

EMI TEST REPORT

Test Report No. : 25FE0211-HO-1

Applicant : **FUJITSU LIMITED**
Type of Equipment : **Personal Computer**
Model No. : **P1510D**
Test standard : **FCC Part 15 Subpart C**
Section 15.207, Section 15.247: 2005
FCC ID : **EJE-WL0009**
Test Result : **Complied**

1. This test report shall not be reproduced in full or partial, without the written approval of UL Apex Co., Ltd.
2. The results in this report apply only to the sample tested.
3. This equipment is in compliance with the above regulation. We hereby certify that the data contain a true representation of the EMC profile.
4. The test results in this report are traceable to the national or international standards.

Date of test: April 8 to May 30, 2005

Tested by:



Keiichi Aoki
EMC Service



Kenichi Adachi
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Mitsuru Fujimura
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Makoto Kosaka
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Approved by :



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SECTION 1: Client information

Company Name : FUJITSU LIMITED
Address : 1405 Ohmaru, Inagi-shi, 206-8503 Tokyo
Telephone Number : +81-42-370-7630
Facsimile Number : +81-42-370-7588
Contact Person : Tsuyoshi Uchihara

SECTION 2: Equipment under test (E.U.T.)

2.1 Identification of E.U.T.

Type of Equipment : Personal Computer
Model No. : P1510D
Serial No. : R5100002
Rating : AC120V/60Hz (AC Adapter)
Country of Manufacture : Japan
Receipt Date of Sample : January 17, 2005
Condition of EUT : Engineering prototype
(Not for Sale: This sample is equivalent to mass-produced items.)

2.2 Product Description

Remarks : This Wireless Module consists of 1 chip each of 5GHz band.
Please refer to 25FE0211-HO-2 for IEEE802.11a (5150 – 5350MHz).

Model No. P1510D is Personal Computer.
Convertible laptop PC installed with a Mini-PCI Wireless LAN module. CPU: 1.0GHz

Equipment Type : Transceiver
Frequency of operation : 11bg: 2412-2462MHz
11a: 5150-5350MHz/5745 - 5825MHz
Channel Spacing : 5MHz(11bg), 20MHz (11a)
Duty Cycle : over 90%
Type of Modulation : DSSS, OFDM, CCK
Mode of operation : Duplex
Antenna Type : Monopole Antenna (M/N: YCE-5008)
Antenna Gain : IEEE802.11b/g: Main -4.78 dBi /AUX -1.49 dBi
IEEE802.11a: Main Antenna: 0.90dBi, AUX Antenna -0.97 dBi
(This antenna gain are values in which antenna was mounted to the PC)
Antenna Connector Type : U-FL
Operating voltage (inner) : DC3.3V
Operating temperature range : 0-+70 deg.C.

FCC 15.31 (e)

This EUT provides stable voltage(DC3.3V) constantly to RF Module regardless of input voltage. Therefore, this EUT complies with the requirement.

FCC Part 15.203 Antenna requirement

This EUT has the external (particular) antenna connector, and the installation is to be done by the professionals. Therefore, the equipment complies with the antenna requirement of Section 15.203.

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SECTION 3: Test specification, procedures & results

3.1 Test Specification

Test Specification : FCC Part15 Subpart C : 2005
Title : FCC 47CFR Part15 Radio Frequency Device Subpart C Intentional Radiators
Section 15.207 Conducted limits : 2005
Section 15.247 Operation within the bands 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz : 2005

3.2 Procedures and results

No.	Item	Test Procedure	Specification	Remarks	Deviation	Worst margin *0	Results
1	Conducted emission	ANSI C63.4:2003 7. AC powerline conducted emission measurements	Section 15.207	-	N/A	5.4dB 0.1691MHz, N (AV) IEEE802.11a High band	Complied
2	6dB Bandwidth	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.247(a)(2)	Conducted	N/A	See data.	Complied
3	Maximum Peak Output Power	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.247(b)(3)	Conducted	N/A	See data.	Complied
4	Spurious Emission	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.247 (d) Section 15.209	Conducted/ Radiated	N/A	3.2dB 5439.9MHz, VER IEEE802.11a AV High band	Complied
5	Restricted Band Edges	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.247 (d)	Conducted/ Radiated	N/A	See data.	Complied
6	Power Density	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.247 (e)	Conducted	N/A	See data.	Complied

Note: UL Apex's EMI Work Procedures No.QPM05 and QPM15.

*0) The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

Uncertainty:

*In case of the margin below the EMC Head Office's uncertainty.

The data listed in this report meets the limits unless the uncertainty is taken into consideration.

Conducted Emission

The measurement uncertainty (with a 95% confidence level) for this test is ± 1.3 dB.

Spurious Emission (Radiated)

The measurement uncertainty (with a 95% confidence level) for this test using Biconical antenna is ± 4.5 dB(3m)/ ± 4.7 dB(10m).

The measurement uncertainty (with a 95% confidence level) for this test using Logperiodic antenna is ± 5.2 dB(3m)/ ± 3.8 dB(10m).

The measurement uncertainty (with a 95% confidence level) for this test using Horn antenna is ± 6.6 dB.

Other test except Conducted Emission and Spurious Emission (Radiated)

The measurement uncertainty (with a 95% confidence level) for this test is ± 3.0 dB.

*These tests were also referred to "Guidance on Measurement for Digital Transmission Systems Section15.247".

*These tests were performed without any deviations from test procedure except for additions or exclusions.

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3.3 Addition to standards

No.	Item	Test Procedure	Specification	Remarks	Deviation	Worst margin	Results
1	99% Occupied Band Width	RSS-210(issue 5): 2001 + Amendment:2002 + Amendment2:2003 + Amendment3:2004 + Amendment4:2004	RSS-210(issue 5): 2001 + Amendment:2002 + Amendment2:2003 + Amendment3:2004 + Amendment4:2004	Conducted	N/A	N/A	N/A

3.4 Test Location

UL Apex Co., Ltd. Head Office EMC Lab. *NVLAP Lab. code: 200572-0

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	FCC Registration Number	IC Registration Number	Width x Depth x Height (m)	Size of reference ground plane (m) / horizontal conducting plane	Other rooms
No.1 semi-anechoic chamber	313583	IC4247	19.2 x 11.2 x 7.7m	7.0 x 6.0m	Preparation room
No.2 semi-anechoic chamber	846015	IC4247-2	7.5 x 5.8 x 5.2m	4.0 x 4.0m	-
No.3 shielded room	-	-	4.7 x 7.5 x 2.7m	4.7 x 7.5m	-
No.4 measurement room	-	-	3.1 x 5.0 x 2.7m	N/A	-

* Size of vertical conducting plane (for Conducted Emission test) : 2.0 x 2.0m for No.1 and No.2 semi-anechoic and No.3 shielded room.

3.5 Test set up, Test instruments and Data of EMI

Refer to APPENDIX 1 to 3.

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SECTION 4: Operation of E.U.T. during testing

4.1 Operating Modes

The EUT was operating in a manner similar to typical use during the tests.

Packet Type : Maximum
Payload : PN9
Operation : **Normal mode(IEEE802.11b/11g)**
Low Channel :2412MHz(Ch1)
Mid Channel :2437MHz(Ch6)
High Channel :2462MHz(Ch11)
Normal mode(IEEE802.11a)
Low Channel :5745MHz(Ch1)
Mid Channel :5785MHz(Ch6)
High Channel :5825MHz(Ch11)

Turbo mode (IEEE802.11g)

The test in Turbo mode was performed at the worst conditions in Normal mode because the difference between Turbo mode and Normal mode was 2 channels at the same time or 1 channel transmission.

For the channel of Turbo mode, the test was performed at the mid ch (2437MHz) because this EUT has only operating Mid channel.

Conditions : 1) Data Rate:IEEE802.11b:1,2,5.5,11Mbps
IEEE802.11g (Normal):6,9,12,18,24,36,48,54 Mbps
IEEE802.11a (Turbo):12, 18, 24, 36, 48, 72, 96, 108 Mbps
IEEE802.11a (Normal):6,9,12,18,24,36,48,54 Mbps
2) AUX Antenna, Main Antenna (same type)

*We pre-confirmed the above conditions on EUT and performed the final test with the following conditions;

	IEEE802.11b	IEEE802.11g (Normal)	IEEE802.11g (Turbo)	IEEE802.11g (Normal/High Band)
Conducted emission test	1)Rate:11 Mbps	1)Rate:54 Mbps	1)Rate:108 Mbps	1)Rate:108 Mbps
	2)AUX Antenna	2)AUX Antenna	2)AUX Antenna	2)AUX Antenna
Radiated emission test	1)Rate:11 Mbps	1)Rate:54 Mbps	1)Rate:108 Mbps	1)Rate:54 Mbps
	2)AUX Antenna	2)AUX Antenna	2)AUX Antenna	2)AUX Antenna
Other tests	1)Rate:11 Mbps	1)Rate:54 Mbps	1)Rate:54 Mbps	1)Rate:54/108 Mbps
	2)Main Antenna	2)Main Antenna	2)Main Antenna	2)Main /AUX Antenna

<The details>

Conducted emission test : The above conditions did not affect the test result so that the test was made with these conditions in the above table.

Radiated emission test : As for Rate, 11Mbps (Maximum transmission rate of 11b) and 54Mbps (Maximum transmission rate of 11g) had worst margins.

The result of AUX Antenna had worst margin.

Other tests : As for Rate, 11Mbps(Maximum transmission rate of 11b) and 54Mbps (11g) had worst margins.

The test was also performed with Maximum transmission rate 54Mbps of 11g.

The result of Main Antenna had worst margin.

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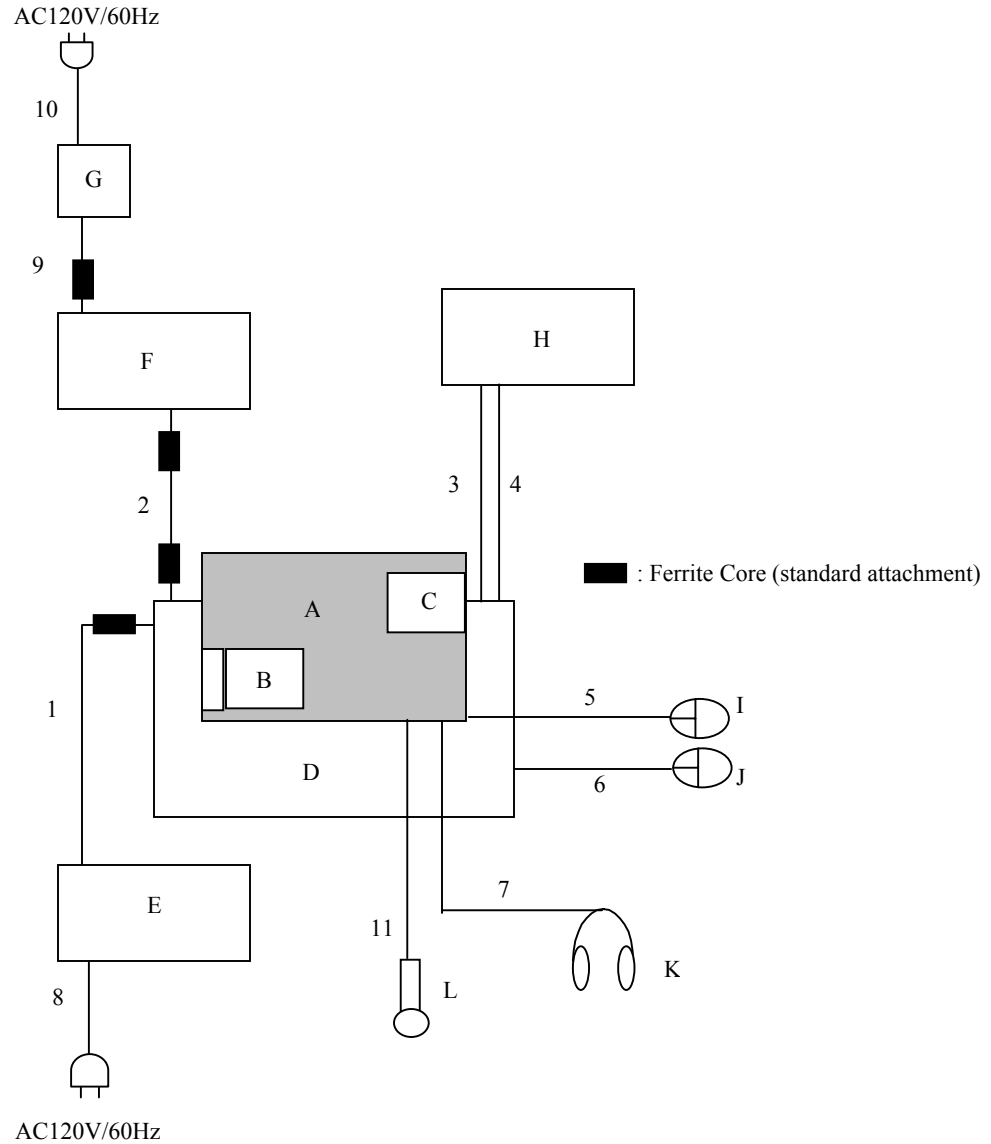
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4.2 Configuration and peripherals



* Cabling was taken into consideration and test data was taken under worse case conditions.

Description of EUT and Support equipment

No.	Item	Model number	Serial number	Manufacturer	FCC ID	Remarks
A	Personal Computer	P1510D	R5100002	FUJITSU LIMITED	EJE-WL0009	EUT
B	PC Card	-	-	IO DATA	-	-
C	SD Card	-	-	IO DATA	-	-
D	Port Replicator	-	30	FUJITSU LIMITED	-	-
E	AC Adapter	CA01007-0730	01208879C	FUJITSU LIMITED	-	-
F	LCD Monitor	PLE430-B1S	05205G4538698	Iiyama	-	-
G	AC Adapter	ADPC12416BB	12416B042126921	Iiyama	-	-
H	Personal Computer	PGMJ140M	09632777	SHARP	-	-
I	Mouse	M-UB48	LZE02650788	Logitech	-	-
J	Mouse	M-UB48	LZE02601001	Logitech	-	-
K	Headset	LT-100	0010D	Panasonic	-	-
L	Microphone	-	-	Fujitsu	-	-

List of cables used

No.	Name	Length (m)	Shield	Backshell Material
1	DC Cable	1.8	N	Polyvinyl chloride
2	Monitor Cable	1.8	Y	Polyvinyl chloride
3	LAN Cable	2.9	N	Polyvinyl chloride
4	TEL Line	2.0	N	Polyvinyl chloride
5	Mouse Cable	0.7	N	Polyvinyl chloride
6	Mouse Cable	0.7	N	Polyvinyl chloride
7	Headset Cable	3.0	N	Polyvinyl chloride
8	AC Cable	2.0	N	Polyvinyl chloride
9	DC Cable	1.2	N	Polyvinyl chloride
10	AC Cable	1.8	N	Polyvinyl chloride
11	Microphone Cable	1.6	N	Polyvinyl chloride

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SECTION 5: Conducted Emission

Test Procedure

EUT was placed on a platform of nominal size, 1.5m by 1.0m, raised 80cm above the conducting ground plane. The rear of tabletop was located 40cm to the vertical conducting plane. The rear of EUT, including peripherals aligned and flushed with rear of tabletop. All other surfaces of tabletop were at least 80cm from any other grounded conducting surface. EUT was located 80cm from a Line Impedance Stabilization Network (LISN)/ Artificial mains Network (AMN) and excess AC cable was bundled in center.

1) For the tests on EUT with other peripherals (as a whole system)

I/O cable and AC cables that were connected to the peripherals were bundled in center. They were folded back and forth forming a bundle 30cm to 40cm long and were hanged at a 40cm height to the ground plane.

2) For the tests on EUT itself (as a stand alone equipment)

Each EUT current-carrying power lead, except the ground (safety) lead, was individually connected through a LISN /(AMN) to the input power source. All unused 50ohm connectors of the LISN(AMN) were resistively terminated in 50ohm when not connected to the measuring equipment.

The AC Mains Terminal Continuous disturbance Voltage has been measured with the EUT in a Semi Anechoic Chamber or a Measurement Room.

The EUT was connected to a LISN (AMN).

An overview sweep with peak detection has been performed.

The measurements have been performed with a CISPR quasi-peak detector (IF BW 9 kHz).

Measurement range: 0.15-30MHz

Test data : **APPENDIX 3**

Test result : **Pass**

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SECTION 6: Spurious Emission

[Conducted]

Test Procedure

The Out of Band Emission was measured with a spectrum analyzer connected to the antenna port.

Test data : APPENDIX 3

Test result : Pass

[Radiated]

Test Procedure

EUT was placed on the size, 0.5m by 1.0m, raised 80cm above the conducting ground plane.

The Radiated Electric Field Strength intensity has been measured in a Semi Anechoic Chamber with a ground plane and at a distance of 3m(Below 10GHz) and 1m(Upper 10GHz).

The height of the measuring varied between 1 and 4m and EUT was rotated a full revolution in order to obtain the maximum value of the electric field intensity.

The measurements were performed for both vertical and horizontal antenna polarization with the Test Receiver or the Spectrum Analyzer.

In any 100kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator confirmed 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on a radiated measurement.

20dBc was applied to the frequency over the limit of FCC 15.209 and outside the restricted band of 15.205.

Frequency	Below 1GHz	Above 1GHz
Instrument used	Test Receiver / Spectrum Analyzer	Spectrum Analyzer
Detector	QP: BW 120kHz(T/R)	PK: RBW:1MHz/VBW: 1MHz
IF Bandwidth	20dBc : RBW:100kHz/VBW: 300kHz (S/A)	AV: RBW:1MHz/VBW:10Hz 20dBc : RBW:100kHz/VBW:300kHz

Test data : APPENDIX 3

Test result : Pass

- The carrier level and noise levels were confirmed at each position of X, Y and Z axes of EUT to see the position of maximum noise, and the test was made at the position that has the maximum noise.

* The level was confirmed with both PC of Tablet type and Note type, and the test was made with the worst-case conditions.

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SECTION 7: Bandwidth

Test Procedure

The bandwidth was measured with a spectrum analyzer connected to the antenna port.

Test data	: APPENDIX 3
Test result	: Pass

SECTION 8: Maximum Peak Output Power

Test Procedure

The Maximum Peak Output Power was measured with a spectrum analyzer connected to the antenna port.
The test was made with the spectrum analyzer that has a function of channel-power measurement.

Test data	: APPENDIX 3
Test result	: Pass

SECTION 9: Peak Power Density

Test Procedure

The Peak Power Density was measured with a spectrum analyzer connected to the antenna port.

Test data	: APPENDIX 3
Test result	: Pass

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APPENDIX 1: Photographs of test setup

Conducted Emission **Front**



Rear



Spurious Emission (Radiated)

Front



Rear



Worst Case Position

(Horizontal : X-axis / Vertical : X-axis) below 1GHz

(Horizontal : Z-axis / Vertical : X-axis) above 1GHz

X-axis



Y-axis



Z-axis



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APPENDIX 2:Test instruments

EMI test equipment

Control No.	Instrument	Manufacturer	Model No	Test Item	Calibration Date * Interval(month)
MAEC-01	Anechoic Chamber	TDK	Semi Anechoic Chamber 10m	RE	2004/11/13 * 12
MTR-01	Test Receiver	Rohde & Schwarz	ES140	RE	2004/11/12 * 12
MCC-18	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX 104	RE	2005/02/03 * 12
MCC-26	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	RE	2004/08/26 * 12
MPA-05	Pre Amplifier	TSJ	TSJ 1-26.5GHz PreAmp	RE	2004/06/12 * 12
MHA-06	Horn Antenna	Schwarzbeck	BBHA9120D	RE	2005/01/10 * 12
MAT-20	Attenuator(10dB)(above1GHz)	HIROSE ELECTRIC CO.,LTD.	AT-110	RE	2005/01/11 * 12
MHF-02	High Pass Filter	Tokimec	TF323DCA	RE	2004/09/18 * 12
MAEC-02	Anechoic Chamber	TDK	Semi Anechoic Chamber 3m	RE / CE	2005/04/11 * 12
MRENT-14	Spectrum Analyzer	Advantest	R3273	RE / CE	2005/02/21 * 12
MCC-04	Microwave Cable 1G-50GHz	Storm	421-011 (90-1394-079)	RE	2005/01/05 * 12
MCC-19	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX 104	RE	2005/02/03 * 12
MPA-01	Pre Amplifier	Agilent	8449B	RE	2005/02/05 * 12
MCC-05	Microwave Cable 1G-50GHz	Storm	421-011 (90-1394-079)	RE	2005/01/05 * 12
MBF-03	SHF Bandpass Filter	M-City	13GHz BPF	RE	2005/05/20 * 12
MHA-02	Horn Antenna	EMCO	3160-09	RE	2005/01/10 * 12
MTR-02	Test Receiver	Rohde & Schwarz	ESCS30	RE/CE	2005/02/02 * 12
MCC-13	Coaxial Cable	Fujikura/Agilent	-	CE	2005/02/24 * 12
MLS-06	LISN(AMN)	Schwarzbeck	NSLK8127	CE(EUT)	2005/02/04 * 12
MLS-07	LISN(AMN)	Schwarzbeck	NSLK8127	CE	2005/02/04 * 12
MTA-04	Termination	MCL	NTRM-50	CE	2005/02/03 * 12
MCC-12	Coaxial Cable	Fujikura/Agilent	-	RE	2005/02/24 * 12
MPA-06	Pre Amplifier	Hewlett Packard	8447D	RE	2004/08/29 * 12
MAT-07	Attenuator(6dB)	Weinschel Corp	2	RE	2004/12/16 * 12
MBA-02	Biconical Antenna	Schwarzbeck	BBA9106	RE	2004/10/14 * 12
MLA-02	Logperiodic Antenna	Schwarzbeck	USLP9143	RE	2004/10/14 * 12
MSA-03	Spectrum Analyzer	Agilent	E4448A	AT	2004/06/12 * 12
MCC-06	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX 104	AT	2005/02/03 * 12
MCC-36	Microwave Cable	Mitachi Co., Ltd.	U.FL-2LP-066-A-(200)	AT	2004/07/22 * 12
MAT-22	Attenuator(10dB)(above1GHz)	Orient Microwave	BX10-0476-00	AT	2005/03/16 * 12

All equipment is calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

Test Item:

CE: Conducted emission RE: Spurious emission(Radiated)

AT: Other tests

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APPENDIX 3: Data of EMI test

Conducted Emission

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber

Applicant : Fujitsu Limited
Kind of EUT : Personal Computer
Model No. : P1510D
Serial No. : R5100002

Report No. : 25FE0211-HO
Power : AC120V / 60Hz
Temp°C/Humi% : 23 deg. C / 72%
Operator : Mitsuru Fujimura

Mode / Remarks : IEEE802.11b Tx2412MHz 11Mbps/Aux Antenna

LIMIT : FCC15C §15.207 (QP)
FCC15C §15.207 (AV)

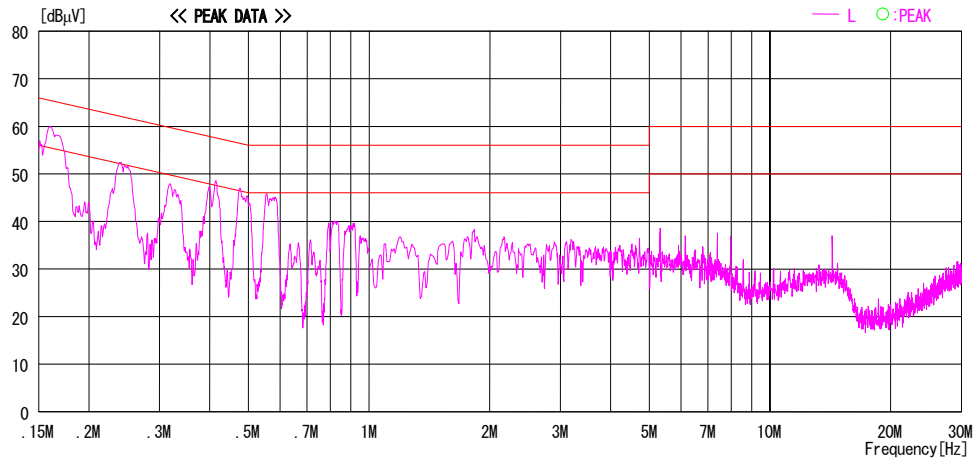
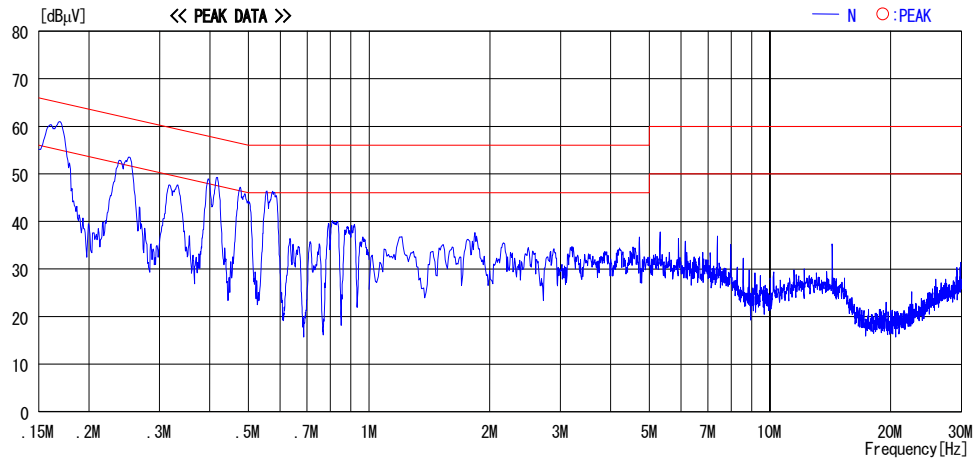


CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALCULATION: RESULT=READING+C.F (LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

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UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber

Applicant : Fujitsu Limited
Kind of EUT : Personal Computer
Model No. : P1510D
Serial No. : R5100002

Report No. : 25FE0211-HO
Power : AC120V / 60Hz
Temp°C/Humi% : 23 deg.C / 72%
Operator : Mitsuru Fujimura

Mode / Remarks: IEEE802.11b Tx2437MHz 11Mbps/Aux Antenna

LIMIT : FCC15C § 15.207 (QP)
FCC15C § 15.207 (AV)

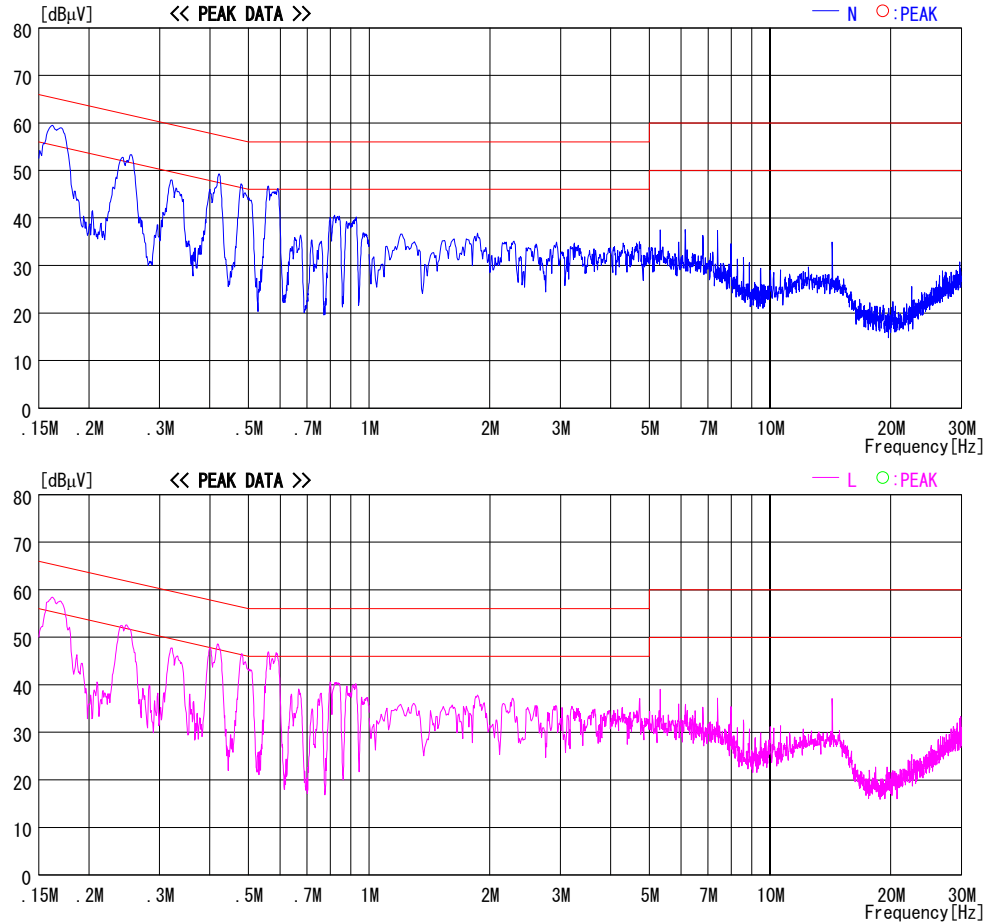


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F (LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

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DATA OF CONDUCTED EMISSION TEST

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Applicant : Fujitsu Limited
Kind of EUT : Personal Computer
Model No. : P1510D
Serial No. : R5100002

Report No. : 25FE0211-HO
Power : AC120V / 60Hz
Temp°C/Humi% : 23 deg.C / 72%
Operator : Mitsuru Fujimura

Mode / Remarks: IEEE802.11b Tx2462MHz 11Mbps/Aux Antenna

LIMIT : FCC15C § 15.207 (QP)
FCC15C § 15.207 (AV)

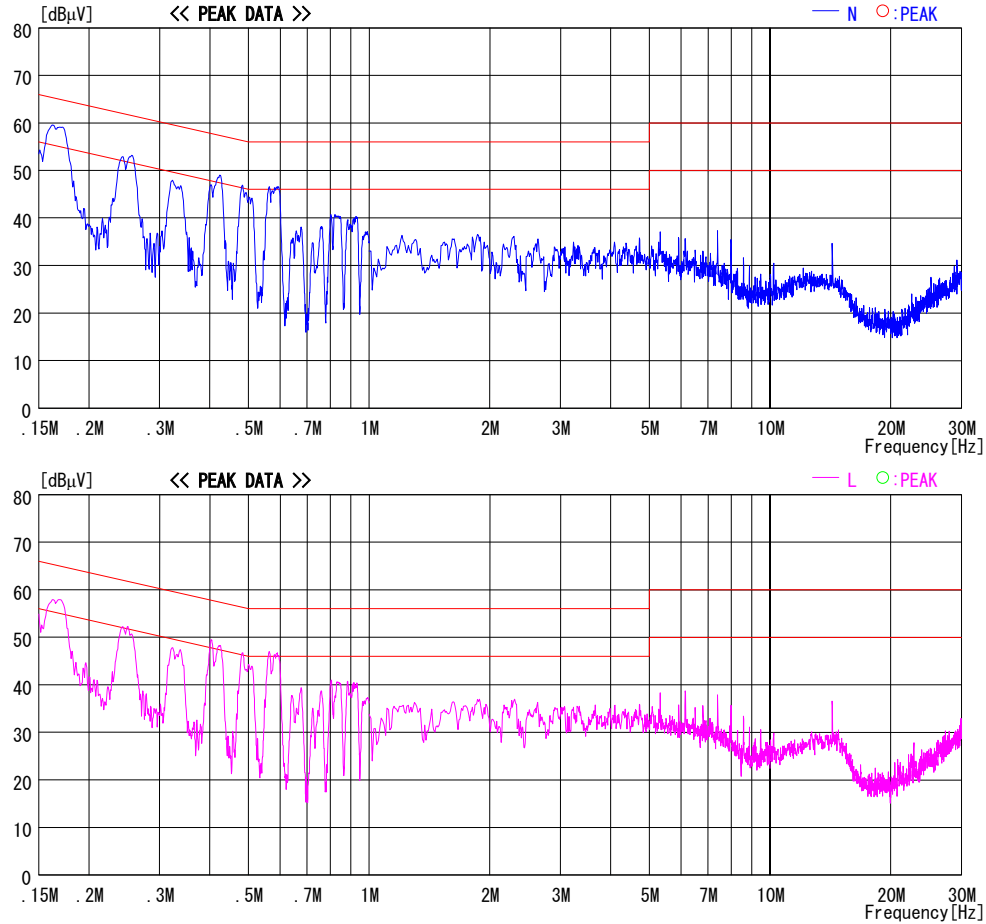


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F (LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

UL Apex Co., Ltd.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

MF060b(01.06.05)

DATA OF CONDUCTED EMISSION TEST

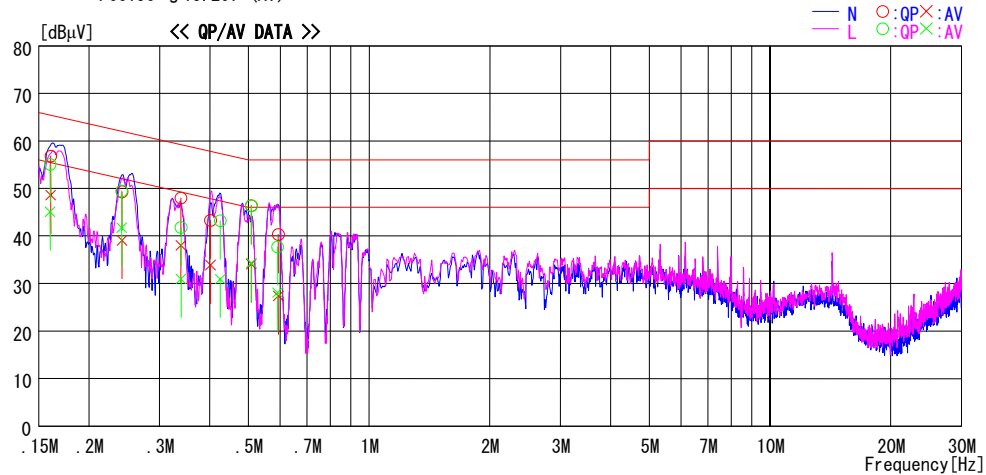
UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber

Applicant : Fujitsu Limited
Kind of EUT : Personal Computer
Model No. : P1510D
Serial No. : R5100002

Report No. : 25FE0211-HO
Power : AC120V / 60Hz
Temp°C/Humi% : 23 deg.C / 72%
Operator : Mitsuru Fujimura

Mode / Remarks: IEEE802.11b Tx2462MHz 11Mbps/Aux Antenna

LIMIT : FCC15C § 15.207 (QP)
FCC15C § 15.207 (AV)



NO	FREQ [MHz]	READING		C. F	RESULT		LIMIT		MARGIN		PHASE
		QP [dBμV]	AV [dBμV]		QP [dBμV]	AV [dBμV]	QP [dBμV]	AV [dBμV]	QP [dB]	AV [dB]	
1	0.1606	56.7	48.5	0.1	56.8	48.6	65.4	55.4	8.6	6.8	N
2	0.2416	49.2	39.0	0.1	49.3	39.1	62.0	52.0	12.7	12.9	N
3	0.3391	47.9	37.9	0.1	48.0	38.0	59.2	49.2	11.2	11.2	N
4	0.4021	43.2	33.8	0.1	43.3	33.9	57.8	47.8	14.5	13.9	N
5	0.5082	46.2	33.9	0.2	46.4	34.1	56.0	46.0	9.6	11.9	N
6	0.5937	40.1	27.2	0.2	40.3	27.4	56.0	46.0	15.7	18.6	N
7	0.1600	55.0	45.0	0.1	55.1	45.1	65.5	55.5	10.4	10.4	L
8	0.2414	49.4	41.6	0.1	49.5	41.7	62.0	52.0	12.5	10.3	L
9	0.3393	41.7	30.9	0.1	41.8	31.0	59.2	49.2	17.4	18.2	L
10	0.4249	43.1	30.8	0.1	43.2	30.9	57.4	47.4	14.2	16.5	L
11	0.5083	46.2	34.1	0.2	46.4	34.3	56.0	46.0	9.6	11.7	L
12	0.5912	37.5	27.9	0.2	37.7	28.1	56.0	46.0	18.3	17.9	L

CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F (LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

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MF060b(01.06.05)

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber

Applicant : Fujitsu Limited
Kind of EUT : Personal Computer
Model No. : P1510D
Serial No. : R5100002

Report No. : 25FE0211-HO
Power : AC120V / 60Hz
Temp°C/Humi% : 23 deg.C / 72%
Operator : Mitsuru Fujimura

Mode / Remarks: IEEE802.11g Tx2412MHz 54Mbps/Aux Antenna

LIMIT : FCC15C § 15.207 (QP)
FCC15C § 15.207 (AV)

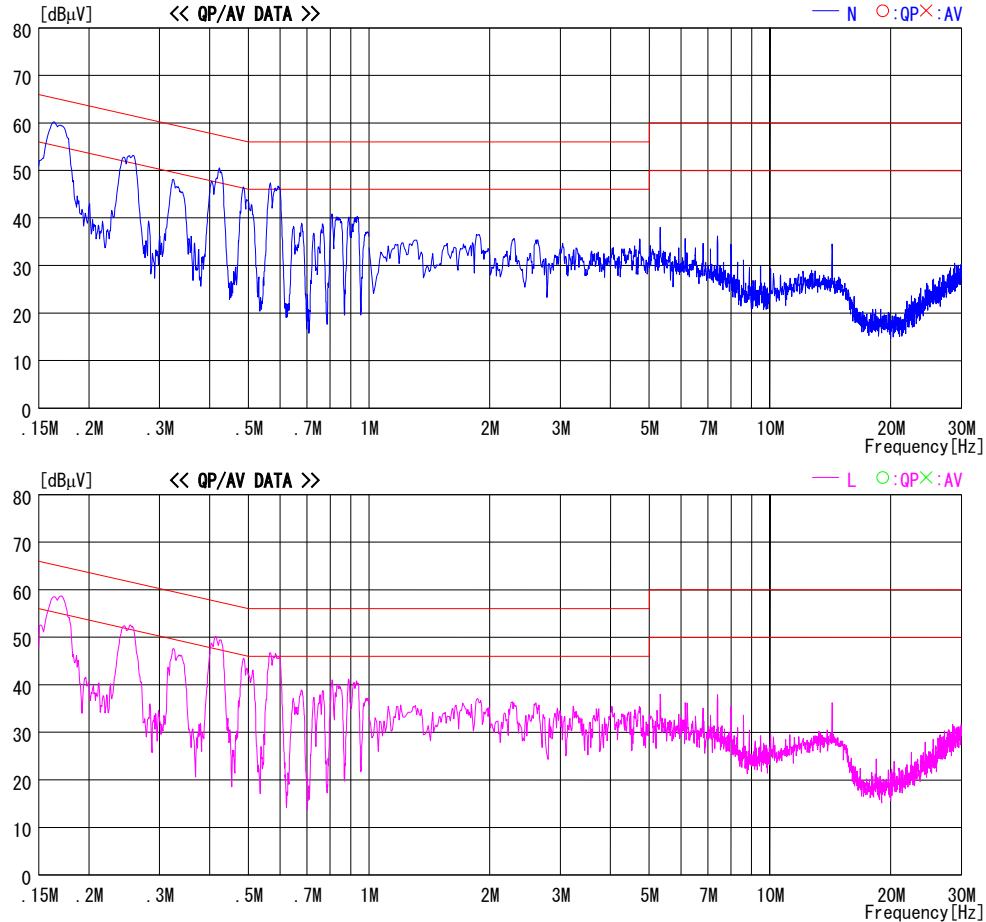


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F (LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

UL Apex Co., Ltd.

Head Office EMC Lab.

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Facsimile : +81 596 24 8124

MF060b(01.06.05)

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber

Applicant : Fujitsu Limited
Kind of EUT : Personal Computer
Model No. : P1510D
Serial No. : R5100002

Report No. : 25FE0211-HO
Power : AC120V / 60Hz
Temp°C/Humi% : 23 deg.C / 72%
Operator : Mitsuru Fujimura

Mode / Remarks: IEEE802.11g Tx2437MHz 54Mbps/Aux Antenna

LIMIT : FCC15C § 15.207 (QP)
FCC15C § 15.207 (AV)

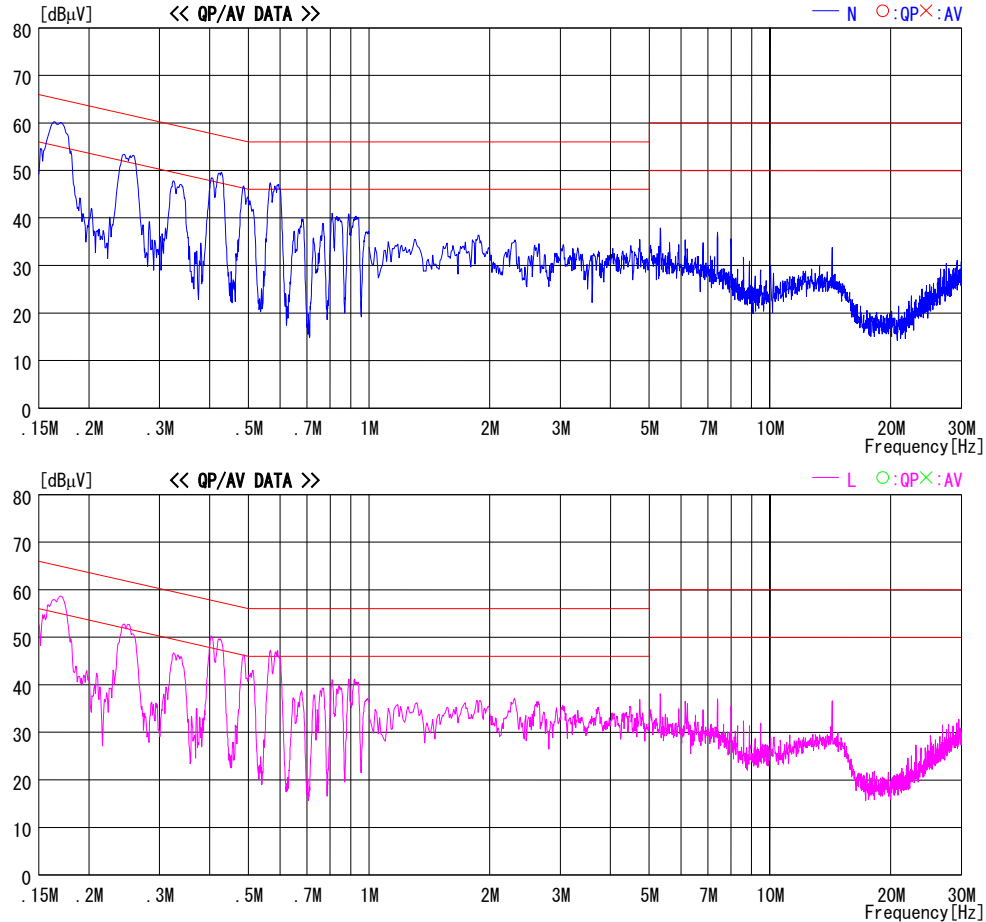


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F (LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

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MF060b(01.06.05)

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber

Applicant : Fujitsu Limited
Kind of EUT : Personal Computer
Model No. : P1510D
Serial No. : R5100002

Report No. : 25FE0211-HO
Power : AC120V / 60Hz
Temp°C/Humi% : 23 deg.C / 72%
Operator : Mitsuru Fujimura

Mode / Remarks: IEEE802.11g Tx2462MHz 54Mbps/Aux Antenna

LIMIT : FCC15C § 15.207 (QP)
FCC15C § 15.207 (AV)

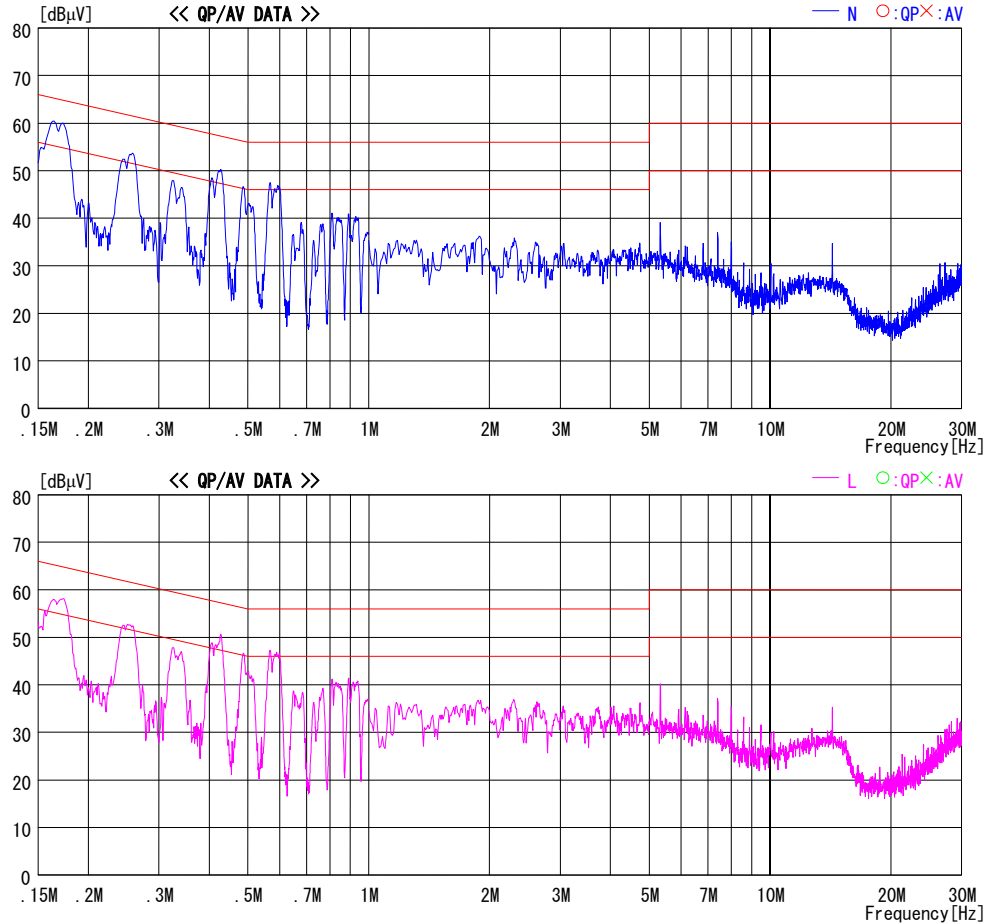


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F (LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

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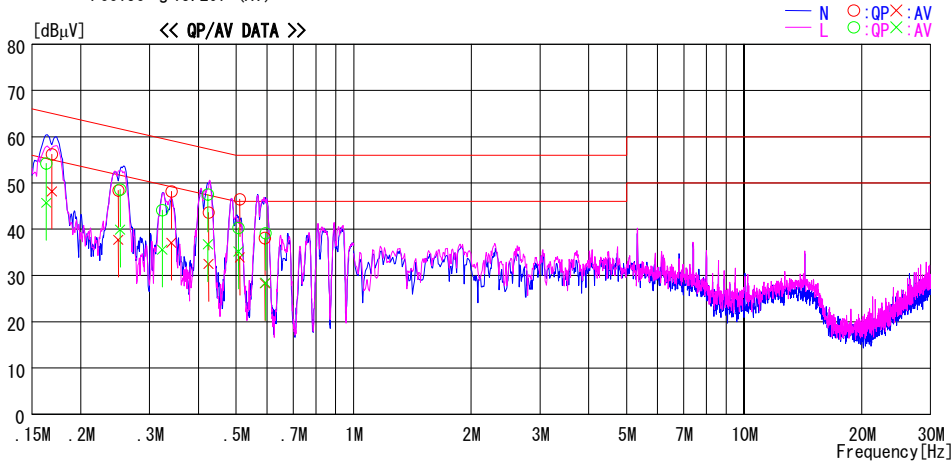
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber

Applicant : Fujitsu Limited
Kind of EUT : Personal Computer
Model No. : P1510D
Serial No. : R5100002
Report No. : 25FE0211-HO
Power : AC120V / 60Hz
Temp°C/Humi% : 23 deg.C / 72%
Operator : Mitsuru Fujimura

Mode / Remarks: IEEE802.11g Tx2462MHz 54Mbps/Aux Antenna

LIMIT : FCC15C § 15.207 (QP)
FCC15C § 15.207 (AV)



NO	FREQ [MHz]	READING		C. F	RESULT		LIMIT		MARGIN		PHASE
		QP [dBμV]	AV [dBμV]		QP [dBμV]	AV [dBμV]	QP [dBμV]	AV [dBμV]	QP [dB]	AV [dB]	
1	0.1688	56.1	48.1	0.1	56.2	48.2	65.0	55.0	8.8	6.8	N
2	0.2499	48.3	37.6	0.1	48.4	37.7	61.8	51.8	13.4	14.1	N
3	0.3415	48.1	37.0	0.1	48.2	37.1	59.2	49.2	11.0	12.1	N
4	0.4253	43.5	32.4	0.1	43.6	32.5	57.3	47.3	13.7	14.8	N
5	0.5114	46.3	33.7	0.2	46.5	33.9	56.0	46.0	9.5	12.1	N
6	0.5927	37.9	28.1	0.2	38.1	28.3	56.0	46.0	17.9	17.7	N
7	0.1633	54.1	45.6	0.1	54.2	45.7	65.3	55.3	11.1	9.6	L
8	0.2525	48.5	39.8	0.1	48.6	39.9	61.7	51.7	13.1	11.8	L
9	0.3236	44.0	35.5	0.1	44.1	35.6	59.6	49.6	15.5	14.0	L
10	0.4235	47.4	36.6	0.1	47.5	36.7	57.4	47.4	9.9	10.7	L
11	0.5069	40.1	35.0	0.2	40.3	35.2	56.0	46.0	15.7	10.8	L
12	0.5950	39.0	28.2	0.2	39.2	28.4	56.0	46.0	16.8	17.6	L

CHART:WITH FACTOR, Peak hold data. Data is uncorrected. CALCURATION: RESULT=READING+C. F (LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber

Applicant : Fujitsu Limited
Kind of EUT : Personal Computer
Model No. : P1510D
Serial No. : R5100002

Report No. : 25FE0211-H0
Power : AC120V / 60Hz
Temp°C/Humi% : 23 deg.C / 72%
Operator : Mitsuru Fujimura

Mode / Remarks: IEEE802.11g Tx2437MHz Turbo 108Mbps/Aux Antenna

LIMIT : FCC15C §15.207 (QP)
FCC15C §15.207 (AV)

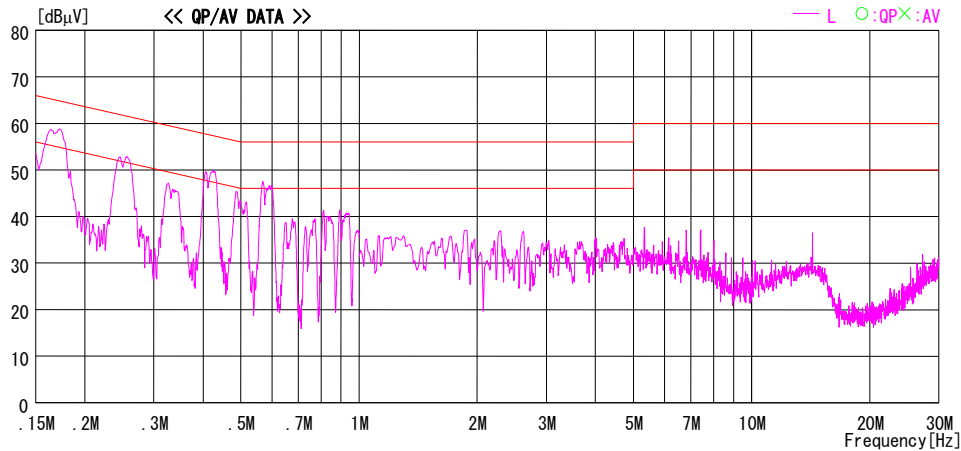
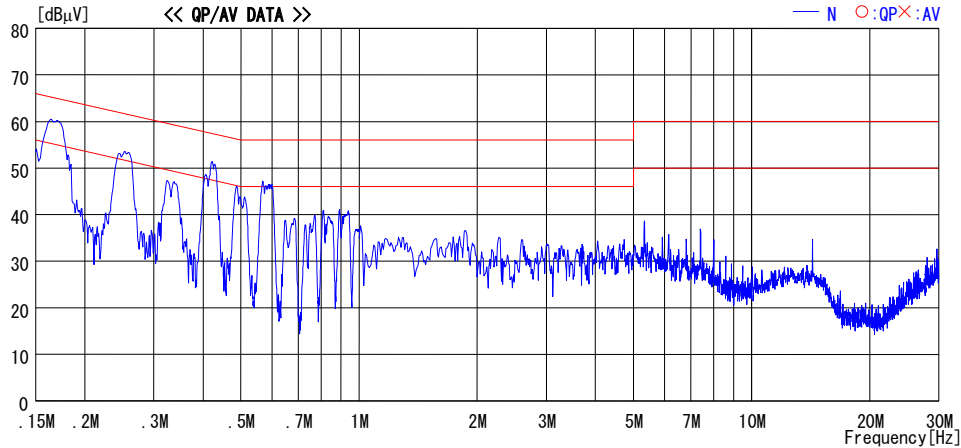


CHART:WITH FACTOR, Peak hold data. Data is uncorrected. CALCURATION: RESULT=READING+C.F (LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

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MF060b(01.06.05)

DATA OF CONDUCTED EMISSION TEST

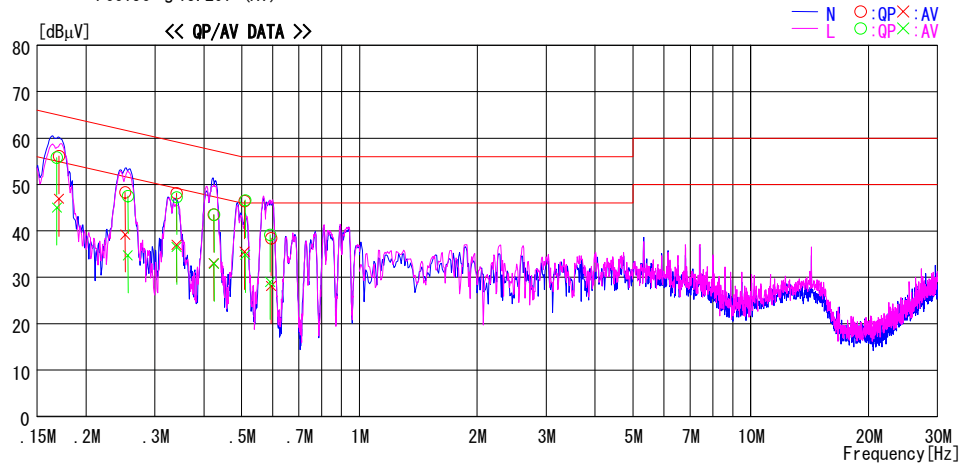
UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber

Applicant : Fujitsu Limited
Kind of EUT : Personal Computer
Model No. : P1510D
Serial No. : R5100002

Report No. : 25FE0211-HO
Power : AC120V / 60Hz
Temp°C/Humi% : 23 deg.C / 72%
Operator : Mitsuru Fujimura

Mode / Remarks: IEEE802.11g Tx2437MHz Turbo 108Mbps/Aux Antenna

LIMIT : FCC15C § 15.207 (QP)
FCC15C § 15.207 (AV)



NO	FREQ [MHz]	READING		C. F	RESULT		LIMIT		MARGIN		PHASE
		QP [dBμV]	AV [dBμV]		QP [dBμV]	AV [dBμV]	QP [dBμV]	AV [dBμV]	QP [dB]	AV [dB]	
1	0.1705	56.0	46.8	0.1	56.1	46.9	64.9	54.9	8.8	8.0	N
2	0.2522	48.2	39.1	0.1	48.3	39.2	61.7	51.7	13.4	12.5	N
3	0.3407	48.0	36.9	0.1	48.1	37.0	59.2	49.2	11.1	12.2	N
4	0.4241	43.4	32.9	0.1	43.5	33.0	57.4	47.4	13.9	14.4	N
5	0.5085	46.2	35.3	0.2	46.4	35.5	56.0	46.0	9.6	10.5	N
6	0.5939	38.2	27.9	0.2	38.4	28.1	56.0	46.0	17.6	17.9	N
7	0.1686	55.7	44.9	0.1	55.8	45.0	65.0	55.0	9.2	10.0	L
8	0.2559	47.4	34.6	0.1	47.5	34.7	61.6	51.6	14.1	16.9	L
9	0.3410	47.2	36.4	0.1	47.3	36.5	59.2	49.2	11.9	12.7	L
10	0.4252	43.4	32.8	0.1	43.5	32.9	57.3	47.3	13.8	14.4	L
11	0.5109	46.4	34.6	0.2	46.6	34.8	56.0	46.0	9.4	11.2	L
12	0.5913	39.0	28.8	0.2	39.2	29.0	56.0	46.0	16.8	17.0	L

CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALCULATION: RESULT=READING+C. F (LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

UL Apex Co., Ltd.

Head Office EMC Lab.

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MF060b(01.06.05)

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber

Applicant : Fujitsu Limited
Kind of EUT : Personal Computer
Model No. : P1510D
Serial No. : R5100002

Report No. : 25FE0211-HO
Power : AC120V / 60Hz
Temp°C/Humi% : 23 deg.C / 72%
Operator : Mitsuru Fujimura

Mode / Remarks: IEEE802.11a Tx5745MHz 54Mbps/Aux Antenna

LIMIT : FCC15C §15.207 (QP)
FCC15C §15.207 (AV)

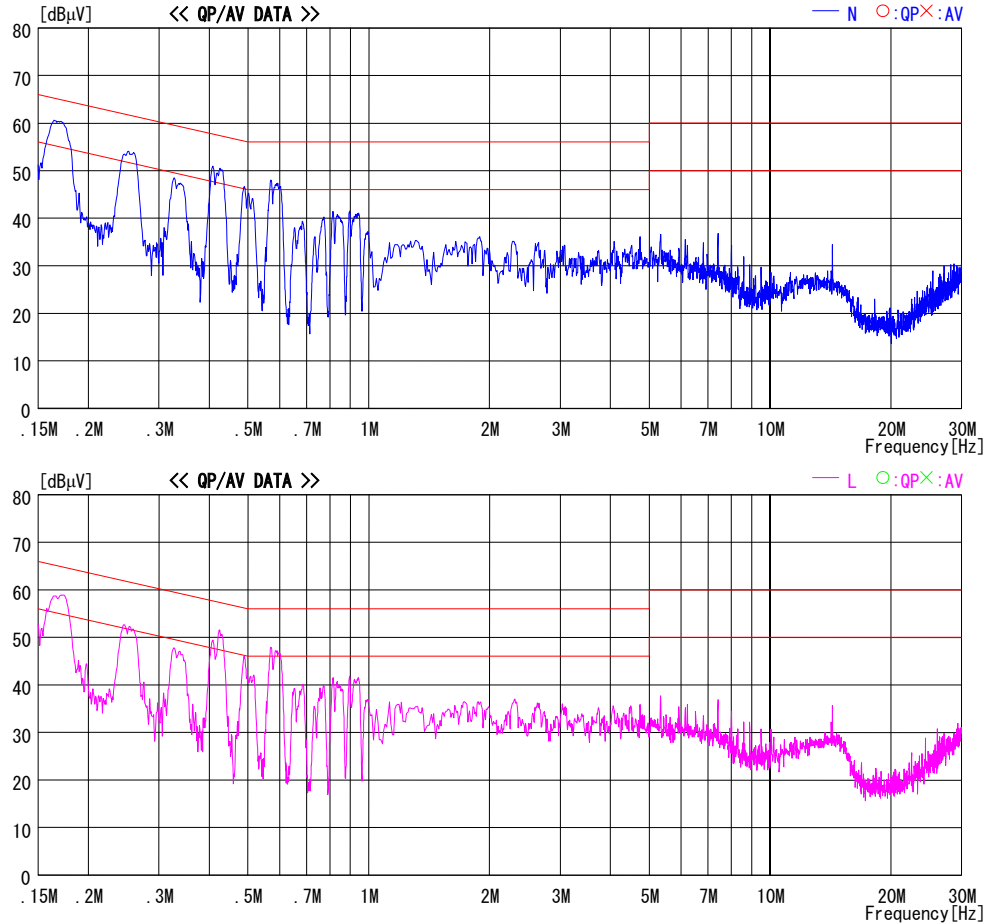


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F (LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

UL Apex Co., Ltd.

Head Office EMC Lab.

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Facsimile : +81 596 24 8124

MF060b(01.06.05)

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber

Applicant : Fujitsu Limited
Kind of EUT : Personal Computer
Model No. : P1510D
Serial No. : R5100002

Report No. : 25FE0211-HO
Power : AC120V / 60Hz
Temp°C/Humi% : 23 deg.C / 72%
Operator : Mitsuru Fujimura

Mode / Remarks: IEEE802.11a Tx5785MHz 54Mbps/Aux Antenna

LIMIT : FCC15C §15.207 (QP)
FCC15C §15.207 (AV)

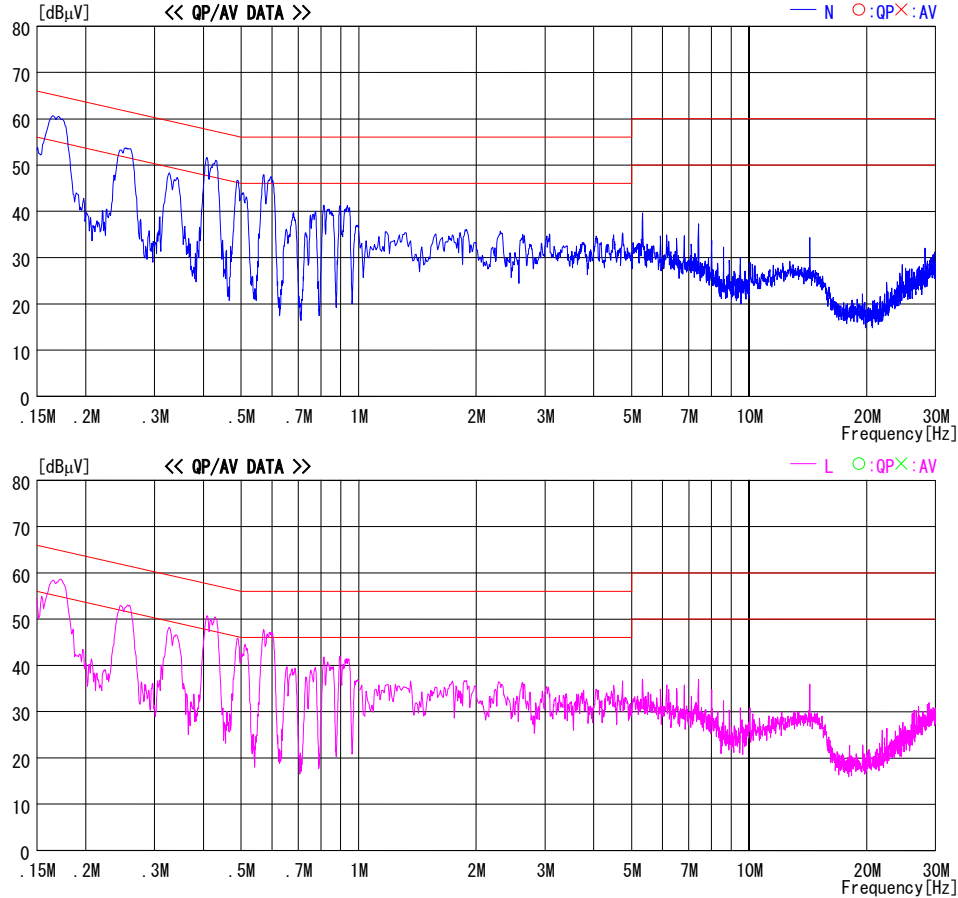


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

UL Apex Co., Ltd.

Head Office EMC Lab.

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MF060b(01.06.05)

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber

Applicant : Fujitsu Limited
Kind of EUT : Personal Computer
Model No. : P1510D
Serial No. : R5100002

Report No. : 25FE0211-H0
Power : AC120V / 60Hz
Temp°C/Humi% : 23 deg.C / 72%
Operator : Mitsuru Fujimura

Mode / Remarks: IEEE802.11a Tx5825MHz 54Mbps/Aux Antenna

LIMIT : FCC15C § 15.207 (QP)
FCC15C § 15.207 (AV)

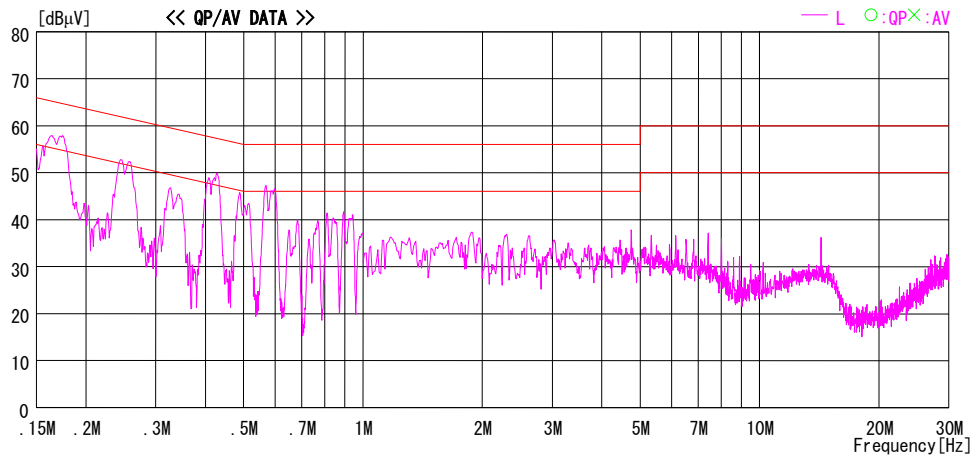
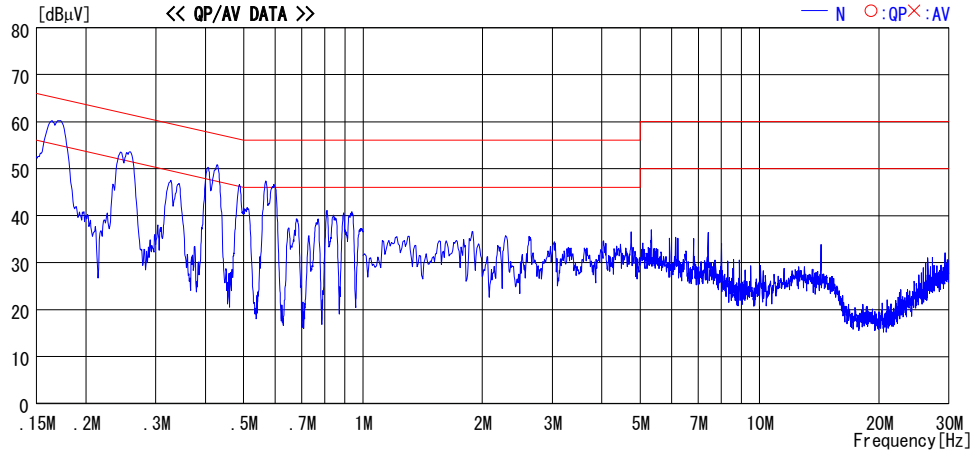


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

UL Apex Co., Ltd.

Head Office EMC Lab.

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MF060b(01.06.05)

DATA OF CONDUCTED EMISSION TEST

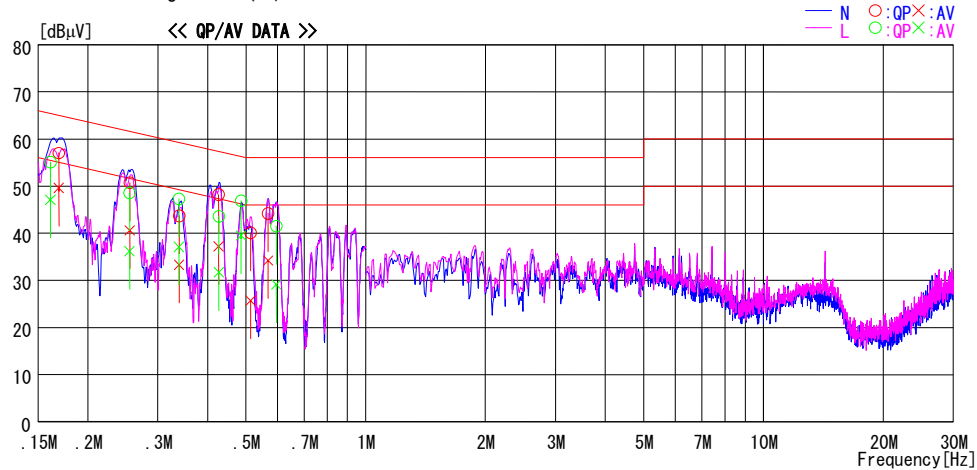
UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber

Applicant : Fujitsu Limited
Kind of EUT : Personal Computer
Model No. : P1510D
Serial No. : R5100002

Report No. : 25FE0211-HO
Power : AC120V / 60Hz
Temp°C/Humi% : 23 deg.C / 72%
Operator : Mitsuru Fujimura

Mode / Remarks: IEEE802.11a Tx5825MHz 54Mbps/Aux Antenna

LIMIT : FCC15C § 15.207 (QP)
FCC15C § 15.207 (AV)



NO	FREQ [MHz]	READING		C. F	RESULT		LIMIT		MARGIN		PHASE
		QP [dBμV]	AV [dBμV]		QP [dBμV]	AV [dBμV]	QP [dBμV]	AV [dBμV]	QP [dB]	AV [dB]	
1	0.1691	56.9	49.5	0.1	57.0	49.6	65.0	55.0	8.0	5.4	N
2	0.2551	50.6	40.5	0.1	50.7	40.6	61.6	51.6	10.9	11.0	N
3	0.3392	43.6	33.2	0.1	43.7	33.3	59.2	49.2	15.5	15.9	N
4	0.4264	48.1	37.1	0.1	48.2	37.2	57.3	47.3	9.1	10.1	N
5	0.5134	39.9	25.5	0.2	40.1	25.7	56.0	46.0	15.9	20.3	N
6	0.5683	44.0	34.0	0.2	44.2	34.2	56.0	46.0	11.8	11.8	N
7	0.1611	55.0	47.0	0.1	55.1	47.1	65.4	55.4	10.3	8.3	L
8	0.2548	48.5	36.1	0.1	48.6	36.2	61.6	51.6	13.0	15.4	L
9	0.3390	47.2	37.0	0.1	47.3	37.1	59.2	49.2	11.9	12.1	L
10	0.4270	43.5	31.6	0.1	43.6	31.7	57.3	47.3	13.7	15.6	L
11	0.4854	46.8	39.4	0.1	46.9	39.5	56.2	46.2	9.3	6.7	L
12	0.5956	41.3	28.9	0.2	41.5	29.1	56.0	46.0	14.5	16.9	L

CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

UL Apex Co., Ltd.

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MF060b(01.06.05)

DATA OF CONDUCTED EMISSION TEST

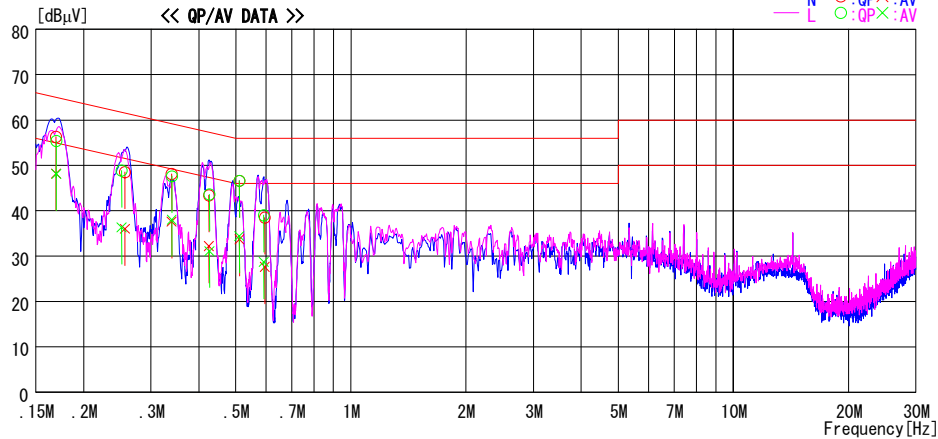
UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber

Applicant : Fujitsu Limited
Kind of EUT : Personal Computer
Model No. : P1510D
Serial No. : R5100002

Report No. : 25FE0211-HO
Power : AC120V / 60Hz
Temp°C/Humi% : 23 deg.C / 72%
Operator : Mitsuru Fujimura

Mode / Remarks : IEEE802.11a Tx5800MHz Turbo 108Mbps/Aux Antenna

LIMIT : FCC15C § 15.207 (QP)
FCC15C § 15.207 (AV)



NO	FREQ [MHz]	READING		C. F	RESULT		LIMIT		MARGIN		PHASE
		QP [dBμV]	AV [dBμV]		QP [dBμV]	AV [dBμV]	QP [dBμV]	AV [dBμV]	QP [dB]	AV [dB]	
1	0.1694	56.2	48.1	0.1	56.3	48.2	65.0	55.0	8.7	6.8	N
2	0.2564	48.4	35.9	0.1	48.5	36.0	61.5	51.5	13.0	15.5	N
3	0.3399	48.0	37.5	0.1	48.1	37.6	59.2	49.2	11.1	11.6	N
4	0.4255	43.3	32.1	0.1	43.4	32.2	57.3	47.3	13.9	15.1	N
5	0.5113	46.4	32.5	0.2	46.6	33.7	56.0	46.0	9.4	12.3	N
6	0.5955	38.3	27.4	0.2	38.5	27.6	56.0	46.0	17.5	18.4	N
7	0.1697	55.3	48.0	0.1	55.4	48.1	65.0	55.0	9.6	6.9	L
8	0.2515	48.7	36.2	0.1	48.8	36.3	61.7	51.7	12.9	15.4	L
9	0.3400	47.5	37.9	0.1	47.6	38.0	59.2	49.2	11.6	11.2	L
10	0.4266	43.5	31.0	0.1	43.6	31.1	57.3	47.3	13.7	16.2	L
11	0.5110	46.4	34.2	0.2	46.6	34.4	56.0	46.0	9.4	11.6	L
12	0.5922	38.8	28.5	0.2	39.0	28.7	56.0	46.0	17.0	17.3	L

CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

UL Apex Co., Ltd.

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MF060b(01.06.05)

6dB Bandwidth(DSSS and other forms of modulation)

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Measurement Room

Company : FUJITSU LIMITED
Equipment : Personal Computer
Model : P1510D
Sample No. : R5100002
Power : AC120V/60Hz
Mode : Tx IEEE 802.11a/b/g

REPORT NO : 25FE0211-HO
REGULATION : FCC 15.247(a)(2)
TEST DISTANCE : -
DATE : 05/30/2005
TEMPERATURE : 23deg.C
HUMIDITY : 40%
ENGINEER : Mitsuru Fujimura

[IEEE802.11b : 11Mbps] Antenna: Main (A)

Ch	Freq.	6dB Bandwidth	Limit
	[MHz]	[MHz]	[kHz]
Low	2412.0	11.458	500.0
Mid	2437.0	11.636	500.0
High	2462.0	11.144	500.0

[IEEE802.11g : 54Mbps] Antenna: Main (A)

Ch	Freq.	6dB Bandwidth	Limit
	[MHz]	[MHz]	[kHz]
Low	2412.0	16.564	500.0
Mid	2437.0	16.573	500.0
High	2462.0	16.537	500.0

[IEEE802.11g : 108Mbps] Antenna: Main (A) Turbo Mode

Ch	Freq.	6dB Bandwidth	Limit
	[MHz]	[MHz]	[kHz]
Mid	2437.0	32.069	500.0

[IEEE802.11a : 54Mbps] Antenna: Main (A)

Ch	Freq.	6dB Bandwidth	Limit
	[MHz]	[MHz]	[kHz]
149	5745.0	16.559	500.0
157	5785.0	16.549	500.0
165	5825.0	16.551	500.0

UL Apex Co., Ltd.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

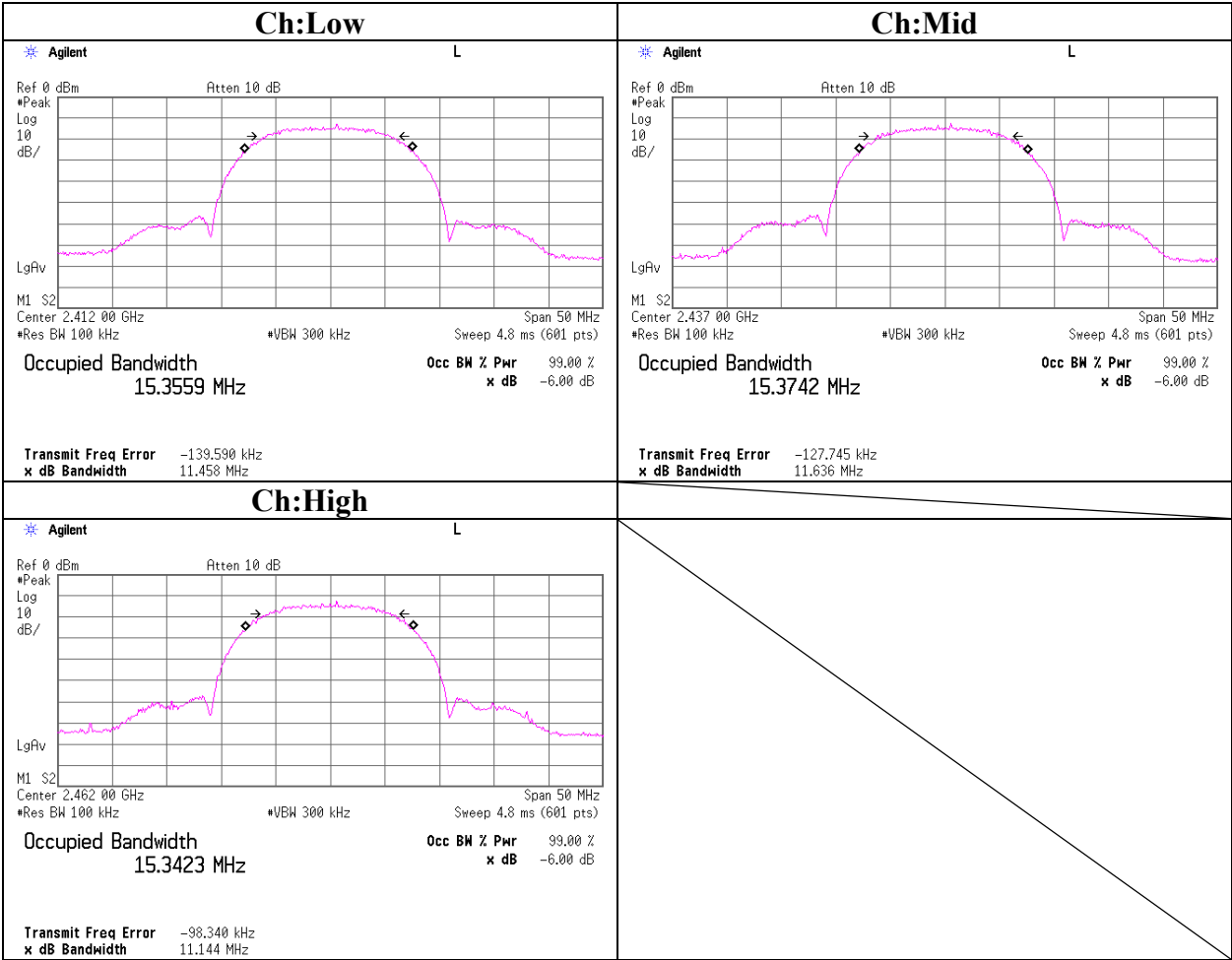
Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

MF060b(01.06.05)

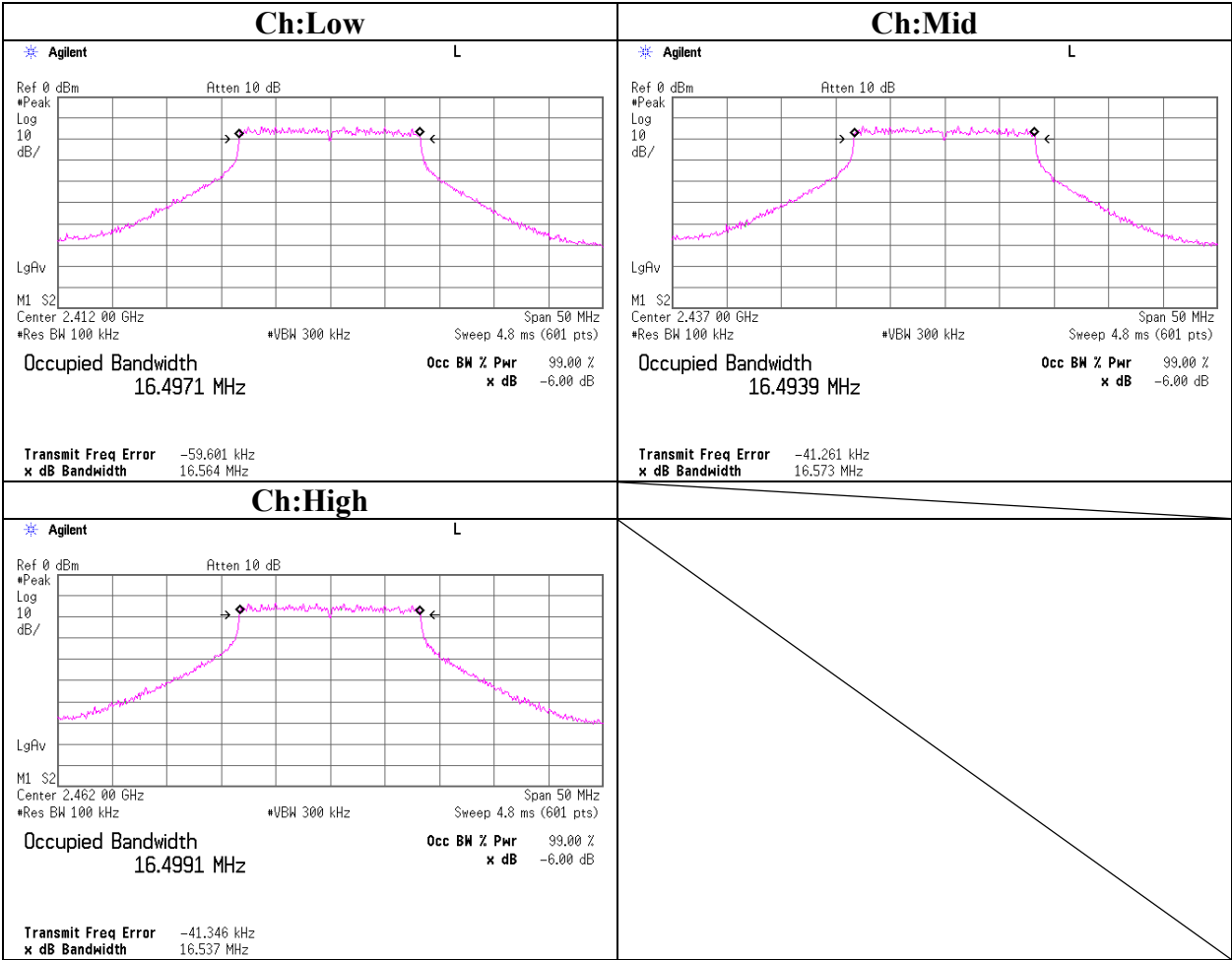
6dB Bandwidth(DSSS and other forms of modulation)

IEEE802.11b 11Mbps Main Antenna



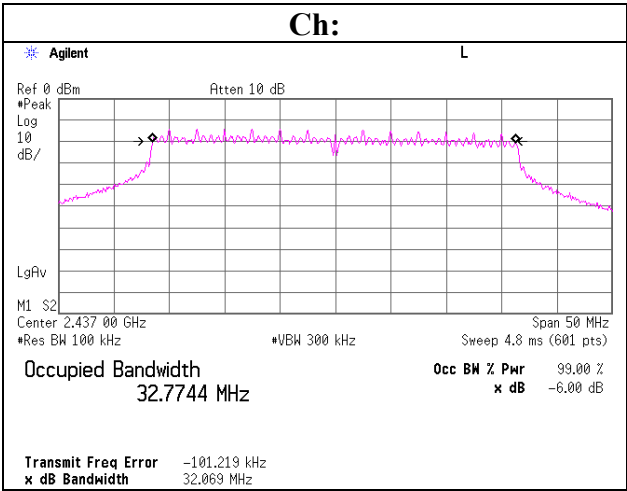
6dB Bandwidth(DSSS and other forms of modulation)

IEEE802.11g 54Mbps Main Antenna



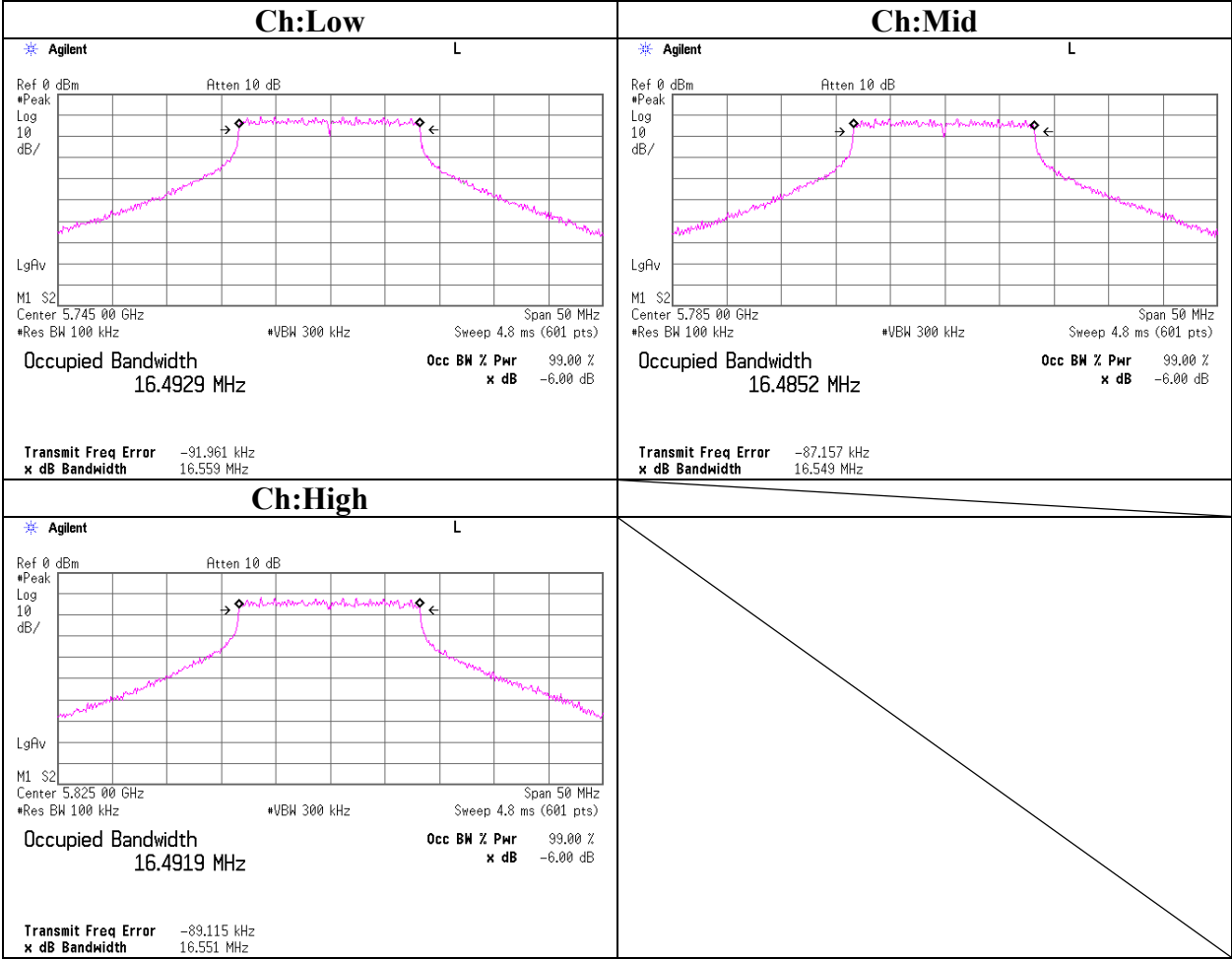
6dB Bandwidth(DSSS and other forms of modulation)

IEEE802.11g 108Mbps Main Antenna Turbo Mode



6dB Bandwidth(DSSS and other forms of modulation)

IEEE802.11a 54Mbps Main Antenna

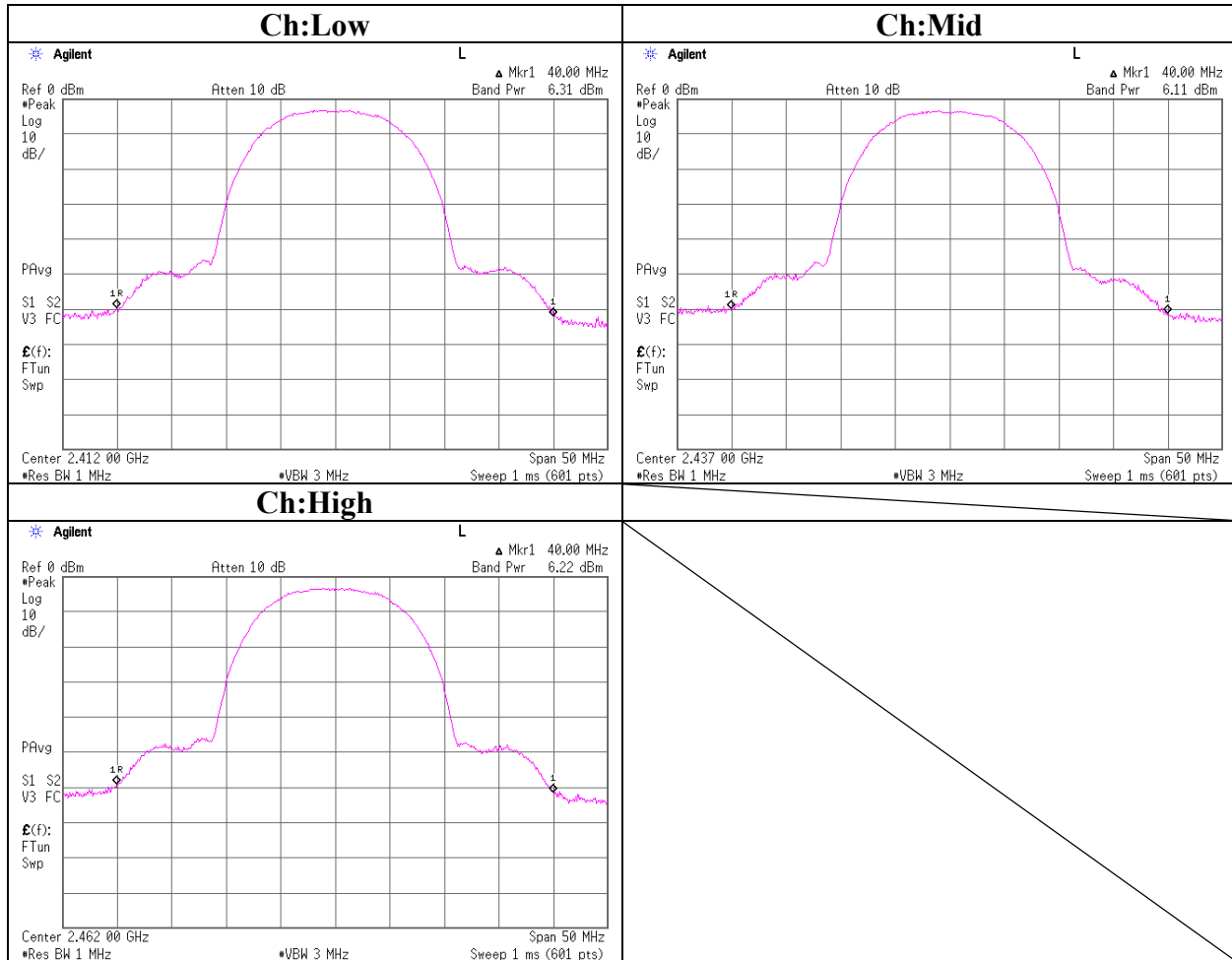


Maximum Peak OutPut Power (DSSS and other forms of modulation)

		UL Apex Co., Ltd.		Head Office EMC Lab. No.3 Measurement Room					
Company	: FUJITSU LIMITED				REPORT NO	: 25FE0211-HO			
Equipment	: Personal Computer				REGULATION	: FCC 15.247(b)(3)			
Model	: P1510D				TEST DISTANCE	: -			
Sample No.	: R5100002				DATE	: 2005/04/28			
Power	: AC120V / 60Hz				TEMPERATURE	: 24deg.C			
Mode	: Tx IEEE 802.11b				HUMIDITY	: 35%			
					ENGINEER	: Mitsuru Fujimura			
[IEEE802.11b : DSSS/11Mbps : Antenna: Main(A)]									
Ch	Freq.	S/A	Cable	Atten.	Result	Limit	Margin		
		Reading	Loss			(1W)			
	[MHz]	[dBm]	[dB]	[dB]	[dBm]	[dBm]	[dB]		
Low	2412.0	6.31	1.04	10.00	17.35	30.00	12.65		
Mid	2437.0	6.11	1.01	10.00	17.12	30.00	12.88		
High	2462.0	6.22	0.99	10.00	17.21	30.00	12.79		
[IEEE802.11b : DSSS/11Mbps : Antenna: Aux(B)]									
Ch	Freq.	S/A	Cable	Atten.	Result	Limit	Margin		
		Reading	Loss			(1W)			
	[MHz]	[dBm]	[dB]	[dB]	[dBm]	[dBm]	[dB]		
Low	2412.0	6.25	1.04	10.00	17.29	30.00	12.71		
Mid	2437.0	6.02	1.01	10.00	17.03	30.00	12.97		
High	2462.0	6.18	0.99	10.00	17.17	30.00	12.83		
Sample Calculation:									
Result = Reading + Cable Loss + Attenuator									
* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.									

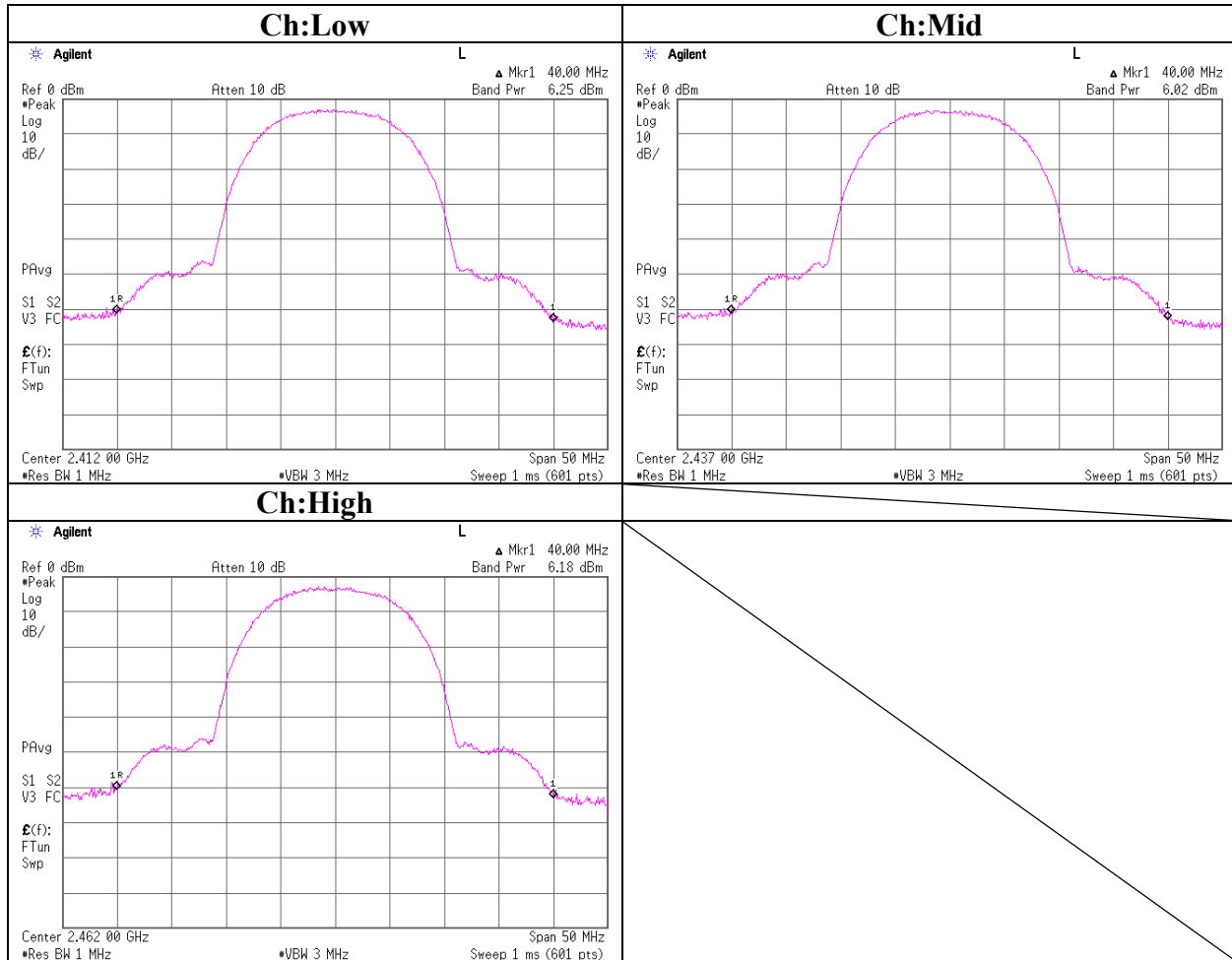
Maximum Peak OutPut Power (DSSS and other forms of modulation)

IEEE802.11b 11Mbps Main Antenna



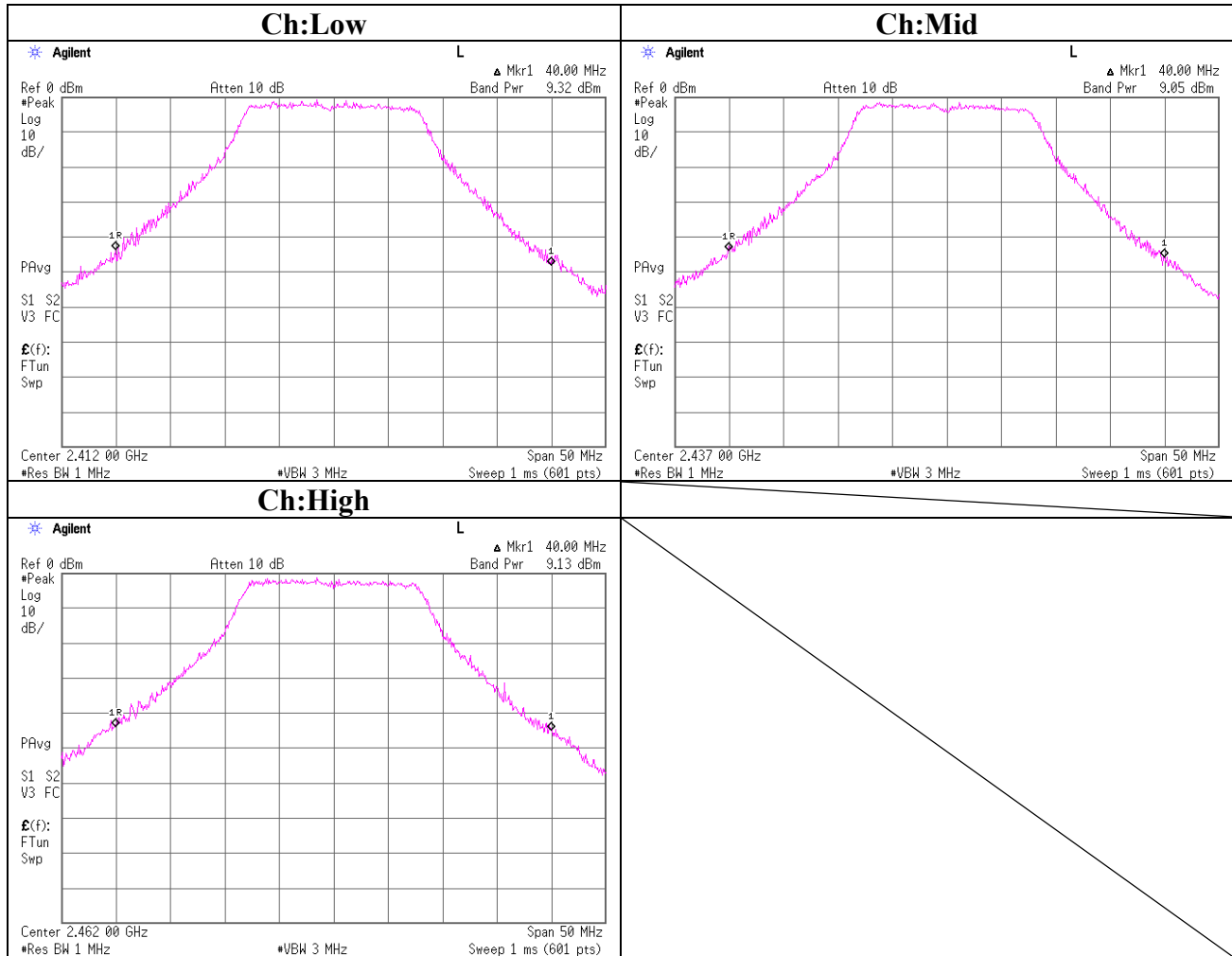
Maximum Peak OutPut Power (DSSS and other forms of modulation)

IEEE802.11b 11Mbps AUX Antenna



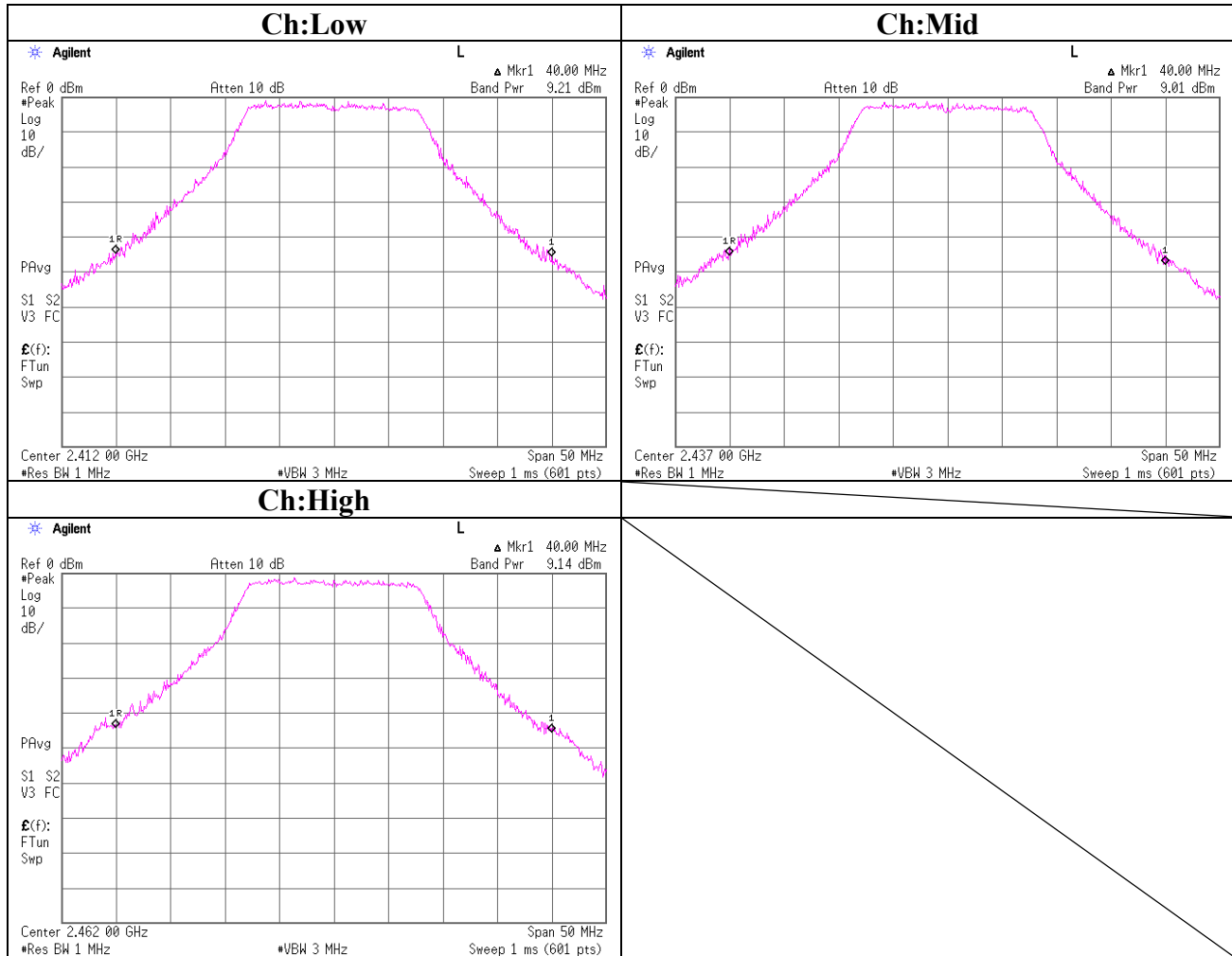
Maximum Peak OutPut Power (DSSS and other forms of modulation)

IEEE802.11g 54Mbps Main Antenna



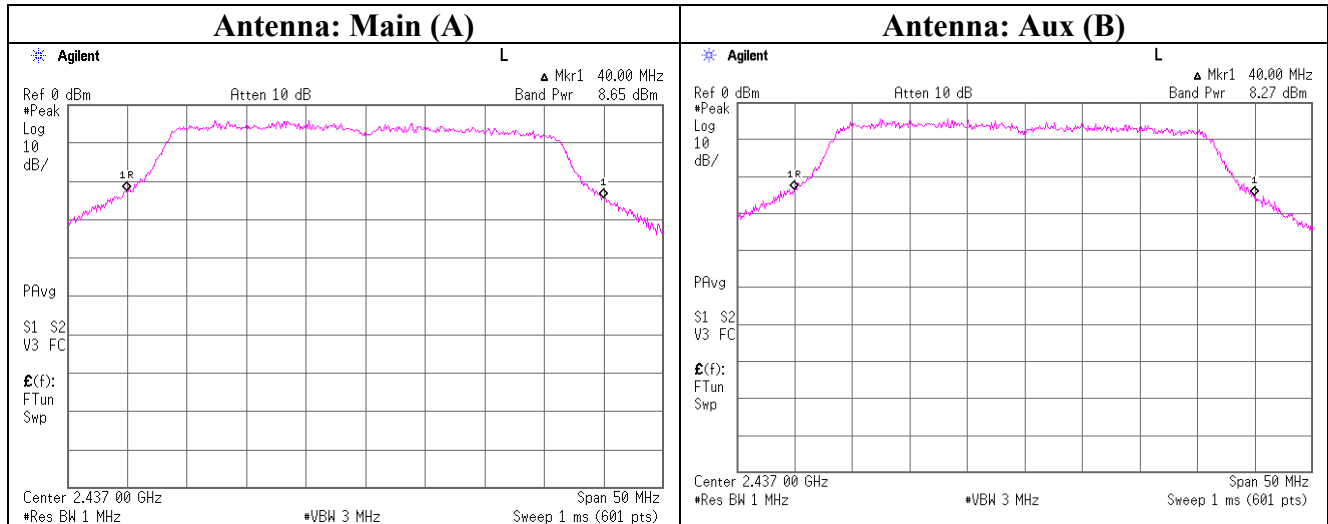
Maximum Peak OutPut Power (DSSS and other forms of modulation)

IEEE802.11g 54Mbps AUX Antenna



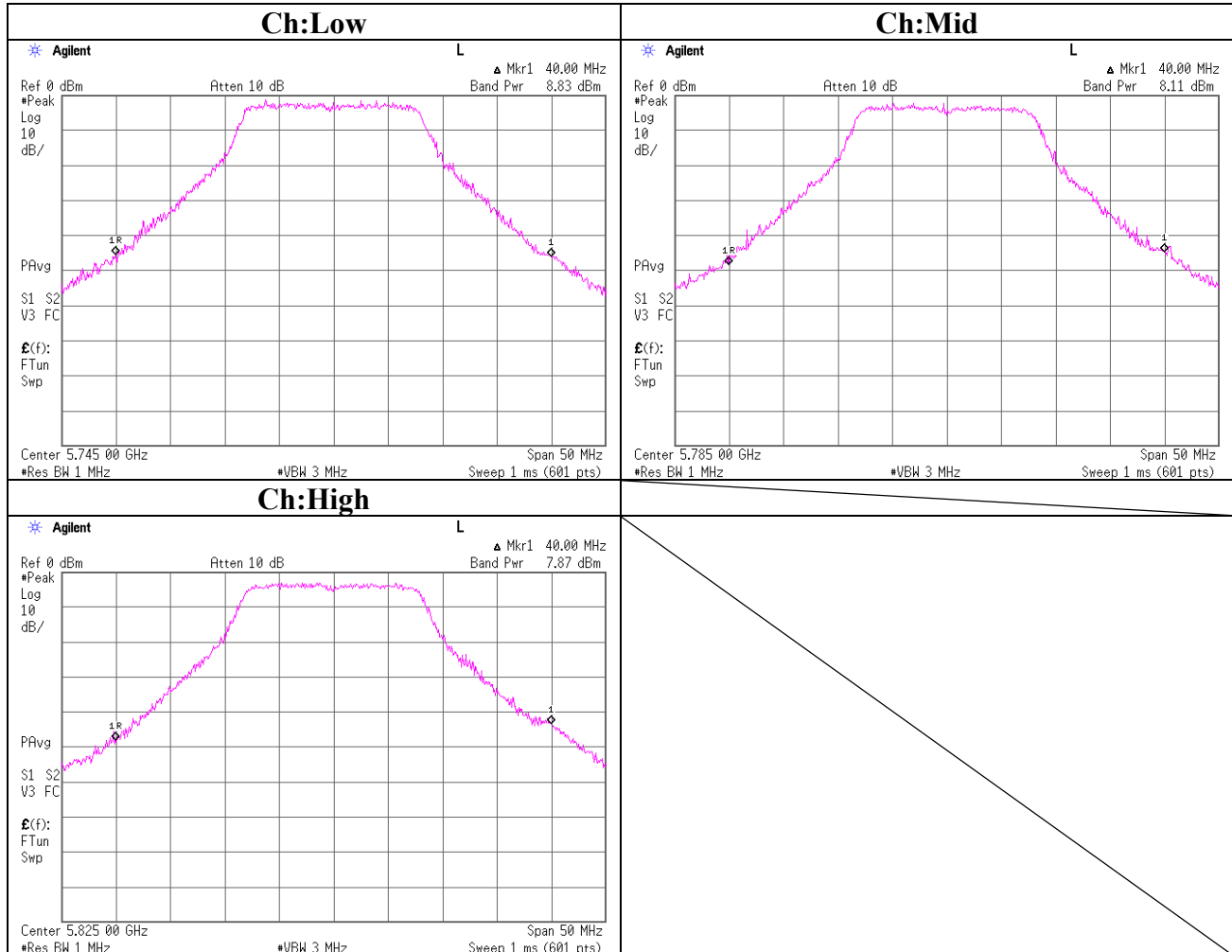
Maximum Peak OutPut Power (DSSS and other forms of modulation)

IEEE802.11g 108Mbps Turbo Mode



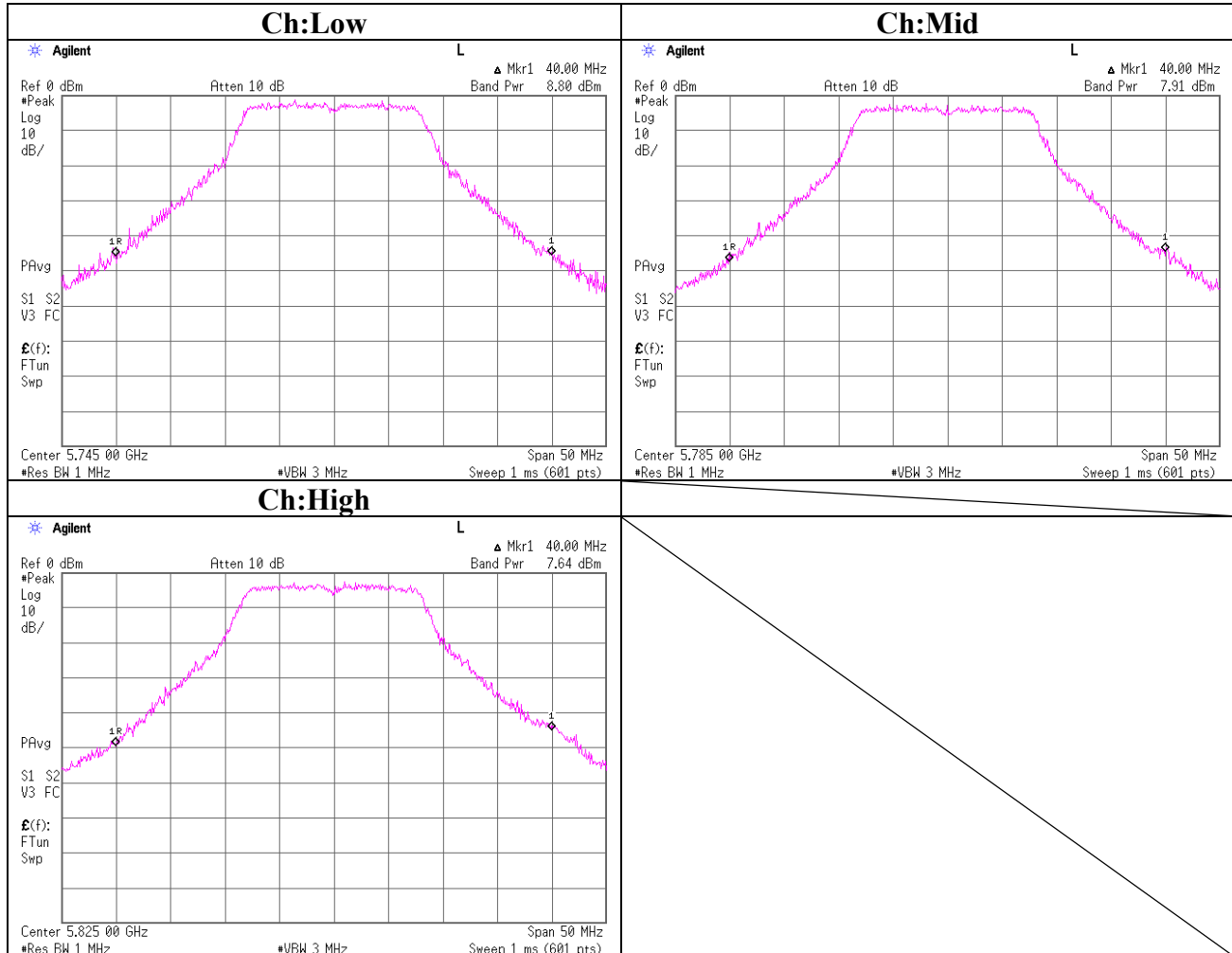
Maximum Peak OutPut Power (DSSS and other forms of modulation)

IEEE802.11a 54Mbps Antenna: Main (A)



Maximum Peak OutPut Power (DSSS and other forms of modulation)

IEEE802.11a 54Mbps Antenna: Aux (B)



Maximum Peak OutPut Power

UL Apex Co., Ltd.

Head Office EMC Lab. No.3 Measurement Room

Company : FUJITSU LIMITED
Equipment : Personal Computer
Model : P1515D
Sample No. : R5100002
Power : AC120V / 60Hz
Mode : Tx IEEE 802.11b/g

REPORT NO : 25FE0211-HO
REGULATION : FCC 15.247(b)(3)
TEST DISTANCE : -
DATE : 2005/04/28
TEMPERATURE : 24deg.C
HUMIDITY : 35%
ENGINEER : Mitsuru Fujimura

[IEEE802.11b : Main Antenna]						
Ch	Data rate [bps]	S/A Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Converted [mW]
6	1	3.04	1.01	10.00	14.05	25.41
6	2	3.24	1.01	10.00	14.25	26.61
6	5.5	4.54	1.01	10.00	15.55	35.89
6	11	6.11	1.01	10.00	17.12	51.52

[IEEE802.11b : Aux Antenna]						
Ch	Data rate [bps]	S/A Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Converted [mW]
6	1	2.92	1.01	10.00	13.93	24.72
6	2	3.38	1.01	10.00	14.39	27.48
6	5.5	4.48	1.01	10.00	15.49	35.40
6	11	6.02	1.01	10.00	17.03	50.47

[IEEE802.11g : Main Antenna]						
Ch	Data rate [bps]	S/A Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Converted [mW]
6	6	8.23	1.01	10.00	19.24	83.95
6	9	8.21	1.01	10.00	19.22	83.56
6	12	8.16	1.01	10.00	19.17	82.60
6	18	8.36	1.01	10.00	19.37	86.50
6	24	8.75	1.01	10.00	19.76	94.62
6	36	8.73	1.01	10.00	19.74	94.19
6	48	8.78	1.01	10.00	19.79	95.28
6	54	9.05	1.01	10.00	20.06	101.39

[IEEE802.11g : Aux Antenna]						
Ch	Data rate [bps]	S/A Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Converted [mW]
6	6	8.25	1.01	10.00	19.26	84.33
6	9	8.04	1.01	10.00	19.05	80.35
6	12	8.45	1.01	10.00	19.46	88.31
6	18	8.44	1.01	10.00	19.45	88.10
6	24	8.73	1.01	10.00	19.74	94.19
6	36	8.65	1.01	10.00	19.66	92.47
6	48	8.65	1.01	10.00	19.66	92.47
6	54	9.01	1.01	10.00	20.02	100.46

[The worst data rate in SAR result]

[IEEE802.11g : Aux Antenna (12Mbps)]						
Ch	Freq. [MHz]	S/A Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Converted [mW]
1	2412.0	8.56	1.04	10.00	19.60	91.20
6	2437.0	8.45	1.01	10.00	19.46	88.31
11	2462.0	8.37	0.99	10.00	19.36	86.30
Turbo 2437.0MHz (24Mbps[12*2])		7.56	1.01	10.00	18.57	71.94

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MF060b(01.06.05)

Maximum Peak OutPut Power

	UL Apex Co., Ltd.	Head Office EMC Lab. No.3 Measurement Room
Company : FUJITSU LIMITED		REPORT NO : 25FE0211-HO
Equipment : Personal Computer		REGULATION : FCC 15.247(b)(3)
Model : P1515D		TEST DISTANCE : -
Sample No. : R5100002		DATE : 2005/04/28
Power : AC120V / 60Hz		TEMPERATURE : 24deg.C
Mode : Tx IEEE 802.11a		HUMIDITY : 35%
		ENGINEER : Mitsuru Fujimura

[IEEE802.11a 5725-5850MHz: Main Antenna]						
Ch	Data rate [bps]	S/A Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Converted [mW]
157	6	7.67	1.16	10.00	18.83	76.42
157	9	7.45	1.16	10.00	18.61	72.65
157	12	7.37	1.16	10.00	18.53	71.32
157	18	7.47	1.16	10.00	18.63	72.98
157	24	7.85	1.16	10.00	19.01	79.66
157	36	7.66	1.16	10.00	18.82	76.25
157	48	7.72	1.16	10.00	18.88	77.31
157	54	8.11	1.16	10.00	19.27	84.57

[IEEE802.11a 5725-5850MHz: Aux Antenna]						
Ch	Data rate [bps]	S/A Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Converted [mW]
157	6	7.31	1.16	10.00	18.47	70.34
157	9	7.38	1.16	10.00	18.54	71.49
157	12	7.15	1.16	10.00	18.31	67.80
157	18	7.25	1.16	10.00	18.41	69.38
157	24	7.65	1.16	10.00	18.81	76.07
157	36	7.56	1.16	10.00	18.72	74.51
157	48	7.66	1.16	10.00	18.82	76.25
157	54	7.91	1.16	10.00	19.07	80.76

[The Worst data rate in SAR result]

[IEEE802.11a 5725-5850MHz: Aux Antenna(9Mbps)]						
Ch	Freq. [MHz]	S/A Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Converted [mW]
149	5745.0	8.32	1.20	10.00	19.52	89.52
157	5785.0	7.38	1.16	10.00	18.54	71.49
165	5825.0	7.18	1.19	10.00	18.37	68.74

Radiated Spurious Emission(DSSS and other forms of modulation)(below 1GHz)

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2005/05/09 19:47:46

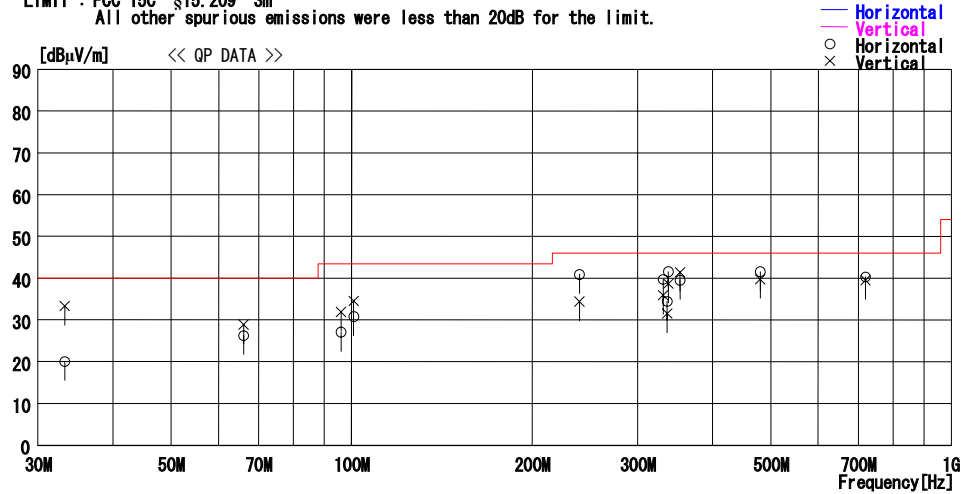
Applicant : Fujitsu Limited
Kind of EUT : Personal Computer
Model No. : P1510D
Serial No. : R5100002

Report No. : 25FE0211-HO
Power : AC120V/60Hz (AC Adaptor)
Temp./Humi. : 26deg. C / 39%
Operator : Kenichi Adachi

Mode / Remarks : 11b Tx2412MHz 11Mbps / Aux Antenna / Hor X, Ver X (MAX Axis)

LIMIT : FCC 15C §15.209 3m

All other spurious emissions were less than 20dB for the limit.



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
Horizontal										
1	33.230	24.5	17.4	6.0	27.8	20.1	40.0	19.9	267	230
2	66.052	40.4	7.4	6.3	27.8	26.3	40.0	13.7	331	355
3	96.104	38.4	9.7	6.6	27.6	27.1	43.5	16.4	305	253
4	100.805	41.2	10.5	6.7	27.6	30.8	43.5	12.7	303	261
5	240.007	43.1	17.1	7.6	26.9	40.9	46.0	5.1	144	77
6	330.763	42.6	16.0	8.0	26.9	39.7	46.0	6.3	100	108
7	336.005	37.3	16.2	8.0	27.0	34.5	46.0	11.5	100	79
8	337.506	44.3	16.2	8.1	27.0	41.6	46.0	4.4	100	108
9	352.805	41.7	16.8	8.1	27.1	39.5	46.0	6.5	286	104
10	480.010	42.3	18.8	8.5	28.0	41.6	46.0	4.4	100	104
11	720.010	38.0	20.8	9.7	28.2	40.3	46.0	5.7	100	41
Vertical										
12	33.230	37.7	17.4	6.0	27.8	33.3	40.0	6.7	100	46
13	66.074	43.0	7.4	6.3	27.8	28.9	40.0	11.1	100	243
14	96.104	43.2	9.7	6.6	27.6	31.9	43.5	11.6	100	285
15	100.805	44.9	10.5	6.7	27.6	34.5	43.5	9.0	100	77
16	240.007	36.6	17.1	7.6	26.9	34.4	46.0	11.6	100	303
17	330.763	38.8	16.0	8.0	26.9	35.9	46.0	10.1	135	171
18	336.005	34.3	16.2	8.0	27.0	31.5	46.0	14.5	170	66
19	337.506	41.4	16.2	8.1	27.0	38.7	46.0	7.3	135	171
20	352.805	43.6	16.8	8.1	27.1	41.4	46.0	4.6	143	180
21	480.009	40.4	18.8	8.5	28.0	39.7	46.0	6.3	100	72
22	720.009	37.2	20.8	9.7	28.2	39.5	46.0	6.5	100	360

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN Page:

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MF060b(01.06.05)

Radiated Spurious Emission(DSSS and other forms of modulation)(below 1GHz)

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2005/05/09 20:57:02

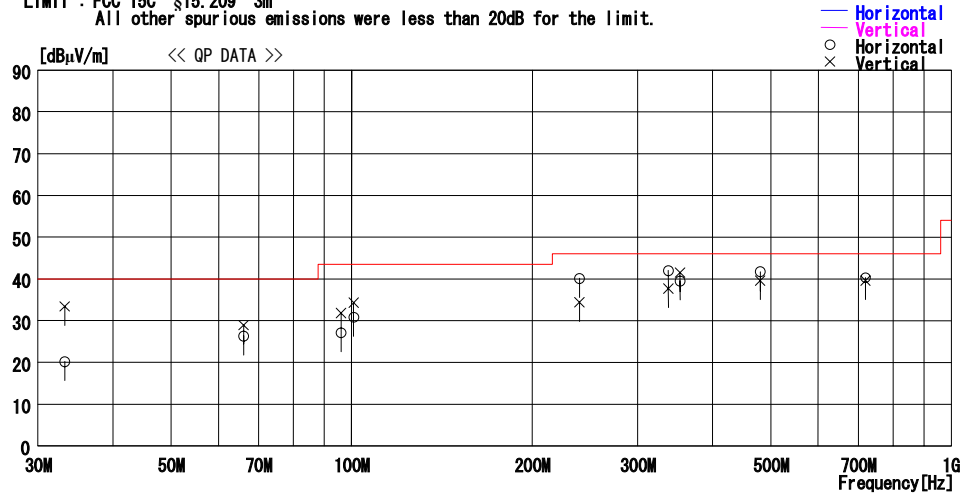
Applicant : Fujitsu Limited
Kind of EUT : Personal Computer
Model No. : P1510D
Serial No. : R5100002

Report No. : 25FE0211-HO
Power : AC120V/60Hz (AC Adaptor)
Temp./Humi. : 26deg.C / 39%
Operator : Kenichi Adachi

Mode / Remarks : 11b Tx2437MHz 11Mbps / Aux Antenna / Hor X, Ver X (MAX Axis)

LIMIT : FCC 15C §15.209 3m

All other spurious emissions were less than 20dB for the limit.



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
Horizontal										
1	33.230	24.6	17.4	6.0	27.8	20.2	40.0	19.8	267	230
2	66.052	40.4	7.4	6.3	27.8	26.3	40.0	13.7	331	354
3	96.104	38.4	9.7	6.6	27.6	27.1	43.5	16.4	304	255
4	100.805	41.2	10.5	6.7	27.6	30.8	43.5	12.7	302	260
5	240.007	42.3	17.1	7.6	26.9	40.1	46.0	5.9	144	281
6	337.508	44.7	16.2	8.1	27.0	42.0	46.0	4.0	100	107
7	352.805	41.7	16.8	8.1	27.1	39.5	46.0	6.5	287	105
8	480.010	42.4	18.8	8.5	28.0	41.7	46.0	4.3	100	104
9	720.010	38.0	20.8	9.7	28.2	40.3	46.0	5.7	100	41
Vertical										
10	33.230	37.8	17.4	6.0	27.8	33.4	40.0	6.6	100	46
11	66.075	43.0	7.4	6.3	27.8	28.9	40.0	11.1	100	243
12	96.104	43.1	9.7	6.6	27.6	31.8	43.5	11.7	100	0
13	100.805	44.7	10.5	6.7	27.6	34.3	43.5	9.2	100	77
14	240.007	36.6	17.1	7.6	26.9	34.4	46.0	11.6	100	303
15	337.508	40.4	16.2	8.1	27.0	37.7	46.0	8.3	135	178
16	352.805	43.7	16.8	8.1	27.1	41.5	46.0	4.5	144	180
17	480.009	40.3	18.8	8.5	28.0	39.6	46.0	6.4	100	72
18	720.009	37.3	20.8	9.7	28.2	39.6	46.0	6.4	100	0

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

Page:

UL Apex Co., Ltd.

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MF060b(01.06.05)

Radiated Spurious Emission(DSSS and other forms of modulation)(below 1GHz)

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2005/05/09 21:24:29

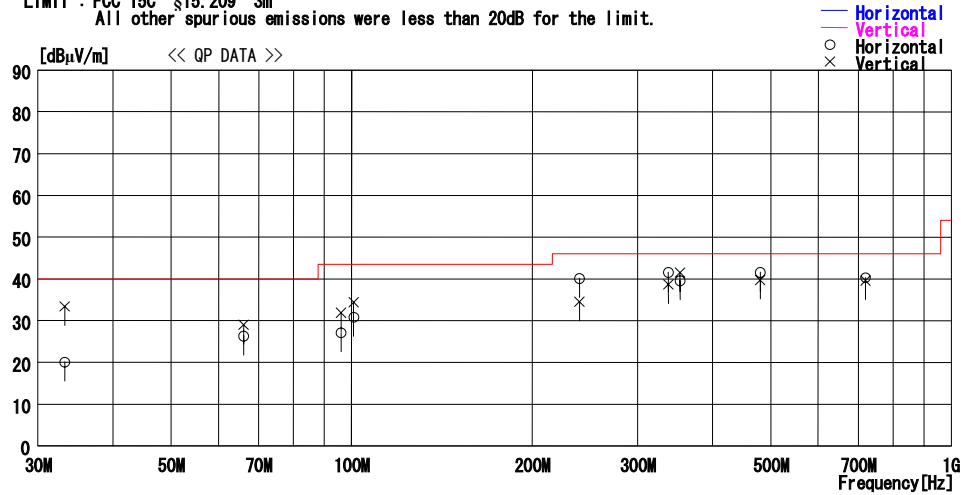
Applicant : Fujitsu Limited
Kind of EUT : Personal Computer
Model No. : P1510D
Serial No. : R5100002

Report No. : 25FE0211-HO
Power : AC120V/60Hz (AC Adaptor)
Temp./Humi. : 26deg. C / 39%
Operator : Kenichi Adachi

Mode / Remarks : 11b Tx2462MHz 11Mbps / Aux Antenna / Hor X, Ver X (MAX Axis)

LIMIT : FCC 15C §15.209 3m

All other spurious emissions were less than 20dB for the limit.



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
Horizontal										
1	33.230	24.5	17.4	6.0	27.8	20.1	40.0	19.9	267	230
2	66.074	40.4	7.4	6.3	27.8	26.3	40.0	13.7	331	355
3	96.104	38.4	9.7	6.6	27.6	27.1	43.5	16.4	304	254
4	100.805	41.2	10.5	6.7	27.6	30.8	43.5	12.7	303	260
5	240.007	42.3	17.1	7.6	26.9	40.1	46.0	5.9	144	77
6	337.506	44.3	16.2	8.1	27.0	41.6	46.0	4.4	100	108
7	352.805	41.8	16.8	8.1	27.1	39.6	46.0	6.4	287	104
8	480.010	42.3	18.8	8.5	28.0	41.6	46.0	4.4	100	104
9	720.010	38.0	20.8	9.7	28.2	40.3	46.0	5.7	100	37
Vertical										
10	33.230	37.8	17.4	6.0	27.8	33.4	40.0	6.6	100	46
11	66.074	43.1	7.4	6.3	27.8	29.0	40.0	11.0	100	243
12	96.104	43.2	9.7	6.6	27.6	31.9	43.5	11.6	100	285
13	100.805	44.8	10.5	6.7	27.6	34.4	43.5	9.1	100	80
14	240.007	36.7	17.1	7.6	26.9	34.5	46.0	11.5	100	303
15	337.506	41.4	16.2	8.1	27.0	38.7	46.0	7.3	145	170
16	352.805	43.7	16.8	8.1	27.1	41.5	46.0	4.5	144	180
17	480.009	40.4	18.8	8.5	28.0	39.7	46.0	6.3	100	72
18	720.009	37.3	20.8	9.7	28.2	39.6	46.0	6.4	100	0

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

Page:

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MF060b(01.06.05)

Radiated Spurious Emission(DSSS and other forms of modulation)(below 1GHz)

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2005/05/09 22:02:56

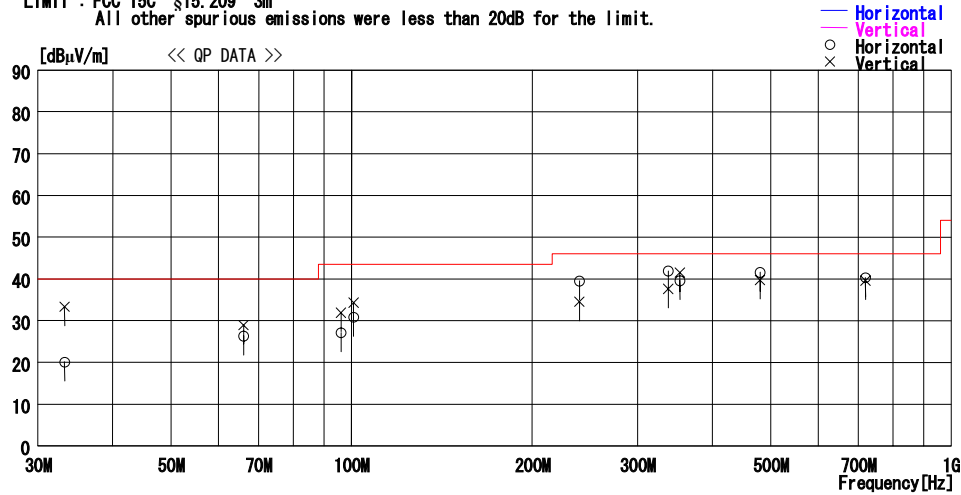
Applicant : Fujitsu Limited
Kind of EUT : Personal Computer
Model No. : P1510D
Serial No. : R5100002

Report No. : 25FE0211-HO
Power : AC120V/60Hz (AC Adaptor)
Temp./Humi. : 26deg. C / 39%
Operator : Kenichi Adachi

Mode / Remarks : 11g Tx2412MHz 54Mbps / Aux Antenna / Hor X, Ver X (MAX Axis)

LIMIT : FCC 15C §15.209 3m

All other spurious emissions were less than 20dB for the limit.



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
Horizontal										
1	33.230	24.5	17.4	6.0	27.8	20.1	40.0	19.9	267	230
2	66.052	40.4	7.4	6.3	27.8	26.3	40.0	13.7	331	355
3	96.104	38.4	9.7	6.6	27.6	27.1	43.5	16.4	304	253
4	100.805	41.2	10.5	6.7	27.6	30.8	43.5	12.7	303	260
5	240.007	41.7	17.1	7.6	26.9	39.5	46.0	6.5	144	77
6	337.498	44.7	16.2	8.0	27.0	41.9	46.0	4.1	100	108
7	352.805	41.8	16.8	8.1	27.1	39.6	46.0	6.4	287	104
8	480.010	42.3	18.8	8.5	28.0	41.6	46.0	4.4	100	104
9	720.010	38.0	20.8	9.7	28.2	40.3	46.0	5.7	100	41
Vertical										
10	33.230	37.7	17.4	6.0	27.8	33.3	40.0	6.7	100	46
11	66.074	43.0	7.4	6.3	27.8	28.9	40.0	11.1	100	243
12	96.104	43.2	9.7	6.6	27.6	31.9	43.5	11.6	100	285
13	100.805	44.7	10.5	6.7	27.6	34.3	43.5	9.2	100	78
14	240.007	36.7	17.1	7.6	26.9	34.5	46.0	11.5	100	303
15	337.498	40.4	16.2	8.0	27.0	37.6	46.0	8.4	135	179
16	352.805	43.7	16.8	8.1	27.1	41.5	46.0	4.5	144	180
17	480.009	40.4	18.8	8.5	28.0	39.7	46.0	6.3	100	72
18	720.009	37.3	20.8	9.7	28.2	39.6	46.0	6.4	100	0

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN Page:

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MF060b(01.06.05)

Radiated Spurious Emission(DSSS and other forms of modulation)(below 1GHz)

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2005/05/09 22:49:18

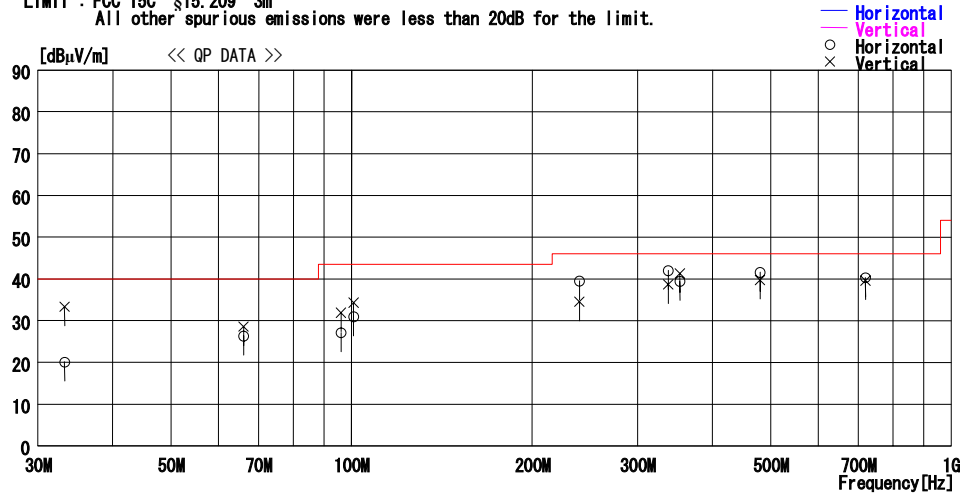
Applicant : Fujitsu Limited
Kind of EUT : Personal Computer
Model No. : P1510D
Serial No. : R5100002

Report No. : 25FE0211-HO
Power : AC120V/60Hz (AC Adaptor)
Temp./Humi. : 26deg.C / 39%
Operator : Kenichi Adachi

Mode / Remarks : 11g Tx2437MHz 54Mbps / Aux Antenna / Hor X, Ver X (MAX Axis)

LIMIT : FCC 15C §15.209 3m

All other spurious emissions were less than 20dB for the limit.



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
Horizontal										
1	33.230	24.5	17.4	6.0	27.8	20.1	40.0	19.9	267	230
2	66.074	40.4	7.4	6.3	27.8	26.3	40.0	13.7	331	355
3	96.104	38.4	9.7	6.6	27.6	27.1	43.5	16.4	304	252
4	100.805	41.3	10.5	6.7	27.6	30.9	43.5	12.6	303	261
5	240.007	41.7	17.1	7.6	26.9	39.5	46.0	6.5	144	77
6	337.506	44.7	16.2	8.1	27.0	42.0	46.0	4.0	100	107
7	352.806	41.6	16.8	8.1	27.1	39.4	46.0	6.6	286	103
8	480.010	42.3	18.8	8.5	28.0	41.6	46.0	4.4	100	104
9	720.010	38.0	20.8	9.7	28.2	40.3	46.0	5.7	100	41
Vertical										
10	33.230	37.7	17.4	6.0	27.8	33.3	40.0	6.7	100	50
11	66.074	42.7	7.4	6.3	27.8	28.6	40.0	11.4	100	255
12	96.104	43.2	9.7	6.6	27.6	31.9	43.5	11.6	100	285
13	100.805	44.7	10.5	6.7	27.6	34.3	43.5	9.2	100	78
14	240.007	36.7	17.1	7.6	26.9	34.5	46.0	11.5	100	302
15	337.506	41.4	16.2	8.1	27.0	38.7	46.0	7.3	135	171
16	352.806	43.5	16.8	8.1	27.1	41.3	46.0	4.7	135	171
17	480.009	40.4	18.8	8.5	28.0	39.7	46.0	6.3	100	72
18	720.009	37.3	20.8	9.7	28.2	39.6	46.0	6.4	100	0

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN Page:

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MF060b(01.06.05)

Radiated Spurious Emission(DSSS and other forms of modulation)(below 1GHz)

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2005/05/09 23:18:26

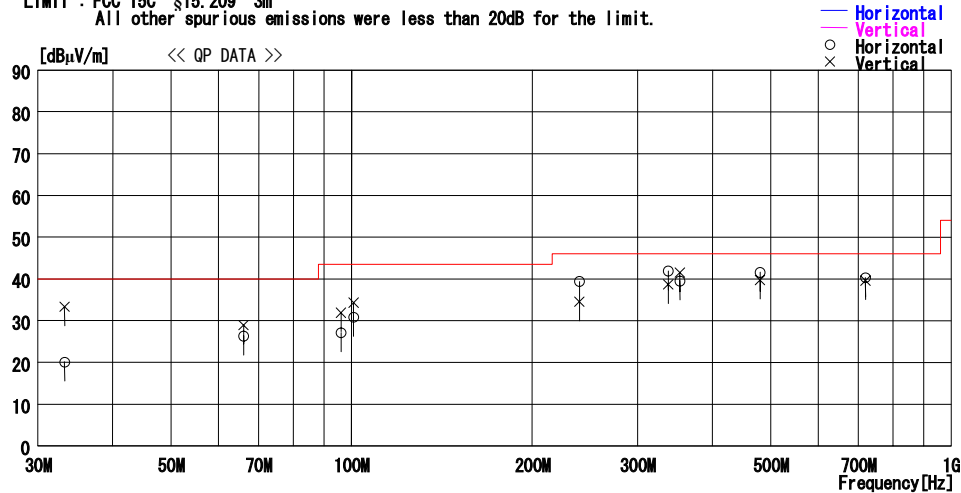
Applicant : Fujitsu Limited
Kind of EUT : Personal Computer
Model No. : P1510D
Serial No. : R5100002

Report No. : 25FE0211-HO
Power : AC120V/60Hz (AC Adaptor)
Temp./Humi. : 26deg. C / 39%
Operator : Kenichi Adachi

Mode / Remarks : 11g Tx2462MHz 54Mbps / Aux Antenna / Hor X, Ver X (MAX Axis)

LIMIT : FCC 15C §15.209 3m

All other spurious emissions were less than 20dB for the limit.



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
Horizontal										
1	33.230	24.5	17.4	6.0	27.8	20.1	40.0	19.9	267	230
2	66.052	40.4	7.4	6.3	27.8	26.3	40.0	13.7	331	353
3	96.104	38.4	9.7	6.6	27.6	27.1	43.5	16.4	304	355
4	100.805	41.2	10.5	6.7	27.6	30.8	43.5	12.7	303	262
5	240.004	41.6	17.1	7.6	26.9	39.4	46.0	6.6	145	70
6	337.512	44.6	16.2	8.1	27.0	41.9	46.0	4.1	100	107
7	352.805	41.7	16.8	8.1	27.1	39.5	46.0	6.5	287	104
8	480.010	42.3	18.8	8.5	28.0	41.6	46.0	4.4	100	105
9	720.010	38.0	20.8	9.7	28.2	40.3	46.0	5.7	100	41
Vertical										
10	33.230	37.7	17.4	6.0	27.8	33.3	40.0	6.7	100	47
11	66.074	43.0	7.4	6.3	27.8	28.9	40.0	11.1	100	244
12	96.104	43.2	9.7	6.6	27.6	31.9	43.5	11.6	100	285
13	100.805	44.7	10.5	6.7	27.6	34.3	43.5	9.2	100	75
14	240.005	36.7	17.1	7.6	26.9	34.5	46.0	11.5	100	300
15	337.512	41.4	16.2	8.1	27.0	38.7	46.0	7.3	170	66
16	352.805	43.7	16.8	8.1	27.1	41.5	46.0	4.5	144	180
17	480.009	40.4	18.8	8.5	28.0	39.7	46.0	6.3	100	71
18	720.009	37.3	20.8	9.7	28.2	39.6	46.0	6.4	100	0

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN Page:

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MF060b(01.06.05)

Radiated Spurious Emission(DSSS and other forms of modulation)(below 1GHz)

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2005/05/09 23:50:36

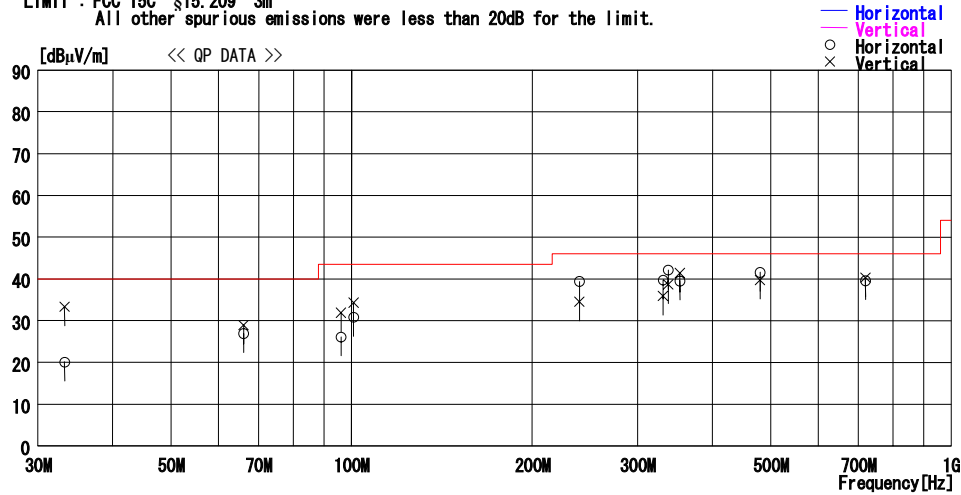
Applicant : Fujitsu Limited
Kind of EUT : Personal Computer
Model No. : P1510D
Serial No. : R5100002

Report No. : 25FE0211-HO
Power : AC120V/60Hz (AC Adaptor)
Temp./Humi. : 26deg. C / 39%
Operator : Kenichi Adachi

Mode / Remarks : 11g Tx2437MHz 108Mbps turbo mode / Aux Antenna / Hor X, Ver X (MAX Axis)

LIMIT : FCC 15C §15.209 3m

All other spurious emissions were less than 20dB for the limit.



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
Horizontal										
1	33.230	24.5	17.4	6.0	27.8	20.1	40.0	19.9	267	230
2	66.053	41.0	7.4	6.3	27.8	26.9	40.0	13.1	331	355
3	96.104	37.4	9.7	6.6	27.6	26.1	43.5	17.4	303	258
4	100.806	41.2	10.5	6.7	27.6	30.8	43.5	12.7	303	264
5	240.007	41.6	17.1	7.6	26.9	39.4	46.0	6.6	142	77
6	330.763	42.6	16.0	8.0	26.9	39.7	46.0	6.3	100	107
7	337.505	44.8	16.2	8.1	27.0	42.1	46.0	3.9	100	107
8	352.805	41.7	16.8	8.1	27.1	39.5	46.0	6.5	284	105
9	480.010	42.3	18.8	8.5	28.0	41.6	46.0	4.4	100	105
10	720.010	37.3	20.8	9.7	28.2	39.6	46.0	6.4	100	41
Vertical										
11	33.230	37.7	17.4	6.0	27.8	33.3	40.0	6.7	100	47
12	66.074	43.0	7.4	6.3	27.8	28.9	40.0	11.1	100	243
13	96.104	43.2	9.7	6.6	27.6	31.9	43.5	11.6	100	285
14	100.806	44.7	10.5	6.7	27.6	34.3	43.5	9.2	100	77
15	240.007	36.7	17.1	7.6	26.9	34.5	46.0	11.5	100	300
16	330.763	38.8	16.0	8.0	26.9	35.9	46.0	10.1	135	171
17	337.505	41.4	16.2	8.1	27.0	38.7	46.0	7.3	135	171
18	352.805	43.6	16.8	8.1	27.1	41.4	46.0	4.6	145	180
19	480.009	40.4	18.8	8.5	28.0	39.7	46.0	6.3	100	72
20	720.009	38.0	20.8	9.7	28.2	40.3	46.0	5.7	100	0

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

Page:

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MF060b(01.06.05)

Radiated Spurious Emission(DSSS and other forms of modulation)(below 1GHz)

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber

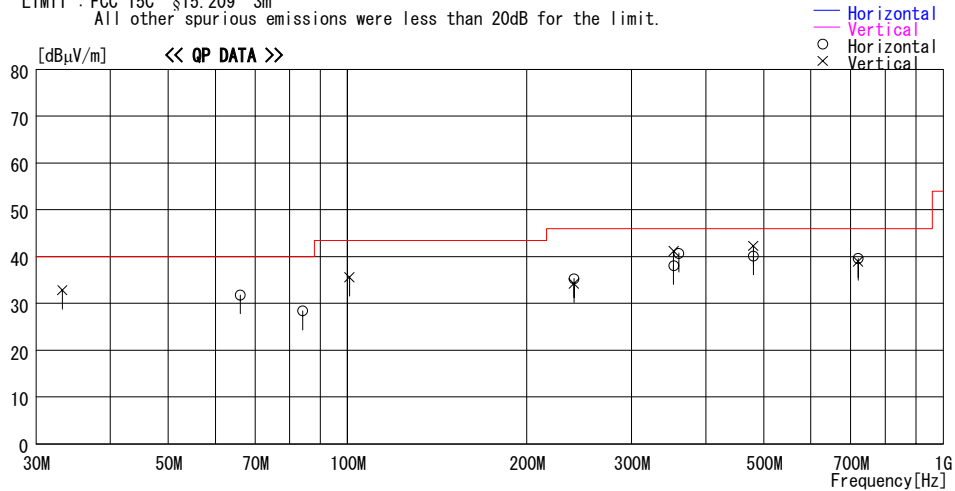
Applicant : Fujitsu Limited
Kind of EUT : Personal Computer
Model No. : P1510D
Serial No. : R5100002

Report No. : 25FE0211-HO
Power : AC120V/60Hz (AC Adaptor)
Temp./Humi. : 25deg. C / 51%
Operator : Mitsuru Fujimura

Mode / Remarks : 11a Tx5745MHz 54Mbps/Aux Antenna/Hor X Ver X(MAXAxis)

LIMIT : FCC 15C §15.209 3m

All other spurious emissions were less than 20dB for the limit.



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	66.057	45.9	7.4	6.3	27.8	31.8	40.0	8.2	400	360
2	84.057	42.2	7.4	6.5	27.7	28.4	40.0	11.6	207	65
3	240.011	37.5	17.1	7.6	26.9	35.3	46.0	10.7	357	350
4	352.809	40.3	16.8	8.1	27.1	38.1	46.0	7.9	100	333
5	360.010	42.7	17.1	8.1	27.2	40.7	46.0	5.3	100	332
6	480.011	40.8	18.8	8.5	28.0	40.1	46.0	5.9	100	106
7	720.011	37.3	20.8	9.7	28.2	39.6	46.0	6.4	100	36
----- Vertical -----										
8	33.235	37.2	17.4	6.0	27.8	32.8	40.0	7.2	100	360
9	100.810	46.0	10.5	6.7	27.6	35.6	43.5	7.9	100	-1
10	240.009	36.4	17.1	7.6	26.9	34.2	46.0	11.8	176	292
11	352.810	43.4	16.8	8.1	27.1	41.2	46.0	4.8	156	341
12	480.011	43.0	18.8	8.5	28.0	42.3	46.0	3.7	100	208
13	720.018	36.7	20.8	9.7	28.2	39.0	46.0	7.0	100	-1

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

Page:

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MF060b(01.06.05)

Radiated Spurious Emission(DSSS and other forms of modulation)(below 1GHz)

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber

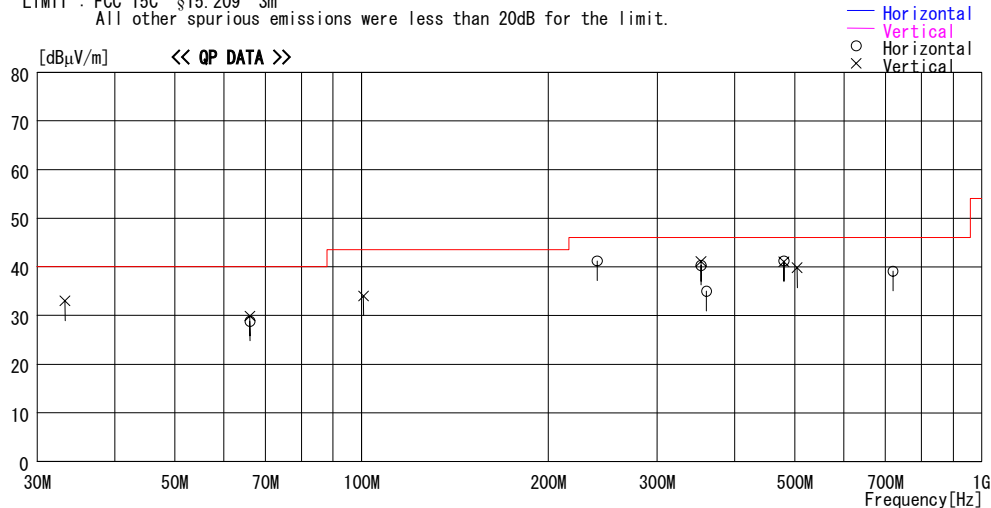
Applicant : Fujitsu Limited
Kind of EUT : Personal Computer
Model No. : P1510D
Serial No. : R5100002

Report No. : 25FE0211-HO
Power : AC120V/60Hz (AC Adaptor)
Temp./Humi. : 25deg.C / 51%
Operator : Mitsuru Fujimura

Mode / Remarks : 11a Tx5785MHz 54Mbps/Aux Antenna/Hor X Ver X(MAXAxis)

LIMIT : FCC 15C §15.209 3m

All other spurious emissions were less than 20dB for the limit.



No.	FREQ [MHz]	READING QP [dBiV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBiV/m]	LIMIT [dBiV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	66.055	42.9	7.4	6.3	27.8	28.8	40.0	11.2	400	360
2	240.009	43.4	17.1	7.6	26.9	41.2	46.0	4.8	149	290
3	352.811	42.5	16.8	8.1	27.1	40.3	46.0	5.7	100	306
4	360.010	37.0	17.1	8.1	27.2	35.0	46.0	11.0	100	330
5	480.012	41.9	18.8	8.5	28.0	41.2	46.0	4.8	100	102
6	720.012	36.8	20.8	9.7	28.2	39.1	46.0	6.9	100	41
----- Vertical -----										
7	33.264	37.4	17.4	6.0	27.8	33.0	40.0	7.0	100	360
8	66.075	44.0	7.4	6.3	27.8	29.9	40.0	10.1	100	237
9	100.812	44.4	10.5	6.7	27.6	34.0	43.5	9.5	100	-1
10	352.810	43.3	16.8	8.1	27.1	41.1	46.0	4.9	143	337
11	480.013	41.7	18.8	8.5	28.0	41.0	46.0	5.0	123	200
12	504.010	40.3	18.9	8.8	28.2	39.8	46.0	6.2	100	304

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN Page:

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MF060b(01.06.05)

Radiated Spurious Emission(DSSS and other forms of modulation)(below 1GHz)

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber

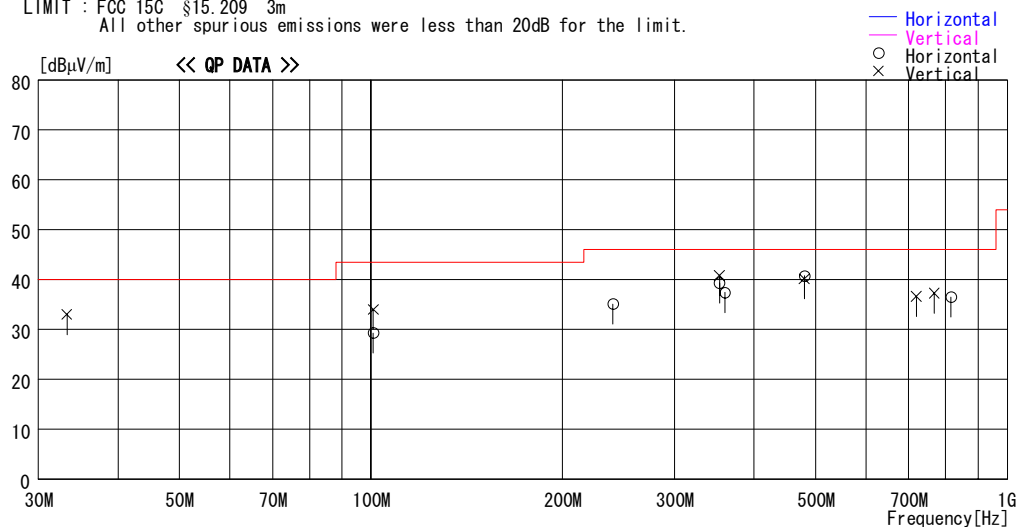
Applicant : Fujitsu Limited
Kind of EUT : Personal Computer
Model No. : P1510D
Serial No. : R5100002

Report No. : 25FE0211-HO
Power : AC120V/60Hz (AC Adaptor)
Temp./Humi. : 25deg. C / 51%
Operator : Mitsuru Fujimura

Mode / Remarks : 11a Tx5825MHz 54Mbps/Aux Antenna/Hor X Ver X(MAXAxis)

LIMIT : FCC 15C §15.209 3m

All other spurious emissions were less than 20dB for the limit.



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	100.811	39.7	10.5	6.7	27.6	29.3	43.5	14.2	302	73
2	240.009	37.3	17.1	7.6	26.9	35.1	46.0	10.9	353	17
3	352.809	41.5	16.8	8.1	27.1	39.3	46.0	6.7	100	311
4	360.011	39.4	17.1	8.1	27.2	37.4	46.0	8.6	100	136
5	480.012	41.4	18.8	8.5	28.0	40.7	46.0	5.3	178	-1
6	816.011	32.5	22.0	9.9	27.9	36.5	46.0	9.5	125	200
----- Vertical -----										
7	33.252	37.4	17.4	6.0	27.8	33.0	40.0	7.0	100	360
8	100.808	44.4	10.5	6.7	27.6	34.0	43.5	9.5	100	-1
9	352.810	43.0	16.8	8.1	27.1	40.8	46.0	5.2	143	298
10	480.009	40.8	18.8	8.5	28.0	40.1	46.0	5.9	133	191
11	720.014	34.3	20.8	9.7	28.2	36.6	46.0	9.4	135	171
12	768.012	34.2	21.5	9.7	28.1	37.3	46.0	8.7	141	152

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN Page:

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MF060b(01.06.05)

Radiated Spurious Emission(DSSS and other forms of modulation)(above1GHz)

UL Apex Co., Ltd.
Head Office EMC Lab. No.1/2 Semi Anechoic Chamber

Company	: Fujitsu Limited	REPORT NO	: 25FE0211-HO
Equipment	: Personal Computer	REGULATION	: Fcc Part15 Subpart C 15.247(d)
Model	: P1510D	TEST DISTANCE	: 3/1m
Sample No.	: R5100002	DATE	: 29/04/2005 06/05/2005
Power	: AC 120 V / 60 Hz	TEMPERATURE	: 24deg.C 27deg.C.
Mode	: W-LAN IEEE802.11b, Tx 2412MHz	HUMIDITY	: 49% 49 %
Remarks	: Hor Z-axis, Ver X-axis	ENGINEER	: Mitsuru Fujimura Keiichi Aoki
	:Antenna Aux, 11Mbps		

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter or ATT [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2376.5	52.1	50.7	31.0	39.9	2.6	10.0	55.8	54.4	74.0	18.2	19.6
2*	2399.9	62.8	61.5	30.9	39.9	2.6	10.0	66.4	65.1	74.0	7.6	8.9
3	4824.0	49.2	50.1	35.0	41.2	3.9	1.0	47.9	48.8	74.0	26.1	25.2
4	7236.0	47.9	47.8	37.6	40.4	4.8	0.4	50.3	50.2	74.0	23.7	23.8
5	9648.0	46.4	46.7	36.3	39.5	5.6	0.2	49.0	49.3	74.0	25.0	24.7
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
6	12057.1	42.1	44.2	41.6	36.1	9.3	0.0	47.4	49.5	74.0	26.6	24.5
7	14472.0	41.9	41.2	41.8	34.6	9.6	0.0	49.2	48.5	74.0	24.8	25.5
8	16884.0	44.2	43.6	45.2	35.0	9.7	0.0	54.6	54.0	74.0	19.4	20.0
9	19296.0	44.3	43.8	40.2	34.1	9.9	0.0	50.8	50.3	74.0	23.2	23.7
10	21708.0	44.5	44.2	39.8	34.7	10.0	0.0	50.1	49.8	74.0	23.9	24.2
11	24120.0	45.1	44.5	40.4	35.6	13.6	0.0	54.0	53.4	74.0	20.0	20.6

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter or ATT [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2376.5	38.8	38.7	31.0	39.9	2.6	10.0	42.5	42.4	54.0	11.5	11.6
2*	2399.9	53.0	52.4	30.9	39.9	2.6	10.0	56.6	56.0	54.0	-	-
3	4824.0	36.3	36.4	35.0	41.2	3.9	1.0	35.0	35.1	54.0	19.0	18.9
4	7236.0	34.8	34.8	37.6	40.4	4.8	0.4	37.2	37.2	54.0	16.8	16.8
5	9648.0	32.8	32.8	36.3	39.5	5.6	0.2	35.4	35.4	54.0	18.6	18.6
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
6	12057.1	30.3	33.7	41.6	36.1	9.3	0.0	35.6	39.0	54.0	18.4	15.0
7	14472.0	29.2	28.9	41.8	34.6	9.6	0.0	36.5	36.2	54.0	17.5	17.8
8	16884.0	31.9	31.8	45.2	35.0	9.7	0.0	42.3	42.2	54.0	11.7	11.8
9	19296.0	31.8	31.7	40.2	34.1	9.9	0.0	38.3	38.2	54.0	15.7	15.8
10	21708.0	32.2	31.9	39.8	34.7	10.0	0.0	37.8	37.5	54.0	16.2	16.5
11	24120.0	32.8	32.6	40.4	35.6	13.6	0.0	41.7	41.5	54.0	12.3	12.5

* Reference data

20dBc(Fundamental 2402MHz) (RBW: 100kHz, VBW: 300kHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATT [dB]	RESULT		Limit 20dBc [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
0	2412.0	96.0	95.6	30.9	39.9	2.7	10.0	99.7	99.3	-	-	-
2	2399.9	54.8	54.3	30.9	39.9	2.6	10.0	58.4	57.9	Funda-20dB	21.2	21.3

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

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MF060b(01.06.05)

Radiated Spurious Emission(DSSS and other forms of modulation)(above1GHz)

UL Apex Co., Ltd.
Head Office EMC Lab. No.1/2 Semi Anechoic Chamber

Company : Fujitsu Limited Equipment : Personal Computer Model : P1510D Sample No. : R5100002 Power : AC 120 V / 60 Hz Mode : W-LAN IEEE802.11b, Tx 2437MHz Remarks : Hor Z-axis, Ver X-axis :Antenna Aux, 11Mbps	REPORT NO : 25FE0211-HO REGULATION : Fcc Part15 Subpart C 15.247(d) TEST DISTANCE : 3/1m DATE : 29/04/2005 06/05/2005 TEMPERATURE : 24deg.C 27deg.C. HUMIDITY : 49% 49% ENGINEER : Mitsuru Fujimura Keiichi Aoki
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PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter or ATT [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dBuV/m]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4874.0	49.3	50.7	35.3	41.2	3.9	1.0	48.3	49.7	74.0	25.7	24.3
2	7311.0	48.0	49.3	37.7	40.4	4.8	0.5	50.6	51.9	74.0	23.4	22.1
3	9748.0	45.6	46.6	36.3	39.5	5.6	0.2	48.2	49.2	74.0	25.8	24.8
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
4	12185.0	41.8	41.9	41.6	36.0	9.8	0.0	47.7	47.8	74.0	26.3	26.2
5	14622.0	42.9	41.9	42.1	35.1	10.0	0.0	50.4	49.4	74.0	23.6	24.6
6	17059.0	44.4	44.6	45.3	34.9	11.9	0.0	57.2	57.4	74.0	16.8	16.6
7	19496.0	44.8	45.1	40.3	34.3	14.4	0.0	55.7	56.0	74.0	18.3	18.0
8	21933.0	44.5	44.9	39.8	34.2	13.1	0.0	53.7	54.1	74.0	20.3	19.9
9	24370.0	43.9	44.4	40.4	35.7	14.6	0.0	53.7	54.2	74.0	20.3	19.8

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter or ATT [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4874.0	36.3	37.0	35.3	41.2	3.9	1.0	35.3	36.0	54.0	18.8	18.0
2	7311.0	34.7	35.4	37.7	40.4	4.8	0.5	37.3	38.0	54.0	16.7	16.0
3	9748.0	32.4	33.4	36.3	39.5	5.6	0.2	35.0	36.0	54.0	19.0	18.0
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
4	12185.0	29.8	29.8	41.6	36.0	9.8	0.0	35.7	35.7	54.0	18.3	18.3
5	14622.0	29.6	29.5	42.1	35.1	10.0	0.0	37.1	37.0	54.0	16.9	17.0
6	17059.0	32.2	32.2	45.3	34.9	11.9	0.0	45.0	45.0	54.0	9.0	9.0
7	19496.0	31.8	31.9	40.3	34.3	14.4	0.0	42.7	42.8	54.0	11.3	11.2
8	21933.0	32.6	32.6	39.8	34.2	13.1	0.0	41.8	41.8	54.0	12.2	12.2
9	24370.0	32.0	32.1	40.4	35.7	14.6	0.0	41.8	41.9	54.0	12.2	12.1

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

Radiated Spurious Emission(DSSS and other forms of modulation)(above1GHz)

UL Apex Co., Ltd.
Head Office EMC Lab. No.1/2 Semi Anechoic Chamber

Company : Fujitsu Limited Equipment : Personal Computer Model : P1510D Sample No. : R5100002 Power : AC 120 V / 60 Hz Mode : W-LAN IEEE802.11b, Tx 2462MHz Remarks : Hor Z-axis, Ver X-axis :Antenna Aux, 11Mbps	REPORT NO : 25FE0211-HO REGULATION : Fcc Part15 Subpart C 15.247(d) TEST DISTANCE : 3/1m DATE : 29/04/2005 06/05/2005 TEMPERATURE : 24deg.C 27deg.C. HUMIDITY : 49% 49% ENGINEER : Mitsuru Fujimura Keiichi Aoki
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PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
	[MHz]	[dBuV]	[dBuV]					Factor	GAIN		LOSS	Filter or ATT
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2483.5	50.9	51.2	30.8	40.0	2.5	10.0	54.2	54.5	74.0	19.8	19.5
2	4924.0	50.5	50.7	35.6	41.3	3.9	1.0	49.7	49.9	74.0	24.3	24.1
3	7386.0	47.9	48.2	37.8	40.3	4.8	0.6	50.8	51.1	74.0	23.2	23.0
4	9920.0	46.3	46.4	36.2	39.6	5.8	0.3	49.0	49.1	74.0	25.0	24.9
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12310.0	42.9	44.7	41.7	35.9	9.9	0.0	49.1	50.9	74.0	24.9	23.1
6	14772.0	43.7	42.9	42.4	35.6	10.3	0.0	51.3	50.5	74.0	22.7	23.5
7	17234.0	45.0	45.0	44.9	35.0	11.9	0.0	57.3	57.3	74.0	16.7	16.7
8	19696.0	44.5	44.9	40.3	34.6	14.0	0.0	54.7	55.1	74.0	19.3	18.9
9	22158.0	46.2	45.1	39.8	34.1	13.0	0.0	55.4	54.3	74.0	18.6	19.7
10	24620.0	44.2	44.4	40.5	35.5	14.9	0.0	54.6	54.8	74.0	19.4	19.2

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter or ATT [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2483.5	37.5	37.2	30.8	40.0	2.5	10.0	40.8	40.5	54.0	13.2	13.5
2	4924.0	34.6	34.6	35.6	41.3	3.9	1.0	33.8	33.8	54.0	20.2	20.2
3	7386.0	34.6	34.6	37.8	40.3	4.8	0.6	37.5	37.5	54.0	16.5	16.5
4	9920.0	33.0	33.0	36.2	39.6	5.8	0.3	35.7	35.7	54.0	18.3	18.3
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12310.0	30.5	32.6	41.7	35.9	9.9	0.0	36.7	38.8	54.0	17.3	15.2
6	14772.0	30.2	30.1	42.4	35.6	10.3	0.0	37.8	37.7	54.0	16.2	16.3
7	17234.0	32.5	32.4	44.9	35.0	11.9	0.0	44.8	44.7	54.0	9.2	9.3
8	19696.0	32.4	32.2	40.3	34.6	14.0	0.0	42.6	42.4	54.0	11.4	11.6
9	22158.0	33.2	33.0	39.8	34.1	13.0	0.0	42.4	42.2	54.0	11.6	11.8
10	24620.0	32.3	32.1	40.5	35.5	14.9	0.0	42.7	42.5	54.0	11.3	11.5

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*In the frequency over the fifth harmonic, the noise from the EUT was not seen.The data above is its base noise.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

Radiated Spurious Emission(DSSS and other forms of modulation)(above1GHz)

Company : Fujitsu Limited
Equipment : Personal Computer
Model : P1510D
Sample No. : R5100002
Power : AC 120 V / 60 Hz
Mode : W-LAN IEEE802.11g, Tx 2412MHz
Remarks : Antenna Axis, 54Mbps
(RBW: 1MHz, VBW: 1MHz)

UL Apex Co., Ltd.
Head Office EMC Lab. No.1/2 Semi Anechoic Chamber
REPORT NO : 25FE0211-HO
REGULATION : Fcc Part15 Subpart C 15.247(d)
TEST DISTANCE : 3/1m
DATE : 04/29/2005 : 02/05/2005 : 06/05/2005
TEMPERATURE : 25deg C : 27deg C : 27deg C
HUMIDITY : 46% : 30% : 49%
ENGINEER : Makoto Kosaka : Mitsuru Fujimura: Keiichi Aoki

PK DETECT (RBW: 1MHz, VBW: 1MHz)												
No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR [dBuV]	VER					HOR [dBuV/m]	VER		HOR [dB]	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2390.0	68.2	68.9	30.5	36.4	3.7	0.0	66.0	66.7	74.0	8.0	7.3
2*	2400.0	89.2	89.0	30.5	36.4	3.7	0.0	87.0	86.8	74.0	-13.0	-12.8
3	4824.0	51.1	51.0	35.0	41.2	3.9	1.0	49.8	49.7	74.0	24.2	24.3
4	7236.0	49.1	49.1	37.6	40.4	4.8	0.4	51.5	51.5	74.0	22.5	22.5
5	9648.0	47.1	47.3	36.3	39.5	5.6	0.2	49.7	49.9	74.0	24.3	24.1
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfacc												
6	12060.0	41.9	42.3	41.6	36.1	9.7	0.0	47.6	48.0	74.0	26.4	26.0
7	14472.0	41.9	41.7	41.8	34.6	9.8	0.0	49.4	49.2	74.0	24.6	24.8
8	16884.0	45.1	44.7	45.2	35.0	11.9	0.0	57.7	57.3	74.0	16.3	16.7
9	19296.0	43.8	43.3	40.2	34.1	14.1	0.0	54.5	54.0	74.0	19.5	20.0
10	21708.0	44.6	44.5	39.8	34.7	14.0	0.0	54.2	54.1	74.0	19.8	19.9
11	24120.0	44.2	44.4	40.4	35.6	14.1	0.0	53.6	53.8	74.0	20.4	20.2

AV DETECT (RBW: 1MHz, VBW: 10Hz)												
No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR [dBuV]	VER					HOR [dBuV/m]	VER		HOR [dB]	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2390.0	47.9	48.6	30.5	36.4	3.7	0.0	45.7	46.4	54.0	8.3	7.6
2*	2400.0	60.8	61.8	30.5	36.4	3.7	0.0	58.6	59.6	54.0	-4.6	-5.6
3	4824.0	36.5	36.5	35.0	41.2	3.9	1.0	35.2	35.2	54.0	18.8	18.8
4	7236.0	35.0	35.0	37.6	40.4	4.8	0.4	37.4	37.4	54.0	16.6	16.6
5	9648.0	32.9	32.9	36.3	39.5	5.6	0.2	35.5	35.5	54.0	18.5	18.5
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfacc												
6	12060.0	30.0	30.0	41.6	36.1	9.7	0.0	35.7	35.7	54.0	18.3	18.3
7	14472.0	29.4	29.5	41.8	34.6	9.8	0.0	36.9	37.0	54.0	17.1	17.0
8	16884.0	32.1	32.1	45.2	35.0	11.9	0.0	44.7	44.7	54.0	9.3	9.3
9	19296.0	31.8	31.7	40.2	34.1	14.1	0.0	42.5	42.4	54.0	11.5	11.6
10	21708.0	32.2	32.2	39.8	34.7	14.0	0.0	41.8	41.8	54.0	12.2	12.2
11	24120.0	32.7	32.7	40.4	35.6	14.1	0.0	42.1	42.1	54.0	11.9	11.9

20dBc(Fundamental 2412MHz)													(RBW: 100kHz, VBW: 300kHz)			
No.	FREQ	S/A READING		ANT Factor	AMP GAIN	CABLE LOSS	Hi-Pass Filter	RESULT		Limit 20dBc	MARGIN					
		HOR	VER					HOR	VER		HOR	VER				
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]		[dBuV/m]		[dBuV/m]	[dB]	[dB]				
Test distance 3meters													RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss			
0	2412.0	102.5	102.6	30.5	36.4	3.7	0.0	100.3	100.4	-	-	-				
2	2400.0	73.4	74.0	30.5	36.4	3.7	0.0	71.2	71.8	Funda-20dB	9.2	8.6				

Test Distance 1.0m*: Distance Factor(Dfacc) = 20log(3/1.0) = -9.5dB
*Except for the above table : All other spurious emissions were less than 20dB for the limit.
*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.
*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.
*Hi-Pass Filter was not used for factor 0.0dB of the above table.

Radiated Spurious Emission(DSSS and other forms of modulation)(above1GHz)

UL Apex Co., Ltd.
Head Office EMC Lab. No.1/2 Semi Anechoic Chamber

Company : Fujitsu Limited
Equipment : Personal Computer
Model : P1510D
Sample No. : R5100002
Power : AC 120 V / 60 Hz
Mode : W-LAN IEEE802.11g, Tx 2437MHz
Remarks : Hor Z-axis, Ver X-axis
:Antenna Aux, 54Mbps

REPORT NO : 25FE0211-HO
REGULATION : Fcc Part15 Subpart C 15.247(d)
TEST DISTANCE : 3/1m
DATE : 04/29/2005 06/05/2005
TEMPERATURE : 25deg.C 27deg.C
HUMIDITY : 46% 49%
ENGINEER : Makoto Kosaka Keiichi Aoki

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4874.0	51.0	51.0	35.3	41.2	3.9	1.0	50.0	50.0	74.0	24.0	24.0
2	7311.0	49.0	49.0	37.7	40.4	4.8	0.5	51.6	51.6	74.0	22.4	22.4
3	9748.0	47.6	47.7	36.3	39.5	5.6	0.2	50.2	50.3	74.0	23.8	23.7
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
4	12185.0	42.9	41.6	41.6	36.0	9.5	0.3	48.8	47.5	74.0	25.2	26.5
5	14622.0	42.2	42.0	42.1	35.1	10.0	0.2	49.9	49.7	74.0	24.1	24.3
6	17059.0	44.4	44.3	45.3	34.9	11.9	1.1	58.3	58.2	74.0	15.7	15.8
7	19496.0	43.6	44.4	40.3	34.3	12.1	2.3	54.5	55.3	74.0	19.5	18.7
8	21933.0	44.5	45.0	39.8	34.2	12.0	1.1	53.7	54.2	74.0	20.3	19.8
9	24370.0	43.9	44.5	40.4	35.7	14.0	0.6	53.7	54.3	74.0	20.3	19.7

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4874.0	36.4	36.5	35.3	41.2	3.9	1.0	35.4	35.5	54.0	18.6	18.5
2	7311.0	35.0	35.0	37.7	40.4	4.8	0.5	37.6	37.6	54.0	16.4	16.4
3	9748.0	33.3	33.3	36.3	39.5	5.6	0.2	35.9	35.9	54.0	18.1	18.1
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
4	12185.0	29.6	29.6	41.6	36.0	9.5	0.3	35.5	35.5	54.0	18.5	18.5
5	14622.0	29.2	29.2	42.1	35.1	10.0	0.2	36.9	36.9	54.0	17.1	17.1
6	17059.0	31.9	32.0	45.3	34.9	11.9	1.1	45.8	45.9	54.0	8.2	8.1
7	19496.0	31.7	31.7	40.3	34.3	12.1	2.3	42.6	42.6	54.0	11.4	11.4
8	21933.0	32.4	32.3	39.8	34.2	12.0	1.1	41.6	41.5	54.0	12.4	12.5
9	24370.0	31.8	31.8	40.4	35.7	14.0	0.6	41.6	41.6	54.0	12.4	12.4

* Reference data

Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*In the frequency over the fifth harmonic, the noise from the EUT was not seen.The data above is its base noise.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

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MF060b(01.06.05)

Radiated Spurious Emission(DSSS and other forms of modulation)(above1GHz)

UL Apex Co., Ltd.
Head Office EMC Lab. No.1/2 Semi Anechoic Chamber

Company : Fujitsu Limited
Equipment : Personal Computer
Model : P1510D
Sample No. : R5100002
Power : AC 120 V / 60 Hz
Mode : W-LAN IEEE802.11g, Tx 2462MHz
Remarks : Hor Z-axis, Ver X-axis
:Antenna Aux, 54Mbps

REPORT NO : 25FE0211-HO
REGULATION : Fcc Part15 Subpart C 15.247(d)
TEST DISTANCE : 3/1m
DATE : 04/29/2005 : 02/05/2005 : 06/05/2005
TEMPERATURE : 25deg.C : 27deg.C : 27deg.C
HUMIDITY : 46% : 30% : 49%
ENGINEER : Makoto Kosaka : Mitsuru Fujimura : Keiichi Aoki

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2483.5	68.1	69.5	30.5	36.4	3.6	0.0	65.8	67.2	74.0	8.2	6.8
2	4924.0	50.8	51.6	35.6	41.3	3.9	1.0	50.0	50.8	74.0	24.0	23.2
3	7386.0	49.0	48.9	37.8	40.3	4.8	0.6	51.9	51.8	74.0	22.1	22.2
4	9920.0	47.6	48.0	36.2	39.6	5.8	0.3	50.3	50.7	74.0	23.7	23.3
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12310.0	42.3	42.2	41.7	35.9	9.5	0.4	48.5	48.4	74.0	25.5	25.6
6	14772.0	43.0	42.4	42.4	35.6	9.9	0.4	50.6	50.0	74.0	23.4	24.0
7	17234.0	45.2	44.2	44.9	35.0	10.9	1.0	57.5	56.5	74.0	16.5	17.5
8	19696.0	43.9	44.3	40.3	34.6	12.2	1.8	54.1	54.5	74.0	19.9	19.5
9	22158.0	44.9	44.5	39.8	34.1	12.1	0.9	54.1	53.7	74.0	19.9	20.3
10	24620.0	44.1	43.8	40.5	35.5	14.0	0.9	54.5	54.2	74.0	19.5	19.8

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2483.5	46.9	48.1	30.5	36.4	3.6	0.0	44.6	45.8	54.0	9.4	8.2
2	4924.0	37.0	37.0	35.6	41.3	3.9	1.0	36.2	36.2	54.0	17.8	17.8
3	7386.0	34.9	34.9	37.8	40.3	4.8	0.6	37.8	37.8	54.0	16.2	16.2
4	9920.0	33.3	33.3	36.2	39.6	5.8	0.3	36.0	36.0	54.0	18.0	18.0
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12310.0	29.8	29.8	41.7	35.9	9.5	0.4	36.0	36.0	54.0	18.0	18.0
6	14772.0	29.5	29.5	42.4	35.6	9.9	0.4	37.1	37.1	54.0	16.9	16.9
7	17234.0	31.7	31.8	44.9	35.0	10.9	1.0	44.0	44.1	54.0	10.0	9.9
8	19696.0	31.7	31.7	40.3	34.6	12.2	1.8	41.9	41.9	54.0	12.1	12.1
9	22158.0	32.4	32.5	39.8	34.1	12.1	0.9	41.6	41.7	54.0	12.4	12.3
10	24620.0	31.5	31.4	40.5	35.5	14.0	0.9	41.9	41.8	54.0	12.1	12.2

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*In the frequency over the fifth harmonic, the noise from the EUT was not seen.The data above is its base noise.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

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MF060b(01.06.05)

Radiated Spurious Emission(DSSS and other forms of modulation)(above1GHz)

UL Apex Co., Ltd.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

Company : Fujitsu Limited
Equipment : Personal Computer
Model : P1510D
Sample No. : R5100002
Power : AC 120 V / 60 Hz
Mode : W-LAN IEEE802.11g, Tx turbo 2437MHz
Remarks : Hor Z-axis, Ver X-axis
:Antenna Aux, 108Mbps

REPORT NO : 25FE0211-HO
REGULATION : Fcc Part15 Subpart C 15.247(d)
TEST DISTANCE : 3/1m
DATE : 06/05/2005 May 10, 2005
TEMPERATURE : 27deg.C 26deg.C
HUMIDITY : 49% 39 %
ENGINEER : Keiichi Aoki Kenichi Adachi

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		Ant Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2389.6	63.6	59.5	30.5	36.4	3.7	0.0	61.4	57.3	74.0	12.6	16.7
2*	2400.0	70.9	68.6	30.5	36.4	3.7	0.0	68.7	66.4	74.0	5.3	7.6
3	2483.7	57.5	53.2	30.5	36.4	3.7	0.0	55.3	51.0	74.0	18.7	23.0
4	3249.3	49.4	48.4	31.5	36.5	4.3	0.0	48.7	47.7	74.0	25.3	26.3
5	4874.0	43.1	43.1	35.5	36.0	5.3	1.0	48.9	48.9	74.0	25.1	25.1
6	7311.0	42.9	42.9	37.9	36.0	6.6	0.5	51.9	51.9	74.0	22.1	22.1
7	9748.0	43.7	43.6	36.9	36.4	8.1	0.2	52.5	52.4	74.0	21.5	21.6
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
8	12185.0	42.3	42.2	41.6	36.0	9.5	0.3	48.2	48.1	74.0	25.8	25.9
9	14622.0	42.2	41.3	42.1	35.1	9.8	0.2	49.7	48.8	74.0	24.3	25.2
10	17059.0	44.4	44.5	45.3	34.9	10.8	1.1	57.2	57.3	74.0	16.8	16.7
11	19496.0	44.8	43.9	40.3	34.3	12.1	2.3	55.7	54.8	74.0	18.3	19.2
12	21933.0	45.7	45.2	39.8	34.2	12.0	1.1	54.9	54.4	74.0	19.1	19.6
13	24370.0	43.5	44.8	40.4	35.7	14.0	0.6	53.3	54.6	74.0	20.7	19.4

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2389.6	48.4	46.5	30.5	36.4	3.7	0.0	46.2	44.3	54.0	7.8	9.7
2*	2400.0	54.7	52.5	30.5	36.4	3.7	0.0	52.5	50.3	54.0	1.5	3.7
3	2483.7	43.4	40.0	30.5	36.4	3.7	0.0	41.2	37.8	54.0	12.8	16.2
4	3249.3	43.4	43.1	31.5	36.5	4.3	0.0	42.7	42.4	54.0	11.3	11.6
5	4874.0	30.5	30.6	35.5	36.0	5.3	1.0	36.3	36.4	54.0	17.7	17.6
6	7311.0	30.3	30.3	37.9	36.0	6.6	0.5	39.3	39.3	54.0	14.7	14.7
7	9748.0	30.9	30.9	36.9	36.4	8.1	0.2	39.7	39.7	54.0	14.3	14.3
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
8	12185.0	29.6	29.5	41.6	36.0	9.5	0.3	35.5	35.4	54.0	18.5	18.6
9	14622.0	29.1	29.2	42.1	35.1	9.8	0.2	36.6	36.7	54.0	17.4	17.3
10	17059.0	31.9	31.9	45.3	34.9	10.8	1.1	44.7	44.7	54.0	9.3	9.3
11	19496.0	31.7	31.7	40.3	34.3	12.1	2.3	42.6	42.6	54.0	11.4	11.4
12	21933.0	32.2	32.2	39.8	34.2	12.0	1.1	41.4	41.4	54.0	12.6	12.6
13	24370.0	31.6	31.5	40.4	35.7	14.0	0.6	41.4	41.3	54.0	12.6	12.7

* Reference data

20dBc(Fundamental 2437MHz) (RBW: 100kHz, VBW: 300kHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATT [dB]	RESULT		Limit 20dBc [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]										
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
0	2437.0	102.7	100.7	30.5	36.4	3.7	0.0	100.5	98.5	-	-	-
2	2400.0	58.0	56.7	30.5	36.4	3.7	0.0	55.8	54.5	Funda-20dB	24.7	24.0

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Filter was not used for factor 0.0dB of the above table.

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MF060b(01.06.05)

Radiated Spurious Emission(DS~~SS~~ and other forms of modulation)

UL Apex Co., Ltd.
Head Office EMC Lab. No.1/2 Semi Anechoic Chamber

Company : Fujitsu Limited Equipment : Personal Computer Model : P1510D Sample No. : R5100002 Power : AC 120 V / 60 Hz Mode : W-LAN IEEE802.11a, Tx 5745MHz Remarks : Hor Z-axis, Ver X-axis :Antenna Aux, 54Mbps	REPORT NO : 25FE0211-HO REGULATION : Fcc Part15 Subpart C 15.247(d) TEST DISTANCE : 3/1m DATE : 27/05/2005 ; 31/05/2005 ; 29/05/2005 TEMPERATURE : 23deg.C : 25deg.C : 24deg.C HUMIDITY : 53% : 37% : 49% ENGINEER : Mitsuru Fujimura : Keiichi Aoki
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PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	5439.9	50.8	54.1	35.9	35.8	5.6	0.0	56.5	59.8	74.0	17.5	14.2
2	5725.0	59.5	60.6	36.3	35.8	5.7	0.0	65.7	66.8	74.0	8.3	7.2
Test distance 1/0.5meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
3	11490.0	47.5	50.5	38.3	39.6	6.3	0.2	43.2	46.2	74.0	30.8	27.8
4	17235.0	48.2	48.6	44.5	41.7	7.1	4.4	53.0	53.4	74.0	21.0	20.7
5	22980.0	44.7	44.6	40.2	34.9	13.9	0.0	54.4	54.3	74.0	19.6	19.7
6	28725.0	42.6	42.3	41.3	24.3	0.6	0.0	50.7	50.4	74.0	23.3	23.6
7	34470.0	47.2	47.7	42.2	24.6	-1.3	0.0	54.0	54.5	74.0	20.0	19.5

*

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	5439.9	41.5	44.2	35.9	35.8	5.6	0.0	47.2	49.9	54.0	6.8	4.1
2	5725.0	42.7	44.3	36.3	35.8	5.7	0.0	48.9	50.5	54.0	5.1	3.5
Test distance 1/0.5meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
3	11490.0	34.7	37.5	38.3	39.6	6.3	0.2	30.4	33.2	54.0	23.6	20.8
4	17235.0	34.9	34.9	44.5	41.7	7.1	4.4	39.7	39.7	54.0	14.3	14.3
5	22980.0	31.3	31.3	40.2	34.9	13.9	0.0	41.0	41.0	54.0	13.0	13.0
6	28725.0	31.2	31.3	41.3	24.3	0.6	0.0	39.3	39.4	54.0	14.7	14.6
7	34470.0	34.0	34.1	42.2	24.6	-1.3	0.0	40.8	40.9	54.0	13.2	13.1

*

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

Test Distance 0.5m(above 26.5GHz) : Distance Factor(Dfac) = 20log(3/0.5) = 15.6dB

(This factor(Dfac) is subtracted from the cable loss.)

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*In the frequency over the fifth harmonic, the noise from the EUT was not seen.The data above is its base noise.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

Radiated Spurious Emission(DSSS and other forms of modulation)

DATA OF SPURIOUS EMISSIONS(1GHz to 40GHz)

UL Apex Co., Ltd.
Head Office EMC Lab. No.1/2 Semi Anechoic Chamber

Company : Fujitsu Limited	REPORT NO : 25FE0211-HO
Equipment : Personal Computer	REGULATION : Fcc Part15 Subpart C 15.247(d)
Model : P1510D	TEST DISTANCE : 3/1m
Sample No. : R5100002	DATE : 27/05/2005 : 31/05/2005 : 29/05/2005
Power : AC 120 V / 60 Hz	TEMPERATURE : 23deg.C : 25deg.C : 24deg.C
Mode : W-LAN IEEE802.11a, Tx 5785MHz	HUMIDITY : 53% : 37% : 49%
Remarks : Hor Z-axis, Ver X-axis	ENGINEER : Mitsuru Fujimura : Keiichi Aoki
:Antenna Aux, 54Mbps	

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ	S/A READING		ANT Factor	AMP GAIN	CABLE LOSS	Hi-Pass Filter	RESULT		Limit PK	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	5439.9	48.0	53.6	35.9	35.8	5.6	0.0	53.7	59.3	74.0	20.3	14.7
Test distance 1/0.5meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
2	11570.0	49.1	51.5	38.7	39.6	6.4	0.2	45.3	47.7	74.0	28.7	26.3
3	17355.0	48.3	48.7	44.4	41.6	7.1	5.2	53.9	54.3	74.0	20.1	19.7
4	23140.0	45.2	45.7	40.3	33.7	8.1	0.0	50.4	50.9	74.0	23.6	23.1
5	28925.0	40.2	41.5	41.3	24.4	0.7	0.0	48.3	49.6	74.0	25.7	24.4
6	34710.0	46.8	45.4	42.2	24.5	-1.2	0.0	53.8	52.4	74.0	20.2	21.6

*

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	5439.9	38.0	44.3	35.9	35.8	5.6	0.0	43.7	50.0	54.0	10.3	4.0
Test distance 1/0.5meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
2	11570.0	34.8	38.3	38.7	39.6	6.4	0.2	31.0	34.5	54.0	23.0	19.5
3	17355.0	35.3	35.5	44.4	41.6	7.1	5.2	40.9	41.1	54.0	13.1	12.9
4	23140.0	32.0	32.0	40.3	33.7	8.1	0.0	37.2	37.2	54.0	16.8	16.8
5	28925.0	31.0	31.0	41.3	24.4	0.7	0.0	39.1	39.1	54.0	14.9	14.9
6	34710.0	37.5	37.4	42.2	24.5	-1.2	0.0	44.5	44.4	54.0	9.5	9.6

*

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

Test Distance 0.5m(above 26.5GHz) : Distance Factor(Dfac) = 20log(3/0.5) = 15.6dB

(This factor(Dfac) is subtracted from the cable loss.)

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

UL Apex Co., Ltd.

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MF060b(01.06.05)

Radiated Spurious Emission(DSSS and other forms of modulation)

UL Apex Co., Ltd.
Head Office EMC Lab. No.1/2 Semi Anechoic Chamber

Company	: Fujitsu Limited	REPORT NO	: 25FE0211-HO
Equipment	: Personal Computer	REGULATION	: Fcc Part15 Subpart C 15.247(d)
Model	: P1510D	TEST DISTANCE	: 3/1m
Sample No.	: R5100002	DATE	: 27/05/2005 : 31/05/2005 : 29/05/2005
Power	: AC 120 V / 60 Hz	TEMPERATURE	: 23deg.C : 25deg.C : 24deg.C
Mode	: W-LAN IEEE802.11a, Tx 5825MHz	HUMIDITY	: 53% : 37% : 49%
Remarks	: Hor Z-axis, Ver X-axis	ENGINEER	: Mitsuru Fujimura : Keiichi Aoki
	: Antenna Aux, 54Mbps		

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1108.8	57.4	55.5	22.9	36.9	2.5	0.0	45.9	44.0	74.0	28.1	30.0
2	1663.2	56.7	50.7	26.3	36.6	3.0	0.0	49.4	43.4	74.0	24.6	30.6
3	5439.9	51.0	55.7	35.9	35.8	5.6	0.0	56.7	61.4	74.0	17.3	12.6
4	5850.0	51.8	53.6	36.6	35.8	5.8	0.0	58.4	60.2	74.0	15.6	13.8
Test distance 1/0.5meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	11651.7	50.0	52.0	39.2	39.6	6.4	0.3	46.8	48.8	74.0	27.2	25.2
6	17475.0	48.0	48.0	44.3	41.5	7.1	6.0	54.4	54.4	74.0	19.6	19.6
7	23300.0	44.4	44.3	40.4	34.7	14.1	0.0	54.7	54.6	74.0	19.3	19.4
8	29125.0	42.3	42.6	41.3	24.4	0.7	0.0	50.4	50.7	74.0	23.6	23.3
9	34950.0	47.3	46.8	42.1	24.4	-1.2	0.0	54.3	53.8	74.0	19.7	20.2

*

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1108.8	50.6	48.3	22.9	36.9	2.5	0.0	39.1	36.8	54.0	14.9	17.2
2	1663.2	40.4	35.6	26.3	36.6	3.0	0.0	33.1	28.3	54.0	20.9	25.7
3	5439.9	41.9	45.1	35.9	35.8	5.6	0.0	47.6	50.8	54.0	6.4	3.2
4	5850.0	34.4	36.3	36.6	35.8	5.8	0.0	41.0	42.9	54.0	13.0	11.1
Test distance 1/0.5meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	11651.7	36.5	39.0	39.2	39.6	6.4	0.3	33.3	35.8	54.0	20.7	18.2
6	17475.0	35.0	35.0	44.3	41.5	7.1	6.0	41.4	41.4	54.0	12.6	12.6
7	23300.0	31.3	31.3	40.4	34.7	14.1	0.0	41.6	41.6	54.0	12.4	12.4
8	29125.0	31.0	31.0	41.3	24.4	0.7	0.0	39.1	39.1	54.0	14.9	14.9
9	34950.0	37.6	37.7	42.1	24.4	-1.2	0.0	44.6	44.7	54.0	9.4	9.3

*

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

Test Distance 0.5m(above 26.5GHz) : Distance Factor(Dfac) = 20log(3/0.5) = 15.6dB

(This factor(Dfac) is subtracted from the cable loss.)

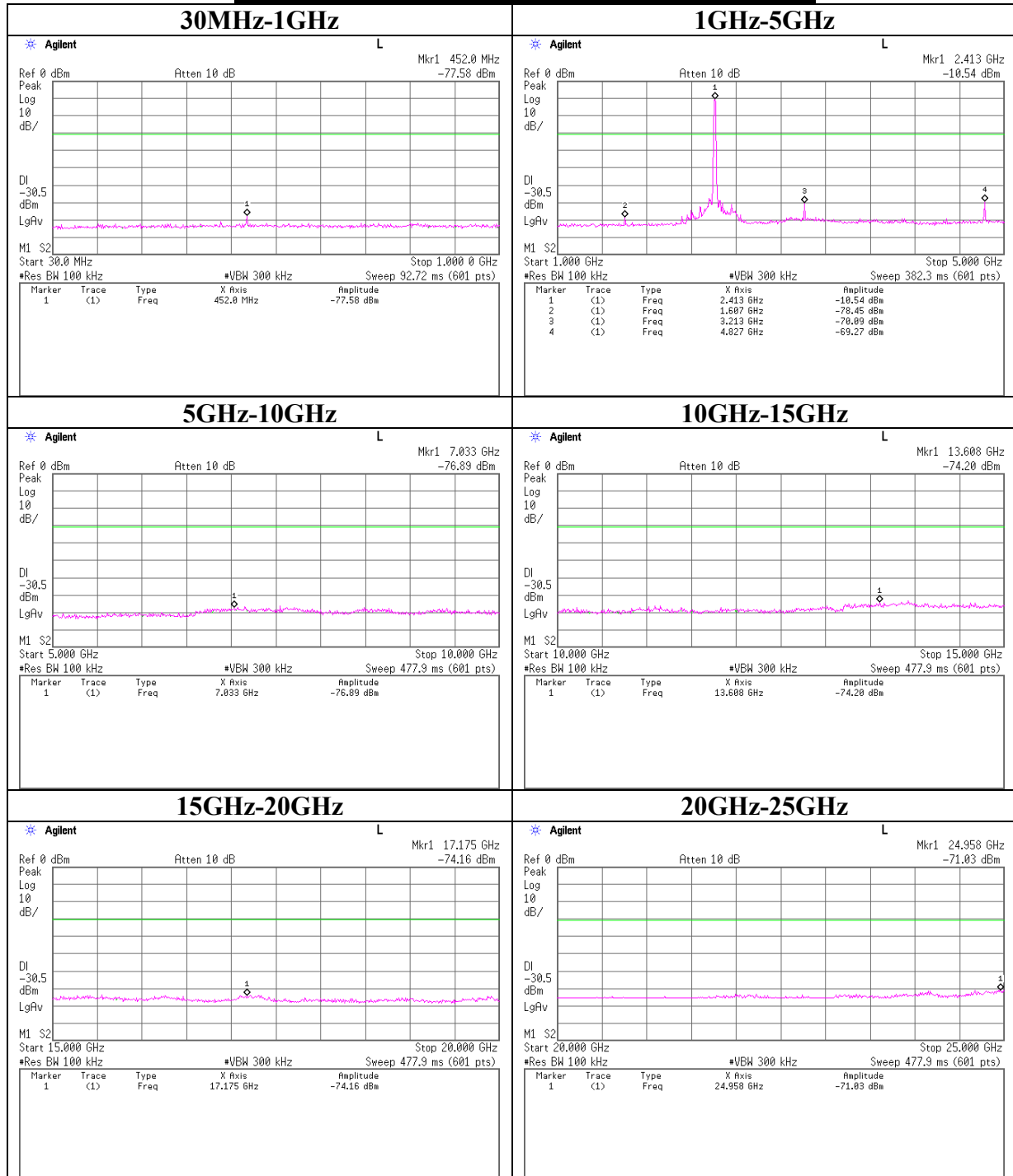
*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.

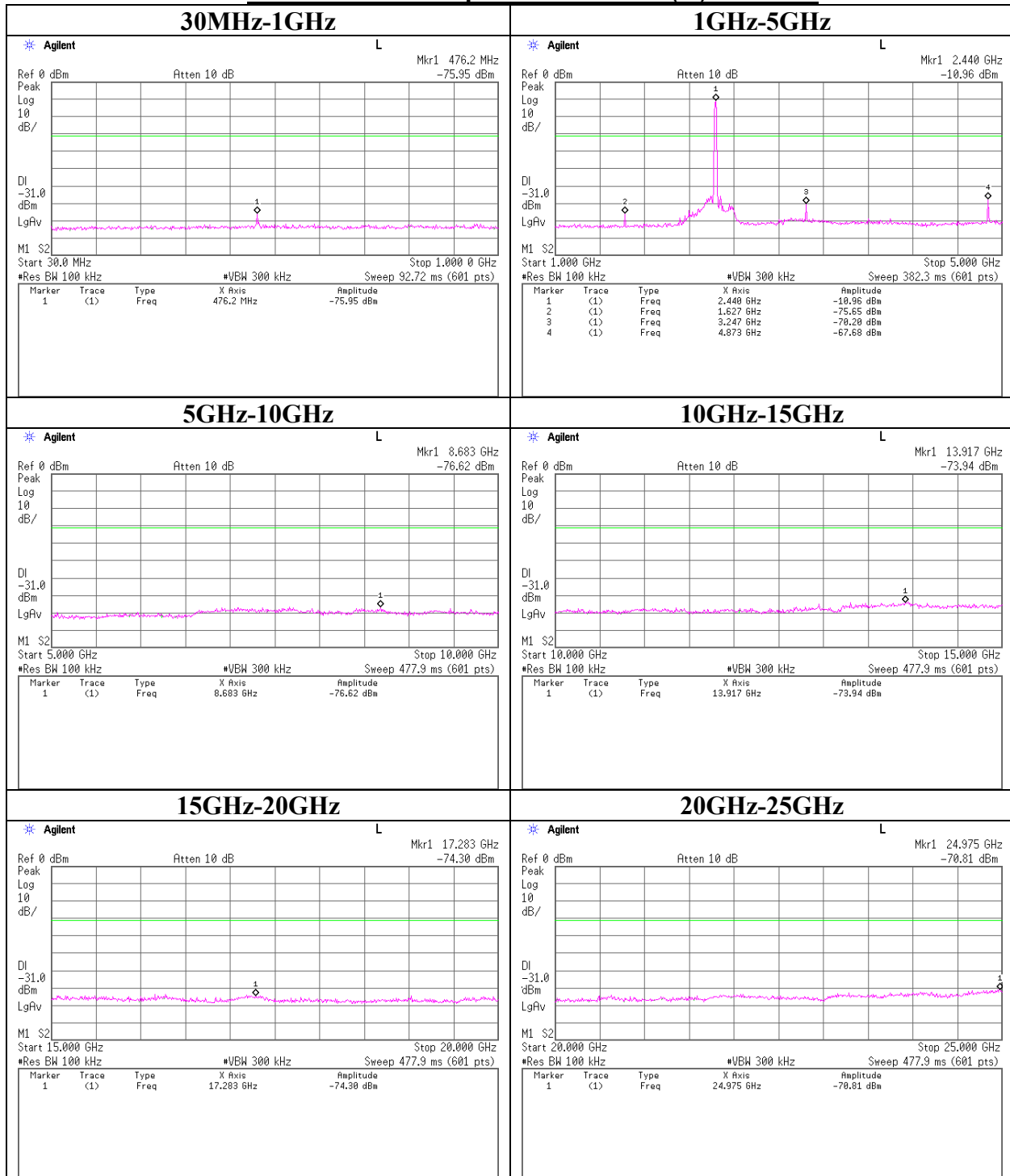
*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

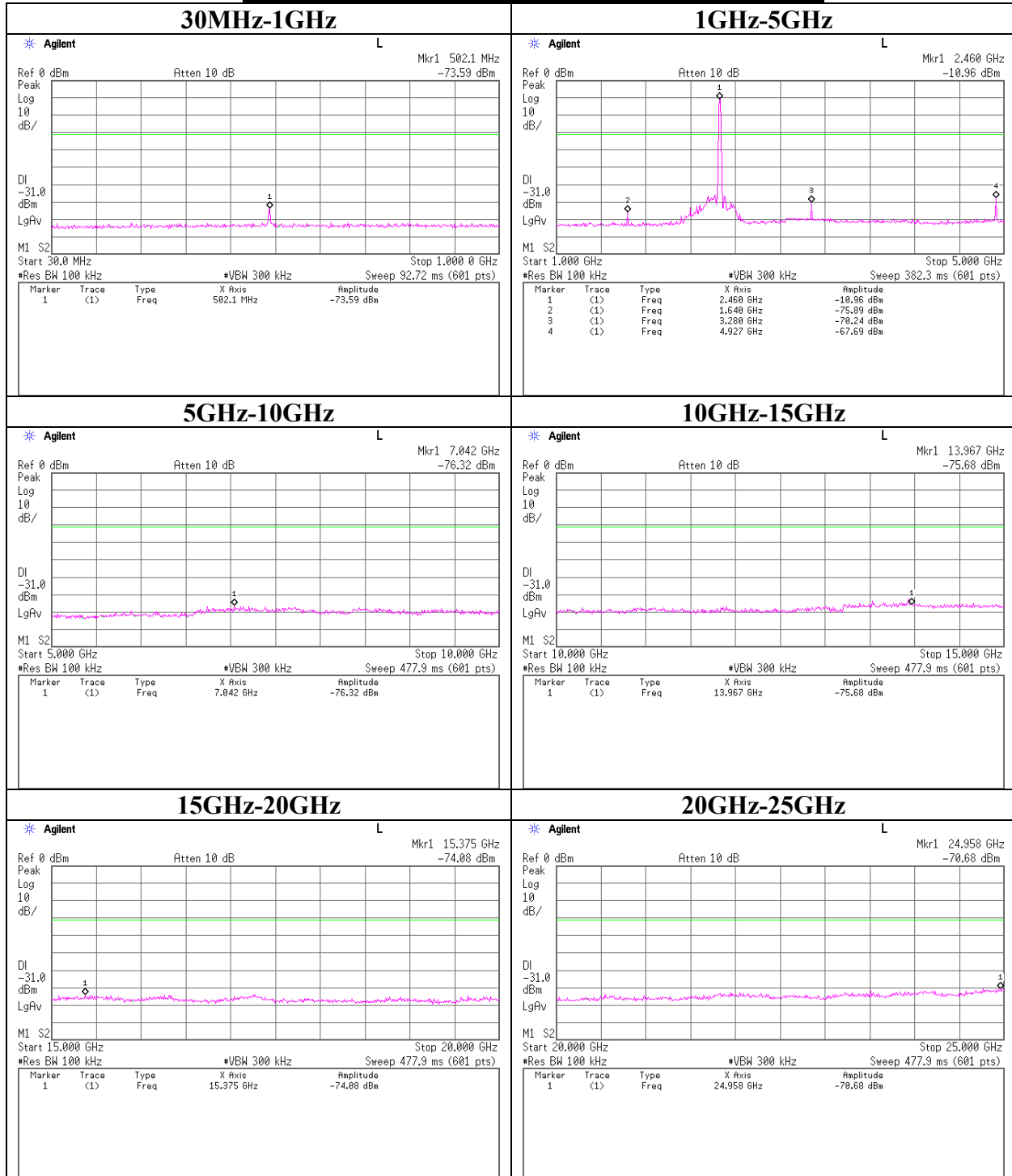
Conducted Spurious Emission(DSSS and other forms of modulation)
IEEE802.11b 11Mbps Antenna: Main (A) Ch : Low



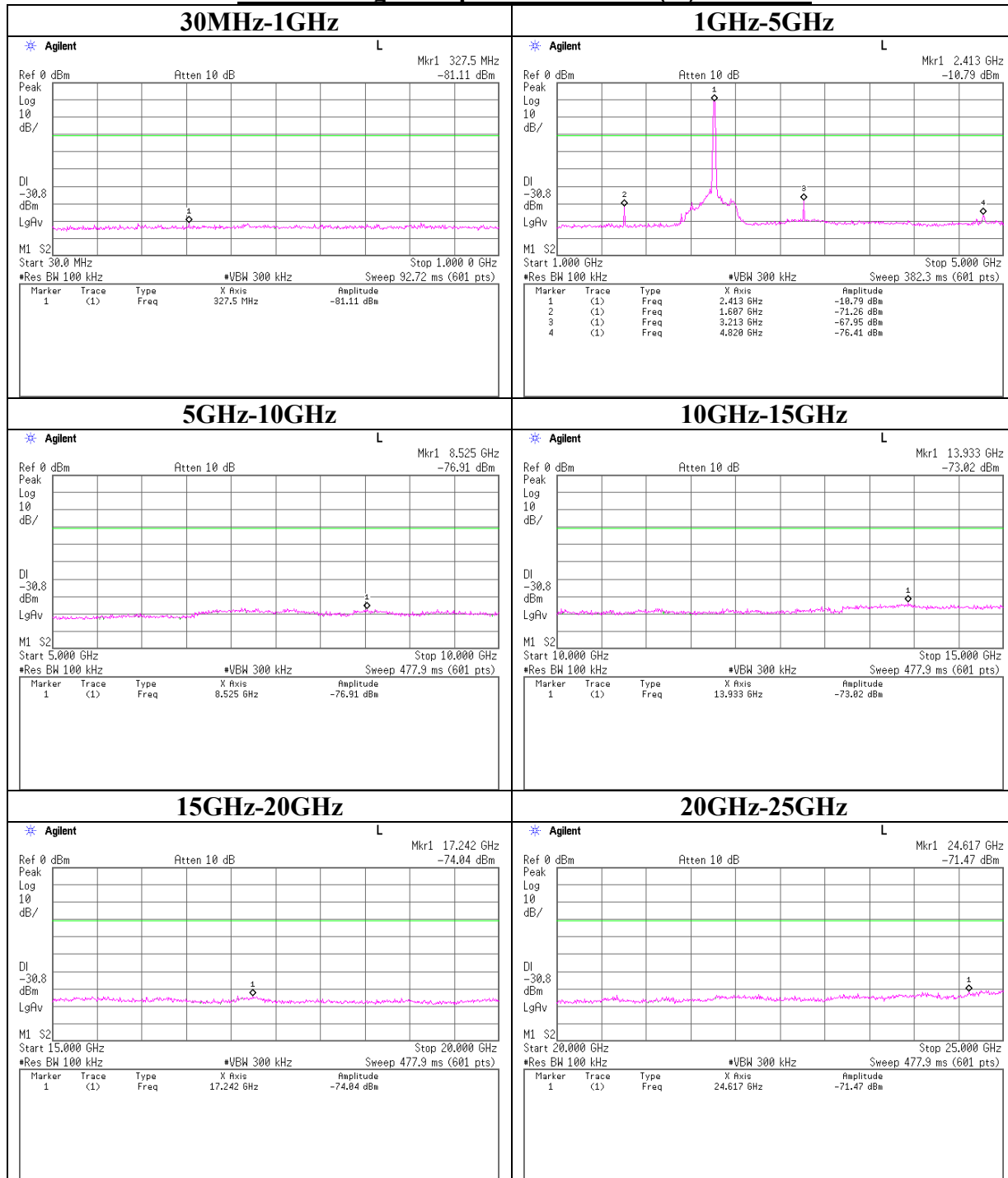
Conducted Spurious Emission(DSSS and other forms of modulation)
IEEE802.11b 11Mbps Antenna: Main (A) Ch : Mid



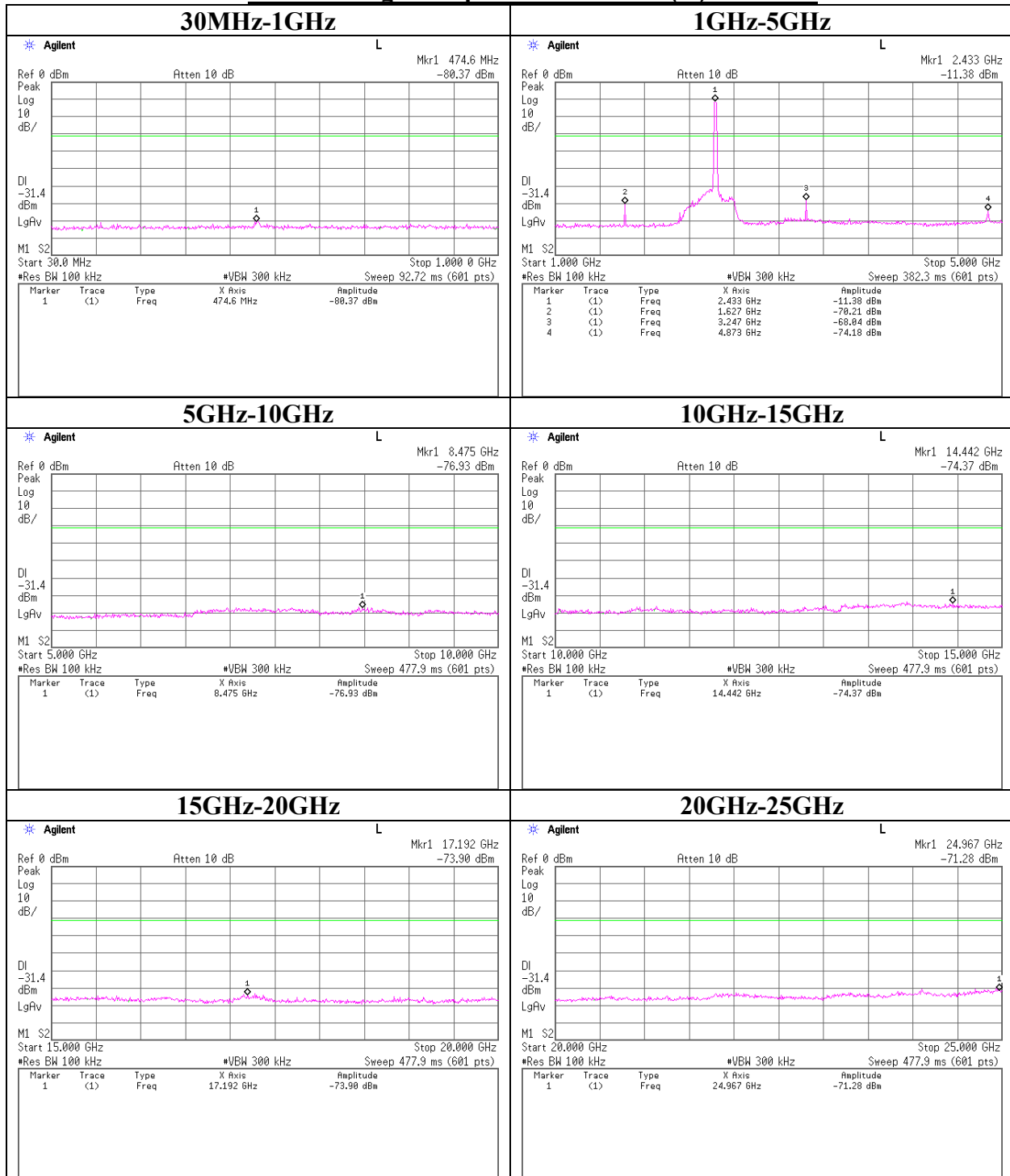
Conducted Spurious Emission(DSSS and other forms of modulation)
IEEE802.11b 11Mbps Antenna: Main (A) Ch : High



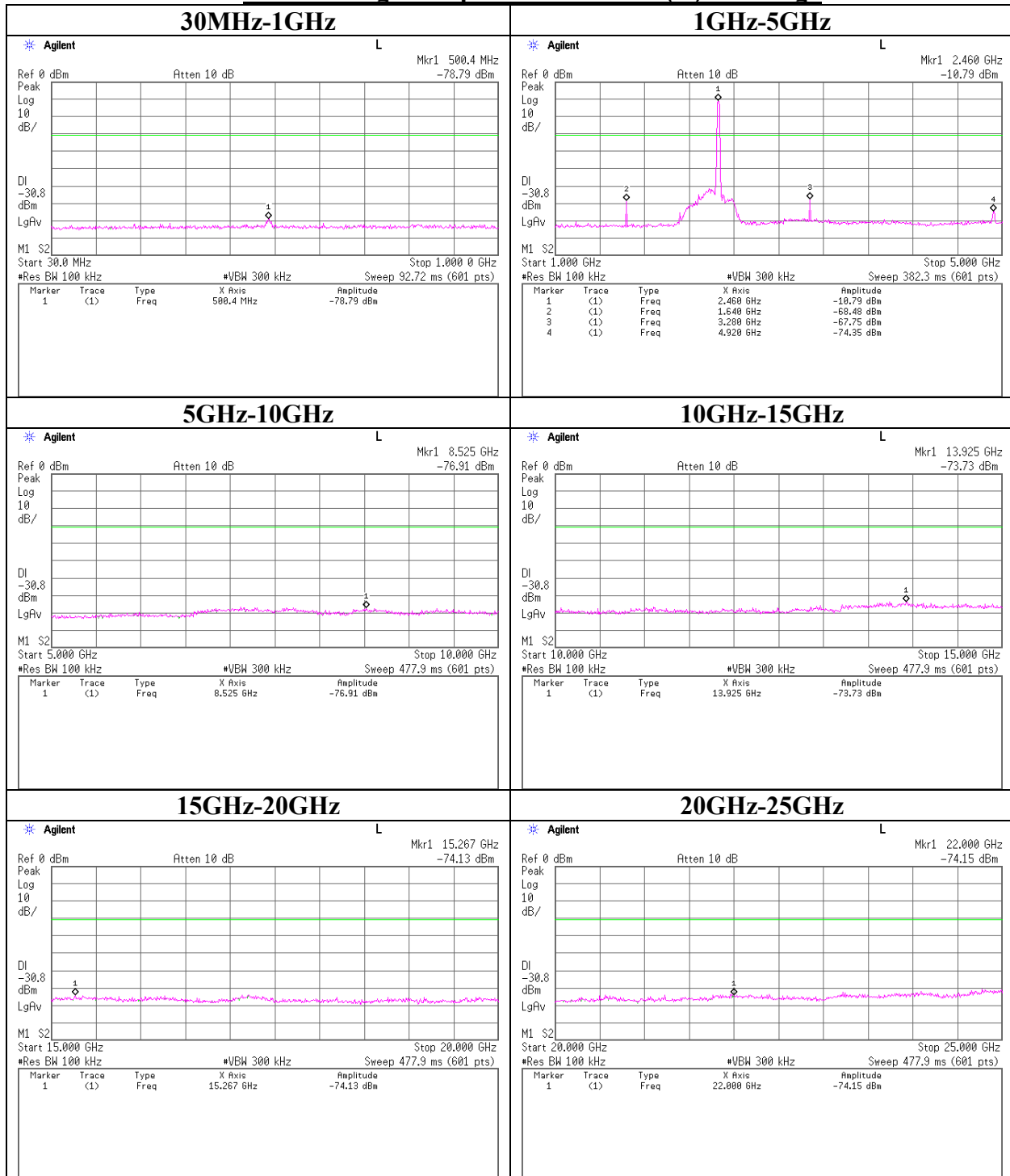
Conducted Spurious Emission(DSSS and other forms of modulation)
IEEE802.11g 54Mbps Antenna: Main (A) Ch : Low



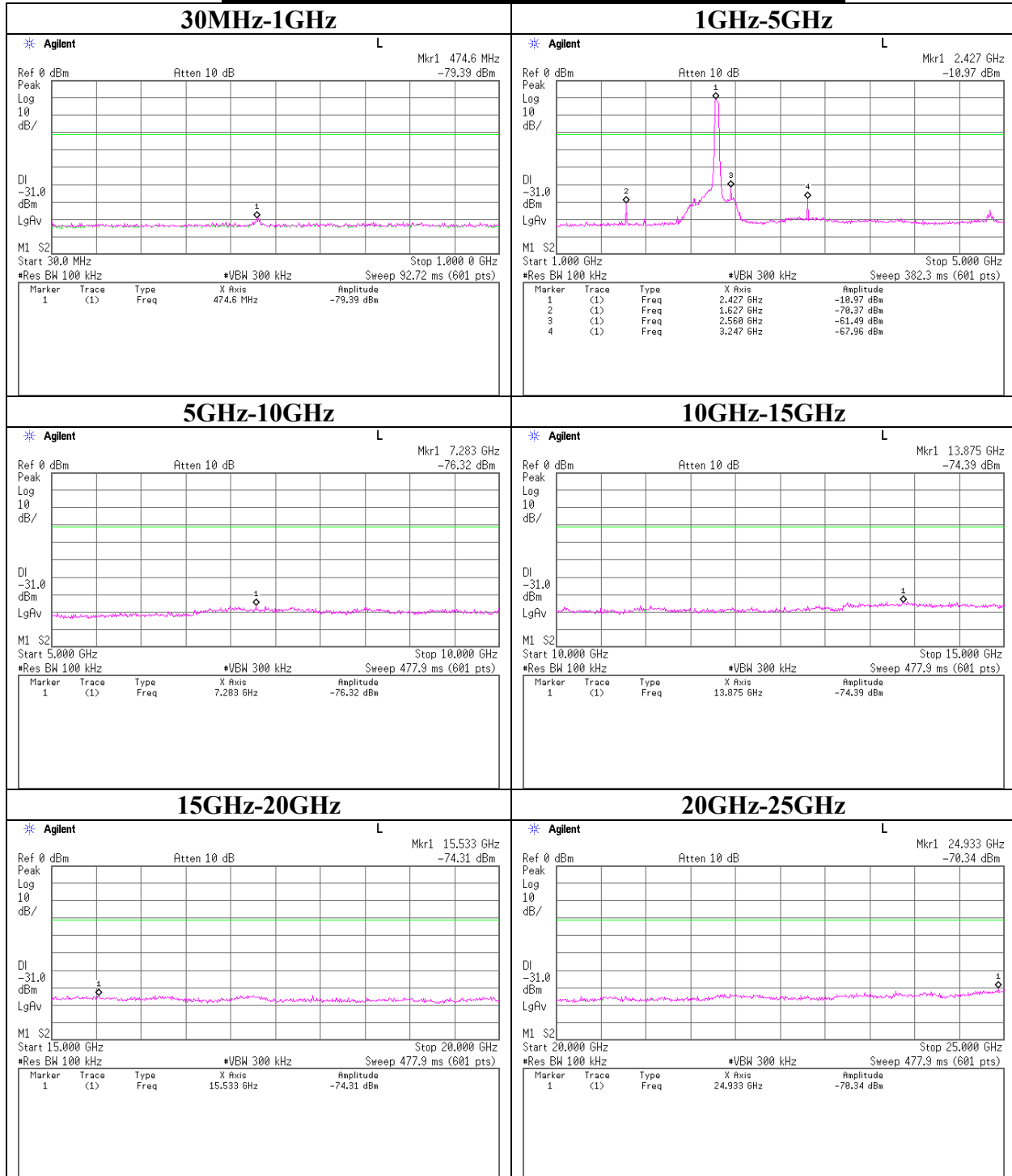
Conducted Spurious Emission(DSSS and other forms of modulation)
IEEE802.11g 54Mbps Antenna: Main (A) Ch : Mid



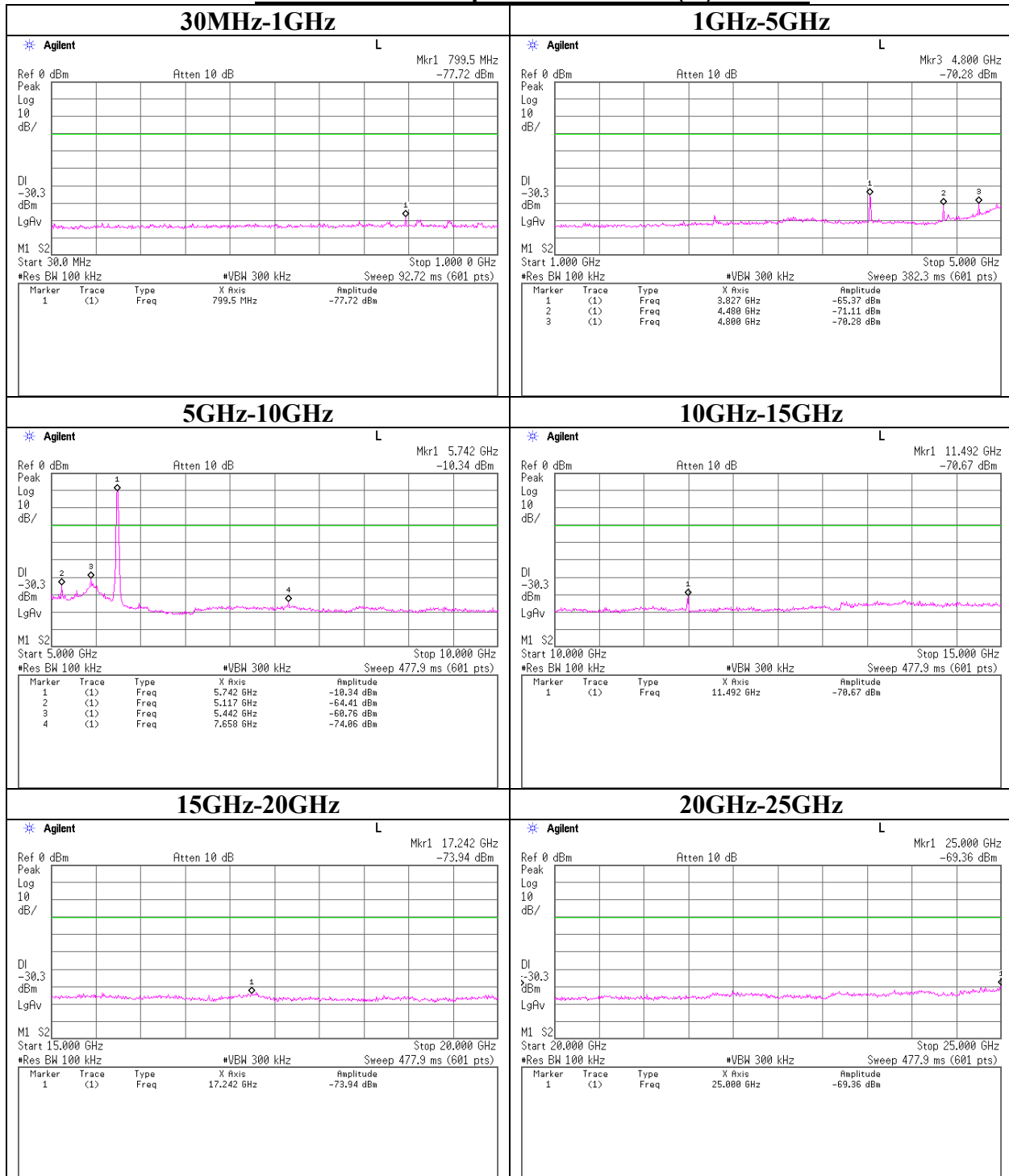
Conducted Spurious Emission(DSSS and other forms of modulation)
IEEE802.11g 54Mbps Antenna: Main (A) Ch : High



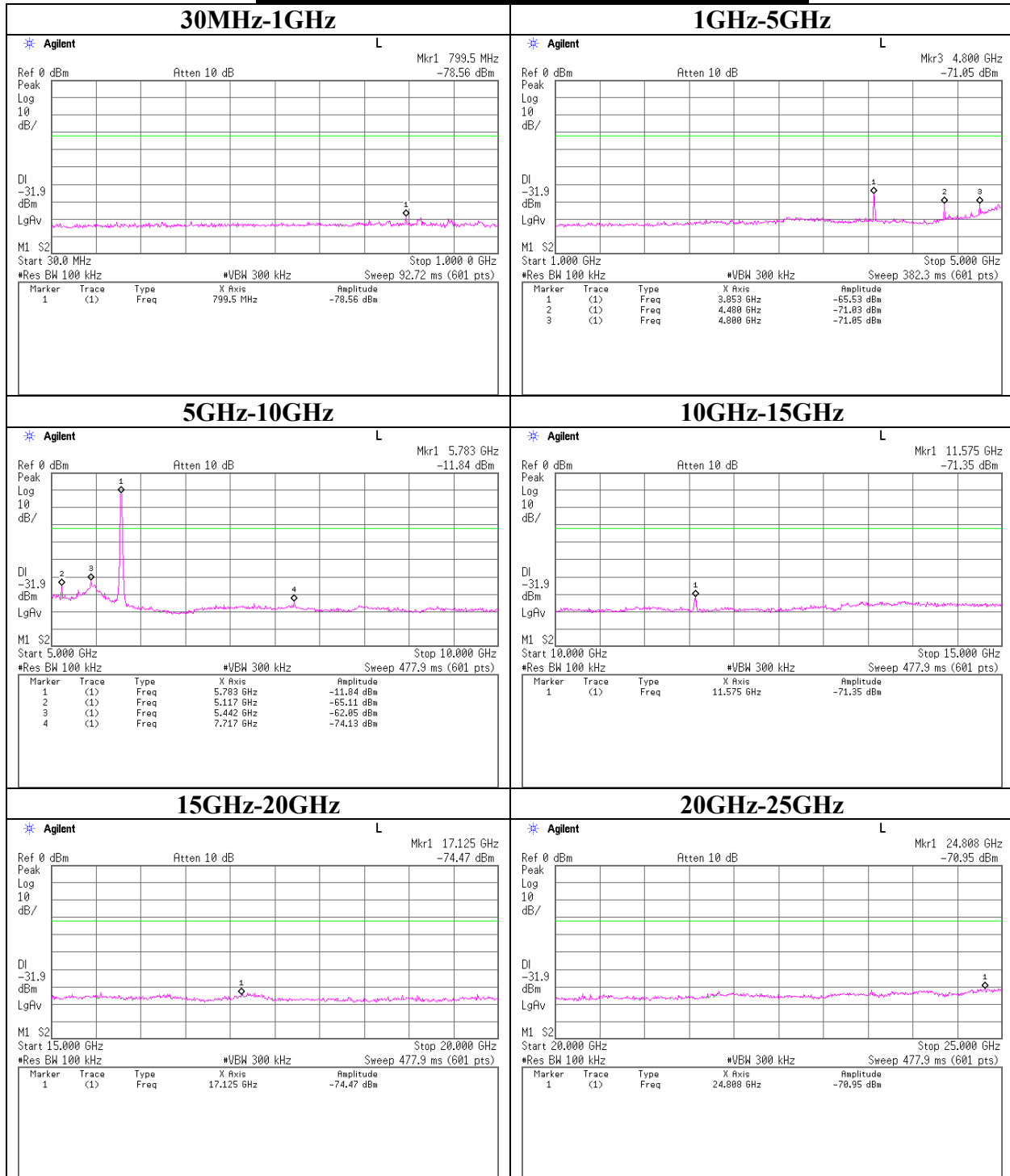
Conducted Spurious Emission(DSSS and other forms of modulation)
IEEE802.11g 108Mbps Antenna: Main (A) Turbo Mode



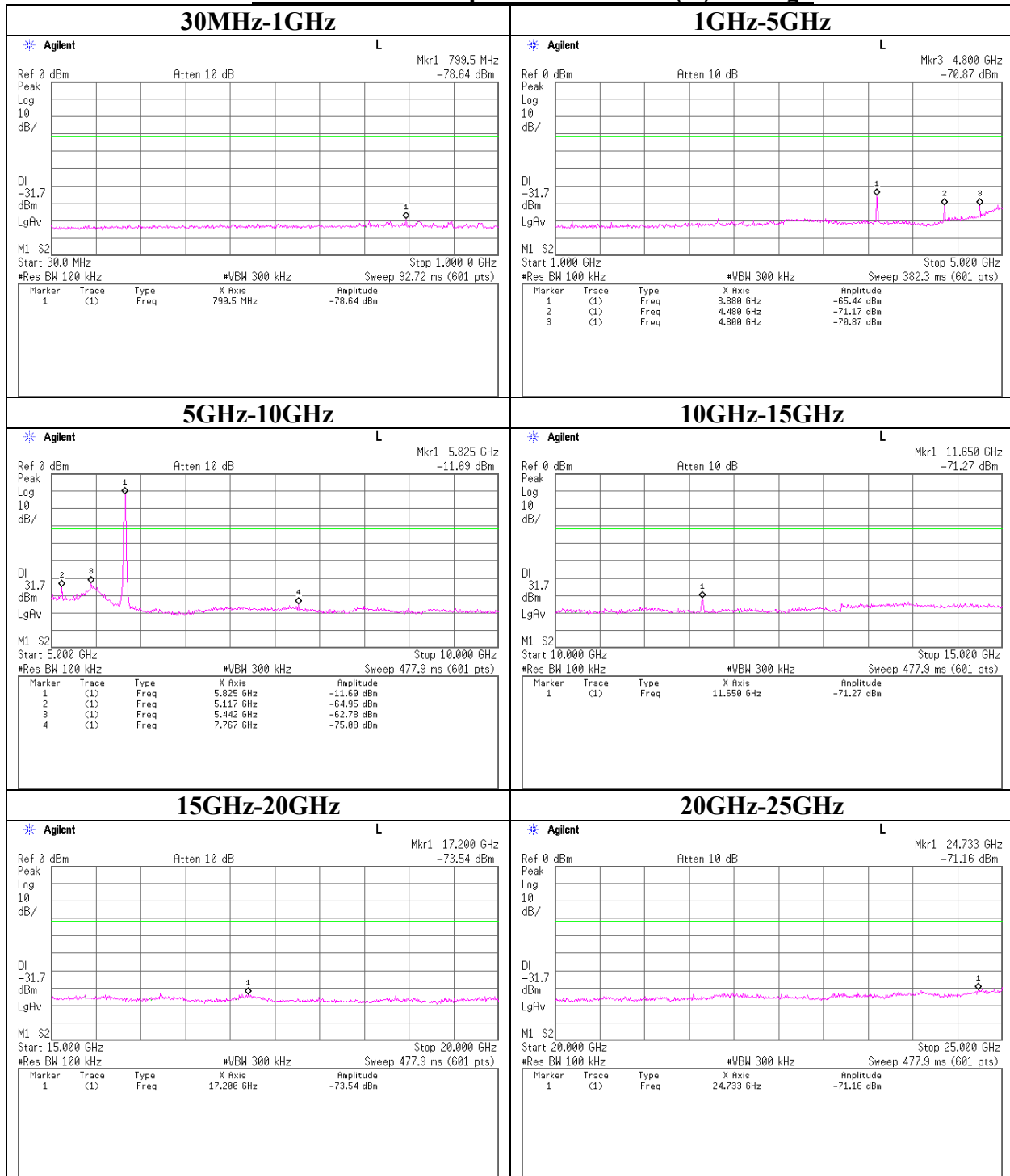
Conducted Spurious Emission(DSSS and other forms of modulation)
IEEE802.11a 54Mbps Antenna: Main (A) Ch:Low



Conducted Spurious Emission(DSSS and other forms of modulation)
IEEE802.11a 54Mbps Antenna: Main (A) Ch:Mid

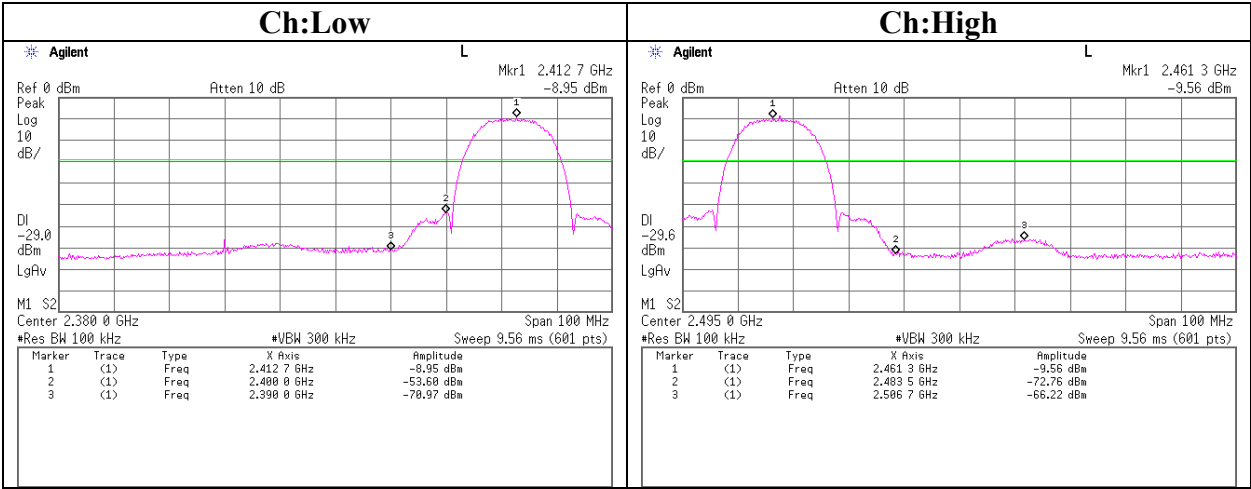


Conducted Spurious Emission(DSSS and other forms of modulation)
IEEE802.11a 54Mbps Antenna: Main (A) Ch:High



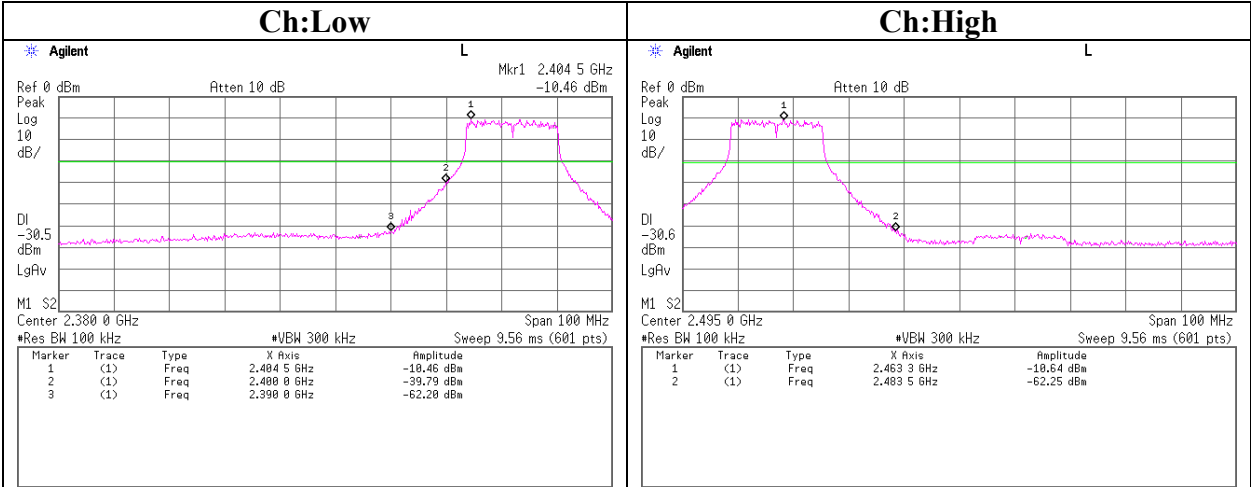
Conducted emission Band Edge compliance (DSSS and other forms of modulation)

IEEE802.11b 11Mbps Antenna: Main (A)



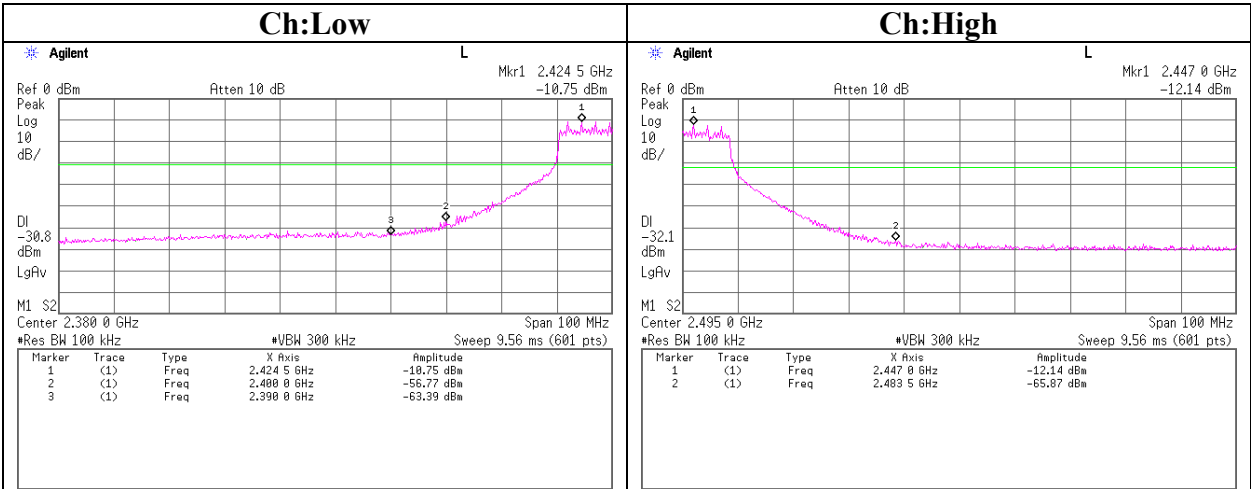
Conducted emission Band Edge compliance (DSSS and other forms of modulation)

IEEE802.11g 54Mbps Antenna: Main (A)



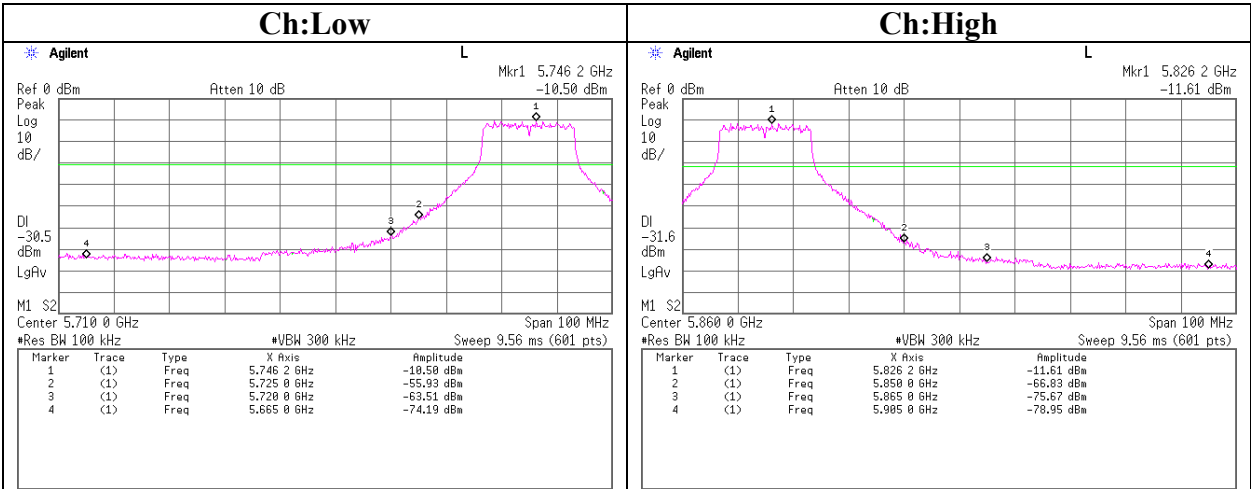
Conducted emission Band Edge compliance (DSSS and other forms of modulation)

IEEE802.11g 108Mbps Antenna: Main (A) Turbo Mode



Conducted emission Band Edge compliance (DSSS and other forms of modulation)

IEEE802.11a 54Mbps Antenna: Main (A)



Power Density (DSSS and other forms of modulation)

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Measurement Room

Company : FUJITSU LIMITED
Equipment : Personal Computer
Model : P1510D
Sample No. : R5100002
Power : AC120V/60Hz
Mode : Tx IEEE 802.11b/g

REPORT NO : 25FE0211-HO
REGULATION : FCC 15.247(b)
TEST DISTANCE : -
DATE : April 08, 2005
TEMPERATURE : 23deg.C
HUMIDITY : 41%
ENGINEER : Keiichi Aoki

[IEEE802.11b : 11Mbps] Antenna: Main (A)

Ch	Freq. [MHz]	Reading [dBm]	Cable [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
Low	2412.0	-23.88	1.04	10.0	-12.8	8.0	20.8
Mid	2437.0	-21.47	1.01	10.0	-10.5	8.0	18.5
High	2462.0	-22.56	0.99	10.0	-11.6	8.0	19.6

[IEEE802.11g : 54Mbps] Antenna: Main (A)

Ch	Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
Low	2412.0	-25.08	1.04	10.0	-14.0	8.0	22.0
Mid	2437.0	-25.48	1.01	10.0	-14.5	8.0	22.5
High	2462.0	-25.02	0.99	10.0	-14.0	8.0	22.0

[IEEE802.11g : 108Mbps] Antenna: Main (A) Turbo Mode

Ch	Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
Mid	2437.0	-28.78	1.01	10.0	-17.8	8.0	25.8

[IEEE802.11a : 54Mbps] Antenna: Main (A) Hight Band

Ch	Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
ch 149	5745.0	-13.02	1.15	10.0	-1.9	8.0	9.9
ch 157	5785.0	-13.54	1.15	10.0	-2.4	8.0	10.4
ch 165	5825.0	-13.39	1.16	10.0	-2.2	8.0	10.2

* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.

UL Apex Co., Ltd.

Head Office EMC Lab.

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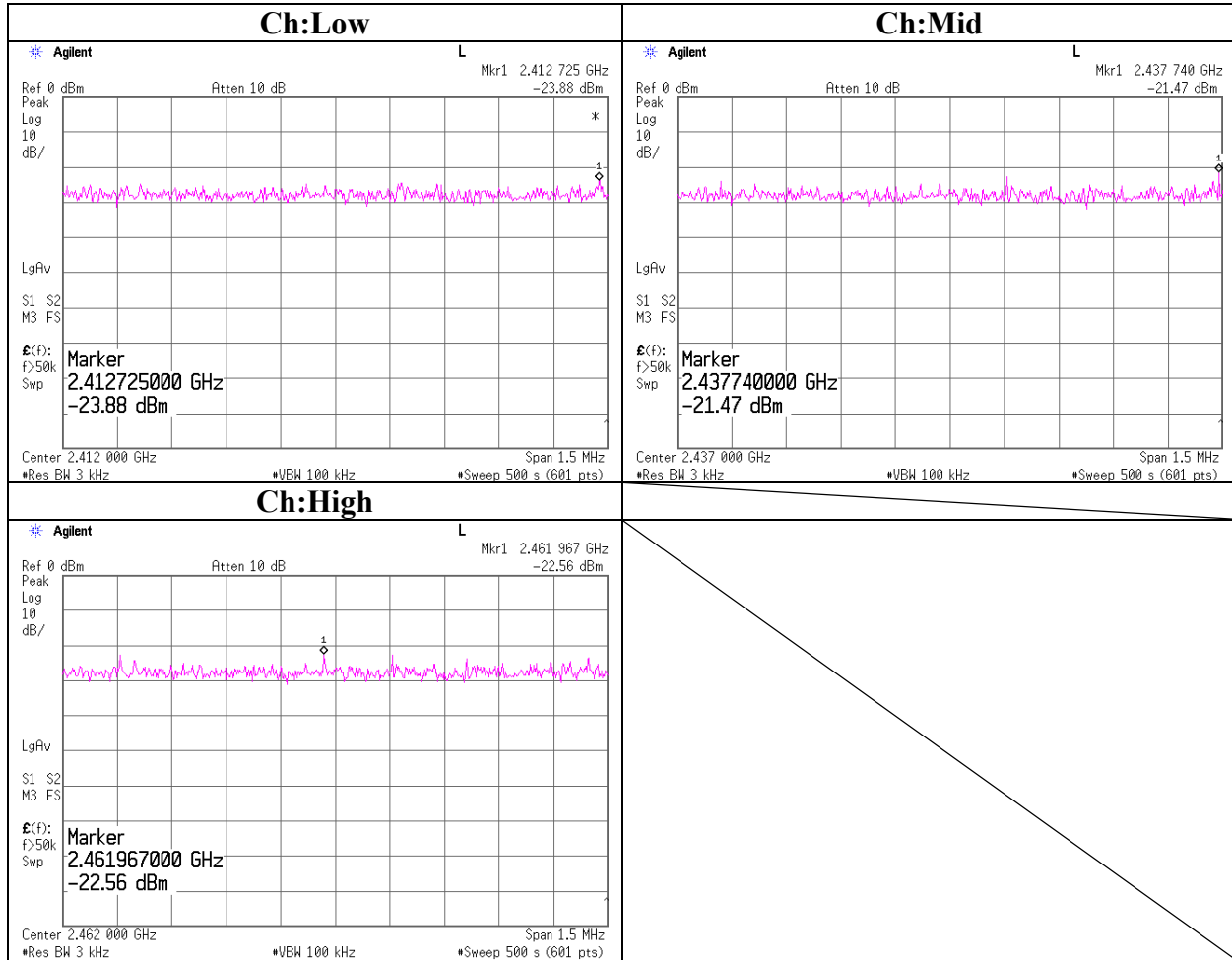
Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

MF060b(01.06.05)

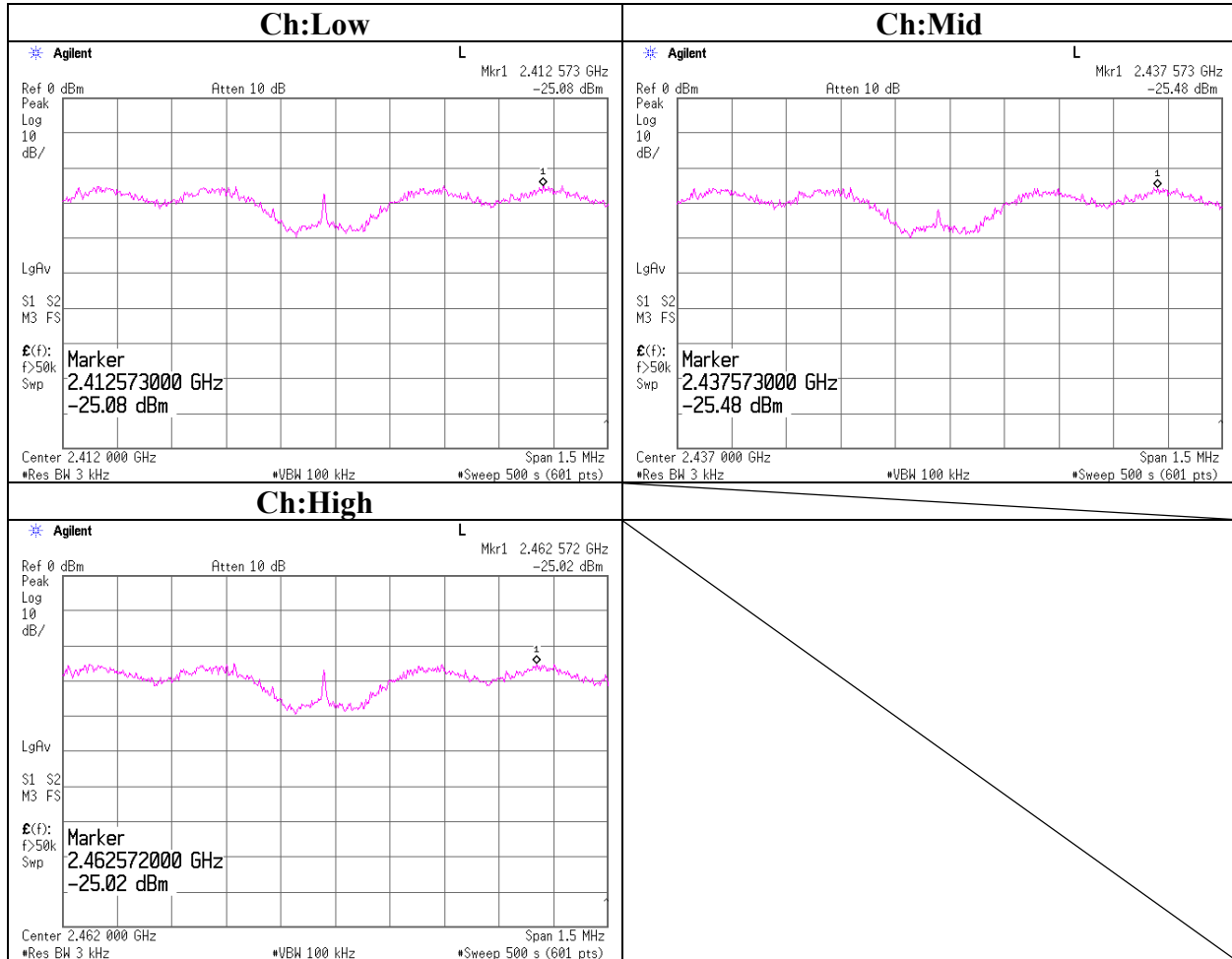
Power Density(DSSS and other forms of modulation)

IEEE802.11b 11Mbps Main Antenna



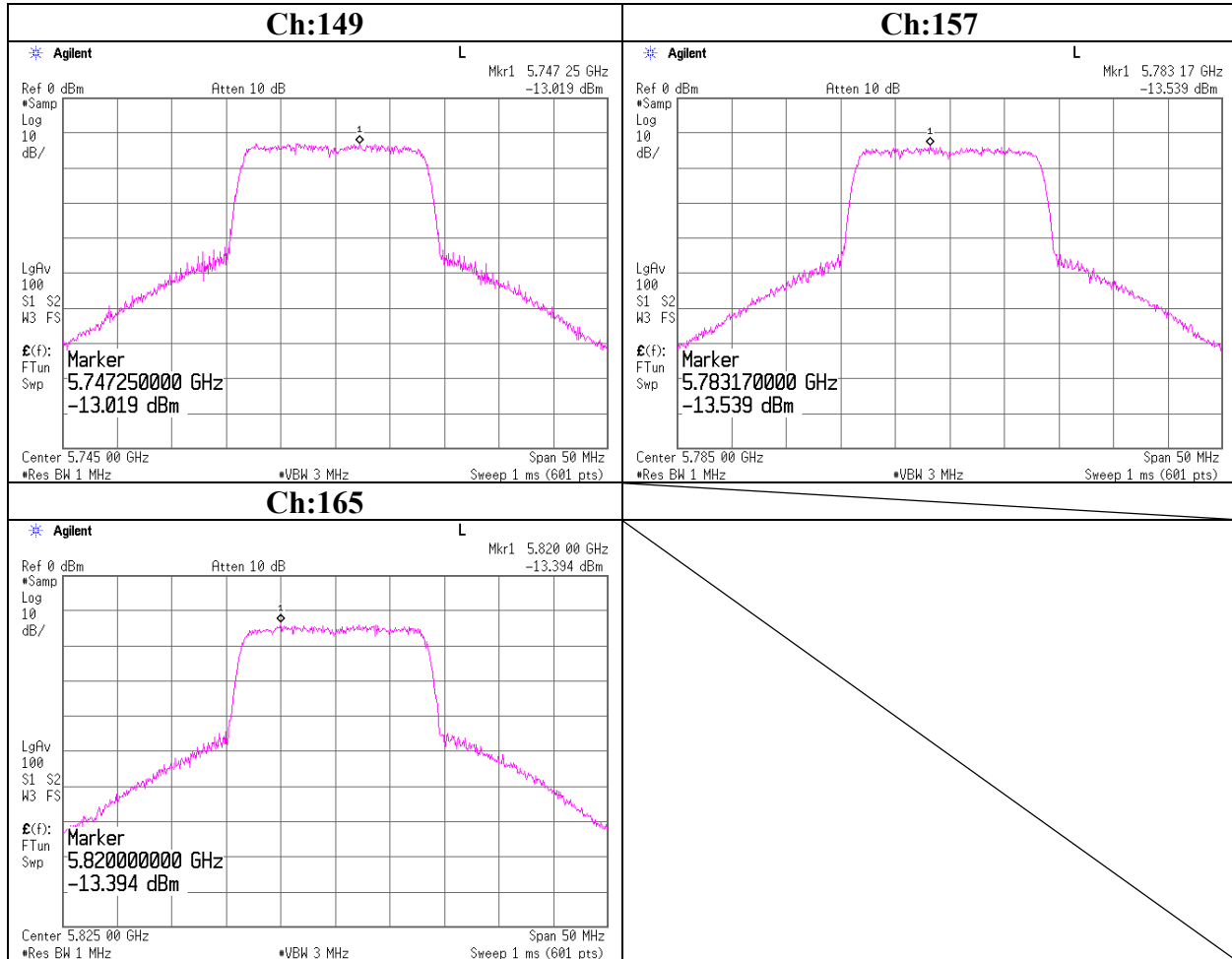
Power Density(DSSS and other forms of modulation)

IEEE802.11g 54Mbps Main Antenna



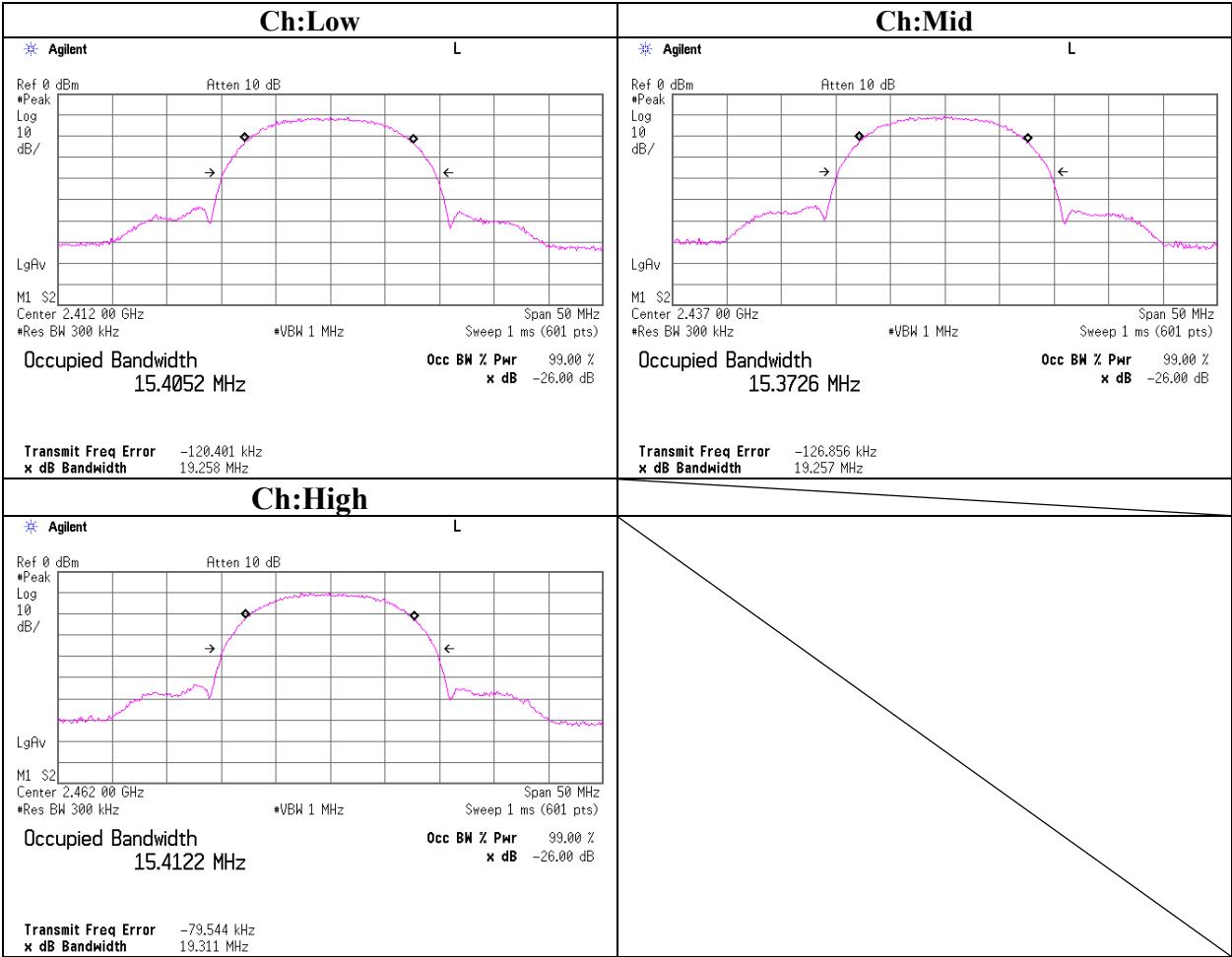
Power Density(DSSS and other forms of modulation)

IEEE802.11a 54Mbps Main Antenna



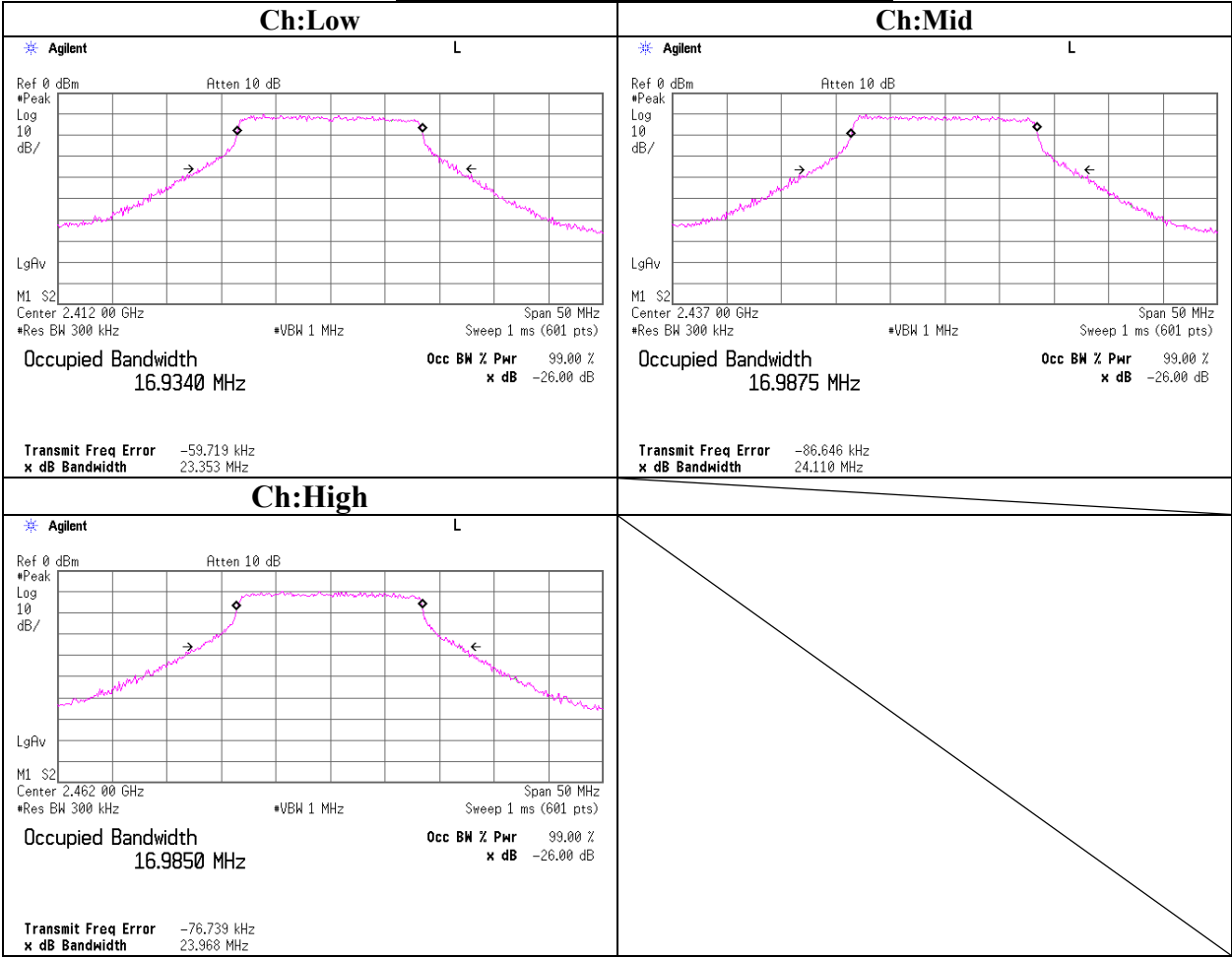
99%Occupied Bandwidth(DSSS and other forms of modulation)

IEEE802.11b 11Mbps Main Antenna



99%Occupied Bandwidth(DSSS and other forms of modulation)

IEEE802.11g 54Mbps Main Antenna



99%Occupied Bandwidth(DSSS and other forms of modulation)

IEEE802.11g 108Mbps Main Antenna Turbo Mode

