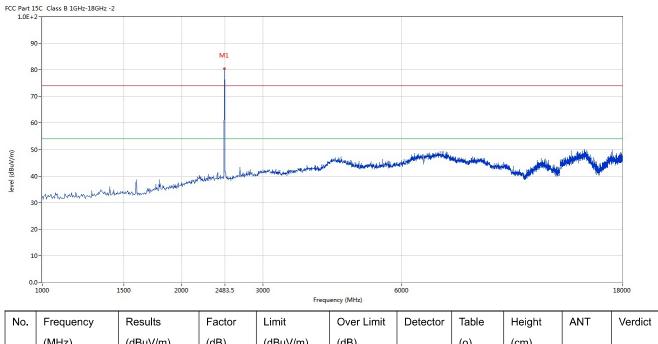
Page 20 of 47

Report No.: TW2503140-01E

Date: 2025-03-27



## Vertical



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2480	80.37	-3.57	114.0	-33.63	Peak	349.00	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.

Report No.: TW2503140-01E Page 21 of 47

Date: 2025-03-27

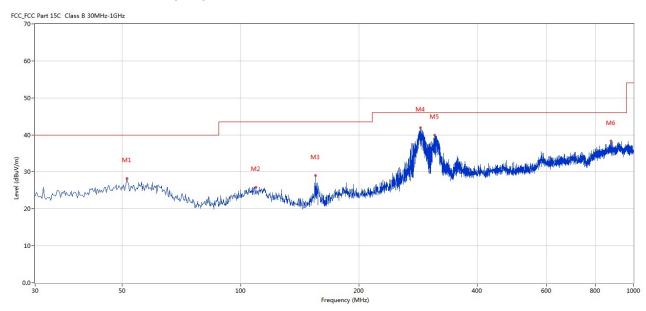


# B. General Radiated Emission Data Radiated Emission In Horizontal (30MHz----1000MHz)

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	51.335	28.21	-4.95	40.0	11.79	Peak	125.00	100	Horizontal	Pass
2	109.278	25.87	-5.98	43.5	17.63	Peak	1.00	100	Horizontal	Pass
3	155.341	29.03	-9.65	43.5	14.47	Peak	360.00	100	Horizontal	Pass
4	286.986	41.93	-4.51	46.0	4.07	Peak	260.00	100	Horizontal	Pass
5	311.957	39.97	-3.72	46.0	6.03	Peak	272.00	100	Horizontal	Pass
6	877.811	38.30	5.10	46.0	7.70	Peak	39.00	100	Horizontal	Pass

Report No.: TW2503140-01E Page 22 of 47

Date: 2025-03-27

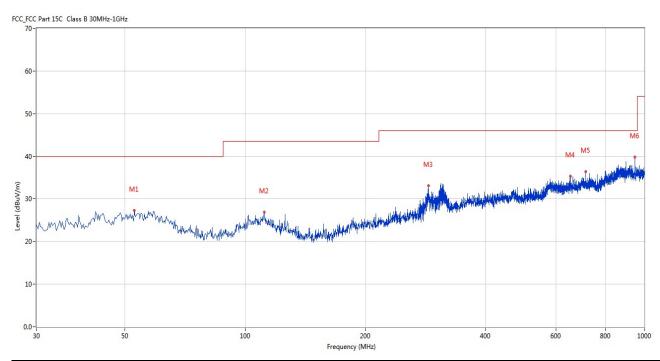


## Radiated Emission In Vertical (30MHz----1000MHz)

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	52.789	27.35	-4.99	40.0	12.65	Peak	139.00	100	Vertical	Pass
2	111.460	26.88	-6.04	43.5	16.62	Peak	252.00	100	Vertical	Pass
3	288.198	33.15	-4.47	46.0	12.85	Peak	1.00	100	Vertical	Pass
4	653.312	35.34	2.00	46.0	10.66	Peak	316.00	100	Vertical	Pass
5	713.437	36.35	2.19	46.0	9.65	Peak	80.00	100	Vertical	Pass
6	947.876	39.79	4.84	46.0	6.21	Peak	269.00	100	Vertical	Pass

Report No.: TW2503140-01E

Date: 2025-03-27

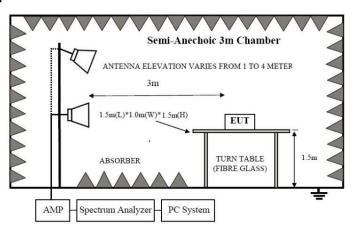


## 7. Band Edge

#### 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.

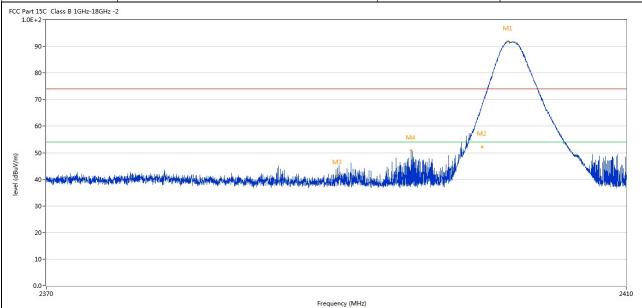
Report No.: TW2503140-01E Page 24 of 47

Date: 2025-03-27



# 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)		(0)	(cm)		
1	2401.802	91.93	-3.57	74.0	17.93	Peak	175.00	100	Horizontal	N/A
2	2400.000	68.07	-3.57	74.0	-5.93	Peak	168.11	100	Horizontal	Pass
2**	2400.000	52.24	-3.57	54.0	-1.76	AV	168.11	100	Horizontal	Pass
3	2390.000	41.43	-3.53	74.0	-32.57	Peak	217.00	100	Horizontal	Pass
4	2395.094	50.80	-3.55	74.0	-23.20	Peak	164.00	100	Horizontal	Pass

Report No.: TW2503140-01E Page 25 of 47

Date: 2025-03-27

2391.615

49.27

-3.54

74.0

-24.73

Peak

324.00

100

Vertical

Pass



I	Product:		Wireless H	eadphone		Detect	or		Vertical	
	Mode	k	Keeping Tra	ansmitting		Test Vol	tage		DC3.7V	
Te	mperature		24 deg. C,			Humidity		;	56% RH	
Те	est Result:		Pas	SS						
Part 1 1.0E+	2- Class B 1GHz-18GHz	-2								
91	0-									
81	0-							M1		
							1	$\leftarrow$		
/	0-									
61	60-									
O.					M4					
	0-				M4		M2			
50		of the spine control to the spine of the spine control to the spine of	de transcription de la construction de la construct	المادور المادان المادور			M2		A Company	
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31		degrifferendstätisjerinde flikker regnesstiffe	day was a sunday of pas	المراجعة فالمراجعة والمراجعة والمراج		ildh ddddd dd d	M2		Marin	a kalendar ibil
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36 26 10	0- 0- 0-	kon, since di dispersión de la frança indica.	da province de conference	u pankin pravidnosti judistratili	equency (MHz)	NAN AHAMILI (AM	M2		Manne	2410
5(4) 3(4) 3(1) 2(1) 1(1)	0-	Results	Factor	Fr. Limit	equency (MHz)  Over Limit	Detector	M2	Heiaht	1779	2410
50 40 30 20 10 0.0		1,771			Over Limit	Detector		Height (cm)	ANT	2410
50 44 30 20 10 0.0	0- 0- 0- 2370	Results	Factor	Limit		Detector	Table (o) 179.00		1779	2410
51 44 34 20 10 10 10 10 10 10 10 10 10 10 10 10 10	o- 0- 0- 0- 0- 2370 Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)		(0)	(cm)	ANT	verdi
36 20 10	0-2370  Frequency (MHz) 2402.082	Results (dBuV/m) 82.44	Factor (dB) -3.57	Limit (dBuV/m) 74.0	Over Limit (dB) 8.44	Peak	(o) 179.00	(cm)	ANT Vertical	2410 Verdi

Page 26 of 47

Report No.: TW2503140-01E

Date: 2025-03-27

2\*\*

2483.500

43.17

-3.57

54.0



Pr	roduct:		Wireless	Headphone		P	olarity		Horizont	al
N	Mode		Keeping	Transmitting		Test	t Voltage		DC3.7V	I
Tem	perature		24 0	leg. C,		Н	ımidity		56% RI	I
Test	t Result:		F	Pass						
Part 15C 1.0E+2-	Class B 1GHz-18GHz	-2	M1							
90- 80- 70-			1							
50- 40- 30-	Marine Ma	leftlalida medega in Albert de de la Colonia	<i>'</i>	M2			dan oʻldinga dladi d	kapungan dalan sebebah dan dalah	has parakasahad kasasasan	ecolorità materia di
40-	ar province all the ball of th	Jeffeldship wal garan ya Maraka ka		M2		الطياب الدارس	dansidina dadisa	lajengian kita yade kina aku	ha gandan da kananan	
40 - 40 30	ar Albanin and	14th bhomatagain Albahar dhire		2483.5	Frequency (MHz)	a de la composição de l	dan arthura dhadisa	lakerijan kala sebelan eskel	hay garakan da kana kana kana kana kana kana ka	2500
40- 30- 20- 10- 0.0- 247	ar Albanin and	Results	Factor	2483.5		Detector	Table	Height	ANT	2500 Verd
30- 20- 10- 0.0- 247	The second secon	Results (dBuV/m)	Factor (dB)	2483.5	Frequency (MHz)				ANT	
40- 30- 20- 10- 0.0- 247	70 Frequency			2483.5 Limit	Over		Table	Height	ANT	

-10.83

ΑV

181.00

100

Horizontal

Pass

Page 27 of 47

Report No.: TW2503140-01E

Date: 2025-03-27



	Product:	'	V 11 C1C55 11	eadphone		Detec	tor		Vertical	
	Mode	K	eeping Tra	ansmitting		Test Vo	ltage		DC3.7V	
Те	emperature		24 de	g. C,		Humio	lity		56% RH	
T	est Result:		Pas	ss						
FCC Part 1.0E	: 15C Class B 1GHz-18GHz -	2								
	90-									
	100		M1							
	80-		Jan Marie	m						
	70-			1						
	60-		ſ	1						
			7	"						
Ê	50-			M2						
(dBuV/m)	40-	J. W. Lander of the Land of the Land of the Land of the Land		May My May	delicitate, mane del desembre describe	والمرابط المالية	المرابع المرابع	ور من المناور والمناور والمناور والمناور والمناولة	والمعادلة المتاركة والمادانة الأدار	Jugarita.
level (dBuV/m	T.	d-pelaphonetalidas-sidas-allidisky	/	MA MA	delikaha apad dalah bilandi dan da	and the second	المساولية المعارض أواجيدا والم	الماداد الماداد والماداد والما	يراط يطخط ومواود المتدامي الاعام بيا	de la constant de la
level (dBuV/m	40 - Landy Land, we want do not be to be	da pilapina na da		MAZ MAZ	datashaba marabbildan bi dinash	seleksikka perkan dan d	بالمارة والمارة	الملحل لمعمود ومعارضا فالمات	kidadeeleen mississi massaad	ductor di la
level (dBuV/m	40-	d-pelaphrapaintes apisocoloidad		MAZ MAZ	datasinin marakilian da yang di	ational description of the contract of the con	. Herrita de la constanta de l	المعادلة الم	ight all the few specific in the land of t	dente di in
level (dBuV/m	40 - Landy Land, we want of the light	e-planteniaria antiquali ai de		MAN AND AND AND AND AND AND AND AND AND A	datishinka menadik disende dinesali	ili ekabilika ne Alban, alban,	مدخهدينيار أرايير براطار	المفار أواسته المعادلة والمعادلة وال	kiril jahatan perintai tugrasa ja	description of the second seco
level (dBuV/π	40- <b>Land John M. M. M. As John Mark</b> 30-	i. pl.jelengialisten sepisapahistek		M2	detici de marce de describ describ	spielosidisen nation elibrory	Mercellin de la constitución de la	المادور في المعادية والمعاددة المادورة المادورة المادورة المادورة المادورة المادورة المادورة المادورة المادورة	kiri alaman yanari marand	2500
level (dBuV/π	40	e-plantenetalista estimativa etik		2483.5	equency (MHz)	alishahilis na Man albany	Militari de	Had he was an executive in the first state of the f	ht dahara qipata ki ngresa d	
level (dBuV/π	40	Results	Factor	2483.5		Detector	Table	Height	ANT	
level (dBuV/π	40	eng jugi traduce englesegipe se en a	Factor (dB)	2483.5 Fre	equency (MHz)					2500
level (dBuV/π	40- 30- 20- 10- 00- 2470	Results		2483.5 Fre	equency (MHz)  Over Limit		Table	Height		2500

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

2. The two modulation modes of GFSK, Pi/4D-QPSK were tested. And only the worst case was recorded in the test report. GFSK was the worst case.

Report No.: TW2503140-01E

Date: 2025-03-27



Page 28 of 47

# 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 with gain 2.499dBi maximum. It fulfills the requirement of this section. Test Result: Pass

Report No.: TW2503140-01E

Date: 2025-03-27



Page 29 of 47

## 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

Page 30 of 47

Report No.: TW2503140-01E

Date: 2025-03-27



## **Test Result**

Product:	Wireles	s 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	8	82kHz			
Ref 10 d	Bm ∗At	* VE	BW 100 kHz JT 5 ms	er 1 [T1 ] -1.10 dBm 2.401868000 GHz	
-0		1 A		[T1] 20.00 dB B2.0000000000 kHz 1 [T1 ndB] A -21.40 dBm	
10			Temp-	2.401586000 GHz 2 [T1 ndb] -21.07 dBm	
<b></b> 20		T. J.	MT2 M	2.402468000 GHz	
40	5a /		7	Λ	
50				3DB	
-60				Maryen	
-70					
80					
-90					
Center 2.	402 GHz	300 kHz/	,	Span 3 MHz	

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

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Page 31 of 47

Report No.: TW2503140-01E



Product:	Win	reless Headphone		Test	Mode:		Keep transmit
Mode	Kee	ping Transmitting		Test '	Voltage		DC3.7V
Temperature		24 deg. C,		Hur	nidity		56% RH
Test Result:		Pass		Det	ector		PK
0dB Bandwidth		882kHz					
Ref 10 di	3m ·	*Att 20 dB	*RBW 30 *VBW 10 SWT 5			.440868	.08 dBm
		1			BW 882	. 000000	000 kHz
-0 -10		M	M		Temp 1	[T1 nd] -21	.19 dBm
20		T1/	7	T <sub>2</sub>	Temp 2	-20 .441468	
30		J (4"		N/	4		
40					N. A.		
<b></b> 50	M				~	A. J.	3DB
-60						<b>L</b>	new
70							
80							
-90							
Center 2.	441 GHz	300	kHz/			Spa	n 3 MHz

Page 32 of 47

Report No.: TW2503140-01E



Product:	Wirele	ess Headphone		Test I	Mode:		Keep transmitting
Mode	Keepir	ng Transmitting		Test V	⁄oltage		DC3.7V
Temperature	2	4 deg. C,		Hun	nidity		56% RH
Test Result:		Pass		Det	ector		PK
0dB Bandwidth		846kHz					
Ref 10 d	Bm ★A1	st 20 dB	*RBW 30 *VBW 100 SWT 5 m	) kHz		1 [T1 ] -1.	.25 dBm
10		1			ndB [T BW 846 Temp 1	l] 20 .0000000 [T1 ndl	.00 dB 000 kHz
L PK MAXH		M	M		2 Temo 2	-21 .4796220	.32 dBm 000 GHz
20		Ţ) N	7	<b>\</b> T2	2	-21 .4804680	.28 dBm
30	ابر			<u> </u>			
40					4		
<b>-</b> -50	114				V	~~/~	ЗДВ
WV/W	/					J	whom
70							
80							
-90							
Center 2.	48 GHz	300	kHz/			Spa	n 3 MHz

Page 33 of 47

Report No.: TW2503140-01E



Product:	Wireless Headphor	ne	Test Mode:	Keep transmitting	
Mode	Keeping Transmitti	ng	Test Voltage	DC3.7V	
Temperature	24 deg. C,		Humidity	56% RH	
Test Result:	Pass		Detector	PK	
20dB Bandwidth	1.242MHz				
Ref 10 dE	Bm ∗Att 20 dB	*RBW 30 *VBW 100 SWT 5 n	ndB [7	-1.35 dBm -1.35 dBm 2.401862000 GHz FL] 20.00 dB	
_0	1		Temp 1		
-20	Two Control of the Co	W W	T2 2	-21.37 dBm -21.37 dBm 2.402630000 GHz	
30	A				
-40	mark the second	+++	- En	3DB	
Stopped Mary	V			1	
<b>-</b> -70					
80					
-90					
Center 2.4	102 GHz 3	00 kHz/		Span 3 MHz	

Page 34 of 47

Report No.: TW2503140-01E



Product:	Wireless He	adphone	Test Mode:	Keep transmitting
Mode	Keeping Transmitting		Test Voltage	DC3.7V
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK
dB Bandwidth	1.236MHz			
Ref 10 dE	om *Att 2	* VBW		1 [T1 ] -1.13 dBm 440868000 GHz ] 20 00 dB
		1		236000 000 MHz [T1 ndB]
PK10	~~~	M		[T1 nd8] A 440394000 GHz
-20	13/2		T2 2.	-21.42 dBm 441630000 GHz
30	-			
-40				νη.
	V 7			3DB
60				
70				
80				
-90				
Center 2.4	141 GHz	300 kHz/		Span 3 MHz

Page 35 of 47

Report No.: TW2503140-01E



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
0dB Bandwidth	1.2781	1.278MHz		
Ref 10 di	Bm ∗Att :	*VBW	30 kHz Marker 100 kHz 5 ms 2.	-1.29 dBm 479868000 GHz
_0		1 Λ σ		278000000 MHz [T1 ndB] A -21 10 dBm
<b>PK</b> 10		The house of the same of the s	2 . ·	479400000 GHz <del>[T1 ndb]</del> -21.38 dBm
-20	711		T2 2	480678000 GHz
-30				
-40	VWV		- N	7 3DB
1				
_ <b>-</b> 60				
80				
-90				
Center 2.	48 GHz	300 kHz/		Span 3 MHz