

Radio Test Report

FCC ID: 2AUDF-CQ12X

Report No. : TB-FCC185288
Applicant : Shenzhen ADDX Innovation Technology co.,LTD.
Equipment Under Test (EUT)
EUT Name : Smart PTZ Battery Camera
Model No. : CQ1
Series Model No. : D3, D3K, D4, D4K, D5, D6, X85, X89
Brand Name : ----
Sample ID : 20211201-07-1#& 20211201-07-2#
Receipt Date : 2021-12-02
Test Date : 2021-12-02 to 2021-12-15
Issue Date : 2021-12-15
Standards : FCC Part 15 Subpart C 15.247
Test Method : ANSI C63.10: 2013
KDB 558074 D01 15.247 Meas Guidance v05r02

Conclusions : **PASS**

In the configuration tested, the EUT complied with the standards specified above.

Witness Engineer :  Seven Wu

Engineer Supervisor :  Ivan Su

Engineer Manager :  Ray Lai



This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in the report.

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1. General Information about EUT

1.1 Client Information

| | | |
|---------------------|---|--|
| Applicant | : | Shenzhen ADDX Innovation Technology co. ,LTD. |
| Address | : | NO.2902, Building 9A-1. Shenzhen Bay Technology and Ecological Park, Nanshan District,Shenzhen, China |
| Manufacturer | : | Shenzhen ADDX Innovation Technology co. ,LTD. |
| Address | : | NO.2902, Building 9A-1. Shenzhen Bay Technology and Ecological Park, Nanshan District, Shenzhen, China |

1.2 General Description of EUT (Equipment Under Test)

| | | |
|--|--------------------------|---|
| EUT Name | : | Smart PTZ Battery Camera |
| HVIN/Models No. | : | CQ1, D3, D3K, D4, D4K, D5, D6, X85, X89 |
| Model Different | : | All these models are identical in the same PCB, layout and electrical circuit, The only difference is model name. |
| Product Description | Operation Frequency: | 802.11b/g/n(HT20): 2412MHz~2462MHz |
| | Number of Channel: | 802.11b/g/n(HT20):11 channels |
| | Antenna Gain: | 3 dBi Dipole Antenna |
| | Modulation Type: | 802.11b: DSSS(CCK, DQPSK, DBPSK) 802.11g/n:OFDM(BPSK,QPSK,16QAM,64 QAM) |
| | Bit Rate of Transmitter: | 802.11b:11/5.5/2/1 Mbps 802.11g:54/48/36/24/18/12/9/6 Mbps 802.11n:up to 150Mbps |
| Power Rating | : | Input: DC 5V Output: DC 3.7V by 9000 mAh Rechargeable Li-ion battery |
| Software Version | : | V0.4.1 |
| Hardware Version | : | CQ121B_C03_V1 |
| Remark: | | |
| (1) The antenna gain and adapter provided by the applicant, the verified for the RF conduction test provided by TOBY test lab. | | |
| (2) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual. | | |
| (3) Antenna information provided by the applicant. | | |

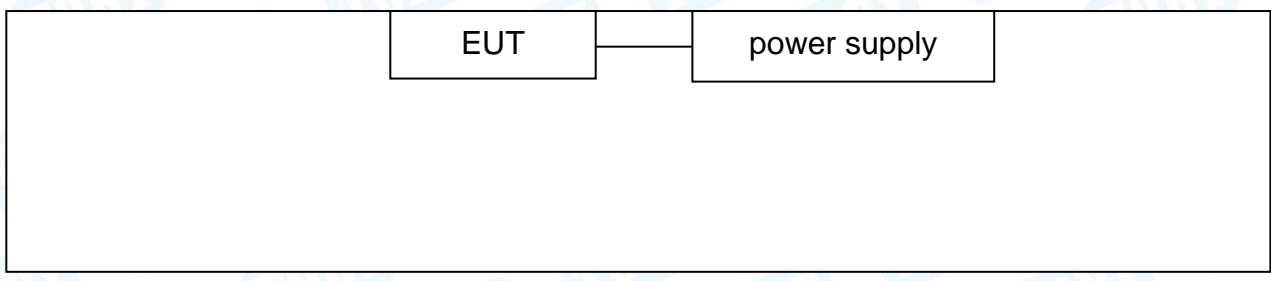
(4) Channel List:

| Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) |
|---------|-----------------|---------|-----------------|---------|-----------------|
| 01 | 2412 | 05 | 2432 | 09 | 2452 |
| 02 | 2417 | 06 | 2437 | 10 | 2457 |
| 03 | 2422 | 07 | 2442 | 11 | 2462 |
| 04 | 2427 | 08 | 2447 | | |

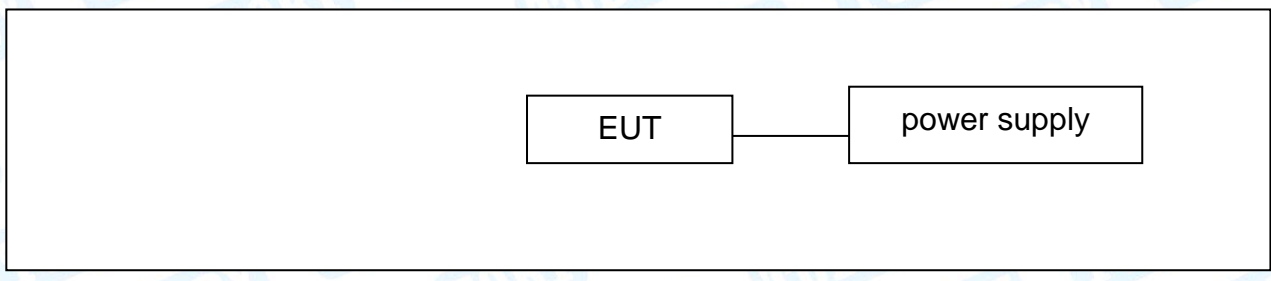
Note: CH 01~CH 11 for 802.11b/g/n(HT20)

1.3 Block Diagram Showing the Configuration of System Tested

Conducted Test



Radiated Test



1.4 Description of Support Units

| Equipment Information | | | | |
|-----------------------|---------------|--------------|--------------|----------|
| Name | Model | FCC ID/VOC | Manufacturer | Used “√” |
| Adapter | ---- | ---- | HUAWEI | --- |
| Cable Information | | | | |
| Number | Shielded Type | Ferrite Core | Length | Note |
| --- | ---- | --- | ---- | --- |

1.5 Description of Test Mode

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 follow was evaluated respectively.

| For Conducted Emission Test | |
|------------------------------------|---------------------------------------|
| Final Test Mode | Description |
| Mode 1 | Charging with TX b Mode Channel 01 |
| For Radiated and RF Conducted Test | |
| Final Test Mode | Description |
| Mode 2 | TX Mode b Mode Channel 01/06/11 |
| Mode 3 | TX Mode g Mode Channel 01/06/11 |
| Mode 4 | TX Mode n(HT20) Mode Channel 01/06/11 |

Note:

- (1) For all test, we have verified the construction and function in typical operation. And all the test modes were carried out with the EUT in transmitting operation in maximum power with all kinds of data rate.
According to ANSI C63.10 standards, the measurements are performed at the highest, middle, lowest available channels, and the worst case data rate as follows:
802.11b Mode: CCK
802.11g Mode: OFDM
802.11n (HT20) Mode: MCS 0
- (2) During the testing procedure, the continuously transmitting with the maximum power mode was programmed by the customer.
- (3) The EUT is considered a portable unit; in normal use it was positioned on X-plane. The worst case was found positioned on X-plane. Therefore only the test data of this X-plane was used for radiated emission measurement test.

1.6 Description of Test Software Setting

During testing channel & Power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of RF setting.

| Test Software: SecureCRT | | | |
|---------------------------------|---|----------------|-------------------|
| | Test Mode: Continuously transmitting | | |
| Mode | Data Rate | Channel | Parameters |
| 802.11b | CCK/ 1Mbps | 01 | 30 |
| | CCK/ 1Mbps | 06 | 30 |
| | CCK/ 1Mbps | 11 | 30 |
| 802.11g | OFDM/ 6Mbps | 01 | 40 |
| | OFDM/ 6Mbps | 06 | 40 |
| | OFDM/ 6Mbps | 11 | 40 |
| 802.11n(HT20) | MCS 0 | 01 | 40 |
| | MCS 0 | 06 | 40 |
| | MCS 0 | 11 | 40 |

1.7 Measurement Uncertainty

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

| Test Item | Parameters | Expanded Uncertainty (U_{Lab}) |
|--------------------|---|---|
| Conducted Emission | Level Accuracy: 9kHz~150kHz 150kHz to 30MHz | ± 3.50 dB ± 3.10 dB |
| Radiated Emission | Level Accuracy: 9kHz to 30 MHz | ± 4.60 dB |
| Radiated Emission | Level Accuracy: 30MHz to 1000 MHz | ± 4.50 dB |
| Radiated Emission | Level Accuracy: Above 1000MHz | ± 4.20 dB |

1.8 Test Facility

The testing report were performed by the Shenzhen Toby Technology Co., Ltd., in their facilities located at 1/F.,Building 6, Rundongsheng Industrial Zone, Longzhu, Xixiang, Bao'an District, Shenzhen, Guangdong, China. At the time of testing, the following bodies accredited the Laboratory:

CNAS (L5813)

The Laboratory has been accredited by CNAS to ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories for the competence in the field of testing. And the Registration No.: CNAS L5813.

A2LA Certificate No.: 4750.01

The laboratory has been accredited by American Association for Laboratory Accreditation(A2LA) to ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories for the technical competence in the field of Electrical Testing. And the A2LA Certificate No.: 4750.01.FCC Accredited Test Site Number: 854351. Designation Number: CN1223.

IC Registration No.: (11950A)

The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing. The site registration: Site# 11950A. CAB identifier: CN0056.

2. Test Summary

| Standard Section | Test Item | Test Sample(s) | Judgment | Remark |
|------------------------|-------------------------------|----------------|----------|--------|
| FCC | | | | |
| FCC 15.207(a) | Conducted Emission | 20211201-07-1# | PASS | N/A |
| FCC 15.209 & 15.247(d) | Radiated Unwanted Emissions | 20211201-07-1# | PASS | N/A |
| FCC 15.203 | Antenna Requirement | / | N/A | N/A |
| FCC 15.247(a)(2) | 6dB Bandwidth | / | N/A | N/A |
| / | 99% Occupied bandwidth | / | N/A | N/A |
| FCC 15.247(b)(3) | Peak Output Power and E.I.R.P | / | N/A | N/A |
| FCC 15.247(e) | Power Spectral Density | / | N/A | N/A |
| FCC 15.247(d) | Band Edge Measurements | / | N/A | N/A |
| FCC 15.207(a) | Conducted Unwanted Emissions | / | N/A | N/A |
| FCC 15.247(d) | Emissions in Restricted Bands | / | N/A | N/A |
| / | On Time and Duty Cycle | / | / | N/A |

Note: N/A is an abbreviation for Not Applicable.

3. Test Software

| Test Item | Test Software | Manufacturer | Version No. |
|--------------------------|---------------|--------------|--------------|
| Conducted Emission | EZ-EMC | EZ | CDI-03A2 |
| Radiation Emission | EZ-EMC | EZ | FA-03A2RE |
| Radiation Emission | TS+ | Tonsced | 3.0.0.4 |
| RF Conducted Measurement | MTS-8310 | MWRFtest | V2.0.0.0 |
| RF Test System | JS1120 | Tonscend | V2.6.88.0336 |

4. Test Equipment

| Conducted Emission Test | | | | | |
|----------------------------|--|-------------------|---------------|---------------|---------------|
| Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Cal. Due Date |
| EMI Test Receiver | Rohde & Schwarz | ESCI | 100321 | Jul. 01, 2021 | Jul. 01, 2022 |
| RF Switching Unit | Compliance Direction Systems Inc | RSU-A4 | 34403 | Jul. 01, 2021 | Jul. 01, 2022 |
| AMN | SCHWARZBECK | NNBL 8226-2 | 8226-2/164 | Jul. 01, 2021 | Jul. 01, 2022 |
| LISN | Rohde & Schwarz | ENV216 | 101131 | Jul. 01, 2021 | Jul. 01, 2022 |
| Radiation Emission Test | | | | | |
| Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Cal. Due Date |
| Spectrum Analyzer | Agilent | E4407B | MY45106456 | Jul. 01, 2021 | Jul. 01, 2022 |
| EMI Test Receiver | Rohde & Schwarz | ESPI | 100010/007 | Jul. 01, 2021 | Jul. 01, 2022 |
| Spectrum Analyzer | Rohde & Schwarz | FSV40-N | 102197 | Jul. 01, 2021 | Jul. 01, 2022 |
| Bilog Antenna | ETS-LINDGREN | 3142E | 00117537 | Mar.01, 2020 | Feb. 28, 2022 |
| Horn Antenna | ETS-LINDGREN | 3117 | 00143207 | Mar.01, 2020 | Feb. 28, 2022 |
| Horn Antenna | ETS-LINDGREN | BBHA 9170 | BBHA9170582 | Mar.01, 2020 | Feb. 28, 2022 |
| Loop Antenna | SCHWARZBECK | FMZB 1519 B | 1519B-059 | Jul. 01, 2021 | Jul. 01, 2022 |
| Pre-amplifier | Sonoma | 310N | 185903 | Feb. 25, 2021 | Feb. 24, 2022 |
| Pre-amplifier | HP | 8449B | 3008A00849 | Feb. 25, 2021 | Feb. 24, 2022 |
| Pre-amplifier | SKET | LNPA_1840G-50 | SK201904032 | Feb. 25, 2021 | Feb. 24, 2022 |
| Cable | HUBER+SUHNER | 100 | SUCOFLEX | Feb. 25, 2021 | Feb. 24, 2022 |
| Positioning Controller | ETS-LINDGREN | 2090 | N/A | N/A | N/A |
| Antenna Conducted Emission | | | | | |
| Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Cal. Due Date |
| Spectrum Analyzer | Agilent | E4407B | MY45106456 | Jul. 01, 2021 | Jul. 01, 2022 |
| Spectrum Analyzer | Rohde & Schwarz | FSV40-N | 102197 | Jul. 01, 2021 | Jul. 01, 2022 |
| MXA Signal Analyzer | Agilent | N9020A | MY49100060 | Sep. 03, 2020 | Sep. 02, 2022 |
| Vector Signal Generator | Agilent | N5182A | MY50141294 | Sep. 03, 2020 | Sep. 02, 2022 |
| Analog Signal Generator | Agilent | N5181A | MY50141953 | Sep. 03, 2020 | Sep. 02, 2022 |
| RF Power Sensor | DARE!! Instruments | RadiPowerRPR3006W | 17I00015SNO26 | Sep. 03, 2020 | Sep. 02, 2022 |
| | DARE!! Instruments | RadiPowerRPR3006W | 17I00015SNO29 | Sep. 03, 2020 | Sep. 02, 2022 |
| | DARE!! Instruments | RadiPowerRPR3006W | 17I00015SNO31 | Sep. 03, 2020 | Sep. 02, 2022 |
| | DARE!! Instruments | RadiPowerRPR3006W | 17I00015SNO33 | Sep. 03, 2020 | Sep. 02, 2022 |

5. Conducted Emission Test

5.1 Test Standard and Limit

5.1.1 Test Standard

FCC Part 15.207

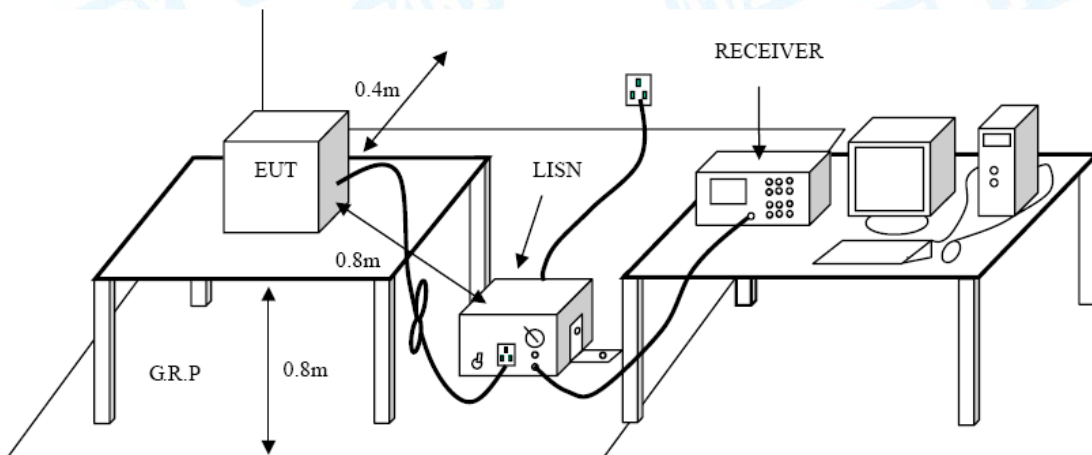
5.1.2 Test Limit

| Frequency | Maximum RF Line Voltage (dB μ V) | |
|---------------|--------------------------------------|---------------|
| | Quasi-peak Level | Average Level |
| 150kHz~500kHz | 66 ~ 56 * | 56 ~ 46 * |
| 500kHz~5MHz | 56 | 46 |
| 5MHz~30MHz | 60 | 50 |

Notes:

- (1) *Decreasing linearly with logarithm of the frequency.
- (2) The lower limit shall apply at the transition frequencies.
- (3) The limit decrease in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

5.2 Test Setup



5.3 Test Procedure

- The EUT was placed 0.8 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.
- 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.
- 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.
- LISN at least 80 cm from nearest part of EUT chassis.
- The bandwidth of EMI test receiver is set at 9 kHz, and the test frequency band is from 0.15MHz to 30MHz.

5.4 Deviation From Test Standard

No deviation

5.5 EUT Operating Mode

Please refer to the description of test mode.

5.6 Test Data

Please refer to the Attachment A inside test report.

6. Radiated and Conducted Unwanted Emissions

6.1 Test Standard and Limit

6.1.1 Test Standard

FCC Part 15.209 & FCC Part 15.247(d)

6.1.2 Test Limit

| General field strength limits at frequencies Below 30MHz | | |
|--|------------------------------------|-------------------------------|
| Frequency (MHz) | Field Strength (microvolt/meter)** | Measurement Distance (meters) |
| 0.009~0.490 | 2400/F(KHz) | 300 |
| 0.490~1.705 | 24000/F(KHz) | 30 |
| 1.705~30.0 | 30 | 30 |

Note: 1, The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector.

| General field strength limits at frequencies above 30 MHz | | |
|---|------------------------------|-------------------------------|
| Frequency (MHz) | Field strength (µV/m at 3 m) | Measurement Distance (meters) |
| 30~88 | 100 | 3 |
| 88~216 | 150 | 3 |
| 216~960 | 200 | 3 |
| Above 960 | 500 | 3 |

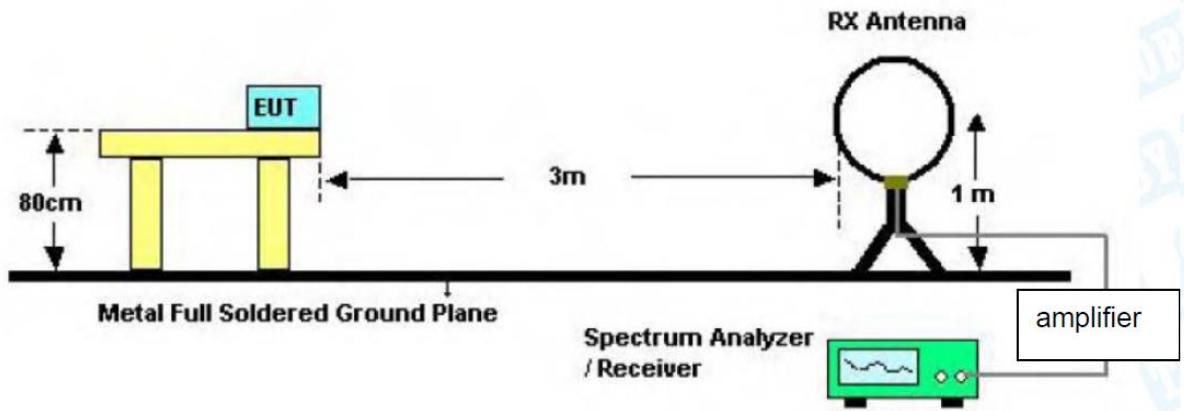
| General field strength limits at frequencies Above 1000MHz | | |
|--|-------------------------|---------|
| Frequency (MHz) | Distance of 3m (dBuV/m) | |
| | Peak | Average |
| Above 1000 | 74 | 54 |

Note:
 (1) The tighter limit applies at the band edges.
 (2) Emission Level(dBuV/m)=20log Emission Level(uV/m)

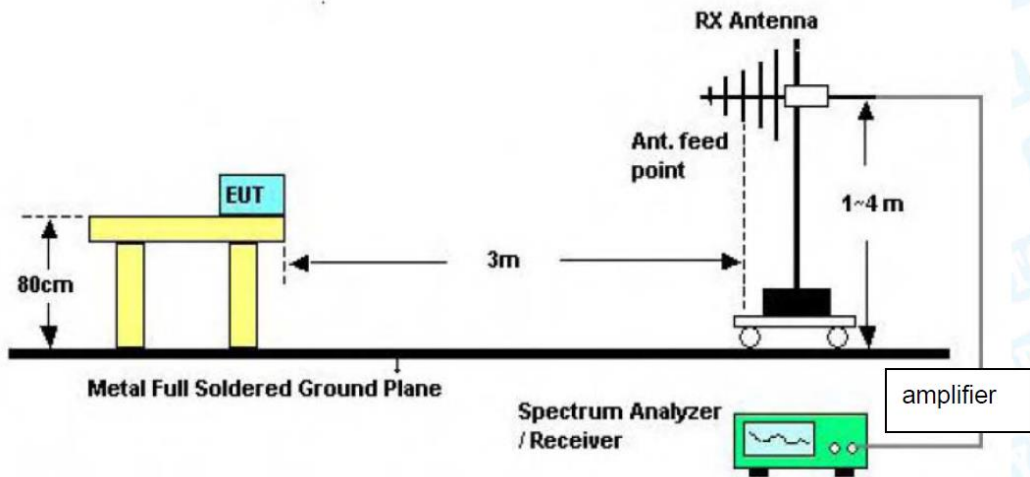
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under section 5.4(d), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

6.2 Test Setup

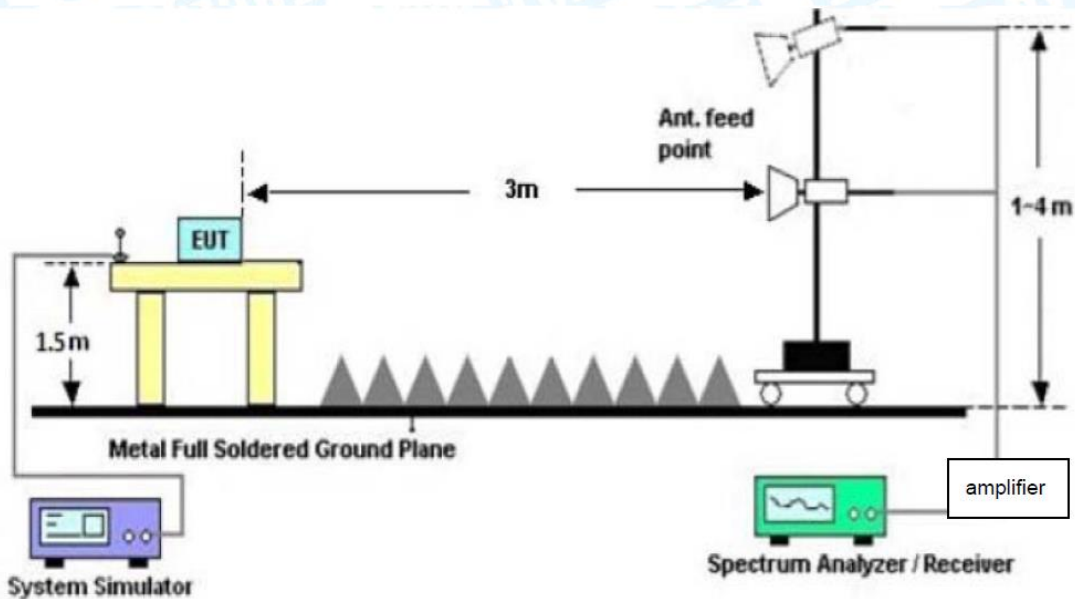
Radiated measurement



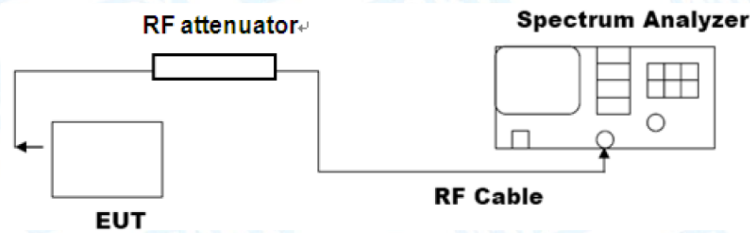
Below 30MHz Test Setup



Below 1000MHz Test Setup



Above 1GHz Test Setup

Conducted measurement**6.3 Test Procedure****---Radiated measurement**

- The measuring distance of 3m shall be used for measurements at frequency up to 1GHz and above 1 GHz. The EUT was placed on a rotating 0.8m high above ground, the table was rotated 360 degrees to determine the position of the highest radiation.
- Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.
- The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.
- 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.
- If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Below 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.
- Testing frequency range 30MHz-1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection. Testing frequency range 9KHz-150Hz the measuring instrument use VBW=200Hz with Quasi-peak detection. Testing frequency range 9KHz-30MHz the measuring instrument use VBW=9kHz with Quasi-peak detection.
- Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.
- For the actual test configuration, please see the test setup photo.

--- Conducted measurement

● Reference level measurement

Establish a reference level by using the following procedure:

- a) Set instrument center frequency to DTS channel center frequency.
- b) Set the span to ≥ 1.5 times the DTS bandwidth.
- c) Set the RBW = 100 kHz.
- d) Set the VBW $\geq [3 \times \text{RBW}]$.
- e) Detector = peak.
- f) Sweep time = auto couple.
- g) Trace mode = max hold.
- h) Allow trace to fully stabilize.
- i) Use the peak marker function to determine the maximum PSD level.

Note that the channel found to contain the maximum PSD level can be used to establish the reference level.

● Emission level measurement

Establish an emission level by using the following procedure:

- a) Set the center frequency and span to encompass frequency range to be measured.
- b) Set the RBW = 100 kHz.
- c) Set the VBW $\geq [3 \times \text{RBW}]$.
- d) Detector = peak.
- e) Sweep time = auto couple.
- f) Trace mode = max hold.
- g) Allow trace to fully stabilize.
- h) Use the peak marker function to determine the maximum amplitude level.

Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) is attenuated by at least the minimum requirements specified in 11.11. Report the three highest emissions relative to the limit.

6.4 Deviation From Test Standard

No deviation

6.5 EUT Operating Mode

Please refer to the description of test mode.

6.6 Test Data

Radiated measurement please refer to the Attachment B inside test report.

Conducted measurement please refer to the Appendix A section 6.

7. Antenna Requirement

11.1 Test Standard and Limit

11.1.1 Test Standard

FCC Part 15.203

11.1.2 Requirement

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. 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.

11.2 Deviation From Test Standard

No deviation

11.3 Antenna Connected Construction

The gains of the antenna used for transmitting is 3dBi, and the antenna de-signed with permanent attachment and no consideration of replacement. Please see the EUT photo for details.

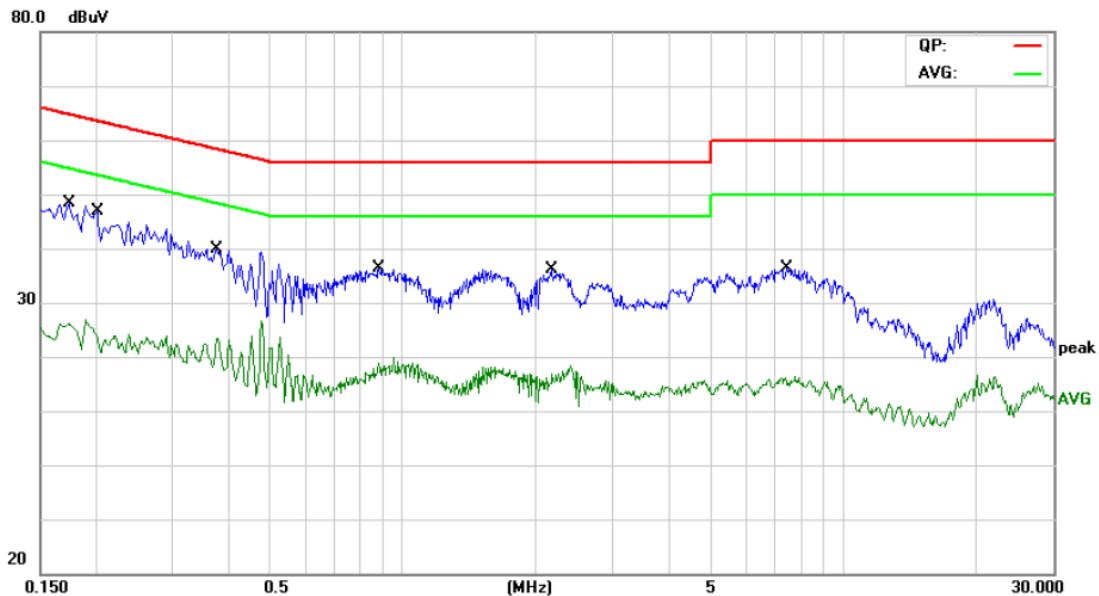
11.4 Test Data

The EUT antenna is a Dipole Antenna. It complies with the standard requirement.

| Antenna Type |
|--|
| <input type="checkbox"/> Permanent attached antenna |
| <input checked="" type="checkbox"/> Unique connector antenna |
| <input type="checkbox"/> Professional installation antenna |

Attachment A-- Conducted Emission Test Data

| | | | |
|---------------|------------------------------|--------------------|-----|
| Temperature: | 24.6°C | Relative Humidity: | 42% |
| Test Voltage: | DC 5V | | |
| Terminal: | Line | | |
| Test Mode: | Mode 1 | | |
| Remark: | Only worse case is reported. | | |

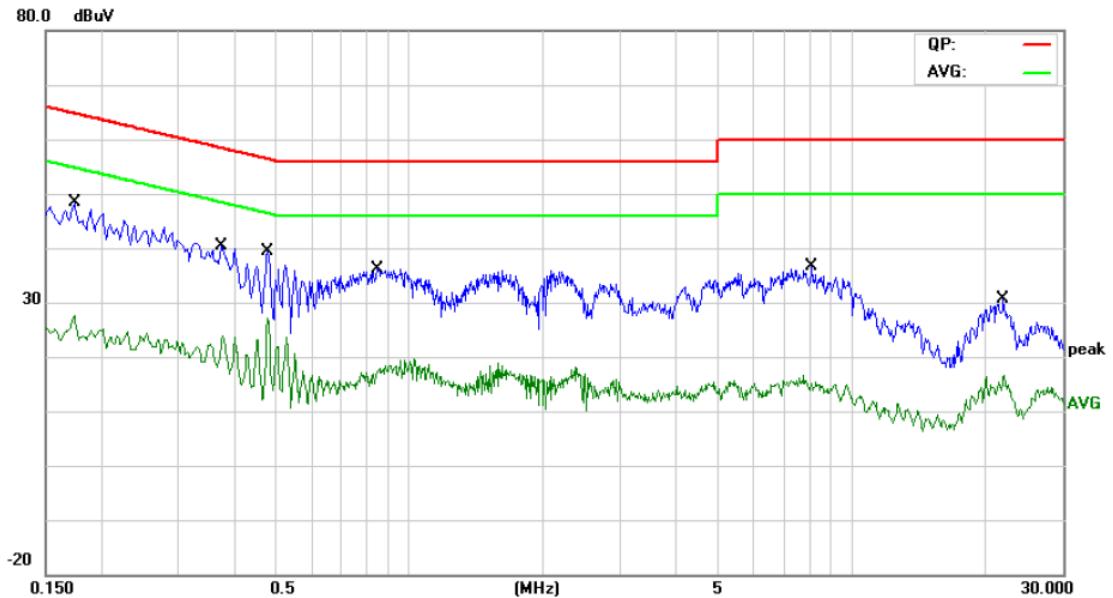


| No. | Mk. | Freq. MHz | Reading Level dBuV | Correct Factor dB | Measure- ment dBuV | Limit dBuV | Over dB | Detector |
|-----|-----|--------------|--------------------------|-------------------------|--------------------------|---------------|------------|----------|
| 1 | * | 0.1740 | 31.98 | 11.63 | 43.61 | 64.76 | -21.15 | QP |
| 2 | | 0.1740 | 13.29 | 11.63 | 24.92 | 54.76 | -29.84 | AVG |
| 3 | | 0.2020 | 30.22 | 11.67 | 41.89 | 63.52 | -21.63 | QP |
| 4 | | 0.2020 | 10.93 | 11.67 | 22.60 | 53.52 | -30.92 | AVG |
| 5 | | 0.3780 | 25.66 | 11.49 | 37.15 | 58.32 | -21.17 | QP |
| 6 | | 0.3780 | 11.63 | 11.49 | 23.12 | 48.32 | -25.20 | AVG |
| 7 | | 0.8820 | 19.81 | 11.29 | 31.10 | 56.00 | -24.90 | QP |
| 8 | | 0.8820 | 5.46 | 11.29 | 16.75 | 46.00 | -29.25 | AVG |
| 9 | | 2.1700 | 20.31 | 10.41 | 30.72 | 56.00 | -25.28 | QP |
| 10 | | 2.1700 | 3.57 | 10.41 | 13.98 | 46.00 | -32.02 | AVG |
| 11 | | 7.4100 | 20.01 | 10.04 | 30.05 | 60.00 | -29.95 | QP |
| 12 | | 7.4100 | 4.42 | 10.04 | 14.46 | 50.00 | -35.54 | AVG |

Remark:

1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)
2. Margin (dB) = QuasiPeak/Average (dBuV)-Limit (dBuV)

| | | | |
|----------------------|------------------------------|---------------------------|-----|
| Temperature: | 24.6°C | Relative Humidity: | 42% |
| Test Voltage: | DC 5V | | |
| Terminal: | Neutral | | |
| Test Mode: | Mode 1 | | |
| Remark: | Only worse case is reported. | | |



| No. | Mk. | Freq. MHz | Reading Level dBuV | Correct Factor dB | Measure- ment dBuV | Limit dBuV | Over dB | Detector |
|-----|-----|--------------|--------------------------|-------------------------|--------------------------|---------------|------------|----------|
| 1 | | 0.1740 | 32.29 | 11.63 | 43.92 | 64.76 | -20.84 | QP |
| 2 | | 0.1740 | 13.96 | 11.63 | 25.59 | 54.76 | -29.17 | AVG |
| 3 | | 0.3740 | 25.25 | 11.49 | 36.74 | 58.41 | -21.67 | QP |
| 4 | | 0.3740 | 10.53 | 11.49 | 22.02 | 48.41 | -26.39 | AVG |
| 5 | * | 0.4780 | 26.10 | 11.50 | 37.60 | 56.37 | -18.77 | QP |
| 6 | | 0.4780 | 14.95 | 11.50 | 26.45 | 46.37 | -19.92 | AVG |
| 7 | | 0.8460 | 20.10 | 11.33 | 31.43 | 56.00 | -24.57 | QP |
| 8 | | 0.8460 | 5.18 | 11.33 | 16.51 | 46.00 | -29.49 | AVG |
| 9 | | 8.1220 | 20.27 | 10.06 | 30.33 | 60.00 | -29.67 | QP |
| 10 | | 8.1220 | 4.27 | 10.06 | 14.33 | 50.00 | -35.67 | AVG |
| 11 | | 22.0380 | 14.35 | 10.56 | 24.91 | 60.00 | -35.09 | QP |
| 12 | | 22.0380 | 5.10 | 10.56 | 15.66 | 50.00 | -34.34 | AVG |

Remark:
 1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)
 2. Margin (dB) = QuasiPeak/Average (dBuV) - Limit (dBuV)

Attachment B--Unwanted Emissions Data

---Radiated Unwanted Emissions

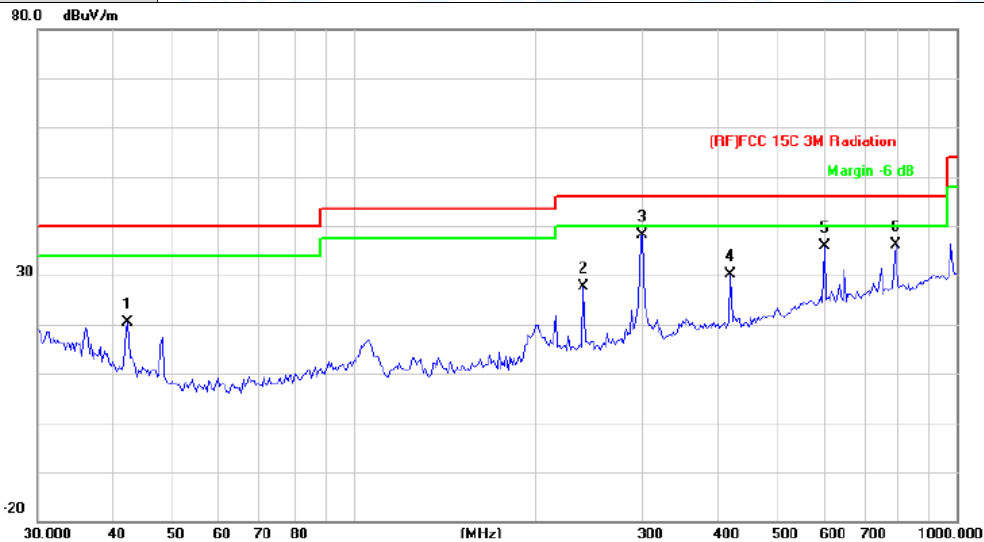
9 KHz~30 MHz

From 9 KHz to 30 MHz: Conclusion: PASS

Note: The amplitude of spurious emissions which are attenuated by more than 20dB Below the permissible value has no need to be reported.

30MHz~1GHz

| | | | |
|---------------|------------------------------|--------------------|-----|
| Temperature: | 23.9°C | Relative Humidity: | 44% |
| Test Voltage: | AC 120V/60HZ | | |
| Ant. Pol. | Horizontal | | |
| Test Mode: | Mode 2 | | |
| Remark: | Only worse case is reported. | | |



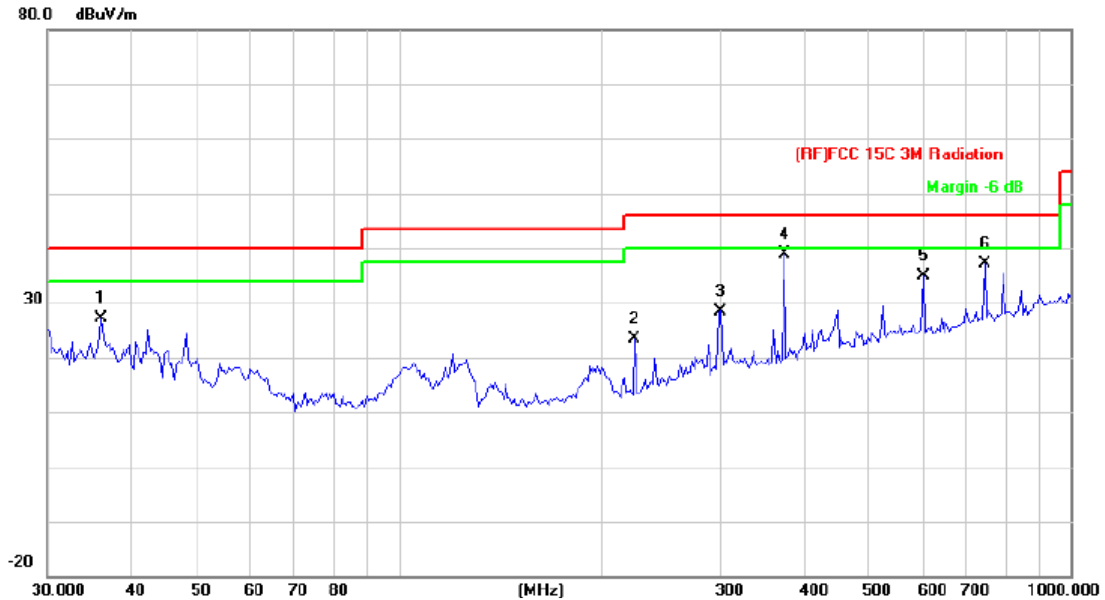
| No. | Mk. | Freq. MHz | Reading Level dBuV | Correct Factor dB/m | Measure- ment dBuV/m | Limit dBuV/m | Over dB | Detector |
|-----|-----|--------------|--------------------------|---------------------------|----------------------------|-----------------|------------|----------|
| 1 | | 42.3022 | 40.95 | -20.59 | 20.36 | 40.00 | -19.64 | peak |
| 2 | | 240.8304 | 45.47 | -17.81 | 27.66 | 46.00 | -18.34 | peak |
| 3 | * | 301.4224 | 54.46 | -16.25 | 38.21 | 46.00 | -7.79 | peak |
| 4 | | 422.0577 | 42.41 | -12.25 | 30.16 | 46.00 | -15.84 | peak |
| 5 | | 603.5392 | 44.31 | -8.38 | 35.93 | 46.00 | -10.07 | peak |
| 6 | | 793.3960 | 41.70 | -5.69 | 36.01 | 46.00 | -9.99 | peak |

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

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. QuasiPeak (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) =Limit QPK(dBμV/m)-QuasiPeak (dBμV/m)

| | | | |
|----------------------|------------------------------|---------------------------|-----|
| Temperature: | 23.9°C | Relative Humidity: | 44% |
| Test Voltage: | AC 120V/60HZ | | |
| Ant. Pol. | Vertical | | |
| Test Mode: | Mode 2 | | |
| Remark: | Only worse case is reported. | | |



| No. | Mk. | Freq. MHz | Reading Level dBuV | Correct Factor dB/m | Measure- ment dBuV/m | Limit dBuV/m | Over dB | Detector |
|-----|-----|--------------|--------------------------|---------------------------|----------------------------|-----------------|------------|----------|
| 1 | | 36.0007 | 44.63 | -17.60 | 27.03 | 40.00 | -12.97 | peak |
| 2 | | 224.5193 | 42.09 | -18.73 | 23.36 | 46.00 | -22.64 | peak |
| 3 | | 301.4224 | 44.75 | -16.25 | 28.50 | 46.00 | -17.50 | peak |
| 4 | * | 374.6225 | 52.47 | -13.56 | 38.91 | 46.00 | -7.09 | peak |
| 5 | | 603.5392 | 43.29 | -8.38 | 34.91 | 46.00 | -11.09 | peak |
| 6 | | 744.8661 | 43.62 | -6.57 | 37.05 | 46.00 | -8.95 | peak |

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

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. QuasiPeak (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) =Limit QPK(dBμV/m)-QuasiPeak (dBμV/m)

-----END OF REPORT-----