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
Address	Taipei, Taiwan R.O.C.
Equipment	N_One Wireless Broadband Router
Model No.	WBR-6000
FCC ID	ULT540564070601
Trade Name	LevelOne

Laboratory Accreditation



- 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.

I ssued date: Jul. 26, 2007

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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.
Address	114 Taipei, Taiwan R.O.C.
Equipment	N_One Wireless Broadband Router
Model No.	WBR-6000
FCC ID	ULT540564070601

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 Aug. 29, 2006 at Exclusive Certification Corp.

Signature

Anson Chou / 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

2. Test Configuration of Equipment under Test

2.1 Feature of Equipment under Test

CPU Marvell 88F5180n 333MHz

CODE SIZE 4MbyteSDRAM 32Mbytes

Switch Marvell 88E6061

WAN Port One RJ45 port with auto negotiation

LAN Port Four RJ45 port with LED and auto negotiation

Power Adapter
 LEDs
 DC 12 V/1.2A
 Refer to Table 1

Reset button
 Reset to factory default by pressing 5 seconds

EMC Class-B PCB Layout 1 layers

2.2 RF Specifications

Spreading

802.11b: DSSS, CCK, QPSK, BPSK

802.11g: OFDM (64QAM, 16QAM, QPSK, BPSK)

Frequency Range

802.11b/g: 2.4 ~ 2.472 GHz

Number of Channels

USA, Canada and Taiwan: 1 ~ 11 Most European Countries: 1 ~ 13

Data Rate

802.11b: 11, 5.5, 2, 1 Mbs

802.11g: 54, 48, 36, 24, 18, 12, 9, 6 Mbps

802.11g MIMO: 7.22 ~ 300 Mbps

Modulation

802.11g: OFDM

802.11b: CCK, DQPSK, DBPSK

Antenna

Dipole Antenna Peak gain: 1.8 dBi

Transmit Power

FCC:

802.11b: 17 dBm 802.11g: 14 dBm

802.11g MIMO: 16.5 dBm

ETSI: (EIRP)

802.11b: 17.8 dBm 802.11g: 14.8 dBm

802.11g MIMO: 17.3 dBm

I ssued date: Jul. 26, 2007

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, "Hypertermail.exe" Application under WIN XP.

The following test including two kind of power adapter and four kind of modulation type:

- Test mode 1: 802.11b (11Mbps), Adapter model is DV-1280-3.
- Test mode 2: 802.11g (54 Mbps), Adapter model is DV-1280-3.
- Test mode 3: 802.11MIMO (144Mbps), Adapter model is DV-1280-3.
- Test mode 4: 802.11MIMO+CB (300 Mbps), Adapter model is DV-1280-3.
- Test mode 5: 802.11b (11Mbps), Adapter model is DSA-15P-12US 120150.
- Test mode 6: 802.11g (54 Mbps), Adapter model is DSA-15P-12US 120150.
- Test mode 7: 802.11MIMO (144Mbps), Adapter model is DSA-15P-12US 120150.
- Test mode 8: 802.11MIMO+CB (300 Mbps), Adapter model is DSA-15P-12US 120150.

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

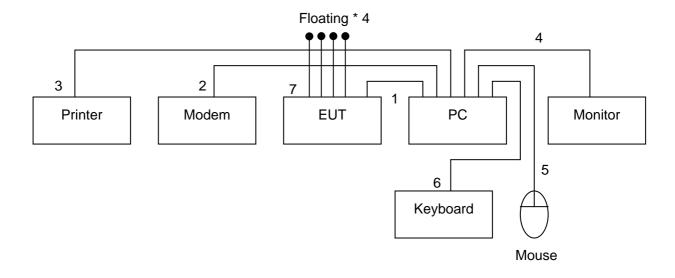
2.4 Description of Test System

Device	Manufacturer	Model No.	Description
PC	IBM	IGV	Power Cable, Unshielding 1.8 m
Monitor	SlimAGE	510A	Power Cable, Adapter Unshielding 1.8 m
			Data Cable, VGA shielding 1.35 m
Keyboard	IBM	KB-0225	Data Cable, PS2 shielding 1.85 m
Mouse	IBM	MO28VO	Data Cable, USB shielding 1.85 m
Modem	ACEXX	DM-1414	Power Cable, Adapter Unshielding 1.8 m
			Data Cable, RS232 Unshielding 1.35 m
Printer	HP	Desk Jet400	Power Cable, Adapter Unshielding 1.8 m
			Data Cable, PRINT Shielding 1.6 m

Use Cable:

Cable	Description		
RS232*1	Unshielding, 1.5m		
RJ-45*4	Unshielding, 0.5m		

2.5 Connection Diagram of Test System



- 1. The RJ 45 cable is connected from PC to the EUT.
- 2. The I/O cable is connected from PC to the Modem.
- 3. The I/O cable is connected from PC to the Printer.
- 4. The I/O cable is connected from PC to the Monitor.
- 5. The I/O cable is connected from PC to the Mouse.
- 6. The I/O cable is connected from PC to the Keyboard.
- 7. There cables are floating.

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
	T-182 for Telecommunication Test
VCCI Registration Number :	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. 26, 2007	The functions and the hardware of Model No.: WBR-6000 (Report No: FI06050201-C) and Model No.: IP1006Mn (Report No: FD06051201-B) are exactly the same. The only difference between these models are their trade name and Model No.
		tricce medere are their trade name and meder ive.

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: Integral Dipole Antenna

Antenna Gain: 1.8 dBi.

.

Exclusive **C**ertification **C**orp. Tel:886-2-2792-3366 Fax:886-2-2792-1100

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.

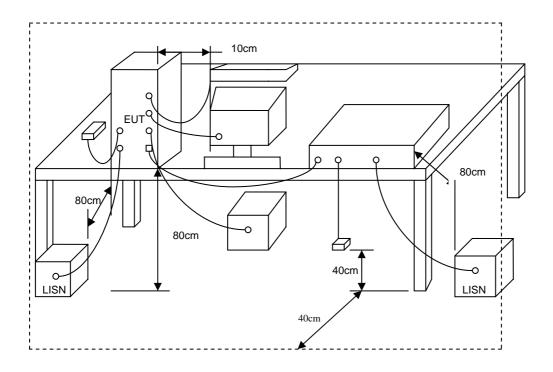
Frequency (MHz)	Quasi Peak (dB µ V)	Average (dB μ V)
0.15 - 0.5	66-56*	56-46*
0.5 - 5.0	56	46
5.0 – 30.0	60	50

^{*}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



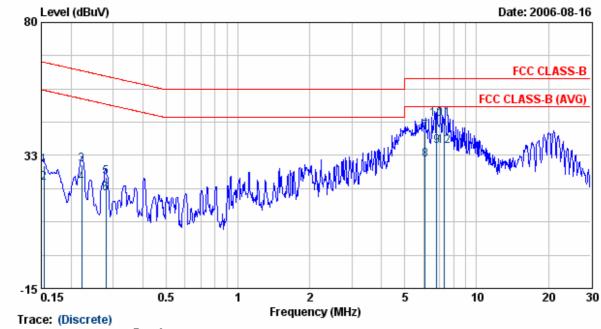
4.4 Measurement equipment

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:

Pol/Phase : NEUTRAL C : AC 120V Power Test Mode : 802.11g CH1 Memo : DV-1280-3 Humidity : 68 %



Read Value Factor Result Limit Margin Remark	Trace:	(Discrete)				,		
1 0.15 28.55 0.28 28.83 65.78 -36.96 QP 2 0.15 22.54 0.28 22.82 55.78 -32.97 AVERAGE 3 0.22 28.91 0.24 29.15 62.76 -33.60 QP 4 0.22 22.44 0.24 22.68 52.76 -30.07 AVERAGE 5 0.28 24.51 0.35 24.86 60.81 -35.95 QP 6 0.28 18.34 0.35 18.69 50.81 -32.12 AVERAGE 7 6.07 40.27 0.60 40.87 60.00 -19.13 QP 8 6.07 30.49 0.60 31.09 50.00 -18.91 AVERAGE 9 6.80 35.09 0.60 35.69 50.00 -14.31 AVERAGE 10 6.80 44.78 0.60 45.38 60.00 -14.62 QP 11 7.35 44.69 0.60 45.29 60.00 -14.71 QP	Item	Freq		Factor	Result	Limit	Margin	Remark
12 7.35 35.28 0.60 35.88 50.00 -14.12 AVERAGE	4 5 6 7 8 9 10	0.15 0.15 0.22 0.22 0.28 0.28 6.07 6.07 6.80 6.80	28.55 22.54 28.91 22.44 24.51 18.34 40.27 30.49 35.09 44.78	0.28 0.28 0.24 0.24 0.35 0.35 0.60 0.60 0.60	28.83 22.82 29.15 22.68 24.86 18.69 40.87 31.09 35.69 45.38	65.78 55.78 62.76 52.76 60.81 50.81 60.00 50.00 50.00	-36.96 -32.97 -33.60 -30.07 -35.95 -32.12 -19.13 -18.91 -14.31 -14.62	ÁVERAGE QP AVERAGE QP AVERAGE QP AVERAGE AVERAGE QP

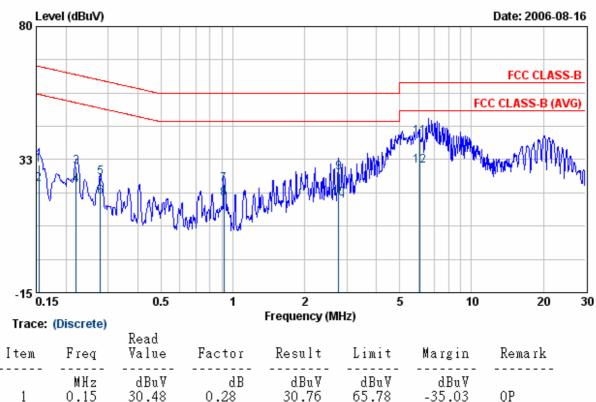
Remarks: 1. Level = Read Level + Factor
2. Factor = LISN(ISN) Factor + Cable Loss
3. All emission below 1GHz at 802.11b/g mode are all the same, so the

802.11g mode chosen as representative in final test.

4. 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.

5. The data is worse case.

: AC 120V : 802.11g CH1 : DV-1280-3 : LINE Pol/Phase Power Test Mode Temperature : 26 š Humidity : 68



MHz dBuV dB dBuV dBuV	dBu∀ -35.03	
1 0.15 30.48 0.28 30.76 65.78 2 0.15 23.58 0.28 23.86 55.78 3 0.22 29.65 0.24 29.89 62.78 4 0.22 23.25 0.24 23.49 52.78 5 0.28 25.83 0.34 26.17 60.85 6 0.28 18.86 0.34 19.20 50.85 7 0.92 23.20 0.50 23.70 56.00 8 0.92 18.02 0.50 18.52 46.00 9 2.78 27.28 0.60 27.88 56.00 10 2.78 17.98 0.60 18.58 46.00 11 6.04 40.07 0.60 40.67 60.00 12 6.04 29.74 0.60 30.34 50.00	-31.93 -32.89 -29.29 -34.67 -31.64 -32.30 -27.48 -28.12 -27.42 -19.33 -19.66	QP AVERAGE

- Remarks: 1. Level = Read Level + Factor

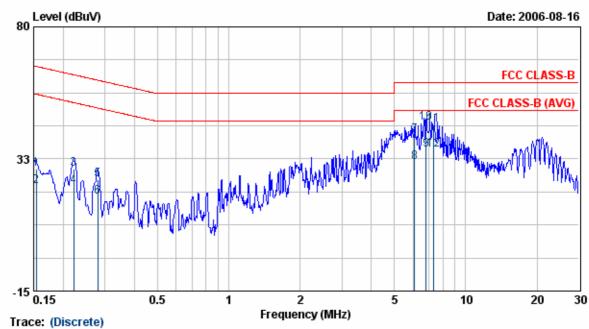
 2. Factor = LISN(ISN) Factor + Cable Loss

 3. All emission below 1GHz at 802.11b/g mode are all the same, so the 802.11g mode chosen as representative in final test.

 4. 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.
 - 5. The data is worse case.

Test Mode 3:

Pol/Phase : NEUTRAL Power : AC 120V : 802.11MIMO CH1 Test Mode Temperature : 26 : DV-1280-3 Humidity : 68 Memo



Trace:	(Discrete)				,			
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	
1 2 3 4 5 6 7 8 9 10 11	MHz 0.15 0.15 0.22 0.22 0.28 0.28 6.07 6.07 6.80 7.35 7.35	dBuV 28.63 22.54 28.48 22.46 24.66 18.49 40.33 30.54 35.18 44.69 44.22 35.17	dB 0.28 0.28 0.24 0.35 0.35 0.60 0.60 0.60 0.60	dBuV 28.91 22.82 28.72 22.70 25.01 18.84 40.93 31.14 35.78 45.29 44.82 35.77	dBuV 65.78 55.78 62.76 52.76 60.81 50.81 60.00 50.00 60.00 60.00	dBuV -36.88 -32.97 -34.03 -30.05 -35.80 -31.97 -19.07 -18.86 -14.22 -14.71 -15.18 -14.23	QP AVERAGE QP AVERAGE QP AVERAGE AVERAGE AVERAGE QP AVERAGE QP QP QP 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 16Hz,so that the channel 1 was chosen as representative in final test.

 4. The data is worse case.

Pol/Phase : LINE

Temperature : 26

Memo : DV-1280-3 Humidity : 68 Level (dBuV) Date: 2006-08-16 80 FCC CLASS-B FCC CLASS-B (AVG) 33 0.15 0.5 1 2 5 10 20 30 Frequency (MHz) Trace: (Discrete) Read Item Freq Factor Limit Value Result Margin Remark -----dBuV dBuV dBuV dBuV MHz dΒ 0.15 30.49 0.28 30.77 -35.02 0P 65.78 1 2 0.15 23.66 0.28 23.94 55.78 -31.85 AVERAGE 29.60 29.84 0.22 0.24 62.78 -32.94 QP 23.23 25.86 0.22 0.24 23.47 52.78 -29.31 AVERAGE

Remarks:

5

ŏ

7

8

9

10

11

12

0.28

0.28

0.92

0.92

2.78

2.78

6.04

6.04

1. Level = Read Level + Factor

18.86

23.54

18.13

27.67

18.06

40.24 29.74

2. Factor = LISM(ISM) Factor + Cable Loss

0.34 0.34 0.50

0.50

0.60

0.60

0.60

0.60

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.

26.20

19.20

24.04

18.63

28.27

18.66

40.84

30.34

60.85

50.85

56.00

46.00

56.00

46.00

60.00

50.00

-34.64

-31.64

-31.96

-27.37

-27.73

-27.34

-19.16

-19.66

OP.

QP.

QΡ

OP.

ÀVERAGE

ÁVERAGE

AVERAGE

AVERAGE

4. The data is worse case.

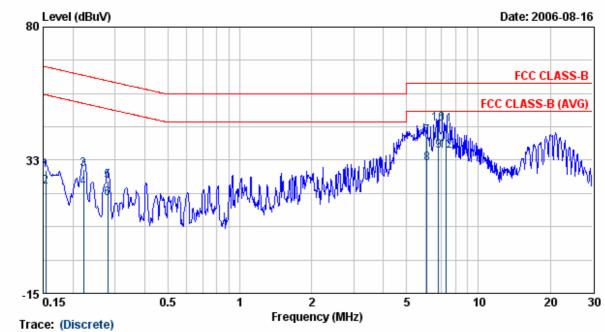
: AC 120V

Test Mode : 802.11MIMO CH1

Power

Test Mode 4:

: NEUTRAL 26 °C % : AC 120V : 802.11MIMO+CB CH3 Power Pol/Phase Test Mode Temperature : 26 Memo : DV-1280-3 Humidity



Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
1 2 3 4 5	MHz 0.15 0.15 0.22 0.22	dBuV 28.72 22.63 29.06 22.58 24.77	dB 0.28 0.28 0.24 0.24 0.35	dBuV 29.00 22.91 29.30 22.82 25.12	dBuV 65.78 55.78 62.76 52.76 60.81	dBuV -36.79 -32.88 -33.45 -29.93 -35.69	QP AVERAGE QP AVERAGE QP
6 7 8 9 10 11 12	0.28 6.07 6.07 6.80 6.80 7.35 7.35	18.53 40.40 30.53 35.16 44.78 44.42 35.03	0.35 0.60 0.60 <mark>0.60</mark> 0.60 0.60 0.60	18.88 41.00 31.13 35.76 45.38 45.02 35.63	50.81 60.00 50.00 50.00 60.00 60.00 50.00	-31.93 -19.00 -18.87 -14.24 -14.62 -14.98 -14.37	AVERAGE QP AVERAGE AVERAGE QP QP AVERAGE

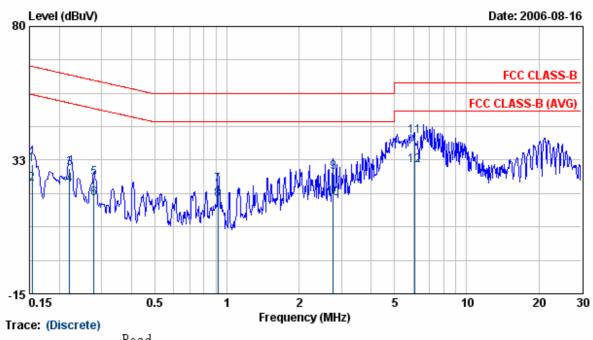
Remarks:

- 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
 : AC 120V
 Pol/Phase
 : LINE

 Test Mode
 : 802.11MIM0+CB CH3
 Temperature
 : 26
 °C

 Memo
 : DV-1280-3
 Humidity
 : 68
 %



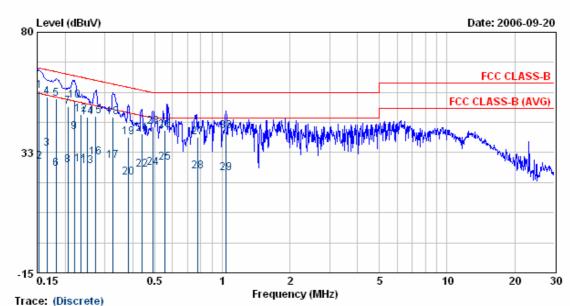
I tem	Freq	Read Value	Factor	Result	Limit	Margin	Remark
1 2 3 4 5 6 7 8 9 10 11 12	MHz 0.15 0.15 0.22 0.22 0.28 0.28 0.92 0.92 2.78 2.78 6.04 6.04	dBuV 30.63 23.69 29.42 23.37 25.71 18.55 23.30 18.02 27.65 18.25 40.36 29.87	dB 0.28 0.28 0.24 0.24 0.34 0.35 0.50 0.50 0.60 0.60	dBuV 30.91 23.97 29.66 23.61 26.05 18.89 23.80 18.52 28.25 18.85 40.96 30.47	dBuV 65.78 55.78 62.78 52.78 60.85 50.85 56.00 46.00 46.00 60.00 50.00	dBuV -34.88 -31.82 -33.12 -29.17 -34.79 -31.95 -32.20 -27.48 -27.75 -27.15 -19.04 -19.53	QP AVERAGE

Remarks:

- 1. Level = Read Level + Factor
- 2. Factor = LISM(ISM) 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 mode 5,6:

: NEUTRAL C : AC 120V : 802.11g CH1 : DSA-15P-12VS 120150 Power Pol/Phase Temperature: 26 Humidity: 57 Test Mode



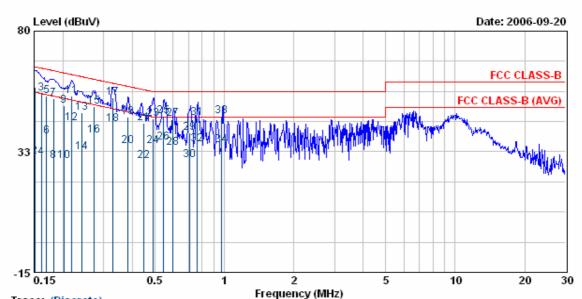
mace.	(Discrete)	D 1					
Item	$F{\rm req}$	Read Value	Factor	Result	Limit	Margin	Remark
5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	0.15 0.17 0.17 0.18 0.21 0.22 0.22 0.24 0.25 0.27 0.33 0.38 0.38 0.44 0.49 0.49 0.555 0.77 0.77 1.04	28.74 33.74 54.01 53.39 25.90 50.40 27.17 40.44 527.73 47.32 26.91 46.05 46.46 30.27 28.75 46.08 37.92 22.28 39.53 42.16 26.09 28.15 41.00 38.22 24.49 23.84	0.25 0.25 0.23 0.21 0.21 0.24 0.27 0.27 0.30 0.33 0.41 0.48 0.48 0.49 0.48 0.49 0.48 0.48 0.48 0.43 0.43 0.40	54.26 53.62 26.13 50.61 27.38 40.68 53.19 28.00 47.59 27.21 46.35 46.79 30.60 29.16 46.49 38.40 22.76 40.02 25.84 42.64 26.57 28.61 41.46 38.65 24.92 24.24	52.24 62.24 51.73 61.73 61.04 51.04 49.57 59.57 58.26 47.06 47.06 56.12 46.12 46.00 56.00 56.00 46.00 46.00	-26.81 -21.17 -10.90 -10.75 -28.24 -12.78 -26.01 -12.15 -9.64 -24.24 -14.65 -24.53 -15.39 -14.25 -20.44 -20.41 -13.08 -19.86 -25.50 -17.04 -21.22 -13.48 -19.55 -17.39 -14.54 -17.35 -21.08 -21.76	QP AVERAGE QP AVERAGE QP QP AVERAGE AVERAGE QP QP AVERAGE QP AVERAGE QP AVERAGE QP AVERAGE QP AVERAGE AVERAGE AVERAGE QP AVERAGE
30	1.04	40.54	0.40	40.94	56.00		QP

5. The data is worse case.

Remarks: 1. Level = Read Level + Factor
2. Factor = LISN(ISN) Factor + Cable Loss
3. All emission below 1GHz at 802.11b/g mode are all the same, so the 802.11g mode chosen as representative in final test.
4. 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.

5. The data is worse case

Power : AC 120V Test Mode : 802.11g CH1 Memo : DSA-15P-12US 120150 Pol/Phase : LINE Temperature : 26 Humidity : 57 $^{\circ}$ %



Trace:	(Discrete)			rrequericy (W	inz <i>)</i>		
Item		Read Value	Factor	Result	Limit	Margin	Remark
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 33 33 34	MHz 0.15 0.15 0.16 0.17 0.18 0.18 0.20 0.22 0.24 0.27 0.33 0.33 0.38 0.45 0.49 0.54 0.60 0.71 0.716 0.76 0.97 0.97	dBuV 57.57 30.17 55.28 30.09 54.02 38.37 53.14 28.77 50.32 28.62 54.10 43.53 47.62 32.10 50.10 38.49 53.35 42.86 45.80 34.32 28.62 50.10 38.49 53.35 42.86 45.80 34.32 48.90 34.02 34.02 34.03 35.03 36.03 36.03 37.03 38.03 39.	dB 0.28 0.28 0.26 0.26 0.25 0.23 0.23 0.20 0.24 0.24 0.28 0.33 0.33 0.41 0.41 0.48 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.5	34.80 43.62 28.78 45.40 34.72 46.55 35.96 45.60 34.09 40.00 29.27 45.88 35.53	51.06 59.52 49.52 58.25 48.25 56.93 46.93 56.15 46.00 46.00 56.00 46.00 56.00 46.00 56.00	dBuV -8.09 -25.49 -9.86 -25.05 -10.71 -16.36 -11.00 -25.37 -13.03 -24.73 -8.54 -9.11 -14.13 -19.65 -10.63 -12.24 -5.75 -6.24 -11.97 -13.45 -10.75 -11.43 -9.45 -10.75 -11.43 -9.45 -10.40 -11.91 -16.00 -16.73 -10.47 -9.51 -10.87	AVERAGE QP AVERAGE

Remarks: 1. Level = Read Level + Factor

2. Factor = LISN(ISN) Factor + Cable Loss

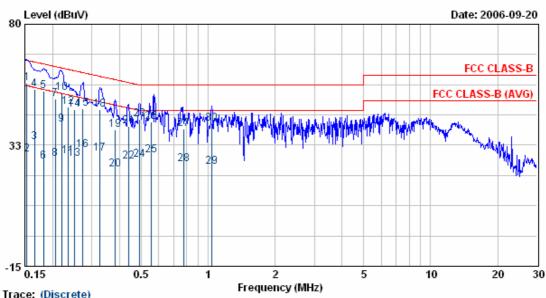
3. All emission below 1GHz at 802.11b/g mode are all the same, so the 802.11g mode chosen as representative in final test.

4. 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.

5. The data is worse case.

Test mode 7:

Pol/Phase : NEUTRAL 26 ℃ : AC 120V : 802.11MIMO CH1 : DSA-15P-12VS 120150 Power Temperature : 26 Humidity : 57 Test Mode % Memo



Trace: (Discrete) Read Item Freq Value Factor Result Limit	4 D n V	
	dBuV -8.85	
4 0.17 54.09 0.25 54.34 65.16 5 0.18 53.49 0.23 53.72 64.37 6 0.18 25.93 0.23 26.16 54.37 7 0.21 50.48 0.21 50.69 63.39 8 0.21 27.08 0.21 27.29 53.39 9 0.22 40.49 0.24 40.73 52.83 10 0.22 52.84 0.24 53.08 62.83 11 0.24 27.87 0.27 28.14 52.24 12 0.24 47.39 0.27 47.66 62.24 13 0.25 26.75 0.30 27.05 51.73 14 0.25 46.36 0.30 46.66 61.73 15 0.27 46.49 0.33 46.82 61.04 16 0.27 30.35 0.33 30.68 51.04 17 0.33 28.89 0.41 29.30 49.57 18 0.33 46.25 0.	-21.37 -10.82 -10.65 -28.21 -12.70 -26.10 -12.10 -9.75 -24.10 -14.58 -24.69 -15.08 -14.22 -20.36 -20.27 -12.91 -19.85 -25.42 -17.10 -20.88 -13.28 -19.40 -17.37 -14.38	AVERAGE QP QP AVERAGE

Remarks:

30

40.56

1. Level = Read Level + Factor 2. Factor = LISN(ISN) Factor + Cable Loss

0.40

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.

40.96

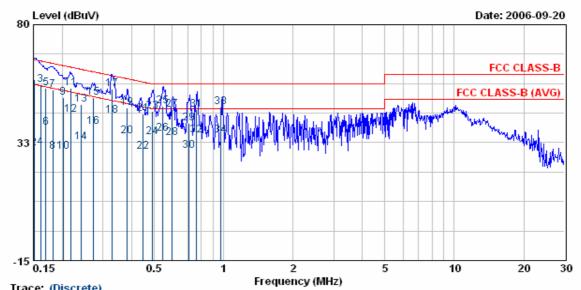
56.00

1.04

-15.04

QP

Power : AC 120V Test Mode : 802.11MIMO CH1 Memo : DSA-15P-12US 120150 Pol/Phase : LINE Temperature : 26 Humidity : 57 Humidity



Trace:	(Discrete)				,		
			Factor				
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 33 34 34 36 37 38 38 38 38 38 38 38 38 38 38 38 38 38	MHz 0.15 0.15 0.16 0.16 0.17 0.17 0.18 0.20 0.22 0.22 0.22 0.22 0.24 0.27 0.33 0.33 0.38 0.45 0.45	dBuV 57.68 30.13 55.47 30.24 54.36 38.30 53.52 28.79 50.36 28.75 54.35 43.50 47.69 32.35 50.38 38.68 53.65 42.98 45.93 34.54 43.51 28.47	dB 0.28 0.28 0.26 0.26 0.25 0.25 0.23 0.20 0.20 0.24 0.24 0.28 0.33 0.33 0.41 0.41 0.48 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.5	dBuV 57.96 30.41 55.73 30.50 54.61 38.55 53.75 29.02 50.56 28.95 54.59 43.74 47.97 32.63 50.71 39.01 54.06 43.39 46.41 28.97 45.22 34.79 47.12 36.08 45.69 34.35 29.31 45.69 34.35 29.31 45.66 35.50 46.82	dBuV 65.94 55.94 65.94 65.41 55.41 64.98 54.37 53.55 62.88 62.03 61.06 51.06 51.06 51.06 51.06 51.06 51.06 51.06 51.06 51.06 51.06 51.06 51.06 51.06 51.06 51.06	dBuV -7.98 -25.53 -9.67 -24.90 -10.37 -16.43 -10.62 -25.35 -12.99 -24.60 -8.29 -9.14 -14.06 -19.40 -10.35 -12.05 -5.45 -6.12 -11.84 -13.23 -12.92 -17.96 -10.93 -11.36 -8.88 -9.92 -10.31 -11.36 -8.88 -9.92 -10.31 -11.36 -9.95 -10.31 -11.35 -10.50 -10.34 -10.50 -10.50 -10.50 -10.50 -10.50 -10.50 -10.50 -10.50 -10.50 -10.50 -10.50 -10.50 -10.50 -10.50 -10.50 -10.50 -10.5	QP AVERAGE
J-1	V.J.	54.15	0.00	55.25	10.00	10.12	11 1 11 11 11 11 11

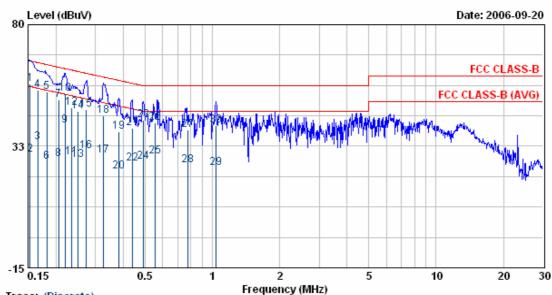
Remarks:

^{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 8:

Power Test Mode

Pol/Phase : NEUTRAL 26 ℃ : AC 120V : 802.11MIM0+CB CH3 : DSA-15P-12US 120150 Temperature : 26 Humidity : 57 % Memo



Trace:	(Discrete)	
		τ

MHz dBuV dB dBuV dBuV dBuV dBuV dBuV 2 0P 2 0.15 56.73 0.28 57.01 65.82 -8.82 0P 2 0.15 28.86 0.28 29.14 55.82 -26.69 AVERAGE 3 0.17 33.83 0.25 34.08 55.16 -21.08 AVERAGE 4 0.17 54.14 0.25 54.39 65.16 -10.77 0P 5 0.18 53.55 0.23 53.78 64.37 -10.59 0P 6 0.18 26.21 0.23 26.44 54.37 -27.93 AVERAGE 7 0.21 50.49 0.21 50.70 63.39 -12.69 0P 8 0.21 27.29 0.21 27.50 53.39 -25.89 AVERAGE 9 0.22 40.25 0.24 40.49 52.83 -12.34 AVERAGE 10 0.22 52.87 0.24 53.11 62.83 -9.72 0P	
10 0.22 52.87 0.24 53.11 62.83 -9.72 QP 11 0.24 27.79 0.27 28.06 52.24 -24.18 AVERAGE 12 0.24 47.38 0.27 47.65 62.24 -14.59 QP 13 0.25 26.82 0.30 27.12 51.73 -24.62 AVERAGE 14 0.25 45.88 0.30 46.18 61.73 -15.56 QP 15 0.27 46.41 0.33 46.74 61.04 -14.30 QP 16 0.27 30.20 0.33 30.53 51.04 -20.51 AVERAGE 17 0.33 28.62 0.41 29.03 49.57 -20.54 AVERAGE 18 0.33 43.95 0.41 44.36 59.57 -15.21 QP 19 0.38 37.76 0.48 38.24 58.26 -20.02 QP 20 0.38 22.12 0.48 22.60 48.26 -25.66 AVERAGE 21 0.44 39.22 0.49 39.71 57.06 -17.35 QP 22 0.44 25.17 0.49 25.66 47.06 -21.40 AVERAGE 23 0.49 42.28 0.48 42.76 56.12 -13.36 QP 24 0.49 26.12 0.48 26.60 46.12 -19.52 AVERAGE 25 0.55 28.12 0.46 28.58 46.00 -17.42 AVERAGE 26 0.55 41.27 0.46 41.73 56.00 -17.42 AVERAGE 27 0.77 38.33 0.43 38.76 56.00 -17.24 QP 28 0.77 24.63 0.43 38.76 56.00 -17.24 QP 29 1.04 23.55 0.40 23.95 46.00 -20.94 AVERAGE 29 1.04 23.55 0.40 23.95 46.00 -20.94 AVERAGE 29 1.04 23.55 0.40 23.95 46.00 -22.05 AVERAGE 20 1.04 40.27 0.40 40.67 56.00 -15.33 QP	

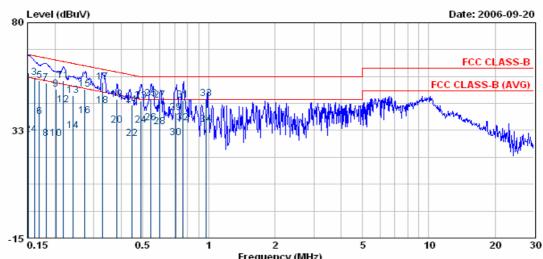
Remarks:

- 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.

Շ %

Pol/Phase : LINE Temperature : 26 Humidity : 57 : AC 120V : 802.11MIMO+CB CH3 : DSA-15P-12VS 120150 Power Test Mode Memo



Trace:	(Discrete)			Frequency (M	IHZ)		
	Freq	Read Value	Factor	Result	Limit	Margin	Remark
3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 22 23 22 23 23 23 23 23 33 33 33 33	0.15 0.16 0.17 0.18 0.20 0.22 0.22 0.22 0.27 0.33 0.33 0.33 0.45 0.49 0.54 0.54 0.60 0.71 0.76 0.97	dBuV 57.68 30.34 55.47 30.22 54.16 38.34 53.10 28.62 50.35 28.60 54.16 43.54 47.63 38.56 43.28 45.28 45.38 45.22 45.37 35.22 45.37 39.67 28.58 45.37 45.37 46.37 46.37 47.	0.28 0.26 0.25 0.25 0.23 0.20 0.20 0.24 0.28 0.28 0.33 0.41 0.41 0.48 0.50 0.50 0.50 0.50	54.41 38.59 53.33 28.85 50.55 28.80 54.40 43.78 47.91 32.46 50.61 38.89 53.79 43.33 46.20 34.78 43.83 28.81 45.60 46.37 35.60 46.37 35.60 46.37 35.60 46.37 35.60	55.94 65.41 55.41 64.98 64.37 63.55 62.03 61.06 59.52 49.25 49.25 49.25 49.25 40.00 46.00 46.00 46.00 46.00 46.00 46.00	-25.32 -9.67 -24.92 -10.57 -16.39 -11.04 -25.52 -13.00 -24.75 -8.48 -9.10 -14.12 -19.57 -10.45 -12.17 -5.72 -6.18 -12.05 -13.47 -13.10 -18.12 -9.63 -10.28 -9.63 -10.28	AVERAGE QP 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:

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	Distance	Radiated	Radiated
(MHz)	Meters	(µ V / M)	(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.

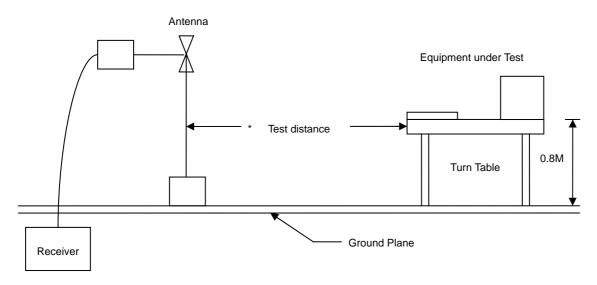
Frequency (MHz)	Distance Meters	Radiated (dB µ V/ M)		
30-230	10	30		
230-1000	10	37		

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.

Exclusive **C**ertification **C**orp. Tel:886-2-2792-3366 Fax:886-2-2792-1100

5.3 Typical Test Setup



5.4 Measurement equipment

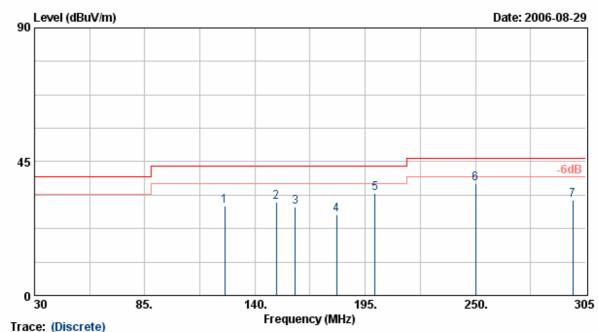
Instrument/Ancillary	Model No.	Manufacturer	Serial No.	Valid Date
EMI Receiver	8546A	HP	3807A00454	2007/05/11
Spectrum Analyzer	FSP40	R&S	10047	2007/01/16
Horn Antenna	3115	EMCO	31589	2007/02/12
Horn Antenna	3116	EMCO	31970	2007/02/09
Bilog Antenna	CBL6112B	Schaffner	2840	2007/04/19
Amplifier	8449B	Agilent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

5.5 Test Result and Data

Test Mode 1, 2:

: AC 120V Power Pol/Phase : HORIZONTAL Test Mode : 28 r : Transmit/Receive Temperature % Operation Channel: 1 : 68 Humidity Modulation Type : 802.11g Atmospheric Pressure: 1010 hPa

: 54 Mbps Rate : DV1280-3 Memo



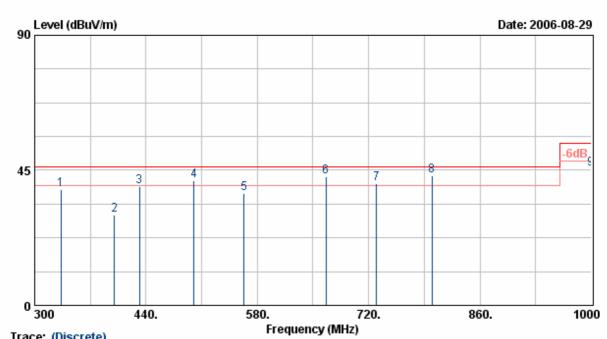
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1 2 3 4 5 6	MHz 125.01 150.75 160.01 180.75 199.99 250.00 298.68	dBuV/m 45.89 48.26 46.71 45.60 52.64 52.23 45.84	dB -15.90 -16.84 -16.98 -18.55 -18.39 -14.44 -13.70	dBuV/m 29.99 31.42 29.73 27.05 34.25 37.79 32.14	dBuV/m 43.50 43.50 43.50 43.50 43.50 46.00 46.00	dB -13.51 -12.08 -13.77 -16.45 -9.25 -8.21 -13.86	Peak Peak Peak Peak Peak Peak Peak	cm 200 200 200 200 200 200 200 200	Deg 0 0 221 360 254 201 112

- 1. Result = Read Value + Factor
- 2. Factor = Antenna Factor + Cable Loss Amplifier
- Factor = Antenna Factor + Cable Loss Amplifier
 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.
 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.
- channel 1 was chosen as representative in final test.
- б. The data is worse case.

Power : AC 120V Pol/Phase : HORIZONTAL : 28 Test Mode Temperature r

: Transmit/Receive Operation Channel: 1 : 68 Humidity Atmospheric Pressure: 1010 : 802.11g Modulation Type hPa

: 54 Mbps Rate : DV1280-3 Memo



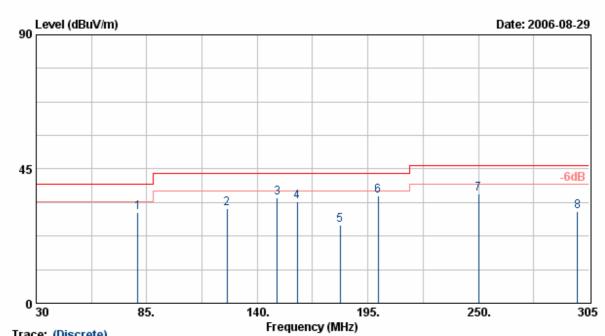
Read	Remark	Ant	Tab
Item Freq Value Factor Result Limit Margin	11031101111	Pos	Pos
MHz dBuV/m dB dBuV/m dBuV/m dB 1 333.33 51.26 -12.61 38.65 46.00 -7.35 2 400.00 40.66 -10.63 30.03 46.00 -15.97 3 432.08 48.94 -9.41 39.53 46.00 -6.47 4 500.00 48.87 -7.18 41.69 46.00 -4.31 5 563.08 42.55 -5.13 37.42 46.00 -8.58 6 666.63 46.52 -3.74 42.78 46.00 -3.22 7 729.80 43.16 -2.57 40.59 46.00 -5.41 8 799.98 45.81 -2.48 43.33 46.00 -2.67 9 999.99 45.32 0.10 45.42 54.00 -8.58	Peak Peak Peak QP Peak QP QP QP Peak	200 200 200 200 200 200 200 200 200 200	Deg 64 93 93 159 88 224 314 352 360

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

: VERTICAL : AC 120V Pol/Phase Power Test Mode : Transmit/Receive : 28 Temperature : 68 % Operation Channel: 1 Humidity Atmospheric Pressure: 1010 hPa

Modulation Type : 802.11g : 54 Mbps Rate : DV1280-3 Memo



Trace: (DIS	crete)							
Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
MHz	dBuV/m	dB	dBuV/m	dBu∀/m	dB		cm	Deg
80.58	50.26	-19.75	30.51	40.00	-9.49	Peak	100	14 Ī
124.93	47.55	-15.90	31.65	43.50	-11.85	Peak	100	86
149.93	52.13	-16.82	35.31	43.50	-8.19	Peak	100	62
159.98	51.12	-16.98	34.14	43.50	-9.36	Peak	100	62
181.20	44.69	-18.52	26.17	43.50	-17.33	Peak	100	221
200.00	54.30	-18.39	35.91	43.50	-7.59	Peak	100	23
250.00	51.17	-14.44	36.73	46.00	-9.27	Peak	100	50
299.23	44.36	-13.70	30.66	46.00	-15.34	Peak	100	211
	Freq MHz 80.58 124.93 149.93 159.98 181.20 200.00 250.00	MHz dBuV/m 80.58 50.26 124.93 47.55 149.93 52.13 159.98 51.12 181.20 44.69 200.00 54.30 250.00 51.17	Read Freq Value Factor MHz dBuV/m dB 80.58 50.26 -19.75 124.93 47.55 -15.90 149.93 52.13 -16.82 159.98 51.12 -16.98 181.20 44.69 -18.52 200.00 54.30 -18.39 250.00 51.17 -14.44	Read Value Factor Result MHz dBuV/m dB dBuV/m 80.58 50.26 -19.75 30.51 124.93 47.55 -15.90 31.65 149.93 52.13 -16.82 35.31 159.98 51.12 -16.98 34.14 181.20 44.69 -18.52 26.17 200.00 54.30 -18.39 35.91 250.00 51.17 -14.44 36.73	Read Freq Value Factor Result Limit MHz dBuV/m dB dBuV/m dBuV/m 80.58 50.26 -19.75 30.51 40.00 124.93 47.55 -15.90 31.65 43.50 149.93 52.13 -16.82 35.31 43.50 159.98 51.12 -16.98 34.14 43.50 181.20 44.69 -18.52 26.17 43.50 200.00 54.30 -18.39 35.91 43.50 250.00 51.17 -14.44 36.73 46.00	Read Freq Value Factor Result Limit Margin MHz dBuV/m dB dBuV/m dBuV/m dB 80.58 50.26 -19.75 30.51 40.00 -9.49 124.93 47.55 -15.90 31.65 43.50 -11.85 149.93 52.13 -16.82 35.31 43.50 -8.19 159.98 51.12 -16.98 34.14 43.50 -9.36 181.20 44.69 -18.52 26.17 43.50 -17.33 200.00 54.30 -18.39 35.91 43.50 -7.59 250.00 51.17 -14.44 36.73 46.00 -9.27	Read Freq Value Factor Result Limit Margin Remark MHz dBuV/m dB dBuV/m dBuV/m dB uV/m dB dBuV/m dB uV/m dB uV/m <td< td=""><td>Read Result Limit Margin Remark Pos MHz dBuV/m dB dBuV/m dBuV/m dB cm 80.58 50.26 -19.75 30.51 40.00 -9.49 Peak 100 124.93 47.55 -15.90 31.65 43.50 -11.85 Peak 100 149.93 52.13 -16.82 35.31 43.50 -8.19 Peak 100 159.98 51.12 -16.98 34.14 43.50 -9.36 Peak 100 181.20 44.69 -18.52 26.17 43.50 -17.33 Peak 100 200.00 54.30 -18.39 35.91 43.50 -7.59 Peak 100 250.00 51.17 -14.44 36.73 46.00 -9.27 Peak 100</td></td<>	Read Result Limit Margin Remark Pos MHz dBuV/m dB dBuV/m dBuV/m dB cm 80.58 50.26 -19.75 30.51 40.00 -9.49 Peak 100 124.93 47.55 -15.90 31.65 43.50 -11.85 Peak 100 149.93 52.13 -16.82 35.31 43.50 -8.19 Peak 100 159.98 51.12 -16.98 34.14 43.50 -9.36 Peak 100 181.20 44.69 -18.52 26.17 43.50 -17.33 Peak 100 200.00 54.30 -18.39 35.91 43.50 -7.59 Peak 100 250.00 51.17 -14.44 36.73 46.00 -9.27 Peak 100

- 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.
- б. The data is worse case.

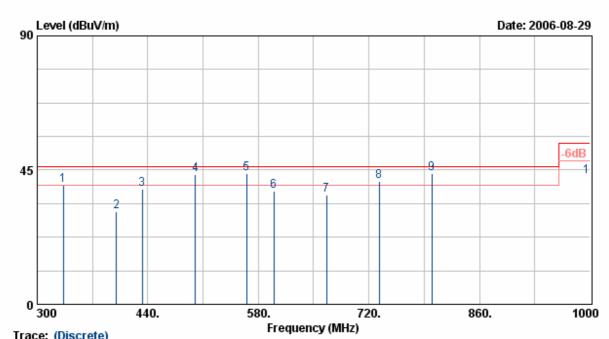
hPa

Atmospheric Pressure: 1010

: VERTICAL Pol/Phase Power : AC 120V : Transmit/Receive Test Mode Temperature : 68 % Operation Channel: 1 Humidity

Modulation Type : 802.11g Mbps : 54 Rate

: DV1280-3 Memo



	Trace. (Dis	Read						Ant	Tab
Item	Freq	Value	Factor	Result	Limit	Margin	Remark	Pos	Pos
1 2 3 4 5 6 7 8	MHz 333.33 400.00 433.08 500.00 565.30 600.00 666.65 733.08 800.00 999.99	dBuV/m 52.38 41.62 47.84 50.77 48.86 42.67 40.42 43.82 46.44 42.65	dB -12.61 -10.63 -9.37 -7.18 -5.10 -4.72 -3.74 -2.47 -2.48 0.10	dBuV/m 39.77 30.99 38.47 43.59 43.76 37.95 36.68 41.35 43.96 42.75	dBuV/m 46.00 46.00 46.00 46.00 46.00 46.00 46.00 46.00 54.00	dB -6.23 -15.01 -7.53 -2.41 -2.24 -8.05 -9.32 -4.65 -2.04 -11.25	Peak Peak Peak QP QP Peak Peak QP QP	cm 100 100 100 100 100 100 100 100 100	Deg 52 36 214 333 96 168 168 45 85

- 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.

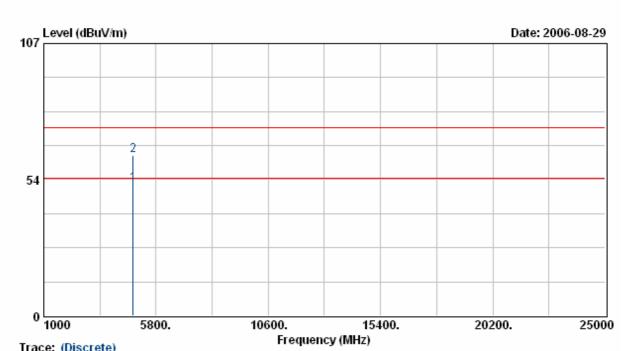
 4. All emission below 1GHz at 802.11b/g mode are all the same, so the
- 802.11g mode chosen as representative in final test.
 5. According to technical experiences, all spurious emission of 802.11g mode at channel 1,6,11 are almost the same below 1GHz,so that the channel 1 was chosen as representative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

Atmospheric Pressure: 1008

hPa

Power : AC 120V
Test Mode : Transmit/Receive
Operation Channel: 1 Pol/Phase : HORIZONTAL ï % : 25 : 67 Temperature Humidity

Modulation Type : 802.11b Rate : 11 : DV-1280-3 Memo



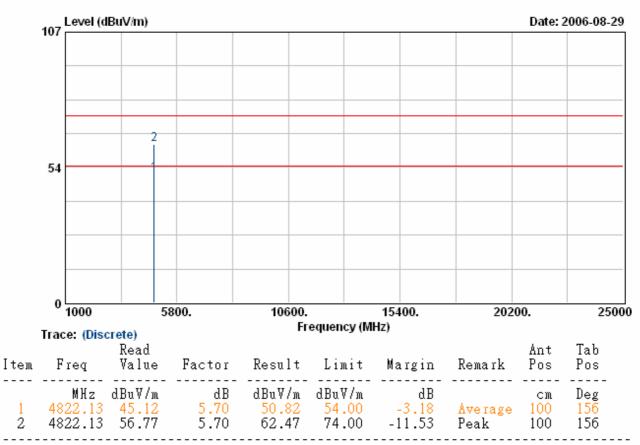
Item	Freq	Read	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1 2	MHz 4822.13 4822.13	46.09	dB 5.70 5.70		54.00	dB - <mark>2.20</mark> -10.79	Average Peak	cm 100 100	Deg 203 203

- 1. Result = Read Value + Factor
- 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
- 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 : Transmit/Receive Temperature : 25 °C
Operation Channel: 1 Humidity : 67 %
Modulation Type : 802.11b Atmospheric Pressure: 1008 hPa

Rate : 11 Mbps Memo : DV-1280-3

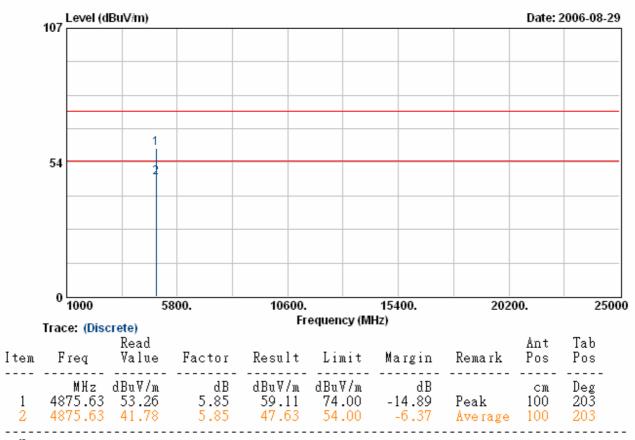


- 1. Result = Read Value + Factor
- 2. Factor = Antenna Factor + Cable Loss Amplifier
- 3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
- detection at frequency below 1GHz.

 4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
- 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 : Transmit/Receive Temperature : 25 ℃ Operation Channel: 6 Humidity : 67 % Modulation Type : 802.11b Atmospheric Pressure: 1008 hPa

Rate : 11 Mbps Memo : DV-1280-3



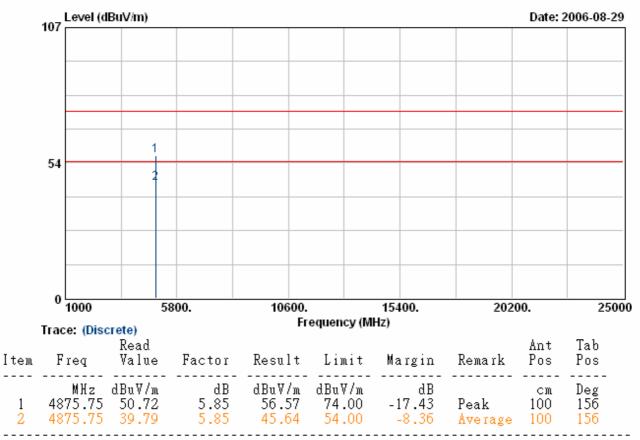
- 1. Result = Read Value + Factor
- 2. Factor = Antenna Factor + Cable Loss Amplifier
- 3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
- 4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
- 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.

Atmospheric Pressure: 1008

hPa

Power : AC 120V Pol/Phase : VERTICAL Test Mode : Transmit/Receive Temperature : 25 °C Operation Channel: 6 Humidity : 67 %

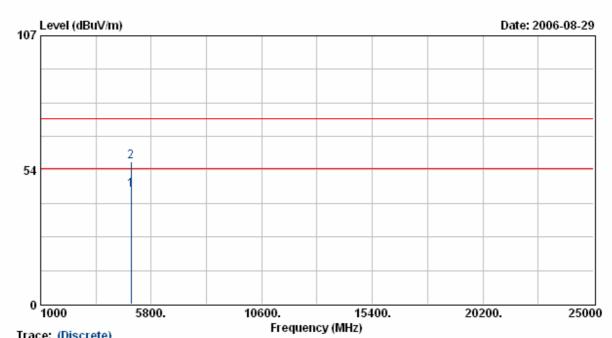
Modulation Type : 802.11b
Rate : 11 Mbps
Memo : DV-1280-3



- 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.

: AC 120V Pol/Phase : HORIZONTAL Power C Test Mode : Transmit/Receive : 25 Temperature % Operation Channel: 11 Humidity : 67 Modulation Type : 802.11b Atmospheric Pressure: 1008 hPa

Rate : 11 Mbps Memo : DV-1280-3

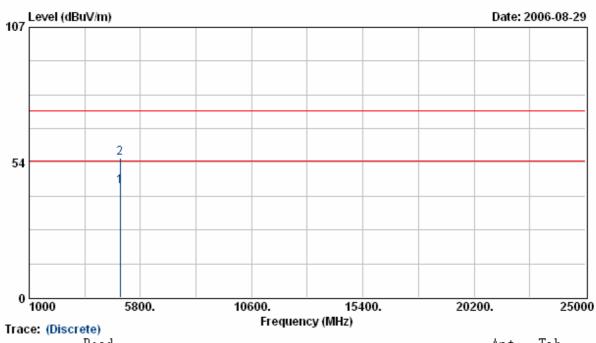


Item	Freq	Read	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1 2	MHz 4923.38 4923.38		dB <mark>5.99</mark> 5.99	dBuV/m 45.61 56.92		dB - <mark>8.39</mark> -17.08	Average Peak	cm 100 100	Deg <mark>203</mark> 203

- 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
- 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.

: AC 120V Pol/Phase : VERTICAL Power c Test Mode : Transmit/Receive : 25 Temperature Operation Channel: 11 : 67 % Humidity Atmospheric Pressure: 1008 Modulation Type : 802.11b hPa

Rate : 11 Mbps Memo : DV-1280-3

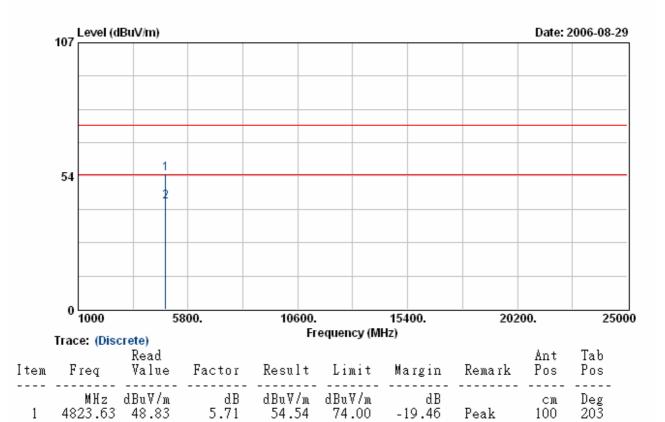


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1 2	MHz 4923.38 4923.38	38.03		44.02	54.00	-9.98	Average Peak	cm 100 100	Deg 156 156

- 1. Result = Read Value + Factor
- 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
- 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 : Transmit/Receive Temperature : 25 $^{\circ}$ C Operation Channel: 1 Humidity : 67 $^{\circ}$ 6 Modulation Type : 802.11g Atmospheric Pressure: 1008 hPa

Rate : 54 Mbps Memo : DV-1280-3



Notes:

2

4823.63 37.56

- 1. Result = Read Value + Factor
- 2. Factor = Antenna Factor + Cable Loss Amplifier

43.26

5.71

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.

54.00

-10.74

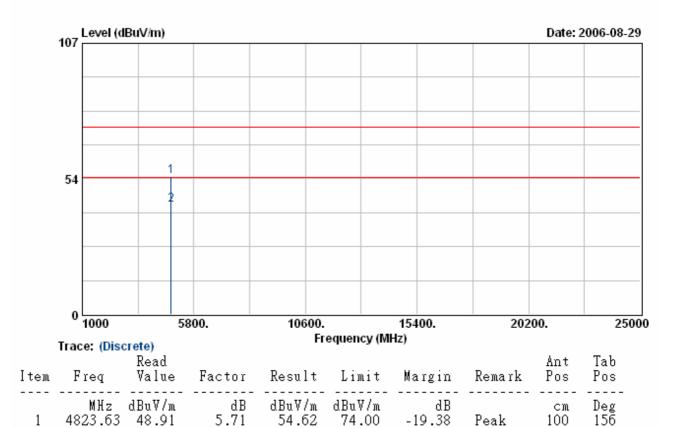
Average 100

- 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.

203

: AC 120V : VERTICAL Power Pol/Phase Test Mode : 25 : Transmit/Receive Temperature % Operation Channel: 1 Humidity : 67 Modulation Type : 802.11g Atmospheric Pressure: 1008 hPa

: 54 Mb) : DV-1280-3 Rate Memo



Notes:

4823.63 37.61

- 1. Result = Read Value + Factor

43.32

Result = Read value + Factor
 Factor = Antenna Factor + Cable Loss - Amplifier
 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.
 The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above

54.00

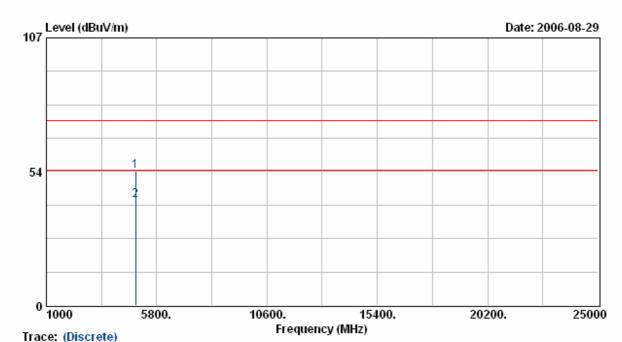
-10.68

Average 100

- 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 Ĉ Test Mode : 25 : Transmit/Receive Temperature Operation Channel: 6 % : 67 Humidity Atmospheric Pressure: 1008 Modulation Type : 802.11g hPa

Rate : 54 Mbps Memo : DV-1280-3



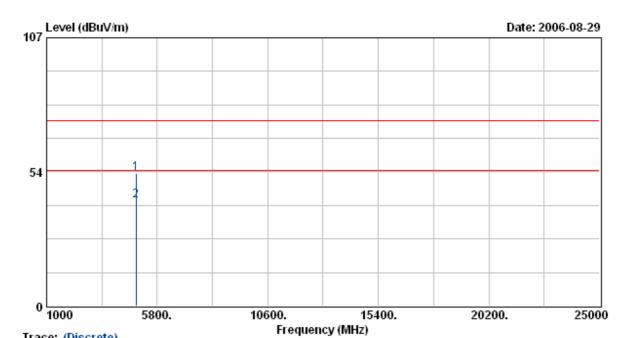
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1 2	MHz 4875.25 4875.25		5.85	dBuV/m 53.77 41.92	74.00	-20.23	Peak Average	cm 100 <mark>100</mark>	Deg 203 <mark>203</mark>

- 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 16Hz
- 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 : Transmit/Receive Temperature : 25 °C

Operation Channel: 6 Humidity : 67 %
Modulation Type : 802.11g Atmospheric Pressure: 1008 hPa

Rate : 54 Mbps Memo : DV-1280-3

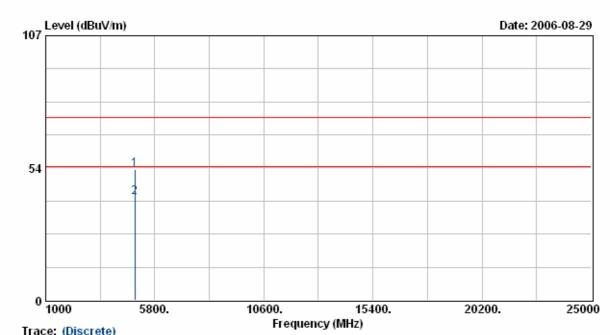


Item	Freq	Read	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1 2	MHz 4873.38 4873.38		dB 5.85 5.85	dBuV/m 53.02 41.85	74.00	dB -20.98 -12.15	Peak Average	cm 100 100	Deg 156 156

- 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 16Hz
- 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 : Transmit/Receive : 25 C Temperature : 67 Operation Channel: 11 % Humidity Modulation Type : 802.11g Atmospheric Pressure: 1008 hPa

: 54 Rate : DV-1280-3 Memo

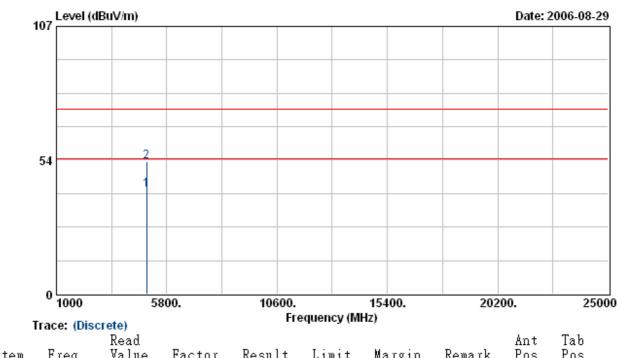


Item	Freq	Read	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos	
1 2	MHz 4923.88 4923.88		dB 5.99 5.99	52.85	74.00	-21.15	Peak Average	cm 100 100	Deg 203 <mark>203</mark>	

- 1. Result = Read Value + Factor
- Factor = Antenna Factor + Cable Loss Amplifier
 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 16Hz.
- 4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above
- 5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above
- 6. The other emissions is too low to be measured.

Power : AC 120V Pol/Phase : VERTICAL
Test Mode : Transmit/Receive Temperature : 25 °C
Operation Channel: 11 Humidity : 67 %
Modulation Type : 802.11g Atmospheric Pressure: 1008 hPa

Modulation Type : 802.11g Rate : 54 Mbps Memo : DV-1280-3



Item	$F\mathrm{req}$	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1 2	MHz 4923.00 4923.00		dB <mark>5.98</mark> 5.98	dBuV/m 41.72 52.93		dB - <mark>12.28</mark> -21.07		cm 100 100	Deg 156 156

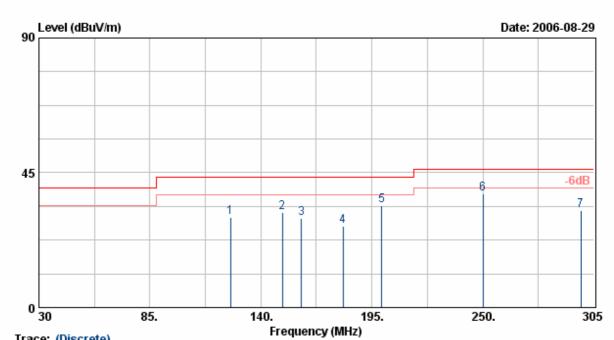
- 1. Result = Read Value + Factor
- 2. Factor = Antenna Factor + Cable Loss Amplifier
- 3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
- detection at frequency below 1GHz.

 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 : AC 120V Pol/Phase : HORIZONTAL
Test Mode : Transmit/Receive Temperature : 28 °C
Operation Channel: 1 Humidity : 68 %
Modulation Type : 802.11MIMO Atmospheric Pressure: 1010 hPa

Rate : 144 Mbps Memo : DV-1280-3

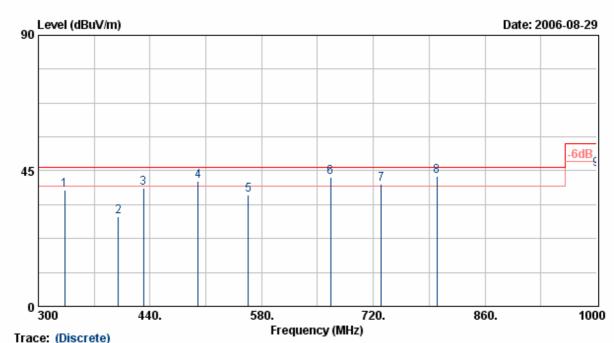


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1 2 3 4 5 6	MHz 125.01 150.75 160.01 180.75 199.99 250.00 298.68	dBuV/m 45.98 48.72 46.70 45.79 52.52 52.26 46.17	dB -15.90 -16.84 -16.98 -18.55 -18.39 -14.44 -13.70	dBuV/m 30.08 31.88 29.72 27.24 34.13 37.82 32.47	dBuV/m 43.50 43.50 43.50 43.50 43.50 43.50 46.00	dB -13.42 -11.62 -13.78 -16.26 -9.37 -8.18 -13.53	Peak Peak Peak Peak Peak Peak Peak	cm 200 200 200 200 200 200 200 200	Deg 0 0 221 360 254 201 112

- 1. Result = Read Value + Factor
- 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 : AC 120V Pol/Phase : HORIZONTAL
Test Mode : Transmit/Receive Temperature : 28 °C
Operation Channel: 1 Humidity : 68 %
Modulation Type : 802.11MIMO Atmospheric Pressure: 1010 hPa

Rate : 144 Mbps Memo : DV-1280-3

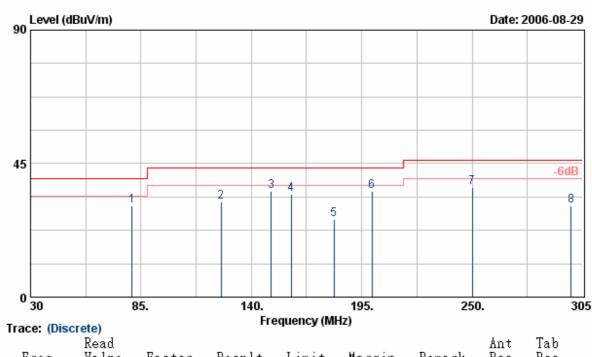


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1 2 3 4 5 6 7 8	MHz 333.33 400.00 432.08 500.00 563.08 666.63 729.80 799.98 999.99	dBuV/m 51.28 40.53 48.77 48.80 42.05 46.66 43.13 45.73 45.46	dB -12.61 -10.63 -9.41 -7.18 -5.13 -3.74 -2.57 -2.48 0.10	dBuV/m 38.67 29.90 39.36 41.62 36.92 42.92 40.56 43.25 45.56	dBuV/m 46.00 46.00 46.00 46.00 46.00 46.00 46.00 46.00 54.00	dB -7.33 -16.10 -6.64 -4.38 -9.08 -3.08 -5.44 -2.75 -8.44	Peak Peak Peak QP Peak QP QP QP Peak	cm 200 200 200 200 200 200 200 200 200	Deg 64 93 93 159 88 224 314 352 360

- 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.

: VERTICAL : AC 120V Pol/Phase Power Test Mode : Transmit/Receive Temperature Operation Channel: 1 Humidity : 68 Modulation Type : 802.11MIMO Atmospheric Pressure: 1010 hPa

: 144 Mbps Rate : DV-1280-3 Memo



	Trace: (DIS	crete)								
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos	
	MHz	dBuV/m	dВ	dBuV/m	dBuV/m	dВ		cm	Deg	
1	80.58	50.62	-19.75	30.87	40.00	-9.13	Peak	100	141	
2	124.93	47.89	-15.90	31.99	43.50	-11.51	Peak	100	86	
3	149.93	52.56	-16.82	35.74	43.50	-7.76	Peak	100	62	
4	159.98	51.53	-16.98	34.55	43.50	-8.95	Peak	100	62	
5	181.20	44.75	-18.52	26.23	43.50	-17.27	Peak	100	221	
6	200.00	54.22	-18.39	35.83	43.50	-7.67	Peak	100	23	
7	250.00	51.36	-14.44	36.92	46.00	-9.08	Peak	100	50	
8	299.23	44.50	-13.70	30.80	46.00	-15.20	Peak	100	211	

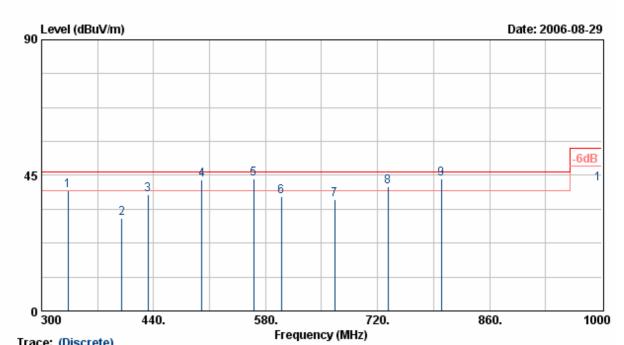
- 1. Result = Read Value + Factor
- 2. Factor = Antenna Factor + Cable Loss Amplifier
- The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 16Hz.
 According to technical experiences, all spurious emission of 802.11MIMO mode at channel 1,6,11 are almost the same below 16Hz, so that the channel 1 was chosen as representative in final test.
- 5. The data is worse case.

Atmospheric Pressure: 1010

hPa

: VERTICAL : AC 120V : Transmit/Receive Pol/Phase Power Temperature : 28 Test Mode Operation Channel: 1 % Humidity : 68

Modulation Type : 802.11MIMO : 144 Mby : DV-1280-3 Rate Mbps Memo



Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos	
1 2 3 4 5 6 7 8	MHz 333.33 400.00 433.08 500.00 565.30 600.00 666.65 733.08 800.00 999.99	dBuV/m 52.46 41.51 47.89 50.70 48.83 42.55 40.56 43.80 46.29 42.11	dB -12.61 -10.63 -9.37 -7.18 -5.10 -4.72 -3.74 -2.47 -2.48 0.10	dBuV/m 39.85 30.88 38.52 43.52 43.73 37.83 36.82 41.33 43.81 42.21	dBuV/m 46.00 46.00 46.00 46.00 46.00 46.00 46.00 46.00 54.00	dB -6.15 -15.12 -7.48 -2.48 -2.27 -8.17 -9.18 -4.67 -2.19 -11.79	Peak Peak Peak QP QP Peak Peak QP Peak	cm 100 100 100 100 100 100 100 100 100	Deg 52 36 214 333 96 168 168 45 85	

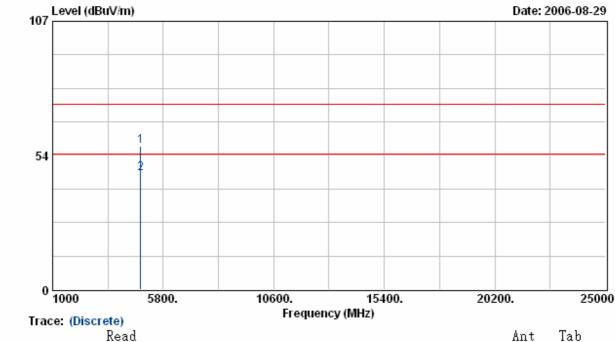
- 1. Result = Read Value + Factor
- 2. Factor = Antenna Factor + Cable Loss Amplifier

 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 16Hz.

 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 : AC 120V Pol/Phase : HORIZONTAL
Test Mode : Transmit/Receive Temperature : 25 °C
Operation Channel: 1 Humidity : 67 %
Modulation Type : 802.11 MIMO Atmospheric Pressure: 1008 hPa

Rate : 144 Mbps Memo : DV-1280-3



Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1 2	MHz 4824.25 4824.25		5.71	dBuV/m 57.19 46.11	74.00	dB -16.81 -7.89	Peak Average	cm 100 100	Deg 203 <mark>203</mark>

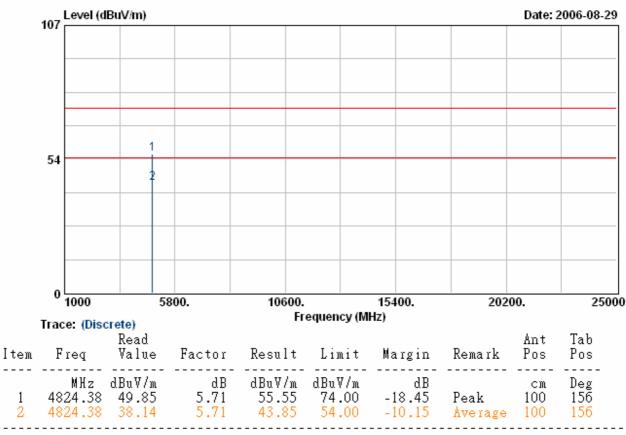
- 1. Result = Read Value + Factor
- 2. Factor = Antenna Factor + Cable Loss Amplifier
- 3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
- detection at frequency below 1GHz.

 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.

: VERTICAL : 25 °C - 67 % Power Test Mode : AC 120V Pol/Phase Temperature : Transmit/Receive

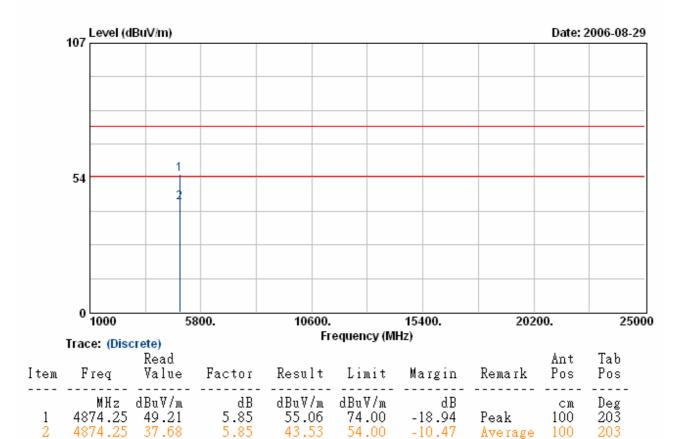
Operation Channel: 1 Humidity Modulation Type : 802.11 MIMO Atmospheric Pressure: 1008

: 144 Mbps : DV-1280-3 Rate Memo



- 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
- δ. The other emissions is too low to be measured.

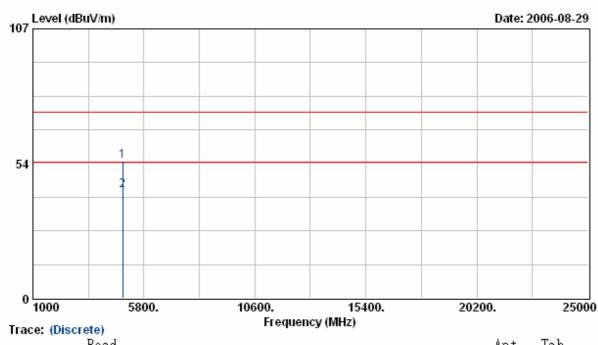
Rate : 144 Mbps Memo : DV-1280-3



- 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.
- 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 : Transmit/Receive Temperature : 25 °C Operation Channel: 6 Humidity : 67 % Modulation Type : 802.11 MIMO Atmospheric Pressure: 1008 hPa

Modulation Type : 802.11 MIMO Rate : 144 Mbps Memo : DV-1280-3

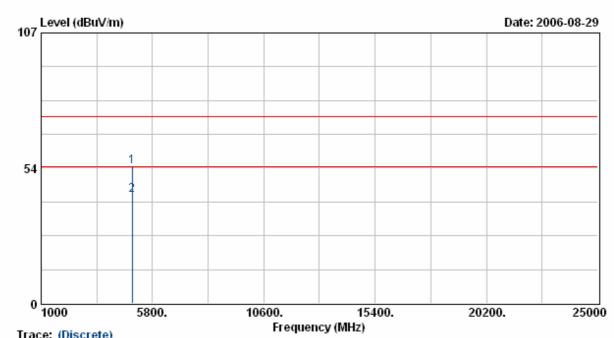


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1 2	MHz 4874.38 4874.38		dB 5.85 5.85	dBuV/m 54.29 42.71	74.00	dB -19.71 -11.29	Peak Average	cm 100 100	Deg 156 156

- 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 Test Mode : Transmit/Receive Operation Channel: 11 Pol/Phase : HORIZONTAL ï % : 25 Temperature : 67 Humidity Modulation Type : 802.11 MIMO Atmospheric Pressure: 1008 hPa

Rate : 144 Mbps : DV-1280-3 Memo

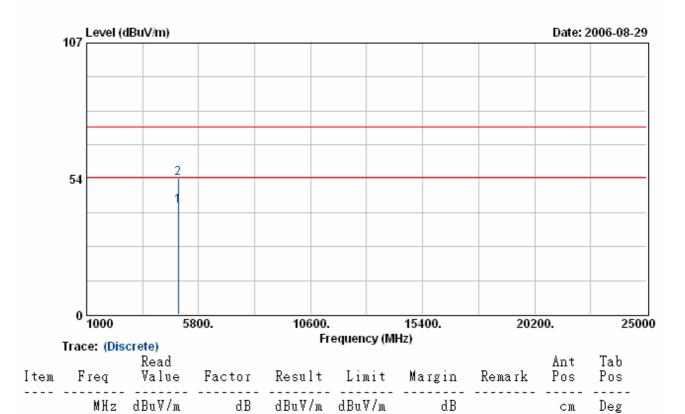


Item	Freq	Read	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos	
1 2	MHz 4923.75 4923.75		dB 5.99 5.99	dBuV/m 54.16 42.82	74.00	dB -19.84 -11.18	Peak Average	cm 100 100	Deg 203 <mark>203</mark>	

- 1. Result = Read Value + Factor
- Factor = Antenna Factor + Cable Loss Amplifier
 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 16Hz.
- 4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
- 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 : Transmit/Receive Temperature : 25 °C
Operation Channel: 11 Humidity : 67 %
Modulation Type : 802.11 MIMO Atmospheric Pressure: 1008 hPa

Rate : 144 Mbps Memo : DV-1280-3



Notes:

2

4924.75 36.76 4924.75 47.86

- 1. Result = Read Value + Factor
- 2. Factor = Antenna Factor + Cable Loss Amplifier

5.99

5.99

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.

74.00

42.75 54.00

53.85

-11.25

-20.15

- 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.

100

100

Average

Peak

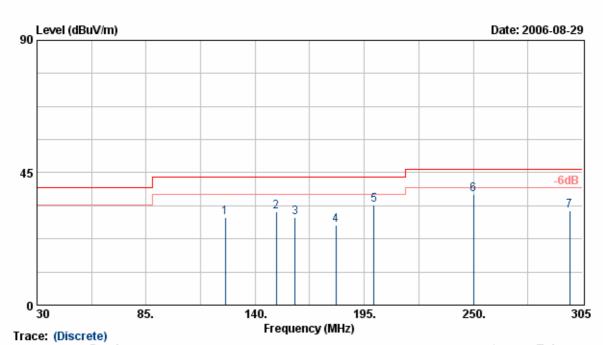
156

Test Mode 4:

Power : AC 120V Pol/Phase : HORIZONTAL °C % : Transmit/Receive : 28 Test Mode Temperature : 68 Operation Channel: 3 Humidity Atmospheric Pressure: 1010 hPa

Modulation Type : 802.11MIMO+CB Rate : 300 Mbps

: DV-1280-3 Memo

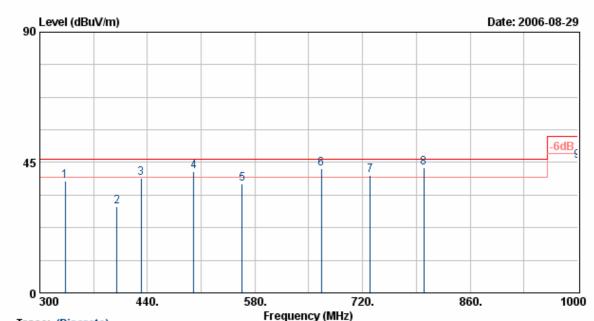


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos	
1 2 3 4 5 6 7	MHz 125.01 150.75 160.01 180.75 199.99 250.00 298.68	dBuV/m 45.80 48.55 46.66 45.68 52.32 52.20 45.71	dB -15.90 -16.84 -16.98 -18.55 -18.39 -14.44 -13.70	dBuV/m 29.90 31.71 29.68 27.13 33.93 37.76 32.01	dBuV/m 43.50 43.50 43.50 43.50 43.50 43.50 46.00 46.00	dB -13.60 -11.79 -13.82 -16.37 -9.57 -8.24 -13.99	Peak Peak Peak Peak Peak Peak Peak	cm 200 200 200 200 200 200 200	Deg 0 0 221 360 254 201 112	

- 1. Result = Read Value + Factor
- Result Read value | Factor
 Factor = Antenna Factor + Cable Loss Amplifier
 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 : AC 120V Pol/Phase : HORIZONTAL Test Mode : Transmit/Receive Temperature : 28 °C Operation Channel: 3 Humidity : 68 % Modulation Type : 802.11MIMO+CB Atmospheric Pressure: 1010 hPa

Modulation Type : 802.11MIMO+CB Rate : 300 Mbps Memo : DV-1280-3



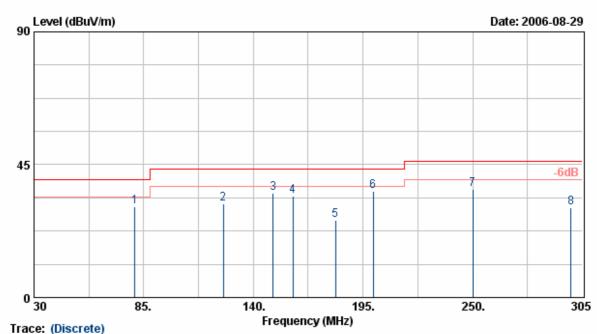
	Trace: (Discrete)			residency (minz)						
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos	
1 2 3 4 5 6 7 8	MHz 333.33 400.00 432.08 500.00 563.08 666.63 729.80 799.98 999.99	dBuV/m 51.28 40.33 48.99 49.22 42.63 46.50 43.13 45.73 45.30	dB -12.61 -10.63 -9.41 -7.18 -5.13 -3.74 -2.57 -2.48 0.10	dBuV/m 38.67 29.70 39.58 42.04 37.50 42.76 40.56 43.25 45.40	dBuV/m 46.00 46.00 46.00 46.00 46.00 46.00 46.00 46.00 54.00	dB -7.33 -16.30 -6.42 -3.96 -8.50 -3.24 -5.44 -2.75 -8.60	Peak Peak Peak QP Peak QP QP QP Peak	cm 200 200 200 200 200 200 200 200 200 20	Deg 64 93 93 159 88 224 314 352 360	

- 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
- 4. According to technical experiences, all spurious emission of 802.11MIMO mode at channel 3,6,9 are almost the same below 16Hz, so that the channel 3 was chosen as representative in final test.
- 5. The data is worse case.

Power : AC 120V Pol/Phase : VERTICAL Temperature : 28 Test Mode : Transmit/Receive % Operation Channel: 3 : 68 Humidity Modulation Type : 802.11MIMO+CB Atmospheric Pressure: 1010

Rate : 300 Mbps : DV-1280-3 Memo



Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1 2 3 4 5 6 7	MHz 80.58 124.93 149.93 159.98 181.20 200.00 250.00 299.23	dBuV/m 50.35 47.51 52.10 51.43 44.60 54.41 51.03 43.98	dB -19.75 -15.90 -16.82 -16.98 -18.52 -18.39 -14.44 -13.70	dBuV/m 30.60 31.61 35.28 34.45 26.08 36.02 36.59 30.28	dBuV/m 40.00 43.50 43.50 43.50 43.50 43.50 46.00 46.00	dB -9.40 -11.89 -8.22 -9.05 -17.42 -7.48 -9.41 -15.72	Peak Peak Peak Peak Peak Peak Peak	cm 100 100 100 100 100 100 100	Deg 141 86 62 62 221 23 50 211

- 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.

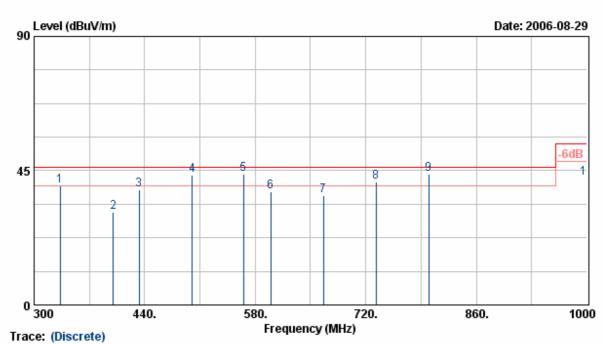
 4. According to technical experiences, all spurious emission of 802.11MIMO
- mode at channel 3,6,9 are almost the same below 16Hz,so that the channel 3 was chosen as representative in final test.
- 5. The data is worse case.

: AC 120V Power Pol/Phase : VERTICAL : 28 Test Mode : Transmit/Receive Temperature

Operation Channel: 3

Humidity : 68 Atmospheric Pressure: 1010 Modulation Type : 802.11MIMO+CB hPa : 300 Mbps Rate

: DV-1280-3 Memo

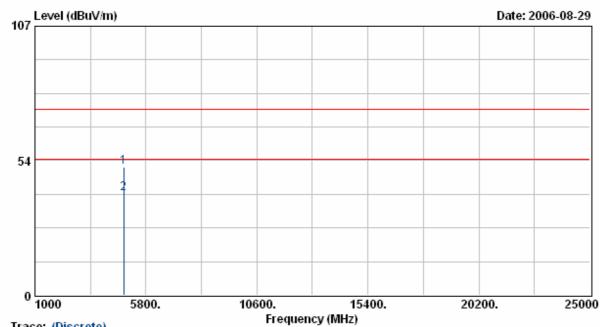


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1 2 3 4 5 6 7 8	MHz 333.33 400.00 433.08 500.00 565.30 600.00 666.65 733.08 800.00 999.99	dBuV/m 52.47 41.59 48.14 50.70 48.83 42.75 40.40 43.63 46.43 42.44	dB -12.61 -10.63 -9.37 -7.18 -5.10 -4.72 -3.74 -2.47 -2.48 0.10	dBuV/m 39.86 30.96 38.77 43.52 43.73 38.03 36.66 41.16 43.95 42.54	dBuV/m 46.00 46.00 46.00 46.00 46.00 46.00 46.00 46.00 46.00 54.00	dB -6.14 -15.04 -7.23 -2.48 -2.27 -7.97 -9.34 -4.84 -2.05 -11.46	Peak Peak Peak QP QP Peak Peak QP QP	cm 100 100 100 100 100 100 100 100 100	Deg 52 36 214 333 96 168 168 45 85

- 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 16Hz.
- 4. According to technical experiences, all spurious emission of 802.11MIMO mode at channel 3,6,9 are almost the same below 16Hz, so that the channel 3 was chosen as representative in final test.
- 5. The data is worse case.

Power : AC 120V Pol/Phase : HORIZONTAL Test Mode : Transmit/Receive Temperature : 25 $^{\circ}$ C Operation Channel: 3 Humidity : 67 $^{\circ}$ 6 Modulation Type : 802.11 MIMO+CB Atmospheric Pressure: 1008 hPa

Rate : 300 Mbps Memo : DV-1280-3



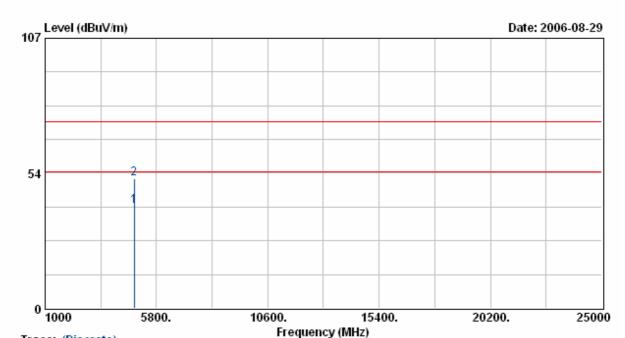
	Trace: (Disc	crete)		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4844.00	45.09	5.76	50.85	74.00	-23.15	Peak	100	203
2	4844.00	34.63	5.76	40.40	54.00	-13.60	Average	100	203

- 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.
- 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 : Transmit/Receive Temperature : 25 °C
Operation Channel: 3 Humidity : 67 %
Modulation Type : 802.11 MIMO+CB Atmospheric Pressure: 1008 hPa

Rate : 300 Mbps Memo : DV-1280-3

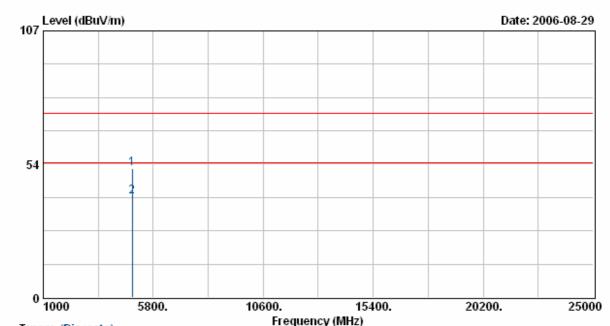


Item	Freq	Read	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos	
1 2	MHz 4844.00 4844.00		dB <mark>5.76</mark> 5.76	dBuV/m 40.53 51.30		dB -13.47 -22.70	Average Peak	cm 100 100	Deg 1 <mark>56</mark> 156	

- 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 16Hz.
- 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 : Transmit/Receive Temperature : 25 ℃
Operation Channel: 6 Humidity : 67 %
Modulation Type : 802.11 MIMO+CB Atmospheric Pressure: 1008 hPa

Modulation Type : 802.11 MIMO+CB Rate : 300 Mbps Memo : DV-1280-3



Trace: (Disc	crete)	,							
	Read						Ant	Tab	
Freq	Value	Factor	Result	Limit	Margin	Remark	Pos	Pos	
МНz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg	
4874.00	45.88	5.85	51.73	74.00	-22.27	Peak	100	203	
4874.00	34.54	5.85	40.39	54.00	-13.61	Average	100	203	
	Freq MHz 4874.00		Read Freq Value Factor MHz dBuV/m dB 4874.00 45.88 5.85	Read Freq Value Factor Result MHz dBuV/m dB dBuV/m 4874.00 45.88 5.85 51.73	Read Freq Value Factor Result Limit MHz dBuV/m dB dBuV/m dBuV/m 4874.00 45.88 5.85 51.73 74.00	Read Freq Value Factor Result Limit Margin MHz dBuV/m dB dBuV/m dBuV/m dB 4874.00 45.88 5.85 51.73 74.00 -22.27	Read Freq Value Factor Result Limit Margin Remark MHz dBuV/m dB dBuV/m dBuV/m dB 4874.00 45.88 5.85 51.73 74.00 -22.27 Peak	Read	Read

- 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.

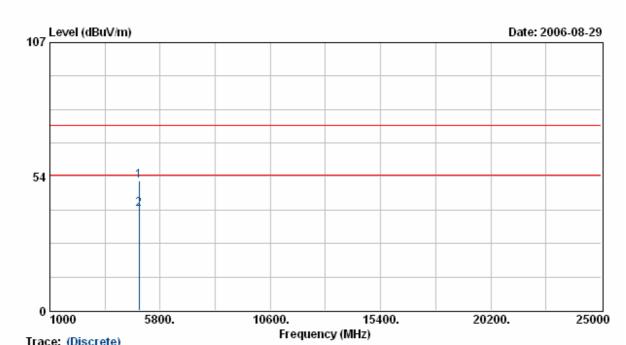
hPa

Atmospheric Pressure: 1008

: AC 120V : Transmit/Receive Pol/Phase : VERTICAL Power Test Mode : 25 Temperature Operation Channel: 6 : 67 % Humidity

Modulation Type : 802.11 MIMO+CB : 300 Mbps

Rate : DV-1280-3 Memo

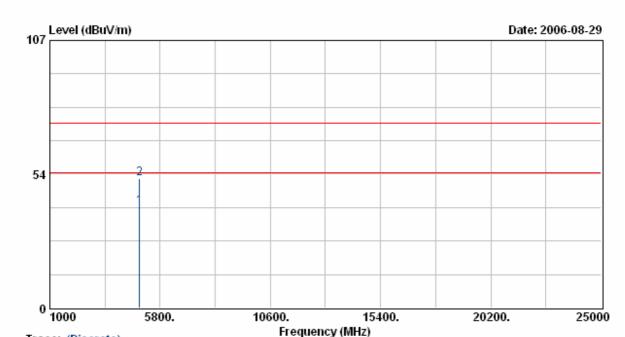


Item	Freq	Read	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1 2	MHz 4874.00 4874.00		dB 5.85 5.85	dBuV/m 51.83 40.51	74.00	dB -22.17 -13.49	Peak Average	cm 100 100	Deg 156 <mark>156</mark>

- 1. Result = Read Value + Factor
- Result Read value | Factor
 Factor = Antenna Factor + Cable Loss Amplifier
 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 16Hz.
- 4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above
- 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 : Transmit/Receive Temperature : 25 °C Operation Channel: 9 Humidity : 67 % Modulation Type : 802.11 MIMO+CB Atmospheric Pressure: 1008 hPa

Rate : 300 Mbps Memo : DV-1280-3

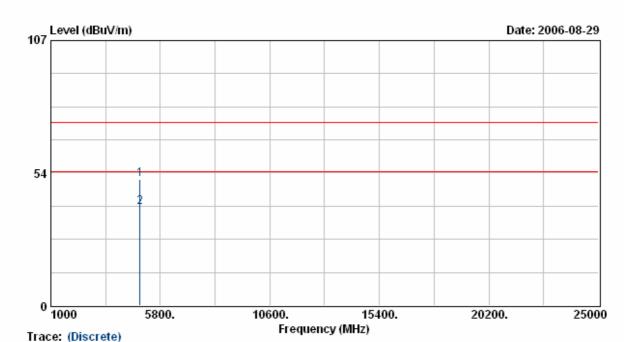


Item	Freq	Read	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos	
1 2	MHz <mark>4904.00</mark> 4904.00		dB <mark>5.93</mark> 5.93	dBuV/m 40.41 51.56	dBuV/m 54.00 74.00	dB -13.59 -22.44	Average Peak	cm 100 100	Deg <mark>203</mark> 203	

- 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 16Hz
- 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 : Transmit/Receive Temperature : 25 °C Operation Channel: 9 Humidity : 67 % Modulation Type : 802.11 MIMO+CB Atmospheric Pressure: 1008 hPa

Modulation Type : 802.11 MIMO+CB Rate : 300 Mbps Memo : DV-1280-3



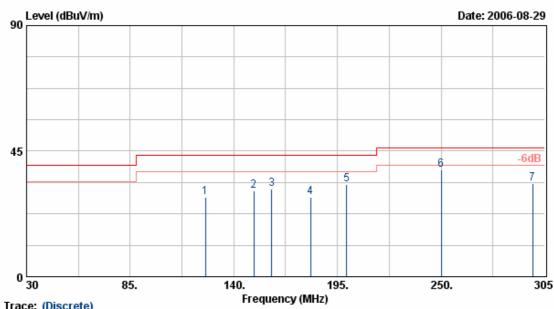
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1 2	MHz 4904.00 4904.00	45.17		dBuV/m 51.10 39.56	74.00	dB -22.90 -14.44	Peak Average		Deg 156 <mark>156</mark>

- 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 16Hz.
- 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 5, 6:

 $\begin{array}{lll} \mbox{Pol/Phase} & : \mbox{ HORIZONTAL} \\ \mbox{Temperature} & : 28 & \mbox{\mathbb{C}} \\ \mbox{Humidity} & : 68 & \% \end{array}$: AC 120V : Transmit/Receive Power Test Mode Operation Channel: 1 Modulation Type : 802.11g
Rate : 54 Mbps
Memo : DSA-15P-12VS 120150 Atmospheric Pressure: 1010 hPa



	Trace: (Dis	crete)	ri equency (Minz)							
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos	
1 2 3 4 5 6	MHz 125.01 150.75 160.01 180.75 199.99 250.00 298.68	dBuV/m 44.36 47.63 48.36 46.91 51.36 52.63 46.92	dB -15.90 -16.84 -16.98 -18.55 -18.39 -14.44 -13.70	dBuV/m 28.46 30.79 31.38 28.36 32.97 38.19 33.22	dBuV/m 43.50 43.50 43.50 43.50 43.50 46.00 46.00	dB -15.04 -12.71 -12.12 -15.14 -10.53 -7.81 -12.78	Peak Peak Peak Peak Peak Peak	cm 200 200 200 200 200 200 200 200	Deg 0 0 221 360 254 201 112	_

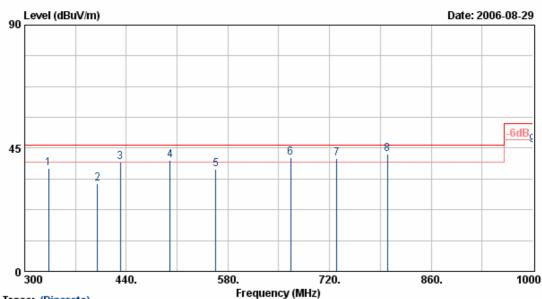
- 1. Result = Read Value + Factor
- Result Read value | Rector | Rector | Rector | Rector | Amplifier
 Factor = Antenna Factor + Cable Loss Amplifier
 The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency 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.
- б. The data is worse case.

: AC 120V Power : HORIZONTAL Pol/Phase : 28 Test Mode : Transmit/Receive r Temperature % Operation Channel: 1 Humidity : 68 Modulation Type : 802.11g Atmospheric Pressure: 1010 hPa : 54

: DSA-15P-12VS 120150 Memo

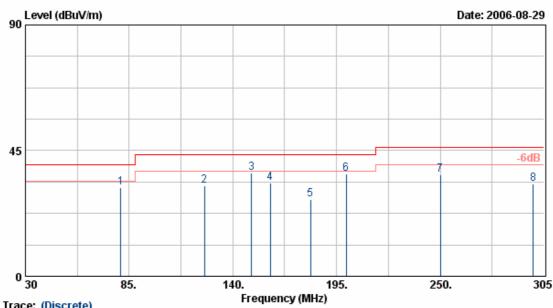


	300	7	70.	500.		120.	00	٠.		v
	Trace: (Dis	crete)		Fr						
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos	
1 2 3 4 5 6 7	MHz 333.33 400.00 432.08 500.00 563.08 666.63 729.80 799.98	dBuV/m 50.14 42.63 49.34 47.64 42.36 45.36 43.67 45.34	dB -12.61 -10.63 -9.41 -7.18 -5.13 -3.74 -2.57 -2.48	dBuV/m 37.53 32.00 39.93 40.46 37.23 41.62 41.10 42.86	dBuV/m 46.00 46.00 46.00 46.00 46.00 46.00 46.00 46.00	dB -8.47 -14.00 -6.07 -5.54 -8.77 -4.38 -4.90 -3.14	Peak Peak Peak QP Peak QP QP QP	cm 200 200 200 200 200 200 200 200 200	Deg 64 93 93 159 88 224 314 352	
9	999.99	46.17	0.10	46.27	54.00	-7.73	Peak	200	360	

- 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 18
- 4. All emission below 16Hz 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

: YERTICAL : AC 120V Power Pol/Phase Test Mode : Transmit/Receive Temperature : 68 % Operation Channel: 1 Humidity Modulation Type : 802.11g Rate : 54 Mbps Atmospheric Pressure: 1010 hPa

: DSA-15P-12VS 120150 Memo



Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1 2 3 4 5 6 7	MHz 80.58 124.93 149.93 159.98 181.20 200.00 250.00 299.23	dBuV/m 51.39 48.41 53.96 50.31 45.93 55.14 50.87 46.91	dB -19.75 -15.90 -16.82 -16.98 -18.52 -18.39 -14.44 -13.70	dBuV/m 31.64 32.51 37.14 33.33 27.41 36.75 36.43 33.21	dBuV/m 40.00 43.50 43.50 43.50 43.50 43.50 46.00 46.00	dB -8.36 -10.99 -6.36 -10.17 -16.09 -6.75 -9.57 -12.79	Peak Peak Peak Peak Peak Peak Peak Peak	cm 100 100 100 100 100 100 100	Deg 141 86 62 62 221 23 50 211

- 1. Result = Read Value + Factor
- Factor = Antenna Factor + Cable Loss Amplifier
 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.

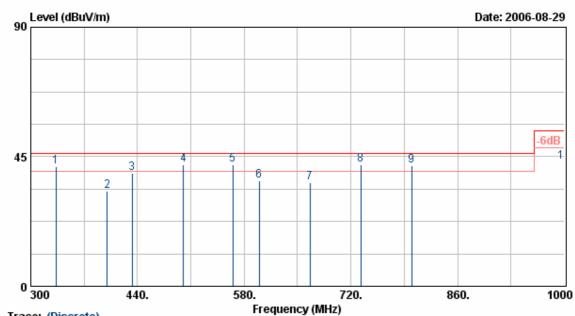
 4. All emission below 1GHz at 802.11b/g mode are all the same, so the 802.11g mode chosen as representative in final test.

 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.
- б. The data is worse case.

: YERTICAL : AC 120V Power Pol/Phase : 28 Test Mode : Transmit/Receive Temperature Operation Channel: 1 : 68 % Humidity Atmospheric Pressure: 1010 Modulation Type : 802.11g hPa

: 54

: DSA-15P-12US 120150 Memo



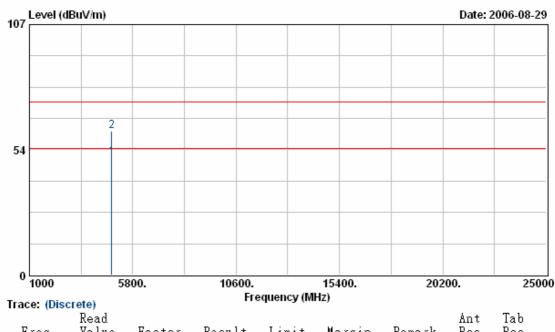
	Trace: (DIS	crete)				•				
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos	
1 2 3 4 5 6 7 8 9	MHz 333.33 400.00 433.08 500.00 565.30 600.00 666.65 733.08 800.00 999.99	dBuV/m 54.28 43.65 48.63 49.34 47.23 41.52 39.62 44.64 44.36 43.11	dB -12.61 -10.63 -9.37 -7.18 -5.10 -4.72 -3.74 -2.47 -2.48 0.10	dBuV/m 41.67 33.02 39.26 42.16 42.13 36.80 35.88 42.17 41.88 43.21	dBuV/m 46.00 46.00 46.00 46.00 46.00 46.00 46.00 46.00 46.00 54.00	dB -4.33 -12.98 -6.74 -3.84 -3.87 -9.20 -10.12 -3.83 -4.12 -10.79	QP Peak Peak QP QP Peak Peak QP QP Peak	cm 100 100 100 100 100 100 100 100 100	Deg 52 36 214 333 96 168 168 45 85 176	

- 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.
- б. The data is worse case.

: AC 120V Power Pol/Phase : HORIZONTAL : 25 : 67 т % Test Mode : Transmit/Receive Temperature Operation Channel: 1 Humidity Modulation Type : 802.11b Atmospheric Pressure: 1008 hPa

Mbps Rate : 11 : DSA-15P-12US 120150 Memo



Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos	
1 2	MHz 4822.13 4822.13		dB <mark>5.70</mark> 5.70	dBuV/m 50.06 61.66		dB - <mark>3.94</mark> -12.34	<mark>Average</mark> Peak	cm 100 100	Deg <mark>203</mark> 203	

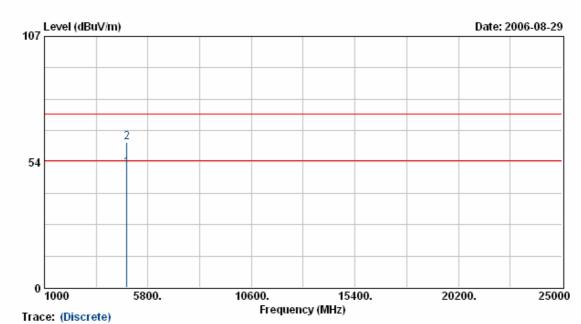
Notes:

- 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 16Hz.
- 4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above
- 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.

I ssued date: Jul. 26, 2007

: VERTICAL : AC 120V Pol/Phase Power : 25 : 67 : Transmit/Receive Test Mode Temperature Operation Channel: 1 % Humidity Modulation Type : 802.11b Atmospheric Pressure: 1008 hPa : 11 Rate Mbps

Memo : DSA-15P-12US 120150



Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1 2	MHz 4822.13 4822.13	45.13	dB <mark>5.70</mark> 5.70	50.83		dB -3.17 -11.95		cm <mark>100</mark> 100	Deg <mark>156</mark> 156

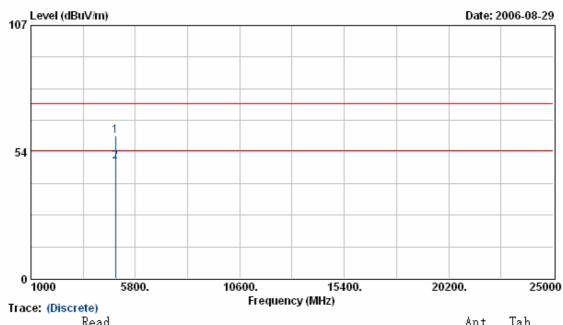
- 1. Result = Read Value + Factor
- 2. Factor = Antenna Factor + Cable Loss Amplifier
- 3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
- detection at frequency below 1GHz.

 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.

: HORIZONTAL : AC 120V Power Pol/Phase ₹ % Test Mode : Transmit/Receive Temperature : 25 Operation Channel: 6 Humidity : 67 Atmospheric Pressure: 1008 Modulation Type : 802.11b hPa

: 11 Mbps Rate

: DSA-15P-12US 120150 Memo



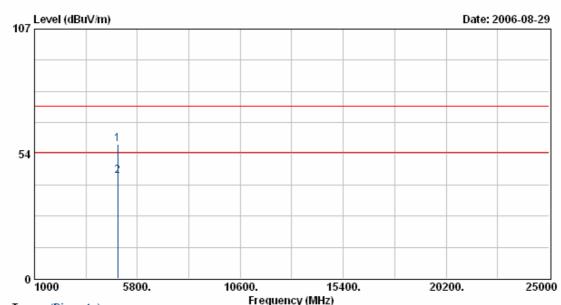
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1 2	MHz 4875.63 4875.63		5.85	dBuV/m 60.46 49.25	74.00		Peak Average	cm 100 100	Deg 203 <mark>203</mark>

- 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 1 MHzand video bandwidth is 10Hz for Average detection at frequency above
- 6. The other emissions is too low to be measured.

: YERTICAL Power : AC 120V Pol/Phase Test Mode : Transmit/Receive Temperature : 25 % Operation Channel: 6 Humidity : 67 Atmospheric Pressure: 1008 Modulation Type : 802.11b hPa

: 11 Mbps Rate

: DSA-15P-12VS 120150 Memo



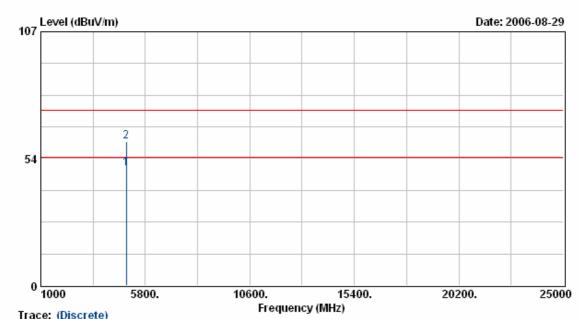
Trace: (Discrete)										
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos	
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg	
1	4875.75	51.69	5.85	57.55	74.00	-16.45	Peak	100	156	
2	4875.75	37.95	5.85	43.80	54.00	-10.20	Average	100	156	

- 1. Result = Read Value + Factor
- Result Read value Nactor
 Factor = Antenna Factor + Cable Loss Amplifier
 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
- 6. The other emissions is too low to be measured.

Power : AC 120V : HORIZONTAL Pol/Phase lest Mode : Transmit/Receive
Operation Channel: 11
Modulation To : 25 : 67 T % Temperature Humidity Modulation Type : 802.11b Atmospheric Pressure: 1008 hPa

: 11 Mbps Rate

: DSA-15P-12VS 120150 Memo



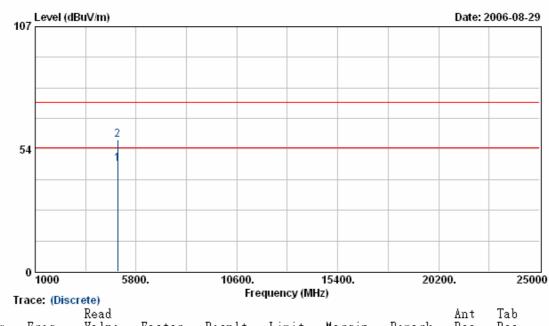
Item	Freq	Read	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1 2	MHz 4923.38 4923.38	.0.00	dB <mark>5.99</mark> 5.99	dBuV/m 49.55 60.62		dB -4.45 -13.38	Average Peak	cm 100 100	Deg 203 203

- 1. Result = Read Value + Factor
- Result Redu value Lactor
 Factor = Antenna Factor + Cable Loss Amplifier
 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 16Hz.
- 4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above
- 5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above
- 6. The other emissions is too low to be measured.

: YERTICAL Power : AC 120V Pol/Phase Test Mode : Transmit/Receive Temperature Operation Channel: 11 : 67 % Humidity Atmospheric Pressure: 1008 hPa

Modulation Type : 802.11b Rate : 11 Mbps

: DSA-15P-12US 120150 Memo



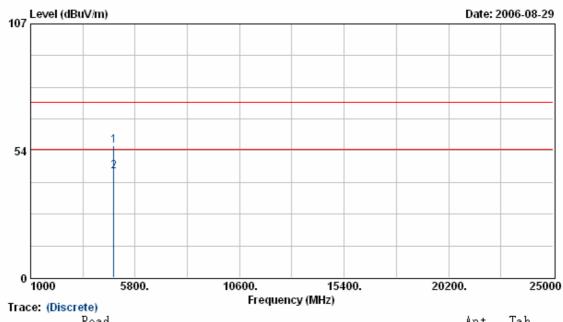
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1 2	MHz 4923.38 4923.38		dB <mark>5.99</mark> 5.99	dBuV/m 47.24 57.41		dB - <mark>6.76</mark> -16.59	Average Peak	cm 100 100	Deg <mark>156</mark> 156

- 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 16Hz.
- 4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above
- 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 ë % Test Mode : Transmit/Receive Temperature : 25 Operation Channel: 1 : 67 Humidity Atmospheric Pressure: 1008 Modulation Type : 802.11g hPa

: 54

: DSA-15P-12US 120150 Memo

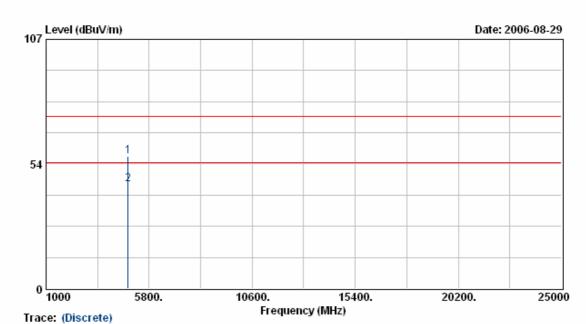


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1 2	MHz 4823.63 4823.63		5.71	55.67	dBuV/m 74.00 54.00	dB -18.33 -9.35	Peak	cm 100 100	Deg 203 <mark>203</mark>

- 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 of test receiver/spectrum analyzer and video bandwidth of test receiver/spectrum analyzer is 120KHz 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
- δ. The other emissions is too low to be measured.

: AC 120V Power Pol/Phase : 25 : 67 Test Mode : Transmit/Receive Temperature Operation Channel. . Modulation Type : 802.11g : 54 Mbps Operation Channel: 1 % Humidity Atmospheric Pressure: 1008 hPa

: DSA-15P-12US 120150 Memo

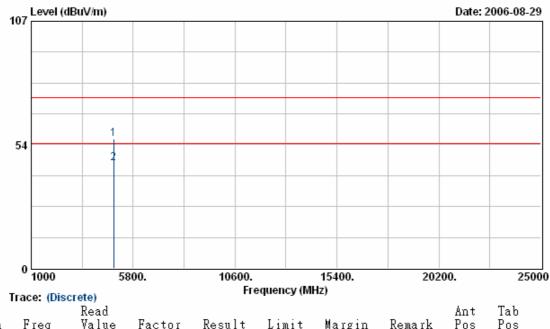


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos	
1 2	MHz 4823.63 4823.63		dB 5.71 5.71	dBuV/m 56.97 44.68	74.00	dB -17.03 -9.32	Peak Average	cm 100 100	Deg 156 156	

- 1. Result = Read Value + Factor
- 2. Factor = Antenna Factor + Cable Loss Amplifier
- ractor = Antenna ractor + Cable Loss Amplifier
 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.
 The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above
- 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.

: AC 120V Power Pol/Phase : HORIZONȚAL °C % : Transmit/Receive Test Mode Temperature : 25 Operation Channel: 6 : 67 Humidity Modulation Type : 802.11g Atmospheric Pressure: 1008 hPa : 54 Rate

: DSA-15P-12US 120150 Memo



Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1	MHz 4875.25	dBuV/m 50.36	dB 5.85	dBuV/m 56.21	dBuV/m 74.00	dB -17.79	Peak	cm 100	Deg 203
2	4875.25	39.65	5.85	45.50	54.00	-8.50	Average	100	203

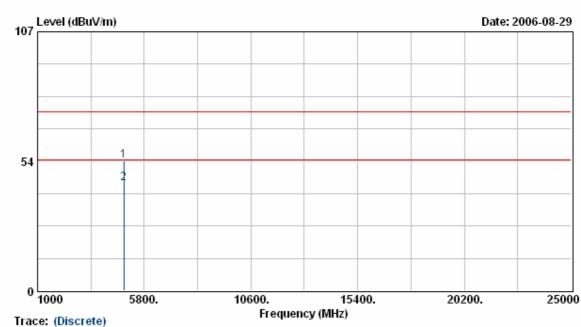
- 1. Result = Read Value + Factor
- 2. Factor = Antenna Factor + Cable Loss Amplifier
- 3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz
- and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.

 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.

: VERTICAL : 25 °C : 67 % : AC 120V Power Pol/Phase : 25 : 67 : Transmit/Receive Test Mode Temperature Operation Channel: 6 Humidity Atmospheric Pressure: 1008

Modulation Type : 802.11g Rate : 54 Mbps

: DSA-15P-12US 120150 Memo

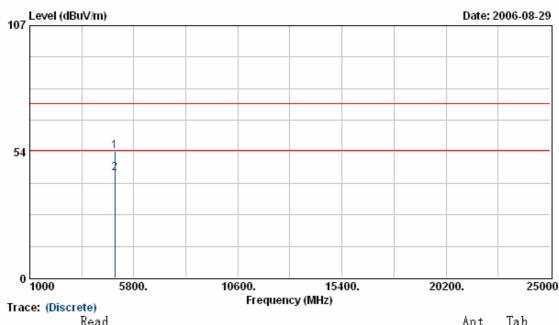


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1 2	MHz 4873.38 4873.38	47.95	5.85	53.79	74.00	dB -20.21 -9.52	Peak	100	Deg 156 <mark>156</mark>

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

: AC 120V Pol/Phase : HORIZONTAL Power Test Mode : Transmit/Receive : 25 : 67 $^{\circ}$ C Temperature Operation Channel. .. Modulation Type : 802.11g : 54 Mbps Operation Channel: 11 Humidity % Atmospheric Pressure: 1008 hPa

: DSA-15P-12US 120150 Memo

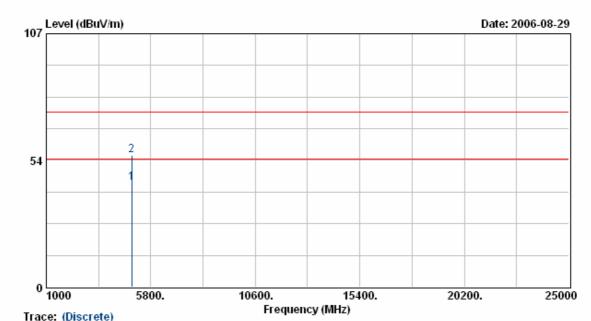


Item	Freq	Read	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos	
	МИз	dBuV/m	dB	dBuV/m	1D. V/	dВ			Daw	
	11111	OLD U.Y.7 JIL	uв	u D u Y / Jii	աքաղոյա	up		cm	Deg	
1	4923.88		5.99	53.63	74.00	-20.37	Peak	100	203	

- Result = Read Value + Factor
 Factor = Antenna Factor + Cable Loss Amplifier
 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.

: VERTICAL · 25 °C : AC 120V Power Pol/Phase Test Mode : Transmit/Receive Operation Channel: 11 : 25 : 67 Temperature % Operation Channel. .. Modulation Type : 802.11g : 54 Mbps Humidity Atmospheric Pressure: 1008 hPa

: DSA-15P-12US 120150 Memo



	Freq	Read	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1 2	MHz 4923.00 4923.00	0.1.0.1		43.90	54.00	dB -10.10 -18.38		cm 100 100	Deg <mark>156</mark> 156

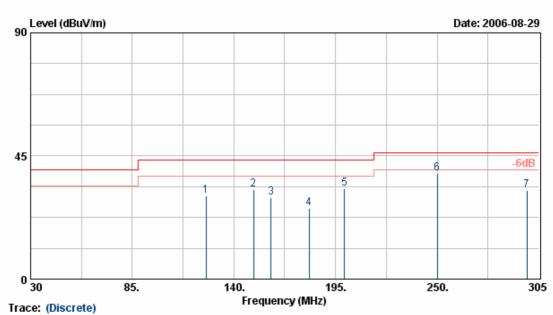
- 1. Result = Read Value + Factor
- 2. Factor = Antenna Factor + Cable Loss Amplifier
 3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 16Hz.
- 4. The resolution bandwidth of test receiver/spectrum 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
- б. The other emissions is too low to be measured.

Test mode 7:

: HORIZONTAL : 28 °C : 68 % : <u>A</u>C 120V Power Pol/Phase Test Mode : Transmit/Receive Temperature Operation Channel: 1 Humidity Modulation Type : 802.11MIMO Atmospheric Pressure: 1010

: 144 Mbps Rate

Memo : DSA-15P-12US 120150



Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1 2 3 4 5 6	MHz 125.01 150.75 160.01 180.75 199.99 250.00 298.68	dBuV/m 46.37 49.63 46.74 44.34 51.36 53.14 45.99	dB -15.90 -16.84 -16.98 -18.55 -18.39 -14.44 -13.70	dBuV/m 30.47 32.79 29.76 25.79 32.97 38.70 32.29	dBuV/m 43.50 43.50 43.50 43.50 43.50 46.00 46.00	dB -13.03 -10.71 -13.74 -17.71 -10.53 -7.30 -13.71	Peak Peak Peak Peak Peak Peak Peak	cm 200 200 200 200 200 200 200 200	Deg 0 0 221 360 254 201 112

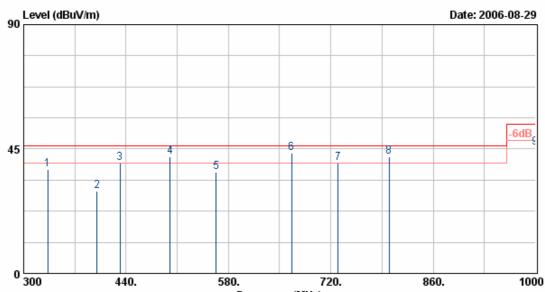
Notes:

- 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 : AC 120V Pol/Phase : HORIZONTAL °C % Test Mode : Transmit/Receive Temperature : 28 Operation Channel: 1 : 68 Humidity Modulation Type : 802.11MIMO Atmospheric Pressure: 1010 hPa

: 144 Mbps : DSA-15P-12VS 120150 Memo



Read Ant Table Trace: (Discrete) Read Ant Table Ant Ta	
1 333.33 50.26 -12.61 37.65 46.00 -8.35 Peak 200 64 2 400.00 40.57 -10.63 29.94 46.00 -16.06 Peak 200 93	
3 432.08 49.37 -9.41 39.96 46.00 -6.04 Peak 200 93 4 500.00 49.31 -7.18 42.13 46.00 -3.87 QP 200 159 5 563.08 41.64 -5.13 36.51 46.00 -9.49 Peak 200 88 6 666.63 47.36 -3.74 43.62 46.00 -2.38 QP 200 224 7 729.80 42.36 -2.57 39.79 46.00 -6.21 QP 200 314 8 799.98 44.64 -2.48 42.16 46.00 -3.84 QP 200 352	

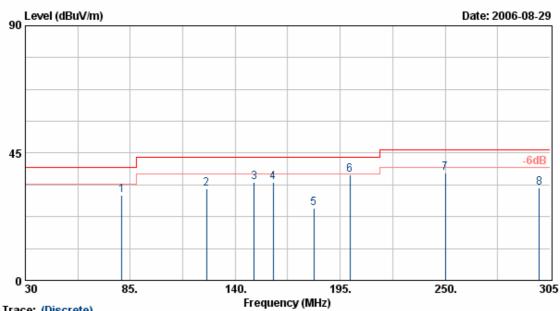
- 1. Result = Read Value + Factor

- Kesult = Kead Value + Factor
 Factor = Antenna Factor + Cable Loss Amplifier
 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.
 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.
 The data is worse case
- 5. The data is worse case.

: VERTICAL : 28 °C : 68 % : AC 120V Pol/Phase Test Mode : Transmit/Receive Temperature : 68 Operation Channel: 1 Humidity Modulation Type : 802.11MIMO Atmospheric Pressure: 1010

: 144 Mbps Rate

: DSA-15P-12VS 120150 Memo



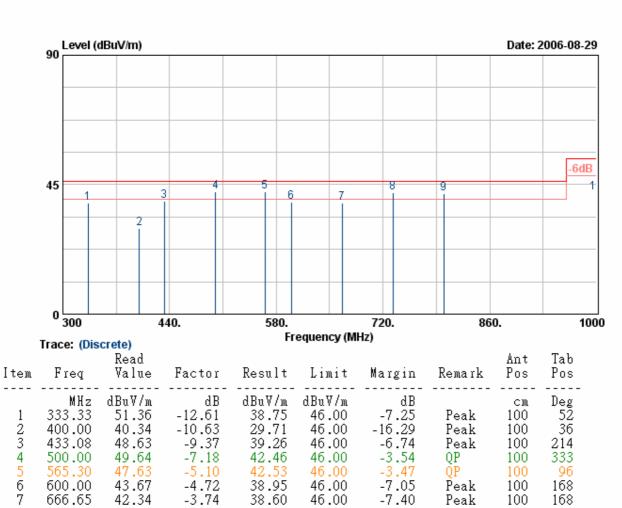
	Trace: (Disc	crete)	rrequency (Minz)						
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	80.58	49.87	-19.75	30.12	40.00	-9.88	Peak	100	141
2	124.93	48.33	-15.90	32.43	43.50	-11.07	Peak	100	86
3	149.93	51.36	-16.82	34.54	43.50	-8.96	Peak	100	62
4	159.98	51.74	-16.98	34.76	43.50	-8.74	Peak	100	62
5	181.20	43.91	-18.52	25.39	43.50	-18.11	Peak	100	221
6	200.00	55.64	-18.39	37.25	43.50	-6.25	Peak	100	23
7	250.00	52.47	-14.44	38.03	46.00	-7.97	Peak	100	50
8	299.23	46.34	-13.70	32.64	46.00	-13.36	Peak	100	211

- 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 16Hz.
- 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 : AC 120V Pol/Phase : VERTICAL
Test Mode : Transmit/Receive Temperature : 28 °C
Operation Channel: 1 Humidity : 68 %
Modulation Type : 802.11MIMO Atmospheric Pressure: 1010 hPa

Rate : 144 Mbps

Memo : DSA-15P-12US 120150



Notes:

733.08

800.00

999.99

8

Q

10

1. Result = Read Value + Factor

-2.47

-2.48

0.10

44.61

44.31

42.11

2. Factor = Antenna Factor + Cable Loss - Amplifier

42.14

41.83

42.21

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

46.00

46.00

54.00

-3.86

-4.17

-11.79

OP.

ÕΡ

Peak

100

100

100

45

85

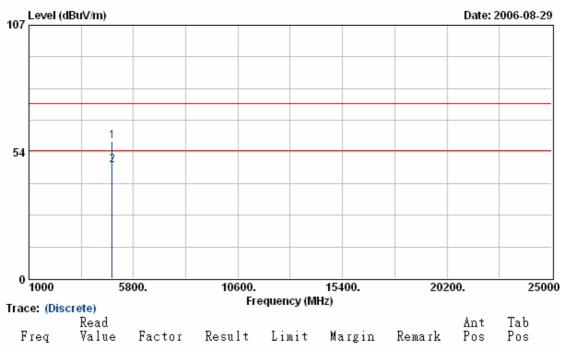
176

- 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.

: AC 120V Power Pol/Phase : HORIZONTAL Ÿ Test Mode : Transmit/Receive Temperature : 25 : 67 Operation Channel: 1 Humidity Modulation Type : 802.11 MIMO Atmospheric Pressure: 1008 hPa

: 144 Mbps

: DSA-15P-12US 120150 Memo

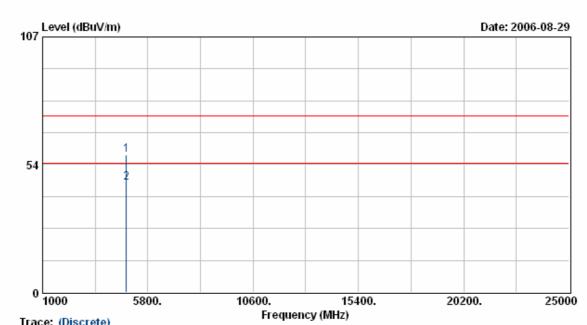


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1 2	MHz 4824.25 4824.25	52.37	dB 5.71 5.71	58.08	dBuV/m 74.00 54.00	dB -15.92 -5.98	Peak	cm 100 100	Deg 203 <mark>203</mark>

- 1. Result = Read Value + Factor
- Result Read value + Pactor
 Factor = Antenna Factor + Cable Loss Amplifier
 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 16Hz.
- 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.

: AC 120V Pol/Phase : VERTICAL Power Test Mode : Transmit/Receive : 25 Temperature : 67 % Operation Channel: 1 Humidity Modulation Type : 802.11 MIMO Atmospheric Pressure: 1008 hPa Rate

Mbps : 144 : DSA-15P-12US 120150 Memo



Item	Freq	Read	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos	
1 2	MHz 4824.38 4824.38		dB 5.71 5.71	dBuV/m 57.67 45.97	74.00	dB -16.33 -8.03	Peak Average	cm 100 100	Deg 156 <mark>156</mark>	

- 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 16Hz.
- 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
- 6. The other emissions is too low to be measured.

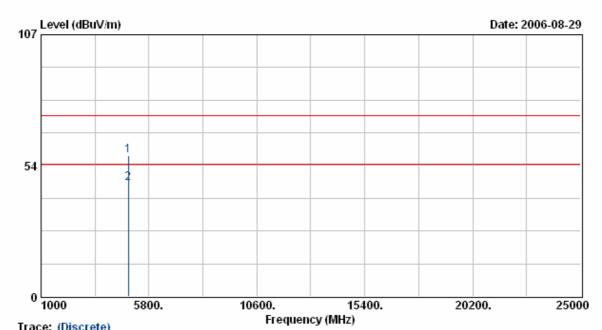
hPa

: HORIZONTAL Power : AC 120V Pol/Phase ۳ % Test Mode : Transmit/Receive Temperature : 25

Operation Channel: 6

: 67 Humidity Modulation Type : 802.11 MIMO Atmospheric Pressure: 1008 Rate : 144 Mbps

: DSA-15P-12US 120150 Memo



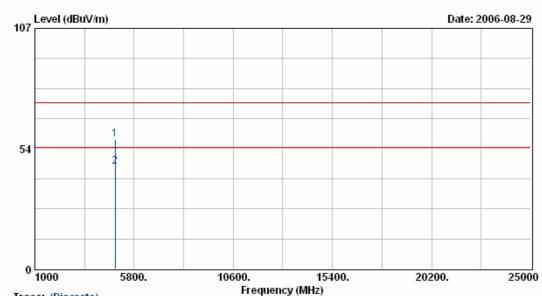
Item	Freq	Read	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1 2	MHz 4874.25 4874.25		5.85	dBuV/m 57.48 46.17	74.00	dB -16.52 -7.83	Peak Average	cm 100 <mark>100</mark>	Deg 203 <mark>203</mark>

- 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
- 6. The other emissions is too low to be measured.

Power : AC 120V Pol/Phase : VERTICAL
Test Mode : Transmit/Receive Temperature : 25 °C
Operation Channel: 6 Humidity : 67 %
Modulation Type : 802.11 MIMO Atmospheric Pressure: 1008 hPa

Rate : 144 Mbps Memo : DSA-15P-12VS 120150



	Trace: (Dis	crete)				•			
		Read						Ant	Tab
Item	Freq	Value	Factor	Result	Limit	Margin	Remark	Pos	Pos
	MHz	dBuV/m	dВ	dBuV/m	dBuV/m	dВ		cm	Deg
1	4874.38		5.85	57.49	74.00	-16.51	Peak	100	156
2	4874.38	39.55	5.85	45.39	54.00	-8.61	Average	100	156

- 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.
- 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.

: AC 120V : HORIZONTAL Pol/Phase Power ё % Test Mode : Transmit/Receive Operation Channel: 11 : 25 : 67 Temperature Humidity Atmospheric Pressure: 1008 hPa

Modulation Type : 802.11 MIMO Mbps : 144 Rate

: DSA-15P-12VS 120150 Memo

	1000 :e: (Disc		5800.	10600. Er	equency	100.	202	200.	250
54		2							
		1							

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1 2	MHz 4923.75 4923.75	50.37	dB 5.99 5.99	56.36	dBuV/m 74.00 54.00	dB -17.64 -8.38	Peak	cm 100 100	Deg 203 <mark>203</mark>

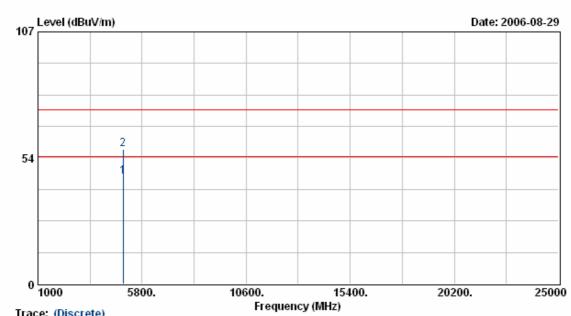
- 1. Result = Read Value + Factor
- 2. Factor = Antenna Factor + Cable Loss Amplifier
- 3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz
- and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.

 4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above
- 5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above
- 6. The other emissions is too low to be measured.

: VERTICAL : AC 120V Pol/Phase Power rest Mode : Transmit/Receive
Operation Channel: 11 : 25 : 67 Temperature $\tilde{\%}$ Humidity Modulation Type : 802.11 MIMO Atmospheric Pressure: 1008 hPa

Rate : 144 Mbps

: DSA-15P-12VS 120150 Memo



Item	Freq	Read	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1 2	MHz 4924.75 4924.75		dB 5.99 5.99	dBuV/m 45.64 57.34		dB -8.36 -16.66	Average Peak	cm 100 100	Deg 156 156

- 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 16Hz.
- 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
- 6. The other emissions is too low to be measured.

hPa

Atmospheric Pressure: 1010

Test mode 8:

Power : AC 120V
Test Mode : Transmit/Receive
Operation Channel: 3 Pol/Phase : HORIZONTAL Temperature : 28 °C Humidity : 68 %

Modulation Type : 802.11MIMO+CB : 300 Mbps Rate

: DSA-15P-12US 120150 Memo

	e (Discrete)			Frequency	(MHz)			
0 J	30	85.	140		19	95.	250.	30
-								
ŀ			1	2 3	4	5		7
							6 i	-6dB
45								CalD
-								
90	_evel (dBuV/m	,						2006-08-29

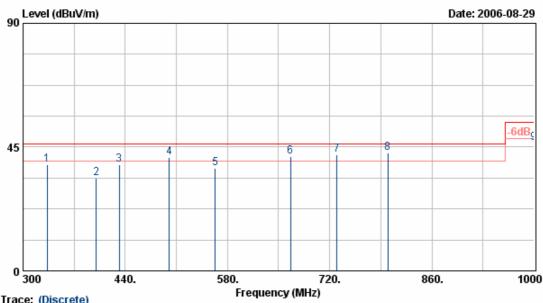
	Hace. (DIS	crete)							
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	125.01	44.34	-15.90	28.44	43.50	-15.06	Peak	200	Ō
2	150.75	47.55	-16.84	30.71	43.50	-12.79	Peak	200	0
3	160.01	48.64	-16.98	31.66	43.50	-11.84	Peak	200	221
4	180.75	46.37	-18.55	27.82	43.50	-15.68	Peak	200	360
5	199.99	51.34	-18.39	32.95	43.50	-10.55	Peak	200	254
б	250.00	53.36	-14.44	38.92	46.00	-7.08	Peak	200	201
7	298.68	44.61	-13.70	30.91	46.00	-15.09	Peak	200	112

- 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 : AC 120V Pol/Phase : HORIZONTAL τ % : Transmit/Receive Test Mode Temperature : 28 Operation Channel: 3 : 68 Humidity Modulation Type : 802.11MIMO+CB Atmospheric Pressure: 1010 Rate

: 300 Mbps : DSA-15P-12VS 120150 Memo



	Trace: (Dis	crete)		• • •	oquonoy (iiii	,				
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos	
1 2 3 4 5 6 7 8	MHz 333.33 400.00 432.08 500.00 563.08 666.63 729.80 799.98 999.99	dBuV/m 51.36 44.36 47.95 48.37 42.36 45.34 44.64 45.34 46.37	dB -12.61 -10.63 -9.41 -7.18 -5.13 -3.74 -2.57 -2.48 0.10	dBuV/m 38.75 33.73 38.54 41.19 37.23 41.60 42.08 42.86 46.47	dBuV/m 46.00 46.00 46.00 46.00 46.00 46.00 46.00 46.00 54.00	dB -7.25 -12.27 -7.46 -4.81 -8.77 -4.40 -3.92 -3.14 -7.53	Peak Peak Peak QP Peak QP QP QP Peak	cm 200 200 200 200 200 200 200 200 200	Deg 64 93 93 159 88 224 314 352 360	

- 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.

: AC 120V : VERTICAL : 28 °C Power Pol/Phase : 28 Test Mode : Transmit/Receive Temperature Operation Channel: 3 % Humidity : 68 Modulation Type : 802.11MIMO+CB Atmospheric Pressure: 1010

Rate

: 300 Mbps : DSA-15P-12VS 120150 Memo

	e: (Disc				equency (M					
0	30		85.	140.		195.	25	0.		30
					5	5				
45				2	3 4	6	7		-60	dB 8
90		BuV/m)						Date:		

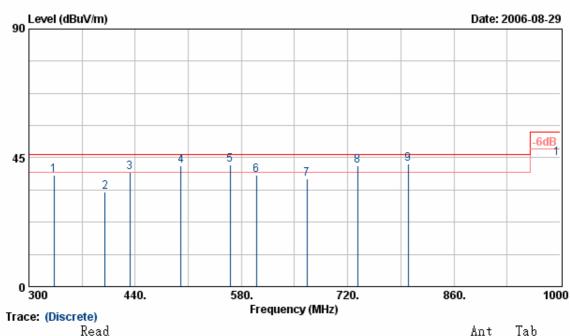
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos	
1 2 3 4 5 6 7	MHz 80.58 124.93 149.93 159.98 181.20 200.00 250.00 299.23	dBuV/m 49.63 48.65 53.14 52.34 43.28 53.69 52.37 44.91	dB -19.75 -15.90 -16.82 -16.98 -18.52 -18.39 -14.44 -13.70	dBuV/m 29.88 32.75 36.32 35.36 24.76 35.30 37.93 31.21	dBuV/m 40.00 43.50 43.50 43.50 43.50 43.50 46.00 46.00	dB -10.12 -10.75 -7.18 -8.14 -18.74 -8.20 -8.07 -14.79	Peak Peak Peak Peak Peak Peak Peak Peak	cm 100 100 100 100 100 100 100	Deg 141 86 62 62 221 23 50 211	

- 1. Result = Read Value + Factor
- Result = Read value + Factor
 Factor = Antenna Factor + Cable Loss Amplifier
 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.
 According to technical experiments, all spurious emission of 802.11MIMO
- mode at channel 3,6,9 are almost the same below 16Hz,so that the channel 3 was chosen as representative in final test.
- 5. The data is worse case.

: YERTICAL : AC 120V Pol/Phase Power rest Mode : Transmit/Receive
Operation Channel: 3 Temperature : 28 : 68 Humidity Modulation Type : 802.11MIMO+CB Atmospheric Pressure: 1010 hPa

: 300 Mbps Rate

: DSA-15P-12US 120150 Memo



Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1 2 3 4 5 6 7 8	MHz 333.33 400.00 433.08 500.00 565.30 600.00 666.65 733.08 800.00 999.99	dBuV/m 51.64 43.65 49.35 49.41 47.61 43.64 41.34 44.69 45.39 44.63	dB -12.61 -10.63 -9.37 -7.18 -5.10 -4.72 -3.74 -2.47 -2.48 0.10	dBuV/m 39.03 33.02 39.98 42.23 42.51 38.92 37.60 42.22 42.91 44.73	dBuV/m 46.00 46.00 46.00 46.00 46.00 46.00 46.00 46.00 46.00 46.00 54.00	dB -6.97 -12.98 -6.02 -3.77 -3.49 -7.08 -8.40 -3.78 -3.09 -9.27	Peak Peak Peak QP Peak Peak QP QP Peak	cm 100 100 100 100 100 100 100 100 100	Deg 52 36 214 333 96 168 168 45 85

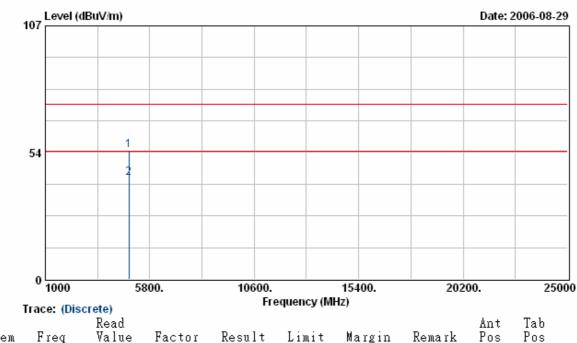
- 1. Result = Read Value + Factor
- 2. Factor = Antenna Factor + Cable Loss Amplifier
 3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 16
- 4. According to technical experiences, all 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 : AC 120V Pol/Phase : HORIZONTAL Test Mode : Transmit/Receive Temperature : 25 °C Operation Channel: 3 Humidity : 67 % Modulation Type : 802.11 MIMO+CB Atmospheric Pressure: 1008 hPa

Rate : 300 Mbps

Memo : DSA-15P-12VS 120150



Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos	
1 2	MHz 4844.00 4844.00		dB 5.76 5.76	dBuV/m 54.40 42.75	74.00	dB -19.60 -11.25	Peak Average	cm 100 100	Deg 203 <mark>203</mark>	

- 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.
- 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.

hPa

Atmospheric Pressure: 1008

EUT : F5D8231-4

: VERTICAL : 25 C : AC 120V Pol/Phase Power Test Mode : Transmit/Receive Temperature Operation Channel: 3 Humidity

Modulation Type : 802.11 MIMO+CB

: 300 Mbps Rate

: DSA-15P-12US 120150 Memo

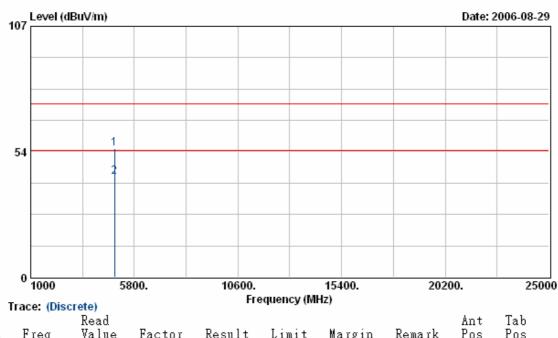
race: (Discret		Frequen	icy (MHz)		
1000	5800.	10600.	15400.	20200.	2500
0					
	1				
4	1				
	2				
07				- Date :	
_ Level (dBu\	//m)			Date: 2	2006-08-29

	Trace: (Disc	crete)				-			
		Read						Ant	Tab
Item	Freq	Value	Factor	Result	Limit	Margin	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBu∀/m		dΒ		cm	Deg
1	4844.00	37.77	5.76	43.53	54.00	-10.47	Average	100	156
2	4844.00	48.63	5.76	54.39	74.00	-19.61	Peak	100	156

- Result = Read Value + Factor
 Factor = Antenna Factor + Cable Loss Amplifier
 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 16Hz.
- 4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above
- 5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above
- 6. The other emissions is too low to be measured.

: AC 120V 1207 mode : Transmit/Receive Operation Channel: 6 Modulation Trans Pol/Phase : HORIZONTAL т % Temperature : 25 : 67 Humidity Modulation Type : 802.11 MIMO+CB Atmospheric Pressure: 1008 hPa

: 300 Mbps : DSA-15P-12US 120150 Memo

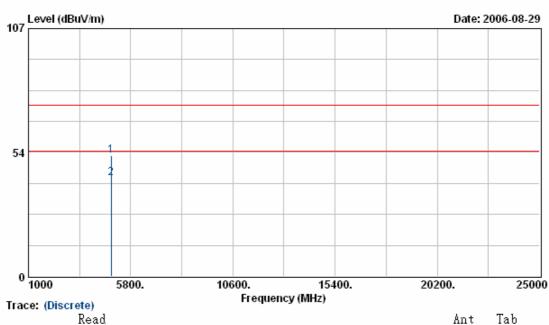


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1 2	MHz 4874.00 4874.00		5.85	54.81	74.00	-19.19	Peak Average	100	Deg 203 <mark>203</mark>

- 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 16Hz.
- 4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above
- 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.

: VERTICAL · 2.5 ℃ : AC 120V Power Pol/Phase Test Mode : Transmit/Receive Temperature : 67 Operation Channel: 6 % Humidity Modulation Type : 802.11 MIMO+CB Atmospheric Pressure: 1008

: 300 Rate Mbps : DSA-15P-12US 120150 Memo



Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1 2	MHz 4874.00 4874.00		dB 5.85 5.85	dBuV/m 52.16 42.41	dBuV/m 74.00 54.00	dB -21.84 -11.59	Peak Average	cm 100 100	Deg 156 156

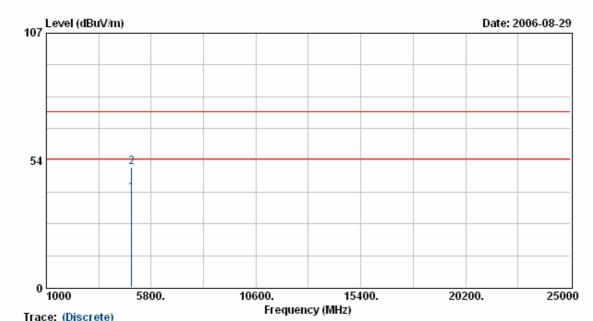
- 1. Result = Read Value + Factor
- 2. Factor = Antenna Factor + Cable Loss Amplifier
 3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak
- detection at frequency below 1GHz.

 4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above
- 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.

: MORIZONTAL : 25 °C : 67 % : AC 120V Power Pol/Phase Test Mode : Transmit/Receive Operation Channel: 9 Temperature Humidity Modulation Type : 802.11 MIMO+CB Atmospheric Pressure: 1008 hPa

: 300 Mbps Rate

: DSA-15P-12US 120150 Memo



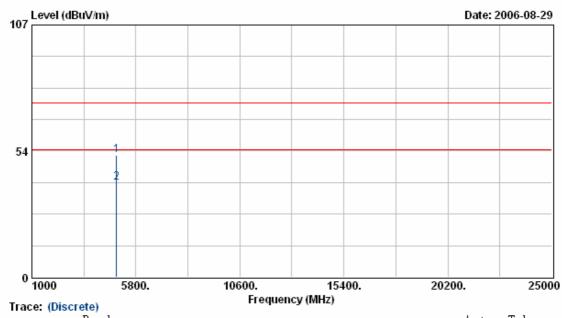
Item	Freq	Read	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
1 2	MHz 4904.00 4904.00		dB <mark>5.93</mark> 5.93		dBuV/m 54.00 74.00	dB -14.50 -23.43	Average Peak	cm 100 100	Deg <mark>203</mark> 203

- 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
- 5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
- б. The other emissions is too low to be measured.

: VERTICAL 25 °C % : AC 120V Pol/Phase Power Test Mode : Transmit/Receive Temperature Operation Channel: 9 Humidity Modulation Type : 802.11 MIMO+CB Atmospheric Pressure: 1008 hPa

: 300 Mbps Rate

: DSA-15P-12US 120150 Memo



Item	Freq	Read	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos	
1 2	MHz 4904.00 4904.00		dB 5.93 5.93	dBu∀/m 51.89 40.06	74.00	dB -22.11 -13.94	Peak Average	cm 100 100	Deg 156 156	

- 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 16Hz.
- 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
- 6. The other emissions is too low to be measured.

6. 6dB Bandwidth Measurement Data

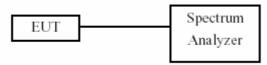
6.1 Test Limit

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

6.2 Test Procedures

- 1. The transmitter output was connected to the spectrum analyzer.
- 2. Set RBW of spectrum analyzer to 100 KHz and VBW to 100 KHz.
- 3. The 6 dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6 dB.

6.3 Test Setup Layout



6.4 Measurement equipment

Instrument/Ancillary	Model No.	Manufacturer	Serial No.	Valid Date.
Spectrum Analyzer	FSP40	R&S	100047	2007/01/16

6.5 Test Result and Data

(1) Modulation Standard: IEEE 802.11b (11Mbps)

Test Date: Aug. 15, 2006 Temperature: 26 Humidity: 68% Atmospheric pressure: 1006 hPa

Channel	Frequency (MHz)	6dB Bandwidth (MHz)
01	2412	10.2
06	2437	9.6
11	2462	9.7

(2) Modulation Standard: IEEE 802.11g (54Mbps)

Test Date: Aug. 15, 2006 Temperature: 26 Humidity: 68% Atmospheric pressure: 1006 hPa

Channel	Frequency (MHz)	6dB Bandwidth (MHz)
01	2412	16.5
06	2437	16.5
11	2462	16.5

(3) Modulation Standard: IEEE 802.11MIMO (144Mbps)

Test Date: Aug. 15, 2006 Temperature: 26 Humidity: 68% Atmospheric pressure: 1006 hPa

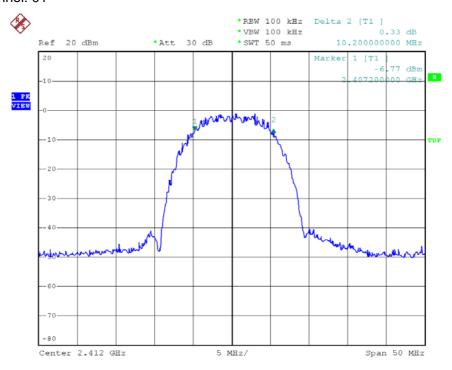
Channel	Frequency	6dB Bandwidth of TX0	6dB Bandwidth of TX1
Channel	(MHz)	(MHz)	(MHz)
01	2412	17.8	17.8
06	2437	17.7	17.8
11	2462	17.7	17.8

(4) Modulation Standard: IEEE 802.11MIMO+CB(300Mbps)

Test Date: Aug. 15, 2006 Temperature: 26 Humidity: 68% Atmospheric pressure: 1006 hPa

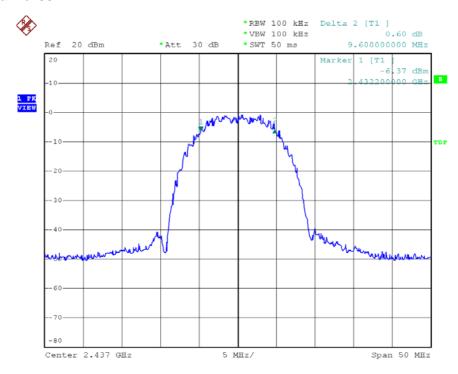
Channel	Frequency (MHz)	6dB Bandwidth of TX0 (MHz)	6dB Bandwidth of TX1 (MHz)
03	2422	36.4	36.6
06	2437	36.6	36.6
09	2452	36.6	36.6

Modulation Standard: 802.11b (11Mbps) Channel: 01



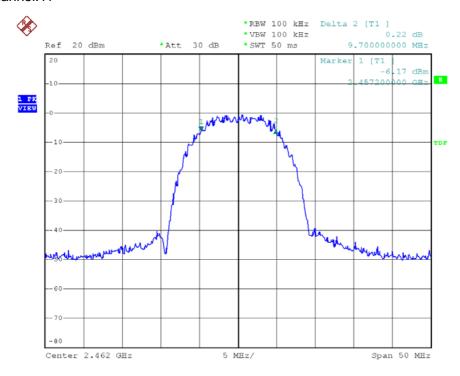
Date: 14.AUG.2006 16:35:02

Channel:06



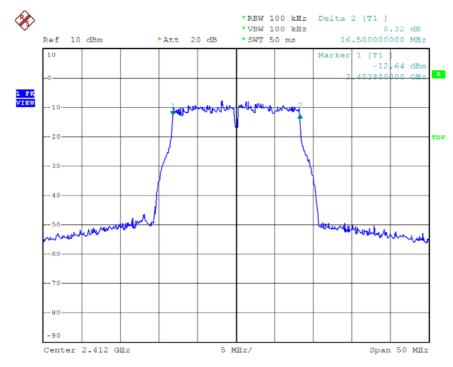
Date: 14.AUG.2006 16:39:29

Channel:11



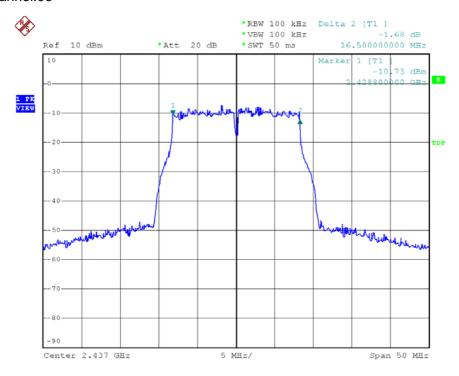
Date: 14.AUG.2006 16:41:20

Modulation Standard:802.11g (54Mbps) Channel:01



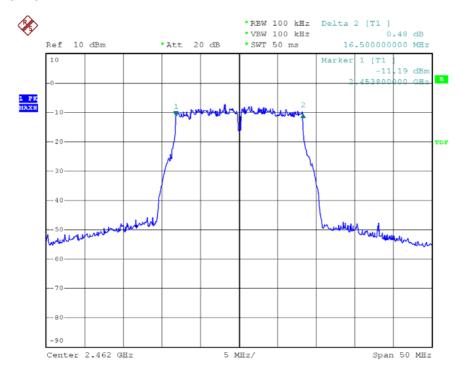
Date: 14.AUG.2006 17:37:19

Channel:06



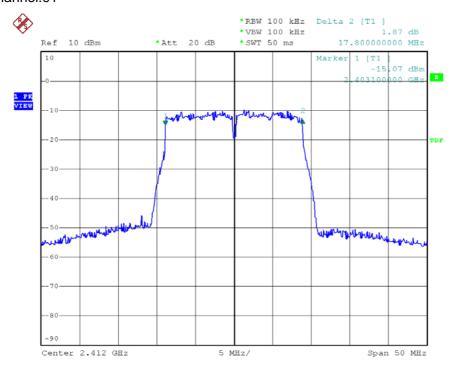
Date: 14.AUG.2006 17:39:04

Channel:11



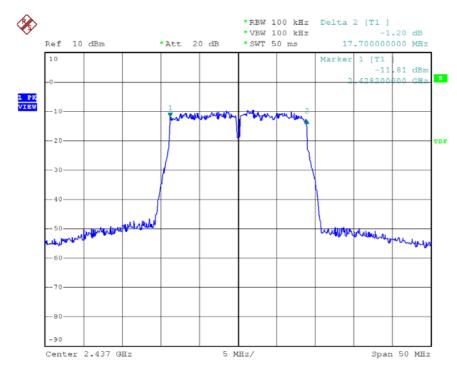
Date: 14.AUG.2006 17:40:46

Modulation Standard:802.11MIMO(144Mbps) – TX0 Channel:01



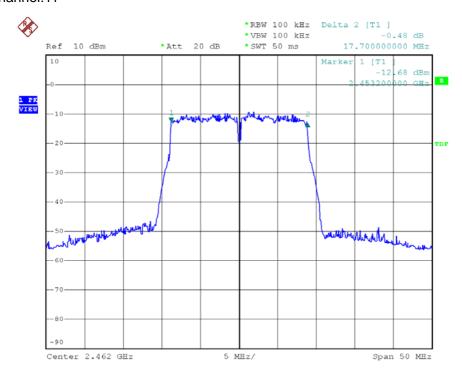
Date: 15.AUG.2006 09:49:16

Channel:06



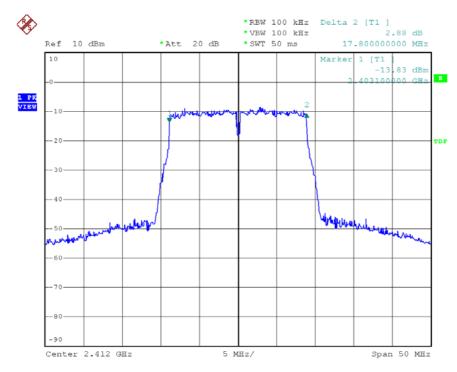
Date: 15.AUG.2006 09:51:14

Channel:11



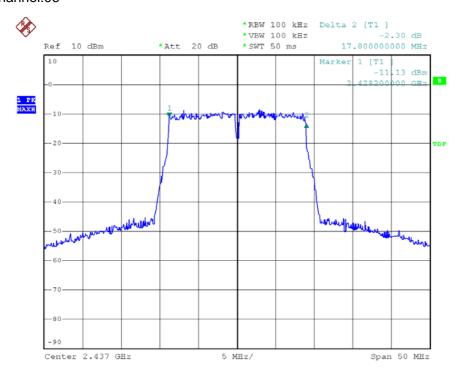
Date: 15.AUG.2006 09:53:10

Modulation Standard:802.11MIMO(144Mbps) – TX1 Channel:01



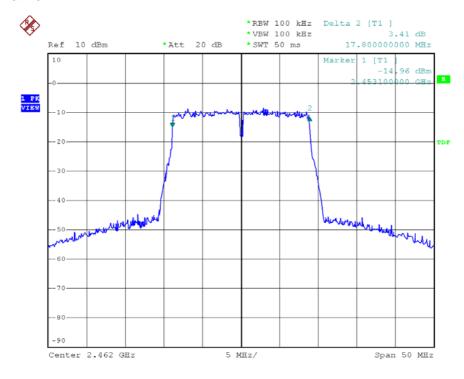
Date: 15.AUG.2006 10:56:29

Channel:06



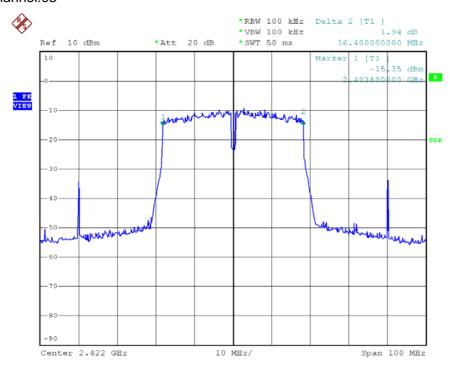
Date: 15.AUG.2006 10:59:11

Channel:11



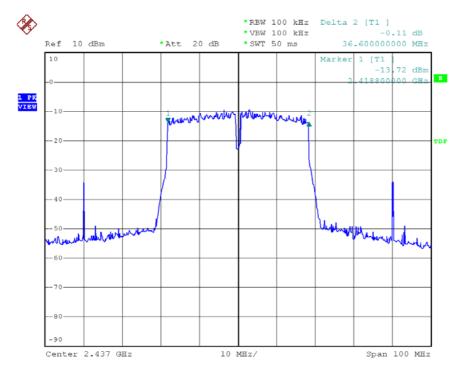
Date: 15.AUG.2006 11:02:11

Modulation Standard:802.11MIMO+CB(300Mbps) – TX0 Channel:03

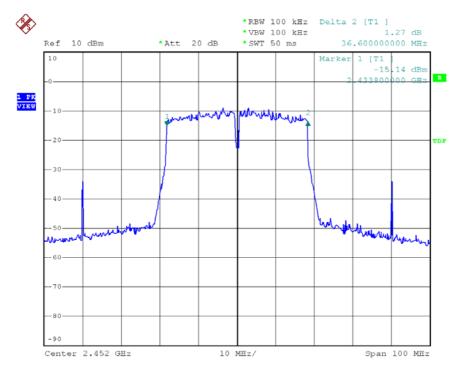


Date: 15.AUG.2006 14:16:11

Channel:06

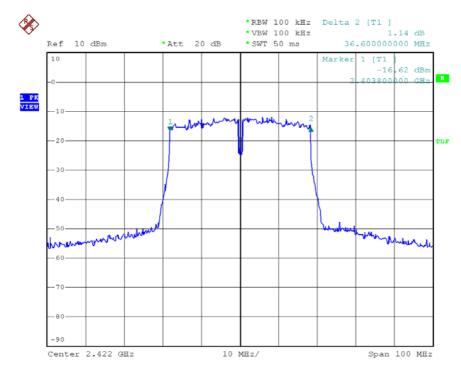


Date: 15.AUG.2006 14:23:13

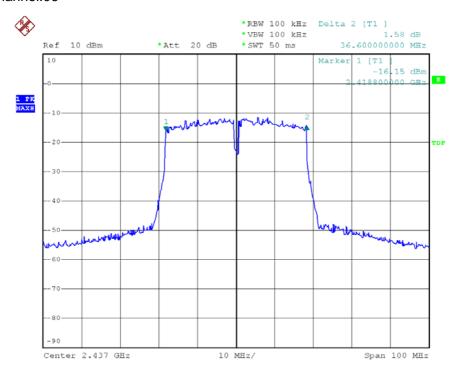


Date: 15.AUG.2006 14:21:14

Modulation Standard:802.11MIMO+CB (300Mbps) – TX1 Channel:03

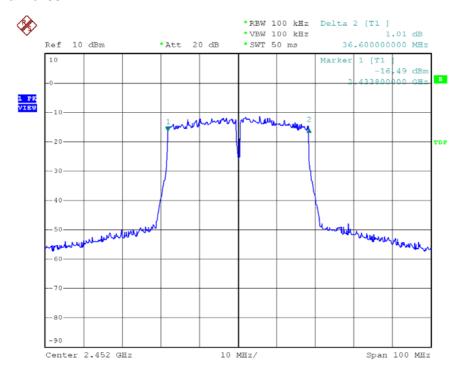


Date: 15.AUG.2006 15:18:10



Date: 15.AUG.2006 15:21:23

Channel:09



Date: 15.AUG.2006 15:26:28

FCC Test Report: FI 06051201-C

7. Maximum Peak Output Power

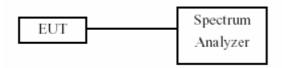
7.1 Test Limit

The Maximum Peak Output Power Measurement is 30dBm.

7.2 Test Procedures

The antenna port(RF output)of the EUT was connected to the input(RF input)of a power meter. Power was read directly from the meter and cable loss connection was added to the reading to obtain power at the EUT antenna terminal. The EUT Output Power was set to maximum to produce the worse case test result.

7.3 Test Setup Layout



7.4 Measurement equipment

Instrument/Ancillary	Model No.	Manufacturer	Serial No.	Valid Date.
Spectrum Analyzer	FSP40	R&S	100047	2007/01/16

7.5 Test Result and Data

(1) Modulation Standard: IEEE 802.11b (11Mbps)

Test Date: Aug. 15, 2006 Temperature: 26 Humidity: 68% Atmospheric pressure: 1006 hPa

Channel	Frequency	Peak Power Output	Peak Power Output
Onamo	(MHz)	(dBm)	(mW)
01	2412	16.54	45.1
06	2437	16.84	48.6
11	2462	17.11	51.4

(2) Modulation Standard: IEEE 802.11g (54Mbps)

Test Date: Aug. 15, 2006 Temperature: 26 Humidity: 68% Atmospheric pressure: 1006 hPa

Channel	Frequency (MHz)	Peak Power Output (dBm)	Peak Power Output (mW)
01	2412	13.20	20.9
06	2437	13.76	23.8
11	2462	14.06	25.5

(3) Modulation Standard: IEEE 802.11MIMO (144Mbps)

Test Date: Aug. 15, 2006 Temperature: 26 Humidity: 68% Atmospheric pressure: 1006 hPa

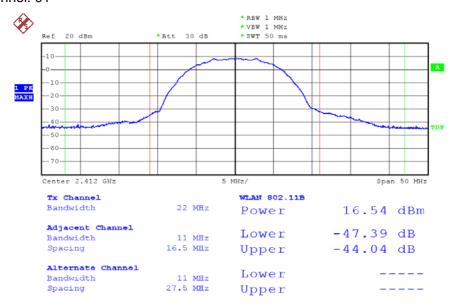
Channel	Frequency	Peak Power Output	Peak Power Output	Peak Power Output	Peak Power Output
Chamer	(MHz)	Of TX0 (dBm)	Of TX1 (dBm)	Of Total (dBm)	Of Total (mW)
01	2412	13.89	12.17	16.12	40.97
06	2437	14.29	12.51	16.50	44.68
11	2462	14.38	12.53	16.56	45.32

(4) Modulation Standard: IEEE 802.11MIMO+CB (300Mbps)

Test Date: Aug. 15, 2006 Temperature: 26 Humidity: 68% Atmospheric pressure: 1006 hPa

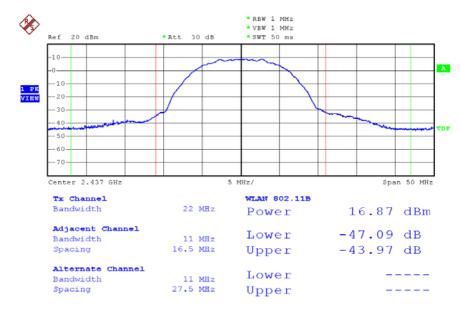
Channel	Frequency	Peak Power Output	Peak Power Output	Peak Power Output	Peak Power Output
Channel	(MHz)	Of TX0 (dBm)	Of TX1 (dBm)	Of Total (dBm)	Of Total (mW)
03	2422	14.14	12.31	16.33	42.96
06	2437	14.33	12.51	16.51	44.74
09	2452	14.31	12.75	16.61	45.81

Modulation Standard: 802.11b (11Mbps) Channel: 01

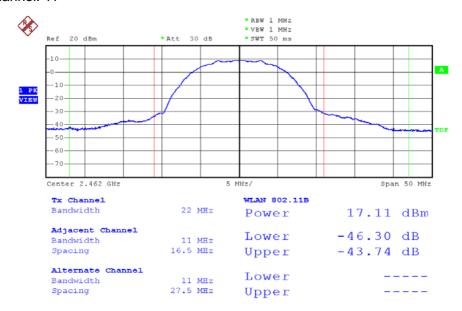


Date: 15.AUG.2006 17:07:34

Channel:06

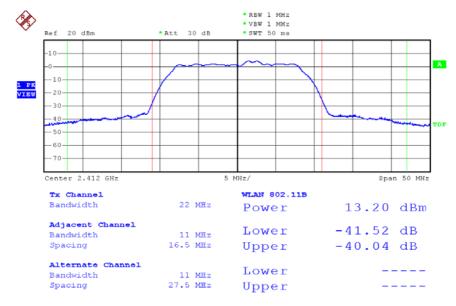


Date: 15.AUG.2006 17:06:54

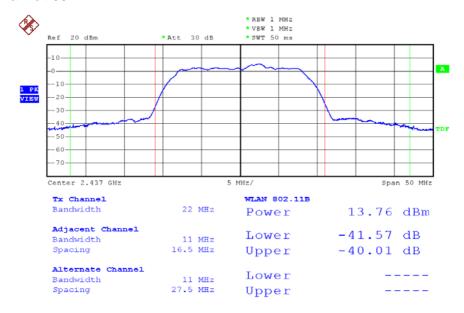


Date: 15.AUG.2006 17:06:12

Modulation Standard:802.11g (54Mbps) Channel:01

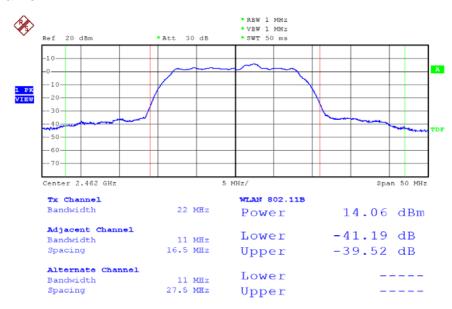


Date: 14.AUG.2006 17:34:12



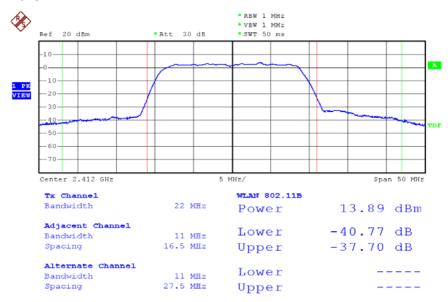
Date: 14.AUG.2006 17:33:02

Channel:11



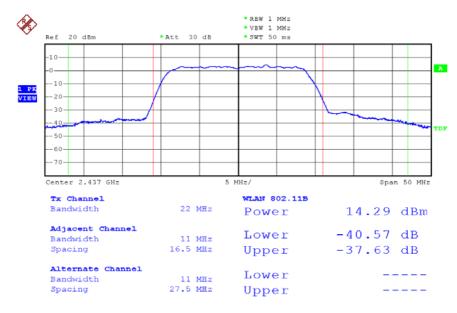
Date: 14.AUG.2006 17:32:05

Modulation Standard:802.11MIMO (144Mbps) - TX0 Channel:01

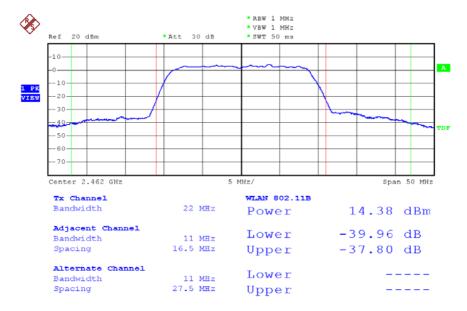


Date: 15.AUG.2006 10:13:02

Channel:06

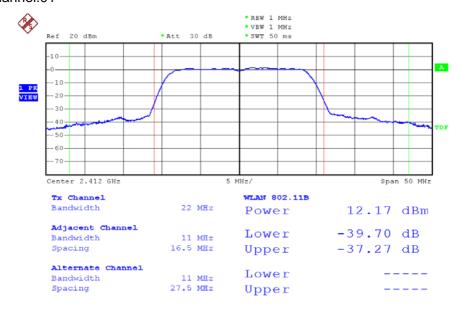


Date: 15.AUG.2006 10:12:08



Date: 15.AUG.2006 10:10:47

Modulation Standard:802.11MIMO (144Mbps) - TX1 Channel:01

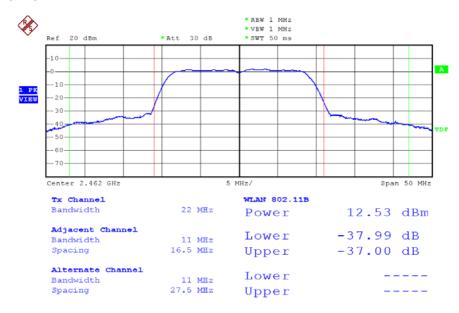


Date: 15.AUG.2006 10:04:25



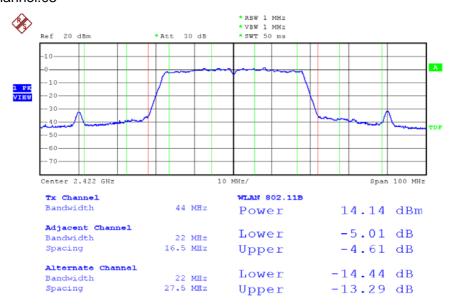
Date: 15.AUG.2006 10:05:26

Channel:11



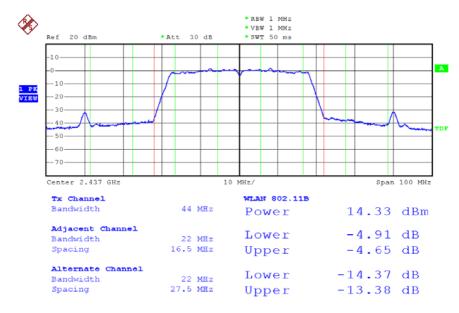
Date: 15.AUG.2006 10:08:54

Modulation Standard:802.11MIMO+CB (300Mbps) - TX0 Channel:03

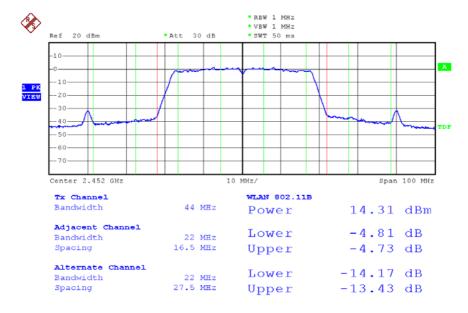


Date: 15.AUG.2006 14:12:06

Channel:06

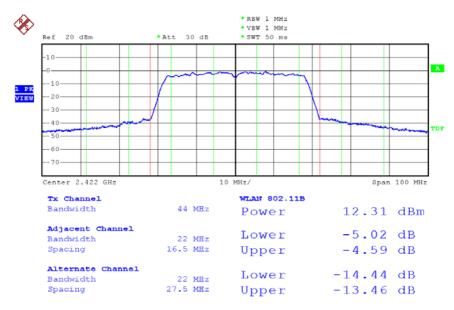


Date: 15.AUG.2006 14:10:04

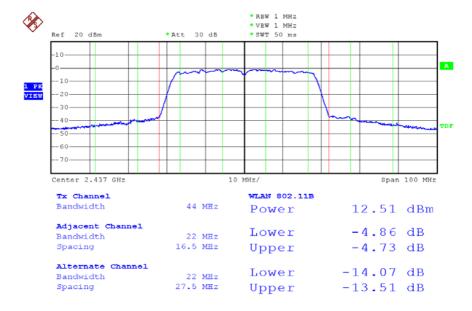


Date: 15.AUG.2006 14:19:47

Modulation Standard:802.11MIMO+CB (300Mbps) - TX1 Channel:03

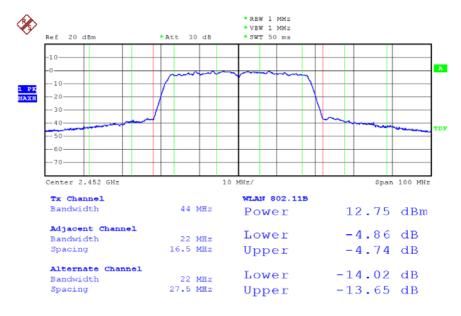


Date: 15.AUG.2006 15:09:36



Date: 15.AUG.2006 15:08:28

Channel:09



Date: 15.AUG.2006 15:07:16

8. Band Edges Measurement

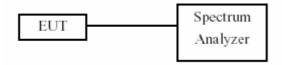
8.1 Test Limit

Below –20dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).

8.2 Test Procedure:

- 1. The transmitter output was connected to the spectrum analyzer via a low lose cable.
- 2. Set both RBW and VBW of spectrum analyzer to 100 KHz with convenient frequency span including 100 KHz bandwidth from band edge.
- 3. The band edges was measured and recorded.

8.3 Test Setup Layout



8.4 List of Measuring Equipment Used

Instrument/Ancillary	Model No.	Manufacturer	Serial No.	Valid Date.
Spectrum Analyzer	FSP40	R&S	100047	2007/01/16

8.5 Test Result and Data

(1) Modulation Standard: IEEE 802.11b (11Mbps)

Test Date: Aug. 15, 2006 Temperature: 26 Humidity: 68% Atmospheric pressure: 1006 hPa

Channel	Frequency	maximum value in frequency	maximum value is
	(MHz)	(MHz)	(dBm)
01	2412	2399.40	-48.93
11	2462	2545.00	-52.48

(2) Modulation Standard: IEEE 802.11g (54Mbps)

Test Date: Aug. 15, 2006 Temperature: 26 Humidity: 68% Atmospheric pressure: 1006 hPa

Channel	Frequency	maximum value in frequency	maximum value is
	(MHz)	(MHz)	(dBm)
01	2412	2399.60	-47.88
11	2462	2545.00	-52.36

(3) Modulation Standard: IEEE 802.11MIMO (144Mbps) -TX0

Test Date: Aug. 15, 2006 Temperature: 26 Humidity: 68% Atmospheric pressure: 1006 hPa

Channel	Frequency	maximum value in frequency	maximum value is
	(MHz)	(MHz)	(dBm)
01	2412	2399.60	-47.99
11	2462	2483.70	-51.02

Modulation Standard: IEEE 802.11MIMO (144Mbps) -TX1

Test Date: Aug. 15, 2006 Temperature: 26 Humidity: 68% Atmospheric pressure: 1006 hPa

Channal	Frequency	maximum value in frequency	maximum value is
Channel	(MHz)	(MHz)	(dBm)
01	2412	2398.60	-46.85
11	2462	2483.70	-51.51

(4) Modulation Standard: IEEE 802.11MIMO+CB (300Mbps) -TX0

Test Date: Aug. 15, 2006 Temperature: 26 Humidity: 68% Atmospheric pressure: 1006 hPa

Channel	Frequency	maximum value in frequency	maximum value is
	(MHz)	(MHz)	(dBm)
03	2422	2382.00	-34.43
09	2452	2492.10	-33.69

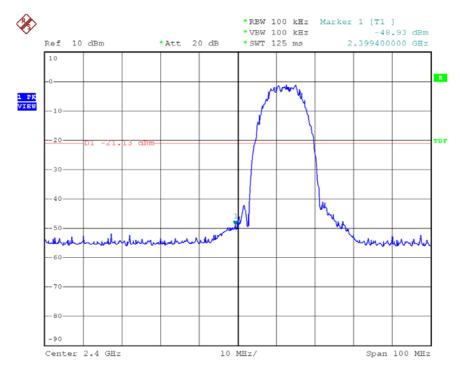
Modulation Standard: IEEE 802.11MIMO+CB (300Mbps) -TX1

Test Date: Aug. 15, 2006 Temperature: 26 Humidity: 68% Atmospheric pressure: 1006 hPa

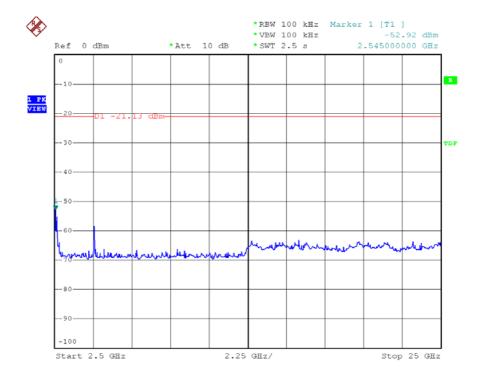
	Channal	Frequency	maximum value in frequency	maximum value is
Channel	(MHz)	(MHz)	(dBm)	
	03	2422	2397.40	-49.99
	09	2452	2485.30	-50.31

Modulation Standard: 802.11b (11Mbps)

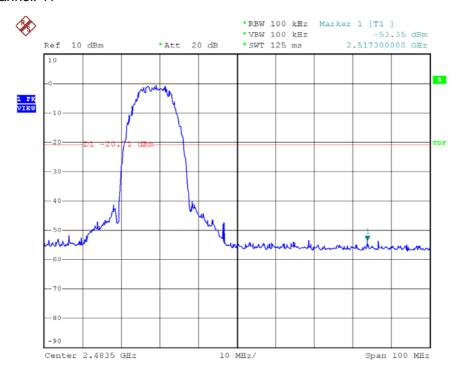
Channel: 01



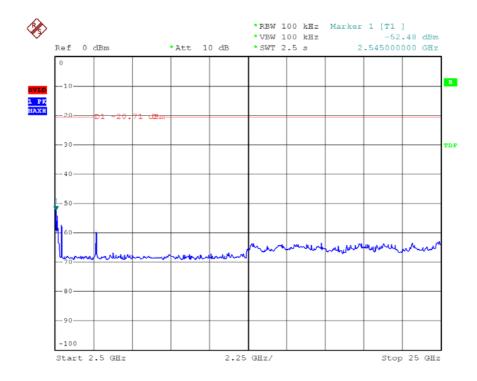
Date: 14.AUG.2006 17:23:54



Date: 14.AUG.2006 17:25:15



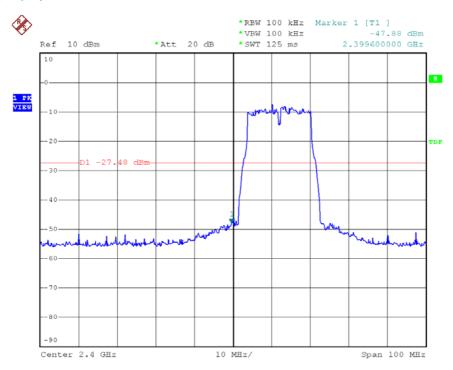
Date: 14.AUG.2006 17:28:01



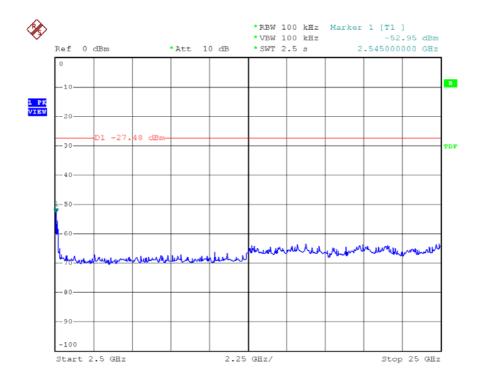
Date: 15.AUG.2006 17:09:01

Modulation Standard: 802.11g (54Mbps)

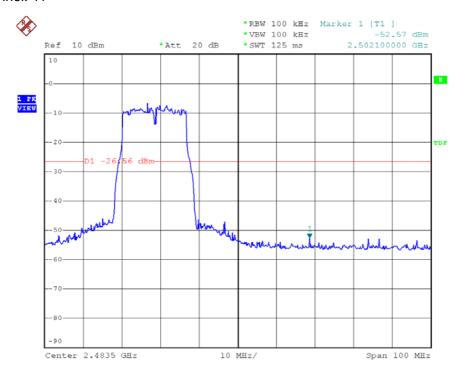
Channel: 01



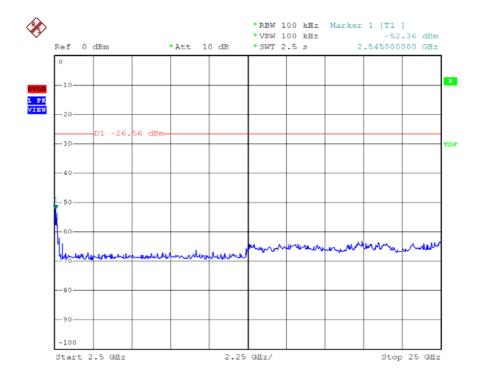
Date: 14.AUG.2006 18:11:31



Date: 14.AUG.2006 18:12:24

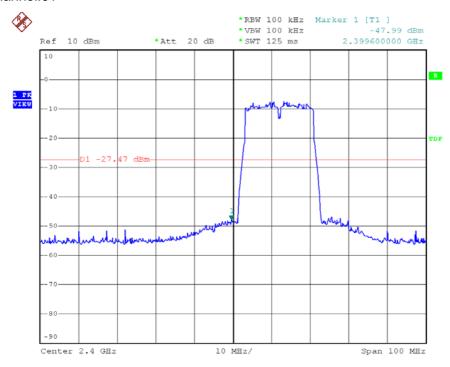


Date: 14.AUG.2006 18:14:13

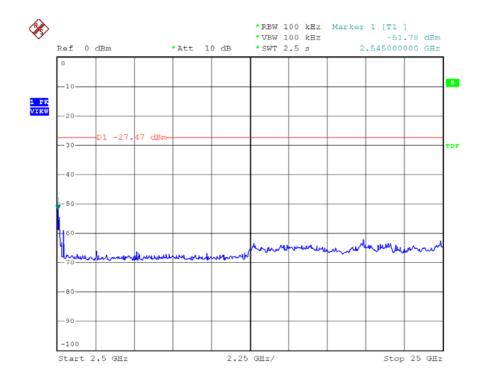


Date: 14.AUG.2006 18:15:08

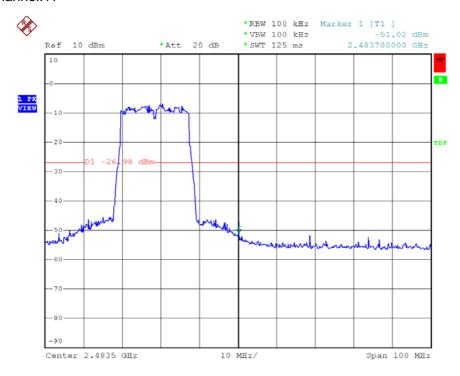
Modulation Standard:802.11g MIMO(144Mbps) – TX0 Channel:01



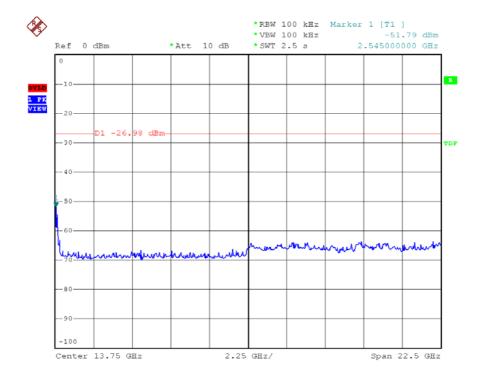
Date: 15.AUG.2006 10:51:02



Date: 15.AUG.2006 10:53:05

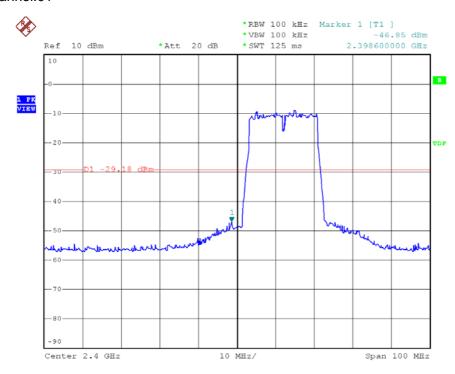


Date: 15.AUG.2006 10:46:48

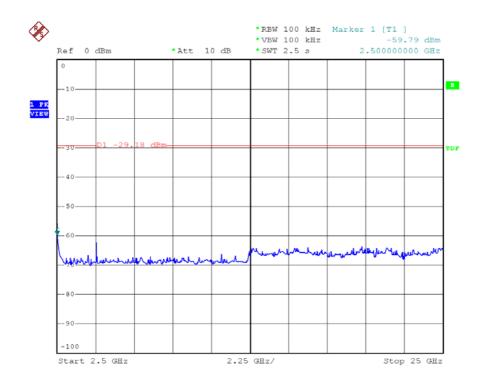


Date: 15.AUG.2006 10:47:48

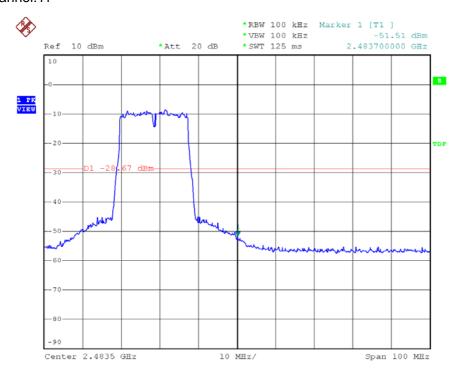
Modulation Standard:802.11g MIMO(144Mbps) – TX1 Channel:01



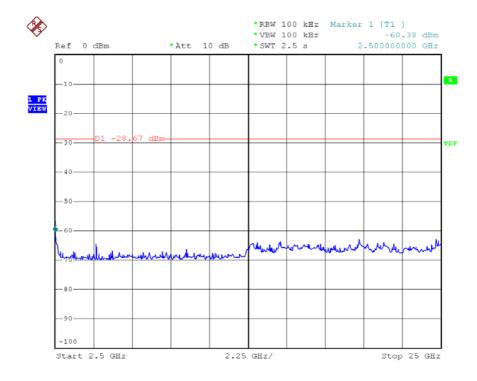
Date: 15.AUG.2006 11:37:14



Date: 15.AUG.2006 11:38:03

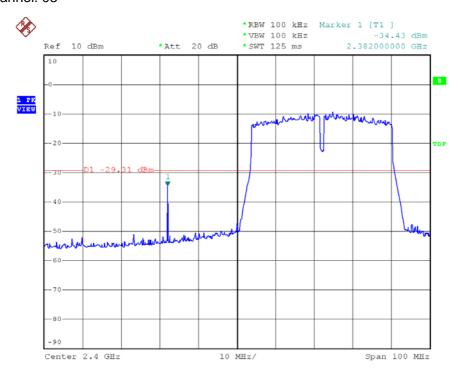


Date: 15.AUG.2006 11:39:25

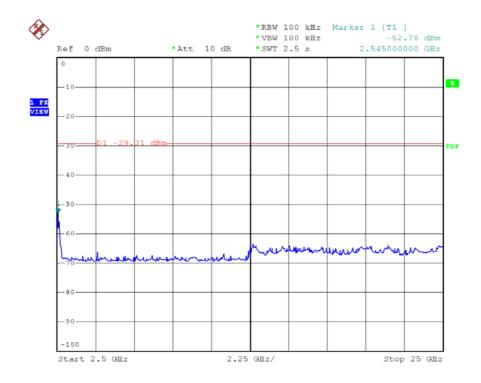


Date: 15.AUG.2006 11:40:00

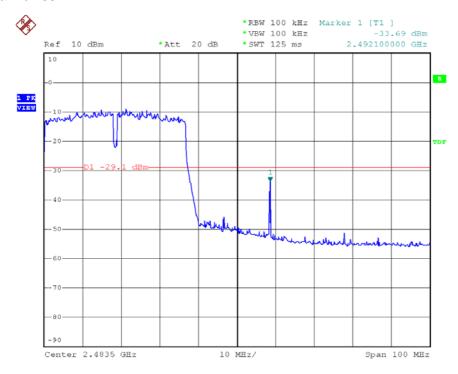
Modulation Standard: 802.11MIMO+CB (300Mbps) – TX0 Channel: 03



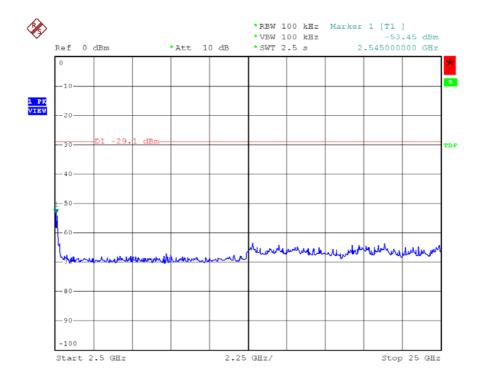
Date: 15.AUG.2006 15:02:50



Date: 15.AUG.2006 15:03:40



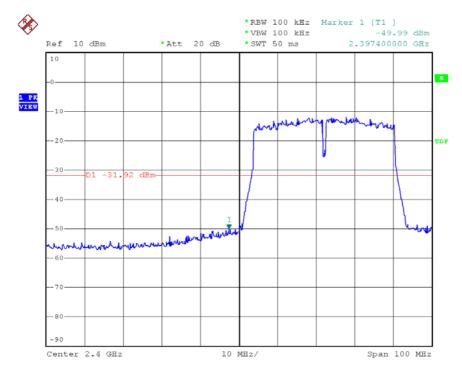
Date: 15.AUG.2006 14:57:43



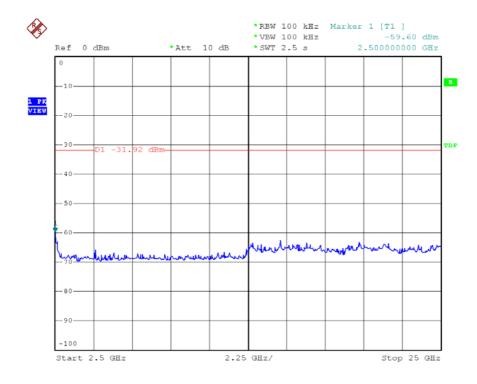
Date: 15.AUG.2006 14:58:29

$Modulation \ Standard: \ 802.11MIMO+CB \ (300Mbps)-TX1$

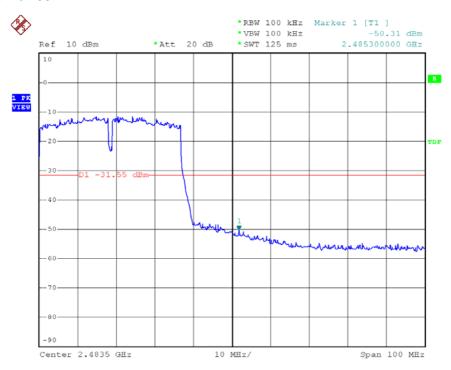
Channel: 03



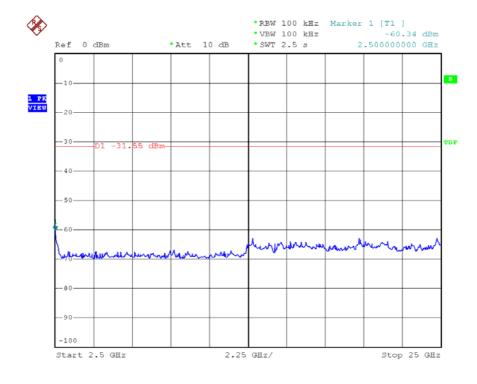
Date: 15.AUG.2006 16:00:25



Date: 15.AUG.2006 16:02:04



Date: 15.AUG.2006 16:03:46



Date: 15.AUG.2006 16:04:51

FCC Test Report: FI 06051201-C

8.6 Restrict band emission Measurement Data

Test Adapter 1: DV-1280-3

Modulation Standard: IEEE 802.11b (11Mbps)

Test Date: Aug. 29, 2006 Temperature: 25 Humidity: 67% Atmospheric pressure: 1007 hPa

a) Channel 1

Frequency (MHz)	Ant-Pol H/V	Meter Reading	Corrected Factor	Result (dBuV/m)	Remark	Limit((dBu)		Margin (dB)	Table (Deg.)	Ant High
(····-)	. ,, .			(======================================		Peak	Ave.	(3-2)	(= -3-)	(m)
2345.904	Н	48.65	-0.89	47.76	Peak	74	54	-26.24	195	1.2
2339.988	Η	36.94	-0.91	36.03	Ave	74	54	-17.97	195	1.2
2329.584	V	50.17	-0.95	49.22	Peak	74	54	-24.78	177	1.0
2349.984	V	38.62	-0.88	37.74	Ave	74	54	-16.26	177	1.0

b) Channel 11

Frequency (MHz)	Ant-Pol H/V	Meter Reading	Corrected Factor	Result (dBuV/m)	Remark	Limit((dBu)		Margin (dB)	Table (Deg.)	Ant High
		3		(* * * *)		Peak	Ave.	((-3)	(m)
2494.452	Н	48.13	-0.42	47.71	Peak	74	54	-26.29	195	1.2
2500.000	Н	37.02	-0.40	36.62	Ave	74	54	-17.38	195	1.2
2498.556	V	48.87	-0.40	48.47	Peak	74	54	-25.53	177	1.0
2500.000	V	37.12	-0.40	36.72	Ave	74	54	-17.28	177	1.0

Modulation Standard: 802.11g (54Mbps)

Test Date: Aug. 29, 2006 Temperature: 25 Humidity: 67% Atmospheric pressure: 1007 hPa

a) Channel 1

	Frequency (MHz)	Ant-Pol H/V	Meter Reading	Corrected Factor	Result (dBuV/m)	Remark	Limit((dBu)	@3m V/m)	Margin (dB)	Table (Deg.)	Ant High
	(····-)				(======================================		Peak	Ave.	(3.2)	(= -3-)	(m)
Ī	2336.928	Н	48.75	-0.92	47.83	Peak	74	54	-26.17	195	1.2
	2339.988	Н	36.84	-0.91	35.93	Ave	74	54	-18.07	195	1.2
	2350.188	V	50.84	-0.88	49.96	Peak	74	54	-24.04	177	1.0
Ī	2349.984	V	38.45	-0.88	37.57	Ave	74	54	-16.43	177	1.0

b) Channel 11

Frequency (MHz)	Ant-Pol H/V	Meter Reading	Corrected Factor	Result (dBuV/m)	Remark	Limit((dBu)	@3m V/m)	Margin (dB)	Table (Deg.)	Ant High
		3		(* * * /		Peak	Ave.	((-3)	(m)
2500.000	Н	48.79	-0.40	48.39	Peak	74	54	-25.61	195	1.2
2500.000	Н	36.92	-0.40	36.52	Ave	74	54	-17.48	195	1.2
2499.886	V	49.23	-0.40	48.83	Peak	74	54	-25.17	177	1.0
2500.000	V	37.13	-0.40	36.73	Ave	74	54	-17.27	177	1.0

Notes:

- 1. Result = Meter Reading + Factor
- 2. Factor = Antenna Factor + Cable Loss Amplifier
- 3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and video bandwidth is 3 MHz for Peak detection at frequency above 1GHz.
- 4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz

Test Adapter 1: DV-1280-3

Modulation Standard: IEEE 802.11MIMO (144Mbps)

Test Date: Aug. 29, 2006 Temperature: 25 Humidity: 67% Atmospheric pressure: 1007 hPa

c) Channel 1

Frequency (MHz)	Ant-Pol H/V	Meter Reading	Corrected Factor	Result (dBuV/m)	Remark	Limit((dBu)		Margin (dB)	Table (Deg.)	Ant High
` '				, ,		Peak	Ave.	, ,	(-3)	(m)
2341.008	Н	48.64	-0.91	47.73	Peak	74	54	-26.27	195	1.2
2389.968	Н	36.76	-0.75	36.01	Ave	74	54	-17.99	195	1.2
2389.968	V	52.38	-0.75	51.63	Peak	74	54	-22.37	177	1.0
2389.968	V	40.64	-0.75	39.89	Ave	74	54	-14.11	177	1.0

d) Channel 11

Frequency (MHz)	Ant-Pol H/V	Meter Reading	Corrected Factor	Result (dBuV/m)	Remark	Limit((dBu		Margin (dB)	Table (Deg.)	Ant High
		3		(* * * * * * * * * * * * * * * * * * *		Peak	Ave.	((-3)	(m)
2493.882	Н	48.41	-0.42	47.99	Peak	74	54	-26.01	195	1.2
2500.000	Н	37.01	-0.40	36.61	Ave	74	54	-17.39	195	1.2
2499.202	V	49.51	-0.40	49.11	Peak	74	54	-24.89	177	1.0
2499.696	V	37.18	-0.40	36.78	Ave	74	54	-17.22	177	1.0

Modulation Standard: IEEE 802.11MIMO (300Mbps)

Test Date: Aug. 29, 2006 Temperature: 25 Humidity: 67% Atmospheric pressure: 1007 hPa

e) Channel 3

Frequency (MHz)	Ant-Pol H/V	Meter Reading	Corrected Factor	Result (dBuV/m)	Remark	Limit(dBu	@3m V/m)	Margin (dB)	Table (Deg.)	Ant High
, ,		3		(* * * *)		Peak	Ave.	((-3)	(m)
2382.114	Н	60.02	-0.78	59.24	Peak	74	54	-14.76	195	1.2
2381.808	Н	48.16	-0.78	47.38	Ave	74	54	-26.62	195	1.2
2382.114	V	58.11	-0.78	57.33	Peak	74	54	-16.67	177	1.0
2381.808	V	46.30	-0.78	45.52	Ave	74	54	-8.48	177	1.0

f) Channel 09

	uency Hz)	Ant-Pol H/V	Meter Reading	Corrected Factor	Result (dBuV/m)	Remark	Limit((dBu)		Margin (dB)	Table (Deg.)	Ant High
,	,		3		(* * * * /		Peak	Ave.	(-)	(-3)	(m)
2494	1.186	Н	49.17	-0.42	48.75	Peak	74	54	-25.25	195	1.2
2491	1.982	Н	38.82	-0.43	38.39	Ave	74	54	-15.61	195	1.2
2492	2.096	V	56.99	-0.43	56.56	Peak	74	54	-17.44	177	1.0
2491	1.982	V	45.22	-0.43	44.79	Ave	74	54	-29.21	177	1.0

Test Adapter 2: DSA-15P-12US 120150 Modulation Standard: IEEE 802.11b (11Mbps)

Test Date: Aug. 29, 2006 Temperature: 25 Humidity: 67% Atmospheric pressure: 1007 hPa

g) Channel 1

Frequency (MHz)	Ant-Pol H/V	Meter Reading	Corrected Factor	Result (dBuV/m)	Remark	Limit((dBu		Margin (dB)	Table (Deg.)	Ant High
()				(0.2 0.1111)		Peak	Ave.	(3.2)	(= -3-)	(m)
2345.904	Н	48.93	-0.89	48.04	Peak	74	54	-25.96	195	1.2
2339.768	Н	36.75	-0.91	35.84	Ave	74	54	-18.16	195	1.2
2329.584	V	50.37	-0.95	49.42	Peak	74	54	-24.58	177	1.0
2349.988	V	38.79	-0.88	37.91	Ave	74	54	-16.09	177	1.0

h) Channel 11

Frequency (MHz)	Ant-Pol H/V	Meter Reading	Corrected Factor	Result (dBuV/m)	Remark	Limit((dBu)		Margin (dB)	Table (Deg.)	Ant High
()				(======================================		Peak	Ave.	(=)	(= -3-)	(m)
2500.000	Н	48.16	-0.40	47.76	Peak	74	54	-26.24	195	1.2
2500.000	Н	37.39	-0.40	36.99	Ave	74	54	-17.01	195	1.2
2494.452	V	48.93	-0.42	48.51	Peak	74	54	-25.49	177	1.0
2500.000	V	38.24	-0.40	37.84	Ave	74	54	-16.16	177	1.0

Modulation Standard: 802.11g (54Mbps)

Test Date: Aug. 29, 2006 Temperature: 25 Humidity: 67% Atmospheric pressure: 1007 hPa

c) Channel 1

Frequency (MHz)	Ant-Pol H/V	Meter Reading	Corrected Factor	Result (dBuV/m)	Remark	Limit((dBu)		Margin (dB)	Table (Deg.)	Ant High
, ,		3		(3 2 2 7		Peak	Ave.	((-3)	(m)
2336.928	Н	48.37	-0.92	47.45	Peak	74	54	-26.55	195	1.2
2339.968	Η	36.24	-0.91	35.33	Ave	74	54	-18.67	195	1.2
2349.984	V	50.83	-0.88	49.95	Peak	74	54	-24.05	177	1.0
2349.984	V	38.69	-0.88	37.81	Ave	74	54	-16.19	177	1.0

d) Channel 11

Frequency (MHz)	Ant-Pol H/V	Meter Reading	Corrected Factor	Result (dBuV/m)	Remark	Limit((dBu)		Margin (dB)	Table (Deg.)	Ant High
(/		3		(* * * *)		Peak	Ave.	(-)	(-3)	(m)
2500.000	Н	48.83	-0.40	48.43	Peak	74	54	-25.57	195	1.2
2500.000	Ι	37.15	-0.40	36.75	Ave	74	54	-17.25	195	1.2
2499.886	V	49.12	-0.40	48.72	Peak	74	54	-25.28	177	1.0
2500.000	V	38.05	-0.40	37.65	Ave	74	54	-16.35	177	1.0

Notes:

- 1. Result = Meter Reading + Factor
- 2. Factor = Antenna Factor + Cable Loss Amplifier
- 3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and video bandwidth is 3 MHz for Peak detection at frequency above 1GHz.
- 4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz

Test Adapter 2: DSA-15P-12US 120150

Modulation Standard: IEEE 802.11MIMO (144Mbps)

Test Date: Aug. 29, 2006 Temperature: 25 Humidity: 67% Atmospheric pressure: 1007 hPa

i) Channel 1

Frequency (MHz)	Ant-Pol H/V	Meter Reading	Corrected Factor	Result (dBuV/m)	Remark	Limit((dBu)	@3m V/m)	Margin (dB)	Table (Deg.)	Ant High
, ,		3		(* * * *)		Peak	Ave.	(-)	(-3)	(m)
2341.010	Н	48.73	-0.91	47.82	Peak	74	54	-26.18	195	1.2
2389.968	Н	36.83	-0.75	36.08	Ave	74	54	-17.92	195	1.2
2389.968	V	52.41	-0.75	51.66	Peak	74	54	-22.34	177	1.0
2389.968	V	40.73	-0.75	39.98	Ave	74	54	-14.02	177	1.0

j) Channel 11

Frequency (MHz)	Ant-Pol H/V	Meter Reading	Corrected Factor	Result (dBuV/m)	Remark	Limit((dBu		Margin (dB)	Table (Deg.)	Ant High
				,		Peak	Ave.	,	(3,	(m)
2493.872	Н	48.37	-0.42	47.95	Peak	74	54	-26.05	195	1.2
2500.000	Н	37.09	-0.40	36.69	Ave	74	54	-17.31	195	1.2
2499.214	V	49.53	-0.40	49.13	Peak	74	54	-24.87	177	1.0
2499.696	V	37.23	-0.40	36.83	Ave	74	54	-17.17	177	1.0

Modulation Standard: IEEE 802.11MIMO (300Mbps)

Test Date: Aug. 29, 2006 Temperature: 25 Humidity: 67% Atmospheric pressure: 1007 hPa

k) Channel 3

Frequency (MHz)	Ant-Pol H/V	Meter Reading	Corrected Factor	Result (dBuV/m)	Remark	Limit(dBu	@3m V/m)	Margin (dB)	Table (Deg.)	Ant High
, ,		3		(* * * /		Peak	Ave.	(-)	(-3)	(m)
2382.117	Н	60.52	-0.78	59.74	Peak	74	54	-14.26	195	1.2
2381.812	Н	48.19	-0.78	47.41	Ave	74	54	-6.59	195	1.2
2382.114	V	58.13	-0.78	57.35	Peak	74	54	-16.65	177	1.0
2381.834	V	46.30	-0.78	45.52	Ave	74	54	-8.48	177	1.0

l) Channel 09

	Frequency (MHz)	Ant-Pol H/V	Meter Reading	Corrected Factor	Result (dBuV/m)	Remark	Limit((dBu)		Margin (dB)	Table (Deg.)	Ant High
	(1411 12)			3.3101	(=== = 1,)		Peak	Ave.	(=-)	(= 09.)	(m)
Ī	2494.196	Н	49.17	-0.42	48.75	Peak	74	54	-25.25	195	1.2
Ī	2491.982	Н	38.99	-0.43	38.26	Ave	74	54	-15.74	195	1.2
	2492.096	V	56.94	-0.43	56.51	Peak	74	54	-17.49	177	1.0
	2491.982	V	45.31	-0.43	44.88	Ave	74	54	-9.12	177	1.0

9. Power Spectral Density

9.1 Test Limit

The Maximum of Power Spectral Density Measurement is 8dBm.

9.2 Test Procedures

- 1. The transmitter output was connected to spectrum analyzer.
- 2. The spectrum analyzer's resolution bandwidth were set at 3KHz RBW and 30KHz VBW as that of the fundamental frequency. Set the sweep time=span/3KHz.
- 3. The power spectral density was measured and recorded.
- 4. The Sweep time is allowed to be longer than span/3KHz for a full response of the mixer in the spectrum analyzer.

9.3 Test Setup Layout:



9.4 List of Measuring Equipment Used

Instrument/Ancillary	Model No.	Manufacturer	Serial No.	Valid Date.
Spectrum Analyzer	FSP40	R&S	100047	2007/01/16

9.5 Test Result and Data

(1) Modulation Standard: IEEE 802.11b (11Mbps)

Test Date: Aug. 15, 2006 Temperature: 26 Humidity: 68% Atmospheric pressure: 1006 hPa

Channel	Frequency	Maximum Power Density of 3 kHz Bandwidth (dBm)
01	2412	-13.98
06	2437	-13.66
11	2462	-13.67

(2) Modulation Standard: IEEE 802.11g (54Mbps)

Test Date: Aug. 15, 2006 Temperature: 26 Humidity: 68% Atmospheric pressure: 1006 hPa

Channal	Fraguenay	Maximum Power Density of 3 kHz Bandwidth
Channel	Frequency	(dBm)
01	2412	-21.70
06	2437	-21.62
11	2462	-21.45

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(3) Modulation Standard: IEEE 802.11MIMO (144Mbps)

Test Date: Aug. 15, 2006 Temperature: 26 Humidity: 68% Atmospheric pressure: 1006 hPa

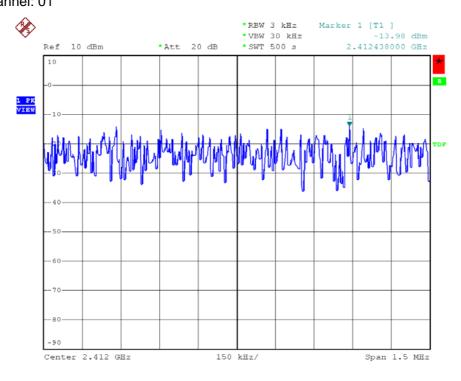
		Maximum Power	Maximum Power	Maximum Power
		Density	Density	Density
Channel	Frequency	of 3 kHz Bandwidth	of 3 kHz Bandwidth	of 3 kHz Bandwidth
		TX0	TX1	Total
		(dBm)	(dBm)	(dBm)
01	2412	-22.31	-21.99	-19.14
06	2437	-21.95	-21.52	-18.72
11	2462	-21.78	-21.28	-18.51

(4) Modulation Standard: IEEE 802.11MIMO (300Mbps)

Test Date: Aug. 15, 2006 Temperature: 26 Humidity: 68% Atmospheric pressure: 1006 hPa

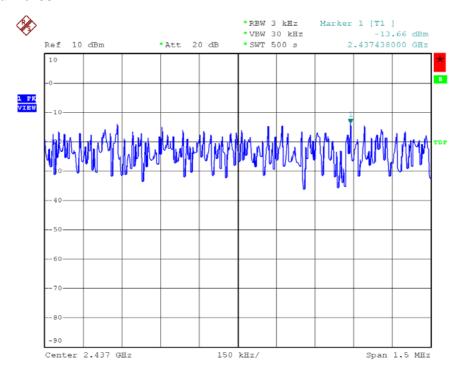
		Maximum Power	Maximum Power	Maximum Power
		Density	Density	Density
Channel	Frequency	of 3 kHz Bandwidth	of 3 kHz Bandwidth	of 3 kHz Bandwidth
		TX0	TX1	Total
		(dBm)	(dBm)	(dBm)
03	2422	-24.16	-26.06	-22.00
06	2437	-23.92	-25.82	-21.76
09	2452	-23.99	-25.72	-21.76

Modulation Standard: 802.11b (11Mbps) Channel: 01

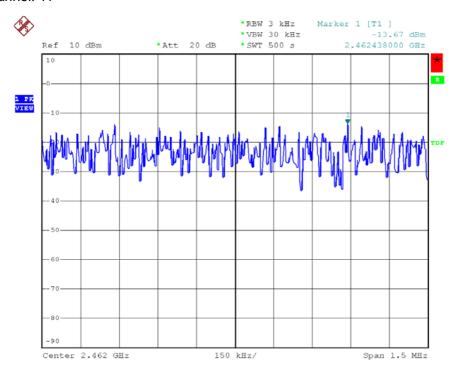


Date: 14.AUG.2006 17:19:57

Channel:06

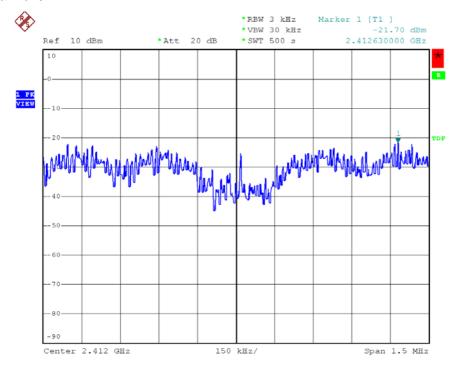


Date: 14.AUG.2006 17:09:11

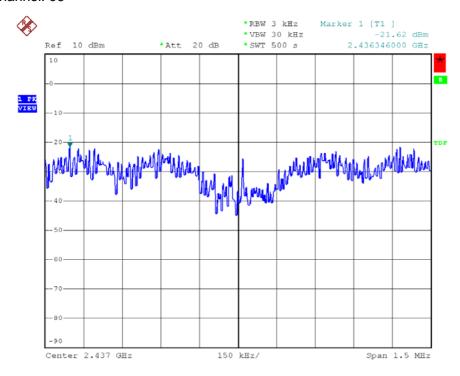


Date: 14.AUG.2006 16:52:33

Modulation Standard:802.11g (54Mbps) Channel:01

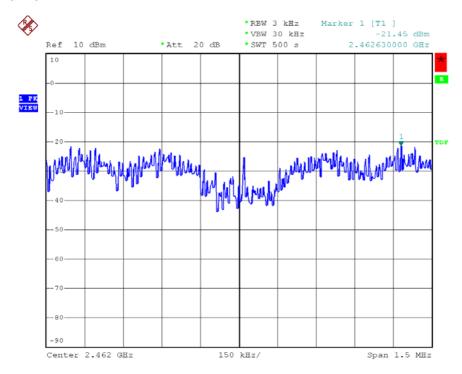


Date: 14.AUG.2006 18:09:31



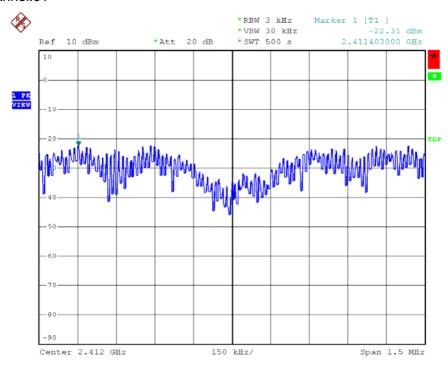
Date: 14.AUG.2006 18:00:15

Channel:11



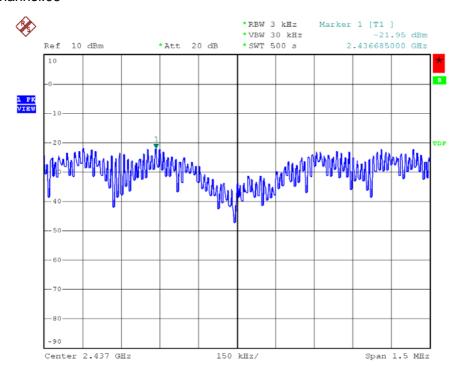
Date: 14.AUG.2006 17:50:47

Modulation Standard:802.11MIMO (144Mbps) – TX0 Channel:01

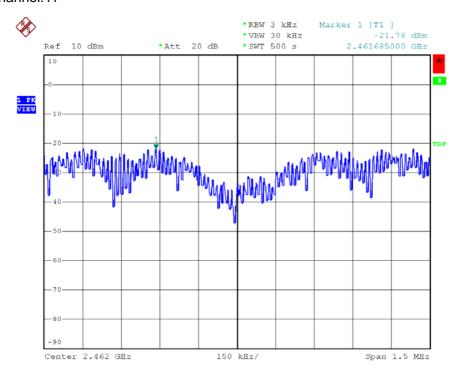


Date: 15.AUG.2006 10:23:33

Channel:06

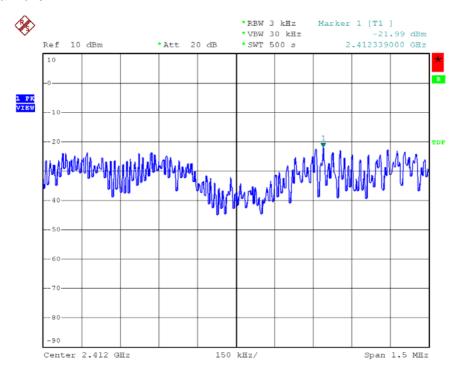


Date: 15.AUG.2006 10:34:28

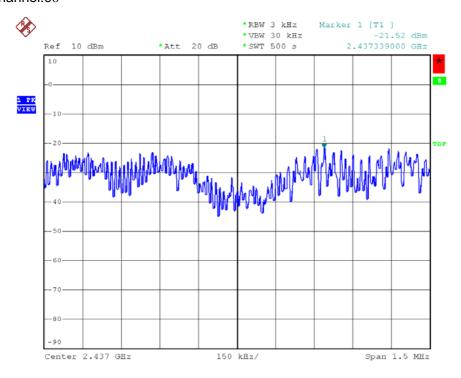


Date: 15.AUG.2006 10:43:48

Modulation Standard:802.11MIMO (144Mbps) – TX1 Channel:01

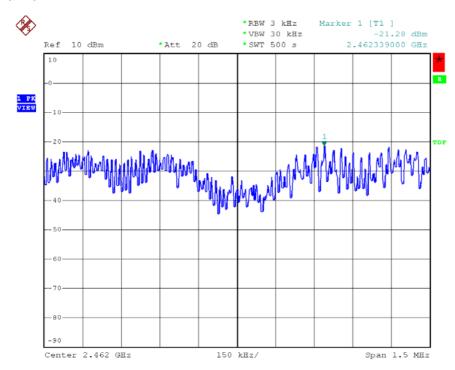


Date: 15.AUG.2006 11:35:04



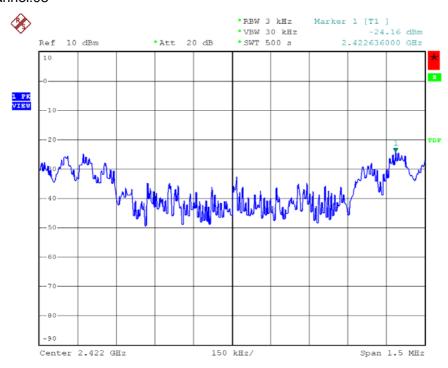
Date: 15.AUG.2006 11:23:07

Channel:11



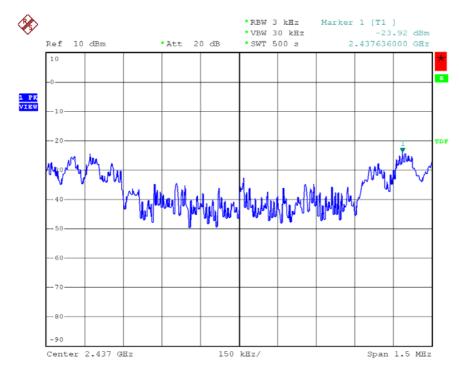
Date: 15.AUG.2006 11:13:03

Modulation Standard:802.11MIMO+CB (300Mbps) – TX0 Channel:03

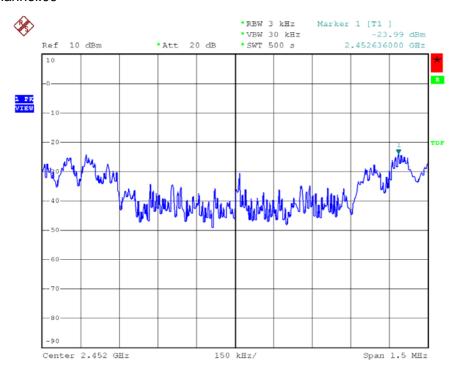


Date: 15.AUG.2006 14:42:59

Channel:06

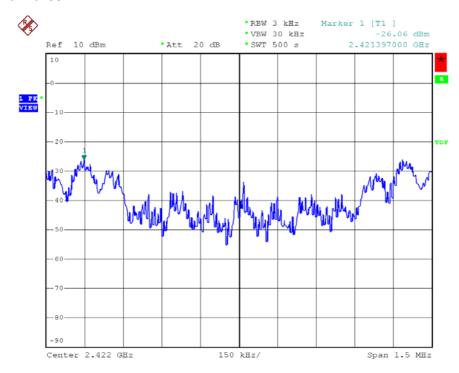


Date: 15.AUG.2006 14:33:32

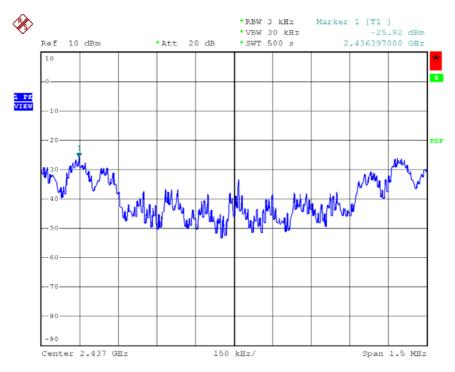


Date: 15.AUG.2006 14:54:41

Modulation Standard:802.11MIMO (300Mbps) – TX1 Channel:03

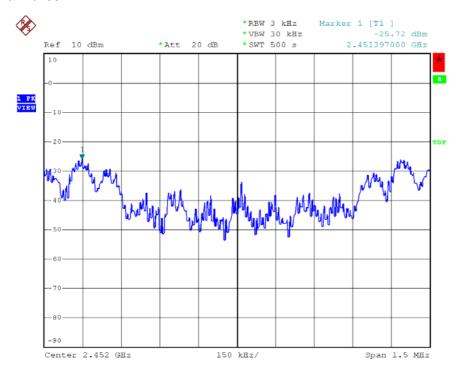


Date: 15.AUG.2006 15:57:50



Date: 15.AUG.2006 15:46:41

Channel:09



Date: 15.AUG.2006 15:36:54

10. Restricted Bands of Operation

Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.09000 - 0.11000	16.42000 - 16.42300	399.9 – 410.0	4.500 - 5.250
0.49500 - 0.505**	16.69475 – 16.69525	608.0 - 614.0	5.350 - 5.460
2.17350 - 2.19050	16.80425 – 16.80475	960.0 - 1240.0	7.250 – 7.750
4.12500 - 4.12800	25.50000 – 25.67000	1300.0 – 1427.0	8.025 - 8.500
4.17725 – 4.17775	37.50000 – 38.25000	1435.0 – 1626.5	9.000 - 9.200
4.20725 - 4.20775	73.00000 – 74.60000	1645.5 – 1646.5	9.300 - 9.500
6.21500 - 6.21800	74.80000 – 75.20000	1660.0 – 1710.0	10.600 – 12.700
6.26775 - 6.26825	108.00000 – 121.94000	1718.8 – 1722.2	13.250 - 13.400
6.31175 – 6.31225	123.00000 – 138.00000	2200.0 - 2300.0	14.470 – 14.500
8.29100 - 8.29400	149.90000 – 150.05000	2310.0 – 2390.0	15.350 – 16.200
8.36200 - 8.36600	156.52475 – 156.52525	2483.5 – 2500.0	17.700 – 21.400
8.37625 - 8.38675	156.70000 – 156.90000	2655.0 - 2900.0	22.010 – 23.120
8.41425 - 8.41475	162.01250 – 167.17000	3260.0 - 3267.0	23.600 - 24.000
12.29000 - 12.29300	167.72000 – 173.20000	3332.0 - 3339.0	31.200 – 31.800
12.51975 – 12.52025	240.00000 – 285.00000	3345.8 - 3358.0	36.430 - 36.500
12.57675 – 12.57725	322.00000 - 335.40000	3600.0 - 4400.0	Above 38.6
13.36000 – 13.41000			

^{**:} Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz

10.1 Labeling Requirement

The device shall bear the following statement in a conspicuous location on the device:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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