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TESTING
CNAS L5313



DEKRA

Test Report

FCC Part15 Subpart E

Product Name : Mi Drone
Model No. : FXQ02FM
FCC ID : 2AG53FXQ02FM

Applicant : BEIJING FIMI TECHNOLOGY LIMITED
Address : No.348,Floor3,1#Complex Building,Yongtaiyuan
Jia,Qinghe,Haidian District,Beijing,China

Date of Receipt : Feb. 13, 2017
Test Date : Feb. 13, 2017~ Feb. 23, 2017
Issued Date : March. 02, 2017
Report No. : 1722041R-RF-US-P09V02
Report Version : V1.1

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

This report must not be used to claim product endorsement by CNAS, TAF or any agency of the government.

The test report shall not be reproduced without the written approval of DEKRA Testing and Certification (Suzhou) Co., Ltd.

Test Report Certification

Issued Date : March. 02, 2017

Report No. : 1722041R-RF-US-P09V02



Product Name : Mi Drone
 Applicant : BEIJING FIMI TECHNOLOGY LIMITED
 Address : No.348,Floor3,1#Complex Building,Yongtaiyuan
 Jia,Qinghe,Haidian District,Beijing,China
 Manufacturer : BEIJING FIMI TECHNOLOGY LIMITED
 Address : No.348,Floor3,1#Complex Building,Yongtaiyuan
 Jia,Qinghe,Haidian District,Beijing,China
 Model No. : FXQ02M
 FCC ID : 2AG53FXQ02FM
 EUT Voltage : DC 15.2V
 Applicable Standard : FCC CFR Title 47 Part 15 Subpart E
 ANSI C63.4:2014;
 ANSI C63.10:2013;
 789033 D02 General UNII Test Procedures New Rules
 v01r03
 Test Result : Complied
 Performed Location : DEKRA Testing and Certification (Suzhou) Co., Ltd.
 Corporation - Suzhou EMC Laboratory
 No.99 Hongye Rd., Suzhou Industrial Park, Suzhou,215006,
 Jiangsu, China
 TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098
 FCC Registration Number: 800392;

Documented By : Kathy Feng
 (Adm. Specialist: Kathy Feng)

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Approved By : Harry Zhao
 (Engineering Manager: Harry Zhao)

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History of This Test Report

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
1722041R-RF-US-P09V02	V1.0	Initial Issued Report	Feb. 24, 2017
1722041R-RF-US-P09V02	V1.1	<ol style="list-style-type: none">1. Change the category of the device to Client on page 7.2. Delete the test frequency configuration of 802.11n and ac on page 14.	Mar. 02, 2017

1. General Information

1.1. EUT Description

Product Name	Mi Drone					
Model No.	FXQ02FM					
EUT Voltage	DC 15.2V					
Type of Modulation	OFDM					
Data Rate	802.11a: 6/9/12/18/24/36/48/54Mbps					
Channel Control	Auto					
Transmit modes	<input checked="" type="checkbox"/>	802.11a	<input type="checkbox"/>	802.11n(20MHz)	<input type="checkbox"/>	802.11n(40MHz)
	<input type="checkbox"/>	802.11ac(20MHz)	<input type="checkbox"/>	802.11ac(40MHz)	<input type="checkbox"/>	802.11ac(80MHz)
Support Bands	<input checked="" type="checkbox"/>	5150MHz~5250MHz	<input type="checkbox"/>	Outdoor AP		
			<input type="checkbox"/>	Indoor AP		
			<input type="checkbox"/>	Fixed point-to-point AP		
			<input type="checkbox"/>	Fixed point-to-Multi point AP		
			<input checked="" type="checkbox"/>	Mobile and Portable Client		
	<input type="checkbox"/>	5250MHz~5350MHz				
	<input type="checkbox"/>	5470MHz~5725MHz	<input type="checkbox"/>	With TDWR Channels		
<input type="checkbox"/>			Without TDWR Channels			
<input checked="" type="checkbox"/>	5725MHz~5850MHz					

1.2. Antenna information

Antenna Model	N/A		
Antenna Manufacturer	N/A		
Antenna Delivery	<input type="checkbox"/> 1*TX+1*RX	<input checked="" type="checkbox"/> 1*TX+2*RX	<input type="checkbox"/> 3*TX+3*RX
Antenna Technology	<input checked="" type="checkbox"/> SISO		
	<input type="checkbox"/> MIMO	<input type="checkbox"/> Basic methodology with NANT transmit antennas	
		<input type="checkbox"/> Sectorized antenna systems	
		<input type="checkbox"/> Cross-polarized antennas	
		<input type="checkbox"/> Unequal antenna gains, with equal transmit powers	
		<input type="checkbox"/> Spatial Multiplexing	
		<input type="checkbox"/> Cyclic Delay Diversity (CDD)	
Antenna Type	PCB Antenna		

Antenna Information			
No.		Ant Gain/ Directional Gain (dBi)	
<input checked="" type="checkbox"/> SISO	<input checked="" type="checkbox"/> Antenna 0	4	
	<input checked="" type="checkbox"/> Antenna 1	4	
	<input type="checkbox"/> Antenna 2	N/A	

1.3. Working Frequency of Each Channel:

802.11a Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
36	5180 MHz	40	5200 MHz	44	5220 MHz	48	5240 MHz
149	5745 MHz	153	5765 MHz	157	5785 MHz	161	5805 MHz
165	5825MHz	N/A	N/A	N/A	N/A	N/A	N/A

1.4. Mode of Operation

DEKRA Testing and Certification (Suzhou) Co., Ltd. has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Test Mode
Mode 1: Transmit by 802.11a

Note 1: Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.

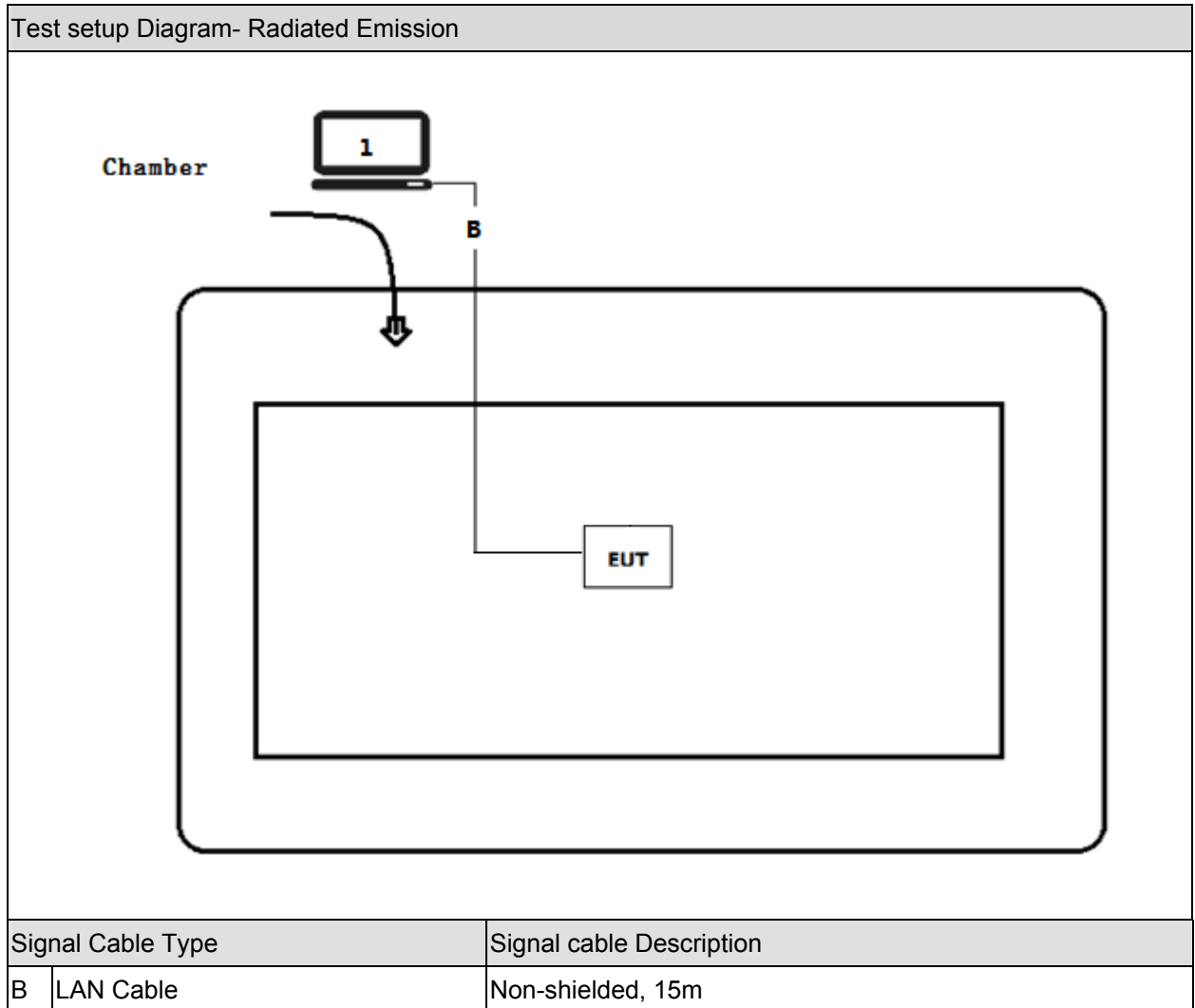
Note 2: For portable device, radiated tests was verified over X, Y, Z axis, and shown the worst case on this report.

1.5. Tested System Details

The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product		Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook	Lenovo	Think pad x220	SUA0600195	Non-shielded

1.6. Configuration of Tested System



1.7. EUT Exercise Software

1	Setup the EUT and Client as shown on above.
2	Turn on the power of equipment.
3	Configure the client and connect the EUT.
4	Run the software 【Art 2】 , and set the test mode and channel, then test.

2. Technical Test

2.1. Summary of Test Result

- No deviations from the test standards
 Deviations from the test standards as below description:

Performed Test Item	Normative References	Limit	Result
Conducted Emission	FCC CFR Title 47 Part 15 Subpart E: 2015 Section 15.207	FCC 15.207	PASS
Radiated Emission	FCC CFR Title 47 Part 15 Subpart E: 2015 Section 15.209	FCC 15.209	PASS
Emission bandwidth and occupied bandwidth	FCC CFR Title 47 Part 15 Subpart E: 2015 Section 15.407(a)	FCC 15.407(e)	PASS
6dB Emission Bandwidth	FCC CFR Title 47 Part 15 Subpart E: 2015 Section 15.407(a)	FCC 15.407(e)	PASS
Power Output	FCC CFR Title 47 Part 15 Subpart E: 2015 Section 15.407(a)	FCC 15.407(a)	PASS
Peak Power Spectral Density	FCC CFR Title 47 Part 15 Subpart E: 2015 Section 15.407(a)	FCC 15.407(a)	PASS
Radiated Emission Band Edge	FCC CFR Title 47 Part 15 Subpart E: 2015 Section 15.205, 15.407(b)	FCC 15.407(b)	PASS
Frequency Stability	FCC CFR Title 47 Part 15 Subpart E: 2015 Section 15.407(g)	Within the band	PASS
Antenna Requirement	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.203	FCC 15.203	PASS

2.2. Test Frequency configuration:

Modulation Mode	Channel	Frequency	Channel	Frequency	Channel	Frequency
802.11a	36	5180MHz	44	5220MHz	48	5240MHz
	149	5745MHz	157	5785MHz	165	5825MHz

2.3. Power Parameter Value of the test software

Test Mode	Frequency	Power Setting	
		Ant 0	Ant 1
802.11a	5180	24.5	24.5
	5220	25	25
	5240	25	25
	5745	25	23.5
	5785	25	23.5
	5825	25	23.5

2.4. Power vs Data Rate

MCS Index for 802.11n	Spatial Streams	Data Rate (Mbps)
		802.11a
0	1	6
1	1	9
2	1	12
3	1	18
4	1	24
5	1	36
6	1	48
7	1	54

Note 1 : The blue form is the maximum power data rate.

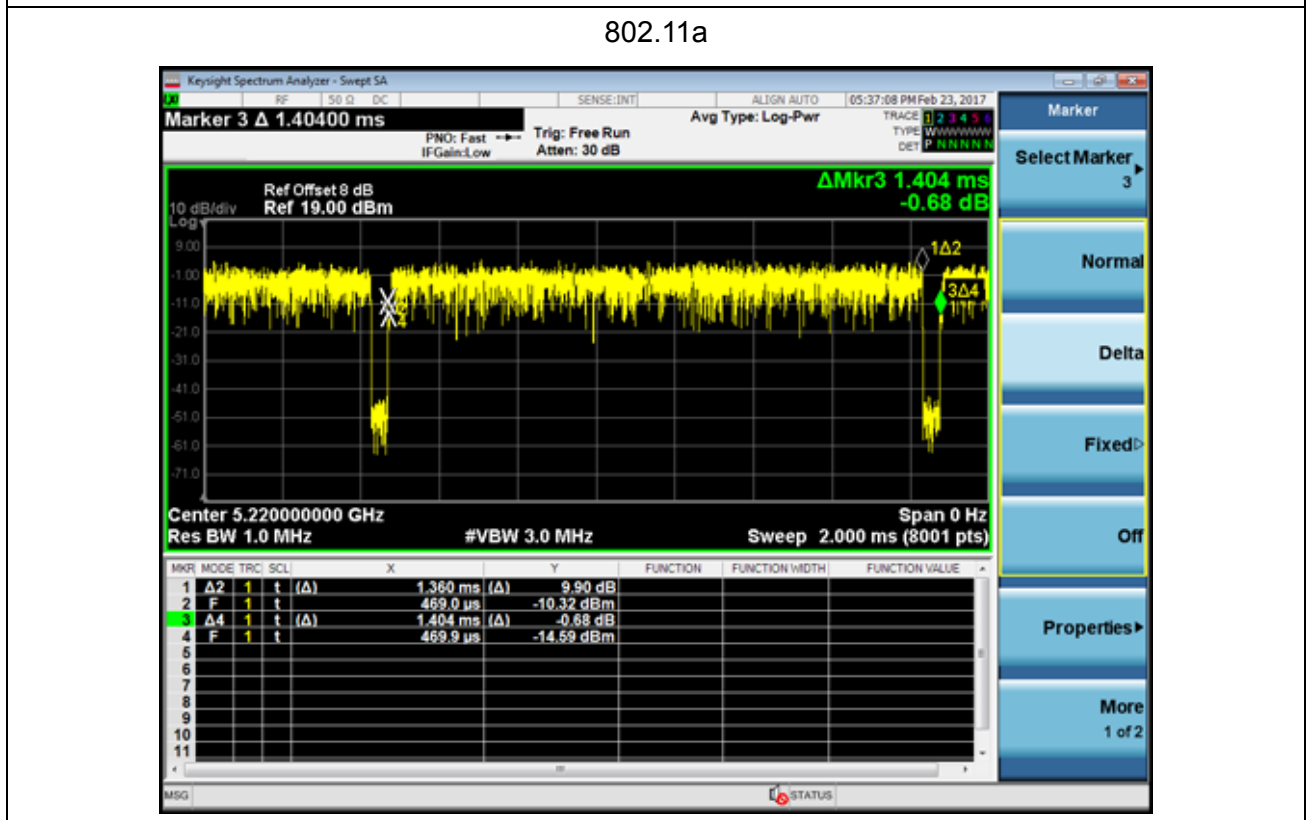
2.5. Duty Cycle

Ant 0:

Test Mode	Tx On (ms)	Tx Off (ms)	VBW	Tx On + Tx Off (ms)	Duty Cycle
802.11a	1.360	0.044	750Hz	1.404	96.86%

Note 1: T means the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

Note 2: According to KDB 789033 , when test for Radiated Emission Band Edge and Radiated Emission, VBW 1/T will be used.



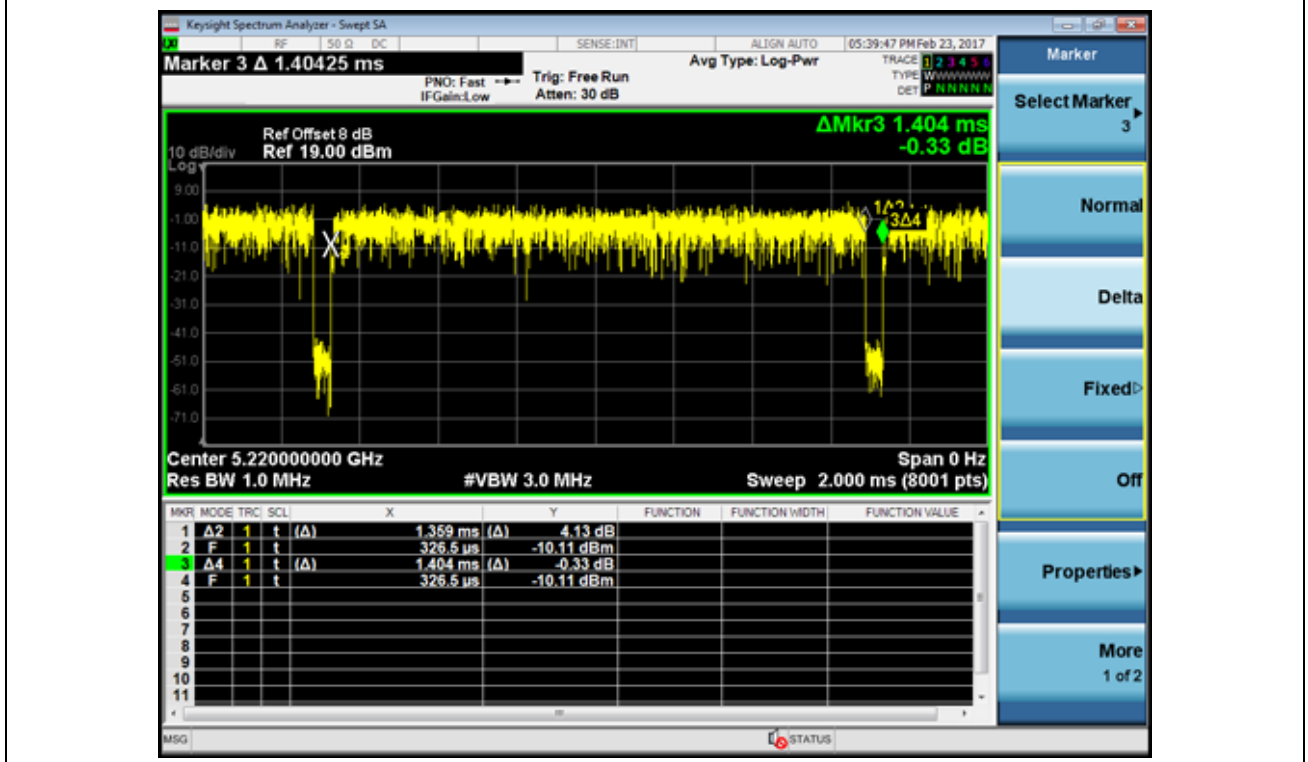
Ant 1:

Test Mode	Tx On (ms)	Tx Off (ms)	VBW	Tx On + Tx Off (ms)	Duty Cycle
802.11a	1.359	0.045	750Hz	1.404	96.79%

Note 1: T means the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

Note 2: According to KDB 789033 , when test for Radiated Emission Band Edge and Radiated Emission, VBW 1/T will be used.

802.11a



2.6. Test Environment

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	21
Humidity (%RH)	25-75	50
Barometric pressure (mbar)	860-1060	950-1000

2.7. Uncertainty

Test Items	Uncertainty
AC Power Line Conducted Emission	$\pm 2.02\text{dB}$
Radiated Emission	Below 1GHz $\pm 3.8\text{ dB}$
	Above 1GHz $\pm 3.9\text{ dB}$
RF Antenna Port Conducted Emission	$\pm 1.27\text{dB}$
Radiated Emission Band Edge	$\pm 3.9\text{dB}$
Occupied Bandwidth	$\pm 1\text{kHz}$
Power Spectral Density	$\pm 1.27\text{dB}$
Frequency Stability	$\pm 100\text{ Hz}$

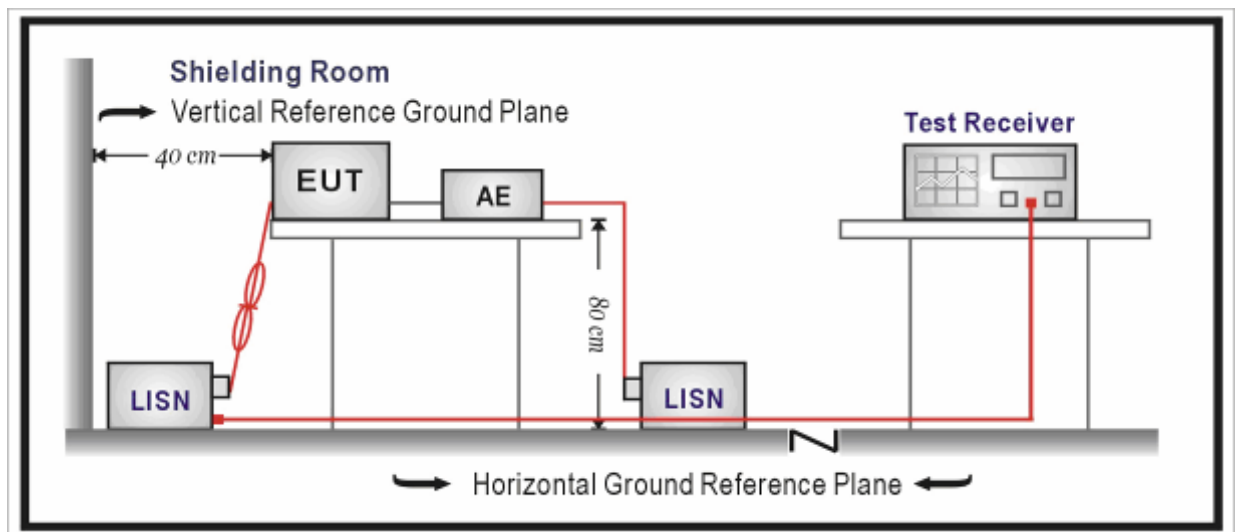
3. Conducted Emission

3.1. Test Equipment

Conducted Emission / TR-1					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
EMI Test Receiver	R&S	ESCI	100906	2016.03.05	2017.03.04
Two-Line V-Network	R&S	ENV 216	101189	2016.06.16	2017.07.15
Two-Line V-Network	R&S	ENV 216	101044	2016.09.16	2017.09.15
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	N/A	N/A
50ohm Termination	SHX	TF2	07081402	2016.09.16	2017.09.15
Temperature/Humidity Meter	Zhichen	ZC1-2	TR1-TH	2017.01.04	2018.01.03

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

3.2. Test Setup



3.3. Limit

Frequency (MHz)	QP (dB μ V)	AV (dB μ V)
0.15 - 0.50	66 – 56	56 – 46
0.50 - 5.0	56	46
5.0 - 30	60	50

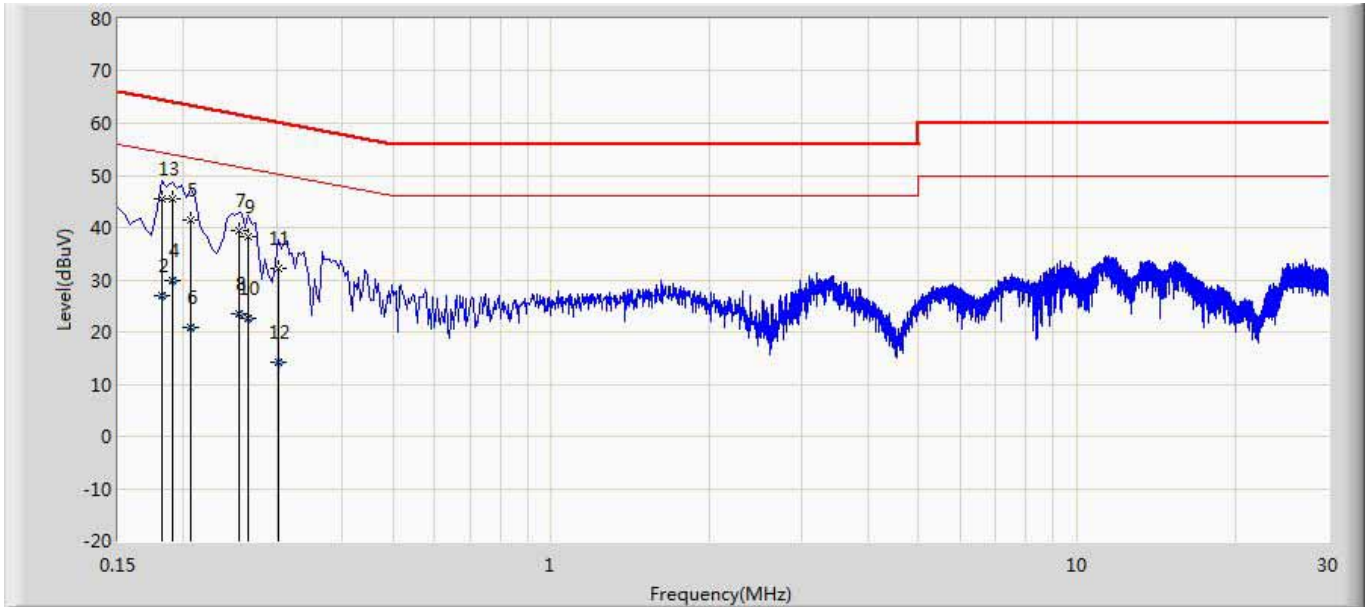
Note 1: The lower limit shall apply at the transition frequencies.
 Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

3.4. Test Procedure

Test Method			
	References Rule	Chapter	Item
<input checked="" type="checkbox"/>	ANSI C63.10-2013	6.2	Standard test method for ac power-line conducted emissions from unlicensed wireless devices
<input checked="" type="checkbox"/>	ANSI C63.4-2014	7	AC power-line conducted emission measurements

3.5. Test Result

Site: TR1	Time: 2017/02/20
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101044(0.009-30MHz)	Polarity: Line
EUT: Mi Drone	Power: AC 120V/60Hz
Note: Transmit at 5785MHz by 802.11a Ant0	

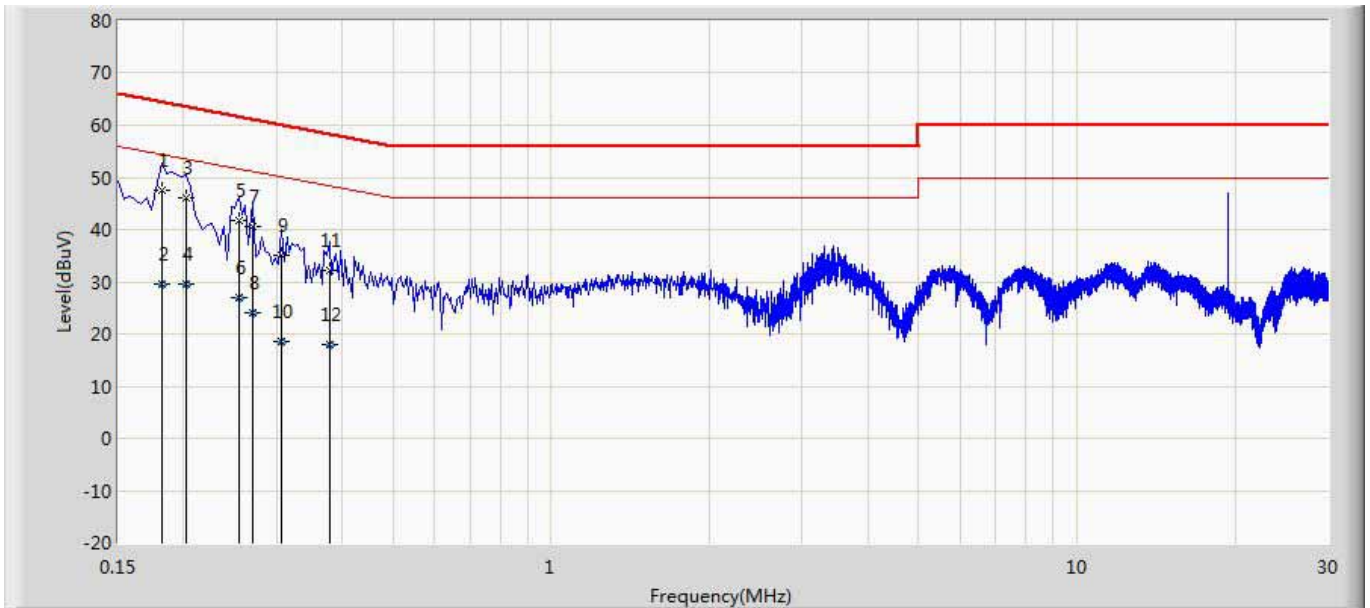


No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.182	45.502	35.787	-18.892	64.394	9.655	0.060	0.000	QP
2		0.182	26.831	17.116	-27.563	54.394	9.655	0.060	0.000	AV
3	*	0.190	45.405	35.695	-18.632	64.037	9.650	0.060	0.000	QP
4		0.190	29.793	20.083	-24.244	54.037	9.650	0.060	0.000	AV
5		0.206	41.570	31.860	-21.795	63.365	9.650	0.060	0.000	QP
6		0.206	20.901	11.191	-32.464	53.365	9.650	0.060	0.000	AV
7		0.254	39.552	29.844	-22.073	61.625	9.648	0.060	0.000	QP
8		0.254	23.387	13.679	-28.238	51.625	9.648	0.060	0.000	AV
9		0.266	38.368	28.664	-22.874	61.242	9.644	0.060	0.000	QP
10		0.266	22.554	12.850	-28.688	51.242	9.644	0.060	0.000	AV
11		0.302	32.275	22.575	-27.913	60.188	9.640	0.060	0.000	QP
12		0.302	14.342	4.642	-35.846	50.188	9.640	0.060	0.000	AV

Note:

1. " * ", means this data is the worst emission level.
2. Measurement Level = Reading Level + Factor(Probe+Cable+Amp).

Site: TR1	Time: 2017/02/20
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101044(0.009-30MHz)	Polarity: Neutral
EUT: Mi Drone	Power: AC 120V/60Hz
Note: Transmit at 5785MHz by 802.11a Ant0	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1	*	0.182	47.681	37.959	-16.713	64.394	9.662	0.060	0.000	QP
2		0.182	29.520	19.798	-24.874	54.394	9.662	0.060	0.000	AV
3		0.202	46.160	36.440	-17.368	63.528	9.660	0.060	0.000	QP
4		0.202	29.545	19.825	-23.983	53.528	9.660	0.060	0.000	AV
5		0.254	41.761	32.043	-19.864	61.625	9.658	0.060	0.000	QP
6		0.254	26.941	17.223	-24.684	51.625	9.658	0.060	0.000	AV
7		0.270	40.597	30.884	-20.521	61.118	9.653	0.060	0.000	QP
8		0.270	24.174	14.461	-26.944	51.118	9.653	0.060	0.000	AV
9		0.306	35.050	25.340	-25.028	60.078	9.650	0.060	0.000	QP
10		0.306	18.418	8.708	-31.660	50.078	9.650	0.060	0.000	AV
11		0.378	32.134	22.434	-26.189	58.323	9.640	0.060	0.000	QP
12		0.378	17.995	8.295	-30.328	48.323	9.640	0.060	0.000	AV

Note:

1. " * ", means this data is the worst emission level.
2. Measurement Level = Reading Level + Factor(Probe+Cable+Amp).

4. Radiated Emission

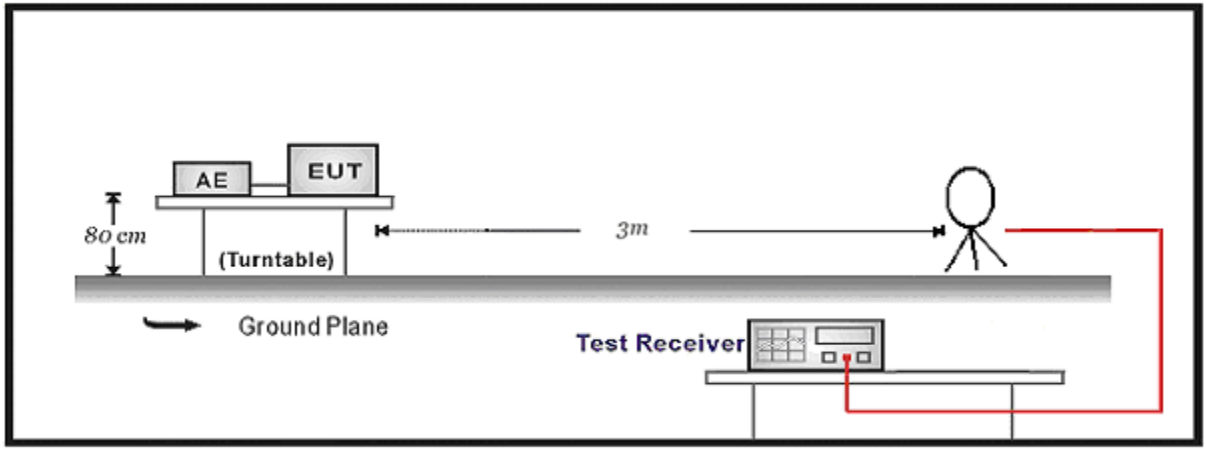
4.1. Test Equipment

Radiated Emission / AC-2					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
EMI Test Receiver	R&S	ESCI	100573	2016.03.29	2017.03.28
Loop Antenna	R&S	HFH2-Z2	833799/003	2016.11.16	2017.11.15
Bilog Antenna	Teseq GmbH	CBL6112D	27611	2016.10.16	2017.10.15
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC2-C	2016.03.02	2017.03.01
Temperature/Humidity Meter	Zhichen	ZC1-2	AC2-TH	2017.01.03	2018.01.02

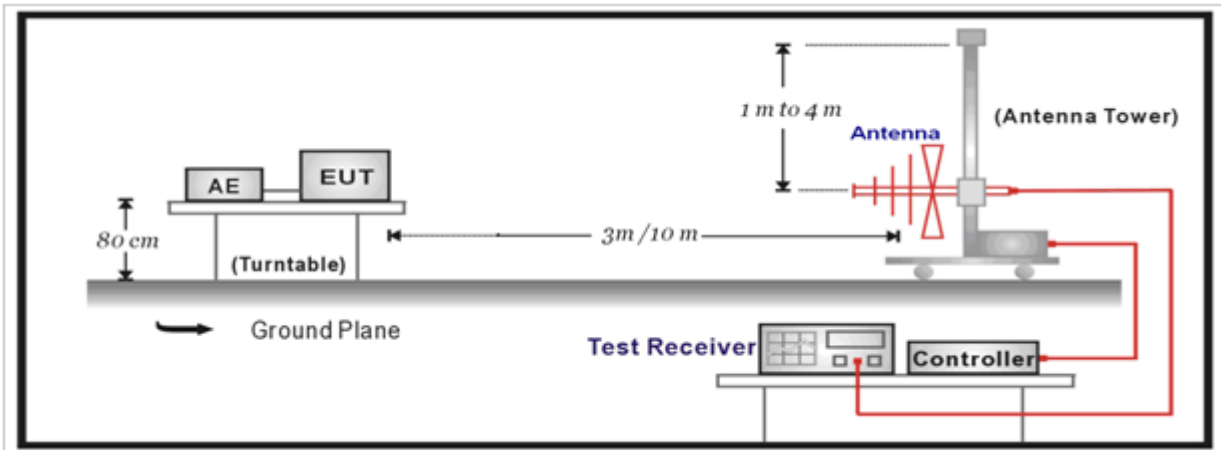
Radiated Emission / AC-5					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Preamplifier	Miteq	NSP1800-25	1364185	2016.05.06	2017.05.05
Preamplifier	DEKRA Testing and Certification (Suzhou) Co., Ltd.	AP-040G	CHM-0906001	2016.05.06	2017.05.05
DRG Horn	ETS-Lindgren	3117	00123988	2017.01.22	2018.01.21
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2016.11.25	2017.11.24
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2016.03.02	2017.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2016.03.02	2017.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	AC5-C3	2016.03.02	2017.03.01
EMI Receiver	Agilent	N9038A	MY51210196	2016.06.10	2017.06.09
Temperature/Humidity Meter	Zhichen	ZC1-2	AC5-TH	2017.01.03	2018.01.02
Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

4.2. Test Setup

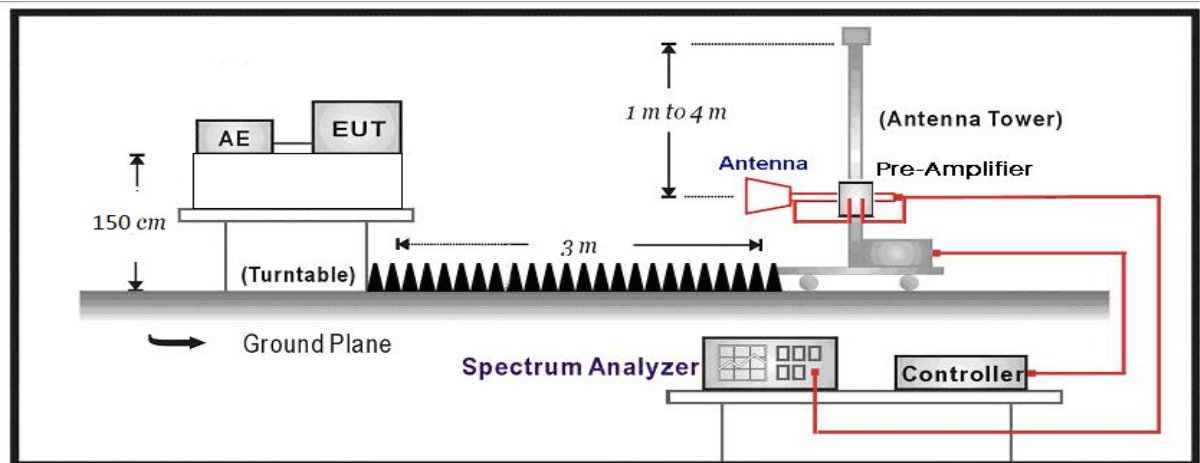
Below 30MHz Test Setup:



30MHz-1GHz Test Setup:



Above 1GHz Test Setup:



4.3. Limit

FCC Part 15 Subpart C Paragraph 15.209 (Restricted Band Emissions Limit)		
Frequency (MHz)	Distance (m)	Level (dB μ V/m)
0.009-0.490	300	2400/F(kHz)
0.490-1.705	30	24000/F(kHz)
1.705-30.0	30	30
30-88	3	100**
88-216	3	150**
216-960	3	200**
Above 960	3	500

Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade).

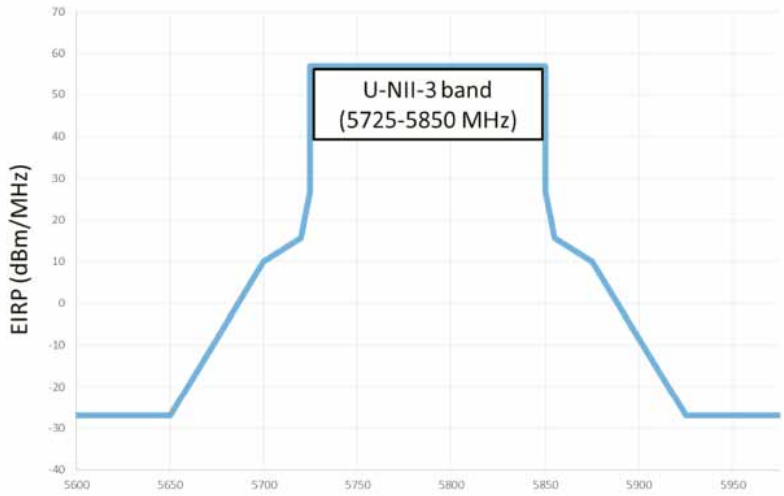
Note 2: At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

FCC Part 15 Subpart C Paragraph 15.205 (Restricted Band)

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 – 0.110	16.42 – 16.423	399.9 – 410	4.5 – 5.15
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
8.81425 – 8.81475	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	
13.36 – 13.41			

FCC Part 15 Subpart C Paragraph 15.407(5)(b) (Unrestricted Band Emissions Limit)		
Operating Frequency Band (MHz)	EIRP Limit (dBm/MHz)	Equivalent Field Strength at 3m (dB μ V/m)
5150 - 5250	-27	68.3
5250 - 5350	-27	68.3
5470 - 5725	-27	68.3

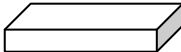
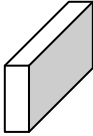
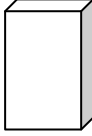
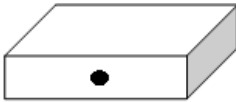
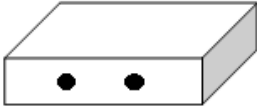

FCC 16-24-A1

Operating Frequency Band (MHz)	EIRP Limit (dBm/MHz)
5725 - 5825	 <p>U-NII-3 band (5725-5850 MHz)</p>

4.4. Test Procedure

Test Method			
	References Rule	Chapter	Description
<input type="checkbox"/>	ANSI C63.10	12.7.3	Emissions in non-restricted frequency bands
<input checked="" type="checkbox"/>	ANSI C63.10	12.7.2	Emissions in restricted frequency bands
	<input checked="" type="checkbox"/>	ANSI C63.10	Radiated emission measurements
	<input checked="" type="checkbox"/>	ANSI C63.10	Procedure for peak unwanted emissions measurements above 1000 MHz
	<input checked="" type="checkbox"/>	ANSI C63.10	Procedures for average unwanted emissions measurements above 1000 MHz
	<input type="checkbox"/>	ANSI C63.10	12.7.7.2 Method AD (average detection)—primary method
	<input checked="" type="checkbox"/>	ANSI C63.10	12.7.7.3 Method VB-A (Alternative)
	<input checked="" type="checkbox"/>	ANSI C63.10	6.4 Radiated emissions from unlicensed wireless devices below 30 MHz
	<input checked="" type="checkbox"/>	ANSI C63.10	6.5 Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
	<input checked="" type="checkbox"/>	ANSI C63.10	6.6 Radiated emissions from unlicensed wireless devices above 1 GHz
<input type="checkbox"/>	FCC KDB 789033 D02v01r03	G.2	Unwanted Emissions that fall Outside of the Restricted Bands
<input type="checkbox"/>	FCC KDB 789033 D02v01r03	G.1	Unwanted Emissions in the Restricted Bands
	<input type="checkbox"/>	FCC KDB 789033 D02v01r03	G.4 Procedure for Unwanted Emissions Measurements below 1000 MHz
	<input type="checkbox"/>	FCC KDB 789033 D02v01r03	G.5 Procedure for Unwanted Maximum Emissions Measurements above 1000 MHz
	<input type="checkbox"/>	FCC KDB 789033 D02v01r03	G.6 Procedures for Average Unwanted Emissions Measurements above 1000 MHz
	<input type="checkbox"/>	FCC KDB 789033 D02v01r03	G.6.c Method AD (Average detection)—primary method
	<input type="checkbox"/>	FCC KDB 789033 D02v01r03	G.6.d Method VB (Averaging using reduced video bandwidth): Alternative method.

4.5. EUT test Axis definition

Item	Radiated Emission			
Device Category	<input type="checkbox"/>	Outdoor AP		
	<input type="checkbox"/>	Indoor AP		
	<input type="checkbox"/>	Fixed point-to-point AP		
	<input type="checkbox"/>	Outdoor fixed point-to-multipoint AP		
	<input checked="" type="checkbox"/>	Client		
Test mode	Mode 1			
Test method	<input checked="" type="checkbox"/>	Radiated		
		X Axis	Y Axis	Z Axis
				
		Worst Axis <input checked="" type="checkbox"/>	Worst Axis <input type="checkbox"/>	Worst Axis <input type="checkbox"/>
	<input type="checkbox"/>	Conducted		
	<input type="checkbox"/>	Chain 1		
				
	<input type="checkbox"/>	Chain 1	Chain 2	
				
	<input type="checkbox"/>	Chain 1	Chain 2	Chain 3
				

4.6. Test Result

Product Name	: Mi Drone	Power	: DC 15.2V
Model No.	: FXQ02FM	Test Site	: AC-5
Test Mode	: Mode 1: Transmit by 802.11a	Test Date	: 2017.02.22

Chain	CH	Antenna Polarity	Frequency (MHz)	Reading Level (dBµV)	Factor (dB)	Measured Level (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Detector
Ant 0	36	V	10360.00	42.58	0.43	43.01	74.00	-30.99	PK
		V	15540.00	38.37	6.18	44.55	74.00	-29.45	PK
		H	10360.00	43.53	0.43	43.96	74.00	-30.04	PK
		H	15540.00	38.72	6.18	44.90	74.00	-29.10	PK
	44	V	10440.00	42.40	0.50	42.90	74.00	-31.10	PK
		V	15660.00	37.85	6.04	43.89	74.00	-30.11	PK
		H	10440.00	42.75	0.50	43.25	74.00	-30.75	PK
		H	15660.00	38.00	6.04	44.04	74.00	-29.96	PK
	48	V	10480.00	42.19	0.42	42.61	74.00	-31.39	PK
		V	15720.00	37.05	7.41	44.46	74.00	-29.54	PK
		H	10480.00	41.81	0.42	42.23	74.00	-31.77	PK
		H	15720.00	37.32	7.41	44.73	74.00	-29.27	PK
	149	V	11489.00	50.79	0.57	51.36	74.00	-22.64	PK
		V	17226.50	47.89	7.19	55.08	74.00	-18.92	PK
		V	17235.00	41.22	6.64	47.86	54.00	-6.14	AV
		H	11497.50	57.60	0.98	58.58	74.00	-15.42	PK
		H	11490.00	46.57	0.62	47.19	54.00	-6.81	AV
		H	17235.00	58.85	6.64	65.49	74.00	-8.51	PK
	157	H	17235.00	46.57	6.64	53.21	54.00	-0.79	AV
		V	11565.50	52.75	1.35	54.10	74.00	-19.90	PK
		V	11565.00	43.66	1.37	45.03	54.00	-8.97	AV
		V	17345.50	47.65	7.72	55.37	74.00	-18.63	PK
		V	17355.00	42.33	7.79	50.12	54.00	-3.88	AV
		H	11565.50	55.45	1.35	56.80	74.00	-17.20	PK
		H	11565.00	44.46	1.37	45.83	54.00	-8.17	AV
		H	17362.50	53.94	7.91	61.85	74.00	-12.15	PK
	165	H	17362.53	41.77	7.91	49.68	54.00	-4.32	AV
		V	11650.50	57.17	1.45	58.62	74.00	-15.38	PK
	V	11650.00	50.22	1.45	51.67	54.00	-2.33	AV	



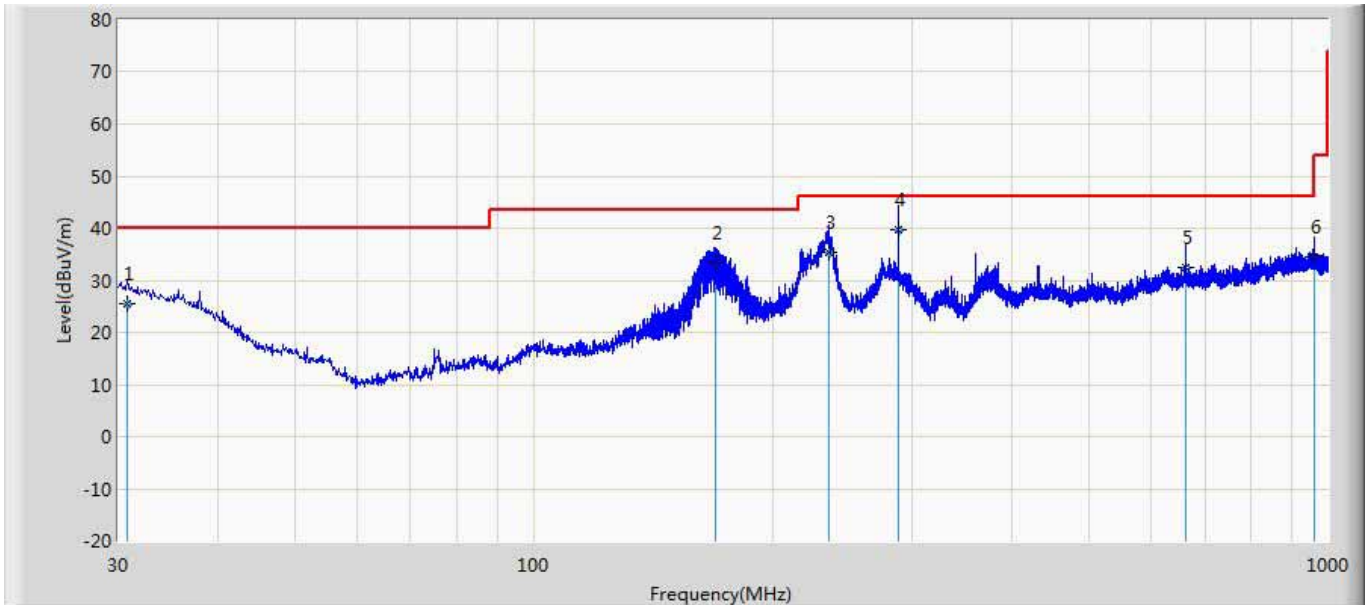
		V	17481.50	49.78	7.99	57.77	74.00	-16.23	PK	
		V	17475.00	44.31	8.18	52.49	54.00	-1.51	AV	
		H	11650.50	48.35	1.45	49.80	74.00	-24.20	PK	
		H	17475.00	44.58	8.18	52.76	54.00	-1.24	AV	
		H	17481.50	59.40	7.99	67.39	74.00	-6.61	PK	
		36	V	10360.00	43.55	0.43	43.98	74.00	-30.02	PK
			V	15540.00	38.27	6.18	44.45	74.00	-29.55	PK
			H	10360.00	42.45	0.43	42.88	74.00	-31.12	PK
H	15540.00		38.60	6.18	44.78	74.00	-29.22	PK		
		V	10440.00	41.61	0.50	42.11	74.00	-31.89	PK	
		44	V	15660.00	37.38	6.04	43.42	74.00	-30.58	PK
			H	10440.00	41.57	0.50	42.07	74.00	-31.93	PK
			H	15660.00	37.81	6.04	43.85	74.00	-30.15	PK
			V	10480.00	40.72	0.42	41.14	74.00	-32.86	PK
		48	V	15720.00	36.48	7.41	43.89	74.00	-30.11	PK
			H	10480.00	41.09	0.42	41.51	74.00	-32.49	PK
			H	15720.00	36.26	7.41	43.67	74.00	-30.33	PK
			V	11497.50	56.80	0.98	57.78	74.00	-16.22	PK
		149	V	11490.00	42.53	0.62	43.15	54.00	-10.85	AV
			V	17252.00	50.42	7.76	58.18	74.00	-15.82	PK
			V	17235.00	43.24	6.64	49.88	54.00	-4.12	AV
			H	11489.00	56.12	0.57	56.69	74.00	-17.31	PK
			H	11490.00	46.59	0.62	47.21	54.00	-6.79	AV
			H	17226.50	58.93	7.19	66.12	74.00	-7.88	PK
			H	17235.00	47.13	6.64	53.77	54.00	-0.23	AV
			V	11565.50	54.28	1.35	55.63	74.00	-18.37	PK
		157	V	11565.00	44.21	1.37	45.58	54.00	-8.42	AV
			V	17354.00	55.53	7.77	63.30	74.00	-10.70	PK
			V	17355.00	45.27	7.79	53.06	54.00	-0.94	AV
			H	11565.50	51.50	1.35	52.85	74.00	-21.15	PK
			H	17354.00	55.96	7.77	63.73	74.00	-10.27	PK
			H	17355.00	45.52	7.79	53.31	54.00	-0.69	AV
			V	11650.50	57.17	1.45	58.62	74.00	-15.38	PK
		165	V	11650.00	50.22	1.45	51.67	54.00	-2.33	AV
			V	17481.50	49.78	7.99	57.77	74.00	-16.23	PK
			V	17475.00	44.31	8.18	52.49	54.00	-1.51	AV
			H	11650.50	48.35	1.45	49.80	74.00	-24.20	PK

	H	17475.00	44.58	8.18	52.76	54.00	-1.24	AV
	H	17481.50	59.40	7.99	67.39	74.00	-6.61	PK

1. Measured Level = Reading Level + Factor.
2. The test frequency range, 9kHz~30MHz, 18GHz~40GHz, both of the worst case are at least 20dB below the limits, therefore no data appear in the report.
3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.
4. As the radiated emission was performed, so conducted emission was not tested.

The worst case of Radiated Emission below 1GHz:

Site: AC3	Time: 2017/02/20
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: AC3_3m (30-1000MHz)	Polarity: Horizontal
EUT: Mi Drone	Power: DC 15.2V
Note: Transmit at 5785MHz by 802.11a Ant0	

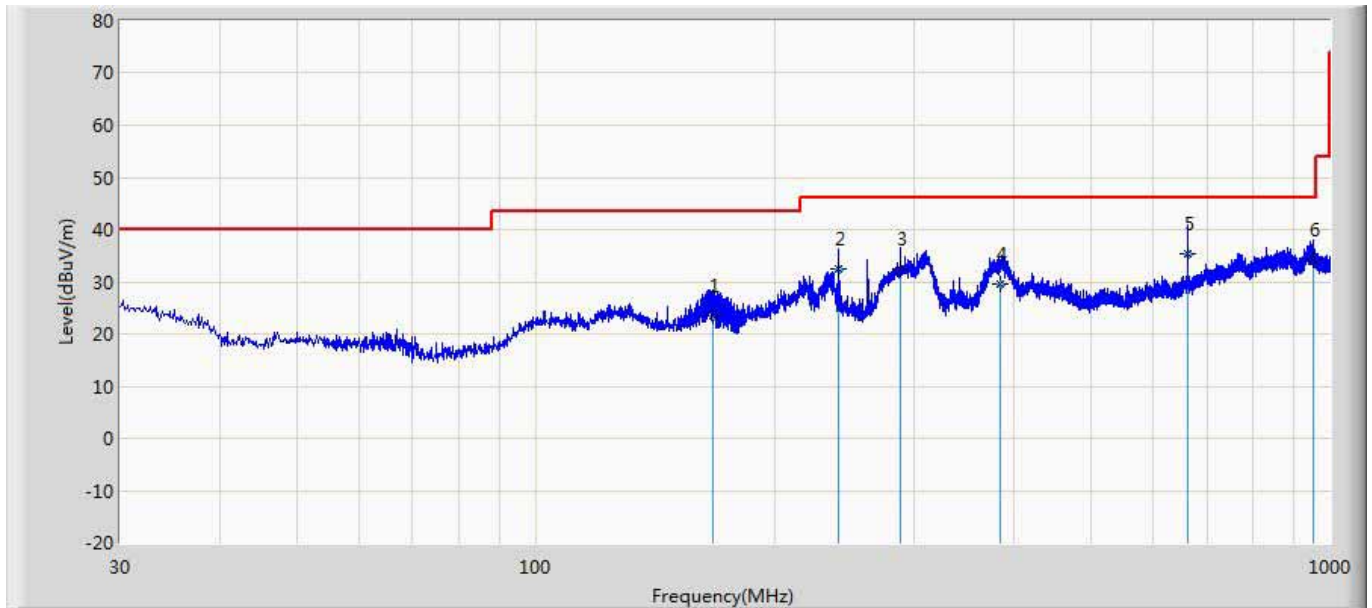


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1		30.849	25.600	29.782	-14.400	40.000	18.307	0.609	23.098	200	41	QP
2		169.559	33.200	45.245	-10.300	43.500	9.614	1.410	23.069	200	154	QP
3		235.276	35.500	46.203	-10.500	46.000	10.933	1.650	23.286	200	314	QP
4	*	287.899	39.600	47.764	-6.400	46.000	13.058	1.820	23.041	200	314	QP
5		662.073	32.500	33.000	-13.500	46.000	18.976	2.840	22.316	100	67	QP
6		960.109	34.500	32.389	-19.500	54.000	20.981	3.420	22.290	200	314	QP

Note:

1. " * ", means this data is the worst emission level.
2. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Site: AC3	Time: 2017/02/20
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: AC3_3m (30-1000MHz)	Polarity: Vertical
EUT: Mi Drone	Power: DC 15.2V
Note: Transmit at 5785MHz by 802.11a Ant0	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1		167.255	23.600	35.578	-19.900	43.500	9.682	1.400	23.060	100	96	QP
2		240.732	32.600	42.649	-13.400	46.000	11.581	1.670	23.300	200	154	QP
3		287.899	32.500	40.664	-13.500	46.000	13.058	1.820	23.041	100	49	QP
4		384.111	29.600	34.863	-16.400	46.000	15.587	2.160	23.010	300	321	QP
5	*	662.198	35.400	35.902	-10.600	46.000	18.975	2.840	22.318	100	69	QP
6		951.015	34.200	32.197	-11.800	46.000	20.908	3.400	22.305	200	341	QP

Note:

1. " * ", means this data is the worst emission level.
2. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

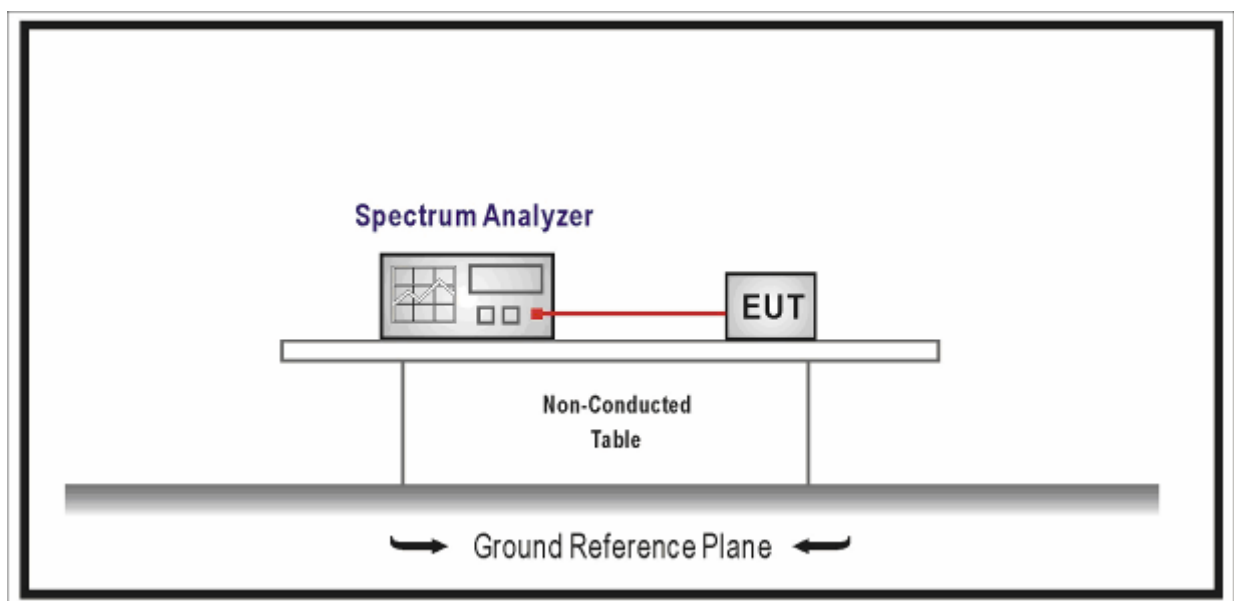
5. Emission bandwidth and occupied bandwidth

5.1. Test Equipment

Emission bandwidth and occupied bandwidth / TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2017.02.04	2018.01.15
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2016.04.09	2017.04.09
MXA Signal Analyzer	Keysight	N9020A	MY56060147	2016.04.09	2017.04.09
Temperature/Humidity Meter	zhichen	ZC1-2	TR8-TH	2016.04.10	2017.04.10

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

5.2. Test Setup



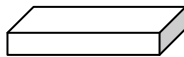
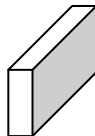
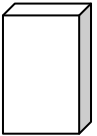



5.3. Limit

N/A

5.4. Test Procedure

Test Method			
	References Rule	Chapter	Description
<input type="checkbox"/>	ANSI C63.10	12.4	Emission bandwidth and occupied bandwidth
	<input type="checkbox"/> ANSI C63.10	12.4.1	Emission bandwidth (26dB)
	<input type="checkbox"/> ANSI C63.10	12.4.2	Occupied bandwidth (99%)
<input checked="" type="checkbox"/>	FCC KDB 789033 D02v01r03	C	Bandwidth Measurement
	<input checked="" type="checkbox"/> FCC KDB 789033 D02v01r03	C.1	Emission Bandwidth (26dB)
	<input type="checkbox"/> FCC KDB 789033 D02v01r03	C.2	Minimum Emission Bandwidth for the band 5.725-5.85 GHz (6dB)
<input checked="" type="checkbox"/>	FCC KDB 789033 D02v01r03	D	99 Percent Occupied Bandwidth

5.5. EUT test Axis definition

Item	Occupied bandwidth			
Device Category	<input type="checkbox"/>	Outdoor AP		
	<input type="checkbox"/>	Indoor AP		
	<input type="checkbox"/>	Fixed point-to-point AP		
	<input type="checkbox"/>	Outdoor fixed point-to-multipoint AP		
	<input checked="" type="checkbox"/>	Client		
Test mode	Mode 1			
Test method	<input type="checkbox"/>	Radiated		
		X Axis	Y Axis	Z Axis
				
		Worst Axis <input type="checkbox"/>	Worst Axis <input type="checkbox"/>	Worst Axis <input type="checkbox"/>
	<input checked="" type="checkbox"/>	Conducted		
	<input type="checkbox"/>	Chain 1		
				
	<input checked="" type="checkbox"/>	Chain 1	Chain 2	
				
	<input type="checkbox"/>	Chain 1	Chain 2	Chain 3
				

5.6. Test Result

Product Name	: Mi Drone	Power	: DC 15.2V
Model No.	: FXQ02FM	Test Site	: TR8
Test Mode	: Mode 1: Transmit by 802.11a	Test Date	: 2017.02.22

Channel No.	Frequency (MHz)	26dB Occupied Bandwidth (MHz)		99% Occupied Bandwidth (MHz)		Lower/Higher Frequency (MHz)		Result
		Ant0	Ant1	Ant0	Ant1	Ant0	Ant1	
36	5180	30.00	24.92	18.356	16.742	5170.82	5171.63	Pass
44	5220	30.00	25.07	18.572	16.645	N/A	N/A	Pass
48	5240	30.00	23.05	19.263	16.761	5249.35	5248.37	Pass

The worst case of Occupied Bandwidth as below:

CH44 (5240MHz) Ant 0



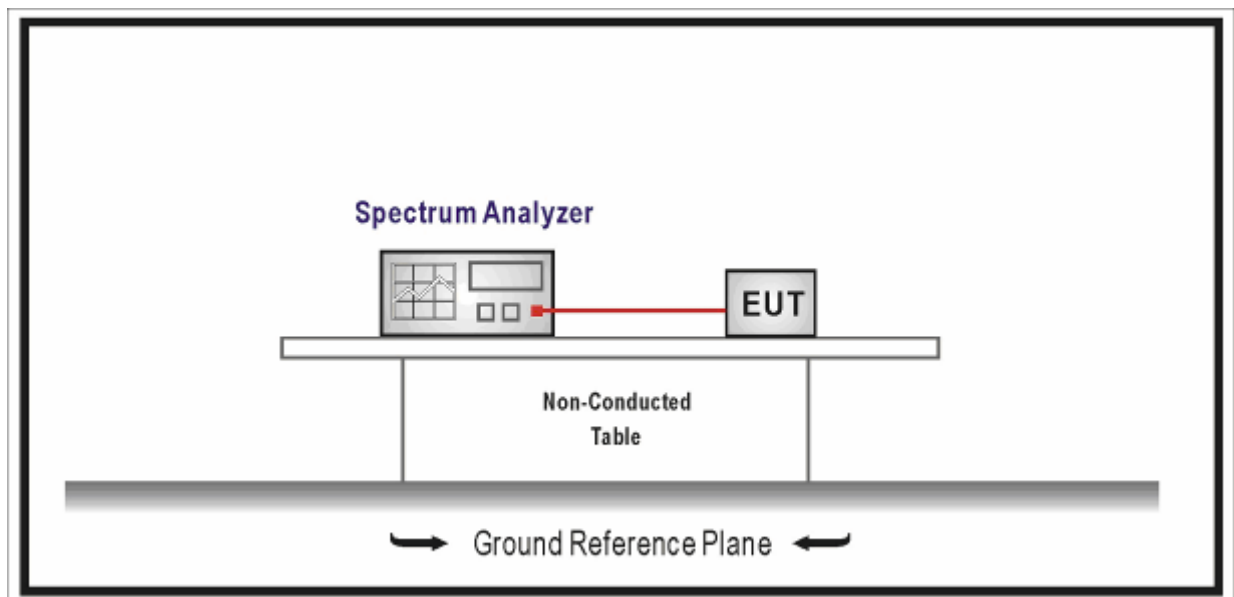
6. 6dB bandwidth

6.1. Test Equipment

6dB bandwidth / TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2016.02.04	2018.01.15
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2016.04.09	2017.04.08
MXA Signal Analyzer	Keysight	N9020A	MY56060147	2016.04.09	2017.04.08
Temperature/Humidity Meter	zhichen	ZC1-2	TR8-TH	2016.04.10	2017.04.09

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

6.2. Test Setup



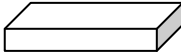
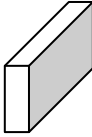
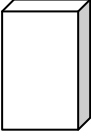
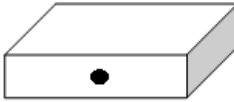
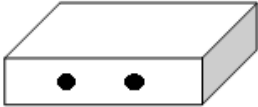

6.3. Limit

>500kHz

6.4. Test Procedure

Test Method			
	References Rule	Chapter	Description
<input type="checkbox"/>	ANSI C63.10	12.4	Emission bandwidth and occupied bandwidth
	<input type="checkbox"/> ANSI C63.10	12.4.1	Emission bandwidth (26dB)
	<input type="checkbox"/> ANSI C63.10	12.4.2	Occupied bandwidth (99%)
<input checked="" type="checkbox"/>	FCC KDB 789033 D02v01r03	C	Bandwidth Measurement
	<input type="checkbox"/> FCC KDB 789033 D02v01r03	C.1	Emission Bandwidth (26dB)
	<input checked="" type="checkbox"/> FCC KDB 789033 D02v01r03	C.2	Minimum Emission Bandwidth for the band 5.725-5.85 GHz (6dB)
<input type="checkbox"/>	FCC KDB 789033 D02v01r03	D	99 Percent Occupied Bandwidth

6.5. EUT test Axis definition

Item	6dB bandwidth			
Device Category	<input type="checkbox"/>	Outdoor AP		
	<input type="checkbox"/>	Indoor AP		
	<input type="checkbox"/>	Fixed point-to-point AP		
	<input type="checkbox"/>	Outdoor fixed point-to-multipoint AP		
	<input checked="" type="checkbox"/>	Client		
Test mode	Mode 1			
Test method	<input type="checkbox"/>	Radiated		
		X Axis	Y Axis	Z Axis
				
		Worst Axis <input type="checkbox"/>	Worst Axis <input type="checkbox"/>	Worst Axis <input type="checkbox"/>
	<input checked="" type="checkbox"/>	Conducted		
	<input type="checkbox"/>	Chain 1		
				
	<input checked="" type="checkbox"/>	Chain 1	Chain 2	
				
	<input type="checkbox"/>	Chain 1	Chain 2	Chain 3
				

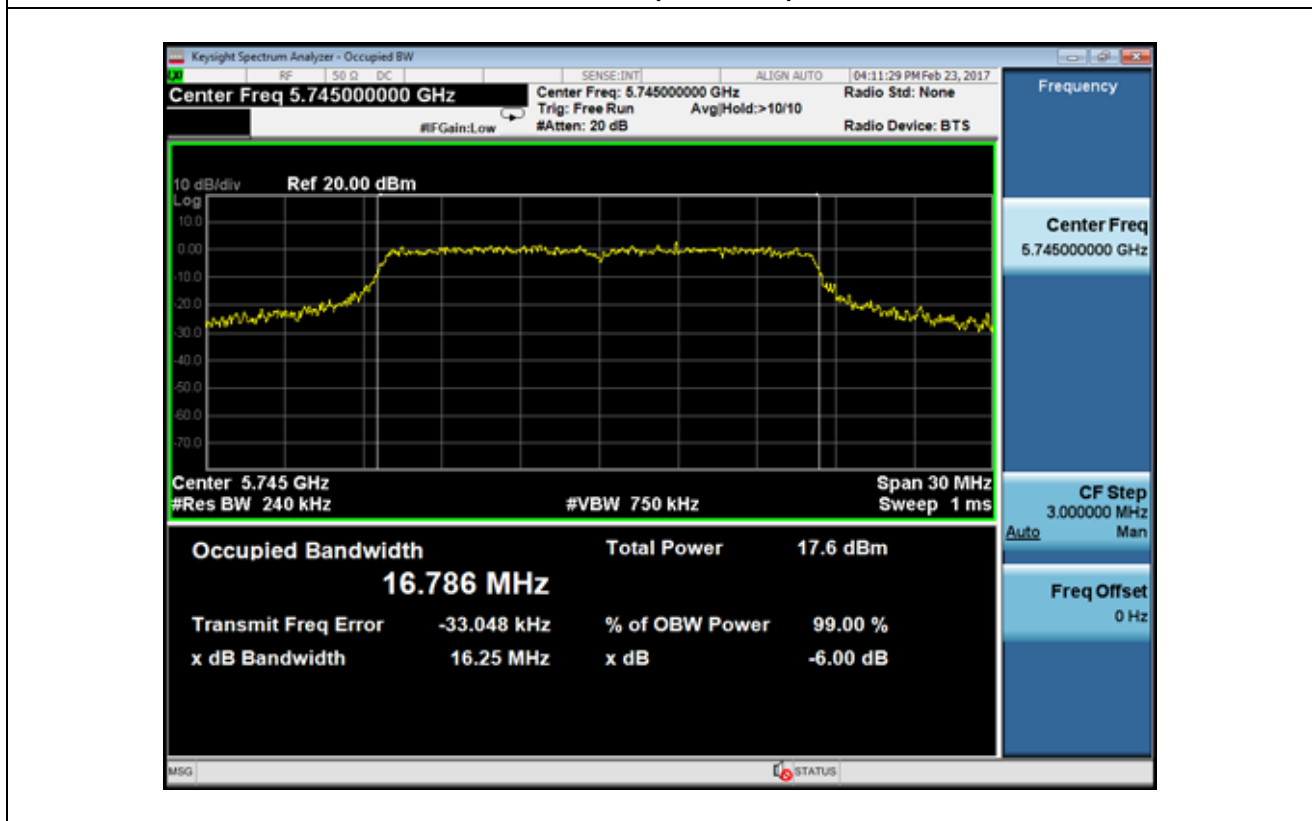
6.6. Test Result

Product Name	: Mi Drone	Power	: DC 15.2V
Model No.	: FXQ02FM	Test Site	: TR8
Test Mode	: Mode 1: Transmit by 802.11a	Test Date	: 2017.02.22

Channel No.	Frequency (MHz)	6dB Bandwidth (MHz)		Limit (kHz)	Result
		Ant0	Ant1		
149	5745	16.25	16.30	>500	Pass
157	5785	16.43	16.41		Pass
165	5825	16.37	16.37		Pass

The worst case of Occupied Bandwidth as below:

Mode 1 CH149 (5745MHz) Ant 0



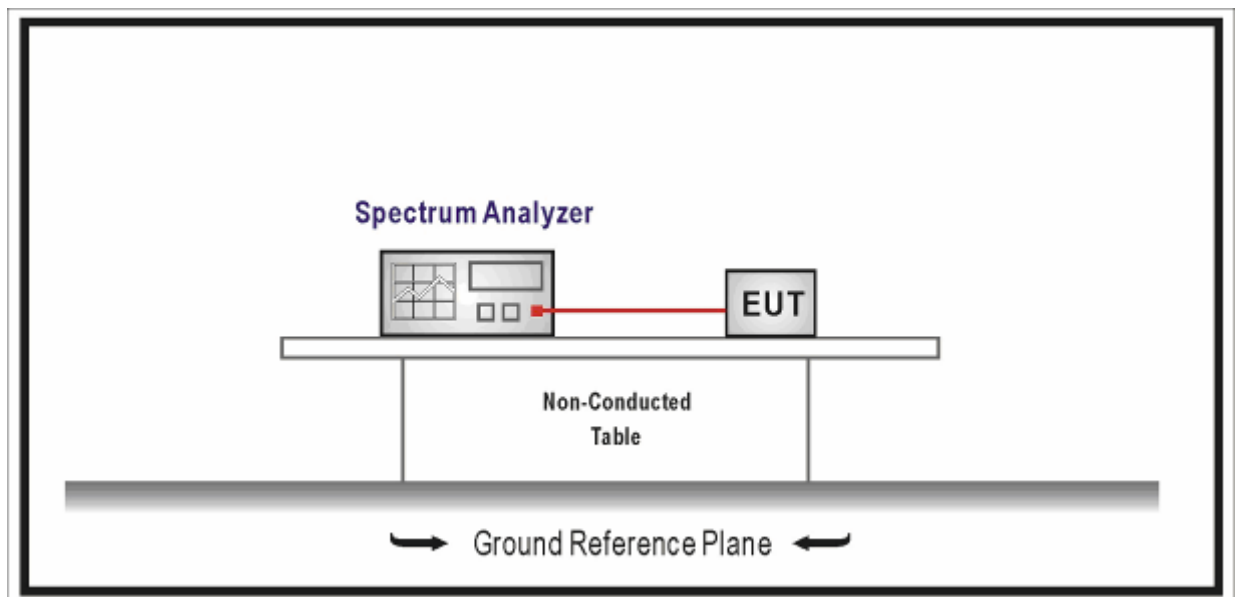
7. Power Output

7.1. Test Equipment

Power Output / TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2017.01.03	2018.01.02
Spectrum Analyzer	Agilent	N9010A	MY48030494	2017.02.04	2018.01.15
Wideband Peak Power Meter	Anritsu	ML2495A	0905006	2016.10.14	2017.10.13
Power Sensor	Anritsu	MA2411B	0846014	2016.10.14	2017.10.13
Temperature/Humidity Meter	zhicheng	ZC1-2	TR8-TH	2016.04.10	2017.04.09

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

7.2. Test Setup



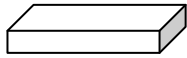
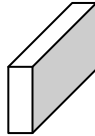
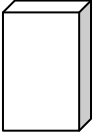
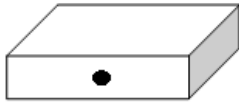


7.3. Limit

Fundamental emission output power Limit	
<input checked="" type="checkbox"/>	For the band 5.15-5.25 GHz
<input type="checkbox"/>	Outdoor Radio Controller: the maximum conducted output power shall not exceed 1 W. If $G_{TX} > 6\text{dBi}$, then $P_{out} = 30 - (G_{TX} - 6)$ and 125mW at any angle above 30 degrees
<input type="checkbox"/>	Indoor Radio Controller: the maximum conducted output power shall not exceed 1 W. If $G_{TX} > 6\text{dBi}$, then $P_{out} = 30 - (G_{TX} - 6)$
<input type="checkbox"/>	Fixed point-to-point Radio Controllers: the maximum conducted output power shall not exceed 1 W. If $G_{TX} > 23\text{dBi}$, then $P_{out} = 30 - (G_{TX} - 23)$
<input checked="" type="checkbox"/>	Mobile and portable client devices: the maximum conducted output power shall not exceed 250mW. If $G_{TX} > 6\text{dBi}$, then $P_{out} = 24 - (G_{TX} - 6)$
<input type="checkbox"/>	For the band 5.25-5.35 GHz:
<input type="checkbox"/>	the maximum conducted output power shall not exceed 250mW or $11\text{dBm} + 10 \text{Log B}$, where B is the 26dB emission bandwidth in MHz. If $G_{TX} > 6\text{dBi}$, then $P_{out} = \text{The lesser of } 24 \text{ or } 11\text{dBm} + 10 \text{Log B} - (G_{TX} - 6)$
<input type="checkbox"/>	For the 5.47-5.725 GHz:
<input type="checkbox"/>	the maximum conducted output power shall not exceed 250mW or $11\text{dBm} + 10 \text{Log B}$, where B is the 26dB emission bandwidth in MHz. If $G_{TX} > 6\text{dBi}$, then $P_{out} = \text{The lesser of } 24 \text{ or } 11\text{dBm} + 10 \text{Log B} - (G_{TX} - 6)$
<input checked="" type="checkbox"/>	For the band 5.725-5.85 GHz:
<input type="checkbox"/>	Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6 \text{ dBi}$, then $P_{Out} = 30 - (G_{TX} - 6)$
<input checked="" type="checkbox"/>	Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W
<p>Note 1 : G_{TX} directional gain of transmitting antennas.</p> <p>Note 2 : P_{out} is maximum peak conducted output power .</p>	

7.4. Test Procedure

Fundamental emission output power Test Method					
	References Rule		Chapter	Description	
<input checked="" type="checkbox"/>	ANSI C63.10		12.3	Maximum conducted output power	
	<input type="checkbox"/>	ANSI C63.10	12.3.2	Maximum conducted output power measurement using a spectrum analyzer (SA) or EMI receiver	
		<input type="checkbox"/>	ANSI C63.10	12.3.2.2	Method SA-1
		<input type="checkbox"/>	ANSI C63.10	12.3.2.3	Method SA-1A (alternative)
		<input type="checkbox"/>	ANSI C63.10	12.3.2.4	Method SA-2
		<input type="checkbox"/>	ANSI C63.10	12.3.2.5	Method SA-2A (alternative)
		<input type="checkbox"/>	ANSI C63.10	12.3.2.6	Method SA-3
		<input type="checkbox"/>	ANSI C63.10	12.3.2.7	Method SA-3A (alternative)
		<input checked="" type="checkbox"/>	ANSI C63.10	12.3.3	Maximum conducted output power using a power meter
		<input type="checkbox"/>	ANSI C63.10	12.3.3.1	Method PM
		<input checked="" type="checkbox"/>	ANSI C63.10	12.3.3.2	Method PM-G
<input type="checkbox"/>	KDB 789033		H	Measurement of emission at elevation angle higher than 30° from horizon	
	<input type="checkbox"/>	KDB 789033	1	For fixed infrastructure, not electrically or mechanically steerable beam antenna	
		<input type="checkbox"/>	KDB 789033	a)	elevation plane radiation pattern is available:
		<input type="checkbox"/>	KDB 789033	b)	elevation plane radiation pattern is not available
	<input type="checkbox"/>	KDB 789033	2	For All Other Types of Antenna	

7.5. EUT test Axis definition

Item	Power Output			
Device Category	<input type="checkbox"/>	Outdoor AP		
	<input type="checkbox"/>	Indoor AP		
	<input type="checkbox"/>	Fixed point-to-point AP		
	<input type="checkbox"/>	Outdoor fixed point-to-multipoint AP		
	<input checked="" type="checkbox"/>	Client		
Test mode	Mode 1			
Test method	<input type="checkbox"/>	Radiated		
		X Axis	Y Axis	Z Axis
				
		Worst Axis <input type="checkbox"/>	Worst Axis <input type="checkbox"/>	Worst Axis <input type="checkbox"/>
	<input checked="" type="checkbox"/>	Conducted		
	<input type="checkbox"/>	Chain 1		
				
	<input checked="" type="checkbox"/>	Chain 1	Chain 2	
				
	<input type="checkbox"/>	Chain 1	Chain 2	Chain 3
				

7.6. Test Result

Product Name	: Mi Drone	Power	: AC120V/60Hz
Model No.	: FXQ02FM	Test Site	: TR8
Test Mode	: Mode 1: Transmit by 802.11a	Test Date	: 2017.02.22

Channel No.	Frequency (MHz)	Measurement Power		Limit (dBm)	Result
		Ant0	Ant1		
CH36	5180	22.69	22.73	24.0	Pass
CH42	5220	22.78	22.52	24.0	Pass
CH48	5240	22.57	22.49	24.0	Pass
Channel No.	Frequency (MHz)	Measurement Power		Limit (dBm)	Result
		Ant0	Ant1		
CH149	5745	22.17	19.18	30.0	Pass
CH157	5785	22.44	19.60	30.0	Pass
CH165	5825	22.49	19.77	30.0	Pass

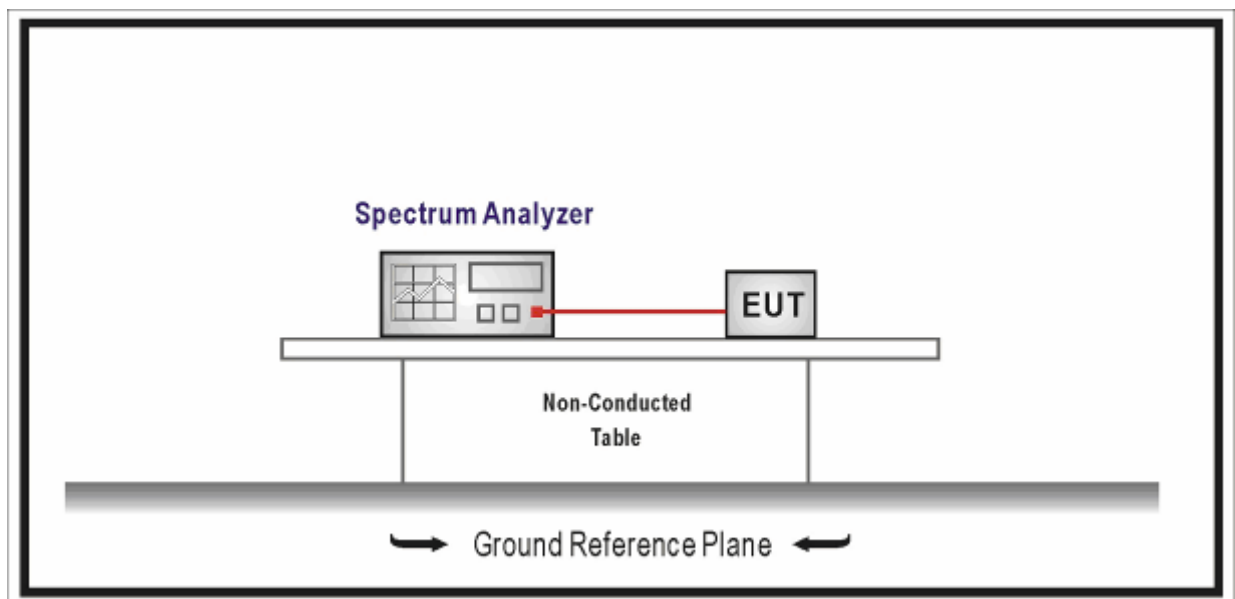
8. Peak Power Spectral Density

8.1. Test Equipment

Peak Power Spectral Density / TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2017.02.04	2018.01.15
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2016.04.09	2017.04.08
MXA Signal Analyzer	Keysight	N9020A	MY56060147	2016.04.09	2017.04.08
Temperature/Humidity Meter	zhichen	ZC1-2	TR8-TH	2016.04.10	2017.04.09

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

8.2. Test Setup



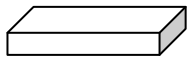
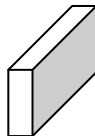
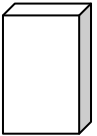



8.3. Limit

Fundamental emission output power Limit	
<input checked="" type="checkbox"/>	For the band 5.15-5.25 GHz
<input type="checkbox"/>	Outdoor Radio Controller: the maximum power spectral density shall not exceed 17 dBm/MHz. If $G_{TX} > 6\text{dBi}$, then $P_{out} = 17 - (G_{TX} - 6)$
<input type="checkbox"/>	Indoor Radio Controller: the maximum power spectral density shall not exceed 17 dBm/MHz. If $G_{TX} > 6\text{dBi}$, then $P_{out} = 17 - (G_{TX} - 6)$
<input type="checkbox"/>	Fixed point-to-point Radio Controllers: the maximum power spectral density shall not exceed 17 dBm/MHz. If $G_{TX} > 23\text{dBi}$, then $P_{out} = 17 - (G_{TX} - 23)$
<input checked="" type="checkbox"/>	Mobile and portable client devices: the maximum power spectral density shall not exceed 11 dBm/MHz. If $G_{TX} > 6\text{dBi}$, then $P_{out} = 11 - (G_{TX} - 6)$
<input type="checkbox"/>	For the 5.25-5.35 GHz:
<input type="checkbox"/>	the maximum power spectral density shall not exceed 11 dBm/MHz. If $G_{TX} > 6\text{dBi}$, then $P_{out} = 11 - (G_{TX} - 6)$
<input type="checkbox"/>	For the 5.47-5.725 GHz:
<input type="checkbox"/>	the maximum power spectral density shall not exceed 11 dBm/MHz. If $G_{TX} > 6\text{dBi}$, then $P_{out} = 11 - (G_{TX} - 6)$
<input checked="" type="checkbox"/>	For the band 5.725-5.85 GHz:
<input checked="" type="checkbox"/>	the maximum power spectral density shall not exceed 30 dBm/500KHz. If $G_{TX} > 6\text{dBi}$, then $P_{out} = 30 - (G_{TX} - 6)$
Note 1 : G_{TX} directional gain of transmitting antennas.	
Note 2 : P_{out} is maximum peak conducted output power .	

8.4. Test Procedure

Fundamental emission output power Test Method			
	References Rule	Chapter	Description
<input checked="" type="checkbox"/>	ANSI C63.10	12.5	Peak power spectral density
<input checked="" type="checkbox"/>	FCC KDB 789033 D02v01r03	F	Maximum Power Spectral Density (PSD)

8.5. EUT test Axis definition

Item	Peak power spectral density			
Device Category	<input type="checkbox"/>	Outdoor AP		
	<input type="checkbox"/>	Indoor AP		
	<input type="checkbox"/>	Fixed point-to-point AP		
	<input type="checkbox"/>	Outdoor fixed point-to-multipoint AP		
	<input checked="" type="checkbox"/>	Client		
Test mode	Mode 1			
Test method	<input type="checkbox"/>	Radiated		
		X Axis	Y Axis	Z Axis
				
		Worst Axis <input type="checkbox"/>	Worst Axis <input type="checkbox"/>	Worst Axis <input type="checkbox"/>
	<input checked="" type="checkbox"/>	Conducted		
	<input type="checkbox"/>	Chain 1		
				
	<input checked="" type="checkbox"/>	Chain 1	Chain 2	
				
	<input type="checkbox"/>	Chain 1	Chain 2	Chain 3
				

8.6. Test Result

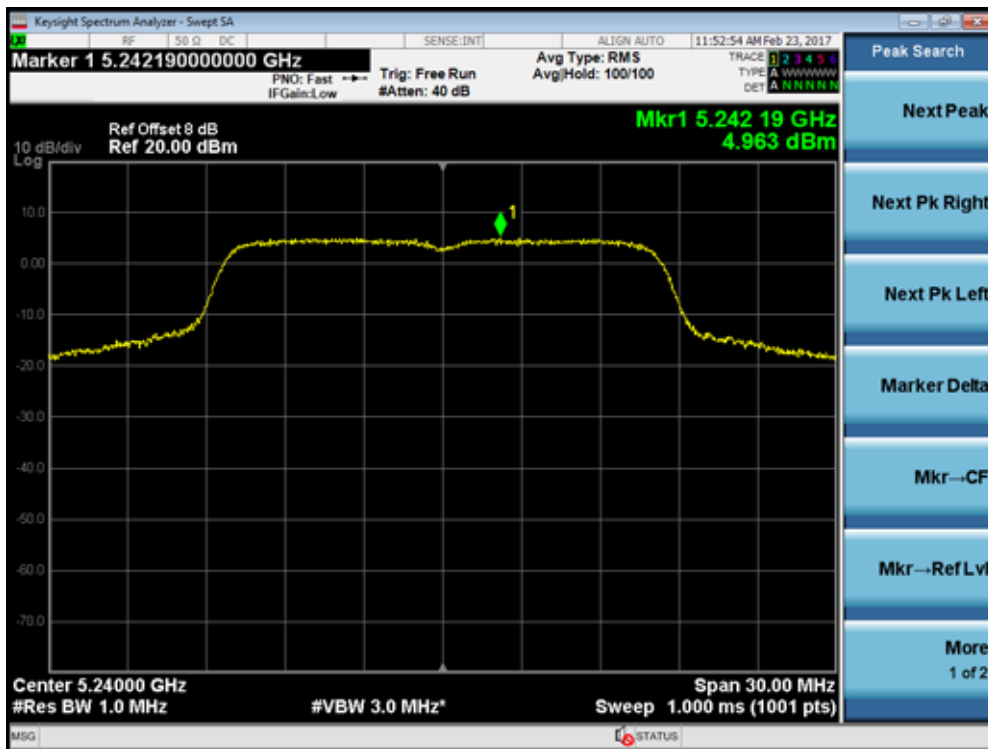
Product Name	: Mi Drone	Power	: DC 15.2V
Model No.	: FXQ02FM	Test Site	: TR8
Test Mode	: Mode 1: Transmit by 802.11a	Test Date	: 2017.02.22

Channel No.	Frequency (MHz)	Measurement Power Spectral Density (dBm/MHz)		Limit (dBm/MHz)	Result
		Ant0	Ant1		
CH36	5180	0.133	2.082	11.0	Pass
CH44	5220	-0.363	0.480	11.0	Pass
CH48	5240	-0.815	-1.483	11.0	Pass

Channel No.	Frequency (MHz)	Measurement Power Spectral Density (dBm/500KHz)		Limit (dBm/500KHz)	Result
		Ant0	Ant1		
CH149	5745	-2.369	-4.714	30.0	Pass
CH157	5785	-2.234	-3.788	30.0	Pass
CH165	5825	-2.804	-3.569	30.0	Pass

The worst case of 6dB Bandwidth as below:

Mode 1 CH48 (5240MHz) Ant 1



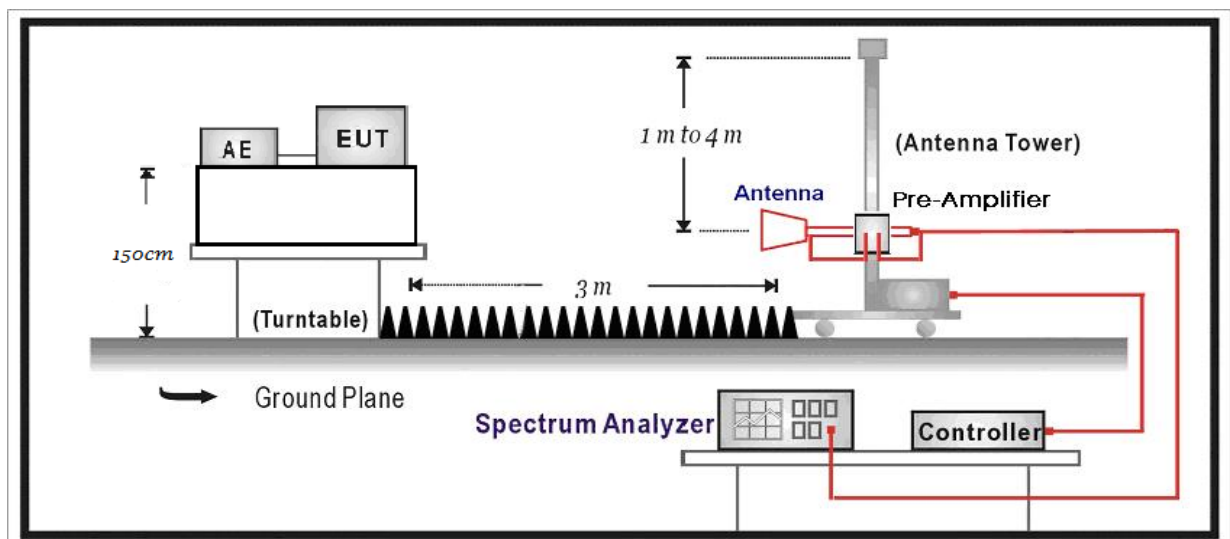
9. Radiated Emission Band Edge

9.1. Test Equipment

Radiated Emission Band Edge / AC-5					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
EMI Receiver	Agilent	N9038A	MY51210196	2016.07.16	2017.07.15
Pre-Amplifier	Miteq	NSP1800-25	1364185	2016.05.03	2017.05.02
DRG Horn Antenna	ETS-Lindgren	3117	00167055	2016.07.12	2017.07.11
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2016.12.12	2017.09.17
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2016.02.28	2017.02.27
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2016.02.28	2017.02.27
Temperature/Humidity Meter	Zhichen	ZC1-2	AC5-TH	2017.01.04	2018.01.03

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

9.2. Test Setup



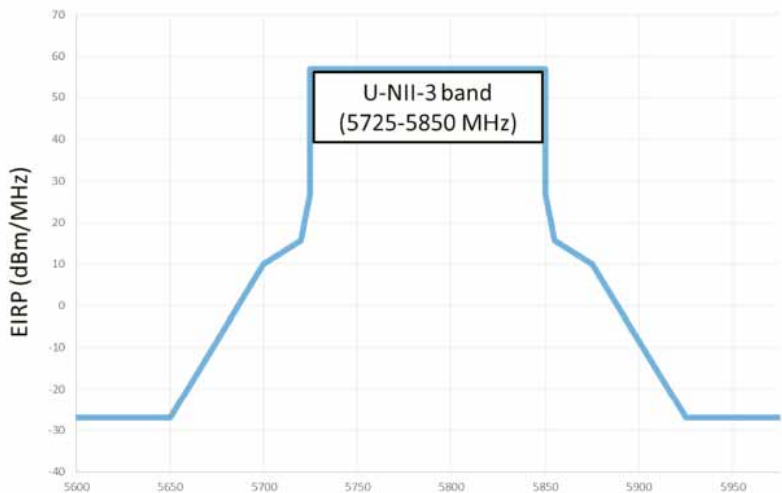
9.3. Limit

FCC Part 15 Subpart C Paragraph 15.209 (Restricted Band Emissions Limit)		
Frequency (MHz)	Distance (m)	Level (dBµV/m)
0.009-0.490	300	2400/F(kHz)
0.490-1.705	30	24000/F(kHz)
1.705-30.0	30	30
30-88	3	100**
88-216	3	150**
216-960	3	200**
Above 960	3	500

Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade).

Note 2: At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

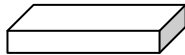
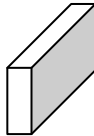
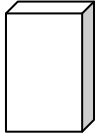

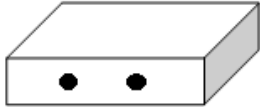

FCC Part 15 Subpart C Paragraph 15.205 (Restricted Band)			
Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (MHz)
0.090 – 0.110	16.42 – 16.423	399.9 – 410	4.5 – 5.15
0.495 – 0.505	16.69475 – 16.69525	608 – 614	5.35 – 5.46
2.1735 – 2.1905	16.80425 – 16.80475	960 – 1240	7.25 – 7.75
4.125 – 4.128	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
8.81425 – 8.81475	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	
13.36 – 13.41			

FCC Part 15 Subpart C Paragraph 15.407(5)(b) (Unrestricted Band Emissions Limit)		
Operating Frequency Band (MHz)	EIRP Limit (dBm/MHz)	Equivalent Field Strength at 3m (dB μ V/m)
5150 - 5250	-27	68.3
5250 - 5350	-27	68.3
5470 - 5725	-27	68.3
FCC 16-24-A1		
Operating Frequency Band (MHz)	EIRP Limit (dBm/MHz)	
5725 - 5825	 <p>U-NII-3 band (5725-5850 MHz)</p>	

9.4. Test Procedure

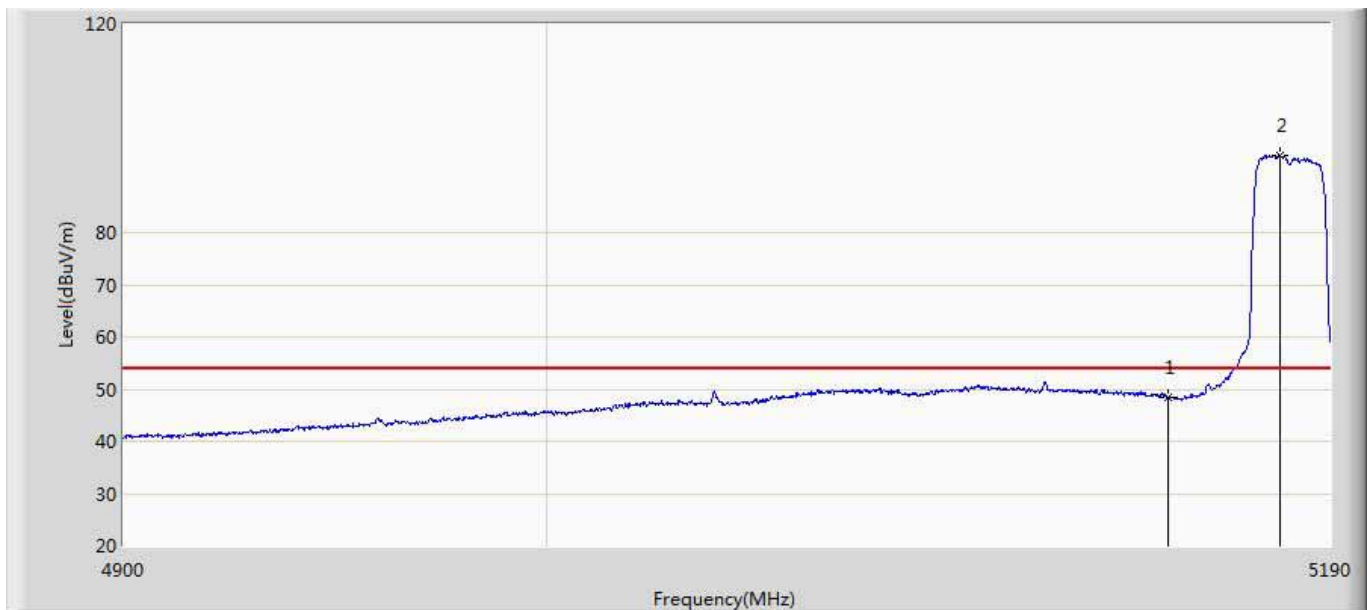
Test Method			
	References Rule	Chapter	Description
<input type="checkbox"/>	ANSI C63.10	12.7.3	Emissions in non-restricted frequency bands
<input checked="" type="checkbox"/>	ANSI C63.10	12.7.2	Emissions in restricted frequency bands
	<input checked="" type="checkbox"/> ANSI C63.10	12.7.5	Radiated emission measurements
	<input checked="" type="checkbox"/> ANSI C63.10	12.7.6	Procedure for peak unwanted emissions measurements above 1000 MHz
	<input checked="" type="checkbox"/> ANSI C63.10	12.7.7	Procedures for average unwanted emissions measurements above 1000 MHz
	<input type="checkbox"/> ANSI C63.10	12.7.7.2	Method AD (average detection)—primary method
	<input checked="" type="checkbox"/> ANSI C63.10	12.7.7.3	Method VB-A (Alternative)
	<input checked="" type="checkbox"/> ANSI C63.10	6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
	<input checked="" type="checkbox"/> ANSI C63.10	6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
	<input checked="" type="checkbox"/> ANSI C63.10	6.6	Radiated emissions from unlicensed wireless devices above 1 GHz
<input type="checkbox"/>	FCC KDB 789033 D02v01r03	G.2	Unwanted Emissions that fall Outside of the Restricted Bands
<input type="checkbox"/>	FCC KDB 789033 D02v01r03	G.1	Unwanted Emissions in the Restricted Bands
	<input type="checkbox"/> FCC KDB 789033 D02v01r03	G.4	Procedure for Unwanted Emissions Measurements below 1000 MHz
	<input type="checkbox"/> FCC KDB 789033 D02v01r03	G.5	Procedure for Unwanted Maximum Emissions Measurements above 1000 MHz
	<input type="checkbox"/> FCC KDB 789033 D02v01r03	G.6	Procedures for Average Unwanted Emissions Measurements above 1000 MHz
	<input type="checkbox"/> FCC KDB 789033 D02v01r03	G.6.c	Method AD (Average detection)—primary method
	<input type="checkbox"/> FCC KDB 789033 D02v01r03	G.6.d	Method VB (Averaging using reduced video bandwidth): Alternative method.

9.5. EUT test Axis definition

Item	Peak power spectral density			
Device Category	<input type="checkbox"/>	Outdoor AP		
	<input type="checkbox"/>	Indoor AP		
	<input type="checkbox"/>	Fixed point-to-point AP		
	<input type="checkbox"/>	Outdoor fixed point-to-multipoint AP		
	<input checked="" type="checkbox"/>	Client		
Test mode	Mode 1			
Test method	<input checked="" type="checkbox"/>	Radiated		
		X Axis	Y Axis	Z Axis
				
		Worst Axis <input checked="" type="checkbox"/>	Worst Axis <input type="checkbox"/>	Worst Axis <input type="checkbox"/>
	<input type="checkbox"/>	Conducted		
	<input type="checkbox"/>	Chain 1		
				
	<input type="checkbox"/>	Chain 1	Chain 2	
				
	<input type="checkbox"/>	Chain 1	Chain 2	Chain 3
				

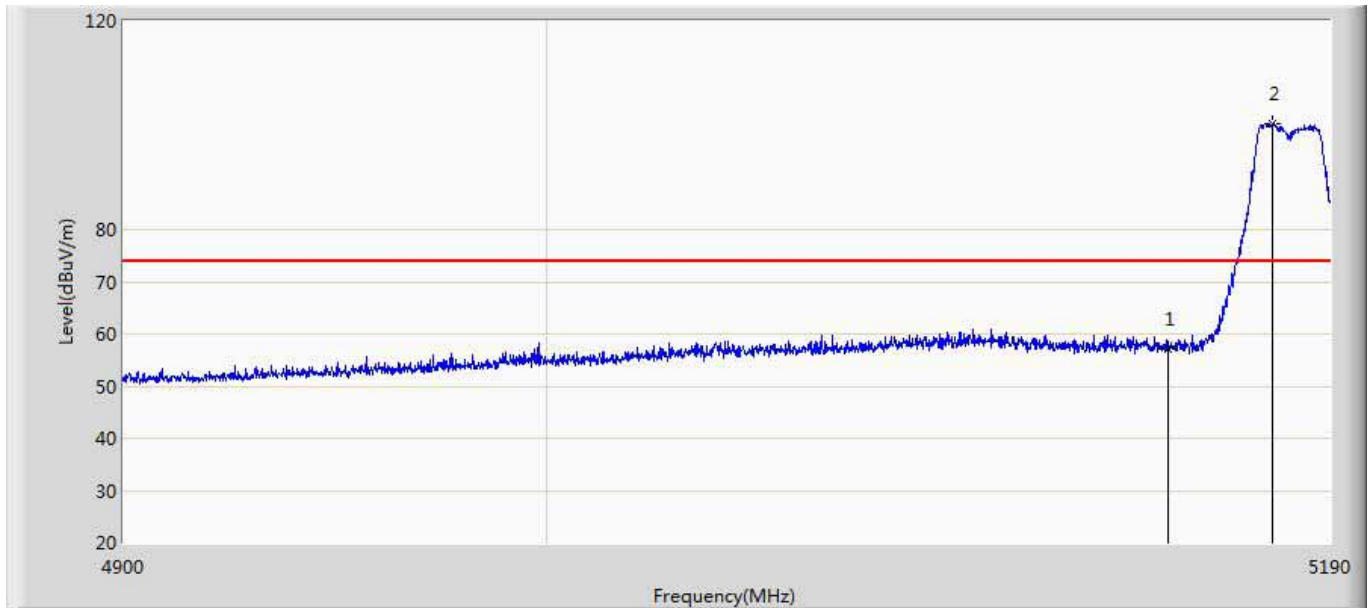
9.6. Test Result

Engineer: Bruce	
Site: AC5	Time: 2017/02/22 - 21:36
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Mi Drone	Power: By Battery
Note: Mode 1:Transmit at 5180 by 802.11a with antenna 0	



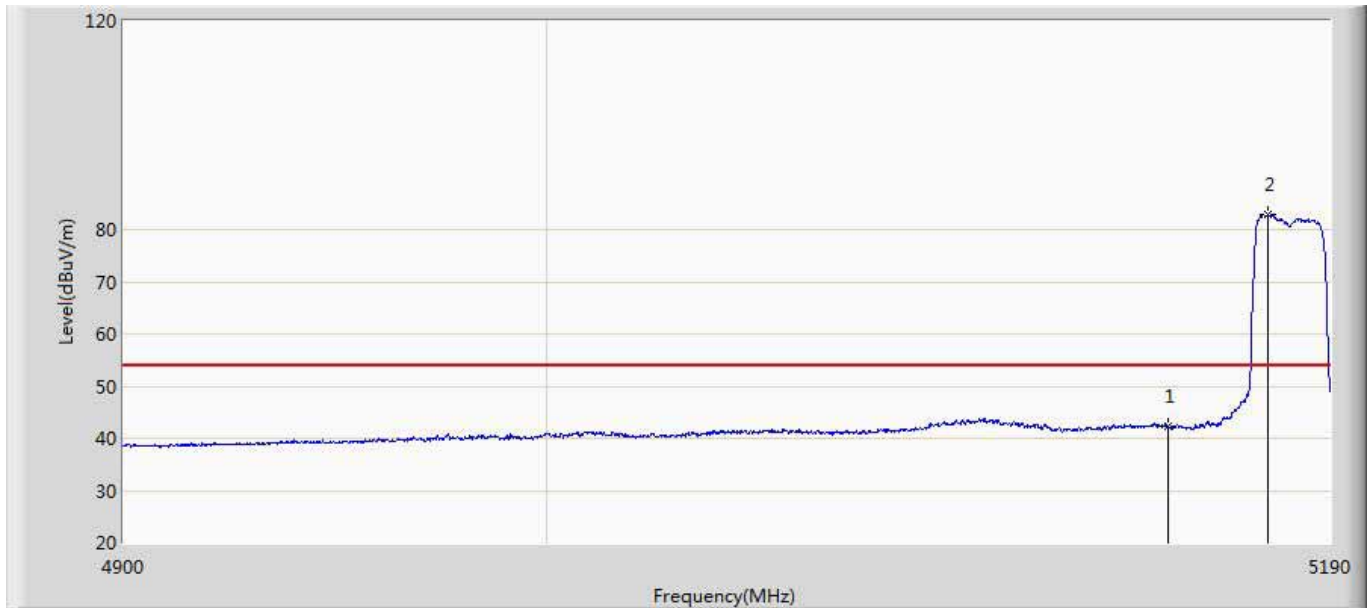
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	48.321	8.267	-5.679	54.000	40.054	AV
2	*	5177.820	94.716	54.600	40.716	54.000	40.116	AV

Engineer: Bruce	
Site: AC5	Time: 2017/02/22 - 21:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Mi Drone	Power: By Battery
Note: Mode 1:Transmit at 5180 by 802.11a with antenna 0	



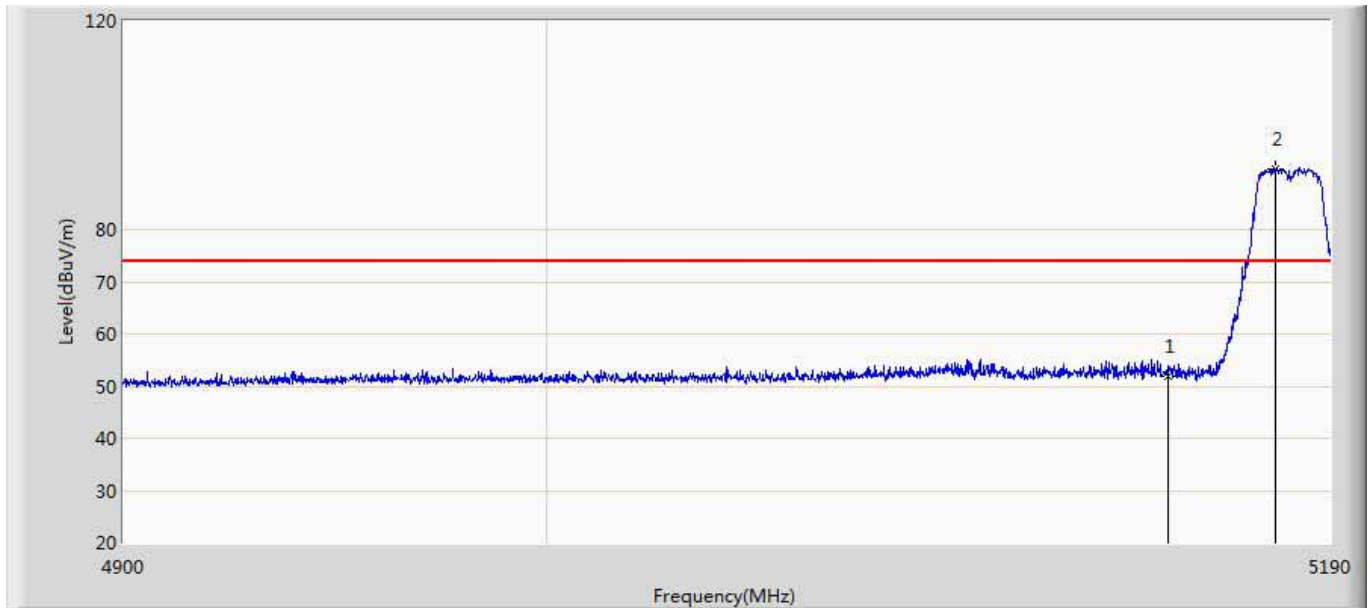
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	57.105	17.051	-16.895	74.000	40.054	PK
2	*	5175.935	100.338	60.225	26.338	74.000	40.113	PK

Engineer: Bruce	
Site: AC5	Time: 2017/02/22 - 21:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Mi Drone	Power: By Battery
Note: Mode 1: Transmit at 5180 by 802.11a with antenna 0	



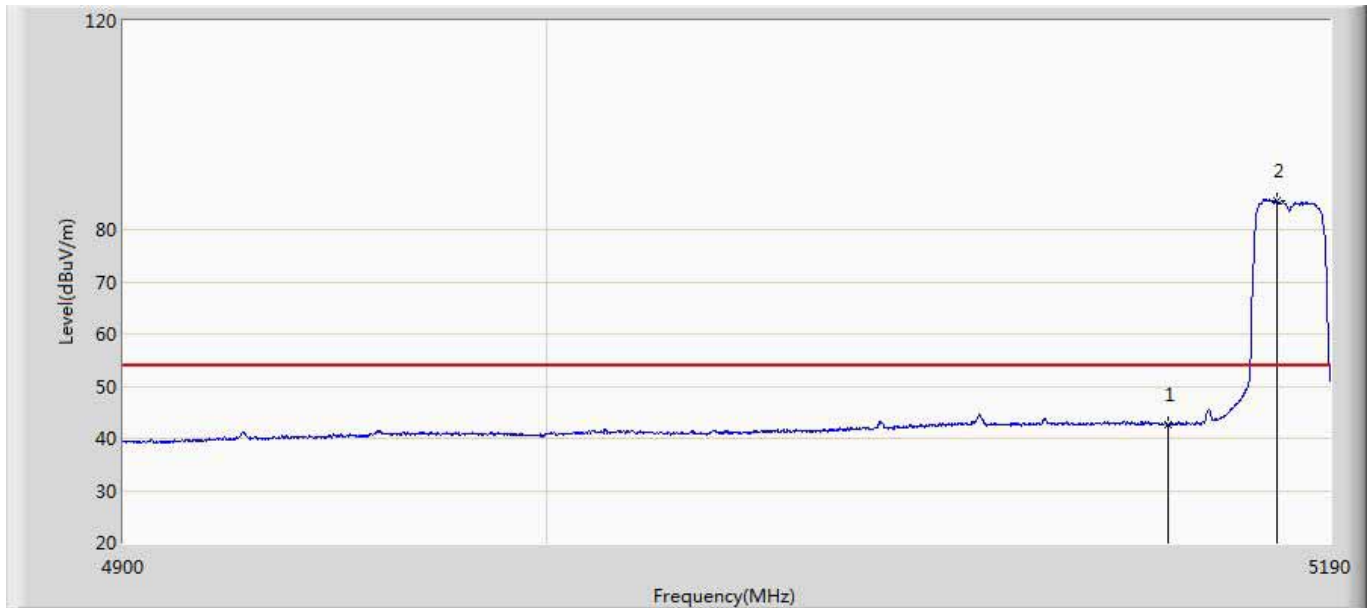
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	42.258	2.204	-11.742	54.000	40.054	AV
2	*	5174.775	82.760	42.649	28.760	54.000	40.111	AV

Engineer: Bruce	
Site: AC5	Time: 2017/02/22 - 21:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Mi Drone	Power: By Battery
Note: Mode 1:Transmit at 5180 by 802.11a with antenna 0	



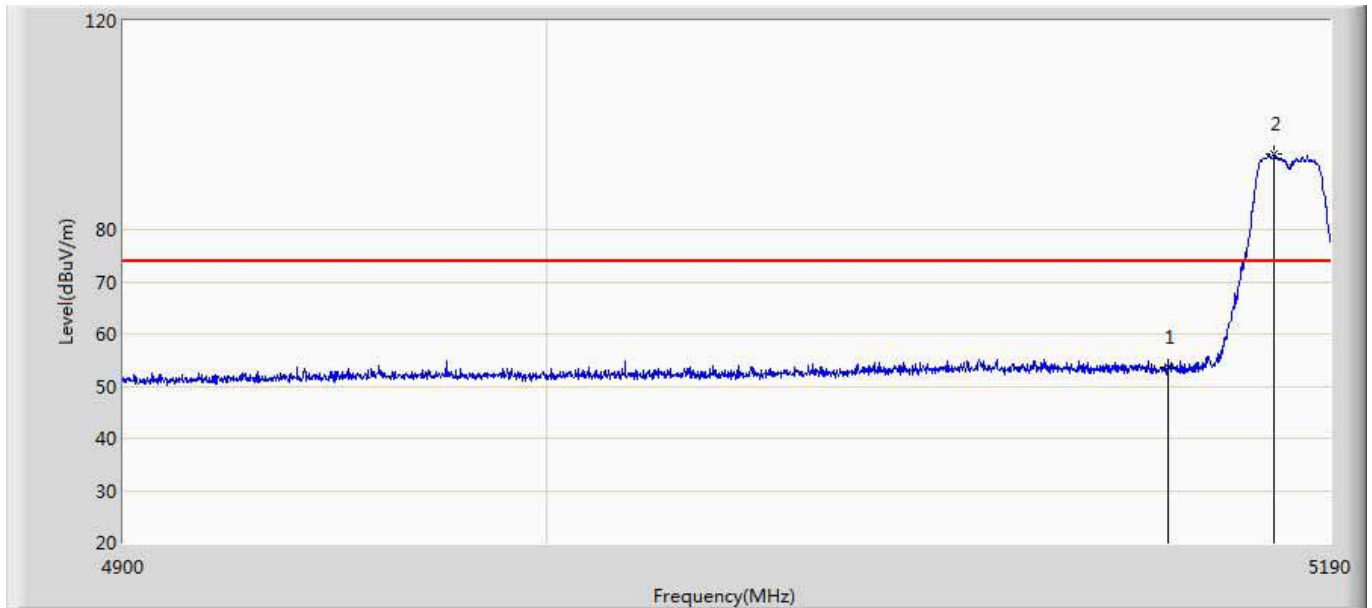
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	51.844	11.790	-22.156	74.000	40.054	PK
2	*	5176.370	91.597	51.484	17.597	74.000	40.113	PK

Engineer: Bruce	
Site: AC5	Time: 2017/02/22 - 21:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Mi Drone	Power: By Battery
Note: Mode 1:Transmit at 5180 by 802.11a with antenna 1	



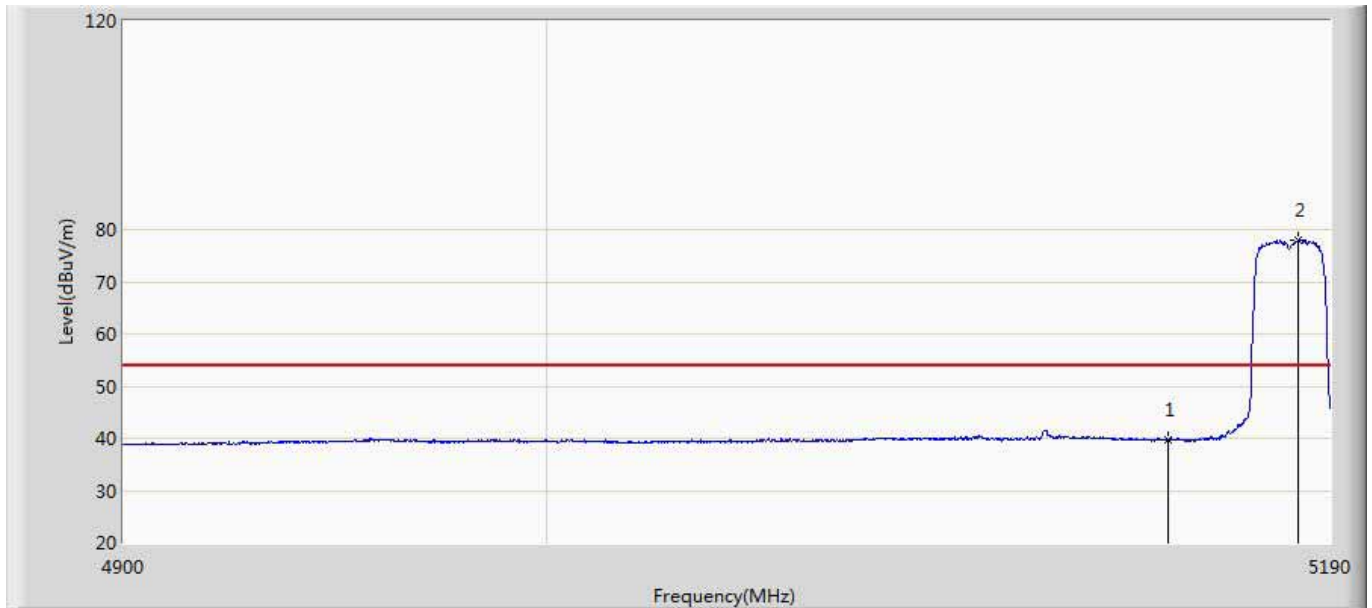
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	42.586	2.532	-11.414	54.000	40.054	AV
2	*	5177.095	85.463	45.349	31.463	54.000	40.114	AV

Engineer: Bruce	
Site: AC5	Time: 2017/02/22 - 21:59
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Mi Drone	Power: By Battery
Note: Mode 1:Transmit at 5180 by 802.11a with antenna 1	



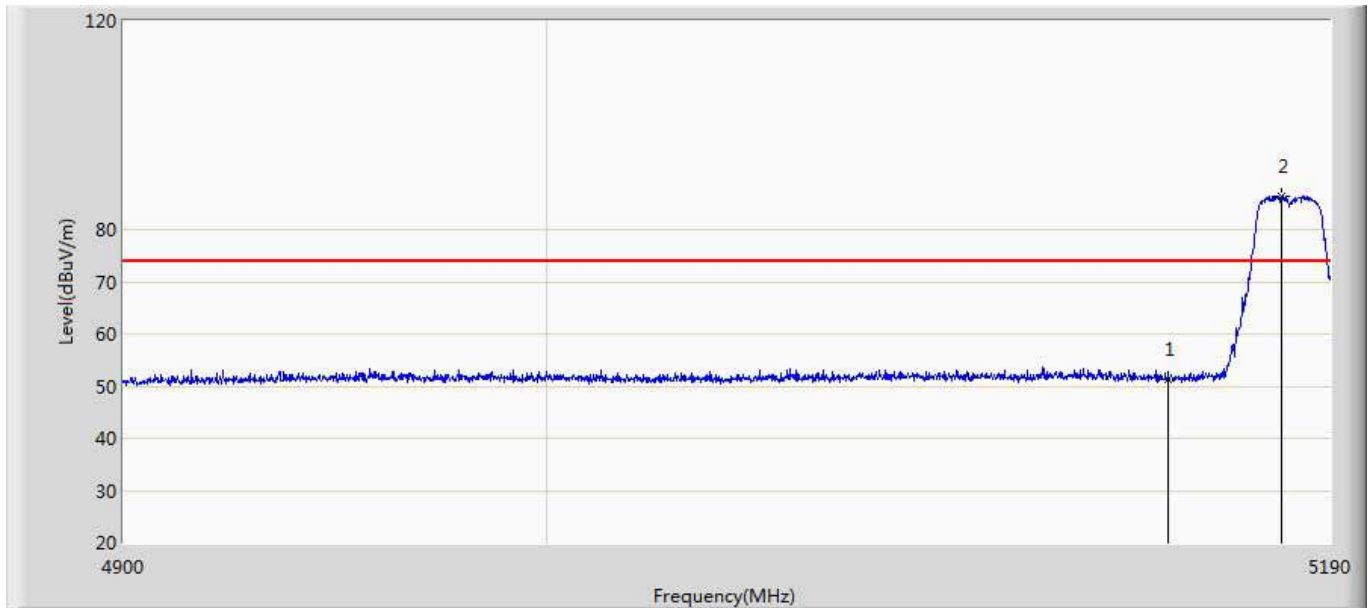
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	53.487	13.433	-20.513	74.000	40.054	PK
2	*	5176.225	94.425	54.312	20.425	74.000	40.113	PK

Engineer: Bruce	
Site: AC5	Time: 2017/02/22 - 22:00
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Mi Drone	Power: By Battery
Note: Mode 1:Transmit at 5180 by 802.11a with antenna 1	



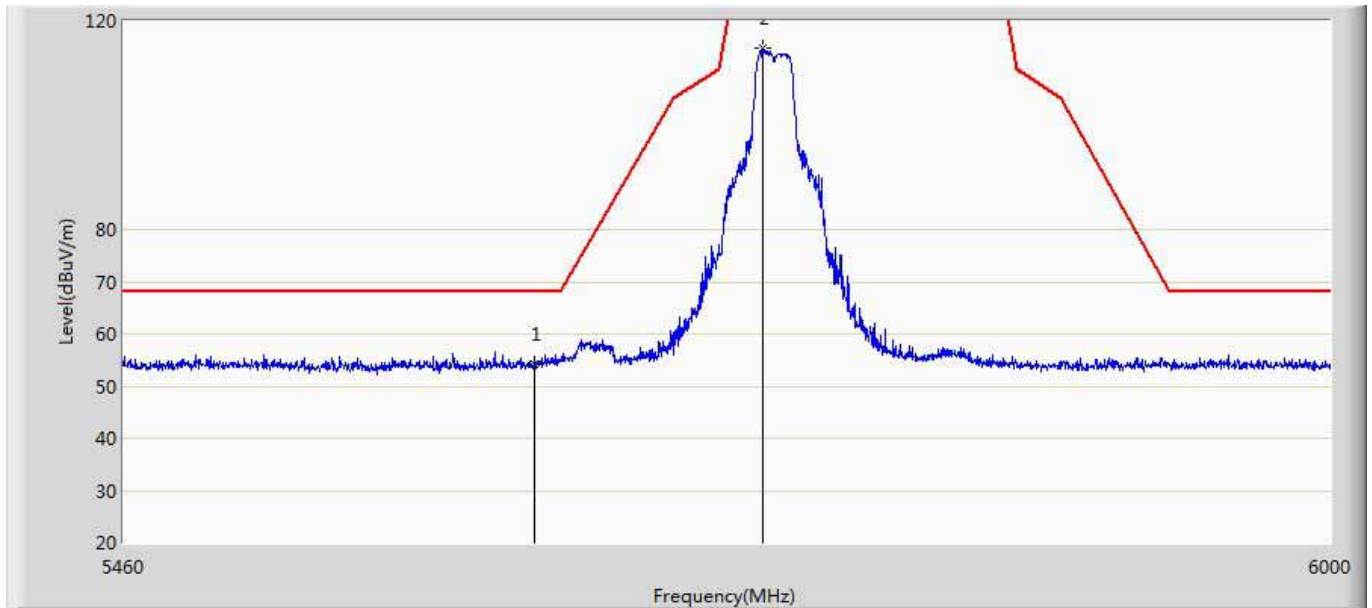
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	39.615	-0.439	-14.385	54.000	40.054	AV
2	*	5182.315	77.932	37.810	23.932	54.000	40.122	AV

Engineer: Bruce	
Site: AC5	Time: 2017/02/22 - 22:02
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Mi Drone	Power: By Battery
Note: Mode 1:Transmit at 5180 by 802.11a with antenna 1	



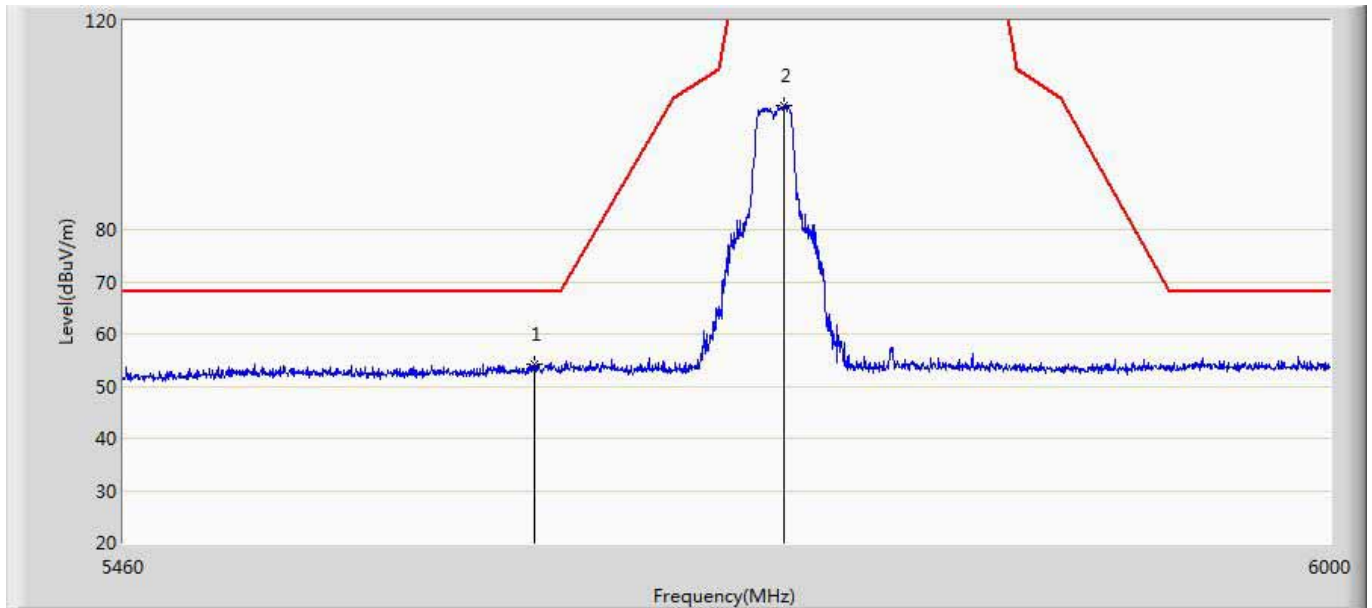
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	51.449	11.395	-22.551	74.000	40.054	PK
2	*	5178.110	86.468	46.352	12.468	74.000	40.116	PK

Engineer: Bruce	
Site: AC5	Time: 2017/02/22 - 22:08
Limit: FCC-15.407 new new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Mi Drone	Power: By Battery
Note: Mode 1: Transmit at 5745 by 802.11a with antenna 0	



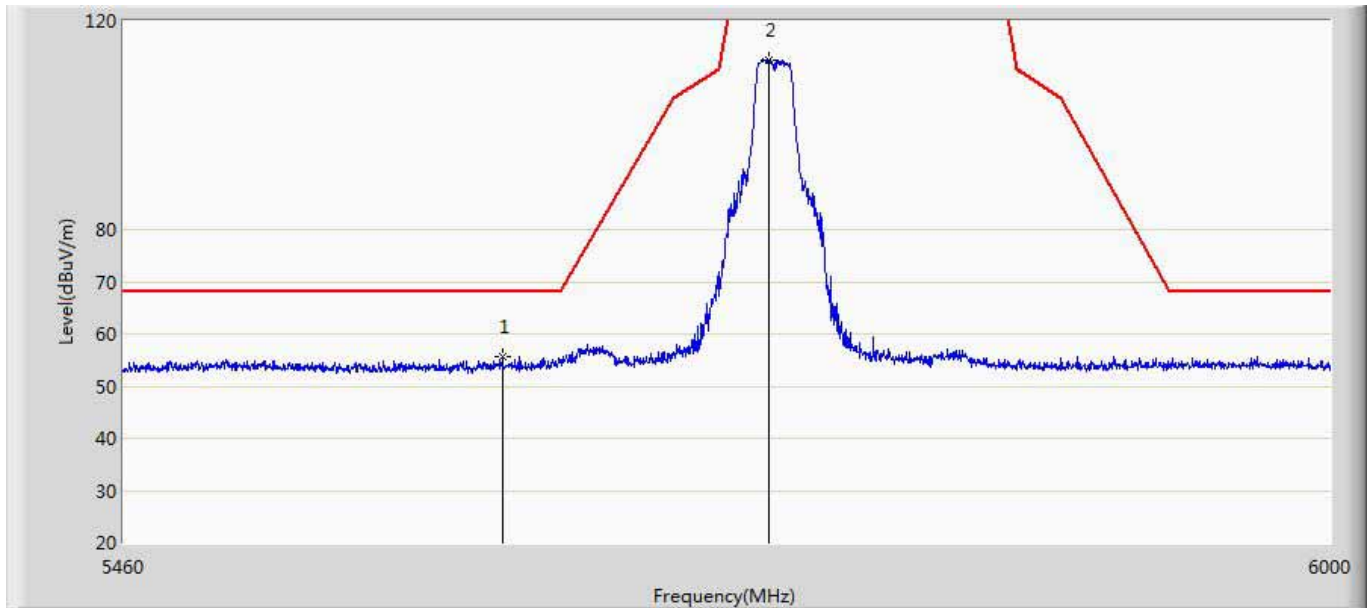
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5638.200	54.115	13.120	-14.085	68.200	40.995	PK
2	*	5739.990	114.686	73.530	-7.514	122.200	41.156	PK

Engineer: Bruce	
Site: AC5	Time: 2017/02/22 - 22:19
Limit: FCC-15.407 new new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Mi Drone	Power: By Battery
Note: Mode 1:Transmit at 5745 by 802.11a with antenna 0	



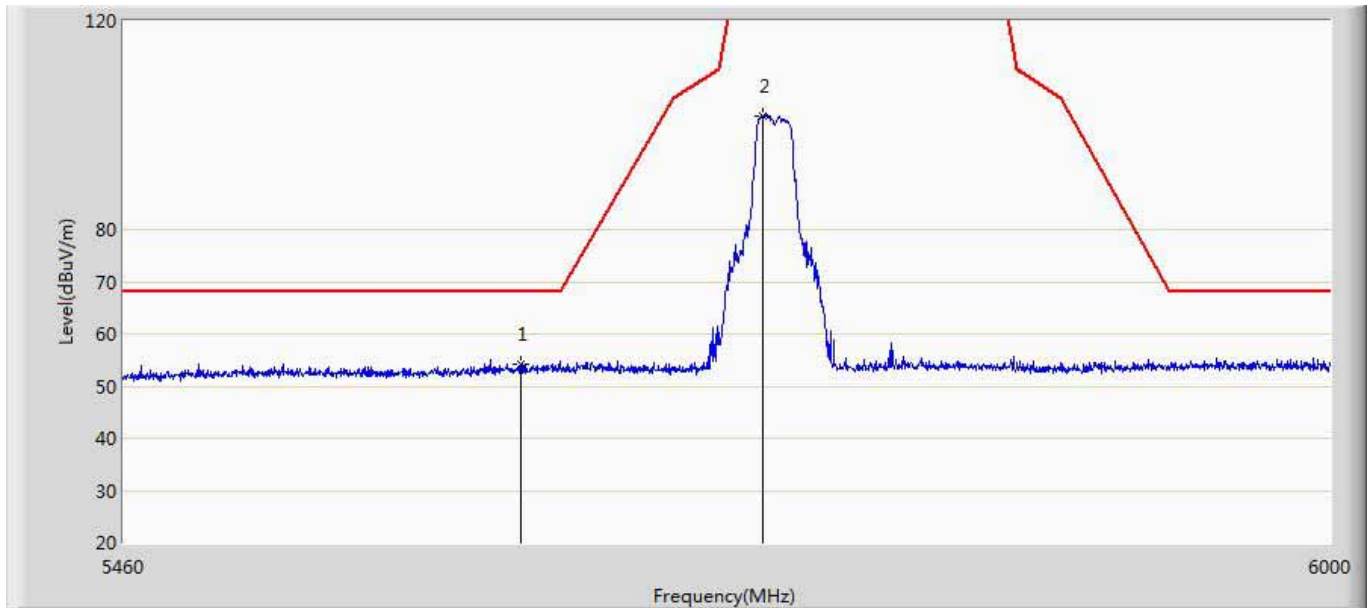
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5638.200	54.115	13.120	-14.085	68.200	40.995	PK
2		5749.170	103.741	62.585	-18.459	122.200	41.156	PK

Engineer: Bruce	
Site: AC5	Time: 2017/02/22 - 22:20
Limit: FCC-15.407 new new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Mi Drone	Power: By Battery
Note: Mode 1: Transmit at 5745 by 802.11a with antenna 1	



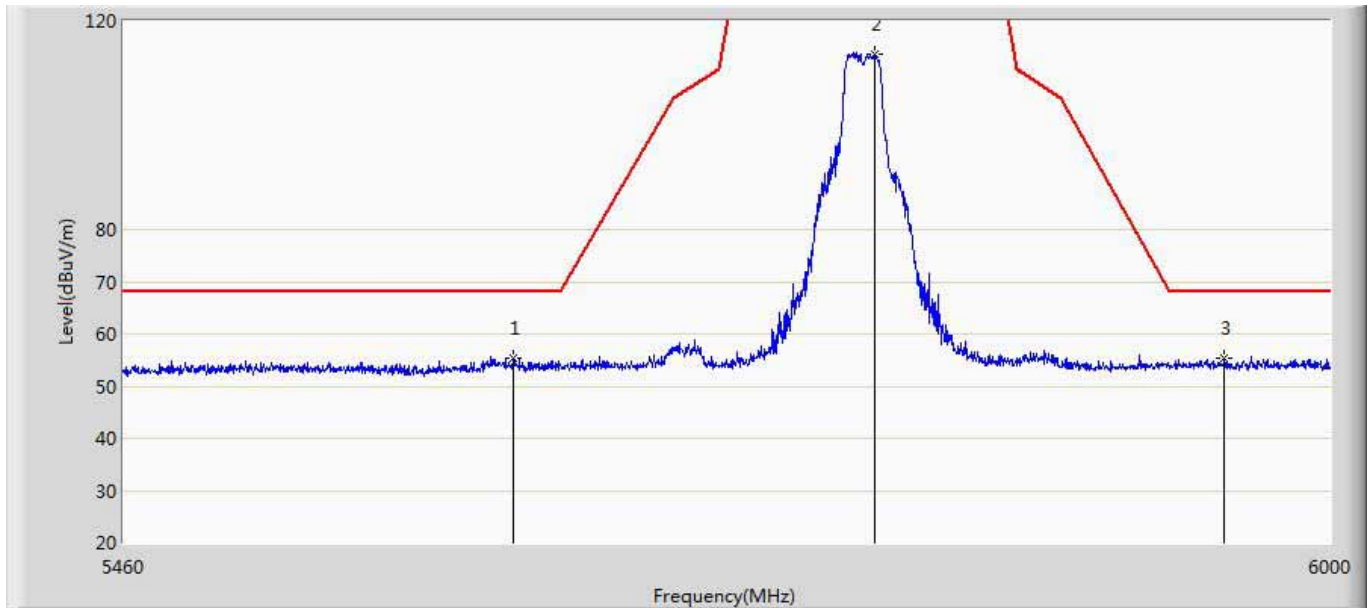
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5624.430	55.653	14.662	-12.547	68.200	40.992	PK
2	*	5742.690	112.562	71.392	-9.638	122.200	41.171	PK

Engineer: Bruce	
Site: AC5	Time: 2017/02/22 - 22:22
Limit: FCC-15.407 new new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Mi Drone	Power: By Battery
Note: Mode 1: Transmit at 5745 by 802.11a with antenna 1	



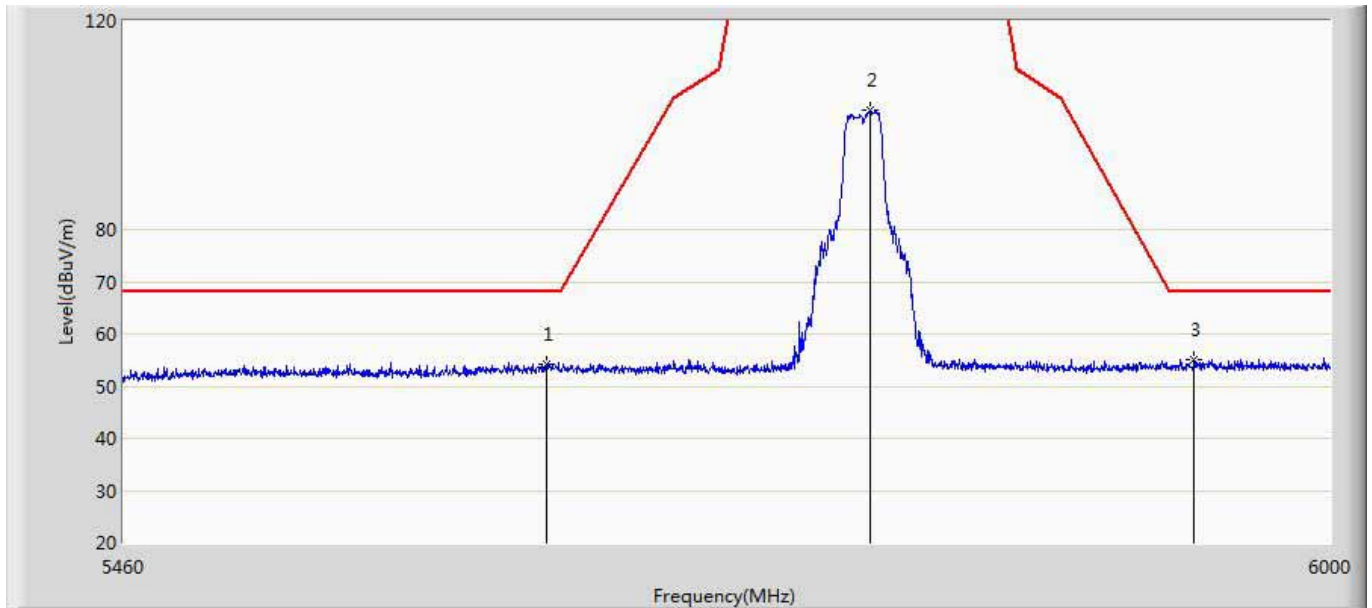
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5632.260	54.332	13.339	-13.868	68.200	40.993	PK
2		5739.720	101.884	60.730	-20.316	122.200	41.154	PK

Engineer: Bruce	
Site: AC5	Time: 2017/02/22 - 22:25
Limit: FCC-15.407 new new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Mi Drone	Power: By Battery
Note: Mode 1: Transmit at 5785 by 802.11a with antenna 0	



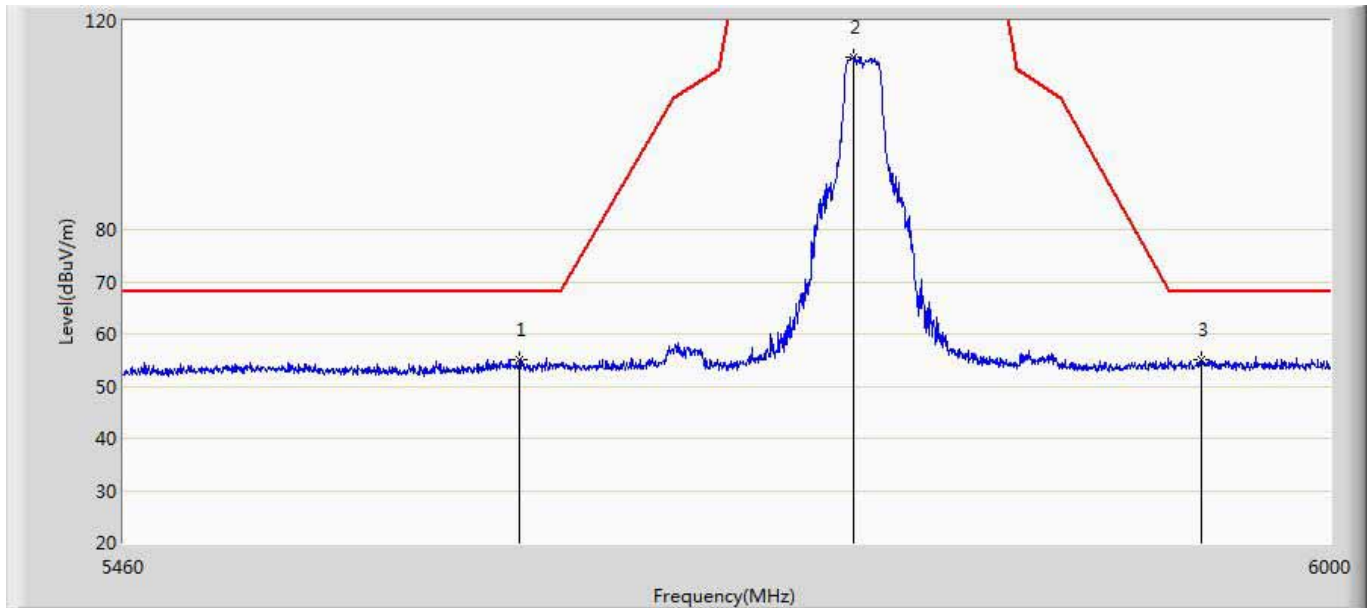
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5629.290	55.321	14.328	-12.879	68.200	40.992	PK
2	*	5790.480	113.584	72.398	-8.616	122.200	41.186	PK
3		5950.860	55.259	13.677	-12.941	68.200	41.582	PK

Engineer: Bruce	
Site: AC5	Time: 2017/02/22 - 22:26
Limit: FCC-15.407 new new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Mi Drone	Power: By Battery
Note: Mode 1: Transmit at 5785 by 802.11a with antenna 0	



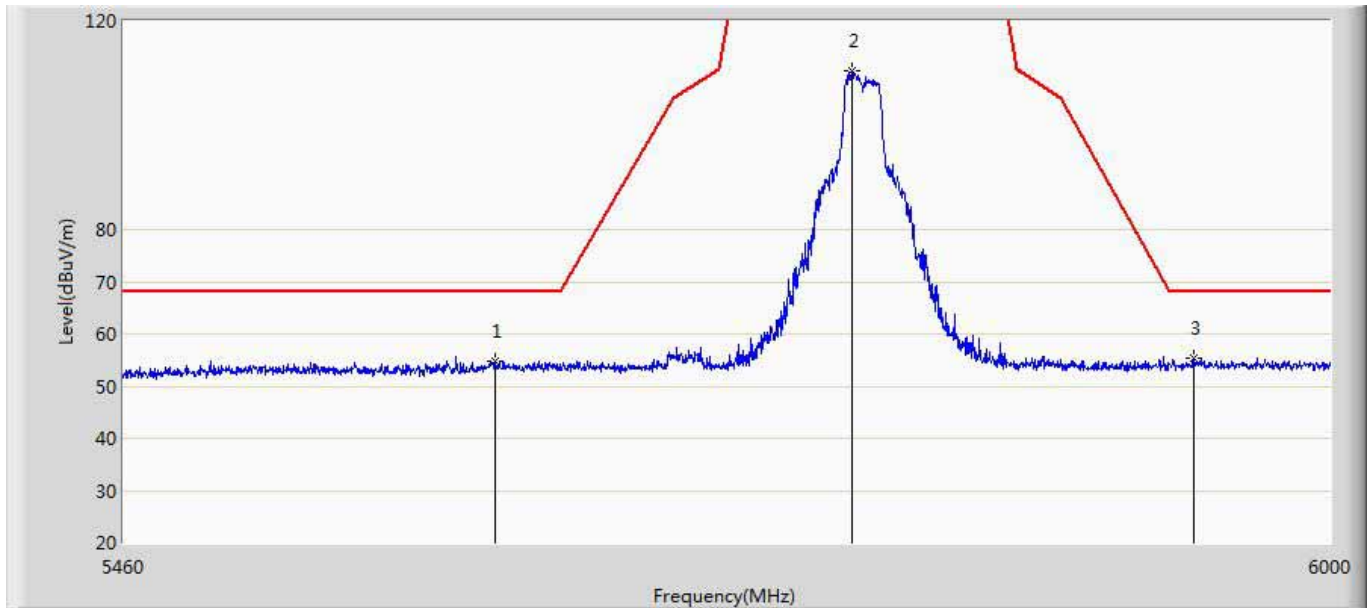
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5643.600	54.334	13.339	-13.866	68.200	40.995	PK
2		5788.050	102.961	61.776	-19.239	122.200	41.185	PK
3	*	5936.550	55.087	13.514	-13.113	68.200	41.572	PK

Engineer: Bruce	
Site: AC5	Time: 2017/02/22 - 22:28
Limit: FCC-15.407 new new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Mi Drone	Power: By Battery
Note: Mode 1:Transmit at 5785 by 802.11a with antenna 1	



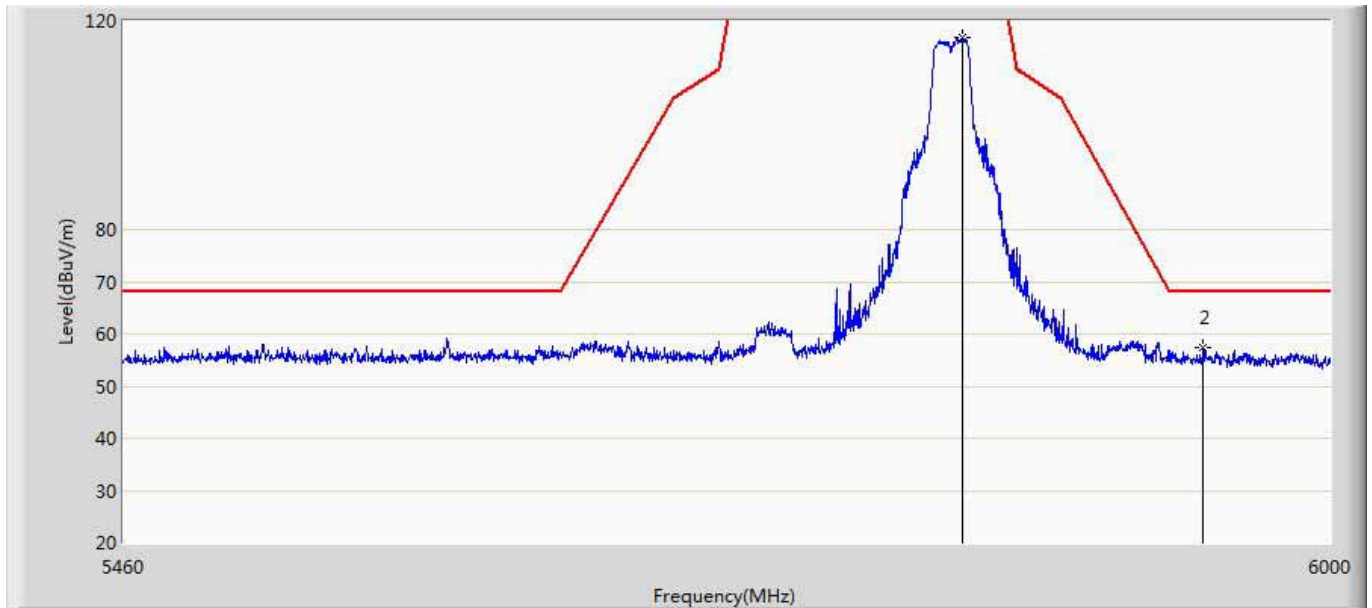
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5631.720	54.956	13.963	-13.244	68.200	40.993	PK
2	*	5780.760	113.039	71.858	-9.161	122.200	41.181	PK
3		5940.060	55.197	13.622	-13.003	68.200	41.575	PK

Engineer: Bruce	
Site: AC5	Time: 2017/02/22 - 22:30
Limit: FCC-15.407 new new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Mi Drone	Power: By Battery
Note: Mode 1: Transmit at 5785 by 802.11a with antenna 0	



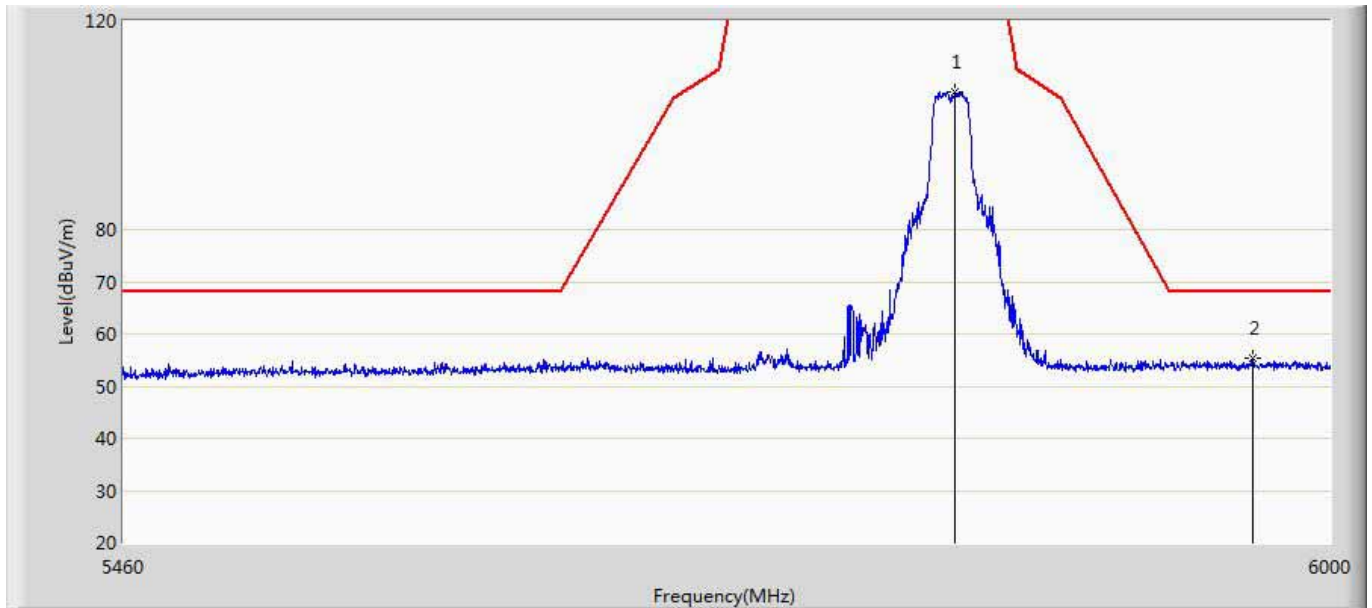
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5621.190	54.665	13.686	-13.535	68.200	40.979	PK
2	*	5780.220	110.406	69.225	-11.794	122.200	41.181	PK
3		5936.280	55.382	13.810	-12.818	68.200	41.573	PK

Engineer: Bruce	
Site: AC5	Time: 2017/02/22 - 22:41
Limit: FCC-15.407 new new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Mi Drone	Power: By Battery
Note: Mode 1:Transmit at 5825 by 802.11a with antenna 0	



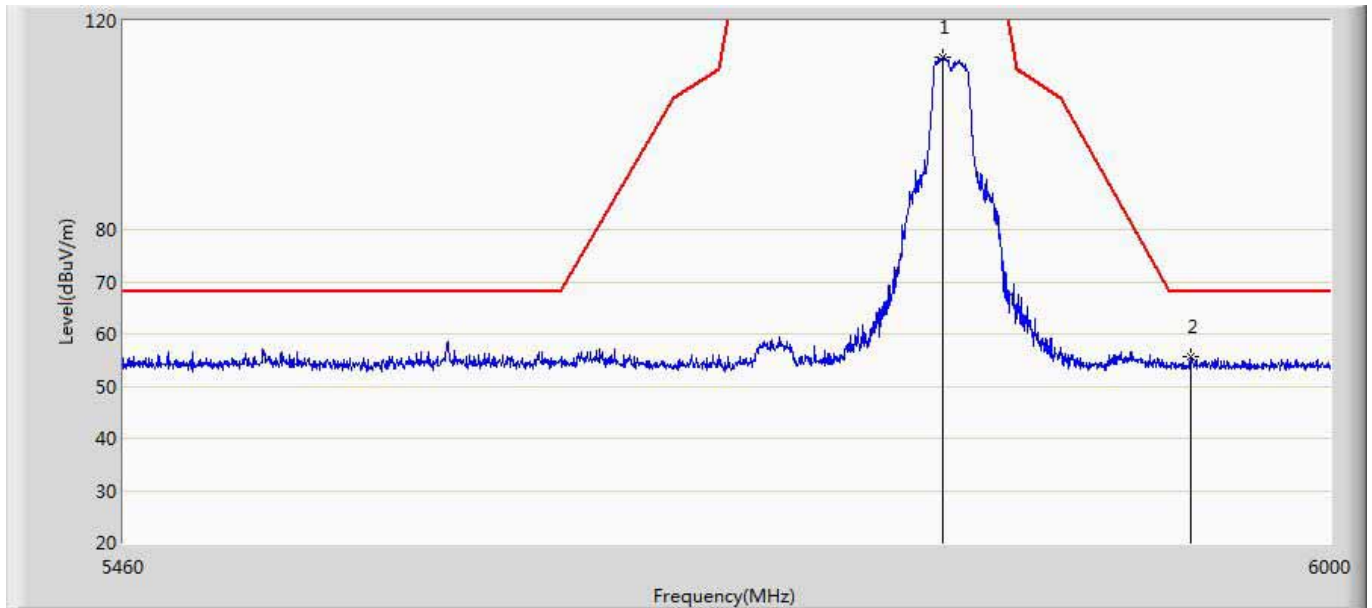
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5829.900	116.846	75.543	-5.354	122.200	41.304	PK
2		5940.870	57.430	15.854	-10.770	68.200	41.575	PK

Engineer: Bruce	
Site: AC5	Time: 2017/02/22 - 22:43
Limit: FCC-15.407 new new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Mi Drone	Power: By Battery
Note: Mode 1: Transmit at 5825 by 802.11a with antenna 1	



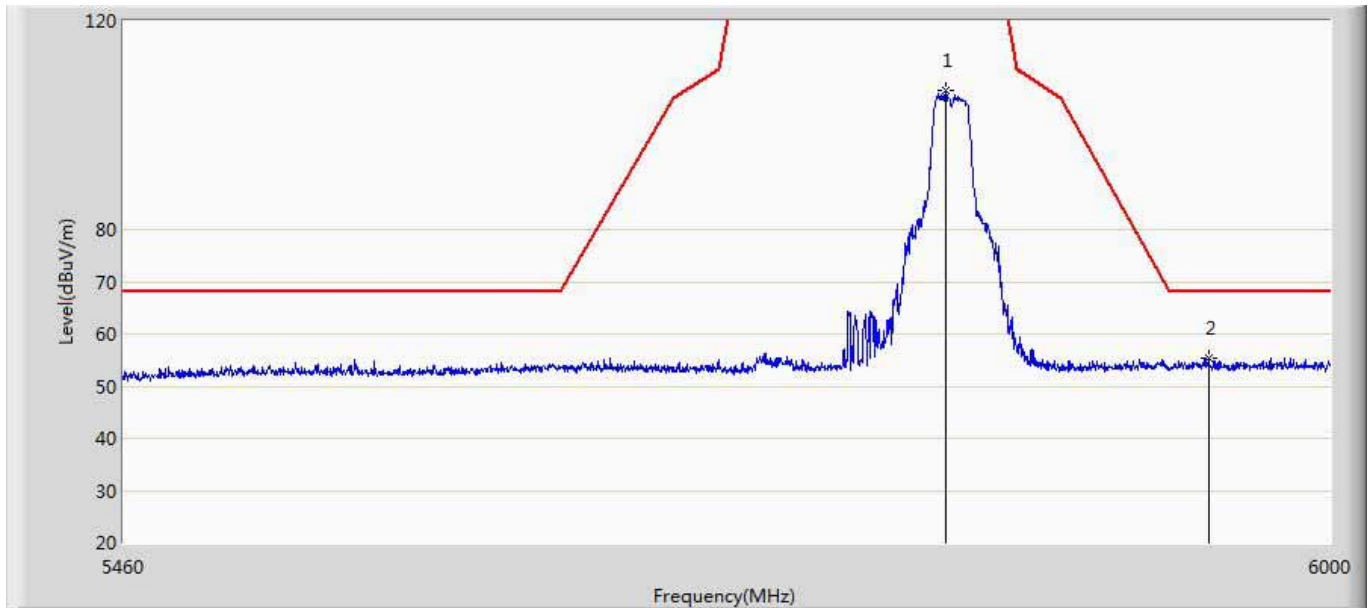
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5826.930	106.329	65.038	-15.871	122.200	41.291	PK
2	*	5964.090	55.272	13.681	-12.928	68.200	41.591	PK

Engineer: Bruce	
Site: AC5	Time: 2017/02/22 - 22:44
Limit: FCC-15.407 new new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Mi Drone	Power: By Battery
Note: Mode 1:Transmit at 5825 by 802.11a with antenna 1	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5820.990	113.082	71.796	-9.118	122.200	41.286	PK
2		5935.200	55.770	14.198	-12.430	68.200	41.571	PK

Engineer: Bruce	
Site: AC5	Time: 2017/02/22 - 22:45
Limit: FCC-15.407 new new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Mi Drone	Power: By Battery
Note: Mode 1:Transmit at 5825 by 802.11a with antenna 1	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5822.340	106.725	65.438	-15.475	122.200	41.287	PK
2	*	5943.570	55.377	13.799	-12.823	68.200	41.577	PK

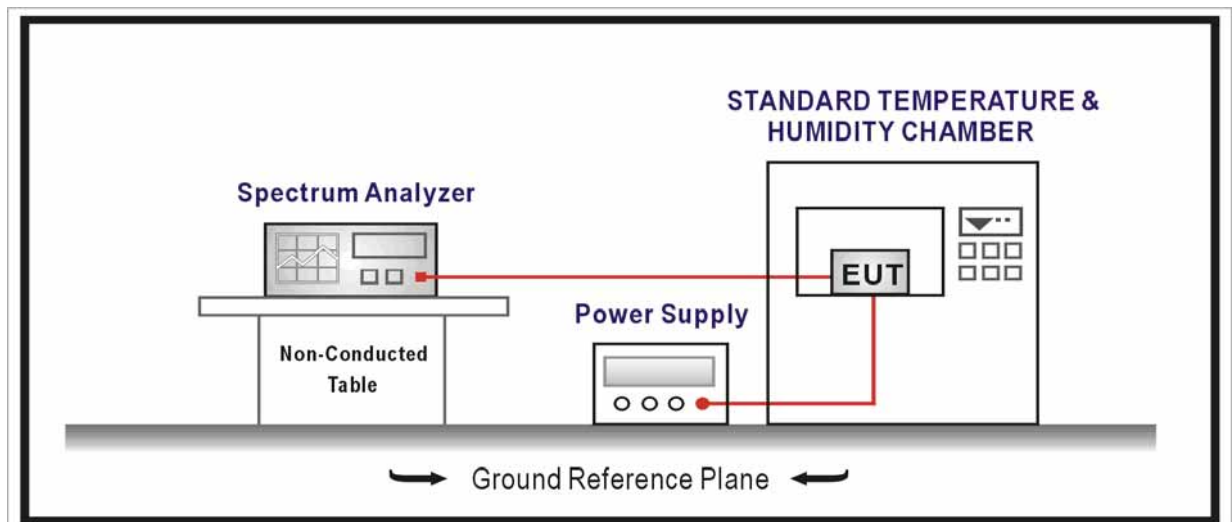
10. Frequency Stability

10.1. Test Equipment

Frequency Stability / TR-7					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2017.02.04	2018.01.15
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2016.04.09	2017.04.09
MXA Signal Analyzer	Keysight	N9020A	MY56060147	2016.04.09	2017.04.09
AC Power Supply	IDRC	CF-500TP	979422	2016.09.16	2017.09.16
DC Power Supply	IDRC	CD-035-020PR	977272	2016.09.16	2017.09.16
Programmable Temperature & Humidity Chamber	Gaoyu	TH-1P-B	WIT-05121302	2017.01.04	2018.01.03
Temperature/Humidity Meter	zhichen	ZC1-2	TR7-TH	2016.04.10	2017.04.10

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

10.2. Test Setup



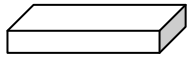
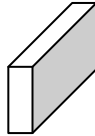
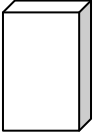
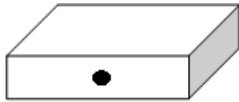


10.3. Limit

Frequency Stability Limit	
UNII Devices	
<input checked="" type="checkbox"/>	In-band emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.
IEEE Std. 802.11n-2009	
<input checked="" type="checkbox"/>	The transmitter center frequency tolerance shall be ± 20 ppm maximum for the 5 GHz band and ± 25 ppm maximum for the 2.4 GHz band.

10.4. Test Procedure

Frequency Stability Test Method			
	References Rule	Chapter	Description
<input checked="" type="checkbox"/>	ANSI C63.10	6.8	Frequency stability tests
	<input checked="" type="checkbox"/> ANSI C63.10	6.8.1	Frequency stability with respect to ambient temperature
	<input checked="" type="checkbox"/> ANSI C63.10	6.8.2	Frequency stability when varying supply voltage

10.5. EUT test Axis definition

Item	Frequency Stability			
Device Category	<input type="checkbox"/>	Outdoor AP		
	<input type="checkbox"/>	Indoor AP		
	<input type="checkbox"/>	Fixed point-to-point AP		
	<input type="checkbox"/>	Outdoor fixed point-to-multipoint AP		
	<input checked="" type="checkbox"/>	Client		
Test mode	Mode 1			
Test method	<input type="checkbox"/>	Radiated		
		X Axis	Y Axis	Z Axis
				
		Worst Axis <input type="checkbox"/>	Worst Axis <input type="checkbox"/>	Worst Axis <input type="checkbox"/>
	<input checked="" type="checkbox"/>	Conducted		
	<input type="checkbox"/>	Chain 1		
				
	<input checked="" type="checkbox"/>	Chain 1	Chain 2	
				
	<input type="checkbox"/>	Chain 1	Chain 2	Chain 3
				

10.6. Test Result

Product Name	: Mi Drone	Power	: DC 15.2V
Model No.	: FXQ02FM	Test Site	: TR7
Test Mode	: Carrier Wave	Test Date	: 2017.02.22

Frequency Stability under Temperature

Temperature Interval ()	Test Frequency (MHz)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)
-30	5180.000	133	0.02	± 20
-20	5180.000	-122	-0.02	± 20
-10	5180.000	-167	-0.03	± 20
0	5180.000	128	0.02	± 20
10	5180.000	-106	-0.02	± 20
20	5180.000	-98	-0.02	± 20
30	5180.000	119	0.02	± 20
40	5180.000	111	0.02	± 20
50	5180.000	-138	-0.02	± 20
-30	5785.000	130	0.02	± 20
-20	5785.000	172	0.03	± 20
-10	5785.000	133	0.02	± 20
0	5785.000	139	0.02	± 20
10	5785.000	-95	-0.01	± 20
20	5785.000	-108	0.02	± 20
30	5785.000	282	0.04	± 20
40	5785.000	200	0.03	± 20
50	5785.000	178	0.03	± 20

Frequency Stability under Voltage

AC Voltage (V)	Test Frequency (MHz)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)
13.4	5180.000	133	0.02	± 20
15.2	5180.000	111	0.02	± 20
17.4	5180.000	123	0.02	± 20
13.4	5785.000	127	0.02	± 20
15.2	5785.000	131	0.02	± 20
17.4	5785.000	-172	-0.03	± 20

11. Antenna Requirement

11.1. Limit

Antenna Requirement Limit	
<p>An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, §15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.</p>	

11.2. Antenna Connector Construction

Antenna Connector Construction	
<input type="checkbox"/>	The use of a permanently attached antenna
<input type="checkbox"/>	The antenna use of a unique coupling to the intentional radiator
<input checked="" type="checkbox"/>	The use of a nonstandard antenna jack or electrical connector
Please refer to the attached document "Internal Photograph" to show the antenna connector.	

_____ The End _____