

## RF Exposure Report

FCC ID: XN6-SV510XW96

Applicant: Zylux Acoustic Corporation

Address: 7F, 70, Rui Guang Road, Neihu District, Taipei 114, Taiwan, Chinese Taipei

Manufacturer: VIZIO INC.

Address: 39 Tesla, Irvine, CA 92618, USA

Product(s): 5.1 Soundbar System

Brand(s): **VIZIO**

Test Model(s): SV510XW-0906

Series Model(s): SV510MW-0906

Test Date: Apr. 29, 2025 ~ May 30, 2025

Issued Date: Jun. 06, 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 2.1093)  
KDB 447498 D01 General RF Exposure Guidance v06

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 :



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Test Report No.: 25022606-SE-US-01

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**Release control record**

Issue No.	Reason for change	Date Issued
25022606-SE-US-01	Original Release	Jun. 06, 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](mailto:service-hs@lyns-tci.com)Release  
Ver. 1.4

## 1 General Information

### 1.1 General Description of EUT

Product(s)	5.1 Soundbar System
Test Model(s)	SV510XW-0906
Sample No.	HX25022606001, HX25022606002
Series Model(s)	SV510MW-0906
Status of EUT	Engineering Prototype
Power Supply Rating	INPUT: 100-240V~ 50/60 Hz 42W
Modulation Type	GFSK, π/4 DQPSK, 8DPSK for FHSS GFSK for DTS GFSK for SRD
Transfer Rate	1Mbps, 2Mbps, 3Mbps
Operating Frequency	2402 ~ 2480MHz
Number of Channel	79 for FHSS 40 for DTS 1Mbps 37 for DTS 2Mbps
Maximum Output Power (Peak)	11.88dBm for FHSS 11.66dBm for DTS 9.21dBm for SRD
Antenna Type and Antenna Gain	FPC Antenna, BT: 2.58dBi SRD: 2.74dBi
Antenna Connector	N/A
Accessory Device	150CM: 2 AC standard cables, 170CM: 1 HDMI cable, 250CM: 2 adapters

Note:

1. Please refer to the EUT photo document (Reference No.: 25022606-01&02) 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. Hwa-Hsing (Dongguan) Testing Co., Ltd. is not responsible for the accuracy of the information provided by the manufacturer.
4. Model difference: The model's name is different, the Subwoofer size and subwoofer speaker are different, while the soundbar and surround sound are the same.  
Soundbar and Subwoofer need to each report a dedicated power board.
5. The above two sizes of Subwoofer are tested.
6. The power boards reported by the above subwoofer and soundbar have been tested.

## 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 <sup>2</sup> )	Average time (minutes)
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

Note: F = Frequency in MHz

### 2.1 MPE calculation formula

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

Where:

Pd = power density in mW/cm<sup>2</sup>

Pout = output power to antenna in mW

G = gain of antenna in linear scale

π = 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.

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### 3 Calculation SAR test exclusion thresholds

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

Function	Transmit and Receive Chain	Antenna Gain (dBi)	Maximum Power		Distance (cm)	Power density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
			(dBm)	(mW)			
BT	1TX,1RX	2.58	11.88	15.42	20	0.005454	1.0
BLE	1TX,1RX	2.58	11.66	14.66	20	0.005454	1.0
SRD	1TX,1RX	2.74	9.21	8.34	20	0.002949	1.0

**Note:** The above wireless function can be transmission simultaneous.

**Worst situation is (0.005454/1) + (0.005454 /1) + (0.002949 /1) = 0.013857, which is less than the limit.**

#### Conclusion:

Therefore, the worst-case situation is 0.013857 mW/cm<sup>2</sup>, which is less than "1". This confirmed that the device compliance with FCC 1.1310 MPE limit.

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### **Appendix – Information on the Testing Laboratories**

We, [Hwa-Hsing \(Dongguan\) Testing 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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