

TEST REPORT

Report number: Z071C-08305

Issue Date: November 18, 2008

The device, as described herewith, was tested pursuant to applicable test procedure indicated below and complies with the requirements of;

FCC Part15 Subpart C / IC RSS-210

The test results are traceable to the international or national standards.

Applicant	: TOPCON CORPORATION 75-1, Hasunuma-cho, Itabashi-ku, Tokyo 174-8580 Japan Phone: +81-3-3558-2634 Fax: +81-3-3966-0038
Equipment under test (EUT)	: Wireless LAN Module
FCC ID	: H5P-RS1NJT499
IC Certification Number	: 6050A-RS1NJT499
Model Number	: RS1NJT-499
Serial Number	: 0607000290
EUT Condition	: Pre-production

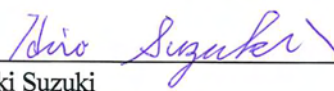
Test procedure : ANSI C63.4-2003
Date of test : November 4, 5, 7, 10, 11,13-15, 2008
Test place : 3m Semi-anechoic chamber, Shielded room
Test results : Complied

Zacta Technology Corporation certifies that no party to the application is subject to a denial of federal benefits that include FCC benefits, pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988,21U.S.C. 853(a).

The results in this report are applicable only to the samples tested.
This report shall not be re-produced except in full without the written approval of ZACTA Technology Corporation.

This test report must not be used by client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

Tested by:


Hiroaki Suzuki

Authorized by:

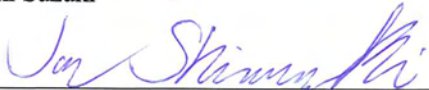

Jun Shimanuki
General Manager of Technical Division



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1. Summary of Test

1.1 Purpose of test

It is the original test in order to verify conformance to standards listed in section 1.2.

1.2 Standards

CFR47 FCC Part 15 Subpart C, RSS-210

1.3 Summary of test results

Table-A presents the list of the measurement items for Digital modulations systems operating in the 2400-2483.5 MHz band under FCC Part 15 Subpart C and Industry Canada RSS-210 Issue 7.

Table-A: List of the measurements

Test Items Section	Test Items	Condition	Result
	Transmit mode [Tx]:		
15.247(a)(2) RSS-210 A8.2(a)	Occupied Bandwidth (6dB Bandwidth)	Conducted	Pass
RSS-Gen 4.6.1	99% Occupied bandwidth	Conducted	Pass
15.247(b)(3) RSS-210 A8.4(4)	Maximum Peak Output Power - Conducted -	Conducted	Pass
15.247(d) RSS-210 A8.5	Band Edge Compliance of RF Conducted Emissions	Conducted	Pass
15.247(d) RSS-210 A8.5 RSS-Gen 4.9, 4.10	Spurious Emissions	Conducted Radiated	Pass
15.247(d) 15.205 15.209 RSS-210 2.2	Restricted Bands of Operation	Radiated	Pass
15.247(e) RSS-210 A8.2(b)	Transmitter power spectral Density	Conducted	Pass
15.207 RSS-Gen 7.2.2	AC Power Line Conducted Emissions 150kHz – 30MHz	Conducted	Pass

1.4 Deviation from the standard

None

1.5 Modification to the EUT by laboratory

None

2.3 Operating channels and frequencies

Channel	Frequency [MHz]
1	2412
2	2417
3	2422
4	2427
5	2432
6	2437
7	2442
8	2447
9	2452
10	2457
11	2462

2.4 Operating mode

【Test mode】

- i) Test program set up (Wlan Util. exe)
- ii) Select a test mode
 - Operating frequency: CH.1, 6, 11
 - Tx Speed: 1Mbps (IEEE802.11b), 6Mbps (IEEE802.11g)
 - Power Control: -10dBm (IEEE802.11b), -14dBm (IEEE802.11g)
- iii) Start test mode

【Standby / Rx mode】

- i) Test program set up (Wlan Util. exe)
- ii) Select a test mode
 - Write Receive only
 - Operating frequency: CH.1, 6, 11
 - Rx Speed: Select a all
- iii) Start test mode

3. Configuration information

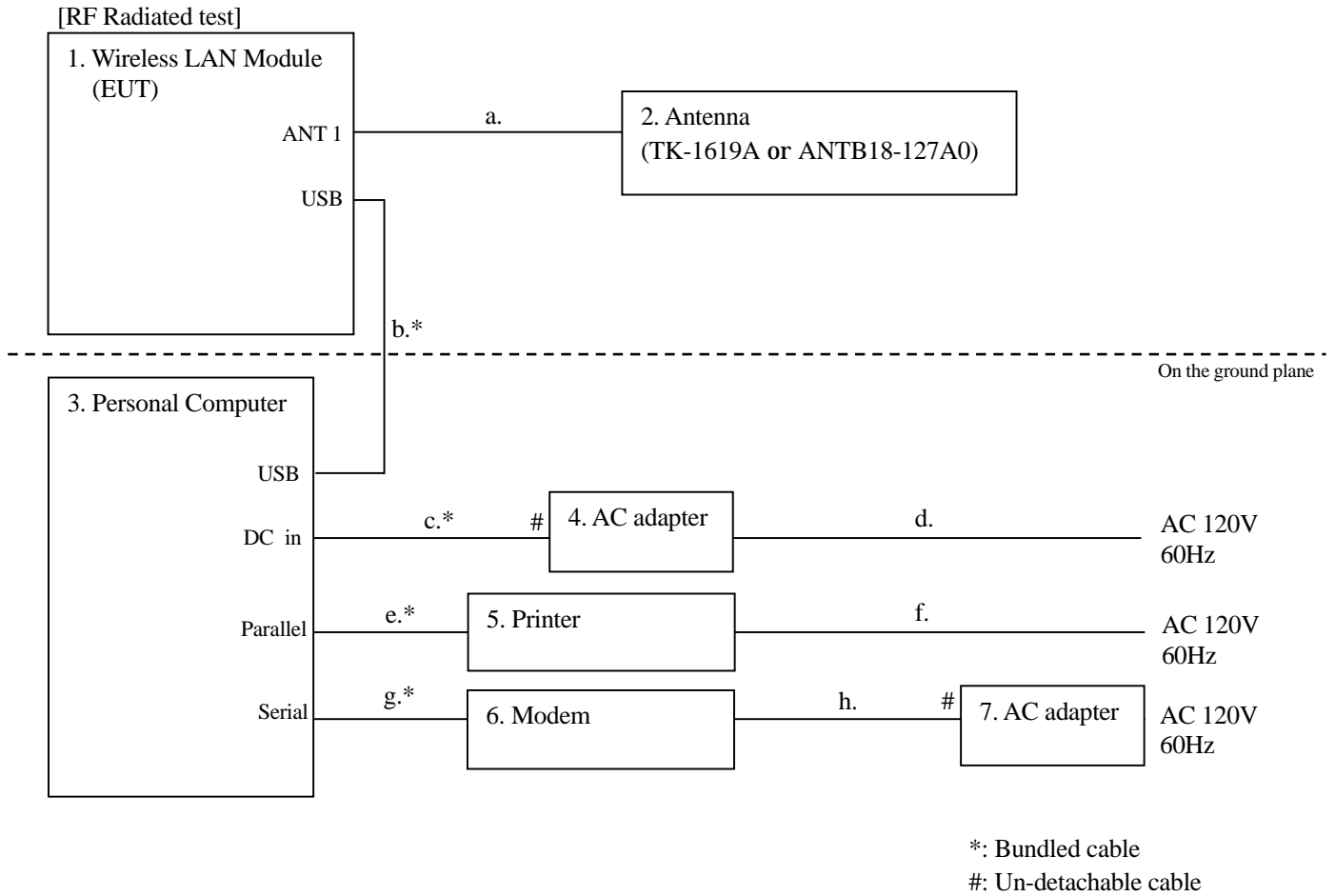
3.1 Peripheral(s) used

No.	Equipment	Company	Model No.	Serial No.	FCC ID/DoC	Comment
2	Antenna	TOPCON	TK-1619A	N/A	-	-
		TOPCON	ANTB18-127A0	N/A	-	
3	Personal Computer	hp	Compaq nx6320	CNU7071H4D	DoC	-
4	AC adapter for PC	hp	PA-1650-02HC	7108054501	-	-
5	Printer	Canon	BJF 200	ETN02300	DoC	-
6	Modem	US. Robotics	Sport_Ster 33.6Kbps	000839032BK6YV4J	DoC	-
7	AC adapter for Modem	DELL	ADP-90FB	CN-0R0423-48661-48P-5POS	-	-

3.2 Cable(s) information

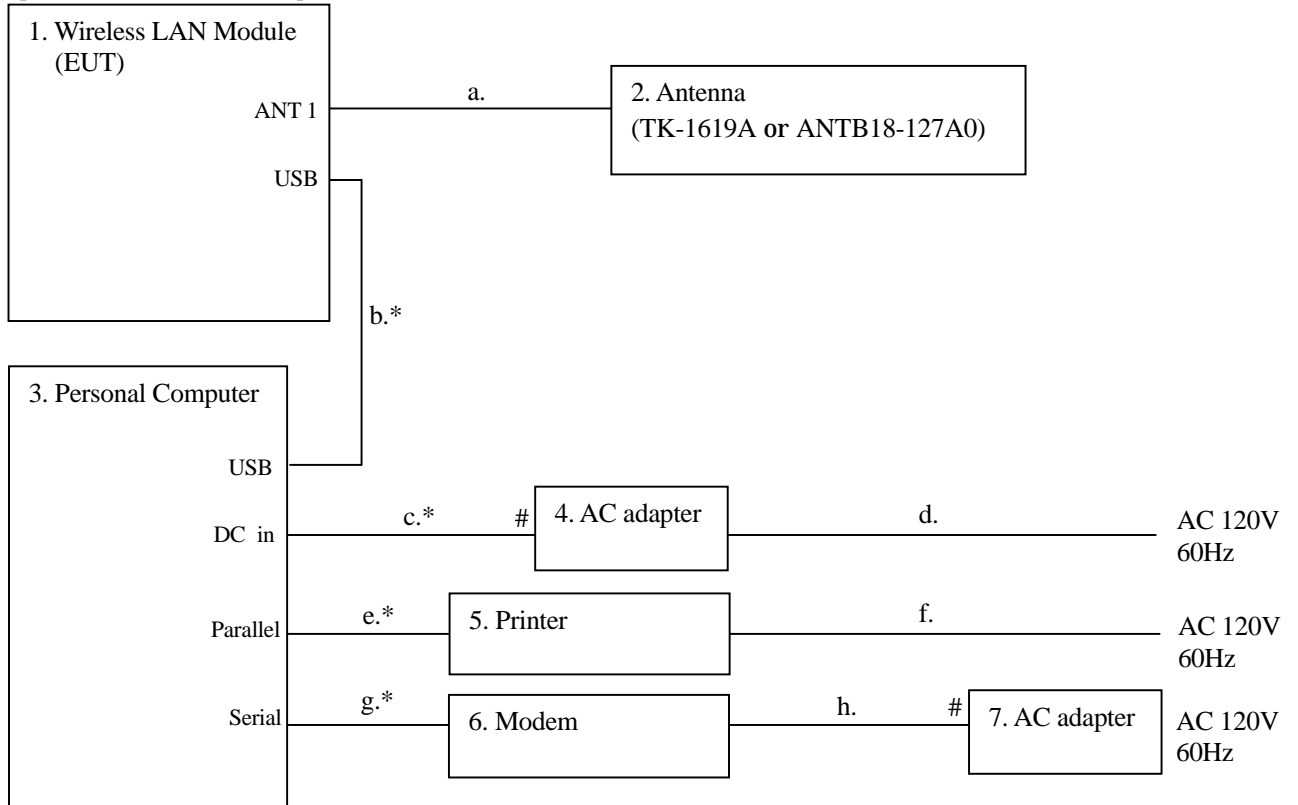
No.	Cable	Length [m]	Shield	Connector	Comment
a	Coaxial cable	0.10	No	Metal	Ant.: TK-1619A
		0.06	No	Metal	Ant.: ANTB18-127A0
b	USB cable	2.0	Yes	Metal	-
c	DC cable for PC AC adapter	1.8	No	Metal	-
d	AC Power cord for PC AC adapter	1.7	No	Plastic	-
e	Parallel cable	2.1	Yes	Metal	-
f	AC Power cord for Printer	1.8	No	Plastic	-
g	Serial cable	1.5	Yes	Metal	-
h	DC Power cord for Modem AC adapter	1.7	No	Metal	-

3.3 System configuration



Note 1: Numbers assigned to equipment or cables on this diagram are corresponded to the list in "2.2 EUT information", "3.1 Peripheral(s) used" and "3.2 Cable(s) information".

[Conducted emissions test]



*: Bundled cable

#: Un-detachable cable

Note 1: Numbers assigned to equipment or cables on this diagram are corresponded to the list in “2.2 EUT information”, “3.1 Peripheral(s) used and “3.2 Cable(s) information”.

4. Test Instruments

List of Measuring Instruments

Equipment	Company	Model No.	Serial No.	Cal. due	Cal. date
Spectrum Analyzer (3Hz – 42.98GHz)	Agilent Technologies	E4447A	MY46180188	Feb. 2009	Feb. 12, 2008
EMI Receiver	ROHDE&SCHWARZ	ESCI	100764	May. 2009	May. 30, 2008
Preamplifier (100kHz-1.2GHz)	ANRITSU	MH648A	M96057	Jun. 2009	Jun. 14, 2008
Preamplifier (1GHz-26.5GHz)	Agilent Technologies	8449B	3008A01008	Dec. 2009	Dec. 11, 2007
Notch filter	Micro-Tronics	BRM50702	045	Sep. 2009	Sep. 8, 2008
Line impedance stabilization network for EUT	Kyoritsu Electrical Works, Ltd.	KNW-407F	8-2003-1	Apr. 2009	Apr. 15, 2008
Line impedance stabilization network for peripheral	Kyoritsu Electrical Works, Ltd.	KNW-242F	8-1973-1	Apr. 2009	Apr. 28, 2008
50Ω terminator	Agilent Technologies	11593A	N/A	Mar. 2009	Mar. 5, 2008
Coaxial switch	ANRITSU	MP59B	6200611581	Feb. 2009	Feb. 14, 2008
Loop antenna	ROHDE&SCHWARZ	HFH2-Z2	892246/010	Feb. 2009	Feb. 12, 2008
Coaxial cable	N/A	RG213	N/A	Feb. 2009	Feb. 14, 2008
Biconical Antenna	Schwarzbeck	VHA9103/BBA9106	2323	Apr. 2009	Apr. 23, 2008
Attenuator(6dB)	TDC	TAT-43B-06	N/A	Aug. 2009	Aug. 8, 2008
Log periodic antenna	Schwarzbeck	UHALP9108A	0589	Apr. 2009	Apr. 23, 2008
Attenuator(3dB)	TDC	TAT-43B-03	N/A	Aug. 2009	Aug. 8, 2008
Double Ridged Guide Antenna	EMCO	3115	9408-4327	Sep. 2009	Sep. 26, 2007
Microwave cable	STORM	MFR-57500 15m	90-660-591	Dec. 2009	Dec. 11, 2007
Microwave cable	SUHNER	SUCOFLEX 104/1m	199119/4	Dec. 2009	Dec. 11, 2007
Coaxial cable	Fujikura	5D-2W/10m	#AEC3R-001	Feb. 2009	Feb. 14, 2008
		5D-2W/1.5m	#AEC3RC-001	Sep. 2009	Sep. 1, 2008
		5D-2W/4m	#AEC3C-001	Feb. 2009	Feb. 14, 2008
Coaxial cable	SUHNER	RG214/U/10m	#AEC3C-002	Feb. 2009	Feb. 14, 2008
Coaxial cable	SUHNER	SUCOFLEX104 0.3m	199511/4	May. 2009	May. 7, 2007
Attenuator	Weinschel	56-10	J4180	May. 2010	May. 7, 2007
PC	DELL	DIMENSION E521	75465BX	N/A	N/A
Software	TOYO Corporation	EP5/CE-AJ	0611193/V3.3	N/A	N/A
Site attenuation	ZACTA Technology	3m Semi anechoic chamber	5192Z	Apr. 2009	Apr. 18, 2008

*The calibrations of the above equipment are traceable to NIST or equivalent standards of the reference organizations.

5. Test Type and Results

5.1 Occupied Bandwidth / 6dB Bandwidth

5.1.1 Test Procedure [FCC 15.247(a)(2), IC RSS-210 A8.2(a)]

The bandwidth at 6dB down from the highest inband spectral density is measured with a spectrum analyzer connected to the antenna terminal, while EUT is operating in transmission mode at the appropriate center frequency.

The spectrum analyzer is set to:

- RBW=180kHz, VBW=180kHz, Span=30MHz, Sweep=auto

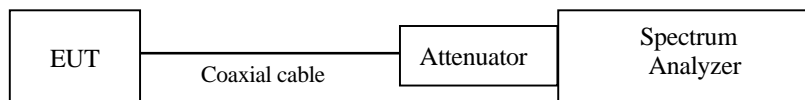
The EUT was set to operate with following conditions.

- ch.1 (low), ch.6 (mid) and ch.11 (high)

The test mode of EUT is as follows.

- Test mode

5.1.2 Measurement Setup



5.1.3 Limit of Bandwidth at 6dB below

None

5.1.4 Measurement Result

[IEEE802.11b]

Channel	Center Frequency [MHz]	Occupied Bandwidth [MHz]	6dB Bandwidth [MHz]
1	2412.0	14.1773	10.161
6	2437.0	14.1476	10.152
11	2462.0	14.1432	10.159

[IEEE802.11g]

Channel	Center Frequency [MHz]	Occupied Bandwidth [MHz]	6dB Bandwidth [MHz]
1	2412.0	16.4157	16.342
6	2437.0	16.4175	16.369
11	2462.0	16.4221	16.338

5.1.5 Trace Data

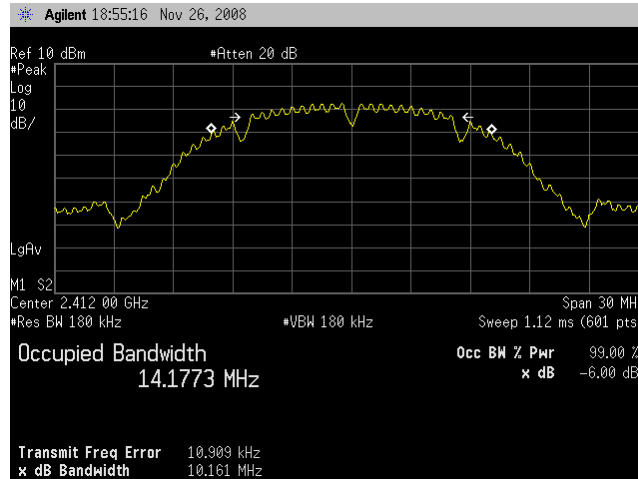
Test Personnel:

Tested by: Hiroaki Suzuki

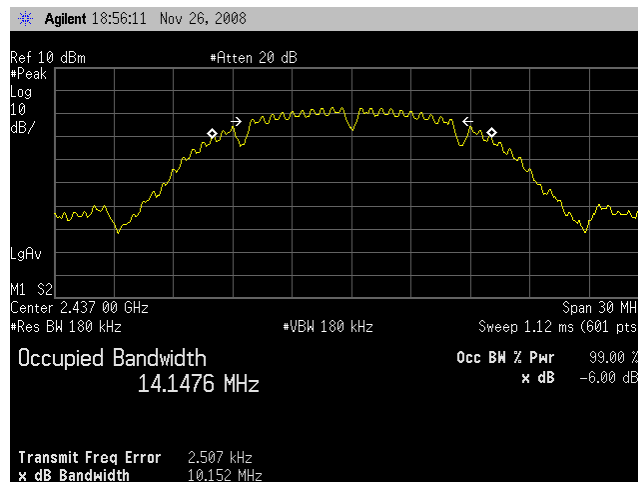
Date : Nov. 4, 2008
 Temperature : 23.6 [°C]
 Humidity : 54.2 [%]
 Test place : Shielded room

Occupied Bandwidth / 6dB Bandwidth [IEEE802.11b]

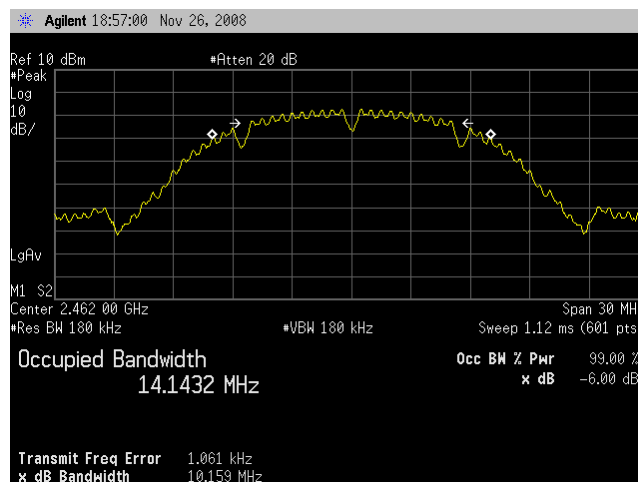
Channel 1: 2412.0MHz



Channel 6: 2437.0MHz

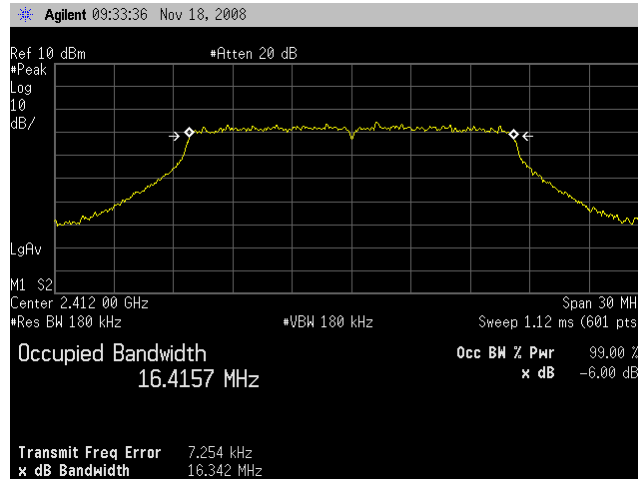


Channel 11: 2462.0MHz

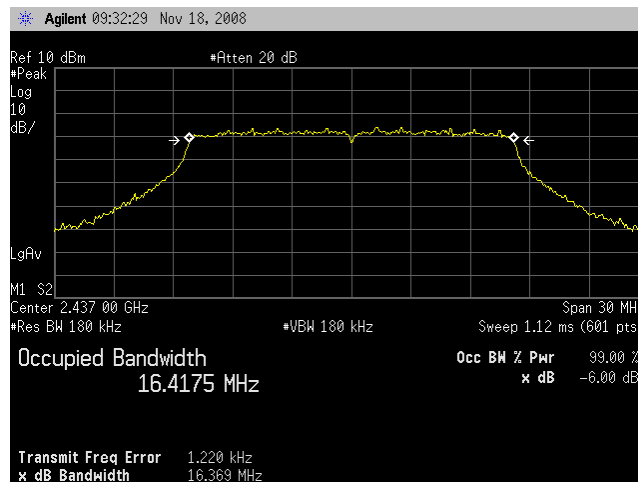


Occupied Bandwidth / 6dB Bandwidth [IEEE802.11g]

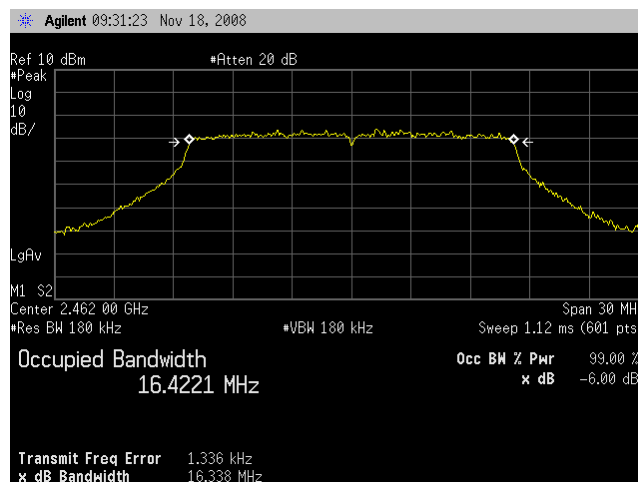
Channel 1: 2412.0MHz



Channel 6: 2437.0MHz



Channel 11: 2462.0MHz



5.2 Maximum Peak Output Power - Conducted -

5.2.1 Test Procedure [FCC 15.247(b)(3), IC RSS-210 A8.4(4)]

The peak power is measured with a spectrum analyzer connected to the antenna terminal, while EUT is operating in transmission mode at the appropriate center frequency.

The spectrum analyzer is set to:

- RBW=1MHz, VBW=3MHz, Span=100MHz, Sweep=auto

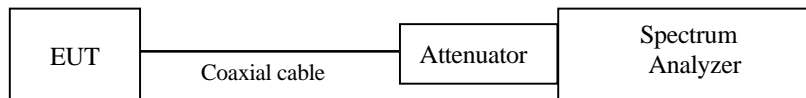
The EUT was set to operate with following conditions.

- ch.1 (low), ch.6 (mid) and ch.11 (high)

The test mode of EUT is as follows.

- Test mode in operation.

5.2.2 Test Instruments and Measurement Setup



5.2.3 Limit of Maximum Peak Output Power

1W (1000mW) or less

5.2.4 Measurement Result

Ant. Type: TK-1619A (2.0dBi)

[IEEE802.11b]

channel	Center Frequency [MHz]	Factor [dB]	Reading [dBm]	Antenna Gain of EUT [dBi]	Level [dBm]	Peak Output Power [mW]	Limit [mW]	PASS /FAIL
1	2412.0	9.86	3.40	2.0	15.26	33.5738	1000	PASS
6	2437.0	9.86	3.56	2.0	15.42	34.8337	1000	PASS
11	2462.0	9.86	3.59	2.0	15.45	35.0752	1000	PASS

[IEEE802.11g]

channel	Center Frequency [MHz]	Factor [dB]	Reading [dBm]	Antenna Gain of EUT [dBi]	Level [dBm]	Peak Output Power [mW]	Limit [mW]	PASS /FAIL
1	2412.0	9.86	-2.56	2.0	9.30	8.5114	1000	PASS
6	2437.0	9.86	-2.73	2.0	9.13	8.1846	1000	PASS
11	2462.0	9.86	-2.61	2.0	9.25	8.4140	1000	PASS

Calculation:

$$\text{Reading (dBm)} + \text{Factor (dB)} + \text{Antenna Gain of EUT (dBi)} = \text{Level (dBm)}$$

$$10\log P = \text{Level (dBm)}$$

$$P = 10^{(\text{Maximum Peak Output Power (dBm)} / 10)} \text{ (mW)}$$

Ant. Type: ANTB18-127A0 (1.9dBi)

[IEEE802.11b]

channel	Center Frequency [MHz]	Factor [dB]	Reading [dBm]	Antenna Gain of EUT [dBi]	Level [dBm]	Peak Output Power [mW]	Limit [mW]	PASS /FAIL
1	2412.0	9.86	3.40	1.9	15.16	32.8095	1000	PASS
6	2437.0	9.86	3.56	1.9	15.32	34.0408	1000	PASS
11	2462.0	9.86	3.59	1.9	15.35	34.2768	1000	PASS

[IEEE802.11g]

channel	Center Frequency [MHz]	Factor [dB]	Reading [dBm]	Antenna Gain of EUT [dBi]	Level [dBm]	Peak Output Power [mW]	Limit [mW]	PASS /FAIL
1	2412.0	9.86	-2.56	1.9	9.20	8.3176	1000	PASS
6	2437.0	9.86	-2.73	1.9	9.03	7.9983	1000	PASS
11	2462.0	9.86	-2.61	1.9	9.15	8.2224	1000	PASS

Calculation:

Reading (dBm) + Factor (dB) + Antenna Gain of EUT (dBi) = Level (dBm)

$10\log P = \text{Level (dBm)}$

$P = 10^{(\text{Maximum Peak Output Power (dBm)} / 10)} \text{ (mW)}$

5.2.5 Trace Data

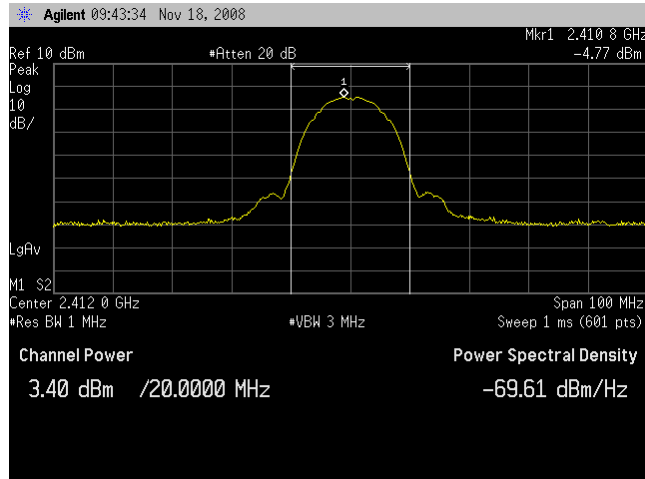
Test Personnel:

Tested by: Hiroaki Suzuki

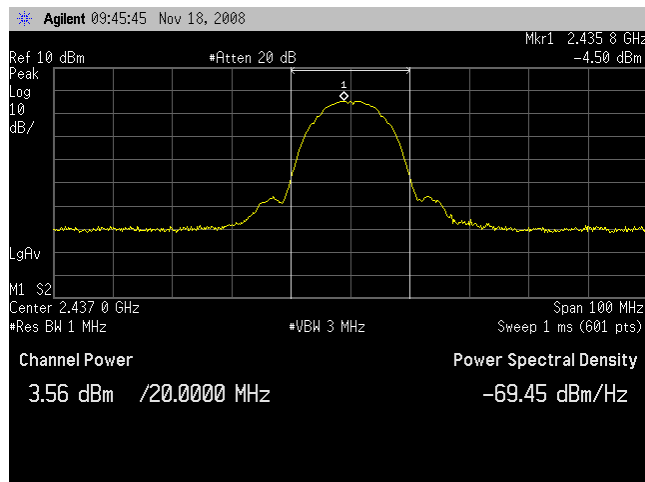
Date : Nov. 4, 2008
 Temperature : 23.6 [°C]
 Humidity : 54.2 [%]
 Test place : Shielded room

Maximum Peak Output Power - Conducted - [IEEE802.11b]

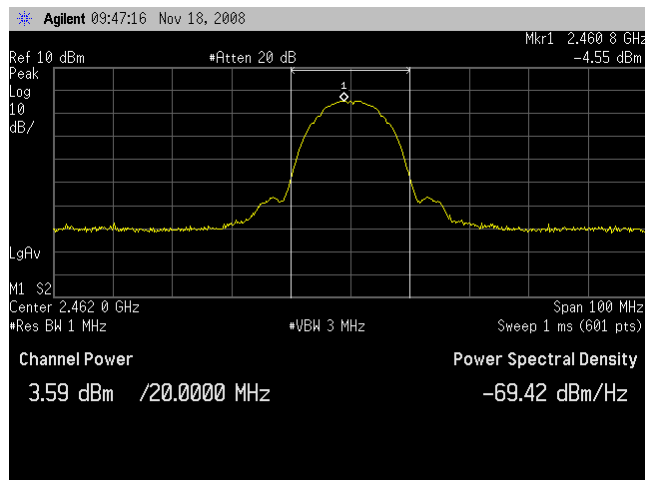
Channel 1: 2412.0MHz



Channel 6: 2437.0MHz

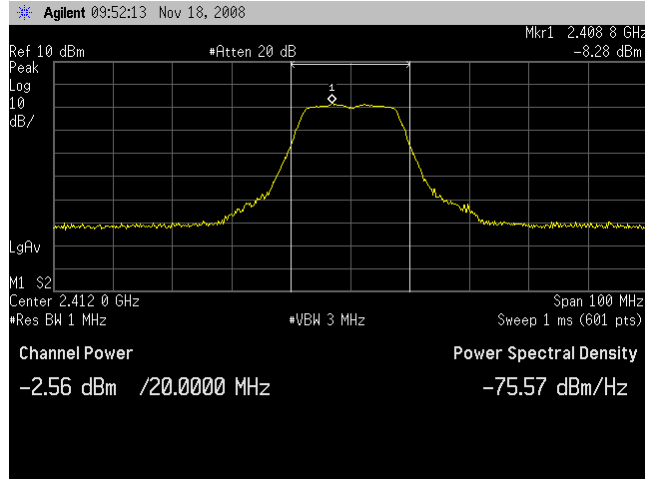


Channel 11: 2462.0MHz

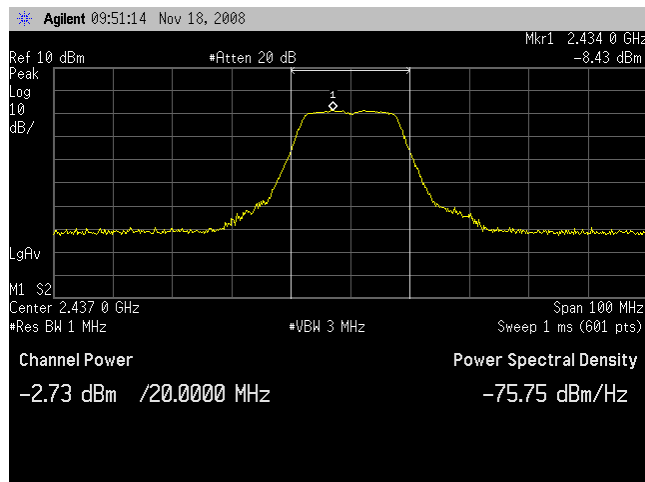


Maximum Peak Output Power - Conducted - [IEEE802.11g]

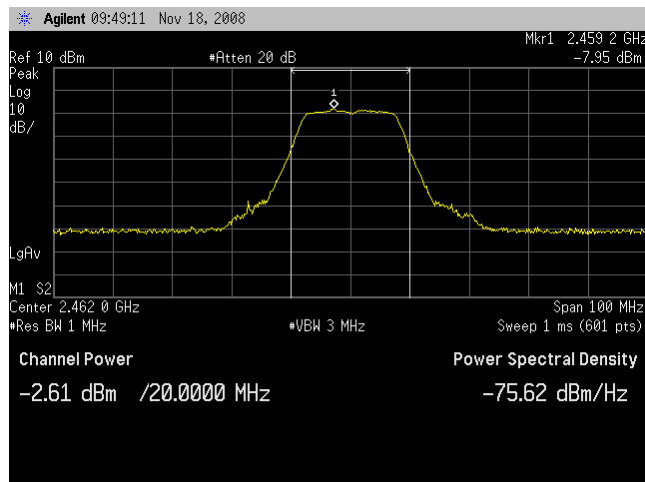
Channel 1: 2412.0MHz



Channel 6: 2437.0MHz



Channel 11: 2462.0MHz



5.3 Band Edge Compliance of RF Conducted Emissions

5.3.1 Test Procedure [FCC 15.247 (d), IC RSS-210 A8.5]

The Band Edge is measured with a spectrum analyzer connected to the antenna terminal, while EUT is operating in transmission mode at the appropriate center frequency.

The spectrum analyzer is set to:

- RBW=100kHz, VBW=100kHz, Span=Arbitrary setting, Sweep=Auto

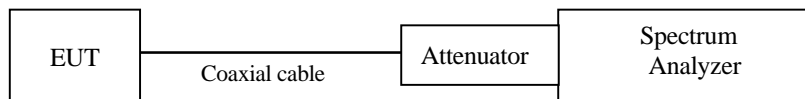
The EUT was set to operate with following conditions.

- ch.1 (low) and ch.11 (high)

The test mode of EUT is as follows.

- Test mode

5.3.2 Test Instruments and Measurement Setup



5.3.3 Limit of Band-edge Compliance of RF Conducted Emissions

In any 100kHz bandwidth outside the frequency band the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.

5.3.4 Measurement Results of Band-edge

[IEEE802.11b]

Channel	Frequency [MHz]	RF power Level [dBm]	Band-edge Frequency [MHz]	Band-edge Level [dBm]	Difference Level [dBm]	Limit [dBm]	PASS / FAIL
1	2413.00	-8.17	2399.50	-53.83	45.66	At least 20dB below from peak of RF.	PASS
11	2461.00	-8.20	2474.50	-50.75	42.55	At least 20dB below from peak of RF.	PASS

[IEEE802.11g]

Channel	Frequency [MHz]	RF power Level [dBm]	Band-edge Frequency [MHz]	Band-edge Level [dBm]	Difference Level [dBm]	Limit [dBm]	PASS / FAIL
1	2413.25	-17.16	2399.25	-57.42	40.26	At least 20dB below from peak of RF.	PASS
11	2463.25	-17.33	2477.38	-59.66	42.33	At least 20dB below from peak of RF.	PASS

5.3.5 Trace Data

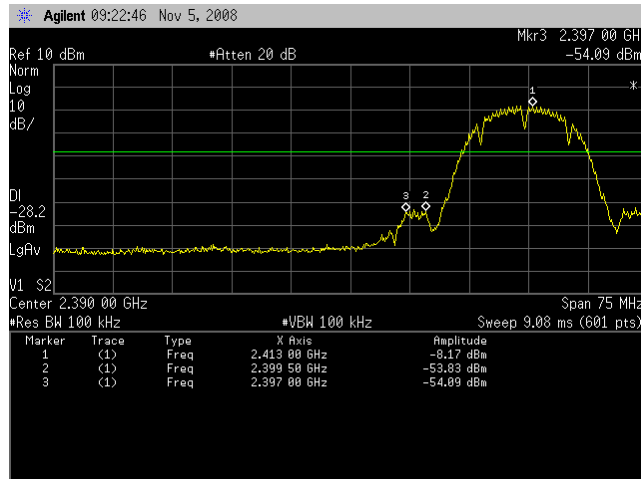
Test Personnel:

Tested by: Hiroaki Suzuki

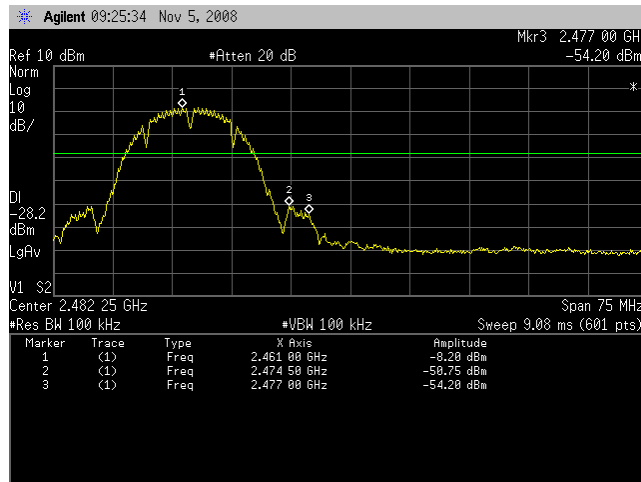
Date : Nov. 5, 2008
 Temperature : 20.0 [°C]
 Humidity : 56.0 [%]
 Test place : Shielded room

Band Edge Compliance of RF Conducted Emissions [IEEE802.11b]

Channel 1: 2412.0MHz

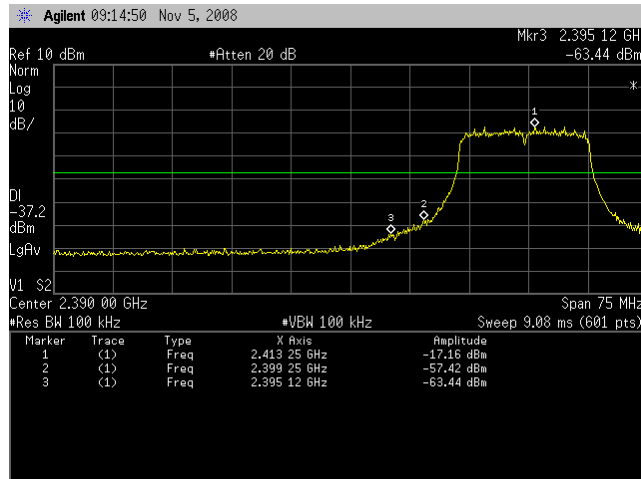


Channel 11: 2462.0MHz

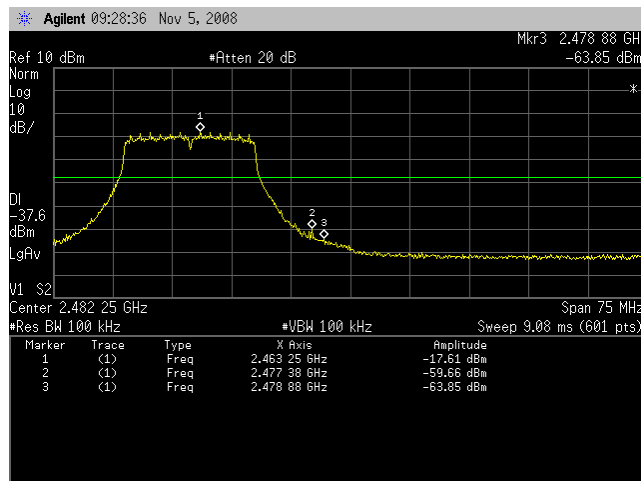


Band Edge Compliance of RF Conducted Emissions [IEEE802.11g]

Channel 1: 2412.0MHz



Channel 11: 2462.0MHz



5.4 Spurious Emissions - Conducted -

5.4.1 Test Procedure [FCC 15.247(d), IC RSS-210 A8.5, RSS-Gen 4.9&4.10]

The spurious emissions (Conducted) are measured with a spectrum analyzer connected to the antenna terminal, while EUT is operating in transmission mode at the appropriate center frequency.

The spectrum analyzer is set to:

- RBW=100kHz, VBW=300kHz, Span=Arbitrary setting, Sweep=Auto

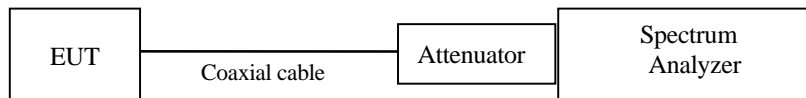
The EUT was set to operate with following conditions.

- ch.1 (low), ch.6 (mid) and ch.11 (high)

The test mode of EUT is as follows.

- Test mode

5.4.2 Measurement Setup



5.4.3 Limit of Spurious Emissions - Conducted -

In any 100kHz bandwidth outside the frequency band the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.

5.4.4 Measurement Results of Spurious Emissions - Conducted -

Channel	Frequency [MHz]	Limit [dBm]	Results Chart	PASS / FAIL
1	2412.0	At least 20dB below from peak of RF.	See the Trace Data	PASS
6	2437.0	At least 20dB below from peak of RF.	See the Trace Data	PASS
11	2462.0	At least 20dB below from peak of RF.	See the Trace Data	PASS

5.4.5 Trace Data

Test Personnel:

Tested by: Hiroaki Suzuki

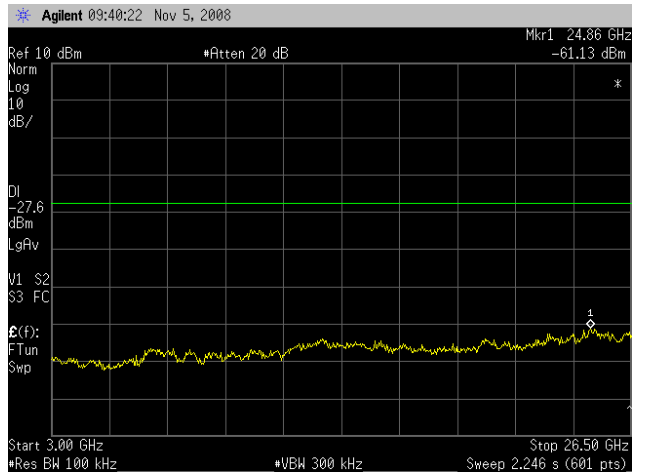
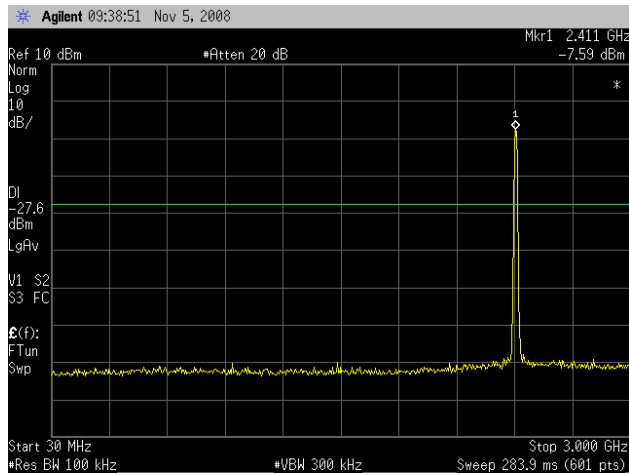
Date : Nov. 5, 2008
 Temperature : 20.0 [°C]
 Humidity : 56.0 [%]
 Test place : Shielded room

Spurious Emissions - Conducted -
30MHz-3GHz

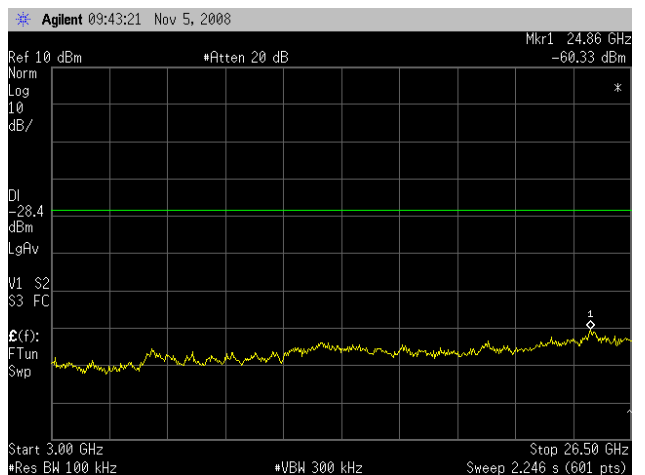
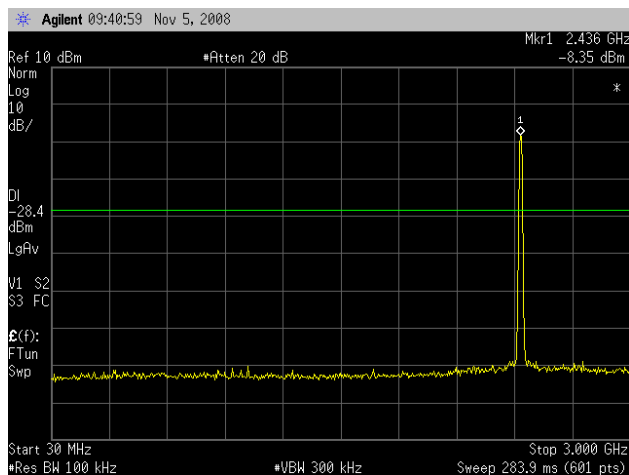
[IEEE802.11b]

3GHz-26.5GHz

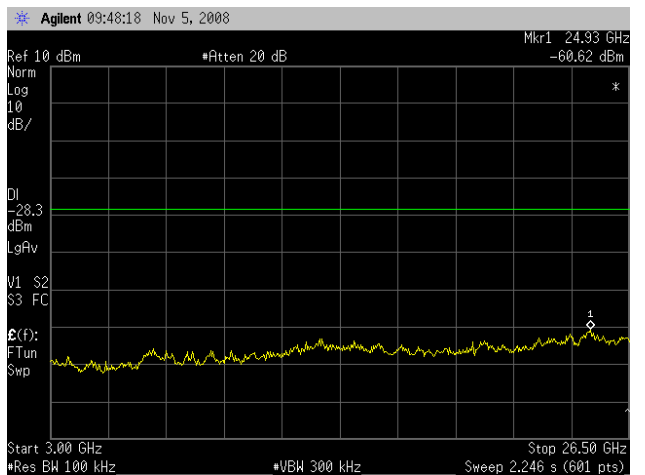
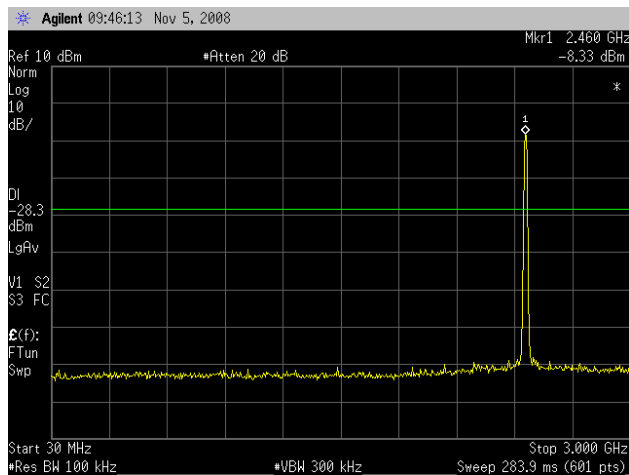
Channel 1: 2412.0MHz



Channel 6: 2437.0MHz



Channel 11: 2462.0MHz

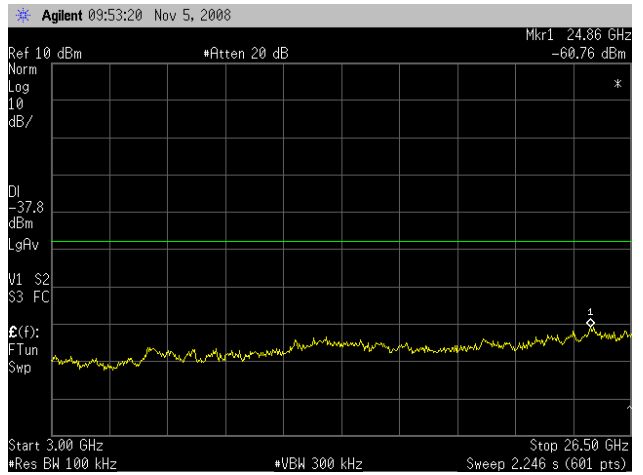
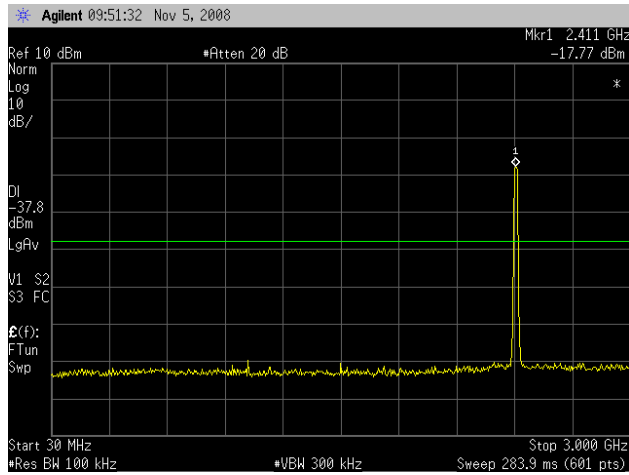


Spurious Emissions - Conducted -
30MHz-3GHz

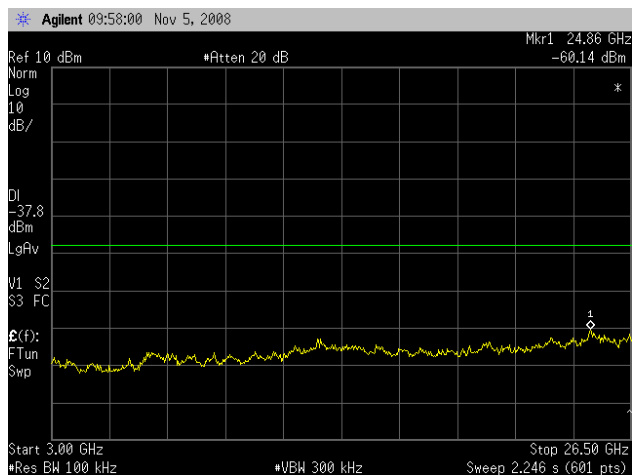
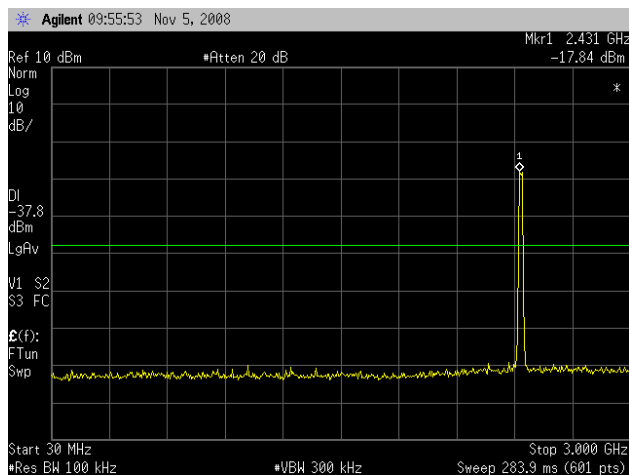
[IEEE802.11g]

3GHz-26.5GHz

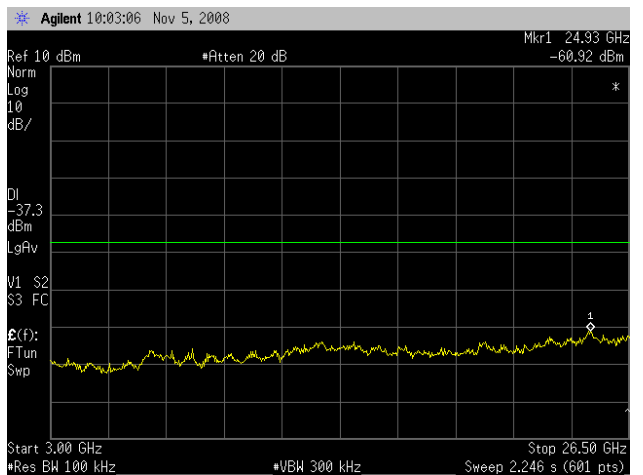
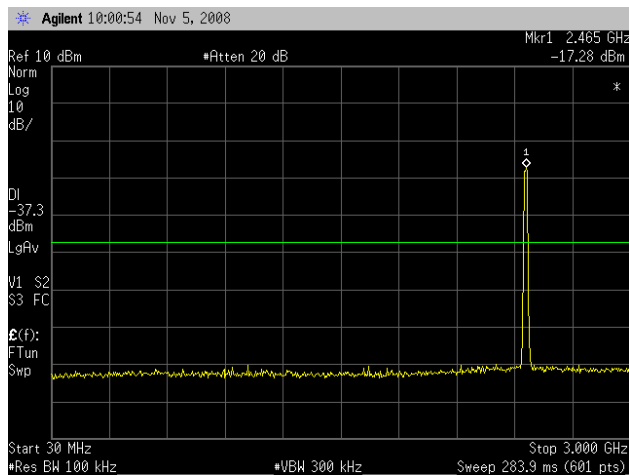
Channel 1: 2412.0MHz



Channel 6: 2437.0MHz



Channel 11: 2462.0MHz



5.5 Spurious Emissions - Radiated - (9kHz - 25GHz)

5.5.1 Test Procedure [FCC 15.205/209/247(d), IC RSS-210 A8.5, RSS-Gen 4.9&4.10]

Radiated emission measurements are performed at 3m distance with the broadband antenna (Loop antenna, Biconical antenna, log-periodic antenna and double-ridged guide antenna). The antenna is positioned both the horizontal and vertical planes of polarization and height is varied 1 to 4 meters and stopped at height producing the maximum emission. As for the Loop antenna, it is positioned with its plane vertical, and the center of the Loop is 1.0meter above the ground plane. Frequency Range: 9kHz -1GHz is scanned and investigated with the test receiver, and above 1GHz, with the spectrum analyzer. The detector function of the test receiver is set to CISPR Quasi-peak mode and the bandwidth is set to 120kHz. Peak and average detectors are used for measurements above 1GHz. The bandwidth of the spectrum analyzer is set to 1MHz.

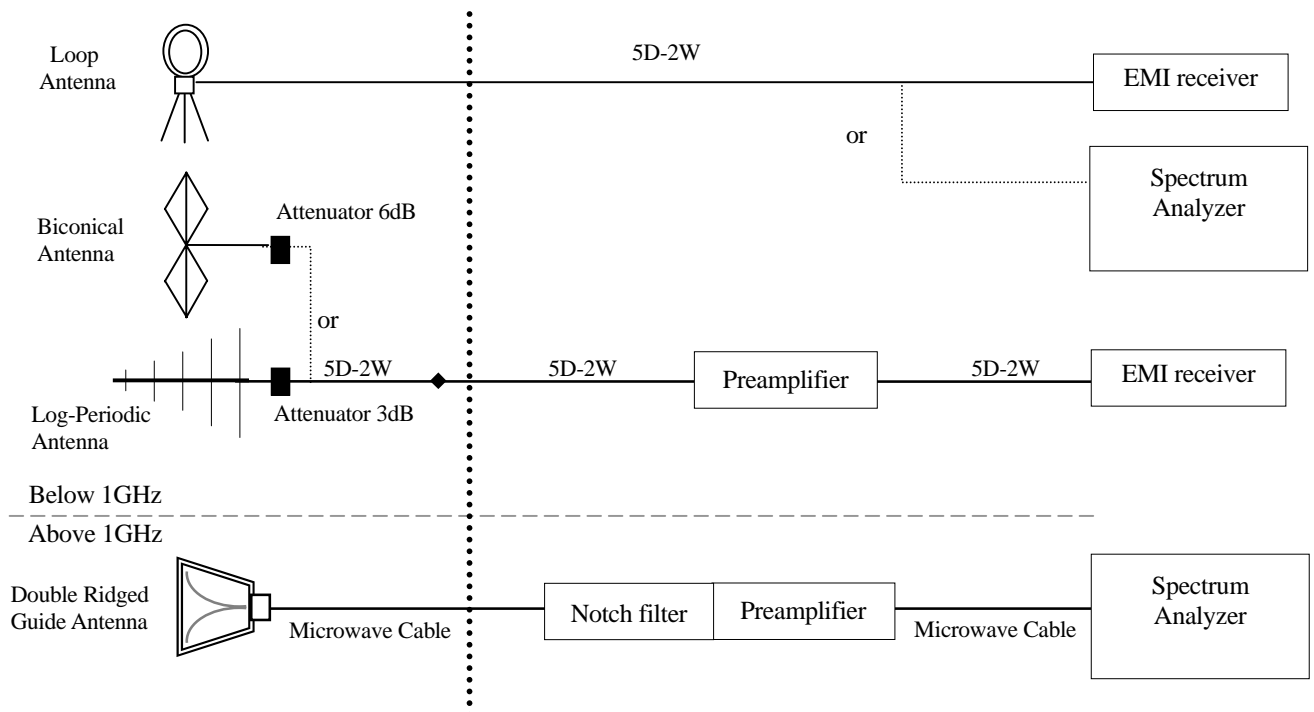
The EUT and support equipment are placed on a 1 meter x 1 meter surface, 0.8meter height styrene form table. The turntable is rotated by 360 degrees and stopped at azimuth of producing the maximum emission.

Interconnecting cables, which hanging closer than 40cm to the horizontal metal ground plane are bundled its excess in center. The highest fundamental frequency generated in the EUT is 2412-2462MHz, therefore the frequency was investigated up to 25GHz, as specified in CFR47 section 15.33, and at least six highest emissions are reported. The test results represent the worst-case emission for each emission with manipulating the EUT, support equipment, interconnecting cables and varying the mode of operation.

Sufficient time for the EUT, support equipment, and test equipment are allowed in order for them to warm up to their normal operating condition.

5.5.2 Measurement Setup

Test configuration for Spurious emissions



5.5.3 Limit of Spurious Emission Measurement

Frequency [MHz]	Field Strength	
	[μ V/m]	[dB μ V/m]
0.009 – 0.490	2400 / F [kHz]	20logE [μ V/m]
0.490 – 1.705	24000 / F [kHz]	20logE [μ V/m]
1.705-30	30	29.5
30 – 88	100	40.0
88 – 216	150	43.5
216 – 960	200	46.0
Above 960	500	54.0

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. Emission level [dB μ V/m] = 20 log Emission [μ V/m]
3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

5.5.4 Sample of field strength calculation

Spurious Emission $\text{dB}\mu\text{V/m} = 20\log_{10}(\mu\text{V/m})$

Limit @ 147.6MHz = 150 μ V/m = 43.5dB μ V/m
Reading = 42.8dB μ V
Ant. Factor + Cable Loss - Amp. Gain = 14.2 + 3.0 - 30.0 = -12.8dB
Total = 42.8 - 12.8 = 30.0dB μ V/m
Margin = 43.5 - 30.0 = <u>13.5dB</u>

5.5.5 Measurement Results

<u>Test Personnel:</u>		Date	: Nov. 7, 2008
Tested by:	Hiroaki Suzuki	Temperature	: 24.3 [°C]
		Humidity	: 34.5 [%]
		Test place	: 3m Semi-anechoic chamber
<u>Test Personnel:</u>		Date	: Nov. 10, 2008
Tested by:	Hiroaki Suzuki	Temperature	: 21.5 [°C]
		Humidity	: 35.7 [%]
		Test place	: 3m Semi-anechoic chamber
<u>Test Personnel:</u>		Date	: Nov. 11, 2008
Tested by:	Hiroaki Suzuki	Temperature	: 22.5 [°C]
		Humidity	: 36.1 [%]
		Test place	: 3m Semi-anechoic chamber

Spurious Emissions - Radiated - [IEEE802.11b] Horizontal installation

Ant. Type: TK-1619A

Tx Channel 1: 2412.0MHz

Frequency [MHz]	(P)	Reading QP [dB(μV)]	c. f [dB(1/m)]	Result QP [dB(μV/m)]	Limit [dB(μV/m)]	Margin QP [dB]	Height [cm]	Angle [°]
150.010	H	42.6	-7.3	35.3	43.5	8.2	344.0	283.0
270.000	H	44.5	-3.1	41.4	46.0	4.6	125.0	82.0
330.000	H	50.3	-9.8	40.5	46.0	5.5	100.0	257.0
443.860	V	44.2	-6.7	37.5	46.0	8.5	100.0	204.0
630.010	V	40.1	-3.3	36.8	46.0	9.2	100.0	81.0
689.990	H	44.8	-2.3	42.5	46.0	3.5	122.0	143.0
690.000	V	42.7	-2.3	40.4	46.0	5.6	100.0	229.0
749.990	V	43.1	-1.4	41.7	46.0	4.3	100.0	174.0
750.000	H	44.9	-1.4	43.5	46.0	2.5	100.0	155.0
810.000	V	38.5	-0.8	37.7	46.0	8.3	100.0	149.0

Tx Channel 6: 2437.0MHz

Frequency [MHz]	(P)	Reading QP [dB(μV)]	c. f [dB(1/m)]	Result QP [dB(μV/m)]	Limit [dB(μV/m)]	Margin QP [dB]	Height [cm]	Angle [°]
150.010	H	42.6	-7.3	35.3	43.5	8.2	186.0	257.0
270.000	H	44.8	-3.1	41.7	46.0	4.3	127.0	88.0
330.000	H	50.3	-9.8	40.5	46.0	5.5	100.0	259.0
443.860	V	44.8	-6.7	38.1	46.0	7.9	100.0	205.0
689.990	H	45.5	-2.3	43.2	46.0	2.8	130.0	219.0
690.000	V	43.0	-2.3	40.7	46.0	5.3	100.0	223.0
749.990	H	44.9	-1.4	43.5	46.0	2.5	100.0	151.0
810.000	V	38.9	-0.8	38.1	46.0	7.9	100.0	145.0
810.000	H	42.2	-0.8	41.4	46.0	4.6	100.0	214.0

Tx Channel 11: 2462.0MHz

Frequency [MHz]	(P)	Reading QP [dB(μV)]	c. f [dB(1/m)]	Result QP [dB(μV/m)]	Limit [dB(μV/m)]	Margin QP [dB]	Height [cm]	Angle [°]
150.000	H	43.7	-7.3	36.4	43.5	7.1	214.0	109.0
270.000	V	36.6	-3.1	33.5	46.0	12.5	236.0	150.0
270.000	H	44.9	-3.1	41.8	46.0	4.2	131.0	95.0
329.990	H	50.0	-9.8	40.2	46.0	5.8	100.0	263.0
629.990	V	38.0	-3.3	34.7	46.0	11.3	151.0	193.0
749.990	V	43.2	-1.4	41.8	46.0	4.2	100.0	177.0
749.990	H	44.6	-1.4	43.2	46.0	2.8	100.0	213.0
810.000	V	38.7	-0.8	37.9	46.0	8.1	206.0	174.0
810.000	H	42.3	-0.8	41.5	46.0	4.5	100.0	221.0

Note: No emissions were detected in frequency range 9kHz to 30MHz at the 3 meters distance.

Spurious Emissions - Radiated - [IEEE802.11b] Horizontal installation <above 1GHz>

Ant. Type: TK-1619A

Tx Channel 1: 2412.0MHz

Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
4824.030	H		46.8	7.1		53.9	74.0		20.1	115.0	36.0
4824.030	H	33.5		7.1	40.6		54.0	13.4		115.0	36.0
4824.030	V		48.7	7.1		55.8	74.0		18.2	100.0	326.0
4824.030	V	37.2		7.1	44.3		54.0	9.7		100.0	326.0
9648.060	H		47.7	15.9		63.6	74.0		10.4	133.0	353.0
9648.060	H	33.4		15.9	49.3		54.0	4.7		133.0	353.0

Tx Channel 6: 2437.0MHz

Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
4874.030	H		47.8	7.2		55.0	74.0		19.0	100.0	39.0
4874.030	H	34.4		7.2	41.6		54.0	12.4		100.0	39.0
4874.020	V		48.5	7.2		55.7	74.0		18.3	100.0	328.0
4874.020	V	37.7		7.2	44.9		54.0	9.1		100.0	328.0
9748.050	H		47.1	15.9		63.0	74.0		11.0	140.0	339.0
9748.050	H	33.0		15.9	48.9		54.0	5.1		140.0	339.0

Tx Channel 11: 2462.0MHz

Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
4924.020	H		47.4	7.4		54.8	74.0		19.2	100.0	47.0
4924.020	H	35.3		7.4	42.7		54.0	11.3		100.0	47.0
4924.040	V		48.4	7.4		55.8	74.0		18.2	100.0	329.0
4924.040	V	37.0		7.4	44.4		54.0	9.6		100.0	329.0
9848.050	H		47.9	16.1		64.0	74.0		10.0	138.0	340.0
9848.050	H	33.5		16.1	49.6		54.0	4.4		138.0	340.0

Spurious Emissions - Radiated [IEEE802.11g] Horizontal installation

Ant. Type: TK-1619A

Tx Channel 1: 2412.0MHz

No.	Frequency [MHz]	(P)	Reading QP [dB(μV)]	c. f [dB(1/m)]	Result QP [dB(μV/m)]	Limit [dB(μV/m)]	Margin QP [dB]	Height [cm]	Angle [°]
1	150.000	H	47.9	-7.3	40.6	43.5	2.9	222.0	264.0
2	269.990	H	46.8	-3.1	43.7	46.0	2.3	129.0	99.0
3	330.000	H	53.6	-9.8	43.8	46.0	2.2	100.0	264.0
4	690.000	V	43.8	-2.3	41.5	46.0	4.5	100.0	220.0
5	690.000	H	44.9	-2.3	42.6	46.0	3.4	130.0	151.0
6	750.000	V	43.7	-1.4	42.3	46.0	3.7	100.0	173.0
7	750.000	H	45.2	-1.4	43.8	46.0	2.2	128.0	107.0
8	809.990	V	41.9	-0.8	41.1	46.0	4.9	208.0	181.0
9	810.000	H	44.8	-0.8	44.0	46.0	2.0	100.0	231.0

Tx Channel 6: 2437.0MHz

No.	Frequency [MHz]	(P)	Reading QP [dB(μV)]	c. f [dB(1/m)]	Result QP [dB(μV/m)]	Limit [dB(μV/m)]	Margin QP [dB]	Height [cm]	Angle [°]
1	150.000	V	38.2	-7.3	30.9	43.5	12.6	100.0	318.0
2	150.010	H	41.1	-7.3	33.8	43.5	9.7	222.0	99.0
3	270.000	H	46.8	-3.1	43.7	46.0	2.3	123.0	256.0
4	330.000	H	53.8	-9.8	44.0	46.0	2.0	100.0	262.0
5	690.000	H	46.0	-2.3	43.7	46.0	2.3	141.0	217.0
6	750.000	V	44.2	-1.4	42.8	46.0	3.2	100.0	178.0
7	750.000	H	44.4	-1.4	43.0	46.0	3.0	112.0	151.0
8	809.990	H	44.6	-0.8	43.8	46.0	2.2	100.0	222.0
9	810.000	V	41.9	-0.8	41.1	46.0	4.9	210.0	175.0

Tx Channel 11: 2462.0MHz

No.	Frequency [MHz]	(P)	Reading QP [dB(μV)]	c. f [dB(1/m)]	Result QP [dB(μV/m)]	Limit [dB(μV/m)]	Margin QP [dB]	Height [cm]	Angle [°]
1	150.010	H	41.0	-7.3	33.7	43.5	9.8	225.0	99.0
2	270.000	H	46.7	-3.1	43.6	46.0	2.4	131.0	248.0
3	330.000	H	53.3	-9.8	43.5	46.0	2.5	100.0	243.0
4	389.990	H	45.6	-7.4	38.2	46.0	7.8	100.0	272.0
5	690.000	V	44.4	-2.3	42.1	46.0	3.9	100.0	225.0
6	690.000	H	44.4	-2.3	42.1	46.0	3.9	138.0	301.0
7	750.000	H	45.3	-1.4	43.9	46.0	2.1	120.0	217.0
8	810.000	V	42.3	-0.8	41.5	46.0	4.5	208.0	175.0
9	810.000	H	44.7	-0.8	43.9	46.0	2.1	100.0	236.0

Note: No emissions were detected in frequency range 9kHz to 30MHz at the 3 meters distance.

Spurious Emissions - Radiated [IEEE802.11g] Horizontal installation <above 1GHz>

Ant. Type: TK-1619A

Tx Channel 1: 2412.0MHz

Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
4824.010	H		47.0	7.1		54.1	74.0		19.9	100.0	47.0
4824.010	H	33.8		7.1	40.9		54.0	13.1		100.0	47.0
4824.030	V		49.6	7.1		56.7	74.0		17.3	100.0	327.0
4824.030	V	40.4		7.1	47.5		54.0	6.5		100.0	327.0
9648.060	H		47.6	15.9		63.5	74.0		10.5	131.0	321.0
9648.060	H	33.6		15.9	49.5		54.0	4.5		131.0	321.0

Tx Channel 6: 2437.0MHz

Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
4874.030	H		47.7	7.2		54.9	74.0		19.1	100.0	41.0
4874.030	H	34.3		7.2	41.5		54.0	12.4		100.0	41.0
4874.030	V		49.4	7.2		56.6	74.0		17.4	100.0	328.0
4874.030	V	39.8		7.2	47.0		54.0	6.9		100.0	328.0
9748.060	H		47.5	15.9		63.4	74.0		10.6	143.0	344.0
9748.060	H	33.0		15.9	48.9		54.0	5.1		143.0	344.0

Tx Channel 11: 2462.0MHz

Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
4924.030	H		48.8	7.4		56.2	74.0		17.8	100.0	48.0
4924.030	H	35.5		7.4	42.9		54.0	11.1		100.0	48.0
4924.040	V		48.4	7.4		55.8	74.0		18.2	100.0	329.0
4924.040	V	37.0		7.4	44.4		54.0	9.6		100.0	329.0
9848.070	H		48.0	16.1		64.1	74.0		9.9	146.0	342.0
9848.070	H	33.7		16.1	49.8		54.0	4.2		146.0	342.0

Spurious Emissions - Radiated - [IEEE802.11b] Vertical installation

Ant. Type: TK-1619A

Tx Channel 1: 2412.0MHz

Frequency [MHz]	(P)	Reading QP [dB(μV)]	c. f [dB(1/m)]	Result QP [dB(μV/m)]	Limit [dB(μV/m)]	Margin QP [dB]	Height [cm]	Angle [°]
270.000	H	41.0	-3.1	37.9	46.0	8.1	124.0	248.0
690.000	V	42.6	-2.3	40.3	46.0	5.7	100.0	226.0
690.000	H	45.1	-2.3	42.8	46.0	3.2	139.0	97.0
750.000	V	40.0	-1.4	38.6	46.0	7.4	100.0	166.0
810.000	V	39.9	-0.8	39.1	46.0	6.9	100.0	144.0

Tx Channel 6: 2437.0MHz

Frequency [MHz]	(P)	Reading QP [dB(μV)]	c. f [dB(1/m)]	Result QP [dB(μV/m)]	Limit [dB(μV/m)]	Margin QP [dB]	Height [cm]	Angle [°]
270.000	H	40.8	-3.1	37.7	46.0	8.3	130.0	261.0
330.000	V	49.9	-9.8	40.1	46.0	5.9	100.0	231.0
690.000	V	42.3	-2.3	40.0	46.0	6.0	100.0	222.0
750.000	V	40.3	-1.4	38.9	46.0	7.1	100.0	168.0
810.000	H	41.9	-0.8	41.1	46.0	4.9	100.0	256.0

Tx Channel 11: 2462.0MHz

Frequency [MHz]	(P)	Reading QP [dB(μV)]	c. f [dB(1/m)]	Result QP [dB(μV/m)]	Limit [dB(μV/m)]	Margin QP [dB]	Height [cm]	Angle [°]
270.000	H	40.7	-3.1	37.6	46.0	8.4	120.0	247.0
330.000	H	50.2	-9.8	40.4	46.0	5.6	100.0	236.0
689.990	H	45.2	-2.3	42.9	46.0	3.1	126.0	94.0

Note: No emissions were detected in frequency range 9kHz to 30MHz at the 3 meters distance.

Spurious Emissions - Radiated [IEEE802.11b] Vertical installation <above 1GHz>

Ant. Type: TK-1619A

Tx Channel 1: 2412.0MHz

Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
4824.010	H		47.0	7.1		54.1	54.0		19.9	100.0	49.0
4824.010	H	33.0		7.1	40.1		54.0	13.9		100.0	49.0
4824.000	V		48.4	7.1		55.5	74.0		18.5	115.0	327.0
4824.000	V	36.8		7.1	43.9		54.0	10.1		115.0	327.0
9648.000	V		47.8	15.9		63.7	74.0		10.3	113.0	184.0
9648.000	V	32.3		15.9	48.2		54.0	5.8		113.0	184.0

Tx Channel 6: 2437.0MHz

Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
4874.020	H		47.2	7.2		54.4	74.0		19.6	100.0	40.0
4874.020	H	34.1		7.2	41.3		54.0	12.7		100.0	40.0
4874.020	V		48.8	7.2		56.0	74.0		18.0	100.0	328.0
4874.020	V	37.9		7.2	45.1		54.0	8.9		100.0	328.0
9748.050	V		47.6	15.9		63.5	74.0		10.5	116.0	173.0
9748.050	V	33.7		15.9	49.6		54.0	4.4		116.0	173.0

Tx Channel 11: 2462.0MHz

Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
4924.020	H		48.0	7.4		55.4	74.0		18.6	128.0	187.0
4924.020	H	34.9		7.4	42.3		54.0	11.7		128.0	187.0
4924.020	V		49.6	7.4		57.0	74.0		17.0	130.0	330.0
4924.020	V	38.2		7.4	45.6		54.0	8.4		130.0	330.0
9848.050	V		48.2	16.1		64.3	74.0		9.7	111.0	175.0
9848.050	V	34.0		16.1	50.1		54.0	3.9		111.0	175.0

Spurious Emissions - Radiated - [IEEE802.11g] Vertical installation

Ant. Type: TK-1619A

Tx Channel 1: 2412.0MHz

Frequency [MHz]	(P)	Reading QP [dB(μV)]	c. f [dB(1/m)]	Result QP [dB(μV/m)]	Limit [dB(μV/m)]	Margin QP [dB]	Height [cm]	Angle [°]
270.000	H	44.9	-3.1	41.8	46.0	4.2	123.0	88.0
330.000	H	52.7	-9.8	42.9	46.0	3.1	100.0	231.0
690.000	V	45.4	-2.3	43.1	46.0	2.9	100.0	225.0
690.000	H	46.2	-2.3	43.9	46.0	2.1	141.0	90.0
750.000	V	44.9	-1.4	43.5	46.0	2.5	100.0	177.0
750.000	H	45.2	-1.4	43.8	46.0	2.2	125.0	95.0
810.000	H	44.5	-0.8	43.7	46.0	2.3	112.0	97.0

Tx Channel 6: 2437.0MHz

Frequency [MHz]	(P)	Reading QP [dB(μV)]	c. f [dB(1/m)]	Result QP [dB(μV/m)]	Limit [dB(μV/m)]	Margin QP [dB]	Height [cm]	Angle [°]
270.000	H	45.1	-3.1	42.0	46.0	4.0	126.0	95.0
330.000	H	53.7	-9.8	43.9	46.0	2.1	100.0	243.0
690.000	V	44.0	-2.3	41.7	46.0	4.3	223.0	168.0
690.000	H	45.8	-2.3	43.5	46.0	2.5	138.0	98.0
750.000	V	43.6	-1.4	42.2	46.0	3.8	100.0	165.0
750.000	H	44.8	-1.4	43.4	46.0	2.6	127.0	96.0
810.000	V	43.6	-0.8	42.8	46.0	3.2	100.0	145.0
810.000	H	44.4	-0.8	43.6	46.0	2.4	100.0	241.0

Tx Channel 11: 2462.0MHz

Frequency [MHz]	(P)	Reading QP [dB(μV)]	c. f [dB(1/m)]	Result QP [dB(μV/m)]	Limit [dB(μV/m)]	Margin QP [dB]	Height [cm]	Angle [°]
270.000	H	45.1	-3.1	42.0	46.0	4.0	131.0	106.0
330.000	H	52.6	-9.8	42.8	46.0	3.2	100.0	250.0
690.000	H	44.5	-2.3	42.2	46.0	3.8	141.0	230.0
750.000	H	45.0	-1.4	43.6	46.0	2.4	130.0	101.0
810.000	H	43.3	-0.8	42.5	46.0	3.5	100.0	256.0
810.010	V	41.6	-0.8	40.8	46.0	5.2	189.0	176.0

Note: No emissions were detected in frequency range 9kHz to 30MHz at the 3 meters distance.

Spurious Emissions - Radiated [IEEE802.11g] Vertical installation <above 1GHz>

Ant. Type: TK-1619A

Tx Channel 1: 2412.0MHz

Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
4824.020	H	33.9	47.8	7.1	41.0	54.9	74.0	13.0	19.1	101.0	48.0
4824.030	V	39.2	48.7	7.1	46.3	55.8	74.0	7.7	18.2	100.0	328.0
9648.060	V	33.7	47.4	15.9	49.6	63.3	74.0	4.4	10.7	100.0	197.0

Tx Channel 6: 2437.0MHz

Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
4874.020	H	34.8	47.7	7.2	42.0	54.9	74.0	11.9	19.1	100.0	47.0
4874.030	V	39.1	48.9	7.2	46.3	56.1	74.0	7.6	17.9	100.0	340.0
9748.060	V	33.4	47.1	15.9	49.3	63.0	74.0	4.7	11.0	114.0	173.0

Tx Channel 11: 2462.0MHz

Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
4924.030	H	35.1	48.4	7.4	42.5	55.8	74.0	11.5	18.2	100.0	49.0
4924.030	V	38.9	49.3	7.4	46.3	56.7	74.0	7.7	17.3	100.0	327.0
9848.060	V	34.1	48.3	16.1	50.2	64.4	74.0	3.6	9.6	115.0	179.0

Spurious Emissions - Radiated - [IEEE802.11b] and [IEEE802.11g]

Ant. Type: TK-1619A

Rx Channel 1: 2402.0MHz

Frequency	(P)	Reading	c. f	Result	Limit	Margin	Height	Angle
[MHz]		QP [dB(μV)]	[dB(1/m)]	QP [dB(μV/m)]	[dB(μV/m)]	QP [dB]	[cm]	[°]
799.890	V	41.7	-1.2	40.5	46.0	5.5	100.0	260.0

Rx Channel 6: 2437.0MHz

Frequency	(P)	Reading	c. f	Result	Limit	Margin	Height	Angle
[MHz]		QP [dB(μV)]	[dB(1/m)]	QP [dB(μV/m)]	[dB(μV/m)]	QP [dB]	[cm]	[°]
799.880	V	41.2	-1.2	40.0	46.0	6.0	100.0	257.0

Rx Channel 11: 2462.0MHz

Frequency	(P)	Reading	c. f	Result	Limit	Margin	Height	Angle
[MHz]		QP [dB(μV)]	[dB(1/m)]	QP [dB(μV/m)]	[dB(μV/m)]	QP [dB]	[cm]	[°]
799.870	V	41.9	-1.2	40.7	46.0	5.3	100.0	261.0

Note: No emissions were detected in frequency range 9kHz to 30MHz at the 3 meters distance.

Spurious Emissions - Radiated [IEEE802.11b] and [IEEE802.11g] <above 1GHz>

Ant. Type: TK-1619A

Rx Channel 1: 2402.0MHz

Frequency	(P)	Reading AV	Reading PK	c. f	Result AV	Result PK	Limit	Margin AV	Margin PK	Height	Angle
[MHz]		[dB(μV)]	[dB(μV)]	[dB(1/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB]	[dB]	[cm]	[°]
1065.730	V	-----	68.9	-8.9	-----	60.0	54.0	-----	14.0	100.0	108.0
1065.320	V	44.4	-----	-8.9	35.5	-----	54.0	18.5	-----	100.0	108.0

Rx Channel 6: 2437.0MHz

Frequency	(P)	Reading AV	Reading PK	c. f	Result AV	Result PK	Limit	Margin AV	Margin PK	Height	Angle
[MHz]		[dB(μV)]	[dB(μV)]	[dB(1/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB]	[dB]	[cm]	[°]
1065.900	V	-----	69.5	-8.9	-----	60.6	74.0	-----	13.4	100.0	106.0
1065.900	V	44.9	-----	-8.9	36.0	-----	54.0	18.0	-----	100.0	106.0

Rx Channel 11: 2462.0MHz

Frequency	(P)	Reading AV	Reading PK	c. f	Result AV	Result PK	Limit	Margin AV	Margin PK	Height	Angle
[MHz]		[dB(μV)]	[dB(μV)]	[dB(1/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB]	[dB]	[cm]	[°]
1065.970	V	-----	69.3	-8.9	-----	60.4	74.0	-----	13.6	100.0	112.0
1065.970	V	45.2	-----	-8.9	36.3	-----	54.0	17.7	-----	100.0	112.0

Spurious Emissions - Radiated - [IEEE802.11b] Horizontal installation

Ant. Type: ANTB18-127A0

Tx Channel 1: 2412.0MHz

Frequency [MHz]	(P)	Reading QP [dB(μV)]	c. f [dB(1/m)]	Result QP [dB(μV/m)]	Limit [dB(μV/m)]	Margin QP [dB]	Height [cm]	Angle [°]
270.000	H	40.0	-3.1	36.9	46.0	9.1	121.0	78.0
330.010	H	51.3	-9.8	41.5	46.0	4.5	100.0	66.0
432.000	V	44.3	-7.0	37.3	46.0	8.7	100.0	210.0
690.000	H	43.1	-2.3	40.8	46.0	5.2	134.0	3.0
750.000	H	39.7	-1.4	38.3	46.0	7.7	117.0	141.0
810.000	H	37.2	-0.8	36.4	46.0	9.6	193.0	151.0

Tx Channel 6: 2437.0MHz

Frequency [MHz]	(P)	Reading QP [dB(μV)]	c. f [dB(1/m)]	Result QP [dB(μV/m)]	Limit [dB(μV/m)]	Margin QP [dB]	Height [cm]	Angle [°]
269.980	H	44.8	-3.1	41.7	46.0	4.3	165.0	83.0
329.990	H	50.2	-9.8	40.4	46.0	5.6	102.0	79.0
432.010	V	44.1	-7.0	37.1	46.0	8.9	100.0	202.0
630.000	H	42.8	-3.3	39.5	46.0	6.5	140.0	125.0
690.000	H	44.8	-2.3	42.5	46.0	3.5	137.0	103.0
809.990	H	40.3	-0.8	39.5	46.0	6.5	100.0	152.0

Tx Channel 11: 2462.0MHz

Frequency [MHz]	(P)	Reading QP [dB(μV)]	c. f [dB(1/m)]	Result QP [dB(μV/m)]	Limit [dB(μV/m)]	Margin QP [dB]	Height [cm]	Angle [°]
270.010	H	45.6	-3.1	42.5	46.0	3.5	125.0	273.0
330.000	H	52.3	-9.8	42.5	46.0	3.5	100.0	75.0
432.000	V	45.2	-7.0	38.2	46.0	7.8	100.0	205.0
689.990	H	44.4	-2.3	42.1	46.0	3.9	100.0	118.0
796.130	V	42.2	-1.5	40.7	46.0	5.3	100.0	207.0

Note: No emissions were detected in frequency range 9kHz to 30MHz at the 3 meters distance.

Spurious Emissions - Radiated [IEEE802.11b] Horizontal installation <above 1GHz>

Ant. Type: ANTB18-127A0

Tx Channel 1: 2412.0MHz

Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
4824.000	H		46.8	7.1		53.9	74.0		20.1	100.0	244.0
4824.000	H	33.7		7.1	40.8		54.0	13.2		100.0	244.0
4824.010	V		48.1	7.1		55.2	74.0		18.8	100.0	265.0
4824.010	V	36.4		7.1	43.5		54.0	10.5		100.0	265.0
9648.010	H		48.2	15.9		64.1	74.0		9.9	128.0	0.0
9648.010	H	33.7		15.9	49.6		54.0	4.4		128.0	0.0

Tx Channel 6: 2437.0MHz

Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
4874.010	H		47.6	7.2		54.8	74.0		19.2	108.0	244.0
4874.010	H	34.1		7.2	41.3		54.0	12.7		108.0	244.0
9748.030	H		47.8	15.9		63.7	74.0		10.3	154.0	325.0
9748.030	H	33.6		15.9	49.5		54.0	4.5		154.0	325.0
4874.020	V		49.1	7.2		56.3	74.0		17.7	100.0	326.0
4874.020	V	37.9		7.2	45.1		54.0	8.9		100.0	326.0

Tx Channel 11: 2462.0MHz

Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
4924.020	H		47.5	7.4		54.9	74.0		19.1	100.0	315.0
4924.020	H	34.1		7.4	41.5		54.0	12.5		100.0	315.0
9848.040	H		47.7	16.1		63.8	74.0		10.2	150.0	347.0
9848.040	H	33.8		16.1	49.9		54.0	4.1		150.0	347.0
4924.020	V		49.0	7.4		56.4	74.0		17.6	100.0	323.0
4924.020	V	37.7		7.4	45.1		54.0	8.9		100.0	323.0

Spurious Emissions - Radiated - [IEEE802.11g] Horizontal installation

Ant. Type: ANTB18-127A0

Tx Channel 1: 2412.0MHz

Frequency [MHz]	(P)	Reading QP [dB(μV)]	c. f [dB(1/m)]	Result QP [dB(μV/m)]	Limit [dB(μV/m)]	Margin QP [dB]	Height [cm]	Angle [°]
209.990	H	40.4	-5.4	35.0	43.5	8.5	148.0	83.0
270.000	H	46.7	-3.1	43.6	46.0	2.4	118.0	77.0
329.990	H	52.6	-9.8	42.8	46.0	3.2	100.0	246.0
689.990	H	45.8	-2.3	43.5	46.0	2.5	134.0	259.0
750.000	H	44.1	-1.4	42.7	46.0	3.3	119.0	336.0
799.860	V	42.0	-1.2	40.8	46.0	5.2	100.0	198.0
810.000	H	43.9	-0.8	43.1	46.0	2.9	114.0	154.0

Tx Channel 6: 2437.0MHz

Frequency [MHz]	(P)	Reading QP [dB(μV)]	c. f [dB(1/m)]	Result QP [dB(μV/m)]	Limit [dB(μV/m)]	Margin QP [dB]	Height [cm]	Angle [°]
210.000	H	40.1	-5.4	34.7	43.5	8.8	154.0	63.0
270.000	H	46.8	-3.1	43.7	46.0	2.3	118.0	79.0
330.000	H	53.1	-9.8	43.3	46.0	2.7	100.0	243.0
689.980	H	46.0	-2.3	43.7	46.0	2.3	129.0	268.0
750.000	H	45.3	-1.4	43.9	46.0	2.1	131.0	55.0
799.860	V	43.1	-1.2	41.9	46.0	4.1	100.0	210.0

Tx Channel 11: 2462.0MHz

Frequency [MHz]	(P)	Reading QP [dB(μV)]	c. f [dB(1/m)]	Result QP [dB(μV/m)]	Limit [dB(μV/m)]	Margin QP [dB]	Height [cm]	Angle [°]
210.000	H	42.5	-5.4	37.1	43.5	6.4	148.0	75.0
270.000	H	46.6	-3.1	43.5	46.0	2.5	121.0	83.0
330.000	H	53.5	-9.8	43.7	46.0	2.3	100.0	262.0
432.000	V	45.6	-7.0	38.6	46.0	7.4	100.0	211.0
689.980	H	45.3	-2.3	43.0	46.0	3.0	139.0	262.0
749.980	H	44.9	-1.4	43.5	46.0	2.5	116.0	55.0

Note: No emissions were detected in frequency range 9kHz to 30MHz at the 3 meters distance.

Spurious Emissions - Radiated [IEEE802.11g] Horizontal installation <above 1GHz>

Ant. Type: ANTB18-127A0

Tx Channel 1: 2412.0MHz

Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
4824.020	H	---	48.4	7.1	---	55.5	74.0	---	18.5	112.0	219.0
4824.020	H	37.0	---	7.1	44.1	---	54.0	9.9	---	112.0	219.0
9648.040	H	---	47.9	15.9	---	63.8	74.0	---	10.2	162.0	348.0
9648.040	H	33.7	---	15.9	49.6	---	54.0	4.4	---	162.0	348.0
4824.030	V	---	49.4	7.1	---	56.5	74.0	---	17.5	100.0	324.0
4824.030	V	40.4	---	7.1	47.5	---	54.0	6.5	---	100.0	324.0

Tx Channel 6: 2437.0MHz

Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
4874.020	H	---	47.6	7.2	---	54.8	74.0	---	19.2	100.0	313.0
4874.020	H	34.7	---	7.2	41.9	---	54.0	12.1	---	100.0	313.0
9748.050	H	---	47.3	15.9	---	63.2	74.0	---	10.8	157.0	325.0
9748.050	H	33.2	---	15.9	49.1	---	54.0	4.9	---	157.0	325.0
4874.030	V	---	49.7	7.2	---	56.9	74.0	---	17.1	100.0	326.0
4874.030	V	40.8	---	7.2	48.0	---	54.0	6.0	---	100.0	326.0

Tx Channel 11: 2462.0MHz

Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
4924.020	H	---	47.8	7.4	---	55.2	74.0	---	18.8	100.0	314.0
4924.020	H	35.4	---	7.4	42.8	---	54.0	11.2	---	100.0	314.0
9848.050	H	---	48.4	16.1	---	64.5	74.0	---	9.5	162.0	239.0
9648.050	H	34.1	---	15.9	50.0	---	54.0	4.0	---	162.0	239.0
4924.020	V	---	48.8	7.4	---	56.2	74.0	---	17.8	114.0	326.0
4924.020	H	38.5	---	7.4	45.9	---	54.0	8.1	---	114.0	326.0

Spurious Emissions - Radiated [IEEE802.11b] Vertical installation

Ant. Type: ANTB18-127A0

Tx Channel 1: 2412.0MHz

Frequency [MHz]	(P)	Reading QP [dB(μV)]	c. f [dB(1/m)]	Result QP [dB(μV/m)]	Limit [dB(μV/m)]	Margin QP [dB]	Height [cm]	Angle [°]
270.000	H	43.4	-3.1	40.3	46.0	5.7	111.0	82.0
432.010	V	45.1	-7.0	38.1	46.0	7.9	100.0	216.0
689.990	H	44.3	-2.3	42.0	46.0	4.0	117.0	118.0
749.990	V	40.3	-1.4	38.9	46.0	7.1	100.0	153.0
799.860	V	41.3	-1.2	40.1	46.0	5.9	119.0	209.0
810.000	V	38.9	-0.8	38.1	46.0	7.9	100.0	0.0

Tx Channel 6: 2437.0MHz

Frequency [MHz]	(P)	Reading QP [dB(μV)]	c. f [dB(1/m)]	Result QP [dB(μV/m)]	Limit [dB(μV/m)]	Margin QP [dB]	Height [cm]	Angle [°]
270.000	H	44.0	-3.1	40.9	46.0	5.1	115.0	96.0
432.010	V	45.5	-7.0	38.5	46.0	7.5	100.0	220.0
689.990	H	44.1	-2.3	41.8	46.0	4.2	121.0	120.0
689.990	V	41.7	-2.3	39.4	46.0	6.6	100.0	5.0
749.990	V	40.3	-1.4	38.9	46.0	7.1	100.0	156.0
799.860	V	42.2	-1.2	41.0	46.0	5.0	121.0	215.0

Tx Channel 11: 2462.0MHz

Frequency [MHz]	(P)	Reading QP [dB(μV)]	c. f [dB(1/m)]	Result QP [dB(μV/m)]	Limit [dB(μV/m)]	Margin QP [dB]	Height [cm]	Angle [°]
270.000	H	44.5	-3.1	41.4	46.0	4.6	118.0	105.0
432.010	V	45.8	-7.0	38.8	46.0	7.2	100.0	208.0
689.990	H	44.6	-2.3	42.3	46.0	3.7	141.0	123.0
749.990	H	44.6	-1.4	43.2	46.0	2.8	100.0	265.0
799.840	V	40.5	-1.2	39.3	46.0	6.7	100.0	3.0

Note: No emissions were detected in frequency range 9kHz to 30MHz at the 3 meters distance.

Spurious Emissions - Radiated [IEEE802.11b] Vertical installation <above 1GHz>

Ant. Type: ANTB18-127A0

Tx Channel 1: 2412.0MHz

Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
4824.020	V		47.9	7.1		55.0	74.0		19.0	100.0	42.0
4824.020	V	36.7		7.1	43.8		54.0	10.2		100.0	42.0
9648.040	V		48.6	15.9		64.5	74.0		9.5	133.0	337.0
9648.040	V	33.8		15.9	49.7		54.0	4.3		133.0	337.0
9648.050	H		48.5	15.9		64.4	74.0		9.6	125.0	0.0
9648.050	H	33.5		15.9	49.4		54.0	4.6		125.0	0.0

Tx Channel 6: 2437.0MHz

Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
4874.020	V		48.1	7.2		55.3	74.0		18.7	100.0	40.0
4874.020	V	37.3		7.2	44.5		54.0	9.5		100.0	40.0
9748.040	V		48.3	15.9		64.2	74.0		9.8	165.0	326.0
9748.040	V	34.1		15.9	50.0		54.0	4.0		165.0	326.0
9748.040	H		47.2	15.9		63.1	74.0		10.9	157.0	53.0
9748.040	H	33.4		15.9	49.3		54.0	4.7		157.0	53.0

Tx Channel 11: 2462.0MHz

Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
4924.020	V		48.6	7.4		56.0	74.0		18.0	109.0	38.0
4924.020	V	37.4		7.4	44.8		54.0	9.2		109.0	39.0
9848.040	V		47.7	16.1		63.8	74.0		10.2	116.0	327.0
9848.040	V	34.4		16.1	50.5		54.0	3.5		116.0	327.0
9848.040	H		48.2	16.1		64.3	74.0		9.7	159.0	0.0
9848.040	H	33.9		16.1	50.0		54.0	4.0		159.0	0.0

Spurious Emissions - Radiated - [IEEE802.11g] Vertical installation

Ant. Type: ANTB18-127A0

Tx Channel 1: 2412.0MHz

Frequency [MHz]	(P)	Reading QP [dB(μV)]	c. f [dB(1/m)]	Result QP [dB(μV/m)]	Limit [dB(μV/m)]	Margin QP [dB]	Height [cm]	Angle [°]
270.000	H	44.6	-3.1	41.5	46.0	4.5	131.0	115.0
330.000	H	50.9	-9.8	41.1	46.0	4.9	100.0	308.0
432.010	V	46.2	-7.0	39.2	46.0	6.8	100.0	225.0
630.000	H	46.2	-3.3	42.9	46.0	3.1	141.0	123.0
689.980	V	45.7	-2.3	43.4	46.0	2.6	100.0	246.0
689.990	H	46.2	-2.3	43.9	46.0	2.1	122.0	248.0
749.990	H	44.4	-1.4	43.0	46.0	3.0	122.0	261.0
799.840	H	42.0	-1.2	40.8	46.0	5.2	168.0	215.0

Tx Channel 6: 2437.0MHz

Frequency [MHz]	(P)	Reading QP [dB(μV)]	c. f [dB(1/m)]	Result QP [dB(μV/m)]	Limit [dB(μV/m)]	Margin QP [dB]	Height [cm]	Angle [°]
270.000	H	47.1	-3.1	44.0	46.0	2.0	125.0	121.0
630.000	H	46.0	-3.3	42.7	46.0	3.3	140.0	125.0
630.000	V	44.3	-3.3	41.0	46.0	5.0	100.0	41.0
689.980	V	45.5	-2.3	43.2	46.0	2.8	100.0	248.0
689.990	H	46.0	-2.3	43.7	46.0	2.3	123.0	244.0
749.990	H	44.2	-1.4	42.8	46.0	3.2	122.0	262.0
799.840	H	41.4	-1.2	40.2	46.0	5.8	156.0	220.0
810.000	V	41.4	-0.8	40.6	46.0	5.4	100.0	4.0

Tx Channel 11: 2462.0MHz

Frequency [MHz]	(P)	Reading QP [dB(μV)]	c. f [dB(1/m)]	Result QP [dB(μV/m)]	Limit [dB(μV/m)]	Margin QP [dB]	Height [cm]	Angle [°]
270.000	H	46.8	-3.1	43.7	46.0	2.3	128.0	118.0
630.000	H	46.0	-3.3	42.7	46.0	3.3	140.0	125.0
689.980	V	44.9	-2.3	42.6	46.0	3.4	100.0	252.0
689.990	H	46.0	-2.3	43.7	46.0	2.3	123.0	244.0
749.990	H	43.5	-1.4	42.1	46.0	3.9	121.0	250.0
750.000	V	42.1	-1.4	40.7	46.0	5.3	100.0	151.0
799.840	H	41.4	-1.2	40.2	46.0	5.8	156.0	220.0
799.840	V	43.1	-1.2	41.9	46.0	4.1	100.0	214.0
810.000	V	41.4	-0.8	40.6	46.0	5.4	100.0	4.0

Note: No emissions were detected in frequency range 9kHz to 30MHz at the 3 meters distance.

Spurious Emissions - Radiated [IEEE802.11g] Vertical installation <above 1GHz>

Ant. Type: ANTB18-127A0

Tx Channel 1: 2412.0MHz

Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
4824.030	V		48.4	7.1		55.5	74.0		18.5	100.0	41.0
4824.030	V	38.7		7.1	45.8		54.0	8.2		100.0	41.0
9648.040	V		48.1	15.9		64.0	74.0		10.0	119.0	334.0
9648.040	V	34.2		15.9	50.1		54.0	3.9		119.0	334.0
9648.040	H		47.6	15.9		63.5	74.0		10.5	125.0	4.0
9648.040	H	33.5		15.9	49.4		54.0	4.6		125.0	4.0

Tx Channel 6: 2437.0MHz

Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
4874.020	V		49.3	7.2		56.5	74.0		17.5	100.0	39.0
4874.020	V	38.4		7.2	45.6		54.0	8.4		100.0	39.0
9748.050	V		48.0	15.9		63.9	74.0		10.1	121.0	327.0
9748.050	V	33.9		15.9	49.8		54.0	4.2		121.0	327.0
9748.050	H		47.0	15.9		62.9	74.0		11.1	124.0	0.0
9748.050	H	33.4		15.9	49.3		54.0	4.7		124.0	0.0

Tx Channel 11: 2462.0MHz

Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
4924.020	V		48.9	7.4		56.3	74.0		17.7	100.0	39.0
4924.020	V	38.6		7.4	46.0		54.0	8.0		100.0	39.0
9848.050	V		48.9	16.1		65.0	74.0		9.0	148.0	321.0
9848.050	V	35.2		16.1	51.3		54.0	2.7		148.0	321.0
9848.050	H		47.4	16.1		63.5	74.0		10.5	129.0	5.0
9848.050	H	33.6		16.1	49.7		54.0	4.3		129.0	5.0

Spurious Emissions - Radiated - [IEEE802.11b] and [IEEE802.11g]

Ant. Type: ANTB18-127A0

Rx Channel 1: 2402.0MHz

Frequency	(P)	Reading	c. f	Result	Limit	Margin	Height	Angle
[MHz]		QP		QP		QP		
		[dB(μV)]	[dB(1/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB]	[cm]	[°]
432.000	V	43.8	-7.0	36.8	46.0	9.2	100.0	207.0
799.840	V	41.9	-1.2	40.7	46.0	5.3	120.0	196.0

Rx Channel 6: 2437.0MHz

Frequency	(P)	Reading	c. f	Result	Limit	Margin	Height	Angle
[MHz]		QP		QP		QP		
		[dB(μV)]	[dB(1/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB]	[cm]	[°]
432.010	V	42.8	-7.0	35.8	46.0	10.2	100.0	208.0
443.860	V	45.8	-6.7	39.1	46.0	6.9	100.0	219.0
799.820	V	40.7	-1.2	39.5	46.0	6.5	179.0	324.0

Rx Channel 11: 2462.0MHz

Frequency	(P)	Reading	c. f	Result	Limit	Margin	Height	Angle
[MHz]		QP		QP		QP		
		[dB(μV)]	[dB(1/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB]	[cm]	[°]
432.000	V	43.7	-7.0	36.7	46.0	9.3	100.0	212.0
443.860	V	46.4	-6.7	39.7	46.0	6.3	100.0	231.0
799.840	V	42.3	-1.2	41.1	46.0	4.9	119.0	192.0

Note: No emissions were detected in frequency range 9kHz to 30MHz at the 3 meters distance.

Spurious Emissions - Radiated [IEEE802.11b] and [IEEE802.11g] <above 1GHz>

Ant. Type: ANTB18-127A0

Rx Channel 1: 2402.0MHz

Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
1065.780	V	41.8	65.3	-8.9	32.9	56.4	74.0	21.1	17.6	100.0	315.0
1065.780	V	41.8	65.3	-8.9	32.9	56.4	74.0	21.1	17.6	100.0	315.0

Rx Channel 6: 2437.0MHz

Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
1066.150	V	40.5	63.8	-8.9	31.6	54.9	74.0	22.4	19.1	100.0	313.0
1066.150	V	40.5	63.8	-8.9	31.6	54.9	74.0	22.4	19.1	100.0	313.0

Rx Channel 11: 2462.0MHz

Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
1066.410	V	40.8	64.8	-8.9	31.9	55.9	74.0	22.1	18.1	100.0	320.0
1066.410	V	40.8	64.8	-8.9	31.9	55.9	74.0	22.1	18.1	100.0	320.0

5.6 Restricted Band of Operation

5.6.1 Test Procedure [FCC 15.205, 15.209, 15.247(d), IC RSS-210 2.2]

The peak power is measured with a spectrum analyzer connected to the antenna terminal, while EUT is operating in transmission mode at the appropriate center frequency.

The spectrum analyzer is set to:

- RBW=1MHz, VBW=1MHz, 10Hz, Span=Arbitrary setting, Sweep=auto

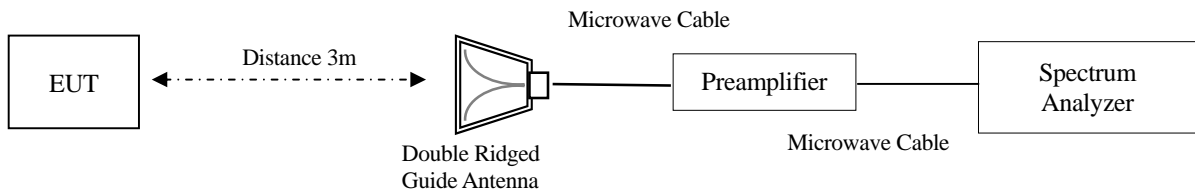
The EUT was set to operate with following conditions.

- ch.1 (low), ch.6 (mid) and ch.11 (high)

The test mode of EUT is as follows.

- Test mode

5.6.2 Measurement Setup



5.6.3 Limit of Restricted Band of Operation

Emission at the boundary of the restricted band provided by 15.205 shall be lower than 15.209 limit.

5.6.4 Measurement Result

[IEEE802.11b] Ant. Type: TK-1619A

Installation	Frequency [MHz]	Pol. [H/V]	Reading [dBμV/m]		Factor [dB]	Emission Level [dBμV/m]		Limit [dBμV/m]		Margin [dB]		PASS /FAIL
			Peak	Ave.		Peak	Ave.	Peak	Ave.	Peak	Ave.	
Horizontal	2390.0	H	49.4	39.7	-1.2	48.2	38.5	74.0	54.0	25.8	15.5	PASS
	2390.0	V	46.9	34.6	-1.2	45.7	33.4	74.0	54.0	28.3	20.6	PASS
	2483.5	H	50.5	40.6	-0.8	49.7	39.8	74.0	54.0	24.3	14.2	PASS
	2483.5	V	45.8	36.6	-0.8	45.0	35.8	74.0	54.0	29.0	18.2	PASS
Vertical	2390.0	H	44.4	33.9	-1.2	43.2	32.7	74.0	54.0	30.8	21.3	PASS
	2390.0	V	46.1	35.0	-1.2	44.9	33.8	74.0	54.0	29.1	20.2	PASS
	2483.5	H	45.1	34.3	-0.8	44.3	33.5	74.0	54.0	29.7	20.5	PASS
	2483.5	V	46.3	38.3	-0.8	45.5	37.5	74.0	54.0	28.5	16.5	PASS

[IEEE802.11g] Ant. Type: TK-1619A

Installation	Frequency [MHz]	Pol. [H/V]	Reading [dBµV/m]		Factor [dB]	Emission Level [dBµV/m]		Limit [dBµV/m]		Margin [dB]		PASS /FAIL
			Peak	Ave.		Peak	Ave.	Peak	Ave.	Peak	Ave.	
Horizontal	2390.0	H	49.3	36.2	-1.2	48.1	35.0	74.0	54.0	25.9	19.0	PASS
	2390.0	V	46.2	34.0	-1.2	45.0	32.8	74.0	54.0	29.0	21.2	PASS
	2483.5	H	50.7	38.3	-0.8	49.9	37.5	74.0	54.0	24.1	16.5	PASS
	2483.5	V	46.9	35.2	-0.8	46.1	34.4	74.0	54.0	27.9	19.6	PASS
Vertical	2390.0	H	44.6	33.6	-1.2	43.4	32.4	74.0	54.0	30.6	21.6	PASS
	2390.0	V	48.1	34.2	-1.2	46.9	33.0	74.0	54.0	27.1	21.0	PASS
	2483.5	H	44.8	33.8	-0.8	44.0	33.0	74.0	54.0	30.0	21.0	PASS
	2483.5	V	46.1	35.3	-0.8	45.3	34.5	74.0	54.0	28.7	19.5	PASS

[IEEE802.11b] Ant. Type: ANTB18-127A0

Installation	Frequency [MHz]	Pol. [H/V]	Reading [dBµV/m]		Factor [dB]	Emission Level [dBµV/m]		Limit [dBµV/m]		Margin [dB]		PASS /FAIL
			Peak	Ave.		Peak	Ave.	Peak	Ave.	Peak	Ave.	
Horizontal	2390.0	H	49.4	38.6	-1.2	48.2	37.4	74.0	54.0	25.8	16.6	PASS
	2390.0	V	46.2	33.6	-1.2	45.0	32.4	74.0	54.0	29.0	21.6	PASS
	2483.5	H	50.7	41.8	-0.8	49.9	41.0	74.0	54.0	24.1	13.0	PASS
	2483.5	V	44.7	34.1	-0.8	43.9	33.3	74.0	54.0	30.1	20.7	PASS
Vertical	2390.0	H	44.7	34.1	-1.2	43.5	32.9	74.0	54.0	30.5	21.1	PASS
	2390.0	V	46.0	34.6	-1.2	44.8	33.4	74.0	54.0	29.2	20.6	PASS
	2483.5	H	44.2	34.3	-0.8	43.4	33.5	74.0	54.0	30.6	20.5	PASS
	2483.5	V	48.8	38.1	-0.8	48.0	37.3	74.0	54.0	26.0	16.7	PASS

[IEEE802.11g] Ant. Type: ANTB18-127A0

Installation	Frequency [MHz]	Pol. [H/V]	Reading [dBμV/m]		Factor [dB]	Emission Level [dBμV/m]		Limit [dBμV/m]		Margin [dB]		PASS /FAIL
			Peak	Ave.		Peak	Ave.	Peak	Ave.	Peak	Ave.	
Horizontal	2390.0	H	49.4	36.9	-1.2	48.2	35.7	74.0	54.0	25.8	18.3	PASS
	2390.0	V	45.8	33.5	-1.2	44.6	32.3	74.0	54.0	29.4	21.7	PASS
	2483.5	H	50.7	37.8	-0.8	49.9	37.0	74.0	54.0	24.1	17.0	PASS
	2483.5	V	44.0	33.6	-0.8	43.2	32.8	74.0	54.0	30.8	21.2	PASS
Vertical	2390.0	H	44.5	33.4	-1.2	43.3	32.2	74.0	54.0	30.7	21.8	PASS
	2390.0	V	45.2	34.5	-1.2	44.0	33.3	74.0	54.0	30.0	20.7	PASS
	2483.5	H	43.9	33.7	-0.8	43.1	32.9	74.0	54.0	30.9	21.1	PASS
	2483.5	V	47.3	36.0	-0.8	46.5	35.2	74.0	54.0	27.5	18.8	PASS

5.6.5 Trace Data

Test Personnel:

Tested by: Hiroaki Suzuki

Date : Nov. 11, 2008
 Temperature : 21.5 [°C]
 Humidity : 35.7 [%]
 Test place : 3m Semi-anechoic chamber

Test Personnel:

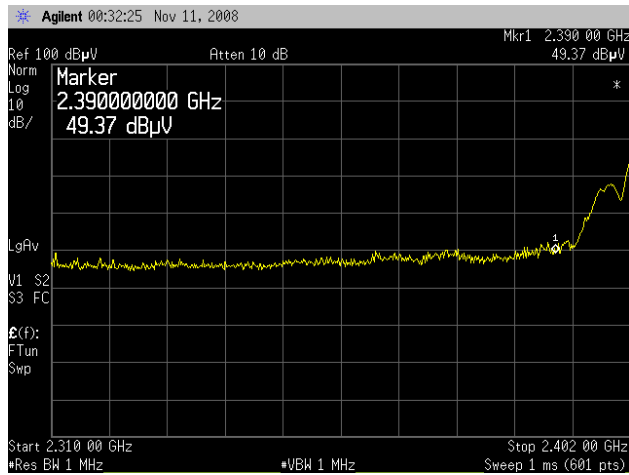
Tested by: Hiroaki Suzuki

Date : Nov. 13, 2008
 Temperature : 20.0 [°C]
 Humidity : 36.6 [%]
 Test place : 3m Semi-anechoic chamber

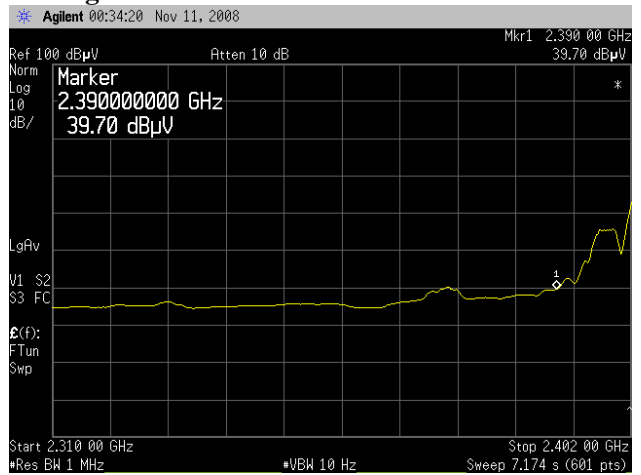
Restricted Band of Operation [IEEE802.11b] **Horizontal installation**

Ant. Type: TK-1619A

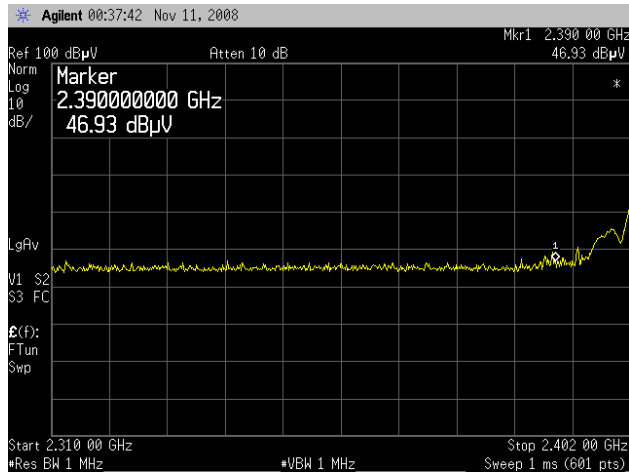
**Frequency: 2390.0MHz -Horizontal-
PEAK**



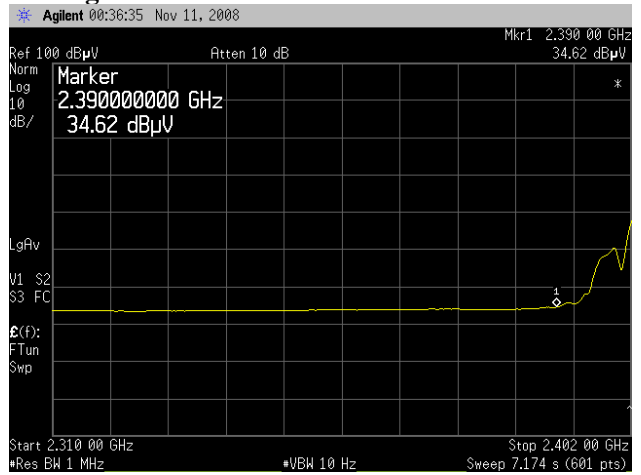
Average



**Frequency: 2390.0MHz -Vertical-
PEAK**



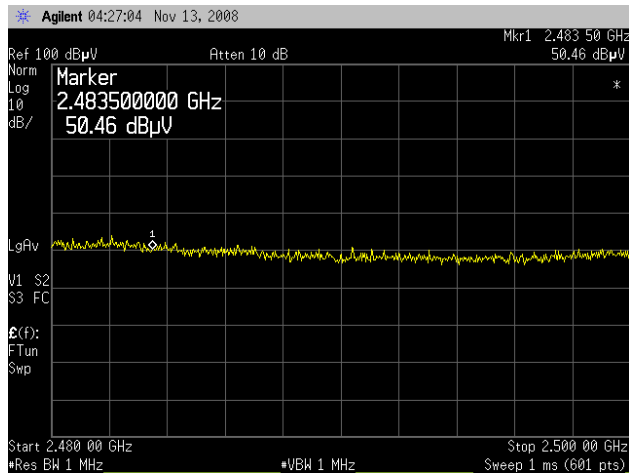
Average



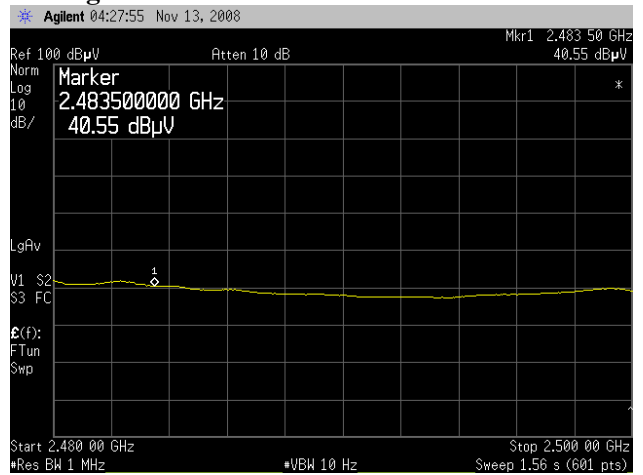
Restricted Band of Operation [IEEE802.11b] **Horizontal installation**

Ant. Type: TK-1619A

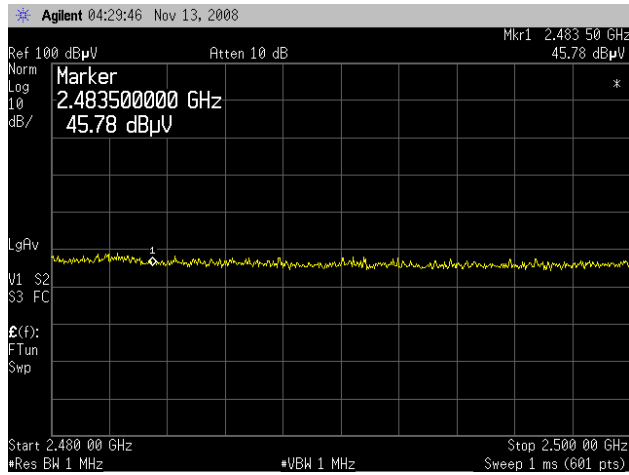
**Frequency: 2483.5MHz -Horizontal-
PEAK**



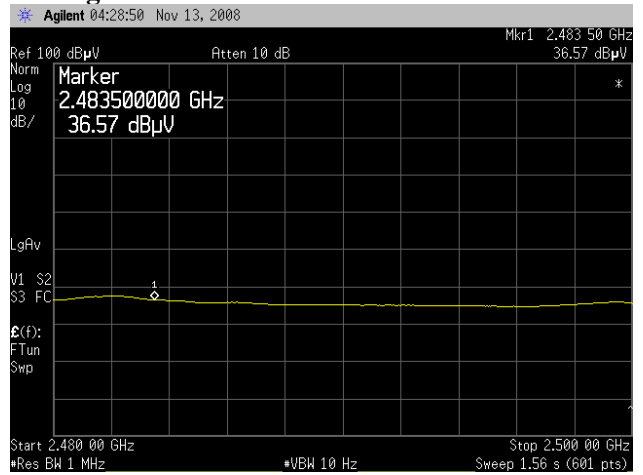
Average



**Frequency: 2483.5MHz -Vertical-
PEAK**



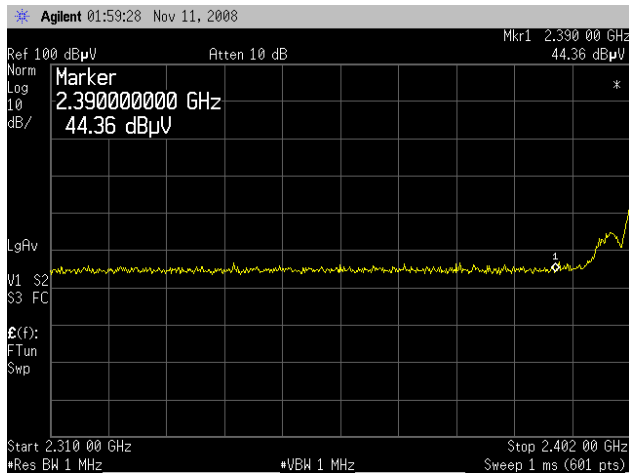
Average



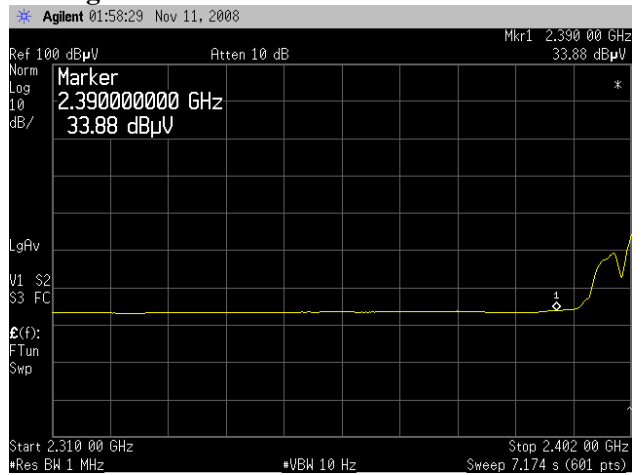
Restricted Band of Operation [IEEE802.11b] Vertical installation

Ant. Type: TK-1619A

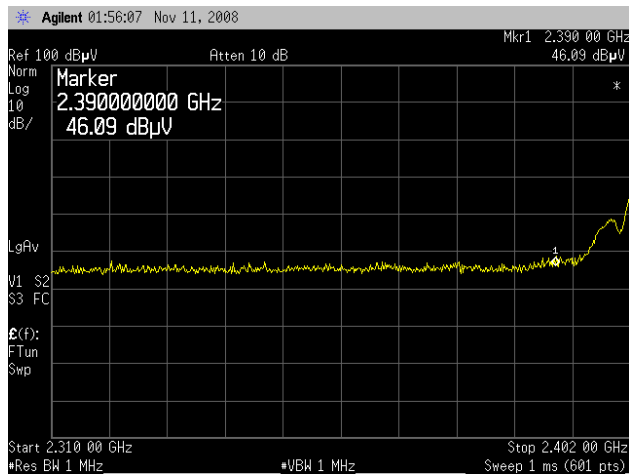
**Frequency: 2390.0MHz -Horizontal-
PEAK**



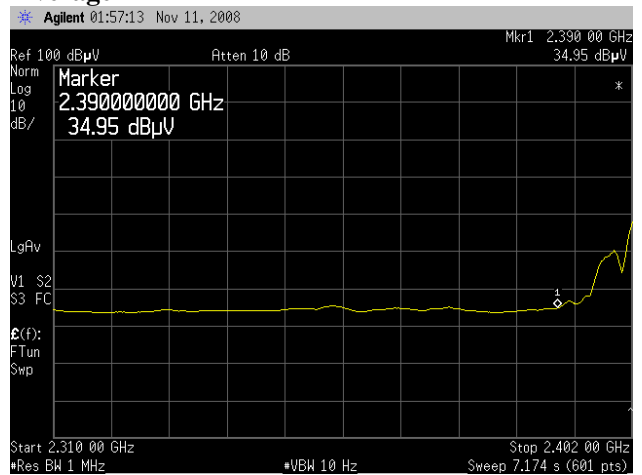
Average



**Frequency: 2390.0MHz -Vertical-
PEAK**



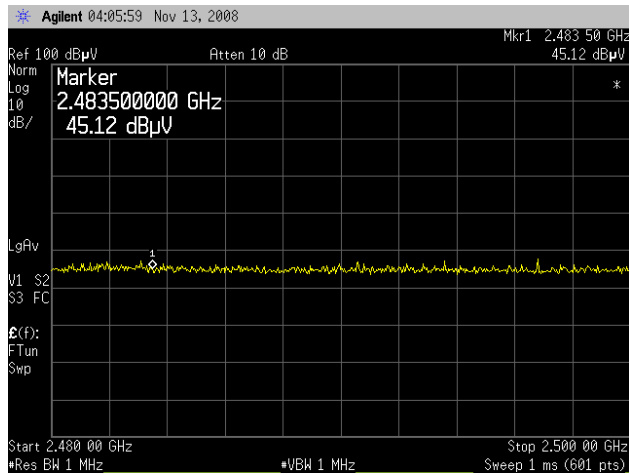
Average



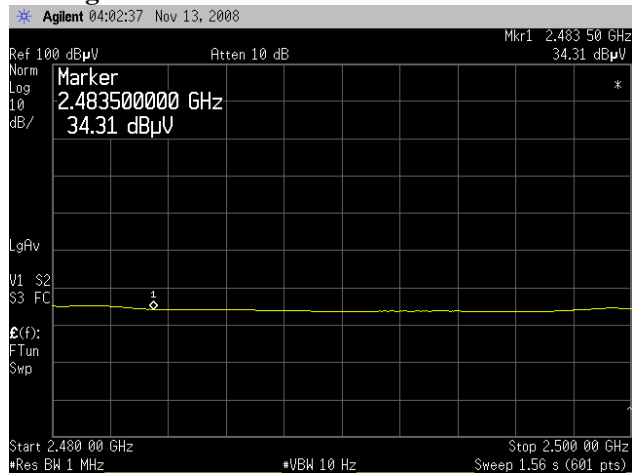
Restricted Band of Operation [IEEE802.11b] Vertical installation

Ant. Type: TK-1619A

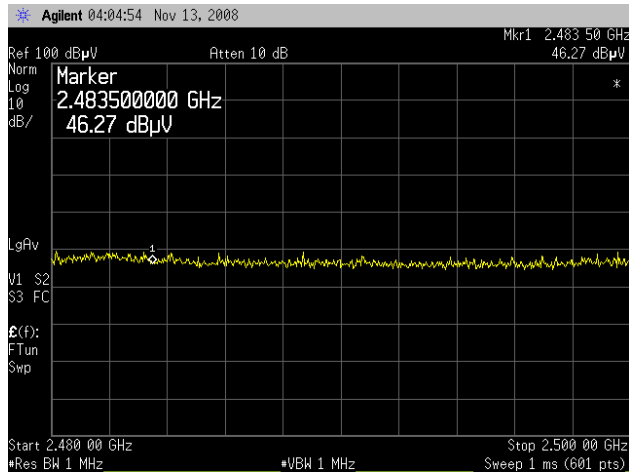
**Frequency: 2483.5MHz -Horizontal-
PEAK**



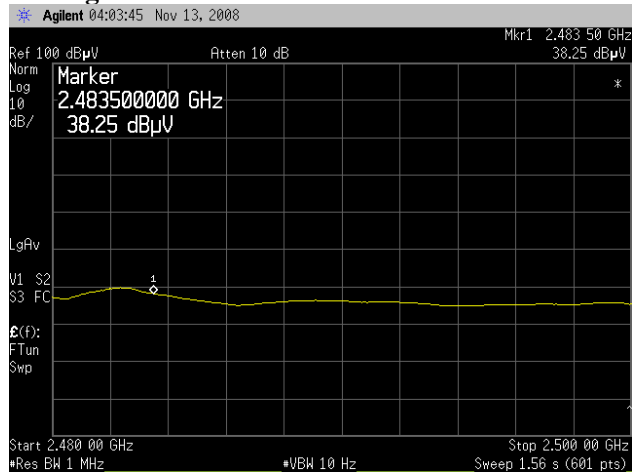
Average



**Frequency: 2483.5MHz -Vertical-
PEAK**



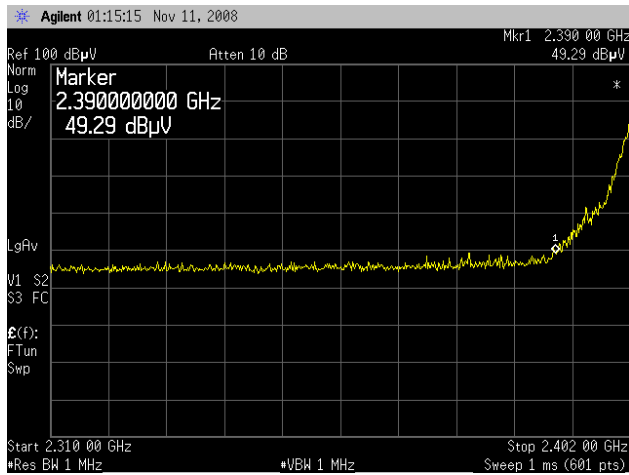
Average



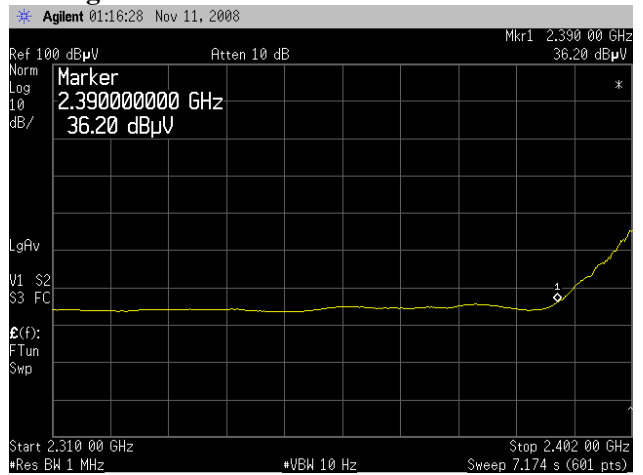
Restricted Band of Operation [IEEE802.11g] **Horizontal installation**

Ant. Type: TK-1619A

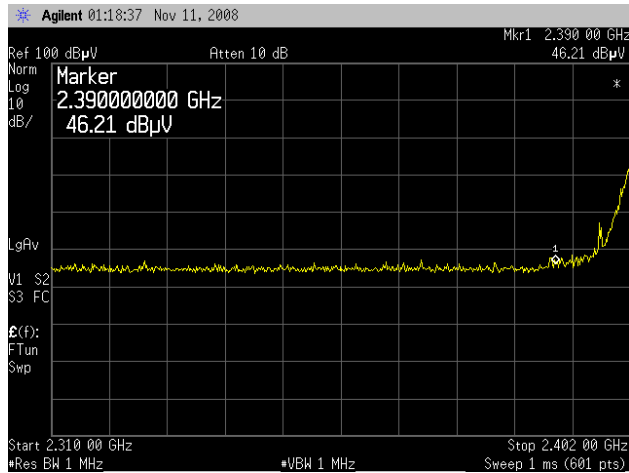
**Frequency: 2390.0MHz -Horizontal-
PEAK**



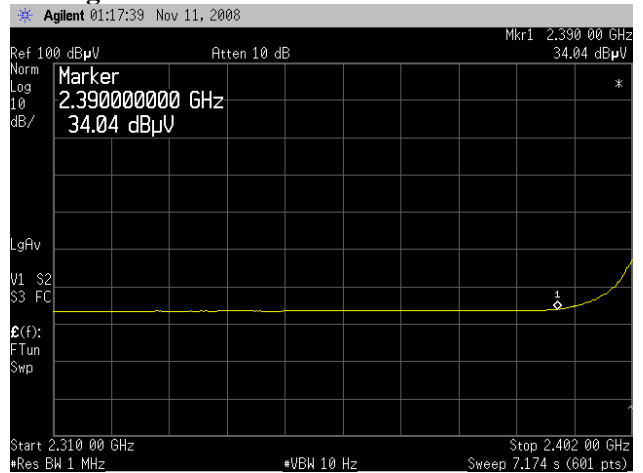
Average



**Frequency: 2390.0MHz -Vertical-
PEAK**



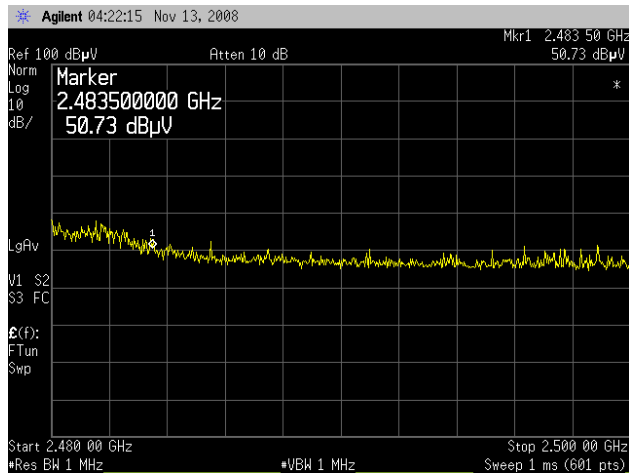
Average



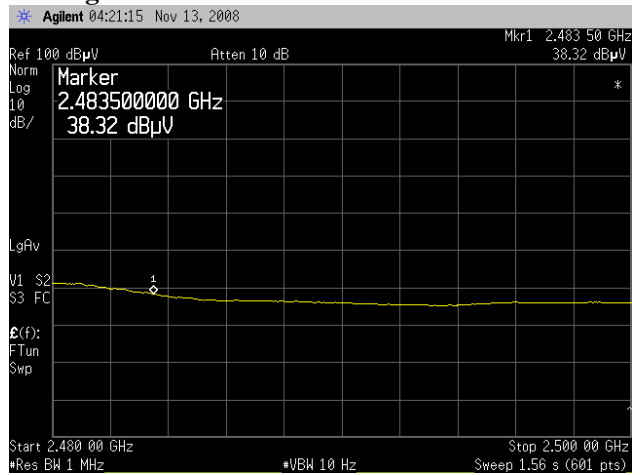
Restricted Band of Operation [IEEE802.11g] **Horizontal installation**

Ant. Type: TK-1619A

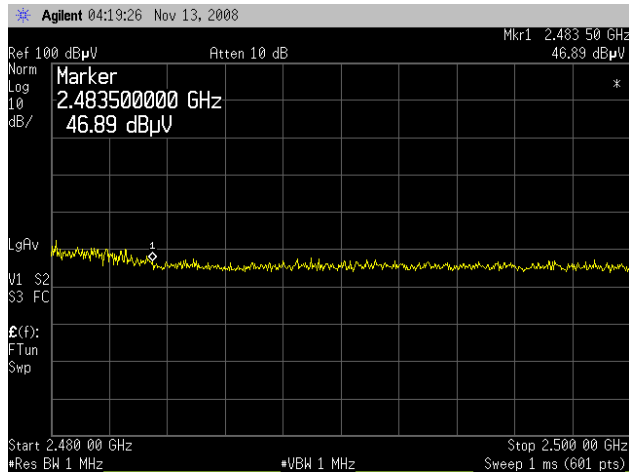
**Frequency: 2483.5MHz -Horizontal-
PEAK**



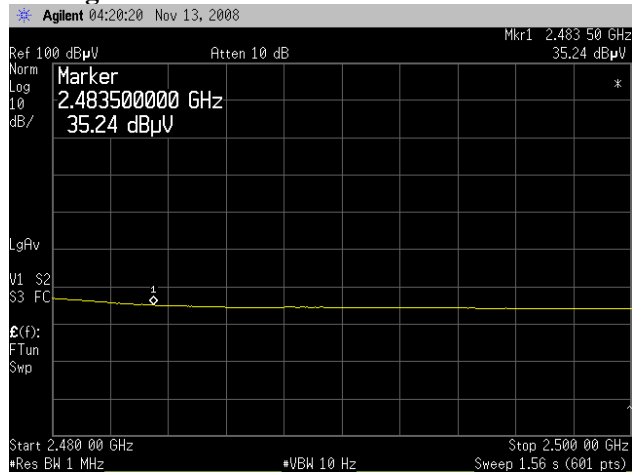
Average



**Frequency: 2483.5MHz -Vertical-
PEAK**



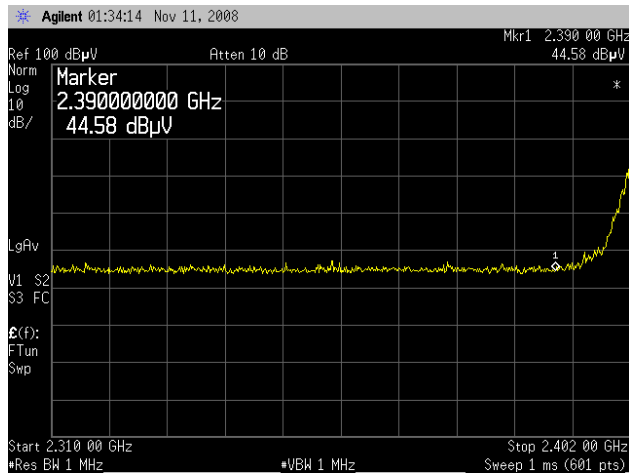
Average



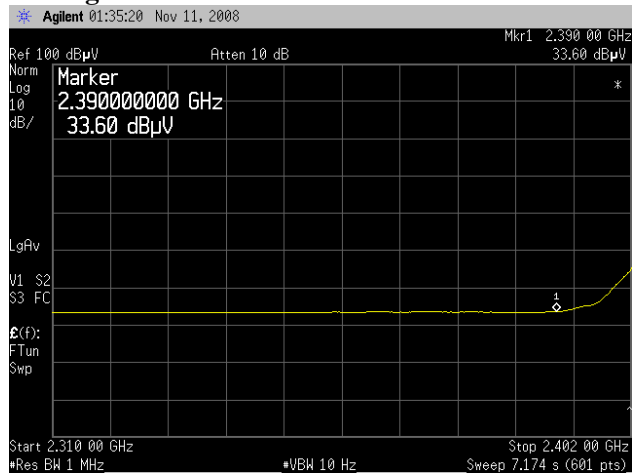
Restricted Band of Operation [IEEE802.11g] Vertical installation

Ant. Type: TK-1619A

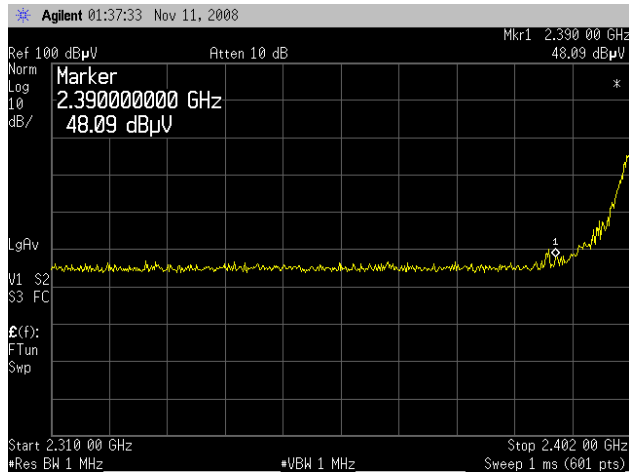
**Frequency: 2390.0MHz -Horizontal-
PEAK**



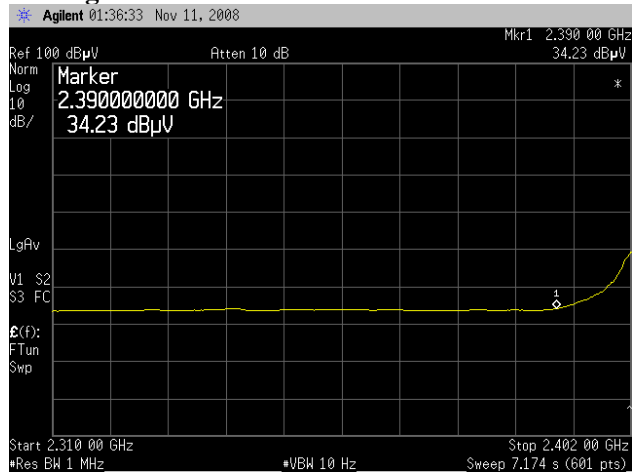
Average



**Frequency: 2390.0MHz -Vertical-
PEAK**



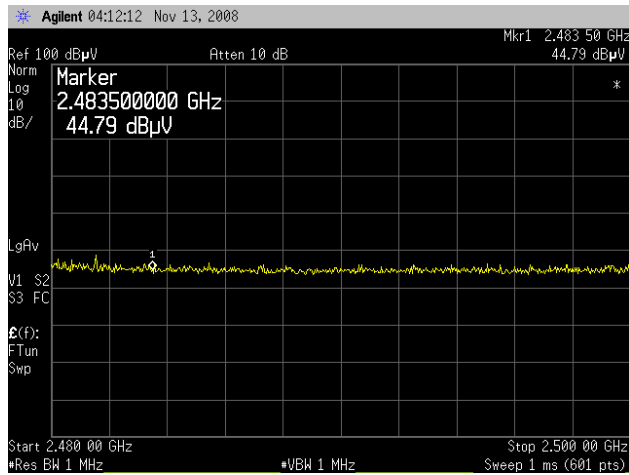
Average



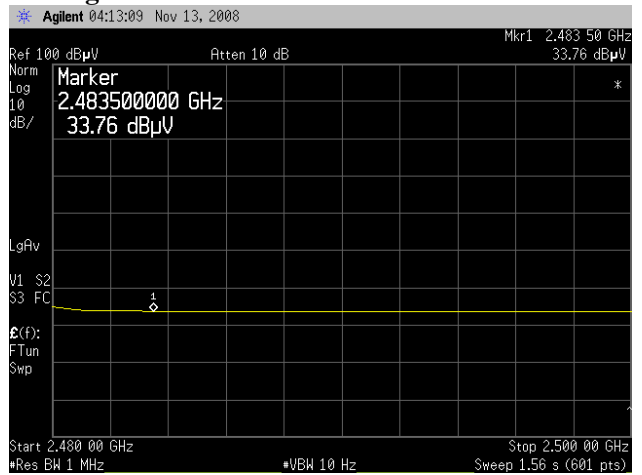
Restricted Band of Operation [IEEE802.11g] Vertical installation

Ant. Type: TK-1619A

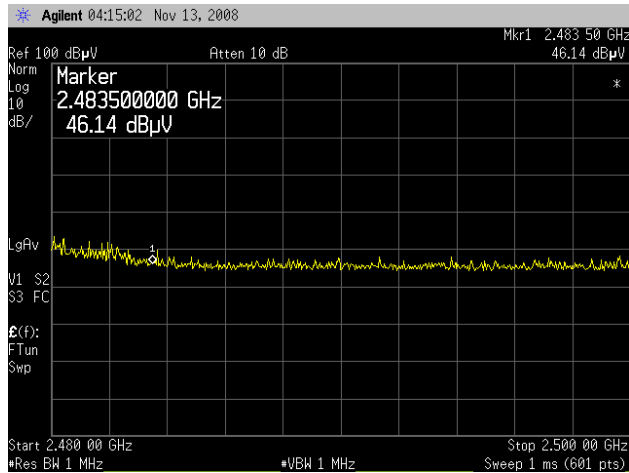
**Frequency: 2483.5MHz -Horizontal-
PEAK**



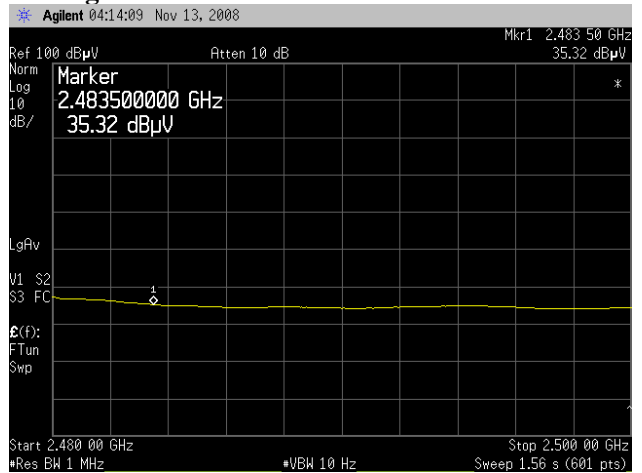
Average



**Frequency: 2483.5MHz -Vertical-
PEAK**



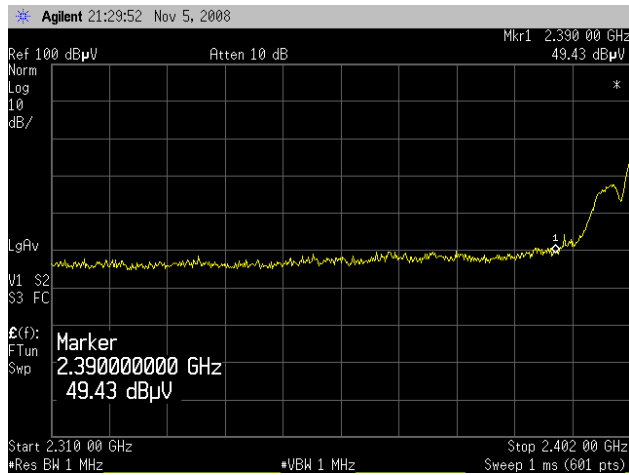
Average



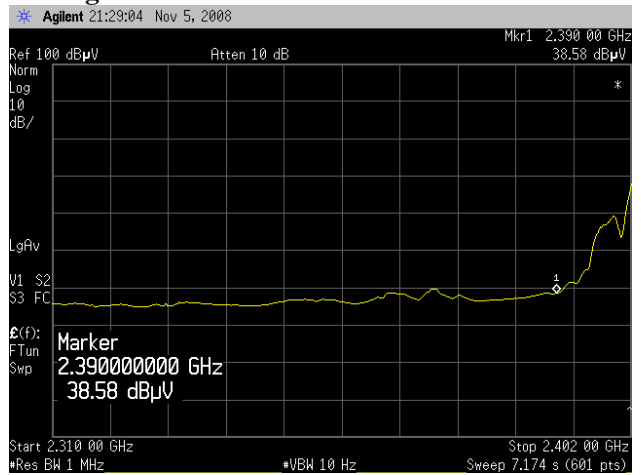
Restricted Band of Operation [IEEE802.11b] **Horizontal installation**

Ant. Type: ANTB18-127A0

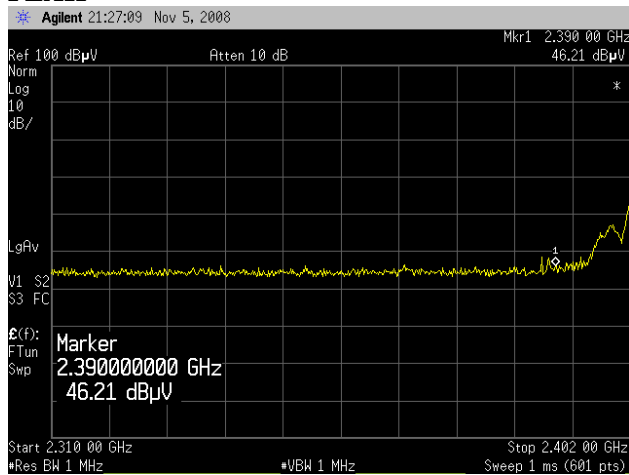
**Frequency: 2390.0MHz -Horizontal-
PEAK**



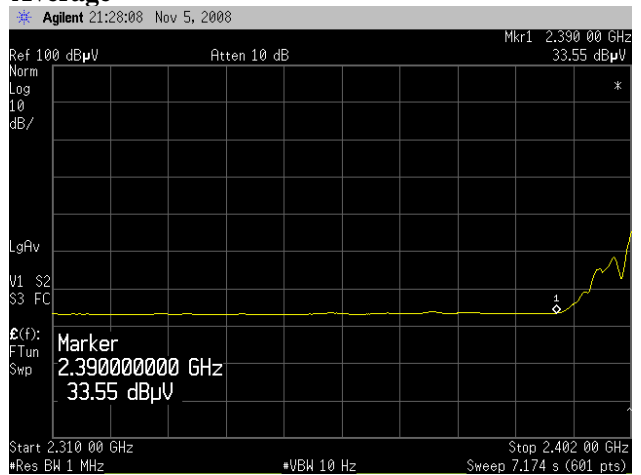
Average



**Frequency: 2390.0MHz -Vertical-
PEAK**



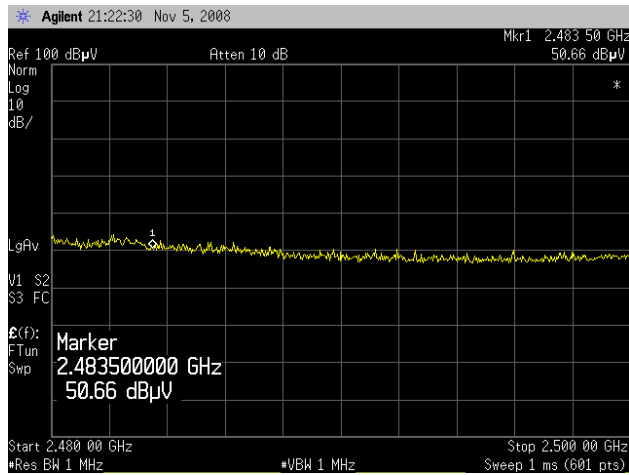
Average



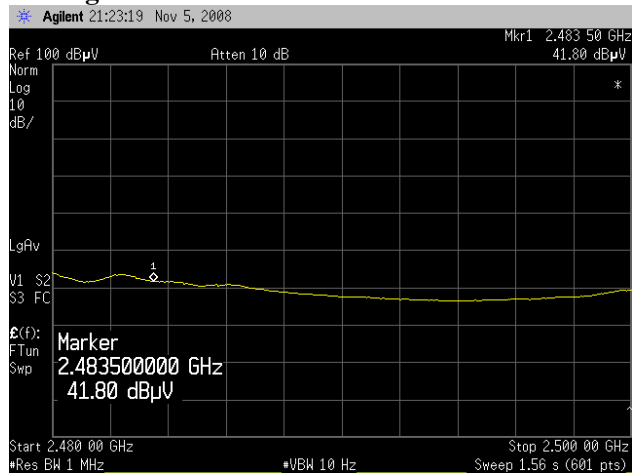
Restricted Band of Operation [IEEE802.11b] **Horizontal installation**

Ant. Type: ANTB18-127A0

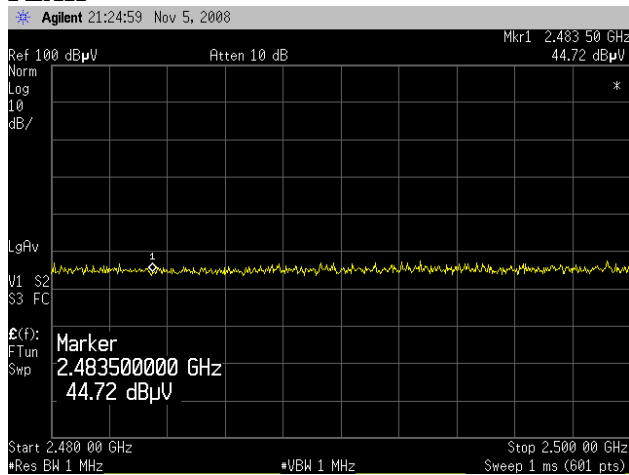
**Frequency: 2483.5MHz -Horizontal-
PEAK**



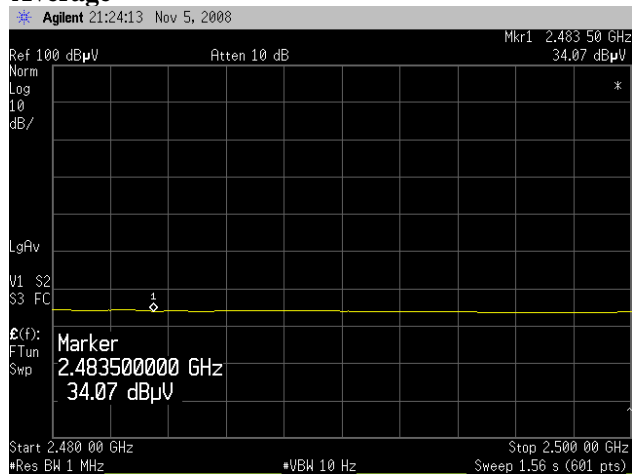
Average



**Frequency: 2483.5MHz -Vertical-
PEAK**



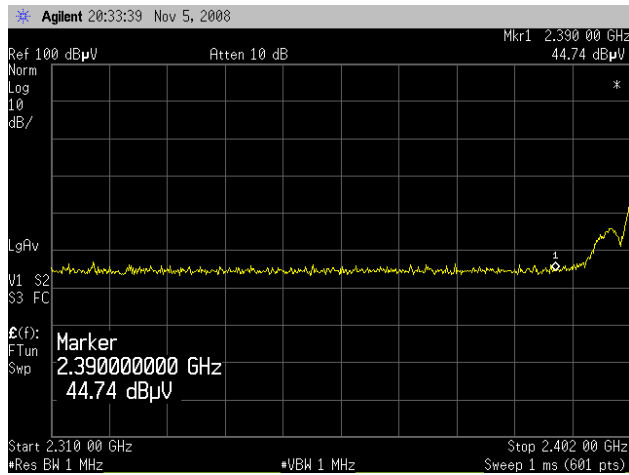
Average



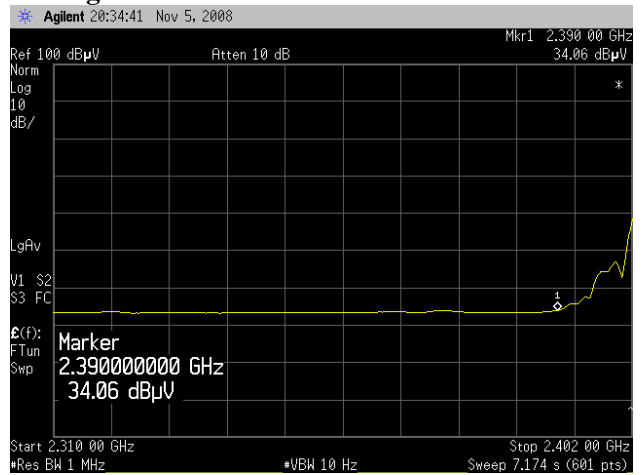
Restricted Band of Operation [IEEE802.11b] Vertical installation

Ant. Type: ANTB18-127A0

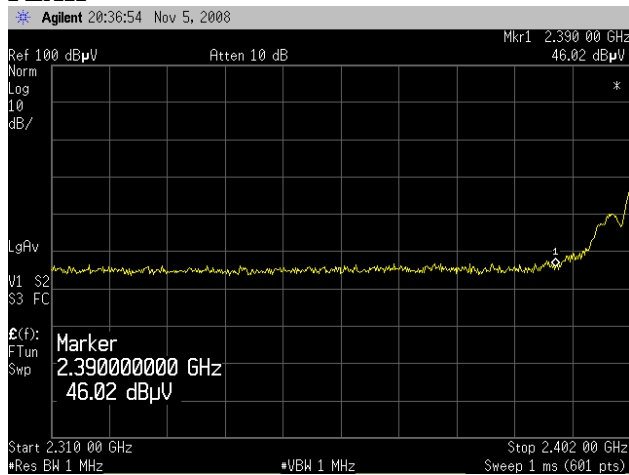
**Frequency: 2390.0MHz -Horizontal-
PEAK**



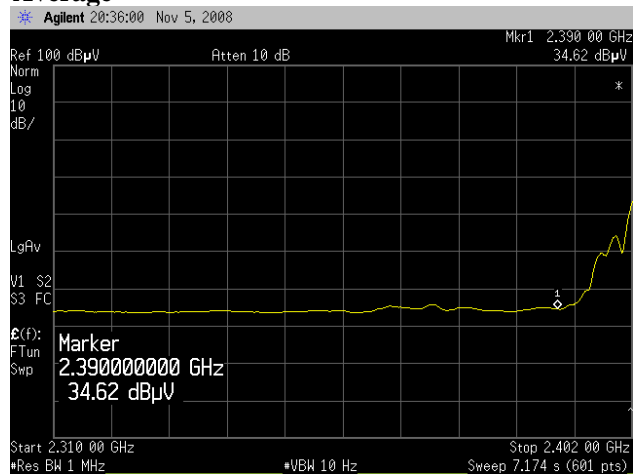
Average



**Frequency: 2390.0MHz -Vertical-
PEAK**



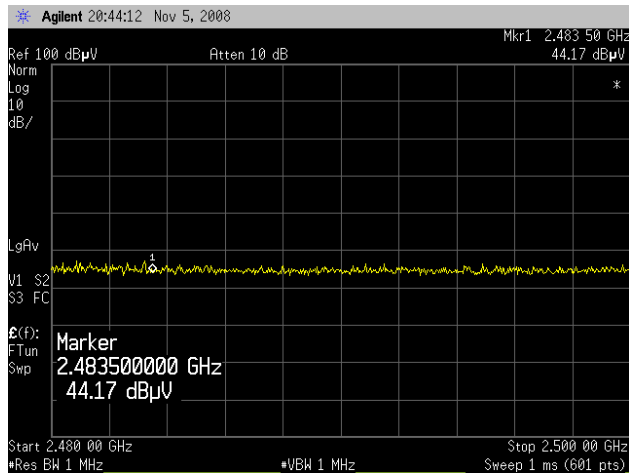
Average



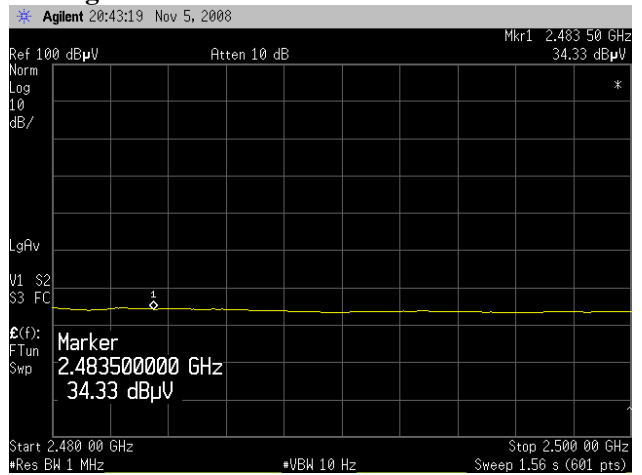
Restricted Band of Operation [IEEE802.11b] Vertical installation

Ant. Type: ANTB18-127A0

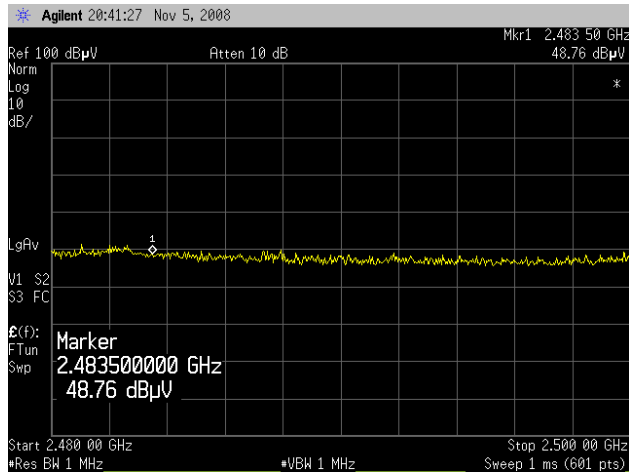
**Frequency: 2483.5MHz -Horizontal-
PEAK**



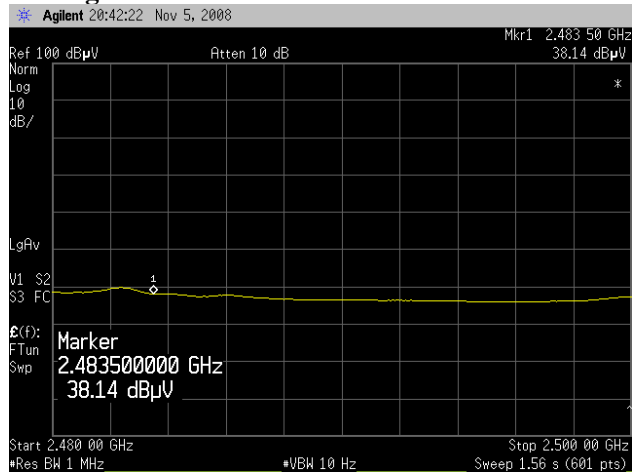
Average



**Frequency: 2483.5MHz -Vertical-
PEAK**



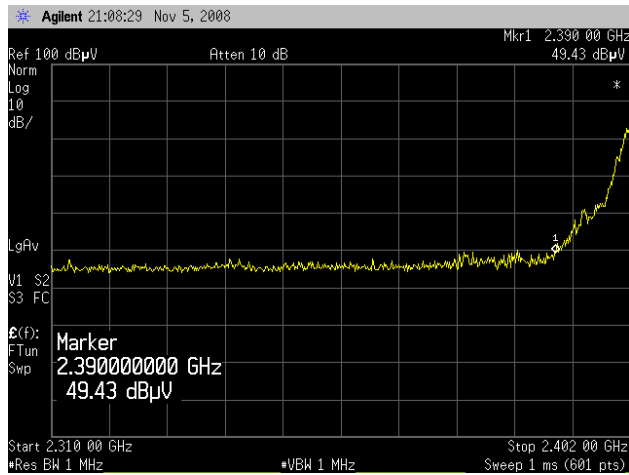
Average



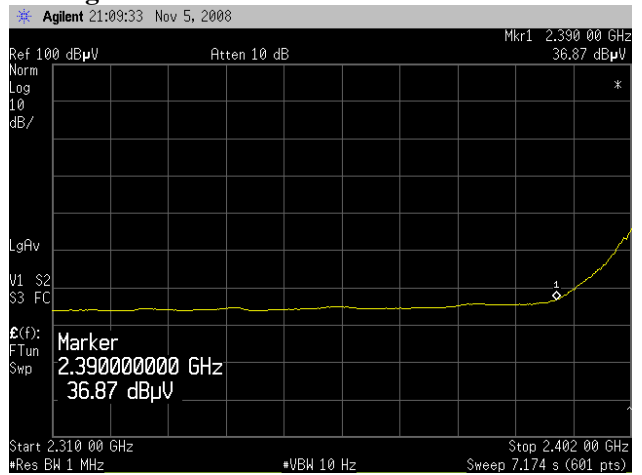
Restricted Band of Operation [IEEE802.11g] **Horizontal installation**

Ant. Type: ANTB18-127A0

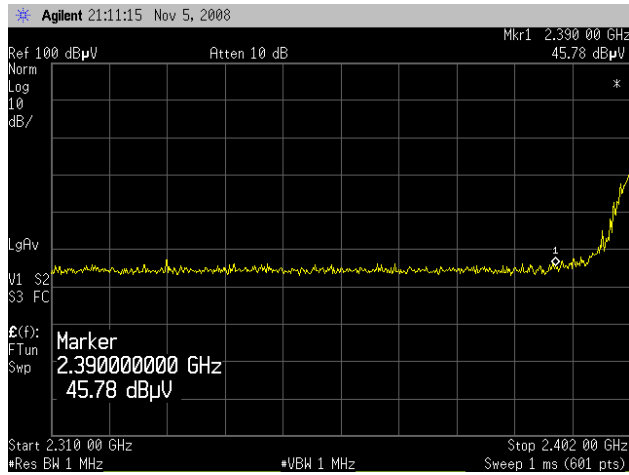
**Frequency: 2390.0MHz -Horizontal-
PEAK**



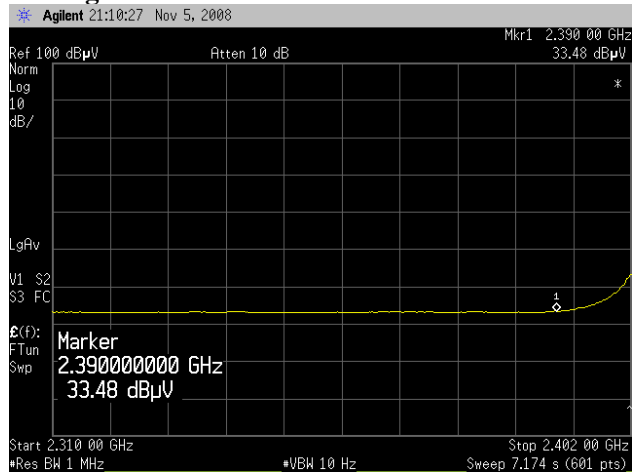
Average



**Frequency: 2390.0MHz -Vertical-
PEAK**



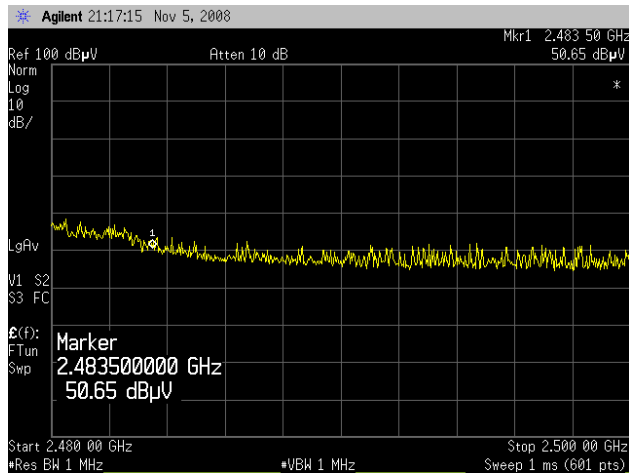
Average



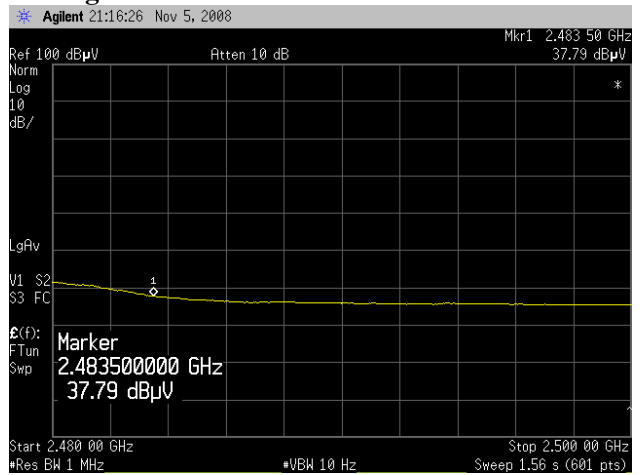
Restricted Band of Operation [IEEE802.11g] **Horizontal installation**

Ant. Type: ANTB18-127A0

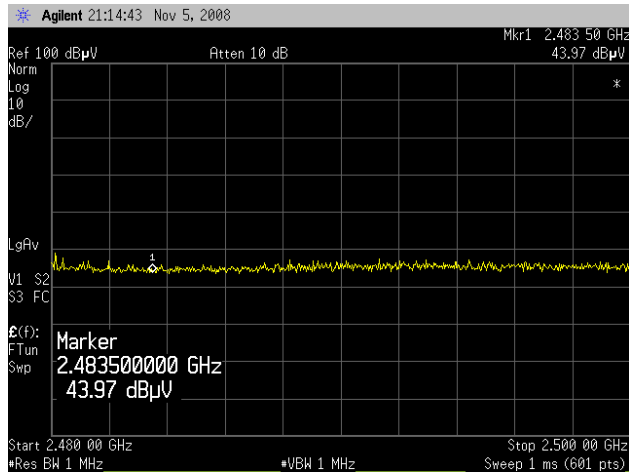
**Frequency: 2483.5MHz -Horizontal-
PEAK**



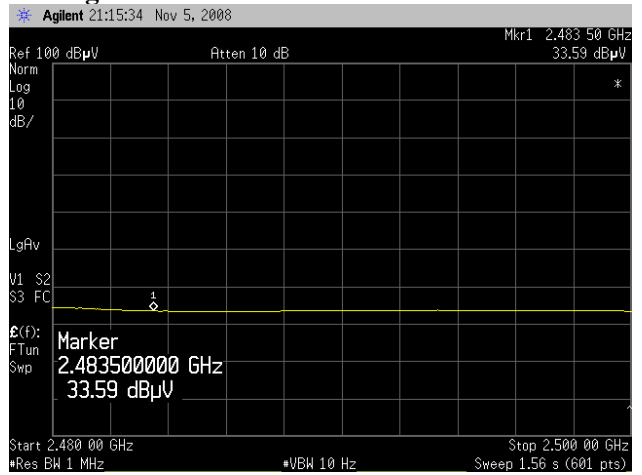
Average



**Frequency: 2483.5MHz -Vertical-
PEAK**



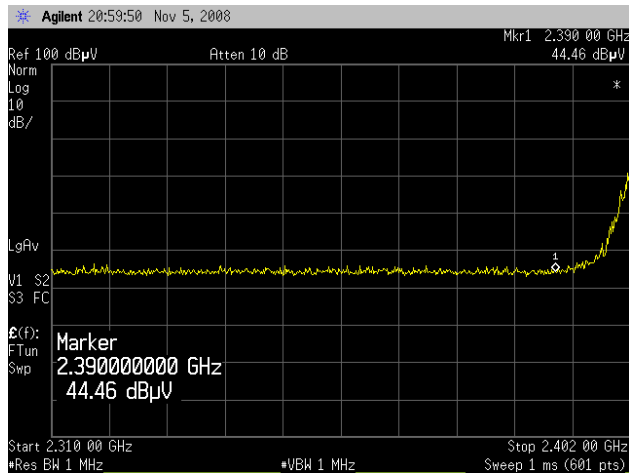
Average



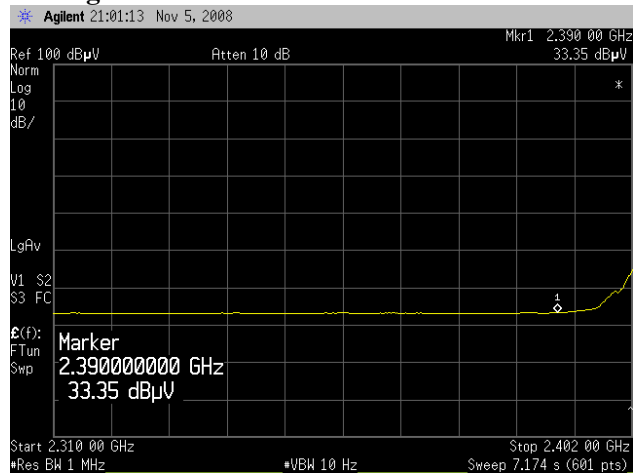
Restricted Band of Operation [IEEE802.11g] Vertical installation

Ant. Type: ANTB18-127A0

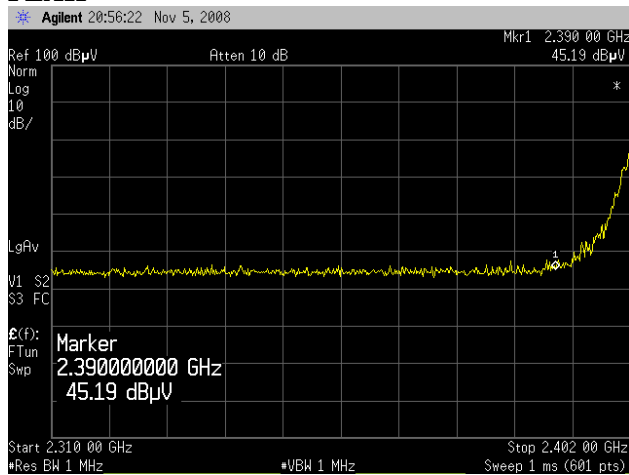
**Frequency: 2390.0MHz -Horizontal-
PEAK**



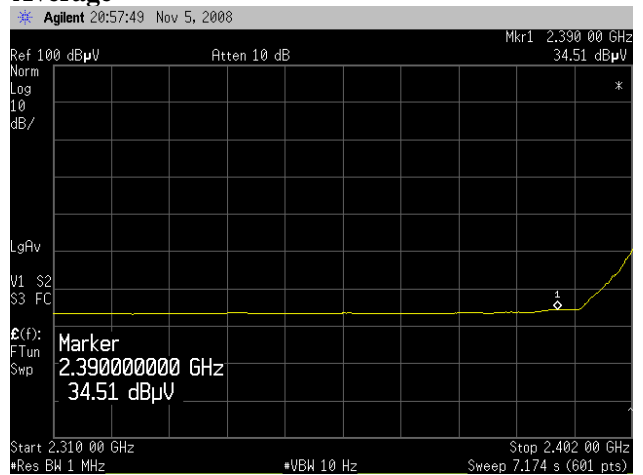
Average



**Frequency: 2390.0MHz -Vertical-
PEAK**



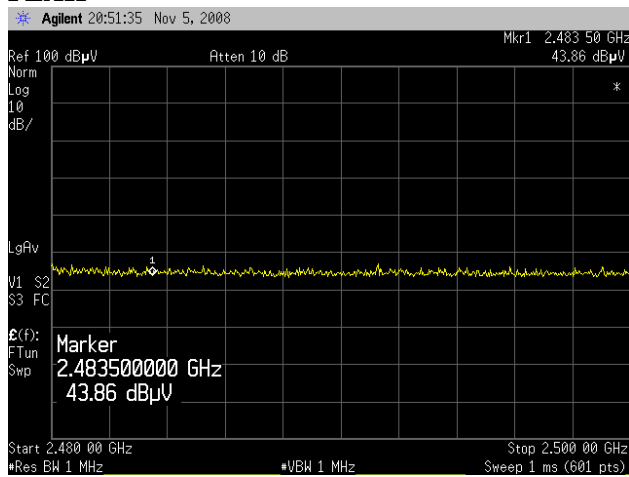
Average



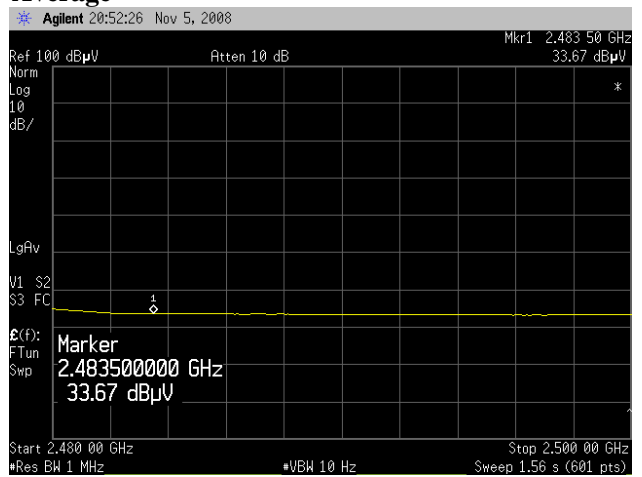
Restricted Band of Operation [IEEE802.11g] Vertical installation

Ant. Type: ANTB18-127A0

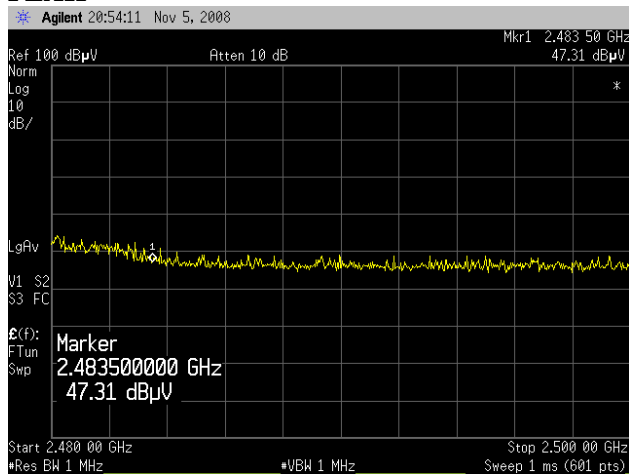
**Frequency: 2483.5MHz -Horizontal-
PEAK**



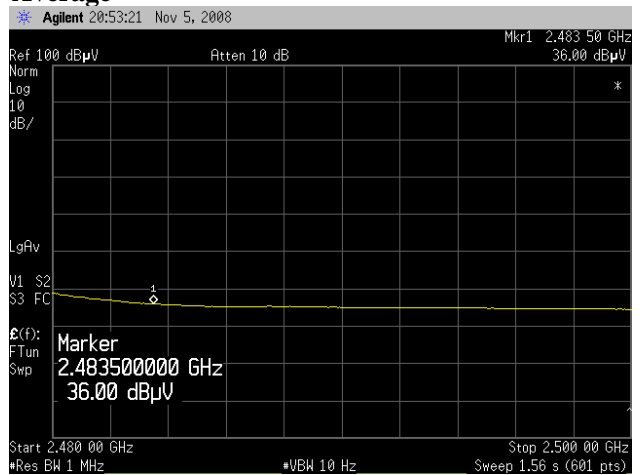
Average



**Frequency: 2483.5MHz -Vertical-
PEAK**



Average



5.7 Transmitter Power Spectral Density

5.7.1 Test Procedure [FCC 15.247(d), IC RSS-210 A8.2(b)]

The peak power density is measured with a spectrum analyzer connected to the antenna terminal, while EUT is operating in transmission mode at the appropriate center frequency.

The spectrum analyzer is set to:

- RBW=3kHz, VBW=3kHz, Span=3MHz, Sweep =auto

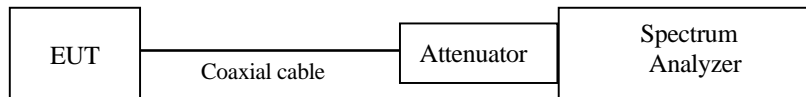
The EUT was set to operate with following conditions.

- ch.1 (low), ch.6 (mid) and ch.11 (high)

The test mode of EUT is as follows.

- Test mode

5.7.2 Measurement Setup



5.7.3 Limit of Transmitter Power Spectral Density

The peak power spectral density shall not be greater than 8dBm in any 3kHz band.

5.7.4 Measurement Results

[IEEE802.11b]

Ch No.	Frequency [MHz]	Reading [dBm]	Factor (Cable loss) [dB]	Level [dBm]	Limit [dBm]	Margin [dB]
1	2412.70	-13.83	9.86	-3.97	8.0	11.97
6	2437.68	-13.27	9.86	-3.41	8.0	11.41
11	2461.32	-13.97	9.86	-4.11	8.0	12.11

[IEEE802.11g]

Ch No.	Frequency [MHz]	Reading [dBm]	Factor (Cable loss) [dB]	Level [dBm]	Limit [dBm]	Margin [dB]
1	2413.30	-32.57	9.86	-22.71	8.0	30.71
6	2435.72	-32.50	9.86	-22.64	8.0	30.64
11	2462.00	-32.48	9.86	-22.62	8.0	30.62

Note: Transmitter Power Spectral Density Level (Margin) = Limit - [Reading + Factor (Cable)]

5.7.5 Trace Data

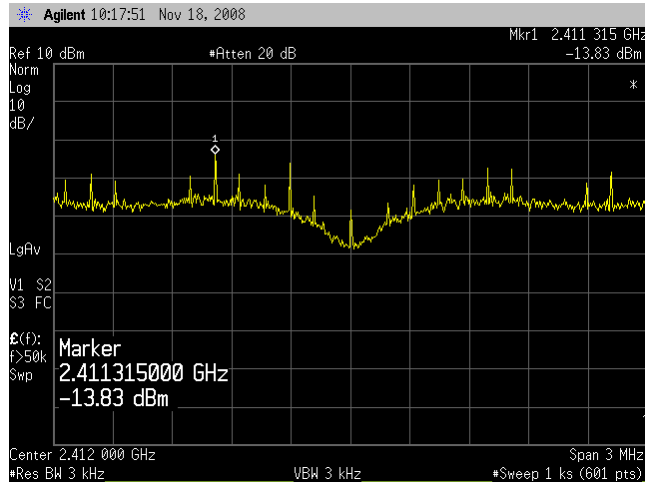
Test Personnel:

Tested by: Hiroaki Suzuki

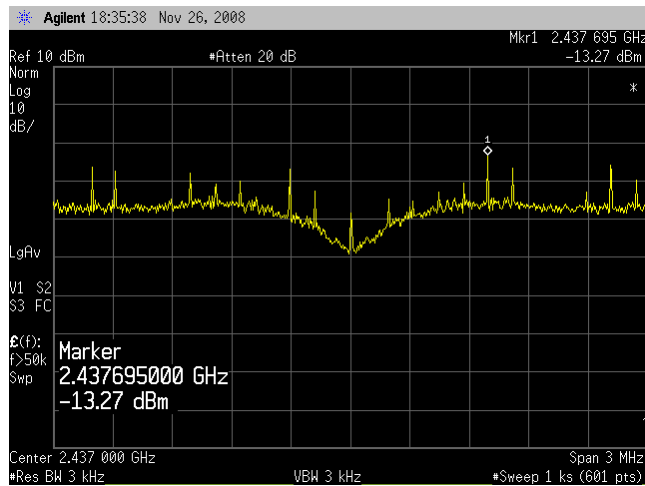
Date : Nov. 4, 2008
 Temperature : 23.6 [°C]
 Humidity : 54.2 [%]
 Test place : Shielded room

Transmitter Power Spectral Density [IEEE802.11b]

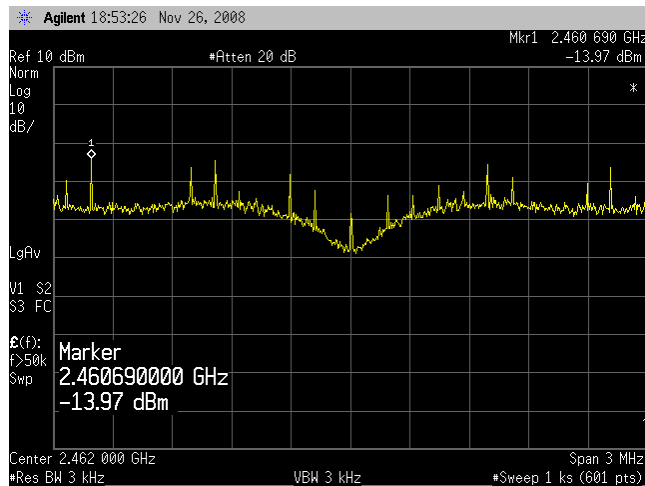
Channel 1: 2412.0MHz



Channel 6: 2437.0MHz

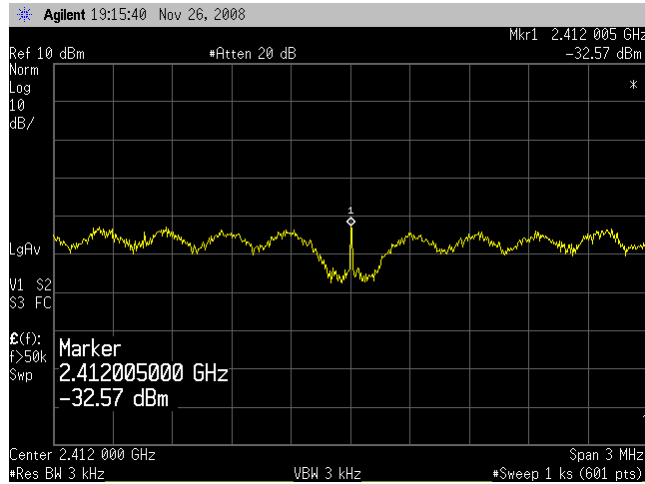


Channel 11: 2462.0MHz

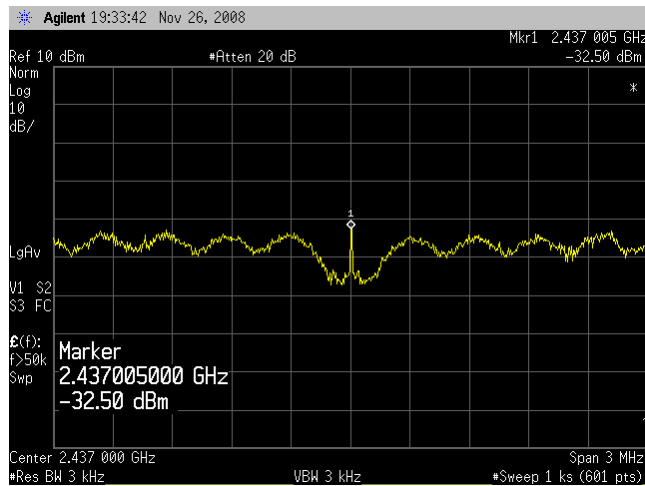


Transmitter Power Spectral Density [IEEE802.11g]

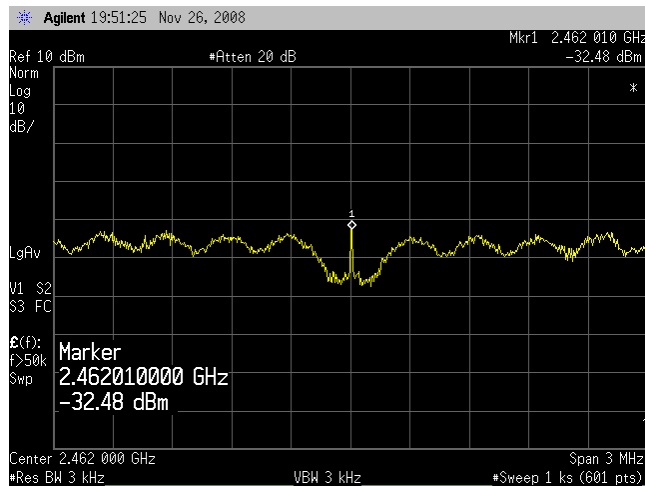
Channel 1: 2412.0MHz



Channel 6: 2437.0MHz



Channel 11: 2462.0MHz



5.8 AC power line Conducted Emissions

5.8.1 Test Procedure [FCC 15.207, IC RSS-Gen 7.2.2]

Conducted emissions at AC mains port measurements are performed at 3m Semi-anechoic chamber according to ANSI C63.4 section 7.

EUT and support equipment are placed on FRP table of 2.0m(W) × 1.0m(D) × 0.8m(H) in size. EUT is connected to 50Ω/50μH Line Impedance Stabilization Network (LISN) which is placed on reference ground plane, and was placed 80cm away from EUT. Excess of AC power cable is bundled in center. Vertical Metal Reference Plane 2.0m (W) × 2.0m (H) in size is placed 0.4m away from EUT. LISN for peripheral is terminated in 50Ω.

EUT operating mode is selected to emit the maximum noise. Overall frequency range is investigated with spectrum analyzer using peak detector. Maximum emission configuration is determined by manipulating the EUT, support equipment, interconnecting cables. Then, emission measurements are performed with test receiver in above setting to each current-carrying conductor of the mains port. Sufficient time for EUT, support equipment and test equipment are provided in order for them to warm up to their normal operating condition.

Frequency range:

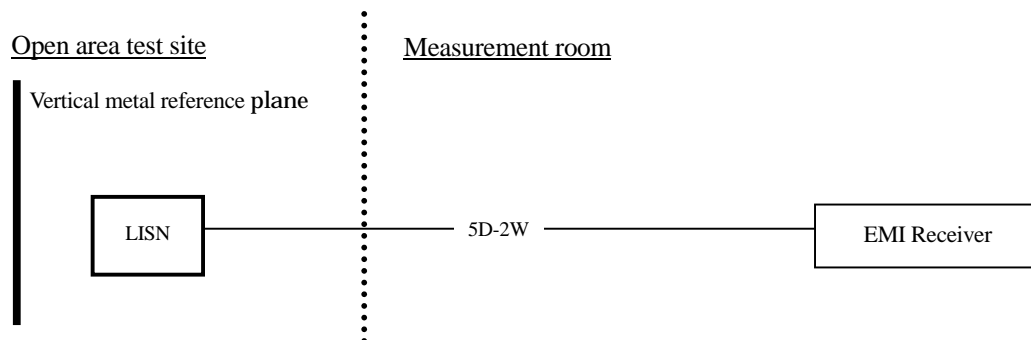
- 0.15MHz to 30MHz

The Test receiver is set to:

- Detector: Quasi-peak, Average
Bandwidth: 9kHz

5.8.2 Measurement Setup

Test configuration for AC power line Conducted Emissions



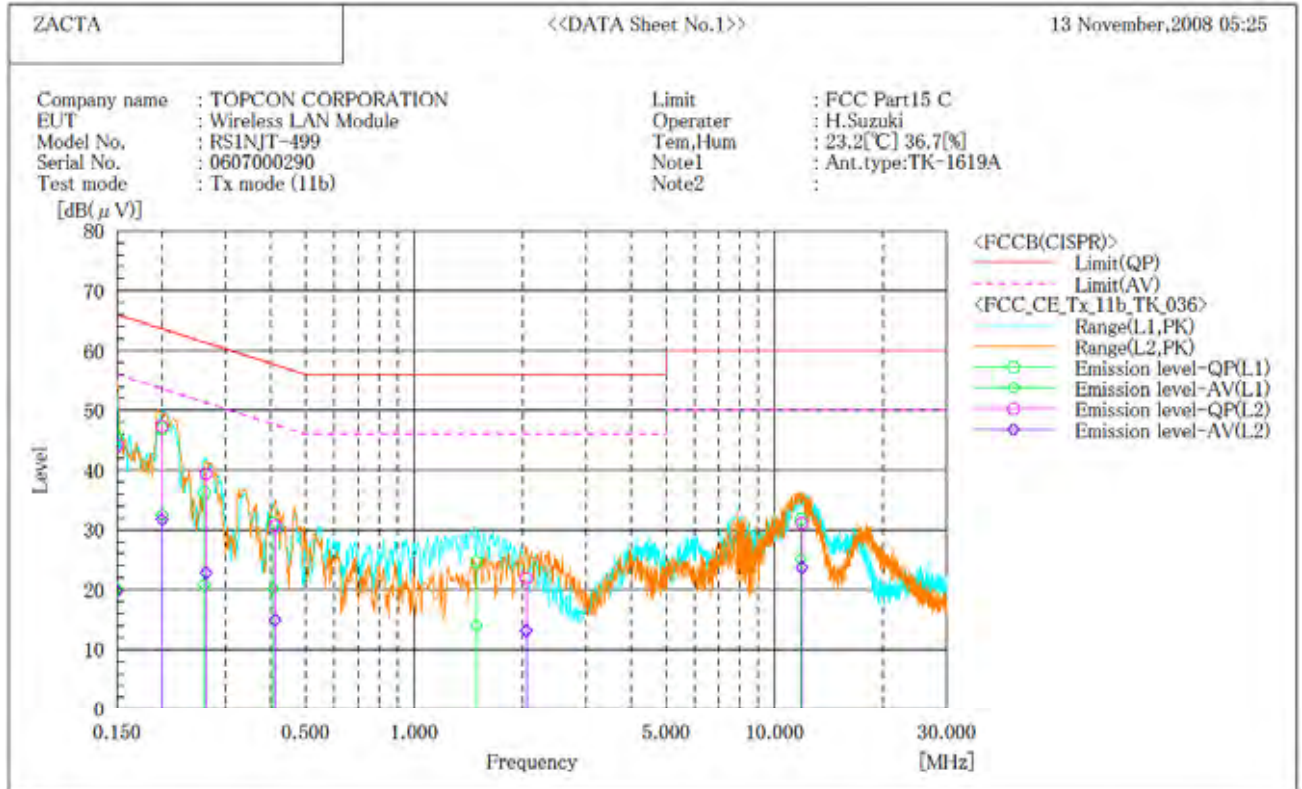
5.8.3 Limit of AC power line Conducted Emissions Measurement (Sample calculation)

Frequency	Limit		Sample of field strength calculation
	QP(dBμV)	AV(dBμV)	
0.15MHz to 0.5MHz	66 to 56*	56 to 46*	$\text{dB}\mu\text{V} = 20\log_{10}(\mu\text{V})$ Limit @ : 60.0dBμV(Quasi-peak) 6.770MHz : 50.0dBμV(Average)
0.5MHz to 5MHz	56	46	(Quasi peak) Reading = 51.2dBμV Cable loss + AMN factor = 0.3dB Total = 51.2 + 0.3 = 51.5dBμV Margin = 60.0 – 51.5 = 8.5dB
5MHz to 30MHz	60	50	(Average) Reading = 45.0dBμV Cable loss + AMN factor = 0.3dB Total = 45.0 + 0.3 = 45.3dBμV Margin = 50.0 – 45.3 = 4.7dB

*: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

5.8.4 Measurement Result

[IEEE802.11b] Ant. Type: TK-1619A



Final Result

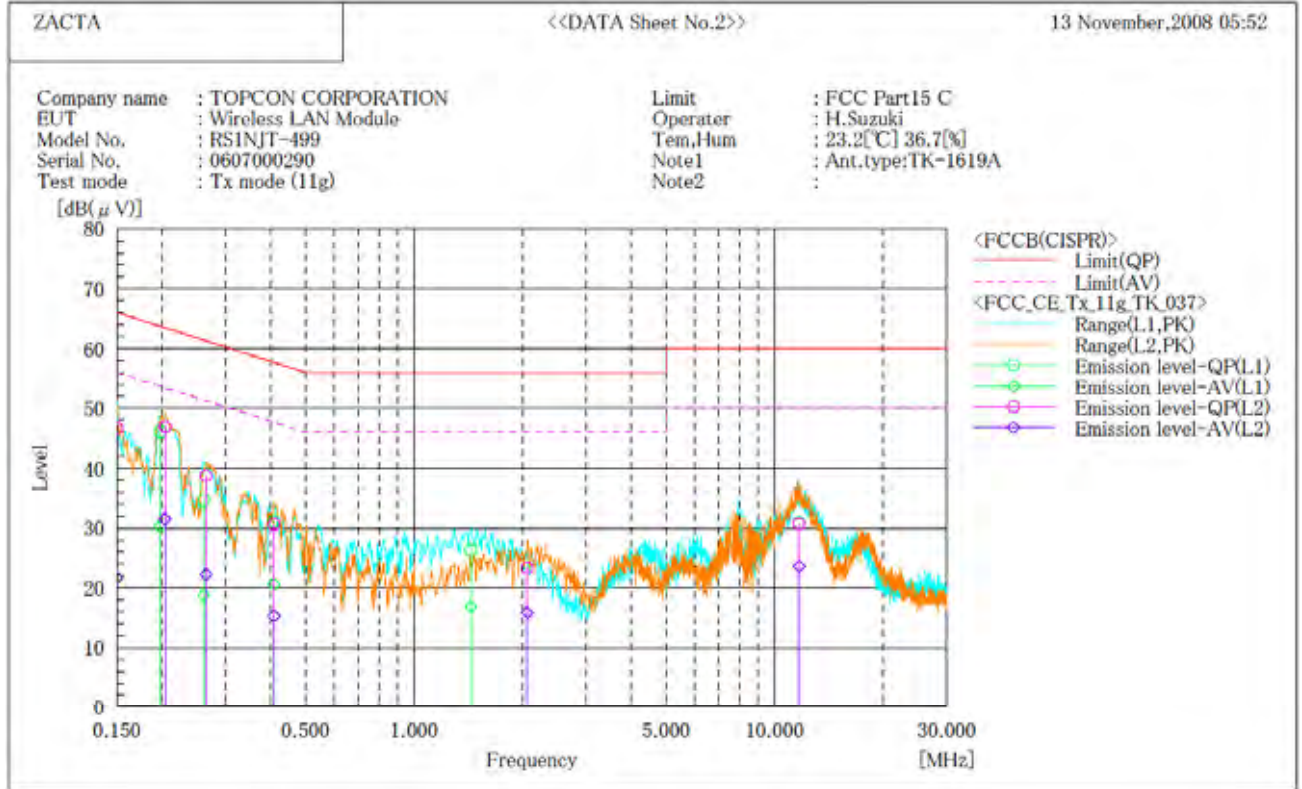
— L1 Phase —

No.	Frequency [MHz]	Reading QP [dB(μV)]	Reading AV [dB(μV)]	c. f [dB]	Result QP [dB(μV)]	Result AV [dB(μV)]	Limit QP [dB(μV)]	Limit AV [dB(μV)]	Margin QP [dB]	Margin AV [dB]
1	0.150	35.1	9.8	10.3	45.4	20.1	66.0	56.0	20.6	35.9
2	0.200	36.8	22.4	10.1	46.9	32.5	63.6	53.6	16.7	21.1
3	0.262	26.1	10.8	10.1	36.2	20.9	61.4	51.4	25.2	30.5
4	0.407	21.0	10.0	10.1	31.1	20.1	57.7	47.7	26.6	27.6
5	1.490	14.6	3.8	10.1	24.7	13.9	56.0	46.0	31.3	32.1
6	11.818	21.2	14.6	10.6	31.8	25.2	60.0	50.0	28.2	24.8

— L2 Phase —

No.	Frequency [MHz]	Reading QP [dB(μV)]	Reading AV [dB(μV)]	c. f [dB]	Result QP [dB(μV)]	Result AV [dB(μV)]	Limit QP [dB(μV)]	Limit AV [dB(μV)]	Margin QP [dB]	Margin AV [dB]
1	0.150	33.8	9.5	10.3	44.1	19.8	66.0	56.0	21.9	36.2
2	0.200	37.2	21.6	10.1	47.3	31.7	63.6	53.6	16.3	21.9
3	0.265	29.3	12.7	10.1	39.4	22.8	61.3	51.3	21.9	28.5
4	0.412	20.6	4.8	10.1	30.7	14.9	57.6	47.6	26.9	32.7
5	2.050	11.8	3.0	10.1	21.9	13.1	56.0	46.0	34.1	32.9
6	11.898	20.5	13.1	10.6	31.1	23.7	60.0	50.0	28.9	26.3

[IEEE802.11g] Ant. Type: TK-1619A



Final Result

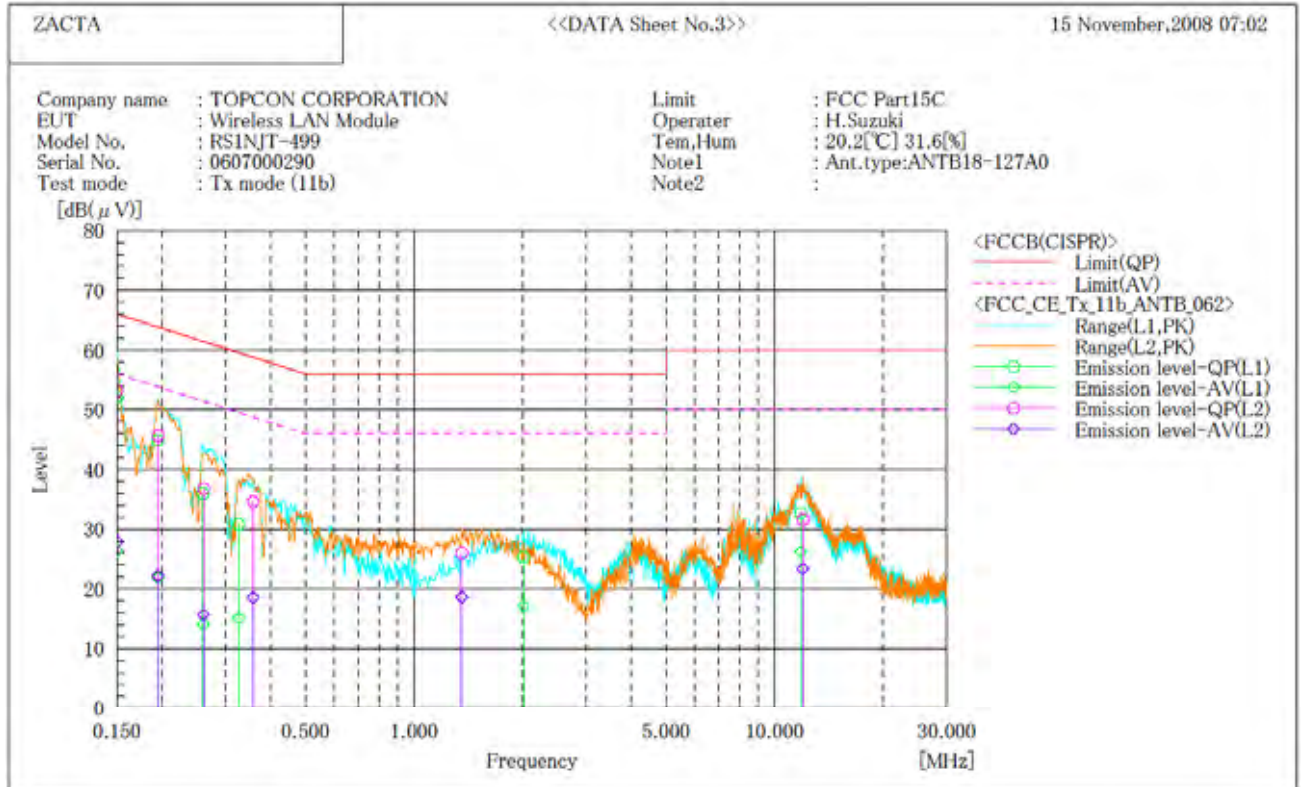
— L1 Phase —

No.	Frequency [MHz]	Reading QP [dB(μV)]	Reading AV [dB(μV)]	c. f [dB]	Result QP [dB(μV)]	Result AV [dB(μV)]	Limit QP [dB(μV)]	Limit AV [dB(μV)]	Margin QP [dB]	Margin AV [dB]
1	0.150	36.4	11.5	10.3	46.7	21.8	66.0	56.0	19.3	34.2
2	0.198	36.0	20.2	10.1	46.1	30.3	63.7	53.7	17.6	23.4
3	0.261	24.5	8.6	10.1	34.6	18.7	61.4	51.4	26.8	32.7
4	0.408	21.1	10.5	10.1	31.2	20.6	57.7	47.7	26.5	27.1
5	1.436	16.2	6.8	10.1	26.3	16.9	56.0	46.0	29.7	29.1
6	11.676	20.3	13.0	10.6	30.9	23.6	60.0	50.0	29.1	26.4

— L2 Phase —

No.	Frequency [MHz]	Reading QP [dB(μV)]	Reading AV [dB(μV)]	c. f [dB]	Result QP [dB(μV)]	Result AV [dB(μV)]	Limit QP [dB(μV)]	Limit AV [dB(μV)]	Margin QP [dB]	Margin AV [dB]
1	0.150	36.4	11.3	10.3	46.7	21.6	66.0	56.0	19.3	34.4
2	0.204	36.8	21.4	10.1	46.9	31.5	63.4	53.4	16.5	21.9
3	0.265	28.6	12.1	10.1	38.7	22.2	61.3	51.3	22.6	29.1
4	0.409	20.5	5.2	10.1	30.6	15.3	57.7	47.7	27.1	32.4
5	2.058	13.2	5.8	10.1	23.3	15.9	56.0	46.0	32.7	30.1
6	11.676	20.1	13.0	10.6	30.7	23.6	60.0	50.0	29.3	26.4

[IEEE802.11b] Ant. Type: ANTB18-127A0



Final Result

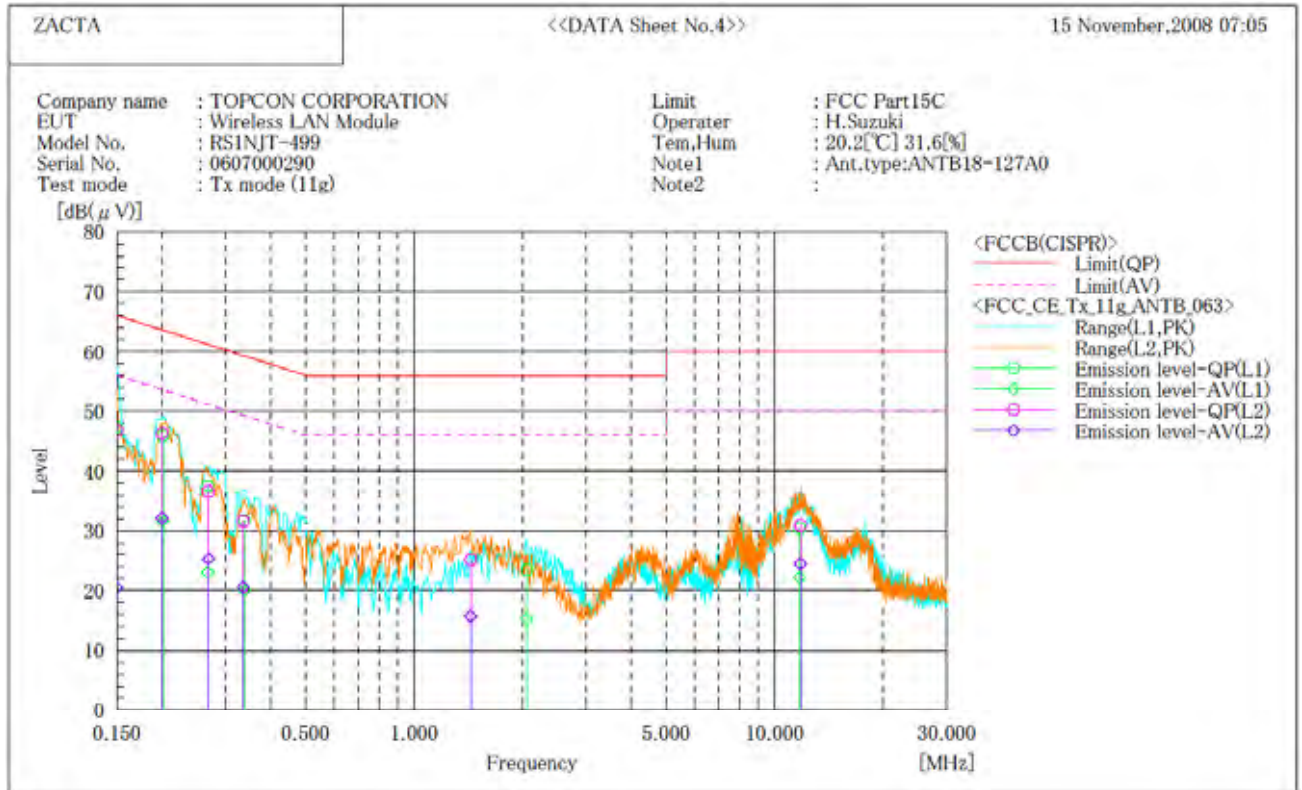
— L1 Phase —

No.	Frequency [MHz]	Reading QP [dB(μV)]	Reading AV [dB(μV)]	c. f [dB]	Result QP [dB(μV)]	Result AV [dB(μV)]	Limit QP [dB(μV)]	Limit AV [dB(μV)]	Margin QP [dB]	Margin AV [dB]
1	0.150	41.8	16.0	10.3	52.1	26.3	66.0	56.0	13.9	29.7
2	0.195	34.8	11.8	10.1	44.9	21.9	63.8	53.8	18.9	31.9
3	0.260	25.9	4.0	10.1	36.0	14.1	61.4	51.4	25.4	37.3
4	0.326	20.7	5.0	10.1	30.8	15.1	59.6	49.6	28.8	34.5
5	2.010	15.1	6.9	10.2	25.3	17.1	56.0	46.0	30.7	28.9
6	11.797	22.1	15.6	10.6	32.7	26.2	60.0	50.0	27.3	23.8

— L2 Phase —

No.	Frequency [MHz]	Reading QP [dB(μV)]	Reading AV [dB(μV)]	c. f [dB]	Result QP [dB(μV)]	Result AV [dB(μV)]	Limit QP [dB(μV)]	Limit AV [dB(μV)]	Margin QP [dB]	Margin AV [dB]
1	0.150	42.9	17.6	10.3	53.2	27.9	66.0	56.0	12.8	28.1
2	0.195	35.5	12.1	10.1	45.6	22.2	63.8	53.8	18.2	31.6
3	0.261	26.7	5.6	10.1	36.8	15.7	61.4	51.4	24.6	35.7
4	0.358	24.5	8.5	10.1	34.6	18.6	58.8	48.8	24.2	30.2
5	1.356	15.9	8.6	10.1	26.0	18.7	56.0	46.0	30.0	27.3
6	11.979	21.0	12.8	10.6	31.6	23.4	60.0	50.0	28.4	26.6

[IEEE802.11g] Ant. Type: ANTB18-127A0



Final Result

— L1 Phase —

No.	Frequency [MHz]	Reading QP [dB(μV)]	Reading AV [dB(μV)]	c. f [dB]	Result QP [dB(μV)]	Result AV [dB(μV)]	Limit QP [dB(μV)]	Limit AV [dB(μV)]	Margin QP [dB]	Margin AV [dB]
1	0.150	37.0	10.2	10.3	47.3	20.5	66.0	56.0	18.7	35.5
2	0.201	35.8	21.5	10.1	45.9	31.6	63.6	53.6	17.7	22.0
3	0.268	27.4	13.0	10.1	37.5	23.1	61.2	51.2	23.7	28.1
4	0.338	21.6	9.9	10.1	31.7	20.0	59.3	49.3	27.6	29.3
5	2.054	13.3	5.0	10.2	23.5	15.2	56.0	46.0	32.5	30.8
6	11.737	19.8	11.6	10.6	30.4	22.2	60.0	50.0	29.6	27.8

— L2 Phase —

No.	Frequency [MHz]	Reading QP [dB(μV)]	Reading AV [dB(μV)]	c. f [dB]	Result QP [dB(μV)]	Result AV [dB(μV)]	Limit QP [dB(μV)]	Limit AV [dB(μV)]	Margin QP [dB]	Margin AV [dB]
1	0.150	36.5	10.2	10.3	46.8	20.5	66.0	56.0	19.2	35.5
2	0.200	36.2	22.0	10.1	46.3	32.1	63.6	53.6	17.3	21.5
3	0.269	26.5	15.2	10.1	36.6	25.3	61.1	51.1	24.5	25.8
4	0.336	21.5	10.5	10.1	31.6	20.6	59.3	49.3	27.7	28.7
5	1.436	15.1	5.6	10.1	25.2	15.7	56.0	46.0	30.8	30.3
6	11.798	20.3	13.9	10.6	30.9	24.5	60.0	50.0	29.1	25.5

5.9 Antenna requirement

According to FCC section 15.203., an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

The antenna has a U.FL type connector and antenna will be internal in the host equipment and inaccessible by the user. Therefore, the EUT complies with the antenna requirement of FCC section 15.203.

6. Uncertainty of measurement

Expanded uncertainties stated were calculated with a coverage Factor $k=2$.

Please note that these results are not taken into account when determining compliance or non-compliance with test result.

Test item	Measurement uncertainty
Conducted emission at mains port (150kHz - 30MHz)	$\pm 3.7\text{dB}$
Radiated emission (9kHz - 30MHz)	$\pm 4.4\text{dB}$
Radiated emission (30MHz – 1000MHz)	$\pm 5.3\text{dB}$
Radiated emission (1000MHz – 26GHz)	$\pm 3.9\text{dB}$

7. Laboratory description

7.1 Location: ZACTA Technology Corporation Yonezawa Testing Center
4149-7 Hachimanpara 5-chome Yonezawa-shi Yamagata 992-1128 Japan
Phone: +81-238-28-2880 Fax: +81-238-28-2888

7.2 Facility filing information:

1) NVLAP accreditation: NVLAP Lab. code: 200306-0

2) FCC filing:

Site name	Registration Number	Expiry Date
Site 2, Site3	91065	November 16, 2008
3m Semi-anechoic chamber 10m Semi-anechoic chamber Shielded room No.1	540072	March 12, 2010

3) Industry Canada Oats site filing:

Site name	Sites on file: Oats 3m/10m	Expiry Date
Site 2	4224A-2	January 24, 2010
Site 3	4224A-3	January 24, 2010
3m Semi-anechoic chamber	4224A-4	January 24, 2010
10m Semi-anechoic chamber	4224A-5	January 24, 2010

4) VCCI site filing:

Site name	Radiated emission	Conducted emission for mains port	Expiry Date	Conducted emission for telecom port	Expiry Date
Site 2	R-137	C-133	Nov. 16, 2011	T-1477	Oct. 8, 2011
Site 3	R-138	C-134	Nov. 16, 2011	T-1478	Oct. 8, 2011
10m Semi-anechoic chamber	R-2480	C-2722	Dec. 19, 2009	T-1474	Oct. 8, 2011
3m Semi-anechoic chamber	R-2481	C-2723	Dec. 19, 2009	T-1475	Oct. 8, 2011
Shielded room No.1	-	C-2724	Dec. 19, 2009	T-1476	Oct. 8, 2011

5) Intertek authorization:

Authorized as an EMC test laboratory.

6) TUV Rheinland authorization:

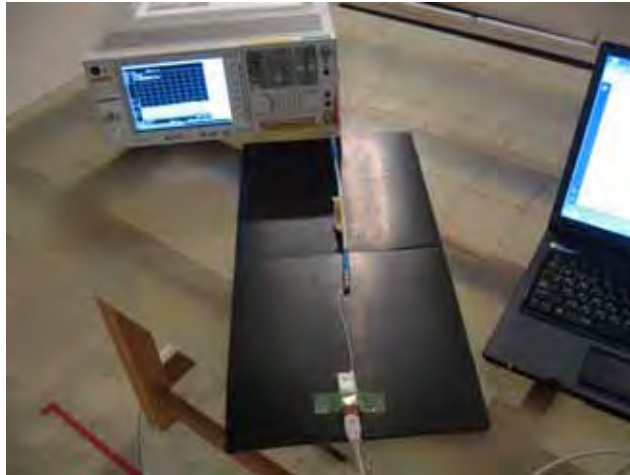
Authorized as an EMC test laboratory.

7) BUREAU VERITAS certification:

Certified as an EMC test laboratory.

8. Test photographs

System configuration (RF Conducted test)



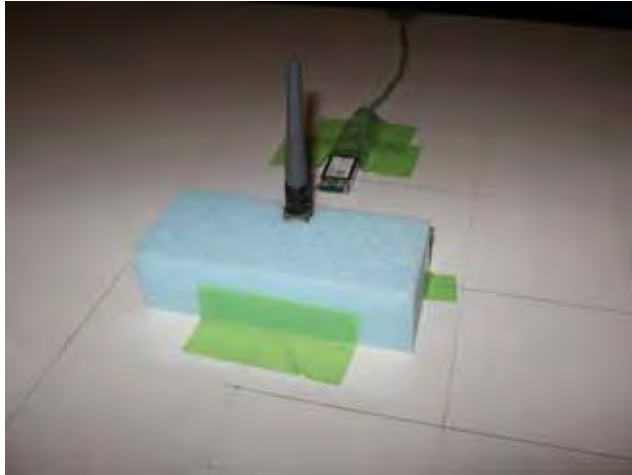
Transmitter Radiated Spurious Emissions (RF Radiated test) – Ant.: TK-1619A

[Horizontal Installation]



Transmitter Radiated Spurious Emissions (RF Radiated test) – Ant.: TK-1619A

[Vertical Installation]



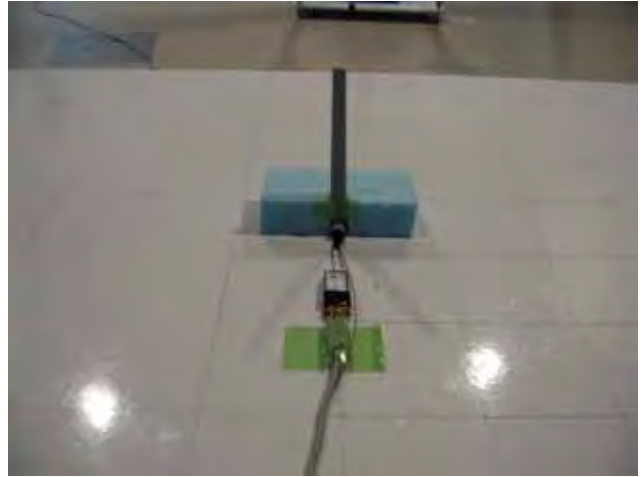
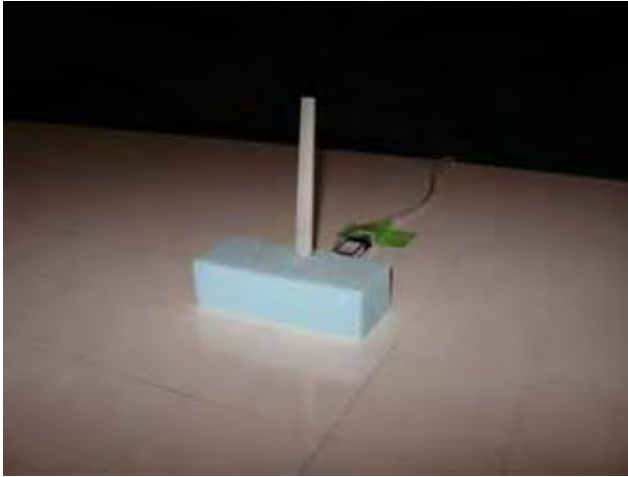
Transmitter Radiated Spurious Emissions (RF Radiated test) – Ant.: ANTB18-127A0

[Horizontal Installation]



Transmitter Radiated Spurious Emissions (RF Radiated test) – Ant.: ANTB18-127A0

[Vertical Installation]



AC power line Conducted Emissions – Ant.: TK-1619A



AC power line Conducted Emissions – Ant.: ANTB18-127A0

