

# FCC Test Report

# Report No.: AGC01110240805FR01A

| FCC ID                | : | 2AOKB-A3331R                  |
|-----------------------|---|-------------------------------|
| APPLICATION PURPOSE   | : | Class II Permissive Change    |
| PRODUCT DESIGNATION   | : | Wireless Headphone            |
| BRAND NAME            | : | soundcore                     |
| MODEL NAME            | : | A3331R                        |
| APPLICANT             | : | Anker Innovations Limited     |
| DATE OF ISSUE         | : | Apr. 21, 2025                 |
| STANDARD(S)           | : | FCC Part 15 Subpart C §15.247 |
| <b>REPORT VERSION</b> | : | V1.0                          |







## **Report Revise Record**

| Report Version | Revise Time | Issued Date   | Valid Version | Notes           |  |
|----------------|-------------|---------------|---------------|-----------------|--|
| V1.0           | /           | Apr. 21, 2025 | Valid         | Initial Release |  |

Note: The original test report AGC01110240805FR01 (dated Aug. 28, 2024 and tested from Aug. 05, 2024 to Aug. 27, 2024) was modified on Apr. 21, 2025, including the following changes and additions:

Changed the earphone battery, the batteries are the same except for the model name and manufacturer;

For the above described change(s) 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          | Wireless Headphone   |
| Brand Name                   | soundcore  |
| Test Model                   | A3331R   |
| Date of receipt of test item | Mar. 26, 2025  |
| Date of Test                 | Apr. 08, 2025~ Apr. 21, 2025   |
| 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.

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Apr. 21, 2025

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Apr. 21, 2025

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Apr. 21, 2025



## 2. Product Information

## 2.1 Product Technical Description

| Frequency Band            | 2400MHz-2483.5MHz                        |
|---------------------------|--|
| Operation Frequency Range | 2402MHz-2480MHz                          |
| Bluetooth Version         | V5.4                                     |
| Modulation Type           | BR 🖾 GFSK, EDR 🖾 $\pi$ /4-DQPSK, 🖾 8DPSK |
| Number of channels        | 79 Channels                              |
| Channel Separation        | 1 MHz                                    |
| Maximum Transmitter Power | 2.360dBm                                 |
| Hardware Version          | V1.2                                     |
| Software Version          | V1.0                                     |
| Antenna Designation       | FPC Antenna                              |
| Antenna Gain              | -2.7dBi                                  |
| Power Supply              | DC 3.85V, 70mAh by battery               |

#### 2.2 Test Frequency List

| Frequency Band               | Channel Number                            | Frequency                            |  |  |
|------------------------------|---|--------------------------------------|--|--|
|                              | 0   | 2402 MHz                             |  |  |
|                              | 1   | 2403 MHz                             |  |  |
|                              | :   | :                                    |  |  |
| 2400~2483.5MHz               | 39  | 2441MHz                              |  |  |
|                              | :   | :                                    |  |  |
|                              | 77  | 2479 MHz                             |  |  |
|                              | 78  | 2480 MHz                             |  |  |
| Note: f = 2402 + 1k MHz, k = | 0, …, 78 ; "f "is the operating frequency | (MHz); "k" is the operating channel. |  |  |



## 2.3 Related Submittal(S) / Grant (S)

This submittal(s) (test report) is intended for FCC ID:**2AOKB-A3331R**, 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   | 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<br>D01 15.247 Meas<br>Guidance v05r02 | Guidance for compliance measurements on Digital Transmission Systems,<br>Frequency Hopping Spread Spectrum system, and Hybrid system devices<br>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 of 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:

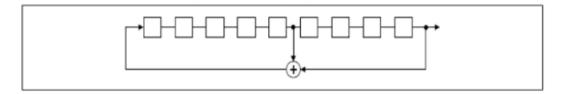
The first connection between the two devices is established, a hopping sequence was generated. For Transmitting the wanted data the complete hopping sequence was not used. The connection ended. The second connection will be established. A new hopping sequence is generated. Due to the fact the Bluetooth 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.



#### 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: 29 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:

| 44 | 35 | 78 | 03 | 20 | ) 76 | 02        | 19 |   | <br>21 | 64 | 75 |
|----|----|----|----|----|------|-----------|----|---|--------|----|----|
|    |    |    |    | ·  |      |           |    |   | <br>   |    |    |
|    |    |    | Ιi |    |      |           |    |   | 1      |    |    |
|    |    |    | ¦  |    |      | 1         |    |   | i.     |    |    |
|    |    |    |    | L  |      | <u>'i</u> |    | 1 | <br>   |    |    |

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 -2.7dBi.



## 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            | DC 3.85V          |

#### **3.4 Measurement Uncertainty**

The reported uncertainty of measurement y  $\pm$ 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   | $U_c = \pm 3.9 \text{ dB}$ |  |  |
| 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     | $U_c = \pm 2 \%$           |  |  |



#### 3.5 List of Equipment Used

| • F         | Radiated Spurious Emission |                                  |              |            |            |                              |                              |  |
|-------------|----------------------------|----------------------------------|--------------|------------|------------|------------------------------|------------------------------|--|
| Used        | Equipment No.              | Test Equipment                   | Manufacturer | Model No.  | Serial No. | Last Cal. Date<br>(YY-MM-DD) | Next Cal. Date<br>(YY-MM-DD) |  |
| $\boxtimes$ | AGC-EM-E046                | EMI Test Receiver                | R&S          | ESCI       | 10096      | 2025-01-14                   | 2026-01-13                   |  |
| $\square$   | AGC-EM-E116                | EMI Test Receiver                | R&S          | ESCI       | 100034     | 2024-05-24                   | 2025-05-23                   |  |
| $\boxtimes$ | AGC-EM-E061                | Spectrum Analyzer                | Agilent      | N9010A     | MY53470504 | 2024-05-28                   | 2025-05-27                   |  |
| $\boxtimes$ | AGC-EM-E086                | Loop Antenna                     | ZHINAN       | ZN30900C   | 18051      | 2024-03-05                   | 2026-03-04                   |  |
| $\boxtimes$ | AGC-EM-E001                | Wideband Antenna                 | SCHWARZBECK  | VULB9168   | D69250     | 2023-05-11                   | 2025-05-10                   |  |
| $\boxtimes$ | AGC-EM-E029                | Broadband Ridged<br>Horn Antenna | ETS          | 3117       | 00034609   | 2025-03-27                   | 2026-03-26                   |  |
| $\boxtimes$ | AGC-EM-E082                | Horn Antenna                     | SCHWARZBECK  | BBHA 9170  | #768       | 2023-09-24                   | 2025-09-23                   |  |
| $\boxtimes$ | AGC-EM-E146                | Pre-amplifier                    | ETS          | 3117-PA    | 00246148   | 2024-07-24                   | 2026-07-23                   |  |
| $\boxtimes$ | AGC-EM-A119                | 2.4G Filter                      | SongYi       | N/A        | N/A        | 2024-05-23                   | 2025-05-22                   |  |
| $\boxtimes$ | 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                   |  |

| • Te      | st Software   |                 |              |                      |                     |
|-----------|---------------|-----------------|--------------|----------------------|---------------------|
| Used      | Equipment No. | Test Equipment  | Manufacturer | Model No.            | Version Information |
|           | AGC-EM-S003   | RE Test System  | FARA         | EZ-EMC               | VRA-03A             |
| $\square$ | AGC-EM-S011   | RSE Test System | Tonscend     | TS+-Ver2.1(JS36-RSE) | 4.0.0.0             |



## **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:

EUT

#### 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        | Manufacturer  | Model No.    | Specification Information | Cable |
|-----|------------------|---------------|--------------|---------------------------|-------|
| 1   |                  |               |              |                           |       |
|     | Test Accessories | Come From The | Manufacturer |                           |       |
| No. | Equipment        | Manufacturer  | Model No.    | Specification Information | Cable |

| I | No. | Equipment | Manufacturer | Model No. | Specification Information | Cable |  |
|---|-----|-----------|--------------|-----------|---------------------------|-------|--|
|   | 1   |           |              |           |                           |       |  |



#### 4.5 Summary of Test Results

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



## 5. Description of Test Modes

|  | Summary table of Test Cases   |
|--|---|
| Test litere  | Data Rate / Modulation  |
| Test Item  | Bluetooth – BR_EDR (GFSK/π /4-DQPSK/8DPSK)  |
| Radiated & Conducted<br>Test Cases   | Mode 1: Bluetooth Tx CH00_2402 MHz_1Mbps (Battery powered)<br>Mode 2: Bluetooth Tx CH39_2441 MHz_1Mbps (Battery powered)<br>Mode 3: Bluetooth Tx CH78_2480 MHz_1Mbps (Battery powered)<br>Mode 4: Bluetooth Tx CH00_2402 MHz_2Mbps (Battery powered)<br>Mode 5: Bluetooth Tx CH39_2441 MHz_2Mbps (Battery powered)<br>Mode 6: Bluetooth Tx CH39_2440 MHz_2Mbps (Battery powered)<br>Mode 6: Bluetooth Tx CH78_2480 MHz_2Mbps (Battery powered)<br>Mode 7: Bluetooth Tx CH00_2402 MHz_3Mbps (Battery powered)<br>Mode 8: Bluetooth Tx CH39_2441 MHz_3Mbps (Battery powered)<br>Mode 9: Bluetooth Tx CH39_2441 MHz_3Mbps (Battery powered)<br>Mode 9: Bluetooth Tx CH78_2480 MHz_3Mbps (Battery powered)<br>Mode 10: Bluetooth Tx Hopping-1Mbps (Battery powered)<br>Mode11: Bluetooth Tx Hopping-2Mbps (Battery powered)<br>Mode12: Bluetooth Tx Hopping-3Mbps (Battery powered) |
| AC Conducted Emission  | Not applicable  |
| <ol> <li>The battery is full-cha</li> <li>For Radiated Emission</li> </ol> |   |



## 6. Radiated Spurious Emission

#### 6.1 Measurement Limit

15.209 Limit in the below table has to be followed

| Frequencies<br>(MHz) | Field Strength<br>(microvolts/meter) | Measurement Distance<br>(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 Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection"

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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.

| 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 |

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

| 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 |



#### • 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

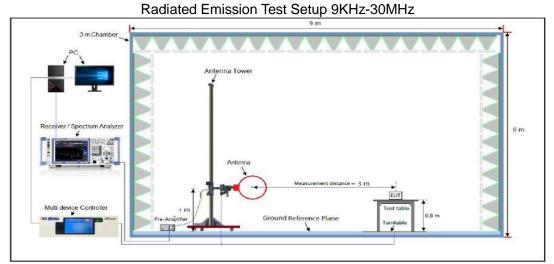
- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = 1MHz
- 3. VBW = 3MHz
- 4. Detector = peak
- 5. Sweep time = auto couple
- 6. Trace mode = max hold
- 7. Trace was allowed to stabilize

#### <u>Average Measurements above 1GHz</u>

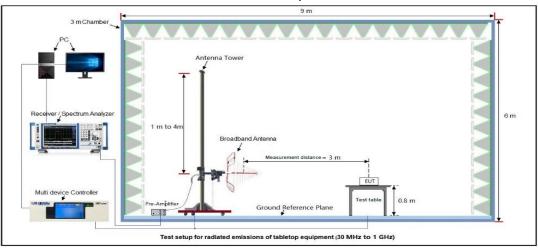
- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = 1MHz
- 3. VBW  $\geq$  [3 × RBW]
- 4. Detector = Power averaging (rms)
- 5. Averaging type = power (i.e., rms)
- 6. Sweep time = auto
- 7. Perform a trace average of at least 100 traces.
- 8. The applicable correction factor is [10\*log (1 / D)], where D is the duty cycle. The factor had been edited in the "Input Correction" of the Spectrum Analyzer.



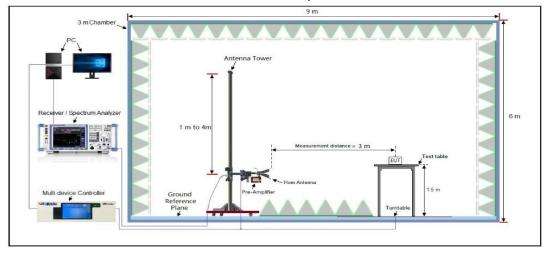
#### 6.3 Measurement Setup (Block Diagram of Configuration)



Radiated Emission Test Setup 30MHz-1000MHz



Radiated Emission Test Setup Above 1000MHz



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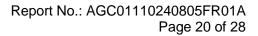
#### **6.4 Measurement Result**

#### **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.

|            |            |            |                              | 1.0   | aula                       | tea E   | 111133                           | sion lest Re   | esults at   | 30MHz  | z-1GH  | lz   |   |                            |        |     |
|------------|------------|------------|------------------------------|---|----------------------------|---|----------------------------------|--|---|--|--|--|---|----------------------------|--------|-----|
| EUT Name   | ٧          | Virel      | ess ⊦                        | lead  | pho                        | ne  |                                  |  | Мо  | del Na   | me   |  | A                                       | 33311                      | R      |     |
| Temperatur | <b>e</b> 1 | 9.2°       | С                            |   |                            |   |                                  |  | Rel   | lative H   | Humi   | dity   | 51                                      | 51.3%                      |        |     |
| Pressure   | ç          | 960hPa     |                              |   |                            |   |                                  |  | Tes   | Test Voltage   |  |  | D                                       | DC 3.85V by batter         |        |     |
| Test Mode  | Ν          | Node       | e 8                          |   |                            |   |                                  |  | An  | tenna  | Polar  | ity  | Н                                       | orizor                     | ntal   |     |
| 72.0       | 0 dBu\     | //m        |                              |   |                            |   |                                  |  |   |  |  |  |   |                            |        |     |
|            |            |            |                              |   |                            |   |                                  |  |   |  |  |  | Limi<br>Mar                             |                            |        |     |
|            |            |            |                              |   |                            |   |                                  |  |   |  |  |  |   |                            |        |     |
|            |            |            |                              |   |                            |   |                                  |  |   |  |  |  |   |                            |        |     |
|            |            |            |                              |   |                            |   |                                  |  |   |  |  |  |   |                            |        |     |
|            |            |            |                              |   |                            |   |                                  |  |   |  |  |  |   |                            | -6     |     |
| 32         |            |            |                              |   |                            |   |                                  |  |   |  |  |  | 5                                       | المعا                      | ~ MA   |     |
|            |            |            |                              |   |                            |   |                                  |  |   | 3  | 4  | with my  | min                                     | n produce                  |        |     |
|            |            |            |                              |   |                            | and a   |                                  | Webself  | 2   | North With March                                     | march  | ¥7   |   |                            |        |     |
|            | Martine we | production | urulhawa                     | white   | An-                        | the way which                                   |                                  | Subatan Surger Scales  | a second and a second and a second as a | ~  |  |  |   |                            |        |     |
|            |            | _          |                              |   |                            |   |                                  |  |   |  |  |  |   |                            |        |     |
|            |            |            |                              |   |                            |   |                                  |  |   |  |  |  |   |                            |        |     |
|            |            |            |                              |   |                            |   |                                  |  |   |  |  |  |   |                            |        |     |
| -0         |            |            |                              |   |                            |   |                                  |  |   |  |  |  |   |                            |        |     |
| -8<br>30   | 0.000      | 40         | 50                           | 60  | 70                         | 80  |                                  | (MHz)  |   | 300  | 400  |  | 600                                     |                            | 1000.0 | 000 |
|            |            |            |                              |   |                            | 80<br>Read                                      |                                  |  | Measur  | 300<br>'e-   | 400  | 500  | 600                                     |                            |        | 000 |
|            |            |            |                              | ٥٥<br>Freq  |                            |   | ing                              | (MHz)  |   | 300<br>7e-   |  |  | 600                                     |                            |        | 000 |
|            |            |            | . F                          |   |                            | Read  | ing                              | (MHz)  | Measur  | 300<br>re-   | 400  | 500<br>Ove   | 600 ;                                   |                            | 1000.0 | 000 |
|            |            | Mk.        | . F                          | Freq<br>MHz   | -                          | Read<br>Leve                                    | ing<br>el<br>V                   | <sup>(MH₂)</sup><br>Correct<br>Factor                                | Measur  | 300<br>re-<br>Li                                     | 400  | 500<br>Ove   | 600 ;                                   | 700                        | 1000.0 | 000 |
|            | No.        | Mk.        | . F                          | Freq<br>MHz<br>4116                                 |                            | Read<br>Leve                                    | ing<br>el<br>V                   | (MHz)<br>Correct<br>Factor<br>dB                                     | Measur<br>ment<br>dBuV/m  | 300<br>re-<br>Li<br>dB<br>43                         | 400<br>imit<br>BuV/m                                 | 500<br>Ove<br>dB                                     | 600 :<br>er<br>08                       | 700<br>Detec               | 1000.0 | 000 |
|            | No.        | Mk.        | . F<br>109.4                 | Freq.<br>MHz<br>4116<br>2000                        | 3<br>)                     | Read<br>Leve<br>dBu                             | ing<br>el<br>V<br>I3             | <sup>(MH₂)</sup><br>Correct<br>Factor<br>dB<br>16.29                 | Measur<br>ment<br>dBuV/m<br>22.42   | 300<br>re-<br>Li<br>43<br>43                         | 400<br>imit<br>8uV/m<br>8.50                         | 500<br>Ove<br>dB<br>-21.0                            | 600<br>er<br>08<br>28                   | 700<br>Detec               | 1000.0 | 000 |
|            | No.        | Mk.        | . F<br>109.4<br>197.1        | Freq<br>MHz<br>4116<br>2000<br>7536                 | 3<br>)<br>3                | Read<br>Leve<br>dBu<br>6.1                      | ing<br>el<br>V<br>13<br>04       | (MHz)<br>Correct<br>Factor<br>dB<br>16.29<br>14.18                   | Measur<br>ment<br>dBuV/m<br>22.42<br>20.22  | 300<br>re-<br>Li<br>43<br>43<br>46                   | 400<br>imit<br>3uV/m<br>3.50<br>3.50                 | 500<br>Ove<br>dB<br>-21.0<br>-23.2                   | 600 :<br>er<br>08<br>28<br>39           | Detec<br>pea               | 1000.0 | 000 |
|            | No.        | Mk.        | . F<br>109.<br>197.<br>306.  | Freq.<br>MHz<br>4116<br>2000<br>7536                | -<br>3<br>)<br>3           | Read<br>Leve<br>dBu<br>6.1<br>6.0<br>7.6        | ing<br>el<br>V<br>13<br>04<br>56 | (мн₂)<br>Correct<br>Factor<br>dB<br>16.29<br>14.18<br>16.50          | Measur<br>ment<br>dBuV/m<br>22.42<br>20.22<br>24.11   | 300<br>re-<br>Li<br>43<br>43<br>43<br>46<br>46       | 400<br>imit<br>3uV/m<br>3.50<br>3.50<br>5.00         | 500<br>Ove<br>dB<br>-21.0<br>-23.2<br>-21.8          | 600<br>er<br>08<br>28<br>39<br>52       | Detec<br>pea<br>pea        | 1000.0 | 000 |
|            | No.        | Mk.        | 109.<br>197.<br>306.<br>434. | Freq<br>MHz<br>4116<br>2000<br>7536<br>0649<br>2078 | -<br>6<br>0<br>6<br>9<br>3 | Read<br>Leve<br>dBu<br>6.1<br>6.0<br>7.6<br>4.5 | ing<br>el<br>V<br>13<br>04<br>56 | (мн₂)<br>Correct<br>Factor<br>dB<br>16.29<br>14.18<br>16.50<br>23.82 | Measur<br>ment<br>dBuV/m<br>22.42<br>20.22<br>24.11<br>28.38  | 300<br>re-<br>Li<br>43<br>43<br>43<br>46<br>46<br>46 | 400<br>imit<br>3uV/m<br>3.50<br>3.50<br>3.00<br>3.00 | 500<br>Ove<br>dB<br>-21.0<br>-23.2<br>-21.8<br>-21.8 | 600<br>er<br>08<br>28<br>39<br>52<br>40 | Detec<br>pea<br>pea<br>pea | 1000.0 | 000 |

#### **RESULT: Pass**





|             |                               |                                  |   | Rac                                 | liated                                 | Emis   | 2011 1621  | Result                               | s at 3  | 0MHz-                                       | -1GH                                 | z                                       |                                   |                         |                          |          |  |
|-------------|-------------------------------|----------------------------------|---|-------------------------------------|--|--|--|--------------------------------------|---|---|--------------------------------------|---|-----------------------------------|-------------------------|--------------------------|----------|--|
| EUT Name    | Wi                            | reles                            | s He                                    | adpl                                | none                                   |  |  |                                      | Mod   | el Nan                                      | ne                                   |   | A                                 | \333                    | 1R                       |          |  |
| Temperature | 19                            | .2℃                              |   |                                     |  |  |  |                                      | Rela  | tive H                                      | umio                                 | lity                                    | 5                                 | 1.3%                    | 6                        |          |  |
| Pressure    | 96                            | 960hPa                           |   |                                     |  |  |  |                                      | Test Voltage                                  |   |                                      |   | C                                 | DC 3.85V by batte       |                          |          |  |
| Test Mode   | Мс                            | ode 8                            |   |                                     |  |  |  |                                      | Ante  | enna P                                      | olar                                 | ity                                     | V                                 | /ertic                  | cal                      |          |  |
| 72.0        | dBuV/m                        | n                                |   |                                     |  |  |  |                                      |   |   |                                      |   |                                   |                         |                          |          |  |
| -           |                               |                                  |   |                                     |  |  |  |                                      |   |   |                                      |   |                                   | nit:<br>argin:          |                          |          |  |
| _           | , at a star log Mar Arr       | whynn de                         | dina-4                                  | 1                                   |  | M-bergenerall                                | harrowski  | marthurn                             | sumplement                                    | 3<br>Amandanad Wel                          |                                      | ngunthi<br>                             | prosperies                        | 500                     | when                     | <b>6</b> |  |
|             |                               |                                  |   |                                     | "///////////////////////////////////// | W-baynowd                                    | (MHz   |                                      | Hand Marker                                   | 3<br>3<br>3<br>3<br>3<br>0<br>0             | 400                                  | 500                                     | 600                               |                         |                          |          |  |
| -8<br>30.0  |                               | 40                               | 50 (                                    |                                     | 70 80<br>Rea                           | ading  |  | )<br>t Mea                           | Hand Marker                                   | 300   | 400                                  |   | 600                               |                         |                          |          |  |
| -8<br>30.0  | 000 4                         | 40                               | 50 (                                    | 60 7                                | ro ao<br>Rea                           | ading  | (мна<br>Соггес   | t Mea                                | asure   | 300<br>-<br>Lir                             | 400                                  | 500                                     | 600<br>er                         |                         | 10                       |          |  |
| -8<br>30.0  | 000 4                         | 10<br>1k.                        | 50 Fre                                  | eq.                                 | n eo<br>Rea<br>Le                      | ading  | мна<br>Correc<br>Facto                                   | t Mea<br>m<br>dBi                    | asure   | 300<br>-<br>Lir                             | 400<br>mit                           | 500<br>Ov                               | 600<br>er                         | 700<br>Dete             | 10                       | D00.0    |  |
| -8<br>30.0  | 000 4<br>No. M                | 10<br>1k.<br>6                   | 50 G                                    | eq.<br>Hz                           | ro eo<br>Rea<br>Le<br>di               | ading<br>evel<br>BuV                         | (мна<br>Correc<br>Facto<br>dB                            | t Mea<br>m<br>dBi<br>23              | asure<br>ient<br>uV/m                         | 300<br>-<br>Lir<br>dBu                      | 400<br>mit<br>IV/m<br>00             | 500<br>Ov<br>dE                         | 600<br>er<br>3<br>.87             | 700<br>Detr             | 10<br>ecto               | D00.0    |  |
| -8<br>30.0  | 000 4<br>No. M                | 10<br>1k.<br>6<br>17             | 50 Fre<br>MF                            | eq.<br>Hz<br>125                    | n ea<br>Rea<br>Le<br>di                | ading<br>evel<br>BuV<br>5.10                 | Correc<br>Facto<br>dB<br>17.03                           | t Mea<br>dBi<br>23                   | asure<br>ient<br>uV/m<br>3.13                 | 300<br>-<br>Lir<br>dBu<br>40.1              | 400<br>mit<br>IV/m<br>00<br>50       | 500<br>Ov<br>dE<br>-16.                 | 600<br>er<br>3<br>87<br>96        | 700<br>Detr             | 10<br>ecto               | D000.0   |  |
| -8<br>30.0  | 000 4<br>No. M<br>1<br>2      | 40<br>/lk.<br>6<br>17<br>30      | 50 Fre<br>Mi<br>07.43                   | eq.<br>Hz<br>12<br>12<br>12<br>1999 | 0 80<br>Rea<br>dl<br>6<br>6<br>7       | ading<br>evel<br>BuV<br>5.10<br>5.18         | Correc<br>Facto<br>dB<br>17.03<br>18.36                  | t Me:<br>dBi<br>23<br>24             | asure<br>ient<br>uV/m<br>3.13                 | 300<br>- Lir<br>dBu<br>40.1<br>- 43.3       | 400<br>mit<br>IV/m<br>00<br>50<br>00 | 500<br>Ov<br>dE<br>-16.<br>-18.         | 600<br>er<br>87<br>96<br>53       | 700<br>Detr             | 10<br>ecto<br>eak        | D00.0    |  |
| -8<br>30.0  | 000 4<br>No. M<br>1<br>2<br>3 | 40<br>1k.<br>6<br>17<br>30<br>44 | 50 Fre<br>MF<br>67.43<br>70.79<br>04.60 | eq.<br>Hz<br>381<br>025<br>099      | 0 80<br>Rea<br>dl<br>6<br>7<br>5       | ading<br>evel<br>BuV<br>5.10<br>5.18<br>7.25 | (мна<br>Соггес<br>Facto<br>dB<br>17.03<br>18.36<br>19.22 | t Me:<br>dBi<br>23<br>24<br>26<br>31 | asure<br>ient<br>uV/m<br>3.13<br>4.54<br>5.47 | 300<br>- Lir<br>dBu<br>40.1<br>43.3<br>46.1 | 400<br>nit<br>i∨/m<br>50<br>00<br>00 | 500<br>Ov<br>dE<br>-16.<br>-18.<br>-19. | 600<br>er<br>87<br>96<br>53<br>79 | 700<br>Detr<br>pe<br>pe | 10<br>ecto<br>eak<br>eak | 0.000.0  |  |

#### **RESULT: Pass**

- **Note:** 1. Factor=Antenna Factor + Cable loss, Margin=Limit-Level.
  - 2. All test modes had been pre-tested. The mode 8 is the worst case and recorded in the report.

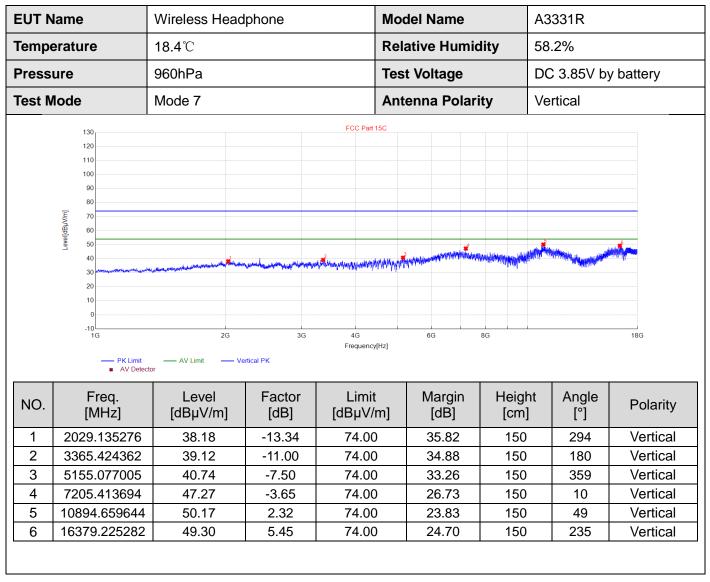


| -0.1                              | Name  | Wireles  | s Head  | lphone   |  | Mod    | lel Name   |  | A33  | 31R                                  |  |
|-----------------------------------|---|--|---|--|--|--------|--|--|------|--------------------------------------|--|
| Гетр                              | erature   | <b>18.4</b> ℃  |   |  |  | Rela   | ative Hun  | nidity   | 58.2 | 2%                                   |  |
| Press                             | sure  | 960hPa   |   |  |  | Test   | t Voltage  |  | DC   | 3.85V b                              | y battery  |
| lest N                            | Mode  | Mode 7   |   |  |  | Ante   | enna Pol   | aritv  | Hori | zontal                               |  |
|                                   |   |  |   |  | FCC Part 1   |        |  | <b>,</b>   |      |                                      |  |
|                                   | 130<br>120  |  |   |  | FCC Part I   | 50     |  |  |      |                                      |  |
|                                   | 110   |  |   |  |  |        |  |  |      |                                      |  |
|                                   | 100<br>90   |  |   |  |  |        |  |  |      |                                      |  |
|                                   | 80  |  |   |  |  |        |  |  |      |                                      |  |
|                                   | [III]         70           60         60           50         50  |  |   |  |  |        |  |  |      |                                      |  |
|                                   | p] 00   |  |   |  |  | .3     |  | 4  |      | L.                                   |  |
|                                   | 40  | ماسار معاطر المعاد والمعاد والمعاد                           | ماسله والمحالية والمحالية الما                  | window manufactures and  | www.   | MANNAM | hallow and the state of the sta |  |      | Hariality                            |  |
|                                   | 20  |  |   |  |  |        |  |  |      |                                      |  |
|                                   | 10  |  |   |  |  |        |  |  |      |                                      |  |
|                                   | 0   |  |   |  |  |        |  |  |      |                                      |  |
|                                   | -10   |  |   |  |  |        |  |  |      |                                      |  |
|                                   | -10L<br>1G  |  | 2G  | 3G   | 4G<br>Frequency[   | Hz]    | 6G   | 8G   |      |                                      | 18G  |
|                                   | 1G PK Limi  |  |   | 3G<br>prizontal PK   |  | Hz]    | 6G   | 8G   |      |                                      | 18G  |
| РКГ                               | 1G<br>—— PK Limi<br><b>*</b> AV De  |  |   |  |  | Hz]    | 6G   | 8G   |      |                                      | 186  |
| PK [                              | 1G<br>— PK Limi<br>* AV De<br>Data List   | tector   | t <u> </u>                                      | rizontal PK  | Frequency  | Hz]    |  |  |      | Angle                                | 18G  |
| PK I<br>NO.                       | 1G<br>—— PK Limi<br><b>*</b> AV De  |  | t — но<br>/el                                   |  |  |        | 6G<br>Margin<br>[dB]   | 8G<br>Heigł<br>[cm]                              |      | Angle<br>[°]                         | 18G<br>Polarity  |
| NO.                               | 1G<br>PK Limi<br>* AV De<br>Data List<br>Freq.<br>[MHz]   | Lev<br>[dBµ\   | t — но<br>vel<br>V/m]                           | Factor<br>[dB]   | Frequency  |        | Margin<br>[dB]   | Heigl<br>[cm]                                    |      | [°]                                  | Polarity   |
|                                   | 1G<br>— PK Limi<br>* AV De<br>Data List<br>Freq.  | Lev<br>[dBµ\<br>39.1   | rel<br>//m]                                     | Factor   | Frequency  |        | Margin   | Heigh  |      |                                      |  |
| NO.<br>1                          | 1G<br>PK Limi<br>* AV De<br>Data List<br>Freq.<br>[MHz]<br>2045.003   | Lev<br>[dBµ\<br>39.0<br>38.3                                 | rel<br>V/m]<br>01<br>74                         | Factor<br>[dB]<br>-13.30   | Erequency<br>Limit<br>[dBµV/n<br>74.00                                     |        | Margin<br>[dB]<br>34.99  | Heigh<br>[cm]<br>150                             |      | [°]<br>326                           | Polarity<br>Horizontal   |
| NO.<br>1<br>2                     | 1G<br>PK Limi<br>* AV De<br>Data List<br>Freq.<br>[MHz]<br>2045.003<br>3320.088006  | Lev<br>[dBµ\<br>39.<br>3 38.<br>3 44.                        | rel<br>//m]<br>01<br>74<br>23                   | Factor<br>[dB]<br>-13.30<br>-11.12                                   | Erequency<br>Limit<br>[dBμV/n<br>74.00<br>74.00                            |        | Margin<br>[dB]<br>34.99<br>35.26   | Heigh<br>[cm]<br>150                             |      | [°]<br>326<br>204                    | Polarity<br>Horizontal<br>Horizontal   |
| NO.<br>1<br>2<br>3                | 1G<br>PK Limi<br>* AV De<br>Data List<br>Freq.<br>[MHz]<br>2045.003<br>3320.088006<br>4803.720248   | Lev<br>[dBµ\<br>39.0<br>5 38.7<br>3 44.7<br>3 53.0           | vel<br>V/m]<br>01<br>74<br>23<br>63             | Factor<br>[dB]<br>-13.30<br>-11.12<br>-7.81                          | Frequency<br>Limit<br>[dBµV/n<br>74.00<br>74.00<br>74.00                   |        | Margin<br>[dB]<br>34.99<br>35.26<br>29.77  | Heigh<br>[cm]<br>150<br>150<br>150               |      | [°]<br>326<br>204<br>17              | Polarity<br>Horizontal<br>Horizontal<br>Horizontal                             |
| NO.<br>1<br>2<br>3<br>4           | 1G<br>PK Limi<br>* AV De<br>Data List<br>Freq.<br>[MHz]<br>2045.003<br>3320.088006<br>4803.720248<br>7206.547103                                | Lev<br>[dBµ\<br>39.1<br>3 38.1<br>3 44.2<br>3 53.1<br>2 50.3 | rel<br>//m]<br>01<br>74<br>23<br>63<br>36       | Factor<br>[dB]<br>-13.30<br>-11.12<br>-7.81<br>-3.65                 | Frequency<br>Limit<br>[dBµV/n<br>74.00<br>74.00<br>74.00<br>74.00          |        | Margin<br>[dB]<br>34.99<br>35.26<br>29.77<br>20.37   | Heigh<br>[cm]<br>150<br>150<br>150<br>150        |      | [°]<br>326<br>204<br>17<br>24        | Polarity<br>Horizontal<br>Horizontal<br>Horizontal<br>Horizontal               |
| NO.<br>1<br>2<br>3<br>4<br>5<br>6 | 16<br>PK Limi<br>* AV De<br>Data List<br>Freq.<br>[MHz]<br>2045.003<br>3320.088006<br>4803.720248<br>7206.547103<br>11019.334623<br>16466.49776 | Lev<br>[dBµ\<br>39.1<br>3 38.1<br>3 44.2<br>3 53.1<br>2 50.3 | rel<br>//m]<br>01<br>74<br>23<br>63<br>36       | Factor<br>[dB]<br>-13.30<br>-11.12<br>-7.81<br>-3.65<br>2.62         | Frequency<br>Limit<br>[dBµV/m<br>74.00<br>74.00<br>74.00<br>74.00<br>74.00 |        | Margin<br>[dB]<br>34.99<br>35.26<br>29.77<br>20.37<br>23.64  | Heigh<br>[cm]<br>150<br>150<br>150<br>150<br>150 |      | [°]<br>326<br>204<br>17<br>24<br>261 | Polarity<br>Horizontal<br>Horizontal<br>Horizontal<br>Horizontal<br>Horizontal |
| NO.<br>1<br>2<br>3<br>4<br>5<br>6 | Teq<br>PK Limi<br>* AV De<br>Data List<br>Freq.<br>[MHz]<br>2045.003<br>3320.088006<br>4803.720248<br>7206.547103<br>11019.334622               | Lev<br>[dBµ\<br>39.1<br>3 38.1<br>3 44.2<br>3 53.1<br>2 50.3 | rel<br>//m]<br>01<br>74<br>23<br>63<br>36<br>44 | Factor<br>[dB]<br>-13.30<br>-11.12<br>-7.81<br>-3.65<br>2.62<br>5.58 | Frequency<br>Limit<br>[dBµV/n<br>74.00<br>74.00<br>74.00<br>74.00<br>74.00 |        | Margin<br>[dB]<br>34.99<br>35.26<br>29.77<br>20.37<br>23.64  | Heigh<br>[cm]<br>150<br>150<br>150<br>150<br>150 |      | [°]<br>326<br>204<br>17<br>24<br>261 | Polarity<br>Horizontal<br>Horizontal<br>Horizontal<br>Horizontal<br>Horizontal |
| NO.<br>1<br>2<br>3<br>4<br>5<br>6 | 16<br>PK Limi<br>* AV De<br>Data List<br>Freq.<br>[MHz]<br>2045.003<br>3320.088006<br>4803.720248<br>7206.547103<br>11019.334623<br>16466.49776 | Lev<br>[dBµ\<br>39.1<br>3 38.2<br>3 44.2<br>3 53.1<br>2 50.3 | rel<br>//m]<br>01<br>74<br>23<br>63<br>36<br>44 | Factor<br>[dB]<br>-13.30<br>-11.12<br>-7.81<br>-3.65<br>2.62         | Frequency<br>Limit<br>[dBµV/m<br>74.00<br>74.00<br>74.00<br>74.00<br>74.00 | 1]     | Margin<br>[dB]<br>34.99<br>35.26<br>29.77<br>20.37<br>23.64  | Heigh<br>[cm]<br>150<br>150<br>150<br>150<br>150 |      | [°]<br>326<br>204<br>17<br>24<br>261 | Polarity<br>Horizontal<br>Horizontal<br>Horizontal<br>Horizontal<br>Horizontal |

## **Radiated Emissions Test Results Above 1GHz**

#### **RESULT: Pass**





#### **RESULT: Pass**



| EUT N       | lame   | Wireless Head   | lphone  | M  | odel Name  | A                                   | 3331R  |  |  |  |
|-------------|--|---|---|--|--|-------------------------------------|--|--|--|--|
| Tempe       | erature  | <b>18.4</b> ℃   |   | Re   | elative Humio  | dity 5                              | 8.2%   |  |  |  |
| Press       | ure  | 960hPa  |   | Те   | st Voltage   | D                                   | DC 3.85V by battery  |  |  |  |
| Test N      | lode   | Mode 8  |   | Ar   | ntenna Polar   | ity H                               | orizontal  |  |  |  |
|             | 130  |   |   | FCC Part 15C                               |  |                                     |  |  |  |  |
|             | 120  |   |   |  |  |                                     |  |  |  |  |
|             | 110  |   |   |  |  |                                     |  |  |  |  |
|             | 90   |   |   |  |  |                                     |  |  |  |  |
|             | 80   |   |   |  |  |                                     |  |  |  |  |
|             | W 70   |   |   |  |  |                                     |  |  |  |  |
|             | [W]         70           [above]         60           [above]         50   |   |   |  |  |                                     | 5  | <u>ھ</u>   |  |  |
|             | 40   |   |   | and an and an and an and an and an and and | a population and a second second second  | www.anternania                      | No. of Concession, Name  |  |  |  |
|             | 30 Honoral and a state of the s | the second second and second and a second | ar han a she water a she far a she a sh | ana    | de l'al a construction de la con |                                     | and the second |  |  |  |
|             | 20   |   |   |  |  |                                     |  |  |  |  |
|             | 10   |   |   |  |  |                                     |  |  |  |  |
|             | 0  |   |   |  |  |                                     |  |  |  |  |
|             | -10  | 26  | 36  | 49   | 66   | 86                                  |  | 186  |  |  |
|             | -  | 2G  | 3G  | 4G<br>Frequency[Hz]                        | 6G   | 8G                                  |  | 18G  |  |  |
|             | -10  | — AV Limit — Ho   | 3G<br>prizontal PK  |  | 6G   | 8G                                  |  | 18G  |  |  |
|             | -10<br>1G<br>  | — AV Limit — Ho   |   |  |  |                                     | Angle  |  |  |  |
| NO.         | -10<br>1G<br>—— PK Limit   | AV Limit Ho   | prizontal PK  | Frequency[Hz]                              | eG<br>Margin<br>[dB]   | BG<br>Height<br>[cm]                | Angle<br>[°]   | Polarity   |  |  |
| NO.         | -10<br>IG<br>W Detec<br>Freq.  | tor AV Limit Ho   | Factor  | Frequency[Hz]                              | Margin   | Height                              |  |  |  |  |
|             | -10<br>-10<br>-10<br>-10<br>IG<br>PK Limit<br>* AV Detec<br>Freq.<br>[MHz]   | - AV Limit - Ho<br>Level<br>[dBµV/m]  | Factor<br>[dB]  | Frequency[Hz]                              | Margin<br>[dB]   | Height<br>[cm]                      | [°]  | Polarity<br>Horizontal                             |  |  |
| 1           | Freq.<br>[MHz]<br>2055.20368   | Level<br>[dBµV/m]<br>38.58  | Factor<br>[dB]<br>-13.28  | Limit<br>[dBµV/m]<br>74.00                 | Margin<br>[dB]<br>35.42  | Height<br>[cm]<br>150               | [°]<br>202   | Polarity   |  |  |
| 1           | Freq.<br>[MHz]<br>2055.20368<br>3573.971598  | - AV Limit - Ho<br>Level<br>[dBµV/m]<br>38.58<br>38.23  | Factor<br>[dB]<br>-13.28<br>-10.54  | Frequency[Hz]                              | Margin<br>[dB]<br>35.42<br>35.77   | Height<br>[cm]<br>150<br>150        | [°]<br>202<br>219  | Polarity<br>Horizontal<br>Horizontal<br>Horizontal |  |  |
| 1<br>2<br>3 | Freq.<br>[MHz]<br>2055.20368<br>3573.971598<br>4881.925462   | - AV Limit - Ho<br>Level<br>[dBµV/m]<br>38.58<br>38.23<br>41.09   | Factor<br>[dB]<br>-13.28<br>-10.54<br>-7.80   | Frequency[Hz]                              | Margin<br>[dB]<br>35.42<br>35.77<br>32.91  | Height<br>[cm]<br>150<br>150<br>150 | [°]<br>202<br>219<br>358   | Polarity<br>Horizontal<br>Horizontal               |  |  |

#### **Radiated Emissions Test Results for Above 1GHz**

## **RESULT: Pass**



| EUT N  | lame  | Wireless Head         | lphone           | M                   | odel Name      | A3             | 3331R        |           |
|--------|---|-----------------------|------------------|---------------------|----------------|----------------|--------------|-----------|
| Tempe  | erature   | <b>18.4</b> ℃         |                  | Re                  | elative Humic  | lity 58        | 8.2%         |           |
| Pressu | ure   | 960hPa                |                  | Те                  | st Voltage     | D              | C 3.85V by   | y battery |
| Test M | lode  | Mode 8                |                  | Ar                  | ntenna Polari  | ity Ve         | ertical      |           |
|        | 130<br>120<br>110<br>90<br>80<br>70<br>60<br>50                       |                       |                  | FCC Part 15C        |                |                | 2            |           |
|        | 40<br>30<br>20<br>10<br>-10<br>-10<br>-10<br>-10<br>-10<br>-10<br>-10 | 2G<br>— AV Limit — V( | 3G<br>ertical PK | 4G<br>Frequency[Hz] | 6G             | BG             |              | 186       |
| NO.    | Freq.<br>[MHz]  | Level<br>[dBµV/m]     | Factor<br>[dB]   | Limit<br>[dBµV/m]   | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity  |
| 1      | 1308.287219   | 33.10                 | -17.85           | 74.00               | 40.90          | 150            | 349          | Vertical  |
| 2      | 2039.335956   | 38.45                 | -13.32           | 74.00               | 35.55          | 150            | 97           | Vertical  |
| 3      | 3368.824588   | 39.55                 | -10.99           | 74.00               | 34.45          | 150            | 38           | Vertical  |
| 4      | 6584.30562  | 46.72                 | -4.34            | 74.00               | 27.28          | 150            | 10           | Vertical  |
| 5      | 11020.468031  |                       | 2.62             | 74.00               | 24.35          | 150            | 236          | Vertical  |
| 6      | 16461.964131  | 48.88                 | 5.57             | 74.00               | 25.12          | 150            | 255          | Vertical  |

## **RESULT: Pass**

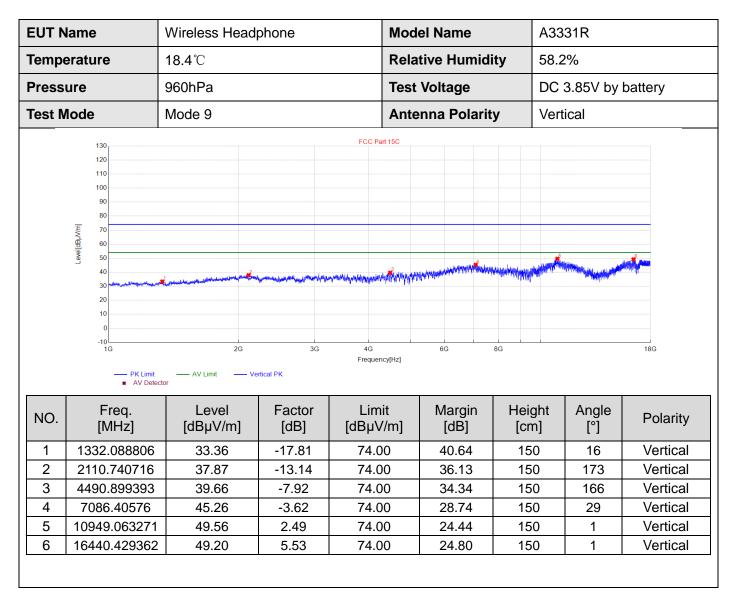


| EUT N                                | ame   | Wireless Head  | phone                                       | Mod   | el Name   | A3                                  | 331R                              |   |  |
|--------------------------------------|---|--|---|---|---|-------------------------------------|-----------------------------------|---|--|
| Temperature<br>Pressure<br>Test Mode |   | 18.4℃<br>960hPa<br>Mode 9  |   |   | Relative Humidity<br>Test Voltage<br>Antenna Polarity |                                     | 58.2%                             |   |  |
|                                      |   |  |   |   |   |                                     | DC 3.85V by battery<br>Horizontal |   |  |
|                                      |   |  |   |   |   |                                     |                                   |   |  |
|                                      | 120<br>110<br>100<br>90<br>80<br>70<br>60<br>90<br>60<br>90<br>80<br>40<br>30<br>20 | - and the contract of the spin |   | antonsal policies and second and the |   |                                     |                                   |   |  |
|                                      | 10<br>0<br>-10<br>1G  | 26   | 3G  | 4G<br>Erequency[Hz]   | 6G  | 8G                                  |                                   | <br>18G   |  |
|                                      | 0<br>-10<br>1G<br><b>PK Limit</b><br><b>X</b> AV Detec                              | AV Limit Ho  | prizontal PK                                | Frequency[Hz]   |   |                                     | Angle                             | 18G   |  |
| NO.                                  | -10<br>-10<br>1G<br>PK Limit  | - AV Limit - Ho  |   |   | 6G<br>Margin<br>[dB]                                  | BG<br>Height<br>[cm]                | Angle<br>[°]                      | 18G<br>Polarity                                 |  |
| NO.                                  | o<br>-10<br>-10<br>-10<br>PK Limit<br>* AV Detec                                    | - AV Limit - Ho  | Factor                                      | Frequency[Hz]   | Margin  | Height                              |                                   |   |  |
|                                      | PK Limit<br>* AV Detec<br>Freq.<br>[MHz]  | - AV Limit - Ho<br>Level<br>[dBµV/m]   | Factor<br>[dB]                              | Frequency[Hz]<br>Limit<br>[dBµV/m]  | Margin<br>[dB]  | Height<br>[cm]                      | [°]                               | Polarity  |  |
| 1                                    | •<br>-10<br>-10<br>-10<br>-10<br>-10<br>-10<br>-10<br>-10<br>-10<br>-10             | Level<br>[dBµV/m]<br>38.10   | Factor<br>[dB]<br>-13.37                    | Frequency[Hz]<br>Limit<br>[dBµV/m]<br>74.00   | Margin<br>[dB]<br>35.90                               | Height<br>[cm]<br>150               | [°]<br>236                        | Polarity<br>Horizontal                          |  |
| 1<br>2                               | •<br>•<br>•<br>•<br>•<br>•<br>•<br>•<br>•<br>•<br>•<br>•<br>•<br>•                  | - AV Limit - Ho<br>Level<br>[dBµV/m]<br>38.10<br>39.10   | Factor<br>[dB]<br>-13.37<br>-11.46          | Frequency[Hz]   | Margin<br>[dB]<br>35.90<br>34.90                      | Height<br>[cm]<br>150<br>150        | [°]<br>236<br>24                  | Polarity<br>Horizonta<br>Horizonta<br>Horizonta |  |
| 2<br>3                               | •<br>-10<br>-10<br>-10<br>-10<br>-10<br>-10<br>-10<br>-10                           | - AV Limit - Ho<br>Level<br>[dBµV/m]<br>38.10<br>39.10<br>41.26  | Factor<br>[dB]<br>-13.37<br>-11.46<br>-7.78 | Frequency[Hz]   | Margin<br>[dB]<br>35.90<br>34.90<br>32.74             | Height<br>[cm]<br>150<br>150<br>150 | [°]<br>236<br>24<br>5             | Polarity<br>Horizontal<br>Horizontal            |  |

#### **Radiated Emissions Test Results for Above 1GHz**

## **RESULT: Pass**





#### **RESULT: Pass**

#### Note:

- 1. The amplitude of other spurious emissions from 18G 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 =Limit-Level.
- 3. The "Factor" value can be calculated automatically by software of measurement system.
- 4. All mode rates are tested and evaluated, 8DPSK modulated 3DH5 mode is the worst case and documented in the report.
- 5. In the test diagram, the frequency point with a protrusion from 2 GHz to 3 GHz is the fundamental frequency of the EUT.



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# Appendix I: Photographs of Test Setup

Refer to the Report No.: AGC01110240805AP01A

## Appendix II: Photographs of Test EUT

Refer to the Report No.: AGC01110240805AP02A



# Conditions of Issuance of Test Reports

1. All samples and goods are accepted by the Attestation of Global Compliance (Shenzhen) Co., Ltd (the "Company") solely for testing and reporting in accordance with the following terms and conditions. The company provides its services on the basis that such terms and conditions constitute express agreement between the company and any person, firm or company requesting its services (the "Clients").

2. Any report issued by Company as a result of this application for testing services (the "Report") shall be issued in confidence to the Clients and the Report will be strictly treated as such by the Company. It may not be reproduced either in its entirety or in part and it may not be used for advertising or other unauthorized purposes without the written consent of the Company. The Clients to whom the Report is issued may, however, show or send it, or a certified copy thereof prepared by the Company to its customer, supplier or other persons directly concerned. The Company will not, without the consent of the Clients, enter into any discussion or correspondence with any third party concerning the contents of the Report, unless required by the relevant governmental authorities, laws or court orders. 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.

 6. The Company will not be liable for or accept responsibility for any loss or damage however arising from the use of information contained in any of its Reports or in any communication whatsoever about its said tests or investigations.
 7.Clients wishing to use the Report in court proceedings or arbitration shall inform the Company to that effect prior to submitting the sample for testing.

8. The Company is not responsible for recalling the electronic version of the original report when any revision is made to them. The Client assumes the responsibility to providing the revised version to any interested party who uses them.

9. Subject to the variable length of retention time for test data and report stored hereinto as otherwise specifically required by individual accreditation authorities, the Company will only keep the supporting test data and information of the test report for a period of six years. The data and information will be disposed of after the aforementioned retention period has elapsed. Under no circumstances shall we provide any data and information which has been disposed of after retention period. Under no circumstances shall we be liable for damage of any kind, including (but not limited to) compensatory damages, lost profits, lost data, or any form of special, incidental, indirect, consequential or punitive damages of any kind, whether based on breach of contract of warranty, tort (including negligence), product liability or otherwise, even if we are informed in advance of the possibility of such damages.

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