





RF Exposure report

Report No.: HQ200414EL04-FM

FCC ID: 2AGJ43KM

Applicant: Specialty Technologies LLC

Address: 340 Victoria Road Youngstown, OH 44515 United States

Product: Powered Subwoofer

Brand: N/A

Test model(s): 3000 Micro

Series model(s): N/A

Test Date: Apr.16, 2020 ~ Jun. 11, 2020

Issued Date: August 01, 2020

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

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

Town, Dongguan, China

FCC Designation

CN1255 Number:

Standards: FCC Part 2 (Section 2.1091); IEEE C95.1

KDB 447498 D01

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 :	1 am h	Date:	Aug. 01, 2020	
	Tank Tan/Engineer			
Approved by:	Dang Li	Date:	Sep. 09, 2020	
	Harry Li/ Supervisor			

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Hwa-Hsing (Dongguan) Testing

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Page 1 of 5



Table of contents

Releas	se control record	3
1.	RF exposure limit	.4
	MPE calculation formula	
	Calculation result of maximum conducted power	
	Appendix – Information on the Testing Laboratories	

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Report Version: V1.1.1



Release control record

Issue No.	Reason for change	Date issued	
HQ200414EL04-FM	Original release	Sep. 09, 2020	

Tel: 0769-83078199
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1. 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/cm²)	Average time (minutes)	
300-1500			F/1500	30	
1500-100,000			1.0	30	
Note: F = Frequency in MHz					

2. 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.

3. Calculation result of maximum conducted power

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

Antenna No.	Antenna Type	Frequency Band (MHz)	Antenna Gain(dBi)	Transmit and Receive Chain	Maximum Power(dBm)
1	PCB Antenna	2402~2480	4.16	1TX,1RX	4.29

Frequency band (MHz)	Max power (mW)	Antenna gain (dBi)	Distance (cm)	Power density (mW/cm²)	Limit (mW/cm²)
2402~2480MHz	2.685	4.16	20	0.001392	1.0

Conclusion:

Therefore, the worst-case situation is <u>0.001392</u>mW/cm², which is less than "1". This confirmed that the device compliance with FCC 1.1310 MPE limit.

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

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4. Appendix - Information on the Testing Laboratories

We, <u>Hwa-Hsing (Dongguan) 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:

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Page 5 of 5

Report Version: V1.1.1