

## FCC PART 15 TEST REPORT

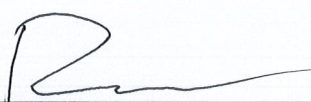
The device described below is tested by Dongguan Nore Testing Center Co., Ltd. to determine the maximum emission levels emanating from the device, the severe levels which the device can endure and E.U.T.'s performance criterion. The test results, data evaluation, test procedures, and equipment of configurations shown in this report were made in accordance with the procedures in ANSI C63.10(2013).

Applicant : Shenzhen Taikeyi Technology Co., Ltd.  
Address : Yuan Zheng science and Technology Park, No. 2 building, Longgang District Bantian Street five and Avenue North Shenzhen City, China  
Manufacturer & Factory : Shenyang Taikeyi Technology Co., Ltd  
Address : No.1-1, Caixia Street, Hunnan new District, Shenyang, China  
E.U.T. : TE720 Pro REMOTE CONTROL  
Brand Name :   
Model No. : RC212  
FCC ID : 2APLB-RC212  
Measurement Standard : FCC PART 15.231  
Date of Receiver : April 10, 2018  
Date of Test : April 10, 2018 to May 25, 2018  
Date of Report : May 25, 2018

This Test Report is Issued Under the Authority of :

Prepared by

Approved & Authorized Signer

  
Rose Hu / Engineer

  
Iori Fan / Authorized Signatory

This test report is for the customer shown above and their specific product only. This report applies to above tested sample only and shall not be reproduced in part without written approval of Dongguan Nore Testing Center Co., Ltd.

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## Revision History of This Test Report

| Report Number  | Description   | Issued Date |
|----------------|---------------|-------------|
| NTC1804064FV00 | Initial Issue | 2018-05-25  |
|                |               |             |
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## 1. GENERAL INFORMATION

### 1.1 Product Description for Equipment under Test

|                                 |                                                                                                                          |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| E.U.T.                          | : TE720 Pro REMOTE CONTROL                                                                                               |
| Main Model Name                 | : RC212                                                                                                                  |
| Additional Model name           | : N/A                                                                                                                    |
| Rating                          | : 2* DC 3.7V li-ion Battery, DC 5V come from USB port                                                                    |
| Adapter                         | : N/A                                                                                                                    |
| Test Voltage                    | : 2* DC 3.7V li-ion Battery,<br>AC 120V 60Hz come from Adapter<br>(Only the worst case was recorded in the test report.) |
| Cable                           | : USB Line: 1.53m shielded                                                                                               |
| I/O Port                        | : Signal port, USB port                                                                                                  |
| Hardware version                | : V1.0                                                                                                                   |
| Software version                | : V1.0                                                                                                                   |
| Description of model difference | : N/A                                                                                                                    |
| Note                            | : N/A                                                                                                                    |
| Remark                          | : N/A                                                                                                                    |

---

**Technical parameters**

Frequency: : 433.4MHz

Modulation : FSK

Antenna Type : Integral

Antenna Gain : 0dBi

Number of Channels : 1

## 1.2 Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for FCC ID: **2APLB-RC212** filing to comply with Section 15.231 of the FCC Part 15 (2016), Subpart C Rule.

## 1.3 Test Methodology

The radiated emission measurement was performed according to the procedures in ANSI C63.10 (2013). Radiated emission measurement was performed in semi-anechoic chamber. For radiated emission measurement, preliminary scans were performed in the semi-anechoic chamber only to determine the worst case modes. All radiated tests were performed at an antenna to EUT distance of 3 meters.

## 1.4 Equipment Modifications

Not available for this EUT intended for grant.

## 1.5 Support Device

Adapter : Model: ST220  
Input: AC 110-240V 50/60Hz 0.5A  
Output: DC 5.0V 1A

## 1.6 Test Facility and Location

### Site Description

EMC Lab : Listed by CNAS, August 14, 2015  
The certificate is valid until August 13, 2018  
The Laboratory has been assessed and proved to  
be in compliance with CNAS/CL01  
The Certificate Registration Number is L5795.

Listed by A2LA, November 01, 2017  
The certificate is valid until December 31, 2019  
The Laboratory has been assessed and proved to  
be in compliance with ISO17025  
The Certificate Registration Number is 4429.01

Listed by FCC, November 06, 2017  
The Designation Number is CN1214  
Test Firm Registration Number: 907417

Listed by Industry Canada, June 08, 2017  
The Certificate Registration Number. Is 46405-9743  
Name of Firm : Dongguan Nore Testing Center Co., Ltd.  
(Dongguan NTC Co., Ltd.)

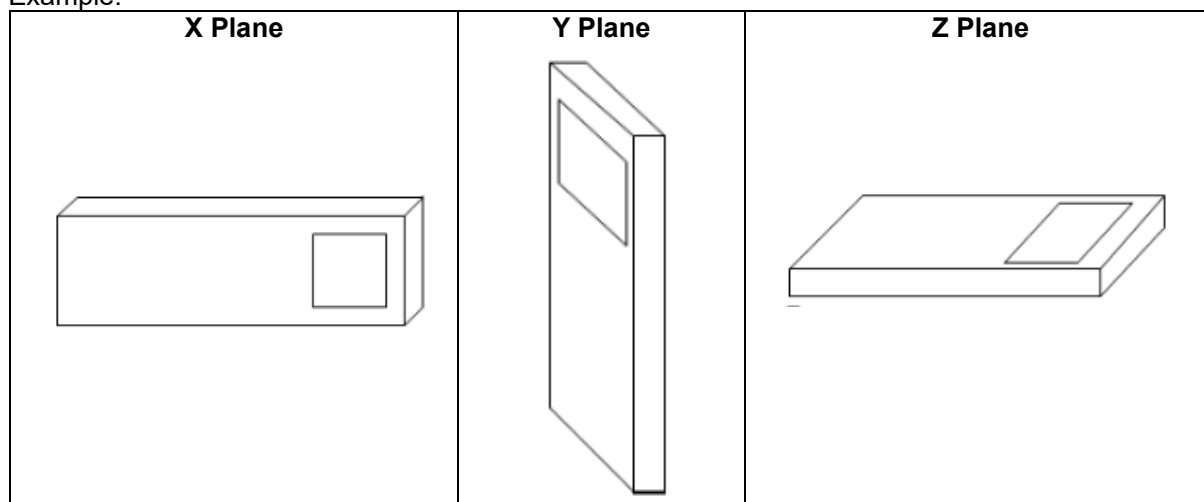
Site Location : Building D, Gaosheng Science & Technology Park,  
Zhouxi Longxi Road, Nancheng District, Dongguan  
City, Guangdong Province, China

## 1.7 Summary of Test Results

| FCC Rules      | Description Of Test         | Result    |
|----------------|-----------------------------|-----------|
| §15.207        | AC Power Conducted Emission | Compliant |
| §15.231&15.209 | Radiated Emission           | Compliant |
| §15.231(c)     | Occupied bandwidth          | Compliant |
| §15.231(a)     | Transmission time           | Compliant |
| §15.203        | Antenna Requirement         | Compliant |

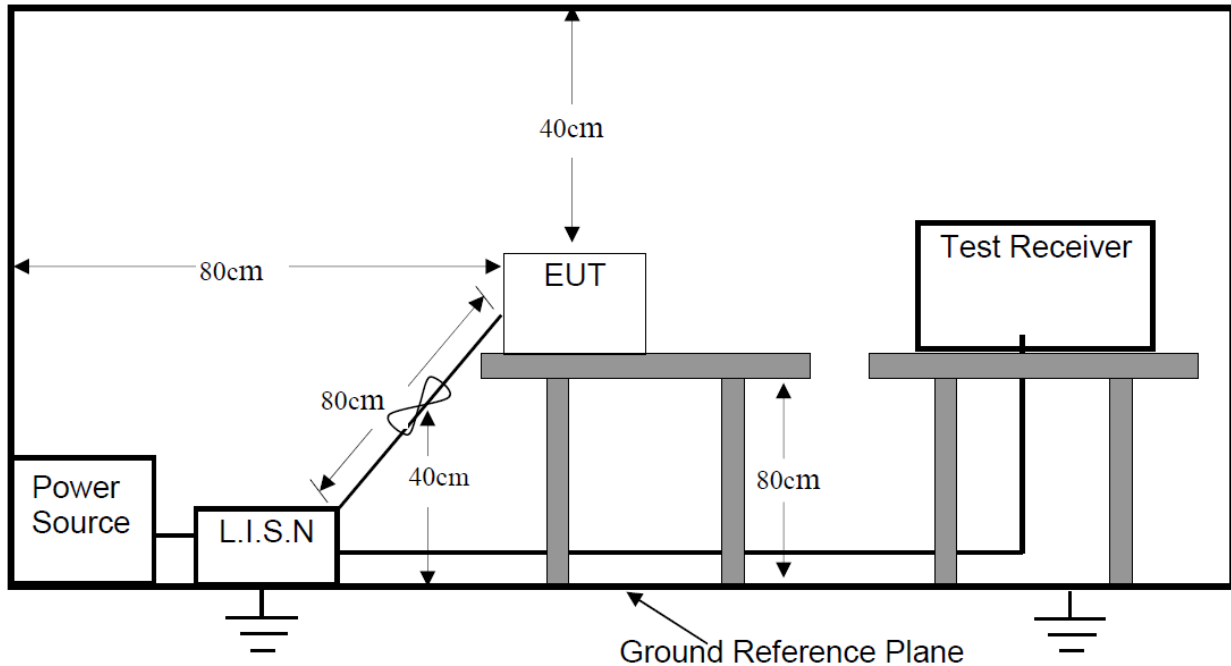
- Note: 1. The EUT has been tested as an independent unit. And Continual transmitting in maximum power (The new battery be used during test)
2. The EUT powered by battery and operating multiple positions, so the EUT shall be performed three orthogonal planes. The worst plane is X.

Example:



## 2. Conducted Emissions Test

### 2.1 Test SET-UP (Block Diagram of Configuration)



### 2.2 Test Condition

**Test Requirement: FCC Part 15.207**

**Frequency Range: 150KHz ~ 30MHz**

**Detector: RBW 9KHz, VBW 30KHz**

**Operation Mode: TX**

### 2.3 Measurement Results

**Please refer to following plots.**



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### Conducted Emission Measurement

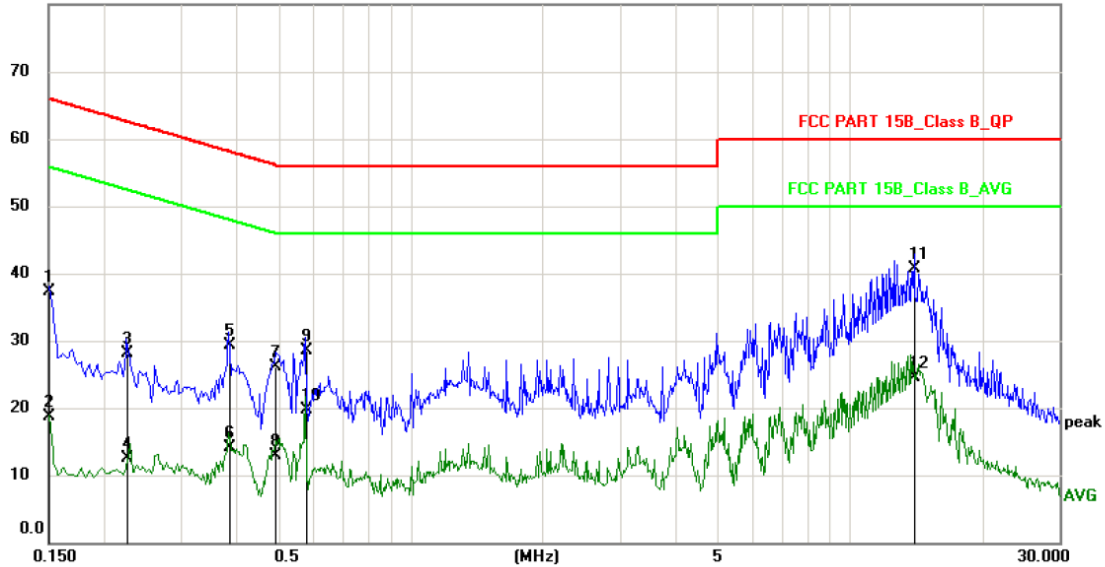
File : PD1210

Data : #13

Date: 2018-5-25

Time: 17:48:02

80.0 dBuV



Site

Phase: **L1**

Temperature: 24

Limit: FCC PART 15B\_Class B\_QP

Power: AC120V/60Hz

Humidity: 50 %

EUT: TE720 Pro REMOTE CONTROL

M/N: RC212

Mode: TX

Note:

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV | Limit<br>dBuV | Over<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|--------------------------|---------------|------------|----------|---------|
| 1   |     | 0.1500       | 26.50                    | 10.80                   | 37.30                    | 66.00         | -28.70     | QP       |         |
| 2   |     | 0.1500       | 7.90                     | 10.80                   | 18.70                    | 56.00         | -37.30     | AVG      |         |
| 3   |     | 0.2260       | 17.40                    | 10.80                   | 28.20                    | 62.60         | -34.40     | QP       |         |
| 4   |     | 0.2260       | 1.80                     | 10.80                   | 12.60                    | 52.60         | -40.00     | AVG      |         |
| 5   |     | 0.3860       | 18.60                    | 10.80                   | 29.40                    | 58.15         | -28.75     | QP       |         |
| 6   |     | 0.3860       | 3.40                     | 10.80                   | 14.20                    | 48.15         | -33.95     | AVG      |         |
| 7   |     | 0.4940       | 15.40                    | 10.80                   | 26.20                    | 56.10         | -29.90     | QP       |         |
| 8   |     | 0.4940       | 2.20                     | 10.80                   | 13.00                    | 46.10         | -33.10     | AVG      |         |
| 9   |     | 0.5780       | 17.70                    | 10.80                   | 28.50                    | 56.00         | -27.50     | QP       |         |
| 10  |     | 0.5780       | 8.90                     | 10.80                   | 19.70                    | 46.00         | -26.30     | AVG      |         |
| 11  | *   | 14.0380      | 30.00                    | 10.80                   | 40.80                    | 60.00         | -19.20     | QP       |         |
| 12  |     | 14.0380      | 13.80                    | 10.80                   | 24.60                    | 50.00         | -25.40     | AVG      |         |



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### Conducted Emission Measurement

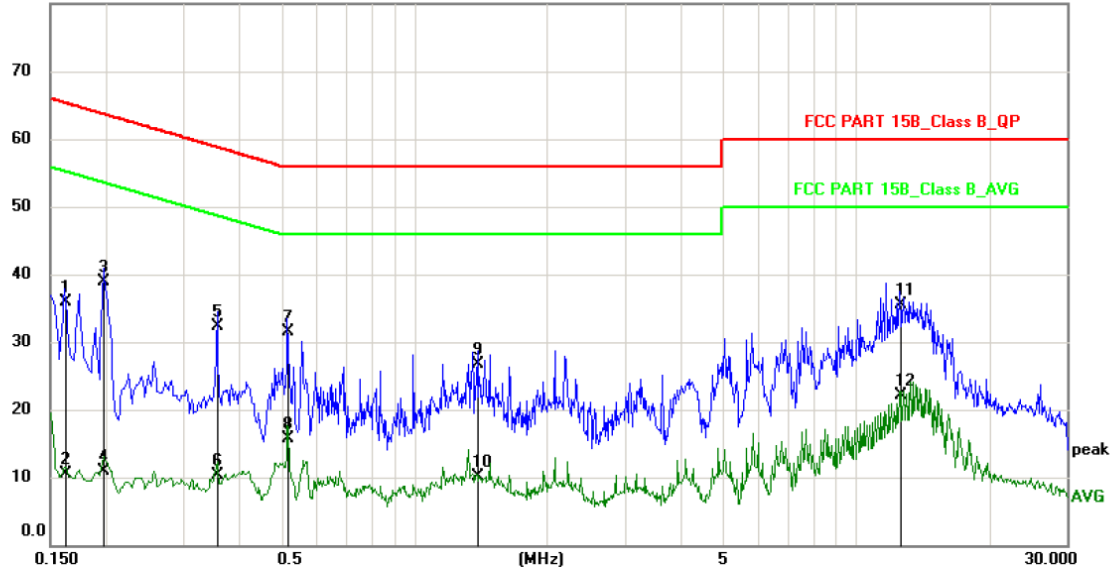
File : PD1210

Data : #14

Date: 2018-5-25

Time: 17:55:52

80.0 dBuV



Site

Phase: **N**

Temperature: 24

Limit: FCC PART 15B\_Class B\_QP

Power: AC120V/60Hz

Humidity: 50 %

EUT: TE720 Pro REMOTE CONTROL

M/N: RC212

Mode: TX

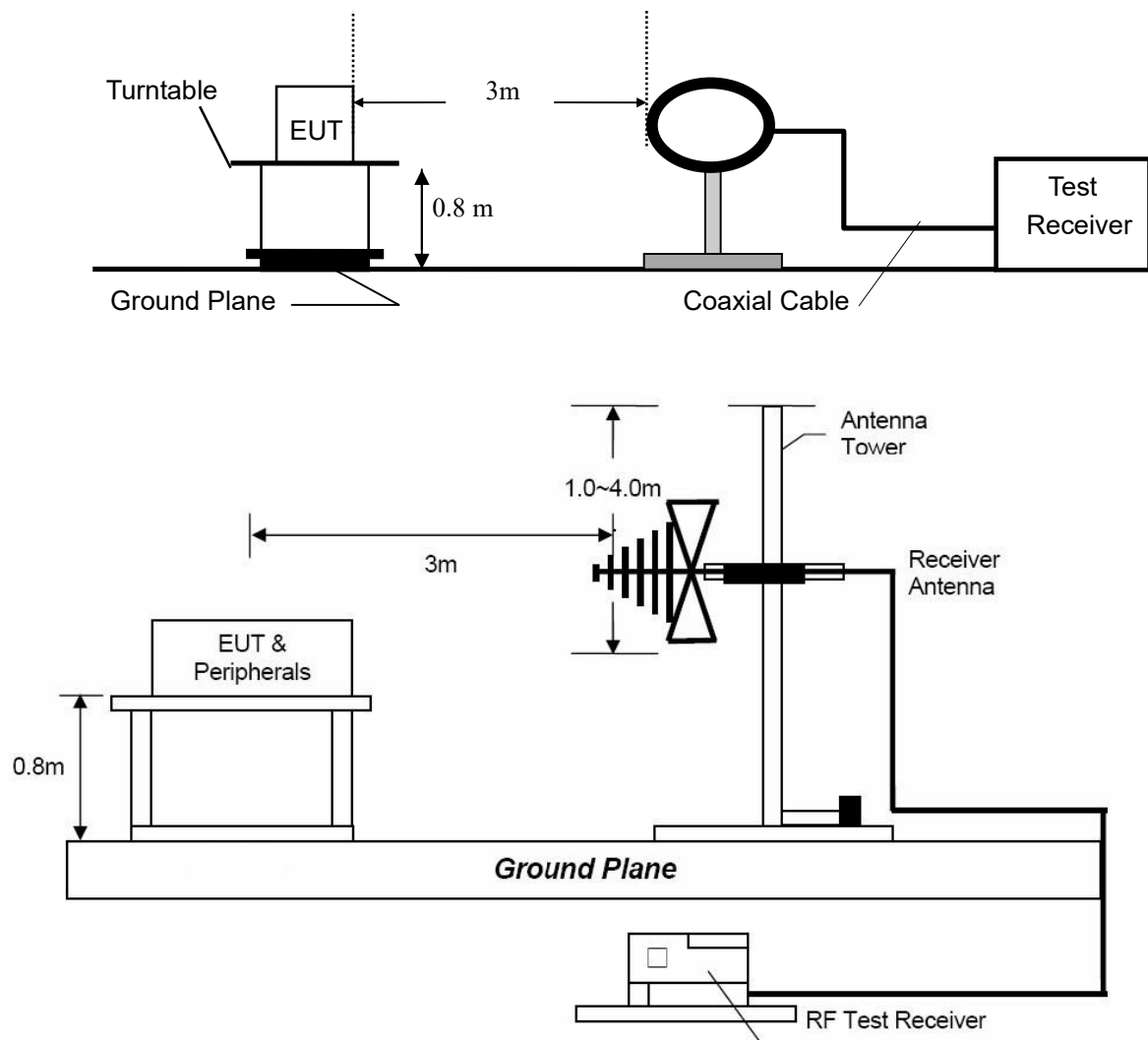
Note:

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV | Limit<br>dBuV | Over<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|--------------------------|---------------|------------|----------|---------|
| 1   |     | 0.1620       | 25.20                    | 10.80                   | 36.00                    | 65.36         | -29.36     | QP       |         |
| 2   |     | 0.1620       | -0.30                    | 10.80                   | 10.50                    | 55.36         | -44.86     | AVG      |         |
| 3   |     | 0.1980       | 28.20                    | 10.80                   | 39.00                    | 63.69         | -24.69     | QP       |         |
| 4   |     | 0.1980       | 0.20                     | 10.80                   | 11.00                    | 53.69         | -42.69     | AVG      |         |
| 5   |     | 0.3580       | 21.60                    | 10.80                   | 32.40                    | 58.77         | -26.37     | QP       |         |
| 6   |     | 0.3580       | -0.50                    | 10.80                   | 10.30                    | 48.77         | -38.47     | AVG      |         |
| 7   | *   | 0.5180       | 20.70                    | 10.80                   | 31.50                    | 56.00         | -24.50     | QP       |         |
| 8   |     | 0.5180       | 4.90                     | 10.80                   | 15.70                    | 46.00         | -30.30     | AVG      |         |
| 9   |     | 1.3900       | 16.00                    | 10.80                   | 26.80                    | 56.00         | -29.20     | QP       |         |
| 10  |     | 1.3900       | -0.60                    | 10.80                   | 10.20                    | 46.00         | -35.80     | AVG      |         |
| 11  |     | 12.5260      | 24.70                    | 10.80                   | 35.50                    | 60.00         | -24.50     | QP       |         |
| 12  |     | 12.5260      | 11.40                    | 10.80                   | 22.20                    | 50.00         | -27.80     | AVG      |         |

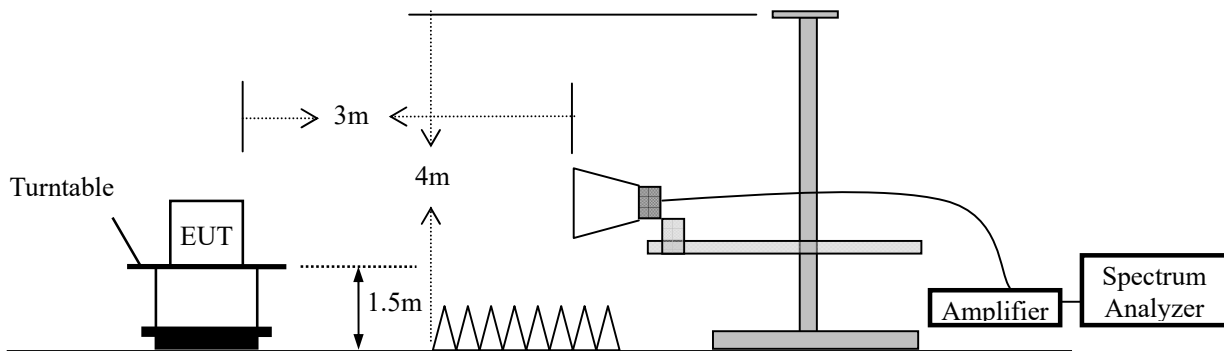
### 3. Radiated Emission Test

#### 3.1 Test SET-UP (Block Diagram of Configuration)

(1) Radiated Emission Test Set-Up, Frequency Below 30MHz



(2) Radiated Emission Test Set-Up, Frequency above 1GHz



### 3.2 Measurement Procedure

- Blow 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi- anechoic chamber room.
- For the radiated emission test above 1GHz:  
The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter full anechoic chamber room. The table was rotated 360 degrees to determine the position of the highest radiation. Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The height of antenna 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.
- 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 and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. The test-receiver system was set to peak detect function and specified bandwidth with maximum hold mode.
- A Quasi-peak measurement was then made for that frequency point for below 1GHz test. PK and AV for above 1GHz emission test.

During the radiated emission test, the spectrum analyzer was set with the following configurations:

| Frequency Band (MHz) | Level   | Resolution Bandwidth | Video Bandwidth |
|----------------------|---------|----------------------|-----------------|
| 30 to 1000           | QP      | 120 kHz              | 300 kHz         |
| Above 1000           | Peak    | 1 MHz                | 3 MHz           |
|                      | Average | Peak+ AV Factor      |                 |

### 3.3 Limit

Table A [0.009MHz~1GHz]

| Frequency range MHz | Distance Meters | Field Strengths Limit (15.209) |
|---------------------|-----------------|--------------------------------|
|                     |                 | $\mu\text{V/m}$                |
| 0.009 ~ 0.490       | 300             | $2400/F(\text{kHz})$           |
| 0.490 ~ 1.705       | 30              | $24000/F(\text{kHz})$          |
| 1.705 ~ 30          | 30              | 30                             |
| 30 ~ 88             | 3               | 100                            |
| 88 ~ 216            | 3               | 150                            |
| 216 ~ 960           | 3               | 200                            |
| Above 960           | 3               | 500                            |

- Remark:
- (1) Emission level (dB) $\mu\text{V}$  = 20 log Emission level  $\mu\text{V/m}$
  - (2) The smaller limit shall apply at the cross point between two frequency bands.
  - (3) As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.
  - (4) The frequency range scanned is from the lowest radio frequency signal generated in the device which is greater than 9 kHz to the tenth harmonic of the highest fundamental frequency or 40 GHz, whichever is lower.

Table B

| Fundamental Frequency (MHz) | Field Strength of Fundamental |                          | Field Strength of Spurious Emissions |                          |
|-----------------------------|-------------------------------|--------------------------|--------------------------------------|--------------------------|
|                             | $\mu\text{V/m}$               | $\text{dB}\mu\text{V/m}$ | $\mu\text{V/m}$                      | $\text{dB}\mu\text{V/m}$ |
| 40.66-40.70                 | 2250                          | 67.04                    | 225                                  | 47.04                    |
| 70-130                      | 1250                          | 61.94                    | 125                                  | 41.94                    |
| 130-174                     | 1250-3370**                   | 61.9-70.55               | 125-375**                            | 41.94-51.48              |
| 174-260                     | 3750                          | 71.48                    | 375                                  | 51.48                    |
| 260-470                     | 3750-12500**                  | 71.48-81.94              | 375-1250**                           | 51.48-61.94              |
| Above 470                   | 12500                         | 81.94                    | 1250                                 | 61.94                    |

\*\* ) Linear interpolations

### 3.4 Measurement Results

- Note: (1) Emission Level= Reading Level+Probe Factor +Cable Loss  
 (2) Factor= Antenna Gain + Cable Loss – Amplifier Gain  
 (3) Measurement uncertainty:  $\pm 3.7\text{dB}$   
 (4) Emission (the row indicated by bold) within the restricted band meets the requirement of FCC part 15 Section 15.205.  
 (5) Horn antenna used for the emission over 1000MHz.



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### Radiated Emission Measurement

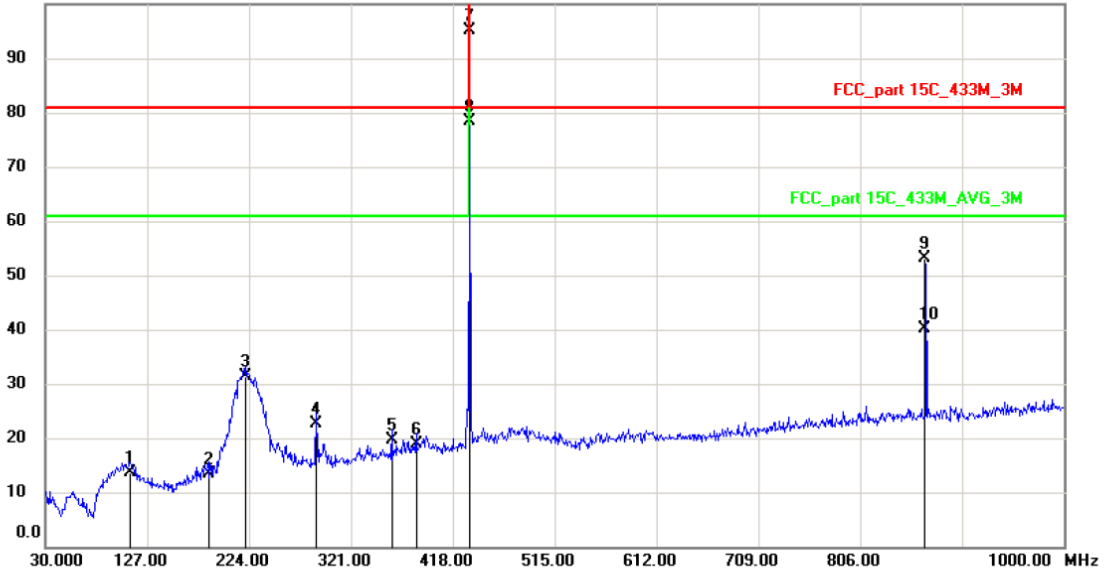
File :RC212

Data :#13

Date: 2018-5-16

Time: 9:32:29

100.0 dBuV/m



Site

Polarization: **Horizontal**

Temperature: 26

Limit: FCC\_part 15C\_433M\_3M

Power: DC7.4V

Humidity: 47 %

EUT: TE720 Pro REMOTE CONTROL

Distance: 3m

M/N: RC212

Mode: TX

Note:

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Over<br>dB | Antenna<br>Height<br>cm | Table<br>Degree<br>degree | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|------------|-------------------------|---------------------------|---------|
| 1   |     | 110.5100     | 25.86                    | -12.26                  | 13.60                      | 80.80           | -67.20     | QP                      |                           |         |
| 2   |     | 185.2000     | 27.33                    | -13.83                  | 13.50                      | 80.80           | -67.30     | QP                      |                           |         |
| 3   |     | 221.0900     | 44.21                    | -12.91                  | 31.30                      | 80.80           | -49.50     | QP                      |                           |         |
| 4   |     | 288.0200     | 33.49                    | -10.79                  | 22.70                      | 80.80           | -58.10     | QP                      |                           |         |
| 5   |     | 359.8000     | 28.73                    | -9.13                   | 19.60                      | 80.80           | -61.20     | QP                      |                           |         |
| 6   |     | 383.0799     | 28.09                    | -9.19                   | 18.90                      | 80.80           | -61.90     | QP                      |                           |         |
| 7   |     | 433.4000     | 103.45                   | -8.35                   | 95.10                      | 100.80          | -5.70      | peak                    |                           |         |
| 8   | *   | 433.4000     | 86.85                    | -8.35                   | 78.50                      | 80.80           | -2.30      | AVG                     |                           |         |
| 9   |     | 866.8000     | 54.32                    | -1.12                   | 53.20                      | 80.80           | -27.60     | peak                    |                           |         |
| 10  |     | 866.8000     | 41.32                    | -1.12                   | 40.20                      | 60.80           | -20.60     | AVG                     |                           |         |

Note: Below 30MHz, the emissions are lower than 20dB below the allowable limit.  
Other emissions are lower than 20dB below the allowable limit. And according to FCC rule, they had not recorded in the report.



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### Radiated Emission Measurement

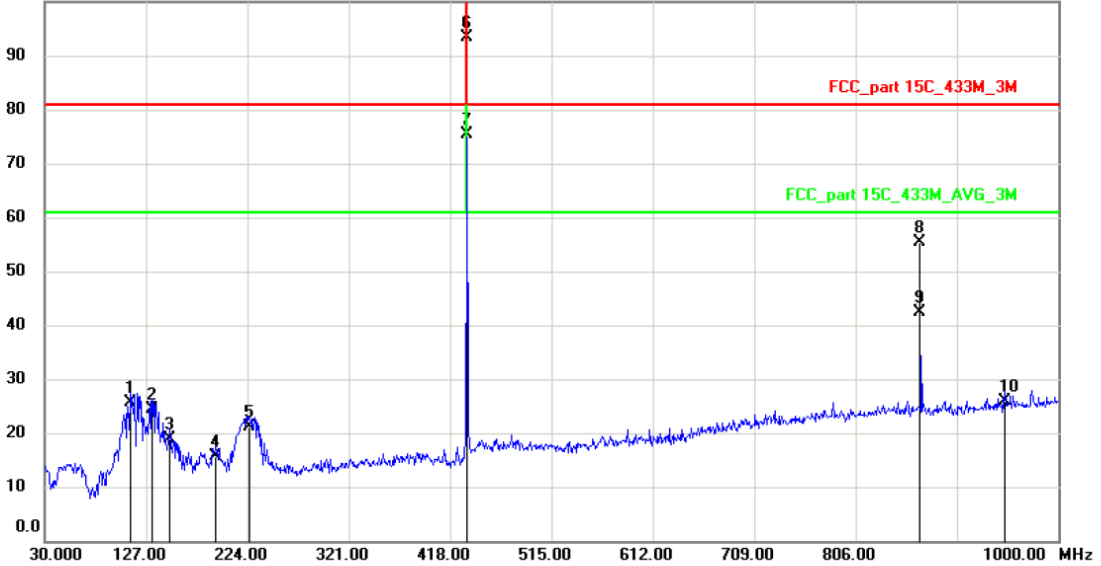
File :RC212

Data :#14

Date: 2018-5-16

Time: 9:40:38

100.0 dBuV/m



Site  
Limit: FCC\_part 15C\_433M\_3M  
EUT: TE720 Pro REMOTE CONTROL  
M/N: RC212  
Mode: TX  
Note:

Polarization: **Vertical**  
Power: DC7.4V  
Distance: 3m  
Temperature: 26  
Humidity: 47 %

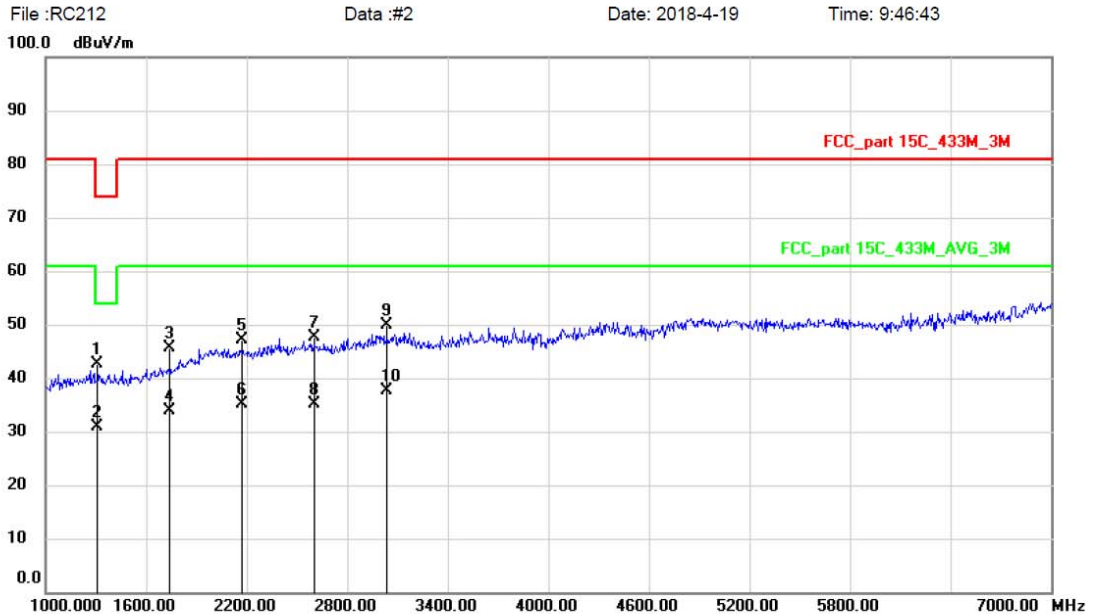
| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Over<br>dB | Detector | Antenna<br>Height<br>cm | Table<br>Degree | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|------------|----------|-------------------------|-----------------|---------|
| 1   |     | 112.4500     | 41.78                    | -16.08                  | 25.70                      | 80.80           | -55.10     | QP       |                         |                 |         |
| 2   |     | 132.8200     | 42.58                    | -18.28                  | 24.30                      | 80.80           | -56.50     | QP       |                         |                 |         |
| 3   |     | 149.3100     | 37.32                    | -18.52                  | 18.80                      | 80.80           | -62.00     | QP       |                         |                 |         |
| 4   |     | 193.9299     | 32.05                    | -16.45                  | 15.60                      | 80.80           | -65.20     | QP       |                         |                 |         |
| 5   |     | 225.9400     | 36.77                    | -15.67                  | 21.10                      | 80.80           | -59.70     | QP       |                         |                 |         |
| 6   |     | 433.4000     | 104.65                   | -11.35                  | 93.30                      | 100.80          | -7.50      | peak     |                         |                 |         |
| 7   | *   | 433.4000     | 86.65                    | -11.35                  | 75.30                      | 80.80           | -5.50      | AVG      |                         |                 |         |
| 8   |     | 866.8000     | 56.52                    | -1.12                   | 55.40                      | 80.80           | -25.40     | peak     |                         |                 |         |
| 9   |     | 866.8000     | 43.52                    | -1.12                   | 42.40                      | 60.80           | -18.40     | AVG      |                         |                 |         |
| 10  |     | 948.5900     | 26.02                    | -0.22                   | 25.80                      | 80.80           | -55.00     | QP       |                         |                 |         |

Note: Below 30MHz, the emissions are lower than 20dB below the allowable limit.  
Other emissions are lower than 20dB below the allowable limit. And according to FCC rule, they had not recorded in the report.



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### Radiated Emission Measurement



|                               |                                 |                 |
|-------------------------------|---------------------------------|-----------------|
| Site                          | Polarization: <b>Horizontal</b> | Temperature: 26 |
| Limit: FCC_part 15C_433M_3M   | Power: DC7.4V                   | Humidity: 47 %  |
| EUT: TE720 Pro REMOTE CONTROL | Distance: 3m                    |                 |
| M/N: RC212                    |                                 |                 |
| Mode: TX                      |                                 |                 |
| Note:                         |                                 |                 |

| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   |     | 1300.200 | 49.70         | -7.09          | 42.61       | 74.00  | -31.39 | peak           |              |         |
| 2   |     | 1300.200 | 37.89         | -7.09          | 30.80       | 54.00  | -23.20 | AVG            |              |         |
| 3   |     | 1733.600 | 49.89         | -4.35          | 45.54       | 80.80  | -35.26 | peak           |              |         |
| 4   |     | 1733.600 | 38.25         | -4.35          | 33.90       | 60.80  | -26.90 | AVG            |              |         |
| 5   |     | 2167.000 | 47.52         | -0.48          | 47.04       | 80.80  | -33.76 | peak           |              |         |
| 6   |     | 2167.000 | 35.58         | -0.48          | 35.10       | 60.80  | -25.70 | AVG            |              |         |
| 7   |     | 2600.400 | 46.95         | 0.74           | 47.69       | 80.80  | -33.11 | peak           |              |         |
| 8   |     | 2600.400 | 34.36         | 0.74           | 35.10       | 60.80  | -25.70 | AVG            |              |         |
| 9   |     | 3033.800 | 48.07         | 1.84           | 49.91       | 80.80  | -30.89 | peak           |              |         |
| 10  | *   | 3033.800 | 35.76         | 1.84           | 37.60       | 60.80  | -23.20 | AVG            |              |         |

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### Radiated Emission Measurement

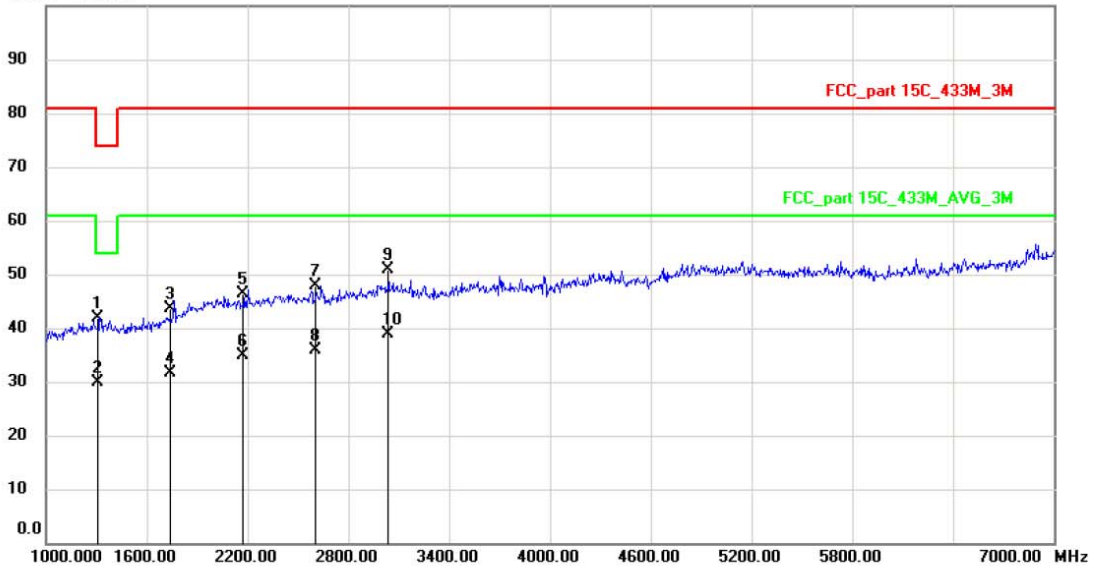
File :RC212

Data :#1

Date: 2018-4-19

Time: 9:37:29

100.0 dBuV/m



Site

Polarization: **Vertical**

Temperature: 26

Limit: FCC\_part 15C\_433M\_3M

Power: DC7.4V

Humidity: 47 %

EUT: TE720 Pro REMOTE CONTROL

Distance: 3m

M/N: RC212

Mode: TX

Note:

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Over<br>dB | Detector | Antenna<br>Height<br>cm | Table<br>Degree<br>degree | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|------------|----------|-------------------------|---------------------------|---------|
| 1   |     | 1300.200     | 48.93                    | -7.09                   | 41.84                      | 74.00           | -32.16     | peak     |                         |                           |         |
| 2   |     | 1300.200     | 36.89                    | -7.09                   | 29.80                      | 54.00           | -24.20     | AVG      |                         |                           |         |
| 3   |     | 1733.600     | 47.92                    | -4.35                   | 43.57                      | 80.80           | -37.23     | peak     |                         |                           |         |
| 4   |     | 1733.600     | 36.04                    | -4.35                   | 31.69                      | 60.80           | -29.11     | AVG      |                         |                           |         |
| 5   |     | 2167.000     | 46.81                    | -0.48                   | 46.33                      | 80.80           | -34.47     | peak     |                         |                           |         |
| 6   |     | 2167.000     | 35.38                    | -0.48                   | 34.90                      | 60.80           | -25.90     | AVG      |                         |                           |         |
| 7   |     | 2600.400     | 47.08                    | 0.74                    | 47.82                      | 80.80           | -32.98     | peak     |                         |                           |         |
| 8   |     | 2600.400     | 35.06                    | 0.74                    | 35.80                      | 60.80           | -25.00     | AVG      |                         |                           |         |
| 9   |     | 3033.800     | 49.00                    | 1.84                    | 50.84                      | 80.80           | -29.96     | peak     |                         |                           |         |
| 10  | *   | 3033.800     | 36.96                    | 1.84                    | 38.80                      | 60.80           | -22.00     | AVG      |                         |                           |         |

Other emissions are lower than 20dB below the allowable limit. And according to FCC rule, they had not recorded in the report.

## 4. Occupied Bandwidth

### 4.1 Measurement Procedure

Same as section 2.2.

### 4.2 Test SET-UP (Block Diagram of Configuration)

Same as section 2.1.

### 4.3 Limit

Please refer section 15.231

According to 15.231(C), the bandwidth of the emission shall be no wider than 0.25% of the center frequency for devices operating above 70MHz and below 900MHz.

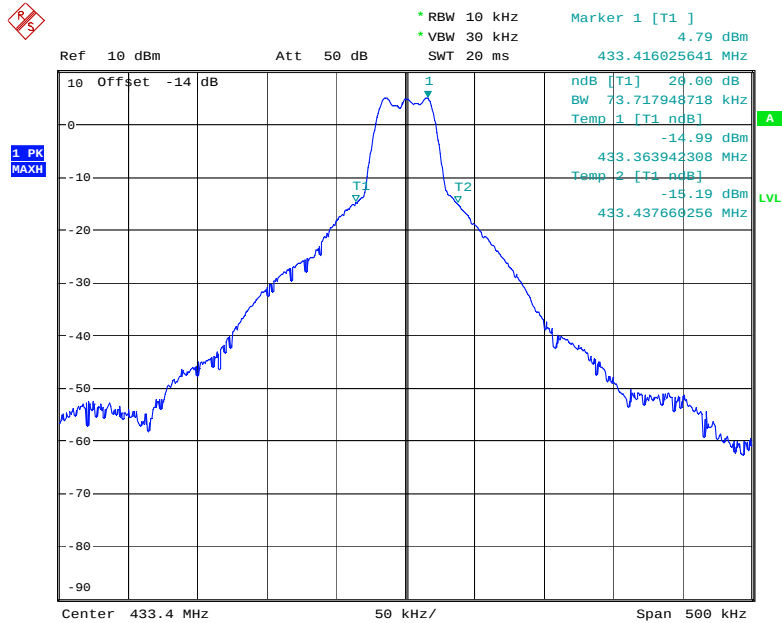
$$\text{Limit} = 433.92 * 0.25\% = 1.08 \text{ MHz}$$

### 4.4 Measurement Results

| 20dB Bandwidth | Limit   |
|----------------|---------|
| 73.7KHz        | 1.08MHz |

Please refer to the following plot.

20dB Bandwidth



Date: 14.MAY.2018 18:33:40

## 5. Transmission Time

### 5.1 Measurement Procedure

Same as section 2.2.

### 5.2 Test SET-UP (Block Diagram of Configuration)

Same as section 2.1.

### 5.3 Limit

According to 15.231(a)(2), A transmitter activated automatically shall cease transmission within 5 seconds after activation.

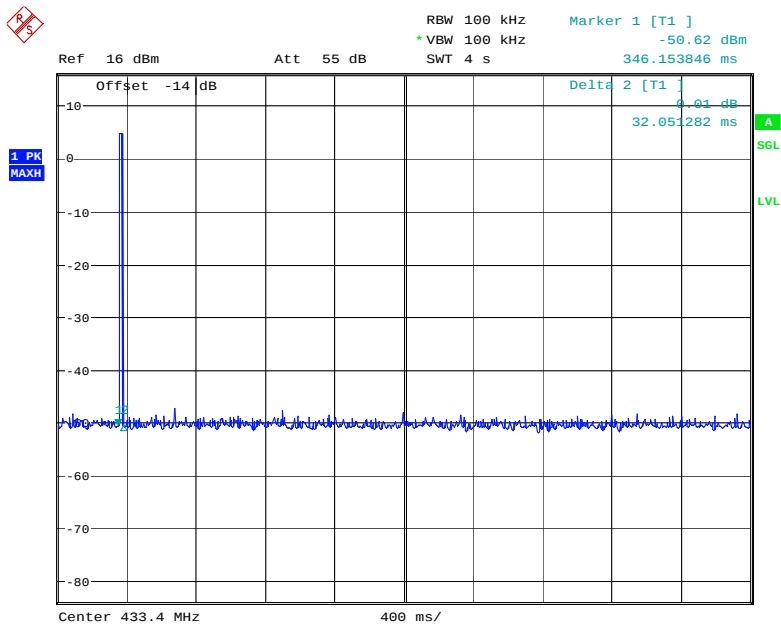
### 5.4 Measurement Results

| Transmission Time | Limit |
|-------------------|-------|
| 0.032s            | 5s    |

Please refer to the following plot.



Transmission Time



Date: 14.MAY.2018 18:42:31

## **6. Antenna Application**

### **6.1 Antenna requirement**

According to of FCC part 15C section 15.203 and 15.240:

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

### **6.2 Measurement Results**

The antenna is integrated on the main Integral and no consideration of replacement, and the best case gain of the antenna is 0dBi. So, the antenna is consider meet the requirement.

## 7. Test Equipment List

| Description                 | Manufacturer    | Model Number | Serial Number | Characteristics | Calibration Date | Calibration Due Date |
|-----------------------------|-----------------|--------------|---------------|-----------------|------------------|----------------------|
| Test Receiver               | Rohde & Schwarz | ESCI7        | 100837        | 9KHz~7GHz       | Mar. 13, 2018    | Mar. 12, 2019        |
| Antenna                     | Schwarzbeck     | VULB9162     | 9162-010      | 30MHz~7GHz      | Mar. 14, 2018    | Mar. 13, 2019        |
| Cable                       | Huber+Suhner    | CBL2-NN-1M   | 22390001      | 9KHz~7GHz       | Mar. 13, 2018    | Mar. 12, 2019        |
| Cable                       | Huber+Suhner    | CIL02        | N/A           | 9KHz~7GHz       | Mar. 13, 2018    | Mar. 12, 2019        |
| RF Cable                    | Huber+Suhner    | SF-104       | MY16559/4     | 9KHz~25GHz      | Apr. 25, 2018    | Apr. 25, 2019        |
| Power Amplifier             | HP              | HP 8447D     | 1145A00203    | 100KHz~1.3GHz   | Mar. 13, 2018    | Mar. 12, 2019        |
| Horn Antenna                | Schwarzbeck     | BBHA9170     | 9170-242      | 15GHz~40GHz     | Mar. 13, 2018    | Mar. 12, 2019        |
| Horn Antenna                | Com-Power       | AH-118       | 071078        | 1GHz~18GHz      | Mar. 14, 2018    | Mar. 13, 2019        |
| RF Cable                    | Huber+Suhner    | SF-104       | N/A           | 9KHz~40GHz      | Apr. 25, 2018    | Apr. 25, 2019        |
| Loop antenna                | Daze            | ZA30900A     | 0708          | 9KHz~30MHz      | Apr. 25, 2018    | Apr. 25, 2019        |
| Spectrum Analyzer           | Rohde & Schwarz | FSU26        | 200409/026    | 20Hz~26.5GHz    | Apr. 25, 2018    | Apr. 25, 2019        |
| Spectrum Analyzer           | Rohde & Schwarz | FSV40        | 101003        | 10Hz~40GHz      | Apr. 06, 2018    | Apr. 05, 2019        |
| Pre-Amplifier               | EMCI            | EMC 184045   | 980102        | 18GHz~40GHz     | Nov. 03, 2017    | Nov. 02, 2018        |
| Pre-Amplifier               | Agilent         | 8449B        | 3008A02964    | 1GHz~26.5GHz    | Apr. 25, 2018    | Apr. 25, 2019        |
| L.I.S.N.                    | Rohde & Schwarz | ENV 216      | 101317        | 9KHz~30MHz      | Mar. 13, 2018    | Mar. 12, 2019        |
| Temporary antenna connector | TESCOM          | SS402        | N/A           | 9KHz-25GHz      | N/A              | N/A                  |
| Power Meter                 | Anritsu         | ML2495A      | 1139001       | 100k-65GHz      | Nov. 03, 2017    | Nov. 02, 2018        |
| Power Sensor                | Anritsu         | MA2411B      | 100345        | 300M-40GHz      | Nov. 03, 2017    | Nov. 02, 2018        |

Note: The temporary antenna connector is soldered on the PCB board in order to perform conducted tests and this temporary antenna connector is listed in the equipment list.

---End---