FCC TEST REPORT

According to

FCC Rules and Regulations

Part 15 Subpart E,

and Canada RSS-210 Issue 7

Applicant	:	Netgear, Inc.
Address	:	350 East Plumeria Drive San Jose, CA 95134 USA
Equipment	:	RangeMax Dual Band Wireless-N USB Adapter
Model No.	:	WNDA3100v2
FCC ID	:	PY310100130
IC ID	:	4054A-09200107
Trade Name	:	NETGEAR

Laboratory accreditation

Testing Laboratory
1332

- The test result refers exclusively to the test presented test model / sample.,
- The test result does not include DFS test for 5250 ~ 5350 MHz.
- Without written approval of **Cerpass Technology Corp.,** the test report shall not be reproduced except in full.
- The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.

CONTENTS

CERTIFICATE OF COMPLIANCE

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FCC ID	:	PY310100130
IC ID	:	4054A-09200107

I **HEREBY** CERTIFY THAT :

The measurements shown in this test report were made in accordance with the procedures given in **ANSI C63.4** The equipment was ***passed*** the test performed according to **FCC Rules and Regulations Part 15 Subpart E (2008).**

The test was carried out on Jan. 19, 2010 at Cerpass Technology Corp.

Signature

Jonson Lee

EMC/RF B.U. Senior Manager

1. Report of Measurements and Examinations

1.1. List of Measurements and Examinations

For Frequency 5.15GHz ~ 5.25GHZ

Applied Standard : FCC Part 15, Subpart E (Section 15.407), Canada RSS-210			
FCC Rule	Canada Rule	. Description of Test	Result
15.407(b)(5)	Item 9	. Conducted Emission	Pass
15.407(b/1/2/3)(b)(5)	A9.3	. Radiated Emission	Pass
15.407(a/1/2/3)	A9.2(1)	. Peak Transmit Power	Pass
15.407(a)(6)	---	. Peak Power Excursion	Pass
15.407(a/1/2/3)	A9.2(1)	. Peak Power Spectral Density	Pass
15.407(g)	---	. Frequency Stability	Pass

2. Test Configuration of Equipment under Test

2.1. Feature of Equipment under Test

Antenna	2 integrated internal wireless antennas
Standards	802.11a, 802.11n draft 2.0, 802.11g or 802.11b
Radio Data Rate	1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48, 54, 08, 140, 246 and 300Mbps (Auto Rate Sensing)
Frequency	2.4GHz to 2.5GHz CCK and OFDM Modulation ; 5GHz
Power	5V Bus powered
Bus interface	USB 2.0
Provided drivers	Microsoft Vista, Windows XP
Operating Environment	Operating temperature: 0 to 40℃
Encryption	40-bit (also called 64-bit) and 128-bit WEP data encryption and WPA-PSK
Warranty	Limited 1-year warranty
Smart Wizard	Enabled
Wireless	
Wireless Communication	Enabled
Wireless Network Name (SSID)	Any (will connect to first wireless network that responds)
Security	Disabled
Network Type	Infrastructure
Transmission Speed	Auto

2.2. Characteristics of Device

The EUT is a 2.4GHz and 5GHz RangeMax Dual Band Wireless-N USB Adapter. It conforms to the IEEE 802.11a/b/g/n protocol and operates in the unlicensed ISM and UNII Band of 2.4GHz and 5GHz.

Band of 2.4GHz and 5GHz

RF Chain	2T2R
Frequency Range	IEEE 802.11b/g/n: 2412MHz~2462MHz IEEE 802.11/an: 5150MHz~5250MHz, 5250MHz~5350MHz, 5470MHz~5725MHz, 5725MHz~5825MHz
Channel Spacing	5MHz

Band of 2.4GHz and 5GHz

RF Chain	1T2R
Frequency Range	IEEE 802.11b/g/n: 2412MHz~2462MHz IEEE 802.11/an: 5150MHz~5250MHz, 5250MHz~5350MHz, 5470MHz~5725MHz, 5725MHz~5825MHz
Channel Spacing	5MHz

2.3. Carrier Frequency of Channels

802.11a, 802.11an HT20 (5150 ~ 5250MHz)

Channel	Frequency(MHz)	Channel	Frequency(MHz)
36	5180	48	5240
44	5220	---	---

802.11a, 802.11an HT20 (5250 ~ 5350 MHz)

Channel	Frequency(MHz)	Channel	Frequency(MHz)
56	5280	64	5320
60	5300	---	---

802.11a, 802.11an HT20 (5470 ~ 5725 MHz)

Channel	Frequency(MHz)	Channel	Frequency(MHz)
100	5500	140	5700
120	5600	---	---

802.11 an HT40 (5150 ~ 5250MHz)

Channel	Frequency(MHz)	Channel	Frequency(MHz)
38	5190	46	5230
42	5210	---	---

802.11 an HT40 (5250 ~ 5350MHz)

Channel	Frequency(MHz)	Channel	Frequency(MHz)
54	5270	62	5310
58	5290	---	---

802.11 an HT40 (5470 ~ 5725MHz)

Channel	Frequency(MHz)	Channel	Frequency(MHz)
102	5510	134	5670
118	5590	---	---

2.4. Test Mode and Test Software

a. During testing, the interface cables and equipment positions were varied according to ANSI C63.4.

b. The complete test system included remote workstation, PC, Monitor, Mouse, Keyboard, Modem, Printer and EUT for EMI test. The remote workstation included Notebook.

c. An executive program, “Ping.exe” under WIN XP, which transmits and receives data to the remote workstation through Wireless.

d. The following test modes were performed for test:

Test Mode 1: EUT with USB cable

- 802.11a/an, HT20: CH 36: 5180MHz, CH 44: 5220MHz, CH 48: 5240MHz
- 802.11a/an, HT20: CH 56: 5280MHz, CH 60: 5300MHz, CH 64: 5320MHz
- 802.11a/an, HT20: CH 100: 5500MHz, CH 120: 5600MHz, CH 140: 5700MHz
- 802.11an, HT40: CH 38: 5190MHz, CH 46: 5230MHz
- 802.11an, HT40: CH 54: 5270MHz, CH 62: 5310MHz
- 802.11an, HT40: CH 102: 5510MHz, CH 118: 5590MHz, CH 134: 5670MHz

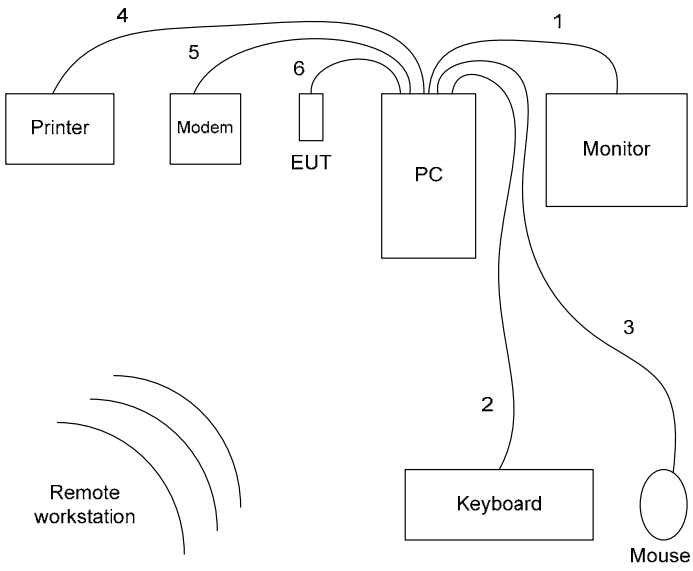
2.5. Description of Test System

Device	Manufacturer	Model No.	Description
PC	IBM	IGV	Power Cable, Unshielding 1.8 m
Monitor	SlimAGE	510A	Data Cable, VGA Shielding 1.35 m Power Cable, Adapter Unshielding 1.8 m
Keyboard	IBM	KB-0225	Data Cable, PS2 Shielding 1.35 m
Mouse	IBM	MO28VO	Data Cable, USB Shielding 1.85 m
Modem	ACEXX	DM-1414	Data Cable, RS232 Unshielding 1.35 m Power Cable, Adapter Unshielding 1.8 m
Printer	HP	Desk Jet 400	Data Cable, PRINT Unshielding 1.6 m Power Cable, Adapter Unshielding 1.8 m
Notebook (Remote Workstation)	DELL	PP10L	Power Cable, Adapter Unshielding 1.8 m

Use Cable:

Cable	Quantity	Description
USB	1	Shielding, 1.0m

2.6. Connection Diagram of Test System



1. The VGA cable is connected from PC to the Monitor.
2. The PS/2 cable is connected from PC to the Keyboard.
3. The USB cable is connected from PC to the Mouse.
4. The Print cable is connected from PC to the Printer.
5. The RS232 cable is connected from PC to the Modem.
6. The USB cable is connected from PC to the EUT.

＊ The EUT keeps to transmit and receive data via Notebook by Wireless.

2.7. General Information of Test

Test Site :	Cerpass Technology Corp. 2F-11, No. 3, YuanQu St. NanKang, Taipei City 115 Taiwan R.O.C.
Test Site Location (OATS1-SD):	No.7-2, Moshihkeng, Fongtian Village, Shihding Township, Taipei City 223, Taiwan, R.O.C.
FCC Registration Number :	TW1049, TW1056, 488071, 982971
IC Registration Number :	4934C-1, 4934D-1
VCCI Registration Number :	T-543 for Telecommunication Test C-3328 for Conducted emission test R-3013 for Radiated emission test G-97 for radiated disturbance above 1GHz
Test Voltage:	AC 120V/ 60Hz
Test in Compliance with:	ANSI C63.4-2003 FCC Part 15 Subpart E Canada RSS-210
Frequency Range Investigated:	AC Power Conducted Emission : from 150kHz to 30 MHz Radiated and conducted Emission: from 30 MHz to 40 GHz
Test Distance:	The test distance of radiated emission from antenna to EUT is 3 M.

2.8. History of this test report

■ ORIGINAL.

☐ Additional attachment as following record:

Attachment No.	Issue Date	Description

3. Antenna Requirements

3.1. Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And according to FCC 47 CFR Section 15.407 (a), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

3.2. Antenna Construction and Directional Gain

Antenna R: PCB Antenna, 1.9 dBi (5GHz Band)
Antenna L: PCB Antenna, 2.5 dBi (5GHz Band)

Note:

1. 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. In addition, the peak power spectral density shall not exceed 4 dBm in any 1-MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

2. 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. In addition, the peak power spectral density shall not exceed 17 dBm in any 1-MHz band.
   If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
   However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain up to 23 dBi without any corresponding reduction in the transmitter peak output power or peak power spectral density.
   For fixed, point-to-point U-NII transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in peak transmitter power and peak power spectral density for each 1 dB of antenna gain in excess of 23 dBi would be required.
   Fixed, point-to-point operations exclude the use of point-tomultipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

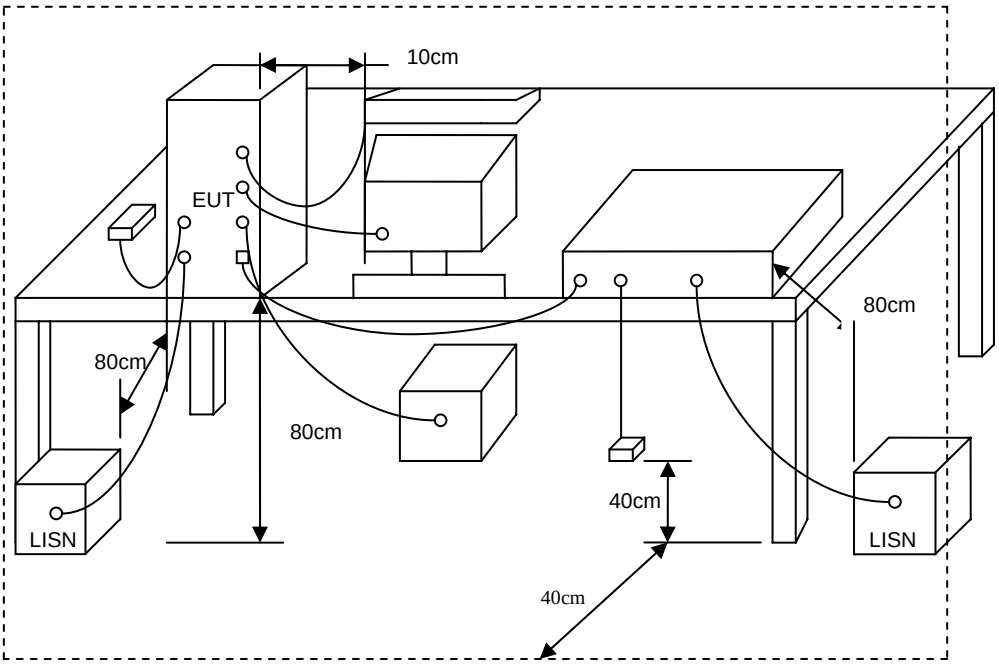
4. Test of Conducted Emission

Conducted Emissions were measured from 150 kHz to 30 MHz with a bandwidth of 9 KHz on the 120 VAC power and return leads of the EUT according to the methods defined in ANSI C63.4-2003 Section 3.1. The EUT was placed on a nonmetallic stand in a shielded room 0.8 meters above the ground plane as shown in section 1.3.1. The interface cables and equipment positioning were varied within limits of reasonable applications to determine the position produced maximum conducted emissions.

4.1. Test Procedures

a. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
b. Connect EUT to the power mains through a line impedance stabilization network (LISN).
c. All the support units are connecting to the other LISN.
d. The LISN provides 50 ohm coupling impedance for the measuring instrument.
e. The FCC states that a 50 ohm, 50 micro-Henry LISN should be used.
f. Both sides of AC line were checked for maximum conducted interference.
g. The frequency range from 150 kHz to 30 MHz was searched.
h. Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

4.2. Typical Test Setup Layout of Conducted Emission



4.3. Conducted Emission Requirement

Conducted Emissions were measured from 150 kHz to 30 MHz with a bandwidth of 9 KHz on the 120 VAC power and return leads of the EUT according to the methods defined in ANSI C63.4-2003 Section 3.1. The EUT was placed on a nonmetallic stand in a shielded room 0.8 meters above the ground plane as shown in section 2.2. The interface cables and equipment positioning were varied within limits of reasonable applications to determine the position produced maximum conducted emissions.

Frequency (MHz)	**Quasi Peak (dB μ V)**	**Average (dB μ V)**
0.15 – 0.5	66-56*	56-46*
0.5 – 5.0	56	46
5.0 – 30.0	60	50

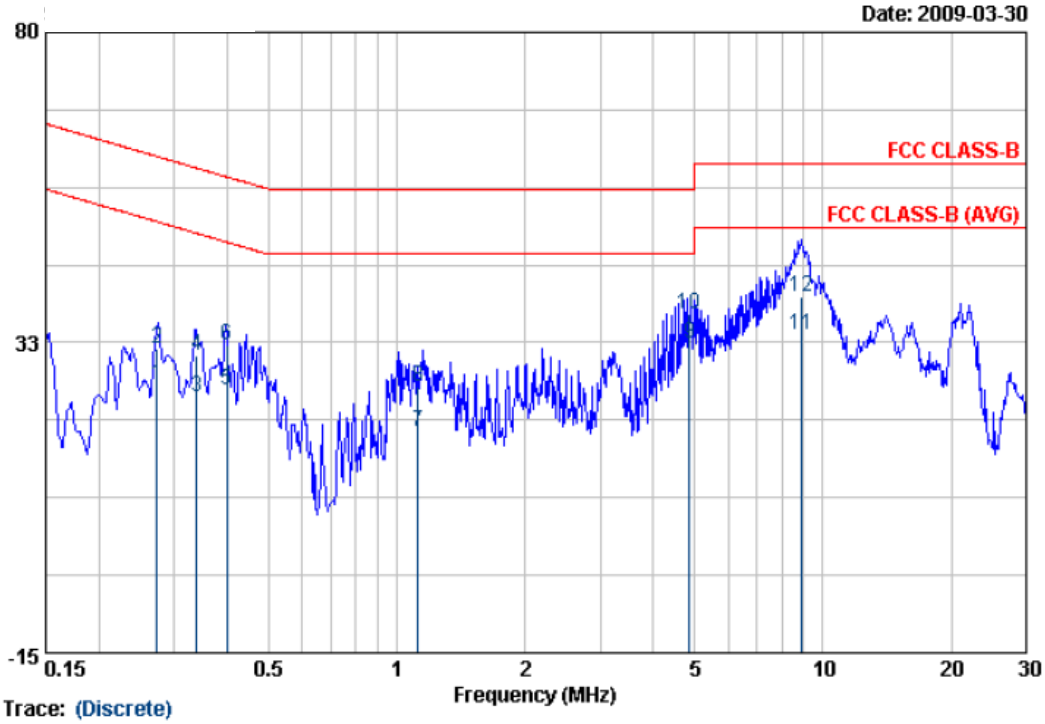
*Decreases with the logarithm of the frequency.

4.4. Measurement Equipment

Instrument/Ancillary	Model No.	Manufacturer	Serial No.	Calibration Date	Valid Date.
EMI Receiver	R&S	ESCI	100443	2009/12/19	2010/12/17
LISN	MESS TEC	NNB-2/16Z	02/10191	2009/05/15	2010/05/14
LISN	ROLF HEINE	NNB-2/16Z	03/10058	2009/04/18	2010/04/17

4.5. Test Result and Data

Power	:	AC 120V	Pol/Phase	:	LINE
Test Mode	:	802.11a, CH36	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	52 %



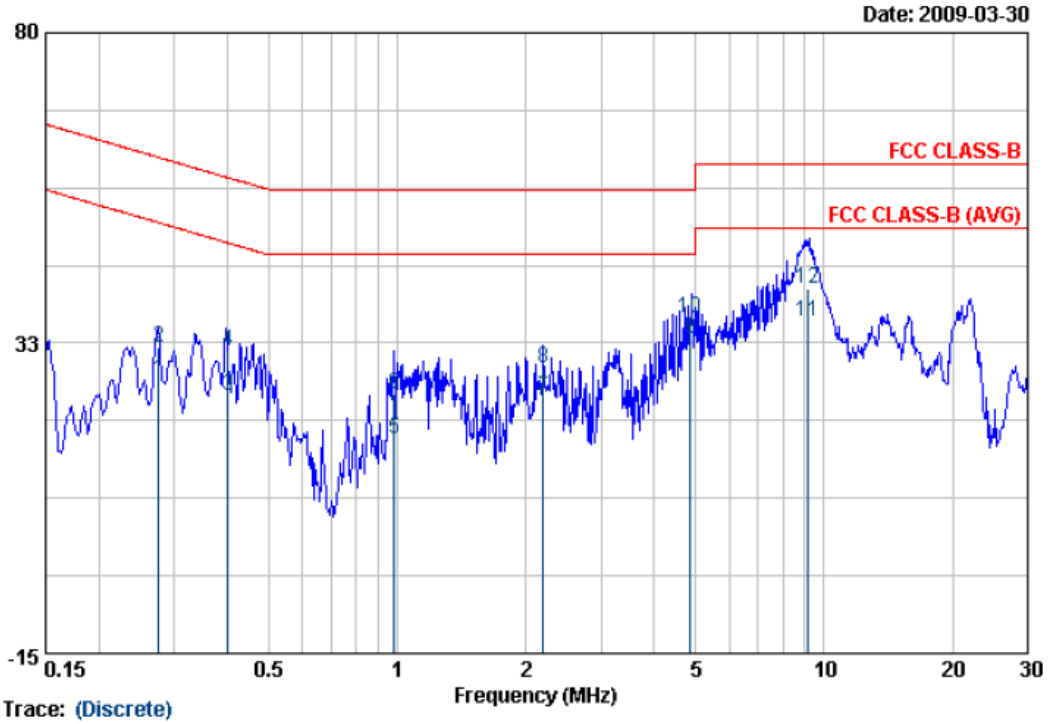
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	
1	0.27390	25.79	0.11	25.90	51.00	-25.10	AVERAGE
2	0.27390	31.45	0.11	31.56	61.00	-29.44	QP
3	0.33840	24.09	0.12	24.21	49.24	-25.03	AVERAGE
4	0.33840	30.34	0.12	30.46	59.24	-28.78	QP
5	0.39950	25.18	0.11	25.29	47.86	-22.57	AVERAGE
6	0.39950	31.97	0.11	32.08	57.86	-25.78	QP
7	1.121	18.66	0.17	18.83	46.00	-27.17	AVERAGE
8	1.121	25.56	0.17	25.73	56.00	-30.27	QP
9	4.869	31.94	0.34	32.28	46.00	-13.72	AVERAGE
10	4.869	36.44	0.34	36.78	56.00	-19.22	QP
11	8.880	33.37	0.37	33.74	50.00	-16.26	AVERAGE
12	8.880	39.13	0.37	39.50	60.00	-20.50	QP

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. According to technical experiences,all spurious emission of 802.11an HT20 mode at channel 149,157,165 are almost the same below 1GHz,so that the channel 149 was chosen as representative in final test.
5. The data is worse case.

Power	:	AC 120V	Pol/Phase	:	NEUTRAL
Test Mode	:	802.11a, CH36	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	52 %



Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	
1	0.27610	26.75	0.13	26.88	50.93	-24.05	AVERAGE
2	0.27610	31.72	0.13	31.85	60.93	-29.08	QP
3	0.40050	24.27	0.14	24.41	47.84	-23.43	AVERAGE
4	0.40050	31.16	0.14	31.30	57.84	-26.54	QP
5	0.98220	17.60	0.18	17.78	46.00	-28.22	AVERAGE
6	0.98220	24.55	0.18	24.73	56.00	-31.27	QP
7	2.195	23.89	0.24	24.13	46.00	-21.87	AVERAGE
8	2.195	28.35	0.24	28.59	56.00	-27.41	QP
9	4.869	32.91	0.33	33.24	46.00	-12.76	AVERAGE
10	4.869	35.89	0.33	36.22	56.00	-19.78	QP
11	9.186	35.32	0.41	35.73	50.00	-14.27	AVERAGE
12	9.186	40.55	0.41	40.96	60.00	-19.04	QP

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
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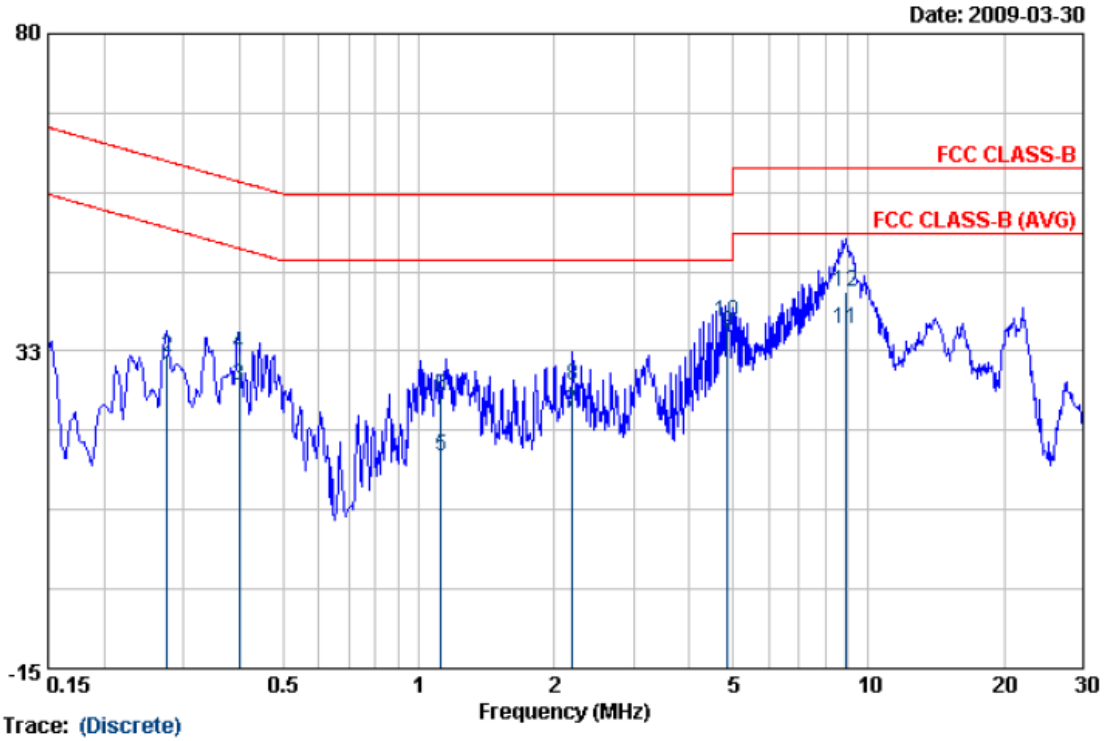
5. The data is worse case.

Power	:	AC 120V	Pol/Phase	:	LINE
Test Mode	:	802.11an HT20, CH36	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	52 %



Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	
1	0.27587	28.56	0.11	28.67	50.94	-22.27	Average
2	0.27587	31.56	0.11	31.67	60.94	-29.27	QP
3	0.39950	27.18	0.11	27.29	47.86	-20.57	AVERAGE
4	0.39950	31.97	0.11	32.08	57.86	-25.78	QP
5	1.121	16.66	0.17	16.83	46.00	-29.17	AVERAGE
6	1.121	25.56	0.17	25.73	56.00	-30.27	QP
7	2.201	23.23	0.24	23.47	46.00	-22.53	Average
8	2.201	27.23	0.24	27.47	56.00	-28.53	QP
9	4.869	34.94	0.34	35.28	46.00	-10.72	AVERAGE
10	4.869	36.44	0.34	36.78	56.00	-19.22	QP
11	8.880	35.37	0.37	35.74	50.00	-14.26	AVERAGE
12	8.880	41.13	0.37	41.50	60.00	-18.50	QP

Notes:

1. Result = Read Value + Factor
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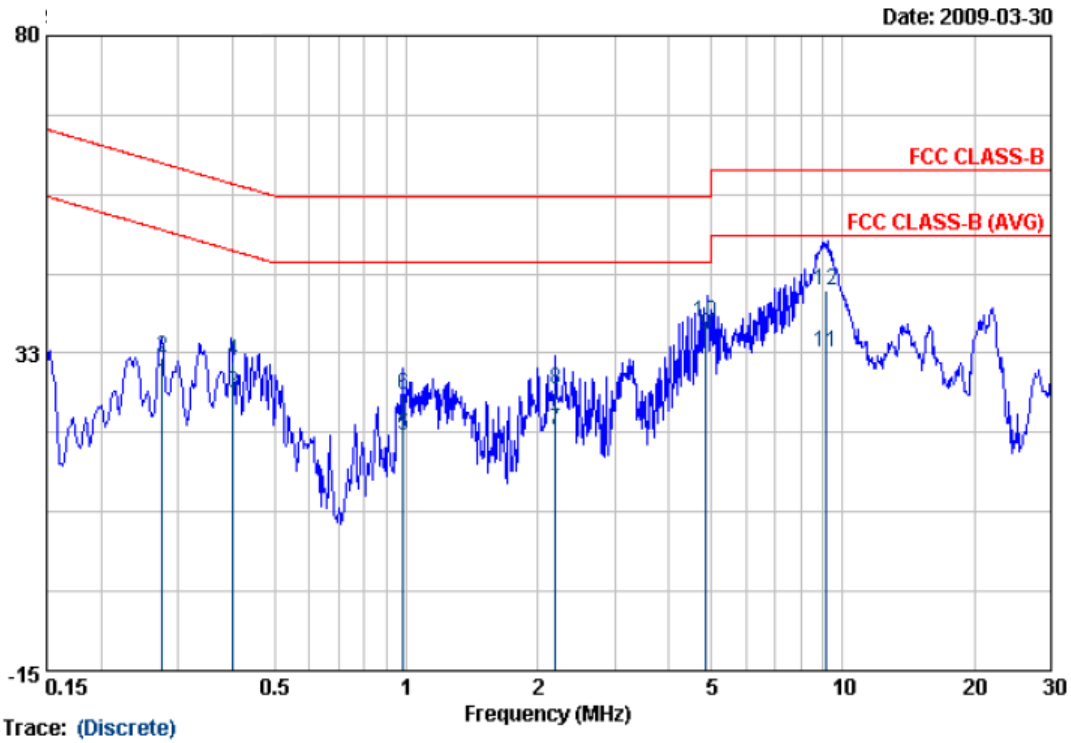
Power	:	AC 120V	Pol/Phase	:	NEUTRAL
Test Mode	:	802.11an HT20, CH36	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	52 %



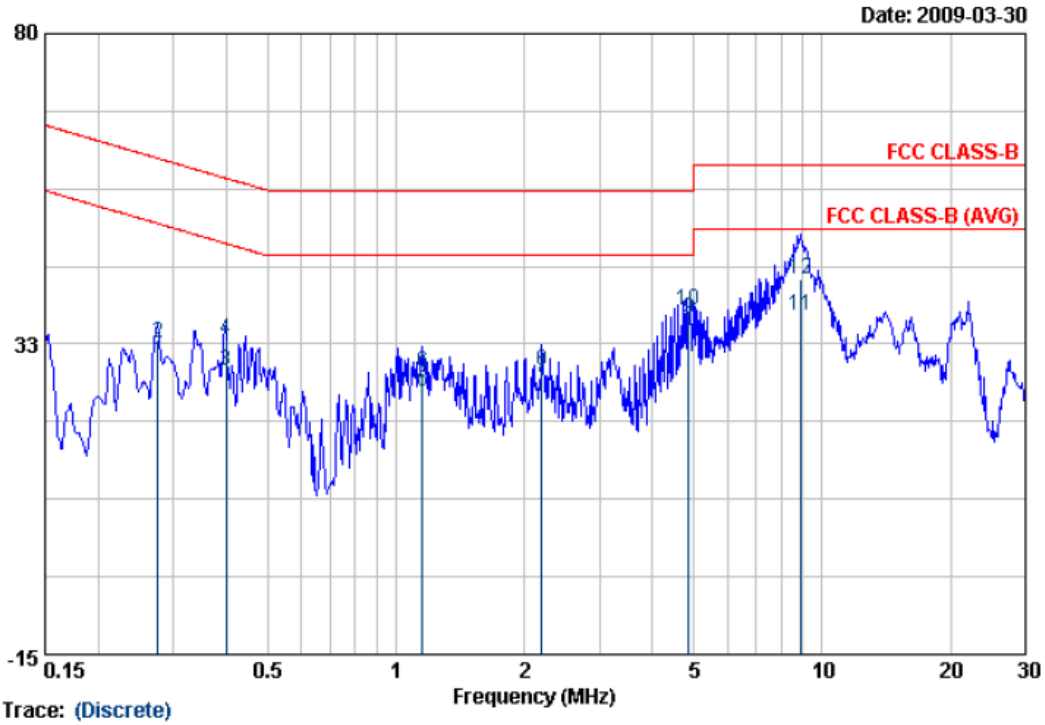
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	
1	0.27610	27.75	0.13	27.88	50.93	-23.05	AVERAGE
2	0.27610	31.72	0.13	31.85	60.93	-29.08	QP
3	0.40050	26.27	0.14	26.41	47.84	-21.43	AVERAGE
4	0.40050	31.16	0.14	31.30	57.84	-26.54	QP
5	0.98391	20.00	0.18	20.18	46.00	-25.82	Average
6	0.98391	26.00	0.18	26.18	56.00	-29.82	QP
7	2.201	20.83	0.24	21.07	46.00	-24.93	Average
8	2.201	26.83	0.24	27.07	56.00	-28.93	QP
9	4.869	34.91	0.33	35.24	46.00	-10.76	AVERAGE
10	4.869	36.89	0.33	37.22	56.00	-18.78	QP
11	9.186	32.32	0.41	32.73	50.00	-17.27	AVERAGE
12	9.186	41.55	0.41	41.96	60.00	-18.04	QP

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. According to technical experiences,all spurious emission of 802.11an HT20 mode at channel 149,157,165 are almost the same below 1GHz,so that the channel 149 was chosen as representative in final test.
5. The data is worse case.

Power	:	AC 120V	Pol/Phase	:	LINE
Test Mode	:	802.11an HT40, CH38	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	52 %



Trace: (Discrete)

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	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	
1	0.27587	29.56	0.11	29.67	50.94	-21.27	Average
2	0.27587	32.56	0.11	32.67	60.94	-28.27	QP
3	0.39950	28.18	0.11	28.29	47.86	-19.57	AVERAGE
4	0.39950	32.97	0.11	33.08	57.86	-24.78	QP
5	1.153	25.01	0.17	25.18	46.00	-20.82	Average
6	1.153	28.01	0.17	28.18	56.00	-27.82	QP
7	2.201	27.23	0.24	27.47	46.00	-18.53	Average
8	2.201	28.23	0.24	28.47	56.00	-27.53	QP
9	4.869	35.94	0.34	36.28	46.00	-9.72	AVERAGE
10	4.869	37.44	0.34	37.78	56.00	-18.22	QP
11	8.880	36.37	0.37	36.74	50.00	-13.26	AVERAGE
12	8.880	42.13	0.37	42.50	60.00	-17.50	QP

Notes:

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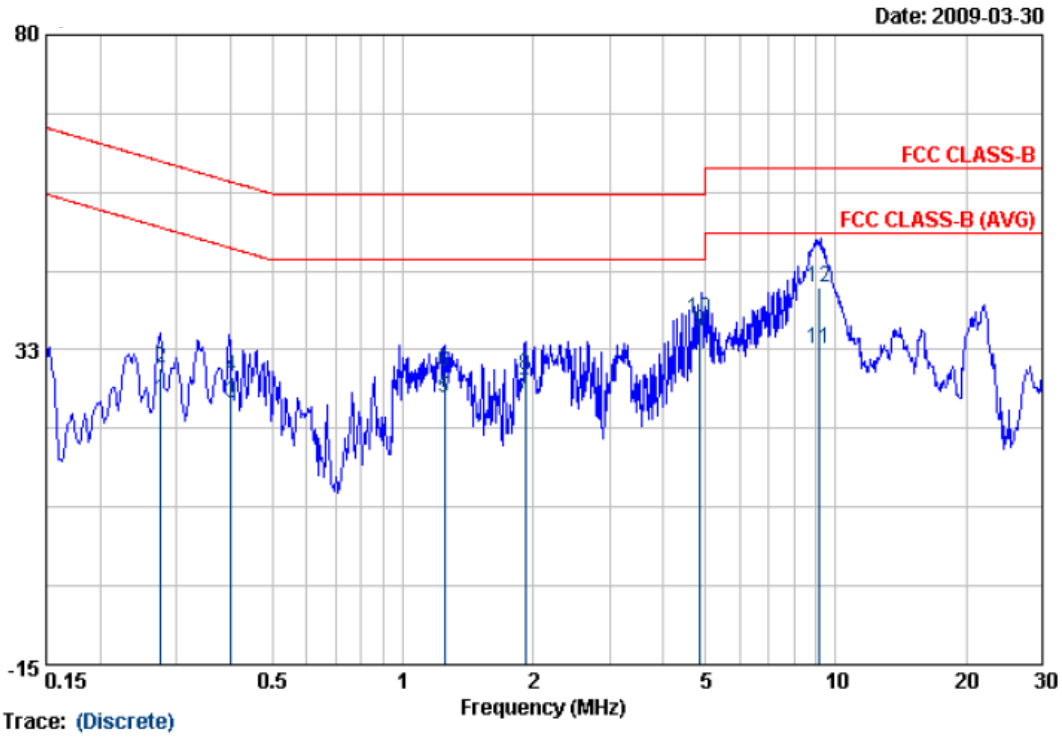
Power	:	AC 120V	Pol/Phase	:	NEUTRAL
Test Mode	:	802.11an HT40, CH38	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	52 %



Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	
1	0.27610	24.75	0.13	24.88	50.93	-26.05	AVERAGE
2	0.27610	29.72	0.13	29.85	60.93	-31.08	QP
3	0.40050	24.27	0.14	24.41	47.84	-23.43	AVERAGE
4	0.40050	28.16	0.14	28.30	57.84	-29.54	QP
5	1.249	25.00	0.20	25.20	46.00	-20.80	Average
6	1.249	29.00	0.20	29.20	56.00	-26.80	QP
7	1.918	25.51	0.22	25.73	46.00	-20.27	Average
8	1.918	28.51	0.22	28.73	56.00	-27.27	QP
9	4.869	34.91	0.33	35.24	46.00	-10.76	AVERAGE
10	4.869	36.89	0.33	37.22	56.00	-18.78	QP
11	9.186	32.32	0.41	32.73	50.00	-17.27	AVERAGE
12	9.186	41.55	0.41	41.96	60.00	-18.04	QP

Notes:

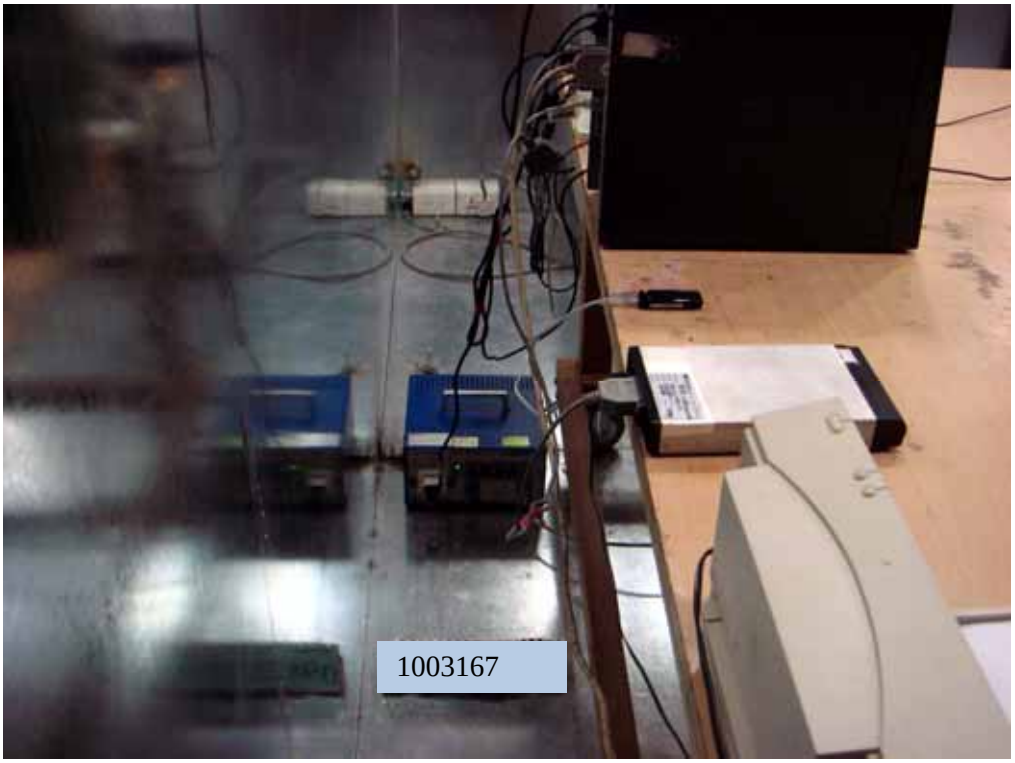
1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. According to technical experiences,all spurious emission of 802.11an HT20 mode at channel 149,157,165 are almost the same below 1GHz,so that the channel 149 was chosen as representative in final test.
5. The data is worse case.

Test engineer: Ben

4.6. Test Photographs

Front View

Rear View



5. Test of Radiated Emission

Radiated emissions from 30 MHz to 40 GHz were measured according to the methods defines in ANSI C63.4-2003. The EUT was placed, 0.8 meter above the ground plane, as shown in section 1.4.2. The interface cables and equipment positions were varied within limits of reasonable applications to determine the positions producing maximum radiated emissions

5.1. Test Procedures

a. The EUT was placed on a rotatable table top 0.8 meter above ground.

b. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.

c. The table was rotated 360 degrees to determine the position of the highest radiation.

d. The antenna is a broadband antenna and its height is varied between one meter and four meters above ground to find the maximum value of the field strength both horizontal polarization and vertical polarization of the antenna are set to make the measurement.

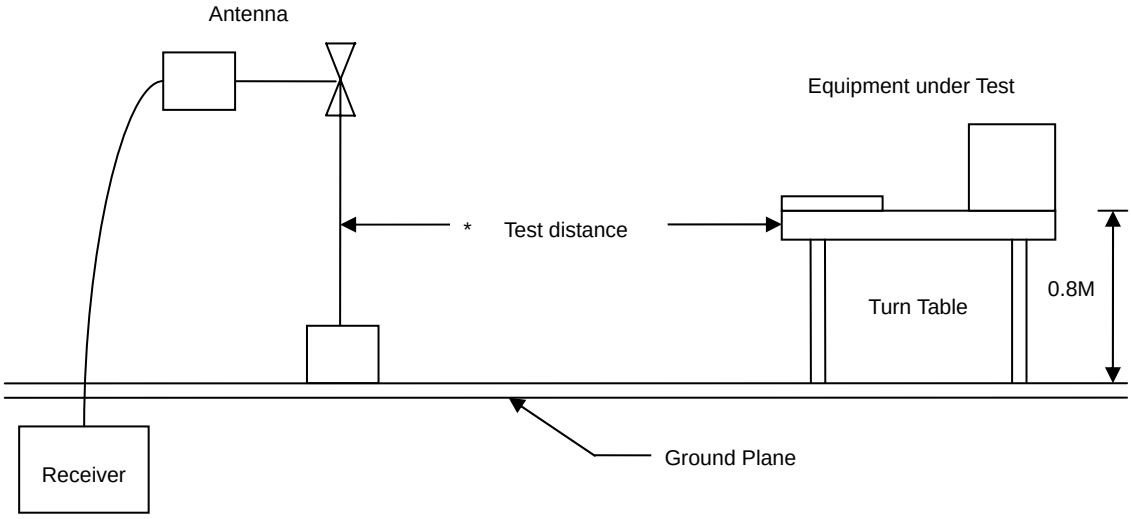
e. For each suspected emission the EUT was arranged to its worst case and then tune the antenna tower (from 1 M to 4 M) and turn table (from 0 degree to 360 degrees) to find the maximum reading.

f. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function and specified bandwidth with Maximum Hold Mode.

g. If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method and reported.

h. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

5.2. Typical Test Setup Layout of Radiated Emission



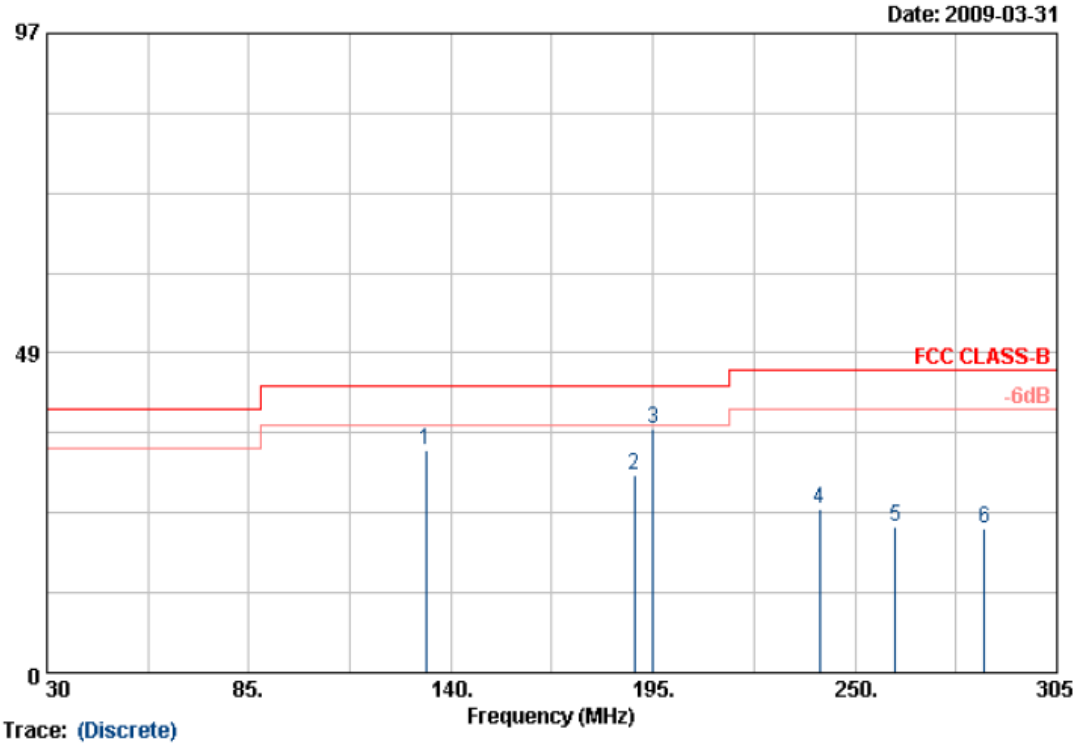
5.3. Measurement Equipment

Instrument/Ancillary	Model No.	Manufacturer	Serial No.	Calibration Date	Valid Date
Bilog Antenna	Schaffner	CBL6112B	2840	2009/05/14	2010/05/13
EMI Receiver	R&S	ESCI	100443	2009/12/18	2010/12/17
Amplifier	Agilent	8447D	2944A10593	2009/05/21	2010/05/20
AC Power Converter	APC	AFC-11005	F103120008	N/A	N/A
Spectrum Analyzer	R&S	FSP40	100047	2009/03/26	2010/03/25
Horn Antenna	EMCO	3115	31589	2009/05/04	2010/05/03
Preamplifier	Agilent	8449B	3008A01954	2009/02/27	2010/02/26

5.4. Test Result of Radiated Emission

5.4.1 Test Result and Data of Transmitter

Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	802.11a, CH36	Temperature	:	25 °C
Memo	:	EUT with USB cable	Humidity	:	65 %



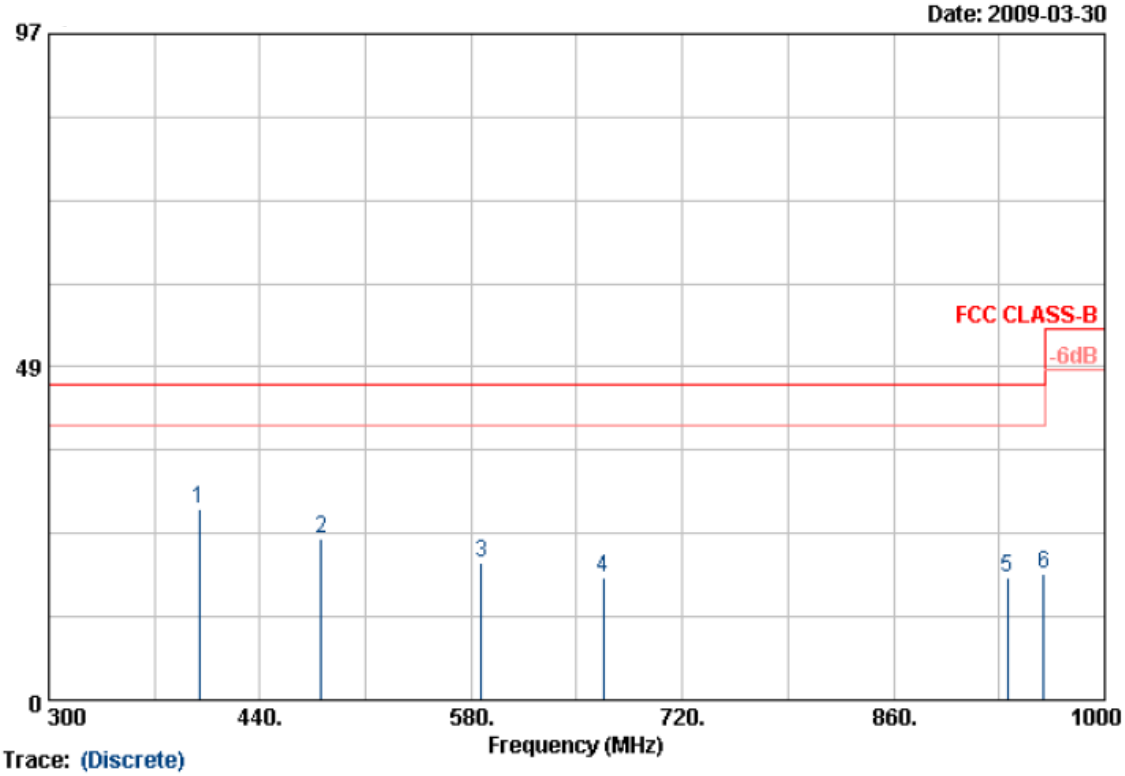
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	133.125	57.33	-23.55	33.78	43.50	-9.72	Peak	150	0
2	190.050	52.50	-22.45	30.05	43.50	-13.45	Peak	150	0
3	195.000	59.38	-22.44	36.94	43.50	-6.56	Peak	150	0
4	240.375	51.21	-26.48	24.73	46.00	-21.27	Peak	150	0
5	261.000	48.86	-26.81	22.05	46.00	-23.95	Peak	150	0
6	285.200	49.35	-27.34	22.01	46.00	-23.99	Peak	150	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. According to technical experiences,all spurious emission of 802.11a mode at channel 36,44,48 are almost the same below 1GHz,so that the channel 36 was chosen as representative in final test.
5. The data is worse case.

Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	802.11a, CH36	Temperature	:	25 °C
Memo	:	EUT with USB cable	Humidity	:	65 %



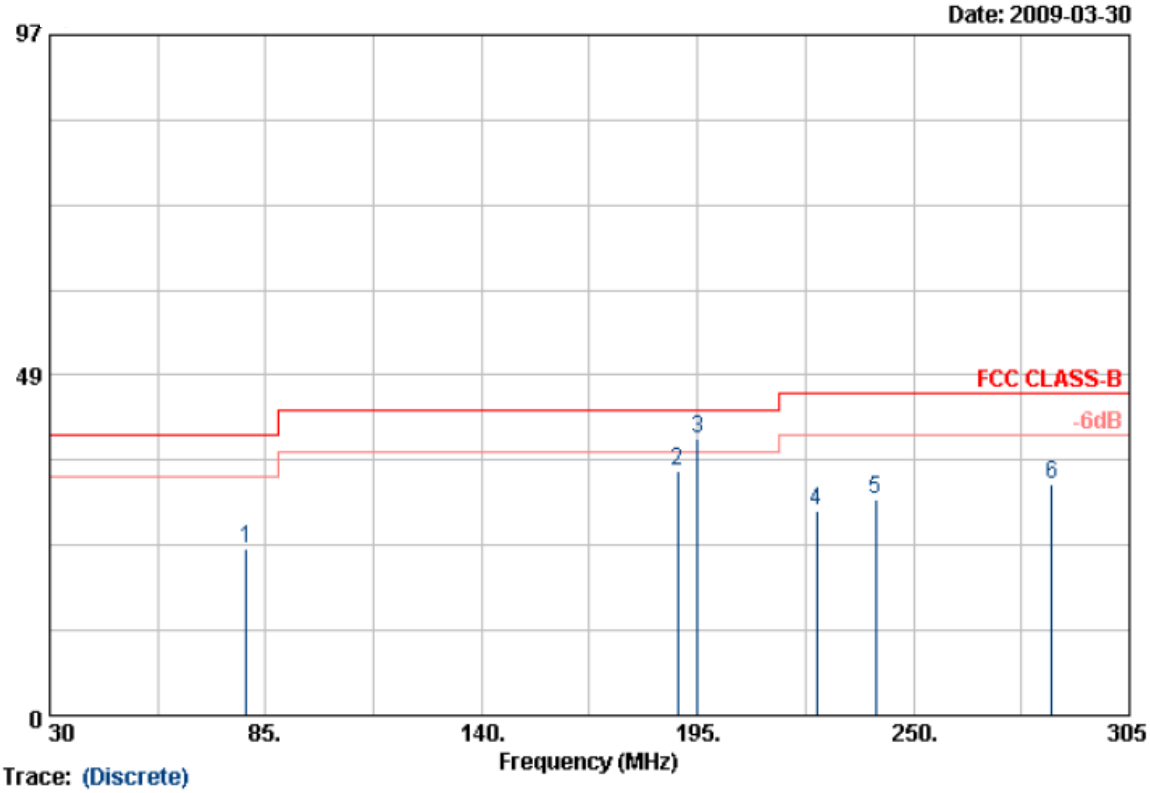
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	399.400	53.33	-25.42	27.91	46.00	-18.09	Peak	100	0
2	480.600	51.40	-27.88	23.52	46.00	-22.48	Peak	100	0
3	587.000	46.33	-26.43	19.90	46.00	-26.10	Peak	100	0
4	667.500	44.52	-26.81	17.71	46.00	-28.29	Peak	100	0
5	935.600	40.81	-22.89	17.92	46.00	-28.08	Peak	100	0
6	959.400	41.45	-23.21	18.24	46.00	-27.76	Peak	100	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. According to technical experiences,all spurious emission of 802.11a mode at channel 36,44,48 are almost the same below 1GHz,so that the channel 36 was chosen as representative in final test.
5. The data is worse case.

Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	802.11a, CH36	Temperature	:	25 °C
Memo	:	EUT with USB cable	Humidity	:	65 %



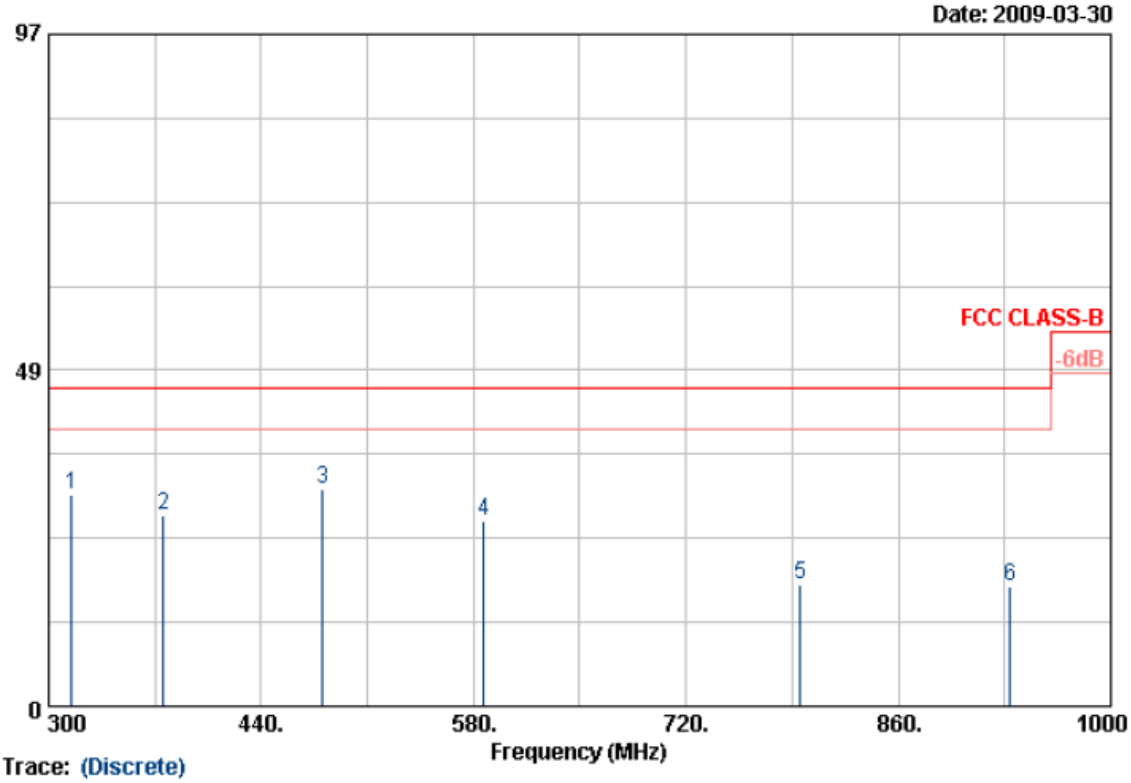
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	80.050	54.58	-30.91	23.67	40.00	-16.33	Peak	150	0
2	190.050	64.65	-29.84	34.81	43.50	-8.69	Peak	150	0
3	195.000	69.68	-30.12	39.56	43.50	-3.94	Peak	150	0
4	225.250	59.01	-29.94	29.07	46.00	-16.93	Peak	150	0
5	240.375	60.57	-29.68	30.89	46.00	-15.11	Peak	150	0
6	285.200	60.79	-27.78	33.01	46.00	-12.99	Peak	150	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. According to technical experiences,all spurious emission of 802.11a mode at channel 36,44,48 are almost the same below 1GHz,so that the channel 36 was chosen as representative in final test.
5. The data is worse case.

Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	802.11a, CH36	Temperature	:	25 °C
Memo	:	EUT with USB cable	Humidity	:	65 %



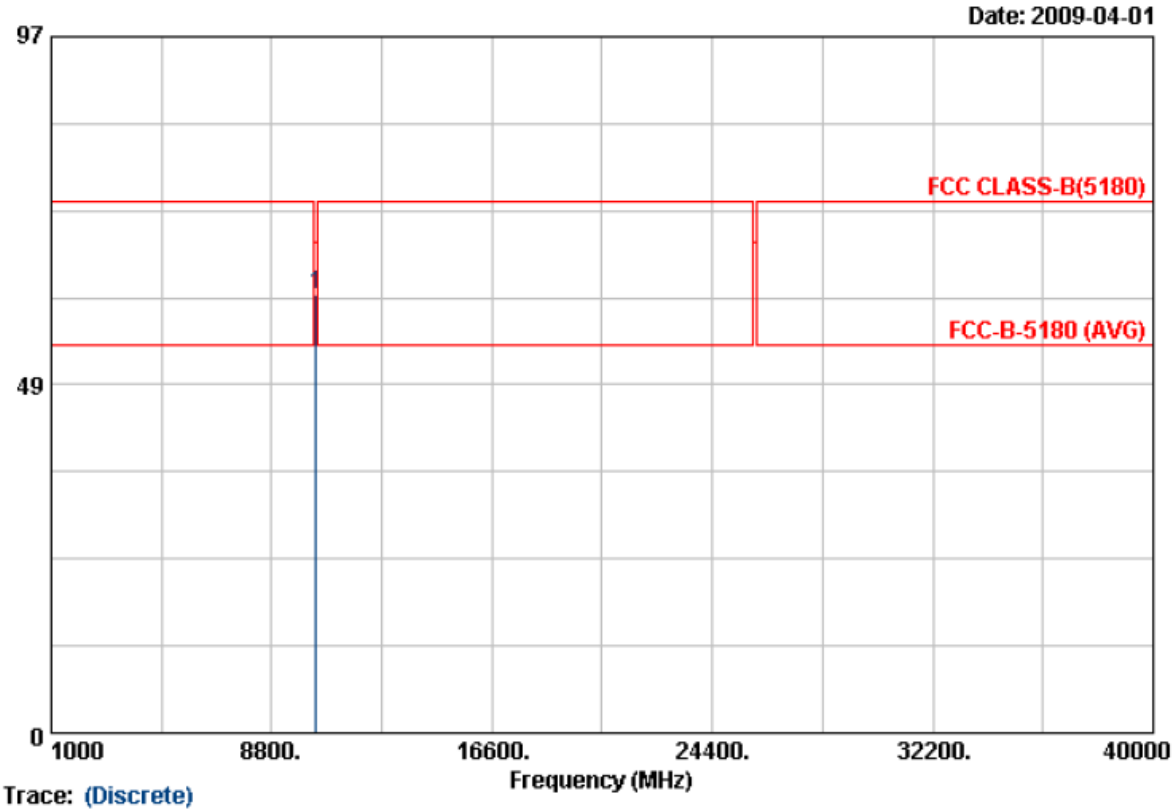
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	315.400	58.72	-28.22	30.50	46.00	-15.50	Peak	150	0
2	375.600	56.66	-29.20	27.46	46.00	-18.54	Peak	150	0
3	480.600	56.13	-24.90	31.23	46.00	-14.77	Peak	150	0
4	587.000	50.48	-23.62	26.86	46.00	-19.14	Peak	150	0
5	795.600	42.81	-25.34	17.47	46.00	-28.53	Peak	150	0
6	933.500	41.11	-23.82	17.29	46.00	-28.71	Peak	150	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. According to technical experiences,all spurious emission of 802.11a mode at channel 36,44,48 are almost the same below 1GHz,so that the channel 36 was chosen as representative in final test.
5. The data is worse case.

Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	802.11a, CH36	Temperature	:	22 °C
Memo	:	EUT with USB cable	Humidity	:	65 %



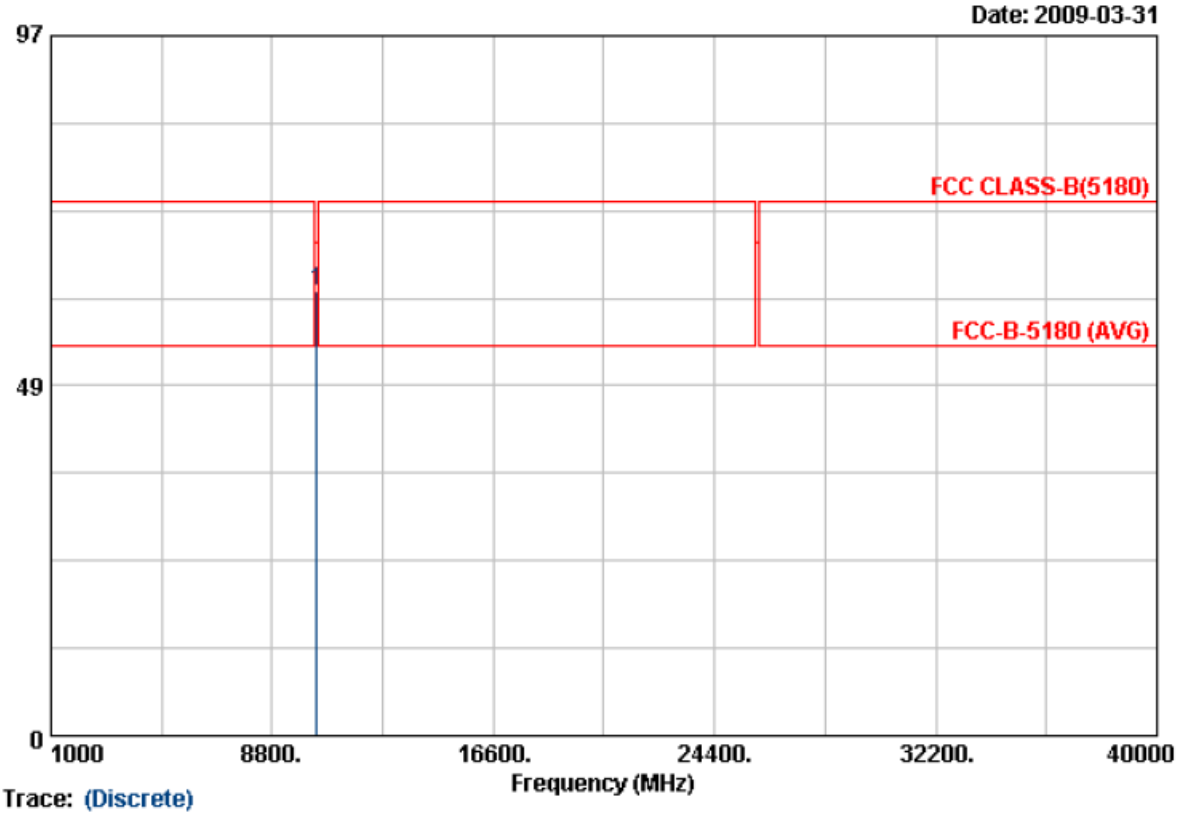
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10358.190	40.10	20.90	61.00	68.30	-7.30	Peak	100	121

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	802.11a, CH36	Temperature	:	22 °C
Memo	:	EUT with USB cable	Humidity	:	65 %



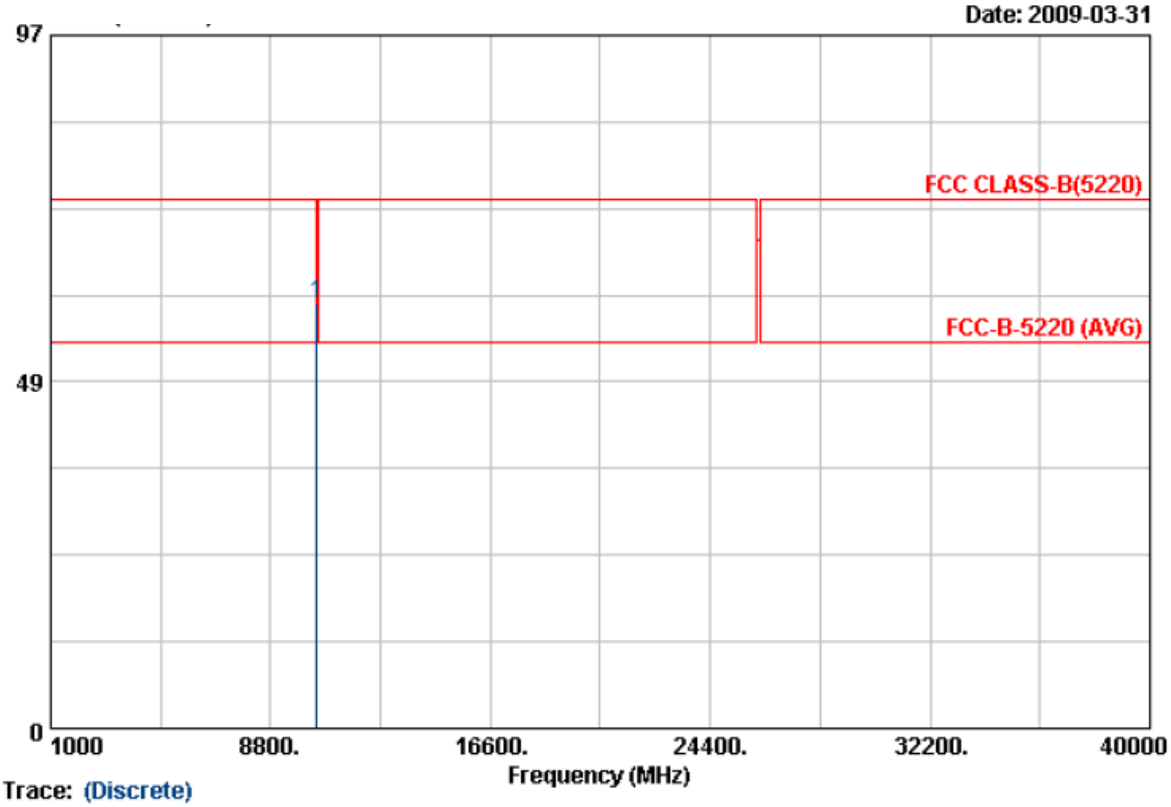
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10362.880	43.14	18.58	61.72	68.30	-6.58	Peak	100	201

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	802.11a, CH44	Temperature	:	22 °C
Memo	:	EUT with USB cable	Humidity	:	65 %



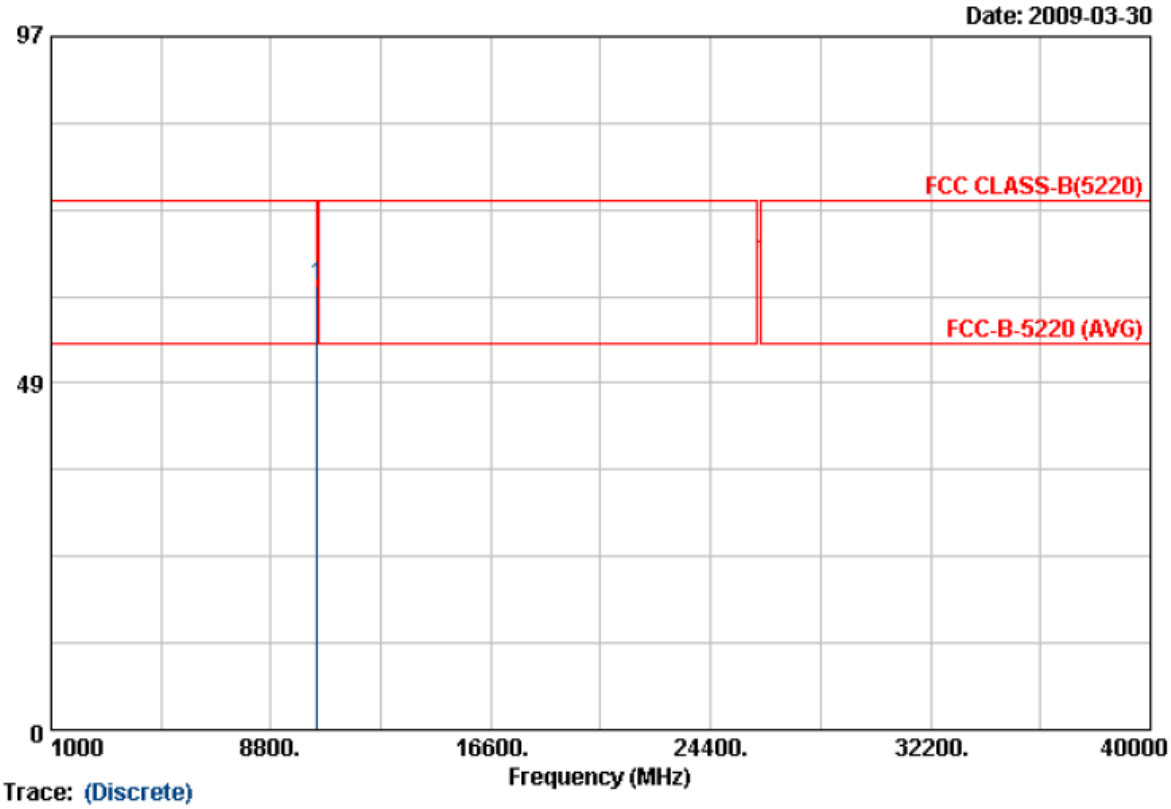
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10436.360	38.70	20.64	59.34	68.30	-8.96	Peak	100	158

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	802.11a, CH44	Temperature	:	22 °C
Memo	:	EUT with USB cable	Humidity	:	65 %



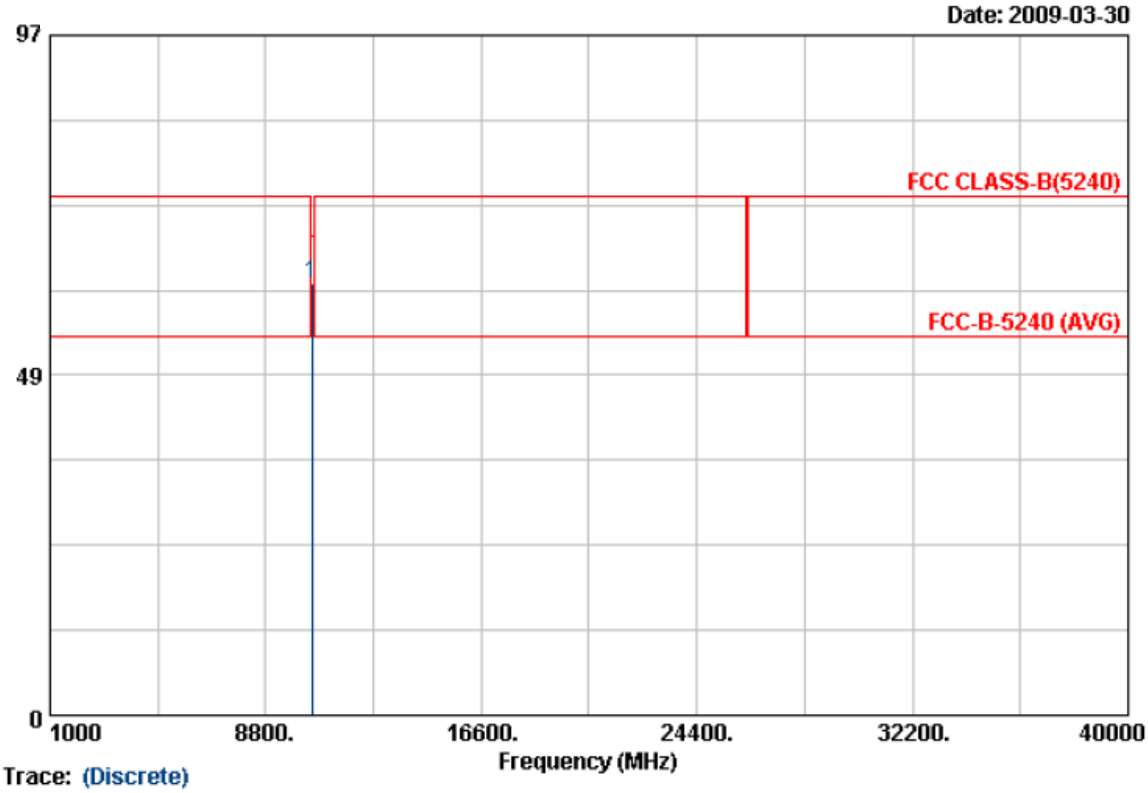
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10442.810	43.59	18.49	62.08	68.30	-6.22	Peak	100	211

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	802.11a, CH48	Temperature	:	22 °C
Memo	:	EUT with USB cable	Humidity	:	65 %



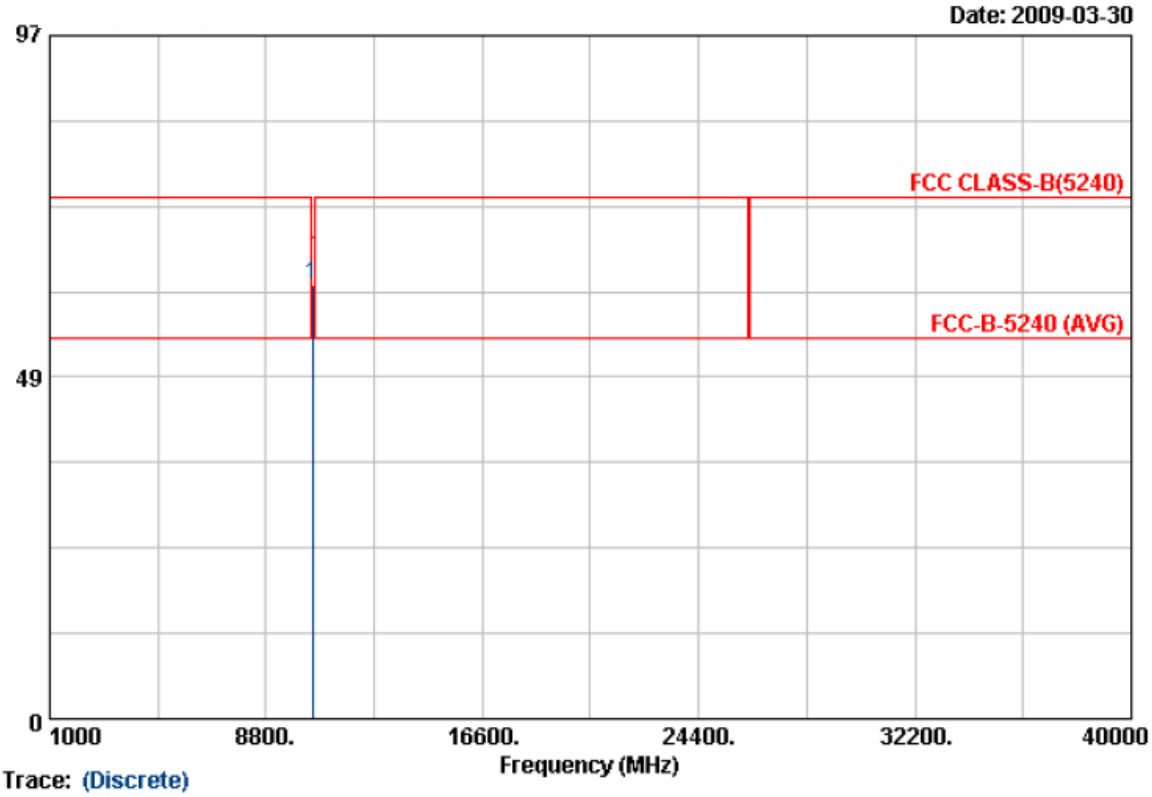
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10475.000	41.18	20.50	61.68	68.30	-6.62	Peak	100	97

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	802.11a, CH48	Temperature	:	22 °C
Memo	:	EUT with USB cable	Humidity	:	65 %



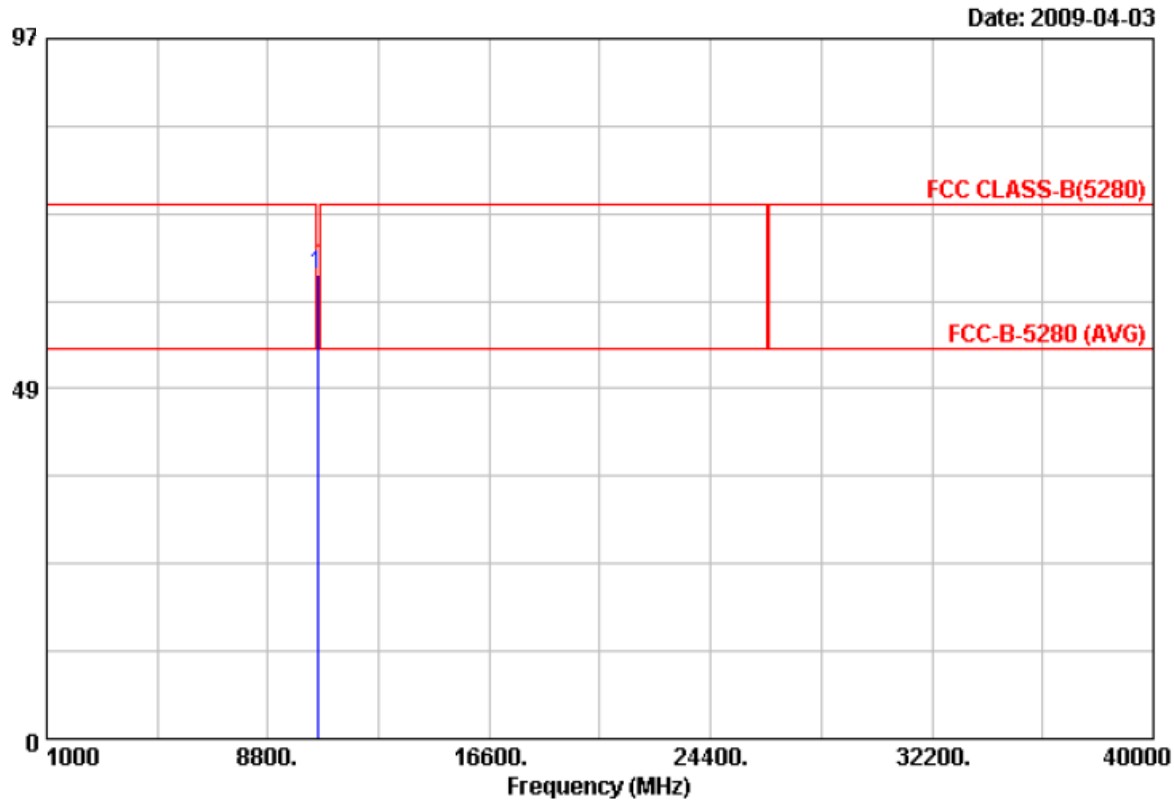
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10480.810	43.03	18.45	61.48	68.30	-6.82	Peak	100	176

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	802.11a, CH56	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	65 %

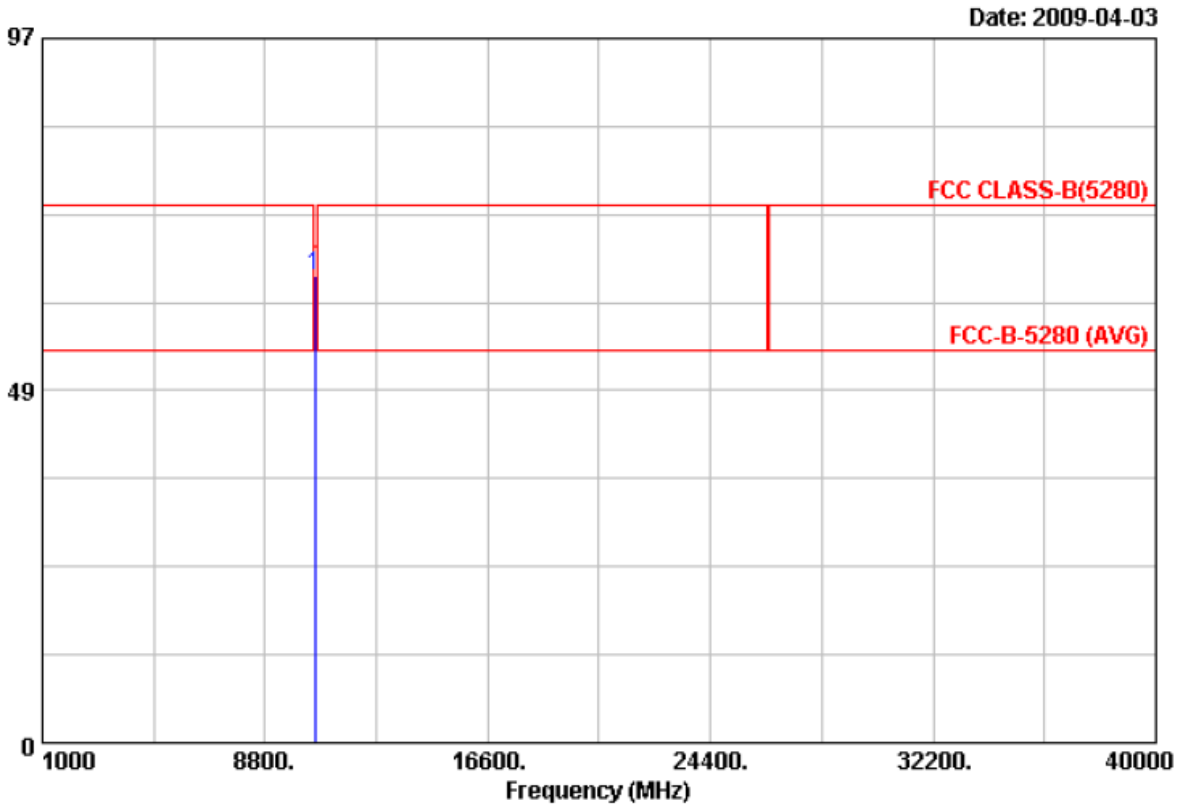


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10559.62	43.72	20.58	64.30	68.30	-4.00	Peak	100	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	802.11a, CH56	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	65 %

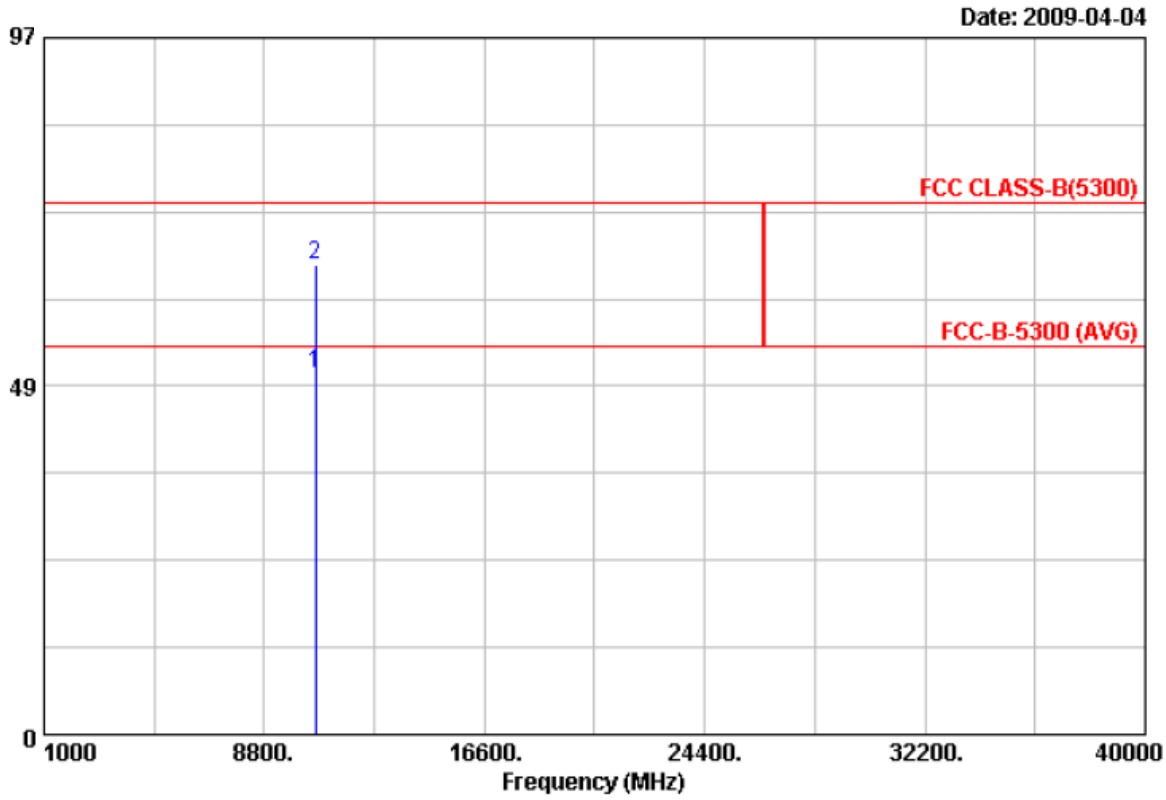


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10560.26	45.69	18.62	64.31	68.30	-3.99	Peak	100	360

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	802.11a, CH60	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	65 %

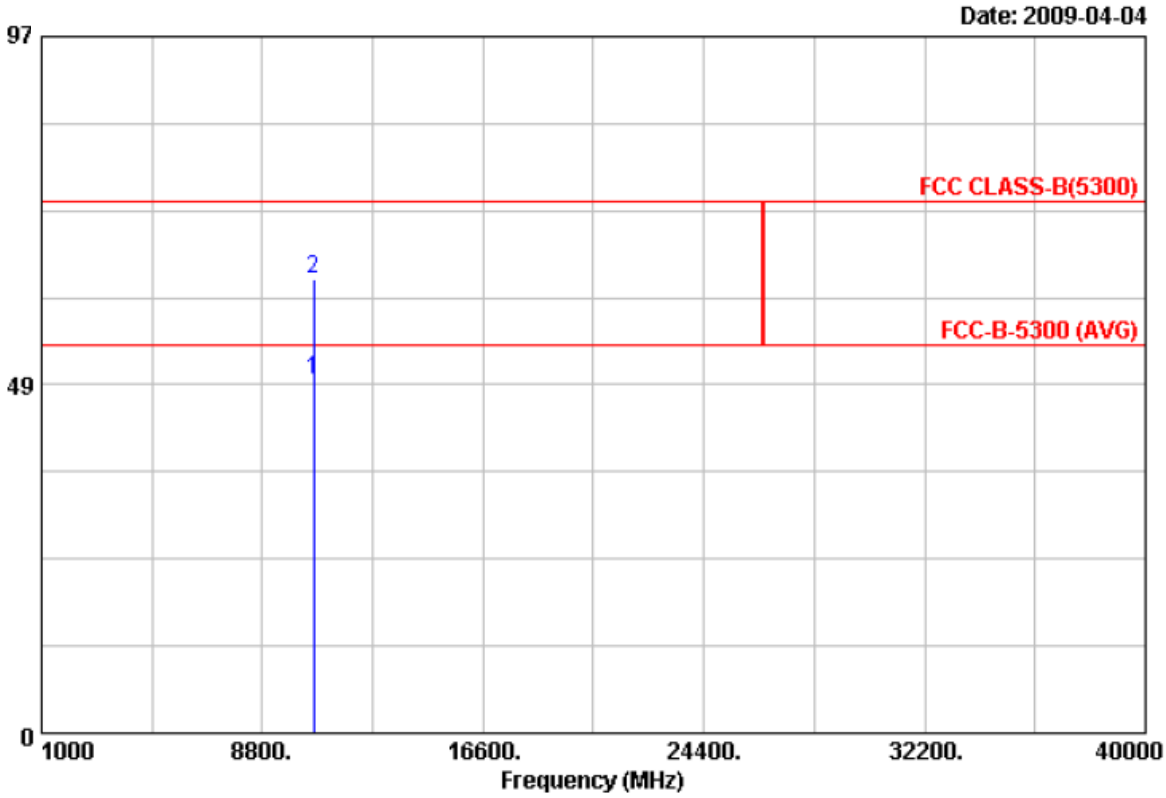


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10595.46	29.69	20.67	50.36	54.00	-3.64	Average	100	0
2	10599.90	44.83	20.67	65.50	74.00	-8.50	Peak	100	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	802.11a, CH60	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	65 %

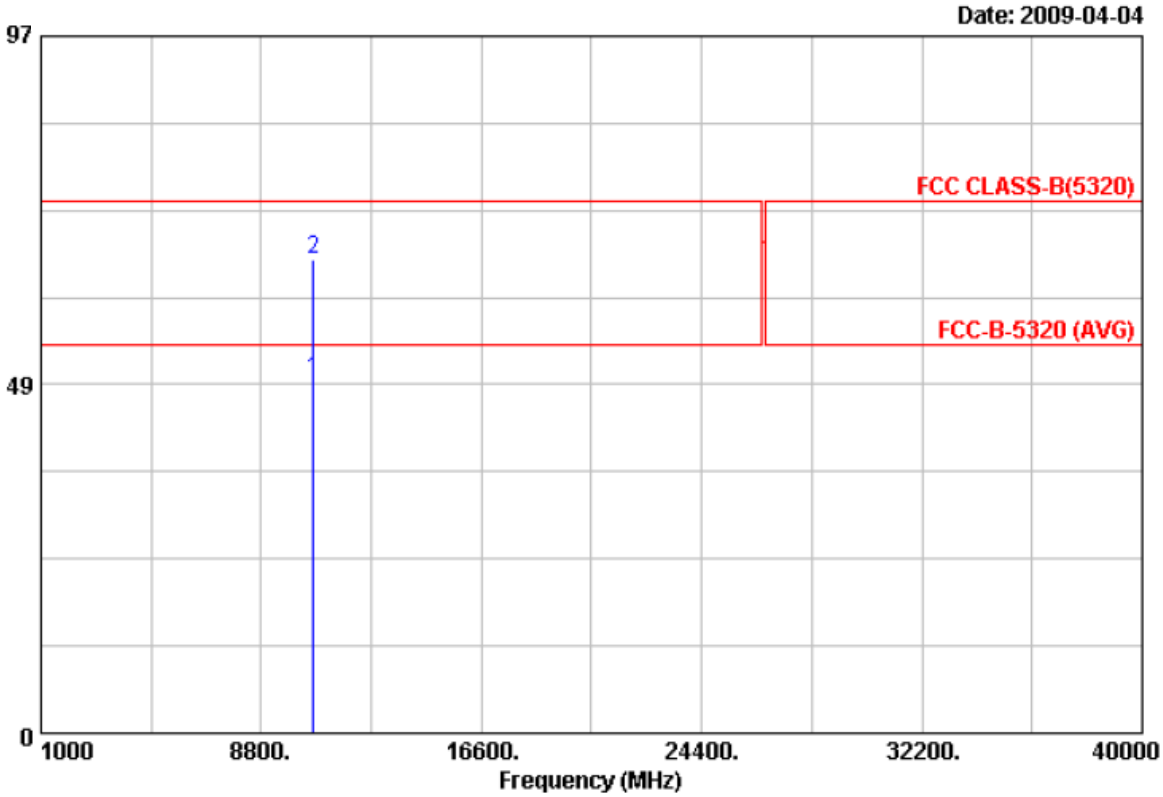


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10595.26	30.57	18.73	49.30	54.00	-4.70	Average	150	0
2	10599.93	44.53	18.74	63.27	74.00	-10.73	Peak	150	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	802.11a, CH64	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	65 %

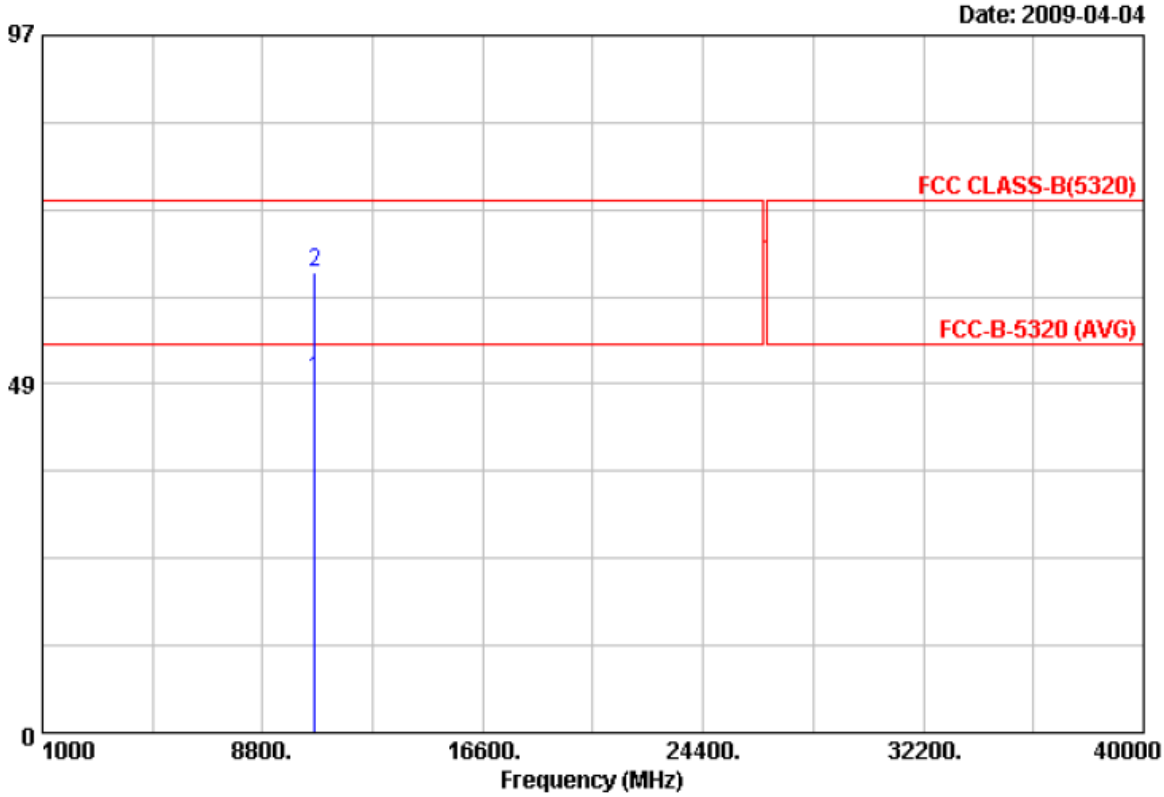


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10635.02	28.43	20.76	49.19	54.00	-4.81	Average	100	0
2	10640.15	45.25	20.77	66.02	74.00	-7.98	Peak	100	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	802.11a, CH64	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	65 %

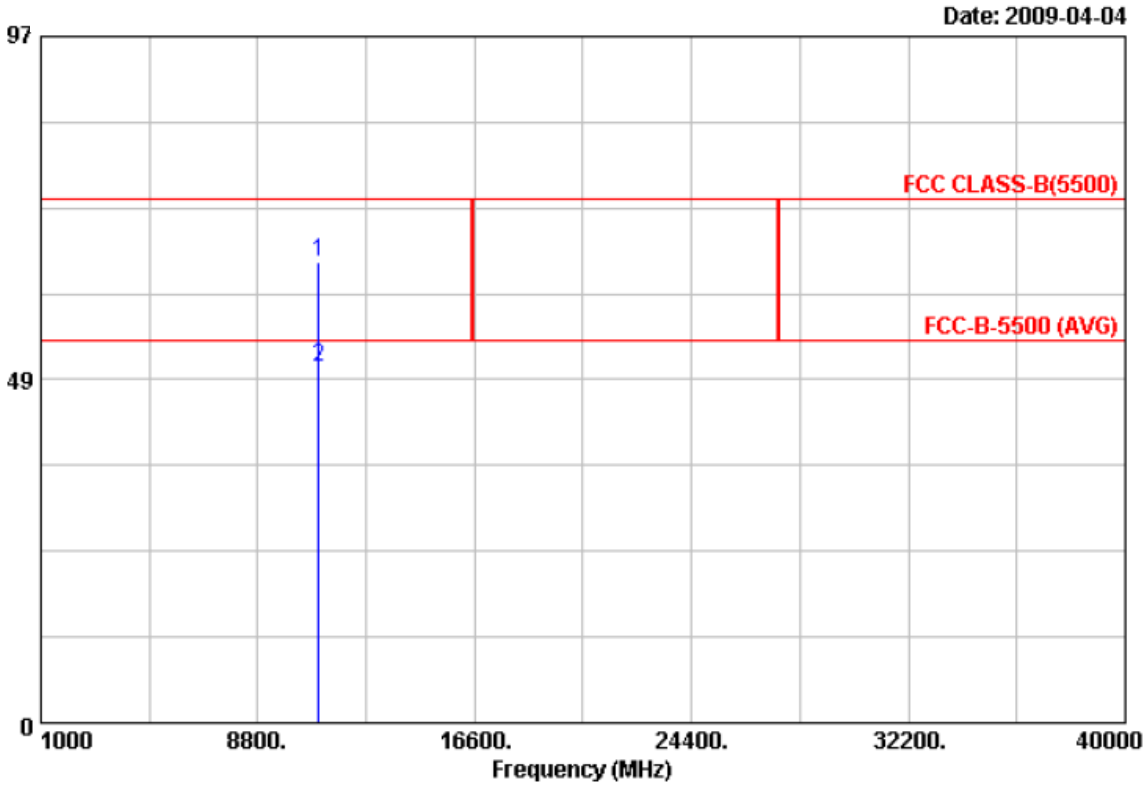


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10636.66	30.43	18.85	49.28	54.00	-4.72	Average	100	0
2	10641.10	45.03	18.87	63.90	74.00	-10.10	Peak	100	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	802.11a, CH100	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	65 %

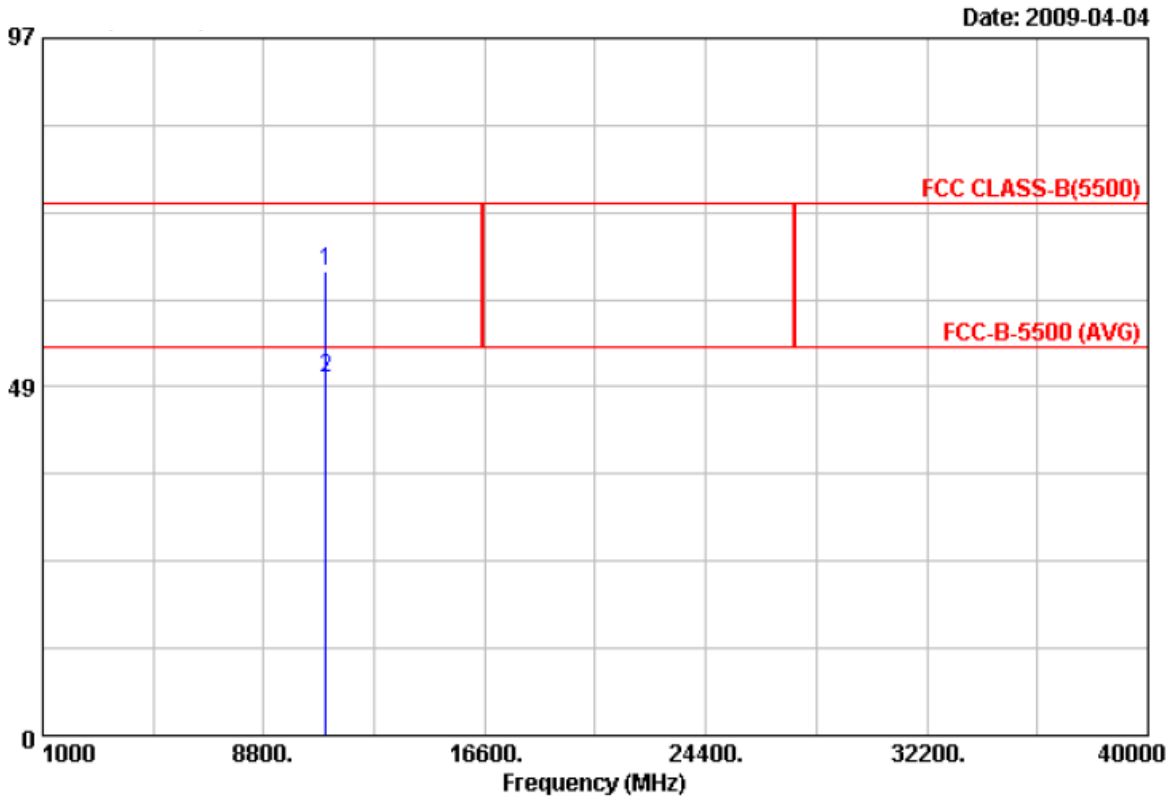


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	11000.12	43.53	21.69	65.22	74.00	-8.78	Peak	100	0
2	11004.84	28.58	21.71	50.29	54.00	-3.71	Average	100	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	802.11a, CH100	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	65 %

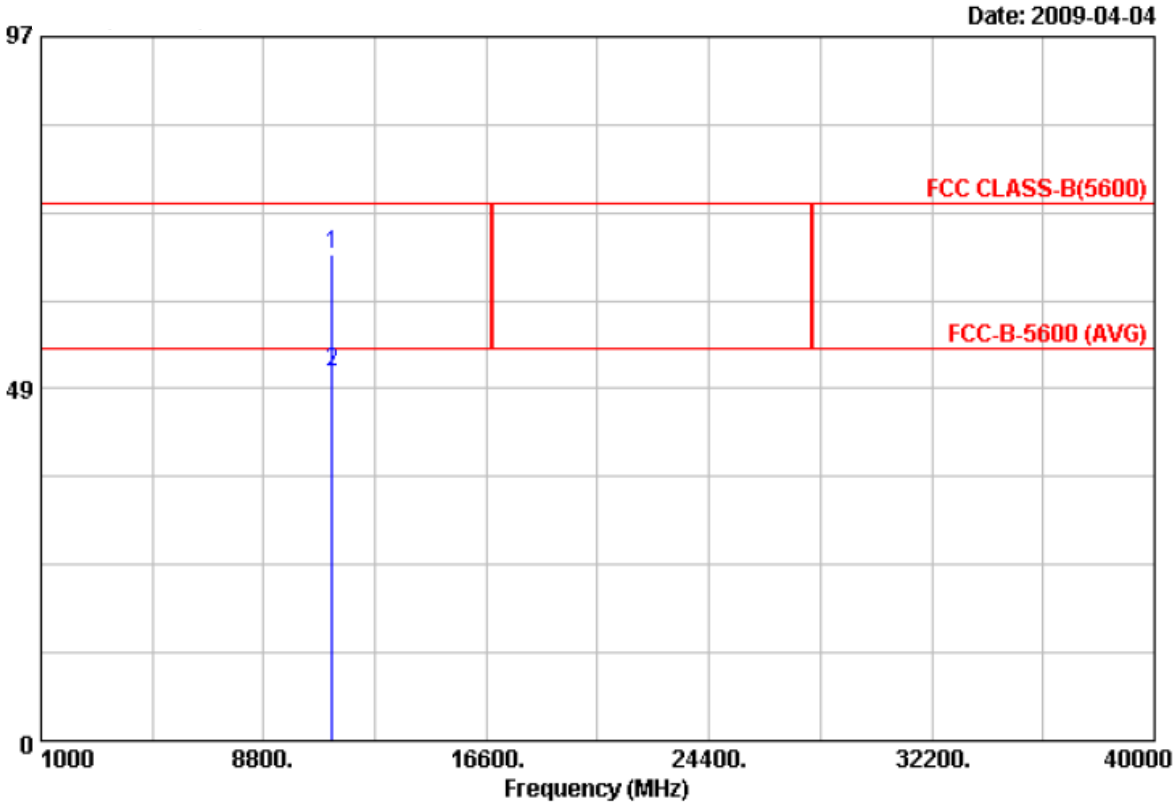


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	11000.99	44.70	19.99	64.69	74.00	-9.31	Peak	100	0
2	11004.34	29.61	20.00	49.61	54.00	-4.39	Average	100	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	802.11a, CH120	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	65 %

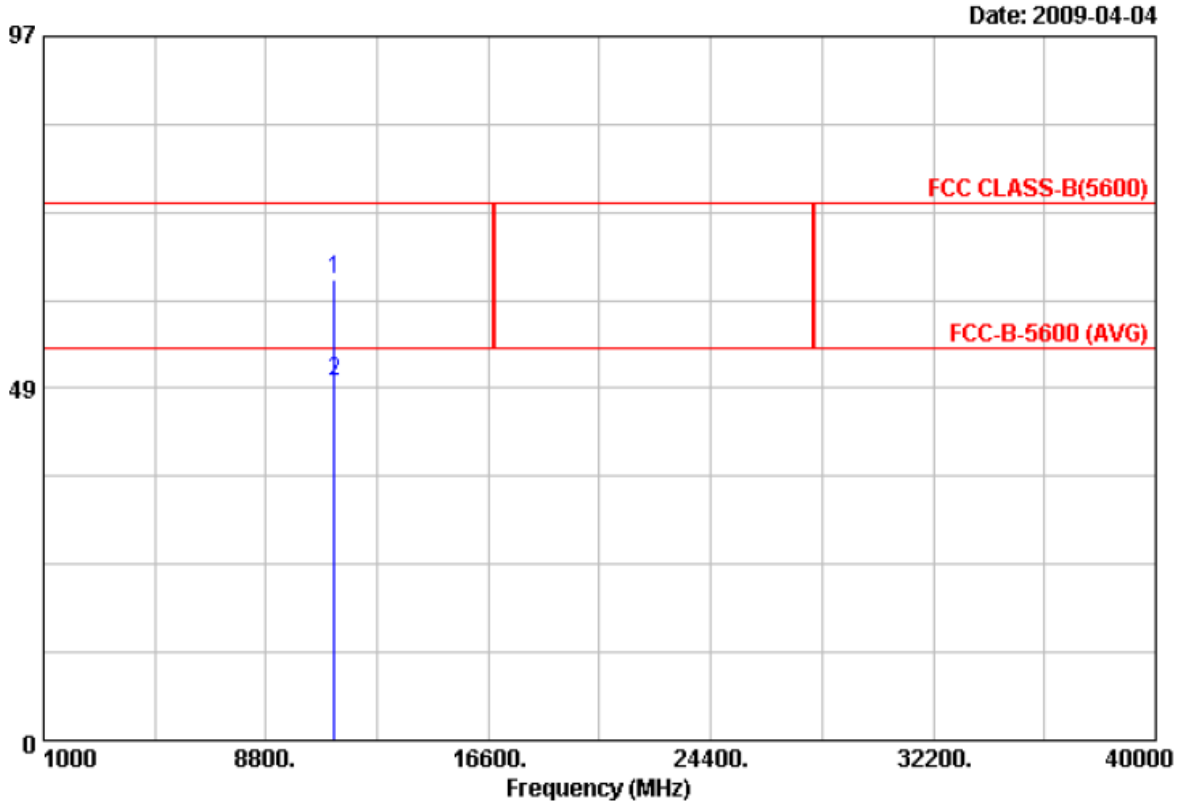


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	11199.83	44.56	22.48	67.04	74.00	-6.96	Peak	100	360
2	11199.90	28.20	22.48	50.68	54.00	-3.32	Average	100	360

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	802.11a, CH120	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	65 %

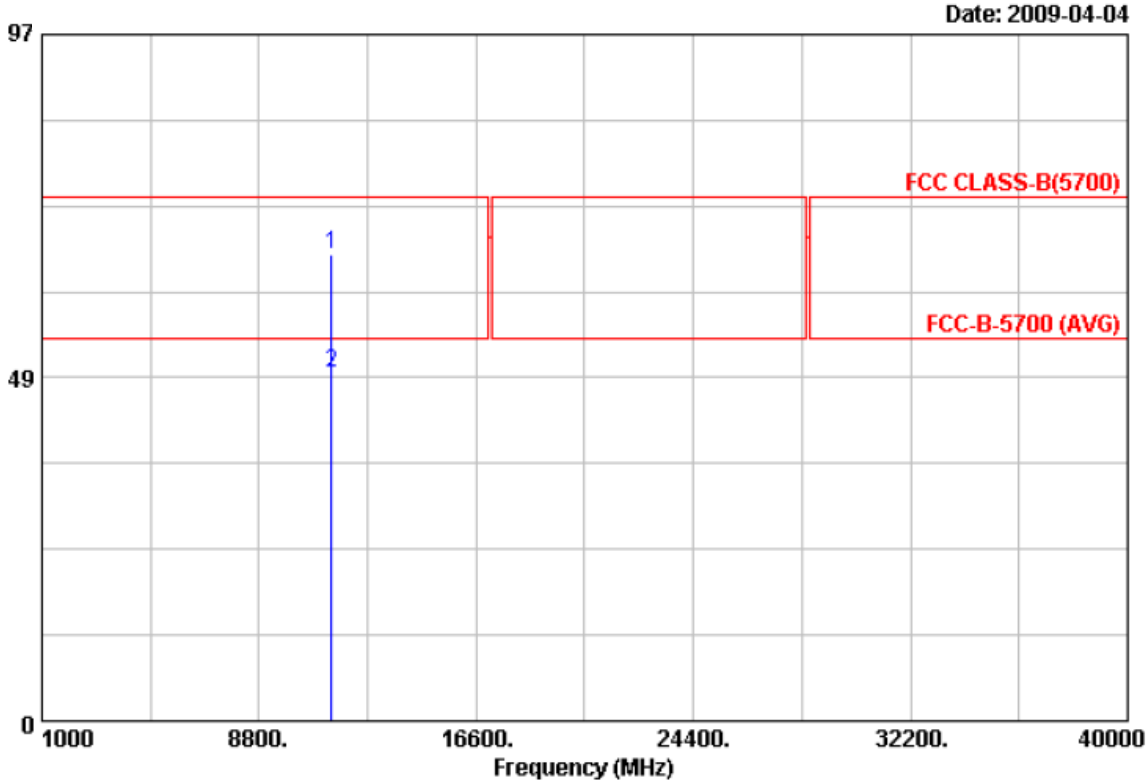


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	11200.23	43.01	20.35	63.36	74.00	-10.64	Peak	100	360
2	11200.44	29.17	20.35	49.52	54.00	-4.48	Average	100	360

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	802.11a, CH140	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	65 %

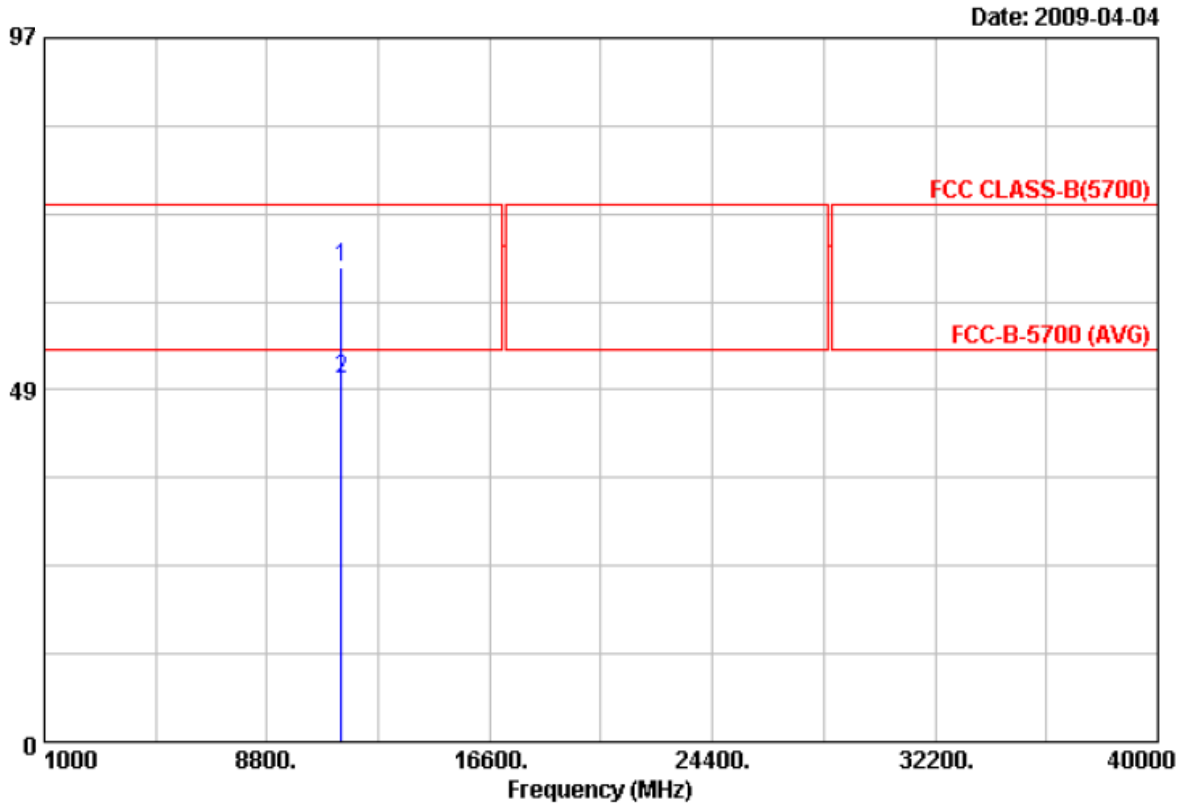


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	11399.83	42.67	23.27	65.94	74.00	-8.06	Peak	100	360
2	11400.34	25.94	23.28	49.22	54.00	-4.78	Average	100	360

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	802.11a, CH140	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	65 %

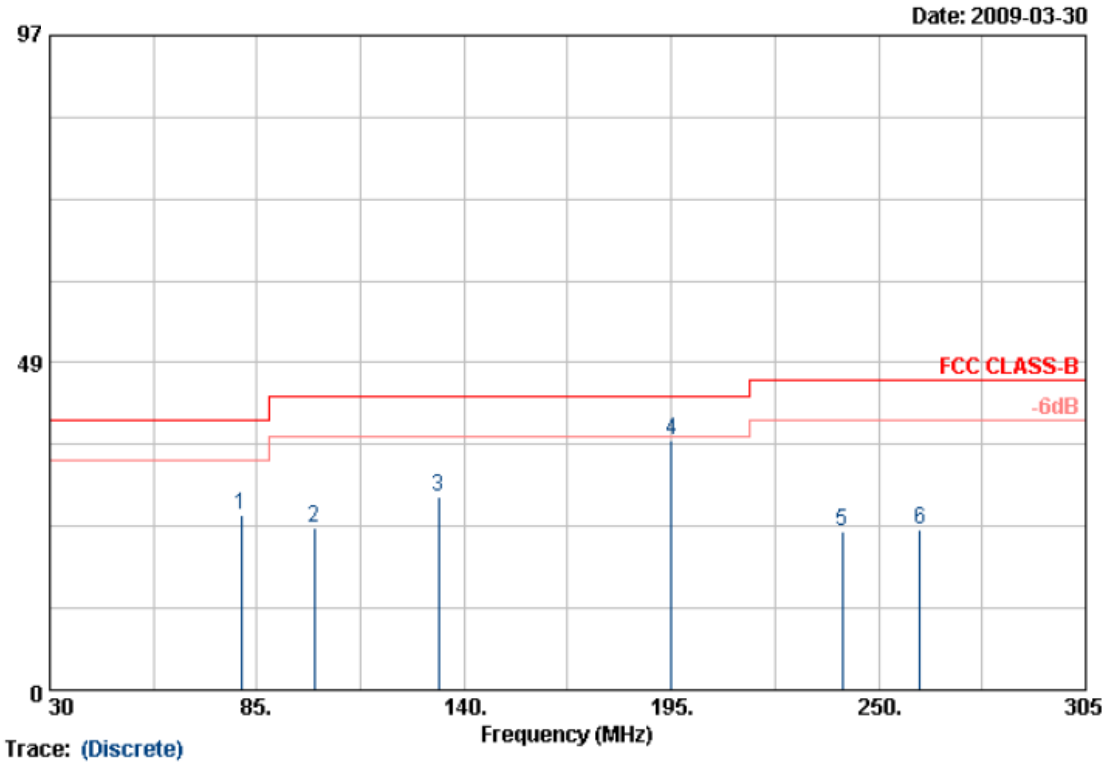


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	11401.47	44.75	20.72	65.47	74.00	-8.53	Peak	100	360
2	11404.86	29.32	20.73	50.05	54.00	-3.95	Average	100	360

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	802.11an HT20, CH36	Temperature	:	25 °C
Memo	:	EUT with USB cable	Humidity	:	65 %



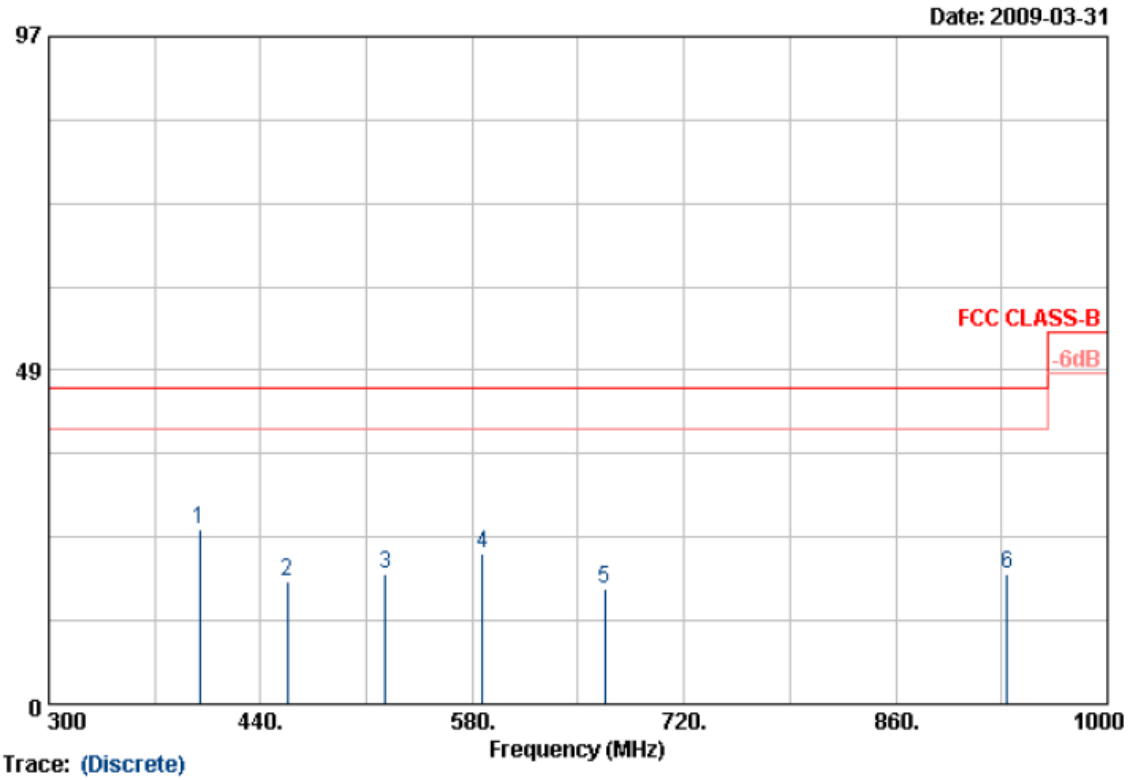
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	80.875	49.83	-23.87	25.96	40.00	-14.04	Peak	100	0
2	100.125	47.77	-23.60	24.17	43.50	-19.33	Peak	100	0
3	133.125	52.15	-23.55	28.60	43.50	-14.90	Peak	100	0
4	195.000	59.42	-22.44	36.98	43.50	-6.52	Peak	100	0
5	240.375	49.92	-26.48	23.44	46.00	-22.56	Peak	100	0
6	261.000	50.45	-26.81	23.64	46.00	-22.36	Peak	100	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. According to technical experiences,all spurious emission of 802.11an HT20 mode at channel 36,44,48 are almost the same below 1GHz,so that the channel 36 was chosen as representative in final test.
5. The data is worse case.

Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	802.11an HT20, CH36	Temperature	:	25 °C
Memo	:	EUT with USB cable	Humidity	:	65 %



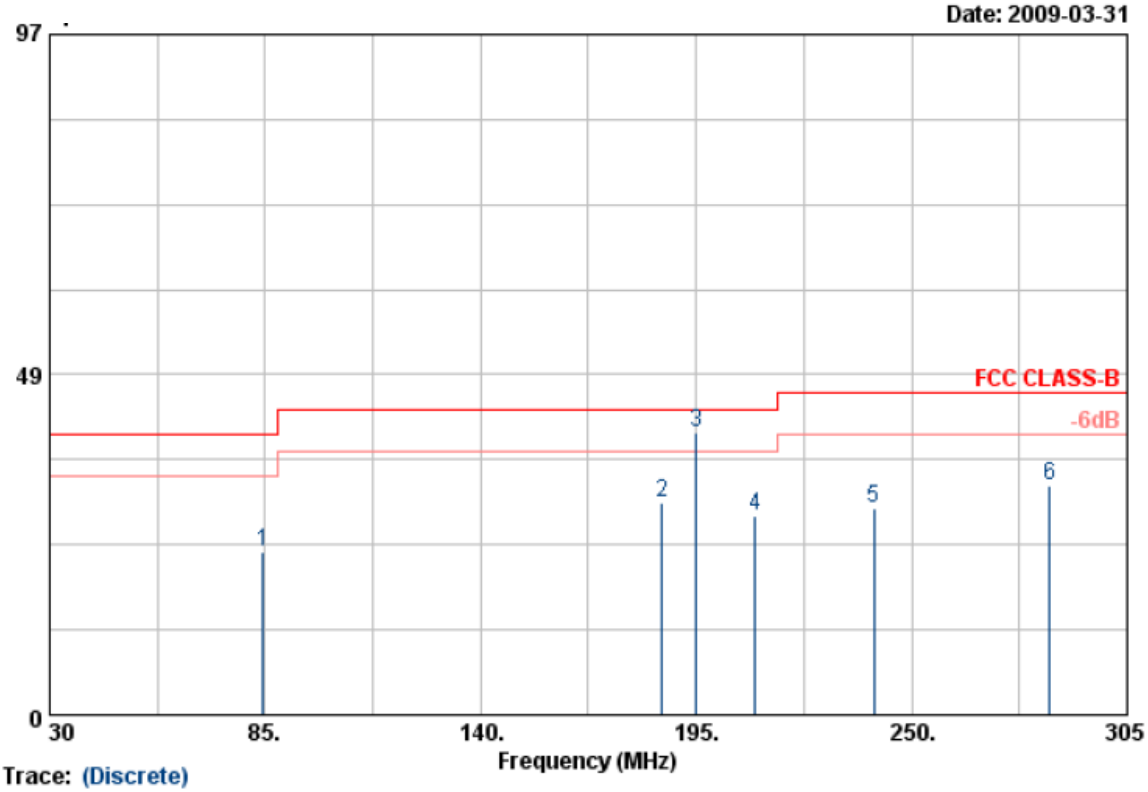
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	399.400	50.75	-25.42	25.33	46.00	-20.67	Peak	150	0
2	457.500	45.21	-27.29	17.92	46.00	-28.08	Peak	150	0
3	522.600	47.29	-28.31	18.98	46.00	-27.02	Peak	150	0
4	587.000	48.39	-26.43	21.96	46.00	-24.04	Peak	150	0
5	667.500	43.60	-26.81	16.79	46.00	-29.21	Peak	150	0
6	933.500	41.51	-22.57	18.94	46.00	-27.06	Peak	150	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. According to technical experiences,all spurious emission of 802.11an HT20 mode at channel 36,44,48 are almost the same below 1GHz,so that the channel 36 was chosen as representative in final test.
5. The data is worse case.

Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	802.11an HT20, CH36	Temperature	:	25 °C
Memo	:	EUT with USB cable	Humidity	:	65 %



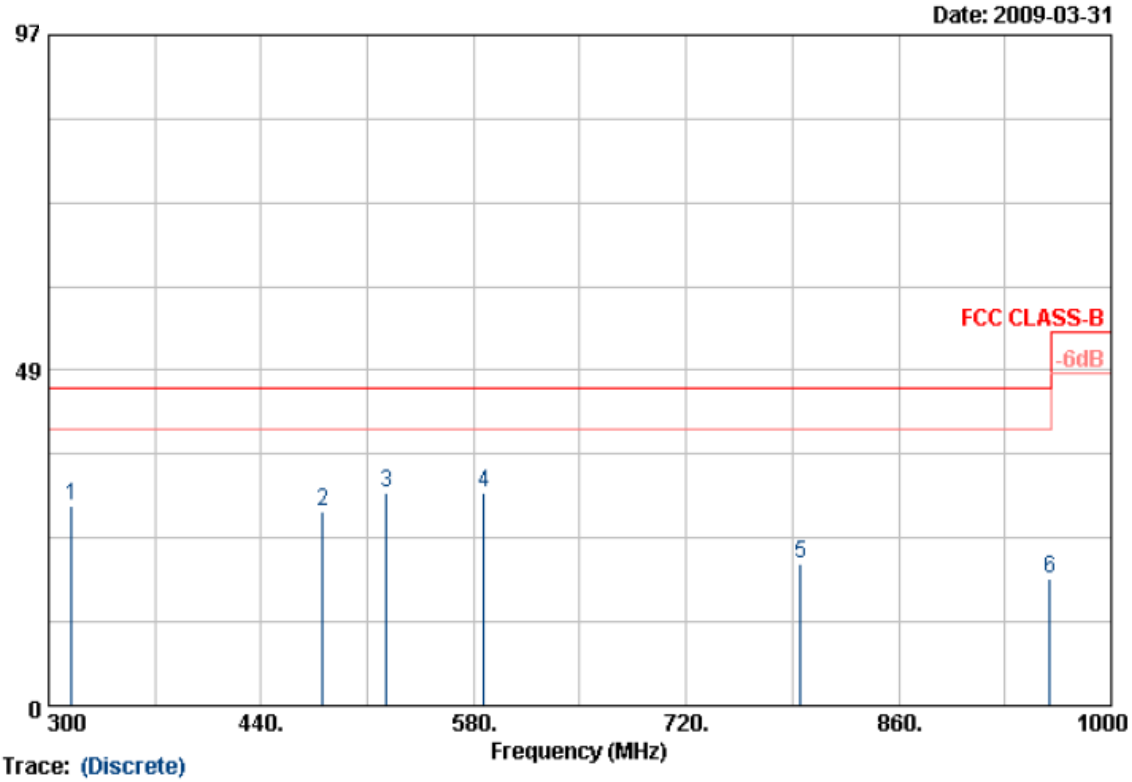
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	84.45	54.24	-31.09	23.15	40.00	-16.85	Peak	100	0
2	186.20	59.55	-29.35	30.20	43.50	-13.30	Peak	100	0
3	195.00	70.49	-30.12	40.37	43.50	-3.13	QP	100	0
4	210.13	57.88	-29.63	28.25	43.50	-15.25	Peak	100	0
5	240.38	59.20	-29.68	29.52	46.00	-16.48	Peak	100	0
6	285.20	60.40	-27.78	32.62	46.00	-13.38	Peak	100	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. According to technical experiences,all spurious emission of 802.11an HT20 mode at channel 36,44,48 are almost the same below 1GHz,so that the channel 36 was chosen as representative in final test.
5. The data is worse case.

Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	802.11an HT20, CH36	Temperature	:	25 °C
Memo	:	EUT with USB cable	Humidity	:	65 %



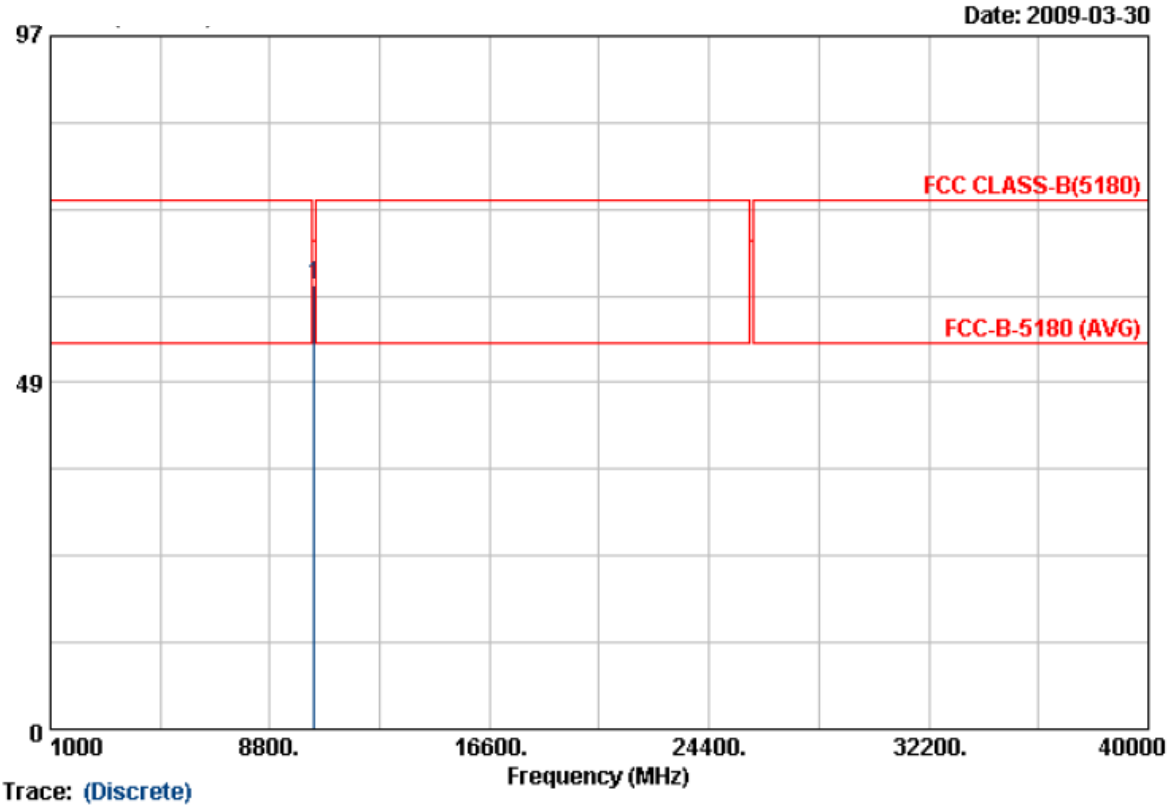
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	315.400	57.15	-28.22	28.93	46.00	-17.07	Peak	150	0
2	480.600	53.06	-24.90	28.16	46.00	-17.84	Peak	150	0
3	522.600	56.96	-26.05	30.91	46.00	-15.09	Peak	150	0
4	587.000	54.35	-23.62	30.73	46.00	-15.27	Peak	150	0
5	795.600	45.94	-25.34	20.60	46.00	-25.40	Peak	150	0
6	959.400	44.32	-25.88	18.44	46.00	-27.56	Peak	150	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. According to technical experiences,all spurious emission of 802.11an HT20 mode at channel 36,44,48 are almost the same below 1GHz,so that the channel 36 was chosen as representative in final test.
5. The data is worse case.

Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	802.11an HT20, CH36	Temperature	:	22 °C
Memo	:	EUT with USB cable	Humidity	:	65 %



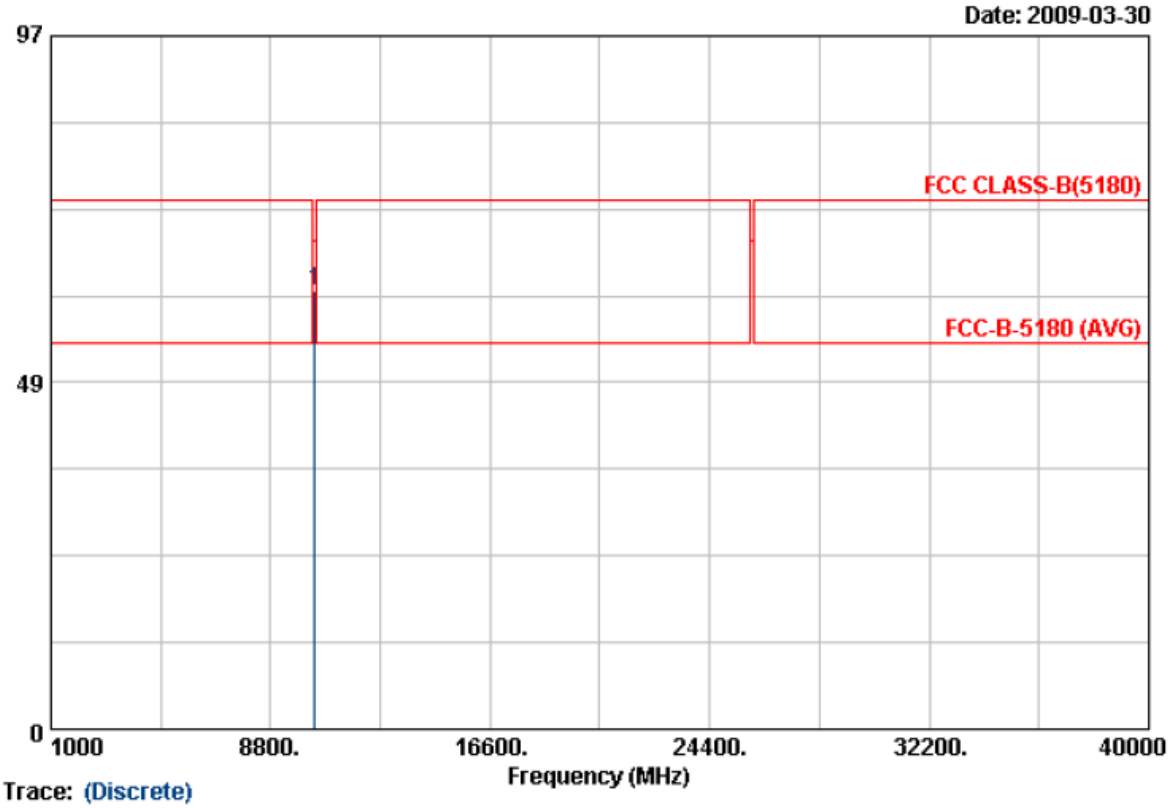
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10355.000	41.16	20.91	62.07	68.30	-6.23	Peak	100	233

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	802.11an HT20, CH36	Temperature	:	22 °C
Memo	:	EUT with USB cable	Humidity	:	65 %



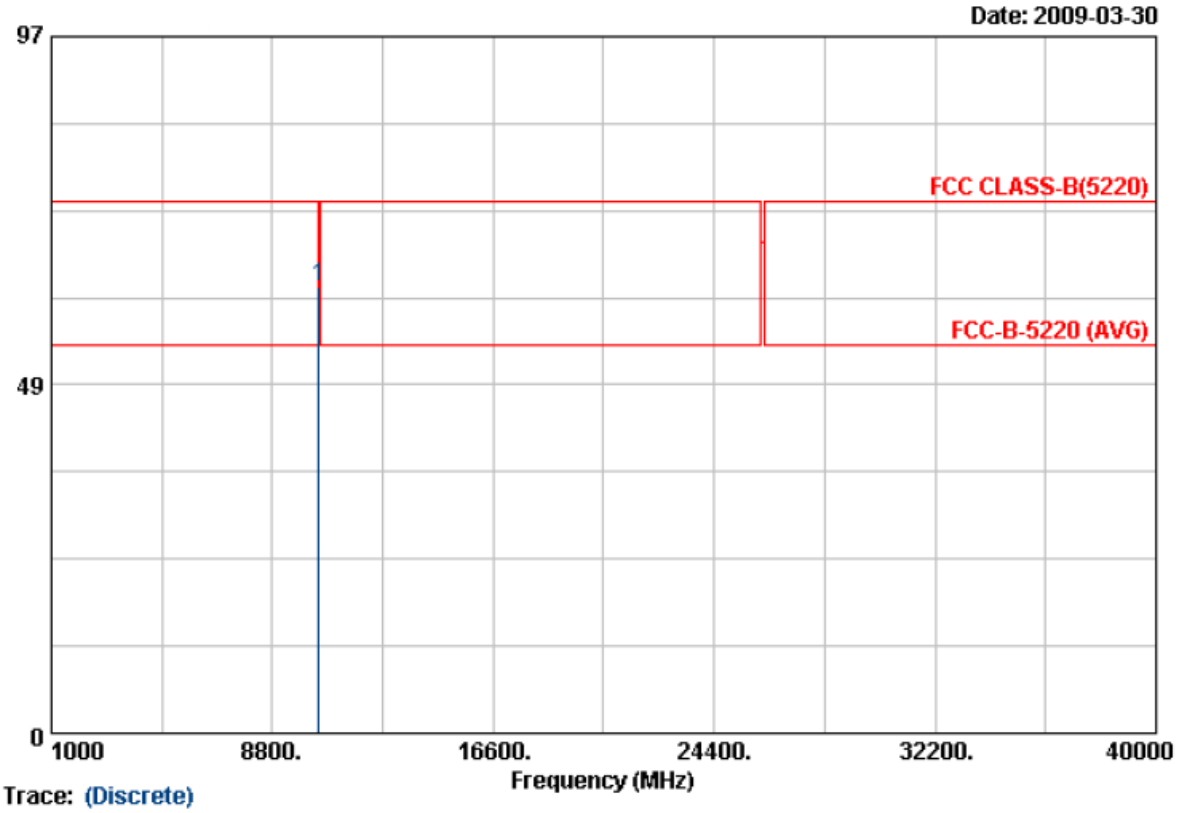
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10365.000	42.85	18.59	61.44	68.30	-6.86	Peak	100	229

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	802.11an HT20, CH44	Temperature	:	22 °C
Memo	:	EUT with USB cable	Humidity	:	65 %



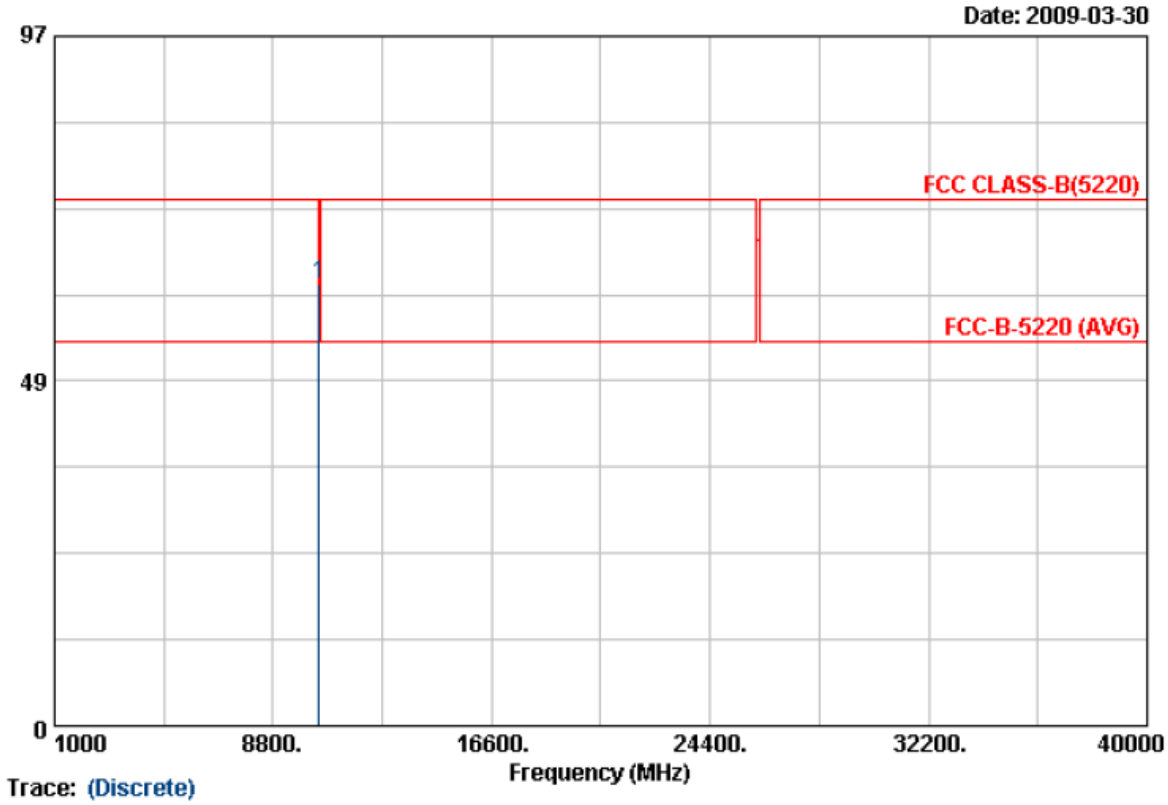
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10442.610	41.66	20.61	62.27	68.30	-6.03	Peak	100	177

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	802.11an HT20, CH44	Temperature	:	22 °C
Memo	:	EUT with USB cable	Humidity	:	65 %



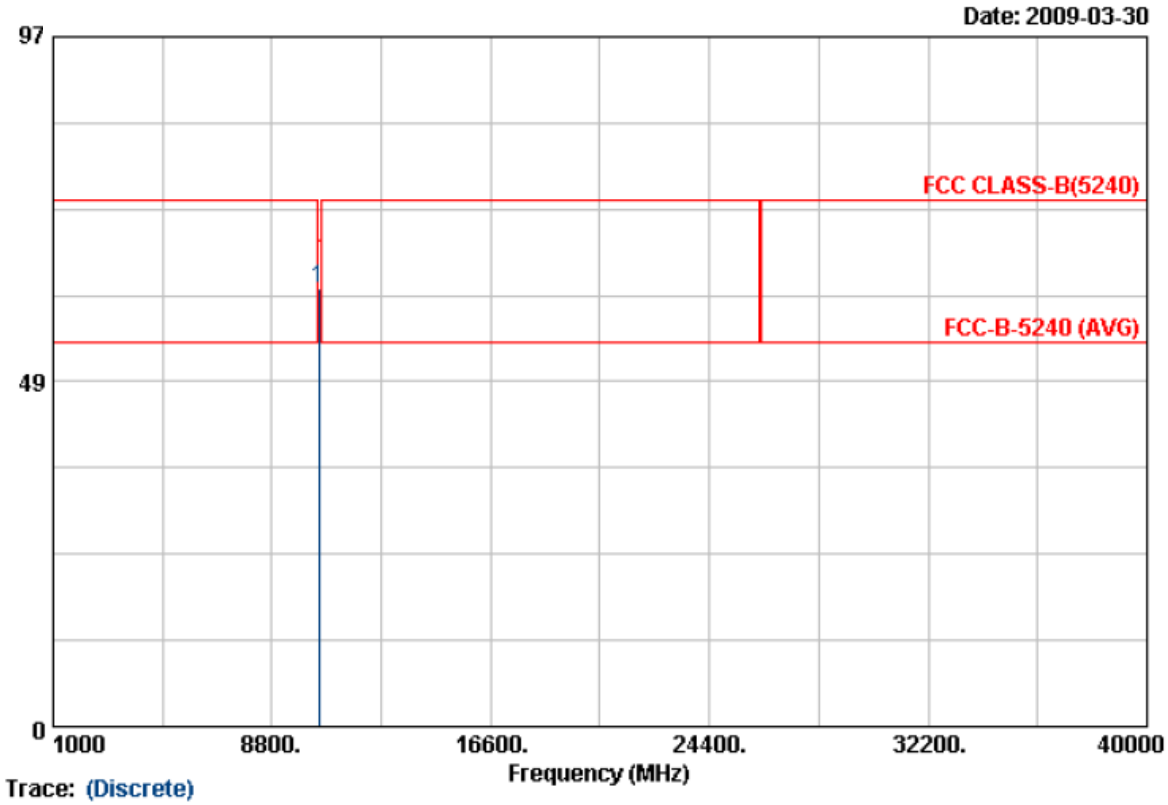
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10445.000	43.56	18.50	62.06	68.30	-6.24	Peak	100	278

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	802.11an HT20, CH48	Temperature	:	22 °C
Memo	:	EUT with USB cable	Humidity	:	65 %



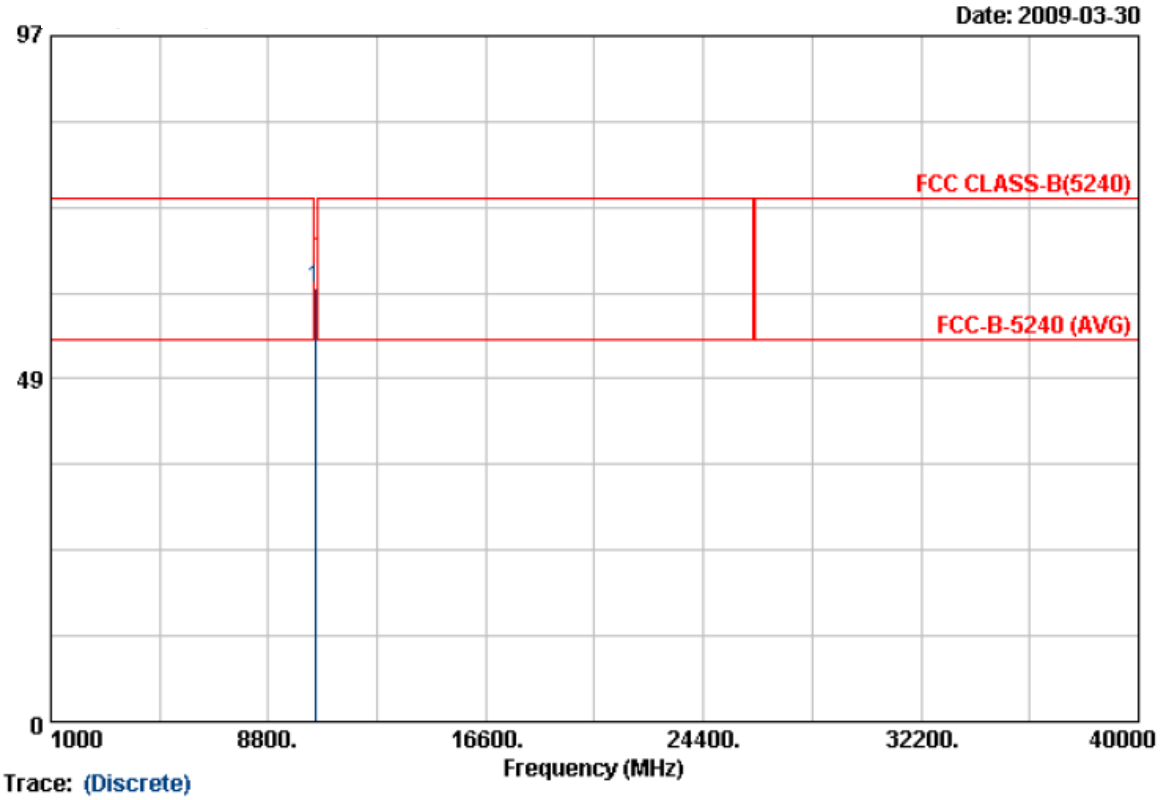
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10483.730	41.06	20.47	61.53	68.30	-6.77	Peak	100	252

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	802.11an HT20, CH48	Temperature	:	22 °C
Memo	:	EUT with USB cable	Humidity	:	65 %



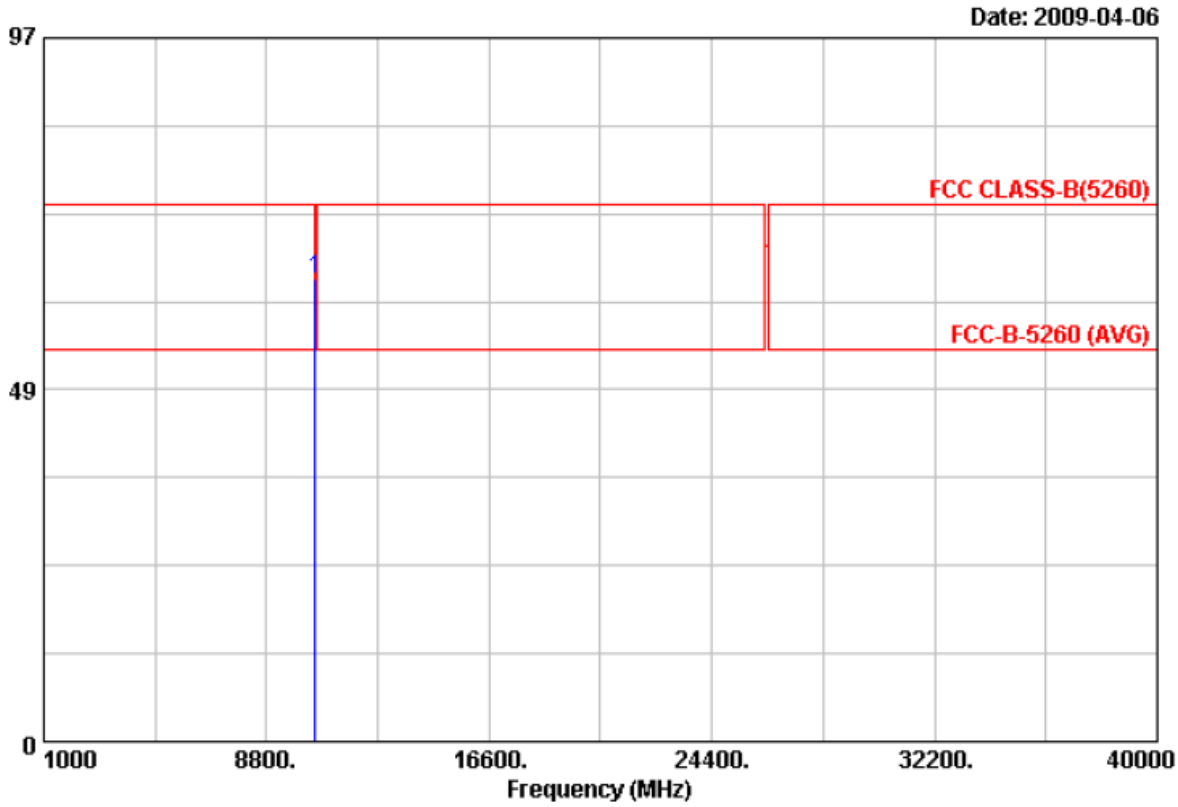
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10476.150	42.93	18.46	61.39	68.30	-6.91	Peak	100	89

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	802.11an HT20, CH56	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	65 %

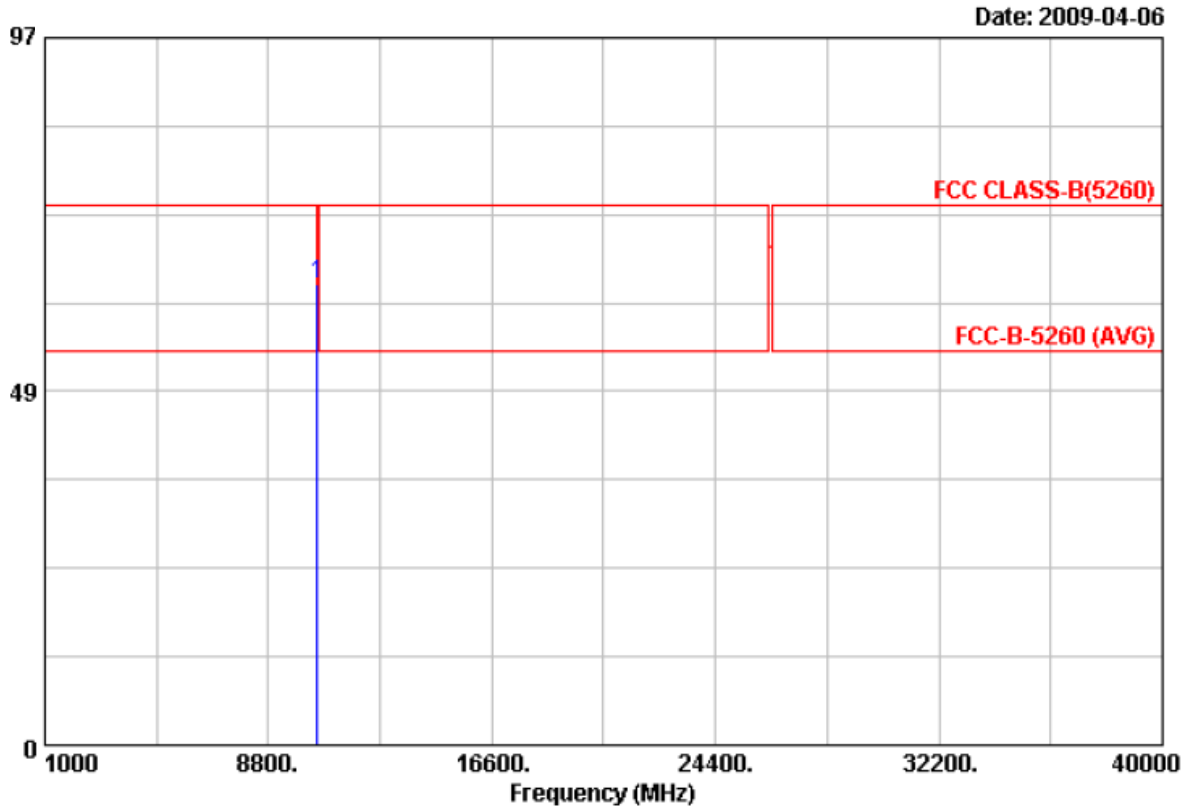


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10517.34	43.34	20.46	63.80	68.30	-4.50	Peak	100	360

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	802.11an HT20, CH56	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	65 %

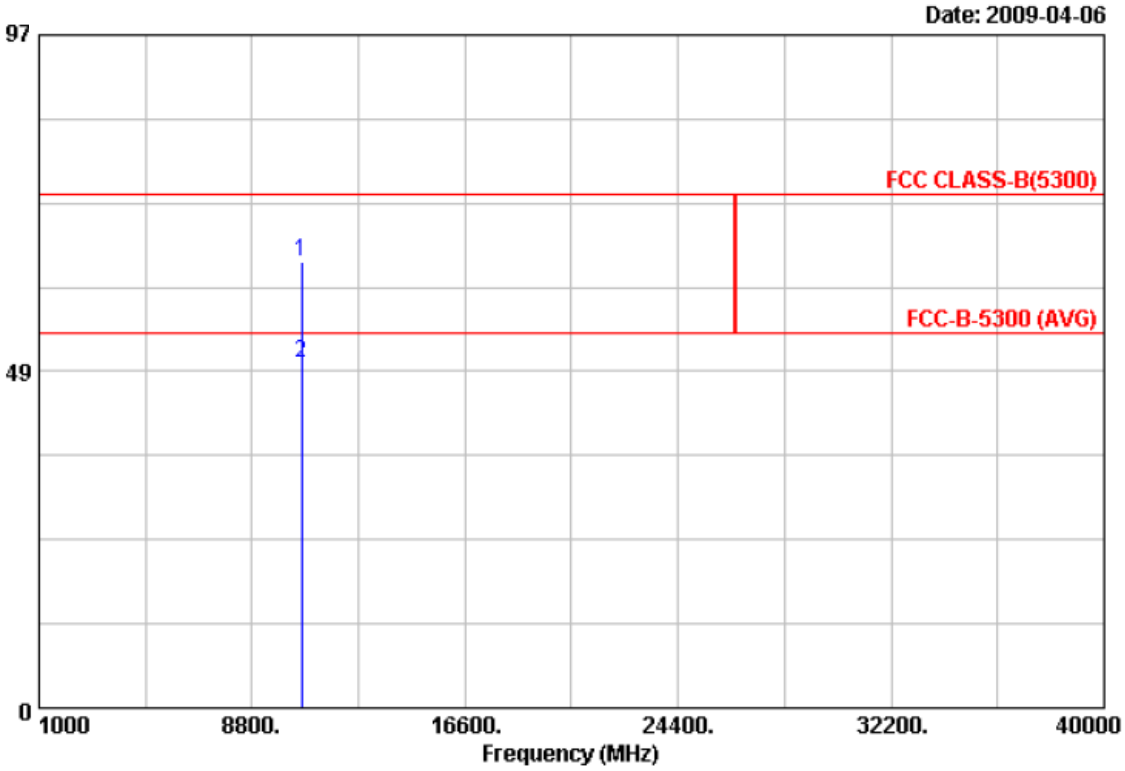


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10519.61	44.75	18.49	63.24	68.30	-5.06	Peak	100	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	802.11an HT20, CH60	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	65 %

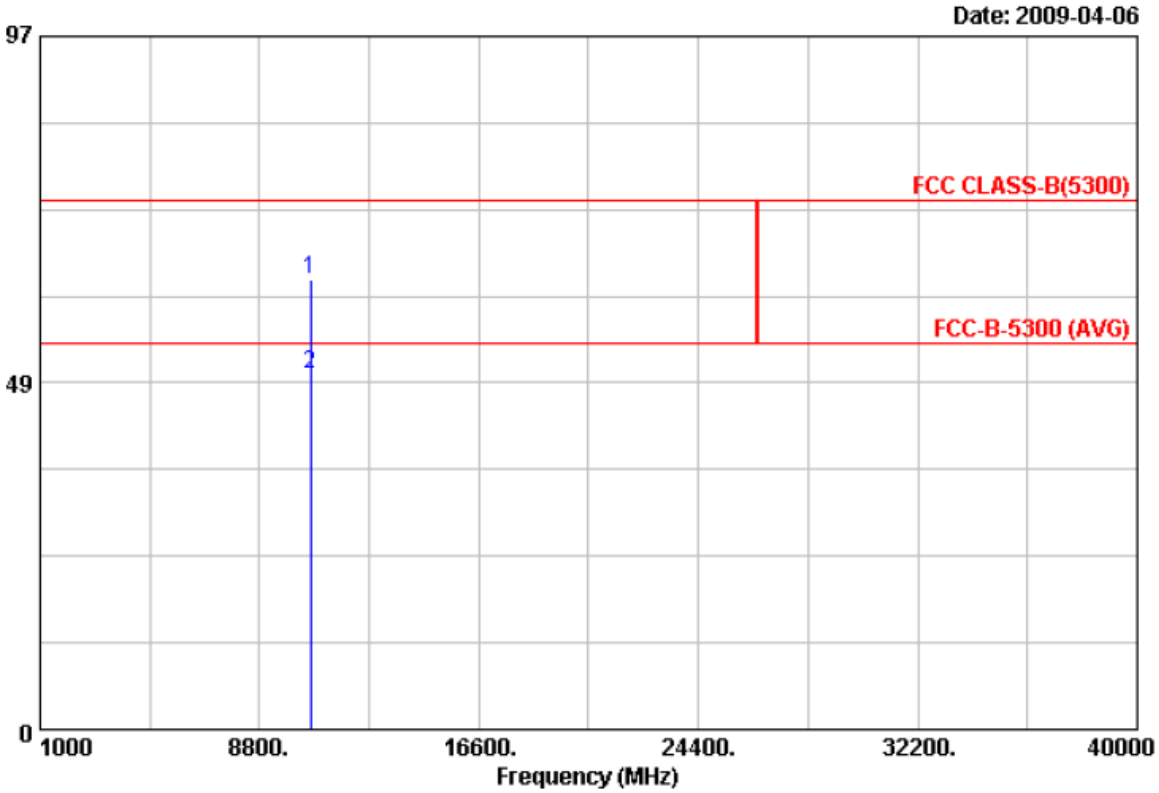


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10600.28	43.73	20.67	64.40	74.00	-9.60	Peak	100	0
2	10600.30	29.11	20.67	49.78	54.00	-4.22	Average	100	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	802.11an HT20, CH60	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	65 %

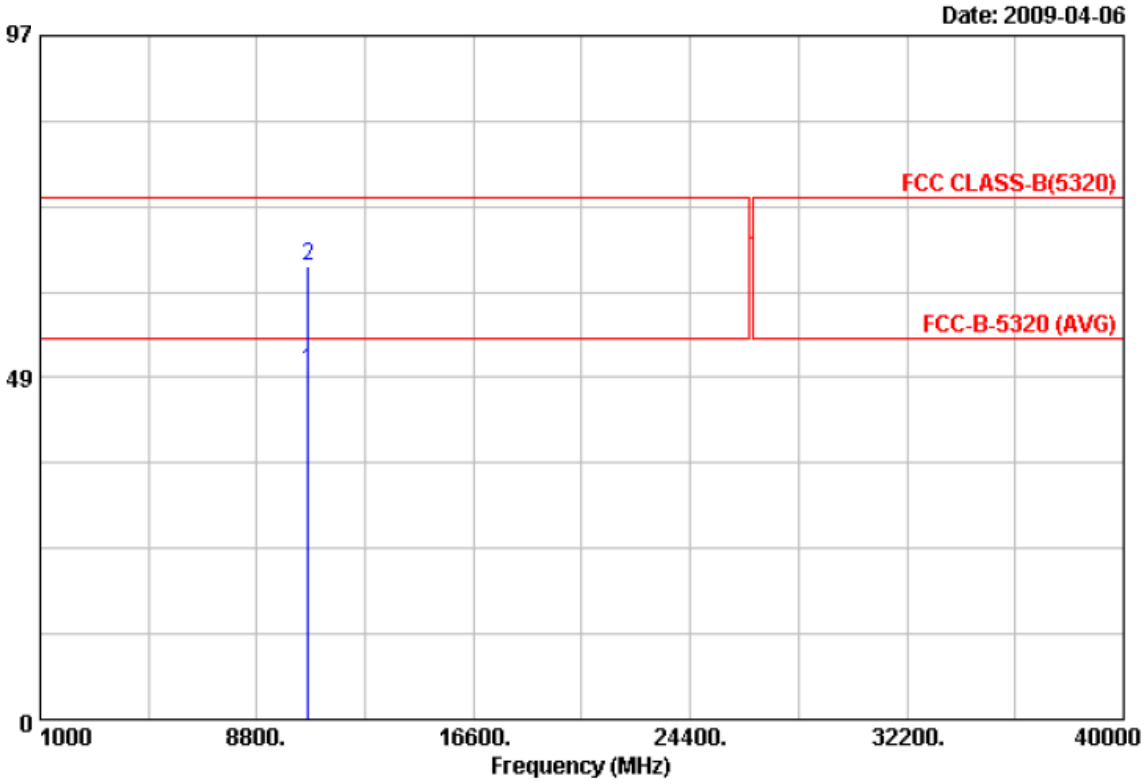


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10599.91	44.28	18.74	63.02	74.00	-10.98	Peak	100	0
2	10600.22	30.97	18.74	49.71	54.00	-4.29	Average	100	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	802.11an HT20, CH64	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	65 %

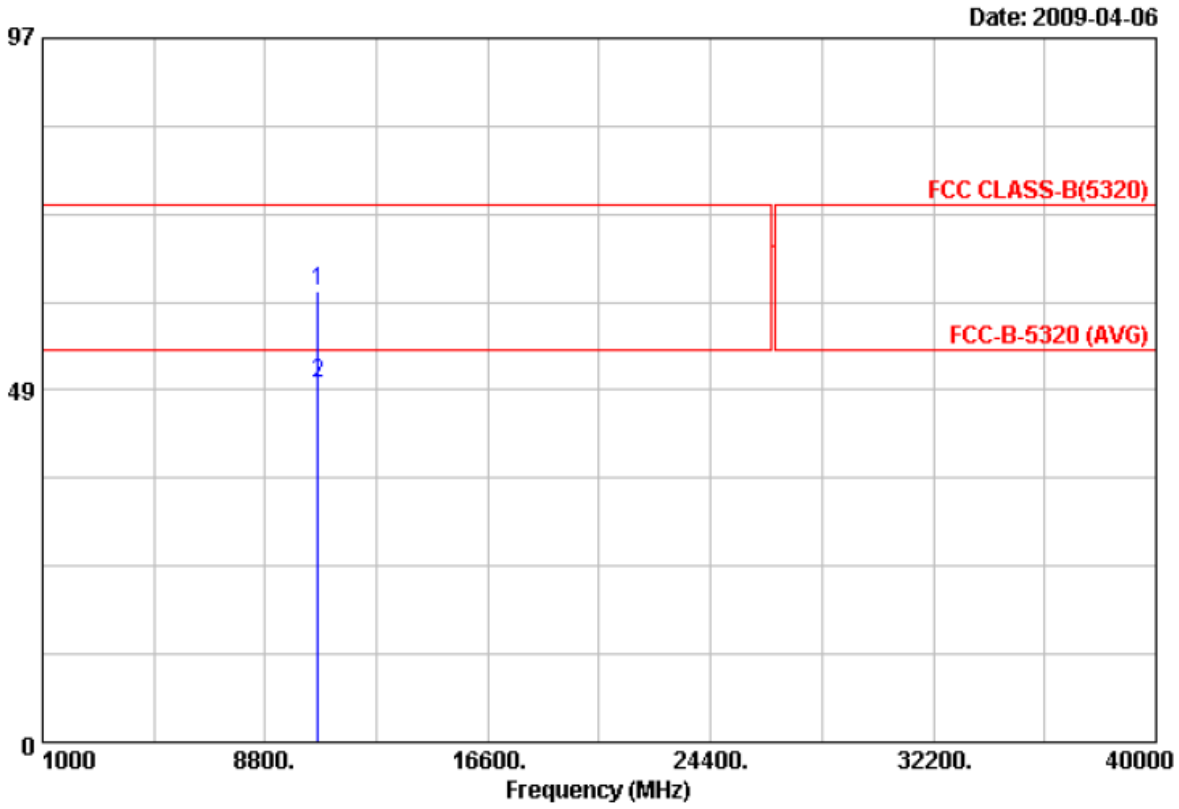


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10639.42	28.76	20.77	49.53	54.00	-4.47	Average	100	0
2	10640.02	43.49	20.77	64.26	74.00	-9.74	Peak	100	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	802.11an HT20, CH64	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	65 %

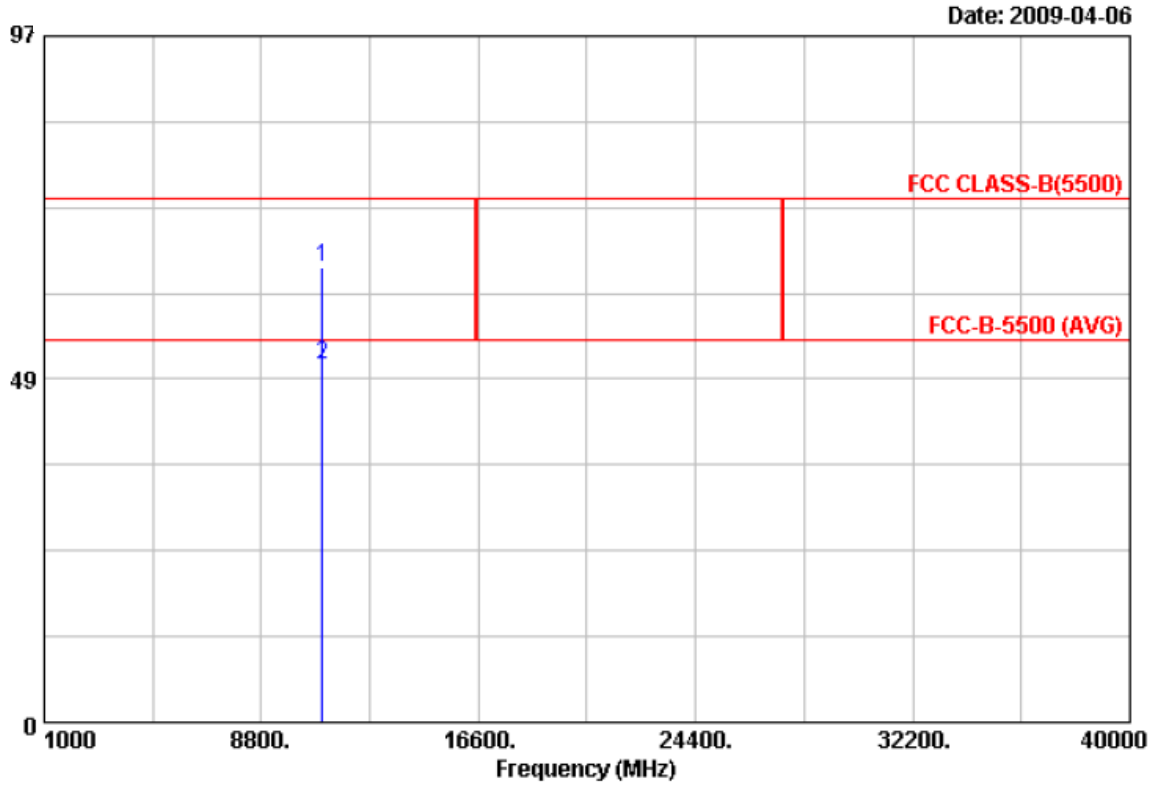


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10640.08	43.41	18.86	62.27	74.00	-11.73	Peak	100	0
2	10640.66	30.69	18.86	49.55	54.00	-4.45	Average	100	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	802.11an HT20, CH100	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	65 %

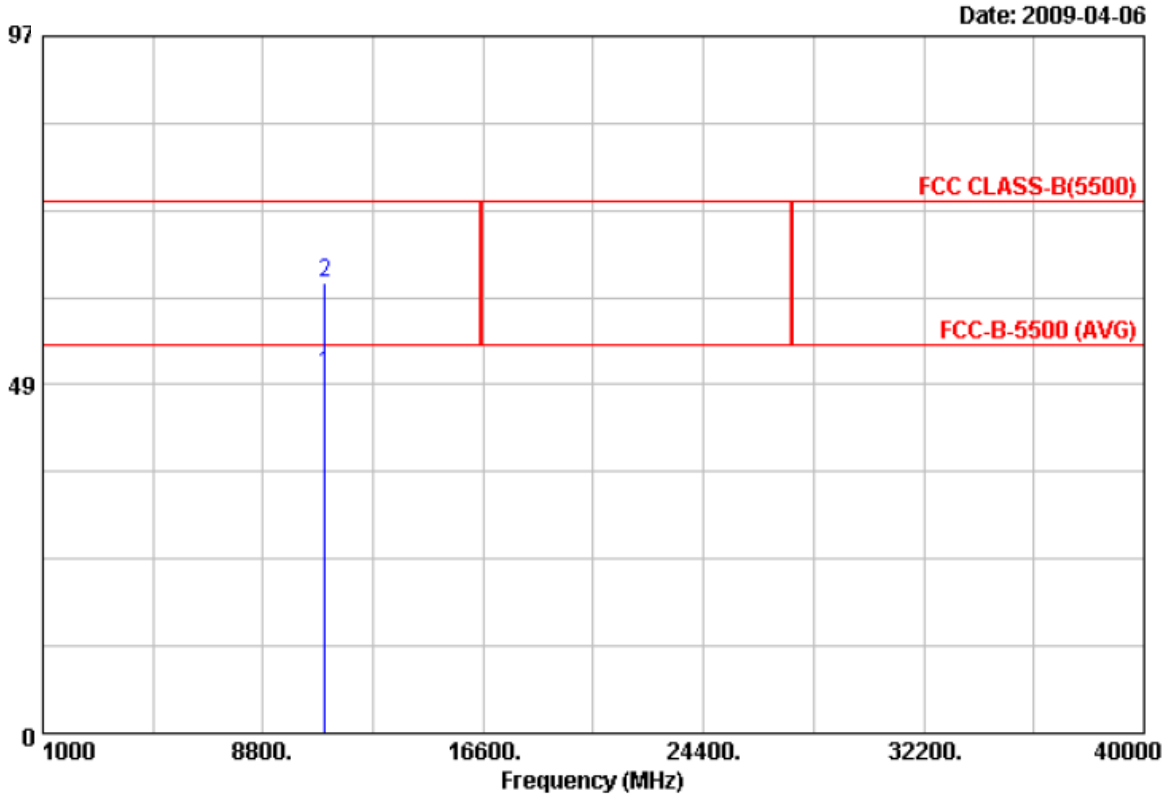


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10999.61	42.57	21.69	64.26	74.00	-9.74	Peak	100	0
2	10999.63	28.84	21.69	50.53	54.00	-3.47	Average	100	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	802.11an HT20, CH100	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	65 %

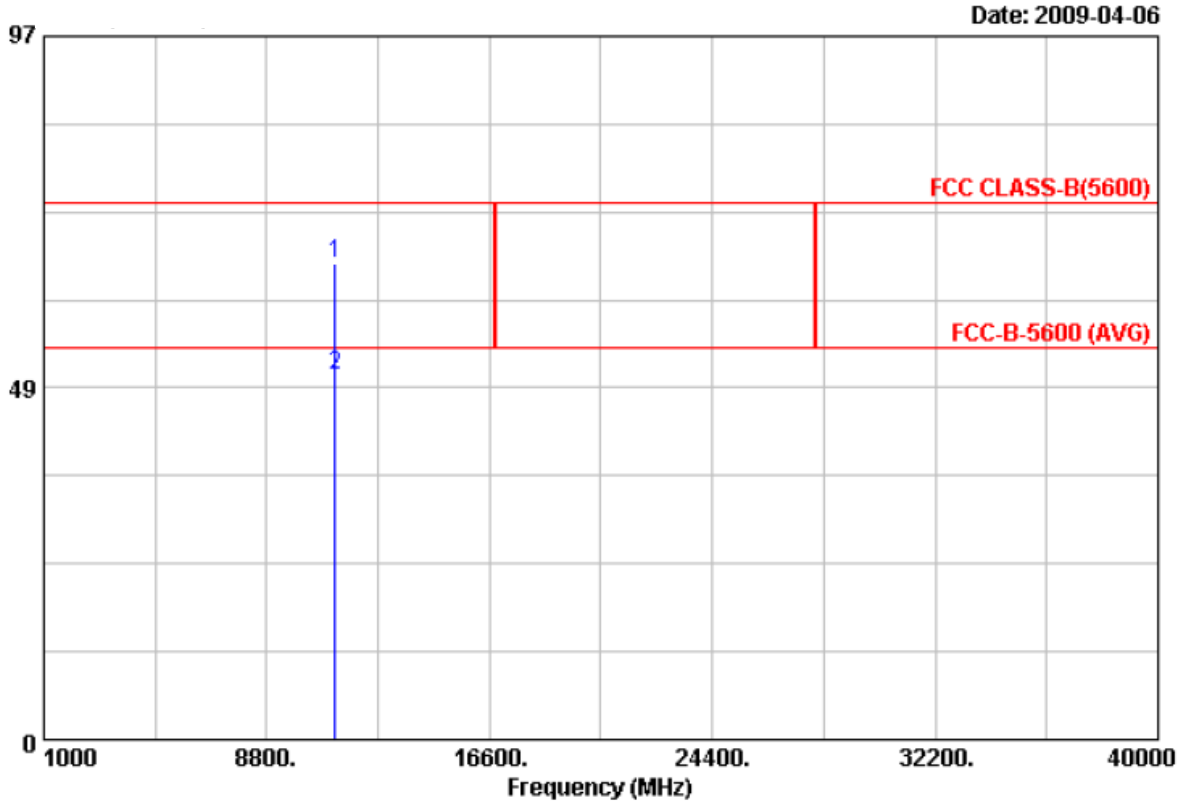


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10999.88	29.87	19.99	49.86	54.00	-4.14	Average	100	0
2	11000.20	42.65	19.99	62.64	74.00	-11.36	Peak	100	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	802.11an HT20, CH120	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	65 %

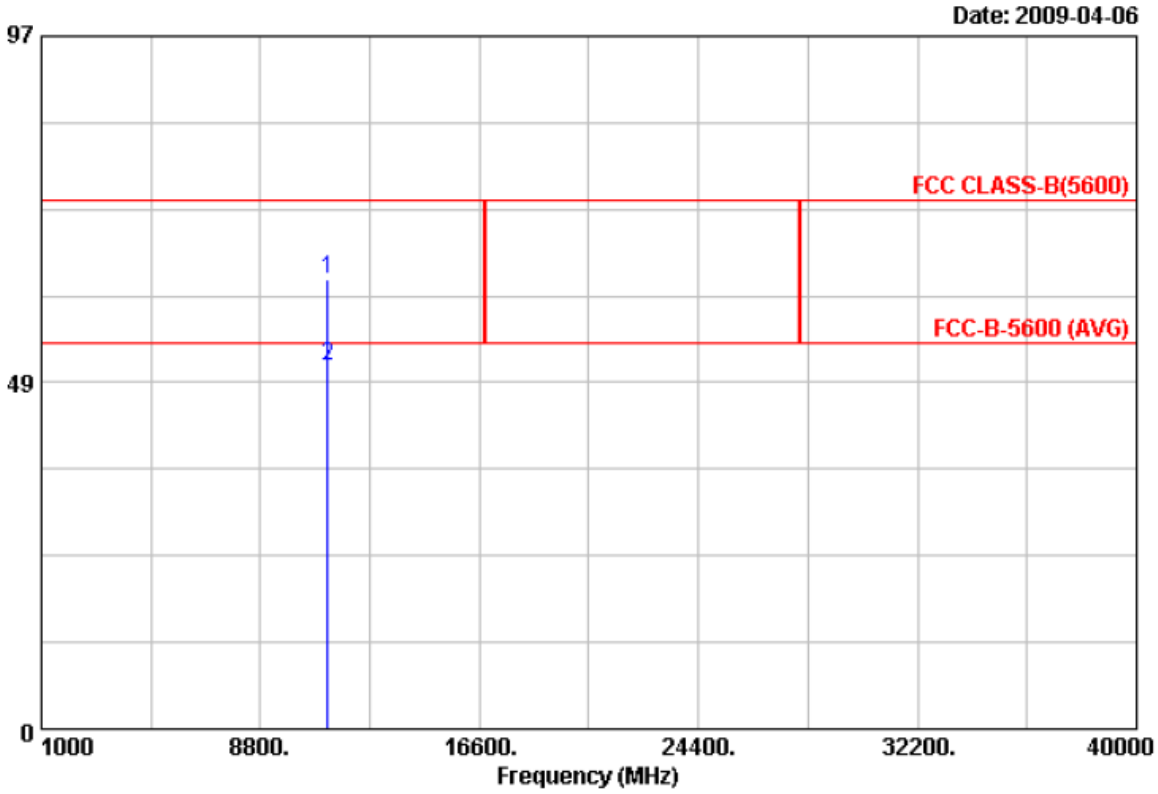


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	11199.930	43.16	22.48	65.64	74.00	-8.36	Peak	100	0
2	11200.070	27.66	22.48	50.14	54.00	-3.86	Average	100	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	802.11an HT20, CH120	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	65 %

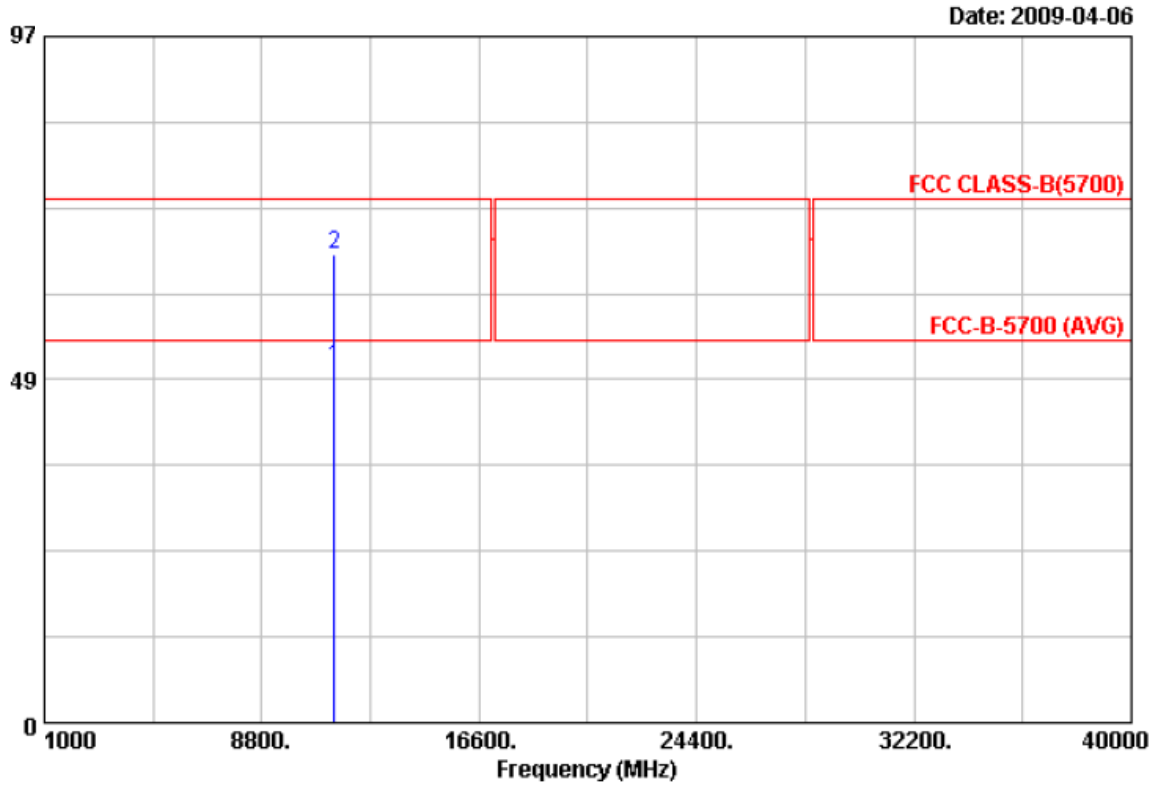


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	11200.100	42.66	20.35	63.01	74.00	-10.99	Peak	100	0
2	11200.230	30.56	20.35	50.91	54.00	-3.09	Average	100	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	802.11an HT20, CH140	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	65 %

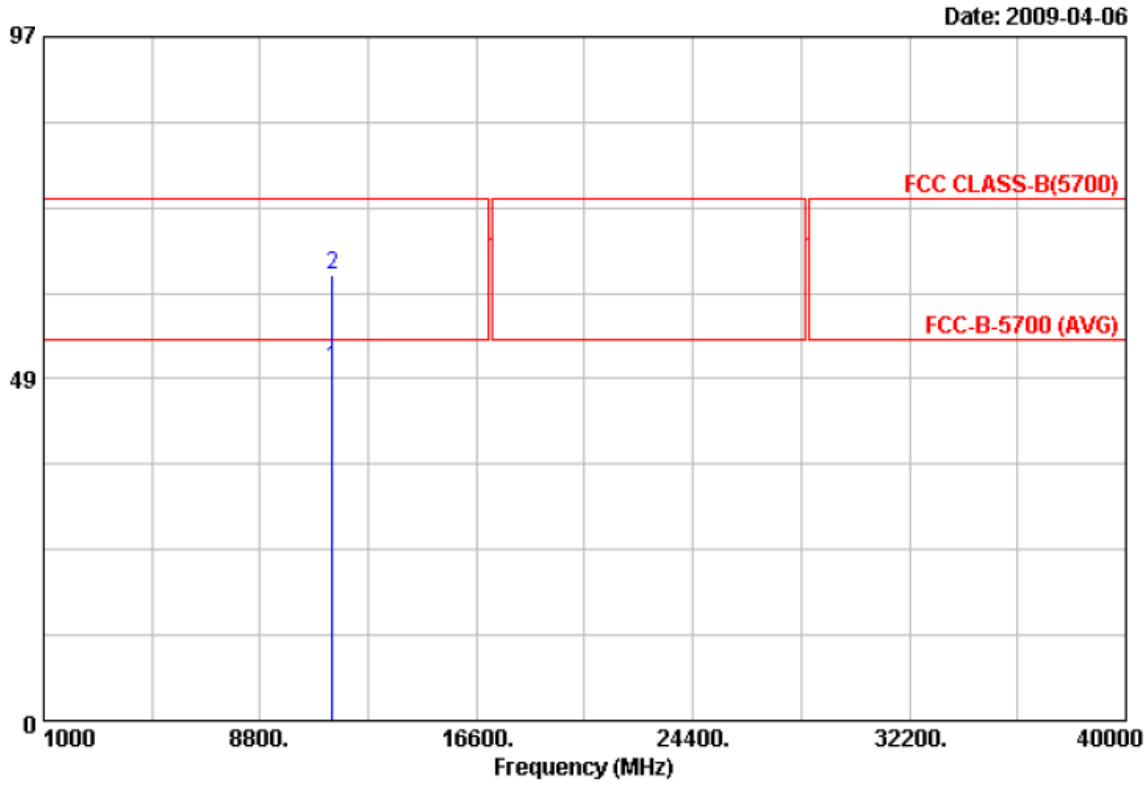


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	11400.02	27.11	23.27	50.38	54.00	-3.62	Average	100	0
2	11400.07	42.81	23.27	66.08	74.00	-7.92	Peak	100	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	802.11an HT20, CH140	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	65 %

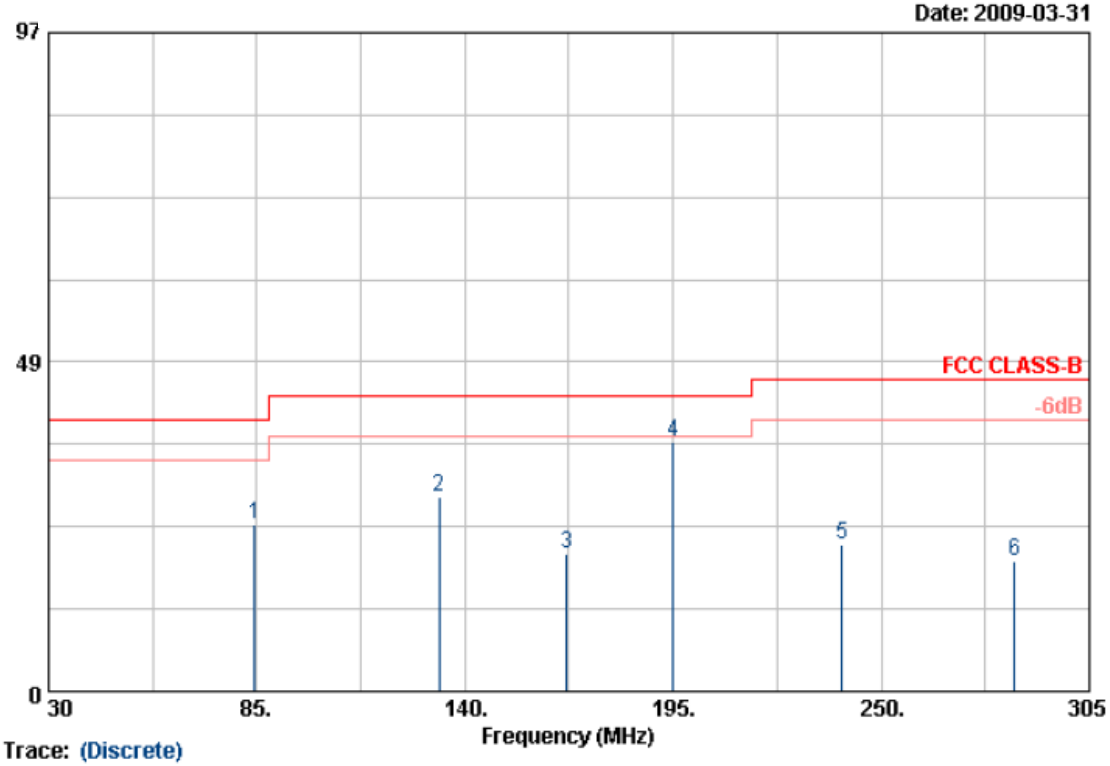


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	11399.90	29.16	20.72	49.88	54.00	-4.12	Average	100	0
2	11400.02	42.56	20.72	63.28	74.00	-10.72	Peak	100	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	802.11an HT40, CH38	Temperature	:	25 °C
Memo	:	EUT with USB cable	Humidity	:	65 %



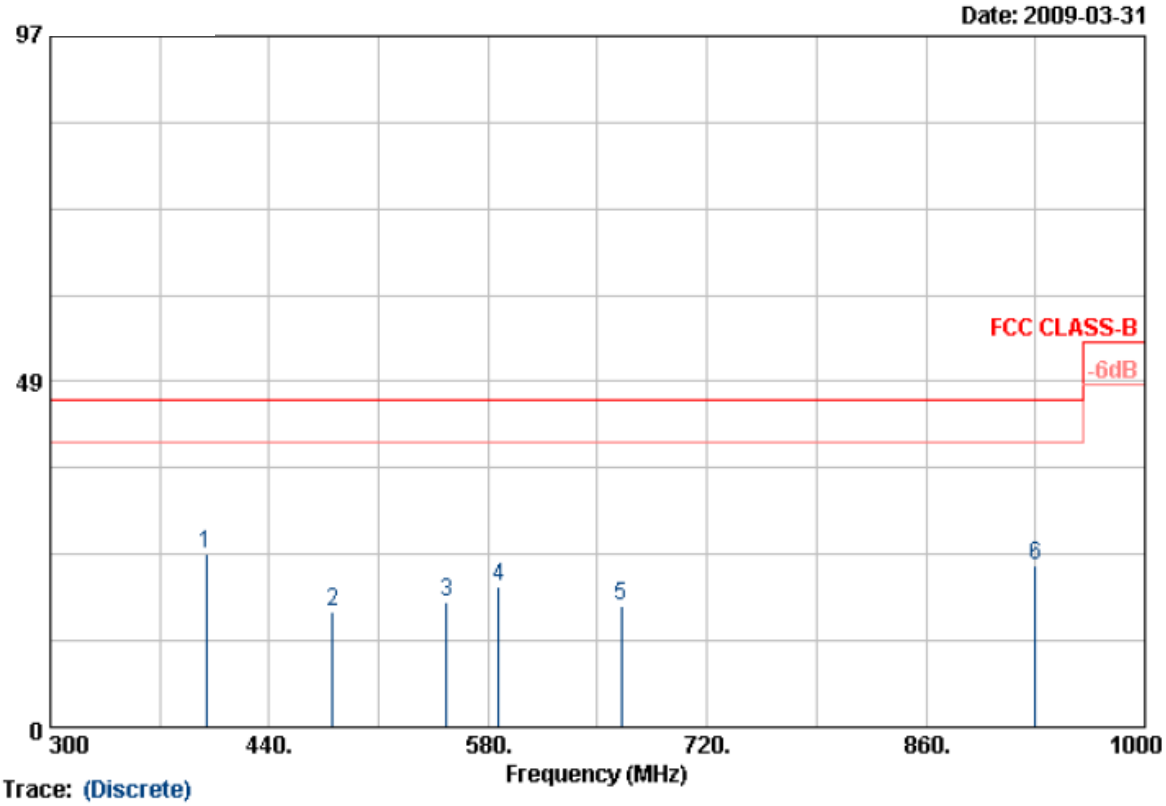
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	84.450	48.26	-23.81	24.45	40.00	-15.55	Peak	100	0
2	133.125	52.14	-23.55	28.59	43.50	-14.91	Peak	100	0
3	166.950	45.51	-25.28	20.23	43.50	-23.27	Peak	100	0
4	195.000	59.09	-22.44	36.65	43.50	-6.85	Peak	100	0
5	239.550	48.05	-26.41	21.64	46.00	-24.36	Peak	100	0
6	285.200	46.58	-27.34	19.24	46.00	-26.76	Peak	100	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. According to technical experiences,all spurious emission of 802.11an HT40 mode at channel 38,42,46 are almost the same below 1GHz,so that the channel 38 was chosen as representative in final test.
5. The data is worse case.

Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	802.11an HT40, CH38	Temperature	:	25 °C
Memo	:	EUT with USB cable	Humidity	:	65 %



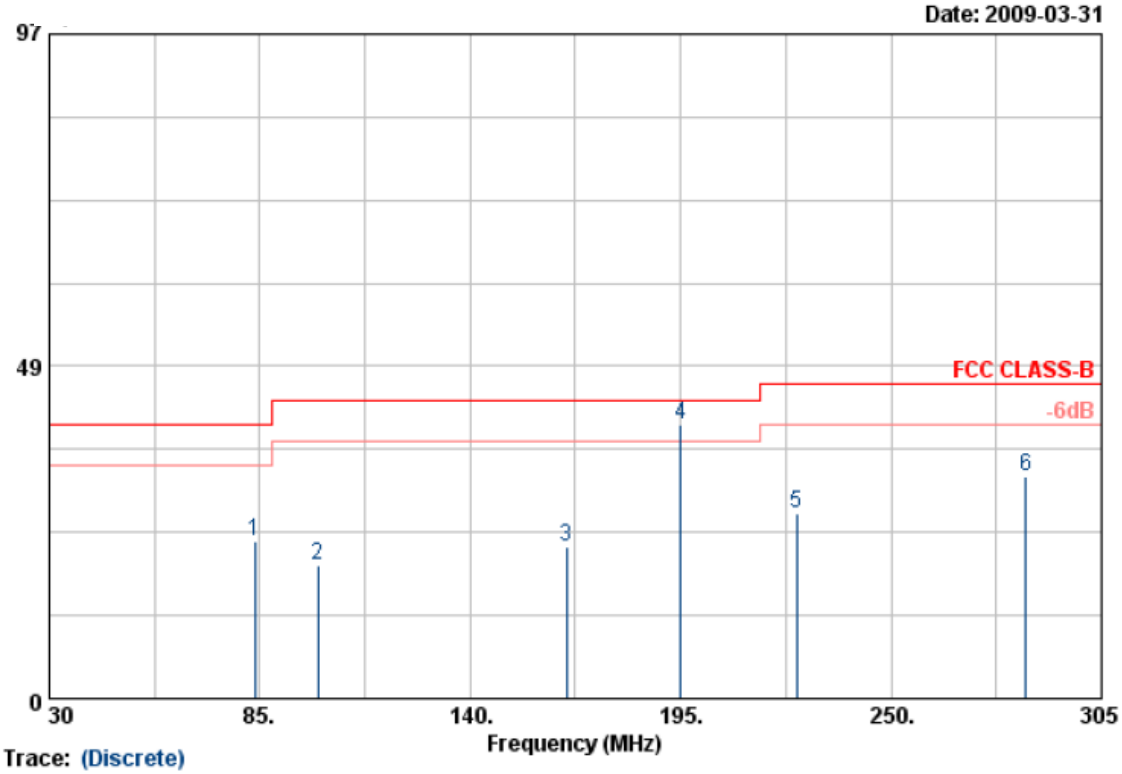
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	399.400	49.63	-25.42	24.21	46.00	-21.79	Peak	150	0
2	480.600	44.19	-27.88	16.31	46.00	-29.69	Peak	150	0
3	553.400	42.40	-24.70	17.70	46.00	-28.30	Peak	150	0
4	587.000	46.20	-26.43	19.77	46.00	-26.23	Peak	150	0
5	665.400	44.03	-27.09	16.94	46.00	-29.06	Peak	150	0
6	930.000	44.49	-21.82	22.67	46.00	-23.33	Peak	150	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. According to technical experiences,all spurious emission of 802.11an HT40 mode at channel 38,42,46 are almost the same below 1GHz,so that the channel 38 was chosen as representative in final test.
5. The data is worse case.

Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	802.11an HT40, CH38	Temperature	:	25 °C
Memo	:	EUT with USB cable	Humidity	:	65 %



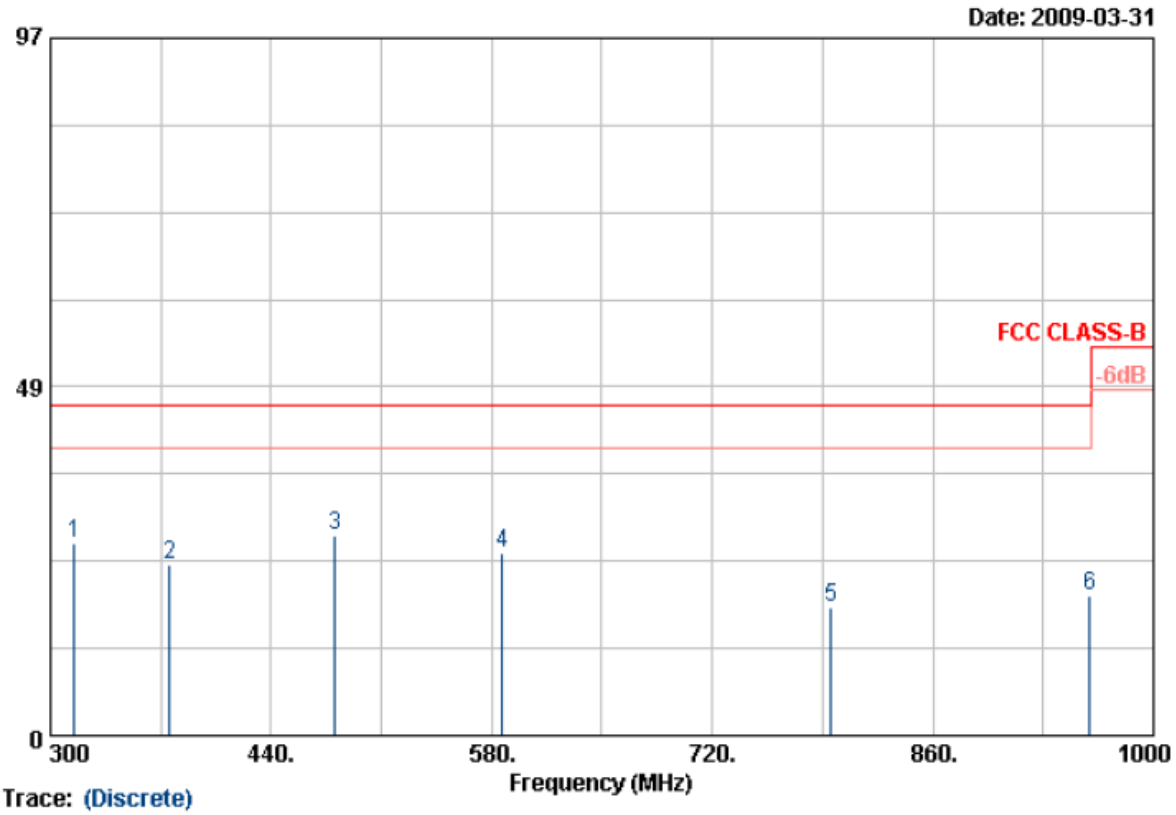
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	83.63	54.07	-31.05	23.02	40.00	-16.98	Peak	100	0
2	100.13	50.19	-30.75	19.44	43.50	-24.06	Peak	100	0
3	165.30	52.48	-30.33	22.15	43.50	-21.35	Peak	100	0
4	195.00	70.06	-30.12	39.94	43.50	-3.56	QP	100	0
5	225.25	57.09	-29.94	27.15	46.00	-18.85	Peak	100	0
6	285.20	60.16	-27.78	32.38	46.00	-13.62	Peak	100	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. According to technical experiences,all spurious emission of 802.11an HT40 mode at channel 38,42,46 are almost the same below 1GHz,so that the channel 38 was chosen as representative in final test.
5. The data is worse case.

Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	802.11an HT40, CH38	Temperature	:	25 °C
Memo	:	EUT with USB cable	Humidity	:	65 %



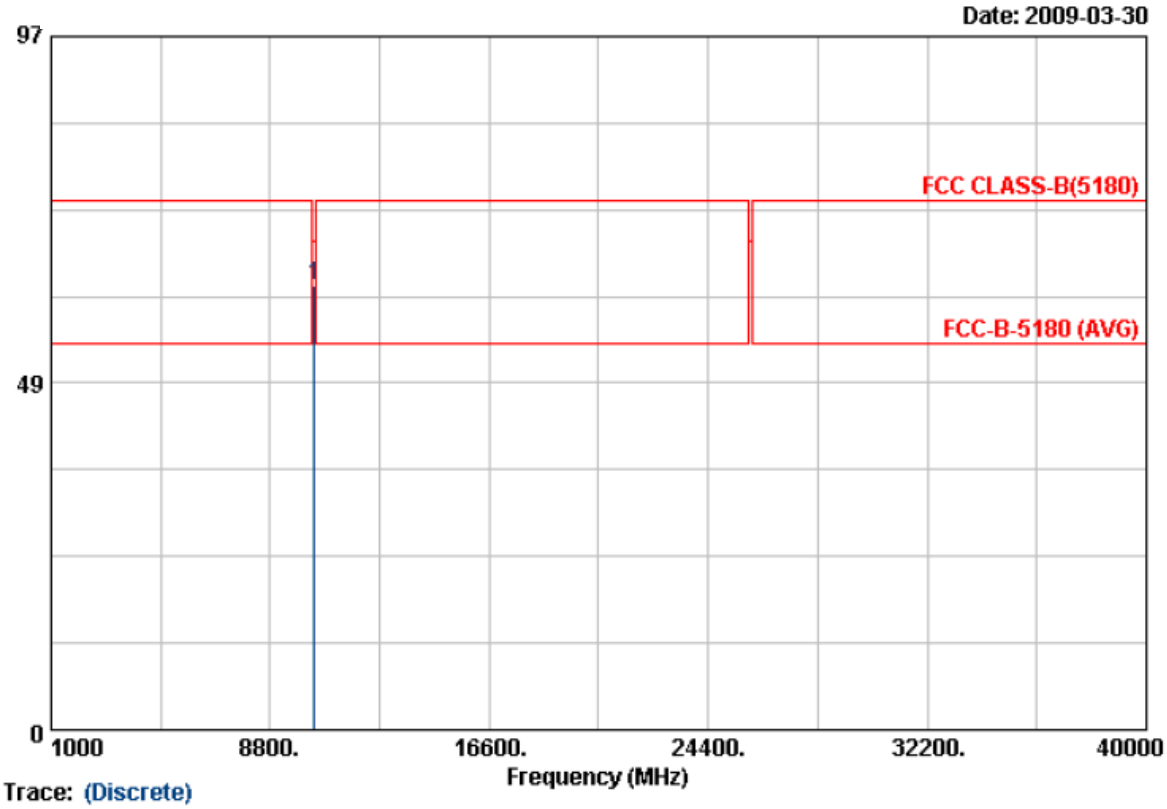
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	315.400	54.99	-28.22	26.77	46.00	-19.23	Peak	150	0
2	375.600	53.10	-29.20	23.90	46.00	-22.10	Peak	150	0
3	480.600	52.70	-24.90	27.80	46.00	-18.20	Peak	150	0
4	587.000	48.99	-23.62	25.37	46.00	-20.63	Peak	150	0
5	795.600	43.25	-25.34	17.91	46.00	-28.09	Peak	150	0
6	959.400	45.25	-25.88	19.37	46.00	-26.63	Peak	150	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. According to technical experiences,all spurious emission of 802.11an HT40 mode at channel 38,42,46 are almost the same below 1GHz,so that the channel 38 was chosen as representative in final test.
5. The data is worse case.

Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	802.11an HT40, CH38	Temperature	:	22 °C
Memo	:	EUT with USB cable	Humidity	:	65 %



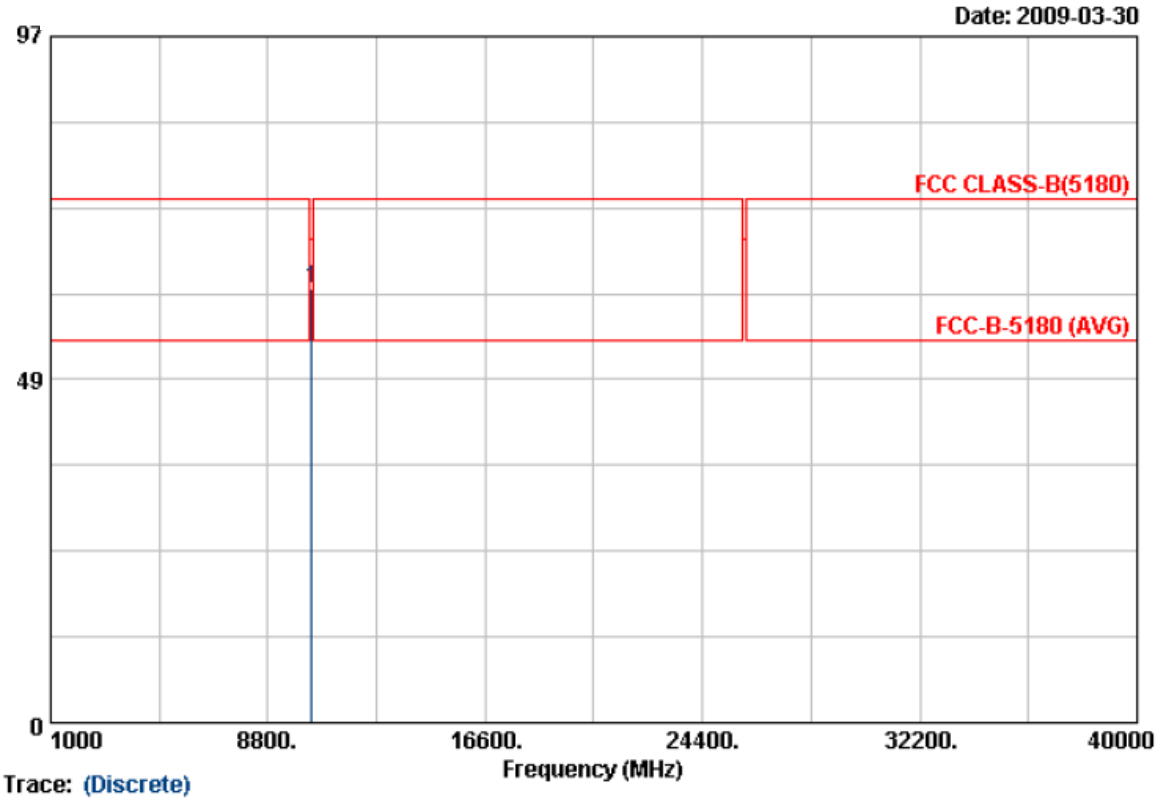
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10383.540	41.43	20.81	62.24	68.30	-6.06	Peak	100	150

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	802.11an HT40, CH38	Temperature	:	22 °C
Memo	:	EUT with USB cable	Humidity	:	65 %



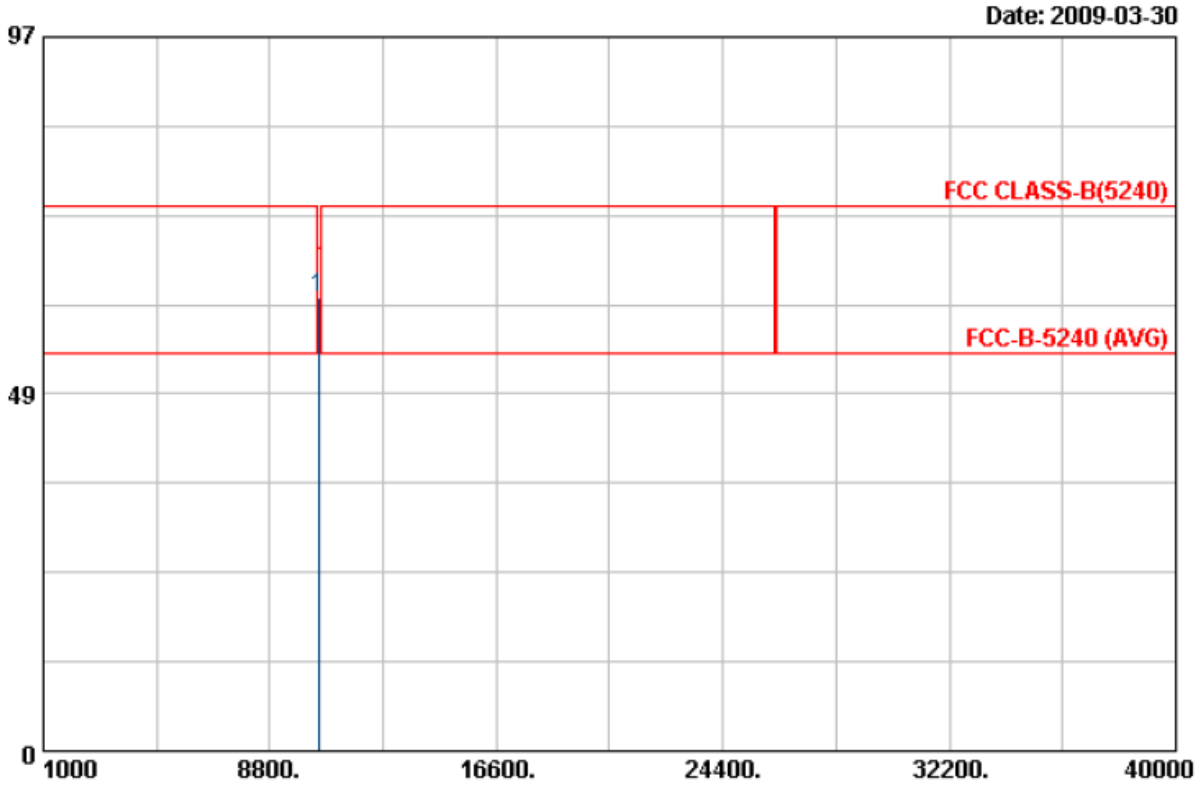
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10384.000	42.87	18.56	61.43	68.30	-6.87	Peak	100	206

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	802.11an HT40, CH46	Temperature	:	22 °C
Memo	:	EUT with USB cable	Humidity	:	65 %



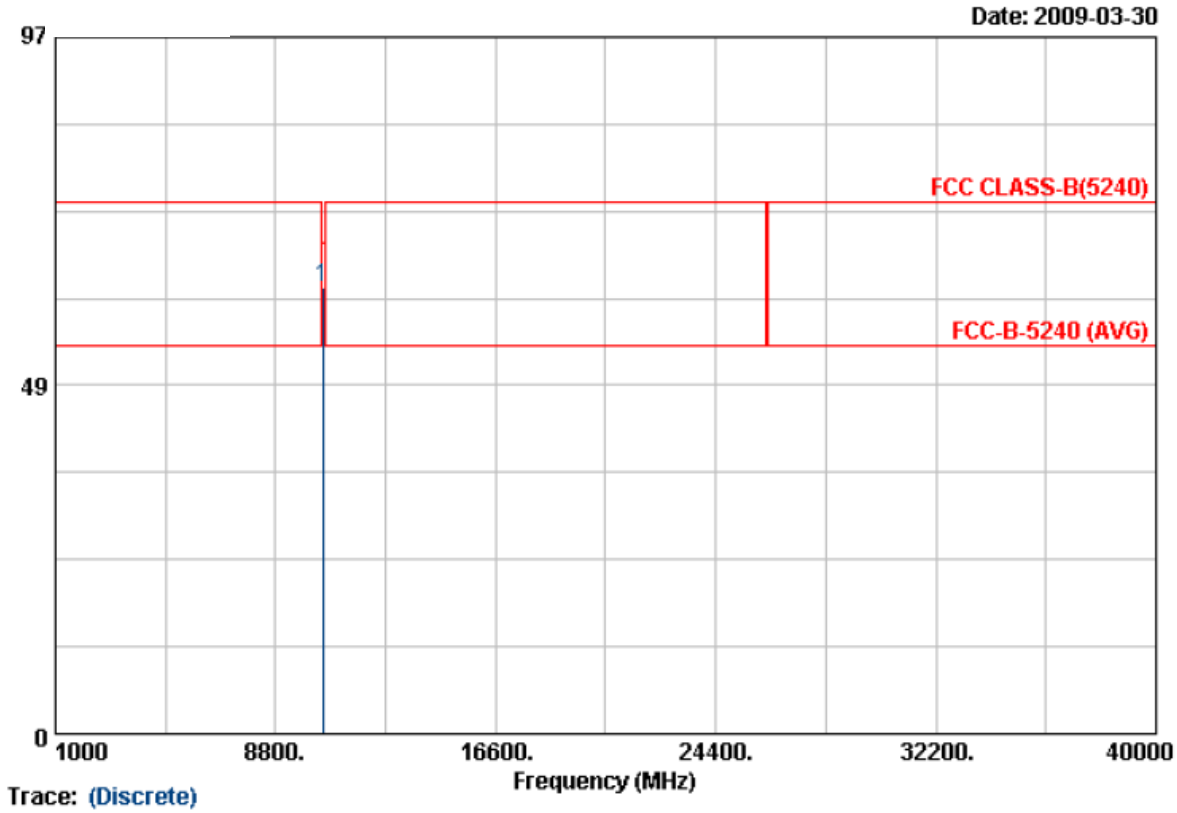
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10460.420	41.02	20.56	61.58	68.30	-6.72	Peak	100	133

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	802.11an HT40, CH46	Temperature	:	22 °C
Memo	:	EUT with USB cable	Humidity	:	65 %



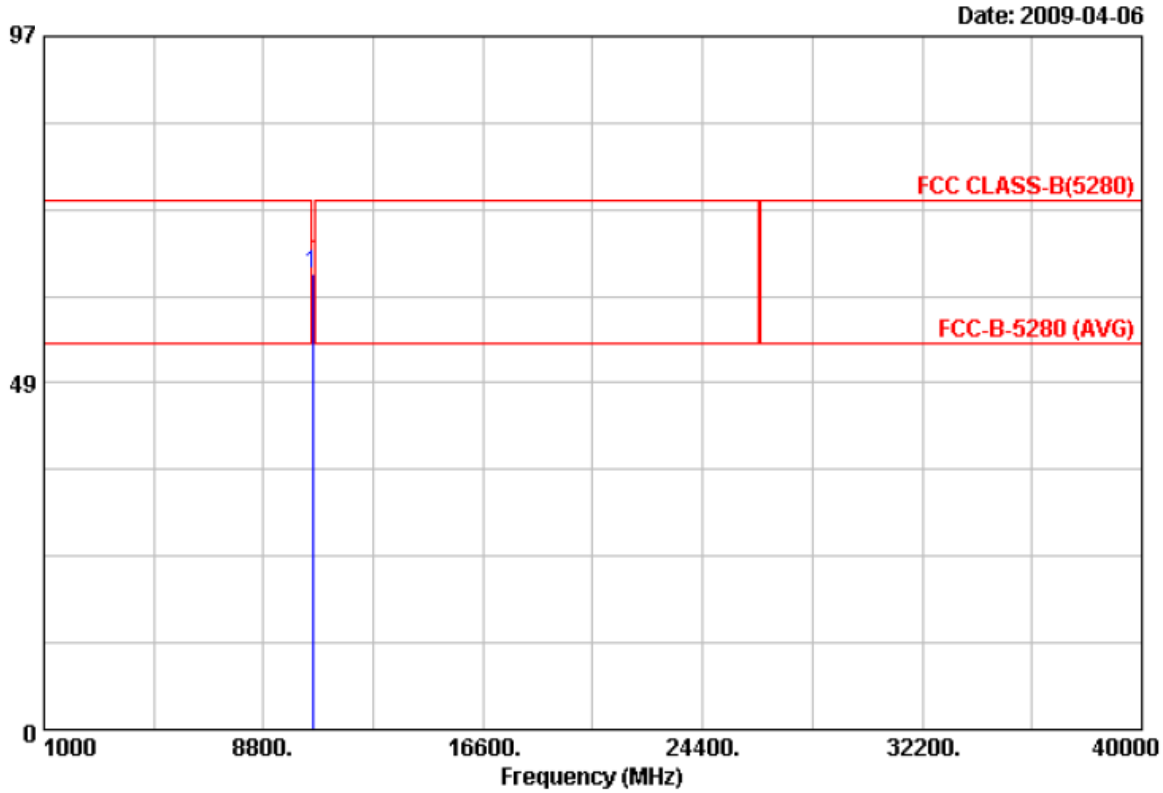
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10463.040	43.76	18.47	62.23	68.30	-6.07	Peak	100	118

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	802.11an HT40, CH54	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	65 %

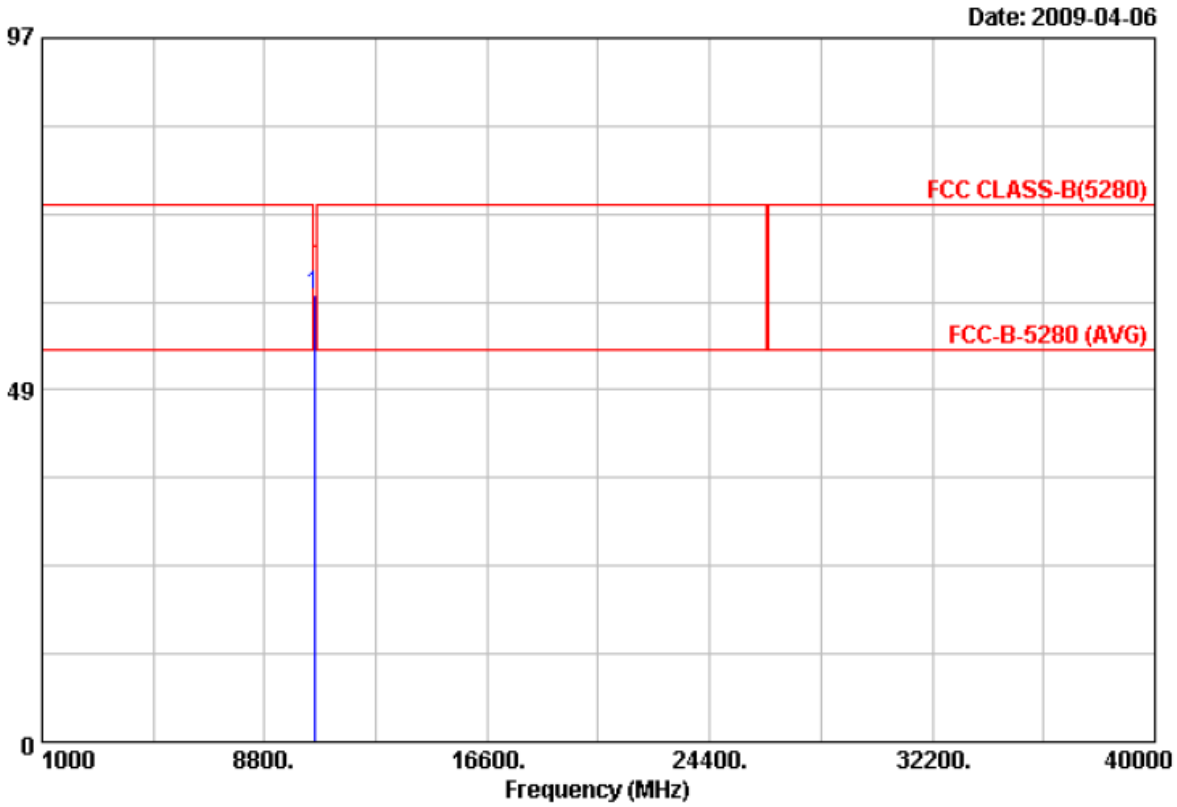


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10539.840	43.29	20.52	63.81	68.30	-4.49	Peak	100	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	802.11an HT40, CH54	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	65 %

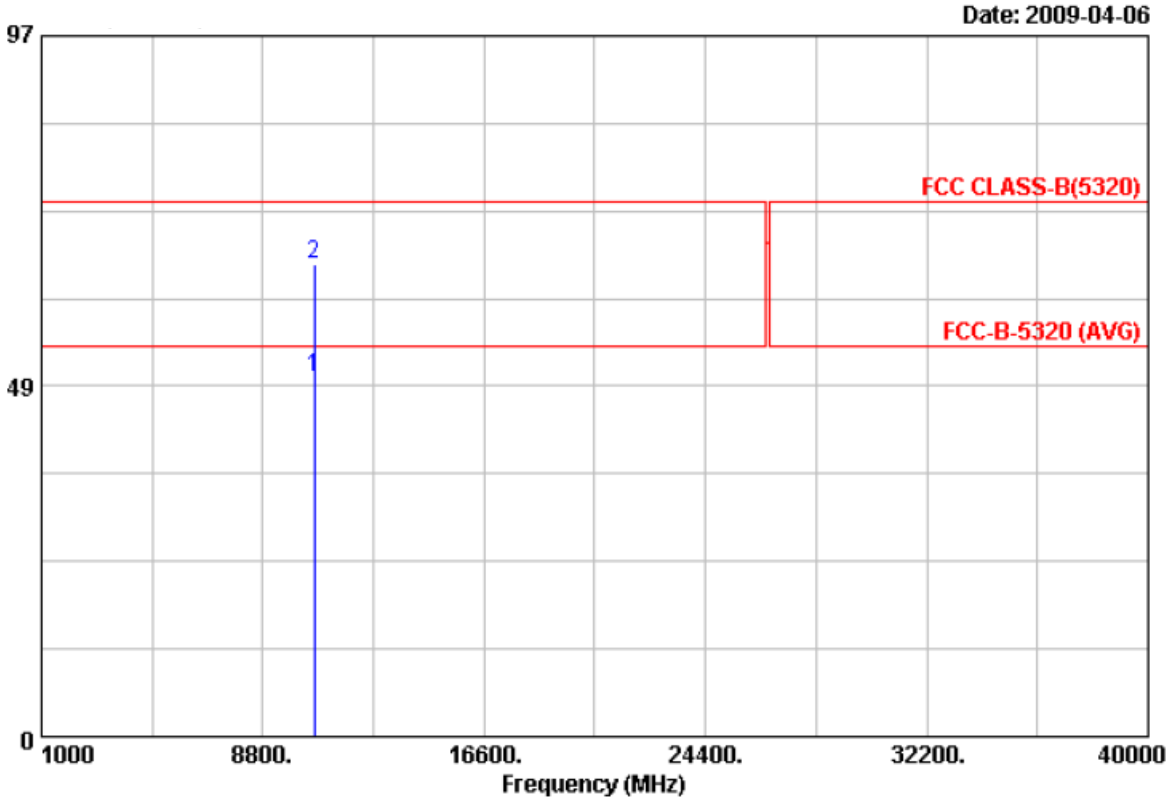


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10540.230	42.94	18.55	61.49	68.30	-6.81	Peak	100	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	802.11an HT40, CH62	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	65 %

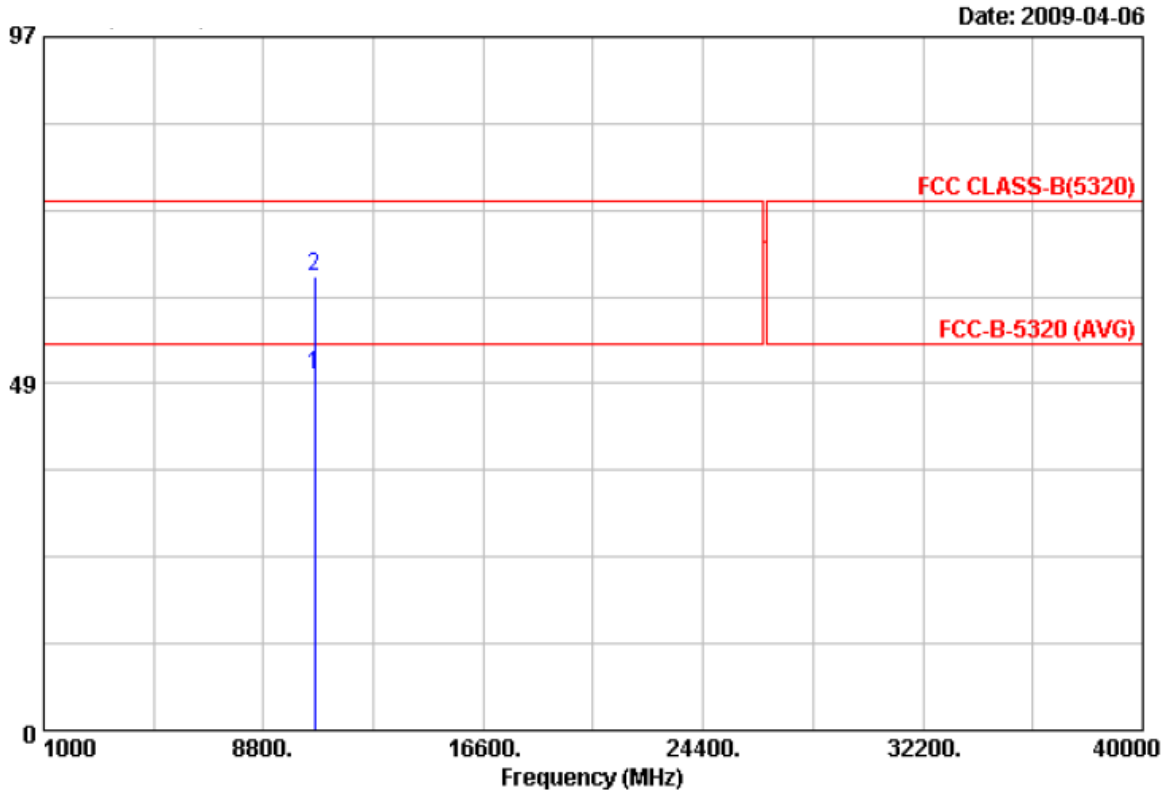


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10619.49	28.98	20.72	49.70	54.00	-4.30	Average	150	0
2	10620.13	44.77	20.72	65.49	74.00	-8.51	Peak	150	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	802.11an HT40, CH62	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	65 %

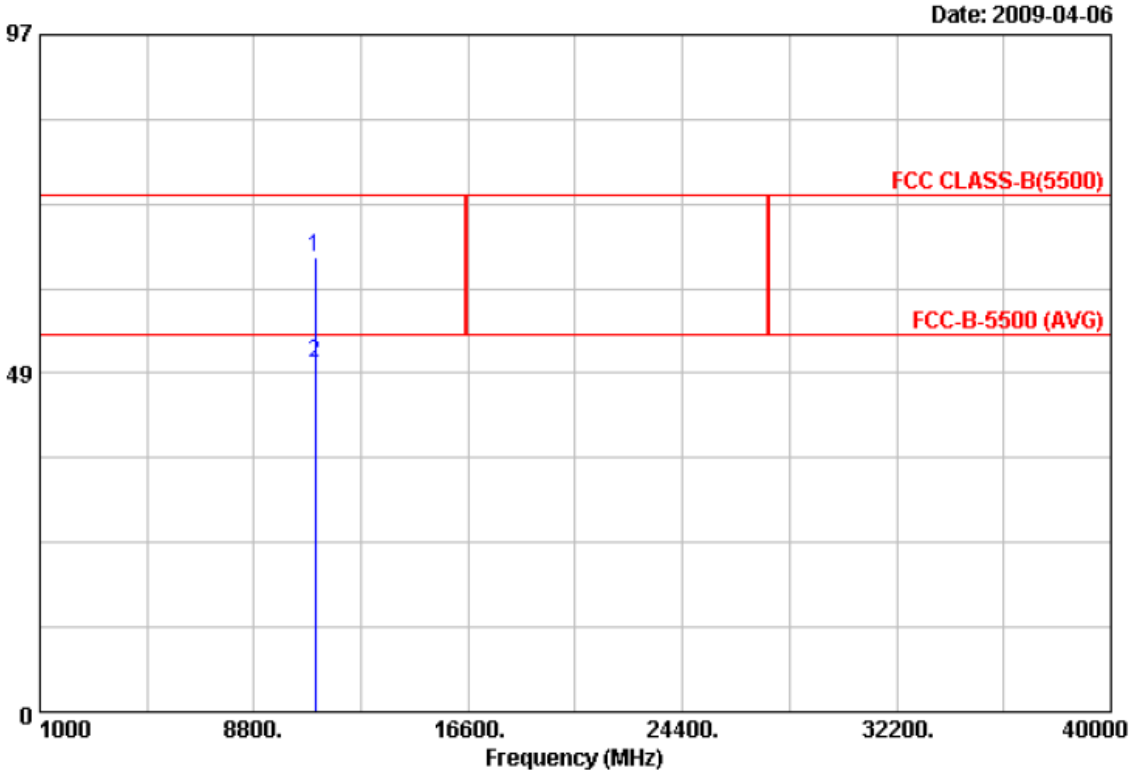


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10619.56	30.97	18.80	49.77	54.00	-4.23	Average	100	0
2	10620.27	44.74	18.80	63.54	74.00	-10.46	Peak	100	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	802.11an HT40, CH102	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	65 %

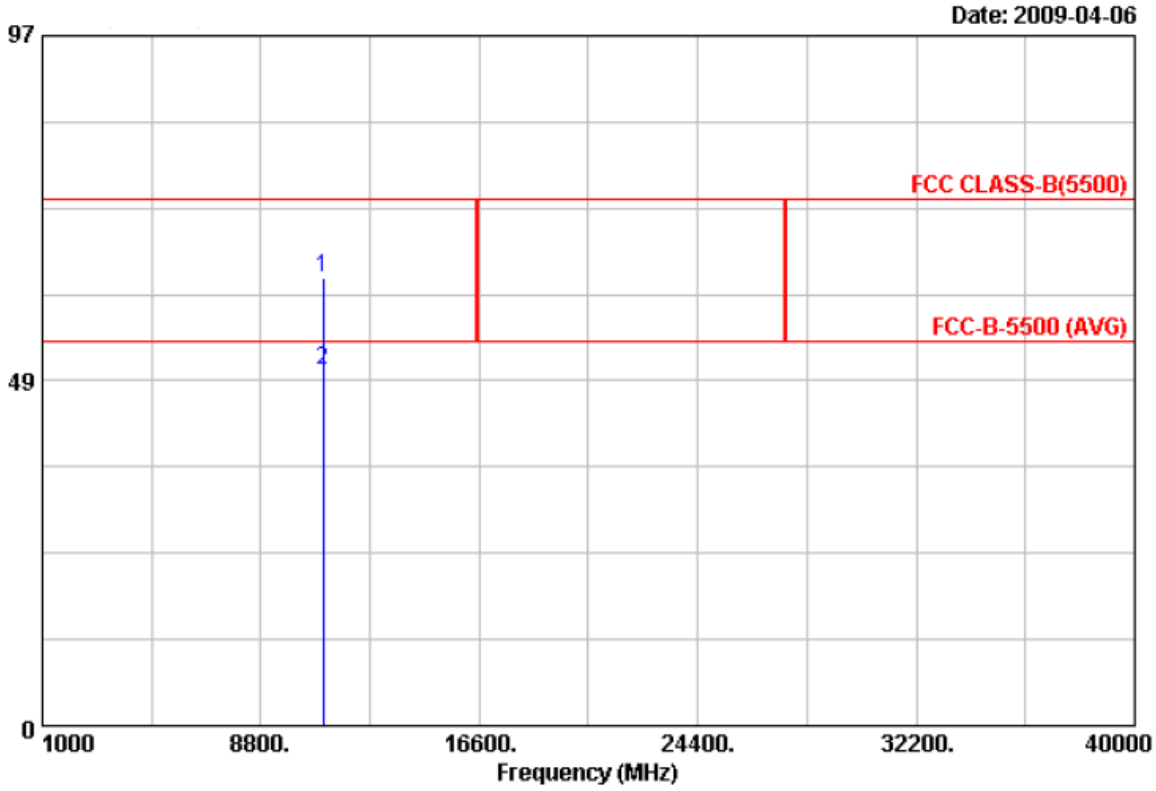


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	11020.08	43.22	21.77	64.99	74.00	-9.01	Peak	100	360
2	11020.82	28.14	21.77	49.91	54.00	-4.09	Average	100	360

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	802.11an HT40, CH102	Temperature	:	23 °C
Memo	:	EUT with USB cable	Humidity	:	65 %



Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	11020.46	42.87	20.02	62.89	74.00	-11.11	Peak	100	360
2	11020.61	29.93	20.02	49.95	54.00	-4.05	Average	100	360

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.