

# RF EXPOSURE REPORT

Applicant	Specialty Technologies LLC
Address	260 Victoria Road Youngstown, OH 44515, USA



Manufacturer or Supplier	Specialty Technologies LLC
Address	260 Victoria Road Youngstown, OH 44515, USA
Product	Powered Subwoofer
Brand Name	SVS
Model	SB-4000
Additional Model & Model Difference	PB-4000, PC-4000, See item 1
Date of tests	Jun. 03, 2016 ~ Jun. 23, 2016

☒ **FCC Part 2 (Section 2.1091)**

☒ **KDB 447498 D01**

☒ **IEEE C95.1**

**CONCLUSION: The submitted sample was found to COMPLY with the test requirement**

Tested by Andy Zhu Project Engineer / EMC Department	Approved by Glyn He Supervisor / EMC Department
	  Date: Aug. 14, 2017

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## TABLE OF CONTENTS

RELEASE CONTROL RECORD .....	3
1. CERTIFICATION.....	4
2. RF EXPOSURE LIMIT .....	5
3. MPE CALCULATION FORMULA.....	5
4. CLASSIFICATION .....	5
5. ANTENNA GAIN .....	6
6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER.....	6

## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FS160523N055	Original release	Jun. 23, 2016
FS170622N026	Based on the original report FS160523N055 changed product name, model no. and it no need to retest after engineer evaluated.	Aug. 14, 2017

## 1. CERTIFICATION

<b>FCC ID:</b>	2AGJ44K
<b>PRODUCT:</b>	Powered Subwoofer
<b>BRAND NAME:</b>	SVS
<b>MODEL NO.:</b>	SB-4000
<b>ADDITIONAL NO.:</b>	PB-4000, PC-4000
<b>TEST SAMPLE:</b>	Engineering Sample
<b>APPLICANT:</b>	Specialty Technologies LLC
<b>STANDARDS:</b>	KDB 447498 D01
	IEEE C95.1
	FCC Part 2 (Section 2.1091)

### NOTE:

1. This report issued based on the report with the report number FS170523N055 changed models SB16-ULTRA, PB16-ULTRA to SB-4000, PB-4000, PC-4000, and the models SB-4000, PB-4000, PC-4000 are identical with the models SB16-ULTRA, PB16-ULTRA except the model no. and the size for trading purpose.
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. Please refer to the EUT photo document (Reference No.: 170622N026) for detailed product photo.
4. Additional models PB-4000, PC-4000 are identical with the test model SB-4000 except the appearance and model no. for trading purpose.

## 2. RF EXPOSURE LIMIT

### LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD STRENGTH (V/m)	MAGNETIC FIELD STRENGTH (A/m)	POWER DENSITY (mW/cm <sup>2</sup> )	AVERAGE TIME (minutes)
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

## 3. MPE CALCULATION FORMULA

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

where

$P_d$  = power density in mW/m<sup>2</sup>

$P_{out}$  = 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

## 4. CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

## 5. ANTENNA GAIN

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

Transmitter Circuit	Peak Gain (dBi)	Total Gain (dBi)	Antenna Type
Chain 0	2.5	2.5	Chip Antenna

## 6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

The tuned conducted Average Power (declared by client)

Frequency (MHz)	Target Power (dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
2402-2480MHz	0	+2	-2	2

The measured conducted Average Power

Mode	Frequency (MHz)	Averaged Power (dBm)
BT-LE (GFSK)	2480	0.67

FREQUENCY BAND (MHz)	MAX AVERAGE POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm <sup>2</sup> )	LIMIT (mW/cm <sup>2</sup> )
2402-2480	2	2.5	20	0.00056	1.0

--- END ---