

RF Exposure

Applicant	:	wanmuchun-us
Address	:	Junshuizhen, yantashequ, qi zu, tongchengxian, hubeisheng, China
Product Name	:	TV Headphones
Brand Mark	:	Swiitech
Model	:	CH-211
FCC ID	:	2A6Y3-CH-211
Report Number	:	BLA-EMC-202506-A10303
Date of Receipt	:	June 26, 2025
Date of Test	:	June 26, 2025 to July 8, 2025
		47 CFR Part 15, Part1.1307
Test Standard	:	47 CFR Part 15, Part2.1093
		KDB447498D04 General RF Exposure Guidance v01
Test Result	:	Pass

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Review by: *Xavier*

Approved by: *Blue Zheng*

Issued Date: July 8, 2025

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

Address: Building C, No. 107, Shihuan Road, Shiyan Sub-District, Baoan District, Shenzhen, Guangdong Province, China



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Revise Record

Version No.	Date	Description
01	July 8, 2025	Original

BlueAsia

1 General information

1.1 General information

Applicant	wanmuchaun-us
Address	Junshuizhen, yantashequ, qi zu, tongchengxian, hubeisheng, China
Manufacturer	Aikexun Intelligent Acoustic Technology Co., Ltd
Address	No. 15 of Technology Park 1st Road, Shiwan Town, Boluo County, Huizhou City
Factory	Aikexun Intelligent Acoustic Technology Co., Ltd
Address	No. 15 of Technology Park 1st Road, Shiwan Town, Boluo County, Huizhou City

1.2 General description of EUT

Product Name	TV Headphones
Model No.	CH-211
Series model	N/A
Test engineer sample no.	BLA-EMC-202506-A103-Headphones
Operation Frequency:	2402MHz-2480MHz
Modulation Type:	GFSK, pi/4DQPSK
Channel Spacing:	1MHz
Number of Channels:	79
Antenna Type:	Chip antenna
Antenna Gain:	1.75dBi(Provided by customer)
Power supply or adapter information	DC3.7V by battery
Hardware Version	V1.0
Software Version	REV0.02

Note: For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.

2 Laboratory and accreditations

The test facility is recognized, certified, or accredited by the following organizations:

Company name:	BlueAsia of Technical Services(Shenzhen) Co., Ltd.
Address:	Building C, No. 107, Shihuan Road, Shiyan Sub-District, Baoan District, Shenzhen, Guangdong Province, China
CNAS accredited No.:	L9788
A2LA Cert. No.:	5071.01
FCC Designation No.:	CN1252
ISED CAB identifier No.:	CN0028
Telephone:	+86-755-28682673
FAX:	+86-755-28682673

3 RF Exposure Compliance Requirement

3.1 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 condition, listed below, is satisfied.

3.2 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

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

3.3 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)

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

Separation distance = 0.5cm

Ant gain = 1.75dBi

For BT(Worst):

Max Output power = -0.299dBm @ 2480MHz

$$\text{EIRP} = -0.299\text{dBm} + 1.75\text{dBi} = 1.451\text{dBm} = 1.397\text{mW} < 2.717\text{mW}$$

$$\text{ERP} = 1.451 - 2.15 = -0.699\text{dBm}$$

Comply with RF exposure exemption limit.

----END OF REPORT----

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