

# **Test Report**

## **FCC Part15 Subpart E**

Product Name : Mi Wi-Fi  
Model No. : R1D  
FCC ID : 2AAF5-MWF01HD

Applicant : Beijing Xiaomi Technology Co., Ltd  
Address : The Rainbow City of China Resources, NO 68, Qinghe  
Middle Street, Haidian District

Date of Receipt : Jul. 03, 2014  
Test Date : Jul. 03, 2014~Jul. 15, 2014  
Issued Date : Aug. 01, 2014  
Report No. : 1470115R-RF-US-P09V01  
Report Version : V1.0



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.

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## Test Report Certification

Issued Date : Aug. 01, 2014  
Report No. : 1470115R-RF-US-P09V01



Product Name : Mi Wi-Fi  
Applicant : Beijing Xiaomi Technology Co., Ltd  
Address : The Rainbow City of China Resources, NO 68, Qinghe Middle Street, Haidian District  
Manufacturer : Xiaomi Electronics Co., Ltd  
Address : Room408-11, Building8, Disheng Beijie No.1, Beijing Economic-Technological Development Area, Beijing, China  
Model No. : R1D  
FCC ID : 2AAF5-MWF01HD  
EUT Voltage : DC: 12V 2.5A  
Brand Name : MI  
Applicable Standard : FCC CFR Title 47 Part 15 Subpart E: 2013  
ANSI C63.4: 2009; KDB 789033  
Test Result : Complied  
Performed Location : Suzhou EMC Laboratory  
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TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098  
FCC Registration Number: 800392

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## Laboratory Information

We, **QuiTek Corporation**, are an independent EMC and safety consultancy that was established the whole facility in our laboratories. The test facility has been accredited/accepted(audited or listed) by the following related bodies in compliance with ISO 17025, EN 45001 and specified testing scope:

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USA	:	FCC
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China	:	CNAS

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If you have any comments, Please don't hesitate to contact us. Our contact information is as below:

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**History of This Test Report**

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
1470115R-RF-US-P09V01	V1.0	Initial Issued Report	Aug. 01, 2014

## 1. General Information

### 1.1. EUT Description

Product Name	Mi Wi-Fi
Brand Name	MI
Model No.	R1D
EUT Voltage	DC 12V 2.5A
Frequency Range	<b>For 2.4GHz Band</b> 802.11b/g/n(20MHz): 2412~2462MHz 802.11n(40MHz): 2422~2452MHz <b>For 5.0GHz Band</b> 802.11a/n(20MHz)/ac(20MHz): 5180~5240MHz, 5745~5825MHz 802.11n(40MHz)/ac(40MHz): 5190~5230MHz, 5755~5795MHz 802.11ac(80MHz): 5210MHz, 5775MHz
Channel Number	For 2.4GHz Band 802.11b/g/n(20MHz): 11    802.11n(40MHz): 7 For 5.0GHz Band 802.11a /n(20MHz) /ac(20MHz): 9    802.11n(40MHz)/ac(40MHz): 4 802.11ac(80MHz): 2
Type of Modulation	802.11b: DSSS 802.11a/g/n/ac: OFDM
Data Rate	802.11a/g: 6/9/12/18/24/36/48/54 Mbps 802.11b: 1/2/5.5/11 Mbps 802.11n: up to 450 Mbps 802.11ac: up to 1299.9 Mbps
Channel Control	Auto
Antenna Delivery	2*Tx + 2*Rx for 2.4GHz 2*Tx + 2*Rx for 5GHz
Antenna Type	Reference to Antenna List
Peak Antenna Gain	Reference to Antenna List

**For 2.4GHz Band**

802.11b/g/n(20MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
01	2412 MHz	02	2417 MHz	03	2422 MHz	04	2427 MHz
05	2432 MHz	06	2437 MHz	07	2442 MHz	08	2447 MHz
09	2452 MHz	10	2457 MHz	11	2462 MHz	N/A	N/A

## 802.11n(40MHz) Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
03	2422 MHz	04	2427 MHz	05	2432 MHz	06	2437 MHz
07	2442 MHz	08	2447 MHz	09	2452 MHz	N/A	N/A

**For 5.0GHz Band**

802.11a/n(20MHz)/ac(20MHz) 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	5825 MHz	N/A	N/A	N/A	N/A	N/A	N/A

## 802.11n(40MHz)/ac(40MHz) Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz	151	5755 MHz	159	5795 MHz

## 802.11ac(80MHz) Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
42	5210 MHz	155	5775 MHz	N/A	N/A	N/A	N/A

**Antenna List**

No.	Manufacturer	Antenna Type	M/N	Peak Gain
ANT1	Hon Hai	PIFA Antenna	C107-511053-A (1401-0022)	2.75 dBi for 2.412-2.462GHz 3.50 dBi for 5.150-5.250GHz 2.46 dBi for 5.250-5.350GHz 2.30 dBi for 5.470-5.725GHz 3.14 dBi for 5.745-5.825GHz
ANT2	Hon Hai	PIFA Antenna	C107-511053-A (1401-0022)	2.99 dBi for 2.412-2.462GHz 2.71 dBi for 5.150-5.250GHz 2.82 dBi for 5.250-5.350GHz 3.25 dBi for 5.470-5.725GHz 3.89 dBi for 5.745-5.825GHz

MIMO Mode (ANT1+ANT2)	Directional gain(dBi)	6.12 dBi for 5.150-5.250GHz 5.65 dBi for 5.250-5.350GHz 5.80 dBi for 5.470-5.725GHz 6.53 dBi for 5.745-5.825GHz
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Note: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] \text{ dBi}$

## Power Parameter Value of the test software

Test Mode	Test Channel	Ant 1	Ant 2	MIMO MODE (Ant 1+2)
802.11a	5180	66	60	x
	5220	68	60	x
	5240	68	60	x
802.11n(20MHz)	5180	68	60	44
	5220	68	62	44
	5240	68	62	44
802.11ac(20MHz)	5180	66	58	44
	5220	66	58	44
	5240	66	58	44
802.11n(40MHz)	5190	74	66	56
	5230	74	66	56
802.11ac(40MHz)	5190	72	64	54
	5230	72	64	54
802.11ac(80MHz)	5210	72	66	56

The test mode of the test software can support.

Test Mode	Ant 1	Ant 2	MIMO MODE (Ant 1+2)
802.11a	✓	✓	✗
802.11n(20MHz)	✓	✓	✓
802.11ac(20MHz)	✓	✓	✓
802.11n(40MHz)	✓	✓	✓
802.11ac(40MHz)	✓	✓	✓
802.11ac(80MHz)	✓	✓	✓

#### Duty Cycle

Test Mode	Duty Cycle
802.11a	99%
802.11n(20MHz)	98%
802.11ac(20MHz)	98%
802.11n(40MHz)	94%
802.11ac(40MHz)	94%
802.11ac(80MHz)	94%

## 1.2. Mode of Operation

QuiTek 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 802.11 a (Ant1;Ant2)
Mode 2: Transmit by 802.11n(20MHz) (Ant1;Ant2;MIMO MODE)
Mode 3: Transmit by 802.11ac(20MHz) (Ant1;Ant2;MIMO MODE)
Mode 4: Transmit by 802.11n(40MHz) (Ant1;Ant2;MIMO MODE)
Mode 5: Transmit by 802.11ac(40MHz) (Ant1;Ant2;MIMO MODE)
Mode 6: Transmit by 802.11ac(80MHz) (Ant1;Ant2;MIMO MODE)

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.

**1.3. 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	Assistant router	N/A	N/A	N/A	N/A
2	USB 3.0 Hard Disc Drive	Lenovo	F360	OA0503512400231	Power by EUT

#### 1.4. Configuration of Tested System

Connection Diagram		
Signal Cable Type	Signal cable Description	
A	USB Cable	Shielded, 0.5m
B	USB Cable	Non-shielded, >10m
C	USB Cable	Non-shielded, >10m
D	USB Cable	Non-shielded, >10m

The diagram illustrates the test setup. The EUT (Equipment Under Test) is at the center. It is connected to a computer labeled '1' via a horizontal line labeled 'B'. A vertical line labeled 'A' connects the EUT to a ground plane labeled '2'. Another horizontal line labeled 'C' connects the EUT to a device labeled '3'. A third horizontal line labeled 'D' connects the EUT to a device labeled '4'. A dashed rectangular box encloses the EUT and its connections to cables A, B, C, and D.

### 1.5. EUT Exercise Software

1	Setup the EUT and simulators as shown on above.
2	Turn on the power of equipment.
3	Run the RF test software “MTool”, and set the test mode and channel, then press OK to start continue Transmit or receive.

## 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	Test Performed	Deviation
Conducted Emission	FCC CFR Title 47 Part 15 Subpart E: 2013 Section 15.207	Yes	No
Radiated Emission	FCC CFR Title 47 Part 15 Subpart E: 2013 Section 15.209	Yes	No
Operation Frequency Range of 20dB Bandwidth	FCC CFR Title 47 Part 15 Subpart E: 2013 15.215(c)	Yes	No
26dB Occupied Bandwidth	FCC CFR Title 47 Part 15 Subpart E: 2013 Section 15.407(a)	Yes	No
Power Output	FCC CFR Title 47 Part 15 Subpart E: 2013 Section 15.407(a)	Yes	No
Peak Power Spectral Density	FCC CFR Title 47 Part 15 Subpart E: 2013 Section 15.407(a)	Yes	No
Peak Excursion	FCC CFR Title 47 Part 15 Subpart E: 2013 Section 15.407(a)(6)	Yes	No
Radiated Emission Band Edge	FCC CFR Title 47 Part 15 Subpart E: 2013 Section 15.205, 15.407(b)	Yes	No
Frequency Stability	FCC CFR Title 47 Part 15 Subpart E: 2013 Section 15.407(g)	Yes	No

## 2.2. 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

### 3. Conducted Emission

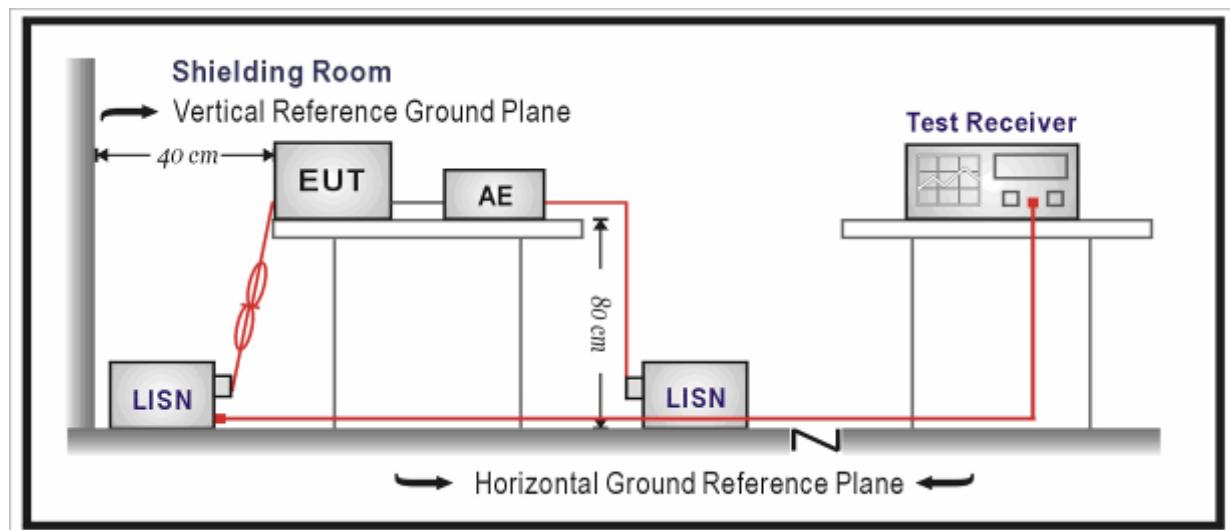
#### 3.1. Test Equipment

Conducted Emission / TR-1

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
EMI Test Receiver	R&S	ESCI	100726	2015.03.28
Two-Line V-Network	R&S	ENV216	100043	2015.03.28
Two-Line V-Network	R&S	ENV216	100044	2014.09.16
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	2015.03.01
50ohm Termination	SHX	TF2	07081401	2014.09.16
Temperature/Humidity Meter	zhicheng	ZC1-2	TR1-TH	2015.01.08

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

FCC Part 15 Subpart C Paragraph 15.207 Limits		
Frequency (MHz)	QP (dBuV)	AV (dBuV)
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

The EUT was setup according to ANSI C63.4, 2009.

The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs)

Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.

The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.

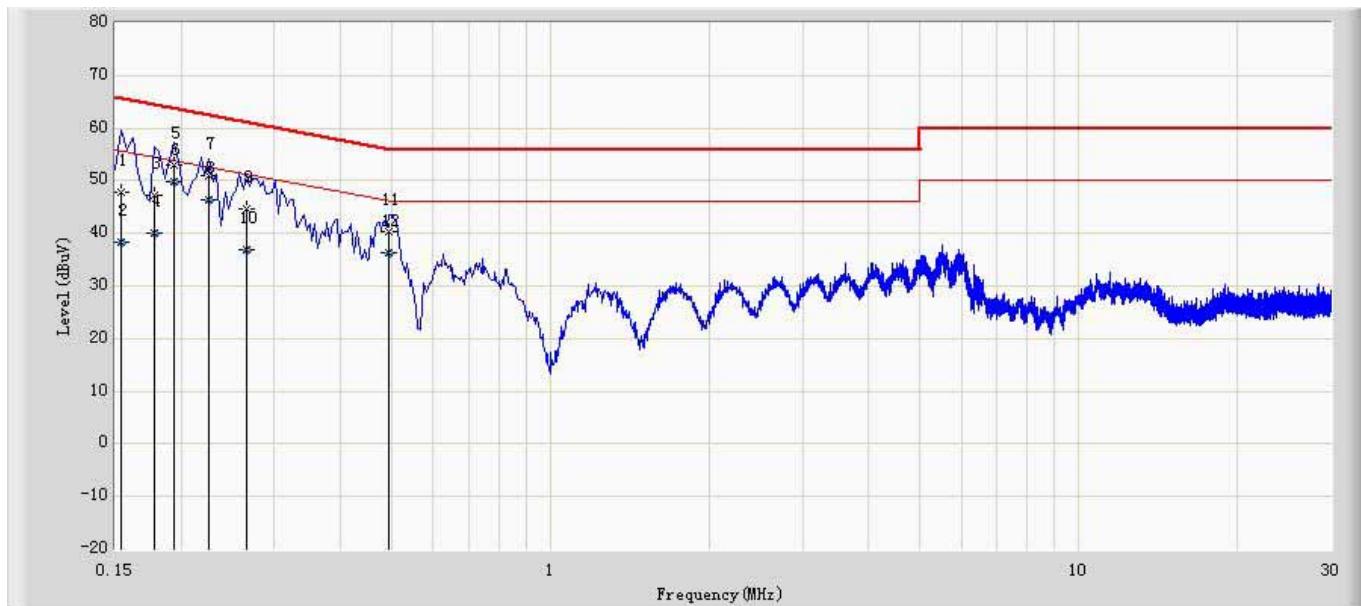
Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

### 3.5. Uncertainty

The measurement uncertainty is defined as  $\pm$  2.02 dB

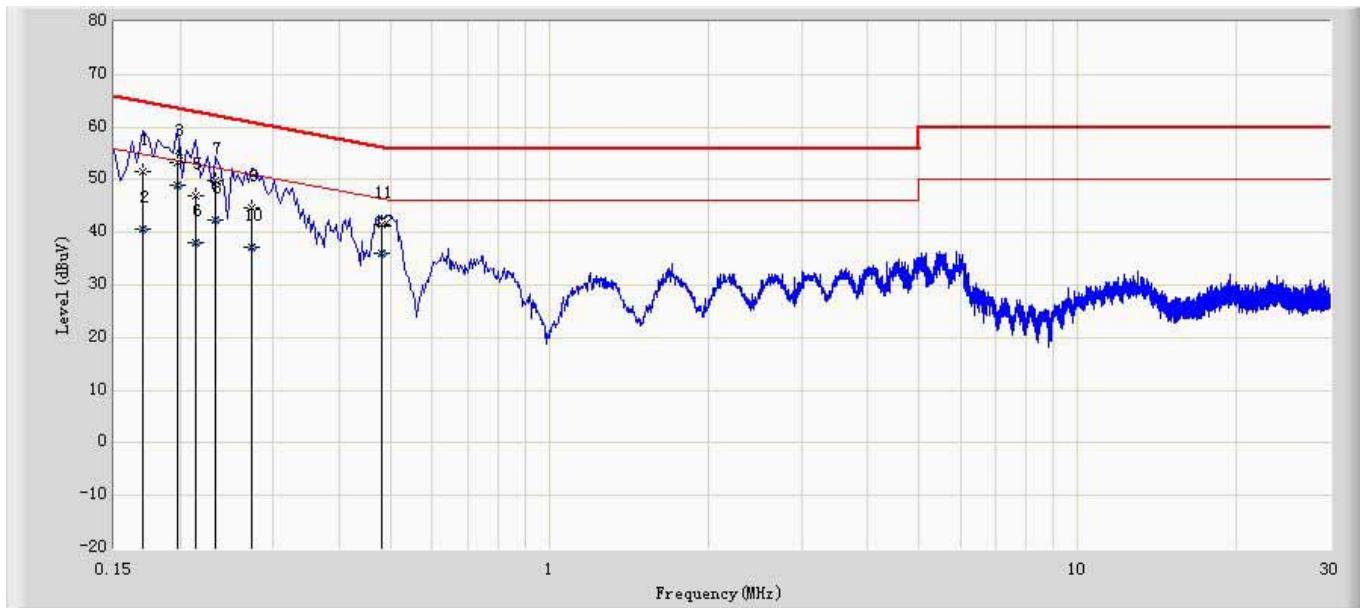
### 3.6. Test Result

Site: TR1	Time: 2014/07/11 - 19:09
Limit: FCC_Part15.207_CE_AC Power_ClassB	Margin: 0
Probe: ENV216-N	Polarity: Neutral
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode1	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		0.154	47.822	37.839	-17.959	65.781	9.982	QP
2		0.154	38.396	28.414	-17.385	55.781	9.982	AV
3		0.178	47.177	37.224	-17.401	64.578	9.952	QP
4		0.178	40.034	30.082	-14.544	54.578	9.952	AV
5		0.194	53.076	43.152	-10.788	63.864	9.924	QP
6		0.194	49.730	39.806	-4.134	53.864	9.924	AV
7		0.226	50.938	41.025	-11.657	62.595	9.913	QP
8		0.226	46.369	36.457	-6.226	52.595	9.913	AV
9		0.266	44.564	34.632	-16.678	61.242	9.933	QP
10	*	0.266	36.989	27.057	-14.253	51.242	9.933	AV
11		0.494	40.275	30.222	-15.825	56.100	10.052	QP
12		0.494	36.306	26.254	-9.794	46.100	10.052	AV

Site: TR1	Time: 2014/07/11 - 19:16
Limit: FCC_Part15.207_CE_AC Power_ClassB	Margin: 0
Probe: ENV216-L1	Polarity: Line
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode1	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		0.170	51.418	41.567	-13.542	64.960	9.851	QP
2		0.170	40.494	30.643	-14.466	54.960	9.851	AV
3		0.198	53.396	43.537	-10.298	63.694	9.860	QP
4		0.198	48.825	38.966	-4.869	53.694	9.860	AV
5		0.214	46.972	37.109	-16.077	63.049	9.862	QP
6		0.214	38.001	28.139	-15.048	53.049	9.862	AV
7		0.234	49.764	39.899	-12.543	62.307	9.865	QP
8	*	0.234	42.253	32.388	-10.054	52.307	9.865	AV
9		0.274	44.717	34.846	-16.279	60.996	9.870	QP
10		0.274	37.063	27.193	-13.933	50.996	9.870	AV
11		0.482	41.471	31.562	-14.834	56.305	9.908	QP
12		0.482	35.954	26.046	-10.351	46.305	9.908	AV

## 4. Radiated Emission

### 4.1. Test Equipment

Radiated Emission / AC-2

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
EMI Test Receiver	R&S	ESCI	100573	2015.03.28
Loop Antenna	R&S	HFH2-Z2	833799/003	2014.11.17
Bilog Chainenna	Teseq GmbH	CBL6112D	27611	2014.10.15
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC2-C	2015.03.01
Temperature/Humidity Meter	Zhicheng	ZC1-2	AC2-TH	2015.01.08

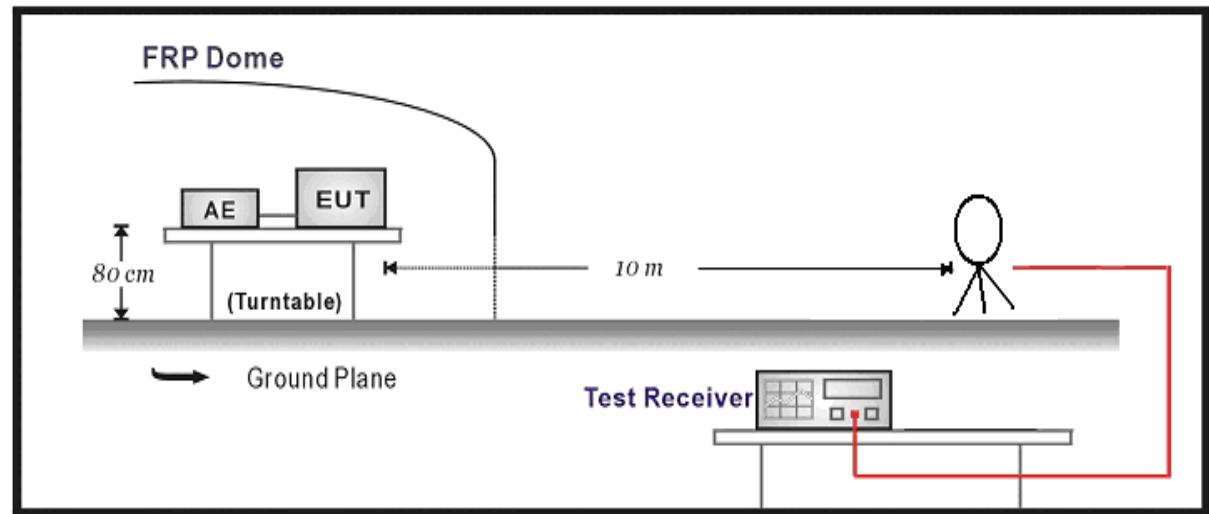
Radiated Emission / AC-5

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	N9020A	MY49100159	2015.03.28
Spectrum Analyzer	Agilent	E4446A	MY45300103	2015.01.07
Preamplifier	Miteq	NSP1800-25	1364185	2015.05.05
Preamplifier	QuieTek	AP-040G	CHM-0906001	2015.05.05
DRG Horn	ETS-Lindgren	3117	00123988	2015.01.21
Broad-Band Horn				
Antenna	Schwarzbeck	BBHA9170	294	2015.11.24
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2015.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2015.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	AC5-C3	2015.03.01
EMI Receiver	Agilent	N9038A	MY51210196	2015.06.09
Temperature/Humidity Meter	Zhichen	ZC1-2	AC5-TH	2015.01.08

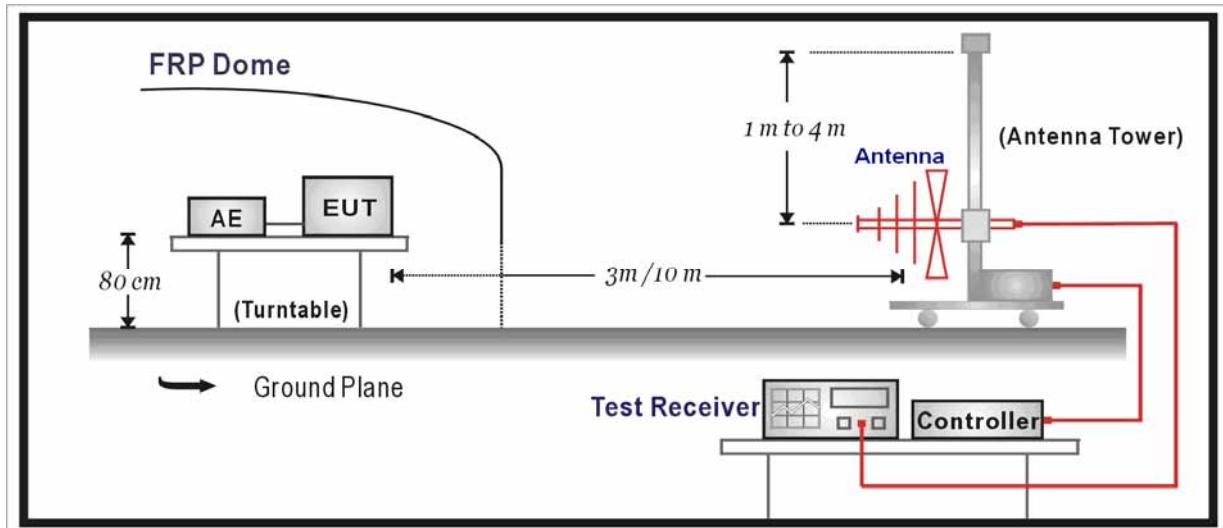
Note 1: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

## 4.2. Test Setup

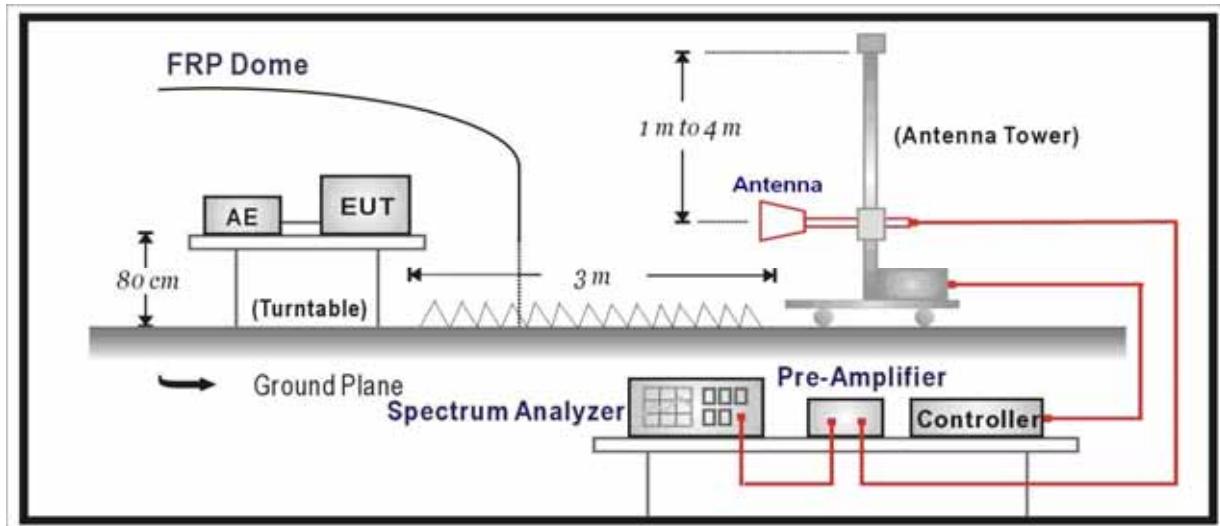
Below 30MHz Test Setup:



Below 1GHz Test Setup:



Above 1GHz Test Setup:



#### 4.3. Limit

FCC Part 15 Subpart C Paragraph 15.209		
Frequency (MHz)	Distance (m)	Level (dBuV/m)
30 - 88	3	40
88 - 216	3	43.5
216 - 960	3	46
Above 960	3	54

Note 1: The lower limit shall apply at the transition frequency.

Note 2: Distance refers to the distance in meters between the measuring instrument Chainenna and the closed point of any part of the device or system.

Note 3: E field strength (dBuV/m) =  $20 \log E$  field strength (uV/m)

#### 4.4. Test Procedure

The EUT was setup according to ANSI C63.4 2009 & KDB 789033.

The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from Chainenna to the EUT was 3 meters.

The Chainenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the Chainenna. In order to find

the maximum emission, all of the interface cables were manipulated according to ANSI C63.4:2009 on radiated measurement.

The resolution bandwidth below 1GHz setting on the field strength meter is 120 kHz and above 1GHz is 1MHz.

The frequency range from 30MHz to 10th harmonic is checked.

Note: When doing emission measurement above 1GHz, the horn Chainenna will be bended down a little (as horn Chainenna has the narrow beamwidth) in order to keeping the Chainenna in the “cone of radiation” of EUT. The 3dB beamwidth is 60~10 degrees for H-plane and 90~10 degrees for E-plane.

#### **4.5. Uncertainty**

The measurement uncertainty above 1G is defined as  $\pm$  3.9 dB  
below 1G is defined as  $\pm$  3.8 dB

#### 4.6. Test Result

All of the test result shown indicates the worst case, and spectrum analyzer parameters setting as shown below:

Peak detector: RBW = 1MHz, VBW = 3MHz, sweep time = 200ms;

Average detector: RBW = 1MHz, VBW = 10Hz, sweep time = auto.

Mode1: Transmit by 802.11a

Chain	CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
Ant 1	36	H	10360.0	29.5	14.6	44.1	54(Note3)	-9.9	PK
		H	15540.0	22.8	23.6	46.4	54(Note3)	-7.6	PK
		V	10360.0	29.1	14.6	43.7	54(Note3)	-10.3	PK
		V	15540.0	23.0	23.4	46.4	54(Note3)	-7.6	PK
	44	H	10440.0	29.1	14.7	43.8	54(Note3)	-10.2	PK
		H	15660.0	23.1	23.4	46.5	54(Note3)	-7.5	PK
		V	10440.0	28.8	14.7	43.5	54(Note3)	-10.5	PK
		V	15660.0	23.8	23.3	47.1	54(Note3)	-6.9	PK
	48	H	10480.0	28.9	14.7	43.6	54(Note3)	-10.4	PK
		H	15720.0	22.2	23.2	45.4	54(Note3)	-8.6	PK
		V	10480.0	29.5	14.7	44.2	54(Note3)	-9.8	PK
		V	15720.0	22.9	23.1	46.0	54(Note3)	-8.0	PK
Ant 2	36	H	10360.0	30.7	14.6	45.3	54(Note3)	-8.7	PK
		H	15540.0	23.5	23.6	47.1	54(Note3)	-6.9	PK
		V	10360.0	29.9	14.6	44.5	54(Note3)	-9.5	PK
		V	15540.0	23.7	23.4	47.1	54(Note3)	-6.9	PK
	44	H	10440.0	30.3	14.7	45.0	54(Note3)	-9.0	PK
		H	15660.0	24.5	23.4	47.9	54(Note3)	-6.1	PK
		V	10440.0	29.7	14.7	44.4	54(Note3)	-9.6	PK
		V	15660.0	24.9	23.3	48.2	54(Note3)	-5.8	PK
	48	H	10480.0	29.6	14.7	44.3	54(Note3)	-9.7	PK
		H	15720.0	23.7	23.2	46.9	54(Note3)	-7.1	PK
		V	10480.0	30.5	14.7	45.2	54(Note3)	-8.8	PK
		V	15720.0	23.9	23.1	47.0	54(Note3)	-7.0	PK

Note: 1. Measure Level = Reading Level + Factor.

2. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~25GHz), 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.

Mode2: Transmit by 802.11n(20MHz)

Chain	CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
Ant 1	36	H	10360.0	29.3	14.6	43.9	54(Note3)	-10.1	PK
		H	15540.0	22.6	23.6	46.2	54(Note3)	-7.8	PK
		V	10360.0	29.4	14.6	44.0	54(Note3)	-10.0	PK
		V	15540.0	22.8	23.4	46.2	54(Note3)	-7.8	PK
	44	H	10440.0	28.6	14.7	43.3	54(Note3)	-10.7	PK
		H	15660.0	23.1	23.4	46.5	54(Note3)	-7.5	PK
		V	10440.0	28.4	14.7	43.1	54(Note3)	-10.9	PK
		V	15660.0	23.3	23.3	46.6	54(Note3)	-7.4	PK
	48	H	10480.0	28.8	14.7	43.5	54(Note3)	-10.5	PK
		H	15720.0	23.2	23.2	46.4	54(Note3)	-7.6	PK
		V	10480.0	28.5	14.7	43.2	54(Note3)	-10.8	PK
		V	15720.0	22.6	23.1	45.7	54(Note3)	-8.3	PK
Ant 2	36	H	10360.0	30.6	14.6	45.2	54(Note3)	-8.8	PK
		H	15540.0	24.0	23.6	47.6	54(Note3)	-6.4	PK
		V	10360.0	31.0	14.6	45.6	54(Note3)	-8.4	PK
		V	15540.0	24.5	23.4	47.9	54(Note3)	-6.1	PK
	44	H	10440.0	30.2	14.7	44.9	54(Note3)	-9.1	PK
		H	15660.0	24.6	23.4	48.0	54(Note3)	-6.0	PK
		V	10440.0	29.7	14.7	44.4	54(Note3)	-9.6	PK
		V	15660.0	24.7	23.3	48.0	54(Note3)	-6.0	PK
	48	H	10480.0	30.5	14.7	45.2	54(Note3)	-8.8	PK
		H	15720.0	24.7	23.2	47.9	54(Note3)	-6.1	PK
		V	10480.0	30.1	14.7	44.8	54(Note3)	-9.2	PK
		V	15720.0	24.3	23.1	47.4	54(Note3)	-6.6	PK
Ant 1+2	36	H	10360.0	30.6	14.6	45.2	54(Note3)	-8.8	PK
		H	15540.0	24.1	23.6	47.7	54(Note3)	-6.3	PK
		V	10360.0	30.8	14.6	45.4	54(Note3)	-8.6	PK
		V	15540.0	24.7	23.4	48.1	54(Note3)	-5.9	PK
	44	H	10440.0	30.1	14.7	44.8	54(Note3)	-9.2	PK
		H	15660.0	24.6	23.4	48.0	54(Note3)	-6.0	PK
		V	10440.0	30.1	14.7	44.8	54(Note3)	-9.2	PK
		V	15660.0	24.7	23.3	48.0	54(Note3)	-6.0	PK

48	H	10480.0	30.1	14.7	44.8	54(Note3)	-9.2	PK
	H	15720.0	24.6	23.2	47.8	54(Note3)	-6.2	PK
	V	10480.0	30.1	14.7	44.8	54(Note3)	-9.2	PK
	V	15720.0	24.3	23.1	47.4	54(Note3)	-6.6	PK

- Note: 1. Measure Level = Reading Level + Factor.  
2. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~25GHz), 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.

Mode3: Transmit by 802.11ac(20MHz)

Chain	CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
Ant 1	36	H	10360.0	32.2	14.6	46.8	54(Note3)	-7.2	PK
		H	15540.0	25.7	23.6	49.3	54(Note3)	-4.7	PK
		V	10360.0	32.6	14.6	47.2	54(Note3)	-6.8	PK
		V	15540.0	26.0	23.4	49.4	54(Note3)	-4.6	PK
	44	H	10440.0	31.5	14.7	46.2	54(Note3)	-7.8	PK
		H	15660.0	26.0	23.4	49.4	54(Note3)	-4.6	PK
		V	10440.0	31.4	14.7	46.1	54(Note3)	-7.9	PK
		V	15660.0	26.2	23.3	49.5	54(Note3)	-4.5	PK
	48	H	10480.0	32.1	14.7	46.8	54(Note3)	-7.2	PK
		H	15720.0	26.4	23.2	49.6	54(Note3)	-4.4	PK
		V	10480.0	31.4	14.7	46.1	54(Note3)	-7.9	PK
		V	15720.0	25.8	23.1	48.9	54(Note3)	-5.1	PK
Ant 2	36	H	10360.0	32.0	14.6	46.6	54(Note3)	-7.4	PK
		H	15540.0	26.0	23.6	49.6	54(Note3)	-4.4	PK
		V	10360.0	32.3	14.6	46.9	54(Note3)	-7.1	PK
		V	15540.0	26.2	23.4	49.6	54(Note3)	-4.4	PK
	44	H	10440.0	31.8	14.7	46.5	54(Note3)	-7.5	PK
		H	15660.0	26.0	23.4	49.4	54(Note3)	-4.6	PK
		V	10440.0	31.4	14.7	46.1	54(Note3)	-7.9	PK
		V	15660.0	26.1	23.3	49.4	54(Note3)	-4.6	PK
	48	H	10480.0	31.7	14.7	46.4	54(Note3)	-7.6	PK
		H	15720.0	26.3	23.2	49.5	54(Note3)	-4.5	PK
		V	10480.0	31.7	14.7	46.4	54(Note3)	-7.6	PK
		V	15720.0	25.8	23.1	48.9	54(Note3)	-5.1	PK
Ant 1+2	36	H	10360.0	31.6	14.6	46.2	54(Note3)	-7.8	PK
		H	15540.0	25.0	23.6	48.6	54(Note3)	-5.4	PK
		V	10360.0	32.0	14.6	46.6	54(Note3)	-7.4	PK
		V	15540.0	25.5	23.4	48.9	54(Note3)	-5.1	PK
	44	H	10440.0	31.1	14.7	45.8	54(Note3)	-8.2	PK
		H	15660.0	25.7	23.4	49.1	54(Note3)	-4.9	PK
		V	10440.0	30.8	14.7	45.5	54(Note3)	-8.5	PK
		V	15660.0	26.1	23.3	49.4	54(Note3)	-4.6	PK

48	H	10480.0	31.3	14.7	46.0	54(Note3)	-8.0	PK
	H	15720.0	25.9	23.2	49.1	54(Note3)	-4.9	PK
	V	10480.0	30.9	14.7	45.6	54(Note3)	-8.4	PK
	V	15720.0	24.9	23.1	48.0	54(Note3)	-6.0	PK

- Note: 1. Measure Level = Reading Level + Factor.  
2. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~25GHz), 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.

Mode4: Transmit by 802.11n(40MHz)

Chain	CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
Ant 1	38	H	10380.0	28.9	14.6	43.5	54(Note3)	-10.5	PK
		H	15570.0	23.1	23.6	46.7	54(Note3)	-7.3	PK
		V	10380.0	29.3	14.6	43.9	54(Note3)	-10.1	PK
		V	15570.0	22.3	23.4	45.7	54(Note3)	-8.3	PK
	46	H	10460.0	28.2	14.7	42.9	54(Note3)	-11.1	PK
		H	15690.0	22.6	23.3	45.9	54(Note3)	-8.1	PK
		V	10460.0	28.4	14.7	43.1	54(Note3)	-10.9	PK
		V	15690.0	22.0	23.2	45.2	54(Note3)	-8.8	PK
Ant 2	38	H	10380.0	30.5	14.6	45.1	54(Note3)	-8.9	PK
		H	15570.0	24.8	23.6	48.4	54(Note3)	-5.6	PK
		V	10380.0	30.9	14.6	45.5	54(Note3)	-8.5	PK
		V	15570.0	23.8	23.4	47.2	54(Note3)	-6.8	PK
	46	H	10460.0	29.5	14.7	44.2	54(Note3)	-9.8	PK
		H	15690.0	24.0	23.3	47.3	54(Note3)	-6.7	PK
		V	10460.0	30.1	14.7	44.8	54(Note3)	-9.2	PK
		V	15690.0	23.5	23.2	46.7	54(Note3)	-7.3	PK
Ant 1+2	38	H	10380.0	31.2	14.6	45.8	54(Note3)	-8.2	PK
		H	15570.0	25.5	23.6	49.1	54(Note3)	-4.9	PK
		V	10380.0	31.9	14.6	46.5	54(Note3)	-7.5	PK
		V	15570.0	25.0	23.4	48.4	54(Note3)	-5.6	PK
	46	H	10460.0	30.7	14.7	45.4	54(Note3)	-8.6	PK
		H	15690.0	25.2	23.3	48.5	54(Note3)	-5.5	PK
		V	10460.0	30.8	14.7	45.5	54(Note3)	-8.5	PK
		V	15690.0	24.8	23.2	48.0	54(Note3)	-6.0	PK

Note: 1. Measure Level = Reading Level + Factor.

2. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~25GHz), 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.

Mode5: Transmit by 802.11ac(40MHz)

Chain	CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
Ant 1	38	H	10380.0	29.5	14.6	44.1	54(Note3)	-9.9	PK
		H	15570.0	22.5	23.6	46.1	54(Note3)	-7.9	PK
		V	10380.0	29.3	14.6	43.9	54(Note3)	-10.1	PK
		V	15570.0	22.8	23.4	46.2	54(Note3)	-7.8	PK
	46	H	10460.0	28.2	14.7	42.9	54(Note3)	-11.1	PK
		H	15690.0	22.2	23.3	45.5	54(Note3)	-8.5	PK
		V	10460.0	28.5	14.7	43.2	54(Note3)	-10.8	PK
		V	15690.0	22.6	23.2	45.8	54(Note3)	-8.2	PK
Ant 2	38	H	10380.0	31.1	14.6	45.7	54(Note3)	-8.3	PK
		H	15570.0	24.2	23.6	47.8	54(Note3)	-6.2	PK
		V	10380.0	30.6	14.6	45.2	54(Note3)	-8.8	PK
		V	15570.0	24.3	23.4	47.7	54(Note3)	-6.3	PK
	46	H	10460.0	29.6	14.7	44.3	54(Note3)	-9.7	PK
		H	15690.0	24.1	23.3	47.4	54(Note3)	-6.6	PK
		V	10460.0	30.0	14.7	44.7	54(Note3)	-9.3	PK
		V	15690.0	24.1	23.2	47.3	54(Note3)	-6.7	PK
Ant 1+2	38	H	10380.0	31.8	14.6	46.4	54(Note3)	-7.6	PK
		H	15570.0	24.9	23.6	48.5	54(Note3)	-5.5	PK
		V	10380.0	31.9	14.6	46.5	54(Note3)	-7.5	PK
		V	15570.0	25.5	23.4	48.9	54(Note3)	-5.1	PK
	46	H	10460.0	30.7	14.7	45.4	54(Note3)	-8.6	PK
		H	15690.0	24.8	23.3	48.1	54(Note3)	-5.9	PK
		V	10460.0	30.9	14.7	45.6	54(Note3)	-8.4	PK
		V	15690.0	25.4	23.2	48.6	54(Note3)	-5.4	PK

Note: 1. Measure Level = Reading Level + Factor.

2. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~25GHz), 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.

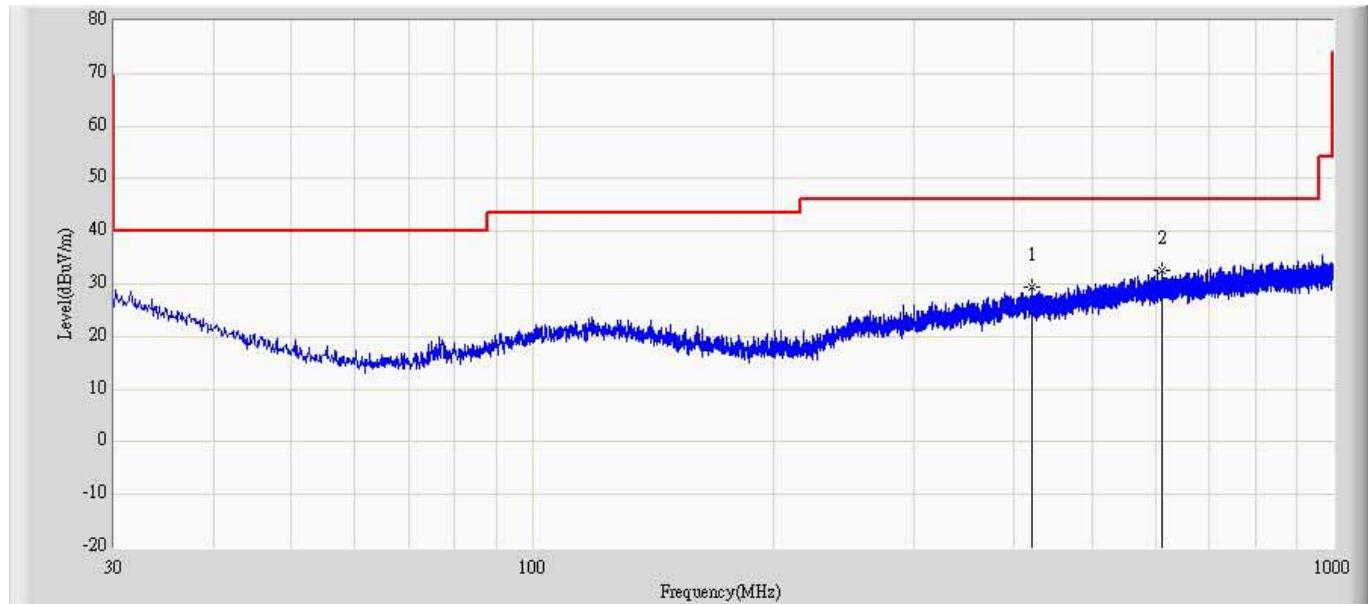
Mode6: Transmit by 802.11ac(80MHz)

Chain	CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
Ant 1	42	H	10420.0	28.7	14.7	43.4	54(Note3)	-10.6	PK
		H	15630.0	22.8	23.4	46.2	54(Note3)	-7.8	PK
		V	10420.0	29.4	14.7	44.1	54(Note3)	-9.9	PK
		V	15630.0	22.5	23.2	45.7	54(Note3)	-8.3	PK
Ant 2	42	H	10420.0	30.4	14.7	45.1	54(Note3)	-8.9	PK
		H	15630.0	24.2	23.4	47.6	54(Note3)	-6.4	PK
		V	10420.0	30.7	14.7	45.4	54(Note3)	-8.6	PK
		V	15630.0	23.9	23.2	47.1	54(Note3)	-6.9	PK
Ant 1+2	42	H	10420.0	31.2	14.7	45.9	54(Note3)	-8.1	PK
		H	15630.0	25.4	23.4	48.8	54(Note3)	-5.2	PK
		V	10420.0	31.8	14.7	46.5	54(Note3)	-7.5	PK
		V	15630.0	25.3	23.2	48.5	54(Note3)	-5.5	PK

- Note:
1. Measure Level = Reading Level + Factor.
  2. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~25GHz), 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.

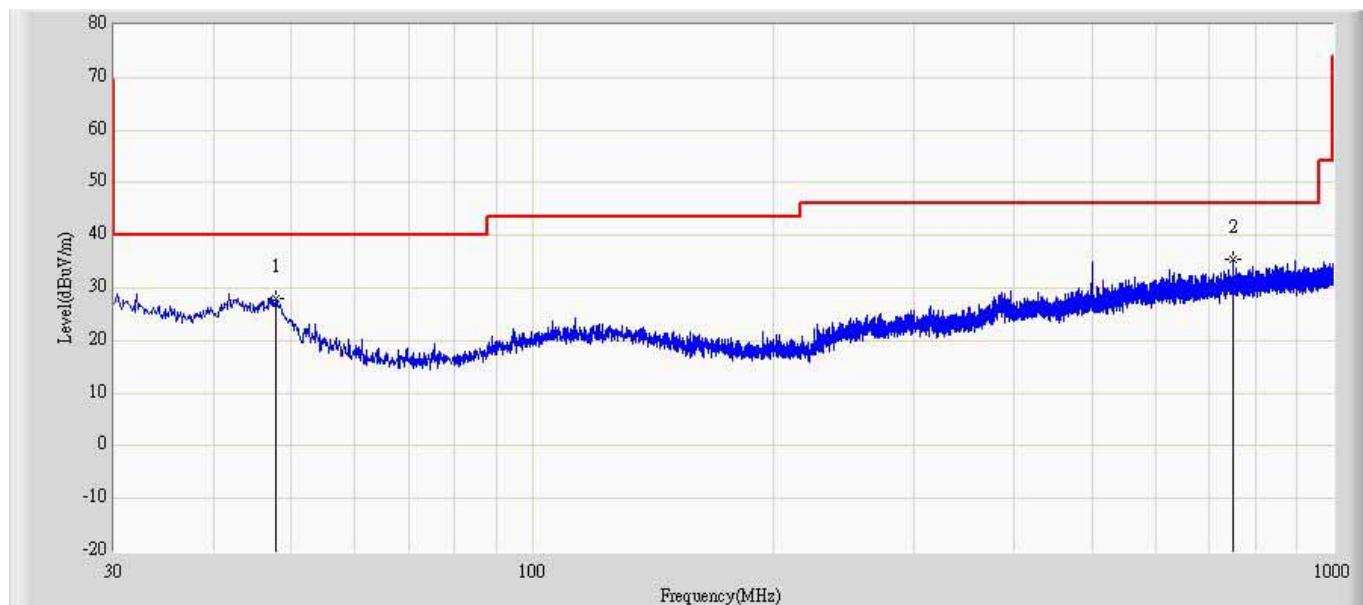
**The worst case of Radiated Emission below 1GHz:**

Site: AC2	Time: 2014/07/22 - 21:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: CBL6112D_27611(30-1000MHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode3: Transmit by 802.11ac(20MHz)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		421.152	29.464	4.989	-16.536	46.000	24.475	QP
2	*	611.151	32.651	5.470	-13.349	46.000	27.181	QP

Site: AC2	Time: 2014/07/22 - 21:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: CBL6112D_27611(30-1000MHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode3: Transmit by 802.11ac(20MHz)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		47.702	28.085	12.957	-11.915	40.000	15.127	QP
2	*	749.982	35.415	6.767	-10.585	46.000	28.648	QP

## 5. Operation Frequency Range of 20dB Bandwidth

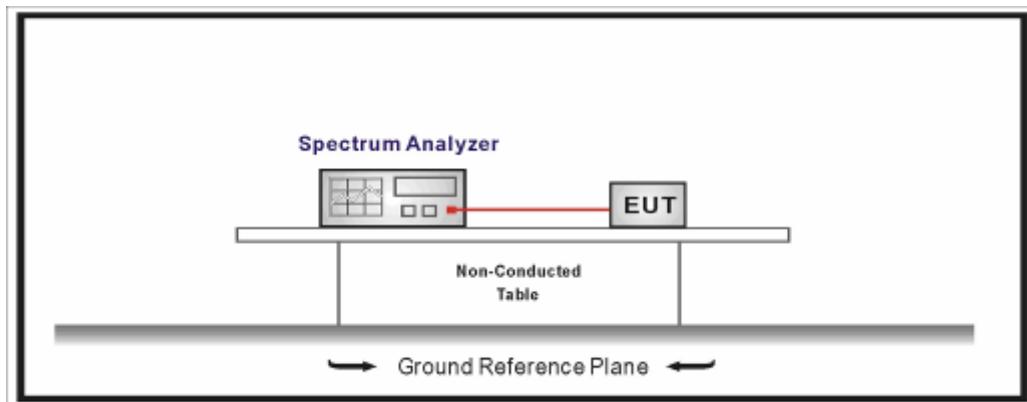
### 5.1. Test Equipment

Operation Frequency Range of 20dB Bandwidth /TR8

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2015.01.07
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH007	2015.04.09

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

20 dB bandwidth of the emission is contained within the operation frequency band. FCC Part15.215(c).

### 5.4. Test Procedure

The EUT was tested according to UNII test procedure of KDB 789033 for compliance to FCC 47CFR 15.407 requirements.

Set RBW = 100 kHz, Span greater than RBW.

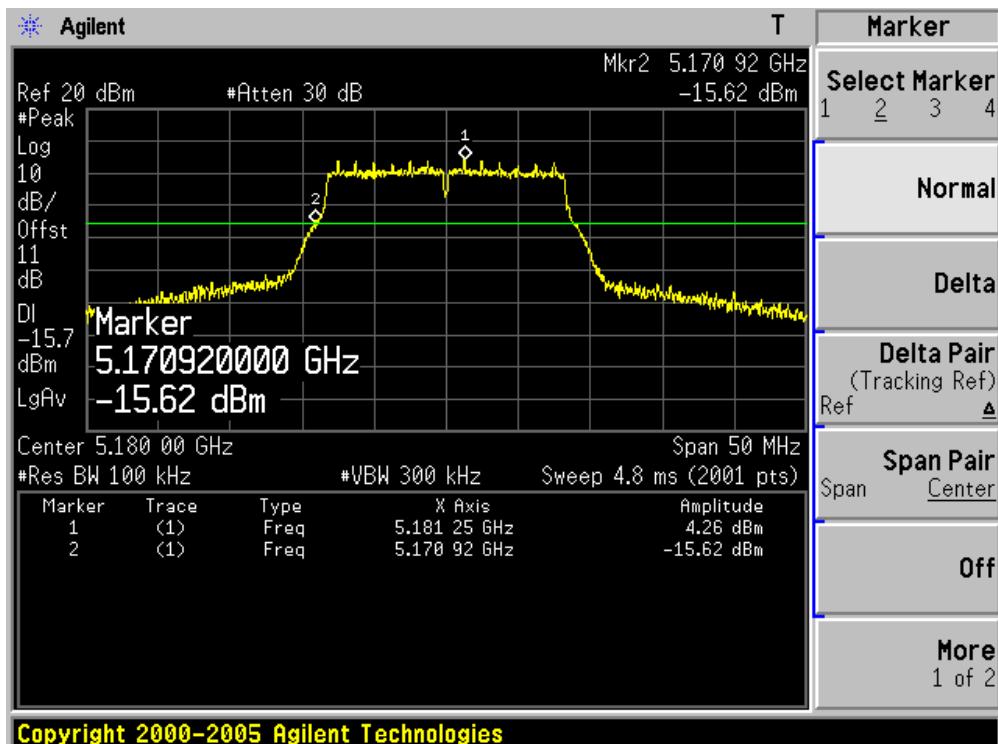
### 5.5. Uncertainty

The measurement uncertainty is defined as  $\pm 1$  kHz

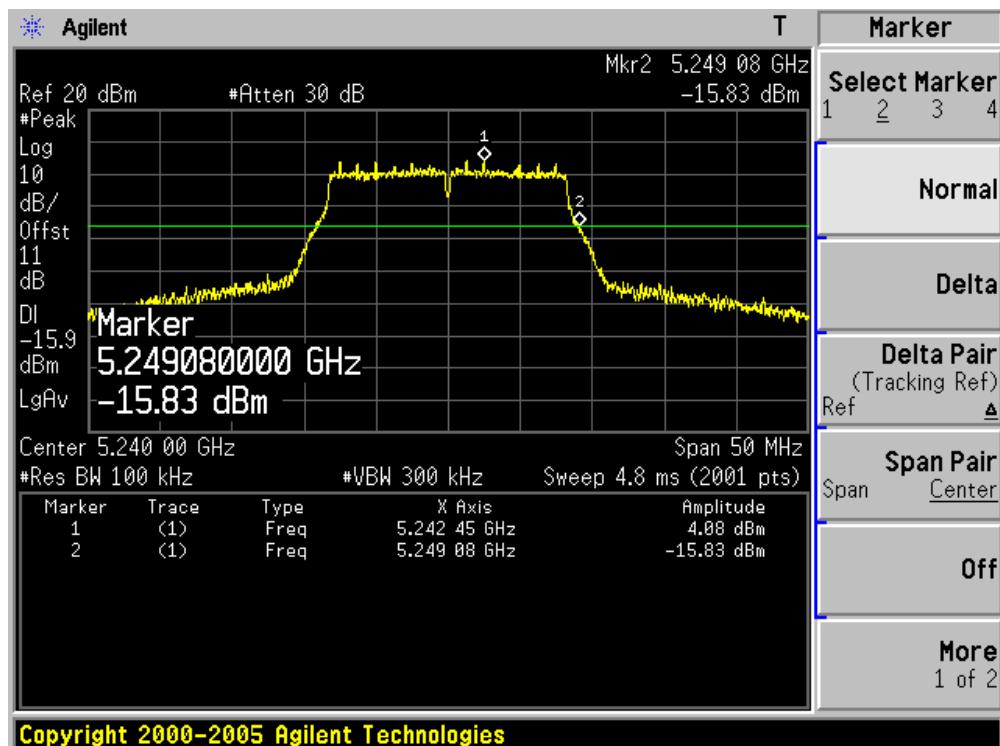
## 5.6. Test Result

Product	:	Mi Wi-Fi
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 1: Transmit by 802.11a

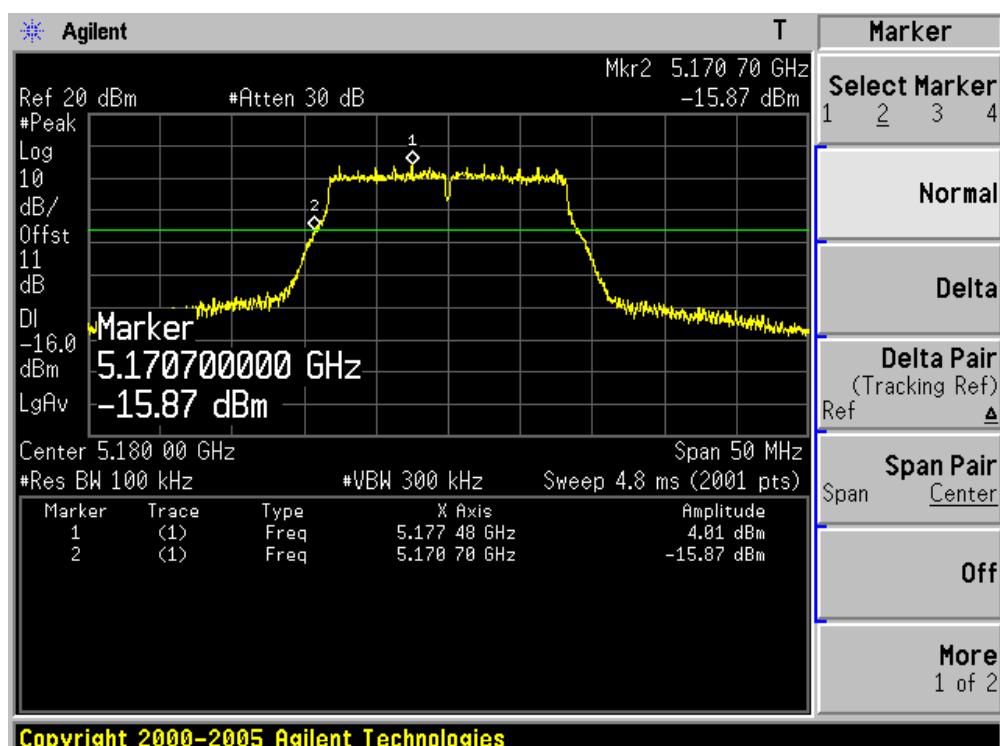
Channel 36 (5180MHz) Ant 1



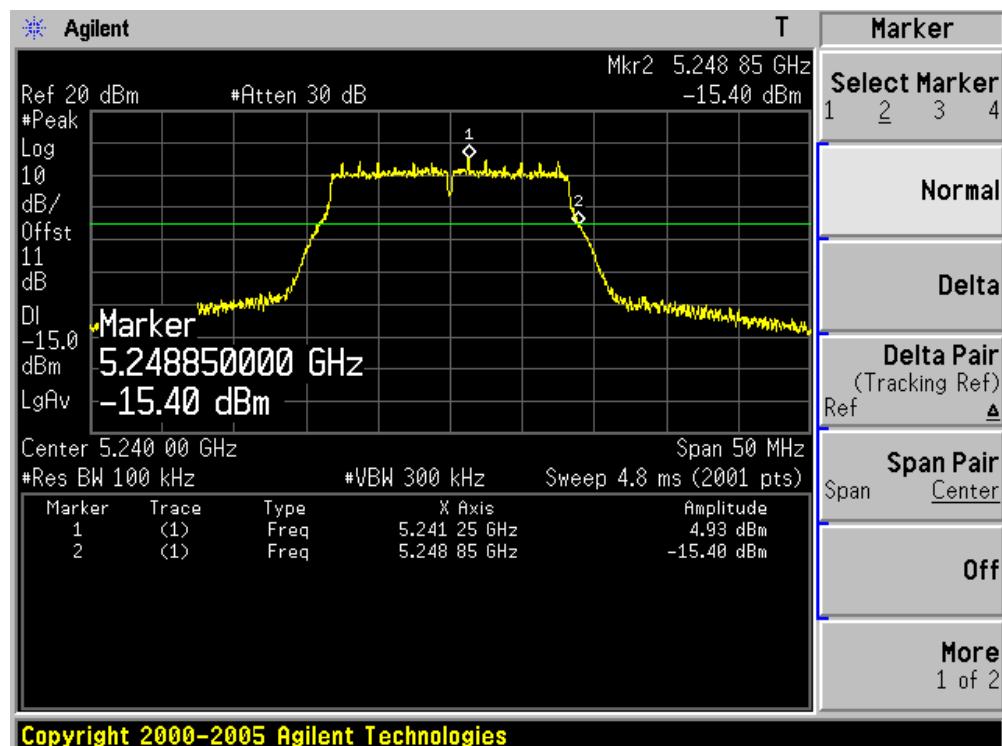
## Channel 48 (5240MHz) Ant 1



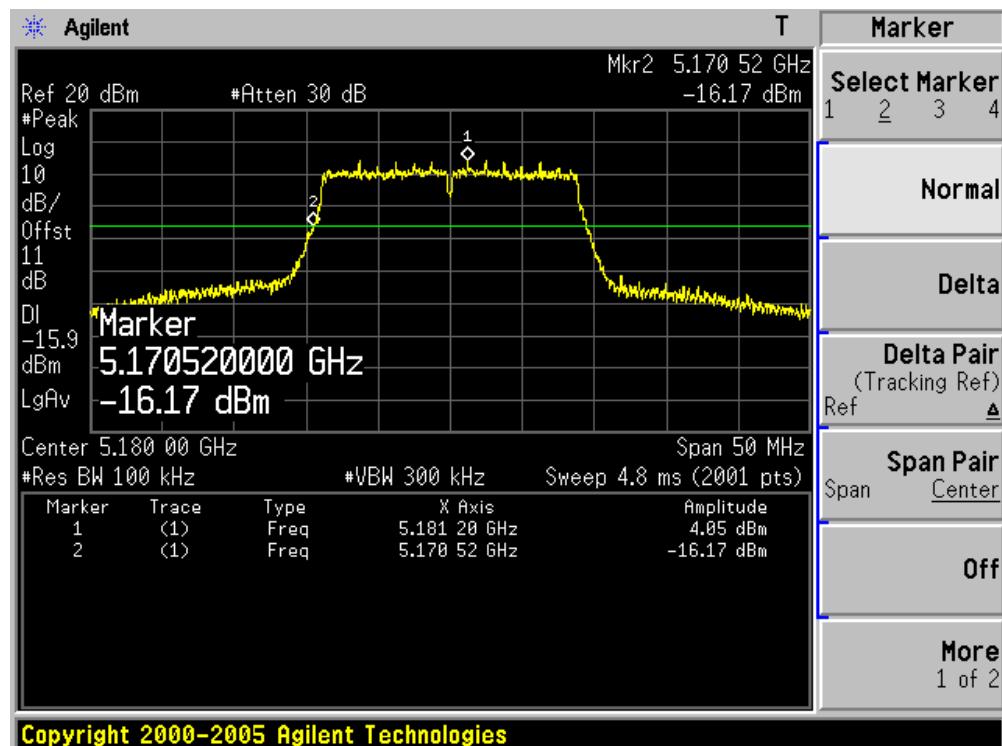
## Channel 36 (5180MHz) Ant 2



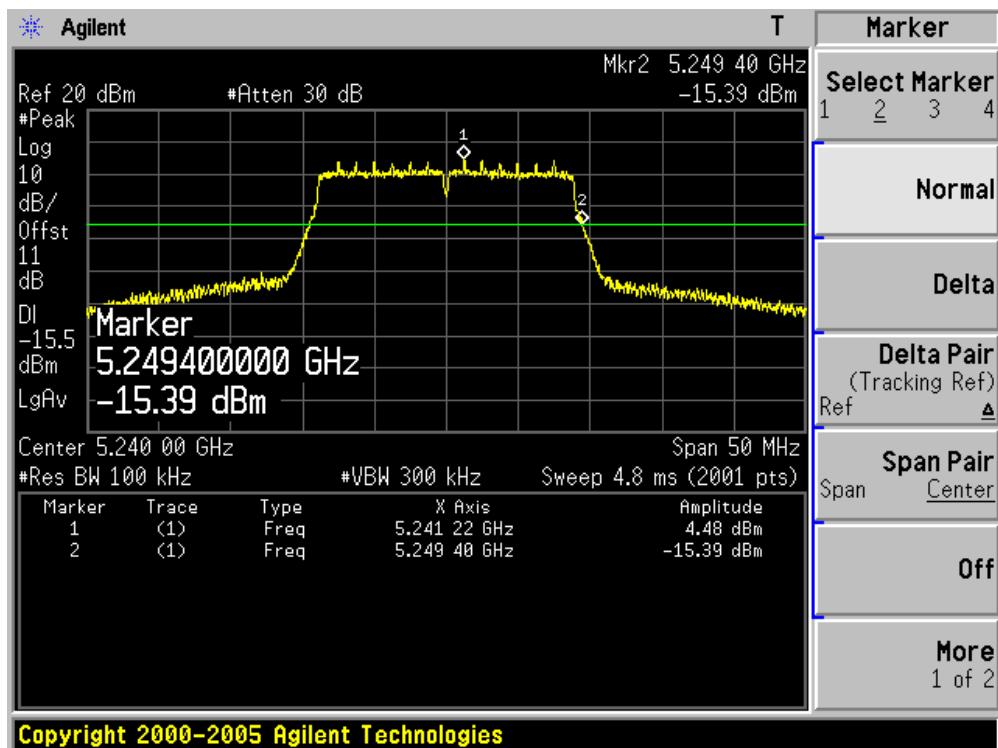
## Channel 48 (5240MHz) Ant 2



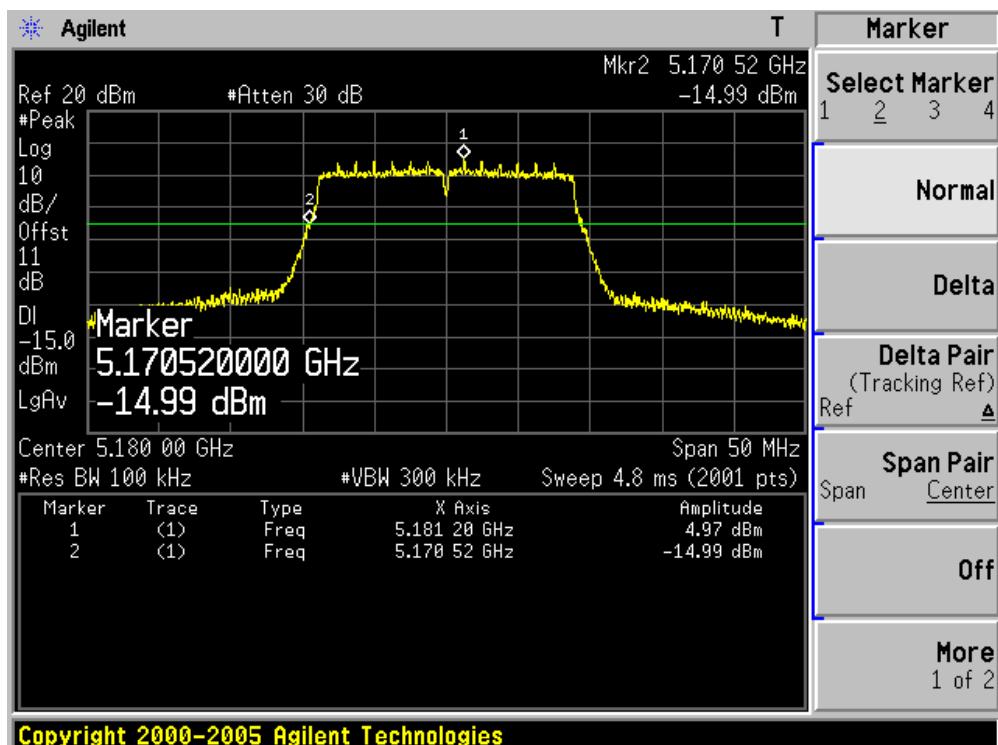
Product	:	Mi Wi-Fi
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 2: Transmit by 802.11n(20MHz)

**Channel 36 (5180MHz) Ant 1**

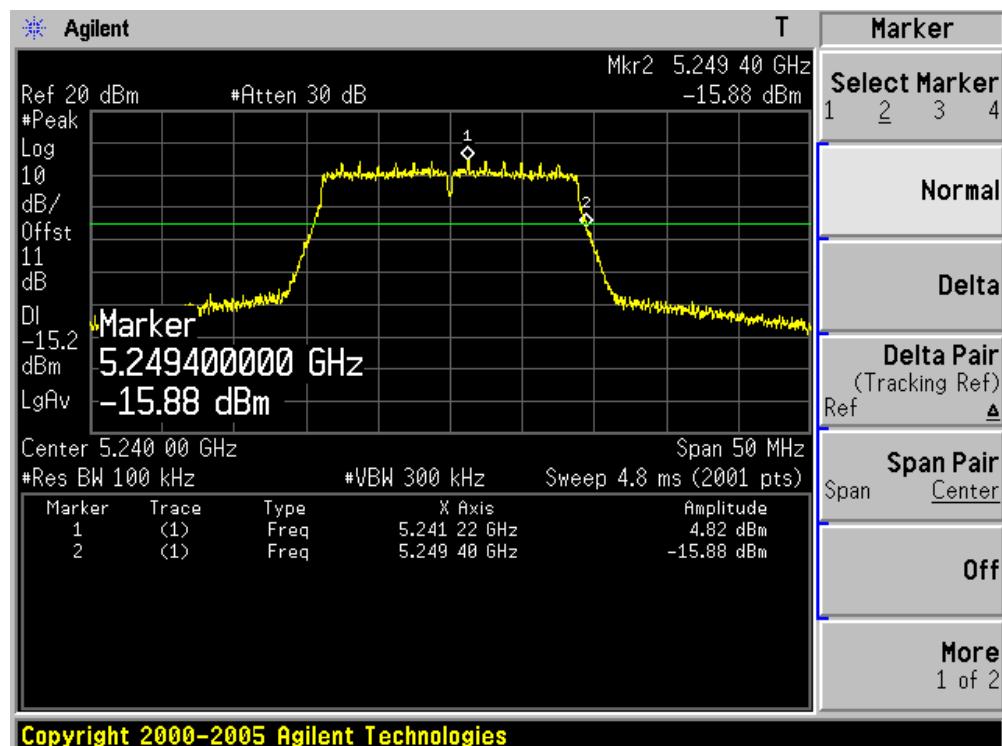
## Channel 48 (5240MHz) Ant 1



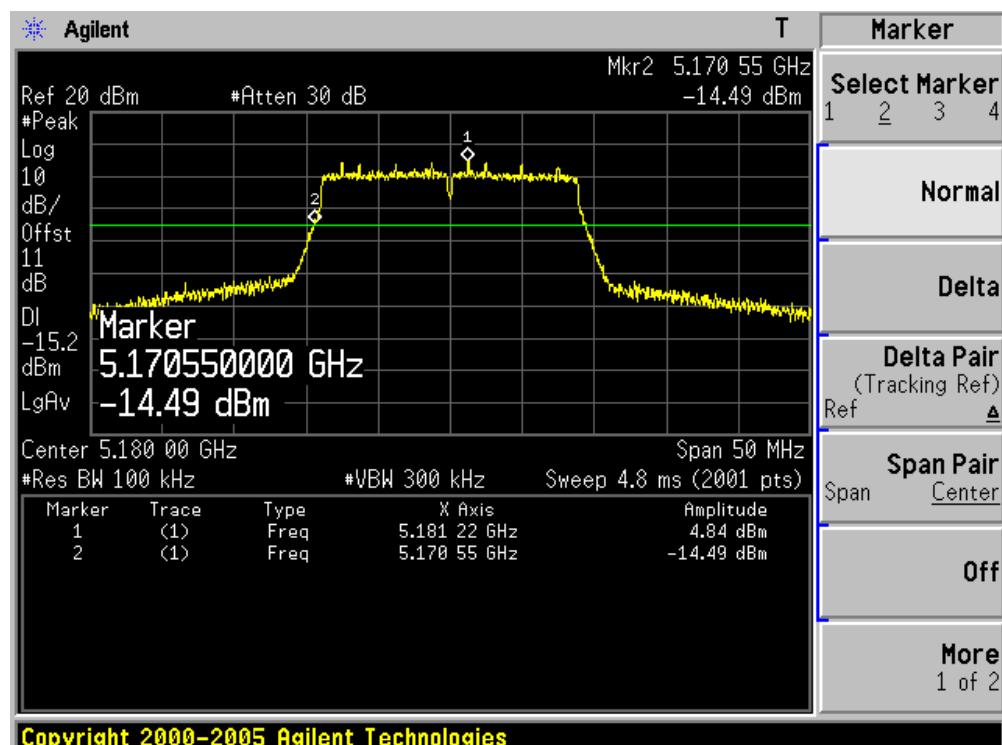
## Channel 36 (5180MHz) Ant 2



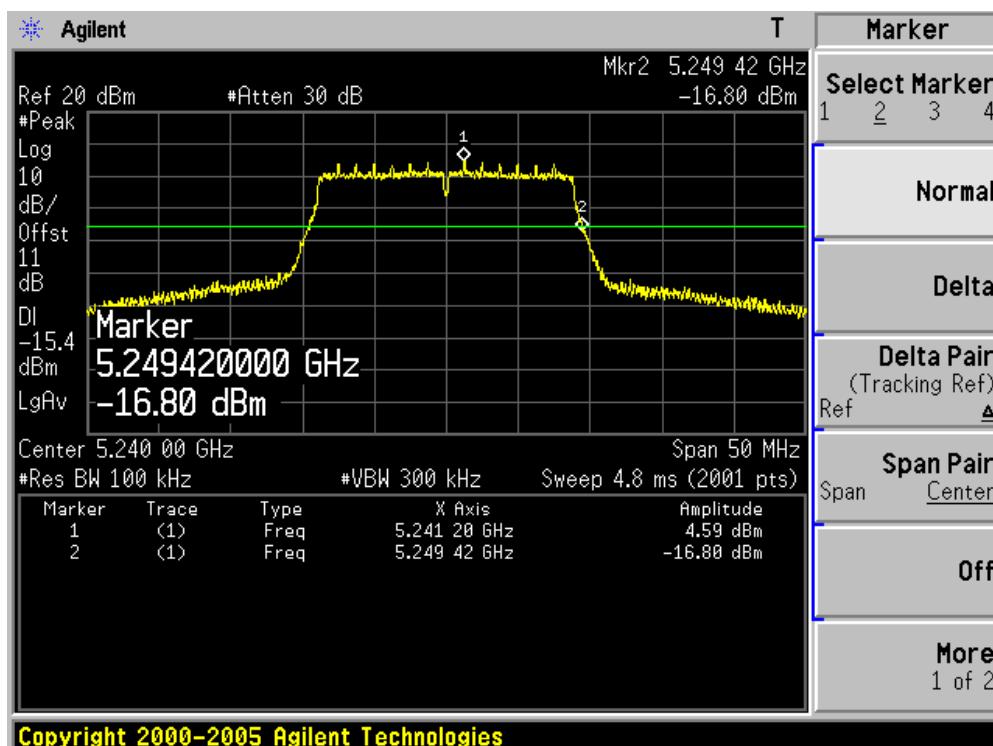
## Channel 48 (5240MHz) Ant 2



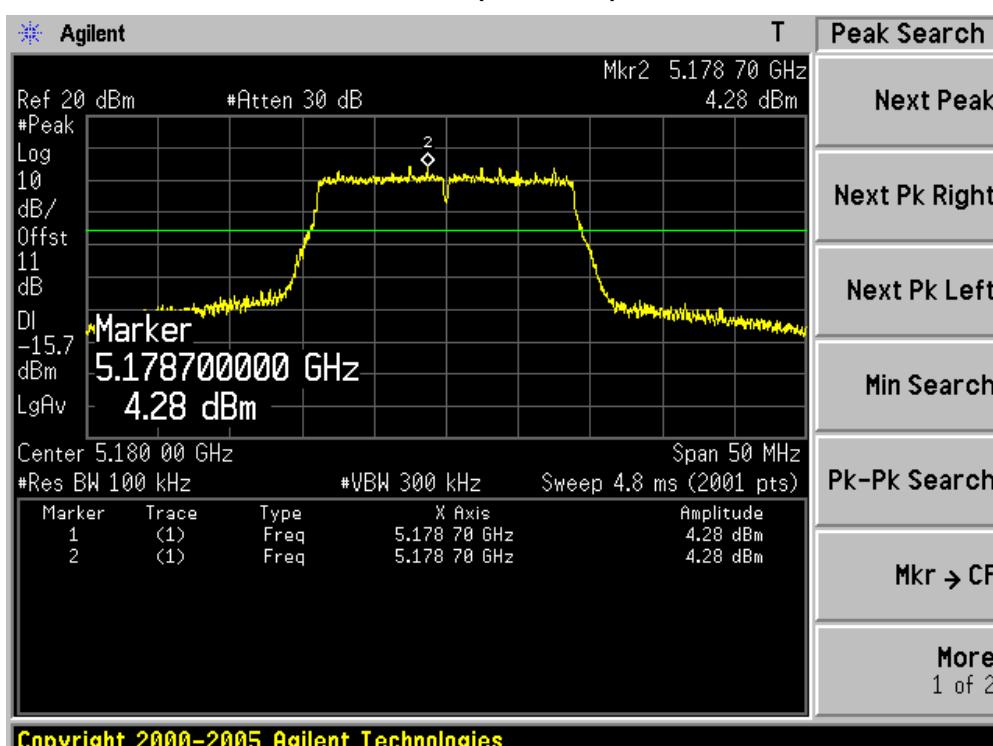
Product	:	Mi Wi-Fi
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 3: Transmit by 802.11ac(20MHz)

**Channel 36 (5180MHz) Ant 1**

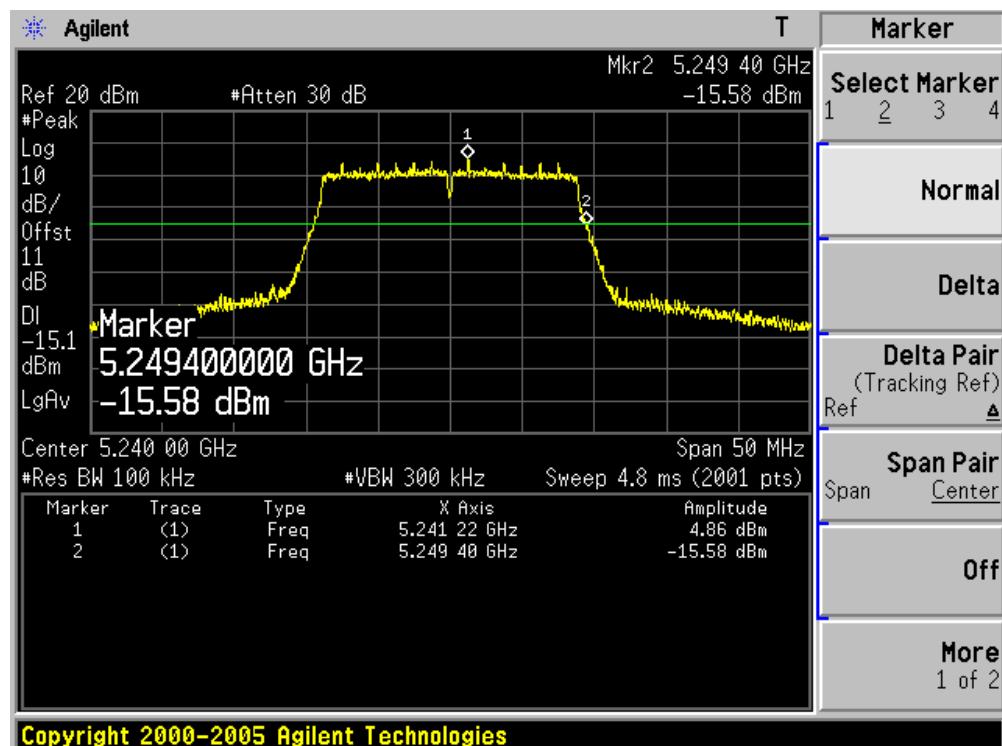
## Channel 48 (5240MHz) Ant 1



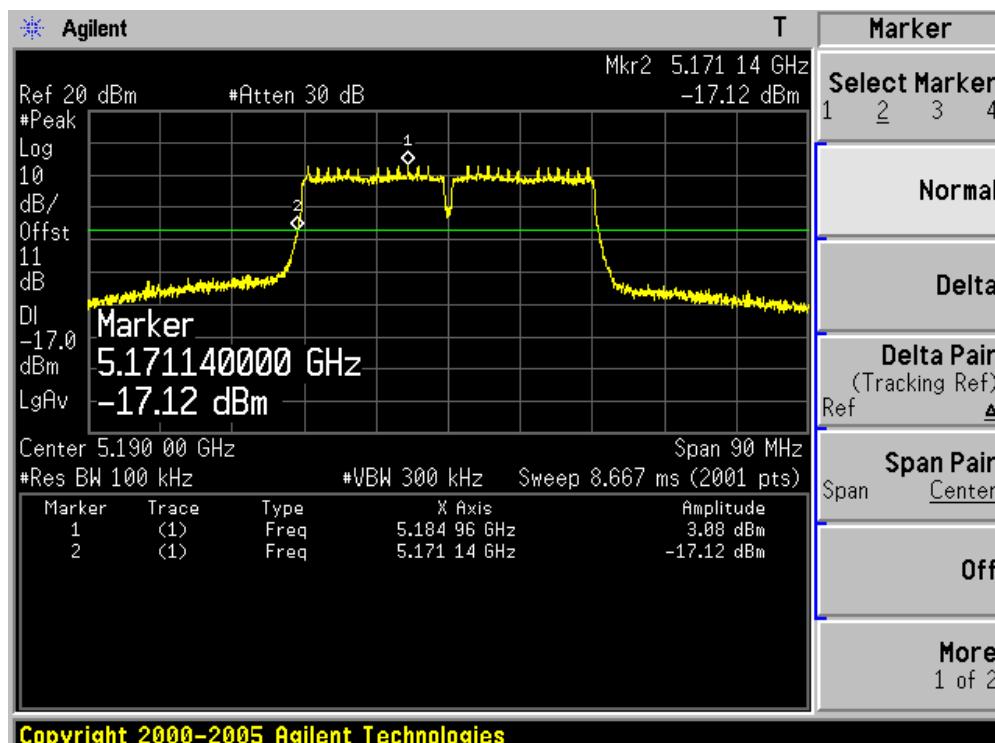
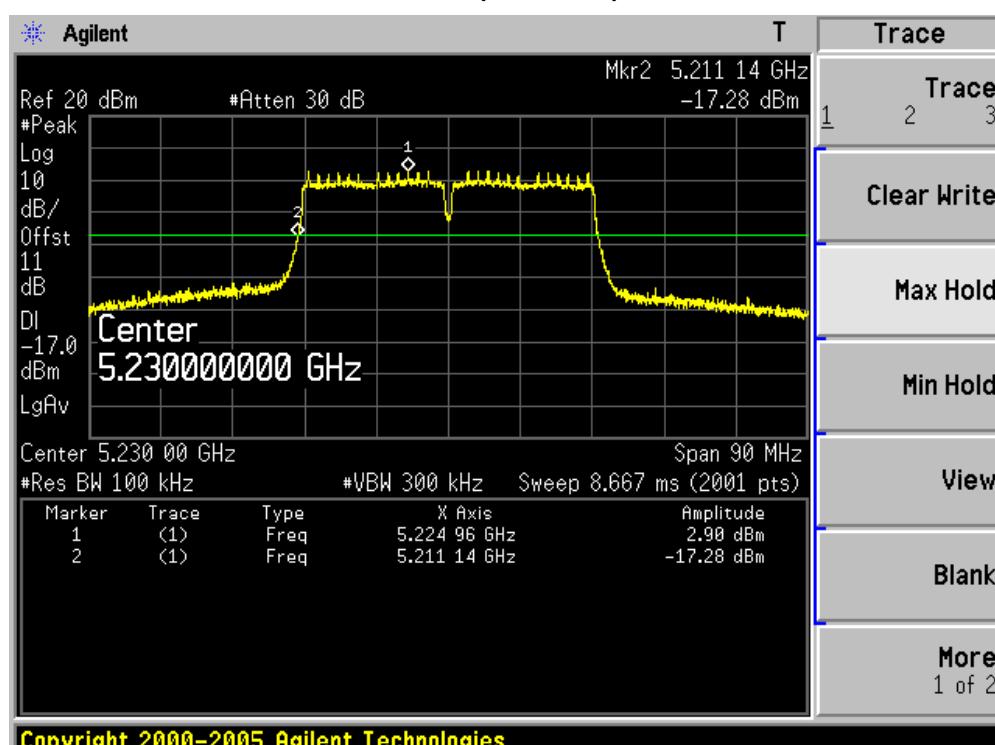
## Channel 36 (5180MHz) Ant 2



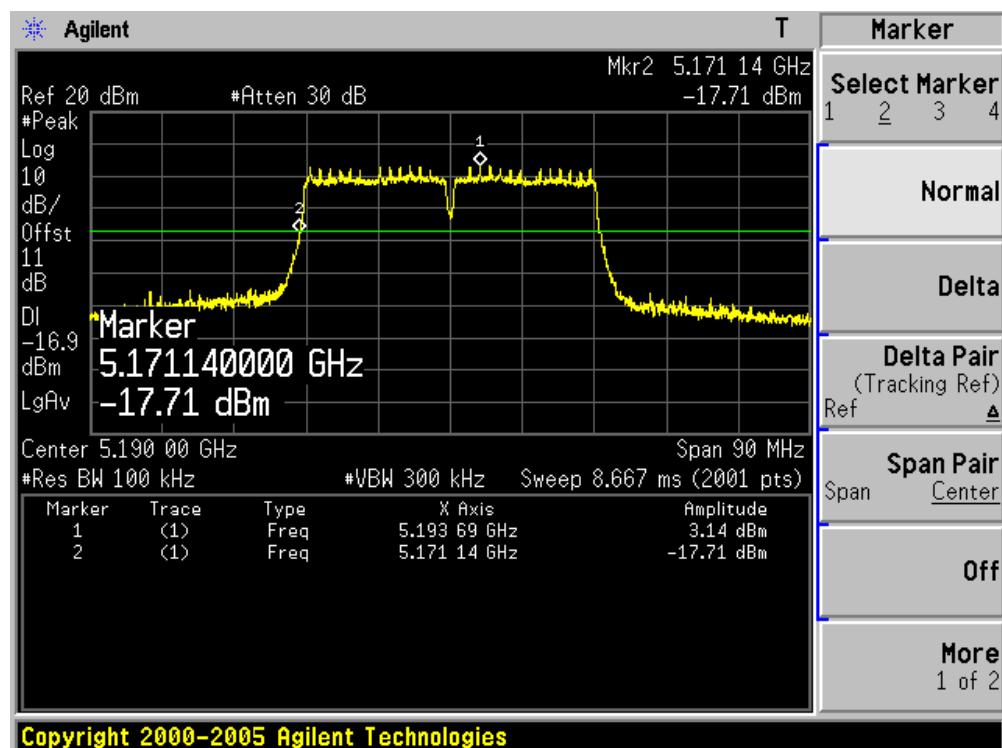
## Channel 48 (5240MHz) Ant 2



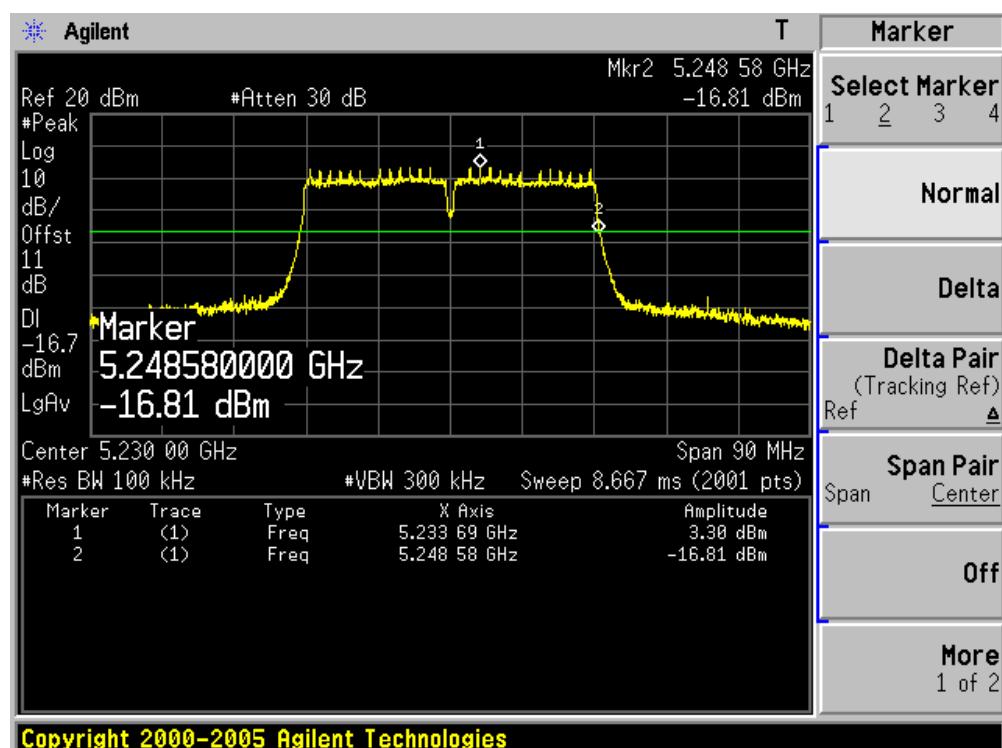
Product	:	Mi Wi-Fi
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 4: Transmit by 802.11n(40MHz)

**Channel 38 (5190MHz) Ant 1****Channel 46 (5230MHz) Ant 1**

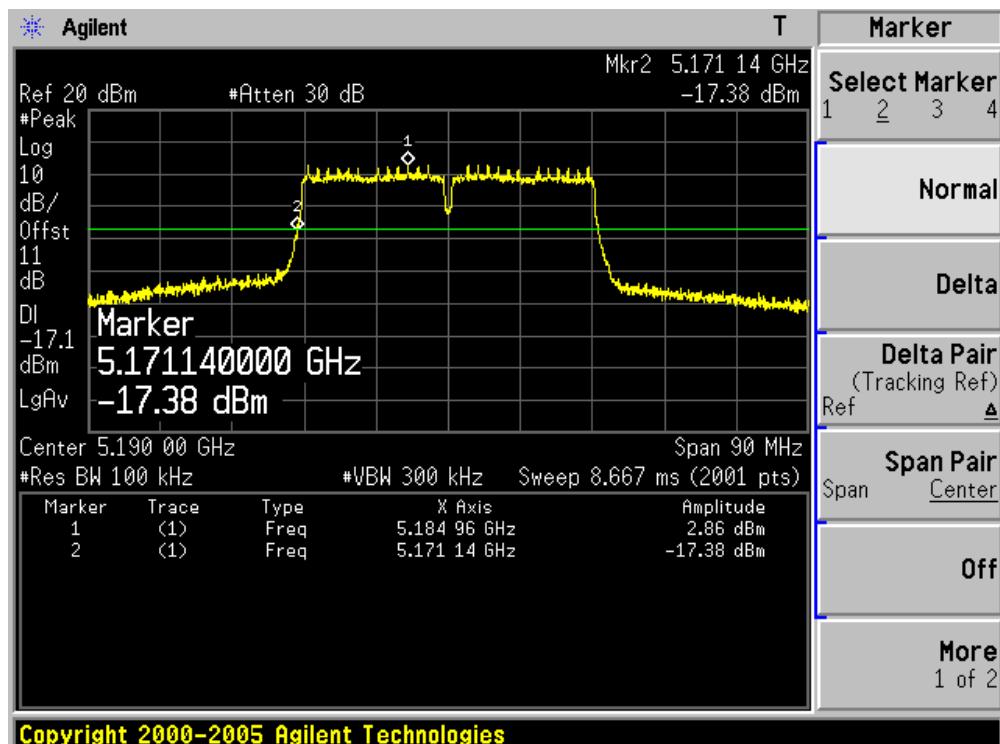
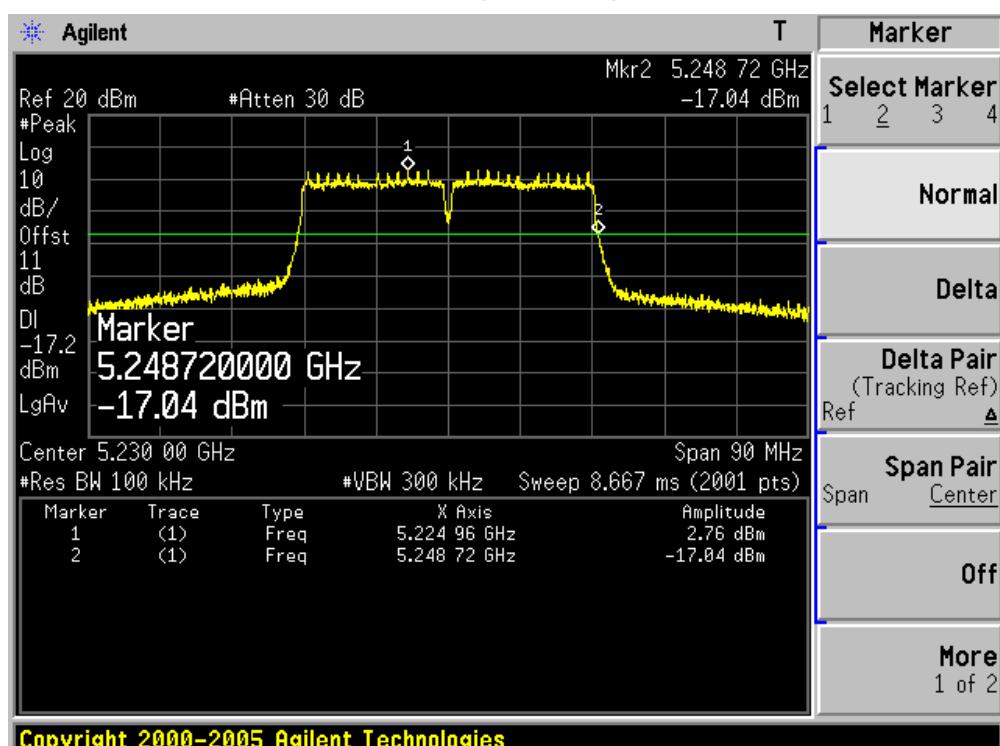
## Channel 38 (5190MHz) Ant 2



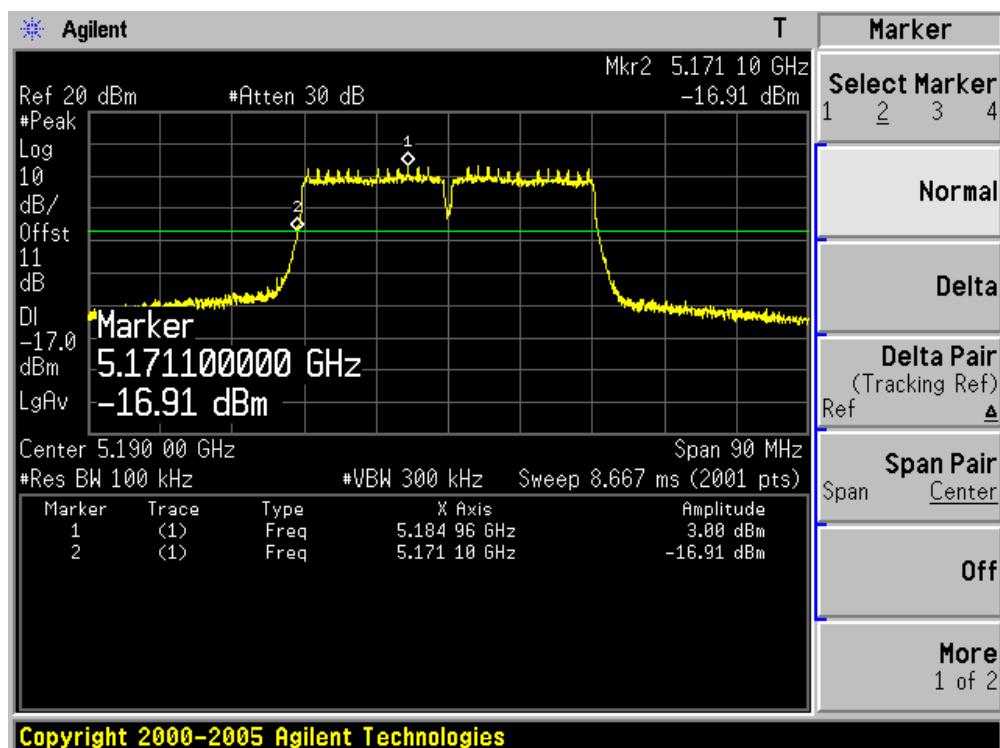
## Channel 46 (5230MHz) Ant 2



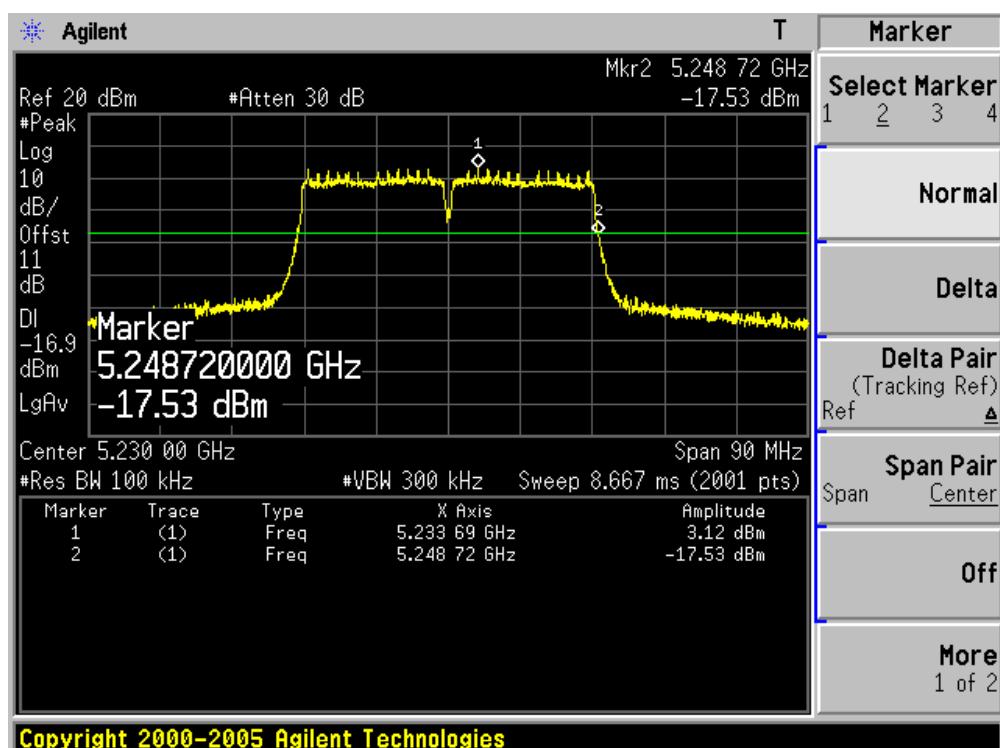
Product	:	Mi Wi-Fi
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 5: Transmit by 802.11ac(40MHz)

**Channel 38 (5190MHz) Ant 1****Channel 46 (5230MHz) Ant 1**

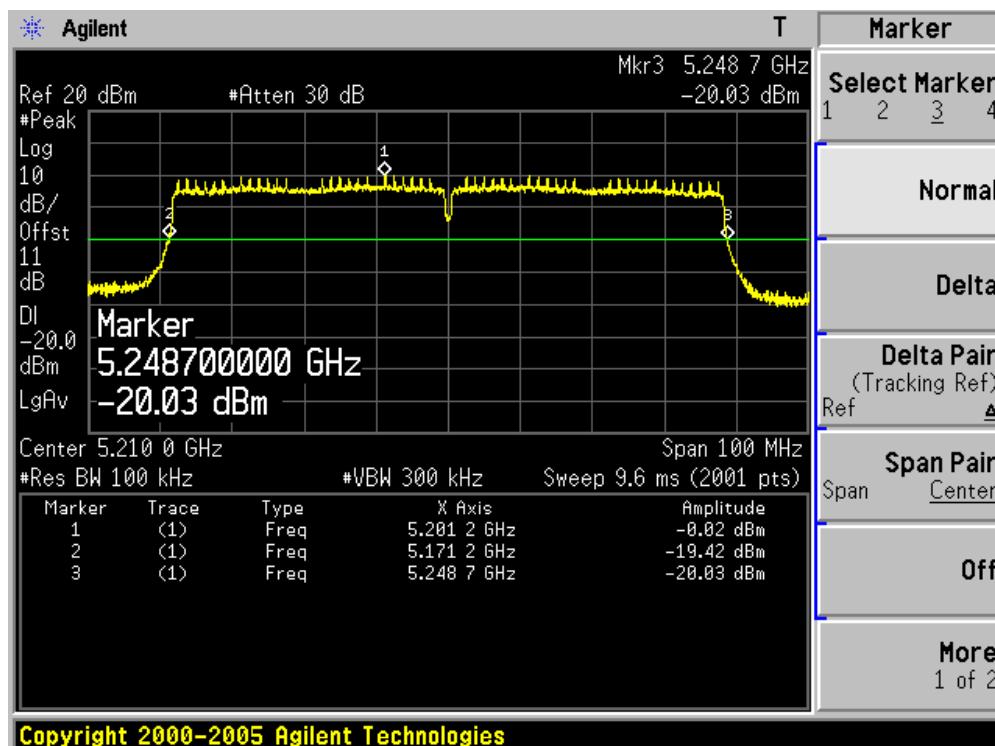
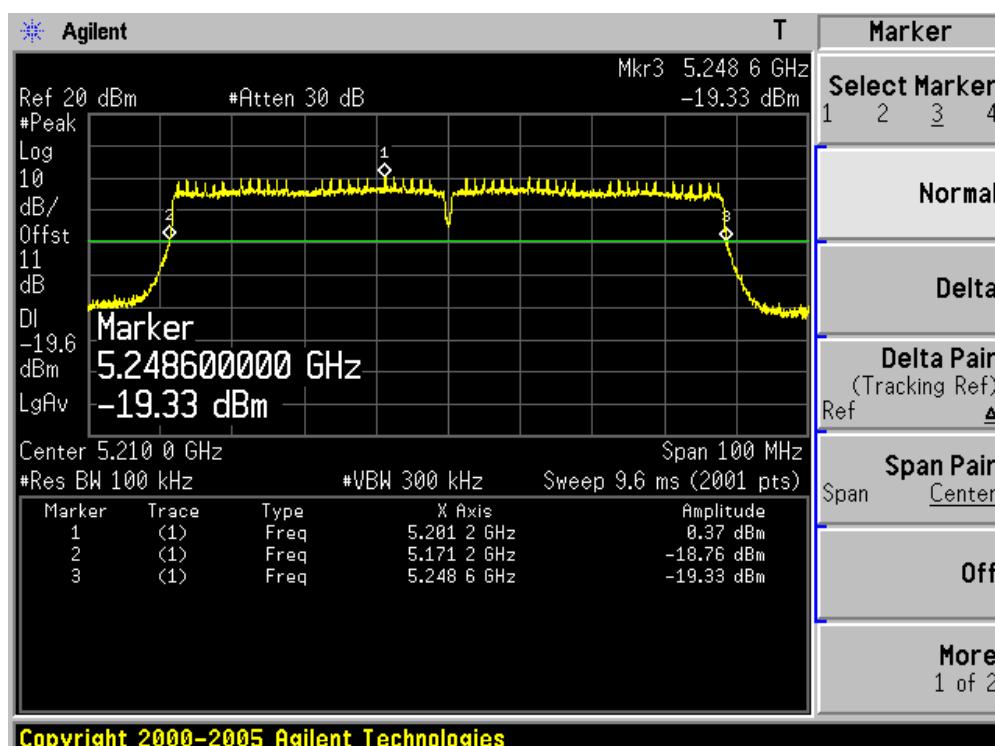
## Channel 38 (5190MHz) Ant 2



## Channel 46 (5230MHz) Ant 2



Product	:	Mi Wi-Fi
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 6: Transmit by 802.11ac(80MHz)

**Channel 42 (5210MHz) Ant 1****Channel 42 (5210MHz) Ant 2**

## 6. Occupied Bandwidth

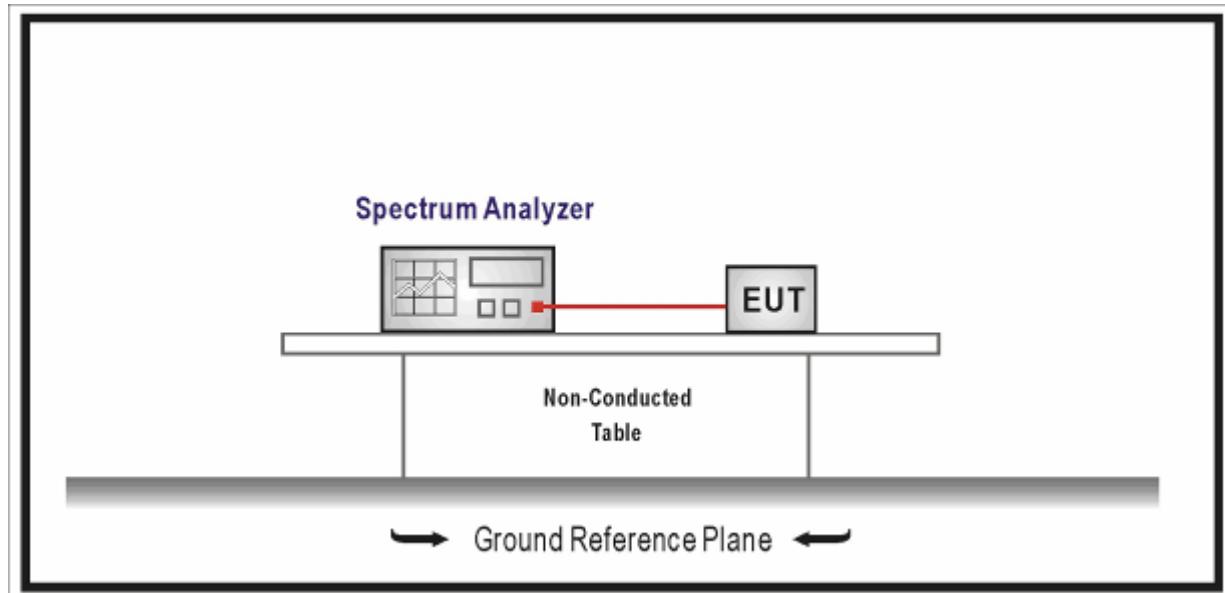
### 6.1. Test Equipment

Occupied Bandwidth / TR-8

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2015.01.07
Temperature/Humidity Meter	zhicheng	ZC1-2	TR8-TH	2015.04.09

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

N/A

## 6.4. Test Procedure

The EUT was tested according to KDB 789033 for compliance to FCC 47CFR 15.407 requirements.

### Emission Bandwidth

- Use a RBW = approximately 1% of the emission bandwidth.
- Set the VBW > RBW
- Detector = Peak.
- Trace mode = max hold.
- Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

### 99% Occupied Bandwidth

- Set center frequency to the nominal EUT channel center frequency.
- Set span = 1.5 times to 5.0 times the OBW.
- Set RBW = 1 % to 5 % of the OBW.
- Set VBW  $\geq 3 \cdot \text{RBW}$ .
- Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
- Use the 99 % power bandwidth function of the instrument (if available).
- If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

## 6.5. Uncertainty

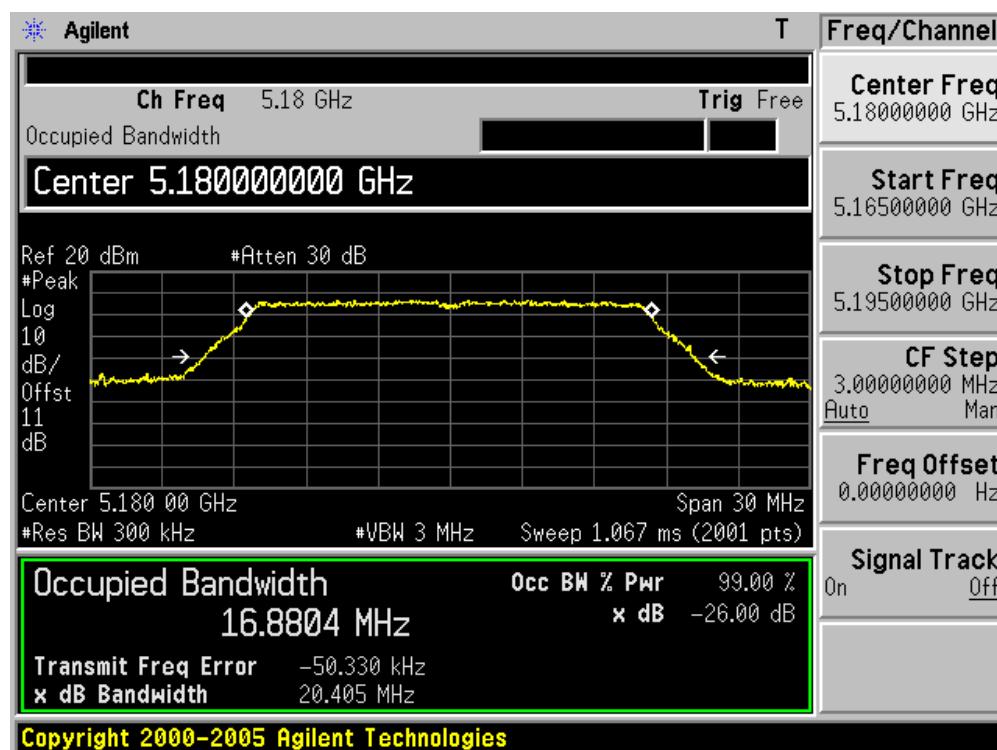
The measurement uncertainty is defined as  $\pm 1 \text{ kHz}$

## 6.6. Test Result

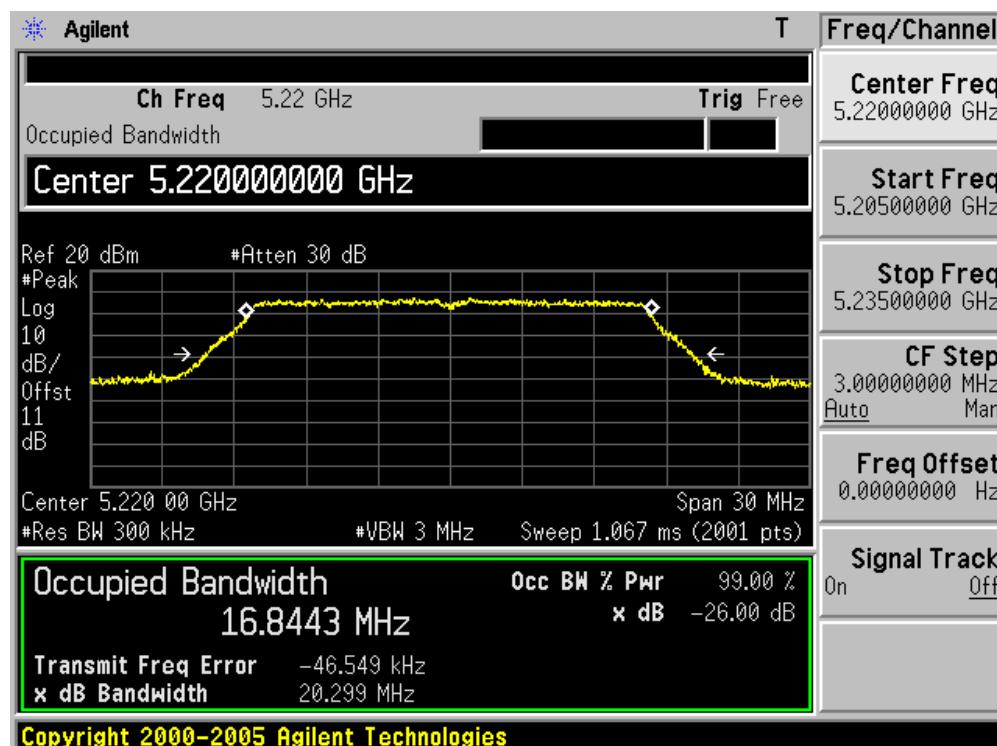
Product	:	Mi Wi-Fi
Test Item	:	Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 1: Transmit by 802.11a (Ant 1)

Channel No.	Frequency (MHz)	26dB Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180	20.41	16.88
44	5220	20.30	16.84
48	5240	20.28	16.84

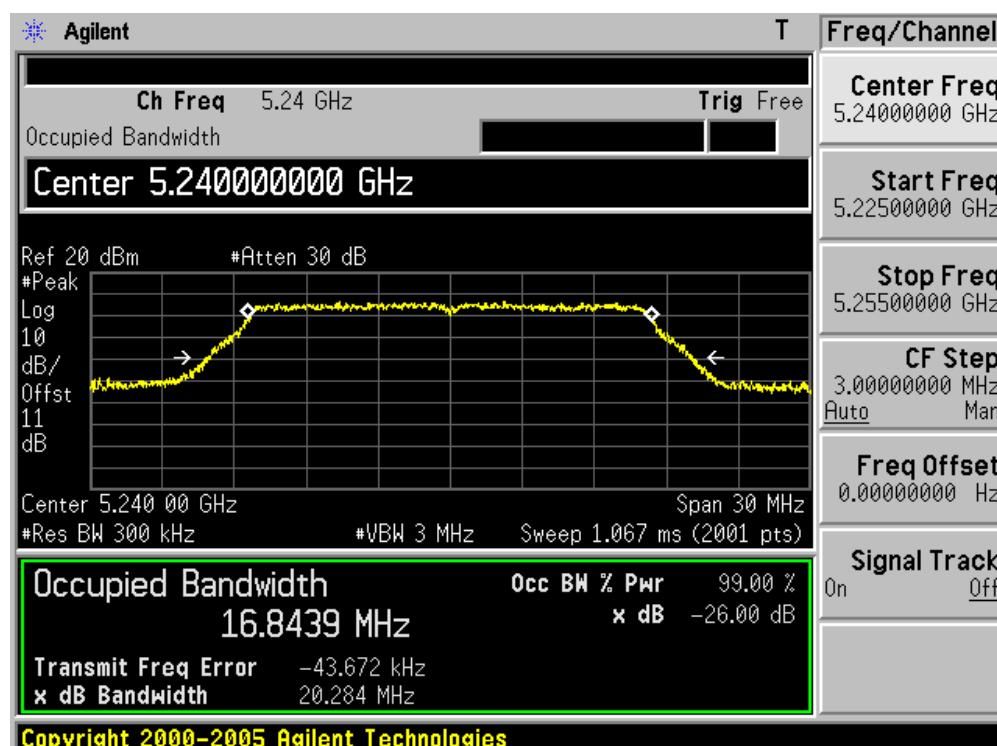
Channel 36 (5180MHz)



## Channel 44 (5220MHz)



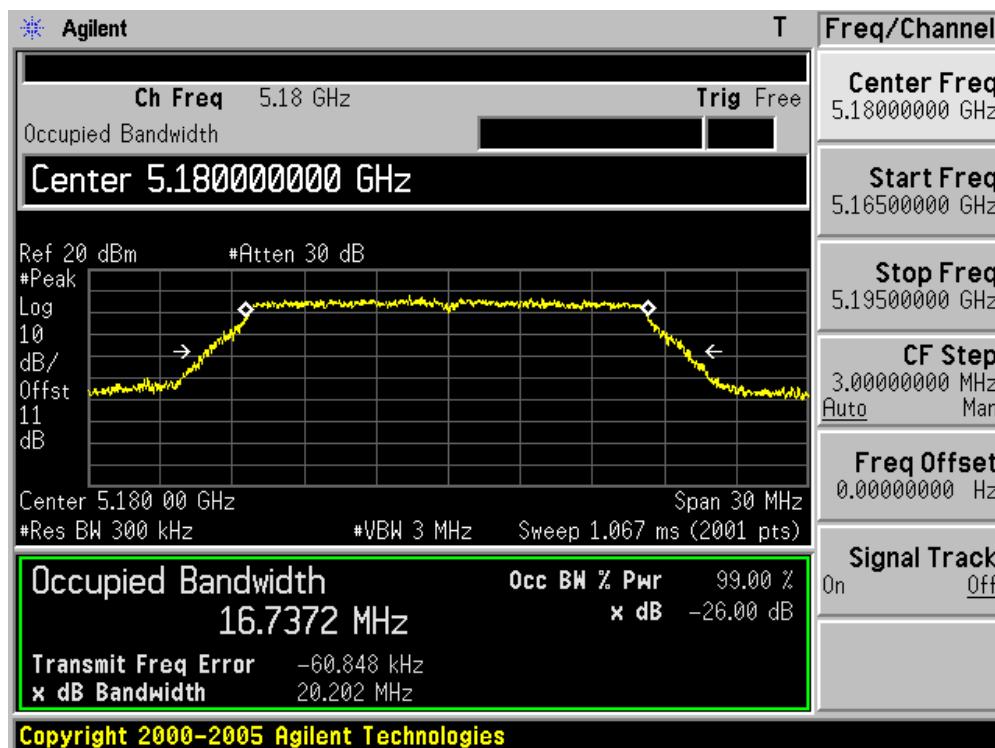
## Channel 48 (5240MHz)



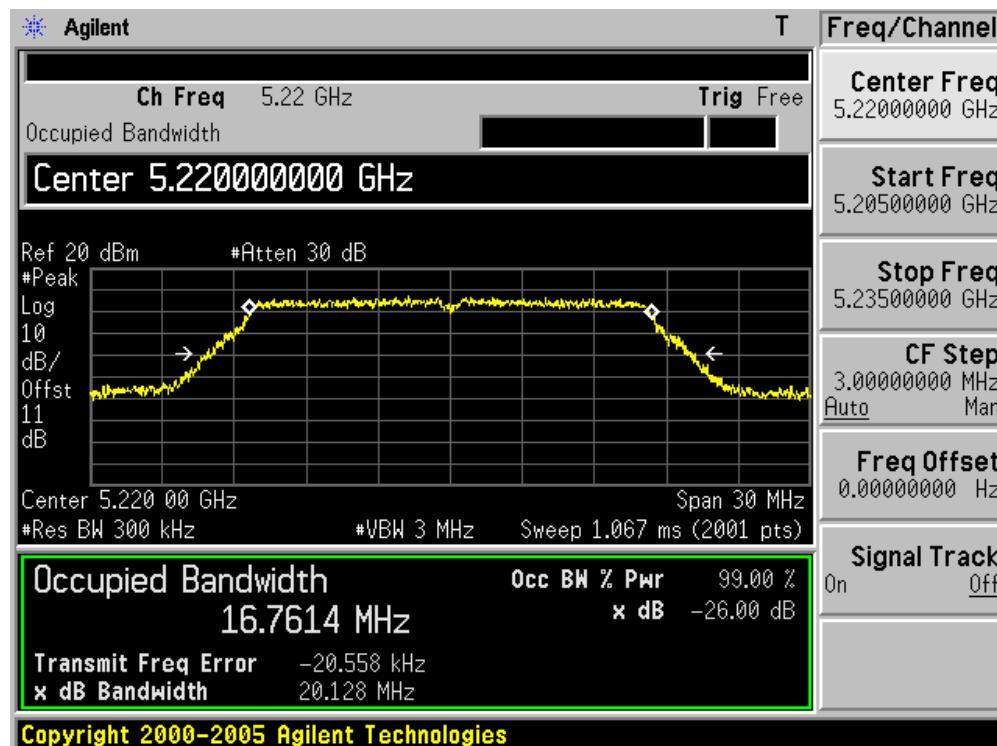
Product	:	Mi Wi-Fi
Test Item	:	Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 1: Transmit by 802.11a (Ant 2)

Channel No.	Frequency (MHz)	26dB Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180	20.20	16.74
44	5220	20.13	16.76
48	5240	20.24	16.83

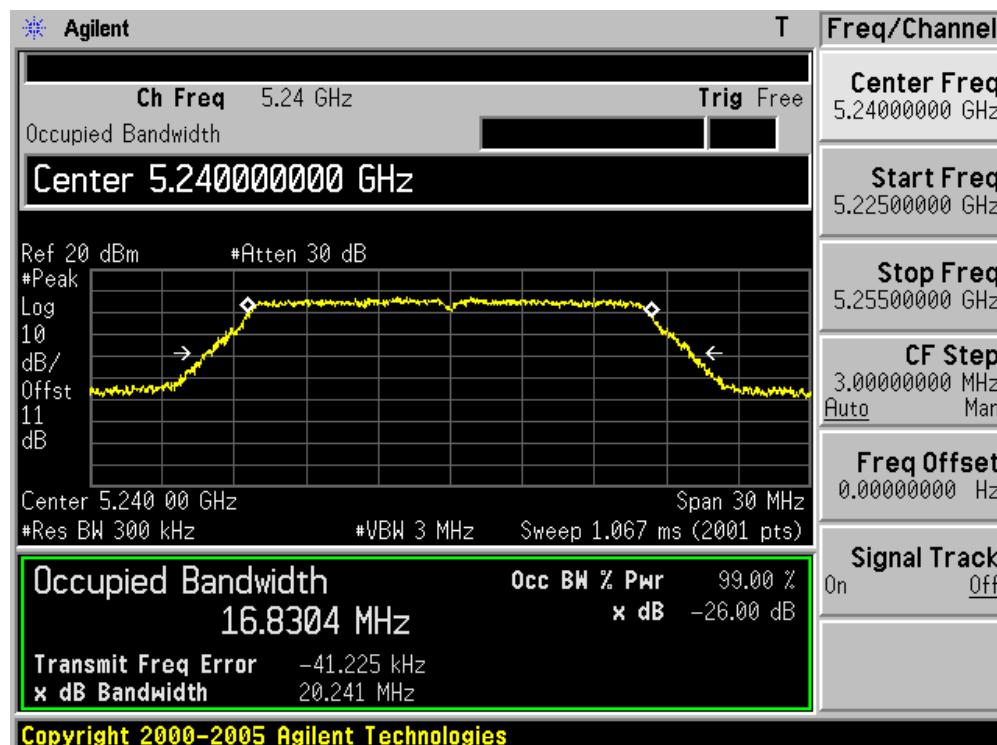
### Channel 36 (5180MHz)



## Channel 44 (5220MHz)



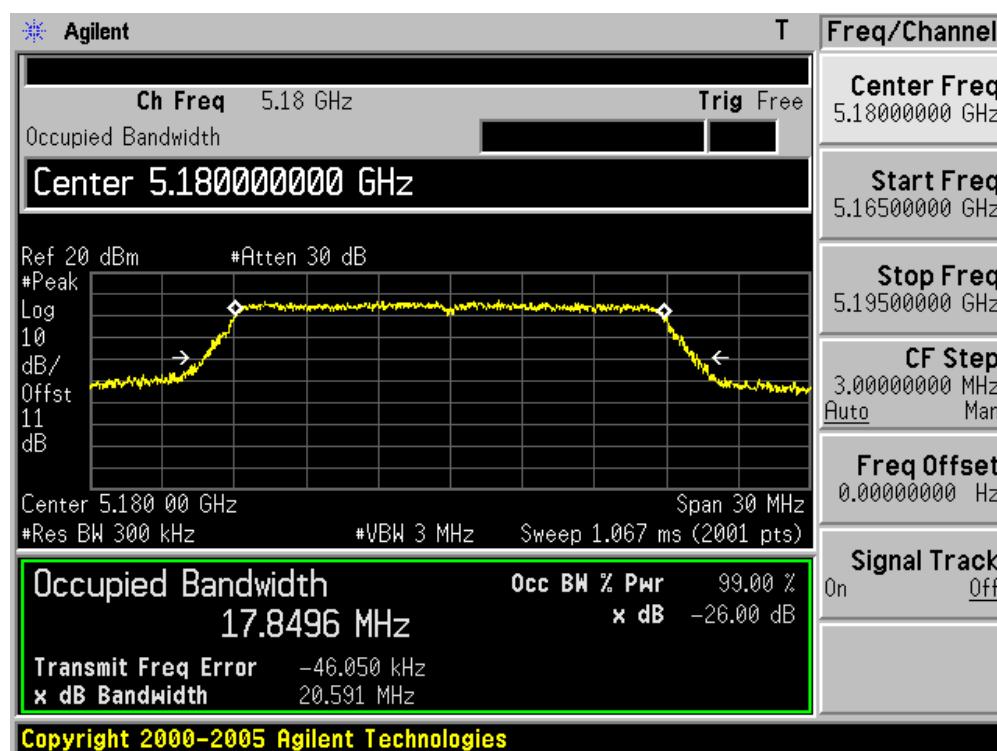
## Channel 48 (5240MHz)



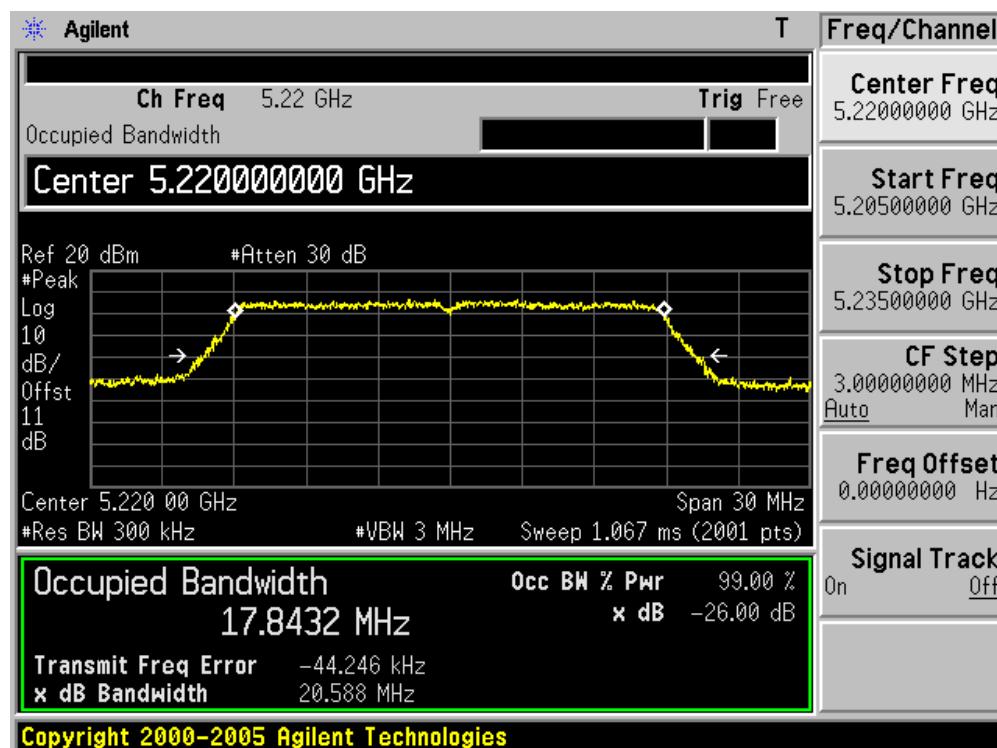
Product	:	Mi Wi-Fi
Test Item	:	Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 2: Transmit by 802.11n(20MHz) (Ant 1)

Channel No.	Frequency (MHz)	26dB Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180	20.59	17.85
44	5220	20.59	17.84
48	5240	20.86	17.93

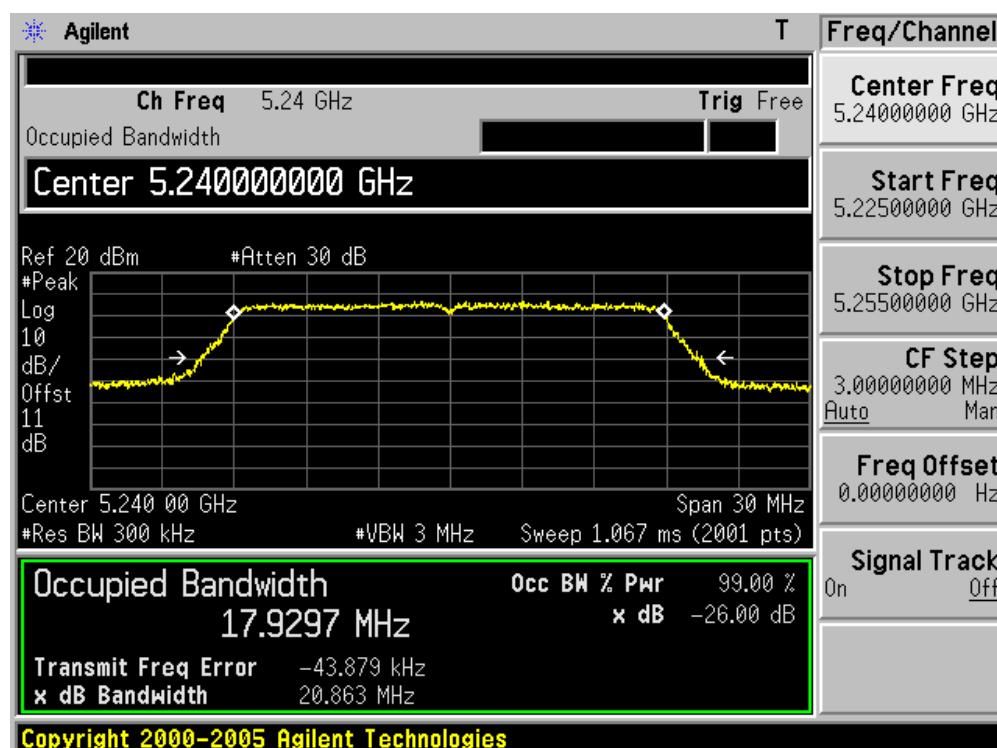
### Channel 36 (5180MHz)



## Channel 44 (5220MHz)

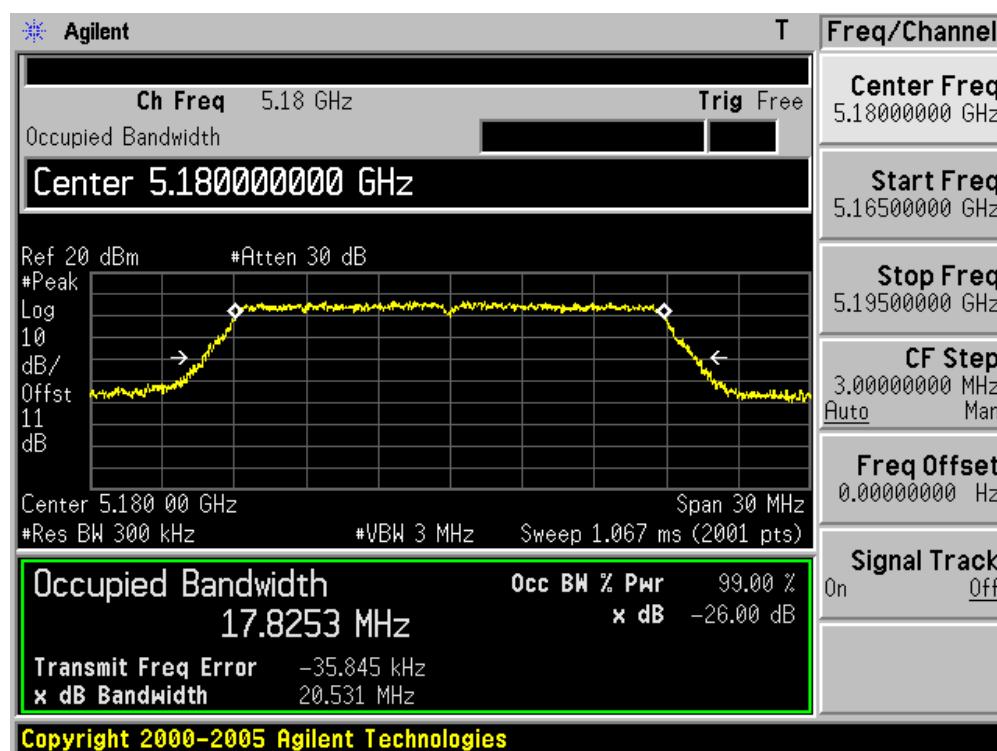


## Channel 48 (5240MHz)

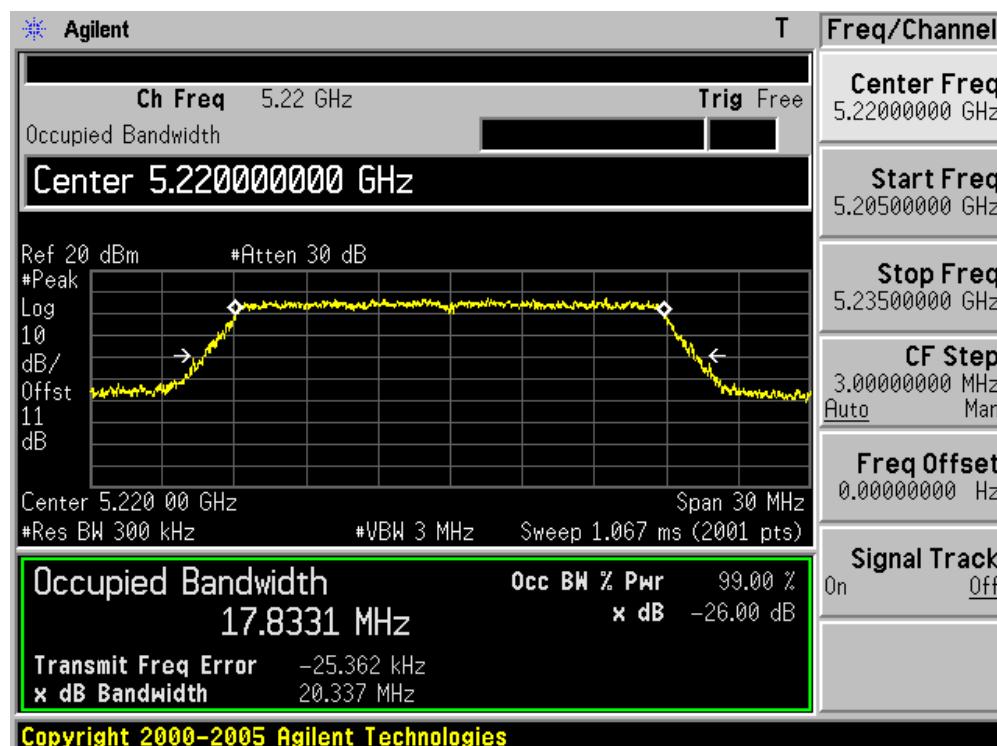


Product	:	Mi Wi-Fi
Test Item	:	Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 2: Transmit by 802.11n(20MHz) (Ant 2)

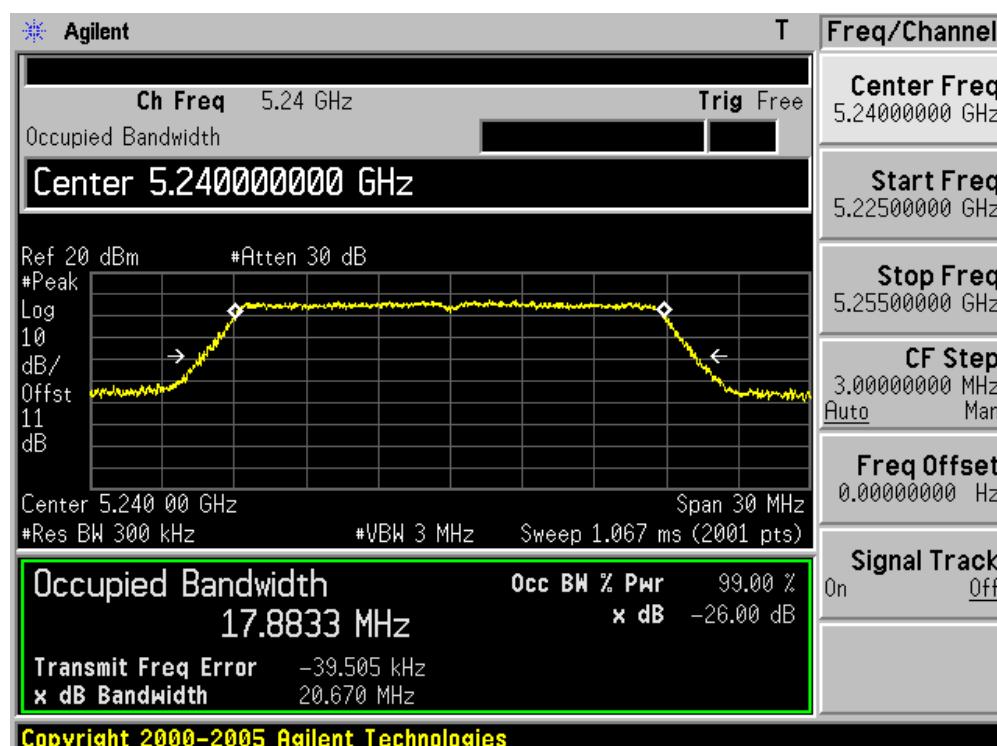
Channel No.	Frequency (MHz)	26dB Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180	20.53	17.83
44	5220	20.34	17.83
48	5240	20.67	17.88

**Channel 36 (5180MHz)**

## Channel 44 (5220MHz)

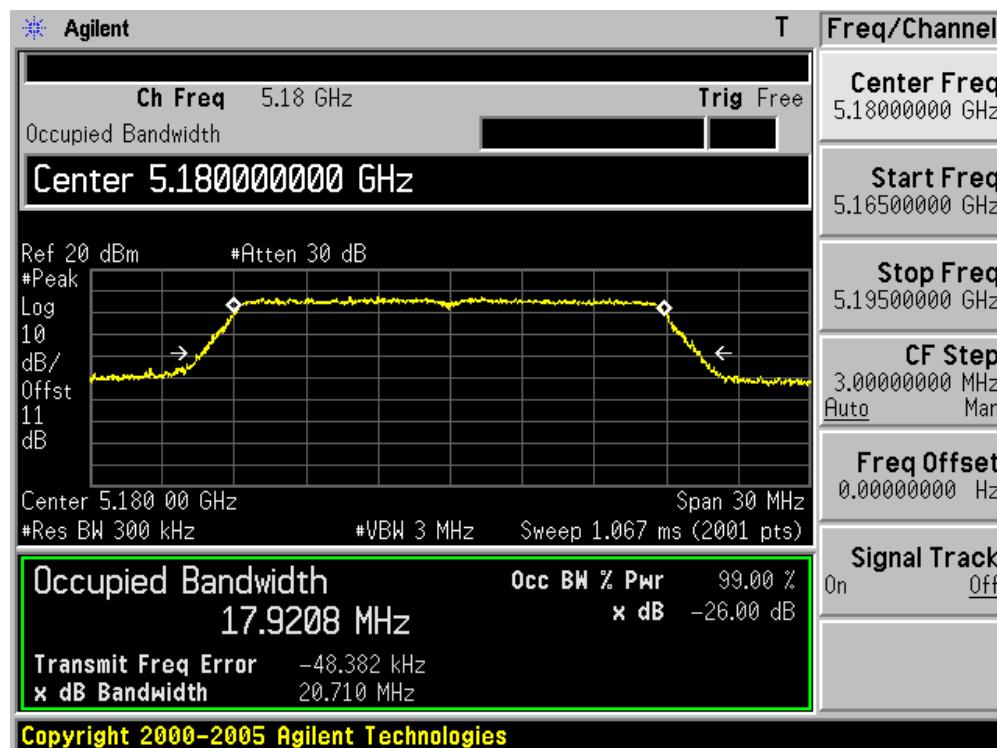


## Channel 48 (5240MHz)

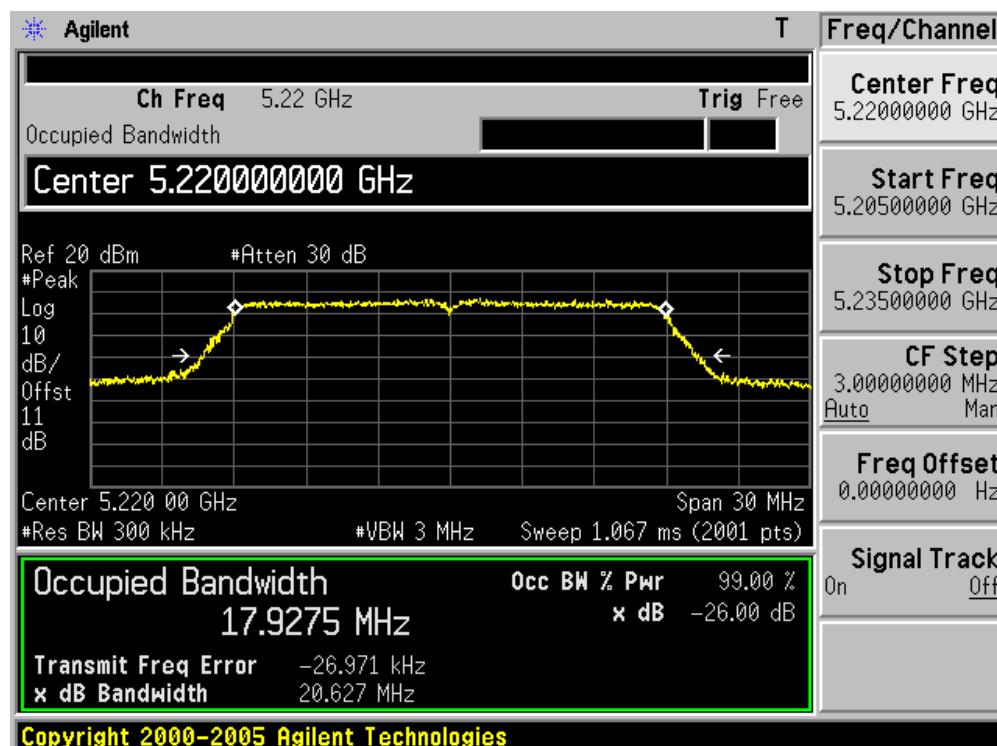


Product	:	Mi Wi-Fi
Test Item	:	Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 3: Transmit by 802.11ac(20MHz) (Ant 1)

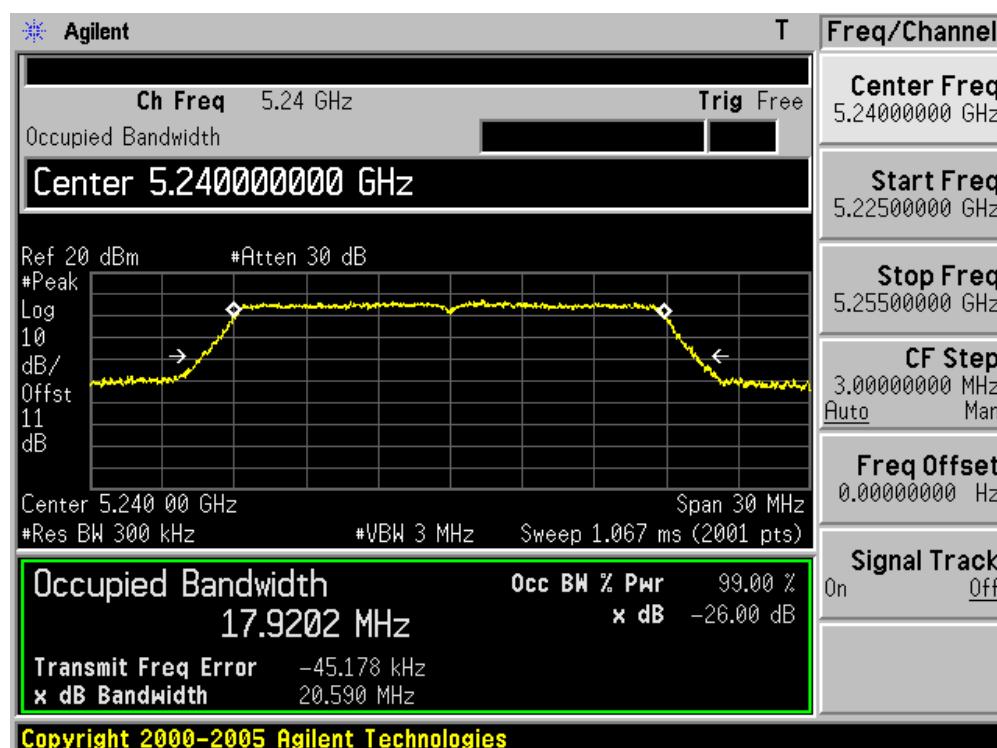
Channel No.	Frequency (MHz)	26dB Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180	20.71	17.92
44	5220	20.63	17.93
48	5240	20.59	17.92

**Channel 36 (5180MHz)**

## Channel 44 (5220MHz)

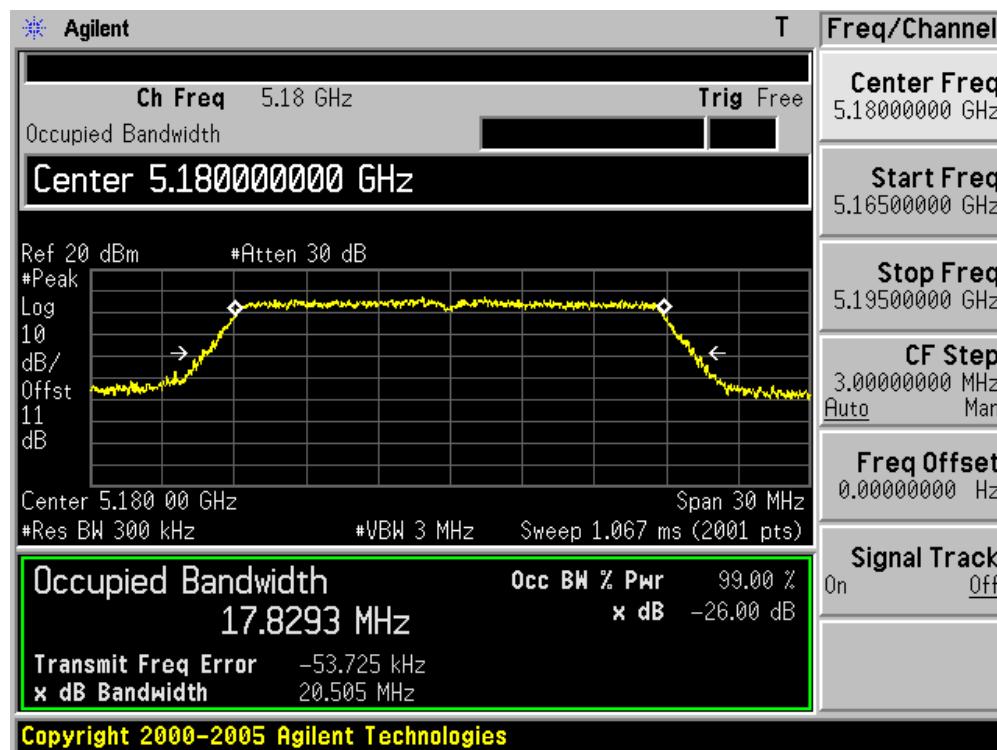


## Channel 48 (5240MHz)

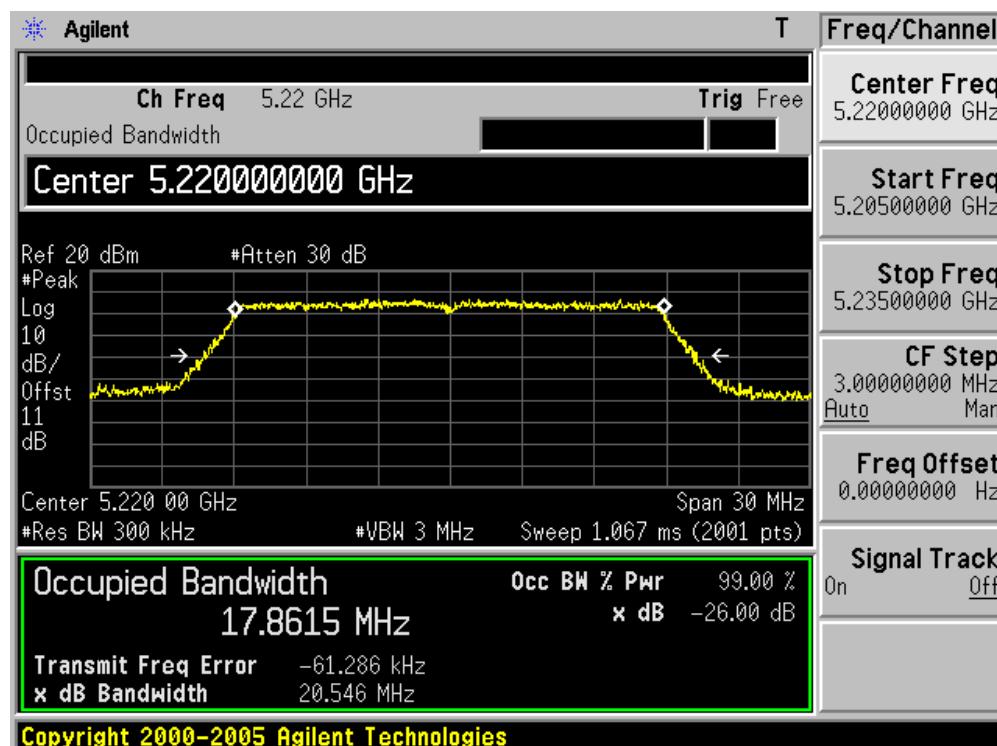


Product	:	Mi Wi-Fi
Test Item	:	Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 3: Transmit by 802.11ac(20MHz) (Ant 2)

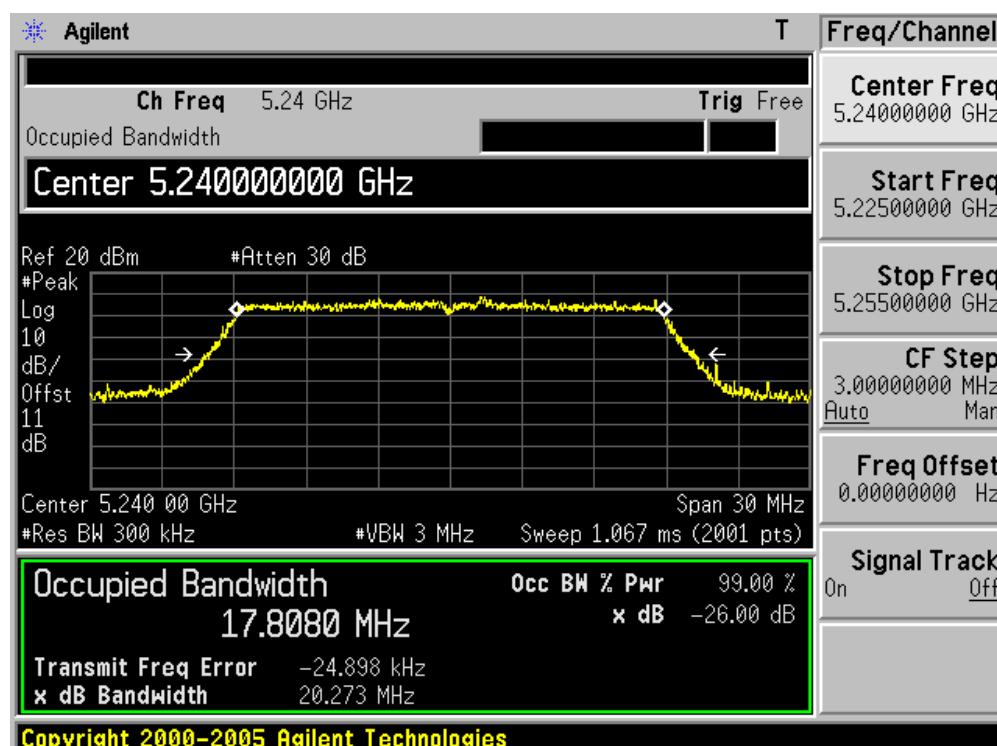
Channel No.	Frequency (MHz)	26dB Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180	20.51	17.83
44	5220	20.55	17.86
48	5240	20.27	17.81

**Channel 36 (5180MHz)**

## Channel 44 (5220MHz)



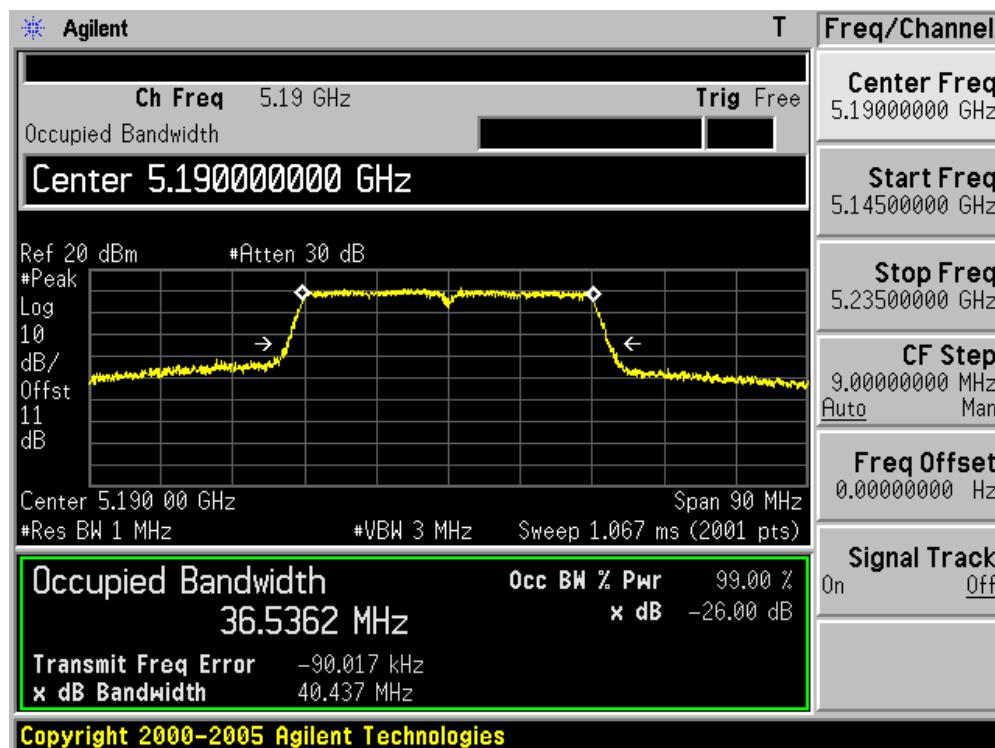
## Channel 48 (5240MHz)



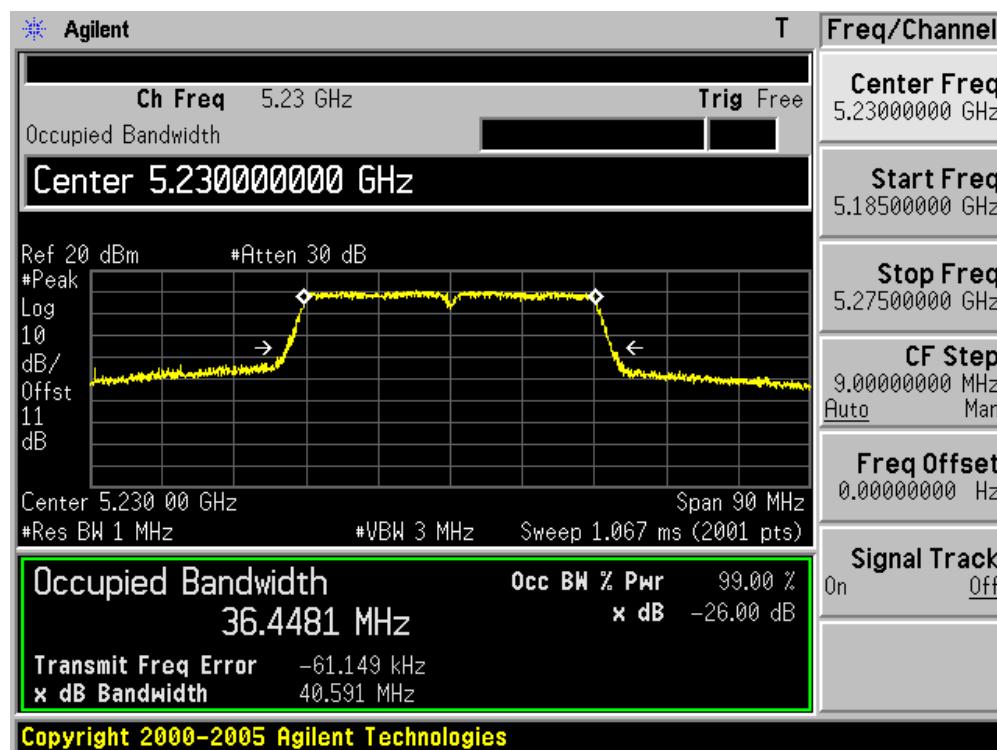
Product	:	Mi Wi-Fi
Test Item	:	Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 4: Transmit by 802.11n(40MHz) (Ant 1)

Channel No.	Frequency (MHz)	26dB Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190	40.44	36.54
46	5230	40.59	36.45

### Channel 38 (5190MHz)

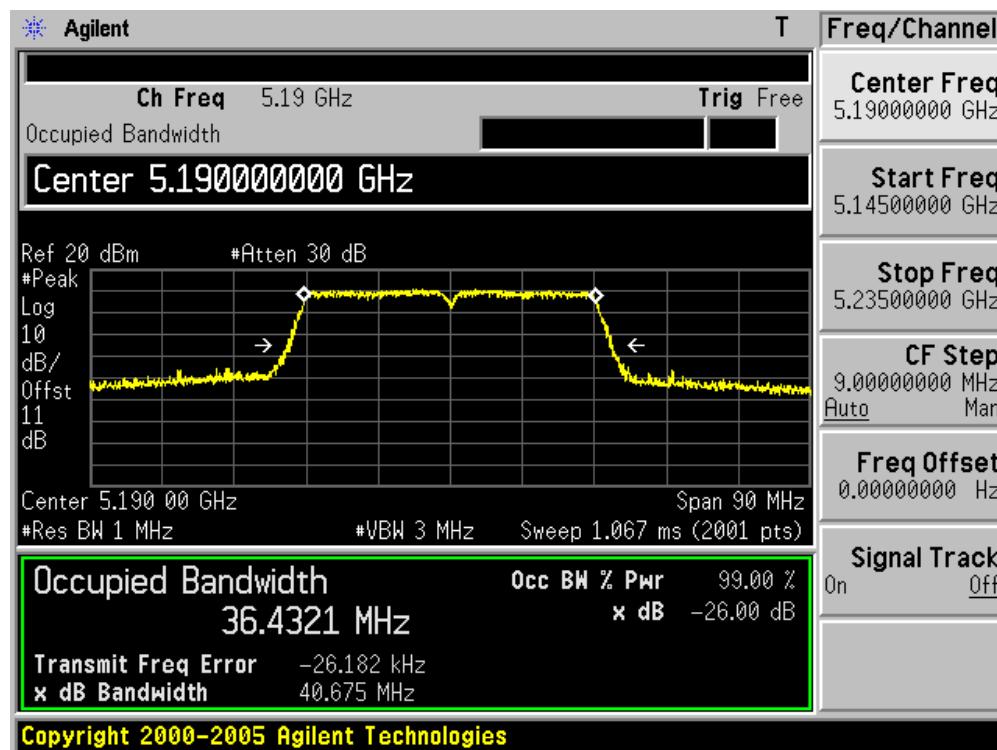


## Channel 46 (5230MHz)

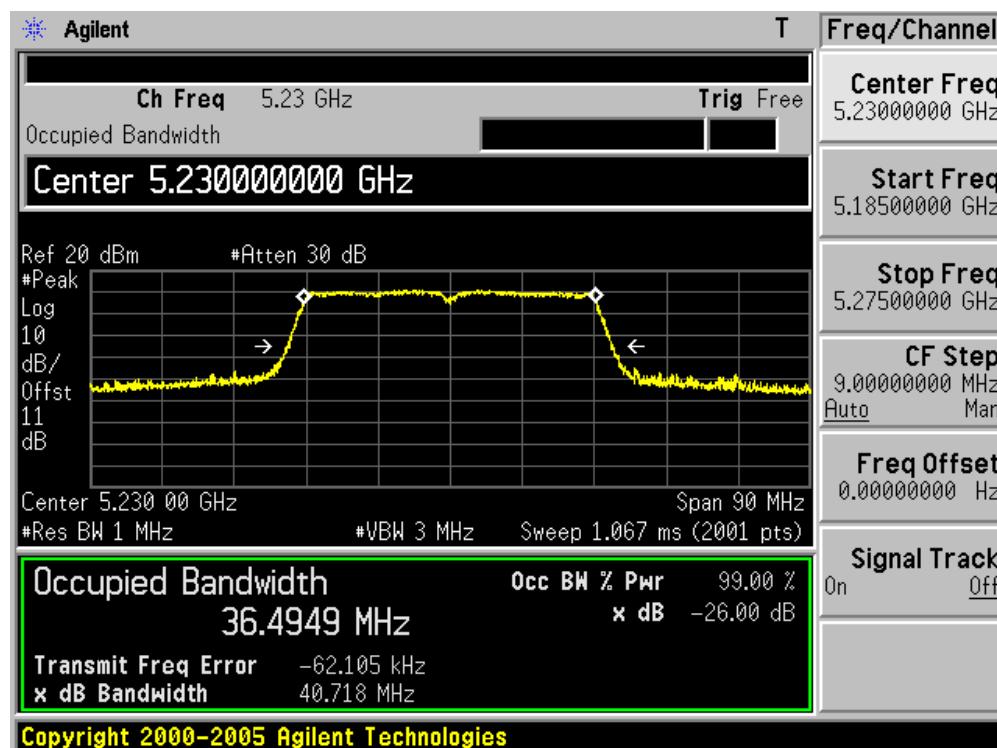


Product	:	Mi Wi-Fi
Test Item	:	Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 4: Transmit by 802.11n(40MHz) (Ant 2)

Channel No.	Frequency (MHz)	26dB Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190	40.68	36.43
46	5230	40.72	36.49

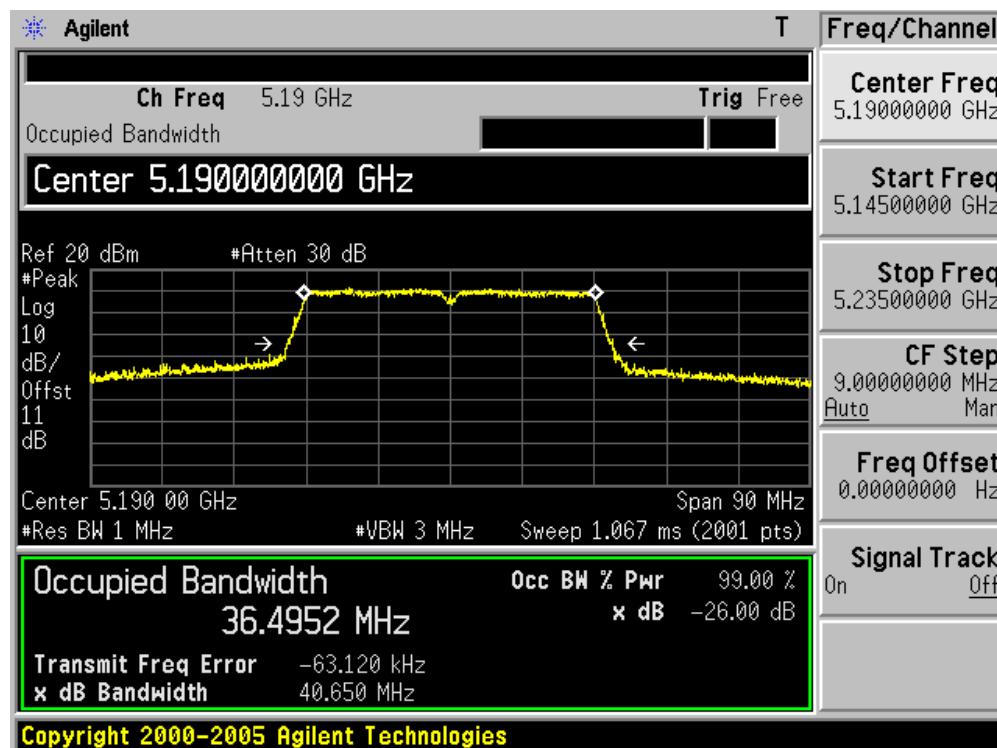
**Channel 38 (5190MHz)**

## Channel 46 (5230MHz)

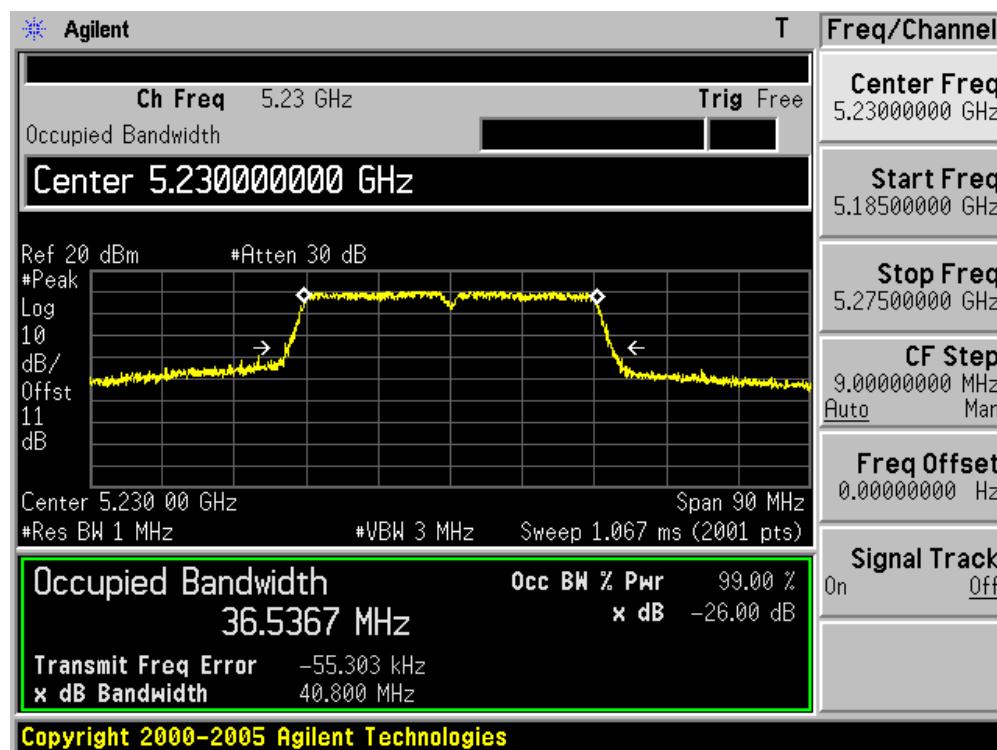


Product	:	Mi Wi-Fi
Test Item	:	Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 5: Transmit by 802.11ac(40MHz) (Ant 1)

Channel No.	Frequency (MHz)	26dB Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190	40.65	36.50
46	5230	40.80	36.54

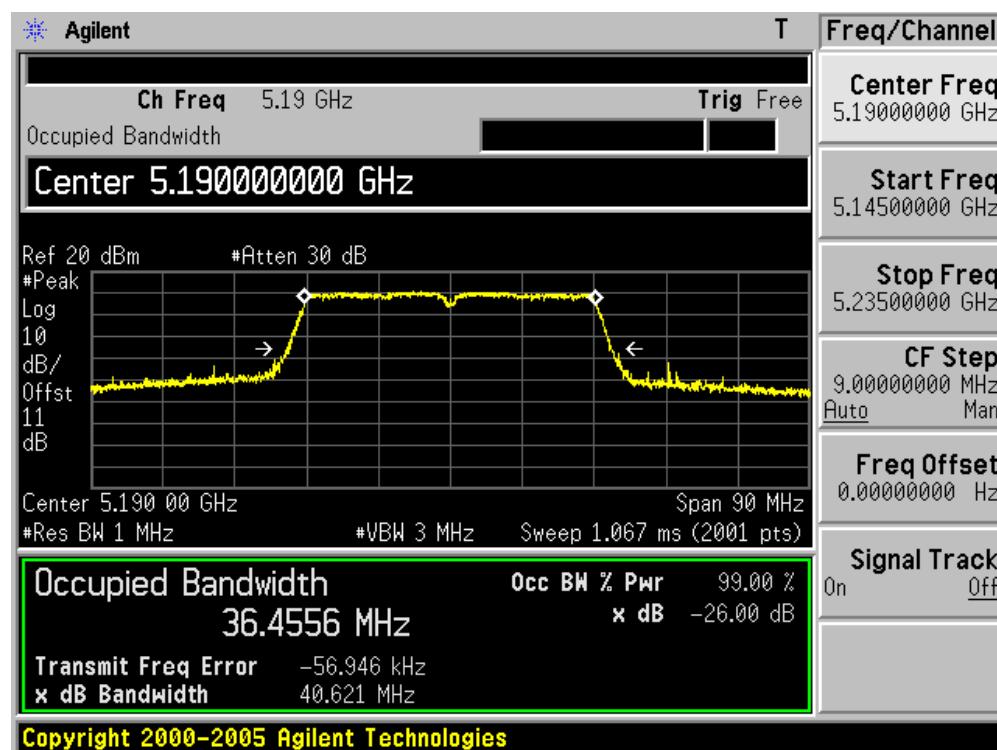
**Channel 38 (5190MHz)**

## Channel 46 (5230MHz)

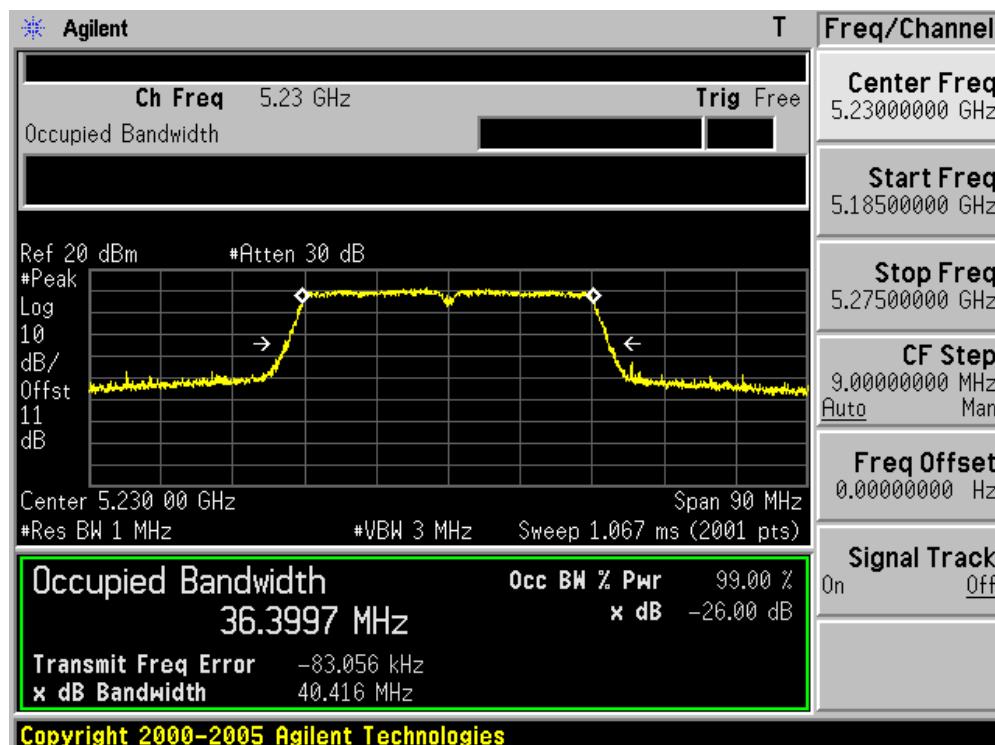


Product	:	Mi Wi-Fi
Test Item	:	Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 5: Transmit by 802.11ac(40MHz) (Ant 2)

Channel No.	Frequency (MHz)	26dB Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190	40.62	36.46
46	5230	40.42	36.40

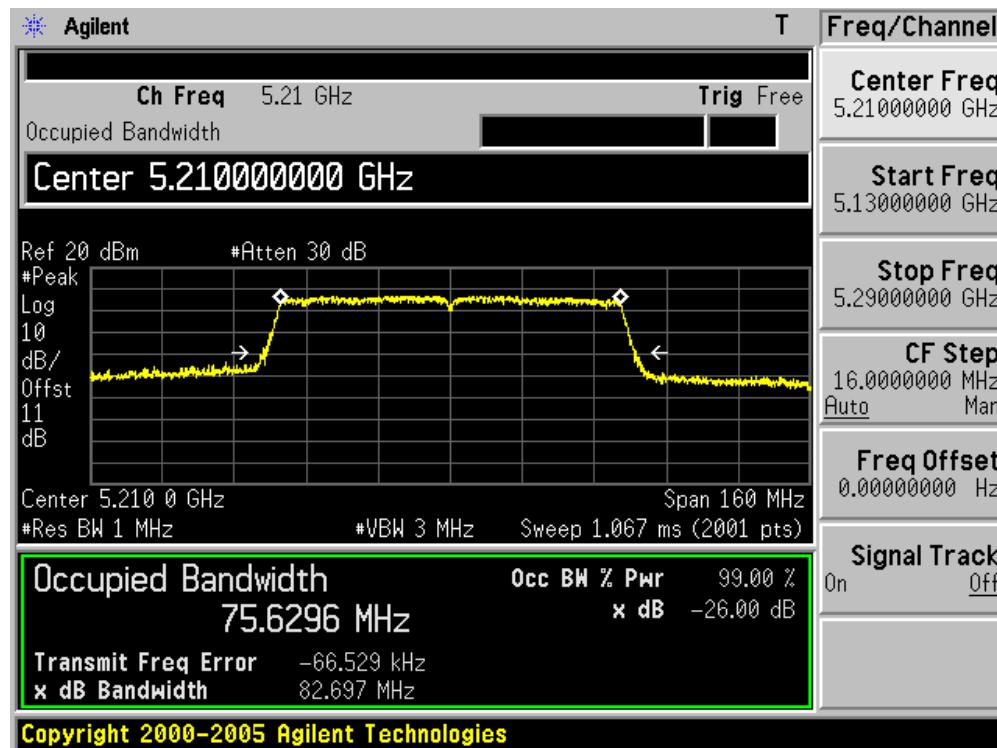
**Channel 38 (5190MHz)**

## Channel 46 (5230MHz)



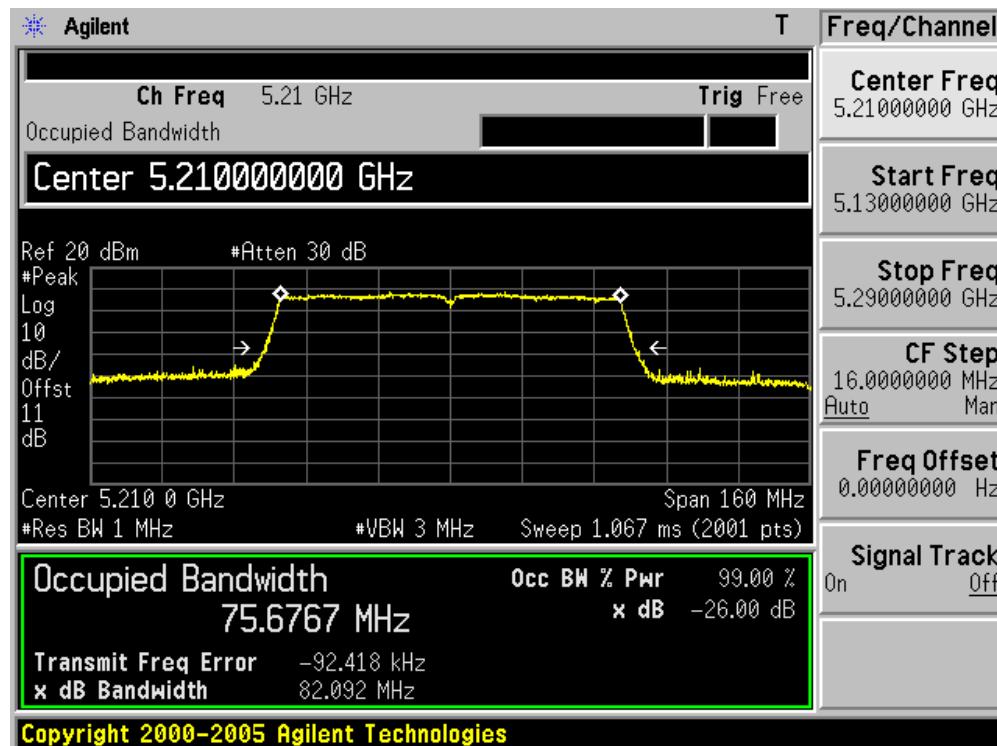
Product	:	Mi Wi-Fi
Test Item	:	Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 6: Transmit by 802.11ac(80MHz) (Ant 1)

Channel No.	Frequency (MHz)	26dB Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210	82.70	75.63

**Channel 42 (5210MHz)**

Product	:	Mi Wi-Fi
Test Item	:	Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 6: Transmit by 802.11ac(80MHz) (Ant 2)

Channel No.	Frequency (MHz)	26dB Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210	82.09	75.68

**Channel 42 (5210MHz)**

## 7. Power Output

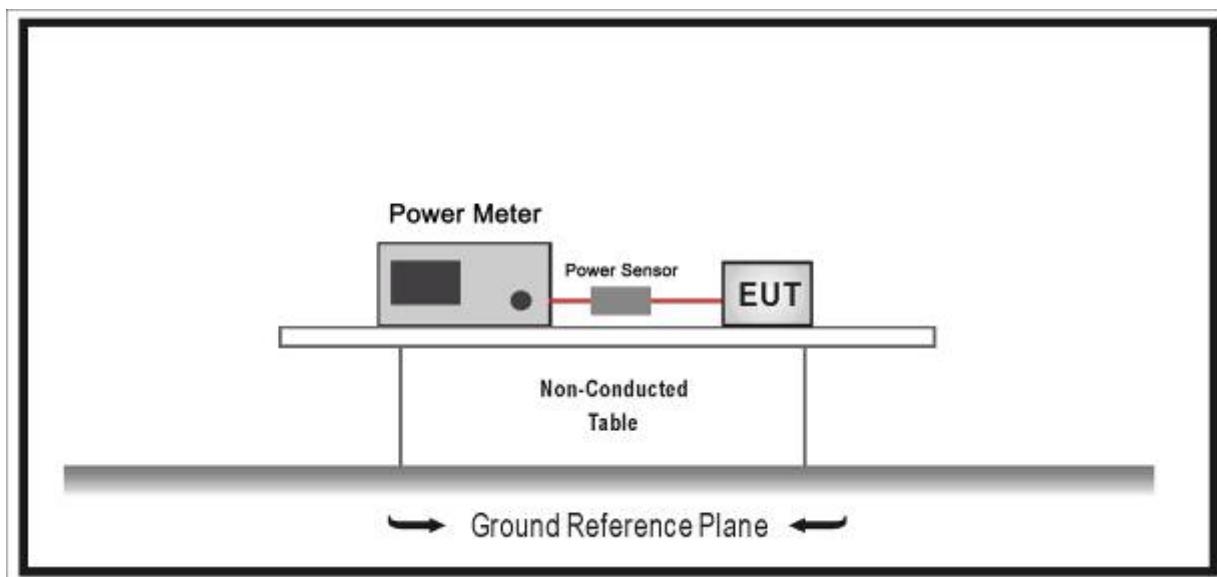
### 7.1. Test Equipment

Power Output / TR-8

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2015.01.07
Temperature/Humidity Meter	zhicheng	ZC1-2	TR8-TH	2015.04.09

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

- For the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 50 mW or 4 dBm + 10log B, where B is the 26 dB emission bandwidth in MHz. If transmitting antenna of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.
- For the band 5.25-5.35 GHz and 5.47-5725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10log B, where B is the 26 dB emission bandwidth in megahertz. If transmitting antenna of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.

dBi.

- For the band 5.725-5.825 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 1 W or  $17 \text{ dBm} + 10\log B$ , where B is the 26 dB emission bandwidth in MHz. If transmitting antenna of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antenna with directional gain up to 23 dBi without any corresponding reduction in the transmitter peak output power. For fixed, point-to-point U-NII transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in peak transmitter power for each 1 dB of antenna gain in excess of 23 dBi would be required.

#### **7.4. Test Procedure**

The EUT was tested according to KDB 789033 for compliance to FCC 47CFR 15.407 requirements.

Use the wideband power meter to test RMS power and record the result.

#### **7.5. Uncertainty**

The measurement uncertainty is defined as  $\pm 1.27 \text{ dB}$

## 7.6. Test Result

Power output test was verified over all data rates of each mode shown as below, and then choose the maximum power output (blue marker) for final test of each channel.

MCS Index for 802.11n	Spatial Streams	Data Rate (Mbps)					
		802.11a	20MHz Bandwidth		40MHz Bandwidth		
			800ns GI	400ns GI	800ns GI	400ns GI	
0	1	6	6.5	7.2	13.5	15.0	
1	1	9	13.0	14.4	27.0	30.0	
2	1	12	19.5	21.7	40.5	45.0	
3	1	18	26.0	28.9	54.0	60.0	
4	1	24	39.0	43.3	81.0	90.0	
5	1	36	52.0	57.8	108.0	120.0	
6	1	48	58.5	65.0	121.5	135.0	
7	1	54	65.0	72.2	135.0	150.0	
8	2	---	13.0	14.4	27.0	30.0	
9	2	---	26.0	28.9	54.0	60.0	
10	2	---	39.0	43.3	81.0	90.0	
11	2	---	52.0	57.8	108.0	120.0	
12	2	---	78.0	86.7	162.0	180.0	
13	2	---	104.0	115.6	216.0	240.0	
14	2	---	117.0	130.0	243.0	270.0	
15	2	---	130.0	144.0	270.0	300.0	

Spatial Streams	MCS Index	Modulation type	Coding rate	Data Rate(Mb/s)							
				20MHz		40MHz		80MHz		160MHz	
				Guard Interval		Guard Interval		Guard Interval		Guard Interval	
				800ns	400ns	800ns	400ns	800ns	400ns	800ns	400ns
1	0	BPSK	1/2	6.5	7.2	13.5	15	29.3	32.5	58.5	65
	1	QPSK	1/2	13	14.4	27	30	58.5	65	117	130
	2	QPSK	3/4	19.5	21.7	40.5	45	87.8	97.5	175.5	195
	3	16-QAM	1/2	26	28.9	54	60	117	130	234	260
	4	16-QAM	3/4	39	43.3	81	90	175.5	195	351	390
	5	64-QAM	2/3	52	57.8	108	120	234	260	468	520
	6	64-QAM	3/4	58.5	65	121.5	135	263.3	292.5	526.5	585
	7	64-QAM	5/6	65	72.2	135	150	292.5	325	585	650

	8	256-QAM	3/4	78	86.7	162	180	351	390	702	780
	9	256-QAM	5/6	N/A	N/A	180	200	390	433.3	780	866.7
2	0	BPSK	1/2	13	14.4	27	30	58.6	65	117	130
	1	QPSK	1/2	26	28.8	54	60	117	130	234	260
	2	QPSK	3/4	39	43.4	81	90	175.6	195	351	390
	3	16-QAM	1/2	52	57.8	108	120	234	260	468	520
	4	16-QAM	3/4	78	86.6	162	180	351	390	702	780
	5	64-QAM	2/3	104	115.6	216	240	468	520	936	1040
	6	64-QAM	3/4	117	130	243	270	526.6	585	1053	1170
	7	64-QAM	5/6	130	144.4	270	300	585	650	1170	1300
	8	256-QAM	3/4	156	173.4	324	360	702	780	1404	1560
	9	256-QAM	5/6	N/A	N/A	360	400	780	866.6	1560	1733.4

## Power output at various data rates:

Test Mode	Bandwidth	Frequency (MHz)	Channel	Data Rate	Average Power (dBm)
802.11a (Ant 1)	20	5180	36	6	15.03
				24	15.01
				54	14.93
802.11n(20MHz) (Ant 1)	20	5180	36	MCS0	15.48
				MCS4	15.36
				MCS7	15.24
802.11ac(20MHz) (Ant 1)	20	5180	36	MCS0NSS1	15.67
				MCS5NSS1	15.57
				MCS8NSS1	15.53
802.11n(40MHz) (Ant 1)	40	5190	38	MCS0	16.42
				MCS4	16.33
				MCS7	16.35
802.11ac(40MHz) (Ant 1)	40	5190	38	MCS0NSS1	16.77
				MCS5NSS1	16.62
				MCS9NSS1	16.57
802.11ac(80MHz) (Ant 1)	80	5210	42	MCS0NSS1	16.47
				MCS5NSS1	16.37
				MCS9NSS1	16.42

Product	:	Mi Wi-Fi
Test Item	:	Power Output
Test Site	:	TR-8
Test Mode	:	Mode 1: Transmit by 802.11a (Ant 1)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 2			
36	5180	15.03	N/A	15.03	17	Pass
44	5220	15.27	N/A	15.27	17	Pass
48	5240	15.45	N/A	15.45	17	Pass

Product	:	Mi Wi-Fi
Test Item	:	Power Output
Test Site	:	TR-8
Test Mode	:	Mode 1: Transmit by 802.11a (Ant 2)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 2			
36	5180	N/A	15.78	15.78	17	Pass
44	5220	N/A	15.38	15.38	17	Pass
48	5240	N/A	15.46	15.46	17	Pass

Product	:	Mi Wi-Fi
Test Item	:	Power Output
Test Site	:	TR-8
Test Mode	:	Mode 2: Transmit by 802.11n(20MHz) (Ant 1)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 2			
36	5180	15.48	N/A	15.48	17	Pass
44	5220	15.31	N/A	15.31	17	Pass
48	5240	15.36	N/A	15.36	17	Pass

Product	:	Mi Wi-Fi
Test Item	:	Power Output
Test Site	:	TR-8
Test Mode	:	Mode 2: Transmit by 802.11n(20MHz) (Ant 2)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 2			
36	5180	N/A	15.74	15.74	17	Pass
44	5220	N/A	15.76	15.76	17	Pass
48	5240	N/A	15.73	15.73	17	Pass

Product	:	Mi Wi-Fi
Test Item	:	Power Output
Test Site	:	TR-8
Test Mode	:	Mode 2: Transmit by 802.11n(20MHz) (Ant 1+2)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 2			
36	5180	7.94	12.84	14.06	16.88	Pass
44	5220	7.93	12.92	14.12	16.88	Pass
48	5240	7.81	12.81	14.00	16.88	Pass

Note: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2]$  dBi=6.12, Limit=17.00-(6.12-6)=16.88

Product	:	Mi Wi-Fi
Test Item	:	Power Output
Test Site	:	TR-8
Test Mode	:	Mode 3: Transmit by 802.11ac(20MHz) (Ant 1)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 2			
36	5180	15.67	N/A	15.67	17	Pass
44	5220	15.47	N/A	15.47	17	Pass
48	5240	15.52	N/A	15.52	17	Pass

Product	:	Mi Wi-Fi
Test Item	:	Power Output
Test Site	:	TR-8
Test Mode	:	Mode 3: Transmit by 802.11ac(20MHz) (Ant 2)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 2			
36	5180	N/A	15.57	15.57	17	Pass
44	5220	N/A	15.66	15.66	17	Pass
48	5240	N/A	15.57	15.57	17	Pass

Product	:	Mi Wi-Fi
Test Item	:	Power Output
Test Site	:	TR-8
Test Mode	:	Mode 3: Transmit by 802.11ac(20MHz) (Ant 1+2)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 2			
36	5180	8.72	12.93	14.33	16.88	Pass
44	5220	8.58	13.03	14.36	16.88	Pass
48	5240	8.35	12.97	14.26	16.88	Pass

Note: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2]$  dB=6.12, Limit=17.00-(6.12-6)=16.88

Product	:	Mi Wi-Fi
Test Item	:	Power Output
Test Site	:	TR-8
Test Mode	:	Mode 4: Transmit by 802.11n(40MHz) (Ant 1)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 2			
38	5190	16.42	N/A	16.42	17	Pass
46	5230	16.53	N/A	16.53	17	Pass

Product	:	Mi Wi-Fi
Test Item	:	Power Output
Test Site	:	TR-8
Test Mode	:	Mode 4: Transmit by 802.11n(40MHz) (Ant 2)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 2			
38	5190	N/A	16.33	16.33	17	Pass
46	5230	N/A	15.48	15.48	17	Pass

Product	:	Mi Wi-Fi
Test Item	:	Power Output
Test Site	:	TR-8
Test Mode	:	Mode 2: Transmit by 802.11n(40MHz) (Ant 1+2)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 2			
38	5190	12.40	14.68	16.70	16.88	Pass
46	5230	11.96	14.59	16.48	16.88	Pass

Note: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2]$  dBi=6.12, Limit=17.00-(6.12-6)=16.88

Product	:	Mi Wi-Fi
Test Item	:	Power Output
Test Site	:	TR-8
Test Mode	:	Mode 5: Transmit by 802.11ac(40MHz) (Ant 1)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 2			
38	5190	16.77	N/A	16.77	17	Pass
46	5230	16.82	N/A	16.82	17	Pass

Product	:	Mi Wi-Fi
Test Item	:	Power Output
Test Site	:	TR-8
Test Mode	:	Mode 5: Transmit by 802.11ac(40MHz) (Ant 2)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 2			
38	5190	N/A	16.46	16.46	17	Pass
46	5230	N/A	16.71	16.71	17	Pass

Product	:	Mi Wi-Fi
Test Item	:	Power Output
Test Site	:	TR-8
Test Mode	:	Mode 5: Transmit by 802.11ac(40MHz) (Ant 1+2)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 2			
38	5190	12.19	14.78	16.69	16.88	Pass
46	5230	12.14	14.86	16.72	16.88	Pass

Note: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2]$  dBi=6.12, Limit=17.00-(6.12-6)=16.88

Product	:	Mi Wi-Fi
Test Item	:	Power Output
Test Site	:	TR-8
Test Mode	:	Mode 6: Transmit by 802.11ac(80MHz) (Ant 1)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 2			
42	5210	16.47	N/A	16.47	17	Pass

Test Item	:	Power Output
Test Site	:	TR-8
Test Mode	:	Mode 6: Transmit by 802.11ac(80MHz) (Ant 2)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 2			
42	5210	N/A	16.73	16.73	17	Pass

Test Item	:	Power Output
Test Site	:	TR-8
Test Mode	:	Mode 6: Transmit by 802.11ac(80MHz) (Ant 1+2)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 2			
42	5210	12.24	14.84	16.74	16.88	Pass

Note: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2]$  dBi=6.12, Limit=17.00-(6.12-6)=16.88

## 8. Peak Power Spectral Density

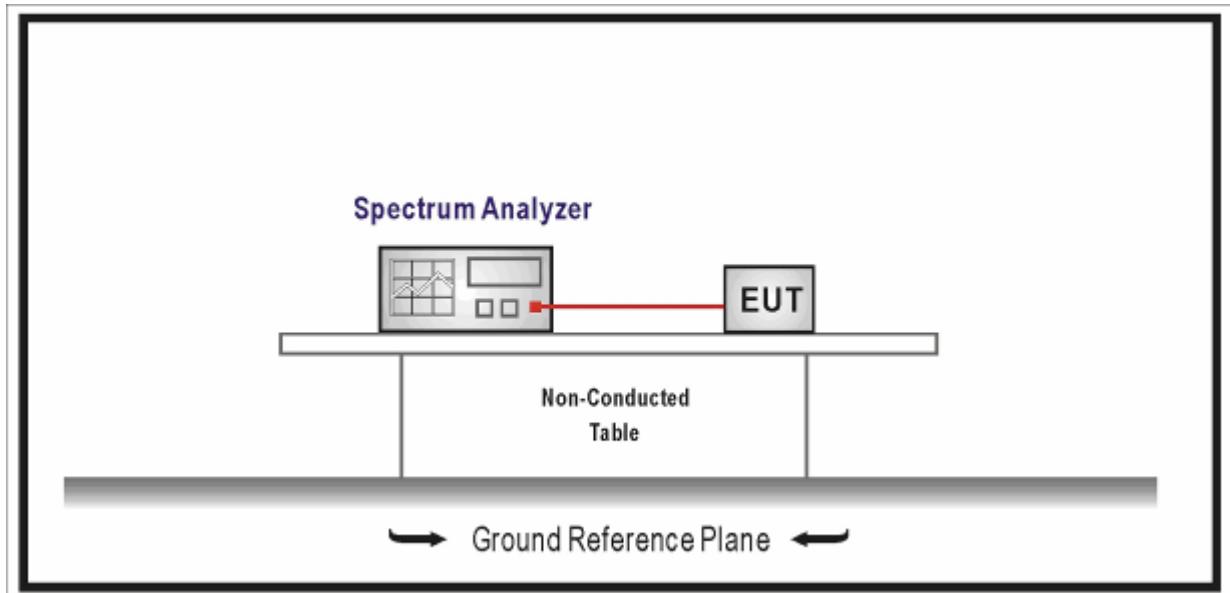
### 8.1. Test Equipment

Peak Power Spectral Density / TR-8

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2015.01.07
Temperature/Humidity Meter	zhicheng	ZC1-2	TR8-TH	2015.04.09

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

- For the band 5.15-5.25 GHz, the peak power spectral density shall not exceed 4dBm in any 1-MHz band. If transmitting antenna of directional gain greater than 6 dBi are used, the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
- For the band 5.25-5.35 GHz and 5.47-5725 GHz bands, the peak power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6dBi are used, the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
- For the band 5.725-5.825 GHz, the peak power spectral density shall not exceed 17 dBm

in any 1-MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain up to 23 dBi without any corresponding reduction in the peak power spectral density. For fixed, point-to-point U-NII transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in peak power spectral density for each 1 dB of antenna gain in excess of 23 dBi would be required.

#### **8.4. Test Procedure**

The EUT was tested according to KDB 789033 for compliance to FCC 47CFR 15.407 requirements.

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz.
- Set VBW  $\geq$  3 MHz.
- Number of points in sweep  $\geq$  2 Span / RBW.
- Sweep time = auto.
- Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode.
- The trigger shall be set to “free run”.
- Trace average at least 100 traces in power averaging (i.e., RMS) mode.

#### **8.5. Uncertainty**

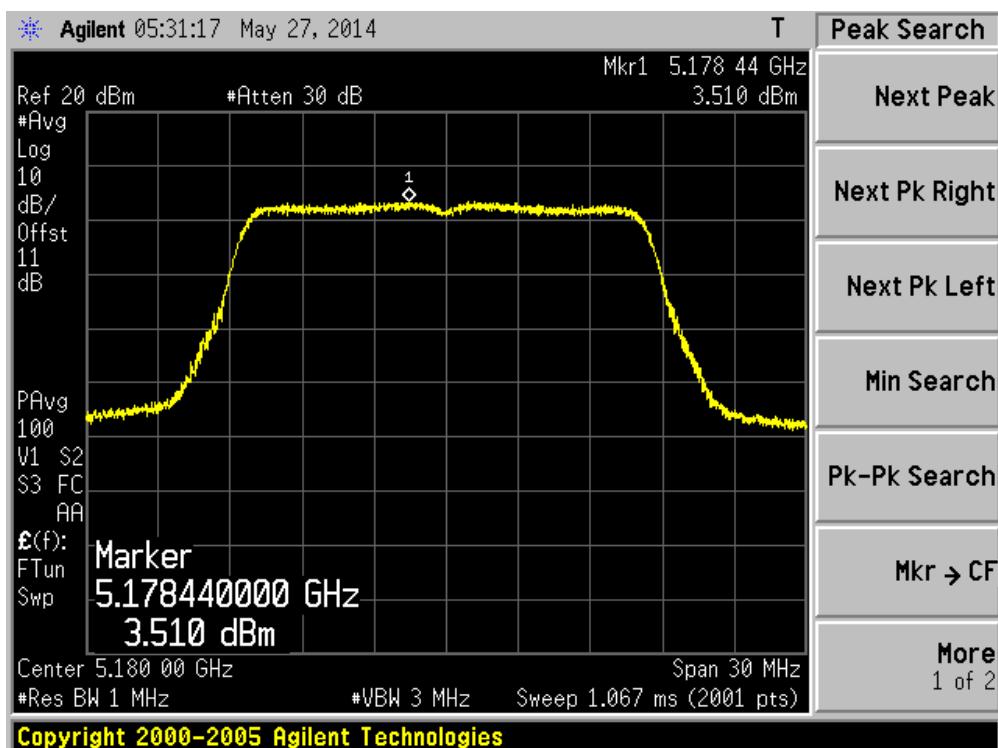
The measurement uncertainty is defined as  $\pm$  1.27 dB

## 8.6. Test Result

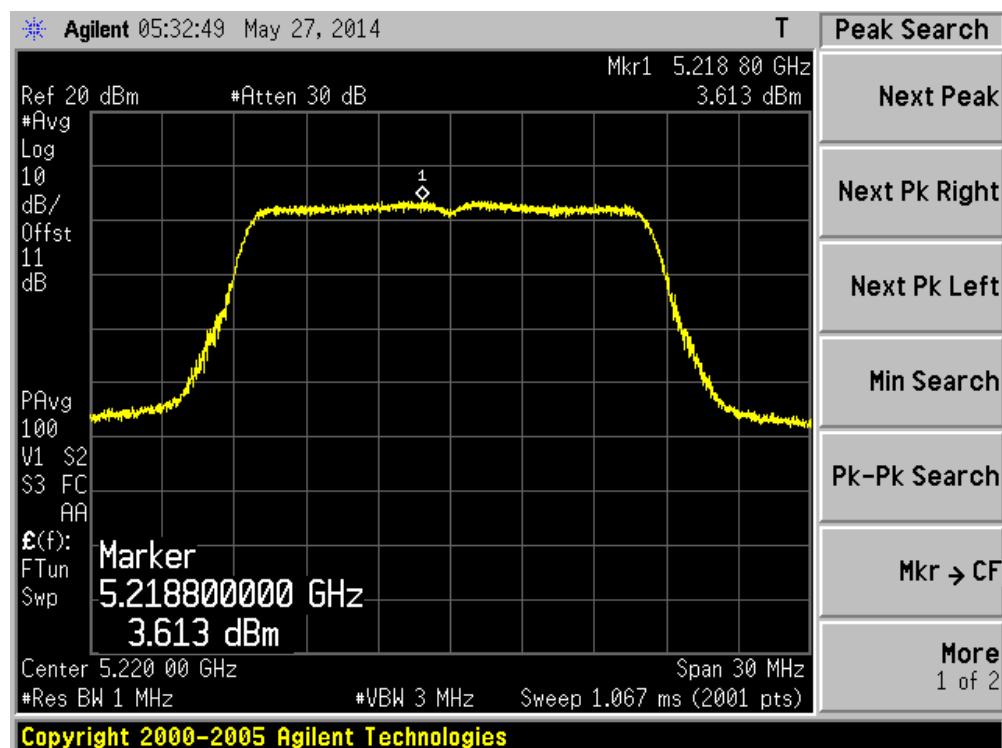
Product	:	Mi Wi-Fi
Test Item	:	Peak Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 1: Transmit by 802.11a (Ant 1)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm/MHz)		Total PPSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Ant 1	Ant 2			
36	5180	3.51	N/A	3.51	4	Pass
44	5220	3.61	N/A	3.61	4	Pass
48	5240	3.80	N/A	3.80	4	Pass

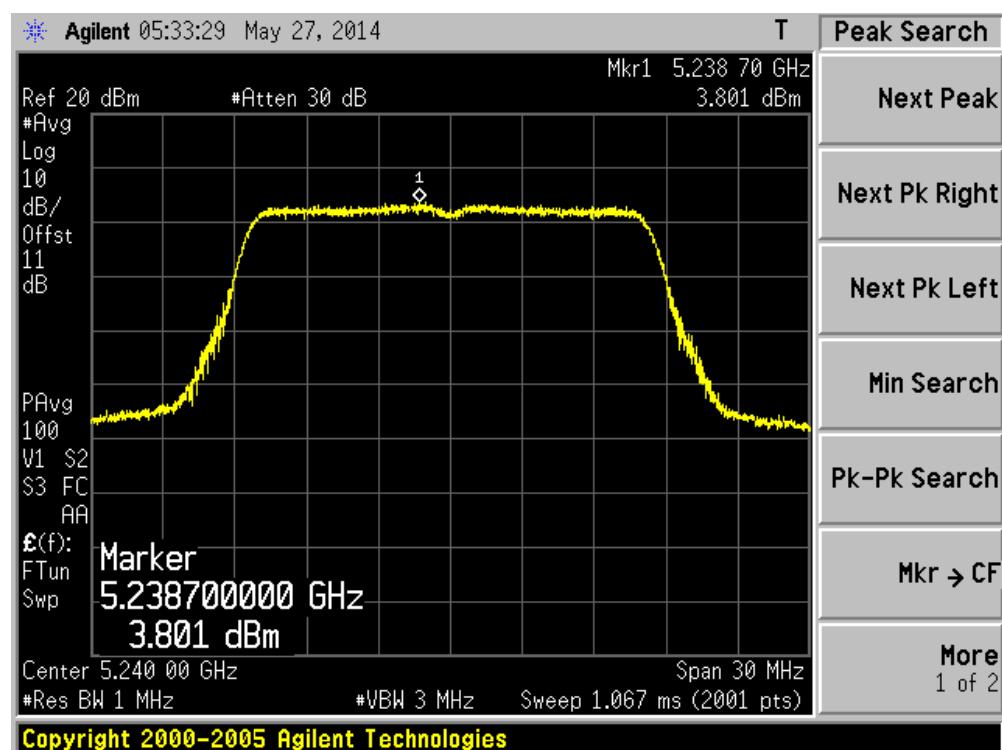
Channel 36 (5180MHz)



## Channel 44 (5220MHz)



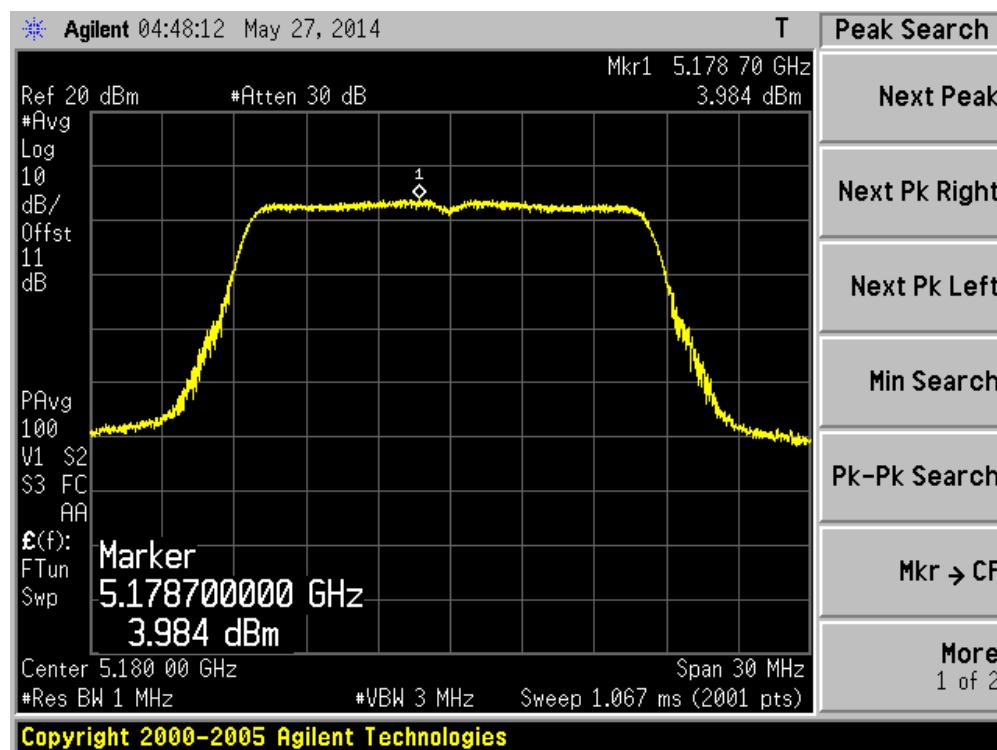
## Channel 48 (5240MHz)



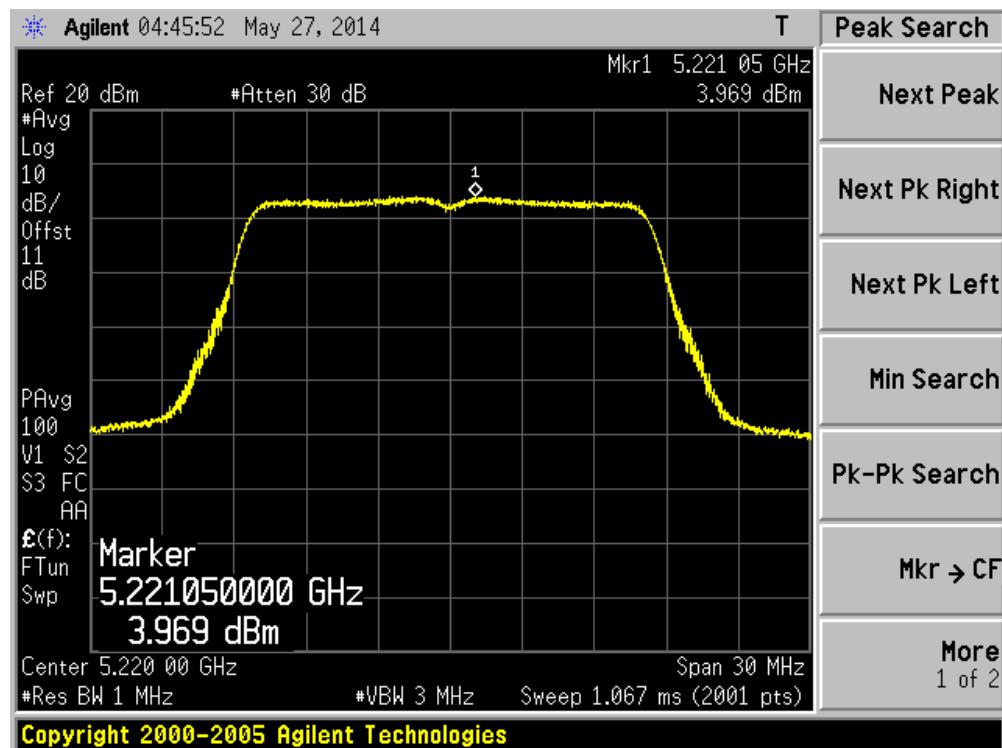
Product	:	Mi Wi-Fi
Test Item	:	Peak Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 1: Transmit by 802.11a (Ant 2)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm/MHz)		Total PPSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Ant 1	Ant 2			
36	5180	N/A	3.98	3.98	4	Pass
44	5220	N/A	3.97	3.97	4	Pass
48	5240	N/A	3.51	3.51	4	Pass

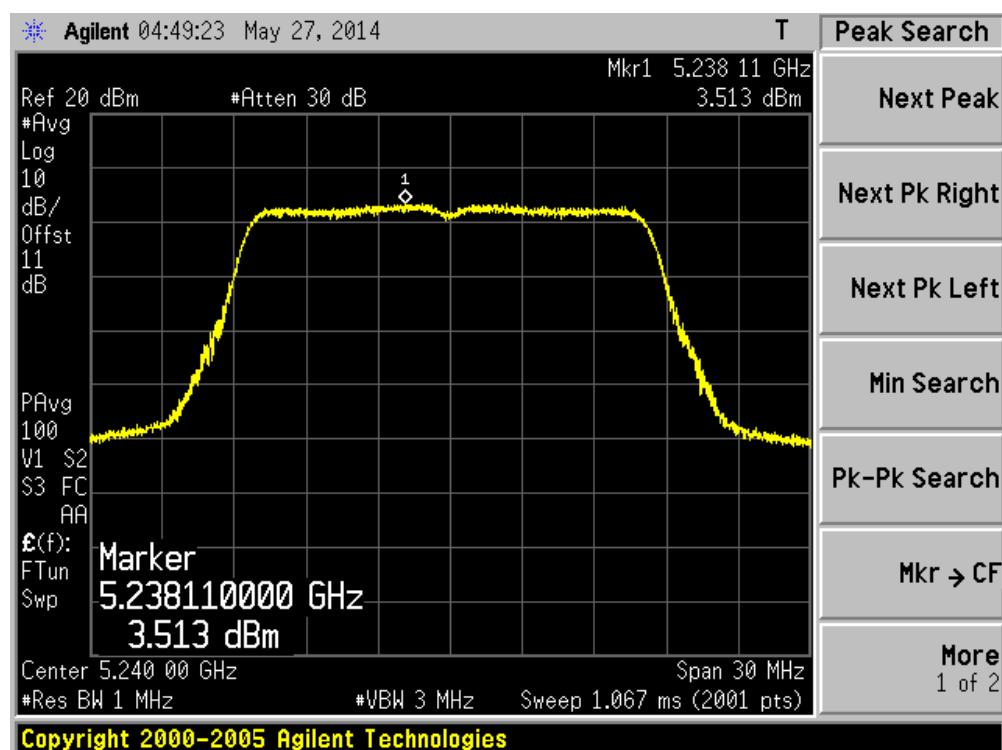
### Channel 36 (5180MHz)



## Channel 44 (5220MHz)



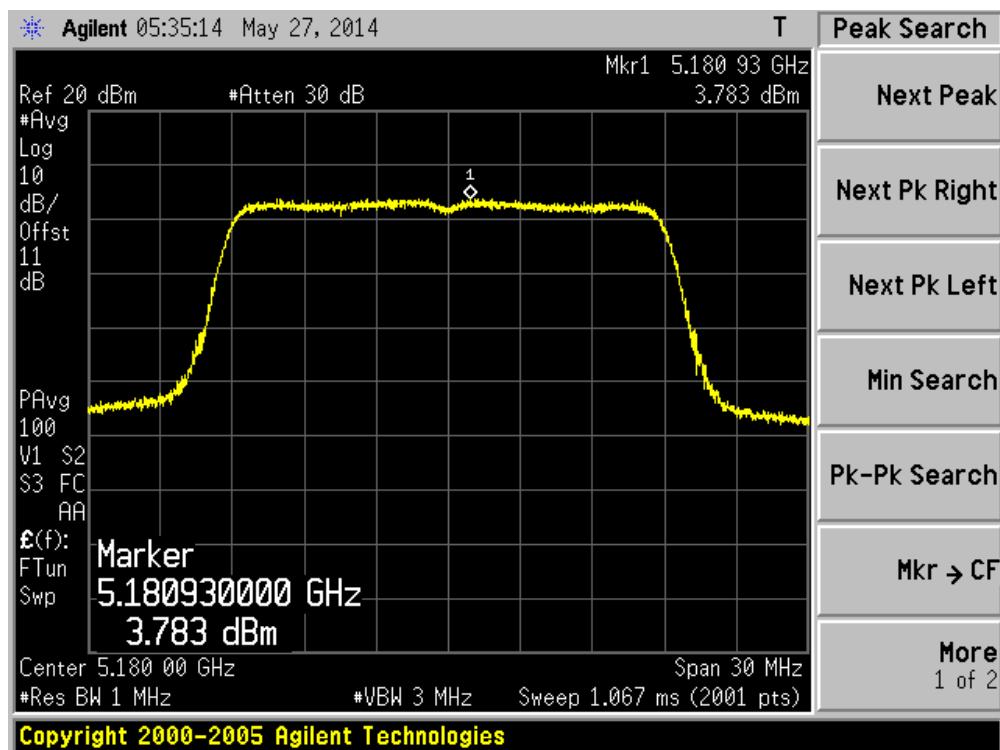
## Channel 48 (5240MHz)



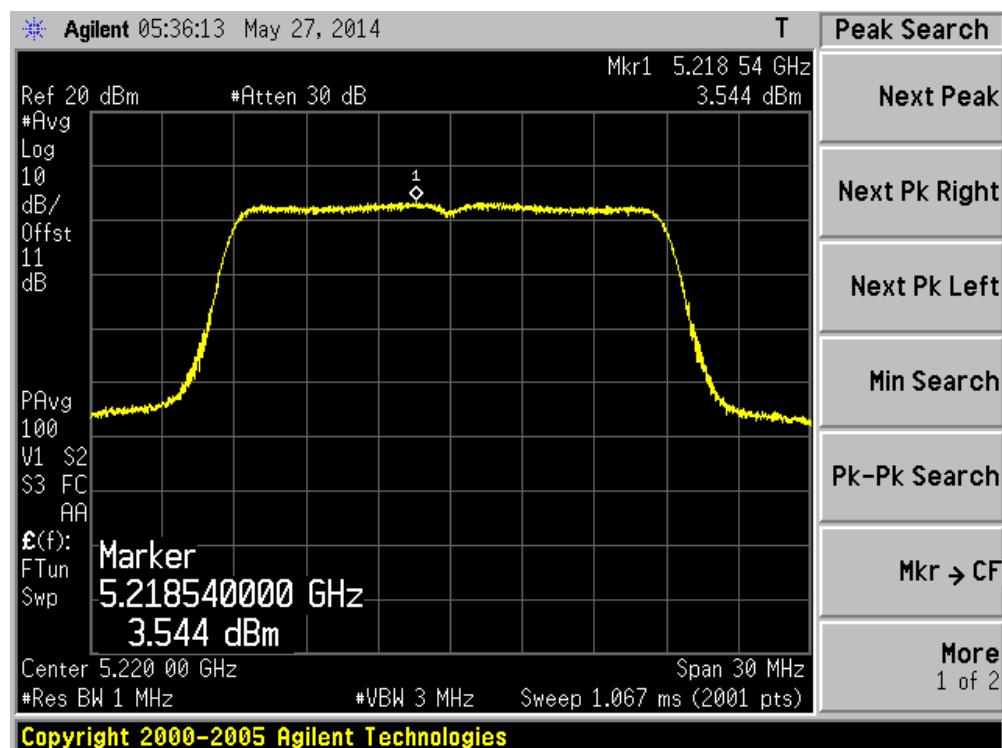
Product	:	Mi Wi-Fi
Test Item	:	Peak Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 2: Transmit by 802.11n(20MHz) (Ant 1)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm/MHz)		Total PPSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Ant 1	Ant 2			
36	5180	3.78	N/A	3.78	4	Pass
44	5220	3.54	N/A	3.54	4	Pass
48	5240	3.35	N/A	3.35	4	Pass

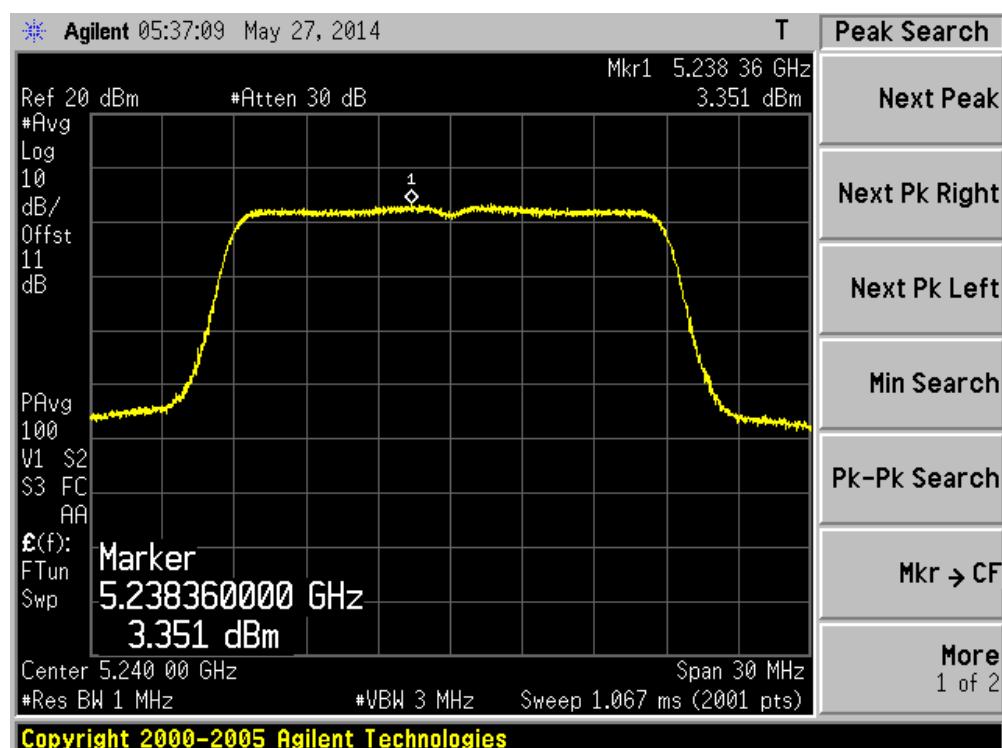
### Channel 36 (5180MHz)



## Channel 44 (5220MHz)



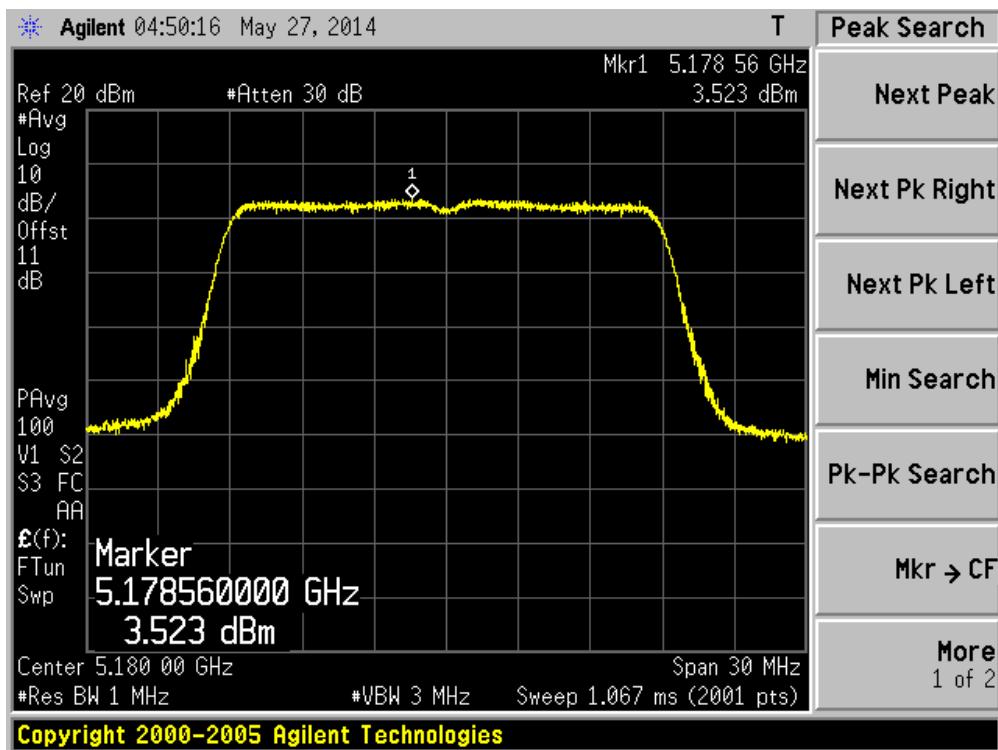
## Channel 48 (5240MHz)



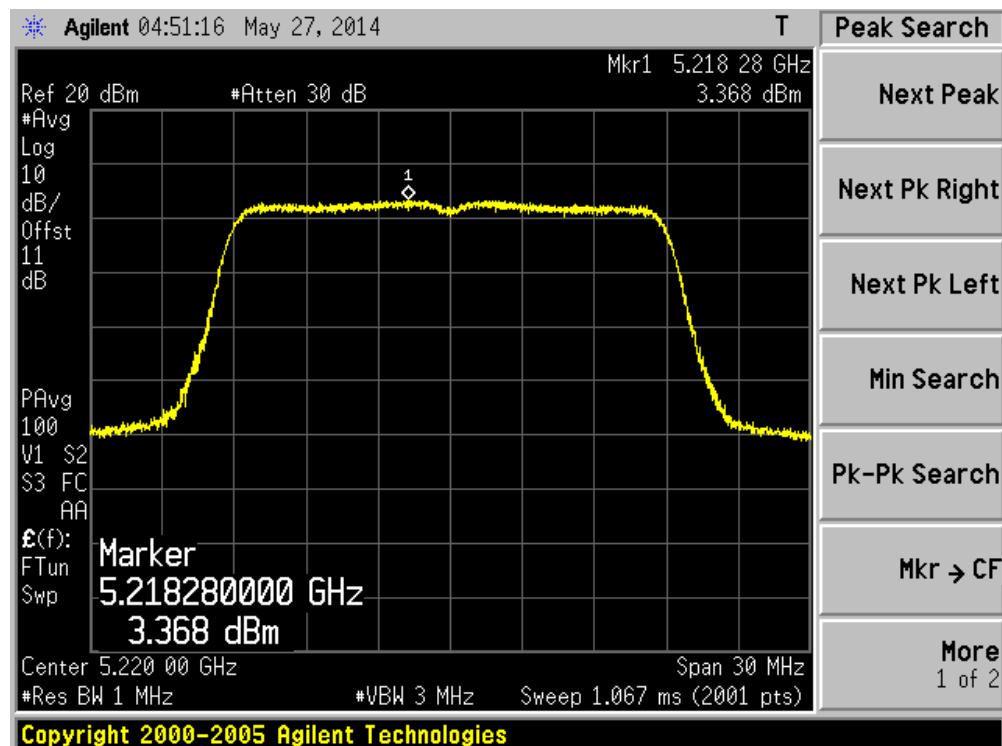
Product	:	Mi Wi-Fi
Test Item	:	Peak Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 2: Transmit by 802.11n(20MHz) (Ant 2)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm/MHz)		Total PPSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Ant 1	Ant 2			
36	5180	N/A	3.52	3.52	4	Pass
44	5220	N/A	3.37	3.37	4	Pass
48	5240	N/A	3.92	3.92	4	Pass

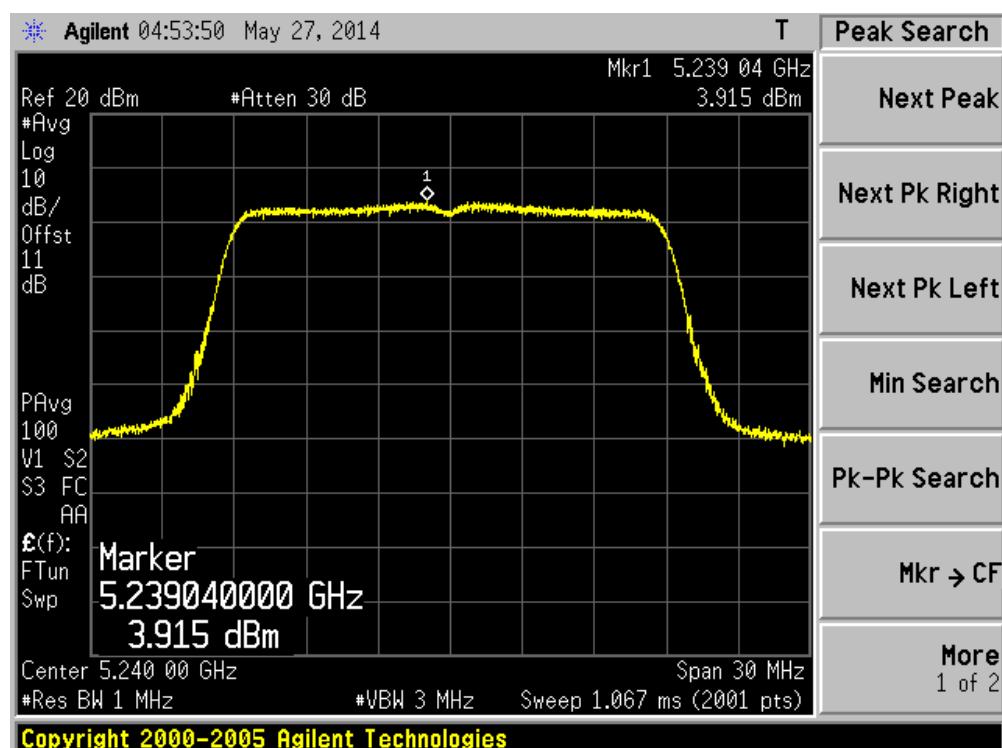
### Channel 36 (5180MHz)



## Channel 44 (5220MHz)



## Channel 48 (5240MHz)

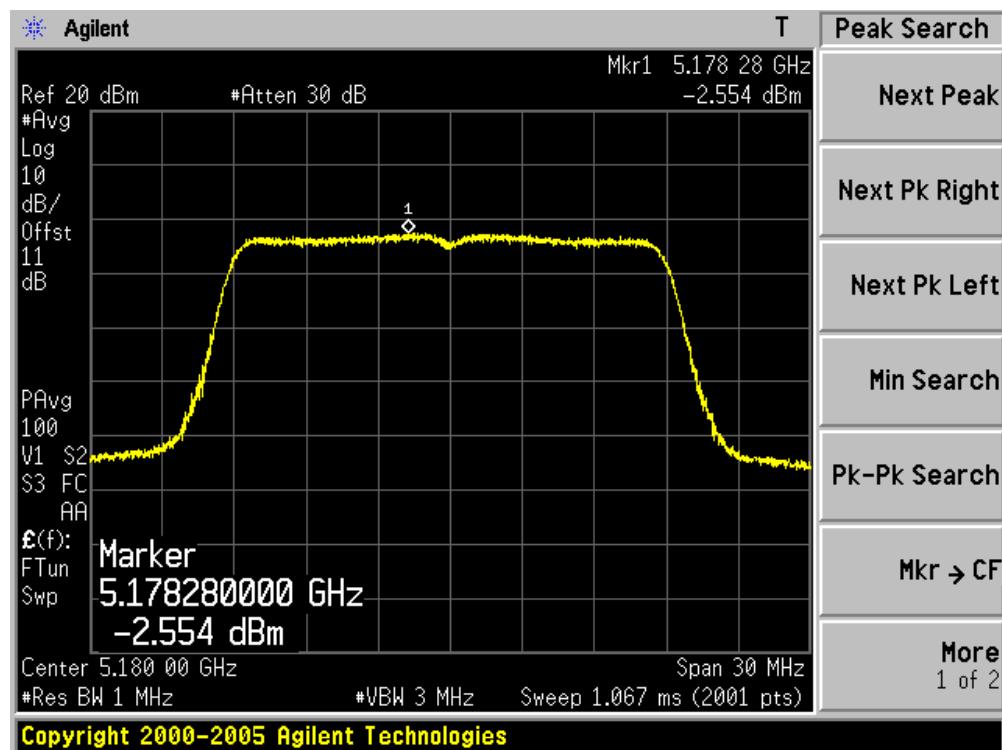


Product	:	Mi Wi-Fi
Test Item	:	Peak Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 2: Transmit by 802.11n(20MHz) (Ant 1+2)

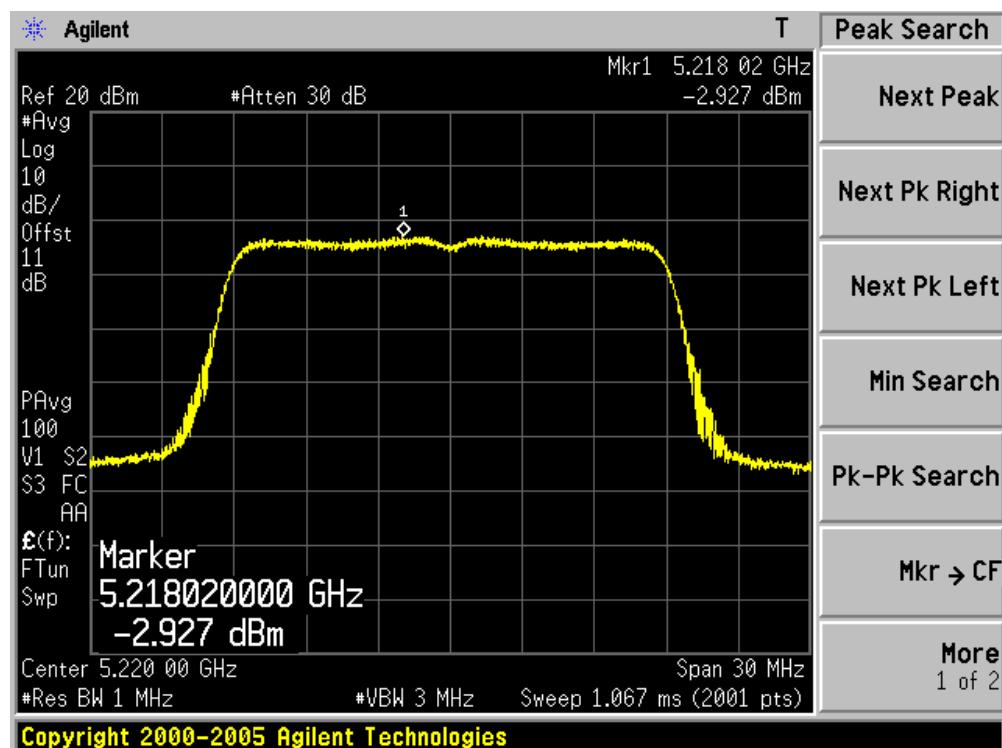
Channel No.	Frequency (MHz)	Measurement PPSD (dBm/MHz)		Total PPSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Ant 1	Ant 2			
36	5180	-2.55	2.44	3.64	3.88	Pass
44	5220	-2.93	2.71	3.76	3.88	Pass
48	5240	-3.00	2.05	3.23	3.88	Pass

Note: Directional gain =  $10 \log[(10^{G1}/20 + 10^{G2}/20)^2/2]$  dBi=6.53; Limit=4.00-(6.12-6)=3.88

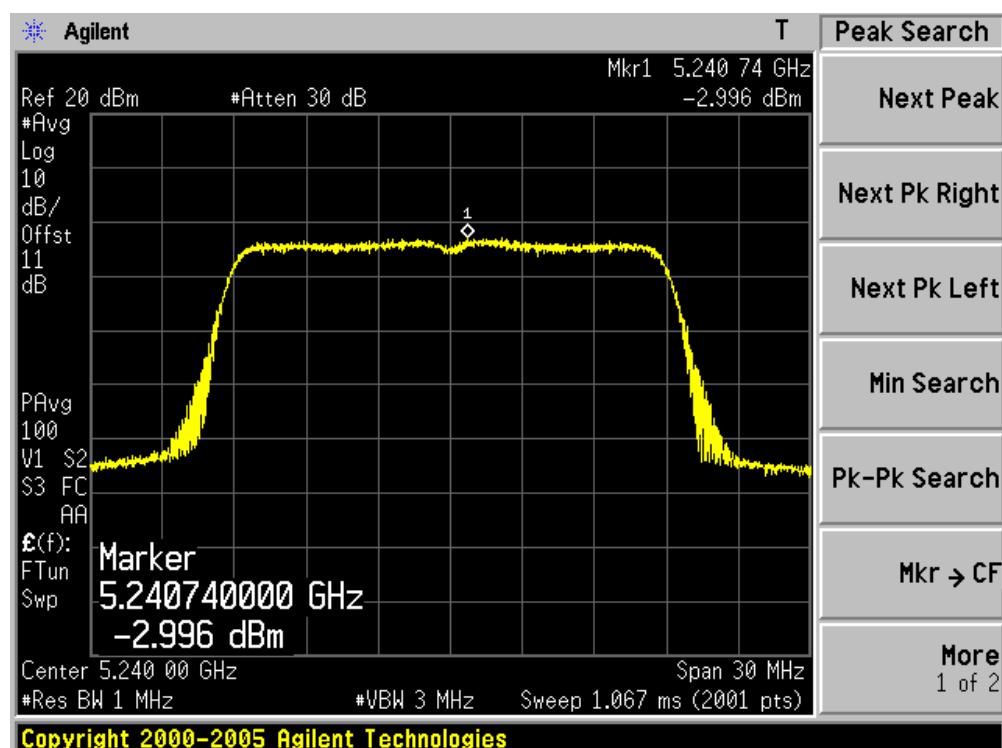
### Channel 36 (5180MHz)-Ant 1

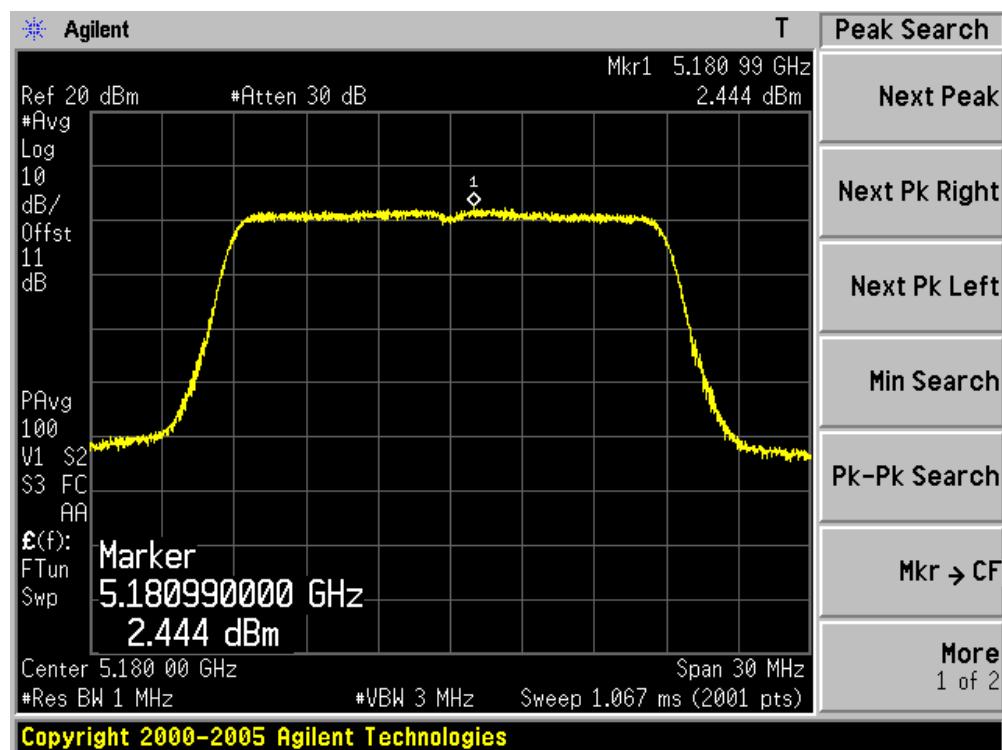


## Channel 44 (5220MHz) -Ant 1

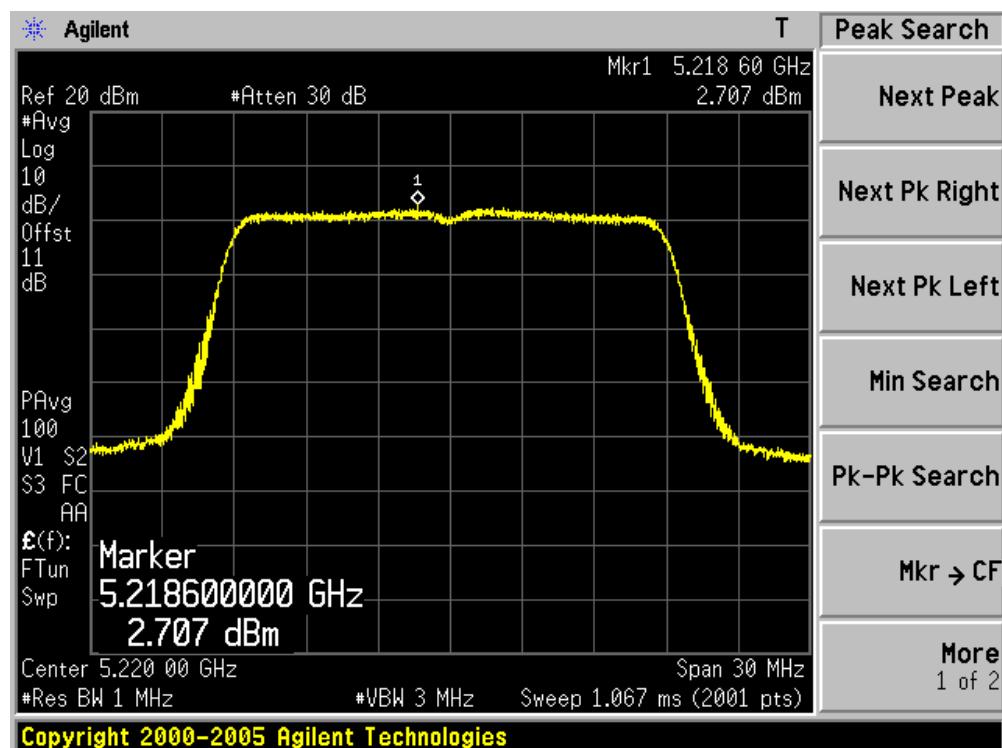


## Channel 48 (5240MHz) -Ant 1

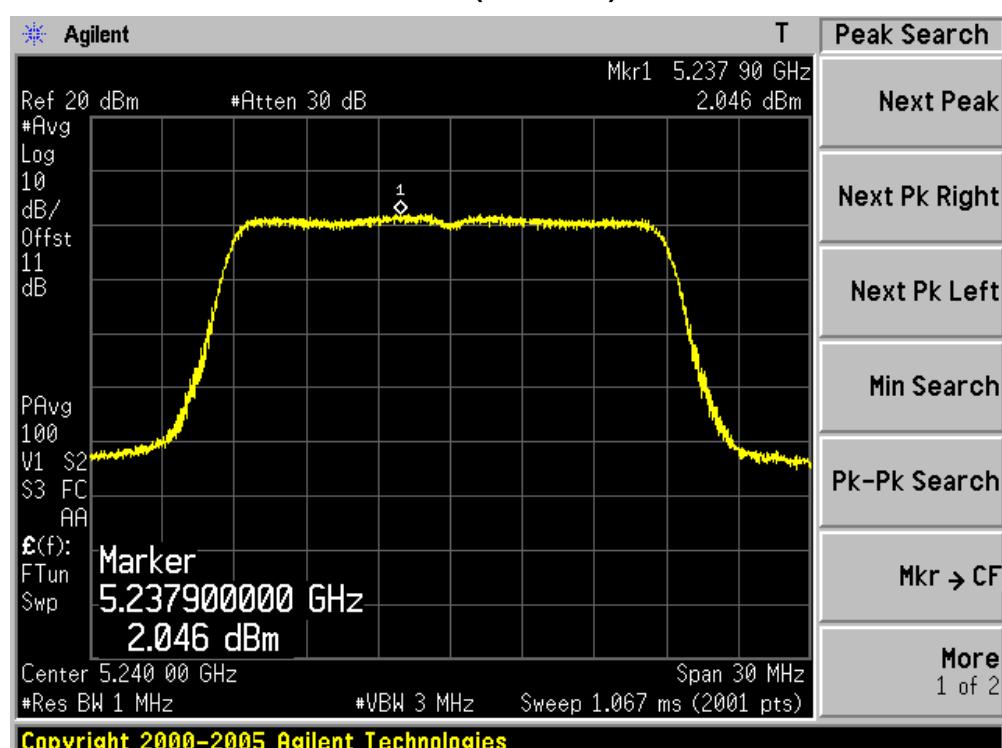


**Channel 36 (5180MHz)-Ant 2**

## Channel 44 (5220MHz) -Ant 2



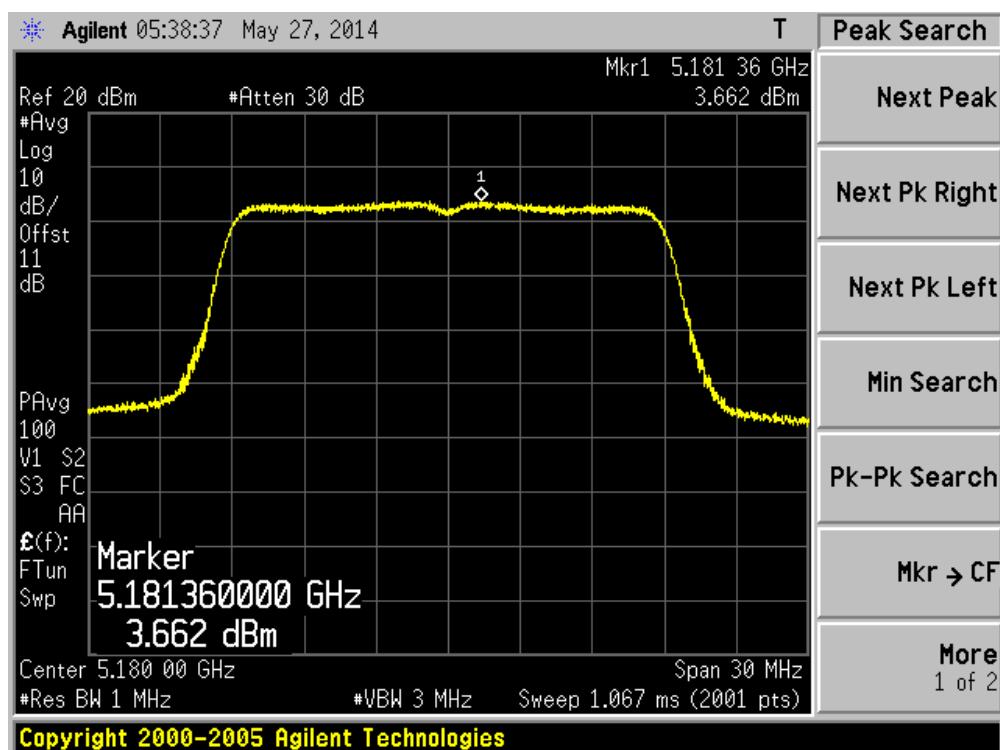
## Channel 48 (5240MHz) -Ant 2



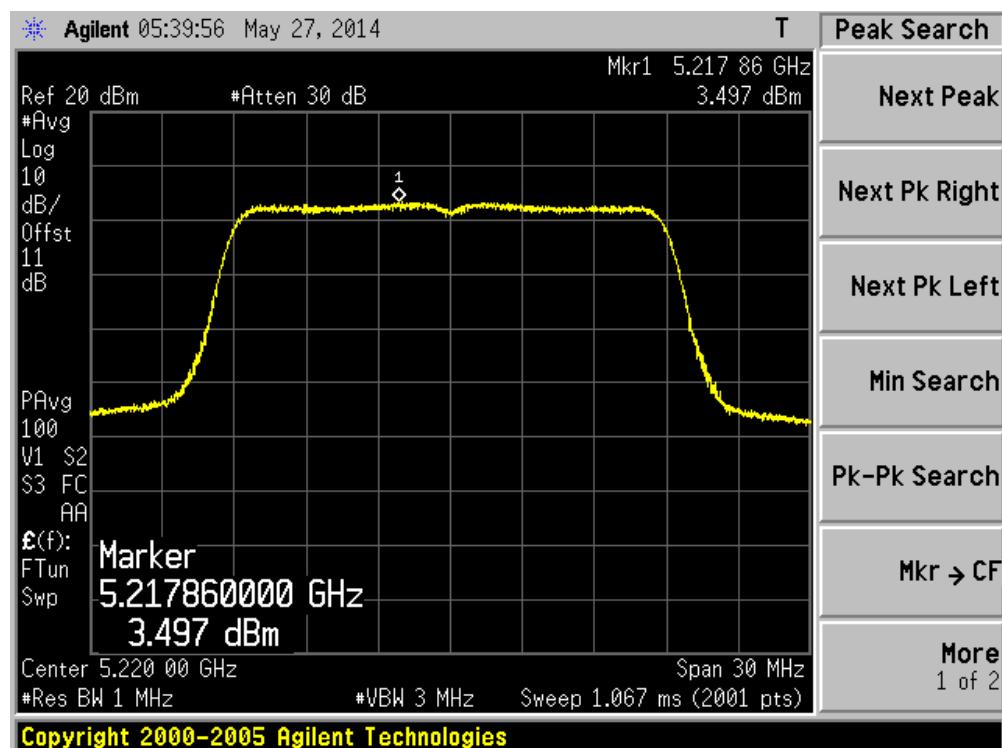
Product	:	Mi Wi-Fi
Test Item	:	Peak Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 3: Transmit by 802.11ac(20MHz) (Ant 1)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm/MHz)		Total PPSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Ant 1	Ant 2			
36	5180	3.66	N/A	3.66	4	Pass
44	5220	3.50	N/A	3.50	4	Pass
48	5240	3.44	N/A	3.44	4	Pass

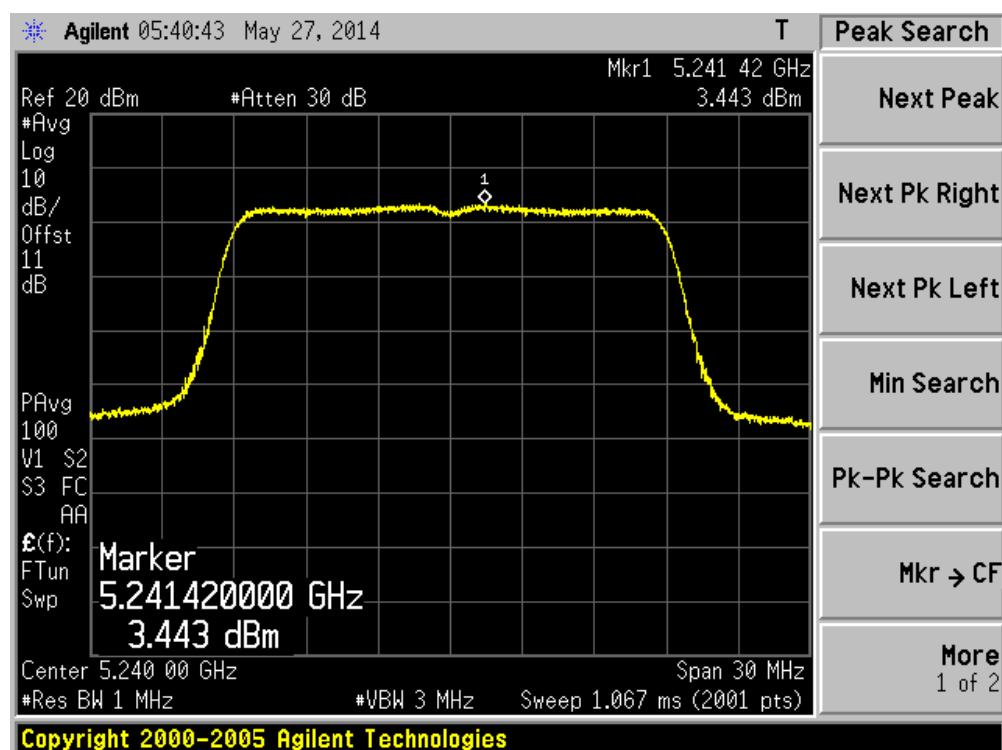
### Channel 36 (5180MHz)



## Channel 44 (5220MHz)

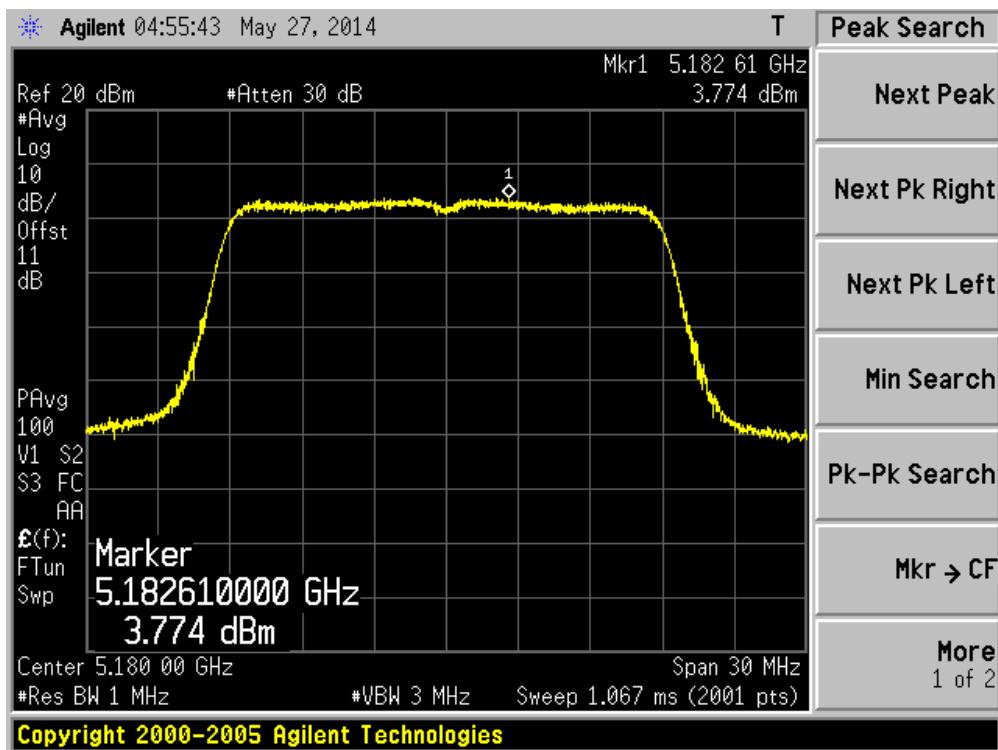


## Channel 48 (5240MHz)

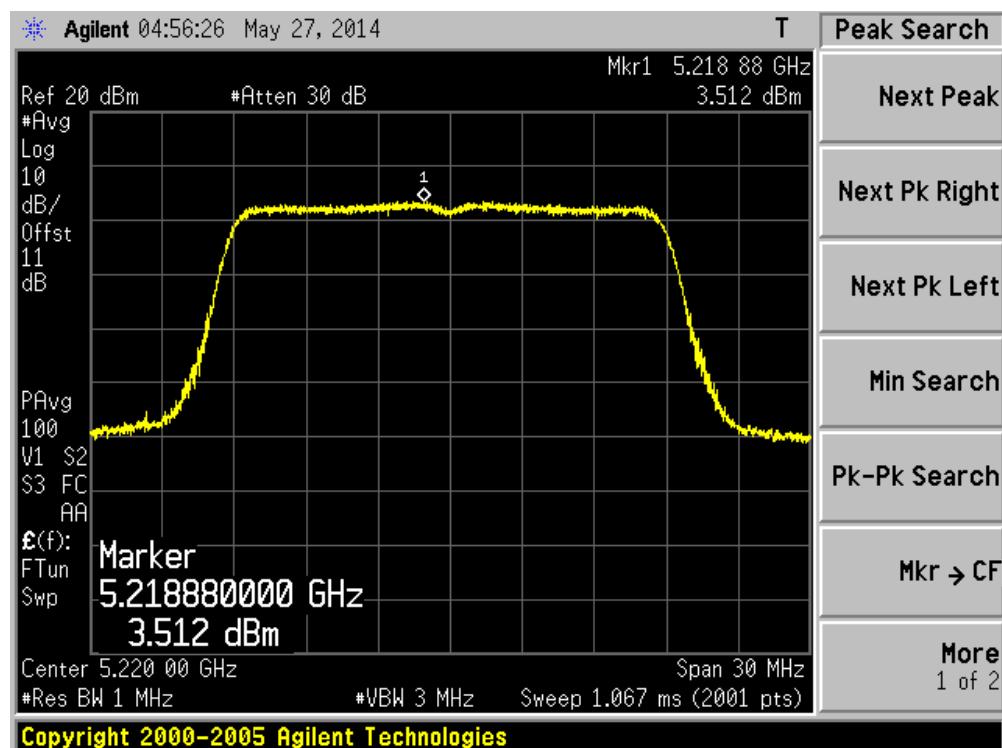


Product	:	Mi Wi-Fi
Test Item	:	Peak Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 3: Transmit by 802.11ac(20MHz) (Ant 2)

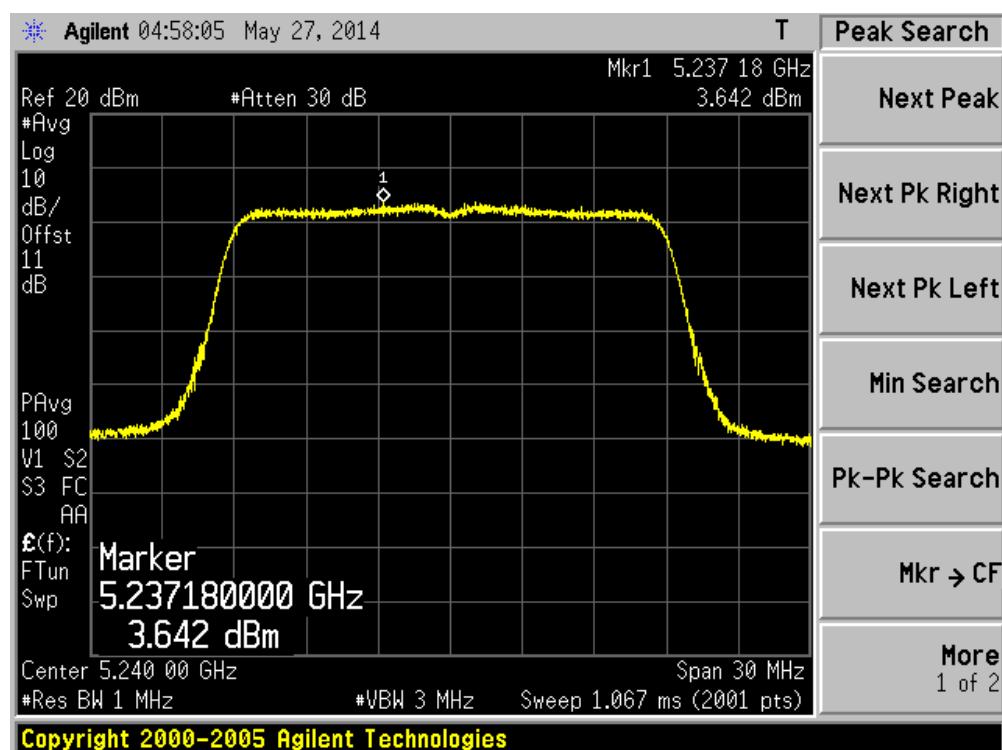
Channel No.	Frequency (MHz)	Measurement PPSD (dBm/MHz)		Total PPSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Ant 1	Ant 2			
36	5180	N/A	3.77	3.77	4	Pass
44	5220	N/A	3.51	3.51	4	Pass
48	5240	N/A	3.64	3.64	4	Pass

**Channel 36 (5180MHz)**

## Channel 44 (5220MHz)



## Channel 48 (5240MHz)

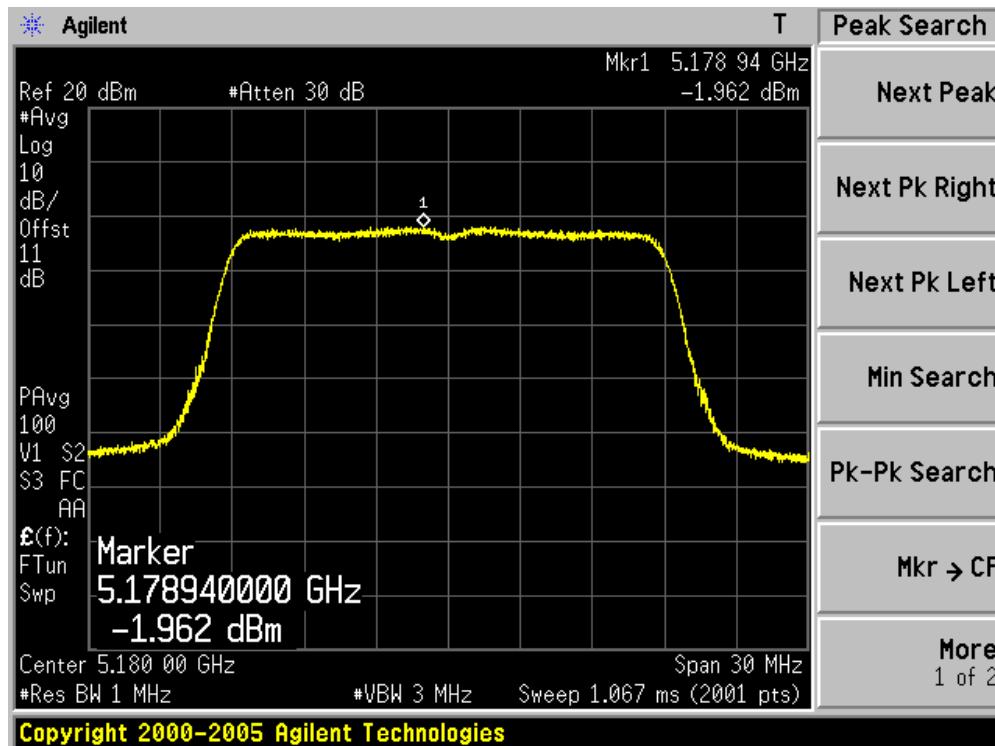


Product	:	Mi Wi-Fi
Test Item	:	Peak Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 3: Transmit by 802.11ac(20MHz) (Ant 1+2)

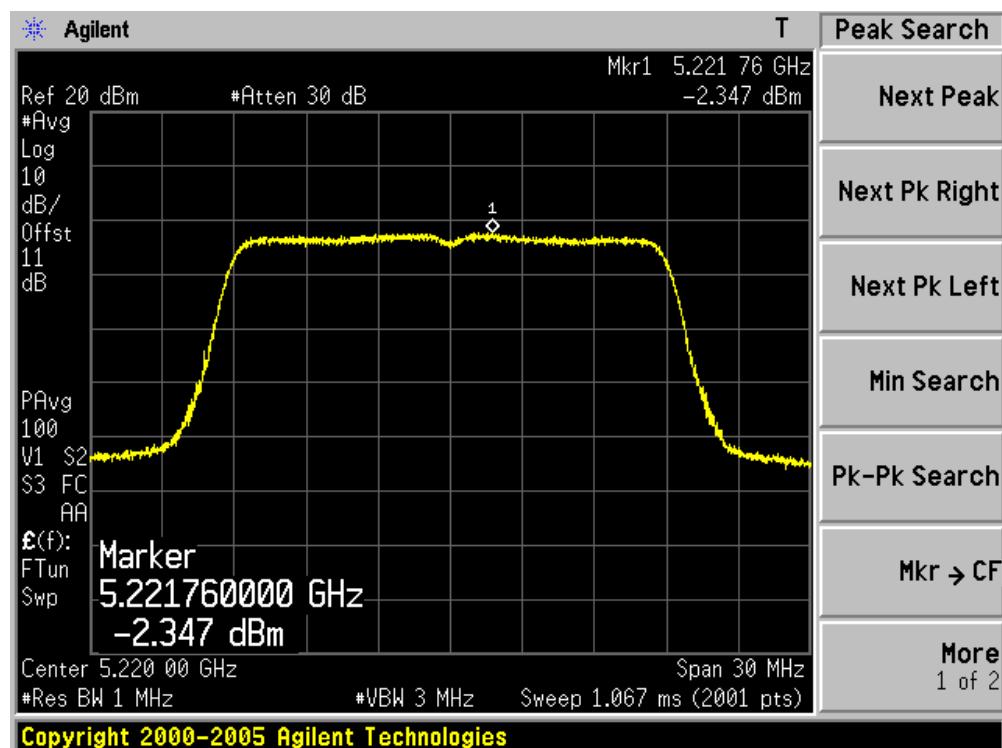
Channel No.	Frequency (MHz)	Measurement PPSD (dBm/MHz)		Total PPSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Ant 1	Ant 2			
36	5180	-1.96	2.52	3.84	3.88	Pass
44	5220	-2.35	2.63	3.83	3.88	Pass
48	5240	-2.43	2.66	3.83	3.88	Pass

Note:Directional gain =  $10 \log[(10^{G1}/20 + 10^{G2}/20)^2/2]$  dBi=6.53;Limit=4.00-(6.12-6)=3.88

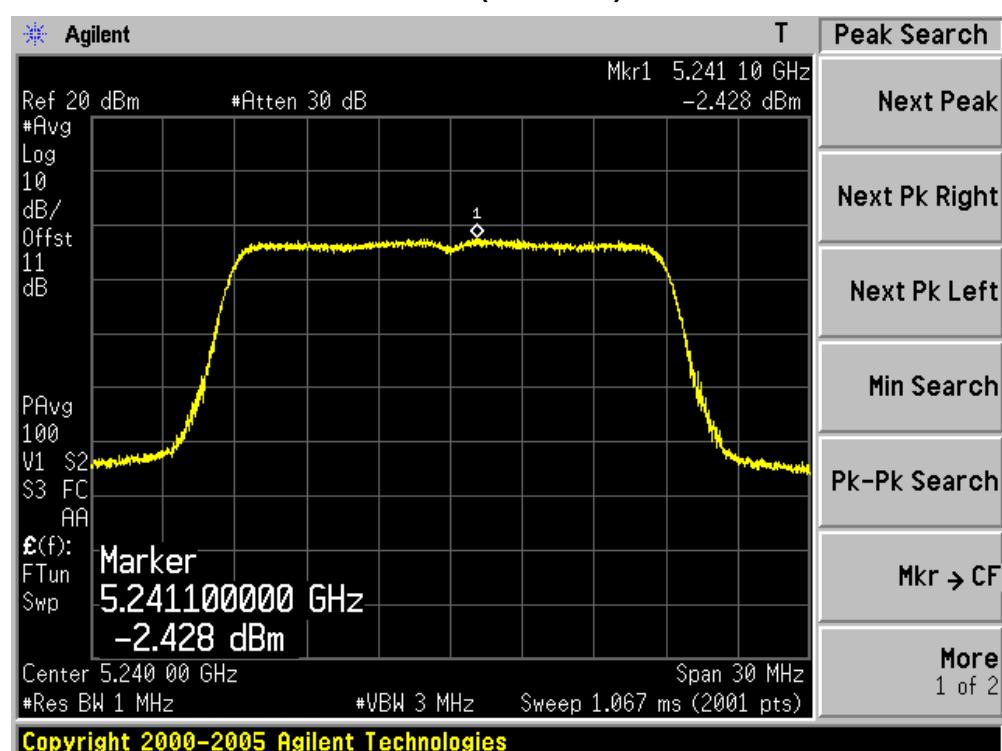
### Channel 36 (5180MHz) Ant 1

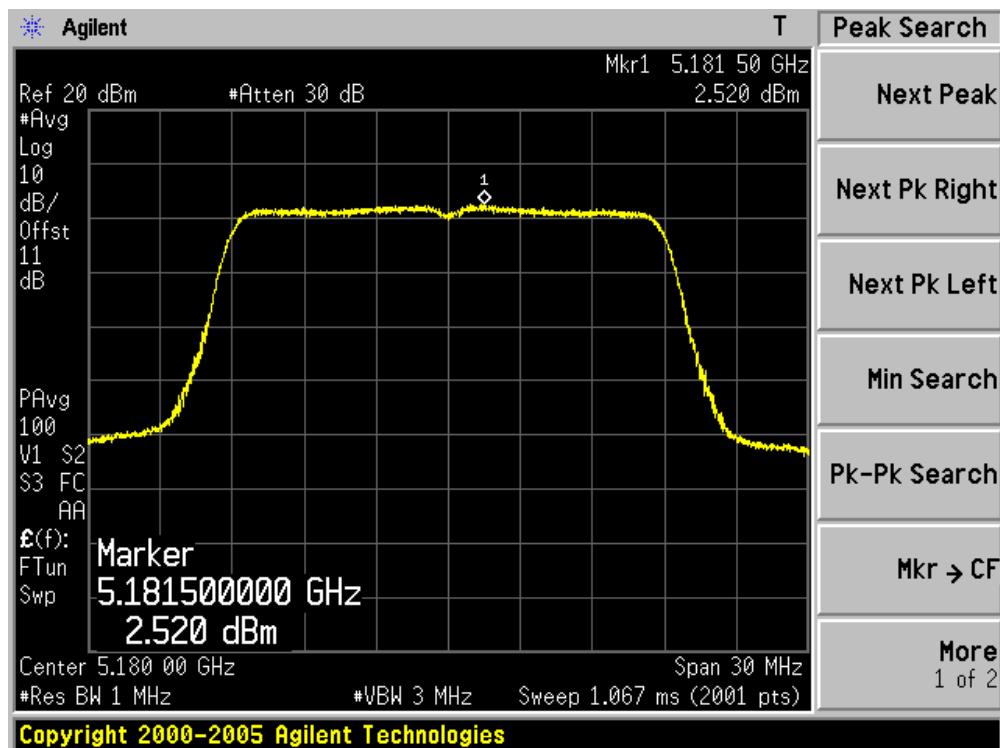


## Channel 44 (5220MHz) Ant 1

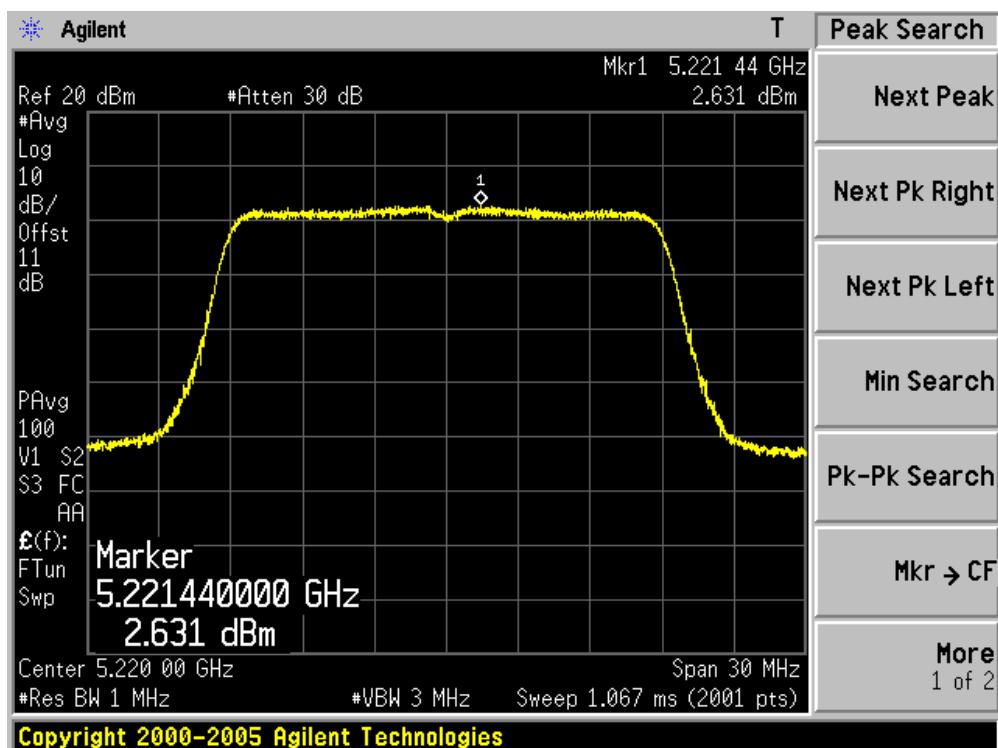


## Channel 48 (5240MHz) Ant 1

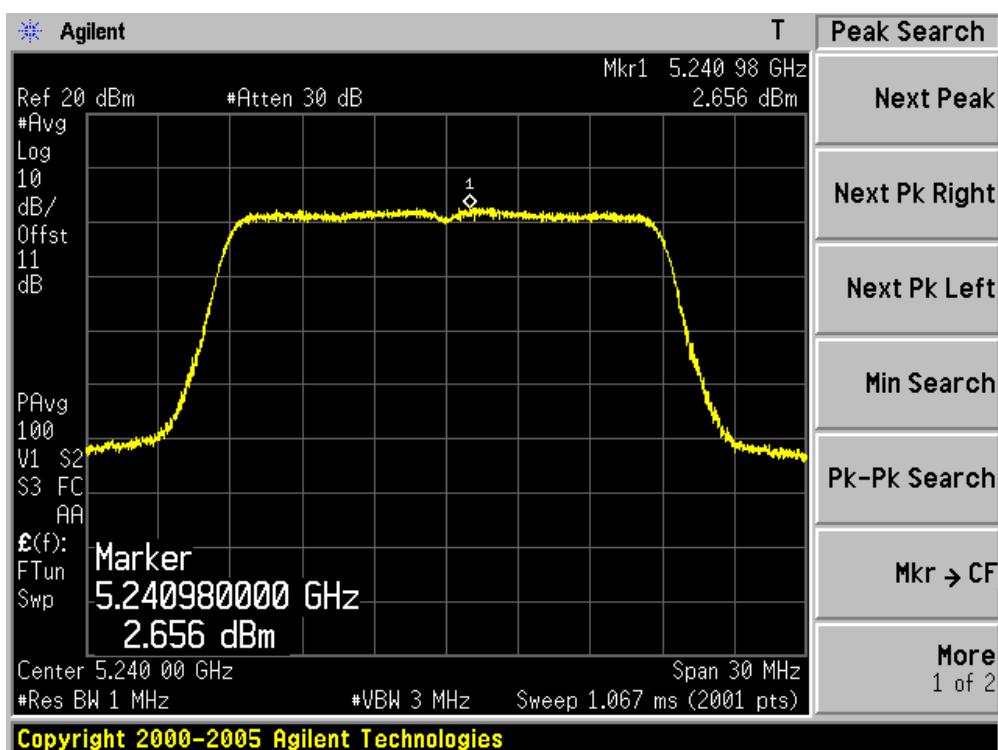


**Channel 36 (5180MHz) Ant 2**

## Channel 44 (5220MHz) Ant 2

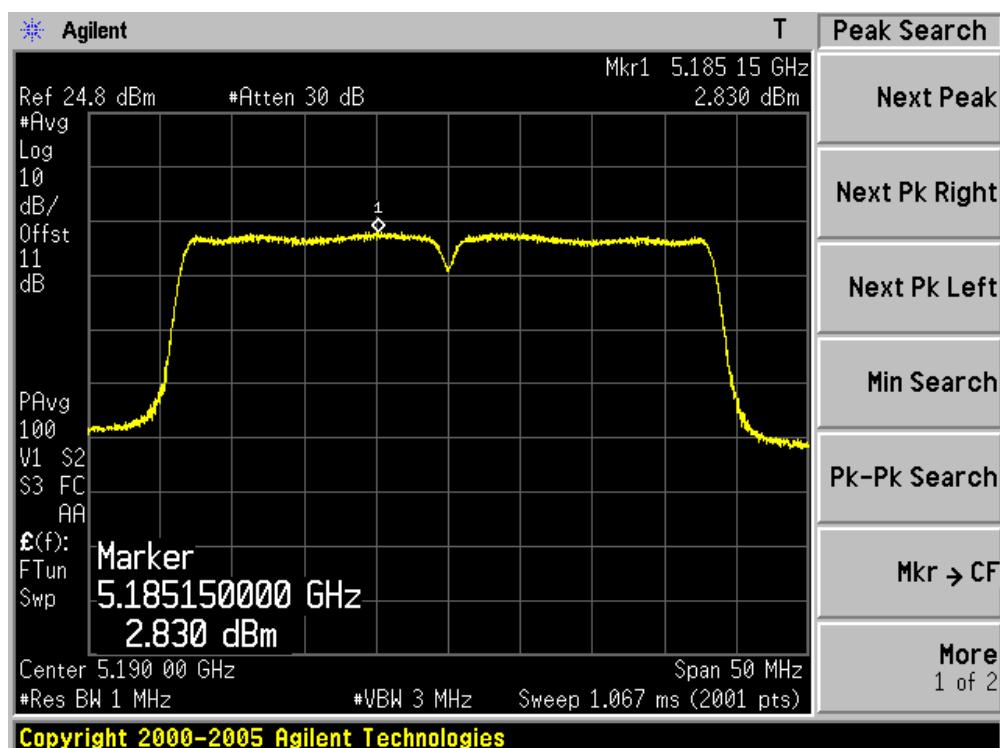


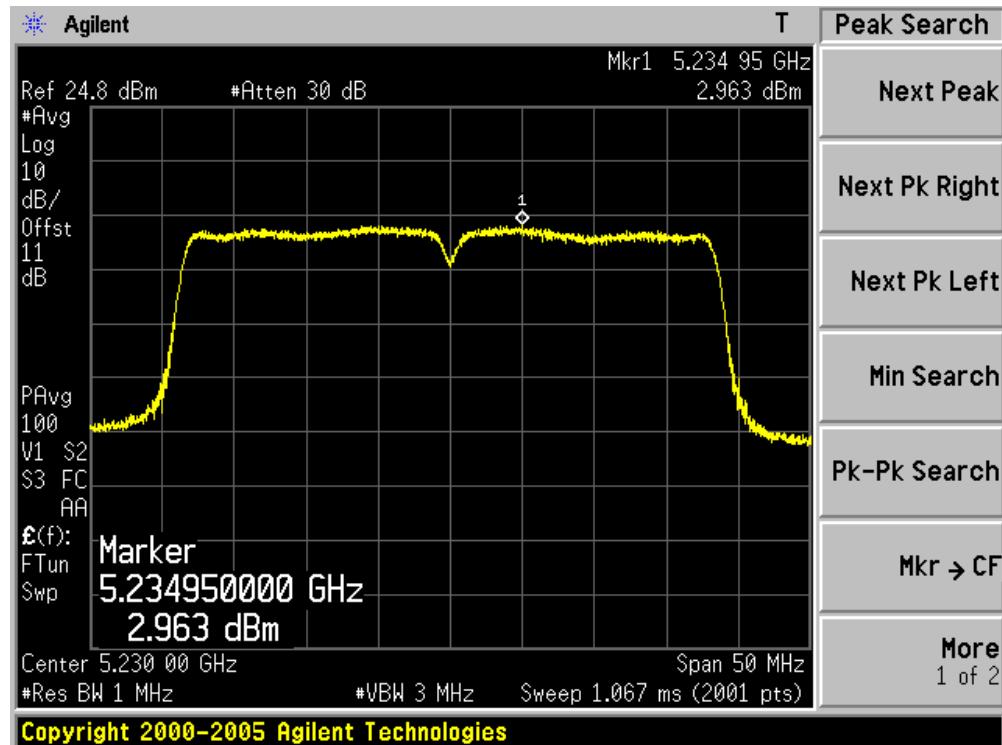
## Channel 48 (5240MHz) Ant 2



Product	:	Mi Wi-Fi
Test Item	:	Peak Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 4: Transmit by 802.11n(40MHz) (Ant 1)

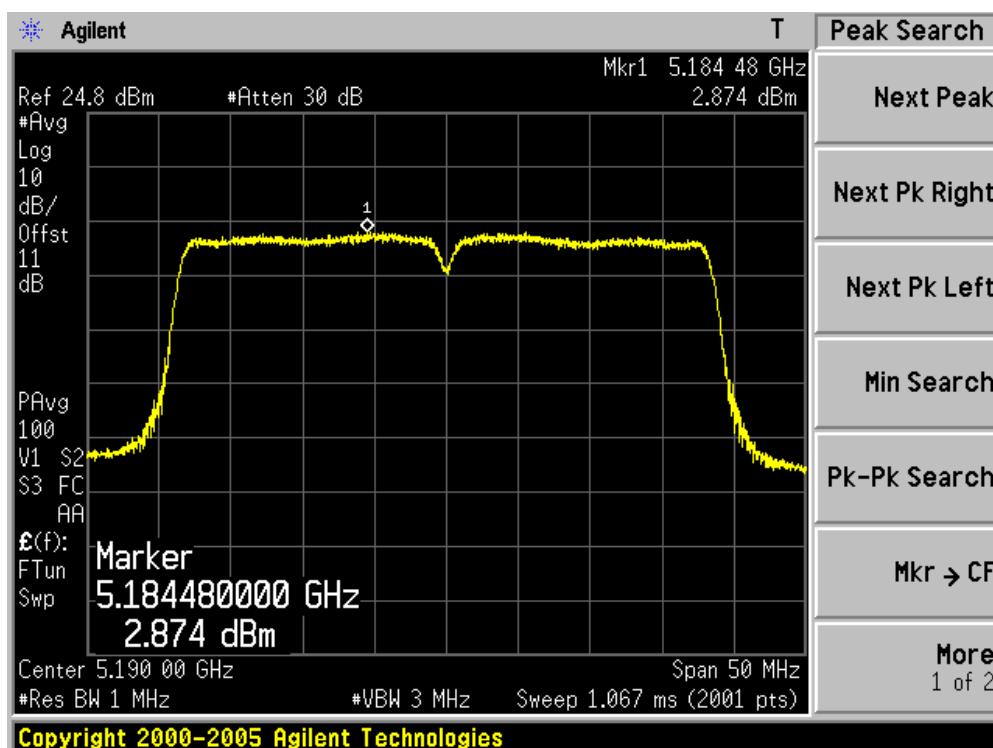
Channel No.	Frequency (MHz)	Measurement PPSD (dBm/MHz)		Total PPSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Ant 1	Ant 2			
38	5190	2.83	N/A	2.83	4	Pass
46	5230	2.96	N/A	2.96	4	Pass

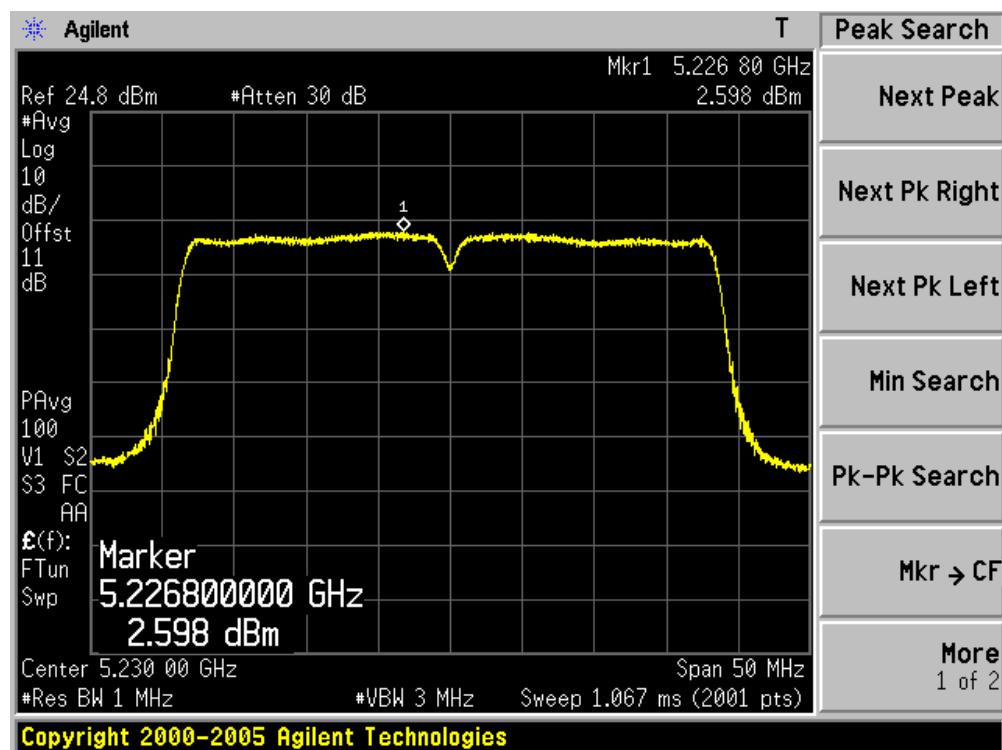
**Channel 38 (5190MHz)**

**Channel 46 (5230MHz)**

Product	:	Mi Wi-Fi
Test Item	:	Peak Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 4: Transmit by 802.11n(40MHz) (Ant 2)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm/MHz)		Total PPSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Ant 1	Ant 2			
38	5190	N/A	2.87	2.87	4	Pass
46	5230	N/A	2.60	2.60	4	Pass

**Channel 38 (5190MHz)**

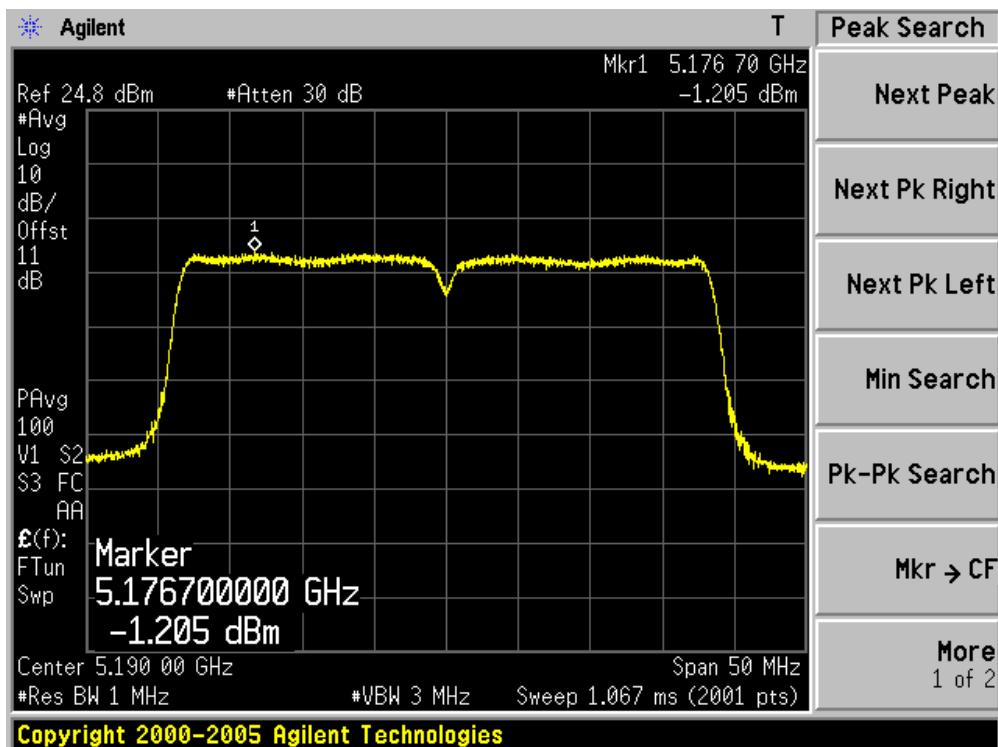
**Channel 46 (5230MHz)**

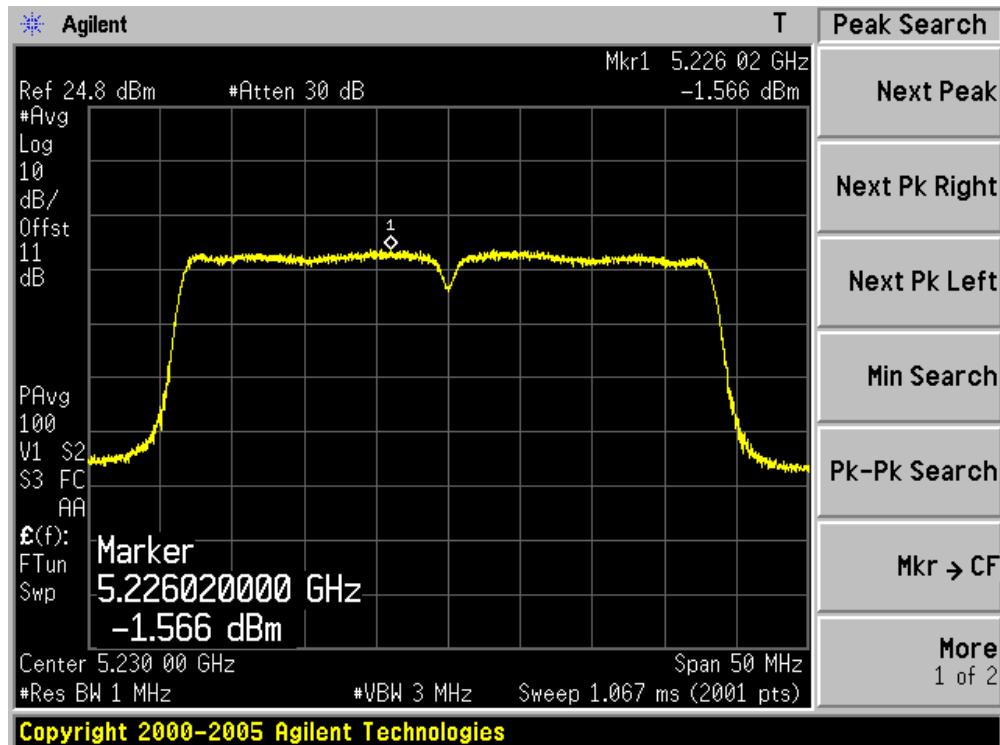
Product	:	Mi Wi-Fi
Test Item	:	Peak Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 4: Transmit by 802.11n(40MHz) (Ant 1+2)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm/MHz)		Total PPSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Ant 1	Ant 2			
38	5190	-1.21	1.08	3.09	3.88	Pass
46	5230	-1.57	1.06	2.95	3.88	Pass

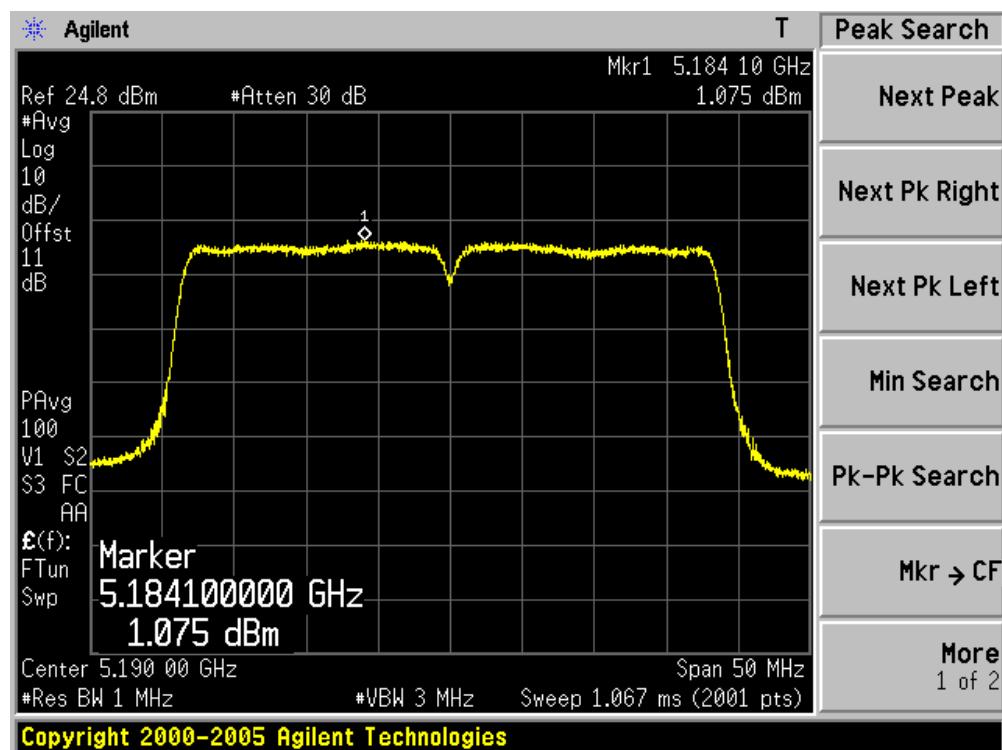
Note: Directional gain =  $10 \log[(10^{G1}/20 + 10^{G2}/20)^2/2]$  dBi=6.53; Limit=4.00-(6.12-6)=3.88

### Channel 38 (5190MHz) Ant 1

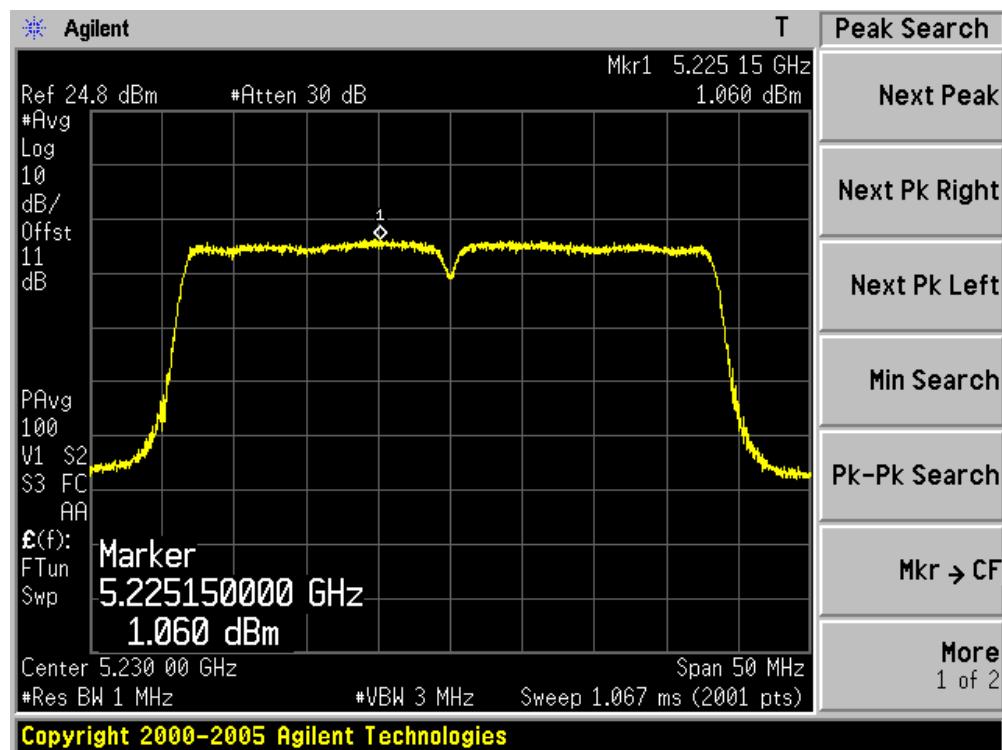


**Channel 46 (5230MHz) Ant 1**

## Channel 38 (5190MHz) Ant 2

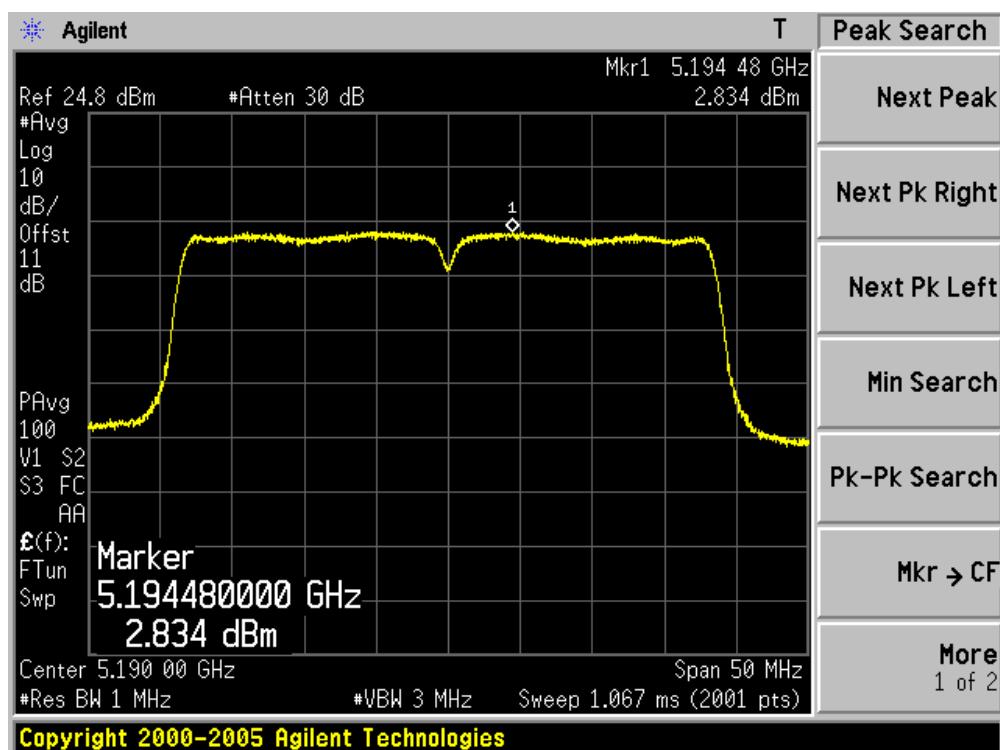


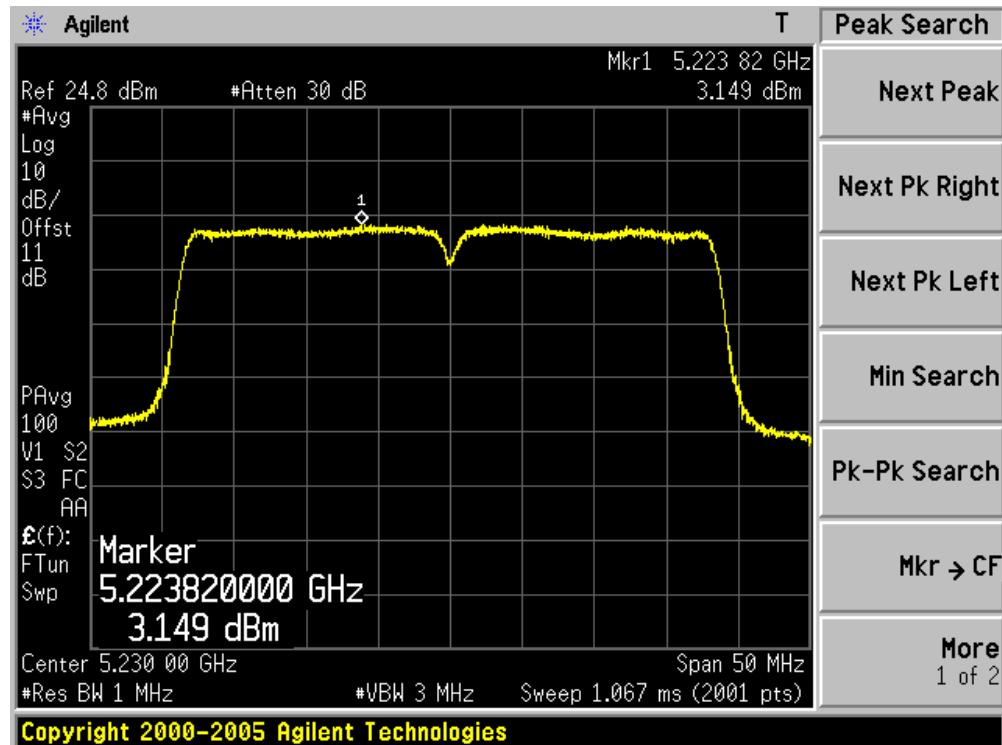
## Channel 46 (5230MHz) Ant 2



Product	:	Mi Wi-Fi
Test Item	:	Peak Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 5: Transmit by 802.11ac(40MHz) (Ant 1)

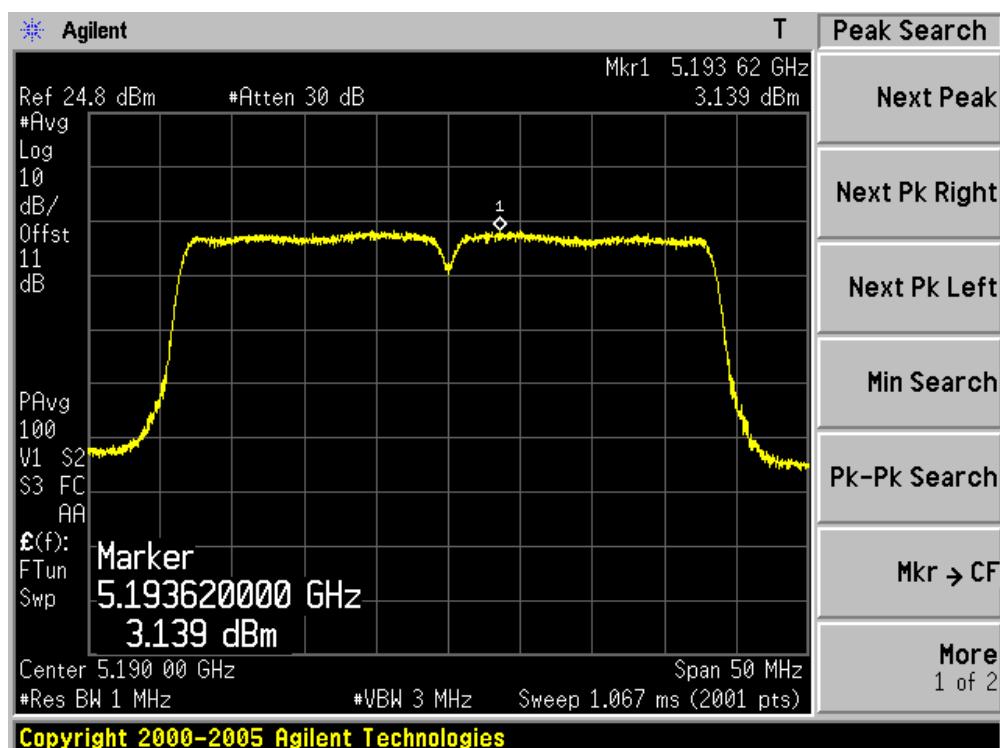
Channel No.	Frequency (MHz)	Measurement PPSD (dBm/MHz)		Total PPSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Ant 1	Ant 2			
38	5190	2.83	N/A	2.83	4	Pass
46	5230	3.15	N/A	3.15	4	Pass

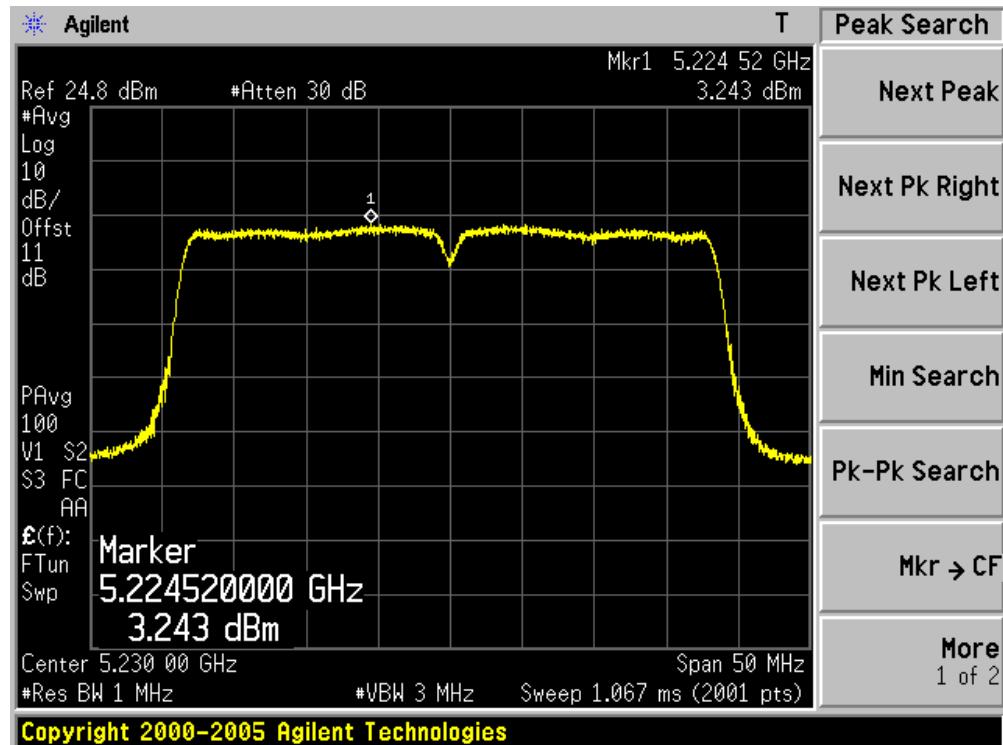
**Channel 38 (5190MHz)**

**Channel 46 (5230MHz)**

Product	:	Mi Wi-Fi
Test Item	:	Peak Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 5: Transmit by 802.11ac(40MHz) (Ant 2)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm/MHz)		Total PPSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Ant 1	Ant 2			
38	5190	N/A	3.14	3.14	4	Pass
46	5230	N/A	3.24	3.24	4	Pass

**Channel 38 (5190MHz)**

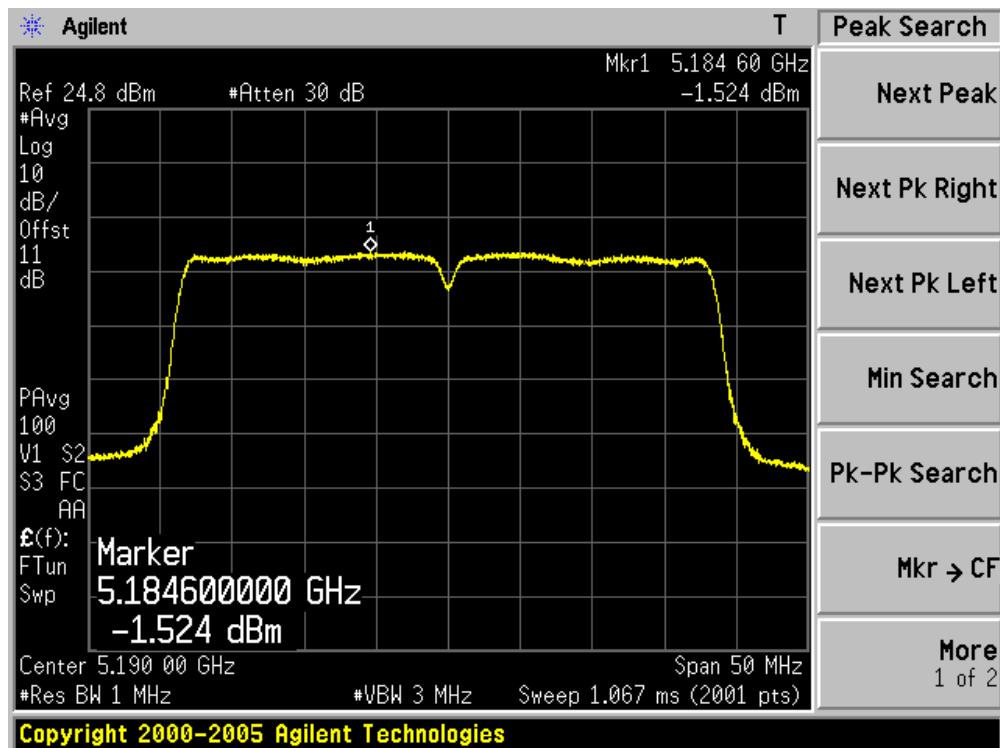
**Channel 46 (5230MHz)**

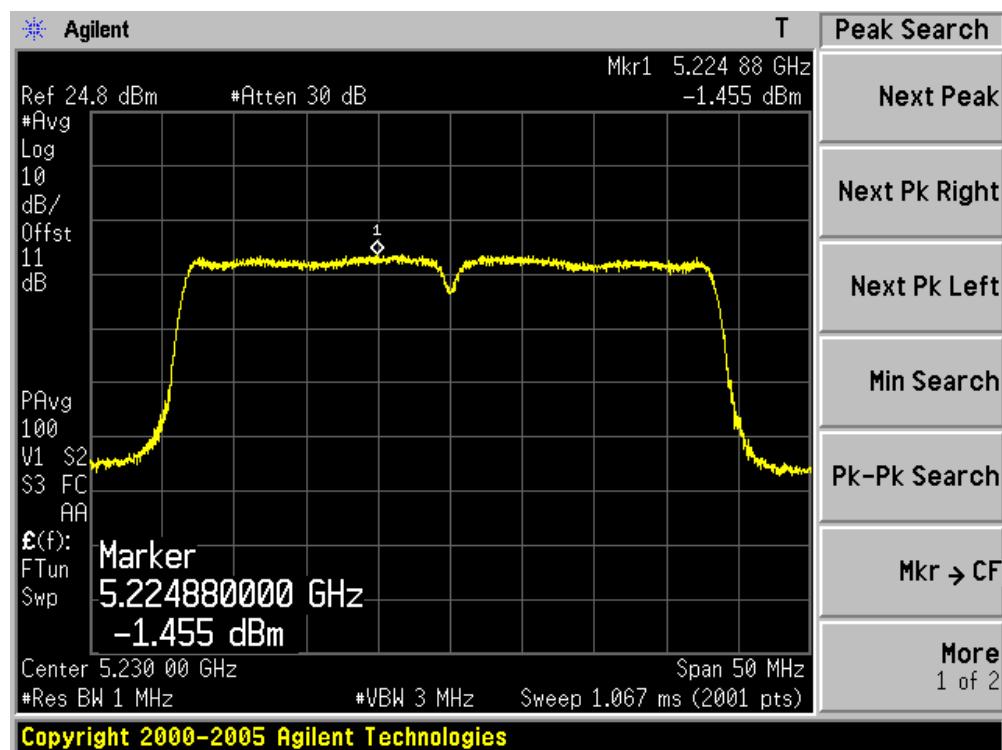
Product	:	Mi Wi-Fi
Test Item	:	Peak Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 5: Transmit by 802.11ac(40MHz) (Ant 1+2)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm/MHz)		Total PPSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Ant 1	Ant 2			
38	5190	-1.52	1.31	3.13	3.88	Pass
46	5230	-1.46	1.40	3.21	3.88	Pass

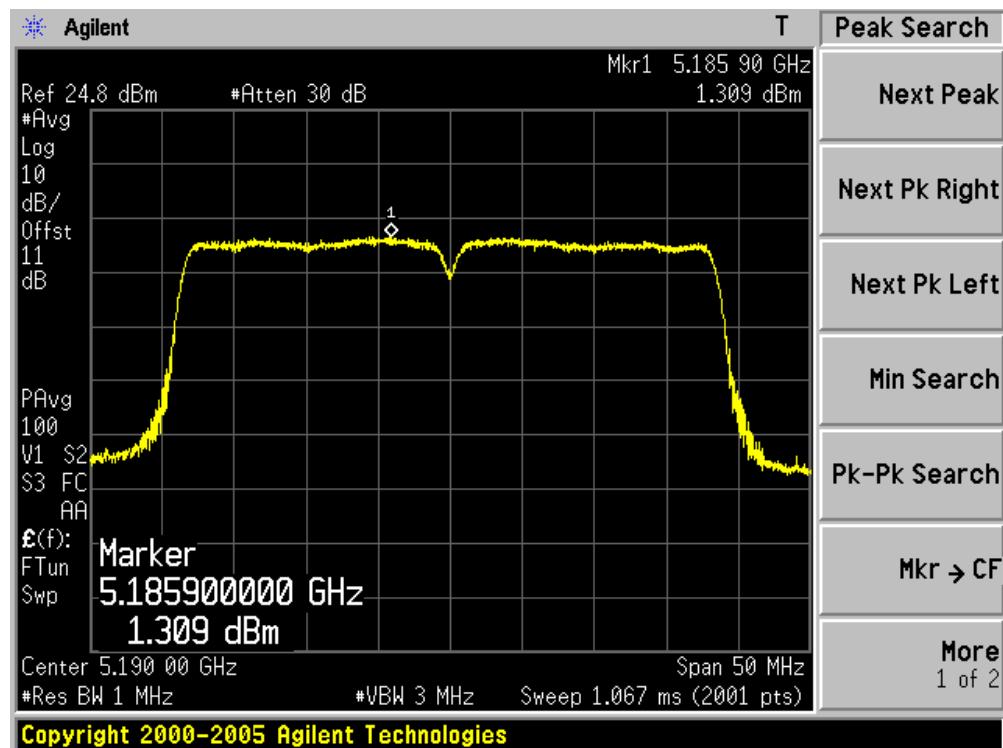
Note: Directional gain =  $10 \log[(10^{G1}/20 + 10^{G2}/20)^2/2]$  dB=6.53; Limit=4.00-(6.12-6)=3.88

### Channel 38 (5190MHz) Ant 1

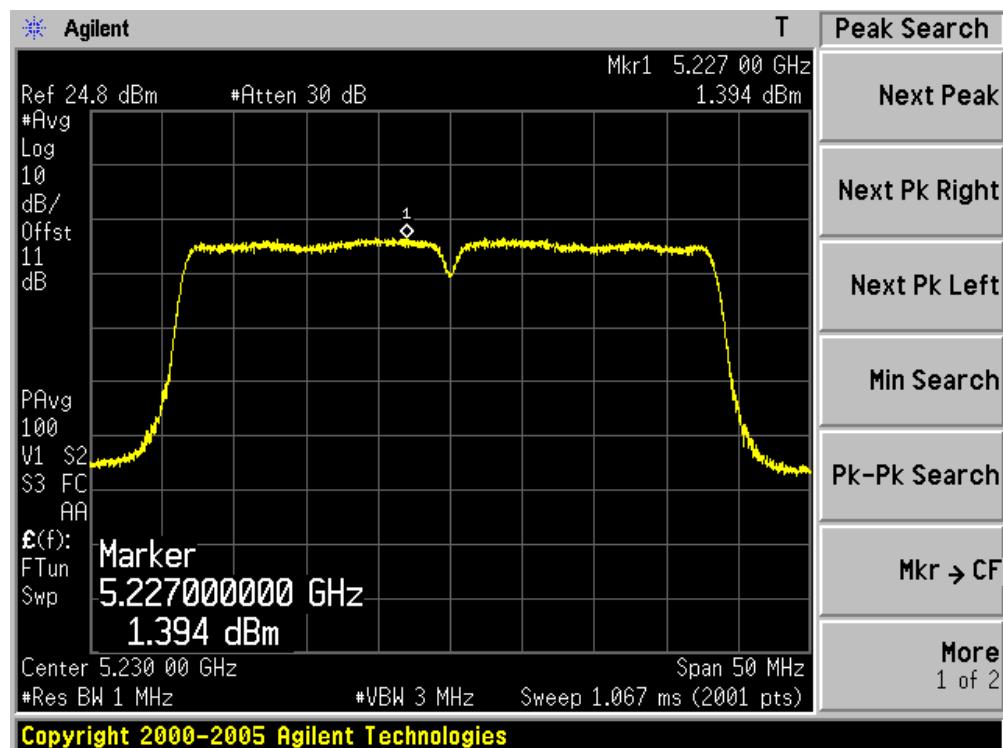


**Channel 46 (5230MHz) Ant 1**

## Channel 38 (5190MHz) Ant 2

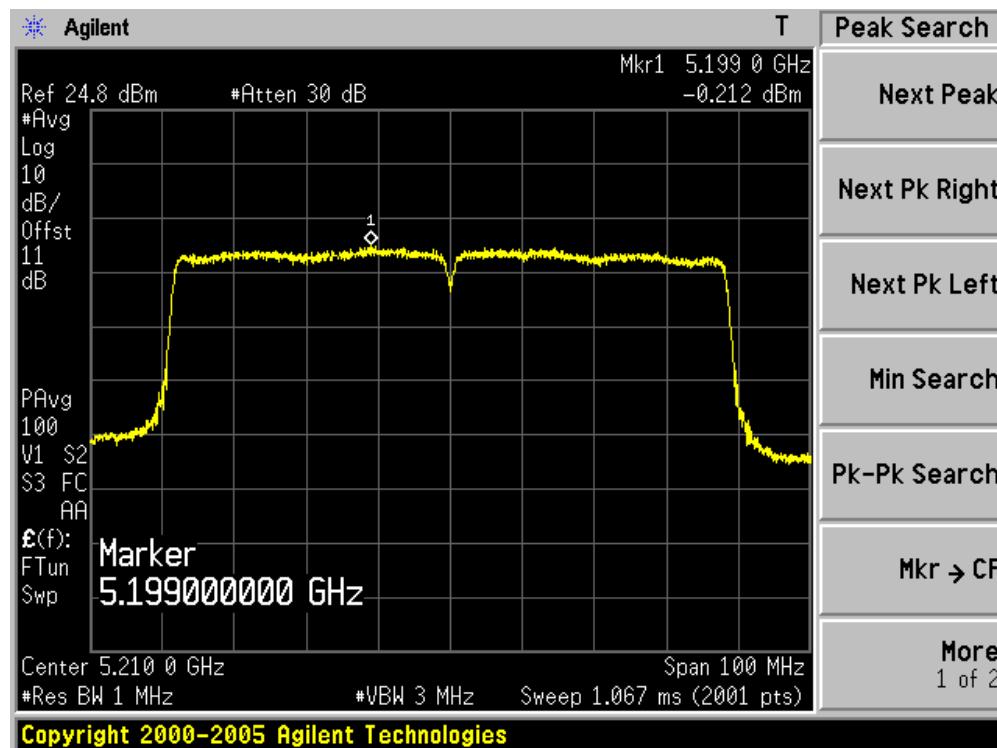


## Channel 46 (5230MHz) Ant 2



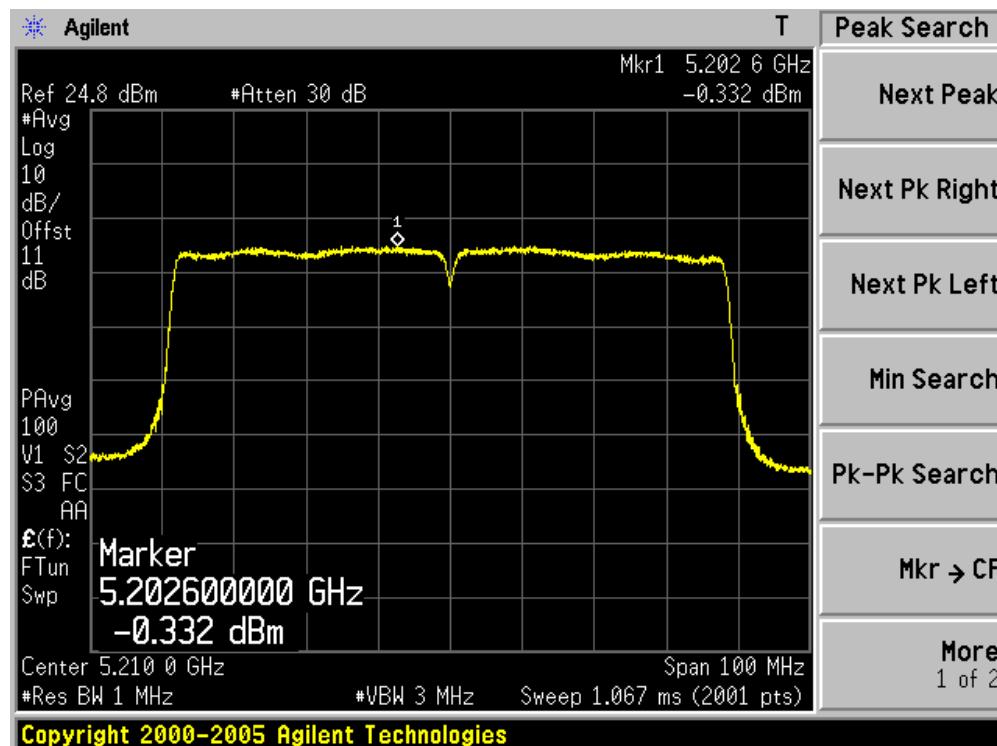
Product	:	Mi Wi-Fi
Test Item	:	Peak Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 6: Transmit by 802.11ac(80MHz) (Ant 1)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm/MHz)		Total PPSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Ant 1	Ant 2			
42	5210	-0.21	N/A	-0.21	4	Pass

**Channel 42 (5210MHz)**

Product	:	Mi Wi-Fi
Test Item	:	Peak Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 6: Transmit by 802.11ac(80MHz) (Ant 2)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm/MHz)		Total PPSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Ant 1	Ant 2			
42	5210	N/A	-0.33	-0.33	4	Pass

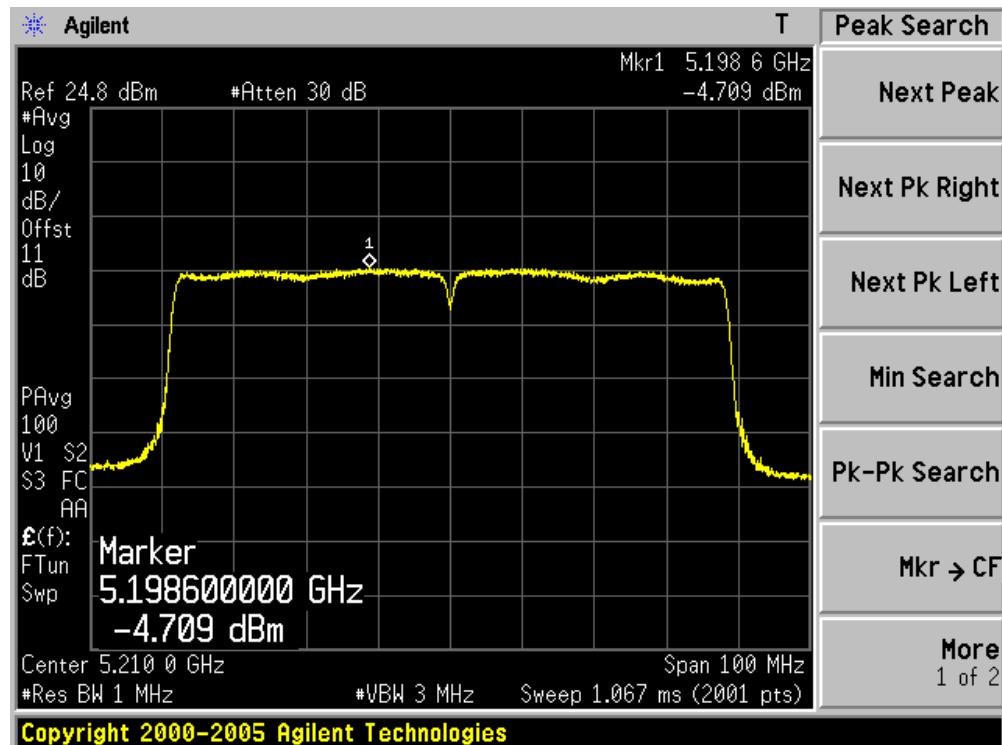
**Channel 42 (5210MHz)**

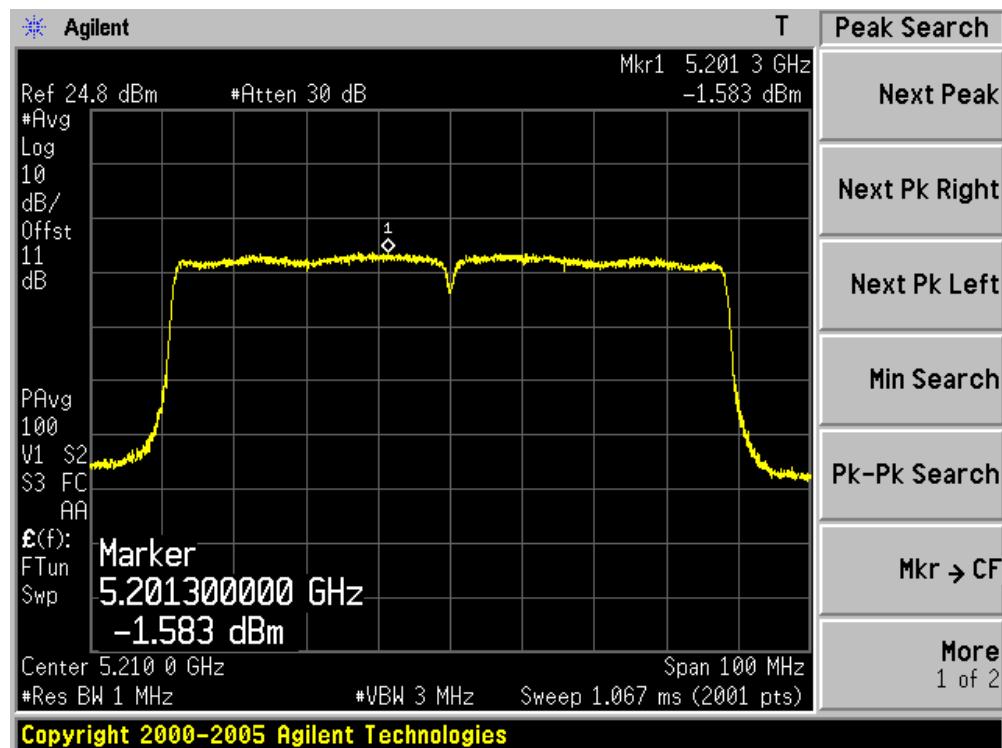
Product	:	Mi Wi-Fi
Test Item	:	Peak Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 6: Transmit by 802.11ac(80MHz) (Ant 1+2)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm/MHz)		Total PPSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Ant 1	Ant 2			
42	5210	-4.71	-1.58	0.14	3.88	Pass

Note: Directional gain =  $10 \log[(10^{G1}/20 + 10^{G2}/20)^2/2]$  dB=6.53; Limit=4.00-(6.12-6)=3.88

### Channel 42 (5210MHz) Ant 1



**Channel 42 (5210MHz) Ant 2**

## 9. Peak Excursion

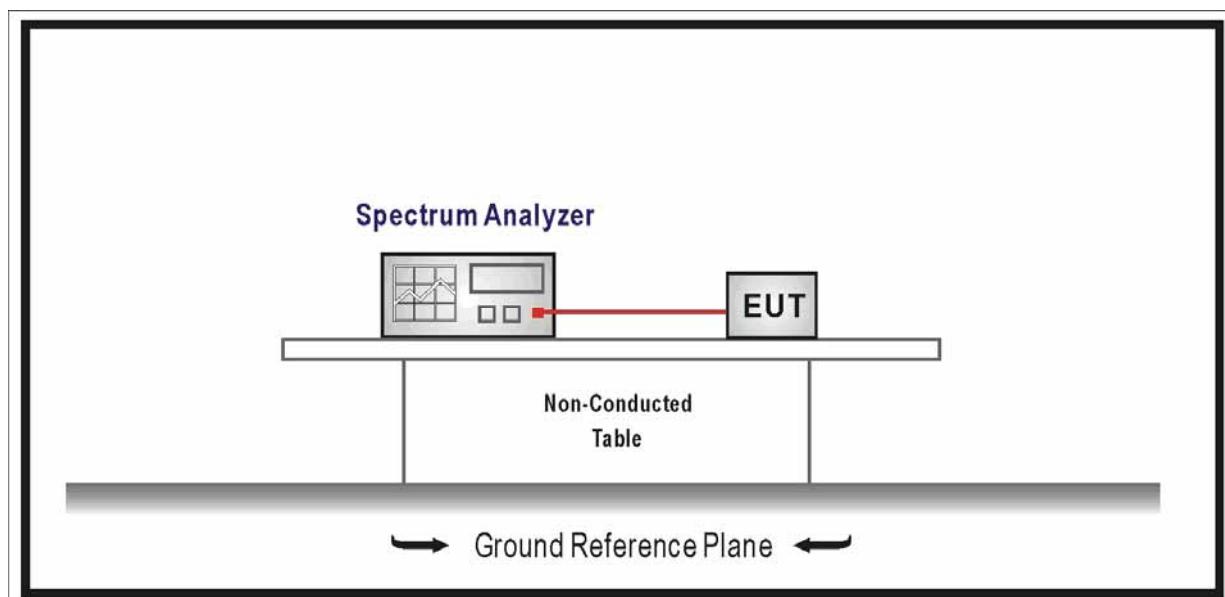
### 9.1. Test Equipment

Peak Excursion / TR-8

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2015.01.07
Temperature/Humidity Meter	zhicheng	ZC1-2	TR8-TH	2015.04.09

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

The ratio of the peak excursion of the modulation envelope (measured using a peak hold function) to the maximum conducted output power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emission bandwidth whichever is less.

#### **9.4. Test Procedure**

The EUT was tested according to KDB 789033 for compliance to FCC 47CFR 15.407 requirements.

Set the spectrum analyzer span to view the entire emission bandwidth. The largest difference between the following two traces must be  $\leq 13$  dB for all frequencies across the emission bandwidth.

- 1st Trace: Set RBW = 1 MHz, VBW  $\geq$  3 MHz with peak detector and max-hold settings.
- 2nd Trace: The result is the peak value of the PPSD.

#### **9.5. Uncertainty**

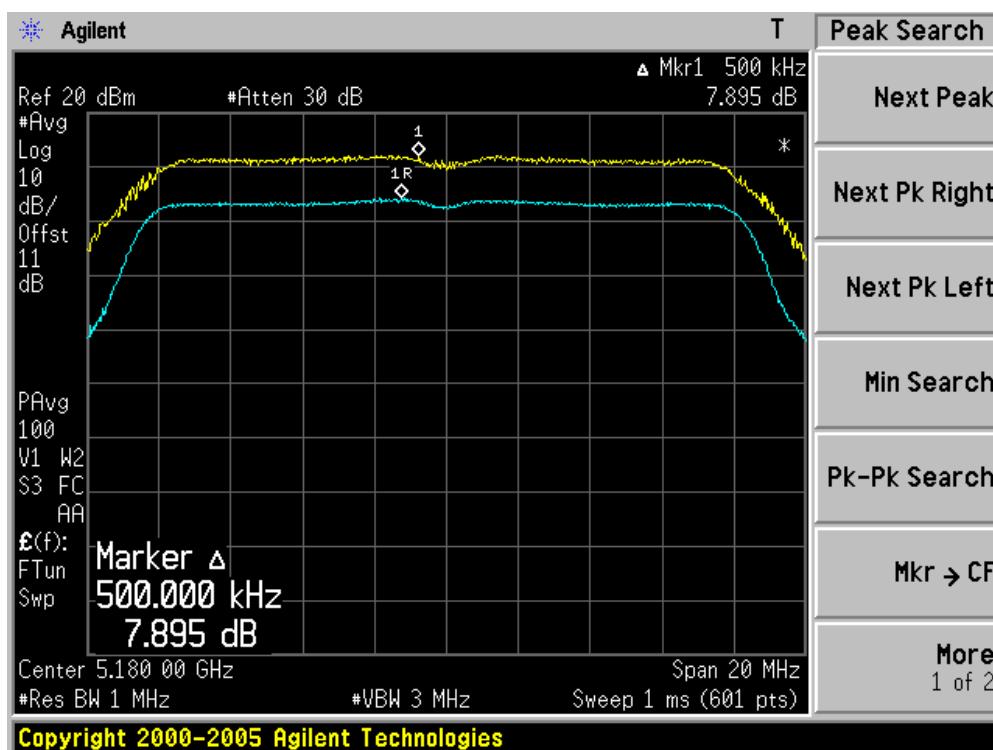
The measurement uncertainty is defined as  $\pm 1.27$  dB

### 9.6. Test Result

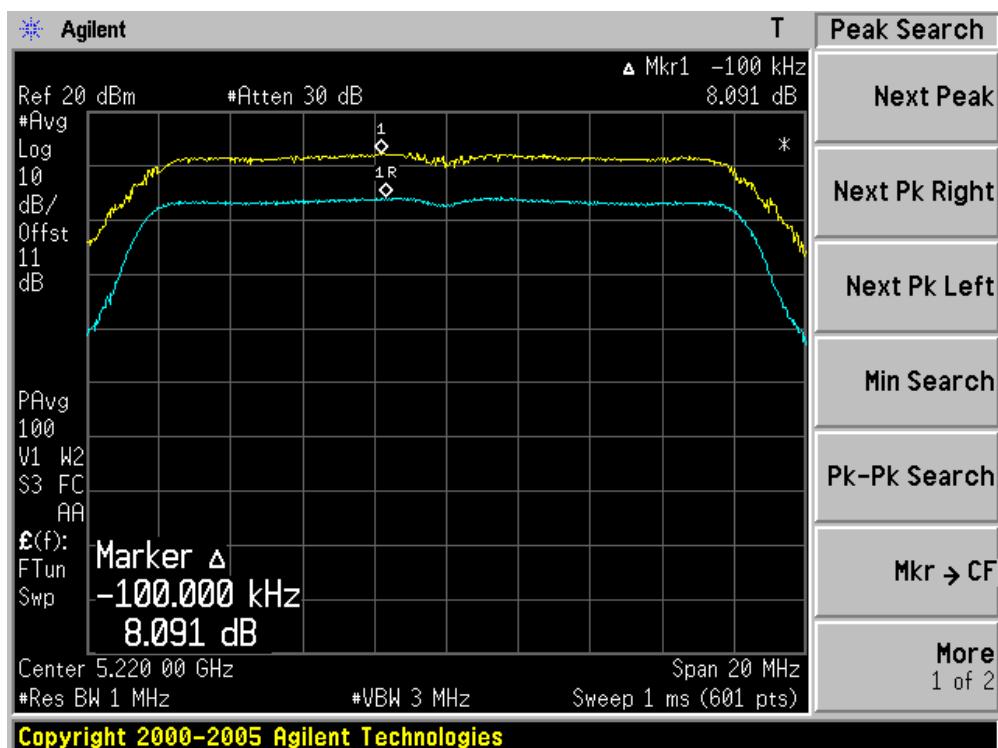
Product	:	Mi Wi-Fi
Test Item	:	Peak Excursion
Test Site	:	TR-8
Test Mode	:	Mode 1: Transmit by 802.11a (Ant 1)

Channel No.	Frequency (MHz)	Peak Excursion (dB)	Limit (dB)	Result
36	5180	7.90	13	Pass
44	5220	8.09	13	Pass
48	5240	8.19	13	Pass

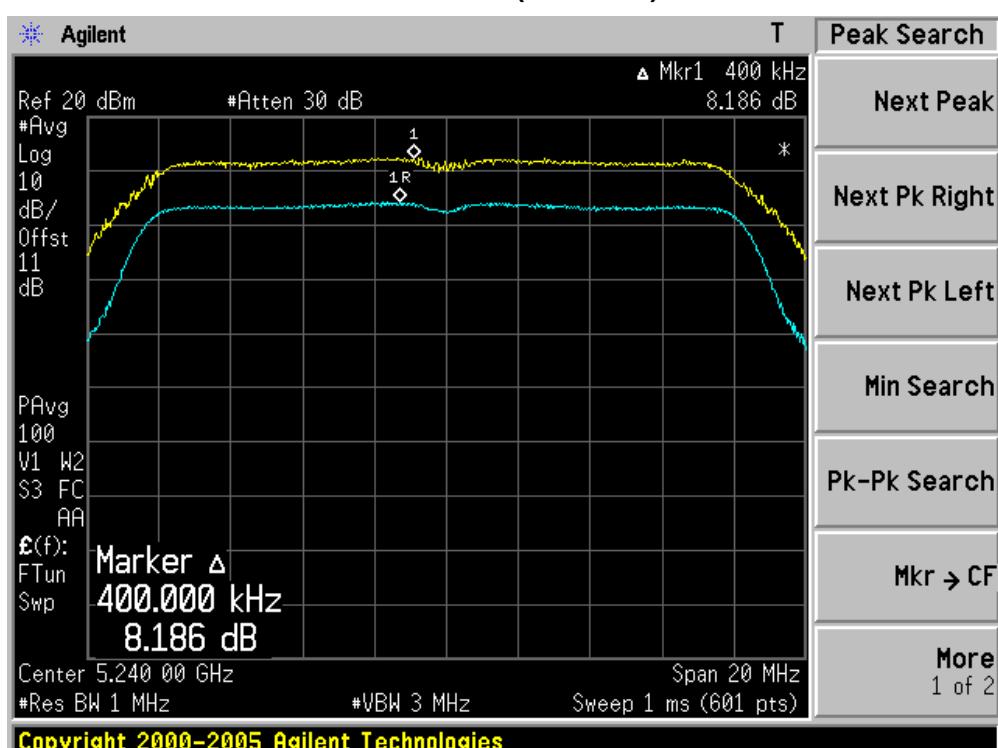
Channel 36 (5180MHz)



## Channel 44 (5220MHz)

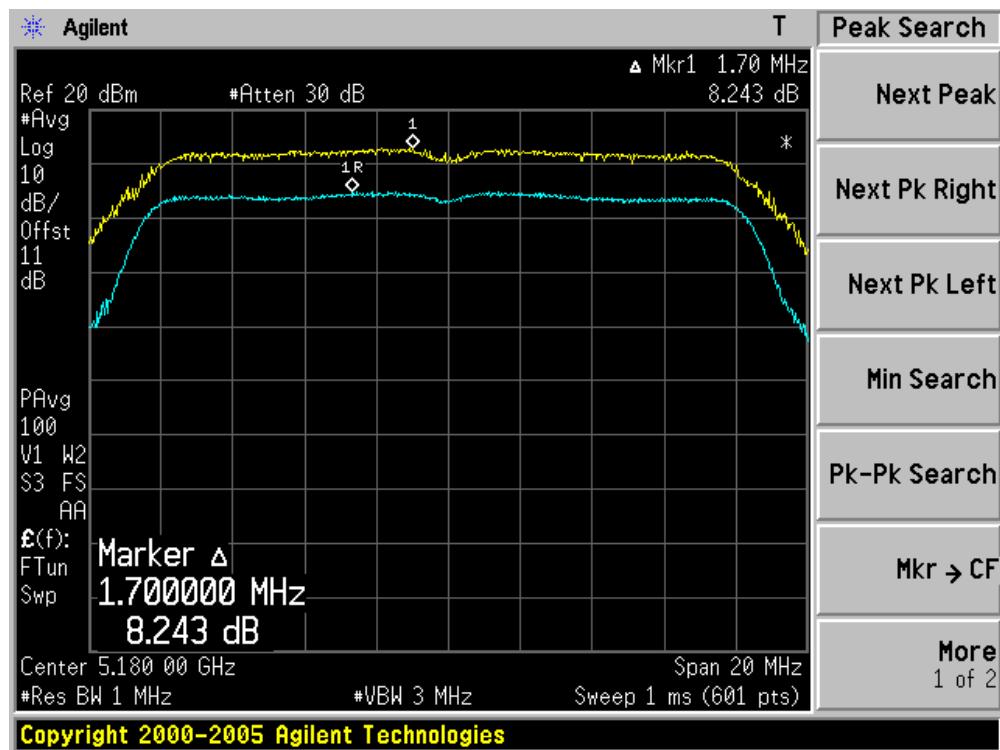


## Channel 48 (5240MHz)

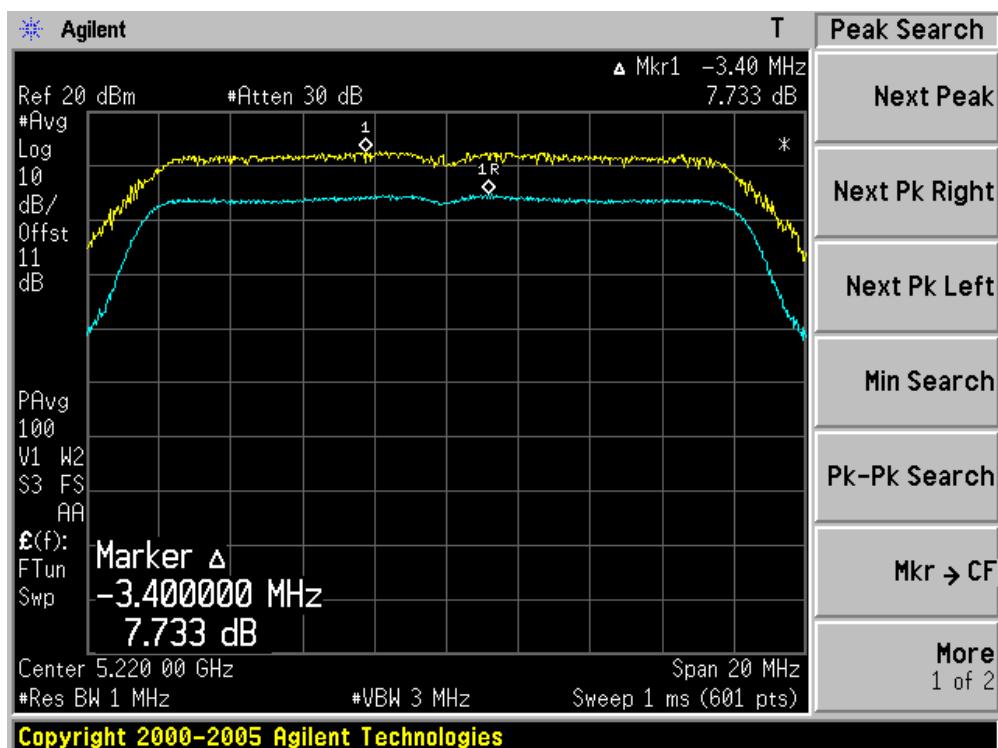


Product	:	Mi Wi-Fi
Test Item	:	Peak Excursion
Test Site	:	TR-8
Test Mode	:	Mode 1: Transmit by 802.11a (Ant 2)

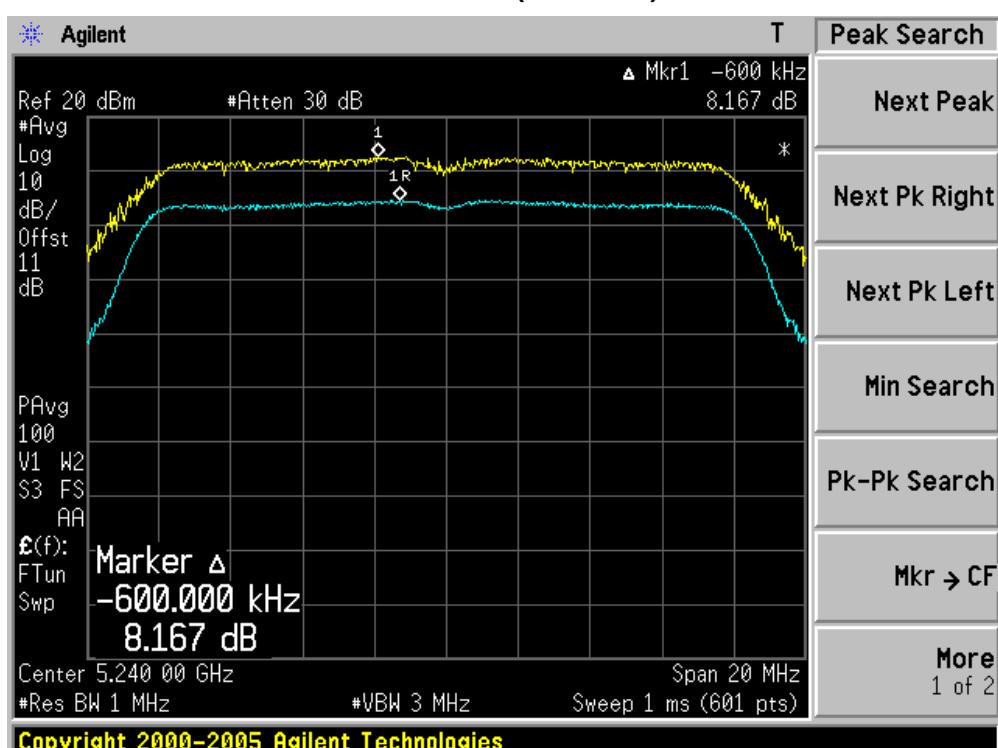
Channel No.	Frequency (MHz)	Peak Excursion (dB)	Limit (dB)	Result
36	5180	8.24	13	Pass
44	5220	7.73	13	Pass
48	5240	8.17	13	Pass

**Channel 36 (5180MHz)**

## Channel 44 (5220MHz)

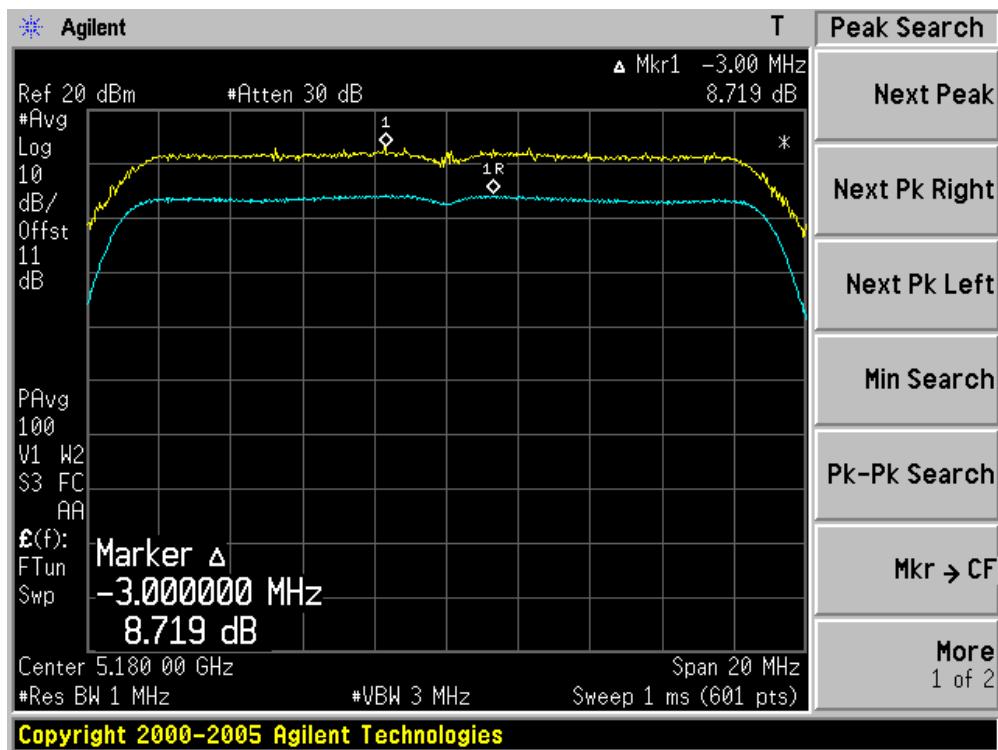


## Channel 48 (5240MHz)

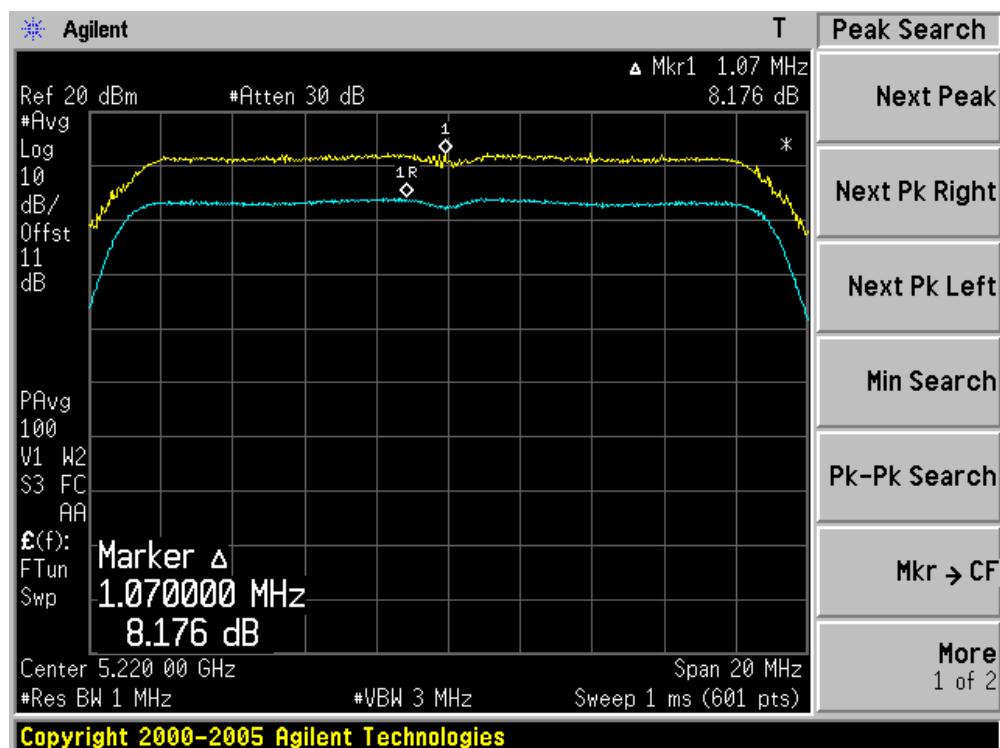


Product	:	Mi Wi-Fi
Test Item	:	Peak Excursion
Test Site	:	TR-8
Test Mode	:	Mode 2: Transmit by 802.11n(20MHz) (Ant 1)

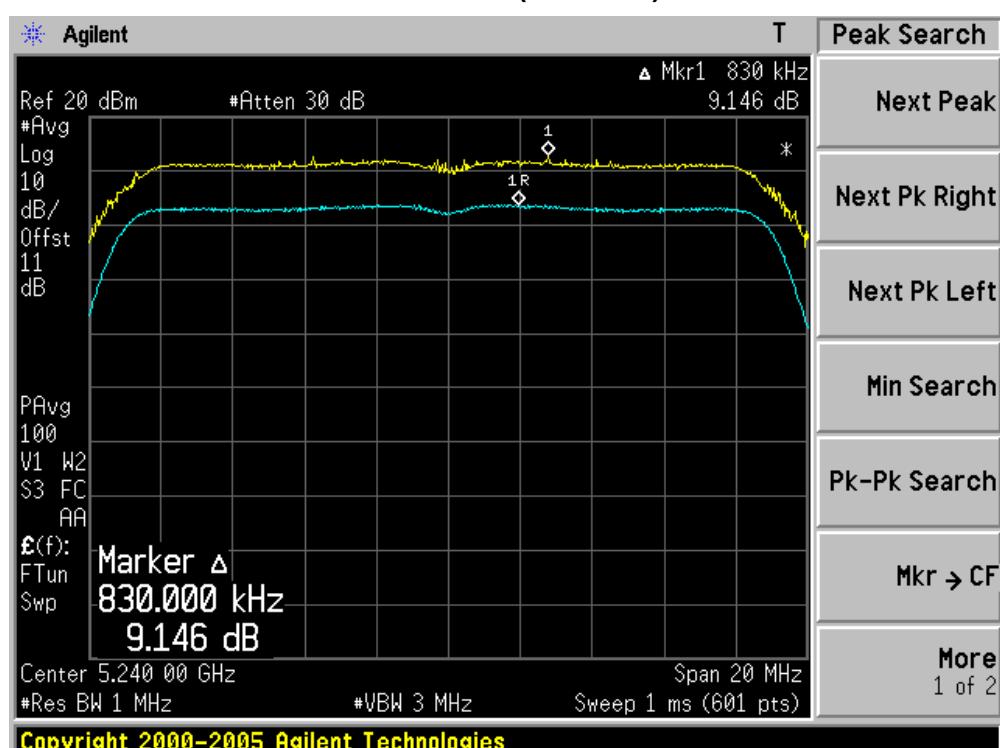
Channel No.	Frequency (MHz)	Peak Excursion (dB)	Limit (dB)	Result
36	5180	8.72	13	Pass
44	5220	8.18	13	Pass
48	5240	9.15	13	Pass

**Channel 36 (5180MHz)**

## Channel 44 (5220MHz)

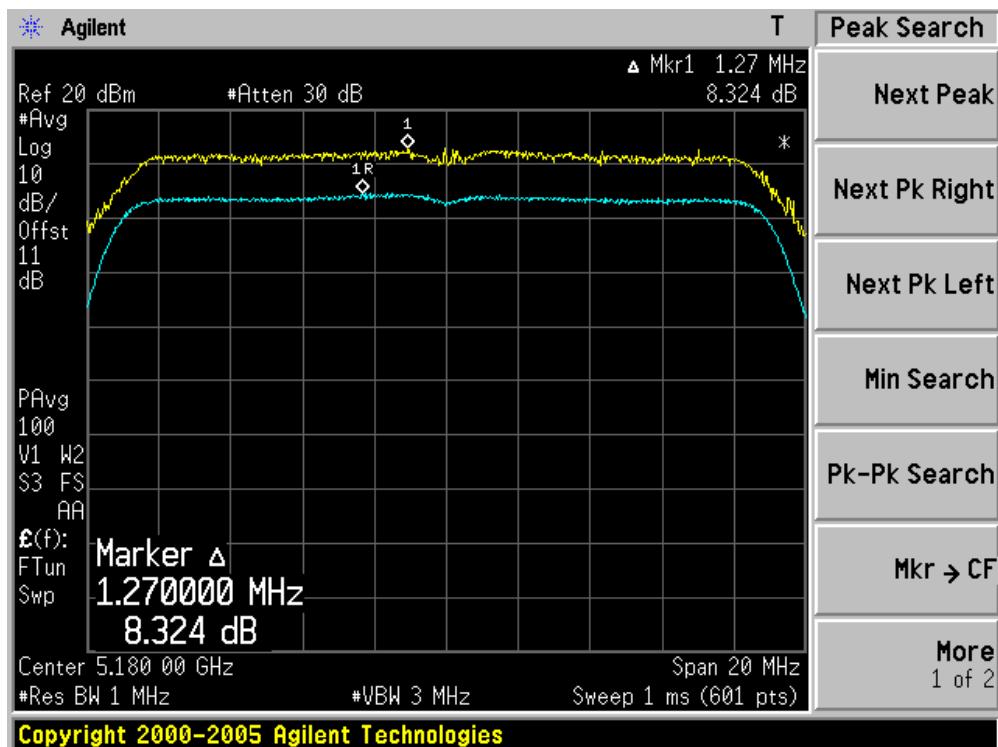


## Channel 48 (5240MHz)

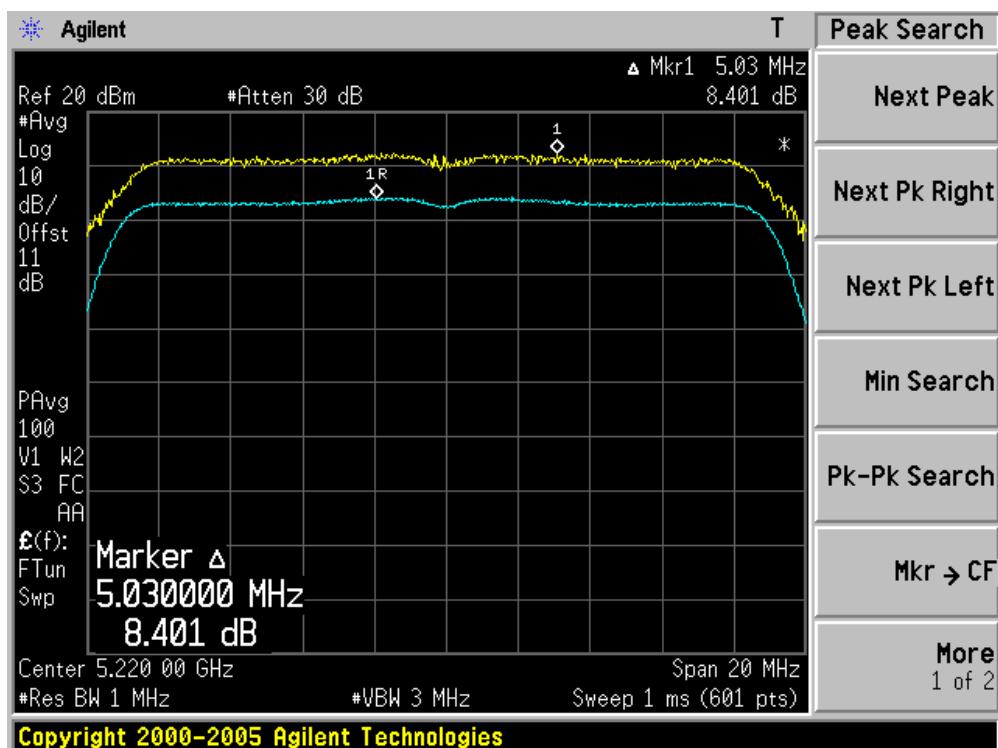


Product	:	Mi Wi-Fi
Test Item	:	Peak Excursion
Test Site	:	TR-8
Test Mode	:	Mode 2: Transmit by 802.11n(20MHz) (Ant 2)

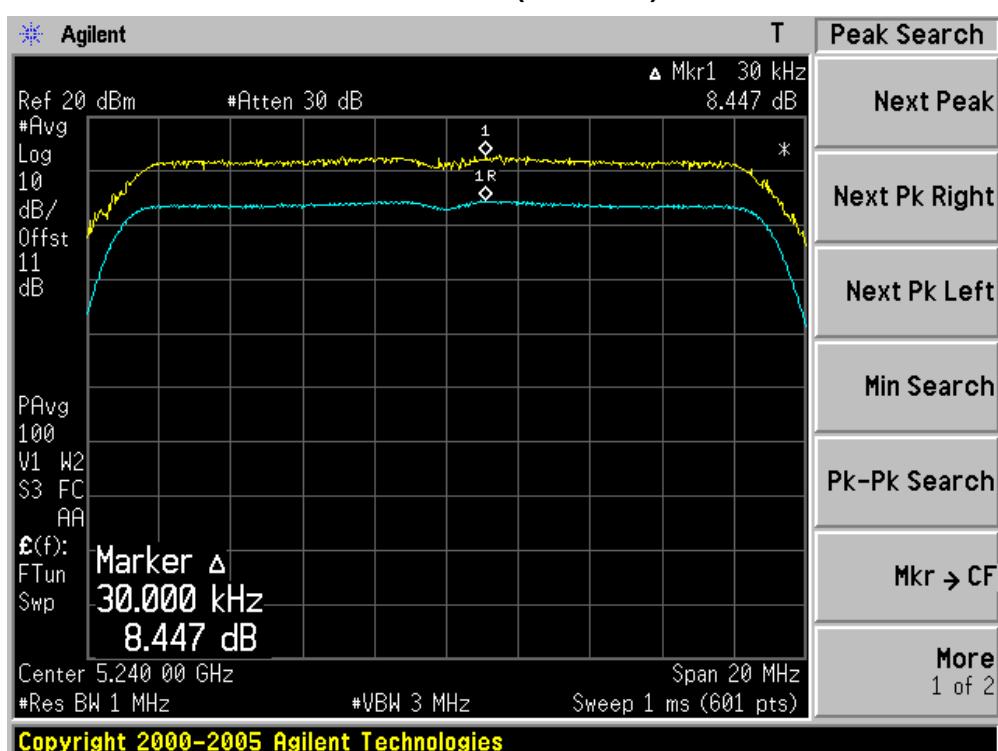
Channel No.	Frequency (MHz)	Peak Excursion (dB)	Limit (dB)	Result
36	5180	8.32	13	Pass
44	5220	8.40	13	Pass
48	5240	8.45	13	Pass

**Channel 36 (5180MHz)**

## Channel 44 (5220MHz)

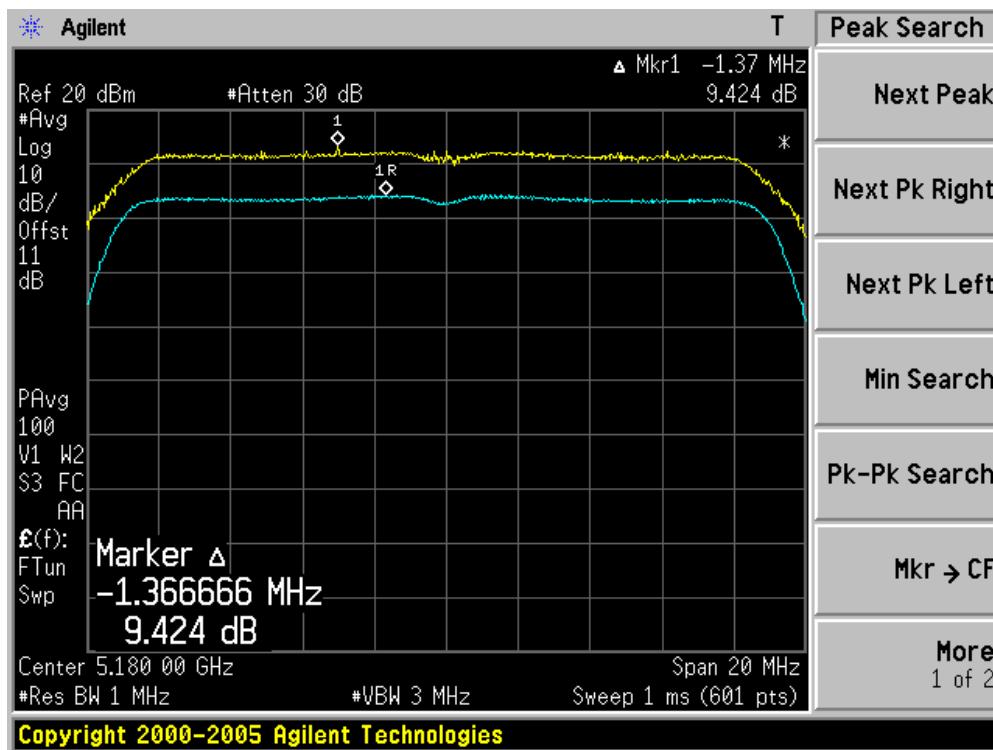


## Channel 48 (5240MHz)

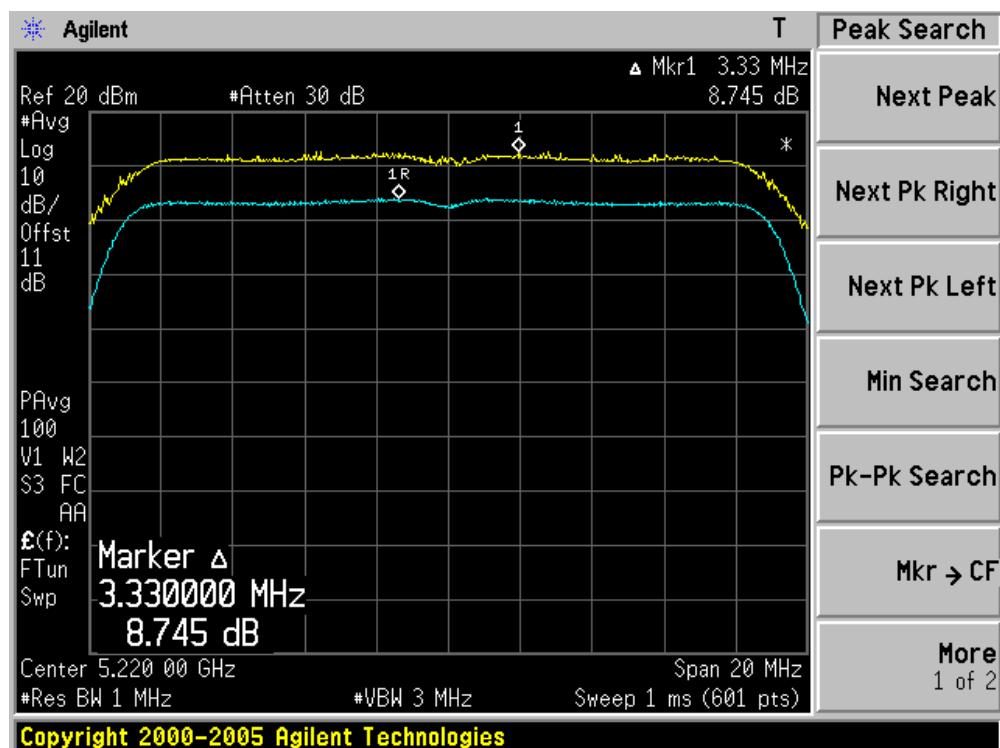


Product	:	Mi Wi-Fi
Test Item	:	Peak Excursion
Test Site	:	TR-8
Test Mode	:	Mode 3: Transmit by 802.11ac(20MHz) (Ant 1)

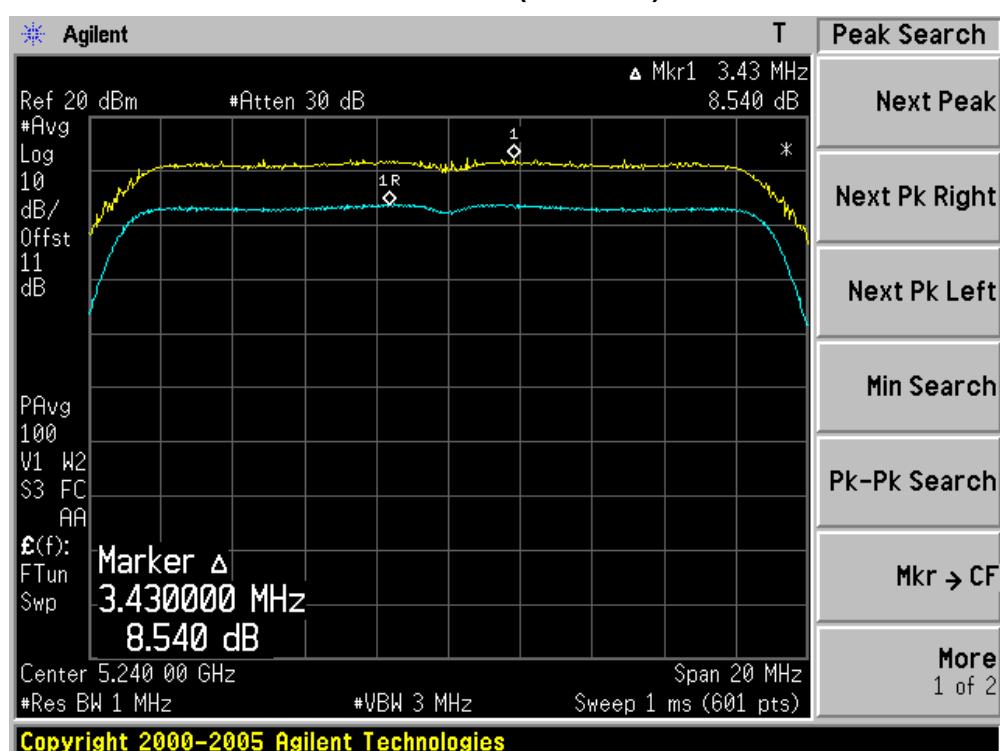
Channel No.	Frequency (MHz)	Peak Excursion (dB)	Limit (dB)	Result
36	5180	9.42	13	Pass
44	5220	8.75	13	Pass
48	5240	8.54	13	Pass

**Channel 36 (5180MHz)**

## Channel 44 (5220MHz)

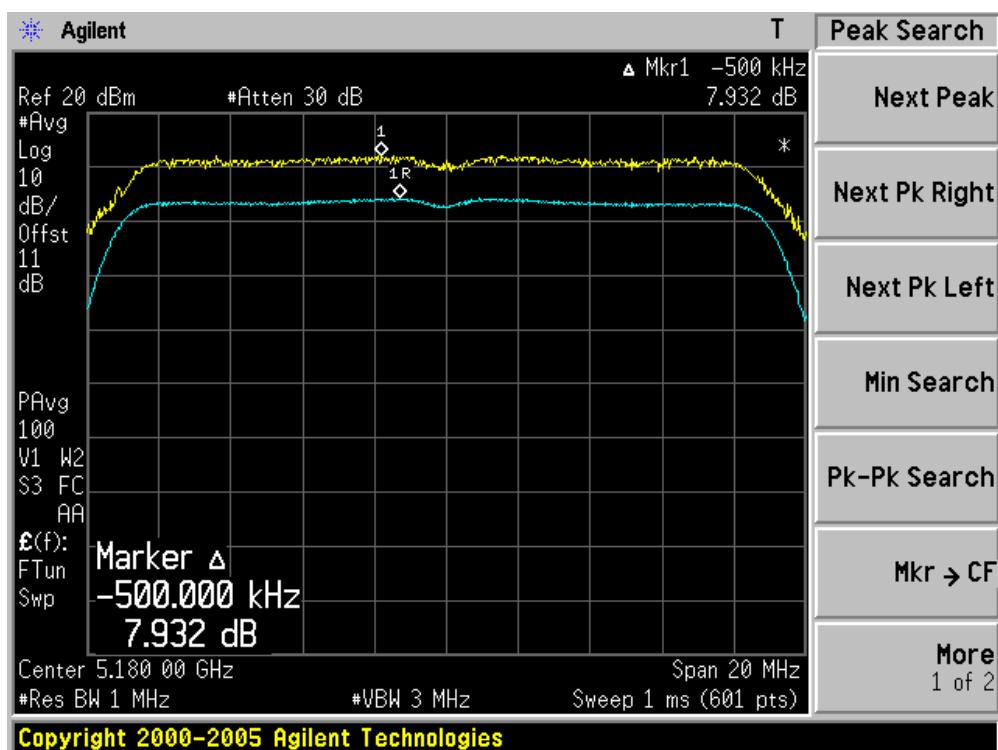


## Channel 48 (5240MHz)

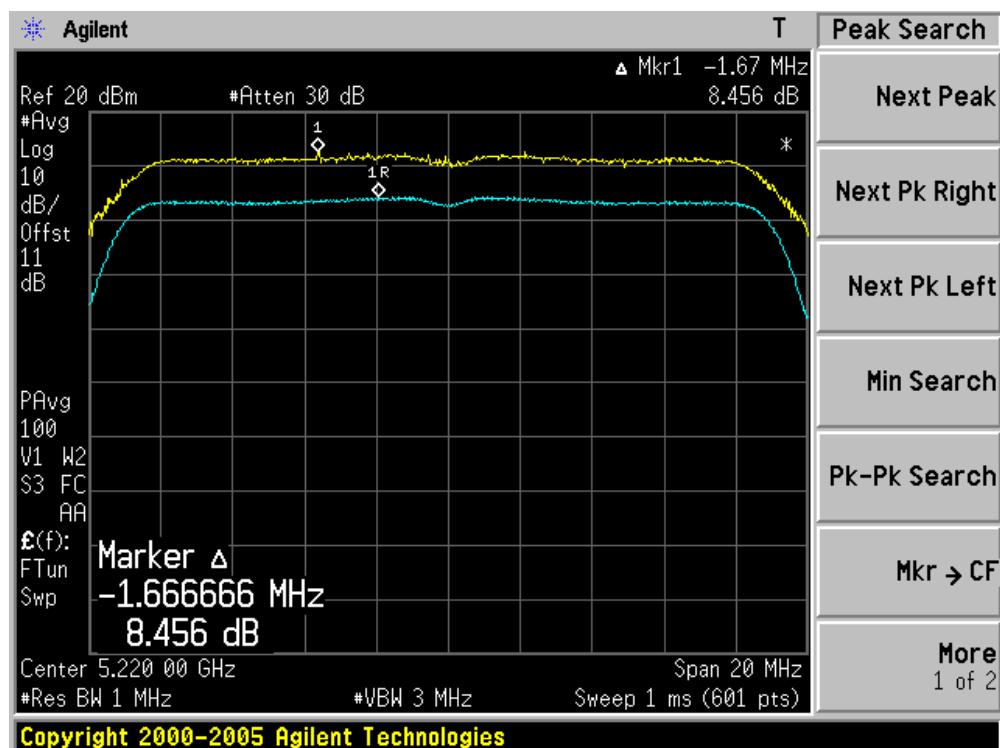


Product	:	Mi Wi-Fi
Test Item	:	Peak Excursion
Test Site	:	TR-8
Test Mode	:	Mode 3: Transmit by 802.11ac(20MHz) (Ant 2)

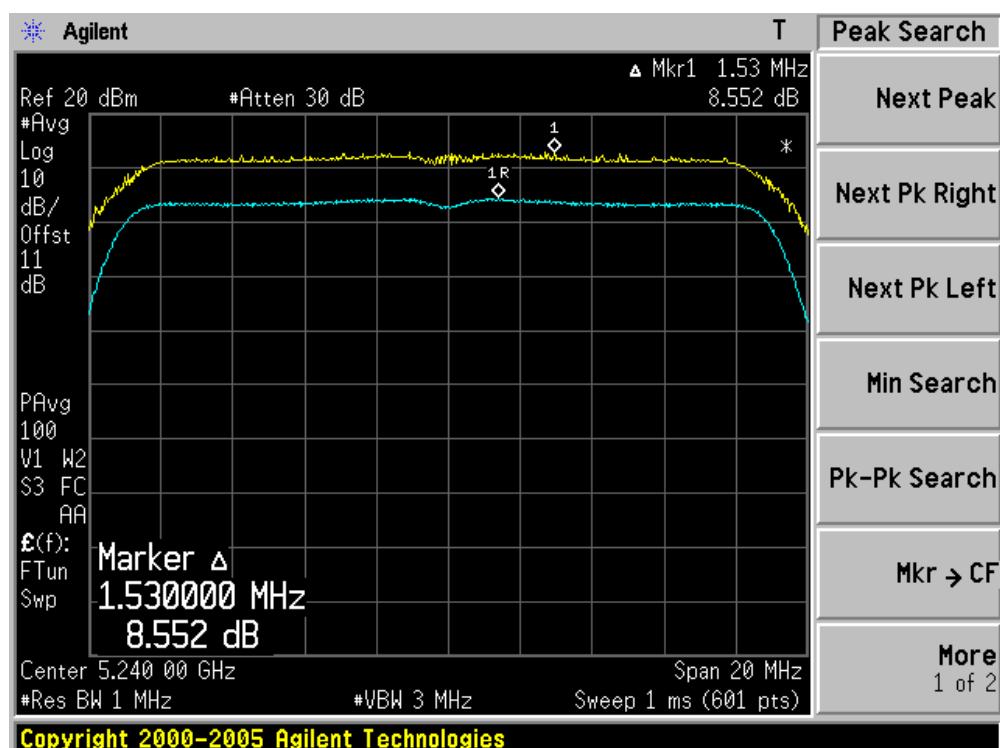
Channel No.	Frequency (MHz)	Peak Excursion (dB)	Limit (dB)	Result
36	5180	8.32	13	Pass
44	5220	8.40	13	Pass
48	5240	8.45	13	Pass

**Channel 36 (5180MHz)**

## Channel 44 (5220MHz)

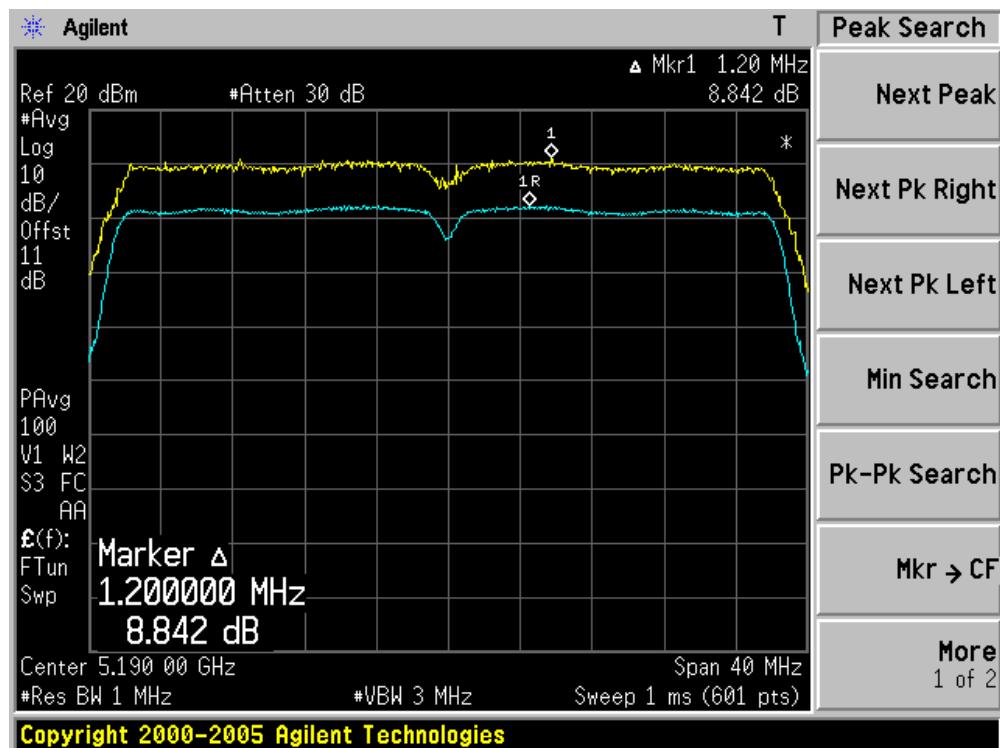


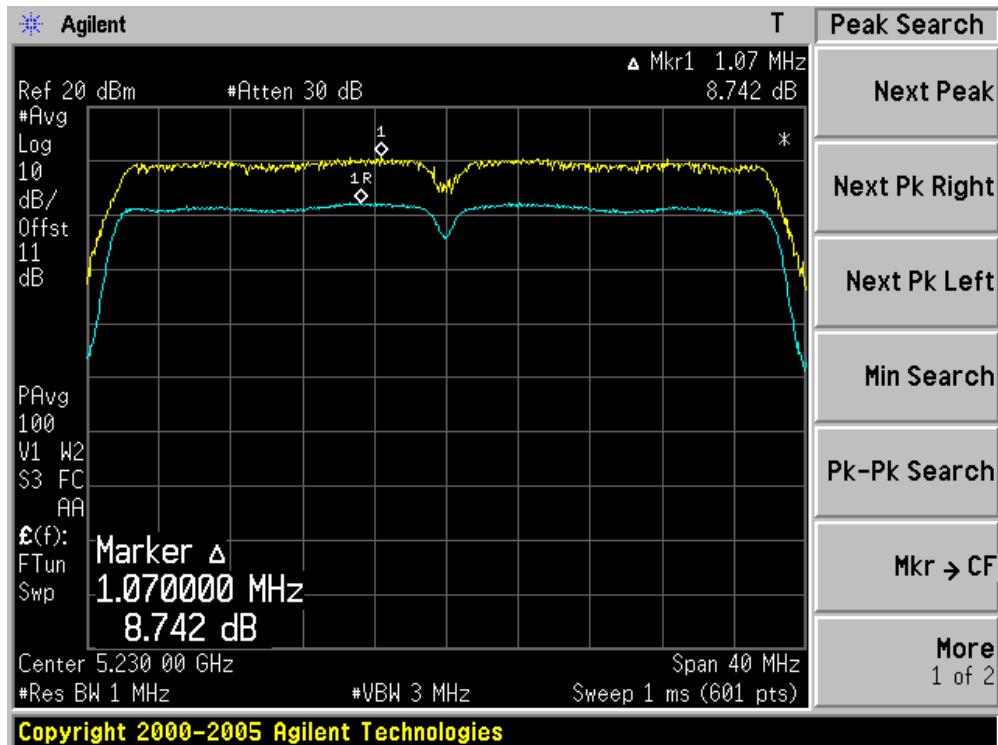
## Channel 48 (5240MHz)



Product	:	Mi Wi-Fi
Test Item	:	Peak Excursion
Test Site	:	TR-8
Test Mode	:	Mode 4: Transmit by 802.11n(40MHz) (Ant 1)

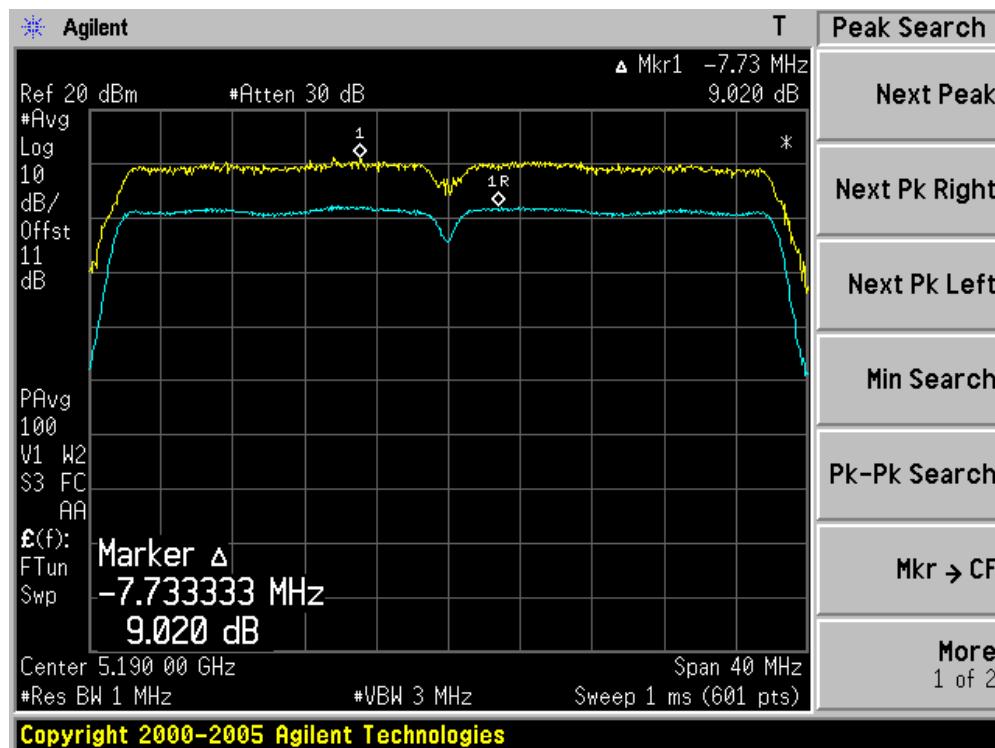
Channel No.	Frequency (MHz)	Peak Excursion (dB)	Limit (dB)	Result
38	5190	8.84	13	Pass
46	5230	8.74	13	Pass

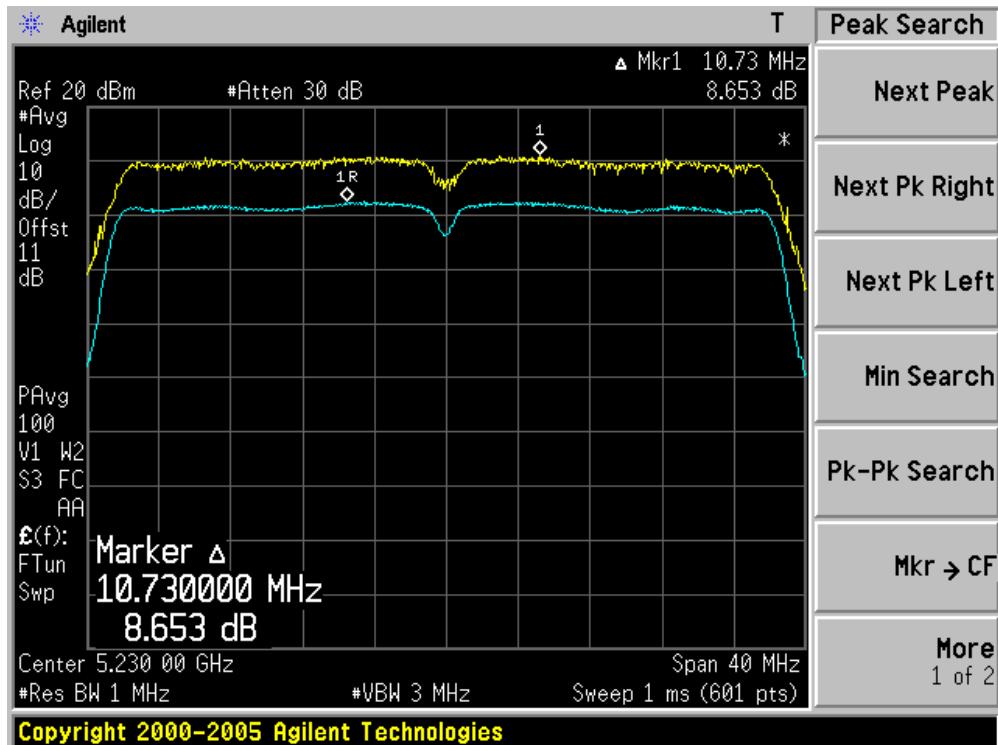
**Channel 38 (5190MHz)**

**Channel 46 (5230MHz)**

Product	:	Mi Wi-Fi
Test Item	:	Peak Excursion
Test Site	:	TR-8
Test Mode	:	Mode 4: Transmit by 802.11n(40MHz) (Ant 2)

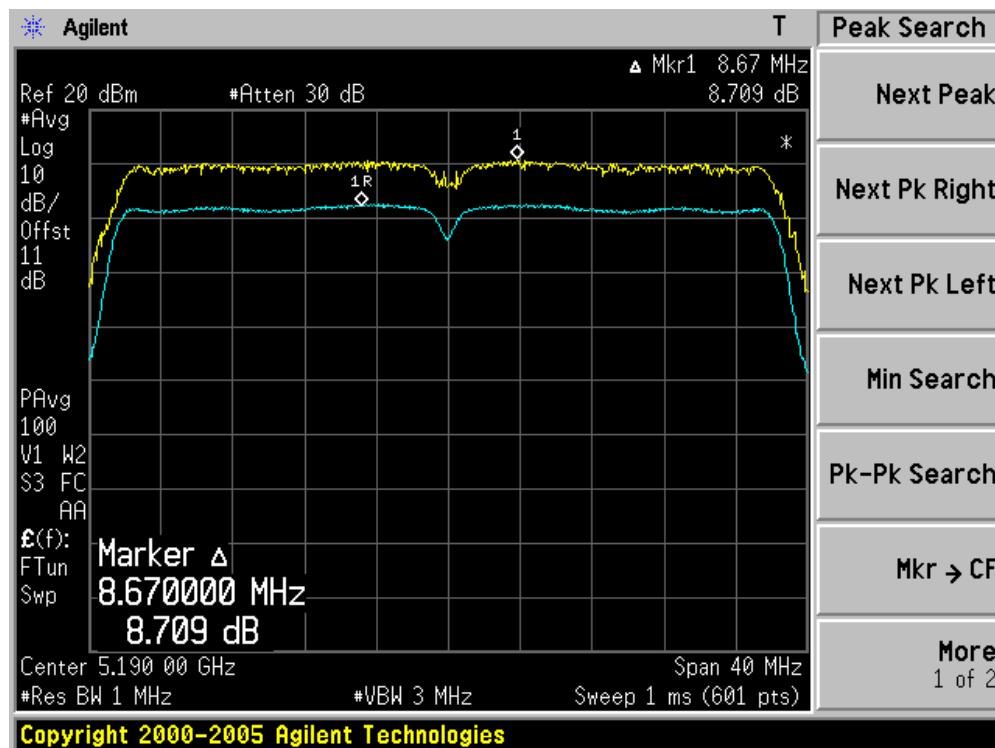
Channel No.	Frequency (MHz)	Peak Excursion (dB)	Limit (dB)	Result
38	5190	9.02	13	Pass
46	5230	8.65	13	Pass

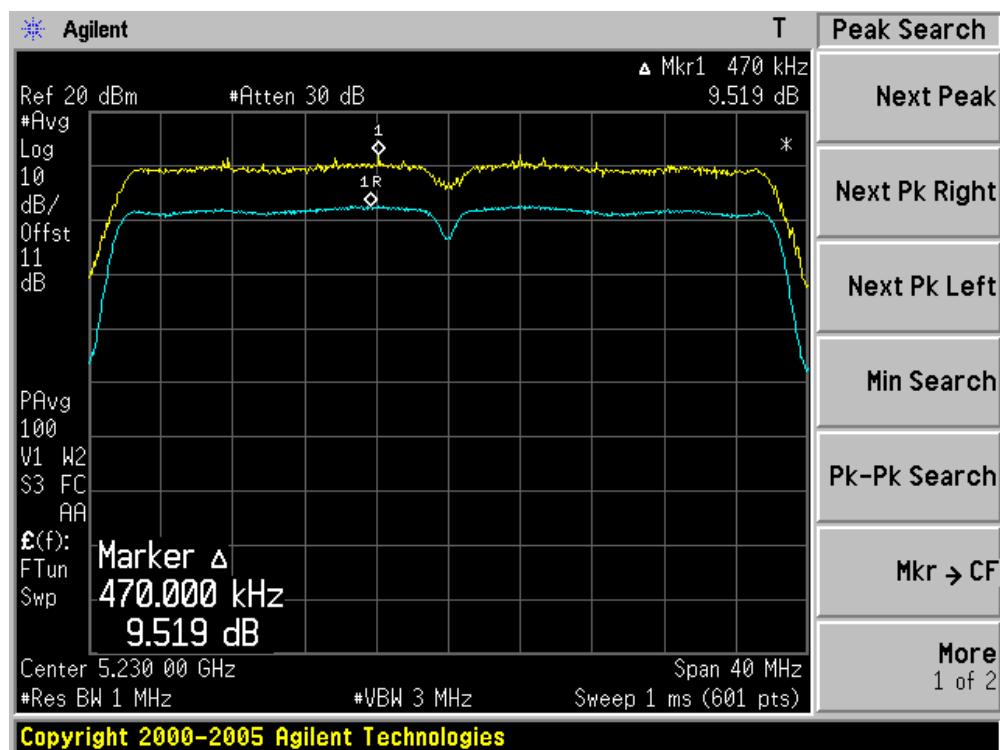
**Channel 38 (5190MHz)**

**Channel 46 (5230MHz)**

Product	:	Mi Wi-Fi
Test Item	:	Peak Excursion
Test Site	:	TR-8
Test Mode	:	Mode 5: Transmit by 802.11ac(40MHz) (Ant 1)

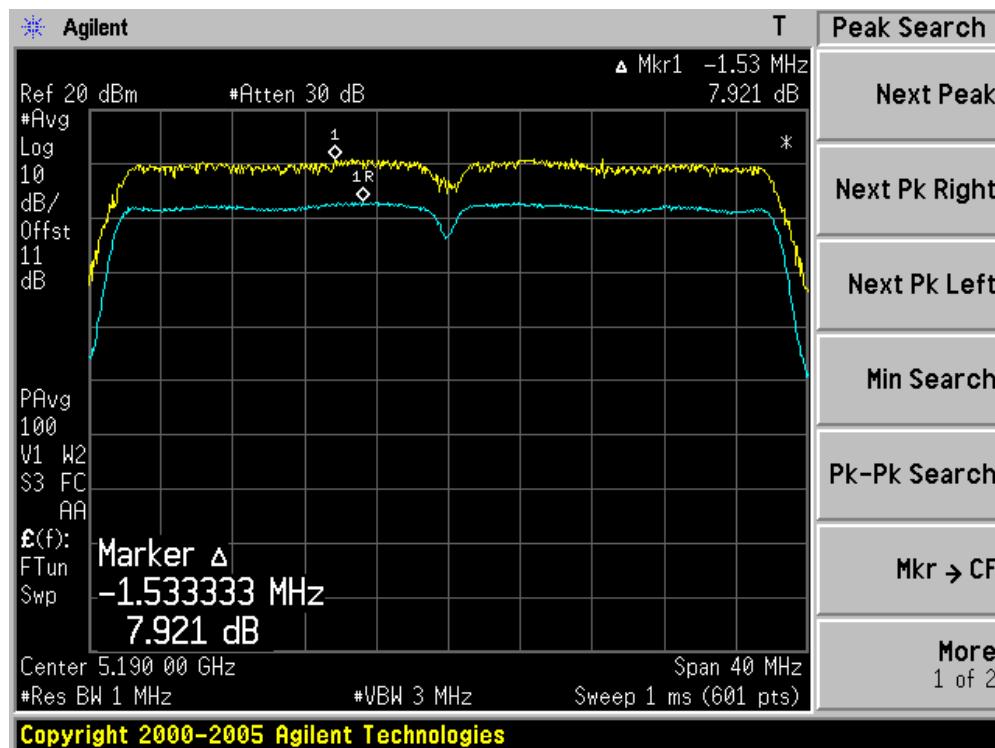
Channel No.	Frequency (MHz)	Peak Excursion (dB)	Limit (dB)	Result
38	5190	9.71	13	Pass
46	5230	9.52	13	Pass

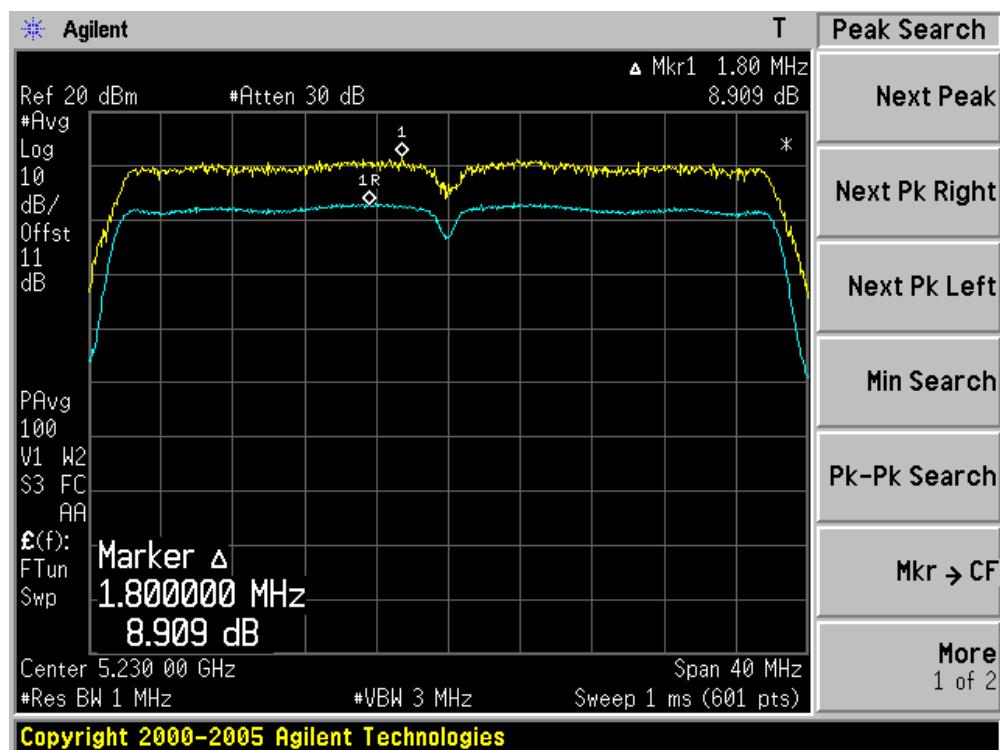
**Channel 38 (5190MHz)**

**Channel 46 (5230MHz)**

Product	:	Mi Wi-Fi
Test Item	:	Peak Excursion
Test Site	:	TR-8
Test Mode	:	Mode 5: Transmit by 802.11ac(40MHz) (Ant 2)

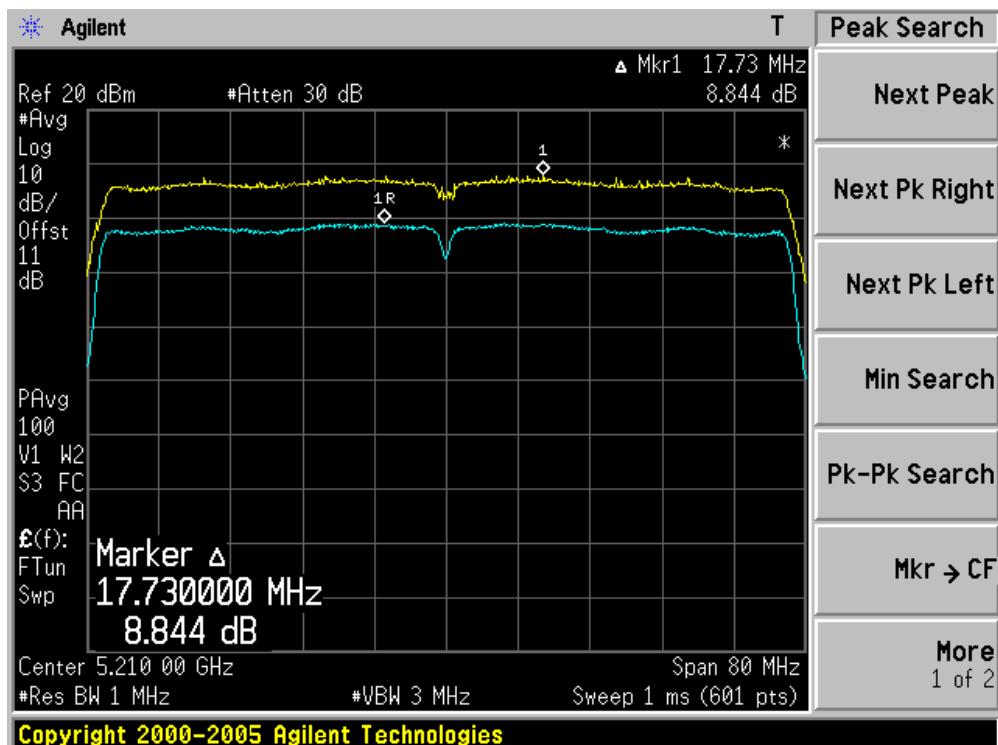
Channel No.	Frequency (MHz)	Peak Excursion (dB)	Limit (dB)	Result
38	5190	7.92	13	Pass
46	5230	8.91	13	Pass

**Channel 38 (5190MHz)**

**Channel 46 (5230MHz)**

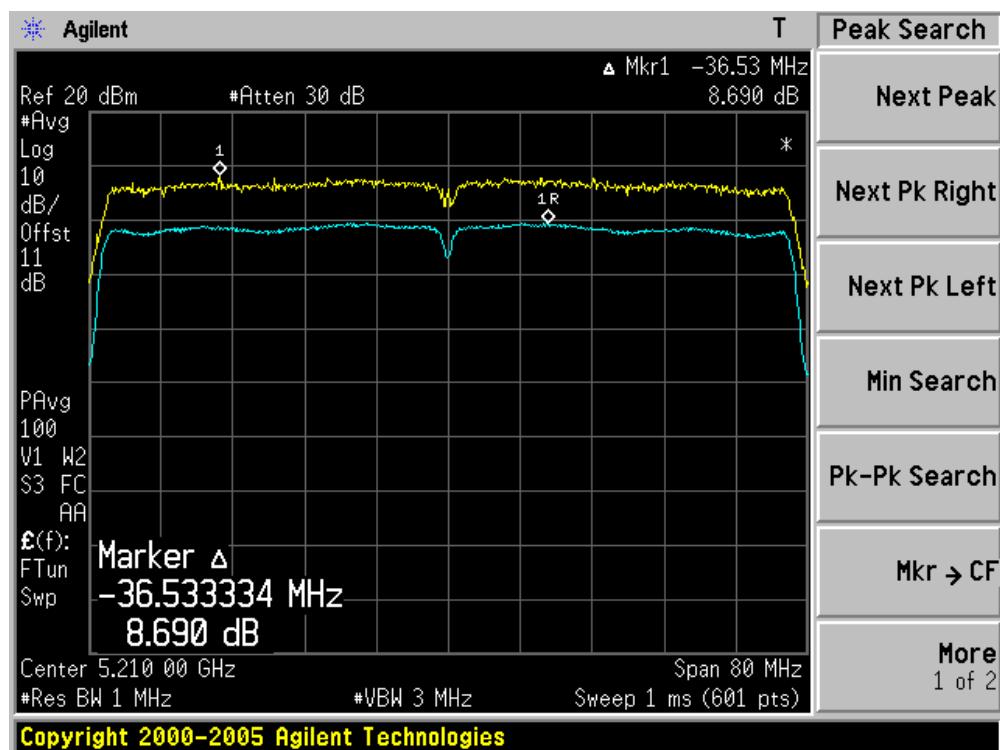
Product	:	Mi Wi-Fi
Test Item	:	Peak Excursion
Test Site	:	TR-8
Test Mode	:	Mode 6: Transmit by 802.11ac(80MHz) (Ant 1)

Channel No.	Frequency (MHz)	Peak Excursion (dB)	Limit (dB)	Result
42	5210	8.84	13	Pass

**Channel 42 (5210MHz)**

Product	:	Mi Wi-Fi
Test Item	:	Peak Excursion
Test Site	:	TR-8
Test Mode	:	Mode 6: Transmit by 802.11ac(80MHz) (Ant 2)

Channel No.	Frequency (MHz)	Peak Excursion (dB)	Limit (dB)	Result
42	5210	8.69	13	Pass

**Channel 42 (5210MHz)**

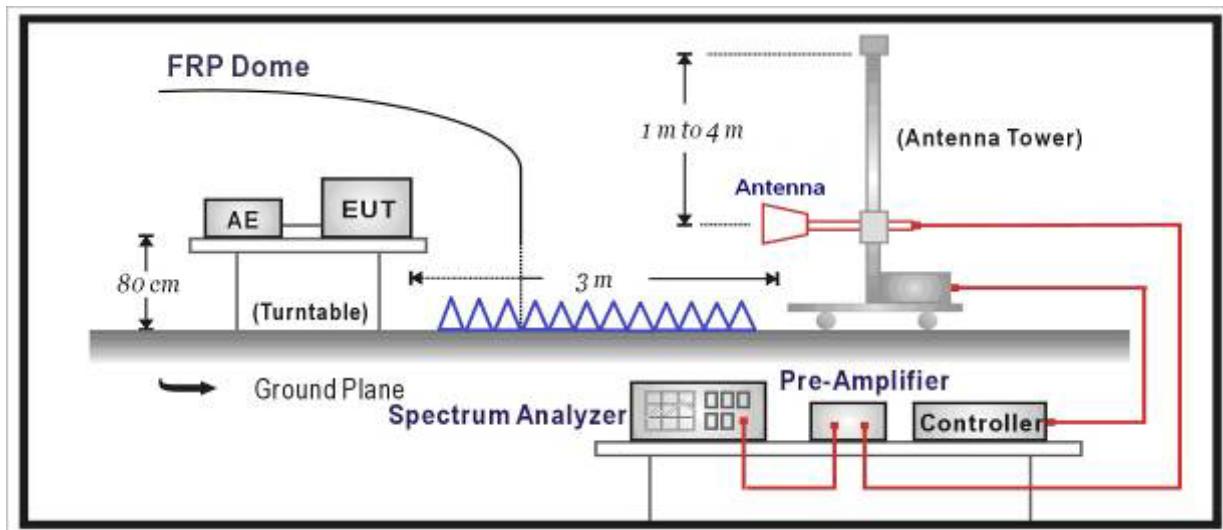
## 10. Radiated Emission Band Edge

### 10.1. Test Equipment

Radiated Emission Band Edge / AC-5

Instrument	Manufacturer	Type No.	Serial No.	Cali. Due Date
Spectrum Analyzer	Agilent	N9020A	MY49100159	2015.03.28
Preamplifier	Miteq	NSP1800-25	1364185	2015.05.03
Preamplifier	QuiTek	AP-040G	CHM-0906001	2015.05.03
Bilog Antenna	Teseq GmbH	CBL6112D	27612	2014.10.15
DRG Horn	ETS-Lindgren	3117	00123988	2015.01.07
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2015.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2015.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	AC5-C3	2015.03.01
EMI Receiver	Agilent	N9038A	MY51210196	2015.06.09
Temperature/Humidity Meter	Zhichen	ZC1-2	AC5-TH	2015.01.08

### 10.2. Test Setup



### 10.3. Limit

#### For 15.205 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
10.495 - 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> )

**For 15.407(b) requirement:**

- For transmitters operating in the 5.15-5.25 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz.

Operating Frequency Band (MHz)	EIRP Limit (dBm/MHz)	Equivalent Field Strength at 3m (dBuV/m)
5150 - 5250	-27	68.3
5250 - 5350	-27	68.3
5470 - 5725	-27	68.3
5725 - 5825	-27 [Note(1)]	68.3
	-17 [Note(2)]	78.3

Note(1): Outsitde the frequency range 5715 - 5835MHz.

Note(2): Within the frequency range from the band edge to 10MHz below or above the band edge, 5715 – 5725MHz and 5825 - 5835MHz.

#### **10.4. Test Procedure**

The EUT was tested according to KDB 789033 for compliance to FCC 47CFR 15.407 requirements.

The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.4: 2009 on radiated measurement.

Note: When doing emission measurement above 1GHz, the horn Chainenna will be bended down a little (as horn Chainenna has the narrow beamwidth) in order to keeping the Chainenna in the “cone of radiation” of EUT. The 3dB beamwidth is 10~60 degrees for H-plane and 10~90 degrees for E-plane.

#### **10.5. Uncertainty**

The measurement uncertainty above 1GHz is defined as  $\pm$  3.9 dB

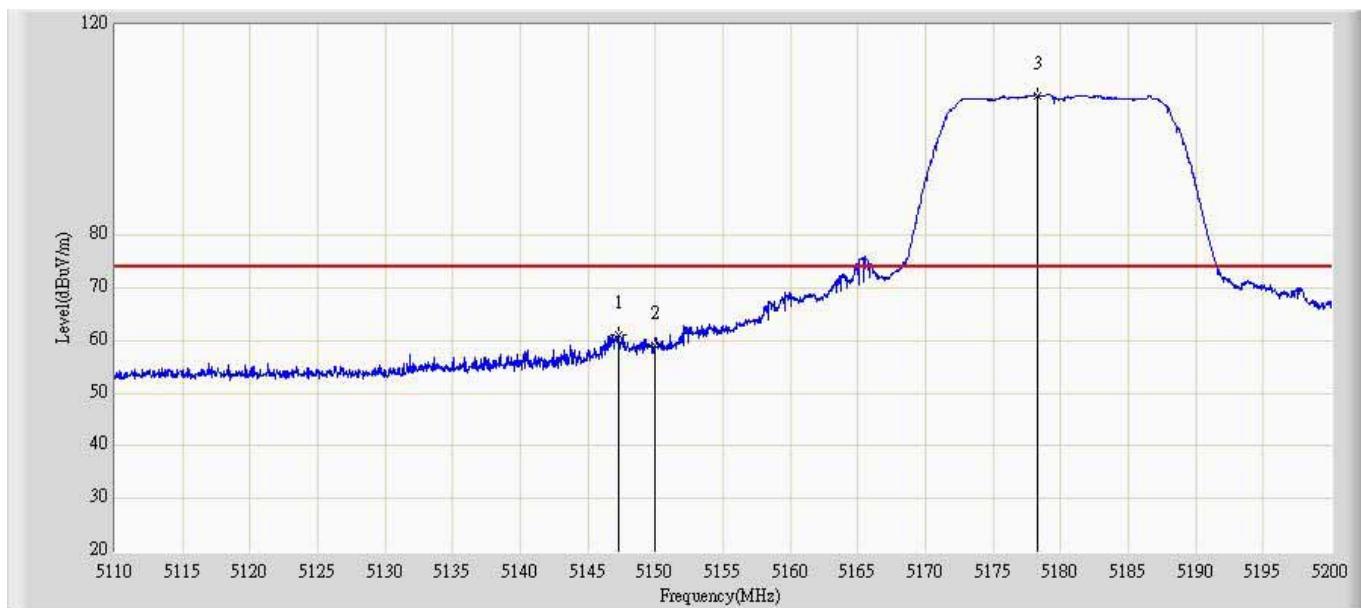
## 10.6. Test Result

Peak detector: RBW = 1MHz, VBW = 3MHz, sweep time = 200ms;

Average detector: RBW = 1MHz, VBW = 10Hz, sweep time = auto.

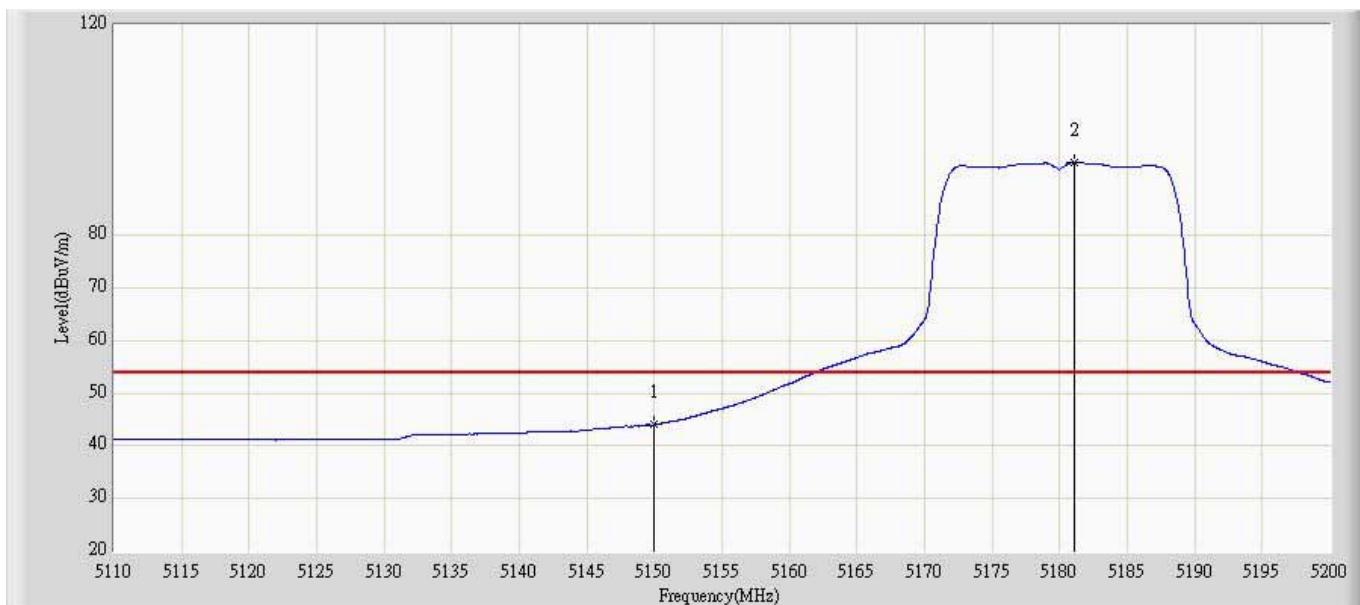
Note: when the duty cycle is less than 98%, a duty cycle factor is calculated in the correction factor

Site: AC5	Time: 2014/06/17 - 18:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 1 : Transmit at channel 5180MHz by 802.11a Ant 1	



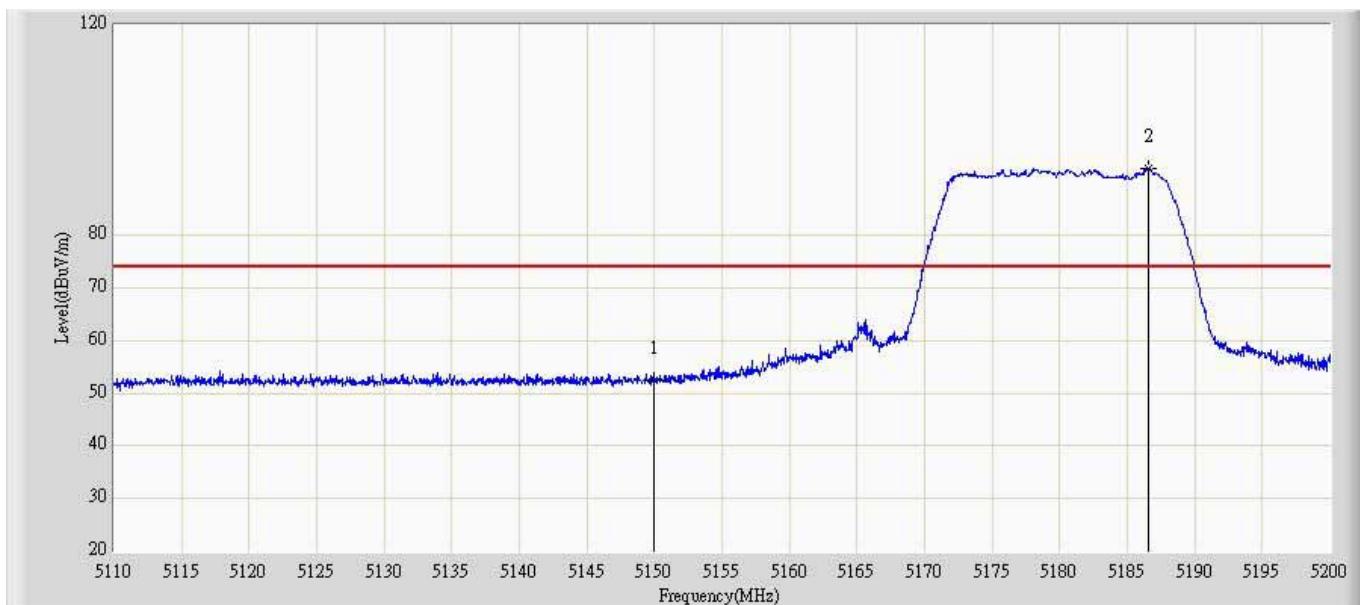
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5147.260	61.032	20.522	-12.968	74.000	40.510	PK
2			5150.000	59.140	18.607	-14.860	74.000	40.533	PK
3		*	5178.265	106.530	65.915	N/A	N/A	40.615	PK

Site: AC5	Time: 2014/06/18 - 16:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 1 : Transmit at channel 5180MHz by 802.11a Ant 1	



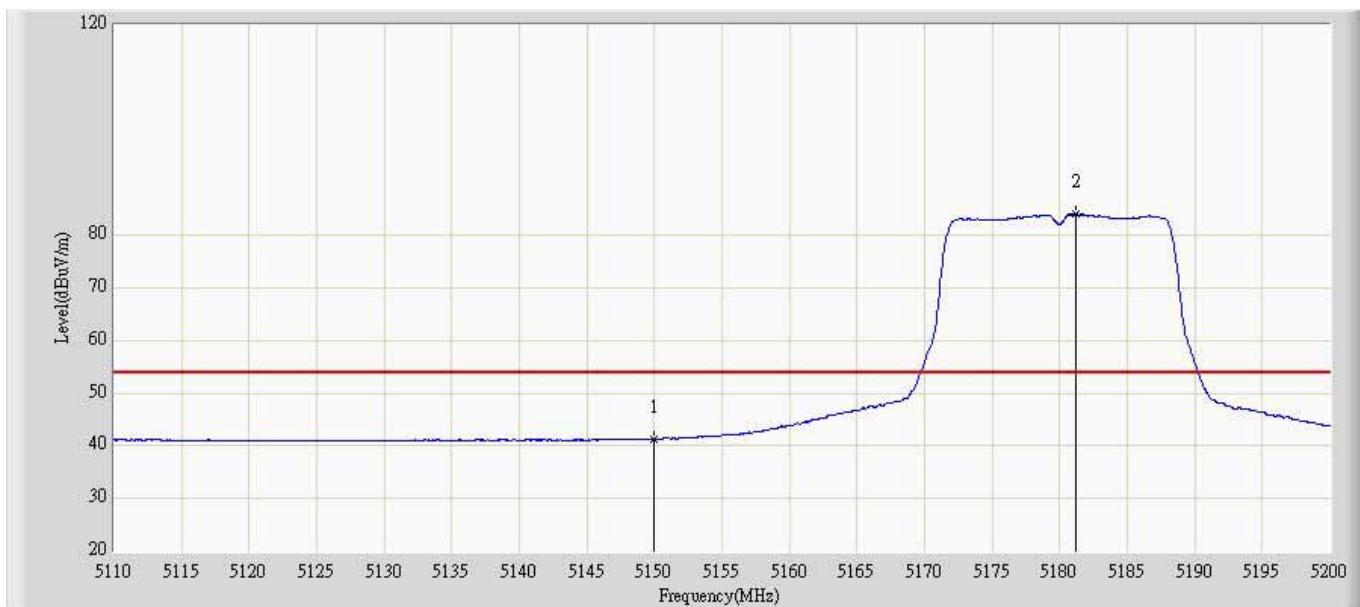
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	44.036	3.503	-9.964	54.000	40.533	AV
2		*	5181.055	93.903	53.287	N/A	N/A	40.616	AV

Site: AC5	Time: 2014/06/19 - 13:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 1 : Transmit at channel 5180MHz by 802.11a Ant 1	



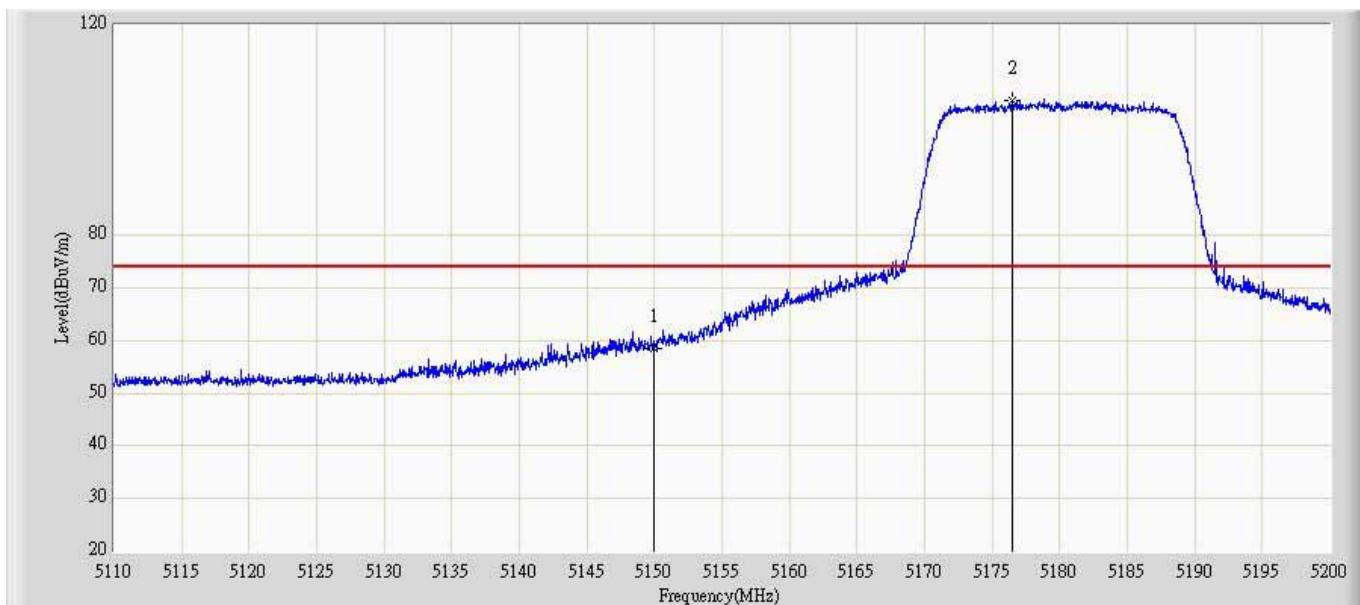
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	52.448	11.915	-21.552	74.000	40.533	PK
2		*	5186.545	92.835	52.215	N/A	N/A	40.619	PK

Site: AC5	Time: 2014/06/19 - 13:36
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 1 : Transmit at channel 5180MHz by 802.11a Ant 1	



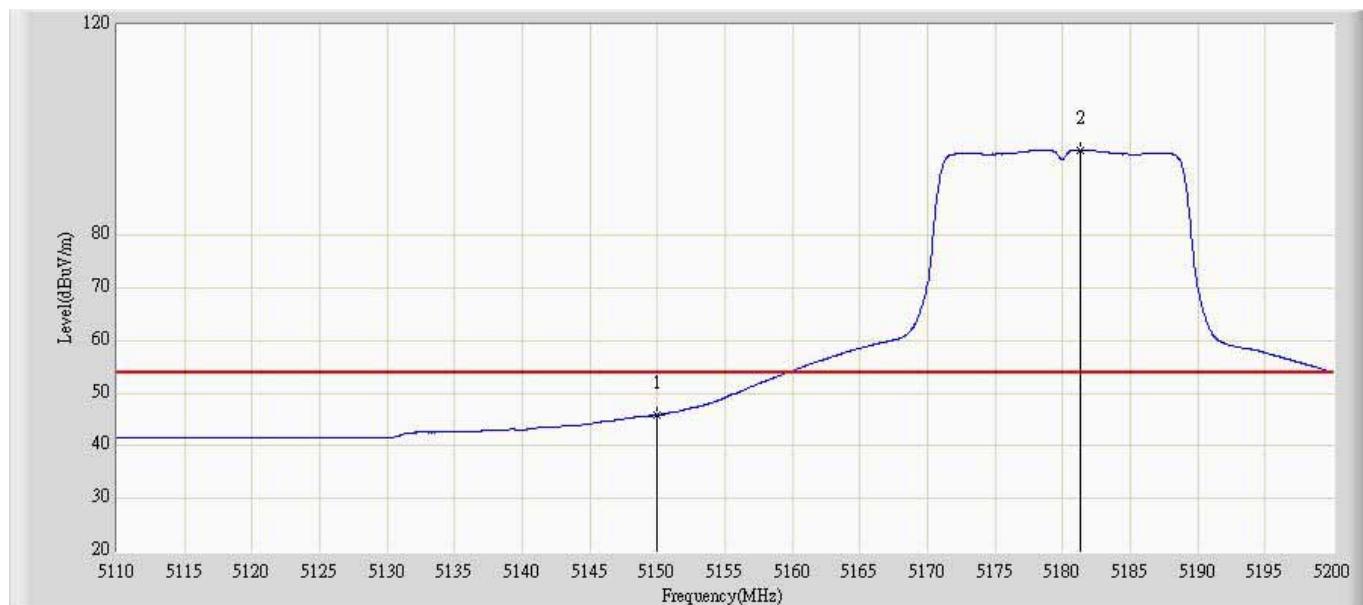
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	41.278	0.745	-12.722	54.000	40.533	AV
2		*	5181.190	84.051	43.435	N/A	N/A	40.617	AV

Site: AC5	Time: 2014/06/19 - 13:37
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 2 : Transmit at channel 5180MHz by 802.11n20 Ant 1	



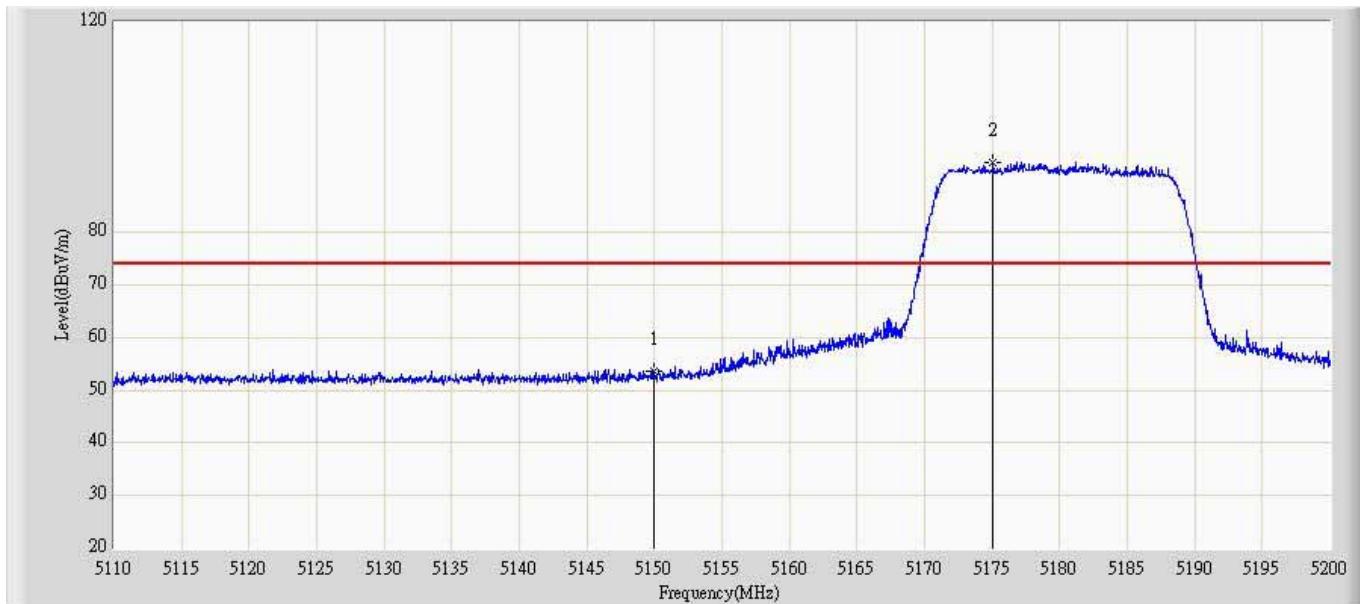
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	58.567	18.074	-15.433	74.000	40.493	PK
2		*	5176.510	105.616	65.085	N/A	N/A	40.531	PK

Site: AC5	Time: 2014/06/19 - 13:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 2 : Transmit at channel 5180MHz by 802.11n20 Ant 1	



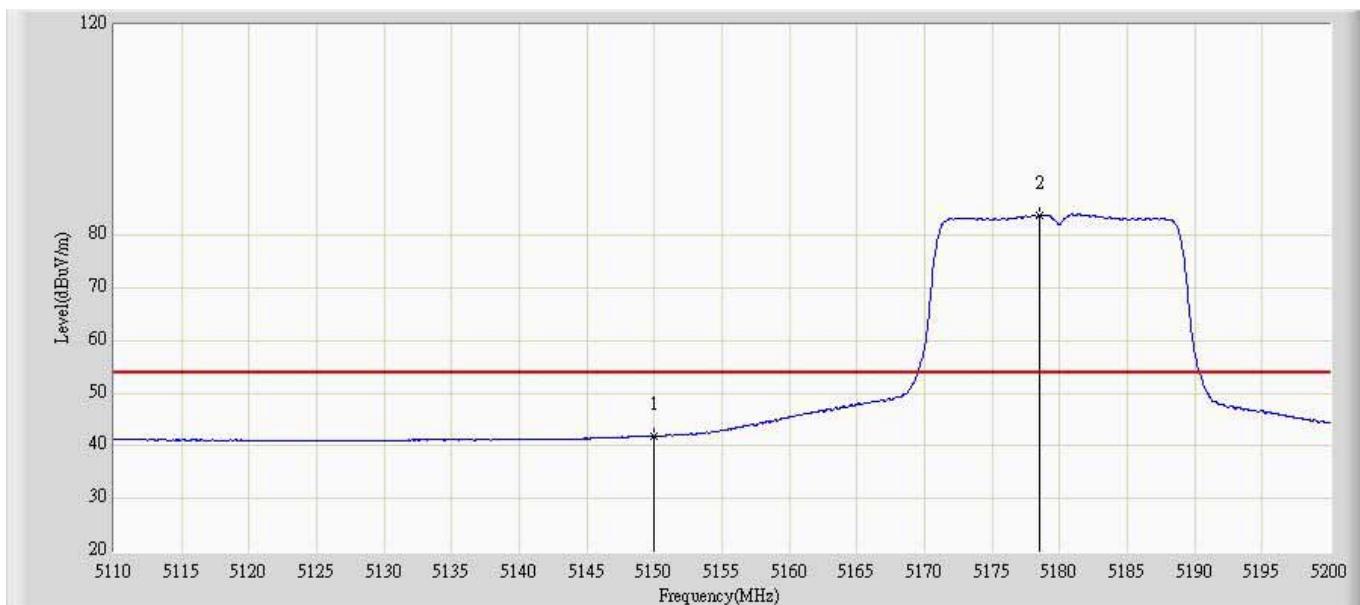
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	45.869	5.376	-8.131	54.000	40.493	AV
2		*	5181.325	96.232	55.705	N/A	N/A	40.527	AV

Site: AC5	Time: 2014/06/19 - 13:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 2 : Transmit at channel 5180MHz by 802.11n20 Ant 1	



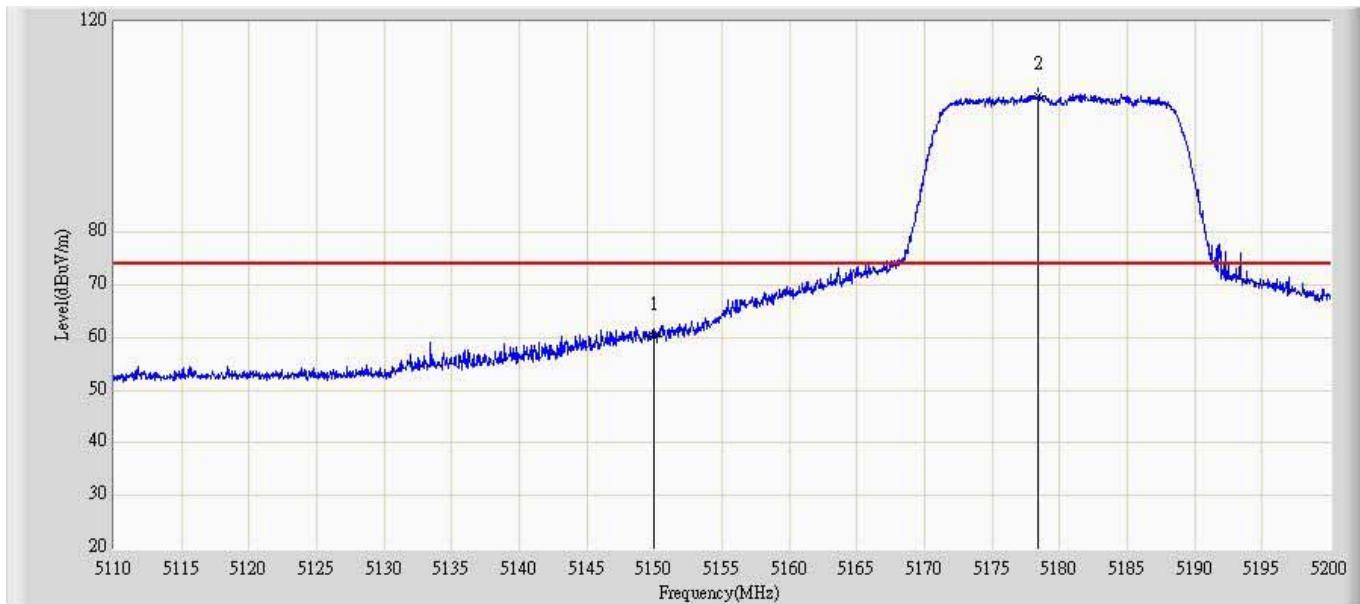
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	53.483	12.950	-20.517	74.000	40.533	PK
2		*	5175.070	93.379	52.765	N/A	N/A	40.614	PK

Site: AC5	Time: 2014/06/19 - 13:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 2 : Transmit at channel 5180MHz by 802.11n20 Ant 1	



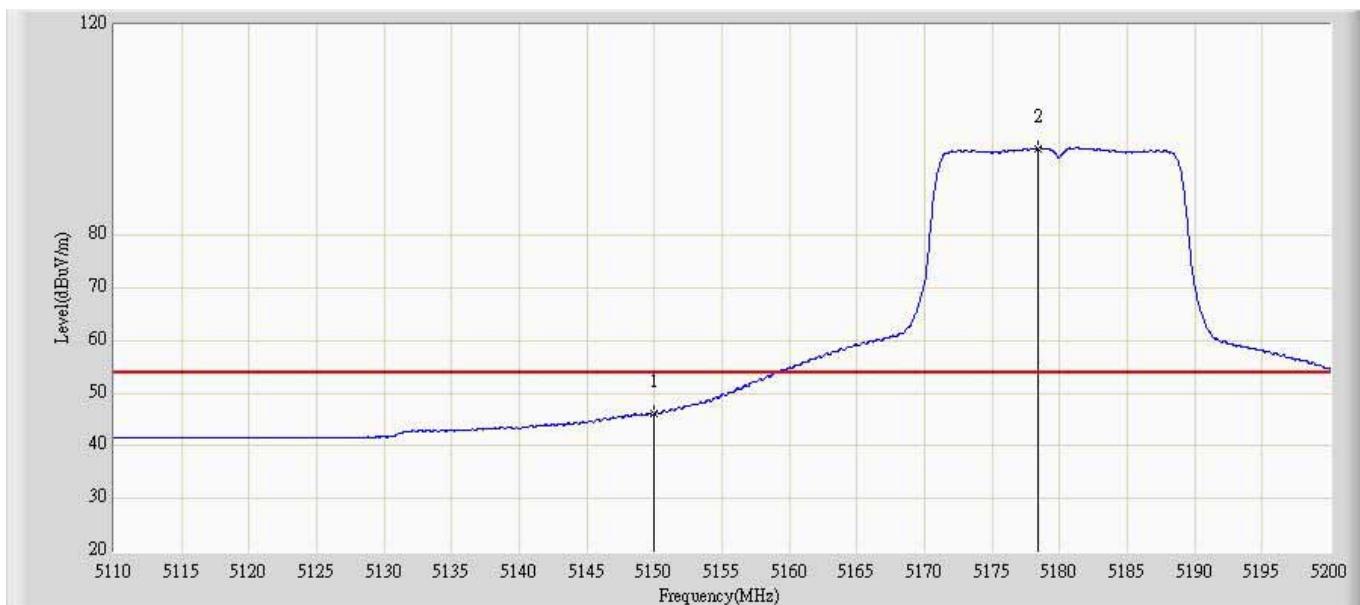
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	41.853	1.320	-12.147	54.000	40.533	AV
2		*	5178.490	83.824	43.209	N/A	N/A	40.614	AV

Site: AC5	Time: 2014/06/19 - 13:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 3 : Transmit at channel 5180MHz by 802.11ac20 Ant 1	



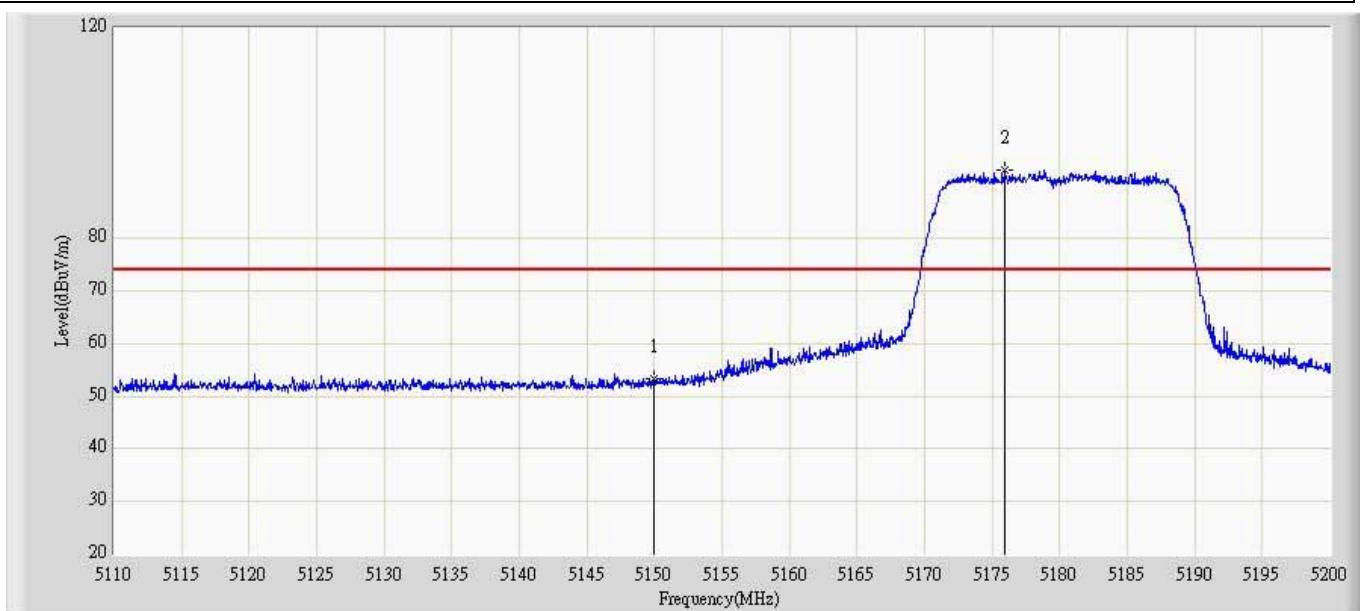
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	60.152	19.659	-13.848	74.000	40.493	PK
2		*	5178.445	105.796	65.266	N/A	N/A	40.530	PK

Site: AC5	Time: 2014/06/19 - 13:42
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 3 : Transmit at channel 5180MHz by 802.11ac20 Ant 1	



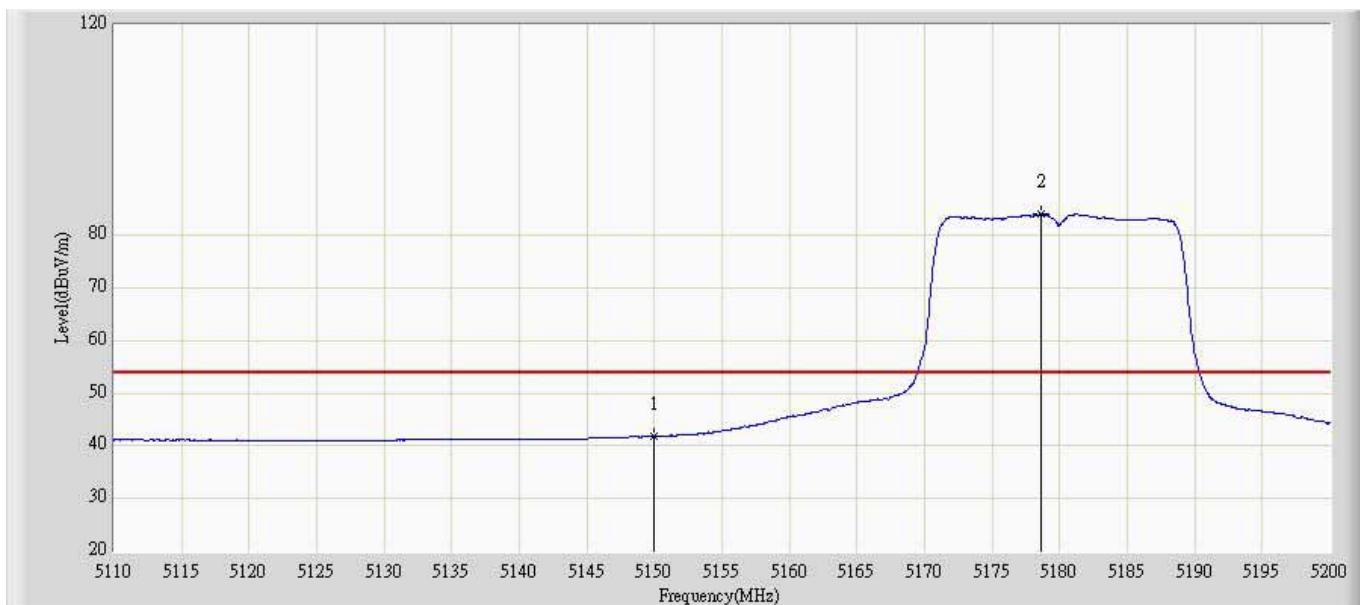
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	46.180	5.687	-7.820	54.000	40.493	AV
2		*	5178.445	96.556	56.026	N/A	N/A	40.530	AV

Site: AC5	Time: 2014/06/19 - 13:42
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 3 : Transmit at channel 5180MHz by 802.11ac20 Ant 1	



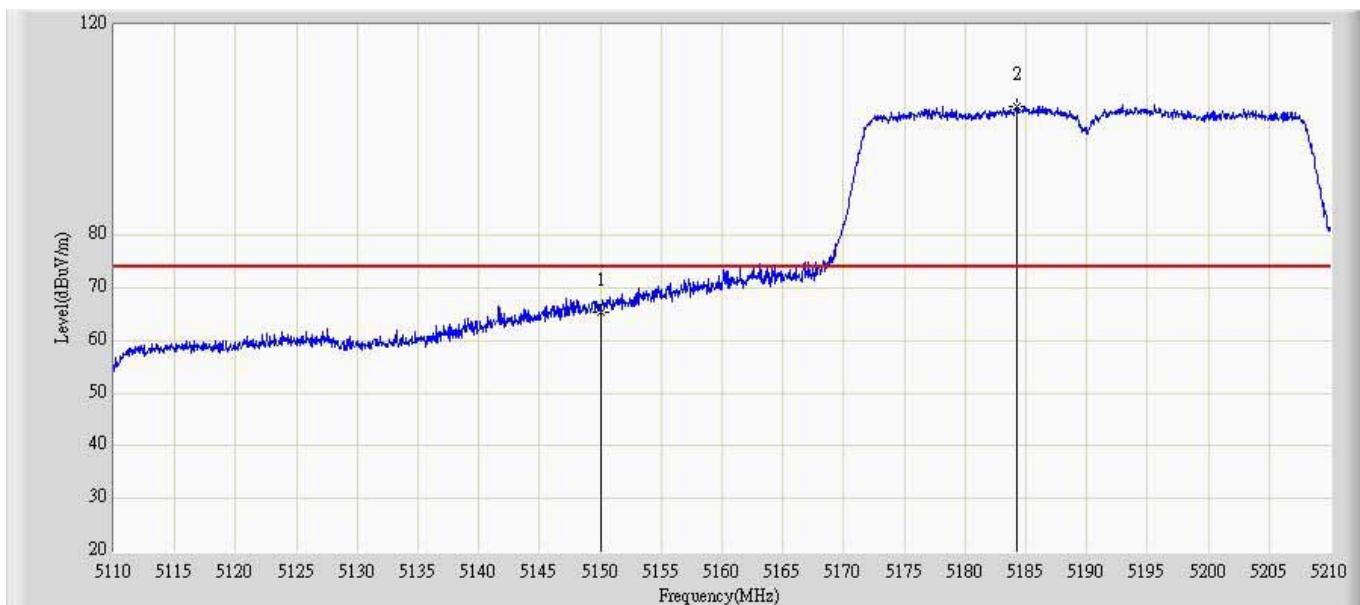
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	53.291	12.758	-20.709	74.000	40.533	PK
2		*	5175.970	92.853	52.240	N/A	N/A	40.613	PK

Site: AC5	Time: 2014/06/19 - 13:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 3 : Transmit at channel 5180MHz by 802.11ac20 Ant 1	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	41.842	1.309	-12.158	54.000	40.533	AV
2		*	5178.670	83.943	43.328	N/A	N/A	40.615	AV

Site: AC5	Time: 2014/06/19 - 13:44
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 4: Transmit at channel 5190MHz by 802.11n40 Ant 1	



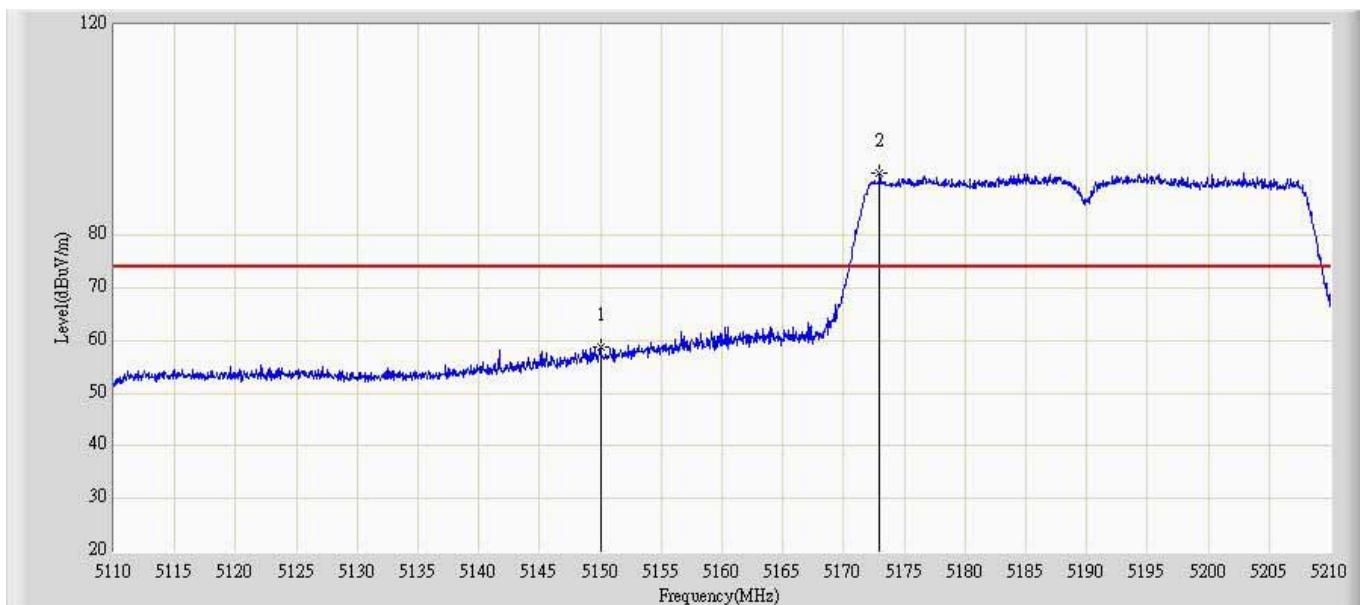
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	65.419	24.926	-8.581	74.000	40.493	PK
2		*	5184.200	104.344	63.820	N/A	N/A	40.524	PK

Site: AC5	Time: 2014/06/19 - 13:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 4: Transmit at channel 5190MHz by 802.11n40 Ant 1	



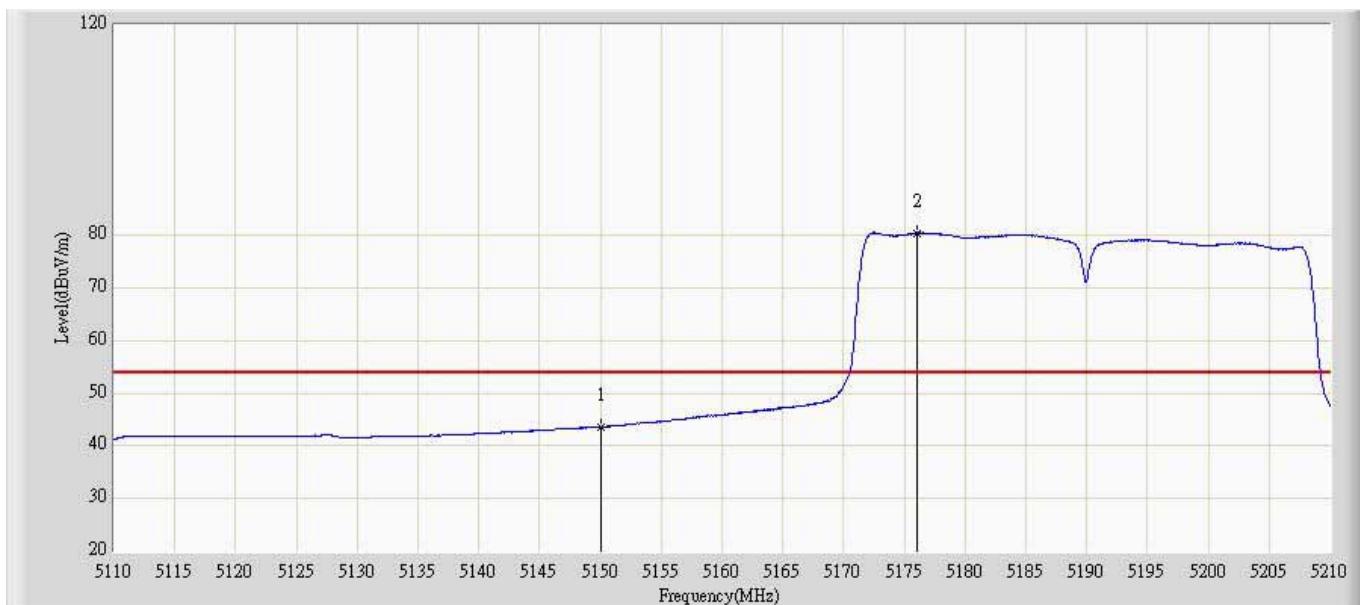
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	53.214	12.721	-0.786	54.000	40.493	AV
2		*	5185.700	94.557	54.035	N/A	N/A	40.522	AV

Site: AC5	Time: 2014/06/19 - 13:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 4: Transmit at channel 5190MHz by 802.11n40 Ant 1	



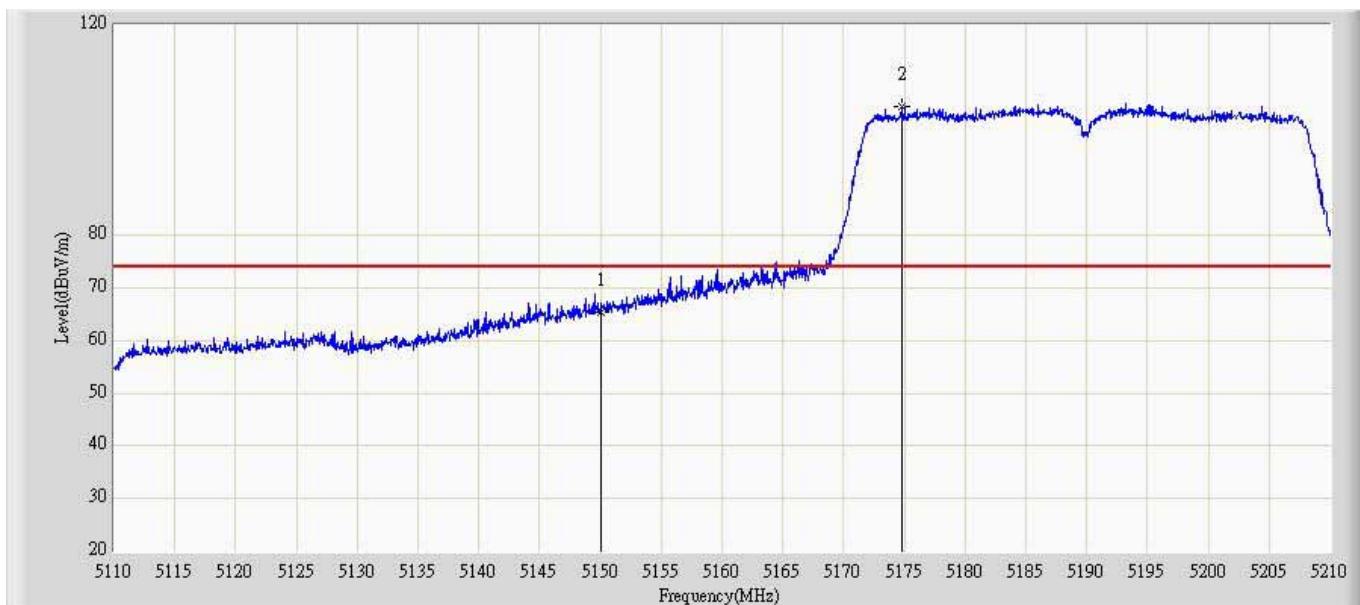
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	58.750	18.217	-15.250	74.000	40.533	PK
2		*	5172.950	91.932	51.318	N/A	N/A	40.615	PK

Site: AC5	Time: 2014/06/19 - 13:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 4: Transmit at channel 5190MHz by 802.11n40 Ant 1	



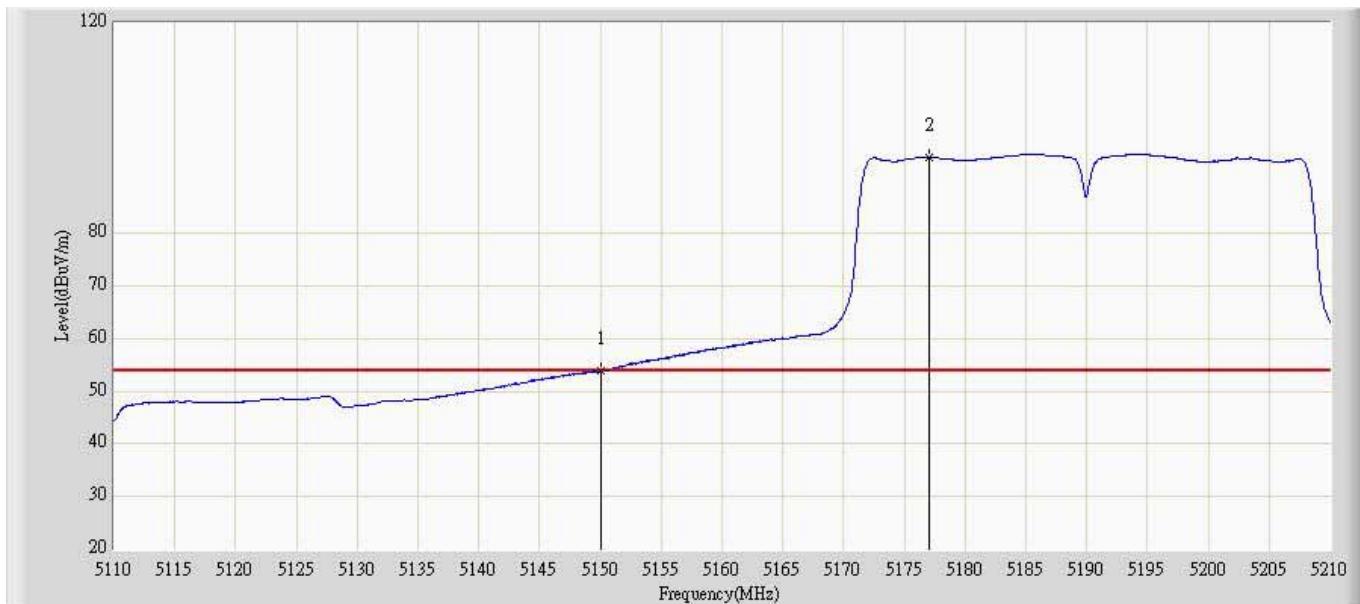
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	43.628	3.095	-10.372	54.000	40.533	AV
2		*	5176.050	80.465	39.852	N/A	N/A	40.614	AV

Site: AC5	Time: 2014/06/19 - 13:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 5: Transmit at channel 5190MHz by 802.11ac40 Ant 1	



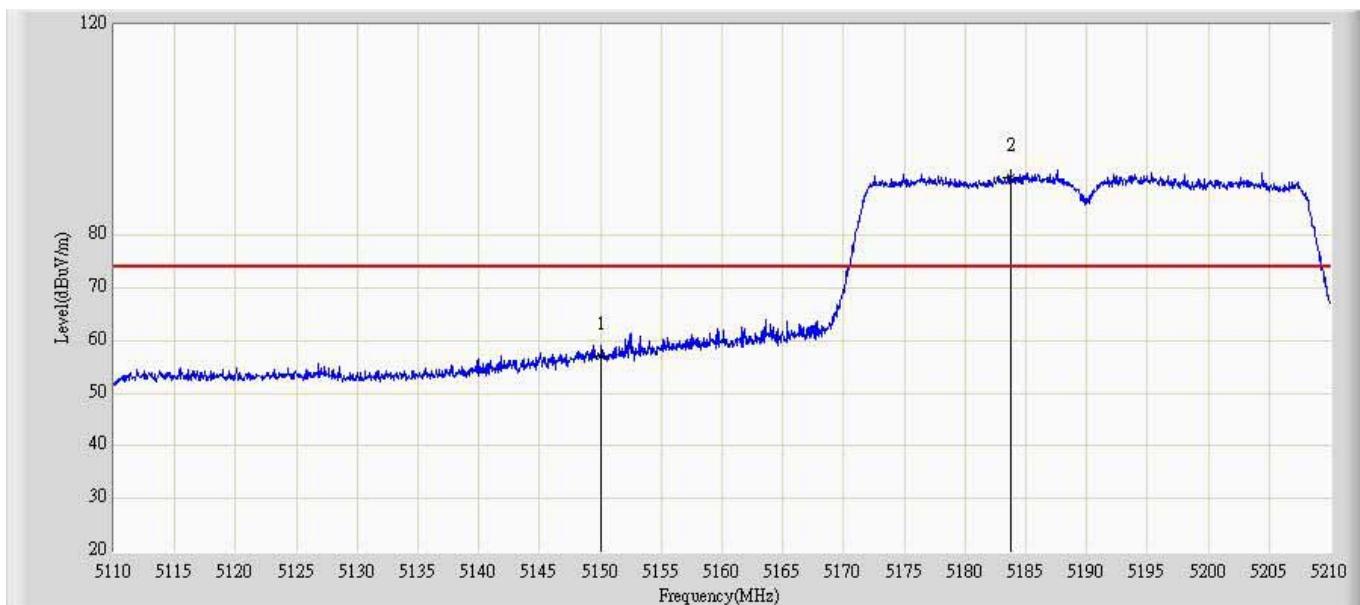
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	65.443	24.950	-8.557	74.000	40.493	PK
2		*	5174.750	104.504	63.970	N/A	N/A	40.534	PK

Site: AC5	Time: 2014/06/19 - 13:53
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 5: Transmit at channel 5190MHz by 802.11ac40 Ant 1	



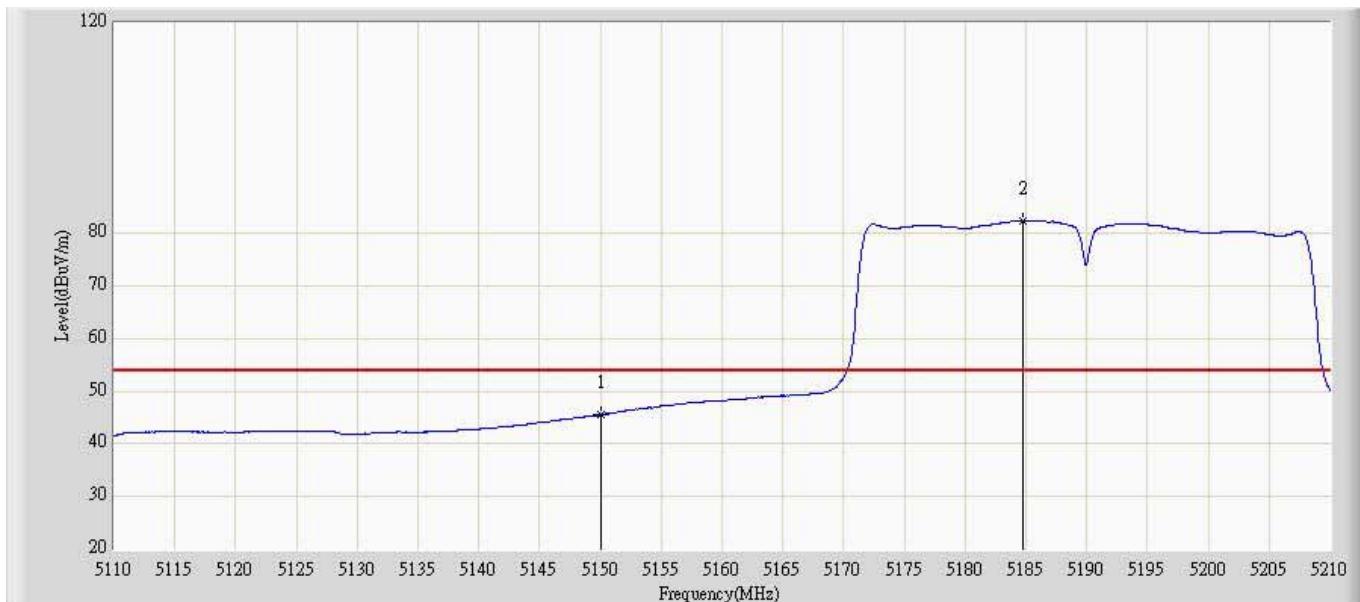
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	53.942	13.449	-0.058	54.000	40.493	AV
2		*	5177.000	94.379	53.848	N/A	N/A	40.531	AV

Site: AC5	Time: 2014/06/19 - 13:55
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 5: Transmit at channel 5190MHz by 802.11ac40 Ant 1	



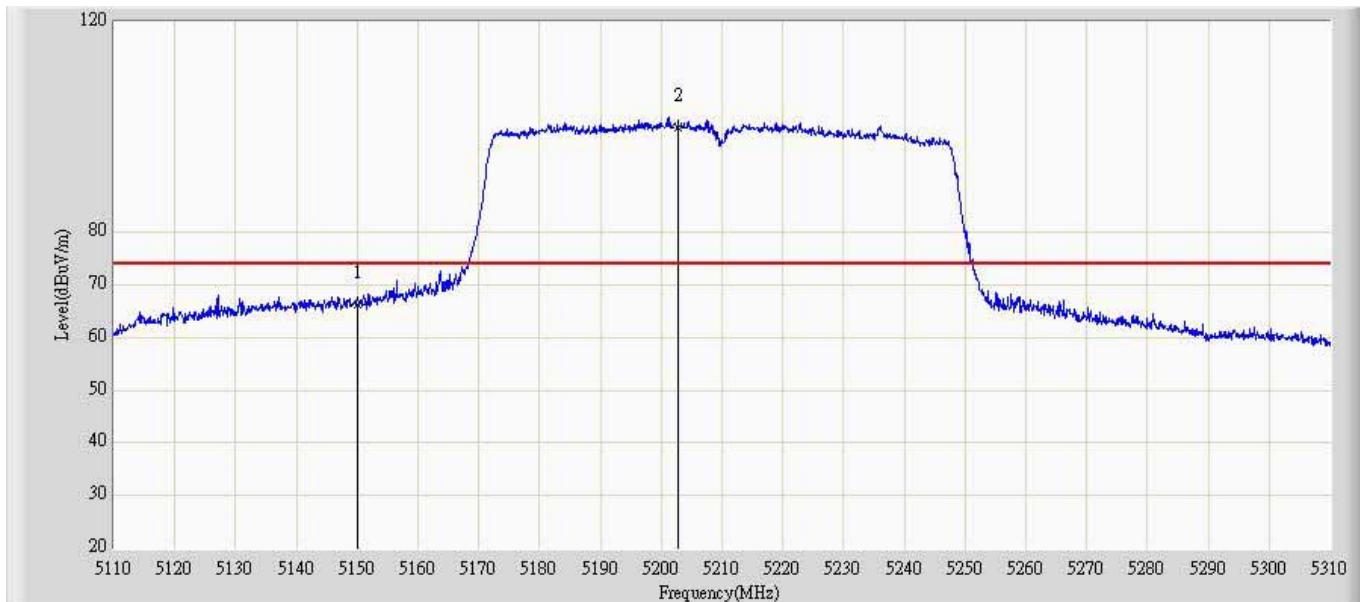
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	57.093	16.560	-16.907	74.000	40.533	PK
2		*	5183.717	90.922	50.304	N/A	N/A	40.618	PK

Site: AC5	Time: 2014/06/19 - 13:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 5: Transmit at channel 5190MHz by 802.11ac40 Ant 1	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	45.484	4.951	-8.516	54.000	40.533	AV
2		*	5184.750	82.423	41.804	N/A	N/A	40.618	AV

Site: AC5	Time: 2014/06/19 - 13:57
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 6: Transmit at channel 5210MHz by 802.11ac80 Ant 1	



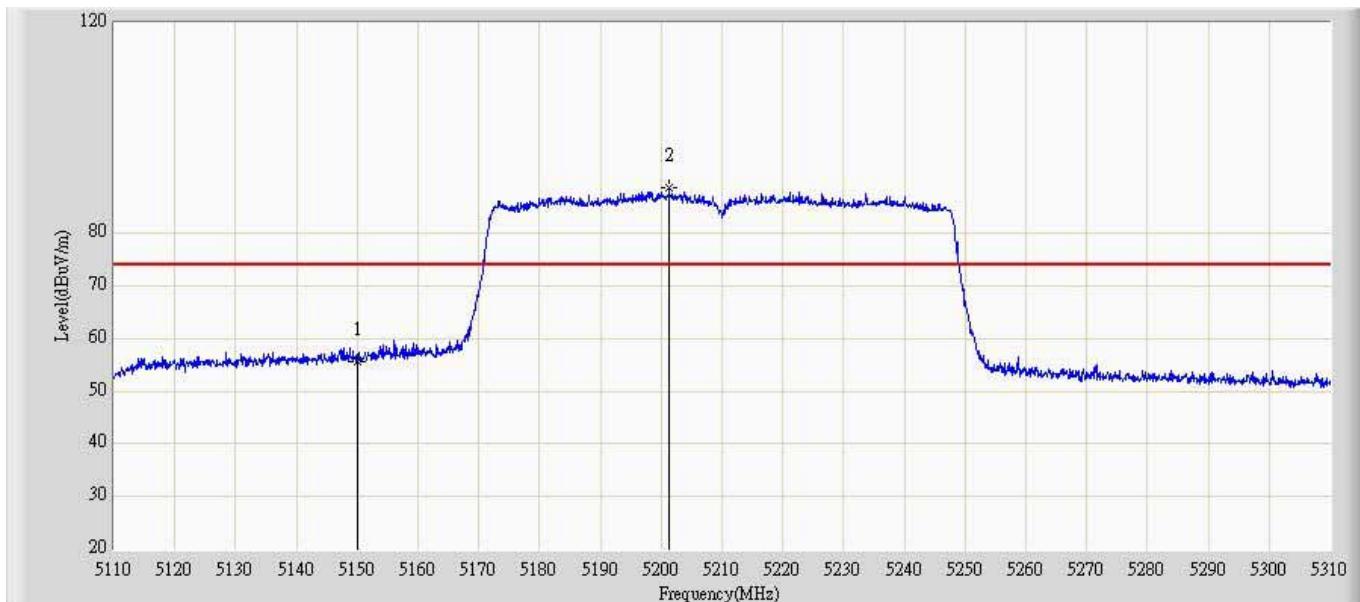
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	66.138	25.645	-7.862	74.000	40.493	PK
2		*	5202.691	99.984	59.416	N/A	N/A	40.568	PK

Site: AC5	Time: 2014/06/19 - 14:00
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 6: Transmit at channel 5210MHz by 802.11ac80 Ant 1	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	53.481	12.988	-0.519	54.000	40.493	AV
2		*	5201.300	90.534	49.973	N/A	N/A	40.561	AV

Site: AC5	Time: 2014/06/19 - 14:01
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 6: Transmit at channel 5210MHz by 802.11ac80 Ant 1	



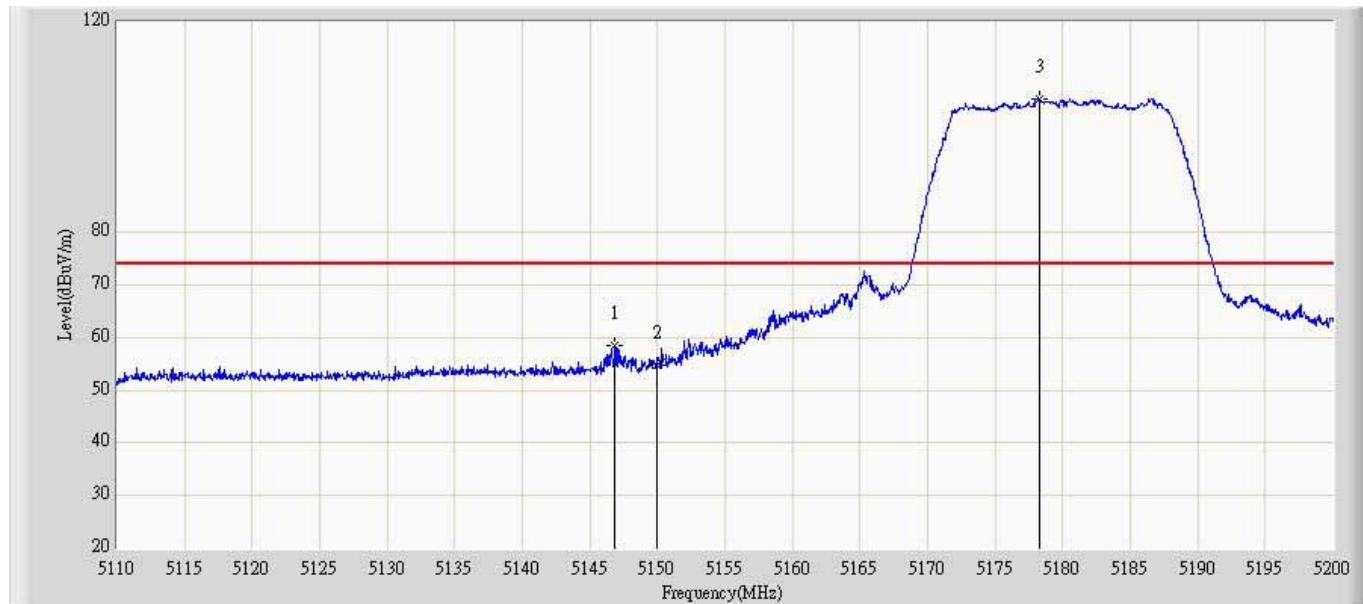
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	55.585	15.052	-18.415	74.000	40.533	PK
2		*	5201.300	88.542	47.859	N/A	N/A	40.683	PK

Site: AC5	Time: 2014/06/19 - 14:02
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 6: Transmit at channel 5210MHz by 802.11ac80 Ant 1	



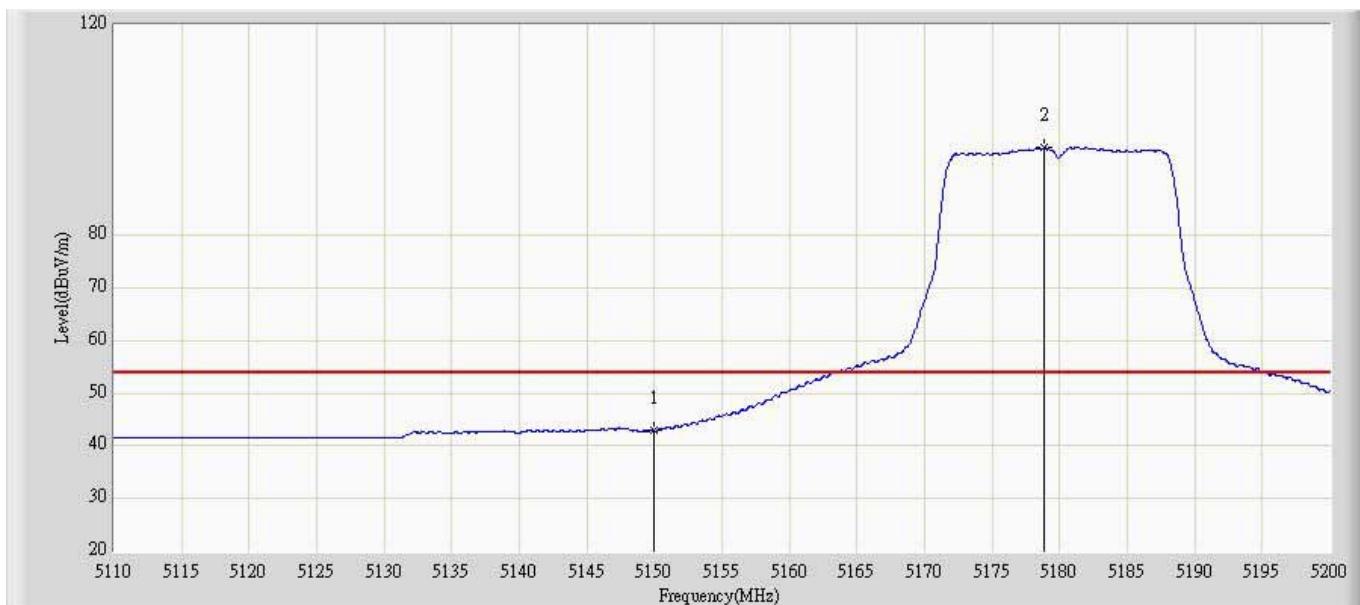
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	44.610	4.077	-9.390	54.000	40.533	AV
2		*	5197.600	78.416	37.757	N/A	N/A	40.659	AV

Site: AC5	Time: 2014/06/19 - 14:03
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 1 : Transmit at channel 5180MHz by 802.11a Ant 2	



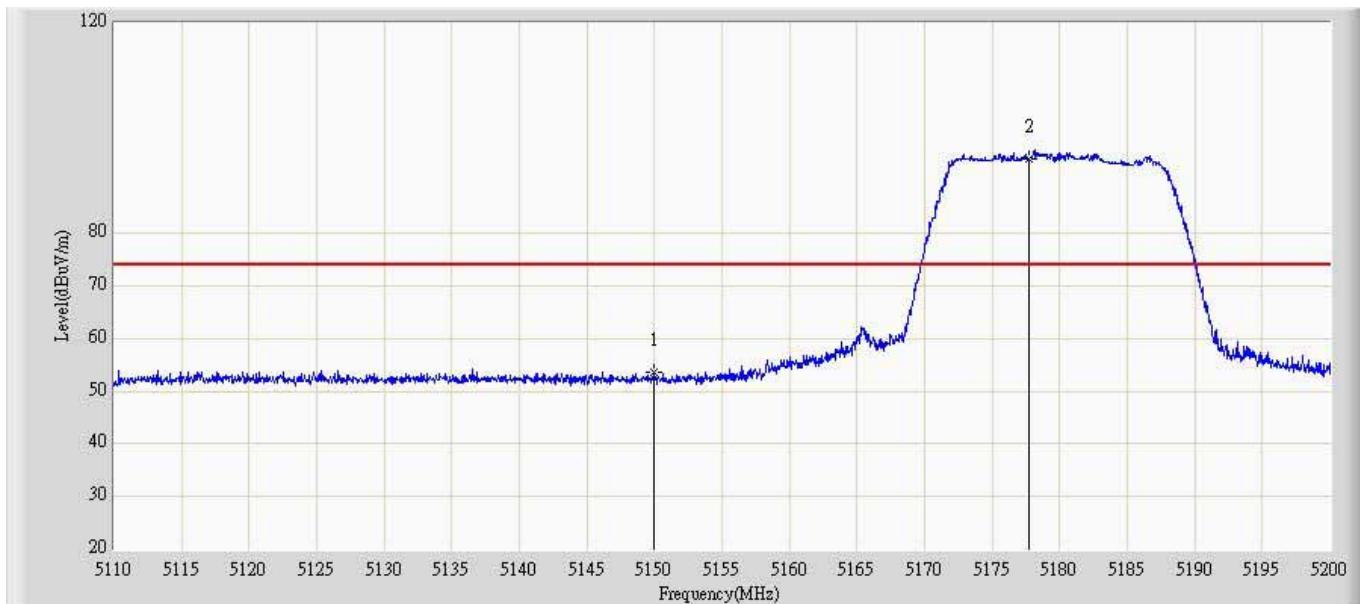
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5146.855	58.491	18.020	-15.509	74.000	40.471	PK
2			5150.000	54.696	14.203	-19.304	74.000	40.493	PK
3		*	5178.265	105.337	64.807	N/A	N/A	40.530	PK

Site: AC5	Time: 2014/06/19 - 14:06
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 1 : Transmit at channel 5180MHz by 802.11a Ant 2	



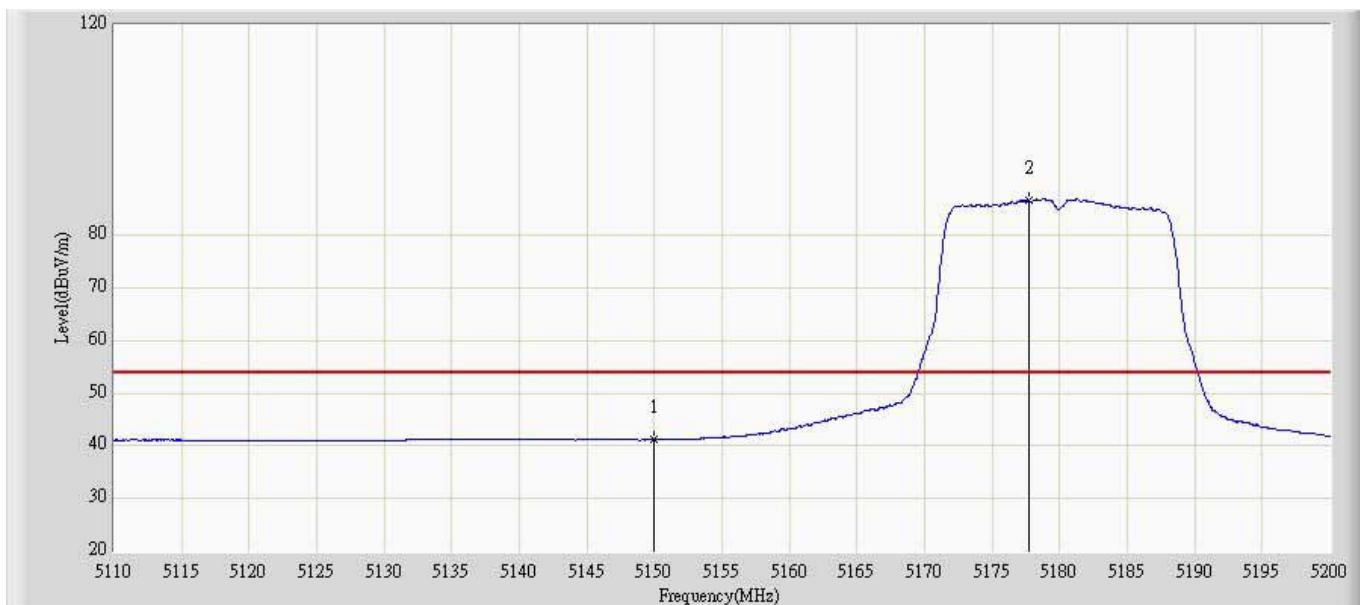
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	42.898	2.405	-11.102	54.000	40.493	AV
2		*	5178.850	96.585	56.056	N/A	N/A	40.529	AV

Site: AC5	Time: 2014/06/19 - 14:06
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 1 : Transmit at channel 5180MHz by 802.11a Ant 2	



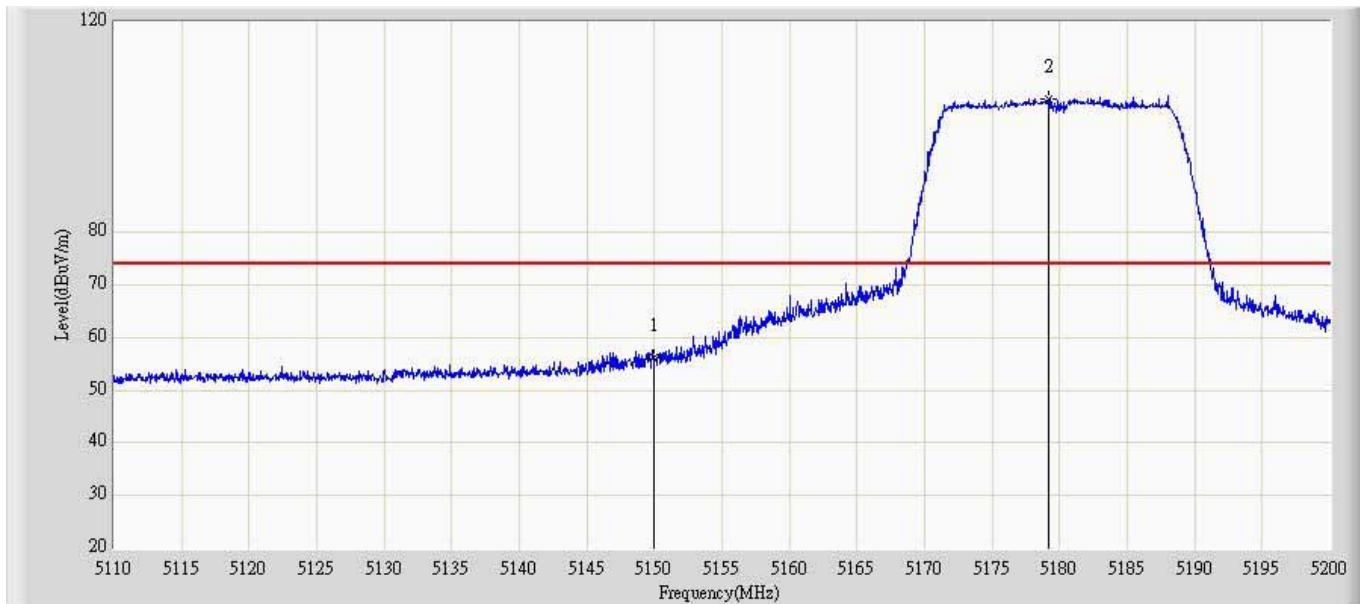
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	53.486	12.953	-20.514	74.000	40.533	PK
2		*	5177.745	94.209	53.595	N/A	N/A	40.614	PK

Site: AC5	Time: 2014/06/19 - 14:08
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 1 : Transmit at channel 5180MHz by 802.11a Ant 2	



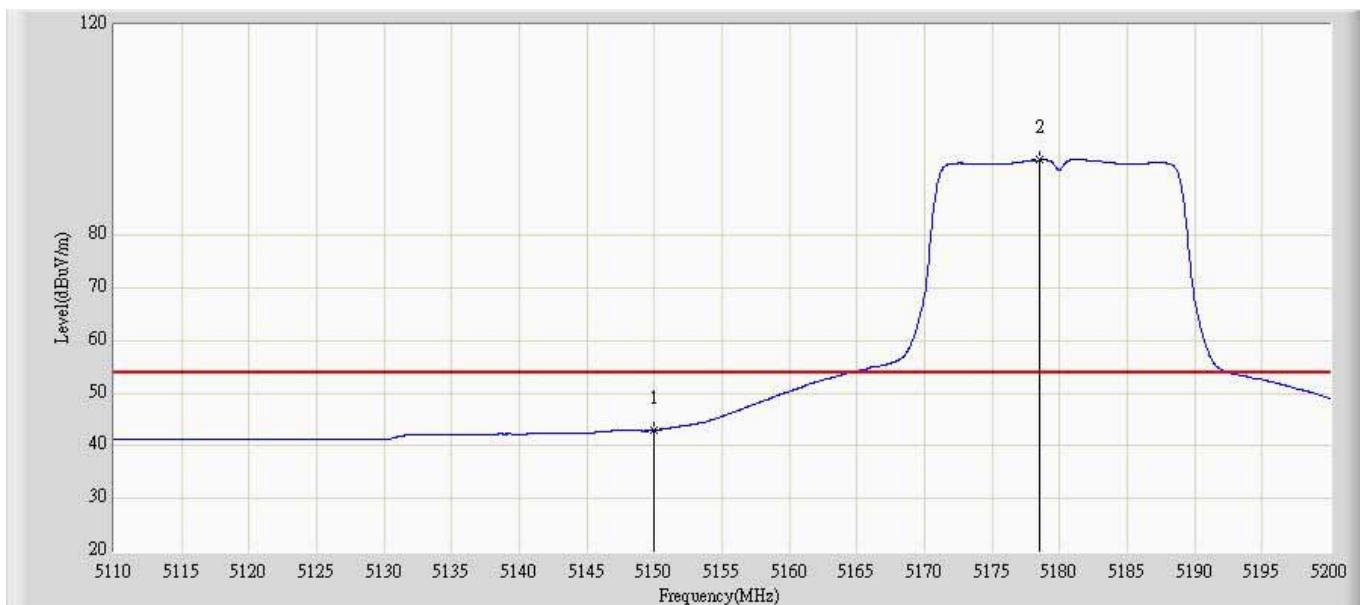
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	41.161	0.628	-12.839	54.000	40.533	AV
2		*	5177.680	86.656	46.042	N/A	N/A	40.614	AV

Site: AC5	Time: 2014/06/19 - 14:10
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 1 : Transmit at channel 5180MHz by 802.11n20 Ant 2	



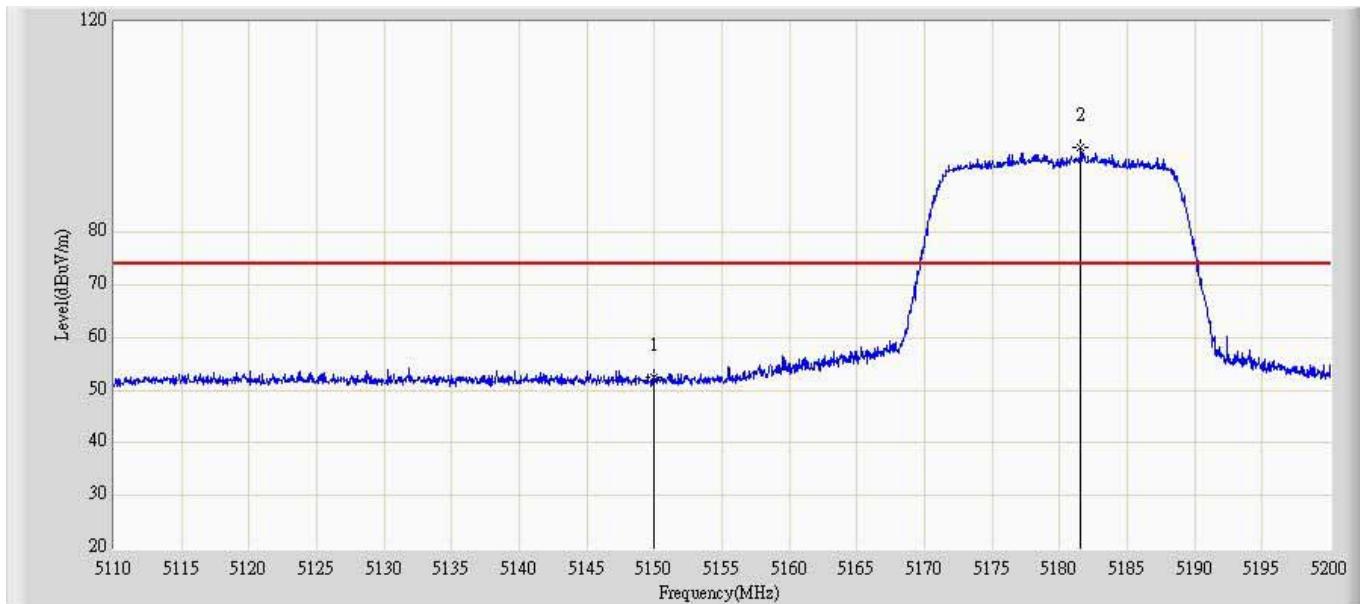
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	56.279	15.786	-17.721	74.000	40.493	PK
2		*	5179.165	105.282	64.753	N/A	N/A	40.529	PK

Site: AC5	Time: 2014/06/19 - 14:12
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 1 : Transmit at channel 5180MHz by 802.11n20 Ant 2	



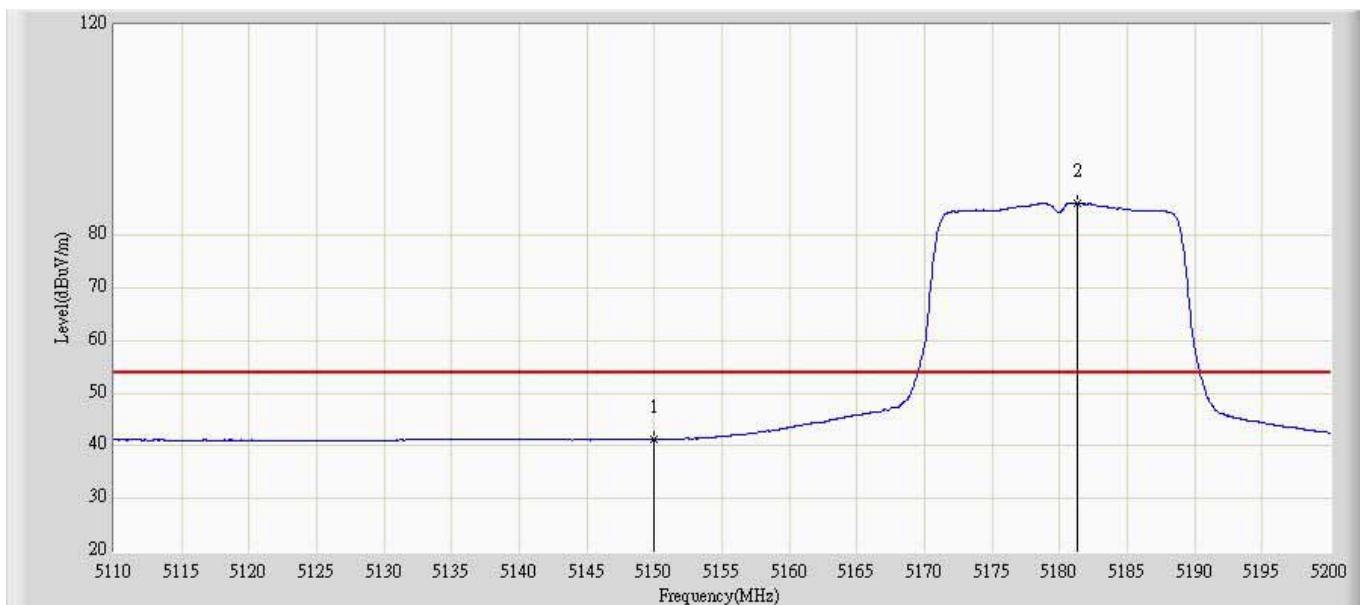
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	42.978	2.485	-11.022	54.000	40.493	AV
2		*	5178.535	94.283	53.754	N/A	N/A	40.529	AV

Site: AC5	Time: 2014/06/19 - 14:12
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 1 : Transmit at channel 5180MHz by 802.11n20 Ant 2	



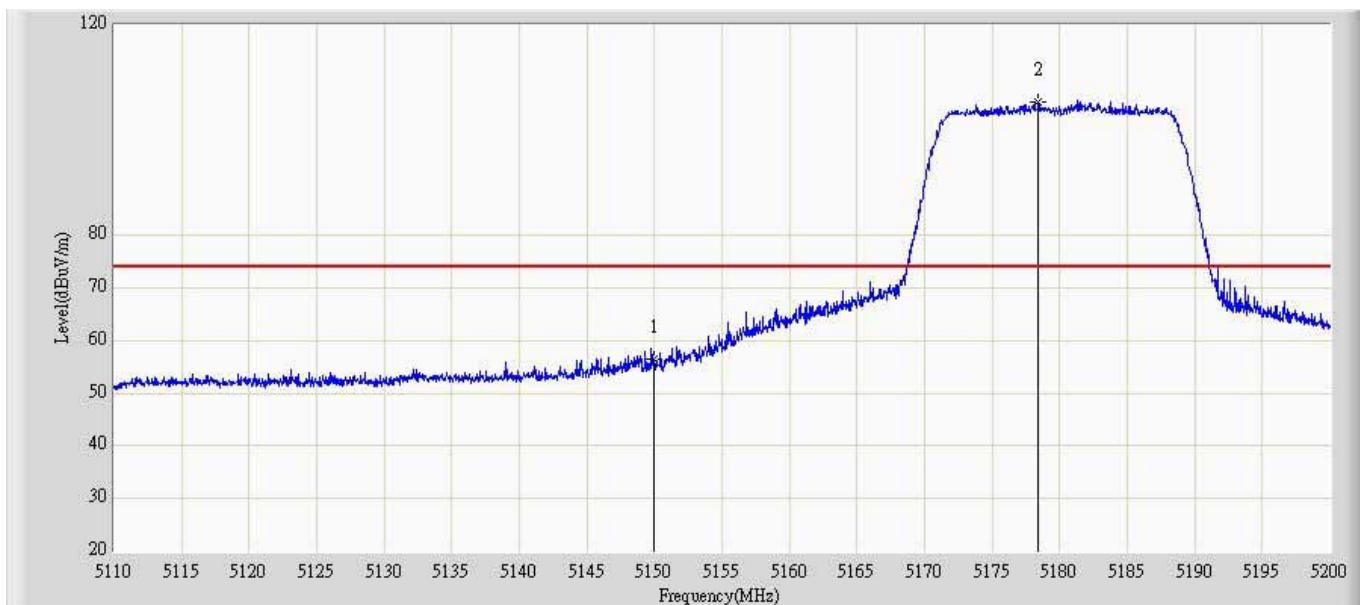
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	52.527	11.994	-21.473	74.000	40.533	PK
2		*	5181.550	96.023	55.406	N/A	N/A	40.616	PK

Site: AC5	Time: 2014/06/19 - 14:13
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 1 : Transmit at channel 5180MHz by 802.11n20 Ant 2	



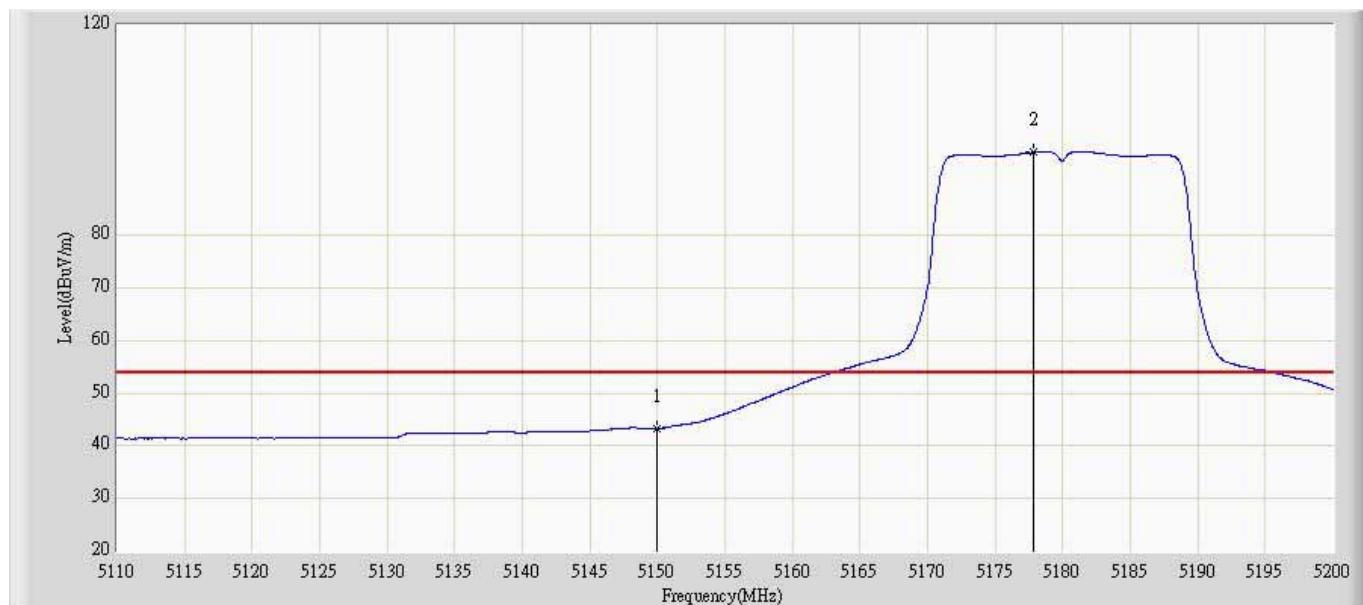
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	41.193	0.660	-12.807	54.000	40.533	AV
2		*	5181.325	86.231	45.614	N/A	N/A	40.617	AV

Site: AC5	Time: 2014/06/19 - 14:14
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 3: Transmit at channel 5180MHz by 802.11ac20 Ant 2	



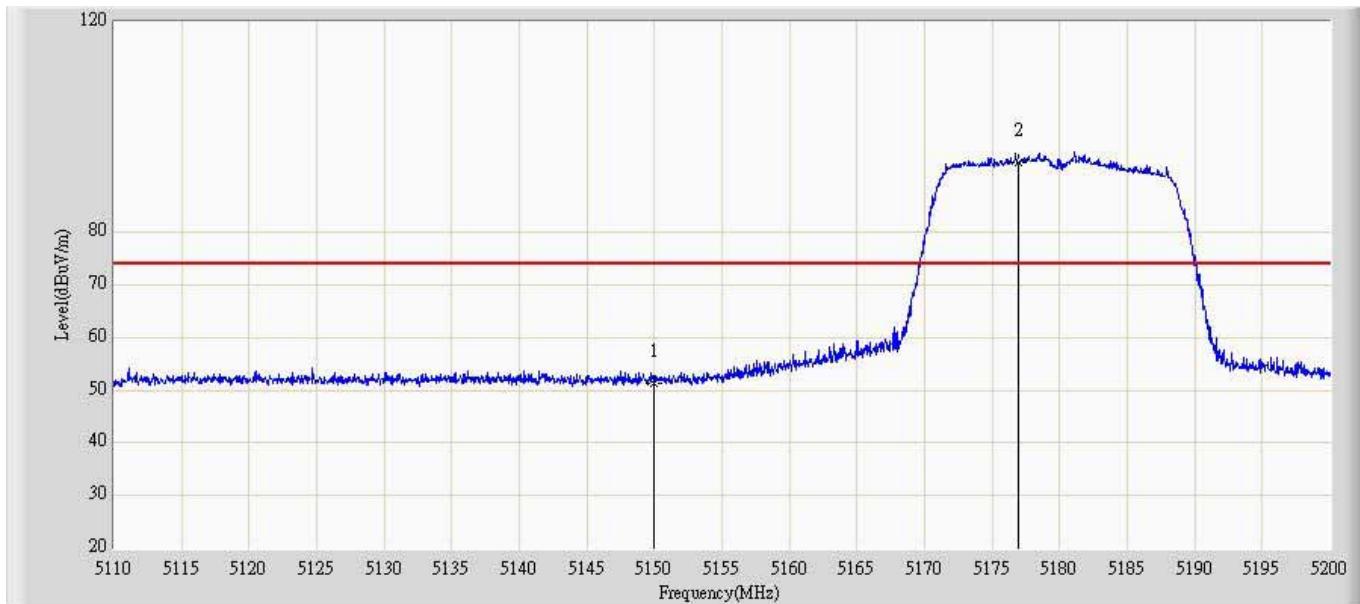
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	56.528	16.035	-17.472	74.000	40.493	PK
2		*	5178.400	105.396	64.866	N/A	N/A	40.530	PK

Site: AC5	Time: 2014/06/19 - 14:15
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 3: Transmit at channel 5180MHz by 802.11ac20 Ant 2	



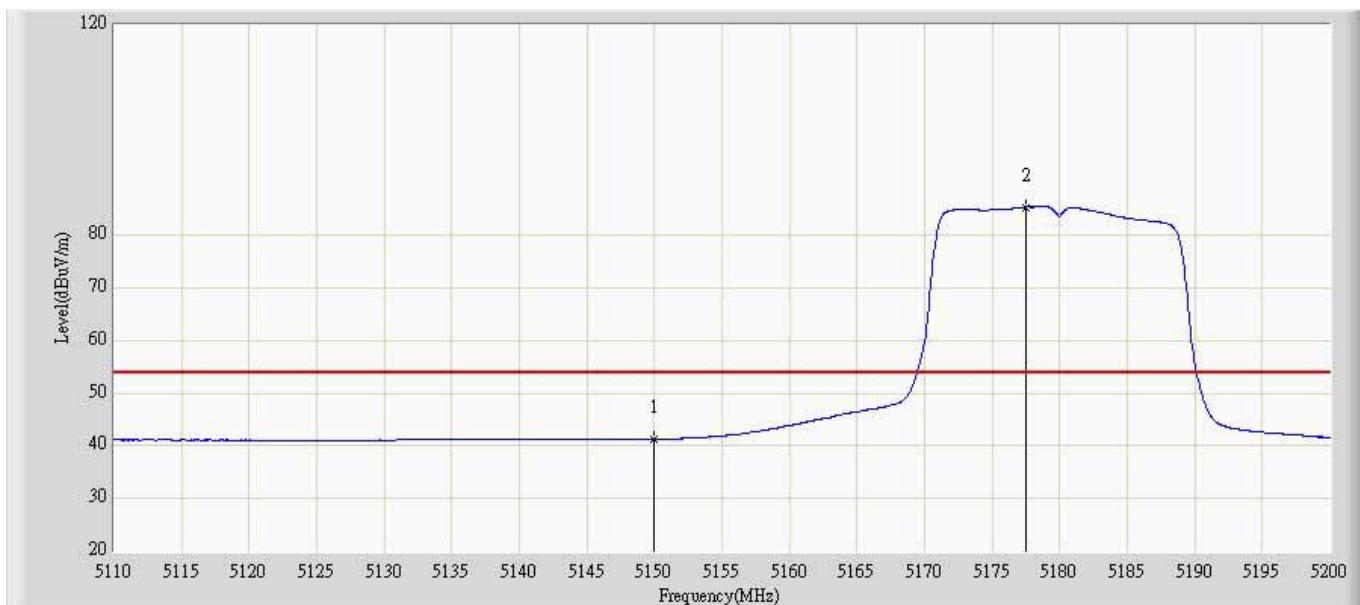
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	43.292	2.799	-10.708	54.000	40.493	AV
2		*	5177.815	95.751	55.221	N/A	N/A	40.530	AV

Site: AC5	Time: 2014/06/19 - 14:15
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 3: Transmit at channel 5180MHz by 802.11ac20 Ant 2	



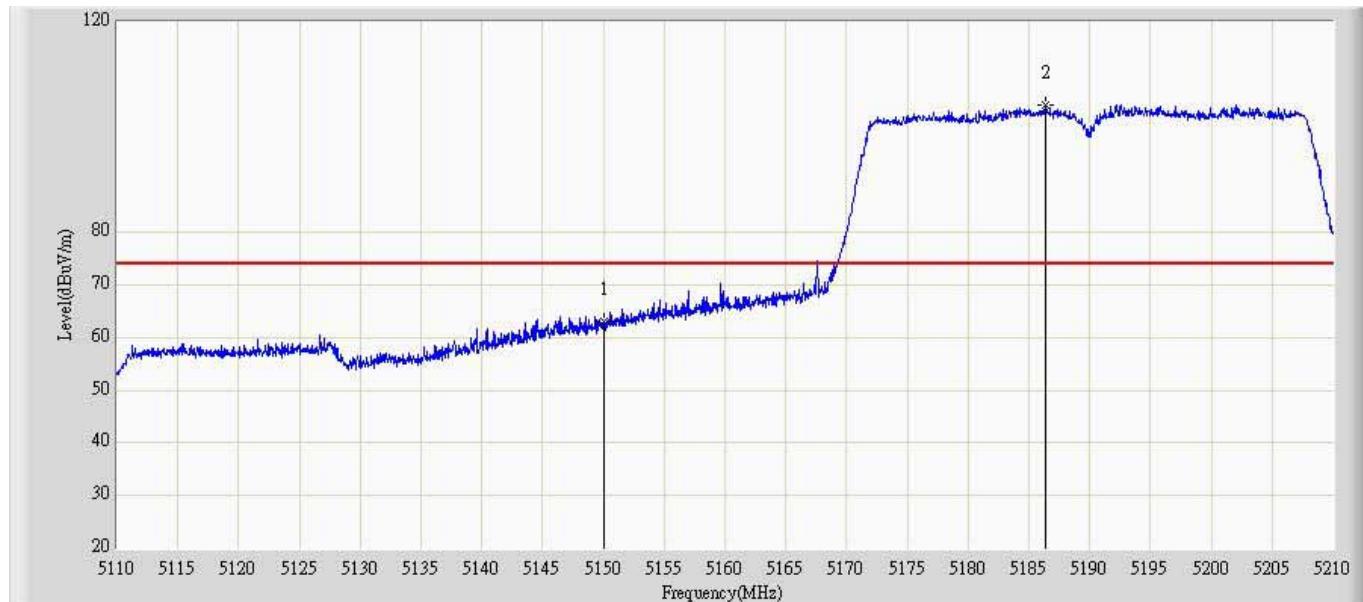
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	51.233	10.700	-22.767	74.000	40.533	PK
2		*	5176.905	93.345	52.731	N/A	N/A	40.614	PK

Site: AC5	Time: 2014/06/19 - 14:16
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 3: Transmit at channel 5180MHz by 802.11ac20 Ant 2	



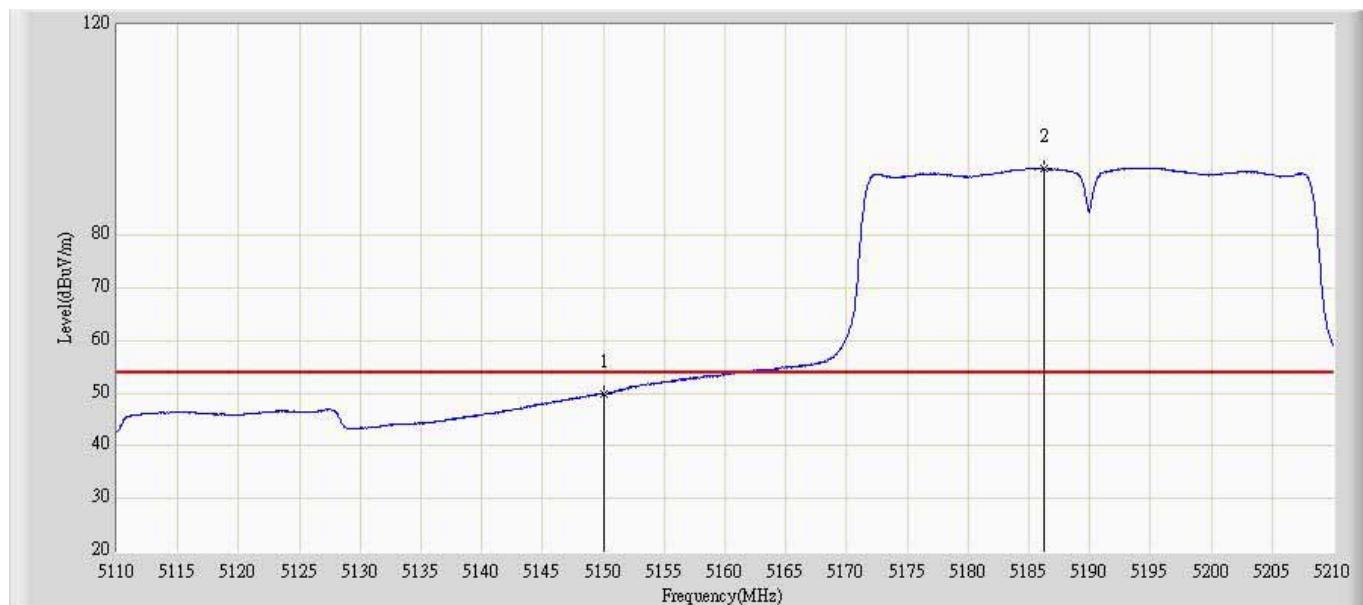
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	41.267	0.734	-12.733	54.000	40.533	AV
2		*	5177.500	85.373	44.759	N/A	N/A	40.614	AV

Site: AC5	Time: 2014/06/19 - 14:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 4: Transmit at channel 5190MHz by 802.11n40 Ant 2	



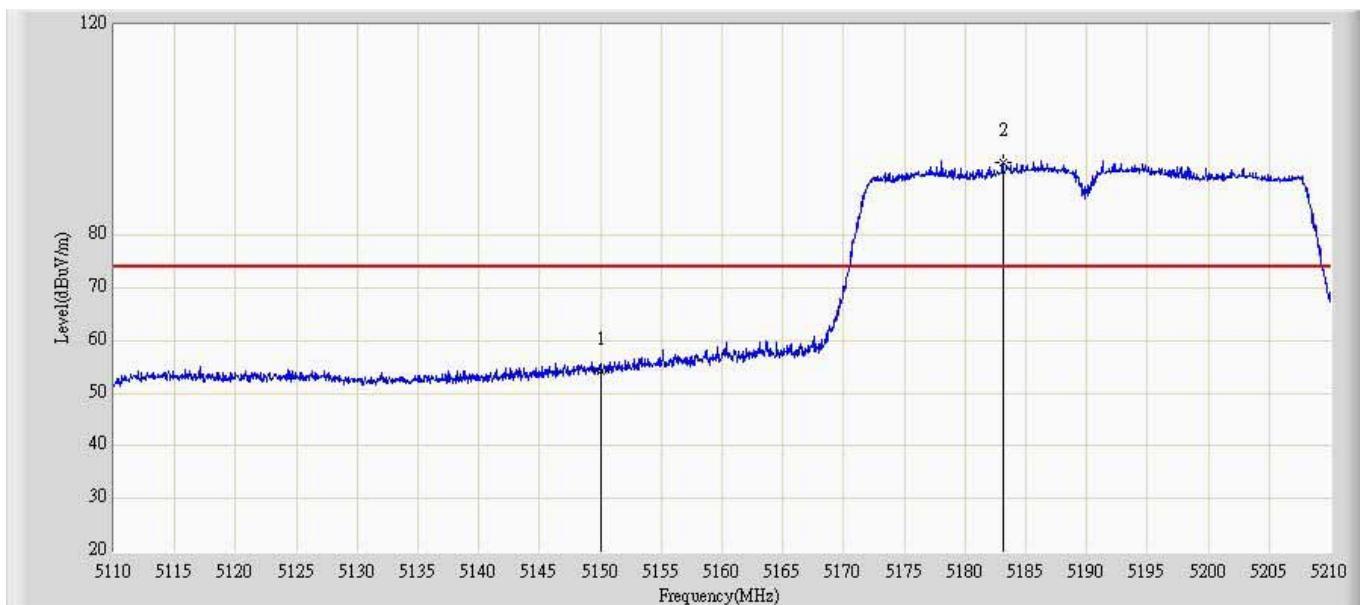
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	63.206	22.713	-10.794	74.000	40.493	PK
2		*	5186.350	104.263	63.741	N/A	N/A	40.522	PK

Site: AC5	Time: 2014/06/19 - 14:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 4: Transmit at channel 5190MHz by 802.11n40 Ant 2	



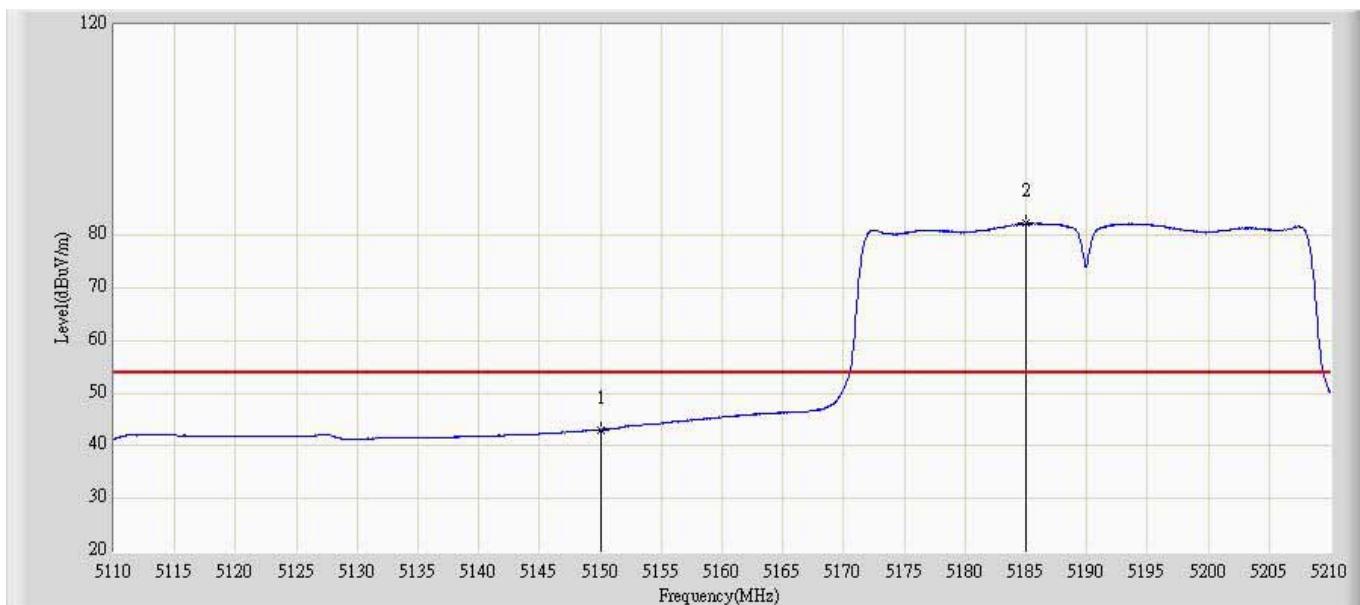
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	49.824	9.331	-4.176	54.000	40.493	AV
2		*	5186.300	92.620	52.001	N/A	N/A	40.620	AV

Site: AC5	Time: 2014/06/19 - 14:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 4: Transmit at channel 5190MHz by 802.11n40 Ant 2	



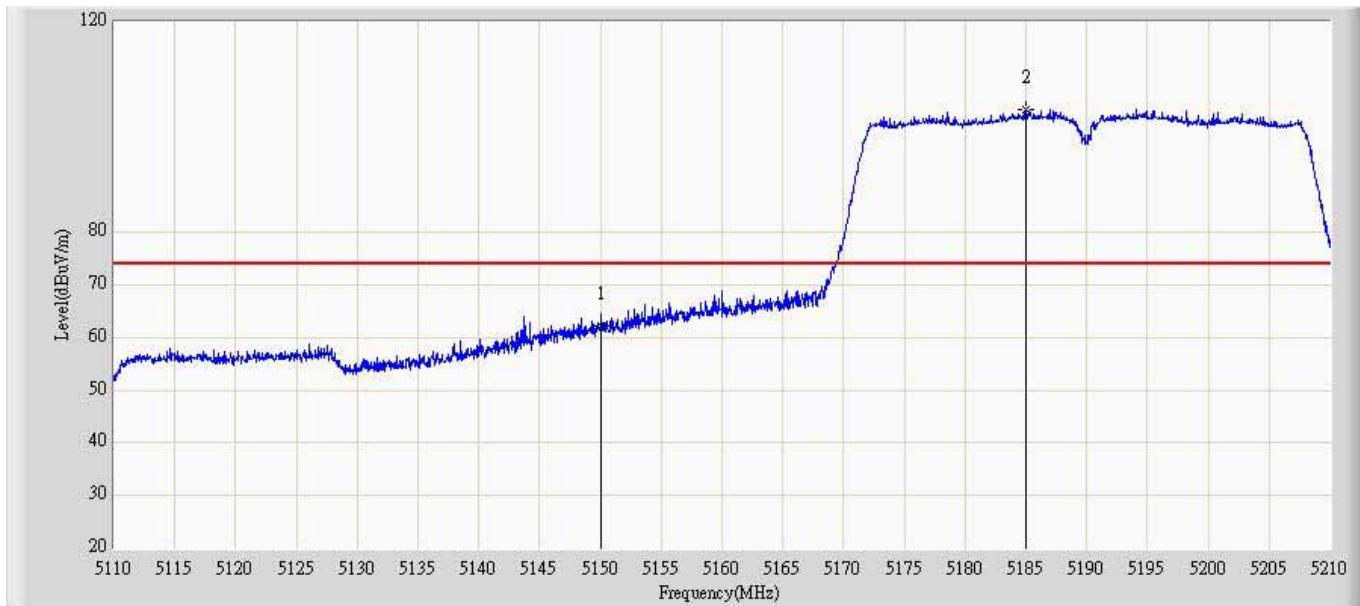
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	54.085	13.552	-19.915	74.000	40.533	PK
2		*	5183.100	93.918	53.300	N/A	N/A	40.618	PK

Site: AC5	Time: 2014/06/19 - 14:21
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 4: Transmit at channel 5190MHz by 802.11n40 Ant 2	



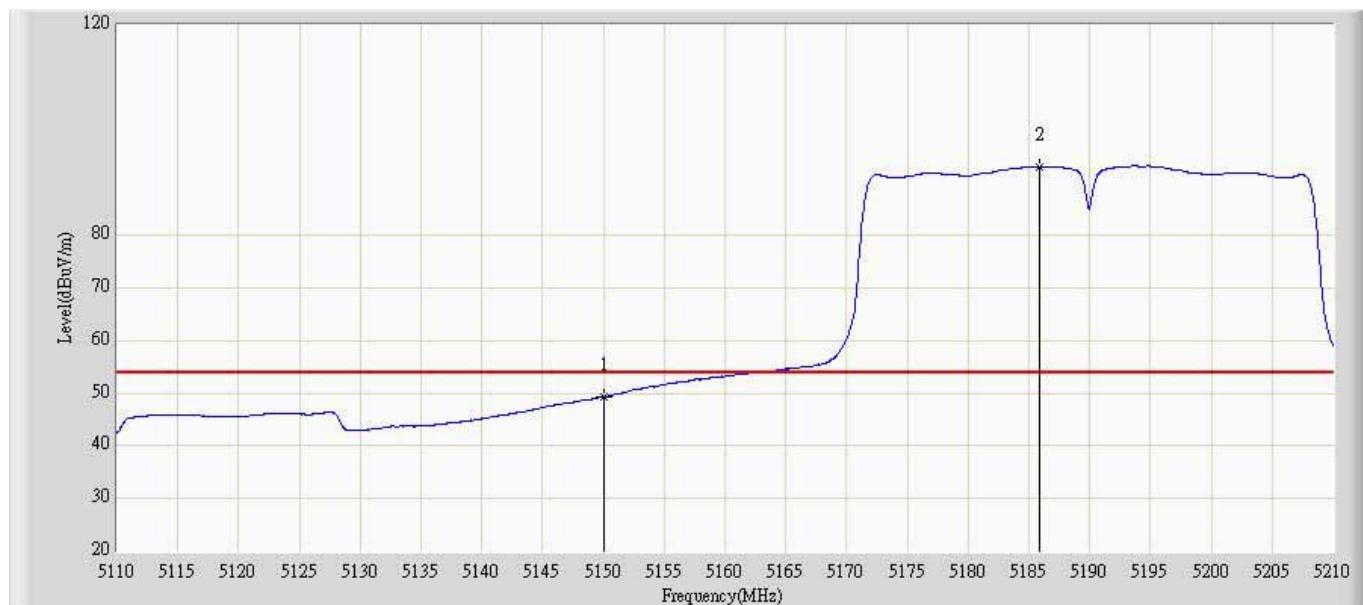
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	43.057	2.524	-10.943	54.000	40.533	AV
2		*	5185.050	82.268	41.649	N/A	N/A	40.619	AV

Site: AC5	Time: 2014/06/19 - 14:22
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 4: Transmit at channel 5190MHz by 802.11ac40 Ant 2	



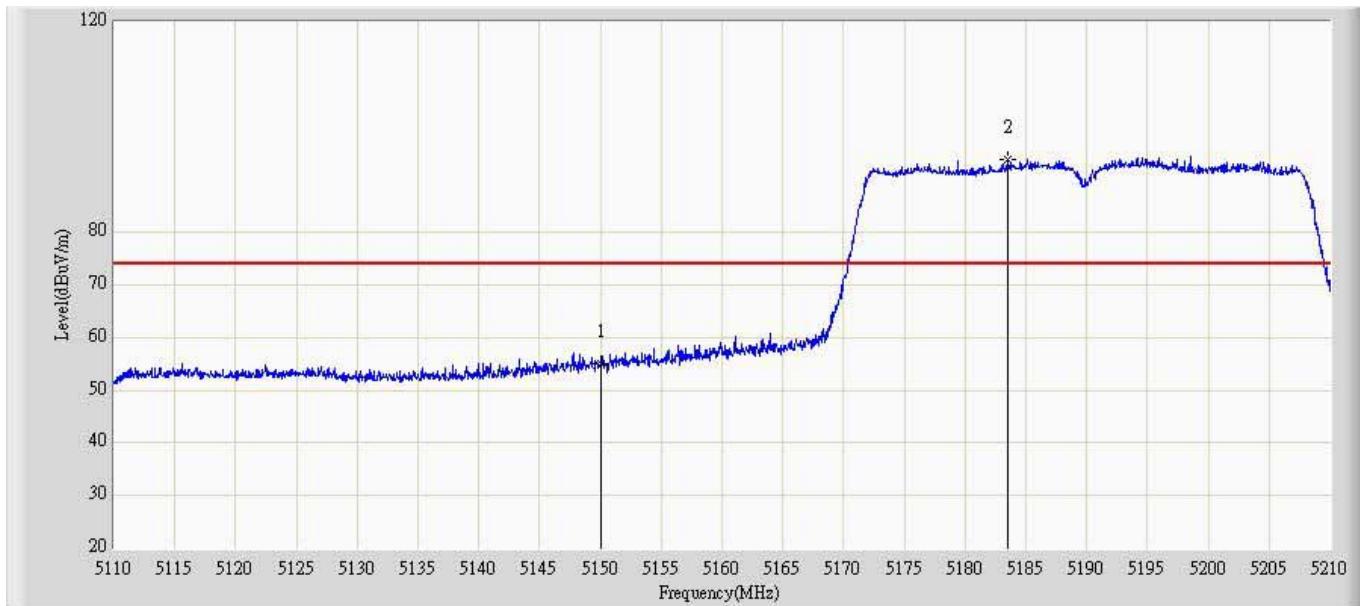
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	62.344	21.851	-11.656	74.000	40.493	PK
2		*	5185.000	103.412	62.889	N/A	N/A	40.523	PK

Site: AC5	Time: 2014/06/19 - 14:22
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 4: Transmit at channel 5190MHz by 802.11ac40 Ant 2	



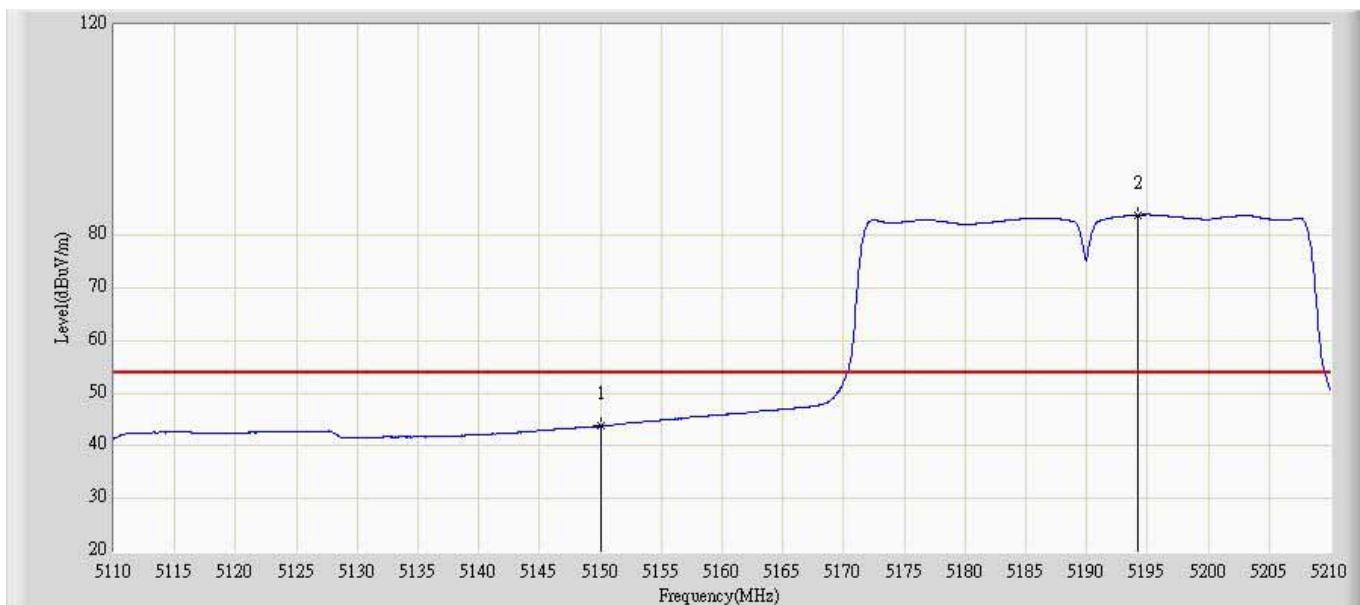
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	49.261	8.768	-4.739	54.000	40.493	AV
2		*	5185.850	93.060	52.538	N/A	N/A	40.522	AV

Site: AC5	Time: 2014/06/19 - 14:22
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 4: Transmit at channel 5190MHz by 802.11ac40 Ant 2	



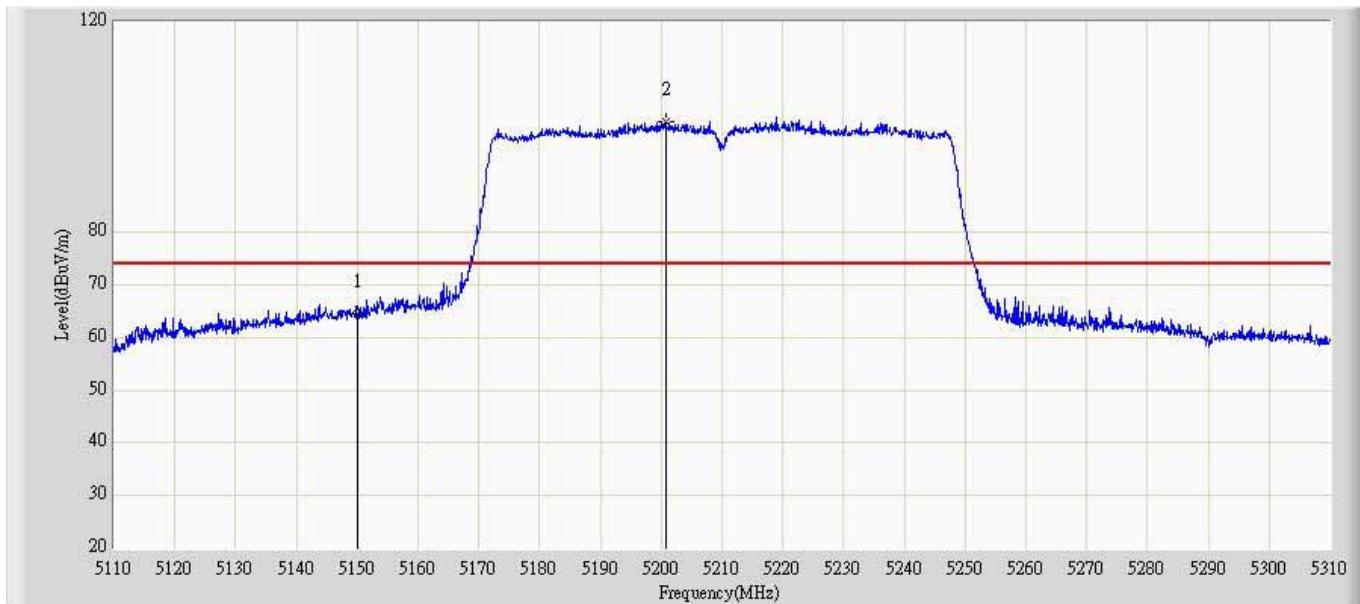
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	55.067	14.534	-18.933	74.000	40.533	PK
2		*	5183.450	93.908	53.290	N/A	N/A	40.617	PK

Site: AC5	Time: 2014/06/19 - 14:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 4: Transmit at channel 5190MHz by 802.11ac40 Ant 2	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	43.754	3.221	-10.246	54.000	40.533	AV
2		*	5194.250	83.874	43.237	N/A	N/A	40.637	AV

Site: AC5	Time: 2014/06/19 - 14:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 6: Transmit at channel 5210MHz by 802.11ac80 Ant 2	



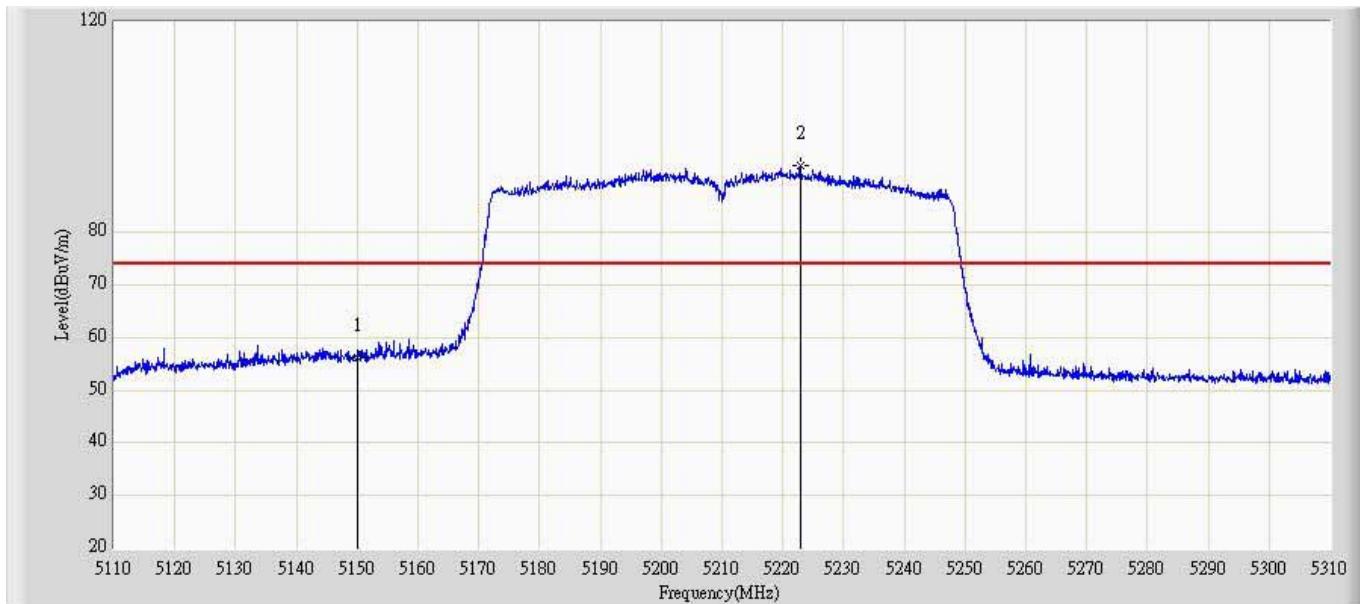
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	64.456	23.963	-9.544	74.000	40.493	PK
2		*	5200.800	100.905	60.346	N/A	N/A	40.559	PK

Site: AC5	Time: 2014/06/19 - 14:25
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 6: Transmit at channel 5210MHz by 802.11ac80 Ant 2	



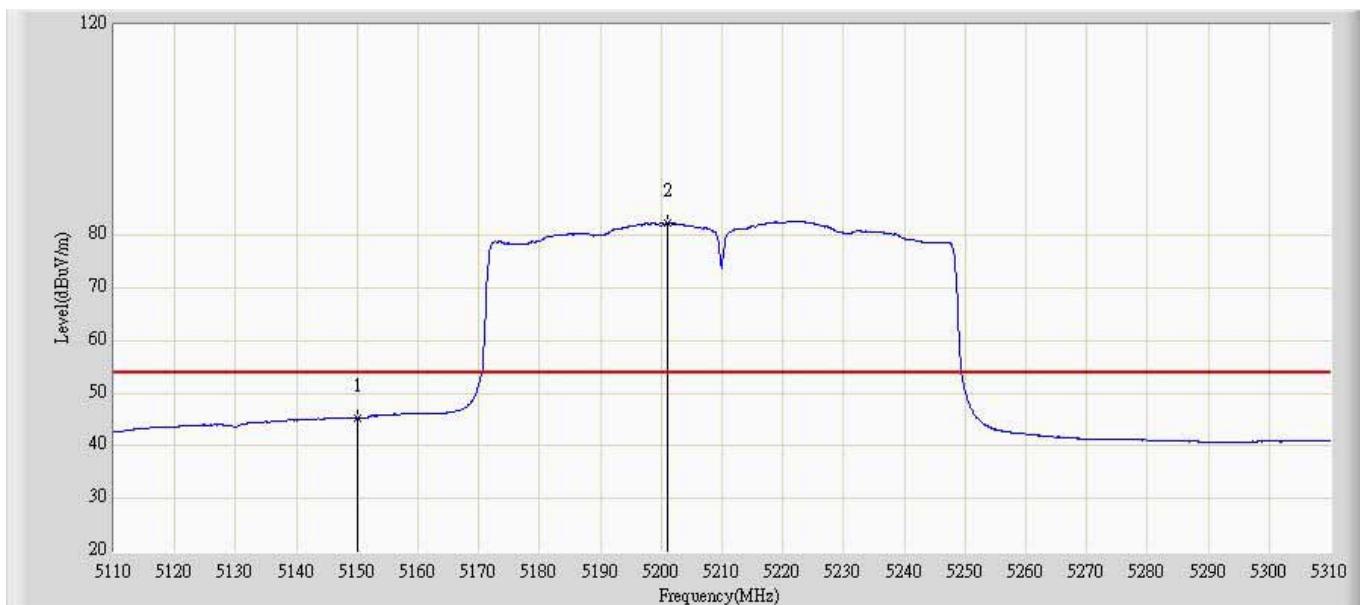
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	52.725	12.232	-1.275	54.000	40.493	AV
2		*	5201.700	91.043	50.480	N/A	N/A	40.563	AV

Site: AC5	Time: 2014/06/19 - 14:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 6: Transmit at channel 5210MHz by 802.11ac80 Ant 2	



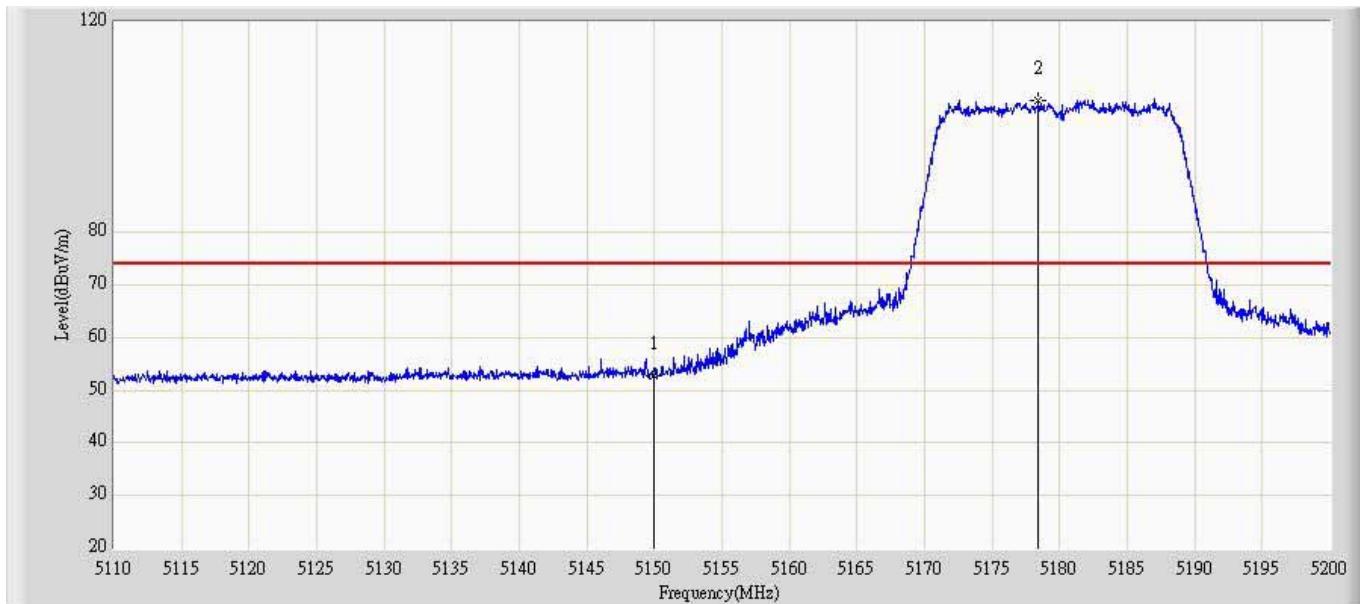
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	56.229	15.696	-17.771	74.000	40.533	PK
2		*	5222.900	92.796	52.083	N/A	N/A	40.713	PK

Site: AC5	Time: 2014/06/19 - 14:27
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 6: Transmit at channel 5210MHz by 802.11ac80 Ant 2	



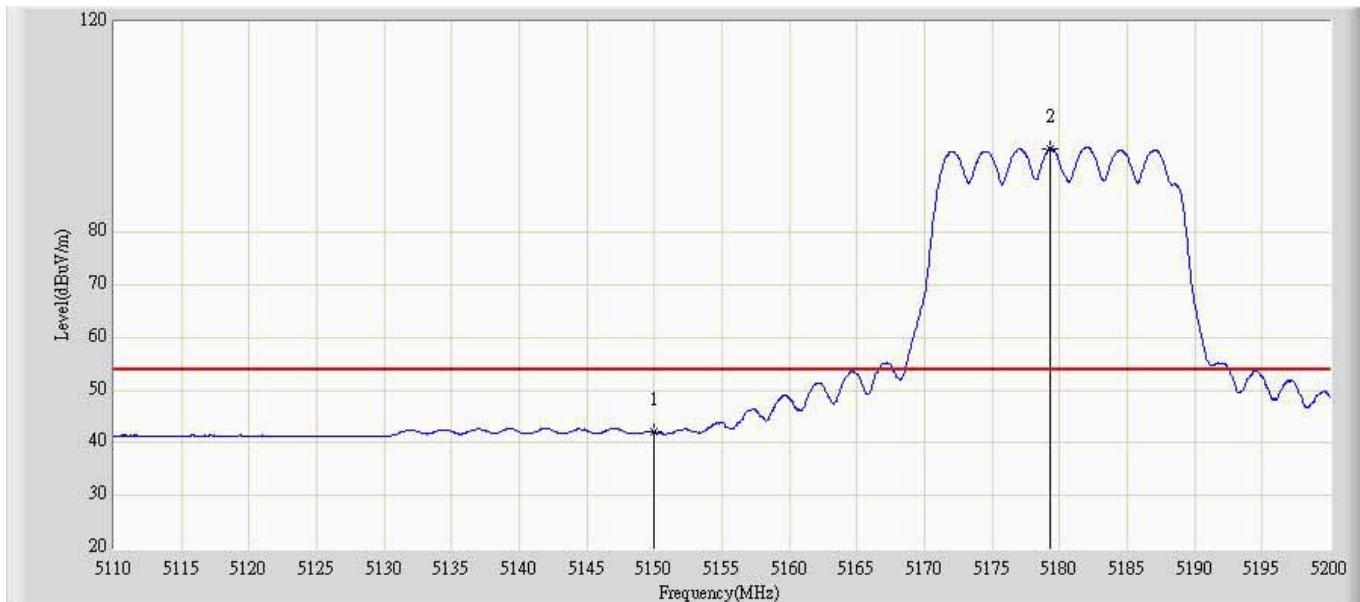
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	45.269	4.736	-8.731	54.000	40.533	AV
2		*	5201.100	82.292	41.611	N/A	N/A	40.681	AV

Site: AC5	Time: 2014/06/19 - 14:28
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 2 : Transmit at channel 5180MHz by 802.11n20 Ant 1+2	



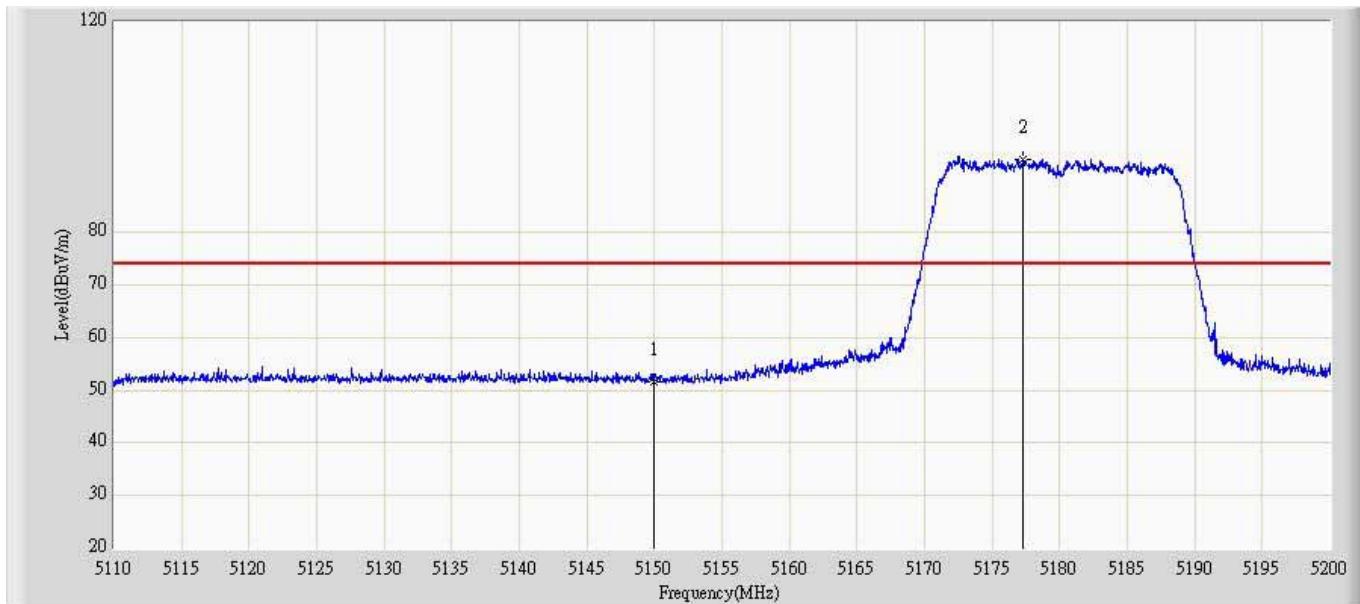
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	52.734	12.241	-21.266	74.000	40.493	PK
2		*	5178.445	105.088	64.558	N/A	N/A	40.530	PK

Site: AC5	Time: 2014/06/19 - 14:29
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 2 : Transmit at channel 5180MHz by 802.11n20 Ant 1+2	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	42.039	1.546	-11.961	54.000	40.493	AV
2		*	5179.300	95.988	55.459	N/A	N/A	40.529	AV

Site: AC5	Time: 2014/06/19 - 14:29
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 2 : Transmit at channel 5180MHz by 802.11n20 Ant 1+2	



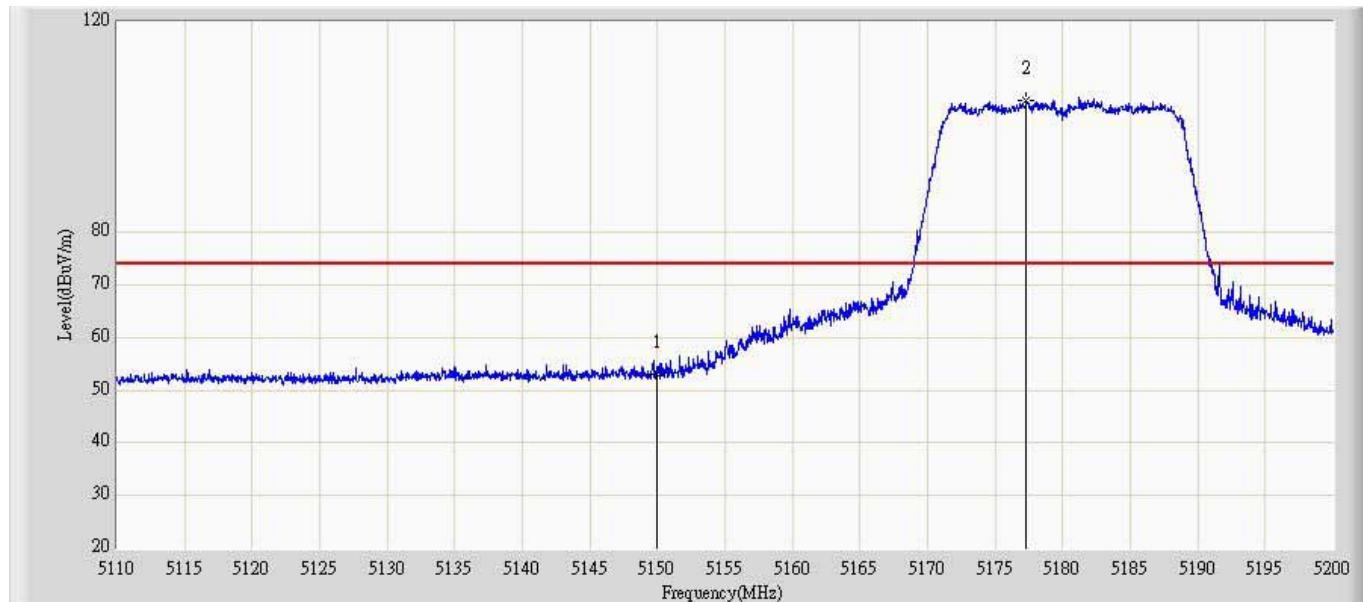
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	51.671	11.138	-22.329	74.000	40.533	PK
2		*	5177.320	93.778	53.164	N/A	N/A	40.615	PK

Site: AC5	Time: 2014/06/19 - 14:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 2 : Transmit at channel 5180MHz by 802.11n20 Ant 1+2	



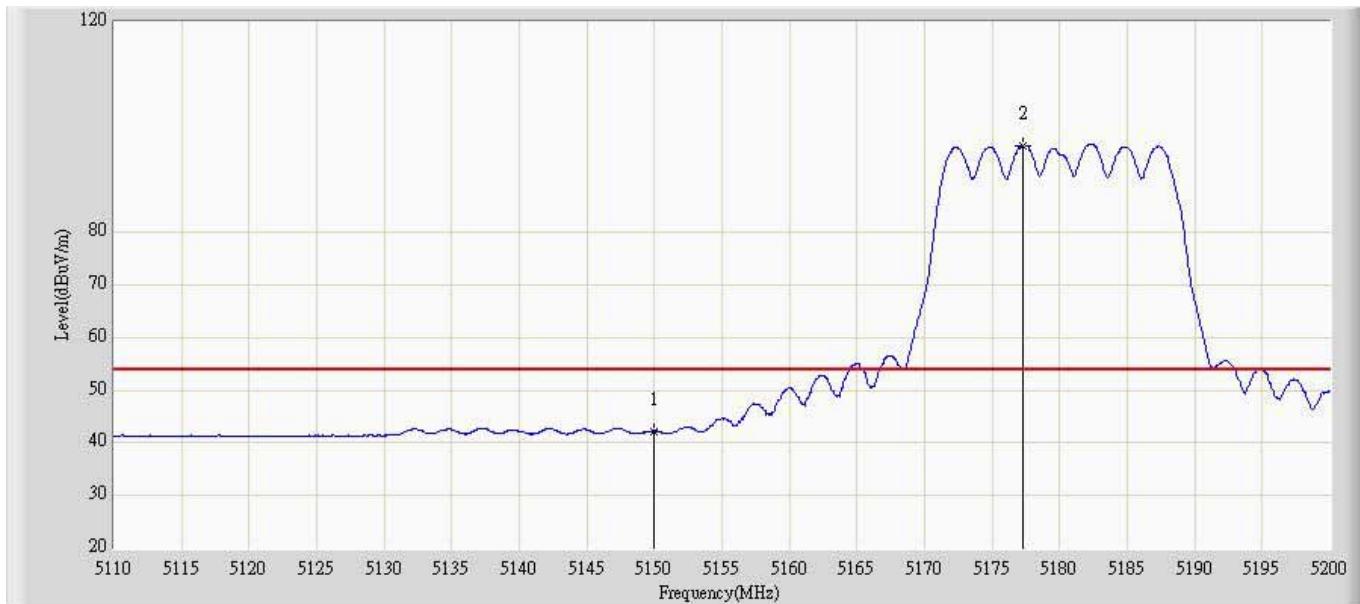
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	40.948	0.415	-13.052	54.000	40.533	AV
2		*	5180.650	83.323	42.707	N/A	N/A	40.616	AV

Site: AC5	Time: 2014/06/19 - 14:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 3 : Transmit at channel 5180MHz by 802.11ac20 Ant 1+2	



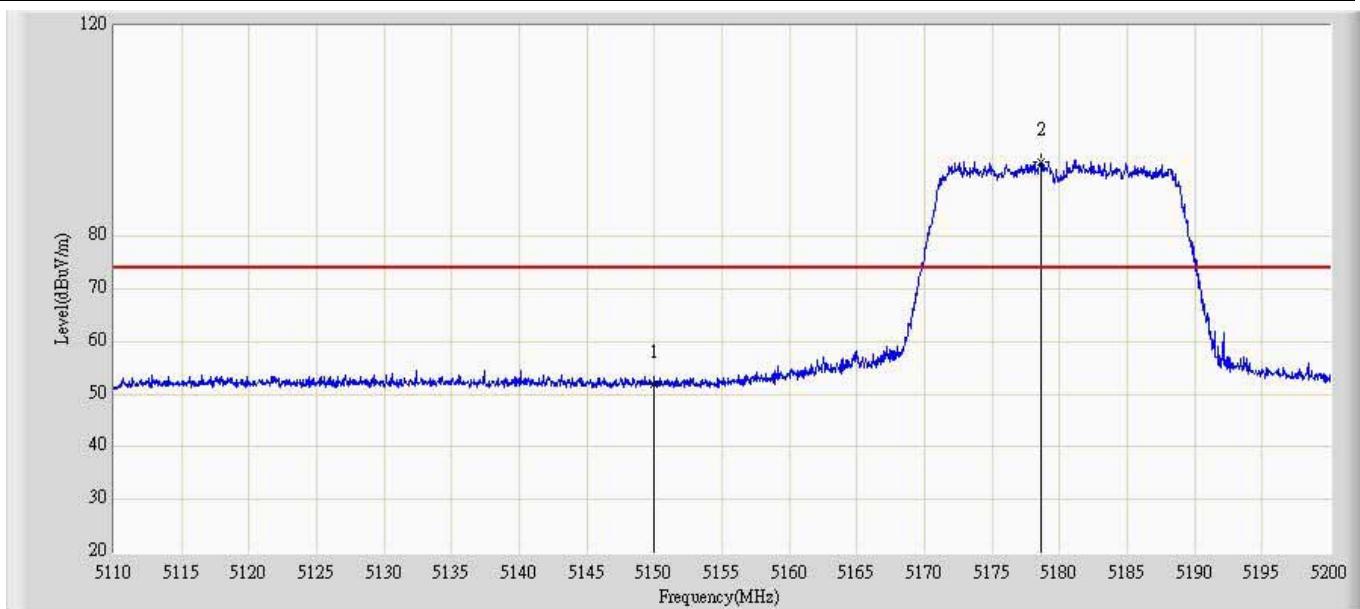
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	53.145	12.652	-20.855	74.000	40.493	PK
2		*	5177.275	105.198	64.667	N/A	N/A	40.531	PK

Site: AC5	Time: 2014/06/19 - 14:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 3 : Transmit at channel 5180MHz by 802.11ac20 Ant 1+2	



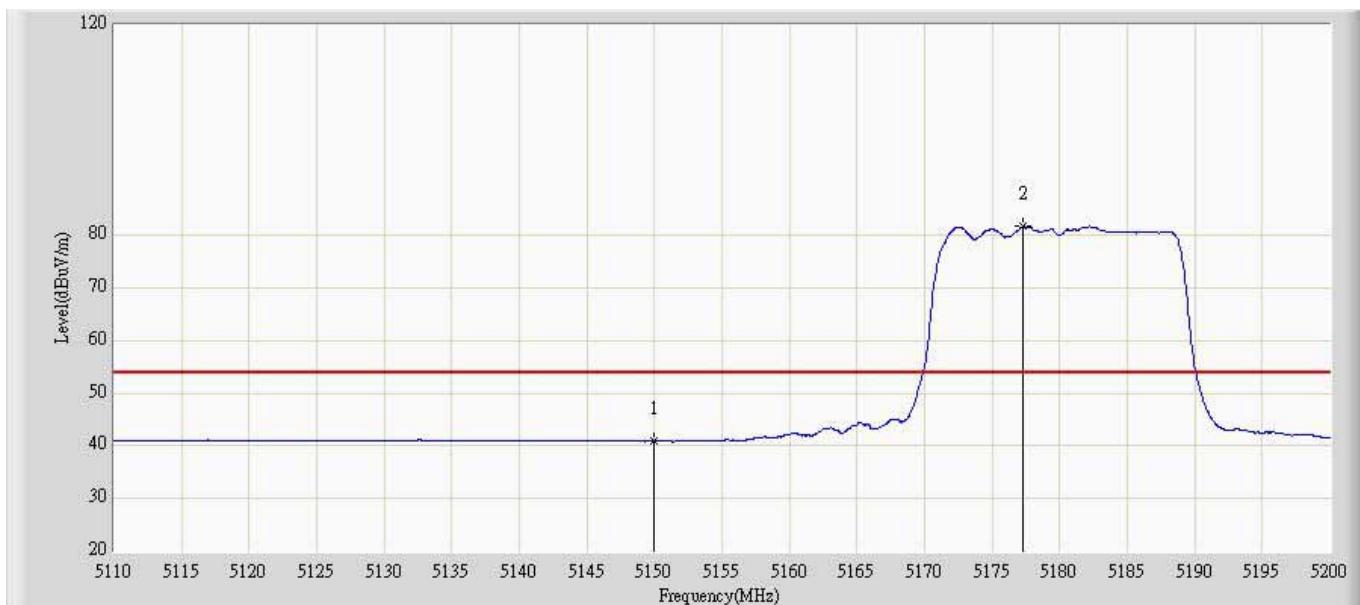
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	42.232	1.739	-11.768	54.000	40.493	AV
2		*	5177.275	96.559	56.028	N/A	N/A	40.531	AV

Site: AC5	Time: 2014/06/19 - 14:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 3 : Transmit at channel 5180MHz by 802.11ac20 Ant 1+2	



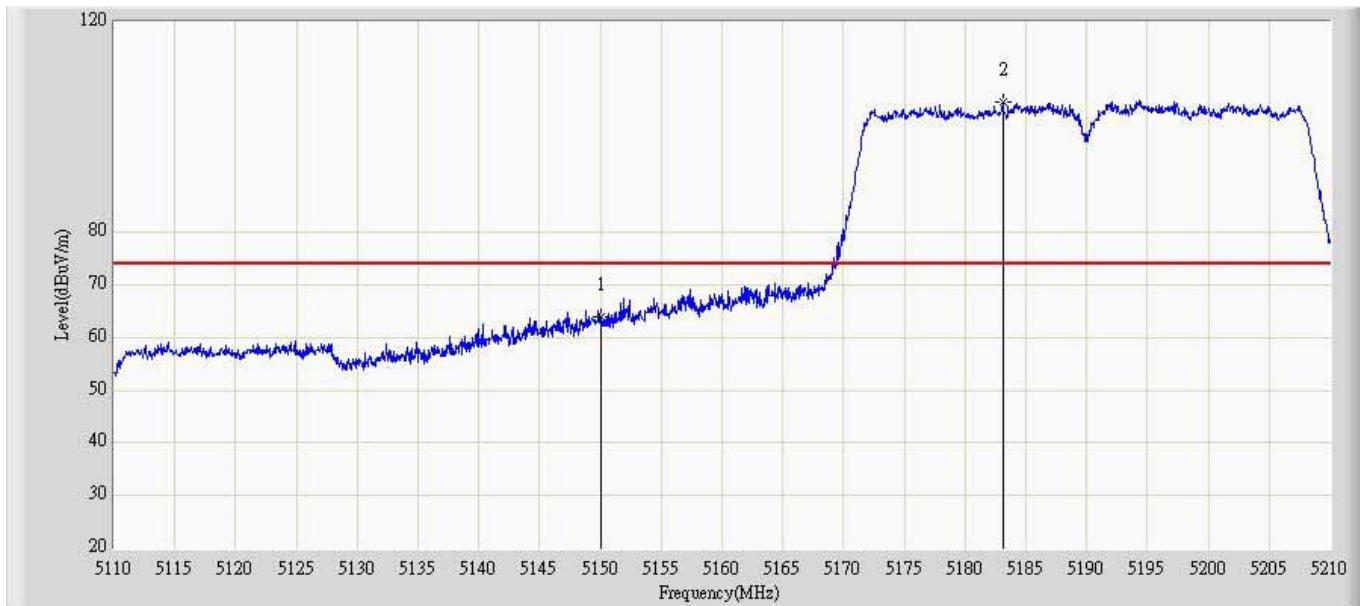
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	51.762	11.229	-22.238	74.000	40.533	PK
2		*	5178.580	94.181	53.566	N/A	N/A	40.615	PK

Site: AC5	Time: 2014/06/19 - 14:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 3 : Transmit at channel 5180MHz by 802.11ac20 Ant 1+2	



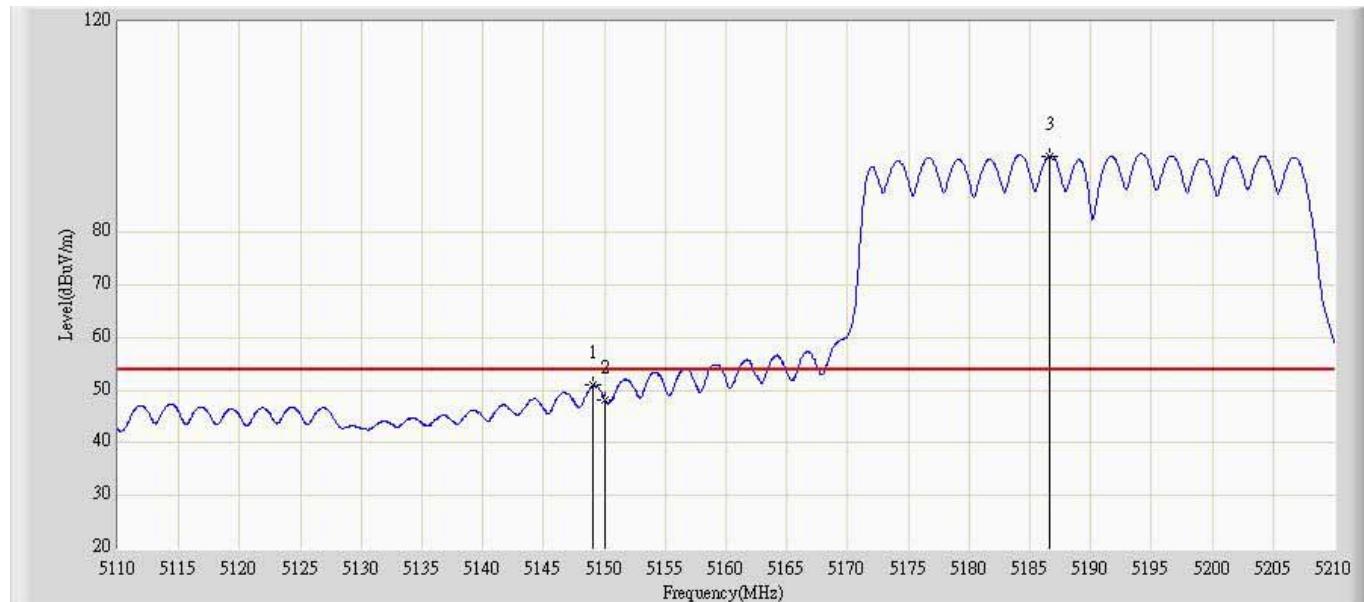
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	40.958	0.425	-13.042	54.000	40.533	AV
2		*	5177.275	81.682	41.068	N/A	N/A	40.614	AV

Site: AC5	Time: 2014/06/19 - 14:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 4: Transmit at channel 5190MHz by 802.11n40 Ant 1+2	



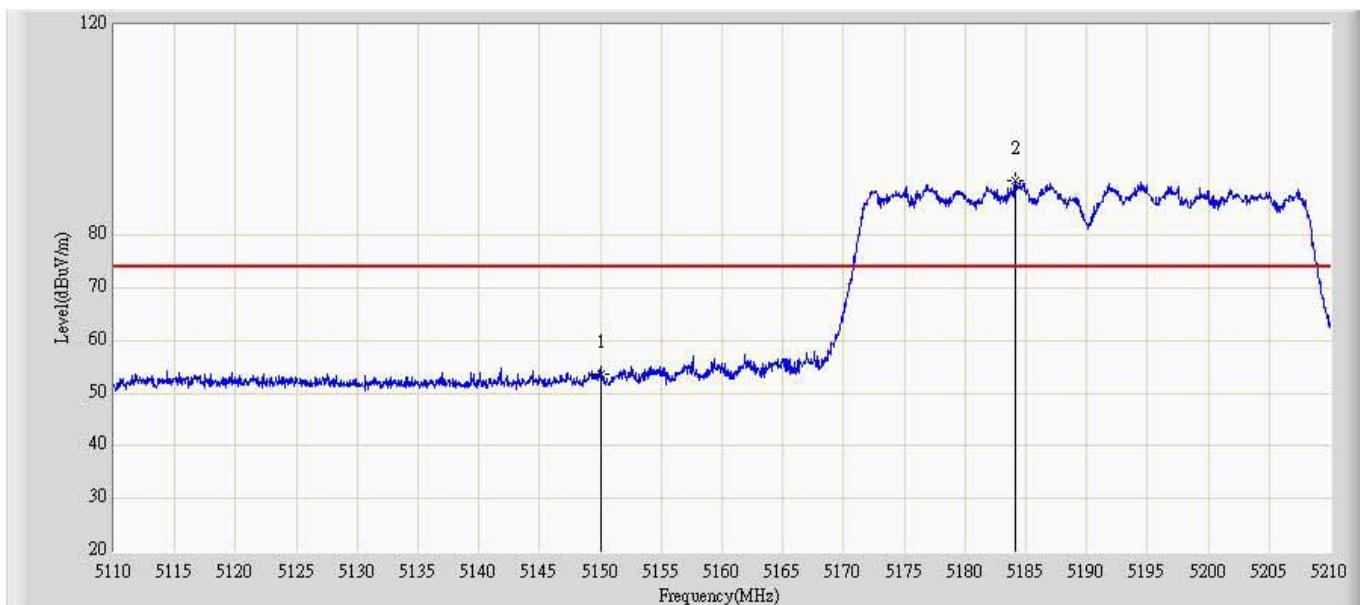
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	63.939	23.446	-10.061	74.000	40.493	PK
2		*	5183.100	104.770	64.245	N/A	N/A	40.525	PK

Site: AC5	Time: 2014/06/19 - 14:37
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 4: Transmit at channel 5190MHz by 802.11n40 Ant 1+2	



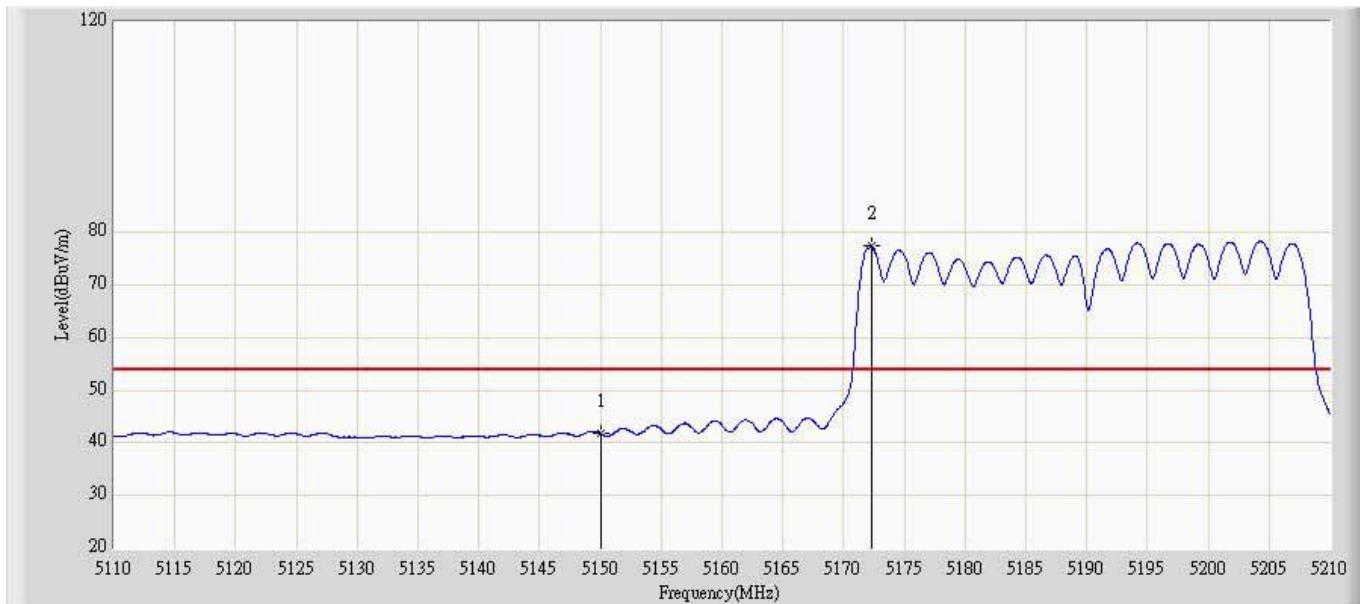
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5149.100	50.936	10.449	-3.064	54.000	40.487	AV
2			5150.000	48.280	7.787	-5.720	54.000	40.493	AV
3		*	5186.600	94.537	54.016	N/A	N/A	40.521	AV

Site: AC5	Time: 2014/06/19 - 14:37
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 4: Transmit at channel 5190MHz by 802.11n40 Ant 1+2	



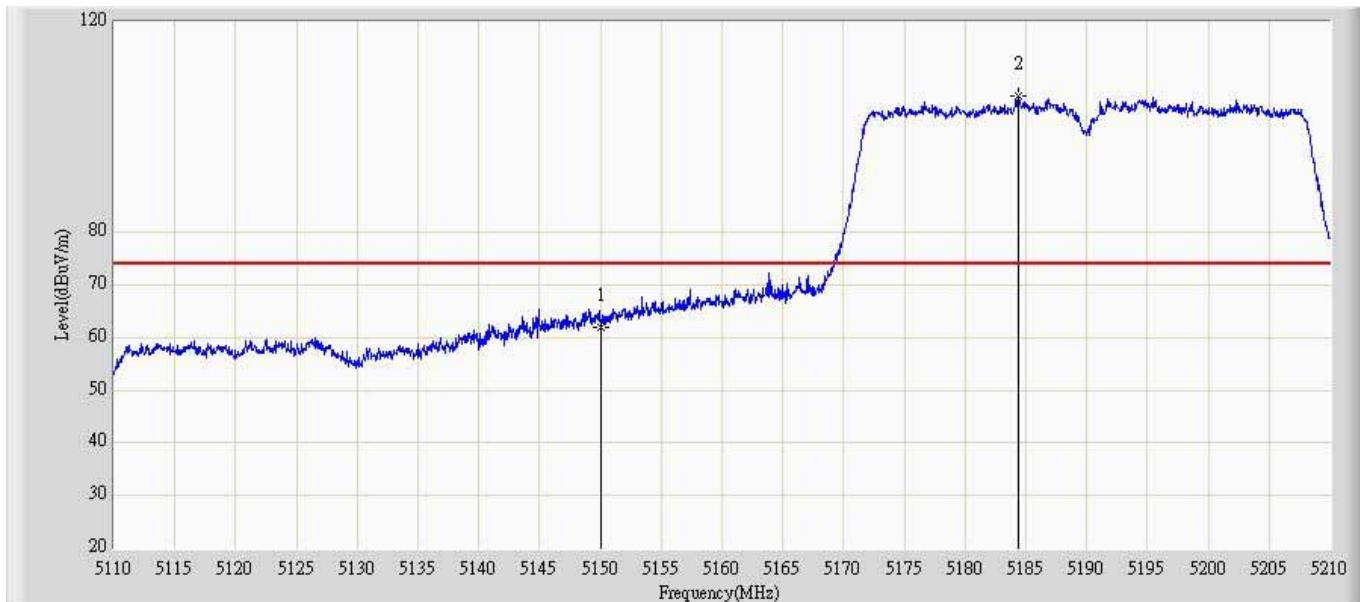
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	53.504	12.971	-20.496	74.000	40.533	PK
2		*	5184.100	90.354	49.736	N/A	N/A	40.618	PK

Site: AC5	Time: 2014/06/19 - 14:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 4: Transmit at channel 5190MHz by 802.11n40 Ant 1+2	



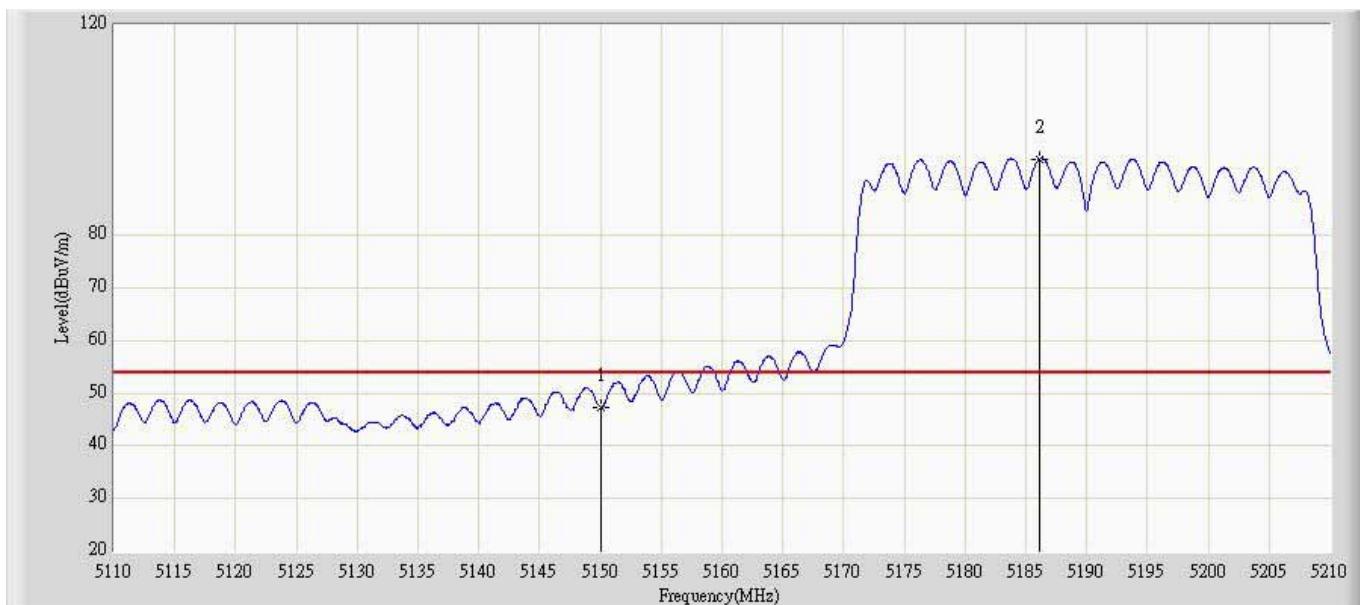
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	41.789	1.256	-12.211	54.000	40.533	AV
2		*	5172.300	77.357	36.743	N/A	N/A	40.615	AV

Site: AC5	Time: 2014/06/19 - 14:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 5: Transmit at channel 5190MHz by 802.11ac40 Ant 1+2	



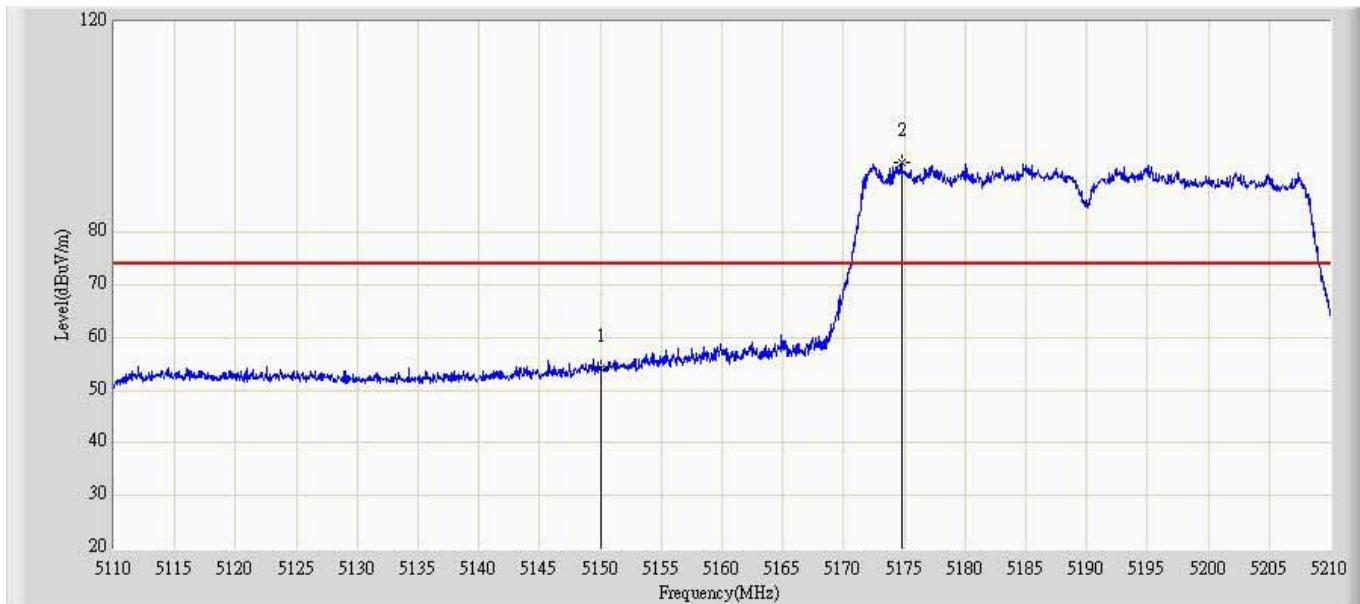
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	61.929	21.436	-12.071	74.000	40.493	PK
2		*	5184.350	105.809	65.285	N/A	N/A	40.524	PK

Site: AC5	Time: 2014/06/19 - 14:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 5: Transmit at channel 5190MHz by 802.11ac40 Ant 1+2	



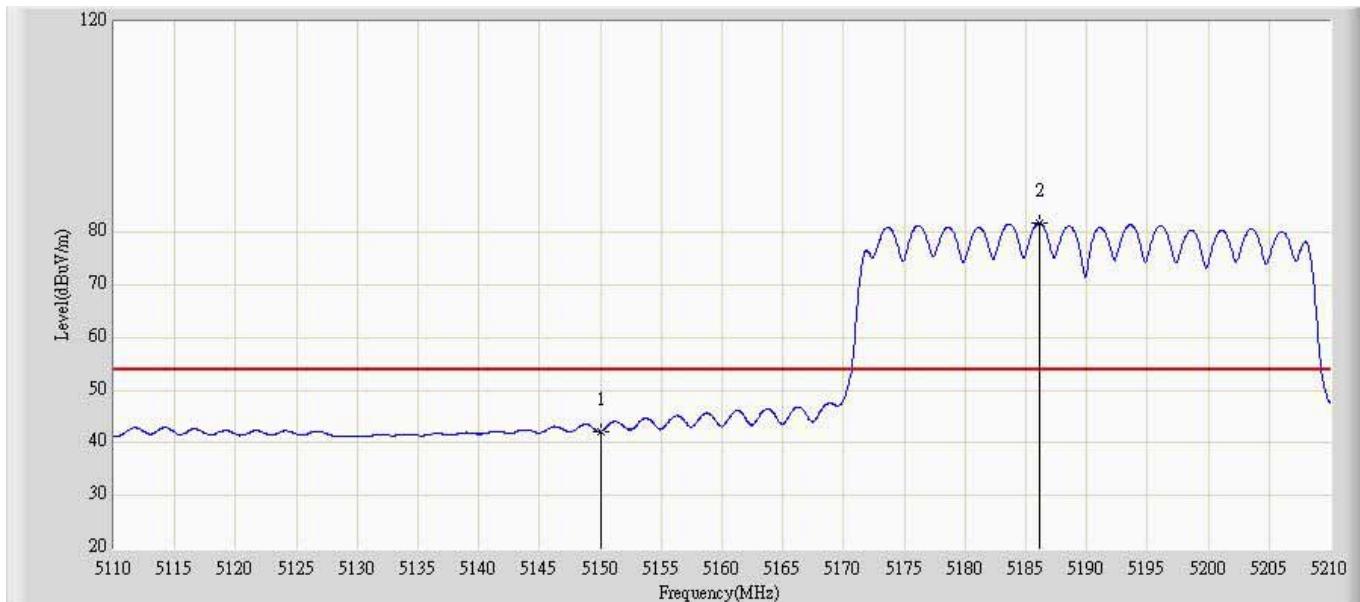
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	47.294	6.801	-6.706	54.000	40.493	AV
2		*	5186.100	94.459	53.937	N/A	N/A	40.522	AV

Site: AC5	Time: 2014/06/19 - 14:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 5: Transmit at channel 5190MHz by 802.11ac40 Ant 1+2	



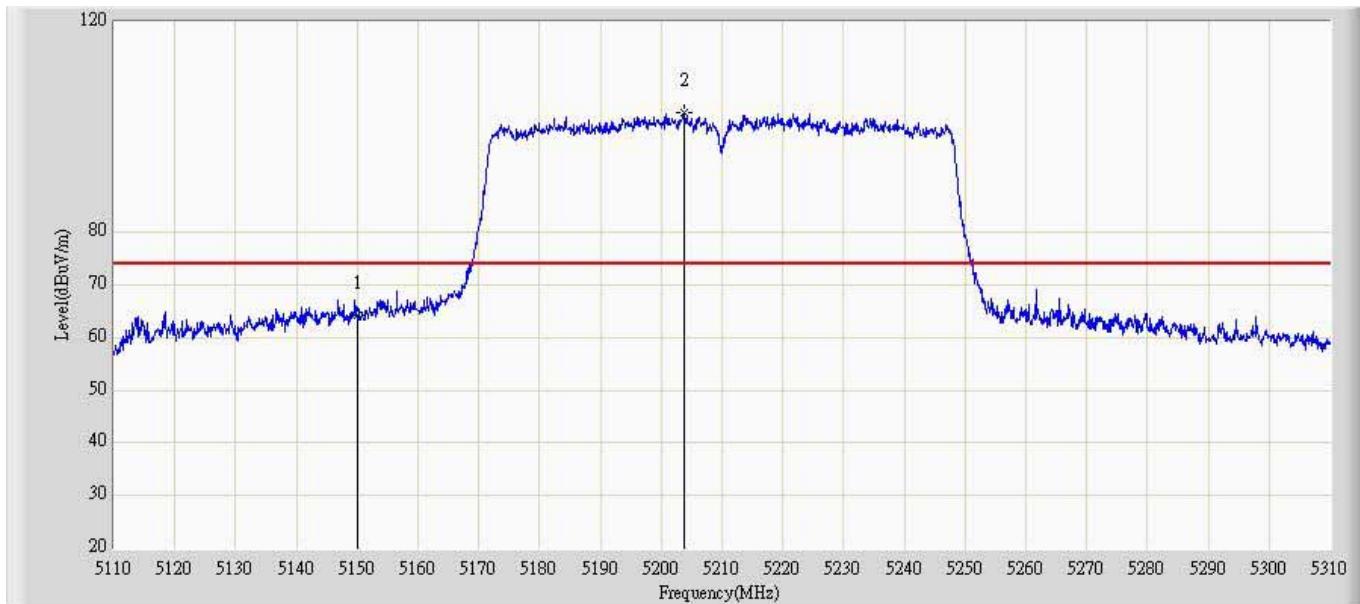
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	54.085	13.552	-19.915	74.000	40.533	PK
2		*	5174.800	93.322	52.708	N/A	N/A	40.614	PK

Site: AC5	Time: 2014/06/19 - 14:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 5: Transmit at channel 5190MHz by 802.11ac40 Ant 1+2	



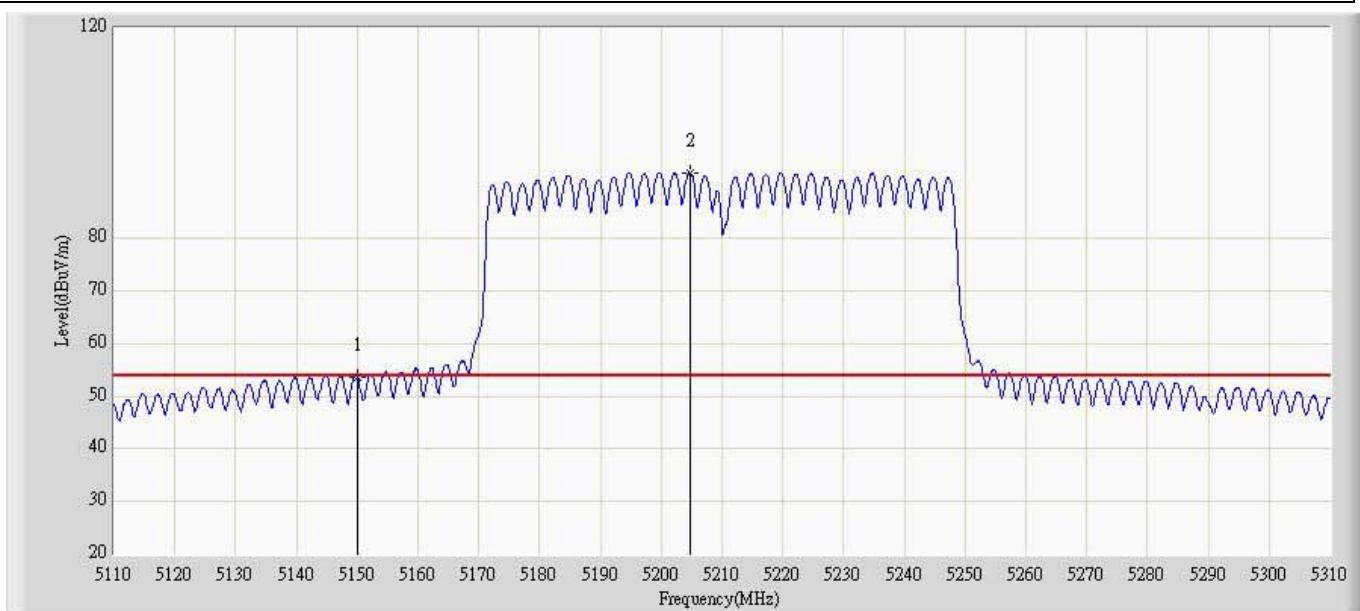
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	42.183	1.650	-11.817	54.000	40.533	AV
2		*	5186.150	81.819	41.200	N/A	N/A	40.620	AV

Site: AC5	Time: 2014/06/19 - 14:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 6: Transmit at channel 5210MHz by 802.11ac80 Ant 1+2	



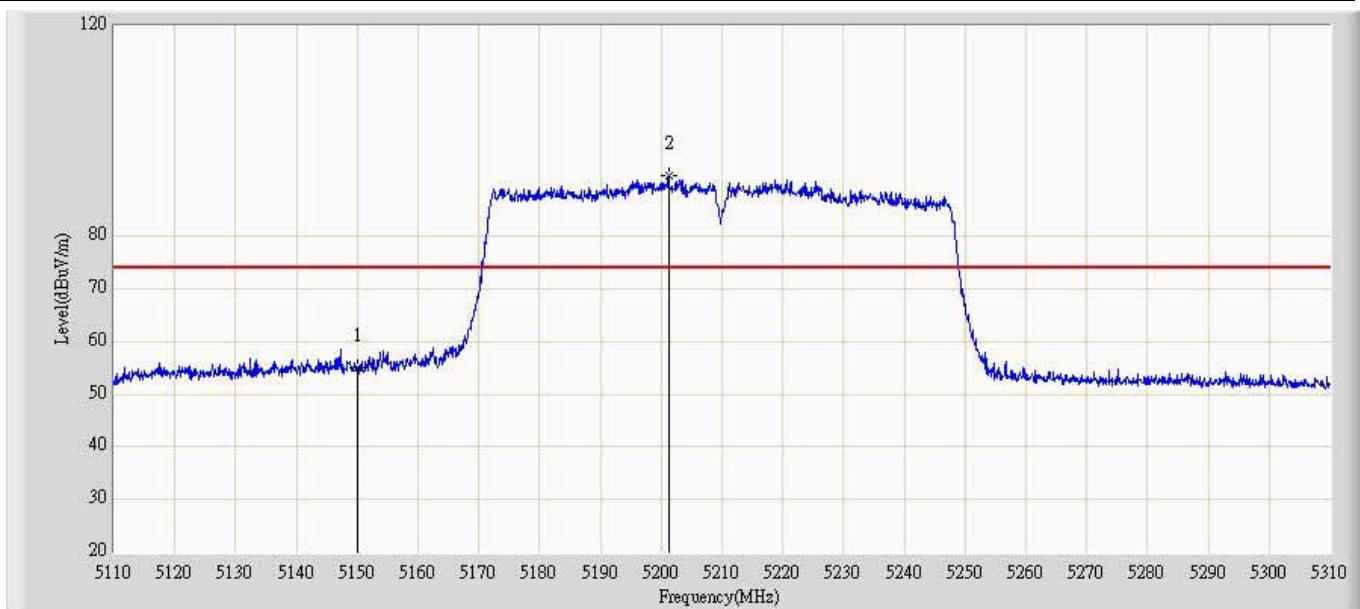
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	64.360	23.867	-9.640	74.000	40.493	PK
2		*	5203.700	102.761	62.188	N/A	N/A	40.573	PK

Site: AC5	Time: 2014/06/19 - 14:42
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 6: Transmit at channel 5210MHz by 802.11ac80 Ant 1+2	



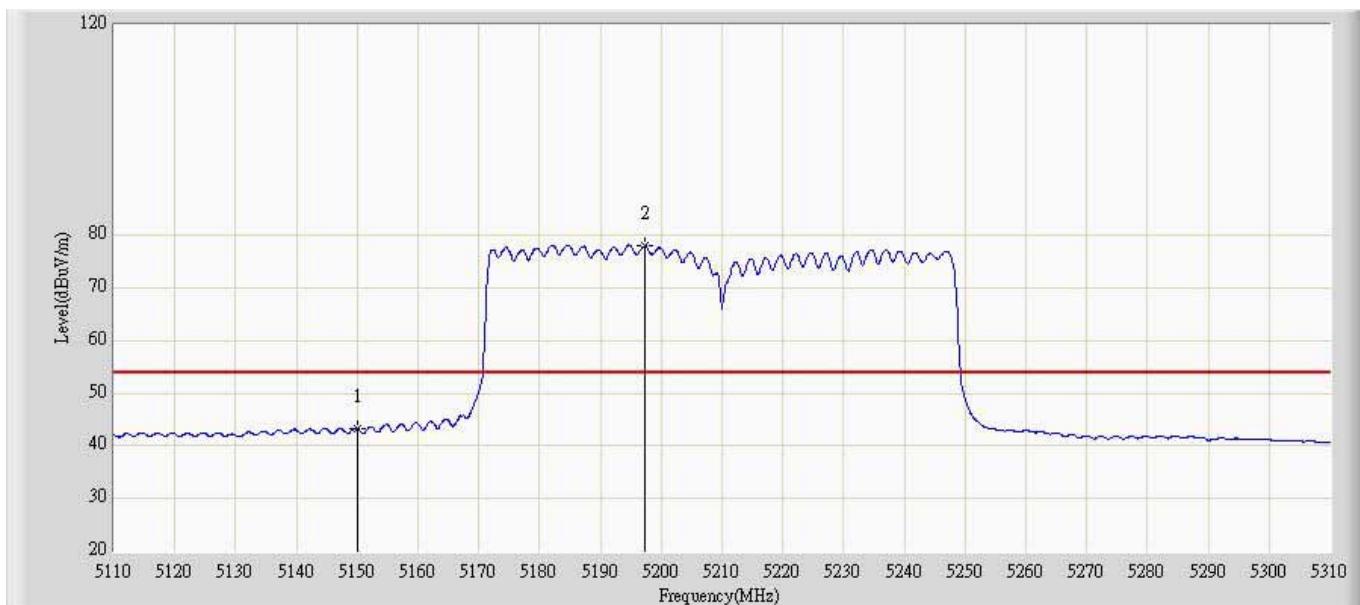
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	53.640	13.147	-0.360	54.000	40.493	AV
2		*	5204.700	92.545	51.967	N/A	N/A	40.578	AV

Site: AC5	Time: 2014/06/19 - 14:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 6: Transmit at channel 5210MHz by 802.11ac80 Ant 1+2	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	55.152	14.619	-18.848	74.000	40.533	PK
2		*	5201.200	91.531	50.849	N/A	N/A	40.683	PK

Site: AC5	Time: 2014/06/19 - 14:44
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Mi Wi-Fi	Power: AC 120V/60Hz
Note: Mode 6: Transmit at channel 5210MHz by 802.11ac80 Ant 1+2	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	43.353	2.820	-10.647	54.000	40.533	AV
2		*	5197.300	77.998	37.341	N/A	N/A	40.657	AV

## 11. Frequency Stability

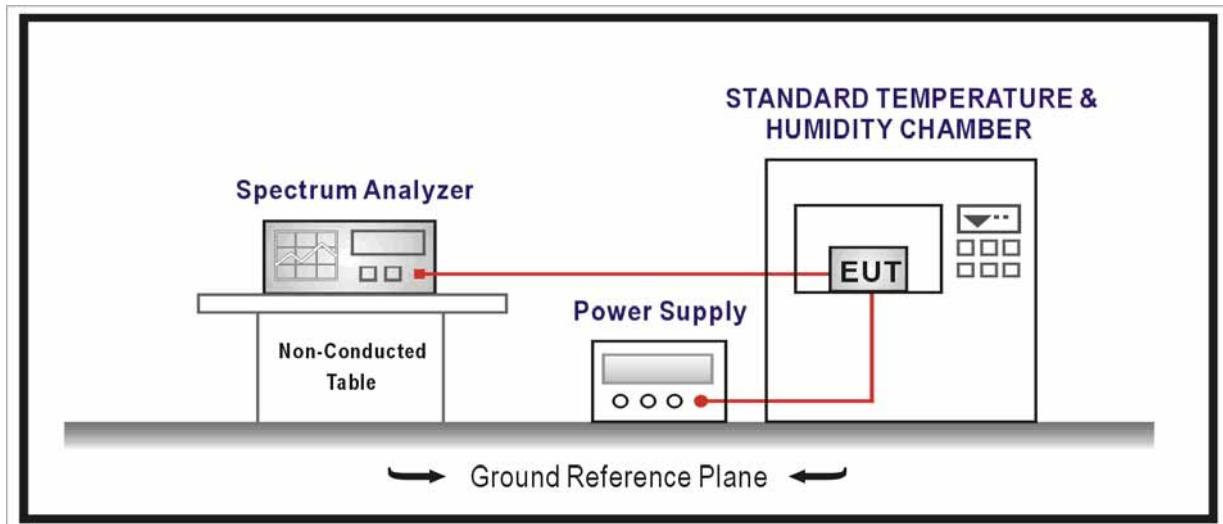
### 11.1. Test Equipment

Frequency Stability / TR-8

Instrument	Manufacturer	Type No.	Serial No.	Cali. Due Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2015.01.07
AC Power Supply	IDRC	CF-500TP	979422	2014.09.16
DC Power Supply	IDRC	CD-035-020PR	977272	2014.09.16
Programmable Temperature & Humidity Chamber	Gaoyu	TH-1P-B	WIT-05121302	2015.01.07
Temperature/Humidity Meter	zhicheng	ZC1-2	TR8-TH	2015.04.09

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

### 11.2. Test Setup



### 11.3. Limit

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

## 11.4. Test Procedure

### **Frequency Stability Under Temperature Variations:**

The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to highest. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C decreased per stage until the lowest temperature reached.

### **Frequency Stability Under Voltage Variations:**

Set chamber temperature to 20°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency. Reduce the input voltage to specify extreme voltage variation ( $\pm 15\%$ ) and endpoint, record the maximum frequency change.

## 11.5. Uncertainty

The measurement uncertainty is defined as  $\pm 100$  Hz

**11.6. Test Result**

Product	:	Mi Wi-Fi
Test Item	:	Frequency Stability
Test Site	:	TR-8
Test Mode	:	Carrier Transmit

Operating Frequency	Temp (°C)	Voltage (AC)	Frequency Tolerance (ppm)			
			0 minutes		2 minutes	
			Operation Frequency(M Hz)	Measure Level(ppm)	Operation Frequency(M Hz)	Measure Level(ppm)
36	0	102	5180.0132	2.54	5180.0122	2.36
		120	5180.0110	2.12	5180.0104	2.00
		138	5180.0116	2.23	5180.0116	2.24
	10	102	5180.0126	2.44	5180.0127	2.45
		120	5180.0104	2.01	5180.0105	2.03
		138	5180.0115	2.22	5180.0117	2.25
	20	102	5180.0122	2.35	5180.0127	2.45
		120	5180.0110	2.13	5180.0106	2.04
		138	5180.0116	2.23	5180.0115	2.22
	30	102	5180.0127	2.45	5180.0121	2.34
		120	5180.0106	2.04	5180.0106	2.04
		138	5180.0118	2.27	5180.0118	2.28
44	0	102	5220.0127	2.43	5220.0130	2.49
		120	5220.0107	2.05	5220.0106	2.03
		138	5220.0121	2.31	5220.0117	2.24
	10	102	5220.0128	2.45	5220.0125	2.39
		120	5220.0107	2.05	5220.0107	2.05
		138	5220.0117	2.24	5220.0156	2.98
	20	102	5220.0130	2.49	5220.0116	2.23
		120	5220.0106	2.03	5220.0145	2.78
		138	5220.0118	2.26	5220.0107	2.05
	30	102	5220.0125	2.40	5220.0122	2.33
		120	5220.0145	2.77	5220.0128	2.45
		138	5220.0120	2.29	5220.0105	2.01

	40	102	5220.0129	2.47	5220.0116	2.22
		120	5220.0105	2.01	5220.0129	2.48
		138	5220.0146	2.80	5220.0106	2.03
48	0	102	5240.0130	2.48	5240.0117	2.24
		120	5240.0105	2.00	5240.0133	2.54
		138	5240.0115	2.20	5240.0107	2.04
	10	102	5240.0124	2.36	5240.0116	2.21
		120	5240.0105	2.00	5240.0126	2.41
		138	5240.0117	2.24	5240.0107	2.04
	20	102	5240.0128	2.45	5240.0118	2.26
		120	5240.0106	2.03	5240.0130	2.48
		138	5240.0118	2.25	5240.0107	2.04
	30	102	5240.0128	2.45	5240.0114	2.17
		120	5240.0107	2.04	5240.0132	2.52
		138	5240.0116	2.22	5240.0106	2.03
	40	102	5240.0123	2.34	5240.0128	2.45
		120	5240.0107	2.04	5240.0127	2.43
		138	5240.0119	2.28	5240.0111	2.12

Operating Frequency	Temp (°C)	Voltage (AC)	Frequency Tolerance (ppm)			
			5 minutes		10 minutes	
			Operation Frequency(M Hz)	Measure Level(ppm)	Operation Frequency(M Hz)	Measure Level(ppm)
36	0	102	5180.0119	2.29	5180.0104	2.00
		120	5180.0128	2.47	5180.0114	2.20
		138	5180.0104	2.01	5180.0122	2.36
	10	102	5180.0145	2.80	5180.0104	2.00
		120	5180.0128	2.48	5180.0116	2.24
		138	5180.0104	2.00	5180.0127	2.45
	20	102	5180.0114	2.20	5180.0105	2.03
		120	5180.0122	2.36	5180.0117	2.25
		138	5180.0104	2.00	5180.0127	2.45
	30	102	5180.0116	2.24	5180.0106	2.04
		120	5180.0127	2.45	5180.0115	2.22
		138	5180.0105	2.03	5180.0121	2.34
	40	102	5180.0117	2.25	5180.0106	2.04
		120	5180.0127	2.45	5180.0118	2.28
		138	5180.0106	2.04	5180.0132	2.54
44	0	102	5220.0116	2.22	5220.0111	2.12
		120	5220.0122	2.34	5220.0116	2.23
		138	5220.0106	2.04	5220.0127	2.44
	10	102	5220.0119	2.28	5220.0105	2.01
		120	5220.0133	2.54	5220.0116	2.22
		138	5220.0111	2.12	5220.0123	2.35
	20	102	5220.0116	2.23	5220.0111	2.13
		120	5220.0127	2.44	5220.0116	2.23
		138	5220.0105	2.01	5220.0128	2.45
	30	102	5220.0116	2.22	5220.0106	2.04
		120	5220.0123	2.35	5220.0118	2.27
		138	5220.0111	2.13	5220.0130	2.49
	40	102	5220.0116	2.23	5220.0127	2.44
		120	5220.0128	2.45	5220.0117	2.24
		138	5220.0106	2.04	5220.0127	2.43
48	0	102	5240.0119	2.27	5240.0107	2.05
		120	5240.0130	2.49	5240.0121	2.31

		138	5240.0128	2.44	5240.0128	2.45
10	102	5240.0117	2.24	5240.0107	2.05	
	120	5240.0127	2.43	5240.0117	2.24	
	138	5240.0107	2.05	5240.0130	2.49	
20	102	5240.0121	2.31	5240.0106	2.03	
	120	5240.0128	2.45	5240.0118	2.26	
	138	5240.0107	2.05	5240.0126	2.40	
30	102	5240.0117	2.24	5240.0145	2.77	
	120	5240.0130	2.49	5240.0120	2.29	
	138	5240.0106	2.03	5240.0129	2.47	
40	102	5240.0118	2.26	5240.0105	2.01	
	120	5240.0126	2.40	5240.0147	2.80	
	138	5240.0145	2.77	5240.0130	2.48	

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The End

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