

FCC TEST REPORT

according to

FCC Rules and Regulations

Part 15 Subpart C

Applicant	Digital Data Communications Asia Co. Ltd
Address	8F No.41 Lane 221 Kang-Ching Rd. Nei-Hu Dis. 114 Taipei, Taiwan R.O.C.
Equipment	N_One Wireless CardBus Adapter
Model No.	WPC-0600
FCC ID	ULT540560070602
Trade Name	LevelOne

Laboratory Accreditation



1332

- The test result refers exclusively to the test presented test model / sample.,
- Without written approval of *Exclusive Certification 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

1. Report of Measurements and Examinations	5
1.1 List of Measurements and Examinations.....	5
2. Test Configuration of Equipment under Test	6
2.1 Feature of Equipment under Test.....	6
2.2 RF Specifications	6
2.3 Test Mode and Test Software.....	7
2.4 Description of Test System.....	7
2.5 Connection Diagram of Test System.....	8
2.6 General Information of Test.....	9
2.7 History of this test report	10
3. Antenna Requirements	11
3.1 Standard Applicable	11
3.2 Antenna Construction and Directional Gain.....	11
4. Test of Conducted Emission	12
4.1 Test Limit.....	12
4.2 Test Procedures.....	12
4.3 Typical Test Setup	13
4.4 Measurement equipment	13
4.5 Test Result and Data.....	14
4.6 Test Photographs	20
5. Test of Radiated Emission	21
5.1 Test Limit.....	21
5.2 Test Procedures.....	22
5.3 Typical Test Setup	23
5.4 Measurement equipment	23
5.5 Test Result and Data.....	24
5.6 Test Photographs	60
6. 6dB Bandwidth Measurement Data	61
6.1 Test Limit	61
6.2 Test Procedures	61
6.3 Test Setup Layout.....	61
6.4 Measurement equipment	61
6.5 Test Result and Data.....	61
7. Maximum Peak Output Power	71
7.1 Test Limit	71
7.2 Test Procedures	71
7.3 Test Setup Layout	71
7.4 Measurement equipment	71
7.5 Test Result and Data.....	71
8. Band Edges Measurement	81
8.1 Test Limit	81
8.2 Test Procedure :	81
8.3 Test Setup Layout	81
8.4 List of Measuring Equipment Used.....	81
8.5 Test Result and Data.....	81
8.6 Restrict band emission Measurement Data.....	90

9. Power Spectral Density 92

9.1 Test Limit 92

9.2 Test Procedures 92

9.3 Test Setup Layout : 92

9.4 List of Measuring Equipment Used 92

9.5 Test Result and Data 92

10. Restricted Bands of Operation 103

10.1 Labeling Requirement 103

Appendix A. Photographs of EUT A1 ~ A4

CERTIFICATE OF COMPLIANCE

according to

FCC Rules and Regulations

Part 15 Subpart C

Applicant	Digital Data Communications Asia Co. Ltd
Address	8F No.41 Lane 221 Kang-Ching Rd. Nei-Hu Dis. 114 Taipei, Taiwan R.O.C.
Equipment	N_One Wireless CardBus Adapter
Model No.	WPC-0600

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 C (2003)**.

The test was carried out on Jul. 03, 2005 at **Exclusive Certification Corp.**

Signature



Eric Chan / Manager

1. Report of Measurements and Examinations

1.1 List of Measurements and Examinations

FCC Rule	Description of Test	Result
15.203	. Antenna Requirement	Pass
15.207	. Conducted Emission	Pass
15.209	. Radiated Emission	Pass
15.247(a)(2)	. 6dB Bandwidth	Pass
15.247(b)	. Maximum Peak Output Power	Pass
15.247(c)	. 100kHz Bandwidth of Frequency Band Edges	Pass
15.247(d)	. Power Spectral Density	Pass
1.1307 1.1310 2.1091 2.1093	. RF Exposure Compliance	Pass

Test engineer: _____

Jerry

2. Test Configuration of Equipment under Test

2.1 Feature of Equipment under Test

- 2.4GHz ISM (Industrial, Science, and Medical) band operation
- Integrated easy-to-use Wireless Networking Utility
- CardBus interface, for operation in virtually any notebook computer
- WPA, WPA2, 64-bit WEP (Wired Equivalent Privacy), or 128-bit encryption
- Wireless access to networked resources
- Data rate of up to 300Mbps* (draft 802.11n), 54Mbps (802.11g), or 11Mbps (802.11b)
- Easy installation and use
- LED power and network link/ activity indicators

2.2 RF Specifications

Host Interface:	32-bit CarBus
Power Consumption:	802.11b/ 802.11g/ 802.11n
802.11b:	1Mbps, 17 dBm, 630mA
802.11g:	6 Mbps, 17 dBm, 670mA
802.11n:	MCS15 HT20, 17 dBm, 660mA/HT40, 17 dBm, 700mA
Operating Temperature:	32—140 degrees F (0—60 degrees C)
Storage Temperature:	-4—176 degrees F (-20—80 degrees C)
Humidity:	Max. 90% (non-condensing)
Typical Operating Range:	Up to 1,000 ft. (304.8m)**

2.3 Test Mode and Test Software

The following test mode and test software was performed for conduction and radiation test:

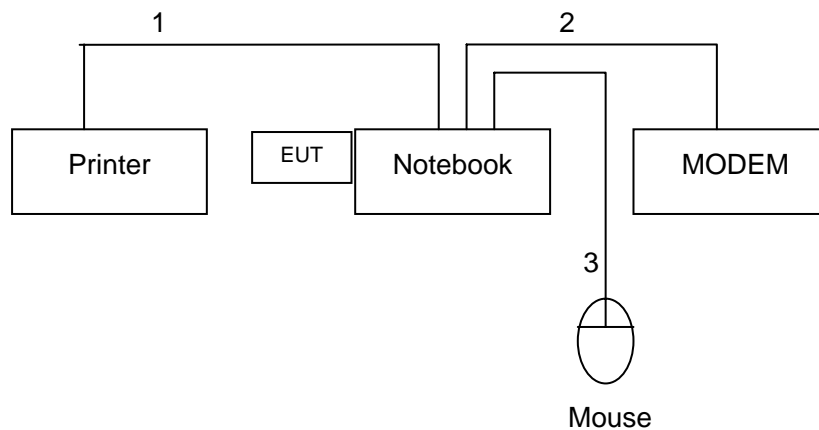
- 802.11b (CH LO: 2412MHz) • 802.11b (CH MID: 2437MHz) • 802.11b (CH HI: 2462MHz)
- 802.11g (CH LO: 2412MHz) • 802.11g (CH MID: 2437MHz) • 802.11g (CH HI: 2462MHz)
- 802.11g MIMO:
CH LO: 2412MHz, CH MID: 2437MHz, CH HI: 2462MHz
- 802.11g MIMO+CB:
CH LO: 2422MHz, CH MID: 2437MHz, CH HI: 2452MHz
- An executive programs, "DutApiClient_Pci.exe" Application under WIN XP.
- Test mode 1: 802.11b (11Mbps)
- Test mode 2: 802.11g (54 Mbps)
- Test mode 3: 802.11 MIMO (144 Mbps)
- Test mode 4: 802.11 MIMO+CB (300 Mbps)

Note: All the transmitter rates had been pre-tested, and the test data is worst case

2.4 Description of Test System

Device	Manufacturer	Model No.	Description
Mouse	IBM	MO28VO	Data Cable, USB shielding 1.85 m
Modem	ACEXX	DM-1414	Power Cable, Adapter Unshielding 1.8 m Data Cable, RS232 shielding 1.35 m
Notebook	DELL	510m	Power Cable, Adapter Unshielding 1.8 m
Printer	HP	LJ-1015	Power Cable, Unshielding 1.8 m Data Cable, PRINT shielding 1.6 m

2.5 Connection Diagram of Test System



1. The I/O cable is connected from Notebook to the. Printer
2. The I/O cable is connected from Notebook to the. Modem
3. The I/O cable is connected from Notebook to the Mouse.

2.6 General Information of Test

Test Site:	Exclusive Certification Corp. 4F-2, No. 28, Lane 78, Xing-Ai Rd. Nei-hu, Taipei City 114 Taiwan R.O.C.
Test Site Location (OATS1-SD):	No.68-1, Shihbachongsi, shihding Township, Taipei City 223, Taiwan, R.O.C.
FCC Registration Number :	632249
IC Registration Number :	6597A-1
VCCI Registration Number :	T-182 for Telecommunication Test C-2188 for Conducted emission test R-1902 for Radiated emission test
Test Voltage:	DC 3.3V
Test in Compliance with:	ANSI C63.4-2003 FCC Part 15 Subpart C
Frequency Range Investigated:	Conducted: from 150kHz to 30 MHz Radiation: from 30 MHz to 24620MHz
Test Distance:	The test distance of radiated emission from antenna to EUT is 3 M.

2.7 History of this test report

ORIGINAL.

Additional attachment as following record:

Attachment No.	Issue Date	Description
---	Jul. 02, 2007	The functions and the hardware of Model No.: WPC-0600 (Report No: FD06050201-C) and Model No.: CB1001Mn (Report No: FD06050201-B) are exactly the same. The only difference between these models are their trade name and Model No.

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 15.247 (b), 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 type: Microstrip Antenna

Antenna Gain: 1dBi.

4. Test of Conducted Emission

4.1 Test Limit

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.

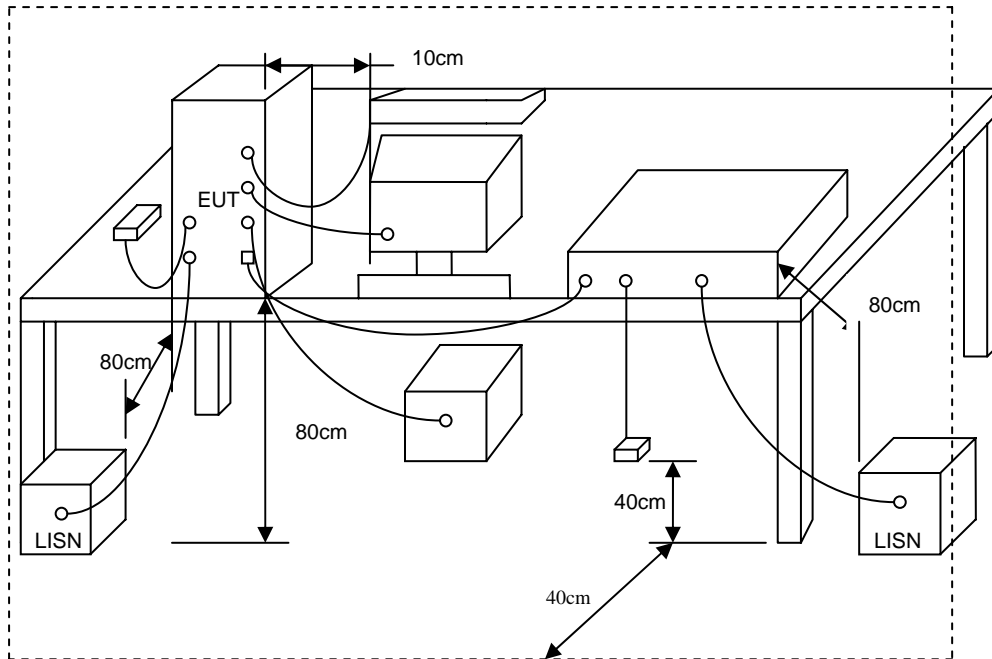
Frequency (MHz)	Quasi Peak (dB μ V)	Average (dB μ V)
0.15 – 0.5	66-56*	56-46*
0.5 – 5.0	56	46
5.0 – 30.0	60	50

*Decreases with the logarithm of the frequency.

4.2 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.

4.3 Typical Test Setup



4.4 Measurement equipment

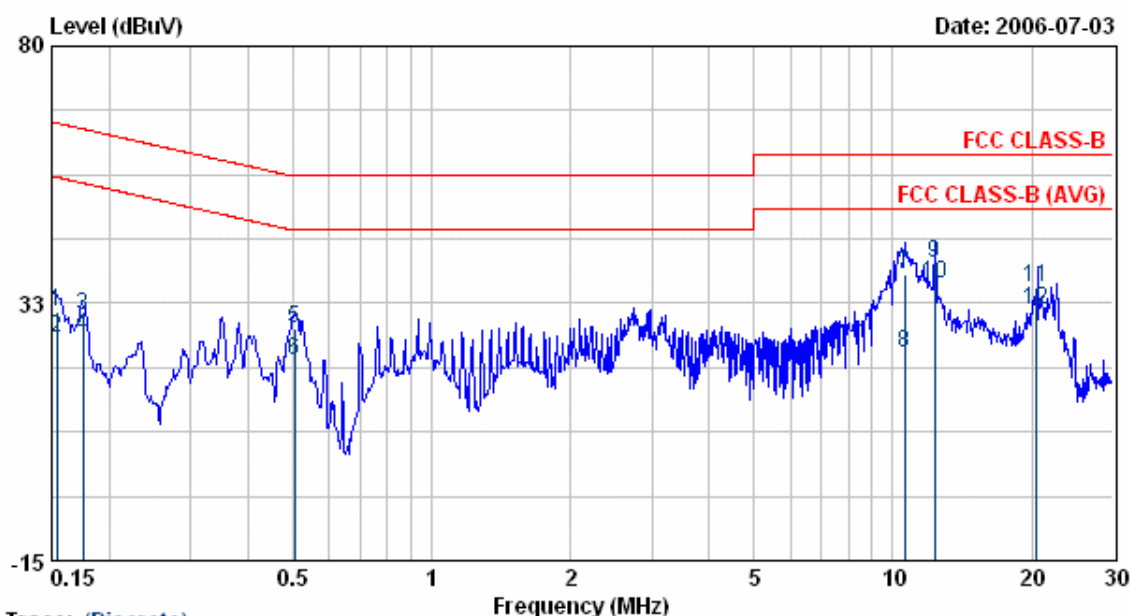
Instrument/Ancillary	Model No.	Manufacturer	Serial No.	Valid Date.
Receiver	SCR3501	Schaffner	437	2006/11/03
LISN	NNB-2/16Z	MESS TEC	02/10191	2007/03/30
LISN	NNB-2/16Z	ROLF HEINE	03/10058	2007/04/26

4.5 Test Result and Data

Test Mode 1, 2:

Power : DC 3.3V from PC
 Test Mode : 802.11g CH1
 Memo :

Pol/Phase : NEUTRAL
 Temperature : 25 °C
 Humidity : 57 %



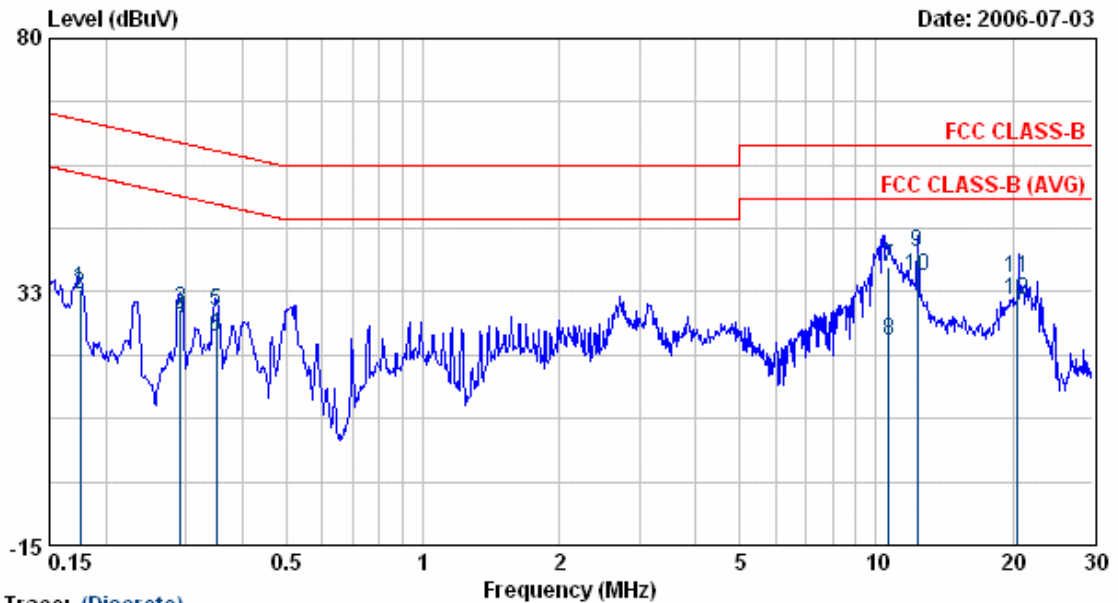
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.15	30.69	0.31	31.00	65.78	-34.78	QP
2	0.15	25.74	0.31	26.05	55.78	-29.73	AVERAGE
3	0.18	29.87	0.26	30.13	64.68	-34.56	QP
4	0.18	26.14	0.26	26.40	54.68	-28.29	AVERAGE
5	0.50	27.29	0.50	27.79	56.00	-28.21	QP
6	0.50	21.41	0.50	21.91	46.00	-24.09	AVERAGE
7	10.63	37.32	0.65	37.97	60.00	-22.03	QP
8	10.63	22.76	0.65	23.41	50.00	-26.59	AVERAGE
9	12.31	39.29	0.75	40.04	60.00	-19.96	QP
10	12.31	35.36	0.75	36.11	50.00	-13.89	AVERAGE
11	20.53	34.54	0.80	35.34	60.00	-24.66	QP
12	20.53	30.44	0.80	31.24	50.00	-18.76	AVERAGE

- Remarks:
- Level = Read Level + Factor
 - Factor = LISN(ISN) Factor + Cable Loss
 - All emission below 1GHz at 802.11g mode are all the same,so the 802.11g mode chosen as representative in final test.
 - According to technical experiences,all spurious emission of 802.11g mode at channel 1,6,11 are almost the same below 1GHz,so that the channel 1 was chosen as representative in final test.
 - The data is worse case.

Power : DC 3.3V from PC
 Test Mode : 802.11g CH1
 Memo :

Pol/Phase : LINE
 Temperature : 25 °C
 Humidity : 57 %



Trace: (Discrete)

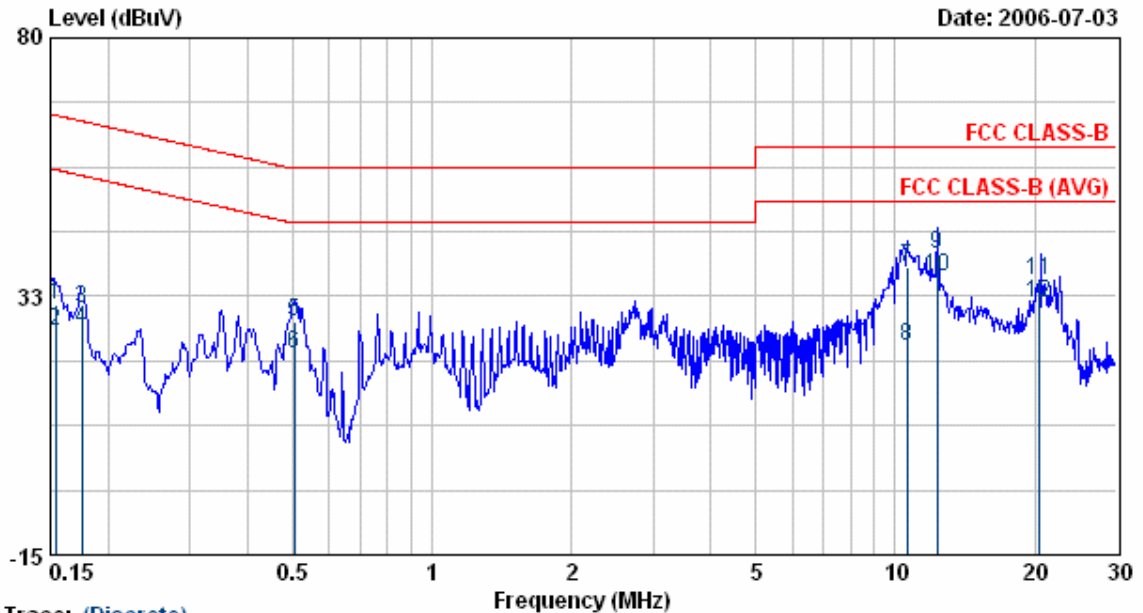
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.18	32.66	0.34	33.00	64.71	-31.71	QP
2	0.18	31.64	0.34	31.98	54.71	-22.73	AVERAGE
3	0.29	28.70	0.46	29.16	60.48	-31.32	QP
4	0.29	26.94	0.46	27.40	50.48	-23.08	AVERAGE
5	0.35	28.50	0.54	29.04	58.97	-29.93	QP
6	0.35	23.60	0.54	24.14	48.97	-24.83	AVERAGE
7	10.67	36.46	0.65	37.11	60.00	-22.89	QP
8	10.67	22.63	0.65	23.28	50.00	-26.72	AVERAGE
9	12.32	39.13	0.75	39.88	60.00	-20.12	QP
10	12.32	34.72	0.75	35.47	50.00	-14.53	AVERAGE
11	20.53	34.36	0.62	34.98	60.00	-25.02	QP
12	20.53	30.30	0.62	30.92	50.00	-19.08	AVERAGE

- Remarks:
- Level = Read Level + Factor
 - Factor = LISN(ISN) Factor + Cable Loss
 - All emission below 1GHz at 802.11b/g mode are all the same,so the 802.11g mode chosen as representative in final test.
 - According to technical experiences,all spurious emission of 802.11g mode at channel 1,6,11 are almost the same below 1GHz,so that the channel 1 was chosen as representative in final test.
 - The data is worse case.

Test Mode 3:

Power : DC 3.3V from PC
 Test Mode : 802.11MIMO CH1
 Memo :

Pol/Phase : NEUTRAL
 Temperature : 25 °C
 Humidity : 57 %



Trace: (Discrete)

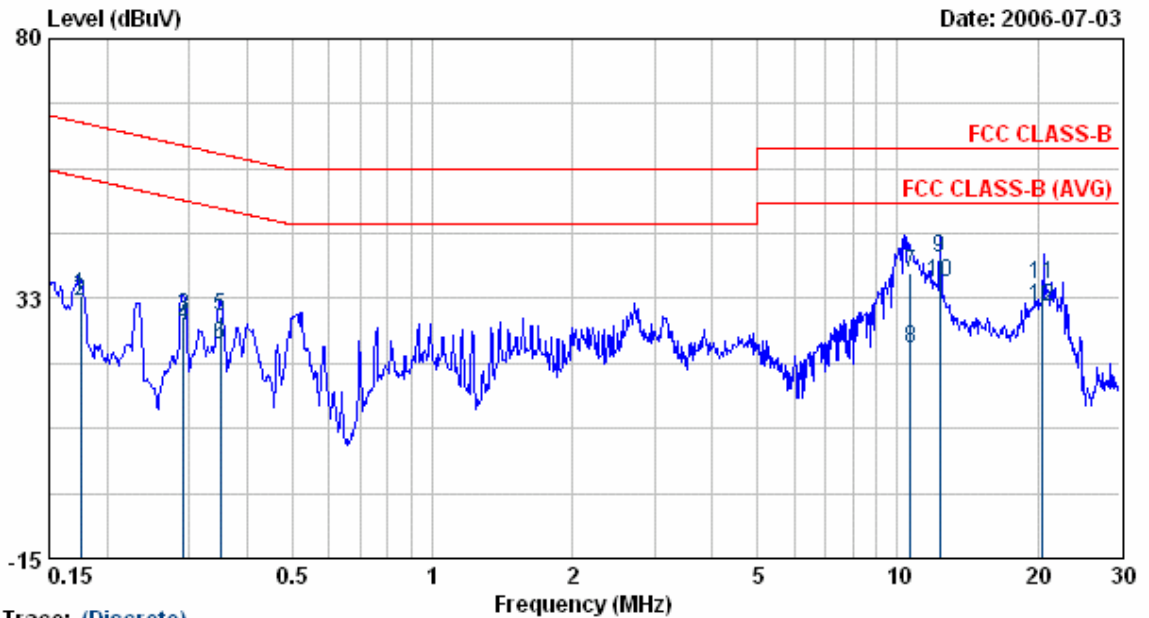
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.15	30.74	0.31	31.05	65.78	-34.73	QP
2	0.15	25.71	0.31	26.02	55.78	-29.76	AVERAGE
3	0.18	30.06	0.26	30.32	64.68	-34.37	QP
4	0.18	26.14	0.26	26.40	54.68	-28.29	AVERAGE
5	0.50	27.26	0.50	27.76	56.00	-28.24	QP
6	0.50	21.37	0.50	21.87	46.00	-24.13	AVERAGE
7	10.63	37.31	0.65	37.96	60.00	-22.04	QP
8	10.63	22.76	0.65	23.41	50.00	-26.59	AVERAGE
9	12.31	39.35	0.75	40.10	60.00	-19.90	QP
10	12.31	35.46	0.75	36.21	50.00	-13.79	AVERAGE
11	20.53	34.73	0.80	35.53	60.00	-24.47	QP
12	20.53	30.50	0.80	31.30	50.00	-18.70	AVERAGE

Remarks:

1. Level = Read Level + Factor
2. Factor = LISN(ISM) Factor + Cable Loss
3. According to technical experiences, all spurious emission of 802.11MIMO mode at channel 1,6,11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
4. The data is worse case.

Power : DC 3.3V from PC
 Test Mode : 802.11MIMO CH1
 Memo :

Pol/Phase : LINE
 Temperature : 25 °C
 Humidity : 57 %



Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.18	32.66	0.34	33.00	64.71	-31.71	QP
2	0.18	31.51	0.34	31.85	54.71	-22.86	AVERAGE
3	0.29	28.83	0.46	29.29	60.48	-31.19	QP
4	0.29	27.06	0.46	27.52	50.48	-22.96	AVERAGE
5	0.35	28.51	0.54	29.05	58.97	-29.92	QP
6	0.35	23.60	0.54	24.14	48.97	-24.83	AVERAGE
7	10.67	36.46	0.65	37.11	60.00	-22.89	QP
8	10.67	22.53	0.65	23.18	50.00	-26.82	AVERAGE
9	12.32	39.11	0.75	39.86	60.00	-20.14	QP
10	12.32	34.84	0.75	35.59	50.00	-14.41	AVERAGE
11	20.53	34.46	0.62	35.08	60.00	-24.92	QP
12	20.53	30.37	0.62	30.99	50.00	-19.01	AVERAGE

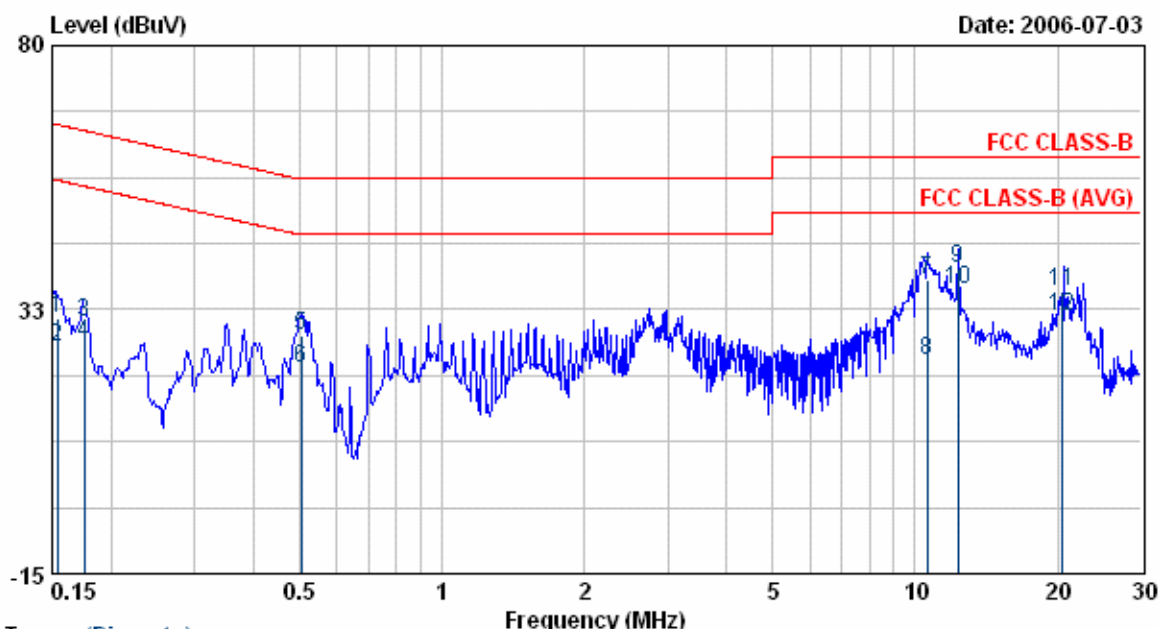
Remarks:

1. Level = Read Level + Factor
2. Factor = LISN(ISN) Factor + Cable Loss
3. According to technical experiences, all spurious emission of 802.11MIMO mode at channel 1,6,11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
4. The data is worse case.

Test Mode 4:

Power : DC 3.3V from PC
 Test Mode : 802.11MIMO+CB CH3
 Memo :

Pol/Phase : NEUTRAL
 Temperature : 25 °C
 Humidity : 57 %



Trace: (Discrete)

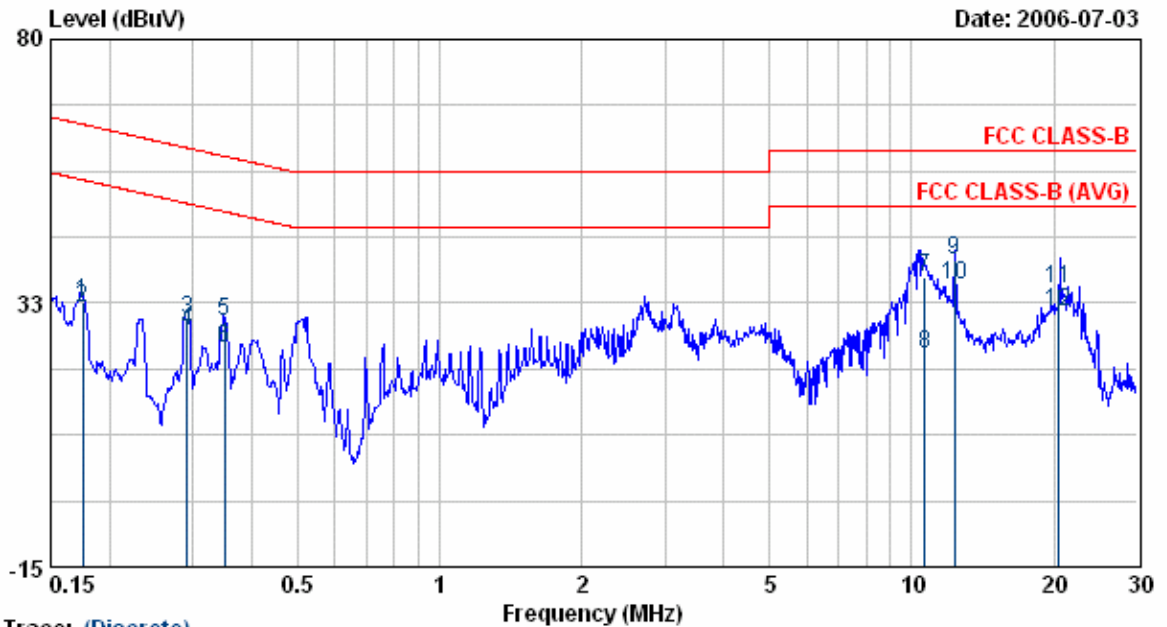
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.15	30.72	0.31	31.03	65.78	-34.75	QP
2	0.15	25.61	0.31	25.92	55.78	-29.86	AVERAGE
3	0.18	29.87	0.26	30.13	64.68	-34.56	QP
4	0.18	26.15	0.26	26.41	54.68	-28.28	AVERAGE
5	0.50	27.32	0.50	27.82	56.00	-28.18	QP
6	0.50	21.41	0.50	21.91	46.00	-24.09	AVERAGE
7	10.63	37.35	0.65	38.00	60.00	-22.00	QP
8	10.63	22.73	0.65	23.38	50.00	-26.62	AVERAGE
9	12.31	39.27	0.75	40.02	60.00	-19.98	QP
10	12.31	35.36	0.75	36.11	50.00	-13.89	AVERAGE
11	20.53	34.83	0.80	35.63	60.00	-24.37	QP
12	20.53	30.63	0.80	31.43	50.00	-18.57	AVERAGE

Remarks:

1. Level = Read Level + Factor
2. Factor = LISN(ISN) Factor + Cable Loss
3. According to technical experiences, all spurious emission of 802.11MIMO mode at channel 3,6,9 are almost the same below 1GHz, so that the channel 3 was chosen as representative in final test.
4. The data is worse case.

Power : DC 3.3V from PC
 Test Mode : 802.11MIMO+CB CH3
 Memo :

Pol/Phase : LINE
 Temperature : 25 °C
 Humidity : 57 %



Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.18	32.44	0.34	32.78	64.71	-31.93	QP
2	0.18	31.42	0.34	31.76	54.71	-22.95	AVERAGE
3	0.29	28.93	0.46	29.39	60.48	-31.09	QP
4	0.29	27.14	0.46	27.60	50.48	-22.88	AVERAGE
5	0.35	28.63	0.54	29.17	58.97	-29.80	QP
6	0.35	23.71	0.54	24.25	48.97	-24.72	AVERAGE
7	10.67	36.46	0.65	37.11	60.00	-22.89	QP
8	10.67	22.58	0.65	23.23	50.00	-26.77	AVERAGE
9	12.32	39.36	0.75	40.11	60.00	-19.89	QP
10	12.32	34.91	0.75	35.66	50.00	-14.34	AVERAGE
11	20.53	34.43	0.62	35.05	60.00	-24.95	QP
12	20.53	30.36	0.62	30.98	50.00	-19.02	AVERAGE

Remarks:

1. Level = Read Level + Factor
2. Factor = LISN(ISN) Factor + Cable Loss
3. According to technical experiences, all spurious emission of 802.11MIMO mode at channel 3,6,9 are almost the same below 1GHz, so that the channel 3 was chosen as representative in final test.
4. The data is worse case.

Test engineer: Ben

5. Test of Radiated Emission

5.1 Test Limit

Radiated emissions from 30 MHz to 25 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 5.6.3. The interface cables and equipment positions were varied within limits of reasonable applications to determine the positions producing maximum radiated emissions

For unintentional device, according to § 15.109(a), except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency (MHz)	Distance Meters	Radiated (μ V / M)	Radiated (dB μ V/ M)
30-88	3	100	40.0
88-216	3	150	43.5
216-960	3	200	46.0
Above 960	3	500	54.0

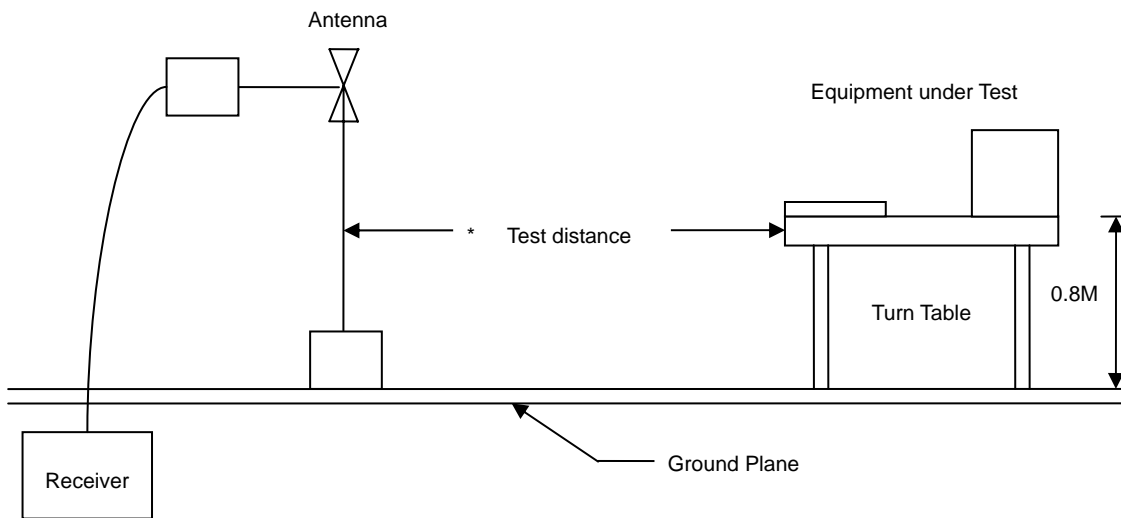
For unintentional device, according to CISPR PUB.22, for Class B digital devices, the general requirement of field strength of radiated emissions from intentional radiators at a distance of 10 meters shall not exceed the above table.

Frequency (MHz)	Distance Meters	Radiated (dB μ V/ M)
30-230	10	30
230-1000	10	37

5.2 Test Procedures

1. The EUT was placed on a rotatable table top 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. 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.
5. 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.
6. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function and specified bandwidth with Maximum Hold Mode.
7. 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.
8. 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.

5.3 Typical Test Setup



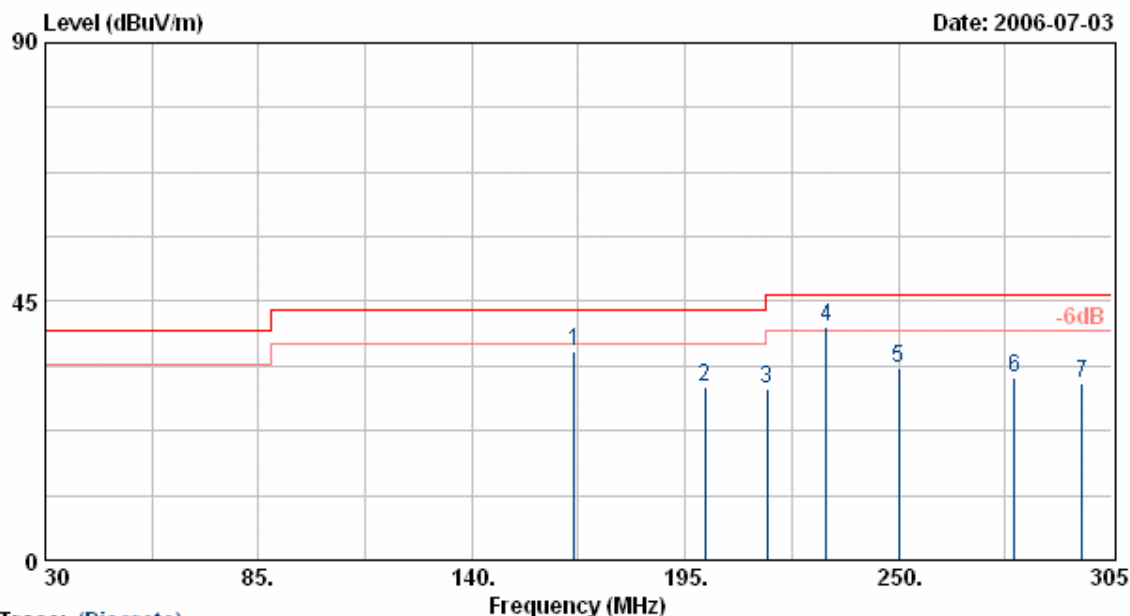
5.4 Measurement equipment

Instrument/Ancillary	Model No.	Manufacturer	Serial No.	Valid Date
EMI Receiver	8546A	HP	3807A00454	2007/05/11
Spectrum Analyzer	FSP40	R&S	10047	2007/01/16
Horn Antenna	3115	EMCO	31589	2007/02/12
Horn Antenna	3116	EMCO	31970	2007/02/09
Bilog Antenna	CBL6112B	Schaffner	2840	2007/04/19
Amplifier	8449B	Agilent	3008A01954	2007/01/08
Amplifier	8447D	Agilent	2944A10531	2007/02/24

5.5 Test Result and Data

Test Mode 1, 2:

Power	: DC 3.3V from PC	Pol/Phase	: HORIZONTAL
Test Mode	: Transmit/Receive	Temperature	: 28 °C
Operation Channel	: 1	Humidity	: 70 %
Modulation Type	: 802.11g	Atmospheric Pressure	: 1010 hPa
Rate	: 54 Mbps		
Memo	:		



Trace: (Discrete)

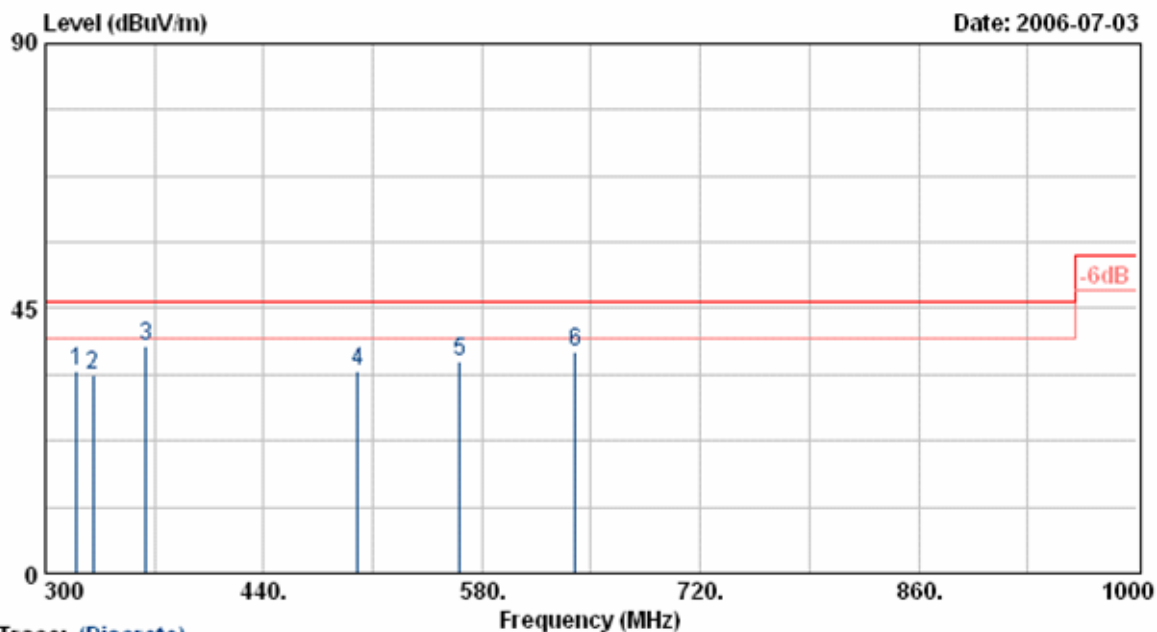
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	166.40	53.76	-17.53	36.23	43.50	-7.27	Peak	200	88
2	200.01	48.47	-18.39	30.08	43.50	-13.42	Peak	200	63
3	216.18	48.15	-18.22	29.93	46.00	-16.07	Peak	200	63
4	231.30	57.41	-16.79	40.62	46.00	-5.38	QP	200	211
5	250.00	47.66	-14.44	33.22	46.00	-12.78	Peak	200	321
6	280.00	45.88	-14.19	31.69	46.00	-14.31	Peak	200	360
7	297.30	44.55	-13.71	30.84	46.00	-15.16	Peak	200	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. All emission below 1GHz at 802.11b/g mode are all the same,so the 802.11g mode chosen as representative in final test.
5. According to technical experiences,all spurious emission of 802.11g mode at channel 1,6,11 are almost the same below 1GHz,so that the channel 1 was chosen as representative in final test.
6. The data is worse case.

Power : DC 3.3V from PC
 Test Mode : Transmit/Receive
 Operation Channel: 1
 Modulation Type : 802.11g
 Rate : 54 Mbps
 Memo :

Pol/Phase : HORIZONTAL
 Temperature : 28 °C
 Humidity : 70 %
 Atmospheric Pressure: 1010 hPa



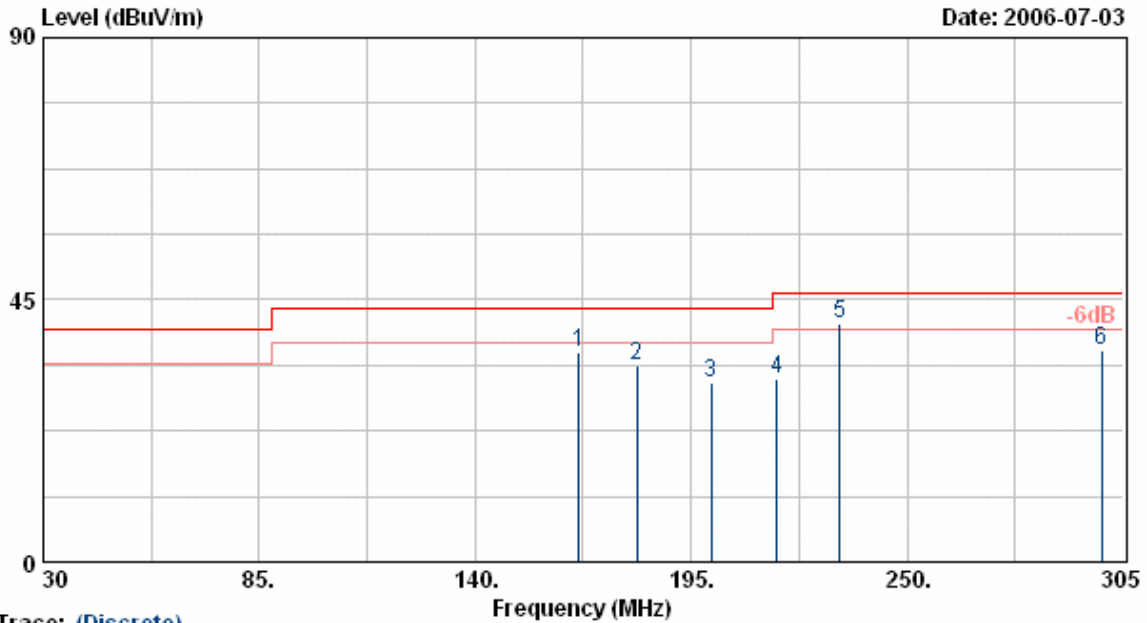
Trace: (Discrete)

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	320.30	47.53	-13.03	34.50	46.00	-11.50	Peak	200	100
2	330.82	46.25	-12.69	33.56	46.00	-12.44	Peak	200	155
3	364.50	50.30	-11.65	38.65	46.00	-7.35	Peak	200	223
4	500.12	41.63	-7.18	34.45	46.00	-11.55	Peak	200	223
5	565.88	41.11	-5.10	36.01	46.00	-9.99	Peak	200	196
6	640.00	41.79	-4.06	37.73	46.00	-8.27	Peak	200	25

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. All emission below 1GHz at 802.11b/g mode are all the same, so the 802.11g mode chosen as representative in final test.
5. According to technical experiences, all spurious emission of 802.11g mode at channel 1,6,11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
6. The data is worse case.

Power : DC 3.3V from PC
 Test Mode : Transmit/Receive
 Operation Channel: 1
 Modulation Type : 802.11g
 Rate : 54 Mbps
 Memo :
 Pol/Phase : VERTICAL
 Temperature : 28 °C
 Humidity : 70 %
 Atmospheric Pressure: 1010 hPa



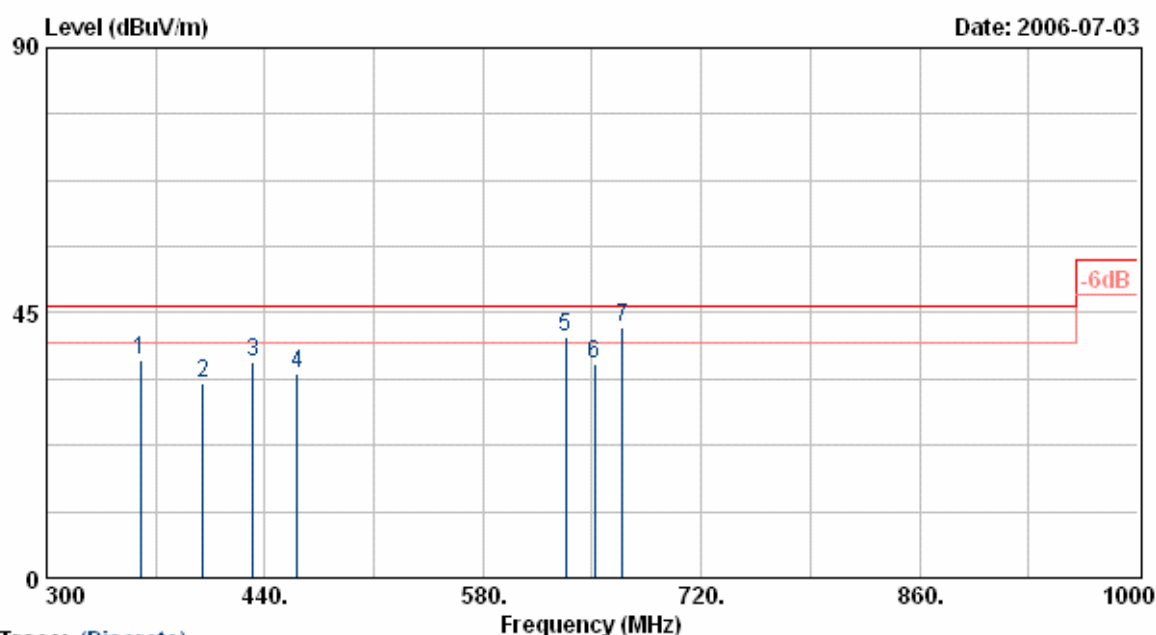
Trace: (Discrete)

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	166.36	53.55	-17.52	36.03	43.50	-7.47	Peak	100	55
2	181.30	52.23	-18.52	33.71	43.50	-9.79	Peak	100	114
3	200.00	49.15	-18.39	30.76	43.50	-12.74	Peak	100	25
4	216.75	49.62	-18.20	31.42	46.00	-14.58	Peak	100	154
5	232.94	57.54	-16.60	40.94	46.00	-5.06	QP	100	102
6	299.50	50.14	-13.70	36.44	46.00	-9.56	Peak	100	225

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. All emission below 1GHz at 802.11g mode are all the same, so the 802.11g mode chosen as representative in final test.
5. According to technical experiences, all spurious emission of 802.11g mode at channel 1, 6, 11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
6. The data is worse case.

Power : DC 3.3V from PC
 Test Mode : Transmit/Receive
 Operation Channel: 1
 Modulation Type : 802.11g
 Rate : 54 Mbps
 Memo :
 Pol/Phase : VERTICAL
 Temperature : 28 °C
 Humidity : 70 %
 Atmospheric Pressure: 1010 hPa



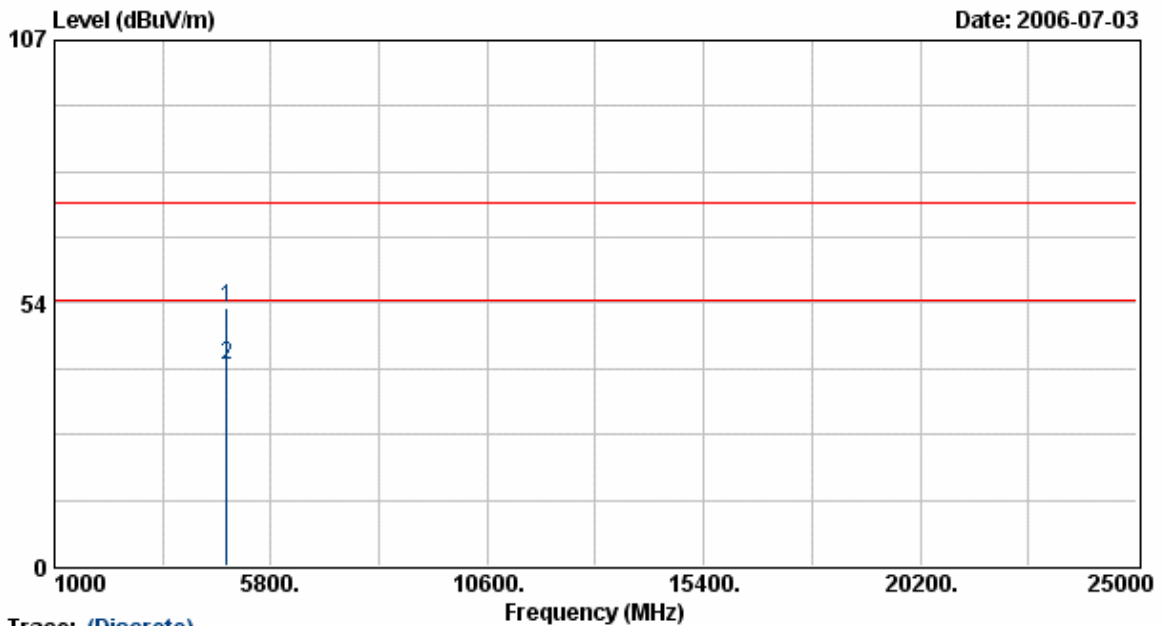
Trace: (Discrete)

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	360.00	48.74	-11.78	36.96	46.00	-9.04	Peak	100	65
2	400.01	43.85	-10.63	33.22	46.00	-12.78	Peak	100	44
3	432.55	45.96	-9.39	36.57	46.00	-9.43	Peak	100	244
4	460.90	43.21	-8.38	34.83	46.00	-11.17	Peak	100	210
5	633.25	45.00	-4.17	40.83	46.00	-5.17	QP	100	210
6	651.35	40.15	-3.89	36.26	46.00	-9.74	Peak	100	352
7	669.30	46.10	-3.71	42.39	46.00	-3.61	QP	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. All emission below 1GHz at 802.11b/g mode are all the same,so the 802.11g mode chosen as representative in final test.
5. According to technical experiences,all spurious emission of 802.11g mode at channel 1,6,11 are almost the same below 1GHz,so that the channel 1 was chosen as representative in final test.
6. The data is worse case.

Power	: DC 3.3V from PC	Pol/Phase	: HORIZONTAL
Test Mode	: Transmit/Receive	Temperature	: 28 °C
Operation Channel	: 1	Humidity	: 70 %
Modulation Type	: 802.11b	Atmospheric Pressure	: 1010 hPa
Rate	: 11 Mbps		
Memo	:		



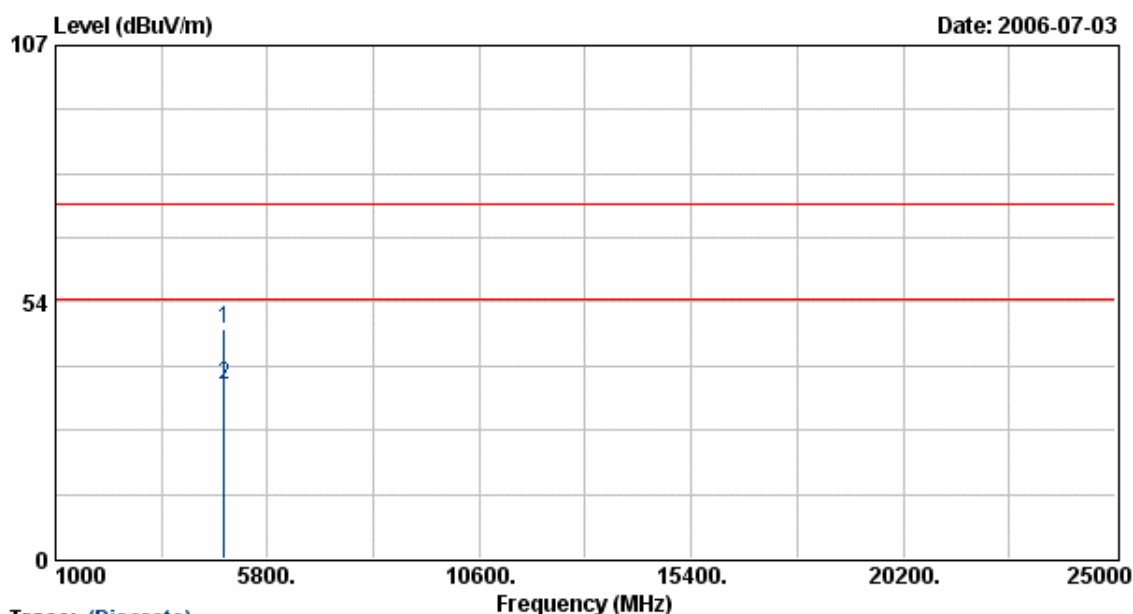
Trace: (Discrete)

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	4823.88	46.96	5.71	52.67	74.00	-21.33	Peak	100	186
2	4823.88	35.19	5.71	40.90	54.00	-13.10	Average	100	186

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	: DC 3.3V from PC	Pol/Phase	: VERTICAL
Test Mode	: Transmit/Receive	Temperature	: 28 °C
Operation Channel	: 1	Humidity	: 70 %
Modulation Type	: 802.11b	Atmospheric Pressure	: 1010 hPa
Rate	: 11 Mbps		
Memo	:		



Trace: (Discrete)

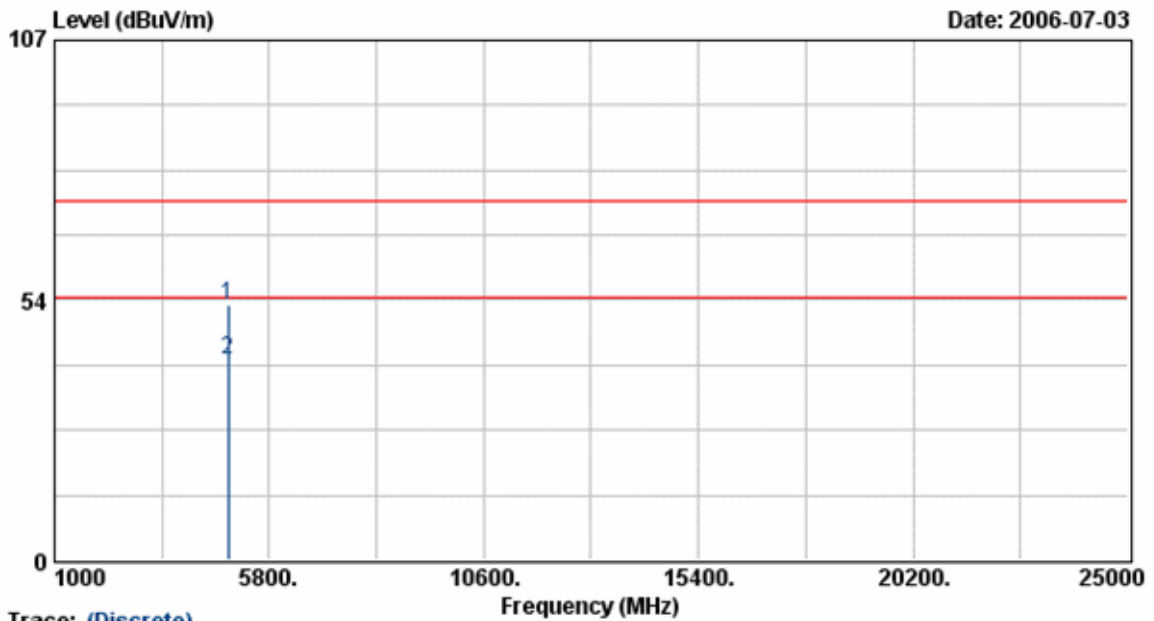
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4823.98	42.24	5.71	47.95	74.00	-26.05	Peak	100	174
2	4823.98	30.57	5.71	36.28	54.00	-17.72	Average	100	174

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 : DC 3.3V from PC
 Test Mode : Transmit/Receive
 Operation Channel: 6
 Modulation Type : 802.11b
 Rate : 11 Mbps
 Memo :

Pol/Phase : HORIZONTAL
 Temperature : 28 °C
 Humidity : 70 %
 Atmospheric Pressure: 1010 hPa



Trace: (Discrete)

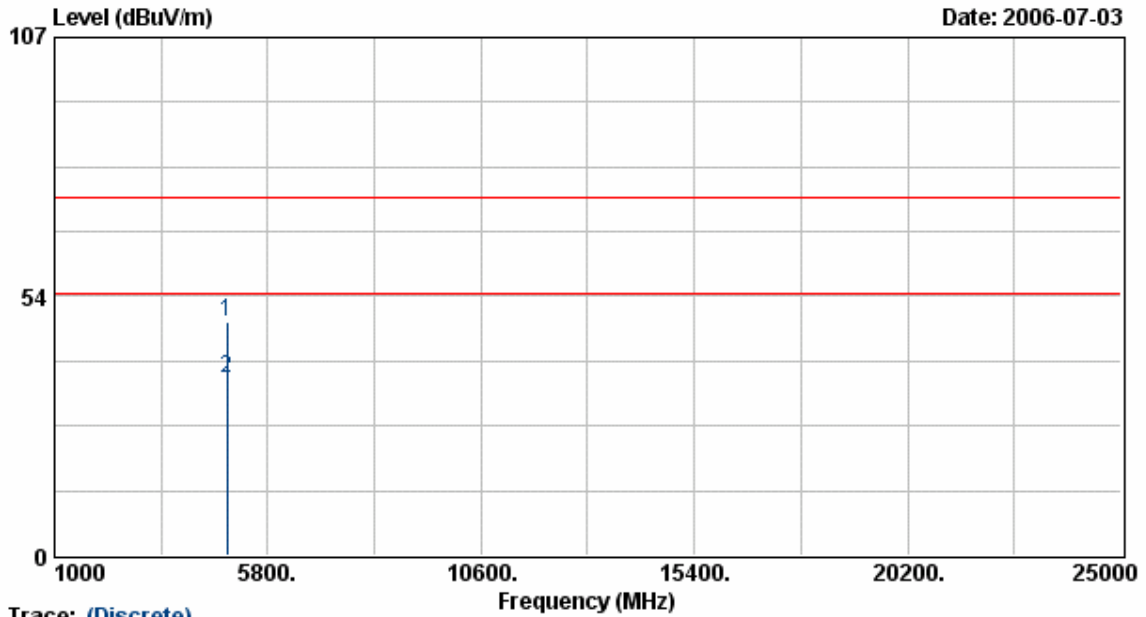
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4873.95	46.85	5.85	52.70	74.00	-21.30	Peak	100	186
2	4873.95	35.21	5.85	41.06	54.00	-12.94	Average	100	186

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 : DC 3.3V from PC
 Test Mode : Transmit/Receive
 Operation Channel : 6
 Modulation Type : 802.11b
 Rate : 11 Mbps
 Memo :

Pol/Phase : VERTICAL
 Temperature : 28 °C
 Humidity : 70 %
 Atmospheric Pressure : 1010 hPa



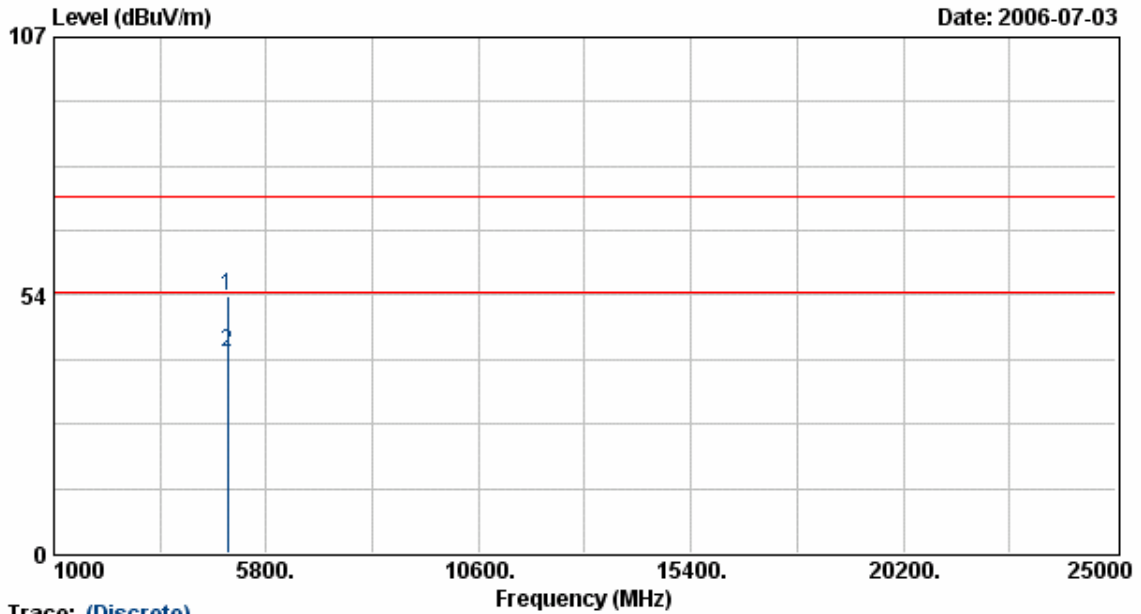
Trace: (Discrete)

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	4874.00	42.25	5.85	48.10	74.00	-25.90	Peak	100	174
2	4874.00	30.57	5.85	36.42	54.00	-17.58	Average	100	174

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	: DC 3.3V from PC	Pol/Phase	: HORIZONTAL
Test Mode	: Transmit/Receive	Temperature	: 28 °C
Operation Channel	: 11	Humidity	: 70 %
Modulation Type	: 802.11b	Atmospheric Pressure	: 1010 hPa
Rate	: 11 Mbps		
Memo	:		



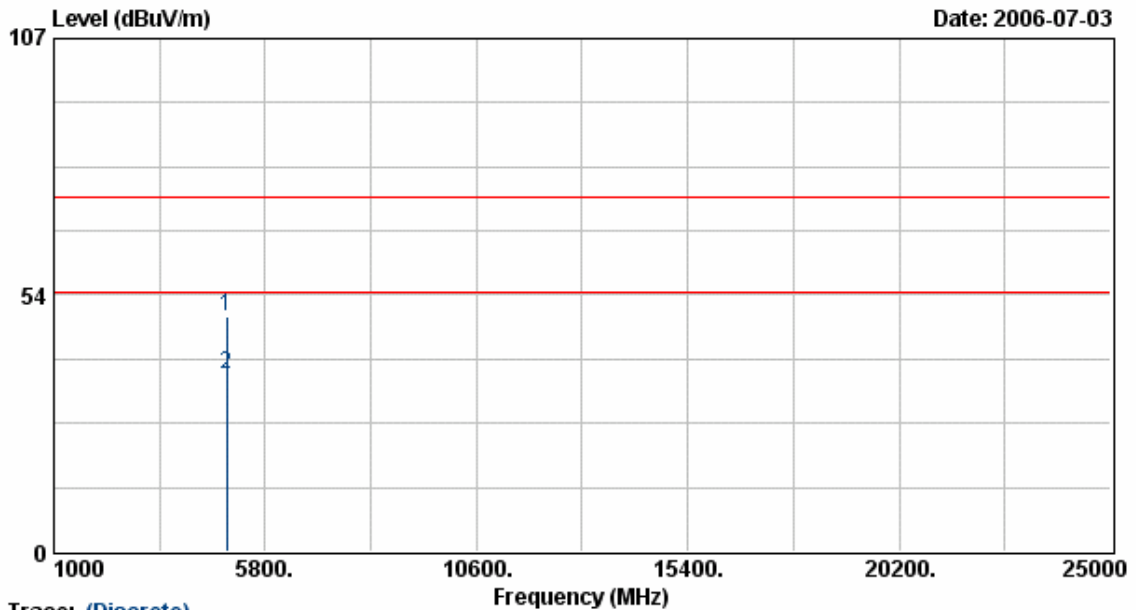
Trace: (Discrete)

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	4924.02	47.45	5.99	53.44	74.00	-20.56	Peak	100	186
2	4924.02	35.77	5.99	41.76	54.00	-12.24	Average	100	186

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	: DC 3.3V from PC	Pol/Phase	: VERTICAL
Test Mode	: Transmit/Receive	Temperature	: 28 °C
Operation Channel	: 11	Humidity	: 70 %
Modulation Type	: 802.11b	Atmospheric Pressure	: 1010 hPa
Rate	: 11 Mbps		
Memo	:		

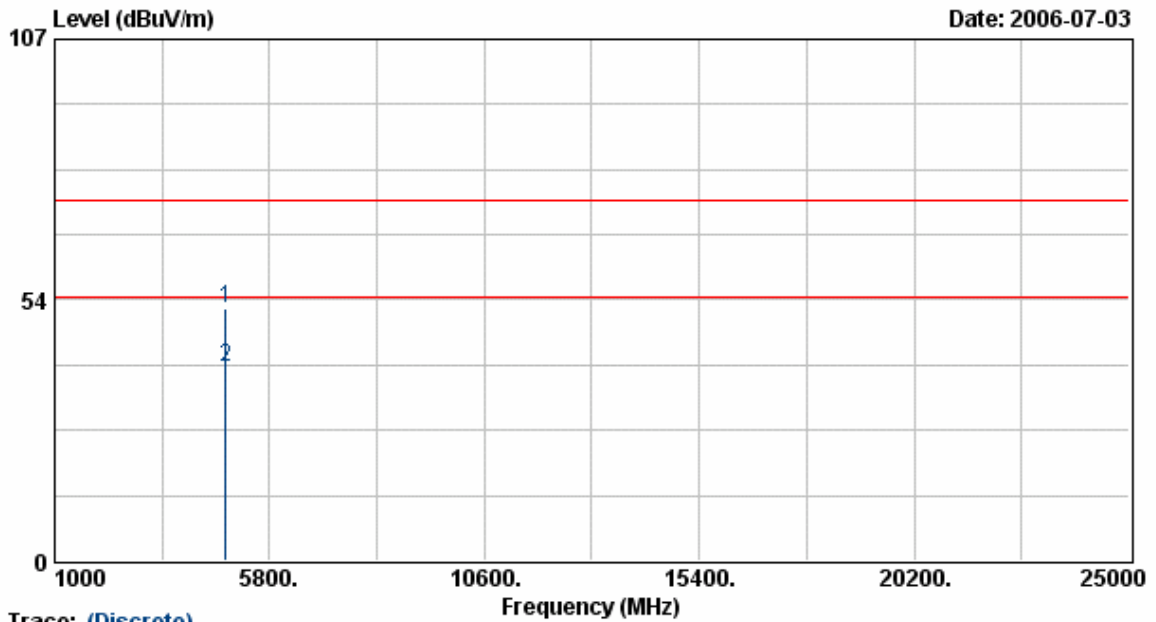


Trace: (Discrete)

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	4923.99	42.87	5.99	48.86	74.00	-25.14	Peak	100	174
2	4923.99	31.11	5.99	37.10	54.00	-16.90	Average	100	174

- 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	: DC 3.3V from PC	Pol/Phase	: HORIZONTAL
Test Mode	: Transmit/Receive	Temperature	: 28 °C
Operation Channel	: 1	Humidity	: 70 %
Modulation Type	: 802.11g	Atmospheric Pressure	: 1010 hPa
Rate	: 54 Mbps		
Memo	:		



Trace: (Discrete)

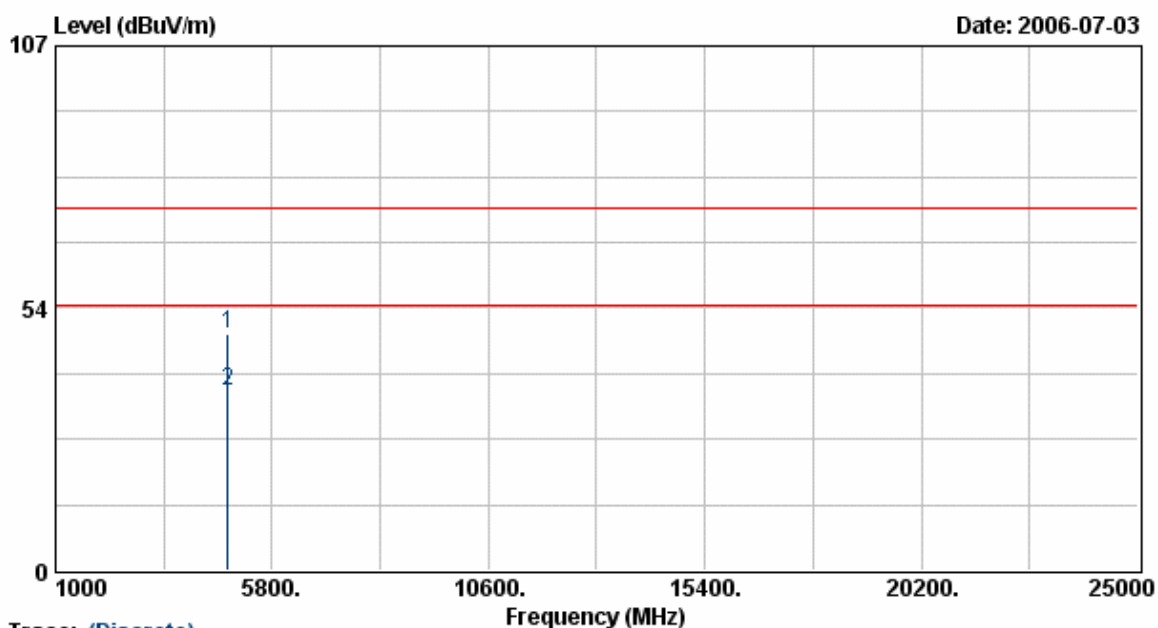
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4823.96	45.85	5.71	51.56	74.00	-22.44	Peak	100	186
2	4823.96	34.14	5.71	39.85	54.00	-14.15	Average	100	186

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 : DC 3.3V from PC
 Test Mode : Transmit/Receive
 Operation Channel: 1
 Modulation Type : 802.11g
 Rate : 54 Mbps
 Memo :

Pol/Phase : VERTICAL
 Temperature : 28 °C
 Humidity : 70 %
 Atmospheric Pressure: 1010 hPa



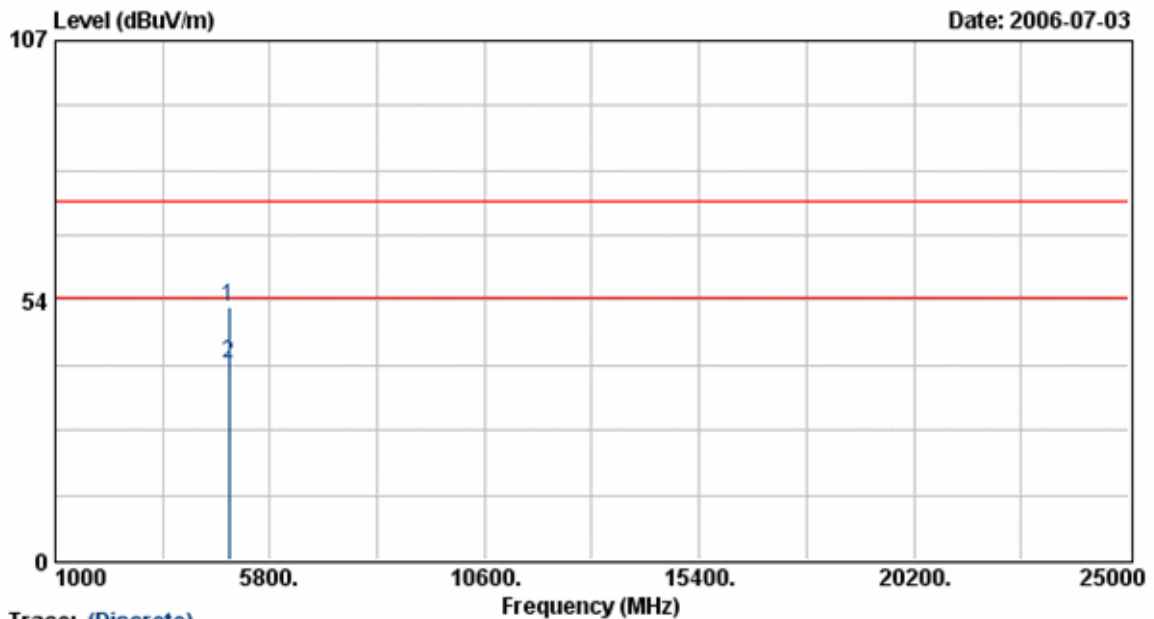
Trace: (Discrete)

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	4824.00	42.69	5.71	48.40	74.00	-25.60	Peak	100	174
2	4824.00	30.97	5.71	36.68	54.00	-17.32	Average	100	174

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	: DC 3.3V from PC	Pol/Phase	: HORIZONTAL
Test Mode	: Transmit/Receive	Temperature	: 28 °C
Operation Channel	: 6	Humidity	: 70 %
Modulation Type	: 802.11g	Atmospheric Pressure	: 1010 hPa
Rate	: 54 Mbps		
Memo	:		



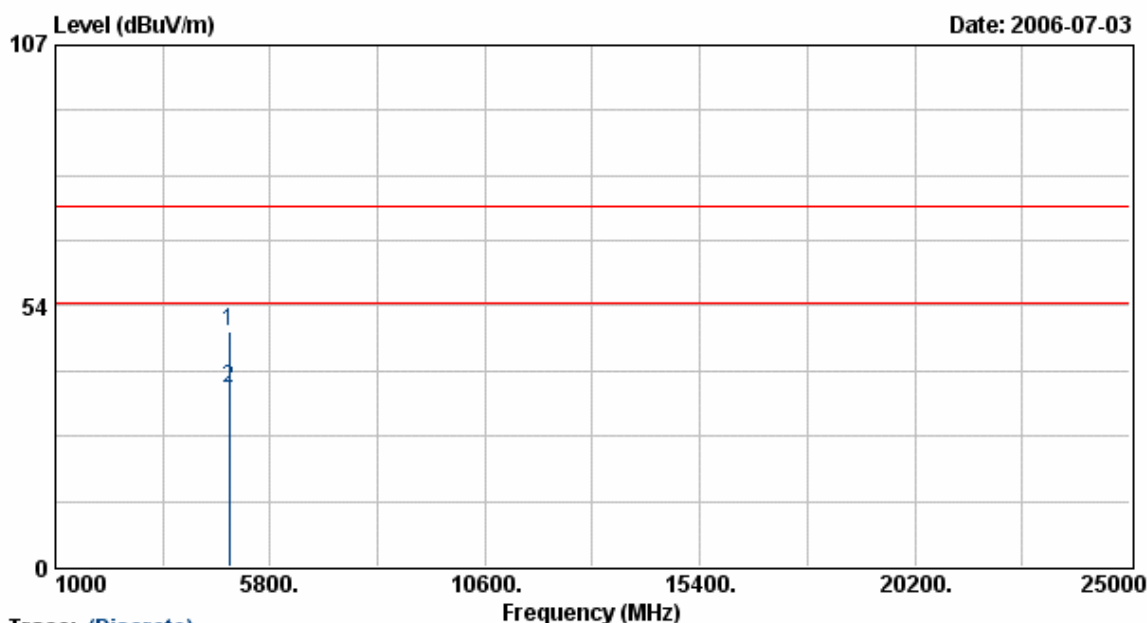
Trace: (Discrete)

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	4874.00	46.36	5.85	52.21	74.00	-21.79	Peak	100	186
2	4874.00	34.67	5.85	40.52	54.00	-13.48	Average	100	186

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	: DC 3.3V from PC	Pol/Phase	: VERTICAL
Test Mode	: Transmit/Receive	Temperature	: 28 °C
Operation Channel	: 6	Humidity	: 70 %
Modulation Type	: 802.11g	Atmospheric Pressure	: 1010 hPa
Rate	: 54 Mbps		
Memo	:		



Trace: (Discrete)

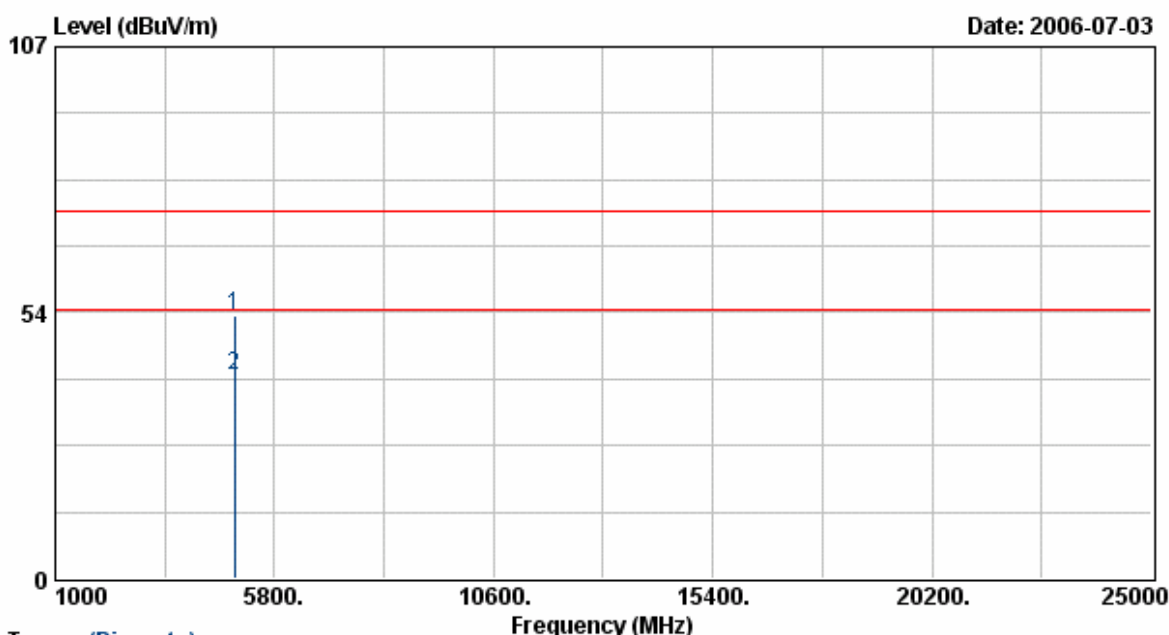
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4874.00	42.54	5.85	48.39	74.00	-25.61	Peak	100	174
2	4874.00	30.80	5.85	36.65	54.00	-17.35	Average	100	174

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 : DC 3.3V from PC
 Test Mode : Transmit/Receive
 Operation Channel: 11
 Modulation Type : 802.11g
 Rate : 54 Mbps
 Memo :

Pol/Phase : HORIZONTAL
 Temperature : 28 °C
 Humidity : 70 %
 Atmospheric Pressure: 1010 hPa



Trace: (Discrete)

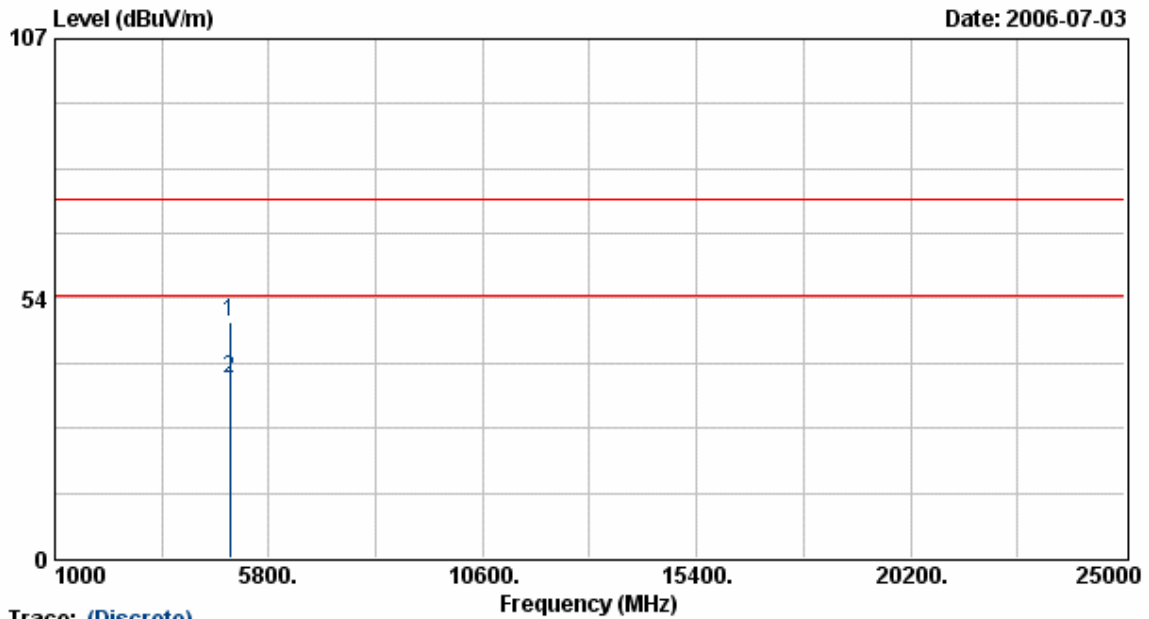
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4924.00	46.77	5.99	52.76	74.00	-21.24	Peak	100	186
2	4924.00	35.03	5.99	41.02	54.00	-12.98	Average	100	186

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 : DC 3.3V from PC
 Test Mode : Transmit/Receive
 Operation Channel : 11
 Modulation Type : 802.11g
 Rate : 54 Mbps
 Memo :

Pol/Phase : VERTICAL
 Temperature : 28 °C
 Humidity : 70 %
 Atmospheric Pressure : 1010 hPa



Trace: (Discrete)

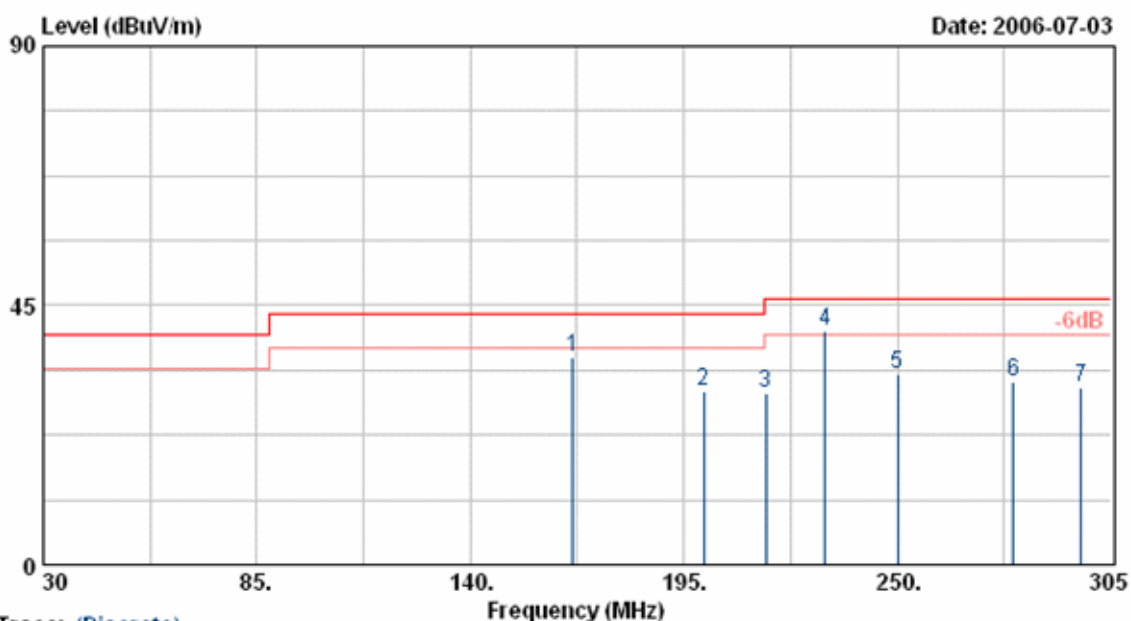
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4923.98	42.74	5.99	48.73	74.00	-25.27	Peak	100	174
2	4923.98	30.99	5.99	36.98	54.00	-17.02	Average	100	174

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.

Test Mode 3:

Power	: DC 3.3V from PC	Pol/Phase	: HORIZONTAL
Test Mode	: Transmit/Receive	Temperature	: 28 °C
Operation Channel	: 1	Humidity	: 70 %
Modulation Type	: 802.11MIMO	Atmospheric Pressure	: 1010 hPa
Rate	: 144 Mbps		
Memo	:		



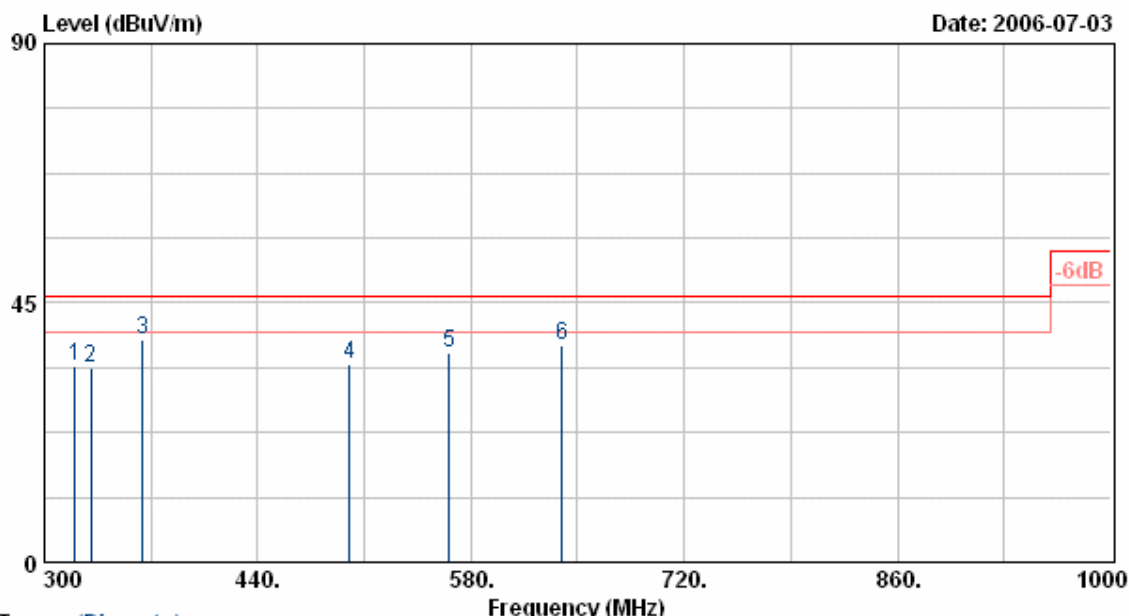
Trace: (Discrete)

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	166.40	53.59	-17.53	36.06	43.50	-7.44	Peak	200	88
2	200.01	48.39	-18.39	30.00	43.50	-13.50	Peak	200	63
3	216.18	48.13	-18.22	29.91	46.00	-16.09	Peak	200	63
4	231.30	57.49	-16.79	40.70	46.00	-5.30	QP	200	211
5	250.00	47.54	-14.44	33.10	46.00	-12.90	Peak	200	321
6	280.00	45.96	-14.19	31.77	46.00	-14.23	Peak	200	360
7	297.30	44.52	-13.71	30.81	46.00	-15.19	Peak	200	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. According to technical experiences, all spurious emission of 802.11MIMO mode at channel 1,6,11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
5. The data is worse case.

Power	: DC 3.3V from PC	Pol/Phase	: HORIZONTAL
Test Mode	: Transmit/Receive	Temperature	: 28 °C
Operation Channel	: 1	Humidity	: 70 %
Modulation Type	: 802.11MIMO	Atmospheric Pressure	: 1010 hPa
Rate	: 144 Mbps		
Memo	:		



Trace: (Discrete)

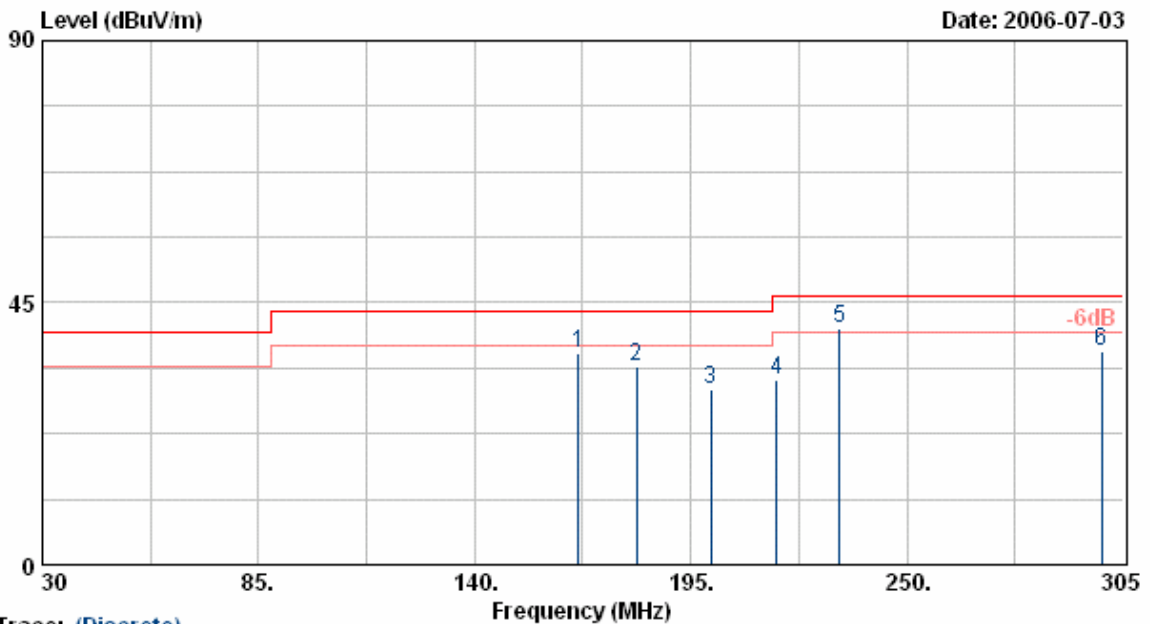
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	320.30	47.21	-13.03	34.18	46.00	-11.82	Peak	200	100
2	330.82	46.39	-12.69	33.70	46.00	-12.30	Peak	200	155
3	364.50	50.39	-11.65	38.74	46.00	-7.26	Peak	200	223
4	500.12	41.69	-7.18	34.51	46.00	-11.49	Peak	200	223
5	565.88	41.39	-5.10	36.29	46.00	-9.71	Peak	200	196
6	640.00	41.82	-4.06	37.76	46.00	-8.24	Peak	200	25

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 802.11MIMO mode at channel 1,6,11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
5. The data is worse case.

Power : DC 3.3V from PC
 Test Mode : Transmit/Receive
 Operation Channel: 1
 Modulation Type : 802.11MIMO
 Rate : 144 Mbps
 Memo :

Pol/Phase : VERTICAL
 Temperature : 28 °C
 Humidity : 70 %
 Atmospheric Pressure: 1010 hPa



Trace: (Discrete)

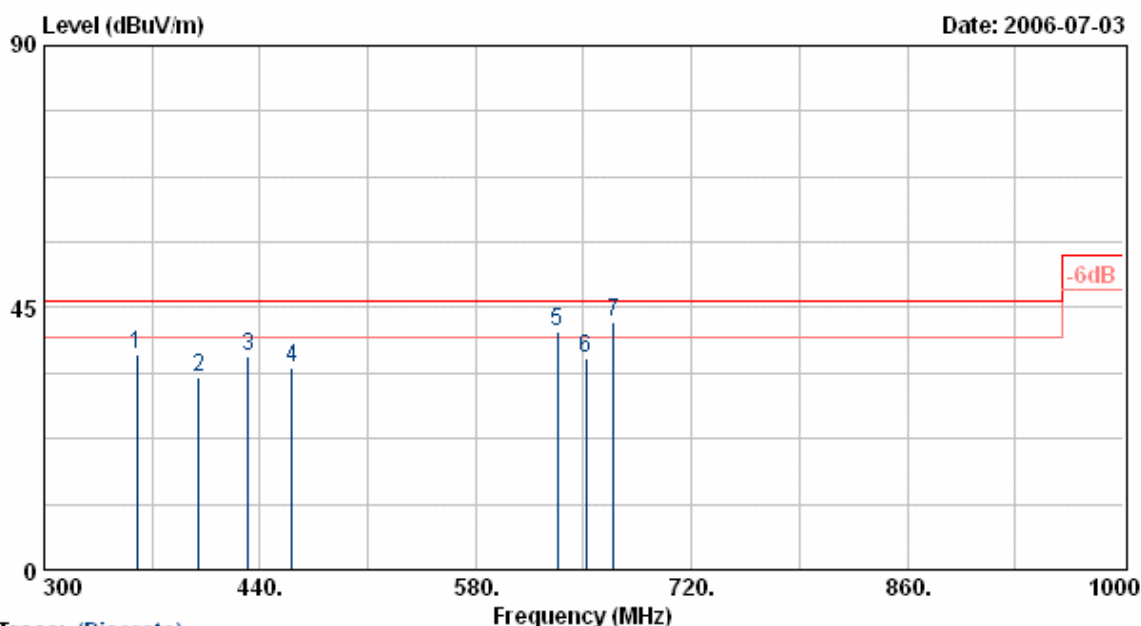
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	166.36	53.86	-17.52	36.34	43.50	-7.16	Peak	100	55
2	181.30	52.44	-18.52	33.92	43.50	-9.58	Peak	100	114
3	200.00	48.45	-18.39	30.06	43.50	-13.44	Peak	100	25
4	216.75	49.83	-18.20	31.63	46.00	-14.37	Peak	100	154
5	232.94	57.26	-16.60	40.66	46.00	-5.34	QP	100	102
6	299.50	50.41	-13.70	36.71	46.00	-9.29	Peak	100	225

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 802.11MIMO mode at channel 1,6,11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
5. The data is worse case.

Power : DC 3.3V from PC
 Test Mode : Transmit/Receive
 Operation Channel: 1
 Modulation Type : 802.11MIMO
 Rate : 144 Mbps
 Memo :

Pol/Phase : VERTICAL
 Temperature : 28 °C
 Humidity : 70 %
 Atmospheric Pressure: 1010 hPa



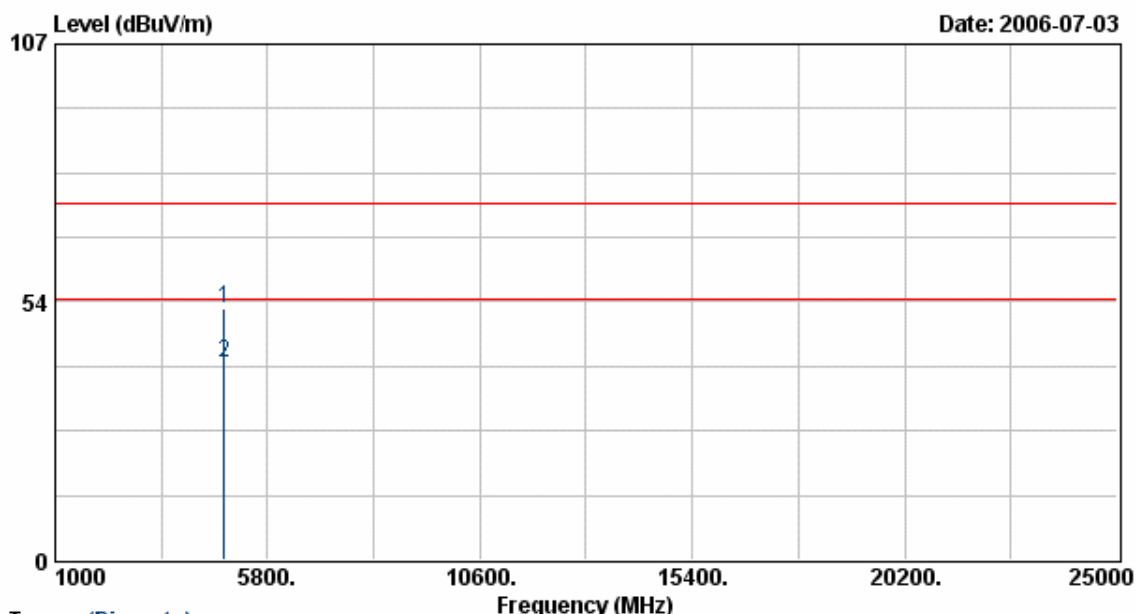
Trace: (Discrete)

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	360.00	48.79	-11.78	37.01	46.00	-8.99	Peak	100	65
2	400.01	43.83	-10.63	33.20	46.00	-12.80	Peak	100	44
3	432.55	46.11	-9.39	36.72	46.00	-9.28	Peak	100	244
4	460.90	43.16	-8.38	34.78	46.00	-11.22	Peak	100	210
5	633.25	45.23	-4.17	41.06	46.00	-4.94	QP	100	210
6	651.35	40.22	-3.89	36.33	46.00	-9.67	Peak	100	352
7	669.30	46.40	-3.71	42.69	46.00	-3.31	QP	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. According to technical experiences, all spurious emission of 802.11MIMO mode at channel 1,6,11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
5. The data is worse case.

Power	: DC 3.3V from PC	Pol/Phase	: HORIZONTAL
Test Mode	: Transmit/Receive	Temperature	: 28 °C
Operation Channel	: 1	Humidity	: 70 %
Modulation Type	: 802.11MIMO	Atmospheric Pressure	: 1010 hPa
Rate	: 144 Mbps		
Memo	:		



Trace: (Discrete)

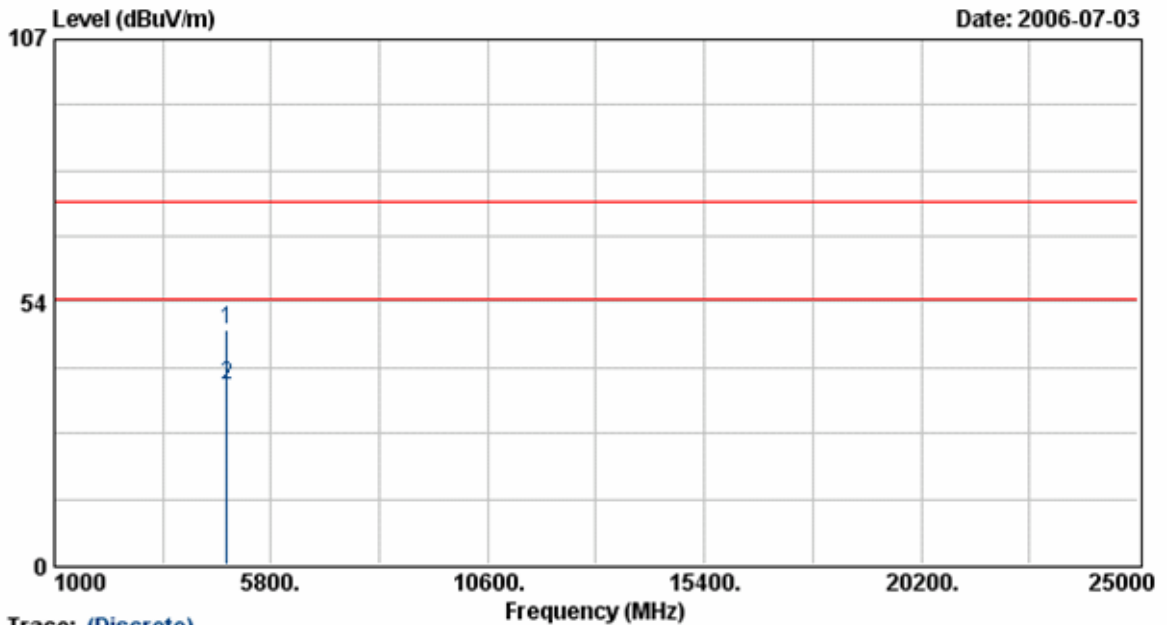
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4823.95	46.60	5.71	52.31	74.00	-21.69	Peak	100	186
2	4823.95	35.00	5.71	40.71	54.00	-13.29	Average	100	186

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 : DC 3.3V from PC
 Test Mode : Transmit/Receive
 Operation Channel : 1
 Modulation Type : 802.11MIMO
 Rate : 144 Mbps
 Memo :

Pol/Phase : VERTICAL
 Temperature : 28 °C
 Humidity : 70 %
 Atmospheric Pressure : 1010 hPa



Trace: (Discrete)

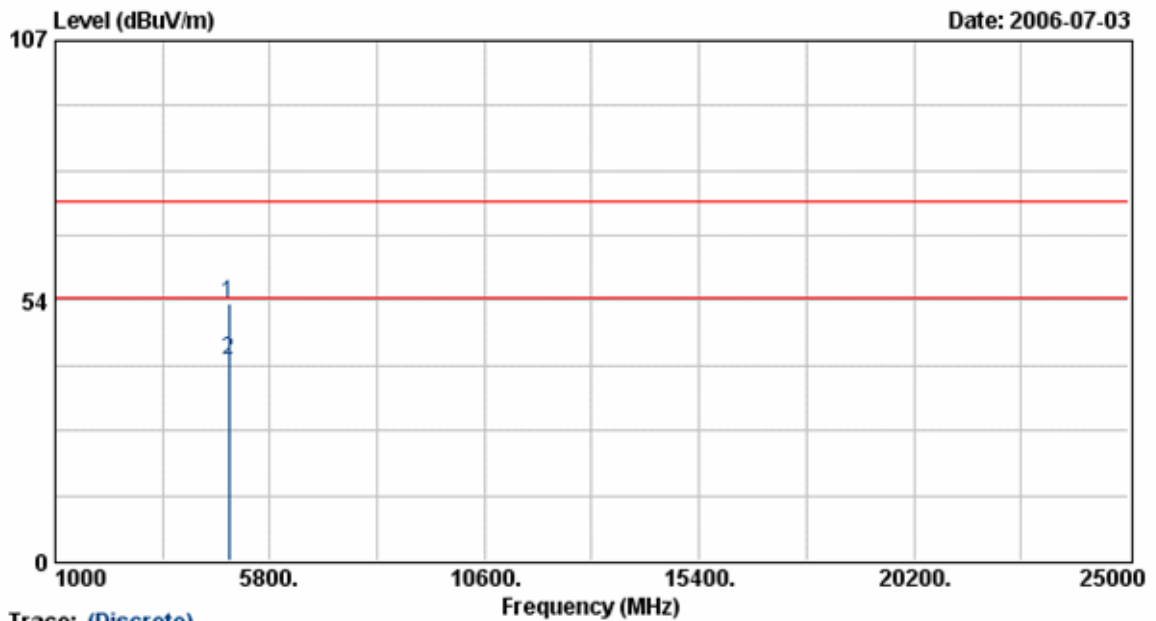
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4823.99	42.13	5.71	47.83	74.00	-26.17	Peak	100	174
2	4823.99	30.71	5.71	36.42	54.00	-17.58	Average	100	174

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 : DC 3.3V from PC
 Test Mode : Transmit/Receive
 Operation Channel: 6
 Modulation Type : 802.11MIMO
 Rate : 144 Mbps
 Memo :

Pol/Phase : HORIZONTAL
 Temperature : 28 °C
 Humidity : 70 %
 Atmospheric Pressure: 1010 hPa



Trace: (Discrete)

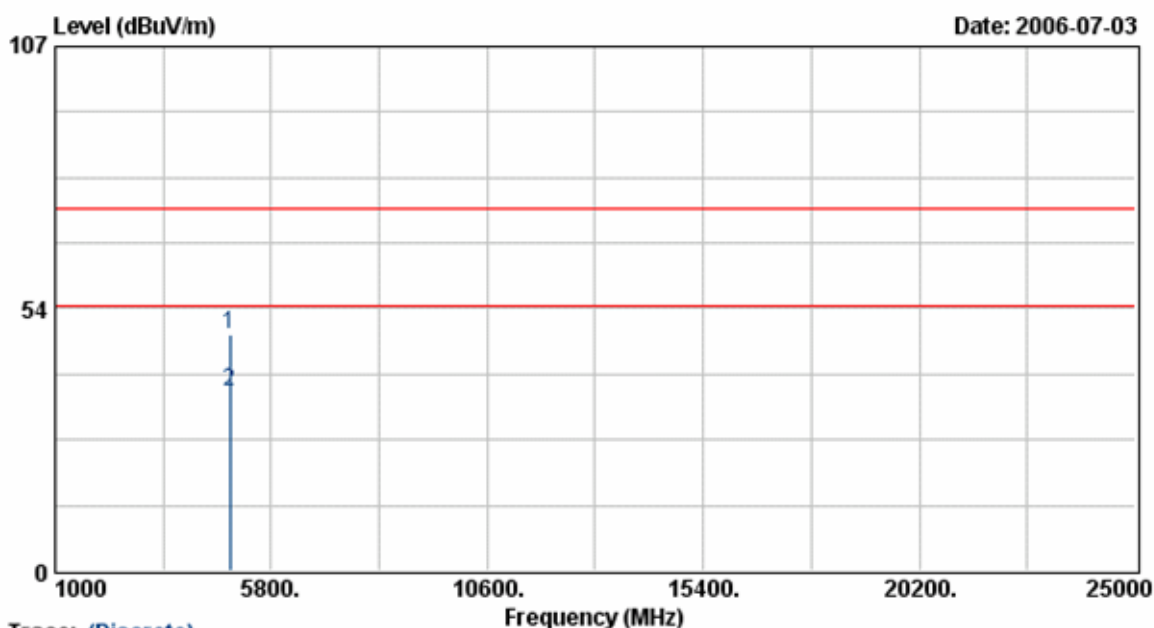
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4873.99	46.99	5.85	52.84	74.00	-21.16	Peak	100	186
2	4873.99	35.33	5.85	41.18	54.00	-12.82	Average	100	186

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 : DC 3.3V from PC
 Test Mode : Transmit/Receive
 Operation Channel: 6
 Modulation Type : 802.11MIMO
 Rate : 144 Mbps
 Memo :

Pol/Phase : VERTICAL
 Temperature : 28 °C
 Humidity : 70 %
 Atmospheric Pressure: 1010 hPa



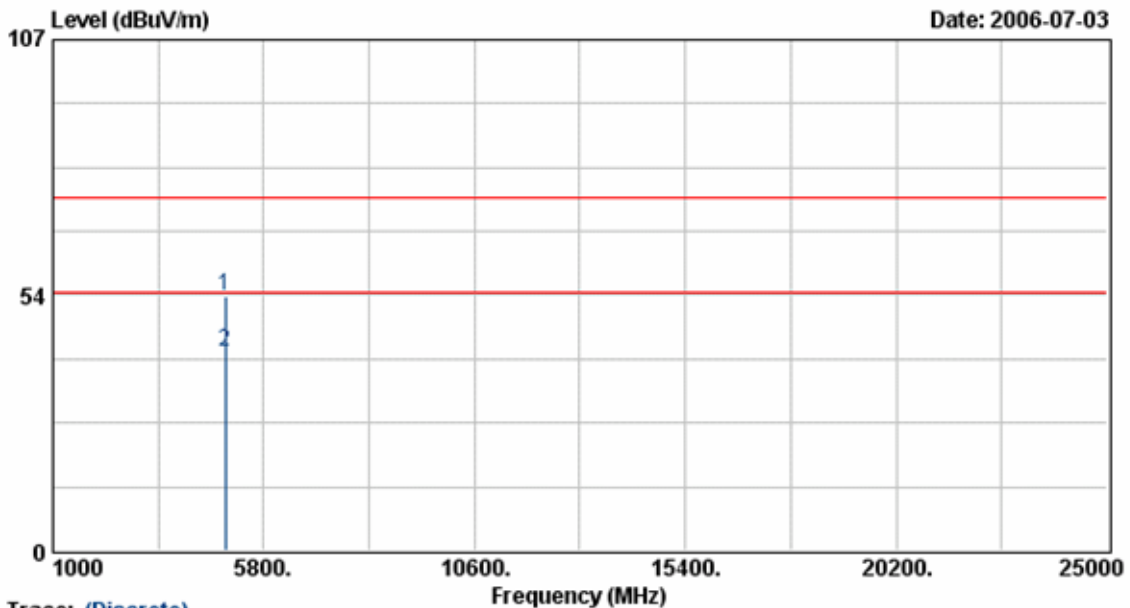
Trace: (Discrete)

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	4874.00	42.36	5.85	48.21	74.00	-25.79	Peak	100	174
2	4874.00	30.67	5.85	36.52	54.00	-17.48	Average	100	174

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	: DC 3.3V from PC	Pol/Phase	: HORIZONTAL
Test Mode	: Transmit/Receive	Temperature	: 28 °C
Operation Channel	: 11	Humidity	: 70 %
Modulation Type	: 802.11MIMO	Atmospheric Pressure	: 1010 hPa
Rate	: 144 Mbps		
Memo	:		



Trace: (Discrete)

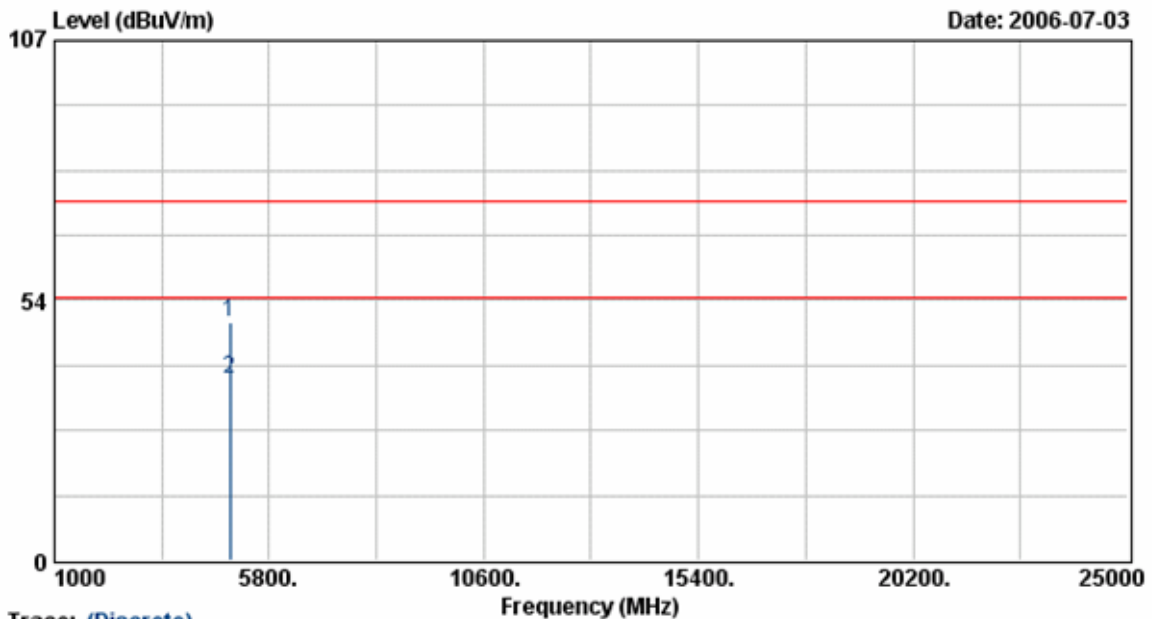
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4924.02	47.14	5.99	53.13	74.00	-20.87	Peak	100	186
2	4924.02	35.55	5.99	41.54	54.00	-12.46	Average	100	186

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 : DC 3.3V from PC
 Test Mode : Transmit/Receive
 Operation Channel: 11
 Modulation Type : 802.11MIMO
 Rate : 144 Mbps
 Memo :

Pol/Phase : VERTICAL
 Temperature : 28 °C
 Humidity : 70 %
 Atmospheric Pressure: 1010 hPa



Trace: (Discrete)

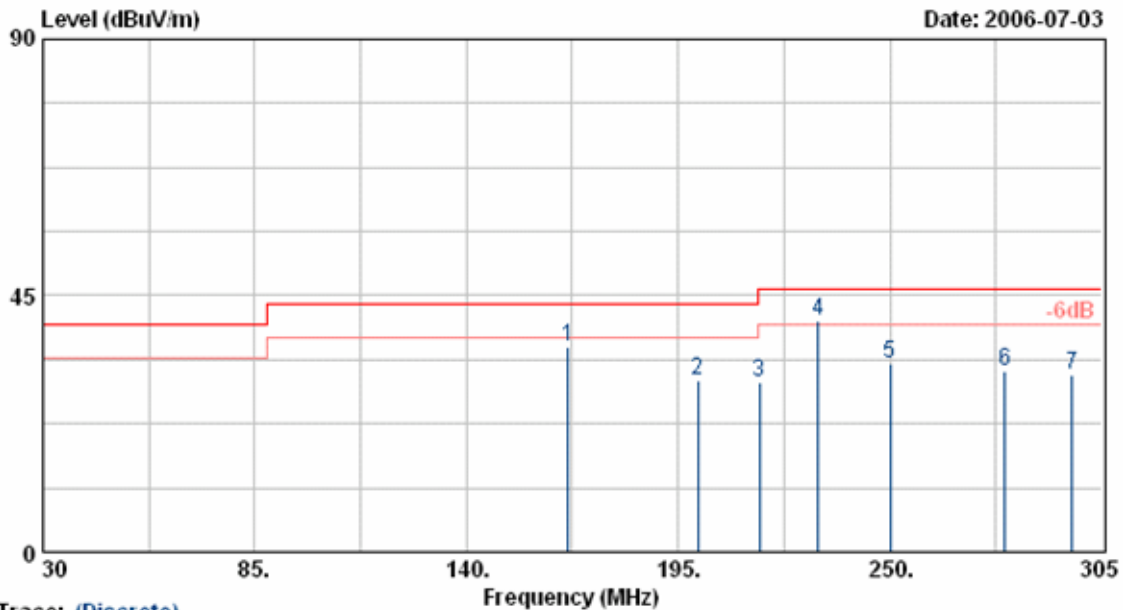
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4924.00	43.21	5.99	49.20	74.00	-24.80	Peak	100	174
2	4924.00	31.47	5.99	37.46	54.00	-16.54	Average	100	174

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.

Test Mode 4:

Power	: DC 3.3V from PC	Pol/Phase	: HORIZONTAL
Test Mode	: Transmit/Receive	Temperature	: 28 °C
Operation Channel	: 3	Humidity	: 70 %
Modulation Type	: 802.11MIMO+CB	Atmospheric Pressure	: 1010 hPa
Rate	: 300 Mbps		
Memo	:		



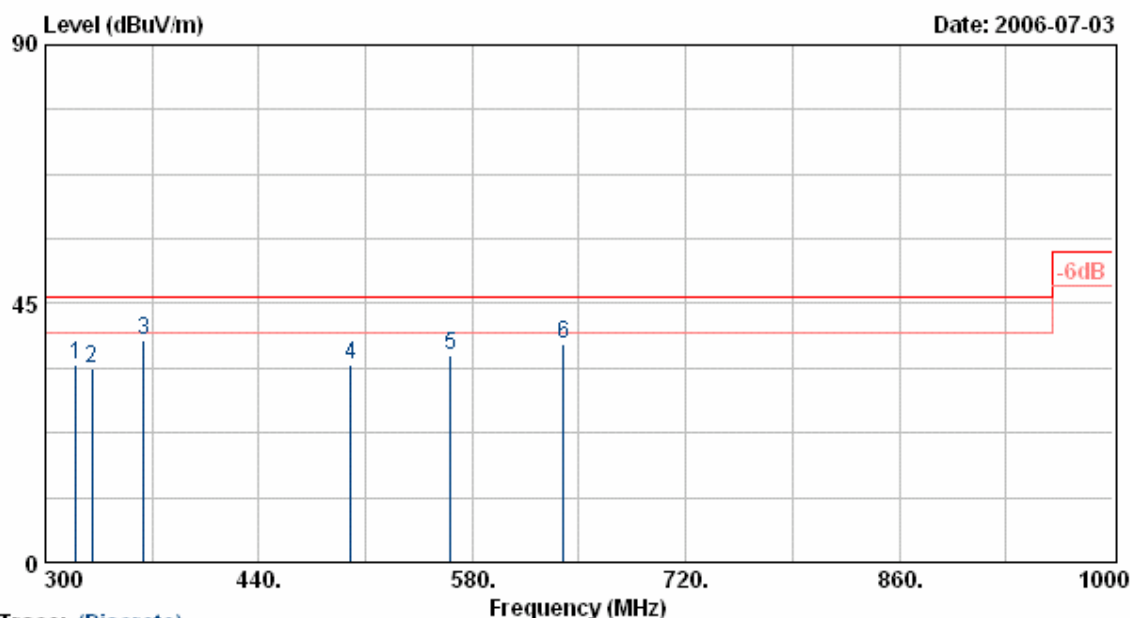
Trace: (Discrete)

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	166.40	53.63	-17.53	36.10	43.50	-7.40	Peak	200	88
2	200.01	48.43	-18.39	30.04	43.50	-13.46	Peak	200	63
3	216.18	48.11	-18.22	29.89	46.00	-16.11	Peak	200	63
4	231.30	57.22	-16.79	40.43	46.00	-5.57	QP	200	211
5	250.00	47.60	-14.44	33.16	46.00	-12.84	Peak	200	321
6	280.00	45.82	-14.19	31.63	46.00	-14.37	Peak	200	360
7	297.30	44.65	-13.71	30.94	46.00	-15.06	Peak	200	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. According to technical experiences, all spurious emission of 802.11MIMO mode at channel 3,6,9 are almost the same below 1GHz, so that the channel 3 was chosen as representative in final test.
5. The data is worse case.

Power	: DC 3.3V from PC	Pol/Phase	: HORIZONTAL
Test Mode	: Transmit/Receive	Temperature	: 28 °C
Operation Channel	: 3	Humidity	: 70 %
Modulation Type	: 802.11MIMO+CB	Atmospheric Pressure	: 1010 hPa
Rate	: 300 Mbps		
Memo	:		



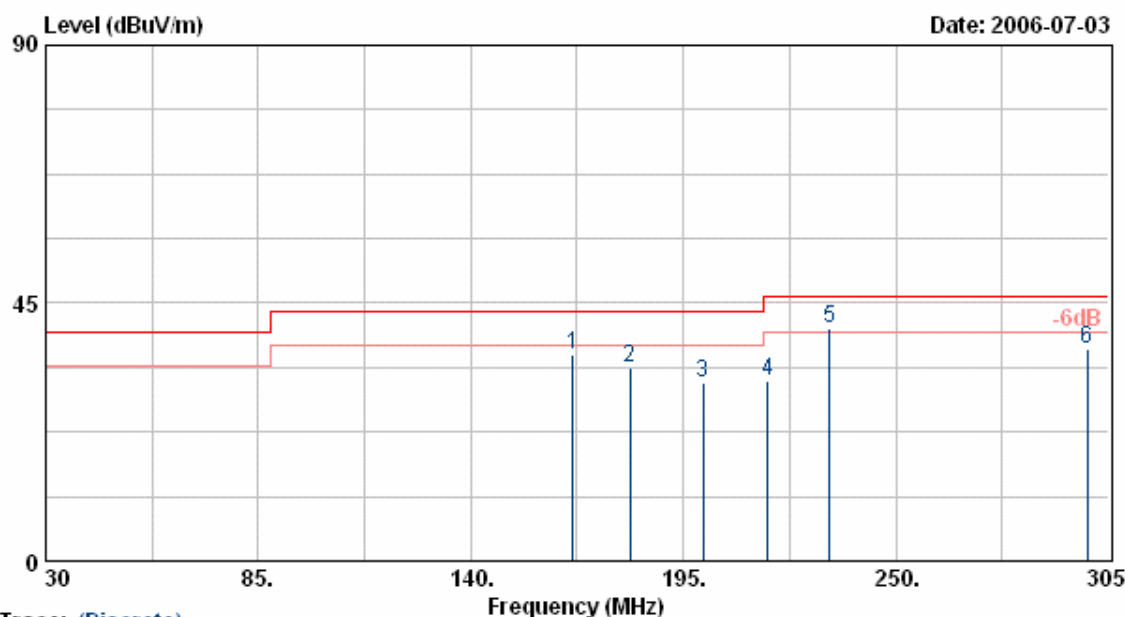
Trace: (Discrete)

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	320.30	47.50	-13.03	34.47	46.00	-11.53	Peak	200	100
2	330.82	46.38	-12.69	33.69	46.00	-12.31	Peak	200	155
3	364.50	50.36	-11.65	38.71	46.00	-7.29	Peak	200	223
4	500.12	41.69	-7.18	34.51	46.00	-11.49	Peak	200	223
5	565.88	41.16	-5.10	36.06	46.00	-9.94	Peak	200	196
6	640.00	41.86	-4.06	37.80	46.00	-8.20	Peak	200	25

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 802.11MIMO mode at channel 3,6,9 are almost the same below 1GHz, so that the channel 3 was chosen as representative in final test.
5. The data is worse case.

Power	: DC 3.3V from PC	Pol/Phase	: VERTICAL
Test Mode	: Transmit/Receive	Temperature	: 28 °C
Operation Channel	: 3	Humidity	: 70 %
Modulation Type	: 802.11MIMO+CB	Atmospheric Pressure	: 1010 hPa
Rate	: 300 Mbps		
Memo	:		



Trace: (Discrete)

Item	Freq MHz	Read Value dBuV/m	Factor dB	Result dBuV/m	Limit dBuV/m	Margin dB	Remark	Ant Pos cm	Tab Pos Deg
1	166.36	53.48	-17.52	35.96	43.50	-7.54	Peak	100	55
2	181.30	52.30	-18.52	33.78	43.50	-9.72	Peak	100	114
3	200.00	49.37	-18.39	30.98	43.50	-12.52	Peak	100	25
4	216.75	49.66	-18.20	31.46	46.00	-14.54	Peak	100	154
5	232.94	57.30	-16.60	40.70	46.00	-5.30	QP	100	102
6	299.50	50.74	-13.70	37.04	46.00	-8.96	Peak	100	225

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 802.11MIMO mode at channel 3,6,9 are almost the same below 1GHz, so that the channel 3 was chosen as representative in final test.
5. The data is worse case.