



RF Exposure Report

FCC ID: 2AR2STAB7807RESW

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: Wireless subwoofer

Brand: PHILIPS or



Test Model(s): TAB7807

Series Model(s): See section 2.1

Test Date: Mar. 08, 2022~Mar. 28, 2022

Issued Date: Apr. 19, 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

Standards: 47 CFR FCC Part 15, Subpart C (Section 15.247)
ANSI C63.10:2013

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.

Prepared by :

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Reviewed by :

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Approved by :

Harry Li/ Technical Director

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Release control record

Issue No.	Reason for change	Date issued
220218KH03-SE-US-01-02	Original Release	Apr. 19, 2022



1 General Information

1.1 General Description of EUT

Product	Wireless subwoofer
Brand	PHILIPS or 
Test Model(s)	TAB7807
Series Model(s)	TAB7807RE, TAB7807/10, TAB7807RE/10, TAB7807/37, TAB7807RE/37, TAB7807/98, TAB7807RE/98, TAB7807xx/yy(x=A-Z or blank, yy=00-99 or blank for country code)
Status of EUT	Engineering Prototype
Power Supply Rating	100-240V~ 50/60Hz 45W;
Modulation Type	GFSK
Transfer Rate	2Mbps
Operating Frequency	2402 ~ 2480MHz
Number of Channel	40
Output Power (Average)	-9.27dBm
Antenna Type	PCB Antenna
Antenna Gain	0.19dBi Maximum peak Gain
Antenna Connector	N/A
Accessory Device	N/A
Cable Supplied	AC Lines: 142cm

Note:

1. Please refer to the EUT photo document (Reference No.: 220218KH03-1-1&-2) 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.



2 RF exposure limit

Limits for maximum permissible exposure (MPE)

Limits for general population / uncontrolled exposure				
Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Average time (minutes)
300-1500	F/1500	30
1500-100,000	1.0	30
Note: F = Frequency in MHz				

2.1 MPE calculation formula

$$P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$$

Where:

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

R = distance between observation point and center of the radiator in cm

Classification:

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user.



3 Calculation result of maximum conducted power

The antennas provided to the EUT, please refer to the following table:

Function	Frequency Band	Antenna Gain (dBi)	Antenna Type	Transmit and Receive Chain	Maximum AVG Power(dBm)
Bluetooth	2400~2483.5MHz	0.19	PCB	1TX,1RX	-9.27

Frequency band (MHz)	Max power (mW)	Antenna gain (dBi)	Distance (cm)	Power density (mW/cm ²)	Limit (mW/cm ²)
2400~2483.5MHz	0.118	0.19	20	0.000025	1.0

Conclusion:

Therefore, the worst-case situation is 0.000025mW/cm², which is less than “1”. This confirmed that the device compliance with FCC 1.1310 MPE limit.



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:

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