



FCC TEST REPORT

Report No: STS1706108F02

Issued for

Gudsen Technology Co., LTD

F6, 10th Building, Jiuxiang Ling Industrial Park, Ave Xili, Nanshan District, Shenzhen, China

| Product Name: | Handheld Gimbal |
|----------------|-------------------|
| Brand Name: | MOZA |
| Model Name: | AIR |
| Series Model: | AIR-360, AIRCORSS |
| FCC ID: | 2AMJRAIR |
| Test Standard: | FCC Part 15.249 |

Any reproduction of this document must be done in full. No single part of this document may be reproduced without permission from BZT, All Test Data Presented in this report is only applicable to presented Test sample.

BZT Testing Technology Co., Ltd

Add.: Buliding 17, Xinghua Road Xingwei industrial Park Fuyong,

Baoan District, Shenzhen, Guangdong, China

TEL: +86-755 3307 1680 FAX: +86-755 27341758 E-mail:bruce@bzt.Cn



TEST RESULT CERTIFICATION

Applicant's name: Gudsen Technology Co., LTD

Address: F6, 10th Building, Jiuxiang Ling Industrial Park, Ave Xili,

Nanshan District, Shenzhen, China

Manufacture's Name : Gudsen Technology Co., LTD

Address: F6, 10th Building, Jiuxiang Ling Industrial Park, Ave Xili,

Nanshan District, Shenzhen, China

Product description

Product name: Handheld Gimbal

Brand name : MOZA

Model and/or type reference: AIR

Standards : FCC Part15.249

Test procedure : ANSI C63.10-2013

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

This report shall not be reproduced except in full, without the written approval of BZT, this document may be altered or revised by BZT, personal only, and shall be noted in the revision of the document.

Date of Test :

Date of performance of tests: 15 June. 2017 ~29 June. 2017

Date of Issue: 05 July. 2017

Test Result : Pass

Testing Engineer : Sean She

(Sean she)

Technical Manager :

(Hakim.hou)

Authorized Signatory:

(Vita Li)



| Table of Contents | Page |
|---|------|
| 1. SUMMARY OF TEST RESULTS | 5 |
| 1.1 TEST FACTORY | 6 |
| 1.2 MEASUREMENT UNCERTAINTY | 6 |
| 2. GENERAL INFORMATION | 7 |
| 2.1 GENERAL DESCRIPTION OF EUT | 7 |
| 2.2 DESCRIPTION OF TEST MODES | 8 |
| 2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED | 9 |
| 2.4 DESCRIPTION OF SUPPORT UNITS | 10 |
| 2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS | 11 |
| 3. EMC EMISSION TEST | 12 |
| 3.1 CONDUCTED EMISSION MEASUREMENT | 12 |
| 3.2 RADIATED EMISSION MEASUREMENT | 16 |
| 4. BANDWIDTH TEST | 24 |
| 4.1 TEST PROCEDURE | 24 |
| 4.2 TEST SETUP | 24 |
| 4.3 EUT OPERATION CONDITIONS | 24 |
| 4.4 TEST RESULTS | 24 |
| 5. ANTENNA REQUIREMENT | 25 |
| 5.1 STANDARD REQUIREMENT | 25 |
| 5.2 EUT ANTENNA | 25 |
| APPENDIX- PHOTOS OF TEST SETUP | 26 |



Revision History

| Rev. | Issue Date | Report NO. | Effect Page | Contents |
|------|-----------------------------|------------|-------------|---------------|
| 00 | 05 July. 2017 STS1706108F02 | | ALL | Initial Issue |
| | | | | |





1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

| FCC Part 15.249, Subpart C | | | | | |
|----------------------------|-------------------------------|----------|--------|--|--|
| Standard Section | Test Item | Judgment | Remark | | |
| 15.207 | Conducted Emission | Pass | | | |
| 15.203 | Antenna Requirement | Pass | | | |
| 15.249 | Radiated Spurious Emission | Pass | | | |
| | conduction Spurious Emission | N/A | | | |
| 15 205 | Radiated Band Edge Emission | Pass | | | |
| 15.205 | conduction Band Edge Emission | N/A | | | |
| 15.249 | 20dB Bandwidth | Pass | | | |

NOTE:

- (1)" N/A" denotes test is not applicable in this Test Report
- (2) All tests are according to ANSI C63.10-2013



1.1 TEST FACTORY

BZT Testing Technology Co., Ltd.

Add.: Buliding 17, Xinghua Road Xingwei industrial Park Fuyong,

Baoan District, Shenzhen, Guangdong, China

FCC Registration No.: 701733

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $\mathbf{y} \pm \mathbf{U}$ where expended uncertainty \mathbf{U} is based on a standard uncertainty multiplied by a coverage factor of $\mathbf{k=2}$ providing a level of confidence of approximately 95 % $^{\circ}$

| No. | Item | Uncertainty |
|-----|--|-------------|
| 1 | Conducted Emission (9KHz-150KHz) | ±2.88dBm |
| 2 | Conducted Emission (150KHz-30MHz) | ±2.67dBm |
| 3 | RF power,conducted | ±0.70dBm |
| 4 | Spurious emissions,conducted | ±1.19dBm |
| 5 | All emissions,radiated(<1G) 30MHz-200MHz | ±2.83dBm |
| 6 | All emissions,radiated(<1G) 200MHz-1000MHz | ±2.94dBm |
| 7 | All emissions,radiated(>1G) | ±3.03dBm |



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

| Equipment | Handheld Gimbal | | |
|-------------------------|--|-----------|--|
| Trade Name | MOZA | | |
| Model Name | AIR | | |
| Series Model | AIR-360, AIRCORSS | | |
| Model Difference | Only different in model | name | |
| Product Description | The EUT is a Handheld Gimbal Operation Frequency: 2440MHz Modulation Type: FSK Antenna Designation: PCB Antenna Antenna Gain(Peak): -5 dBi Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual. | | |
| Channel List | Please refer to the Note | 2. | |
| Battery | Battery(rating): Rated Voltage: 3.7V Charge Limit: 4.2V Capacity:2000mAh | | |
| Hardware version number | v1.0 | | |
| Software version number | v1.0 | | |
| Connecting I/O Port(s) | Please refer to the User | 's Manual | |

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

2 Table for Filed Antenna

| Ant | Brand | Model Name | Antenna Type | Connector | Gain (dBi) | NOTE |
|-----|-------|------------|--------------|-----------|------------|---------|
| 1 | MOZA | AIR | PCB | NA | -5 | Antenna |

The EUT antenna is PCB Antenna. No antenna other than that furnished by the responsible party shall be used with the device.



2.2 DESCRIPTION OF TEST MODES

For conducted test items and radiated spurious emissions Each of these EUT operation mode(s) or test configuration mode(s) mentioned below was evaluated respectively..

| Pretest Mode | Description | Data/Modulation |
|--------------|-------------|-----------------|
| Mode 1 | TX CH01 | 1 MHz/FSK |

Note:

- (1) The measurements are performed at all Bit Rate of Transmitter, the worst data was reported
- (2) We have be tested for all available U.S. voltage and frequencies(For 120V 60Hz) for which the device is capable of operation.
- (3) The EUT was programmed to be in continuously transmitting with a modulated carrier at maximum power on bottom/middle/top channels as required using the supported data rates/modulation types and the transmit duty cycle is not less than 98%.
- (4) Controlled using a bespoke application on the laptop PC supplied by the customer. The application was used to enable a continuous transmission mode and to select the test channels, data rates and modulation schemes as required.

For AC Conducted Emission

| 1 017 to Colladotod I | |
|-----------------------|---------------------|
| | Test Case |
| AC Conducted | Mode 2 : Keeping TX |
| Emission | |



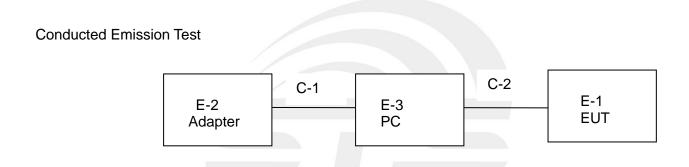
2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

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

Radiated Spurious Emission Test



NOTE: New battery is used during all test





2.4 DESCRIPTION OF SUPPORT UNITS

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

| Item | Equipment | Mfr/Brand | Model/Type No. | Serial No. | Note |
|------|-----------------|-----------|----------------|------------|------|
| E-1 | Handheld Gimbal | MOZA | AIR | N/A | EUT |
| E-2 | Adapter | N/A | PA-1650-86 | N/A | N/A |
| E-3 | PC | HP | 500-320cx | N/A | N/A |
| | | | | | |

| Item | Shielded Type | Ferrite Core | Length | Note |
|------|--------------------------------|--------------|--------|------|
| C-1 | Cable shielded line (Charging) | NO | 100cm | N/A |
| C-2 | USB Connecting line | NO | 110cm | N/A |
| | | | | |
| | | | | |
| | | | | |

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in <code>"Length_"</code> column.



2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation Test equipment

| rtadiation root oq | Tradiction root oddipmont | | | | | | |
|-----------------------|---------------------------|---------------------|-------------------|------------------|------------------|--|--|
| Kind of Equipment | Manufacturer | Type No. | Serial No. | Last calibration | Calibrated until | | |
| Spectrum Analyzer | Agilent | E4407B | MY50140340 | 2016.10.23 | 2017.10.22 | | |
| Test Receiver | R&S | ESCI | 101427 | 2016.10.23 | 2017.10.22 | | |
| Bilog Antenna | TESEQ | CBL6111D | 34678 | 2014.11.24 | 2017.11.23 | | |
| Horn Antenna | Schwarzbeck | BBHA 9120D(1201) | 9120D-1343 | 2015.03.05 | 2018.03.04 | | |
| Loop Antenna | EMCO | 6502 | 9003-2485 | 2016.03.06 | 2019.03.05 | | |
| 50Ω Coaxial Switch | Anritsu | MP59B | 6200264416 | 2016.10.23 | 2017.10.22 | | |
| PreAmplifier | Agilent | 8449B | 60538 | 2016.10.23 | 2017.10.22 | | |
| USB RF power sensor | DARE | RPR3006W | 15I00041SNO0 3 | 2016.10.23 | 2017.10.22 | | |
| Semi-anechoic chamber | Changling | 966 | N/A | 2016.10.23 | 2017.10.22 | | |

Conduction Test equipment

| Kind of Equipment | Manufacturer | Type No. | Serial No. | Last calibration | Calibrated until |
|-------------------|--------------|----------|------------|------------------|------------------|
| EMI Test Receiver | R&S | ESPI | 102086 | 2016.10.23 | 2017.10.22 |
| LISN | R&S | ENV216 | 101242 | 2016.10.23 | 2017.10.22 |
| LISN | EMCO | 3810/2NM | 000-23625 | 2016.10.23 | 2017.10.22 |
| Shielding Room | Changling | 854 | N/A | 2016.10.23 | 2017.10.22 |



3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION LIMITS

Operating frequency band. In case the emission fall within the restricted band specified on Part 15.249 limit in the table below has to be followed.

| | Class B | Standard | |
|-----------------|------------|-----------|----------|
| FREQUENCY (MHz) | Quasi-peak | Average | Standard |
| 0.15 -0.5 | 66 - 56 * | 56 - 46 * | CISPR |
| 0.50 -5.0 | 56.00 | 46.00 | CISPR |
| 5.0 -30.0 | 60.00 | 50.00 | CISPR |

| 0.15 -0.5 | 66 - 56 * | 56 - 46 * | FCC |
|-----------|-----------|-----------|-----|
| 0.50 -5.0 | 56.00 | 46.00 | FCC |
| 5.0 -30.0 | 60.00 | 50.00 | FCC |

Note:

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

The following table is the setting of the receiver

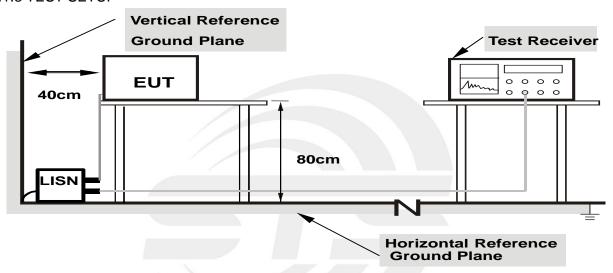
| Receiver Parameters | Setting |
|---------------------|----------|
| Attenuation | 10 dB |
| Start Frequency | 0.15 MHz |
| Stop Frequency | 30 MHz |
| IF Bandwidth | 9 kHz |



3.1.2 TEST PROCEDURE

- a. The EUT was 0.8 meters from the horizontal ground plane and 0.4 meters from the vertical 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.
- b. 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.
- c. 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.
- d LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

3.1.3 TEST SETUP



Note: 1.Support units were connected to second LISN.

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

3.1.4 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.



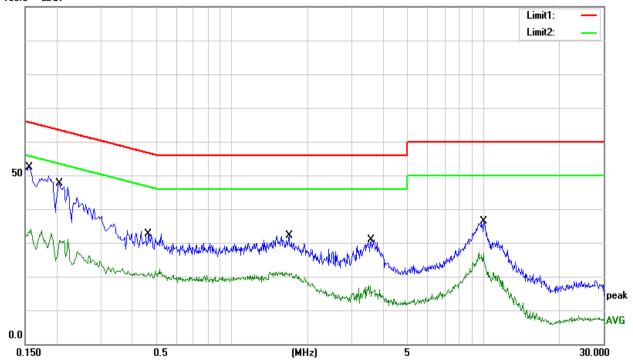
3.1.5 TEST RESULTS

| Temperature: | 26 ℃ | Relative Humidity: | 54% |
|---------------|--------------|--------------------|---------|
| Pressure: | 1010hPa | Phase: | L |
| Test Voltage: | AC 120V/60Hz | Test Mode: | Model 2 |

| Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|-----------|---------|------------|--------|--------|--------|--------|
| (MHz) | (dBuV) | Factor(dB) | (dBuV) | (dBuV) | (dB) | Remark |
| 0.1556 | 43.26 | 9.23 | 52.49 | 65.70 | -13.21 | QP |
| 0.1556 | 24.79 | 9.23 | 34.02 | 55.70 | -21.68 | AVG |
| 0.2060 | 38.39 | 9.22 | 47.61 | 63.37 | -15.76 | QP |
| 0.2060 | 21.18 | 9.22 | 30.40 | 53.37 | -22.97 | AVG |
| 0.4660 | 23.44 | 9.24 | 32.68 | 56.58 | -23.90 | QP |
| 0.4660 | 11.67 | 9.24 | 20.91 | 46.58 | -25.67 | AVG |
| 1.6820 | 22.88 | 9.22 | 32.10 | 56.00 | -23.90 | QP |
| 1.6820 | 10.80 | 9.22 | 20.02 | 46.00 | -25.98 | AVG |
| 3.5740 | 21.67 | 9.26 | 30.93 | 56.00 | -25.07 | QP |
| 3.5740 | 5.66 | 9.26 | 14.92 | 46.00 | -31.08 | AVG |
| 10.0300 | 26.82 | 9.50 | 36.32 | 60.00 | -23.68 | QP |
| 10.0300 | 13.66 | 9.50 | 23.16 | 50.00 | -26.84 | AVG |

Remark:

- 1. All readings are Quasi-Peak and Average values.
- 2. Margin = Result (Result = Reading + Factor)-Limit 100.0 dBuV



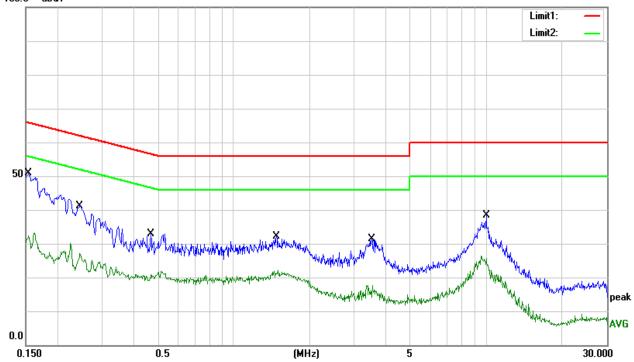


| Temperature: | 26 ℃ | Relative Humidity: | 54% |
|---------------|--------------|--------------------|---------|
| Pressure: | 1010hPa | Phase: | N |
| Test Voltage: | AC 120V/60Hz | Test Mode: | Model 2 |

| Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|-----------|---------|------------|--------|--------|--------|--------|
| (MHz) | (dBuV) | Factor(dB) | (dBuV) | (dBuV) | (dB) | Remark |
| 0.1540 | 41.74 | 9.23 | 50.97 | 65.78 | -14.81 | QP |
| 0.1540 | 22.36 | 9.23 | 31.59 | 55.78 | -24.19 | AVG |
| 0.2460 | 31.99 | 9.18 | 41.17 | 61.89 | -20.72 | QP |
| 0.2460 | 18.01 | 9.18 | 27.19 | 51.89 | -24.70 | AVG |
| 0.4700 | 23.73 | 9.23 | 32.96 | 56.51 | -23.55 | QP |
| 0.4700 | 10.99 | 9.23 | 20.22 | 46.51 | -26.29 | AVG |
| 1.4780 | 22.85 | 9.20 | 32.05 | 56.00 | -23.95 | QP |
| 1.4780 | 12.52 | 9.20 | 21.72 | 46.00 | -24.28 | AVG |
| 3.5260 | 22.19 | 9.26 | 31.45 | 56.00 | -24.55 | QP |
| 3.5260 | 6.58 | 9.26 | 15.84 | 46.00 | -30.16 | AVG |
| 10.0180 | 28.82 | 9.50 | 38.32 | 60.00 | -21.68 | QP |
| 10.0180 | 10.04 | 9.50 | 19.54 | 50.00 | -30.46 | AVG |

Remark:

- All readings are Quasi-Peak and Average values.
 Margin = Result (Result = Reading + Factor)-Limit 100.0 dBuV





3.2 RADIATED EMISSION MEASUREMENT

3.2.1 RADIATED EMISSION LIMITS

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on Part 15.249 and the Part 15.209(a) limit in the table below has to be followed.

Standard FCC 15.209

| Frequencies | Field Strength | Measurement Distance |
|-------------|----------------------------|----------------------|
| (MHz) | (micorvolts/meter) | (meters) |
| 0.009~0.490 | 2400/F(KHz) | 300 |
| 0.490~1.705 | 24000/F(KHz) | 30 |
| 1.705~30.0 | 30 | 30 |
| 30~88 | 100 | 3 |
| 88~216 | 150 | 3 |
| 216~960 | 200 | 3 |
| 960~1000 | 500 | 3 |
| Above 1000 | Other:74.0 dB(µV)/m (Peak) | 3 |
| | 54.0 dB(μV)/m (Average) | |

Standard FCC 15.249

| Frequency of Emission (MHz) | Field Strength of fundamental (millivolts /meter) | Field Strength of Harmonics (microvolts/meter) |
|-----------------------------|---|--|
| 900~928 | 50 | 500 |
| 2400~2483.5 | 50 | 500 |
| 5725~5875 | 50 | 500 |
| 24000~242500 | 250 | 2500 |

Notes:

(1) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

| Spectrum Parameter | Setting |
|----------------------------------|-----------------------|
| Detector | Peak/AV |
| Attenuation | Auto |
| Start Frequency | 1000 MHz |
| Stop Frequency | 10th carrier harmonic |
| RB (emission in restricted band) | >20BW |
| VB (emission in restricted band) | =3xRB |



| Receiver Parameter | Setting |
|------------------------|--------------------------------------|
| Attenuation | Auto |
| | 9kHz~90kHz / RB 200Hz for PK & AV |
| | 90kHz~110kHz / RB 200Hz for QP |
| Start ~ Stop Frequency | 110kHz~490kHz / RB 200Hz for PK & AV |
| | 490kHz~30MHz / RB 9kHz for QP |
| | 30MHz~1000MHz / RB 120kHz for QP |

3.2.2 TEST PROCEDURE

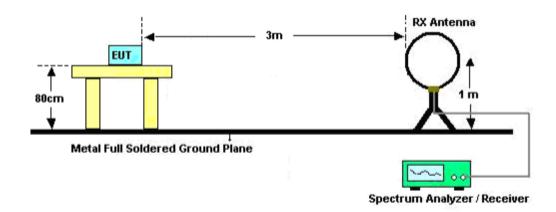
- a. The measuring distance of 3m shall be used for measurements. The EUT was placed on the top of arotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation(Below 1GHz)
- b. The measuring distance of 3m shall used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation(Above 1GHz)
- ^{C.} The height of the test antenna shall vary between 1m to 4m.Both horizontal and vertical polarization Of the antenna are set to make the measurement.
- d. The initial step in collecting radiated emission data is a receive peak detector mode.
 Pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- e. All readings are peak unless otherwise stated QP in column of Note. Peak denoted that the Peak reading compliance with the QP limits and then QP Mode measurement didn't perform (Below 1GHz)
- f. All readings are Peak mode value unless otherwise stated AVG in column of Note. If the Peak mode measured value compliance with the Peak limits and lower than AVG Limits, the EUT shall be deemed to meet Peak & AVG limits and then only Peak mode was measured, but AVG mode didn't perform.(Above 1GHz)
- 9. For the actual test configuration, please refer to the related Item –EUT Test Photos. Note: Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported

3.2.3 DEVIATION FROM TEST STANDARD No deviation

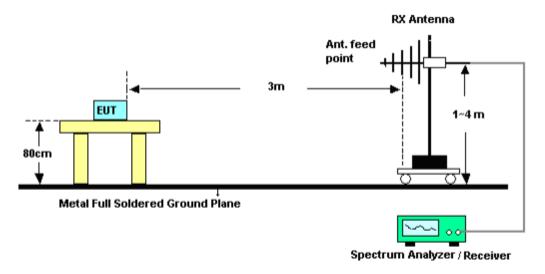


3.2.4 TEST SETUP

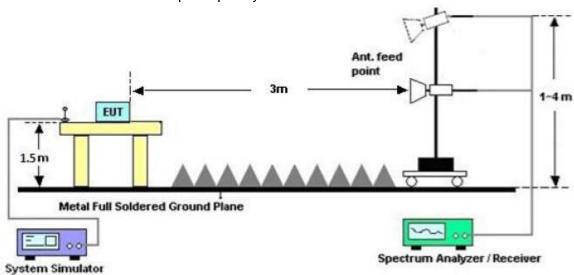
(A) Radiated Emission Test-Up Frequency Below 30MHz



(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



(C) Radiated Emission Test-Up Frequency Above 1GHz





3.2.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

Below 30 MHz

| Temperature: | 26 ℃ | Relative Humidity: | 60% |
|---------------|-------------|--------------------|-----|
| Pressure: | 1010 hPa | Polarization: | |
| Test Voltage: | DC 3.7V | | |
| Test Mode: | TX Mode | | |

| Freq. | Reading | Limit | Margin | State |
|-------|----------|----------|--------|-------|
| (MHz) | (dBuV/m) | (dBuV/m) | (dB) | P/F |
| | | | | PASS |
| | | | | PASS |

NOTE:

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

Distance extrapolation factor =40 log (specific distance/test distance)(dB);

Limit line = specific limits(dBuv) + distance extrapolation factor.



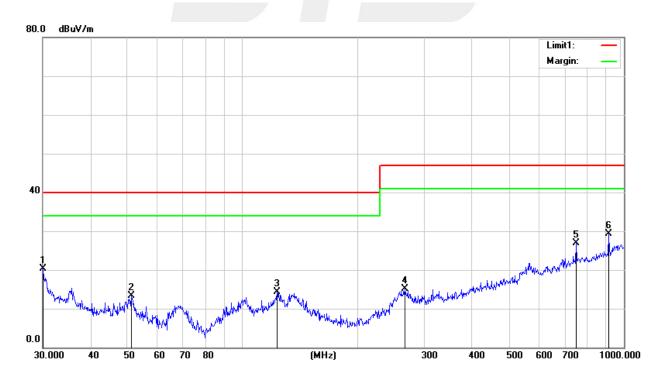
Between 30MHz - 1000 MHz Radiation Spurious

| Temperature: | 26 ℃ | Relative Humidity: | 60% |
|---------------|---------|--------------------|------------|
| Pressure: | 1010hPa | Phase: | Horizontal |
| Test Voltage: | DC 3.7V | Test Mode: | Mode 1 |

| Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|-----------|---------|--------------|----------|----------|--------|--------|
| (MHz) | (dBuV) | Factor(dB/m) | (dBuV/m) | (dBuV/m) | (dB) | |
| 30.1054 | 31.49 | -11.24 | 20.25 | 40.00 | -19.75 | QP |
| 51.3005 | 35.22 | -21.85 | 13.37 | 40.00 | -26.63 | QP |
| 123.2655 | 31.96 | -17.65 | 14.31 | 40.00 | -25.69 | QP |
| 266.6090 | 30.48 | -15.33 | 15.15 | 47.00 | -31.85 | QP |
| 750.1082 | 30.48 | -3.56 | 26.92 | 47.00 | -20.08 | QP |
| 912.8620 | 31.11 | -1.82 | 29.29 | 47.00 | -17.71 | QP |

Remark:

- 1. All readings are Quasi-Peak.
- 2. Margin = Result (Result = Reading + Factor)-Limit





| Temperature: | 26 ℃ | Relative Humidity: | 60% |
|---------------|---------|--------------------|----------|
| Pressure: | 1010hPa | Phase: | Vertical |
| Test Voltage: | DC 3.7V | Test Mode: | Mode 1 |

| Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|-----------|---------|--------------|----------|----------|--------|--------|
| (MHz) | (dBuV) | Factor(dB/m) | (dBuV/m) | (dBuV/m) | (dB) | |
| 40.5591 | 36.39 | -16.62 | 19.77 | 40.00 | -20.23 | QP |
| 71.0803 | 52.39 | -23.94 | 28.45 | 40.00 | -11.55 | QP |
| 124.1330 | 47.55 | -17.64 | 29.91 | 40.00 | -10.09 | QP |
| 144.3348 | 48.12 | -17.72 | 30.40 | 40.00 | -9.60 | QP |
| 261.9753 | 37.49 | -15.14 | 22.35 | 47.00 | -24.65 | QP |
| 909.6666 | 29.84 | -1.93 | 27.91 | 47.00 | -19.09 | QP |

Remark:

- 1. All readings are Quasi-Peak.
- 2. Margin = Result (Result = Reading + Factor)-Limit





Fundamental frequency:

PΚ

| | Reading | Amplifier | Lann | Antenna | Fastar(dD) | Result | Limit | Margin(dD) | |
|-----------|----------|-----------|------|---------|------------|----------|----------|------------|--------------|
| Frequency | (dBµV/m) | Ampliner | Loss | Factor | Factor(dB) | (dBµV/m) | (dBµV/m) | Margin(dB) | Polarization |
| (MHz) | PEAK | (dB) | (dB) | (dB/m) | Corr. | PEAK | PEAK | PEAK | |
| 2440 | 87.172 | 44.40 | 6.04 | 27.63 | -10.73 | 76.45 | 114 | -37.55 | Vertical |
| 2440 | 85.258 | 44.40 | 6.04 | 27.63 | -10.73 | 74.53 | 114 | -39.47 | Horizontal |

 AV

| | Reading | Amplifier | Loop | Antenna Result Limit | | Morgin(dD) | | | |
|-----------|----------|-----------|------|----------------------|--------|------------|----------|------------|--------------|
| Frequency | (dBµV/m) | Ampliner | Loss | Factor | ` | (dBµV/m) | (dBµV/m) | Margin(dB) | Polarization |
| (MHz) | AV | (dB) | (dB) | (dB/m) | Corr. | AV | AV | AV | |
| 2440 | 67.862 | 44.40 | 6.04 | 27.63 | -10.73 | 57.14 | 94 | -36.86 | Vertical |
| 2440 | 65.183 | 44.40 | 6.04 | 27.63 | -10.73 | 54.46 | 94 | -39.54 | Horizontal |

Note: RBW>20DB BW; VBW=3xRBW BW



Above 1G Radiation Spurious

| Frequency | Reading | Amplifier | Loss | Antenna | Corrected | Emission | Limits | Margin | Detector | |
|-----------|---------|-----------|-------|---------|-----------|----------|----------|--------|----------|------------|
| | | | | Factor | Factor | Level | | | | Comment |
| (MHz) | (dBµV) | (dB) | (dB) | (dB/m) | (dB) | (dBµV/m) | (dBµV/m) | (dB) | Туре | |
| | | | | 2440 N | ЛHz | | | | | |
| 3264.65 | 48.44 | 44.70 | 6.70 | 28.20 | -9.80 | 38.64 | 74.00 | -35.36 | PK | Vertical |
| 3264.65 | 38.51 | 44.70 | 6.70 | 28.20 | -9.80 | 28.71 | 54.00 | -25.29 | AV | Vertical |
| 3264.57 | 47.79 | 44.70 | 6.70 | 28.20 | -9.80 | 37.99 | 74.00 | -36.01 | PK | Horizontal |
| 3264.57 | 38.12 | 44.70 | 6.70 | 28.20 | -9.80 | 28.32 | 54.00 | -25.68 | AV | Horizontal |
| 4880.51 | 59.32 | 44.20 | 9.04 | 31.60 | -3.56 | 55.76 | 74.00 | -18.24 | PK | Vertical |
| 4880.51 | 38.58 | 44.20 | 9.04 | 31.60 | -3.56 | 35.02 | 54.00 | -18.98 | AV | Vertical |
| 4880.35 | 59.00 | 44.20 | 9.04 | 31.60 | -3.56 | 55.44 | 74.00 | -18.56 | PK | Horizontal |
| 4880.35 | 38.22 | 44.20 | 9.04 | 31.60 | -3.56 | 34.66 | 54.00 | -19.34 | AV | Horizontal |
| 5359.60 | 45.74 | 44.20 | 9.86 | 32.00 | -2.34 | 43.40 | 74.00 | -30.60 | PK | Vertical |
| 5359.60 | 37.04 | 44.20 | 9.86 | 32.00 | -2.34 | 34.70 | 54.00 | -19.30 | AV | Vertical |
| 5359.82 | 45.41 | 44.20 | 9.86 | 32.00 | -2.34 | 43.07 | 74.00 | -30.93 | PK | Horizontal |
| 5359.82 | 37.54 | 44.20 | 9.86 | 32.00 | -2.34 | 35.20 | 54.00 | -18.80 | AV | Horizontal |
| 7320.80 | 50.95 | 43.50 | 11.40 | 35.50 | 3.40 | 54.35 | 74.00 | -19.65 | PK | Vertical |
| 7320.80 | 33.31 | 43.50 | 11.40 | 35.50 | 3.40 | 36.71 | 54.00 | -17.29 | AV | Vertical |
| 7320.68 | 51.53 | 43.50 | 11.40 | 35.50 | 3.40 | 54.93 | 74.00 | -19.07 | PK | Horizontal |
| 7320.68 | 33.37 | 43.50 | 11.40 | 35.50 | 3.40 | 36.77 | 54.00 | -17.23 | AV | Horizontal |
| 9759.91 | 41.11 | 43.60 | 14.30 | 39.50 | 10.20 | 51.31 | 74.00 | -22.69 | PK | Vertical |
| 9759.91 | 30.09 | 43.60 | 14.30 | 39.50 | 10.20 | 40.29 | 54.00 | -13.71 | AV | Vertical |
| 9760.04 | 40.56 | 43.60 | 14.30 | 39.50 | 10.20 | 50.76 | 74.00 | -23.24 | PK | Horizontal |
| 9760.04 | 29.78 | 43.60 | 14.30 | 39.50 | 10.20 | 39.98 | 54.00 | -14.02 | AV | Horizontal |
| 13299.28 | 40.21 | 42.60 | 15.90 | 38.90 | 12.20 | 52.41 | 74.00 | -21.59 | PK | Vertical |
| 13299.28 | 28.54 | 42.60 | 15.90 | 38.90 | 12.20 | 40.74 | 54.00 | -13.26 | AV | Vertical |
| 13299.46 | 40.86 | 42.60 | 15.90 | 38.90 | 12.20 | 53.06 | 74.00 | -20.94 | Pk | Horizontal |
| 13299.46 | 29.73 | 42.60 | 15.90 | 38.90 | 12.20 | 41.93 | 54.00 | -12.07 | AV | Horizontal |
| 15999.72 | 39.81 | 42.70 | 18.00 | 37.10 | 12.40 | 52.21 | 74.00 | -21.79 | PK | Vertical |
| 15999.72 | 28.64 | 42.70 | 18.00 | 37.10 | 12.40 | 41.04 | 54.00 | -12.96 | AV | Vertical |
| 15999.63 | 40.42 | 42.70 | 18.00 | 37.10 | 12.40 | 52.82 | 74.00 | -21.18 | PK | Horizontal |
| 15999.63 | 30.12 | 42.70 | 18.00 | 37.10 | 12.40 | 42.52 | 54.00 | -11.48 | AV | Horizontal |
| 17997.68 | 30.35 | 42.70 | 19.40 | 46.50 | 23.20 | 53.55 | 74.00 | -20.45 | PK | Vertical |
| 17997.68 | 18.84 | 42.70 | 19.40 | 46.50 | 23.20 | 42.04 | 54.00 | -11.96 | AV | Vertical |
| 17997.58 | 30.94 | 42.70 | 19.40 | 46.50 | 23.20 | 54.14 | 74.00 | -19.86 | PK | Horizontal |
| 17997.58 | 18.39 | 42.70 | 19.40 | 46.50 | 23.20 | 41.59 | 54.00 | -12.41 | AV | Horizontal |



4. BANDWIDTH TEST

4.1 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting : RBW= 30KHz, VBW≧RBW, Sweep time = Auto.

4.2 TEST SETUP



4.3 EUT OPERATION CONDITIONS

TX mode.

4.4 TEST RESULTS

| Temperature: | 25 ℃ | Relative Humidity: | 50% |
|--------------|----------|--------------------|---------|
| Pressure: | 1012 hPa | Test Voltage: | DC 3.7V |

| Test Channel | Frequency | 20dB Bandwidth | 99% Bandwidth |
|---------------|-----------|----------------|---------------|
| rest orialine | (MHz) | (MHz) | (MHz) |
| CH01 | 2440 | 1.299 | 2.7299 |

Test Channel:2440MHz





5. ANTENNA REQUIREMENT

5.1 STANDARD REQUIREMENT

According to the FCC Part 15 Paragraph 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.

5.2 EUT ANTENNA

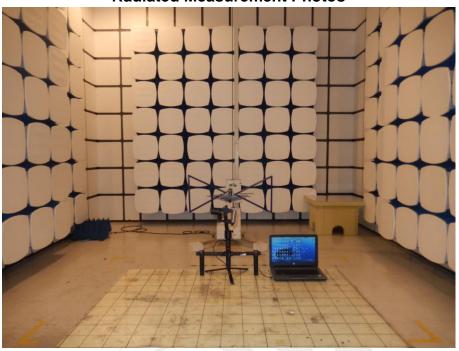
The EUT antenna is PCB Antenna. It conforms to the standard requirements.





APPENDIX- PHOTOS OF TEST SETUP

Radiated Measurement Photos





****END OF THE REPORT***