





# **RF Exposure Report**

FCC ID: 2AR2STAN7506

Applicant: MMD Hong Kong Holding Limited

Address: Unit 1006, 10th Floor, C-Bons International Center, 108 Wai Yip Street,

Kwun Tong, Kowloon, Hong Kong

Manufacturer: MMD Hong Kong Holding Limited

Address: Unit 1006, 10th Floor, C-Bons International Center, 108 Wai Yip Street,

Kwun Tong, Kowloon, Hong Kong

Product(s): Active Noise Canceling wireless headphones

Brand(s): PHILIPS or

Test Model(s): TAN7506

Series Model(s): TAN7506xx/yy (xx=AA-ZZ or blank denoted different color; yy=00-99

denoted different country destination)

Test Date: Apr. 26, 2022~ May 10, 2022

Issued Date: May 21, 2022

Issued By: Hwa-Hsing (Dongguan) Testing Co., Ltd.

Address: No.101, Bld N1, Yuyuan 2Rd, Yuyuan Industrial Park, HuangJiang

Town, Dongguan, China

Test Firm Registration No.: 915896

Designation No.: CN1255

Standards: FCC Part 2 (Section 2.1093)

KDB 447498 D01 General RF Exposure Guidance v06

**IEEE C95.1** 

The above equipment has been tested by **Hwa-Hsing (Dongguan) Testing Co., Ltd.**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Harry Li

This report is 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 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. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence, 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. Unless specific mention, the uncertainty of measurement has been explicitly taken into account to declare the compliance or non-compliance to the specification. The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any government agencies.

Lab: <u>Hwa-Hsing (Dongguan) Testing Co., Ltd.</u>
Address: <u>No.101, Bld N1, Yuyuan 2Rd, Yuyuan Industrial Park,</u>

HuangJiang Town, Dongguan, China

Tel: <u>0769-83078199</u> Web.: <u>www.hwa-hsing.com</u>

E-Mail: customerservice.dg@hwa-hsing.com



## **Table of contents**

Relea	se control record	3
	General InformationGeneral Description of EUT	
	RF exposure limit	
3	Calculation	5
	Calculation SAR test exclusion thresholds	

Lab: <u>Hwa-Hsing (Dongguan) Testing Co., Ltd.</u>
Address: <u>No.101, Bld N1, Yuyuan 2Rd, Yuyuan Industrial Park, HuangJiang Town, Dongguan, China</u>

Tel: <u>0769-83078199</u>
Web.: <u>www.hwa-hsing.com</u>
E-Mail: <u>customerservice.dg@hwa-hsing.com</u>



### Release control record

Issue No.	Reason for change	Date issued	
220425KH01-01-SE-US-01	Original Release	May 21, 2022	

Lab: Hwa-Hsing (Dongguan) Testing Co., Ltd. Address: No.101, Bld N1, Yuyuan 2Rd, Yuyuan Industrial Park,

HuangJiang Town, Dongguan, China

Tel: <u>0769-83078199</u>

Web.: www.hwa-hsing.com
E-Mail: customerservice.dg@hwa-hsing.com



### 1 General Information

### 1.1 General Description of EUT

Product(s)	Active Noise Canceling wireless headphones			
Test Model(s)	TAN7506			
Series Model(s)	TAN7506xx/yy (xx=AA-ZZ or blank denoted different color; yy=00-99 denoted different country destination)			
Status of EUT	Engineering Prototype			
Power Supply Rating	DC 5V from USB or DC 3.7V from battery			
Modulation Type	GFSK, π/4DQPSK, 8DPSK for FHSS GFSK for DTS			
Transfer Rate	FHSS: 1/2/3Mbps DTS: 1Mbps			
Operating Frequency	2402 ~ 2480MHz			
Number of Channel	FHSS: 79 DTS: 40			
Output Power (AVG)	FHSS: -2.071dBm DTS: -7.772dBm			
Antenna Type	Chip Antenna			
Antenna Gain	1.06dBi Maximum peak Gain			
Antenna Connector	N/A			
Accessory Device	N/A			
Cable Supplied	USB-A to Type-C Cable: 0.5m;			

#### Note:

- 1. Please refer to the EUT photo document (Reference No.: 220425KH01-01-01&02) for detailed product photo.
- 2. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.
- 3. Model difference: These models are only different for model name for trade purpose.

Lab: <u>Hwa-Hsing (Dongguan) Testing Co., Ltd.</u>
Address: <u>No.101</u>, <u>Bld N1</u>, <u>Yuyuan 2Rd</u>, <u>Yuyuan Industrial Park</u>,

HuangJiang Town, Dongguan, China

Tel: <u>0769-83078199</u> Web.: <u>www.hwa-hsing.com</u>

E-Mail: customerservice.dg@hwa-hsing.com



#### 2 RF exposure limit

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)]  $\cdot [\sqrt{f(GHz)}] \le 3.0$  for 1-g SAR and  $\le 7.5$  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  $\leq$  50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, the 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 Calculation

The antenna of this product, under normal use condition, is at less than 5mm away from the body of the user.

Lab: <u>Hwa-Hsing (Dongguan) Testing Co., Ltd.</u>
Address: <u>No.101, Bld N1, Yuyuan 2Rd, Yuyuan Industrial Park,</u>

HuangJiang Town, Dongguan, China

Tel: <u>0769-83078199</u> Web.: <u>www.hwa-hsing.com</u>

E-Mail: customerservice.dg@hwa-hsing.com



### 4 Calculation SAR test exclusion thresholds

The measured of Maximum RF Conduted Average Power

Mode	Frequency (MHz)	Maximum RF Power (dBm)
FHSS	2402-2480	-2.071
DTS	2402-2480	-7.772

The tuned Average Power (declared by client)

Mode	Frequency (MHz)	Target Power (dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
FHSS	2402-2480	-2	±2	-4	0
DTS	2402-2480	-7	±2	-9	-5

#### SAR Test Exclusion Thresholds

Mode	Maximum source-based time averaged conducted output power(dBm)	Minimum separation distance (mm)	Result of Eq. 1	Limit for 1-g SAR	Limit for 10-g extremity SAR	Verdict
FHSS	0	5	0.314	3.0	7.5	Exempt from SAR
DTS	-5	5	0.099	3.0	7.5	Exempt from SAR

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

HuangJiang Town, Dongguan, China

Tel: <u>0769-83078199</u> Web.: <u>www.hwa-hsing.com</u>

E-Mail: customerservice.dg@hwa-hsing.com



### Appendix – Information on the Testing Laboratories

We, Hwa-Hsing (Dongguan) Co., Ltd., A global provider of TESTING and CERTIFICATION services for consumer products, electronic products and wireless information technology products. Adhering to the core values "HONEST and TRUSTWORTHY, OBJECTIVE and IMPARTIALITY, RIGOROUS and AFFICIENT", commitment to provide professional, perfect and efficient comprehensive ONE-STOP solution of TESTING and CERTIFICATION services for Manufacturers, Buyers, Traders, Brands, Retailers. Assist client to better manage risk, protect their brands, reduce costs and cut time to over 150 markets in global. Our laboratories are FCC recognized accredited test firms and accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

Lab Address: No.101, Bld N1, Yuyuan 2Rd, Yuyuan Industrial Park, HuangJiang Town, Dongguan, China

Contact Tel: 0769-83078199

Email: Customerservice.dg@hwa-hsing.com

Web Site: www.hwa-hsing.com

--- END ---

Lab: Hwa-Hsing (Dongguan) Testing Co., Ltd. Address: No.101, Bld N1, Yuyuan 2Rd, Yuyuan Industrial Park,

HuangJiang Town, Dongguan, China

Tel: 0769-83078199 Web.: www.hwa-hsing.com

E-Mail: customerservice.dg@hwa-hsing.com