# TEST REPORT

| | | |
|---|---|---|
| **Product Name** | : | Smart Phone |
| **Brand Name** | : | LAGENIO |
| **Model** | : | A11 |
| **Series Model** | : | A11 Pro |
| **Applicant** | : | **Shenzhen Tianruixiang Communication Equipment Co.,LTD** |
| **Address** | : | 12/F, Building B, Longhua Digital Innovation Center, Longhua District, Shenzhen, China |
| **Manufacturer** | : | **Shenzhen Tianruixiang Communication Equipment Co.,LTD** |
| **Address** | : | 12/F, Building B, Longhua Digital Innovation Center, Longhua District, Shenzhen, China |
| **Standard(s)** | : | FCC CFR Title 47 Part 15 Subpart B |
| **Date of Receipt** | : | Mar. 13, 2025 |
| **Date of Test** | : | Mar. 14, 2025~ Apr. 09, 2025 |
| **Issued Date** | : | Apr. 10, 2025 |

**Issued By:** **Guangdong Asia Hongke Test Technology Limited**

B1/F, Building 11, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

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**Reviewed by:** Leon Yi
Leon.yi

**Approved by:** Sean She
Sean She

Note: This device has been tested and found to comply with the standard(s) listed, this test report merely corresponds to the test sample. It is not permitted to copy extracts of these test result without the written permission of the test laboratory. This report shall not be reproduced except in full, without the written approval of Guangdong Asia Hongke Test Technology Limited. If there is a need to alter or revise this document, the right belongs to Guangdong Asia Hongke Test Technology Limited, and it should give a prior written notice of the revision document. This test report must not be used by the client to claim product endorsement.

## Report Revise Record

| Report Version | Issued Date | Notes |
|---|---|---|
| M1 | Apr. 10, 2025 | Initial Release |

# Contents

# 1 TEST SUMMARY

## 1.1 Test Standards

The tests were performed according to following standards:
47 CFR FCC Part 15 Subpart B - Unintentional Radiators

ANSI C63.4: 2014 – American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40GHz

## 1.2 Test Summary

| Test Item | Section in 47 CFR | Test Result |
|---|---|---|
| AC Power Line Conducted Emission | FCC Part 15 B (Section15.107)<br>ICES-003 Issue 7 (Section 3.1) | PASS |
| Electric Field Radiated Emissions | FCC Part 15 B (Section15.109)<br>ICES-003 Issue 7 (Section3.2) | PASS |

## 1.3 Test Facility

**Test Laboratory:**
**Guangdong Asia Hongke Test Technology Limited**
B1/F, Building 11, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

The test facility is recognized, certified or accredited by the following organizations:
**FCC-Registration No.: 251906 Designation Number: CN1376**
Guangdong Asia Hongke Test Technology Limited 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.

**IC —Registration No.: 31737 CAB identifier: CN0165**
The 3m Semi-anechoic chamber of Guangdong Asia Hongke Test Technology Limited has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 31737

**A2LA-Lab Cert. No.: 7133.01**
Guangdong Asia Hongke Test Technology Limited has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with 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.

## 1.4 Measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report according to CISPR 16 - 4 “Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements” and is documented in the Guangdong Asia Hongke Test Technology Limited’s quality system according to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.
Hereafter the best measurement capability for Asia Hongke laboratory is reported:

| Test | Measurement Uncertainty | Notes |
|---|---|---|
| Power Line Conducted Emission | 150KHz~30MHz ±1.20 dB | (1) |
| Radiated Emission | 9KHz~30Hz ±3.10dB | (1) |
| Radiated Emission | 9KHz~1GHz ±3.75dB | (1) |
| Radiated Emission | 1GHz~18GHz ±3.88 dB | (1) |
| Radiated Emission | 18GHz-40GHz ±3.88dB | (1) |
| RF power, conducted | 30MHz~6GHz ±0.16dB | (1) |
| RF power density, conducted | ±0.24dB | (1) |
| Spurious emissions, conducted | ±0.21dB | (1) |
| Temperature | ±1℃ | (1) |
| Humidity | ±3% | (1) |
| DC and low frequency voltages | ±1.5% | (1) |
| Time | ±2% | (1) |
| Duty cycle | ±2% | (1) |

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

# 2 GENGENERAL INFORMATION

## 2.1 Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

| | |
|---|---|
| Normal Temperature: | 25°C |
| Relative Humidity: | 55 % |
| Air Pressure: | 101 kPa |

## 2.2 General Description of EUT

| | |
|---|---|
| Product Name: | Smart Phone |
| Model/Type reference: | A11 |
| Serial Model: | A11 Pro |
| Power Supply: | Input: DC 5V⎓2A<br>DC 3.87V 5150mAh/19.93Wh Rechargeable Li-ion battery |
| Adapter information: | Model: TPA-418G050200UU01<br>Input: 100-240V~ 50/60Hz 0.3A<br>Output: 5.0V⎓2.0A 10.0W |
| Hardware Version: | SC6019LU_MB_V2.0.0 20241223 |
| Software Version: | N/A |
| I.O port | Type-C |

## 2.3 Description of Test Modes

The device, according to the function of the EUT, select the following operating modes for testing.

| Test Modes: | |
|---|---|
| Mode 1 | Data transfer with PC |
| Mode 2 | Charging with adapter |

Note:

1. Pre-testing on all test modes, only the worst case mode was recorded in this report.
2. After the pre-testing, the following test modes were found to be the worst mode for the corresponding test items and recorded in the report

| Test item | Test mode (Worse case operation mode) |
|---|---|
| EMI | Test mode 1 |

## 2.4 Special Accessories

Follow auxiliary equipment(s) test with EUT that provided by the manufacturer or laboratory is listed as follow:

| Description | Manufacturer | Model | Serial No. | Provided by | Other |
|---|---|---|---|---|---|
| Computer | GIGABYTE | 610L | / | Test lab. | / |
| / | / | / | / | / | / |
| / | / | / | / | / | / |
| / | / | / | / | / | / |

## 2.5 Equipment List for the Test

☒ **Radiation Emission Test Equipment (AiT 966 chamber)**

| Item | Test Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Cal.Due |
|---|---|---|---|---|---|---|
| 1 | EMI Measuring Receiver | R&S | ESR | 101160 | 2024.09.25 | 2025.09.24 |
| 2 | Low Noise Pre Amplifier | SCHWARZBECK | BBV 9745 | 00282 | 2024.09.25 | 2025.09.24 |
| 3 | Low Noise Pre Amplifier | CESHENG | CSKJLNA231016A | CSKJLNA231016A | 2024.09.25 | 2025.09.24 |
| 4 | Spectrum Analyser | R&S | FSV40 | 101470 | 2024.09.23 | 2025.09.22 |
| 5 | Passive Loop | ETS | 6512 | 00165355 | 2024.08.29 | 2026.08.28 |
| 6 | TRILOG Super Broadband test Antenna | SCHWARZBECK | VULB9168 | 01434 | 2024.08.29 | 2026.08.28 |
| 7 | Broadband Horn Antenna | Schwarzbeck | BBHA 9120D | 452 | 2024.08.29 | 2026.08.28 |
| 8 | 6dB Attenuator | JFW | 50FPE-006 | 4360846-949-1 | 2024.09.24 | 2025.09.23 |
| 9 | Filter | MICRO-TRONICS | BRM50702-02 | 16 | 2024.09.23 | 2025.09.22 |
| 10 | Filter | MICRO-TRONICS | BRC50703-02 | 17 | 2024.09.23 | 2025.09.22 |
| 11 | Filter | MICRO-TRONICS | BRC50705-02 | 18 | 2024.09.23 | 2025.09.22 |

☒ **Conducted Emission Test Equipment (AiT shiled room)**

| Item | Test Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Cal.Due |
|---|---|---|---|---|---|---|
| 1 | EMI Test Receiver | R&S | ESPI | 100771 | 2024.09.25 | 2025.09.24 |
| 2 | LISN | R&S | NNLK 8129 | 8130179 | 2024.09.24 | 2025.09.23 |
| 3 | ISN | TESEQ | T800 | 29429 | 2024.09.26 | 2025.09.25 |
| 4 | Pulse Limiter | R&S | ESH3-Z2 | 102789 | 2024.09.24 | 2025.09.23 |

# 3 TEST CONDITIONS AND RESULTS

## 3.1 Conducted Emission

**LIMIT**

For unintentional device, according to § 15.107(a) Line Conducted Emission Limits is as following：

| FREQUENCY (MHz) | ☐Class A (dBuV) | | ☒Class B (dBuV) | |
|---|---|---|---|---|
| | Quasi-peak | Average | Quasi-peak | Average |
| 0.15 -0.5 | 79.00 | 66.00 | 66 - 56 * | 56 - 46 * |
| 0.50 -5.0 | 73.00 | 60.00 | 56.00 | 46.00 |
| 5.0 -30.0 | 73.00 | 60.00 | 60.00 | 50.00 |

**TEST PROCEDURE**

a) The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. The EUT is a tabletop system; a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.4-2014.

b) Support equipment, if needed, was placed as per ANSI C63.4-2014.

c) All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4-2014.

d) The EUT received AC120V/60Hz power through a Line Impedance Stabilization Network (LISN) which supplied power source and was grounded to the ground plane.

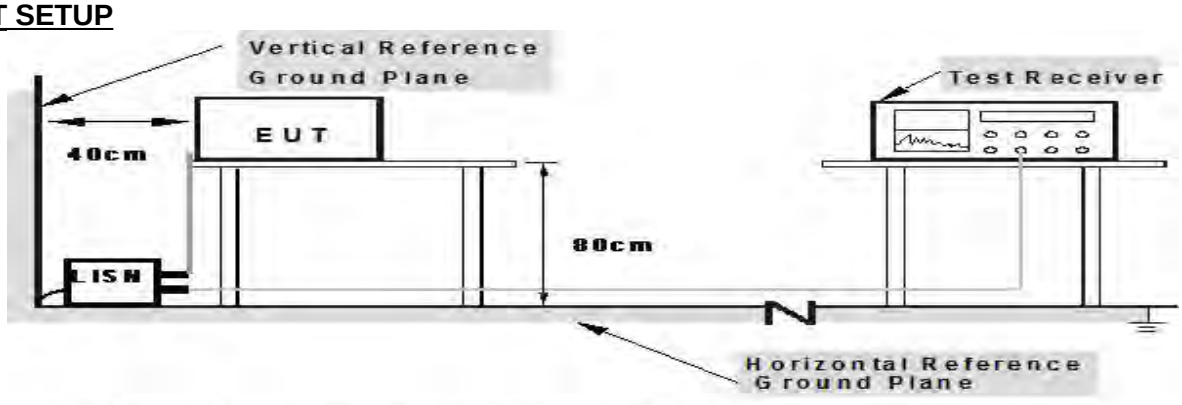
e) All support equipments received AC power from a second LISN, if any.

f) The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.

g) Analyzer / Receiver scanned from 150 KHz to 30MHz for emissions in each of the test modes.

h) During the above scans, the emissions were maximized by cable manipulation.

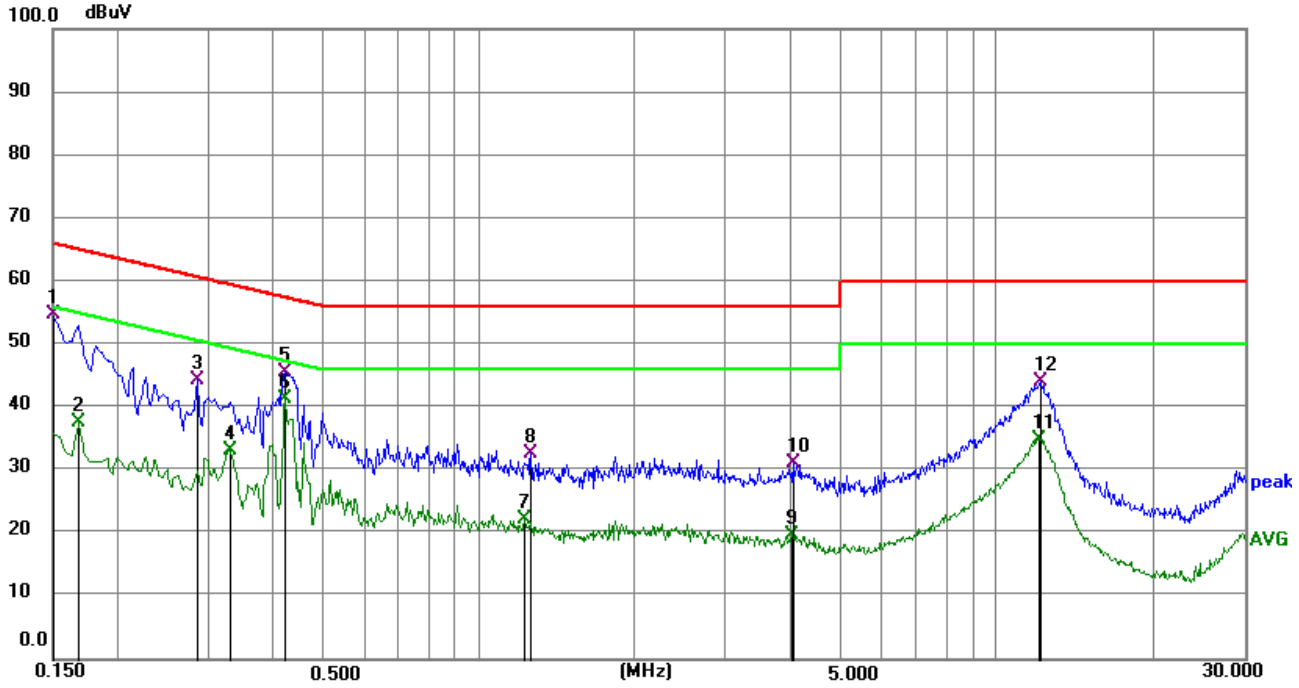
**TEST SETUP**




Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

## TEST RESULTS

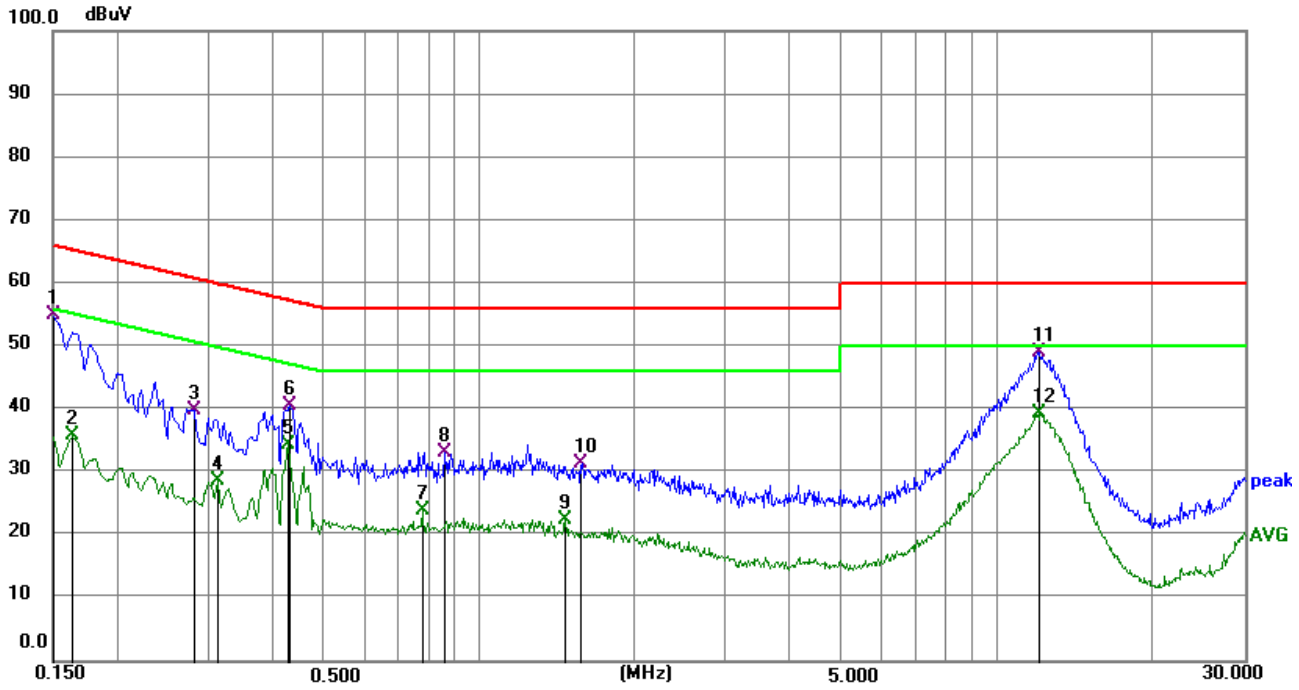
| Test Mode | Mode 1 | Line: | L |
|---|---|---|---|




Remark: Correct Factor = Insertion loss of LISN + Cable loss + Insertion loss of Pulse Limiter;
Measurement Result = Reading Level +Correct Factor;
Margin = Measurement Result- Limit

| No. | Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|---|---|---|---|---|---|---|---|
| | (MHz) | (dBuV) | (dB) | (dBuV) | (dBuV) | (dB) | |
| 1 | 0.1500 | 42.81 | 11.84 | 54.65 | 66.00 | -11.35 | QP |
| 2 | 0.1680 | 27.00 | 10.67 | 37.67 | 55.06 | -17.39 | AVG |
| 3 | 0.2850 | 33.66 | 10.70 | 44.36 | 60.67 | -16.31 | QP |
| 4 | 0.3300 | 22.35 | 10.70 | 33.05 | 49.45 | -16.40 | AVG |
| 5 | 0.4200 | 34.74 | 10.69 | 45.43 | 57.45 | -12.02 | QP |
| 6 | 0.4200 | 30.57 | 10.69 | 41.26 | 47.45 | -6.19 | AVG |
| 7 | 1.2255 | 11.51 | 10.68 | 22.19 | 46.00 | -23.81 | AVG |
| 8 | 1.2570 | 21.87 | 10.68 | 32.55 | 56.00 | -23.45 | QP |
| 9 | 4.0065 | 8.61 | 11.00 | 19.61 | 46.00 | -26.39 | AVG |
| 10 | 4.0290 | 20.04 | 11.00 | 31.04 | 56.00 | -24.96 | QP |
| 11 | 12.1020 | 23.61 | 11.28 | 34.89 | 50.00 | -15.11 | AVG |
| 12 | 12.1694 | 32.86 | 11.28 | 44.14 | 60.00 | -15.86 | QP |

| Test Mode | Mode 1 | Line: | N |
|---|---|---|---|




Remark: Correct Factor = Insertion loss of LISN + Cable loss + Insertion loss of Pulse Limiter;
Measurement Result = Reading Level +Correct Factor;

Margin = Measurement Result- Limit

| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB) | Result (dBuV) | Limit (dBuV) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 0.1508 | 43.13 | 11.75 | 54.88 | 65.96 | -11.08 | QP |
| 2 | 0.1635 | 25.08 | 10.67 | 35.75 | 55.28 | -19.53 | AVG |
| 3 | 0.2805 | 29.21 | 10.69 | 39.90 | 60.80 | -20.90 | QP |
| 4 | 0.3120 | 17.85 | 10.69 | 28.54 | 49.92 | -21.38 | AVG |
| 5 | 0.4245 | 23.65 | 10.69 | 34.34 | 47.36 | -13.02 | AVG |
| 6 | 0.4290 | 29.80 | 10.69 | 40.49 | 57.27 | -16.78 | QP |
| 7 | 0.7755 | 13.27 | 10.66 | 23.93 | 46.00 | -22.07 | AVG |
| 8 | 0.8610 | 22.56 | 10.65 | 33.21 | 56.00 | -22.79 | QP |
| 9 | 1.4640 | 11.86 | 10.71 | 22.57 | 46.00 | -23.43 | AVG |
| 10 | 1.5809 | 20.67 | 10.72 | 31.39 | 56.00 | -24.61 | QP |
| 11 | 12.0030 | 37.88 | 11.24 | 49.12 | 60.00 | -10.88 | QP |
| 12 | 12.1110 | 28.14 | 11.25 | 39.39 | 50.00 | -10.61 | AVG |

## 3.2 Radiated Emission

**LIMITS**

**LIMITS OF RADIATED EMISSION MEASUREMENT (Below 1000MHz)**

| FREQUENCY (MHz) | ☐Class A (at 10m) | ☒Class B (at 3m) |
|---|---|---|
| | dBuV/m | dBuV/m |
| 30 ~ 88 | 39.0 | 40.0 |
| 88 ~ 216 | 43.5 | 43.5 |
| 216 ~ 960 | 46.5 | 46.0 |
| Above 960 | 49.5 | 54.0 |

**LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)**

| FREQUENCY (MHz) | Class A (at 3m) dBuV/m | | Class B (at 3m) dBuV/m | |
|---|---|---|---|---|
| | Peak | Avg | Peak | Avg |
| Above 1000 | 80 | 60 | 74 | 54 |

Notes:

1) The limit for radiated test was performed according to as following: CISPR 22/ FCC PART 15B /ICES-003.
2) The tighter limit applies at the band edges.
3) Emission level (dBuV/m)=20log Emission level (uV/m).

**TEST PROCEDURE**

a) The measuring distance of at 10 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.

b) The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.

c) The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

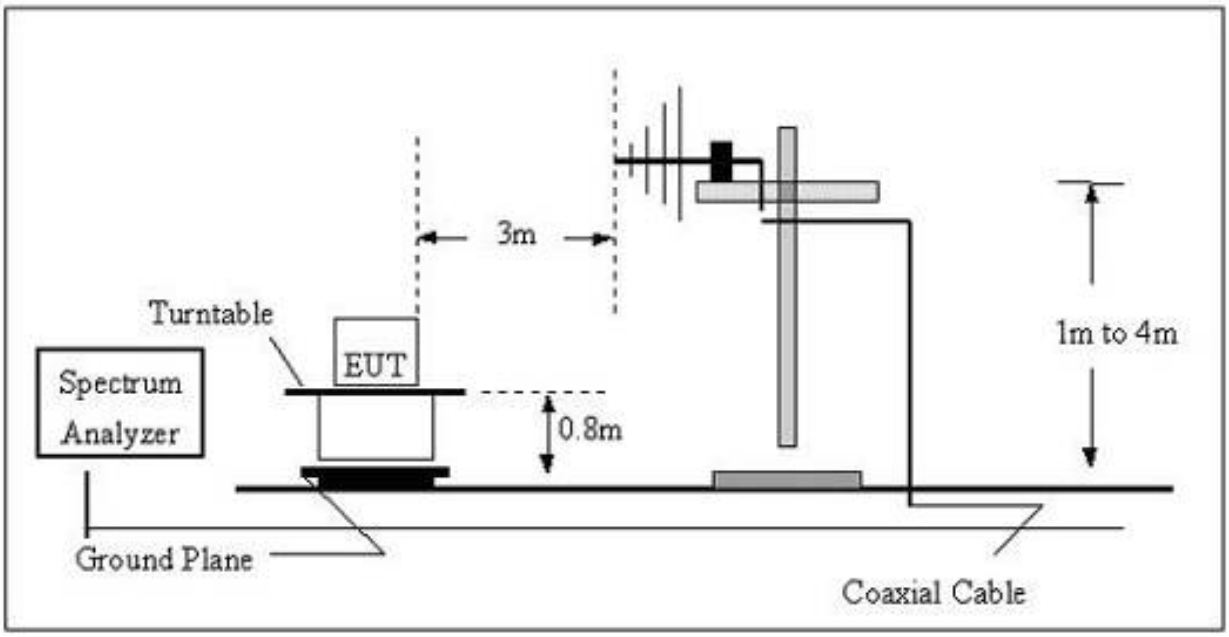
d) The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured, above 1G Average detector mode will be instead.

e) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP (AV) Limits and then no additional QP Mode measurement performed.

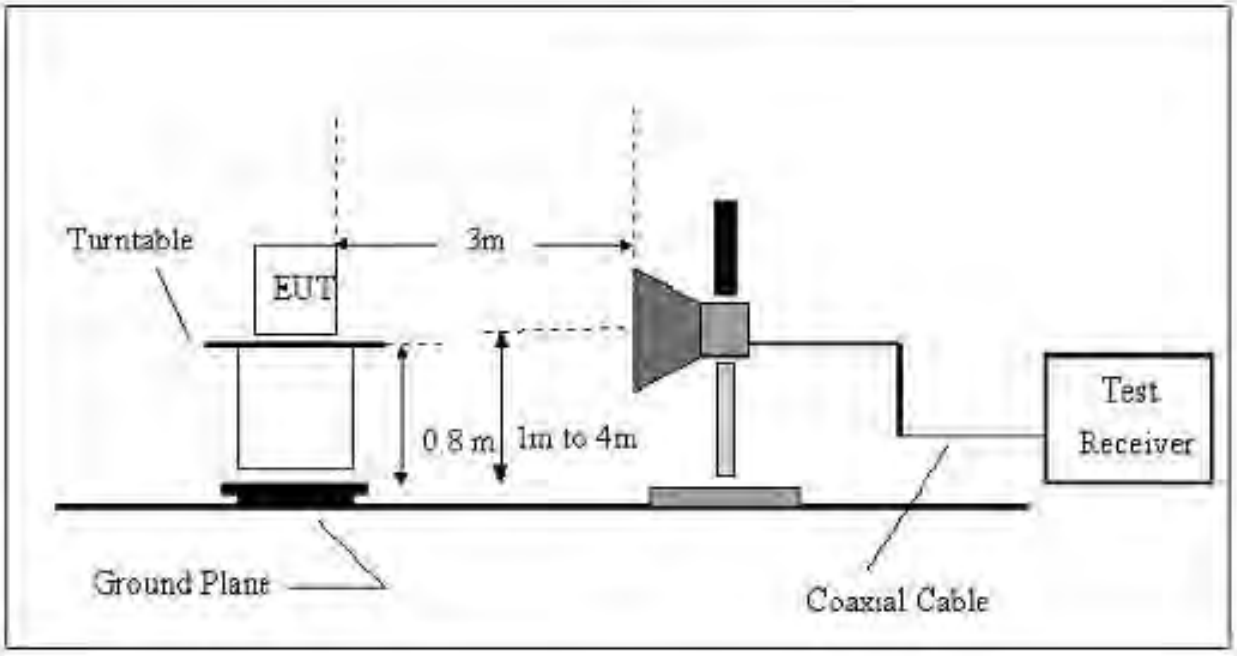
f) For the actual test configuration, please refer to the related Item –EUT Test Photos.

**TEST SETUP**

**(A) Radiated Emission Test Set-Up Frequency Below 1 GHz**

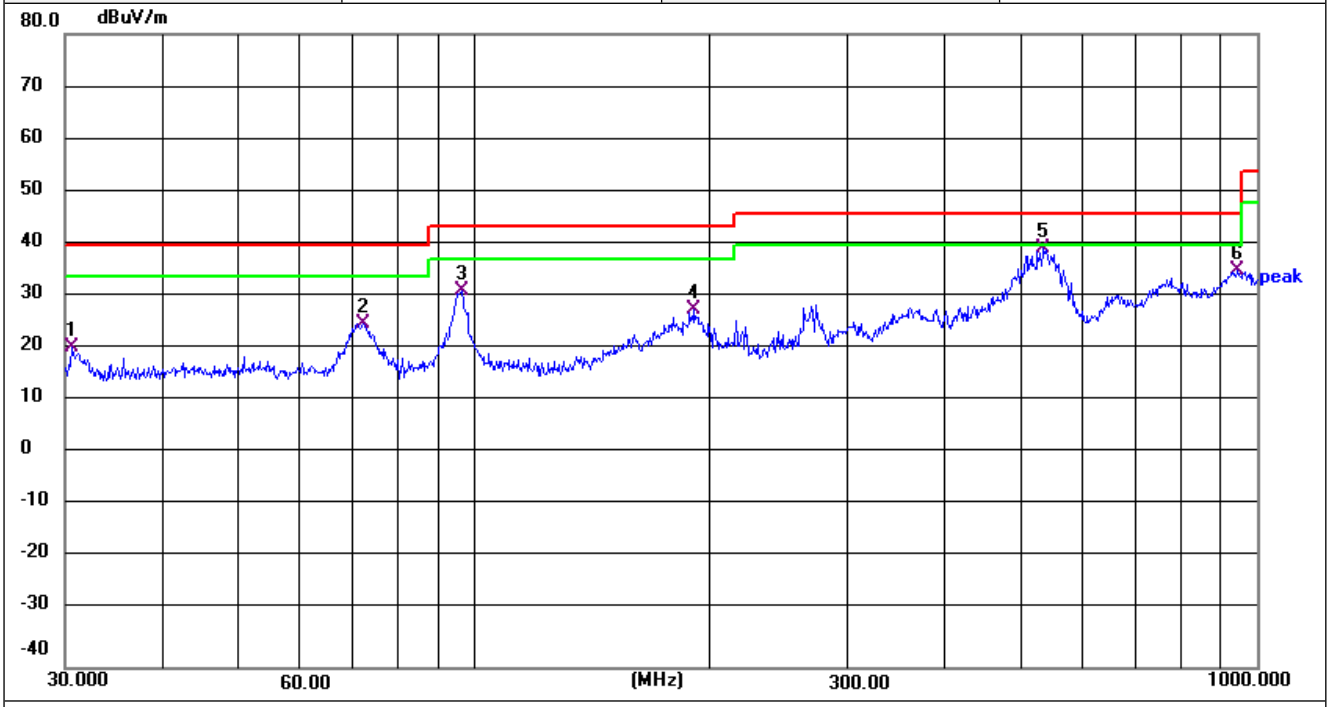



**(B) Radiated Emission Test Set-UP Frequency Above 1GHz**



**30-1GHz:**

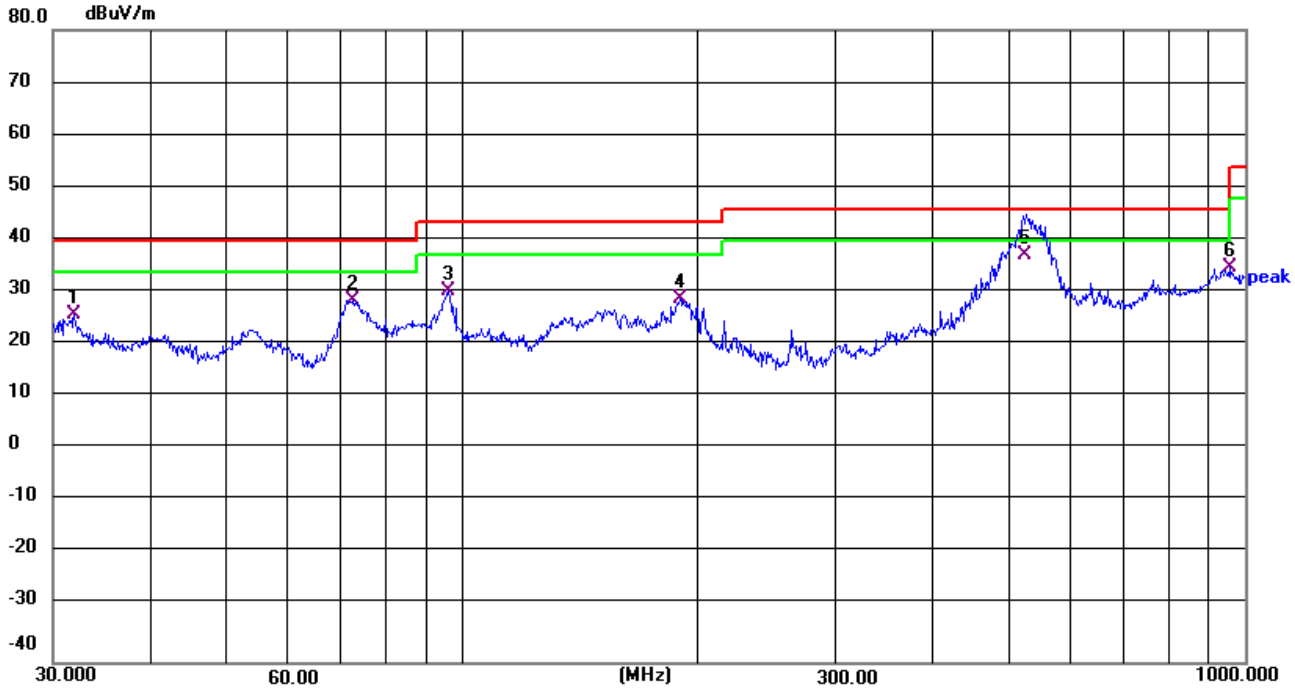
| Test mode: | Mode 1 | Polarization: | Horizontal |
|---|---|---|---|




Remark:
Emission Level = Reading + Factor;
Factor = Antenna Factor + Cable Loss – Pre-amplifier;
Margin= Emission Level - Limit.

| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. |
|---|---|---|---|---|---|---|---|
| 1 | 30.6379 | 38.39 | -17.53 | 20.86 | 40.00 | -19.14 | QP |
| 2 | 72.0843 | 44.43 | -19.33 | 25.10 | 40.00 | -14.90 | QP |
| 3 | 96.4362 | 51.87 | -20.56 | 31.31 | 43.50 | -12.19 | QP |
| 4 | 191.0738 | 47.52 | -19.51 | 28.01 | 43.50 | -15.49 | QP |
| 5 | 533.8321 | 51.25 | -11.68 | 39.57 | 46.00 | -6.43 | QP |
| 6 | 945.4399 | 38.97 | -3.63 | 35.34 | 46.00 | -10.66 | QP |

| Test mode: | Mode 1 | Polarization: | Vertical |
|---|---|---|---|

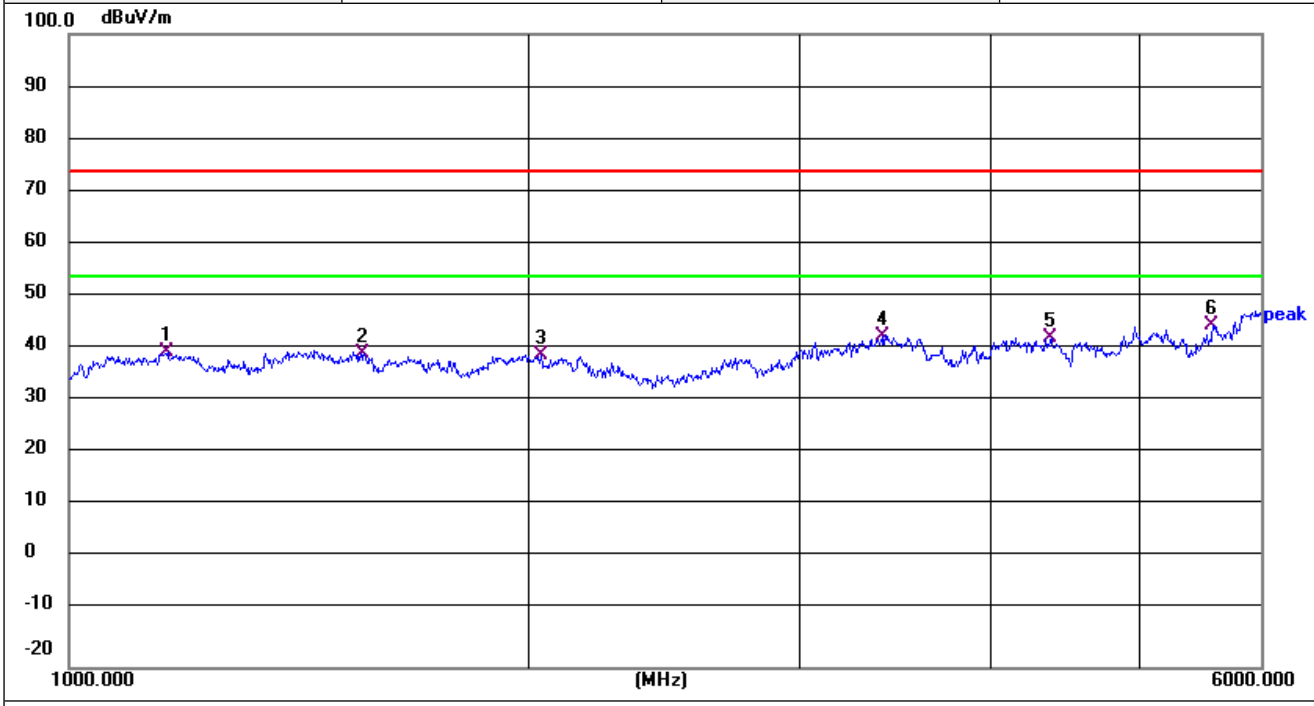



Remark:
Emission Level = Reading + Factor;
Factor = Antenna Factor + Cable Loss – Pre-amplifier;
Margin= Emission Level - Limit.

| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. |
|---|---|---|---|---|---|---|---|
| 1 | 31.9546 | 43.63 | -17.43 | 26.20 | 40.00 | -13.80 | QP |
| 2 | 72.5916 | 48.36 | -19.45 | 28.91 | 40.00 | -11.09 | QP |
| 3 | 96.0986 | 51.08 | -20.58 | 30.50 | 43.50 | -13.00 | QP |
| 4 | 189.7385 | 48.43 | -19.43 | 29.00 | 43.50 | -14.50 | QP |
| 5 | 524.9830 | 49.42 | -11.98 | 37.44 | 46.00 | -8.56 | QP |
| 6 | 955.4381 | 38.39 | -3.49 | 34.90 | 46.00 | -11.10 | QP |

**1GHz-6GHz:**

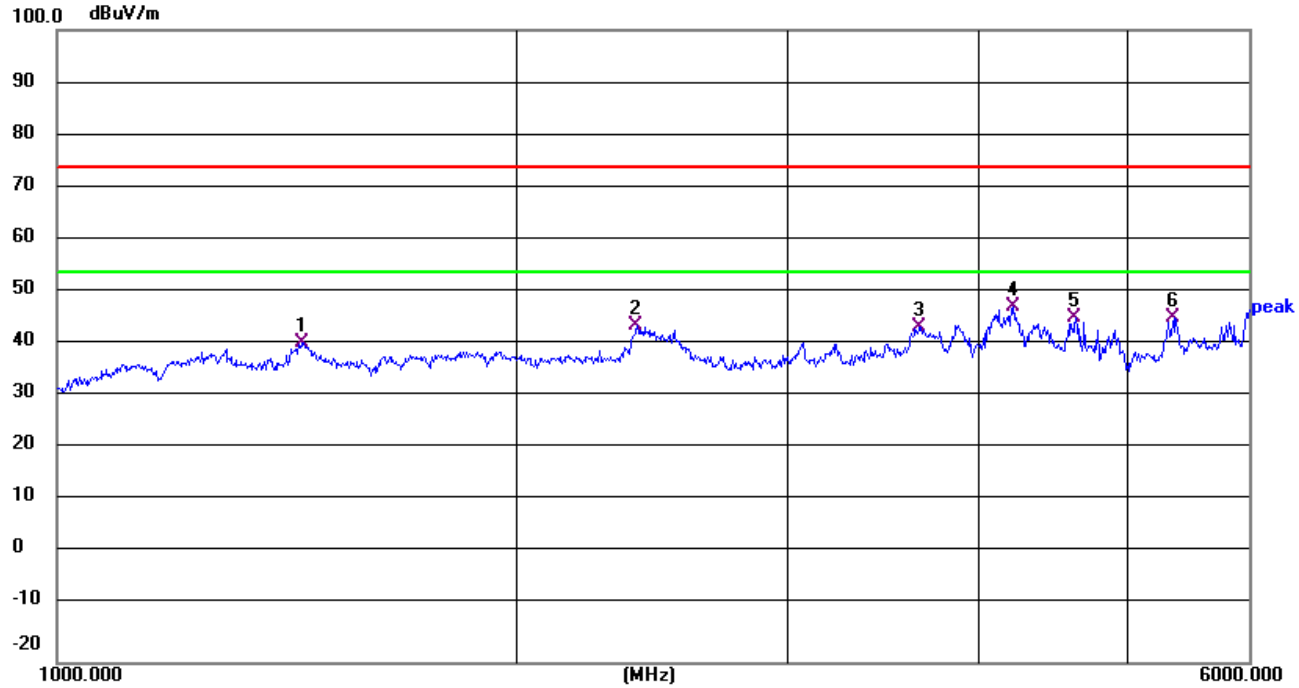
| Test mode: | Mode 1 | Polarization: | Horizontal |
|---|---|---|---|




Remark:
Emission Level = Reading + Factor;
Factor = Antenna Factor + Cable Loss – Pre-amplifier;
Margin= Emission Level - Limit.

| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. |
|---|---|---|---|---|---|---|---|
| 1 | 1160.343 | 50.46 | -10.69 | 39.77 | 74.00 | -34.23 | QP |
| 2 | 1559.486 | 49.35 | -9.87 | 39.48 | 74.00 | -34.52 | QP |
| 3 | 2033.049 | 47.98 | -8.80 | 39.18 | 74.00 | -34.82 | QP |
| 4 | 3393.901 | 43.74 | -0.92 | 42.82 | 74.00 | -31.18 | QP |
| 5 | 4377.202 | 38.14 | 4.49 | 42.63 | 74.00 | -31.37 | QP |
| 6 | 5585.026 | 41.04 | 3.92 | 44.96 | 74.00 | -29.04 | QP |

| Test mode: | Mode 1 | Polarization: | Vertical |
|---|---|---|---|



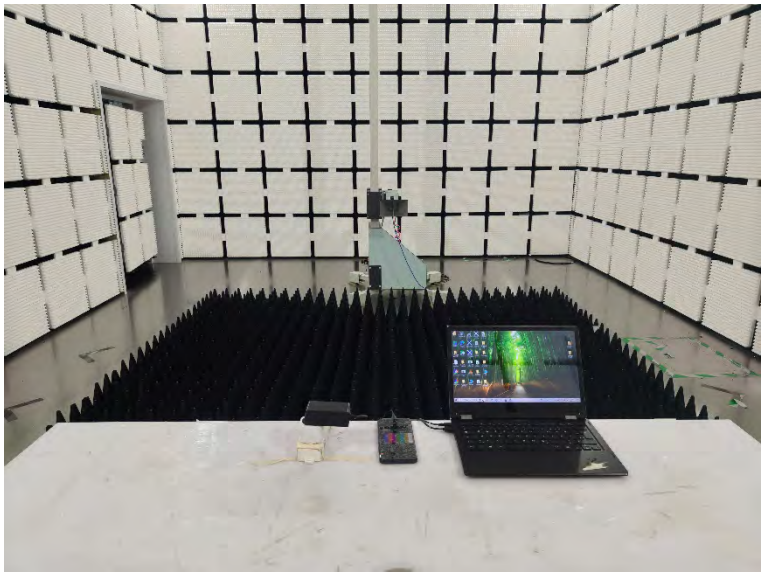

Remark:
Emission Level = Reading + Factor;
Factor = Antenna Factor + Cable Loss – Pre-amplifier;
Margin= Emission Level - Limit.

| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. |
|---|---|---|---|---|---|---|---|
| 1 | 1443.846 | 50.76 | -10.11 | 40.65 | 74.00 | -33.35 | QP |
| 2 | 2393.093 | 49.80 | -5.75 | 44.05 | 74.00 | -29.95 | QP |
| 3 | 3665.723 | 42.66 | 1.11 | 43.77 | 74.00 | -30.23 | QP |
| 4 | 4208.015 | 43.56 | 4.15 | 47.71 | 74.00 | -26.29 | QP |
| 5 | 4627.211 | 40.45 | 5.07 | 45.52 | 74.00 | -28.48 | QP |
| 6 | 5359.542 | 41.16 | 4.27 | 45.43 | 74.00 | -28.57 | QP |

# 4 Test Setup Photographs of EUT

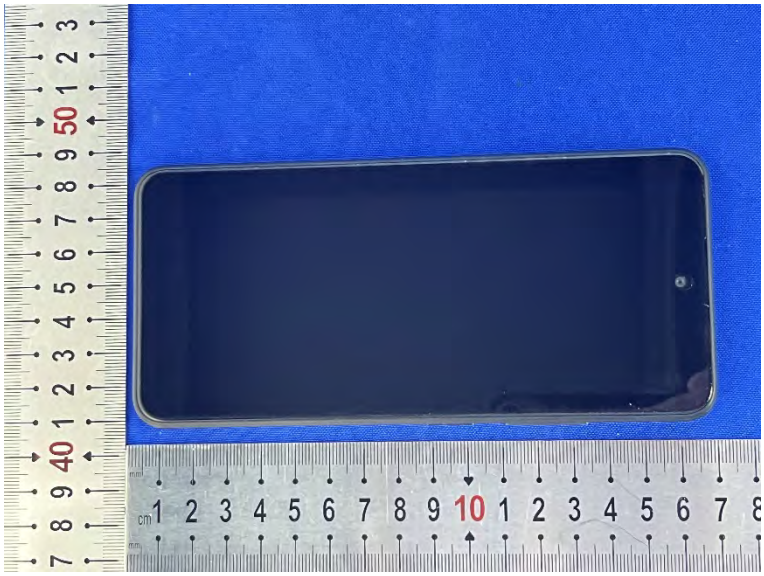
Conducted Emission

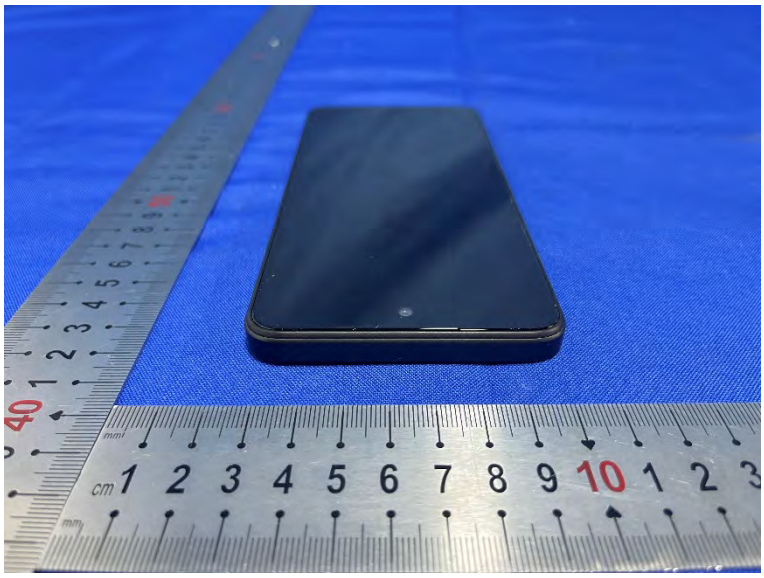
Radiated Emission

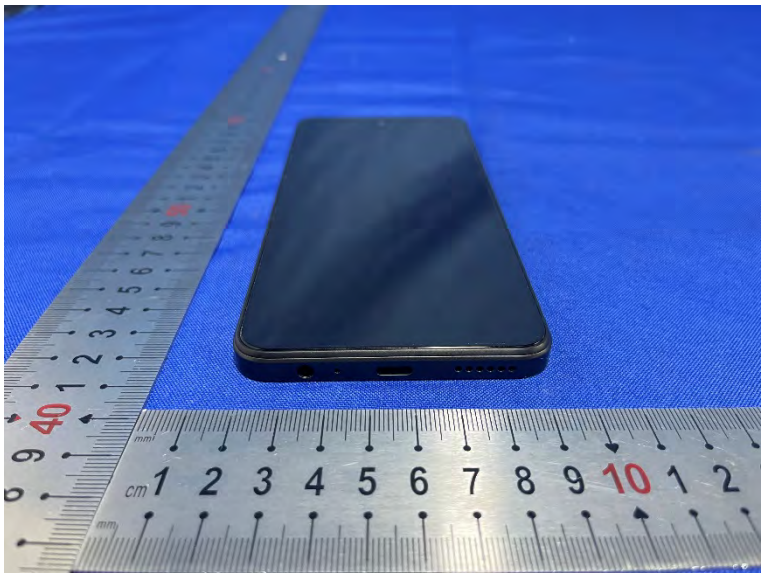


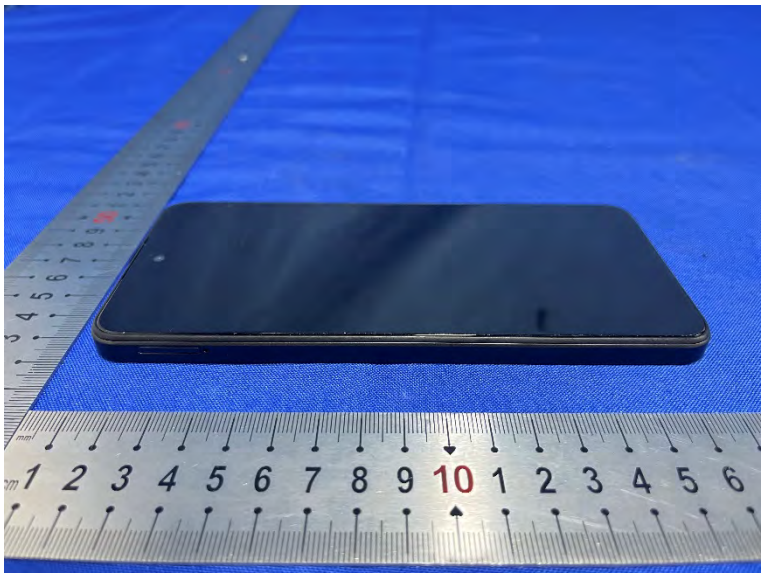
# 5 Photographs of EUT

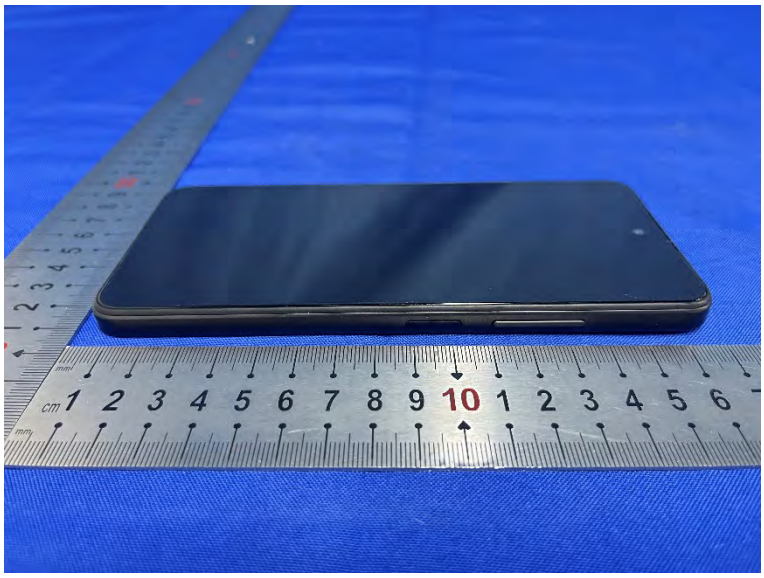
External Photos





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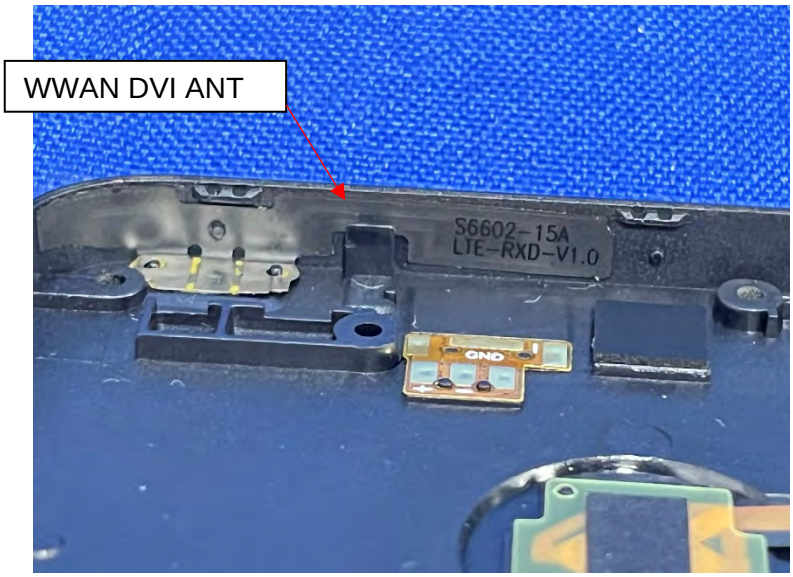
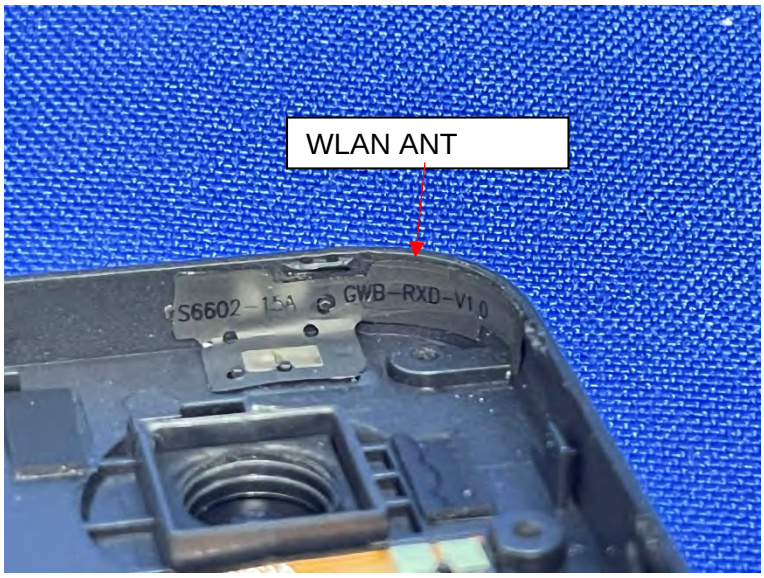
LAGENIO
AC Adapter
Model: TPA-418G050200UU01
Input: 100-240V ~ 50/60Hz 0.3A
Output: 5.0V⎓2.0A 10.0W
SHENZHEN TIANYIN ELECTRONICS CO.,LTD.
Made in China
2504

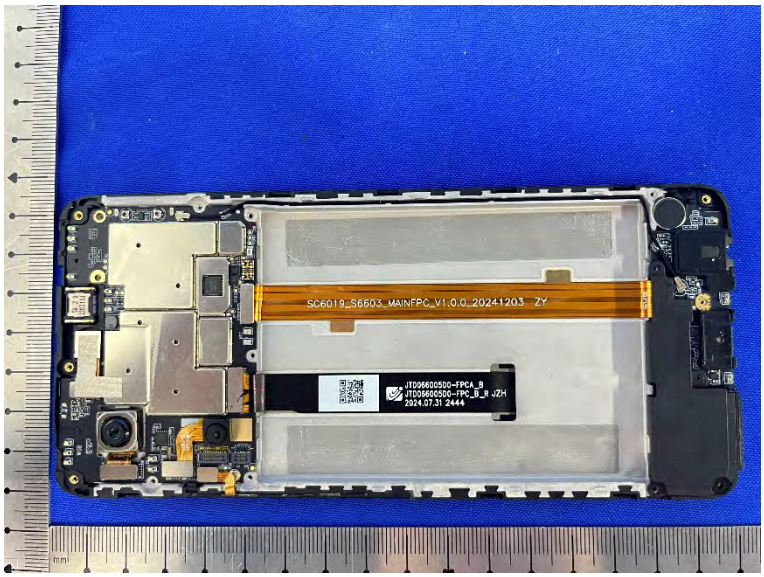
Internal photos






WLAN ANT
S6602-15A GWB-RXD-V1.0


WWAN Main ANT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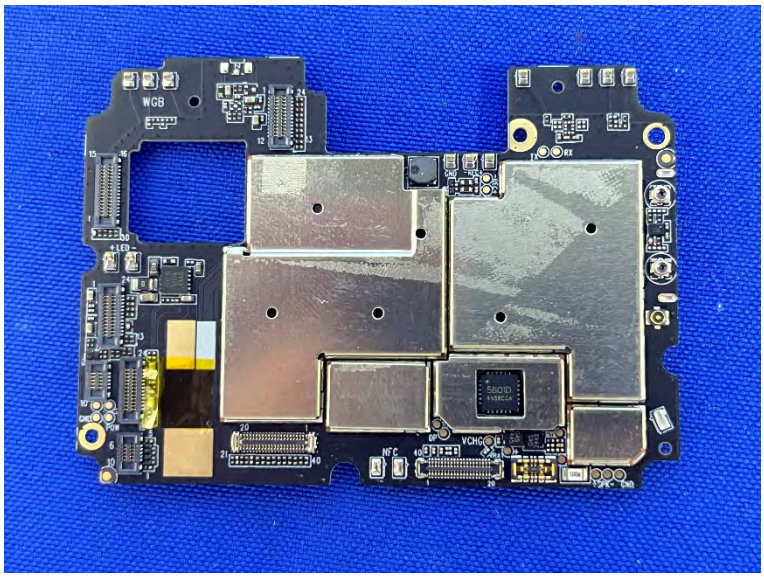

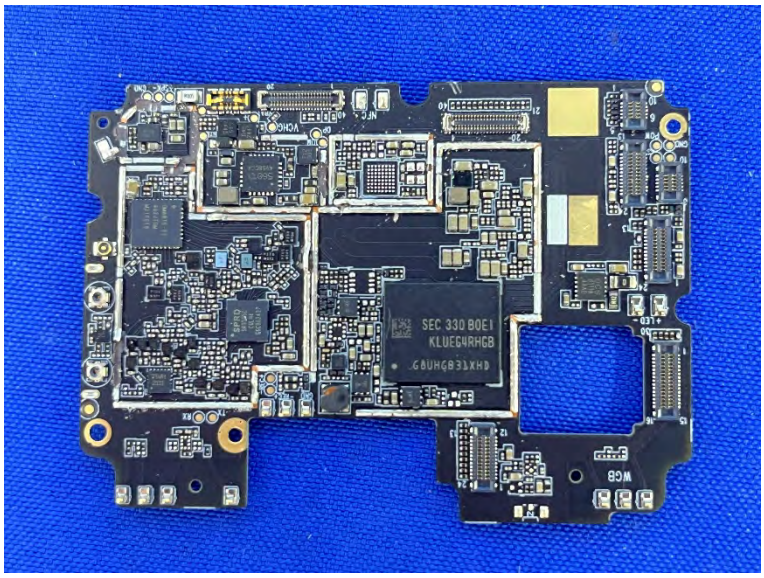

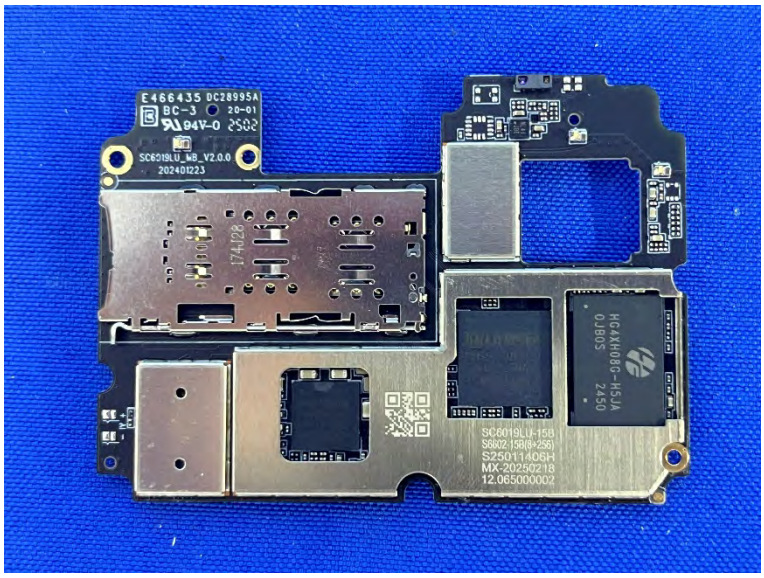

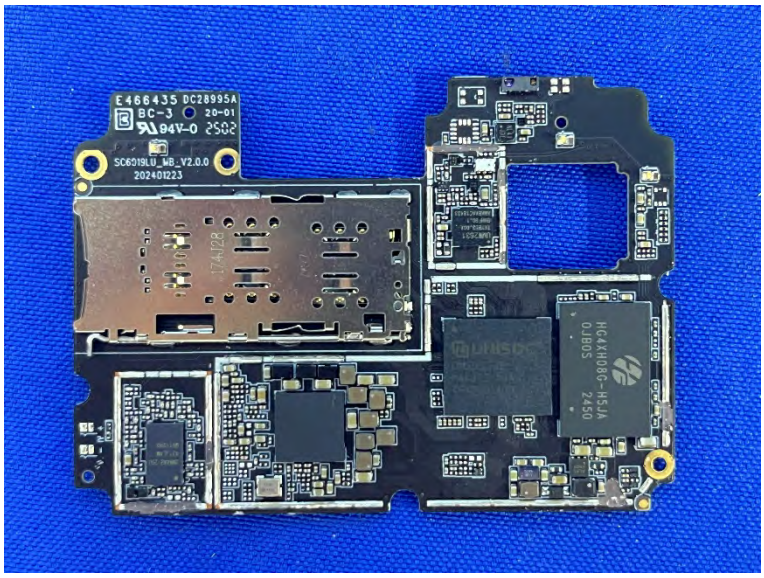
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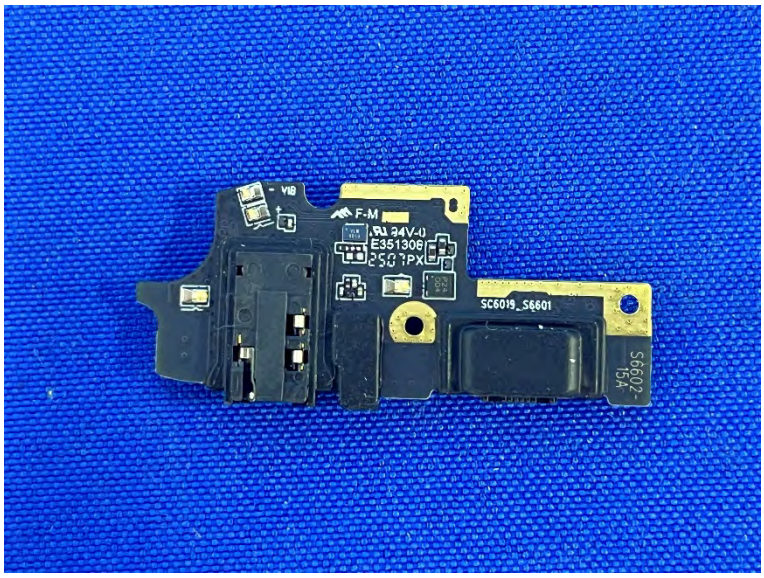
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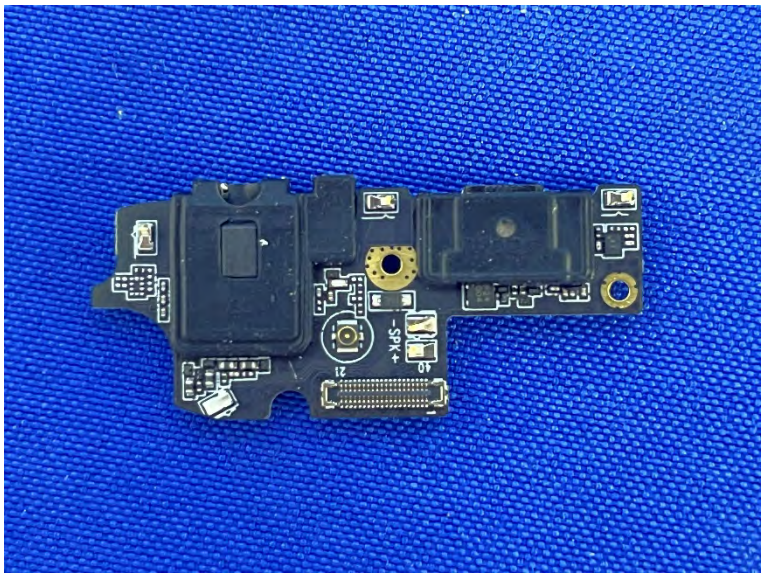
SPK-
SPK+


********** End of Report **********