







RF Exposure Report

FCC ID: 2AR2STAB5309SW

Applicant: MMD Hong Kong Holding Limited

Address: Units 1208-11, 12th Floor, C-Bons International Center, 108 Wai Yip

Street, Kwun Tong, Kowloon, Hong Kong

Manufacturer: MMD Hong Kong Holding Limited

Address: Units 1208-11, 12th Floor, C-Bons International Center, 108 Wai Yip

Street, Kwun Tong, Kowloon, Hong Kong

Product: Wireless subwoofer

Brand(s): PHILIPS or

Test Model(s): TAB5309/37

Series Model(s): See Section 2.1

Test Date: Jan. 16, 2023 ~ Mar. 08, 2024

Issued Date: Mar. 20, 2025

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

Address: No.101, Building N1, Yuyuan 2 Road, Yuyuan Industrial Park,

HuangJiang Town, Dongguan City, People's Republic of China

Test Firm Registration No.: 915896

Standards: FCC Part 2 (Section 2.1091)

KDB 447498 D01

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.

Prepared by: Reviewed by: Wendy Lee Approved by:

"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 identified herein. Our report includes all the tests requested by you and the results thereof based upon the information that you provided to us. The report would be invalid without specific stamp of test institute and the signatures of tester and approver."

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

Address: No.101, Building N1, Yuyuan 2 Road, Yuyuan Industrial Park, HuangJiang Town, Dongguan City, People's

Republic of China

Tel: 0769-85598986 Web.: www.lyns-tci.com E-Mail: service-hs@lyns-tci.com



Table of contents

Rele	ease control record	3
	General Information	
2 2.1	RF exposure limitMPE calculation formula	5 5
	Calculation result of maximum conducted powerendix – Information on the Testing Laboratories	

Republic of China

Tel: 0769-85598986 Web.: www.lyns-tci.com E-Mail: service-hs@lyns-tci.com



Release control record

Issue No.	Reason for change	Date issued
24012105-SE-US-02	Original Release	Mar. 25, 2024
2411180519-SE-US-02	Based on the above report 24012105-SE-US-02 to add additional model, after engineering evaluation, no additional testing is required.	Mar. 20, 2025

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

Address: No.101, Building N1, Yuyuan 2 Road, Yuyuan Industrial Park, HuangJiang Town, Dongguan City, People's Republic of China

Tel: 0769-85598986 Web.: www.lyns-tci.com E-Mail: service-hs@lyns-tci.com



1 General Information

1.1 General Description of EUT

Product	Wireless subwoofer			
Sample No.	HS2401090012			
Test Model(s)	TAB5309/37			
Series Model(s)	TAB5309, TAB5309/61, TAB5309/98, TAB5309/10, TAB5309/yy, TAB6200, TAB6200/37, TAB6200/10, TAB6200/yy(yy=00-99 or blank, for country code)			
Status of EUT	Engineering Prototype			
Power Supply Rating	AC 100-240V 50/60Hz 20W			
Modulation Type	BDR/EDR: GFSK, π/4 DQPSK, 8DPSK for FHSS			
Transfer Rate	BDR/EDR: 1/2/3Mbps			
Operating Frequency	2402 ~ 2480MHz			
Number of Channel	BDR/EDR: 79			
Maximum Output Power	BDR/EDR:0.08dBm (Average)			
Antenna Type	FPC Antenna			
Antenna Gain	2.02 dBi Gain			
Antenna Connector	N/A			
Accessory Device	Remote Control			
Data Cable Supplied	AC Line: 150cm Non-shielded, Detachable			

Note:

- 1. Please refer to the EUT photo document (Reference No.: 2411180519-02-01&02) for detailed product photo.
- 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.
 Hwa-Hsing (Dongguan) Testing Co., Ltd. is not responsible for the accuracy of the information provided by the manufacturer.
- 3. Model difference: These models are only different for model name and color for trade purpose.

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

Address: No.101, Building N1, Yuyuan 2 Road, Yuyuan Industrial Park, HuangJiang Town, Dongguan City, People's

Republic of China

Tel: 0769-85598986 Web.: www.lyns-tci.com E-Mail: service-hs@lyns-tci.com



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

 $Pd = (Pout*G) / (4*pi*r^2)$

Where:

Pd = power density in mW/cm²

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 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.

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

Address: No.101, Building N1, Yuyuan 2 Road, Yuyuan Industrial Park, HuangJiang Town, Dongguan City, People's

Republic of China

Tel: <u>0769-85598986</u> Web.: <u>www.lyns-tci.com</u> E-Mail: <u>service-hs@lyns-tci.com</u>

Release <u>Ver. 1.5</u>



3 Calculation result of maximum conducted power

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

antenna provide to the Long please refer to the remember by table.						
Function	Frequency (MHz)	Antenna Gain (dBi)	Antenna Type	Transmit and Receive Chain	Maximum AVG Power	
BDR/EDR	2402-2480	2.02	FPC	1TX,1RX	0.08dBm	

Frequency	Max power	Antenna gain	Distance	Power density	Limit
(MHz)	(mW)	(dBi)	(cm)	(mW/cm²)	(mW/cm ²)
2402-2480	1.019	2.02	20	0.000323	1.0

Conclusion:

Therefore, the worst-case situation is <u>0.000323 mW/cm²</u>, which is less than "1". This confirmed that the device compliance with FCC 1.1310 MPE limit.

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

Address: No.101, Building N1, Yuyuan 2 Road, Yuyuan Industrial Park, HuangJiang Town, Dongguan City, People's

Republic of China

Tel: <u>0769-85598986</u> Web.: <u>www.lyns-tci.com</u> E-Mail: <u>service-hs@lyns-tci.com</u>



Appendix - Information on the Testing Laboratories

We, <u>Hwa-Hsing (Dongguan) Testing Co., Ltd.</u>, 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, Building N1, Yuyuan 2 Road, Yuyuan Industrial Park, HuangJiang Town, Dongguan

City, People's Republic of China Contact Tel: 0769-85598986 Email:service-hs@lyns-tci.com Web Site: www.lyns-tci.com

--- END ---

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

Address: No.101, Building N1, Yuyuan 2 Road, Yuyuan Industrial Park, HuangJiang Town, Dongguan City, People's

Republic of China

Tel: 0769-85598986 Web.: www.lyns-tci.com E-Mail: service-hs@lyns-tci.com