

# Test Report

**Applicant** : Unavi USA, Inc.  
**Address** : 15032 Red Hill Ave, Suite F, Tustin, CA  
92780, USA  
**Product Name** : Portable Car Stereo with CarPlay &  
Android Auto  
**Brand Mark** : Unavi  
**Model** : Unavi Anyway Go U-8801  
**Series model** : ZAOAWUVODA  
**FCC ID** : 2BL9Z-U8801  
**Report Number** : BLA-EMC-202410-A2605  
**Date of Receipt** : 2024.10.12  
**Date of Test** : 2024.10.12 to 2024.11.01  
**Test Standard** : 47 CFR Part 15, Subpart E 15.407  
**Test Result** : Pass

Compiled by: *Hugh* Review by: *Sueels* Approved by: *Blue Zheng*  
Issued Date: 2024.11.01

## BlueAsia of Technical Services(Shenzhen) Co., Ltd.

Address: Building C, No. 107, Shihuan Road, Shiyuan Sub-District, Baoan District,  
Shenzhen, Guangdong Province, China



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## Revise Record

| Version No. | Date       | Description |
|-------------|------------|-------------|
| 01          | 2024.11.01 | Original    |
|             |            |             |
|             |            |             |
|             |            |             |

## 1 General information

### 1.1 General information

|              |                                                                                                                                   |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Applicant    | Unavi USA, Inc.                                                                                                                   |
| Address      | 15032 Red Hill Ave, Suite F, Tustin, CA 92780, USA                                                                                |
| Manufacturer | Shenzhen Shengpai Technology Co.,LTD                                                                                              |
| Address      | 7/F, Building A, Guancheng Low Carbon Industrial Park, Shangcun, Gongming Street, Guangming District, Shenzhen, Guangdong, China. |
| Factory      | N/A                                                                                                                               |
| Address      | N/A                                                                                                                               |

### 1.2 General description of EUT

|                                            |                                                                                                             |
|--------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| Operation Frequency:                       | Band 1: 5180MHz-5240MHz;<br>Band 4: 5745MHz-5825MHz                                                         |
| Channel numbers:                           | Band 1: 802.11a/802.11n(HT20): 4<br>802.11n(HT40):2<br>Band 4: 802.11a/802.11(HT20): 5<br>802.11n(HT40): 2, |
| Channel separation:                        | 802.11a/n(HT20): 20MHz,<br>802.11n(HT40): 40MHz                                                             |
| Modulation technology:<br>(IEEE 802.11a/n) | BPSK, QPSK, 16-QAM, 64-QAM, 256QAM                                                                          |
| Data speed (IEEE 802.11a)                  | 6Mbps, 9Mbps, 12Mbps, 18Mbps, 24Mbps, 36Mbps, 48Mbps, 54Mbps                                                |
| Data speed (IEEE 802.11n):                 | Up to 600Mbps                                                                                               |
| Antenna Type:                              | FPC antenna                                                                                                 |
| Antenna gain:                              | Band1: 1.08dBi; Band4: 2.19dBi                                                                              |

## 2 Test summary

| No. | Test item                                             | Result | Remark |
|-----|-------------------------------------------------------|--------|--------|
| 1   | Frequency Stability                                   | Pass   |        |
| 2   | Radiated Emissions which fall in the restricted bands | Pass   |        |
| 3   | Radiated Emissions                                    | Pass   |        |
| 4   | DFS: Channel Closing Transmission Time                | Pass   |        |
| 5   | DFS: Non-occupancy period                             | Pass   |        |
| 6   | Peak Power spectrum density                           | Pass   |        |
| 7   | Transmitter Power Control                             | Pass   |        |
| 8   | Maximum Conducted output power                        | Pass   |        |
| 9   | Minimum 6 dB bandwidth (5.725-5.85 GHz band )         | Pass   |        |
| 10  | 26dB Emission bandwidth                               | Pass   |        |
| 11  | 99% Bandwidth                                         | Pass   |        |
| 12  | Duty Cycle                                            | Pass   |        |
| 13  | Conducted Emissions at AC Power Line (150kHz-30MHz)   | N/A    |        |
| 14  | Antenna Requirement                                   | Pass   |        |
| 15  | User Access Restrictions                              | Pass   |        |

N/A: Not Applicable

### 3 Test Configuration

#### 3.1 Test mode

| Test Mode <sup>Note 1</sup> | Description                                                                                                         |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------|
| TX                          | Keep the EUT in continuously transmitting mode with modulation. (hopping and non-hopping mode all have been tested) |
| RX                          | Keep the EUT in receiving mode                                                                                      |
| TX Low channel              | Keep the EUT in continuously transmitting mode in low channel                                                       |
| TX middle channel           | Keep the EUT in continuously transmitting mode in middle channel                                                    |
| TX high channel             | Keep the EUT in continuously transmitting mode in high channel                                                      |

*Note 1: The EUT was configured to measure its highest possible emission and/or immunity level. The test modes were adapted according to the operation manual for use; the EUT was operated in the engineering mode <sup>Note 2</sup> to fix the TX or Rx frequency that was for the purpose of the measurements.*

### 3.2 Operation Frequency each of channel

| Band 1: 5150-5250MHz         |           |                      |           |            |           |
|------------------------------|-----------|----------------------|-----------|------------|-----------|
| 802.11a/802.11n20/802.11ac20 |           | 802.11ac40/802.11n40 |           | 802.11ac80 |           |
| Channel                      | Frequency | Channel              | Frequency | Channel    | Frequency |
| 36                           | 5180MHz   | 38                   | 5190MHz   | 42         | 5210MHz   |
| 40                           | 5200MHz   | 46                   | 5230MHz   |            |           |
| 44                           | 5220MHz   |                      |           |            |           |
| 48                           | 5240MHz   |                      |           |            |           |

| Band 4: 5745-5825MHz         |           |                      |           |            |           |
|------------------------------|-----------|----------------------|-----------|------------|-----------|
| 802.11a/802.11n20/802.11ac20 |           | 802.11ac40/802.11n40 |           | 802.11ac80 |           |
| Channel                      | Frequency | Channel              | Frequency | Channel    | Frequency |
| 149                          | 5745MHz   | 151                  | 5755MHz   | 155        | 5775MHz   |
| 153                          | 5765MHz   | 159                  | 5795MHz   |            |           |
| 157                          | 5785MHz   |                      |           |            |           |
| 161                          | 5805MHz   |                      |           |            |           |
| 165                          | 5825MHz   |                      |           |            |           |

### 3.3 Test channel

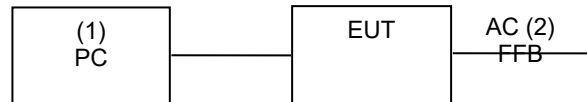
#### BAND 1:

802.11a/802.11n20/802.11ac20: 5180MHz(lowest channel), 5200MHz(middle channel), 5240MHz(highest channel);  
802.11ac40/802.11n40: 5190MHz(lowest channel), 5230MHz(highest channel); 802.11ac80: 5230MHz.

#### BAND 4:

802.11a/802.11n20/802.11ac20: 5745MHz(lowest channel), 5785MHz(middle channel), 5825MHz(highest channel);  
802.11ac40/802.11n40: 5755MHz(lowest channel), 5795MHz(highest channel); 802.11ac80: 5775MHz.

### 3.4 Configuration diagram of EUT



#### Support equipment

| Name | Device type           | Brand  | Mode  | Series No | Remark |
|------|-----------------------|--------|-------|-----------|--------|
| (1)  | PC                    | Lenovo | E460C | N/A       | N/A    |
| (2)  | Fixed frequency board | N/A    | N/A   | N/A       | N/A    |

### 3.5 Auxiliary equipment

| Device Type | Manufacturer | Model Name | Serial No. | Remark                             |
|-------------|--------------|------------|------------|------------------------------------|
| PC          | Lenovo       | E460C      | N/A        | From lab<br>(No.BLA-ZC-BS-2022005) |

**Note:**

“--” mean no any auxiliary device during testing.

### 3.6 Test environment

| Environment | Temperature | Voltage |
|-------------|-------------|---------|
| Normal      | 25°C        | DC 12V  |

## 4 Laboratory information

### 4.1 Laboratory and accreditations

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

|                          |                                                                                                             |
|--------------------------|-------------------------------------------------------------------------------------------------------------|
| Company name:            | BlueAsia of Technical Services(Shenzhen) Co., Ltd.                                                          |
| Address:                 | Building C, No. 107, Shihuan Road, Shiyan Sub-District, Baoan District, Shenzhen, Guangdong Province, China |
| CNAS accredited No.:     | L9788                                                                                                       |
| A2LA Cert. No.:          | 5071.01                                                                                                     |
| FCC Designation No.:     | CN1252                                                                                                      |
| ISED CAB identifier No.: | CN0028                                                                                                      |
| Telephone:               | +86-755-28682673                                                                                            |
| FAX:                     | +86-755-28682673                                                                                            |

### 4.2 Measurement uncertainty

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of  $k=1.96$ .

| Parameter                                      | Expanded Uncertainty            |
|------------------------------------------------|---------------------------------|
| Radiated Emission(9kHz-30MHz)                  | $\pm 4.34\text{dB}$             |
| Radiated Emission(30Mz-1000MHz)                | $\pm 4.24\text{dB}$             |
| Radiated Emission(1GHz-18GHz)                  | $\pm 4.68\text{dB}$             |
| AC Power Line Conducted Emission(150kHz-30MHz) | $\pm 3.45\text{dB}$             |
| Occupied Channel Bandwidth                     | $\pm 5\%$                       |
| RF output power, conducted                     | $\pm 1.5\text{ dB}$             |
| Power Spectral Density, conducted              | $\pm 3.0\text{ dB}$             |
| Unwanted Emissions, conducted                  | $\pm 3.0\text{ dB}$             |
| Temperature                                    | $\pm 3\text{ }^{\circ}\text{C}$ |
| Supply voltages                                | $\pm 3\%$                       |
| Time                                           | $\pm 5\%$                       |

## 5 Test equipment

### RF conducted

| Equipment       | Name                       | Model    | Manufacture     | S/N           | Cal. Date  | Due. Date  |
|-----------------|----------------------------|----------|-----------------|---------------|------------|------------|
| BLA-EMC-003-003 | Shield room                | 5*3*3    | SKET            | N/A           | 2023/11/16 | 2025/11/15 |
| BLA-EMC-016     | Signal Generator           | N5182A   | Agilent         | MY52420567    | 2024/06/28 | 2025/06/27 |
| BLA-EMC-038     | Spectrum                   | N9020A   | Agilent         | MY49100060    | 2024/08/08 | 2025/08/07 |
| BLA-EMC-042     | Power sensor               | RPR3006W | DARE            | 14I00889SN042 | 2024/08/08 | 2025/08/07 |
| BLA-EMC-044     | Radio communication tester | CMW500   | R&S             | 132429        | 2024/08/08 | 2025/08/07 |
| BLA-EMC-064     | Signal Generator           | N5182B   | KEYSIGHT        | MY58108892    | 2024/06/28 | 2025/06/27 |
| BLA-EMC-079     | Spectrum                   | N9020A   | Agilent         | MY54420161    | 2024/08/08 | 2025/08/07 |
| BLA-EMC-088     | Audio Analyzer             | ATS-1    | Audio Precision | ATS141094     | 2024/06/28 | 2025/06/27 |

### Radiated Spurious Emissions (Below 1GHz)

| Equipment      | Name              | Model            | Manufacture | S/N    | Cal. Date  | Due. Date  |
|----------------|-------------------|------------------|-------------|--------|------------|------------|
| BLA-EMC-002-01 | Anechoic chamber  | 9*6*6 chamber    | SKET        | N/A    | 2024/3/27  | 2027/3/26  |
| BLA-EMC-002-02 | Control room      | 966 control room | SKET        | N/A    | 2024/3/27  | 2027/3/26  |
| BLA-EMC-009    | EMI receiver      | ESR7             | R&S         | 101199 | 2024/08/08 | 2025/08/07 |
| BLA-EMC-043    | Loop antenna      | FMZB1519B        | Schwarzbeck | 00102  | 2024/06/29 | 2026/06/28 |
| BLA-EMC-065    | Broadband antenna | VULB9168         | Schwarzbeck | 01065P | 2024/06/29 | 2026/06/27 |
| BLA-XC-01      | Coaxial Cable     | N/A              | BlueAsia    | V01    | N/A        | N/A        |
| BLA-XC-02      | Coaxial Cable     | N/A              | BlueAsia    | V02    | N/A        | N/A        |

### Radiated Spurious Emissions (Above 1GHz)

| Equipment      | Name              | Model               | Manufacture | S/N          | Cal. Date  | Due. Date  |
|----------------|-------------------|---------------------|-------------|--------------|------------|------------|
| BLA-EMC-001-01 | Anechoic chamber  | 9*6*6 chamber       | SKET        | N/A          | 2023/11/16 | 2026/11/15 |
| BLA-EMC-001-02 | Control Room      | 966 control room    | SKET        | N/A          | 2023/11/16 | 2025/11/15 |
| BLA-EMC-008    | Spectrum          | FSP40               | R&S         | 100817       | 2024/08/08 | 2025/08/07 |
| BLA-EMC-012    | Broadband antenna | VULB9168            | Schwarzbeck | 00836P:00227 | 2022/10/12 | 2025/10/11 |
| BLA-EMC-013    | Horn Antenna      | BBHA9120D           | Schwarzbeck | 01892        | 2024/06/29 | 2026/06/28 |
| BLA-EMC-014    | Amplifier         | PA_000318G-45       | SKET        | PA2018043003 | 2024/08/08 | 2025/08/07 |
| BLA-EMC-046    | Filter bank       | 2.4G/5G Filter bank | SKET        | N/A          | 2024/06/28 | 2025/06/27 |
| BLA-EMC-061    | Receiver          | ESPI7               | R&S         | 101477       | 2024/06/28 | 2025/06/27 |
| BLA-EMC-066    | Amplifier         | LNPA_30M01G-30      | SKET        | SK2021060801 | 2024/06/28 | 2025/06/27 |
| BLA-EMC-086    | Amplifier         | LNPA_18G40G-50dB    | SKET        | SK2022071301 | 2024/06/28 | 2025/06/27 |

|             |               |           |             |      |            |            |
|-------------|---------------|-----------|-------------|------|------------|------------|
| BLA-EMC-087 | Horn Antenna  | BBHA 9170 | Schwarzbeck | 1106 | 2024/06/29 | 2026/06/28 |
| BLA-XC-03   | Coaxial Cable | N/A       | BlueAsia    | V03  | N/A        | N/A        |
| BLA-XC-04   | Coaxial Cable | N/A       | BlueAsia    | V04  | N/A        | N/A        |

**Test Software Record:**

| Software No. | Software Name                  | Manufacture | Software version | Test site |
|--------------|--------------------------------|-------------|------------------|-----------|
| BLA-EMC-S001 | EZ-EMC                         | EZ          | EEMC-3A1+        | RE        |
| BLA-EMC-S002 | EZ-EMC                         | EZ          | EEMC-3A1+        | RE        |
| BLA-EMC-S010 | MTS 8310                       | MW          | 2.0.0.0          | RF        |
| BLA-EMC-S014 | Bluetooth and WiFi Test System | Tonscend    | 2.5.77.0418      | RF        |

## 6 Test result

### 6.1 Antenna requirement

|               |                                  |
|---------------|----------------------------------|
| Test Standard | 47 CFR Part 15, Subpart C 15.247 |
| Test Method   | N/A                              |

#### 6.1.1 Requirement

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit permanently attached antenna or of a so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

EUT antenna:

The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is 0.55 dBi.

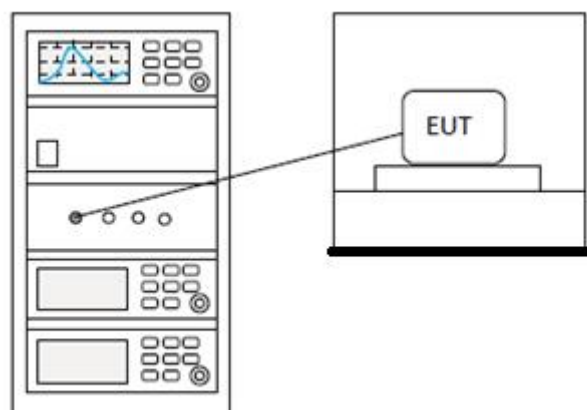
## 6.2 Maximum Conducted output power

|                               |                                  |
|-------------------------------|----------------------------------|
| <b>Test Standard</b>          | 47 CFR Part 15, Subpart E 15.407 |
| <b>Test Method</b>            | KDB 789033 D02 II E              |
| <b>Test Mode (Pre-Scan)</b>   | TX                               |
| <b>Test Mode (Final Test)</b> | TX                               |

### 6.2.1 LIMITS

| <b>Frequency band(MHz)</b> | <b>Limit</b>                                                                                                                                                                                                                            |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5150-5250                  | $\leq 1\text{W}(30\text{dBm})$ for master device                                                                                                                                                                                        |
|                            | $\leq 250\text{mW}(24\text{dBm})$ for client device                                                                                                                                                                                     |
| 5250-5350                  | $\leq 250\text{mW}(24\text{dBm})$ for client device or $11\text{dBm}+10\log B^*$                                                                                                                                                        |
| 5470-5725                  | $\leq 250\text{mW}(24\text{dBm})$ for client device or $11\text{dBm}+10\log B^*$                                                                                                                                                        |
| 5725-5850                  | $\leq 1\text{W}(30\text{dBm})$                                                                                                                                                                                                          |
| Remark:                    | <p>* Where B is the 26dB emission bandwidth in MHz.</p> <p>The maximum conducted output power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage.</p> |

### 6.2.2 BLOCK DIAGRAM OF TEST SETUP



### 6.2.3 TEST Data

Pass: Please refer to appendix A for details

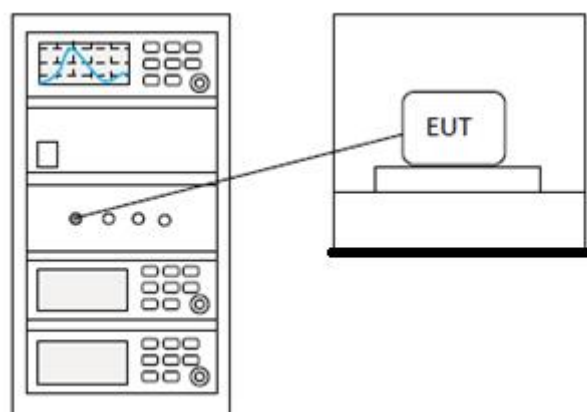
### 6.3 Peak Power spectrum density

|                        |                                  |
|------------------------|----------------------------------|
| Test Standard          | 47 CFR Part 15, Subpart E 15.407 |
| Test Method            | KDB 789033 D02 II F              |
| Test Mode (Pre-Scan)   | TX                               |
| Test Mode (Final Test) | TX                               |

#### 6.3.1 LIMITS

| Frequency band(MHz) | Limit                                                                                                                                                    |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5150-5250           | ≤17dBm in 1MHz for master device                                                                                                                         |
|                     | ≤11dBm in 1MHz for client device                                                                                                                         |
| 5250-5350           | ≤11dBm in 1MHz for client device                                                                                                                         |
| 5470-5725           | ≤11dBm in 1MHz for client device                                                                                                                         |
| 5725-5850           | ≤30dBm in 500 kHz                                                                                                                                        |
| Remark:             | The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. |

#### 6.3.2 BLOCK DIAGRAM OF TEST SETUP



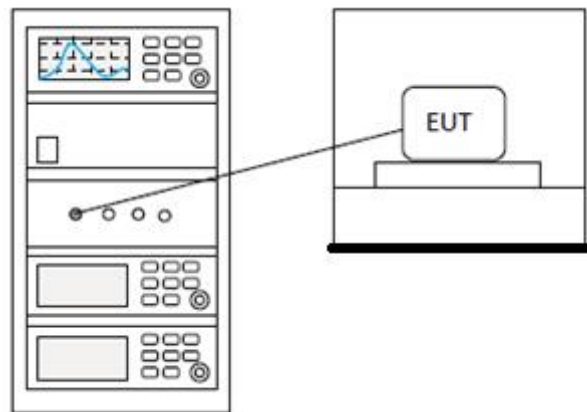
#### 6.3.3 TEST Data

Pass: Please refer to appendix A for details

## 6.4 Duty Cycle

|                        |                                  |
|------------------------|----------------------------------|
| Test Standard          | 47 CFR Part 15, Subpart E 15.407 |
| Test Method            | KDB 789033 II B 1                |
| Test Mode (Pre-Scan)   | TX                               |
| Test Mode (Final Test) | TX                               |

### 6.4.1 BLOCK DIAGRAM OF TEST SETUP



### 6.4.2 TEST Data

Pass: Please refer to appendix A for details

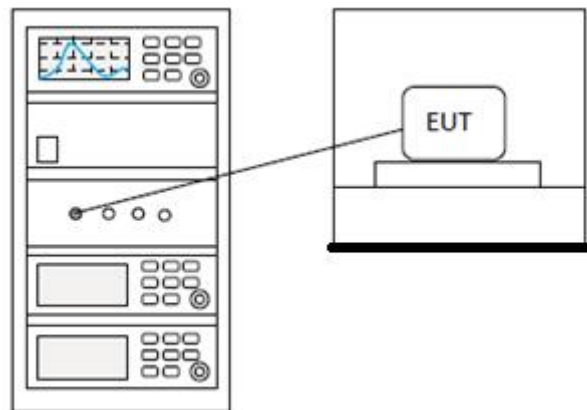
## 6.5 Frequency Stability

|                               |                                  |
|-------------------------------|----------------------------------|
| <b>Test Standard</b>          | 47 CFR Part 15, Subpart E 15.407 |
| <b>Test Method</b>            | ANSI C63.10 (2013) Section 6.8   |
| <b>Test Mode (Pre-Scan)</b>   | TX                               |
| <b>Test Mode (Final Test)</b> | TX                               |

### 6.5.1 LIMITS

|               |                                                                                                                                                                                                                                                                                                         |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Limit:</b> | The frequency tolerance shall be maintained within the band of operation frequency over a temperature variation of 0 degrees to 35 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 6.5.2 BLOCK DIAGRAM OF TEST SETUP



### 6.5.3 TEST Data

Pass: Please refer to appendix A for details

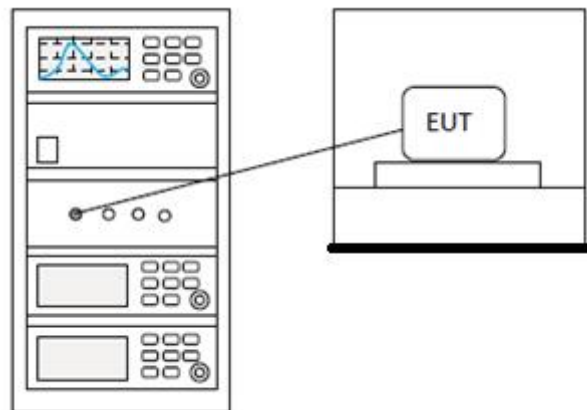
## 6.6 Minimum 6 dB bandwidth (5.725-5.85 GHz band )

|                        |                                  |
|------------------------|----------------------------------|
| Test Standard          | 47 CFR Part 15, Subpart E 15.407 |
| Test Method            | KDB 789033 D02 II C 2            |
| Test Mode (Pre-Scan)   | TX                               |
| Test Mode (Final Test) | TX                               |

### 6.6.1 LIMITS

|        |          |
|--------|----------|
| Limit: | ≥500 kHz |
|--------|----------|

### 6.6.2 BLOCK DIAGRAM OF TEST SETUP



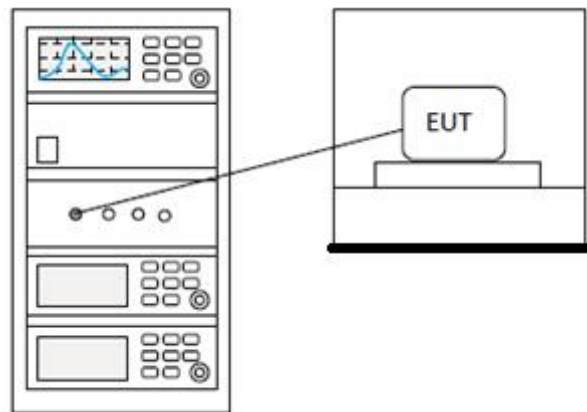
### 6.6.3 TEST Data

Pass: Please refer to appendix A for details

## 6.7 26dB Emission bandwidth

|                        |                                  |
|------------------------|----------------------------------|
| Test Standard          | 47 CFR Part 15, Subpart E 15.407 |
| Test Method            | KDB 789033 D02 II C 1            |
| Test Mode (Pre-Scan)   | TX                               |
| Test Mode (Final Test) | TX                               |

### 6.7.1 BLOCK DIAGRAM OF TEST SETUP



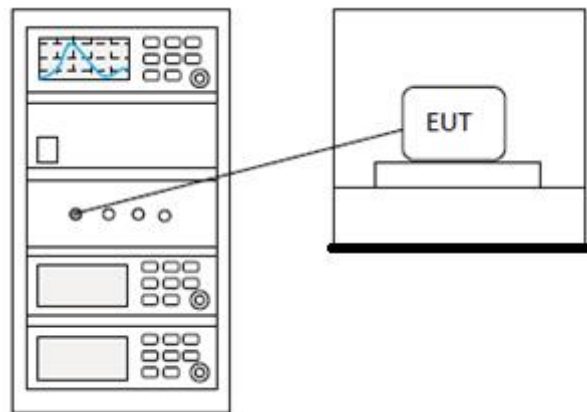
### 6.7.2 TEST Data

Pass: Please refer to appendix A for details

## 6.899% Bandwidth

|                        |                                  |
|------------------------|----------------------------------|
| Test Standard          | 47 CFR Part 15, Subpart E 15.407 |
| Test Method            | KDB 789033 II D                  |
| Test Mode (Pre-Scan)   | TX                               |
| Test Mode (Final Test) | TX                               |

## 6.8.1 BLOCK DIAGRAM OF TEST SETUP



## 6.8.2 TEST Data

Pass: Please refer to appendix A for details

## 6.9 Radiated Emissions

|                        |                                  |
|------------------------|----------------------------------|
| Test Standard          | 47 CFR Part 15, Subpart E 15.407 |
| Test Method            | KDB 789033 D02 II G              |
| Test Mode (Pre-Scan)   | TX                               |
| Test Mode (Final Test) | TX                               |

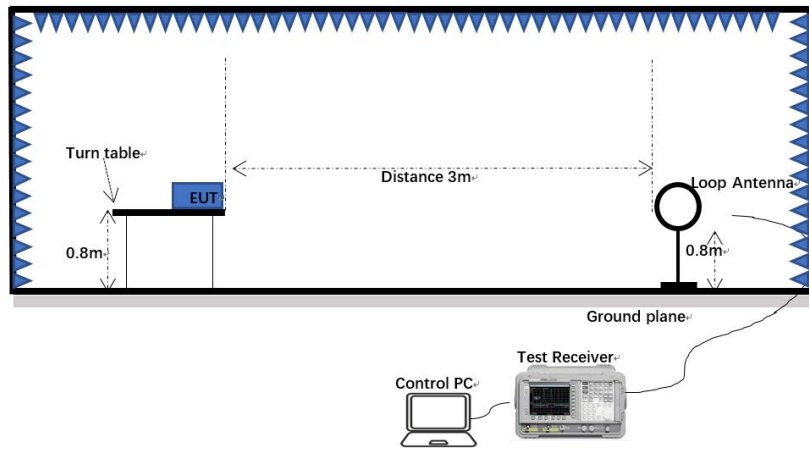
### 6.9.1 Limit

| Frequency(MHz) | Field strength(microvolts/meter) | Measurement distance(meters) |
|----------------|----------------------------------|------------------------------|
| 0.009-0.490    | 2400/F(kHz)                      | 300                          |
| 0.490-1.705    | 24000/F(kHz)                     | 30                           |
| 1.705-30.0     | 30                               | 30                           |
| 30-88          | 100                              | 3                            |
| 88-216         | 150                              | 3                            |
| 216-960        | 200                              | 3                            |
| Above 960      | 500                              | 3                            |

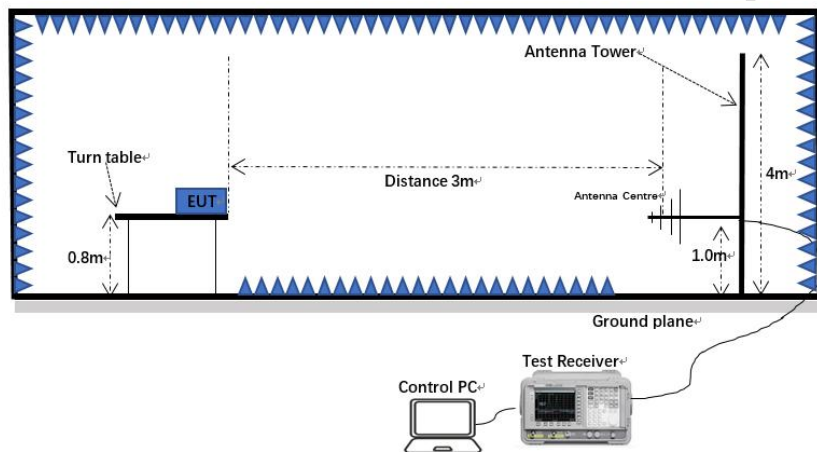
*Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.*

## 6.9.2 Test setup

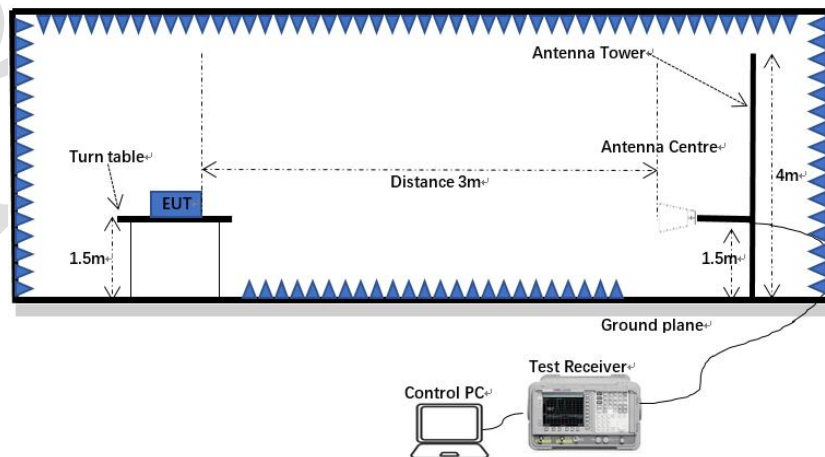
Below 1GHz:



30MHz-1GHz:



Above 1GHz:



### 6.9.3 Procedure

- a) For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b) For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c) The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d) The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- e) For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- f) The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- g) If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- h) Test the EUT in the lowest channel, the middle channel, the highest channel.
- i) The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- j) Repeat above procedures until all frequencies measured was complete.

*Note 1: Scan from 9 kHz to 25GHz, the disturbance above 12.75GHz and below 30MHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported. Fundamental frequency is blocked by filter, and only spurious emission is shown. all modes have been tested, and only the worst mode is showed in the report.*

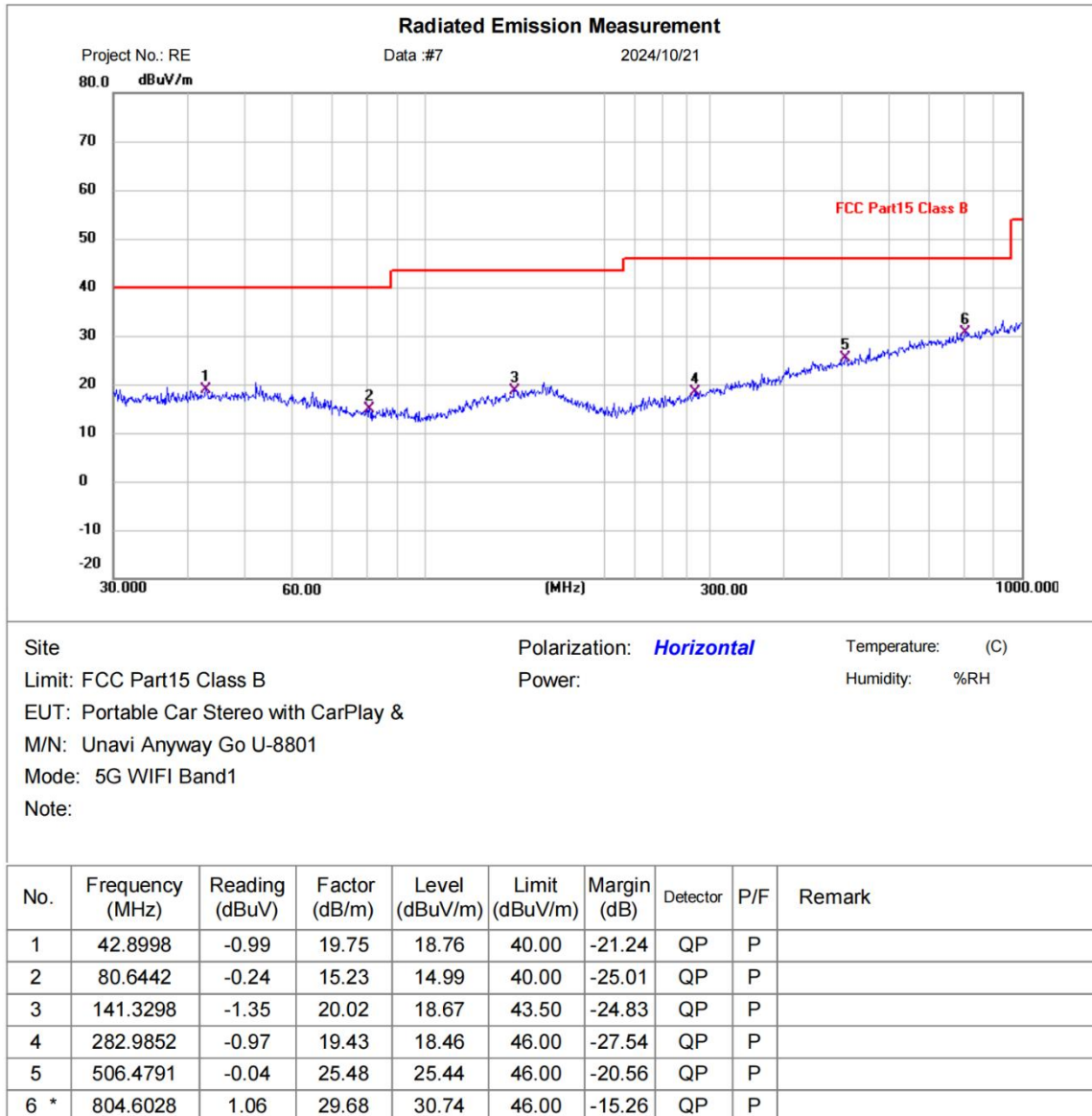
*Note 2: For frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.*

*Note 3: The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:*

$$\text{Level (dBuV)} = \text{Reading (dBuV)} + \text{Factor (dB/m)}$$

## 6.9.4 TEST Data

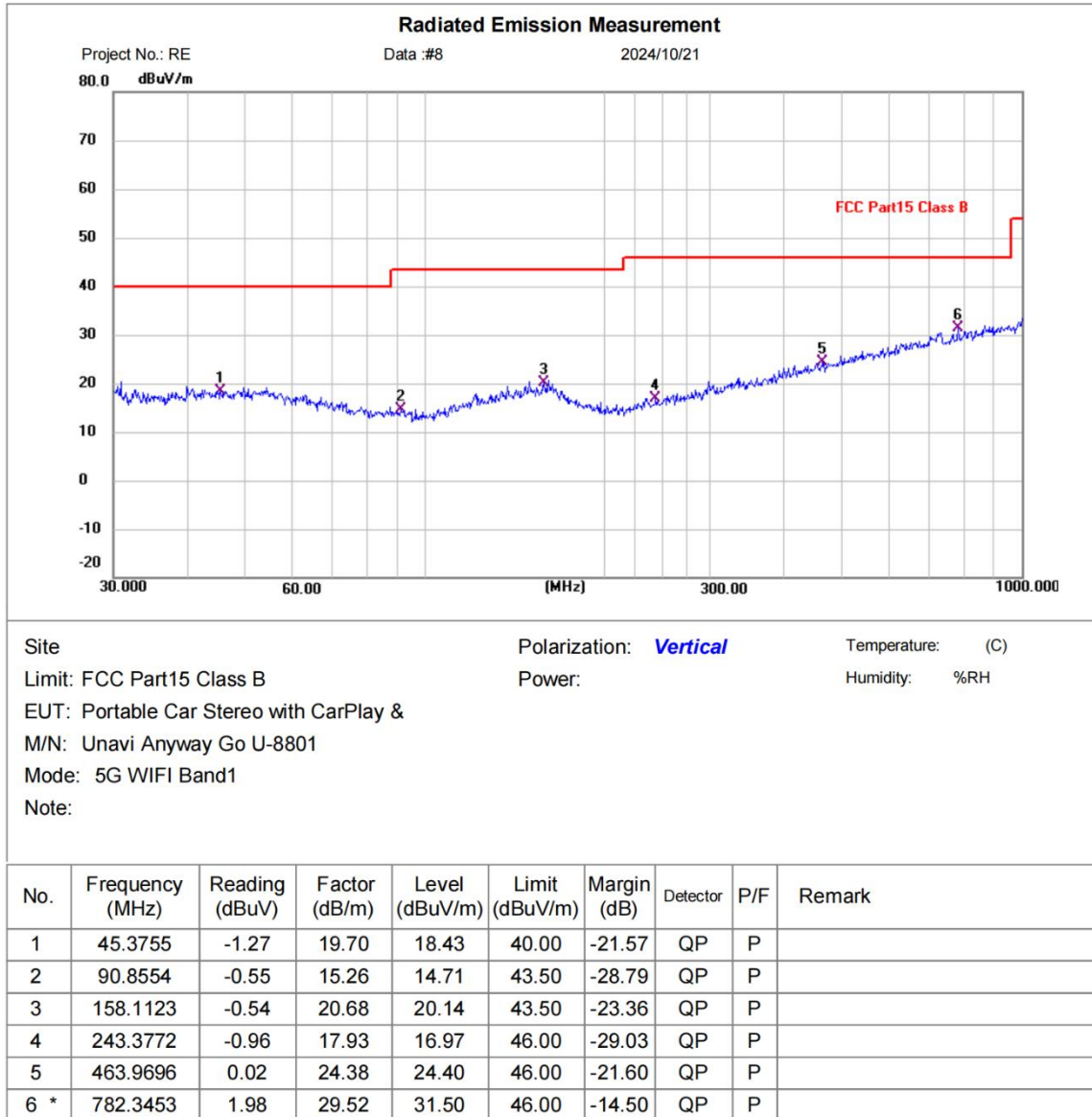
[TestMode: TX below 1G]; [Polarity: Horizontal]



\*:Maximum data    x:Over limit    !:over margin

**Test Result: Pass**

[TestMode: TX below 1G]; [Polarity: Vertical]

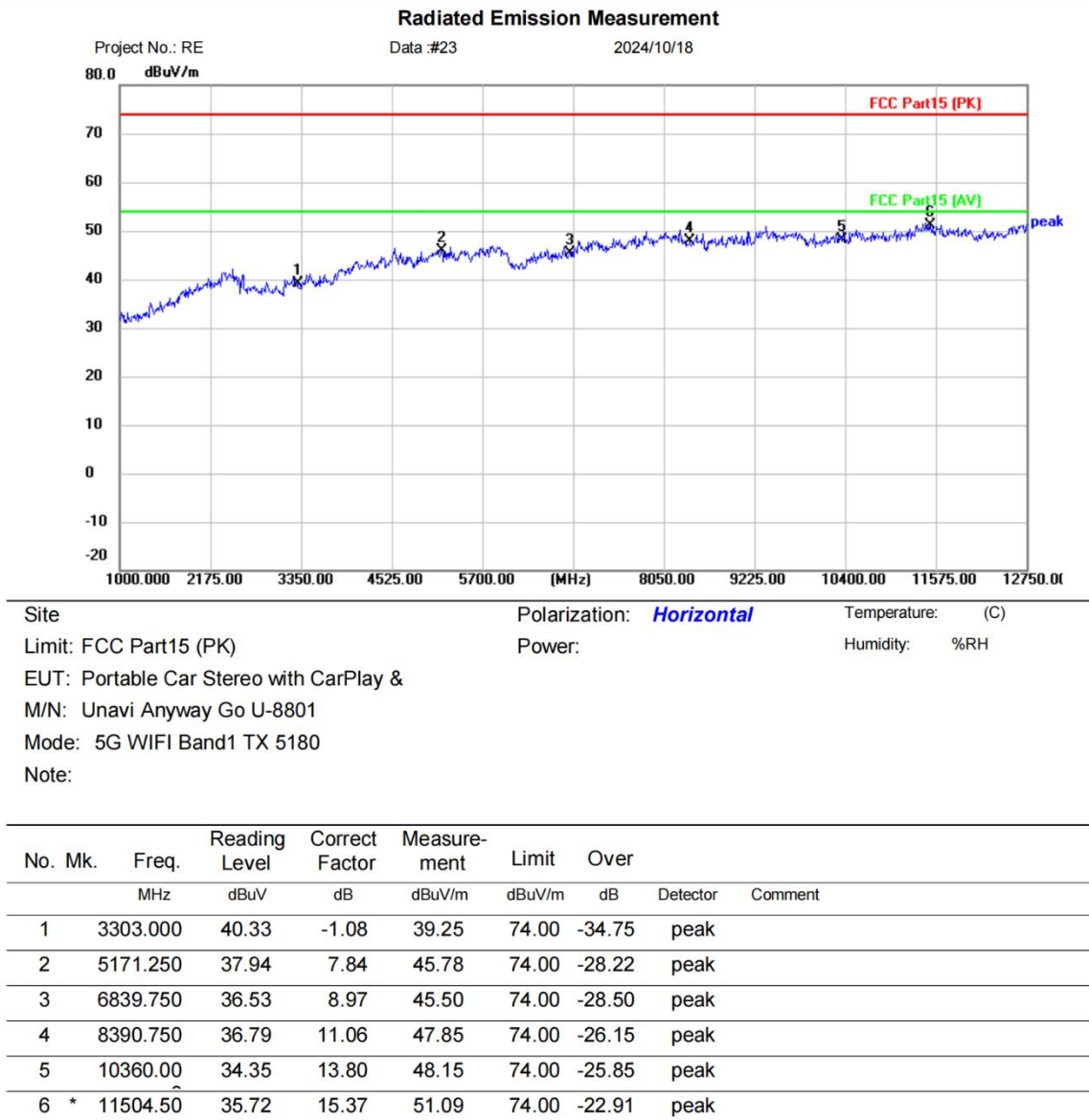


\*:Maximum data    x:Over limit    !:over margin

**Test Result: Pass**

Remark: During the test, pre-scan the 802.11a/n/ac mode, and found the 802.11a mode which it is worse case.

[TestMode: TX band1 a 5180 channel]; [Polarity: Horizontal]

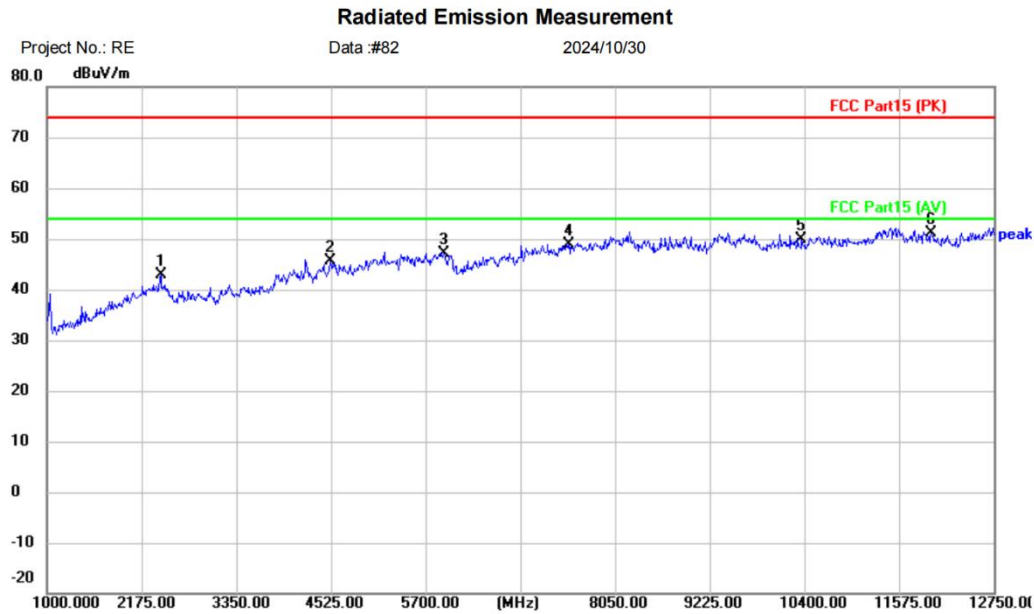


\*:Maximum data    x:Over limit    !:over margin      <Reference Only

Receiver:      ESR\_1      Spectrum Analyzer:      FSP40  
Antenna:      EZ 9120D 1G-18G 2024      Engineer Signature:

**Test Result: Pass**

[TestMode: TX band1 a 5180 channel]; [Polarity: Vertical]



Site:      Polarization: **Vertical**      Temperature: (C)  
 Limit: FCC Part15 (PK)      Power:      Humidity: %RH  
 EUT: Portable Car Stereo with CarPlay &  
 M/N: Unavi Anyway Go U-8801  
 Mode: 5G WIFI Band1 TX 5180  
 Note:

| No. Mk. | Freq.    | Reading Level | Correct Factor | Measure-ment | Limit  | Over   |          |         |
|---------|----------|---------------|----------------|--------------|--------|--------|----------|---------|
|         | MHz      | dBuV          | dB             | dBuV/m       | dBuV/m | dB     | Detector | Comment |
| 1       | 2410.000 | 42.68         | 0.10           | 42.78        | 74.00  | -31.22 | peak     |         |
| 2       | 4513.250 | 40.09         | 5.49           | 45.58        | 74.00  | -28.42 | peak     |         |
| 3       | 5923.250 | 38.17         | 9.06           | 47.23        | 74.00  | -26.77 | peak     |         |
| 4       | 7474.250 | 37.93         | 10.94          | 48.87        | 74.00  | -25.13 | peak     |         |
| 5       | 10360.00 | 36.11         | 13.80          | 49.91        | 74.00  | -24.09 | peak     |         |
| 6 *     | 11974.50 | 36.71         | 14.37          | 51.08        | 74.00  | -22.92 | peak     |         |

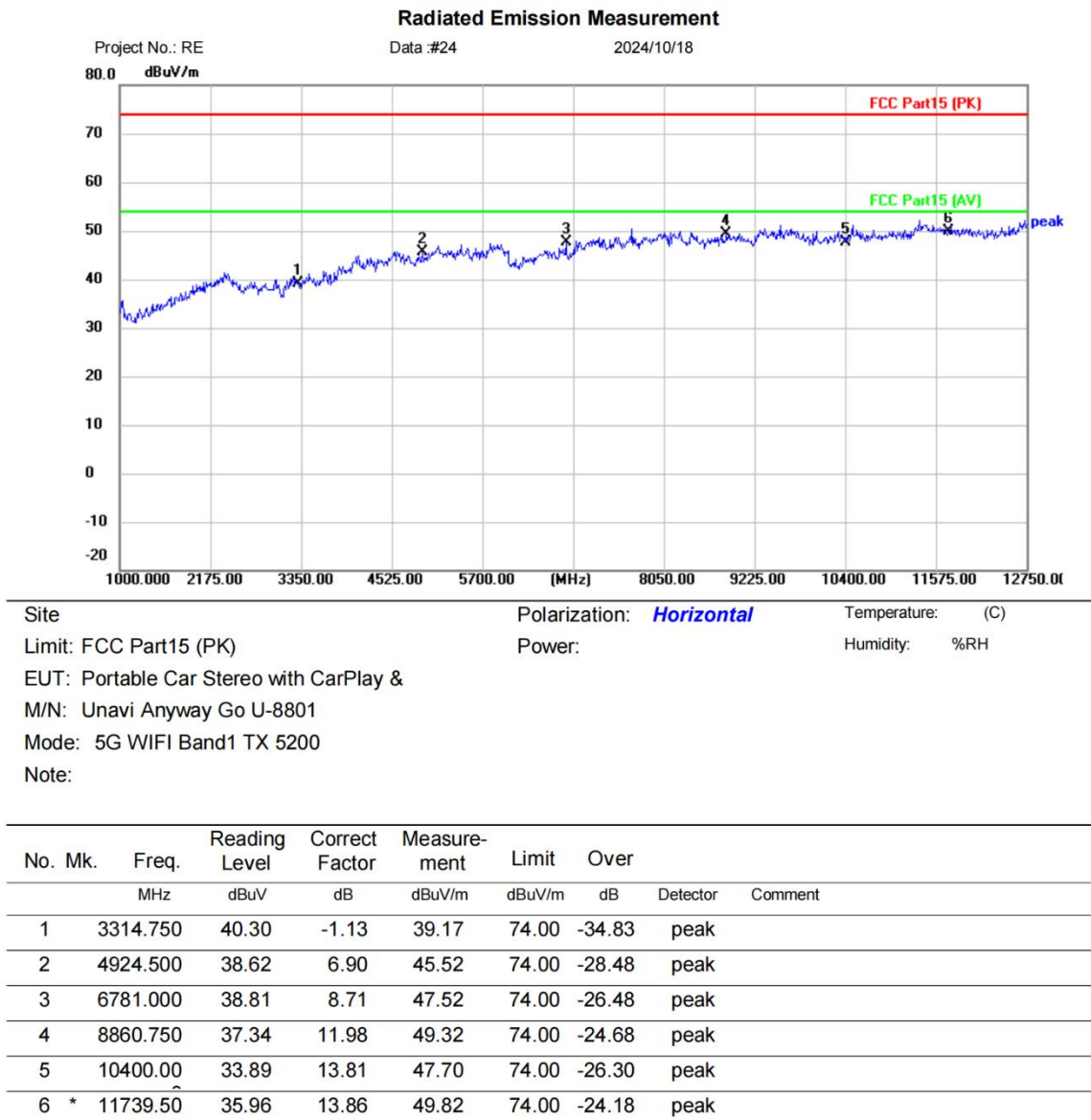
\*:Maximum data    x:Over limit    !:over margin      <Reference Only

Receiver: ESR\_1      Spectrum Analyzer: FSP40

Antenna: EZ 9120D 1G-18G 2024      Engineer Signature:

**Test Result: Pass**

[TestMode: TX band1 a 5200 channel]; [Polarity: Horizontal]



\*:Maximum data    x:Over limit    !:over margin

<Reference Only

Receiver: ESR\_1

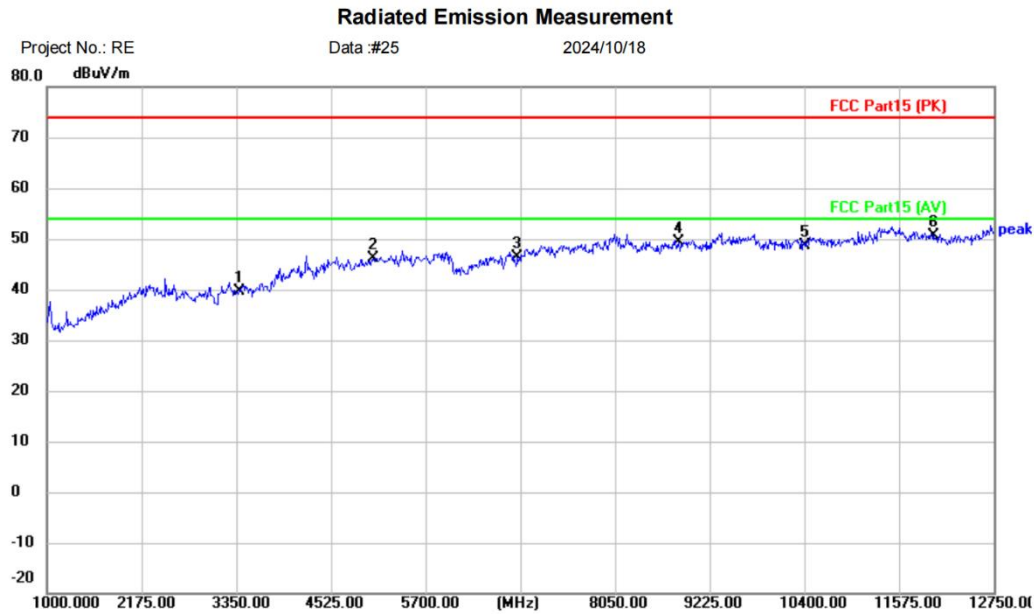
Spectrum Analyzer: FSP40

Antenna: EZ 9120D 1G-18G 2024

Engineer Signature:

**Test Result: Pass**

[TestMode: TX band1 a 5200 channel]; [Polarity: Vertical]



Site:      Polarization: **Vertical**      Temperature: (C)  
Limit: FCC Part15 (PK)      Power:      Humidity: %RH  
EUT: Portable Car Stereo with CarPlay &  
M/N: Unavi Anyway Go U-8801  
Mode: 5G WIFI Band1 TX 5200  
Note:

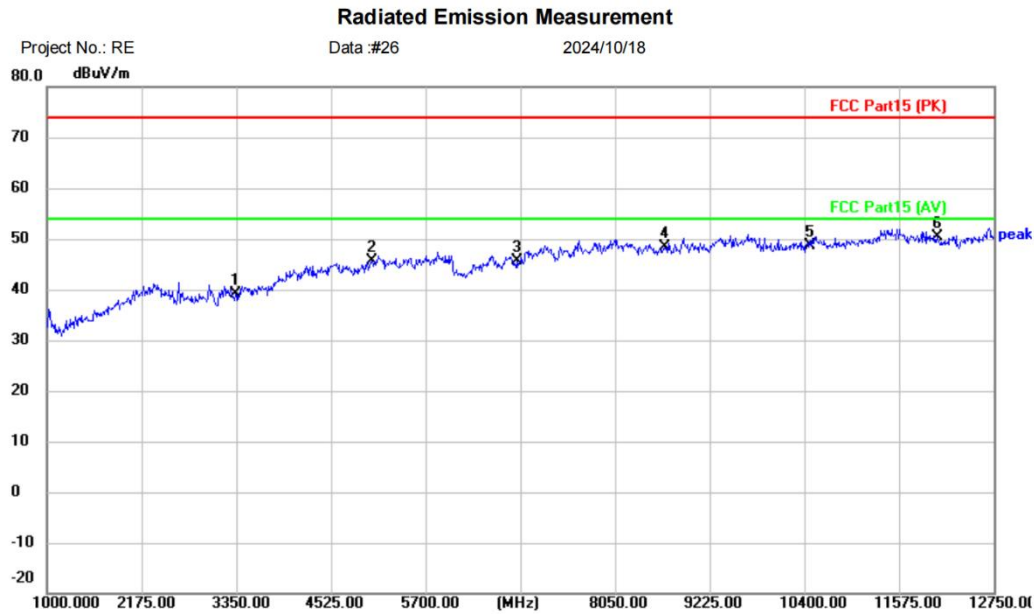
| No. Mk. | Freq.    | Reading Level | Correct Factor | Measure-ment | Limit  | Over   |          |         |
|---------|----------|---------------|----------------|--------------|--------|--------|----------|---------|
|         | MHz      | dBuV          | dB             | dBuV/m       | dBuV/m | dB     | Detector | Comment |
| 1       | 3385.250 | 40.59         | -1.04          | 39.55        | 74.00  | -34.45 | peak     |         |
| 2       | 5053.750 | 37.77         | 8.44           | 46.21        | 74.00  | -27.79 | peak     |         |
| 3       | 6839.750 | 37.33         | 8.97           | 46.30        | 74.00  | -27.70 | peak     |         |
| 4       | 8837.250 | 37.43         | 11.92          | 49.35        | 74.00  | -24.65 | peak     |         |
| 5       | 10400.00 | 34.93         | 13.81          | 48.74        | 74.00  | -25.26 | peak     |         |
| 6 *     | 12009.75 | 36.15         | 14.49          | 50.64        | 74.00  | -23.36 | peak     |         |

\*:Maximum data    x:Over limit    !:over margin      <Reference Only

Receiver: ESR\_1      Spectrum Analyzer: FSP40  
Antenna: EZ 9120D 1G-18G 2024      Engineer Signature:

**Test Result: Pass**

[TestMode: TX band1 a 5240 channel]; [Polarity: Horizontal]



Site:      Polarization: **Horizontal**      Temperature: (C)  
 Limit: FCC Part15 (PK)      Power:      Humidity: %RH  
 EUT: Portable Car Stereo with CarPlay &  
 M/N: Unavi Anyway Go U-8801  
 Mode: 5G WIFI Band1 TX 5240  
 Note:

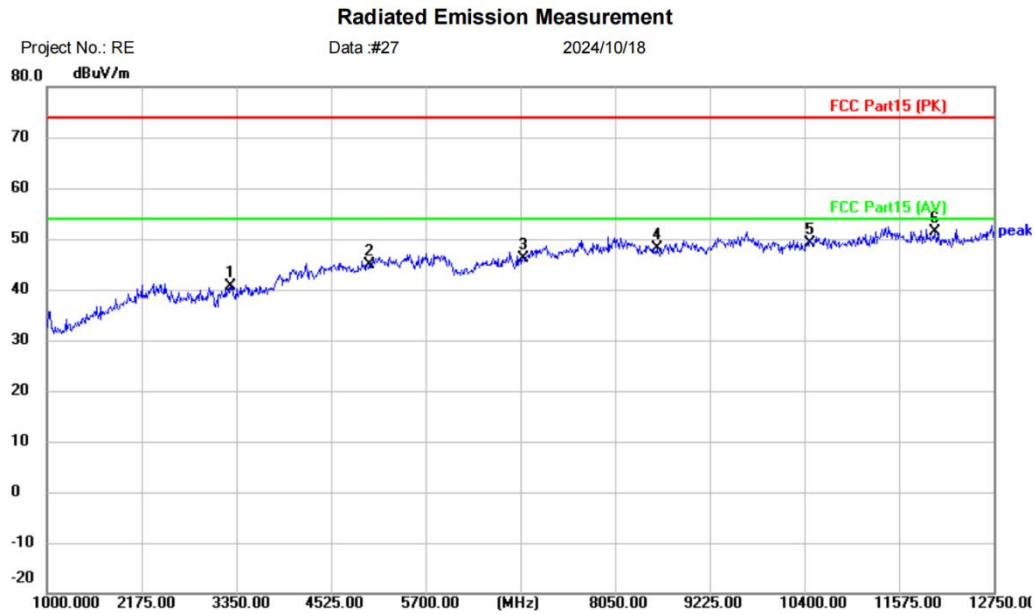
| No. Mk. | Freq.    | Reading Level | Correct Factor | Measure-ment | Limit  | Over   | Detector | Comment |
|---------|----------|---------------|----------------|--------------|--------|--------|----------|---------|
|         | MHz      | dBuV          | dB             | dBuV/m       | dBuV/m | dB     |          |         |
| 1       | 3338.250 | 40.45         | -1.24          | 39.21        | 74.00  | -34.79 | peak     |         |
| 2       | 5030.250 | 37.52         | 8.22           | 45.74        | 74.00  | -28.26 | peak     |         |
| 3       | 6828.000 | 36.72         | 8.83           | 45.55        | 74.00  | -28.45 | peak     |         |
| 4       | 8661.000 | 36.65         | 11.79          | 48.44        | 74.00  | -25.56 | peak     |         |
| 5       | 10480.00 | 34.61         | 14.06          | 48.67        | 74.00  | -25.33 | peak     |         |
| 6 *     | 12045.00 | 36.09         | 14.38          | 50.47        | 74.00  | -23.53 | peak     |         |

\*:Maximum data    x:Over limit    !:over margin      <Reference Only

Receiver: ESR\_1      Spectrum Analyzer: FSP40  
 Antenna: EZ 9120D 1G-18G 2024      Engineer Signature:

**Test Result: Pass**

[TestMode: TX band1 a 5240 channel]; [Polarity: Vertical]



Site:      Polarization: **Vertical**      Temperature: (C)  
 Limit: FCC Part15 (PK)      Power:      Humidity: %RH  
 EUT: Portable Car Stereo with CarPlay &  
 M/N: Unavi Anyway Go U-8801  
 Mode: 5G WIFI Band1 TX 5240  
 Note:

| No. Mk. | Freq.    | Reading Level | Correct Factor | Measure-ment | Limit  | Over   | Detector | Comment |
|---------|----------|---------------|----------------|--------------|--------|--------|----------|---------|
|         | MHz      | dBuV          | dB             | dBuV/m       | dBuV/m | dB     |          |         |
| 1       | 3279.500 | 41.72         | -1.13          | 40.59        | 74.00  | -33.41 | peak     |         |
| 2       | 4995.000 | 37.14         | 7.81           | 44.95        | 74.00  | -29.05 | peak     |         |
| 3       | 6910.250 | 36.99         | 9.21           | 46.20        | 74.00  | -27.80 | peak     |         |
| 4       | 8567.000 | 36.66         | 11.47          | 48.13        | 74.00  | -25.87 | peak     |         |
| 5       | 10480.00 | 35.19         | 14.06          | 49.25        | 74.00  | -24.75 | peak     |         |
| 6 *     | 12021.50 | 36.85         | 14.46          | 51.31        | 74.00  | -22.69 | peak     |         |

\*:Maximum data    x:Over limit    !:over margin      <Reference Only

Receiver: ESR\_1      Spectrum Analyzer: FSP40

Antenna: EZ 9120D 1G-18G 2024      Engineer Signature:

**Test Result: Pass**