

# TEST REPORT

Reference No..... : WTS20S12093462W002  
FCC ID ..... : 2ATVN-W236-S430B  
Applicant..... : AJS ELECTRONICS LIMITED  
Address..... : 15/F, Liuchuang Building II, No. 29, South Ring Road, South Area  
Hi-Tech Zone, Nanshan District, Shenzhen, China  
Manufacturer ..... : Shenzhen Fudeyuan Digital Technology Co., Ltd.  
Address..... : 1st Floor, No.3, Road 4 Dawei, Xinqiao Community, Xinqiao Street,  
Baoan District, Shenzhen, 518000, Guangdong, China  
Product..... : 2.1CH Soundbar with wireless subwoofer  
Brand Name..... : AJS, JVC, Soundstage  
Model(s) ..... : FS83HW, TH-S430B, STAGE-W236  
Standards..... : FCC Part 1.1307  
Date of Receipt sample .... : 2020-12-07  
Date of Test ..... : 2020-12-07 to 2020-12-18  
Date of Issue..... : 2020-12-22  
Test Result..... : **Pass**

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

**Prepared By:**

**Waltek Testing Group Co., Ltd.**

Address: No. 77, Houjie Section, Guantai Road, Houjie Town, Dongguan City, Guangdong, China

Tel: +86-769-2267 6998

Fax: +86-769-2267 6828

Compiled by:



Estel Qian / Project Engineer

Approved by:



Daniel Liu / Manager

## 2. Contents

	<b>Page</b>
<b>1 COVER PAGE</b> .....	<b>1</b>
<b>2 CONTENTS</b> .....	<b>2</b>
<b>3 REVISION HISTORY</b> .....	<b>3</b>
<b>4 GENERAL INFORMATION</b> .....	<b>4</b>
4.1. GENERAL DESCRIPTION OF E.U.T.....	4
4.2. DETAILS OF E.U.T.....	4
<b>5 TEST SUMMARY</b> .....	<b>5</b>
<b>6 RF EXPOSURE</b> .....	<b>6</b>
6.1. REQUIREMENTS.....	6
6.2. THE PROCEDURES / LIMIT .....	6
6.3. MPE CALCULATION METHOD .....	7
6.4. RESULT: COMPLIANCE .....	7

### 3. Revision History

Test report No.	Date of Receipt sample	Date of Test	Date of Issue	Purpose	Comment	Approved
WTS20S12093 462W002	2020-12-07	2020-12-07 to 2020-12-18	2020-12-22	original	-	Valid

## 4. General Information

### 4.1. General Description of E.U.T.

Product:	2.1CH Soundbar with wireless subwoofer
Model(s):	FS83HW, TH-S430B, STAGE-W236
Model difference:	All models are same in all respects. Only the model names and brand names are different for different market requirement. The model TH-S430B is the tested sample.
Operation Frequency:	2402-2480MHz, 79 Channels in total
Antenna installation:	PCB Printed Antenna
Antenna Gain:	0dBi
Type of Modulation:	GFSK, $\pi/4$ DQPSK, 8DPSK
Hardware Version:	FS69H Ver1.0
Software Version:	V3.1

### 4.2. Details of E.U.T.

Max. RF output power:	4.55dBm
Ratings:	Power Supply: AC 110-240V 50/60Hz Power output: 80W R.M.S.
Adapter:	N/A

## 5. Test Summary

Test Items	Test Requirement	Result
Maximum Permissible Exposure (Exposure of Humans to RF Fields)	1.1307	PASS

## 6. RF Exposure

Test Requirement: FCC Part 1.1307

Evaluation Method: FCC Part 2.1091 & KDB 447498 D01 General RF Exposure Guidance v06

### 6.1. Requirements

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2 m normally can be maintained between the user and the device.

### 6.2. The procedures / limit

#### (A) Limits for Occupational / Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-100,000			5	6

#### (B) Limits for General Population / Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100,000			1.0	30

Note: f = frequency in MHz; \*Plane-wave equivalent power density

### 6.3. MPE Calculation Method

$$S = \frac{P \times G}{4 \times \pi \times R^2}$$

S = power density (in appropriate units, e.g. mW/cm<sup>2</sup>)

P = output power to the antenna (in appropriate units, e.g., mW).

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain.

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

From the peak EUT RF output power, the minimum mobile separation distance, R=20cm, as well as the gain of the used antenna, the RF power density can be obtained

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. conducted Output Power (dBm)	Max. conducted Output Power (mW)	Power Density (mW/cm <sup>2</sup> )	Limit of Power Density (mW/cm <sup>2</sup> )	Result
0	1	4.55	2.85	0.000567	1	Compliance

### 6.4. Result: Compliance

No SAR measurement is required.

=====End of Report=====