducted Output Power (dBm) | Maximum tune-up Power | | Calculated value | Exclusion threshold | SAR Test Exclusion |
| | | (dBm) | (mW) | | | |
| Lowest(2402MHz) | 3.057 | 4.057 | 2.55 | 0.78 | 3.0 | Yes |

**.....THE END OF REPORT.....**