

Report No.: TW2502018-01E

Applicant: Electronic World LLC

Product: Wireless speaker

Electro Vibe Duo Model No.:

Trademark: Electro

Test Standards: FCC Part 15.249

It is herewith confirmed and found to comply with the Test result:

requirements set up by ANSI C63.10 & FCC Part 15 Subpart C, 15.249 regulations for the evaluation

electromagnetic compatibility

Approved By

Terry Tang

Manager

Dated: February 19, 2025

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

Tel (755) 83448688, Fax (755) 83442996, E-Mail:info@timeway-lab.com

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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

Report No.: TW2502018E

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Test Report Conclusion

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

11.0

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Photo of Test Setup and EUT View....

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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: Electronic World LLC

Address: 575 Julie Rivers Drive, Sugar Land, TX, United States, 77478

1.3 Description of EUT

Product: Wireless speaker

Manufacturer: Shenzhen Glory Star Technology Industrial Co., Ltd

Address: Room2102, Block 1st, Yi Luan Building, Xixiang Road 230, BaoAn District,

Shenzhen, China

Trademark: Electro

Model Number: Electro Vibe Duo

Additional Model Name N/A

Rating: Input: DC5V

Battery: DC3.7V, 1200mAh Li-ion battery

Serial No.: P301202402

Hardware Version: V1.0 Software Version: V1.0

Operation Frequency: 2402-2480MHz Modulation Type: GFSK, JI/4DQPSK

Number of Channels: 79 Channel Separation: 1MHz

Antenna Designation PCB antenna with gain 2.39dBi maximum (Get from the antenna specification)

1.4 Submitted Sample: 2 Samples

1.5 Test Duration

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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	2024-07-12	2025-07-11
LISN	R&S	EZH3-Z5	100294	2024-07-12	2025-07-11
LISN	R&S	EZH3-Z5	100253	2024-07-12	2025-07-11
Impuls-Begrenzer	R&S	ESH3-Z2	100281	2024-07-12	2025-07-11
Loop Antenna	EMCO	6507	00078608	2022-07-18	2025-07-17
Spectrum	R&S	FSIQ26	100292	2024-07-12	2025-07-11
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	2025-07-17
Power meter	Anritsu	ML2487A	6K00003613	2024-07-12	2025-07-11
Power sensor	Anritsu	MA2491A	32263	2024-07-12	2025-07-11
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	2024-07-12	2025-07-11
EMI Test Receiver	RS	ESCS 30	834115/006	2024-07-12	2025-07-11
Spectrum	HP/Agilent	E4407B	MY50441392	2024-07-12	2025-07-11
Spectrum	RS	FSP	1164.4391.38	2024-07-12	2025-07-11
RF Cable	Zhengdi	ZT26-NJ-NJ-8M/FA		2024-07-12	2025-07-11
RF Cable	Zhengdi	7m		2024-07-12	2025-07-11
Pre-Amplifier	Schwarebeck	BBV9743	#218	2024-07-12	2025-07-11
Pre-Amplifier	HP/Agilent	8449B	3008A00160	2024-07-12	2025-07-11
LISN	SCHAFFNER	NNB42	00012	2024-07-12	2025-07-11
ESPI Test Receiver	R&S	ESPI 3	100379	2024-07-12	2025-07-11
LISN	R&S	EZH3-Z5	100294	2024-07-12	2025-07-11

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	n tested accordin	g to the following	specifications:
		A	, 50000

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

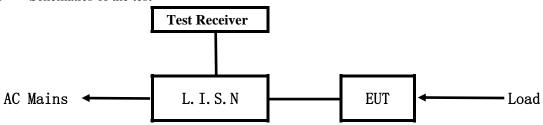
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5.0 Power Line Conducted Emission Test

5.1 Schematics of the test

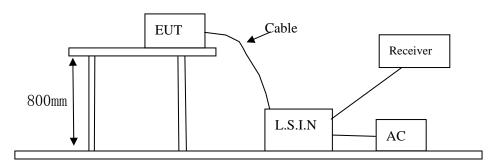


EUT: Equipment Under Test

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 speaker	Shenzhen Glory Star Technology Industrial Co.,	Electro Vibe Duo	2BB37-ELLC-VD1
Wheless speaker	Ltd	Electro vice Buo	2BB37 EEEC VB1

B. Internal Device

Device	Manufacturer	Model	FCC ID/DOC
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N/A

C. Peripherals

Device	Manufacturer	Model	Rating
Power Supply	Xiaomi	CDQ02ZM	Input: 100-240V~, 50/60Hz, 1.2A;
			Output: DC5V, 3A; DC9V, 3A; DC12V,
			3A; DC15V, 3A; DC20V, 2.25A;

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)

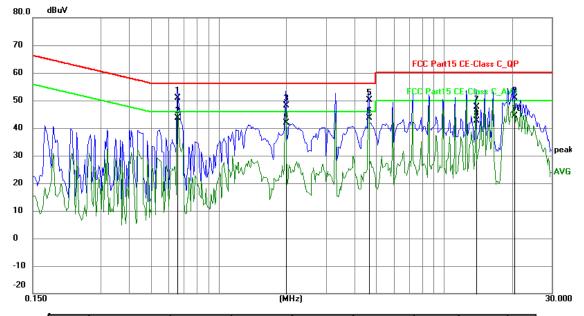
EUT Operating Environment

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

EUT set Condition: Charging and 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	0.6570	40.31	10.45	50.76	56.00	-5.24	QP	Р
2	0.6570	33.21	10.45	43.66	46.00	-2.34	AVG	Р
3	1.9869	36.88	11.31	48.19	56.00	-7.81	QP	Р
4	1.9869	30.46	11.31	41.77	46.00	-4.23	AVG	Р
5	4.6224	37.82	12.20	50.02	56.00	-5.98	QP	Р
6	4.6224	31.54	12.20	43.74	46.00	-2.26	AVG	Р
7	13.8693	32.74	14.83	47.57	60.00	-12.43	QP	Р
8	13.8693	27.80	14.83	42.63	50.00	-7.37	AVG	Р
9	20.4720	34.47	16.34	50.81	60.00	-9.19	QP	Р
10	20.4720	28.04	16.34	44.38	50.00	-5.62	AVG	Ъ

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

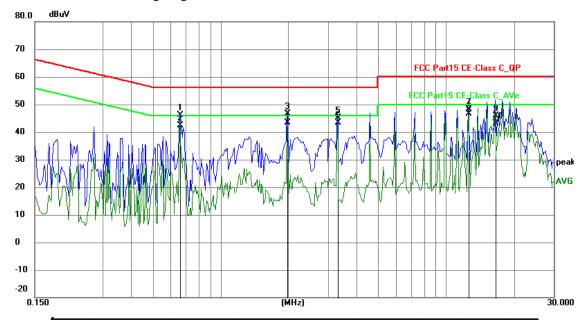
EUT Operating Environment

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

EUT set Condition: Charging and 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	0.6609	35.65	10.45	46.10	56.00	-9.90	QP	Р
2	0.6609	31.84	10.45	42.29	46.00	-3.71	AVG	Р
3	1.9791	35.23	11.30	46.53	56.00	-9.47	QP	Р
4	1.9791	32.03	11.30	43.33	46.00	-2.67	AVG	Р
5	3.3003	33.46	11.78	45.24	56.00	-10.76	QP	Р
6	3.3003	31.53	11.78	43.31	46.00	-2.69	AVG	Р
7	12.5394	33.55	14.49	48.04	60.00	-11.96	QP	Р
8	12.5394	32.24	14.49	46.73	50.00	-3.27	AVG	Р
9	16.5018	30.30	15.52	45.82	60.00	-14.18	QP	Р
10	16.5018	27.52	15.52	43.04	50.00	-6.96	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:

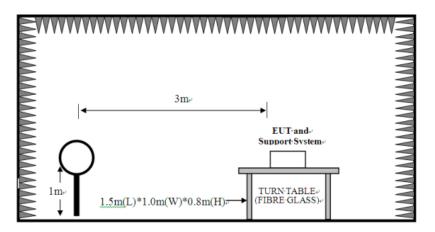
Frequency	Detector	RBW	VBW	Value
9KHz-150KHz	Quasi-peak	200Hz	600Hz	Quasi-peak
150KHz-30MHz	Quasi-peak	9KHz	30KHz	Quasi-peak
30MHz-1GHz	Quasi-peak	120KHz	300KHz	Quasi-peak
Above 1GHz	Peak	1MHz	3MHz	Peak
ADOVE IGHZ	Peak	1MHz	10Hz	Average

(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

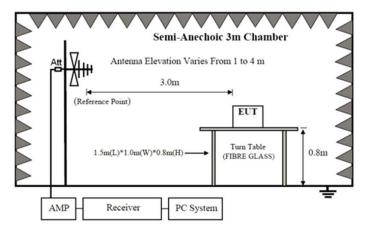


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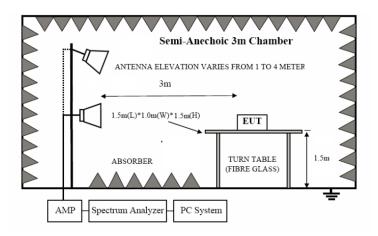
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For radiated emissions from 30MHz to1GHz



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)	74 (Peak)
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Note:

- 1. RF Field Strength $(dBuV) = 20 \log RF \text{ Voltage } (uV)$
- 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 μ 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.
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 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.
- 6. Battery was fully charged during test

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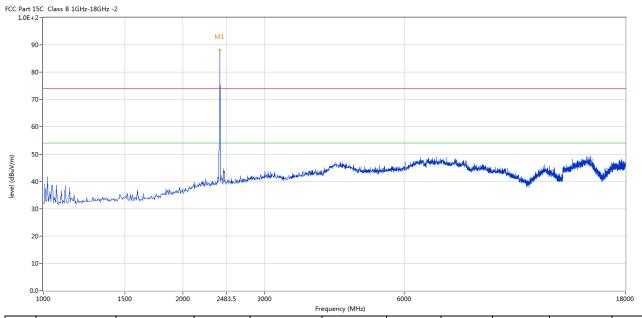


6.5 Test result

A Fundamental & Harmonics Radiated Emission Data

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

Horizontal



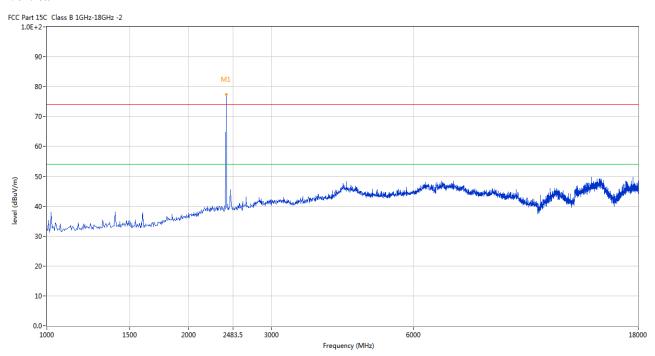
	No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit	Detector	Table (o)	Height (cm)	ANT	Verdict
-	1	2402	88.05	-3.57	114.0	-25.95	Peak	245.00	100	Horizontal	Pass

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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	77.48	-3.57	114.0	-36.52	Peak	207.00	100	Vertical	Pass

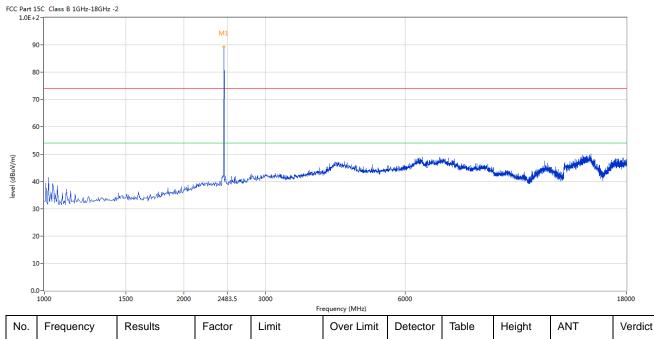
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Please refer to the following test plots for details: Middle Channel-2441MHz

Horizontal



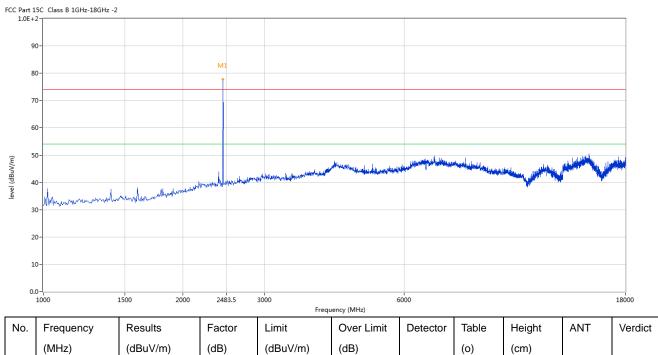
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2441	89.29	-3.57	114.0	-24.71	Peak	154.00	100	Horizontal	Pass

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Vertical



١	No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
		(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1		2441	77.80	-3.57	114.0	-36.20	Peak	27.00	100	Vertical	Pass

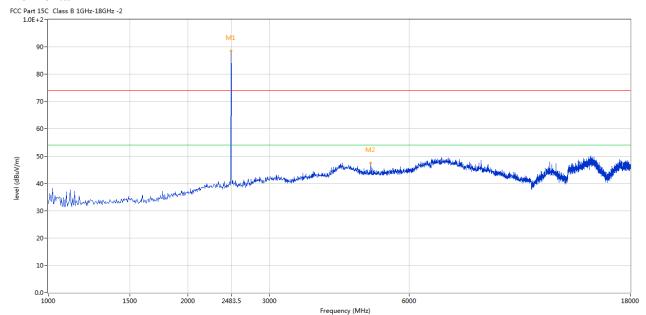
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Please refer to the following test plots for details: High Channel-2480MHz

Horizontal



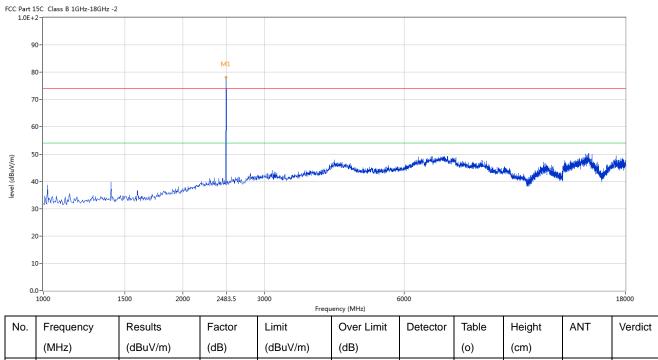
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2480	88.45	-3.57	114.0	-25.55	Peak	231.00	100	Horizontal	Pass
2	4960.010	47.41	3.36	74.0	-26.59	Peak	247.00	100	Horizontal	Pass

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Vertical



2480 78.10 -3.57 114.0 -35.90 19.00 100 Vertical Pass Peak

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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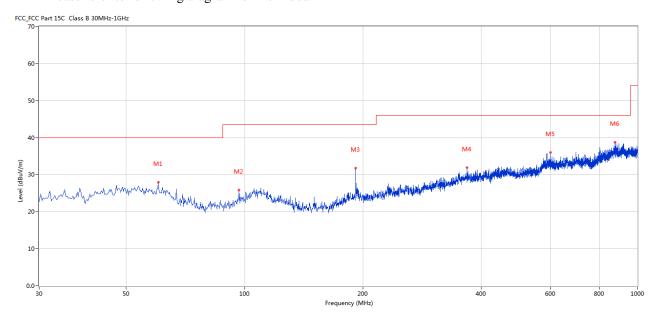


B. General Radiated Emission Data Radiated Emission In Horizontal (30MHz----1000MHz)

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	60.305	27.99	-5.47	40.0	12.01	Peak	94.00	100	Horizontal	Pass
2	96.671	25.86	-7.34	43.5	17.64	Peak	306.00	100	Horizontal	Pass
3	191.950	31.72	-7.38	43.5	11.78	Peak	276.00	100	Horizontal	Pass
4	368.203	31.96	-1.70	46.0	14.04	Peak	206.00	100	Horizontal	Pass
5	599.975	36.01	1.61	46.0	9.99	Peak	293.00	100	Horizontal	Pass
6	875.871	38.72	4.99	46.0	7.28	Peak	51.00	100	Horizontal	Pass

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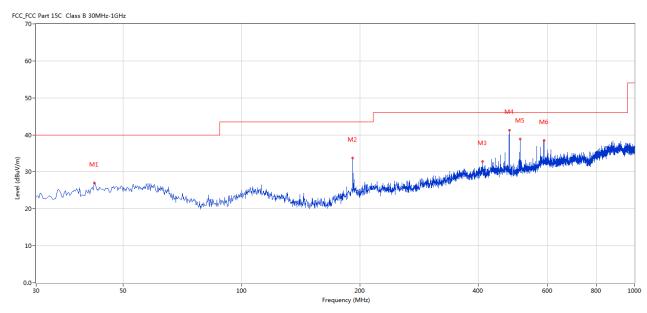


Radiated Emission In Vertical (30MHz----1000MHz)

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	42.122	27.00	-5.39	40.0	13.00	Peak	336.00	100	Vertical	Pass
2	191.950	33.76	-7.38	43.5	9.74	Peak	360.00	100	Vertical	Pass
3	410.872	32.81	-1.20	46.0	13.19	Peak	140.00	100	Vertical	Pass
4	479.968	41.28	-0.95	46.0	4.72	Peak	75.00	100	Vertical	Pass
5	511.970	38.92	-0.75	46.0	7.08	Peak	160.00	100	Vertical	Pass
6	588.095	38.48	1.55	46.0	7.52	Peak	331.00	100	Vertical	Pass

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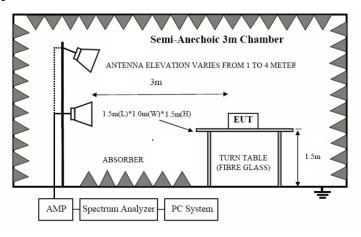


7. Band Edge

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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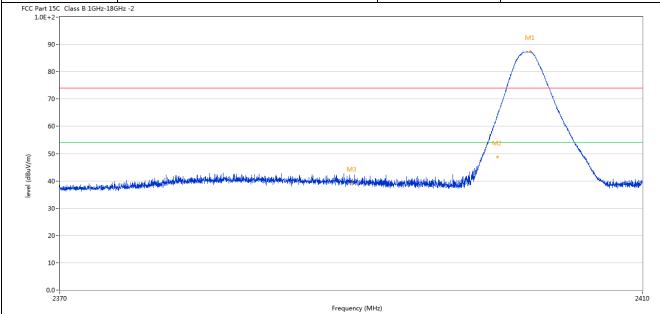
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7.6 Test Result

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



N	١o.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
		(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1		2402.262	87.31	-3.57	74.0	13.31	Peak	238.00	100	Horizontal	N/A
2	2	2400.000	64.21	-3.57	74.0	-9.79	Peak	231.00	100	Horizontal	Pass
2	**	2400.000	48.77	-3.57	54.0	-5.23	AV	231.00	100	Horizontal	Pass
3	}	2390.000	39.23	-3.53	74.0	-34.77	Peak	189.50	100	Horizontal	Pass

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J	Product:		Wireless speaker D				or		Vertical	
Mode Temperature		I	Keeping Transmitting			Test Vol	tage	DC3.7V		
		24 deg. C,				Humidity		56% RH		
Te	est Result:									
CC Part 1.0E	15C Class B 1GHz-18GH +2-	tz -2								
	90-									
	80-							M1		
	70-							\bigwedge		
	60-							/ \		
_	50-				M4				\ 	
=							- I V		\	
/Angp) leael	30-	araska sedari artari barilda, arkilda desila,	dharatharad gairelaid	Ahnamadarikin birindiskon da jib			M2		Andrew Marie	ita di
level (dbuv/m)		erapendade des la deservable de la c	illian di an angan di an	the second residual design of the second second second			M2		No. Abs	
	30- 20- 10- 0.0- 2370				Frequency (MHz)	Detector	Table	Lloight .		2410
	20-	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)		Detector	Table (o)	Height (cm)	ANT	2410
No.	20- 10- 0.0- 2370 Frequency	Results	Factor	Limit	Frequency (MHz) Over Limit	Detector Peak				2410
No.	20- 10- 0.0- 2370 Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Frequency (MHz) Over Limit (dB)		(o)	(cm)	ANT	2410 Verdic
No.	20- 10- 2370 Frequency (MHz) 2401.772	Results (dBuV/m) 77.23	Factor (dB) -3.57	Limit (dBuV/m) 74.0	Frequency (MHz) Over Limit (dB) 3.23	Peak	(o) 206.00	(cm)	ANT Vertical	Verdic
	20- 10- 0.0- 2370 Frequency (MHz) 2401.772 2400.000	Results (dBuV/m) 77.23 53.88	Factor (dB) -3.57	Limit (dBuV/m) 74.0	Frequency (MHz) Over Limit (dB) 3.23 -20.12	Peak Peak	(o) 206.00 195.00	(cm) 100 100	ANT Vertical Vertical	Verdice N/A Pass

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]	Product:			P	olarity		Horizont	al		
	Mode		Keeping 7	Fransmitting		Test	t Voltage		DC3.7V	I
Te	mperature		Humidity 56%		56% RF	ł				
Te	Test Result: Pass									
C Part : 1.0E+	15C Class B 1GHz-18GH	z -2						•		
	30-		M1	1						
7	70-		-							
6										
			<i>[</i>	\						
	50-	/	/							
		traffeterses samples and table to the factor of the samples and the samples are the samples and the samples are the samples and the samples are the samples ar	/	M2	A STATE OF THE PARTY OF THE PAR	ipilandhichteinidesiland	ing airl its on the land	and the state of the land of t	oplywariantha wood and a state of the state	and the state of t
5	50-	المعاديد والمعادد وال	/	M2	And the second second	işşilendi kirilikinin bilişsilen adıl	agg and the architelpolately	inderen für sambreitet freigt hertf	والمرابعة والمفادورة والمدارات والموادية والموادية والموادية والموادية والموادية والموادية والموادية والموادية	of the second second
3	10- 11-1	t-Adams od in sold his bridge	/	M2	The second section	ig eile an k hai aiteen aktiopsi oo neh	ang ang ika ang ikaliyah aling	and the state of t	gaffed bereit for the first facility and the	
3	50-	t-Ankrussonipis makabilih birk	/	M2	The second second second	ing the state of t	ng and the artifety to the	and the second of the second o	phylocock of the phylocock of the state of t	
3	50- 10- 10- 20-	t-Marine, so di eta sono di		M2	The second secon	igiliyahka disendek yil sund	and the antibular of the last	uning glocarding (shall be glocal)	g digital being be _e n of the color by all his sample	and the second second
3	10 - Mark Mark Mark Mark Mark Mark Mark Mark	transcending and the little debut of		M2	The second secon	inited has been deposed to	ngi and the artifet but the		gaffedd hawnigh an dei fan staf y faillach acunge	2500
3 3 1 0 0	50	Results	Factor		.5	Detector	Table	Height	ANT	2500 Verdie
3 3 1 0 0	00 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -		Factor (dB)	2483	.5 Frequency (MHz)					
3 2 1 0	10- 10- 10- 10- 10- 2470 Frequency	Results		2483	.5 Frequency (MHz)		Table	Height		
3	Frequency (MHz)	Results (dBuV/m)	(dB)	Limit (dBuV/m)	.5 Frequency (MHz) Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdi

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]	Product: Wireless speaker					Detec	tor		Vertical	
	Mode		Test Vo	ltage		DC3.7V				
Te	Temperature 24 deg. C, Test Result: Pass			g. C,		Humidity		56% RH		
Te				SS						
	rt 15C Class B 1GHz-18G E+2-	Hz -2			•			•		
	90-			_						
	80-		- N	M1						
	70-			1						
				1						
	60			1.						
	60-		/							
Ĩ.	50-		+	M2						
(m/angn) iaa	50-			M2	The state of the s		de dipoler conspected de la	in the state of the		(Palo logical) distribut
(m/Angn) lakel	50-	المعاولة المتراضعة والمعاولة المتعاولة المتعاولة المتعاولة المتعاولة المتعاولة المتعاولة المتعاولة المتعاولة ا		M2	Market should be	and and a stable of the latest	i diplama in fallah	ikyday, ladd mada jh	a samuel a sala sala sala sala sala sala sala	(pd. maa), ku da
level (dbuv/m)	50- 40-	للبري المراجعة		M2	the developed and the state of	and a subsect to the	hadipaka maya deshibi	ikydespilstabbunddajh	and the second second	ypyk manifektolder
level (dbuv/m)	50- 40-	المدعود المعادل		M2	· Committee and the state of th	nder here de albert al deliber	the third and the third th	irishan karbirna arib	ose no prospede é planta de la constante de la	y pode training black day
(m/\ngn (dgn\/m)	50- 40-	પ્રેપ્તરો કહે કહે કહે કહે છે. હ કહે છે કહે કહે છે છે કહે છે		M2	Amademine and secretary distributions	nda kanka dishin	المدار والمدار	niyda, diabbonada, b	rad widowa nii kalikulusi	والماملية والمراجعة
	30- 20-	المدعولة المراجعة ال		M2		ntrafranderstein af siek he	المعالم المعالم والمعالم والم	historia de la compete de la c	and the state of t	
	30- 20-	den elegate a film a constructive a constructive principal and a		M2		nderfest dishin	المدال المالية بسيرون أفرأ المالية	historia de la compansa de la compa		ph han live de
	30- 20-	Results	Factor	2483	5	Detector	Table	Height	ANT	2500
	50 - 40 - 30 - 20 - 10 - 2470		Factor (dB)		.5 Frequency (MHz)					
	50- 40- 30- 20- 10- 2470	Results		Limit	.5 Frequency (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.

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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 with gain 2.39dBi maximum. 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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Test Result

Product: Wireless speaker				Test M	Iode:	Ke	ep transm	itting	
Mode	Mode Keeping Transmitting				Test Voltage		DC3.7V		7
Temperature		24 deg.	. С,		Hum	idity		56% RF	I
Test Result:		Pass	;		Dete	ctor		PK	
OdB Bandwidth		876kF	łz			-			
Ref 10 di	Bm	*Att 2	0 dB	*RBW 30 *VBW 10 SWT 5	00 kHz		-6 2.401868	.77 dBm	
10						ndB [T		.00 dB	
						BW 876	.000000	000 kHz	A
PK			1				1	.75 dBm	
-10			$+$ \wedge	\wedge_{\wedge}		Temp 2	.401586	l II	
			1,7			_	-26 2.402462	.54 dBm	
-20		m1/	/'		$\sqrt{T2}$.402402	JUU GHZ	
		TJ.			V				
-30									
-40	/	<u> </u>				7			
						7	m		3DB
50	\(\frac{1}{2}\)					4	\\		
-60	V					\	4	.	
ruivi 9									
-70									
80									
-90									
Center 2.	402 GHz	1	300	kHz/		<u> </u>	Spa	n 3 MHz	

Date: 17.FEB.2025 10:21:04

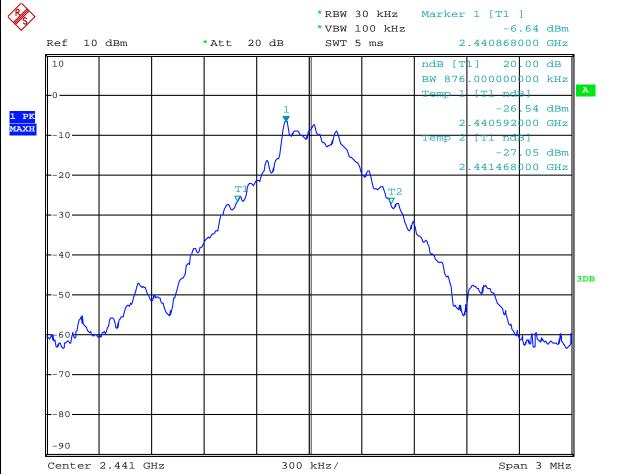
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GFSK								
Product:	Wireless speaker	Test Mode:	Keep transmitting					
Mode	Keeping Transmitting	Test Voltage	DC3.7V					
Temperature	24 deg. C,	Humidity	56% RH					
Test Result:	Pass	Detector	PK					
20dB Bandwidth	876kHz							
\wedge								



Date: 17.FEB.2025 10:22:08

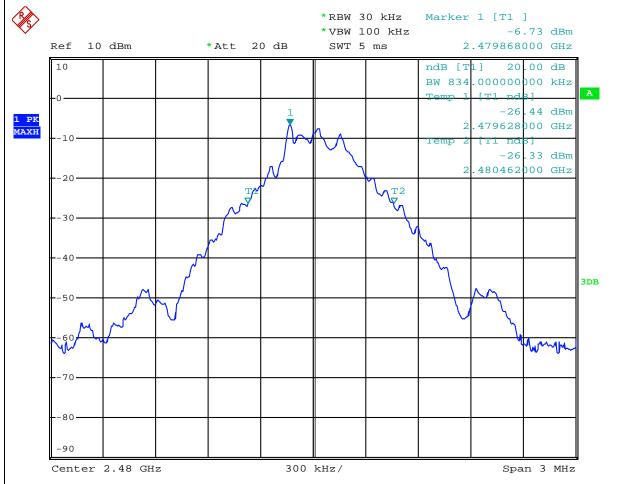
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GFSK			
Product:	Wireless speaker	Test Mode:	Keep transmitting
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK
20dB Bandwidth	834kHz		



Date: 17.FEB.2025 10:25:42

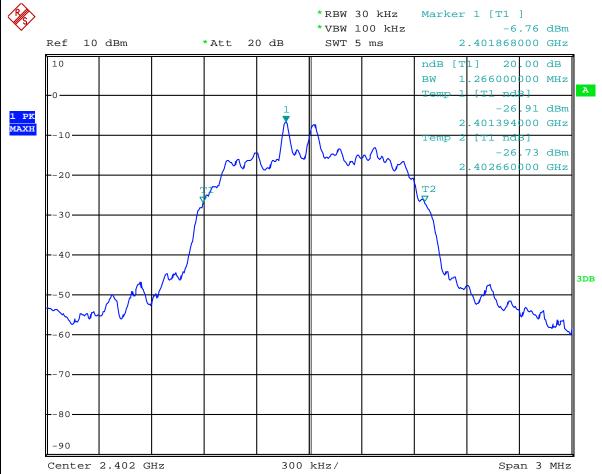
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Л/4DQPSK			
Product:	Wireless speaker	Test Mode:	Keep transmitting
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK
20dB Bandwidth	1.266MHz		



Date: 17.FEB.2025 10:30:04

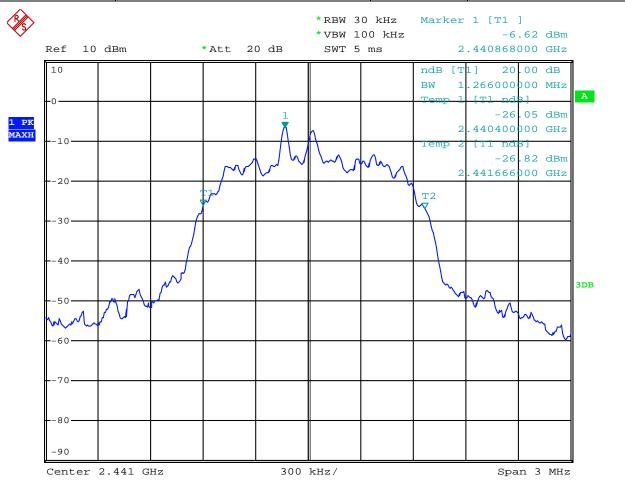
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Л/4DQPSK			
Product:	Wireless speaker	Test Mode:	Keep transmitting
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK
20dB Bandwidth	1.266MHz		



Date: 17.FEB.2025 10:27:36

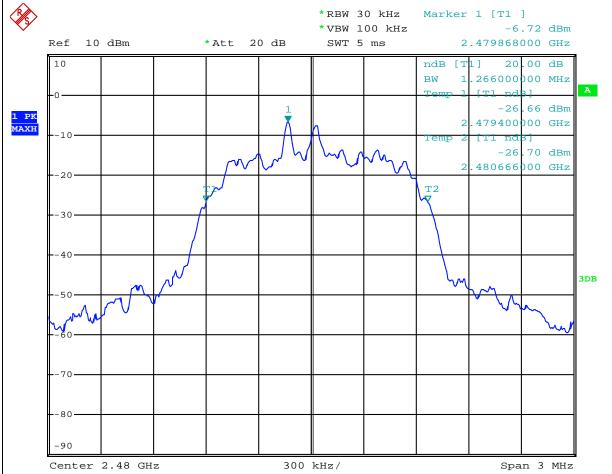
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Л/4DQPSK			
Product:	Wireless speaker	Test Mode:	Keep transmitting
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK
20dB Bandwidth	1.266MHz		



Date: 17.FEB.2025 10:26:55

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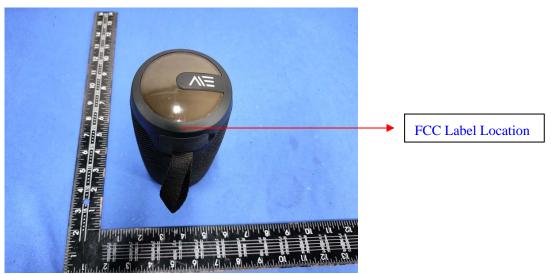


10.0 FCC ID Label

FCC ID: 2BB37-ELLC-VD1

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

Report No.: TW2502018E

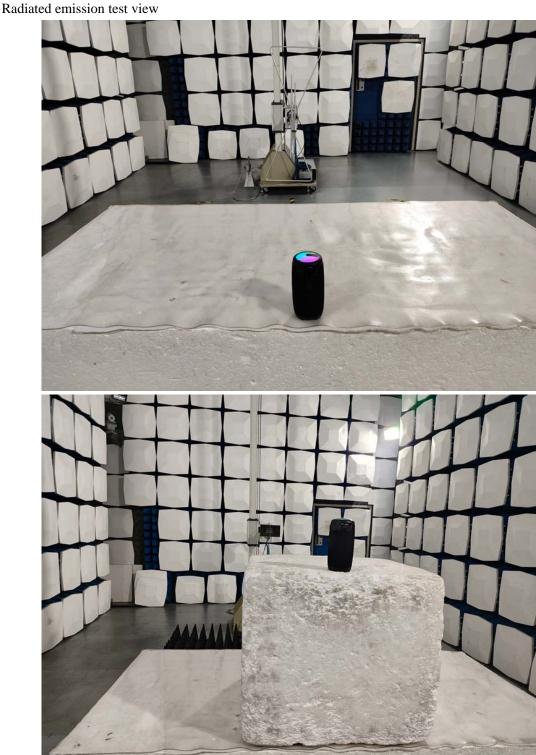


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11.2 Photographs - EUT

Outside View



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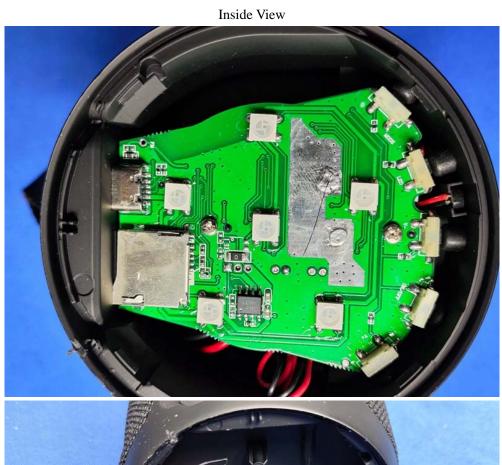
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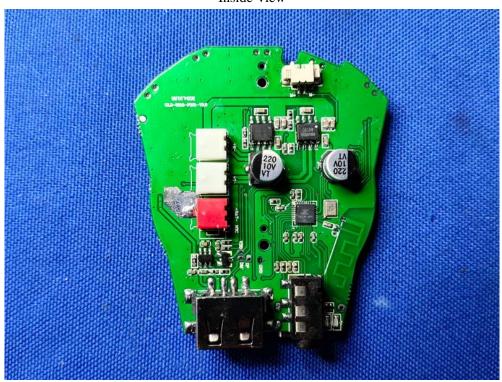
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Inside View





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Inside View



-- End of the report--