EMI TEST REPORT

Test Report No. : 22FE0052-YW-2

Applicant: **SONY Corporation**

Type of Equipment: **Wireless LAN PC Card**

Model No.: **PCWA-C150S**

FCC ID: **AK8PCWAC150S**

Test standard: **FCC Part15 Subpart C, Section 15.247**
***Except §15.247(e) Processing Gain**

Test Result: **Complied**

The results in this report apply only to the sample tested.

Date of test: February 5 and 6, 2002 **Issued date:** February 21, 2002

Tested by: Naoki Sakamoto
Group Leader of EMC section

Approved by: Kazutoyo Nakanishi
Site Operation Manager of EMC section

A-pex International Co., Ltd.
YOKOWA LAB.
108 Yokowa-cho, Ise-shi, Mie-ken 516-1106 JAPAN
Telephone: int +81 596 39 1485
Facsimile: int +81 596 39 0232

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A-pex International Co., Ltd.
YOKOWA LAB.
108 Yokowa-cho, Ise-shi, Mie-ken 516-1106 JAPAN
Telephone: int +81 596 39 1485
Facsimile: int +81 596 39 0232

1 GENERAL INFORMATION

APPLICANT	: SONY Corporation
ADDRESS	: 6-7-35 Kitashinagawa, Shinagawa-ku, Tokyo 141-0001 Japan Tel: +81-3-5795-8716 Fax: +81-3-5795-8981
REGULATION(S)	: FCC Part15 Subpart C, Section 15.247 *Except §15.247(e) Processing Gain
MODEL NUMBER	: PCWA-C150S
SERIAL NUMBER	: 01UT49419208
TYPE OF EQUIPMENT	: Wireless LAN Card
TESTED DATE	: February 5 and 6, 2002
RECEIPT DATE OF SAMPLE	: February 5, 2002
REPORT FILE NUMBER	: 22FE0052-YW-2
TEST SITE	: A-PEX Yokowa No.3 Open Test Site

1.1 Tested Methodology

The measurement was performed according to the procedures in ANSI C63.4(1992).

1.2 Test Facility

The open area site measurement facilities used to collect the radiated data are located at 108, Yokowa-cho, Ise-shi, Mie-ken, 516-1106 Japan.
No.3 test site has been fully described in reports submitted to the FCC office.
This test site has filed to the FCC on September 12, 2000 as number: 90412 and is accepted by Industry Canada on May 01,2001 as number IC2973-3.

2 PRODUCT DESCRIPTION

SONY Corporation, Model PCWA-C150S (referred to as the EUT in this report) is a Wireless LAN PC Card.
The specification is as following :

Wireless LAN : Direct sequence spread spectrum.(IEEE 802.11b)
2412 through 2462MHz (11channels / each 5MHz wide)
Antenna Type: Inverted-F type Antenna
Antenna Connector Type: Proprietary
Antenna Gain: -3.6dBi
I/F:PCMCIA-bus

*FCC Part 15.203 Antenna requirement
The antenna connector of Wireless LAN PC Card, model: PCWA-C1505 is a type of proprietary.
It is a particular connector so that general end user can not change the antenna and it complies with FCC15.203.

2.1 Test System Details

No.	Item	Model number	Serial number	Manufacturer	Remark (FCC ID)
A	Wireless LAN PC Card	PCWA-C150S	01UT49419208	SONY	AK8PCWAC150S (EUT)
B	PCMC1A Adaptor	1-800-600-5710	-	GREYSTONE PERIPHERALS	-
C	Notebook PC	PCG-N505VE	28303130 3211366	SONY	DoC
D	AC Adaptor	PCGA-AC5N	9939 A 0088416	SONY	DoC

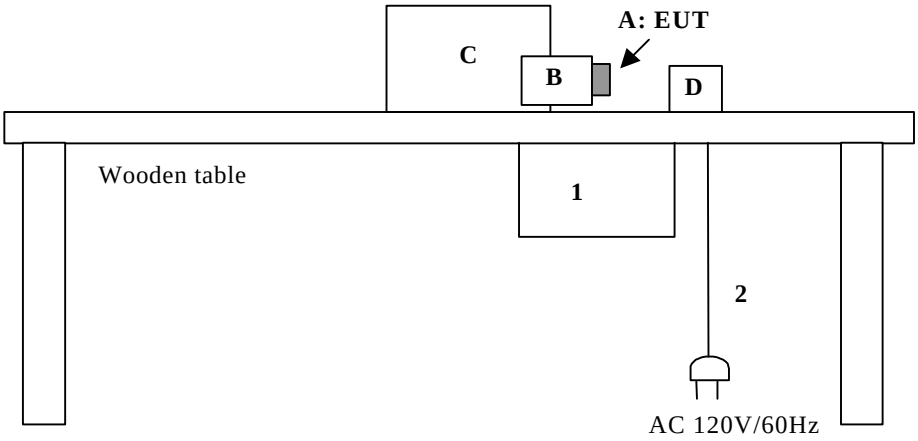
3 SYSTEM TEST CONFIGURATION

3.1 Justification

The system was configured in typical fashion (as a customer would normally use it) for testing.

Test mode : Transmitting mode (11Mdps)
Performed the test about channels 1(low), 6(mid) and 11(high) among 11 channels of all Carrier frequencies.

3.2 Configuration of Tested System



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

List of cables used

No.	Name	Length (m)	Shield	Backshell material	Remark
1	DC Power Cable	1.8	N	Polyvinyl chloride	-
2	AC Power Cable	0.8	N	Polyvinyl chloride	-

4 Measurement Uncertainty

Conducted Emission Test

The measurement uncertainty (with a 95% confidence level) for this test was ±2.0dB.

The data listed in this test report has enough margin, more than site margin.

Radiated Emission Test

The measurement uncertainty (with a 95% confidence level) for this test using Biconical antenna is ±4.4dB.
The measurement uncertainty (with a 95% confidence level) for this test using Logperiodic antenna is ±3.2dB.
The measurement uncertainty (with a 95% confidence level) for this test using Horn antenna is ±5.8dB.

The data listed in this test report may exceed the test limit because it does not have enough margin.

5 TEST EQUIPMENT USED

Name	Manufacturer	Model	Control No.	Calibrated Until
Pre Amplifier	Hewlett Packard	8447D	AF-01	March 30, 2002
Pre Amplifier	Agilent	HP8449B	AF-06	December 20, 2002
Attenuator(6dB)	Anritsu	MP721B	AT-06	March 30, 2002
Attenuator(10dB)	Hirose Electric	ATT-106	AT-20	December 03, 2002
Biconical Antenna	Schwarzbeck	BBA9106	BA-03	April 30, 2002
Logperiodic Antenna	Schwarzbeck	UHALP9108-A	LA-06	April 30, 2002
LISN	Rohde & Schwarz	ESH3-Z5	LS-02	November 5, 2002
Horn Antenna	AH System, Inc	SAS-200/571	HA-02	May 19, 2002
Horn Antenna	Schwarzbeck	BBHA9170	EST-10	October 16, 2004
High Pass Filter	Tokimec	TF323DCA	HF-04	October 14, 2002
Spectrum Analyzer	Hewlett packard	8567A	SA-04	March 30, 2002
Spectrum Analyzer	Advantest	R3273	SA-06	November 19, 2002
Test Receiver	Rohde & Schwarz	ESHS10	TR-05	August 23, 2002
Test Receiver	Rohde & Schwarz	ESVS10	TR-06	November 21, 2002
Power Sensor	Hewlett packard	ECP-E18A	PS-01	May 28, 2002
Power Meter	Hewlett packard	EPM-442A	PM-01	May 28, 2002
Microwave Cable	Suhner	SUCOFLEX	CC-C12	January 12, 2003
Microwave Cable	Suhner	SUCOFLEX	CC-C13	January 12, 2003
Yokowa No.3 open Coaxial(0.01-1000MHz)	A-PEX	CC-31~CC-37, SW-31,SW-32	CC-3ORC	March 30, 2002
Yokowa No.3 shield Coaxial(0.01-30MHz)	A-PEX	CC-35~CC-38, SW-31,SW-32	CC-3SC	March 30, 2002
No.3 Open Test Site	JSE	10m	YOATS-03	April 30, 2002

All measurement equipment is traceable to national standards.

6 SUMMARY OF TESTS

6.1 §15.207 Conducted Emissions

Test Procedure
EUT was placed on a platform of nominal size, 1m by 1m, 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 flushes with rear of tabletop. All other surfaces of tabletop were at least 80cm from any other grounded conducting surface. I/O cables 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. Each EUT current-carrying power lead, except the ground (safety) lead, was individually connected through a LISN to the input power source. All unused 50ohm connectors of the LISN 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 on a shielded room.
The EUT was connected to a Line Impedance Stabilization Network (LISN).
An overview sweep with peak detection has been performed.
The measurements have been performed with a CISPR quasi-peak detector(IF BW 10kHz) .
(Measurement range : 450kHz to 30MHz)

Test data : APPENDIX A1 to A5
Photographs of test setup : Page 12(1)
Test result : Pass
Test instruments : LS-02, SA-04, TR-05, CC-3SC

6.2 § 15.247(a)(2) 6dB Bandwidth

Test Procedure
The minimum 6dB bandwidth was measured with a spectrum analyzer connected to the antenna port.

1. 2412MHz(Low) : 10.10MHz > 500kHz
2. 2437MHz(Mid) : 9.18MHz > 500kHz
3. 2462MHz(High) : 9.94MHz > 500kHz

Test data : APPENDIX A6
Test result : Pass
Test instruments : SA-06

6.3 § 15.247(b) Maximum Peak Out Put Power(Conducted)

Test Procedure
The Maximum Peak Output power was measured with a power meter connected to the antenna port.
According to FCC 15.31(e), change of maximum output power and frequency was monitored by spectrum analyzer during supply voltage(AC Adaptor) to host PC was changed to AC102V(85%)～AC138V(115%).
Since regulated voltage is always supplied to Wireless LAN PC Card from host PC, there were no change about both of maximum output power and frequency and found that it complies with requirements of FCC 15.31(e).
* Antenna Gain dose not exceed 6dBi.

Test data : APPENDIX A7
Test result : Pass
Test instruments : PS-01, PM-01, SA-06

6.4 § 15.247(c) Out of Band Emissions(Radiated)

Test Procedure
EUT was placed on a platform of nominal size, 1m by 1.5m, raised 80cm above the conducting ground plane.
I/O 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 40cm height to the ground plane. Test was made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna was varied in height above the conducting ground plane to obtain the maximum signal strength.
The Radiated Electric Field Strength intensity has been measured on an open test site with a ground plane and at a distance of 3m.
The measuring antenna height was varied between 1 to 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.
EUT emission levels were compared when the EUT antenna position was vertical polarization and horizontal polarization.

Radiated Spurious emissions
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. The result was also satisfied the general limits specified in Sec.15.209(a).
Measurement range : 30MHz to 1000MHz CISPR QP Detector, IF BW 120kHz
: 1GHz to 26GHz PK and AV Detector

Test data : APPENDIX A8 to A10(30 - 1000MHz)
: APPENDIX A11 to A13(1 - 26GHz)
: APEENDIX A14 to A18(Band Edges: 2.39GHz and 2.4835GHz)
Photographs of test setup : Page13(2)
Test result : Pass
Test instruments : AF-01, AF-06, AT-06, AT-20, BA-03, LA-06, HA-02, EST-10, HF-04, SA-04, SA-06, TR-06, CC-3ORC, CC-12, CC-13, YOATS-03

6.5 § 15.247(c) Out of Band Emissions(Conducted)

Test Procedure
The Out of Band Emissions(Conducted) was measured with a spectrum analyzer connected to the antenna port.

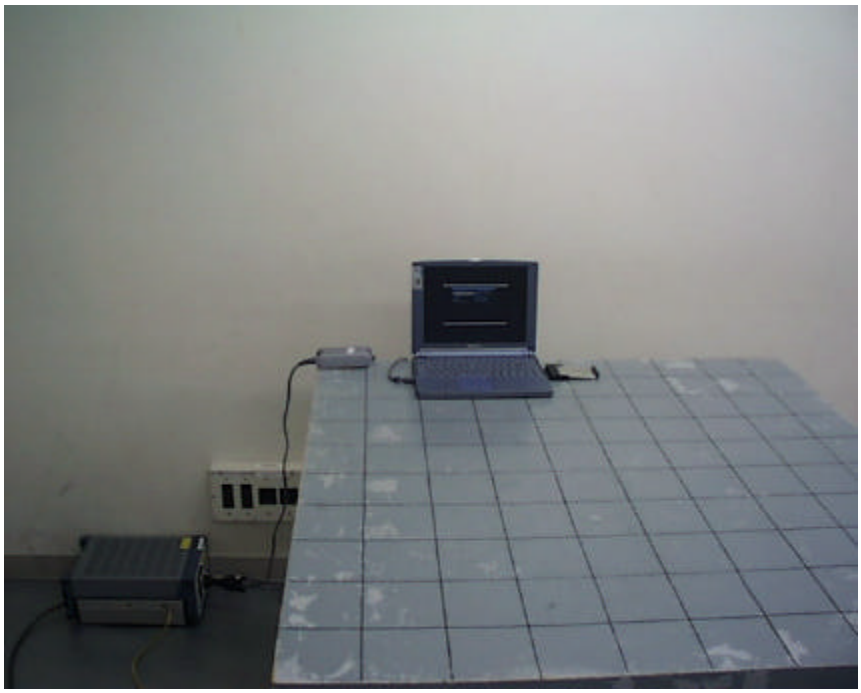
Test data : APPENDIX A19 to A29
Test result : Pass
Test instruments : SA-06

6.6 § 15.247(d) Power Density(Conducted)

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

Test data : APPENDIX A30 to A31
Test result : Pass
Test instruments : SA-06

Photographs of test setup(1)



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Photographs of test setup(2)

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APPENDIX

Test Data

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DATA OF CONDUCTION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.2 OPEN TEST SITE
Report No. : 22FE0052-YW-2

Applicant	: SONY Corporation
Kind of Equipment	: Wireless LAN PC Card
Model No.	: PCWA-C150S
Serial No.	:
Power	: AC120V/60Hz
Mode	: Transmitting(2412MHz)
Remarks	: FCC ID:AK8PCWAC150S
Date	: 2/6/2002
Phase	: Single Phase
Temperature	: 21 ℃
Humidity	: 31 %
Regulation	: FCC Part15.207

Engineer : Naoki Sakamoto

No.	FREQ.	READING(N) QP		AV	READING(L1) QP		AV	LISN FACTOR	CABLE LOSS	ATTEN.	RESULT QP		AV	LIMITS QP		AV	MARGIN QP		AV
	[MHz]	[dBuV]			[dBuV]			[dB]	[dB]	[dB]	[dBuV]			[dBuV]			[dB]		
1.	0.4500	26.3	-		26.8	-		0.1	0.2	0.0	27.1	-		48.0	0.0		20.9	-	
2.	0.4945	28.4	-		29.4	-		0.1	0.2	0.0	29.7	-		48.0	0.0		18.3	-	
3.	1.8965	15.3	-		19.5	-		0.2	0.4	0.0	20.1	-		48.0	0.0		27.9	-	
4.	2.7204	13.7	-		20.1	-		0.2	0.5	0.0	20.8	-		48.0	0.0		27.2	-	
5.	5.0301	19.3	-		20.4	-		0.3	0.7	0.0	21.4	-		48.0	0.0		26.6	-	
6.	9.5628	29.5	-		28.5	-		0.5	1.0	0.0	31.0	-		48.0	0.0		17.0	-	
7.	16.0000	31.3	-		30.4	-		0.7	1.3	0.0	33.3	-		48.0	0.0		14.7	-	
8.	20.1136	30.0	-		28.7	-		0.9	1.4	0.0	32.3	-		48.0	0.0		15.7	-	

CALCULATION: READING + LISN FACTOR + CABLE LOSS + ATTEN.

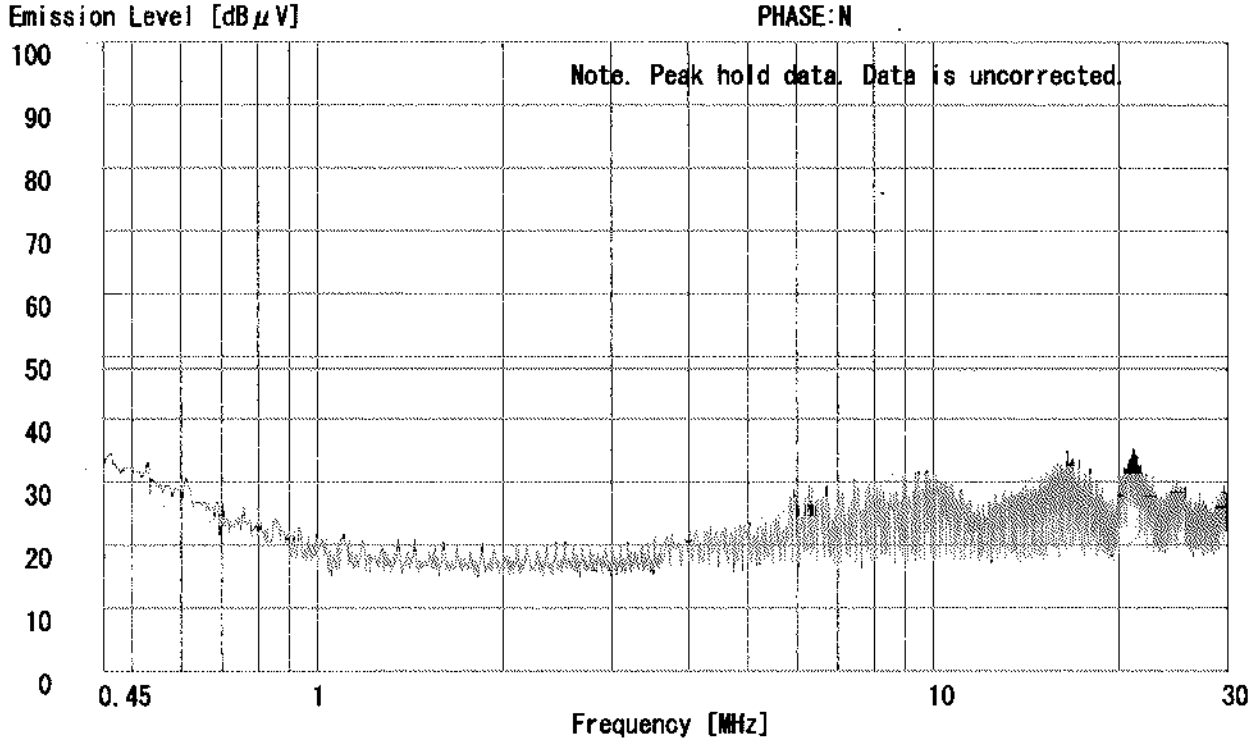
All other spurious emissions were less than 20dB for the limit.

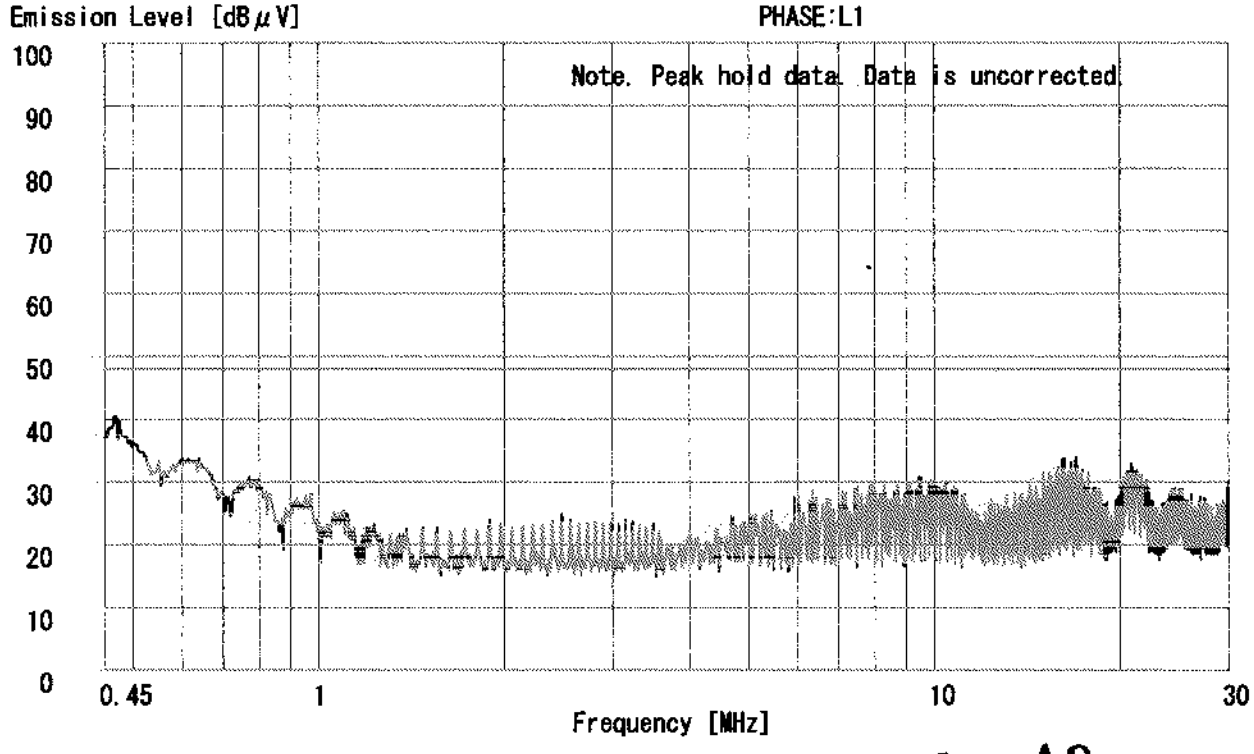
DATA OF CONDUCTION TEST CHART

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.2 OPEN TEST SITE
Report No. : 22FE0052-YW-2

Applicant	:	SONY Corporation
Kind of Equipment	:	Wireless LAN PC Card
Model No.	:	PCWA-C150S
Serial No.	:	
Power	:	AC120V/60Hz
Mode	:	Transmitting(2412MHz)
Remarks	:	FCC ID:AK8PCWA150S
Date	:	2/6/2002
Phase	:	Single Phase
Temperature	:	22 ℃
Humidity	:	31 %
Regulation 1	:	FCC Part15.207
Regulation 2	:	None

Engineer : Naoki Sakamoto



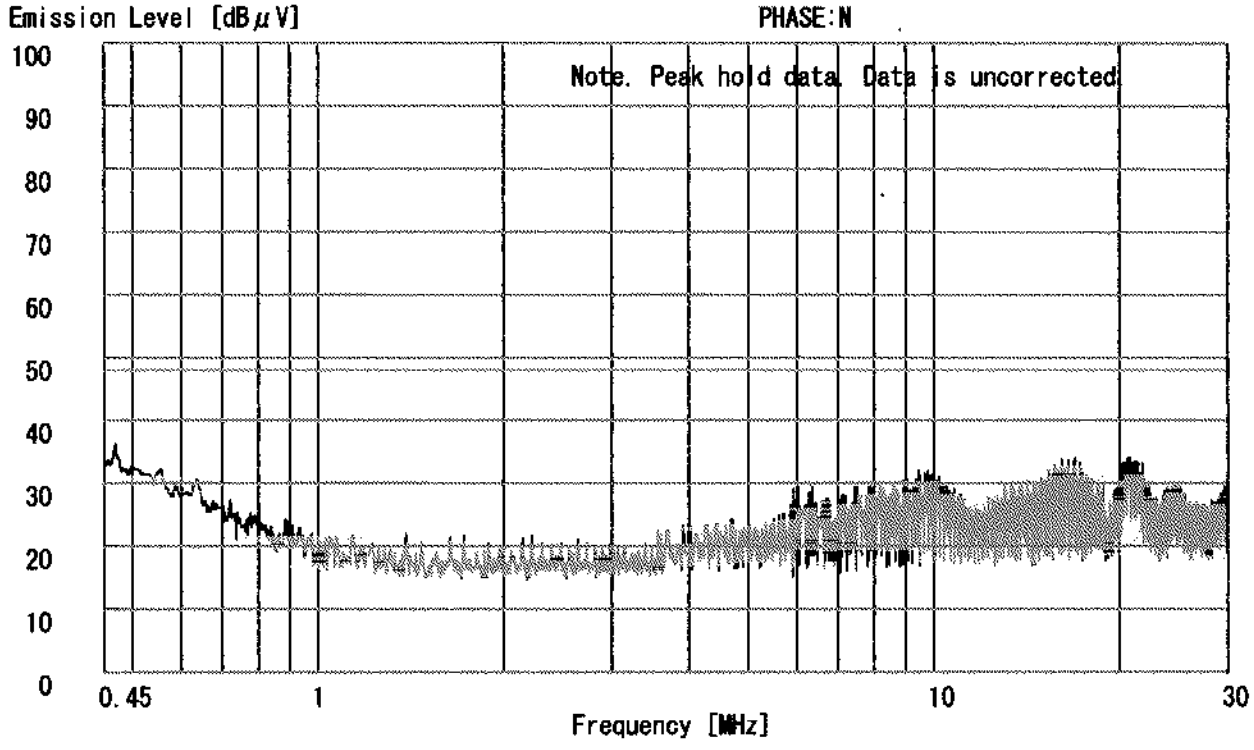


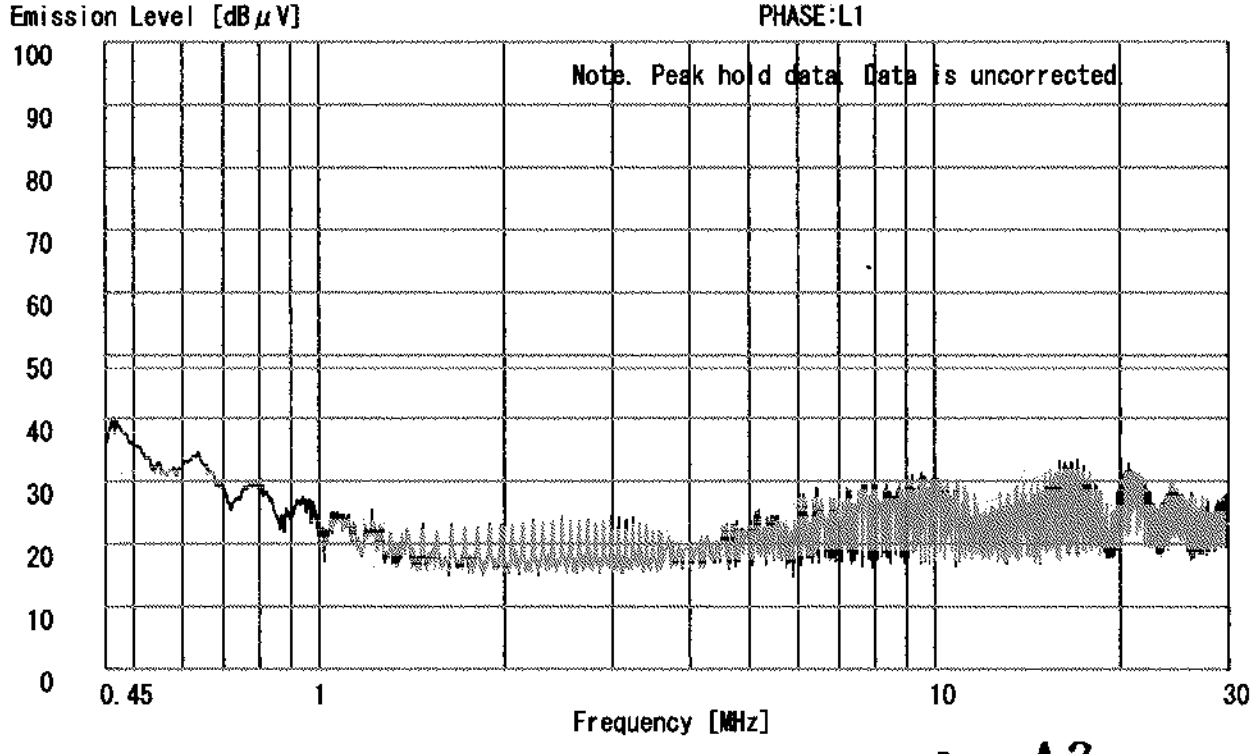
DATA OF CONDUCTION TEST CHART

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.2 OPEN TEST SITE
Report No.: 22FE0052-YW-2

Applicant	: SONY Corporation
Kind of Equipment	: Wireless LAN PC Card
Model No.	: PCWA-C150S
Serial No.	:
Power	: AC120V/60Hz
Mode	: Transmitting(2437MHz)
Remarks	: FCC ID:AK8PCWA150S
Date	: 2/6/2002
Phase	: Single Phase
Temperature	: 22 ℃
Humidity	: 31 %
Regulation 1	: FCC Part15.207
Regulation 2	: None

Engineer : Naoki Sakamoto



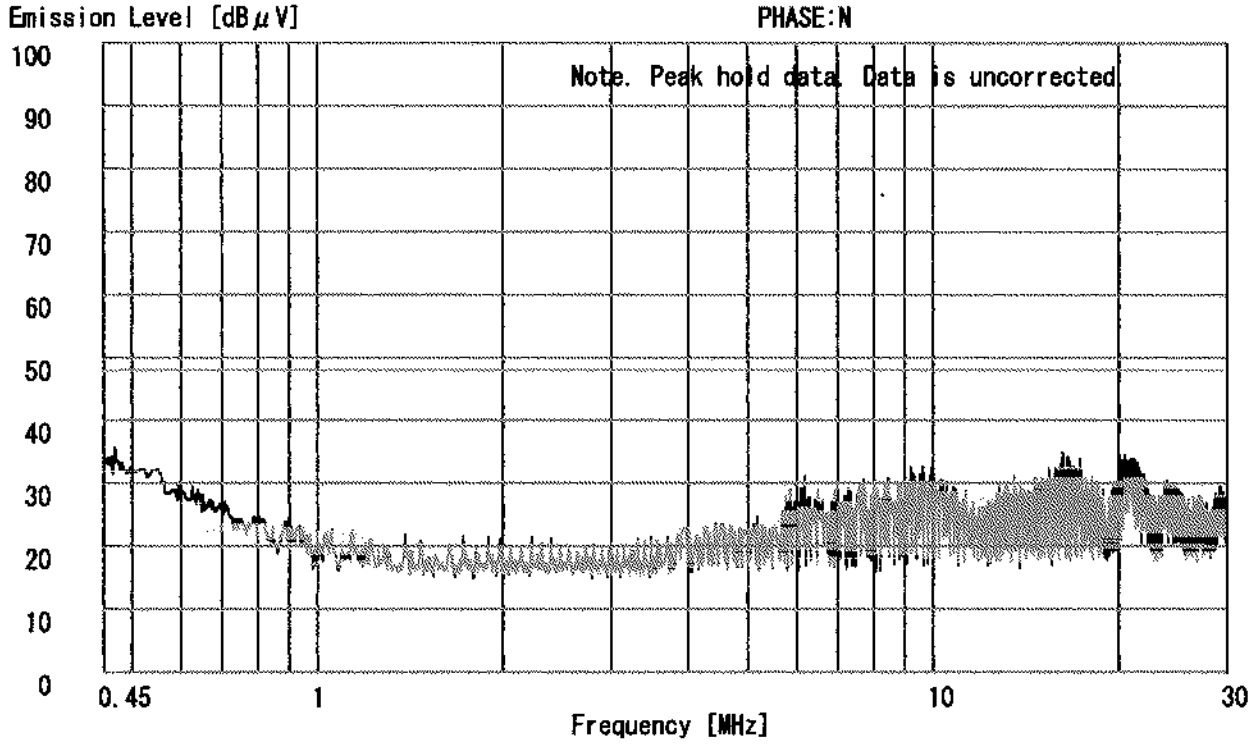


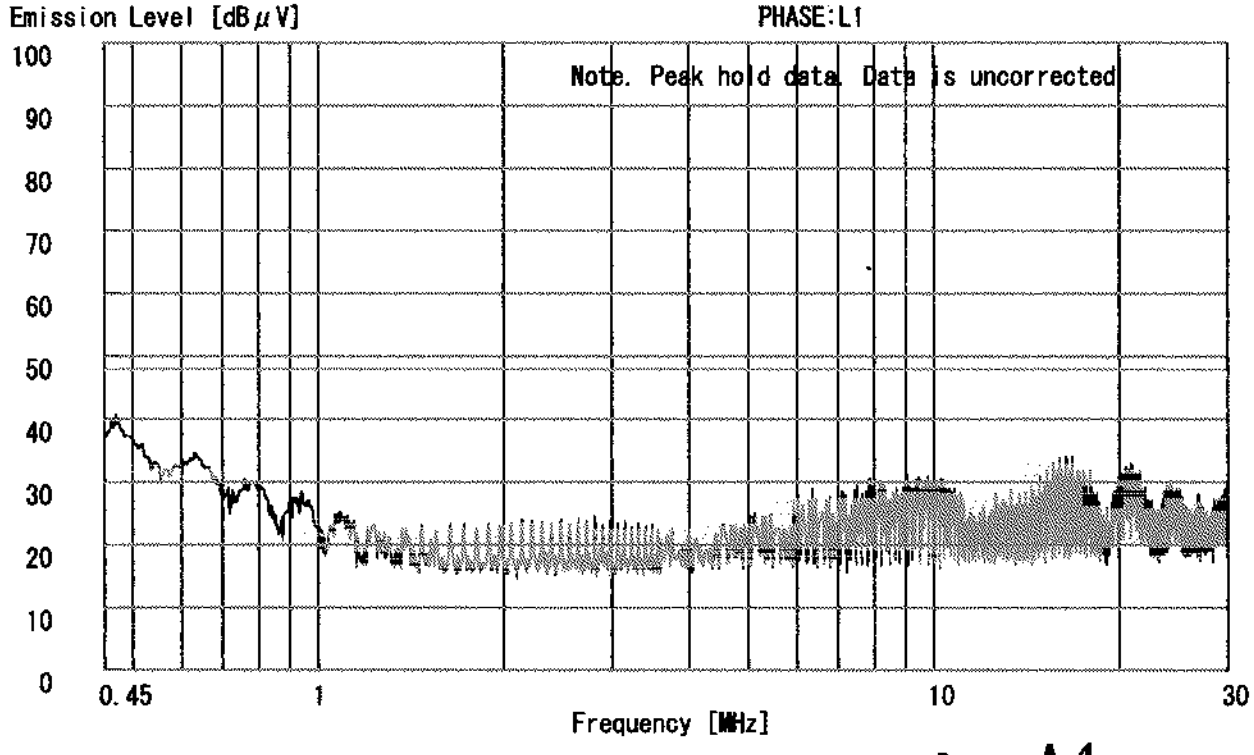
DATA OF CONDUCTION TEST CHART

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.2 OPEN TEST SITE
Report No. : 22FE0052-YW-2

Applicant	:	SONY Corporation
Kind of Equipment	:	Wireless LAN PC Card
Model No.	:	PCWA-C150S
Serial No.	:	
Power	:	AC120V/60Hz
Mode	:	Transmitting(2462MHz)
Remarks	:	FCC ID:AK8PCWA150S
Date	:	2/6/2002
Phase	:	Single Phase
Temperature	:	22 ℃
Humidity	:	31 %
Regulation 1	:	FCC Part15.207
Regulation 2	:	None

Engineer : Naoki Sakamoto



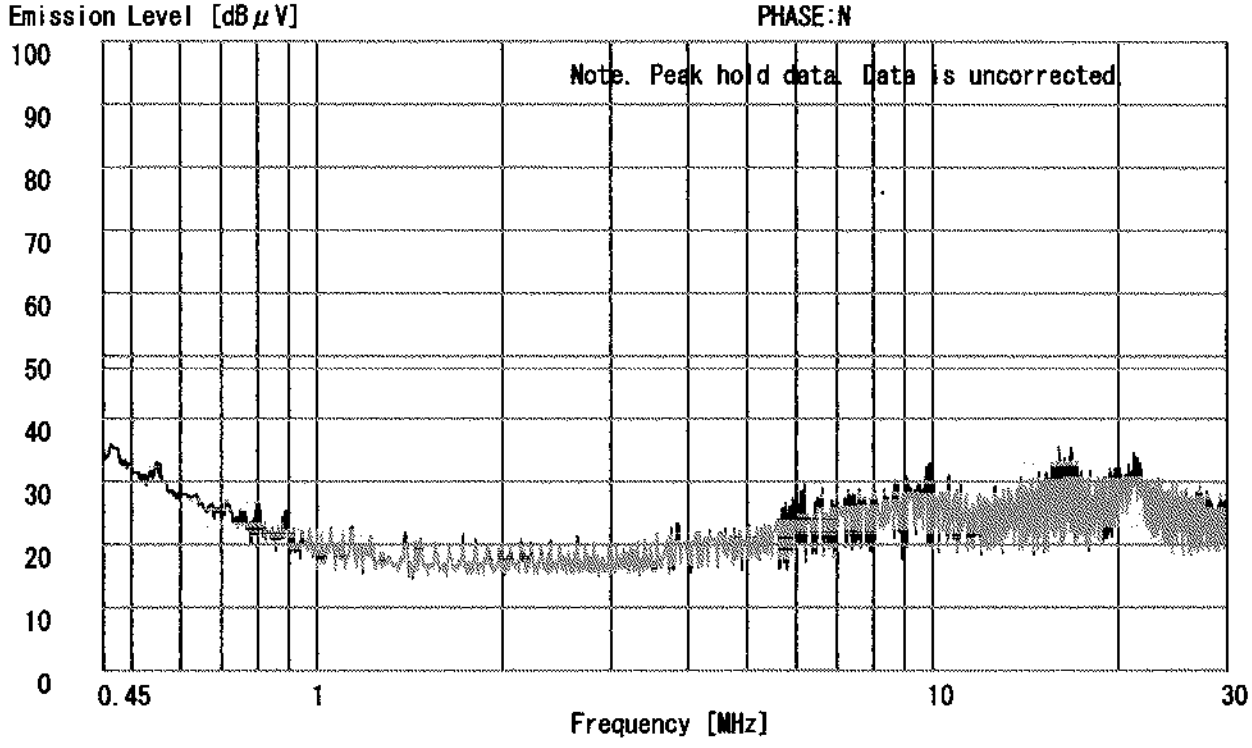


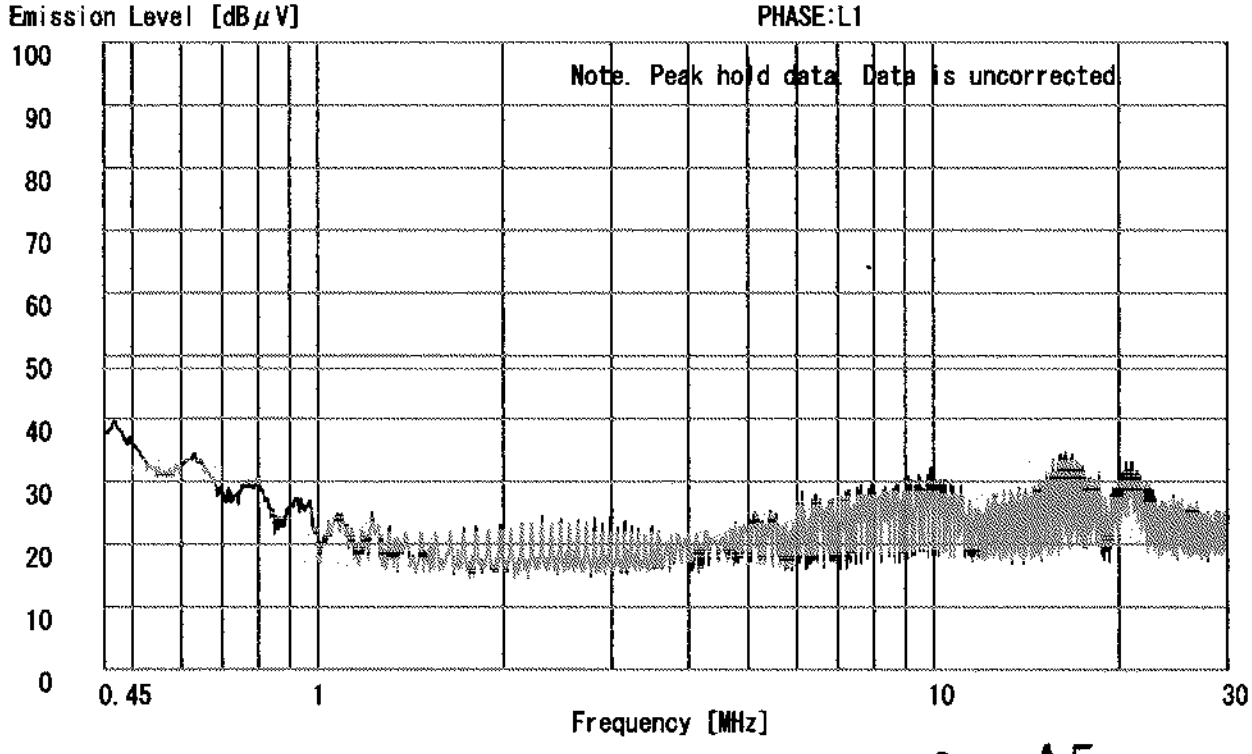
DATA OF CONDUCTION TEST CHART

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.2 OPEN TEST SITE
Report No. : 22FE0052-YW-2

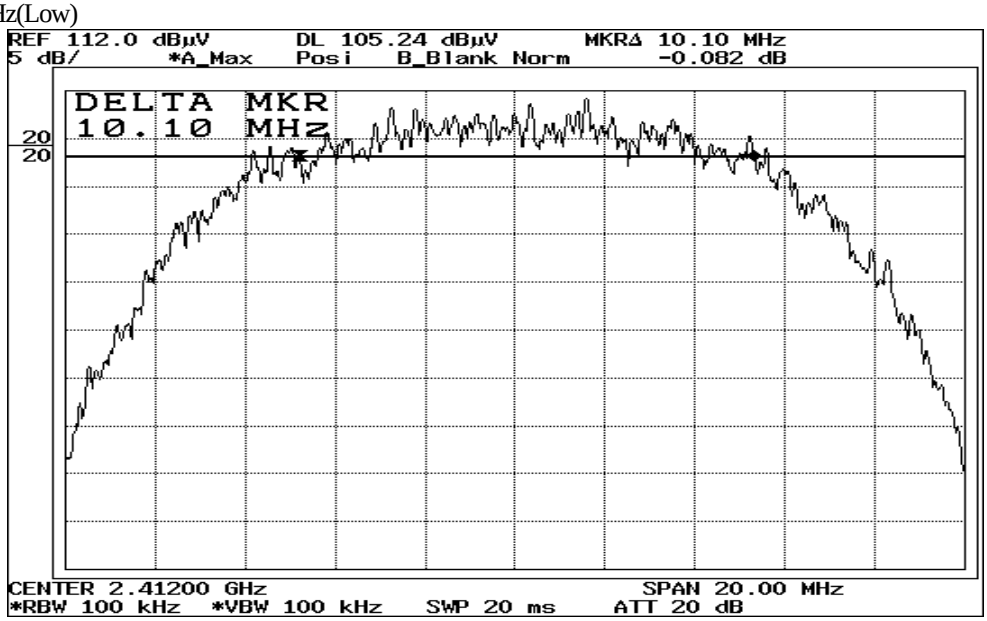
Applicant	:	SONY Corporation
Kind of Equipment	:	Wireless LAN PC Card
Model No.	:	PCWA-C150S
Serial No.	:	
Power	:	AC120V/60Hz
Mode	:	Standby
Remarks	:	FCC ID:AK8PCWA150S
Date	:	2/6/2002
Phase	:	Single Phase
Temperature	:	22 ℃
Humidity	:	31 %
Regulation 1	:	FCC Part15.207
Regulation 2	:	None

Engineer : Naoki Sakamoto

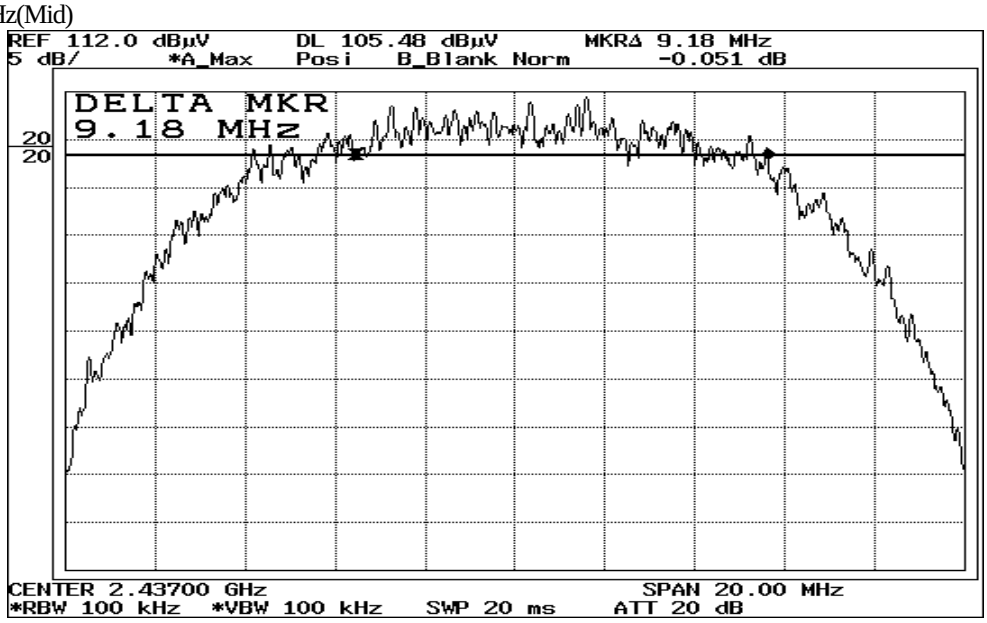




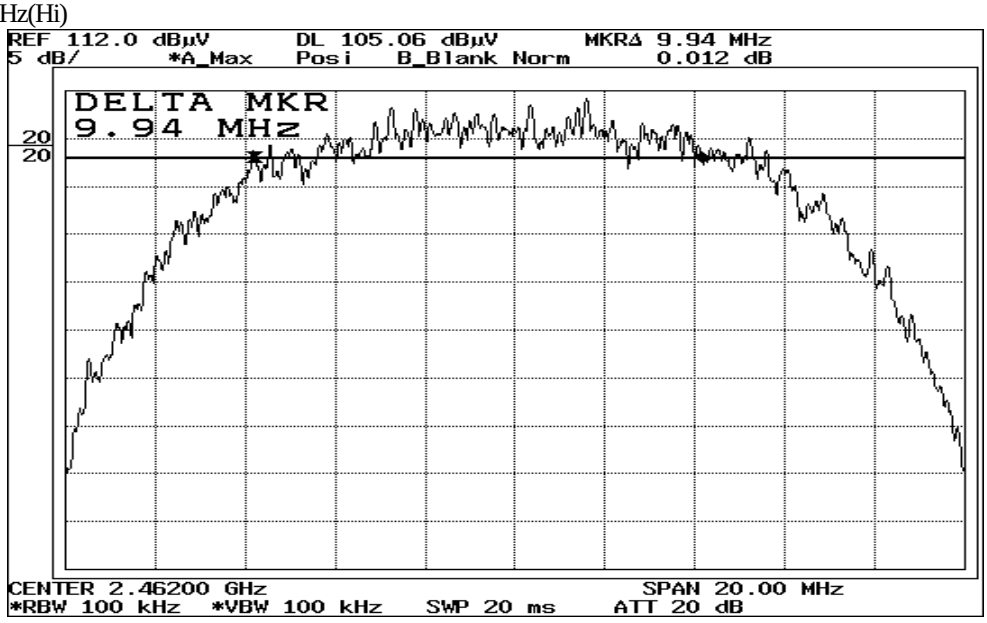
1. Ch1: 2412MHz(Low)



2. Ch6: 2437MHz(Mid)



3. Ch11: 2462MHz(Hi)



Peak Out Put Power(Conducted)

A-PEX INTERNATIONAL CO., LTD.
YOKOWA NO.3 OPEN SITE

COMPANY : SONY Corporation
EQUIPMENT : Wireless LAN PC Card
MODEL : PCWA-C150S
FCC ID : AK8PCWAC150S
POWER : AC120V/60Hz
Mode : Transmitting

REPORT NO : 22FE0052-YW-2
REGULATION : Fcc Part15SubpartC 247(b)(1)

DATE : 2002/2/6
Temp./Humi. : 24deg.C / 30%

ENGINEER : Naoki Sakamoto

CH	FREQ [GHz]	PM Reading [dBm]	Limit (1W) [dBm]	MARGIN [dB]
Low	2.41200	14.7	30.0	15.3
Mid	2.43700	14.9	30.0	15.1
High	2.46200	14.8	30.0	15.2

DATA OF RADIATION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.3 OPEN TEST SITE
Report No.: 22FE0052-YW-2

Applicant	: SONY Corporation
Kind of Equipment	: Wireless LAN PC Card
Model No.	: PCWA-C150S
Serial No.	:
Power	: AC120V/60Hz
Mode	: Transmitting(2412MHz)
Remarks	: FCC ID:AK8PCWAC150S
Date	: 2/6/2002
Test Distance	: 3 m
Temperature	: 17 ℃
Humidity	: 65 %
Regulation	: Fcc 15C §15.209(a)

Engineer : Naoki Sakamoto

No.	FREQ. [MHz]	ANT TYPE	READING HOR [dBμV]	READING VER [dBμV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT HOR [dBμV/m]	RESULT VER [dBμV/m]	LIMITS [dBμV/m]	MARGIN HOR [dB]	MARGIN VER [dB]
1.	114.57	BB	44.7	45.6	12.4	27.9	2.0	5.9	37.1	38.0	43.5	6.4	5.5
2.	122.32	BB	44.7	40.3	13.4	27.9	2.1	5.9	38.2	33.8	43.5	5.3	9.7
3.	130.48	BB	47.9	44.0	13.7	27.8	2.2	5.9	41.9	38.0	43.5	1.6	5.5
4.	195.70	BB	35.5	30.4	16.3	27.8	2.8	5.9	32.7	27.6	43.5	10.8	15.9
5.	245.78	BB	39.1	34.4	16.6	27.7	3.2	5.9	37.1	32.4	46.0	8.9	13.6
6.	260.92	BB	38.9	34.9	17.2	27.7	3.3	5.8	37.5	33.5	46.0	8.5	12.5
7.	266.67	BB	41.7	33.0	17.5	27.6	3.3	5.8	40.7	32.0	46.0	5.3	14.0
8.	440.00	BB	38.9	37.2	16.5	27.6	4.5	5.9	38.2	36.5	46.0	7.8	9.5
9.	484.01	BB	36.9	35.4	17.7	27.5	4.7	5.8	37.6	36.1	46.0	8.4	9.9
10.	506.01	BB	35.6	34.8	18.1	27.5	4.8	5.9	36.9	36.1	46.0	9.1	9.9
11.	528.02	BB	37.6	34.3	18.3	27.5	4.9	5.9	39.2	35.9	46.0	6.8	10.1

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

All other spurious emissions were less than 20dB for the limit.
ANT. TYPE:30-300MHz Biconical, 300-1000MHz Logperiodic

DATA OF RADIATION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.3 OPEN TEST SITE
Report No. : 22FE0052-YW-2

Applicant : SONY Corporation
Kind of Equipment : Wireless LAN PC Card
Model No. : PCWA-C150S
Serial No. :
Power : AC120V/60Hz
Mode : Transmitting(2437MHz)
Remarks : FCC ID:AK8PCWAC150S
Date : 2/6/2002
Test Distance : 3 m
Temperature : 17 ℃
Humidity : 65 %
Regulation : Fcc 15C §15.209(a)

Engineer : Naoki Sakamoto

No.	FREQ. [MHz]	ANT TYPE	READING HOR [dBμV]	READING VER [dBμV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT HOR [dBμV/m]	RESULT VER [dBμV/m]	LIMITS [dBμV/m]	MARGIN HOR [dB]	MARGIN VER [dB]
1.	114.57	BB	42.9	43.7	12.4	27.9	2.0	5.9	35.3	36.1	43.5	8.2	7.4
2.	122.32	BB	43.7	40.4	13.4	27.9	2.1	5.9	37.2	33.9	43.5	6.3	9.6
3.	130.48	BB	49.0	43.8	13.7	27.8	2.2	5.9	43.0	37.8	43.5	0.5	5.7
4.	195.70	BB	36.8	31.8	16.3	27.8	2.8	5.9	34.0	29.0	43.5	9.5	14.5
5.	245.78	BB	37.3	35.8	16.6	27.7	3.2	5.9	35.3	33.8	46.0	10.7	12.2
6.	260.92	BB	40.9	34.1	17.2	27.7	3.3	5.8	39.5	32.7	46.0	6.5	13.3
7.	266.12	BB	44.0	32.2	17.5	27.6	3.3	5.8	43.0	31.2	46.0	3.0	14.8
8.	440.01	BB	38.8	37.1	16.5	27.6	4.5	5.9	38.1	36.4	46.0	7.9	9.6
9.	484.00	BB	36.7	35.5	17.7	27.5	4.7	5.8	37.4	36.2	46.0	8.6	9.8
10.	506.02	BB	35.6	34.7	18.1	27.5	4.8	5.9	36.9	36.0	46.0	9.1	10.0
11.	528.03	BB	37.3	34.4	18.3	27.5	4.9	5.9	38.9	36.0	46.0	7.1	10.0

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

All other spurious emissions were less than 20dB for the limit.
ANT. TYPE:30-300MHz Biconical, 300-1000MHz Logperiodic

DATA OF RADIATION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.3 OPEN TEST SITE
Report No. : 22FE0052-YW-2

Applicant	: SONY Corporation
Kind of Equipment	: Wireless LAN PC Card
Model No.	: PCWA-C150S
Serial No.	:
Power	: AC120V/60Hz
Mode	: Transmitting(2462MHz)
Remarks	: FCC ID:AK8PCWAC150S
Date	: 2/6/2002
Test Distance	: 3 m
Temperature	: 17 ℃
Humidity	: 65 %
Regulation	: Fcc 15C §15.209(a)

Engineer : Naoki Sakamoto

No.	FREQ. [MHz]	ANT TYPE	READING HOR [dBμV]	READING VER [dBμV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT HOR [dBμV/m]	RESULT VER [dBμV/m]	LIMITS [dBμV/m]	MARGIN HOR [dB]	MARGIN VER [dB]
1.	114.54	BB	43.7	44.4	12.4	27.9	2.0	5.9	36.1	36.8	43.5	7.4	6.7
2.	122.32	BB	43.8	40.3	13.4	27.9	2.1	5.9	37.3	33.8	43.5	6.2	9.7
3.	130.48	BB	48.9	44.2	13.7	27.8	2.2	5.9	42.9	38.2	43.5	0.6	5.3
4.	195.70	BB	36.9	31.2	16.3	27.8	2.8	5.9	34.1	28.4	43.5	9.4	15.1
5.	245.76	BB	38.7	35.6	16.6	27.7	3.2	5.9	36.7	33.6	46.0	9.3	12.4
6.	260.91	BB	38.5	34.2	17.2	27.7	3.3	5.8	37.1	32.8	46.0	8.9	13.2
7.	265.71	BB	43.0	33.1	17.4	27.6	3.3	5.8	41.9	32.0	46.0	4.1	14.0
8.	440.01	BB	39.3	37.5	16.5	27.6	4.5	5.9	38.6	36.8	46.0	7.4	9.2
9.	484.01	BB	36.7	35.2	17.7	27.5	4.7	5.8	37.4	35.9	46.0	8.6	10.1
10.	507.25	BB	35.5	33.9	18.2	27.5	4.8	5.9	36.9	35.3	46.0	9.1	10.7
11.	528.03	BB	37.2	34.4	18.3	27.5	4.9	5.9	38.8	36.0	46.0	7.2	10.0

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

All other spurious emissions were less than 20dB for the limit.
ANT. TYPE:30-300MHz Biconical, 300-1000MHz Logperiodic

DATA OF SUPURIOUS EMISSIONS(1GHz to 26GHz)

A-PEX INTERNATIONAL CO., LTD.
YOKOWA NO.3 OPEN SITE

COMPANY : SONY Corporation
EQUIPMENT : Wireless LAN PC Card
MODEL : PCWA-C150S
S/N : -
FCC ID : AK8PCWAC150S
POWER : AC120V/60Hz
Mode : Transmitting (ch1: 2412MHz / 11Mbps)

REPORT NO : 22FE0052-YW-2
REGULATION : Fcc Part15SubpartC 247(b)(1)
TEST DISTANCE : 1m(10-26GHz)/3m(1-10GHz)
DATE : 2002/2/5
Temperature : 25degrees centigrade
Humidity : 41%

ENGINEER : Naoki Sakamoto

PK DETECT(S/A : RBW 1MHz and VBW 1MHz)

No.	FREQ	S/A READING		ANT	AMP	CABLE	H-Pass	ATTEN	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter		HOR	VER	PK	HOR	VER
	[GHz]	[dBuV]		[dB]	[dB]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	[dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + (High Pass or ATTEN).													
1	1.31785	47.4	53.8	26.2	38.7	2.1	0.0	0.0	37.0	43.4	74.0	37.0	30.6
2	1.65855	46.6	55.3	27.9	38.4	2.4	0.0	0.0	38.5	47.2	74.0	35.5	26.8
3	2.09400	44.4	45.8	30.6	38.0	2.8	0.0	0.0	39.8	41.2	74.0	34.2	32.8
4	4.82400	48.1	47.6	35.3	34.5	5.2	1.1	0.0	55.2	54.7	74.0	18.8	19.3
5	7.23600	44.8	44.8	38.5	34.8	6.3	0.5	0.0	55.3	55.3	74.0	18.7	18.7
6	9.64800	47.0	46.0	38.4	35.0	7.9	0.5	0.0	58.8	57.8	74.0	15.2	16.2
Test distance 1.0meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + High Pass - Dfac													
7	12.06000	45.6	46.1	43.0	34.4	8.7	0.5	0.0	53.9	54.4	74.0	20.1	19.6
8	14.47283	45.3	45.9	41.8	33.1	9.2	0.6	0.0	54.3	54.9	74.0	19.7	19.1
9	16.88484	47.8	47.7	38.6	33.4	9.6	0.6	0.0	53.7	53.6	74.0	20.3	20.4
10	19.29685	46.9	46.8	38.4	33.4	10.3	1.1	0.0	53.8	53.7	74.0	20.2	20.3
11	21.70885	48.0	48.0	38.8	33.0	11.4	0.5	0.0	56.2	56.2	74.0	17.9	17.8
12	24.12085	47.3	47.9	39.3	33.2	12.3	0.7	0.0	56.9	57.5	74.0	17.1	16.5

AV DETECT(S/A : RBW 1MHz and VBW 10Hz)

No.	FREQ	S/A READING		ANT	AMP	CABLE	H-Pass	ATTEN	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter		HOR	VER	AV	HOR	VER
	[GHz]	[dBuV]		[dB]	[dB]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	[dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + (High Pass or ATTEN).													
1	1.31785	35.5	37.5	26.2	38.7	2.1	0.0	0.0	25.1	27.1	54.0	28.9	26.9
2	1.65855	35.2	37.5	27.9	38.4	2.4	0.0	0.0	27.1	29.4	54.0	26.9	24.6
3	2.09400	33.9	34.8	30.6	38.0	2.8	0.0	0.0	29.3	30.2	54.0	24.7	23.8
4	4.82400	37.1	37.3	35.3	34.5	5.2	1.1	0.0	44.2	44.4	54.0	9.8	9.6
5	7.23600	32.4	32.0	38.5	34.8	6.3	0.5	0.0	42.9	42.5	54.0	11.1	11.5
6	9.64882	32.7	32.9	38.4	35.0	7.9	0.5	0.0	44.5	44.7	54.0	9.5	9.3
Test distance 1.0meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + High Pass - Dfac													
7	12.06082	33.3	33.4	43.0	34.4	8.7	0.5	0.0	41.6	41.7	54.0	12.4	12.3
8	14.47283	32.4	33.0	41.8	33.1	9.2	0.6	0.0	41.4	42.0	54.0	12.6	12.0
9	16.88484	34.2	34.3	38.6	33.4	9.6	0.6	0.0	40.1	40.2	54.0	13.9	13.8
10	19.29685	34.2	34.4	38.4	33.4	10.3	1.1	0.0	41.1	41.3	54.0	12.9	12.8
11	21.70885	34.9	35.2	38.8	33.0	11.4	0.5	0.0	43.1	43.4	54.0	10.9	10.6
12	24.12085	34.6	34.7	39.3	33.2	12.3	0.7	0.0	44.2	44.3	54.0	9.8	9.7

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1) = 9.5 dB
*Except for the above table : All other spurious emissions were less than 20dB for the limit.

DATA OF SUPURIOUS EMISSIONS(1GHz to 26GHz)

A-PEX INTERNATIONAL CO., LTD.
YOKOWA NO.3 OPEN SITE

COMPANY : SONY Corporation
EQUIPMENT : Wireless LAN PC Card
MODEL : PCWA-C150S
S/N : -
FCC ID : AK8PCWAC150S
POWER : AC120V/60Hz
Mode : Transmitting (ch6: 2437MHz)

REPORT NO : 22FE0052-YW-2
REGULATION : Fcc Part15SubpartC 247(b)(1)
TEST DISTANCE : 1m(10-26GHz)/3m(1-10GHz)
DATE : 2002/2/5
Temperature : 25degrees centigrade
Humidity : 41%

ENGINEER : Naoki Sakamoto

PK DETECT(S/A : RBW 1MHz and VBW 1MHz)

No.	FREQ	S/A READING		ANT	AMP	CABLE	H-Pass	ATTEN	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter		HOR	VER	PK	HOR	VER
	[GHz]	[dBuV]		[dB]	[dB]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	[dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + (High Pass or ATTEN).													
1	1.32590	49.8	53.4	26.2	38.7	2.1	0.0	0.0	39.4	43.0	74.0	34.6	31.0
2	1.66780	50.0	55.5	27.9	38.4	2.4	0.0	0.0	41.9	47.4	74.0	32.1	26.6
3	2.10575	46.4	46.7	30.6	38.0	2.8	0.0	0.0	41.8	42.1	74.0	32.2	31.9
4	4.87400	48.5	47.9	35.5	37.9	5.2	1.1	0.0	52.4	51.8	74.0	21.6	22.2
5	7.31100	45.1	45.2	38.6	38.2	6.4	0.5	0.0	52.4	52.5	74.0	21.6	21.5
6	9.74800	46.3	46.0	38.4	38.5	8.0	0.5	0.0	54.7	54.4	74.0	19.3	19.6
Test distance 1.0meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + High Pass - Dfac													
7	12.18500	47.4	47.0	43.1	38.5	8.7	0.5	0.0	51.7	51.3	74.0	22.3	22.7
8	14.62200	45.9	46.0	42.1	38.5	9.3	0.5	0.0	49.8	49.9	74.0	24.3	24.1
9	17.05900	46.5	47.2	43.5	38.5	9.6	0.6	0.0	52.2	52.9	74.0	21.8	21.2
10	19.49600	47.4	46.6	38.1	38.5	10.4	1.3	0.0	49.2	48.4	74.0	24.8	25.6
11	21.93300	48.1	47.9	38.7	38.5	11.6	0.3	0.0	50.7	50.5	74.0	23.3	23.5
12	24.37000	49.0	48.7	39.4	38.5	12.4	0.8	0.0	53.6	53.3	74.0	20.4	20.7

AV DETECT(S/A : RBW 1MHz and VBW 10Hz)

No.	FREQ	S/A READING		ANT	AMP	CABLE	H-Pass	ATTEN	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter		HOR	VER	AV	HOR	VER
	[GHz]	[dBuV]		[dB]	[dB]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	[dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + (High Pass or ATTEN).													
1	1.32590	36.0	37.4	26.2	38.7	2.1	0.0	0.0	25.6	27.0	54.0	28.4	27.0
2	1.66780	35.9	37.6	27.9	38.4	2.4	0.0	0.0	27.8	29.5	54.0	26.2	24.5
3	2.10575	35.7	36.5	30.6	38.0	2.8	0.0	0.0	31.1	31.9	54.0	22.9	22.1
4	4.87400	37.5	35.4	35.5	37.9	5.2	1.1	0.0	41.4	39.3	54.0	12.6	14.7
5	7.31100	32.2	32.1	38.6	38.2	6.4	0.5	0.0	39.5	39.4	54.0	14.5	14.6
6	9.74800	32.9	33.0	38.4	38.5	8.0	0.5	0.0	41.3	41.4	54.0	12.7	12.6
Test distance 1.0meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + High Pass - Dfac													
7	12.18500	33.8	34.2	43.1	38.5	8.7	0.5	0.0	38.1	38.5	54.0	15.9	15.5
8	14.62200	32.6	32.9	42.1	38.5	9.3	0.5	0.0	36.5	36.8	54.0	17.6	17.2
9	17.05900	33.5	33.5	43.5	38.5	9.6	0.6	0.0	39.2	39.2	54.0	14.8	14.8
10	19.49600	34.1	33.9	38.1	38.5	10.4	1.3	0.0	35.9	35.7	54.0	18.2	18.3
11	21.93300	35.1	34.7	38.7	38.5	11.6	0.3	0.0	37.7	37.3	54.0	16.3	16.8
12	24.37000	35.7	35.5	39.4	38.5	12.4	0.8	0.0	40.3	40.1	54.0	13.7	13.9

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1) = 9.5 dB
*Except for the above table : All other spurious emissions were less than 20dB for the limit.

DATA OF SUPURIOUS EMISSIONS(1GHz to 26GHz)

A-PEX INTERNATIONAL CO., LTD.
YOKOWA NO.3 OPEN SITE

COMPANY : SONY Corporation
EQUIPMENT : Wireless LAN PC Card
MODEL : PCWA-C150S
S/N : -
FCC ID : AK8PCWAC150S
POWER : AC120V/60Hz
Mode : Transmitting (ch11: 2462MHz)

REPORT NO : 22FE0052-YW-2
REGULATION : Fcc Part15SubpartC 247(b)(1)
TEST DISTANCE : 1m(10-26GHz)/3m(1-10GHz)
DATE : 2002/2/5
Temperature : 25degrees centigrade
Humidity : 41%

ENGINEER : Naoki Sakamoto

PK DETECT(S/A : RBW 1MHz and VBW 1MHz)

No.	FREQ	S/A READING		ANT	AMP	CABLE	H-Pass	ATTEN	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter		HOR	VER	PK	HOR	VER
	[GHz]	[dBuV]		[dB]	[dB]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	[dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + (High Pass or ATTEN).													
1	1.32640	50.0	54.9	26.2	38.7	2.1	0.0	0.0	39.6	44.5	74.0	34.4	29.5
2	1.64610	48.8	53.5	27.9	38.4	2.4	0.0	0.0	40.7	45.4	74.0	33.3	28.6
3	2.10572	46.1	47.8	30.6	38.0	2.8	0.0	0.0	41.5	43.2	74.0	32.5	30.8
4	4.92600	48.7	50.4	35.8	37.9	5.3	1.1	0.0	53.0	54.7	74.0	21.0	19.3
5	7.38654	45.2	45.6	38.7	38.3	6.4	0.5	0.0	52.5	52.9	74.0	21.5	21.1
6	9.84830	47.3	47.1	38.5	38.5	8.1	0.5	0.0	55.9	55.7	74.0	18.1	18.3
Test distance 1.0meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + High Pass - Dfac													
7	12.31000	47.3	47.2	43.3	34.2	8.7	0.5	0.0	56.1	56.0	74.0	17.9	18.0
8	14.77200	45.5	45.0	42.3	33.0	9.4	0.5	0.0	55.2	54.7	74.0	18.8	19.4
9	17.23400	46.7	46.8	38.2	33.1	9.7	0.6	0.0	52.6	52.7	74.0	21.5	21.3
10	19.69600	48.5	49.2	38.3	33.4	10.5	1.5	0.0	55.9	56.6	74.0	18.1	17.4
11	22.15800	47.0	48.2	38.7	33.0	11.6	0.3	0.0	55.1	56.3	74.0	18.9	17.8
12	24.62000	49.1	49.3	39.4	33.2	12.5	0.9	0.0	59.2	59.4	74.0	14.9	14.6

AV DETECT(S/A : RBW 1MHz and VBW 10Hz)

No.	FREQ	S/A READING		ANT	AMP	CABLE	H-Pass	ATTEN	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter		HOR	VER	AV	HOR	VER
	[GHz]	[dBuV]		[dB]	[dB]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	[dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + (High Pass or ATTEN).													
1	1.32640	35.9	38.1	26.2	38.7	2.1	0.0	0.0	25.5	27.7	54.0	28.5	26.3
2	1.64610	35.9	36.9	27.9	38.4	2.4	0.0	0.0	27.8	28.8	54.0	26.2	25.2
3	2.10572	35.6	39.5	30.6	38.0	2.8	0.0	0.0	31.0	34.9	54.0	23.0	19.1
4	4.92600	37.4	38.1	35.8	37.9	5.3	1.1	0.0	41.7	42.4	54.0	12.3	11.6
5	7.38654	32.7	32.8	38.7	38.3	6.4	0.5	0.0	40.0	40.1	54.0	14.0	13.9
6	9.84830	34.1	34.0	38.5	38.5	8.1	0.5	0.0	42.7	42.6	54.0	11.3	11.4
Test distance 1.0meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + High Pass - Dfac													
7	12.31000	34.0	34.0	43.3	34.2	8.7	0.5	0.0	42.8	42.8	54.0	11.2	11.2
8	14.77200	32.7	32.5	42.3	33.0	9.4	0.5	0.0	42.4	42.2	54.0	11.6	11.8
9	17.23400	33.7	33.8	38.2	33.1	9.7	0.6	0.0	39.6	39.7	54.0	14.4	14.3
10	19.69600	35.3	35.7	38.3	33.4	10.5	1.5	0.0	42.7	43.1	54.0	11.3	10.9
11	22.15800	34.4	34.9	38.7	33.0	11.6	0.3	0.0	42.5	43.0	54.0	11.5	11.1
12	24.62000	36.3	36.5	39.4	33.2	12.5	0.9	0.0	46.4	46.6	54.0	7.6	7.4

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5 dB
*Except for the above table : All other spurious emissions were less than 20dB for the limit.

Restricted Band Edges(Radiated)

A-PEX INTERNATIONAL CO., LTD.
YOKOWA NO.3 OPEN SITE

COMPANY :SONY Corporation
EQUIPMENT :Wireless LAN PC Card
MODEL : PCWA-C150S
S/N : -
FCC ID : AK8PCWAC150S
POWER : AC120V/60Hz
Mode : Transmitting

REPORT NO : 22FE0052-YW-2
REGULATION : Fcc Part15SubpartC 247(b)(1)
TEST DISTANCE : 3m
DATE : 2002/2/6
Temperature : 24degrees centigrade
Humidity : 30%

ENGINEER : Naoki Sakamoto

PK DETECT(S/A : RBW 1MHz and VBW 1MHz)

No.	FREQ	S/A READING		ANT	AMP	CABLE	ATTEN	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS		HOR	VER	PK	HOR	VER
	[GHz]	[dBuV]	[dBuV]	[dB]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]
Ch1	2.3900	47.1	50.6	31.2	38.1	2.5	6.0	48.7	52.2	74.0	25.3	21.8
Ch11	2.4835	48.3	49.2	31.4	38.1	2.6	6.0	50.2	51.1	74.0	23.8	22.9

AV DETECT(S/A : RBW 1MHz and VBW 10Hz)

No.	FREQ	S/A READING		ANT	AMP	CABLE	ATTEN	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS		HOR	VER	AV	HOR	VER
	[GHz]	[dBuV]	[dBuV]	[dB]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]
Ch1	2.3900	35.5	39.0	31.2	38.1	2.5	6.0	37.1	40.6	54.0	16.9	13.4
Ch11	2.4835	36.5	37.4	31.4	38.1	2.6	6.0	38.4	39.3	54.0	15.6	14.7

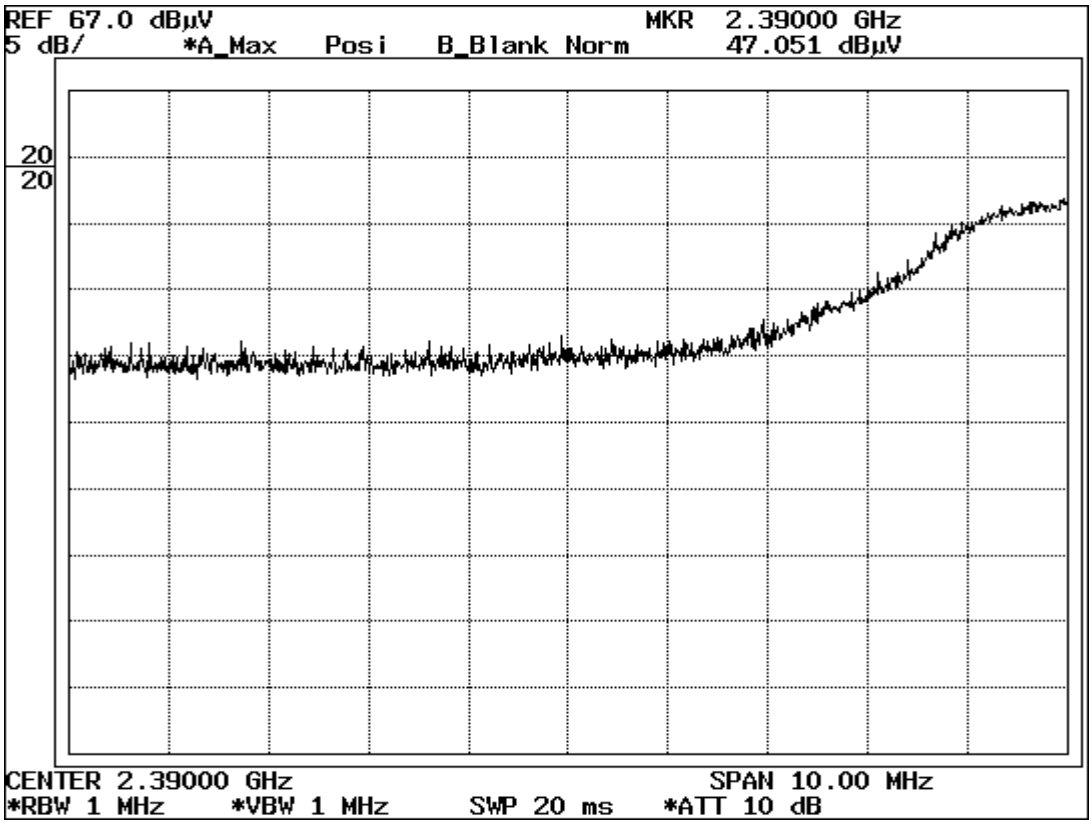
Sample Calculation :
RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + ATTEN

*Ch1: 2412MHz Transmitting
*Ch11: 2462MHz Transmitting

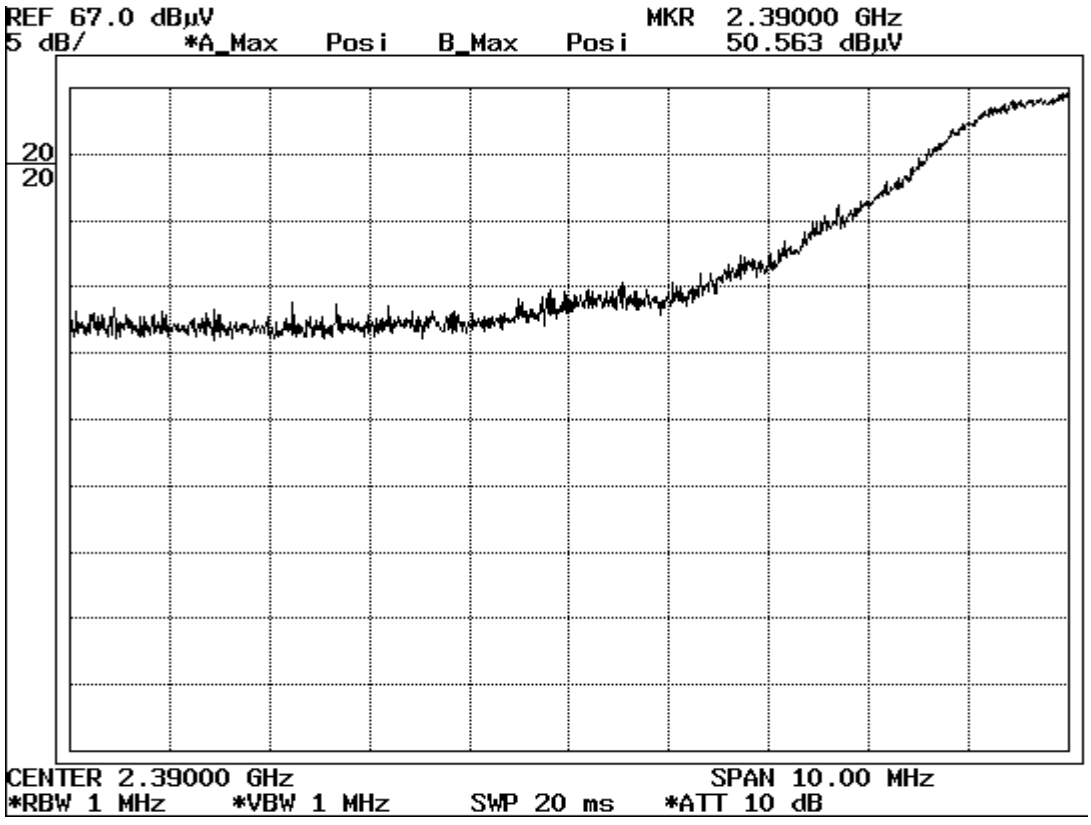
2.39GHz(Ch1)

PK Detector

1. Horizontal



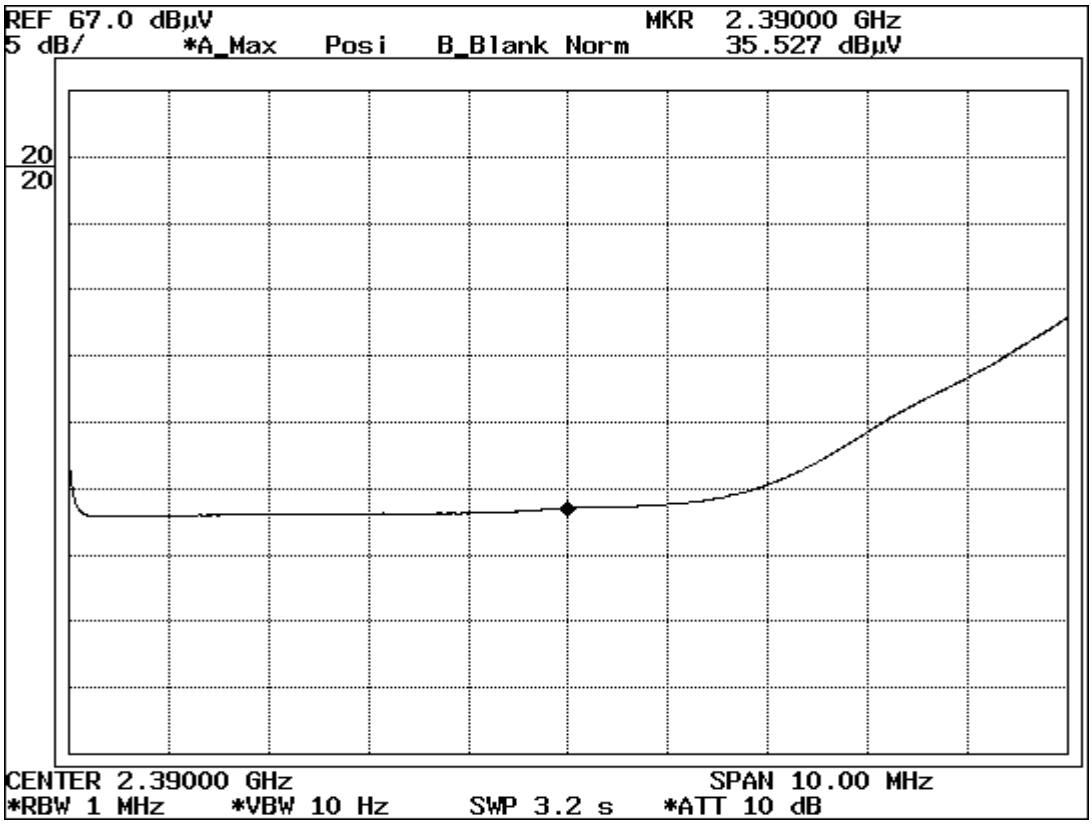
2. Vertical



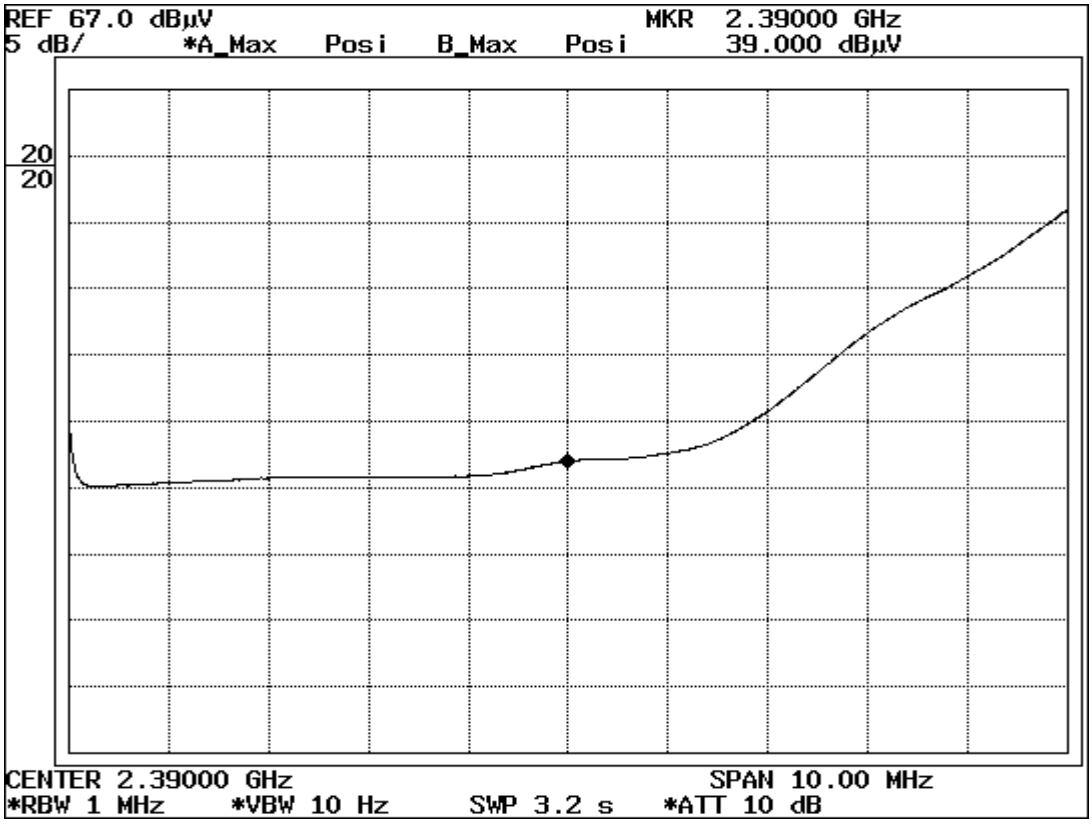
2.39GHz(Ch1)

AV Detector

1. Horizontal



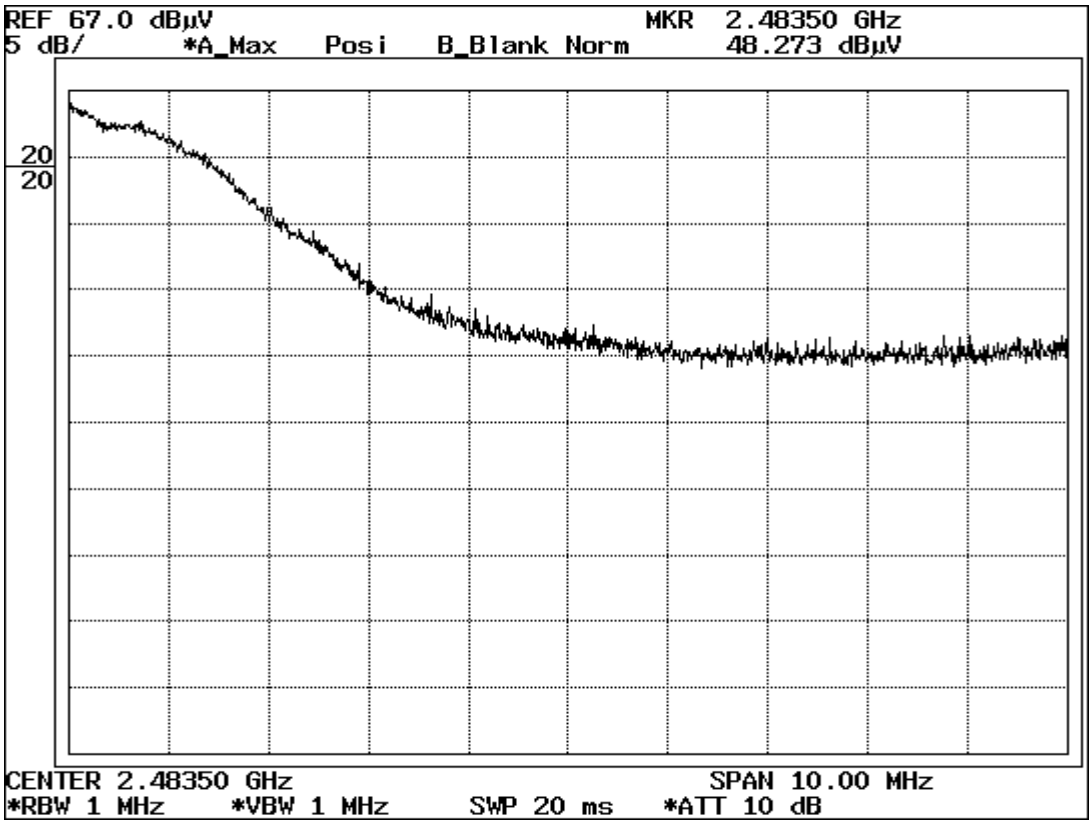
2. Vertical



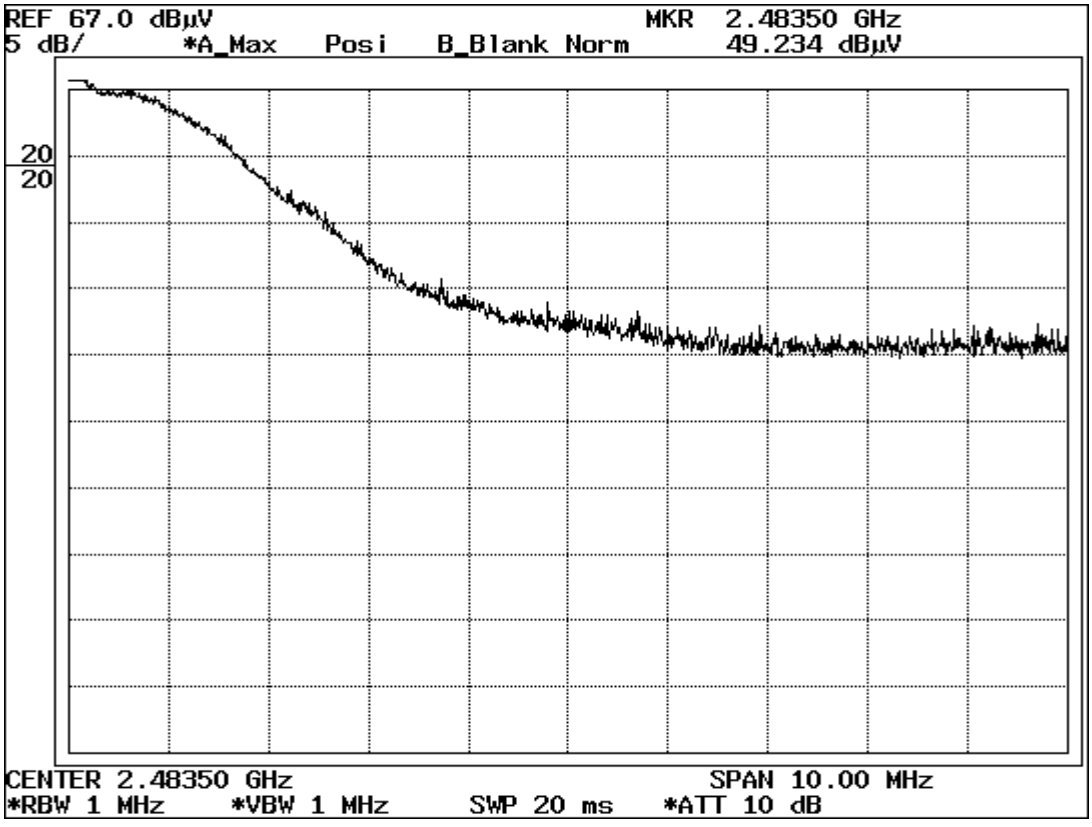
2.4835GHz(Ch11)

PK Detector

1. Horizontal



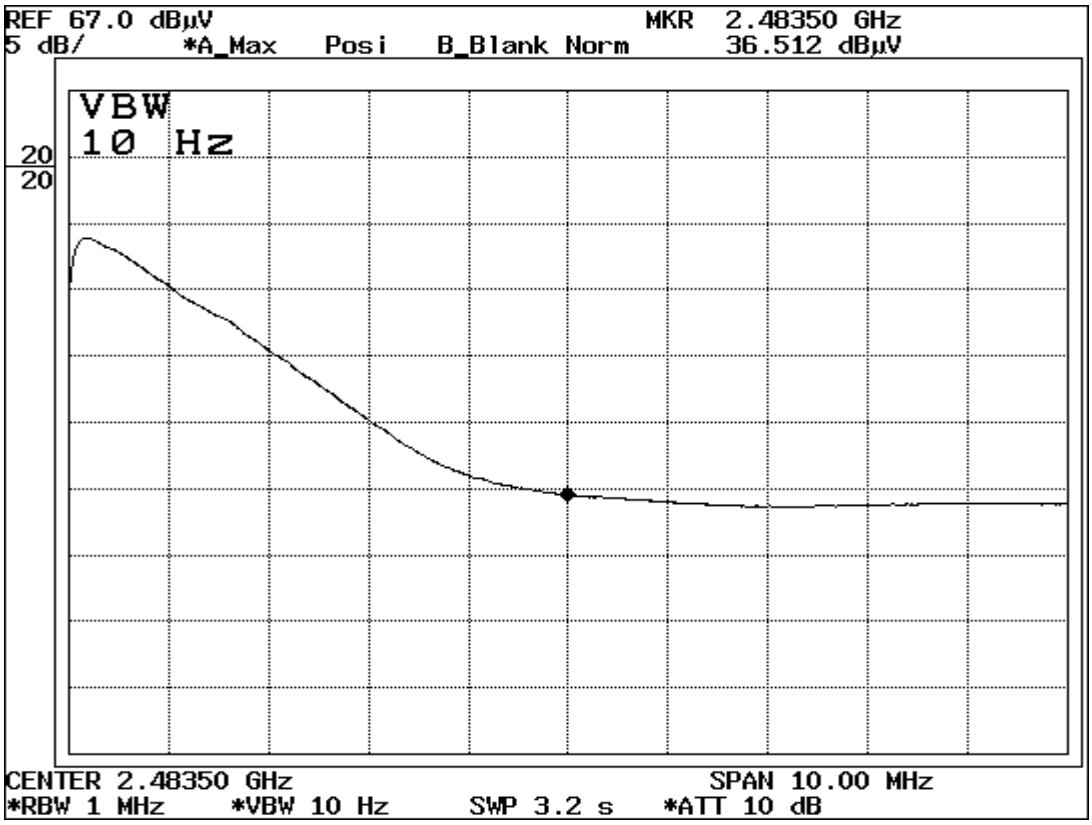
2. Vertical



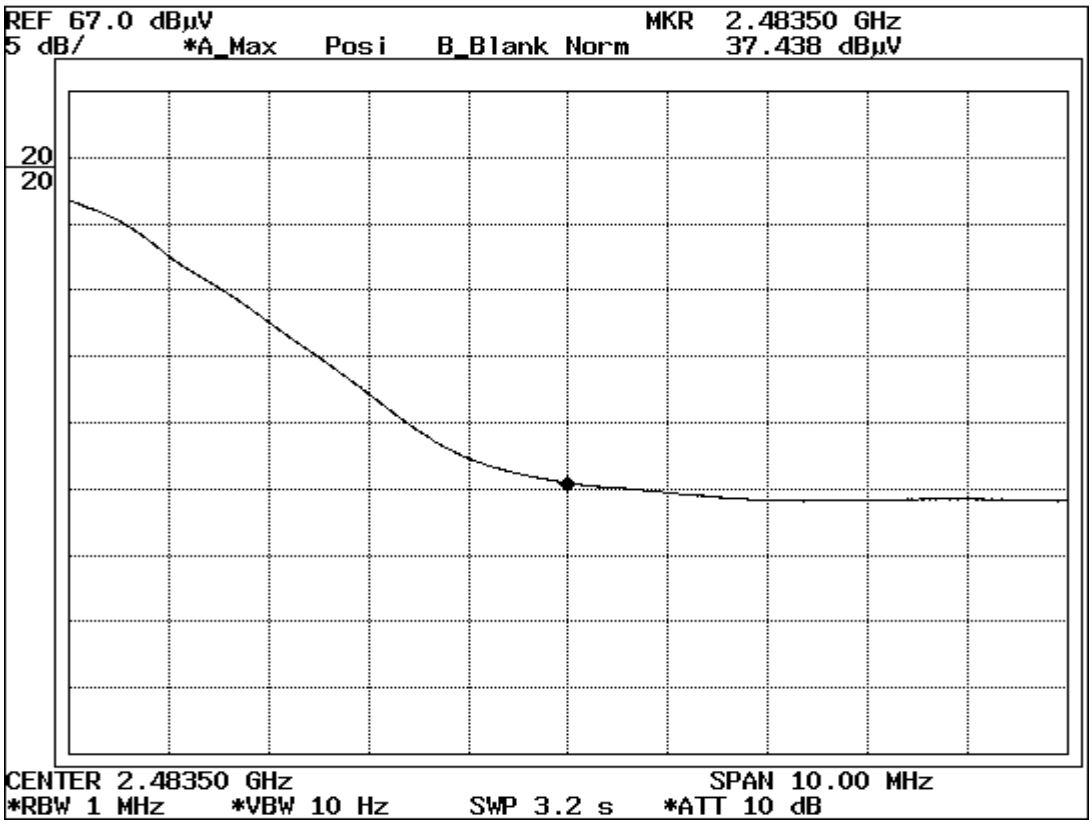
2.4835GHz(Ch11)

AV Detector

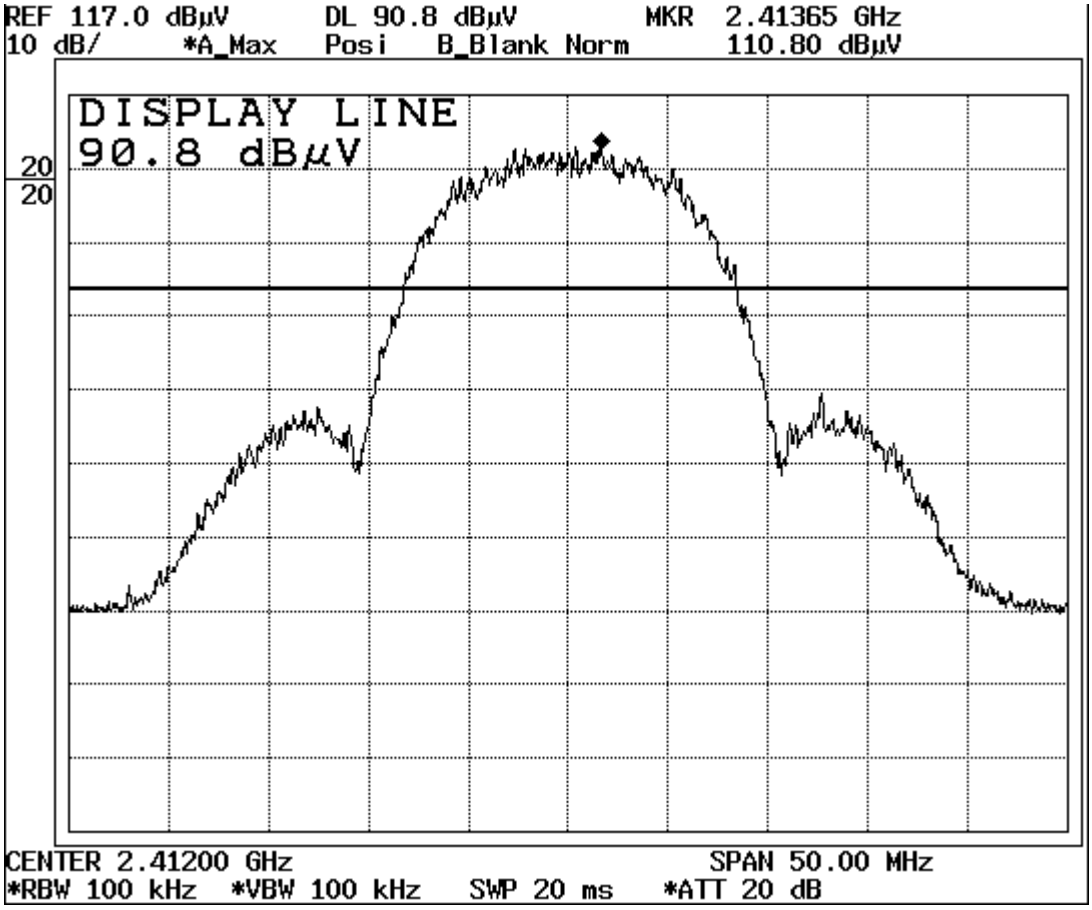
1. Horizontal

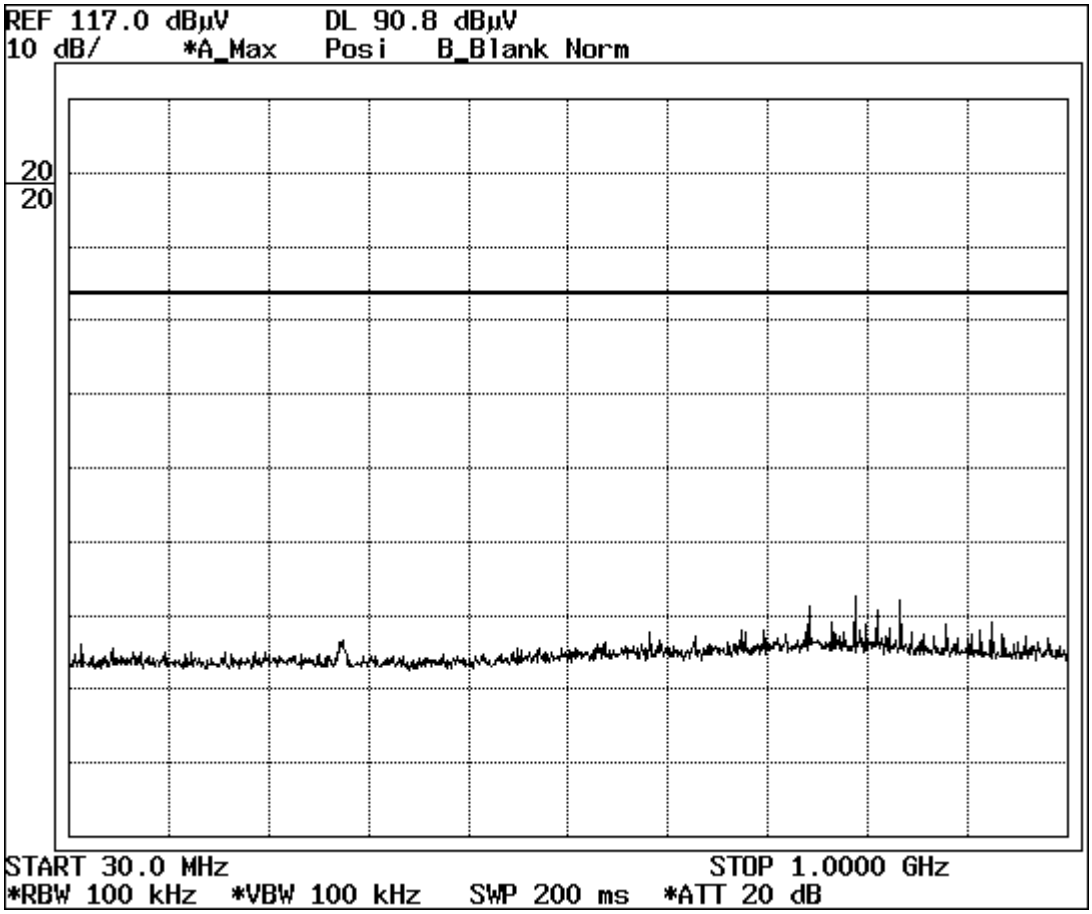


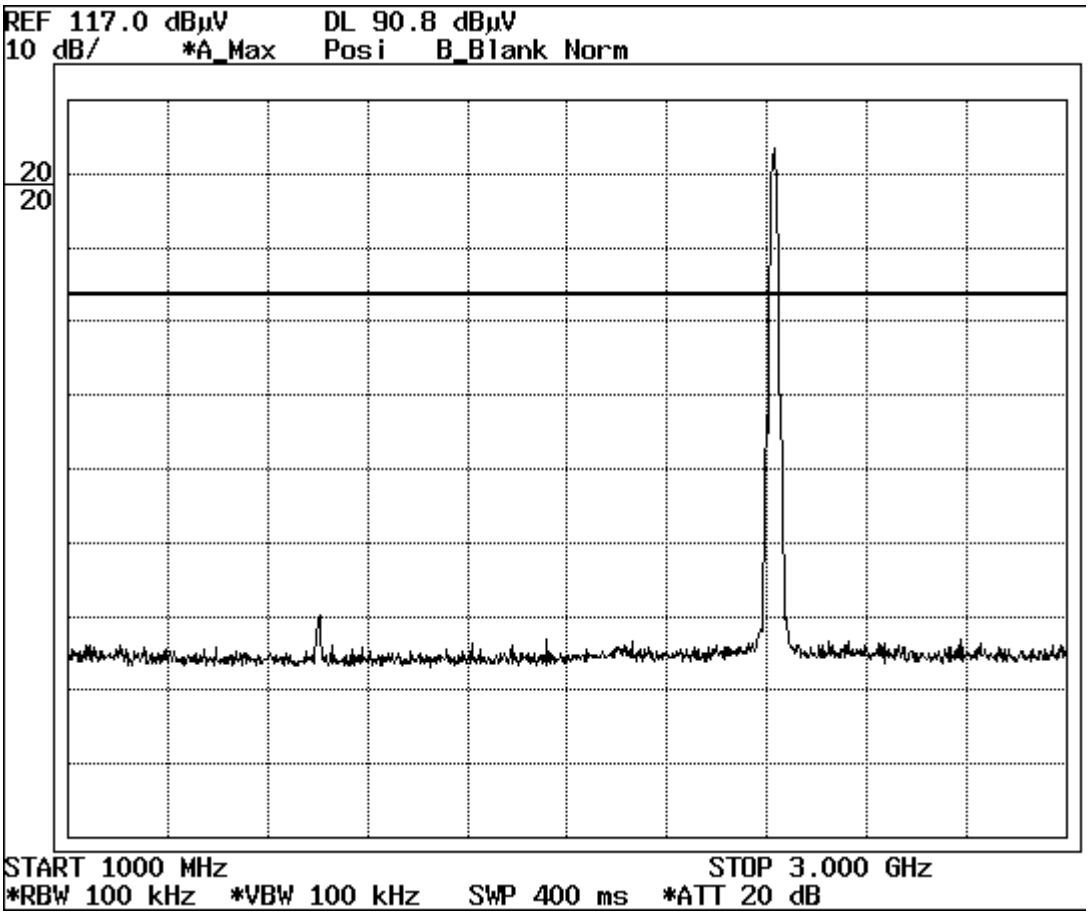
2. Vertical

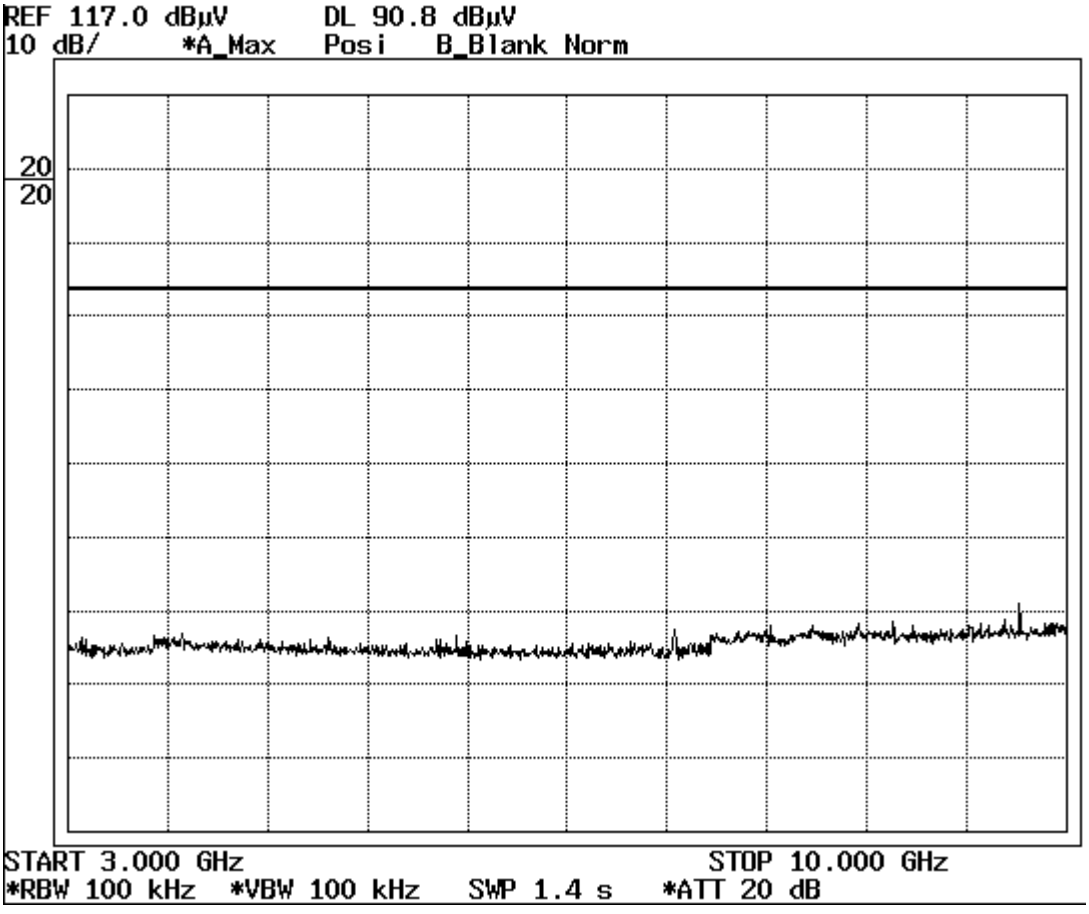


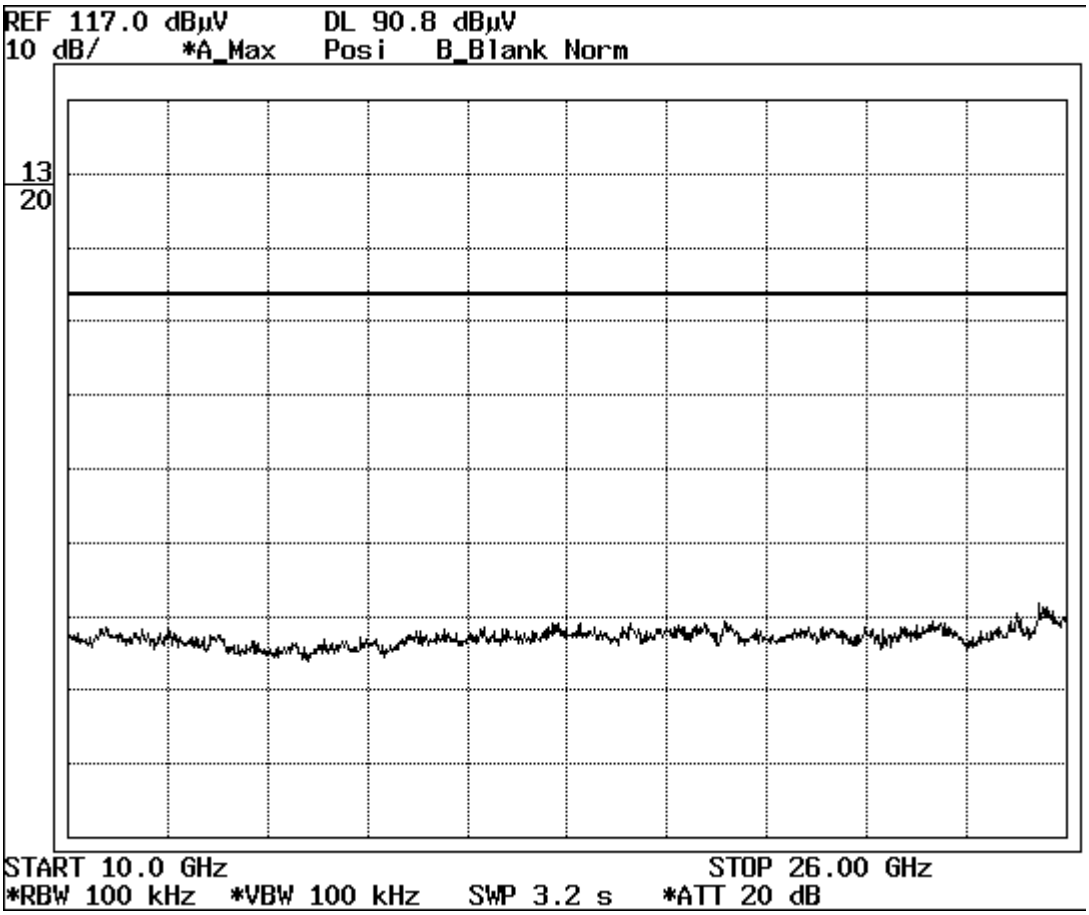
Ch1: 2412MHz(Low)



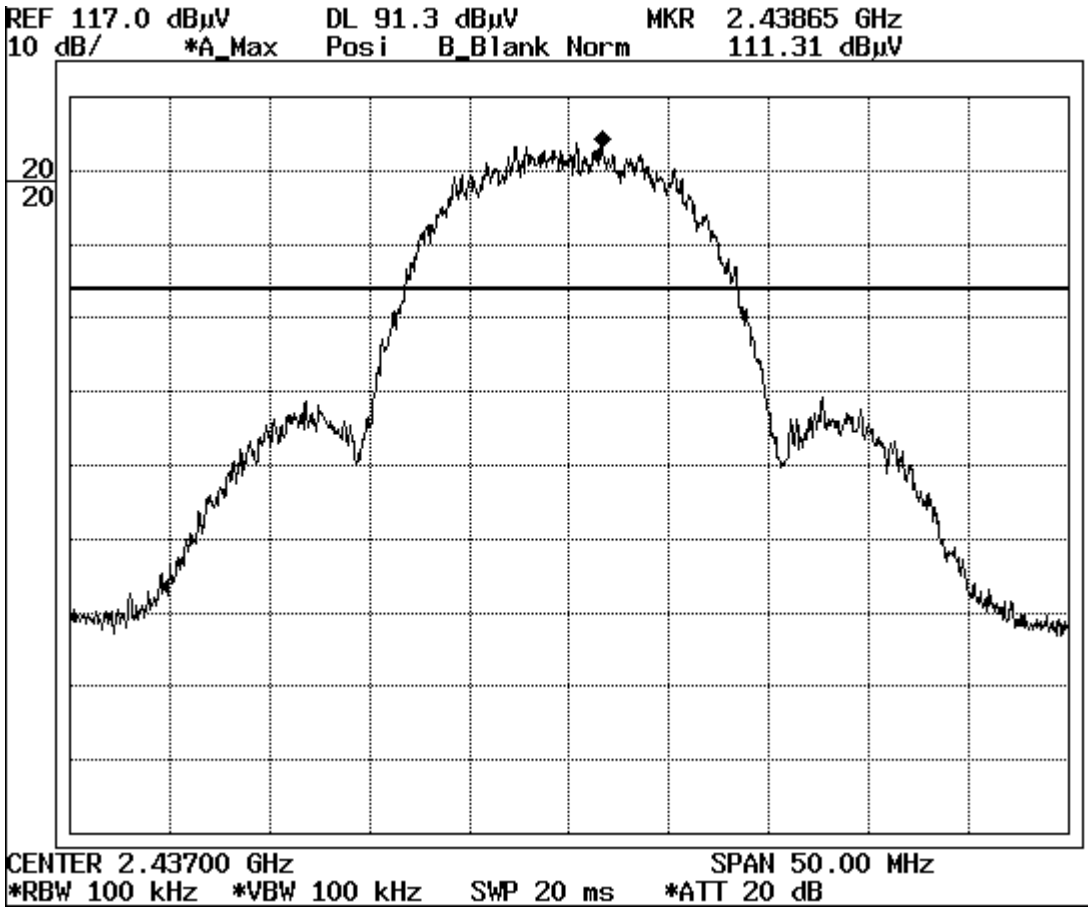


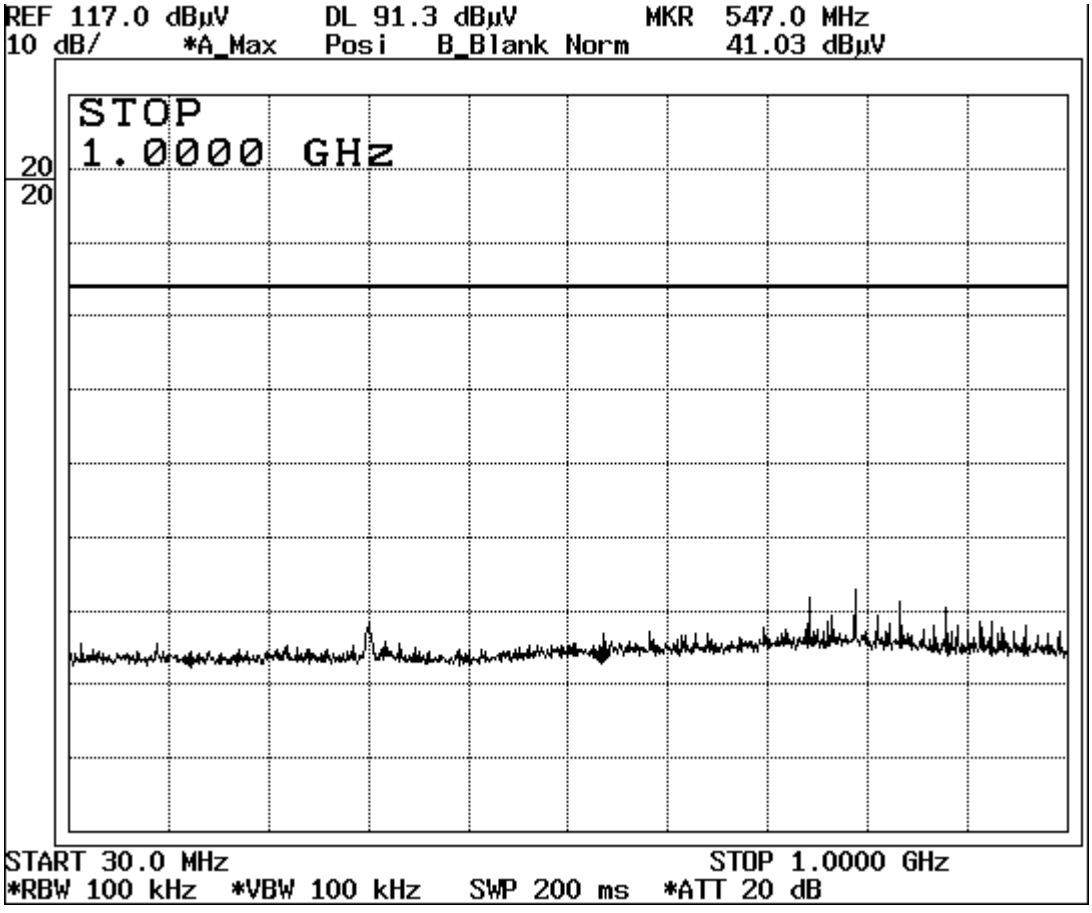

REF 117.0 dBµV
DL 90.8 dBµV
10 dB/
*A_Max
Posi
B_Blank Norm
20
20
START 1000 MHz
STOP 3.000 GHz
*RBW 100 kHz
*VBW 100 kHz
SWP 400 ms
*ATT 20 dB

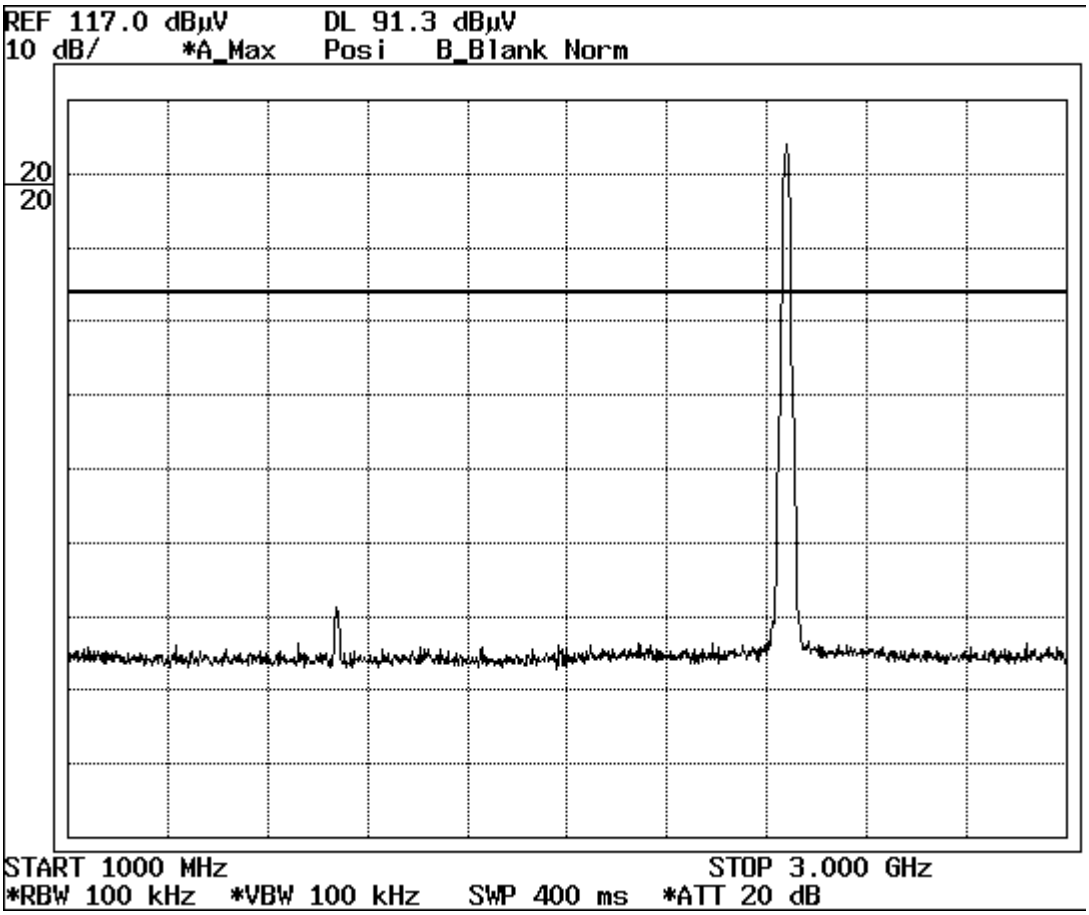

REF 117.0 dBµV
DL 90.8 dBµV
10 dB/
*A_Max
Posi
B_Blank Norm
20
20
START 3.000 GHz
STOP 10.000 GHz
*RBW 100 kHz
*VBW 100 kHz
SWP 1.4 s
*ATT 20 dB

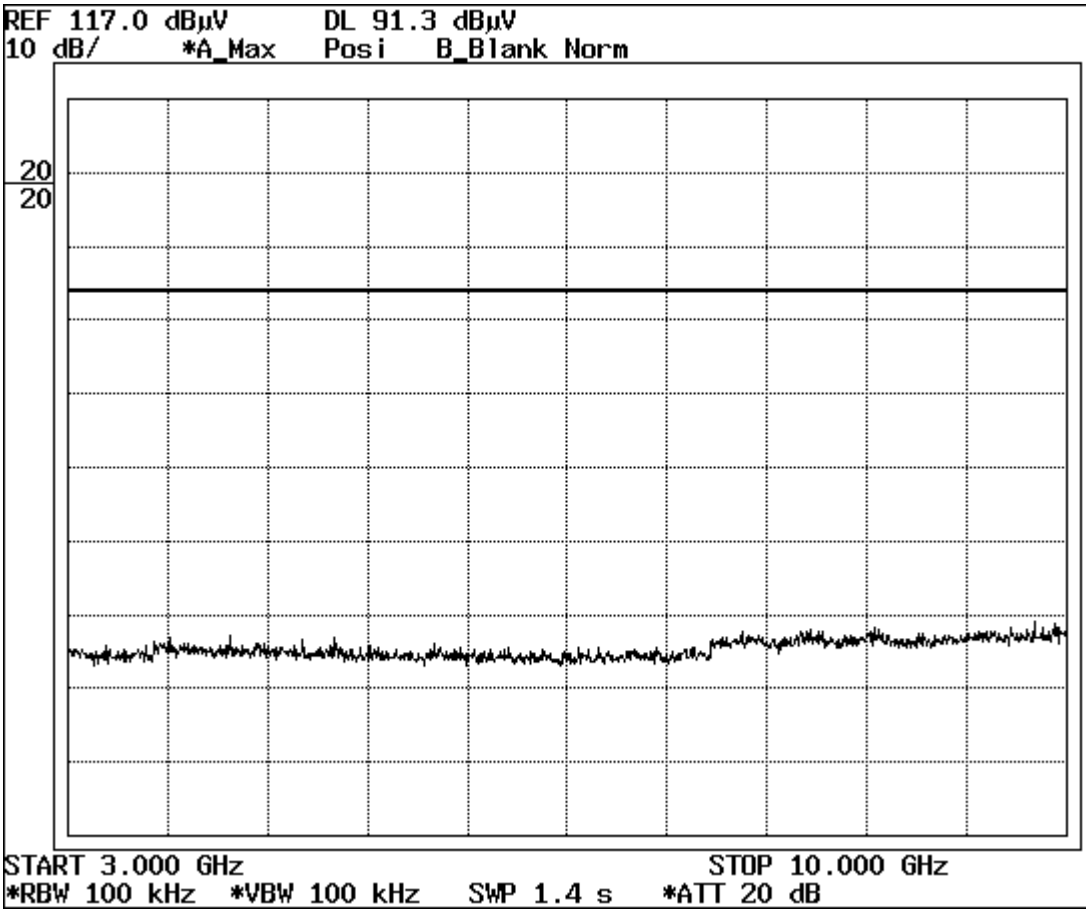

REF 117.0 dBµV
DL 90.8 dBµV
10 dB/
*A_Max
Posi
B_Blank Norm
13
20
START 10.0 GHz
STOP 26.00 GHz
*RBW 100 kHz
*VBW 100 kHz
SWP 3.2 s
*ATT 20 dB

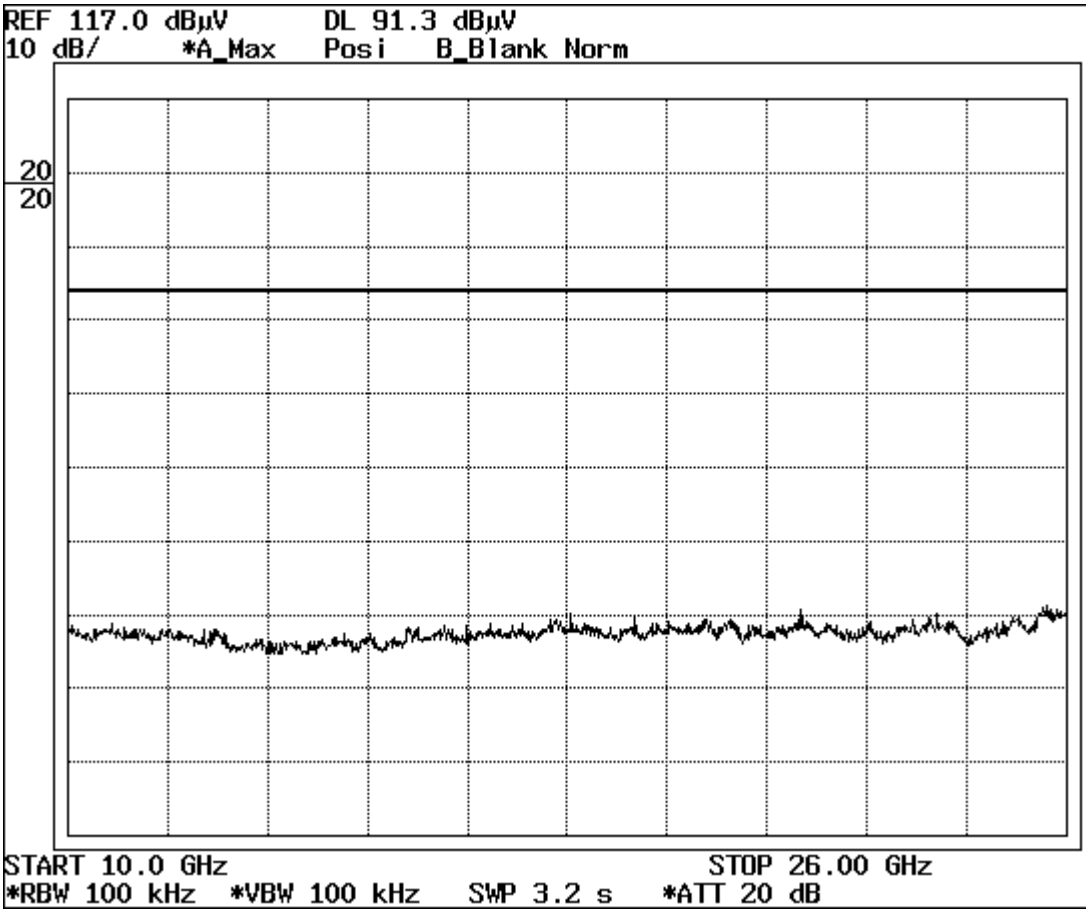
Ch6: 2437MHz(Mid)



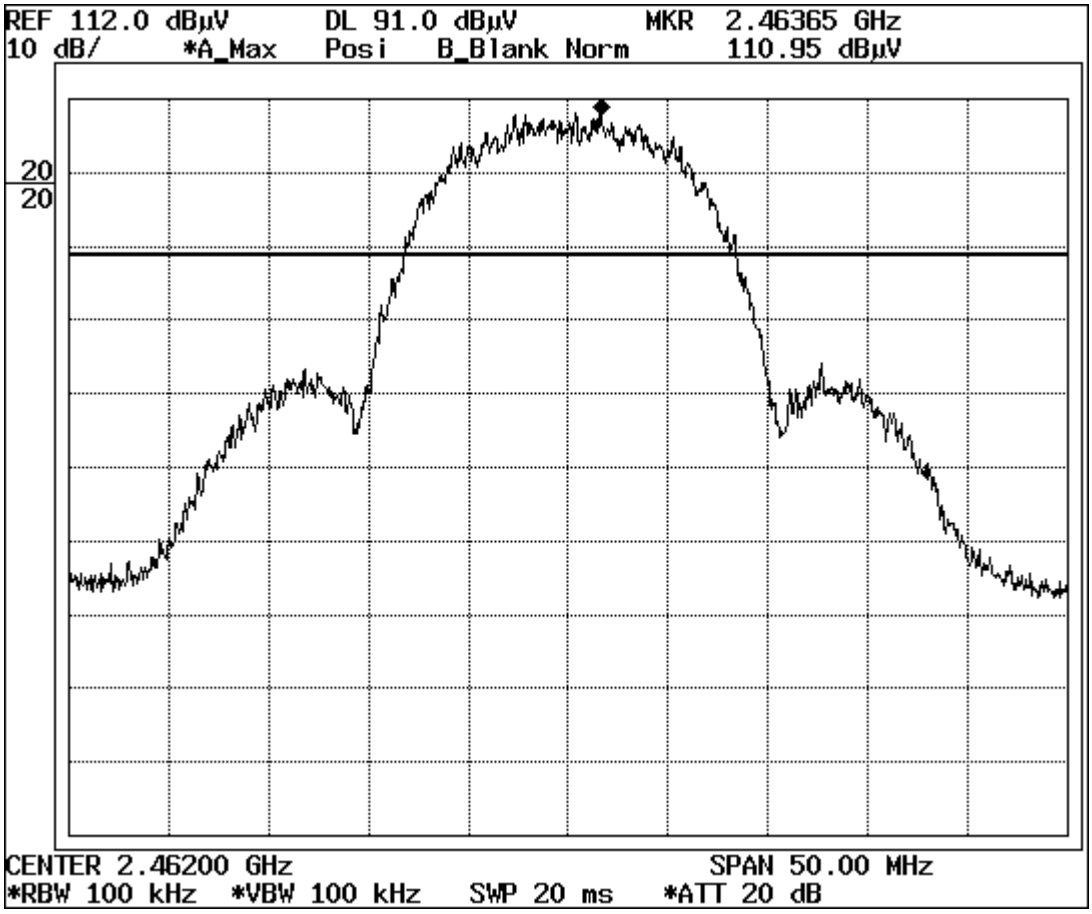


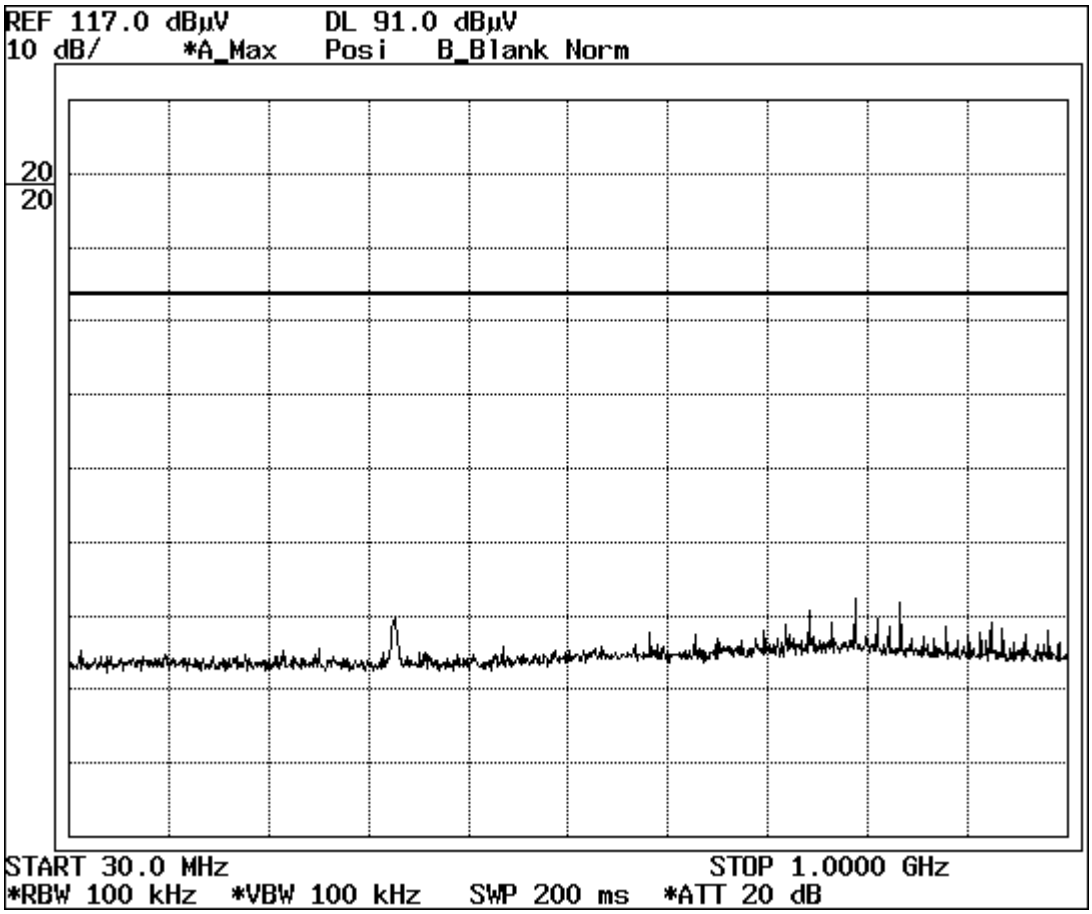

REF 117.0 dBµV
DL 91.3 dBµV
10 dB/
*A_Max
Posi
B_Blank Norm
20
20
START 1000 MHz
STOP 3.000 GHz
*RBW 100 kHz
*VBW 100 kHz
SWP 400 ms
*ATT 20 dB

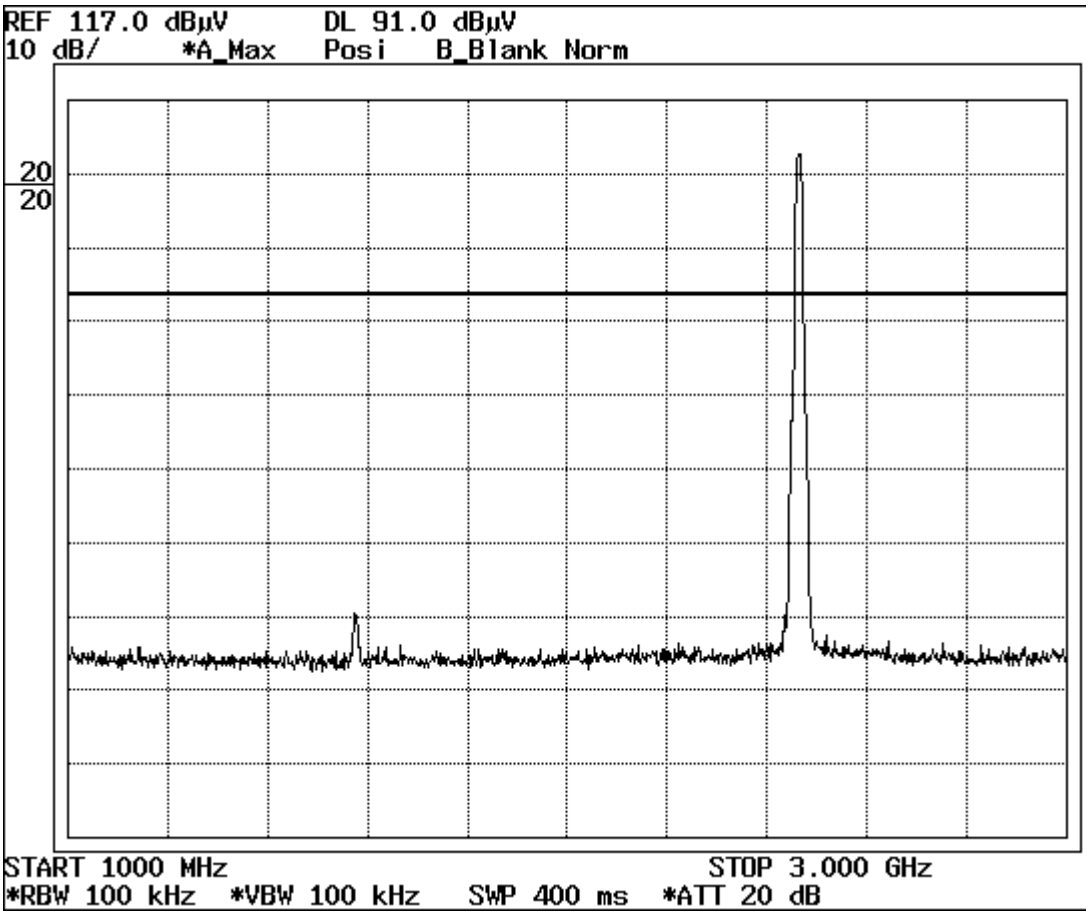

REF 117.0 dBµV
DL 91.3 dBµV
10 dB/
*A_Max
Posi
B_Blank Norm
20
20
START 3.000 GHz
STOP 10.000 GHz
*RBW 100 kHz
*VBW 100 kHz
SWP 1.4 s
*ATT 20 dB

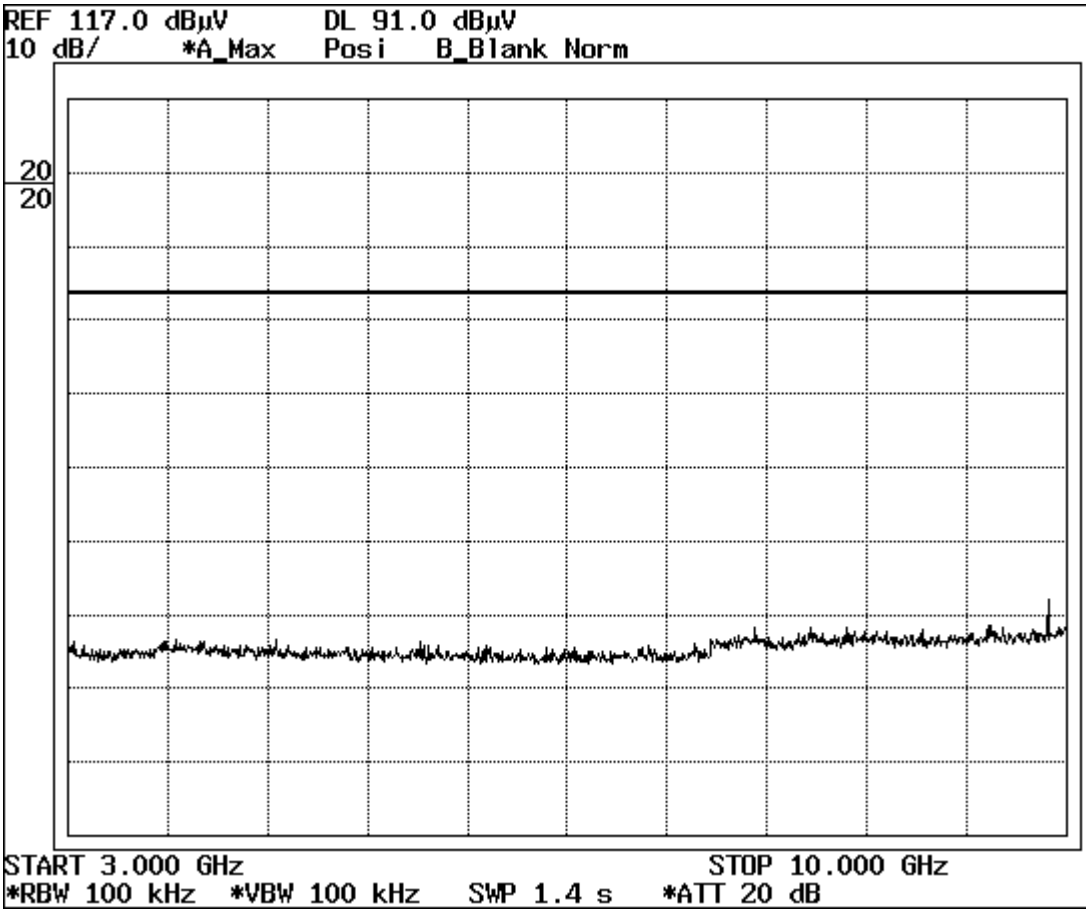

REF 117.0 dBµV
DL 91.3 dBµV
10 dB/
*A_Max
Posi
B_Blank Norm
20
20
START 10.0 GHz
STOP 26.00 GHz
*RBW 100 kHz
*VBW 100 kHz
SWP 3.2 s
*ATT 20 dB

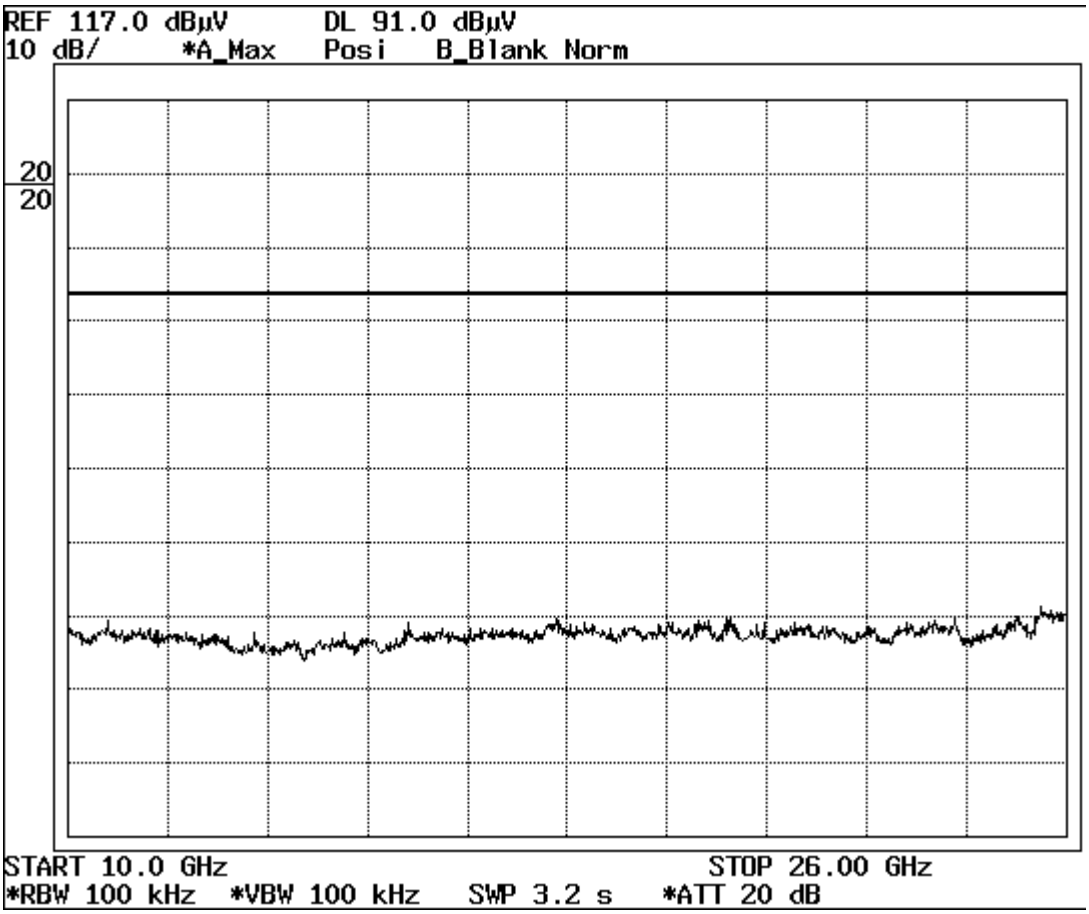
Ch11: 2462MHz(High)



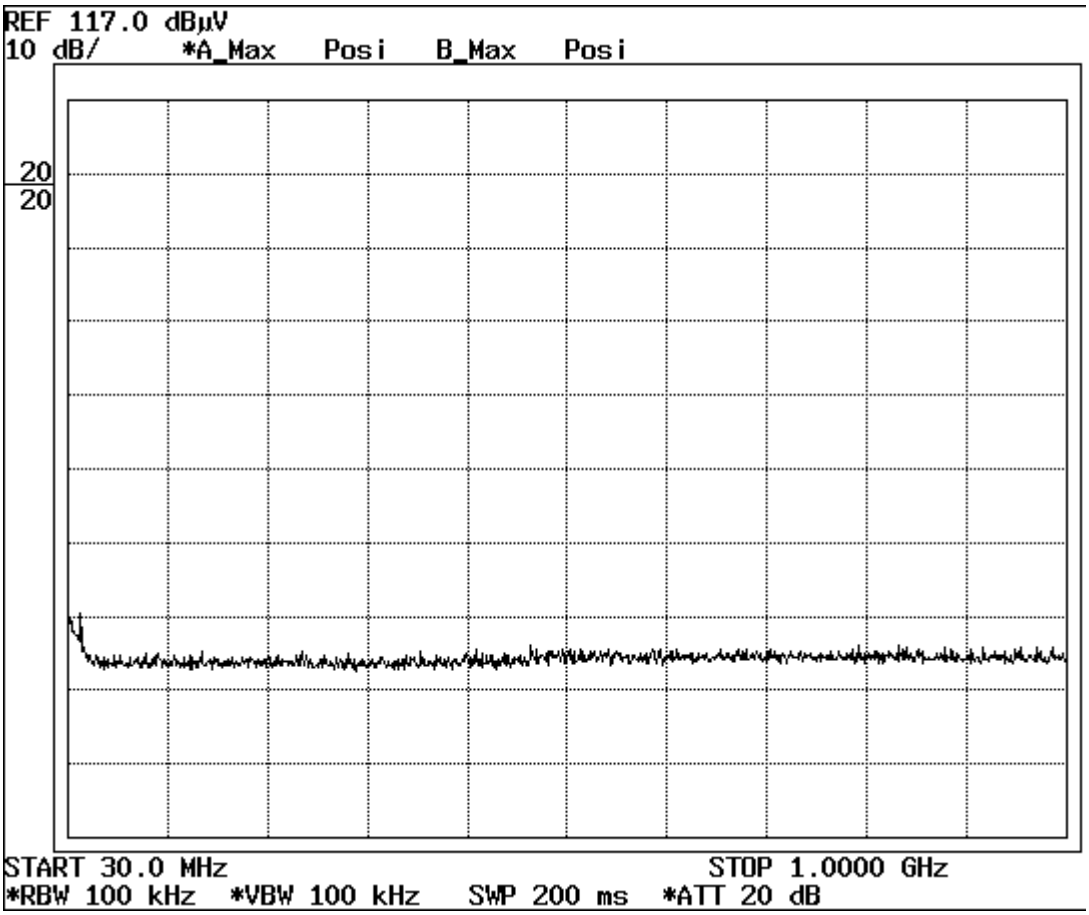


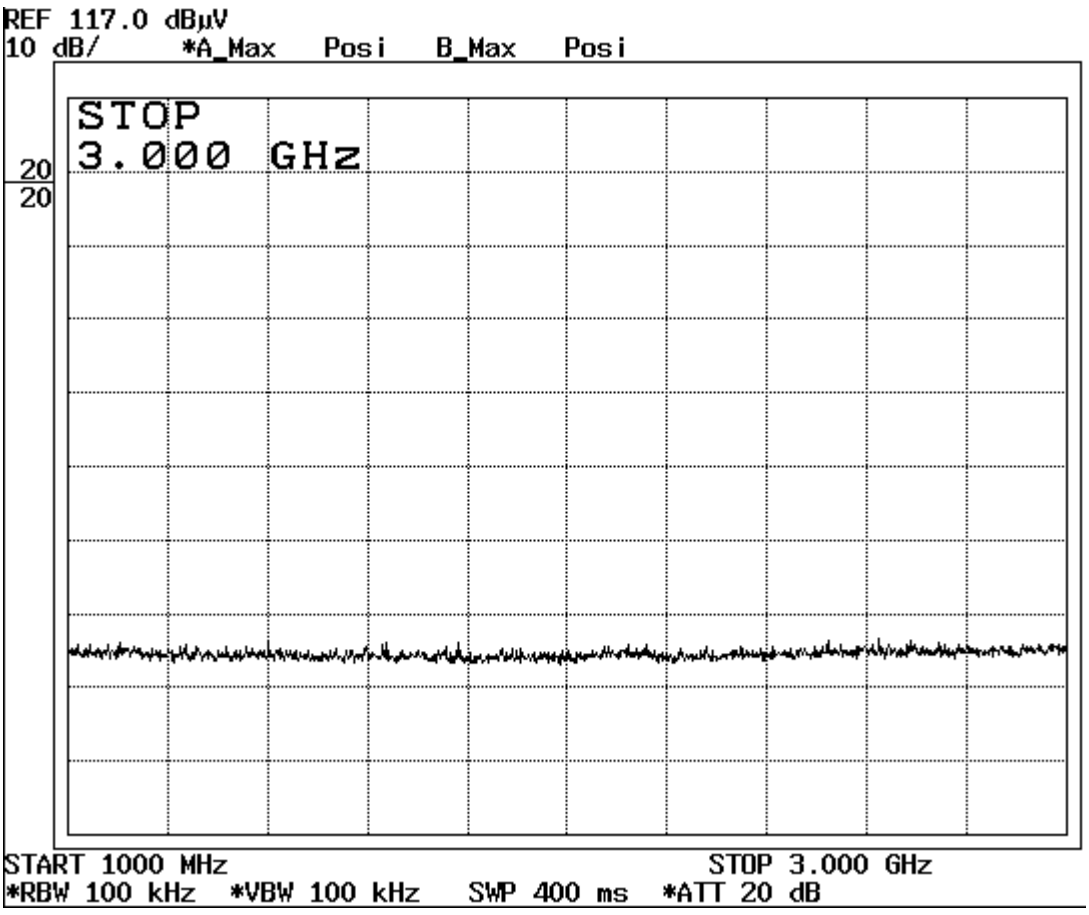

REF 117.0 dBµV
DL 91.0 dBµV
10 dB/
*A_Max
Posi
B_Blank Norm
20
20
START 1000 MHz
STOP 3.000 GHz
*RBW 100 kHz
*VBW 100 kHz
SWP 400 ms
*ATT 20 dB

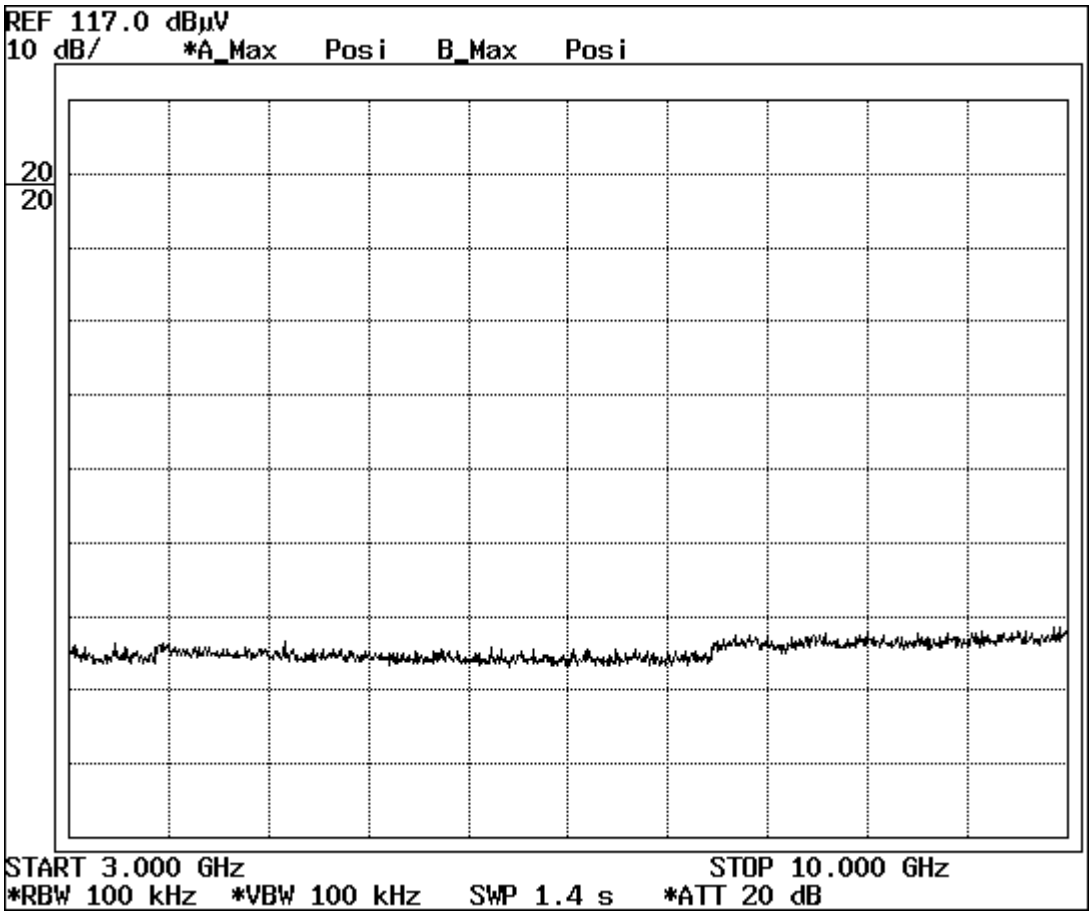

REF 117.0 dBµV
DL 91.0 dBµV
10 dB/
*A_Max
Posi
B_Blank Norm
20
20
START 3.000 GHz
STOP 10.000 GHz
*RBW 100 kHz
*VBW 100 kHz
SWP 1.4 s
*ATT 20 dB

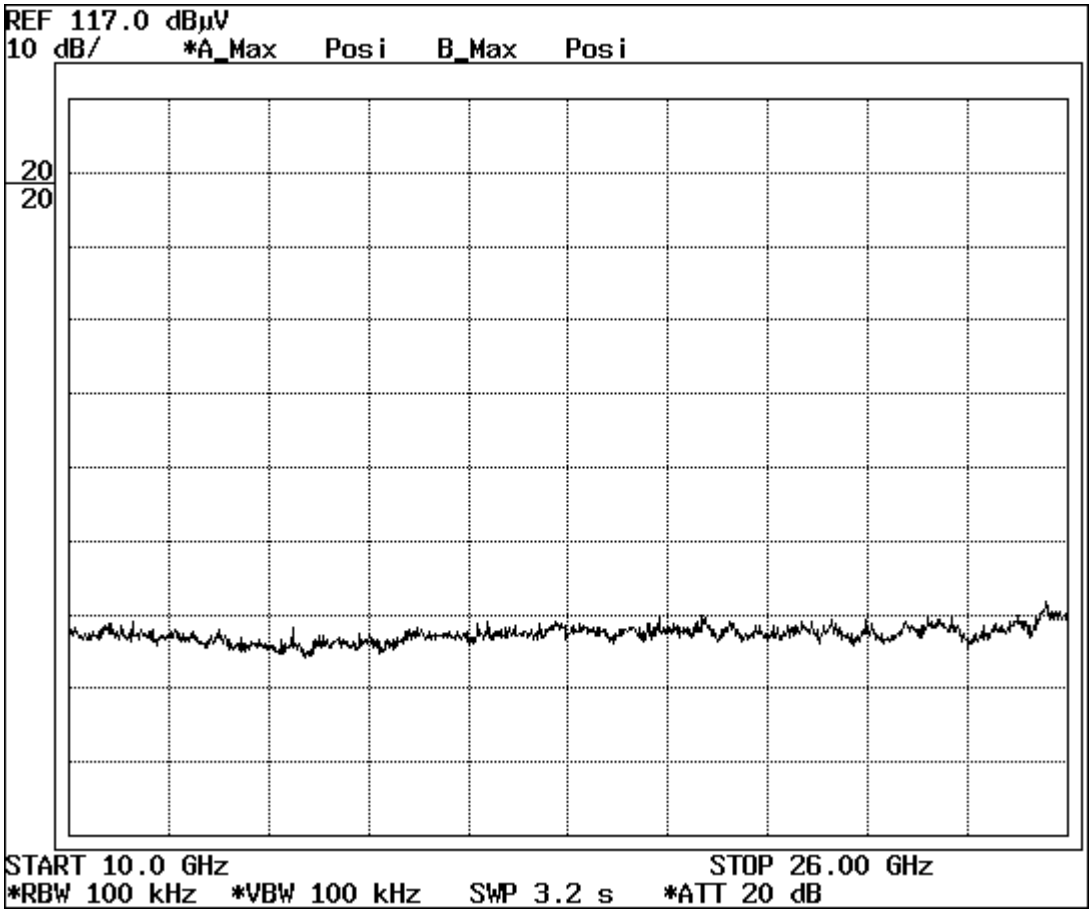

REF 117.0 dBµV
DL 91.0 dBµV
10 dB/
*A_Max
Posi
B_Blank Norm
20
20
START 10.0 GHz
STOP 26.00 GHz
*RBW 100 kHz
*VBW 100 kHz
SWP 3.2 s
*ATT 20 dB

Receiving


REF 117.0 dBµV
10 dB/ *A_Max Posi B_Max Posi
20
START 30.0 MHz
STOP 1.0000 GHz
*RBW 100 kHz *VBW 100 kHz SWP 200 ms *ATT 20 dB


REF 117.0 dBµV
10 dB/ *A_Max Posi B_Max Posi
STOP
3.000 GHz
20
START 1000 MHz
STOP 3.000 GHz
*RBW 100 kHz *VBW 100 kHz SWP 400 ms *ATT 20 dB


REF 117.0 dBµV
10 dB/ *A_Max Posi B_Max Posi
20
20
START 3.000 GHz
STOP 10.000 GHz
*RBW 100 kHz *VBW 100 kHz SWP 1.4 s *ATT 20 dB


REF 117.0 dBµV
10 dB/ *A_Max Posi B_Max Posi
20
20
START 10.0 GHz
STOP 26.00 GHz
*RBW 100 kHz *VBW 100 kHz SWP 3.2 s *ATT 20 dB

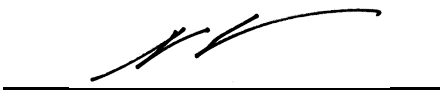
Power Density(Conducted)

A-PEX INTERNATIONAL CO., LTD.
YOKOWA NO.3 OPEN SITE

COMPANY : SONY Corporation
EQUIPMENT : Wireless LAN PC Card
MODEL : PCWA-C150S
FCC ID : AK8PCWAC150S
POWER : AC120V/60Hz
Mode : Transmitting

REPORT NO : 22FE0052-YW-2
REGULATION : Fcc Part15SubpartC 247 (d)

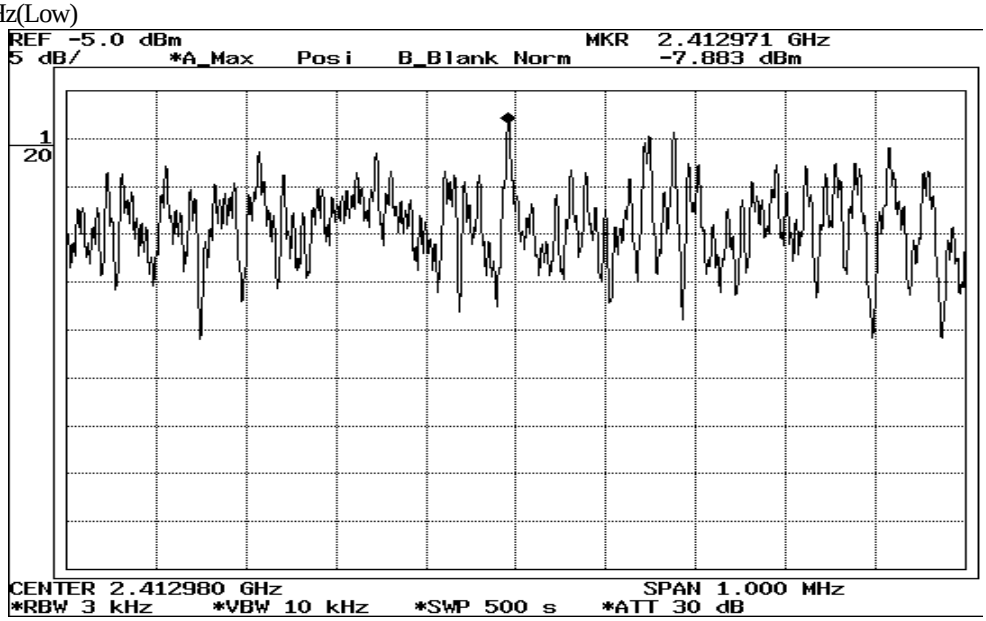
DATE : 2002/2/6
Temp./Humi. : 24deg.C / 30%



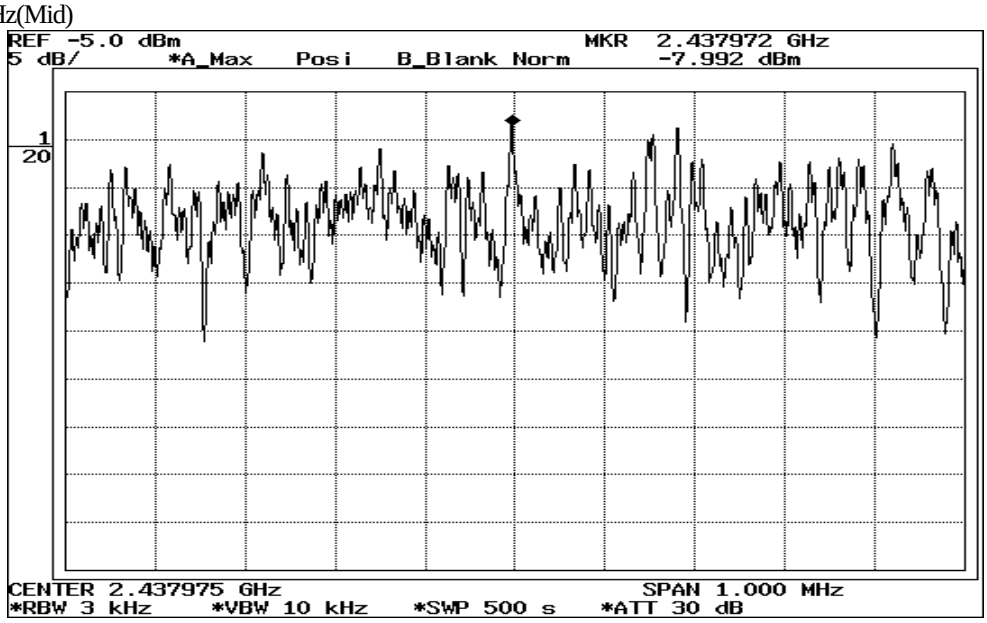
ENGINEER : Naoki Sakamoto

CH	FREQ [GHz]	S/A Reading [dBm]	Limit [dBm]	Margin [dB]
Low	2.4130	-7.9	8.0	15.9
Mid	2.4380	-8.0	8.0	16.0
High	2.4630	-8.3	8.0	16.3

1. Ch1: 2412MHz(Low)



2. Ch6: 2437MHz(Mid)



3. Ch11: 2462MHz(Hi)