

Tivoli Audio, Inc.

MPE ASSESSMENT REPORT

Report Type:

FCC MPE assessment report

Model:

REV

REPORT NUMBER:

190900016SHA-006

ISSUE DATE:

October 16, 2019

DOCUMENT CONTROL NUMBER:

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TEST REPORT

Applicant: Tivoli Audio, Inc.
218 Newbury Street Boston, MA 02116-2563, USA

Manufacturer: Tivoli Audio, Inc.
218 Newbury Street Boston, MA 02116-2563, USA

Manufacturing site: Hansong (Nanjing) Technology Ltd.
8th Kangping Road, Jiangning Economy and Technology Development
Zone, Nanjing, 211106, China.

Product Name: REVIVE

Type/Model: REV

FCC ID: 2AO3C-REVIVE

SUMMARY:

The equipment complies with the requirements according to the following standard(s) or Specification:

FCC PART 1 SECTION 1.1310

PREPARED BY:



Project Engineer
Nemo Li

REVIEWED BY:



Reviewer
Daniel Zhao

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Revision History

Report No.	Version	Description	Issued Date
190900016SHA-006	Rev. 01	Initial issue of report	October 16, 2019

Measurement result summary

TEST ITEM	FCC REFERENCE	TEST RESULT	NOTE
RF Exposure	1.1310	Pass	-

Notes: 1: NA =Not Applicable

2. Determination of the test conclusion is based on IEC Guide 115 in consideration of measurement uncertainty.

TEST REPORT

1 GENERAL INFORMATION

1.1 Description of Equipment Under Test (EUT)

Product name:	REVIVE
Type/Model:	REV
Description of EUT:	The EUT is a Bluetooth speaker which have wireless charger and Lighting function, the Bluetooth module support BR+EDR only and there have only one mode.
Rating:	DC 15V 2.4A by adaptor
Category of EUT:	Class B
EUT type:	<input checked="" type="checkbox"/> Table top <input type="checkbox"/> Floor standing
Software Version:	/
Hardware Version:	/
Sample received date:	July 20, 2019
Date of test:	July 20, 2019 ~ August 30, 2019

1.2 Technical Specification

Frequency Range:	110kHz – 205kHz
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1.3 Description of Test Facility

Name:	Intertek Testing Services Shanghai
Address:	Building 86, No. 1198 Qinzhou Road(North), Shanghai 200233, P.R. China
Telephone:	86 21 61278200
Telefax:	86 21 54262353

The test facility is recognized, certified, or accredited by these organizations:	CNAS Accreditation Lab Registration No. CNAS L0139
	FCC Accredited Lab Designation Number: CN1175
	IC Registration Lab CAB identifier.: CN0051
	VCCI Registration Lab Registration No.: R-14243, G-10845, C-14723, T-12252
	A2LA Accreditation Lab Certificate Number: 3309.02

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2 TEST SPECIFICATIONS

2.1 Standards or specification

FCC PART 1 SECTION 1.1310

KDB 680106 D01 RF Exposure Wireless Charging App v03

2.2 Mode of operation during the test

Within this test report, EUT was tested under the following seven modes and tested under its rating voltage and frequency. Other voltage and frequency is specified if used. The worst data was listed in the report.

2.3 Test peripherals list

Item No.	Name	Band and Model	Description
1	wireless load	Provided by client	100% power level
2	wireless load	Provided by client	50% power level
3	wireless load	Provided by client	0% power level

2.4 Record of climatic conditions

Test Item	Temperature (°C)	Relative Humidity (%)	Pressure (kPa)
RF Exposure	23	57	102

2.5 Instrument list

Used	Equipment	Manufacturer	Type	Internal no.	Due date
<input checked="" type="checkbox"/>	Exposure Level Tester	Narda	ELT-400	EC 2928	2020-08-15
<input checked="" type="checkbox"/>	Field sensor & Field meter	AR	FL17000	EC 5818-1	2020-05-21

3 RF Exposure Assessment

Test result: Pass

3.1 Assessment Limit

Reference: 47 CFR §1.1310, KDB 680106

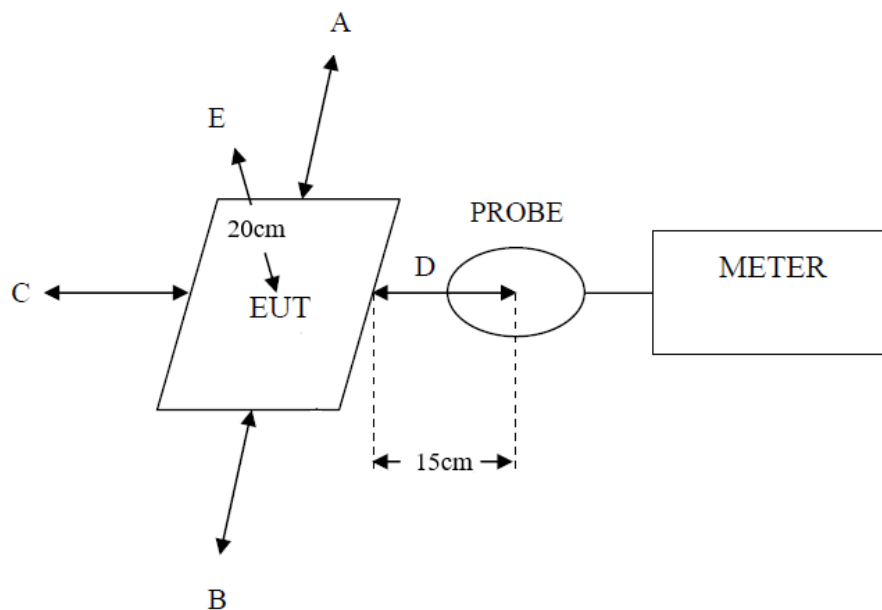
Limits for General Population/Uncontrolled Exposure

Frequency range [MHz]	Electric field strength [V/m]	Magnetic field strength [A/m]	Power density [mW/cm ²]	Averaging time [minutes]
0.1 – 0.3	614	1.63	*100	30
0.3 – 1.34	614	1.63	*100	30
1.34 – 30	824/f	2.19/f	*180/f ²	30
30 – 300	27.5	0.073	0.2	30
300 – 1 500	-	-	f/1500	30
1 500 – 100 000	-	-	1.0	30

Limits for Occupational/Controlled Exposure

Frequency range [MHz]	Electric field strength [V/m]	Magnetic field strength [A/m]	Power density [mW/cm ²]	Averaging time [minutes]
0.1 – 0.3	614	1.63	*100	6
0.3 – 3.0	614	1.63	*100	6
3.0 – 30	1842/f	4.89/f	*900/f ²	6
30 – 300	61.4	0.163	1.0	6
300 – 1 500	-	-	f/300	6
1 500 – 100 000	-	-	5	6

3.2 Assessment Configuration



3.3 Assessment Results

Test result of Magnetic Field Strength:

Test Position	Test distance (cm)	Test result (A/m)	Limit (A/m)	Result (Pass/Fail)
A: Right	15	0.206	1.63 *0.5	Pass
B: Left	15	0.207	1.63 *0.5	Pass
C: Front	15	0.209	1.63 *0.5	Pass
D: Back	15	0.208	1.63 *0.5	Pass
E: Top	20	0.206	1.63 *0.5	Pass

Test result of Electric Field Strength:

Test Position	Test distance (cm)	Test result (V/m)	Limit (V/m)	Result (Pass/Fail)
A: Right	15	3.25	614 *0.5	Pass
B: Left	15	3.25	614 *0.5	Pass
C: Front	15	3.34	614 *0.5	Pass
D: Back	15	3.23	614 *0.5	Pass
E: Top	20	3.35	614 *0.5	Pass

***** END *****