

FCC Test Report

Report No.: AGC01110220533FE02A

FCC ID : 2AOKB-A33A1

APPLICATION PURPOSE: Class II permissive change

PRODUCT DESIGNATION: Wireless Speaker

BRAND NAME : soundcore

MODEL NAME : A33A1

APPLICANT: Anker Innovations Limited

DATE OF ISSUE : Sep. 28, 2022

STANDARD(S) : FCC Part 15.247

REPORT VERSION: V1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd





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REPORT REVISE RECORD

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Sep. 28, 2022	Valid	Initial Release

Note:

The original test report Ref.No. AGC01110220533FE02 dated on Jun. 24, 2022 was quote on Sep. 28, 2022 to include the following changes:

- -Change the EUT Photos;
- -Change the EMC test photos;
- -Change the Brand Name;
- -Change the Hardware Version;
- -IO port changes: Change GPIO38 to RGB-EN, GPIO55 to USB-EN
- -Increase the reserved circuit for RGB
- -The Radiated Emission, Band Edge Emission and Line Conduction Emission tests have been updated.



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1. VERIFICATION OF COMPLIANCE

Applicant	Anker Innovations Limited
Address	Room 1318-19, Hollywood Plaza, 610 Nathan Road, Mongkok, Kowloon, Hongkong
Manufacturer	Anker Innovations Limited
Address	Room 1318-19, Hollywood Plaza, 610 Nathan Road, Mongkok, Kowloon, Hongkong
Product Designation	Wireless Speaker
Brand Name	soundcore
Test Model	A33A1
Date of test	Sep. 02, 2022 to Sep. 27, 2022
Deviation	No any deviation from the test method
Condition of Test Sample	Normal
Test Result	Pass
Report Template	AGCRT-US-BLE/RF

We hereby certify that:

The above equipment was tested by Attestation of Global Compliance (Shenzhen) Co., Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) and the energy emitted by the sample EUT tested as described in this report is in compliance with radiated emission limits of FCC part 15.247.

Prepared By	Alan Duan	
	Alan Duan (Project Engineer)	Sep. 28, 2022
Reviewed By	Calin Lin	
	Calvin Liu (Reviewer)	Sep. 28, 2022
Approved By	Max Zhang	
	Max Zhang (Authorized Officer)	Sep. 28, 2022



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2. GENERAL INFORMATION

2.1. PRODUCT DESCRIPTION

The EUT is designed as a "Wireless Speaker". It is designed by way of utilizing the GFSK technology to achieve the system operation.

A major technical description of EUT is described as following

1,1 11 11 11 11 11 11 11 11 11 11 11 11		
Operation Frequency	2.402GHz to 2.480GHz	
RF Output Power	BLE 1M: 5.210dBm (Max) BLE 2M: 4.830dBm (Max)	
Bluetooth Version V5.3		
Modulation	BR□GFSK, EDR□π /4-DQPSK, □8DPSK BLE☑GFSK 1Mbps ☑GFSK 2Mbps	
Number of channels	40 Channels	
Antenna Designation	FPC Antenna (Comply with requirements of the FCC part 15.203)	
Antenna Gain	4.74dBi	
Hardware Version	V7.0	
Software Version	V1.3	
Power Supply	DC 7.2V by battery or DC 5V by adapter	

2.2. TABLE OF CARRIER FREQUENCYS

Frequency Band	Channel Number	Frequency	
	0	2402 MHz	
	1	2404 MHz	
2400~2483.5MHz	:	:	
	38	2478 MHz	
	39	2480 MHz	



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2.3. RELATED SUBMITTAL(S)/GRANT(S)

This submittal(s) (test report) is intended for **FCC ID: 2AOKB-A33A1** filing to comply with the FCC Part 15.247 requirements.

2.4. TEST METHODOLOGY

Both conducted and radiated testing was performed according to the procedures in ANSI C63.10 (2013). Radiated testing was performed at an antenna to EUT distance 3 meters.

2.5. SPECIAL ACCESSORIES

Refer to section 5.2.

2.6. EQUIPMENT MODIFICATIONS

Not available for this EUT intended for grant.

2.7. ANTENNA REQUIREMENT

This intentional radiator is designed with a permanently attached antenna of an antenna to ensure that no antenna other than that furnished by the responsible party shall be used with the device. For more information of the antenna, please refer to the APPENDIX B: PHOTOGRAPHS OF EUT.

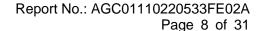


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3. MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement y ±U, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%.

Item	Measurement Uncertainty
Uncertainty of Conducted Emission for AC Port	$U_c = \pm 2.9 \text{ dB}$
Uncertainty of Radiated Emission below 1GHz	$U_c = \pm 3.8 \text{ dB}$
Uncertainty of Radiated Emission above 1GHz	$U_c = \pm 4.9 \text{ dB}$
Uncertainty of total RF power, conducted	$U_c = \pm 0.8 \text{ dB}$
Uncertainty of RF power density, conducted	$U_c = \pm 2.6 \text{ dB}$
Uncertainty of spurious emissions, conducted	$U_c = \pm 2 \%$
Uncertainty of Occupied Channel Bandwidth	$U_c = \pm 2 \%$



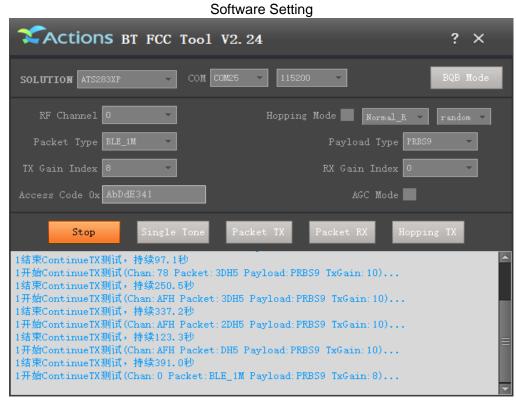


4. DESCRIPTION OF TEST MODES

NO.	TEST MODE DESCRIPTION
1	Low channel TX_2402MHz_GFSK_1Mbps
2	Middle channel TX_2440MHz_GFSK_1Mbps
3	High channel TX_2480MHz_GFSK_1Mbps
4	Low channel TX_2402MHz_GFSK_2Mbps
5	Middle channel TX_2440MHz_GFSK_2Mbps
6	High channel TX_2480MHz_GFSK_2Mbps

Note: 1. Only the result of the worst case was recorded in the report, if no other cases.

- 2. For Radiated Emission, 3axis were chosen for testing for each applicable mode.
- 3. For Conducted Test method, a temporary antenna connector is provided by the manufacture.



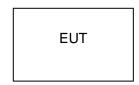


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5. SYSTEM TEST CONFIGURATION

5.1. CONFIGURATION OF TESTED SYSTEM

Radiated Emission Configure:



Conducted Emission Configure:

EUT	AE

5.2. EQUIPMENT USED IN TESTED SYSTEM

Item	Equipment	Model No.	ID or Specification	Remark
1	Wireless Speaker	A33A1	2AOKB-A33A1	EUT
2	Control Box	USB-TTL	N/A	AE
3	Charger line	N/A	0.6m unshielded	Accessory
4	Adapter	HW-050200C01	DC 5V	AE

5.3. SUMMARY OF TEST RESULTS

FCC RULES	DESCRIPTION OF TEST	RESULT
15.209	Radiated Emission	Compliant
15.207	Conducted Emission	Compliant



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6. TEST FACILITY

Test Site	Attestation of Global Compliance (Shenzhen) Co., Ltd	
Location	1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China	
Designation Number	CN1259	
FCC Test Firm Registration Number	975832	
A2LA Cert. No.	5054.02	
Description	Attestation of Global Compliance (Shenzhen) Co., Ltd is accredited by A2LA	

TEST EQUIPMENT OF CONDUCTED EMISSION TEST

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
Test Receiver	R&S	ESPI	101206	Mar. 28, 2022	Mar. 27, 2023
Artificial power network	R&S	ESH2-Z5	100086	Jun. 08, 2022	Jun. 07, 2023
Test Software	FARA	EZ-EMC(Ver. AGC-CON03A1)	N/A	N/A	N/A

TEST EQUIPMENT OF RADIATED EMISSION TEST

1231 EQUIFMENT OF RADIATED EMISSION 1231						
Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due	
Test Receiver	R&S	ESCI	10096	Mar. 28, 2022	Mar. 27, 2023	
EXA Signal Analyzer	Aglient	N9010A	MY53470504	Nov. 17, 2021	Nov. 16, 2022	
Signal Analyzer	Aglient	N9020A	MY52090123	Aug. 04, 2022	Aug. 03, 2023	
2.4GHz Filter	EM Electronics	N/A	N/A	Mar. 18, 2022	Mar. 19, 2024	
Attenuator	ZHINAN	E-002	N/A	Aug. 04, 2022	Aug. 03, 2024	
Horn Antenna	SCHWARZBEC	BBHA9170	768	Oct. 31, 2021	Oct. 30, 2023	
Active Loop Antenna (9K-30Mhz)	ZHINAN	ZN30900C	18051	Mar. 12, 2022	Mar. 11, 2024	
Double-Ridged Waveguide Horn	ETS	3117	00034609	Apr. 23, 2021	Apr. 22, 2023	
Preamplifier Assembly	ETS	3117PA	00225134	Sep. 01, 2022	Sep. 02, 2024	
Wideband Antenna	SCHWARZBECK	VULB9168	VULB9168-49 4	Jan. 08, 2021	Jan. 07, 2023	
Test Software	FARA	EZ-EMC(Ver.RA-0 3A)	N/A	N/A	N/A	

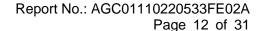


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7. RADIATED EMISSION

7.1. MEASUREMENT PROCEDURE

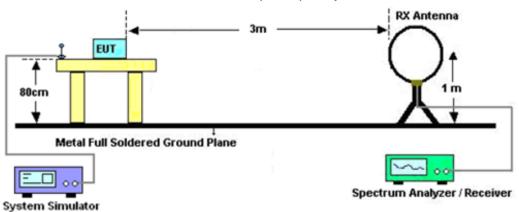
- 1. The EUT was placed on the top of the turntable 0.8 or 1.5 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
- 2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
- 3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
- 4. For each suspected emission, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
- 5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
- 6. For emissions above 1GHz, use 1MHz RBW and 3MHz VBW for peak reading. Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
- 7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum values.
- 8.If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
- 9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
- 10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High Low scan is not required in this case.



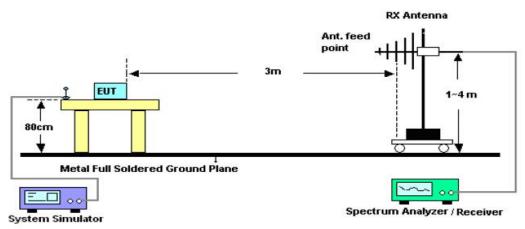


7.2. TEST SETUP

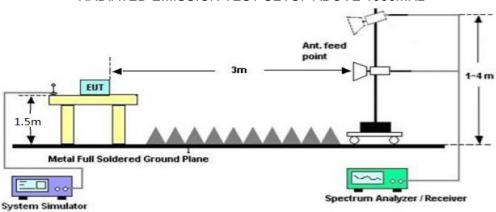
Radiated Emission Test-Setup Frequency Below 30MHz



RADIATED EMISSION TEST SETUP 30MHz-1000MHz



RADIATED EMISSION TEST SETUP ABOVE 1000MHz





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7.3. LIMITS AND MEASUREMENT RESULT

15.209 Limit in the below table has to be followed

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(kHz)	300
0.490~1.705	24000/F(kHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

Note: All modes were tested for restricted band radiated emission, the test records reported below are the worst result compared to other modes.

7.4. TEST RESULT

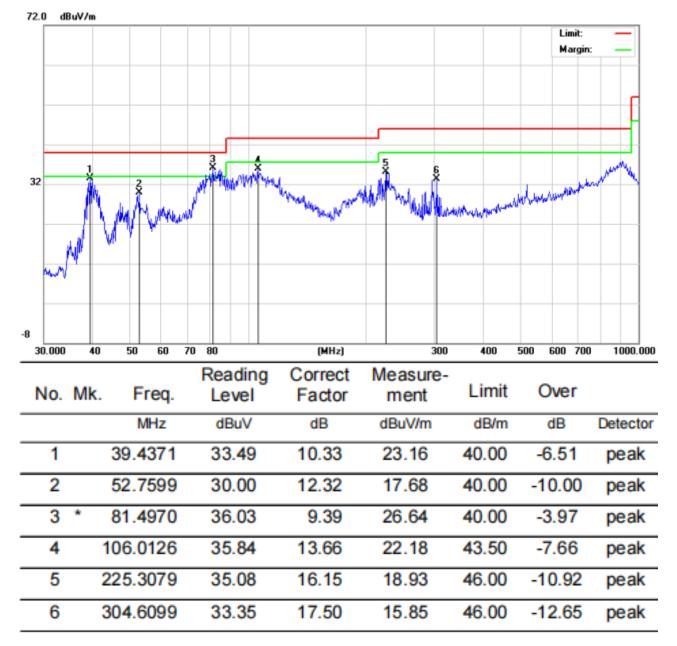
Radiated emission below 30MHz

The amplitude of spurious emissions from 9kHz to 30MHz which are attenuated more than 20 dB below the permissible value need not be reported.

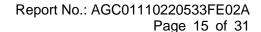


Radiated emission from 30MHz to 1000MHz

EUT	Wireless Speaker	Model Name	A33A1
Temperature	22°C	Relative Humidity	55%
Pressure	985hPa	Test Voltage	Normal Voltage
Test Mode	Mode 2	Antenna	Horizontal

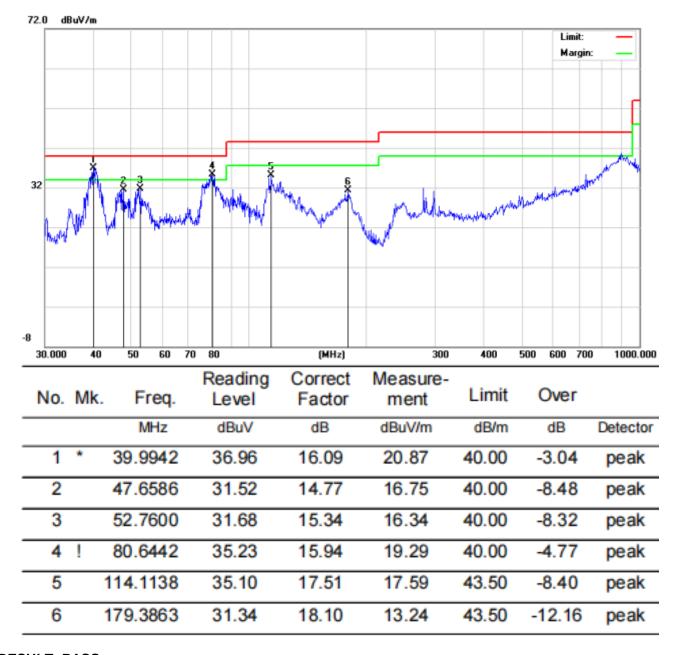


RESULT: PASS





EUT	Wireless Speaker	Model Name	A33A1
Temperature	22°C	Relative Humidity	55%
Pressure	985hPa	Test Voltage	Normal Voltage
Test Mode	Mode 2	Antenna	Vertical



RESULT: PASS

Note: 1. Factor=Antenna Factor + Cable loss, Over=Measurement-Limit.

2. All test modes had been tested. The BLE 1Mbps mode 2 is the worst case and recorded in the report.



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Radiated emission above 1GHz

EUT	Wireless Speaker	Model Name	A33A1
Temperature	22°C	Relative Humidity	55%
Pressure	985hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	\/alua Tima
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
4804.000	50.34	0.08	50.42	74	-23.58	peak
4804.000	38.37	0.08	38.45	54	-15.55	AVG
7206.000	45.17	2.21	47.38	74	-26.62	peak
7206.000	34.86	2.21	37.07	54	-16.93	AVG
Remark:	•					•
actor = Anter	nna Factor + Cabl	e Loss – Pre-	amplifier.	·		

EUT	Wireless Speaker	Model Name	A33A1
Temperature	22°C	Relative Humidity	55%
Pressure	985hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	\/alua Trea
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
4804.000	51.93	0.08	52.01	74	-21.99	peak
4804.000	36.58	0.08	36.66	54	-17.34	AVG
7206.000	46.25	2.21	48.46	74	-25.54	peak
7206.000	33.62	2.21	35.83	54	-18.17	AVG
Remark:						
actor = Anter	nna Factor + Cab	e Loss – Pre-	amplifier			



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EUT	Wireless Speaker	Model Name	A33A1
Temperature	22°C	Relative Humidity	55%
Pressure	985hPa	Test Voltage	Normal Voltage
Test Mode	Mode 2	Antenna	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Tree
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
4880.000	50.34	0.14	50.48	74	-23.52	peak
4880.000	39.75	0.14	39.89	54	-14.11	AVG
7320.000	45.57	2.36	47.93	74	-26.07	peak
7320.000	36.31	2.36	38.67	54	-15.33	AVG
Damanda						
Remark:						
Factor = Anter	na Factor + Cabl	e Loss – Pre-	amplifier.			

≣UΤ	Wireless Speaker	Model Name	A33A1
	_		

Temperature22°CRelative Humidity55%Pressure985hPaTest VoltageNormal VoltageTest ModeMode 2AntennaVertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Tree	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type	
4880.000	47.98	0.14	48.12	74	-25.88	peak	
4880.000	38.52	0.14	38.66	54	-15.34	AVG	
7320.000	43.07	2.36	45.43	74	-28.57	peak	
7320.000	34.87	2.36	37.23	54	-16.77	AVG	
Remark:							

Factor = Antenna Factor + Cable Loss - Pre-amplifier.



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EUT	Wireless Speaker	Model Name	A33A1
Temperature	22°C	Relative Humidity	55%
Pressure	985hPa	Test Voltage	Normal Voltage
Test Mode	Mode 3	Antenna	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Time		
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type		
4960.000	51.63	0.22	51.85	74	-22.15	peak		
4960.000	40.15	0.22	40.37	54	-13.63	AVG		
7440.000	46.32	2.64	48.96	74	-25.04	peak		
7440.000	35.62	2.64	38.26	54	-15.74	AVG		
Remark:	'		'			'		
Factor = Anter	nna Factor + Cabl	e Loss – Pre-a	amplifier.					

Wireless Speaker Model Name A22A1

EUT	Wireless Speaker	Model Name	A33A1
Temperature	22°C	Relative Humidity	55%
Pressure	985hPa	Test Voltage	Normal Voltage
Test Mode	Mode 3	Antenna	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	\/alua Tima		
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type		
4960.000	49.82	0.22	50.04	74	-23.96	peak		
4960.000	38.64	0.22	38.86	54	-15.14	AVG		
7440.000	45.08	2.64	47.72	74	-26.28	peak		
7440.000	33.27	2.64	35.91	54	-18.09	AVG		
Remark:								
Factor = Antenna Factor + Cable Loss – Pre-amplifier.								

RESULT: PASS

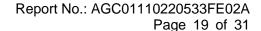
Note:

The amplitude of other spurious emissions from 1G to 25 GHz which are attenuated more than 20 dB below the permissible value need not be reported.

Factor = Antenna Factor + Cable loss - Amplifier gain, Margin=Emission Level-Limit.

The "Factor" value can be calculated automatically by software of measurement system.

All test modes had been tested. The BLE 1Mbps modulation is the worst case and recorded in the report.

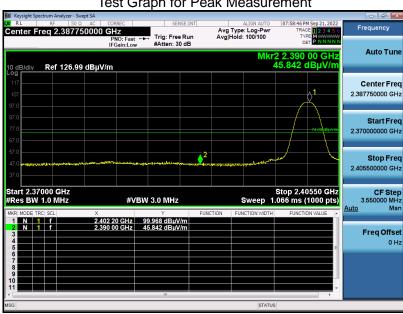


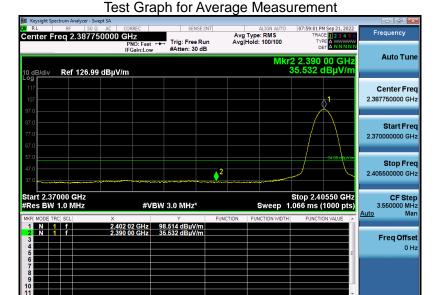


Test result for band edge emission at restricted bands (BLE 1M)

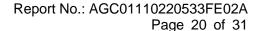
EUT	Wireless Speaker	Model Name	A33A1
Temperature	21.8°C	Relative Humidity	55%
Pressure	985hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Horizontal

Test Graph for Peak Measurement





RESULT: PASS

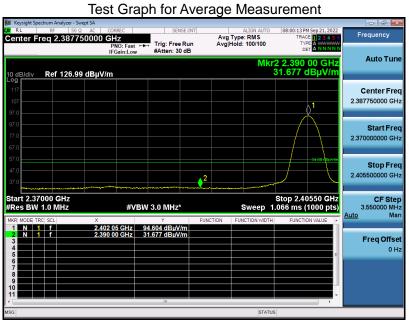




EUT Wireless Speaker A33A1 **Model Name** 25°C **Temperature Relative Humidity** 55% 985hPa **Test Voltage** Normal Voltage **Pressure Test Mode** Mode 1 **Antenna** Vertical

Test Graph for Peak Measurement

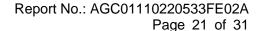




RESULT: PASS

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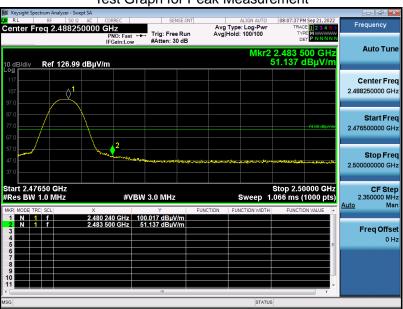
Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: http://www.agccert.com/

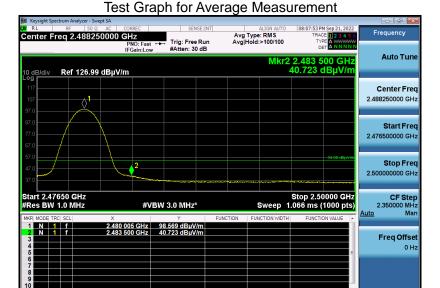




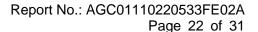
EUT Wireless Speaker A33A1 **Model Name** 25°C **Temperature Relative Humidity** 55% 985hPa **Test Voltage** Normal Voltage **Pressure Test Mode** Mode 3 **Antenna** Horizontal

Test Graph for Peak Measurement





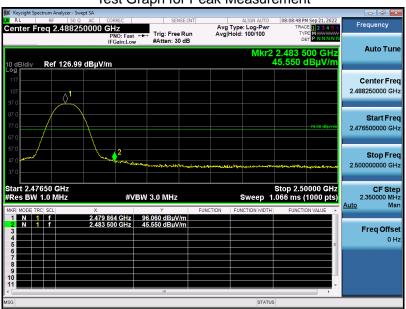
RESULT: PASS

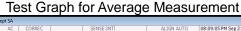




EUT A33A1 Wireless Speaker **Model Name** 25°C **Temperature Relative Humidity** 55% 985hPa **Test Voltage** Normal Voltage **Pressure Test Mode** Mode 3 **Antenna** Vertical

Test Graph for Peak Measurement

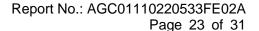






RESULT: PASS

Note: The factor had been edited in the "Input Correction" of the Spectrum Analyzer.

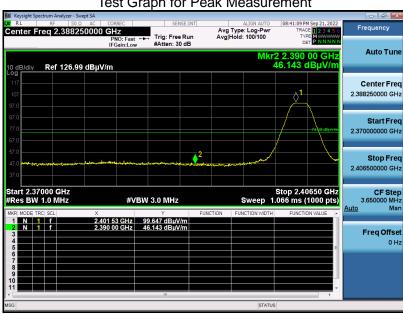


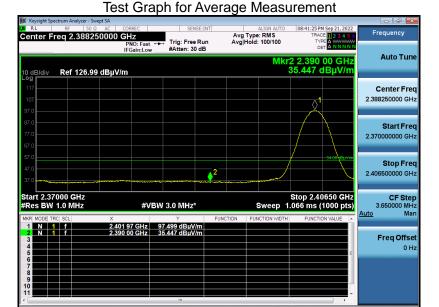


Test result for band edge emission at restricted bands (BLE 2M)

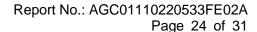
EUT	Wireless Speaker	Model Name	A33A1
Temperature	25°C	Relative Humidity	55%
Pressure	985hPa	Test Voltage	Normal Voltage
Test Mode	Mode 4	Antenna	Horizontal

Test Graph for Peak Measurement





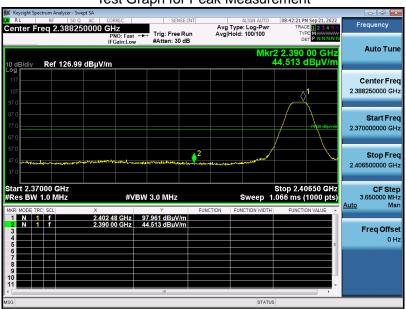
RESULT: PASS



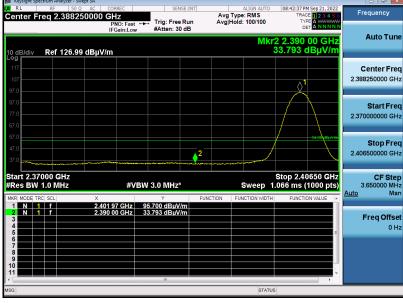


EUT	Wireless Speaker	Model Name	A33A1
Temperature	25°C	Relative Humidity	55%
Pressure	985hPa	Test Voltage	Normal Voltage
Test Mode	Mode 4	Antenna	Vertical

Test Graph for Peak Measurement



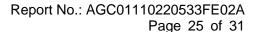




RESULT: PASS

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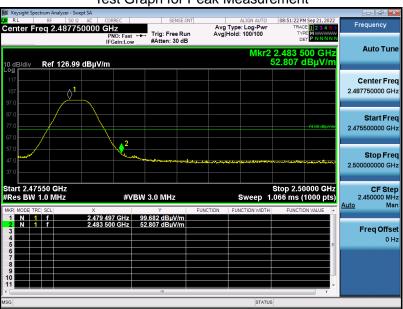
Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: http://www.agccert.com/



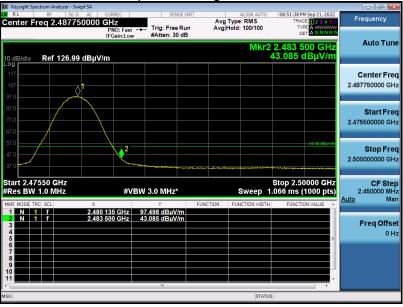


EUT	Wireless Speaker	Model Name	A33A1
Temperature	25°C	Relative Humidity	55%
Pressure	985hPa	Test Voltage	Normal Voltage
Test Mode	Mode 6	Antenna	Horizontal

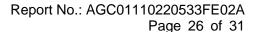
Test Graph for Peak Measurement







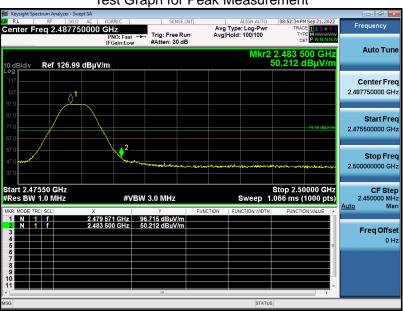
RESULT: PASS

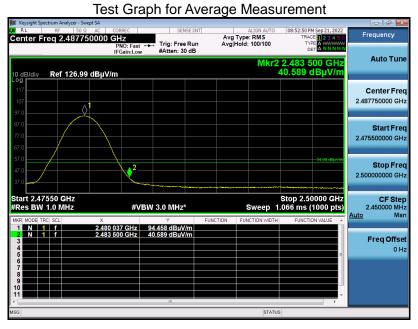




EUT A33A1 Wireless Speaker **Model Name** 25°C **Temperature Relative Humidity** 55% 985hPa **Test Voltage** Normal Voltage **Pressure Test Mode** Mode 6 **Antenna** Vertical

Test Graph for Peak Measurement





RESULT: PASS

Note: The factor had been edited in the "Input Correction" of the Spectrum Analyzer.



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8. LINE CONDUCTED EMISSION TEST

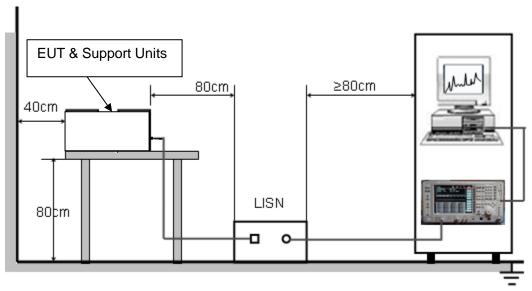
8.1. LIMITS OF LINE CONDUCTED EMISSION TEST

Francis	Maximum RF Line Voltage			
Frequency	Q.P.(dBuV)	Average(dBuV)		
150kHz~500kHz	66-56	56-46		
500kHz~5MHz	56	46		
5MHz~30MHz	60	50		

Note: 1. The lower limit shall apply at the transition frequency.

2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.

8.2. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST





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8.3. PRELIMINARY PROCEDURE OF LINE CONDUCTED EMISSION TEST

- 1. The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.10 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- 2. Support equipment, if needed, was placed as per ANSI C63.10.
- 3. All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.
- 4. All support equipment received AC120V/60Hz power from a LISN, if any.
- 5. The EUT received DC 5V power from adapter which received AC120V/60Hz power from a LISN.
- 6. The test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
- 7. Analyzer / Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.
- 8. During the above scans, the emissions were maximized by cable manipulation.
- 9. The test mode(s) were scanned during the preliminary test.

Then, the EUT configuration and cable configuration of the above highest emission level were recorded for reference of final testing.

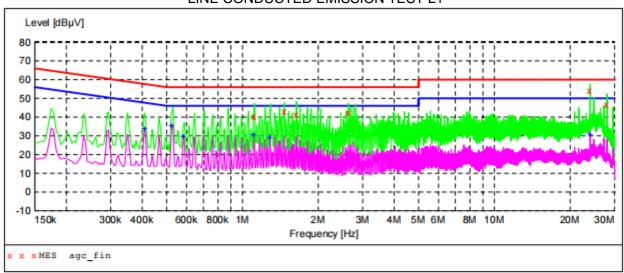
8.4. FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST

- 1. EUT and support equipment was set up on the test bench as per step 2 of the preliminary test.
- 2. A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. If EUT emission level was less 2dB to the A.V. limit in Peak mode, then the emission signal was re-checked using Q.P and Average detector.
- 3. The test data of the worst case condition(s) was reported on the Summary Data page.



8.5. TEST RESULT OF LINE CONDUCTED EMISSION TEST

LINE CONDUCTED EMISSION TEST-L1



MEASUREMENT RESULT: "agc fin"

2022/9/14	14:07						
Frequenc	y Level	Transd	Limit	Margin	Detector	Line	PE
MH	z dBµV	dB	dΒμV	dB			
1.11400	0 40.20	5.6	56	15.8	QP	L1	GND
1.46600	0 43.10	6.0	56	12.9	QP	L1	GND
1.63800	0 41.30	6.2	56	14.7	QP	L1	GND
2.63400	0 42.30	6.5	56	13.7	QP	L1	GND
24.00200	0 54.00	9.1	60	6.0	QP	L1	GND
28.00200	0 46.60	9.4	60	13.4	QP	L1	GND

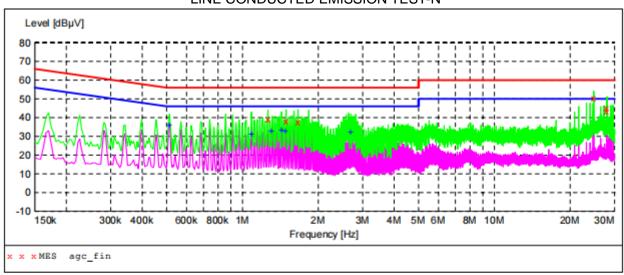
MEASUREMENT RESULT: "agc fin2"

2022/9/14 14:07							
Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
MHz	dBµV	dB	dΒμV	dB			
0.410000	33.60	5.7	48	14.0	AV	L1	GND
0.526000	35.20	5.4	46	10.8	AV	L1	GND
0.586000	29.30	5.4	46	16.7	AV	L1	GND
1.114000	30.80	5.6	46	15.2	AV	L1	GND
1.290000	29.10	5.8	46	16.9	AV	L1	GND
24.002000	30.80	9.1	50	9.2	AV	L1	GND

RESULT: PASS



LINE CONDUCTED EMISSION TEST-N



MEASUREMENT RESULT: "agc fin"

2022/9/14 14	1:02						
Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
MHz	dΒμV	dB	dΒμV	dB			
1.262000	39.10	5.8	56	16.9	QP	N	GND
1.490000	38.00	6.0	56	18.0	QP	N	GND
1.662000	37.60	6.2	56	18.4	QP	N	GND
24.794000	50.30	9.1	60	9.7	QP	N	GND
27.938000	44.90	9.4	60	15.1	QP	N	GND
27.990000	43.50	9.4	60	16.5	QP	N	GND

MEASUREMENT RESULT: "agc fin2"

2022/9/14 14 Frequency MHz	:02 Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.514000 1.086000 1.314000 1.430000 1.490000 2.694000	35.80 31.30 32.50 33.10 33.00 32.10	5.4 5.6 5.8 6.0 6.0	46 46 46 46 46	10.2 14.7 13.5 12.9 13.0 13.9	AV AV AV AV AV	N N N N	GND GND GND GND GND GND

RESULT: PASS

Note: All the test modes had been tested, the Mode 2 was the worst case. Only the data of the worst case would be record in this test report.



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APPENDIX A: PHOTOGRAPHS OF TEST SETUP

Refer to the Report No.: AGC01110220533AP02A

APPENDIX B: PHOTOGRAPHS OF EUT

Refer to the Report No.: AGC01110220533AP03A

----END OF REPORT----



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- 3. The Company shall not be called or be liable to be called to give evidence or testimony on the Report in a court of law without its prior written consent, unless required by the relevant governmental authorities, laws or court orders.
- 4. In the event of the improper use of the report as determined by the Company, the Company reserves the right to withdraw it, and to adopt any other additional remedies which may be appropriate.
- 5. Samples submitted for testing are accepted on the understanding that the Report issued cannot form the basis of, or be the instrument for, any legal action against the Company.
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