

# FCC RADIO TEST REPORT

**FCC ID: VIZUSB001**

**Product :** 2.4G Wireless receiver

**Trade Name :** N/A

**Model Name :** USB Nano-receiver

**Serial Model :** N/A

**Report No. :** UNIA2018071406FR-01

## Prepared for

Palm Max Technology Co., Ltd.

5F-5, No. 736, Zhongzheng Rd., Zhonghe Dist., New Taipei City 23511,  
New Taipei City, Taiwan

## Prepared by

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## TEST RESULT CERTIFICATION

**Applicant's name** ..... : Palm Max Technology Co., Ltd.

**Address** ..... : 5F-5, No. 736, Zhongzheng Rd., Zhonghe Dist., New Taipei City 23511, New Taipei City, Taiwan

**Manufacture's Name** ..... : Palm Max Technology Co., Ltd.

**Address** ..... : 5F-5, No. 736, Zhongzheng Rd., Zhonghe Dist., New Taipei City 23511, New Taipei City, Taiwan

**Product description**

**Product name** ..... : 2.4G Wireless receiver

**Trade Mark** ..... : N/A

**Model and/or type reference** : USB Nano-receiver

**Standards** ..... : FCC Part 15 Subpart B  
ANSI C63.4:2014

This device described above has been tested by Shenzhen United Testing Technology Co., Ltd., and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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**Date of Test** ..... :

**Date (s) of performance of tests** ..... : Jul. 12, 2018 ~ Jul. 30, 2018

**Date of Issue** ..... : Jul. 30, 2018

**Test Result** ..... : Pass

Prepared by:

*Kahn Yang*

Kahn yang/Editor

Reviewer:

*Sherwin Qian*

Sherwin Qian/Supervisor

Approved & Authorized Signer:

*Liuze*

Liuze/Manager

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## 1. TEST SUMMARY

### 1.1 TEST PROCEDURES AND RESULTS

| EMC Emission                              |                    |         |        |
|-------------------------------------------|--------------------|---------|--------|
| Standard                                  | Test Item          | Limit   | Result |
| FCC Part 15 Subpart B<br>ANSI C63.4: 2014 | Conducted Emission | Class B | PASS   |
|                                           | Radiated Emission  | Class B | PASS   |

Note: 1. "N/A" denotes test is not applicable in this test report.  
2. For client's request and manual description, the test will not be executed.

### 1.2 TEST FACILITY

Test Firm : Shenzhen United Testing Technology Co., Ltd.  
Address : 2F, Annex Bldg, Jiahuangyuan Tech Park, #365 Baotian 1 Rd, Tiegang Community, Xixiang Str, Bao'an District, Shenzhen, China

The testing quality ability of our laboratory meet with "Quality Law of People's Republic of China" Clause 19. The testing quality system of our laboratory meets with ISO/IEC-17025 requirements, which is approved by CNAS. This approval result is accepted by MRA of APLAC.

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

CNAS-LAB Code: L6494

The EMC Laboratory has been assessed and in compliance with CNAS-CL01 accreditation criteria for testing Laboratories (identical to ISO/IEC 17025:2017 General Requirements) for the Competence of testing Laboratories.

Designation Number: CN1227

Test Firm Registration Number: 674885

The EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications commission. The acceptance letter from the FCC is maintained in our files.

### 1.3 MEASUREMENT UNCERTAINTY

#### Measurement Uncertainty

|                                                       |               |
|-------------------------------------------------------|---------------|
| Conducted Emission Expanded Uncertainty               | = 2.23dB, k=2 |
| Radiated emission expanded uncertainty(9kHz-30MHz)    | = 3.08dB, k=2 |
| Radiated emission expanded uncertainty(30MHz-1000MHz) | = 4.42dB, k=2 |
| Radiated emission expanded uncertainty(Above 1GHz)    | = 4.06dB, k=2 |

## 2. GENERAL INFORMATION

### 2.1 GENERAL DESCRIPTION OF EUT

|                     |                                                                                                                                                                                                                    |     |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| Equipment           | 2.4G Wireless receiver                                                                                                                                                                                             |     |
| Trade Mark          | N/A                                                                                                                                                                                                                |     |
| Model Name          | USB Nano-receiver                                                                                                                                                                                                  |     |
| Serial No.          | N/A                                                                                                                                                                                                                |     |
| Model Difference    | N/A                                                                                                                                                                                                                |     |
| FCC ID              | VIZUSB001                                                                                                                                                                                                          |     |
| Product Description | The EUT is a 2.4G Wireless receiver.                                                                                                                                                                               |     |
|                     | Operating frequency:                                                                                                                                                                                               | N/A |
|                     | Connecting I/O port:                                                                                                                                                                                               | N/A |
|                     | Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual. |     |
| Battery             | N/A                                                                                                                                                                                                                |     |
| Power Source        | DC 5V from Laptop USB Port                                                                                                                                                                                         |     |
| Adapter Model       | N/A                                                                                                                                                                                                                |     |

## 2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

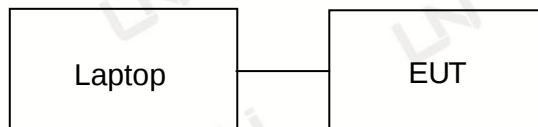
| Pretest Mode | Description |
|--------------|-------------|
| Mode 1       | Running     |

| For Conducted Test |             |
|--------------------|-------------|
| Final Test Mode    | Description |
| Mode 1             | Running     |

| For Radiated Test |             |
|-------------------|-------------|
| Final Test Mode   | Description |
| Mode 1            | Running     |

## 2.3 DESCRIPTION OF TEST SETUP

Operation of EUT during testing:



## 2.4 DESCRIPTION TEST PERIPHERAL AND EUT PERIPHERAL

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

| Item | Equipment              | Mfr/Brand | Model/Type No.    | Note |
|------|------------------------|-----------|-------------------|------|
| E-1  | 2.4G Wireless receiver | N/A       | USB Nano-receiver | EUT  |
| E-2  | Laptop                 | LENOVO    | XiaoXin Air 12    | AE   |
|      |                        |           |                   |      |
|      |                        |           |                   |      |
|      |                        |           |                   |      |
|      |                        |           |                   |      |
|      |                        |           |                   |      |
|      |                        |           |                   |      |

| Item | Shielded Type | Ferrite Core | Length | Note |
|------|---------------|--------------|--------|------|
|      |               |              |        |      |
|      |               |              |        |      |
|      |               |              |        |      |
|      |               |              |        |      |
|      |               |              |        |      |
|      |               |              |        |      |
|      |               |              |        |      |
|      |               |              |        |      |

Note:

1. The support equipment was authorized by Declaration of Confirmation.
2. For detachable type I/O cable should be specified the length in cm in 『Length』 column.
3. “YES” means “shielded” “with core”, “NO” means “unshielded” “without core”.

## 2.5 MEASUREMENT INSTRUMENTS LIST

| Item                     | Equipment                           | Manufacturer  | Model No.   | Serial No.    | Calibrated until |
|--------------------------|-------------------------------------|---------------|-------------|---------------|------------------|
| CONDUCTED EMISSIONS TEST |                                     |               |             |               |                  |
| 1                        | AMN                                 | Schwarzbeck   | NNLK8121    | 8121370       | 2018.9.9         |
| 2                        | AMN                                 | ETS           | 3810/2      | 00020199      | 2018.9.9         |
| 3                        | EMI TEST RECEIVER                   | Rohde&Schwarz | ESCI        | 101210        | 2018.9.9         |
| 4                        | AAN                                 | TESEQ         | T8-Cat6     | 38888         | 2018.9.9         |
| RADIATED EMISSION TEST   |                                     |               |             |               |                  |
| 1                        | Horn Antenna                        | Sunol         | DRH-118     | A101415       | 2018.9.29        |
| 2                        | BicoNLog Antenna                    | Sunol         | JB1 Antenna | A090215       | 2018.9.29        |
| 3                        | PREAMP                              | HP            | 8449B       | 3008A00160    | 2018.9.9         |
| 4                        | PREAMP                              | HP            | 8447D       | 2944A07999    | 2018.9.9         |
| 5                        | EMI TEST RECEIVER                   | Rohde&Schwarz | ESR3        | 101891        | 2018.9.9         |
| 6                        | VECTOR Signal Generator             | Rohde&Schwarz | SMU200A     | 101521        | 2018.9.28        |
| 7                        | Signal Generator                    | Agilent       | E4421B      | MY4335105     | 2018.9.28        |
| 8                        | MXA Signal Analyzer                 | Agilent       | N9020A      | MY50510140    | 2018.9.28        |
| 9                        | MXA Signal Analyzer                 | Agilent       | N9020A      | MY51110104    | 2018.9.9         |
| 10                       | ANT Tower&Turn table Controller     | Champro       | EM 1000     | 60764         | 2018.9.28        |
| 11                       | Anechoic Chamber                    | Taihe Maorui  | 9m*6m*6m    | 966A0001      | 2018.9.9         |
| 12                       | Shielding Room                      | Taihe Maorui  | 6.4m*4m*3m  | 643A0001      | 2018.9.9         |
| 13                       | RF Power sensor                     | DARE          | RPR3006W    | 15I00041SNO88 | 2019.3.14        |
| 14                       | RF Power sensor                     | DARE          | RPR3006W    | 15I00041SNO89 | 2019.3.14        |
| 15                       | RF power divider                    | Anritsu       | K241B       | 992289        | 2018.9.28        |
| 16                       | Wideband radio communication tester | Rohde&Schwarz | CMW500      | 154987        | 2018.9.28        |
| 17                       | Biconical antenna                   | Schwarzbeck   | VHA 9103    | 91032360      | 2018.9.8         |
| 18                       | Biconical antenna                   | Schwarzbeck   | VHA 9103    | 91032361      | 2018.9.8         |
| 19                       | Broadband Hybrid Antennas           | Schwarzbeck   | VULB9163    | VULB9163#958  | 2018.9.8         |
| 20                       | Horn Antenna                        | Schwarzbeck   | BBHA9120D   | 9120D-1680    | 2019.1.12        |
| 21                       | Active Receive Loop Antenna         | Schwarzbeck   | FMZB 1919B  | 00023         | 2018.11.02       |
| 22                       | Horn Antenna                        | Schwarzbeck   | BBHA 9170   | BBHA9170651   | 2019.03.14       |
| 23                       | Microwave Broadband Preamplifier    | Schwarzbeck   | BBV 9721    | 100472        | 2018.10.24       |
| 24                       | Active Loop Antenna                 | Com-Power     | AL-130R     | 10160009      | 2019.05.10       |
| 25                       | Power Meter                         | KEYSIGHT      | N1911A      | MY50520168    | 2019.05.10       |

### 3. CONDUCTED EMISSIONS TEST

#### 3.1 Test Limit

| Frequency<br>(MHz) | Maximum RF Line Voltage(dBμV) |      |         |        |
|--------------------|-------------------------------|------|---------|--------|
|                    | CLASS A                       |      | CLASS B |        |
|                    | Q.P.                          | Ave. | Q.P.    | Ave.   |
| 0.15~0.50          | 79                            | 66   | 66~56*  | 56~46* |
| 0.50~5.00          | 73                            | 60   | 56      | 46     |
| 5.00~30.0          | 73                            | 60   | 60      | 50     |

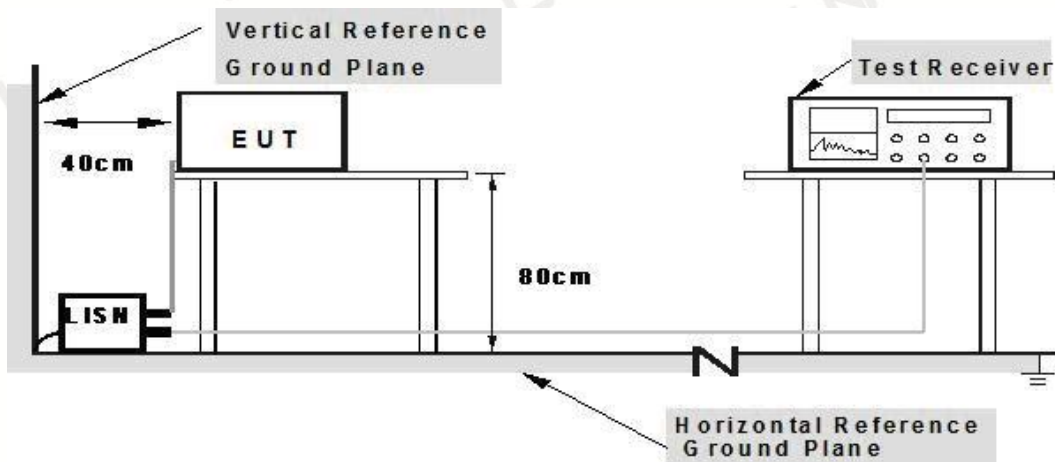
Note:

1. The tighter limit applies at the band edges.
2. The limit of " \* " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver:

| Receiver Parameters | Setting  |
|---------------------|----------|
| Attenuation         | 10 dB    |
| Start Frequency     | 0.15 MHz |
| Stop Frequency      | 30 MHz   |
| IF Bandwidth        | 9 kHz    |

#### 3.2 Test Setup



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

### 3.3 Test Procedure

1. The EUT was placed 0.4 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
2. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
3. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
4. LISN at least 80 cm from nearest part of EUT chassis.
5. For the actual test configuration, please refer to the related Item EUT Test Photos.

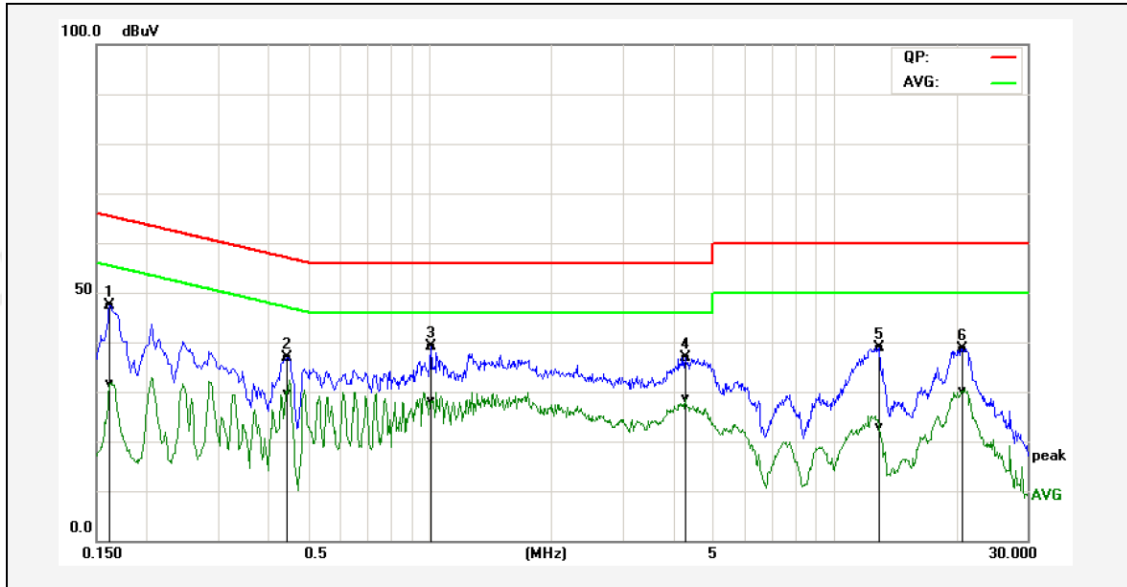
### 3.4 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

### 3.5 Test Result

Pass

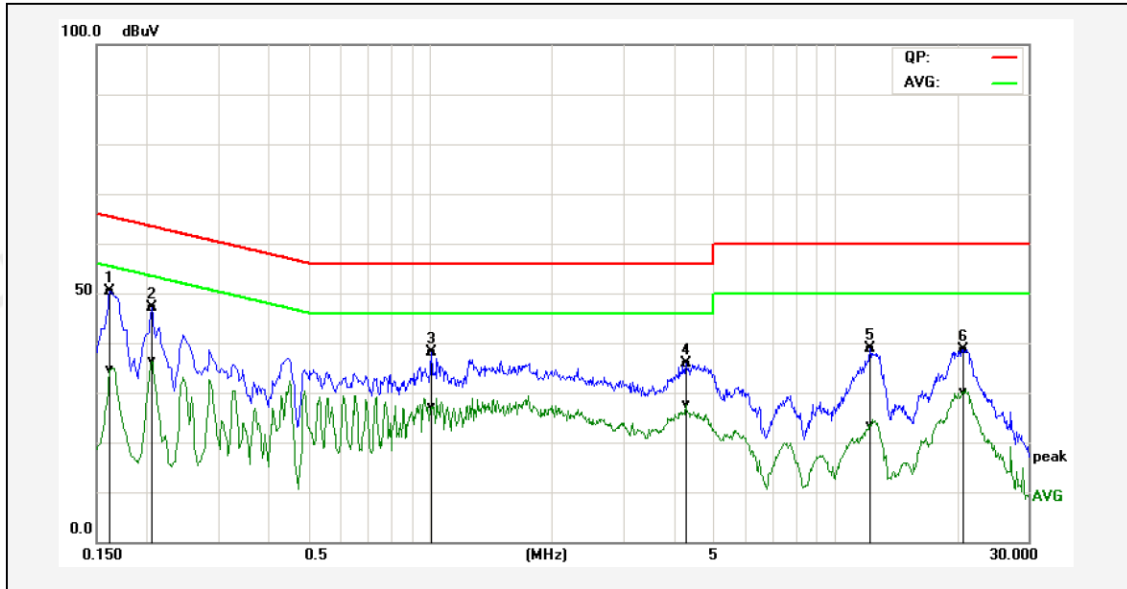
|               |               |                    |         |
|---------------|---------------|--------------------|---------|
| Temperature:  | 26°C          | Relative Humidity: | 40%     |
| Test Date:    | Jul. 16, 2018 | Pressure:          | 1010hPa |
| Test Voltage: | DC 5V         | Phase:             | Line    |
| Test Mode:    | Running       |                    |         |



| No. | Frequency<br>(MHz) | QuasiPeak<br>reading<br>(dBuV) | Average<br>reading<br>(dBuV) | Correction<br>factor<br>(dB) | QuasiPeak<br>result<br>(dBuV) | Average<br>result<br>(dBuV) | QuasiPeak<br>limit<br>(dBuV) | Average<br>limit<br>(dBuV) | QuasiPeak<br>margin<br>(dB) | Average<br>margin<br>(dB) | Remark |
|-----|--------------------|--------------------------------|------------------------------|------------------------------|-------------------------------|-----------------------------|------------------------------|----------------------------|-----------------------------|---------------------------|--------|
| 1P  | 0.1620             | 39.00                          | 23.15                        | 8.49                         | 47.49                         | 31.64                       | 65.36                        | 55.36                      | -17.87                      | -23.72                    | Pass   |
| 2P  | 0.4460             | 27.07                          | 19.81                        | 9.92                         | 36.99                         | 29.73                       | 56.95                        | 46.95                      | -19.96                      | -17.22                    | Pass   |
| 3*  | 1.0100             | 29.09                          | 18.21                        | 10.03                        | 39.12                         | 28.24                       | 56.00                        | 46.00                      | -16.88                      | -17.76                    | Pass   |
| 4P  | 4.2780             | 26.83                          | 18.71                        | 10.01                        | 36.84                         | 28.72                       | 56.00                        | 46.00                      | -19.16                      | -17.28                    | Pass   |
| 5P  | 12.9260            | 28.68                          | 12.80                        | 10.20                        | 38.88                         | 23.00                       | 60.00                        | 50.00                      | -21.12                      | -27.00                    | Pass   |
| 6P  | 20.7060            | 28.18                          | 19.67                        | 10.45                        | 38.63                         | 30.12                       | 60.00                        | 50.00                      | -21.37                      | -19.88                    | Pass   |

Remark: Factor = Insertion Loss + Cable Loss, Result = Reading + Factor, Margin = Result – Limit.

|               |               |                    |         |
|---------------|---------------|--------------------|---------|
| Temperature:  | 26°C          | Relative Humidity: | 40%     |
| Test Date:    | Jul. 16, 2018 | Pressure:          | 1010hPa |
| Test Voltage: | DC 5V         | Phase:             | Neutral |
| Test Mode:    | Running       |                    |         |



| No. | Frequency<br>(MHz) | QuasiPeak<br>reading<br>(dBuV) | Average<br>reading<br>(dBuV) | Correction<br>factor<br>(dB) | QuasiPeak<br>result<br>(dBuV) | Average<br>result<br>(dBuV) | QuasiPeak<br>limit<br>(dBuV) | Average<br>limit<br>(dBuV) | QuasiPeak<br>margin<br>(dB) | Average<br>margin<br>(dB) | Remark |
|-----|--------------------|--------------------------------|------------------------------|------------------------------|-------------------------------|-----------------------------|------------------------------|----------------------------|-----------------------------|---------------------------|--------|
| 1*  | 0.1620             | 42.00                          | 26.15                        | 8.49                         | 50.49                         | 34.64                       | 65.36                        | 55.36                      | -14.87                      | -20.72                    | Pass   |
| 2P  | 0.2060             | 37.12                          | 26.32                        | 9.94                         | 47.06                         | 36.26                       | 63.37                        | 53.37                      | -16.31                      | -17.11                    | Pass   |
| 3P  | 1.0100             | 28.09                          | 17.21                        | 10.03                        | 38.12                         | 27.24                       | 56.00                        | 46.00                      | -17.88                      | -18.76                    | Pass   |
| 4P  | 4.2780             | 25.83                          | 17.71                        | 10.01                        | 35.84                         | 27.72                       | 56.00                        | 46.00                      | -20.16                      | -18.28                    | Pass   |
| 5P  | 12.2220            | 28.59                          | 13.17                        | 10.17                        | 38.76                         | 23.34                       | 60.00                        | 50.00                      | -21.24                      | -26.66                    | Pass   |
| 6P  | 20.7060            | 28.06                          | 19.55                        | 10.57                        | 38.63                         | 30.12                       | 60.00                        | 50.00                      | -21.37                      | -19.88                    | Pass   |

Remark: Factor = Insertion Loss + Cable Loss, Result = Reading + Factor, Margin = Result – Limit.

## 4. RADIATED EMISSION TEST

### 4.1 Test Limit

For unintentional device, according to § 15.109(a), except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

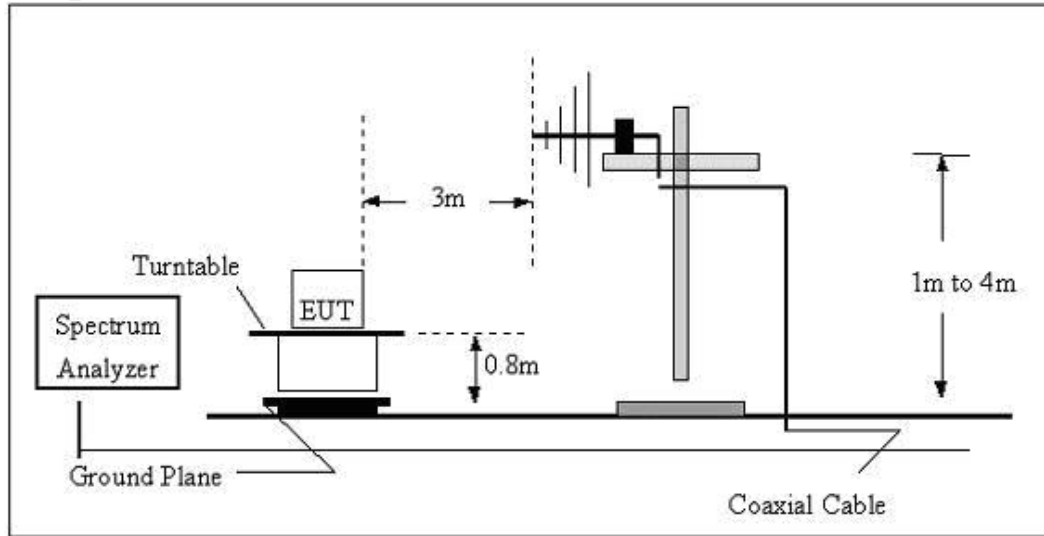
| Frequency<br>(MHz) | Class A (at 10m) | Class B (at 3m) |
|--------------------|------------------|-----------------|
|                    | dBuV/m           | dBuV/m          |
| 30-88              | 39.0             | 40.0            |
| 88-216             | 43.5             | 43.5            |
| 216-960            | 46.5             | 46.0            |
| Above 960          | 49.5             | 54.0            |

Notes:

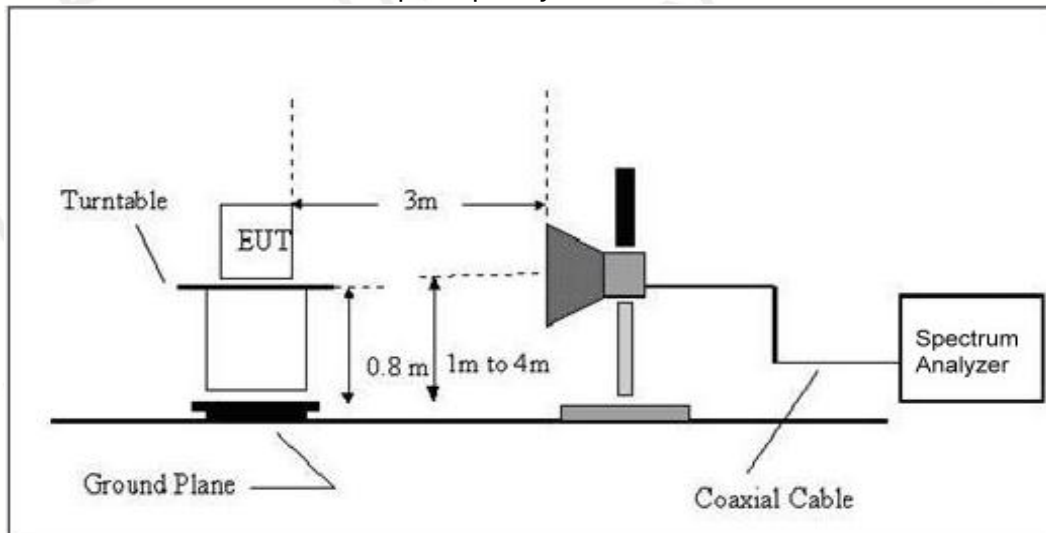
1. The limit for radiated test was performed according to as following: FCC PART 15B / ICES-003.
2. The tighter limit applies at the band edges.
3. Emission level (dBuV/m) = 20log Emission level (uV/m).

## 4.2 Test Setup

### 1. Radiated Emission Test Set-Up Frequency Below 1 GHz



### 2. Radiated Emission Test Set-Up Frequency Above 1GHz



#### 4.3 Test Procedure

1. The measuring distance of at 10 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
2. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
3. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
4. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured, above 1G Average detector mode will be instead.
5. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP(AV) Limits and then no additional QP Mode measurement performed.
6. For the actual test configuration, please refer to the related Item EUT Test Photos.

#### 4.4 EUT OPERATING CONDITIONS

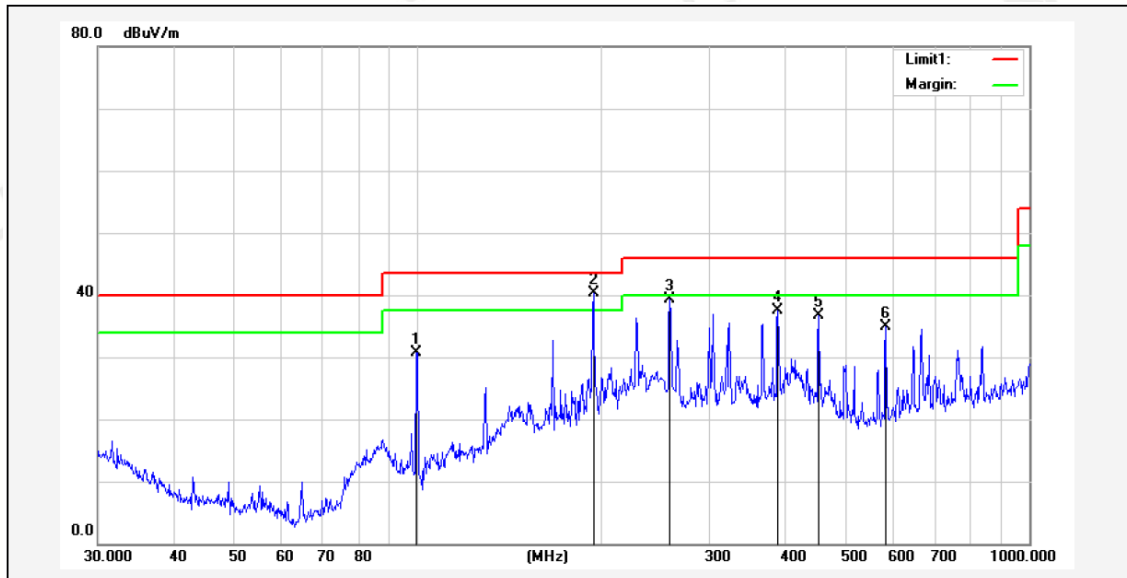
The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

#### 4.5 Test Result

Pass

### Below 1GHz Test Results:

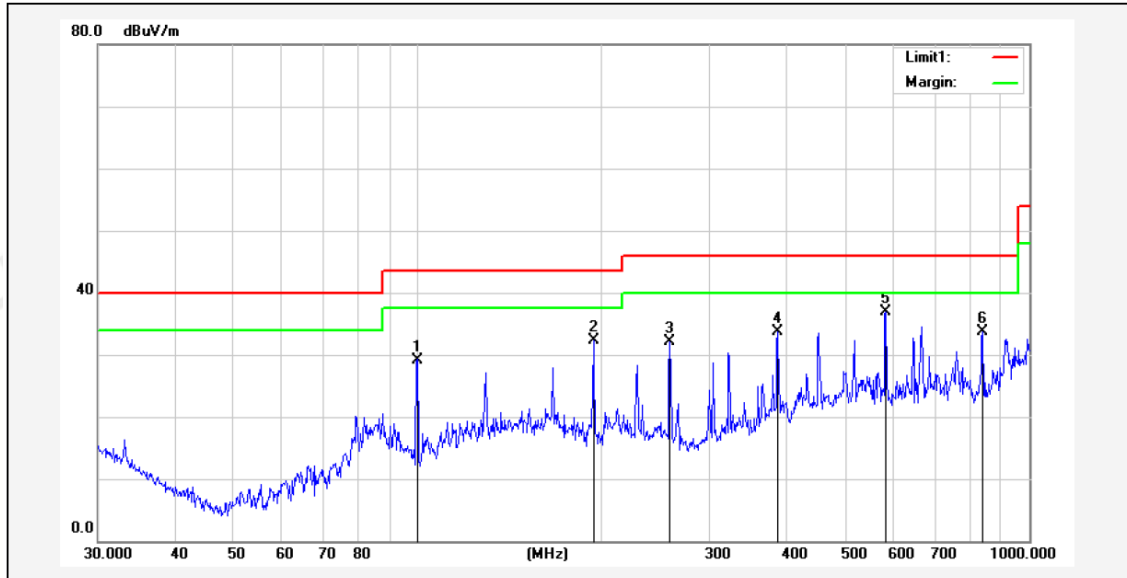
|               |               |                    |            |
|---------------|---------------|--------------------|------------|
| Temperature:  | 22°C          | Relative Humidity: | 38%        |
| Test Date:    | Jul. 18, 2018 | Pressure:          | 1010hPa    |
| Test Voltage: | DC 5V         | Polarization:      | Horizontal |
| Test Mode:    | Running       |                    |            |



| No. | Frequency (MHz) | Reading (dBuV) | Correction factor(dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Degree (deg.) | Height (cm) | Remark |
|-----|-----------------|----------------|-------------------------|-----------------|----------------|-------------|---------------|-------------|--------|
| 1   | 99.5281         | 47.41          | -16.69                  | 30.72           | 43.50          | -12.78      |               |             | peak   |
| 2*  | 193.7728        | 53.39          | -13.08                  | 40.31           | 43.50          | -3.19       |               |             | peak   |
| 3   | 258.3264        | 51.99          | -12.73                  | 39.26           | 46.00          | -6.74       |               |             | peak   |
| 4   | 387.9920        | 48.40          | -10.87                  | 37.53           | 46.00          | -8.47       |               |             | peak   |
| 5   | 452.7197        | 45.67          | -8.95                   | 36.72           | 46.00          | -9.28       |               |             | peak   |
| 6   | 582.7425        | 41.98          | -7.06                   | 34.92           | 46.00          | -11.08      |               |             | peak   |

Remark: Absolute Level = Reading Level + Factor, Margin = Absolute Level – Limit  
Factor = Ant. Factor + Cable Loss – Pre-amplifier

|               |               |                    |          |
|---------------|---------------|--------------------|----------|
| Temperature:  | 22°C          | Relative Humidity: | 38%      |
| Test Date:    | Jul. 18, 2018 | Pressure:          | 1010hPa  |
| Test Voltage: | DC 5V         | Polarization:      | Vertical |
| Test Mode:    | Running       |                    |          |



| No. | Frequency (MHz) | Reading (dBuV) | Correction factor(dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Degree (deg.) | Height (cm) | Remark |
|-----|-----------------|----------------|-------------------------|-----------------|----------------|-------------|---------------|-------------|--------|
| 1   | 99.8777         | 45.81          | -16.61                  | 29.20           | 43.50          | -14.30      |               |             | peak   |
| 2   | 193.7728        | 45.46          | -13.08                  | 32.38           | 43.50          | -11.12      |               |             | peak   |
| 3   | 258.3264        | 44.90          | -12.73                  | 32.17           | 46.00          | -13.83      |               |             | peak   |
| 4   | 387.9920        | 44.67          | -10.87                  | 33.80           | 46.00          | -12.20      |               |             | peak   |
| 5*  | 582.7425        | 43.95          | -7.06                   | 36.89           | 46.00          | -9.11       |               |             | peak   |
| 6   | 839.1818        | 36.91          | -3.25                   | 33.66           | 46.00          | -12.34      |               |             | peak   |

Remark: Absolute Level = Reading Level + Factor, Margin = Absolute Level – Limit  
Factor = Ant. Factor + Cable Loss – Pre-amplifier

### Above 1 GHz Test Results:

|               |               |                    |         |
|---------------|---------------|--------------------|---------|
| Temperature:  | 22°C          | Relative Humidity: | 38%     |
| Test Date:    | Jul. 18, 2018 | Pressure:          | 1010hPa |
| Test Voltage: | DC 5V         | Test Mode:         | Running |

### Horizontal:

| Frequency                                                                                     | Reading Result | Factor | Emission Level | Limits   | Margin | Detector |
|-----------------------------------------------------------------------------------------------|----------------|--------|----------------|----------|--------|----------|
| (MHz)                                                                                         | (dBμV)         | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   | Type     |
| 1255.62                                                                                       | 57.23          | -1.58  | 55.65          | 74       | -18.35 | PK       |
| 1254.58                                                                                       | 45.63          | -1.58  | 44.05          | 54       | -9.95  | AV       |
| 2056.44                                                                                       | 61.37          | -4.62  | 56.75          | 74       | -17.25 | PK       |
| 2055.86                                                                                       | 50.19          | -4.62  | 45.57          | 54       | -8.43  | AV       |
| Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier. Margin = Absolute Level – Limit |                |        |                |          |        |          |

### Vertical:

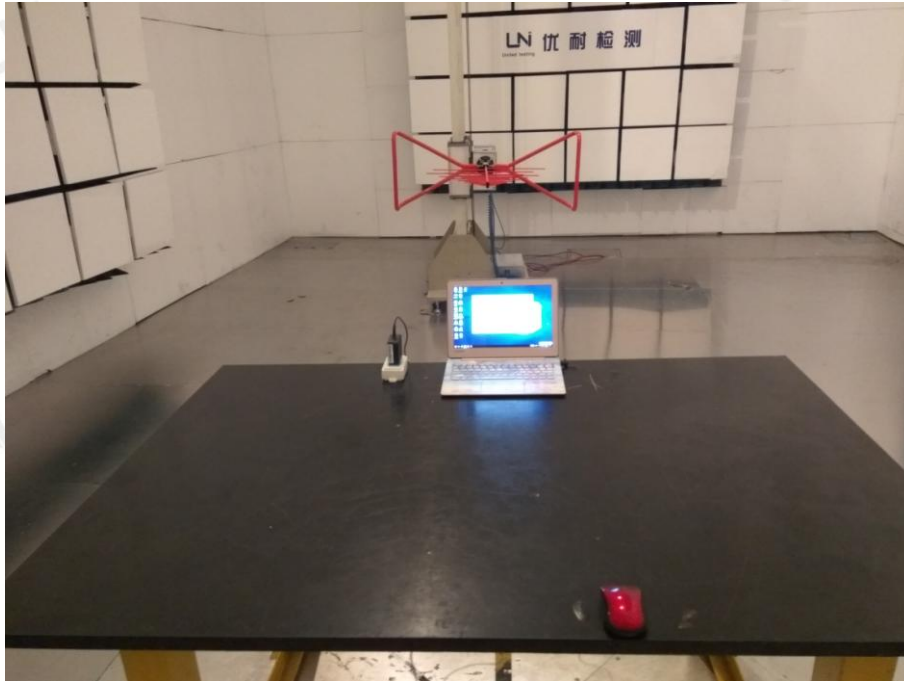
| Frequency                                                                                     | Reading Result | Factor | Emission Level | Limits   | Margin | Detector |
|-----------------------------------------------------------------------------------------------|----------------|--------|----------------|----------|--------|----------|
| (MHz)                                                                                         | (dBμV)         | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   | Type     |
| 1255.62                                                                                       | 56.96          | -1.58  | 55.38          | 74       | -18.62 | PK       |
| 1254.58                                                                                       | 46.11          | -1.58  | 44.53          | 54       | -9.47  | AV       |
| 2056.44                                                                                       | 60.88          | -4.62  | 56.26          | 74       | -17.74 | PK       |
| 2055.86                                                                                       | 50.06          | -4.62  | 45.44          | 54       | -8.56  | AV       |
| Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier. Margin = Absolute Level – Limit |                |        |                |          |        |          |

#### Remark :

- (1) Measuring frequencies from 1 GHz to the 25 GHz .
- (2) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (3) \* denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (4) Data of measurement within this frequency range shown "----" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for peak measurement with peak detector at frequency above 1GHz. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average measurement with peak detection at frequency above 1GHz.
- (6) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.
- (7) All modes of operation were investigated and the worst-case emissions are reported.

## 5 PHOTOGRAPH OF TEST

### 5.1 Radiated Emission



## 5.2 Conducted Emission



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