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FCC RADIO TEST REPORT

Applicant's company	**Realtek Semiconductor Corp.**
Applicant Address	No. 2, Innovation Road II, Hsinchu Science Park, Hsinchu 300, Taiwan
FCC ID	**TX2RTL8188CEB8**
Manufacturer's company	**Realtek Semiconductor Corp.**
Manufacturer Address	No. 2, Innovation Road II, Hsinchu Science Park, Hsinchu 300, Taiwan

Product Name	802.11b/g/n RTL8188CE Combo miniCard
Brand Name	Realtek
Model Name	RTL8188CEB8
Test Rule	47 CFR FCC Part 15 Subpart C § 15.247
Test Freq. Range	2400 ~ 2483.5MHz
Received Date	Jul. 23, 2010
Final Test Date	Sep. 29, 2010
Submission Type	Original Equipment

Statement

Test result included in this report is for the IEEE 802.11n and IEEE 802.11b/g part of the product.

The test result in this report refers exclusively to the presented test model / sample.

Without written approval of SPORTON International Inc., the test report shall not be reproduced except in full.

The measurements and test results shown in this test report were made in accordance with the procedures and found in compliance with the limit given in **ANSI C63.4-2003** and **47 CFR FCC Part 15 Subpart C**.

The test equipment used to perform the test is calibrated and traceable to NML/ROC.

Testing Laboratory
1190

Table of Contents

History of This Test Report

Original Issue Date: Oct. 05, 2010

Report No.: FR080215AA

■ No additional attachment.

□ Additional attachment were issued as following record:

Attachment No.	Issue Date	Description

Certificate No.: CB9910005

1. CERTIFICATE OF COMPLIANCE

Product Name	:	802.11b/g/n RTL8188CE Combo miniCard
Brand Name	:	Realtek
Model Name	:	RTL8188CEB8
Applicant	:	Realtek Semiconductor Corp.
Test Rule Part(s)	:	47 CFR FCC Part 15 Subpart C § 15.247

Sporton International as requested by the applicant to evaluate the EMC performance of the product sample received on Jul. 23, 2010 would like to declare that the tested sample has been evaluated and found to be in compliance with the tested rule parts. The data recorded as well as the test configuration specified is true and accurate for showing the sample's EMC nature.

Jordan Hsiao 2010.10.12

Jordan Hsiao

SPORTON INTERNATIONAL INC.

2. SUMMARY OF THE TEST RESULT

Applied Standard: 47 CFR FCC Part 15 Subpart C				
Part	**Rule Section**	**Description of Test**	**Result**	**Under Limit**
4.1	15.207	AC Power Line Conducted Emissions	Complies	15.41 dB
4.2	15.247(b)(3)	Conducted Peak Output Power	Complies	3.79 dB
4.3	15.247(e)	Power Spectral Density	Complies	17.51 dB
4.4	15.247(a)(2)	6dB Spectrum Bandwidth	Complies	-
4.5	15.247(d)	Radiated Emissions	Complies	0.16 dB
4.6	15.247(d)	Band Edge Emissions	Complies	0.30 dB
4.7	15.203	Antenna Requirements	Complies	-

Test Items	Uncertainty	Remark
AC Power Line Conducted Emissions	±2.3dB	Confidence levels of 95%
Maximum Conducted Output Power	±0.8dB	Confidence levels of 95%
Power Spectral Density	±0.5dB	Confidence levels of 95%
6dB Spectrum Bandwidth	$\pm 8.5\times10^{-8}$	Confidence levels of 95%
Radiated Emissions (9kHz~30MHz)	±0.8dB	Confidence levels of 95%
Radiated Emissions (30MHz~1000MHz)	±1.9dB	Confidence levels of 95%
Radiated / Band Edge Emissions (1GHz~18GHz)	±1.9dB	Confidence levels of 95%
Radiated Emissions (18GHz~40GHz)	±1.9dB	Confidence levels of 95%
Temperature	±0.7℃	Confidence levels of 95%
Humidity	±3.2%	Confidence levels of 95%
DC / AC Power Source	±1.4%	Confidence levels of 95%

3. GENERAL INFORMATION

3.1. Product Details

IEEE 802.11n

Items	Description
Product Type	WLAN (1TX, 1RX)
Radio Type	Intentional Transceiver
Power Type	From Host System
Modulation	see the below table for IEEE 802.11n
Data Modulation	OFDM (BPSK / QPSK / 16QAM / 64QAM)
Data Rate (Mbps)	see the below table for IEEE 802.11n
Frequency Range	2400 ~ 2483.5MHz
Channel Number	11 for 20MHz bandwidth ; 7 for 40MHz bandwidth
Channel Band Width (99%)	MCS0 (20MHz): 17.68 MHz ; MCS0 (40MHz): 36.16 MHz
Conducted Output Power	MCS0 (20MHz): 25.99 dBm ; MCS0 (40MHz): 25.13 dBm
Carrier Frequencies	Please refer to section 3.4
Antenna	Please refer to section 3.3

IEEE 802.11b/g

Items	Description
Product Type	WLAN (1TX, 1RX)
Radio Type	Intentional Transceiver
Power Type	From Host System
Modulation	DSSS for IEEE 802.11b ; OFDM for IEEE 802.11g
Data Modulation	DSSS (BPSK / QPSK / CCK) ; OFDM (BPSK / QPSK / 16QAM / 64QAM)
Data Rate (Mbps)	DSSS (1/ 2/ 5.5/11) ; OFDM (6/9/12/18/24/36/48/54)
Frequency Range	2400 ~ 2483.5MHz
Channel Number	11
Channel Band Width (99%)	11b: 15.04 MHz ; 11g: 16.52 MHz
Conducted Output Power	11b: 21.47 dBm ; 11g: 26.21 dBm
Carrier Frequencies	Please refer to section 3.4
Antenna	Please refer to section 3.3

Antenna & Band width

Antenna	Single (TX)	
Band width Mode	20 MHz	40 MHz
IEEE 802.11b	V	X
IEEE 802.11g	V	X
IEEE 802.11n	V	V

IEEE 802.11n spec

MCS Index	Nss	Modulation	R	NBPSC	NCBPS		NDBPS		Datarate(Mbps)			
									800nsGI		400nsGI	
					20MHz	40MHz	20MHz	40MHz	20MHz	40MHz	20MHz	40MHz
0	1	BPSK	1/2	1	52	108	26	54	6.5	13.5	7.200	15
1	1	QPSK	1/2	2	104	216	52	108	13.0	27.0	14.400	30
2	1	QPSK	3/4	2	104	216	78	162	19.5	40.5	21.700	45
3	1	16-QAM	1/2	4	208	432	104	216	26.0	54.0	28.900	60
4	1	16-QAM	3/4	4	208	432	156	324	39.0	81.0	43.300	90
5	1	64-QAM	2/3	6	312	648	208	432	52.0	108.0	57.800	120
6	1	64-QAM	3/4	6	312	648	234	486	58.5	121.5	65.000	135
7	1	64-QAM	5/6	6	312	648	260	540	65.0	135.0	72.200	150
8	2	BPSK	1/2	1	104	216	52	108	13.0	27.0	14.444	30
9	2	QPSK	1/2	2	208	432	104	216	26.0	54.0	28.889	60
10	2	QPSK	3/4	2	208	432	156	324	39.0	81.0	43.333	90
11	2	16-QAM	1/2	4	416	864	208	432	52.0	108.0	57.778	120
12	2	16-QAM	3/4	4	416	864	312	648	78.0	162.0	86.667	180
13	2	64-QAM	2/3	6	624	1296	416	864	104.0	216.0	115.556	240
14	2	64-QAM	3/4	6	624	1296	468	972	117.0	243.0	130.000	270
15	2	64-QAM	5/6	6	624	1296	520	1080	130.0	270.0	144.444	300

Symbol	Explanation
NSS	Number of spatial streams
R	Code rate
NBPSC	Number of coded bits per single carrier
NCBPS	Number of coded bits per symbol
NDBPS	Number of data bits per symbol
GI	guard interval

3.2. Accessories

N/A

3.3. Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	Remark
A	Wan shih	TN1WFI0009A	Dipole Antenna	IPEX	2.00	TX/RX
B	WNC	DQ661500301	PIFA Antenna	I-PEX	3.95	TX/RX
				I-PEX	3.90	TX/RX

Note:

1. There are 125 sets of antenna provided to this EUT, please refer to Appendix E for further information.

Connector 1 (Main): Ant. A / Ant. B

Connector 2 (Aux.): Ant. A / Ant. B

2. There are three types of EUT, and they would collocate with two types of antenna (Dipole and PIFA Antenna).

EUT 1 (Dual Port Diversity Transmitter):

EUT has two antenna ports, and it supports the antenna with WLAN and Bluetooth diversity function.

EUT 2 (Dual Port Fixed Path Transmitter):

EUT has two antenna ports, and the main antenna port supports Bluetooth function, and the auxiliary antenna port supports WLAN function.

EUT 3 (Single Port Diversity Transmitter):

EUT has one antenna port, and users could switch WLAN or Bluetooth function by themselves.

3. TX / RX Function:

<For EUT 1>:

For IEEE 802.11n mode (1TX/1RX):

Ant. A and Ant. B can be used as transmitting or receiving antenna.

For IEEE 802.11b/g mode (1TX/1RX):

Ant. A and Ant. B can be used as transmitting or receiving antenna.

The EUT supports the antenna with TX/RX diversity function. Due to the “Connector 1” generated higher output power than “Connector 2”, all the tests were base on this setting and recorded in this report.

<For EUT 2 & EUT 3>:

For IEEE 802.11n mode (1TX/1RX):

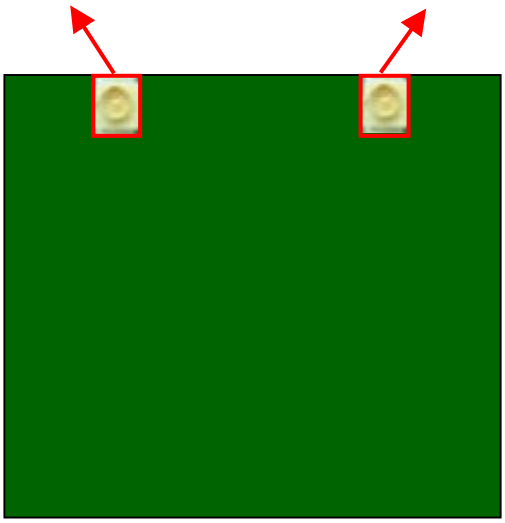
Ant. A or Ant. B can be used as transmitting/ receiving antenna.

For IEEE 802.11b/g mode (1TX/1RX):

Ant. A or Ant. B can be used as transmitting/ receiving antenna.

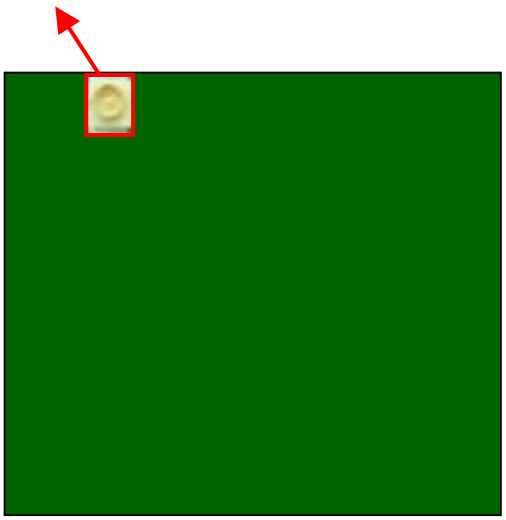
<For EUT 1 (Dual Port Diversity Transmitter) & EUT 2 (Dual Port Fixed Path Transmitter)>:

Connector 1(Main): TX/RX Connector 2(Aux): TX/RX



<For EUT 3 (Single Port Diversity Transmitter)>:

Connector 1: TX/RX



3.4. Table for Carrier Frequencies

There are two bandwidth systems for IEEE 802.11n.

For both 20MHz bandwidth systems, use Channel 1~Channel 11.

For both 40MHz bandwidth systems, use Channel 3~Channel 9.

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
2400~2483.5MHz	1	2412 MHz	7	2442 MHz
	2	2417 MHz	8	2447 MHz
	3	2422 MHz	9	2452 MHz
	4	2427 MHz	10	2457 MHz
	5	2432 MHz	11	2462 MHz
	6	2437 MHz	-	-

3.5. Table for Test Modes

Preliminary tests were performed in different data rate to find the worst radiated emission. The data rate shown in the table below is the worst-case rate with respect to the specific test item. Investigation has been done on all the possible configurations for searching the worst cases. The following table is a list of the test modes shown in this test report.

Test Items	Mode	Data Rate	Channel	Antenna
AC Power Line Conducted Emissions	Normal Link	-	-	A, B
Conducted Peak Output Power	MCS0/20MHz	6.5 Mbps	1/6/11	A, B
	MCS0/40MHz	13.5 Mbps	3/6/9	A, B
	11b/BPSK	1 Mbps	1/6/11	A, B
	11g/BPSK	6 Mbps	1/6/11	A, B
Power Spectral Density 6dB Spectrum Bandwidth	MCS0/20MHz	6.5 Mbps	1/6/11	A, B
	MCS0/40MHz	13.5 Mbps	3/6/9	A, B
	11b/BPSK	1 Mbps	1/6/11	A, B
	11g/BPSK	6 Mbps	1/6/11	A, B
Radiated Emissions 9kHz~1GHz	Normal Link	-	-	A, B
Radiated Emissions 1GHz~10th Harmonic	MCS0/20MHz	6.5 Mbps	1/6/11	A, B
	MCS0/40MHz	13.5 Mbps	3/6/9	A, B
	11b/BPSK	1 Mbps	1/6/11	A, B
	11g/BPSK	6 Mbps	1/6/11	A, B
Band Edge Emissions	MCS0/20MHz	6.5 Mbps	1/11	A, B
	MCS0/40MHz	13.5 Mbps	3/9	A, B
	11b/BPSK	1 Mbps	1/11	A, B
	11g/BPSK	6 Mbps	1/11	A, B

Note:

1. There are three types of EUT, and they would collocate with two types of antenna (Dipole and PIFA Antenna).
2. The EUT could be divided into main source and second source.
3. There are two shielded case types of EUT. (One piece splicing by soldering and assembly by soldering frame and cover.)

EUT 1 (Dual Port Diversity Transmitter-DPDT Type):

EUT has two antenna ports, and it supports the antenna with WLAN and Bluetooth diversity function.

EUT 2 (Dual Port Fixed Path Transmitter-Fixed Type):

EUT has two antenna ports, and the main antenna port supports Bluetooth function, and the auxiliary antenna port supports WLAN function.

EUT 3 (Single Port Diversity Transmitter-SPDT Type):

EUT has one antenna port, and users could switch WLAN or Bluetooth function by themselves,

All the test modes were listed as below.

<For Radiated Emissions Test Above 1GHz>:

<For Main Source>:

After testing, EUT 2 with assembly by soldering frame has been evaluated to be the worst case, thus it performed all measurement in this report, EUT 1 and EUT 3 with assembly by soldering frame only performed middle channel (each modulation).

Test Mode 1: EUT 2 (Main Source) + assembly by soldering frame and cover (shielded case type) + Dipole Antenna (Full Test)

Test Mode 2: EUT 2 (Main Source) + assembly by soldering frame and cover (shielded case type) + PIFA Antenna (Full Test)

Test Mode 3: EUT 1 (Main Source) + assembly by soldering frame and cover (shielded case type) + Dipole Antenna (Middle Channel Only)

Test Mode 4: EUT 1 (Main Source) + assembly by soldering frame and cover (shielded case type) + PIFA Antenna (Middle Channel Only)

Test Mode 5: EUT 3 (Main Source) + assembly by soldering frame and cover (shielded case type) + Dipole Antenna (Middle Channel Only)

Test Mode 6: EUT 3 (Main Source) + assembly by soldering frame and cover (shielded case type) + PIFA Antenna (Middle Channel Only)

<For Second Source>:

Due to EUT 2 with assembly by soldering frame has been evaluated to be the worst case for EUT main source, thus the test configuration would be performed for EUT second source.

Test Mode 1: EUT 2 (Second Source) + assembly by soldering frame and cover (shielded case type) + Dipole Antenna (Full Test)

Test Mode 2: EUT 2 (Second Source) + assembly by soldering frame and cover (shielded case type) + PIFA Antenna (Full Test)

<For Conducted Emissions Test, Radiated Emissions Test Below 1GHz and Other Tests>:

After testing, EUT 2 with assembly by soldering frame has been evaluated to be the worst case, thus measurement under conducted emissions test, radiated Emissions test below 1GHz and other tests will follow this same test configuration.

<For Main Source>:

Test Mode 1: EUT 2 (Main Source) + assembly by soldering frame and cover + Dipole Antenna

Test Mode 2: EUT 2 (Main Source) + assembly by soldering frame and cover + PIFA Antenna

<For Second Source>:

Test Mode 1: EUT 2 (Second Source) + assembly by soldering frame and cover + Dipole Antenna

Test Mode 2: EUT 2 (Second Source) + assembly by soldering frame and cover + PIFA Antenna

<For MPE and Co-location Test>:

The EUT could be applied with Bluetooth and wireless LAN function; therefore Maximum Permissible Exposure (please refer to Appendix C) and Co-location (please refer to Appendix D) tests are added for simultaneously transmit between Bluetooth and wireless LAN function.

Test Mode 1: EUT 2 (Main Source) + Wireless LAN function + Bluetooth function

Test Mode 2: EUT 2 (Second Source) + Wireless LAN function + Bluetooth function

3.6. Table for Testing Locations

Test Site No.	Site Category	Location	FCC Reg. No.	IC File No.	VCCI Reg. No
03CH03-HY	SAC	Hwa Ya	879474	IC 4086	-
CO04-HY	Conduction	Hwa Ya	879474	IC 4086	-
TH01-HY	OVEN Room	Hwa Ya	-	-	-

Open Area Test Site (OATS); Semi Anechoic Chamber (SAC); Fully Anechoic Chamber (FAC).

Please refer section 6 for Test Site Address.

3.7. Table for Supporting Units

Support Unit	Brand	Model	FCC ID
Notebook	DELL	M1330	E2K4965AGNM
Mouse	First Price	FP-M02	DoC
Modem	ACEEX	DM1414	IFAXDM1414
Wireless AP	Planex	GW-AP54SGX	N/A

3.8. Table for Parameters of Test Software Setting

During testing, Channel & Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

<For Main Source – EUT 2 (Mode 1 with Dipole Antenna)>:

Power Parameters of IEEE 802.11n

Test Software Version	Realtek		
Frequency	2412 MHz	2437 MHz	2462 MHz
MCS0 20MHz	43	52	44
Frequency	2422 MHz	2437 MHz	2452 MHz
MCS0 40MHz	43	46	44

Power Parameters of IEEE 802.11b/g

Test Software Version	Realtek		
Frequency	2412 MHz	2437 MHz	2462 MHz
IEEE 802.11b	40	44	41
IEEE 802.11g	45	52	46

<For Main Source - EUT 2 (Mode 2 with PIFA Antenna)>:

Power Parameters of IEEE 802.11n

Test Software Version	Realtek		
Frequency	2412 MHz	2437 MHz	2462 MHz
MCS0 20MHz	43	52	44
Frequency	2422 MHz	2437 MHz	2452 MHz
MCS0 40MHz	43	46	44

Power Parameters of IEEE 802.11b/g

Test Software Version	Realtek		
Frequency	2412 MHz	2437 MHz	2462 MHz
IEEE 802.11b	40	44	41
IEEE 802.11g	45	52	46

<For Second Source - EUT 2 (Mode 1 with Dipole Antenna)>:

Power Parameters of IEEE 802.11n

Test Software Version	Realtek		
Frequency	2412 MHz	2437 MHz	2462 MHz
MCS0 20MHz	46	54	44
Frequency	2422 MHz	2437 MHz	2452 MHz
MCS0 40MHz	45	49	46

Power Parameters of IEEE 802.11b/g

Test Software Version	Realtek		
Frequency	2412 MHz	2437 MHz	2462 MHz
IEEE 802.11b	41	46	42
IEEE 802.11g	48	54	47

<For Second Source - EUT 2 (Mode 2 with PIFA Antenna)>:

Power Parameters of IEEE 802.11n

Test Software Version	Realtek		
Frequency	2412 MHz	2437 MHz	2462 MHz
MCS0 20MHz	46	54	44
Frequency	2422 MHz	2437 MHz	2452 MHz
MCS0 40MHz	45	49	46

Power Parameters of IEEE 802.11b/g

Test Software Version	Realtek		
Frequency	2412 MHz	2437 MHz	2462 MHz
IEEE 802.11b	41	46	42
IEEE 802.11g	48	54	47

During the test, “Realtek” under WIN XP was executed the test program to control the EUT continuously transmit RF signal.

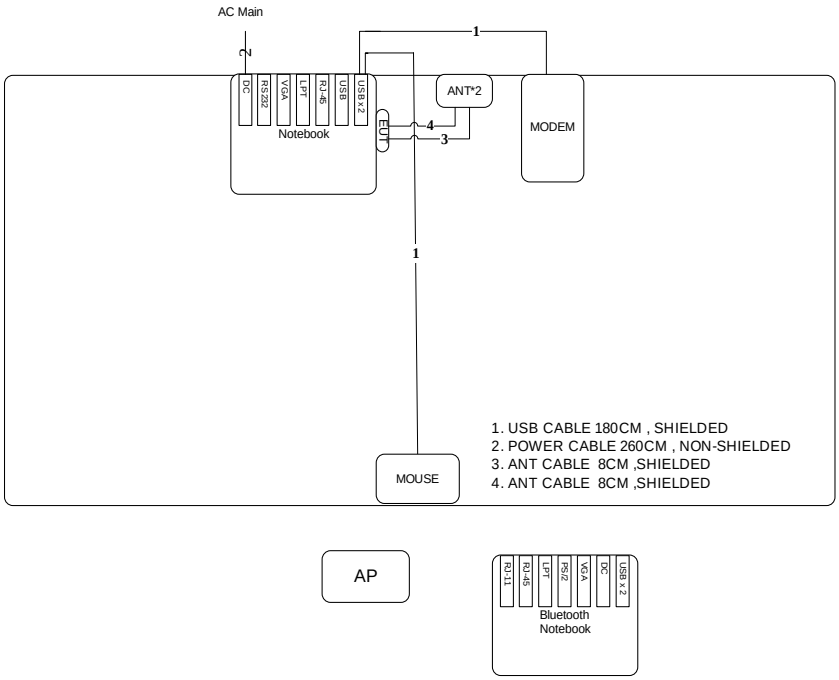
3.9. Test Configurations

3.9.1. Radiation Emissions Test Configuration

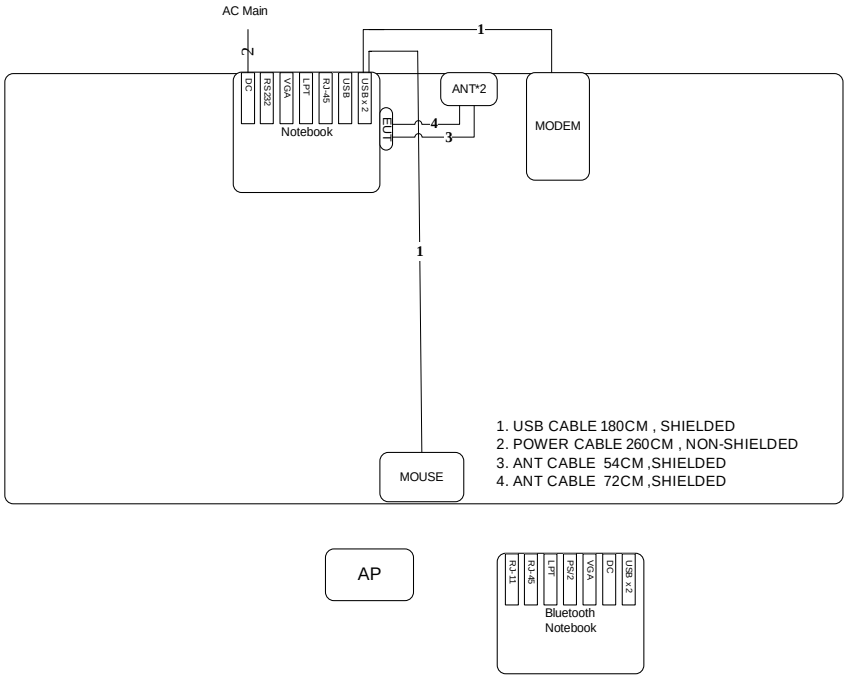
<For WLAN Function>:

Test Configuration: 9KHz~1GHz

<For Main Source, Second Source– EUT 2 (Mode 1 with Dipole Antenna)>



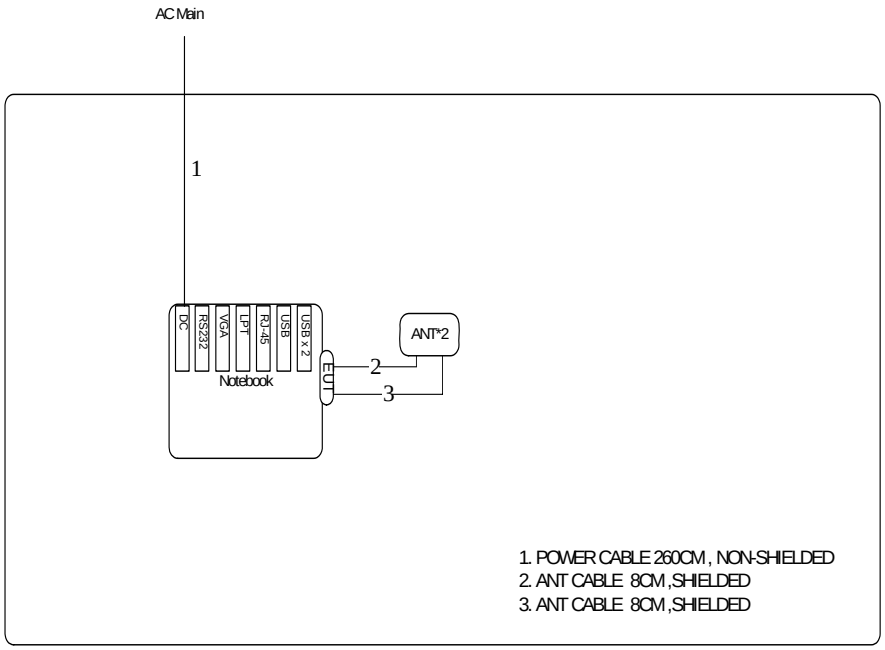
<For Main Source, Second Source– EUT 2 (Mode 2 with PIFA Antenna)>:



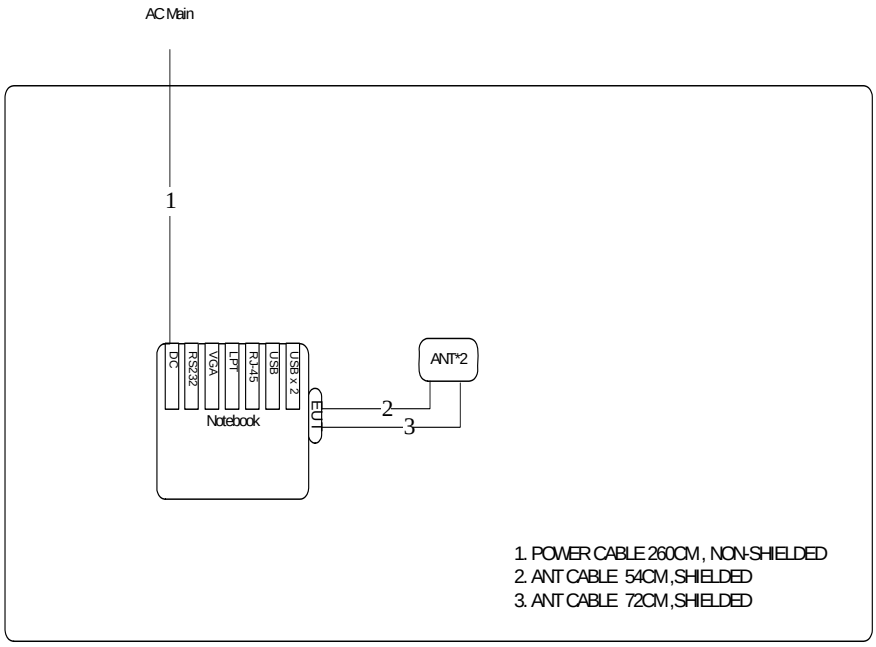
<For WLAN Function>:

Test Configuration: above 1GHz

<For Main Source, Second Source– EUT 2 (Mode 1 with Dipole Antenna)>

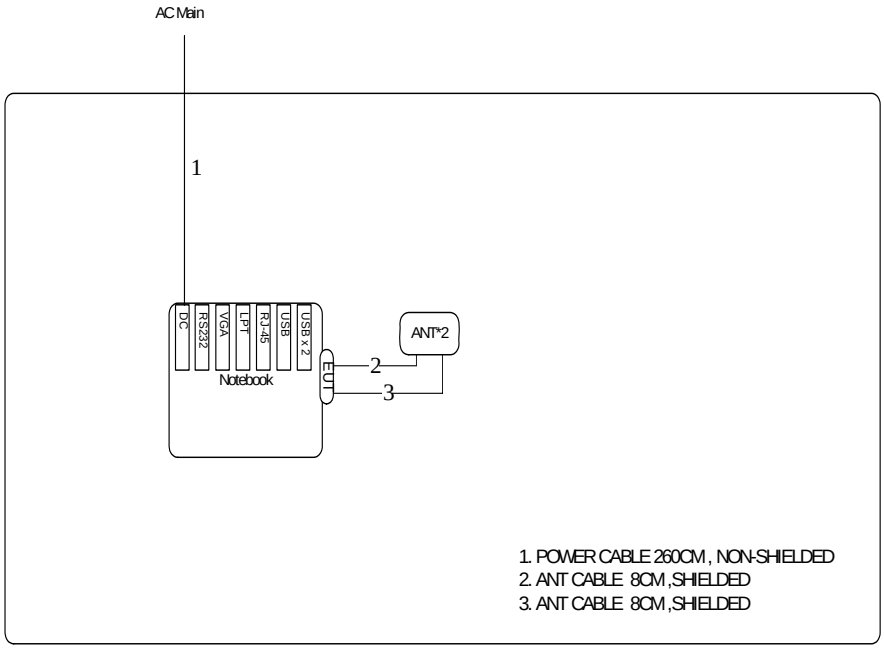


<For Main Source, Second Source– EUT 2 (Mode 2 with PIFA Antenna)>

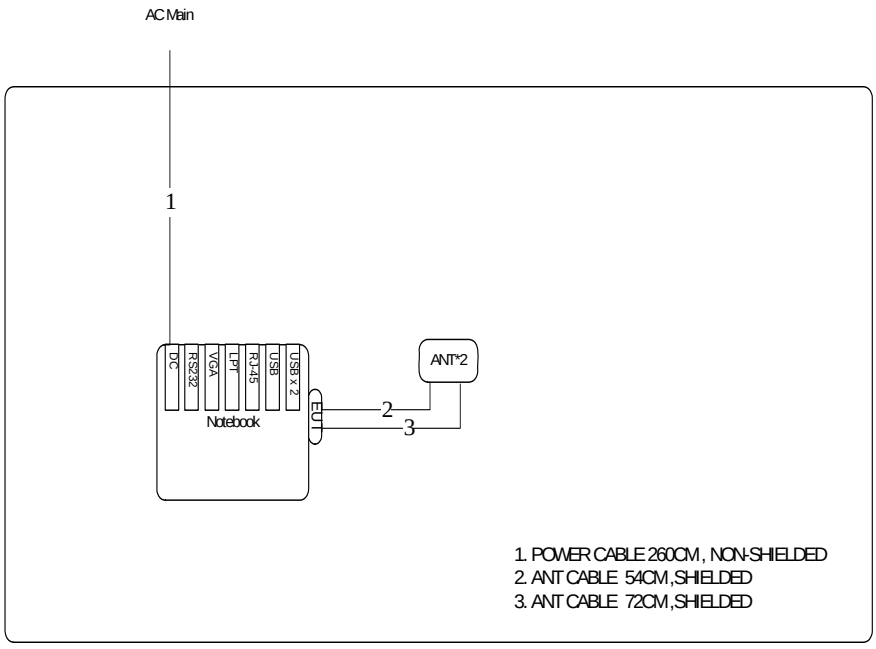


<For Co-location>:

<For Main Source, Second Source– EUT 2 (Mode 1 with Dipole Antenna)>

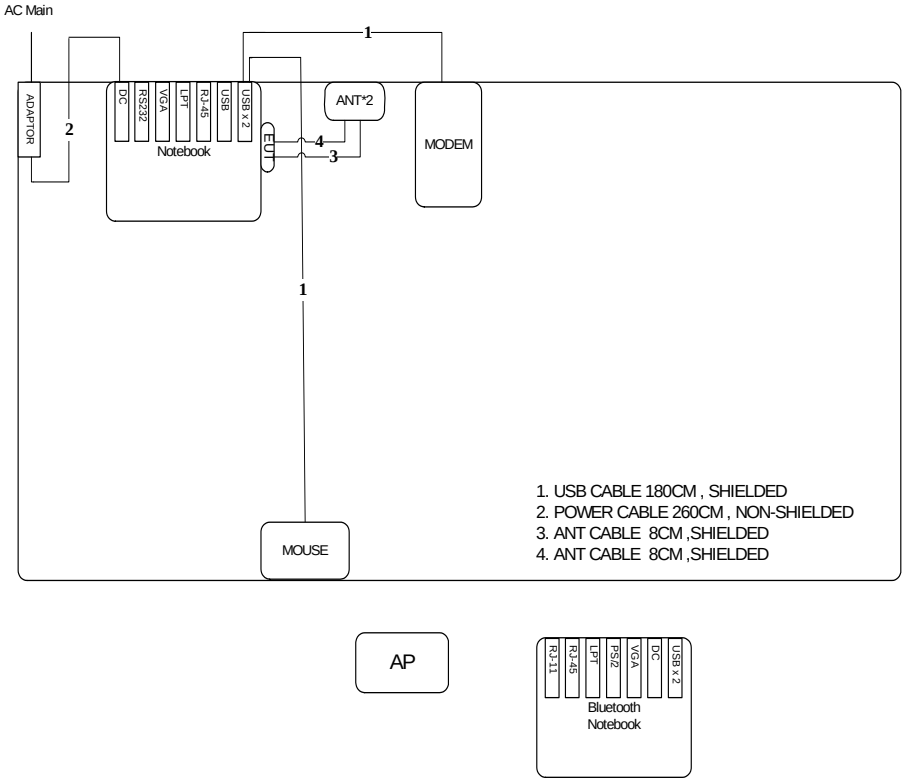


<For Main Source, Second Source– EUT 2 (Mode 2 with PIFA Antenna)>

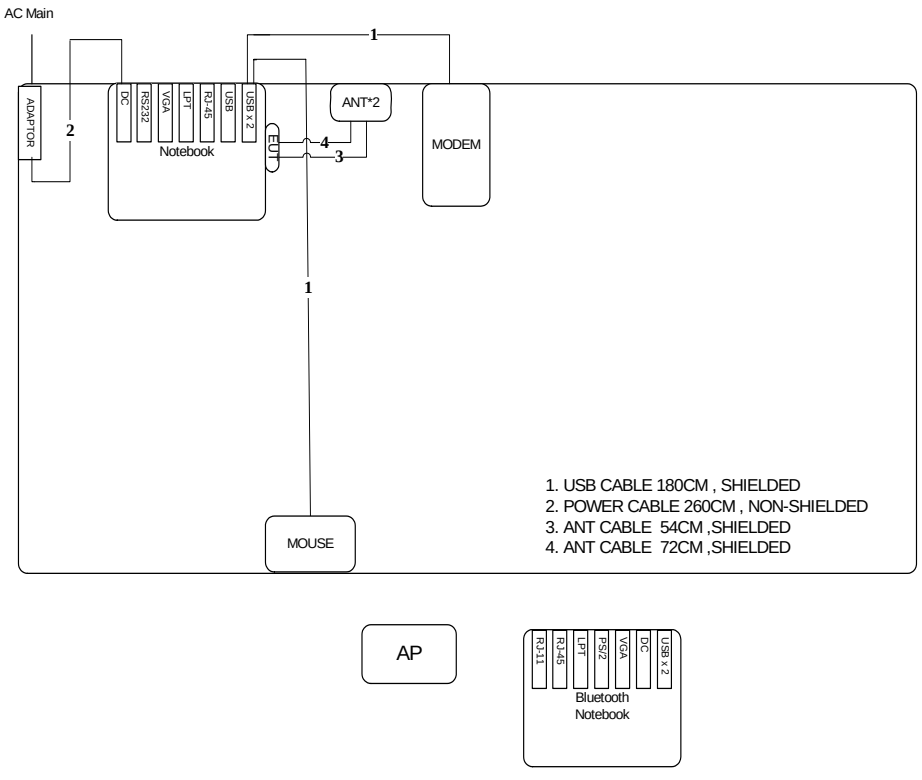


3.9.2. AC Power Line Conduction Emissions Test Configuration

<For Main Source, Second Source– EUT 2 (Mode 1 with Dipole Antenna)>:



<For Main Source, Second Source– EUT 2 (Mode 2 with PIFA Antenna)>:



4. TEST RESULT

4.1. AC Power Line Conducted Emissions Measurement

4.1.1. Limit

For this product which is designed to be connected to the AC power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed below limits table.

Frequency (MHz)	QP Limit (dBuV)	AV Limit (dBuV)
0.15~0.5	66~56	56~46
0.5~5	56	46
5~30	60	50

4.1.2. Measuring Instruments and Setting

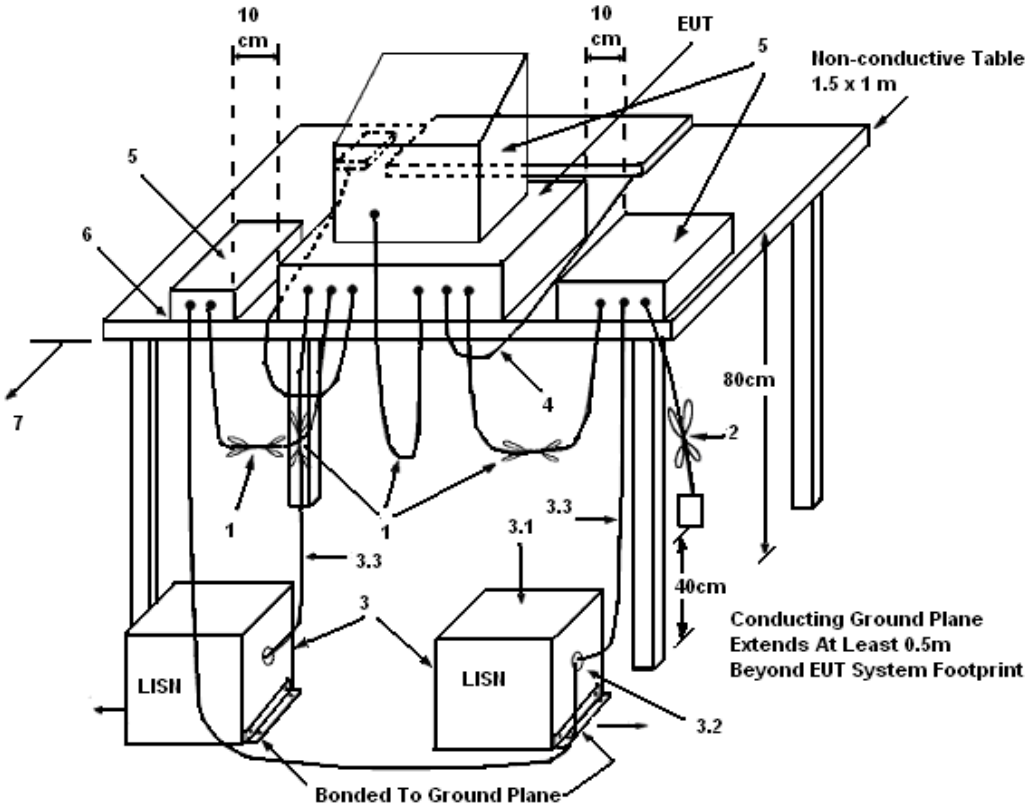
Please refer to section 5 of equipments list in this report. The following table is the setting of the receiver.

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 KHz

4.1.3. Test Procedures

1. Configure the EUT according to ANSI C63.4. The EUT or host of EUT has to be placed 0.4 meter far from the conducting wall of the shielding room and at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT or host of EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connected to the other LISNs. The LISN should provide 50uH/50ohms coupling impedance.
4. The frequency range from 150 KHz to 30 MHz was searched.
5. Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. The measurement has to be done between each power line and ground at the power terminal.

4.1.4. Test Setup Layout



LEGEND:

(1) Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.

(2) I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.

(3) EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50 Ω. LISN can be placed on top of, or immediately beneath, reference ground plane.

(3.1) All other equipment powered from additional LISN(s).

(3.2) Multiple outlet strip can be used for multiple power cords of non-EUT equipment.

(3.3) LISN at least 80 cm from nearest part of EUT chassis.

(4) Cables of hand-operated devices, such as keyboards, mice, etc., shall be placed as for normal use.

(5) Non-EUT components of EUT system being tested.

(6) Rear of EUT, including peripherals, shall all be aligned and flush with rear of tabletop.

(7) Rear of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane.

4.1.5. Test Deviation

There is no deviation with the original standard.

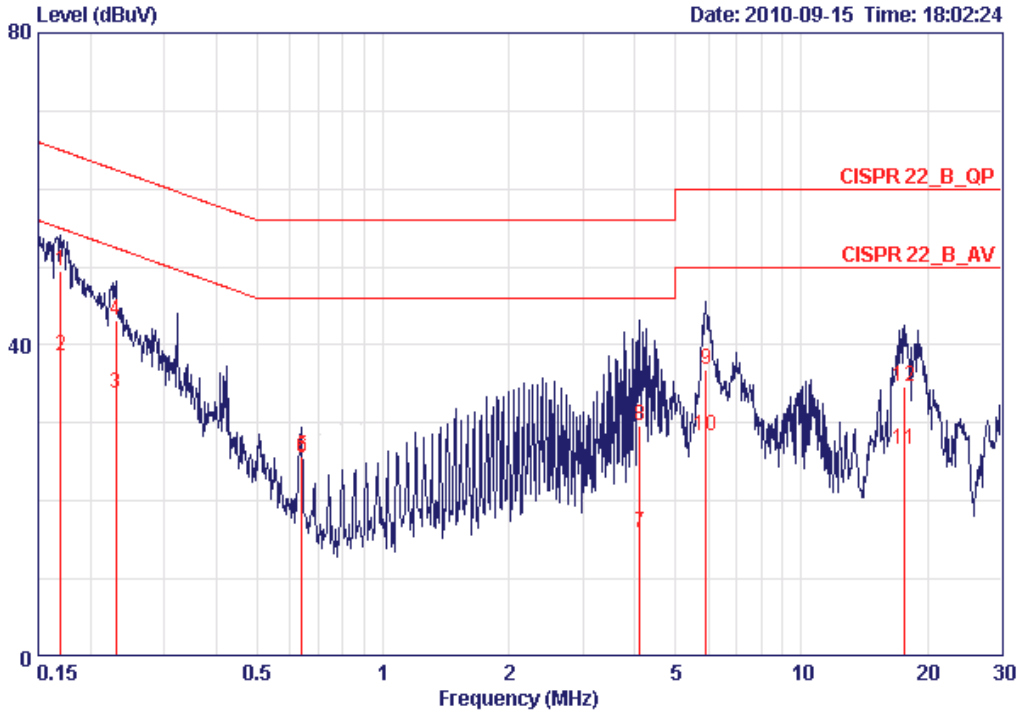
4.1.6. EUT Operation during Test

The EUT was placed on the test table and programmed in normal function.

4.1.7. Results of AC Power Line Conducted Emissions Measurement

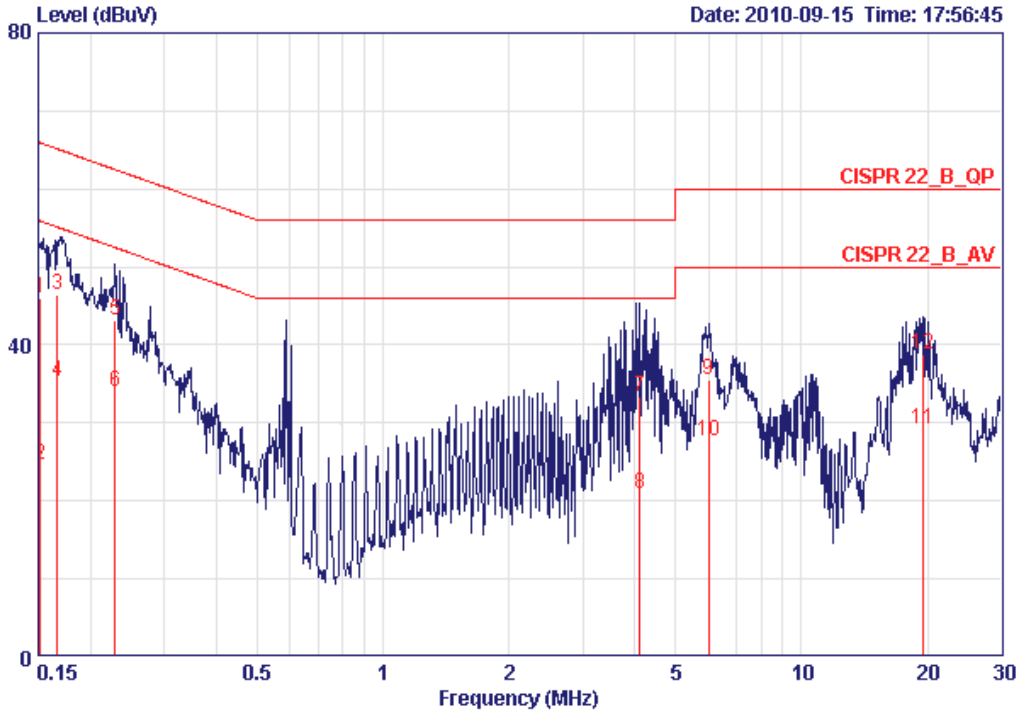
<For Main Source – EUT 2 (Mode 1 with Dipole Antenna)>:

Temperature	23°C	**Humidity**	54%
Test Engineer	Sin Chang	**Phase**	Line
Configuration	Normal Link		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1 @	0.16944	49.40	-15.58	64.99	49.14	0.06	0.20	QP
2 @	0.16944	38.62	-16.36	54.99	38.36	0.06	0.20	AVERAGE
3	0.23040	33.84	-18.60	52.44	33.59	0.05	0.20	AVERAGE
4	0.23040	43.14	-19.30	62.44	42.89	0.05	0.20	QP
5	0.64058	25.65	-20.35	46.00	25.42	0.03	0.20	AVERAGE
6	0.64058	25.53	-30.47	56.00	25.30	0.03	0.20	QP
7	4.114	15.91	-30.09	46.00	15.50	0.11	0.30	AVERAGE
8	4.114	29.56	-26.44	56.00	29.15	0.11	0.30	QP
9	5.929	36.81	-23.19	60.00	36.30	0.21	0.30	QP
10	5.929	28.32	-21.68	50.00	27.81	0.21	0.30	AVERAGE
11	17.568	26.52	-23.48	50.00	25.32	0.70	0.50	AVERAGE
12	17.568	34.69	-25.31	60.00	33.49	0.70	0.50	QP

Temperature	23°C	Humidity	54%
Test Engineer	Sin Chang	Phase	Neutral
Configuration	Normal Link		



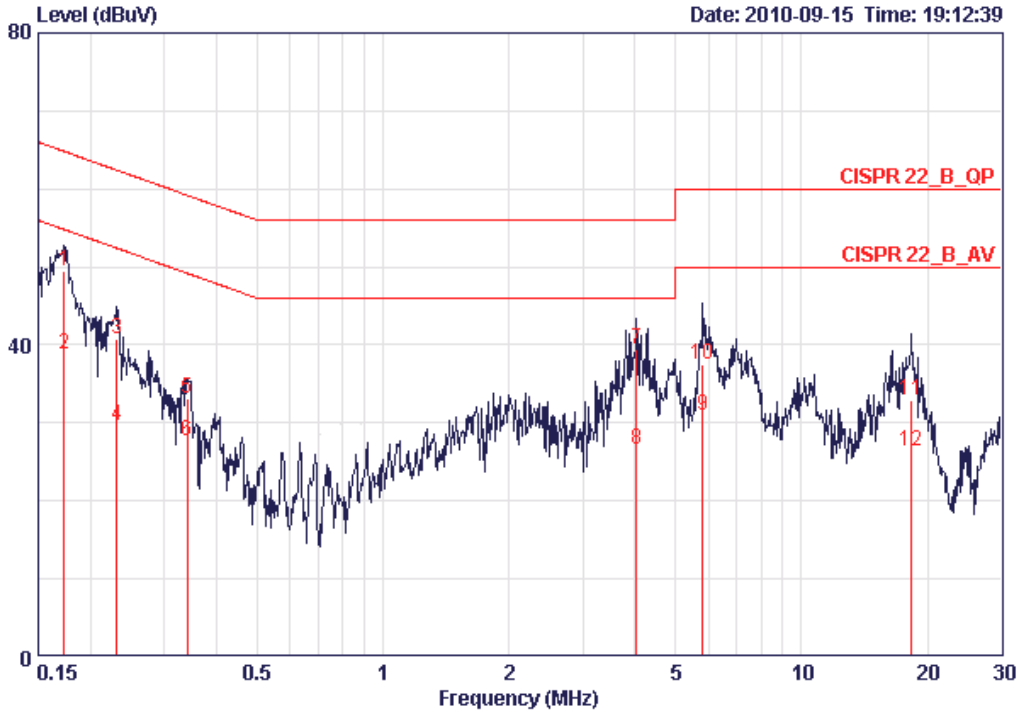
	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.15160	46.01	-19.90	65.91	45.71	0.10	0.20	QP
2	0.15160	24.60	-31.31	55.91	24.30	0.10	0.20	AVERAGE
3	0.16677	46.45	-18.67	65.12	46.15	0.10	0.20	QP
4	0.16677	35.40	-19.72	55.12	35.10	0.10	0.20	AVERAGE
5	0.22918	43.23	-19.25	62.48	42.95	0.08	0.20	QP
6	0.22918	34.04	-18.44	52.48	33.76	0.08	0.20	AVERAGE
7	4.114	33.26	-22.74	56.00	32.81	0.15	0.30	QP
8	4.114	20.89	-25.11	46.00	20.44	0.15	0.30	AVERAGE
9	5.993	35.61	-24.39	60.00	35.06	0.25	0.30	QP
10	5.993	27.61	-22.39	50.00	27.06	0.25	0.30	AVERAGE
11	19.532	29.11	-20.89	50.00	27.83	0.78	0.50	AVERAGE
12	19.532	38.79	-21.21	60.00	37.51	0.78	0.50	QP

Note:

Level = Read Level + LISN Factor + Cable Loss.

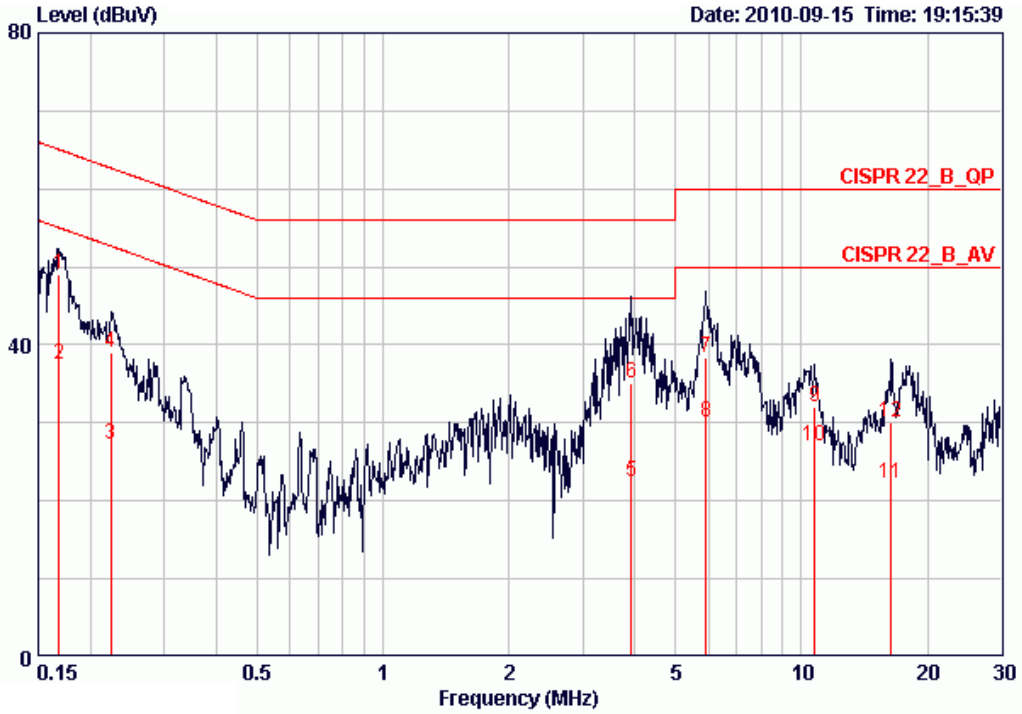
<For Main Source – EUT 2 (Mode 2 with PIFA Antenna)>:

Temperature	23°C	Humidity	54%
Test Engineer	Sin Chang	Phase	Line
Configuration	Normal Link		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1 @	0.17307	49.40	-15.41	64.81	49.14	0.06	0.20	QP
2 @	0.17307	38.73	-16.08	54.81	38.47	0.06	0.20	AVERAGE
3	0.23162	40.74	-21.66	62.39	40.49	0.05	0.20	QP
4	0.23162	29.74	-22.66	52.39	29.49	0.05	0.20	AVERAGE
5	0.34100	33.11	-26.06	59.18	32.88	0.03	0.20	QP
6	0.34100	27.65	-21.52	49.18	27.42	0.03	0.20	AVERAGE
7 @	4.027	39.56	-16.44	56.00	39.16	0.10	0.30	QP
8	4.027	26.55	-19.45	46.00	26.15	0.10	0.30	AVERAGE
9	5.805	30.91	-19.09	50.00	30.41	0.20	0.30	AVERAGE
10	5.805	37.52	-22.48	60.00	37.02	0.20	0.30	QP
11	18.328	32.84	-27.16	60.00	31.60	0.74	0.50	QP
12	18.328	26.40	-23.60	50.00	25.16	0.74	0.50	AVERAGE

Temperature	23°C	Humidity	54%
Test Engineer	Sin Chang	Phase	Neutral
Configuration	Normal Link		



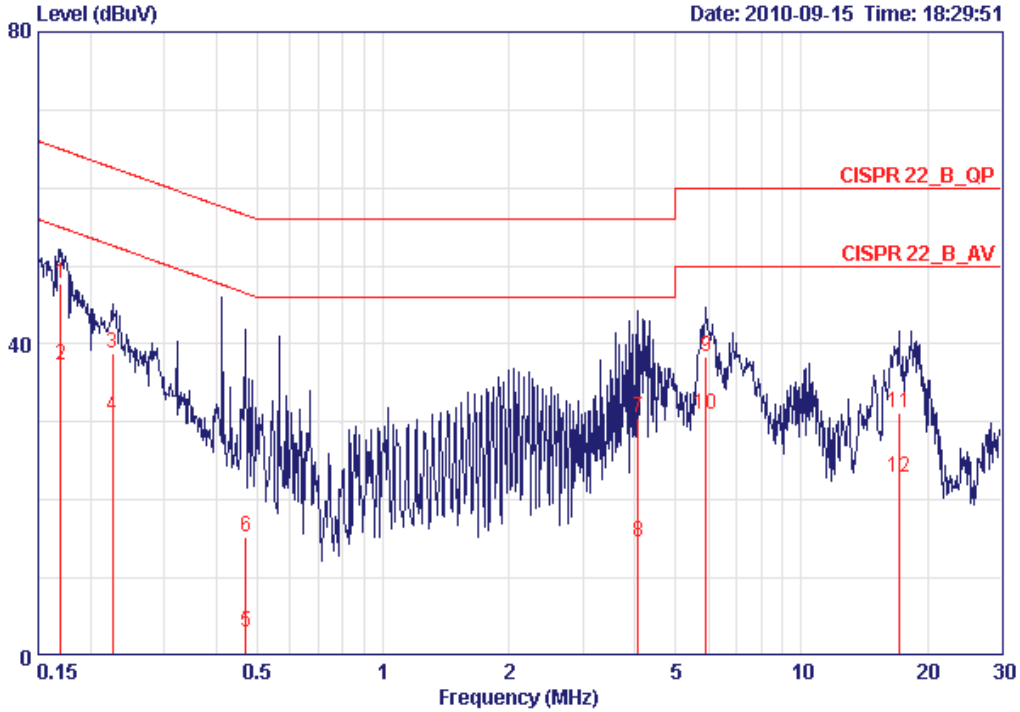
	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1 @	0.16854	49.09	-15.94	65.03	48.80	0.09	0.20	QP
2 @	0.16854	37.56	-17.47	55.03	37.27	0.09	0.20	AVERAGE
3	0.22319	27.26	-25.44	52.70	26.98	0.08	0.20	AVERAGE
4	0.22319	38.95	-23.75	62.70	38.67	0.08	0.20	QP
5	3.922	22.41	-23.59	46.00	21.97	0.14	0.30	AVERAGE
6	3.922	35.00	-21.00	56.00	34.56	0.14	0.30	QP
7	5.929	38.27	-21.73	60.00	37.72	0.25	0.30	QP
8	5.929	30.04	-19.96	50.00	29.49	0.25	0.30	AVERAGE
9	10.733	31.97	-28.03	60.00	31.15	0.42	0.40	QP
10	10.733	27.02	-22.98	50.00	26.20	0.42	0.40	AVERAGE
11	16.398	22.22	-27.78	50.00	21.15	0.65	0.42	AVERAGE
12	16.398	30.17	-29.83	60.00	29.10	0.65	0.42	QP

Note:

Level = Read Level + LISN Factor + Cable Loss.

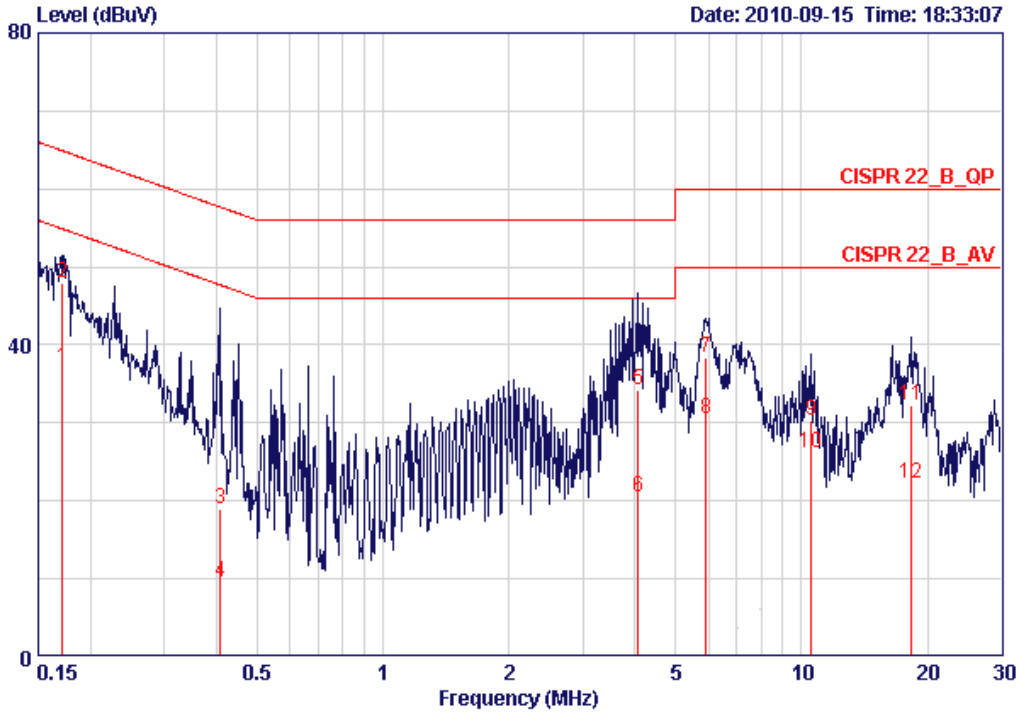
<For Second Source – EUT 2 (Mode 1 with Dipole Antenna)>:

Temperature	23°C	Humidity	54%
Test Engineer	Sin Chang	Phase	Line
Configuration	Normal Link		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1 @	0.16944	47.84	-17.14	64.99	47.58	0.06	0.20	QP
2	0.16944	37.22	-17.76	54.99	36.96	0.06	0.20	AVERAGE
3	0.22556	38.80	-23.81	62.61	38.55	0.05	0.20	QP
4	0.22556	30.84	-21.77	52.61	30.59	0.05	0.20	AVERAGE
5	0.47110	3.07	-43.42	46.49	2.84	0.03	0.20	AVERAGE
6	0.47110	15.34	-41.15	56.49	15.11	0.03	0.20	QP
7	4.070	30.50	-25.50	56.00	30.09	0.11	0.30	QP
8	4.070	14.70	-31.30	46.00	14.29	0.11	0.30	AVERAGE
9	5.929	38.47	-21.53	60.00	37.96	0.21	0.30	QP
10	5.929	31.02	-18.98	50.00	30.51	0.21	0.30	AVERAGE
11	17.109	31.16	-28.84	60.00	29.98	0.68	0.50	QP
12	17.109	22.97	-27.03	50.00	21.79	0.68	0.50	AVERAGE

Temperature	23°C	Humidity	54%
Test Engineer	Sin Chang	Phase	Neutral
Configuration	Normal Link		



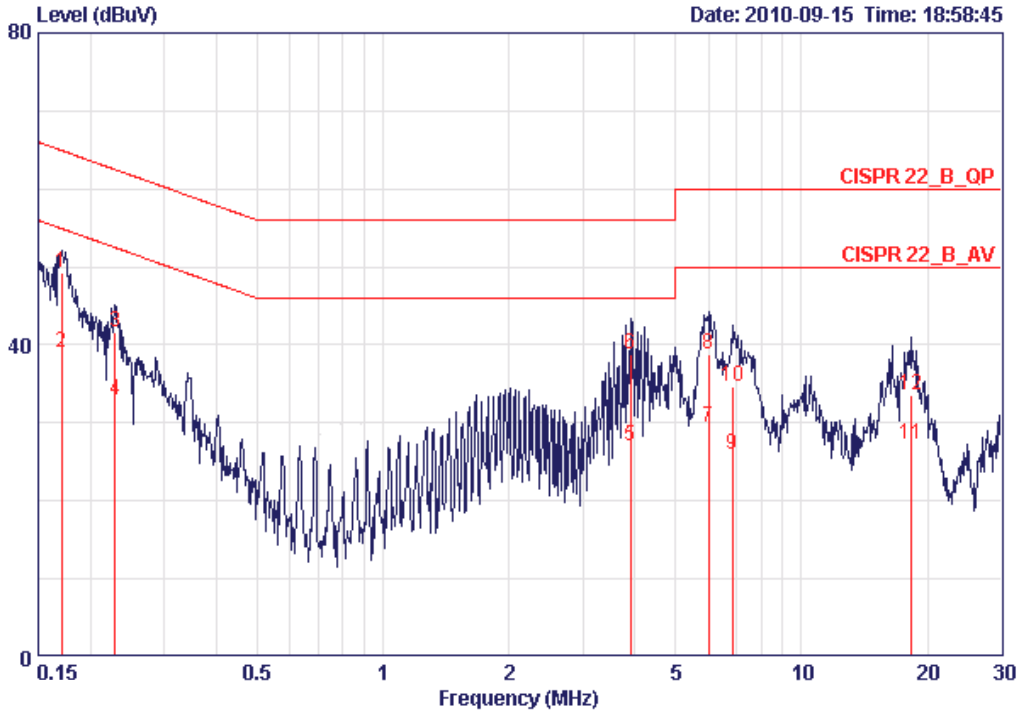
	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.17125	37.07	-17.83	54.90	36.78	0.09	0.20	AVERAGE
2 @	0.17125	47.87	-17.03	64.90	47.58	0.09	0.20	QP
3	0.40831	18.87	-38.81	57.68	18.60	0.07	0.20	QP
4	0.40831	9.53	-38.15	47.68	9.26	0.07	0.20	AVERAGE
5	4.070	34.15	-21.85	56.00	33.70	0.15	0.30	QP
6	4.070	20.55	-25.45	46.00	20.10	0.15	0.30	AVERAGE
7	5.929	38.33	-21.67	60.00	37.78	0.25	0.30	QP
8	5.929	30.43	-19.57	50.00	29.88	0.25	0.30	AVERAGE
9	10.564	30.34	-29.66	60.00	29.53	0.42	0.39	QP
10	10.564	26.25	-23.75	50.00	25.44	0.42	0.39	AVERAGE
11	18.328	32.17	-27.83	60.00	30.94	0.73	0.50	QP
12	18.328	22.27	-27.73	50.00	21.04	0.73	0.50	AVERAGE

Note:

Level = Read Level + LISN Factor + Cable Loss.

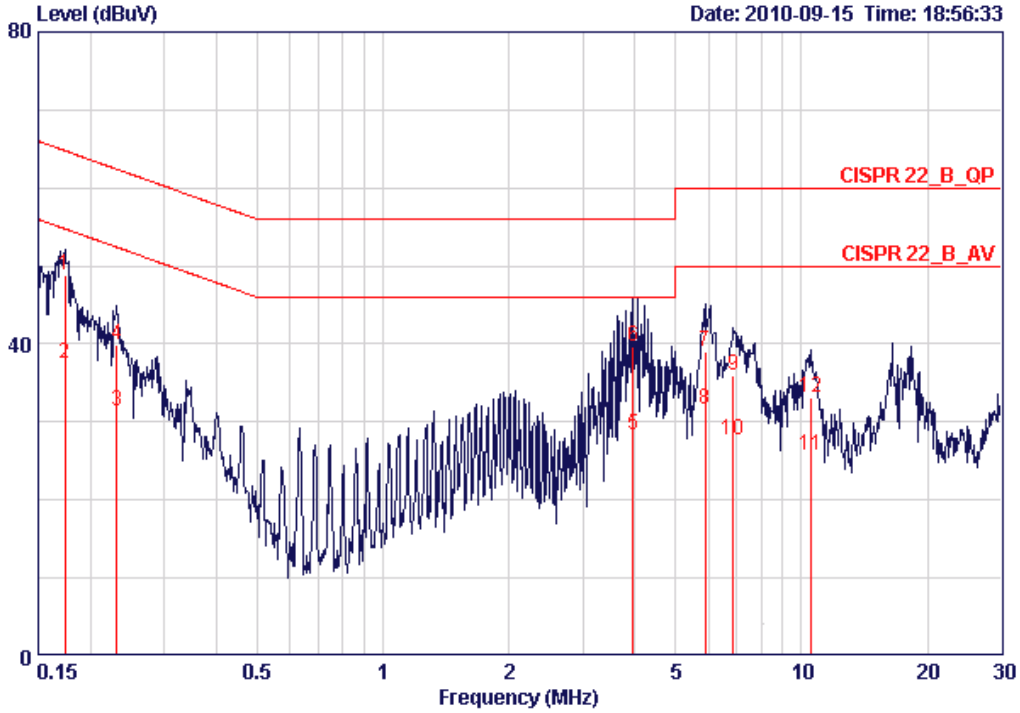
<For Second Source – EUT 2 (Mode 2 with PIFA Antenna)>:

Temperature	23°C	Humidity	54%
Test Engineer	Sin Chang	Phase	Line
Configuration	Normal Link		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1 @	0.17034	49.16	-15.78	64.94	48.90	0.06	0.20	QP
2 @	0.17034	38.94	-16.00	54.94	38.68	0.06	0.20	AVERAGE
3	0.22918	41.58	-20.90	62.48	41.33	0.05	0.20	QP
4	0.22918	32.94	-19.54	52.48	32.69	0.05	0.20	AVERAGE
5	3.901	27.04	-18.96	46.00	26.64	0.10	0.30	AVERAGE
6 @	3.901	38.71	-17.29	56.00	38.31	0.10	0.30	QP
7	5.993	29.36	-20.64	50.00	28.85	0.21	0.30	AVERAGE
8	5.993	38.82	-21.18	60.00	38.31	0.21	0.30	QP
9	6.841	26.02	-23.98	50.00	25.45	0.25	0.33	AVERAGE
10	6.841	34.64	-25.36	60.00	34.07	0.25	0.33	QP
11	18.232	27.29	-22.71	50.00	26.05	0.74	0.50	AVERAGE
12	18.232	33.60	-26.40	60.00	32.36	0.74	0.50	QP

Temperature	23°C	Humidity	54%
Test Engineer	Sin Chang	Phase	Neutral
Configuration	Normal Link		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1 @	0.17399	48.84	-15.93	64.77	48.55	0.09	0.20	QP
2 @	0.17399	37.50	-17.27	54.77	37.21	0.09	0.20	AVERAGE
3	0.23162	31.43	-20.96	52.39	31.15	0.08	0.20	AVERAGE
4	0.23162	39.85	-22.54	62.39	39.57	0.08	0.20	QP
5 @	3.964	28.34	-17.66	46.00	27.90	0.14	0.30	AVERAGE
6 @	3.964	39.57	-16.43	56.00	39.13	0.14	0.30	QP
7	5.898	38.93	-21.07	60.00	38.38	0.25	0.30	QP
8	5.898	31.72	-18.28	50.00	31.17	0.25	0.30	AVERAGE
9	6.878	35.98	-24.02	60.00	35.36	0.29	0.33	QP
10	6.878	27.59	-22.41	50.00	26.97	0.29	0.33	AVERAGE
11	10.508	25.80	-24.20	50.00	25.00	0.41	0.39	AVERAGE
12	10.508	33.17	-26.83	60.00	32.37	0.41	0.39	QP

Note:

Level = Read Level + LISN Factor + Cable Loss.

4.2. Conducted Peak Output Power Measurement

4.2.1. Limit

For systems using digital modulation in the 2400-2483.5MHz, the limit for peak output power is 30dBm. The limited has to be reduced by the amount in dB that the gain of the antenna exceed 6dBi. In case of point-to-point operation, the limit has to be reduced by 1dB for every 3dB that the directional gain of the antenna exceeds 6dBi.

4.2.2. Measuring Instruments and Setting

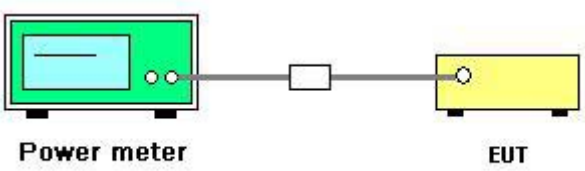
Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

Power Meter Parameter	Setting
Bandwidth	50MHz bandwidth is greater than the EUT emission bandwidth
Detector	Peak

4.2.3. Test Procedures

Spectrum Parameter	Setting
RF Output Power Method	☒ ANSI C63.10 clause 6.10.2.1 (a) power meter method
RF Output Power Method	☐ ANSI C63.10 clause 6.10.2.1 (b) channel integration method
RF Output Power Method	☐ ANSI C63.10 clause 6.10.3.1 Method 1 - spectral trace averaging
RF Output Power Method	☐ ANSI C63.10 clause 6.10.3.2 Method 2 - zero-span mode with trace averaging

4.2.4. Test Setup Layout



4.2.5. Test Deviation

There is no deviation with the original standard.

4.2.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

4.2.7. Test Result of Conducted Peak Output Power

<For Main Source – EUT 2 (Mode 1 with Dipole Antenna)>:

Temperature	26°C	Humidity	60%
Test Engineer	Allen Liu	Configurations	IEEE 802.11n

Configuration IEEE 802.11n MCS0 20MHz

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
1	2412 MHz	23.91	30.00	Complies
6	2437 MHz	25.99	30.00	Complies
11	2462 MHz	23.54	30.00	Complies

Configuration IEEE 802.11n MCS0 40MHz

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
3	2422 MHz	23.39	30.00	Complies
6	2437 MHz	25.13	30.00	Complies
9	2452 MHz	23.49	30.00	Complies

Temperature	26°C	Humidity	60%
Test Engineer	Allen Liu	Configurations	IEEE 802.11b/g

Configuration IEEE 802.11b

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
1	2412 MHz	19.22	30.00	Complies
6	2437 MHz	21.26	30.00	Complies
11	2462 MHz	19.74	30.00	Complies

Configuration IEEE 802.11g

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
1	2412 MHz	23.82	30.00	Complies
6	2437 MHz	26.21	30.00	Complies
11	2462 MHz	24.71	30.00	Complies

<For Main Source – EUT 2 (Mode 2 with PIFA Antenna)>:

Temperature	26°C	Humidity	60%
Test Engineer	Allen Liu	Configurations	IEEE 802.11n

Configuration IEEE 802.11n MCS0 20MHz

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
1	2412 MHz	23.91	30.00	Complies
6	2437 MHz	25.99	30.00	Complies
11	2462 MHz	23.54	30.00	Complies

Configuration IEEE 802.11n MCS0 40MHz

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
3	2422 MHz	23.39	30.00	Complies
6	2437 MHz	25.13	30.00	Complies
9	2452 MHz	23.49	30.00	Complies

Temperature	26°C	Humidity	60%
Test Engineer	Allen Liu	Configurations	IEEE 802.11b/g

Configuration IEEE 802.11b

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
1	2412 MHz	19.22	30.00	Complies
6	2437 MHz	21.26	30.00	Complies
11	2462 MHz	19.74	30.00	Complies

Configuration IEEE 802.11g

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
1	2412 MHz	23.82	30.00	Complies
6	2437 MHz	26.21	30.00	Complies
11	2462 MHz	24.71	30.00	Complies

<For Second Source – EUT 2 (Mode 1 with Dipole Antenna)>:

Temperature	23°C	Humidity	60%
Test Engineer	Allen Liu	Configurations	IEEE 802.11n

Configuration IEEE 802.11n MCS0 20MHz

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
1	2412 MHz	23.88	30.00	Complies
6	2437 MHz	25.91	30.00	Complies
11	2462 MHz	23.49	30.00	Complies

Configuration IEEE 802.11n MCS0 40MHz

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
3	2422 MHz	23.17	30.00	Complies
6	2437 MHz	25.02	30.00	Complies
9	2452 MHz	23.43	30.00	Complies

Temperature	20°C	Humidity	60%
Test Engineer	Allen Liu	Configurations	IEEE 802.11b/g

Configuration IEEE 802.11b

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
1	2412 MHz	19.24	30.00	Complies
6	2437 MHz	21.47	30.00	Complies
11	2462 MHz	19.89	30.00	Complies

Configuration IEEE 802.11g

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
1	2412 MHz	24.95	30.00	Complies
6	2437 MHz	26.01	30.00	Complies
11	2462 MHz	25.02	30.00	Complies

<For Second Source - EUT 2 (Mode 2 with PIFA Antenna)>:

Temperature	23°C	Humidity	60%
Test Engineer	Allen Liu	Configurations	IEEE 802.11n

Configuration IEEE 802.11n MCS0 20MHz

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
1	2412 MHz	23.88	30.00	Complies
6	2437 MHz	25.91	30.00	Complies
11	2462 MHz	23.49	30.00	Complies

Configuration IEEE 802.11n MCS0 40MHz

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
3	2422 MHz	23.17	30.00	Complies
6	2437 MHz	25.02	30.00	Complies
9	2452 MHz	23.43	30.00	Complies

Temperature	23°C	Humidity	60%
Test Engineer	Allen Liu	Configurations	IEEE 802.11b/g

Configuration IEEE 802.11b

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
1	2412 MHz	19.24	30.00	Complies
6	2437 MHz	21.47	30.00	Complies
11	2462 MHz	19.89	30.00	Complies

Configuration IEEE 802.11g

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
1	2412 MHz	24.95	30.00	Complies
6	2437 MHz	26.01	30.00	Complies
11	2462 MHz	25.02	30.00	Complies

4.3. Power Spectral Density Measurement

4.3.1. Limit

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

4.3.2. Measuring Instruments and Setting

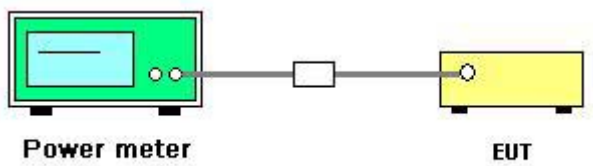
Please refer to section 5 of equipments list in this report. The following table is the setting of Spectrum Analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	30 kHz
RB	3 kHz
VB	30 kHz
Detector	Peak

4.3.3. Test Procedures

Spectrum Parameter	Setting
Power Density Method	☒ UNII for ANSI C63.10 clause 6.11.2.3 Method 1 - peak measurement
Power Density Method	☐ UNII for ANSI C63.10 clause 6.11.2.4 Method 2 - trace averaging

4.3.4. Test Setup Layout



4.3.5. Test Deviation

There is no deviation with the original standard.

4.3.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

4.3.7. Test Result of Power Spectral Density

<For Main Source – EUT 2 (Mode 1 with Dipole Antenna)>:

Temperature	26°C	Humidity	60%
Test Engineer	Allen Liu	Configurations	IEEE 802.11n

Configuration IEEE 802.11n MCS0 20MHz

Channel	Frequency	Power Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
1	2412 MHz	-14.55	8.00	Complies
6	2437 MHz	-9.57	8.00	Complies
11	2462 MHz	-13.47	8.00	Complies

Configuration IEEE 802.11n MCS0 40MHz

Channel	Frequency	Power Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
3	2422 MHz	-15.18	8.00	Complies
6	2437 MHz	-12.56	8.00	Complies
9	2452 MHz	-14.22	8.00	Complies

Temperature	26°C	Humidity	60%
Test Engineer	Allen Liu	Configurations	IEEE 802.11b/g

Configuration IEEE 802.11b

Channel	Frequency	Power Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
1	2412 MHz	-13.04	8.00	Complies
6	2437 MHz	-9.51	8.00	Complies
11	2462 MHz	-12.31	8.00	Complies

Configuration IEEE 802.11g

Channel	Frequency	Power Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
1	2412 MHz	-13.87	8.00	Complies
6	2437 MHz	-9.96	8.00	Complies
11	2462 MHz	-12.53	8.00	Complies

Note: All the test values were listed in the report.

For plots, only the worse case of DSSS and OFDM modulation were listed in the report.

<For Main Source – EUT 2 (Mode 2 with PIFA Antenna)>:

Temperature	23°C	Humidity	60%
Test Engineer	Allen Liu	Configurations	IEEE 802.11n

Configuration IEEE 802.11n MCS0 20MHz

Channel	Frequency	Power Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
1	2412 MHz	-14.55	8.00	Complies
6	2437 MHz	-9.57	8.00	Complies
11	2462 MHz	-13.47	8.00	Complies

Configuration IEEE 802.11n MCS0 40MHz

Channel	Frequency	Power Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
3	2422 MHz	-15.18	8.00	Complies
6	2437 MHz	-12.56	8.00	Complies
9	2452 MHz	-14.22	8.00	Complies

Temperature	23°C	Humidity	60%
Test Engineer	Allen Liu	Configurations	IEEE 802.11b/g

Configuration IEEE 802.11b

Channel	Frequency	Power Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
1	2412 MHz	-13.04	8.00	Complies
6	2437 MHz	-9.51	8.00	Complies
11	2462 MHz	-12.31	8.00	Complies

Configuration IEEE 802.11g

Channel	Frequency	Power Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
1	2412 MHz	-13.87	8.00	Complies
6	2437 MHz	-9.96	8.00	Complies
11	2462 MHz	-12.53	8.00	Complies

Note: All the test values were listed in the report.

For plots, only the worse case of DSSS and OFDM modulation were listed in the report.

<For Second Source – EUT 2 (Mode 1 with Dipole Antenna)>:

Temperature	23°C	Humidity	60%
Test Engineer	Allen Liu	Configurations	IEEE 802.11n

Configuration IEEE 802.11n MCS0 20MHz

Channel	Frequency	Power Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
1	2412 MHz	-14.77	8.00	Complies
6	2437 MHz	-10.15	8.00	Complies
11	2462 MHz	-14.07	8.00	Complies

Configuration IEEE 802.11n MCS0 40MHz

Channel	Frequency	Power Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
3	2422 MHz	-14.65	8.00	Complies
6	2437 MHz	-12.67	8.00	Complies
9	2452 MHz	-15.98	8.00	Complies

Temperature	23°C	Humidity	56%
Test Engineer	Allen Liu	Configurations	IEEE 802.11b/g

Configuration IEEE 802.11b

Channel	Frequency	Power Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
1	2412 MHz	-14.71	8.00	Complies
6	2437 MHz	-10.17	8.00	Complies
11	2462 MHz	-13.41	8.00	Complies

Configuration IEEE 802.11g

Channel	Frequency	Power Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
1	2412 MHz	-14.79	8.00	Complies
6	2437 MHz	-11.93	8.00	Complies
11	2462 MHz	-14.13	8.00	Complies

Note: All the test values were listed in the report.

For plots, only the worse case of DSSS and OFDM modulation were listed in the report.

<For Second Source – EUT 2 (Mode 2 with PIFA Antenna)>:

Temperature	23°C	Humidity	56%
Test Engineer	Allen Liu	Configurations	IEEE 802.11n

Configuration IEEE 802.11n MCS0 20MHz

Channel	Frequency	Power Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
1	2412 MHz	-14.77	8.00	Complies
6	2437 MHz	-10.15	8.00	Complies
11	2462 MHz	-14.07	8.00	Complies

Configuration IEEE 802.11n MCS0 40MHz

Channel	Frequency	Power Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
3	2422 MHz	-14.65	8.00	Complies
6	2437 MHz	-12.67	8.00	Complies
9	2452 MHz	-15.98	8.00	Complies

Temperature	23°C	Humidity	60%
Test Engineer	Allen Liu	Configurations	IEEE 802.11b/g

Configuration IEEE 802.11b

Channel	Frequency	Power Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
1	2412 MHz	-14.71	8.00	Complies
6	2437 MHz	-10.17	8.00	Complies
11	2462 MHz	-13.41	8.00	Complies

Configuration IEEE 802.11g

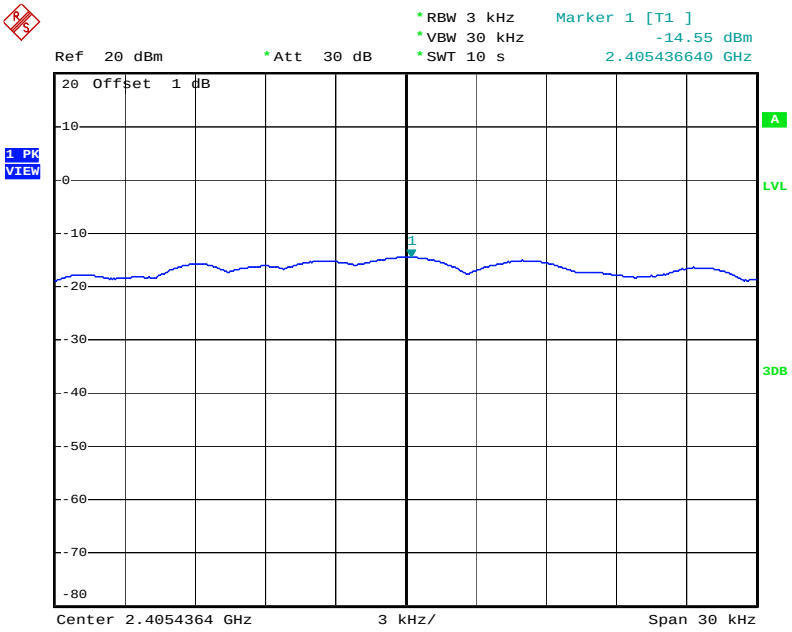
Channel	Frequency	Power Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
1	2412 MHz	-14.79	8.00	Complies
6	2437 MHz	-11.93	8.00	Complies
11	2462 MHz	-14.13	8.00	Complies

Note: All the test values were listed in the report.

For plots, only the worse case of DSSS and OFDM modulation were listed in the report.

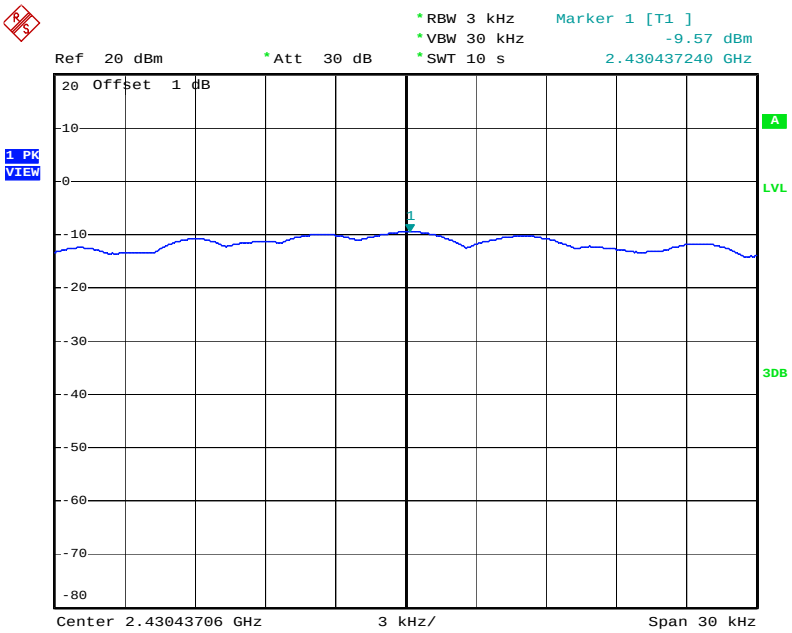
<For Main Source – EUT 2 (Mode 1 with Dipole Antenna)>:

Power Density Plot on Configuration IEEE 802.11n MCS0 20MHz / 2412 MHz



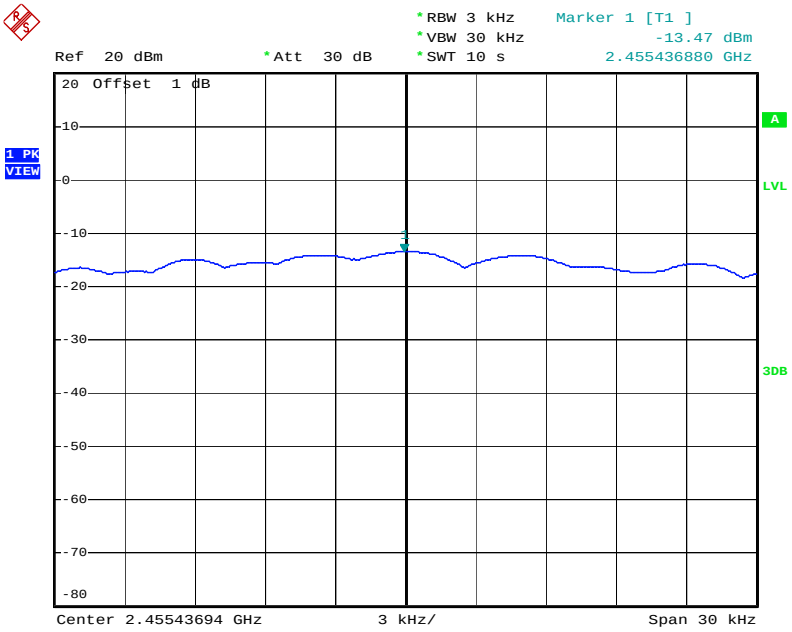
Date: 13.SEP.2010 18:05:11

Power Density Plot on Configuration IEEE 802.11n MCS0 20MHz / 2437 MHz



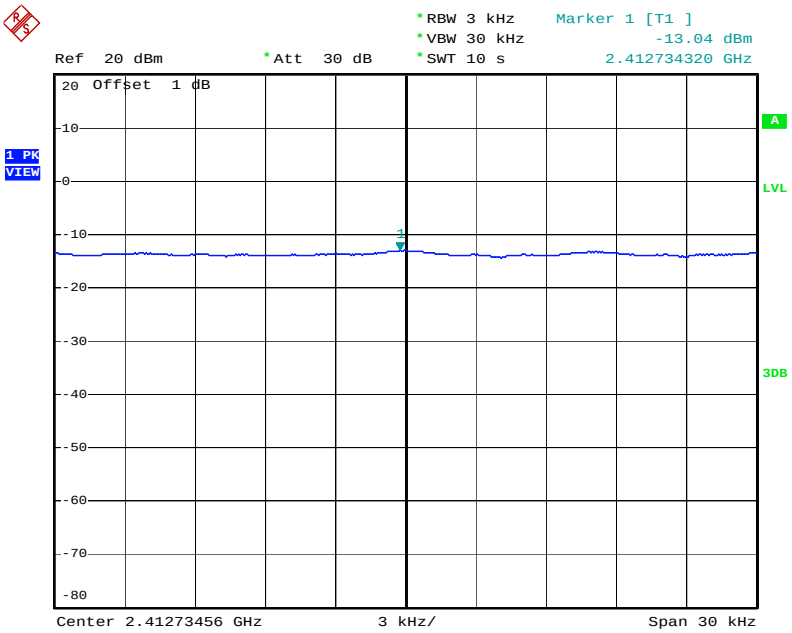
Date: 13.SEP.2010 18:07:25

Power Density Plot on Configuration IEEE 802.11n MCS0 20MHz / 2462 MHz



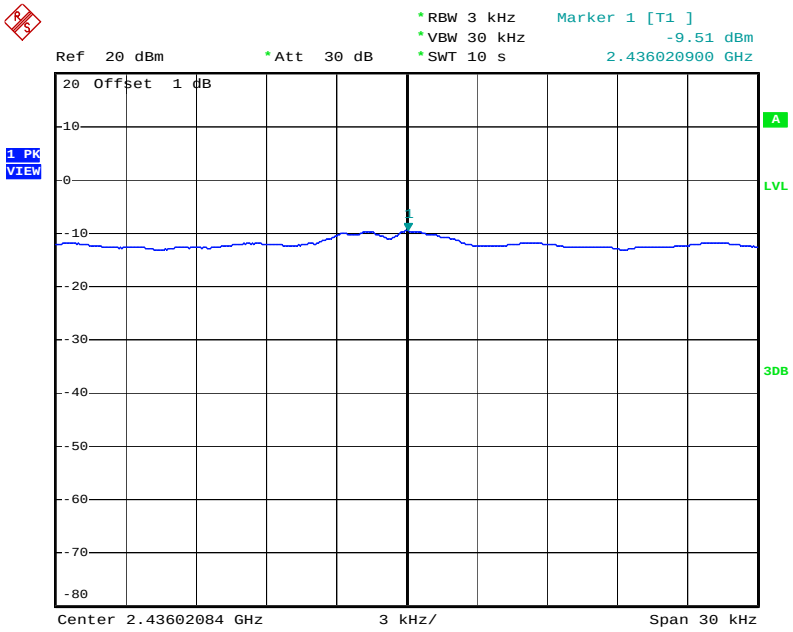
Date: 13.SEP.2010 18:09:28

Power Density Plot on Configuration IEEE 802.11b / 2412 MHz



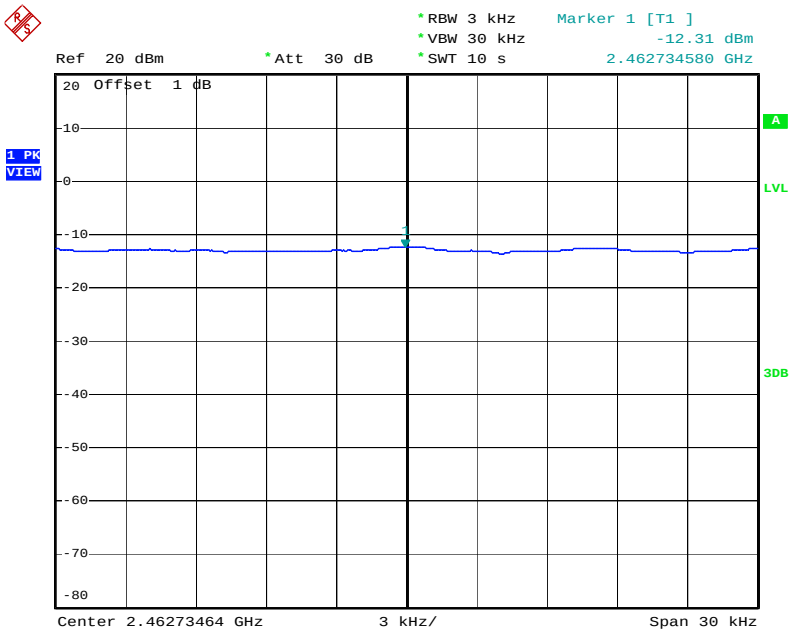
Date: 13.SEP.2010 18:29:49

Power Density Plot on Configuration IEEE 802.11b / 2437 MHz



Date: 13.SEP.2010 17:50:09

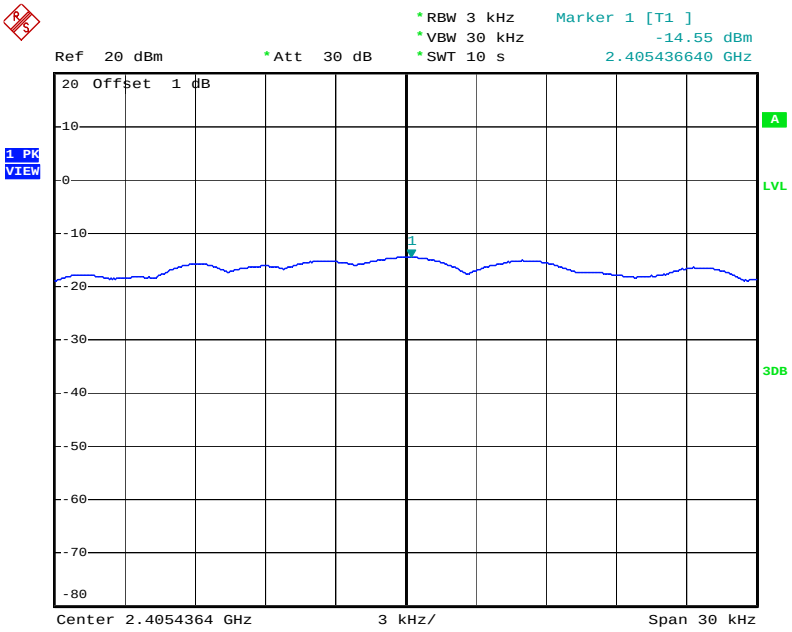
Power Density Plot on Configuration IEEE 802.11b / 2462 MHz



Date: 13.SEP.2010 17:52:52

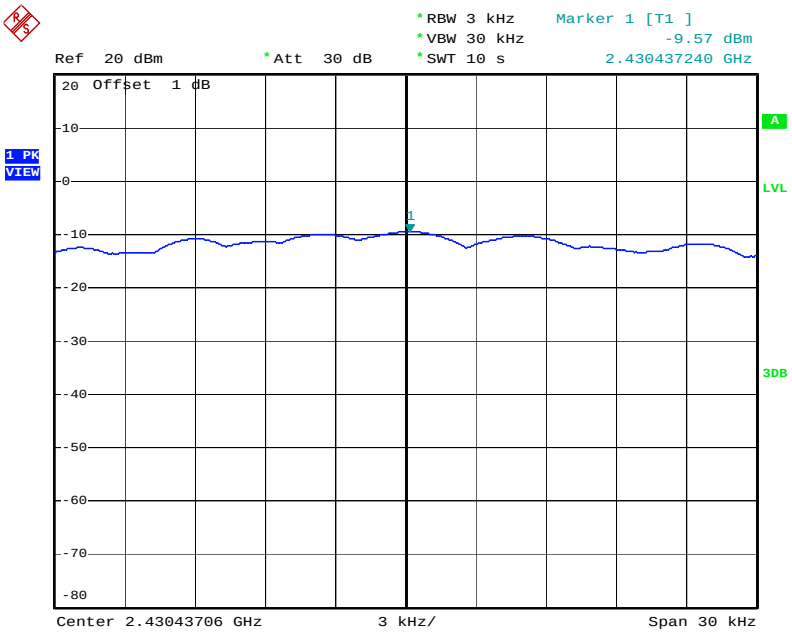
<For Main Source – EUT 2 (Mode 2 with PIFA Antenna)>:

Power Density Plot on Configuration IEEE 802.11n MCS0 20MHz / 2412 MHz



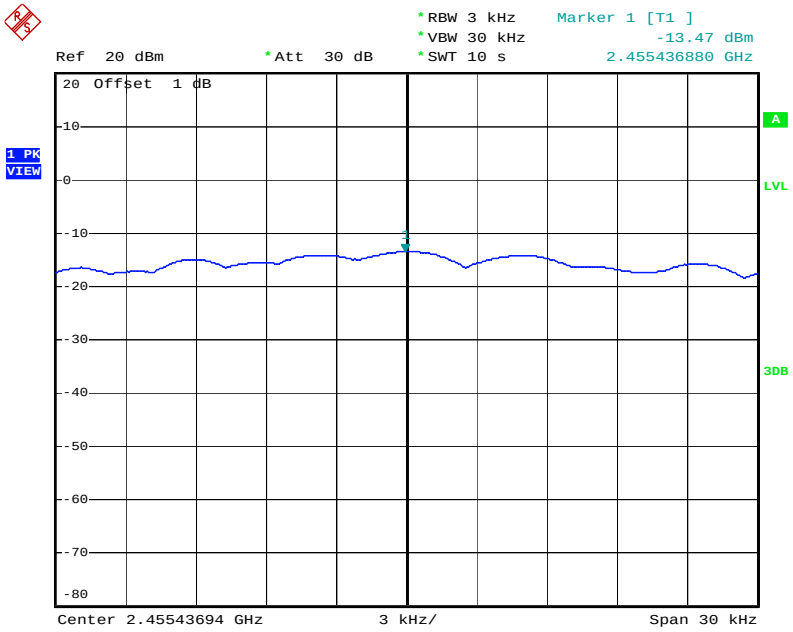
Date: 13.SEP.2010 18:05:11

Power Density Plot on Configuration IEEE 802.11n MCS0 20MHz / 2437 MHz



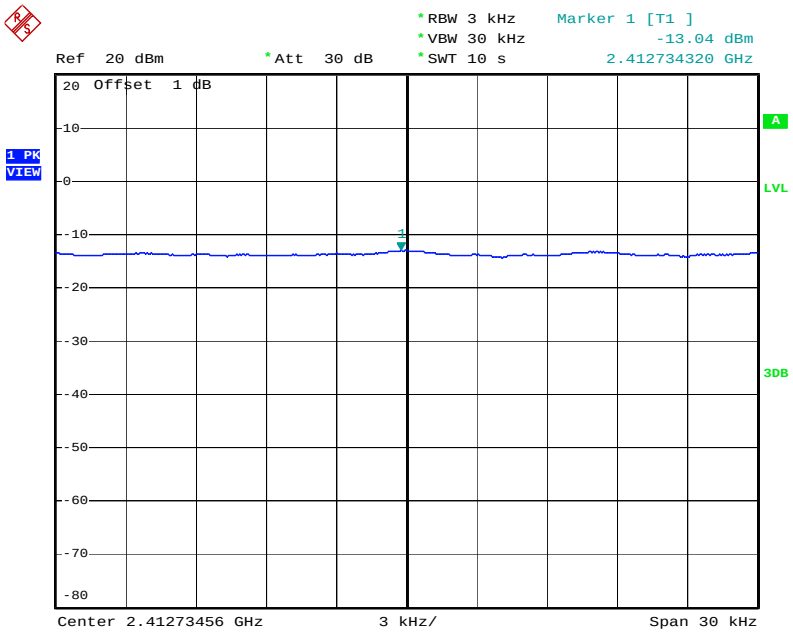
Date: 13.SEP.2010 18:07:25

Power Density Plot on Configuration IEEE 802.11n MCS0 20MHz / 2462 MHz



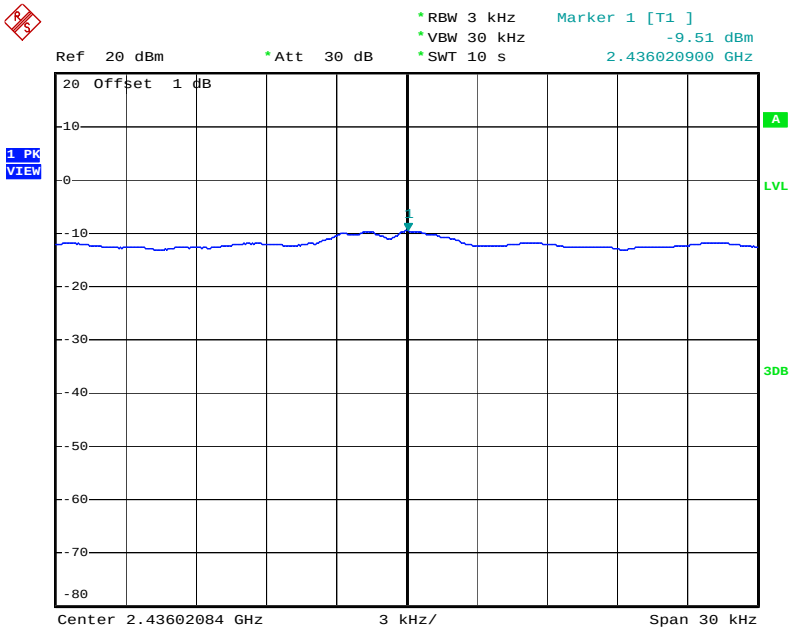
Date: 13.SEP.2010 18:09:28

Power Density Plot on Configuration IEEE 802.11b / 2412 MHz



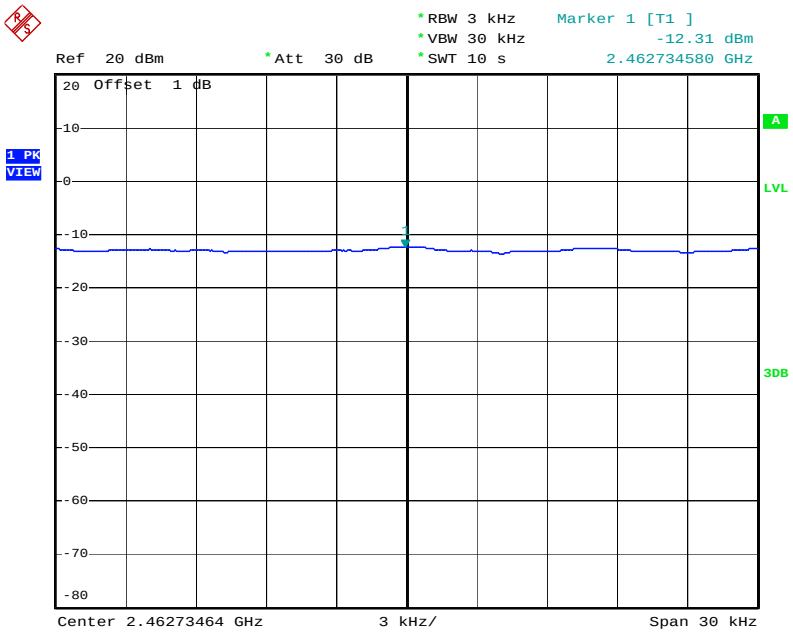
Date: 13.SEP.2010 18:29:49

Power Density Plot on Configuration IEEE 802.11b / 2437 MHz



Date: 13.SEP.2010 17:50:09

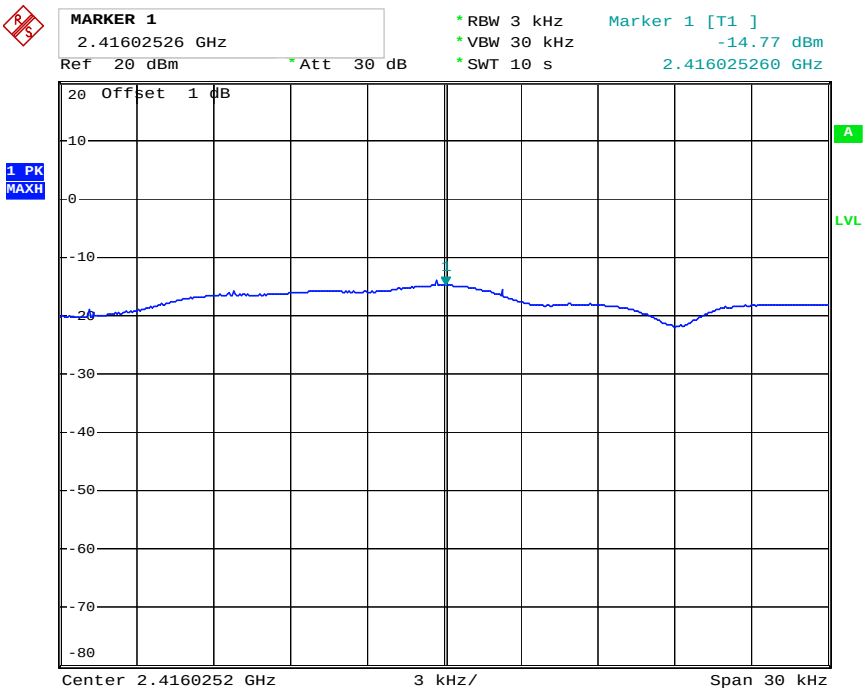
Power Density Plot on Configuration IEEE 802.11b / 2462 MHz



Date: 13.SEP.2010 17:52:52

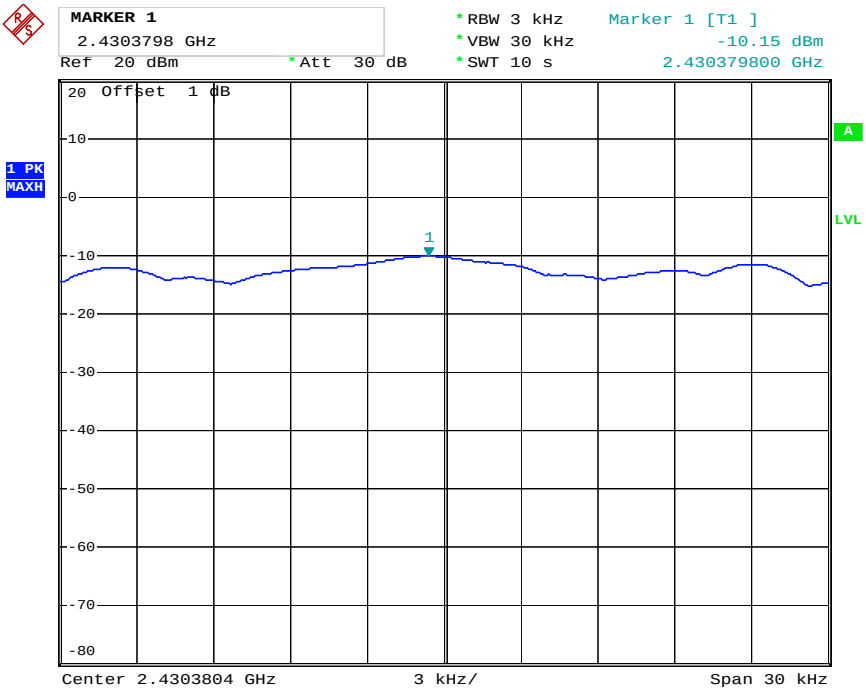
<For Second Source – EUT 2 (Mode 1 with Dipole Antenna)>:

Power Density Plot on Configuration IEEE 802.11n MCS0 20MHz / 2412 MHz



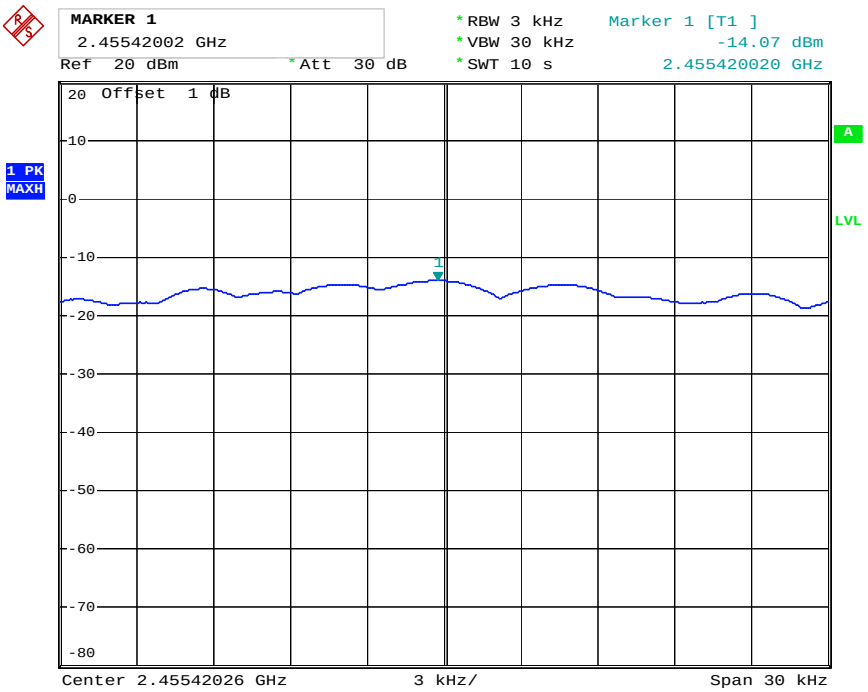
Date: 29.SEP.2010 12:14:05

Power Density Plot on Configuration IEEE 802.11n MCS0 20MHz / 2437 MHz



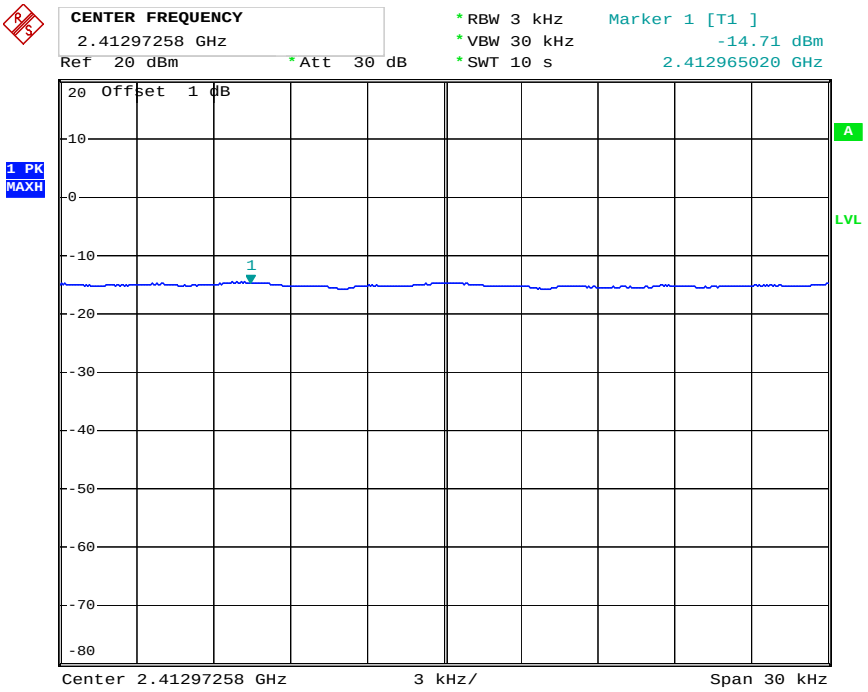
Date: 29.SEP.2010 12:15:11

Power Density Plot on Configuration IEEE 802.11n MCS0 20MHz / 2462 MHz



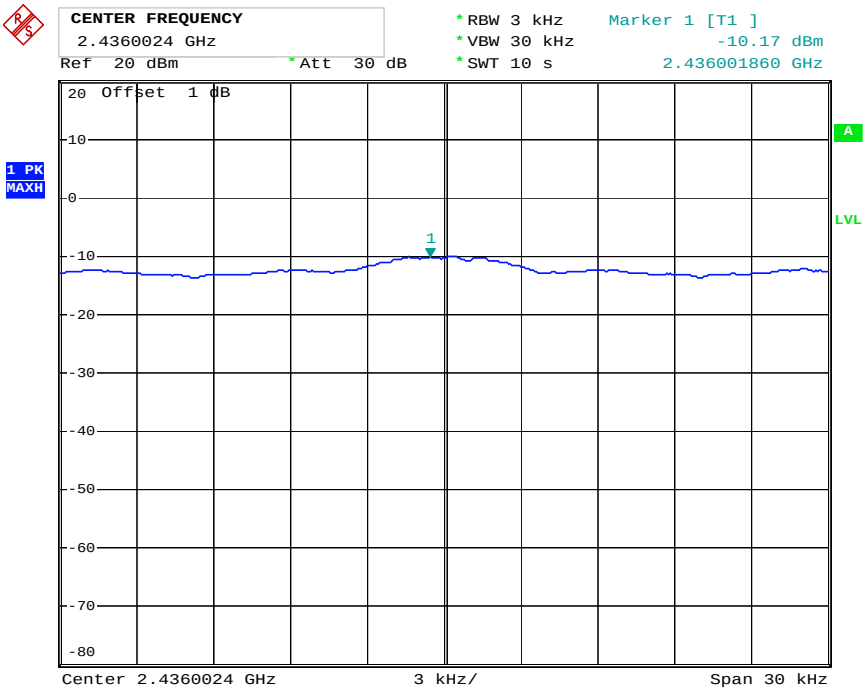
Date: 29.SEP.2010 12:16:28

Power Density Plot on Configuration IEEE 802.11b / 2412 MHz



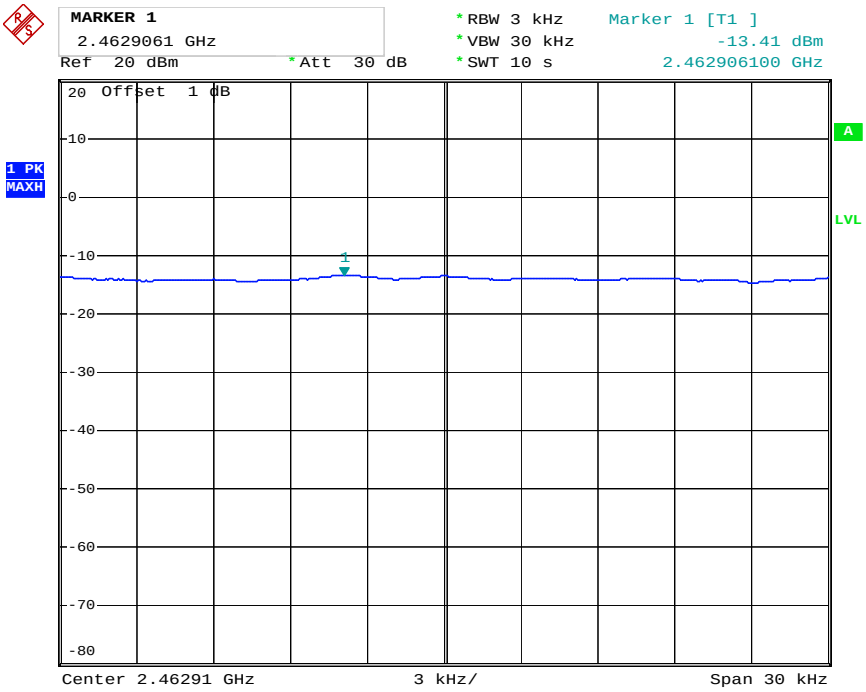
Date: 29.SEP.2010 11:43:45

Power Density Plot on Configuration IEEE 802.11b / 2437 MHz



Date: 29.SEP.2010 11:55:15

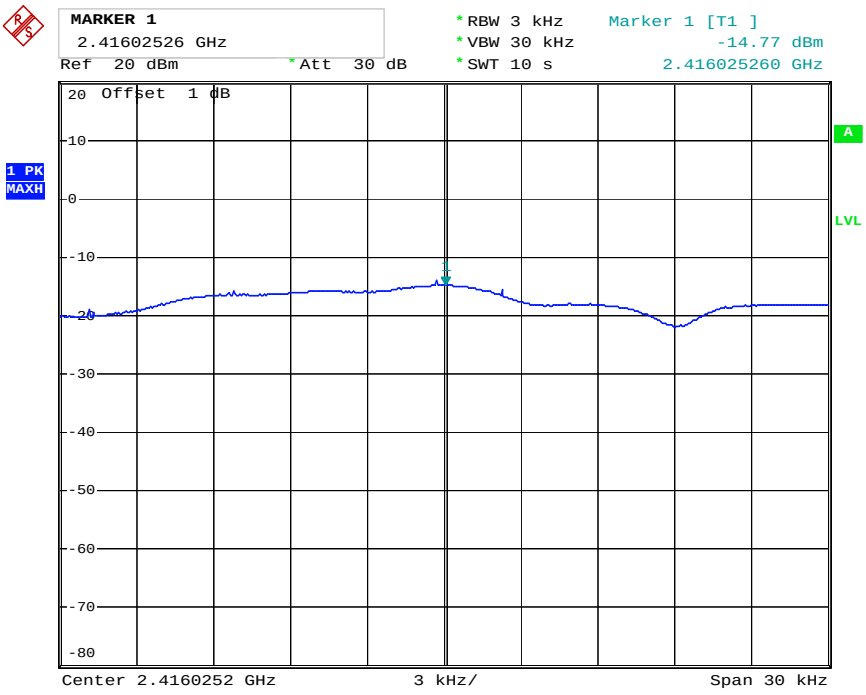
Power Density Plot on Configuration IEEE 802.11b / 2462 MHz



Date: 29.SEP.2010 11:56:30

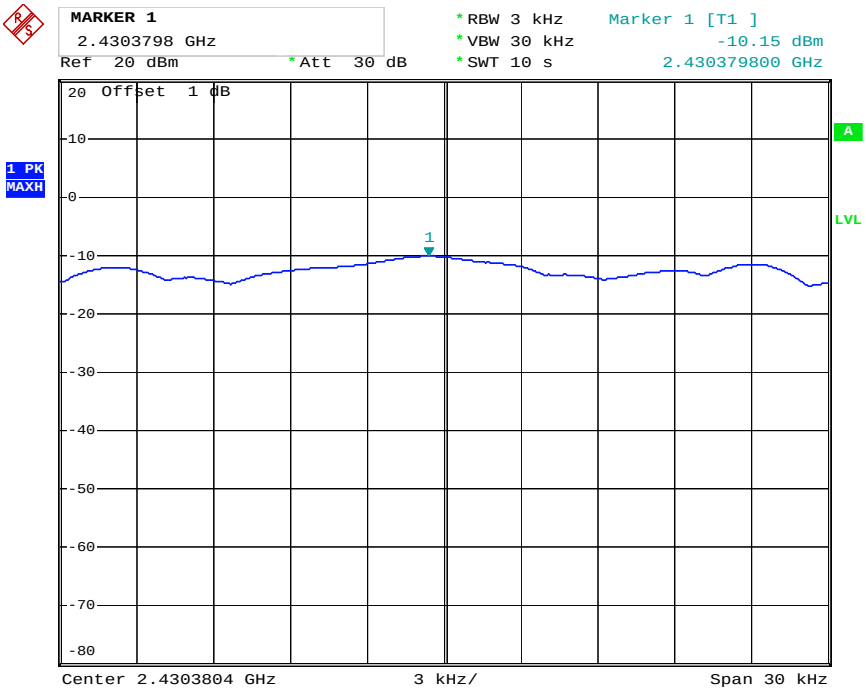
<For Second Source – EUT 2 (Mode 2 with PIFA Antenna)>:

Power Density Plot on Configuration IEEE 802.11n MCS0 20MHz / 2412 MHz



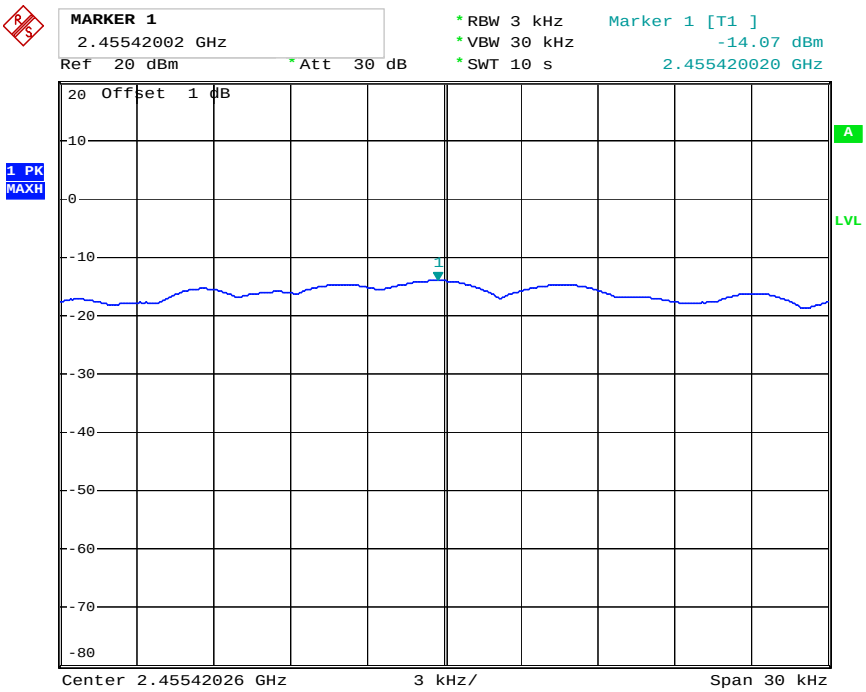
Date: 29.SEP.2010 12:14:05

Power Density Plot on Configuration IEEE 802.11n MCS0 20MHz / 2437 MHz



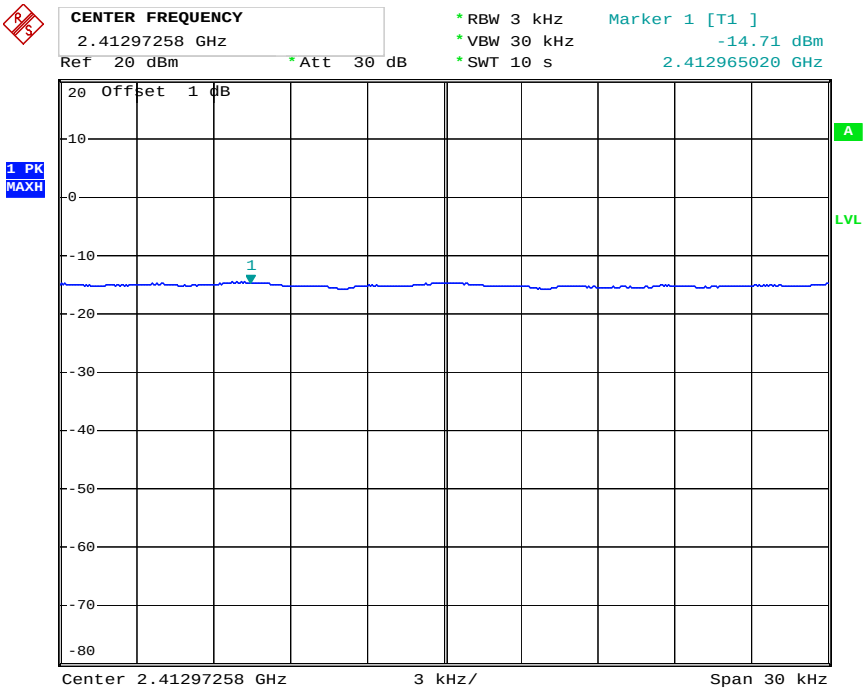
Date: 29.SEP.2010 12:15:11

Power Density Plot on Configuration IEEE 802.11n MCS0 20MHz / 2462 MHz



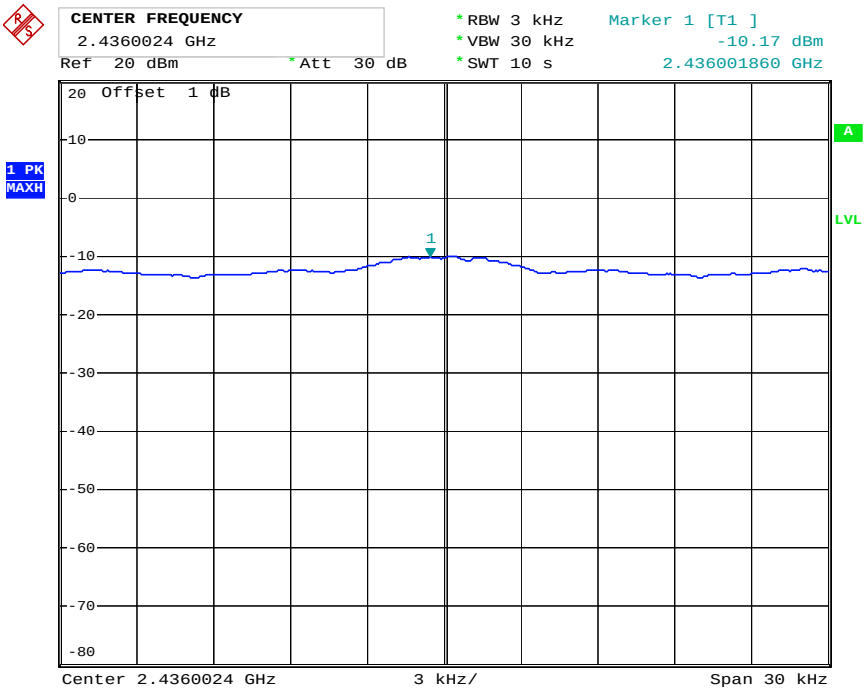
Date: 29.SEP.2010 12:16:28

Power Density Plot on Configuration IEEE 802.11b / 2412 MHz



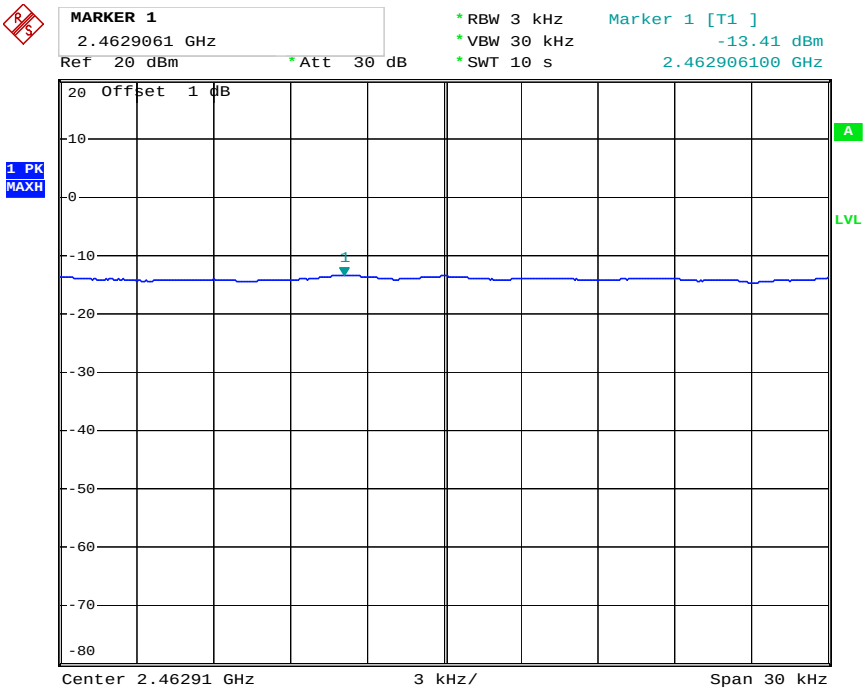
Date: 29.SEP.2010 11:43:45

Power Density Plot on Configuration IEEE 802.11b / 2437 MHz



Date: 29.SEP.2010 11:55:15

Power Density Plot on Configuration IEEE 802.11b / 2462 MHz



Date: 29.SEP.2010 11:56:30

4.4. 6dB Spectrum Bandwidth Measurement

4.4.1. Limit

For digital modulation systems, the minimum 6 dB bandwidth shall be at least 500 kHz.

4.4.2. Measuring Instruments and Setting

Please refer to section 5 of equipments list in this report. The following table is the setting of the Spectrum Analyzer.

Spectrum Parameters	Setting
Attenuation	Auto
Span Frequency	> 6dB Bandwidth
RB	100 kHz
VB	100 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

4.4.3. Test Procedures

1. The transmitter output (antenna port) was connected to the spectrum analyzer in peak hold mode.
2. The resolution bandwidth of 100 kHz and the video bandwidth of 100 kHz were used.
3. Measured the spectrum width with power higher than 6dB below carrier.

4.4.4. Test Setup Layout

4.4.5. Test Deviation

There is no deviation with the original standard.

4.4.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

4.4.7. Test Result of 6dB Spectrum Bandwidth

<For Main Source – EUT 2 (Mode 1 with Dipole Antenna)>:

Temperature	26°C	Humidity	60%
Test Engineer	Allen Liu	Configurations	IEEE 802.11n

Configuration IEEE 802.11n MCS0 20MHz

Channel	Frequency	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Min. Limit (kHz)	Test Result
1	2412 MHz	17.72	17.68	500	Complies
6	2437 MHz	17.80	17.68	500	Complies
11	2462 MHz	17.84	17.68	500	Complies

Configuration IEEE 802.11n MCS0 40MHz

Channel	Frequency	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Min. Limit (kHz)	Test Result
3	2422 MHz	36.48	36.16	500	Complies
6	2437 MHz	36.40	36.08	500	Complies
9	2452 MHz	36.56	36.16	500	Complies

Temperature	26°C	Humidity	60%
Test Engineer	Allen Liu	Configurations	IEEE 802.11b/g

Configuration IEEE 802.11b

Channel	Frequency	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Min. Limit (kHz)	Test Result
1	2412 MHz	10.08	15.04	500	Complies
6	2437 MHz	10.08	15.04	500	Complies
11	2462 MHz	10.12	15.04	500	Complies

Configuration IEEE 802.11g

Channel	Frequency	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Min. Limit (kHz)	Test Result
1	2412 MHz	16.56	16.48	500	Complies
6	2437 MHz	16.56	16.52	500	Complies
11	2462 MHz	16.60	16.52	500	Complies

Note: All the test values were listed in the report.

For plots, only the worse case of DSSS and OFDM modulation were listed in the report.

<For Main Source – EUT 2 (Mode 2 with PIFA Antenna)>:

Temperature	23°C	Humidity	60%
Test Engineer	Allen Liu	Configurations	IEEE 802.11n

Configuration IEEE 802.11n MCS0 20MHz

Channel	Frequency	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Min. Limit (kHz)	Test Result
1	2412 MHz	17.72	17.68	500	Complies
6	2437 MHz	17.80	17.68	500	Complies
11	2462 MHz	17.84	17.68	500	Complies

Configuration IEEE 802.11n MCS0 40MHz

Channel	Frequency	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Min. Limit (kHz)	Test Result
3	2422 MHz	36.48	36.16	500	Complies
6	2437 MHz	36.40	36.08	500	Complies
9	2452 MHz	36.56	36.16	500	Complies

Temperature	23℃	Humidity	60%
Test Engineer	Allen Liu	Configurations	IEEE 802.11b/g

Configuration IEEE 802.11b

Channel	Frequency	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Min. Limit (kHz)	Test Result
1	2412 MHz	10.08	15.04	500	Complies
6	2437 MHz	10.08	15.04	500	Complies
11	2462 MHz	10.12	15.04	500	Complies

Configuration IEEE 802.11g

Channel	Frequency	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Min. Limit (kHz)	Test Result
1	2412 MHz	16.56	16.48	500	Complies
6	2437 MHz	16.56	16.52	500	Complies
11	2462 MHz	16.60	16.52	500	Complies

Note: All the test values were listed in the report.

For plots, only the worse case of DSSS and OFDM modulation were listed in the report.

<For Second Source – EUT 2 (Mode 1 with Dipole Antenna)>:

Temperature	23°C	Humidity	60%
Test Engineer	Allen Liu	Configurations	IEEE 802.11n

Configuration IEEE 802.11n MCS0 20MHz

Channel	Frequency	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Min. Limit (kHz)	Test Result
1	2412 MHz	17.72	17.64	500	Complies
6	2437 MHz	17.72	17.64	500	Complies
11	2462 MHz	17.64	17.64	500	Complies

Configuration IEEE 802.11n MCS0 40MHz

Channel	Frequency	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Min. Limit (kHz)	Test Result
3	2422 MHz	36.40	36.00	500	Complies
6	2437 MHz	36.40	36.08	500	Complies
9	2452 MHz	36.40	36.08	500	Complies

Temperature	23℃	Humidity	60%
Test Engineer	Allen Liu	Configurations	IEEE 802.11b/g

Configuration IEEE 802.11b

Channel	Frequency	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Min. Limit (kHz)	Test Result
1	2412 MHz	10.08	14.88	500	Complies
6	2437 MHz	10.08	14.92	500	Complies
11	2462 MHz	10.08	14.88	500	Complies

Configuration IEEE 802.11g

Channel	Frequency	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Min. Limit (kHz)	Test Result
1	2412 MHz	16.48	16.44	500	Complies
6	2437 MHz	16.52	16.44	500	Complies
11	2462 MHz	16.52	16.44	500	Complies

Note: All the test values were listed in the report.

For plots, only the worse case of DSSS and OFDM modulation were listed in the report.

<For Second Source – EUT 2 (Mode 2 with PIFA Antenna)>:

Temperature	23°C	Humidity	60%
Test Engineer	Allen Liu	Configurations	IEEE 802.11n

Configuration IEEE 802.11n MCS0 20MHz

Channel	Frequency	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Min. Limit (kHz)	Test Result
1	2412 MHz	17.72	17.64	500	Complies
6	2437 MHz	17.72	17.64	500	Complies
11	2462 MHz	17.64	17.64	500	Complies

Configuration IEEE 802.11n MCS0 40MHz

Channel	Frequency	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Min. Limit (kHz)	Test Result
3	2422 MHz	36.40	36.00	500	Complies
6	2437 MHz	36.40	36.08	500	Complies
9	2452 MHz	36.40	36.08	500	Complies

Temperature	23℃	Humidity	60%
Test Engineer	Allen Liu	Configurations	IEEE 802.11b/g

Configuration IEEE 802.11b

Channel	Frequency	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Min. Limit (kHz)	Test Result
1	2412 MHz	10.08	14.88	500	Complies
6	2437 MHz	10.08	14.92	500	Complies
11	2462 MHz	10.08	14.88	500	Complies

Configuration IEEE 802.11g

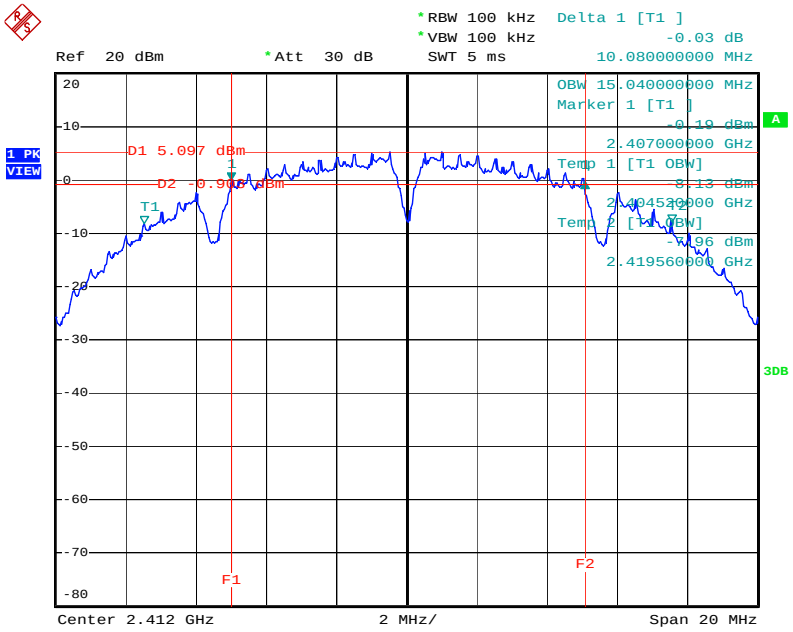
Channel	Frequency	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Min. Limit (kHz)	Test Result
1	2412 MHz	16.48	16.44	500	Complies
6	2437 MHz	16.52	16.44	500	Complies
11	2462 MHz	16.52	16.44	500	Complies

Note: All the test values were listed in the report.

For plots, only the worse case of DSSS and OFDM modulation were listed in the report.

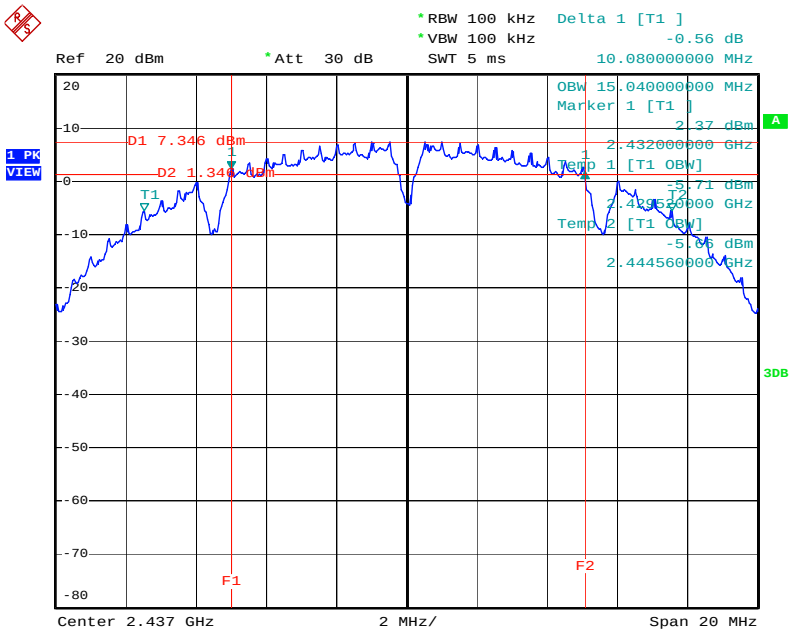
<For Main Source – EUT 2 (Mode 1 with Dipole Antenna)>:

6 dB Bandwidth Plot on Configuration IEEE 802.11b / 2412 MHz



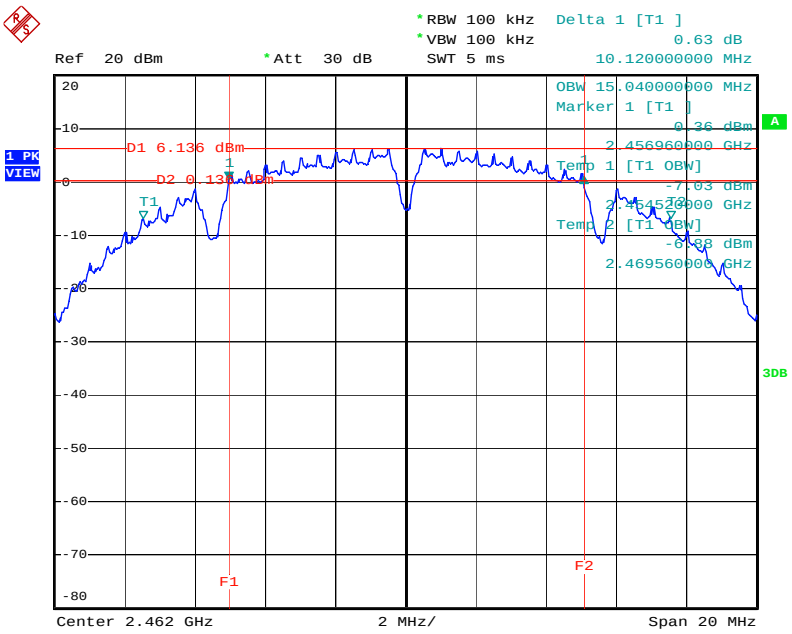
Date: 13.SEP.2010 18:28:20

6 dB Bandwidth Plot on Configuration IEEE 802.11b / 2437 MHz



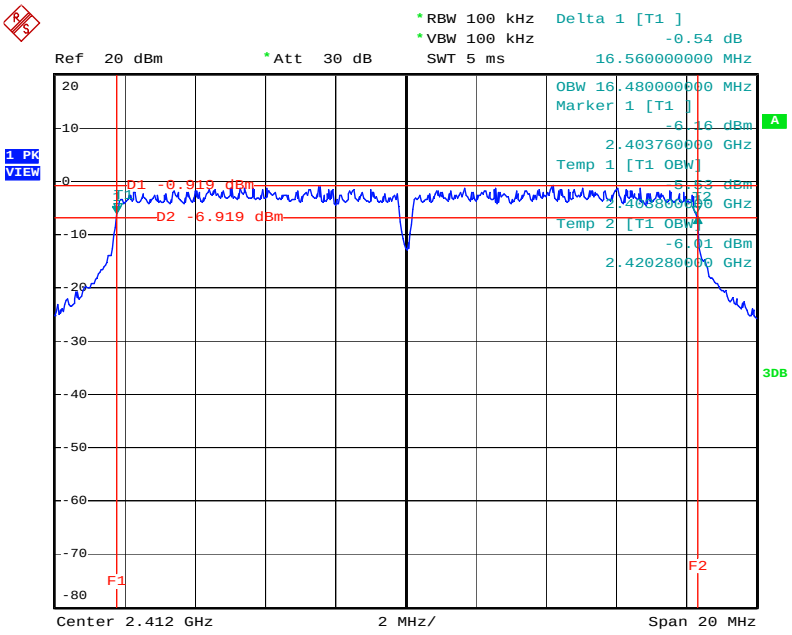
Date: 13.SEP.2010 17:48:39

6 dB Bandwidth Plot on Configuration IEEE 802.11b / 2462 MHz



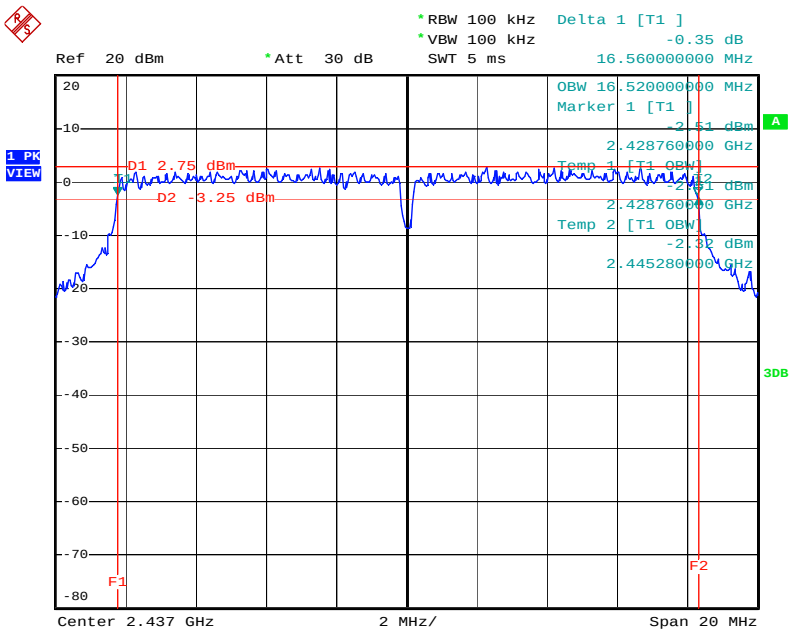
Date: 13.SEP.2010 17:51:23

6 dB Bandwidth Plot on Configuration IEEE 802.11g / 2412 MHz



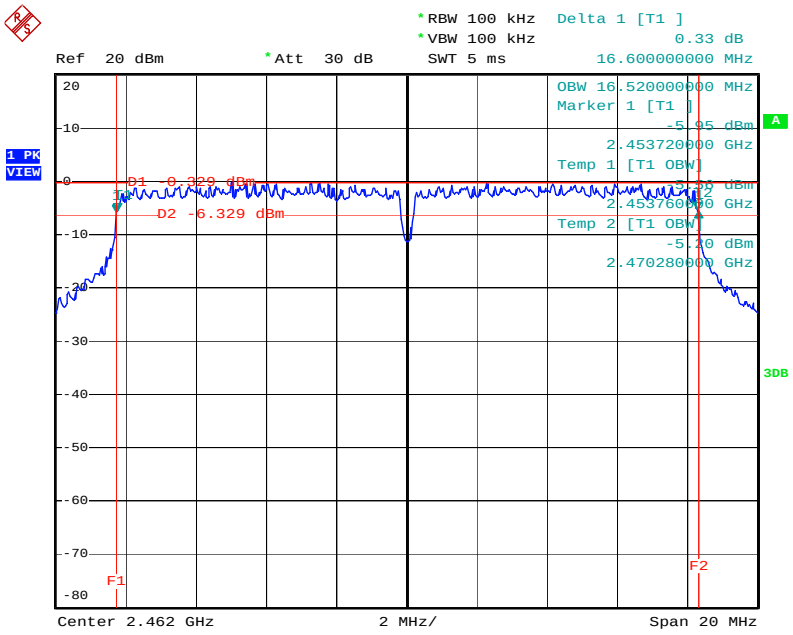
Date: 13.SEP.2010 17:54:29

6 dB Bandwidth Plot on Configuration IEEE 802.11g / 2437 MHz



Date: 13.SEP.2010 17:56:38

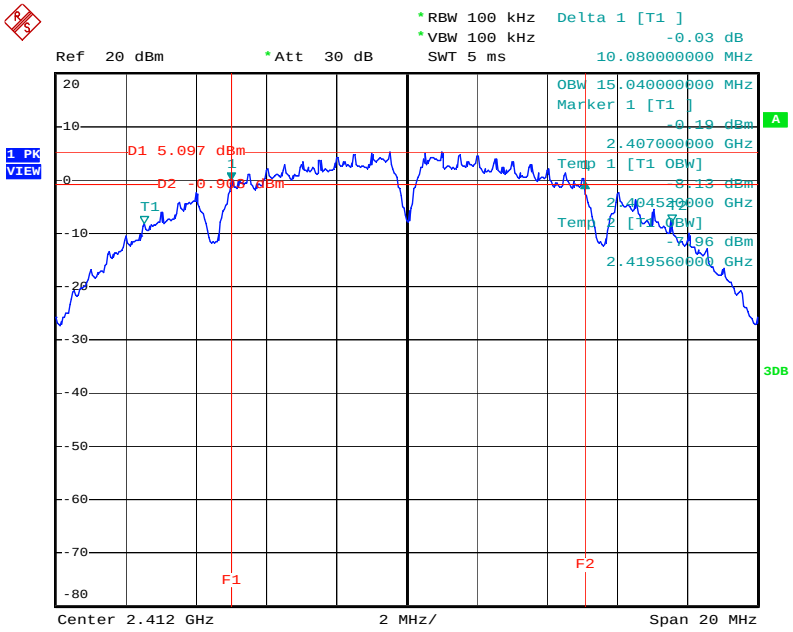
6 dB Bandwidth Plot on Configuration IEEE 802.11g / 2462 MHz



Date: 13.SEP.2010 17:59:17

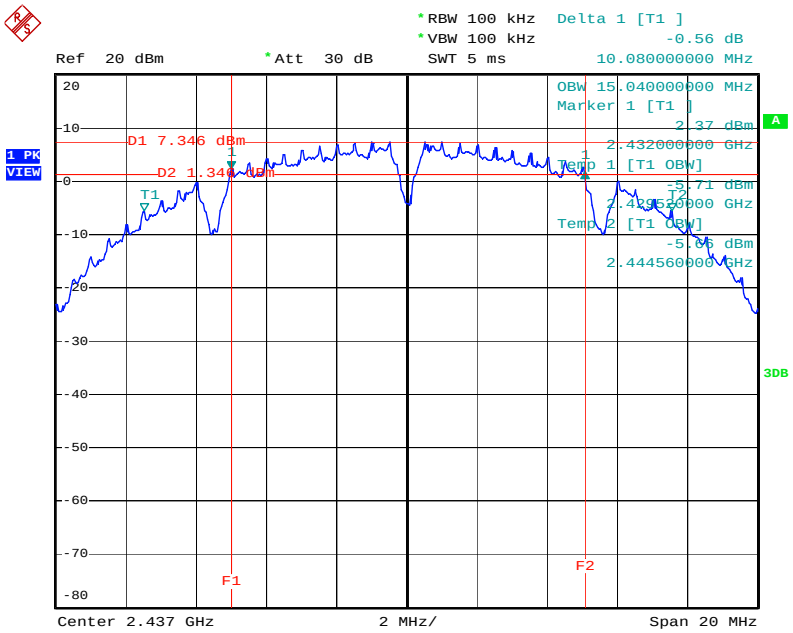
<For Main Source – EUT 2 (Mode 2 with PIFA Antenna)>:

6 dB Bandwidth Plot on Configuration IEEE 802.11b / 2412 MHz



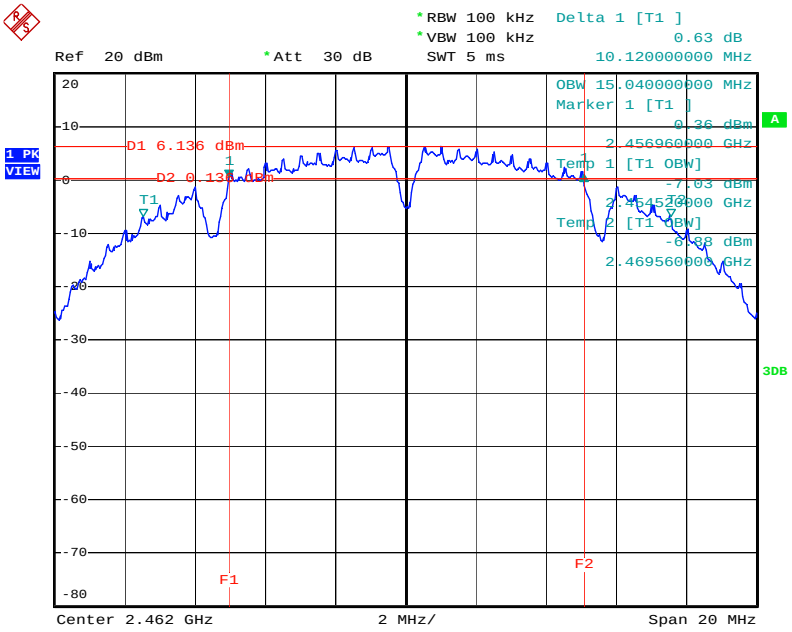
Date: 13.SEP.2010 18:28:20

6 dB Bandwidth Plot on Configuration IEEE 802.11b / 2437 MHz



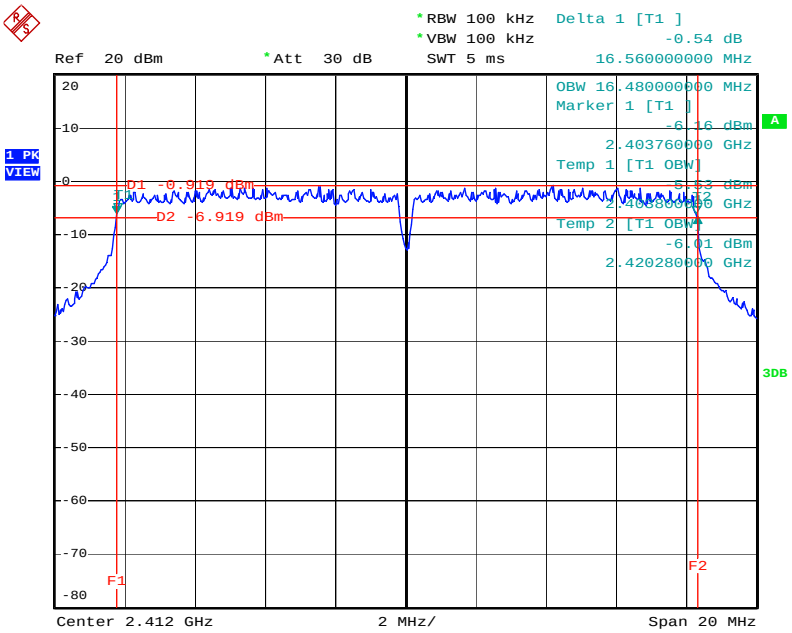
Date: 13.SEP.2010 17:48:39

6 dB Bandwidth Plot on Configuration IEEE 802.11b / 2462 MHz



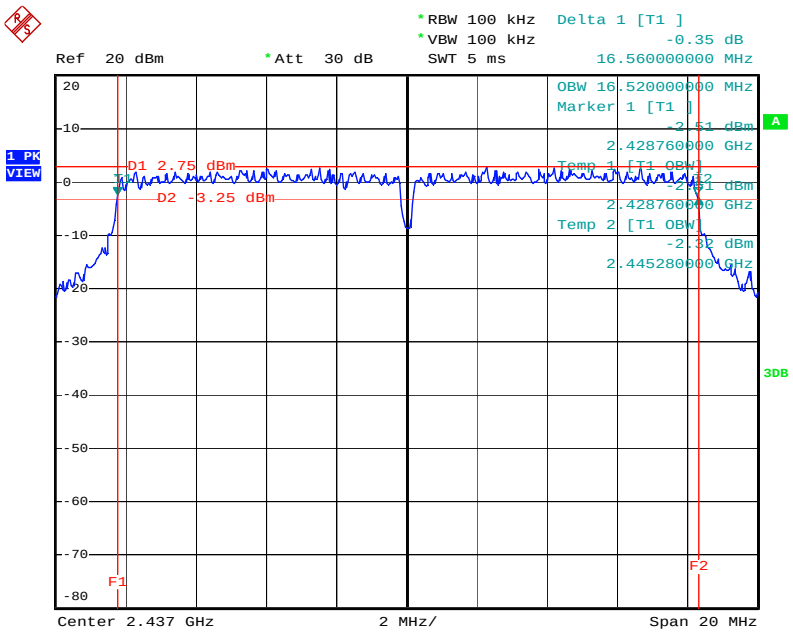
Date: 13.SEP.2010 17:51:23

6 dB Bandwidth Plot on Configuration IEEE 802.11g / 2412 MHz



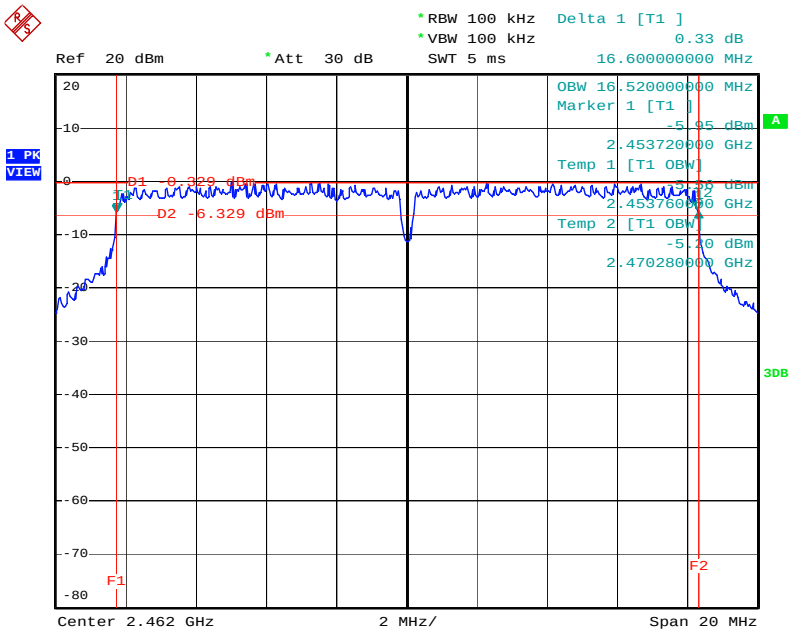
Date: 13.SEP.2010 17:54:29

6 dB Bandwidth Plot on Configuration IEEE 802.11g / 2437 MHz



Date: 13.SEP.2010 17:56:38

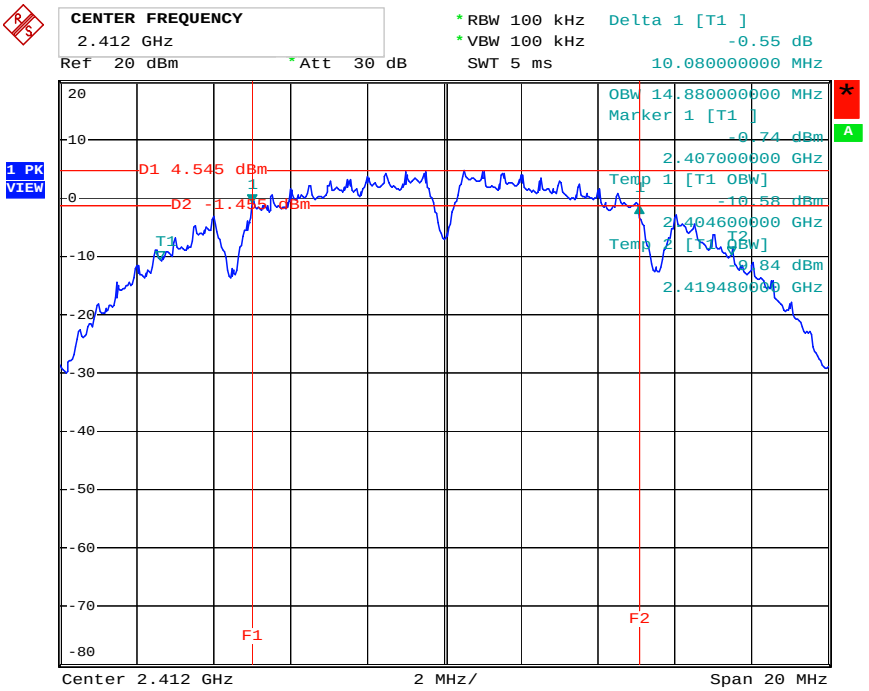
6 dB Bandwidth Plot on Configuration IEEE 802.11g / 2462 MHz



Date: 13.SEP.2010 17:59:17

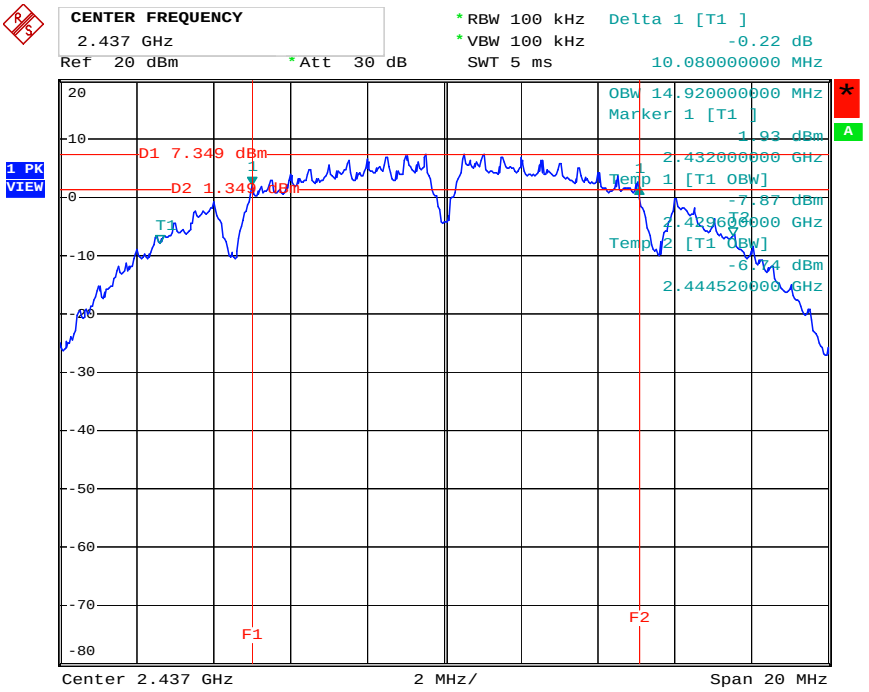
<For Second Source – EUT 2 (Mode 1 with Dipole Antenna)>:

6 dB Bandwidth Plot on Configuration IEEE 802.11b / 2412 MHz



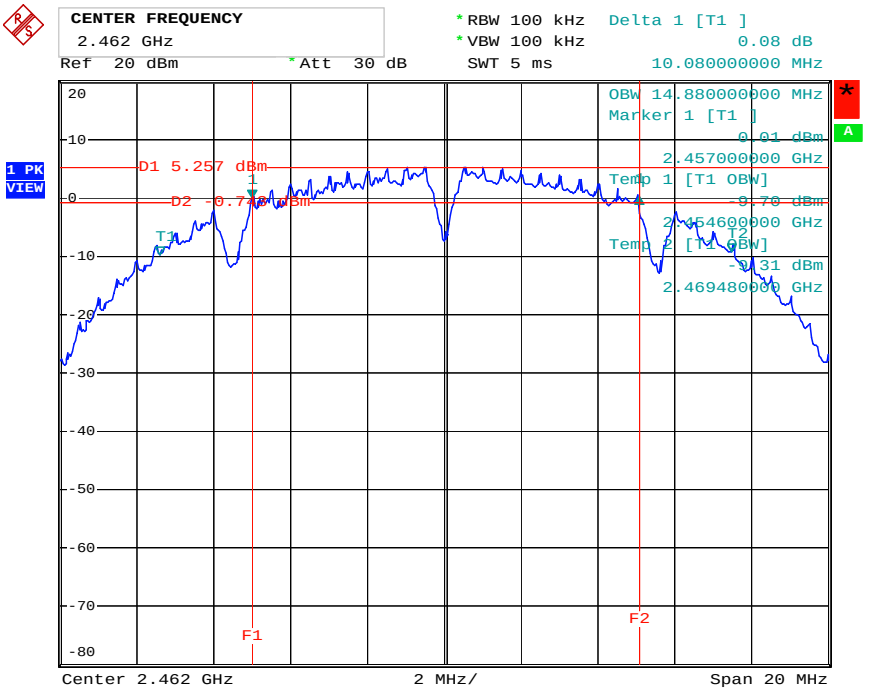
Date: 29.SEP.2010 11:40:08

6 dB Bandwidth Plot on Configuration IEEE 802.11b / 2437 MHz

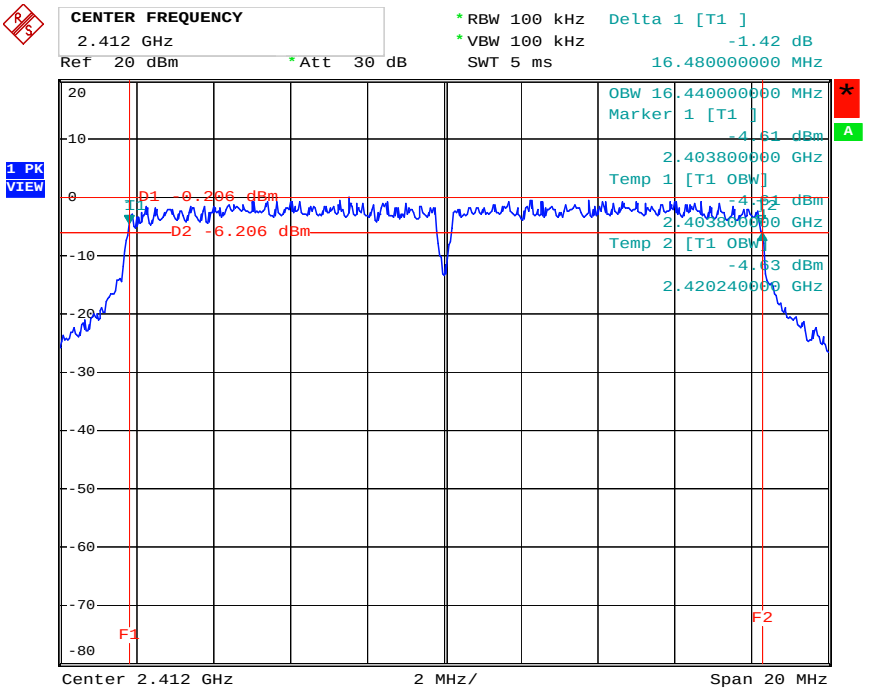


Date: 29.SEP.2010 11:45:27

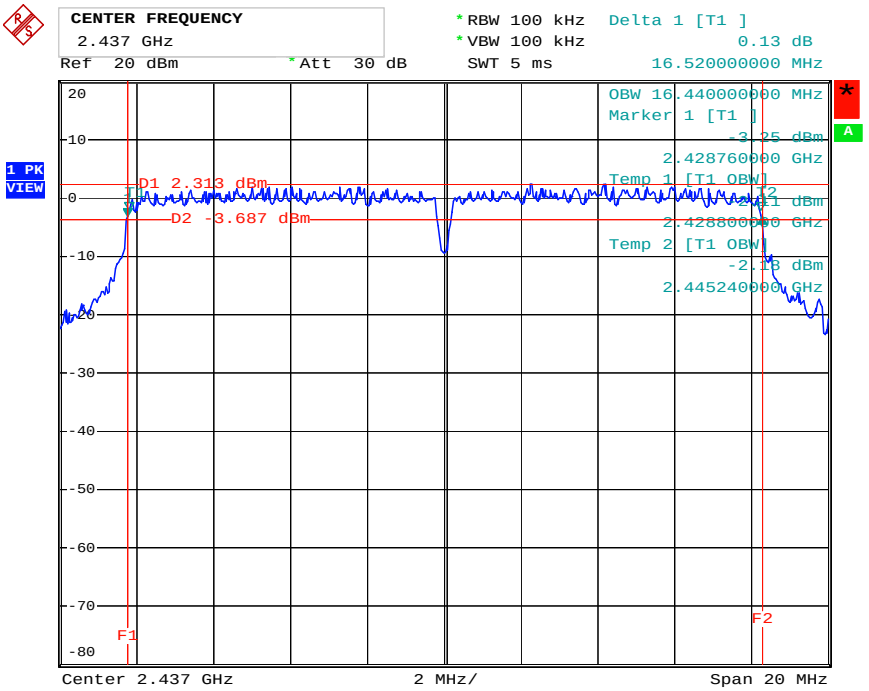
6 dB Bandwidth Plot on Configuration IEEE 802.11b / 2462 MHz



6 dB Bandwidth Plot on Configuration IEEE 802.11g / 2412 MHz

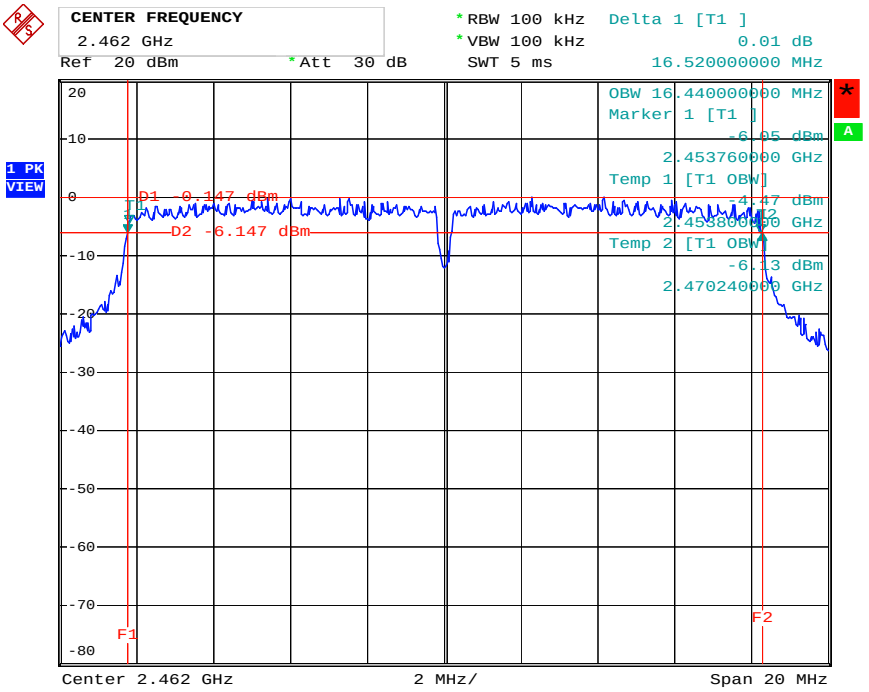


6 dB Bandwidth Plot on Configuration IEEE 802.11g / 2437 MHz



Date: 29.SEP.2010 12:06:35

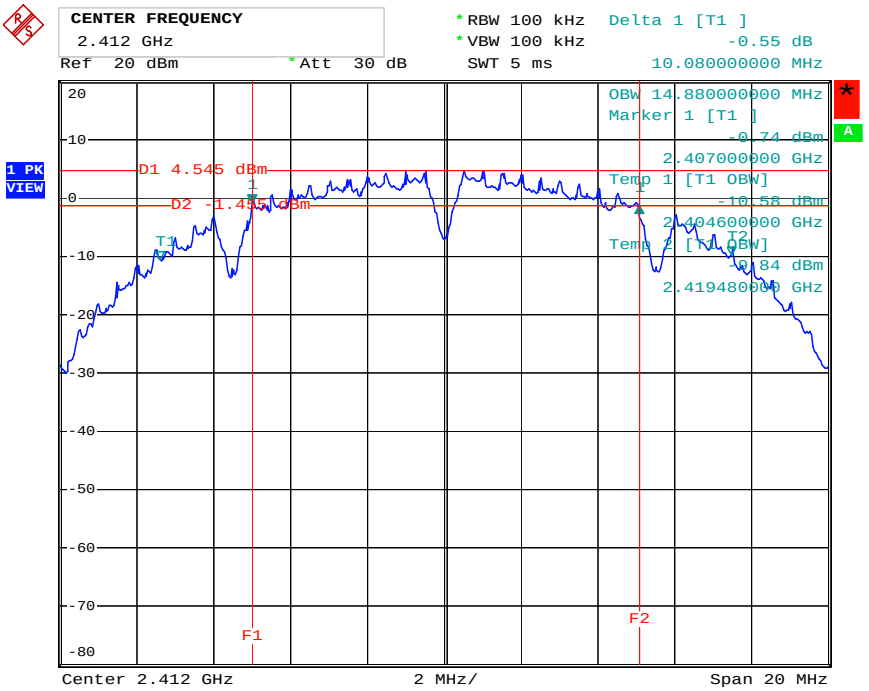
6 dB Bandwidth Plot on Configuration IEEE 802.11g / 2462 MHz



Date: 29.SEP.2010 11:59:49

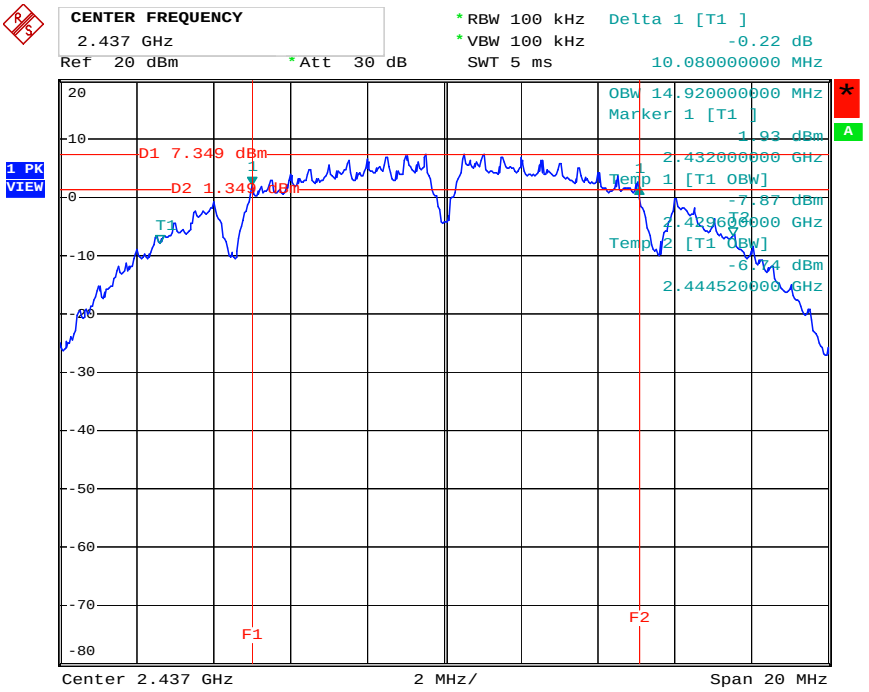
<For Second Source – EUT 2 (Mode 1 with Dipole Antenna)>:

6 dB Bandwidth Plot on Configuration IEEE 802.11b / 2412 MHz



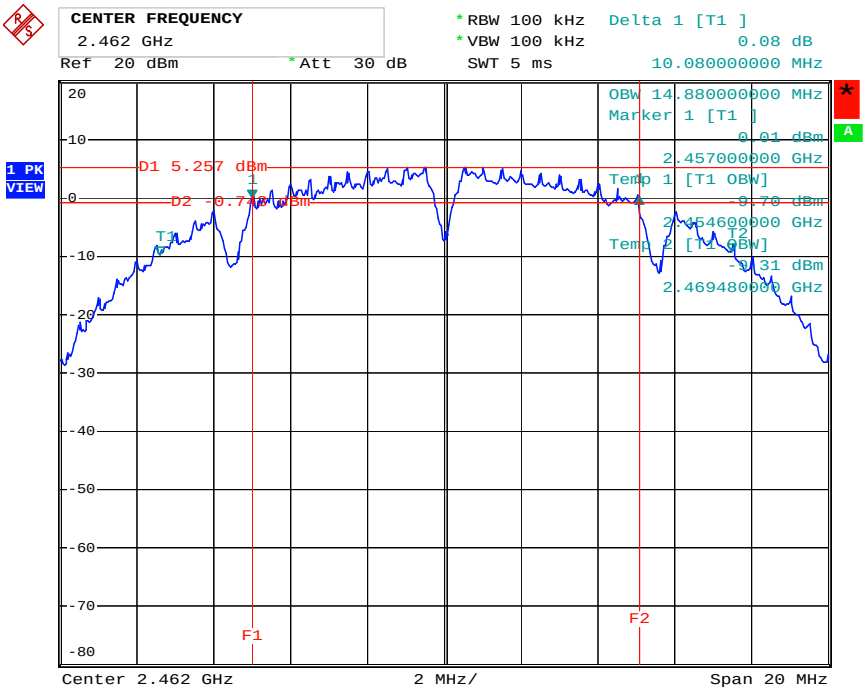
Date: 29.SEP.2010 11:40:08

6 dB Bandwidth Plot on Configuration IEEE 802.11b / 2437 MHz



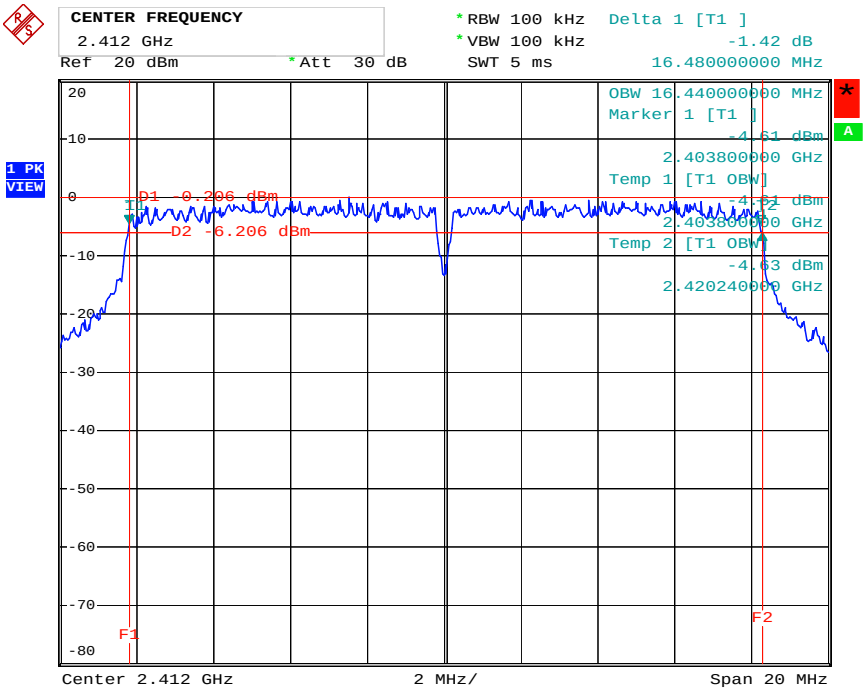
Date: 29.SEP.2010 11:45:27

6 dB Bandwidth Plot on Configuration IEEE 802.11b / 2462 MHz



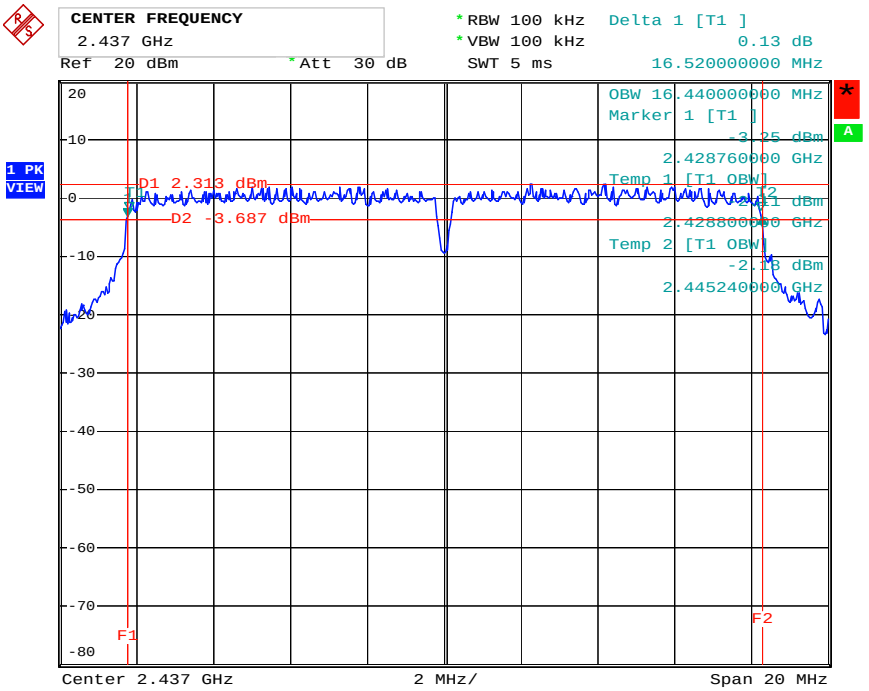
Date: 29.SEP.2010 11:57:15

6 dB Bandwidth Plot on Configuration IEEE 802.11g / 2412 MHz



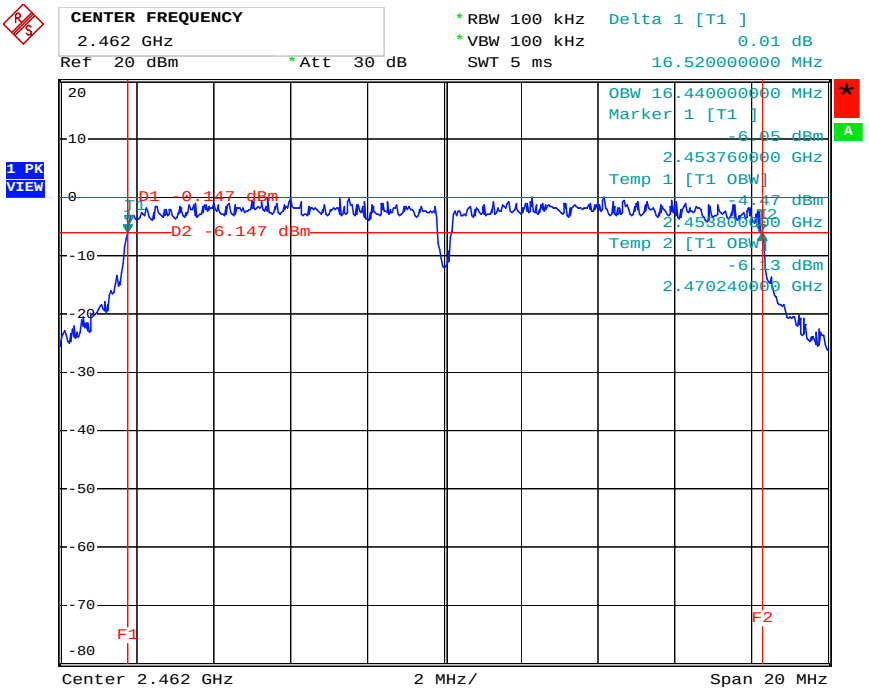
Date: 29.SEP.2010 12:07:39

6 dB Bandwidth Plot on Configuration IEEE 802.11g / 2437 MHz



Date: 29.SEP.2010 12:06:35

6 dB Bandwidth Plot on Configuration IEEE 802.11g / 2462 MHz



Date: 29.SEP.2010 11:59:49

4.5. Radiated Emissions Measurement

4.5.1. Limit

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

4.5.2. Measuring Instruments and Setting

Please refer to section 5 of equipments list in this report. The following table is the setting of spectrum analyzer and receiver.

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (Emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average
RB / VB (Emission in non-restricted band)	1MHz / 1MHz for peak

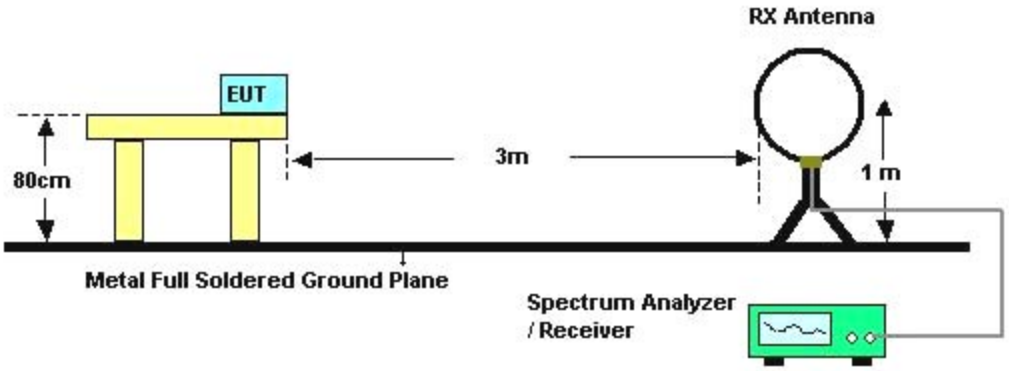
Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

4.5.3. Test Procedures

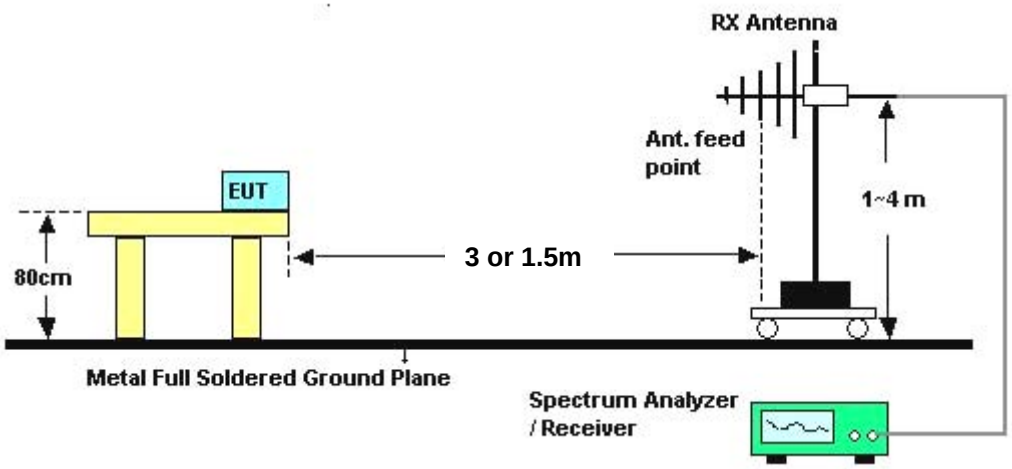
1. Configure the EUT according to ANSI C63.4. The EUT was placed on the top of the turntable 0.8 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
4. For each suspected emissions, the antenna tower was scan (from 1 m to 4 m) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
6. For emissions above 1GHz, use 1MHz VBW and RBW for peak reading. Then 1MHz RBW and 10Hz VBW for average reading in spectrum analyzer.
7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.
8. If the emissions level of the EUT in peak mode was 3 dB lower than the average 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 for below 1GHz.
9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions 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.
10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High – Low scan is not required in this case.

4.5.4. Test Setup Layout

For radiated emissions below 30MHz



For radiated emissions above 30MHz



Above 10 GHz shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade form 3m to 1.5m.

Distance extrapolation factor = 20 log (specific distanc [3m] / test distance [1.5m]) (dB);

Limit line = specific limits (dBuV) + distance extrapolation factor [6 dB].

4.5.5. Test Deviation

There is no deviation with the original standard.

4.5.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

4.5.7. Results of Radiated Emissions (9kHz~30MHz)

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	Normal Link

Freq. (MHz)	Level (dBuV)	Over Limit (dB)	Limit Line (dBuV)	Remark
-	-	-	-	See Note

Note:

The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.

Distance extrapolation factor = 40 log (specific distance / test distance) (dB);

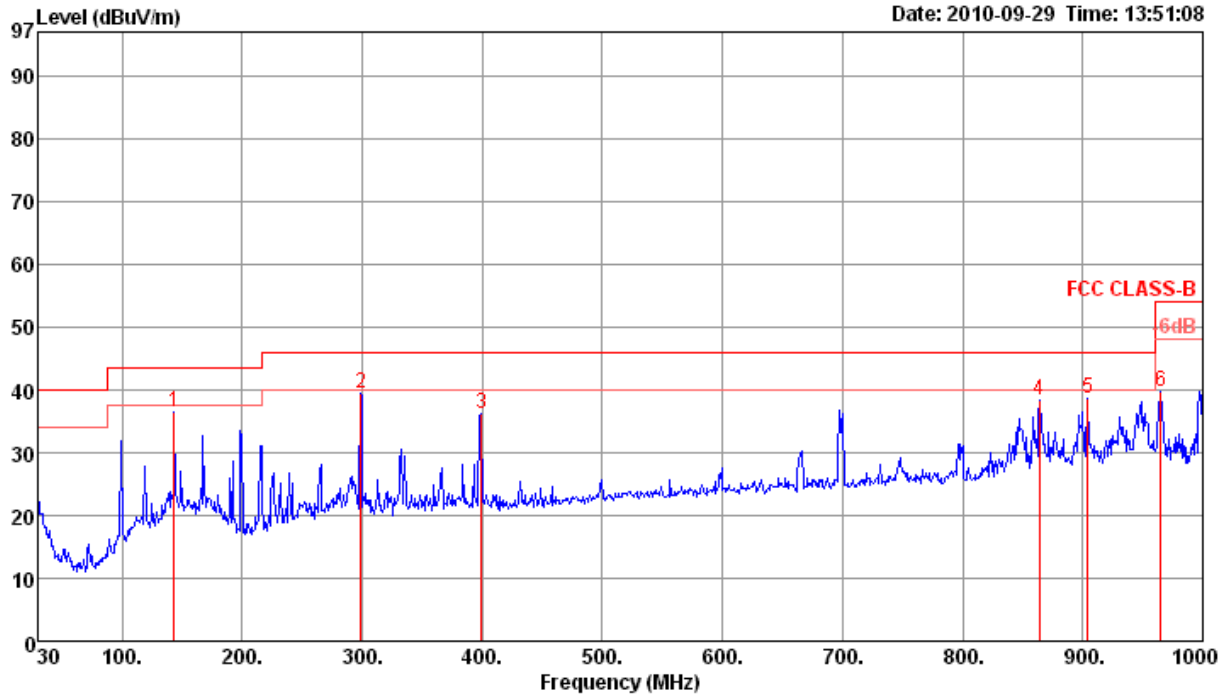
Limit line = specific limits (dBuV) + distance extrapolation factor.

4.5.8. Results of Radiated Emissions (30MHz~1GHz)

<For Main Source – EUT 2 (Mode 1 with Dipole Antenna)>:

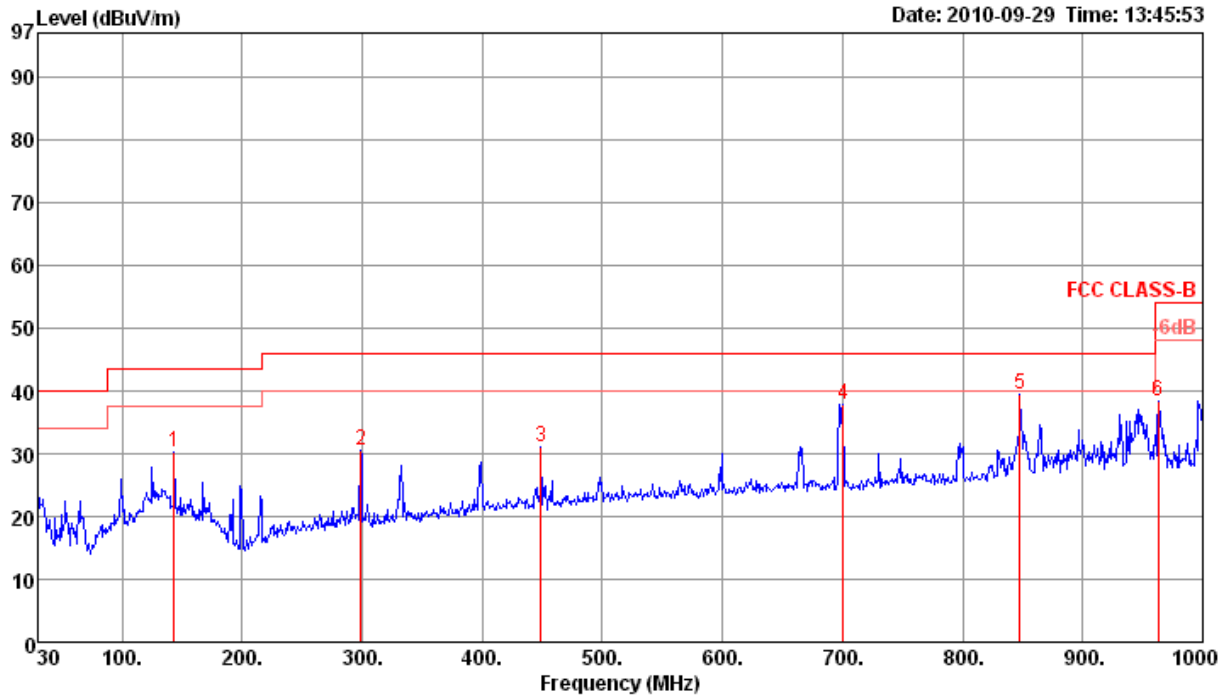
Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	Normal Link

Horizontal



		Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1		143.49	36.54	43.50	-6.96	50.33	1.42	27.38	12.17	0	100	Peak	HORIZONTAL
2	p	298.69	39.50	46.00	-6.50	50.95	2.10	26.90	13.35	0	100	Peak	HORIZONTAL
3		399.57	36.30	46.00	-9.70	45.54	2.30	27.60	16.06	0	100	Peak	HORIZONTAL
4		864.20	38.43	46.00	-7.57	42.18	3.46	27.47	20.26	0	100	Peak	HORIZONTAL
5		903.97	38.75	46.00	-7.25	41.97	3.60	27.38	20.56	0	100	Peak	HORIZONTAL
6		965.08	39.67	54.00	-14.33	42.16	3.63	27.14	21.02	0	100	Peak	HORIZONTAL

Vertical



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1	143.49	30.28	43.50	-13.22	44.07	1.42	27.38	12.17	0	400	Peak	VERTICAL
2	298.69	30.51	46.00	-15.49	41.96	2.10	26.90	13.35	0	400	Peak	VERTICAL
3	449.04	31.13	46.00	-14.87	39.56	2.59	27.85	16.83	0	400	Peak	VERTICAL
4	700.27	37.85	46.00	-8.15	43.45	3.30	27.99	19.09	0	400	Peak	VERTICAL
5 p	847.71	39.55	46.00	-6.45	43.53	3.40	27.51	20.13	0	400	Peak	VERTICAL
6	963.14	38.38	54.00	-15.62	40.89	3.63	27.15	21.01	0	400	Peak	VERTICAL

Note:

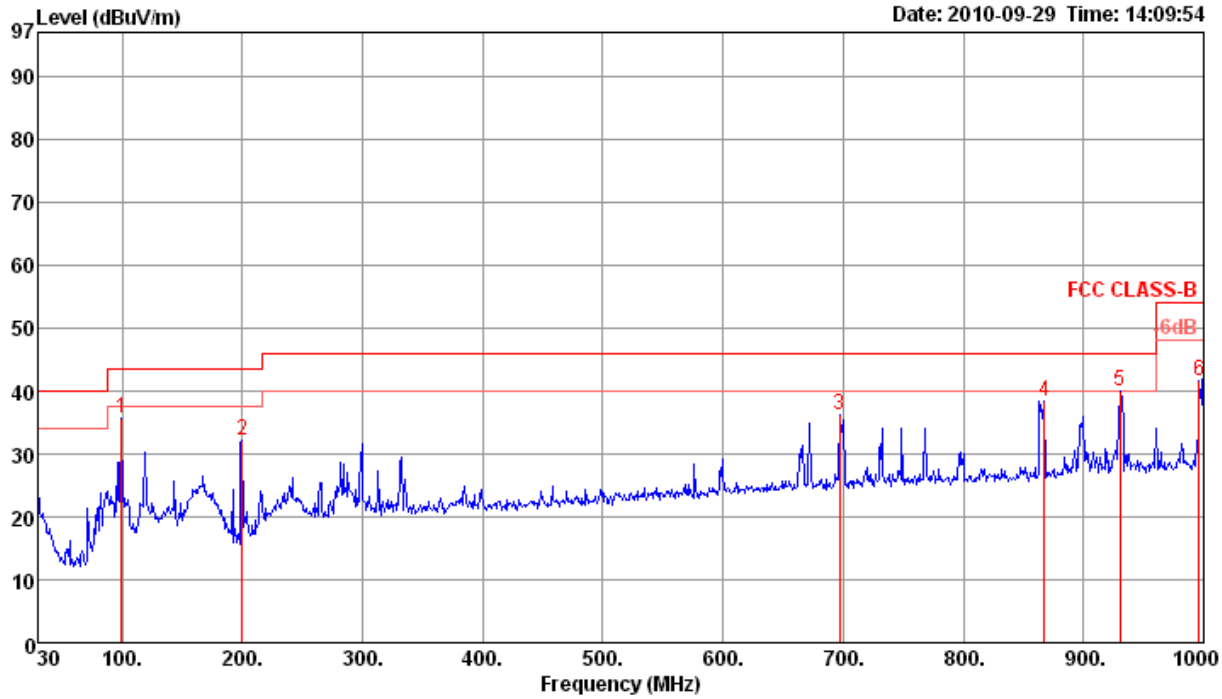
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

<For Main Source – EUT 2 (Mode 2 with PIFA Antenna)>:

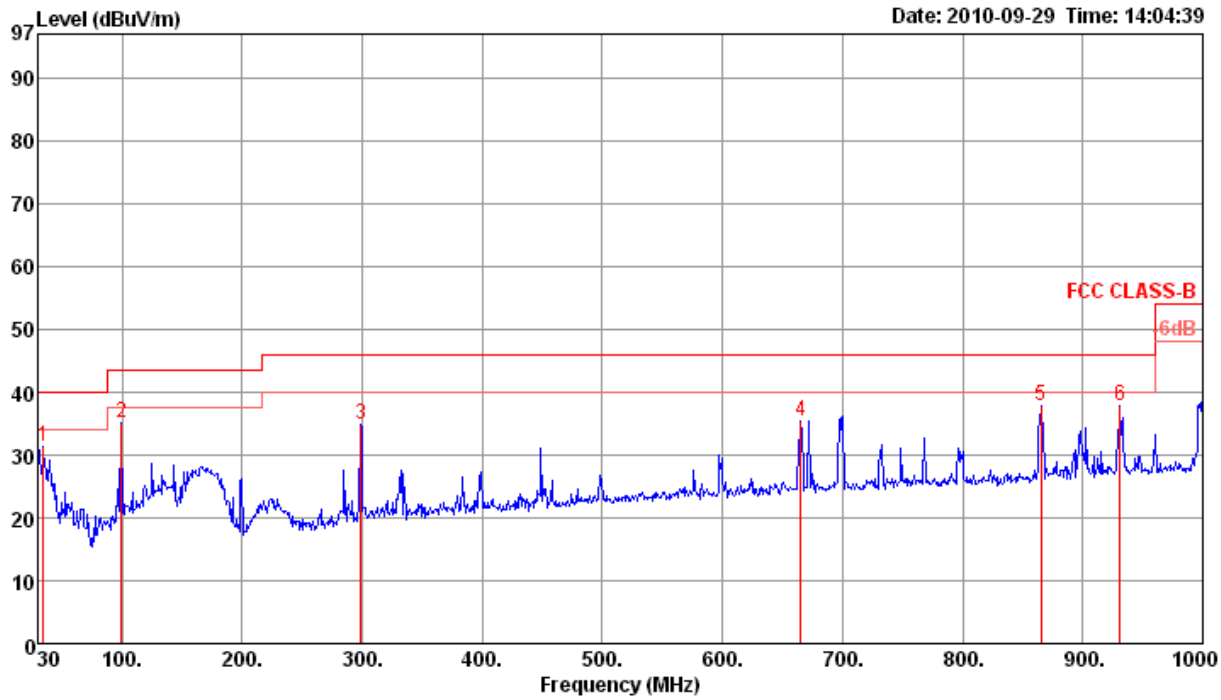
Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	Normal Link

Horizontal



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1	99.84	35.64	43.50	-7.86	51.05	1.20	27.60	10.99	0	100	Peak	HORIZONTAL
2	199.75	32.02	43.50	-11.48	48.37	1.70	27.10	9.05	0	100	Peak	HORIZONTAL
3	697.36	36.22	46.00	-9.78	41.83	3.31	28.00	19.08	0	100	Peak	HORIZONTAL
4	867.11	38.40	46.00	-7.60	42.12	3.47	27.47	20.28	0	100	Peak	HORIZONTAL
5 p	930.16	39.93	46.00	-6.07	42.85	3.60	27.28	20.76	0	100	Peak	HORIZONTAL
6	996.12	41.61	54.00	-12.39	43.68	3.69	27.02	21.26	0	100	Peak	HORIZONTAL

Vertical



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1	34.85	31.29	40.00	-8.71	42.51	0.50	27.80	16.08	0	400	Peak	VERTICAL
2	99.84	35.12	43.50	-8.38	50.53	1.20	27.60	10.99	0	400	Peak	VERTICAL
3	298.69	34.94	46.00	-11.06	46.39	2.10	26.90	13.35	0	400	Peak	VERTICAL
4	665.35	35.44	46.00	-10.56	41.05	3.44	28.03	18.98	0	400	Peak	VERTICAL
5 p	865.17	37.95	46.00	-8.05	41.70	3.46	27.47	20.26	0	400	Peak	VERTICAL
6	931.13	37.91	46.00	-8.09	40.81	3.60	27.27	20.77	0	400	Peak	VERTICAL

Note:

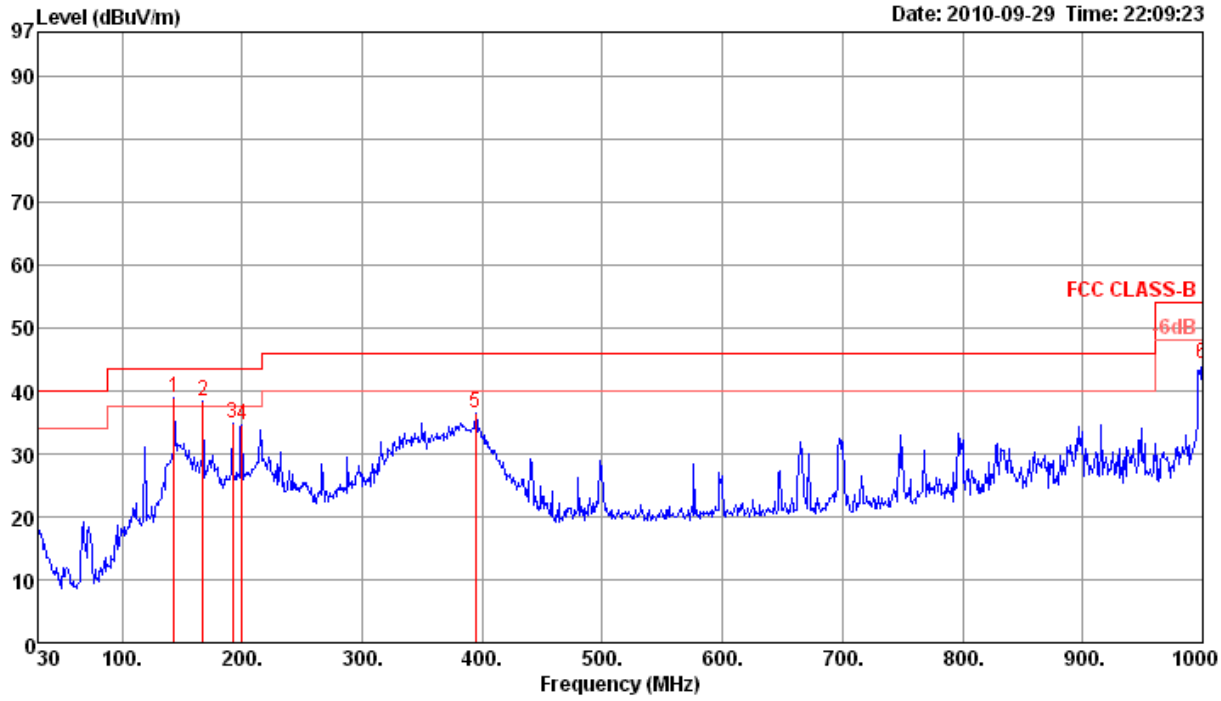
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

<For Second Source – EUT 2 (Mode 1 with Dipole Antenna)>:

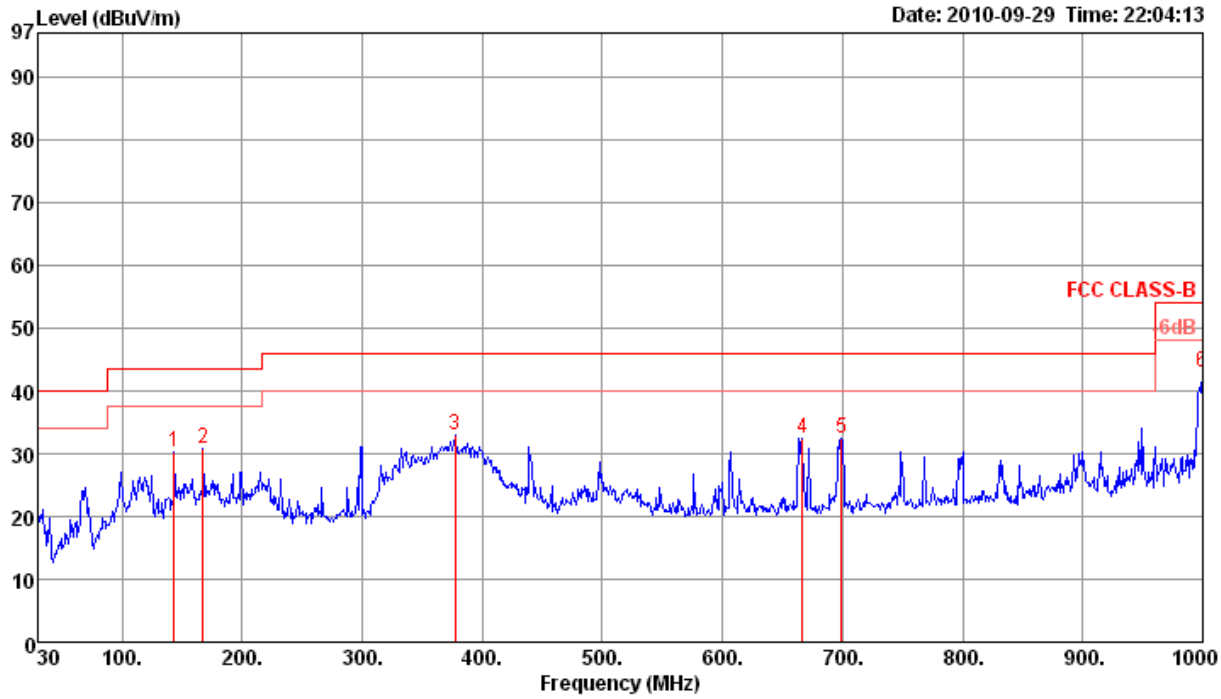
Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	Normal Link

Horizontal



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1 p	143.49	38.86	43.50	-4.64	52.65	1.42	27.38	12.17	0	100	Peak	HORIZONTAL
2 !	167.74	38.41	43.50	-5.09	51.52	1.54	27.26	12.61	0	100	Peak	HORIZONTAL
3	191.99	34.81	43.50	-8.69	49.60	1.66	27.14	10.69	0	100	Peak	HORIZONTAL
4	199.75	34.53	43.50	-8.97	50.88	1.70	27.10	9.05	0	100	Peak	HORIZONTAL
5	394.72	36.38	46.00	-9.62	45.72	2.29	27.56	15.93	0	100	Peak	HORIZONTAL
6	1000.00	44.19	54.00	-9.81	46.20	3.70	27.00	21.29	0	100	Peak	HORIZONTAL

Vertical



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1	143.49	30.27	43.50	-13.23	44.06	1.42	27.38	12.17	0	400	Peak	VERTICAL
2	167.74	30.71	43.50	-12.79	43.82	1.54	27.26	12.61	0	400	Peak	VERTICAL
3	377.26	33.01	46.00	-12.99	42.74	2.25	27.44	15.46	0	400	Peak	VERTICAL
4	666.32	32.55	46.00	-13.45	38.17	3.43	28.03	18.98	0	400	Peak	VERTICAL
5	699.30	32.47	46.00	-13.53	38.08	3.30	28.00	19.09	0	400	Peak	VERTICAL
6 p	1000.00	42.85	54.00	-11.15	44.86	3.70	27.00	21.29	0	400	Peak	VERTICAL

Note:

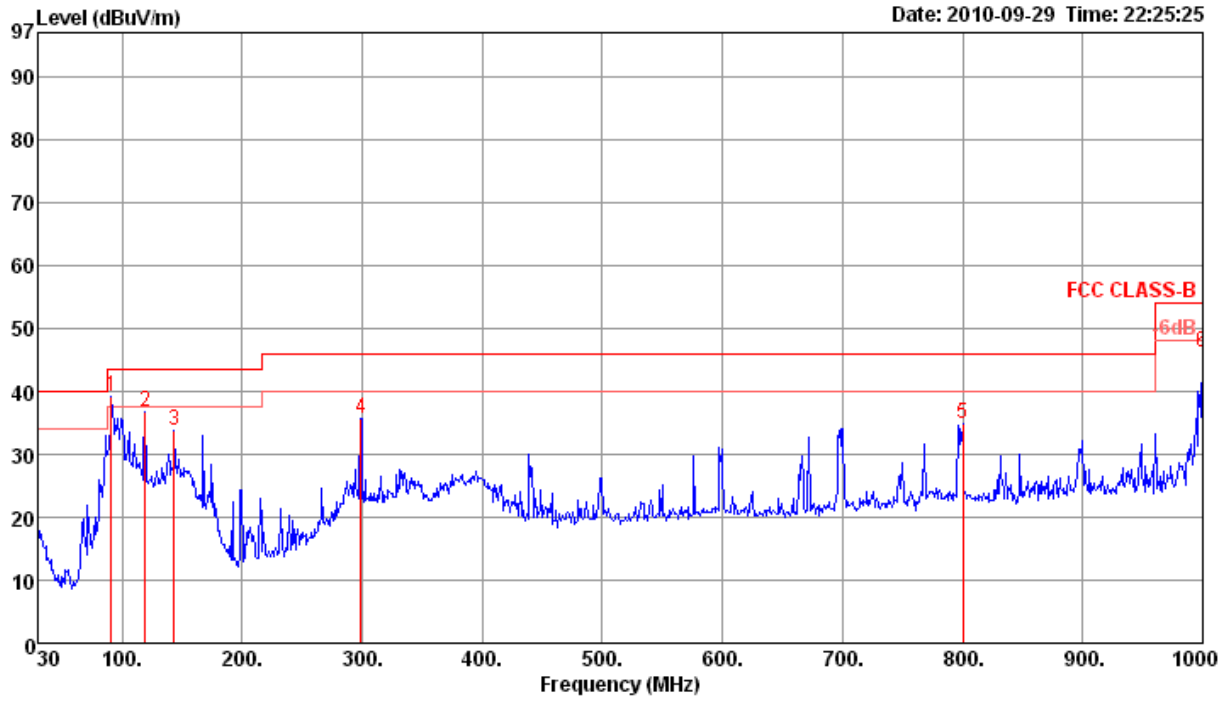
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

<For Second Source – EUT 2 (Mode 2 with PIFA Antenna)>:

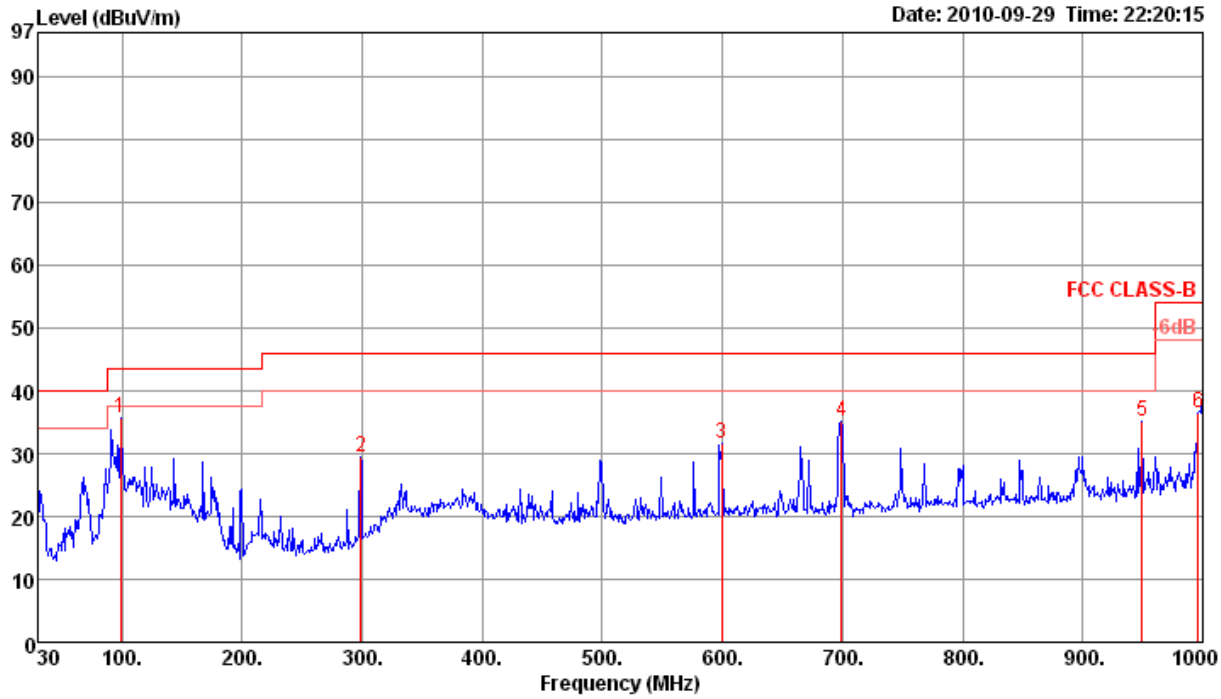
Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	Normal Link

Horizontal



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1 p	91.11	39.22	43.50	-4.28	56.58	1.10	27.64	9.18	0	100	Peak	HORIZONTAL
2	119.24	36.64	43.50	-6.86	50.48	1.20	27.50	12.46	0	100	Peak	HORIZONTAL
3	143.49	33.85	43.50	-9.65	47.64	1.42	27.38	12.17	0	100	Peak	HORIZONTAL
4	298.69	35.63	46.00	-10.37	47.08	2.10	26.90	13.35	0	100	Peak	HORIZONTAL
5	800.18	34.74	46.00	-11.26	39.27	3.30	27.60	19.77	0	100	Peak	HORIZONTAL
6	1000.00	46.15	54.00	-7.85	48.16	3.70	27.00	21.29	0	100	Peak	HORIZONTAL

Vertical



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1 p	98.87	35.76	43.50	-7.74	51.40	1.18	27.61	10.79	0	400	Peak	VERTICAL
2	298.69	29.32	46.00	-16.68	40.77	2.10	26.90	13.35	0	400	Peak	VERTICAL
3	599.39	31.50	46.00	-14.50	37.94	2.90	28.10	18.76	0	400	Peak	VERTICAL
4	699.30	35.08	46.00	-10.92	40.69	3.30	28.00	19.09	0	400	Peak	VERTICAL
5	949.56	35.22	46.00	-10.78	37.91	3.60	27.20	20.91	0	400	Peak	VERTICAL
6	996.12	36.52	54.00	-17.48	38.59	3.69	27.02	21.26	0	400	Peak	VERTICAL

Note:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

4.5.9. Results for Radiated Emissions (1GHz~10th Harmonic)

<For Main Source – EUT 2 (Mode 1 with Dipole Antenna)>:

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 20MHz Ch 1 / Mode 1
Test Date	Sep. 10, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4824.01	41.09	74.00	-32.91	40.60	2.46	33.06	35.03	56	100	Peak	HORIZONTAL
2	4824.14	28.17	54.00	-25.83	27.68	2.46	33.06	35.03	56	100	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4823.97	40.69	74.00	-33.31	40.20	2.46	33.06	35.03	269	100	Peak	VERTICAL
2	4824.25	29.00	54.00	-25.00	28.51	2.46	33.06	35.03	269	100	Average	VERTICAL

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 20MHz Ch 6 / Mode 1
Test Date	Sep. 10, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4873.94	39.72	74.00	-34.28	39.12	2.47	33.16	35.03	53	100	Peak	HORIZONTAL
2	4874.23	27.89	54.00	-26.11	27.29	2.47	33.16	35.03	53	100	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4873.76	41.41	74.00	-32.59	40.81	2.47	33.16	35.03	263	100	Peak	VERTICAL
2	4874.05	30.36	54.00	-23.64	29.76	2.47	33.16	35.03	263	100	Average	VERTICAL

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 20MHz Ch11 / Mode 1
Test Date	Sep. 10, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4923.70	29.41	54.00	-24.59	28.69	2.47	33.26	35.01	55	100	Average	HORIZONTAL
2	4924.13	41.19	74.00	-32.81	40.47	2.47	33.26	35.01	55	100	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4923.73	43.74	74.00	-30.26	43.02	2.47	33.26	35.01	144	100	Peak	VERTICAL
2	4924.25	31.76	54.00	-22.24	31.04	2.47	33.26	35.01	144	100	Average	VERTICAL

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 40MHz Ch 3 / Mode 1
Test Date	Sep. 10, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4843.98	28.14	54.00	-25.86	27.62	2.46	33.09	35.03	61	100	Average	HORIZONTAL
2	4844.00	39.85	74.00	-34.15	39.33	2.46	33.09	35.03	61	100	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4843.52	40.19	74.00	-33.81	39.67	2.46	33.09	35.03	237	100	Peak	VERTICAL
2	4843.86	28.37	54.00	-25.63	27.85	2.46	33.09	35.03	237	100	Average	VERTICAL

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 40MHz Ch 6 / Mode 1
Test Date	Sep. 10, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4873.56	39.74	74.00	-34.26	39.14	2.47	33.16	35.03	61	100	Peak	HORIZONTAL
2	4873.99	28.20	54.00	-25.80	27.60	2.47	33.16	35.03	61	100	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4874.35	44.10	74.00	-29.90	43.50	2.47	33.16	35.03	309	100	Peak	VERTICAL
2	4874.37	32.05	54.00	-21.95	31.45	2.47	33.16	35.03	309	100	Average	VERTICAL

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 40MHz Ch 9 / Mode 1
Test Date	Sep. 10, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4903.82	28.05	54.00	-25.95	27.41	2.47	33.19	35.02	66	100	Average	HORIZONTAL
2	4904.14	40.19	74.00	-33.81	39.55	2.47	33.19	35.02	66	100	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4903.81	43.74	74.00	-30.26	43.10	2.47	33.19	35.02	268	100	Peak	VERTICAL
2	4904.06	31.89	54.00	-22.11	31.25	2.47	33.19	35.02	268	100	Average	VERTICAL

Note:

The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11b CH 1 / Mode 1
Test Date	Sep. 10, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4824.21	40.03	74.00	-33.97	39.54	2.46	33.06	35.03	66	100	Peak	HORIZONTAL
2	4824.24	27.81	54.00	-26.19	27.32	2.46	33.06	35.03	66	100	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4824.00	33.21	54.00	-20.79	32.72	2.46	33.06	35.03	93	100	Average	VERTICAL
2	4824.20	43.46	74.00	-30.54	42.97	2.46	33.06	35.03	93	100	Peak	VERTICAL

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11b CH 6 / Mode 1
Test Date	Sep. 10, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4873.32	41.95	74.00	-32.05	41.35	2.47	33.16	35.03	306	100	Peak	HORIZONTAL
2	4874.06	28.66	54.00	-25.34	28.06	2.47	33.16	35.03	306	100	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4873.99	38.83	54.00	-15.17	38.23	2.47	33.16	35.03	73	118	Average	VERTICAL
2	4874.23	44.90	74.00	-29.10	44.30	2.47	33.16	35.03	73	118	Peak	VERTICAL

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11b CH 11 / Mode 1
Test Date	Sep. 10, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4923.65	41.44	74.00	-32.56	40.72	2.47	33.26	35.01	122	181	Peak	HORIZONTAL
2	4924.02	29.43	54.00	-24.57	28.71	2.47	33.26	35.01	122	181	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4923.97	44.43	74.00	-29.57	43.71	2.47	33.26	35.01	92	173	Peak	VERTICAL
2	4924.01	35.24	54.00	-18.76	34.52	2.47	33.26	35.01	92	173	Average	VERTICAL

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11g CH 1 / Mode 1
Test Date	Sep. 10, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4823.80	40.75	74.00	-33.25	40.26	2.46	33.06	35.03	334	100	Peak	HORIZONTAL
2	4823.91	27.81	54.00	-26.19	27.32	2.46	33.06	35.03	334	100	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4823.79	40.56	74.00	-33.44	40.07	2.46	33.06	35.03	200	100	Peak	VERTICAL
2	4823.92	28.42	54.00	-25.58	27.93	2.46	33.06	35.03	200	100	Average	VERTICAL

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11g CH 6 / Mode 1
Test Date	Sep. 10, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4873.90	27.82	54.00	-26.18	27.22	2.47	33.16	35.03	69	100	Average	HORIZONTAL
2	4874.11	40.52	74.00	-33.48	39.92	2.47	33.16	35.03	69	100	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4873.95	40.10	74.00	-33.90	39.50	2.47	33.16	35.03	170	100	Peak	VERTICAL
2	4874.15	28.25	54.00	-25.75	27.65	2.47	33.16	35.03	170	100	Average	VERTICAL

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11g CH 11 / Mode 1
Test Date	Sep. 10, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4923.98	40.34	74.00	-33.66	39.62	2.47	33.26	35.01	63	100	Peak	HORIZONTAL
2	4924.49	28.30	54.00	-25.70	27.58	2.47	33.26	35.01	63	100	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4924.33	41.17	74.00	-32.83	40.45	2.47	33.26	35.01	229	100	Peak	VERTICAL
2	4924.42	30.45	54.00	-23.55	29.73	2.47	33.26	35.01	229	100	Average	VERTICAL

Note:

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

<For Main Source – EUT 2 (Mode 2 with PIFA Antenna)>:

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 20MHz Ch 1 / Mode 2
Test Date	Sep. 10, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4823.98	29.25	54.00	-24.75	28.76	2.46	33.06	35.03	284	101	Average	HORIZONTAL
2	4824.00	41.28	74.00	-32.72	40.79	2.46	33.06	35.03	284	101	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4823.98	42.68	74.00	-31.32	42.19	2.46	33.06	35.03	204	101	Peak	VERTICAL
2	4823.99	30.09	54.00	-23.91	29.60	2.46	33.06	35.03	204	101	Average	VERTICAL

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 20MHz Ch 6 / Mode 2
Test Date	Sep. 10, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4873.99	28.65	54.00	-25.35	28.05	2.47	33.16	35.03	101	99	Average	HORIZONTAL
2	4874.00	41.29	74.00	-32.71	40.69	2.47	33.16	35.03	101	99	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4873.99	29.59	54.00	-24.41	28.99	2.47	33.16	35.03	297	100	Average	VERTICAL
2	4874.02	42.19	74.00	-31.81	41.59	2.47	33.16	35.03	297	100	Peak	VERTICAL

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 20MHz Ch11 / Mode 2
Test Date	Sep. 10, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4923.97	29.19	54.00	-24.81	28.47	2.47	33.26	35.01	343	99	Average	HORIZONTAL
2	4924.01	42.04	74.00	-31.96	41.32	2.47	33.26	35.01	343	99	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4924.04	29.85	54.00	-24.15	29.13	2.47	33.26	35.01	141	99	Average	VERTICAL
2	4924.08	41.88	74.00	-32.12	41.16	2.47	33.26	35.01	141	99	Peak	VERTICAL

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 40MHz Ch 3 / Mode 2
Test Date	Sep. 10, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4843.93	29.15	54.00	-24.85	28.63	2.46	33.09	35.03	94	99	Average	HORIZONTAL
2	4844.09	41.76	74.00	-32.24	41.24	2.46	33.09	35.03	94	99	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4843.95	41.43	74.00	-32.57	40.91	2.46	33.09	35.03	323	99	Peak	VERTICAL
2	4843.97	29.95	54.00	-24.05	29.43	2.46	33.09	35.03	323	99	Average	VERTICAL

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 40MHz Ch 6 / Mode 2
Test Date	Sep. 10, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4874.02	40.99	74.00	-33.01	40.39	2.47	33.16	35.03	261	99	Peak	HORIZONTAL
2	4874.08	28.52	54.00	-25.48	27.92	2.47	33.16	35.03	261	99	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4873.96	42.31	74.00	-31.69	41.71	2.47	33.16	35.03	98	99	Peak	VERTICAL
2	4874.00	29.68	54.00	-24.32	29.08	2.47	33.16	35.03	98	99	Average	VERTICAL

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 40MHz Ch 9 / Mode 2
Test Date	Sep. 10, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4904.04	41.41	74.00	-32.59	40.77	2.47	33.19	35.02	172	99	Peak	HORIZONTAL
2	4904.09	28.80	54.00	-25.20	28.16	2.47	33.19	35.02	172	99	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4903.98	41.51	74.00	-32.49	40.87	2.47	33.19	35.02	326	99	Peak	VERTICAL
2	4903.99	29.34	54.00	-24.66	28.70	2.47	33.19	35.02	326	99	Average	VERTICAL

Note:

The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11b CH 1 / Mode 2
Test Date	Sep. 10, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4824.04	44.89	74.00	-29.11	44.40	2.46	33.06	35.03	299	100	Peak	HORIZONTAL
2	4824.06	37.65	54.00	-16.35	37.16	2.46	33.06	35.03	299	100	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4824.00	39.43	54.00	-14.57	38.94	2.46	33.06	35.03	284	100	Average	VERTICAL
2	4824.12	45.51	74.00	-28.49	45.02	2.46	33.06	35.03	284	100	Peak	VERTICAL

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11b CH 6 / Mode 2
Test Date	Sep. 10, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4874.01	35.43	54.00	-18.57	34.83	2.47	33.16	35.03	300	100	Average	HORIZONTAL
2	4874.15	43.28	74.00	-30.72	42.68	2.47	33.16	35.03	300	100	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4874.04	36.60	54.00	-17.40	36.00	2.47	33.16	35.03	182	100	Average	VERTICAL
2	4874.07	43.99	74.00	-30.01	43.39	2.47	33.16	35.03	182	100	Peak	VERTICAL

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11b CH 11 / Mode 2
Test Date	Sep. 10, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4924.05	44.04	74.00	-29.96	43.32	2.47	33.26	35.01	136	100	Peak	HORIZONTAL
2	4924.06	34.39	54.00	-19.61	33.67	2.47	33.26	35.01	136	100	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4924.01	37.53	54.00	-16.47	36.81	2.47	33.26	35.01	336	100	Average	VERTICAL
2	4924.09	45.19	74.00	-28.81	44.47	2.47	33.26	35.01	336	100	Peak	VERTICAL

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11g CH 1 / Mode 2
Test Date	Sep. 10, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4823.98	42.02	74.00	-31.98	41.53	2.46	33.06	35.03	196	100	Peak	HORIZONTAL
2	4823.99	29.72	54.00	-24.28	29.23	2.46	33.06	35.03	196	100	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4823.98	43.80	74.00	-30.20	43.31	2.46	33.06	35.03	297	100	Peak	VERTICAL
2	4823.99	30.89	54.00	-23.11	30.40	2.46	33.06	35.03	297	100	Average	VERTICAL

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11g CH 6 / Mode 2
Test Date	Sep. 10, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4873.99	28.78	54.00	-25.22	28.18	2.47	33.16	35.03	225	100	Average	HORIZONTAL
2	4873.99	41.33	74.00	-32.67	40.73	2.47	33.16	35.03	225	100	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4873.99	29.70	54.00	-24.30	29.10	2.47	33.16	35.03	180	100	Average	VERTICAL
2	4874.00	42.45	74.00	-31.55	41.85	2.47	33.16	35.03	180	100	Peak	VERTICAL

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11g CH 11 / Mode 2
Test Date	Sep. 10, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4923.98	41.68	74.00	-32.32	40.96	2.47	33.26	35.01	76	101	Peak	HORIZONTAL
2	4923.99	29.31	54.00	-24.69	28.59	2.47	33.26	35.01	76	101	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4923.98	42.51	74.00	-31.49	41.79	2.47	33.26	35.01	267	101	Peak	VERTICAL
2	4924.02	30.13	54.00	-23.87	29.41	2.47	33.26	35.01	267	101	Average	VERTICAL

Note:

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

<For Main Source – EUT 1 (Mode 3 with Dipole Antenna)>:

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 20MHz Ch 6 / Mode 3
Test Date	Sep. 23, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1 p	7310.58	55.41	74.00	-18.59	48.97	5.36	35.43	36.51	283	170	Peak	HORIZONTAL
2 a	7311.50	40.16	54.00	-13.84	33.71	5.37	35.43	36.51	283	170	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1 p	7310.67	63.75	74.00	-10.25	57.31	5.36	35.43	36.51	259	152	Peak	VERTICAL
2 a	7311.50	48.23	54.00	-5.77	41.78	5.37	35.43	36.51	259	152	Average	VERTICAL

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 40MHz Ch 6 / Mode 3
Test Date	Sep. 23, 2010		

Horizontal

		Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1	a	7311.09	32.94	54.00	-21.06	26.50	5.36	35.43	36.51	254	100	Average	HORIZONTAL
2	p	7311.47	46.67	74.00	-27.33	40.22	5.37	35.43	36.51	254	100	Peak	HORIZONTAL

Vertical

		Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1	a	7310.64	35.15	54.00	-18.85	28.71	5.36	35.43	36.51	262	100	Average	VERTICAL
2	p	7311.36	49.12	74.00	-24.88	42.67	5.37	35.43	36.51	262	100	Peak	VERTICAL

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11b CH 6 / Mode 3
Test Date	Sep. 23, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1 a	7310.50	44.92	54.00	-9.08	38.48	5.36	35.43	36.51	283	169	Average	HORIZONTAL
2 p	7310.60	53.11	74.00	-20.89	46.67	5.36	35.43	36.51	283	169	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1 a	7310.50	53.84	54.00	-0.16	47.40	5.36	35.43	36.51	258	151	Average	VERTICAL
2 p	7311.47	59.26	74.00	-14.74	52.81	5.37	35.43	36.51	258	151	Peak	VERTICAL

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11g CH 6 / Mode 3
Test Date	Sep. 23, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1 a	7310.50	36.69	54.00	-17.31	30.25	5.36	35.43	36.51	279	100	Average	HORIZONTAL
2 p	7310.69	51.44	74.00	-22.56	45.00	5.36	35.43	36.51	279	100	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1 a	7310.50	48.99	54.00	-5.01	42.55	5.36	35.43	36.51	257	171	Average	VERTICAL
2 p	7310.71	63.38	74.00	-10.62	56.94	5.36	35.43	36.51	257	171	Peak	VERTICAL

Note:

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

<For Main Source – EUT 1 (Mode 4 with PIFA Antenna)>:

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 20MHz Ch 6 / Mode 4
Test Date	Sep. 24, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1 p	7311.20	56.30	74.00	-17.70	49.86	5.36	35.43	36.51	323	100	Peak	HORIZONTAL
2 a	7311.49	41.30	54.00	-12.70	34.85	5.37	35.43	36.51	323	100	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1 p	7311.00	60.40	74.00	-13.60	53.96	5.36	35.43	36.51	267	138	Peak	VERTICAL
2 a	7311.00	44.96	54.00	-9.04	38.52	5.36	35.43	36.51	267	138	Average	VERTICAL

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 40MHz Ch 6 / Mode 4
Test Date	Sep. 24, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1 p	7310.99	49.46	74.00	-24.54	43.02	5.36	35.43	36.51	325	100	Peak	HORIZONTAL
2 a	7311.47	35.14	54.00	-18.86	28.69	5.37	35.43	36.51	325	100	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1 p	7311.07	48.82	74.00	-25.18	42.38	5.36	35.43	36.51	251	100	Peak	VERTICAL
2 a	7311.50	35.50	54.00	-18.50	29.05	5.37	35.43	36.51	251	100	Average	VERTICAL

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11b CH 6 / Mode 4
Test Date	Sep. 24, 2010		

Horizontal

		Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1	a	7310.50	48.15	54.00	-5.85	41.71	5.36	35.43	36.51	323	118	Average	HORIZONTAL
2	p	7310.66	54.98	74.00	-19.02	48.54	5.36	35.43	36.51	323	118	Peak	HORIZONTAL

Vertical

		Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1		4874.00	54.04	74.00	-19.96	51.43	4.33	35.20	33.48	260	112	Peak	VERTICAL
2	!	4874.02	51.27	54.00	-2.73	48.66	4.33	35.20	33.48	260	112	Average	VERTICAL
3	a	7310.50	53.71	54.00	-0.29	47.27	5.36	35.43	36.51	93	151	Average	VERTICAL
4	p	7310.66	59.46	74.00	-14.54	53.02	5.36	35.43	36.51	93	151	Peak	VERTICAL

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11g CH 6 / Mode 4
Test Date	Sep. 24, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1 a	7310.53	41.65	54.00	-12.35	35.21	5.36	35.43	36.51	320	100	Average	HORIZONTAL
2 p	7311.50	56.52	74.00	-17.48	50.07	5.37	35.43	36.51	320	100	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1 a	7310.50	46.34	54.00	-7.66	39.90	5.36	35.43	36.51	273	138	Average	VERTICAL
2 p	7311.46	60.51	74.00	-13.49	54.06	5.37	35.43	36.51	273	138	Peak	VERTICAL

Note:

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

<For Main Source – EUT 3 (Mode 5 with Dipole Antenna)>:

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 20MHz Ch 6 / Mode 5
Test Date	Sep. 23, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4873.99	42.10	74.00	-31.90	41.50	2.47	33.16	35.03	145	100	Peak	HORIZONTAL
2	4873.99	29.82	54.00	-24.18	29.22	2.47	33.16	35.03	145	100	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4873.99	30.67	54.00	-23.33	30.07	2.47	33.16	35.03	352	100	Average	VERTICAL
2	4874.01	42.82	74.00	-31.18	42.22	2.47	33.16	35.03	352	100	Peak	VERTICAL

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 40MHz Ch 6 / Mode 5
Test Date	Sep. 23, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4873.99	29.49	54.00	-24.51	28.89	2.47	33.16	35.03	355	100	Average	HORIZONTAL
2	4874.00	42.25	74.00	-31.75	41.65	2.47	33.16	35.03	355	100	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4873.99	42.25	74.00	-31.75	41.65	2.47	33.16	35.03	186	100	Peak	VERTICAL
2	4874.01	29.71	54.00	-24.29	29.11	2.47	33.16	35.03	186	100	Average	VERTICAL

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11b CH 6 / Mode 5
Test Date	Sep. 23, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4874.01	30.46	54.00	-23.54	29.86	2.47	33.16	35.03	181	100	Average	HORIZONTAL
2	4874.01	42.67	74.00	-31.33	42.07	2.47	33.16	35.03	181	100	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4873.99	43.77	74.00	-30.23	43.17	2.47	33.16	35.03	0	100	Peak	VERTICAL
2	4874.00	32.66	54.00	-21.34	32.06	2.47	33.16	35.03	0	100	Average	VERTICAL

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11g CH 6 / Mode 5
Test Date	Sep. 23, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4874.00	42.26	74.00	-31.74	41.66	2.47	33.16	35.03	268	100	Peak	HORIZONTAL
2	4874.01	29.93	54.00	-24.07	29.33	2.47	33.16	35.03	268	100	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4873.99	30.51	54.00	-23.49	29.91	2.47	33.16	35.03	251	100	Average	VERTICAL
2	4874.00	42.68	74.00	-31.32	42.08	2.47	33.16	35.03	251	100	Peak	VERTICAL

Note:

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

<For Main Source – EUT 3 (Mode 6 with PIFA Antenna)>:

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 20MHz Ch 6 / Mode 6
Test Date	Sep. 23, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4874.00	29.50	54.00	-24.50	28.90	2.47	33.16	35.03	137	100	Average	HORIZONTAL
2	4874.01	41.96	74.00	-32.04	41.36	2.47	33.16	35.03	137	100	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4874.00	29.73	54.00	-24.27	29.13	2.47	33.16	35.03	283	99	Average	VERTICAL
2	4874.00	42.73	74.00	-31.27	42.13	2.47	33.16	35.03	283	99	Peak	VERTICAL

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 40MHz Ch 6 / Mode 6
Test Date	Sep. 23, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4874.00	29.58	54.00	-24.42	28.98	2.47	33.16	35.03	143	100	Average	HORIZONTAL
2	4874.00	42.28	74.00	-31.72	41.68	2.47	33.16	35.03	143	100	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4873.99	29.93	54.00	-24.07	29.33	2.47	33.16	35.03	33	101	Average	VERTICAL
2	4874.00	41.92	74.00	-32.08	41.32	2.47	33.16	35.03	33	101	Peak	VERTICAL

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11b CH 6 / Mode 6
Test Date	Sep. 23, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4873.99	35.42	54.00	-18.58	34.82	2.47	33.16	35.03	69	108	Average	HORIZONTAL
2	4874.00	44.60	74.00	-29.40	44.00	2.47	33.16	35.03	69	108	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4873.78	35.72	54.00	-18.28	35.12	2.47	33.16	35.03	150	108	Average	VERTICAL
2	4873.99	44.90	74.00	-29.10	44.30	2.47	33.16	35.03	150	108	Peak	VERTICAL

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11g CH 6 / Mode 6
Test Date	Sep. 23, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4873.99	29.54	54.00	-24.46	28.94	2.47	33.16	35.03	269	99	Average	HORIZONTAL
2	4874.00	42.19	74.00	-31.81	41.59	2.47	33.16	35.03	269	99	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4874.00	29.54	54.00	-24.46	28.94	2.47	33.16	35.03	286	99	Average	VERTICAL
2	4874.01	42.43	74.00	-31.57	41.83	2.47	33.16	35.03	286	99	Peak	VERTICAL

Note:

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

<For Second Source – EUT 2 (Mode 1 with Dipole Antenna)>:

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 20MHz Ch 1 / Mode 1
Test Date	Sep. 18, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4823.99	28.81	54.00	-25.19	28.32	2.46	33.06	35.03	163	100	Average	HORIZONTAL
2	4824.00	42.05	74.00	-31.95	41.56	2.46	33.06	35.03	163	100	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4823.99	30.15	54.00	-23.85	29.66	2.46	33.06	35.03	213	100	Average	VERTICAL
2	4824.01	42.26	74.00	-31.74	41.77	2.46	33.06	35.03	213	100	Peak	VERTICAL

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 20MHz Ch 6 / Mode 1
Test Date	Sep. 18, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4874.02	29.28	54.00	-24.72	28.68	2.47	33.16	35.03	298	100	Average	HORIZONTAL
2	4874.06	41.63	74.00	-32.37	41.03	2.47	33.16	35.03	298	100	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4873.93	49.18	74.00	-24.82	48.58	2.47	33.16	35.03	223	116	Peak	VERTICAL
2	4874.00	34.89	54.00	-19.11	34.29	2.47	33.16	35.03	223	116	@verage	VERTICAL

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 20MHz Ch11 / Mode 1
Test Date	Sep. 18, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4923.90	41.72	74.00	-32.28	41.00	2.47	33.26	35.01	216	100	Peak	HORIZONTAL
2	4924.08	29.38	54.00	-24.62	28.66	2.47	33.26	35.01	216	100	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4923.99	29.92	54.00	-24.08	29.20	2.47	33.26	35.01	166	100	Average	VERTICAL
2	4924.05	42.57	74.00	-31.43	41.85	2.47	33.26	35.01	166	100	Peak	VERTICAL

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 40MHz Ch 3 / Mode 1
Test Date	Sep. 18, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4844.00	43.19	74.00	-30.81	42.67	2.46	33.09	35.03	322	99	Peak	HORIZONTAL
2	4844.00	29.71	54.00	-24.29	29.19	2.46	33.09	35.03	322	99	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4844.00	41.86	74.00	-32.14	41.34	2.46	33.09	35.03	159	100	Peak	VERTICAL
2	4844.00	32.23	54.00	-21.77	31.71	2.46	33.09	35.03	159	100	Average	VERTICAL

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 40MHz Ch 6 / Mode 1
Test Date	Sep. 18, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4874.00	41.76	74.00	-32.24	41.16	2.47	33.16	35.03	26	100	Peak	HORIZONTAL
2	4874.00	28.84	54.00	-25.16	28.24	2.47	33.16	35.03	26	100	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4874.00	42.87	74.00	-31.13	42.27	2.47	33.16	35.03	65	100	Peak	VERTICAL
2	4874.00	28.94	54.00	-25.06	28.34	2.47	33.16	35.03	65	100	Average	VERTICAL

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 40MHz Ch 9 / Mode 1
Test Date	Sep. 18, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4904.00	42.20	74.00	-31.80	41.56	2.47	33.19	35.02	234	112	Peak	HORIZONTAL
2	4904.00	28.81	54.00	-25.19	28.17	2.47	33.19	35.02	234	112	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4903.99	29.46	54.00	-24.54	28.82	2.47	33.19	35.02	167	112	Average	VERTICAL
2	4904.01	41.79	74.00	-32.21	41.15	2.47	33.19	35.02	167	112	Peak	VERTICAL

Note:

The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11b CH 1 / Mode 1
Test Date	Sep. 18, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4823.94	31.84	54.00	-22.16	31.35	2.46	33.06	35.03	165	100	Average	HORIZONTAL
2	4824.00	43.21	74.00	-30.79	42.72	2.46	33.06	35.03	165	100	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4823.92	46.67	74.00	-27.33	46.18	2.46	33.06	35.03	104	132	Peak	VERTICAL
2	4824.03	42.42	54.00	-11.58	41.93	2.46	33.06	35.03	104	132	Average	VERTICAL

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11b CH 6 / Mode 1
Test Date	Sep. 18, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4873.96	43.05	74.00	-30.95	42.45	2.47	33.16	35.03	280	101	Peak	HORIZONTAL
2	4874.07	33.15	54.00	-20.85	32.55	2.47	33.16	35.03	280	101	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4873.97	47.73	54.00	-6.27	47.13	2.47	33.16	35.03	102	129	Average	VERTICAL
2	4874.12	50.43	74.00	-23.57	49.83	2.47	33.16	35.03	102	129	Peak	VERTICAL

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11b CH 11 / Mode 1
Test Date	Sep. 18, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4923.71	40.98	74.00	-33.02	40.26	2.47	33.26	35.01	84	100	Peak	HORIZONTAL
2	4924.06	29.55	54.00	-24.45	28.83	2.47	33.26	35.01	84	100	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4923.98	39.90	54.00	-14.10	39.18	2.47	33.26	35.01	102	113	Average	VERTICAL
2	4924.02	49.92	74.00	-24.08	49.20	2.47	33.26	35.01	102	113	Peak	VERTICAL

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11g CH 1 / Mode 1
Test Date	Sep. 18, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4824.21	36.47	54.00	-17.53	35.98	2.46	33.06	35.03	66	100	Average	HORIZONTAL
2	4824.21	45.00	74.00	-29.00	44.51	2.46	33.06	35.03	66	100	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4823.92	52.29	74.00	-21.71	51.80	2.46	33.06	35.03	287	100	Peak	VERTICAL
2	4824.11	38.90	54.00	-15.10	38.41	2.46	33.06	35.03	287	100	Average	VERTICAL

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11g CH 6 / Mode 1
Test Date	Sep. 18, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4873.95	42.72	74.00	-31.28	42.12	2.47	33.16	35.03	146	154	Peak	HORIZONTAL
2	4874.02	30.03	54.00	-23.97	29.43	2.47	33.16	35.03	146	154	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4873.83	42.63	74.00	-31.37	42.03	2.47	33.16	35.03	107	100	Peak	VERTICAL
2	4874.18	35.39	54.00	-18.61	34.79	2.47	33.16	35.03	107	100	Average	VERTICAL

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11g CH 11 / Mode 1
Test Date	Sep. 18, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4923.96	41.75	74.00	-32.25	41.03	2.47	33.26	35.01	206	100	Peak	HORIZONTAL
2	4923.97	29.80	54.00	-24.20	29.08	2.47	33.26	35.01	206	100	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4923.93	30.67	54.00	-23.33	29.95	2.47	33.26	35.01	281	100	Average	VERTICAL
2	4924.15	42.93	74.00	-31.07	42.21	2.47	33.26	35.01	281	100	Peak	VERTICAL

Note:

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

<For Second Source – EUT 2 (Mode 2 with PIFA Antenna)>:

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 20MHz Ch 1 / Mode 2
Test Date	Sep. 21, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4823.96	40.72	54.00	-13.28	40.23	2.46	33.06	35.03	313	100	Average	HORIZONTAL
2	4824.05	53.62	74.00	-20.38	53.13	2.46	33.06	35.03	313	100	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4823.93	40.49	54.00	-13.51	40.00	2.46	33.06	35.03	244	100	Average	VERTICAL
2	4824.07	54.91	74.00	-19.09	54.42	2.46	33.06	35.03	244	100	Peak	VERTICAL

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 20MHz Ch 6 / Mode 2
Test Date	Sep. 21, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4867.40	56.97	74.00	-17.03	56.41	2.47	33.12	35.03	304	104	Peak	HORIZONTAL
2	4870.50	41.92	54.00	-12.08	41.36	2.47	33.12	35.03	304	104	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4867.60	54.04	74.00	-19.96	53.48	2.47	33.12	35.03	81	101	Peak	VERTICAL
2	4868.70	41.54	54.00	-12.46	40.98	2.47	33.12	35.03	81	101	Average	VERTICAL

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 20MHz Ch11 / Mode 2
Test Date	Sep. 21, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4924.07	30.28	54.00	-23.72	29.56	2.47	33.26	35.01	177	101	Average	HORIZONTAL
2	4924.08	43.15	74.00	-30.85	42.43	2.47	33.26	35.01	177	101	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4923.93	30.23	54.00	-23.77	29.51	2.47	33.26	35.01	271	101	Average	VERTICAL
2	4924.04	43.28	74.00	-30.72	42.56	2.47	33.26	35.01	271	101	Peak	VERTICAL

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 40MHz Ch 3 / Mode 2
Test Date	Sep. 21, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4843.97	33.99	54.00	-20.01	33.47	2.46	33.09	35.03	40	100	Average	HORIZONTAL
2	4844.02	46.88	74.00	-27.12	46.36	2.46	33.09	35.03	40	100	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4843.97	46.85	74.00	-27.15	46.33	2.46	33.09	35.03	299	100	Peak	VERTICAL
2	4844.00	34.03	54.00	-19.97	33.51	2.46	33.09	35.03	299	100	Average	VERTICAL

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 40MHz Ch 6 / Mode 2
Test Date	Sep. 21, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4873.95	32.01	54.00	-21.99	31.41	2.47	33.16	35.03	301	100	Average	HORIZONTAL
2	4874.03	43.74	74.00	-30.26	43.14	2.47	33.16	35.03	301	100	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4873.98	31.90	54.00	-22.10	31.30	2.47	33.16	35.03	195	100	Average	VERTICAL
2	4874.00	42.35	74.00	-31.65	41.75	2.47	33.16	35.03	195	100	Peak	VERTICAL

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 40MHz Ch 9 / Mode 2
Test Date	Sep. 21, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4903.93	42.09	74.00	-31.91	41.45	2.47	33.19	35.02	174	100	Peak	HORIZONTAL
2	4904.08	29.57	54.00	-24.43	28.93	2.47	33.19	35.02	174	100	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4903.99	42.55	74.00	-31.45	41.91	2.47	33.19	35.02	244	100	Peak	VERTICAL
2	4904.03	29.63	54.00	-24.37	28.99	2.47	33.19	35.02	244	100	Average	VERTICAL

Note:

The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11b CH 1 / Mode 2
Test Date	Sep. 21, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4823.99	54.82	74.00	-19.18	54.33	2.46	33.06	35.03	328	156	Peak	HORIZONTAL
2	4824.02	52.56	54.00	-1.44	52.07	2.46	33.06	35.03	328	156	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4824.02	51.07	54.00	-2.93	50.58	2.46	33.06	35.03	324	99	Average	VERTICAL
2	4824.06	52.86	74.00	-21.14	52.37	2.46	33.06	35.03	324	99	Peak	VERTICAL

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11b CH 6 / Mode 2
Test Date	Sep. 21, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4874.02	52.65	54.00	-1.35	52.05	2.47	33.16	35.03	305	103	Average	HORIZONTAL
2	4874.06	55.01	74.00	-18.99	54.41	2.47	33.16	35.03	305	103	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4874.00	54.64	74.00	-19.36	54.04	2.47	33.16	35.03	187	100	Peak	VERTICAL
2	4874.01	52.06	54.00	-1.94	51.46	2.47	33.16	35.03	187	100	Average	VERTICAL

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11b CH 11 / Mode 2
Test Date	Sep. 21, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4923.93	47.12	74.00	-26.88	46.40	2.47	33.26	35.01	301	99	Peak	HORIZONTAL
2	4924.03	41.45	54.00	-12.55	40.73	2.47	33.26	35.01	301	99	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4924.01	43.17	54.00	-10.83	42.45	2.47	33.26	35.01	291	100	Average	VERTICAL
2	4924.06	47.64	74.00	-26.36	46.92	2.47	33.26	35.01	291	100	Peak	VERTICAL

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11g CH 1 / Mode 2
Test Date	Sep. 21, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4824.79	55.51	74.00	-18.49	55.02	2.46	33.06	35.03	297	100	Peak	HORIZONTAL
2	4825.91	43.29	54.00	-10.71	42.80	2.46	33.06	35.03	297	100	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4820.20	56.40	74.00	-17.60	55.91	2.46	33.06	35.03	270	100	Peak	VERTICAL
2	4825.90	43.09	54.00	-10.91	42.60	2.46	33.06	35.03	270	100	Average	VERTICAL

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11g CH 6 / Mode 2
Test Date	Sep. 21, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4871.60	53.64	74.00	-20.36	53.04	2.47	33.16	35.03	300	149	Peak	HORIZONTAL
2	4872.00	41.18	54.00	-12.82	40.58	2.47	33.16	35.03	300	149	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4871.57	53.94	74.00	-20.06	53.34	2.47	33.16	35.03	285	100	Peak	VERTICAL
2	4872.10	42.19	54.00	-11.81	41.59	2.47	33.16	35.03	285	100	Average	VERTICAL

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11g CH 11 / Mode 2
Test Date	Sep. 21, 2010		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4922.37	43.32	74.00	-30.68	42.60	2.47	33.26	35.01	199	99	Peak	HORIZONTAL
2	4923.98	30.17	54.00	-23.83	29.45	2.47	33.26	35.01	199	99	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	4921.70	29.90	54.00	-24.10	29.21	2.47	33.23	35.01	209	99	Average	VERTICAL
2	4922.36	42.41	74.00	-31.59	41.69	2.47	33.26	35.01	209	99	Peak	VERTICAL

Note:

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

4.6. Band Edge Emissions Measurement

4.6.1. Limit

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

4.6.2. Measuring Instruments and Setting

Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	100 MHz
RB / VB (Emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average
RB / VB (Emission in non-restricted band)	100 KHz /100 KHz for Peak

4.6.3. Test Procedures

1. The test procedure is the same as section 4.5.3, only the freqeuncy range investigated is limited to 100MHz around bandedges.
2. In case the emission is fail due to the used RB/VB is too wide, marker-delta method of FCC Public Notice DA00-705 will be followed.

4.6.4. Test Setup Layout

This test setup layout is the same as that shown in section 4.5.4.

4.6.5. Test Deviation

There is no deviation with the original standard.

4.6.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

4.6.7. Test Result of Band Edge and Fundamental Emissions

<For Main Source – EUT 2 (Mode 1 with Dipole Antenna)>:

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 20MHz Ch 1,6, 11 / Mode 1
Test Date	Sep. 10, 2010		

Channel 1

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2378.20	45.22	54.00	-8.78	15.33	1.76	28.13	0.00	206	100	Average	VERTICAL
2	2390.00	60.78	74.00	-13.22	30.85	1.76	28.17	0.00	206	100	Peak	VERTICAL
3	2409.20	106.02	74.00			1.77	28.21	0.00	206	100	Peak	VERTICAL
4	2409.40	96.15	54.00			1.77	28.21	0.00	206	100	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 2412 MHz

Channel 6

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2390.00	45.06	54.00	-8.94	15.13	1.76	28.17	0.00	242	102	Average	VERTICAL
2	2390.00	57.81	74.00	-16.19	27.88	1.76	28.17	0.00	242	102	Peak	VERTICAL
3	2431.40	101.28	54.00			1.78	28.25	0.00	242	102	Average	VERTICAL
4	2434.00	111.08	74.00			1.78	28.29	0.00	242	102	Peak	VERTICAL
5	2483.50	48.49	54.00	-5.51	18.31	1.81	28.37	0.00	242	102	Average	VERTICAL
6	2483.50	69.37	74.00	-4.63	39.19	1.81	28.37	0.00	242	102	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

Channel 11

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2467.40	97.54	54.00			1.80	28.33	0.00	241	105	Average	VERTICAL
2	2467.40	106.62	74.00			1.80	28.33	0.00	241	105	Peak	VERTICAL
3	2483.50	49.00	54.00	-5.00	18.82	1.81	28.37	0.00	241	105	Average	VERTICAL
4	2483.70	66.32	74.00	-7.68	36.14	1.81	28.37	0.00	241	105	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 2462 MHz.

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 40MHz Ch 3, 6, 9 / Mode 1
Test Date	Sep. 10, 2010		

Channel 3

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2388.80	47.31	54.00	-6.69	17.38	1.76	28.17	0.00	0	100	Average	VERTICAL
2	2390.00	60.57	74.00	-13.43	30.64	1.76	28.17	0.00	0	100	Peak	VERTICAL
3	2406.40	89.92	54.00			1.77	28.21	0.00	0	100	Average	VERTICAL
4	2406.80	99.06	74.00			1.77	28.21	0.00	0	100	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2422 MHz.

Channel 6

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2390.00	47.18	54.00	-6.82	17.25	1.76	28.17	0.00	242	102	Average	VERTICAL
2	2390.00	60.93	74.00	-13.07	31.00	1.76	28.17	0.00	242	102	Peak	VERTICAL
3	2422.20	105.47	74.00			1.77	28.25	0.00	242	102	Peak	VERTICAL
4	2427.40	96.47	54.00			1.77	28.25	0.00	242	102	Average	VERTICAL
5	2483.50	53.59	54.00	-0.41	23.41	1.81	28.37	0.00	242	102	Average	VERTICAL
6	2485.50	72.41	74.00	-1.59	42.19	1.81	28.41	0.00	242	102	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

Channel 9

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2435.60	102.91	74.00			1.78	28.29	0.00	243	100	Peak	VERTICAL
2	2468.00	94.00	54.00			1.80	28.33	0.00	243	100	Average	VERTICAL
3	2483.50	51.81	54.00	-2.19	21.63	1.81	28.37	0.00	243	100	Average	VERTICAL
4	2487.90	70.69	74.00	-3.31	40.47	1.81	28.41	0.00	243	100	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 2452 MHz.

Note: Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11b CH 1, 6, 11 / Mode 1
Test Date	Sep. 10, 2010		

Channel 1

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2371.00	56.86	74.00	-17.14	26.99	1.74	28.13	0.00	87	100	Peak	VERTICAL
2	2375.20	47.78	54.00	-6.22	17.91	1.74	28.13	0.00	87	100	Average	VERTICAL
3	2411.20	102.57	54.00			1.77	28.21	0.00	87	100	Average	VERTICAL
4	2413.00	106.16	74.00			1.77	28.21	0.00	87	100	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 2412 MHz.

Channel 6

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2389.00	54.17	74.00	-19.83	24.24	1.76	28.17	0.00	202	99	Peak	VERTICAL
2	2390.00	43.78	54.00	-10.22	13.85	1.76	28.17	0.00	202	99	Average	VERTICAL
3	2438.00	111.57	74.00			1.78	28.29	0.00	202	99	Peak	VERTICAL
4	2438.80	107.80	54.00			1.78	28.29	0.00	202	99	Average	VERTICAL
5	2484.30	56.07	74.00	-17.93	25.89	1.81	28.37	0.00	202	99	Peak	VERTICAL
6	2484.50	44.59	54.00	-9.41	14.41	1.81	28.37	0.00	202	99	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

Channel 11

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2463.00	108.84	74.00			1.80	28.33	0.00	240	100	Peak	VERTICAL
2	2463.80	105.10	54.00			1.80	28.33	0.00	240	100	Average	VERTICAL
3	2487.10	59.09	74.00	-14.91	28.87	1.81	28.41	0.00	240	100	Peak	VERTICAL
4	2490.30	49.71	54.00	-4.29	19.49	1.81	28.41	0.00	240	100	Average	VERTICAL

Item 1, 2 are the fundamental frequency at 2462 MHz.

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11g CH 1, 6, 11 / Mode 1
Test Date	Sep. 10, 2010		

Channel 1

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2389.20	61.45	74.00	-12.55	31.52	1.76	28.17	0.00	344	100	Peak	VERTICAL
2	2390.00	46.12	54.00	-7.88	16.19	1.76	28.17	0.00	344	100	Average	VERTICAL
3	2405.80	96.83	54.00			1.77	28.21	0.00	344	100	Average	VERTICAL
4	2406.80	105.67	74.00			1.77	28.21	0.00	344	100	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2412 MHz.

Channel 6

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2390.00	45.20	54.00	-8.80	15.27	1.76	28.17	0.00	243	99	Average	VERTICAL
2	2390.00	55.90	74.00	-18.10	25.97	1.76	28.17	0.00	243	99	Peak	VERTICAL
3	2430.60	111.43	74.00			1.78	28.25	0.00	243	99	Peak	VERTICAL
4	2434.40	101.73	54.00			1.78	28.29	0.00	243	99	Average	VERTICAL
5	2483.50	48.16	54.00	-5.84	17.98	1.81	28.37	0.00	243	99	Average	VERTICAL
6	2484.30	64.47	74.00	-9.53	34.29	1.81	28.37	0.00	243	99	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2437 MHz.

Channel 11

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2468.60	108.13	74.00			1.80	28.37	0.00	242	100	Peak	VERTICAL
2	2469.40	99.09	54.00			1.80	28.37	0.00	242	100	Average	VERTICAL
3	2483.50	52.11	54.00	-1.89	21.93	1.81	28.37	0.00	242	100	Average	VERTICAL
4	2483.50	72.57	74.00	-1.43	42.39	1.81	28.37	0.00	242	100	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 2462 MHz.

Note: Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

<For Main Source – EUT 2 (Mode 2 with PIFA Antenna)>:

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 20MHz Ch 1, 6, 11 / Mode 2
Test Date	Sep. 10, 2010		

Channel 1

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2390.00	44.73	54.00	-9.27	14.80	1.76	28.17	0.00	352	100	Average	VERTICAL
2	2390.00	62.48	74.00	-11.52	32.55	1.76	28.17	0.00	352	100	Peak	VERTICAL
3	2406.60	94.13	54.00			1.77	28.21	0.00	352	100	Average	VERTICAL
4	2408.80	103.57	74.00			1.77	28.21	0.00	352	100	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2412 MHz

Channel 6

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2388.60	53.09	74.00	-20.91	23.16	1.76	28.17	0.00	7	108	Peak	HORIZONTAL
2	2390.00	42.79	54.00	-11.21	12.86	1.76	28.17	0.00	7	108	Average	HORIZONTAL
3	2434.00	104.44	74.00			1.78	28.29	0.00	7	108	Peak	HORIZONTAL
4	2442.60	94.80	54.00			1.78	28.29	0.00	7	108	Average	HORIZONTAL
5	2483.50	44.10	54.00	-9.90	13.91	1.81	28.38	0.00	7	108	Average	HORIZONTAL
6	2484.70	59.18	74.00	-14.82	28.99	1.81	28.38	0.00	7	108	Peak	HORIZONTAL

Item 3, 4 are the fundamental frequency at 2437MHz.

Channel 11

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2465.20	95.10	54.00			1.80	28.33	0.00	14	100	Average	VERTICAL
2	2467.80	104.05	74.00			1.80	28.33	0.00	14	100	Peak	VERTICAL
3	2483.50	46.48	54.00	-7.52	16.30	1.81	28.37	0.00	14	100	Average	VERTICAL
4	2483.50	63.18	74.00	-10.82	33.00	1.81	28.37	0.00	14	100	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 2462 MHz.

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 40MHz Ch 3, 6, 9 / Mode 2
Test Date	Sep. 10, 2010		

Channel 3

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2386.00	60.62	74.00	-13.38	30.69	1.76	28.17	0.00	15	100	Peak	VERTICAL
2	2390.00	47.19	54.00	-6.81	17.26	1.76	28.17	0.00	15	100	Average	VERTICAL
3	2425.20	92.04	54.00			1.77	28.25	0.00	15	100	Average	VERTICAL
4	2428.80	101.30	74.00			1.78	28.25	0.00	15	100	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2422 MHz.

Channel 6

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2390.00	46.50	54.00	-7.50	16.57	1.76	28.17	0.00	7	100	Average	VERTICAL
2	2390.00	59.09	74.00	-14.91	29.16	1.76	28.17	0.00	7	100	Peak	VERTICAL
3	2427.40	93.85	54.00			1.77	28.25	0.00	7	100	Average	VERTICAL
4	2429.40	103.35	74.00			1.78	28.25	0.00	7	100	Peak	VERTICAL
5	2483.50	48.99	54.00	-5.01	18.81	1.81	28.37	0.00	7	100	Average	VERTICAL
6	2483.50	65.32	74.00	-8.68	35.14	1.81	28.37	0.00	7	100	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

Channel 9

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2462.40	98.45	74.00			1.80	28.33	0.00	153	100	Peak	VERTICAL
2	2468.80	89.45	54.00			1.80	28.37	0.00	153	100	Average	VERTICAL
3	2483.50	48.66	54.00	-5.34	18.48	1.81	28.37	0.00	153	100	Average	VERTICAL
4	2488.30	62.95	74.00	-11.05	32.73	1.81	28.41	0.00	153	100	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 2452 MHz.

Note: Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11b CH 1, 6, 11 / Mode 2
Test Date	Sep. 10, 2010		

Channel 1

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2374.80	44.74	54.00	-9.26	14.87	1.74	28.13	0.00	14	100	Average	VERTICAL
2	2386.40	55.59	74.00	-18.41	25.66	1.76	28.17	0.00	14	100	Peak	VERTICAL
3	2411.20	103.18	54.00			1.77	28.21	0.00	14	100	Average	VERTICAL
4	2411.20	106.75	74.00			1.77	28.21	0.00	14	100	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 2412 MHz.

Channel6

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2388.80	53.23	74.00	-20.77	23.30	1.76	28.17	0.00	350	100	Peak	VERTICAL
2	2390.00	42.75	54.00	-11.25	12.82	1.76	28.17	0.00	350	100	Average	VERTICAL
3	2436.20	103.54	54.00			1.78	28.29	0.00	350	100	Average	VERTICAL
4	2436.20	107.28	74.00			1.78	28.29	0.00	350	100	Peak	VERTICAL
5	2484.30	54.57	74.00	-19.43	24.39	1.81	28.37	0.00	350	100	Peak	VERTICAL
6	2485.30	43.77	54.00	-10.23	13.55	1.81	28.41	0.00	350	100	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

Channel 11

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2461.20	100.91	54.00			1.80	28.33	0.00	13	120	Average	VERTICAL
2	2463.20	104.97	74.00			1.80	28.33	0.00	13	120	Peak	VERTICAL
3	2483.50	45.85	54.00	-8.15	15.67	1.81	28.37	0.00	13	120	Average	VERTICAL
4	2483.50	55.57	74.00	-18.43	25.39	1.81	28.37	0.00	13	120	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 2462 MHz.

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11g CH 1, 6, 11 / Mode 2
Test Date	Sep. 10, 2010		

Channel 1

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2390.00	46.97	54.00	-7.03	17.04	1.76	28.17	0.00	15	100	Average	VERTICAL
2	2390.00	62.47	74.00	-11.53	32.54	1.76	28.17	0.00	15	100	Peak	VERTICAL
3	2405.60	105.19	74.00			1.77	28.21	0.00	15	100	Peak	VERTICAL
4	2409.40	95.91	54.00			1.77	28.21	0.00	15	100	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 2412 MHz.

Channel 6

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2389.00	53.41	74.00	-20.59	23.48	1.76	28.17	0.00	153	100	Peak	VERTICAL
2	2390.00	43.08	54.00	-10.92	13.15	1.76	28.17	0.00	153	100	Average	VERTICAL
3	2430.80	105.81	74.00			1.78	28.25	0.00	153	100	Peak	VERTICAL
4	2432.00	96.30	54.00			1.78	28.25	0.00	153	100	Average	VERTICAL
5	2483.50	44.28	54.00	-9.72	14.10	1.81	28.37	0.00	153	100	Average	VERTICAL
6	2486.10	57.56	74.00	-16.44	27.34	1.81	28.41	0.00	153	100	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2437 MHz.

Channel 11

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2465.40	103.75	74.00			1.80	28.33	0.00	349	134	Peak	HORIZONTAL
2	2466.00	94.52	54.00			1.80	28.33	0.00	349	134	Average	HORIZONTAL
3	2483.50	47.99	54.00	-6.01	17.80	1.81	28.38	0.00	349	134	Average	HORIZONTAL
4	2483.50	68.31	74.00	-5.69	38.12	1.81	28.38	0.00	349	134	Peak	HORIZONTAL

Item 1, 2 are the fundamental frequency at 2462 MHz.

Note: Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

<For Main Source – EUT 1 (Mode 3 with Dipole Antenna)>:

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 20MHz Ch 6 / Mode 3
Test Date	Sep. 23, 2010		

Channel 6

		Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1		2389.40	58.37	74.00	-15.63	27.46	2.86	0.00	28.05	256	100	Peak	VERTICAL
2		2390.00	47.02	54.00	-6.98	16.09	2.88	0.00	28.05	256	100	Average	VERTICAL
3	a	2431.60	103.56	54.00			2.89	0.00	28.13	256	100	Average	VERTICAL
4	p	2432.20	113.05	74.00			2.89	0.00	28.13	256	100	Peak	VERTICAL
5	!	2483.50	48.22	54.00	-5.78	17.03	2.93	0.00	28.26	256	100	Average	VERTICAL
6		2483.70	67.75	74.00	-6.25	36.56	2.93	0.00	28.26	256	100	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 40MHz Ch 6 / Mode 3
Test Date	Sep. 23, 2010		

Channel 6

		Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1		2390.00	65.48	74.00	-8.52	34.55	2.88	0.00	28.05	258	100	Peak	VERTICAL
2	!	2390.00	50.68	54.00	-3.32	19.75	2.88	0.00	28.05	258	100	Average	VERTICAL
3	p	2429.40	107.55	74.00			2.89	0.00	28.13	258	100	Peak	VERTICAL
4	a	2432.60	97.88	54.00			2.89	0.00	28.13	258	100	Average	VERTICAL
5	!	2483.50	69.93	74.00	-4.07	38.74	2.93	0.00	28.26	258	100	Peak	VERTICAL
6	!	2483.50	53.46	54.00	-0.54	22.27	2.93	0.00	28.26	258	100	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11b CH 6 / Mode 3
Test Date	Sep. 23, 2010		

Channel 6

		Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1		2389.60	56.46	74.00	-17.54	25.55	2.86	0.00	28.05	258	100	Peak	VERTICAL
2		2389.80	46.49	54.00	-7.51	15.56	2.88	0.00	28.05	258	100	Average	VERTICAL
3	p	2436.20	112.85	74.00			2.89	0.00	28.18	258	100	Peak	VERTICAL
4	a	2436.20	109.11	54.00			2.89	0.00	28.18	258	100	Average	VERTICAL
5		2483.50	46.42	54.00	-7.58	15.23	2.93	0.00	28.26	258	100	Average	VERTICAL
6		2485.30	57.19	74.00	-16.81	25.96	2.93	0.00	28.30	258	100	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11g Ch 6 / Mode 3
Test Date	Sep. 23, 2010		

Channel 6

		Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1		2390.00	57.43	74.00	-16.57	26.50	2.88	0.00	28.05	257	100	Peak	VERTICAL
2		2390.00	47.32	54.00	-6.68	16.39	2.88	0.00	28.05	257	100	Average	VERTICAL
3	p	2433.20	113.87	74.00			2.89	0.00	28.13	257	100	Peak	VERTICAL
4	a	2434.40	104.41	54.00			2.89	0.00	28.18	257	100	Average	VERTICAL
5	!	2483.50	48.65	54.00	-5.35	17.46	2.93	0.00	28.26	257	100	Average	VERTICAL
6		2484.30	63.42	74.00	-10.58	32.23	2.93	0.00	28.26	257	100	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2437 MHz.

Note: Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

<For Main Source – EUT 1 (Mode 4 with PIFA Antenna)>:

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 20MHz Ch 6 / Mode 4
Test Date	Sep. 24, 2010		

Channel 6

		Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1		2390.00	53.71	74.00	-20.29	22.78	2.88	0.00	28.05	328	125	Peak	VERTICAL
2		2390.00	44.60	54.00	-9.40	13.67	2.88	0.00	28.05	328	125	Average	VERTICAL
3	p	2433.60	108.64	74.00			2.89	0.00	28.13	328	125	Peak	VERTICAL
4	a	2434.40	99.04	54.00			2.89	0.00	28.18	328	125	Average	VERTICAL
5		2483.50	60.32	74.00	-13.68	29.13	2.93	0.00	28.26	328	125	Peak	VERTICAL
6		2483.50	45.23	54.00	-8.77	14.04	2.93	0.00	28.26	328	125	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 40MHz Ch 6 / Mode 4
Test Date	Sep. 24, 2010		

Channel 6

		Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase	Au Facto
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm			d
1		2388.80	61.04	74.00	-12.96	30.13	2.86	0.00	28.05	328	126	Peak	VERTICAL	0.0
2	!	2390.00	48.44	54.00	-5.56	17.51	2.88	0.00	28.05	328	126	Average	VERTICAL	0.0
3	p	2435.00	103.39	74.00			2.89	0.00	28.18	328	126	Peak	VERTICAL	0.0
4	a	2435.00	93.47	54.00			2.89	0.00	28.18	328	126	Average	VERTICAL	0.0
5		2483.50	64.21	74.00	-9.79	33.02	2.93	0.00	28.26	328	126	Peak	VERTICAL	0.0
6	!	2483.50	48.83	54.00	-5.17	17.64	2.93	0.00	28.26	328	126	Average	VERTICAL	0.0

Item 3, 4 are the fundamental frequency at 2437MHz.

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11b CH 6 / Mode 4
Test Date	Sep. 23, 2010		

Channel 6

		Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1		2389.60	54.95	74.00	-19.05	24.04	2.86	0.00	28.05	330	127	Peak	VERTICAL
2		2389.80	44.56	54.00	-9.44	13.63	2.88	0.00	28.05	330	127	Average	VERTICAL
3	p	2436.20	108.99	74.00			2.89	0.00	28.18	330	127	Peak	VERTICAL
4	a	2436.20	105.24	54.00			2.89	0.00	28.18	330	127	Average	VERTICAL
5		2483.50	44.16	54.00	-9.84	12.97	2.93	0.00	28.26	330	127	Average	VERTICAL
6		2486.10	54.68	74.00	-19.32	23.45	2.93	0.00	28.30	330	127	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11g Ch 6 / Mode 4
Test Date	Sep. 24, 2010		

Channel 6

		Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1		2390.00	54.60	74.00	-19.40	23.67	2.88	0.00	28.05	328	124	Peak	VERTICAL
2		2390.00	44.59	54.00	-9.41	13.66	2.88	0.00	28.05	328	124	Average	VERTICAL
3	p	2433.20	108.55	74.00			2.89	0.00	28.13	328	124	Peak	VERTICAL
4	a	2434.40	99.19	54.00			2.89	0.00	28.18	328	124	Average	VERTICAL
5		2483.50	44.89	54.00	-9.11	13.70	2.93	0.00	28.26	328	124	Average	VERTICAL
6		2484.50	57.83	74.00	-16.17	26.64	2.93	0.00	28.26	328	124	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2437 MHz.

Note: Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

<For Main Source – EUT 3 (Mode 5 with Dipole Antenna)>:

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 20MHz Ch 6 / Mode 5
Test Date	Sep. 23, 2010		

Channel 6

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2389.80	59.95	74.00	-14.05	30.02	1.76	28.17	0.00	149	116	Peak	VERTICAL
2	2390.00	43.53	54.00	-10.47	13.60	1.76	28.17	0.00	149	116	Average	VERTICAL
3	2442.40	98.89	54.00			1.78	28.29	0.00	149	116	Average	VERTICAL
4	2443.40	108.20	74.00			1.78	28.29	0.00	149	116	Peak	VERTICAL
5	2483.50	49.60	54.00	-4.40	19.42	1.81	28.37	0.00	149	116	Average	VERTICAL
6	2486.50	69.45	74.00	-4.55	39.23	1.81	28.41	0.00	149	116	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 40MHz Ch 6 / Mode 5
Test Date	Sep. 23, 2010		

Channel 6

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2389.20	56.14	74.00	-17.86	26.21	1.76	28.17	0.00	328	115	Peak	VERTICAL
2	2390.00	44.05	54.00	-9.95	14.12	1.76	28.17	0.00	328	115	Average	VERTICAL
3	2453.00	94.89	54.00			1.78	28.33	0.00	328	115	Average	VERTICAL
4	2453.00	104.28	74.00			1.78	28.33	0.00	328	115	Peak	VERTICAL
5	2483.50	52.52	54.00	-1.48	22.34	1.81	28.37	0.00	328	115	Average	VERTICAL
6	2483.50	69.83	74.00	-4.17	39.65	1.81	28.37	0.00	328	115	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11b CH 6 / Mode 5
Test Date	Sep. 23, 2010		

Channel 6

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2388.40	52.95	74.00	-21.05	23.02	1.76	28.17	0.00	149	114	Peak	VERTICAL
2	2390.00	42.85	54.00	-11.15	12.92	1.76	28.17	0.00	149	114	Average	VERTICAL
3	2438.00	107.60	74.00			1.78	28.29	0.00	149	114	Peak	VERTICAL
4	2438.80	103.80	54.00			1.78	28.29	0.00	149	114	Average	VERTICAL
5	2484.70	45.42	54.00	-8.58	15.24	1.81	28.37	0.00	149	114	Average	VERTICAL
6	2486.30	57.14	74.00	-16.86	26.92	1.81	28.41	0.00	149	114	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11g Ch 6 / Mode 5
Test Date	Sep. 23, 2010		

Channel 6

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2390.00	43.33	54.00	-10.67	13.40	1.76	28.17	0.00	150	113	Average	VERTICAL
2	2390.00	54.36	74.00	-19.64	24.43	1.76	28.17	0.00	150	113	Peak	VERTICAL
3	2440.40	108.02	74.00			1.78	28.29	0.00	150	113	Peak	VERTICAL
4	2442.60	98.83	54.00			1.78	28.29	0.00	150	113	Average	VERTICAL
5	2483.50	48.98	54.00	-5.02	18.80	1.81	28.37	0.00	150	113	Average	VERTICAL
6	2484.70	65.97	74.00	-8.03	35.79	1.81	28.37	0.00	150	113	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2437 MHz.

Note: Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

<For Main Source – EUT 3 (Mode 6 with PIFA Antenna)>:

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 20MHz Ch 6 / Mode 6
Test Date	Sep. 23, 2010		

Channel 6

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2389.40	57.92	74.00	-16.08	27.99	1.76	28.17	0.00	270	99	Peak	VERTICAL
2	2390.00	43.40	54.00	-10.60	13.47	1.76	28.17	0.00	270	99	Average	VERTICAL
3	2431.60	95.33	54.00			1.78	28.25	0.00	270	99	Average	VERTICAL
4	2434.20	104.79	74.00			1.78	28.29	0.00	270	99	Peak	VERTICAL
5	2483.50	45.60	54.00	-8.40	15.42	1.81	28.37	0.00	270	99	Average	VERTICAL
6	2483.90	61.91	74.00	-12.09	31.73	1.81	28.37	0.00	270	99	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 40MHz Ch 6 / Mode 6
Test Date	Sep. 23, 2010		

Channel 6

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2390.00	46.69	54.00	-7.31	16.76	1.76	28.17	0.00	132	105	Average	HORIZONTAL
2	2390.00	59.51	74.00	-14.49	29.58	1.76	28.17	0.00	132	105	Peak	HORIZONTAL
3	2447.40	99.20	74.00			1.78	28.29	0.00	132	105	Peak	HORIZONTAL
4	2453.00	89.60	54.00			1.78	28.33	0.00	132	105	Average	HORIZONTAL
5	2483.50	51.39	54.00	-2.61	21.20	1.81	28.38	0.00	132	105	Average	HORIZONTAL
6	2485.10	66.76	74.00	-7.24	36.53	1.81	28.42	0.00	132	105	Peak	HORIZONTAL

Item 3, 4 are the fundamental frequency at 2437MHz.

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11b CH 6 / Mode 6
Test Date	Sep. 23, 2010		

Channel 6

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2388.40	54.13	74.00	-19.87	24.20	1.76	28.17	0.00	354	100	Peak	VERTICAL
2	2390.00	43.86	54.00	-10.14	13.93	1.76	28.17	0.00	354	100	Average	VERTICAL
3	2436.00	107.13	74.00			1.78	28.29	0.00	354	100	Peak	VERTICAL
4	2436.20	103.61	54.00			1.78	28.29	0.00	354	100	Average	VERTICAL
5	2484.10	55.55	74.00	-18.45	25.37	1.81	28.37	0.00	354	100	Peak	VERTICAL
6	2484.30	44.38	54.00	-9.62	14.20	1.81	28.37	0.00	354	100	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11g Ch 6 / Mode 6
Test Date	Sep. 23, 2010		

Channel 6

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2389.60	55.11	74.00	-18.89	25.18	1.76	28.17	0.00	350	99	Peak	VERTICAL
2	2390.00	43.75	54.00	-10.25	13.82	1.76	28.17	0.00	350	99	Average	VERTICAL
3	2432.20	97.46	54.00			1.78	28.25	0.00	350	99	Average	VERTICAL
4	2433.20	106.88	74.00			1.78	28.25	0.00	350	99	Peak	VERTICAL
5	2483.50	45.18	54.00	-8.82	15.00	1.81	28.37	0.00	350	99	Average	VERTICAL
6	2484.50	57.92	74.00	-16.08	27.74	1.81	28.37	0.00	350	99	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2437 MHz.

Note: Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

<For Second Source – EUT 2 (Mode 1 with Dipole Antenna)>:

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 20MHz Ch 1,6, 11 / Mode 1
Test Date	Sep. 18, 2010		

Channel 1

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2390.00	49.33	54.00	-4.67	19.40	1.76	28.17	0.00	102	99	Average	VERTICAL
2	2390.00	69.19	74.00	-4.81	39.26	1.76	28.17	0.00	102	99	Peak	VERTICAL
3	2406.20	98.33	54.00			1.77	28.21	0.00	102	99	Average	VERTICAL
4	2407.40	107.60	74.00			1.77	28.21	0.00	102	99	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2412 MHz

Channel 6

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2389.40	56.69	74.00	-17.31	26.76	1.76	28.17	0.00	105	100	Peak	VERTICAL
2	2390.00	45.09	54.00	-8.91	15.16	1.76	28.17	0.00	105	100	Average	VERTICAL
3	2433.80	101.50	54.00			1.78	28.25	0.00	105	100	Average	VERTICAL
4	2434.00	111.28	74.00			1.78	28.29	0.00	105	100	Peak	VERTICAL
5	2483.50	49.78	54.00	-4.22	19.60	1.81	28.37	0.00	105	100	Average	VERTICAL
6	2486.50	69.31	74.00	-4.69	39.09	1.81	28.41	0.00	105	100	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

Channel 11

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2467.40	98.53	54.00			1.80	28.33	0.00	104	100	Average	VERTICAL
2	2469.20	107.84	74.00			1.80	28.37	0.00	104	100	Peak	VERTICAL
3	2483.50	49.62	54.00	-4.38	19.44	1.81	28.37	0.00	104	100	Average	VERTICAL
4	2483.90	69.32	74.00	-4.68	39.14	1.81	28.37	0.00	104	100	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 2462 MHz.

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 40MHz Ch 3, 6, 9 / Mode 1
Test Date	Sep. 18, 2010		

Channel 3

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2387.60	69.46	74.00	-4.54	39.53	1.76	28.17	0.00	102	100	Peak	VERTICAL
2	2390.00	53.70	54.00	-0.30	23.77	1.76	28.17	0.00	102	100	Average	VERTICAL
3	2420.00	95.57	74.00			1.77	28.25	0.00	102	100	Averafe	VERTICAL
4	2432.40	104.70	74.00			1.78	28.25	0.00	102	100	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2422 MHz.

Channel 6

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2390.00	47.38	54.00	-6.62	17.45	1.76	28.17	0.00	257	101	Average	VERTICAL
2	2390.00	61.07	74.00	-12.93	31.14	1.76	28.17	0.00	257	101	Peak	VERTICAL
3	2427.40	96.10	54.00			1.77	28.25	0.00	257	101	Average	VERTICAL
4	2429.40	105.57	74.00			1.78	28.25	0.00	257	101	Peak	VERTICAL
5	2483.90	53.39	54.00	-0.61	23.21	1.81	28.37	0.00	257	101	Average	VERTICAL
6	2485.50	70.81	74.00	-3.19	40.59	1.81	28.41	0.00	257	101	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

Channel 9

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2461.20	95.54	54.00			1.80	28.33	0.00	218	100	Average	VERTICAL
2	2462.40	105.40	74.00			1.80	28.33	0.00	218	100	Peak	VERTICAL
3	2483.50	52.51	54.00	-1.49	22.33	1.81	28.37	0.00	218	100	Average	VERTICAL
4	2487.90	70.68	74.00	-3.32	40.46	1.81	28.41	0.00	218	100	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 2452 MHz.

Note: Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11b CH 1, 6, 11 / Mode 1
Test Date	Sep. 18, 2010		

Channel 1

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2370.80	57.63	74.00	-16.37	27.76	1.74	28.13	0.00	222	100	Peak	VERTICAL
2	2375.00	49.32	54.00	-4.68	19.45	1.74	28.13	0.00	222	100	Average	VERTICAL
3	2411.00	111.04	74.00			1.77	28.21	0.00	222	100	Peak	VERTICAL
4	2411.20	107.34	54.00			1.77	28.21	0.00	222	100	Average	VERTICAL

Item 1, 2 are the fundamental frequency at 2412 MHz.

Channel 6

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2389.40	44.61	54.00	-9.39	14.68	1.76	28.17	0.00	107	100	Average	VERTICAL
2	2389.40	54.52	74.00	-19.48	24.59	1.76	28.17	0.00	107	100	Peak	VERTICAL
3	2436.20	109.43	54.00			1.78	28.29	0.00	107	100	Average	VERTICAL
4	2438.00	112.82	74.00			1.78	28.29	0.00	107	100	Peak	VERTICAL
5	2483.90	48.02	54.00	-5.98	17.84	1.81	28.37	0.00	107	100	Average	VERTICAL
6	2485.30	58.60	74.00	-15.40	28.38	1.81	28.41	0.00	107	100	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

Channel 11

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2463.00	106.73	74.00			1.80	28.33	0.00	104	100	Peak	VERTICAL
2	2463.80	103.12	54.00			1.80	28.33	0.00	104	100	Average	VERTICAL
3	2487.70	49.83	54.00	-4.17	19.61	1.81	28.41	0.00	104	100	Average	VERTICAL
4	2488.10	59.20	74.00	-14.80	28.98	1.81	28.41	0.00	104	100	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 2462 MHz.

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11g CH 1, 6, 11 / Mode 1
Test Date	Sep. 18, 2010		

Channel 1

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2389.20	67.46	74.00	-6.54	37.53	1.76	28.17	0.00	102	100	Peak	VERTICAL
2	2390.00	50.81	54.00	-3.19	20.88	1.76	28.17	0.00	102	100	Average	VERTICAL
3	2405.60	109.01	74.00			1.77	28.21	0.00	102	100	Peak	VERTICAL
4	2405.80	99.53	54.00			1.77	28.21	0.00	102	100	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 2412 MHz.

Channel 6

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2390.00	45.43	54.00	-8.57	15.50	1.76	28.17	0.00	259	100	Average	VERTICAL
2	2390.00	56.17	74.00	-17.83	26.24	1.76	28.17	0.00	259	100	Peak	VERTICAL
3	2439.20	100.50	54.00			1.78	28.29	0.00	259	100	Average	VERTICAL
4	2439.80	109.81	74.00			1.78	28.29	0.00	259	100	Peak	VERTICAL
5	2483.50	49.49	54.00	-4.51	19.31	1.81	28.37	0.00	259	100	Average	VERTICAL
6	2483.50	65.68	74.00	-8.32	35.50	1.81	28.37	0.00	259	100	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2437 MHz.

Channel 11

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2469.20	98.16	54.00			1.80	28.37	0.00	105	100	Average	VERTICAL
2	2469.60	107.13	74.00			1.80	28.37	0.00	105	100	Peak	VERTICAL
3	2483.50	52.69	54.00	-1.31	22.51	1.81	28.37	0.00	105	100	Average	VERTICAL
4	2485.10	73.00	74.00	-1.00	42.78	1.81	28.41	0.00	105	100	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 2462 MHz.

Note: Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

<For Second Source – EUT 2 (Mode 2 with PIFA Antenna)>:

Temperature	23°C	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 20MHz Ch 1, 6, 11 / Mode 2
Test Date	Sep. 21, 2010		

Channel 1

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2390.00	52.29	54.00	-1.71	22.36	1.76	28.17	0.00	27	100	Average	VERTICAL
2	2390.00	72.30	74.00	-1.70	42.37	1.76	28.17	0.00	27	100	Peak	VERTICAL
3	2417.40	96.98	54.00			1.77	28.25	0.00	27	100	Average	VERTICAL
4	2418.20	105.88	74.00			1.77	28.25	0.00	27	100	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2412 MHz

Channel 6

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2389.80	56.26	74.00	-17.74	26.33	1.76	28.17	0.00	8	124	Peak	VERTICAL
2	2390.00	42.91	54.00	-11.09	12.98	1.76	28.17	0.00	8	124	Average	VERTICAL
3	2431.60	100.72	54.00			1.78	28.25	0.00	8	124	Average	VERTICAL
4	2431.80	110.17	74.00			1.78	28.25	0.00	8	124	Peak	VERTICAL
5	2483.50	46.82	54.00	-7.18	16.64	1.81	28.37	0.00	8	124	Average	VERTICAL
6	2485.50	64.50	74.00	-9.50	34.28	1.81	28.41	0.00	8	124	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

Channel 11

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2467.40	95.49	54.00			1.80	28.33	0.00	8	123	Average	VERTICAL
2	2468.00	104.55	74.00			1.80	28.33	0.00	8	123	Peak	VERTICAL
3	2483.50	46.49	54.00	-7.51	16.31	1.81	28.37	0.00	8	123	Average	VERTICAL
4	2483.50	61.56	74.00	-12.44	31.38	1.81	28.37	0.00	8	123	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 2462 MHz.

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11n MCS0 40MHz Ch 3, 6, 9 / Mode 2
Test Date	Sep. 21, 2010		

Channel 3

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2388.80	69.02	74.00	-4.98	39.09	1.76	28.17	0.00	28	100	Peak	VERTICAL
2	2390.00	52.83	54.00	-1.17	22.90	1.76	28.17	0.00	28	100	Average	VERTICAL
3	2425.20	93.27	54.00			1.77	28.25	0.00	28	100	Average	VERTICAL
4	2428.80	102.35	74.00			1.78	28.25	0.00	28	100	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2422 MHz.

Channel 6

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2390.00	47.26	54.00	-6.74	17.33	1.76	28.17	0.00	24	100	Average	VERTICAL
2	2390.00	62.31	74.00	-11.69	32.38	1.76	28.17	0.00	24	100	Peak	VERTICAL
3	2427.40	94.70	54.00			1.77	28.25	0.00	24	100	Average	VERTICAL
4	2430.20	104.14	74.00			1.78	28.25	0.00	24	100	Peak	VERTICAL
5	2483.50	51.66	54.00	-2.34	21.48	1.81	28.37	0.00	24	100	Average	VERTICAL
6	2483.50	67.82	74.00	-6.18	37.64	1.81	28.37	0.00	24	100	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

Channel 9

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2436.40	92.83	54.00			1.78	28.29	0.00	25	100	Average	VERTICAL
2	2437.20	101.93	74.00			1.78	28.29	0.00	25	100	Peak	VERTICAL
3	2483.50	50.46	54.00	-3.54	20.28	1.81	28.37	0.00	25	100	Average	VERTICAL
4	2487.90	67.47	74.00	-6.53	37.25	1.81	28.41	0.00	25	100	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 2452 MHz.

Note: Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11b CH 1, 6, 11 / Mode 2
Test Date	Sep. 21, 2010		

Channel 1

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2386.00	55.92	74.00	-18.08	25.99	1.76	28.17	0.00	26	100	Peak	VERTICAL
2	2387.00	45.45	54.00	-8.55	15.52	1.76	28.17	0.00	26	100	Average	VERTICAL
3	2412.80	104.65	54.00			1.77	28.21	0.00	26	100	Average	VERTICAL
4	2413.00	107.82	74.00			1.77	28.21	0.00	26	100	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2412 MHz.

Channel 6

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2388.20	43.56	54.00	-10.44	13.63	1.76	28.17	0.00	352	101	Average	VERTICAL
2	2390.00	53.32	74.00	-20.68	23.39	1.76	28.17	0.00	352	101	Peak	VERTICAL
3	2436.20	105.98	54.00			1.78	28.29	0.00	352	101	Average	VERTICAL
4	2436.20	109.54	74.00			1.78	28.29	0.00	352	101	Peak	VERTICAL
5	2483.90	46.01	54.00	-7.99	15.83	1.81	28.37	0.00	352	101	Average	VERTICAL
6	2484.90	54.18	74.00	-19.82	24.00	1.81	28.37	0.00	352	101	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

Channel 11

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2461.20	99.14	54.00			1.80	28.33	0.00	346	101	Average	VERTICAL
2	2463.00	102.91	74.00			1.80	28.33	0.00	346	101	Peak	VERTICAL
3	2490.30	48.23	54.00	-5.77	18.01	1.81	28.41	0.00	346	101	Average	VERTICAL
4	2498.50	56.18	74.00	-17.82	25.96	1.81	28.41	0.00	346	101	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 2462 MHz.

Temperature	23℃	Humidity	53%
Test Engineer	Satoshi Yang	Configurations	IEEE 802.11g CH 1, 6, 11 / Mode 2
Test Date	Sep. 21, 2010		

Channel 1

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2390.00	53.16	54.00	-0.84	23.23	1.76	28.17	0.00	27	100	Average	VERTICAL
2	2390.00	70.33	74.00	-3.67	40.40	1.76	28.17	0.00	28	100	Peak	VERTICAL
3	2417.60	98.38	54.00			1.77	28.25	0.00	28	100	Average	VERTICAL
4	2417.60	107.51	74.00			1.77	28.25	0.00	28	100	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2412 MHz.

Channel 6

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2390.00	44.63	54.00	-9.37	14.70	1.76	28.17	0.00	26	99	Average	VERTICAL
2	2390.00	55.52	74.00	-18.48	25.59	1.76	28.17	0.00	26	99	Peak	VERTICAL
3	2431.60	100.15	54.00			1.78	28.25	0.00	26	99	Average	VERTICAL
4	2433.20	109.45	74.00			1.78	28.25	0.00	26	99	Peak	VERTICAL
5	2483.50	46.02	54.00	-7.98	15.84	1.81	28.37	0.00	26	99	Average	VERTICAL
6	2484.30	61.31	74.00	-12.69	31.13	1.81	28.37	0.00	26	99	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2437 MHz.

Channel 11

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	2469.40	92.95	54.00			1.80	28.37	0.00	33	148	Average	VERTICAL
2	2469.60	101.96	74.00			1.80	28.37	0.00	33	148	Peak	VERTICAL
3	2483.50	47.45	54.00	-6.55	17.27	1.81	28.37	0.00	33	148	Average	VERTICAL
4	2483.50	64.98	74.00	-9.02	34.80	1.81	28.37	0.00	33	148	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 2462 MHz.

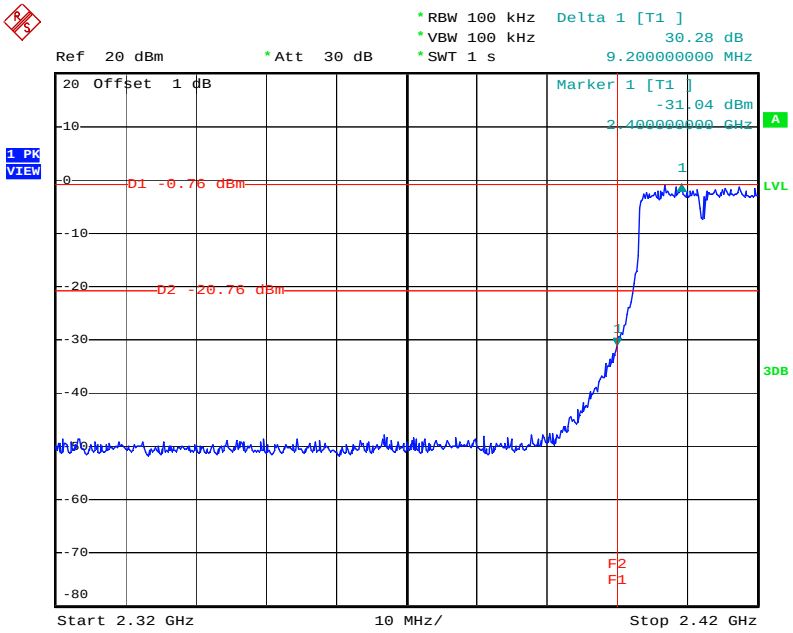
Note: Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

<For Main Source – EUT 2 (Mode 1 with Dipole Antenna)>:

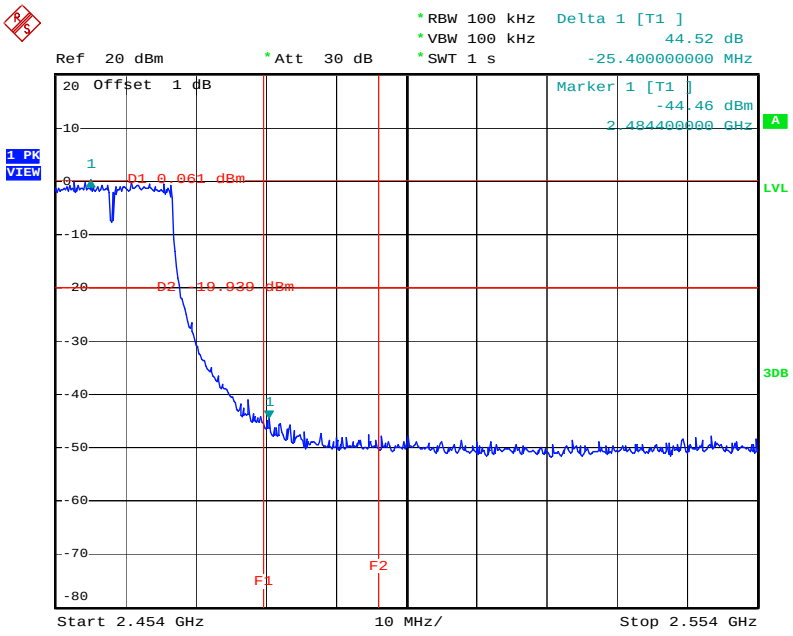
For Emission not in Restricted Band

Low Band Edge Plot on Configuration IEEE 802.11n MCS0 20MHz / 2412 MHz



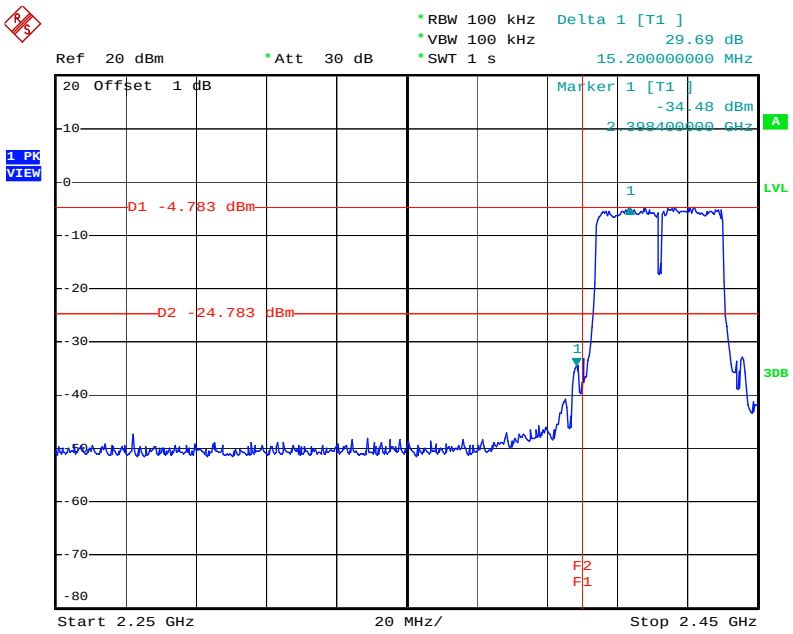
Date: 13.SEP.2010 18:05:21

High Band Edge Plot on Configuration IEEE 802.11n MCS0 20MHz / 2462 MHz



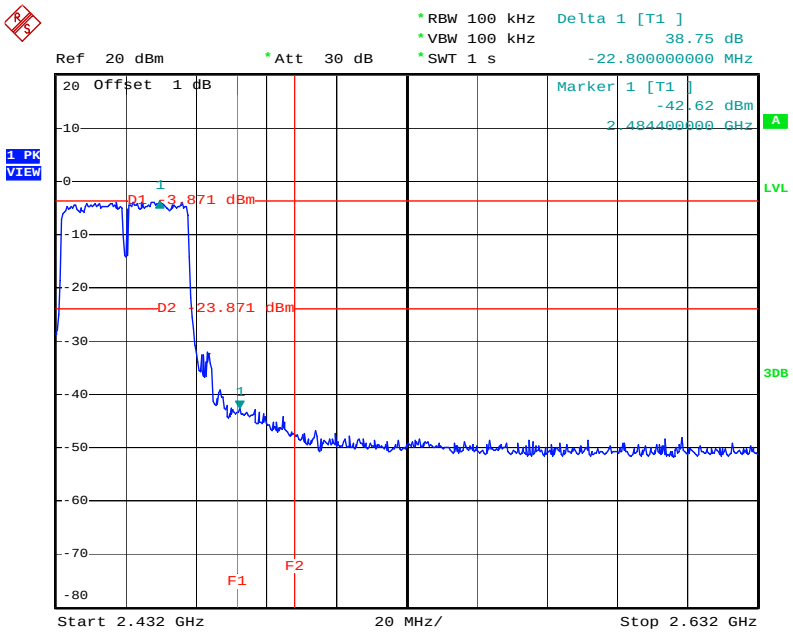
Date: 13.SEP.2010 18:09:38

Low Band Edge Plot on Configuration IEEE 802.11n MCS0 40MHz / 2422 MHz



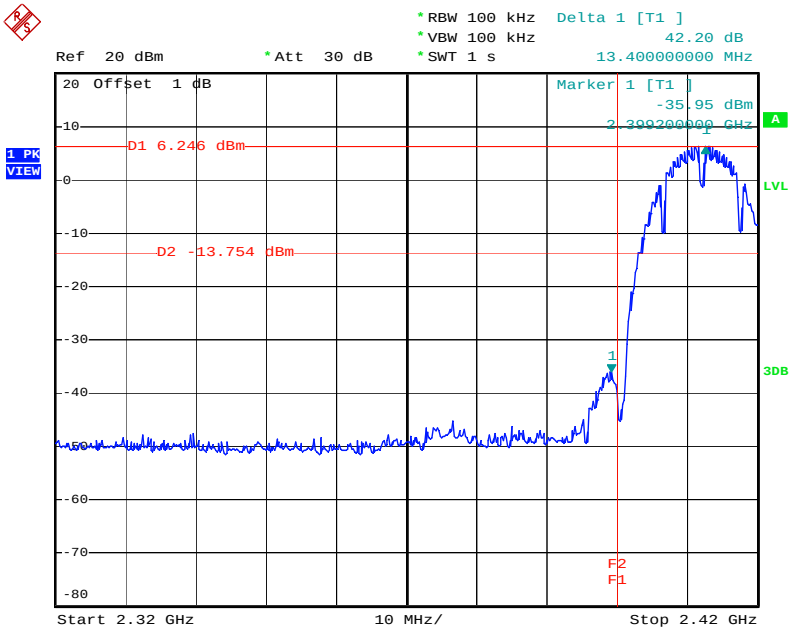
Date: 13.SEP.2010 18:15:16

High Band Edge Plot on Configuration IEEE 802.11n MCS0 40MHz / 2452 MHz



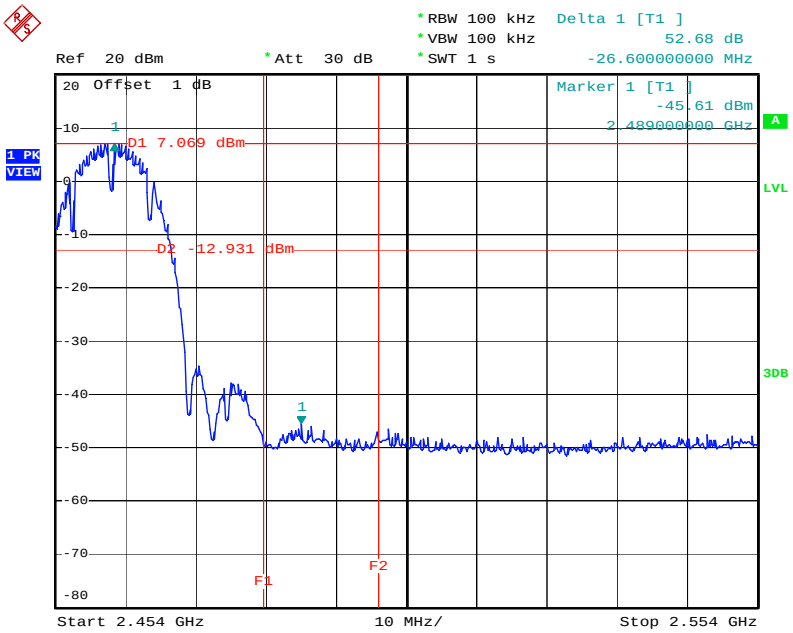
Date: 13.SEP.2010 18:19:42

Low Band Edge Plot on Configuration IEEE 802.11b / 2412 MHz



Date: 13.SEP.2010 18:29:59

High Band Edge Plot on Configuration IEEE 802.11b / 2462 MHz



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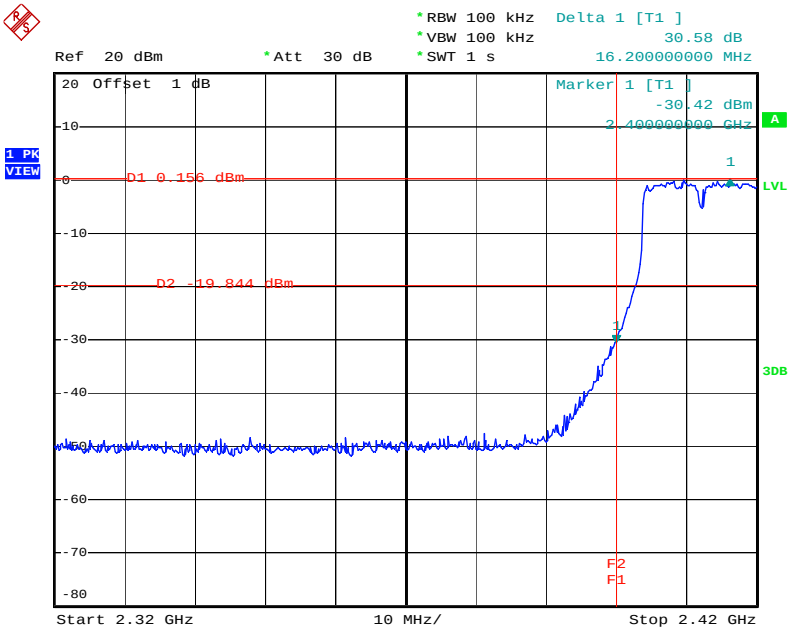
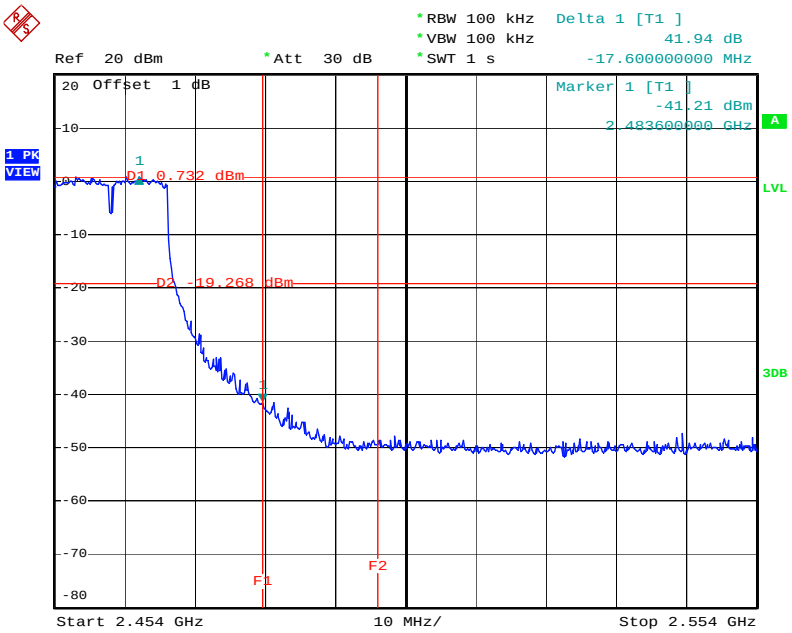
Low Band Edge Plot on Configuration IEEE 802.11g / 2412 MHz



Date: 13.SEP.2010 17:56:08

High Band Edge Plot on Configuration IEEE 802.11g / 2462 MHz

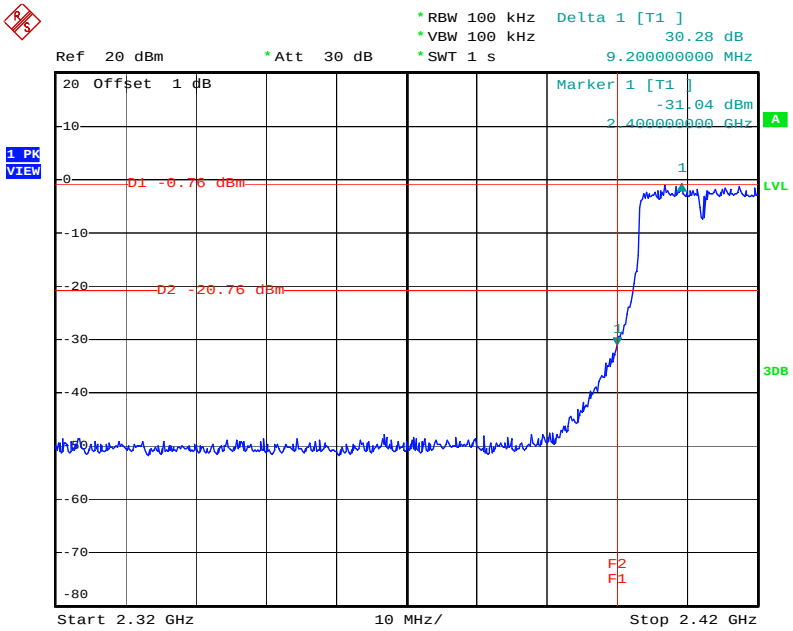


Date: 13.SEP.2010 18:00:56

<For Main Source – EUT 2 (Mode 2 with PIFA Antenna)>:

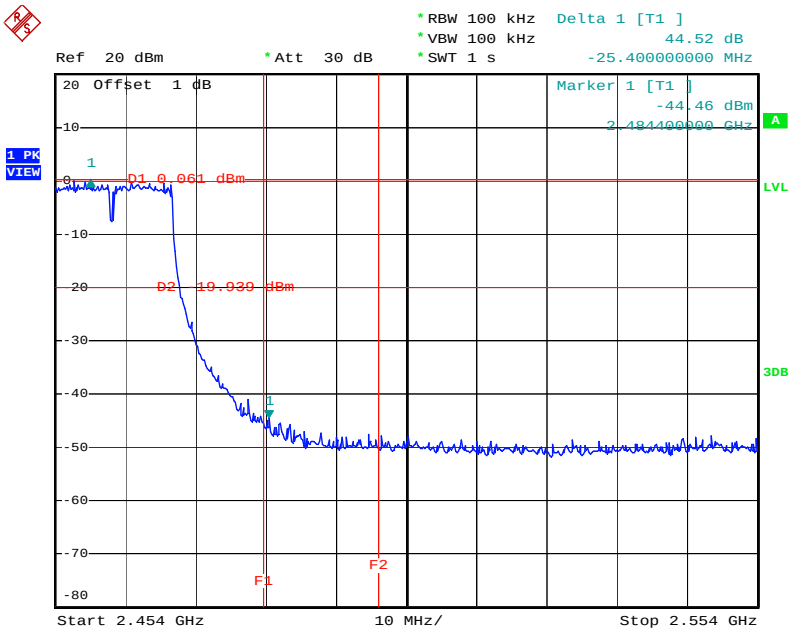
For Emission not in Restricted Band

Low Band Edge Plot on Configuration IEEE 802.11n MCS0 20MHz / 2412 MHz



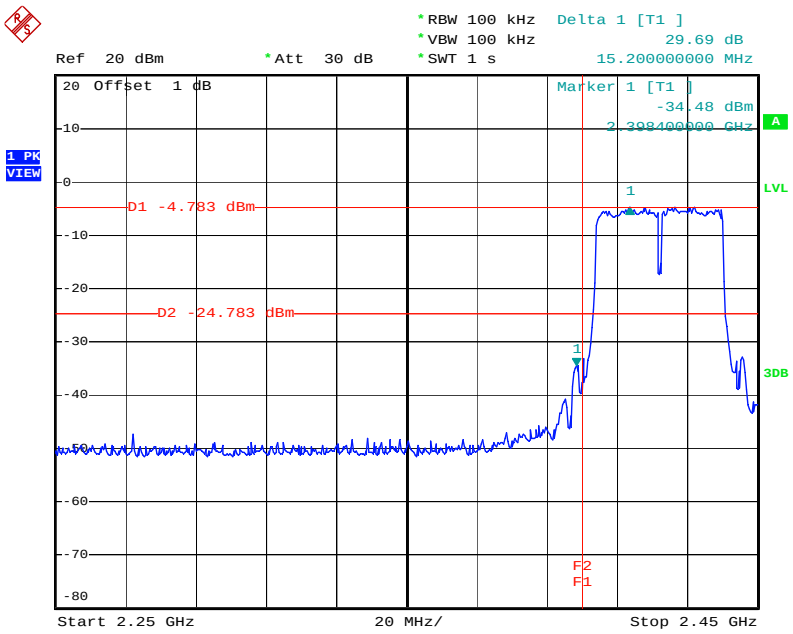
Date: 13.SEP.2010 18:05:21

High Band Edge Plot on Configuration IEEE 802.11n MCS0 20MHz / 2462 MHz



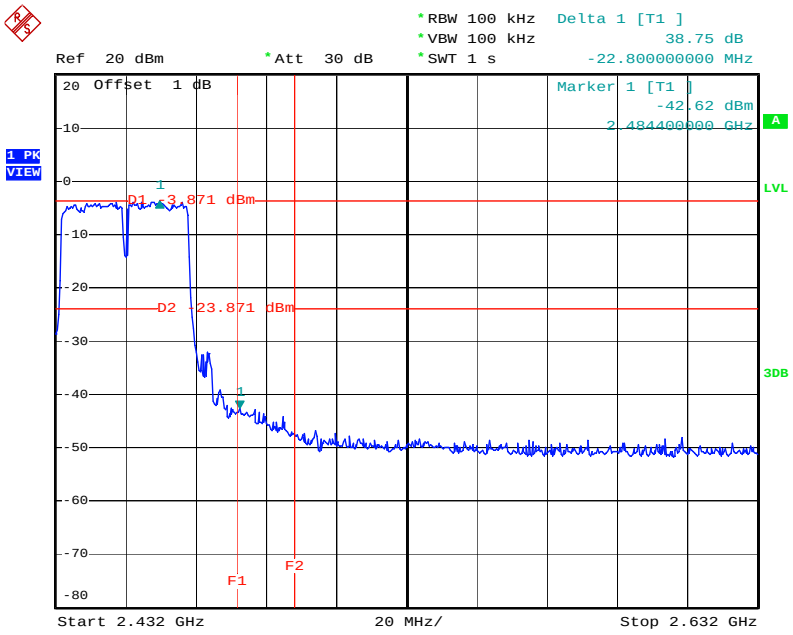
Date: 13.SEP.2010 18:09:38

Low Band Edge Plot on Configuration IEEE 802.11n MCS0 40MHz / 2422 MHz



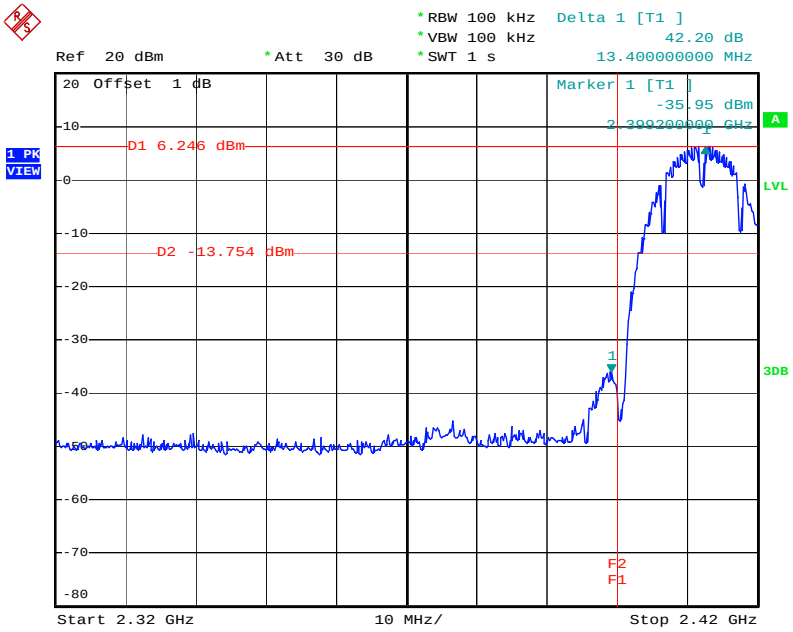
Date: 13.SEP.2010 18:15:16

High Band Edge Plot on Configuration IEEE 802.11n MCS0 40MHz / 2452 MHz



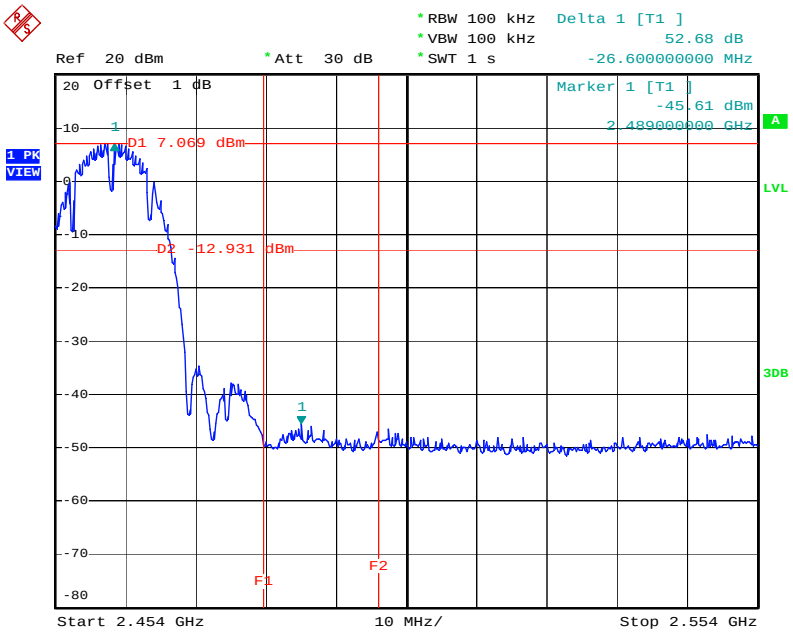
Date: 13.SEP.2010 18:19:42

Low Band Edge Plot on Configuration IEEE 802.11b / 2412 MHz



Date: 13.SEP.2010 18:29:59

High Band Edge Plot on Configuration IEEE 802.11b / 2462 MHz



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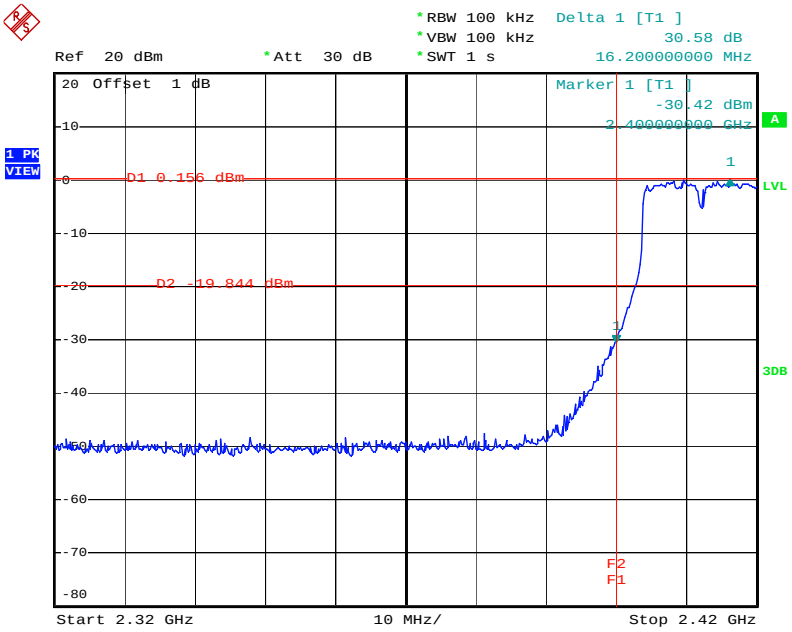
Low Band Edge Plot on Configuration IEEE 802.11g / 2412 MHz



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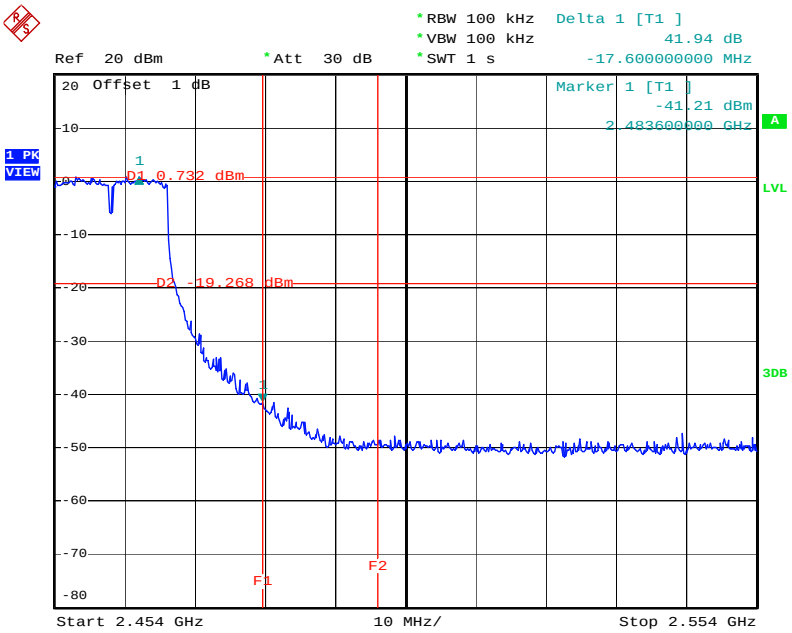
High Band Edge Plot on Configuration IEEE 802.11g / 2462 MHz

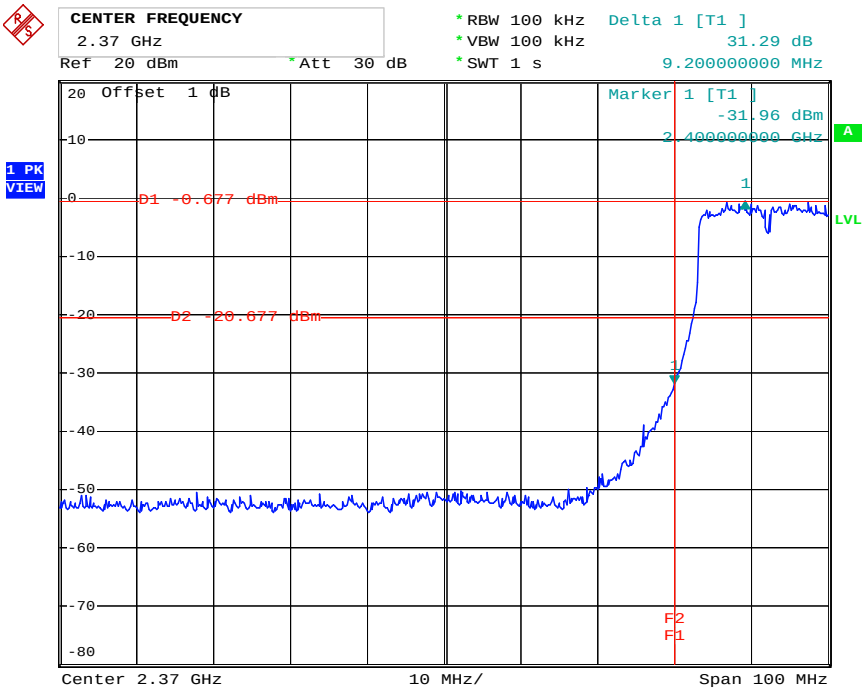


Date: 13.SEP.2010 18:00:56

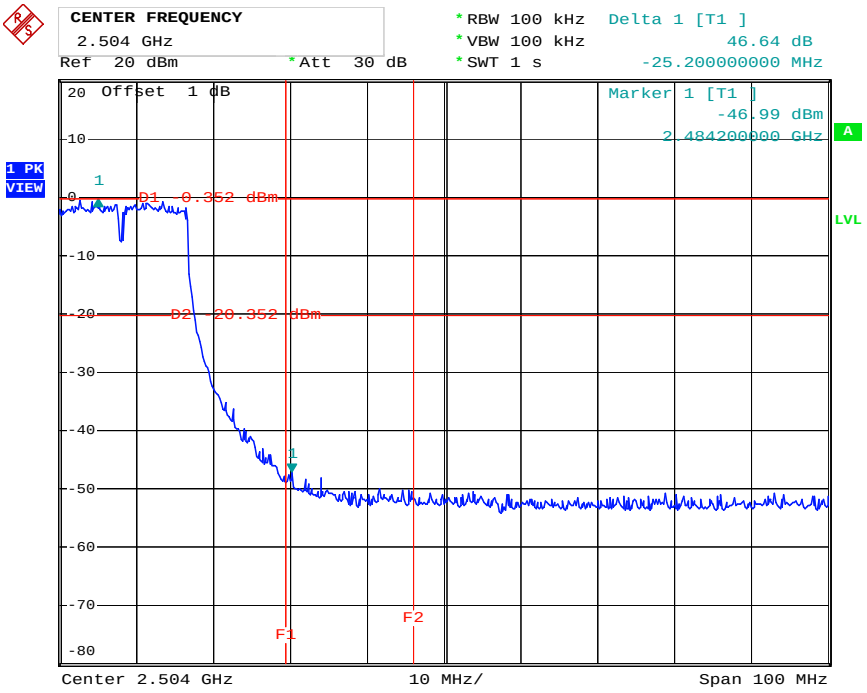
<For Second Source – EUT 2 (Mode 1 with Dipole Antenna)>:

For Emission not in Restricted Band

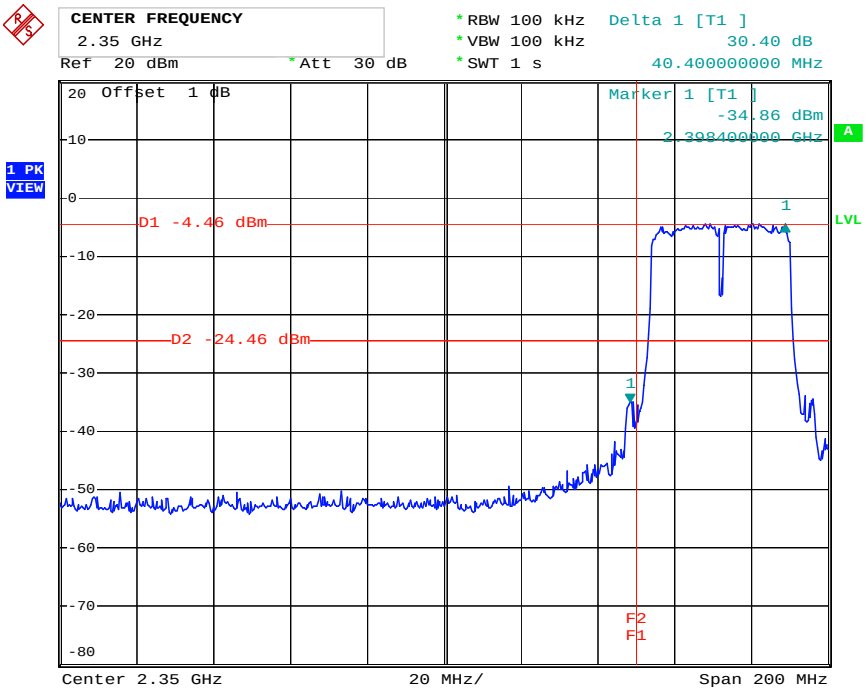
Low Band Edge Plot on Configuration IEEE 802.11n MCS0 20MHz / 2412 MHz



High Band Edge Plot on Configuration IEEE 802.11n MCS0 20MHz / 2462 MHz

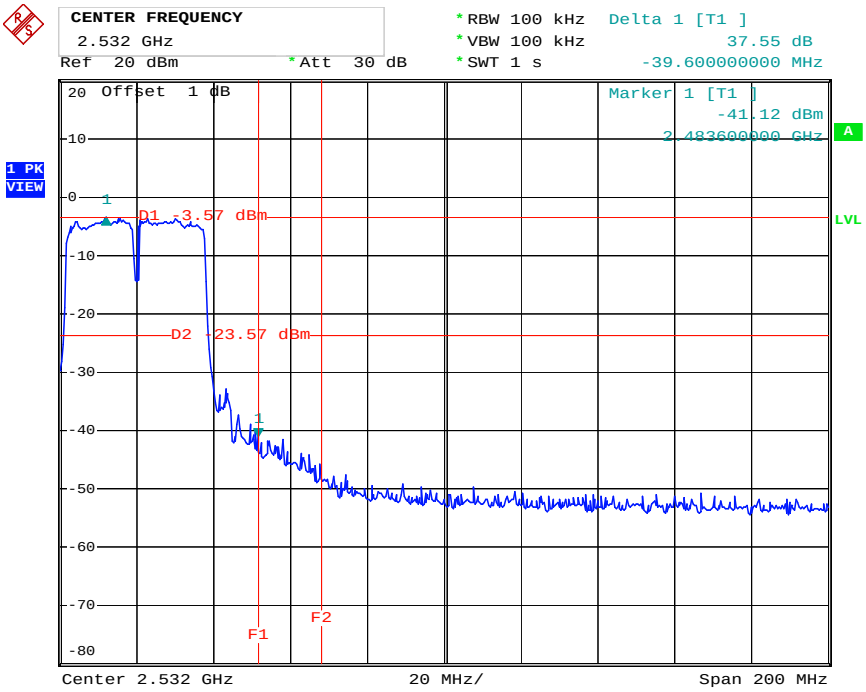


Low Band Edge Plot on Configuration IEEE 802.11n MCS0 40MHz / 2422 MHz



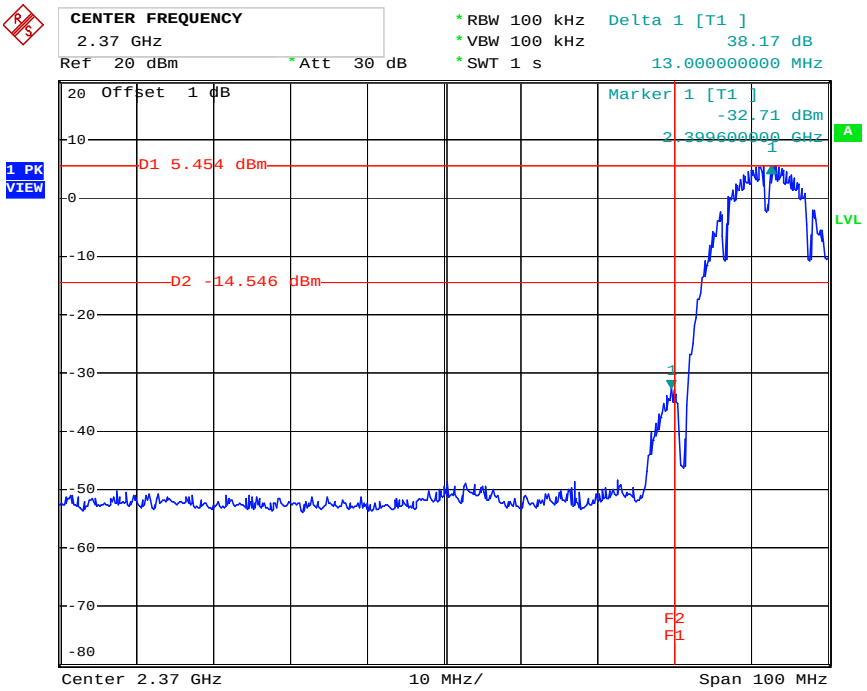
Date: 29.SEP.2010 12:30:03

High Band Edge Plot on Configuration IEEE 802.11n MCS0 40MHz / 2452 MHz



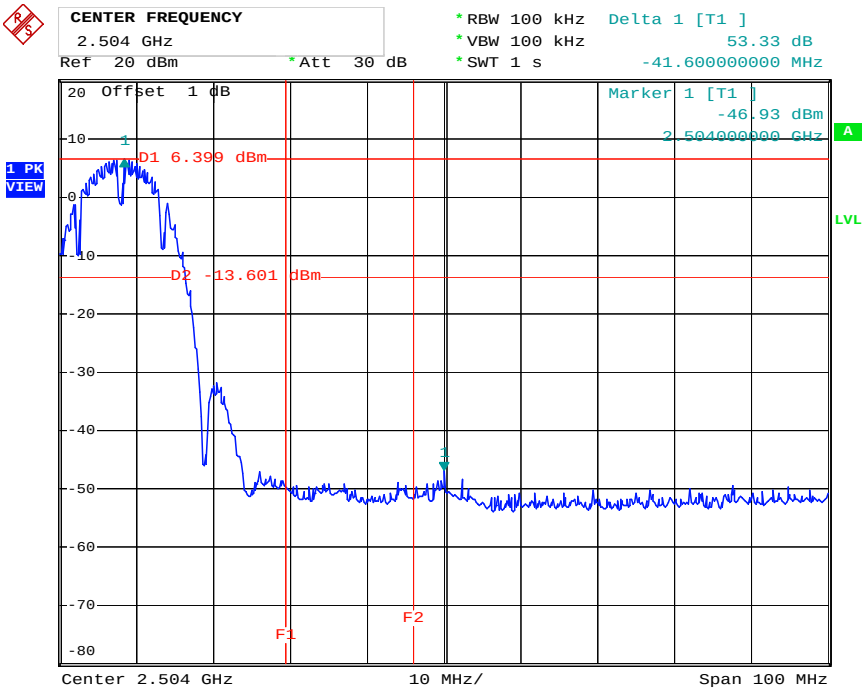
Date: 29.SEP.2010 12:29:18

Low Band Edge Plot on Configuration IEEE 802.11b / 2412 MHz



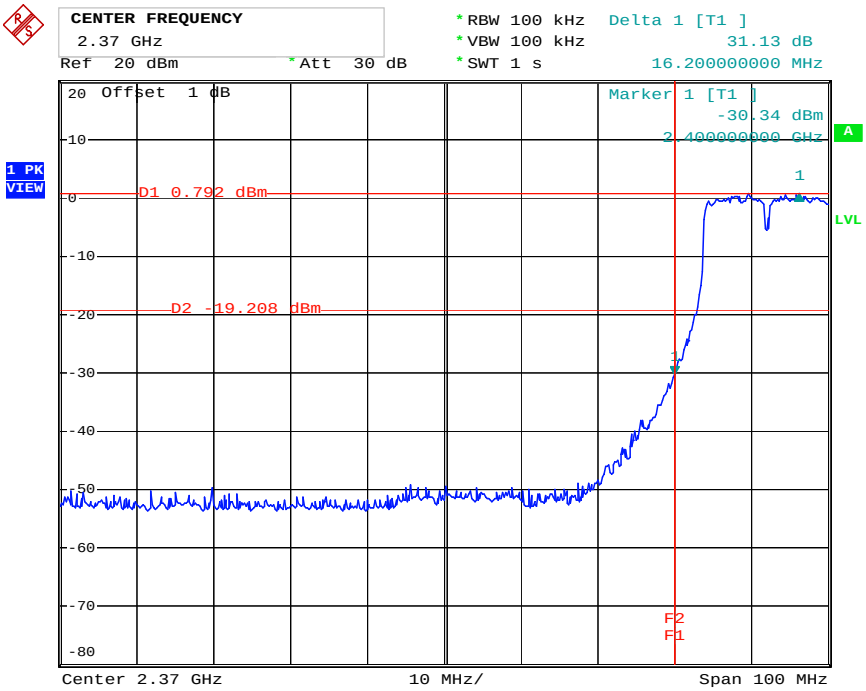
Date: 29.SEP.2010 11:44:44

High Band Edge Plot on Configuration IEEE 802.11b / 2462 MHz



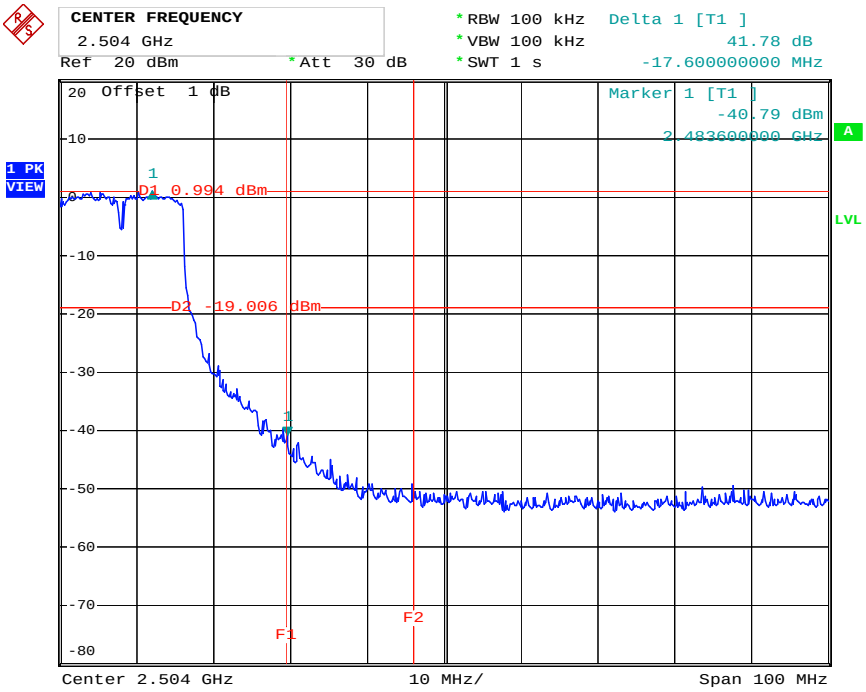
Date: 29.SEP.2010 11:58:17

Low Band Edge Plot on Configuration IEEE 802.11g / 2412 MHz



Date: 29.SEP.2010 12:08:25

High Band Edge Plot on Configuration IEEE 802.11g / 2462 MHz

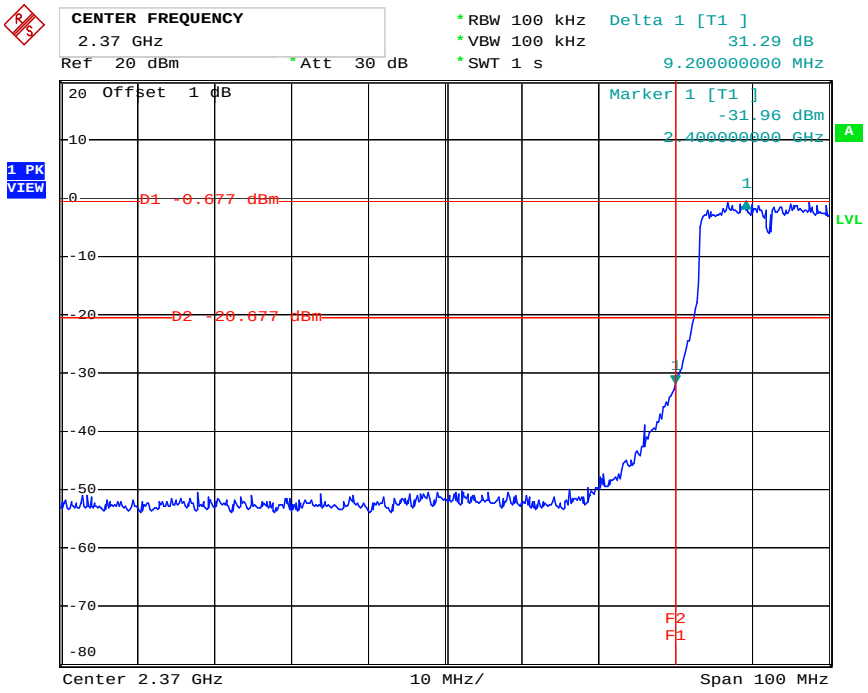


Date: 29.SEP.2010 11:59:31

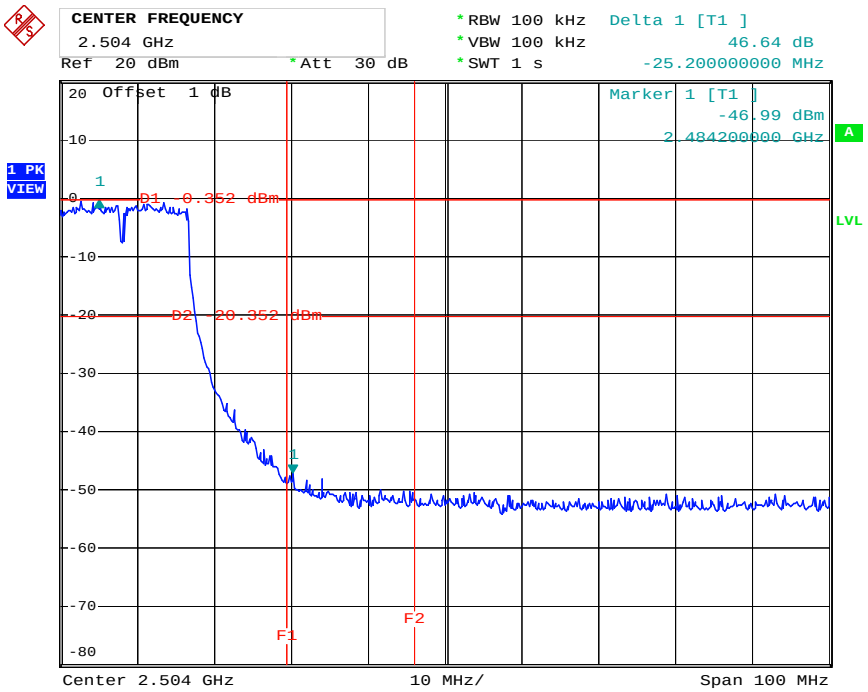
<For Main Source – EUT 2 (Mode 2 with PIFA Antenna)>:

For Emission not in Restricted Band

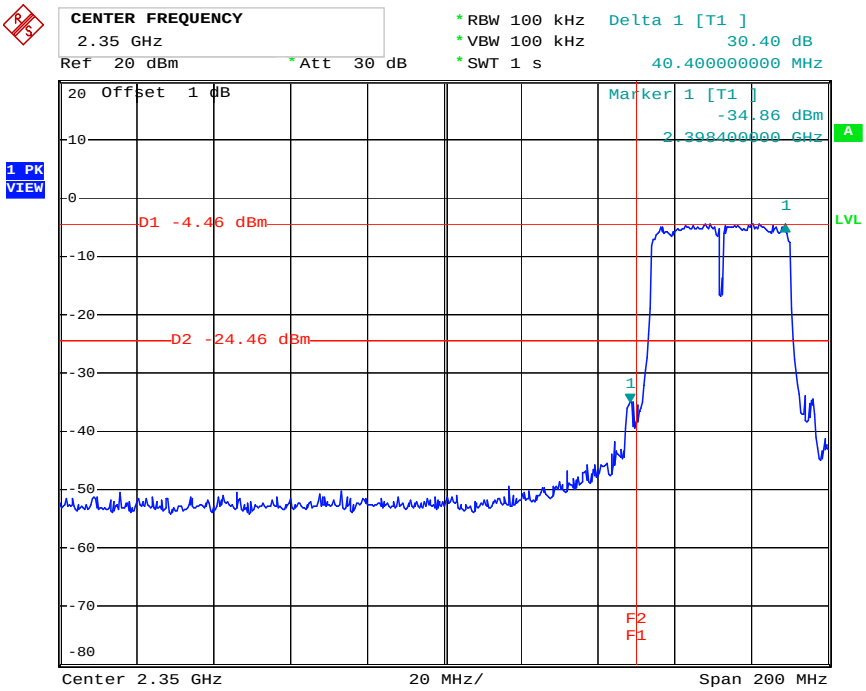
Low Band Edge Plot on Configuration IEEE 802.11n MCS0 20MHz / 2412 MHz



High Band Edge Plot on Configuration IEEE 802.11n MCS0 20MHz / 2462 MHz

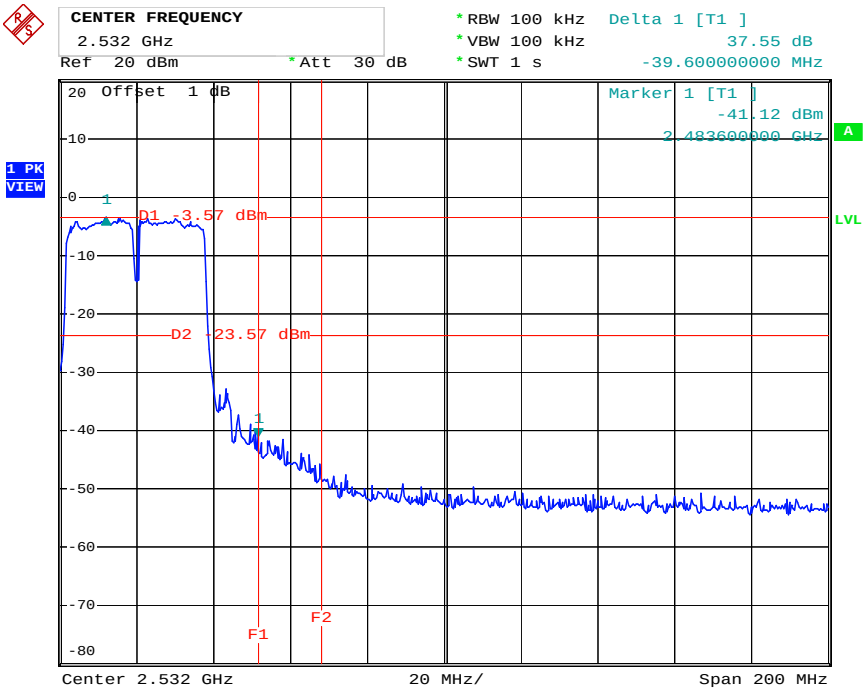


Low Band Edge Plot on Configuration IEEE 802.11n MCS0 40MHz / 2422 MHz



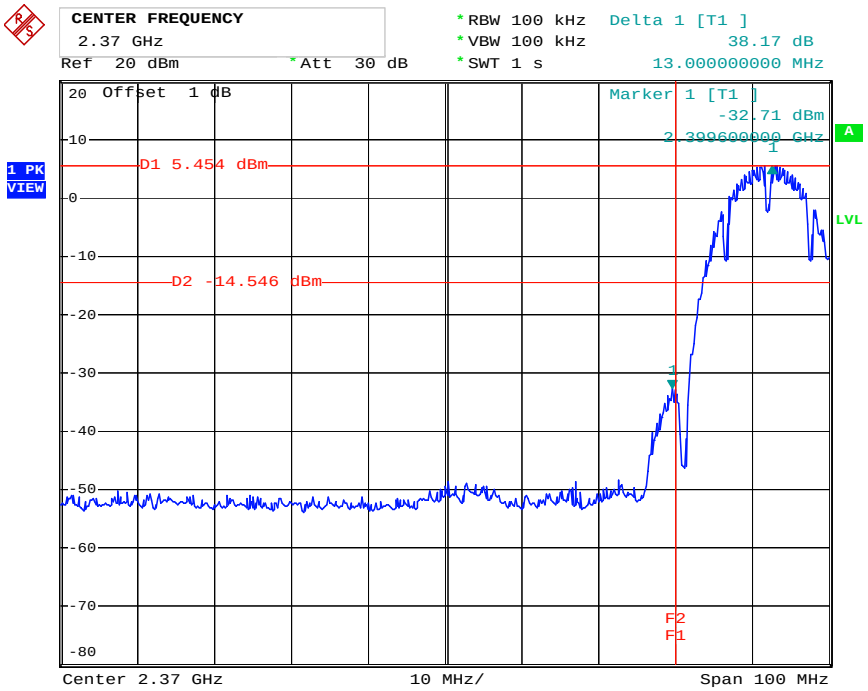
Date: 29.SEP.2010 12:30:03

High Band Edge Plot on Configuration IEEE 802.11n MCS0 40MHz / 2452 MHz



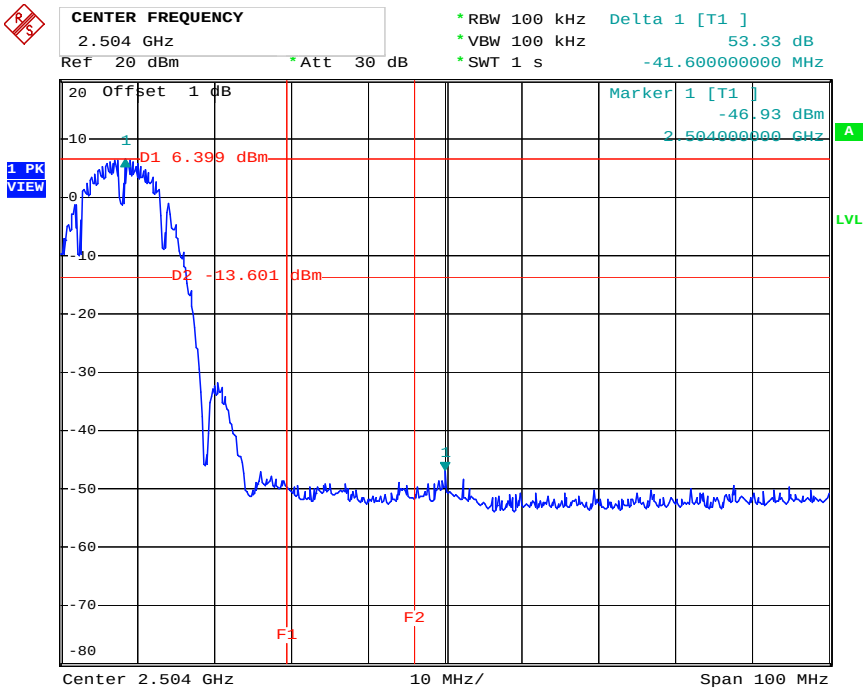
Date: 29.SEP.2010 12:29:18

Low Band Edge Plot on Configuration IEEE 802.11b / 2412 MHz



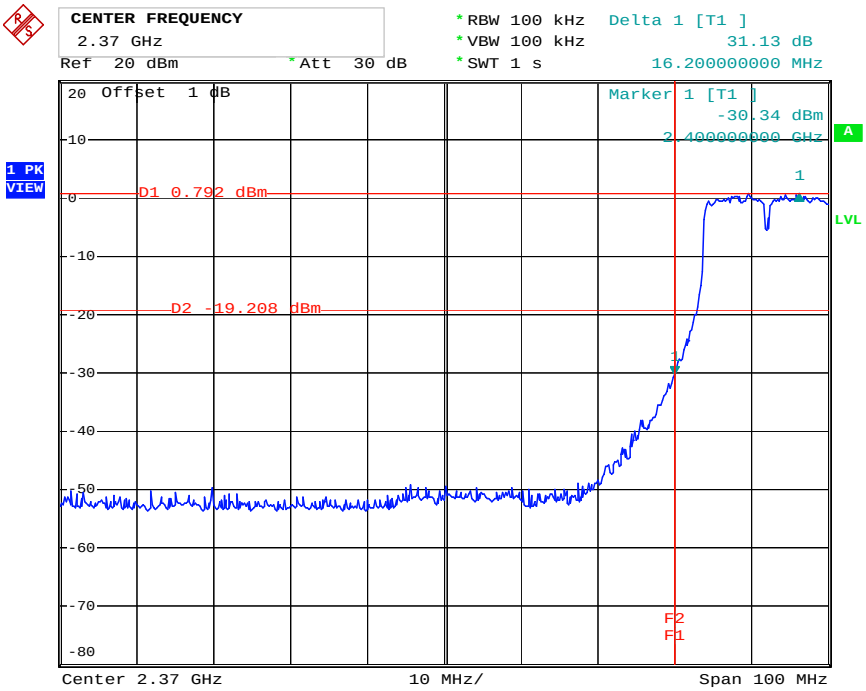
Date: 29.SEP.2010 11:44:44

High Band Edge Plot on Configuration IEEE 802.11b / 2462 MHz



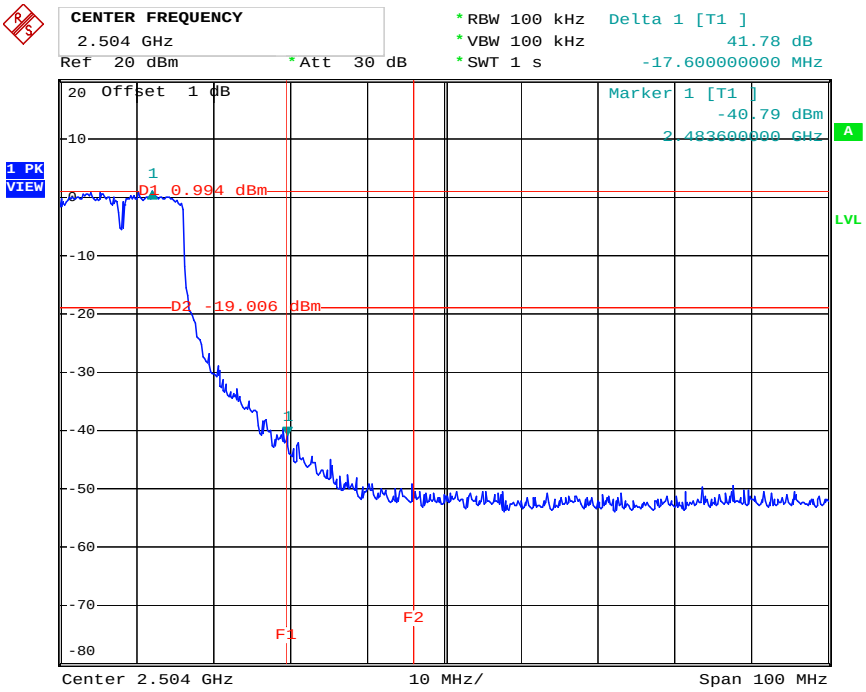
Date: 29.SEP.2010 11:58:17

Low Band Edge Plot on Configuration IEEE 802.11g / 2412 MHz



Date: 29.SEP.2010 12:08:25

High Band Edge Plot on Configuration IEEE 802.11g / 2462 MHz



Date: 29.SEP.2010 11:59:31

4.7. Antenna Requirements

4.7.1. Limit

Except for special regulations, the Low-power Radio-frequency Devices must not be equipped with any jacket for installing an antenna with extension cable. 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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited. Further, this requirement does not apply to intentional radiators that must be professionally installed.

4.7.2. Antenna Connector Construction

Please refer to section 3.3 in this test report; antenna connector complied with the requirements.

5. LIST OF MEASURING EQUIPMENTS

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMC Receiver	R&S	ESCS 30	100174	9kHz – 2.75GHz	Apr. 06, 2010	Conduction (CO04-HY)
LISN	MessTec	NNB-2/16Z	99041	9kHz – 30MHz	Mar. 23, 2010	Conduction (CO04-HY)
LISN (Support Unit)	EMCO	3810/2NM	9703-1839	9kHz – 30MHz	Apr. 29, 2010	Conduction (CO04-HY)
RF Cable-CON	UTIFLEX	3102-26886-4	CB049	9kHz – 30MHz	Apr. 20, 2010	Conduction (CO04-HY)
ISN	SCHAFFNER	ISN T400	21653	9kHz –30MHz	Jun. 10, 2010	Conduction (CO04-HY)
EMI Filter	LINDGREN	LRE-2030	2651	< 450 Hz	N/A	Conduction (CO04-HY)
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30 MHz - 1 GHz 3m	Jun. 18, 2010	Radiation (03CH03-HY)
Amplifier	SCHAFFNER	COA9231A	18667	9 kHz - 2 GHz	Jan. 24, 2010	Radiation (03CH03-HY)
Amplifier	Agilent	8449B	3008A02120	1 GHz - 26.5 GHz	Aug. 02, 2010	Radiation (03CH03-HY)
Spectrum Analyzer	R&S	FSP40	100004	9 kHz - 40 GHz	Oct. 03, 2009	Radiation (03CH03-HY)
Bilog Antenna	SCHAFFNER	CBL 6112D	22237	30 MHz – 1 GHz	Sep. 26, 2009	Radiation (03CH03-HY)
Horn Antenna	EMCO	3115	6741	1GHz ~ 18GHz	May 20, 2010	Radiation (03CH03-HY)
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	15 GHz - 40 GHz	Jan.11, 2010	Radiation (03CH03-HY)
RF Cable-R03m	Jye Bao	RG142	CB021	30 MHz - 1 GHz	Jan. 05, 2010	Radiation (03CH03-HY)
RF Cable-HIGH	SUHNER	SUCOFLEX 106	03CH03-HY	1 GHz - 40 GHz	Jan. 05, 2010	Radiation (03CH03-HY)
Turn Table	HD	DS 420	420/650/00	0 – 360 degree	N/A	Radiation (03CH03-HY)
Antenna Mast	HD	MA 240	240/560/00	1 m - 4 m	N/A	Radiation (03CH03-HY)
Loop Antenna	R&S	HFH2-Z2	860004/001	9 kHz - 30 MHz	Jul. 29, 2010*	Radiation (03CH03-HY)
Spectrum Analyzer	R&S	FSU26.5	100015	20Hz ~ 26.5GHz	Oct. 29, 2009	Conducted (TH01-HY)
Power Meter	R&S	NRVS	100444	DC ~ 40GHz	Jul. 25, 2010	Conducted (TH01-HY)
Power Sensor	Anritsu	MA2411B	0917017	300MHz~40GHz	Dec. 03, 2009	Conducted (TH01-HY)
Power Meter	Anritsu	ML2495A	0949003	300MHz~40GHz	Dec. 03, 2009	Conducted (TH01-HY)
AC Power Source	HPC	HPA-500W	HPA-9100024	AC 0 ~ 300V	Jul. 26, 2010*	Conducted (TH01-HY)
DC Power Source	G.W.	GPC-6030D	C671845	DC 1V ~ 60V	Apr. 16, 2010	Conducted (TH01-HY)
Temp. and Humidity Chamber	Giant Force	GTH-225-20-S	MAB0103-001	N/A	Aug. 06, 2009	Conducted (TH01-HY)
RF CABLE-1m	Jye Bao	RG142	CB034-1m	20MHz ~ 7GHz	Dec. 02, 2009	Conducted (TH01-HY)
RF CABLE-2m	Jye Bao	RG142	CB035-2m	20MHz ~ 1GHz	Dec. 02, 2009	Conducted (TH01-HY)
Vector Signal Generator	R&S	SMU200A	102098	100kHz ~ 6GHz	Feb. 13, 2010	Conducted (TH01-HY)
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	Mar. 30, 2010	Conducted (TH01-HY)
Power Sensor	Anritsu	MA2411B	0917017	300MHz~40GHz	Dec. 03, 2009	Conducted (TH01-HY)
Power Meter	Anritsu	ML2495A	0949003	300MHz~40GHz	Dec. 03, 2009	Conducted (TH01-HY)

Note: Calibration Interval of instruments listed above is one year.

Note: For "*" Calibration Interval of instruments listed above is two years.

6. TEST LOCATION

SHIJR	ADD	:	6Fl., No. 106, Sec. 1, Shintai 5th Rd., Shijr City, Taipei, Taiwan 221, R.O.C.
	TEL	:	886-2-2696-2468
	FAX	:	886-2-2696-2255
HWA YA	ADD	:	No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.
	TEL	:	886-3-327-3456
	FAX	:	886-3-318-0055
LINKOU	ADD	:	No. 30-2, Dingfu Tsuen, Linkou Shiang, Taipei, Taiwan 244, R.O.C
	TEL	:	886-2-2601-1640
	FAX	:	886-2-2601-1695
DUNGHU	ADD	:	No. 3, Lane 238, Kangle St., Neihu Chiu, Taipei, Taiwan 114, R.O.C.
	TEL	:	886-2-2631-4739
	FAX	:	886-2-2631-9740
JUNGHE	ADD	:	7Fl., No. 758, Jungjeng Rd., Junghe City, Taipei, Taiwan 235, R.O.C.
	TEL	:	886-2-8227-2020
	FAX	:	886-2-8227-2626
NEIHU	ADD	:	4Fl., No. 339, Hsin Hu 2nd Rd., Taipei 114, Taiwan, R.O.C.
	TEL	:	886-2-2794-8886
	FAX	:	886-2-2794-9777
JHUBEI	ADD	:	No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C.
	TEL	:	886-3-656-9065
	FAX	:	886-3-656-9085

7. TAF CERTIFICATE OF ACCREDITATION

Certificate No. : L1190-091230

財團法人全國認證基金會
Taiwan Accreditation Foundation

Certificate of Accreditation

This is to certify that

Sporton International Inc.
EMC & Wireless Communications Laboratory
No.52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.

is accredited in respect of laboratory

Accreditation Criteria	:	ISO/IEC 17025:2005
Accreditation Number	:	1190
Originally Accredited	:	December 15, 2003
Effective Period	:	January 10, 2010 to January 09, 2013
Accredited Scope	:	Testing Field, see described in the Appendix
Specific Accreditation Program	:	Accreditation Program for Designated Testing Laboratory for Commodities Inspection Accreditation Program for Telecommunication Equipment Testing Laboratory Accreditation Program for BSMI Mutual Recognition Arrangment with Foreign Authorities

Jay-San Chen
President, Taiwan Accreditation Foundation
Date : December 30, 2009

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The Appendix forms an integral part of this Certificate, which shall be invalid when use without the Appendix