Test Report

Industry Canada RSS-Gen Issue 2/RSS-210 Issue 7
FCC Part15 Subpart E

Product Name	:	Flip Share TV(USB Dongle)
Model No.	:	CTV1-UB
FCC ID	:	Q87CTV1UB
IC ID	:	3839A-CTV1UB

Applicant	:	CISCO-LINKSYS LLC
Address	:	121 THEORY DR IRVINE, CA 92617 USA

Date of Receipt	:	2009/08/31
Issued Date	:	2009/09/16
Report No.	:	098S103R-ITUSP01V01
Report Version	:	V2.0

Test Report Certification

Issued Date : 2009/09/16
Report No. : 098S103R-RF-US-P09V01

QuieTek

Product Name	:	Flip Share TV(USB Dongle)
Applicant	:	CISCO-LINKSYS LLC
Address	:	121 THEORY DR IRVINE, CA 92617 USA
Manufacturer	:	Ambit Microsoft system(shanghai) LTD.
Address	:	No.1925, Nanle road Songjiang Export Processing Zone Shanghai China
Model No.	:	CTV1-UB
FCC ID	:	Q87CTV1UB
IC ID	:	3839A-CTV1UB
Rated Voltage	:	DC 5V
EUT Voltage	:	DC 5V
Trade Name	:	Cisco
Applicable Standard	:	FCC CFR Title 47 Part 15 Subpart E: 2008 ANSI C63.4: 2003 Industry Canada RSS-Gen Issue 2/RSS-210 Issue 7
Test Result	:	Complied
Performed Location	:	SuZhou EMC laboratory No.99 Hongye Rd., Suzhou Industrial Park Loufeng Hi-Tech Development Zone., SuZhou, China TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098 FCC Registration Number: 800392, IC Lab Code: 4075B

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Reviewed By : Marlin Chen

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Approved By : Dream Cao

(Engineering Manager: Dream Cao)

Laboratory Information

We , **QuieTek Corporation**, are an independent EMC and safety consultancy that was established the whole facility in our laboratories. The test facility has been accredited by the following accreditation Bodies in compliance with ISO 17025, EN 45001 and Guide 25:

Taiwan R.O.C.	**:**	**BSMI, DGT, CNLA**
Germany	**:**	**TUV Rheinland**
Norway	**:**	**Nemko, DNV**
USA	**:**	**FCC, NVLAP**
Japan	**:**	**VCCI**

The related certificate for our laboratories about the test site and management system can be downloaded from QuieTek Corporation's Web Site : http://tw.quietek.com/modules/myalbum/
The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site : http://www.quietek.com/
If you have any comments, Please don't hesitate to contact us. Our contact information is as below:

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1313

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NVLAP Lab Code : 200743-0
1596

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1. General Information

1.1. EUT Description

Product Name	Flip Share TV(USB Dongle)
Trade Name	Cisco
Model No.	CTV1-UB
FCC ID	Q87CTV1UB
IC ID	3839A-CTV1UB

Working Voltage	DC 5V
Frequency Range	**For 2.4GHz Band** 802.11b/g/n(20MHz): 2412 - 2462 MHz 802.11n(40MHz): 2422 - 2452 MHz **For 5.0GHz Band** 802.11a/n(20MHz): 5180 - 5240 MHz, 5745 - 5825MHz 802.11n(40MHz): 5190 - 5230 MHz, 5755 - 5795 MHz
Channel Number	**For 2.4GHz Band** 802.11b/g/n(20MHz): 11 802.11n(40MHz): 7 **For 5.0GHz Band** 802.11a/n(20MHz): 9 802.11n(40MHz): 4
Type of Modulation	802.11b: DSSS
	802.11a/g/n: 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 300 Mbps
Channel Control	Auto
Antenna Type	PIFA
Antenna Gain	Refer 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) 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	---	---	---	---	---	---
802.11n(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

802.11a/b/g/n Antenna List

Antenna	Manufacturer	Model No.	Antenna Gain(dBi)
Left Antenna(For 5.2G)	Galtronics	02036140-04231	3.6
Right Antenna(For 5.2G)	Galtronics	02036140-04231	4.3

1.2. Mode of Operation

QuieTek has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Test Mode
Mode 1: Transmit by 802.11a
Mode 2: Transmit by 802.11n (20MHz Bandwidth)
Mode 3: Transmit by 802.11n (40MHz Bandwidth)

Note:

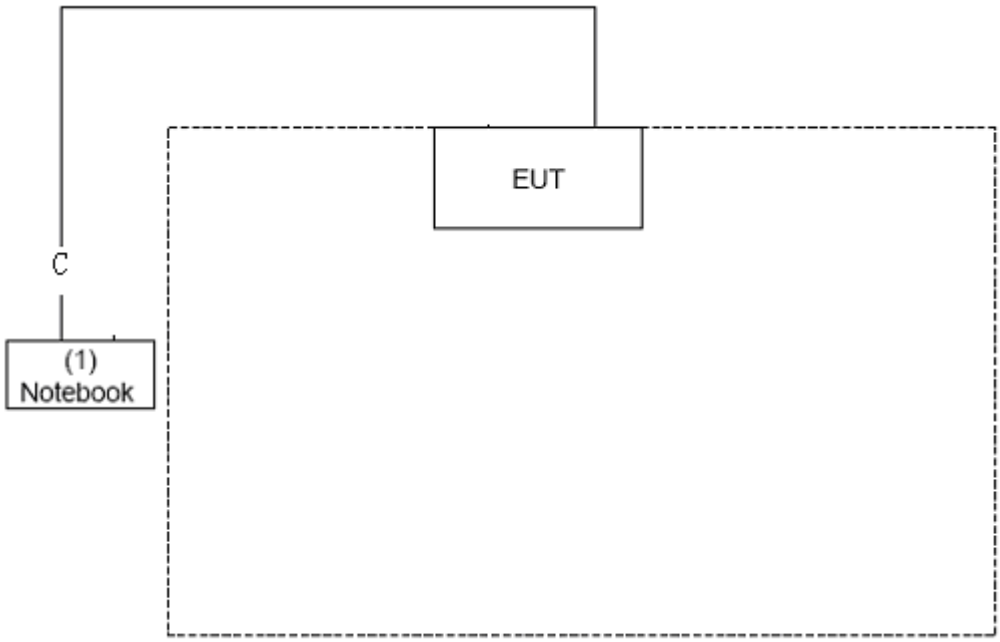
1. Regards to the frequency band operation: the lowest、middle and highest frequency of channel were selected to perform the test, then shown on this report.
2. This device is a composite device in accordance with Part 15 Subpart B regulations. The function for the receiver was measured and made a test report that the report number is 098S103R.

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	Notebook	DELL	PP19L	JH097 A01	Power by adapter

1.4. Configuration of Tested System

Connection Diagram


Signal Cable Type		Signal cable Description
C	USB Cable	Non-Shielded, 1.5m

1.5. EUT Exercise Software

1	Setup the EUT and simulators as shown on above.
2	Turn on the power of equipment.
3	Open the software “RT3x7xQA”, then select the transmission mode , test channel and start test.

2. Technical Test

2.1. Summary of Test Result

☒ No deviations from the test standards

☐ Deviations from the test standards as below description:

Performed Test Item	Normative References	Test Performed	Deviation
Conducted Emission	FCC CFR Title 47 Part 15 Subpart C: 2008 Section 15.207	Yes	No
Radiated Emission	FCC CFR Title 47 Part 15 Subpart C: 2008 Section 15.209	Yes	No
Operation Frequency Range of 20dB Bandwidth	FCC CFR Title 47 Part 15 Subpart C: 2008 15.215(c)	Yes	No
26dB Occupied Bandwidth	FCC CFR Title 47 Part 15 Subpart C: 2008 Section 15.407(a)	Yes	No
Power Output	FCC CFR Title 47 Part 15 Subpart C: 2008 Section 15.407(a)	Yes	No
Peak Power Spectral Density	FCC CFR Title 47 Part 15 Subpart C: 2008 Section 15.407(a)	Yes	No
Peak Excursion	FCC CFR Title 47 Part 15 Subpart C: 2008 Section 15.407(a)(6)	Yes	No
Radiated Emission Band Edge	FCC CFR Title 47 Part 15 Subpart C: 2008 Section 15.205, 15.407(b)	Yes	No
Frequency Stability	FCC CFR Title 47 Part 15 Subpart C: 2008 Section 15.407(g)	Yes	No

Performed Test Item	Normative References	Test Performed	Deviation
Conducted Emission	RSS-Gen Issue 2 June 2007 Table 2	Yes	No
Radiated Emission	RSS-210 Issue 2 June 2007 Section 2.7 Table 2 and Table 3	Yes	No
99% Occupied Bandwidth	RSS-Gen Issue 2 June 2007 Section 4.6.1 and 4.6.2	Yes	No
Power Output	RSS-210 Issue 2 June 2007 A9.2	Yes	No
Peak Power Spectral Density	RSS-210 Issue 2 June 2007 A9.2/A9.5	Yes	No
Radiated Emission Band Edge	RSS-210 Issue 2 June 2007 A9.3	Yes	No
Frequency Stability	RSS-210 Issue 2 June 2007 A9.5(5)	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

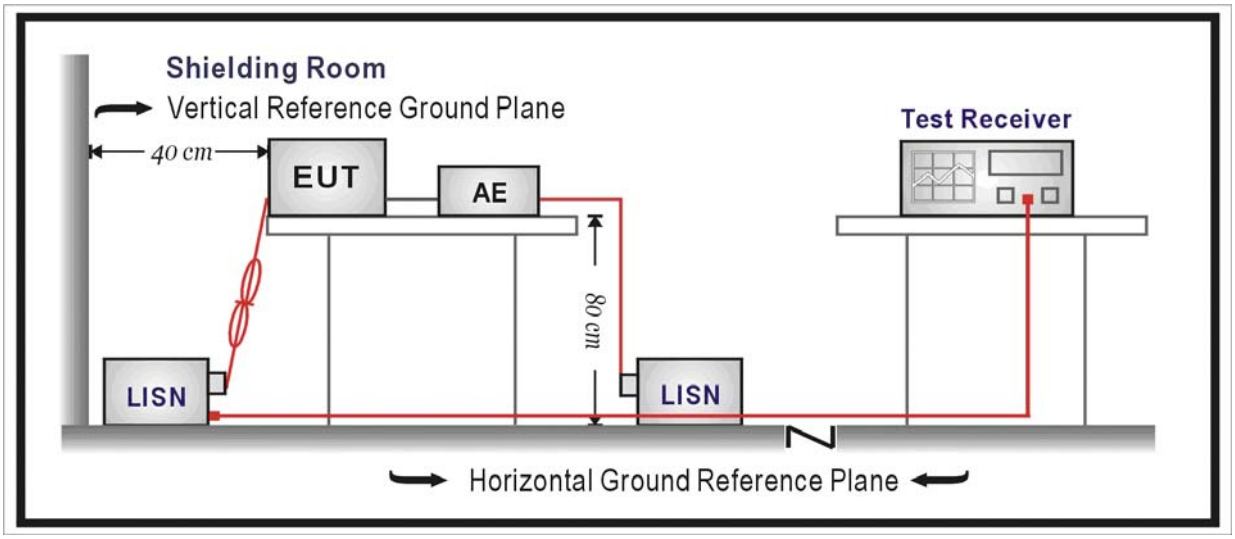
3.1. Test Equipment

Conducted Emission / SR-1

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
EMI Test Receiver	R&S	ESCI	100726	2009/06/28
Two-Line V-Network	R&S	ENV216	100013	2009/06/28
Two-Line V-Network	R&S	ENV216	100014	2009/06/28
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	2008/11/25
50ohm Termination	SHX	TF2	07081401	2008/10/19
Coaxial Cable	Luthi	RG214	519358	2008/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH004	2009/03/31

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, 2003.

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.

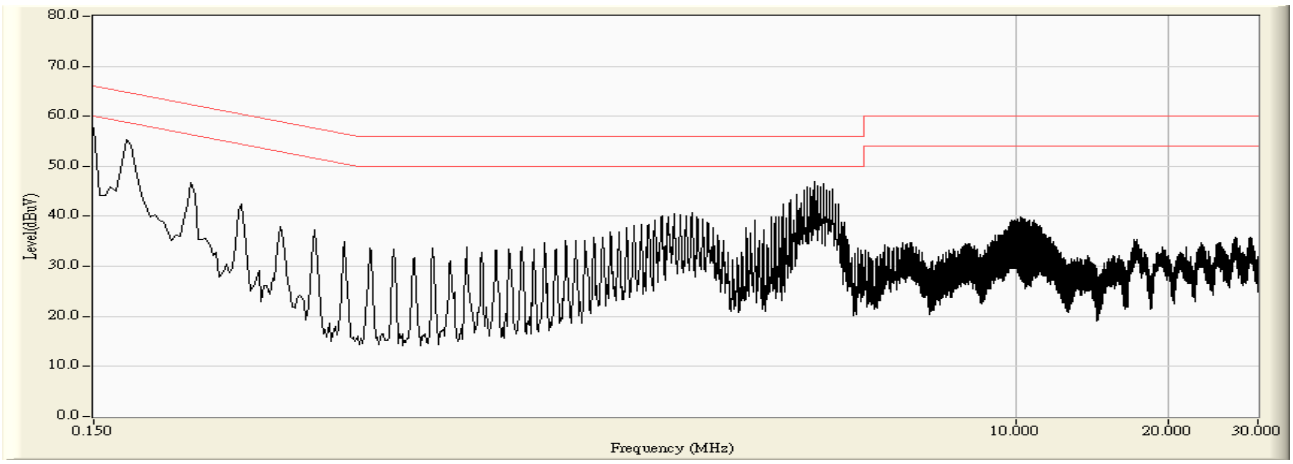
Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

3.5. Uncertainty

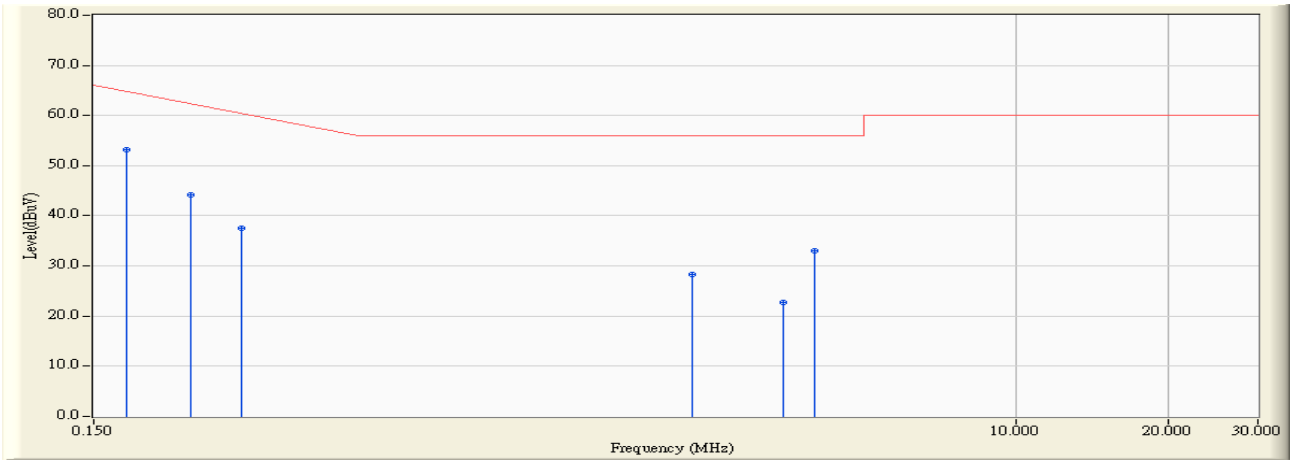
The measurement uncertainty is defined as ± 2.02 dB

3.6. Test Result

Engineer : Cryst	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	**Time : 2009/09/12 - 13:41**
Limit : FCC_Part15.207_00M_QP	**Margin : 6**
Probe : ENV216_100014(0.009-30MHz) - Line1	**Power : AC 120V/60Hz**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 1**

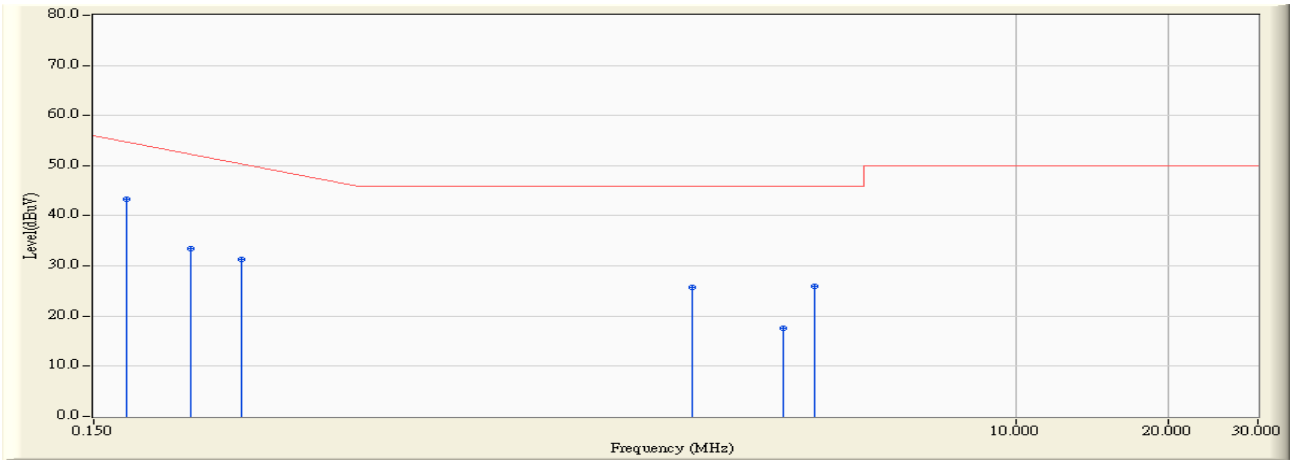


Engineer : Cryst	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	**Time : 2009/09/12 - 13:46**
Limit : FCC_Part15.207_00M_QP	**Margin : 0**
Probe : ENV216_100014(0.009-30MHz) - Line1	**Power : AC 120V/60Hz**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 1**



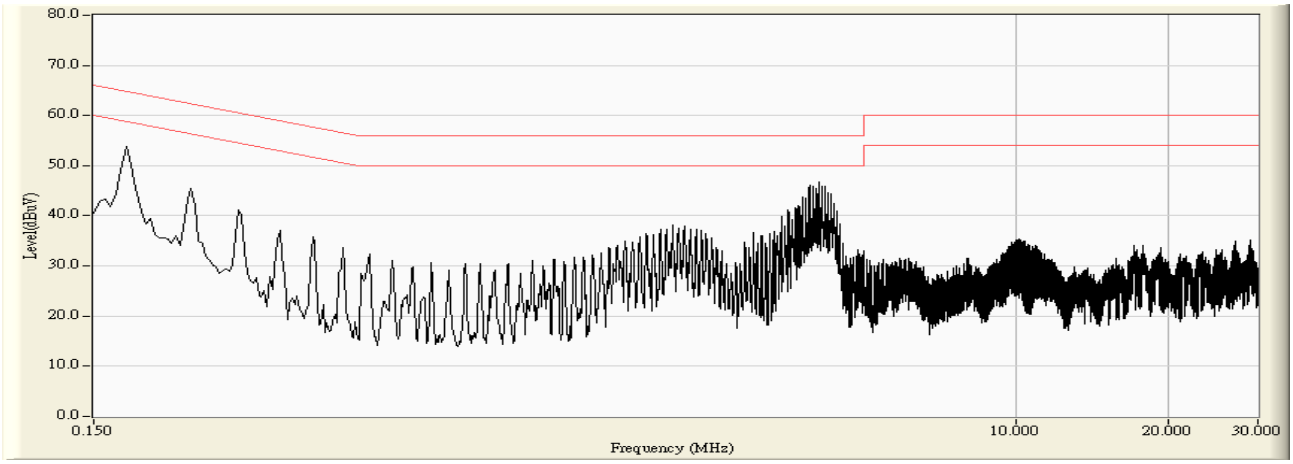
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.174	9.929	43.200	53.129	-11.638	64.767	QUASIPEAK
2		0.234	9.450	34.800	44.250	-18.057	62.307	QUASIPEAK
3		0.294	9.498	28.000	37.498	-22.913	60.411	QUASIPEAK
4		2.282	9.708	18.600	28.308	-27.692	56.000	QUASIPEAK
5		3.450	9.780	13.000	22.780	-33.220	56.000	QUASIPEAK
6		3.978	9.813	23.200	33.013	-22.987	56.000	QUASIPEAK

Engineer : Cryst	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	**Time : 2009/09/12 - 13:46**
Limit : FCC_Part15.207_00M_AV	**Margin : 0**
Probe : ENV216_100014(0.009-30MHz) - Line1	**Power : AC 120V/60Hz**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 1**

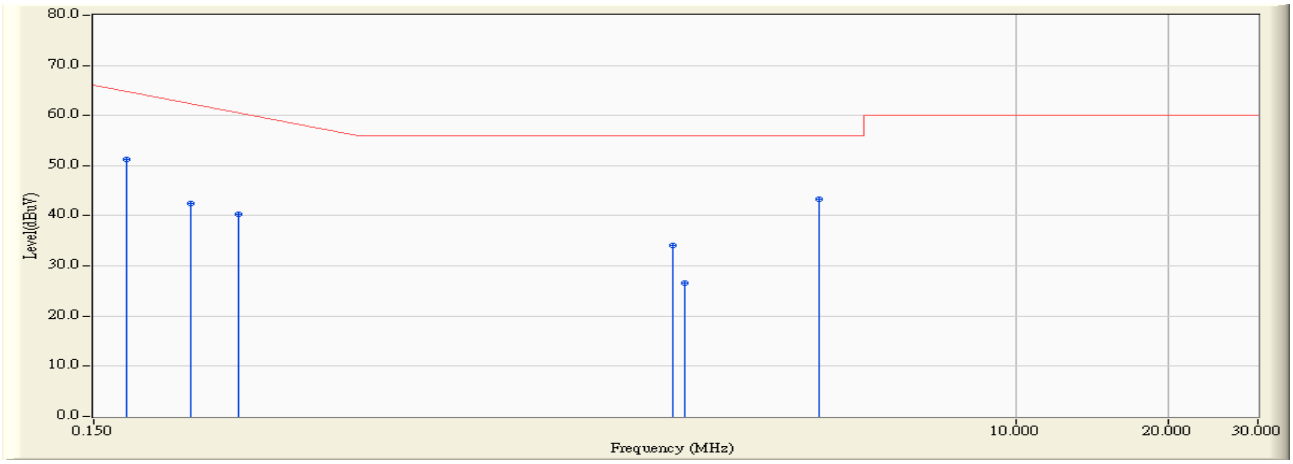


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.174	9.929	33.500	43.429	-11.338	54.767	AVERAGE
2		0.234	9.450	24.100	33.550	-18.757	52.307	AVERAGE
3		0.294	9.498	21.900	31.398	-19.013	50.411	AVERAGE
4		2.282	9.708	16.000	25.708	-20.292	46.000	AVERAGE
5		3.450	9.780	7.700	17.480	-28.520	46.000	AVERAGE
6		3.978	9.813	16.100	25.913	-20.087	46.000	AVERAGE

Engineer : Cryst	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	**Time : 2009/09/12 - 14:01**
Limit : FCC_Part15.207_00M_QP	**Margin : 6**
Probe : ENV216_100014(0.009-30MHz) – Line 2	**Power : AC 120V/60Hz**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 1**

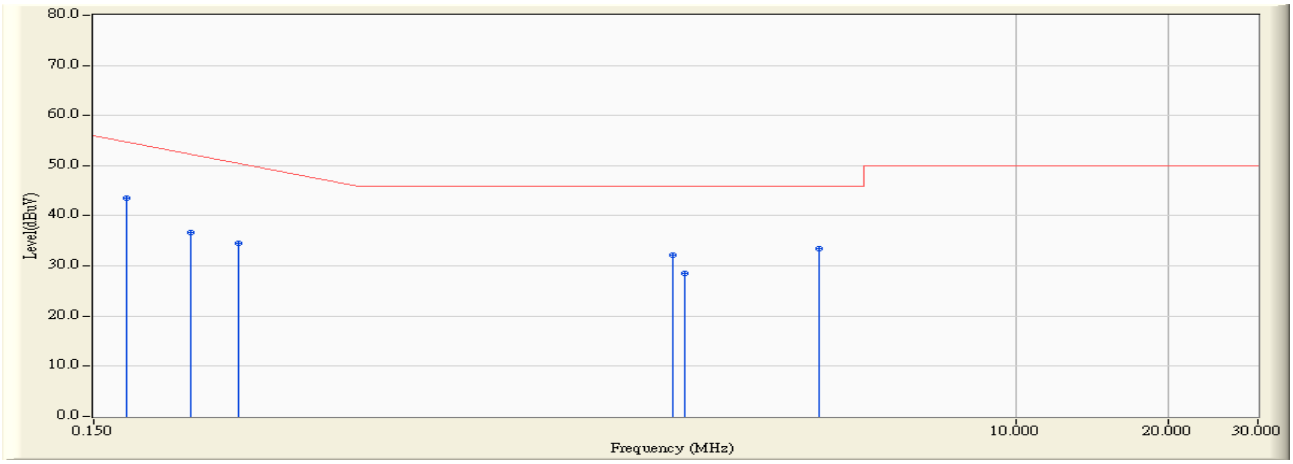


Engineer : Cryst	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	**Time : 2009/09/12 - 14:04**
Limit : FCC_Part15.207_00M_QP	**Margin : 0**
Probe : ENV216_100014(0.009-30MHz) - Line 2	**Power : AC 120V/60Hz**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 1**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.174	9.929	41.400	51.329	-13.438	64.767	QUASIPEAK
2		0.234	9.450	33.000	42.450	-19.857	62.307	QUASIPEAK
3		0.290	9.494	30.800	40.294	-20.230	60.524	QUASIPEAK
4		2.090	9.684	24.400	34.084	-21.916	56.000	QUASIPEAK
5		2.210	9.700	16.800	26.500	-29.500	56.000	QUASIPEAK
6	*	4.062	9.820	33.600	43.420	-12.580	56.000	QUASIPEAK

Engineer : Cryst	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	**Time : 2009/09/12 - 14:04**
Limit : FCC_Part15.207_00M_AV	**Margin : 0**
Probe : ENV216_100014(0.009-30MHz) - Line 2	**Power : AC 120V/60Hz**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 1**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.174	9.929	33.600	43.529	-11.238	54.767	AVERAGE
2		0.234	9.450	27.300	36.750	-15.557	52.307	AVERAGE
3		0.290	9.494	25.100	34.594	-15.930	50.524	AVERAGE
4		2.090	9.684	22.500	32.184	-13.816	46.000	AVERAGE
5		2.210	9.700	18.900	28.600	-17.400	46.000	AVERAGE
6		4.062	9.820	23.600	33.420	-12.580	46.000	AVERAGE

4. Radiated Emission

4.1. Test Equipment

☒Radiated Emission / AC-2

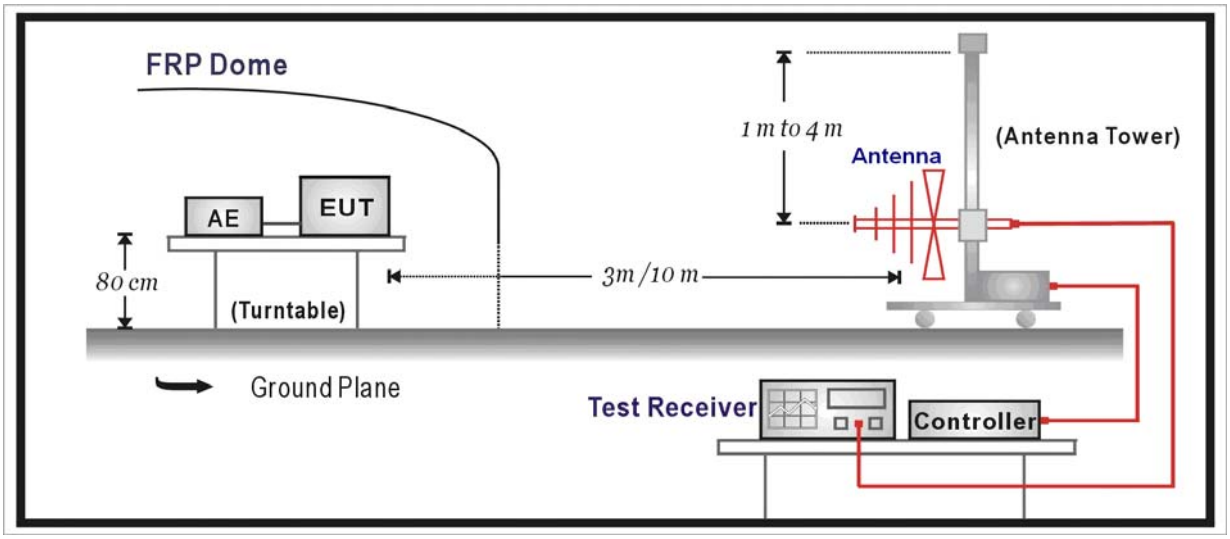
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2009/06/11
EMI Test Receiver	R&S	ESCI	100573	2009/05/10
Preamplifier	Quietek	AP-025C	QT-AP003	2008/11/25
Preamplifier	Quietek	AP-180C	CHM-0602012	2008/11/25
Bilog Type Antenna	Schaffner	CBL6112B	2932	2008/11/22
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	496	2008/11/25
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2008/11/25
High-Pass Filter	Wainwright	WHKX7.0/18G-8SS	SN16	2009/03/03
Low-Pass Filter	Wainwright	WLKS4500-9SS	SN2	2009/03/03
50ohm Coaxial Switch	Anritsu	MP59B	6200447304	2008/11/25
Coaxial Cable	Huber+Suhner	AC2-C	04	2008/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH002	2009/03/31

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

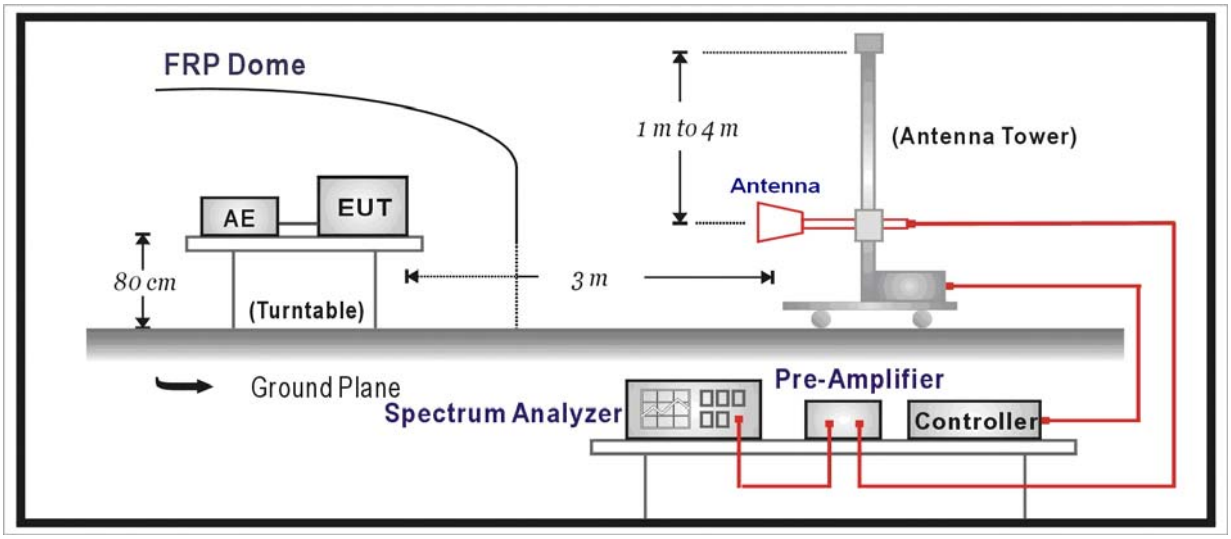
Note 2: The test instruments marked with “X” are used to measure the final test results.

4.2. Test Setup

Under 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 antenna 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, 2003.

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 C63.4:2003 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 antenna will be bended down a little (as horn antenna has the narrow beamwidth) in order to keeping the antenna in the “cone of radiation” of EUT. The 3dB beamwidth is 60 degrees for H-plane and 90 degrees for E-plane.

4.5. Uncertainty

The measurement uncertainty above 1G is defined as ± 3.9 dB

below 1G is defined as ± 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.

802.11a (Chain 0)

Channel	Frequency Range (MHz)	Measure Level (dBuV/m)	Detector Type	Limit (dBuV/m)
36	30~88	≤32	QP	40
	88~216	≤34	QP	43.5
	216~960	≤33	QP	46
	960~1000	≤39	QP	54
	1000~25000	≤59	PK	74
		≤43	AV	54
40	30~88	≤31	QP	40
	88~216	≤34	QP	43.5
	216~960	≤32	QP	46
	960~1000	≤39	QP	54
	1000~25000	≤57	PK	74
		≤43	AV	54
48	30~88	≤33	QP	40
	88~216	≤36	QP	43.5
	216~960	≤33	QP	46
	960~1000	≤38	QP	54
	1000~25000	≤55	PK	74
		≤40	AV	54

802.11a (Chain 1)

Channel	Frequency Range (MHz)	Measure Level (dBuV/m)	Detector Type	Limit (dBuV/m)
36	30~88	≤34	QP	40
	88~216	≤35	QP	43.5
	216~960	≤33	QP	46
	960~1000	≤36	QP	54
	1000~25000	≤57	PK	74
		≤43	AV	54
40	30~88	≤32	QP	40
	88~216	≤34	QP	43.5
	216~960	≤33	QP	46
	960~1000	≤39	QP	54
	1000~25000	≤56	PK	74
		≤41	AV	54
48	30~88	≤32	QP	40
	88~216	≤34	QP	43.5
	216~960	≤33	QP	46
	960~1000	≤39	QP	54
	1000~25000	≤58	PK	74
		≤42	AV	54

802.11n(20MHz) (Chain 0)

Channel	Frequency Range (MHz)	Measure Level (dBuV/m)	Detector Type	Limit (dBuV/m)
36	30~88	≤32	QP	40
	88~216	≤34	QP	43.5
	216~960	≤33	QP	46
	960~1000	≤39	QP	54
	1000~25000	≤58	PK	74
		≤44	AV	54
40	30~88	≤32	QP	40
	88~216	≤34	QP	43.5
	216~960	≤33	QP	46
	960~1000	≤39	QP	54
	1000~25000	≤59	PK	74
		≤45	AV	54
48	30~88	≤32	QP	40
	88~216	≤34	QP	43.5
	216~960	≤33	QP	46
	960~1000	≤39	QP	54
	1000~25000	≤57	PK	74
		≤43	AV	54

802.11n(20MHz) (Chain 1)

Channel	Frequency Range (MHz)	Measure Level (dBuV/m)	Detector Type	Limit (dBuV/m)
36	30~88	≤32	QP	40
	88~216	≤34	QP	43.5
	216~960	≤33	QP	46
	960~1000	≤39	QP	54
	1000~25000	≤58	PK	74
		≤44	AV	54
40	30~88	≤32	QP	40
	88~216	≤34	QP	43.5
	216~960	≤33	QP	46
	960~1000	≤39	QP	54
	1000~25000	≤59	PK	74
		≤44	AV	54
48	30~88	≤32	QP	40
	88~216	≤34	QP	43.5
	216~960	≤33	QP	46
	960~1000	≤39	QP	54
	1000~25000	≤59	PK	74
		≤43	AV	54

802.11n(20MHz) (Chain 0+1)

Channel	Frequency Range (MHz)	Measure Level (dBuV/m)	Detector Type	Limit (dBuV/m)
36	30~88	≤32	QP	40
	88~216	≤34	QP	43.5
	216~960	≤33	QP	46
	960~1000	≤39	QP	54
	1000~25000	≤58	PK	74
		≤45	AV	54
40	30~88	≤32	QP	40
	88~216	≤34	QP	43.5
	216~960	≤33	QP	46
	960~1000	≤39	QP	54
	1000~25000	≤57	PK	74
		≤41	AV	54
48	30~88	≤32	QP	40
	88~216	≤34	QP	43.5
	216~960	≤33	QP	46
	960~1000	≤39	QP	54
	1000~25000	≤59	PK	74
		≤44	AV	54

802.11n(40MHz) (Chain 0)

Channel	Frequency Range (MHz)	Measure Level (dBuV/m)	Detector Type	Limit (dBuV/m)
38	30~88	≤32	QP	40
	88~216	≤34	QP	43.5
	216~960	≤33	QP	46
	960~1000	≤39	QP	54
	1000~25000	≤58	PK	74
		≤44	AV	54
46	30~88	≤32	QP	40
	88~216	≤34	QP	43.5
	216~960	≤33	QP	46
	960~1000	≤39	QP	54
	1000~25000	≤58	PK	74
		≤44	AV	54

802.11n(40MHz) (Chain 1)

Channel	Frequency Range (MHz)	Measure Level (dBuV/m)	Detector Type	Limit (dBuV/m)
38	30~88	≤32	QP	40
	88~216	≤34	QP	43.5
	216~960	≤33	QP	46
	960~1000	≤39	QP	54
	1000~25000	≤57	PK	74
		≤41	AV	54
46	30~88	≤32	QP	40
	88~216	≤34	QP	43.5
	216~960	≤33	QP	46
	960~1000	≤39	QP	54
	1000~25000	≤59	PK	74
		≤43	AV	54

802.11n(40MHz) (Chain 0+1)

Channel	Frequency Range (MHz)	Measure Level (dBuV/m)	Detector Type	Limit (dBuV/m)
38	30~88	≤32	QP	40
	88~216	≤34	QP	43.5
	216~960	≤33	QP	46
	960~1000	≤39	QP	54
	1000~25000	≤58	PK	74
		≤44	AV	54
46	30~88	≤32	QP	40
	88~216	≤34	QP	43.5
	216~960	≤33	QP	46
	960~1000	≤39	QP	54
	1000~25000	≤58	PK	74
		≤44	AV	54

5. Operation Frequency Range of 20dB Bandwidth

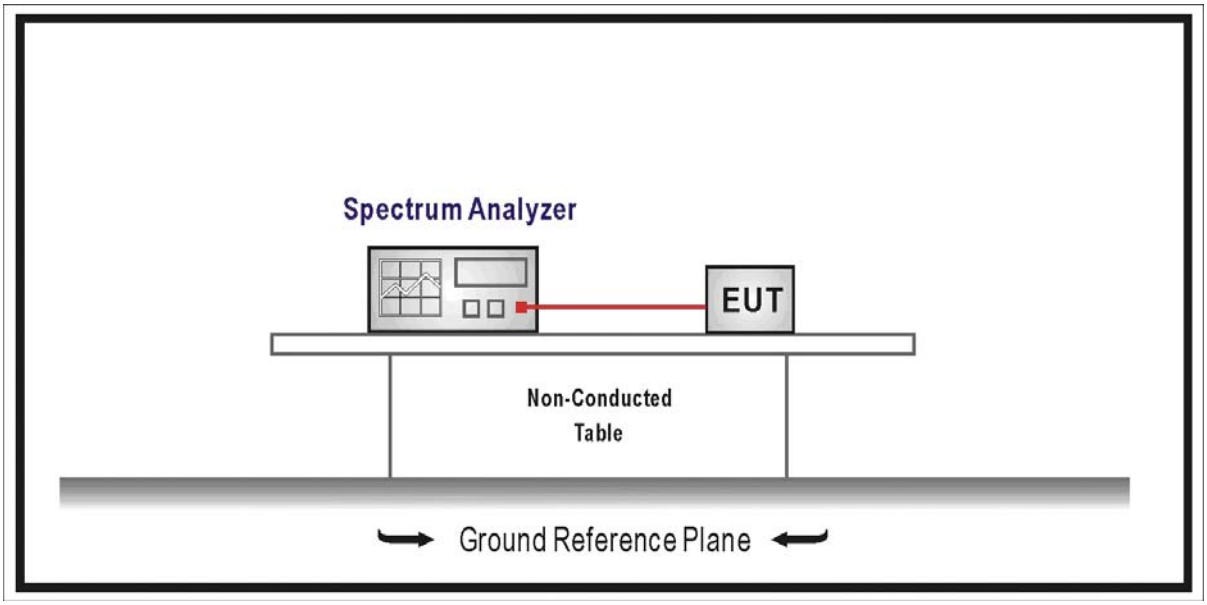
5.1. Test Equipment

Operation Frequency Range of 20dB Bandwidth / AC-6

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2009/06/11
Coaxial Cable	Huber+Suhner	AC4-RF	09	2008/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH007	2009/03/30

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 Oct 2002 KDB558074 for compliance to FCC 47CFR 15.407 requirements.
Set RBW = 100 kHz, Span greater than RBW.

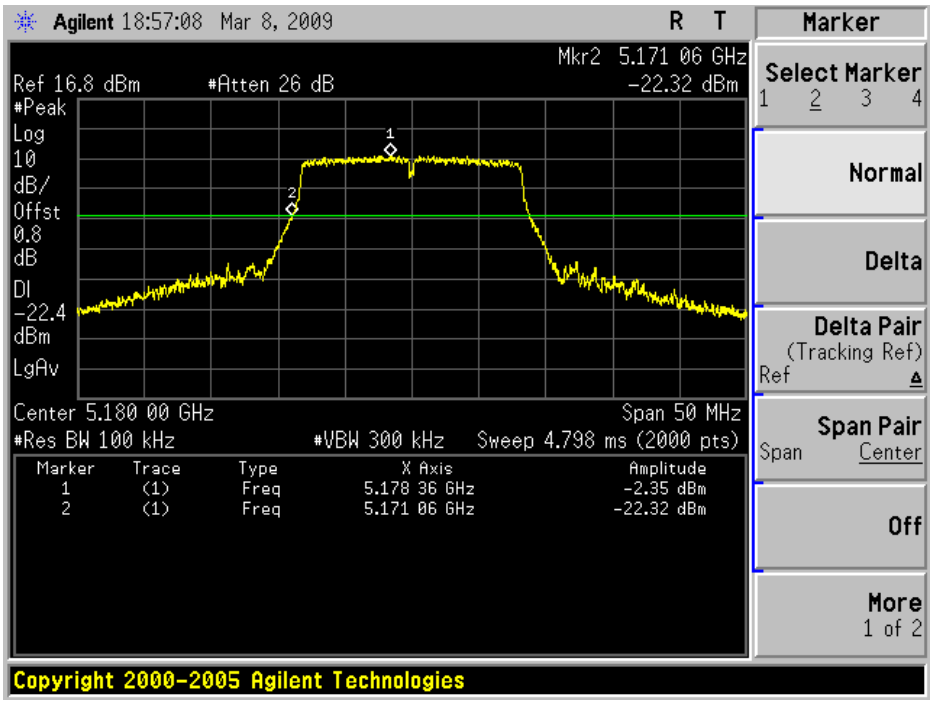
5.5. Uncertainty

The measurement uncertainty is defined as ± 1 kHz

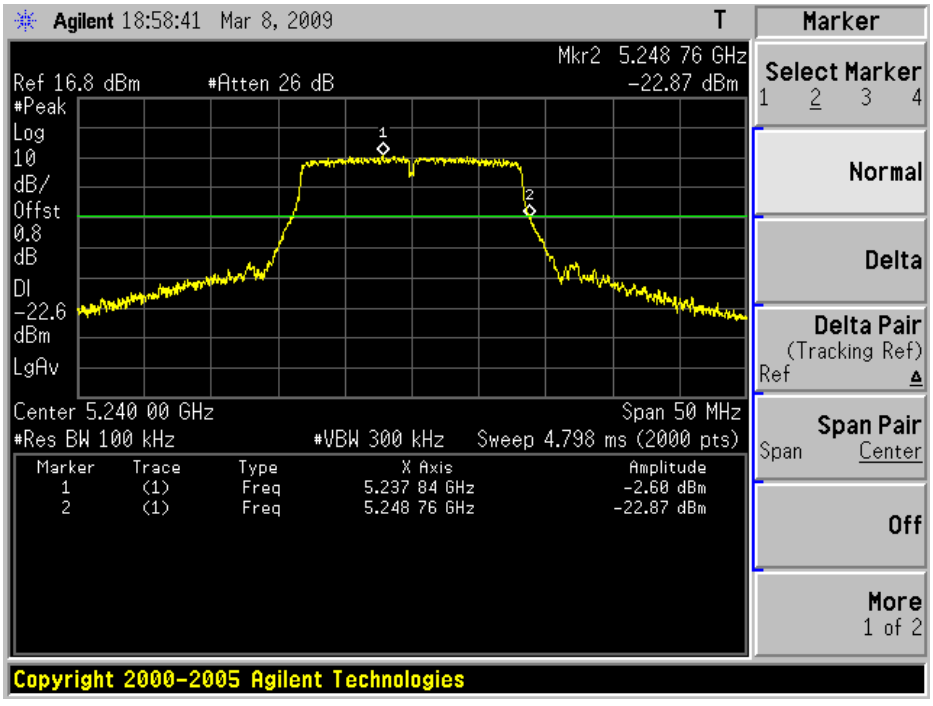
5.6. Test Result

Product	:	Flip Share TV(USB Dongle)
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	AC-6
Test Mode	:	Mode 1: Transmit by 802.11a (Chain 0)

Channel 36 (5180MHz)

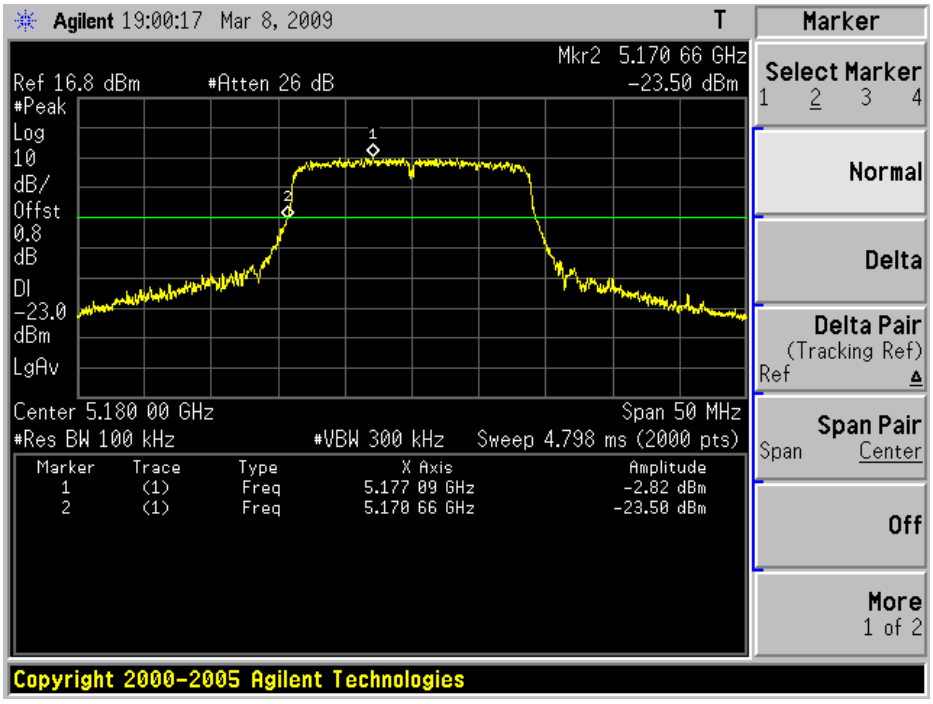


Channel 48 (5240MHz)

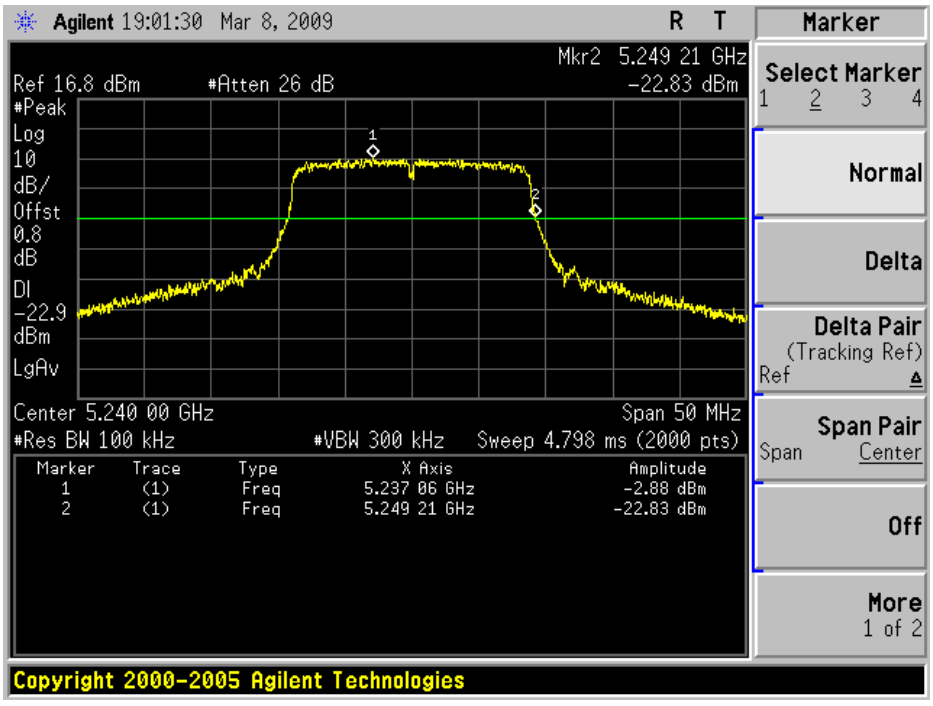


Product	:	Flip Share TV(USB Dongle)
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	AC-6
Test Mode	:	Mode 4: Transmit by 802.11n (20MHz) (Chain 0)

Channel 36 (5180MHz)

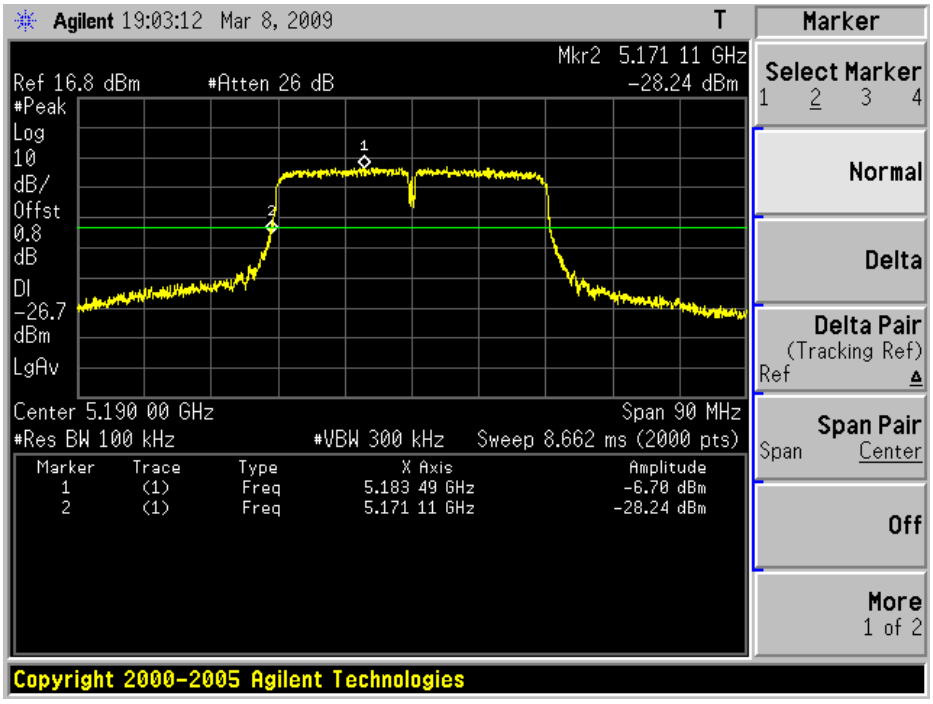


Channel 48 (5240MHz)

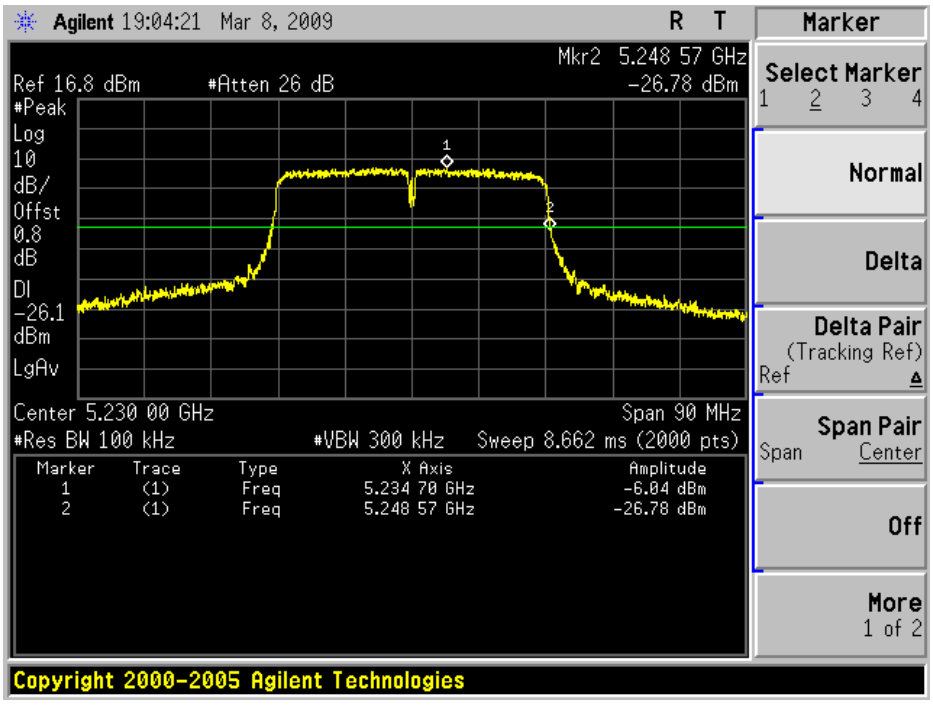


Product	:	Flip Share TV(USB Dongle)
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	AC-6
Test Mode	:	Mode 5: Transmit by 802.11n (40MHz) (Chain 0)

Channel 38 (5190MHz)

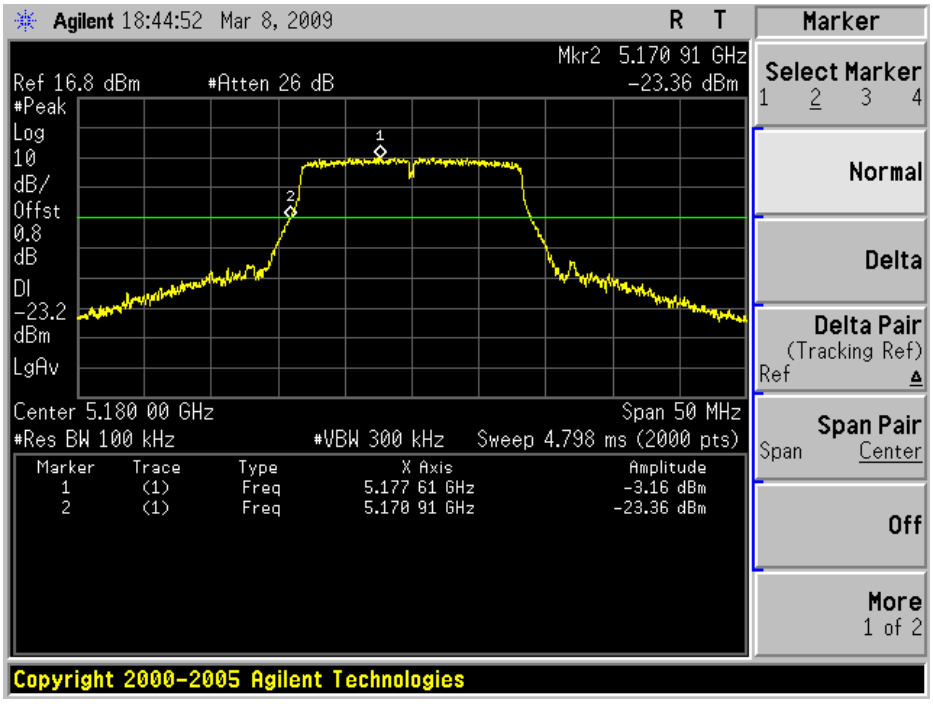


Channel 46 (5230MHz)

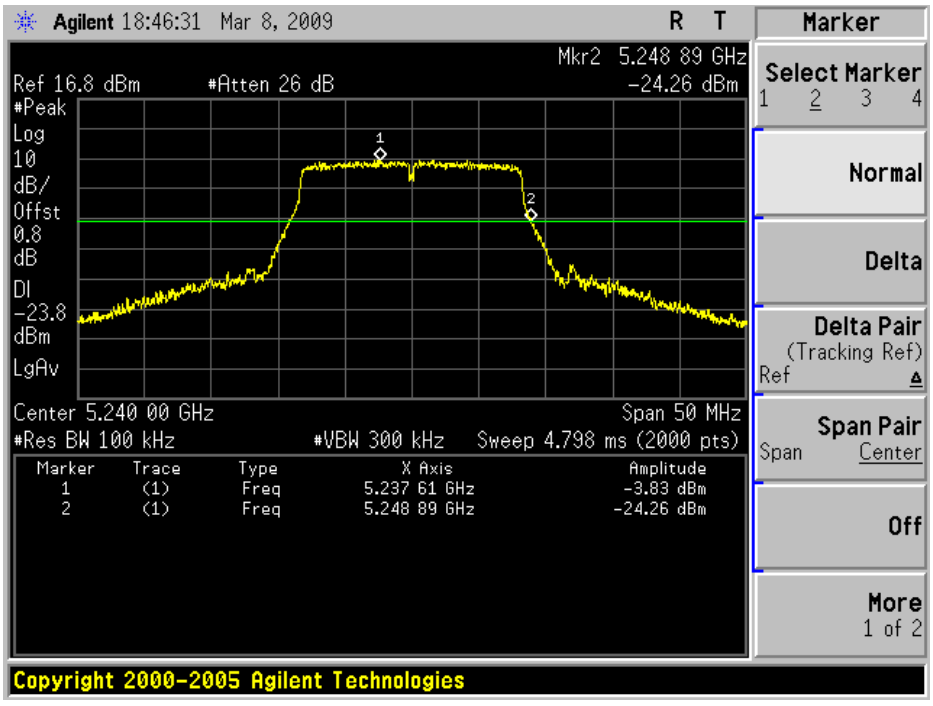


Product	:	Flip Share TV(USB Dongle)
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	AC-6
Test Mode	:	Mode 1: Transmit by 802.11a (Chain 1)

Channel 36 (5180MHz)

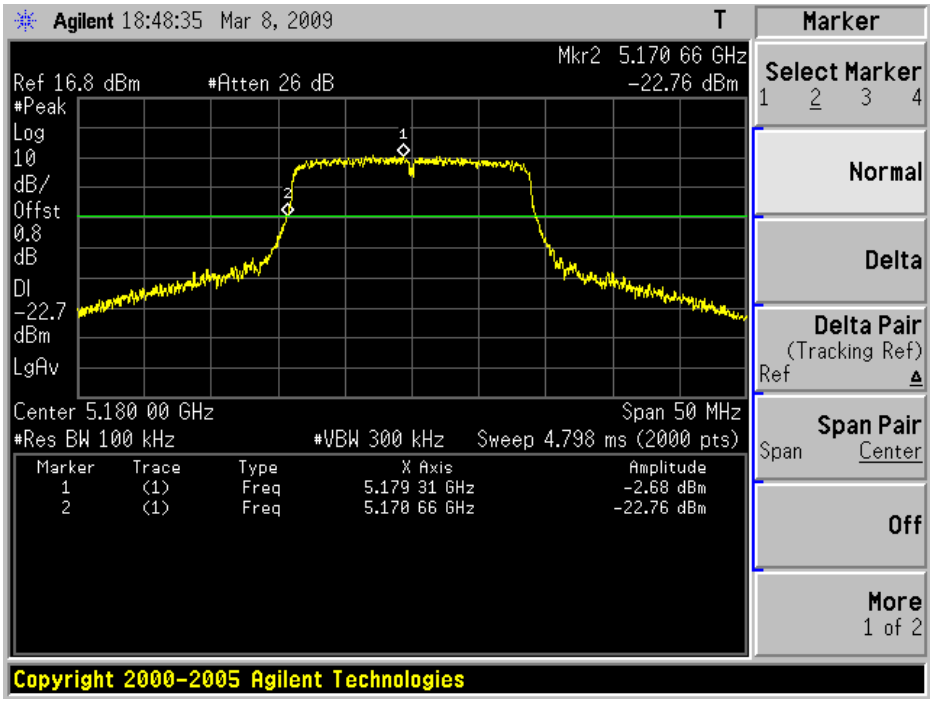


Channel 48 (5240MHz)

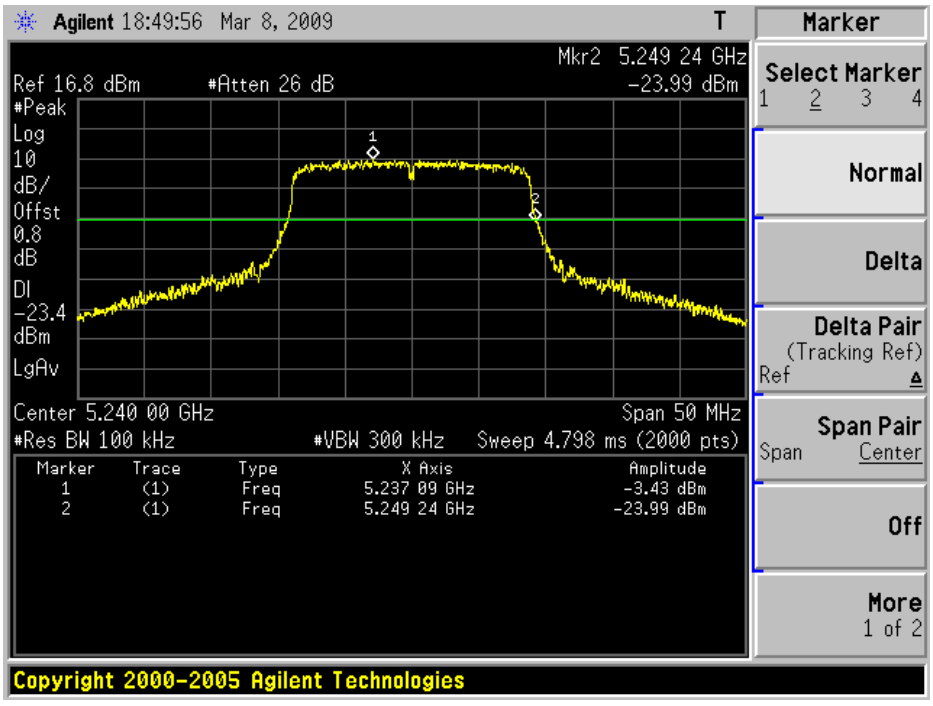


Product	:	Flip Share TV(USB Dongle)
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	AC-6
Test Mode	:	Mode 4: Transmit by 802.11n (20MHz) (Chain 1)

Channel 36 (5180MHz)

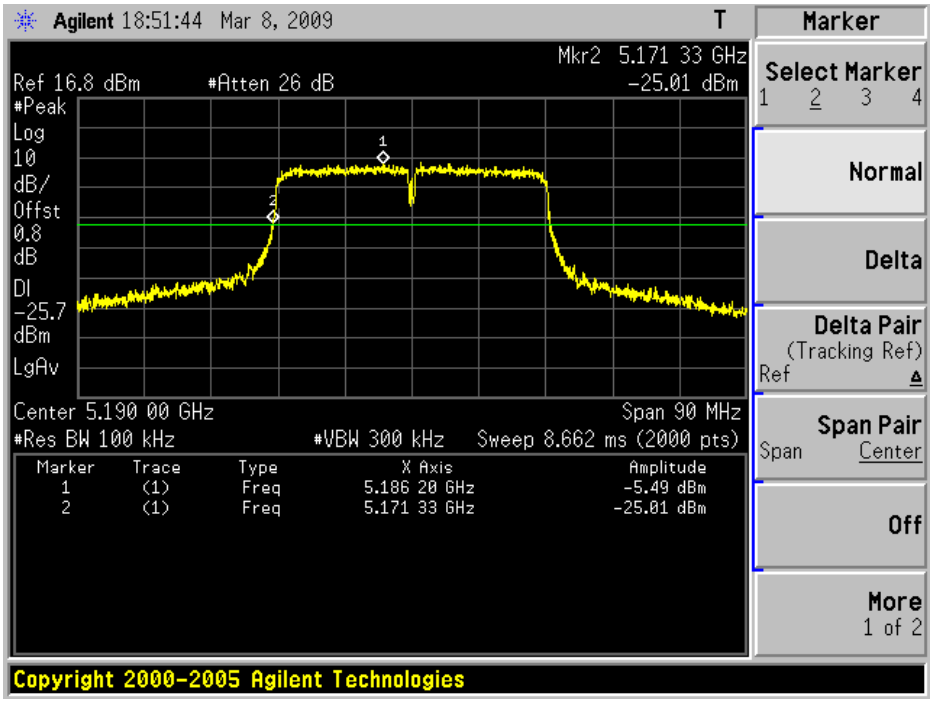


Channel 48 (5240MHz)

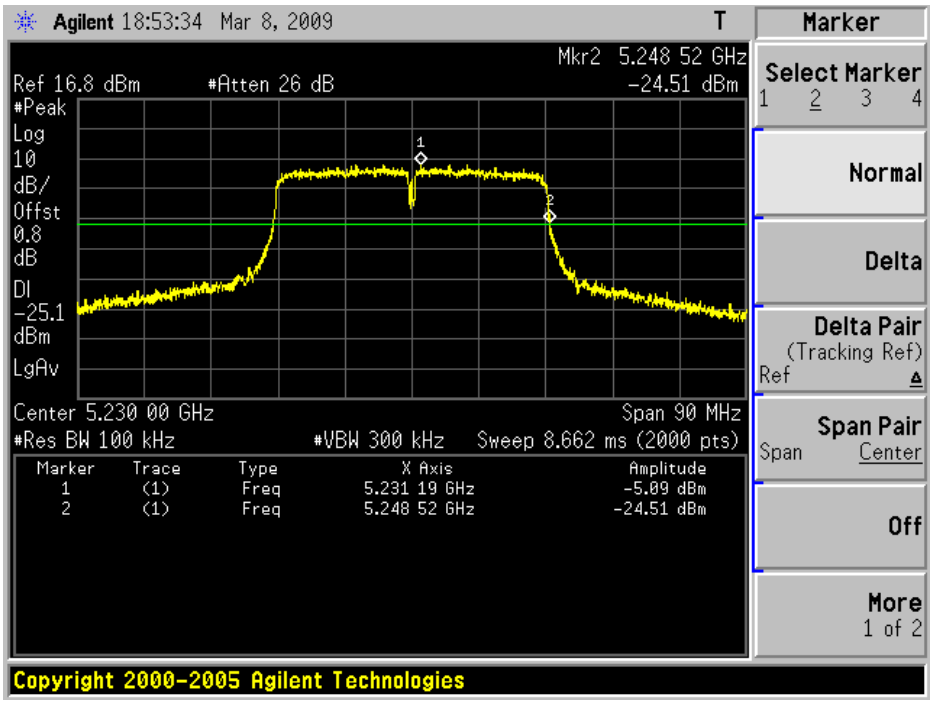


Product	:	Flip Share TV(USB Dongle)
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	AC-6
Test Mode	:	Mode 5: Transmit by 802.11n (40MHz) (Chain 1)

Channel 38 (5190MHz)



Channel 46 (5230MHz)



6. Occupied Bandwidth

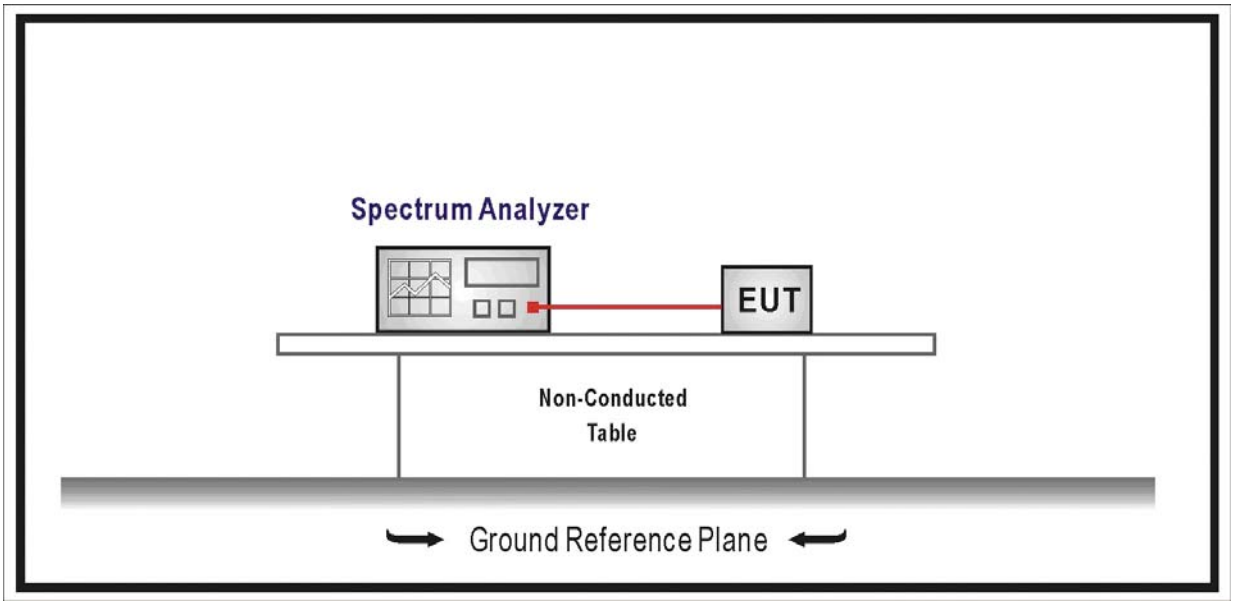
6.1. Test Equipment

26dB Occupied Bandwidth / AC-6

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2009/06/11
Coaxial Cable	Huber+Suhner	AC4-RF	09	2008/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH007	2009/03/30

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 FCC Public Notice DA 02-2138, August 30, 2002 for compliance to FCC 47CFR 15.407 requirements.

Emission bandwidth “B” MHz.

- Use a RBW = approximately 1% of the emission bandwidth.
- Set the VBW > RBW
- Use a peak detector.
- Do not use the Max Hold function. Rather, use the view button to capture the emission.
- 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%.

6.5. Uncertainty

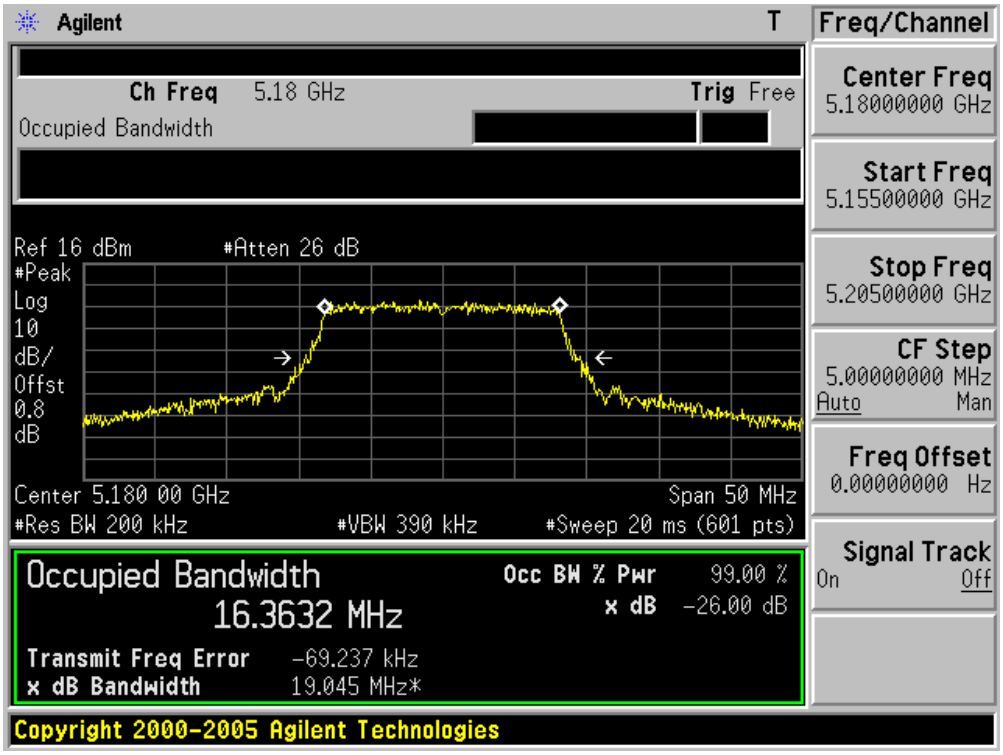
The measurement uncertainty is defined as ± 1 kHz

6.6. Test Result

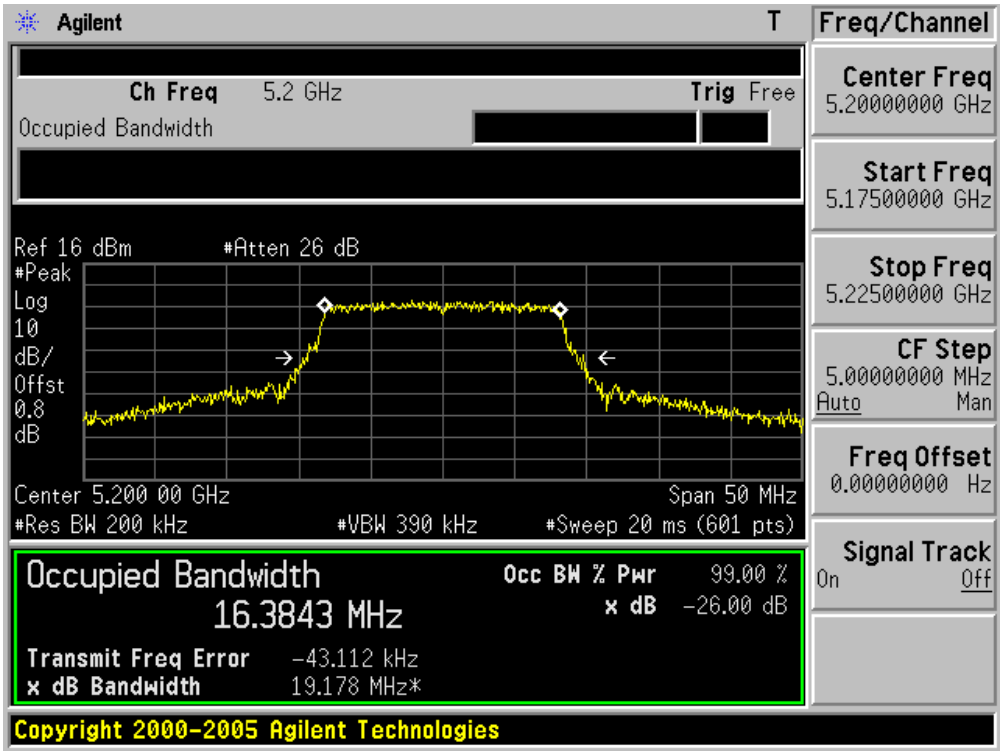
Product	:	Flip Share TV(USB Dongle)
Test Item	:	Occupied Bandwidth
Test Site	:	AC-6
Test Mode	:	Mode 1: Transmit by 802.11a (Chain 0)

Channel No.	Frequency (MHz)	26dB Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180	19.045	16.3632
40	5200	19.178	16.3843
48	5240	19.113	16.3389

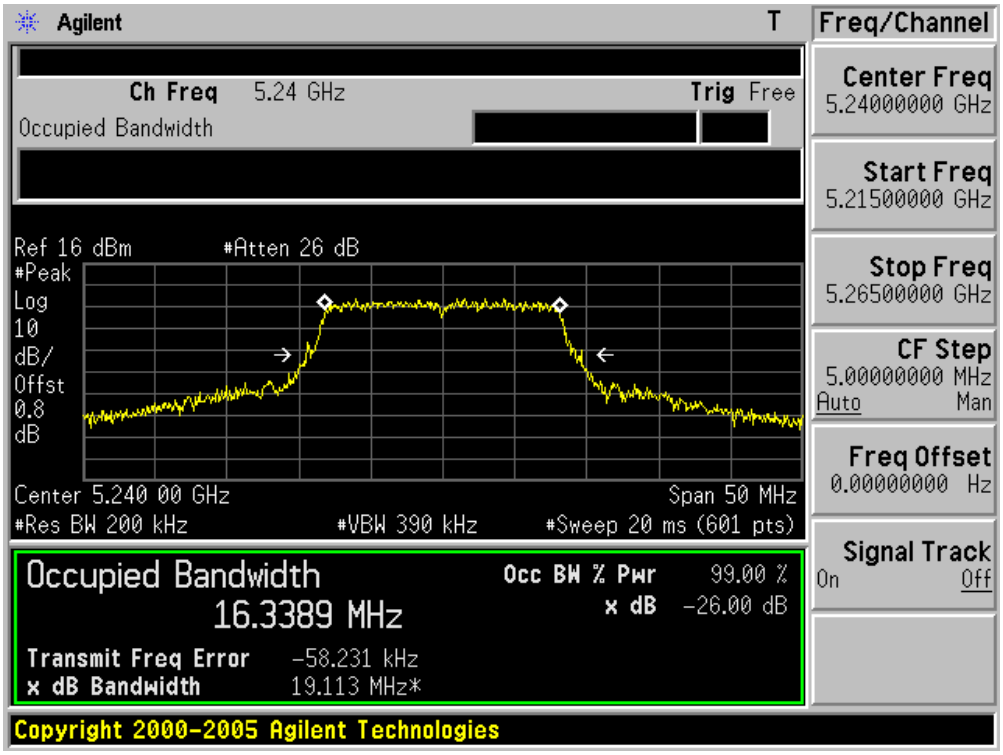
Channel 36 (5180MHz)



Channel 40 (5200MHz)



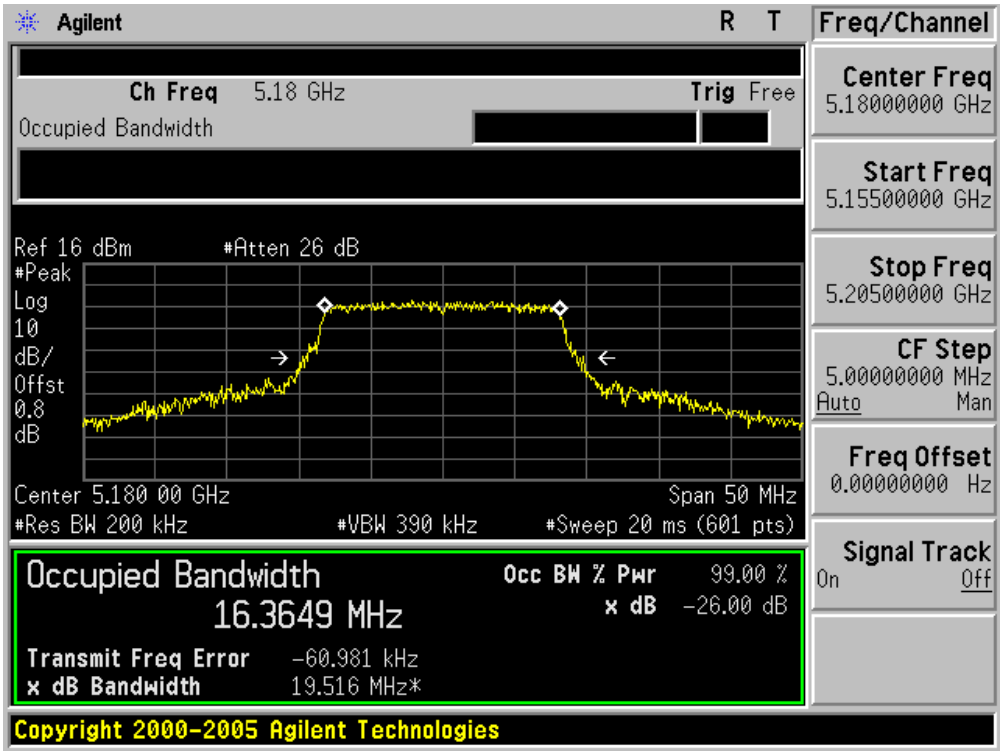
Channel 48 (5240MHz)



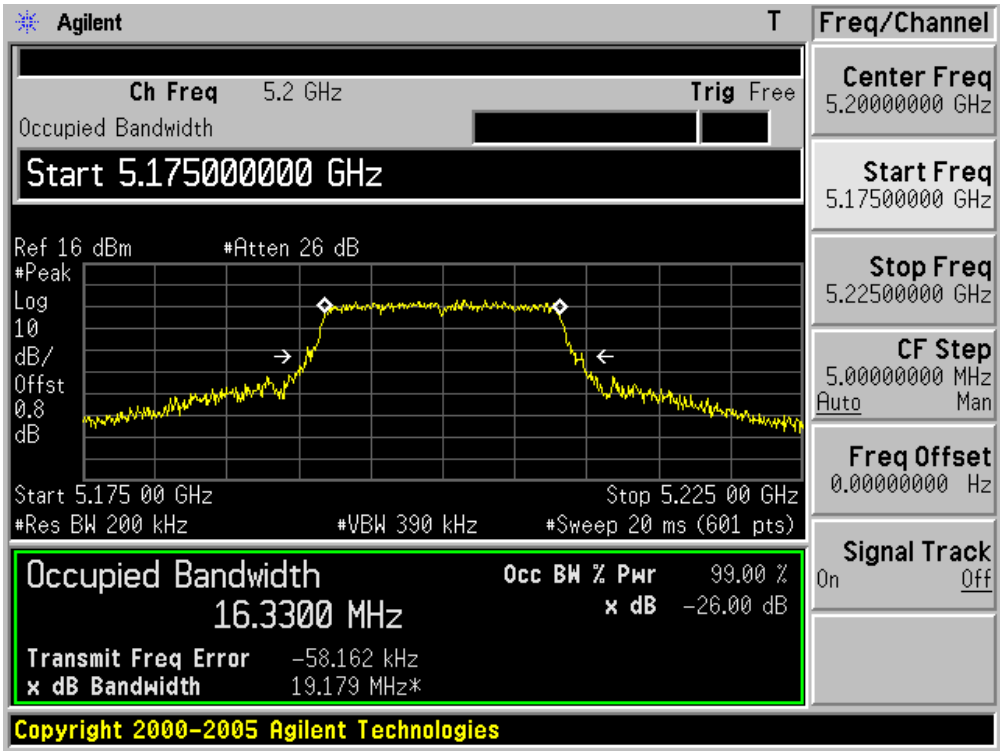
Product	:	Flip Share TV(USB Dongle)
Test Item	:	Occupied Bandwidth
Test Site	:	AC-6
Test Mode	:	Mode 1: Transmit by 802.11a (Chain 1)

Channel No.	Frequency (MHz)	26dB Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180	19.516	16.3649
40	5200	19.179	16.3300
48	5240	18.544	16.3618

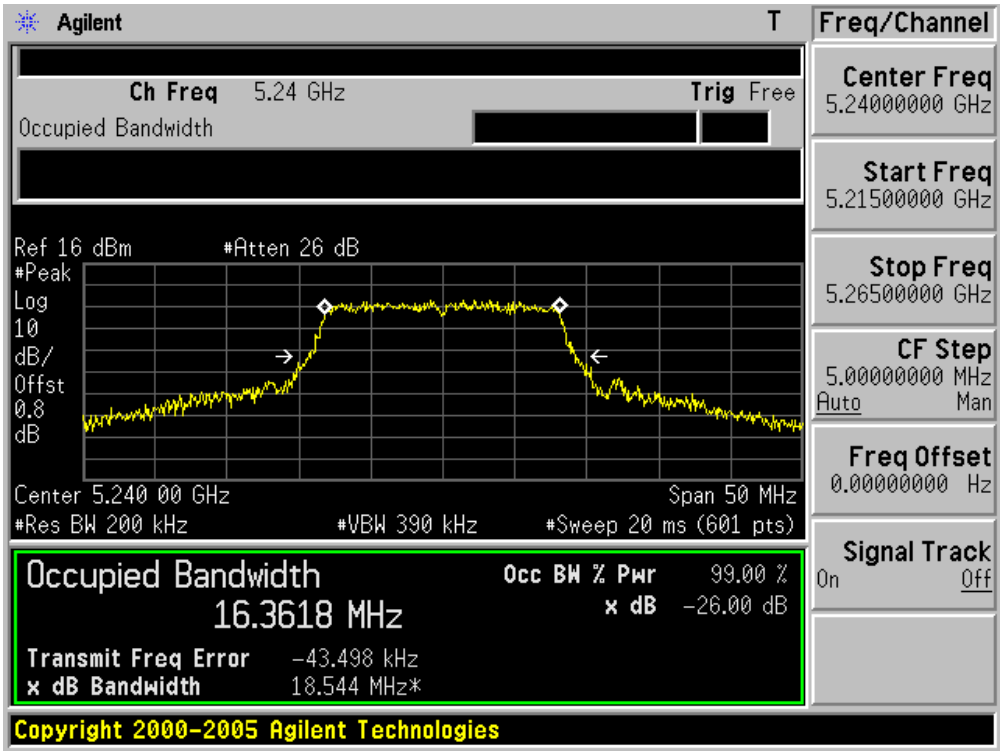
Channel 36 (5180MHz)



Channel 40 (5200MHz)



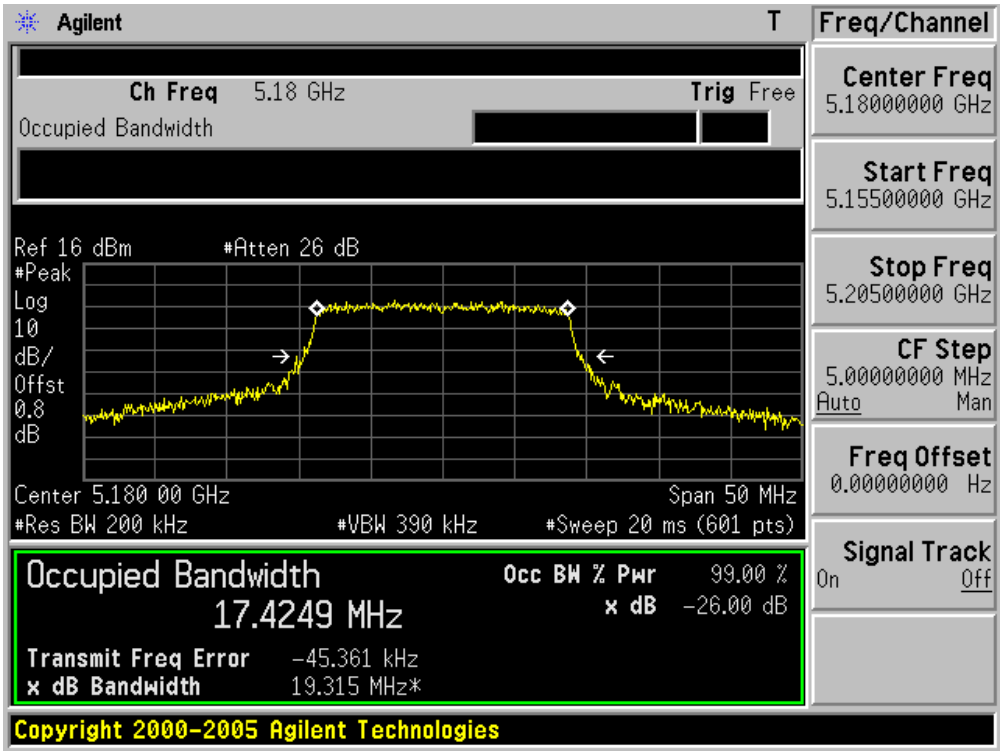
Channel 48 (5240MHz)



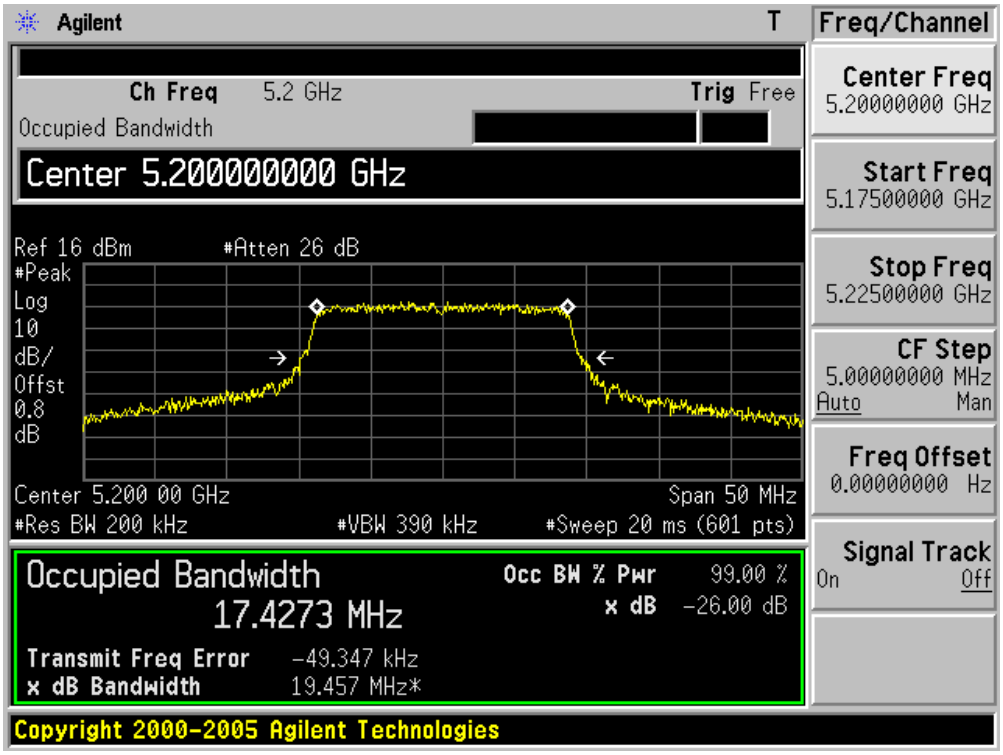
Product	:	Flip Share TV(USB Dongle)
Test Item	:	Occupied Bandwidth
Test Site	:	AC-6
Test Mode	:	Mode 2: Transmit by 802.11n (20MHz Bandwidth) (Chain 0)

Channel No.	Frequency (MHz)	26dB Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180	19.315	17.4249
40	5200	19.457	17.4273
48	5240	19.491	17.4666

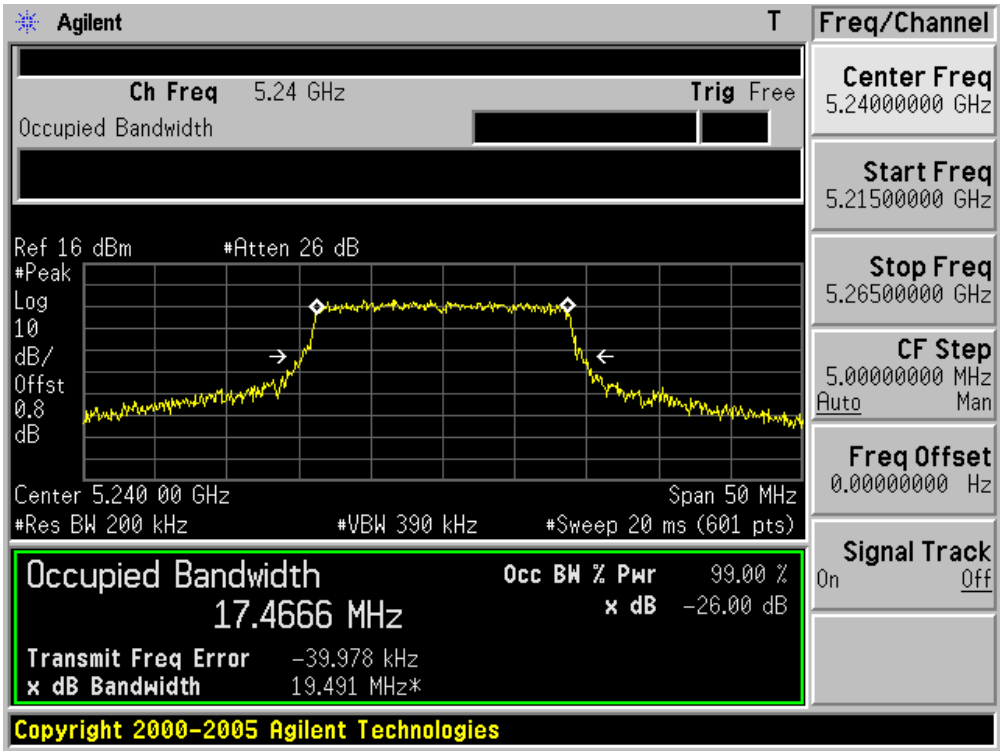
Channel 36 (5180MHz)



Channel 40 (5200MHz)



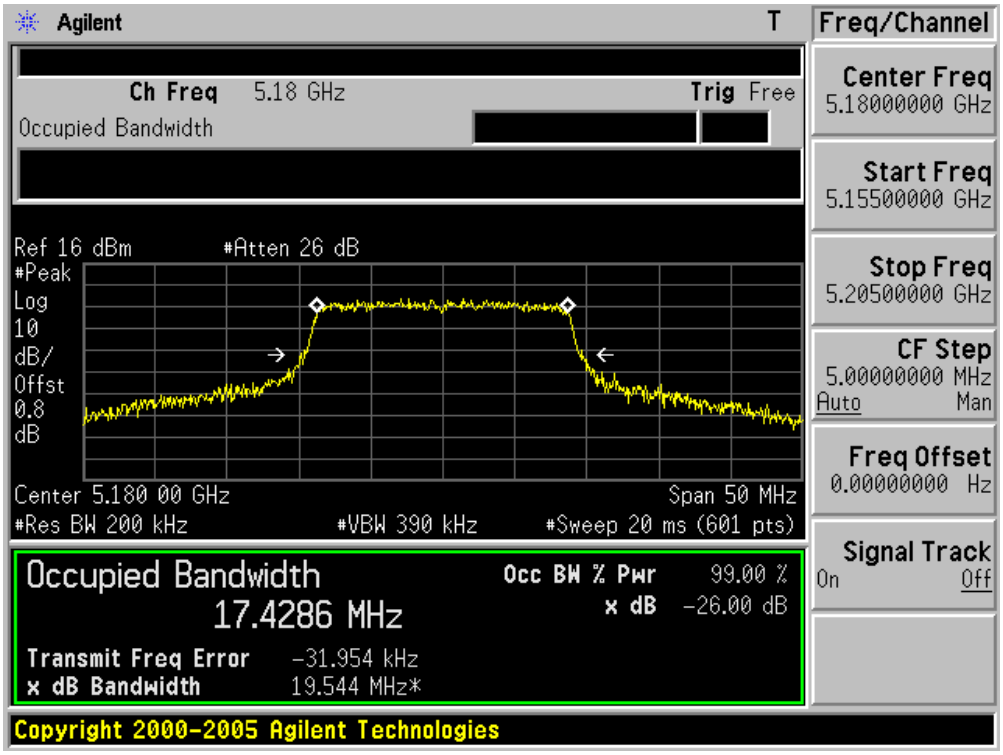
Channel 48 (5240MHz)



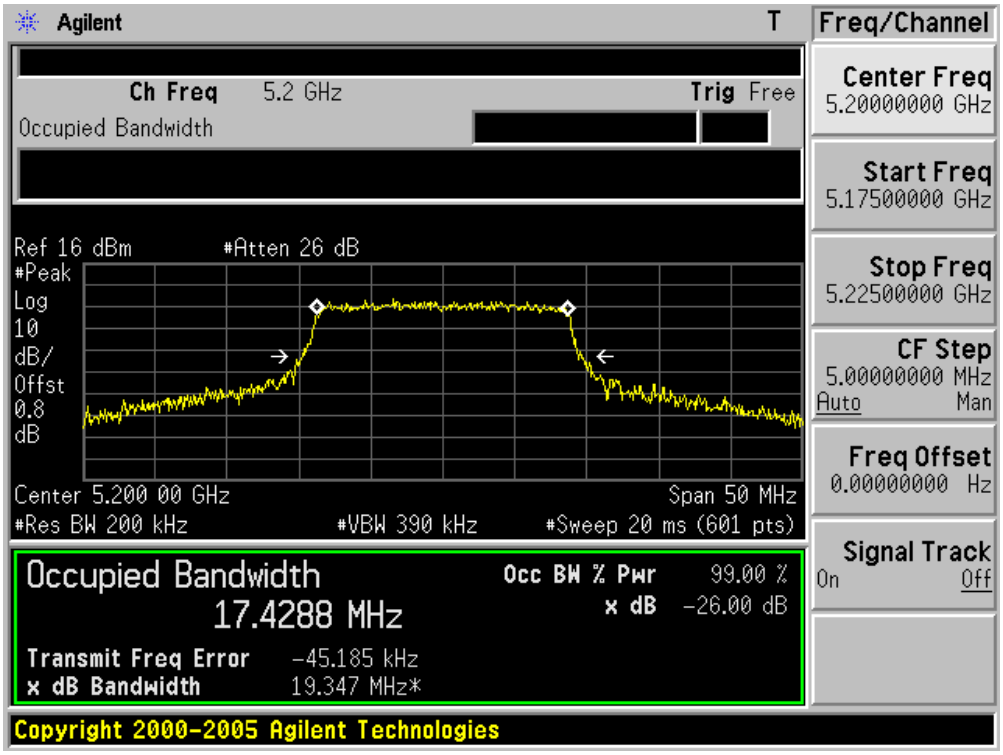
Product	:	Flip Share TV(USB Dongle)
Test Item	:	Occupied Bandwidth
Test Site	:	AC-6
Test Mode	:	Mode 2: Transmit by 802.11n (20MHz Bandwidth) (Chain 1)

Channel No.	Frequency (MHz)	26dB Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180	19.544	17.4286
40	5200	19.347	17.4288
48	5240	19.729	17.4439

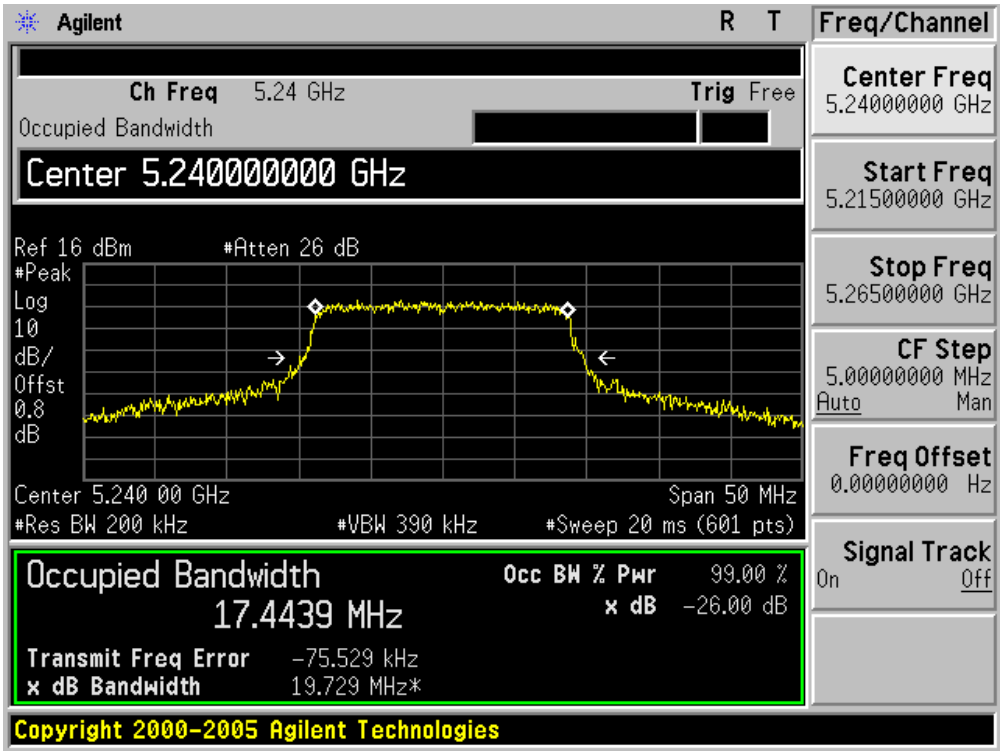
Channel 36 (5180MHz)



Channel 40 (5200MHz)



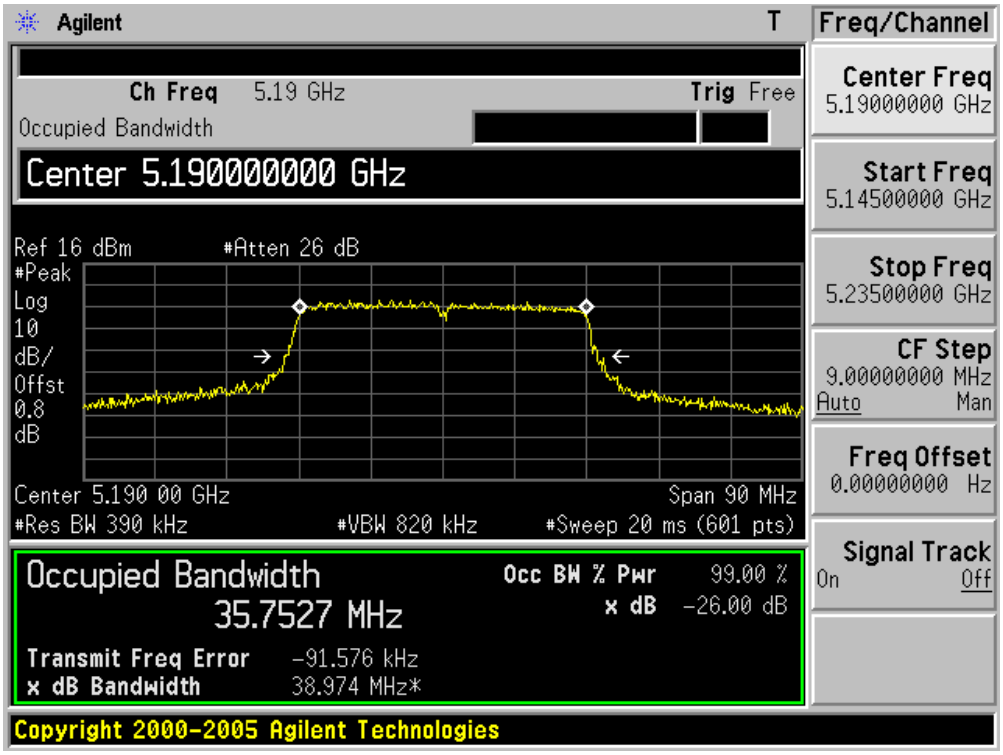
Channel 48 (5240MHz)



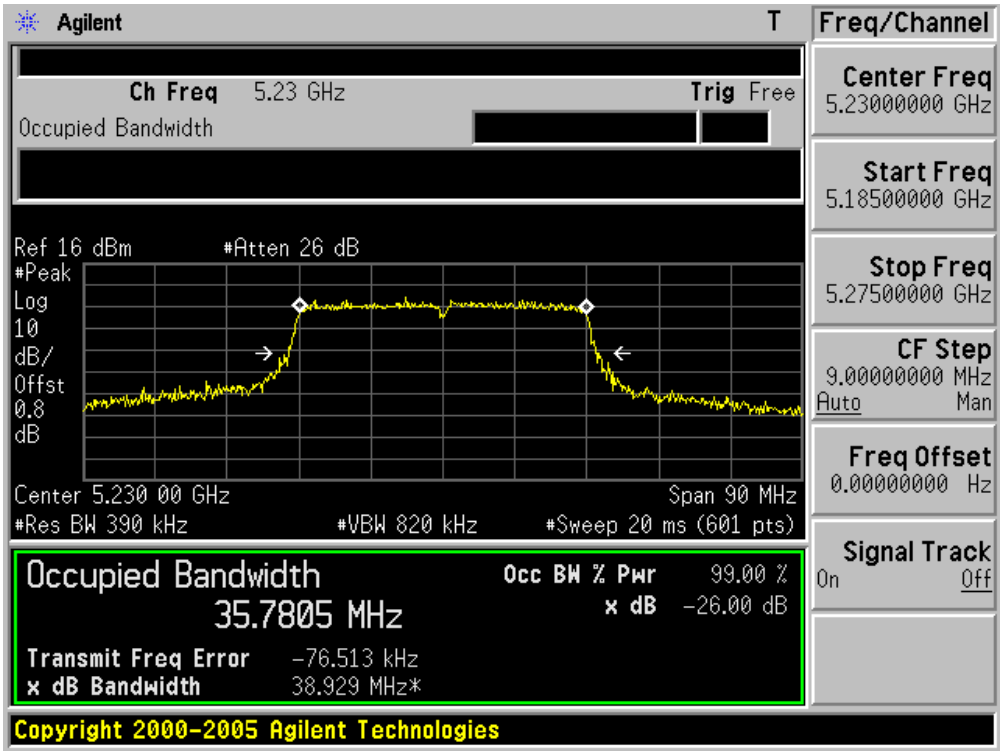
Product	:	Flip Share TV(USB Dongle)
Test Item	:	Occupied Bandwidth
Test Site	:	AC-6
Test Mode	:	Mode 3: Transmit by 802.11n (40MHz Bandwidth) (Chain 0)

Channel No.	Frequency (MHz)	26dB Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190	38.974	35.7527
46	5230	38.929	35.7805

Channel 38 (5190MHz)



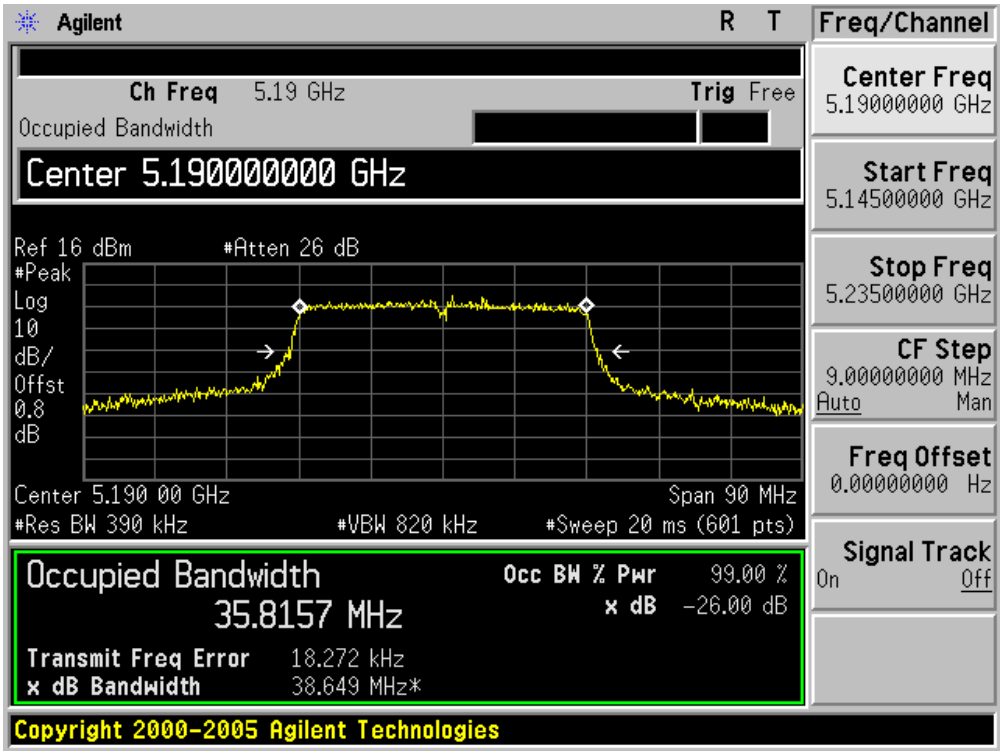
Channel 46 (5230MHz)



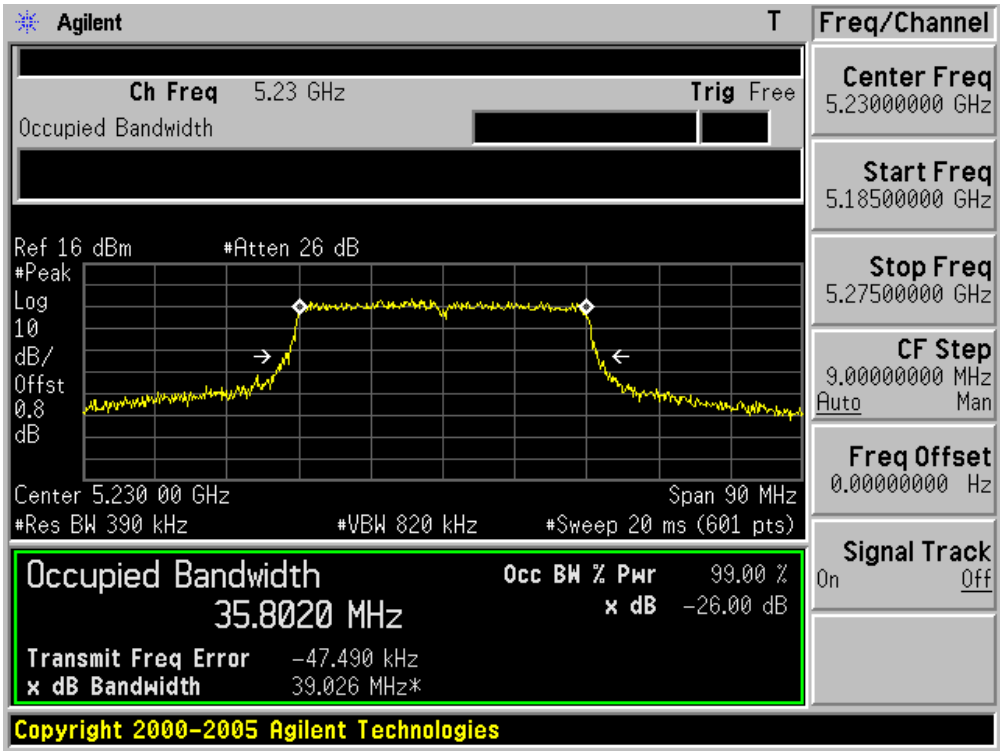
Product	:	Flip Share TV(USB Dongle)
Test Item	:	Occupied Bandwidth
Test Site	:	AC-6
Test Mode	:	Mode 3: Transmit by 802.11n (40MHz Bandwidth) (Chain 1)

Channel No.	Frequency (MHz)	26dB Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190	38.649	35.8157
46	5230	39.026	35.8020

Channel 38 (5190MHz)



Channel 46 (5230MHz)



7. Power Output

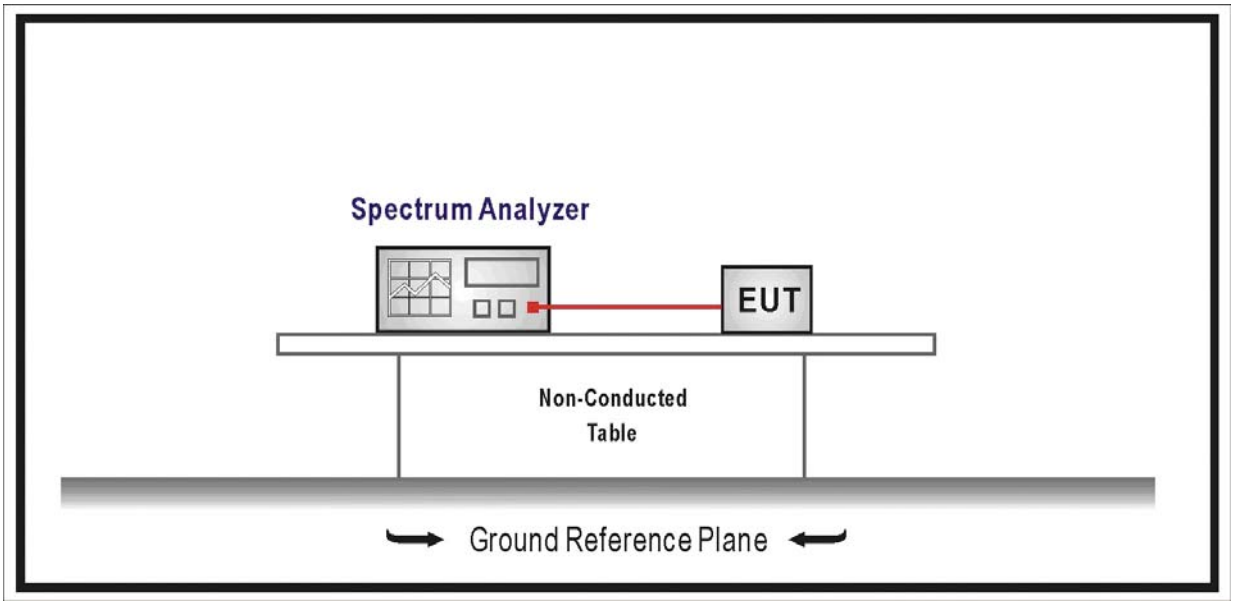
7.1. Test Equipment

Power Output / AC-6

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Wideband Peak Power Meter	Anritsu	ML2495A	0905006	2009/02/12
Power Sensor	Anritsu	MA2411B	0846014	2009/01/12
Coaxial Cable	Huber+Suhner	AC4-RF	09	2008/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH007	2009/03/09

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.

- 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 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. 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 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 FCC Public Notice DA 02-2138, August 30, 2002 for compliance to FCC 47CFR 15.407 requirements.

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

7.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 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

Peak power output at various data rates:

Test Mode	Chain	Bandwidth	Frequency (MHz)	Channel	Data Rate	Peak Power (dBm)
802.11a	0	20	5200	40	6	14.24
					24	14.13
					54	14.05
802.11a	1	20	5200	40	6	13.94
					24	13.81
					54	13.72
802.11n	0	20	5200	40	HT0	13.32
					HT4	13.19
					HT7	13.04
802.11n	1	20	5200	40	HT0	13.48
					HT4	13.37
					HT7	13.28
802.11n	0	40	5230	46	HT0	13.49
					HT4	13.34
					HT7	13.28
802.11n	1	40	5230	46	HT0	12.37
					HT4	12.31
					HT7	12.22

Product	:	Flip Share TV (USB Dongle)				
Test Item	:	Power Output				
Test Site	:	AC-6				
Test Mode	:	Mode 2: Transmit by 802.11a (Chain 0)				
Channel No.	Frequency (MHz)	Measurement Power Output (dBm)	Cable Loss (dBm)	Total Power (dBm)	Limit (dBm)	Result
36	5180	13.92	0.8	14.72	17.00	Pass
40	5200	13.44	0.8	14.24	17.00	Pass
48	5240	13.30	0.8	14.10	17.00	Pass
Test Mode	:	Mode 2: Transmit by 802.11a (Chain 1)				
Channel No.	Frequency (MHz)	Measurement Power Output (dBm)	Cable Loss (dBm)	Total Power (dBm)	Limit (dBm)	Result
36	5180	14.10	0.8	14.90	17.00	Pass
40	5200	13.14	0.8	13.94	17.00	Pass
48	5240	12.94	0.8	13.74	17.00	Pass
Test Mode	:	Mode 3: Transmit by 802.11n (20MHz) (Chain 0)				
Channel No.	Frequency (MHz)	Measurement Power Output (dBm)	Cable Loss (dBm)	Total Power (dBm)	Limit (dBm)	Result
36	5180	12.06	0.8	12.86	17.00	Pass
40	5200	12.52	0.8	13.32	17.00	Pass
48	5240	12.56	0.8	13.36	17.00	Pass
Test Mode	:	Mode 3: Transmit by 802.11n (20MHz) (Chain 1)				
Channel No.	Frequency (MHz)	Measurement Power Output (dBm)	Cable Loss (dBm)	Total Power (dBm)	Limit (dBm)	Result
36	5180	12.90	0.8	13.70	30.00	Pass
40	5200	12.68	0.8	13.48	30.00	Pass
48	5240	12.10	0.8	12.90	30.00	Pass

Test Mode	:	Mode 3: Transmit by 802.11n (20MHz) (Chain 0+1)					
Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Cable Loss (dBm)	Total Power (dBm)	Limit (dBm)	Result
		Chain 0	Chain 1				
36	5180	12.86	12.60	0.8	**16.54**	17.00	Pass
40	5200	12.38	12.48	0.8	16.24	17.00	Pass
48	5240	12.55	12.25	0.8	16.21	17.00	Pass
Test Mode	:	Mode 4: Transmit by 802.11n (40MHz) (Chain 0)					
Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Cable Loss (dBm)	Total Power (dBm)	Limit (dBm)	Result
38	5190	12.79		0.8	13.59	17.00	Pass
46	5230	12.69		0.8	13.49	17.00	Pass
Test Mode	:	Mode 4: Transmit by 802.11n (40MHz) (Chain 1)					
Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Cable Loss (dBm)	Total Power (dBm)	Limit (dBm)	Result
38	5190	11.99		0.8	12.79	17.00	Pass
46	5230	11.57		0.8	12.37	17.00	Pass
Test Mode	:	Mode 4: Transmit by 802.11n(40MHz) (Chain 0+1)					
Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Cable Loss (dBm)	Total Power (dBm)	Limit (dBm)	Result
		Chain 0	Chain 1				
38	5190	12.74	12.11	0.8	**16.25**	17.00	Pass
46	5230	12.18	11.50	0.8	15.66	17.00	Pass

8. Peak Power Spectral Density

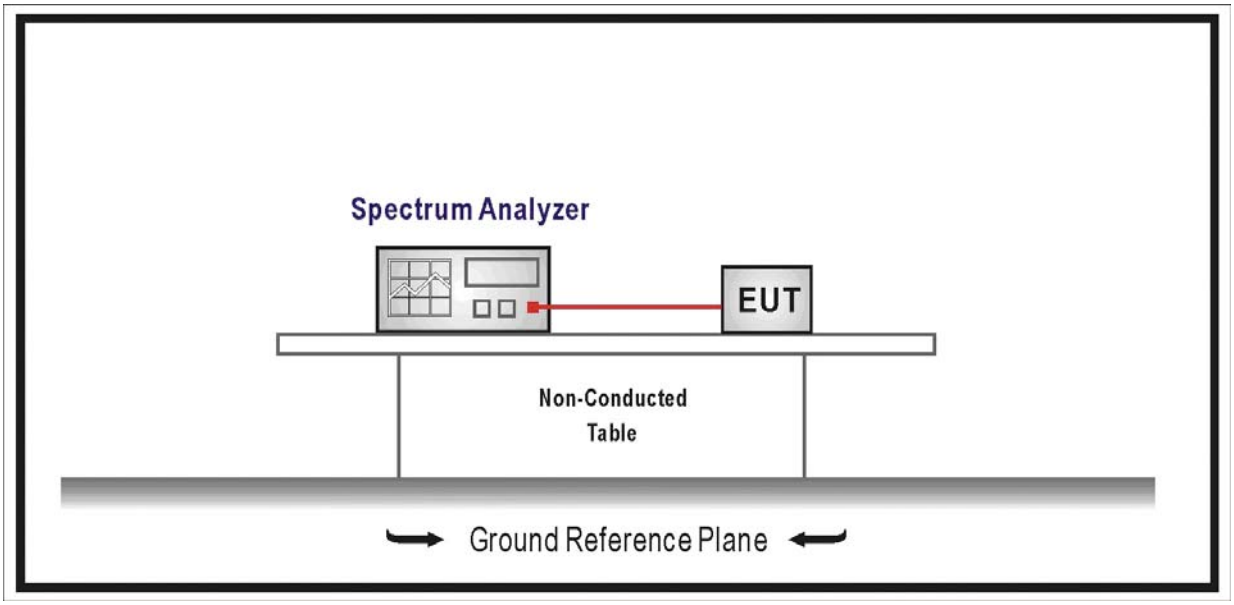
8.1. Test Equipment

Peak Power Spectral Density / AC-6

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2009/06/11
Coaxial Cable	Huber+Suhner	AC4-RF	09	2008/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH007	2009/03/09

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 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.

- 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 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. 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 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.

8.4. Test Procedure

The EUT was tested according to FCC Public Notice DA 02-2138, August 30, 2002 for compliance to FCC 47CFR 15.407 requirements.
Use sample detector and power averaging (not video averaging) mode. Set RBW= 1 MHz*, VBW > 1 MHz. The PPSD is the highest level found across the emission in any 1-MHz band after 100 sweeps of averaging. This method is permitted only if the transmission pulse or sequence of pulses remains at maximum transmit power throughout each of the 100 sweeps of averaging and that the interval between pulses is not included in any of the sweeps (e.g., 100 sweeps should occur during one transmission, or each sweep gated to occur during a transmission).

8.5. Uncertainty

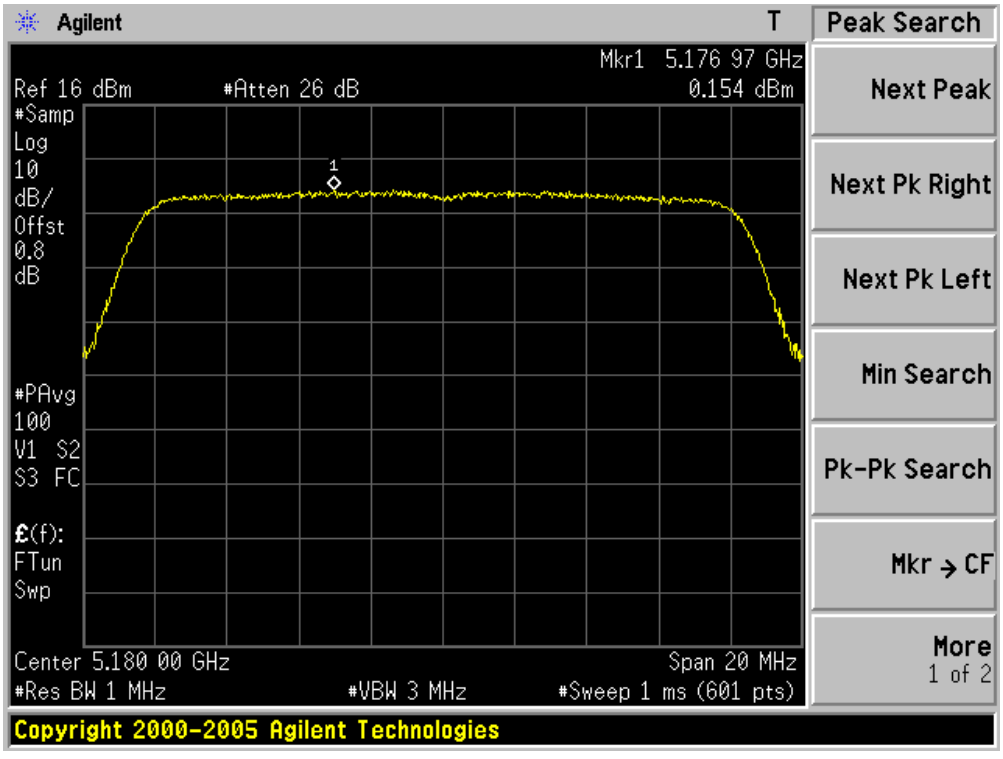
The measurement uncertainty is defined as ± 1.27 dB

8.6. Test Result

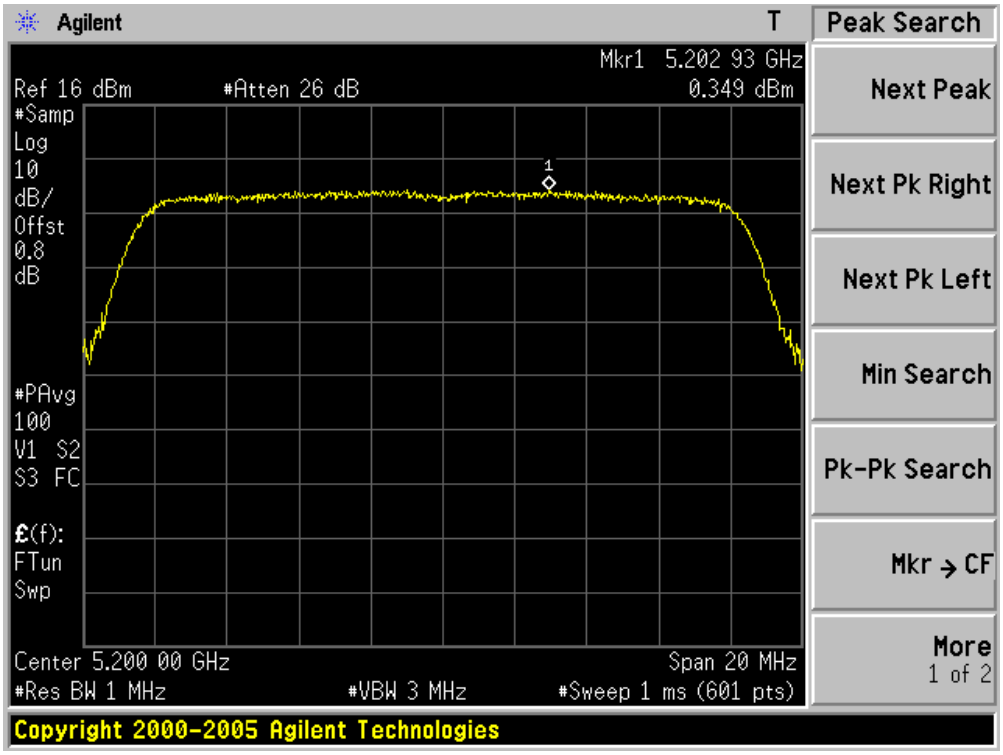
Product	:	Flip Share TV(USB Dongle)
Test Item	:	Peak Power Spectral Density
Test Site	:	AC-6
Test Mode	:	Mode 1: Transmit by 802.11a (Chain 0)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm/MHz)		Total PPSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Chain 0	Chain 1			
36	5180	0.154	N/A	0.154	4	Pass
40	5200	0.349	N/A	0.349	4	Pass
48	5240	1.100	N/A	1.100	4	Pass

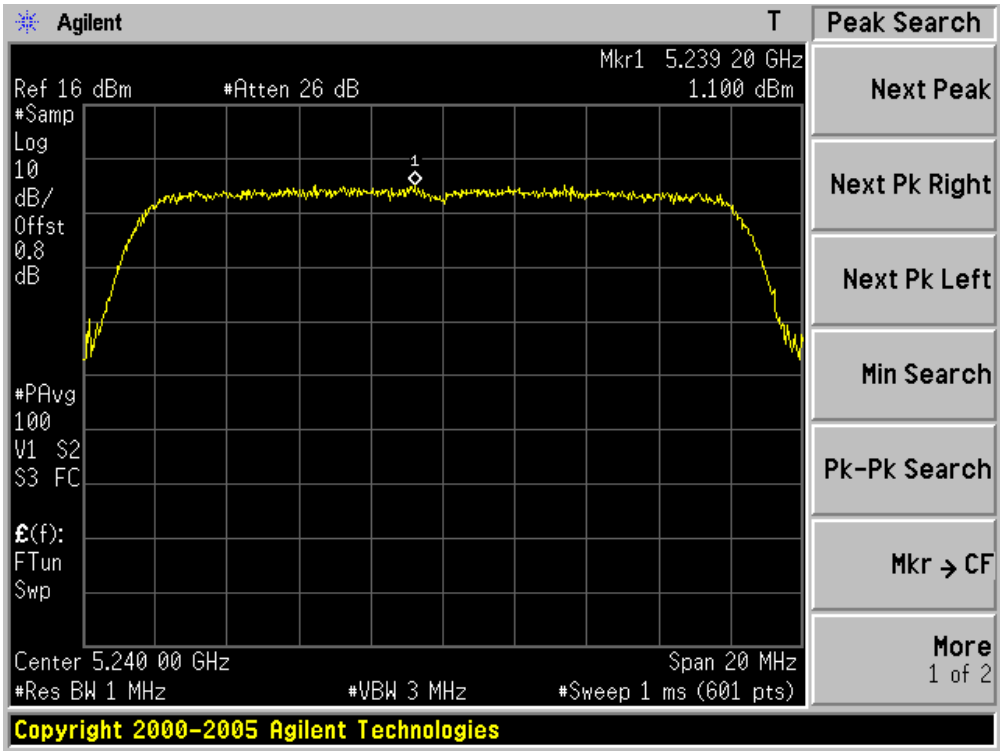
Channel 36 (5180MHz)



Channel 40 (5200MHz)



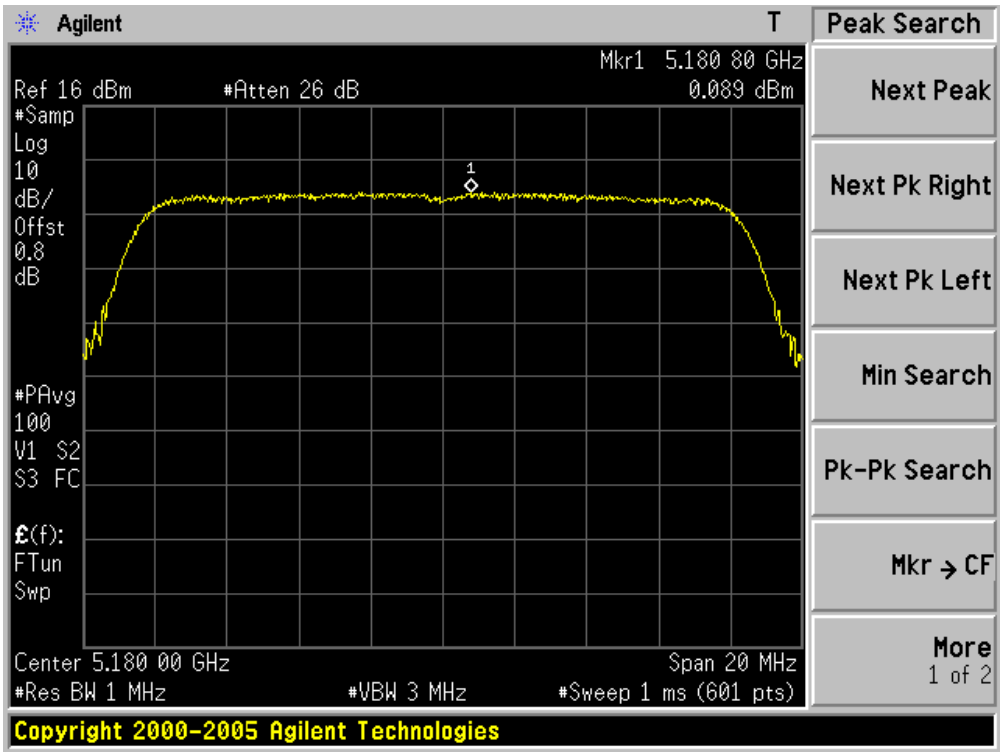
Channel 48 (5240MHz)



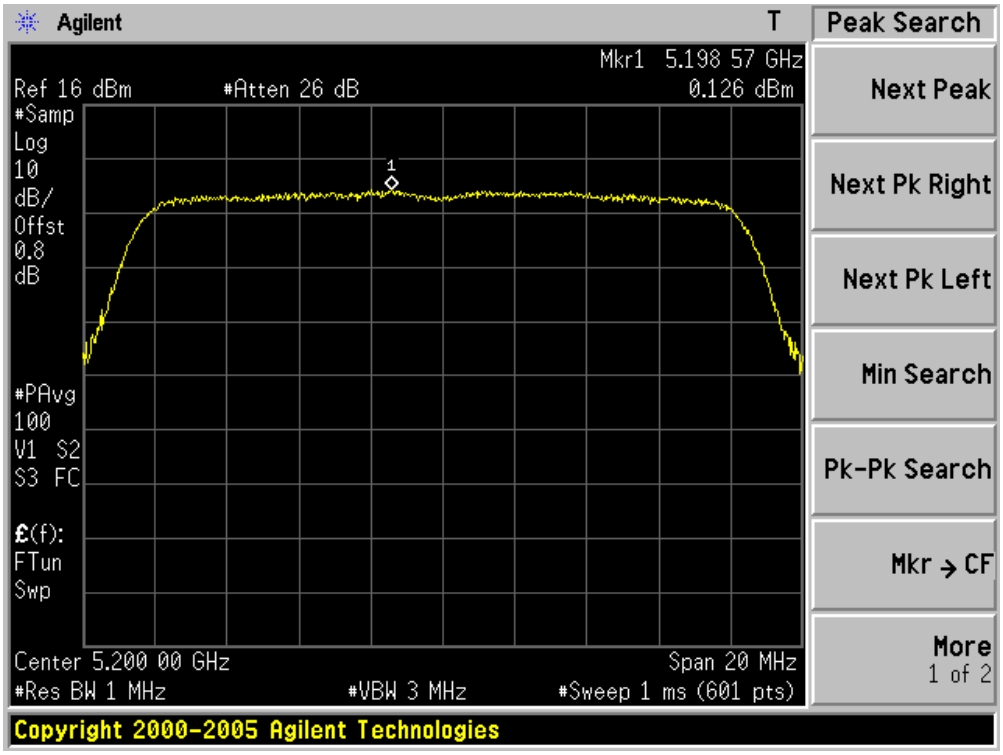
Product	:	Flip Share TV(USB Dongle)
Test Item	:	Power Output
Test Site	:	AC-6
Test Mode	:	Mode 1: Transmit by 802.11a (Chain 1)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm/MHz)		Total PPSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Chain 0	Chain 1			
36	5180	N/A	0.089	0.089	4	Pass
40	5200	N/A	0.126	0.126	4	Pass
48	5240	N/A	-0.042	-0.042	4	Pass

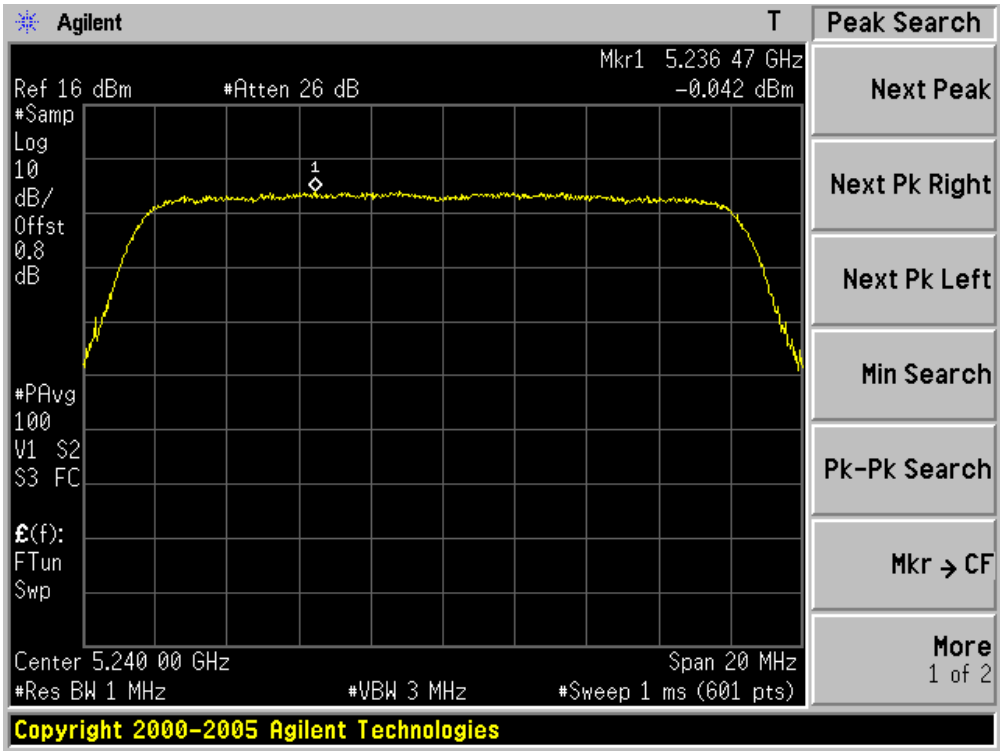
Channel 36 (5180MHz)



Channel 40 (5200MHz)



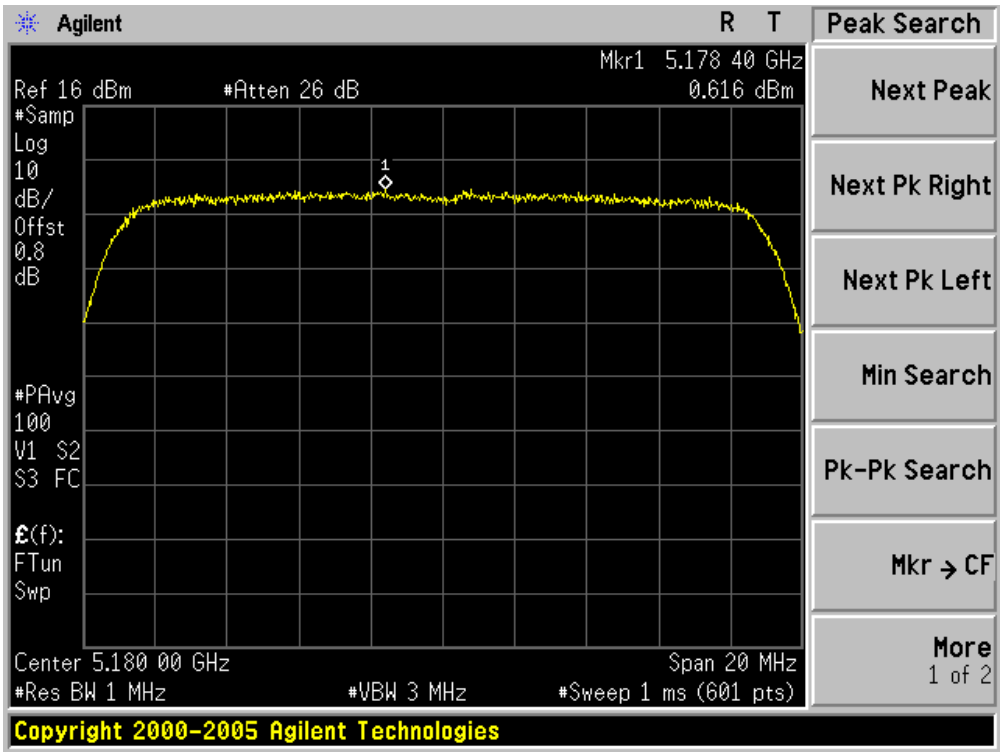
Channel 48 (5240MHz)



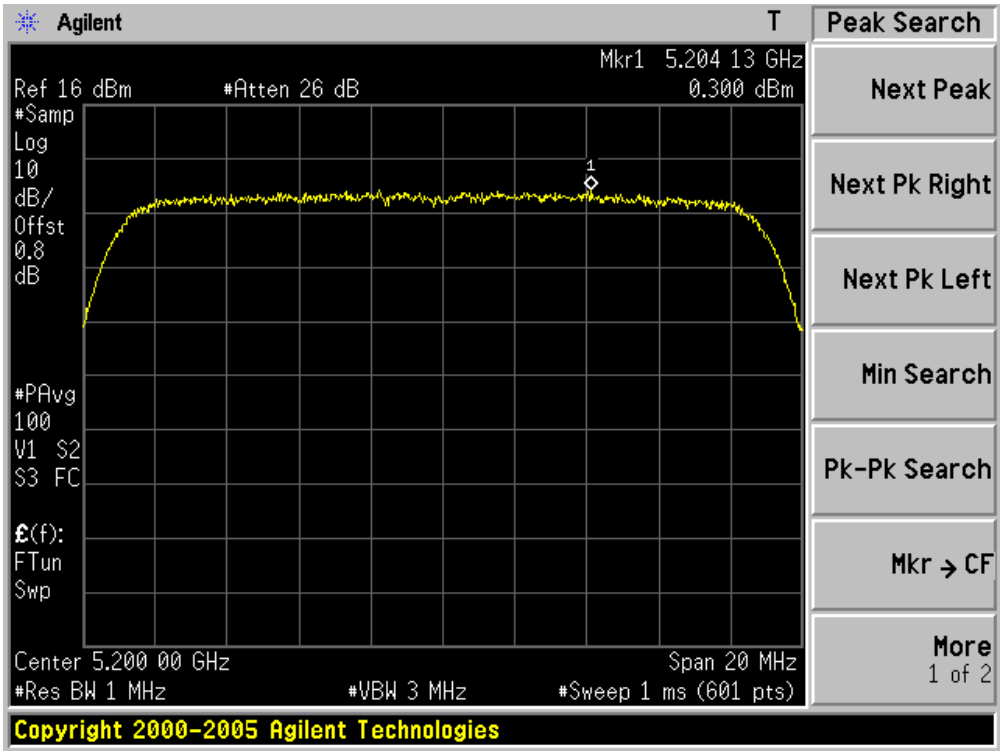
Product	:	Flip Share TV(USB Dongle)
Test Item	:	Power Output
Test Site	:	AC-6
Test Mode	:	Mode 2: Transmit by 802.11n (20MHz Bandwidth) (Chain 0)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm/MHz)		Total PPSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Chain 0	Chain 1			
36	5180	0.616	N/A	0.616	4	Pass
40	5200	0.300	N/A	0.300	4	Pass
48	5240	0.977	N/A	0.977	4	Pass

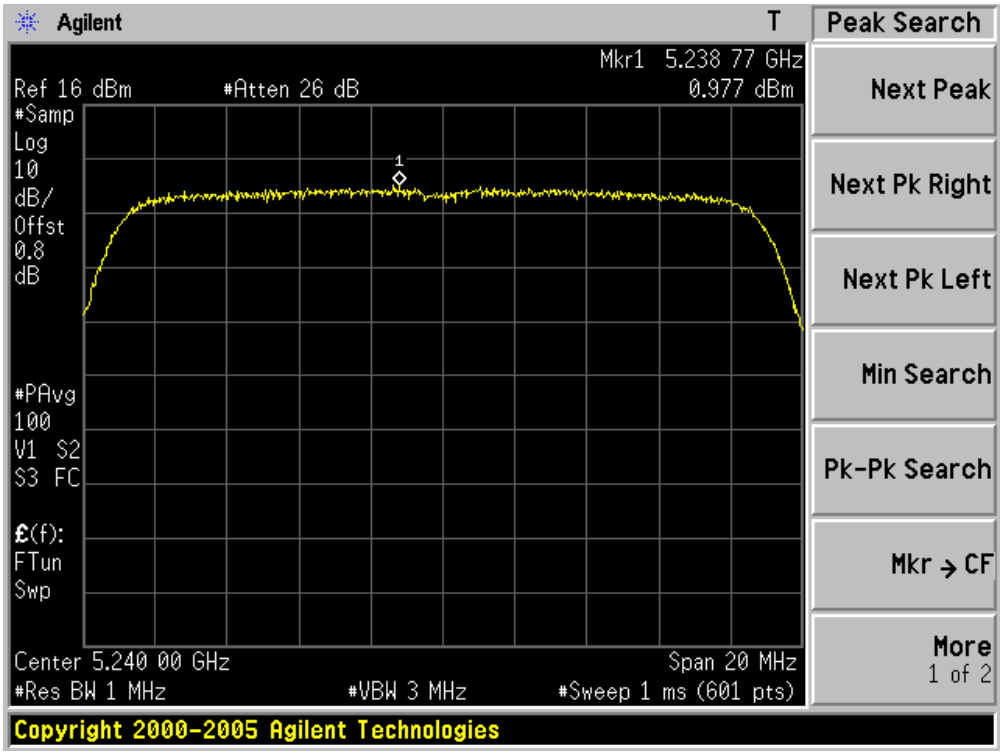
Channel 36 (5180MHz)



Channel 40 (5200MHz)



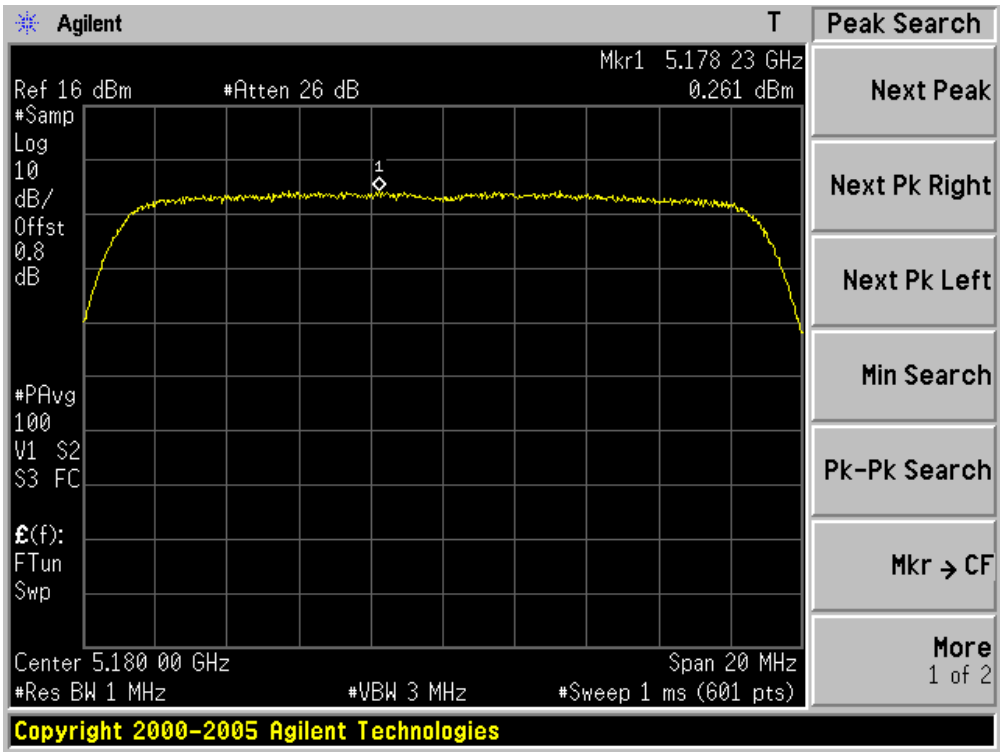
Channel 48 (5240MHz)



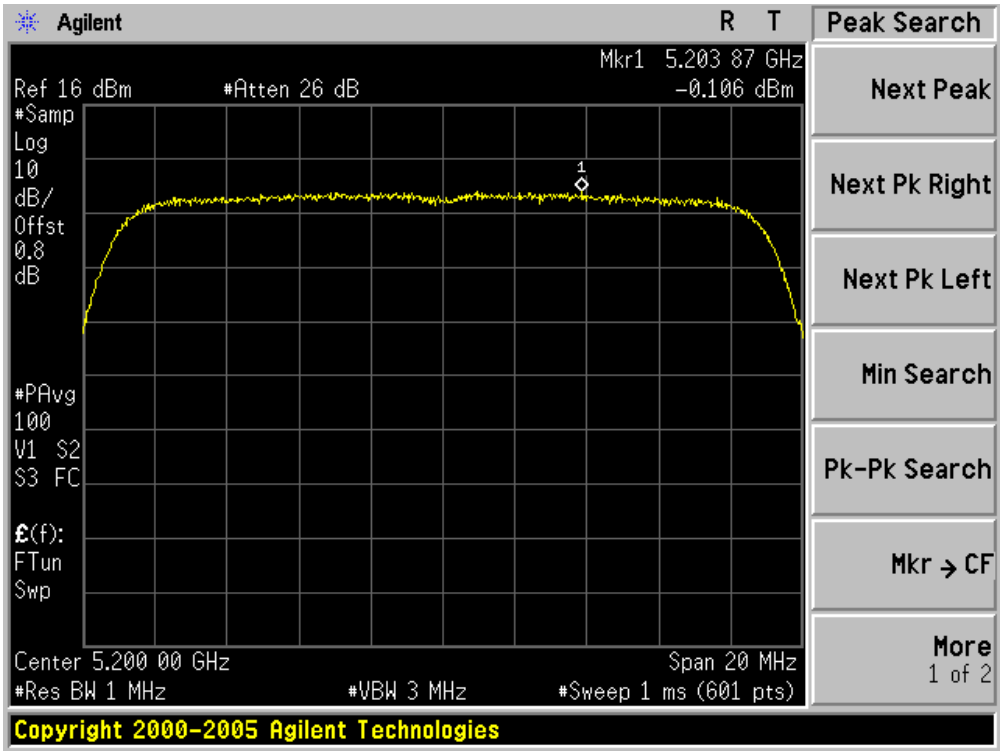
Product	:	Flip Share TV(USB Dongle)
Test Item	:	Power Output
Test Site	:	AC-6
Test Mode	:	Mode 2: Transmit by 802.11n (20MHz Bandwidth) (Chain 1)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm/MHz)		Total PPSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Chain 0	Chain 1			
36	5180	N/A	0.261	0.261	4	Pass
40	5200	N/A	-0.106	-0.106	4	Pass
48	5240	N/A	-0.599	-0.599	4	Pass

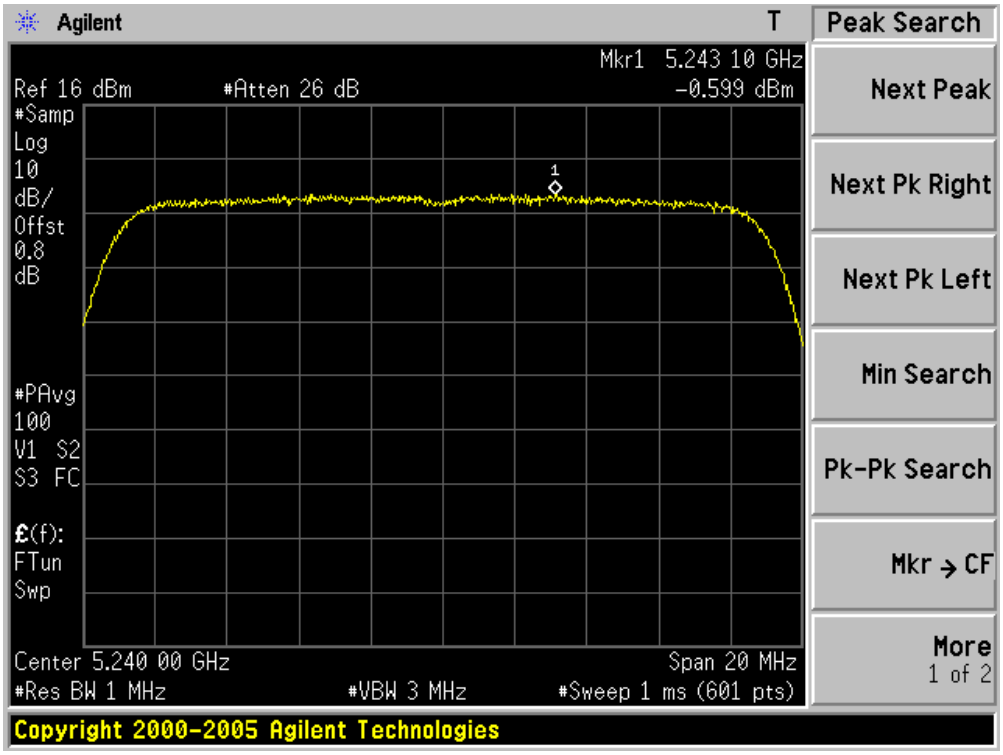
Channel 36 (5180MHz)



Channel 40 (5200MHz)



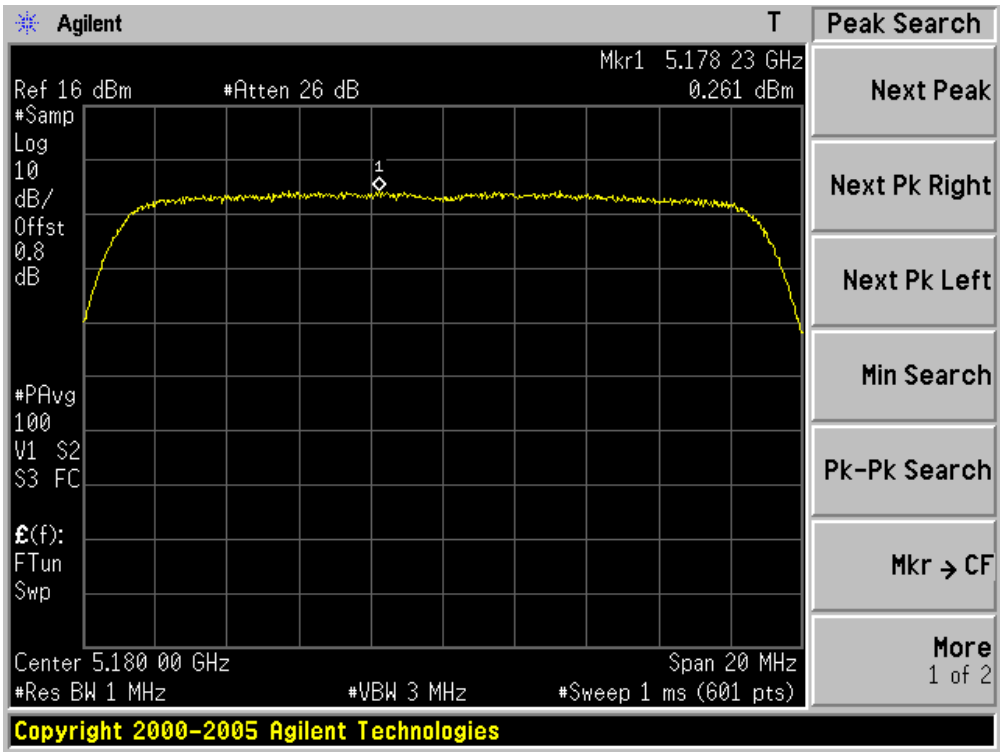
Channel 48 (5240MHz)



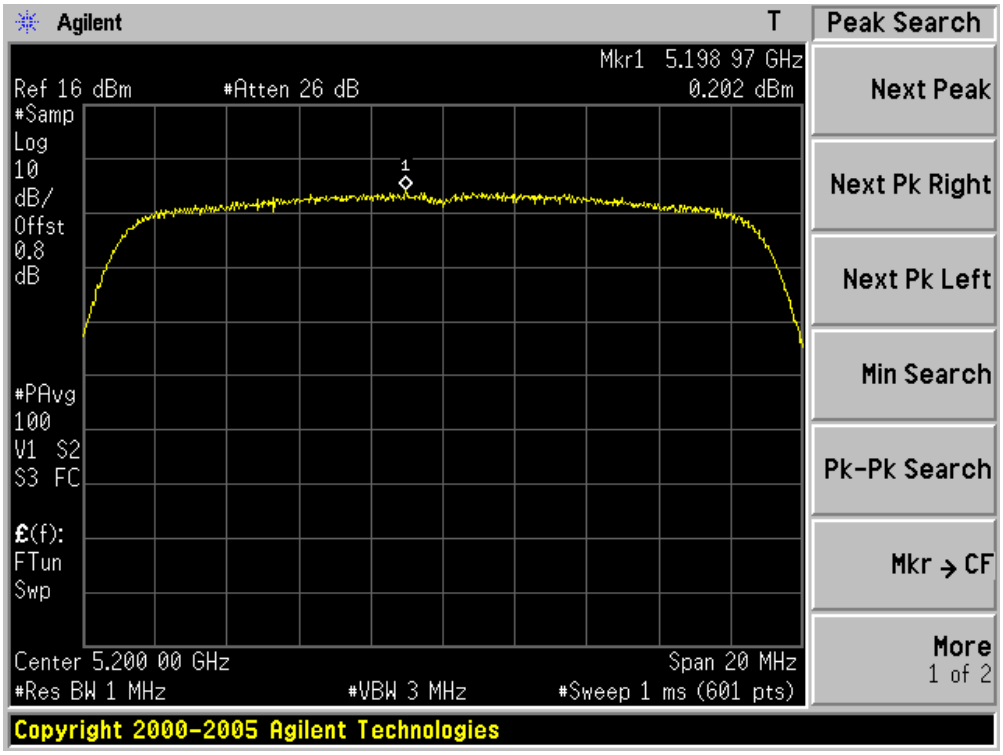
Product	:	Flip Share TV(USB Dongle)
Test Item	:	Power Output
Test Site	:	AC-6
Test Mode	:	Mode 2: Transmit by 802.11n (20MHz Bandwidth) (Chain 0+1)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm/MHz)		Total PPSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Chain 0	Chain 1			
36	5180	0.261	0.523	3.404	4	Pass
40	5200	0.202	0.246	3.234	4	Pass
48	5240	0.447	0.662	3.566	4	Pass

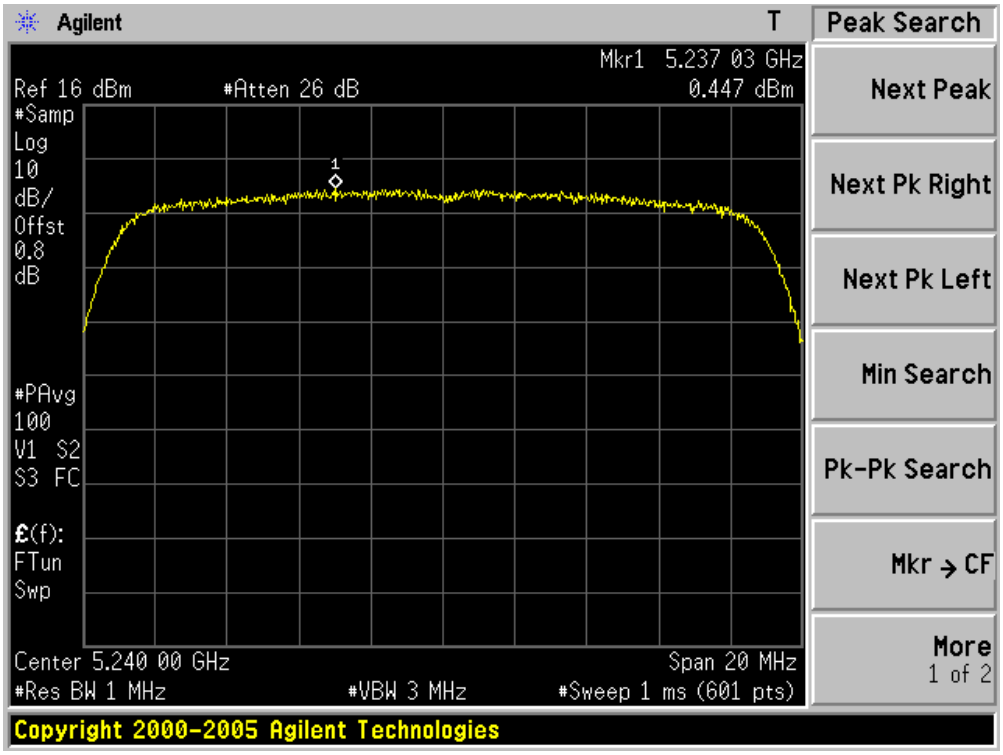
Channel 36 (5180MHz) - Chain 0



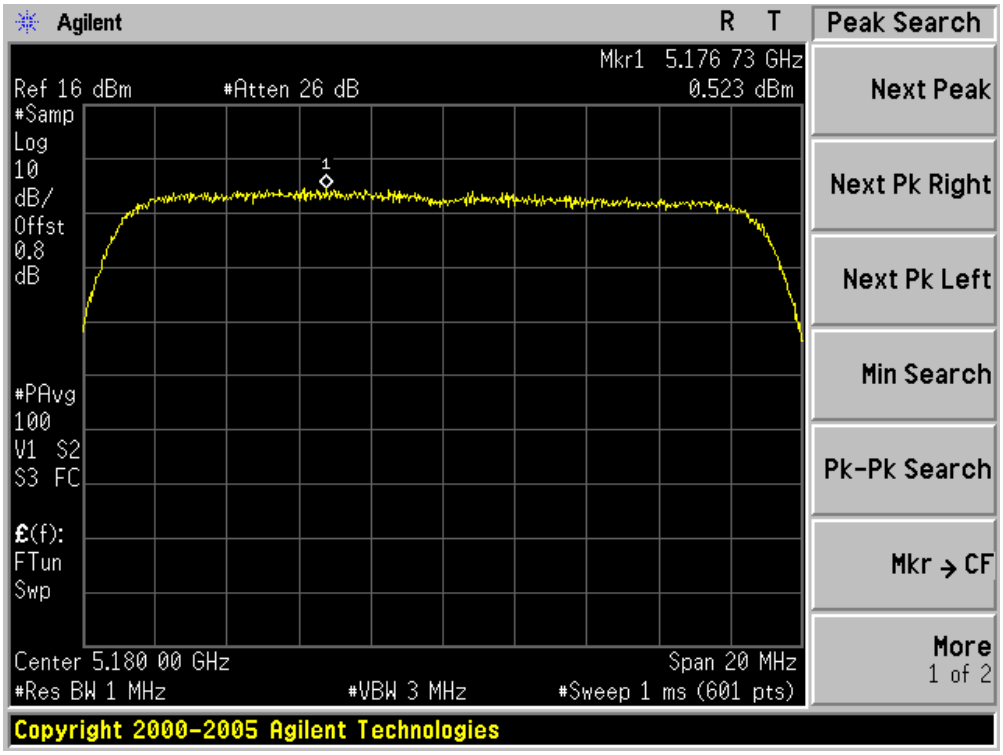
Channel 40 (5200MHz) - Chain 0



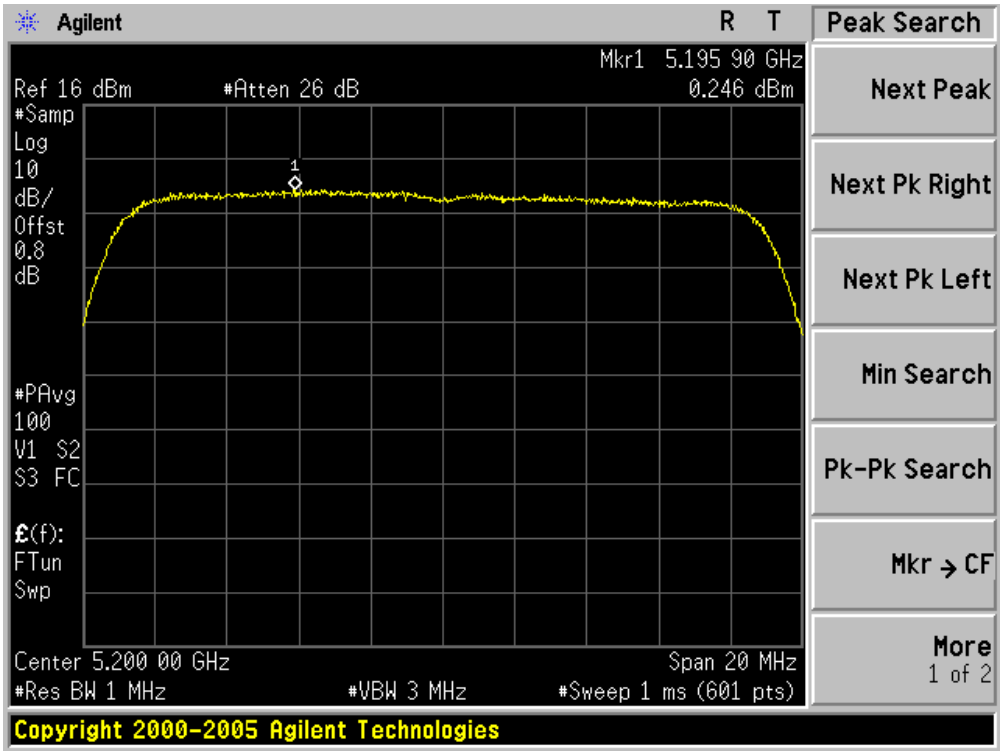
Channel 48 (5240MHz) - Chain 0



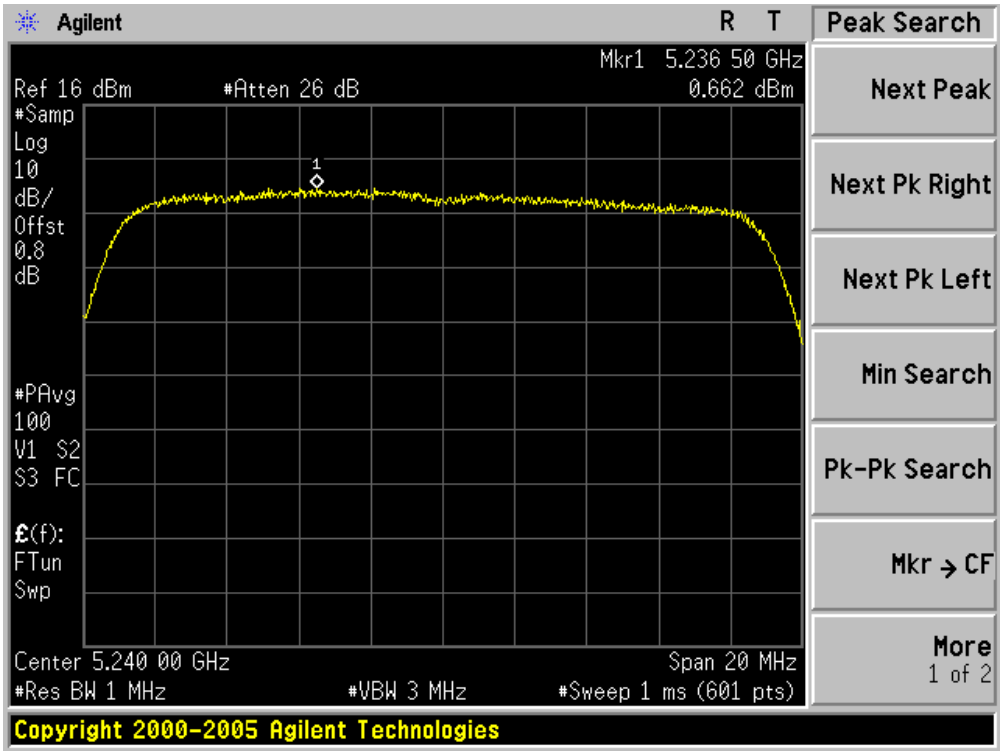
Channel 36 (5180MHz) - Chain 1



Channel 40 (5200MHz) - Chain 1



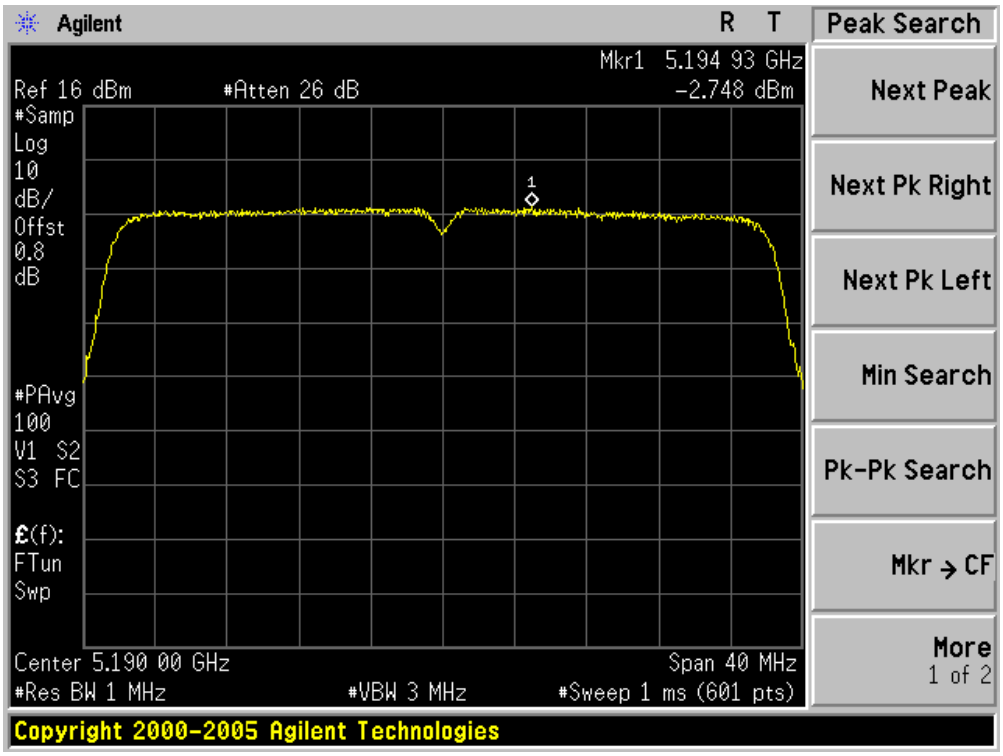
Channel 48 (5240MHz) - Chain 1



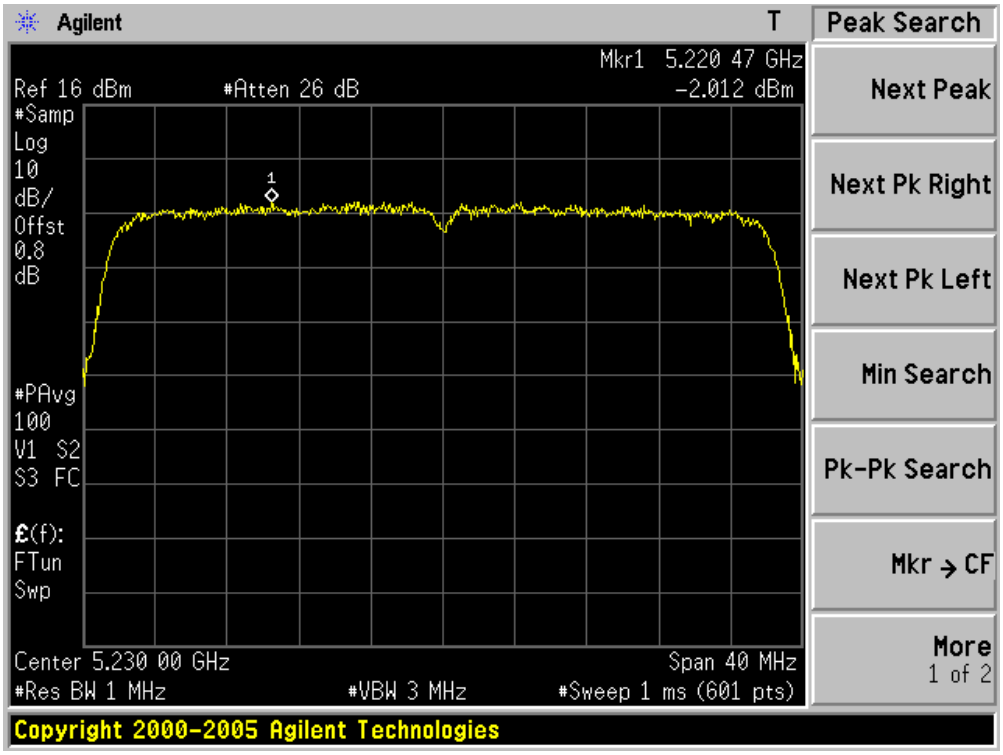
Product	:	Flip Share TV(USB Dongle)
Test Item	:	Power Output
Test Site	:	AC-6
Test Mode	:	Mode 3: Transmit by 802.11n (40MHz Bandwidth) (Chain 0)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm/MHz)		Total PPSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Chain 0	Chain 1			
38	5190	-2.748	N/A	-2.748	4	Pass
46	5230	-2.012	N/A	-2.012	4	Pass

Channel 38 (5190MHz)



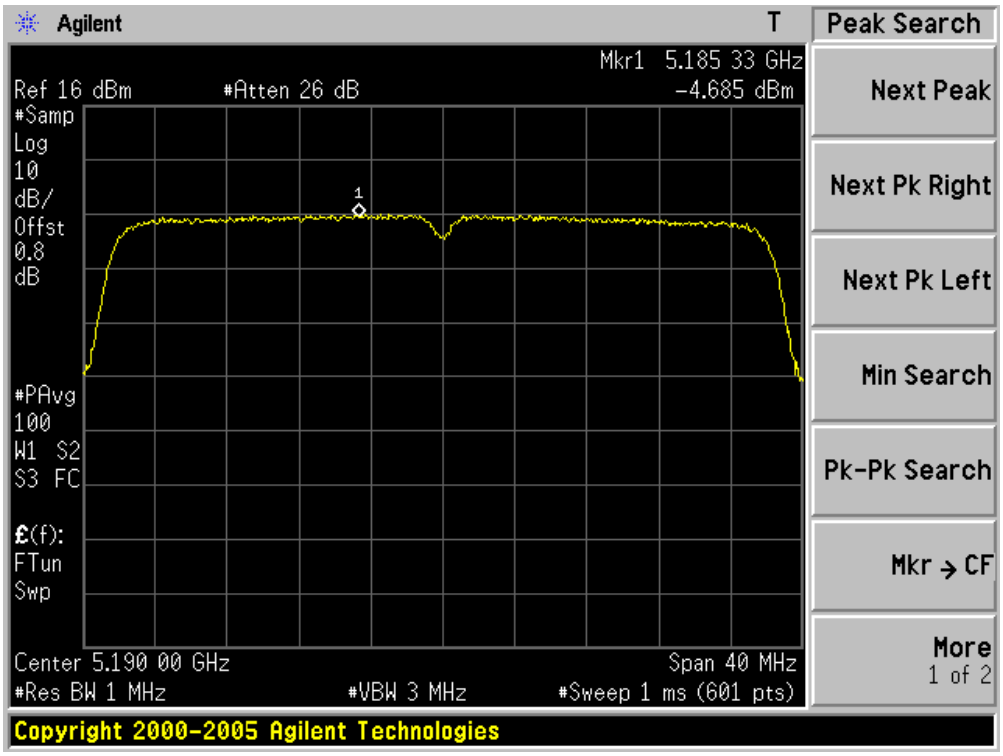
Channel 46 (5230MHz)



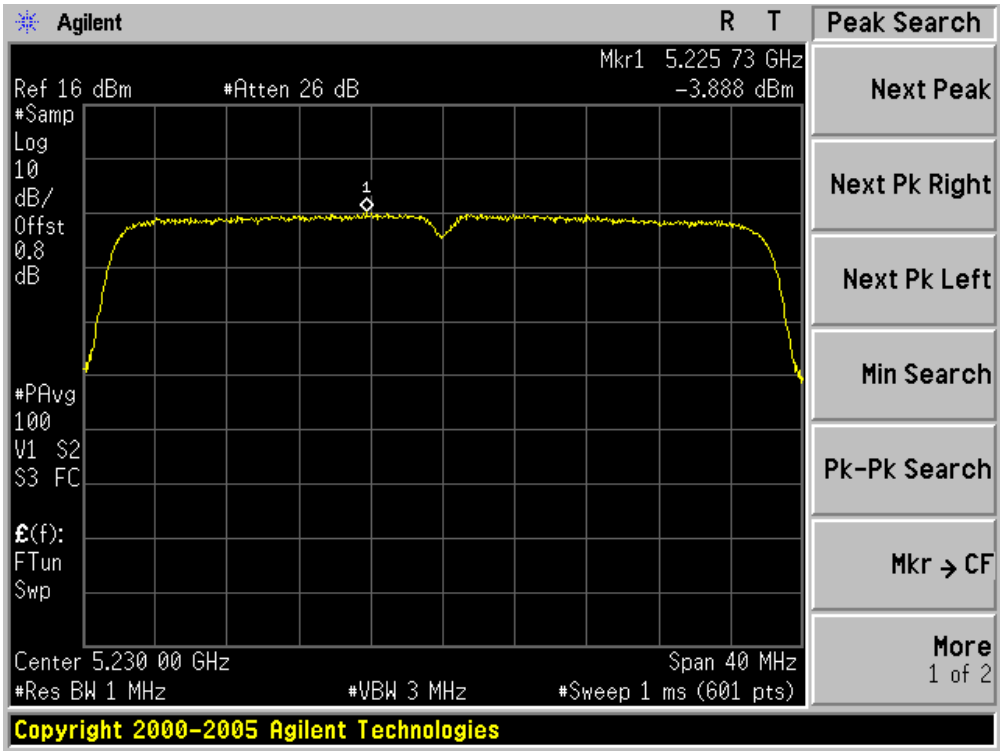
Product	:	Flip Share TV(USB Dongle)
Test Item	:	Power Output
Test Site	:	AC-6
Test Mode	:	Mode 3: Transmit by 802.11n (40MHz Bandwidth) (Chain 1)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm/MHz)		Total PPSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Chain 0	Chain 1			
38	5190	N/A	-4.685	-4.685	4	Pass
46	5230	N/A	-3.888	-3.888	4	Pass

Channel 38 (5190MHz)



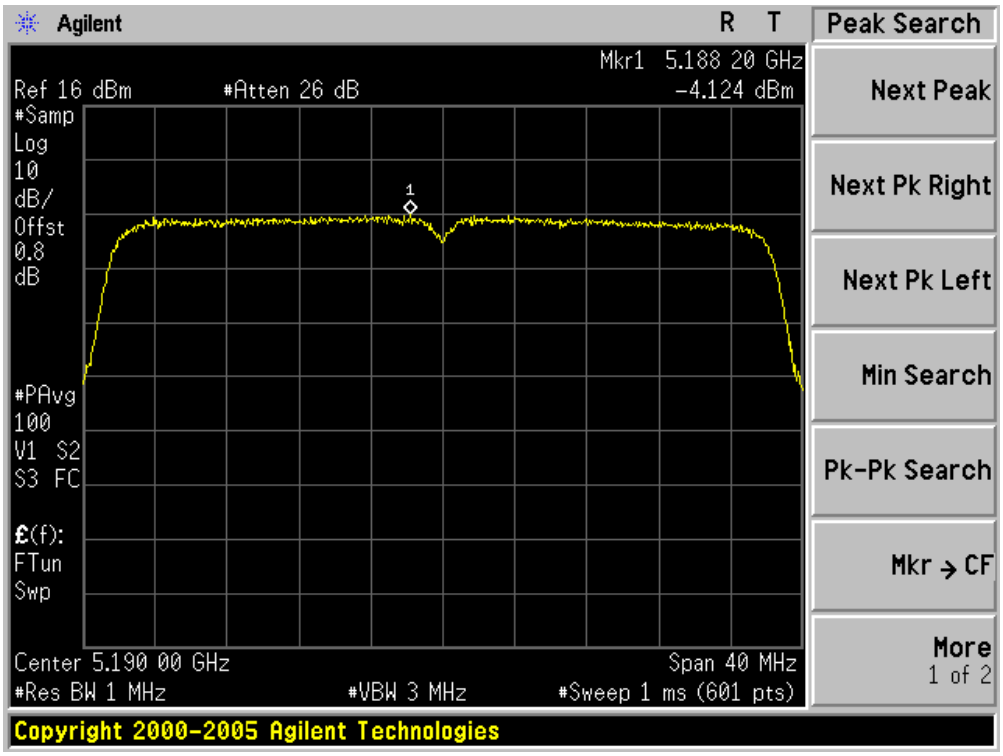
Channel 46 (5230MHz)



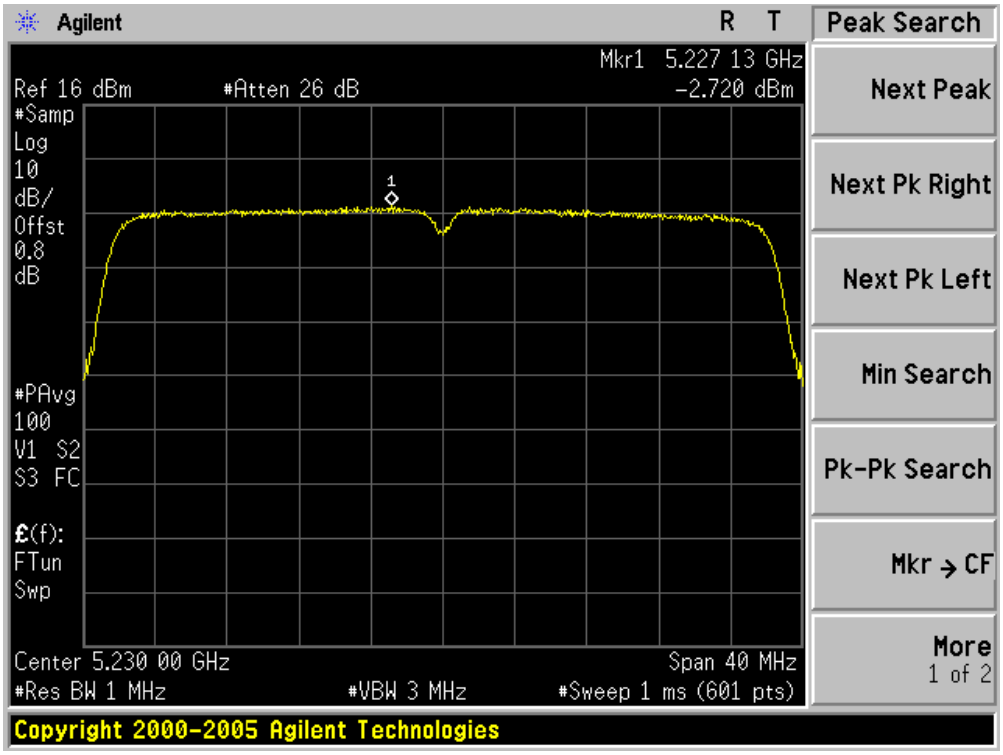
Product	:	Flip Share TV(USB Dongle)
Test Item	:	Power Output
Test Site	:	AC-6
Test Mode	:	Mode 3: Transmit by 802.11n (40MHz Bandwidth) (Chain 0+1)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm/MHz)		Total PPSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Chain 0	Chain 1			
38	5190	-4.124	-2.685	-0.335	4	Pass
46	5230	-2.720	-3.703	-0.173	4	Pass

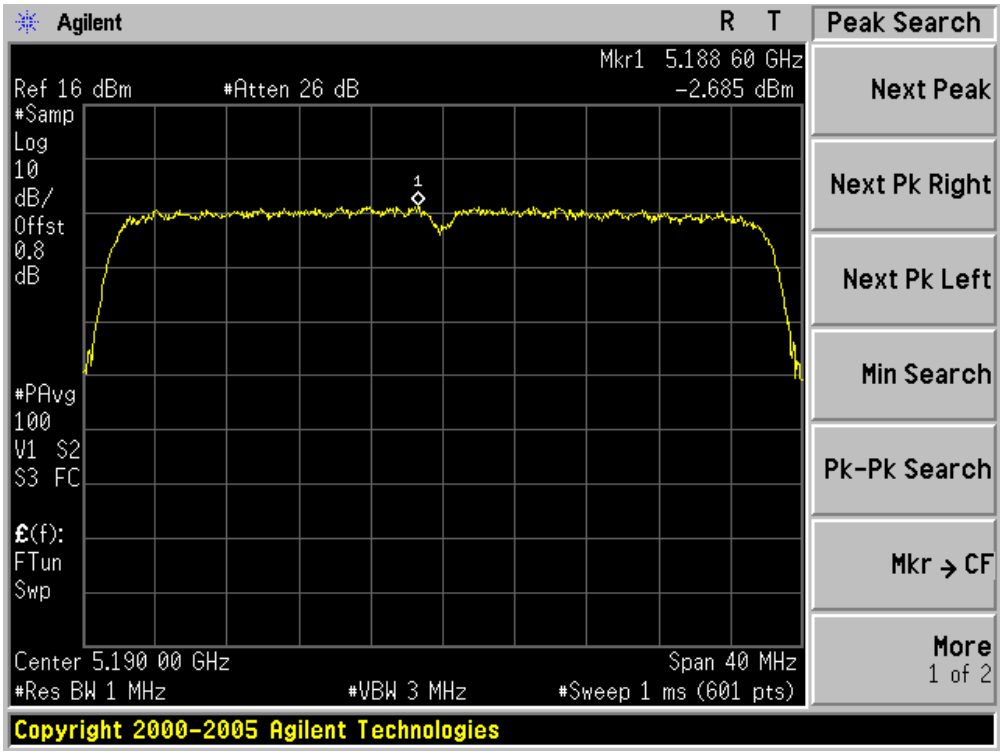
Channel 38 (5190MHz) - Chain 0



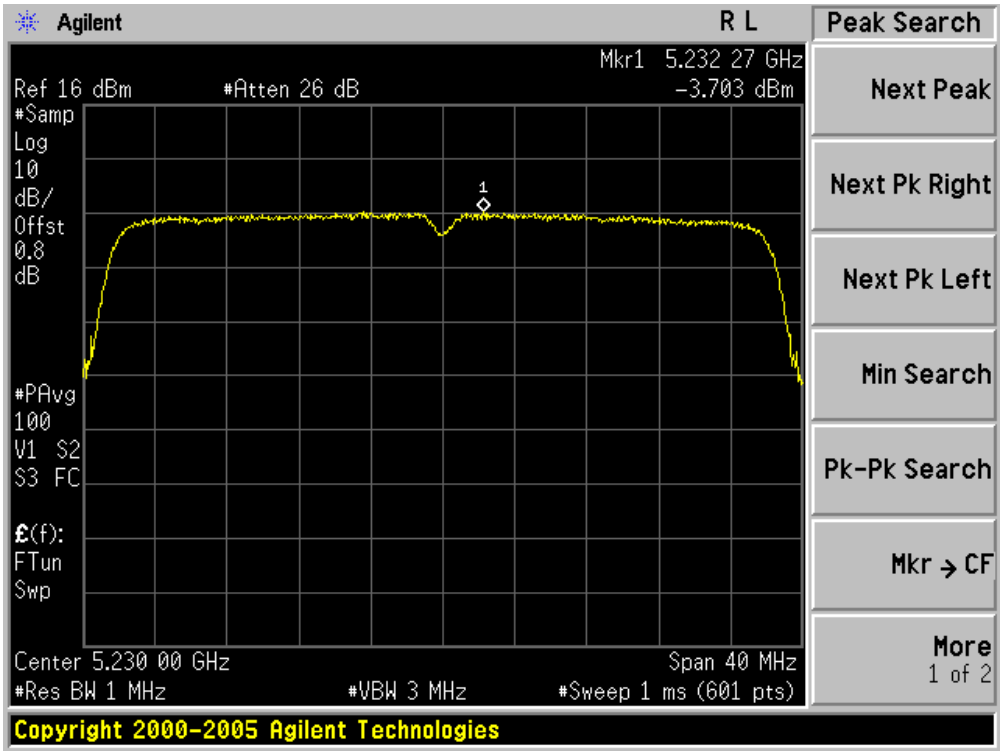
Channel 46 (5230MHz) - Chain 0



Channel 38 (5190MHz) - Chain 1



Channel 46 (5230MHz) - Chain 1



9. Peak Excursion

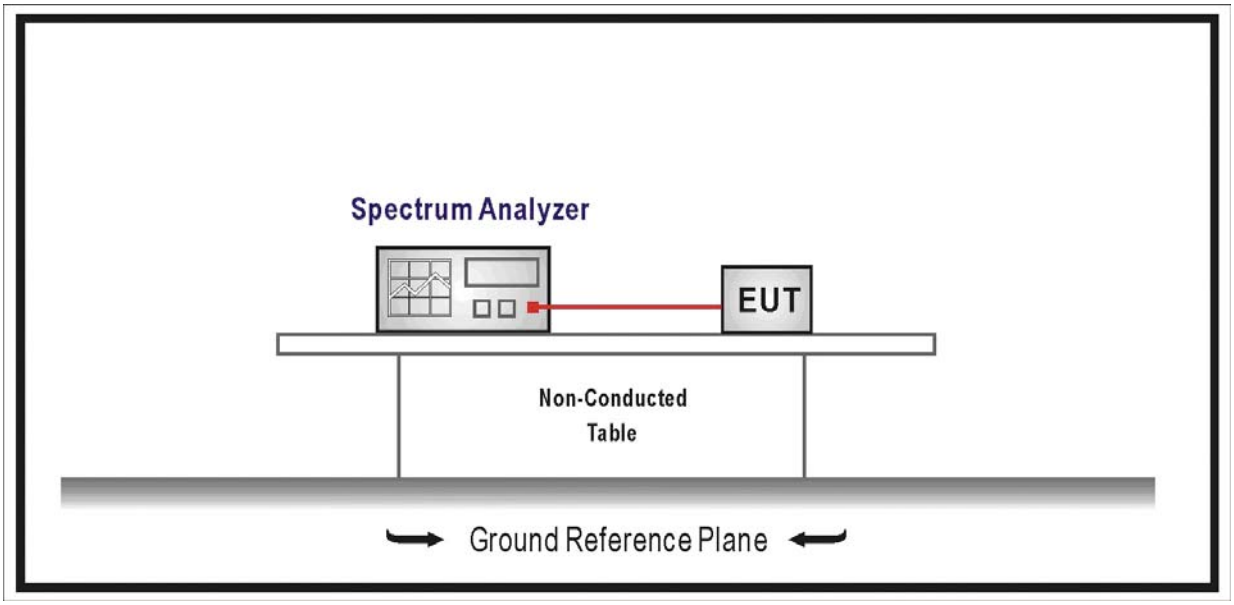
9.1. Test Equipment

Peak Excursion / AC-6

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2009/06/11
Coaxial Cable	Huber+Suhner	AC4-RF	09	2008/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH007	2009/03/30

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 FCC Public Notice DA 02-2138, August 30, 2002 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 ≤ 13 dB for all frequencies across the emission bandwidth.

- 1st Trace: Set RBW = 1 MHz, VBW ≥ 3 MHz with peak detector and maxhold settings.
- 2nd Trace: Set RBW = 1 MHz, VBW = 30 kHz with peak detector and maxhold settings.

9.5. Uncertainty

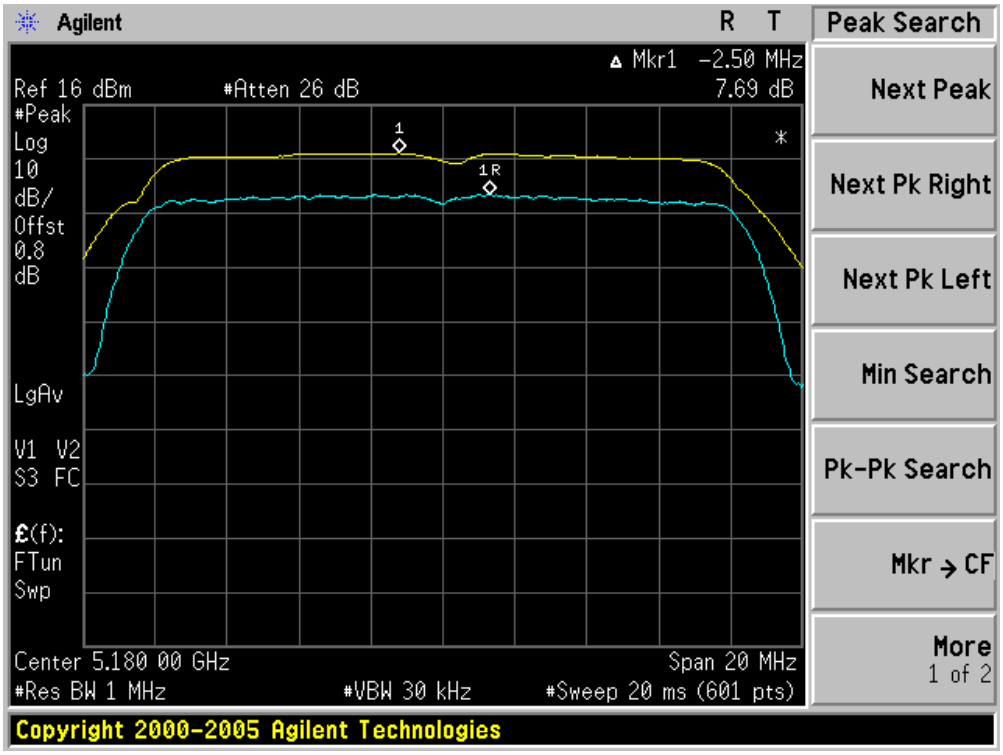
The measurement uncertainty is defined as ± 1.27 dB

9.6. Test Result

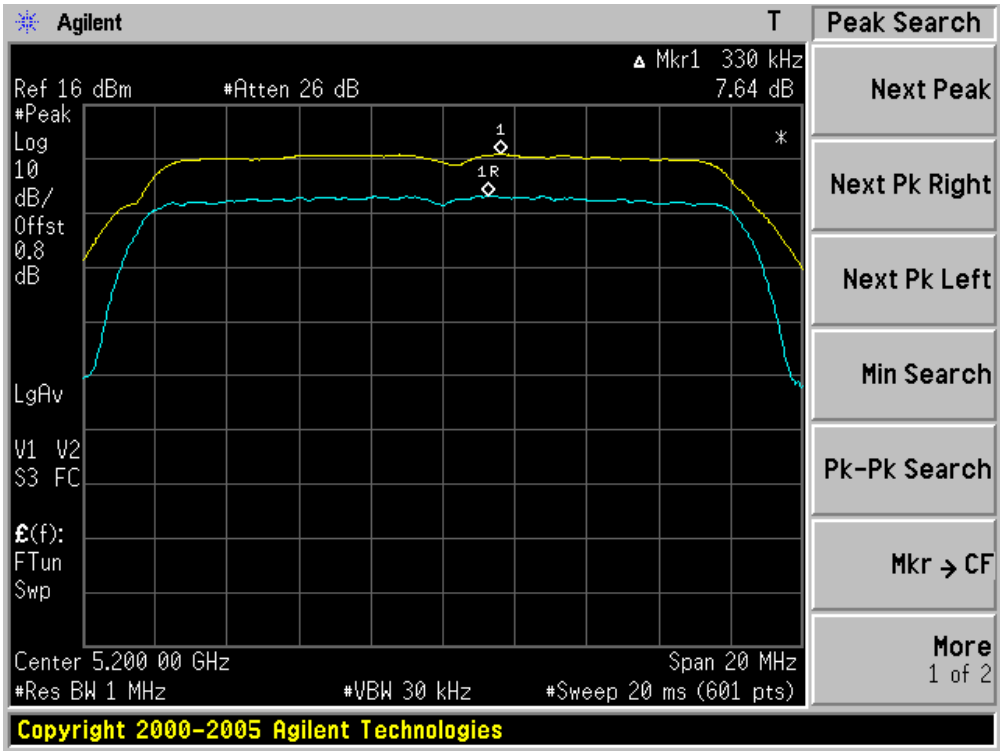
Product	:	Flip Share TV(USB Dongle)
Test Item	:	Peak Excursion
Test Site	:	AC-6
Test Mode	:	Mode 1: Transmit by 802.11a (Chain 0)

Channel No.	Frequency (MHz)	Peak Excursion (dB)	Limit (dB)	Result
36	5180	7.69	13	Pass
40	5200	7.64	13	Pass
48	5240	7.65	13	Pass

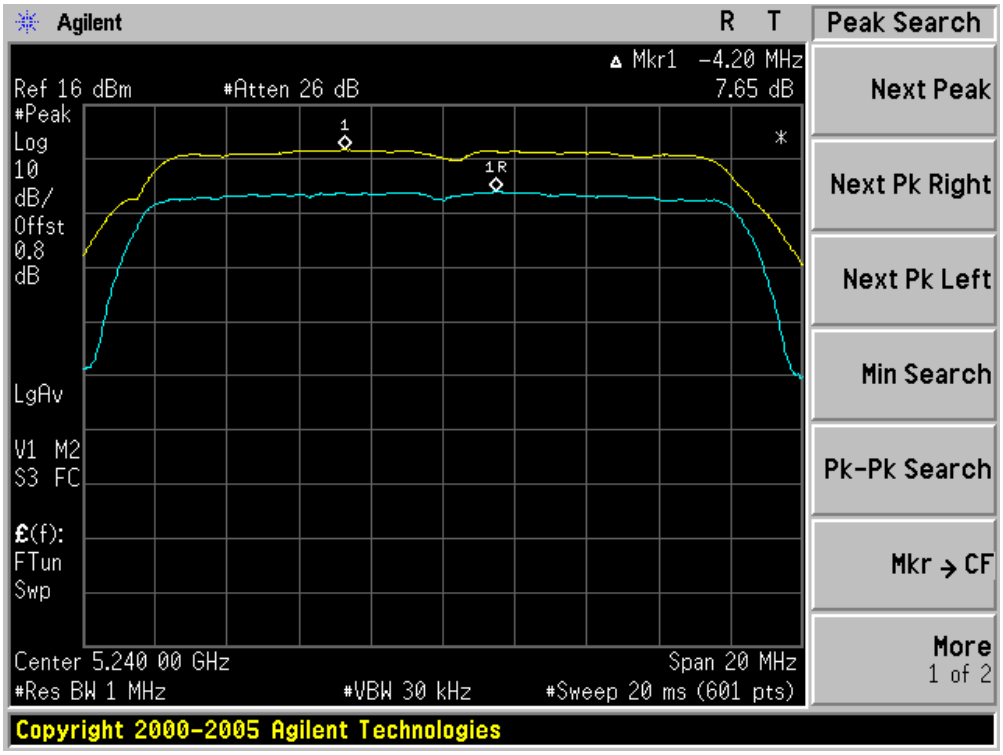
Channel 36 (5180MHz)



Channel 40 (5200MHz)



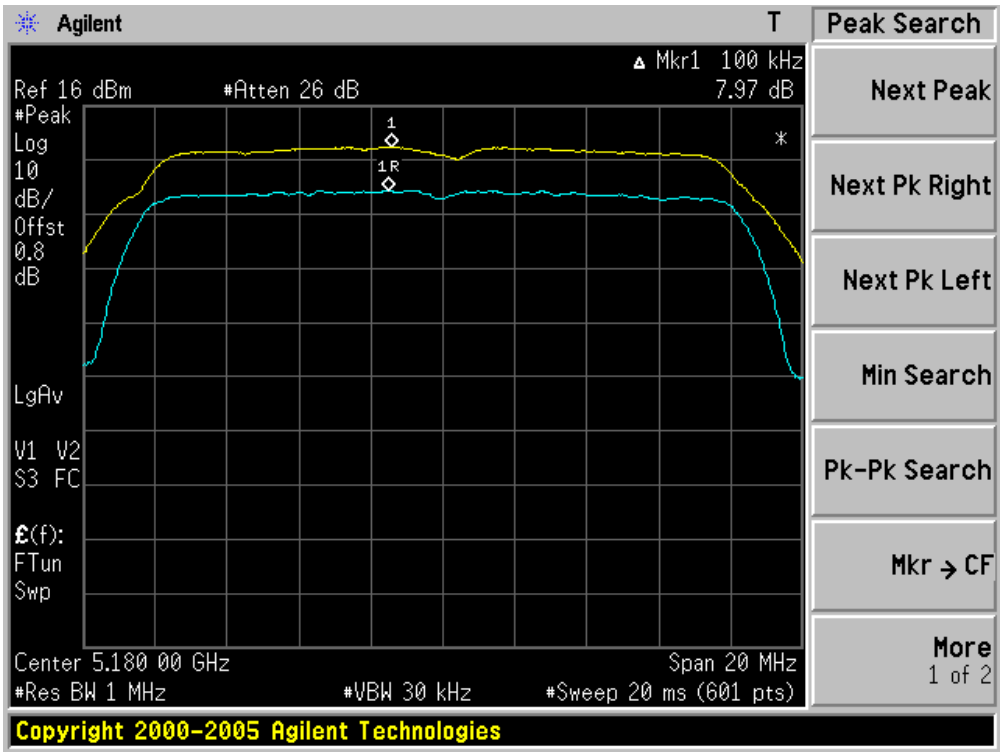
Channel 48 (5240MHz)



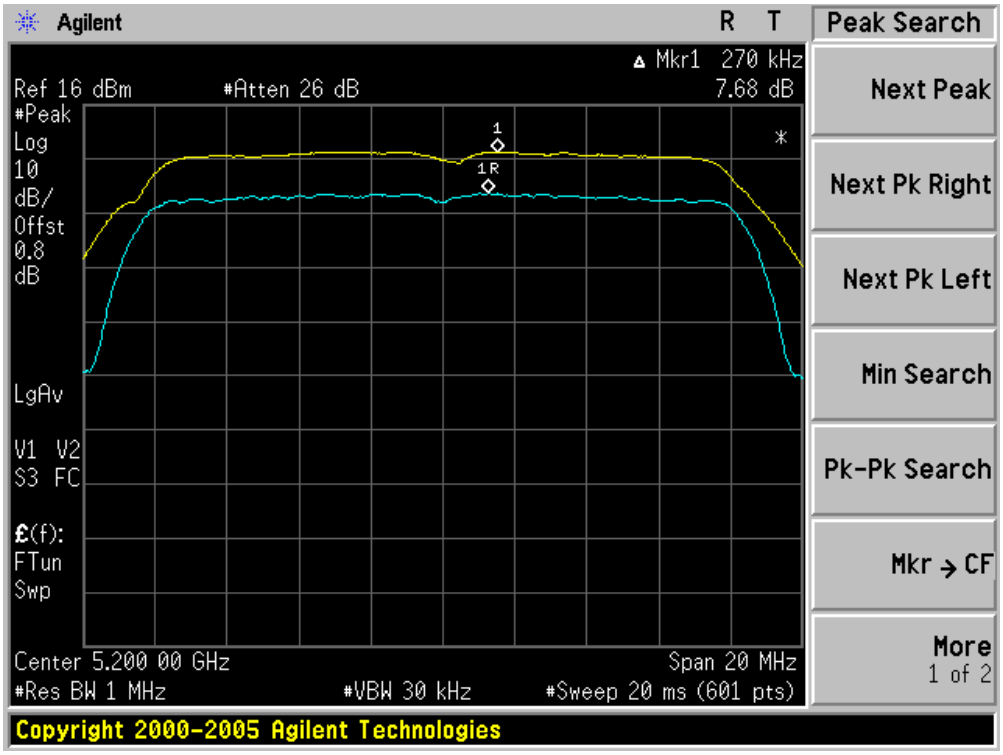
Product	:	Flip Share TV(USB Dongle)
Test Item	:	Peak Excursion
Test Site	:	AC-6
Test Mode	:	Mode 1: Transmit by 802.11a (Chain 1)

Channel No.	Frequency (MHz)	Peak Excursion (dB)	Limit (dB)	Result
36	5180	7.97	13	Pass
40	5200	7.68	13	Pass
48	5240	7.82	13	Pass

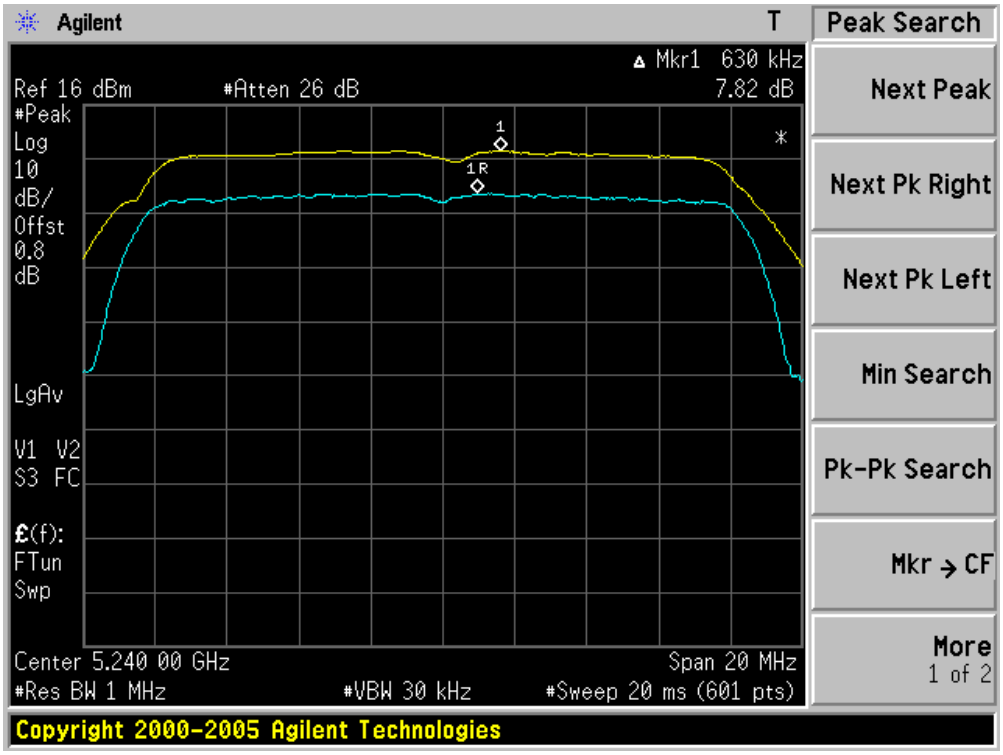
Channel 36 (5180MHz)



Channel 40 (5200MHz)



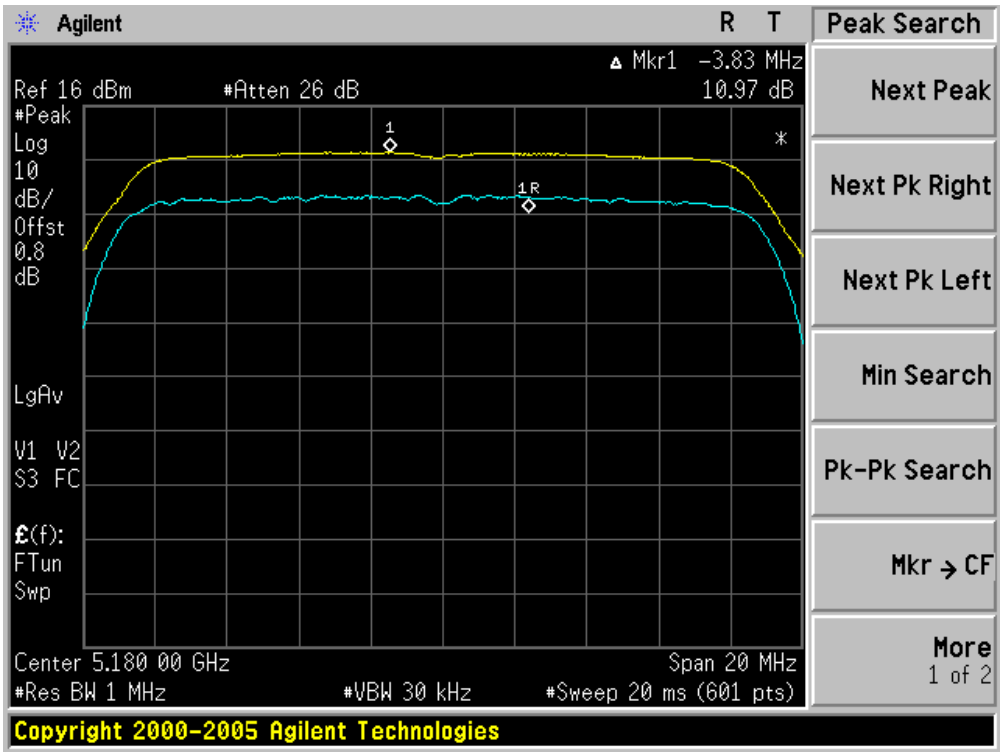
Channel 48 (5240MHz)



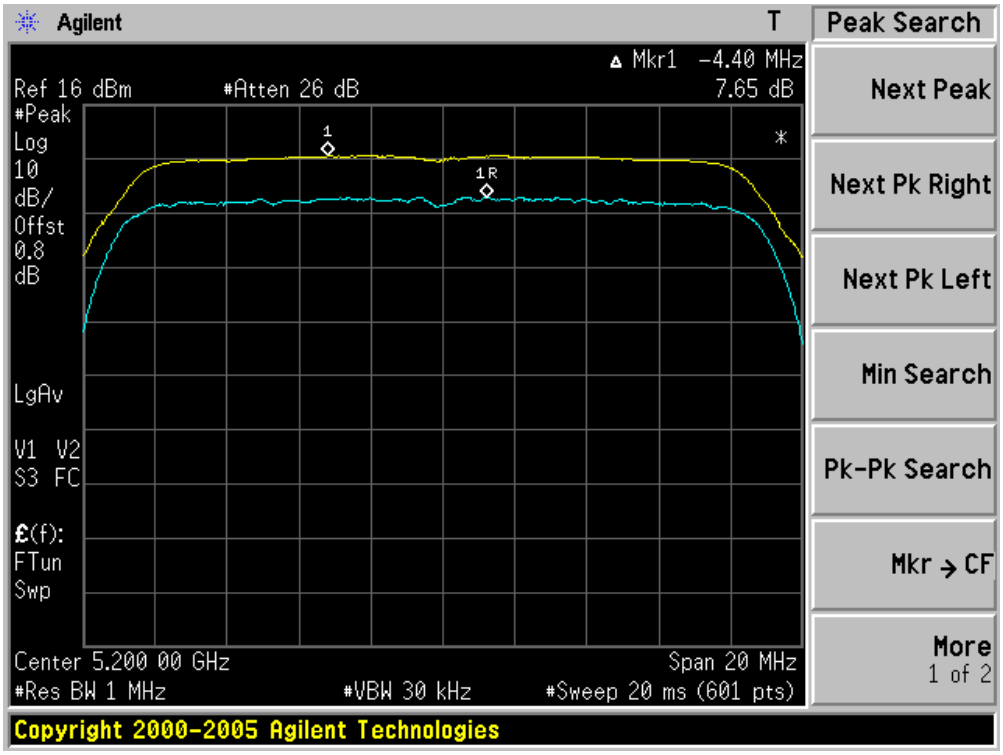
Product	:	Flip Share TV(USB Dongle)
Test Item	:	Peak Excursion
Test Site	:	AC-6
Test Mode	:	Mode 2: Transmit by 802.11n (20MHz Bandwidth) (Chain 0)

Channel No.	Frequency (MHz)	Peak Excursion (dB)	Limit (dB)	Result
36	5180	10.97	13	Pass
40	5200	7.65	13	Pass
48	5240	7.63	13	Pass

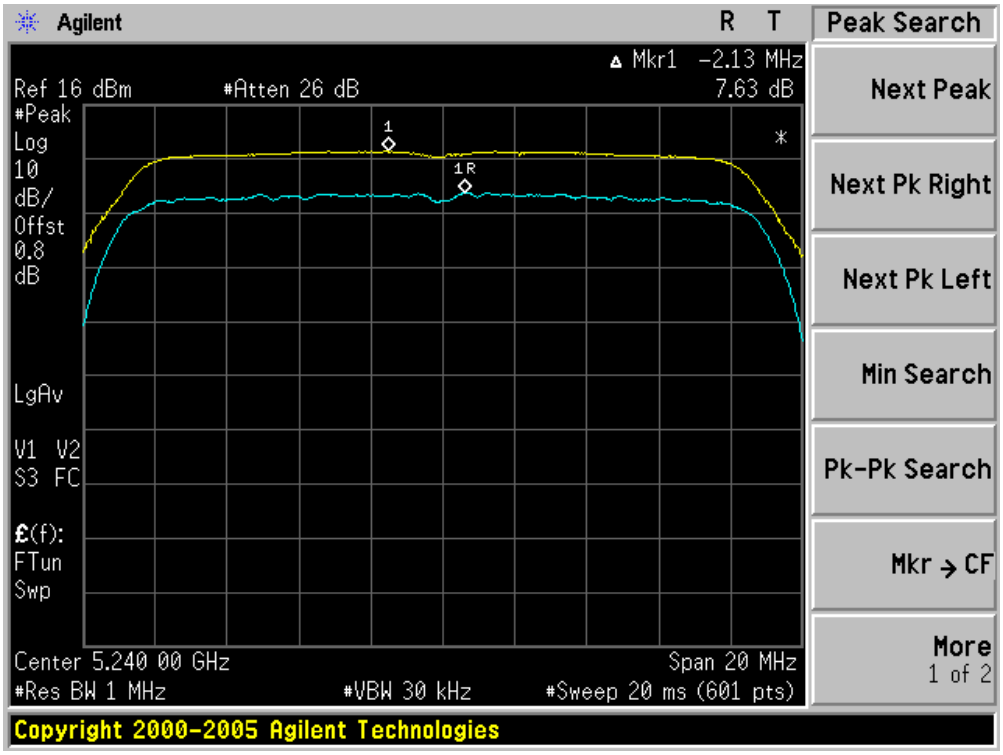
Channel 36 (5180MHz)



Channel 40 (5200MHz)



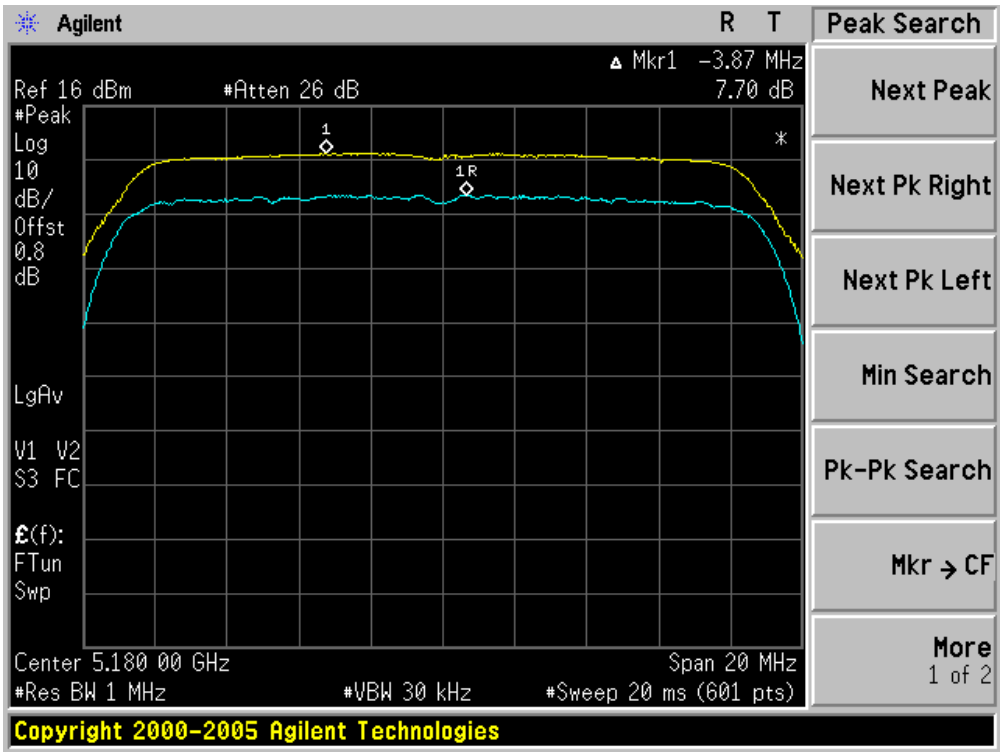
Channel 48 (5240MHz)



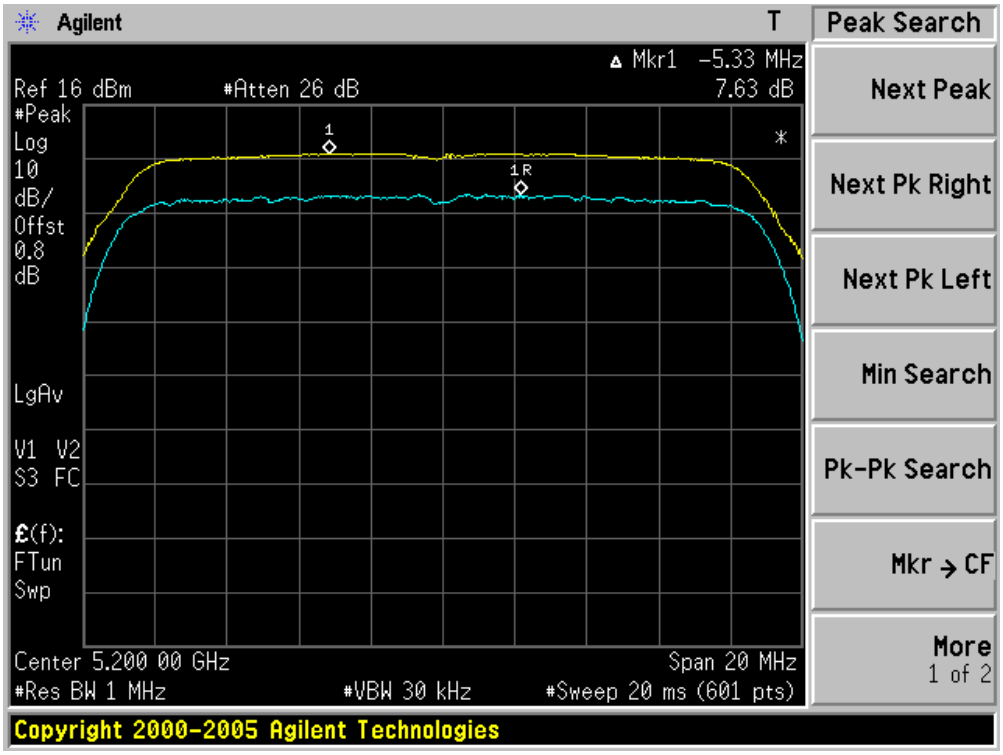
Product	:	Flip Share TV(USB Dongle)
Test Item	:	Peak Excursion
Test Site	:	AC-6
Test Mode	:	Mode 2: Transmit by 802.11n (20MHz Bandwidth) (Chain 1)

Channel No.	Frequency (MHz)	Peak Excursion (dB)	Limit (dB)	Result
36	5180	7.70	13	Pass
40	5200	7.63	13	Pass
48	5240	7.47	13	Pass

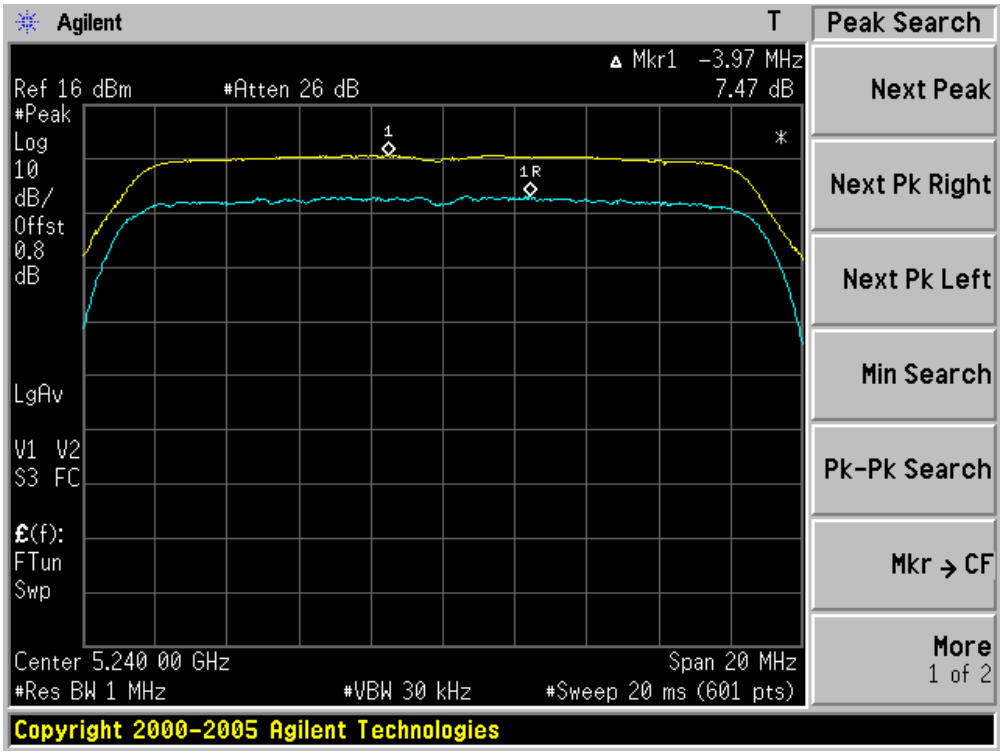
Channel 36 (5180MHz)



Channel 40 (5200MHz)



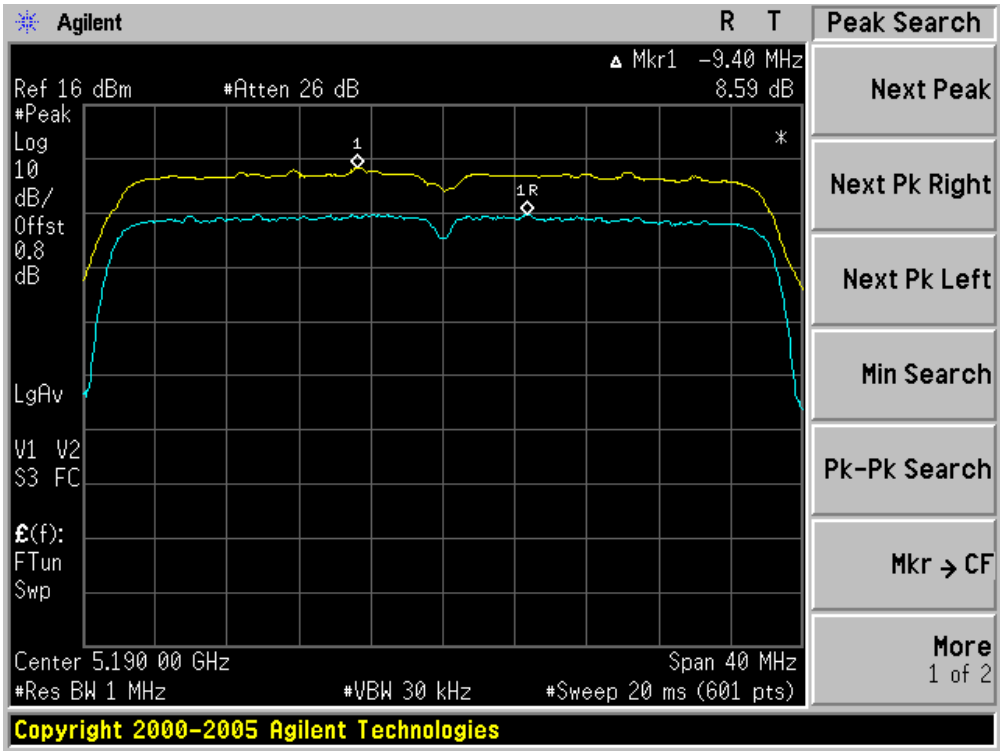
Channel 48 (5240MHz)



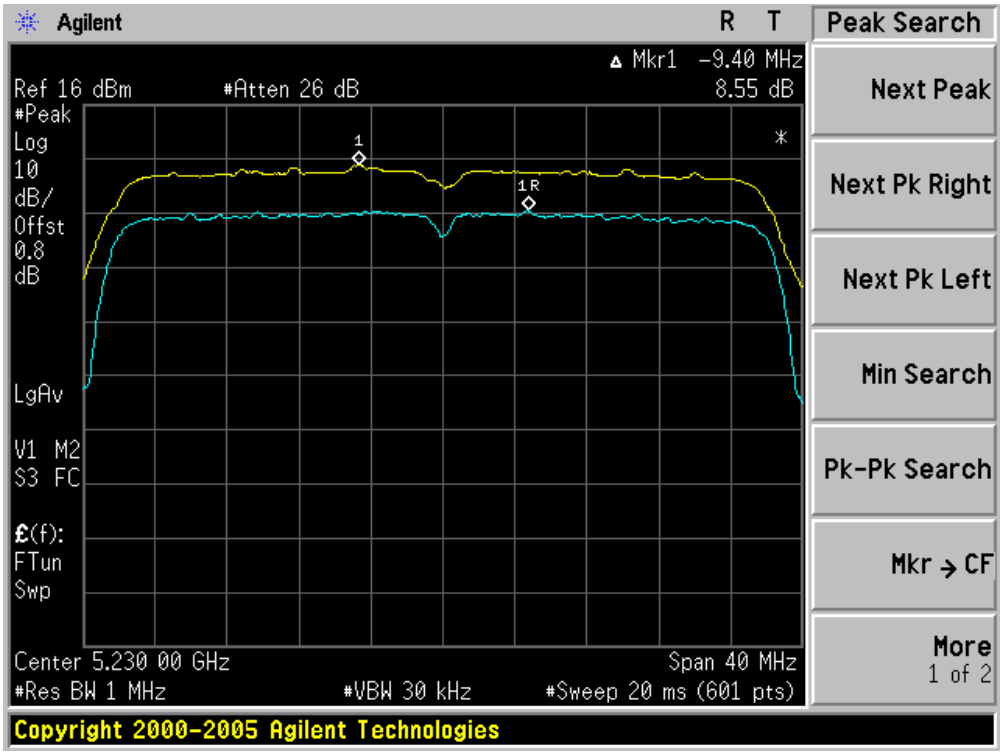
Product	:	Flip Share TV(USB Dongle)
Test Item	:	Peak Excursion
Test Site	:	AC-6
Test Mode	:	Mode 3: Transmit by 802.11n (40MHz Bandwidth) (Chain 0)

Channel No.	Frequency (MHz)	Peak Excursion (dB)	Limit (dB)	Result
38	5190	8.59	13	Pass
46	5230	8.55	13	Pass

Channel 38 (5190MHz)



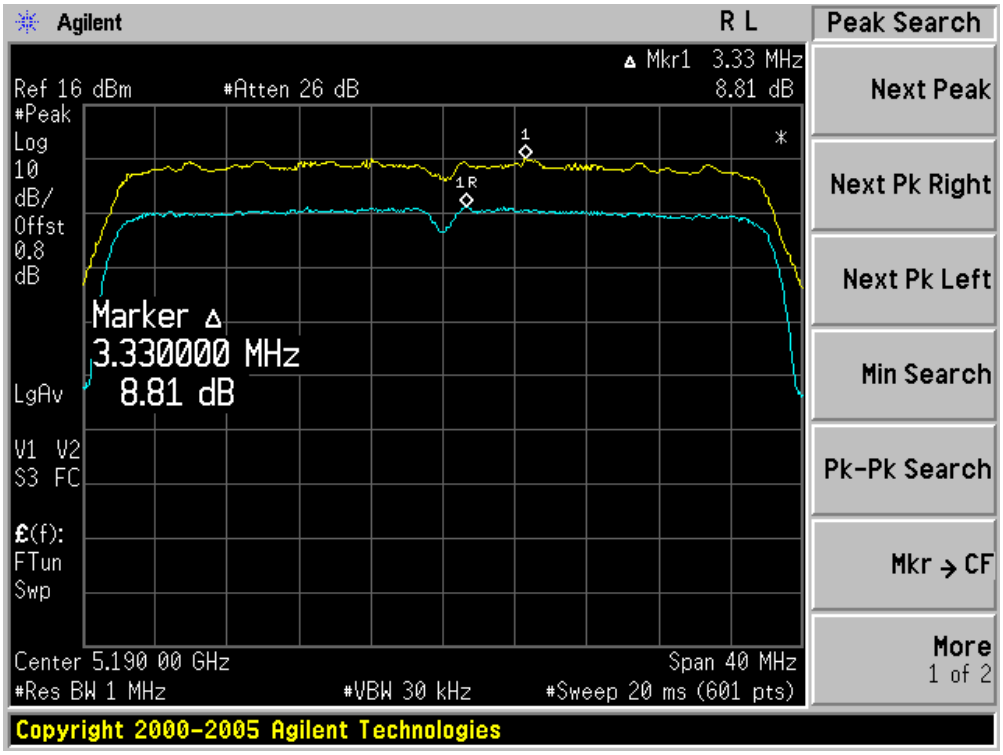
Channel 46 (5230MHz)



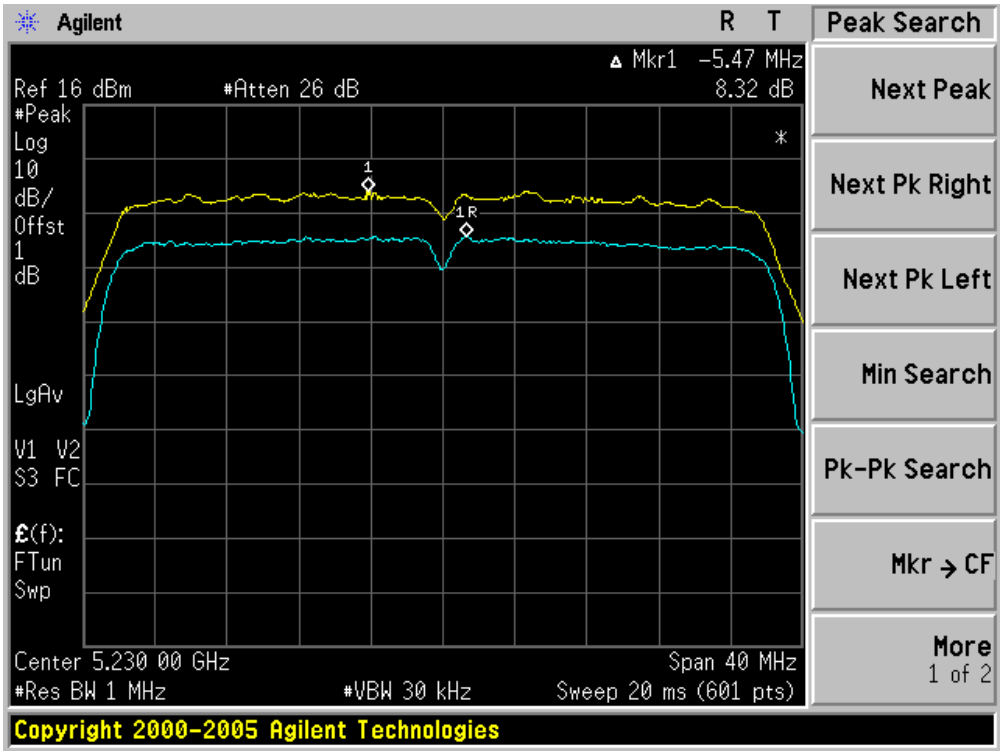
Product	:	Flip Share TV(USB Dongle)
Test Item	:	Peak Excursion
Test Site	:	AC-6
Test Mode	:	Mode 3: Transmit by 802.11n (40MHz Bandwidth) (Chain 1)

Channel No.	Frequency (MHz)	Peak Excursion (dB)	Limit (dB)	Result
38	5190	8.81	13	Pass
46	5230	8.32	13	Pass

Channel 38 (5190MHz)



Channel 46 (5230MHz)



10. Radiated Emission Band Edge

10.1. Test Equipment

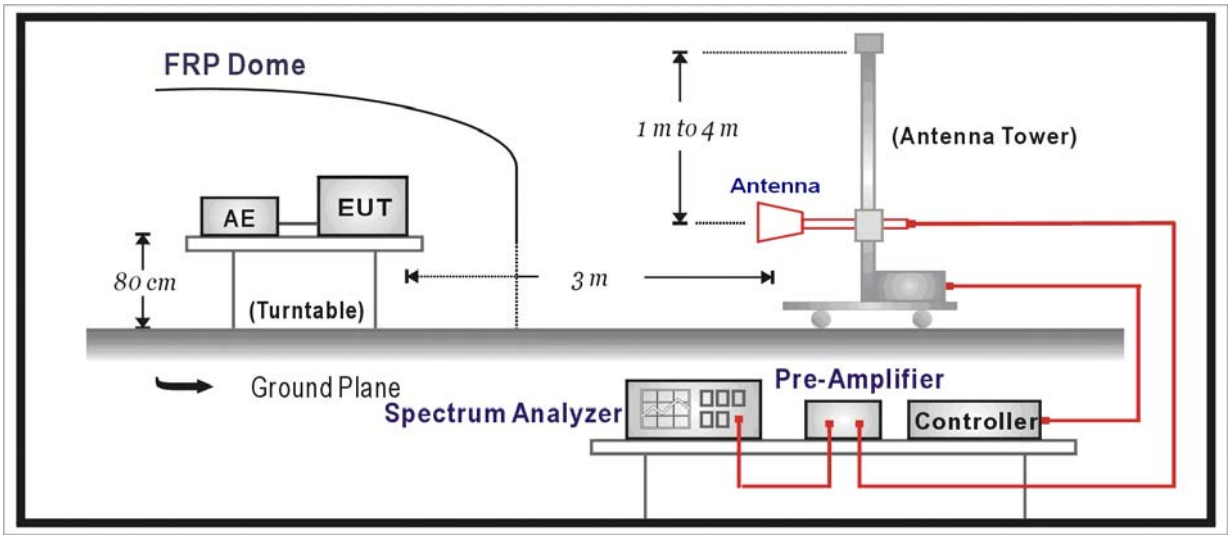
☒Radiated Emission / AC-2

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2009/06/11
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	496	2008/11/25
Coaxial Cable	Huber+Suhner	AC2-C	04	2008/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH002	2009/03/31

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

Note 2: The test instruments marked with “X” are used to measure the final test results.

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

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.
- For transmitters operating in the 5.25-5.35 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5.25-5.35 GHz band that generate emissions in the 5.15-5.25 GHz band must meet all applicable technical requirements for operation in the 5.15-5.25 GHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27dBm/MHz in the 5.15-5.25 GHz band.
- For transmitters operating in the 5.47-5.725 GHz band: all emission outside of the 5.47-5725 GHz band shall not exceed an EIRP of -27 dBm/MHz.
- For transmitters operating in the 5.725-5.825 GHz band: all emission within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an EIRP of -17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions 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 FCC Public Notice DA 02-2138, August 30, 2002 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 C63.4:2003 on radiated measurement.

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

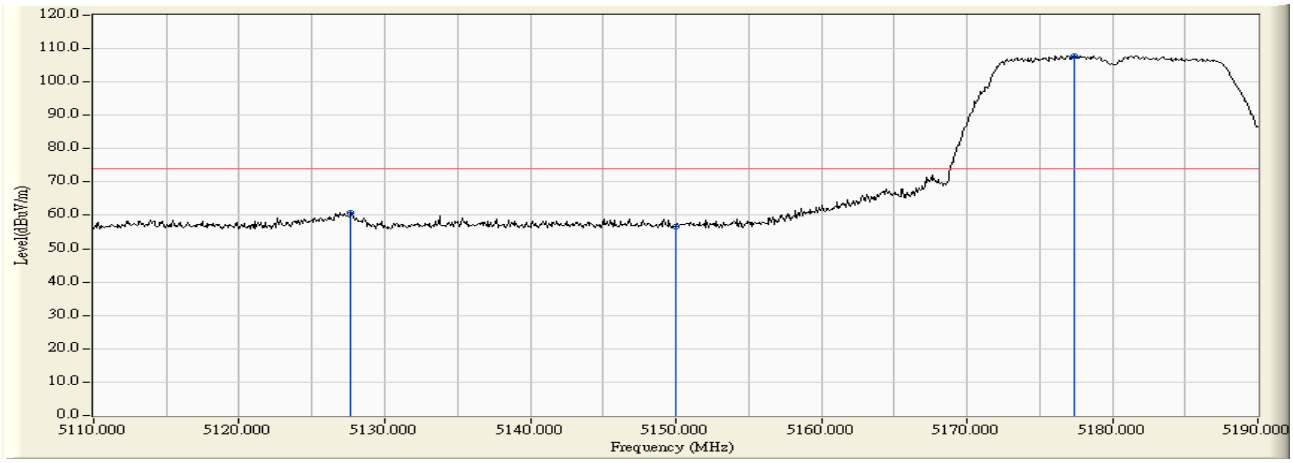
10.5. Uncertainty

The measurement uncertainty above 1GHz is defined as ± 3.9 dB

10.6. Test Result

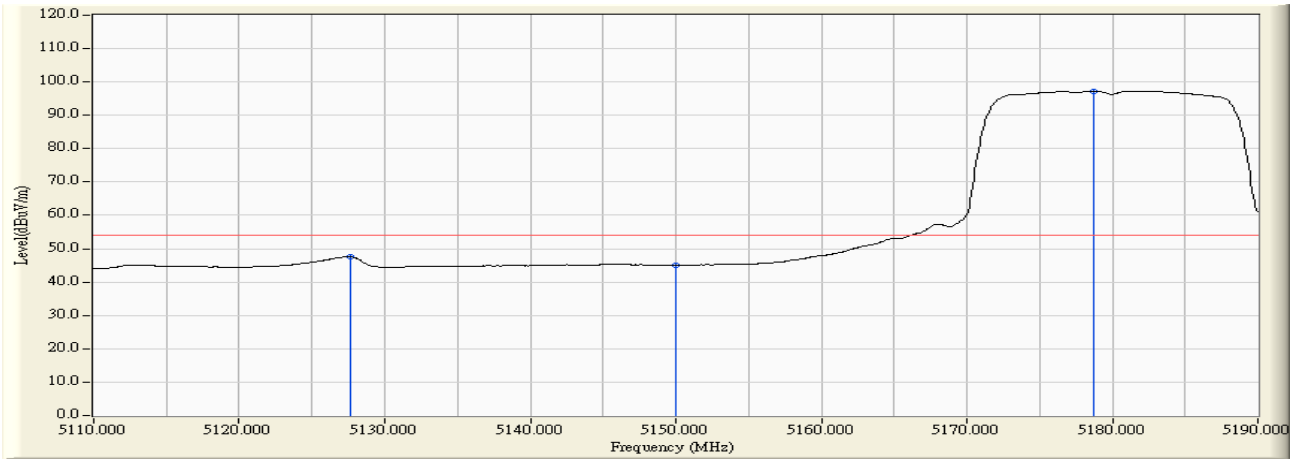
Peak detector: RBW = 1MHz, VBW = 3MHz, sweep time = 200ms;
Average detector: RBW = 1MHz, VBW = 10Hz, sweep time = auto.

Engineer : Cryst	
Site : AC-5 (3m Semi-Anechoic Chamber)	**Time : 2009/09/07 - 15:17**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
Probe : 9120D_499(1-18GHz) - HORIZONTAL	**Power : DC**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 1: Transmit at Channel 5180MHz by 802.11a(chain 0)**



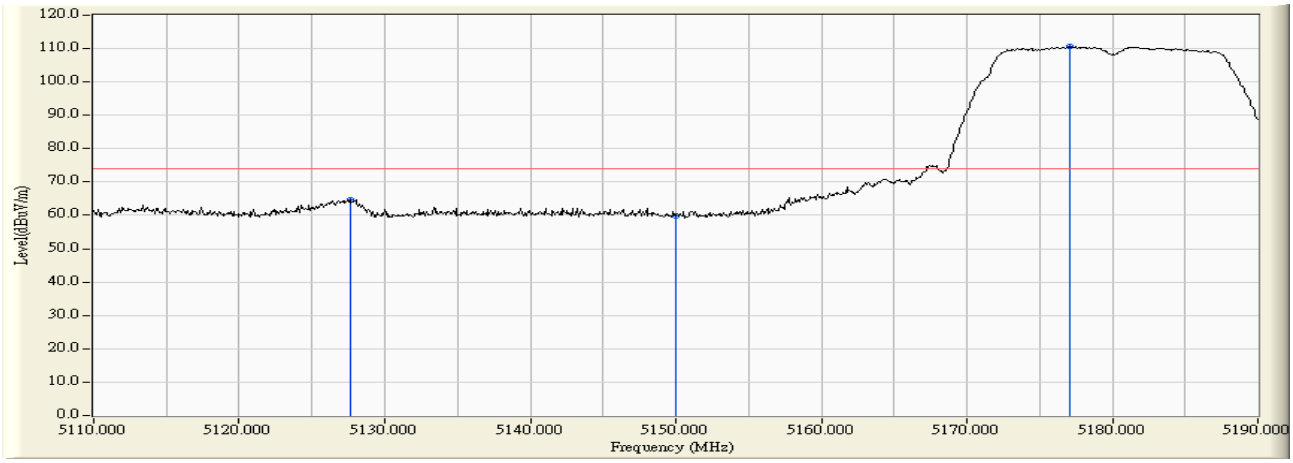
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5127.680	1.050	59.789	60.839	-13.131	73.970	PEAK
2		5150.000	1.093	55.689	56.782	-17.188	73.970	PEAK
3	*	5177.360	1.132	106.686	107.818	N/A	N/A	PEAK

Engineer : Cryst	
Site : AC-5 (3m Semi-Anechoic Chamber)	**Time : 2009/09/07 - 15:18**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
Probe : 9120D_499(1-18GHz) - HORIZONTAL	**Power : DC**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 1: Transmit at Channel 5180MHz by 802.11a(chain 0)**



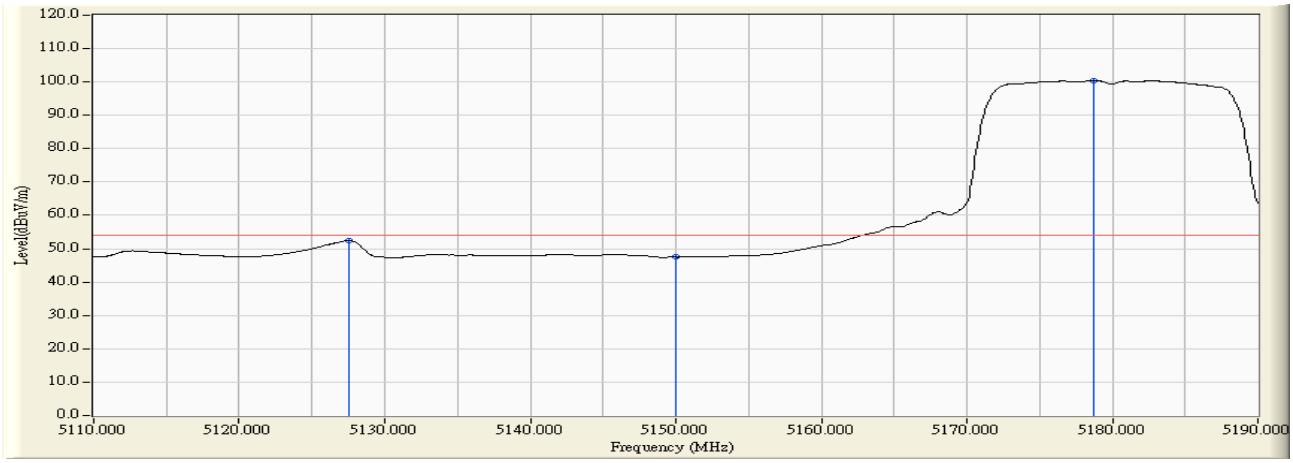
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5127.600	1.050	46.539	47.589	-6.381	53.970	AVERAGE
2		5150.000	1.093	43.977	45.070	-8.900	53.970	AVERAGE
3	*	5178.720	1.134	96.170	97.304	N/A	N/A	AVERAGE

Engineer : Cryst	
Site : AC-5 (3m Semi-Anechoic Chamber)	**Time : 2009/09/07 - 15:26**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
Probe : 9120D_499(1-18GHz) - VERTICAL	**Power : DC**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 1: Transmit at Channel 5180MHz by 802.11a(chain 0)**



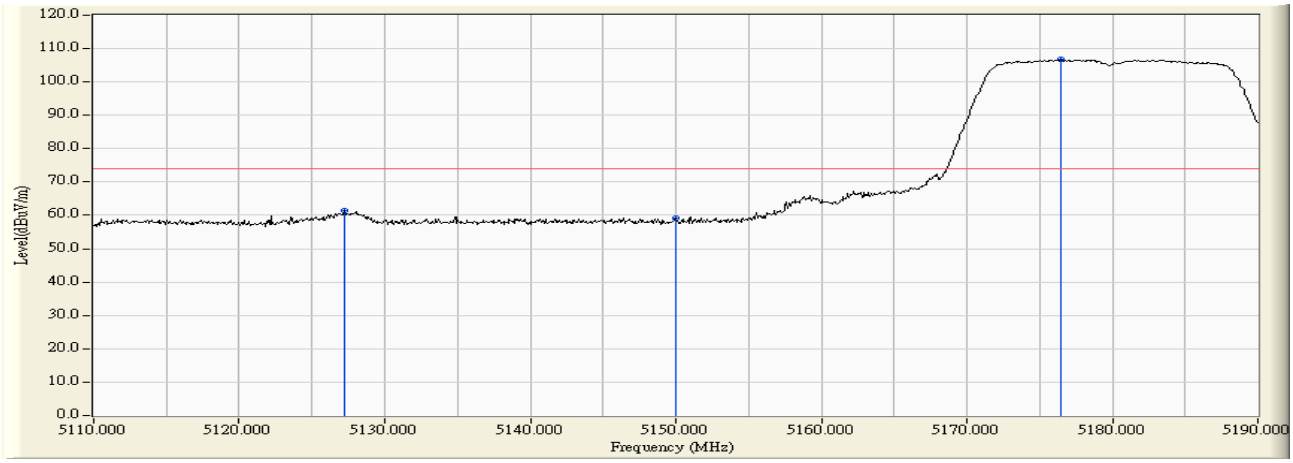
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5127.680	1.050	63.735	64.785	-9.185	73.970	PEAK
2		5150.000	1.093	58.629	59.722	-14.248	73.970	PEAK
3	*	5177.120	1.132	109.409	110.541	N/A	N/A	PEAK

Engineer : Cryst	
Site : AC-5 (3m Semi-Anechoic Chamber)	**Time : 2009/09/07 - 15:26**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
Probe : 9120D_499(1-18GHz) - VERTICAL	**Power : DC**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 1: Transmit at Channel 5180MHz by 802.11a(chain 0)**



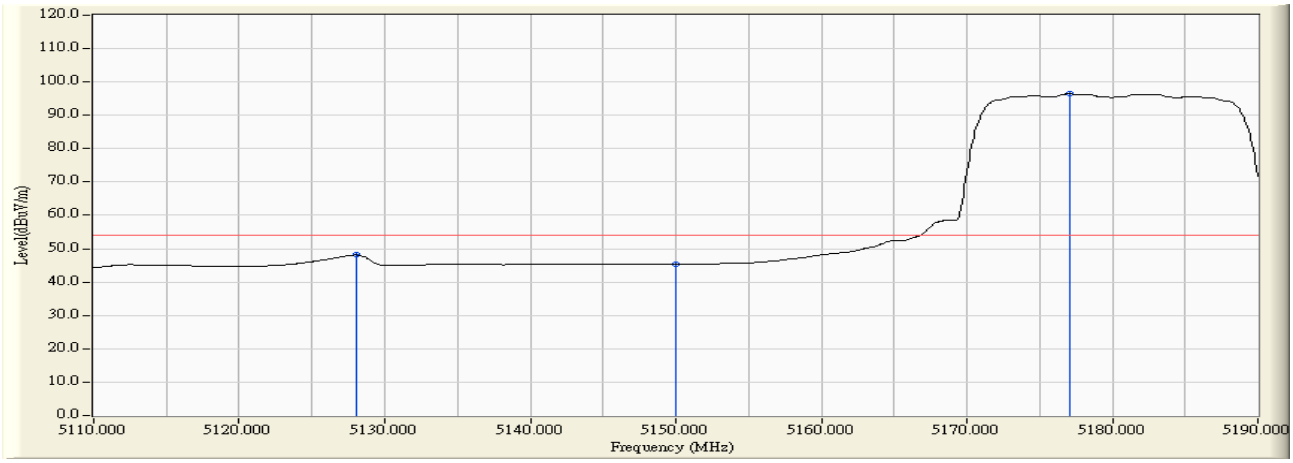
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5127.520	1.049	51.362	52.411	-1.559	53.970	AVERAGE
2		5150.000	1.093	46.362	47.455	-6.515	53.970	AVERAGE
3	*	5178.720	1.134	99.277	100.411	N/A	N/A	AVERAGE

Engineer : Cryst	
Site : AC-5 (3m Semi-Anechoic Chamber)	**Time : 2009/09/07 - 15:50**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
Probe : 9120D_499(1-18GHz) - HORIZONTAL	**Power : DC**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 2: Transmit at Channel 5180MHz by 802.11n(20MHz)(chain 0)**



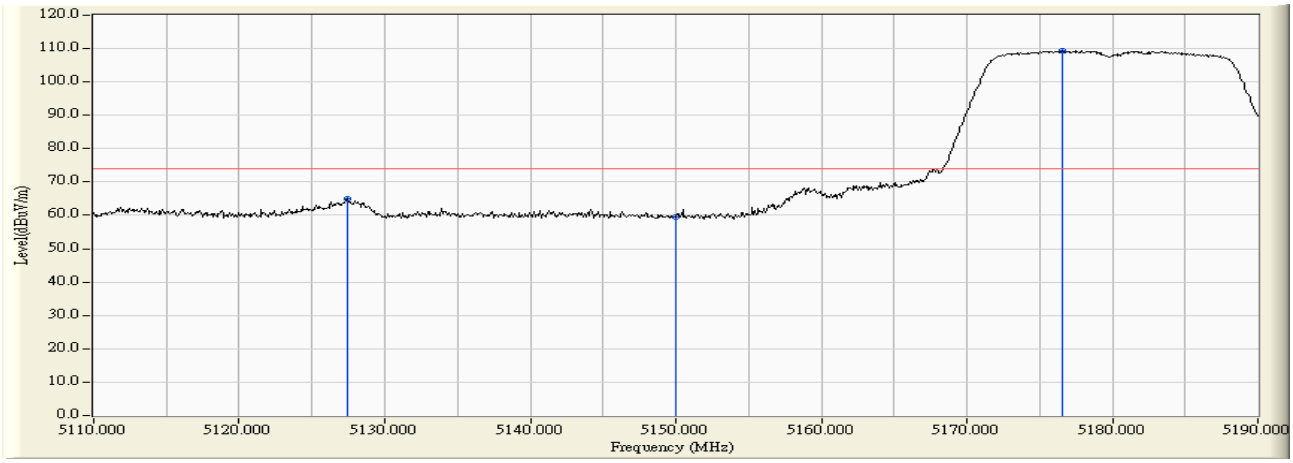
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5127.200	1.049	60.509	61.558	-12.412	73.970	PEAK
2		5150.000	1.093	58.048	59.141	-14.829	73.970	PEAK
3	*	5176.480	1.132	105.532	106.663	N/A	N/A	PEAK

Engineer : Cryst	
Site : AC-5 (3m Semi-Anechoic Chamber)	**Time : 2009/09/07 - 15:50**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
Probe : 9120D_499(1-18GHz) - HORIZONTAL	**Power : DC**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 2: Transmit at Channel 5180MHz by 802.11n(20MHz)(chain 0)**



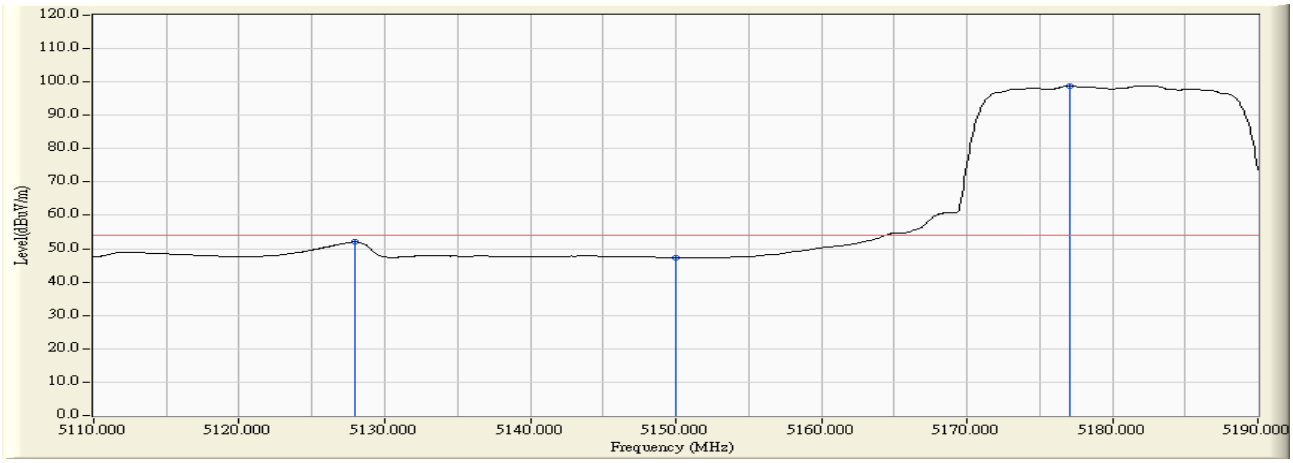
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5128.000	1.050	47.068	48.119	-5.851	53.970	AVERAGE
2		5150.000	1.093	44.255	45.348	-8.622	53.970	AVERAGE
3	*	5177.040	1.131	95.268	96.400	N/A	N/A	AVERAGE

Engineer : Cryst	
Site : AC-5 (3m Semi-Anechoic Chamber)	**Time : 2009/09/07 - 15:54**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
Probe : 9120D_499(1-18GHz) - VERTICAL	**Power : DC**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 2: Transmit at Channel 5180MHz by 802.11n(20MHz)(chain 0)**



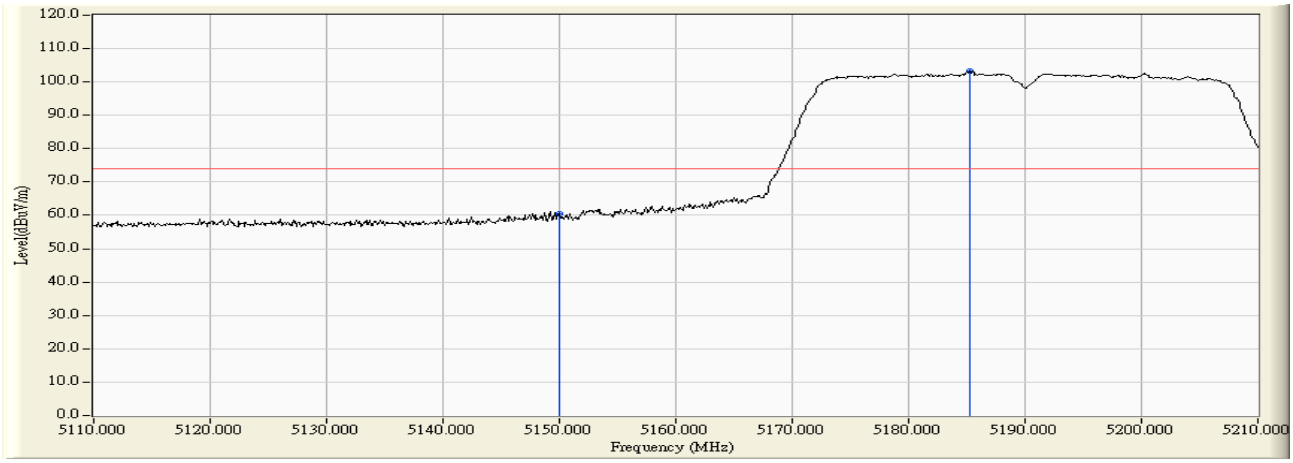
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5127.440	1.049	63.809	64.858	-9.112	73.970	PEAK
2		5150.000	1.093	58.437	59.530	-14.440	73.970	PEAK
3	*	5176.560	1.131	108.182	109.313	N/A	N/A	PEAK

Engineer : Cryst	
Site : AC-5 (3m Semi-Anechoic Chamber)	**Time : 2009/09/07 - 15:55**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
Probe : 9120D_499(1-18GHz) - VERTICAL	**Power : DC**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 2: Transmit at Channel 5180MHz by 802.11n(20MHz)(chain 0)**



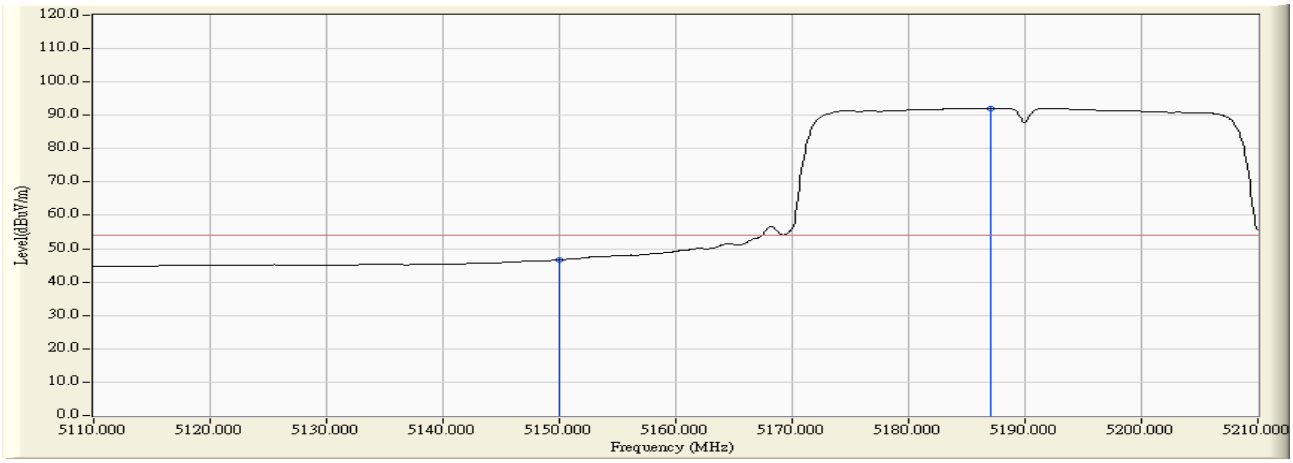
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5127.920	1.050	50.972	52.022	-1.948	53.970	AVERAGE
2		5150.000	1.093	46.140	47.233	-6.737	53.970	AVERAGE
3	*	5177.040	1.131	97.639	98.771	N/A	N/A	AVERAGE

Engineer : Cryst	
Site : AC-5 (3m Semi-Anechoic Chamber)	**Time : 2009/09/07 - 16:23**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
Probe : 9120D_499(1-18GHz) - HORIZONTAL	**Power : DC**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 3: Transmit at Channel 5190MHz by 802.11n(40MHz)(chain 0)**



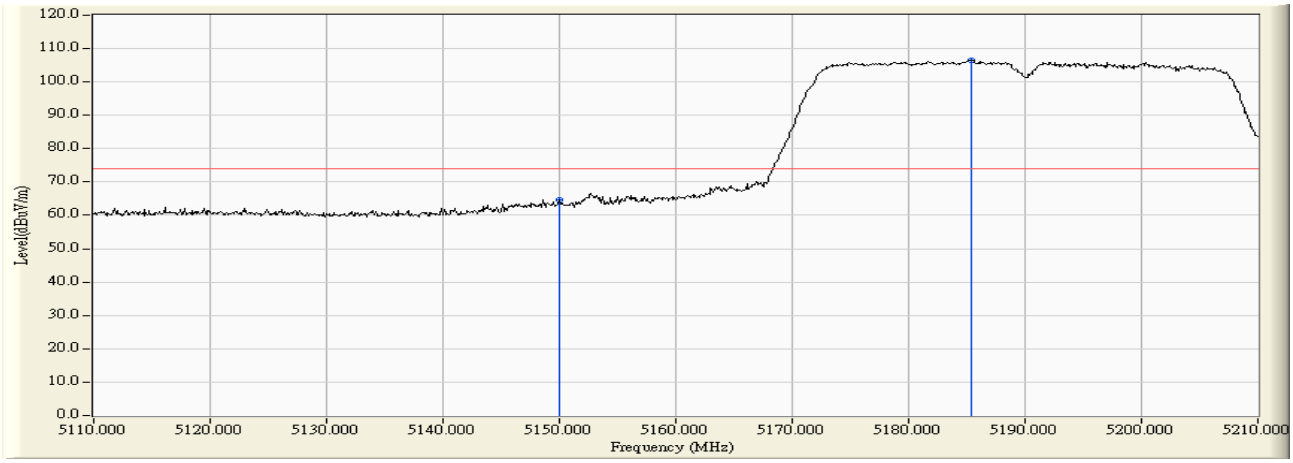
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5150.000	1.093	59.314	60.407	-13.563	73.970	PEAK
2	*	5185.300	1.143	102.120	103.262	N/A	N/A	PEAK

Engineer : Cryst	
Site : AC-5 (3m Semi-Anechoic Chamber)	**Time : 2009/09/07 - 16:23**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
Probe : 9120D_499(1-18GHz) - HORIZONTAL	**Power : DC**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 3: Transmit at Channel 5190MHz by 802.11n(40MHz)(chain 0)**



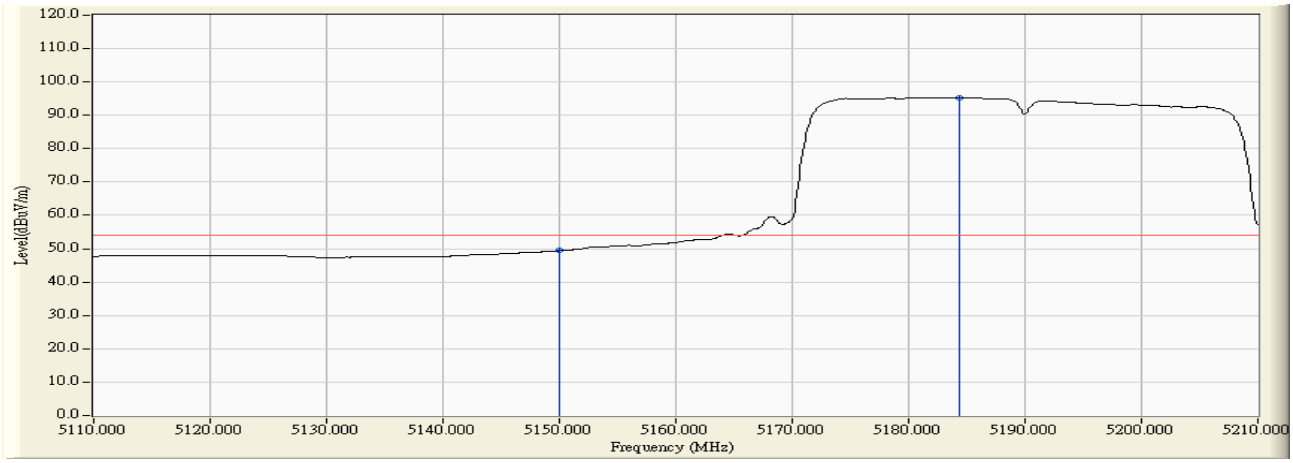
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5150.000	1.093	45.558	46.651	-7.319	53.970	AVERAGE
2	*	5187.000	1.144	91.011	92.155	N/A	N/A	AVERAGE

Engineer : Cryst	
Site : AC-5 (3m Semi-Anechoic Chamber)	**Time : 2009/09/07 - 16:19**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
Probe : 9120D_499(1-18GHz) - VERTICAL	**Power : DC**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 3: Transmit at Channel 5190MHz by 802.11n(40MHz)(chain 0)**



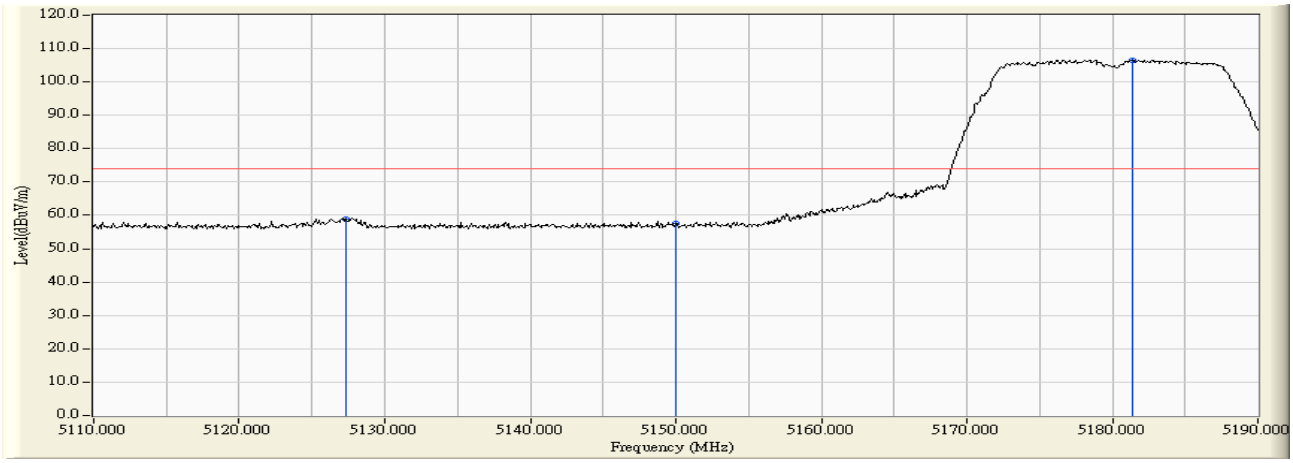
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5150.000	1.093	63.524	64.617	-9.353	73.970	PEAK
2	*	5185.400	1.143	105.456	106.599	N/A	N/A	PEAK

Engineer : Cryst	
Site : AC-5 (3m Semi-Anechoic Chamber)	**Time : 2009/09/07 - 16:20**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
Probe : 9120D_499(1-18GHz) - VERTICAL	**Power : DC**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 3: Transmit at Channel 5190MHz by 802.11n(40MHz)(chain 0)**



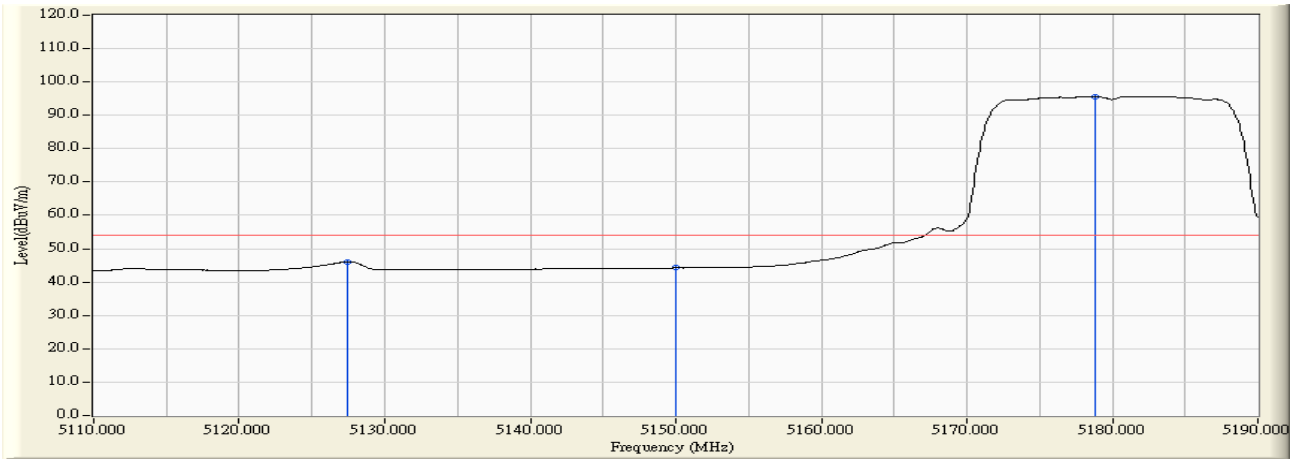
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5150.000	1.093	48.301	49.394	-4.576	53.970	AVERAGE
2	*	5184.400	1.142	94.150	95.292	N/A	N/A	AVERAGE

Engineer : Cryst	
Site : AC-5 (3m Semi-Anechoic Chamber)	**Time : 2009/09/07 - 15:41**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
Probe : 9120D_499(1-18GHz) - HORIZONTAL	**Power : DC**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 1: Transmit at Channel 5180MHz by 802.11a(chain 1)**



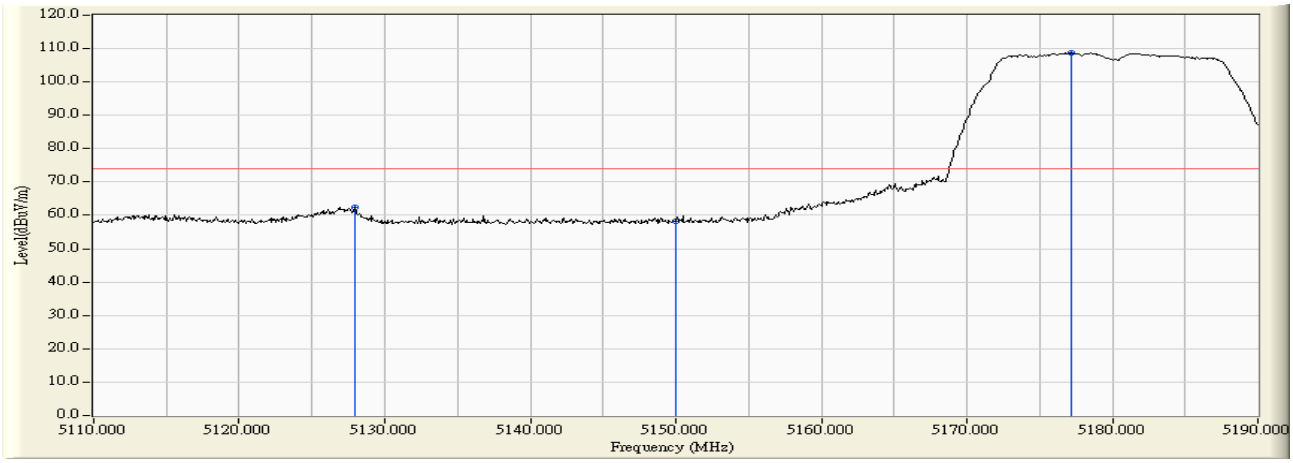
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5127.360	1.049	57.964	59.013	-14.957	73.970	PEAK
2		5150.000	1.093	56.343	57.436	-16.534	73.970	PEAK
3	*	5181.360	1.139	105.504	106.642	N/A	N/A	PEAK

Engineer : Cryst	
Site : AC-5 (3m Semi-Anechoic Chamber)	**Time : 2009/09/07 - 15:41**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
Probe : 9120D_499(1-18GHz) - HORIZONTAL	**Power : DC**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 1: Transmit at Channel 5180MHz by 802.11a(chain 1)**



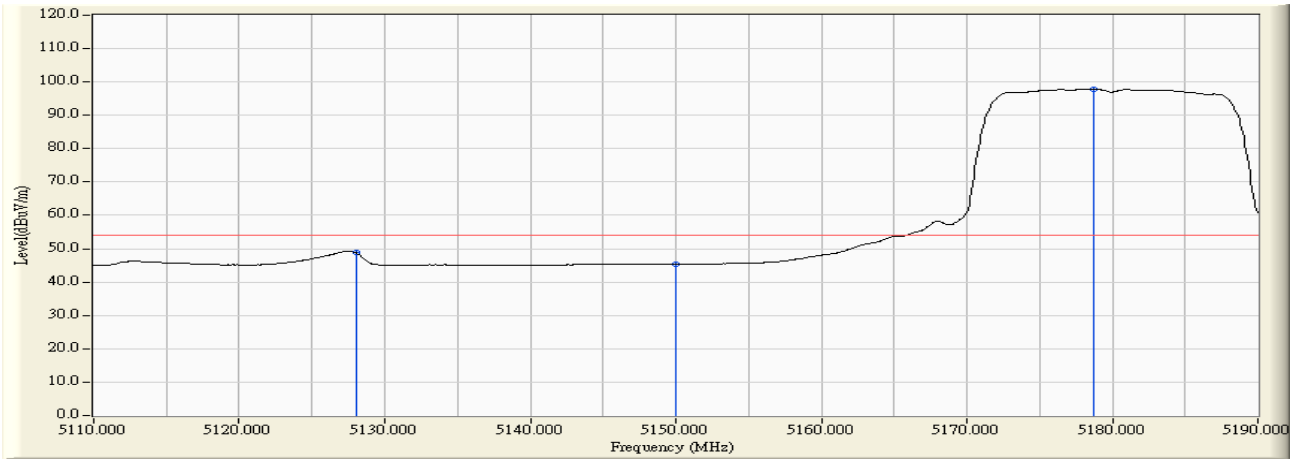
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5127.440	1.049	45.083	46.132	-7.838	53.970	AVERAGE
2		5150.000	1.093	43.156	44.249	-9.721	53.970	AVERAGE
3	*	5178.800	1.135	94.471	95.606	N/A	N/A	AVERAGE

Engineer : Cryst	
Site : AC-5 (3m Semi-Anechoic Chamber)	**Time : 2009/09/07 - 15:36**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
Probe : 9120D_499(1-18GHz) - VERTICAL	**Power : DC**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 1: Transmit at Channel 5180MHz by 802.11a(chain 1)**



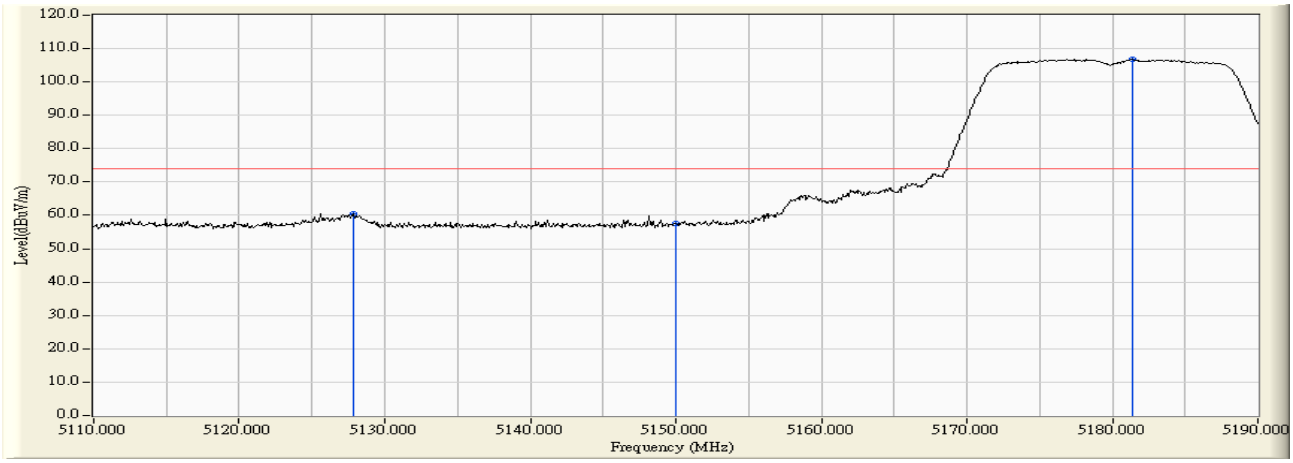
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5127.920	1.050	61.262	62.312	-11.658	73.970	PEAK
2		5150.000	1.093	56.990	58.083	-15.887	73.970	PEAK
3	*	5177.200	1.132	107.490	108.622	N/A	N/A	PEAK

Engineer : Cryst	
Site : AC-5 (3m Semi-Anechoic Chamber)	**Time : 2009/09/07 - 15:37**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
Probe : 9120D_499(1-18GHz) - VERTICAL	**Power : DC**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 1: Transmit at Channel 5180MHz by 802.11a(chain 1)**



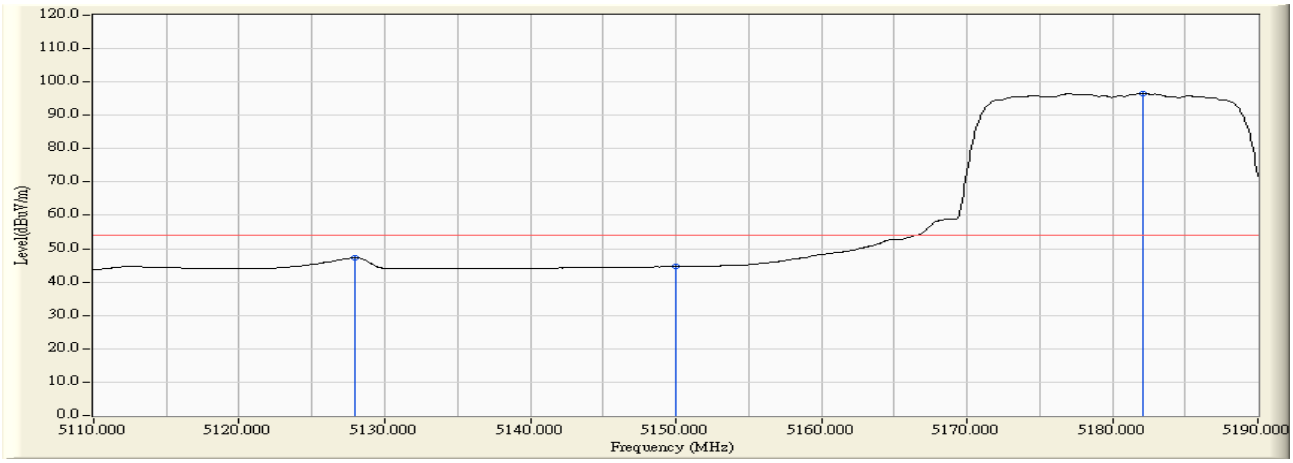
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5128.000	1.050	47.746	48.797	-5.173	53.970	AVERAGE
2		5150.000	1.093	44.263	45.356	-8.614	53.970	AVERAGE
3	*	5178.720	1.134	96.699	97.833	N/A	N/A	AVERAGE

Engineer : Cryst	
Site : AC-5 (3m Semi-Anechoic Chamber)	**Time : 2009/09/07 - 16:00**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
Probe : 9120D_499(1-18GHz) - HORIZONTAL	**Power : DC**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 2: Transmit at Channel 5180MHz by 802.11n(20MHz)(chain 1)**



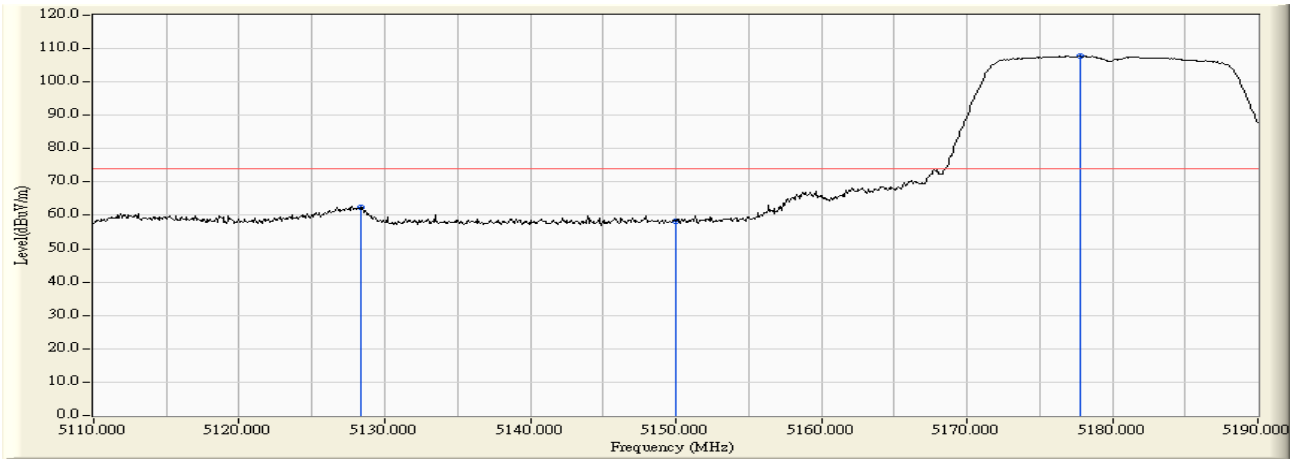
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5127.840	1.050	59.462	60.512	-13.458	73.970	PEAK
2		5150.000	1.093	56.390	57.483	-16.487	73.970	PEAK
3	*	5181.360	1.139	105.574	106.712	N/A	N/A	PEAK

Engineer : Cryst	
Site : AC-5 (3m Semi-Anechoic Chamber)	**Time : 2009/09/07 - 16:00**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
Probe : 9120D_499(1-18GHz) - HORIZONTAL	**Power : DC**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 2: Transmit at Channel 5180MHz by 802.11n(20MHz)(chain 1)**



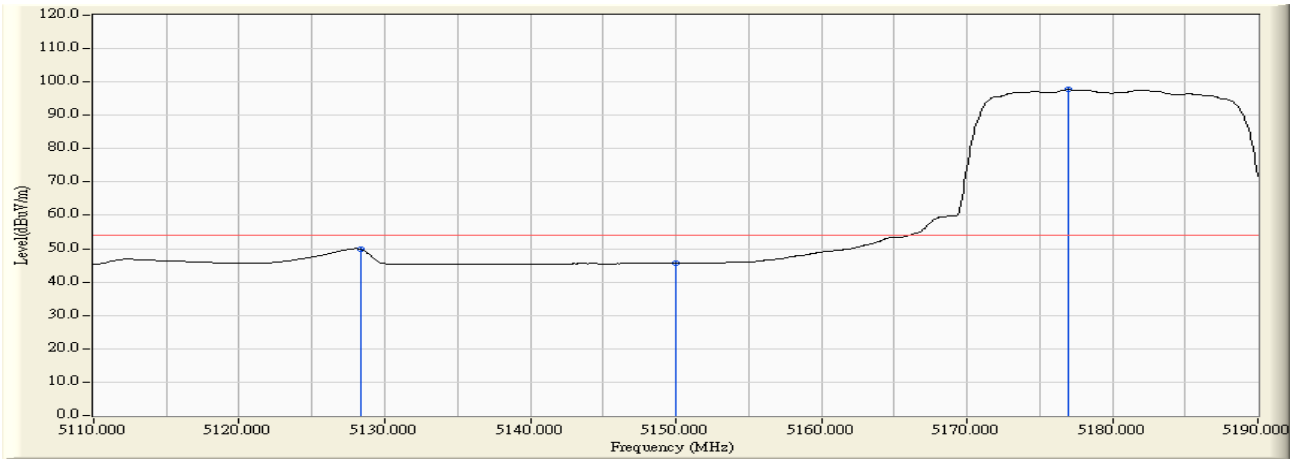
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5127.920	1.050	46.203	47.253	-6.717	53.970	AVERAGE
2		5150.000	1.093	43.618	44.711	-9.259	53.970	AVERAGE
3	*	5182.080	1.139	95.294	96.433	N/A	N/A	AVERAGE

Engineer : Cryst	
Site : AC-5 (3m Semi-Anechoic Chamber)	**Time : 2009/09/07 - 15:58**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
Probe : 9120D_499(1-18GHz) - VERTICAL	**Power : DC**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 2: Transmit at Channel 5180MHz by 802.11n(20MHz)(chain 1)**



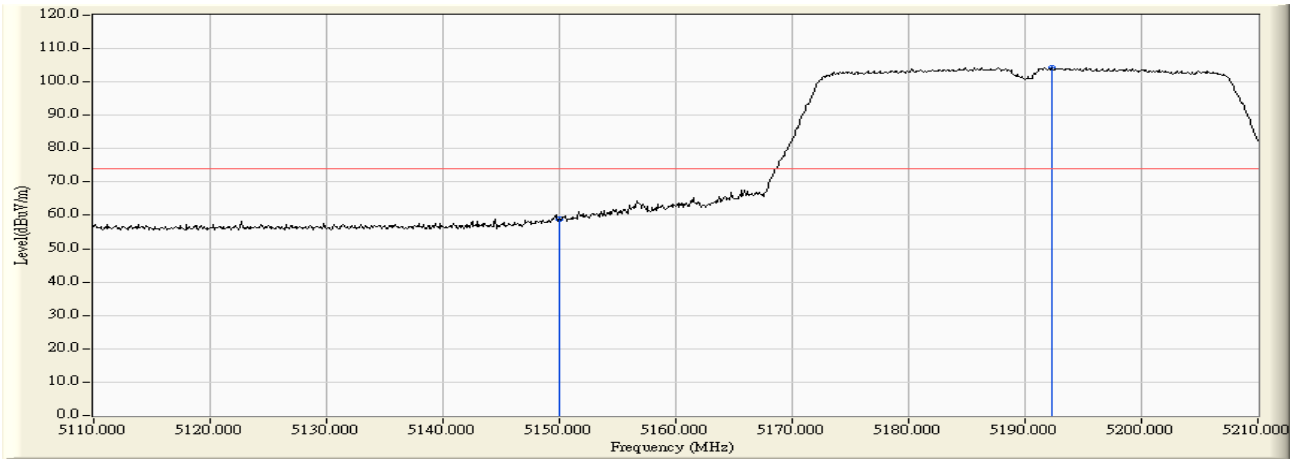
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5128.320	1.052	61.267	62.318	-11.652	73.970	PEAK
2		5150.000	1.093	57.074	58.167	-15.803	73.970	PEAK
3	*	5177.760	1.134	106.582	107.715	N/A	N/A	PEAK

Engineer : Cryst	
Site : AC-5 (3m Semi-Anechoic Chamber)	**Time : 2009/09/07 - 15:58**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
Probe : 9120D_499(1-18GHz) - VERTICAL	**Power : DC**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 2: Transmit at Channel 5180MHz by 802.11n(20MHz)(chain 1)**



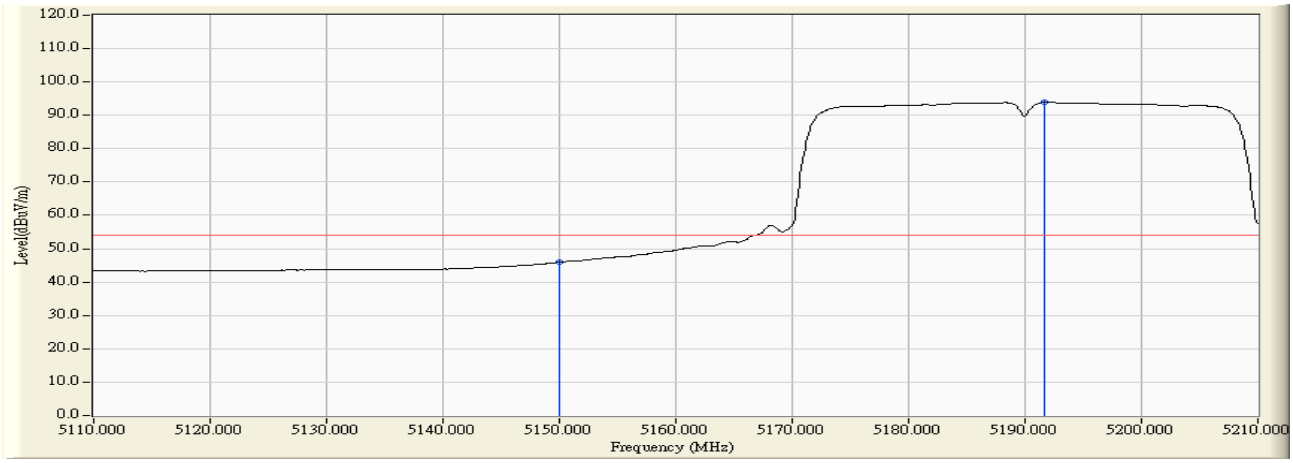
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5128.320	1.052	48.794	49.845	-4.125	53.970	AVERAGE
2		5150.000	1.093	44.589	45.682	-8.288	53.970	AVERAGE
3	*	5176.960	1.132	96.533	97.665	N/A	N/A	AVERAGE

Engineer : Cryst	
Site : AC-5 (3m Semi-Anechoic Chamber)	**Time : 2009/09/07 - 16:27**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
Probe : 9120D_499(1-18GHz) - HORIZONTAL	**Power : DC**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 3: Transmit at Channel 5190MHz by 802.11n(40MHz)(chain 1)**



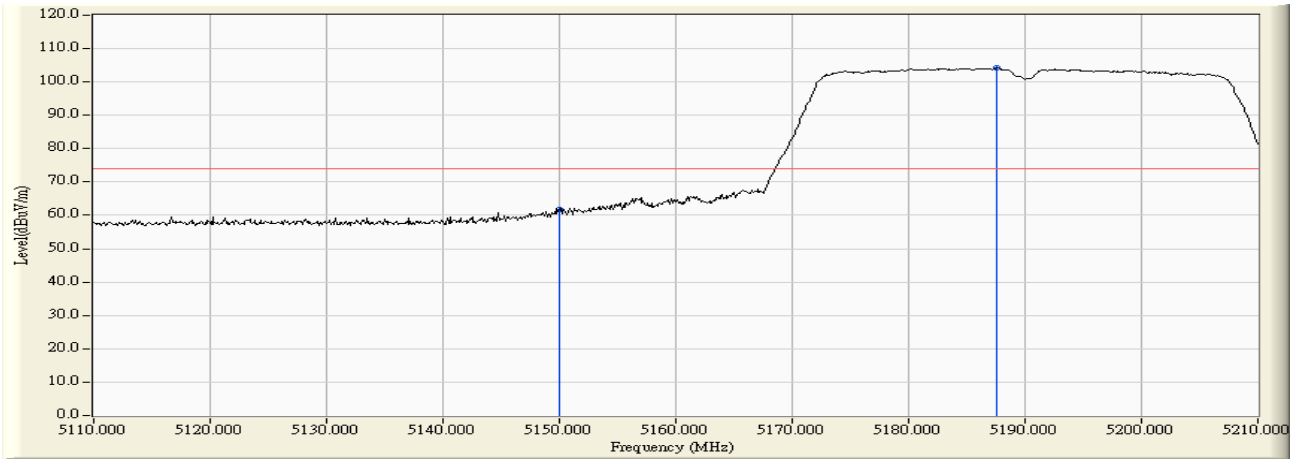
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5150.000	1.093	57.734	58.827	-15.143	73.970	PEAK
2	*	5192.300	1.149	103.014	104.163	N/A	N/A	PEAK

Engineer : Cryst	
Site : AC-5 (3m Semi-Anechoic Chamber)	**Time : 2009/09/07 - 16:28**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
Probe : 9120D_499(1-18GHz) - HORIZONTAL	**Power : DC**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 3: Transmit at Channel 5190MHz by 802.11n(40MHz)(chain 1)**



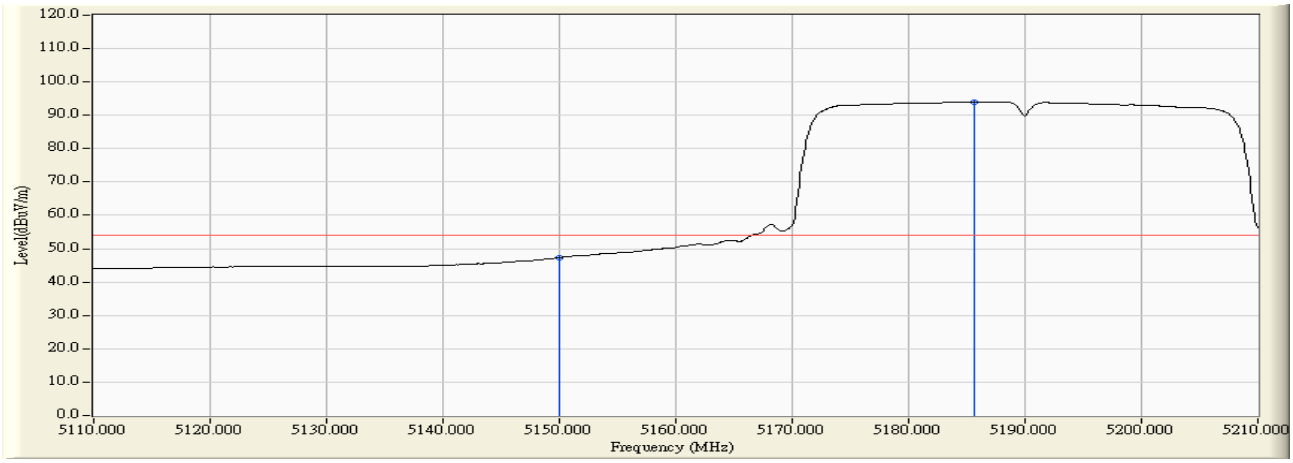
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5150.000	1.093	44.857	45.950	-8.020	53.970	AVERAGE
2	*	5191.700	1.149	92.690	93.838	N/A	N/A	AVERAGE

Engineer : Cryst	
Site : AC-5 (3m Semi-Anechoic Chamber)	**Time : 2009/09/07 - 16:30**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
Probe : 9120D_499(1-18GHz) - VERTICAL	**Power : DC**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 3: Transmit at Channel 5190MHz by 802.11n(40MHz)(chain 1)**



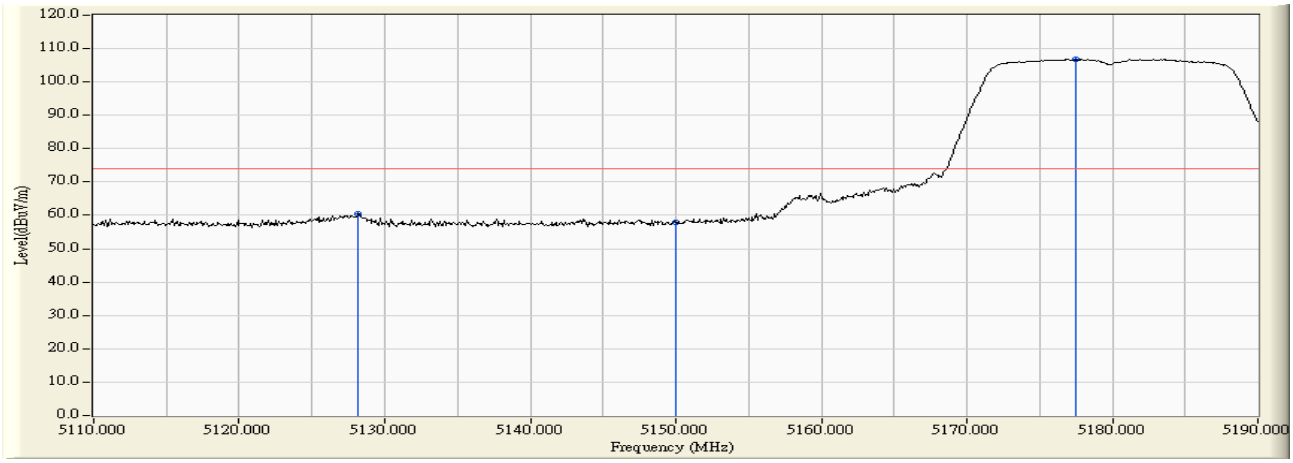
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5150.000	1.093	60.669	61.762	-12.208	73.970	PEAK
2	*	5187.600	1.144	103.037	104.182	N/A	N/A	PEAK

Engineer : Cryst	
Site : AC-5 (3m Semi-Anechoic Chamber)	**Time : 2009/09/07 - 16:30**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
Probe : 9120D_499(1-18GHz) - VERTICAL	**Power : DC**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 3: Transmit at Channel 5190MHz by 802.11n(40MHz)(chain 1)**



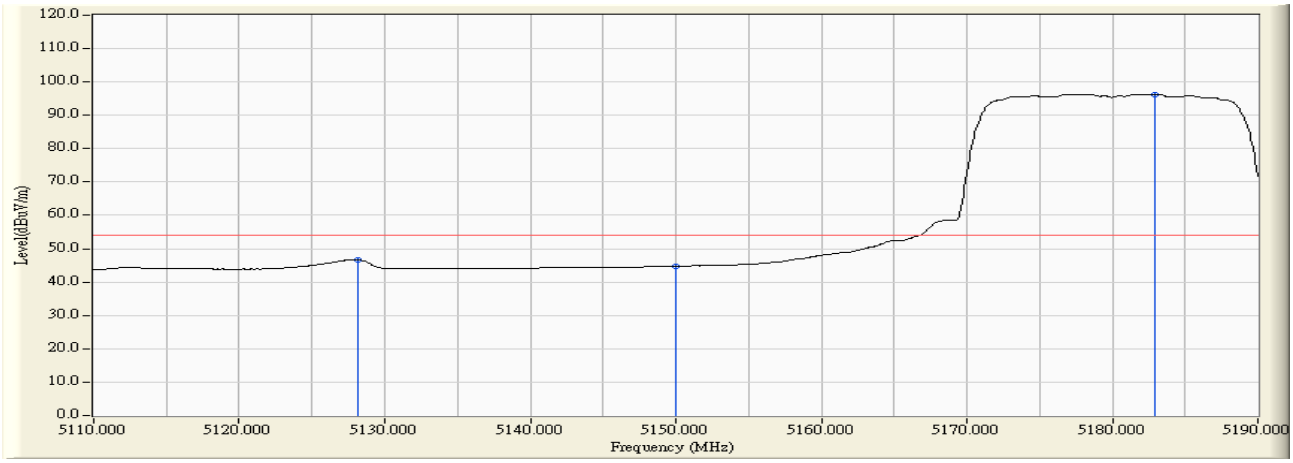
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5150.000	1.093	46.266	47.359	-6.611	53.970	AVERAGE
2	*	5185.700	1.143	92.855	93.998	N/A	N/A	AVERAGE

Engineer : Cryst	
Site : AC-5 (3m Semi-Anechoic Chamber)	**Time : 2009/09/07 - 16:04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
Probe : 9120D_499(1-18GHz) - HORIZONTAL	**Power : DC**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 2: Transmit at Channel 5180MHz by 802.11n(20MHz)(chain 0+1)**



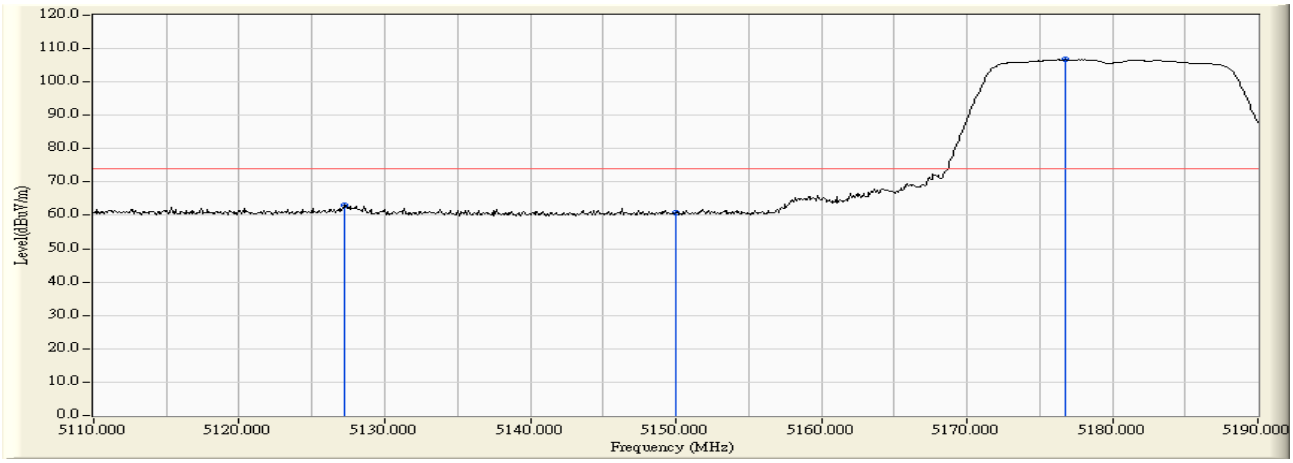
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5128.160	1.052	59.334	60.385	-13.585	73.970	PEAK
2		5150.000	1.093	56.766	57.859	-16.111	73.970	PEAK
3	*	5177.440	1.133	105.632	106.765	N/A	N/A	PEAK

Engineer : Cryst	
Site : AC-5 (3m Semi-Anechoic Chamber)	**Time : 2009/09/07 - 16:04**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
Probe : 9120D_499(1-18GHz) - HORIZONTAL	**Power : DC**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 2: Transmit at Channel 5180MHz by 802.11n(20MHz)(chain 0+1)**



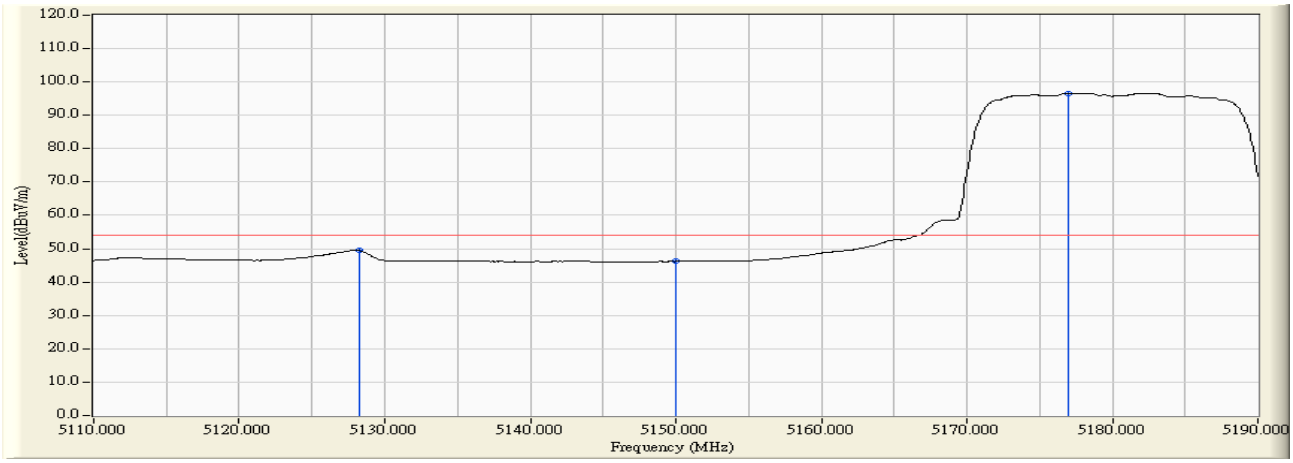
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5128.160	1.052	45.710	46.761	-7.209	53.970	AVERAGE
2		5150.000	1.093	43.643	44.736	-9.234	53.970	AVERAGE
3	*	5182.960	1.140	95.203	96.343	N/A	N/A	AVERAGE

Engineer : Cryst	
Site : AC-5 (3m Semi-Anechoic Chamber)	**Time : 2009/09/07 - 16:13**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
Probe : 9120D_499(1-18GHz) - VERTICAL	**Power : DC**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 2: Transmit at Channel 5180MHz by 802.11n(20MHz)(chain 0+1)**



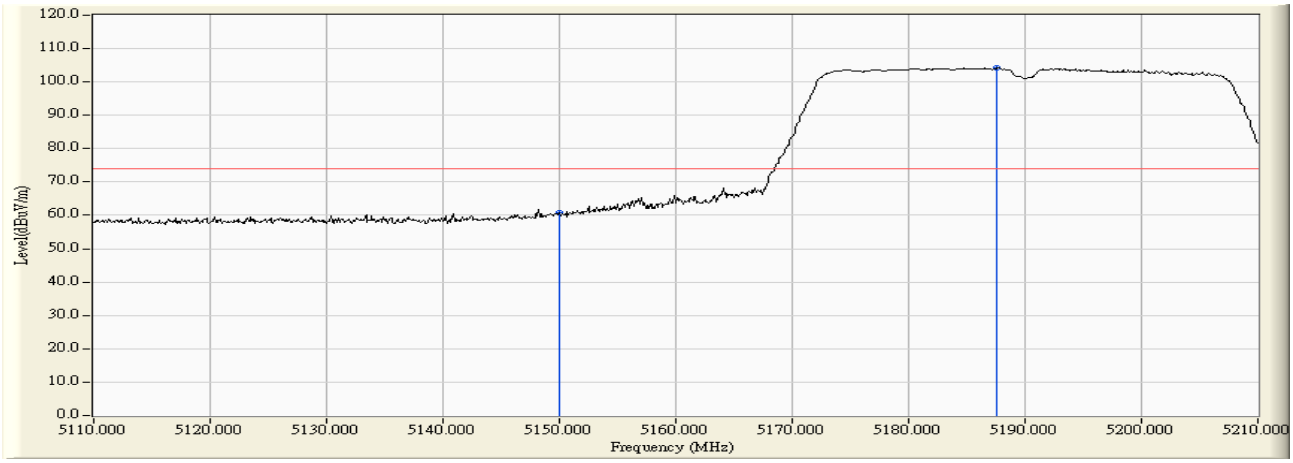
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5127.200	1.049	61.869	62.918	-11.052	73.970	PEAK
2		5150.000	1.093	59.628	60.721	-13.249	73.970	PEAK
3	*	5176.800	1.132	105.631	106.763	N/A	N/A	PEAK

Engineer : Cryst	
Site : AC-5 (3m Semi-Anechoic Chamber)	**Time : 2009/09/07 - 16:13**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
Probe : 9120D_499(1-18GHz) - VERTICAL	**Power : DC**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 2: Transmit at Channel 5180MHz by 802.11n(20MHz)(chain 0+1)**



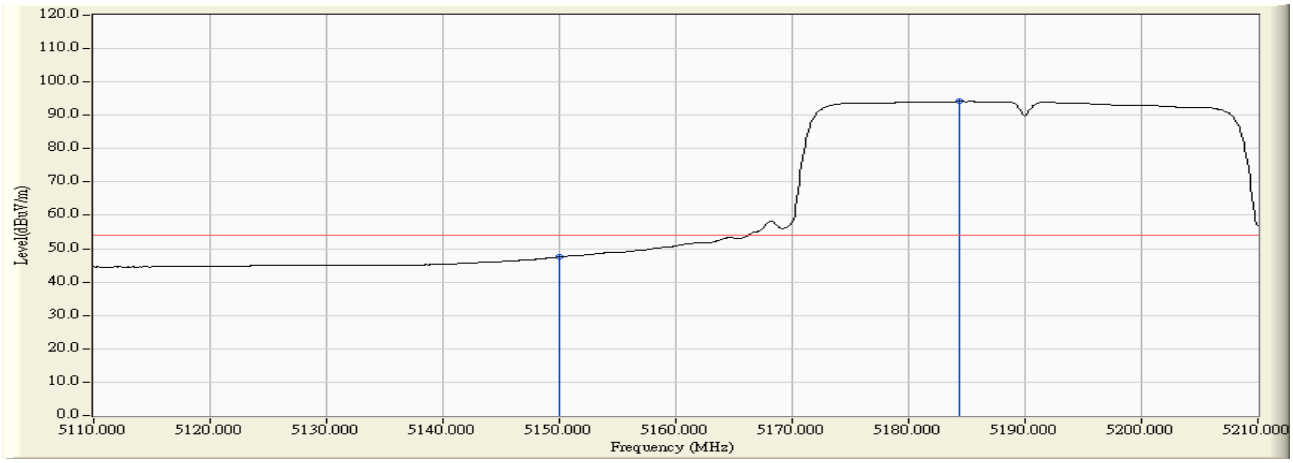
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5128.240	1.052	48.350	49.401	-4.569	53.970	AVERAGE
2		5150.000	1.093	45.092	46.185	-7.785	53.970	AVERAGE
3	*	5176.960	1.132	95.379	96.511	N/A	N/A	AVERAGE

Engineer : Cryst	
Site : AC-5 (3m Semi-Anechoic Chamber)	**Time : 2009/09/07 - 16:37**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
Probe : 9120D_499(1-18GHz) - HORIZONTAL	**Power : DC**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 3: Transmit at Channel 5190MHz by 802.11n(40MHz)(chain 0+1)**



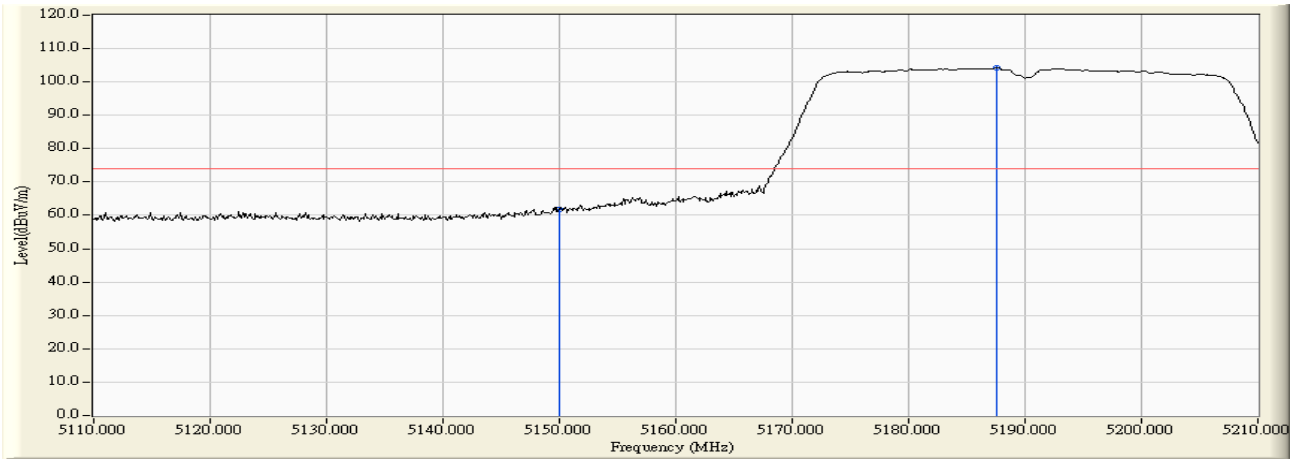
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5150.000	1.093	59.638	60.731	-13.239	73.970	PEAK
2	*	5187.600	1.144	103.081	104.226	N/A	N/A	PEAK

Engineer : Cryst	
Site : AC-5 (3m Semi-Anechoic Chamber)	**Time : 2009/09/07 - 16:37**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
Probe : 9120D_499(1-18GHz) - HORIZONTAL	**Power : DC**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 3: Transmit at Channel 5190MHz by 802.11n(40MHz)(chain 0+1)**



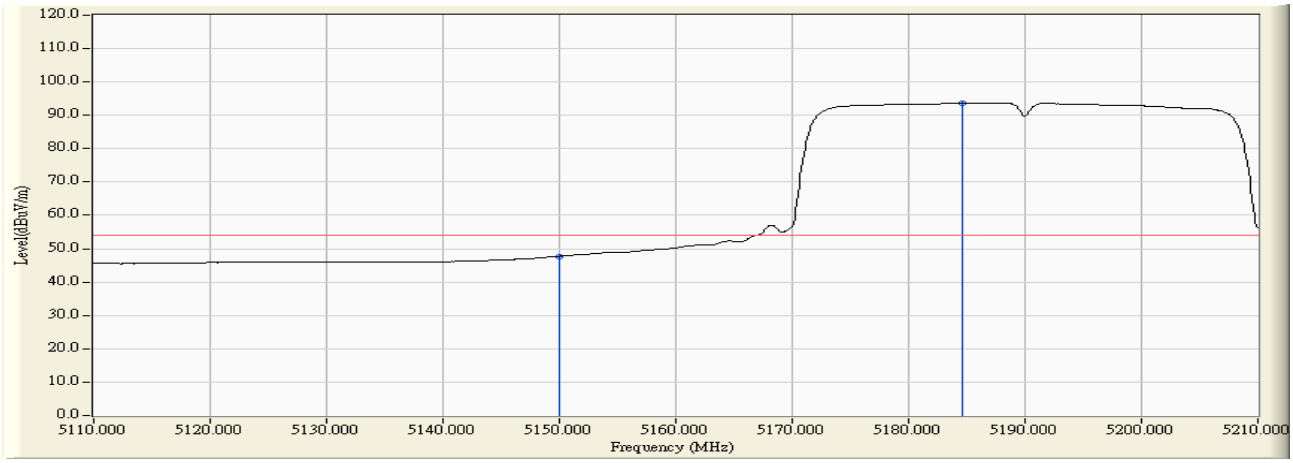
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5150.000	1.093	46.440	47.533	-6.437	53.970	AVERAGE
2	*	5184.400	1.142	92.994	94.136	N/A	N/A	AVERAGE

Engineer : Cryst	
Site : AC-5 (3m Semi-Anechoic Chamber)	**Time : 2009/09/07 - 16:35**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
Probe : 9120D_499(1-18GHz) - VERTICAL	**Power : DC**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 3: Transmit at Channel 5190MHz by 802.11n(40MHz)(chain 0+1)**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5150.000	1.093	60.773	61.866	-12.104	73.970	PEAK
2	*	5187.600	1.144	103.093	104.238	N/A	N/A	PEAK

Engineer : Cryst	
Site : AC-5 (3m Semi-Anechoic Chamber)	**Time : 2009/09/07 - 16:35**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
Probe : 9120D_499(1-18GHz) - VERTICAL	**Power : DC**
EUT : Flip Share TV(USB Dongle)	**Note : Mode 3: Transmit at Channel 5190MHz by 802.11n(40MHz)(chain 0+1)**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5150.000	1.093	46.659	47.752	-6.218	53.970	AVERAGE
2	*	5184.600	1.142	92.594	93.736	N/A	N/A	AVERAGE

11. Frequency Stability

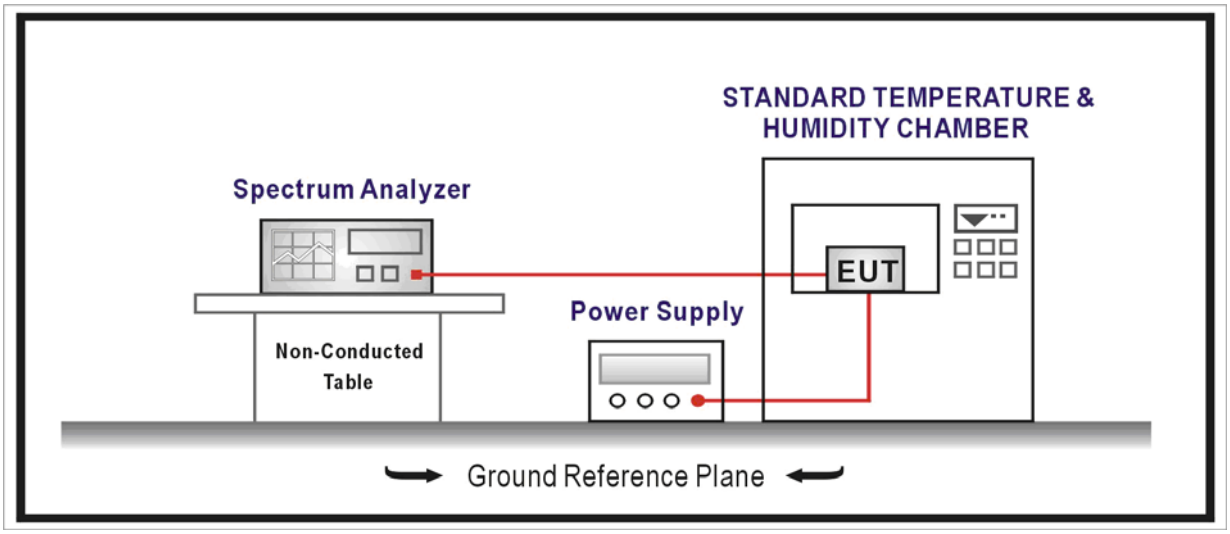
11.1. Test Equipment

Frequency Stability / AC-6

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2009/06/11
AC Power Supply	IDRC	CF-500TP	979422	2008/10/30
DC Power Supply	IDRC	CD-035-020PR	977272	2008/10/30
Programmable Temperature & Humidity Chamber	Gaoyu	TH-1P-B	WIT-05121302	2009/01/19
Coaxial Cable	Huber+Suhner	AC4-RF	09	2008/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH007	2009/03/30

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

Manufactures 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℃ 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℃ decreased per stage until the lowest temperature reached.

Frequency Stability Under Voltage Variations:

Set chamber temperature to 20℃. 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 (±15%) and endpoint, record the maximum frequency change.

11.5. Uncertainty

The measurement uncertainty is defined as ± 100 Hz

11.6. Test Result

Product	:	Flip Share TV (USB Dangle)
Test Item	:	Frequency Stability
Test Site	:	AC-6
Test Mode	:	Carrier Transmit

Operating Frequency: 5180MHz					
Temp (℃)	Voltage (AC)	Frequency Tolerance (ppm)			
		0 minutes	2 minutes	5 minutes	10 minutes
-20	102	2.13	2.13	2.19	2.18
	120	1.98	1.97	1.96	1.98
	138	2.22	2.21	2.21	2.14
20	102	2.13	2.13	2.19	2.18
	120	1.96	1.96	1.95	1.94
	138	2.21	2.21	2.21	2.14
55	102	2.13	2.13	2.19	2.18
	120	1.97	1.96	1.96	1.94
	138	2.22	2.20	2.18	2.16

12. Receiver Spurious Emission for Industry Canada RSS-Gen Requirement

12.1. Test Equipment

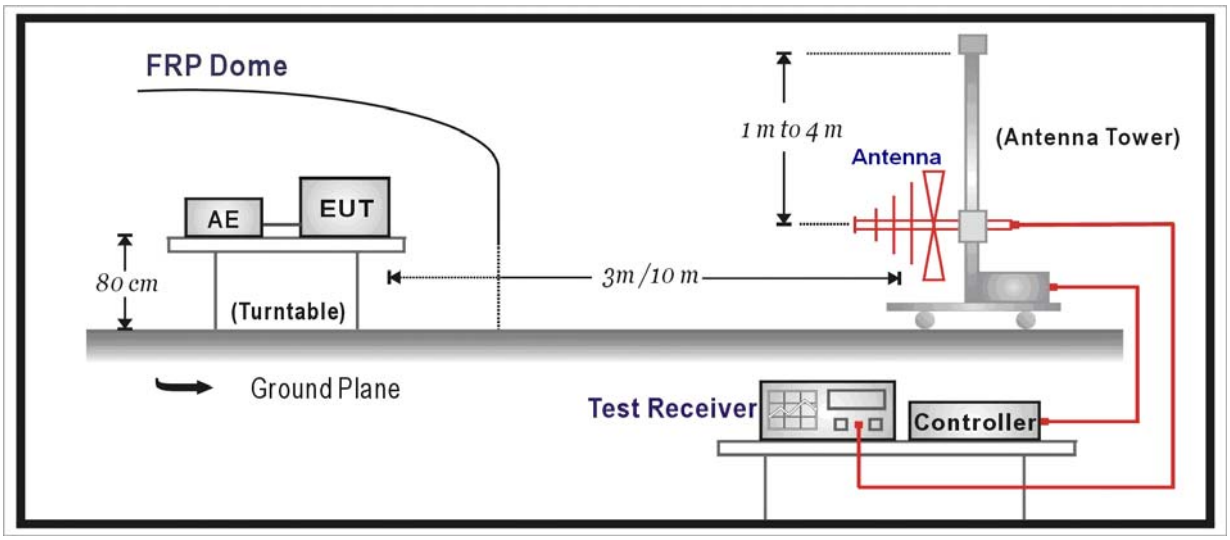
☒Radiated Emission / AC-2

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2009/06/11
EMI Test Receiver	R&S	ESCI	100573	2009/05/10
Preamplifier	Quietek	AP-025C	QT-AP003	2008/11/25
Preamplifier	Quietek	AP-180C	CHM-0602012	2008/11/25
Bilog Type Antenna	Schaffner	CBL6112B	2932	2008/11/22
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	496	2008/11/25
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2008/11/25
High-Pass Filter	Wainwright	WHKX7.0/18G-8SS	SN16	2009/03/03
Low-Pass Filter	Wainwright	WLKS4500-9SS	SN2	2009/03/03
50ohm Coaxial Switch	Anritsu	MP59B	6200447304	2008/11/25
Coaxial Cable	Huber+Suhner	AC2-C	04	2008/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH002	2009/03/31

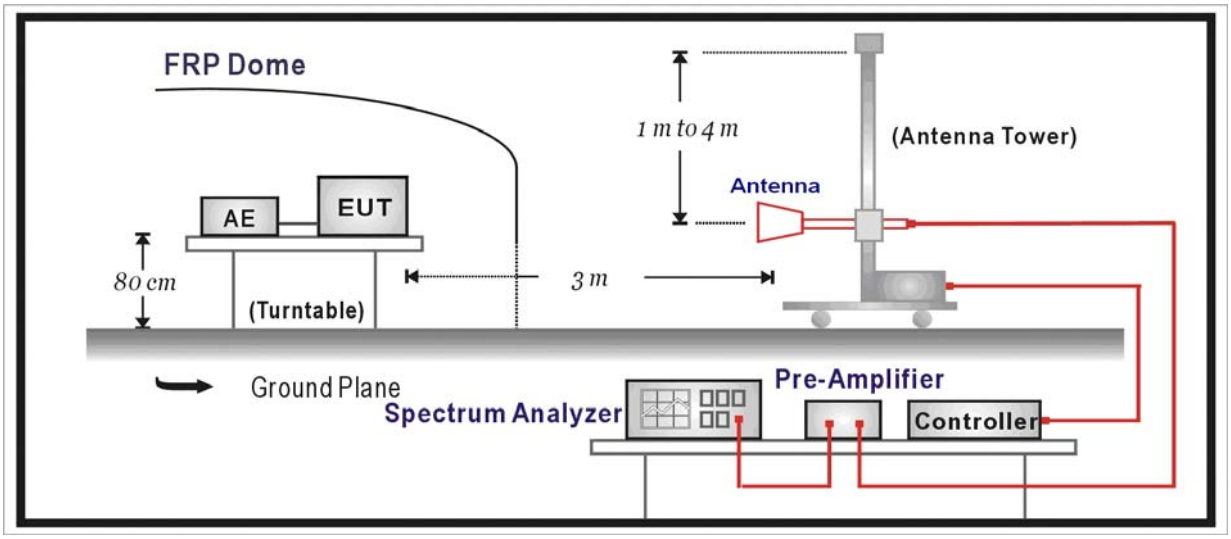
Note 1: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

12.2. Test Setup

Below 1GHz Test Setup:



Above 1GHz Test Setup:



12.3. Limit

FCC Part 15 Subpart B Paragraph 15.109		
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 antenna 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)

12.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003.

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 C63.4:2003 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 antenna will be bended down a little (as horn antenna has the narrow beamwidth) in order to keeping the antenna in the “cone of radiation” of EUT. The 3dB beamwidth is 60~10 degrees for H-plane and 90~10 degrees for E-plane.

12.5. Uncertainty

The measurement uncertainty above 1G is defined as ± 3.9 dB

below 1G is defined as ± 3.8 dB

12.6. 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.

No significant emissions measurable. Plots reported here represent the worse case emissions.

802.11n(20MHz) (Chain 0+1)

Channel	Frequency Range (MHz)	Measure Level (dBuV/m)	Detector Type	Limit (dBuV/m)
1	30~88	≤38	QP	40
	88~216	≤30	QP	43.5
	216~960	≤36	QP	46
	960~1000	≤38	QP	54
	1000~40000	≤49	PK	54 (Note 1)
6	30~88	≤38	QP	40
	88~216	≤30	QP	43.5
	216~960	≤36	QP	46
	960~1000	≤38	QP	54
	1000~40000	≤50	PK	54 (Note 1)
11	30~88	≤38	QP	40
	88~216	≤30	QP	43.5
	216~960	≤36	QP	46
	960~1000	≤38	QP	54
	1000~40000	≤51	PK	54 (Note 1)
36	30~88	≤38	QP	40
	88~216	≤30	QP	43.5
	216~960	≤36	QP	46
	960~1000	≤38	QP	54
	1000~40000	≤50	PK	54 (Note 1)
40	30~88	≤38	QP	40
	88~216	≤30	QP	43.5
	216~960	≤36	QP	46
	960~1000	≤38	QP	54
	1000~40000	≤49	PK	54 (Note 1)

48	30~88	≤38	QP	40
	88~216	≤30	QP	43.5
	216~960	≤36	QP	46
	960~1000	≤38	QP	54
	1000~40000	≤46	PK	54 (Note 1)
149	30~88	≤38	QP	40
	88~216	≤30	QP	43.5
	216~960	≤36	QP	46
	960~1000	≤38	QP	54
	1000~40000	≤46	PK	54 (Note 1)
157	30~88	≤38	QP	40
	88~216	≤30	QP	43.5
	216~960	≤36	QP	46
	960~1000	≤38	QP	54
	1000~40000	≤47	PK	54 (Note 1)
165	30~88	≤38	QP	40
	88~216	≤30	QP	43.5
	216~960	≤36	QP	46
	960~1000	≤38	QP	54
	1000~40000	≤47	PK	54 (Note 1)

Note 1: 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.

802.11n(40MHz) (Chain 0+1)

Channel	Frequency Range (MHz)	Measure Level (dBuV/m)	Detector Type	Limit (dBuV/m)
3	30~88	≤38	QP	40
	88~216	≤30	QP	43.5
	216~960	≤36	QP	46
	960~1000	≤38	QP	54
	1000~40000	≤53	PK	54 (Note 1)
6	30~88	≤38	QP	40
	88~216	≤30	QP	43.5
	216~960	≤36	QP	46
	960~1000	≤38	QP	54
	1000~40000	≤54	PK	54 (Note 1)
9	30~88	≤38	QP	40
	88~216	≤30	QP	43.5
	216~960	≤36	QP	46
	960~1000	≤38	QP	54
	1000~40000	≤53	PK	54 (Note 1)
38	30~88	≤38	QP	40
	88~216	≤30	QP	43.5
	216~960	≤36	QP	46
	960~1000	≤38	QP	54
	1000~40000	≤52	PK	54 (Note 1)
46	30~88	≤38	QP	40
	88~216	≤30	QP	43.5
	216~960	≤36	QP	46
	960~1000	≤38	QP	54
	1000~40000	≤53	PK	54 (Note 1)
151	30~88	≤37	QP	40
	88~216	≤29	QP	43.5
	216~960	≤36	QP	46
	960~1000	≤38	QP	54
	1000~40000	≤51	PK	54 (Note 1)
159	30~88	≤38	QP	40
	88~216	≤30	QP	43.5
	216~960	≤36	QP	46
	960~1000	≤38	QP	54

	1000~40000	≤54	PK	54 (Note 1)

Note 1: 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.