

# FCC RF Exposure

**Applicant** : Guangzhou Panyu Juda Car Audio Equipment Co., Ltd.  
NO.5 Building, No.139, Zhouxing Street, Dongchong  
**Address** : Town, Nansha District, Guangzhou City, Guangdong  
Province, China  
**Product Name** : 2.1 Soundbar System  
**Brand Mark** : VIZIO  
**Model** : SV210X-0805  
**Series model** : N/A  
**FCC ID** : ESX-SV210XC  
**Report Number** : BLA-EMC-202501-A7003  
**Date of Receipt** : Jan. 15, 2025  
**Date of Test** : Jan. 15, 2025 to Apr. 24, 2025  
47 CFR Part 15, Part 1.1307  
**Test Standard** : 47 CFR Part 15, Part 2.1093  
KDB447498D04 General RF Exposure Guidance v01  
**Test Result** : Pass

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Review by: Xavier

Approved by:

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Issued Date: May 12, 2025



## BlueAsia of Technical Services(Shenzhen) Co.,Ltd.

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## Table of Contents

|                                                   |          |
|---------------------------------------------------|----------|
| <b>1 General information .....</b>                | <b>4</b> |
| 1.1 General information .....                     | 4        |
| 1.2 General description of EUT .....              | 4        |
| <b>2 RF Exposure Compliance Requirement .....</b> | <b>6</b> |
| 2.1 Standard Requirement .....                    | 6        |
| 2.2 Limits .....                                  | 6        |
| 2.3 Result .....                                  | 7        |

## Revise Record

| Version No. | Date         | Description |
|-------------|--------------|-------------|
| 01          | May 12, 2025 | Original    |
|             |              |             |
|             |              |             |
|             |              |             |

# 1 General information

## 1.1 General information

|              |                                                                                                                                                                                          |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Applicant    | Guangzhou Panyu Juda Car Audio Equipment Co., Ltd.                                                                                                                                       |
| Address      | NO.5 Building, No.139, Zhouxing Street,Dongchong Town, Nansha District, Guangzhou City, Guangdong Province, China                                                                        |
| Manufacturer | Guangzhou Panyu Juda Car Audio Equipment Co., Ltd.                                                                                                                                       |
| Address      | NO.5 Building, No.139, Zhouxing Street,Dongchong Town, Nansha District, Guangzhou City, Guangdong Province, China                                                                        |
| Factory 1    | Guangzhou Panyu Juda Car Audio Equipment Co., Ltd.                                                                                                                                       |
| Address      | NO.5 Building, No.139, Zhouxing Street,Dongchong Town, Nansha District, Guangzhou City, Guangdong Province, China                                                                        |
| Factory 2    | Exzone Precision Engineering Sdn. Bhd.                                                                                                                                                   |
| Address      | Lot 50, Jalan 7, Kawasan Perindustrian Bakar Arang, 08000 Sungai Petani, Kedah, Malaysia                                                                                                 |
| Factory 3    | VTREK VIETNAM COMPANY LIMITED                                                                                                                                                            |
| Address      | Factory No. NX2 (B7), Nam Tai Thai Binh International Company Limited, Lot B2, Lien Ha Thai Industrial Park (Green iP-I),Diem Dien Town, Thai Thuy district, Thai Binh province, Vietnam |

## 1.2 General description of EUT

|                     |                                           |
|---------------------|-------------------------------------------|
| Product name        | 2.1 Soundbar System                       |
| Model no.           | SV210X-0805                               |
| Operation Frequency | BT/BLE:2402MHz-2480MHz                    |
| Modulation Type     | BLE:GFSK<br>BT:GFSK, $\pi/4$ DQPSK, 8DPSK |
| Number of Channels  | BLE:40 BT:79                              |
| Rate data(BLE)      | 1Mbps                                     |
| Rate data(BT)       | 1Mbps, 2Mbps, 3Mbps                       |
| Antenna Type:       | PCB Antenna                               |
| Antenna Gain:       | 3.96dBi (Provided by customer)            |
| Power supply:       | AC 120V                                   |

|                  |     |
|------------------|-----|
| Hardware Version | N/A |
| Software Version | N/A |

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## 2 RF Exposure Compliance Requirement

### 2.1 Standard Requirement

According to 447498 D04 Interim General RF Exposure Guidance v01

Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

### 2.2 Limits

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases} \quad (\text{B. 2})$$

where

$$x = -\log_{10} \left( \frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right)$$

and  $f$  is in GHz,  $d$  is the separation distance (cm), and  $ERP_{20 \text{ cm}}$  is per Formula (B.1).

Example values shown in Table B.2 are for illustration only.

Table B.2—Example Power Thresholds (mW)

| Frequency (MHz) | Distance (mm) |    |    |    |     |     |     |     |     |     |     |
|-----------------|---------------|----|----|----|-----|-----|-----|-----|-----|-----|-----|
|                 |               | 5  | 10 | 15 | 20  | 25  | 30  | 35  | 40  | 45  | 50  |
|                 | 300           | 39 | 65 | 88 | 110 | 129 | 148 | 166 | 184 | 201 | 217 |
|                 | 450           | 22 | 44 | 67 | 89  | 112 | 135 | 158 | 180 | 203 | 226 |
|                 | 835           | 9  | 25 | 44 | 66  | 90  | 116 | 145 | 175 | 207 | 240 |
|                 | 1900          | 3  | 12 | 26 | 44  | 66  | 92  | 122 | 157 | 195 | 236 |
|                 | 2450          | 3  | 10 | 22 | 38  | 59  | 83  | 111 | 143 | 179 | 219 |
|                 | 3600          | 2  | 8  | 18 | 32  | 49  | 71  | 96  | 125 | 158 | 195 |
|                 | 5800          | 1  | 6  | 14 | 25  | 40  | 58  | 80  | 106 | 136 | 169 |

$$P_{th} \text{ (mW)} = ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases} \quad (\text{B. 1})$$

## 2.3 Result

$$\text{EIRP} = \text{pt} \times \text{gt} = (\text{E} \times \text{d})^{2/30}$$

Where:

pt = transmitter output power in watts,

gt = numeric gain of the transmitting antenna (unitless),

E = electric field strength in V/m,

d = measurement distance in meters (m)

$$\text{Spot} = (\text{E} \times \text{d})^{2/30} \times \text{gt}$$

Separation distance = 20cm

Ant gain = 3.96dBi

For BLE(Worst):

Max Output power = 2.776dBm @ 2480MHz

EIRP = 2.776dBm + 3.96dBi = 6.736dBm,

So, ERP = 6.736 - 2.15 = 4.586dBm = 2.875mW < 3060 mW

For BT Classic(8DPSK):

Max Output power = 2.936dBm @ 2480MHz

EIRP = 2.936dBm + 3.96dBi = 6.896dBm,

So, ERP = 6.896dBm - 2.15 = 4.746dBm = 2.983mW < 3060 mW

Comply with RF exposure exemption limit.

----END OF REPORT----

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