

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                    |                                                                                     |                                                     |                                                                                       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>Prüfbericht-Nr.:</b><br>Test report no.:                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>CN24LM90 001</b>                                                                                                | <b>Auftrags-Nr.:</b><br>Order no.:                                                  | 168485064                                           | Seite 1 von 20<br>Page 1 of 20                                                        |
| <b>Kunden-Referenz-Nr.:</b><br>Client reference no.:                                                                                                                                                                                                                                                                                                                                                                                                                 | N/A                                                                                                                | <b>Auftragsdatum:</b><br>Order date:                                                | 2024-09-27                                          |                                                                                       |
| <b>Auftraggeber:</b><br>Client:                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>SAIC GM WULING AUTOMOBILE CO.,LTD</b><br>18th Hexi Road, Liuzhou City, Guangxi, Zhuang Autonomous Region, China |                                                                                     |                                                     |                                                                                       |
| <b>Prüfgegenstand:</b><br>Test item:                                                                                                                                                                                                                                                                                                                                                                                                                                 | ICE (In Car Entertainment)                                                                                         |                                                                                     |                                                     |                                                                                       |
| <b>Bezeichnung / Typ-Nr.:</b><br>Identification / Type no.:                                                                                                                                                                                                                                                                                                                                                                                                          | MP-202S-00                                                                                                         |                                                                                     |                                                     |                                                                                       |
| <b>Auftrags-Inhalt:</b><br>Order content:                                                                                                                                                                                                                                                                                                                                                                                                                            | Test Report                                                                                                        |                                                                                     |                                                     |                                                                                       |
| <b>Prüfgrundlage:</b><br>Test specification:                                                                                                                                                                                                                                                                                                                                                                                                                         | CFR47 FCC Part 15: Subpart C Section 15.247                                                                        |                                                                                     |                                                     |                                                                                       |
| <b>Wareneingangsdatum:</b><br>Date of sample receipt:                                                                                                                                                                                                                                                                                                                                                                                                                | 2024-09-27                                                                                                         |  |                                                     |                                                                                       |
| <b>Prüfmuster-Nr.:</b><br>Test sample no.:                                                                                                                                                                                                                                                                                                                                                                                                                           | A003717814-001~003                                                                                                 |                                                                                     |                                                     |                                                                                       |
| <b>Prüfzeitraum:</b><br>Testing period:                                                                                                                                                                                                                                                                                                                                                                                                                              | 2024-10-27 - 2024-12-20                                                                                            |                                                                                     |                                                     |                                                                                       |
| <b>Ort der Prüfung:</b><br>Place of testing:                                                                                                                                                                                                                                                                                                                                                                                                                         | TÜV Rheinland<br>(Shenzhen) Co., Ltd.                                                                              |                                                                                     |                                                     |                                                                                       |
| <b>Prüflaboratorium:</b><br>Testing laboratory:                                                                                                                                                                                                                                                                                                                                                                                                                      | TÜV Rheinland<br>(Shenzhen) Co., Ltd.                                                                              |                                                                                     |                                                     |                                                                                       |
| <b>Prüfergebnis*:</b><br>Test result*:                                                                                                                                                                                                                                                                                                                                                                                                                               | Pass                                                                                                               |                                                                                     |                                                     |                                                                                       |
| <b>geprüft von:</b><br>tested by:                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                 |                                                                                     | <b>genehmigt von:</b><br>authorized by:             |  |
| <b>Datum:</b><br>Date: 2025-05-20                                                                                                                                                                                                                                                                                                                                                                                                                                    | Signed by: Jonathan Li                                                                                             |                                                                                     | <b>Ausstellungsdatum:</b><br>Issue date: 2025-05-20 | Signed by: Bell Hu                                                                    |
| <b>Stellung / Position:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                          | Sachverständige(r)/Expert                                                                                          |                                                                                     | <b>Stellung / Position:</b>                         | Sachverständige(r)/Expert                                                             |
| <b>Sonstiges /</b><br><b>Other:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                  | This report is for BLE operation.<br><br>FCC ID: 2AVYX-MP202S00                                                    |                                                                                     |                                                     |                                                                                       |
| <b>Zustand des Prüfgegenstandes bei Anlieferung:</b><br>Condition of the test item at delivery:                                                                                                                                                                                                                                                                                                                                                                      | Prüfmuster vollständig und unbeschädigt<br>Test item complete and undamaged                                        |                                                                                     |                                                     |                                                                                       |
| * Legende:                                                                                                                                                                                                                                                                                                                                                                                                                                                           | P(ass) = entspricht o.g. Prüfgrundlage(n)                                                                          | F(ail) = entspricht nicht o.g. Prüfgrundlage(n)                                     | N/A = nicht anwendbar                               | N/T = nicht getestet                                                                  |
| * Legend:                                                                                                                                                                                                                                                                                                                                                                                                                                                            | P(ass) = passed a.m. test specification(s)                                                                         | F(ail) = failed a.m. test specification(s)                                          | N/A = not applicable                                | N/T = not tested                                                                      |
| <b>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.</b><br><i>This test report only relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i> |                                                                                                                    |                                                                                     |                                                     |                                                                                       |

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**Anmerkungen**  
*Remarks*

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | <p>Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben.</p> <p>Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden.</p> <p><i>The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system. Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
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| 3 | <p>Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben.</p> <p>Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt.</p> <p><i>Test clauses with remark of * are subcontracted to qualified subcontractors and described under the respective test clause in the report.</i></p> <p><i>Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 4 | <p>Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnissen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2021, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezüglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019.</p> <p><i>The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the "Zero Guard Band Rule" and "Simple Acceptance" in accordance with ILAC G8:2019 and IEC Guide 115:2021, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019.</i></p>                                                                                                                                                                                                                                                                                       |

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## ***Test Summary***

**5.1.1 ANTENNA REQUIREMENT**

*RESULT: Pass*

**5.1.2 MAXIMUM PEAK CONDUCTED OUTPUT POWER**

*RESULT: Pass*

**5.1.3 CONDUCTED POWER SPECTRAL DENSITY**

*RESULT: Pass*

**5.1.4 6dB BANDWIDTH**

*RESULT: Pass*

**5.1.5 99% BANDWIDTH**

*RESULT: Pass*

**5.1.6 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 KHz BANDWIDTH**

*RESULT: Pass*

**5.1.7 RADIATED SPURIOUS EMISSION**

*RESULT: Pass*

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# 1 General Remarks

## 1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Test Results of Bluetooth Low Energy

Appendix B: Photographs of the Test Set-up

## 2 Test Sites

### 2.1 Test Facilities

**TÜV Rheinland (Shenzhen) Co., Ltd.**

2-3F, 101 & 102, No.2, Nuclear Power Industrial Park, Fuming Community, Fucheng Street,  
Longhua District, Shenzhen 518000, People's Republic of China

FCC Accreditation Designation No.: CN1260

### 2.2 List of Test and Measurement Instruments

**Table 1: List of Test and Measurement Equipment**

| <b>Radio Spectrum Testing (SRD-Tonscend)</b>   |                     |                   |                   |                   |
|------------------------------------------------|---------------------|-------------------|-------------------|-------------------|
| <b>Equipment</b>                               | <b>Manufacturer</b> | <b>Model</b>      | <b>Serial No.</b> | <b>Cal. until</b> |
| EXA Signal Analyzer, Multi-touch               | Keysight            | N9010B            | MY60241175        | 25.09.2025        |
| MXG X-Series RF Vector Signal Generator        | Keysight            | N5182B            | MY61250137        | 25.09.2025        |
| EXG X-Series Microwave Analog Signal Generator | Keysight            | N5173B            | MY61250141        | 25.09.2025        |
| DC Power Supply                                | Keysight            | E3642A            | MY61276100        | 25.09.2025        |
| Wireless Connectivity Tester                   | R&S                 | CMW270            | 102505            | 25.09.2025        |
| Power Control Unit                             | Tonscend            | JS0806-4ADC       | N/A               | 25.09.2025        |
| Automation Control Unit                        | Tonscend            | JS0806-2          | 21C8060396        | 25.09.2025        |
| Test Software                                  | Tonscend            | JS1120-3          | N/A               | N/A               |
| Control PC                                     | Lenovo              | TianYi510S-071MB  | YLX23JMF          | N/A               |
| <b>Unwanted Emission Testing (TS9975)</b>      |                     |                   |                   |                   |
| <b>Equipment</b>                               | <b>Manufacturer</b> | <b>Model</b>      | <b>Serial No.</b> | <b>Cal. until</b> |
| EMI Test Receiver                              | R&S                 | ESR 7             | 102021            | 28.09.2025        |
| Signal Analyzer                                | R&S                 | FSV 40            | 101439            | 28.09.2025        |
| System Controller Interface                    | R&S                 | SCI-100           | S10010038         | N/A               |
| Filterbank                                     | R&S                 | Wlan              | 100759            | 28.09.2025        |
| OSP                                            | R&S                 | OSP 120           | 102040            | N/A               |
| Pre-amplifier                                  | R&S                 | SCU08F1           | 08320031          | 28.09.2025        |
| Amplifier                                      | R&S                 | SCU-18F           | 180070            | 28.09.2025        |
| Amplifier                                      | R&S                 | SCU40A            | 100475            | 28.09.2025        |
| Trilog Broadband Antenna (30 MHz - 7 GHz)      | Schwarzbeck         | VULB 9162         | 193               | 27.09.2026        |
| Double-Ridged Antenna (1 -18 GHz)              | ETS-LINDGREN        | 3117              | 00218717          | 27.09.2026        |
| Wideband Ridged Horn Antenna (18-40 GHz)       | Steatite            | QMS-00880         | 19067             | 27.09.2026        |
| Active Loop Antenna                            | Schwarzbeck         | FMZB 1513         | 302               | 27.09.2026        |
| Test software                                  | R&S                 | EMC32 (V10.60.10) | N/A               | N/A               |

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|                          |           |               |              |            |
|--------------------------|-----------|---------------|--------------|------------|
| Control PC               | Dell      | OptiPlex 7050 | 36NV9P2      | N/A        |
| 3m Semi-Anechoic Chamber | Albatross | SAC-3m        | APC17151-SAC | 13.09.2027 |

## 2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

## 2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

## 2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements as below table.

**Table 2: Measurement Uncertainty**

| Parameter                                              | Uncertainty (k=2)     |
|--------------------------------------------------------|-----------------------|
| RF output power, conducted                             | ± 0.99 dB             |
| Occupied Channel Bandwidth                             | ± 2.08 %              |
| RF power density, conducted                            | ± 0.99 dB             |
| Unwanted Emissions, conducted                          | ± 0.89 dB             |
| All emissions, radiated                                | ±4.17 dB              |
| Conducted Emission, (9kHz to 150kHz)/(150kHz to 30MHz) | ± 3.70 dB / ± 3.30 dB |

## 2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix A & B of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) Co., Ltd. file for certification follow-up purposes.

## 2.7 Status of Facility Used for Testing

The TÜV Rheinland (Shenzhen) Co., Ltd. Test facility located at **Error! Reference source not found.** is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

### 3 General Product Information

#### 3.1 Product Function and Intended Use

The EUT is a ICE (In Car Entertainment) intended to be assembled into automotive environment, which supports Bluetooth (dual mode) technologies.

For details refer to the User Manual, Technical Description and Circuit Diagram.

#### 3.2 Ratings and System Details

Table 3: Technical Specification of EUT

| General Information of EUT              | Value                      |
|-----------------------------------------|----------------------------|
| Product Name:                           | ICE (In Car Entertainment) |
| Model No.:                              | MP-202S-00                 |
| Operating Voltage:                      | DC 12V                     |
| Testing Voltage:                        | DC 12 V                    |
| Operating Temperature Range:            | -30 °C ~ 80 °C             |
| Technical Specification of Bluetooth LE |                            |
| Operating Frequency:                    | 2402 MHz to 2480 MHz       |
| Type of Modulation:                     | GFSK                       |
| Channel Number:                         | 40 channels                |
| Channel Separation:                     | 2MHz                       |
| Data Rate:                              | 1Mbps                      |
| Antenna Type:                           | Integral Antenna           |
| Antenna Gain of Bluetooth:              | 1 dBi                      |

Note: The correctness of all data provided by customer in the test report is ensured and responsible of the customer. Any misjudgment of the test results caused by the use of incorrect data provided by customer shall be borne by the customer.

**Table 4: RF Channel and Frequency of Bluetooth LE**

| RF Channel | Frequency (MHz) | RF Channel | Frequency (MHz) | RF Channel | Frequency (MHz) | RF Channel | Frequency (MHz) |
|------------|-----------------|------------|-----------------|------------|-----------------|------------|-----------------|
| <b>0</b>   | <b>2402</b>     | 10         | 2422            | 20         | 2442            | 30         | 2462            |
| 1          | 2404            | 11         | 2424            | 21         | 2444            | 31         | 2464            |
| 2          | 2406            | 12         | 2426            | 22         | 2446            | 32         | 2466            |
| 3          | 2408            | 13         | 2428            | 23         | 2448            | 33         | 2468            |
| 4          | 2410            | 14         | 2430            | 24         | 2450            | 34         | 2470            |
| 5          | 2412            | 15         | 2432            | 25         | 2452            | 35         | 2472            |
| 6          | 2414            | 16         | 2434            | 26         | 2454            | 36         | 2474            |
| 7          | 2416            | 17         | 2436            | 27         | 2456            | 37         | 2476            |
| 8          | 2418            | 18         | 2438            | 28         | 2458            | 38         | 2478            |
| 9          | 2420            | <b>19</b>  | <b>2440</b>     | 29         | 2460            | <b>39</b>  | <b>2480</b>     |

Test frequencies are lowest channel: 2402 MHz, middle channel: 2440 MHz and highest channel: 2480 MHz for Bluetooth LE

### 3.3 Independent Operation Modes

The basic operation modes are:

- A. On, Bluetooth transmitting mode (Bluetooth LE mode)
  - 1) Low Channel
  - 2) Middle Channel
  - 3) High Channel
- B. On, Normal operation +Bluetooth
- C. Off

### 3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

### 3.5 Submitted Documents

- Application Form
- ID Label and Location Info
- User Manual

## 4 Test Set-up and Operation Modes

### 4.1 Principle of Configuration Selection

**Radio Spectrum:** The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

**Emission:** The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

### 4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All tests were performed according to the procedures in ANSI C63.10: 2013.

According to clause 3.1, all tests were performed on model MP-202S-00 in this report.

### 4.3 Special Accessories and Auxiliary Equipment

Table 5: Auxiliary Equipment Used during Test

| Description     | Manufacturer | Model | S/N       |
|-----------------|--------------|-------|-----------|
| Laptop          | Lenovo       | T480  | PF-16A6N8 |
| DC power Supply | Topward      | 3303D | 809332    |

### 4.4 Countermeasures to Achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF).

No additional measures were employed to achieve compliance.

## 4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test (Below 1GHz)

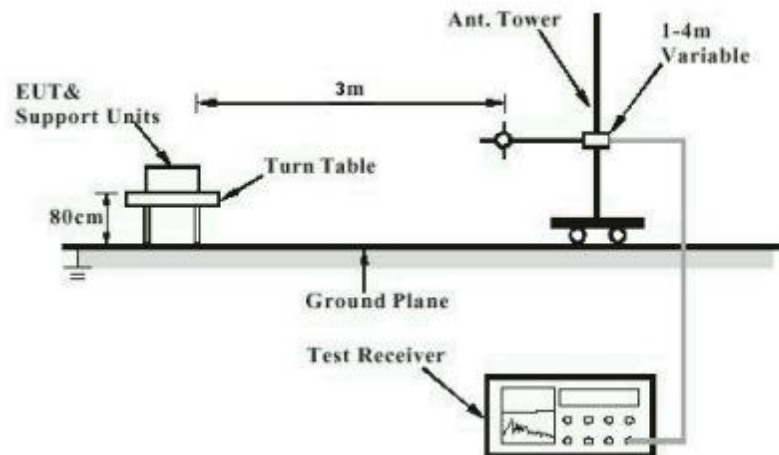
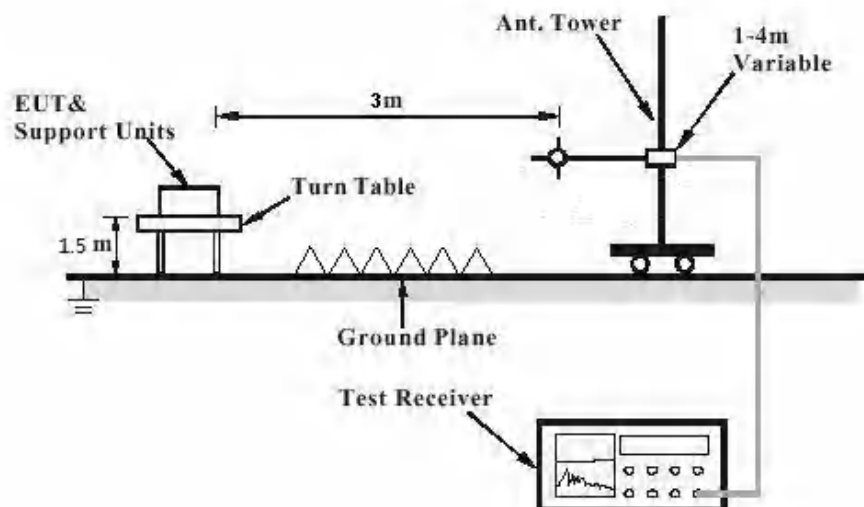
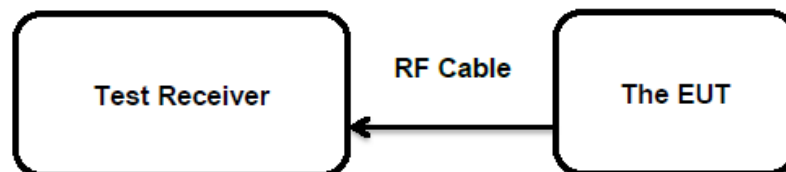


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)



**Diagram of Measurement Configuration for Conducted Transmitter Measurement**



## 5 Test Results

### 5.1 Transmitter Requirement & Test Suites

#### 5.1.1 Antenna Requirement

RESULT:

**Pass**

**Test Specification**

Test standard : FCC Part 15.247(b)(4) and Part 15.203

According to the manufacturer declared, the EUT has an Integral antenna, the directional gain of antenna is 1dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement.

Therefore the EUT is considered sufficient to comply with the provision.

Refer to EUT Photo for further details.

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## 5.1.2 Maximum Peak Conducted Output Power

**RESULT:**

**Pass**

### Test Specification

Test standard : FCC Part 15.247(b)(1)&(3)  
Basic standard : ANSI C63.10: 2013  
Limits : FHSS < 0.125 Watts, DSSS < 1.0 Watts  
Kind of test site : Shielded Room

### Test Setup

Date of testing : 2024-10-27 - 2024-12-20  
Input voltage : DC 12V  
Operation mode : A  
Test channel : Low / Middle / High  
Ambient temperature : 25.4 °C  
Relative humidity : 54 %  
Atmospheric pressure : 101 kPa

For details refer to following test result.

**Table 6: Test Result of Maximum Peak Conducted Output Power, Bluetooth LE**

| Test Mode                  | Test Channel<br>(MHz) | Measured Peak Power |         | Limit<br>(W) |
|----------------------------|-----------------------|---------------------|---------|--------------|
|                            |                       | (dBm)               | (W)     |              |
| BLE<br>(1 Mbps)            | 2402                  | 3.78                | 0.00239 | < 1.0        |
|                            | 2440                  | 3.86                | 0.00243 |              |
|                            | 2480                  | 3.86                | 0.00243 |              |
| <b>Max. Measured Value</b> |                       | 3.86                | 0.00243 |              |

Note:

- 1) The cable loss is taken into account in results.
- 2) Antenna gain(G): 1dBi

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*Test Report No.:*

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### 5.1.3 Conducted Power Spectral Density

**RESULT:**

**Pass**

#### Test Specification

Test standard : FCC Part 15.247(e)  
Basic standard : ANSI C63.10: 2013  
Limits : < 8 dBm / 3kHz  
Kind of test site : Shielded Room

#### Test Setup

Date of testing : 2024-10-27 - 2024-12-20  
Input voltage : DC 12V  
Operation mode : A  
Test channel : Low / Middle / High  
Ambient temperature : 25.4 °C  
Relative humidity : 54 %  
Atmospheric pressure : 101 kPa

For the measurement records, refer to the appendix A.

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*Test Report No.:*

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### 5.1.4 6dB Bandwidth

**RESULT:**

**Pass**

#### Test Specification

Test standard : FCC Part 15.247(a)(2)  
Basic standard : ANSI C63.10: 2013  
Limits : > 500 kHz  
Kind of test site : Shielded Room

#### Test Setup

Date of testing : 2024-10-27 - 2024-12-20  
Input voltage : DC 12V  
Operation mode : A  
Test channel : Low / Middle / High  
Ambient temperature : 25.4 °C  
Relative humidity : 54 %  
Atmospheric pressure : 101 kPa

For the measurement records, refer to the appendix A.

**Prüfbericht - Nr.:** CN24LM90 001  
*Test Report No.:*

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### 5.1.5 99% Bandwidth

**RESULT:**

**Pass**

#### Test Specification

Test standard : FCC Part 15.247(a)  
Basic standard : ANSI C63.10: 2013  
Kind of test site : Shielded Room

#### Test Setup

Date of testing : 2024-10-27 - 2024-12-20  
Input voltage : DC 12V  
Operation mode : A  
Test channel : Low / Middle / High  
Ambient temperature : 25.4 °C  
Relative humidity : 54 %  
Atmospheric pressure : 101 kPa

For the measurement records, refer to the appendix A.

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## 5.1.6 Conducted Spurious Emissions Measured in 100 kHz Bandwidth

RESULT:

Pass

### Test Specification

|                   |                                                                                                                                                                                                                                                                    |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test standard     | : FCC Part 15.247(d)                                                                                                                                                                                                                                               |
| Basic standard    | : ANSI C63.10: 2013                                                                                                                                                                                                                                                |
| Limits            | : 20dB (below that in the 100kHz bandwidth within the band that contains the highest level of the desired power);<br>In addition, radiated emissions which fall in the restricted bands, must also comply with the radiated emission limits specified in 15.209(a) |
| Kind of test site | : Shielded Room                                                                                                                                                                                                                                                    |

### Test Setup

|                      |                           |
|----------------------|---------------------------|
| Date of testing      | : 2024-10-27 - 2024-12-20 |
| Input voltage        | : DC 12V                  |
| Operation mode       | : A                       |
| Test channel         | : Low / Middle / High     |
| Ambient temperature  | : 25.4 °C                 |
| Relative humidity    | : 54 %                    |
| Atmospheric pressure | : 101 kPa                 |

Test results of 100kHz Bandwidth of Frequency Band Edge by Conducted method refer to test plots, and compliance is achieved as well.

For the measurement records, refer to the appendix A.

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### 5.1.7 Radiated Spurious Emission

**RESULT:****Pass****Test Specification**

|                   |                                            |
|-------------------|--------------------------------------------|
| Test standard     | : FCC Part 15.247(d) & FCC Part 15.205     |
| Basic standard    | : ANSI C63.10: 2013                        |
| Limits            | : Refer to 15.209(a) of FCC part 15.247(d) |
| Kind of test site | : 3m Semi-anechoic Chamber                 |

**Test Setup**

|                      |                           |
|----------------------|---------------------------|
| Date of testing      | : 2024-10-27 - 2024-12-20 |
| Input voltage        | : DC 12V                  |
| Operation mode       | : A                       |
| Test channel         | : Low / Middle / High     |
| Ambient temperature  | : Refer to test result    |
| Relative humidity    | : Refer to test result    |
| Atmospheric pressure | : 101 kPa                 |

**Remark:**

Testing was carried out within frequency range 9kHz to the tenth harmonics. Only the worst case spurious emissions configuration of the each mode were reported.

For the measurement records, refer to the appendix A.

## 6 Photographs of the Test Set-Up

For photographs of the test set-up, refer to the appendix B.

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## Appendix A: Test Results of Bluetooth LE

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## 1.1 DTS Bandwidth

### 1.1.1 Test Result

| TestMode | Antenna | Channel | DTS BW [MHz] | FL[MHz]  | FH[MHz]  | Limit[MHz] | Verdict |
|----------|---------|---------|--------------|----------|----------|------------|---------|
| BLE_1M   | Ant1    | 2402    | 0.664        | 2401.672 | 2402.336 | 0.5        | PASS    |
|          |         | 2440    | 0.652        | 2439.680 | 2440.332 | 0.5        | PASS    |
|          |         | 2480    | 0.640        | 2479.684 | 2480.324 | 0.5        | PASS    |

## 1.1.2 Test Graphs





## 1.2 Occupied Channel Bandwidth

### 1.2.1 Test Result

| TestMode | Antenna | Channel | OCB [MHz] | FL[MHz]   | FH[MHz]   | Limit[MHz] | Verdict |
|----------|---------|---------|-----------|-----------|-----------|------------|---------|
| BLE_1M   | Ant1    | 2402    | 1.0819    | 2401.4779 | 2402.5598 | ---        | ---     |
|          |         | 2440    | 1.0679    | 2439.4822 | 2440.5501 | ---        | ---     |
|          |         | 2480    | 1.0674    | 2479.4757 | 2480.5431 | ---        | ---     |

## 1.2.2 Test Graphs





## 1.3 Maximum conducted output power

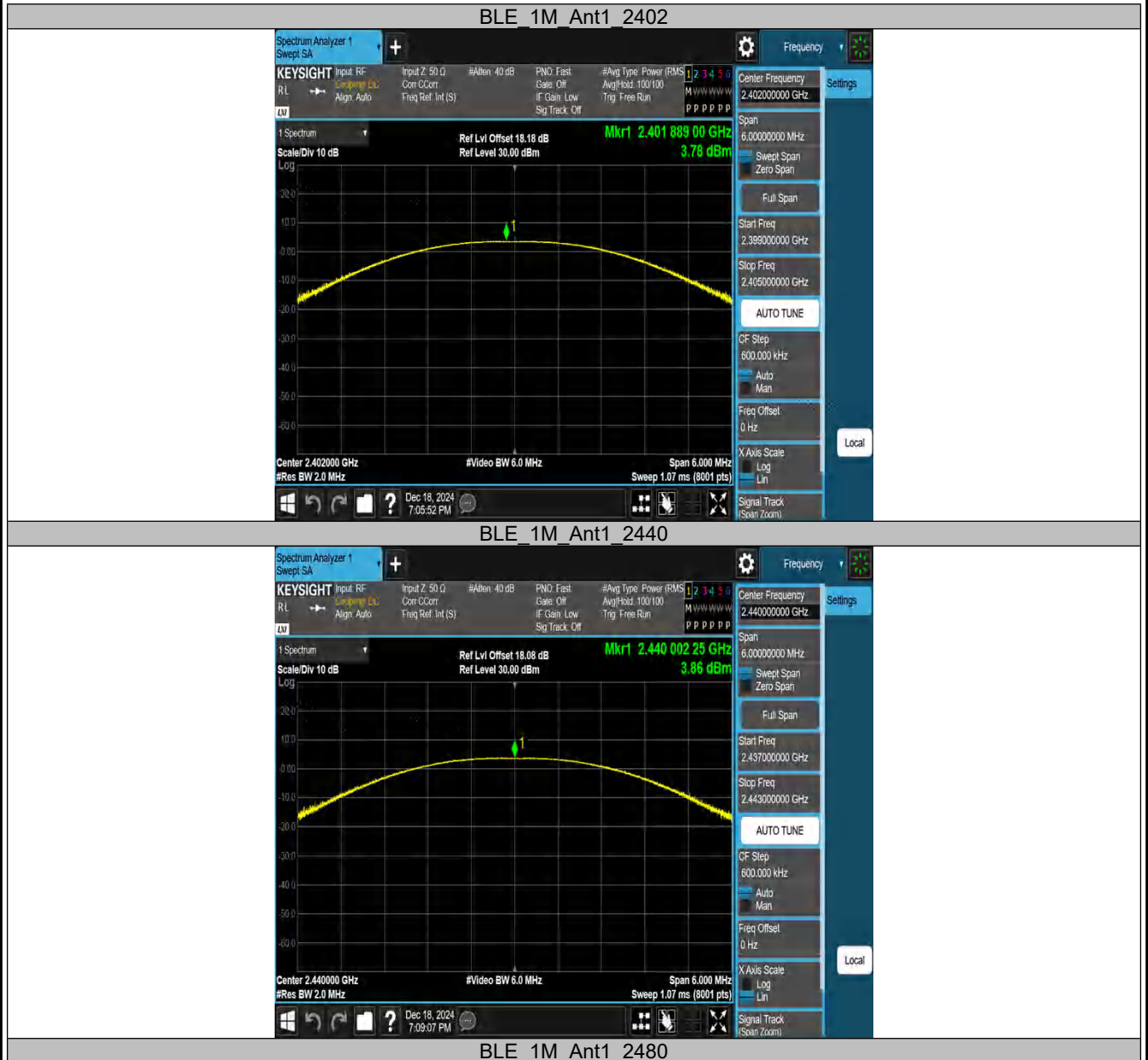
### 1.3.1 Test Result PK

| TestMode | Antenna | Channel | Result[dBm] | Limit[dBm] | Verdict |
|----------|---------|---------|-------------|------------|---------|
| BLE_1M   | Ant1    | 2402    | 3.78        | ≤30        | PASS    |
|          |         | 2440    | 3.86        | ≤30        | PASS    |
|          |         | 2480    | 3.86        | ≤30        | PASS    |

### 1.3.2 Test Result AV

| TestMode | Antenna | Channel | Result[dBm] | Limit[dBm] | Verdict |
|----------|---------|---------|-------------|------------|---------|
| BLE_1M   | Ant1    | 2402    | 3.23        | ≤30        | PASS    |
|          |         | 2440    | 3.45        | ≤30        | PASS    |
|          |         | 2480    | 3.41        | ≤30        | PASS    |

### 1.3.3 Test Graphs PK





## 1.4 Maximum power spectral density

### 1.4.1 Test Result

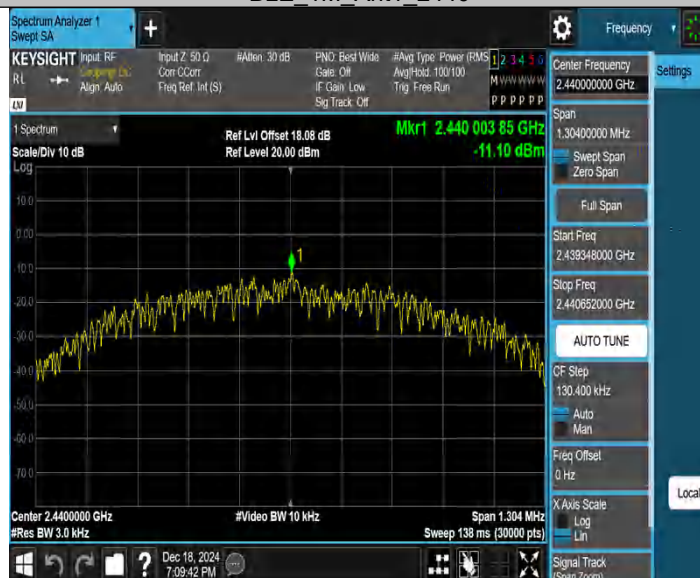
| TestMode | Antenna | Channel | Result[dBm/3-100kHz] | Limit[dBm/3kHz] | Verdict |
|----------|---------|---------|----------------------|-----------------|---------|
| BLE_1M   | Ant1    | 2402    | -11.37               | ≤8.00           | PASS    |
|          |         | 2440    | -11.10               | ≤8.00           | PASS    |
|          |         | 2480    | -11.26               | ≤8.00           | PASS    |

## 1.4.2 Test Graphs

BLE\_1M\_Ant1\_2402



BLE\_1M\_Ant1\_2440



BLE\_1M\_Ant1\_2480



## 1.5 Band edge measurements

### 1.5.1 Test Result

| TestMode | Antenna | ChName | Channel | RefLevel[dBm] | Result[dBm] | Limit[dBm] | Verdict |
|----------|---------|--------|---------|---------------|-------------|------------|---------|
| BLE_1M   | Ant1    | Low    | 2402    | 2.65          | -43.87      | ≤-17.35    | PASS    |
|          |         | High   | 2480    | 2.42          | -44.03      | ≤-17.58    | PASS    |

## 1.5.2 Test Graphs

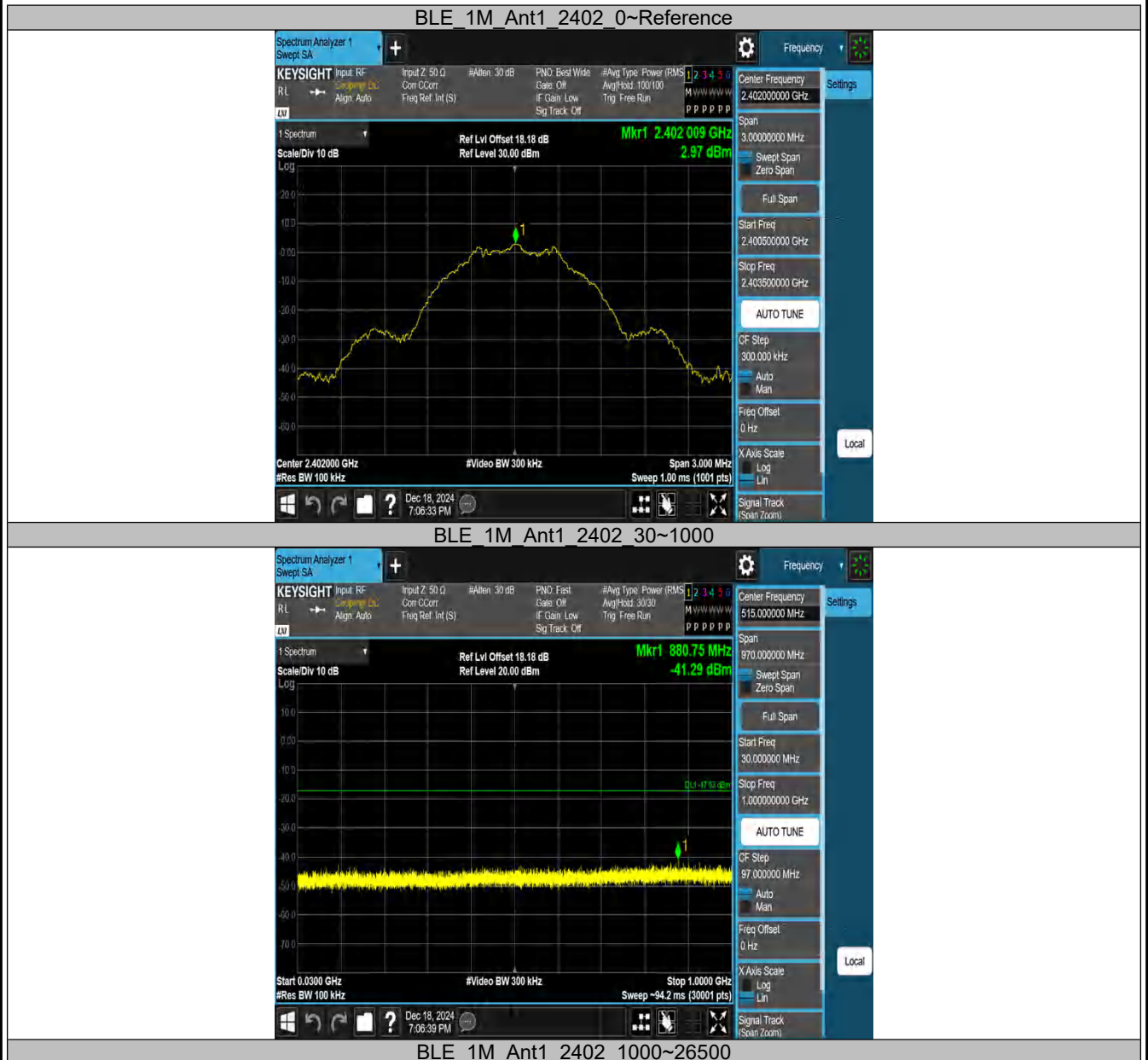


## 1.6 Conducted Spurious Emission

### 1.6.1 Test Result

| TestMode | Antenna | Channel | FreqRange [MHz] | RefLevel [dBm] | Result[dBm] | Limit[dBm] | Verdict |
|----------|---------|---------|-----------------|----------------|-------------|------------|---------|
| BLE_1M   | Ant1    | 2402    | Reference       | 2.97           | 2.97        | ---        | PASS    |
|          |         |         | 30~1000         | 2.97           | -41.29      | ≤-17.03    | PASS    |
|          |         |         | 1000~26500      | 2.97           | -32.43      | ≤-17.03    | PASS    |
|          |         | 2440    | Reference       | 2.92           | 2.92        | ---        | PASS    |
|          |         |         | 30~1000         | 2.92           | -41.19      | ≤-17.08    | PASS    |
|          |         |         | 1000~26500      | 2.92           | -33.08      | ≤-17.08    | PASS    |
|          |         | 2480    | Reference       | 3.06           | 3.06        | ---        | PASS    |
|          |         |         | 30~1000         | 3.06           | -41.93      | ≤-16.94    | PASS    |
|          |         |         | 1000~26500      | 3.06           | -33.4       | ≤-16.94    | PASS    |

## 1.6.2 Test Graphs





BLE 1M Ant1 2440 0~Reference



BLE 1M Ant1 2440 30~1000



BLE 1M Ant1 2440 1000~26500



BLE 1M Ant1 2480 0~Reference



BLE 1M Ant1 2480 30~1000



BLE 1M Ant1 2480 1000~26500

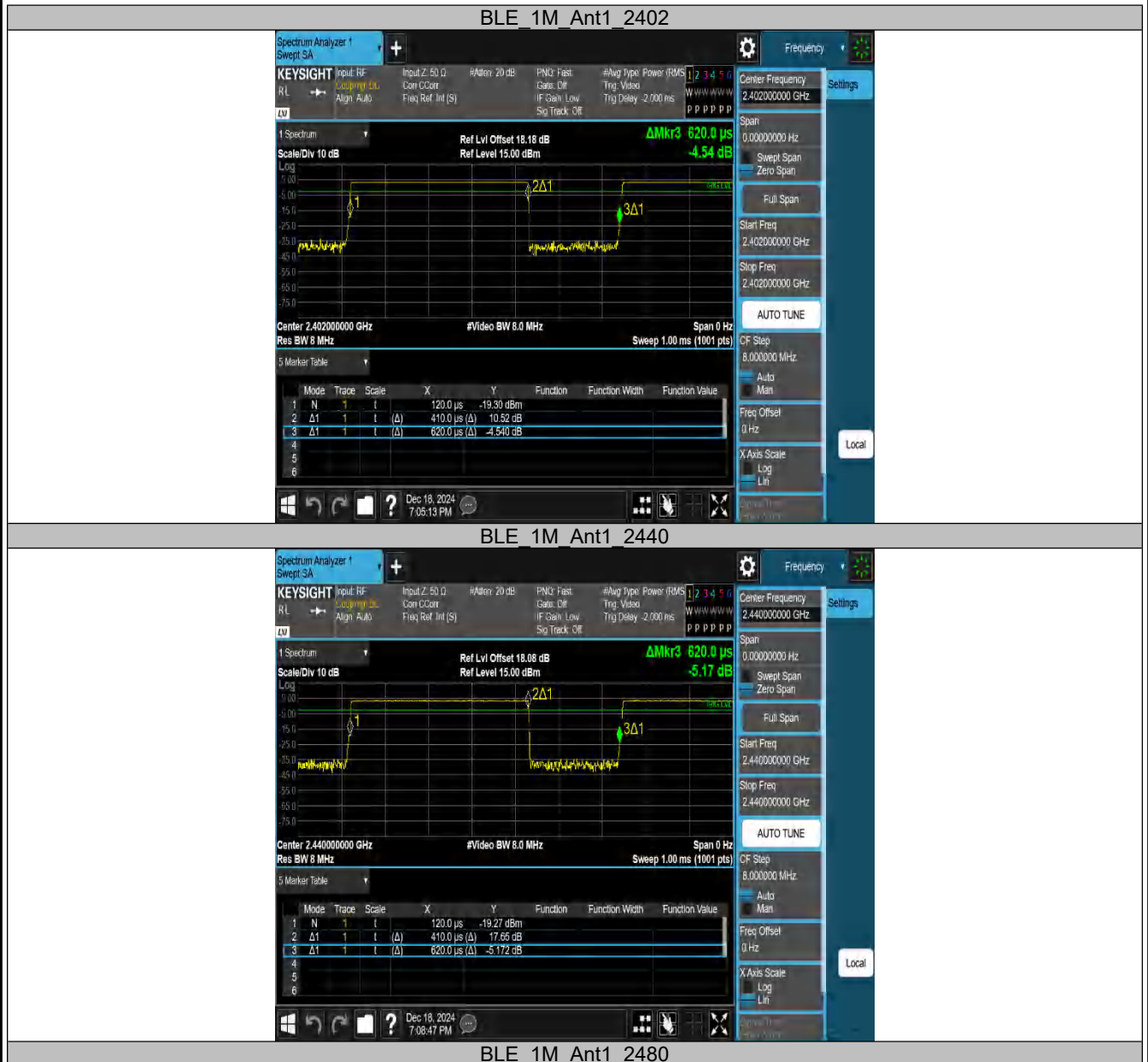


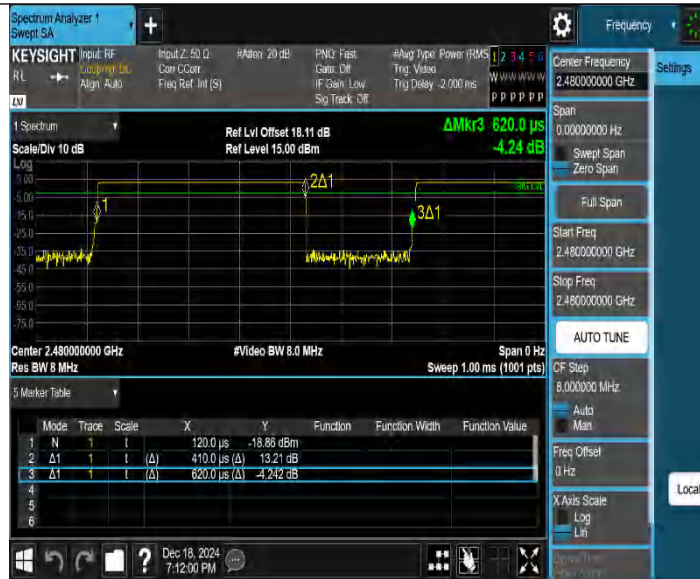
## 1.7 Duty Cycle

### 1.7.1 Test Result

| TestMode | Antenna | Channel | ON Time<br>[ms] | Period<br>[ms] | X      | DC [%] | xFactor | Limit | Verdict |
|----------|---------|---------|-----------------|----------------|--------|--------|---------|-------|---------|
| BLE_1M   | Ant1    | 2402    | 0.41            | 0.62           | 0.6613 | 66.13  | 1.80    | ---   | ---     |
|          |         | 2440    | 0.41            | 0.62           | 0.6613 | 66.13  | 1.80    | ---   | ---     |
|          |         | 2480    | 0.41            | 0.62           | 0.6613 | 66.13  | 1.80    | ---   | ---     |

## 1.7.2 Test Graphs





## 1.8 Test Results of Radiated Spurious Emissions

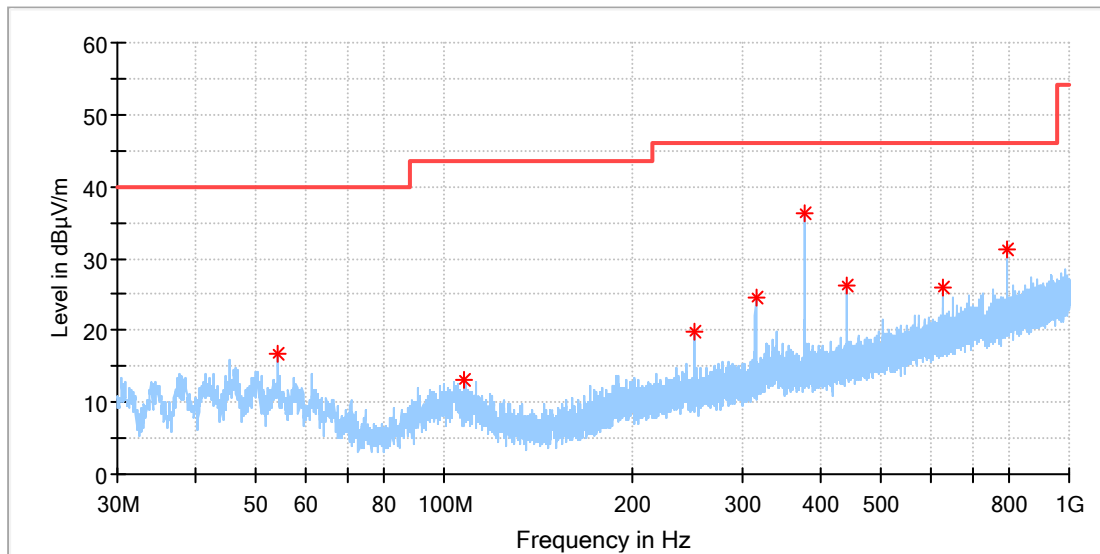
Note:

- 1) Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and 18GHz - 26.5GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported.  
30 MHz - 1GHz(Worst case)

# Test Report

## EUT Information

|                     |                          |
|---------------------|--------------------------|
| EUT Name:           | Multimedia player        |
| Model:              | MP-202S-00               |
| Test Mode:          | BLE 1M_Mid channel       |
| Order No/Sample No: | 168485064/A003865536-002 |
| Test Voltage::      | DC 12V From DC Source    |
| Remark:             | Temp 23 Humi:53%         |
| Test Standard:      | FCC 15.247               |
| Tested By:          | Kei Zhang                |
| Reviewed By:        | Terry Yin                |



## Critical Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 54.063462       | 16.76            | 40.00          | 23.24       | 100.0       | H   | 78.0          | -18.5        |
| 107.973077      | 13.00            | 43.50          | 30.50       | 100.0       | H   | 183.0         | -19.1        |
| 252.018077      | 19.74            | 46.00          | 26.26       | 100.0       | H   | 328.0         | -17.3        |
| 315.030769      | 24.63            | 46.00          | 21.37       | 100.0       | H   | 60.0          | -15.9        |
| 378.006154      | 36.26            | 46.00          | 9.74        | 100.0       | H   | 217.0         | -14.3        |
| 441.018846      | 26.15            | 46.00          | 19.85       | 100.0       | H   | 233.0         | -12.9        |
| 630.019615      | 25.85            | 46.00          | 20.15       | 100.0       | H   | 0.0           | -9.2         |
| 796.523846      | 31.26            | 46.00          | 14.74       | 100.0       | H   | 127.0         | -6.3         |

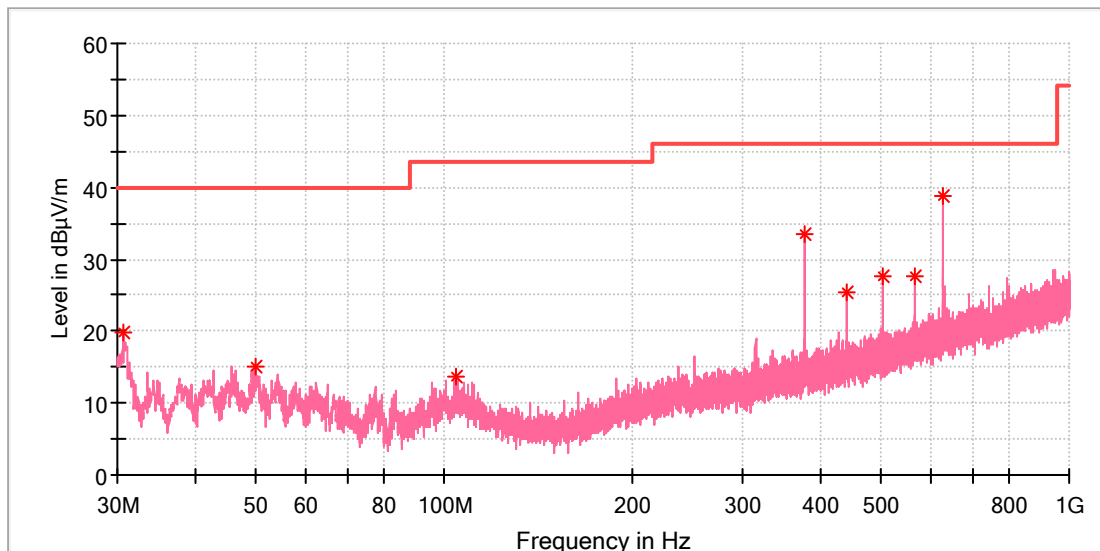
## Final Result

| Frequency (MHz) | QuasiPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|--------------------|----------------|-------------|-------------|-----|---------------|--------------|
| ---             | ---                | ---            | ---         | ---         | --- | ---           | ---          |

## Test Report

### EUT Information

|                     |                          |
|---------------------|--------------------------|
| EUT Name:           | Multimedia player        |
| Model:              | MP-202S-00               |
| Test Mode:          | BLE 1M_Mid channel       |
| Order No/Sample No: | 168485064/A003865536-002 |
| Test Voltage::      | DC 12V From DC Source    |
| Remark:             | Temp 23 Humi:53%         |
| Test Standard:      | FCC 15.247               |
| Tested By:          | Kei Zhang                |
| Reviewed By:        | Terry Yin                |



### Critical Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 30.634231       | 19.77            | 40.00          | 20.23       | 100.0       | V   | 57.0          | -22.9        |
| 49.959615       | 14.99            | 40.00          | 25.01       | 100.0       | V   | 0.0           | -18.4        |
| 104.727308      | 13.78            | 43.50          | 29.72       | 100.0       | V   | 293.0         | -18.9        |
| 378.006154      | 33.55            | 46.00          | 12.45       | 100.0       | V   | 96.0          | -14.3        |
| 441.018846      | 25.38            | 46.00          | 20.62       | 100.0       | V   | 185.0         | -12.9        |
| 504.031539      | 27.55            | 46.00          | 18.46       | 100.0       | V   | 177.0         | -11.8        |
| 567.006923      | 27.75            | 46.00          | 18.25       | 100.0       | V   | 152.0         | -10.4        |
| 629.982308      | 38.85            | 46.00          | 7.15        | 100.0       | V   | 152.0         | -9.2         |

### Final Result

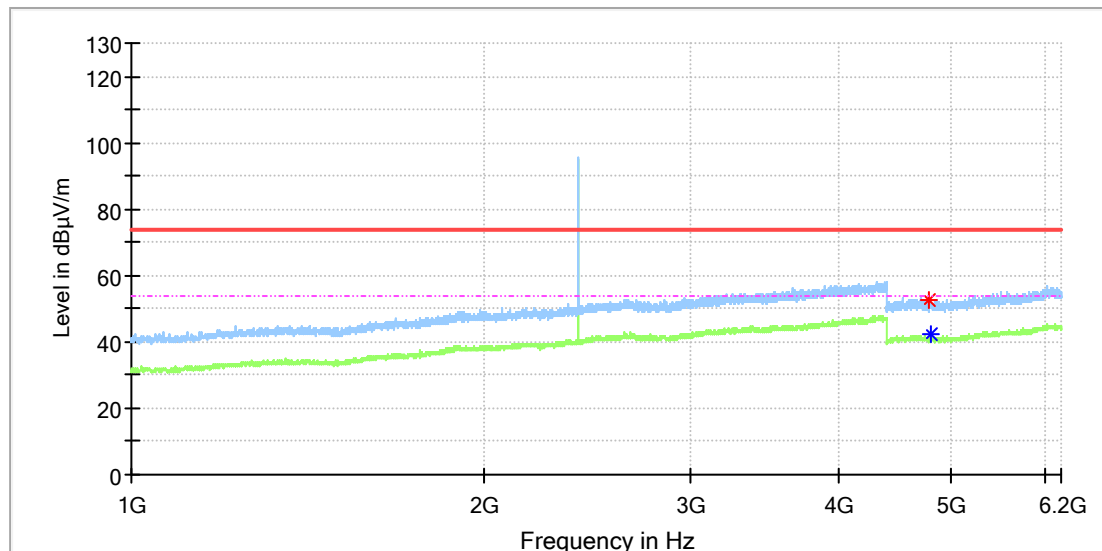
| Frequency (MHz) | QuasiPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|--------------------|----------------|-------------|-------------|-----|---------------|--------------|
| ---             | ---                | ---            | ---         | ---         | --- | ---           | ---          |

Above 1G

# Test Report

## EUT Information

|                     |                          |
|---------------------|--------------------------|
| EUT Name:           | Multimedia player        |
| Model:              | MP-202S-00               |
| Test Mode:          | BLE 1M_Low channel       |
| Order No/Sample No: | 168485064/A003865536-002 |
| Test Voltage::      | DC 12V From DC Source    |
| Remark:             | Temp 23 Humi:53%         |
| Test Standard:      | FCC 15.247               |
| Tested By:          | Kei Zhang                |
| Reviewed By:        | Terry Yin                |



## Critical\_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 4782.000000     | 52.63            | ---              | 74.00          | 21.37       | 150.0       | H   | 59.0          | 13.3         |
| 4804.000000     | ---              | 42.21            | 54.00          | 11.79       | 150.0       | H   | 80.0          | 13.3         |

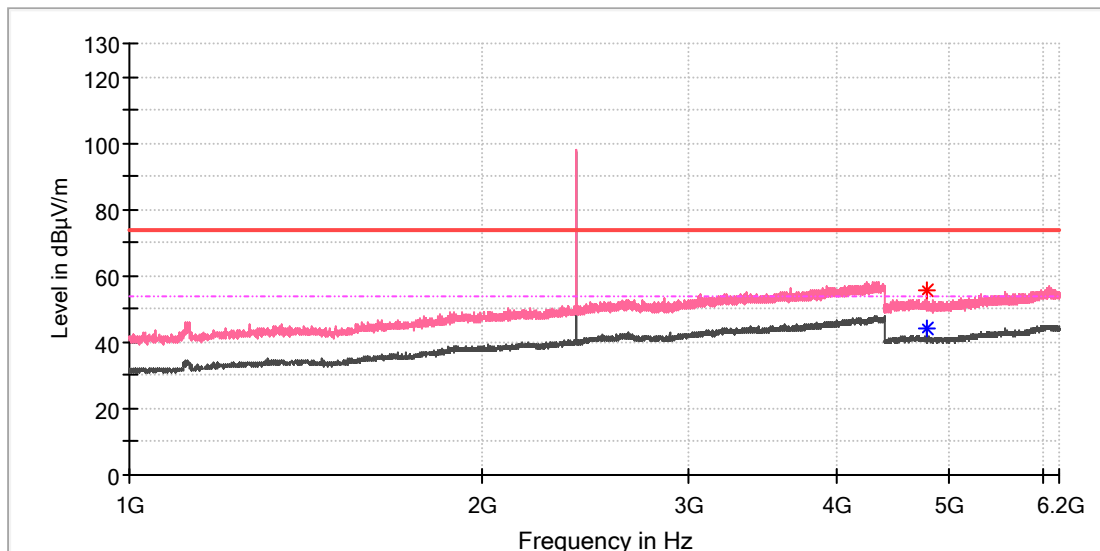
## Final\_Result

| Frequency (MHz) | MaxPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| ---             | ---              | ---            | ---         | ---         |     | ---           | ---          |

# Test Report

## EUT Information

|                     |                          |
|---------------------|--------------------------|
| EUT Name:           | Multimedia player        |
| Model:              | MP-202S-00               |
| Test Mode:          | BLE 1M_Low channel       |
| Order No/Sample No: | 168485064/A003865536-002 |
| Test Voltage::      | DC 12V From DC Source    |
| Remark:             | Temp 23 Humi:53%         |
| Test Standard:      | FCC 15.247               |
| Tested By:          | Kei Zhang                |
| Reviewed By:        | Terry Yin                |



## Critical Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 4779.000000     | 55.69            | ---              | 74.00          | 18.31       | 150.0       | V   | 352.0         | 13.3         |
| 4779.000000     | ---              | 44.28            | 54.00          | 9.72        | 150.0       | V   | 352.0         | 13.3         |

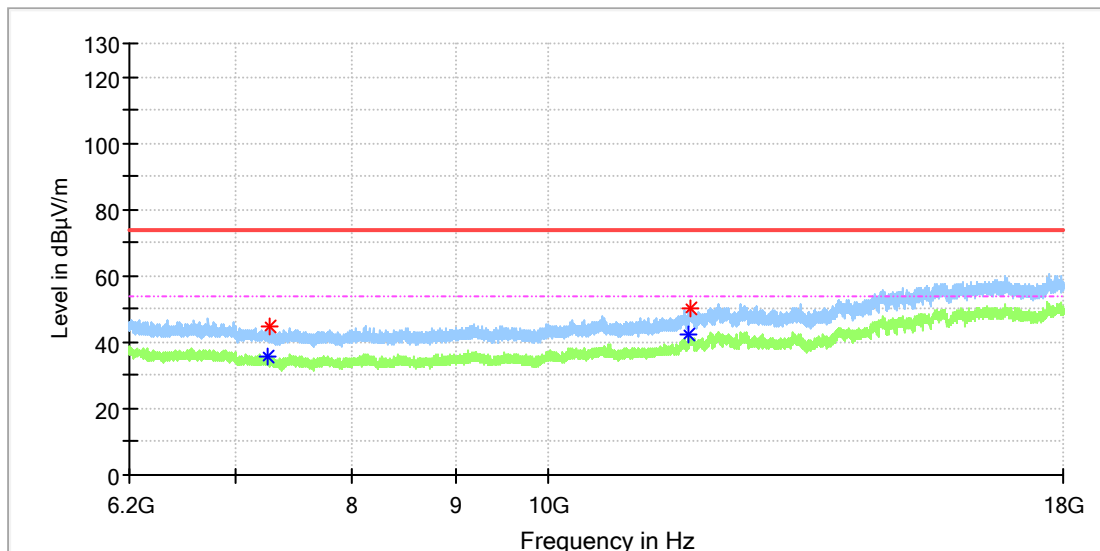
## Final Result

| Frequency (MHz) | MaxPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| ---             | ---              | ---            | ---         | ---         |     | ---           | ---          |

# Test Report

## EUT Information

EUT Name: Multimedia player  
Model: MP-202S-00  
Test Mode: BLE 1M\_Low channel  
Order No/Sample No: 168485064/A003865536-002  
Test Voltage:: DC 12V From DC Source  
Remark: Temp 23 Humi:53%  
Test Standard: FCC 15.247  
Tested By: Kei Zhang  
Reviewed By: Terry Yin



## Critical Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 7262.983333     | ---              | 35.82            | 54.00          | 18.18       | 150.0       | H   | 241.0         | 8.5          |
| 7272.816667     | 44.99            | ---              | 74.00          | 29.01       | 150.0       | H   | 128.0         | 8.4          |
| 11748.458333    | ---              | 42.10            | 54.00          | 11.90       | 150.0       | H   | 198.0         | 15.4         |
| 11750.916667    | 50.11            | ---              | 74.00          | 23.89       | 150.0       | H   | 263.0         | 15.5         |

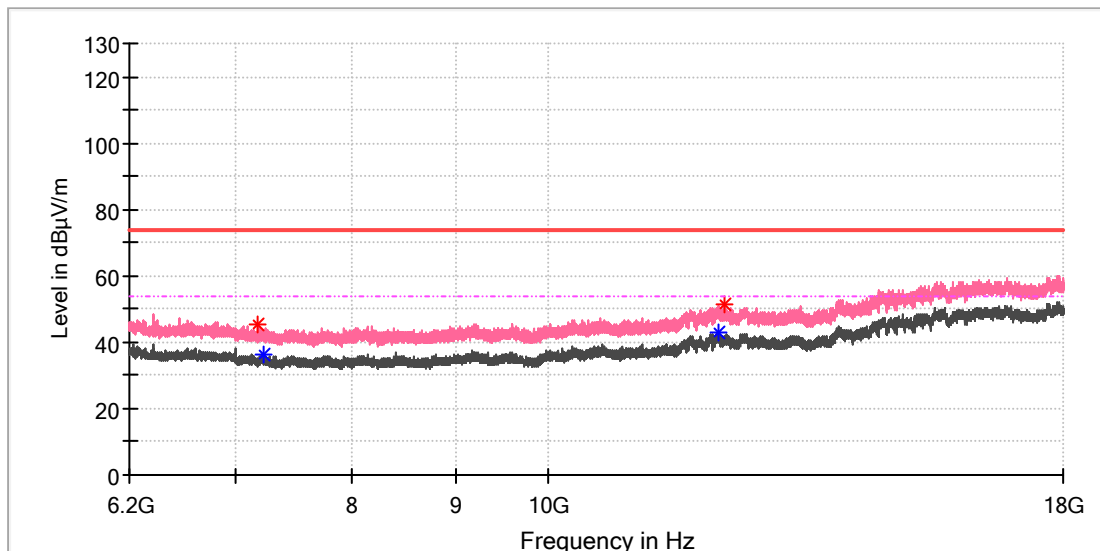
## Final Result

| Frequency (MHz) | MaxPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| ---             | ---              | ---            | ---         | ---         | --- | ---           | ---          |

# Test Report

## EUT Information

EUT Name: Multimedia player  
Model: MP-202S-00  
Test Mode: BLE 1M\_Low channel  
Order No/Sample No: 168485064/A003865536-002  
Test Voltage:: DC 12V From DC Source  
Remark: Temp 23 Humi:53%  
Test Standard: FCC 15.247  
Tested By: Kei Zhang  
Reviewed By: Terry Yin



## Critical Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 7185.300000     | 45.55            | ---              | 74.00          | 28.45       | 150.0       | V   | 75.0          | 8.8          |
| 7220.700000     | ---              | 36.03            | 54.00          | 17.97       | 150.0       | V   | 86.0          | 8.7          |
| 12149.658333    | ---              | 42.87            | 54.00          | 11.13       | 150.0       | V   | 2.0           | 16.7         |
| 12222.916667    | 51.37            | ---              | 74.00          | 22.63       | 150.0       | V   | 229.0         | 15.9         |

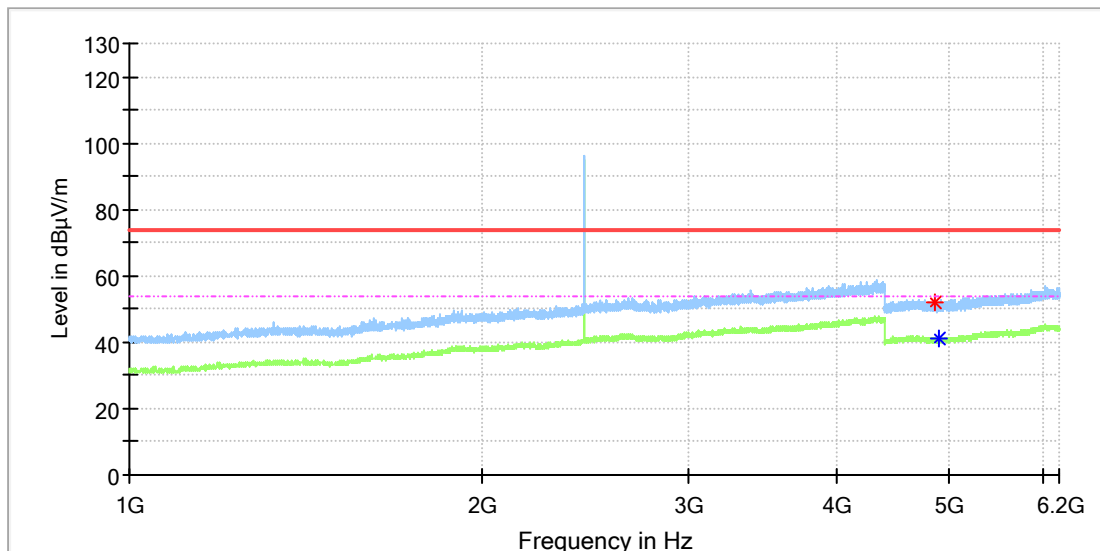
## Final Result

| Frequency (MHz) | MaxPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| ---             | ---              | ---            | ---         | ---         | --- | ---           | ---          |

# Test Report

## EUT Information

EUT Name: Multimedia player  
Model: MP-202S-00  
Test Mode: BLE 1M\_Mid channel  
Order No/Sample No: 168485064/A003865536-002  
Test Voltage:: DC 12V From DC Source  
Remark: Temp 23 Humi:53%  
Test Standard: FCC 15.247  
Tested By: Kei Zhang  
Reviewed By: Terry Yin



## Critical Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 4865.500000     | 52.09            | ---              | 74.00          | 21.91       | 150.0       | H   | 91.0          | 13.3         |
| 4903.500000     | ---              | 41.31            | 54.00          | 12.69       | 150.0       | H   | 151.0         | 13.3         |

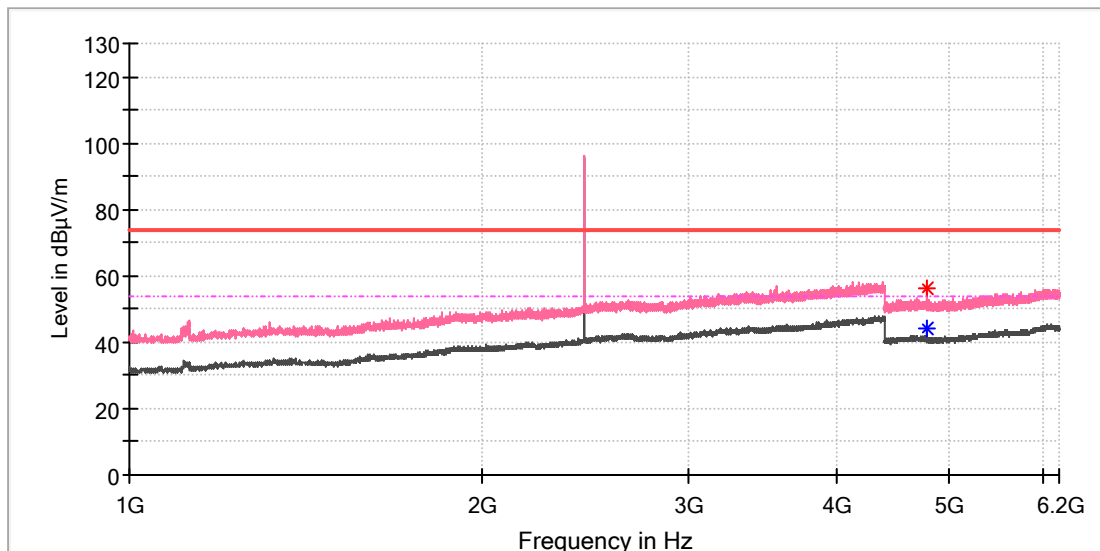
## Final Result

| Frequency (MHz) | MaxPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| ---             | ---              | ---            | ---         | ---         |     | ---           | ---          |

## Test Report

### EUT Information

|                     |                          |
|---------------------|--------------------------|
| EUT Name:           | Multimedia player        |
| Model:              | MP-202S-00               |
| Test Mode:          | BLE 1M_Mid channel       |
| Order No/Sample No: | 168485064/A003865536-002 |
| Test Voltage::      | DC 12V From DC Source    |
| Remark:             | Temp 23 Humi:53%         |
| Test Standard:      | FCC 15.247               |
| Tested By:          | Kei Zhang                |
| Reviewed By:        | Terry Yin                |



### Critical Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 4778.500000     | 56.41            | ---              | 74.00          | 17.59       | 150.0       | V   | 39.0          | 13.3         |
| 4778.500000     | ---              | 43.89            | 54.00          | 10.11       | 150.0       | V   | 39.0          | 13.3         |

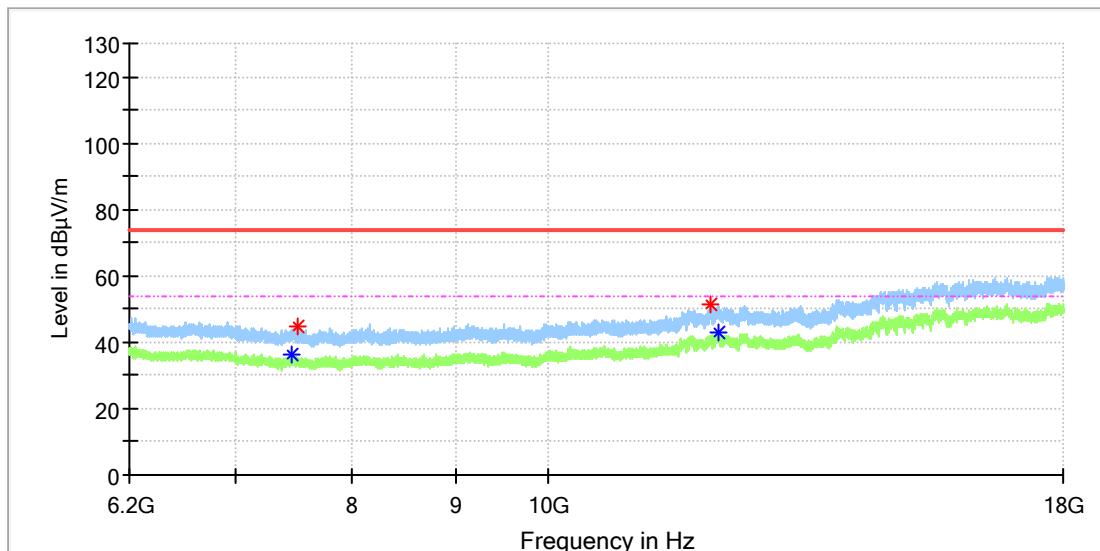
### Final Result

| Frequency (MHz) | MaxPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| ---             | ---              | ---            | ---         | ---         |     | ---           | ---          |

# Test Report

## EUT Information

|                     |                          |
|---------------------|--------------------------|
| EUT Name:           | Multimedia player        |
| Model:              | MP-202S-00               |
| Test Mode:          | BLE 1M_Mid channel       |
| Order No/Sample No: | 168485064/A003865536-002 |
| Test Voltage::      | DC 12V From DC Source    |
| Remark:             | Temp 23 Humi:53%         |
| Test Standard:      | FCC 15.247               |
| Tested By:          | Kei Zhang                |
| Reviewed By:        | Terry Yin                |



## Critical Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 7454.733333     | ---              | 36.22            | 54.00          | 17.78       | 150.0       | H   | 187.0         | 8.5          |
| 7521.108333     | 44.75            | ---              | 74.00          | 29.25       | 150.0       | H   | 150.0         | 8.7          |
| 12047.391667    | 51.42            | ---              | 74.00          | 22.58       | 150.0       | H   | 0.0           | 16.4         |
| 12152.116667    | ---              | 42.74            | 54.00          | 11.26       | 150.0       | H   | 6.0           | 16.6         |

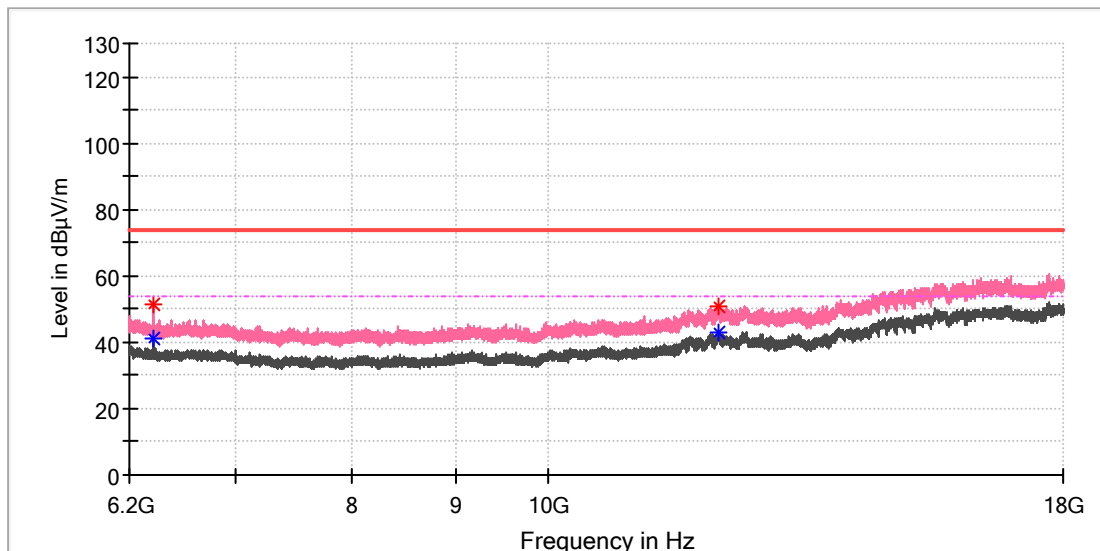
## Final Result

| Frequency (MHz) | MaxPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| ---             | ---              | ---            | ---         | ---         | --- | ---           | ---          |

## Test Report

### EUT Information

|                     |                          |
|---------------------|--------------------------|
| EUT Name:           | Multimedia player        |
| Model:              | MP-202S-00               |
| Test Mode:          | BLE 1M_Mid channel       |
| Order No/Sample No: | 168485064/A003865536-002 |
| Test Voltage::      | DC 12V From DC Source    |
| Remark:             | Temp 23 Humi:53%         |
| Test Standard:      | FCC 15.247               |
| Tested By:          | Kei Zhang                |
| Reviewed By:        | Terry Yin                |



### Critical Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 6372.083333     | ---              | 41.17            | 54.00          | 12.83       | 150.0       | V   | 342.0         | 8.9          |
| 6372.083333     | 51.40            | ---              | 74.00          | 22.60       | 150.0       | V   | 342.0         | 8.9          |
| 12135.400000    | 50.64            | ---              | 74.00          | 23.36       | 150.0       | V   | 330.0         | 16.3         |
| 12148.675000    | ---              | 42.90            | 54.00          | 11.10       | 150.0       | V   | 353.0         | 16.7         |

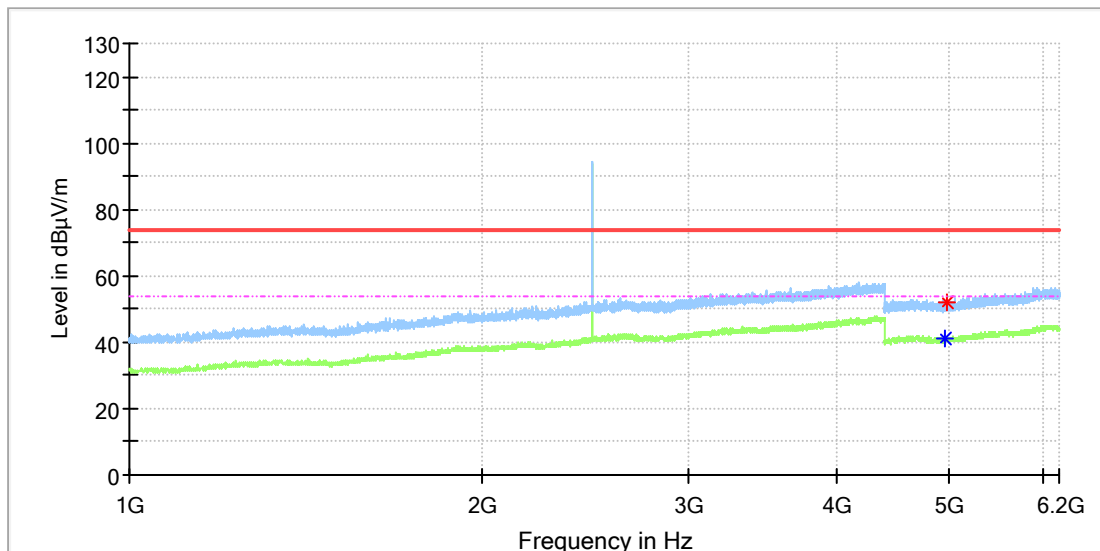
### Final Result

| Frequency (MHz) | MaxPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| ---             | ---              | ---            | ---         | ---         | --- | ---           | ---          |

# Test Report

## EUT Information

EUT Name: Multimedia player  
Model: MP-202S-00  
Test Mode: BLE 1M\_High channel  
Order No/Sample No: 168485064/A003865536-002  
Test Voltage:: DC 12V From DC Source  
Remark: Temp 23 Humi:53%  
Test Standard: FCC 15.247  
Tested By: Kei Zhang  
Reviewed By: Terry Yin



## Critical Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 4962.500000     | ---              | 41.38            | 54.00          | 12.62       | 150.0       | H   | 21.0          | 13.3         |
| 4967.000000     | 52.15            | ---              | 74.00          | 21.85       | 150.0       | H   | 39.0          | 13.3         |

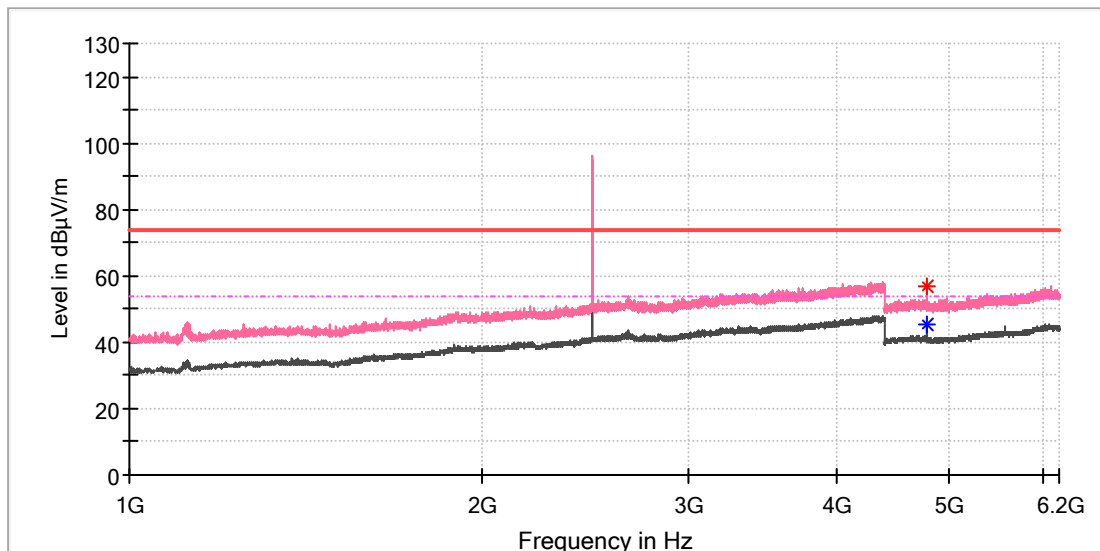
## Final Result

| Frequency (MHz) | MaxPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| ---             | ---              | ---            | ---         | ---         |     | ---           | ---          |

## Test Report

### EUT Information

|                     |                          |
|---------------------|--------------------------|
| EUT Name:           | Multimedia player        |
| Model:              | MP-202S-00               |
| Test Mode:          | BLE 1M_High channel      |
| Order No/Sample No: | 168485064/A003865536-002 |
| Test Voltage::      | DC 12V From DC Source    |
| Remark:             | Temp 23 Humi:53%         |
| Test Standard:      | FCC 15.247               |
| Tested By:          | Kei Zhang                |
| Reviewed By:        | Terry Yin                |



### Critical Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 4778.500000     | 56.68            | ---              | 74.00          | 17.32       | 150.0       | V   | 340.0         | 13.3         |
| 4779.000000     | ---              | 45.50            | 54.00          | 8.50        | 150.0       | V   | 3.0           | 13.3         |

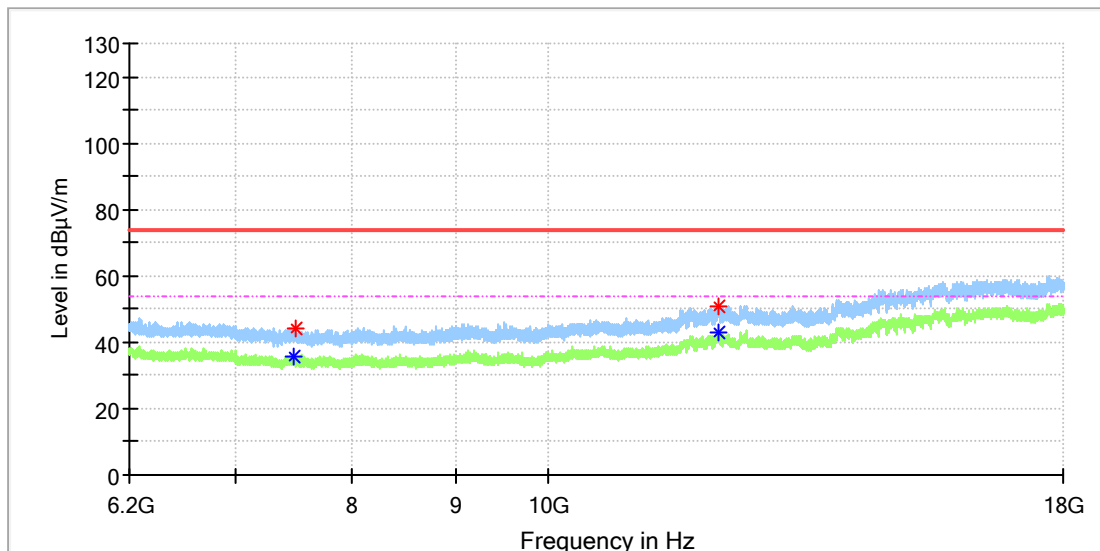
### Final Result

| Frequency (MHz) | MaxPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| ---             | ---              | ---            | ---         | ---         |     | ---           | ---          |

# Test Report

## EUT Information

EUT Name: Multimedia player  
Model: MP-202S-00  
Test Mode: BLE 1M\_High channel  
Order No/Sample No: 168485064/A003865536-002  
Test Voltage:: DC 12V From DC Source  
Remark: Temp 23 Humi:53%  
Test Standard: FCC 15.247  
Tested By: Kei Zhang  
Reviewed By: Terry Yin



## Critical Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 7484.725000     | ---              | 35.52            | 54.00          | 18.48       | 150.0       | H   | 271.0         | 8.7          |
| 7493.575000     | 44.24            | ---              | 74.00          | 29.76       | 150.0       | H   | 192.0         | 8.7          |
| 12143.266667    | 50.82            | ---              | 74.00          | 23.18       | 150.0       | H   | 235.0         | 16.6         |
| 12146.216667    | ---              | 42.70            | 54.00          | 11.30       | 150.0       | H   | 47.0          | 16.6         |

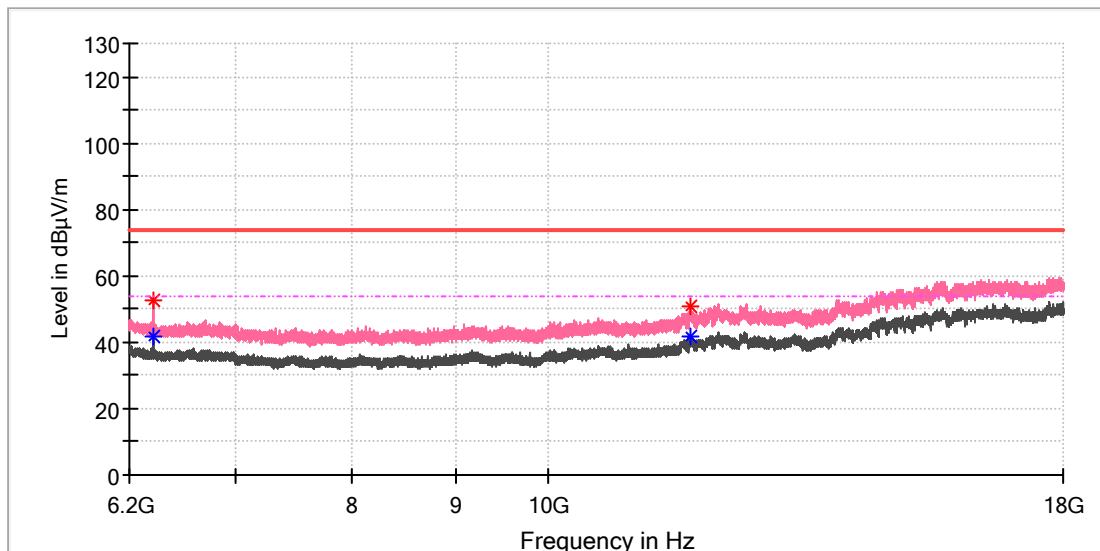
## Final Result

| Frequency (MHz) | MaxPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| ---             | ---              | ---            | ---         | ---         | --- | ---           | ---          |

## Test Report

### EUT Information

|                     |                          |
|---------------------|--------------------------|
| EUT Name:           | Multimedia player        |
| Model:              | MP-202S-00               |
| Test Mode:          | BLE 1M_High channel      |
| Order No/Sample No: | 168485064/A003865536-002 |
| Test Voltage::      | DC 12V From DC Source    |
| Remark:             | Temp 23 Humi:53%         |
| Test Standard:      | FCC 15.247               |
| Tested By:          | Kei Zhang                |
| Reviewed By:        | Terry Yin                |



### Critical Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 6371.591667     | ---              | 41.61            | 54.00          | 12.39       | 150.0       | V   | 330.0         | 8.9          |
| 6371.591667     | 52.36            | ---              | 74.00          | 21.64       | 150.0       | V   | 330.0         | 8.9          |
| 11757.800000    | 50.83            | ---              | 74.00          | 23.17       | 150.0       | V   | 2.0           | 15.4         |
| 11763.208333    | ---              | 41.68            | 54.00          | 12.32       | 150.0       | V   | 301.0         | 15.3         |

### Final Result

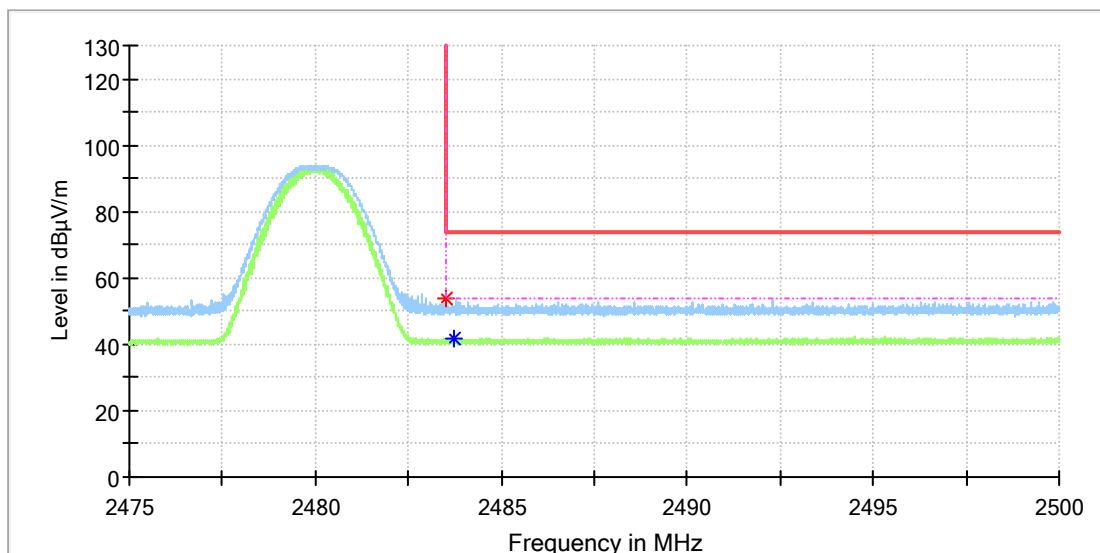
| Frequency (MHz) | MaxPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| ---             | ---              | ---            | ---         | ---         | --- | ---           | ---          |

## 1.9 Test Results of Radiated Emissions in Restricted Bands

### Test Report

#### EUT Information

|                     |                          |
|---------------------|--------------------------|
| EUT Name:           | Multimedia player        |
| Model:              | MP-202S-00               |
| Test Mode:          | BLE 1M_High channel      |
| Order No/Sample No: | 168485064/A003865536-002 |
| Test Voltage::      | DC 12V From DC Source    |
| Remark:             | Temp 23 Humi:53%         |
| Test Standard:      | FCC 15.247               |
| Tested By:          | Kei Zhang                |
| Reviewed By:        | Terry Yin                |



#### Critical\_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 2483.533088     | 53.71            | ---              | 74.00          | 20.29       | 150.0       | H   | 271.0         | 9.0          |
| 2483.750000     | ---              | 41.46            | 54.00          | 12.54       | 150.0       | H   | 173.0         | 9.0          |

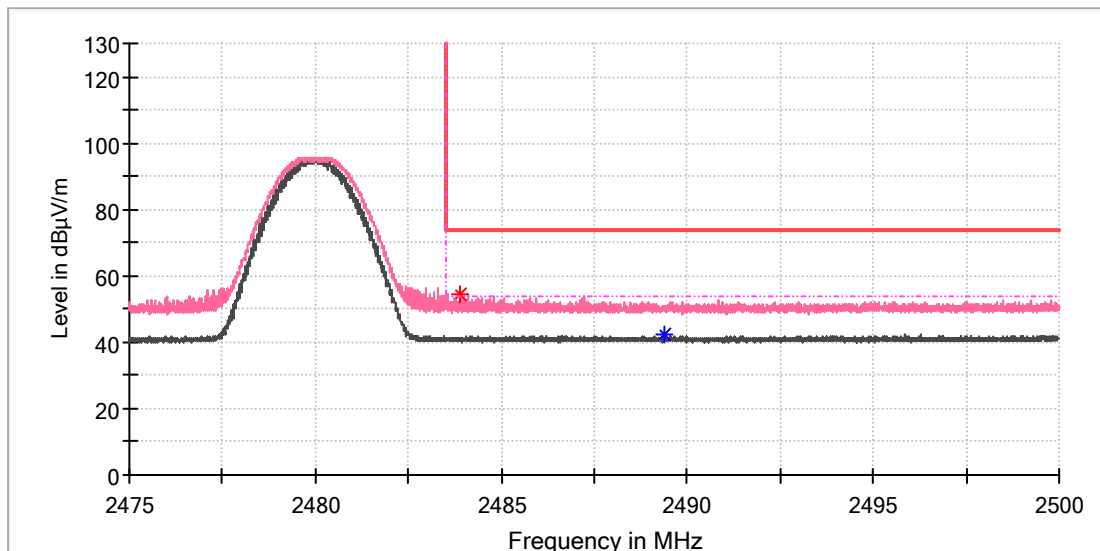
#### Final\_Result

| Frequency (MHz) | MaxPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| ---             | ---              | ---            | ---         | ---         |     | ---           | ---          |

## Test Report

### EUT Information

|                     |                          |
|---------------------|--------------------------|
| EUT Name:           | Multimedia player        |
| Model:              | MP-202S-00               |
| Test Mode:          | BLE 1M_High channel      |
| Order No/Sample No: | 168485064/A003865536-002 |
| Test Voltage::      | DC 12V From DC Source    |
| Remark:             | Temp 23 Humi:53%         |
| Test Standard:      | FCC 15.247               |
| Tested By:          | Kei Zhang                |
| Reviewed By:        | Terry Yin                |



### Critical Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 2483.886030     | 54.42            | ---              | 74.00          | 19.58       | 150.0       | V   | 171.0         | 9.0          |
| 2489.382353     | ---              | 42.39            | 54.00          | 11.61       | 150.0       | V   | 156.0         | 9.0          |

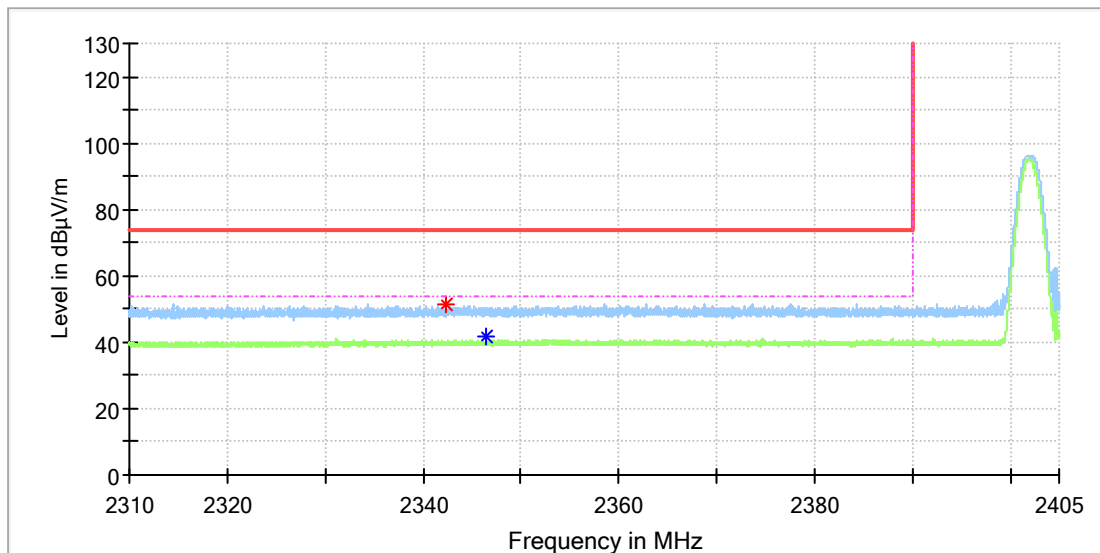
### Final Result

| Frequency (MHz) | MaxPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| ---             | ---              | ---            | ---         | ---         |     | ---           | ---          |

## Test Report

### EUT Information

|                     |                          |
|---------------------|--------------------------|
| EUT Name:           | Multimedia player        |
| Model:              | MP-202S-00               |
| Test Mode:          | BLE 1M_Low channel       |
| Order No/Sample No: | 168485064/A003865536-002 |
| Test Voltage::      | DC 12V From DC Source    |
| Remark:             | Temp 23 Humi:53%         |
| Test Standard:      | FCC 15.247               |
| Tested By:          | Kei Zhang                |
| Reviewed By:        | Terry Yin                |



### Critical Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 2342.258088     | 51.65            | ---              | 74.00          | 22.35       | 150.0       | H   | 102.0         | 8.4          |
| 2346.449265     | ---              | 41.42            | 54.00          | 12.58       | 150.0       | H   | 34.0          | 8.5          |

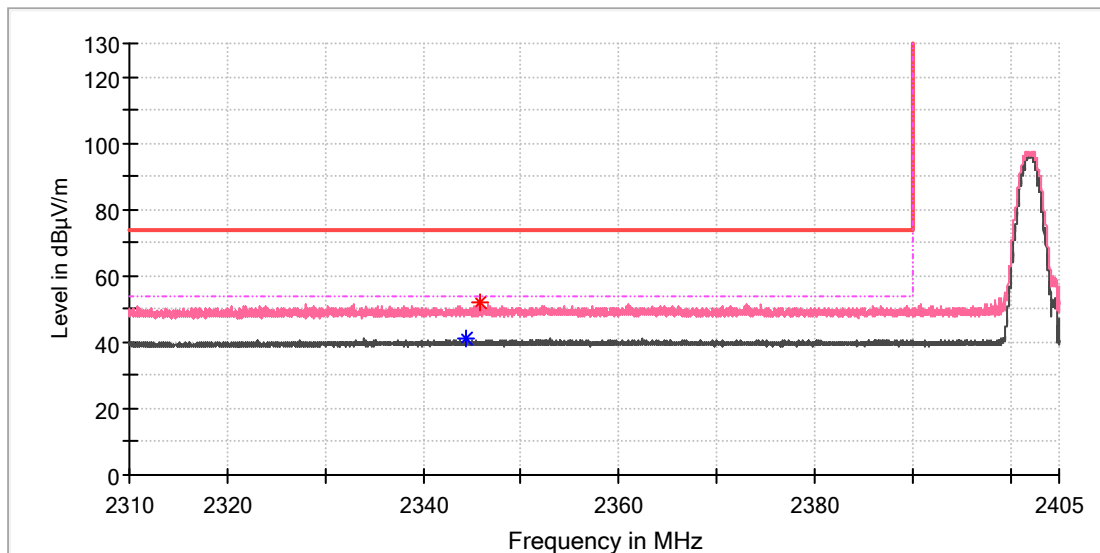
### Final Result

| Frequency (MHz) | MaxPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| ---             | ---              | ---            | ---         | ---         |     | ---           | ---          |

## Test Report

### EUT Information

EUT Name: Multimedia player  
Model: MP-202S-00  
Test Mode: BLE 1M\_Low channel  
Order No/Sample No: 168485064/A003865536-002  
Test Voltage:: DC 12V From DC Source  
Remark: Temp 23 Humi:53%  
Test Standard: FCC 15.247  
Tested By: Kei Zhang  
Reviewed By: Terry Yin



### Critical Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 2344.311765     | ---              | 40.96            | 54.00          | 13.04       | 150.0       | V   | 0.0           | 8.4          |
| 2345.736765     | 52.15            | ---              | 74.00          | 21.85       | 150.0       | V   | 242.0         | 8.5          |

### Final Result

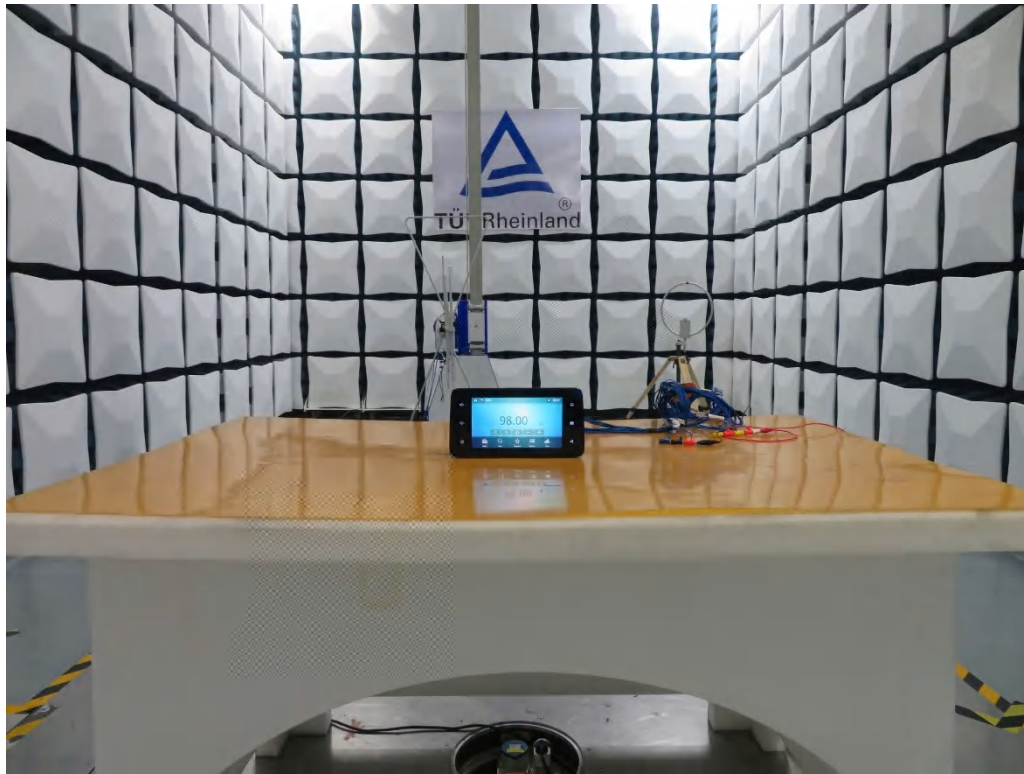
| Frequency (MHz) | MaxPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| ---             | ---              | ---            | ---         | ---         |     | ---           | ---          |

---End of appendix---

## Appendix C: Photographs of the Test Set-Up

|                                                                             |          |
|-----------------------------------------------------------------------------|----------|
| <b>APPENDIX C: PHOTOGRAPHS OF THE TEST SET-UP .....</b>                     | <b>1</b> |
| PHOTOGRAPH 1: SET-UP PHOTO FOR RADIATED SPURIOUS EMISSION, BELOW 1GHZ ..... | 2        |
| PHOTOGRAPH 2: SET-UP PHOTO FOR RADIATED SPURIOUS EMISSION, ABOVE 1GHZ.....  | 2        |

**Photograph 1: Set-up photo for Radiated Spurious Emission, below 1GHz**



**Photograph 2: Set-up photo for Radiated Spurious Emission, above 1GHz**

