
FCC Test Report

Report No.: AGC01110231036FR02A

FCC ID : 2A0KB-A3138

APPLICATION PURPOSE : Class II Permissive Change

PRODUCT DESIGNATION : soundcore Boom 2, SOUNDCORE BOOM 2

BRAND NAME : soundcore

MODEL NAME : A3138

APPLICANT : Anker Innovations Limited

DATE OF ISSUE : Oct. 21, 2024

STANDARD(S) : FCC Part 15 Subpart C §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	/	Oct. 21, 2024	Valid	Initial Release

Note: The original test report AGC01110231036FR02 (dated Dec. 18, 2023 and tested from Oct. 30, 2023 to Dec. 18, 2023) was modified on Oct. 21, 2024, including the following changes and additions:

- Update applicant address and manufacturer address;
- Update model name and manufacturer name of battery;

For the above described change the following tests was considered to be necessary:

Clause	Testing
§15.209	Radiated Spurious Emission

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1. General Information

Applicant	Anker Innovations Limited
Address	Unit 56, 8th Floor, Tower 2, Admiralty Centre, 18 Harcourt Road, Hong Kong
Manufacturer	Anker Innovations Limited
Address	Unit 56, 8th Floor, Tower 2, Admiralty Centre, 18 Harcourt Road, Hong Kong
Factory	N/A
Address	N/A
Product Designation	soundcore Boom 2, SOUNDCORE BOOM 2
Brand Name	soundcore
Test Model	A3138
Series Model(s)	N/A
Difference Description	N/A
Date of receipt of test item	Sep. 25, 2024
Date of Test	Sep. 25, 2024 to Oct. 21, 2024
Deviation from Standard	No any deviation from the test method
Condition of Test Sample	Normal
Test Result	Pass
Test Report Form No	AGCER-FCC-BR_EDR-V1

Note: The test results of this report relate only to the tested sample identified in this report.

Prepared By

Cool Cheng
(Project Engineer)

Oct. 21, 2024

Reviewed By

Calvin Liu
(Reviewer)

Oct. 21, 2024

Approved By

Max Zhang
(Authorized Officer)

Oct. 21, 2024

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2. Product Information

2.1 Product Technical Description

Frequency Band	2400MHz-2483.5MHz
Operation Frequency Range	2402MHz-2480MHz
Bluetooth Version	V5.3
Modulation Type	BR ☒ GFSK, EDR ☒ π /4-DQPSK, ☒ 8DPSK
Number of channels	79 Channels
Channel Separation	1 MHz
Maximum Transmitter Power	9.337dBm
Hardware Version	VF.0
Software Version	V1.3
Antenna Designation	FPC Antenna
Antenna Gain	3.21dBi
Power Supply	DC 7.3V by battery or DC 5V by adapter
Adapter Information	N/A

2.2 Test Frequency List

Frequency Band	Channel Number	Frequency
2400~2483.5MHz	0	2402 MHz
	1	2403 MHz
	:	:
	39	2441MHz
	:	:
	77	2479 MHz
	78	2480 MHz
Note: $f = 2402 + 1k \text{ MHz}$, $k = 0, \dots, 78$; “f” is the operating frequency (MHz); “k” is the operating channel.		

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2.3 Related Submittal(S) / Grant (S)

This submittal(s) (test report) is intended for FCC ID: 2AOKB-A3138, filing to comply with Part 2, Part 15 of the Federal Communication Commission rules.

2.4 Test Methodology

The tests were performed according to following standards:

No.	Identity	Document Title
1	FCC 47 CFR Part 2	Frequency allocations and radio treaty matters; general rules and regulations
2	FCC 47 CFR Part 15	Radio Frequency Devices
3	ANSI C63.10-2013	American National Standard for Testing Unlicensed Wireless Devices
4	KDB 558074 D01 15.247 Meas Guidance v05r02	Guidance for compliance measurements on Digital Transmission Systems, Frequency Hopping Spread Spectrum system, and Hybrid system devices operating under Section 15.247 of the FCC rules

2.5 Receiver Input Bandwidth

The input bandwidth of the receiver is 1.3MHz, in every connection one Bluetooth device is the master and the other one is slave. The master determines the hopping sequence. The slave follows this sequence. Both devices shift between RX and TX time slot according to the clock of the master. Additionally, the type of connection (e.g. single or multi slot packet) is set up at the beginning of the connection. The master adapts its hopping frequency and its TX/RX timing according to the packet type of the connection. Also, the slave of the connection will use these settings. Repeating of a packet has no influence on the hopping sequence. The hopping sequence generated by the master of the connection will be followed in any case. That means, a repeated packet will not be send on the same frequency, it is send on the next frequency of the hopping sequence.

2.6 Equally Average Use of Frequencies And Behaviour

The generation of the hopping sequence in connection mode depends essentially on two input values:

1. LAP/UAP of the master of the connection.
2. Internal master clock.

The LAP (lower address part) are the 24 LSB's of the 48 BD_ADDRESS. The BD_ADDRESS is an unambiguous number of every Bluetooth unit. The UAP (upper address part) are the 24MSB's of the 48BD_ADDRESS

The internal clock of a Bluetooth unit is derived from a free running clock which is never adjusted and is never turned off. For behavior action with other units only offset is used. It has no relation to the time of the day. Its resolution is at least half the RX/TX slot length of 312.5us. The clock has a cycle of about one day(23h30).

In most case it is implemented as 28 bits counter. For the deriving of the hopping sequence the entire. LAP (24 bits),4LSB's(4bits) (Input 1) and the 27MSB's of the clock (Input 2) are used. With this input values different mathematical procedures (permutations, additions, XOR-operations) are performed to generate the Sequence. This will be done at the beginning of every new transmission.

Regarding short transmissions the Bluetooth system has the following behavior:

The first connection between the two devices is established, a hopping sequence was generated. For Transmitting the wanted data the complete hopping sequence was not used. The connection ended.

The second connection will be established. A new hopping sequence is generated. Due to the fact the Bluetooth clock has a different value, because the period between the two transmission is longer (and it Cannot be shorter) than the minimum resolution of the clock(312.5us). The hopping sequence will always differ from the first one.

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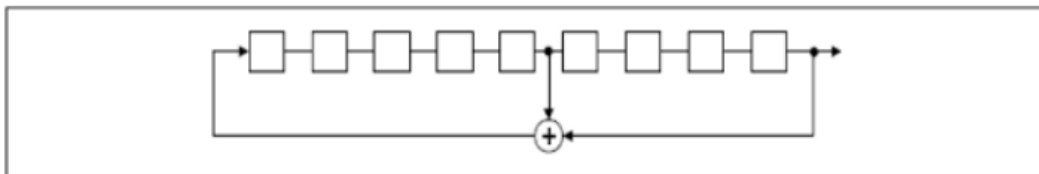
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2.7 Pseudorandom Frequency Hopping Sequence

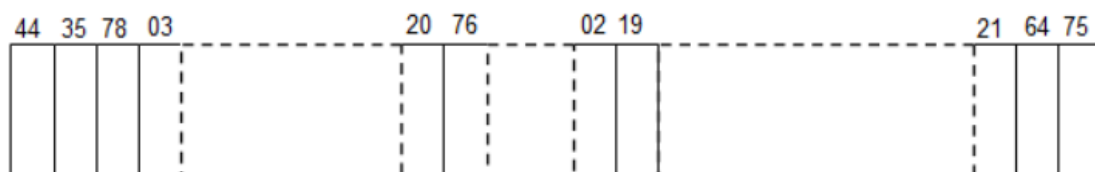
The pseudorandom sequence may be generated in a nine-stage shift register whose 5th and 9th stage outputs are added in a modulo-two addition stage. And the result is fed back to the input of the first stage. The sequence begins with the first ONE of 9 consecutive ONES; i.e. the shift register is initialized with nine ones.

- Number of shift register stages: 9
- Length of pseudo-random sequence: $2^9 - 1 = 511$ bits
- Longest sequence of zeros: 8 (non-inverted signal)



Linear Feedback Shift Register for Generation of The PRBS Sequence

An example of Pseudorandom Frequency Hopping Sequence as follow:



Each frequency used equally on the average by each transmitter.

The system receivers have input bandwidths that match the hopping channel bandwidths of their Corresponding transmitters and shift frequencies in synchronization with the transmitted signals.

2.8 Special Accessories

Not available for this EUT intended for grant.

2.9 Equipment Modifications

Not available for this EUT intended for grant.

2.10 Antenna Requirement

Standard Requirement
15.203 requirement: 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, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.
15.247(b) (4) requirement: The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi
EUT Antenna: The non-detachable antenna inside the device cannot be replaced by the user at will. The gain of the antenna is 3.21dBi.

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3. Test Environment

3.1 Address of The Test Laboratory

Laboratory: Attestation of Global Compliance (Shenzhen) Co., Ltd.

Address: 1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

3.2 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

CNAS-Lab Code: L5488

Attestation of Global Compliance (Shenzhen) Co., Ltd. has been assessed and proved to follow CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories.)

A2LA-Lab Cert. No.: 5054.02

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to follow ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

FCC-Registration No.: 975832

Attestation of Global Compliance (Shenzhen) Co., Ltd. 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 with Registration 975832.

IC-Registration No.: 24842(CAB identifier: CN0063)

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the Certification and Engineering Bureau of Industry Canada. The acceptance letter from the IC is maintained in our files with Registration 24842.

3.3 Environmental Conditions

	Normal Conditions
Temperature range (°C)	15 - 35
Relative humidity range	20 % - 75 %
Pressure range (kPa)	86 - 106
Power supply	7.3V

3.4 Measurement Uncertainty

The reported uncertainty of measurement $y \pm U$, where expanded 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	$U_c = \pm 3.9 \text{ dB}$
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	$U_c = \pm 2 \%$

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3.5 List of Equipment Used

● Radiated Spurious Emission							
Used	Equipment No.	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
☒	AGC-EM-E046	EMI Test Receiver	R&S	ESCI	10096	2024-02-01	2025-01-31
☐	AGC-EM-E116	EMI Test Receiver	R&S	ESCI	100034	2024-05-24	2025-05-23
☒	AGC-EM-E061	Spectrum Analyzer	Agilent	N9010A	MY53470504	2024-05-28	2025-05-27
☒	AGC-EM-E086	Loop Antenna	ZHINAN	ZN30900C	18051	2024-03-05	2026-03-04
☒	AGC-EM-E001	Wideband Antenna	SCHWARZBECK	VULB9168	D69250	2023-05-11	2025-05-10
☒	AGC-EM-E029	Broadband Ridged Horn Antenna	ETS	3117	00034609	2024-03-31	2025-03-30
☒	AGC-EM-E082	Horn Antenna	SCHWARZBECK	BBHA 9170	#768	2023-09-24	2025-09-23
☒	AGC-EM-E146	Pre-amplifier	ETS	3117-PA	00246148	2024-07-24	2026-07-23
☒	AGC-EM-A119	2.4GHz Filter	SongYi	N/A	N/A	2024-05-23	2025-05-22
☒	AGC-EM-A138	6dB Attenuator	Eeatsheep	LM-XX-6-5W	N/A	2023-06-09	2025-06-08
☐	AGC-EM-A139	6dB Attenuator	Eeatsheep	LM-XX-6-5W	N/A	2023-06-09	2025-06-08

● Test Software					
Used	Equipment No.	Test Equipment	Manufacturer	Model No.	Version Information
☒	AGC-EM-S003	RE Test System	FARA	EZ-EMC	V.RA-03A
☒	AGC-EM-S011	RSE Test System	Tonscend	TS+-Ver2.1(JS36-RSE)	4.0.0.0

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4. System Test Configuration

4.1 EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commission's requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

4.2 EUT Exercise

The Transmitter was operated in the normal operating mode. The TX frequency was fixed which was for the purpose of the measurements.

4.3 Configuration of Tested System

Radiated Emission Configure:



4.4 Equipment Used in Tested System

The following peripheral devices and interface cables were connected during the measurement:

☒ Test Accessories Come From The Laboratory

No.	Equipment	Model No.	Manufacturer	Specification Information	Cable
1	Adapter	HW-200440 C00	Huawei	Input(AC): 100V-240V 50/60Hz 2.4A Output(DC): USB-C(5V/3A;9V/3A;10V/4A;11V/6A;12V/3A;15V/3A;20V4.4A) USB-A(5V/2A;10V/4A;11V/6A;20V/4.4A)	--

☒ Test Accessories Come From The Manufacturer

No.	Equipment	Model No.	Manufacturer	Specification Information	Cable
1	USB Cable	--	--	--	0.53m unshielded

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4.5 Summary of Test Results

Item	FCC Rules	Description of Test	Result
1	§15.209	Radiated Spurious Emission	Pass

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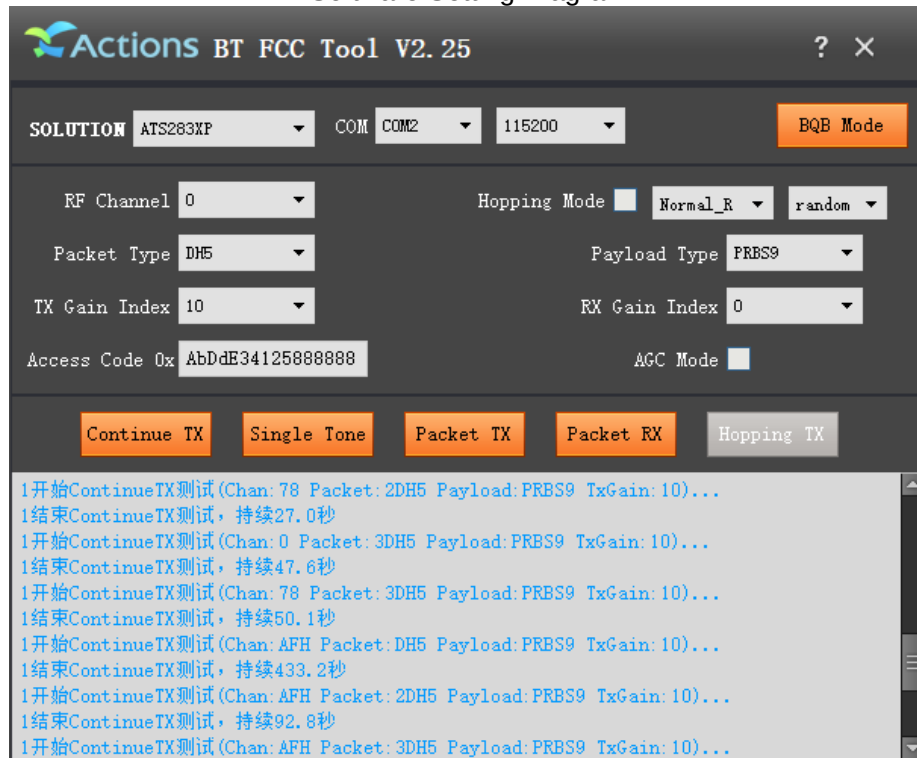
5. Description of Test Modes

Summary table of Test Cases	
Test Item	Data Rate / Modulation
	Bluetooth – BR_EDR (GFSK/π /4-DQPSK/8DPSK)
Radiated & Conducted Test Cases	Mode 1: Bluetooth Tx CH00_2402 MHz_1Mbps (Battery powered or AC/DC adapter)
	Mode 2: Bluetooth Tx CH39_2441 MHz_1Mbps (Battery powered or AC/DC adapter)
	Mode 3: Bluetooth Tx CH78_2480 MHz_1Mbps (Battery powered or AC/DC adapter)
	Mode 4: Bluetooth Tx CH00_2402 MHz_2Mbps (Battery powered or AC/DC adapter)
	Mode 5: Bluetooth Tx CH39_2441 MHz_2Mbps (Battery powered or AC/DC adapter)
	Mode 6: Bluetooth Tx CH78_2480 MHz_2Mbps (Battery powered or AC/DC adapter)
	Mode 7: Bluetooth Tx CH00_2402 MHz_3Mbps (Battery powered or AC/DC adapter)
	Mode 8: Bluetooth Tx CH39_2441 MHz_3Mbps (Battery powered or AC/DC adapter)
	Mode 9: Bluetooth Tx CH78_2480 MHz_3Mbps (Battery powered or AC/DC adapter)
	Mode10: Bluetooth Tx Hopping-1Mbps (Battery powered or AC/DC adapter)
	Mode11: Bluetooth Tx Hopping-2Mbps (Battery powered or AC/DC adapter)
	Mode12: Bluetooth Tx Hopping-3Mbps (Battery powered or AC/DC adapter)

Note:

1. Only the result of the worst case was recorded in the report, if no other cases.
2. The battery is full-charged during the test.
3. For Radiated Emission, 3axis were chosen for testing for each applicable mode.

Software Setting Diagram



The screenshot shows the 'Actions BT FCC Tool V2.25' interface. At the top, there are dropdown menus for 'SOLUTION' (set to AT283XP), 'COM' (set to COM2), and a frequency field (set to 115200). An orange button labeled 'BQB Mode' is on the right. Below these are several configuration sections: 'RF Channel' (0), 'Hopping Mode' (Normal_R), 'Packet Type' (DH5), 'Payload Type' (PRBS9), 'TX Gain Index' (10), 'RX Gain Index' (0), 'Access Code 0x' (AbDdE34125888888), and 'AGC Mode' (unchecked). A row of five orange buttons is present: 'Continue TX', 'Single Tone', 'Packet TX', 'Packet RX', and 'Hopping TX'. At the bottom, a log window displays the following text:

```

1开始ContinueTX测试(Chan: 78 Packet: 2DH5 Payload: PRBS9 TxGain: 10)...
1结束ContinueTX测试, 持续27.0秒
1开始ContinueTX测试(Chan: 0 Packet: 3DH5 Payload: PRBS9 TxGain: 10)...
1结束ContinueTX测试, 持续47.6秒
1开始ContinueTX测试(Chan: 78 Packet: 3DH5 Payload: PRBS9 TxGain: 10)...
1结束ContinueTX测试, 持续50.1秒
1开始ContinueTX测试(Chan: AFH Packet: DH5 Payload: PRBS9 TxGain: 10)...
1结束ContinueTX测试, 持续433.2秒
1开始ContinueTX测试(Chan: AFH Packet: 2DH5 Payload: PRBS9 TxGain: 10)...
1结束ContinueTX测试, 持续92.8秒
1开始ContinueTX测试(Chan: AFH Packet: 3DH5 Payload: PRBS9 TxGain: 10)...

```

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6. Radiated Spurious Emission

6.1 Measurement Limit

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.

6.2 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

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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.

The following table is the setting of spectrum analyzer and receiver.

Spectrum Parameter	Setting
Start ~Stop Frequency	9KHz~150KHz/RB 200Hz for QP
Start ~Stop Frequency	150KHz~30MHz/RB 9KHz for QP
Start ~Stop Frequency	30MHz~1000MHz/RB 120KHz for QP
Start ~Stop Frequency	1GHz~26.5GHz 1MHz/3MHz for Peak, 1MHz/3MHz for Average

Receiver Parameter	Setting
Start ~Stop Frequency	9KHz~150KHz/RB 200Hz for QP
Start ~Stop Frequency	150KHz~30MHz/RB 9KHz for QP
Start ~Stop Frequency	30MHz~1000MHz/RB 120KHz for QP

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● **Quasi-Peak Measurements below 1GHz**

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1MHz
3. RBW = as shown in the table above
4. Detector = CISPR quasi-peak
5. Sweep time = auto couple
6. Trace was allowed to stabilize

● **Peak Measurements above 1GHz**

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

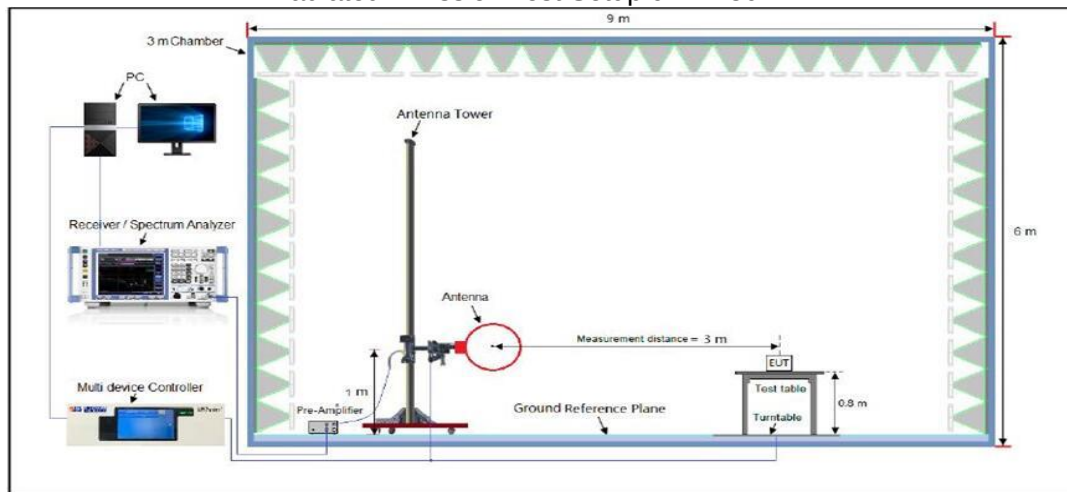
● **Average Measurements above 1GHz (Method VB)**

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW setting requirements are as follows:
4. If the EUT is configured to transmit with duty cycle $\geq 98\%$, set VBW = 10 Hz.
5. If the EUT duty cycle is $< 98\%$, set VBW $\geq 1/T$. T is the minimum transmission duration.
6. Detector = Peak
7. Sweep time = auto
8. Trace mode = max hold
8. Trace was allowed to stabilize

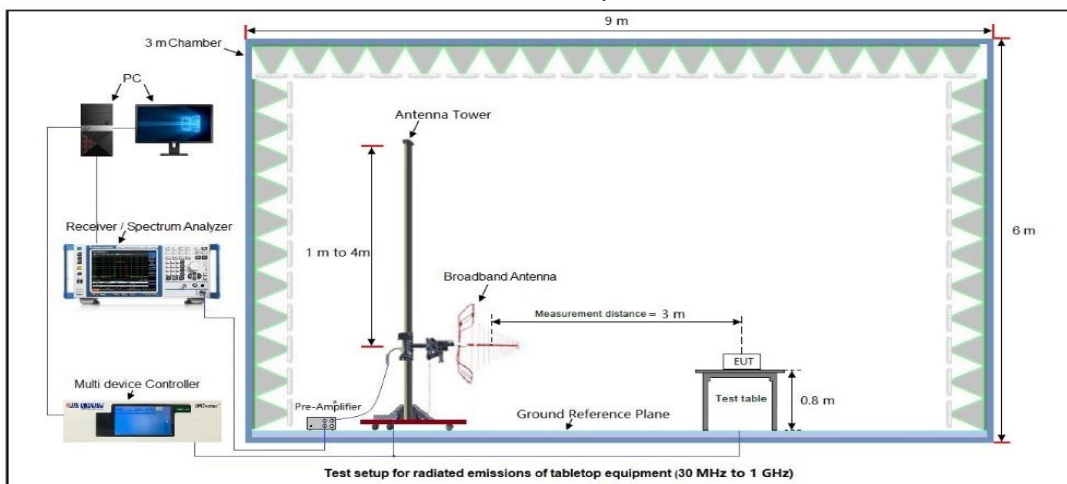
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6.3 Measurement Setup (Block Diagram of Configuration)

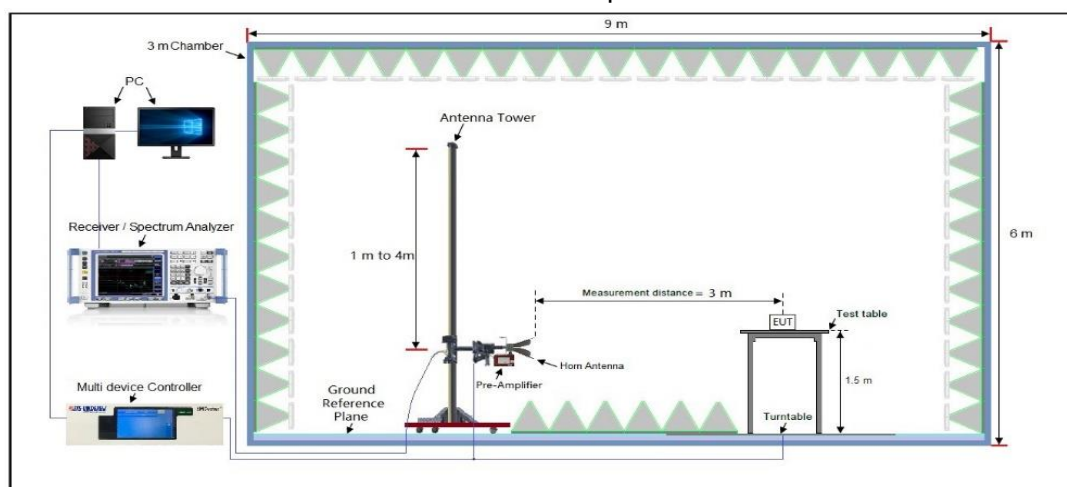
Radiated Emission Test Setup 9KHz-30MHz



Radiated Emission Test Setup 30MHz-1000MHz



Radiated Emission Test Setup Above 1000MHz

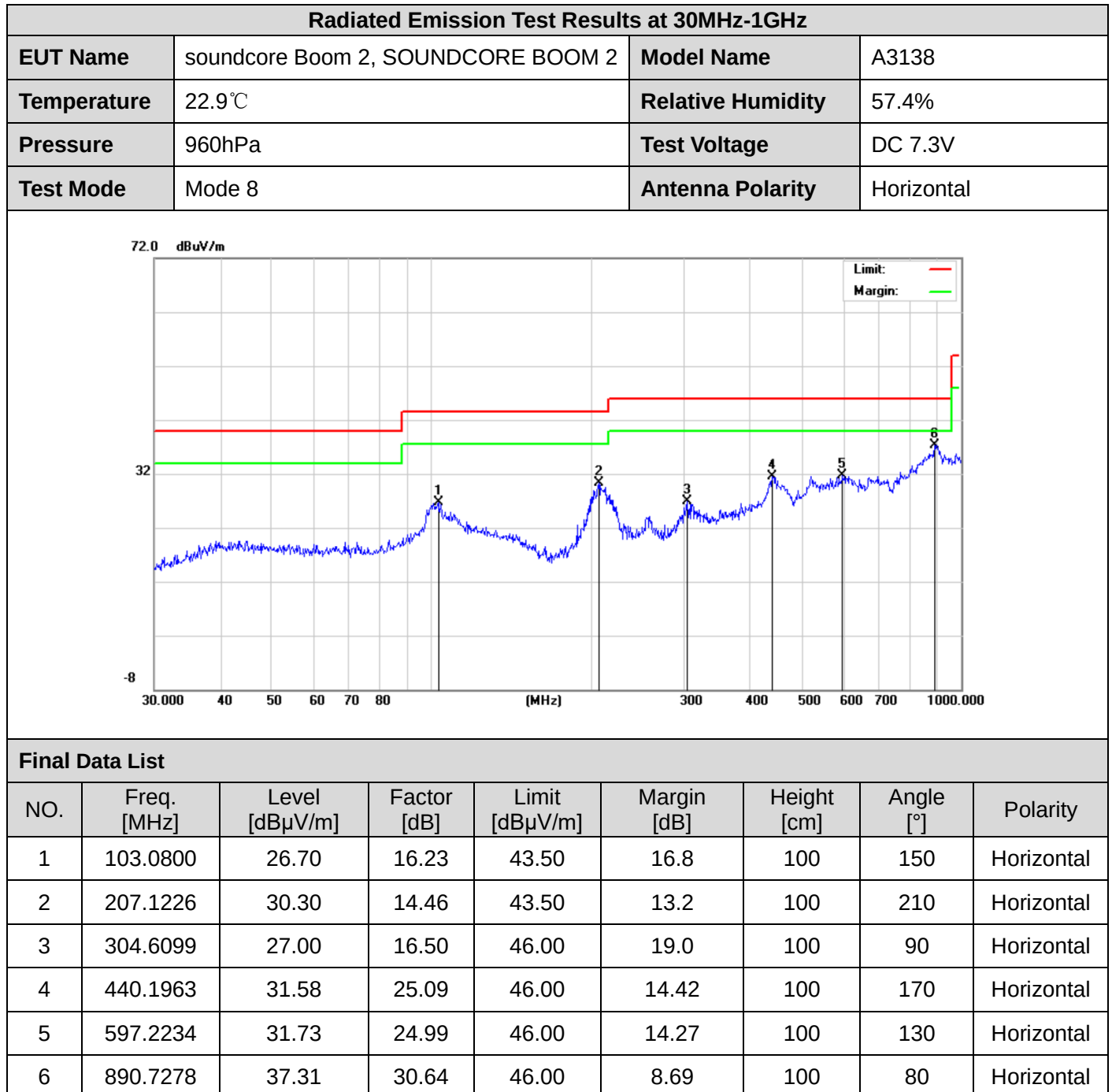


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6.4 Measurement Result

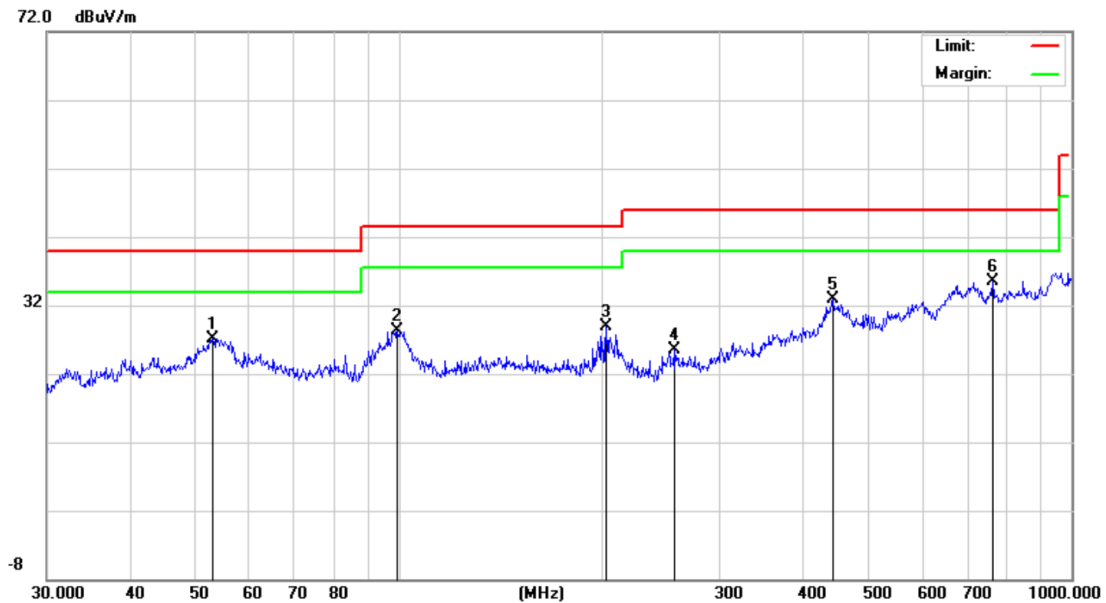
Radiated Emission Below 30MHz

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



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Radiated Emission Test Results at 30MHz-1GHz			
EUT Name	soundcore Boom 2, SOUNDCORE BOOM 2	Model Name	A3138
Temperature	22.9℃	Relative Humidity	57.4%
Pressure	960hPa	Test Voltage	DC 7.3V
Test Mode	Mode 8	Antenna Polarity	Vertical



Final Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	52.9453	27.15	17.03	40.00	12.85	100	60	Vertical
2	99.5281	28.23	14.26	43.50	15.27	100	120	Vertical
3	203.5228	28.84	17.64	43.50	14.66	100	190	Vertical
4	256.5211	25.42	17.61	46.00	20.58	100	230	Vertical
5	441.7426	32.84	26.02	46.00	13.16	100	100	Vertical
6	763.3757	35.60	28.06	46.00	10.4	100	170	Vertical

RESULT: Pass

Note: 1. Factor=Antenna Factor + Cable loss, Margin= Limit-Level.

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Radiated Emissions Test Results Above 1 GHz

EUT Name	soundcore Boom 2, SOUNDCORE BOOM 2	Model Name	A3138
Temperature	22.9℃	Relative Humidity	57.4%
Pressure	960hPa	Test Voltage	DC 7.3V
Test Mode	Mode 7	Antenna Polarity	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4804.000	46.52	0.08	46.6	74	-27.4	peak
4804.000	37.89	0.08	37.97	54	-16.03	AVG
7206.000	41.54	2.21	43.75	74	-30.25	peak
7206.000	31.28	2.21	33.49	54	-20.51	AVG

Remark:

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

EUT Name	soundcore Boom 2, SOUNDCORE BOOM 2	Model Name	A3138
Temperature	22.9℃	Relative Humidity	57.4%
Pressure	960hPa	Test Voltage	DC 7.3V
Test Mode	Mode 7	Antenna Polarity	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4804.000	48.36	0.08	48.44	74	-25.56	peak
4804.000	37.24	0.08	37.32	54	-16.68	AVG
7206.000	41.94	2.21	44.15	74	-29.85	peak
7206.000	31.76	2.21	33.97	54	-20.03	AVG

Remark:

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

RESULT: Pass

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Radiated Emissions Test Results for Above 1 GHz

EUT Name	soundcore Boom 2, SOUNDCORE BOOM 2	Model Name	A3138
Temperature	22.9℃	Relative Humidity	57.4%
Pressure	960hPa	Test Voltage	DC 7.3V
Test Mode	Mode 8	Antenna Polarity	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4882.000	46.95	0.14	47.09	74	-26.91	peak
4882.000	37.26	0.14	37.4	54	-16.6	AVG
7323.000	41.52	2.36	43.88	74	-30.12	peak
7323.000	31.81	2.36	34.17	54	-19.83	AVG

Remark:

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

EUT Name	soundcore Boom 2, SOUNDCORE BOOM 2	Model Name	A3138
Temperature	22.9℃	Relative Humidity	57.4%
Pressure	960hPa	Test Voltage	DC 7.3V
Test Mode	Mode 8	Antenna Polarity	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4882.000	47.21	0.14	47.35	74	-26.65	peak
4882.000	37.96	0.14	38.1	54	-15.9	AVG
7323.000	42.05	2.36	44.41	74	-29.59	peak
7323.000	31.84	2.36	34.2	54	-19.8	AVG

Remark:

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

RESULT: Pass

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Radiated Emissions Test Results for Above 1 GHz

EUT Name	soundcore Boom 2, SOUNDCORE BOOM 2	Model Name	A3138
Temperature	22.9℃	Relative Humidity	57.4%
Pressure	960hPa	Test Voltage	DC 7.3V
Test Mode	Mode 9	Antenna Polarity	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4960.000	47.24	0.22	47.46	74	-26.54	peak
4960.000	37.62	0.22	37.84	54	-16.16	AVG
7440.000	41.59	2.64	44.23	74	-29.77	peak
7440.000	30.85	2.64	33.49	54	-20.51	AVG

Remark:

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

EUT Name	soundcore Boom 2, SOUNDCORE BOOM 2	Model Name	A3138
Temperature	22.9℃	Relative Humidity	57.4%
Pressure	960hPa	Test Voltage	DC 7.3V
Test Mode	Mode 9	Antenna Polarity	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4960.000	46.57	0.22	46.79	74	-27.21	peak
4960.000	36.82	0.22	37.04	54	-16.96	AVG
7440.000	41.54	2.64	44.18	74	-29.82	peak
7440.000	31.68	2.64	34.32	54	-19.68	AVG

Remark:

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

RESULT: Pass

Note:

1. 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.
2. Factor = Antenna Factor + Cable loss – Pre-amplifier gain, Margin =Emission Level-Limit.
3. The “Factor” value can be calculated automatically by software of measurement system.

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Appendix I: Photographs of Test Setup

Refer to the Report No.: AGC01110231036AP02A

Appendix II: Photographs of Test EUT

Refer to the Report No.: AGC01110231036AP03A

-----End of Report-----

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