

Applicant: RADIOSHACK WORLDWIDE CORP.

Product: SPEAKER BOX

Model No.: 4001942, MAX-210B

Trademark: Radioshack

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

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

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Date: 2024-03-21



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



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....

In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.

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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: RADIOSHACK WORLDWIDE CORP.

Address: Millennium Tower, 18th floor Paseo General Escalon Number 3675 Col. Escalon, San

Salvador, El Salvador

1.3 Description of EUT

Product: SPEAKER BOX

Manufacturer: MAXTRONIX CO., LTD.

Address: NO.12, HEXIANG ROAD, WUJIN ECONOMIC DEVELOPMENT ZONE,

CHANGZHOU, JIANGSU, CHINA

Trademark: Radioshack
Model Number: 4001942
Additional Model Name MAX-210B

Rating: Input: 100-240V~, 50/60Hz, 650m A
Battery: DC12V, 5.0AH Lead-Acid Battery

Serial No.: MS400194220240328115B

Hardware Version: 4001942-V1.1 Software Version: 4001942-V1.1 Operation Frequency: 2402-2480MHz

Modulation Type: GFSK, 月/4DQPSK, 8DPSK

Number of Channels: 79 Channel Separation: 1MHz

Antenna Designation PCB antenna with gain 1.7dBi maximum (Get from the antenna specification)

1.4 Submitted Sample: 2 Samples

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1.5 Test Duration

2024-03-07 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	1	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

mi mimi i	4 4 1	1 • 4	41 6 11	•	• 6• 4•
The EUT has b	been testea	according to	o tne tou	owing spe	ecifications:

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

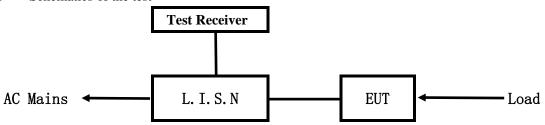
No modification by SHENZHEN TIMEWAY TESTING LABORATORIES

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5.0 Power Line Conducted Emission Test

5.1 Schematics of the test

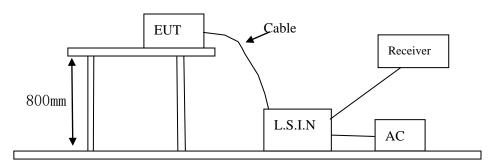


EUT: Equipment Under Test

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

Dev	Device Manufacturer		Model	FCC ID	
SPEAK	ER BOX	MAXTRONIX CO., LTD.	4001942, MAX-210B	2BDUR-4001942	

B. Internal Device

Device	Manufacturer	Model	FCC ID/DOC
N/A			

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C. Peripherals

Device	Manufacturer	Model	Rating
N/A			

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 (d	IB μV)
(MHz)	Quasi-peak Level	Aver ge 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:

Date: 2024-03-21



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

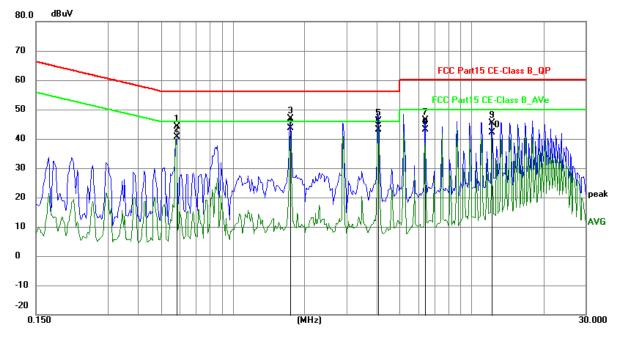
EUT Operating Environment

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

EUT set Condition: 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	0.5829	34.43	9.77	44.20	56.00	-11.80	QP	Р
2	0.5829	30.83	9.77	40.60	46.00	-5.40	AVG	Р
3	1.7412	37.13	9.80	46.93	56.00	-9.07	QP	Р
4	1.7412	33.83	9.80	43.63	46.00	-2.37	AVG	Р
5	4.0608	36.13	9.89	46.02	56.00	-9.98	QP	Р
6	4.0608	33.34	9.89	43.23	46.00	-2.77	AVG	Р
7	6.3773	36.52	9.98	46.50	60.00	-13.50	QP	Р
8	6.3773	33.05	9.98	43.03	50.00	-6.97	AVG	Р
9	12.1767	35.17	10.26	45.43	60.00	-14.57	QP	Р
10	12.1767	31.87	10.26	42.13	50.00	-7.87	AVG	Р

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

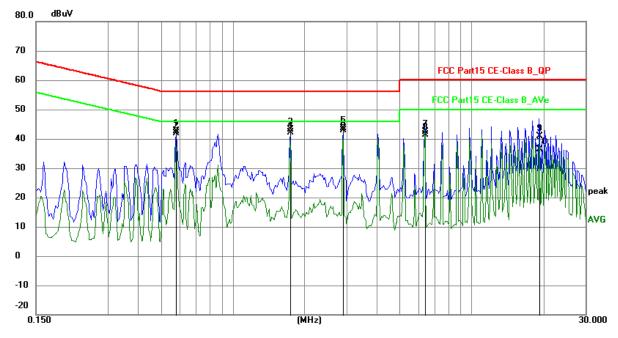
EUT Operating Environment

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

EUT set Condition: 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	0.5790	32.87	9.77	42.64	56.00	-13.36	QP	Р
2	0.5790	32.04	9.77	41.81	46.00	-4.19	AVG	Р
3	1.7412	33.39	9.80	43.19	56.00	-12.81	QP	Р
4	1.7412	32.21	9.80	42.01	46.00	-3.99	AVG	Р
5	2.8995	33.82	9.84	43.66	56.00	-12.34	QP	Р
6	2.8995	32.94	9.84	42.78	46.00	-3.22	AVG	Р
7	6.3773	32.52	9.98	42.50	60.00	-17.50	Q Q	Р
8	6.3773	31.34	9.98	41.32	50.00	-8.68	AVG	Р
9	19.1342	30.35	10.63	40.98	60.00	-19.02	Q Q	Р
10	19.1342	25.85	10.63	36.48	50.00	-13.52	AVG	Р

Date: 2024-03-21



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:

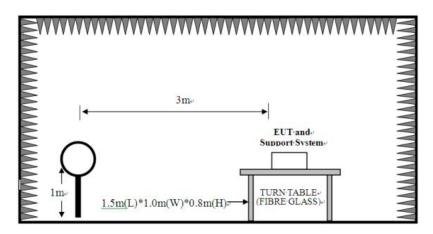
Frequency	Detector	RBW	VBW	Value
9KHz-150KHz	Quasi-peak	200Hz	600Hz	Quasi-peak
150KHz-30MHz	Quasi-peak	9KHz	30KHz	Quasi-peak
30MHz-1GHz	Quasi-peak	120KHz	300KHz	Quasi-peak
Above 1GHz	Peak	1MHz	3MHz	Peak
ADOVE IGHZ	Peak	1MHz	10Hz	Average

(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

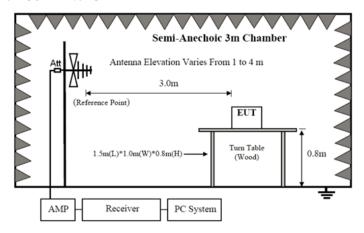
For radiated emissions from 9kHz to 30MHz



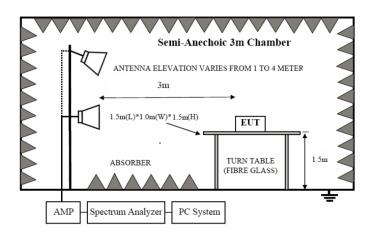
Date: 2024-03-21



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 S	trength of Harmonics (3m)
(MHz)	mV/m	dBuV/m	uV/m	dBuV/m

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2400 2402 7	~~	0.4.4.4	444 (75 4)		- 4 / 4	= 4 (D 1)
2400-2483.5	50	94 (Average)	114 (Peak)	500	54 (Average)	74 (Peak)
2100 2103.5	50) i (riverage)	III (I can)	500	3 (Tiverage)	/ I (I call)

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	40.0
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.

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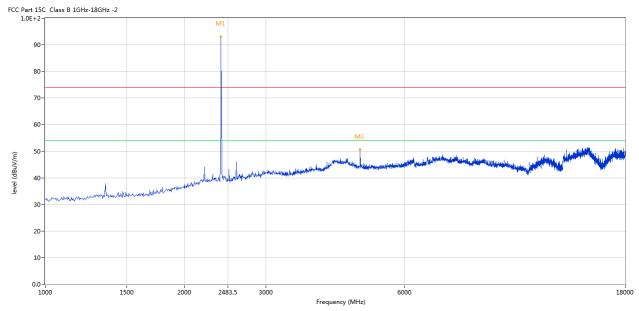


6.5 Test result

A Fundamental & Harmonics Radiated Emission Data

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

Horizontal



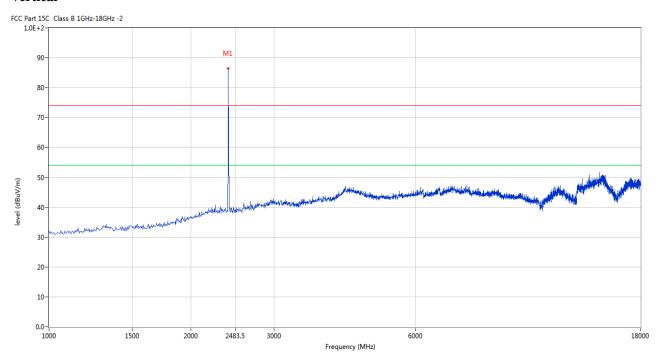
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2402	93.07	-3.57	114.0	-20.93	Peak	111.00	100	Horizontal	Pass
2	4802.799	50.75	3.12	74.0	-23.25	Peak	266.00	100	Horizontal	Pass

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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	86.50	-3.57	114.0	-27.50	Peak	184.00	100	Vertical	Pass

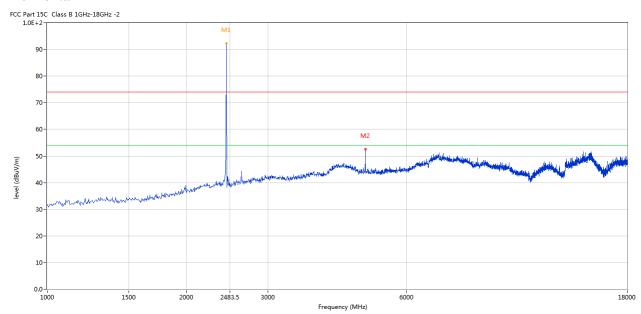
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Please refer to the following test plots for details: Middle Channel-2440MHz

Horizontal



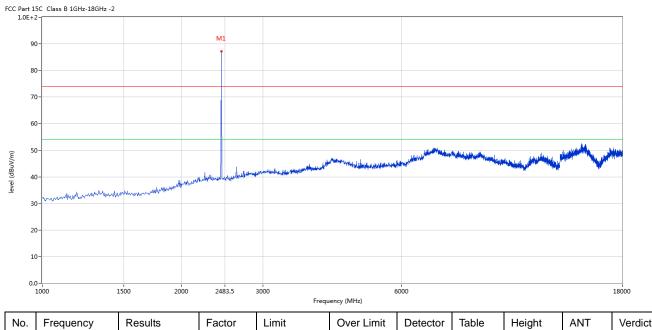
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2441	92.35	-3.57	114.0	-21.65	Peak	278.00	100	Horizontal	Pass
2	4883.529	52.58	3.20	74.0	-21.42	Peak	288.00	100	Horizontal	Pass

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Vertical



ı	No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
		(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
	1	2441	87.15	-3.57	114.0	-26.85	Peak	169.00	100	Vertical	Pass

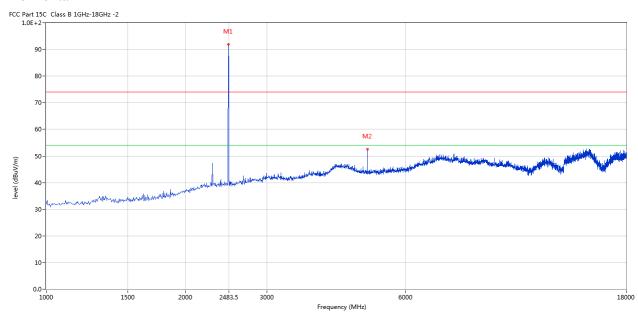
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Please refer to the following test plots for details: High Channel-2480MHz

Horizontal



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2480	91.88	-3.57	114.0	-22.12	Peak	269.00	100	Horizontal	Pass
2	4960.010	52.53	3.36	74.0	-21.47	Peak	264.00	100	Horizontal	Pass

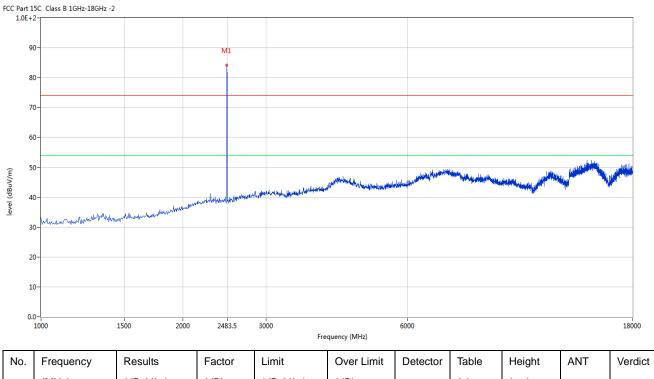
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Vertical



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2480	84.10	-3.57	114.0	-29.99	Peak	360.00	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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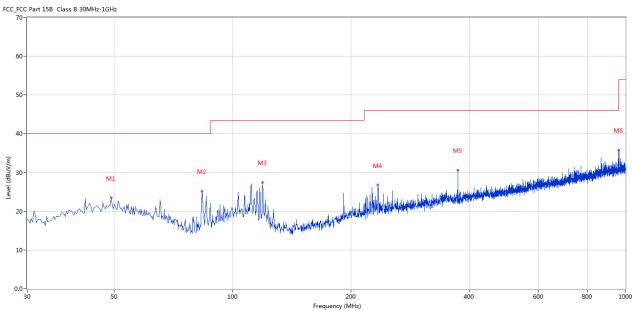


B. General Radiated Emission Data Radiated Emission In Horizontal (30MHz----1000MHz)

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	49.153	23.49	-11.24	40.0	16.51	Peak	355.00	100	Horizontal	Pass
2	83.579	25.14	-16.83	40.0	14.86	Peak	270.00	100	Horizontal	Pass
3	119.218	27.47	-15.13	43.5	16.03	Peak	257.00	100	Horizontal	Pass
4	234.376	26.74	-12.53	46.0	19.26	Peak	111.00	100	Horizontal	Pass
5	374.749	30.60	-9.46	46.0	15.40	Peak	333.00	100	Horizontal	Pass
6	960.482	35.81	-1.62	54.0	18.19	Peak	329.00	100	Horizontal	Pass

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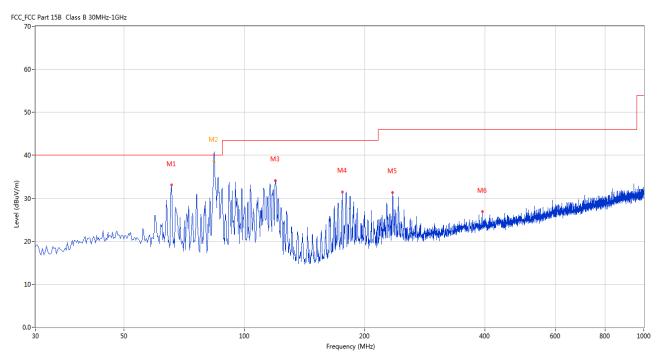


Radiated Emission In Vertical (30MHz----1000MHz)

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	65.639	33.09	-13.79	40.0	6.91	Peak	36.00	100	Vertical	Pass
2	83.856	41.13	-16.72	40.0	-0.57	Peak	160.00	138	Vertical	N/A
2*	83.856	38.67	-16.72	40.0	1.33	QP	160.00	138	Vertical	Pass
3	119.460	34.11	-15.19	43.5	9.39	Peak	334.00	100	Vertical	Pass
4	175.706	31.47	-15.59	43.5	12.03	Peak	178.00	100	Vertical	Pass
5	235.104	31.34	-12.52	46.0	14.66	Peak	187.00	100	Vertical	Pass
6	394.386	26.89	-8.86	46.0	19.11	Peak	242.00	100	Vertical	Pass

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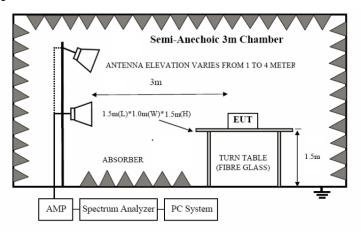


7. Band Edge

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

J	Product:		SPEAKE	R BOX		Polar	ity		Horizontal	
	Mode	k	Leeping Tra	ansmitting		Test Vol	Itage		DC12V	
Те	mperature		24 deg	g. C,		Humic	lity		56% RH	
Τe	est Result:		Pas	SS			-			
	rt 15C Class B 1GHz-18GH	lz -2			I			I		
level (dBuV/m)	90 - 80 - 70 - 60 - 50 - 40 - 40 - 40 - 40 - 40 - 40 - 4						мз	4M5		s nath in
leve	30-	The state of the s	etaragitik magapi Princi Marabik		and the second s	atharing politic action become and	ation in the second	(MAN)		
leve	20-		etared behing up to the second second		Frequency (MHz)	ath Miller and Antiques of the State of the	olichile (v. a. v. and All)	NAME OF THE PROPERTY OF THE PR		2410
No.	20-	Results	Factor	Limit		Detector	Table	Height	ANT	2410 Verdid
	30- 20- 10- 0.0- 2350				Frequency (MHz)			Height (cm)	ANT	ı
No.	30- 20- 10- 0.0- 2350	Results	Factor	Limit	Frequency (MHz) Over Limit		Table	_	ANT Horizontal	ı
No.	20- 10- 0.0- 2350 Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Frequency (MHz) Over Limit (dB)	Detector	Table (o)	(cm)		Verdi
No. 1	20- 10- 2350 Frequency (MHz) 2401.812	Results (dBuV/m) 92.68	Factor (dB)	Limit (dBuV/m) 74.0	Frequency (MHz) Over Limit (dB) 18.68	Detector Peak	Table (o) 264.00	(cm)	Horizontal	Verdi
No.	20- 10- 2350 Frequency (MHz) 2401.812 2400.000	Results (dBuV/m) 92.68 63.59	Factor (dB) -3.57	Limit (dBuV/m) 74.0 74.0	Frequency (MHz) Over Limit (dB) 18.68 -10.41	Detector Peak Peak	Table (o) 264.00 101.00	(cm) 100 100	Horizontal Horizontal	Verdid N/A Pass
	20- 10- 2350 Frequency (MHz) 2401.812 2400.000 2400.000	Results (dBuV/m) 92.68 63.59 49.65	Factor (dB) -3.57 -3.57	Limit (dBuV/m) 74.0 74.0 54.0	Frequency (MHz) Over Limit (dB) 18.68 -10.41 -4.35	Detector Peak Peak AV	Table (o) 264.00 101.00 101.00	(cm) 100 100	Horizontal Horizontal Horizontal	Verdie N/A Pass Pass

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P	Product:		SPEAKE	R BOX		Detect	or		Vertical	
	Mode	K	Keeping Tra	ansmitting		Test Vol	tage		DC12V	
Ter	mperature		24 deg	g. C,		Humid	ity	:	56% RH	
Tes	st Result:		Pas	SS						
Part 15 1.0E+2	5C Class B 1GHz-18GHz	-2								
90	0-								M1	
									\wedge	
80	0-									
70	0-									
60	0-								$\overline{}$	
									$\overline{}$	
50	0-							M2	1	
50						M:		M2 •	1	V., w.l.
40	D-	thought his thirt and an active or the complete or	ertalisanyet egen is banan et estytypa	المراجعة والمراجعة والمراج	المراجعة والمتعادية وا			M2 •	1	
50 40 30	D-	thought which the advanced option to any later	erlaikingeregen ja kannan bedrift pa	أسيد ومناهوة بأن يتأولوا المردود الأراب والمالية والمرادود والمالية والمردود والمردود والمردود والمردود والمردود	ting the sould represent the second to the s			M2 •	1	
40		though also the advantage to a training the	estlalidangskinjin.ikia.nandelskippa	ing arrangely sidely incenditions addition	derect has a fine stands than impedict in her			M2 •		
40 30	D	three is the tip of the continue in the tip of the continue is the tip of the continue in the tip of the continue is the continue is the tip of the continue is the con	esthalianysissius is income of stations.	ત્રિક કરાક કરાક કરો છે. જે કરો	dere dere der der der der der der der de			M2		
40 30 20 10		though the tip danged prime in any figure	erfağlanyaktıyını, ti dana merlediğiyen	and art language of the state o	and the state of t			M2 •		
40 30 20 10		elumidi ndiseksid melanculayaken melandaksi	erelministraturgelessen in dem med et dielestra		Frequency (MHz)			bullarisatiff o		2
40 30 20 10		Results	Factor		and the second s			Height	ANT	ı
40 30 20 10		managery and a second a second and a second			Frequency (MHz)	i gettagang pi dashiri da ing ping	Attalian jang dang dalah	Height (cm)	ANT	ı
40 30 20 10	Frequency	Results	Factor	Limit	Frequency (MHz) Over Limit	i gettagang pi dashiri da ing ping	Table		ANT Vertical	ı
40 30 20 10 0.0.0	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Frequency (MHz) Over Limit (dB)	Detector	Table	(cm)		Verdi N/A Pass
40 30 20 10 0.0.0	Frequency (MHz)	Results (dBuV/m) 86.42	Factor (dB) -3.57	Limit (dBuV/m) 74.0	Frequency (MHz) Over Limit (dB) 12.42	Detector Peak	Table (o) 112.00	(cm)	Vertical	Verdi

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]	Product:		SPEAK	KER BOX		P	olarity		Horizont	al
	Mode		Keeping	Fransmitting		Test	Voltage		DC12V	7
Te	mperature		24 0	leg. C,		Н	ımidity		56% RF	I
Te	est Result:		F	Pass						
2 Part 1 1.0E+	L5C Class B 1GHz-18GHz	z -2								
9	10-		ا ا	M1						
8	0-		-f							
7	70-			<i>y</i>						
6	60-			Mary Mary						
. 5	60-			M	Market Company					
. 5	0-	i din salah dan dalam da		. ₩.	2. And the control of	and the latest the second second				de la constantina
4		in and the large statement of the statem		₩.	The world have all the said	and in playable below the tree	isasa daki inkuning birili-aba	en distribution de la compansión de la comp	di Nambianaksia kufika adimatari na	A - A - A - A - A - A - A - A - A - A -
4	0-10-10-10-10-10-10-10-10-10-10-10-10-10	i din saidheile garaile dha ann an deann an dean		M	The same of the sa	and continued to be a summer to the continue of the continue o	energe Andrich school West, when	ecipalitation (populary), mile	di Naudo di Palasia (he Misso) (h	
3	0-	i pira di salaha jayara di dagan da		• • • • • • • • • • • • • • • • • • •	2- Constitution of the second	adaptable and approprie	ining Adhibutan Wali-aba	en distributivas de estados es	de Na _{rr} dospandense haj dies _{ver} dospansons d	
4 3 2	0-	a più anti di di di più di			The sall head think	ad qeleşileli ili kunlaşırı	rusiga Andrik dibindara Perefi, mban	re determination in produce of such	de Valenderistant des des des communicacións de la communicación de la communicación de la communicación de la	المرابع والما
4 3 2 1	0-	i pira di didukti para di danara di		M. 248.	The sall head think	adadhiridad a malacad	i sakga Andri ilifu diras Marija eta a	nchalus, i pud neg ad	de Nacado antida se la plata a materio de	2
4 3 2 1	0-	Results	Factor		3.5	Detector	Table	Height	ANT	2
4 3 2 1	0-		Factor (dB)	248:	3.5 Frequency (MHz)					
4 3 2 2 1 0.	0- 0- 0- 2470 Frequency	Results		248.	3.5 Frequency (MHz)		Table	Height		2:
. 4 3 2	o- 2470 Frequency (MHz)	Results (dBuV/m)	(dB)	Limit (dBuV/m)	3.5 Frequency (MHz) Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verd

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]	Product:		SPEAKE	ER BOX		Detec	tor		Vertical	
	Mode	F	Keeping Tr	ansmitting		Test Vo	ltage		DC12V	
Te	mperature		24 de	g. C,		Humio	lity		56% RH	
Te	est Result:		Pa	SS						
	rt 15C Class B 1GHz-18G	Hz -2								
	90-									
	80-		M1	and the same of th						
	70-									
	60-									
			F							
(FL)	50-		_	W2						
evel (dBuV/m)	50- 40-	and the state of t		V2	Mary Mary Mary Mary Mary Mary Mary Mary	k Mari në njëtë kë njekë ka je një kë një	où hi dip oletigeet had	وإحوروا فدعيه أحرام والمواليان	والعالمة والمقاربة والمثارة والمتارة والمتارة والمتارة والمتارة والمتارة والمتارة والمتارة والمتارة والمتارة و	Hadippedicity
level (dBuV/m)	40-	- manufacture of		M2	Mary Company of the C	ichteid of morthology, made in specific	a political and the process political	operation being being being being being	والطون والخروان المراجع المراجع والمراجع والمراجع والمراجع والمراجع والمراجع والمراجع والمراجع والمراجع والمراجع	Marage makes ded
level (dBuV/m)	40-	magnetic and the distance of the		W2	made assert story or wild	n tagi di nambidan pa an pada naprima	o fishindy who the appropring sta	et me et kom	ती नेहर कहीं के ती है में स्वाप है कि उसके हैं।	Westigen alle Marie
level (dBuV/m)	40-	and the state of t		M2	made week de gegen while	luksida merilda masa merilda masa merilda meri	ağ dirdi olatlı gerere ir at	ng mangahang, began tapah ang Lian.	all-dynastikk ellytundi den yanga	Westparado Ad
level (dBuV/m)	30 - 20 - 10 -	ne spirite and the state of the		M2	male weeks surprised	a kan da da kan da	eg filindir slating per insta	eg we galang, in parky of week fact,	ની સુંજના મેક તાલું મેના લોક સ્તાર્થ કરે છે. જો કરો હતા છે. જો કરો હતા છે. જો કરો હતા છે. જો કરો હતા છે. જો ક	Westing with the
level (dBuV/m)	40-	nogogogogogogogogogogogogogogogogogogog		2483.		i ligal di amerikan na anna di ngelon.	eş dindi olutluş peri in din	egonezakung, Ingelision di Aleksian	all-dynastika edy tamon i dan sekense	2500
O.	30 - 10 - 0.0	Results	Factor	2483.	5	Detector	Table	Height	Aldreadis-Applicate described	2500
	30 - 20 - 10 - 2470		Factor (dB)	1	5 Frequency (MHz)					2500
	30- 20- 10- 2470	Results		Limit	5 Frequency (MHz)		Table	Height		

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

2. 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 with gain 1.7dBi 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:	S	PEAKER BOX		Test Mod	le:	Ke	ep transmi	tting
Mode	Kee	ping Transmitting	7	Test Volta	ige		DC12V	
Temperature		24 deg. C,	4 deg. C,			56% RH		
Test Result:		Pass		Detecto	r		PK	
20dB Bandwidth		894kHz						
Ref 10 d	Bm ,	*Att 20 dB	*RBW 30 *VBW 10 *SWT 5	00 kHz ms	2 dB [T	1 [T1] -14020000	.28 dBm 000 GHz	
-10		M	1	T	2 emp 2	. 4015380 [T1 nd] -20	.92 dBm 000 GHz	А
20		T.J.		T2 M	2	. 4024320	000 GHz	
40	man					Vy.	3	BDB
60						- Conti		
70								
-90								
Center 2.	402 GHz	300	kHz/	l	ı	Spa	n 3 MHz	

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

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Product:	S	PEAKER BO	X	Test	Mode:		Keep transn	nitting
Mode	Kee	eping Transmi	g Transmitting				DC12V	V
Temperature		24 deg. C,		Hun	nidity	56% RH		Н
Test Result:		Pass		Det	ector		PK	
20dB Bandwidth		888kHz						
Ref 10 di	Bm	*Att 20 dF	*RBW 30 *VBW 10 **SWT 5	00 kHz	2 ndB [T	.440000	.35 dBm 000 GHz	
_0			W/h		Temp 1 2	.439544	.48 dBm 000 GHz	•
-20		TI		T2	2	-19	.95 dBm	
30				À	<u>aq</u>			
40	m. /				<u> </u>			
لى مالىمىدى المالى	M WWW				7		31	ЭВ
60								
70								
80								
-90								
Center 2.	44 GHz	•	300 kHz/			Spa	n 3 MHz	

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Product:	;	SPEAKER	BOX		Test	Mode:		Keep trans	mitting
Mode	Ke	eping Tran	smitting		Test '	Voltage		DC12	.V
Temperature		24 deg.	C,		Hur	nidity	56% RH		
Test Result:		Pass			Det	tector		PK	
OdB Bandwidth		894kH	[z						
Ref 10 d	Bm	*Att 20) dB	*RBW 3 *VBW 1 *SWT 5	00 kHz		.480000	.99 dBm	
10						BW 894	.000000	000 kHz	
-0 -10			\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	M		Temp 1	T1 nd: -22.479538	.31 dBm	A
-20		T,1	N .	1	Т2	2 2	-21 .480432	.63 dBm	
-30					N	MA.			
40						1			
-58	Annual .					\	V. Lue	Arriba .	DB
60									
70									
80									
-90									
Center 2.	48 GHz		300	kHz/			Spa	n 3 MHz	

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Product:	SI	PEAKER 1	BOX		Test M	Iode:	Ke	ep transmitt	ing
Mode	Kee	ping Trans	mitting		Test Vo	oltage		DC12V	
Temperature		24 deg. (Ξ,		Humi	idity	56% RH		
Test Result:		Pass			Dete	ctor		PK	
20dB Bandwidth		1.272MHz							
Ref 10 de	3m →	∗Att 20	dB	*RBW 3 *VBW 1 *SWT 5	00 kHz		1 [T1] -1.	.19 dBm	
10								.00 dB	
				1		BW 1 Temp 1	.2720000 [T1 ndl		A
1 PK MAXH10		~ ^ ^	\mathcal{N}	M	My	2		.36 dBm	
20	T _p l				The same of	T2 2		.93 dBm	
30									
40	a /								
- 50	WW					pry	Va .	30	ЭB
My Maybe here							M	man ha	
60									
70									
80									
-90									

Date: 13.MAR.2024 14:24:20

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Keeping Transmittin 24 deg. C, Pass 1.272MHz * Att 20 dB	*RBW 30 *VBW 10 *SWT 5	0 kHz	DC12V 56% RH PK
Pass 1.272MHz	* VBW 10	Detector kHz Marker	PK
1.272MHz	* VBW 10	kHz Marker	1 [T1]
	* VBW 10	kHz Marker	1 [T1]
*Att 20 dB	* VBW 10	0 kHz	
			-0.30 dBm .440126000 GHz
	1 1 A A	ndB [T BW 1 Temp 1	
	W VW	My Temp 2	
		T2 2	.440630000 GHz
/ 		M	3DB
	30	300 kHz/	T T2 2

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Span 3 MHz

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Product:	SPEAKER BOX	X	Test Mode:	Keep tran	nsmitting	
Mode	Keeping Transmit	ting	Test Voltage	DC	12V	
Temperature	24 deg. C,		Humidity	56%	RH	
Test Result:	Pass		Detector	P	K	
20dB Bandwidth	1.272MHz					
Ref 10 di	Bm *Att 20 dB	*RBW 30 *VBW 10 *SWT 5	0 kHz	-1.95 dBm		
10		1	ndB [T BW 1 Temp 1	1] 20.00 dB	A	
1 PK MAXH 10		MA	ha Temp 2	[Tl ndb]		
20			T2 2	-21.70 dBm .480630000 GHz		
30						
40	W		h	A -	3DB	
-59 - A				La Marian	SDB	
60						
70						
80						
-90						

Date: 13.MAR.2024 14:18:12

Center 2.48 GHz

300 kHz/

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Product:	S	PEAKER	BOX		Test M	Iode:	Ke	ep transmi	tting
Mode	Kee	Keeping Transmitting				oltage	DC12V		
Temperature		24 deg. C,				dity	56% RH		[
Test Result:		Pass			Dete	ctor		PK	
20dB Bandwidth		1.236MI	Hz						
Ref 10 d	Зm	*Att 20) dB	*RBW 30 *VBW 10 *SWT 5	00 kHz		-1 [T1]	.39 dBm	
10			1			ndB [TBW 1Temp 1	.236000	.00 dB 000 MHz	A
-10		^~	\mathbb{N}	M	\ \			.47 dBm	
20	2			V		T2 2		.29 dBm	
30									
40									
- Thursday	ha ha					\v (M m	- Phylippe	3DB
60									
70									
80									
-90									
Center 2.	102 GHz		300	kHz/			Spa	n 3 MHz	

Date: 13.MAR.2024 14:26:59

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Date: 2024-03-21



Product:	SPEAKER BOX					Test Mode:		Keep transmitting		
Mode Keeping Transmitting Temperature 24 deg. C,					Test Voltage Humidity		DC12V 56% RH			
										est Result: Pass
dB Bandwidth	vidth 1.236MHz									
Ref 10 de	sm ,	*Att 20	dB	*RBW 30 *VBW 10 *SWT 5	0 kHz	2	1] 20	.42 dBm 000 GHz		
_0			ΛŃ) 		BW 1 Temp 1		A .26 dBm		
- -10	т	m	14 *	***		2 Temp 2 T2 2	.4393880 (T1 nd) -20 .4406240	.40 dBm		
20						2	. 440624	J00 GH2		
40										
tajkanu ~	Mr. A					VV	\mathcal{N}	ЗДВ		
60										
70										
80										
-90	4 GHz		300					n 3 MHz		

Date: 13.MAR.2024 14:36:55

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Span 3 MHz

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Product:	SPEAKER BOX					Test Mode:		Keep transmitting		
Mode Keeping Transmitting					Test Voltage Humidity		DC12V 56% RH			
Temperature 24 deg. C, Test Result: Pass										
					Det	tector	PK			
OdB Bandwidth		1.236MHz								
R)				*RBW 30	kHz	Marker	1 [T1]		
(\$/				*VBW 10	0 kHz		-2	.06 dBm		
Ref 10 d	Bm	*Att 20	dB	*SWT 5	ms	2	.480000	000 GHz		
10						ndB [T	1] 20	.00 dB	Ì	
						BW 1	.236000	000 MHz		
-0			-			Temp 1	[T1 nd]	B]	A	
PK			$\Lambda \Lambda I$	N A L			1	.97 dBm		
XH			1 / A	MIT		2	.479388	000 GHz		
-10				V		Temp 2	[T1 nd]	.86 dBm		
		I∮ I			1	_	-21 .480624	1		
-20		1				т2 [∠]	. 400624	JUU GHZ		
	ر ا	1				4				
3.0	f					Į Į				
-30	Ţ					1				
	l f					l ł				
40						-				
	$\Lambda M \Lambda$						$\Lambda\Lambda$			
E0.	J. J.					• •	A f	k .	3DB	
	-						Ang	The Mark		
								* A AL		
60										
I										
-70									Ì	
80										
	1					I	1	1		

Date: 13.MAR.2024 14:42:05

Center 2.48 GHz

300 kHz/

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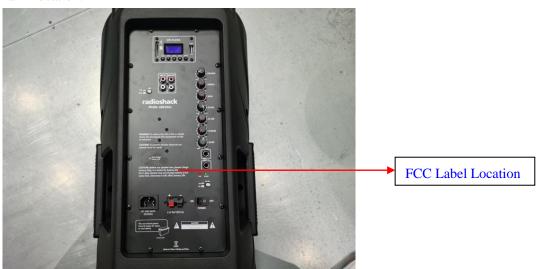
10.0 FCC ID Label

FCC ID: 2BDUR-4001942

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation

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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11.2 Photographs – EUT

Outside View





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Outside View





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Outside View





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Outside View



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Outside View



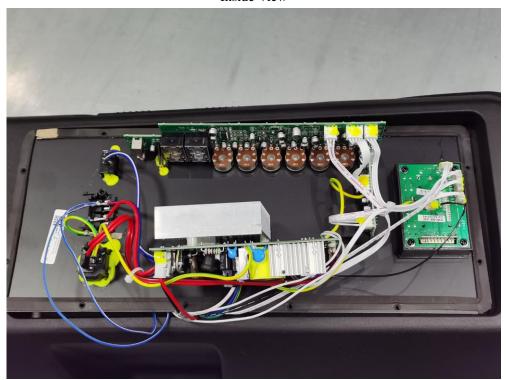
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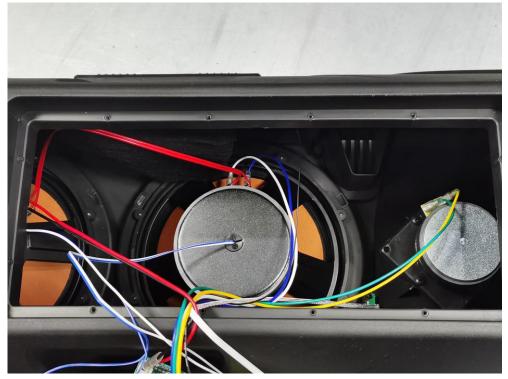
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Inside View





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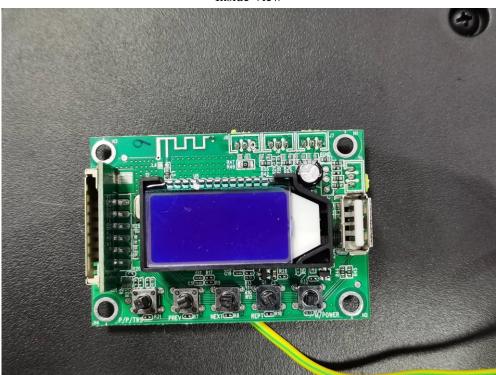
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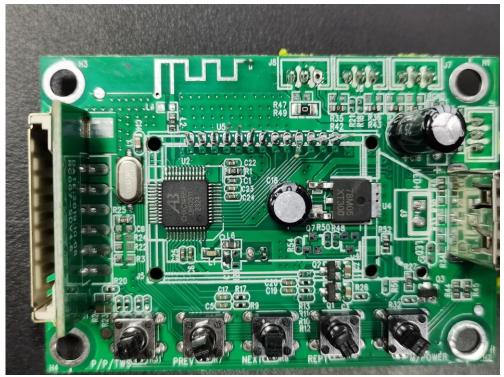
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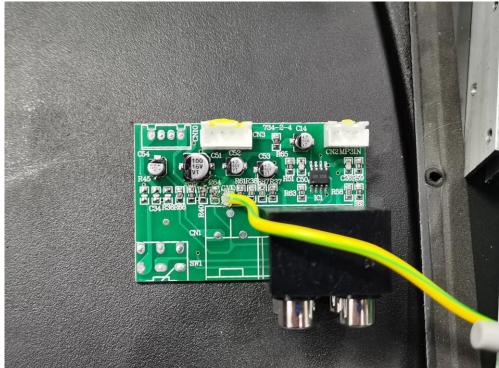
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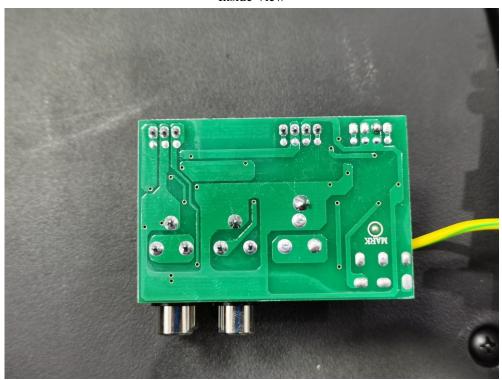
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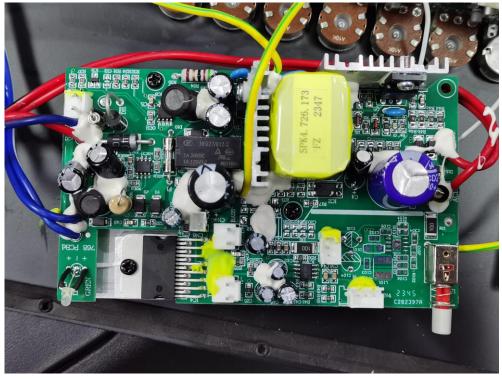
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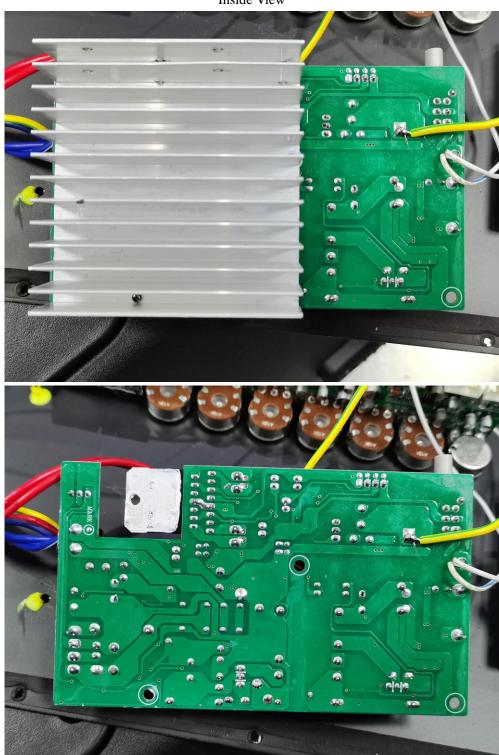
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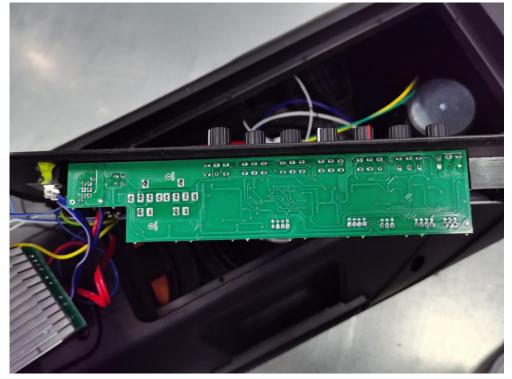
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