ACCREDITED Certificate # 5200.01

RF Exposure report

Report No.:	HQ200701EL01-FM
FCC ID:	2AGJ41KP
Applicant:	Specialty Technologies LLC
Address:	340 Victoria Rd Youngstown Ohio 44515 United States
Manufacturer:	Specialty Technologies LLC
Address:	340 Victoria Rd Youngstown Ohio 44515 United States
Product:	Powered Subwoofer
Brand:	SVS (SVS)
Test Model(s):	SB-1000 Pro
Series Model(s):	PB-1000 Pro
Test Date:	Jul.16, 2020 ~ Jul. 29, 2020
Issued By:	Hwa-Hsing (Dongguan) Testing Co., Ltd.
Lab Address:	No.101, Bld N1, Yuyuan 2Rd, Yuyuan Industrial Park, HuangJiang Town, Dongguan, China
FCC Designation Number:	CN1255
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 : _____ **Date:** Aug. 01, 2020

Tank Tan/Engineer

Approved by : _____ **Date:** Sep. 15, 2020

Harry Li/ Supervisor

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Release control record

Issue No.	Reason for change	Date issued
HQ200701EL01-FM	Original release	Sep. 15, 2020

1. General Description of EUT

Product	Powered Subwoofer
Brand	SVS (SVS)
FCC ID:	2AGJ41KP
Test Model(s)	SB-1000 Pro
Series Model(s)	PB-1000 Pro
Status of EUT	Engineering prototype
Power Supply Rating	AC120V/60Hz
Modulation Type	GFSK
Transfer Rate	1 Mbps
Operating Frequency	2402 ~ 2480MHz
Number of Channel	40
Maximum Output Power	2.339mW
Antenna Type	PCB antenna with 4.16dBi gain
Antenna Connector	N/A
Accessory Device	AC Line: 2.0m, Un-shielding
Data Cable Supplied	N/A

Note:

1. Please refer to the EUT photo document (Reference No.: HQ200701EL01) 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. Models difference:
   1) Different appearance size (PB-1000 Pro is larger than SB-1000 Pro)
   2) PB-1000 Pro has two more air ducts than SB-1000 Pro. SB-1000 Pro has no air ducts.
   3) The overall structure of the horn is different.
   4) The frame size of the speaker is also different.

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				

3. MPE calculation formula

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

Where:

Pd = power density in mW/cm^2

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.

4. Calculation result of maximum conducted power

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

Antenna No.	Frequency Band (MHz)	Antenna Gain (dBi)	Antenna Type	Transmit and Receive Chain	Maximum Power(dBm)
1	2402~2480	4.16	PCB Antenna	1TX,1RX	2.339

Frequency band (MHz)	Max power (mW)	Antenna gain (dBi)	Distance (cm)	Power density (mW/cm^2)	Limit (mW/cm^2)
2402~2480	2.685	4.16	20	0.001213	1.0

Conclusion:

Therefore, the worst-case situation is 0.001213mW/cm^2, which is less than “1”. This confirmed that the device compliance with FCC 1.1310 MPE limit.

5. 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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