

APPLICATION CERTIFICATION FCC Part 15C  
On Behalf of  
ZEGO ELECTRONIC COMPANY LIMITED

Foldable drone  
Model No.: 66117

FCC ID: 2ACS629TX

Prepared for : ZEGO ELECTRONIC COMPANY LIMITED  
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ROAD, KOWLOON, HONG KONG

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Report No. : ATE20181607  
Date of Test : Aug. 31-Sep. 12, 2018  
Date of Report : Sep. 14, 2018

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## Test Report Certification

Applicant : ZEGO ELECTRONIC COMPANY LIMITED  
Address : ROOM 703, KOWLOON BUILDING, 555 NATHAN ROAD,  
KOWLOON, HONG KONG

Manufacturer : Shenzhen Yangri Electronic Company Limited  
Address : The Third Industrial Area, Luotian community, Songgang town,  
Shenzhen City, China

Product : Foldable drone

Model No. : 66117

Measurement Procedure Used:

**FCC Rules and Regulations Part 15 Subpart C Section 15.247**  
**ANSI C63.10: 2013**

The EUT was tested according to DTS test procedure of August 24, 2018 KDB558074 D01 DTS Meas Guidance v05 for compliance to FCC 47CFR 15.247 requirements

The device described above is tested by Shenzhen Accurate Technology Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C Section 15.247 limits. The measurement results are contained in this test report and Shenzhen Accurate Technology Co., Ltd. is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Shenzhen Accurate Technology Co., Ltd.

Date of Test : Aug. 31-Sep. 12, 2018  
Date of Report : Sep. 14, 2018

Prepared by :



(St Yang Engineer)

Approved & Authorized Signer :

(Sean Liu, Manager)

## 1. GENERAL INFORMATION

### 1.1. Description of Device (EUT)

EUT	:	Foldable drone
Model Number	:	66117
Frequency Range	:	802.11b/g/n(20MHz): 2412-2462MHz
Number of Channels	:	802.11b/g/n (20MHz):11
Antenna Gain	:	2dBi
Type of Antenna	:	Wire antenna
Data Rate	:	802.11b: 11, 5.5, 2, 1 Mbps 802.11g: 54, 48, 36, 24, 18, 12, 9, 6 Mbps 802.11n: 72.2~6.5Mbps
Modulation Type	:	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
Power Supply	:	DC 3.7V from Li-ion Battery

### 1.2. Carrier Frequency of Channels

802.11b, 802.11g, 802.11n (20MHz)

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

### 1.3. Accessory and Auxiliary Equipment

PC	:	Manufacturer: LENOVO
(provided by laboratory)	:	M/N: 4290-RT8
	:	S/N: R9-FW93G 11/08

#### 1.4. Description of Test Facility

EMC Lab	:	Recognition of accreditation by Federal Communications Commission (FCC) The Designation Number is CN1189 The Registration Number is 708358  Listed by Innovation, Science and Economic Development Canada (ISED) The Registration Number is 5077A-2  Accredited by China National Accreditation Service for Conformity Assessment (CNAS) The Registration Number is CNAS L3193  Accredited by American Association for Laboratory Accreditation (A2LA) The Certificate Number is 4297.01
Name of Firm	:	Shenzhen Accurate Technology Co., Ltd.
Site Location	:	1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China

#### 1.5. Measurement Uncertainty

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

## 2. MEASURING DEVICE AND TEST EQUIPMENT

**Table 1: List of Test and Measurement Equipment**

Kind of equipment	Manufacturer	Type	S/N	Calibrated dates	Calibrated until
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	Jan. 06, 2018	1 Year
EMI Test Receiver	Rohde&Schwarz	ESR	101817	Jan. 06, 2018	1 Year
Spectrum Analyzer	Rohde&Schwarz	FSV-40	101495	Jan. 06, 2018	1 Year
Pre-Amplifier	Rohde&Schwarz	CBLU1183540-01	3791	Jan. 06, 2018	1 Year
Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan. 06, 2018	1 Year
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan. 06, 2018	1 Year
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Jan. 06, 2018	1 Year
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	Jan. 06, 2018	1 Year
Open Switch and Control Unit	Rohde&Schwarz	OSP120 + OSP-B157	101244 + 100866	Jan. 06, 2018	1 Year
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 06, 2018	1 Year
Highpass Filter	Wainwright Instruments	WHKX3.6/18G-10SS	N/A	Jan. 06, 2018	1 Year
Band Reject Filter	Wainwright Instruments	WRCG2400/2485-2375 /2510-60/11SS	N/A	Jan. 06, 2018	1 Year
RF COAXIAL CABLE	SUHNER	N-5m(Frequency range:9KHz-26.5GHz)	NO.3	Jan. 06, 2018	1 Year
RF COAXIAL CABLE	SUHNER	N-5m(Frequency range:9KHz-26.5GHz)	NO.4	Jan. 06, 2018	1 Year
RF COAXIAL CABLE	SUHNER	N-1m(Frequency range:9KHz-26.5GHz)	NO.5	Jan. 06, 2018	1 Year
RF COAXIAL CABLE	SUHNER	N-1m(Frequency range:9KHz-26.5GHz)	NO.6	Jan. 06, 2018	1 Year
Temporary antenna connector	NTGS	14AE	N/A	Sep. 10, 2018	N/A

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

### 3. OPERATION OF EUT DURING TESTING

#### 3.1.Operating Mode

The mode is used: **1.802.11b Transmitting mode**

Low Channel: 2412MHz

Middle Channel: 2437MHz

High Channel: 2462MHz

#### **2.802.11g Transmitting mode**

Low Channel: 2412MHz

Middle Channel: 2437MHz

High Channel: 2462MHz

#### **3.802.11n (20MHz) Transmitting mode**

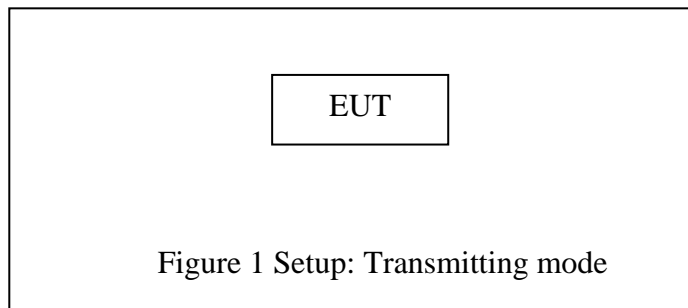
Low Channel: 2412MHz

Middle Channel: 2437MHz

High Channel: 2462MHz

Note: The WiFi has been tested under continuous transmission mode.

#### 3.2.Configuration and peripherals





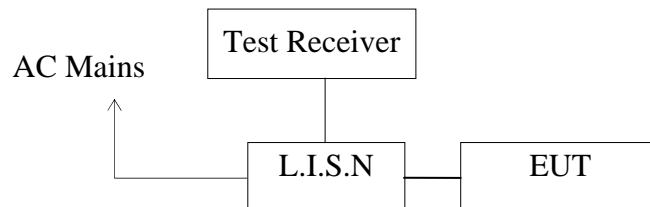
#### 4. TEST PROCEDURES AND RESULTS

FCC Rules	Description of Test	Result
Section 15.207	Power Line Conducted Emission	Compliant
Section 15.247(a)(2)	6dB Bandwidth Test	Compliant
ANSI C63.10: 2013 Section 6.9.3	99% occupied Bandwidth	Compliant
KDB558074 D01 DTS Meas Guidance v05	Duty cycle	Compliant
Section 15.247(b)(3)	Maximum Peak Output Power Test	Compliant
Section 15.247(e)	Power Spectral Density Test	Compliant
Section 15.247(d)	Band Edge Compliance Test	Compliant
Section 15.247(d) Section 15.209	Radiated Spurious Emission Test	Compliant
Section 15.203	Antenna Requirement	Compliant

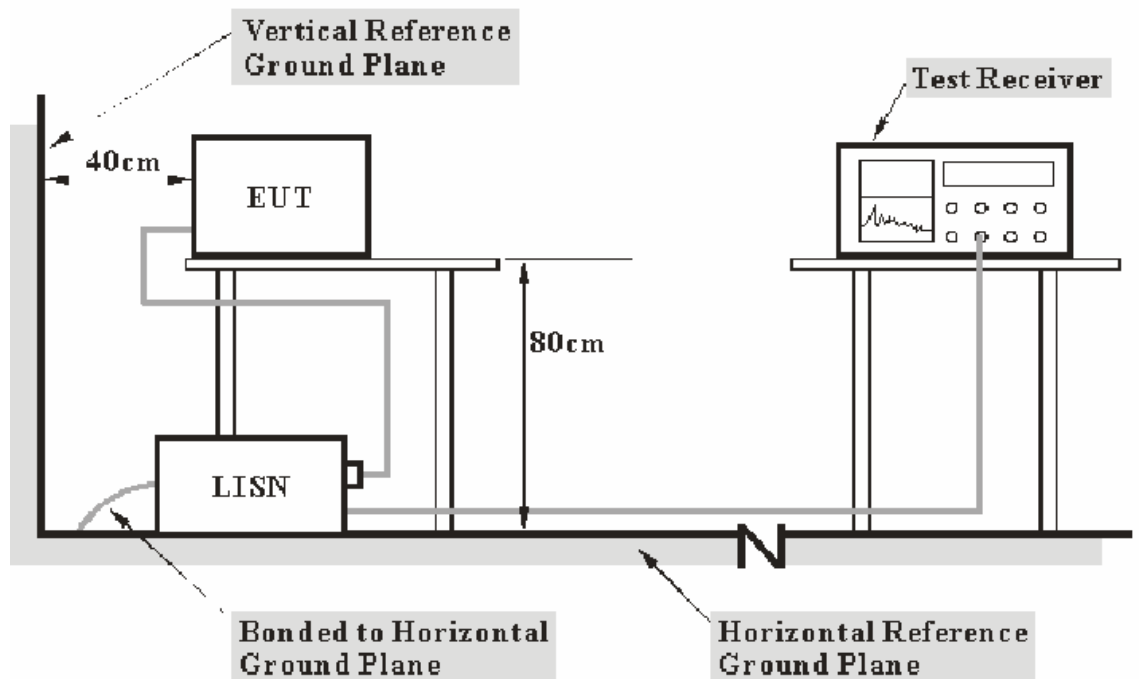
Note: The conducted emission measurement is for the charger part

## 5. POWER LINE CONDUCTED MEASUREMENT

### 5.1. Block Diagram of Test Setup



#### 5.1.1. Test System Setup



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

## 5.2.Power Line Conducted Emission Measurement Limits

Frequency (MHz)	Limit dB( $\mu$ V)	
	Quasi-peak Level	Average Level
0.15 - 0.50	66.0 – 56.0 *	56.0 – 46.0 *
0.50 - 5.00	56.0	46.0
5.00 - 30.00	60.0	50.0
NOTE1: The lower limit shall apply at the transition frequencies.		
NOTE2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.		

## 5.3.Configuration of EUT on Measurement

The equipments are installed on Power Line Conducted Emission Measurement to meet the commission requirement and operating regulations in a manner, which tends to maximize its emission characteristics in a normal application.

## 5.4.Operating Condition of EUT

5.4.1. Setup the EUT and simulator as shown as Section 5.1.

5.4.2. Turn on the power of all equipment.

5.4.3. Let the EUT work in test mode and measure it.

## 5.5.Test Procedure

The EUT is put on the plane 0.8 m high above the ground by insulating support and is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC lines are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10: 2013 on Conducted Emission Measurement.

The bandwidth of test receiver (R & S ESCS30) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

## 5.6.Data Sample

Frequency (MHz)	Transducer value (dB)	QuasiPeak Level (dBμV)	Average Level (dBμV)	QuasiPeak Limit (dBμV)	Average Limit (dBμV)	QuasiPeak Margin (dB)	Average Margin (dB)	Remark (Pass/Fail)
X.XX	10.5	51.1	34.2	56.0	46.0	4.9	11.8	Pass

Frequency(MHz) = Emission frequency in MHz

Transducer value(dB) = Insertion loss of LISN + Cable Loss

Level(dBμV) = Quasi-peak Reading/Average Reading + Transducer value

Limit (dBμV) = Limit stated in standard

Margin = Limit (dBμV) - Level (dBμV)

Calculation Formula:

Margin = Limit (dBμV) - Level (dBμV)

## 5.7.Power Line Conducted Emission Measurement Results

**PASS.**

The frequency range from 150kHz to 30MHz is checked.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.  
Emissions attenuated more than 20 dB below the permissible value are not reported.

All data was recorded in the Quasi-peak and average detection mode.

The spectral diagrams are attached as below.

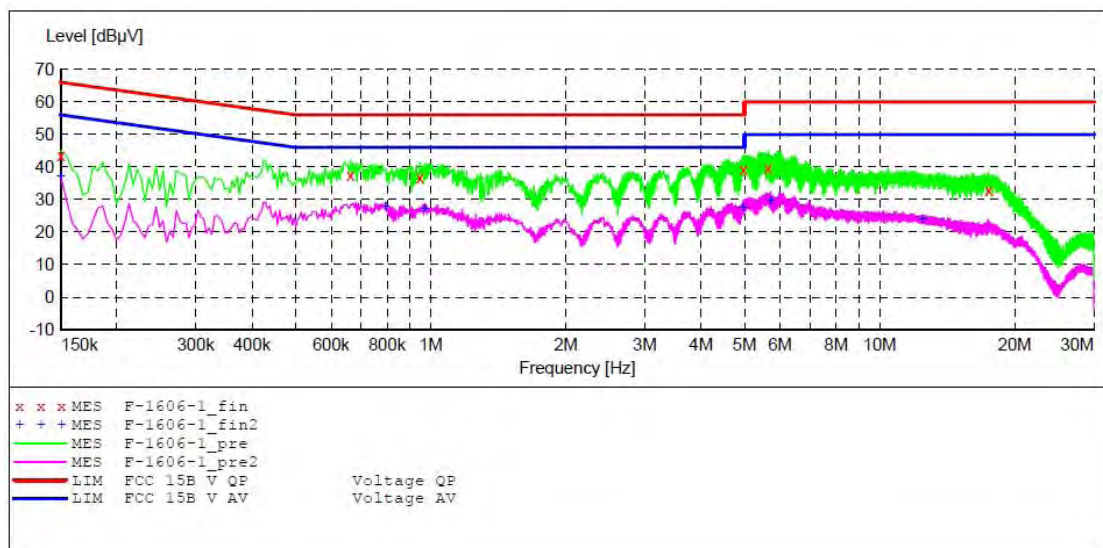
## ACCURATE TECHNOLOGY CO., LTD

### CONDUCTED EMISSION STANDARD FCC PART 15C

EUT: Foldable drone M/N:66117  
 Manufacturer: Yangri  
 Operating Condition: Charging  
 Test Site: 2#Shielding Room  
 Operator: Frank  
 Test Specification: L 120V/60Hz  
 Comment: Report NO.:ATE20181607  
 Start of Test: 2018-8-31 / 17:36:52

### SCAN TABLE: "V 150K-30MHz fin"

Short Description: SUB STD\_VTERM2 1.70  
 Start Stop Step Detector Meas. IF Transducer  
 Frequency Frequency Width Time Bandw.  
 150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008  
 Average



### MEASUREMENT RESULT: "F-1606-1\_fin"

2018-8-31 17:39

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.150000	43.50	10.8	66	22.5	QP	L1	GND
0.663000	37.60	11.1	56	18.4	QP	L1	GND
0.946500	36.70	11.1	56	19.3	QP	L1	GND
4.974000	39.20	11.4	56	16.8	QP	L1	GND
5.644500	39.50	11.5	60	20.5	QP	L1	GND
17.502000	32.90	11.7	60	27.1	QP	L1	GND

### MEASUREMENT RESULT: "F-1606-1\_fin2"

2018-8-31 17:39

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.150000	37.30	10.8	56	18.7	AV	L1	GND
0.793500	27.70	11.1	46	18.3	AV	L1	GND
0.969000	27.00	11.1	46	19.0	AV	L1	GND
4.965000	27.40	11.4	46	18.6	AV	L1	GND
5.712000	29.60	11.5	50	20.4	AV	L1	GND
12.489000	23.90	11.6	50	26.1	AV	L1	GND

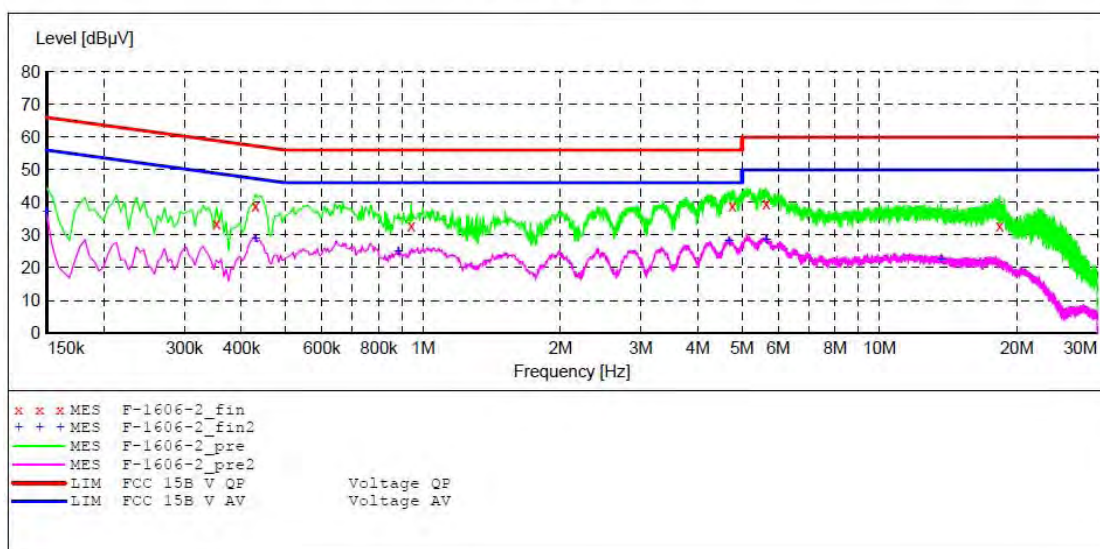
## ACCURATE TECHNOLOGY CO., LTD

### CONDUCTED EMISSION STANDARD FCC PART 15C

EUT: Foldable drone M/N:66117  
 Manufacturer: Yangri  
 Operating Condition: Charging  
 Test Site: 2#Shielding Room  
 Operator: Frank  
 Test Specification: N 120V/60Hz  
 Comment: Report NO.:ATE20181607  
 Start of Test: 2018-8-31 / 17:40:02

### SCAN TABLE: "V 150K-30MHz fin"

Short Description: \_SUB STD VTERM2 1.70  
 Start Stop Step Detector Meas. IF Transducer  
 Frequency Frequency Width Time Bandw.  
 150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008  
 Average



### MEASUREMENT RESULT: "F-1606-2\_fin"

2018-8-31 17:42

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.352500	33.70	10.9	59	25.2	QP	N	GND
0.429000	39.00	11.0	57	18.3	QP	N	GND
0.942000	33.00	11.1	56	23.0	QP	N	GND
4.762500	39.00	11.4	56	17.0	QP	N	GND
5.644500	39.70	11.5	60	20.3	QP	N	GND
18.343500	33.00	11.7	60	27.0	QP	N	GND

### MEASUREMENT RESULT: "F-1606-2\_fin2"

2018-8-31 17:42

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.150000	37.10	10.8	56	18.9	AV	N	GND
0.429000	28.80	11.0	47	18.5	AV	N	GND
0.883500	25.10	11.1	46	20.9	AV	N	GND
4.681500	28.10	11.4	46	17.9	AV	N	GND
5.644500	28.70	11.5	50	21.3	AV	N	GND
13.641000	22.40	11.6	50	27.6	AV	N	GND



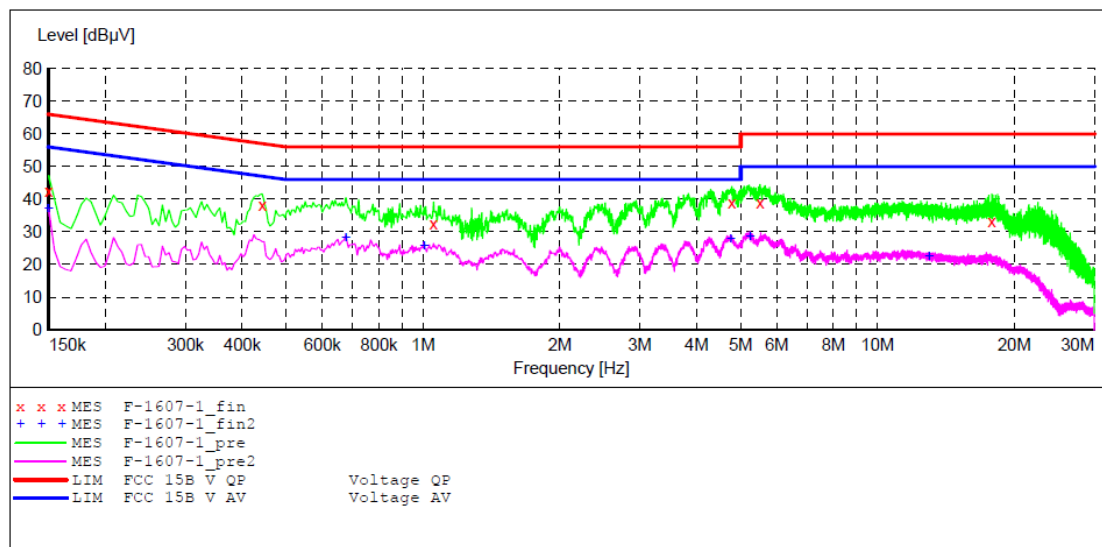
## ACCURATE TECHNOLOGY CO.,LTD

### CONDUCTED EMISSION STANDARD FCC PART 15C

EUT: Foldable drone M/N:66117  
 Manufacturer: Yangri  
 Operating Condition: Charging  
 Test Site: 2#Shielding Room  
 Operator: Frank  
 Test Specification: N 240V/60Hz  
 Comment: Report NO.:ATE20181607  
 Start of Test: 2018-8-31 / 17:43:15

### SCAN TABLE: "V 150K-30MHz fin"

Short Description: \_SUB\_STD\_VTERM2 1.70  
 Start Stop Step Detector Meas. IF Transducer  
 Frequency Frequency Width Time Bandw.  
 150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008  
 Average



### MEASUREMENT RESULT: "F-1607-1\_fin"

2018-8-31 17:46

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.150000	42.70	10.8	66	23.3	QP	N	GND
0.442500	38.20	11.0	57	18.8	QP	N	GND
1.054500	32.50	11.1	56	23.5	QP	N	GND
4.780500	38.90	11.4	56	17.1	QP	N	GND
5.514000	39.10	11.5	60	20.9	QP	N	GND
17.844000	33.30	11.7	60	26.7	QP	N	GND

### MEASUREMENT RESULT: "F-1607-1\_fin2"

2018-8-31 17:46

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.150000	37.00	10.8	56	19.0	AV	N	GND
0.676500	28.40	11.1	46	17.6	AV	N	GND
1.005000	25.70	11.1	46	20.3	AV	N	GND
4.753500	28.00	11.4	46	18.0	AV	N	GND
5.239500	28.60	11.4	50	21.4	AV	N	GND
12.984000	22.50	11.6	50	27.5	AV	N	GND

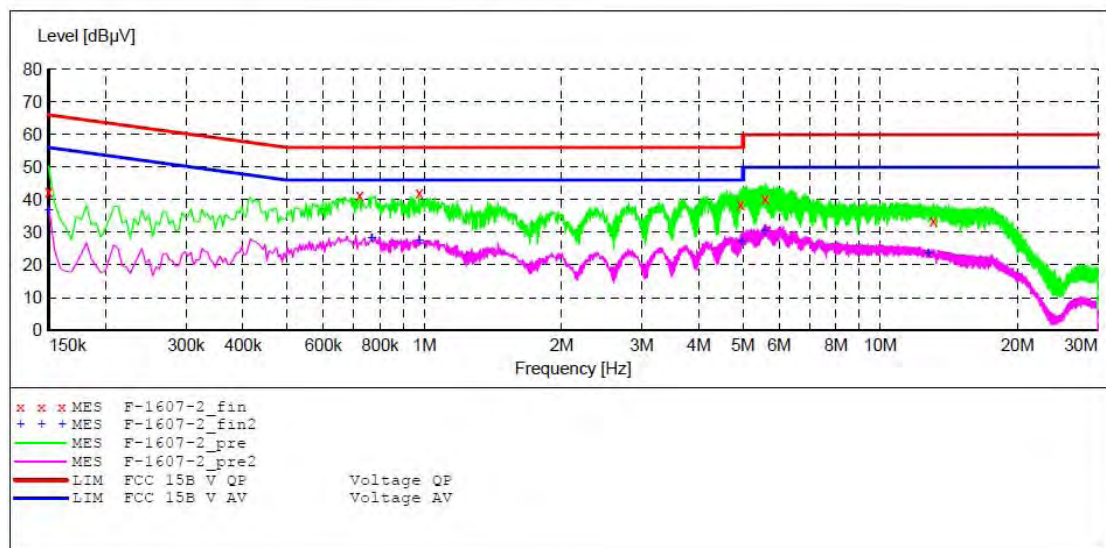
## ACCURATE TECHNOLOGY CO.,LTD

### CONDUCTED EMISSION STANDARD FCC PART 15C

EUT: Foldable drone M/N:66117  
 Manufacturer: Yangri  
 Operating Condition: Charging  
 Test Site: 2#Shielding Room  
 Operator: Frank  
 Test Specification: L 240V/60Hz  
 Comment: Report NO.:ATE20181607  
 Start of Test: 2018-8-31 / 17:46:33

### SCAN TABLE: "V 150K-30MHz fin"

Short Description: SUB STD VTERM2 1.70  
 Start Stop Step Detector Meas. IF Transducer  
 Frequency Frequency Width Time Bandw.  
 150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008  
 Average



### MEASUREMENT RESULT: "F-1607-2\_fin"

2018-8-31 17:49

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.150000	42.60	10.8	66	23.4	QP	L1	GND
0.721500	41.30	11.1	56	14.7	QP	L1	GND
0.973500	42.30	11.1	56	13.7	QP	L1	GND
4.942500	38.60	11.4	56	17.4	QP	L1	GND
5.590500	40.20	11.5	60	19.8	QP	L1	GND
13.069500	33.50	11.6	60	26.5	QP	L1	GND

### MEASUREMENT RESULT: "F-1607-2\_fin2"

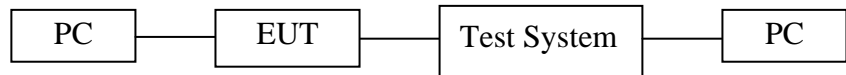
2018-8-31 17:49

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.150000	36.80	10.8	56	19.2	AV	L1	GND
0.766500	28.40	11.1	46	17.6	AV	L1	GND
0.973500	27.40	11.1	46	18.6	AV	L1	GND
4.965000	27.30	11.4	46	18.7	AV	L1	GND
5.572500	30.50	11.5	50	19.5	AV	L1	GND
12.754500	23.60	11.6	50	26.4	AV	L1	GND



## 6. 6DB BANDWIDTH MEASUREMENT

### 6.1. Block Diagram of Test Setup



### 6.2. The Requirement For Section 15.247(a)(2)

Section 15.247(a)(2): Systems using digital modulation techniques may operate in the 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

### 6.3. EUT Configuration on Measurement

The equipment are installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

### 6.4. Operating Condition of EUT

6.4.1. Setup the EUT and simulator as shown as Section 6.1.

6.4.2. Turn on the power of all equipment.

6.4.3. Let the EUT work in TX modes measure it. The transmit frequency are 2412-2462. We select 2412MHz, 2437MHz, 2462MHz TX frequency to transmit.

### 6.5. Test Procedure

1. Set resolution bandwidth (RBW) = 100 kHz.
2. Set the video bandwidth (VBW)  $\geq 3 \times$  RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

## 6.6.Test Result

The test was performed with 802.11b				
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Result
Low	2412	10.225	> 0.5MHz	PASS
Middle	2437	10.220	> 0.5MHz	PASS
High	2462	10.225	> 0.5MHz	PASS

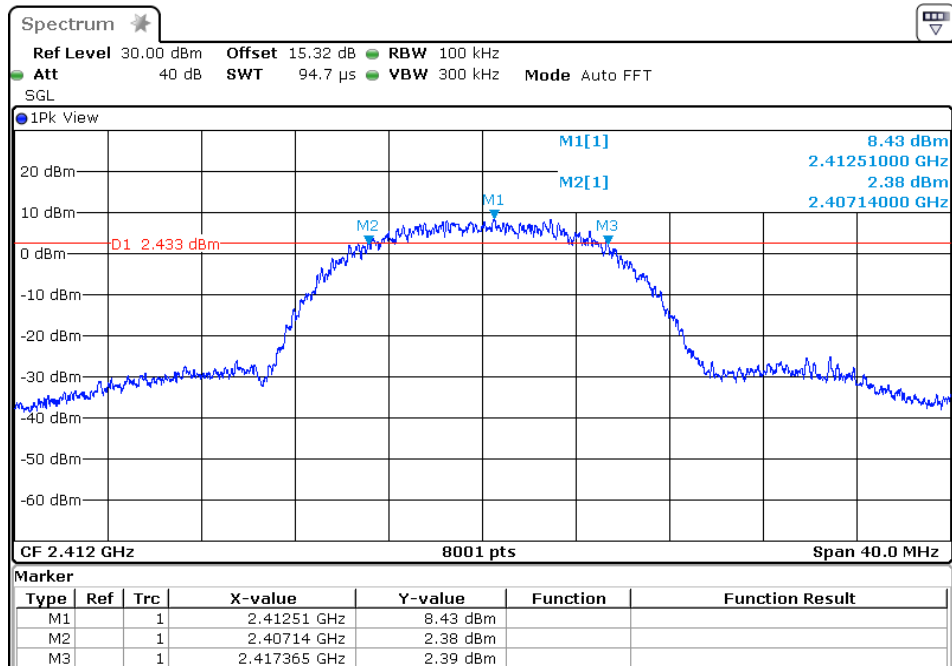
The test was performed with 802.11g				
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Result
Low	2412	16.455	> 0.5MHz	PASS
Middle	2437	16.490	> 0.5MHz	PASS
High	2462	16.450	> 0.5MHz	PASS

The test was performed with 802.11n (Bandwidth: 20 MHz)				
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Result
Low	2412	17.790	> 0.5MHz	PASS
Middle	2437	17.795	> 0.5MHz	PASS
High	2462	17.765	> 0.5MHz	PASS

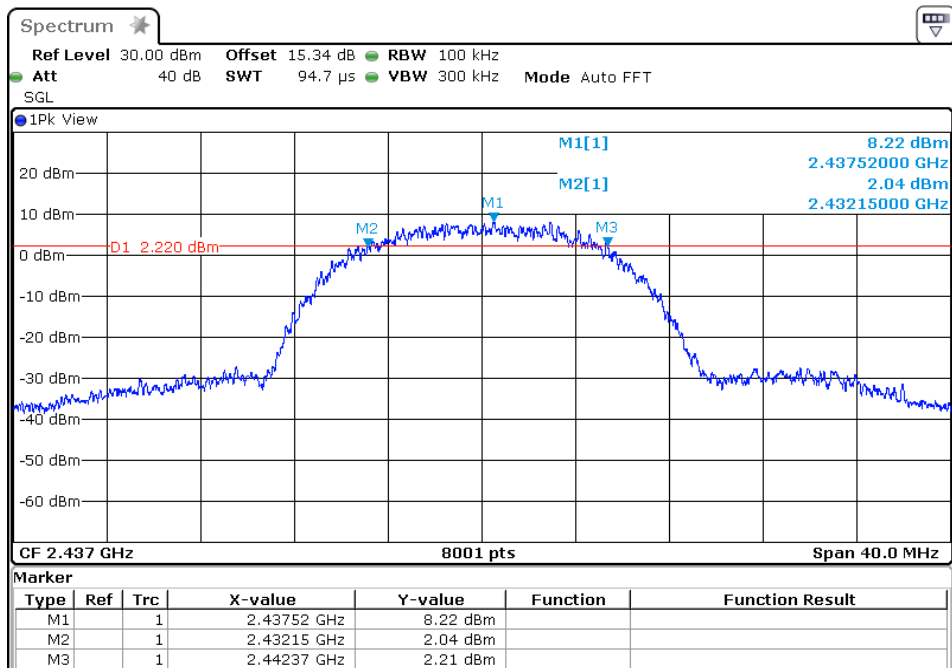
Note: We tested 802.11b/g/n mode the all data rate and recorded the worst case data for this channel to be 11Mbps for 802.11b mode and 54Mbps for 802.11g mode and MCS7 for 802.11n mode.

The spectrum analyzer plots are attached as below.

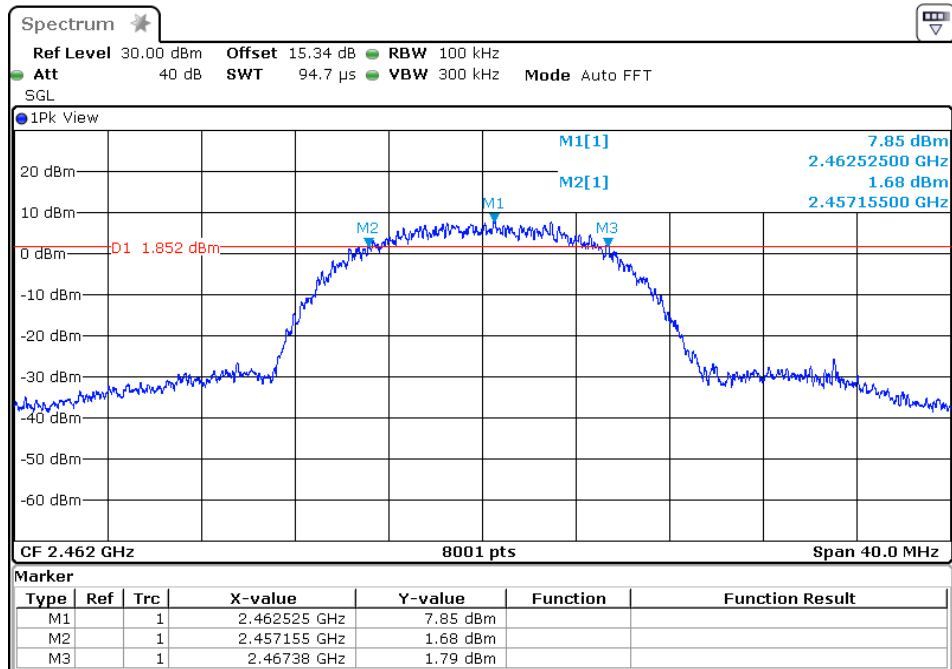
### 802.11b Channel Low 2412MHz



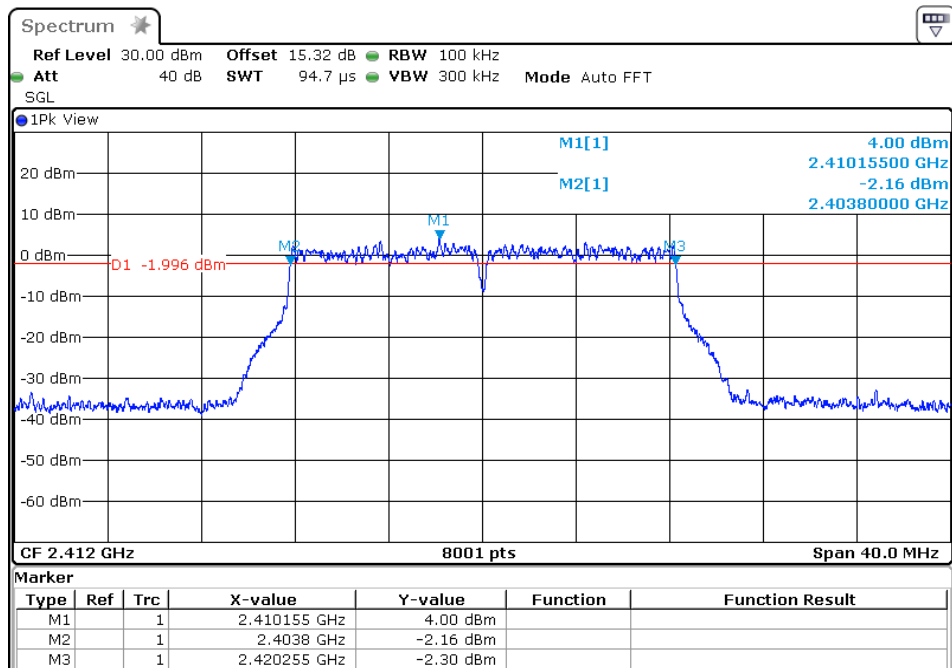
### 802.11b Channel Middle 2437MHz



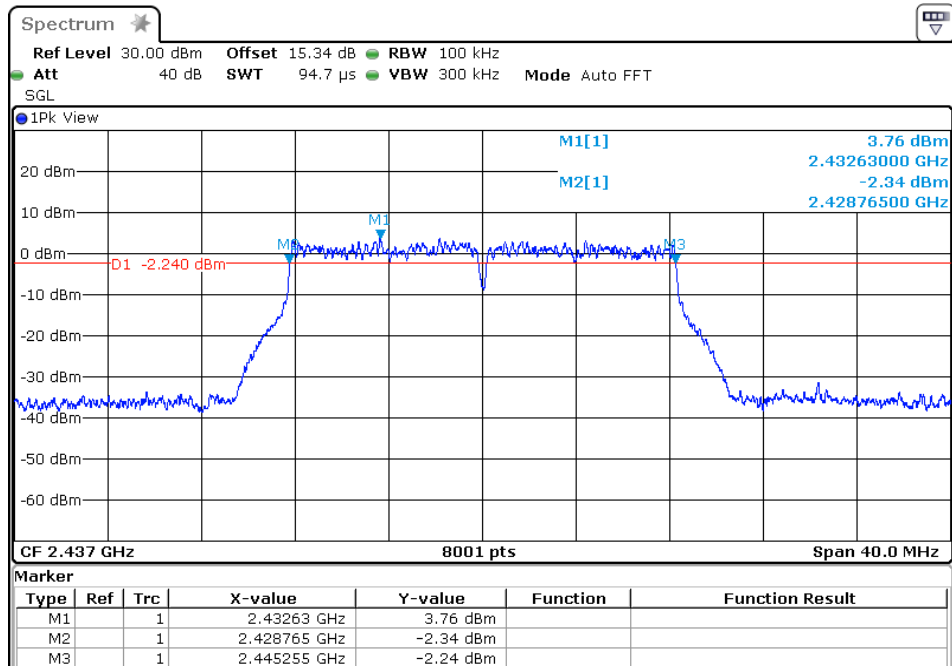
## 802.11b Channel High 2462MHz



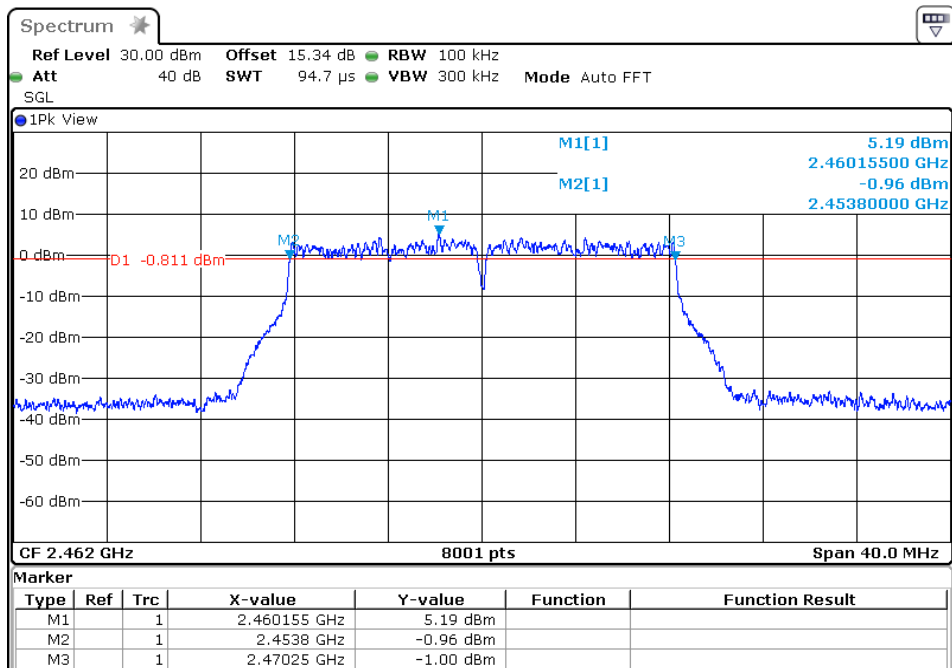
## 802.11g Channel Low 2412MHz



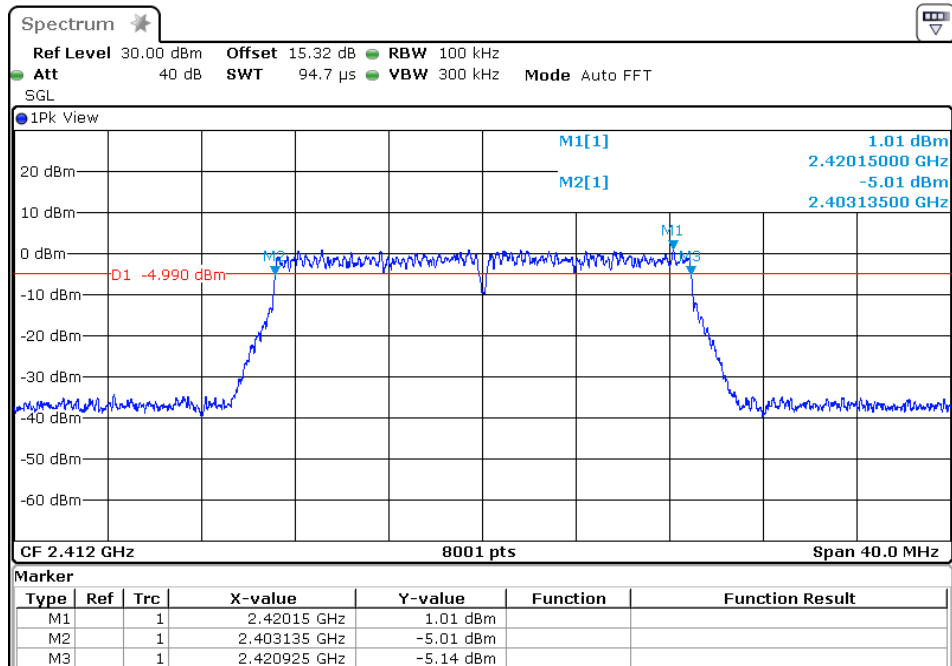
## 802.11g Channel Middle 2437MHz



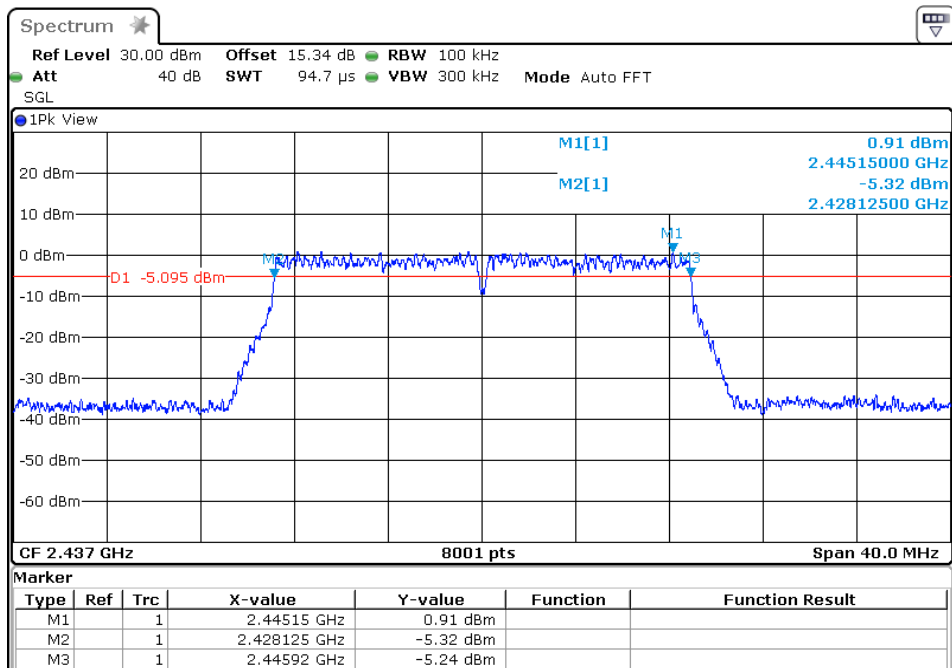
## 802.11g Channel High 2462MHz



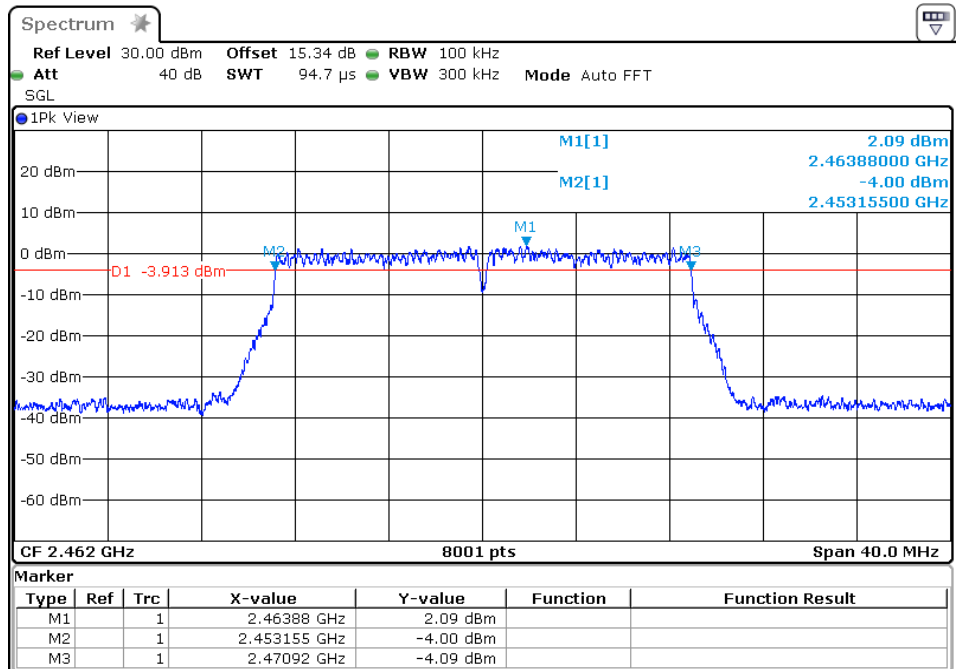
## 802.11n Channel Low 2412MHz (20MHz)



## 802.11n Channel Middle 2437MHz (20MHz)

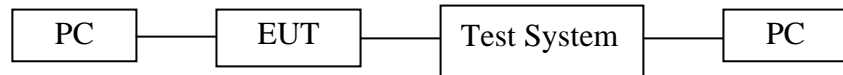


802.11n Channel High 2462MHz (20MHz)



## 7. 99% OCCUPIED BANDWIDTH

### 7.1. Block Diagram of Test Setup



### 7.2. The Requirement For ANSI C63.10: 2013 Section 6.9.3

ANSI C63.10: 2013 Section 6.9.3: The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission.

### 7.3. EUT Configuration on Measurement

The following equipment is installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

### 7.4. Operating Condition of EUT

7.4.1. Setup the EUT and simulator as shown as Section 7.1.

7.4.2. Turn on the power of all equipment.

7.4.3. Let the EUT work in TX modes measure it. The transmit frequency are 2412-2462. We select 2412MHz, 2437MHz, 2462MHz TX frequency to transmit.

### 7.5. Test Procedure

7.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable. The transmitter shall be operated at its maximum carrier power measured under normal test conditions. The span of the analyzer shall be set to capture all products of the modulation process, including the emission skirts.

7.5.2. The resolution bandwidth (RBW) shall be in the range of 1% to 5% of the occupied bandwidth (OBW) and video bandwidth (VBW) shall be approximately 3x RBW.

7.5.3. A peak, or peak hold, may be used in place of the sampling detector as this may produce a wider bandwidth than the actual bandwidth (worst-case measurement). Use of a peak hold may be necessary to determine the occupied bandwidth if the device is not transmitting continuously.

7.5.4. Set SPA "Meas" function, Select "Occupied Bandwidth" function, Select "99% Power Bandwidth". The frequency of the upper and lower markers indicating the edges of the transmitters "99% Power" emission bandwidth shall be recorded to automate by SPA.



## 7.6.Measurement Result

The test was performed with 802.11b		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
Low	2412	13.343
Middle	2437	13.318
High	2462	13.203

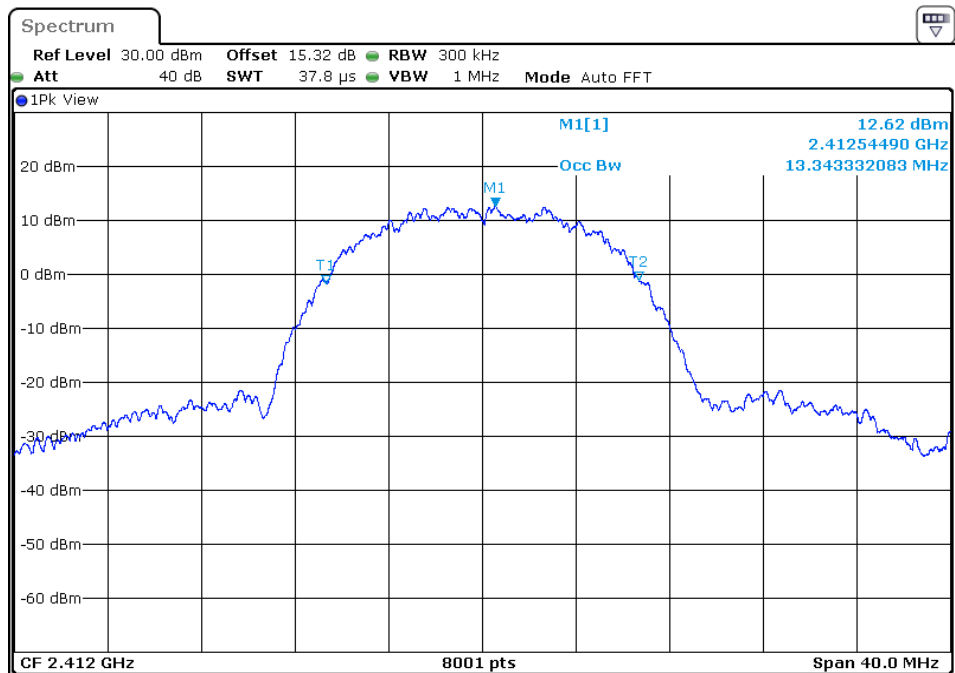
The test was performed with 802.11g		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
Low	2412	16.628
Middle	2437	16.683
High	2462	16.628

The test was performed with 802.11n (Bandwidth: 20 MHz)		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
Low	2412	17.833
Middle	2437	17.828
High	2462	17.788

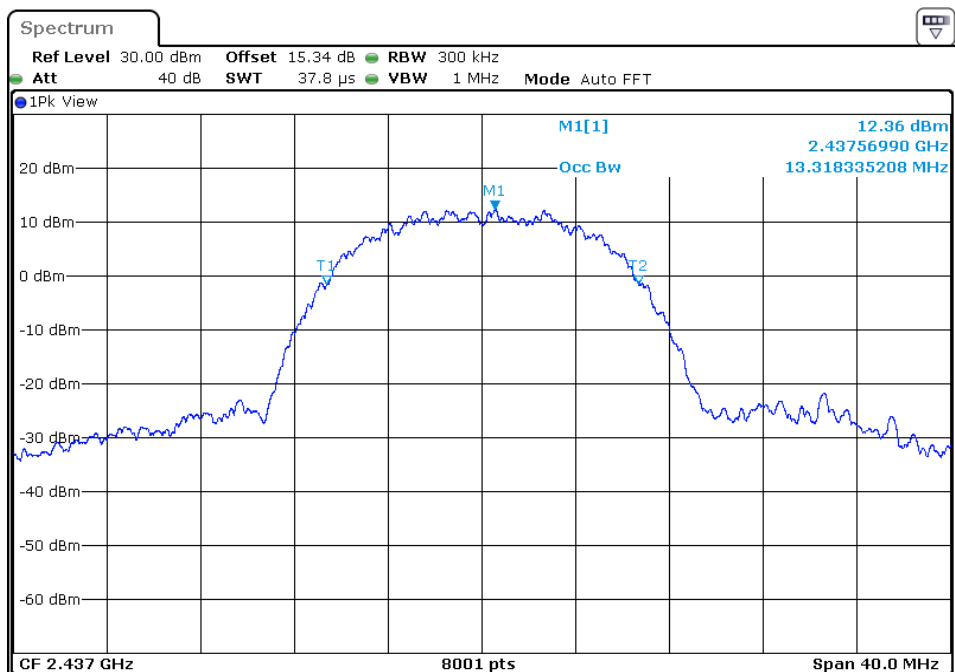
Note: We tested 802.11b/g/n mode the all data rate and recorded the worst case data for this channel to be 11Mbps for 802.11b mode and 54Mbps for 802.11g mode and MCS7 for 802.11n mode.

The spectrum analyzer plots are attached as below.

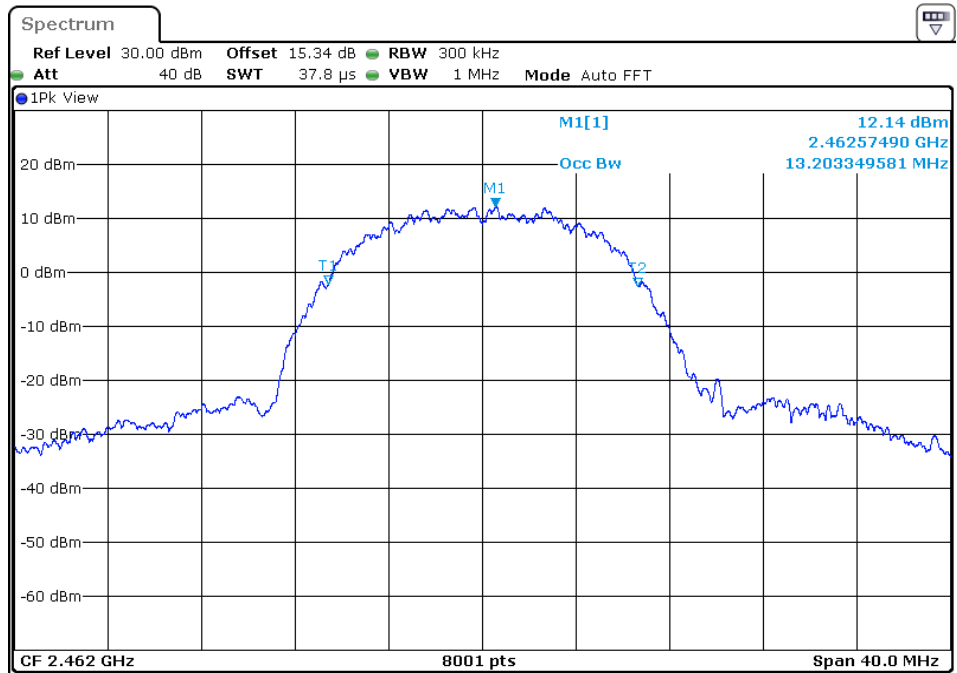
## 802.11b Channel Low 2412MHz



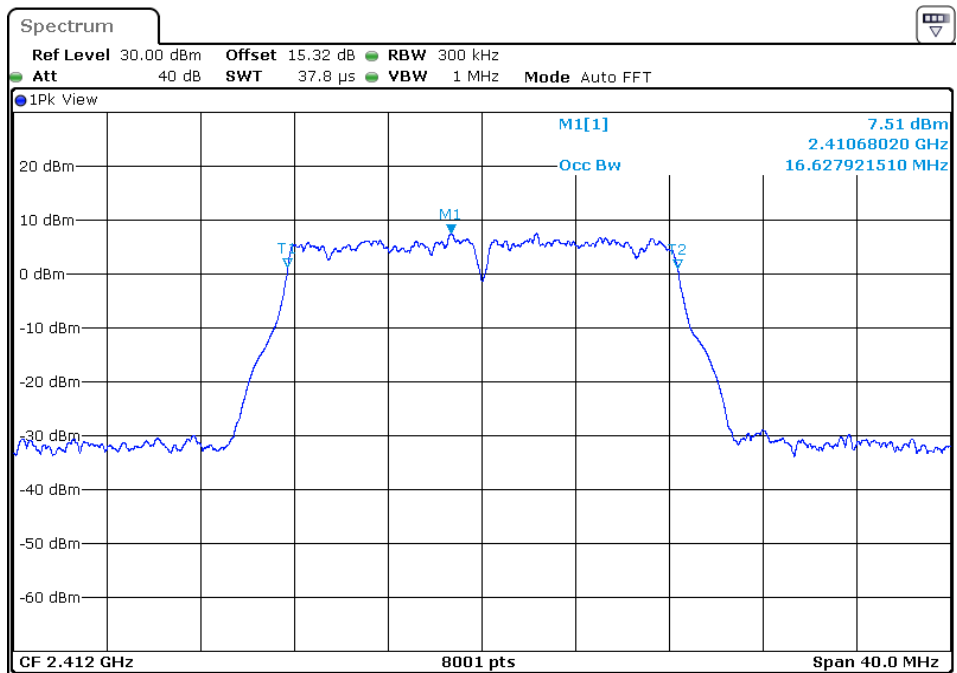
## 802.11b Channel Middle 2437MHz



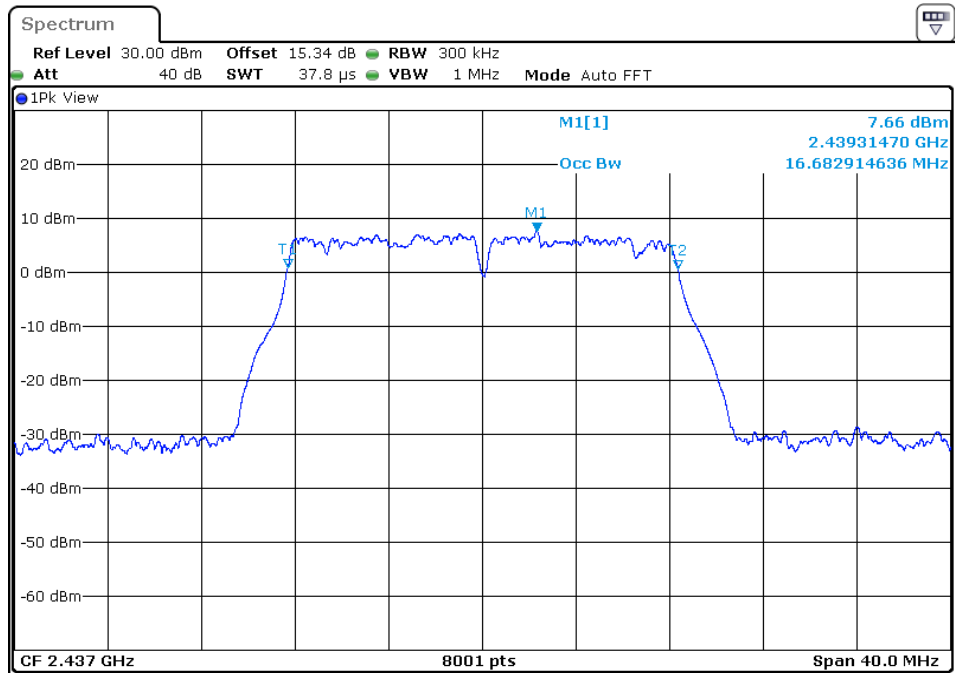
## 802.11b Channel High 2462MHz



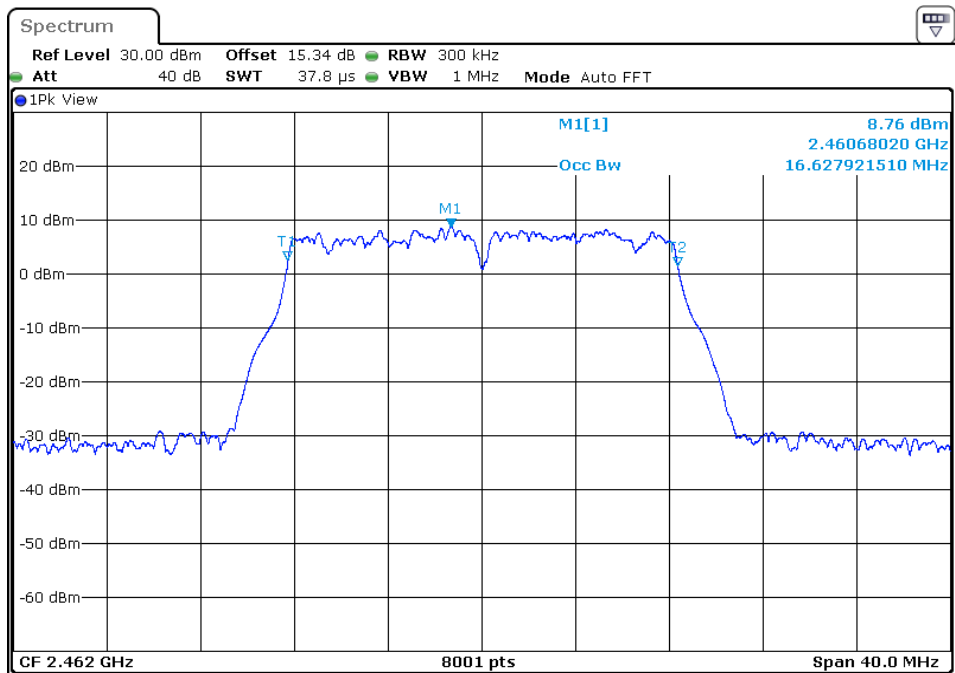
## 802.11g Channel Low 2412MHz



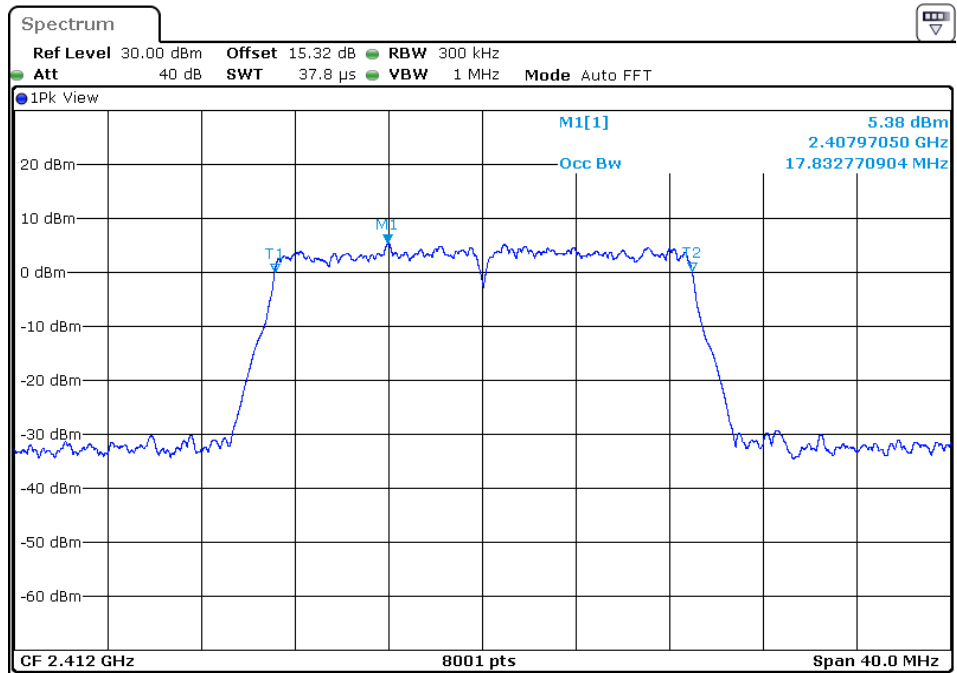
## 802.11g Channel Middle 2437MHz



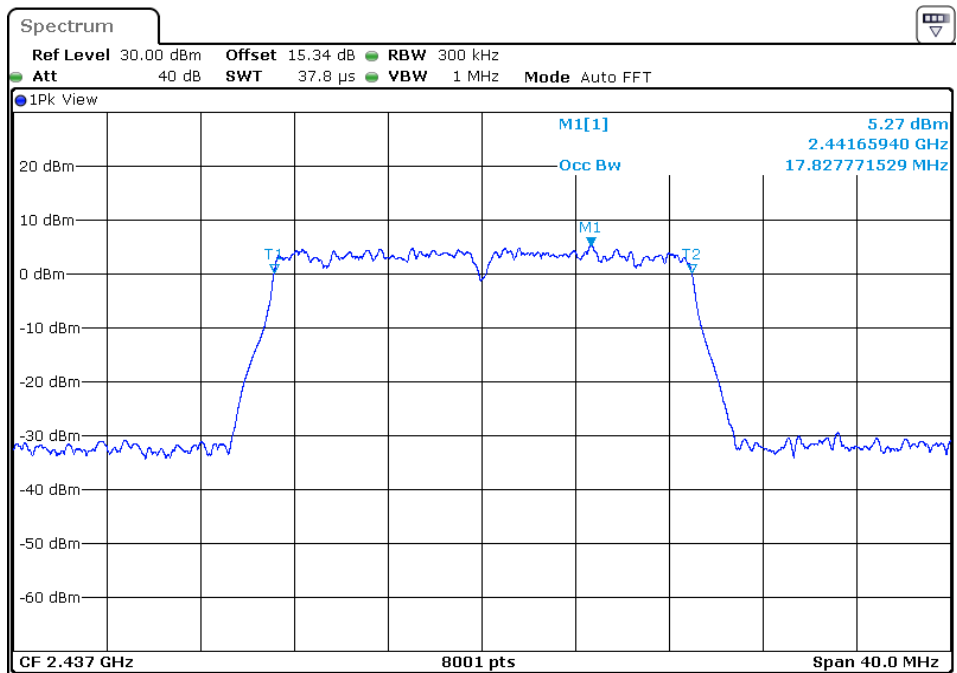
## 802.11g Channel High 2462MHz



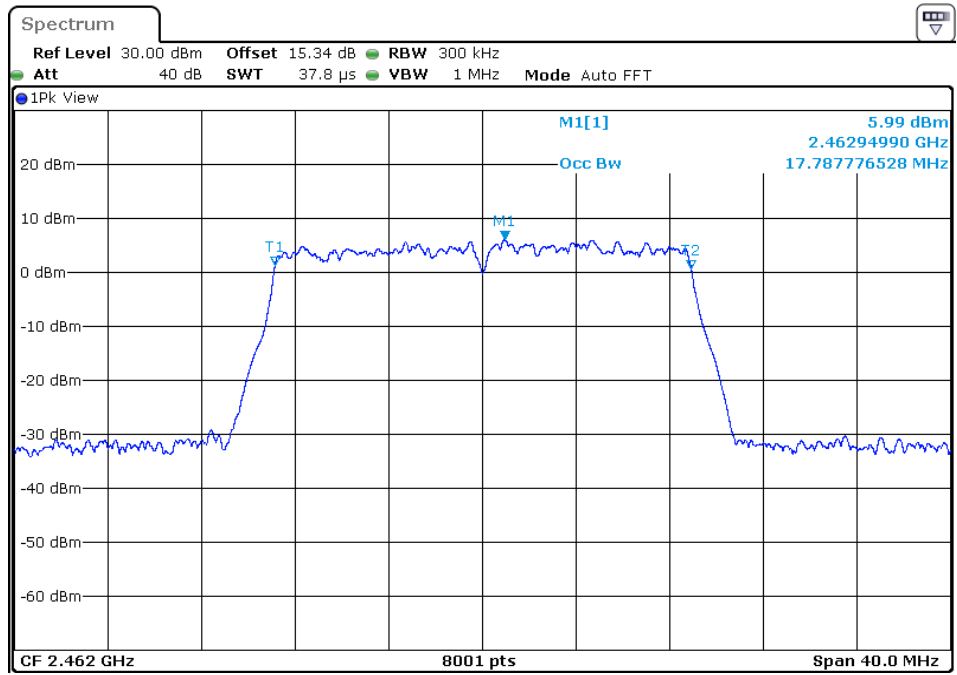
## 802.11n Channel Low 2412MHz (20MHz)



## 802.11n Channel Middle 2437MHz (20MHz)

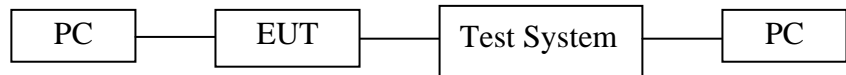


802.11n Channel High 2462MHz (20MHz)



## 8. DUTY CYCLE MEASUREMENT

### 8.1. Block Diagram of Test Setup



### 8.2. EUT Configuration on Measurement

The equipment are installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

### 8.3. Operating Condition of EUT

8.3.1. Setup the EUT and simulator as shown as Section 8.1.

8.3.2. Turn on the power of all equipment.

8.3.3. Let the EUT work in TX modes measure it. The transmit frequency are 2412-2462. We select 2412MHz, 2437MHz, 2462MHz TX frequency to transmit.

### 8.4. Test Procedure

Measurements of duty cycle and transmission duration shall be performed using one of the following techniques:

1. A diode detector and an oscilloscope that together have sufficiently short response time to permit accurate measurements of the on- and off-times of the transmitted signal.
2. The zero-span mode on a spectrum analyzer or EMI receiver if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the on- and off-times of the transmitted signal
  - a. Set the center frequency of the instrument to the centre frequency of the transmission
  - b. Set  $RBW \geq OBW$  if possible; otherwise, set RBW to the largest available value(10MHz).
  - c. Set detector = Peak or average.
  - d. The zero-span measurement method shall not be used unless both RBW and VBW are  $> 50/T$  and the number of sweep points across duration T exceeds 100.  
(For example, if VBW and/or RBW are limited to 3MHz, then the zero-span method of measuring duty cycle shall not be used if  $T \leq 16.7$  microseconds.)

## 8.5. Test Result

The test was performed with 802.11b			
Channel	Frequency (MHz)	duty cycle(x)	10log(1/x)
Middle	2437	100%	0

The test was performed with 802.11g			
Channel	Frequency (MHz)	duty cycle(x)	10log(1/x)
Middle	2437	100%	0

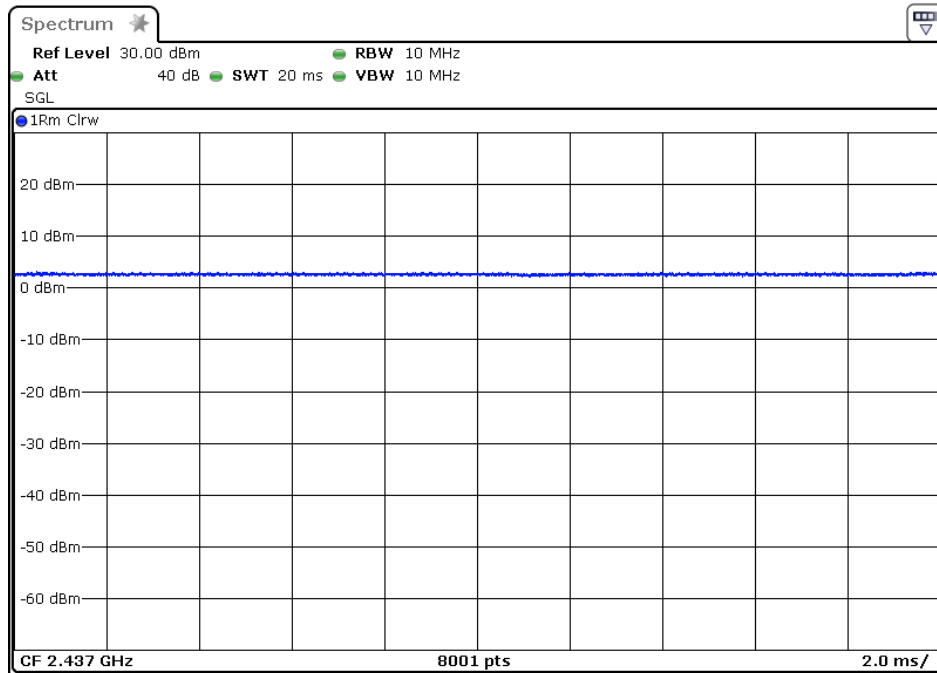
The test was performed with 802.11n (Bandwidth: 20 MHz)			
Channel	Frequency (MHz)	duty cycle(x)	10log(1/x)
Middle	2437	100%	0

Note: We tested 802.11b/g/n mode the all data rate and recorded the worst case data for this channel to be 11Mbps for 802.11b mode and 54Mbps for 802.11g mode and MCS7 for 802.11n mode.

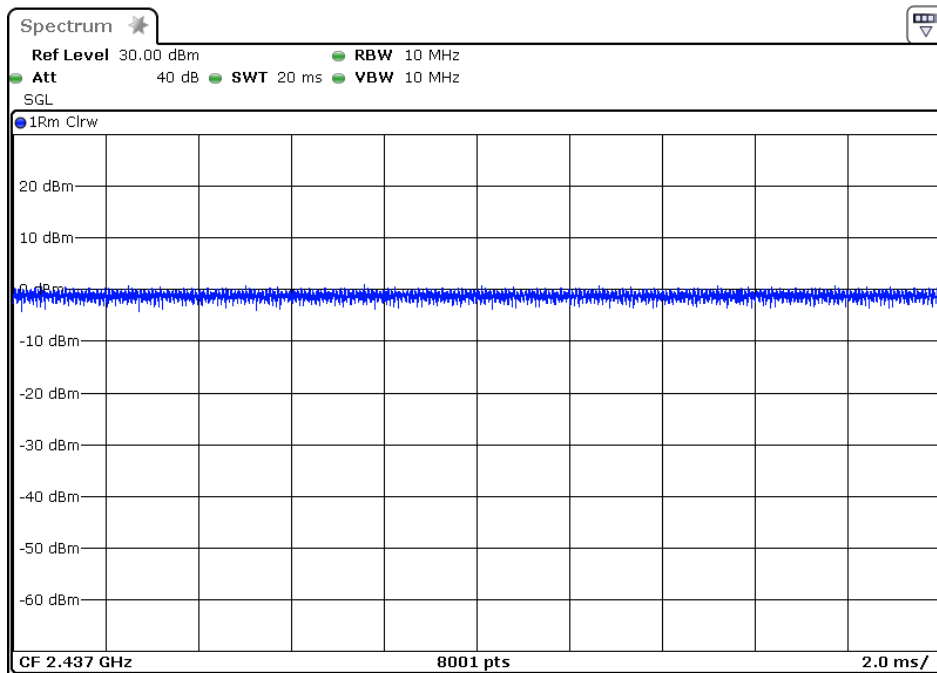
The spectrum analyzer plots are attached as below.



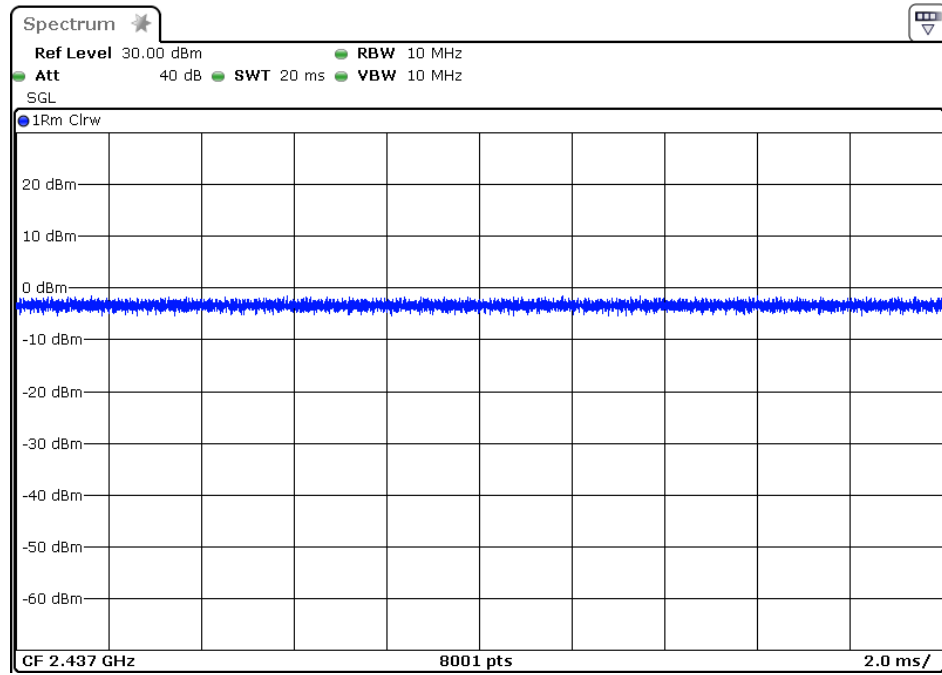
802.11b Channel Middle 2437MHz



802.11g Channel Middle 2437MHz

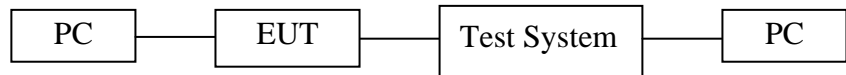


802.11n Channel Middle 2437MHz(20MHz)



## 9. MAXIMUM CONDUCTED (AVERAGE) OUTPUT POWER

### 9.1. Block Diagram of Test Setup



### 9.2. The Requirement For Section 15.247(b)(3)

Section 15.247(b)(3): For systems using digital modulation in the 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz bands: 1 Watt.

### 9.3. EUT Configuration on Measurement

The equipment is installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

### 9.4. Operating Condition of EUT

9.4.1. Setup the EUT and simulator as shown as Section 9.1.

9.4.2. Turn on the power of all equipment.

9.4.3. Let the EUT work in TX modes measure it. The transmit frequency are 2412-2462. We select 2412MHz, 2437MHz, 2462MHz TX frequency to transmit.

### 9.5. Test Procedure

9.5.1. The EUT was tested according to DTS test procedure of August 24, 2018 KDB558074 D01 DTS Meas Guidance v05 for compliance to FCC 47CFR 15.247 requirements.

9.5.2. The transmitter output was connected to the spectrum analyzer through a low loss cable.

9.5.3. Set RBW = 1-5% of the OBW, not to exceed 1 MHz, VBW  $\geq$  3 x RBW, Sweep time = auto, Set span to at least 1.5 times the OBW, Detector = RMS.

9.5.4. Measurement the Maximum conducted (average) output power.

## 9.6.Test Result

Final power= Ave output power+10log(1/ duty cycle)

The test was performed with 802.11b						
Channel	Frequency (MHz)	Ave output power (dBm)	10log(1/ duty cycle)	Final power (dBm)	Final power (W)	Limits dBm / W
Low	2412	18.66	0	18.66	0.0735	30 dBm / 1 W
Middle	2437	19.16	0	19.16	0.0824	30 dBm / 1 W
High	2462	18.77	0	18.77	0.0753	30 dBm / 1 W

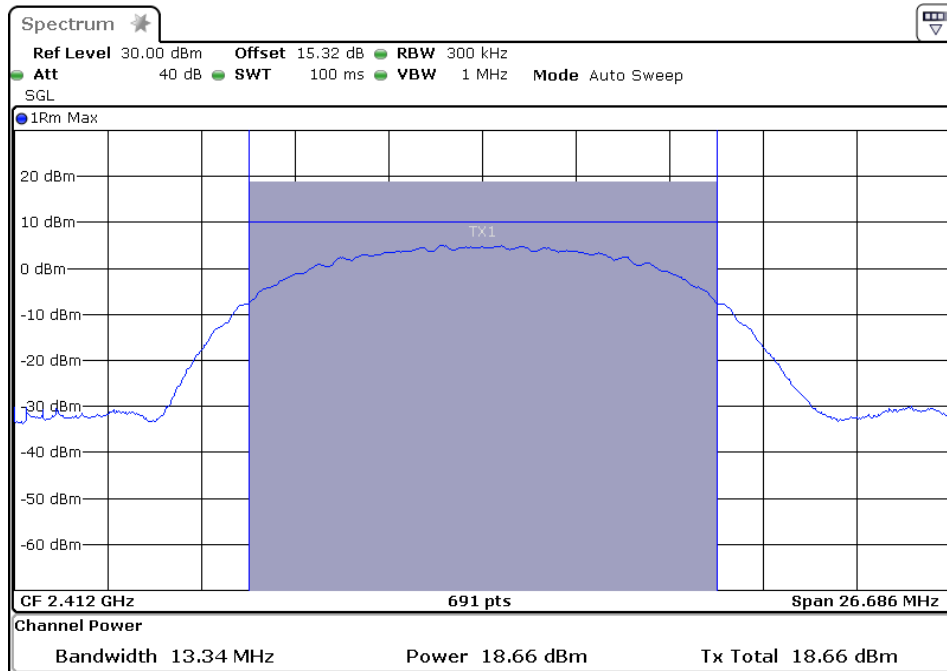
The test was performed with 802.11g						
Channel	Frequency (MHz)	Ave output power (dBm)	10log(1/ duty cycle)	Final power (dBm)	Final power (W)	Limits dBm / W
Low	2412	16.45	0	16.45	0.0442	30 dBm / 1 W
Middle	2437	16.76	0	16.76	0.0474	30 dBm / 1 W
High	2462	17.39	0	17.39	0.0548	30 dBm / 1 W

The test was performed with 802.11n (20MHz)						
Channel	Frequency (MHz)	Ave output power (dBm)	10log(1/ duty cycle)	Final power (dBm)	Final power (W)	Limits dBm / W
Low	2412	14.85	0	14.85	0.0305	30 dBm / 1 W
Middle	2437	14.91	0	14.91	0.0310	30 dBm / 1 W
High	2462	15.38	0	15.38	0.0345	30 dBm / 1 W

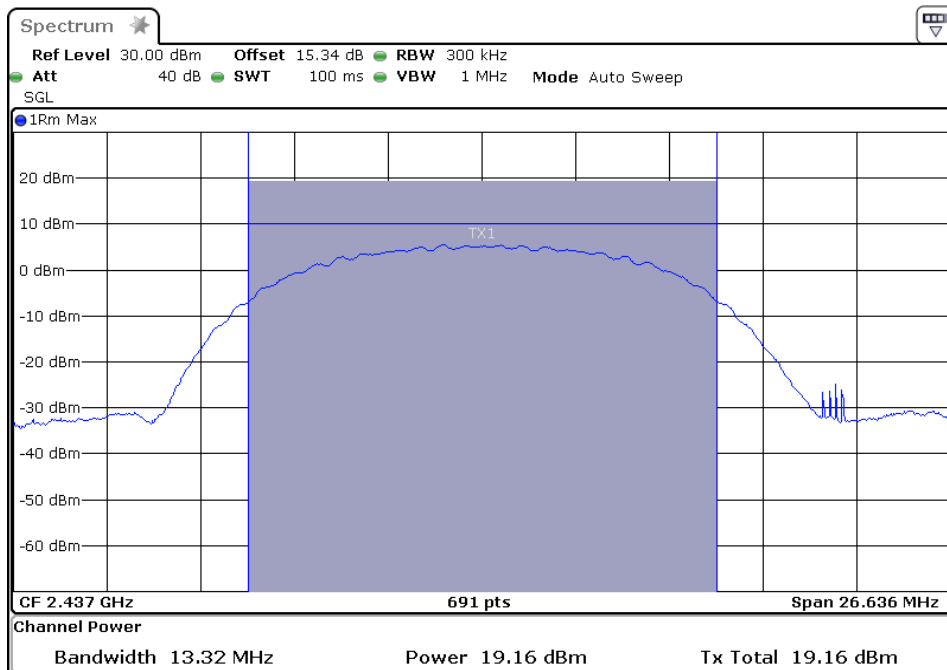
Note: We tested 802.11b/g/n mode the all data rate and recorded the worst case data for this channel to be 11Mbps for 802.11b mode and 54Mbps for 802.11g mode and MCS7 for 802.11n mode.

The spectrum analyzer plots are attached as below.

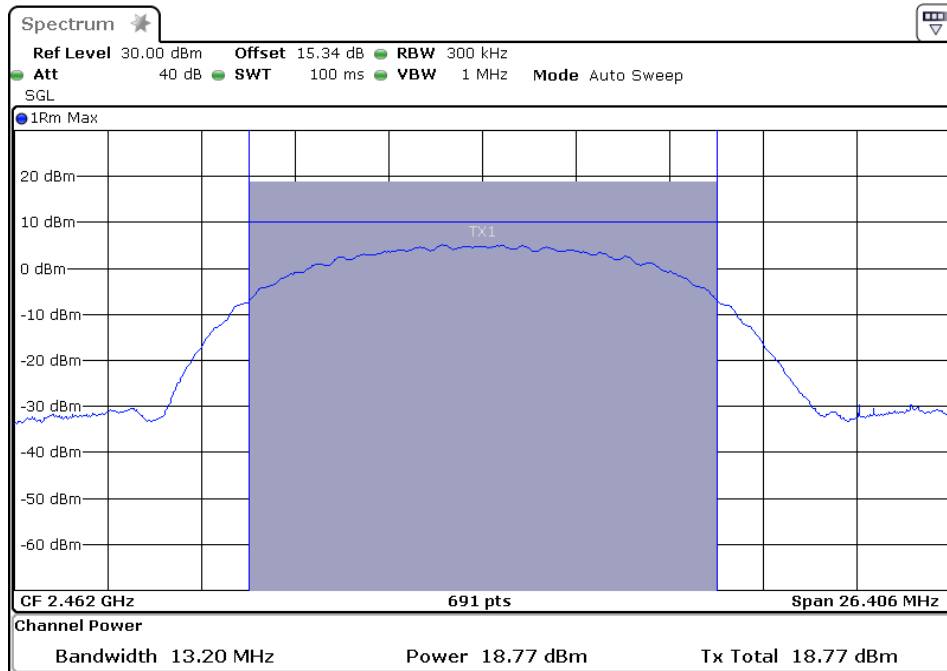
## 802.11b Channel Low 2412MHz



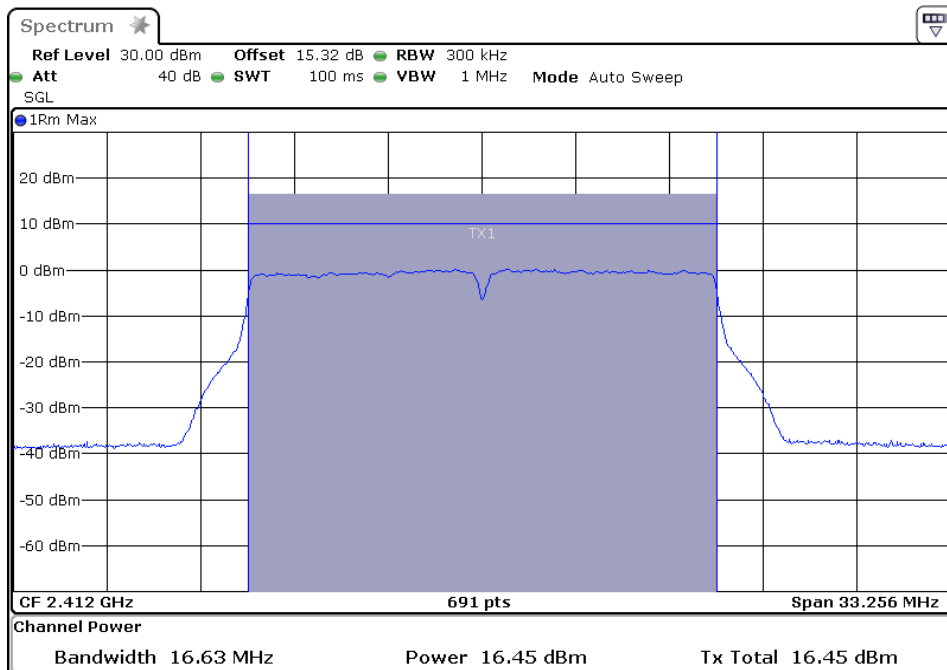
## 802.11b Channel Middle 2437MHz



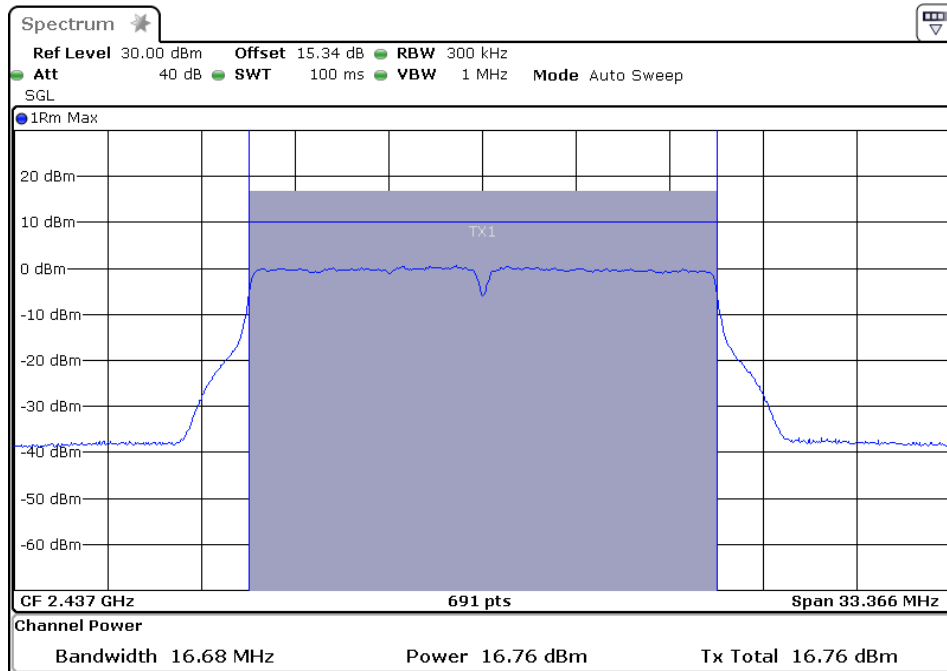
## 802.11b Channel High 2462MHz



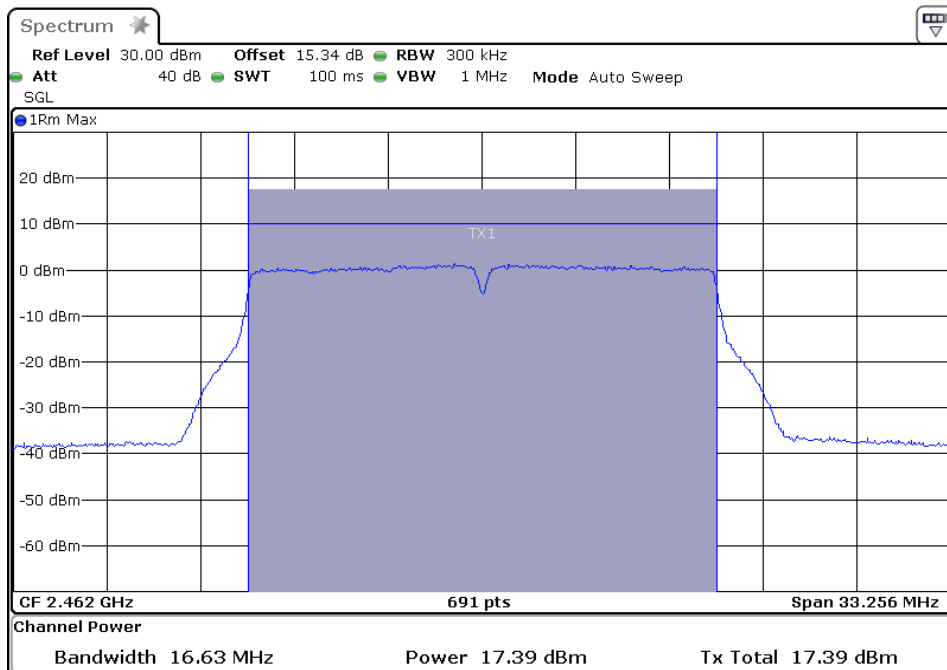
## 802.11g Channel Low 2412MHz



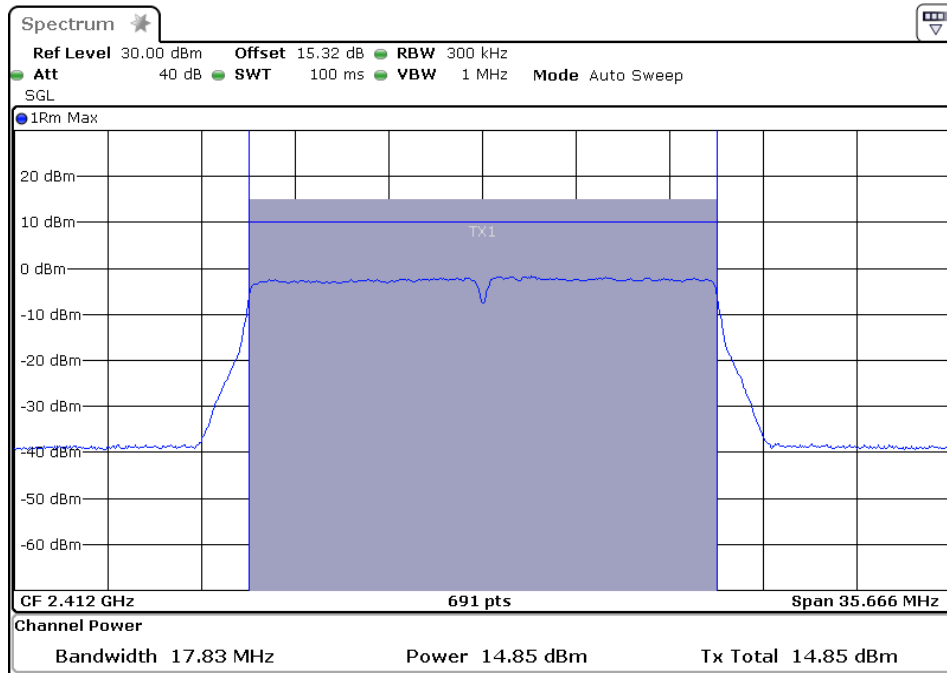
## 802.11g Channel Middle 2437MHz



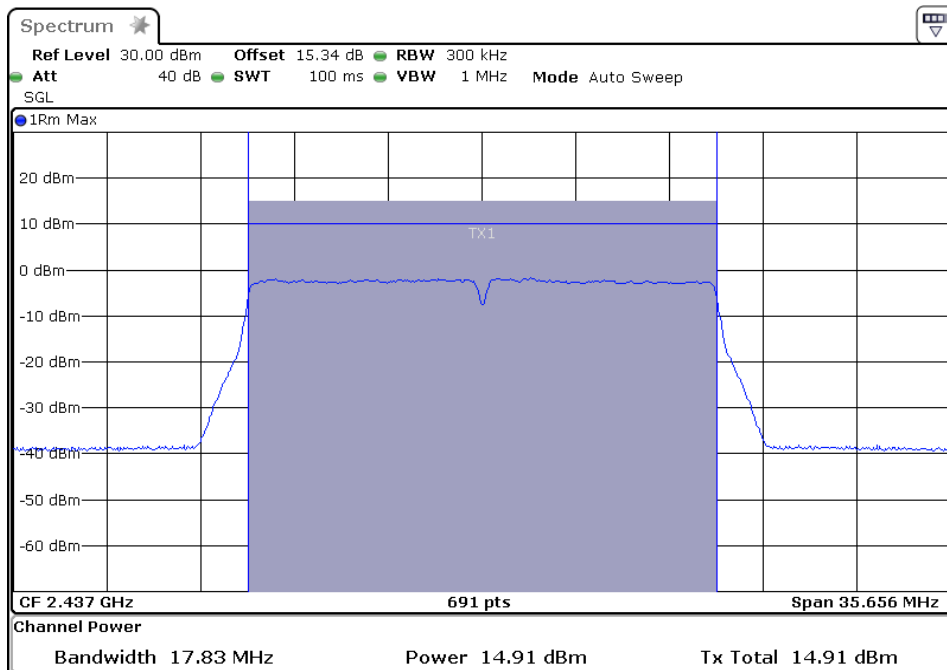
## 802.11g Channel High 2462MHz



## 802.11n Channel Low 2412MHz (20MHz)

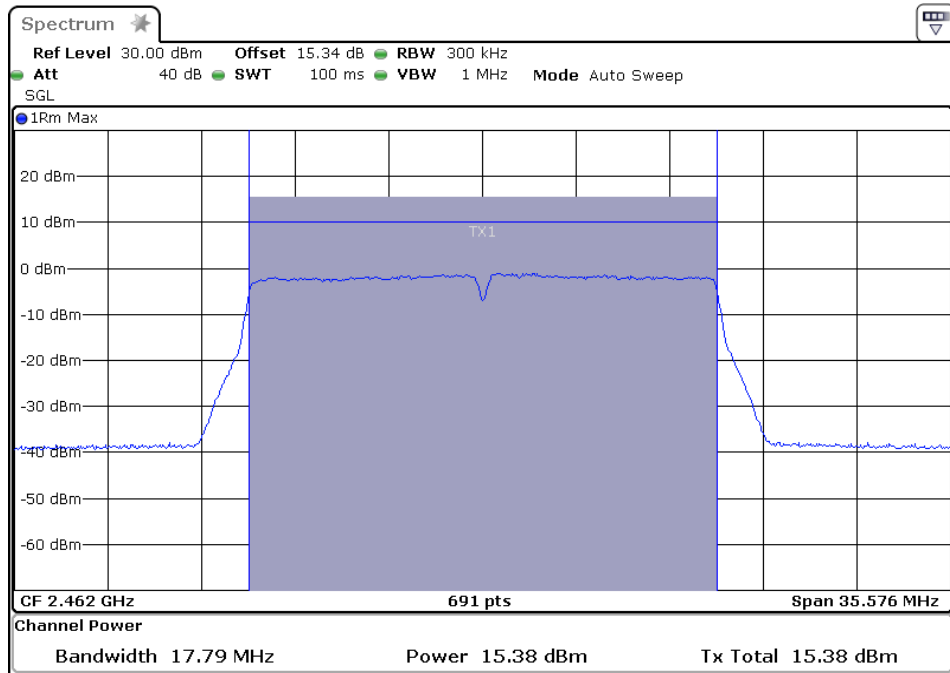


## 802.11n Channel Middle 2437MHz (20MHz)



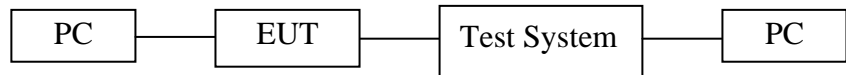


802.11n Channel High 2462MHz (20MHz)



## 10. POWER SPECTRAL DENSITY MEASUREMENT

### 10.1. Block Diagram of Test Setup



### 10.2. The Requirement For Section 15.247(e)

Section 15.247(e): For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

### 10.3. EUT Configuration on Measurement

The equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

### 10.4. Operating Condition of EUT

10.4.1. Setup the EUT and simulator as shown as Section 10.1.

10.4.2. Turn on the power of all equipment.

10.4.3. Let the EUT work in TX modes measure it. The transmit frequency are 2412-2462. We select 2412MHz, 2437MHz, 2462MHz TX frequency to transmit.

## 10.5. Test Procedure

10.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.

### 10.5.2. Measurement Procedure AVGPSD-2:

This procedure is applicable when the EUT cannot be configured to transmit continuously (i.e., duty cycle < 98%), and when sweep triggering/signal gating cannot be used to measure only when the EUT is transmitting at its maximum power control level, and when the transmission duty is constant (i.e., duty cycle variations are less than  $\pm 2\%$ ):

Measure the duty cycle(x) of the transmitter output signal as described in Section 6.0.

Set instrument center frequency to DTS channel center frequency.

Set span to at least  $1.5 \times \text{OBW}$ .

Set RBW to:  $3\text{kHz} \leq \text{RBW} \leq 100\text{kHz}$ .

Set VBW  $\geq 3 \times \text{RBW}$

Detector = power averaging(RMS) or sample detector (when RMS not available).

Ensure that the number of measurement points in sweep  $\geq 2 \times \text{span/RBW}$ .

Sweep time = auto couple.

Do not use sweep triggering. Allow sweep to “free run”.

Employ trace averaging(RMS) mode over a minimum of 100 traces.

Use the peak maker function to determine the maximum amplitude level.

Add  $10\log(1/x)$ , where x is the duty cycle measured in step(a), to the measured PSD to compute the average PSD during the actual transmission time.

If resultant value exceeds the limit, then reduce RBW (no less than 3kHz) and repeat (note that this may require zooming in on the emission of interest and reducing the span in order to meet the minimum measurement point requirement as the RBW is reduced).

## 10.6.Test Result

The test was performed with 802.11b					
Channel	Frequency (MHz)	AVG Power Spectral Density (dBm/3KHz)	10log(1/ duty cycle)	Final Power Spectral Density (dBm/3KHz)	Limits (dBm/3KHz)
Low	2412	-7.60	0	-7.60	8 dBm
Middle	2437	-6.76	0	-6.76	8 dBm
High	2462	-7.57	0	-7.57	8 dBm

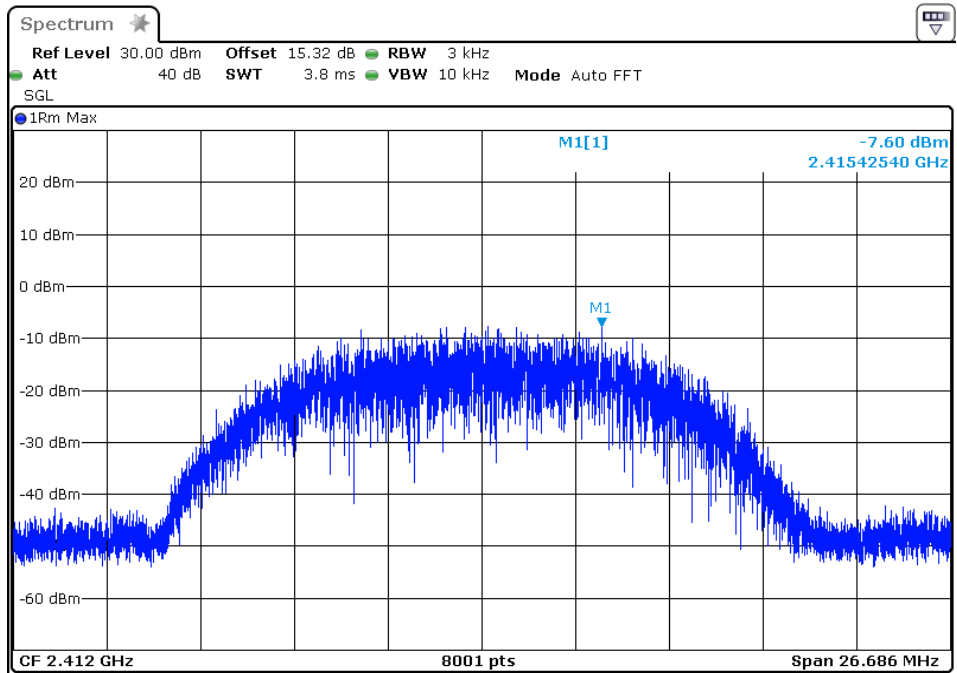
The test was performed with 802.11g					
Channel	Frequency (MHz)	AVG Power Spectral Density (dBm/3KHz)	10log(1/ duty cycle)	Final Power Spectral Density (dBm/3KHz)	Limits (dBm/3KHz)
Low	2412	-11.31	0	-11.31	8 dBm
Middle	2437	-12.12	0	-12.12	8 dBm
High	2462	-10.42	0	-10.42	8 dBm

The test was performed with 802.11n (20MHz)					
Channel	Frequency (MHz)	AVG Power Spectral Density (dBm/3KHz)	10log(1/ duty cycle)	Final Power Spectral Density (dBm/3KHz)	Limits (dBm/3KHz)
Low	2412	-12.20	0	-12.20	8 dBm
Middle	2437	-12.16	0	-12.16	8 dBm
High	2462	-11.70	0	-11.70	8 dBm

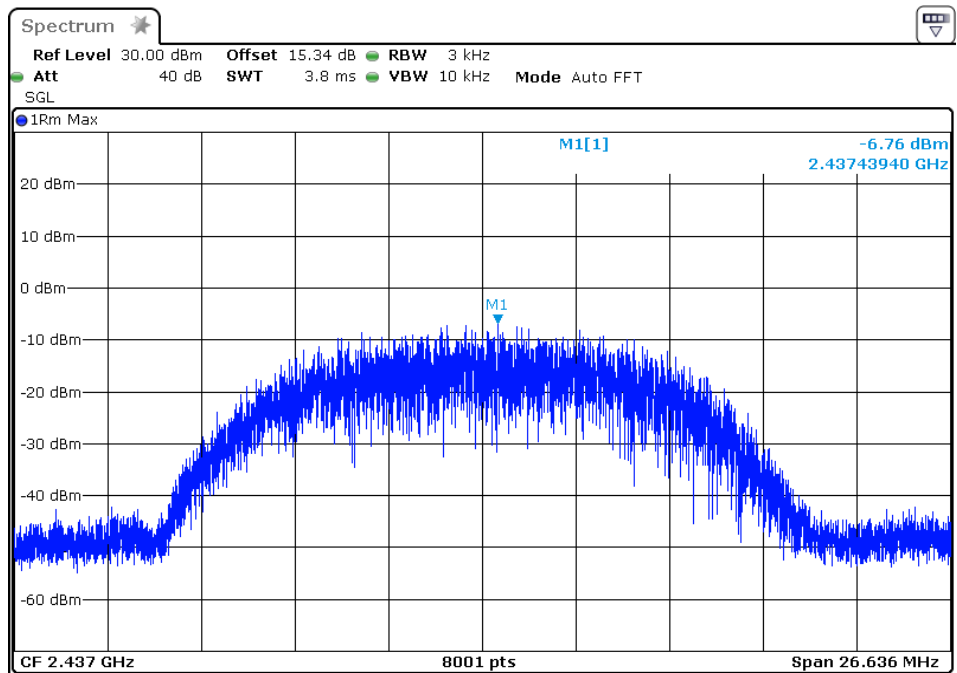
Note: We tested 802.11b/g/n mode the all data rate and recorded the worst case data for this channel to be 11Mbps for 802.11b mode and 54Mbps for 802.11g mode and MCS7 for 802.11n mode.

The spectrum analyzer plots are attached as below.

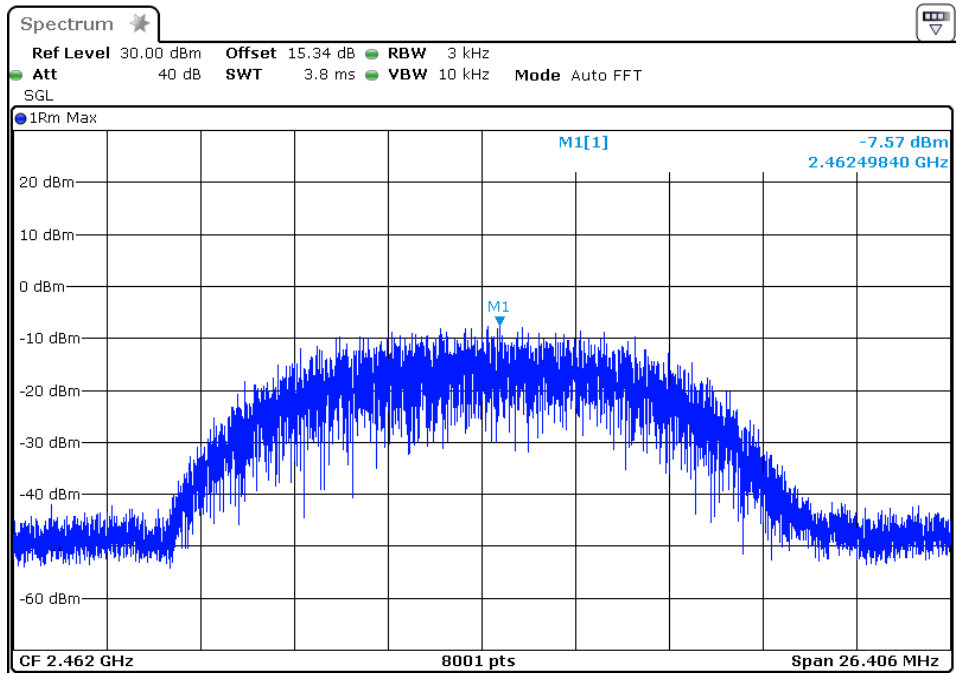
### 802.11b Channel Low 2412MHz



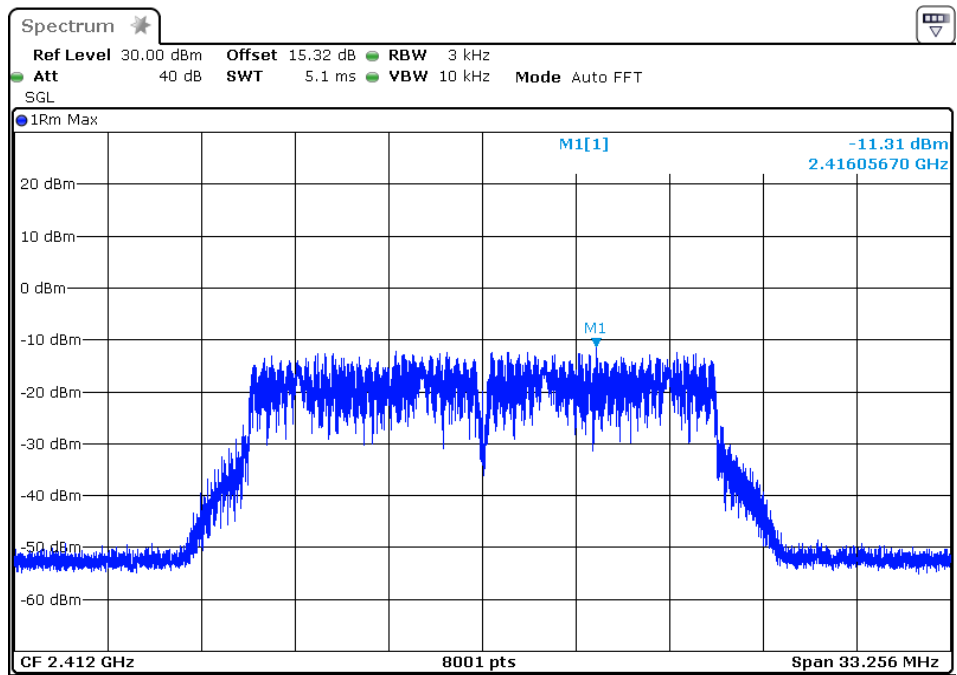
### 802.11b Channel Middle 2437MHz



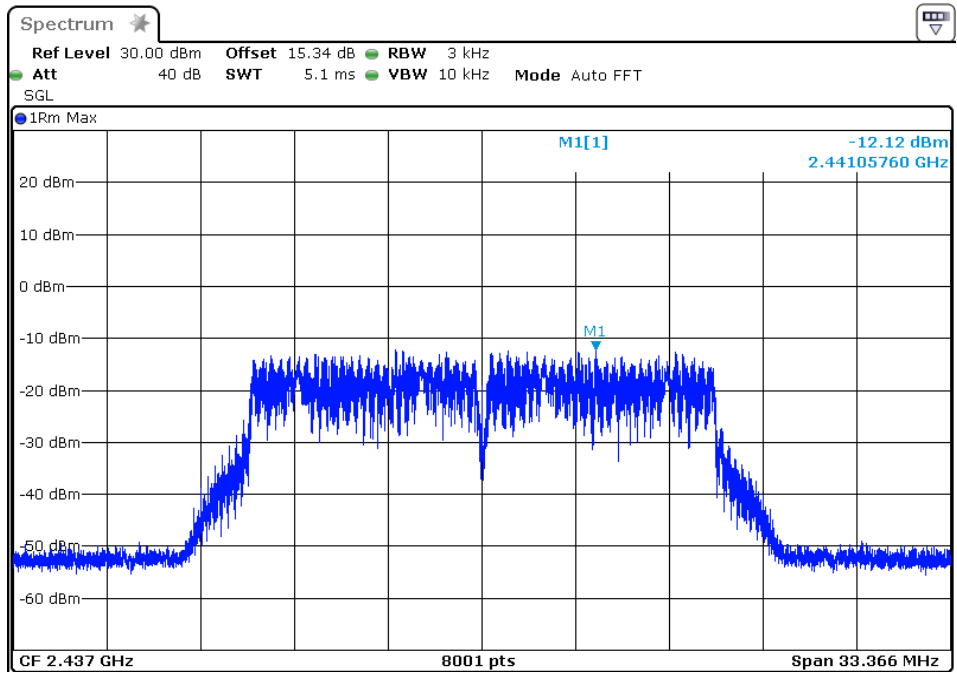
### 802.11b Channel High 2462MHz



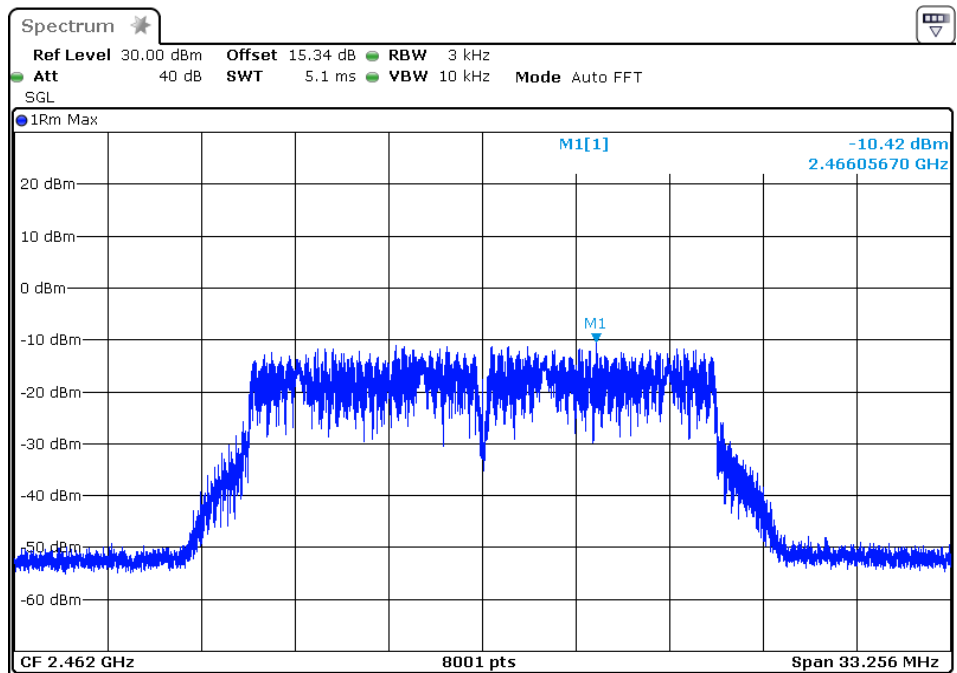
### 802.11g Channel Low 2412MHz



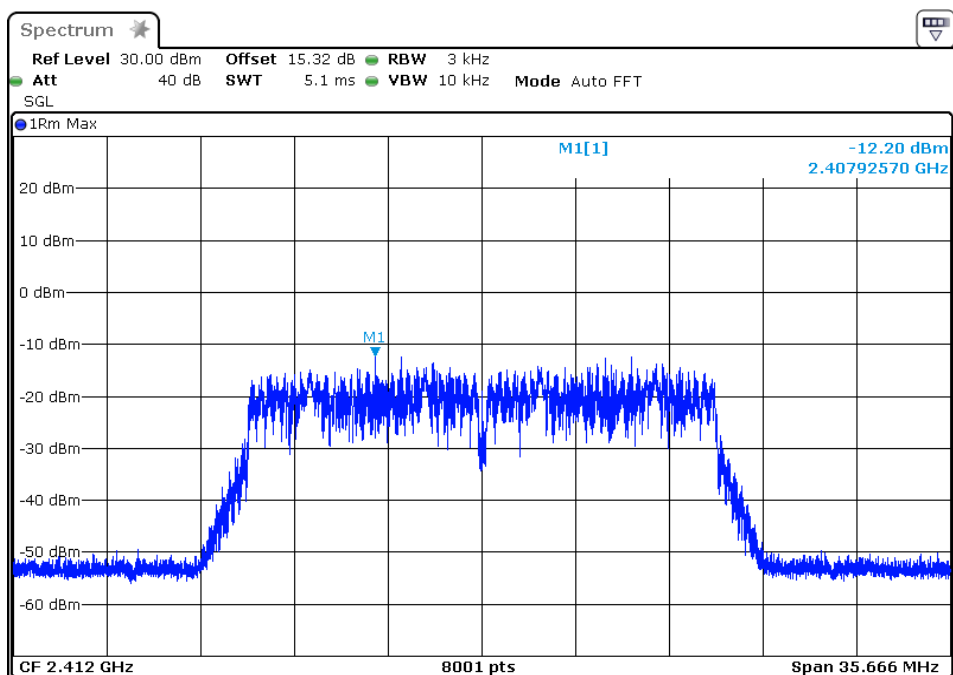
### 802.11g Channel Middle 2437MHz



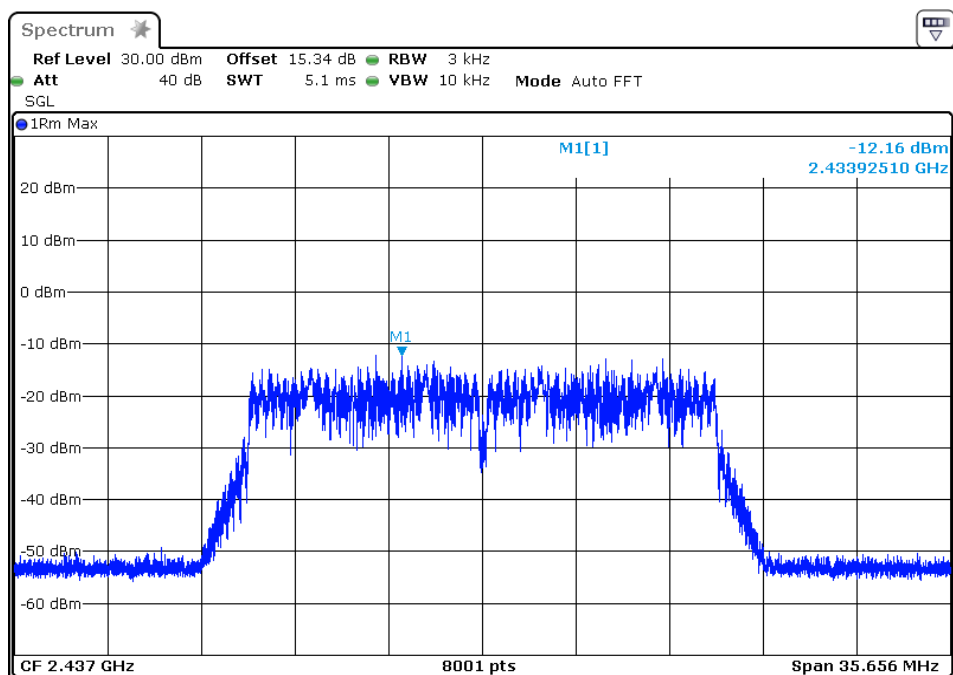
### 802.11g Channel High 2462MHz



## 802.11n Channel Low 2412MHz (20MHz)

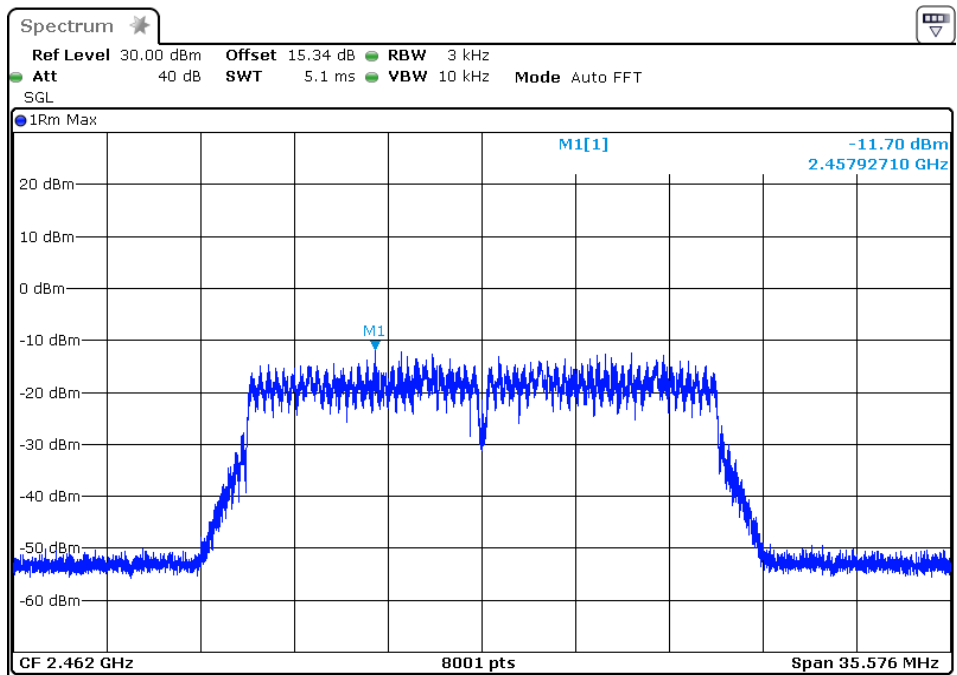


## 802.11n Channel Middle 2437MHz (20MHz)



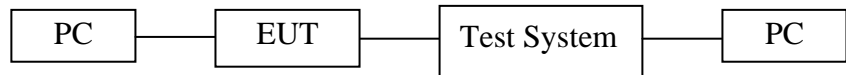


802.11n Channel High 2462MHz (20MHz)



## 11.BAND EDGE COMPLIANCE TEST

### 11.1.Block Diagram of Test Setup



### 11.2.The Requirement For Section 15.247(d)

Section 15.247(d): In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator 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 the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

### 11.3.EUT Configuration on Measurement

The equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

### 11.4.Operating Condition of EUT

11.4.1.Setup the EUT and simulator as shown as Section 11.1.

11.4.2.Turn on the power of all equipment.

11.4.3.Let the EUT work in TX modes measure it. The transmit frequency are 2412-2462. We select 2412MHz, 2462MHz TX frequency to transmit.

## 11.5. Test Procedure

### Conducted Band Edge:

11.5.1. The transmitter output was connected to the spectrum analyzer via a low loss cable.

11.5.2. Set RBW of spectrum analyzer to 100kHz and VBW to 300kHz.

### Radiate Band Edge:

11.5.3. The EUT is placed on a turntable, which is 1.5m above the ground plane and worked at highest radiated power.

11.5.4. The turntable was rotated for 360 degrees to determine the position of maximum emission level.

11.5.5. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.

11.5.6. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:

11.5.7. RBW=1MHz, VBW=1MHz

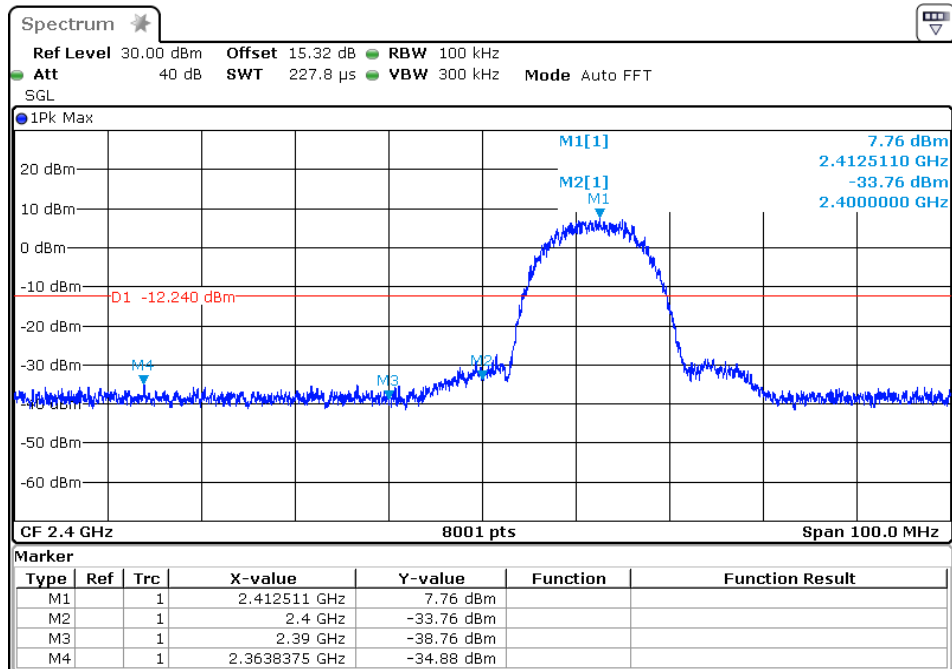
11.5.8. The band edges was measured and recorded.

## 11.6. Test Result

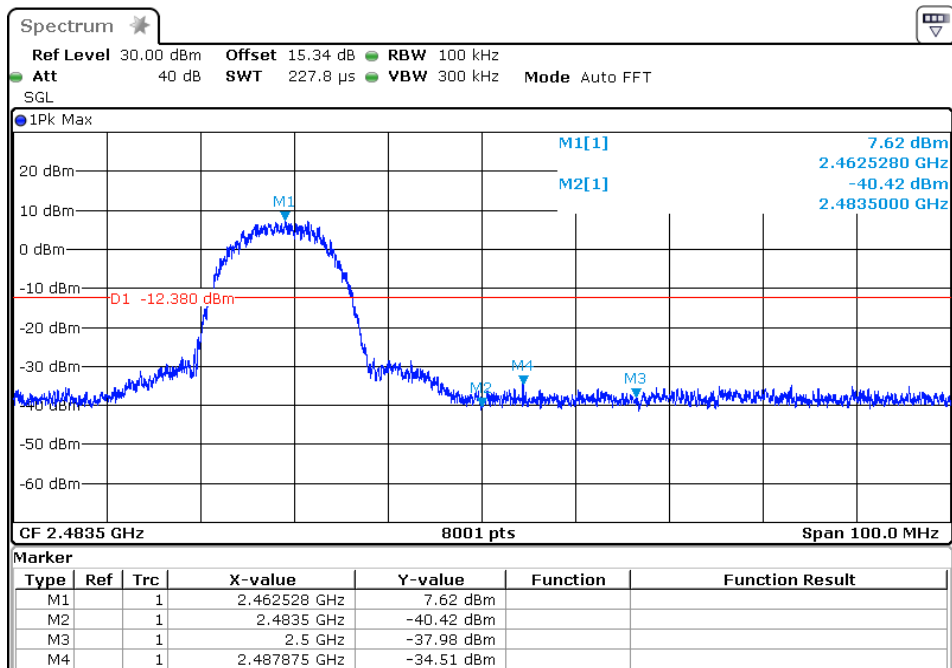
The test was performed with 802.11b		
Frequency (MHz)	Result of Band Edge (dBc)	Limit of Band Edge (dBc)
2400	41.52	> 30dBc
2483.5	48.04	> 30dBc
The test was performed with 802.11g		
Frequency (MHz)	Result of Band Edge (dBc)	Limit of Band Edge (dBc)
2400	43.52	> 30dBc
2483.5	44.99	> 30dBc
The test was performed with 802.11n (20MHz)		
Frequency (MHz)	Result of Band Edge (dBc)	Limit of Band Edge (dBc)
2400	41.33	> 30dBc
2483.5	41.51	> 30dBc

Note: We tested 802.11b/g/n mode the all data rate and recorded the worst case data for this channel to be 11Mbps for 802.11b mode and 54Mbps for 802.11g mode and MCS7 for 802.11n mode. The spectrum analyzer plots are attached as below.

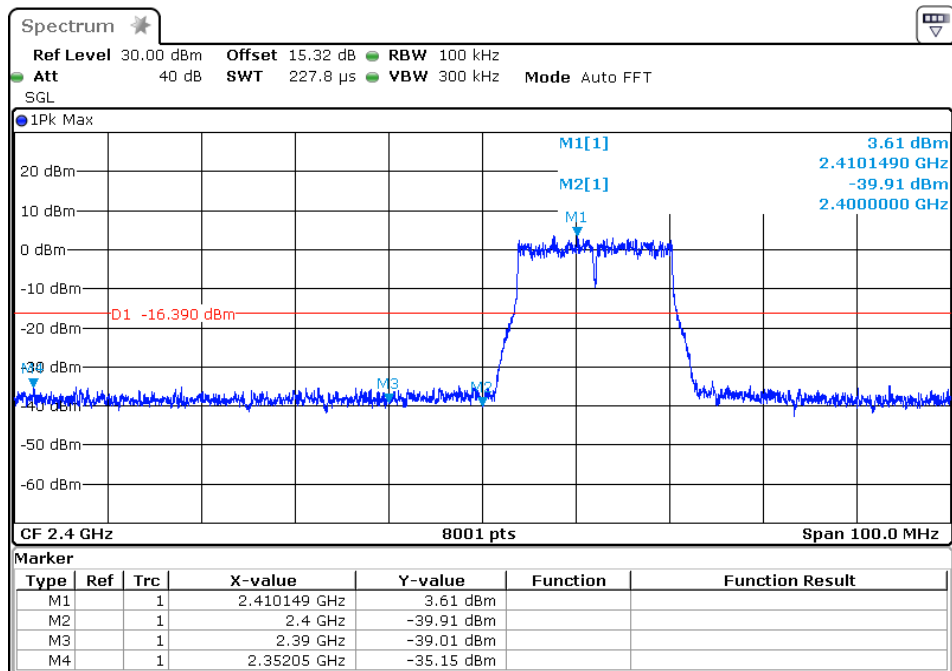
## 802.11b Channel Low 2412MHz



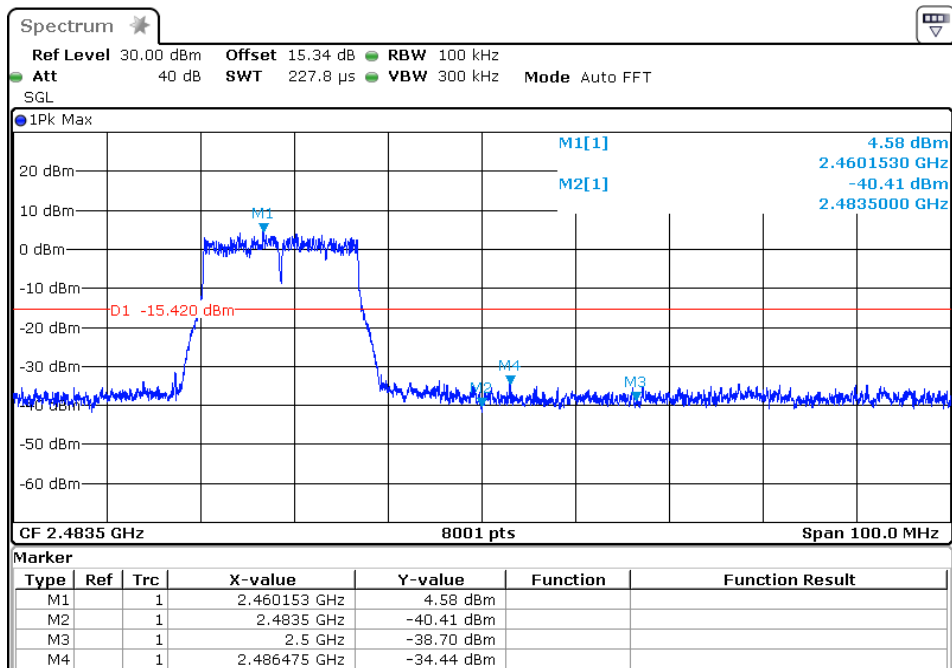
## 802.11b Channel High 2462MHz



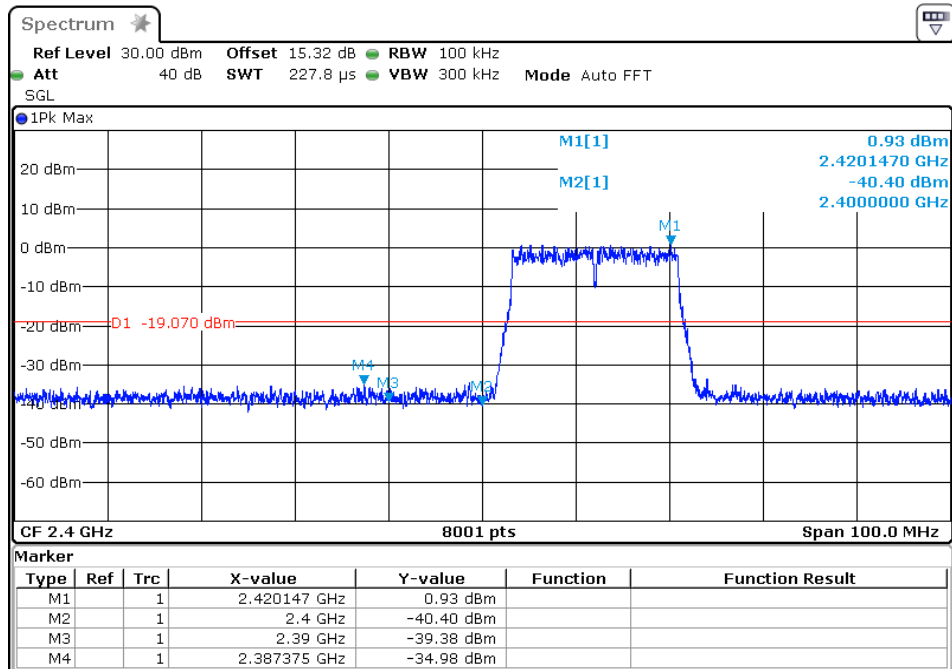
## 802.11g Channel Low 2412MHz



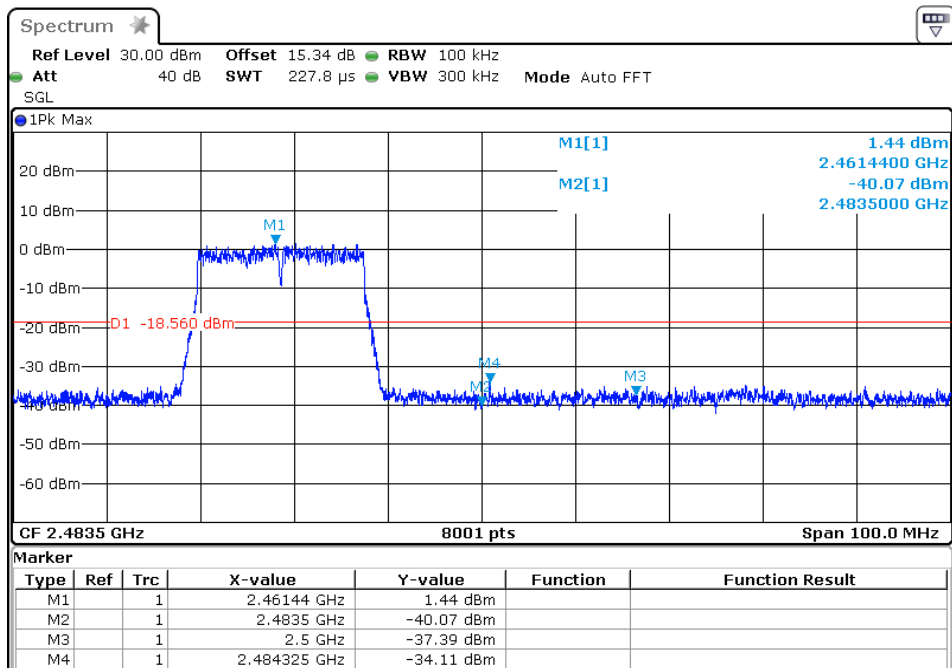
## 802.11g Channel High 2462MHz



## 802.11n Channel Low 2412MHz (20MHz)



## 802.11n Channel High 2462MHz (20MHz)



## Radiated Band Edge Result

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:  
$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$
3. Display the measurement of peak values.

Test Procedure:

The EUT and its simulators are placed on a turntable, which is 1.5 meter high above ground(Above 1GHz). The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bi-log antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the EUT location must be manipulated according to ANSI C63.10:2013 on radiated emission measurement. This EUT was tested in 3 orthogonal positions and the worst case position data was reported.

Let the EUT work in TX modes then measure it.

We select 2412MHz, 2462MHz TX frequency to transmit (802.11b/g/n20 mode).

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

- 1.The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for peak measurement with peak detector at frequency above 1GHz.
- 2.The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average measurement with peak detection at frequency above 1GHz.
- 3.We tested 802.11b/g/n mode the all and the worst-case emissions are reported.



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Job No.: FRANK2018 #1560

Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Foldable drone

Mode: TX Channel 1(802.11B)

Model: 66117

Manufacturer: Yangri

Polarization: Horizontal

Power Source: DC 3.7V

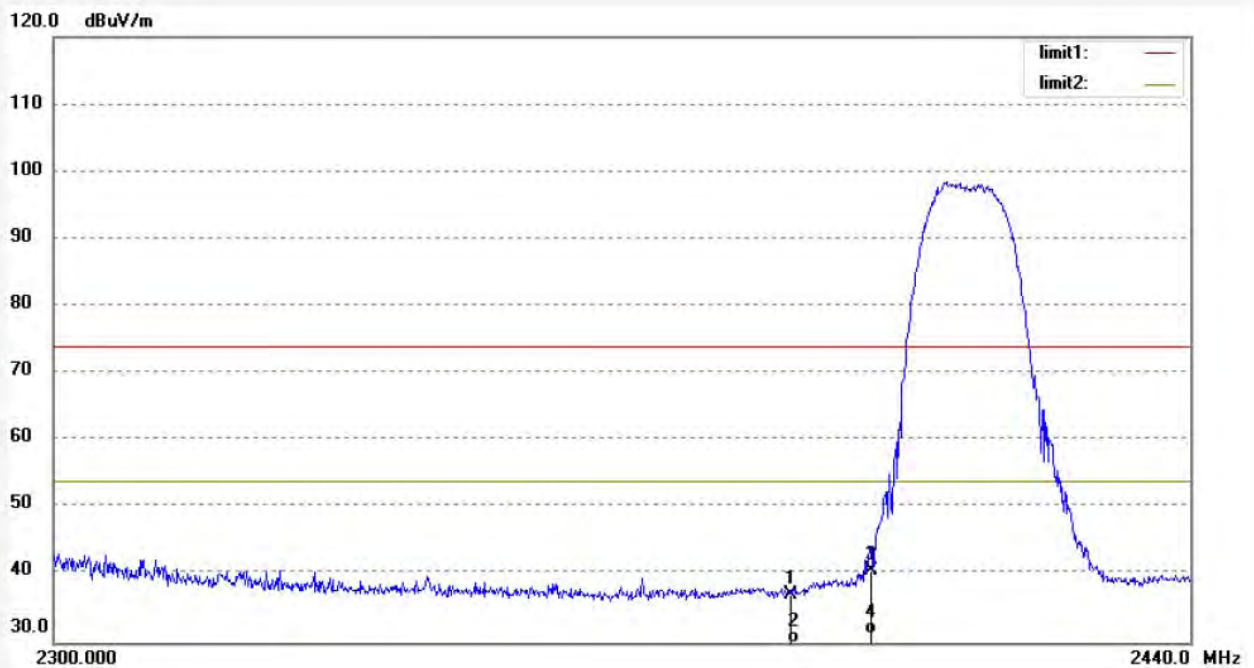
Date: 18/09/12/

Time: 13/24/44

Engineer Signature:

Distance: 3m

Note: Report NO.:ATE20181607



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2390.000	41.50	-4.32	37.18	74.00	-36.82	peak	250	128	
2	2390.000	32.35	-4.32	28.03	54.00	-25.97	AVG	250	132	
3	2400.000	44.93	-4.27	40.66	74.00	-33.34	peak	250	109	
4	2400.000	35.46	-4.27	31.19	54.00	-22.81	AVG	250	84	





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Job No.: FRANK2018 #1561

Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Foldable drone

Mode: TX Channel 1(802.11B)

Model: 66117

Manufacturer: Yangri

Polarization: Vertical

Power Source: DC 3.7V

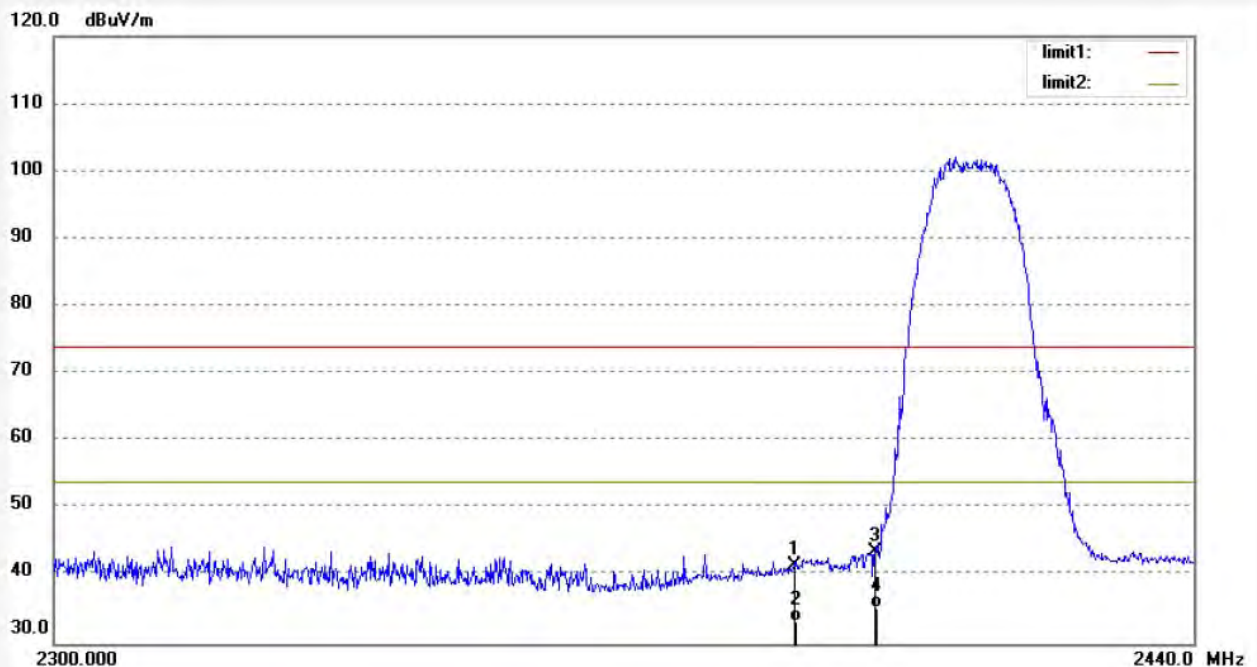
Date: 18/09/12/

Time: 13/28/35

Engineer Signature:

Distance: 3m

Note: Report NO.:ATE20181607



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2390.000	45.87	-4.32	41.55	74.00	-32.45	peak	250	195	
2	2390.000	37.64	-4.32	33.32	54.00	-20.68	AVG	200	121	
3	2400.000	47.90	-4.27	43.63	74.00	-30.37	peak	200	230	
4	2400.000	39.45	-4.27	35.18	54.00	-18.82	AVG	200	187	



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Job No.: FRANK2018 #1575

Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Foldable drone

Mode: TX Channel 11(802.11B)

Model: 66117

Manufacturer: Yangri

Polarization: Horizontal

Power Source: DC 3.7V

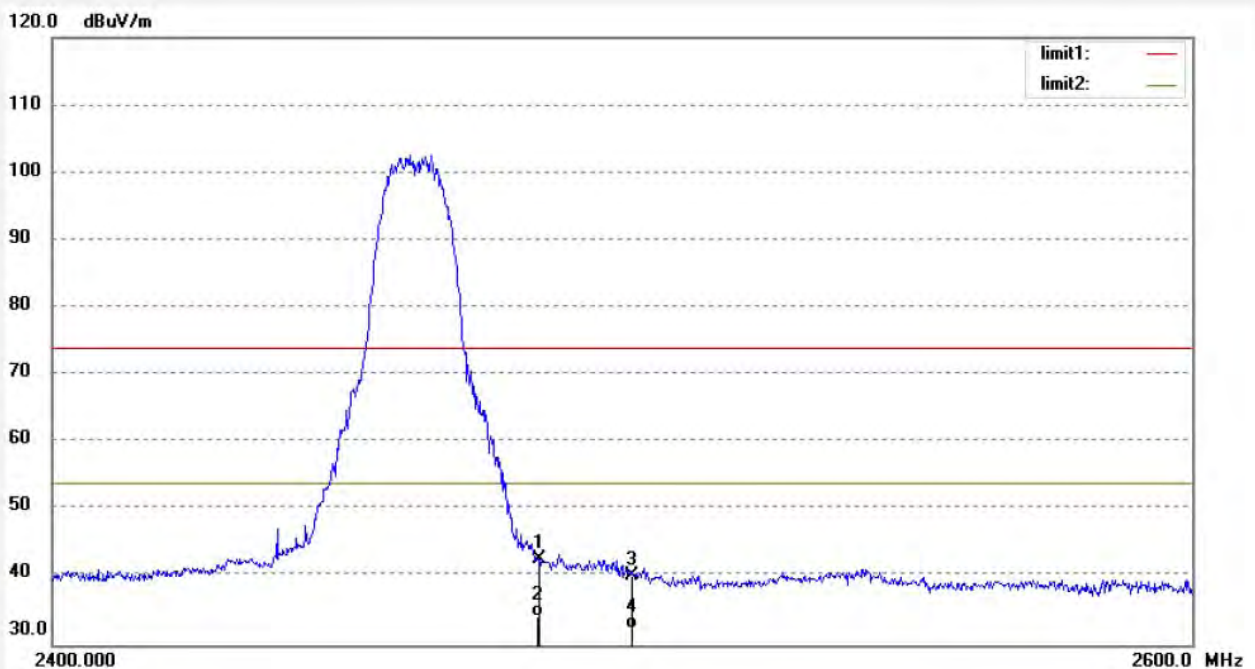
Date: 18/09/12/

Time: 14/45/49

Engineer Signature:

Distance: 3m

Note: Report NO.:ATE20181607



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	46.52	-3.89	42.63	74.00	-31.37	peak	300	199	
2	2483.500	38.16	-3.89	34.27	54.00	-19.73	AVG	250	264	
3	2500.000	44.07	-3.81	40.26	74.00	-33.74	peak	250	162	
4	2500.000	36.20	-3.81	32.39	54.00	-21.61	AVG	250	102	



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Job No.: FRANK2018 #1574

Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Foldable drone

Mode: TX Channel 11(802.11B)

Model: 66117

Manufacturer: Yangri

Polarization: Vertical

Power Source: DC 3.7V

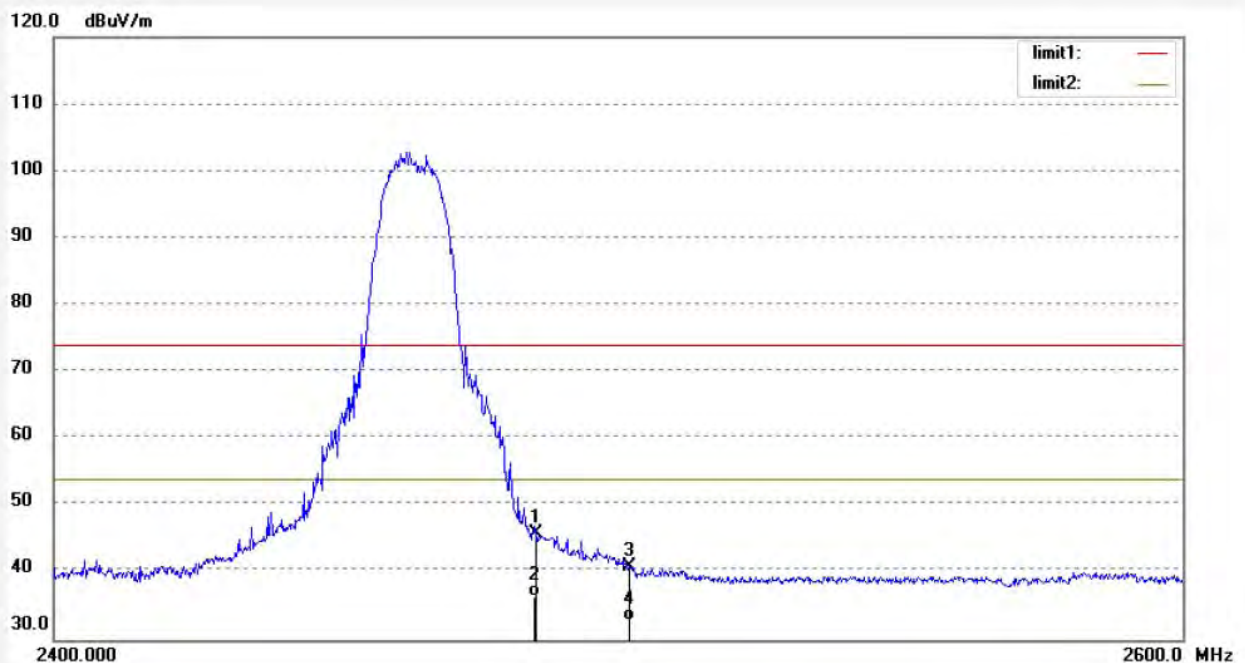
Date: 18/09/12/

Time: 14/40/07

Engineer Signature:

Distance: 3m

Note: Report NO.:ATE20181607



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	49.71	-3.89	45.82	74.00	-28.18	peak	250	163	
2	2483.500	40.26	-3.89	36.37	54.00	-17.63	AVG	150	25	
3	2500.000	44.68	-3.81	40.87	74.00	-33.13	peak	250	232	
4	2500.000	36.69	-3.81	32.88	54.00	-21.12	AVG	150	196	





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Job No.: FRANK2018 #1563

Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Foldable drone

Mode: TX Channel 1(802.11G)

Model: 66117

Manufacturer: Yangri

Polarization: Horizontal

Power Source: DC 3.7V

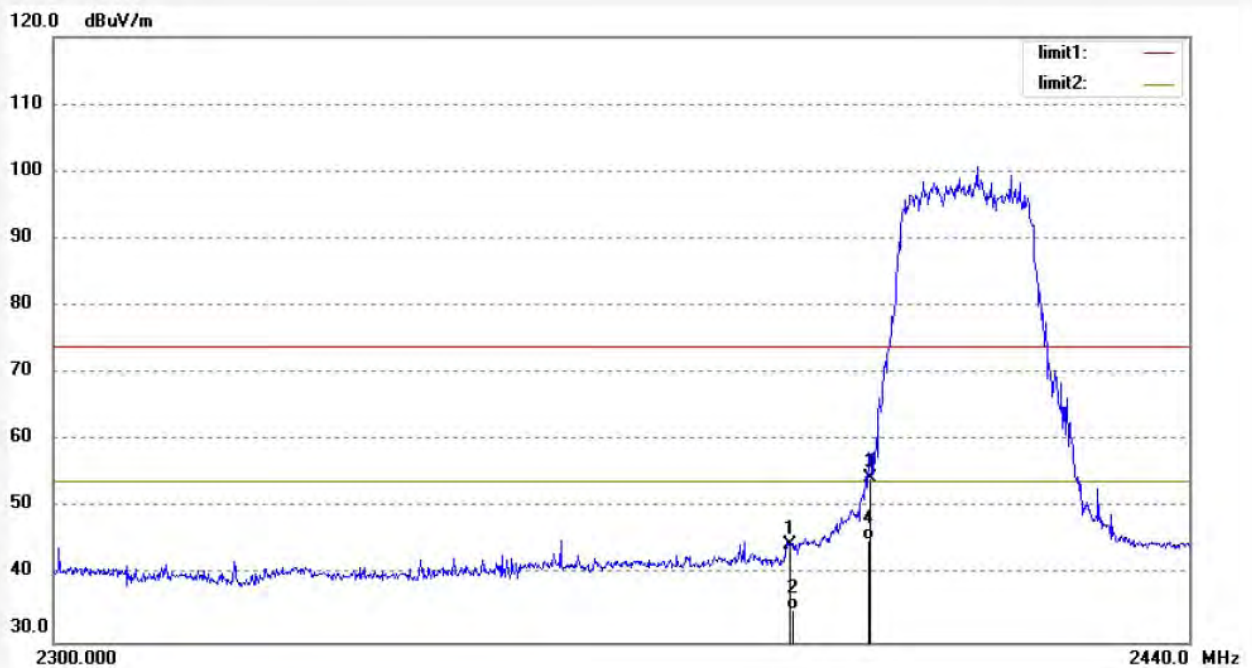
Date: 18/09/12/

Time: 13/40/42

Engineer Signature:

Distance: 3m

Note: Report NO.:ATE20181607



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2390.000	48.81	-4.32	44.49	74.00	-29.51	peak	250	130	
2	2390.000	39.16	-4.32	34.84	54.00	-19.16	AVG	250	210	
3	2400.000	58.70	-4.27	54.43	74.00	-19.57	peak	250	95	
4	2400.000	49.56	-4.27	45.29	54.00	-8.71	AVG	250	64	



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Job No.: FRANK2018 #1562

Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Foldable drone

Mode: TX Channel 1(802.11G)

Model: 66117

Manufacturer: Yangri

Polarization: Vertical

Power Source: DC 3.7V

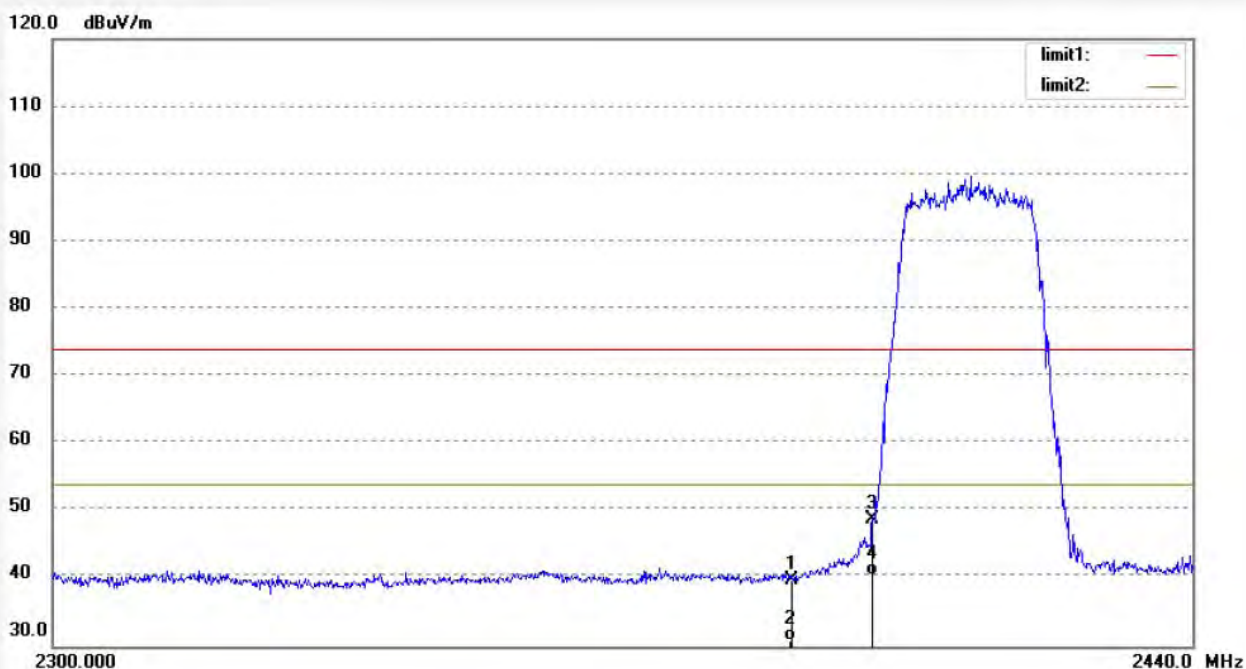
Date: 18/09/12/

Time: 13/34/57

Engineer Signature:

Distance: 3m

Note: Report NO.:ATE20181607



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2390.000	44.12	-4.32	39.80	74.00	-34.20	peak	250	149	
2	2390.000	35.15	-4.32	30.83	54.00	-23.17	AVG	200	126	
3	2400.000	53.11	-4.27	48.84	74.00	-25.16	peak	250	94	
4	2400.000	44.64	-4.27	40.37	54.00	-13.63	AVG	250	50	



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Job No.: FRANK2018 #1572

Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Foldable drone

Mode: TX Channel 11(802.11G)

Model: 66117

Manufacturer: Yangri

Polarization: Horizontal

Power Source: DC 3.7V

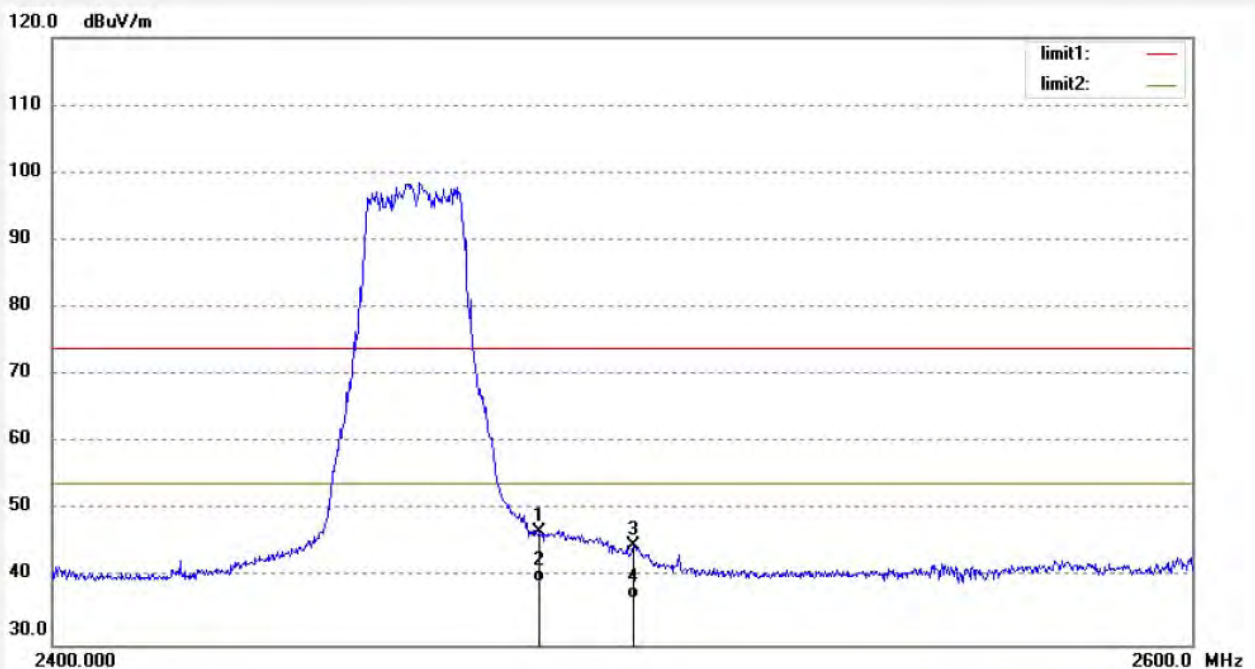
Date: 18/09/12/

Time: 14/30/16

Engineer Signature:

Distance: 3m

Note: Report NO.:ATE20181607



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	50.73	-3.89	46.84	74.00	-27.16	peak	250	199	
2	2483.500	43.19	-3.89	39.30	54.00	-14.70	AVG	250	114	
3	2500.000	48.44	-3.81	44.63	74.00	-29.37	peak	250	62	
4	2500.000	40.69	-3.81	36.88	54.00	-17.12	AVG	250	160	





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Job No.: FRANK2018 #1573

Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Foldable drone

Mode: TX Channel 11(802.11G)

Model: 66117

Manufacturer: Yangri

Polarization: Vertical

Power Source: DC 3.7V

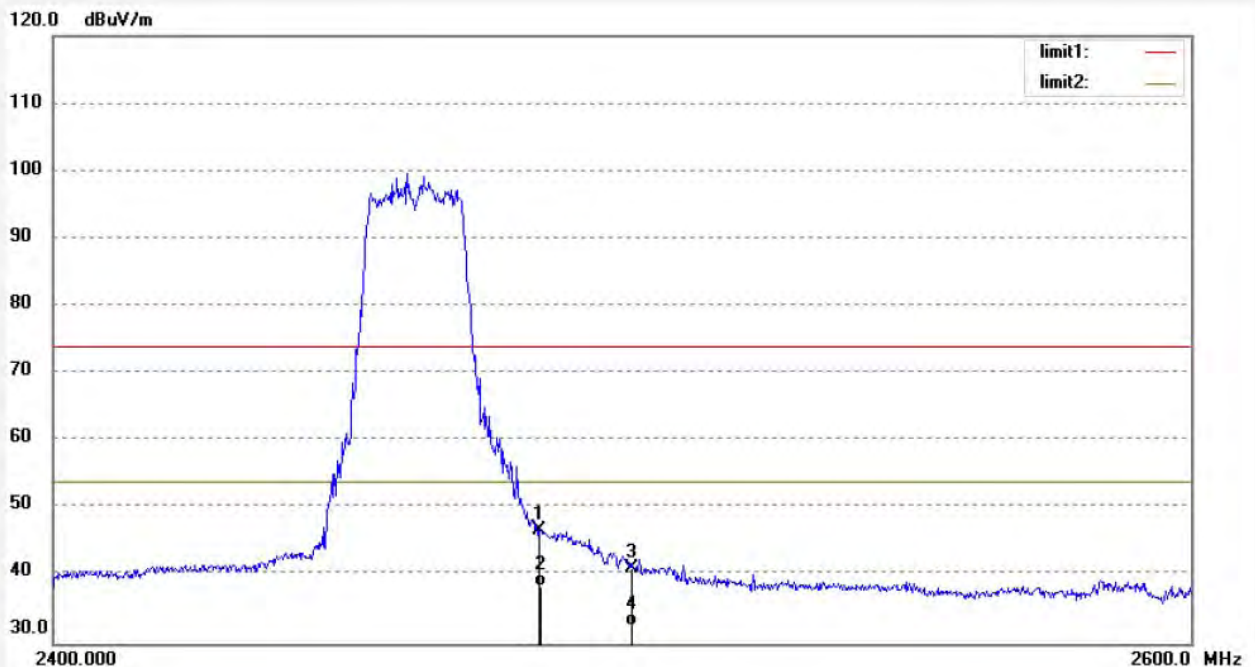
Date: 18/09/12/

Time: 14/35/05

Engineer Signature:

Distance: 3m

Note: Report NO.:ATE20181607



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	50.61	-3.89	46.72	74.00	-27.28	peak	200	123	
2	2483.500	42.44	-3.89	38.55	54.00	-15.45	AVG	150	29	
3	2500.000	44.95	-3.81	41.14	74.00	-32.86	peak	250	61	
4	2500.000	36.49	-3.81	32.68	54.00	-21.32	AVG	150	160	



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Job No.: FRANK2018 #1564

Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Foldable drone

Mode: TX Channel 1(802.11N20)

Model: 66117

Manufacturer: Yangri

Polarization: Horizontal

Power Source: DC 3.7V

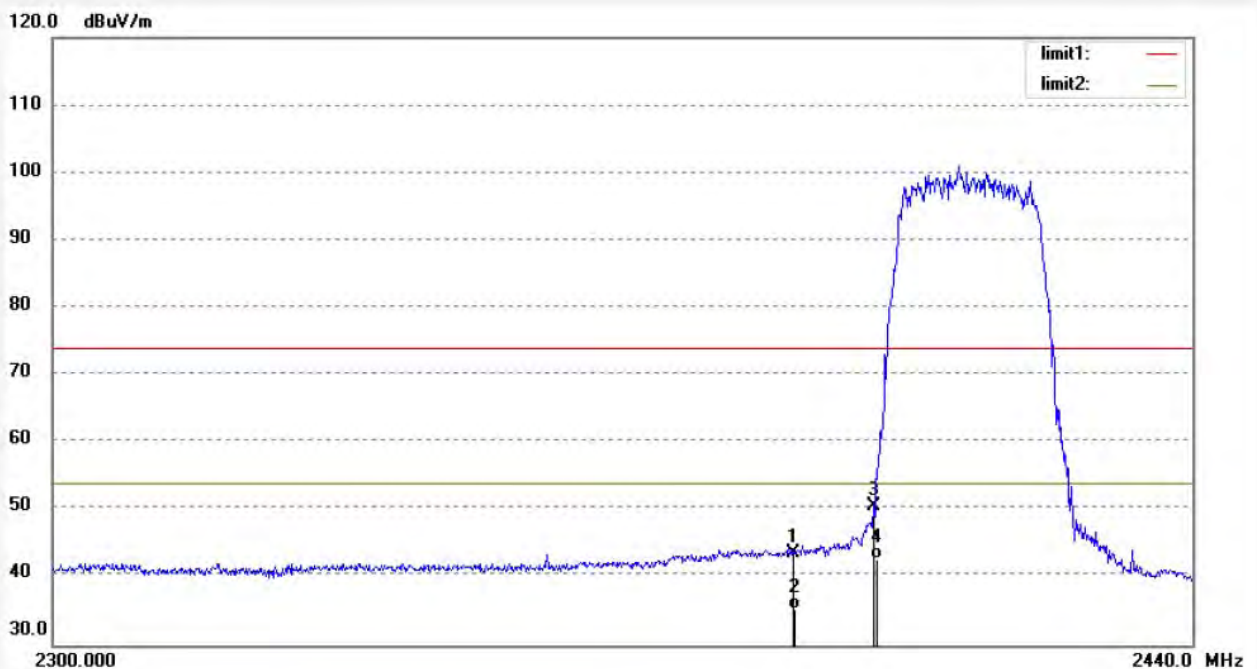
Date: 18/09/12/

Time: 13/45/35

Engineer Signature:

Distance: 3m

Note: Report NO.:ATE20181607



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2390.000	47.94	-4.32	43.62	74.00	-30.38	peak	250	193	
2	2390.000	39.50	-4.32	35.18	54.00	-18.82	AVG	250	97	
3	2400.000	54.86	-4.27	50.59	74.00	-23.41	peak	250	13	
4	2400.000	46.98	-4.27	42.71	54.00	-11.29	AVG	250	125	





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Job No.: FRANK2018 #1565

Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Foldable drone

Mode: TX Channel 1(802.11N20)

Model: 66117

Manufacturer: Yangri

Polarization: Vertical

Power Source: DC 3.7V

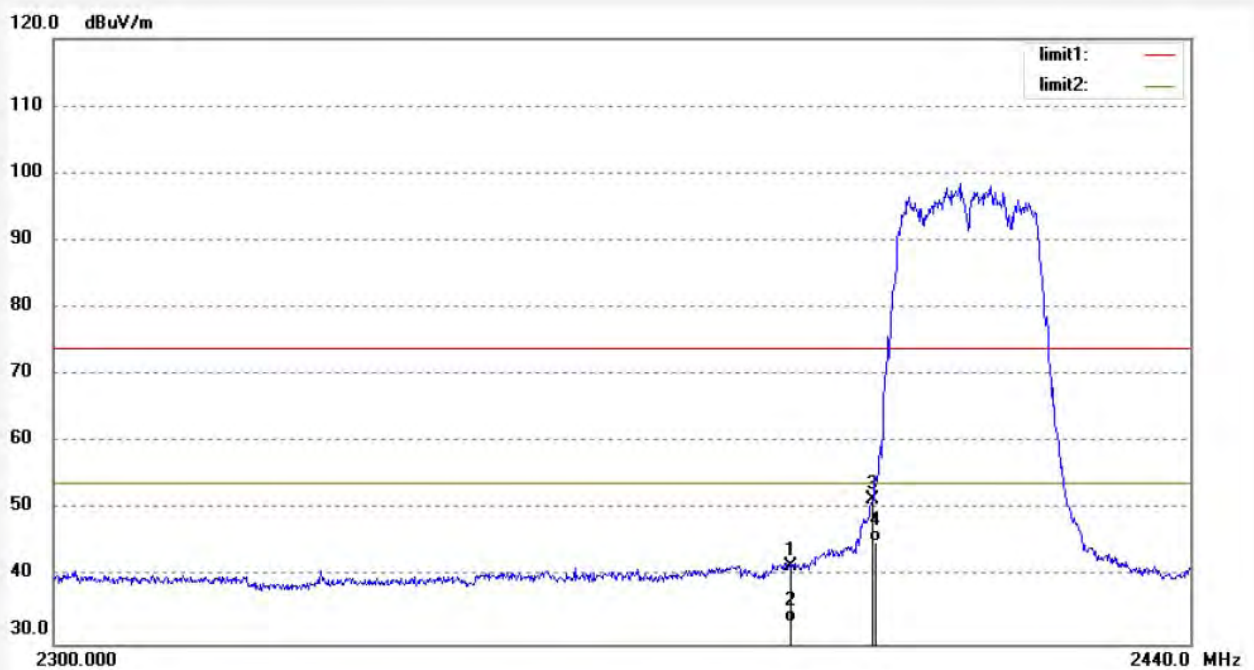
Date: 18/09/12/

Time: 13/50/57

Engineer Signature:

Distance: 3m

Note: Report NO.:ATE20181607



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2390.000	45.91	-4.32	41.59	74.00	-32.41	peak	250	89	
2	2390.000	37.61	-4.32	33.29	54.00	-20.71	AVG	150	215	
3	2400.000	55.79	-4.27	51.52	74.00	-22.48	peak	300	197	
4	2400.000	49.46	-4.27	45.19	54.00	-8.81	AVG	150	51	



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Job No.: FRANK2018 #1571

Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Foldable drone

Mode: TX Channel 11(802.11N20)

Model: 66117

Manufacturer: Yangri

Polarization: Horizontal

Power Source: DC 3.7V

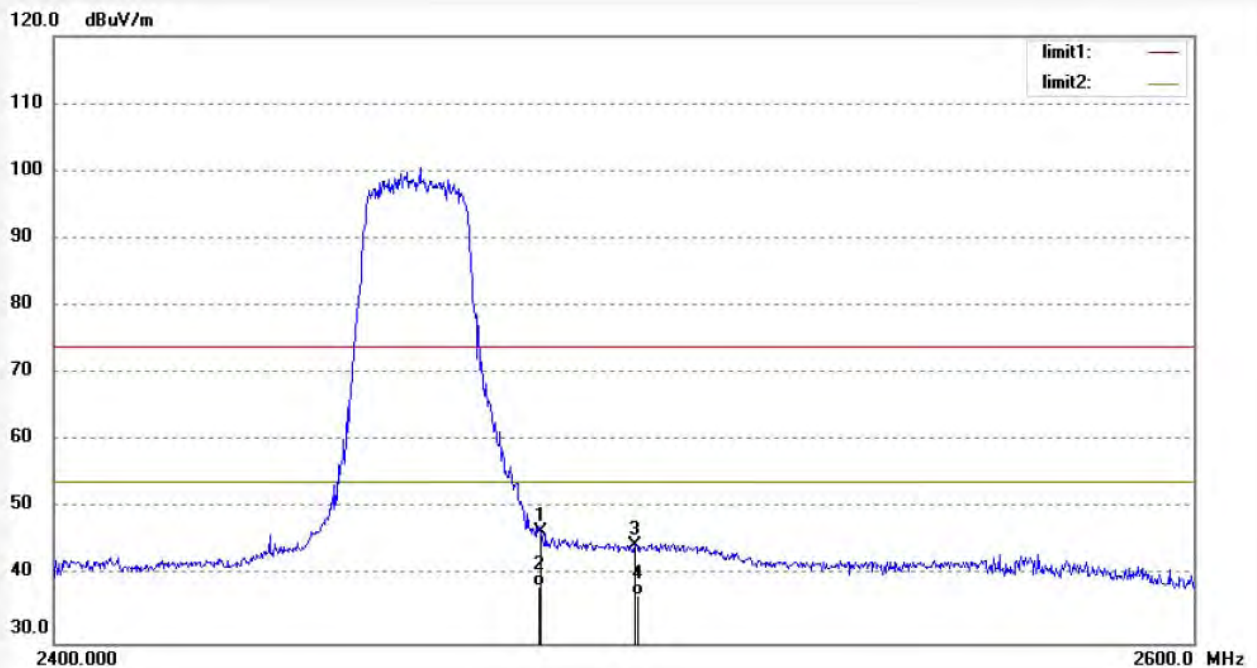
Date: 18/09/12/

Time: 14/25/20

Engineer Signature:

Distance: 3m

Note: Report NO.:ATE20181607



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	50.53	-3.89	46.64	74.00	-27.36	peak	250	169	
2	2483.500	42.35	-3.89	38.46	54.00	-15.54	AVG	250	154	
3	2500.000	48.26	-3.81	44.45	74.00	-29.55	peak	250	45	
4	2500.000	40.91	-3.81	37.10	54.00	-16.90	AVG	250	135	



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Job No.: FRANK2018 #1570

Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Foldable drone

Mode: TX Channel 11(802.11N20)

Model: 66117

Manufacturer: Yangri

Polarization: Vertical

Power Source: DC 3.7V

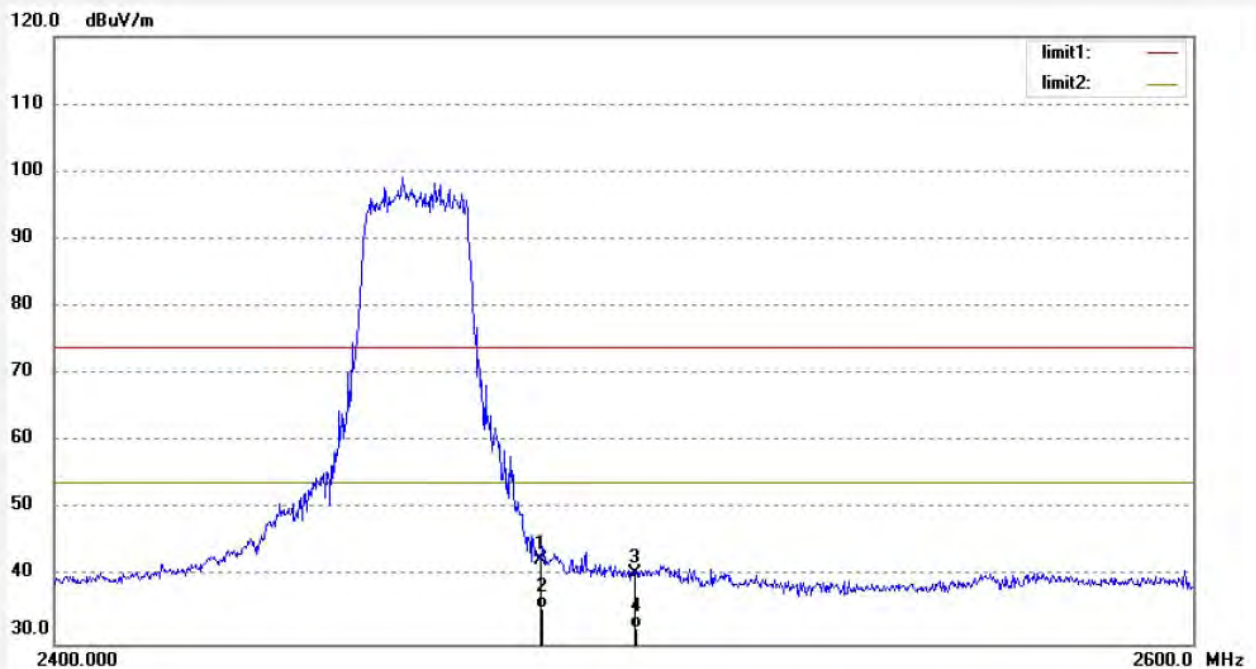
Date: 18/09/12/

Time: 14/20/27

Engineer Signature:

Distance: 3m

Note: Report NO.:ATE20181607



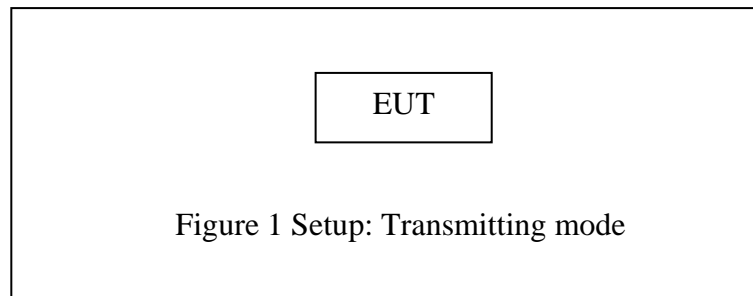
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	46.47	-3.89	42.58	74.00	-31.42	peak	250	193	
2	2483.500	39.16	-3.89	35.27	54.00	-18.73	AVG	150	102	
3	2500.000	44.37	-3.81	40.56	74.00	-33.44	peak	200	79	
4	2500.000	36.20	-3.81	32.39	54.00	-21.61	AVG	150	260	



## 12.RADIATED SPURIOUS EMISSION TEST

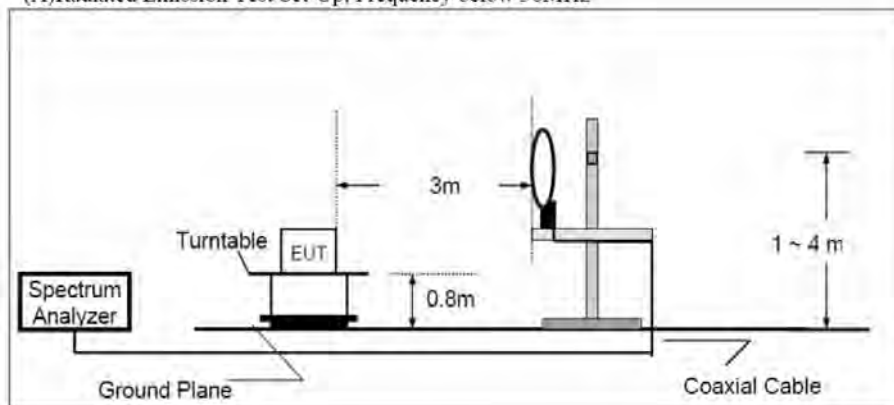
### 12.1.Block Diagram of Test Setup

#### 12.1.1.Block diagram of connection between the EUT and peripherals

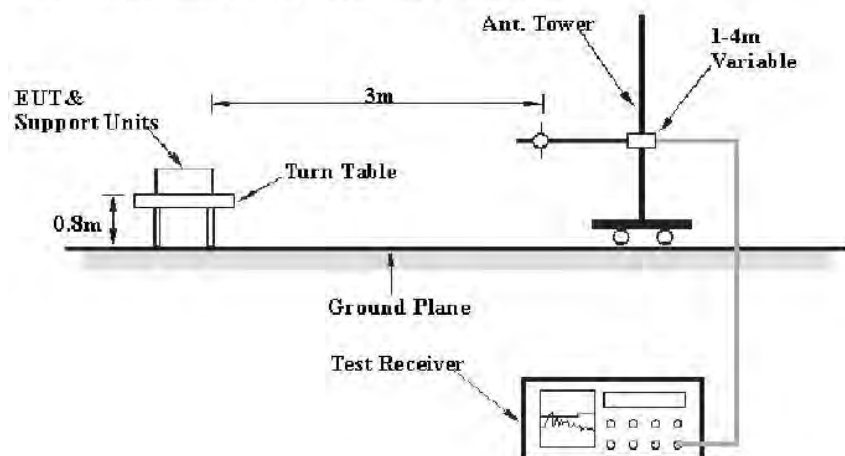


#### 12.1.2.Semi-Anechoic Chamber Test Setup Diagram

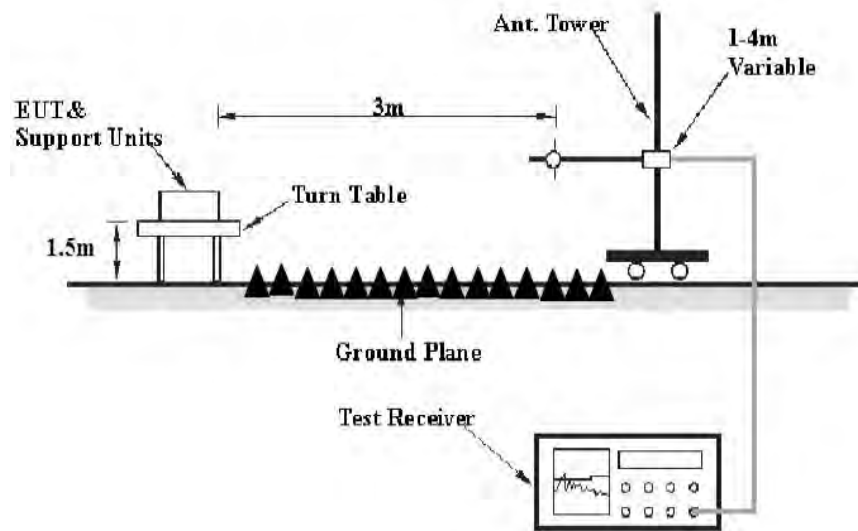
(A) Radiated Emission Test Set-Up, Frequency below 30MHz



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



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



## 12.2.The Limit For Section 15.247(d)

Section 15.247(d): In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator 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 the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

## 12.3.Restricted bands of operation

### 12.3.1.FCC Part 15.205 Restricted bands of operation

(a) Except as shown in paragraph (d) of this section, Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
<sup>1</sup> 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	( <sup>2</sup> )
13.36-13.41			

<sup>1</sup>Until February 1, 1999, this restricted band shall be 0.490-0.510

<sup>2</sup>Above 38.6

(b) Except as provided in paragraphs (d) and (e), the field strength of emission appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000MHz, Compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

## 12.4.Configuration of EUT on Measurement

The equipment are installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

## 12.5. Operating Condition of EUT

12.5.1. Setup the EUT and simulator as shown as Section 12.1.

12.5.2. Turn on the power of all equipment.

12.5.3. Let the EUT work in TX modes measure it. The transmit frequency are 2412-2462. We select 2412MHz, 2437MHz, 2462MHz TX frequency to transmit.

## 12.6. Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground (Below 1GHz). The EUT and its simulators are placed on a turntable, which is 1.5 meter high above ground (Above 1GHz). The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bi-log antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the EUT location must be manipulated according to ANSI C63.10:2013 on radiated emission measurement.

The frequency range from 30MHz to 26500MHz is checked.

Result = Reading + Corrected Factor

Where Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

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

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for peak measurement with peak detector at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average measurement with peak detection at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

## 12.7.Data Sample

Frequency (MHz)	Reading (dB $\mu$ v)	Factor (dB/m)	Result (dB $\mu$ v/m)	Limit (dB $\mu$ v/m)	Margin (dB)	Remark
X.XX	48.69	-13.35	35.34	46	-10.66	QP

Frequency(MHz) = Emission frequency in MHz

Reading(dB $\mu$ v) = Uncorrected Analyzer/Receiver reading

Factor (dB/m) = Antenna factor + Cable Loss – Amplifier gain

Result(dB $\mu$ v/m) = Reading(dB $\mu$ v) + Factor(dB/m)

Limit (dB $\mu$ v/m) = Limit stated in standard

Margin (dB) = Result(dB $\mu$ v/m) - Limit (dB $\mu$ v/m)

QP = Quasi-peak Reading

Calculation Formula:

Margin(dB) = Result (dB $\mu$ V/m)–Limit(dB $\mu$ V/m)

Result(dB $\mu$ V/m)= Reading(dB $\mu$ V)+ Factor(dB/m)

The “Margin” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -7dB means the emission is 7dB below the limit.

## 12.8.The Field Strength of Radiation Emission Measurement Results

Test Lab: 3m Anechoic chamber

Test Engineer: Star

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. \*: Denotes restricted band of operation.
3. The radiation emissions from 18-26.5GHz and 9KHz-30MHz are not reported, because the test values lower than the limits of 20dB.
4. We tested 802.11b/g/n mode the all data rate and the worst case data for this channel to be 11Mbps for 802.11b mode.



## Below 1G



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Job No.: frank2018 #1517

Standard: FCC PART 15C 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Foldable drone

Mode: TX Channel 1(802.11b)

Model: 66117

Manufacturer: Yangri

Polarization: Horizontal

Power Source: DC 3.7V

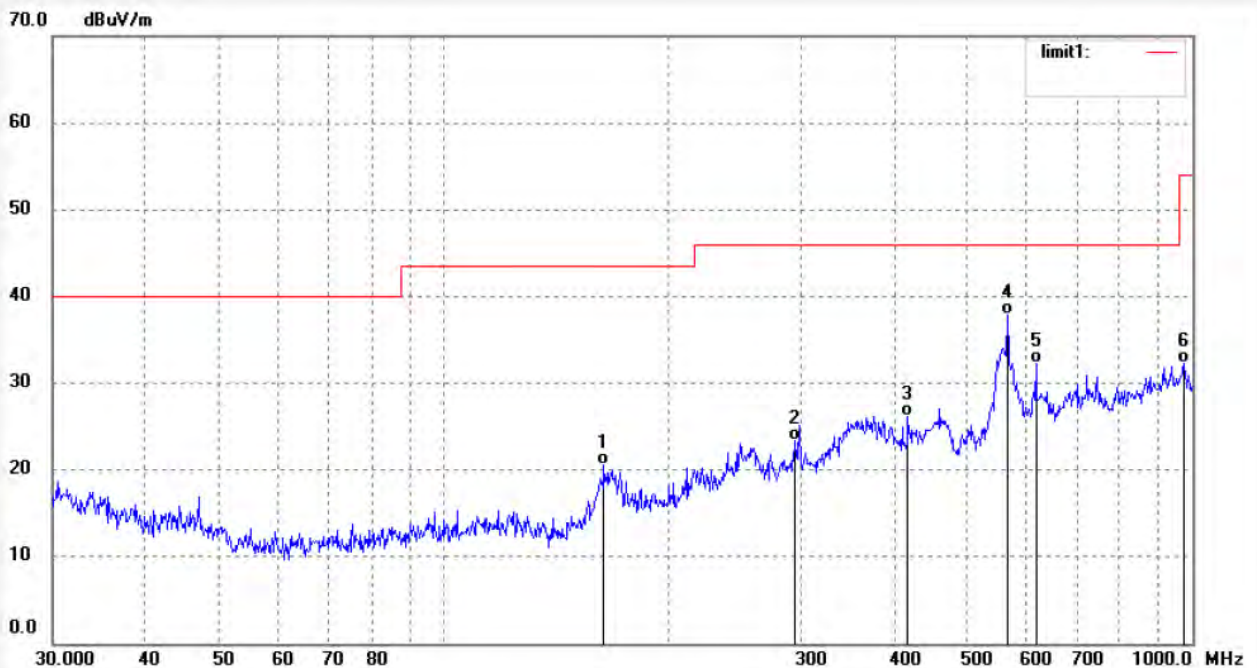
Date: 18/09/12/

Time:

Engineer Signature:

Distance:

Note: Report NO.:ATE20181607



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	163.7366	41.46	-20.95	20.51	43.50	-22.99	QP	200	302	
2	294.4259	39.72	-16.38	23.34	46.00	-22.66	QP	200	112	
3	416.9108	39.85	-13.74	26.11	46.00	-19.89	QP	200	95	
4	565.9776	48.56	-10.73	37.83	46.00	-8.17	QP	200	266	
5	617.9416	41.78	-9.51	32.27	46.00	-13.73	QP	200	232	
6	975.7048	35.33	-3.04	32.29	54.00	-21.71	QP	200	200	



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Job No.: frank2018 #1516

Standard: FCC PART 15C 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Foldable drone

Mode: TX Channel 1(802.11b)

Model: 66117

Manufacturer: Yangri

Polarization: Vertical

Power Source: DC 3.7V

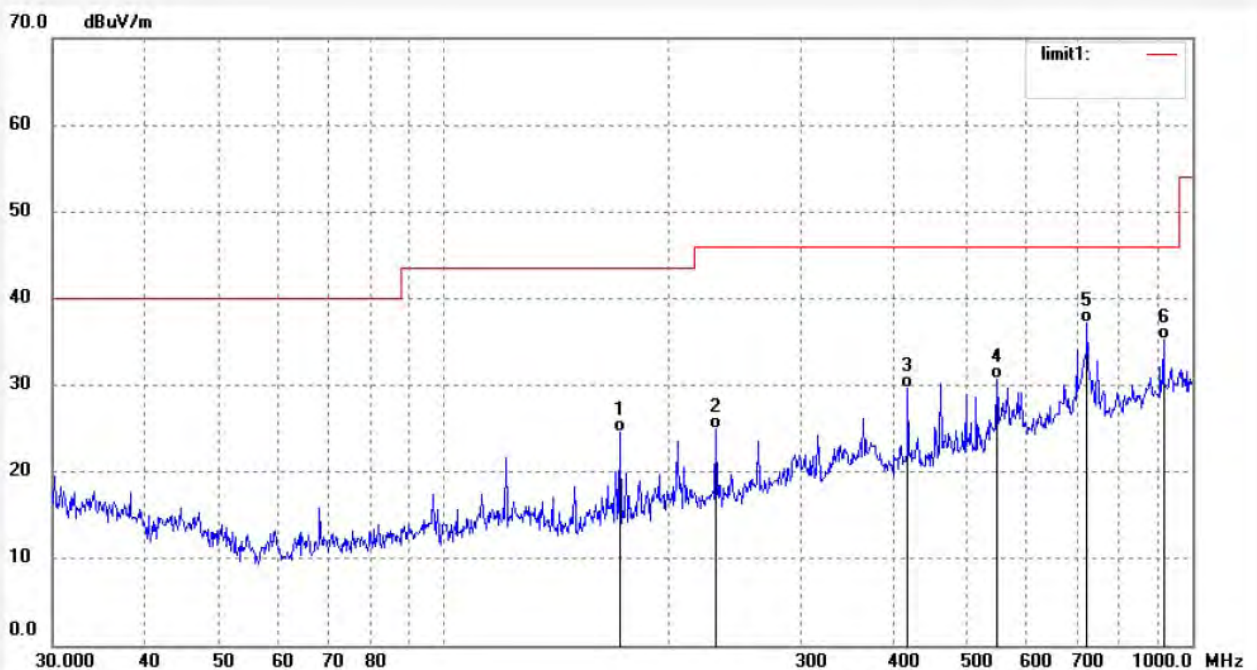
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Time:

Engineer Signature:

Distance:

Note: Report NO.:ATE20181607



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	171.9921	45.12	-20.50	24.62	43.50	-18.88	QP	100	169	
2	231.0398	43.33	-18.31	25.02	46.00	-20.98	QP	100	52	
3	416.9108	43.42	-13.74	29.68	46.00	-16.32	QP	100	126	
4	548.3600	41.79	-11.14	30.65	46.00	-15.35	QP	100	195	
5	723.7930	44.57	-7.39	37.18	46.00	-8.82	QP	100	22	
6	915.9076	39.24	-3.92	35.32	46.00	-10.68	QP	100	136	





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Job No.: frank2018 #1518

Standard: FCC PART 15C 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Foldable drone

Mode: TX Channel 6(802.11b)

Model: 66117

Manufacturer: Yangri

Polarization: Horizontal

Power Source: DC 3.7V

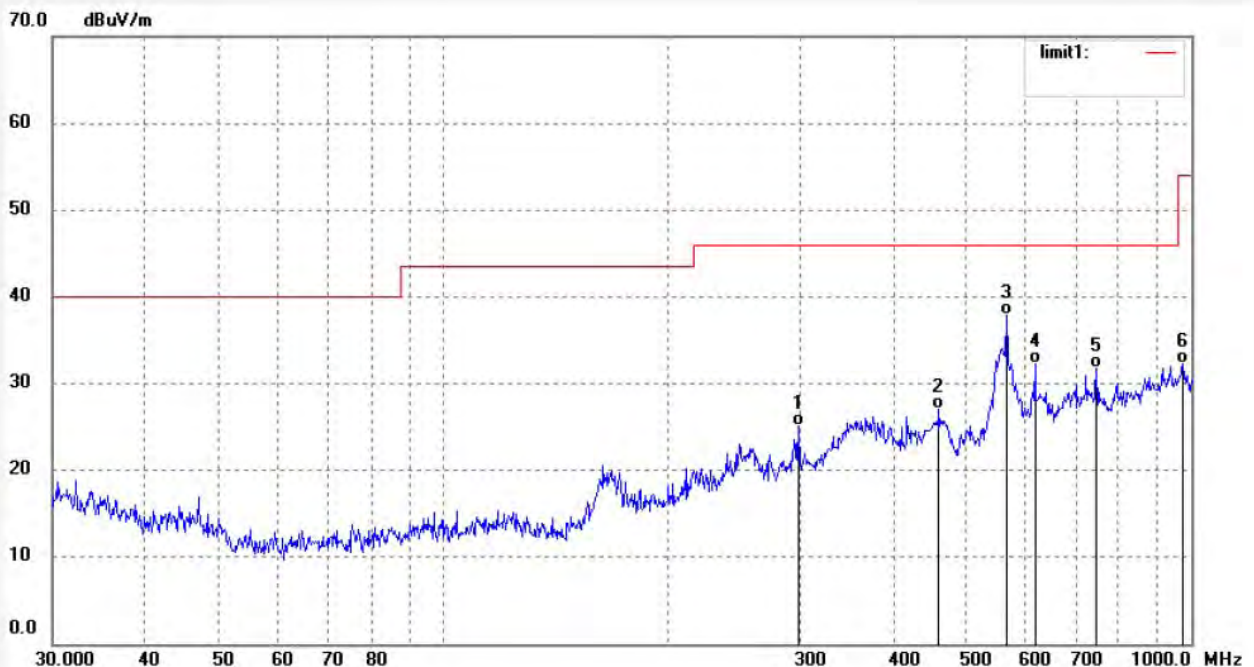
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Time:

Engineer Signature:

Distance:

Note: Report NO.:ATE20181607



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	298.5932	41.44	-16.30	25.14	46.00	-20.86	QP	200	63	
2	460.0122	39.85	-12.73	27.12	46.00	-18.88	QP	200	315	
3	565.9776	48.56	-10.73	37.83	46.00	-8.17	QP	200	322	
4	617.9416	41.78	-9.51	32.27	46.00	-13.73	QP	200	102	
5	747.0465	38.62	-6.82	31.80	46.00	-14.20	QP	200	91	
6	975.7048	35.33	-3.04	32.29	54.00	-21.71	QP	200	131	



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Job No.: frank2018 #1519

Standard: FCC PART 15C 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Foldable drone

Mode: TX Channel 6(802.11b)

Model: 66117

Manufacturer: Yangri

Polarization: Vertical

Power Source: DC 3.7V

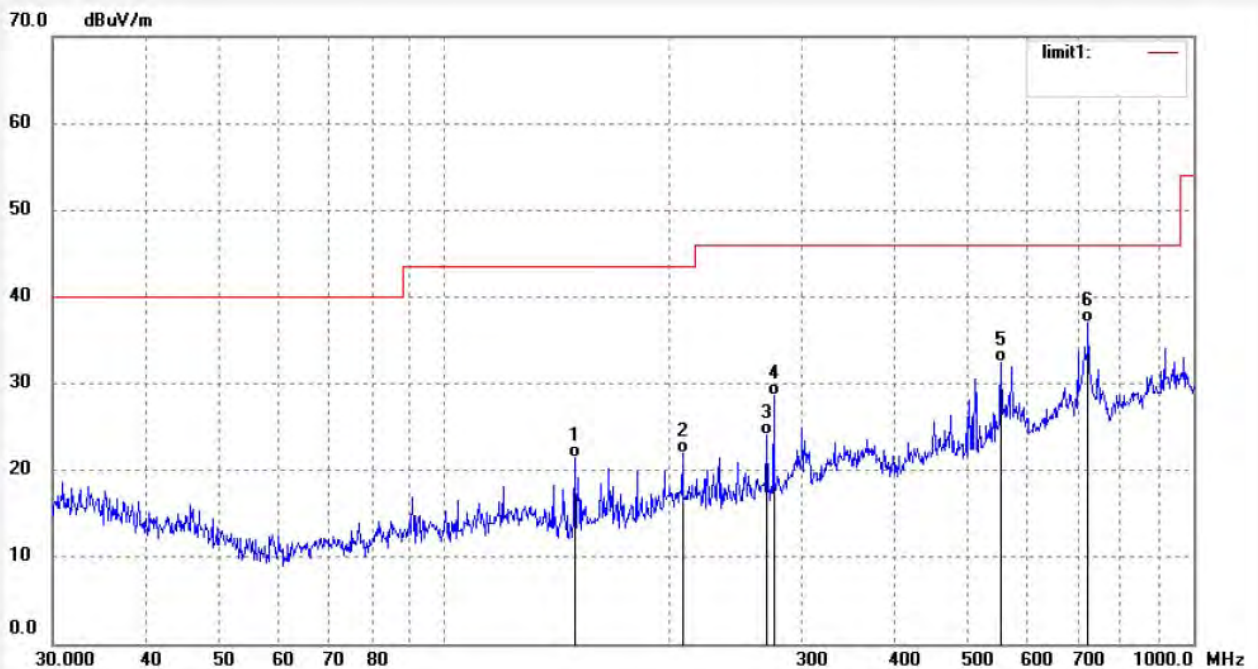
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Time:

Engineer Signature:

Distance:

Note: Report NO.:ATE20181607



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	149.4415	43.77	-22.30	21.47	43.50	-22.03	QP	100	305	
2	207.9260	40.43	-18.50	21.93	43.50	-21.57	QP	100	321	
3	269.6669	41.17	-17.13	24.04	46.00	-21.96	QP	100	201	
4	275.4123	45.56	-16.96	28.60	46.00	-17.40	QP	100	99	
5	554.1707	43.50	-11.01	32.49	46.00	-13.51	QP	100	41	
6	723.7930	44.37	-7.39	36.98	46.00	-9.02	QP	100	345	





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Job No.: frank2018 #1521

Standard: FCC PART 15C 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Foldable drone

Mode: TX Channel 11(802.11b)

Model: 66117

Manufacturer: Yangri

Polarization: Horizontal

Power Source: DC 3.7V

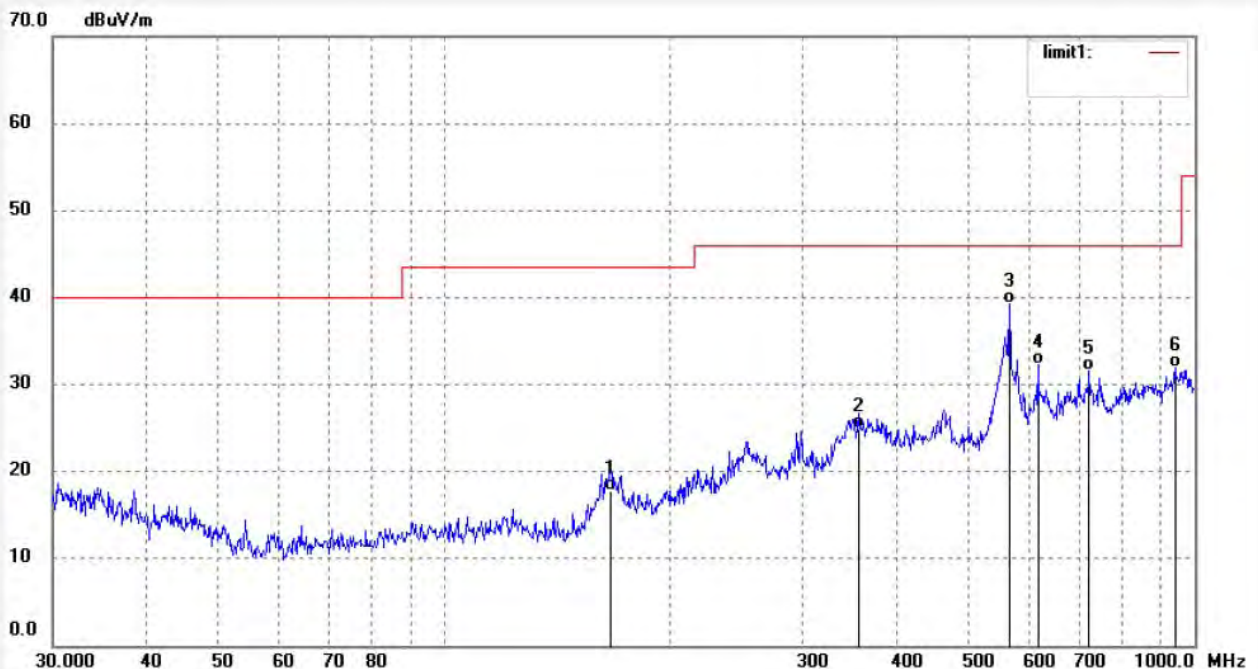
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Time:

Engineer Signature:

Distance:

Note: Report NO.:ATE20181607



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	166.6384	38.45	-20.64	17.81	43.50	-25.69	QP	200	82	
2	355.9397	39.45	-14.44	25.01	46.00	-20.99	QP	200	94	
3	565.9776	49.94	-10.73	39.21	46.00	-6.79	QP	200	123	
4	617.9416	41.81	-9.51	32.30	46.00	-13.70	QP	200	129	
5	723.7930	38.97	-7.39	31.58	46.00	-14.42	QP	200	215	
6	942.0180	35.43	-3.54	31.89	46.00	-14.11	QP	200	103	



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Job No.: frank2018 #1520

Standard: FCC PART 15C 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Foldable drone

Mode: TX Channel 11(802.11b)

Model: 66117

Manufacturer: Yangri

Polarization: Vertical

Power Source: DC 3.7V

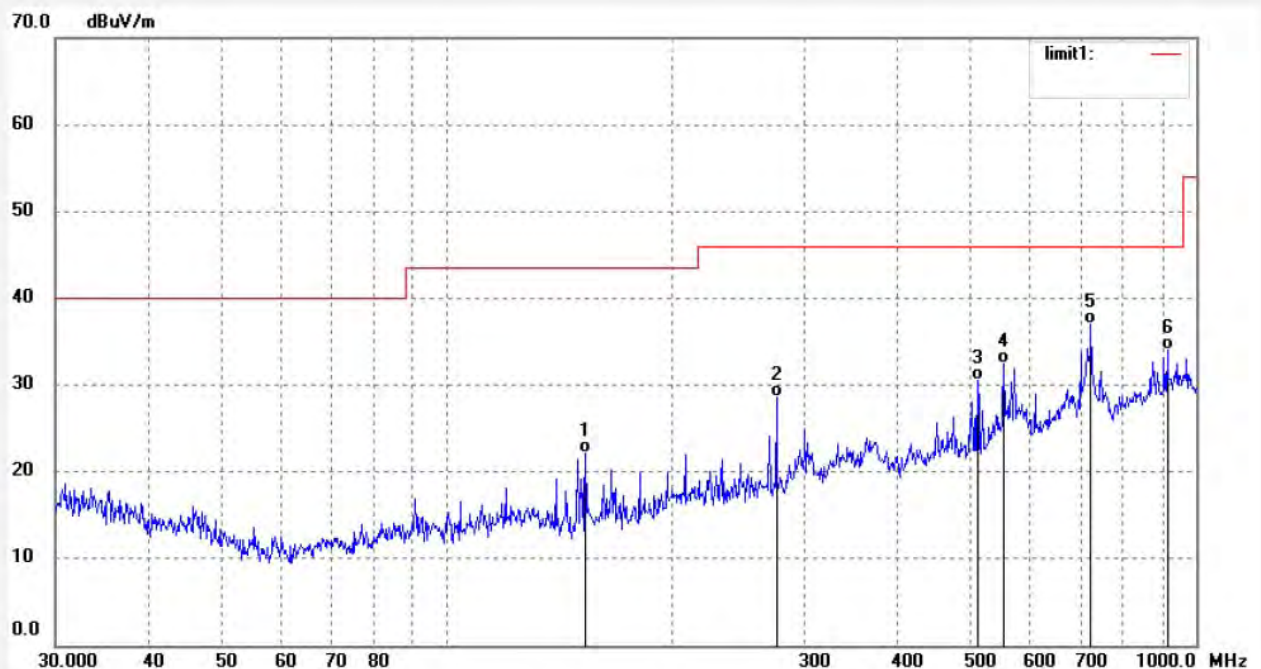
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Time:

Engineer Signature:

Distance:

Note: Report NO.:ATE20181607



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	153.1627	44.10	-22.04	22.06	43.50	-21.44	QP	100	324	
2	275.4123	45.56	-16.96	28.60	46.00	-17.40	QP	100	226	
3	511.1487	42.49	-11.97	30.52	46.00	-15.48	QP	100	164	
4	554.1707	43.50	-11.01	32.49	46.00	-13.51	QP	100	59	
5	723.7930	44.37	-7.39	36.98	46.00	-9.02	QP	100	199	
6	915.9077	37.91	-3.92	33.99	46.00	-12.01	QP	100	130	



## Above 1G



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Job No.: frank2018 #1554

Standard: FCC PART 15C 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Foldable drone

Mode: TX Channel 1(802.11b)

Model: 66117

Manufacturer: Yangri

Polarization: Horizontal

Power Source: DC 3.7V

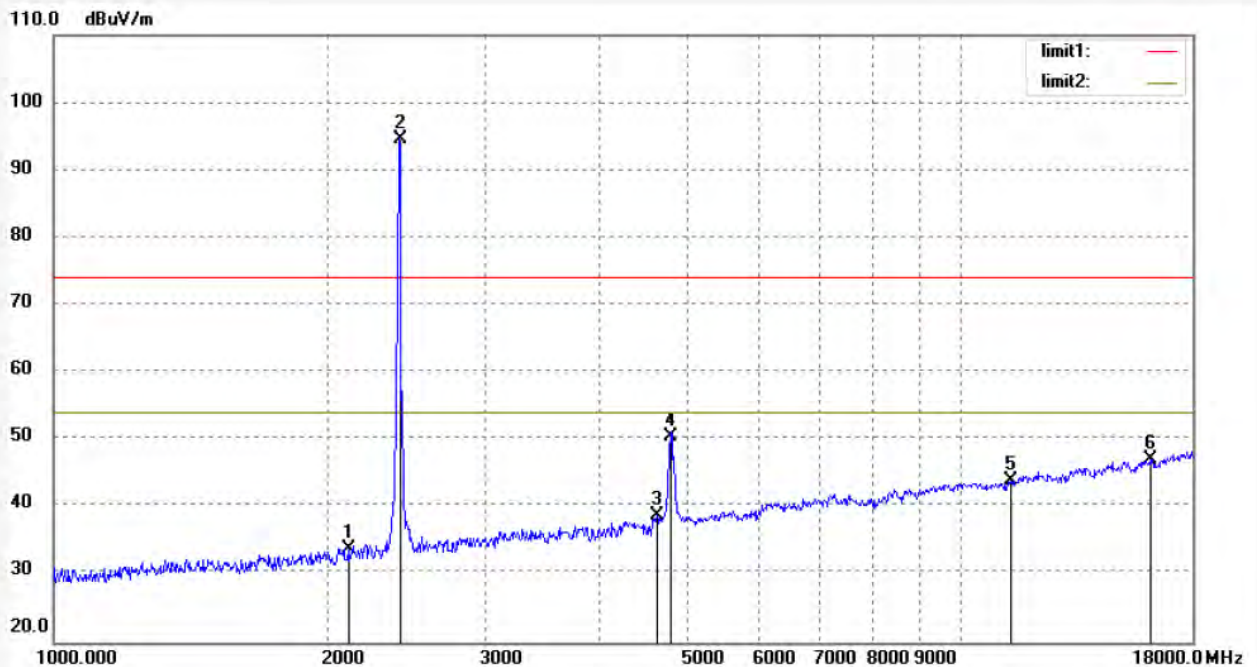
Date: 18/09/12/

Time: 10/12/18

Engineer Signature:

Distance:

Note: Report NO.:ATE20181607



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2112.901	42.64	-8.72	33.92	74.00	-40.08	peak	250	312	
2	2412.600	102.59	-7.96	94.63			peak	200	65	
3	4623.042	41.65	-2.89	38.76	74.00	-35.24	peak	250	105	
4	4824.328	52.82	-2.30	50.52			peak	200	49	
5	11364.264	37.68	6.36	44.04	74.00	-29.96	peak	200	126	
6	16162.183	34.09	12.97	47.06	74.00	-26.94	peak	200	302	



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Job No.: frank2018 #1555

Standard: FCC PART 15C 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Foldable drone

Mode: TX Channel 1(802.11b)

Model: 66117

Manufacturer: Yangri

Polarization: Vertical

Power Source: DC 3.7V

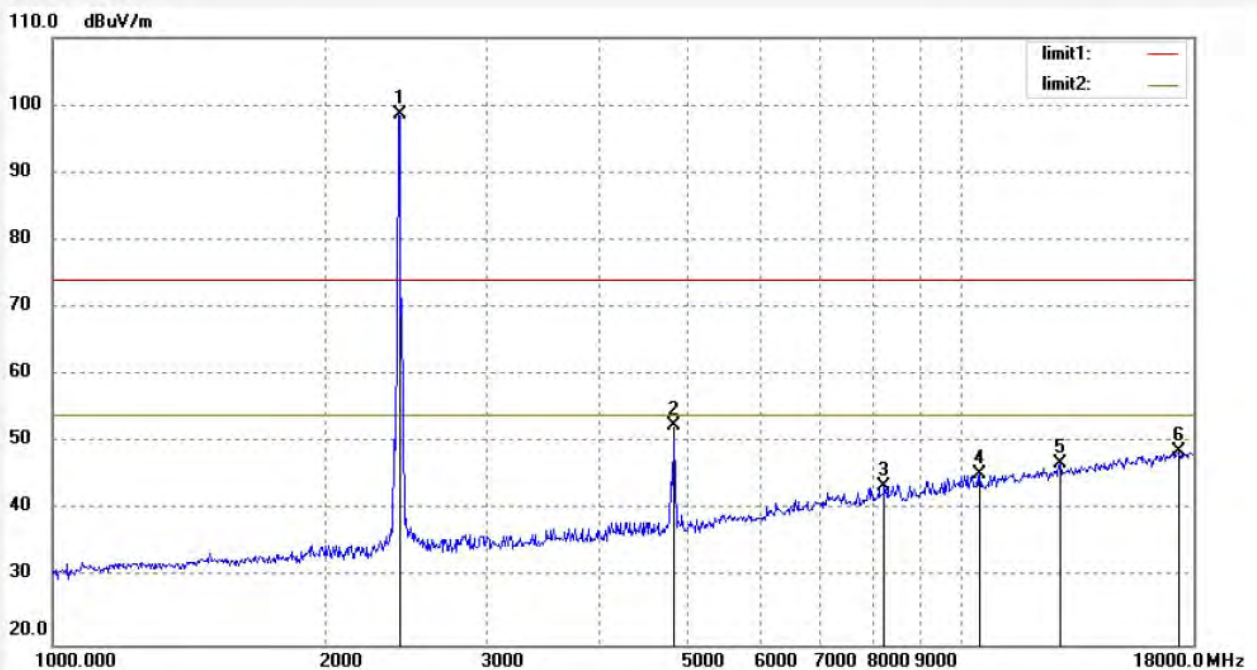
Date: 18/09/12/

Time: 10/12/18

Engineer Signature:

Distance:

Note: Report NO.:ATE20181607



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2412.600	106.59	-7.96	98.63			peak	150	103	
2	4824.361	54.71	-2.20	52.51			peak	150	212	
3	8226.666	39.77	3.77	43.54	74.00	-30.46	peak	150	166	
4	10474.805	39.83	5.38	45.21	74.00	-28.79	peak	150	102	
5	12842.052	37.84	8.97	46.81	74.00	-27.19	peak	150	133	
6	17331.611	33.54	15.09	48.63	74.00	-25.37	peak	150	192	





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Job No.: frank2018 #1557

Standard: FCC PART 15C 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Foldable drone

Mode: TX Channel 6(802.11b)

Model: 66117

Manufacturer: Yangri

Polarization: Horizontal

Power Source: DC 3.7V

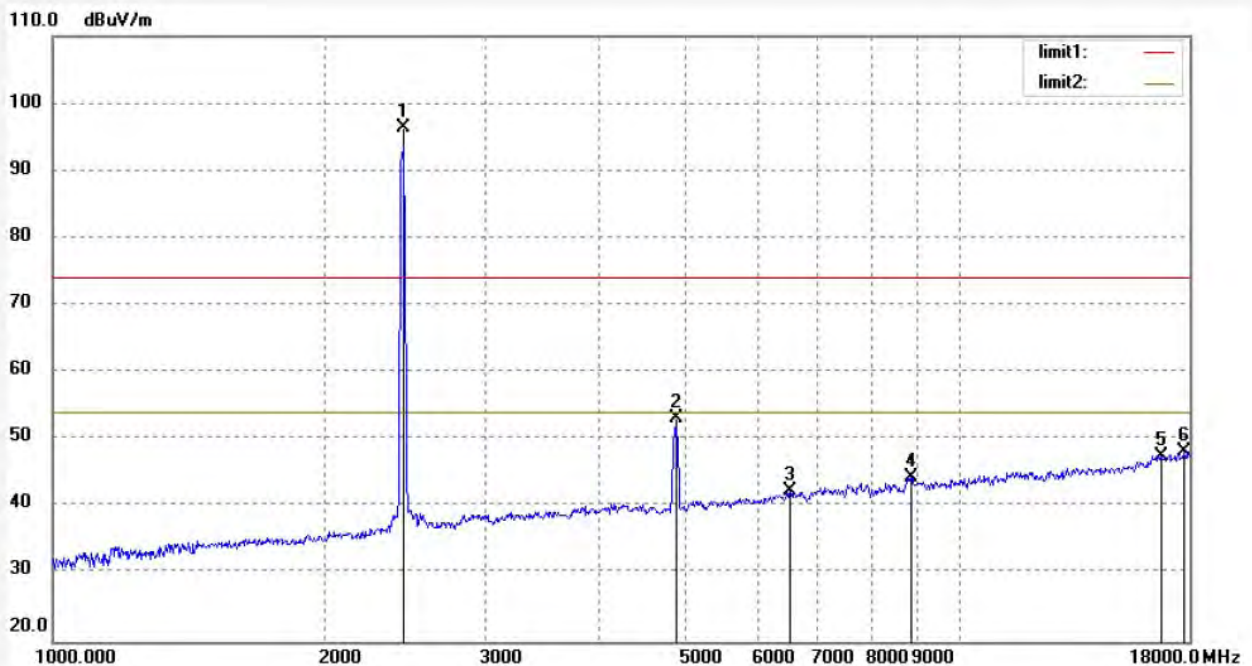
Date: 18/09/12/

Time: 10/12/18

Engineer Signature:

Distance:

Note: Report NO.:ATE20181607



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2437.007	104.26	-7.88	96.38			peak	200	33	
2	4874.017	55.29	-2.02	53.27			peak	200	210	
3	6517.697	41.48	0.98	42.46	74.00	-31.54	peak	250	53	
4	8873.419	39.82	4.65	44.47	74.00	-29.53	peak	250	189	
5	16736.686	33.53	14.08	47.61	74.00	-26.39	peak	200	156	
6	17791.642	32.78	15.35	48.13	74.00	-25.87	peak	250	302	



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Job No.: frank2018 #1556

Standard: FCC PART 15C 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Foldable drone

Mode: TX Channel 6(802.11b)

Model: 66117

Manufacturer: Yangri

Polarization: Vertical

Power Source: DC 3.7V

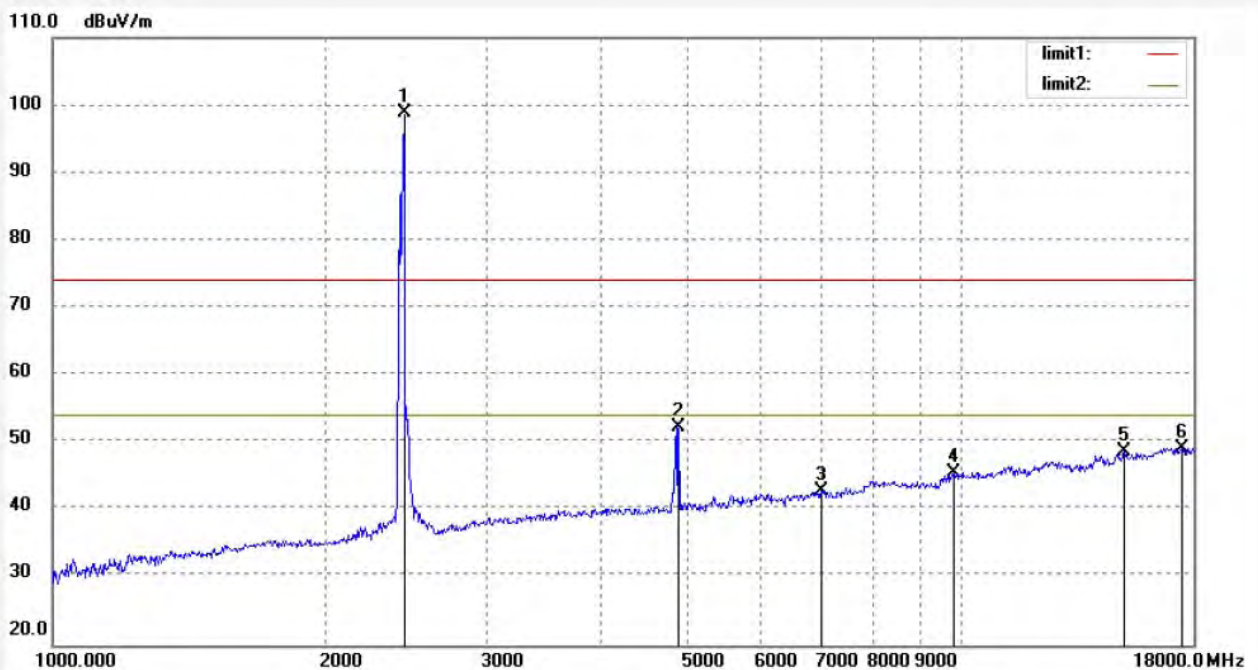
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Time: 10/12/18

Engineer Signature:

Distance:

Note: Report NO.:ATE20181607



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2437.007	106.76	-7.88	98.88			peak	150	233	
2	4874.017	54.29	-2.02	52.27			peak	150	210	
3	7009.664	41.03	1.80	42.83	74.00	-31.17	peak	150	263	
4	9825.061	40.01	5.46	45.47	74.00	-28.53	peak	150	56	
5	15115.594	35.48	13.13	48.61	74.00	-25.39	peak	150	266	
6	17483.617	34.09	15.15	49.24	74.00	-24.76	peak	150	130	





## ACCURATE TECHNOLOGY CO., LTD.

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Site: 1# Chamber  
Tel:+86-0755-26503290  
Fax:+86-0755-26503396

Job No.: frank2018 #1558

Standard: FCC PART 15C 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Foldable drone

Mode: TX Channel 11(802.11b)

Model: 66117

Manufacturer: Yangri

Polarization: Horizontal

Power Source: DC 3.7V

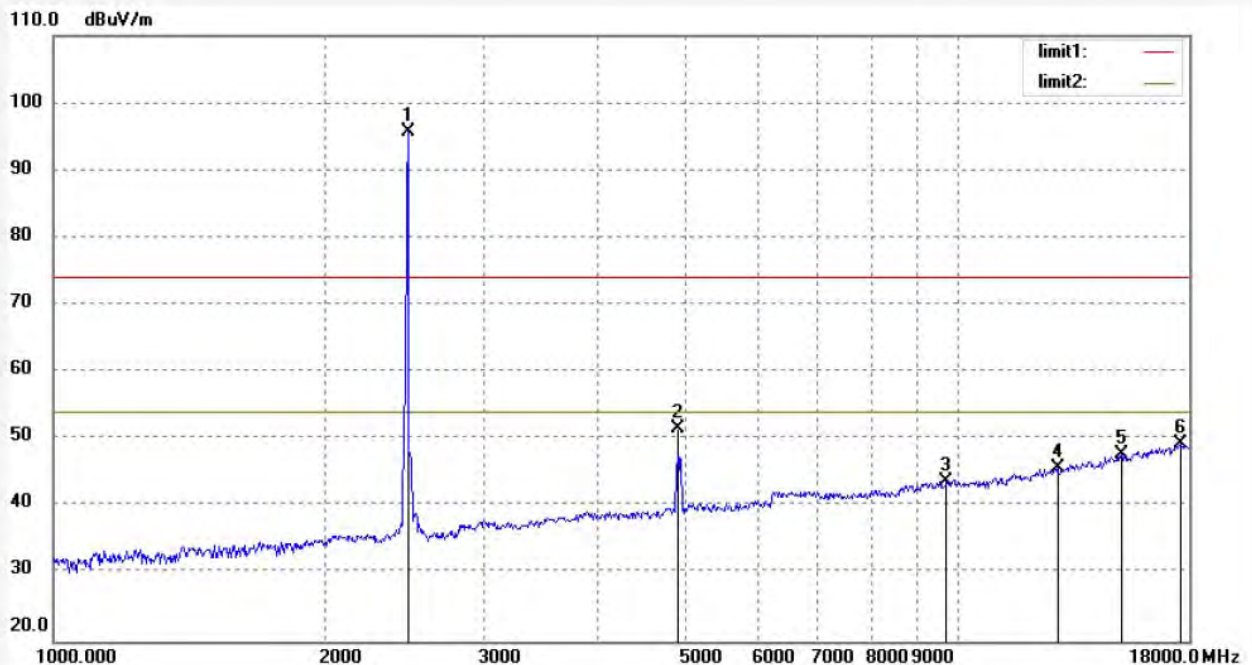
Date: 18/09/12/

Time: 10/12/18

Engineer Signature:

Distance:

Note: Report NO.:ATE20181607



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2462.345	103.61	-7.80	95.81			peak	250	145	
2	4924.160	53.62	-1.97	51.65			peak	250	23	
3	9711.332	38.36	5.47	43.83	74.00	-30.17	peak	200	219	
4	12879.487	36.73	9.05	45.78	74.00	-28.22	peak	200	122	
5	15159.656	34.71	13.06	47.77	74.00	-26.23	peak	250	64	
6	17636.957	34.05	15.24	49.29	74.00	-24.71	peak	250	169	



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Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: frank2018 #1559

Standard: FCC PART 15C 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Foldable drone

Mode: TX Channel 11(802.11b)

Model: 66117

Manufacturer: Yangri

Polarization: Vertical

Power Source: DC 3.7V

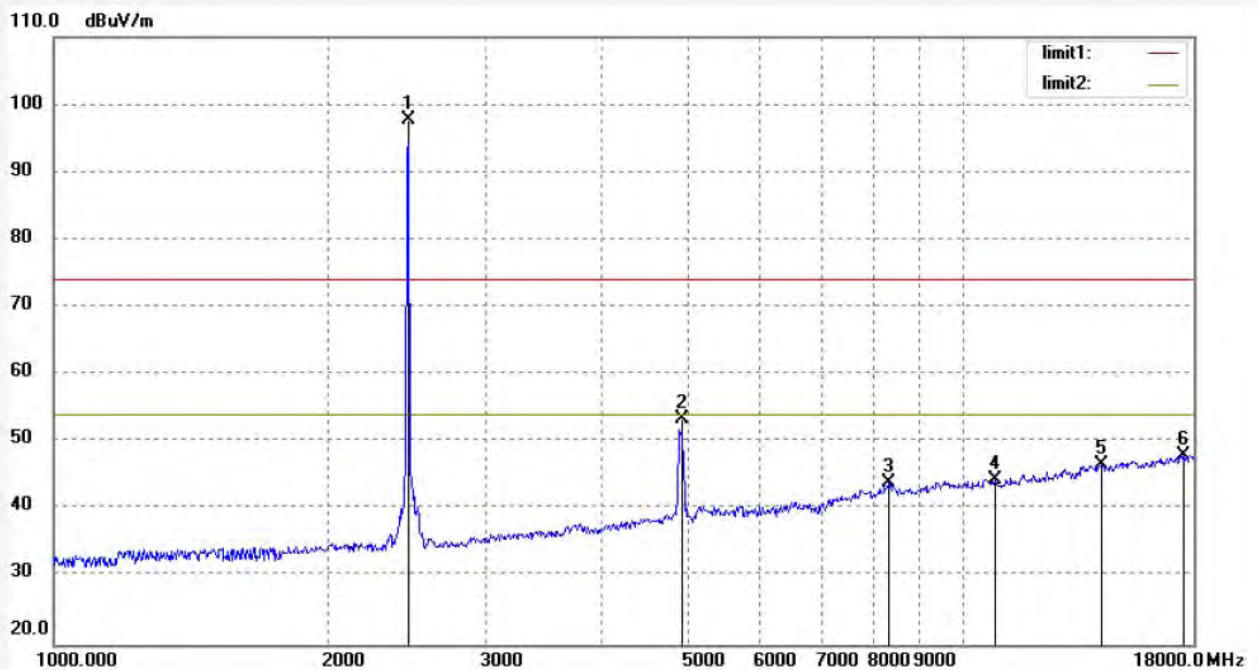
Date: 18/09/12/

Time: 10/12/18

Engineer Signature:

Distance:

Note: Report NO.:ATE20181607



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2462.179	105.51	-7.83	97.68			peak	150	103	
2	4920.444	55.33	-1.92	53.41			peak	150	222	
3	8298.818	40.16	3.90	44.06	74.00	-29.94	peak	150	195	
4	10878.763	38.78	5.74	44.52	74.00	-29.48	peak	150	133	
5	14260.764	33.53	13.06	46.59	74.00	-27.41	peak	150	198	
6	17585.695	32.85	15.21	48.06	74.00	-25.94	peak	150	100	

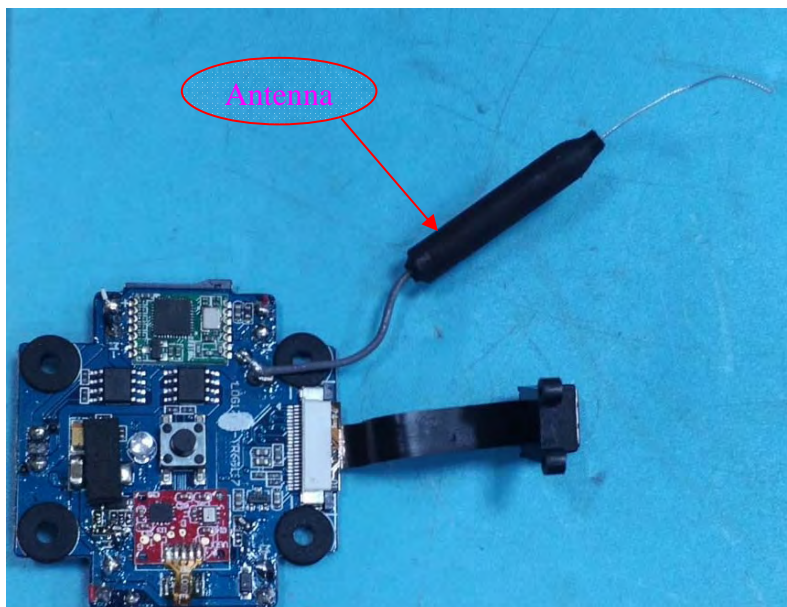
## 13.ANTENNA REQUIREMENT

### 13.1.The Requirement

According to 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.

### 13.2.Antenna Construction

Device is equipped with permanent attached antenna, which isn't displaced by other antenna. The Antenna gain of EUT is 2dBi. Therefore, the equipment complies with the antenna requirement of Section 15.203.



----- THE END OF TEST REPORT -----