

TEST REPORT

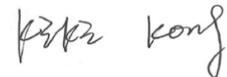
For RF

Report No. : **CHTEW23050037** Report Verification: 
Project No...... : **SHT2303133001EW**
FCC ID..... : **IN2TX55**
Applicant's name..... : **Hunter Fan Company**
Address..... : 7130 Goodlett Farms Pkwy, Suite 400, Memphis Tennessee
38016 United States
Product Name : **Remote Control for Ceiling Fan**
Trade Mark : Hunter
Model No. : K0474-A1
Listed Model(s) : K0474-A2,K0474-A3,K0474-A5,K0474-A6,K6017-A1
Standard : **FCC CFR Title 47 Part 15 Subpart C § 15.231**
Date of receipt of test sample..... : Apr.06, 2023
Date of testing..... : Apr.06, 2023-May.12, 2023
Date of issue..... : May.15, 2023
Result..... : **PASS**

Compiled by
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Supervised by
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Approved by
(Position+Printed name+Signature): RF Manager Hans Hu



Testing Laboratory Name : **Shenzhen Huatongwei International Inspection Co., Ltd.**

Address..... : 1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road,
Tianliao, Gongming, Shenzhen, China

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1. TEST STANDARDS AND REPORT VERSION

1.1. Test Standards

The tests were performed according to following standards:

- [FCC CFR Title 47 Part 15 Subpart C § 15.231](#): Periodic operation in the band 40.66-40.70 MHz and above 70 MHz
- [ANSI C63.10:2013](#): American National Standard for Testing Unlicensed Wireless Devices

1.2. Report version

| Revision No. | Date of issue | Description |
|--------------|---------------|-------------|
| N/A | 2023-05-15 | Original |
| | | |
| | | |
| | | |
| | | |

2. TEST DESCRIPTION

| Report clause | Test Items | Standard Requirement | Result | Test Engineer |
|---------------|--|-------------------------|--------------------|---------------|
| 5.1 | Antenna Requirement | 15.203 | PASS | Xiaoqin Li |
| 5.2 | AC Conducted Emission | 15.207 | N/A | N/A |
| 5.3 | 20dB Bandwidth | 15.231(c) | PASS | Xiaoqin Li |
| 5.4 | 99% Occupied Bandwidth | - | PASS ^{*1} | Xiaoqin Li |
| 5.5 | Transmission time | 15.231(a)(1) | PASS | Xiaoqin Li |
| 5.6 | Duty cycle corrected factor | - | PASS ^{*1} | Xiaoqin Li |
| 5.7 | Field strength of the Fundamental signal | 15.231(b) | PASS | Yifan Wang |
| 5.8 | Radiated Spurious Emission | 15.231(b)/15.205/15.209 | PASS | Yifan Wang |

Note:

- The measurement uncertainty is not included in the test result.
- *1: No requirement on standard, only report these test data.

3. SUMMARY

3.1. Client Information

| | |
|---------------|---|
| Applicant: | Hunter Fan Company |
| Address: | 7130 Goodlett Farms Pkwy, Suite 400, Memphis Tennessee 38016 United States |
| Manufacturer: | Hunter Fan Company |
| Address: | 7130 Goodlett Farms Pkwy, Suite 400, Memphis Tennessee 38016 United States |
| Factory: | Shenzhen H&T Intelligent Control CO., Ltd. |
| Address: | H&T Industrial Park, No.18 BaoShan Road, Tian Liao Community, Guangming new district, Shenzhen, Guangdong, China 518132 |

3.2. Product Description

| Main unit information: | |
|------------------------|--|
| Product Name: | Remote Control for Ceiling Fan |
| Trade Mark: | Hunter |
| Model No.: | K0474-A1 |
| Listed Model(s): | K0474-A2, K0474-A3, K0474-A5, K0474-A6, K6017-A1 |
| Power supply: | DC 3V from Battery |
| Hardware version: | V01 |
| Software version: | V01 |

3.3. Radio Specification Description

| | |
|----------------------|-----------|
| Operation frequency: | 433.92MHz |
| Modulation: | OOK |
| Channel number: | 1 |
| Antenna type: | PCB |

3.4. Testing Laboratory Information

| Laboratory Name | Shenzhen Huatongwei International Inspection Co., Ltd. | |
|----------------------|---|----------------------|
| Laboratory Location | 1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Tianliao, Gongming, Shenzhen, China | |
| Contact information: | Phone: 86-755-26715499 E-mail: cs@szhtw.com.cn http://www.szhtw.com.cn | |
| Qualifications | Type | Accreditation Number |
| | FCC | 762235 |

4. TEST CONFIGURATION

4.1. Test frequency list

According to section ANSI C63.10 section 5.6.1,

Measurements of unlicensed wireless devices shall be performed and, if required, reported for each band in which the EUT can be operated with the device operating at the number of frequencies in each band specified in Table 4

Table 4—Number of frequencies to be tested

| Frequency range in which device operates | Number of frequencies | Location in frequency range of operation |
|--|-----------------------|--|
| 1 MHz or less | 1 | Middle |
| 1 MHz to 10 MHz | 2 | 1 near top and 1 near bottom |
| More than 10 MHz | 3 | 1 near top, 1 near middle, and 1 near bottom |

So test frequency as follow:

| Channel | Frequency (MHz) |
|-----------------------|-----------------|
| CH_M | 433.92 |

4.2. Descriptions of Test mode

| |
|---|
| For RF test items |
| The engineering test program was provided and enabled to make EUT continuous transmit. |
| For Radiated spurious emissions test item: |
| The engineering test program was provided and enabled to make EUT continuous transmit. The EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data Recorded in the report. |

4.3. Test sample information

| Test item | HTW sample no. |
|-------------------------|--|
| RF Conducted test items | Please refer to the description in the appendix report |
| RF Radiated test items | YPHT2303133001 |

Note:

RF Conducted test items: 20dB Bandwidth ,99% Occupied Bandwidth, Transmission time, Duty cycle corrected factor

RF Radiated test items: Field strength of the Fundamental signal

4.4. Support unit used in test configuration and system

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

The following peripheral devices and interface cables were connected during the measurement:

| Whether support unit is used? | | | |
|-------------------------------|-----------|------------|-----------|
| ✓ No | | | |
| Item | Equipment | Trade Name | Model No. |
| 1 | | | |
| 2 | | | |

4.5. Testing environmental condition

| Type | Requirement | Actual |
|--------------------|--------------|----------|
| Temperature: | 15~35°C | 25°C |
| Relative Humidity: | 25~75% | 50% |
| Air Pressure: | 860~1060mbar | 1000mbar |

4.6. Statement of the measurement uncertainty

| No. | Test Items | Measurement Uncertainty |
|-----|--|--|
| 1 | AC Conducted Emission | 3.21dB |
| 2 | 20dB Bandwidth | 0.002% |
| 3 | 99% Occupied Bandwidth | 0.002% |
| 4 | Transmission time | 2.3ns |
| 5 | Duty cycle corrected factor | - |
| 6 | Field strength of the Fundamental signal | 4.54dB for 30MHz-1GHz 5.10dB for above 1GHz |
| 7 | Radiated Spurious Emission | 4.54dB for 30MHz-1GHz 5.10dB for above 1GHz |

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

4.7. Equipment Used during the Test

| ● Conducted test item | | | | | | | |
|-----------------------|------------------------------|--------------|---------------|-----------|------------|---------------------------|---------------------------|
| Used | Test Equipment | Manufacturer | Equipment No. | Model No. | Serial No. | Last Cal. Date (YY-MM-DD) | Next Cal. Date (YY-MM-DD) |
| ● | Signal and spectrum Analyzer | R&S | HTWE0242 | FSV40 | 100048 | 2022/08/25 | 2023/08/24 |
| ● | Signal & Spectrum Analyzer | R&S | HTWE0262 | FSW26 | 103440 | 2022/08/25 | 2023/08/24 |
| ● | Vector signal generator | R&S | HTWE0244 | SMBV100A | 260790 | 2022/05/25 | 2023/05/24 |
| ● | Test software | Tonscend | N/A | JS1120 | N/A | N/A | N/A |

| ● Radiated emission- Below 1GHz | | | | | | | |
|---------------------------------|-------------------------|--------------------|---------------|-------------|------------|---------------------------|---------------------------|
| Used | Test Equipment | Manufacturer | Equipment No. | Model No. | Serial No. | Last Cal. Date (YY-MM-DD) | Next Cal. Date (YY-MM-DD) |
| ● | Semi-Anechoic Chamber | Albatross projects | HTWE0127 | SAC-3m-02 | C11121 | 2018/09/30 | 2023/09/29 |
| ● | EMI Test Receiver | R&S | HTWE0099 | ESCI | 100900 | 2022/08/30 | 2023/08/29 |
| ● | Loop Antenna | R&S | HTWE0546 | HFH2-Z2E | 101073 | 2021/05/25 | 2024/05/24 |
| ● | Ultra-Broadband Antenna | SCHWARZBECK | HTWE0547 | VULB9163 | 945 | 2022/05/23 | 2025/05/22 |
| ● | Pre-Amplifier | SCHWARZBECK | HTWE0295 | BBV 9742 | N/A | 2022/11/04 | 2023/11/03 |
| ● | RF Connection Cable | HUBER+SUHNER | HTWE0062-01 | N/A | N/A | 2023/02/24 | 2024/02/23 |
| ● | RF Connection Cable | HUBER+SUHNER | HTWE0062-02 | SUCOFLEX104 | 501184/4 | 2023/02/24 | 2024/02/23 |
| ● | Test Software | R&S | N/A | ES-K1 | N/A | N/A | N/A |

| ● Radiated emission- Above 1GHz | | | | | | | |
|---------------------------------|-------------------------|--------------------|---------------|-------------------|------------|---------------------------|---------------------------|
| Used | Test Equipment | Manufacturer | Equipment No. | Model No. | Serial No. | Last Cal. Date (YY-MM-DD) | Next Cal. Date (YY-MM-DD) |
| ● | Semi-Anechoic Chamber | Albatross projects | HTWE0122 | SAC-3m-01 | C11121 | 2018/09/27 | 2023/09/26 |
| ● | Spectrum Analyzer | R&S | HTWE0098 | FSP40 | 100597 | 2022/08/25 | 2023/08/24 |
| ● | Horn Antenna | ETS | HTWE0548 | 3117 | 240120 | 2022/05/20 | 2025/05/19 |
| ● | Horn Antenna | STEATITE | HTWE0549 | QMS-00880 | 25661 | 2022/05/20 | 2025/05/19 |
| ● | Pre-amplifier | CD | HTWE0071 | PAP-0102 | 12004 | 2022/11/04 | 2023/11/03 |
| ● | Broadband Pre-amplifier | SCHWARZBECK | HTWE0201 | BBV 9718 | 9718-248 | 2023/02/27 | 2024/02/26 |
| ● | RF Connection Cable | HUBER+SUHNER | HTWE0120-01 | 6m 18GHz S Serisa | N/A | 2023/02/24 | 2024/02/23 |
| ● | RF Connection Cable | HUBER+SUHNER | HTWE0120-02 | 6m 3GHz RG Serisa | N/A | 2023/02/24 | 2024/02/23 |
| ● | RF Connection Cable | HUBER+SUHNER | HTWE0119-05 | 6m 3GHz RG Serisa | N/A | 2023/02/24 | 2024/02/23 |
| ● | RF Connection Cable | HUBER+SUHNER | HTWE0120-04 | 6m 3GHz RG Serisa | N/A | 2023/02/24 | 2024/02/23 |
| ● | Test Software | Audix | N/A | E3 | N/A | N/A | N/A |

5. TEST CONDITIONS AND RESULTS

5.1. Antenna Requirement

Requirement

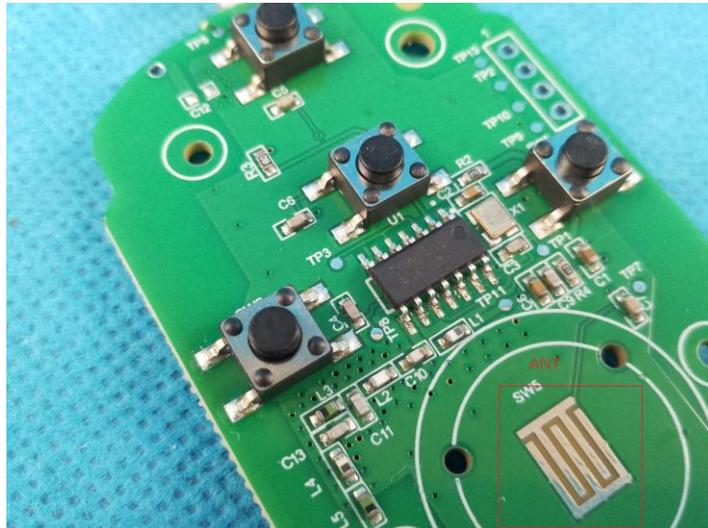
FCC CFR Title 47 Part 15 Subpart C Section 15.203:

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.

TEST RESULT

Passed **Not Applicable**

The antenna type is a PCB antenna, please refer to the below antenna photo.



5.2. AC Conducted Emission

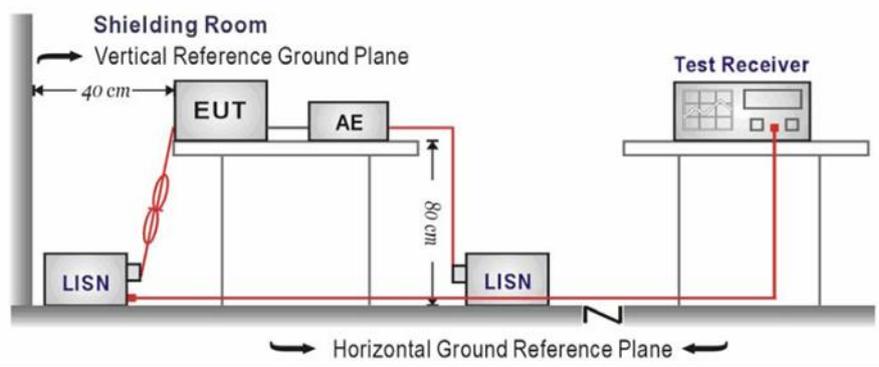
LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.207

| Frequency range (MHz) | Limit (dBuV) | |
|-----------------------|--------------|-----------|
| | Quasi-peak | Average |
| 0.15-0.5 | 66 to 56* | 56 to 46* |
| 0.5-5 | 56 | 46 |
| 5-30 | 60 | 50 |

* Decreases with the logarithm of the frequency.

TEST CONFIGURATION



TEST PROCEDURE

1. The EUT was setup according to ANSI C63.10 requirements.
2. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface.
3. The EUT and simulators are connected to the main power through a line impedances stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment.
4. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs)
5. Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.
6. The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.
7. Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.
8. During the above scans, the emissions were maximized by cable manipulation.

TEST MODE:

Please refer to the clause 4.2

TEST RESULT

Passed Not Applicable

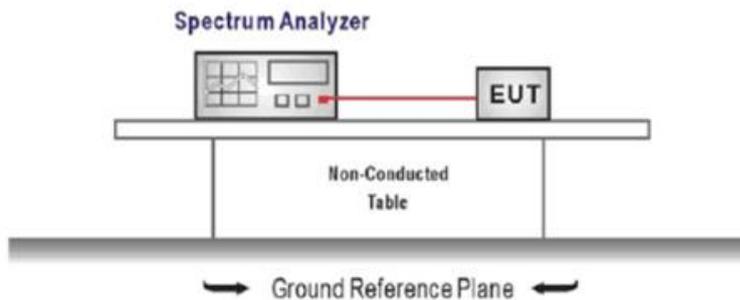
5.3. 20dB bandwidth

LIMIT

The bandwidth of the emission shall be no wider than 0.25% of the center frequency for devices operating above 70MHz and below 900 MHz.

For devices operating above 900 MHz, the emission shall be no wider than 0.5% of the center frequency.

TEST CONFIGURATION



TEST PROCEDURE

1. Connect the antenna port(s) to the spectrum analyzer input.
2. Configure the spectrum analyzer as shown below (enter all losses between the transmitter output and the spectrum analyzer).
Center Frequency = channel center frequency
Span= approximately 2 to 3 times the 20 dB bandwidth
RBW = 100 kHz, VBW $\geq 3 \times$ RBW
Sweep time= auto couple
Detector = Peak
Trace mode = max hold
3. Place the radio in continuous transmit mode, allow the trace to stabilize, view the transmitter waveform on the spectrum analyzer.
4. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 20 dB relative to the maximum level measured in the fundamental emission, and record the pertinent measurements.

TEST MODE:

Please refer to the clause 4.2

TEST RESULT

Passed Not Applicable

TEST DATA:

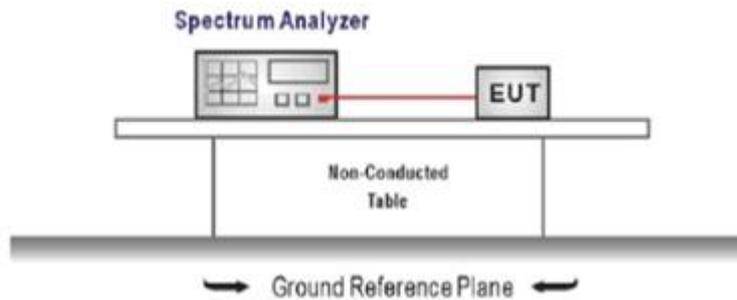
Refer to the appendix report on the section 8

5.4. 99% Occupied Bandwidth

LIMIT

N/A

TEST CONFIGURATION



TEST PROCEDURE

1. Connect the antenna port(s) to the spectrum analyzer input.
2. Configure the spectrum analyzer as shown below (enter all losses between the transmitter output and the spectrum analyzer).
Center Frequency = channel center frequency
Span $\geq 1.5 \times$ OBW
RBW = 1%~5%OBW
VBW $\geq 3 \times$ RBW
Sweep time = auto couple
Detector = Peak
Trace mode = max hold
3. Place the radio in continuous transmit mode, allow the trace to stabilize, view the transmitter waveform on the spectrum analyzer.

TEST MODE:

Please refer to the clause 4.2

TEST RESULT

Passed Not Applicable

TEST DATA

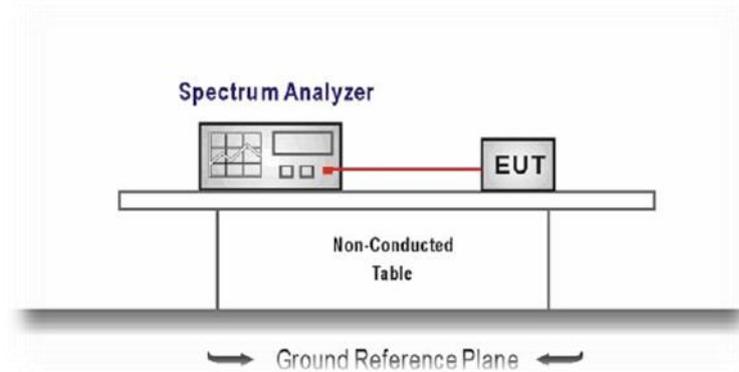
Refer to the appendix report on the section 8

5.5. Transmission Time

LIMIT

A manually operated transmitter shall employ a switch that will auto-matically deactivate the transmitter within not more than 5 seconds of being released.

TEST CONFIGURATION



TEST PROCEDURE

1. The transmitter output was connected to the spectrum analyzer through an attenuator, the path loss was compensated to the results for each measurement.
2. Set to the maximum power setting and enable the EUT transmit continuously
3. Use the following spectrum analyzer settings:
Frequency=Center carrier frequency
RBW=100kHz, VBW=300kHz, Span= zero,
Sweep time= 10second, Detector function = peak, Trace = single
4. Measure and record the results in the test report.

TEST MODE:

Please refer to the clause 4.2

TEST RESULTS

Passed Not Applicable

TEST DATA

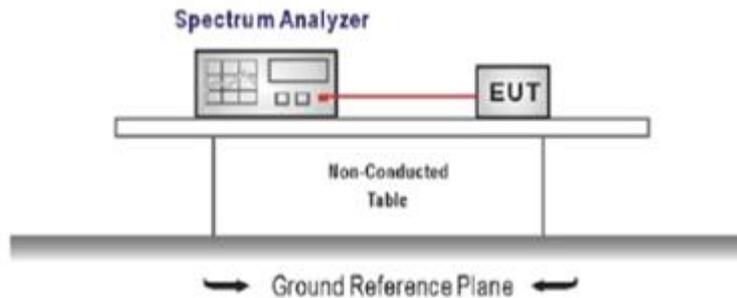
Refer to the appendix report on the section 8

5.6. Duty Cycle Corrected Factor

LIMIT

N/A

TEST CONFIGURATION



TEST PROCEDURE

1. The transmitter output was connected to the spectrum analyzer through an attenuator, the path loss was compensated to the results for each measurement.
2. Set to the maximum power setting and enable the EUT transmit continuously
3. Use the following spectrum analyzer settings:
Span=zero span, Frequency=centered channel, RBW= 1MHz, VBW \geq RBW
Sweep time=as necessary to capture the entire dwell time,
Detector function = peak, Trigger mode
4. Measure and record the duty cycle data

TEST MODE:

Please refer to the clause 4.2

TEST DATA

Refer to the appendix report on the section 8

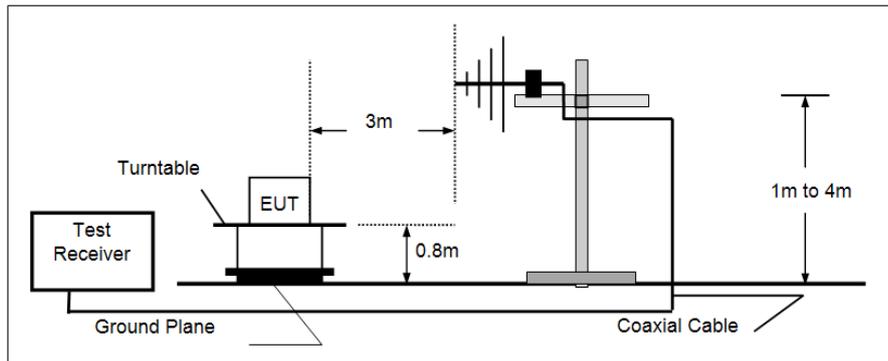
5.7. Radiated field strength of the fundamental signal

LIMIT

| Fundamental frequency (MHz) | Field strength of fundamental (microvolts/meter) | Field strength of spurious emissions (microvolts/meter) |
|-----------------------------|--|---|
| 40.66-40.70 | 2,250 | 225 |
| 70-130 | 1,250 | 125 |
| 130-174 | ¹ 1,250 to 3,750 | ¹ 125 to 375 |
| 174-260 | 3,750 | 375 |
| 260-470 | ¹ 3,750 to 12,500 | ¹ 375 to 1,250 |
| Above 470 | 12,500 | 1,250 |

¹Linear interpolations.

TEST CONFIGURATION



TEST PROCEDURE

- The EUT was setup and tested according to ANSI C63.10.
- The EUT is placed on a turn table which is 0.8 meter above ground for below 1GHz, The turn table is rotated 360 degrees to determine the position of the maximum emission level.
- The EUT was set 3 meters from the receiving antenna, which was mounted on the top of a variable height antenna tower.
- For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines.
- Set to the maximum power setting and enable the EUT transmit continuously.
- Use the following spectrum analyzer settings
 - Span shall wide enough to fully capture the emission being measured;
 - RBW=120 kHz, VBW=300 kHz, Sweep=auto, Detector function=peak, Trace=max hold;

If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

TEST MODE:

Please refer to the clause 4.2

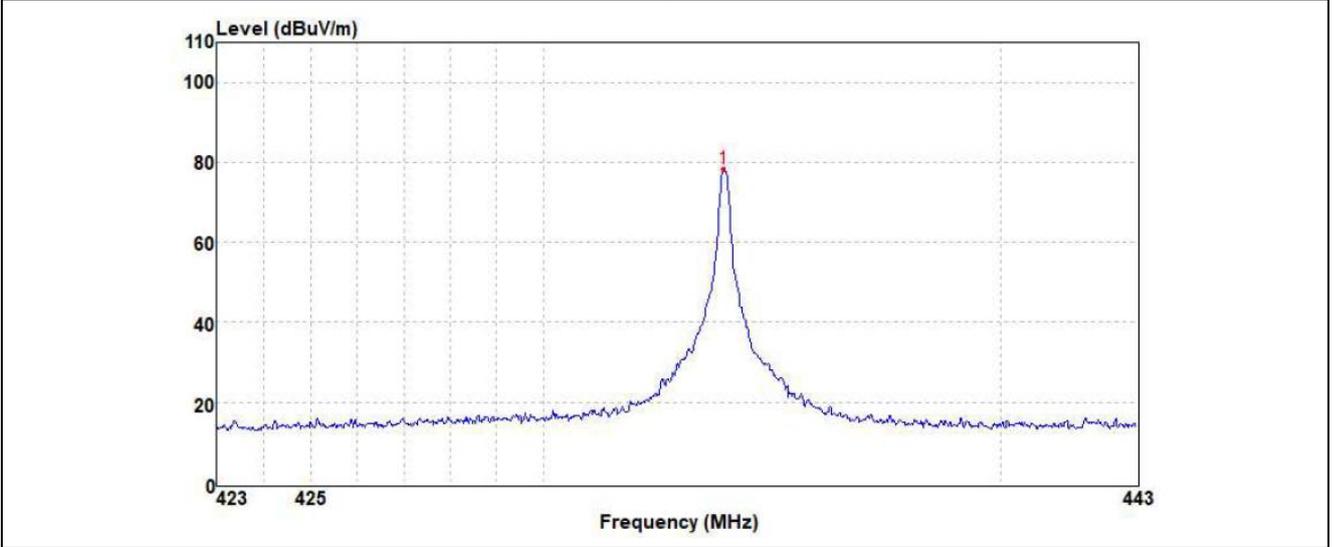
TEST RESULTS

Passed Not Applicable

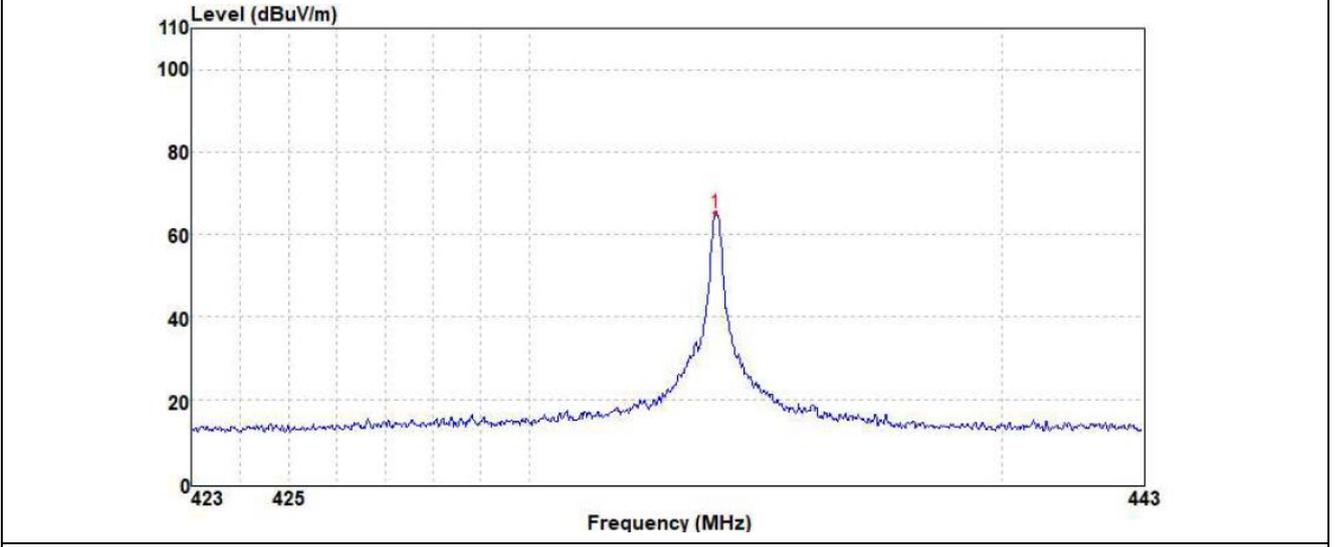
Note:

- Level= Reading + Factor; Factor =Antenna Factor+ Cable Loss- Preamp Factor
- Over Limit = Level - Limit

Polarization: Horizontal



Polarization: Vertical



| Fundamental of Peak | | | | | | | | |
|---------------------|-------------|------------------|-------------|----------------|----------------|-------------|------------|----------|
| No. | Freq. [MHz] | Reading [dBμV/m] | Factor [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Polarity | Detector |
| 1 | 433.92 | 77.10 | -11.76 | 65.34 | 100.80 | 35.46 | Vertical | PK |
| 2 | 433.92 | 90.22 | -11.76 | 78.46 | 100.80 | 22.34 | Horizontal | PK |

| Fundamental of Average | | | | | | | | |
|------------------------|-------------|-------------------|-----------|----------------|----------------|-------------|------------|----------|
| No. | Freq. [MHz] | PK level [dBμV/m] | DCCF [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Polarity | Detector |
| 1 | 433.92 | 65.34 | -7.32 | 58.02 | 80.80 | 22.78 | Vertical | AV |
| 2 | 433.92 | 78.46 | -7.32 | 71.14 | 80.80 | 9.66 | Horizontal | AV |

5.8. Radiated Spurious Emission

LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.231(b)

| Fundamental frequency (MHz) | Field strength of fundamental (microvolts/meter) | Field strength of spurious emissions (microvolts/meter) |
|-----------------------------|--|---|
| 40.66-40.70 | 2,250 | 225 |
| 70-130 | 1,250 | 125 |
| 130-174 | ¹ 1,250 to 3,750 | ¹ 125 to 375 |
| 174-260 | 3,750 | 375 |
| 260-470 | ¹ 3,750 to 12,500 | ¹ 375 to 1,250 |
| Above 470 | 12,500 | 1,250 |

FCC CFR Title 47 Part 15 Subpart C Section 15.209

| Frequency | Limit (dBuV/m) | Value |
|----------------------|-------------------|------------|
| 0.009 MHz ~0.49 MHz | 2400/F(kHz) @300m | Quasi-peak |
| 0.49 MHz ~ 1.705 MHz | 24000/F(kHz) @30m | Quasi-peak |
| 1.705 MHz ~30 MHz | 30 @30m | Quasi-peak |

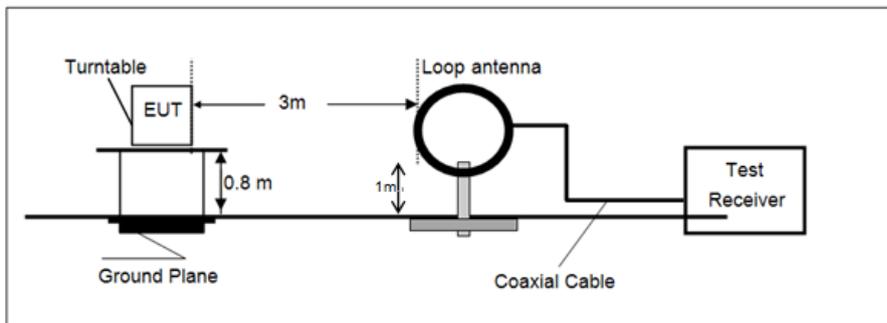
Note: Limit dBuV/m @3m = Limit dBuV/m @300m + 40*log(300/3)= Limit dBuV/m @300m +80,

Limit dBuV/m @3m = Limit dBuV/m @30m +40*log(30/3)= Limit dBuV/m @30m + 40.

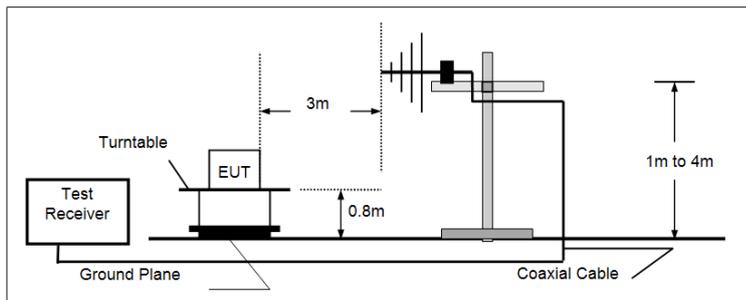
| Frequency | Limit (dBuV/m @3m) | Value |
|---------------|--------------------|------------|
| 30MHz~88MHz | 40.00 | Quasi-peak |
| 88MHz~216MHz | 43.50 | Quasi-peak |
| 216MHz~960MHz | 46.00 | Quasi-peak |
| 960MHz~1GHz | 54.00 | Quasi-peak |
| Above 1GHz | 54.00 | Average |
| | 74.00 | Peak |

TEST CONFIGURATION

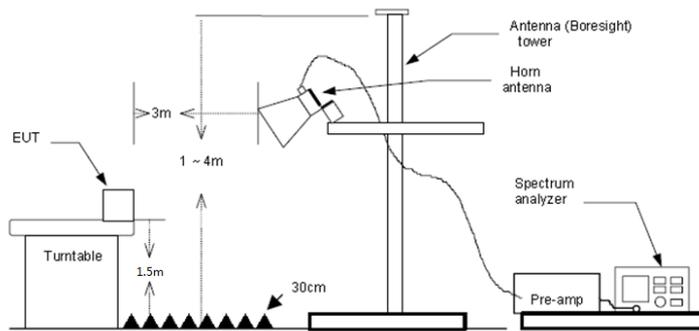
- 9 kHz ~ 30 MHz



- 30 MHz ~ 1 GHz



- Above 1 GHz



TEST PROCEDURE

1. The EUT was setup and tested according to ANSI C63.10.
 2. The EUT is placed on a turn table which is 0.8 meter above ground for below 1 GHz, and 1.5 m for above 1 GHz. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
 3. The EUT was set 3 meters from the receiving antenna, which was mounted on the top of a variable height antenna tower.
 4. For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines.
 5. Set to the maximum power setting and enable the EUT transmit continuously.
 6. Use the following spectrum analyzer settings
 - a) Span shall wide enough to fully capture the emission being measured;
 - b) Below 1 GHz:
 - RBW=120 kHz, VBW=300 kHz, Sweep=auto, Detector function=peak, Trace=max hold;
 - If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
 - c) Set RBW=1MHz, VBW=3MHz for >1GHz, Sweep time=auto, Detector=peak, Trace=max hold for Peak measurement
- For average measurement:
Average level = Peak level – DCCF

TEST MODE:

Please refer to the clause 4.2

TEST RESULT

Passed **Not Applicable**

Note:

- 1) Level= Reading + Factor/Transd; Factor/Transd =Antenna Factor+ Cable Loss- Preamp Factor
- 2) Margin = Limit – Level
- 3) Over Limit = Level – Limit

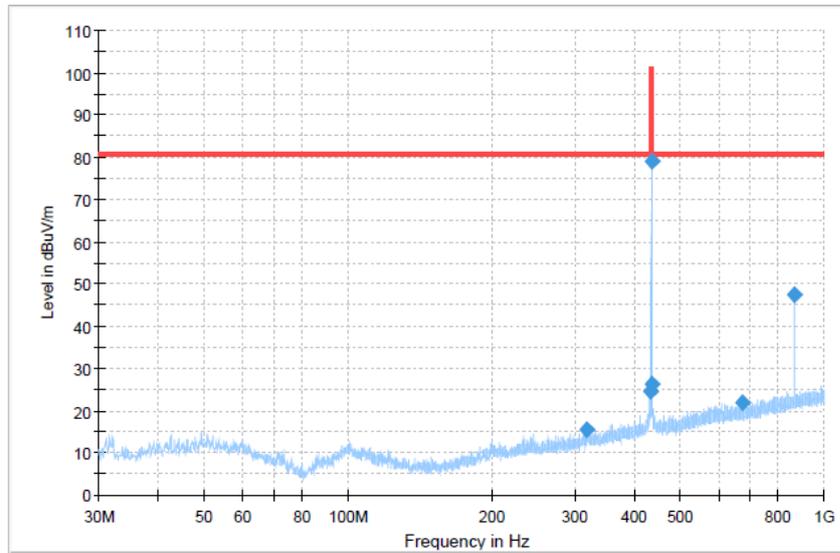
FOR 9 kHz ~ 30 MHz

The EUT was pre-scanned this frequency band, found the radiated level 20dB lower than the limit, so don't show data on this report.

FOR 30 MHz ~ 1000 MHz

Polarization:

Horizontal



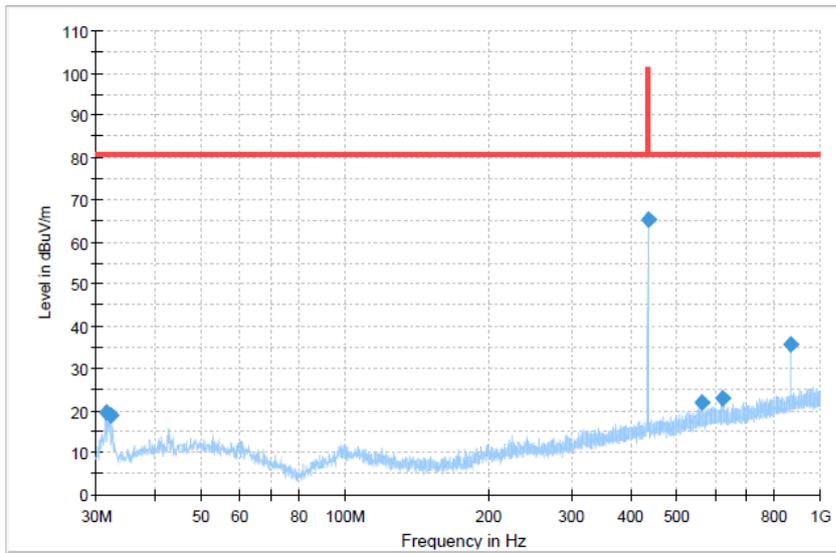
Final Result

| Frequency (MHz) | MaxPeak (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 318.332500 | 15.58 | 80.80 | 65.22 | 100.0 | H | 294.0 | -5.8 |
| 431.943750 | 24.48 | 80.80 | 56.32 | 100.0 | H | 0.0 | -2.5 |
| 433.883750 | 78.95 | 100.80 | 21.85 | 100.0 | H | 352.0 | -2.5 |
| 435.096250 | 26.22 | 80.80 | 54.58 | 100.0 | H | 7.0 | -2.5 |
| 672.625000 | 21.94 | 80.80 | 58.86 | 100.0 | H | 289.0 | 1.2 |
| 867.837500 | 47.51 | 80.80 | 33.29 | 100.0 | H | 100.0 | 4.0 |

| Spurious Emission of Average | | | | | | | | |
|------------------------------|-------------|-------------------|-----------|----------------|----------------|-------------|------------|----------|
| No. | Freq. [MHz] | PK level [dBμV/m] | DCCF [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Polarity | Detector |
| 1 | 318.33250 | 15.58 | -7.32 | 8.26 | 60.80 | 52.54 | Horizontal | AV |
| 2 | 431.94375 | 24.48 | -7.32 | 17.16 | 60.80 | 43.64 | Horizontal | AV |
| 3 | 433.88375 | 78.95 | -7.32 | 71.63 | 80.80 | 9.17 | Horizontal | AV |
| 4 | 435.09625 | 26.22 | -7.32 | 18.90 | 60.80 | 41.90 | Horizontal | AV |
| 5 | 672.62500 | 21.94 | -7.32 | 14.62 | 60.80 | 46.18 | Horizontal | AV |
| 6 | 867.83750 | 47.51 | -7.32 | 40.19 | 60.80 | 20.61 | Horizontal | AV |

Polarization:

Vertical



Final Result

| Frequency (MHz) | MaxPeak (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 31.455000 | 19.60 | 80.80 | 61.20 | 100.0 | V | 88.0 | -11.1 |
| 32.182500 | 18.85 | 80.80 | 61.95 | 100.0 | V | 140.0 | -10.9 |
| 433.883750 | 65.19 | 100.80 | 35.61 | 100.0 | V | 243.0 | -2.5 |
| 562.530000 | 21.76 | 80.80 | 59.04 | 100.0 | V | 210.0 | 0.2 |
| 625.095000 | 22.97 | 80.80 | 57.83 | 100.0 | V | 324.0 | 1.0 |
| 867.837500 | 35.64 | 80.80 | 45.16 | 100.0 | V | 353.0 | 4.0 |

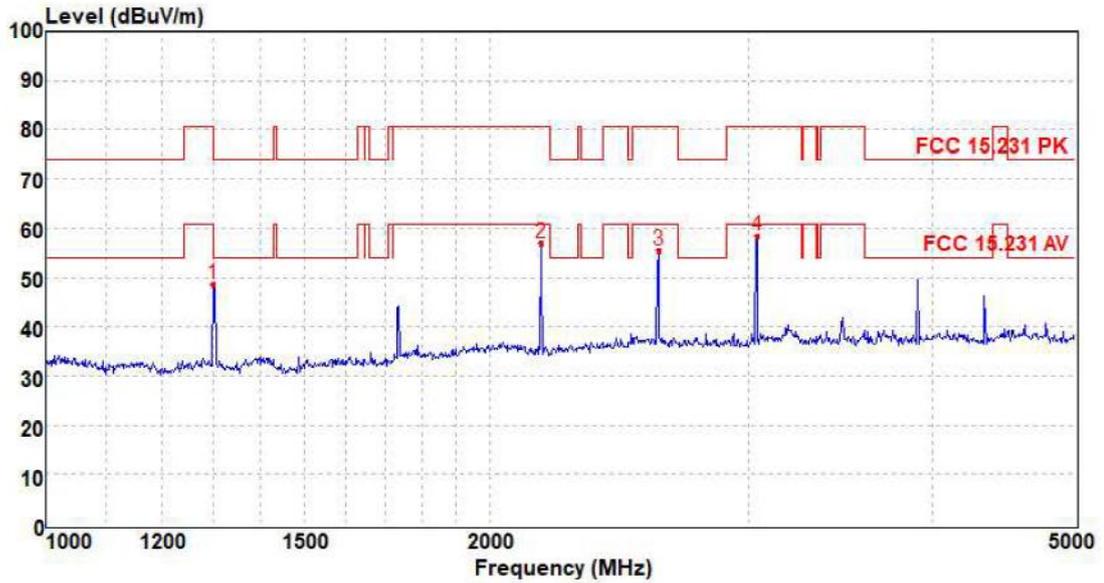
Spurious Emission of Average

| No. | Freq. [MHz] | PK level [dBμV/m] | DCCF [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Polarity | Detector |
|-----|-------------|-------------------|-----------|----------------|----------------|-------------|----------|----------|
| 1 | 31.45500 | 19.60 | -7.32 | 12.28 | 60.80 | 48.52 | Vertical | AV |
| 2 | 32.18250 | 18.85 | -7.32 | 11.53 | 60.80 | 49.27 | Vertical | AV |
| 3 | 433.88375 | 65.19 | -7.32 | 57.87 | 80.80 | 22.93 | Vertical | AV |
| 4 | 562.53000 | 21.76 | -7.32 | 14.44 | 60.80 | 46.36 | Vertical | AV |
| 5 | 625.09500 | 22.97 | -7.32 | 15.65 | 60.80 | 45.15 | Vertical | AV |
| 6 | 867.83750 | 35.64 | -7.32 | 28.32 | 60.80 | 32.48 | Vertical | AV |

FOR 1 GHz ~ 5 GHz

Polarization:

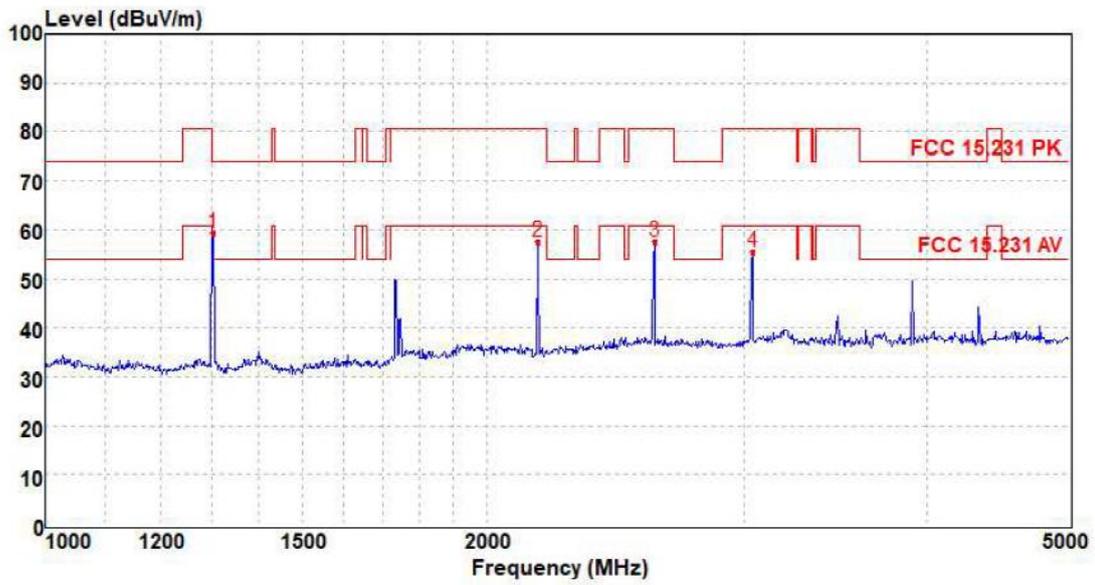
Horizontal



| Mark | Frequency MHz | Reading dBuV/m | Antenna dB | Cable dB | Preamp dB | Level dBuV/m | Limit dBuV/m | Over limit | Remark |
|------|---------------|----------------|------------|----------|-----------|--------------|--------------|------------|--------|
| 1 | 1299.97 | 59.94 | 28.50 | 2.94 | 42.70 | 48.68 | 80.80 | -32.12 | Peak |
| 2 | 2168.73 | 64.36 | 31.30 | 3.76 | 42.31 | 57.11 | 80.80 | -23.69 | Peak |
| 3 | 2605.48 | 60.44 | 32.89 | 4.14 | 42.08 | 55.39 | 80.80 | -25.41 | Peak |
| 4 | 3040.80 | 63.24 | 32.75 | 4.48 | 41.92 | 58.55 | 80.80 | -22.25 | Peak |

| Spurious Emission of Average | | | | | | | | |
|------------------------------|-------------|-------------------|-----------|----------------|----------------|-------------|------------|----------|
| No. | Freq. [MHz] | PK level [dBuV/m] | DCCF [dB] | Level [dBuV/m] | Limit [dBuV/m] | Margin [dB] | Polarity | Detector |
| 1 | 1299.97 | 48.68 | -7.32 | 41.36 | 60.80 | 19.44 | Horizontal | AV |
| 2 | 2168.73 | 57.11 | -7.32 | 49.79 | 60.80 | 11.01 | Horizontal | AV |
| 3 | 2605.48 | 55.39 | -7.32 | 48.07 | 60.80 | 12.73 | Horizontal | AV |
| 4 | 3040.80 | 58.55 | -7.32 | 51.23 | 60.80 | 9.57 | Horizontal | AV |

Polarization: Vertical

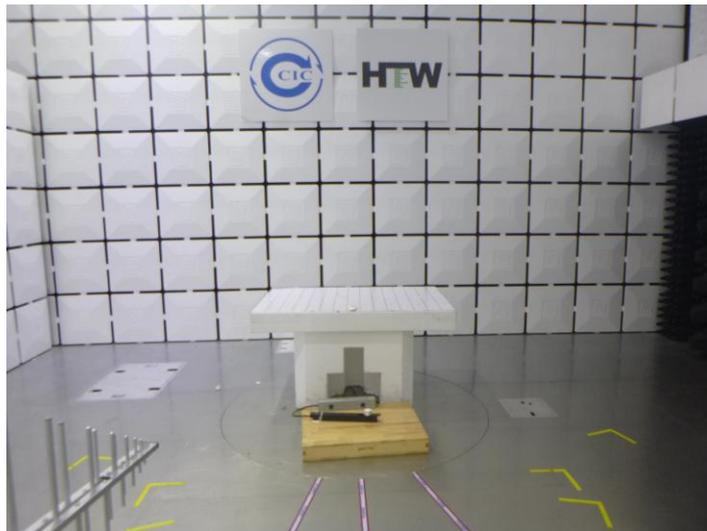
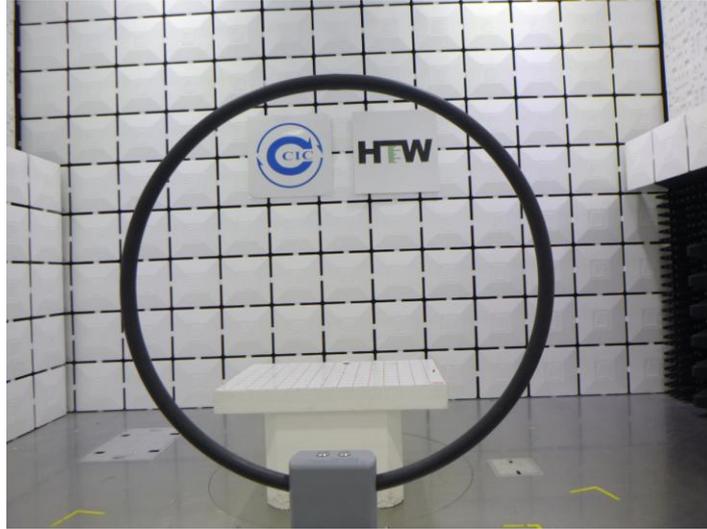


| Mark | Frequency MHz | Reading dBuV/m | Antenna dB | Cable dB | Preamp dB | Level dBuV/m | Limit dBuV/m | Over limit | Remark |
|------|---------------|----------------|------------|----------|-----------|--------------|--------------|------------|--------|
| 1 | 1302.06 | 70.57 | 28.48 | 2.95 | 42.70 | 59.30 | 74.00 | -14.70 | Peak |
| 2 | 2168.73 | 64.94 | 31.30 | 3.76 | 42.31 | 57.69 | 80.80 | -23.11 | Peak |
| 3 | 2605.48 | 62.62 | 32.89 | 4.14 | 42.08 | 57.57 | 80.80 | -23.23 | Peak |
| 4 | 3040.80 | 60.11 | 32.75 | 4.48 | 41.92 | 55.42 | 80.80 | -25.38 | Peak |

| Spurious Emission of Average | | | | | | | | |
|------------------------------|-------------|-------------------|-----------|----------------|----------------|-------------|----------|----------|
| No. | Freq. [MHz] | PK level [dBuV/m] | DCCF [dB] | Level [dBuV/m] | Limit [dBuV/m] | Margin [dB] | Polarity | Detector |
| 1 | 1302.06 | 59.30 | -7.32 | 51.98 | 54.00 | 2.02 | Vertical | AV |
| 2 | 2168.73 | 57.69 | -7.32 | 50.37 | 60.80 | 10.43 | Vertical | AV |
| 3 | 2605.48 | 57.57 | -7.32 | 50.25 | 60.80 | 10.55 | Vertical | AV |
| 4 | 3040.80 | 55.42 | -7.32 | 48.10 | 60.80 | 12.70 | Vertical | AV |

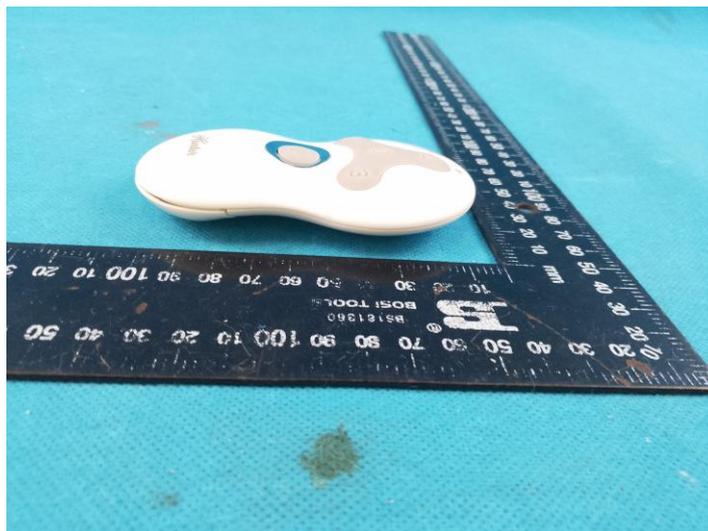
6. TEST SETUP PHOTOS

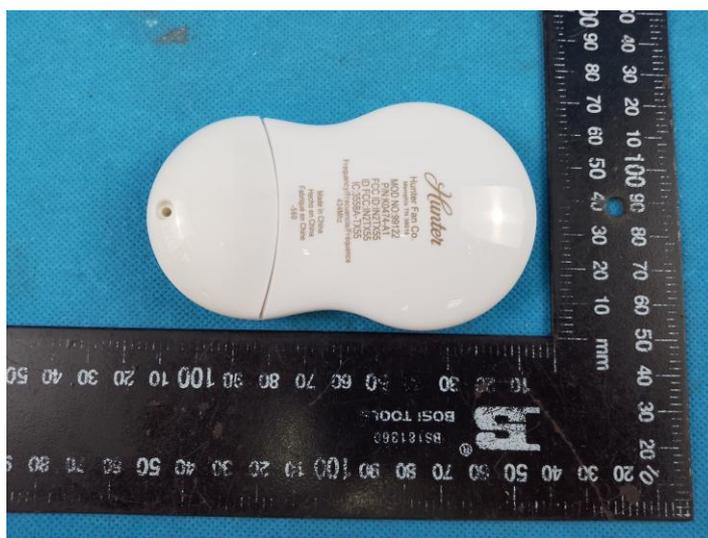
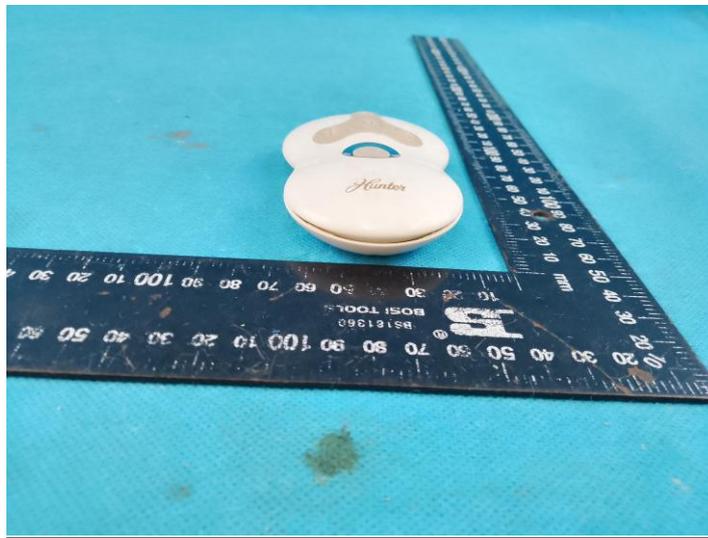
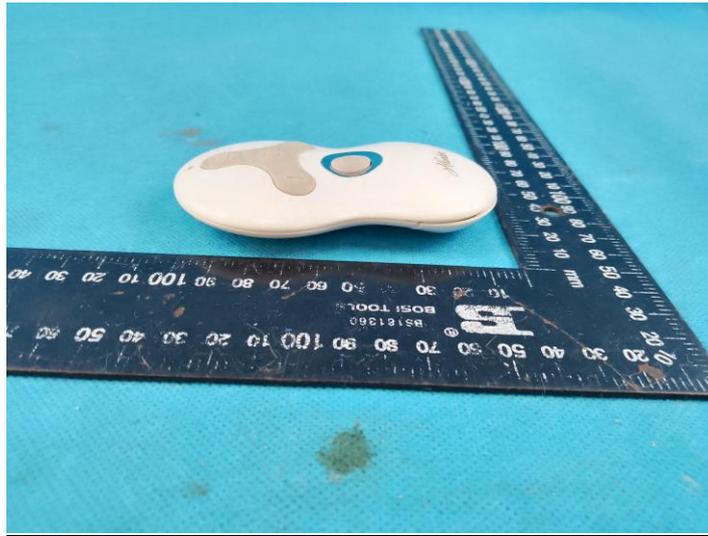
Radiated Emission



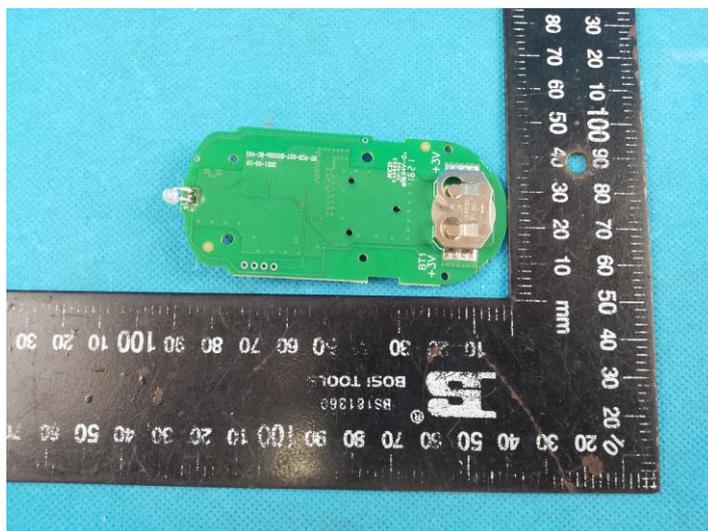
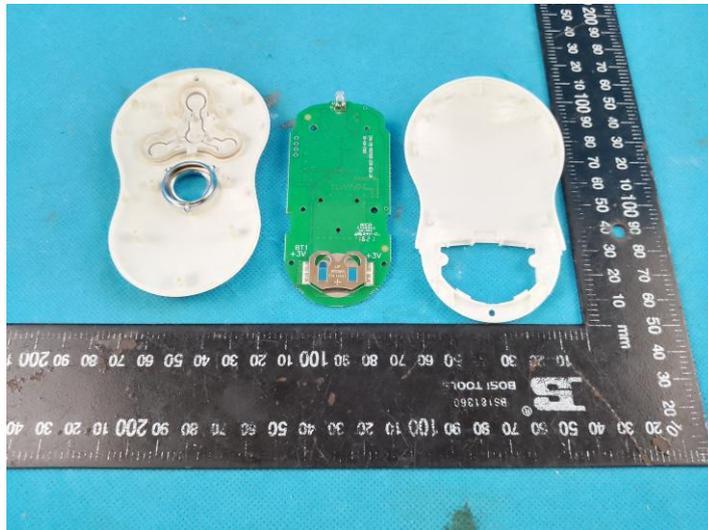
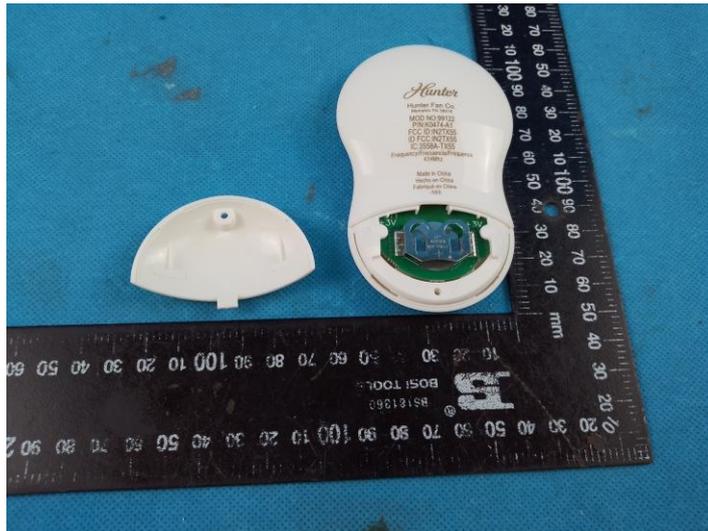
7. EXTERNAL AND INTERNAL PHOTOS

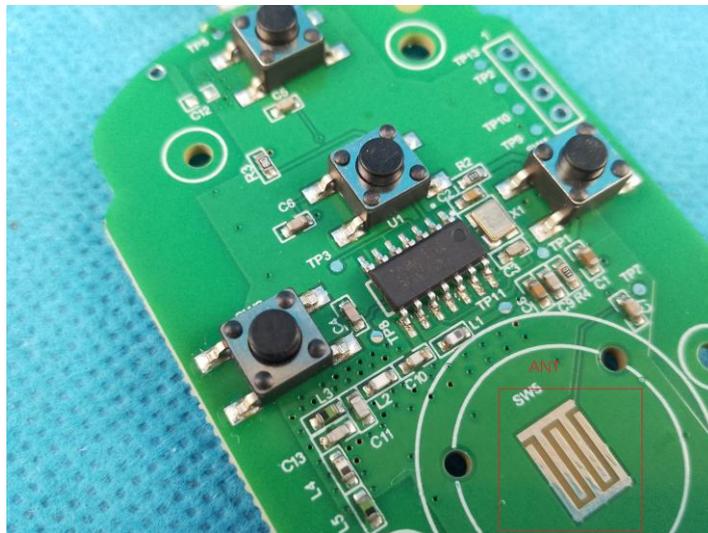
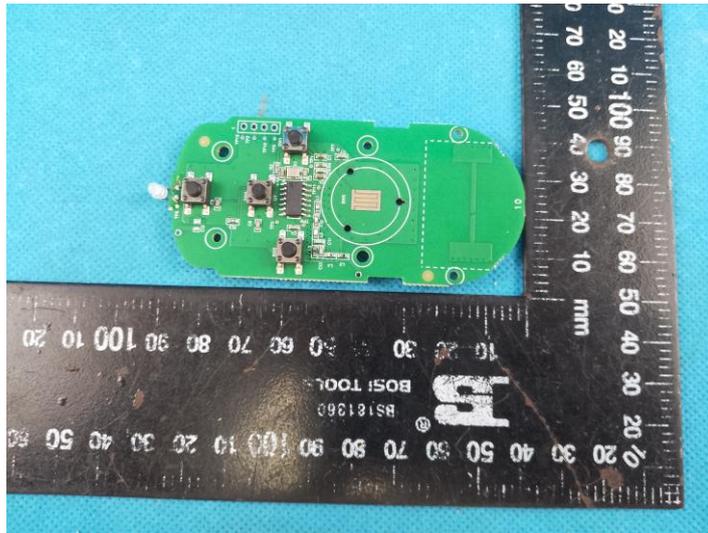
7.1. External Photos





7.2. Internal Photos





8. APPENDIX REPORT