

Applicant: Shenzhen Glory Star Technology Industrial Co., Ltd

Product: Wireless Headphone

Model No.: BH31, X-VIBE, A11, A69, A18, A15, TXVOE1

Trademark: Glory Star, Tech Rebellion

Test Standards: FCC Part 15.249

Test result:

It is herewith confirmed and found to comply with the

requirements set up by ANSI C63.10 & FCC Part 15 Subpart C,

Paragraph 15.249 regulations for the evaluation of

electromagnetic compatibility

Approved By

Terry Tang

Manager

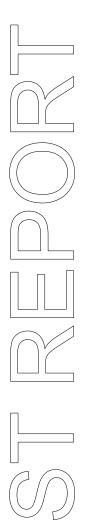
Dated: March 21, 2024

Results appearing herein relate only to the sample tested The technical reports is issued errors and omissions exempt and is subject to withdrawal at

# SHENZHEN TIMEWAY TESTING LABORATORIES

Zone C, 1st Floor, Block B, Jun Xiang Da Building, Zhongshan Park Road West, Tong Le Village, Nanshan District, Shenzhen, China

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# **Special Statement:**

# FCC-Registration No.: 744189

The EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications commission. The acceptance letter from the FCC is maintained in our files. Registration No.: 744189.

# Industry Canada (IC) — Registration No.:5205A

The EMC Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 5205A.

# **A2LA (Certification Number:5013.01)**

The EMC Laboratory has been accredited by the American Association for Laboratory Accreditation (A2LA). Certification Number:5013.01

CAB identifier: CN0033

Date: 2024-03-21



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#### 1.0 General Details

#### 1.1 Test Lab Details

Name: SHENZHEN TIMEWAY TESTING LABORATORIES.

Address: Zone C, 1st Floor, Block B, Jun Xiang Da Building, Zhongshan Park Road West, Tong Le

Village, Nanshan District, Shenzhen, China

Telephone: (755) 83448688 Fax: (755) 83442996

Site on File with the Federal Communications Commission – United Sates

Registration Number: 744189 For 3m Anechoic Chamber

# 1.2 Applicant Details

Applicant: Shenzhen Glory Star Technology Industrial Co., Ltd

Address: Room 2102, Block 1st, Yi Luan Building, Xixiang Road 230, BaoAn District, Shenzhen, China

#### 1.3 Description of EUT

Product: Wireless Headphone

Manufacturer: Shenzhen Glory Star Technology Industrial Co., Ltd

Address: Room 2102, Block 1st, Yi Luan Building, Xixiang Road 230, BaoAn District,

Shenzhen, China

Factory: Shenzhen Glory Star Technology Industrial Co., Ltd

Address: Room 2102, Block 1st, Yi Luan Building, Xixiang Road 230, BaoAn District,

Shenzhen, China

Trademark: Glory Star, Tech Rebellion

Model Number: BH31

Additional Model Name X-VIBE, A11, A69, A18, A15, TXVOE1

Rating: DC5V, 500mA

Battery: DC3.7V, 200mAh Li-ion battery

Modulation Type: GFSK, Π/4DQPSK, 8DPSK for Bluetooth

Operation Frequency: 2402-2480MHz

Channel Number: 79
Channel Separation: 1MHz
Hardware Version: V1.0
Software Version: V1.0

Serial No.: BH13120240321

Antenna Designation PCB antenna with gain -0.58dBi Max (Get from the antenna specification)

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1.4 Submitted Sample: 2 Samples

1.5 Test Duration 2024-03-08 to 2024-03-21

1.6 Test Uncertainty

Conducted Emissions Uncertainty =3.6dB

Radiated Emissions below 1GHz Uncertainty =4.7dB

Radiated Emissions above 1GHz Uncertainty =6.0dB

Conducted Power Uncertainty =6.0dB

Occupied Channel Bandwidth Uncertainty =5%

Conducted Emissions Uncertainty = 3.6dB

Note: The measurement uncertainty is for coverage factor of k=2 and a level of confidence of 95%.

1.7 Test Engineer

The sample tested by

Print Name: Andy Xing

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2.0 Test Equipment					
Instrument Type	Manufacturer	Model	Serial No.	Date of Cal.	Due Date
ESPI Test Receiver	R&S	ESPI 3	100379	2023-07-14	2024-07-13
LISN	R&S	EZH3-Z5	100294	2023-07-14	2024-07-13
LISN	R&S	EZH3-Z5	100253	2023-07-14	2024-07-13
Impuls-Begrenzer	R&S	ESH3-Z2	100281	2023-07-14	2024-07-13
Loop Antenna	EMCO	6507	00078608	2022-07-18	2025-07-17
Spectrum	R&S	FSIQ26	100292	2023-07-14	2024-07-13
Horn Antenna	A-INFO	LB-180400-KF	J211060660	2022-07-18	2025-07-17
Horn Antenna	R&S	BBHA 9120D	9120D-631	2022-07-18	2024-07-17
Power meter	Anritsu	ML2487A	6K00003613	2023-07-14	2024-07-13
Power sensor	Anritsu	MA2491A	32263	2023-07-14	2024-07-13
Bilog Antenna	Schwarebeck	VULB9163	9163/340	2022-07-18	2025-07-17
9*6*6 Anechoic			N/A	2022-07-26	2025-07-25
EMI Test Receiver	RS	ESVB	826156/011	2023-07-14	2024-07-13
EMI Test Receiver	RS	ESCS 30	834115/006	2023-07-14	2024-07-13
Spectrum	HP/Agilent	E4407B	MY50441392	2023-07-14	2024-07-13
Spectrum	RS	FSP	1164.4391.38	2023-07-14	2024-07-13
RF Cable	Zhengdi	ZT26-NJ-NJ-8M/FA		2023-07-14	2024-07-13
RF Cable	Zhengdi	7m		2023-07-14	2024-07-13
Pre-Amplifier	Schwarebeck	BBV9743	#218	2023-07-14	2024-07-13
Pre-Amplifier	HP/Agilent	8449B	3008A00160	2023-07-14	2024-07-13
LISN	SCHAFFNER	NNB42	00012	2023-07-14	2024-07-13
ESPI Test Receiver	R&S	ESPI 3	100379	2023-07-14	2024-07-13
LISN	R&S	EZH3-Z5	100294	2023-07-14	2024-07-13

# 2.2 Automation Test Software

### For Conducted Emission Test

Name	Version
EZ-EMC	Ver.EMC-CON 3A1.1

# For Radiated Emissions

Name	Version
EMI Test Software BL410-EV18.91	V18.905
EMI Test Software BL410-EV18.806 High Frequency	V18.06

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#### 3.0 Technical Details

# 3.1 Summary of test results

The EUT has	been tested	l according to t	he following s	specifications:
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			Decine

Standard	Test Type	Result	Notes
FCC Part 15, Paragraph 15.203	Antenna Requirement	Pass	Complies
FCC Part 15, Paragraph 15.207	Conducted Emission Test	Pass	Complies
FCC Part 15 Subpart C Paragraph 15.249(a) & 15.249(b) Limit	Field Strength of Fundamental	Pass	Complies
FCC Part 15, Paragraph 15.209	Radiated Emission Test	Pass	Complies
FCC Part 15 Subpart C Paragraph 15.249(d) Limit	Band Edge Test	Pass	Complies
FCC Part 15.215(c)	20dB bandwidth	Pass	Complies

#### 3.2 Test Standards

FCC Part 15 Subpart C, Paragraph 15.249, ANSI C63.4:2014 and ANSI C63.10:2013

# 4.0 EUT Modification

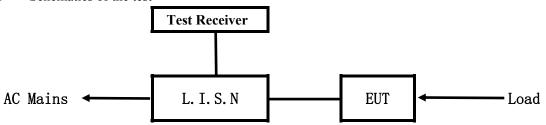
No modification by SHENZHEN TIMEWAY TESTING LABORATORIES

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#### 5.0 Power Line Conducted Emission Test

#### 5.1 Schematics of the test

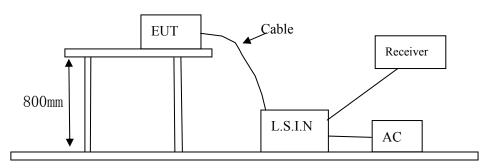


**EUT: Equipment Under Test** 

## 5.2 Test Method and test Procedure

The EUT was tested according to ANSI C63.10-2013. The Frequency spectrum from 0.15MHz to 30MHz was investigated. The LISN used was 50ohm/50uH as specified by section 5.1 of ANSI C63.10-2013.

Test Voltage: 120V~, 60Hz Block diagram of Test setup



# 5.3 Configuration of the EUT

The EUT was configured according to ANSI C63.10-2013. All interface ports were connected to the appropriate peripherals. All peripherals and cables are listed below.

79 channels are provided to the EUT

#### A. EUT

Device	Manufacturer	Model	FCC ID
Wireless Headphone	Shenzhen Glory Star Technology Industrial Co., Ltd	BH31, X-VIBE, A11, A69, A18, A15, TXVOE1	2AS7V-BH31

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#### B. Internal Device

Device	Manufacturer	Model	FCC ID/DOC
N/A			

# C. Peripherals

Device	Manufacturer	Model	Rating
Power Supply	KEYU	KA23-0502000DEU	Input: 100-240V~, 50/60Hz, 0.35A;
			Output: DC5V, 2A

5.4 EUT Operating Condition

Operating condition is according to ANSI C63.10-2013

- A Setup the EUT and simulators as shown on follow
- B Enable AF signal and confirm EUT active to normal condition

5.5 Power line conducted Emission Limit according to Paragraph 15.207

Frequency	Limits (dB μ V)			
(MHz)	Quasi-peak Level	Average Level		
$0.15 \sim 0.50$	66.0~56.0*	56.0~46.0*		
$0.50 \sim 5.00$	56.0	46.0		
5.00 ~ 30.00	60.0	50.0		

Notes:

- 1. \*Decreasing linearly with logarithm of frequency.
- 2. The tighter limit shall apply at the transition frequencies

# 5.6 Test Results:

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# A: Conducted Emission on Live Terminal (150kHz to 30MHz)

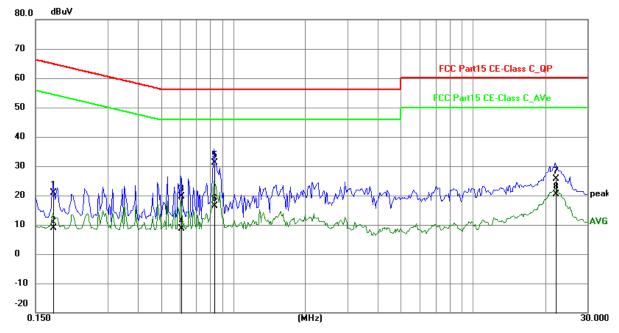
**EUT Operating Environment** 

Temperature: 25°C Humidity: 65%RH Atmospheric Pressure: 101 kPa

**EUT set Condition: Charging + Communication by BT** 

**Results: Pass** 

Please refer to following diagram for individual



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1773	11.06	9.77	20.83	64.61	-43.78	QP	Р
2	0.1773	-0.85	9.77	8.92	54.61	-45.69	AVG	Р
3	0.6063	9.89	9.78	19.67	56.00	-36.33	QP	Р
4	0.6063	-1.06	9.78	8.72	46.00	-37.28	AVG	Р
5	0.8325	21.24	9.78	31.02	56.00	-24.98	QP	Р
6	0.8325	6.50	9.78	16.28	46.00	-29.72	AVG	Р
7	22.0826	14.89	10.81	25.70	60.00	-34.30	QP	Р
8	22.0826	9.47	10.81	20.28	50.00	-29.72	AVG	Р

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# B: Conducted Emission on Neutral Terminal (150kHz to 30MHz)

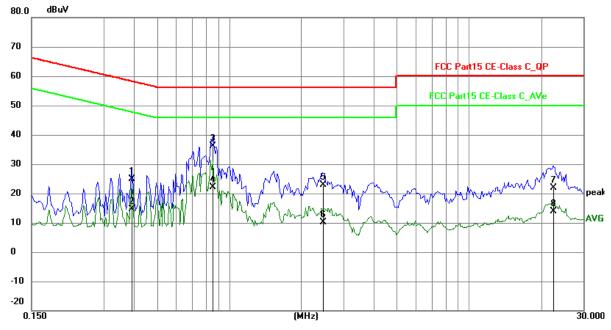
**EUT Operating Environment** 

Temperature: 25°C Humidity: 65%RH Atmospheric Pressure: 101 kPa

**EUT set Condition: Charging + Communication by BT** 

**Results: Pass** 

Please refer to following diagram for individual



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.3918	15.22	9.76	24.98	58.03	-33.05	QP	Р
2	0.3918	4.82	9.76	14.58	48.03	-33.45	AVG	Р
3	0.8559	26.28	9.79	36.07	56.00	-19.93	QP	Р
4	0.8559	12.22	9.79	22.01	46.00	-23.99	AVG	Р
5	2.4549	12.95	9.82	22.77	56.00	-33.23	QP	Р
6	2.4549	0.29	9.82	10.11	46.00	-35.89	AVG	Р
7	22.5117	11.11	10.84	21.95	60.00	-38.05	QP	Р
8	22.5117	3.15	10.84	13.99	50.00	-36.01	AVG	Р

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#### **6** Radiated Emission Test

- 6.1 Test Method and test Procedure:
- (1) The EUT was tested according to ANSI C63.10-2013. The radiated test was performed at Timeway EMC Laboratory. This site is on file with the FCC laboratory division, Registration No. 744189
- (2) The EUT, peripherals were put on the turntable which table size is 1m x 1.5 m, table high 0.8 m. All set up is according to ANSI C63.10-2013.
- (3) The frequency spectrum from 9kHz to 25 GHz was investigated. The frequency spectrum is set as follows:

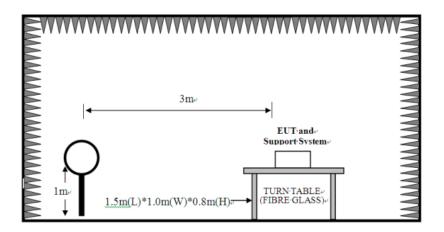
Frequency	Detector	RBW	VBW	Value
9KHz-150KHz	Quasi-peak	200Hz	600Hz	Quasi-peak
150KHz-30MHz	Quasi-peak	9KHz	30KHz	Quasi-peak
30MHz-1GHz	Quasi-peak	120KHz	300KHz	Quasi-peak
Above 1GHz	Peak	1MHz	3MHz	Peak
ADOVE IGHZ	Peak	1MHz	10Hz	Average

(Note: for Fundamental frequency radiated emission measurement, RBW=3MHz, VBW=10MHz). Measurements were made at 3 meters.

- (4) The antenna high is varied from 1 m to 4 m high to find the maximum emission for each frequency.
- (5) The antenna polarization: Vertical polarization and Horizontal polarization.

#### **Block diagram of Test setup**

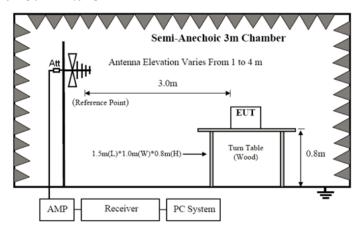
For radiated emissions from 9kHz to 30MHz



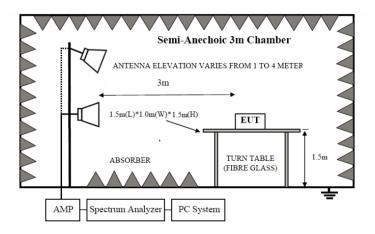
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For radiated emissions from 30MHz to1GHz



For radiated emissions above 1GHz



- 6.2 Configuration of the EUT
  Same as section 5.3 of this report
- 6.3 EUT Operating Condition
  Same as section 5.4 of this report.
- 6.4 Radiated Emission Limit

All emission from a digital device, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strength specified below:

# A FCC Part 15 Subpart C Paragraph 15.249(a) Limit

Fundamental Frequency	Field Stre	ength of Fundamental (3m)	Field Strength of Harmonics (3m)			
(MHz)	mV/m	dBuV/m	uV/m	dBuV/m		

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2400-2483.5   50   94 (Average)   114 (Peak)   500   54 (Average)	ge) 74 (Peak)

Note: 1. RF Field Strength (dBuV) = 20 log RF Voltage (uV)

- 2.Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.
- 3. The emission limit in this paragraph is based on measurement instrumentation employing an average detector.

# B. Frequencies in restricted band are complied to limit on Paragraph 15.209.

Frequency Range (MHz)	Distance (m)	Field strength (dB $\mu$ V/m)				
0.009-0.490	3	20log(2400/F(kHz)) +40log (300/3)				
0.490-1.705	3	20log(24000/F(kHz)) +40log (30/3)				
1.705-30	3	69.5				
30-80	3	40.0				
88-216	3	43.5				
216-960	3	46.0				
Above 960	3	54.0				

Note:

- 1. RF Voltage  $(dBuV) = 20 \log RF \text{ Voltage } (uV)$
- 2. In the Above Table, the tighter limit applies at the band edges.
- 3. Distance refers to the distance in meters between the measuring instrument antenna and the EUT
- 4. All scanning using PK detector. And the final emission level was get using QP detector for frequency range from 30-1000MHz.As to 1G-25G, the final emission level got using PK. For fundamental measurement, PK detector used.
- 5. The three modulation modes of GFSK, Pi/4D-QPSK and 8DPSK were tested. And only the worst case was recorded in the test report. GFSK was the worst case.
- 6. This is a portable device. The radiated emissions should be tested under 3-axes position (Lying, Side, and Stand), After pre-test. It was found that the worse radiated emission was get at the lying position.
- 7. Battery fully charged was used during the test.

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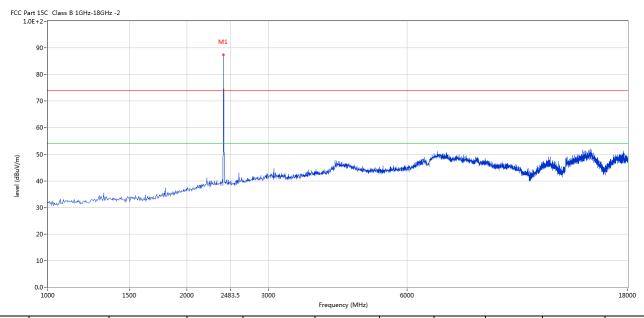


# 6.5 Test result

# A Fundamental & Harmonics Radiated Emission Data

Please refer to the following test plots for details: Low Channel-2402MHz

#### Horizontal



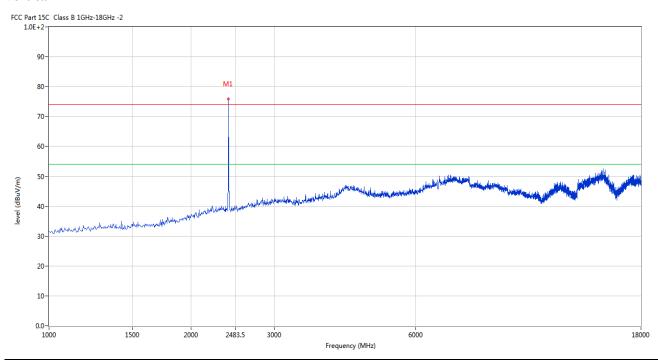
N	١o.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
		(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1		2402	87.36	-3.57	114.0	-26.64	Peak	288.00	100	Horizontal	Pass

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# Vertical



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2402	75.91	-3.57	114.0	-38.09	Peak	178.00	100	Vertical	Pass

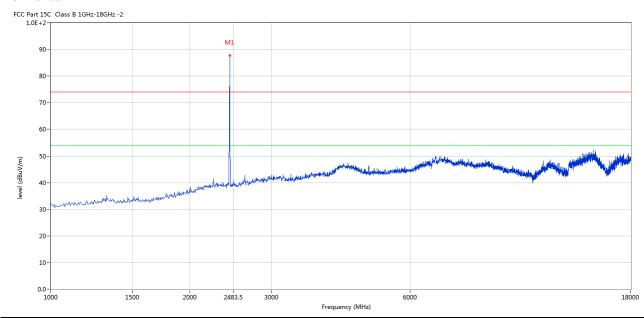
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Please refer to the following test plots for details: Middle Channel-2440MHz

#### Horizontal



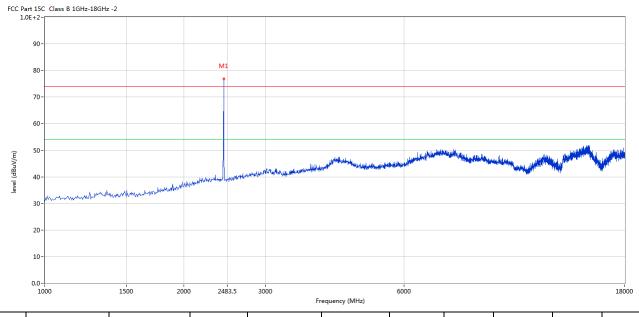
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2441	87.71	-3.57	114.0	-26.29	Peak	263.00	100	Horizontal	Pass

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# Vertical



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2441	76.80	-3.57	114.0	-37.20	Peak	40.00	100	Vertical	Pass

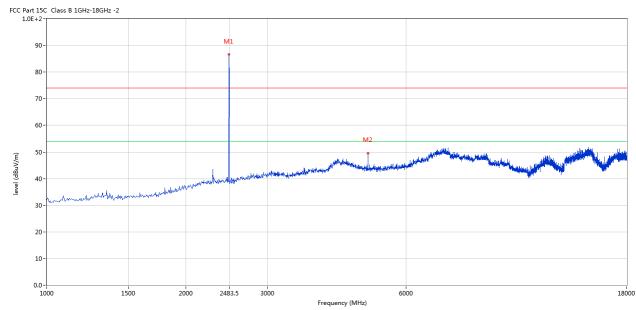
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Please refer to the following test plots for details: High Channel-2480MHz

#### Horizontal



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2480	86.55	-3.57	114.0	-27.45	Peak	249.00	100	Horizontal	Pass
2	4960.010	49.58	3.36	74.0	-24.42	Peak	260.00	100	Horizontal	Pass

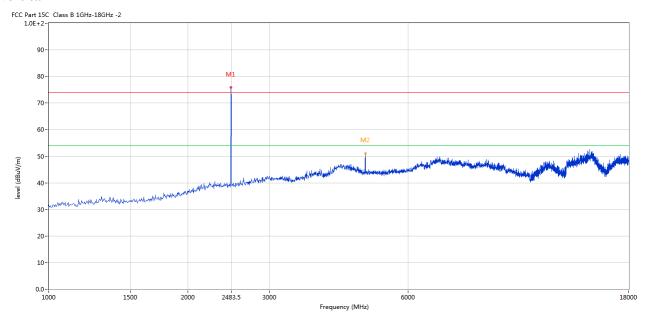
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#### Vertical



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2480	75.85	-3.57	114.0	-38.15	Peak	188.00	100	Vertical	Pass
2	4845.289	51.05	3.16	74.0	-22.95	Peak	76.00	100	Vertical	Pass

Note: (1) Emission Level = Reading Level + Antenna Factor + Cable Loss-Amplifier

- (2) Margin=Emission-Limits
- (3) According to section 15.35(b), the peak limit is 20dB higher than the average limit
- (4) For test purpose, keep EUT continuous transmitting
- (5) For emission above 18GHz and Below 30MHz, It is only the floor noise and less than the limit for more than 20dB. No necessary to take down.
- (6) the measured PK value less than the AV limit.

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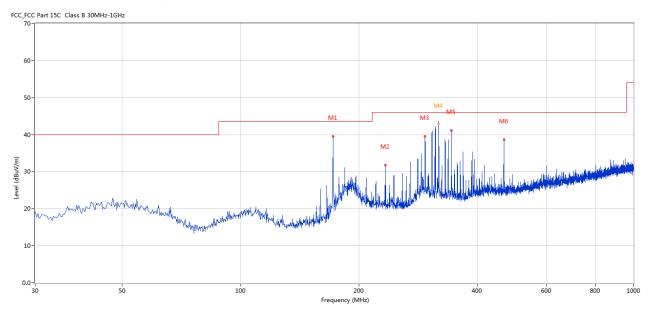


# B. General Radiated Emission Data Radiated Emission In Horizontal (30MHz----1000MHz)

EUT set Condition: Keep Tx transmitting

**Results:** Pass

Please refer to following diagram for individual



No.	Frequency	Results	Factor	Limit	Margin	Detector	Table	Height	Antenna	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(Degree)	(cm)		
1	171.827	39.51	-15.91	43.5	3.99	Peak	214.00	100	Horizontal	Pass
2	233.892	31.79	-12.53	46.0	14.21	Peak	300.00	100	Horizontal	Pass
3	294.744	39.50	-11.18	46.0	6.50	Peak	121.00	100	Horizontal	Pass
4	319.484	43.68	-10.62	46.0	2.32	Peak	300.00	101	Horizontal	Pass
4*	319.484	42.83	-10.62	46.0	3.17	QP	300.00	101	Horizontal	Pass
5	343.717	41.12	-9.61	46.0	4.88	Peak	103.00	100	Horizontal	Pass
6	467.846	38.63	-7.61	46.0	7.37	Peak	71.00	100	Horizontal	Pass

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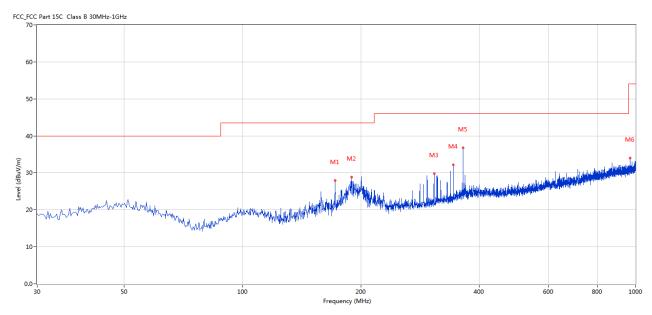


# Radiated Emission In Vertical (30MHz----1000MHz)

EUT set Condition: Keep Tx transmitting

Results: Pass

Please refer to following diagram for individual



No.	Frequency	Results	Factor	Limit	Margin	Detector	Table	Height	Antenna	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(Degree)	(cm)		
1	171.827	27.99	-15.91	43.5	15.51	Peak	102.00	100	Vertical	Pass
2	189.768	28.88	-14.33	43.5	14.62	Peak	275.00	100	Vertical	Pass
3	307.108	29.79	-10.98	46.0	16.21	Peak	53.00	100	Vertical	Pass
4	343.959	32.20	-9.58	46.0	13.80	Peak	20.00	100	Vertical	Pass
5	363.839	36.78	-9.57	46.0	9.22	Peak	359.00	100	Vertical	Pass
6	967.998	34.04	-1.47	54.0	19.96	Peak	60.00	100	Vertical	Pass

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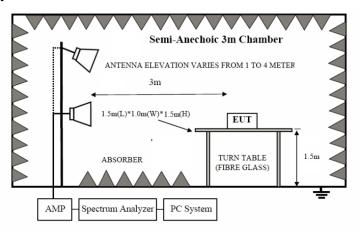


# 7. Band Edge

#### 7.1 Test Method and test Procedure:

- (1) The EUT was tested according to ANSI C63.10–2013. The radiated test was performed at Timeway EMC Laboratory. This site is on file with the FCC laboratory division, Registration No. 744189
- (2) Set Spectrum as RBW=1MHz, VBW=3MHz and Peak detector used for PK value. RBW=1MHz, VBW=10Hz and Peak detector used for AV value.
- (3) The antenna high is varied from 1 m to 4 m high to find the maximum emission for each frequency.
- (4) The antenna polarization: Vertical polarization and Horizontal polarization.

# 7. 2 Radiated Test Setup



For the actual test configuration, please refer to the related items – Photos of Testing

# 7.3 Configuration of the EUT

Same as section 5.3 of this report

### 7.4 EUT Operating Condition

Same as section 5.4 of this report.

#### 7.5 Band Edge Limit

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

The report refers only to the sample tested and does not apply to the bulk.

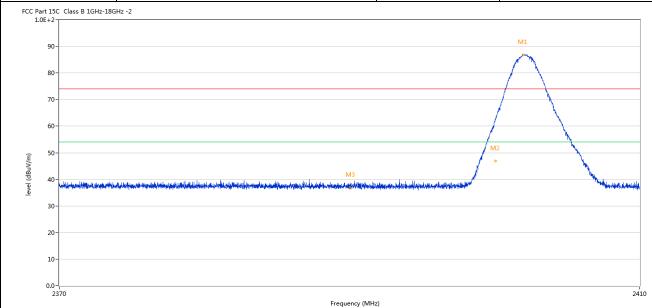
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#### 7.6 Test Result

Product:	Wireless Headphone	Polarity	Horizontal
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass		



No	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2401.902	86.79	-3.57	74.0	12.79	Peak	293.00	100	Horizontal	N/A
2	2400.000	62.79	-3.57	74.0	-11.21	Peak	293.00	100	Horizontal	Pass
2**	2400.000	46.92	-3.57	54.0	-7.08	AV	293.00	100	Horizontal	Pass
3	2390.000	36.81	-3.53	74.0	-37.19	Peak	266.00	100	Horizontal	Pass

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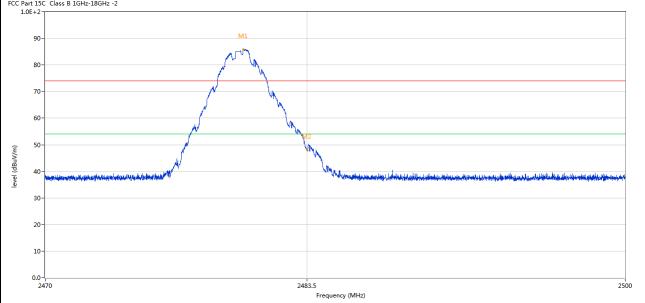
	Product: Wireless Headphone					Detect	or		Vertical	
	Mode	I	Keeping Tra	ansmitting		Test Volt	age		DC3.7V	
Те	emperature		24 deg. C,			Humid	ity	56% RH		
Т	est Result:		Pas	SS						
Part 1.0E-	15C Class B 1GHz-18GHz +2-	-2								
,	90-									
	80-							M1		
	70-									
	60-						M2	$\overline{}$		
	50-							<b>X</b>		
!	50-							/	\.	
	40-	النصور في النصور والمادي المادي والمادي والمادي والمادي والمادي	مراه والمالية والمالية المالية المالية والمالية والمالية والمالية والمالية والمالية والمالية والمالية والمالية	tribles although specific and dis-	M3	d advisad to 1684 b doub	18-1-10	,	A LAND AND A LAND	
,		an ang maturity di ang sigil an anasara	المرادر اعتلبائية عطاية لحاسرت عزور	فالمأرا والمراجعة وا	M3	والعراب أوافق فإن والمتوافقة والمتعربة و	Physical	,	A CANADA MININA M	krokodaj
;	40-	<u>અન્ય ભાગ કરવામાં આવેલી તેમ ભાગ કર્યો તે </u>	المراجعة الم	માં તે ફેર્કાઇન્ડ નવેત મે નવે હંમાવવાના કરીક લાહો માને અને હતો		<u>ૄર્યત્વનોકારકનોન નાંકૃતીકે પૂ</u> ર્વ નોગરીફ્લ	a April 100 Marie 100 Mari		A CAMPANIAN A	house dest
:	40-kinlashurunnukulikulikulikulikulikulikulikulikulikul	<u></u>	<i>ىرىلىرىلىلىنىڭ ئۇرۇپىلىدىدى</i> بىلىنىڭ ئالىرىلىدىدى بىلىنىڭ ئالىرىلىدىدى بىلىنىڭ ئالىرىلىدىدى بىلىنىڭ ئالىرىلىدى	મેર કે ફેસ્ટક્યું ન કરવાનો કરે અને કરવાનો કરવાનો અને		ميلادران ا <mark>داخة فيان مشاوط ووال</mark> يور باد	about	,	**************************************	karandari <sup>14</sup>
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:	40-kinlashurunnukulikulikulikulikulikulikulikulikulikul	<u> </u>	nga se s <del>alah sebagai</del>				a spectrum of		A CONTRACTOR OF THE PARTY OF TH	2410
:	40	Results	Factor		en, delet Historia, provide annuele	Detector	Table	Height	ANT	2410
:	40	Results (dBuV/m)		Fre	equency (MHz)		Table (o)	Height (cm)		2410
:	30- 10- 2370 Frequency		Factor	Fre	equency (MHz)  Over Limit			_		2410
· · · · · · · · · · · · · · · · · · ·	40- 30- 20- 10- 2370 Frequency (MHz)	(dBuV/m)	Factor (dB)	Fre Limit (dBuV/m)	equency (MHz)  Over Limit (dB)	Detector	(o)	(cm)	ANT	2410 Verdic

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Product:	Wireless Headphone	Polarity	Horizontal
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass		



No.	Frequency	Results	Factor	Limit	Over	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	Limit (dB)		(o)	(cm)		
1	2480.205	85.93	-3.57	74.0	11.93	Peak	260.00	100	Horizontal	N/A
2	2483.500	48.21	-3.57	74.0	-25.79	Peak	293.29	100	Horizontal	Pass

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]	Product:	·	Wireless H	eadphone		Detec	tor		Vertical	
	Mode	k	Keeping Tra	ansmitting		Test Vo	ltage		DC3.7V	
Те	emperature		24 deg	g. C,		Humio	lity		56% RH	
Те	est Result:		Pas	SS						
CC Part 1 1.0E+	15C Class B 1GHz-18GHz -2									
9	90-									
8	30-		M1							
7	70-									
6	50-									
(E / 5	50-		/	M2						
(m/\ngp) level				M2	Pasekan dayaddayan kadakaliyasadda	وروهان غير موقف الانتجاب المتعادم وم	ed with the Alexandry to bridge with	uddig dawiglige general general trajlik	<del>mykkolonijaln</del> u ged <del>la opalaskonijaln</del> i	باليارية والمراسلية
m/Vudb) level	10-	······································	/	M2	<del>Pāgļies <sub>(P</sub>. plas</del> t, plastik ļauti, izviga	يدودار إرسادات الإنابالية المتعاديد	يه مينية الإيارية المائية الإيارية المائية المائية المائية المائية المائية المائية المائية المائية المائية الم	المراد والمراد	<del>nagalis</del> h saj <del>i jeu q</del> (da najinash sajilipan	بالنه وومسال در
m/∖ndb) level (dbu√γ) a	10 - Marsun diplomoi de distributo con respecto de del constituido de la constituida del constituida de la constituida del constituida de la constituida de la constituida de la constituida de la constituida de	······································	/	M2	<del>riselande elip</del> mekkaskinskinserin	ورودانها والمقاولة والمتاوية والمتاوية والمتاوية والمتاوية والمتاوية والمتاوية والمتاوية والمتاوية والمتاوية و	od acideine kinnen, vije obrahajema	edistantingspermentusitische	<del>naghin hasibbu</del> ngahanganbangankanisikan	walnengapik
۳/۸ngp) اوموا عدد المواد المو	10-Vermandelmodernwederschalderschalter	······································		M2	Parlin er eller de level seiter	يدوه في الدين سوافات الإنفاق المؤلفة المقادر المرد	nin asiki kisa dan dan dan dan dan dan dan dan dan da	edistanting engles sengen at the dro	maphik keziphu enthansa kanasafun	malmmagapik,
#/nngp   4	10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -	······································	/		Martine des et des	پير وخار پارس افغان او ان پارا افغان بورو	and an industrial participants	elle derektely egy genege ville, ble	<del>ng Mala a spilyas y est meneralya a indun</del>	
#/nngp   4		umumanaka kanga diki dipungkan kandarak		2483.5	equency (MHz)	برده فارسي فاعتران المؤلفة المتواجع	ni siddin dan righindig and	odis konistracju uznaga sitte, bio	<del>nagdin</del> h hastigen gestheten tanken tildynn	2500
#/nngp   4	10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -	Results	Factor	2483.5		Detector	Table	Height	ANT	
E/(Appp)   44   3   3   3   3   3   3   3   3	00-		Factor (dB)	2483.5 Fr	equency (MHz)					2500
E/(Appp)   44   3   3   3   3   3   3   3   3	10	Results		2483.5 Fr	equency (MHz)  Over Limit		Table	Height		2500
₩/(/ngp) away 3 2 1 1 0.	Frequency (MHz)	Results (dBuV/m)	(dB)	2483.5 Fr Limit (dBuV/m)	equency (MHz)  Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	2500 Verdict

Note: 1. The PK emission level less than the AV limit. No necessary to record the AV emission level.

2. For Restricted band test, the three modulation modes of GFSK, Pi/4D-QPSK and 8DPSK were tested. And only the worst case was recorded in the test report. GFSK was the worst case.

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# 8.0 Antenna Requirement

# **Applicable Standard**

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

This product has a PCB antenna. The antenna gain is -0.58dBi Max. It fulfills the requirement of this section. Test Result: Pass

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#### 9.0 20dB Bandwidth Measurement

# **Test Configuration**



# **Test Procedure**

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 30kHz RBW and 100kHz VBW.

The 20dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20dB.

#### Limit

N/A

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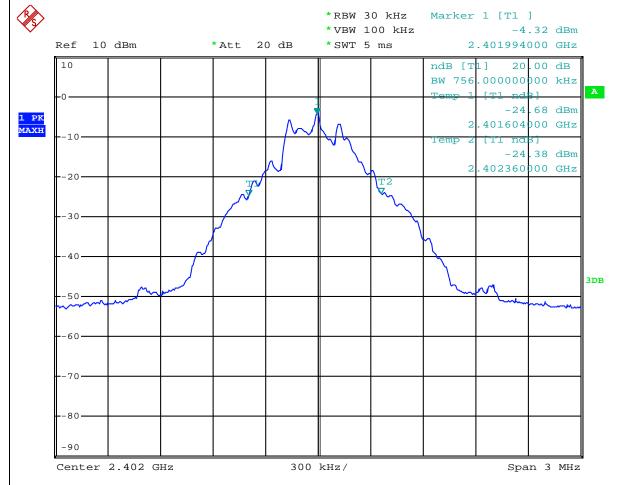
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#### **Test Result**

GFSK			
Product:	Wireless Headphone	Test Mode:	Keep transmitting
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK
20dB Bandwidth	756kHz		



Date: 14.MAR.2024 16:13:46

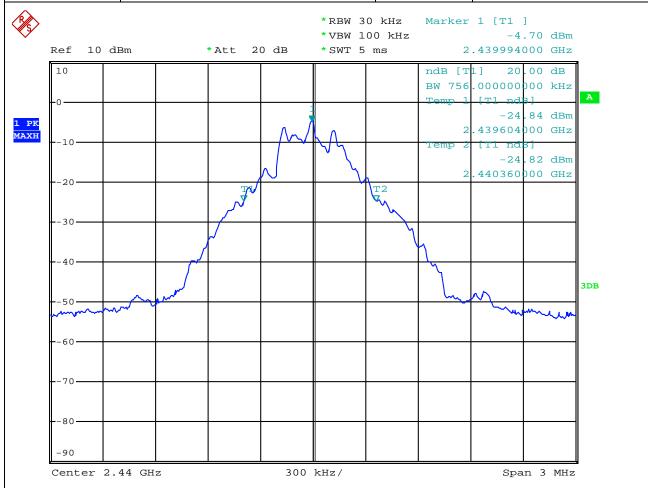
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GFSK			
Product:	Wireless Headphone	Test Mode:	Keep transmitting
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK
20dB Bandwidth	756kHz		



Date: 14.MAR.2024 16:15:04

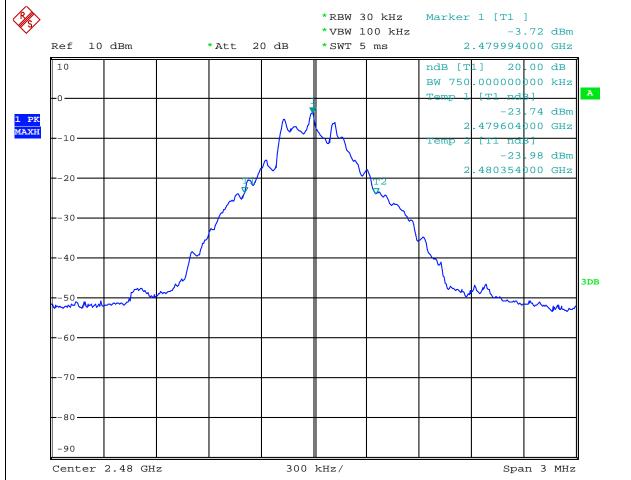
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GFSK			
Product:	Wireless Headphone	Test Mode:	Keep transmitting
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK
20dB Bandwidth	750kHz		



Date: 14.MAR.2024 16:15:37

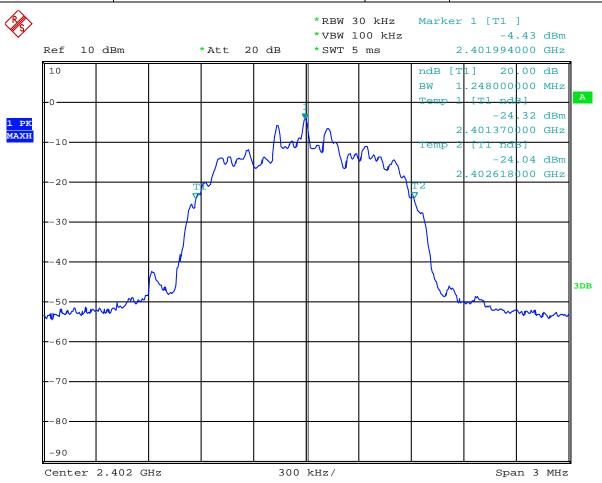
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Л/4DQPSK			
Product:	Wireless Headphone	Test Mode:	Keep transmitting
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK
20dB Bandwidth	1.248MHz		-



Date: 14.MAR.2024 16:17:25

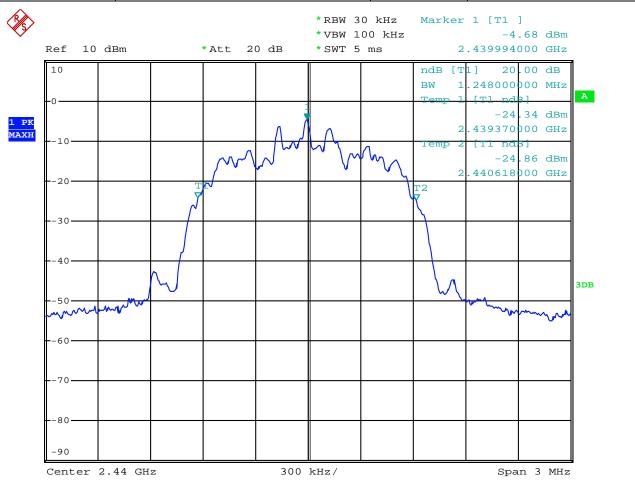
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Л/4DQPSK			
Product:	Wireless Headphone	Test Mode:	Keep transmitting
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK
20dB Bandwidth	1.248MHz		



Date: 14.MAR.2024 16:16:53

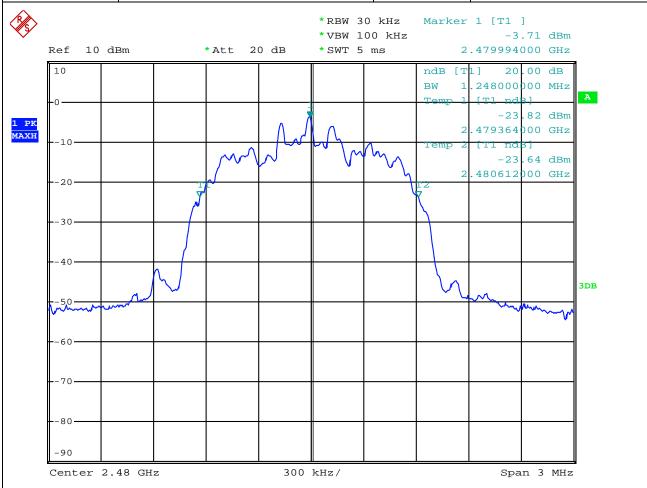
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Л/4DQPSK			
Product:	Wireless Headphone	Test Mode:	Keep transmitting
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK
20dB Bandwidth	1.248MHz		



Date: 14.MAR.2024 16:16:19

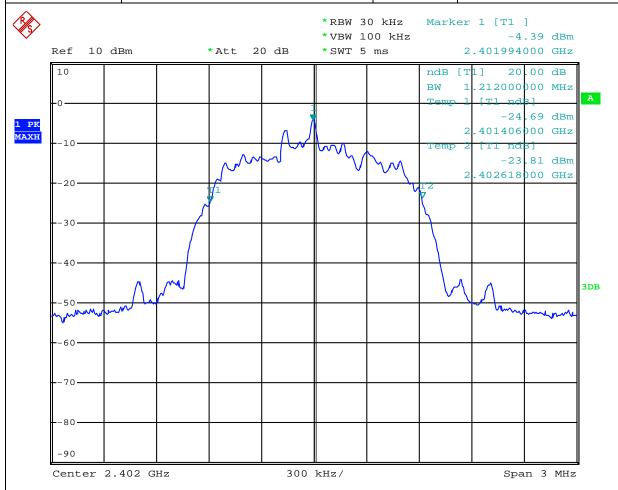
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8DPSK			
Product:	Wireless Headphone	Test Mode:	Keep transmitting
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK
20dB Bandwidth	1.212MHz		



Date: 14.MAR.2024 16:18:16

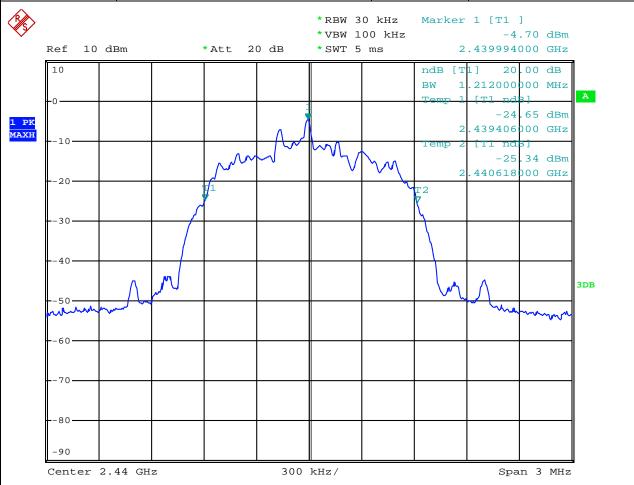
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8DPSK			
Product:	Wireless Headphone	Test Mode:	Keep transmitting
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK
20dB Bandwidth	1.212MHz		



Date: 14.MAR.2024 16:18:48

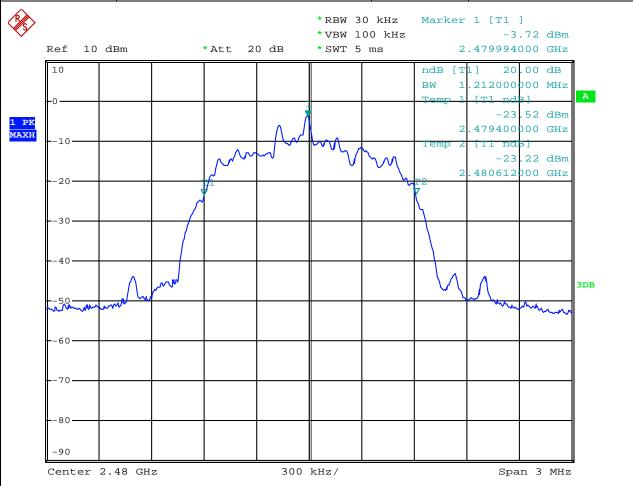
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8DPSK			
Product:	Wireless Headphone	Test Mode:	Keep transmitting
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK
20dB Bandwidth	1.212MHz		



Date: 14.MAR.2024 16:19:24

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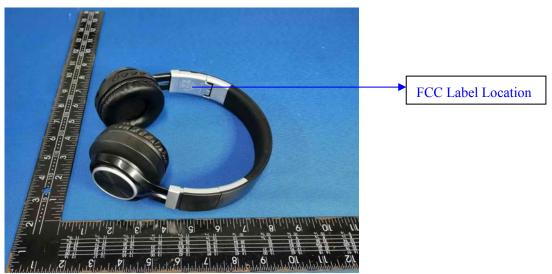


#### 10.0 FCC ID Label

#### FCC ID: 2AS7V-BH31

The label must not be a stick-on paper label. The label on these products must be permanently affixed to the product and readily visible at the time of purchase and must last the expected lifetime of the equipment not be readily detachable.

#### Mark Location:



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#### 11.0 Photo of testing

#### 11.1 Conducted test View



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### Radiated emission test view



The report refers only to the sample tested and does not apply to the bulk.

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#### 11.2 Photographs – EUT

#### Outside View



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Outside View



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Outside View





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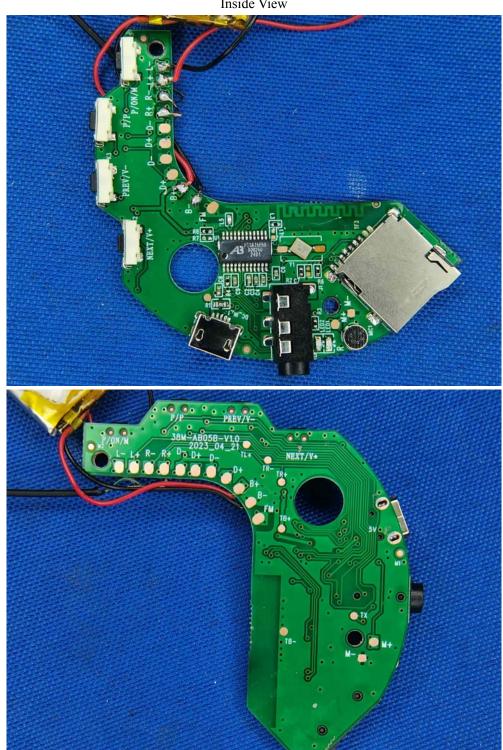
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Inside View



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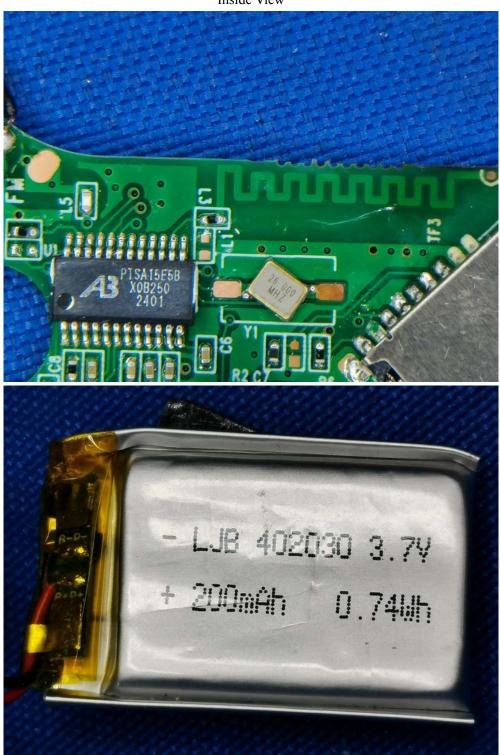
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Inside View



-- End of the report--

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