MEASUREMENT REPORT
of
DOCSIS 2.0 Advanced Cable Gateway

Applicant	**:**	Netgear Incorporated
EUT	**:**	DOCSIS 2.0 Advanced Cable Gateway
Model No.	**:**	CGD24N
FCC ID	**:**	PY305400025

Tested by :

Training Research Co., Ltd.

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CERTIFICATION

We here by verify that:

The test data, data evaluation, test procedures and equipment configurations shown in this report were made mainly in accordance with the procedures given in ANSI C63.4 (2003) as a reference. All test were conducted by ***Training Research Co., Ltd.***, 255 Nanyang Street, Shijr, Taipei Hsien 221, Taiwan, R.O.C. Also, we attest to the accuracy of each.

We further submit that the energy emitted by the sample EUT tested as described in the report is **in compliance with** the technical requirements set forth in the FCC Rules Part 15 Subpart C Section 15.247.

Applicant	**:**	Netgear Incorporated
Applicant Address	**:**	350 East Plumeria Drive, San Jose, California, United States
Product Name	**:**	DOCSIS 2.0 Advanced Cable Gateway
Model	**:**	CGD24N
Report No.	**:**	N1015090003
Test Date	**:**	January 14, 2009 ~ February 9, 2009

Prepared by: Jack Tsai *Jack Tsai*

Approved by: Frank Tsai *Frank Tsai*

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NVLAP LAB CODE 200174-0

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Ⅰ. GENERAL

1.1 Introduction

The following measurement report is submitted on behalf of applicant in support that the certification in accordance with Part 2 Subpart J and Part 15 Subpart A and C of the Commission's Rules and Regulations.

1.2 Description of EUT

FCC ID	**:**	PY305400025
Product Name	**:**	DOCSIS 2.0 Advanced Cable Gateway
Model Name	**:**	CGD24N
Frequency Range	**:**	IEEE 802.11b/g/n Draft 1.0 20M: 2.412GHz ~ 2.462GHz IEEE 802.11n Draft 1.0 40M: 2.422GHz ~ 2.452GHz
Channel Spacing	**:**	5MHz
Support Channel	**:**	IEEE 802.11b/g/n Draft 1.0 20M: 11 Channels IEEE 802.11n Draft 1.0 40M: 7 Channels
Modulation Skill	**:**	DBPSK, DQPSK, CCK, OFDM
Data Cable	**:**	USB cable x 1, 1.5m length, shielded, with ferrite core RJ45 cable x 3, 1.0m length, non-shielded, no ferrite core RJ45 cable x 1, 20m length, non-shielded, no ferrite core Coaxial cable x 1, 20m length, non-shielded, no ferrite core
Power Type	**:**	Powered by the switching adapter, Manufacture: NETGEAR Model: MT12-Y120100-A1 I/P: 100 ~ 120VAC ~ 60Hz 0.3A O/P: 12VDC 1.0A. 187cm length, non-shielded, without ferrite core

1.3 Test method

1.3.1 The DC-In connected to AC mains supply by switching adapter.

1.3.2 The LAN1 port and coaxial port of EUT are connected to far LAN card and cable modem simulator.

1.3.3 The LAN2 and LAN3 ports are termination by RJ45 cables.

1.3.4 The USB port of EUT connected to the PC by USB cable.

1.3.5 The notebook PC and test fixture is connected by RS-232 cable, and then test fixture connected with EUT setting test mode

1.3.6 The Notebook PC and test fixture is moving when test mode set finish. The software provided by the manufacturer, the test is performed under the specific conditions

1.3.7 Set different data rate and channel (IEEE 802.11b/g/n Draft 1.0 20M: CH01/CH06/CH11, IEEE 802.11n Draft 1.0 40M: CH03/CH06/CH09) being tested and repeat the procedures above.

(a) Conducted test and Radiated:
making EUT to the mode of continuous transmission

1.4 Description of Support Equipment

In order to construct the minimum testing, following equipment were used as the support units.

PC	**:**	**HP, IBM 8434**
Model No.	:	Pavilion t1000, IVG
Serial No.	:	TWL3320051, 99CCZA3
FCC ID	:	N/A, DoC (Declaration of Confirmation) Approved
BSMI	:	R33001, R33026
Power type	:	100 ~ 127VAC/200 ~ 240VAC, 6A/3A, 50 ~ 60Hz, Switching
Power cord	:	Non-shielded, 1.80m length, Plastic hood, No ferrite core
Monitor	**:**	**HP 15' Color Monitor, HP pavilion mx70, ViewSonic**
Model No.	:	D2827A, P1283A, VCDTS21366
Serial No.	:	KR91379759, TWTBQ00397, KP74620621
FCC ID	:	C5F7NFCMC1518X, DoC Approved, GSS17019
BSMI	:	3872B039, 4872A167, 3862A401
Power type	:	100 ~ 240 VAC / 50 ~ 60 Hz, Switching
Power cord	:	Shielded, 1.83m length, No ferrite core
Data cable	:	Shielded, 1.46m length, with two ferrite cores
Printer	**:**	**EPSON; HP**
Model No.	:	B241A, C2642A
Serial No.	:	FAPY155090, SG69A196GV
FCC ID	:	None (DoC Approved), B94C2642X
BSMI	:	R33126, None
Power type	:	Switching adaptor
Power cord	:	Non-shielded, 173cm length, No ferrite core (between adaptor and AC source) Non-shielded, 180cm length, with ferrite core (between printer and adaptor)
Data cable	:	Shielded, 1.70m length, No ferrite core

Fax/Modem	**:**	**Aceex**
Model No.	:	DM-1414
Serial No.	:	9010582
FCC ID	:	IFAXDM1414
Power type	:	110 VAC / 50 ~ 60 Hz, Switching
Power Cord	:	Non-shielded, 1.90m length, Plastic hoods, and no ferrite bead
Data Cable	:	RS-232→Shielded, 1.30m length, Metal hoods , No bead
		RJ-11Cx2→Non-shielded, 7’ length, Plastic hoods, No bead

Mouse	**:**	**HP**
Model No.	:	M-UR89
Serial No.	:	LZS21750238
FCC ID	:	DoC Approved
BSMI	:	3892D767
Power type	:	By PC
Power cord	:	Non-shielded, 1.88m length, No ferrite core

Keyboard	**:**	**HP**
Model No.	:	5187-0343
Serial No.	:	BE21700404
FCC ID	:	DoC Approved
BSMI	:	3892C981
Power type	:	By PC
Data cable	:	Shielded, 1.73m length, Plastic hood, No ferrite core

Notebook	**:**	**IBM ThinkPad T43**
Model No.	:	2662-8HT
Serial No.	:	FX-V3657
FCC ID	:	N/A, DoC (Declaration of Confirmation) Approved
BSMI	:	3892B564
Adaptor	**:**	**IBM**
Model No.	:	92P1018
Serial No.	:	11S92P1018Z1ZAPU57M9W6 REV: D
BSMI	:	D33030
Power type	:	100 ~ 240VAC / 50 ~ 60Hz, 1.0 ~ 0.4A, Switching
Power cord	:	Primary: Non-shielded, 1.0m length, Plastic hood, No ferrite core Secondary: Shielded, 1.84m length, Plastic hood, ferrite core

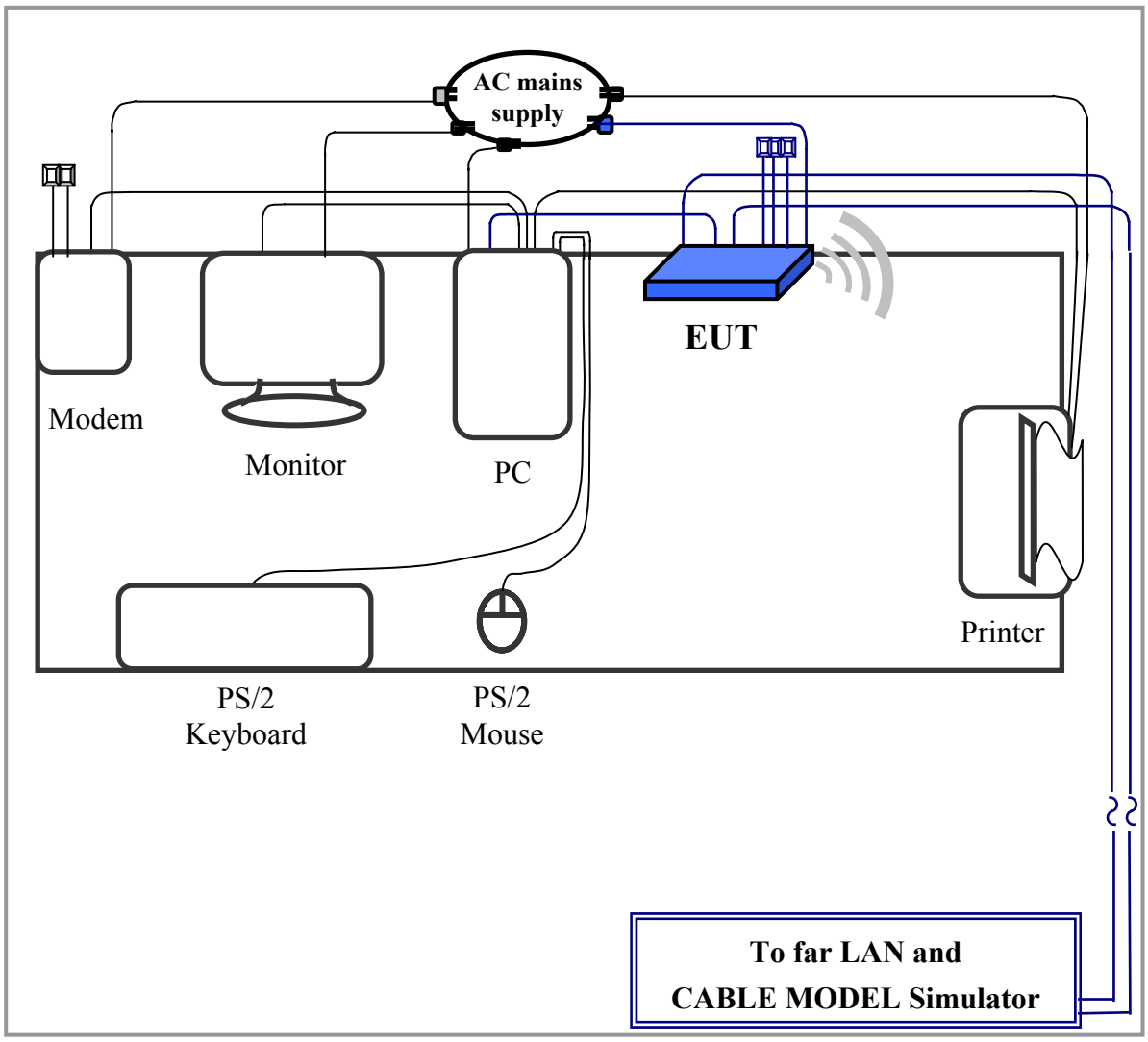
Test fixture	**:**	**PEGATRON**
Model No.	:	ASBCON REV:1.00
Power type	:	By notebook PC
Data cable	:	Shielded, 1.50m long, No ferrite core

LAN Card	**:**	**D-Link**
Model No.	:	DFE-530TX
Serial No.	:	0050BAE32FF3
FCC ID	:	N/A, DoC Approved

Cable Modem		
Emulator	**:**	**ARRIS CMTS.**
Model No.	:	713917
Serial No.	:	06351C3005479
Power type	:	100 ~ 200VAC / 47 ~ 63Hz, 5.0A, Switching

1.5 Configuration of System Under Test

1.5.1 Conducted and Radiated



Connections of Equipment

PC: *Parallel Port …….. a printer

*VGA Port ……. a monitor

*Serial Port ……..... an external modem

*PS/2-key Port …….. a PS/2 keyboard

*PS/2-mouse Port …... a PS/2 mouse

*USB Port ……... **EUT**

The tests below are carried with the EUT transmitter set at high power in TDD mode. The EUT is forced to select of output power level and channel number by test fixture and notebook PC.

The setting up procedure was recorded in 1.3 test method.

1.6 Verify the Frequency and Channel

Channel	Frequency (GHz)
1	2.412
2	2.417
3	2.422
4	2.427
5	2.432
6	2.437
7	2.442
8	2.447
9	2.452
10	2.457
11	2.462

Note:

1. This is for confirming that all frequencies of IEEE 802.11b/g/n Draft 1.0 20M are in 2.412GHz to 2.462GHz. and all frequencies of IEEE 802.11n Draft 1.0 40M are in 2.422GHz to 2.452GHz.
2. Section 15.31(m): Measurements on intentional radiators or receivers shall be performed at three frequencies for operating frequency range over 10 MHz
   (The locations of these frequencies one near the top, one near the middle and one near the bottom.)
3. After test, the EUT operating frequencies are in 2.412GHz to 2.462GHz and 2.422GHz to 2.452GHz. So all the items as followed in testing report are need to test these three frequencies: IEEE 802.11b/g/n Draft 1.0 20M: CH01/CH06/CH11, IEEE 802.11n Draft 1.0 40M: CH03/CH06/CH09

1.7 Test Procedure

All measurements contained in this report were performed mainly according to the techniques described in ANSI C63.4 (2003) and the pre-setup was written on 1.3 test method, the detail setup was written on each test item.

1.8 Location of the Test Site

The radiated emissions measurements required by the rules were performed on the **three-meter**, **semi-anechoic Chamber (FCC Registration Number: 93906)** maintained by *Training Research Co., Ltd.* 1F, No. 255 Nanyang Street, Shijr, Taipei Hsien 221, Taiwan, R.O.C. Complete description and measurement data have been placed on file with the commission. The conducted power line emissions tests and other test items were performed in a anechoic chamber also located at Training Research Co., Ltd.

No. 255 Nanyang Street, Shijr, Taipei Hsien 221, Taiwan, R.O.C. *Training Research Co., Ltd.* is listed by the FCC as a facility available to do measurement work for others on a contract basis.

1.9 General Test Condition

The conditions under which the EUT operates were varied to determine their effect on the equipment's emission characteristics. The final configuration of the test system and the mode of operation used during these tests were chosen as that which produced the highest emission levels. However, only those conditions, which the EUT was considered likely to encounter in normal use were investigated.

In test, they were set in high power and continuously transmitting mode that controlled by computer. The ch01, ch06 and ch11 of EUT were all tested. The setting up procedure is recorded on 1.3 test method.

II. Section 15.203: Antenna requirement

The EUT's integral inverted L antennas on PCB. In addition, there is no external antenna or external connector employed. The antenna requirement stated in Section15.203 is inapplicable to this EUT.

The antenna specification of list as follows,

Manufacturer	:	WHA YU INDUSTRIAL CO., LTD.
Part No	:	C660S51022-A (SSR-83345)
Connector	:	MHF
Antenna Type	:	RF PCB Antenna Assembly
Antenna Gain	:	1.80dBi

III. Section 15.207: Power Line Conducted Emissions for AC Powered Units

3.1 Test Condition & Setup

The power line conducted emission measurements were performed in an anechoic chamber. The EUT was assembled on a wooden table, which is 80 centimeters high, was placed 40 centimeters from the backwall and at least 1 meter from the sidewall.

Power was fed to the EUT from the public utility power grid through a line filter and Line Impedance Stabilization Networks (LISNs). The LISN housing, measuring instrumentation case, ground plane, etc., were electrically bonded together at the same RF potential. The Spectrum analyzer (or EMI receiver) was connected to the AC line through an isolation transformer. The 50-ohm output of the LISN was connected to the spectrum analyzer directly. Conducted emission levels were in the CISPR quasi-peak and average detection mode. The analyzer's 6 dB bandwidth was set to 9 KHz. No post-detector video filter was used.

The spectrum was scanned from 150 KHz to 30 MHz. The physical arrangement of the test system and associated cabling was varied (within the scope of arrangements likely to be encountered in actual use) to determine the effect on the unit's emanations in amplitude and frequency. All spurious emission frequencies were observed. The highest emission amplitudes relative to the appropriate limit were measured and have been recorded in paragraph 4.3

There is a test condition apply in this test item, the test procedure description as <1.3>. Three channels were tested, one in the top, one in the middle and the other in bottom.

3.2 List of Test Instruments

Calibration Date

Instrument Name	Model No.	Brand	Serial No.	Next time
EMI Receiver	8546A	HP	3520A00242	04/15/09
RF Filter Section	85460A	HP	3448A00217	04/15/09
LISN (EUT)	LISN-01	TRC	99-05	02/10/09
LISN (Support E.)	LISN-01	TRC	9912-03, 04	03/22/09
Pre-amplifier	15542 ZFL-500	Mini – Circuits	0 0117	04/10/09
6dB Attenuator	MCL BW-S6W2	Mini – Circuits	9915 – Conducted	04/10/09
10dB Attenuator	A5542 VAT010	Mini – Circuits	0215 – Conducted	04/10/09
Coaxial Cable (2.0 meter)	A30A30-0058-50FS-2M	Jyebao	SMA-08	04/10/09
Coaxial Cable (1.1 meter)	A30A30-0058-50FS-1M	Jyebao	SMA-09	04/10/09
Coaxial Cable (20 meter)	RG-214/U	Jyebao	NP-01	04/10/09
Coaxial Cable (20 meter)	RG-214/U	Jyebao	NP-02	04/10/09
Auto Switch Box (< 30MHz)	ASB-01	TRC	9904-01	04/10/09

3.3 Test Result of Power Line Conducted Emissions

The following table shows a summary of the highest emissions of power line conducted emissions on the LIVE and NETURAL conductors of the EUT power cord. Show as follows.

Test Conditions: Temperature : 25 °C Humidity : 73 % RH

Test mode: IEEE 802.11b Channel 1

Power Connected Emissions					*Class B*		
Conductor	***Frequency (KHz)***	***Peak (dBμV)***	***QP (dBμV)***	***Average (dBμV)***	***QP-limit (dBμV)***	***AVG-limit (dBμV)***	***Margin (dB)***
Line 1	426.580	53.61	52.83	37.00	58.26	48.26	-5.43
	547.900	52.00	52.77	34.82	56.43	46.43	-3.23
	669.710	54.34	53.27	34.02	56.00	46.00	-2.73
	791.690	54.19	52.83	33.51	56.00	46.00	-3.17
	899.300	53.47	51.05	33.07	56.00	46.00	-4.95
	4014.805	52.91	51.27	36.19	56.00	46.00	-4.73
Line 2	548.165	53.97	53.03	35.25	56.00	46.00	-2.97
	669.965	53.98	53.10	34.24	56.00	46.00	-2.90
	791.510	53.78	52.82	33.74	56.00	46.00	-3.18
	1034.490	53.00	51.80	31.31	56.00	46.00	-4.20
	3892.820	52.34	51.06	36.49	56.00	46.00	-4.94
	4136.165	52.49	51.41	35.13	56.00	46.00	-4.59

NOTE:

(1)Margin = Peak Amplitude – Limit, *The reading amplitudes are all under limit.*

(2)A "+" sign in the margin column means the emission is OVER the Class B Limit and "–" sign of means UNDER the Class B limit

Test mode: IEEE 802.11b Channel 6

Power Connected Emissions					*Class B*		
Conductor	*Frequency (KHz)*	*Peak (dBμV)*	*QP (dBμV)*	*Average (dBμV)*	*QP-limit (dBμV)*	*AVG-limit (dBμV)*	*Margin (dB)*
Line 1	548.615	53.31	52.20	34.41	56.00	46.00	-3.80
	670.160	53.38	52.33	32.40	56.00	46.00	-3.67
	791.825	53.37	52.19	31.73	56.00	46.00	-3.81
	911.000	52.80	51.55	33.36	56.00	46.00	-4.45
	1031.150	51.85	50.38	32.36	56.00	46.00	-5.62
	3957.360	52.10	50.58	35.44	56.00	46.00	-5.42
Line 2	547.360	53.53	52.65	35.14	56.00	48.83	-3.35
	670.280	54.24	53.12	32.90	56.00	47.63	-2.88
	791.825	54.21	53.14	32.51	56.00	46.00	-2.86
	913.205	54.00	53.00	31.98	56.00	46.00	-3.00
	1035.380	53.16	51.78	31.75	56.00	46.00	-4.22
	3956.315	52.74	51.68	36.75	56.00	46.00	-4.32

Test mode: IEEE 802.11b Channel 11

Power Connected Emissions					*Class B*		
Conductor	*Frequency (KHz)*	*Peak (dBμV)*	*QP (dBμV)*	*Average (dBμV)*	*QP-limit (dBμV)*	*AVG-limit (dBμV)*	*Margin (dB)*
Line 1	426.225	52.85	52.06	36.77	58.00	48.00	-6.05
	547.135	53.19	52.54	36.19	56.00	46.00	-3.46
	670.520	53.40	51.37	32.56	56.00	46.00	-4.63
	788.920	52.86	52.06	35.34	56.00	46.00	-3.94
	914.645	52.83	50.21	30.16	56.00	46.00	-5.79
	1031.825	51.78	50.02	32.97	56.00	46.00	-5.98
Line 2	486.485	51.93	50.77	34.99	56.43	46.43	-5.66
	547.495	53.42	52.39	34.77	56.00	46.00	-3.61
	608.635	51.38	50.14	33.14	56.00	46.00	-5.86
	662.355	53.72	51.62	36.33	56.00	46.00	-4.38
	791.285	53.39	51.79	30.53	56.00	46.00	-4.21
	914.645	53.15	50.29	28.46	56.00	46.00	-5.71

Test mode: IEEE 802.11g Channel 1

Power Connected Emissions					*Class B*		
Conductor	*Frequency (KHz)*	*Peak (dBμV)*	*QP (dBμV)*	*Average (dBμV)*	*QP-limit (dBμV)*	*AVG-limit (dBμV)*	*Margin (dB)*
Line 1	486.395	51.22	50.32	35.68	56.43	46.43	-6.11
	544.340	53.18	51.73	37.21	56.00	46.00	-4.27
	668.045	53.16	52.20	35.46	56.00	46.00	-3.38
	790.115	53.03	51.98	33.68	56.00	46.00	-4.02
	3595.150	51.67	50.28	34.59	56.00	46.00	-5.72
	3958.690	52.04	50.47	35.10	56.00	46.00	-5.53
Line 2	426.630	53.45	52.79	36.56	58.11	48.11	-5.32
	487.875	52.18	51.53	33.11	56.57	46.57	-5.04
	549.110	53.68	51.99	30.83	56.00	46.00	-4.01
	670.370	53.66	51.86	29.61	56.00	46.00	-4.14
	792.230	53.70	52.84	29.16	56.00	46.00	-3.16
	1157.025	51.84	50.66	31.80	56.00	46.00	-5.34

Test mode: IEEE 802.11g Channel 6

Power Connected Emissions					*Class B*		
Conductor	*Frequency (KHz)*	*Peak (dBμV)*	*QP (dBμV)*	*Average (dBμV)*	*QP-limit (dBμV)*	*AVG-limit (dBμV)*	*Margin (dB)*
Line 1	489.100	52.06	51.30	35.32	56.29	46.29	-4.99
	551.590	53.78	51.20	32.57	56.00	46.00	-4.80
	671.645	53.55	52.55	32.67	56.00	46.00	-3.45
	785.815	53.31	51.10	34.96	56.00	46.00	-4.90
	910.010	52.84	51.01	33.60	56.00	46.00	-4.99
	1021.905	51.78	49.52	31.34	56.00	46.00	-6.48
Line 2	426.795	53.14	52.07	35.74	58.26	48.26	-6.19
	487.515	51.90	50.93	33.41	56.57	46.57	-5.64
	549.430	53.61	52.64	34.11	56.00	46.00	-3.36
	671.600	53.62	52.36	32.86	56.00	46.00	-3.64
	912.530	53.12	51.86	32.88	56.00	46.00	-4.14
	1037.000	52.34	50.75	30.64	56.00	46.00	-5.25

Test mode: IEEE 802.11g Channel 11

Power Connected Emissions					*FCC Class B*		
Conductor	*Frequency (KHz)*	*Peak (dBμV)*	*QP (dBμV)*	*Average (dBμV)*	*QP-limit (dBμV)*	*AVG-limit (dBμV)*	*Margin (dB)*
Line 1	488.915	52.01	50.90	32.65	56.43	46.43	-5.53
	549.745	53.52	52.45	31.98	56.00	46.00	-3.55
	670.325	53.39	52.30	31.48	56.00	46.00	-3.70
	794.705	53.68	51.50	31.27	56.00	46.00	-4.50
	906.230	52.84	50.60	33.49	56.00	46.00	-5.40
	1035.110	52.16	50.63	32.16	56.00	46.00	-5.37
Line 2	426.675	53.12	52.35	36.31	58.11	48.11	-5.76
	550.155	53.67	51.70	32.14	56.00	46.00	-4.30
	671.825	53.71	52.42	34.00	56.00	46.00	-3.58
	788.920	53.36	51.95	34.12	56.00	46.00	-4.05
	904.925	53.07	50.98	33.81	56.00	46.00	-5.02
	1156.350	51.31	49.76	29.82	56.00	46.00	-6.24

Test mode: IEEE 802.11n 20M Channel 1

Power Connected Emissions					*Class B*		
Conductor	*Frequency (KHz)*	*Peak (dBμV)*	*QP (dBμV)*	*Average (dBμV)*	*QP-limit (dBμV)*	*AVG-limit (dBμV)*	*Margin (dB)*
Line 1	427.665	54.58	53.01	37.69	58.11	48.11	-5.10
	489.140	53.74	51.17	34.81	56.43	46.43	-5.26
	541.905	54.98	50.54	36.34	56.00	46.00	-5.46
	662.535	54.27	50.25	35.07	56.00	46.00	-5.75
	796.730	54.74	52.80	35.33	56.00	46.00	-3.20
	913.250	53.58	50.97	33.46	56.00	46.00	-5.03
Line 2	366.240	53.23	50.28	33.63	59.91	49.91	-9.63
	546.825	54.53	52.60	36.27	56.00	46.00	-3.40
	1029.800	51.45	49.43	33.37	56.00	46.00	-6.57
	1445.825	51.93	46.76	35.25	56.00	46.00	-9.24
	4161.095	48.30	46.86	30.58	56.00	46.00	-9.14
	4583.720	48.35	47.25	31.30	56.00	46.00	-8.75

Test mode: IEEE 802.11n 20M Channel 6

Power Connected Emissions					*Class B*		
Conductor	*Frequency (KHz)*	*Peak (dBμV)*	*QP (dBμV)*	*Average (dBμV)*	*QP-limit (dBμV)*	*AVG-limit (dBμV)*	*Margin (dB)*
Line 1	424.195	53.63	52.71	38.32	58.26	48.26	-5.55
	542.360	54.26	52.69	37.33	56.00	46.00	-3.31
	603.265	51.99	50.36	35.36	56.00	46.00	-5.64
	663.615	54.34	52.60	36.83	56.00	46.00	-3.40
	784.960	54.63	52.13	36.94	56.00	46.00	-3.87
	905.060	54.32	51.16	36.12	56.00	46.00	-4.84
Line 2	424.150	53.70	52.85	37.59	58.26	48.26	-5.41
	477.615	52.81	49.79	33.39	56.57	46.57	-6.78
	536.775	54.29	51.51	35.46	56.00	46.00	-4.49
	662.495	54.36	52.20	34.48	56.00	46.00	-3.80
	784.240	54.83	51.87	36.86	56.00	46.00	-4.13
	907.400	54.00	51.40	36.45	56.00	46.00	-4.60

Test mode: IEEE 802.11n 20M Channel 11

Power Connected Emissions					*Class B*		
Conductor	*Frequency (KHz)*	*Peak (dBμV)*	*QP (dBμV)*	*Average (dBμV)*	*QP-limit (dBμV)*	*AVG-limit (dBμV)*	*Margin (dB)*
Line 1	484.545	52.34	51.22	35.67	56.57	46.57	-5.35
	542.495	54.24	52.58	37.62	56.00	46.00	-3.42
	602.920	51.94	50.09	35.44	56.00	46.00	-5.91
	663.485	54.43	52.41	37.47	56.00	46.00	-3.59
	783.250	54.74	51.98	36.98	56.00	46.00	-4.02
	892.550	54.00	49.82	34.74	56.00	46.00	-6.18
Line 2	363.585	52.66	51.65	36.40	59.91	49.91	-8.26
	424.015	53.59	52.78	37.81	58.26	48.26	-5.48
	655.590	54.27	50.90	33.93	56.00	46.00	-5.10
	722.940	52.41	49.60	35.01	56.00	46.00	-6.40
	1089.155	49.67	46.98	32.11	56.00	46.00	-9.02
	1149.175	49.30	47.47	32.08	56.00	46.00	-8.53

Test mode: IEEE 802.11n 40M Channel 3

Power Connected Emissions					*Class B*		
Conductor	***Frequency (KHz)***	***Peak (dBμV)***	***QP (dBμV)***	***Average (dBμV)***	***QP-limit (dBμV)***	***AVG-limit (dBμV)***	***Margin (dB)***
Line 1	488.735	52.09	50.76	32.91	56.43	46.43	-5.67
	548.390	53.67	52.69	34.46	56.00	46.00	-3.31
	610.585	51.83	50.11	32.13	56.00	46.00	-5.89
	671.600	53.58	50.97	29.85	56.00	46.00	-5.03
	788.920	52.93	51.39	33.12	56.00	46.00	-4.61
	910.190	52.03	50.39	32.47	56.00	46.00	-5.61
Line 2	427.750	53.56	52.70	35.03	58.26	48.26	-5.56
	488.460	52.39	51.28	34.58	56.57	46.57	-5.29
	549.705	53.89	53.13	35.01	56.00	46.00	-2.87
	611.155	51.57	50.46	32.15	56.00	46.00	-5.54
	670.145	53.56	52.46	34.45	56.00	46.00	-3.54
	793.940	53.04	51.89	30.91	56.00	46.00	-4.11

Test mode: IEEE 802.11n 40M Channel 6

Power Connected Emissions					*Class B*		
Conductor	***Frequency (KHz)***	***Peak (dBμV)***	***QP (dBμV)***	***Average (dBμV)***	***QP-limit (dBμV)***	***AVG-limit (dBμV)***	***Margin (dB)***
Line 1	427.395	54.03	52.34	37.04	58.11	48.11	-5.77
	488.105	52.89	50.88	34.80	56.43	46.43	-5.55
	548.795	54.52	52.71	36.21	56.00	46.00	-3.29
	610.900	52.38	50.33	33.38	56.00	46.00	-5.67
	662.855	54.04	51.64	36.15	56.00	46.00	-4.36
	783.115	55.65	50.53	33.55	56.00	46.00	-5.47
Line 2	490.355	52.48	51.01	32.70	56.43	46.43	-5.42
	550.465	54.06	53.29	34.76	56.00	46.00	-2.71
	611.650	51.64	50.67	32.37	56.00	46.00	-5.33
	661.860	53.49	51.20	34.33	56.00	46.00	-4.80
	792.075	53.07	51.66	32.04	56.00	46.00	-4.34
	916.715	52.10	50.61	30.90	56.00	46.00	-5.39

Test mode: IEEE 802.11n 40M Channel 9

Power Connected Emissions					*FCC Class B*		
Conductor	*Frequency (KHz)*	*Peak (dBμV)*	*QP (dBμV)*	*Average (dBμV)*	*QP-limit (dBμV)*	*AVG-limit (dBμV)*	*Margin (dB)*
Line 1	542.095	54.52	52.37	38.02	56.00	46.00	-3.63
	609.580	52.38	49.87	33.93	56.00	46.00	-6.13
	662.540	54.55	52.23	37.42	56.00	46.00	-3.77
	724.765	52.46	49.69	36.05	56.00	46.00	-6.31
	783.160	55.02	51.72	36.78	56.00	46.00	-4.28
	906.860	54.60	51.14	37.01	56.00	46.00	-4.86
Line 2	426.895	54.11	52.61	37.11	58.26	48.26	-5.65
	487.965	53.40	51.27	34.14	56.57	46.57	-5.30
	547.720	54.79	53.30	36.24	56.00	46.00	-2.70
	658.200	54.41	49.78	33.58	56.00	46.00	-6.22
	783.070	54.90	51.66	36.31	56.00	46.00	-4.34
	906.005	54.73	51.34	37.30	56.00	46.00	-4.66

IV. Section 15.247 (a): Technical description of the EUT

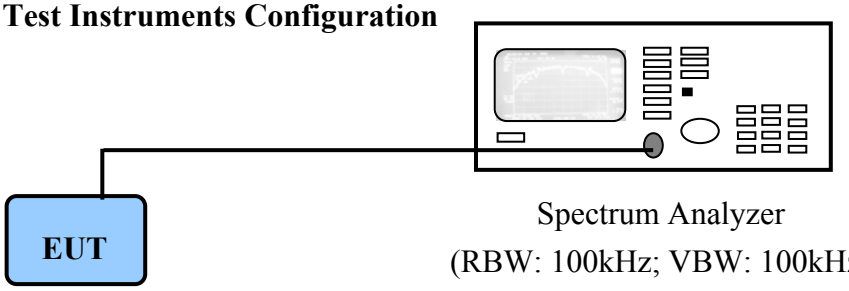
Direct Sequence System is a spread spectrum system in which the carrier has been modulated by a high speed spreading code and an information data stream. The high speed code sequence dominates the "modulating function" and is the direct cause of the wide spreading of the transmitted signal. In the operational description demonstrates the operation principles of the Baseband processor employed by the EUT, shows that which is a complete DSSS baseband processor and meets the definition of the direct sequence spread spectrum system.

V. Section 15.247(a)(2): Bandwidth for Direct Sequence System.

5.1 Test Condition & Setup

The transmitter bandwidth measurements were performed by the contact manner. The EUT was set to transmit continuously, also various channels were investigated to find the maximum occupied bandwidth. The output of the EUT was connected to the spectrum analyzer. The bandwidth of the fundamental frequency is observed by the spectrum analyzer with 100kHz RBW and 100kHz VBW.

5.2 Test Instruments Configuration



PC to control the EUT at maximal power output and channel number and set antenna kit

5.3 List of Test Instruments

Instrument Name	Model No.	Brand	Serial No.	Next time
Spectrum Analyzer	MS2665C	ANRITSU	6200175476	03/19/09

5.4 Test Result of Bandwidth

IEEE 802.11b

Channel	Limited (kHz)	Antenna(MHz)
CH01	≧ 500	11.16
CH06	≧ 500	11.16
CH11	≧ 500	11.12

IEEE 802.11g

CH01	≧ 500	16.72
CH06	≧ 500	16.76
CH11	≧ 500	16.76

IEEE 802.11n 20M

Channel	Limit (kHz)	Antenna#1(MHz)	Antwnna#2(MHz)
CH01	≧ 500	18.04	18.00
CH06	≧ 500	18.04	18.00
CH11	≧ 500	18.00	18.04

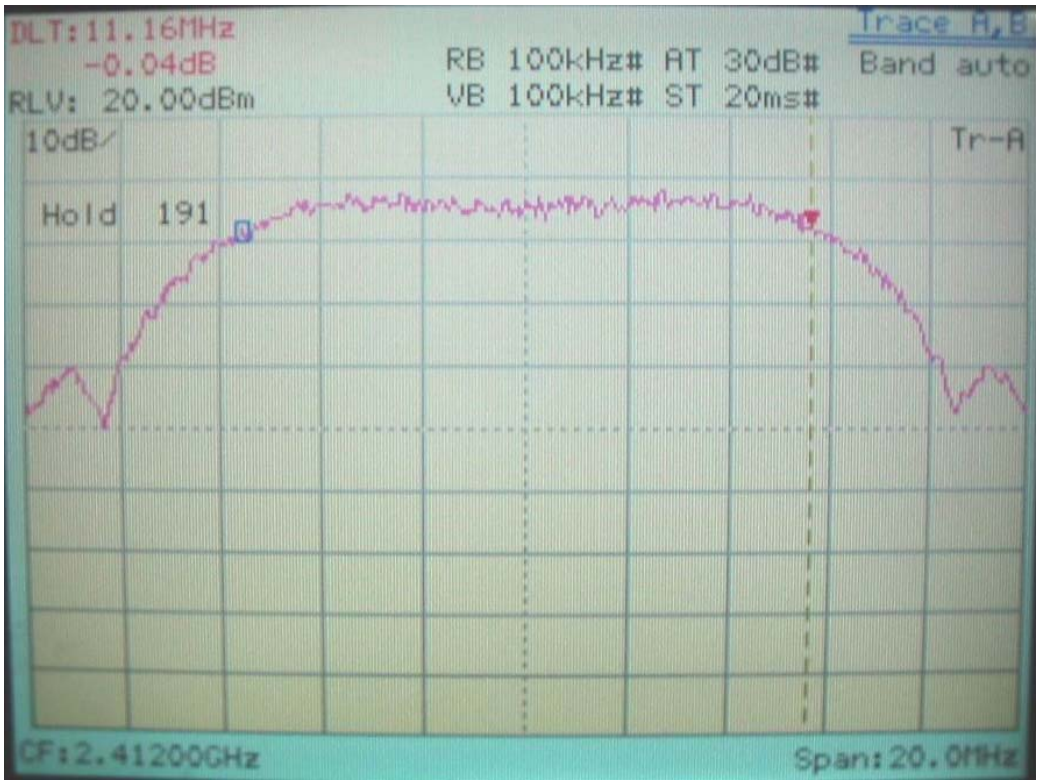
IEEE 802.11n 40M

CH03	≧ 500	36.80	36.80
CH06	≧ 500	36.80	36.80
CH09	≧ 500	36.70	36.70

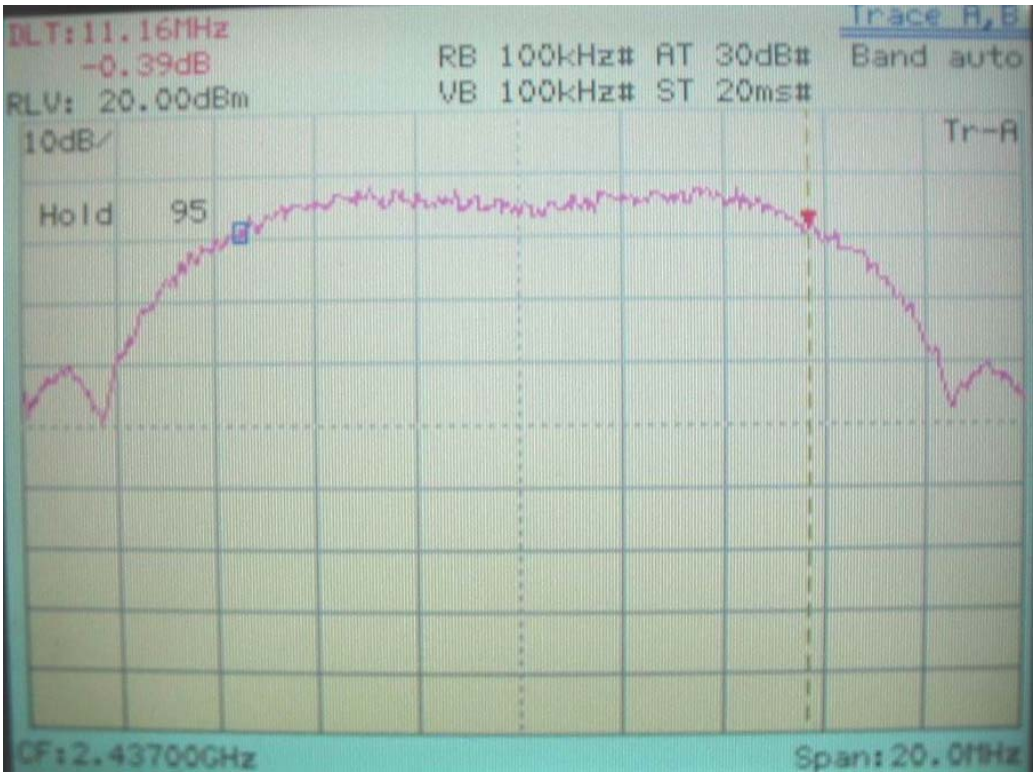
Note: 1. The data in the above table are summarizing the following attachment spectrum analyzer hard copy. According to the guidance, we'd made the measurement with the spectrum analyzer's resolution bandwidth *(RBW)=100kHz* and set the *span>>RBW*. The results show the measured 6dB bandwidth comply with the minimum 500kHz requirement.

2. The attachments show these on the following pages.

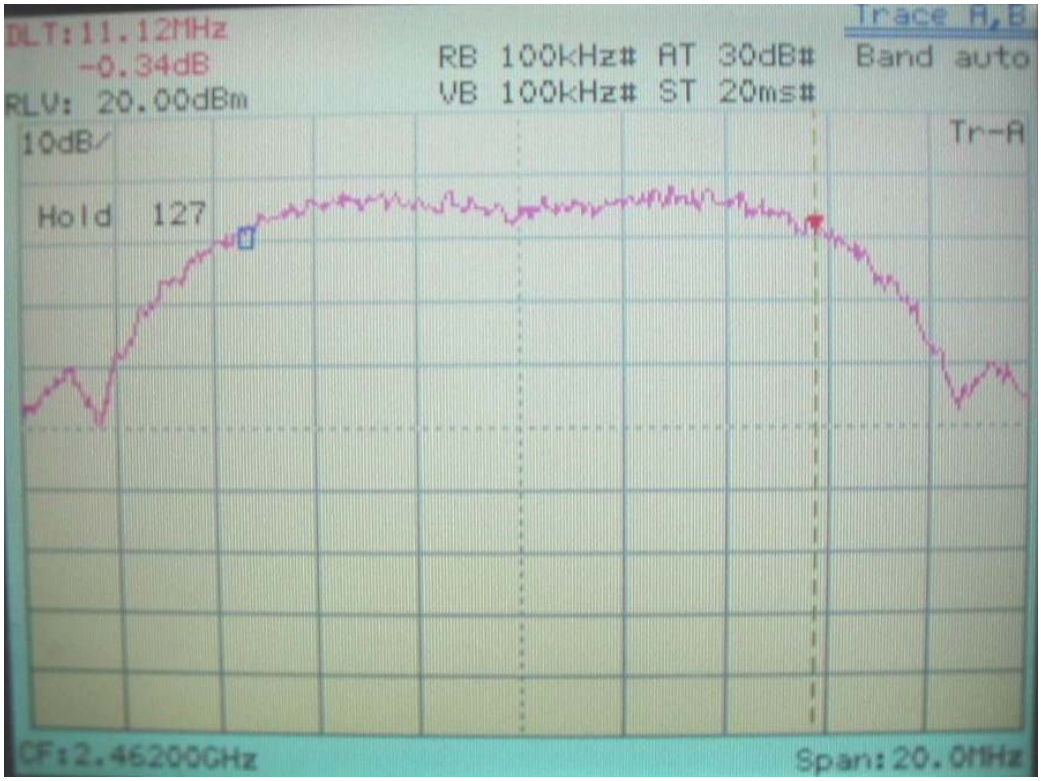
6dB Bandwidth of Channel CH01 IEEE 802.11b, 2412MHz



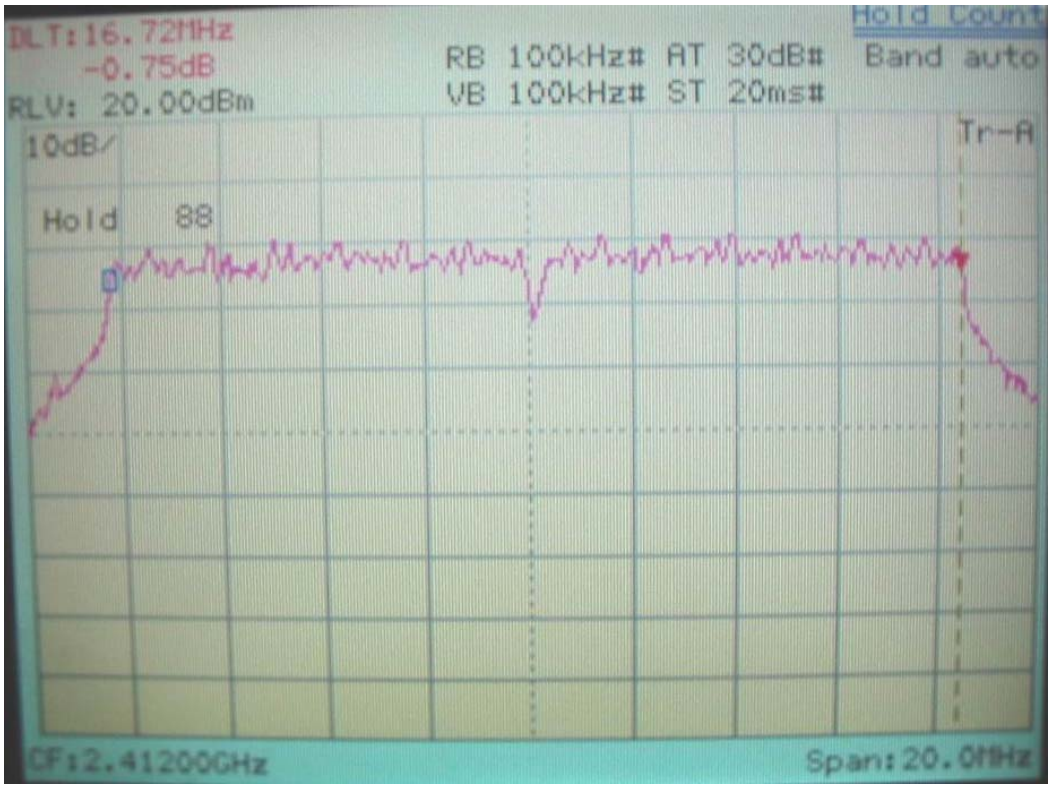
6dB Bandwidth of Channel CH06 IEEE 802.11b, 2437MHz



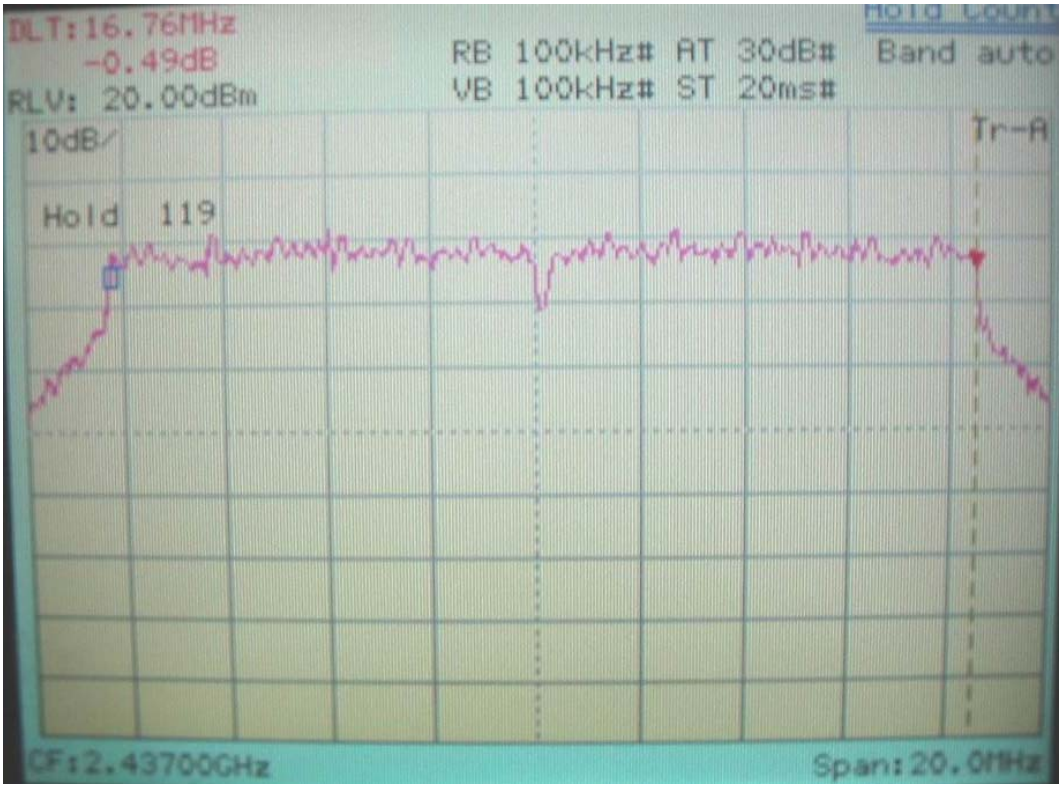
6dB Bandwidth of Channel CH11 IEEE 802.11b, 2462MHz



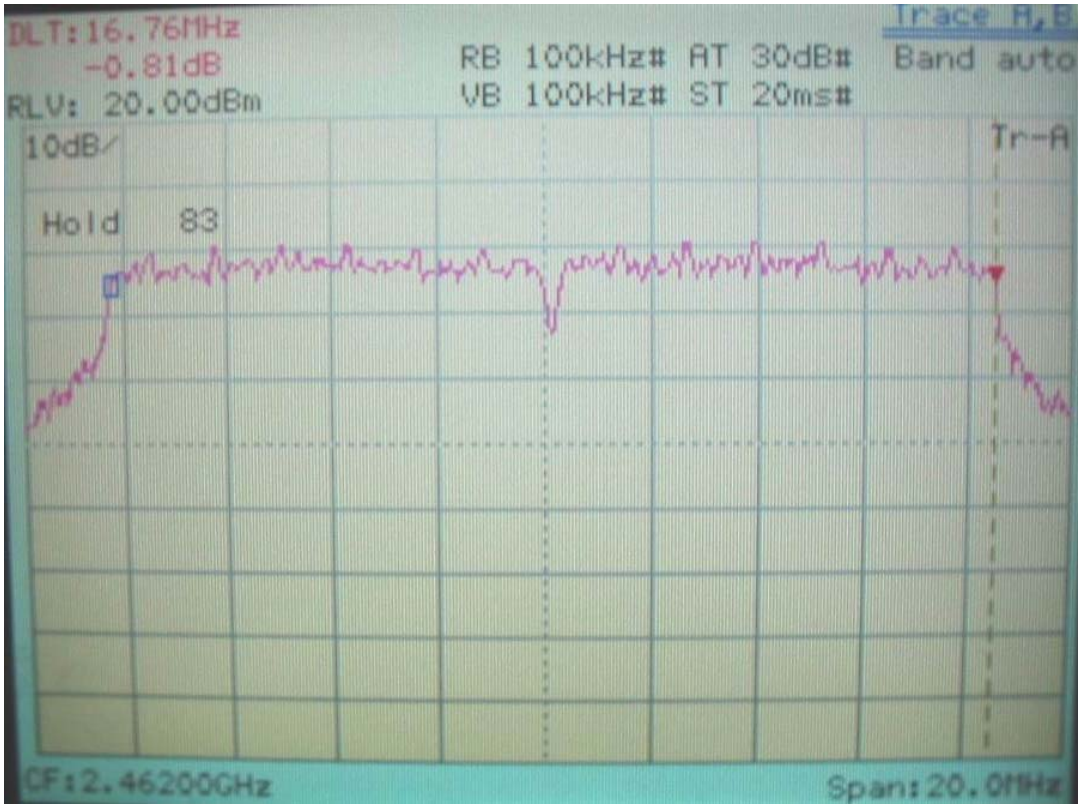
6dB Bandwidth of Channel CH01 IEEE 802.11g, 2412MHz



6dB Bandwidth of Channel CH06 IEEE 802.11g, 2437MHz

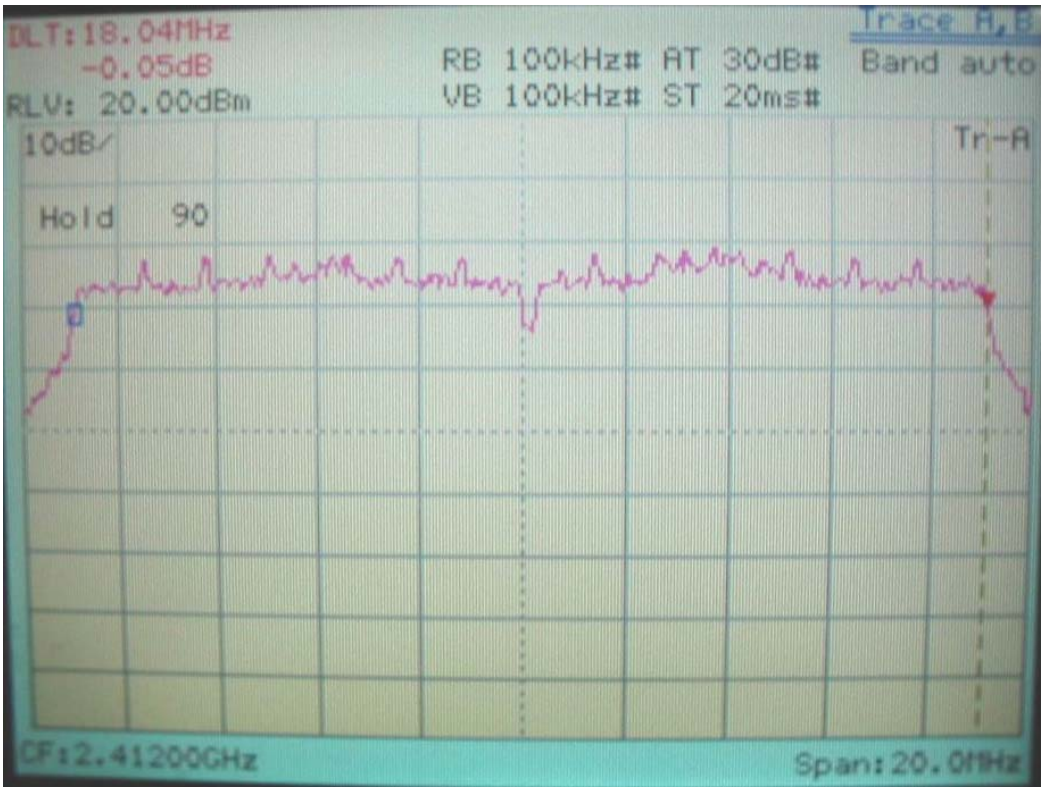


6dB Bandwidth of Channel CH11 IEEE 802.11g, 2462MHz

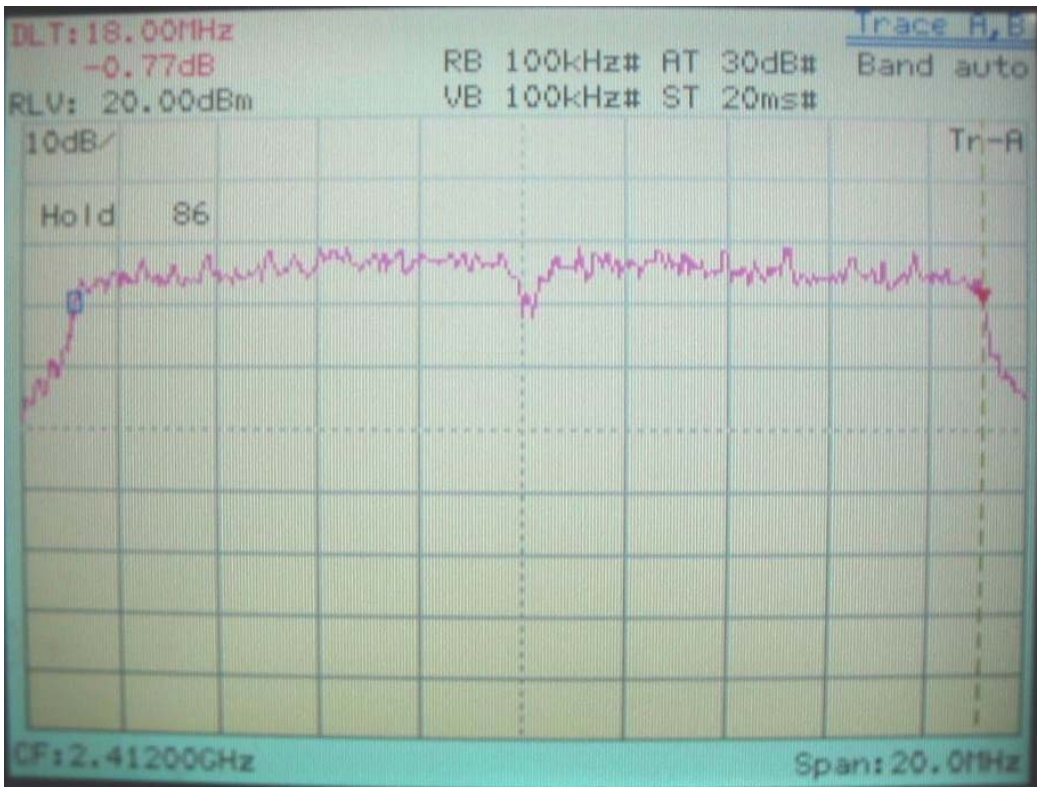


6dB Bandwidth of Channel 01 IEEE 802.11n 20M, 2412MHz

Ant#1

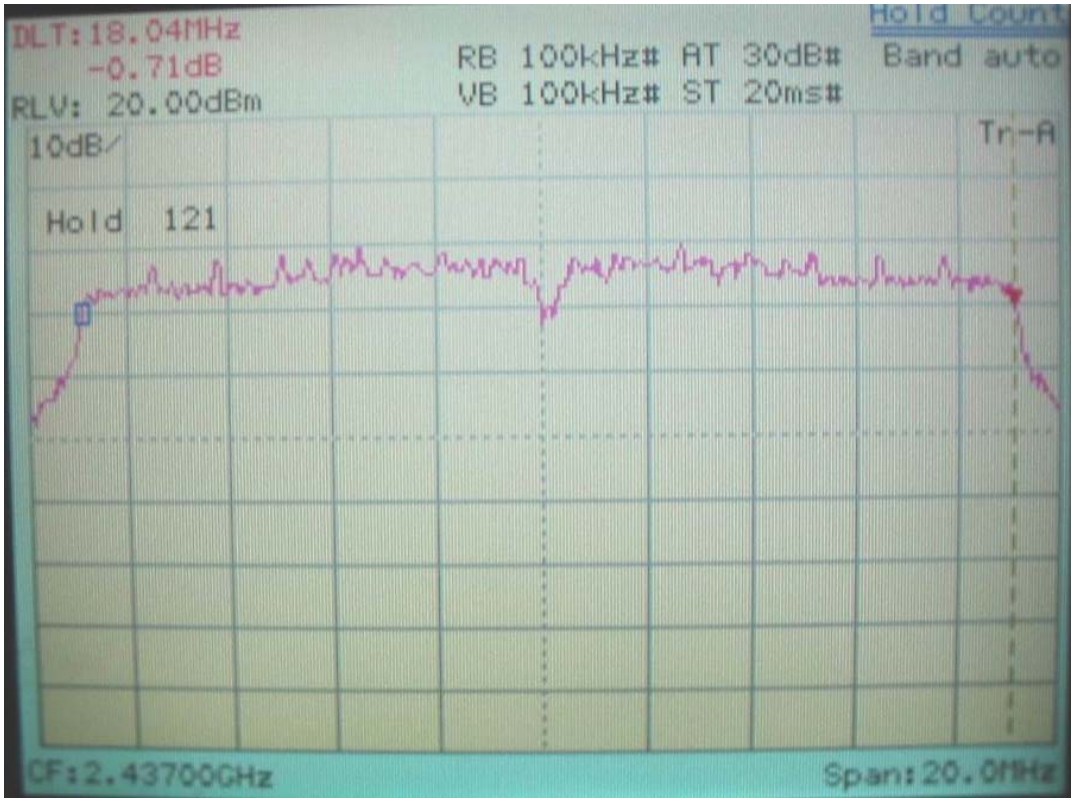


Ant#2

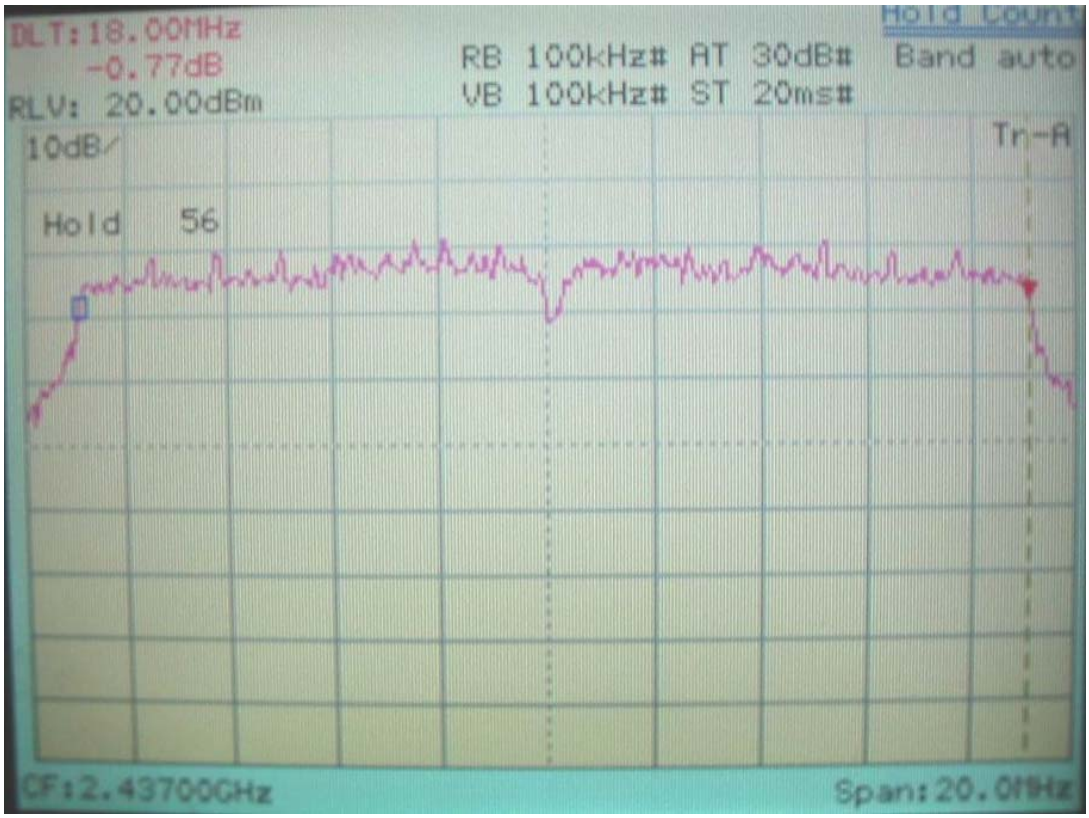


6dB Bandwidth of Channel 06 IEEE 802.11n 20M, 2437MHz

Ant#1

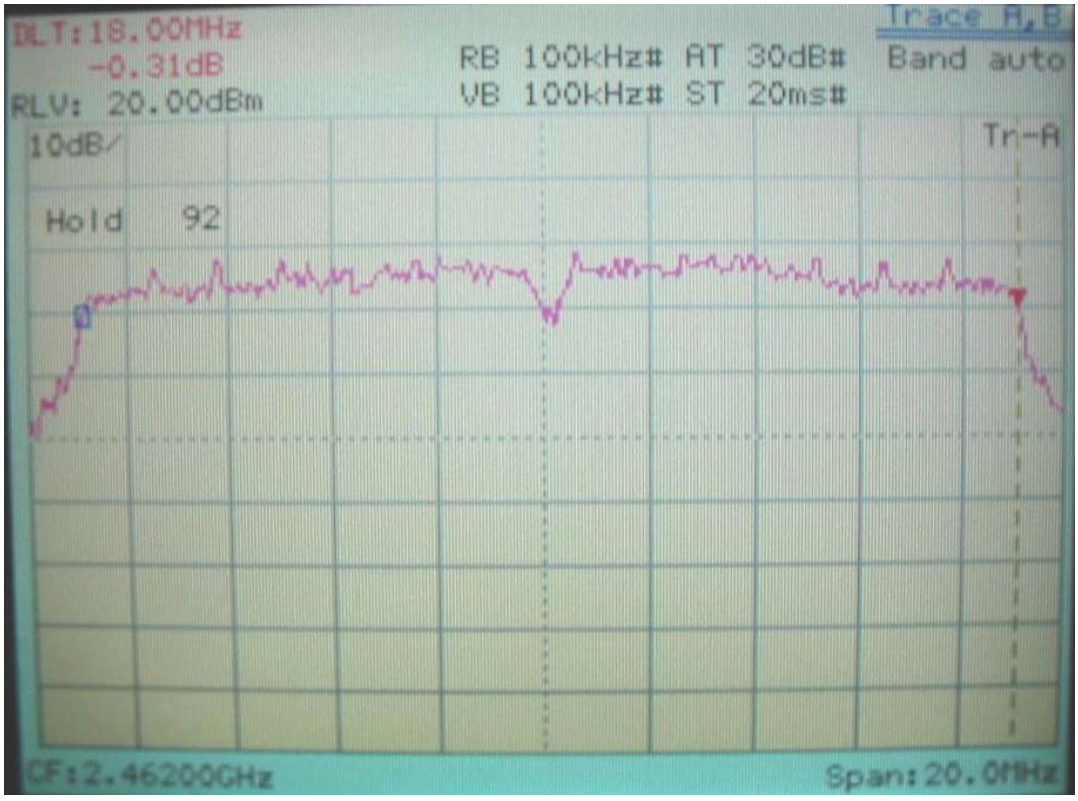


Ant#2

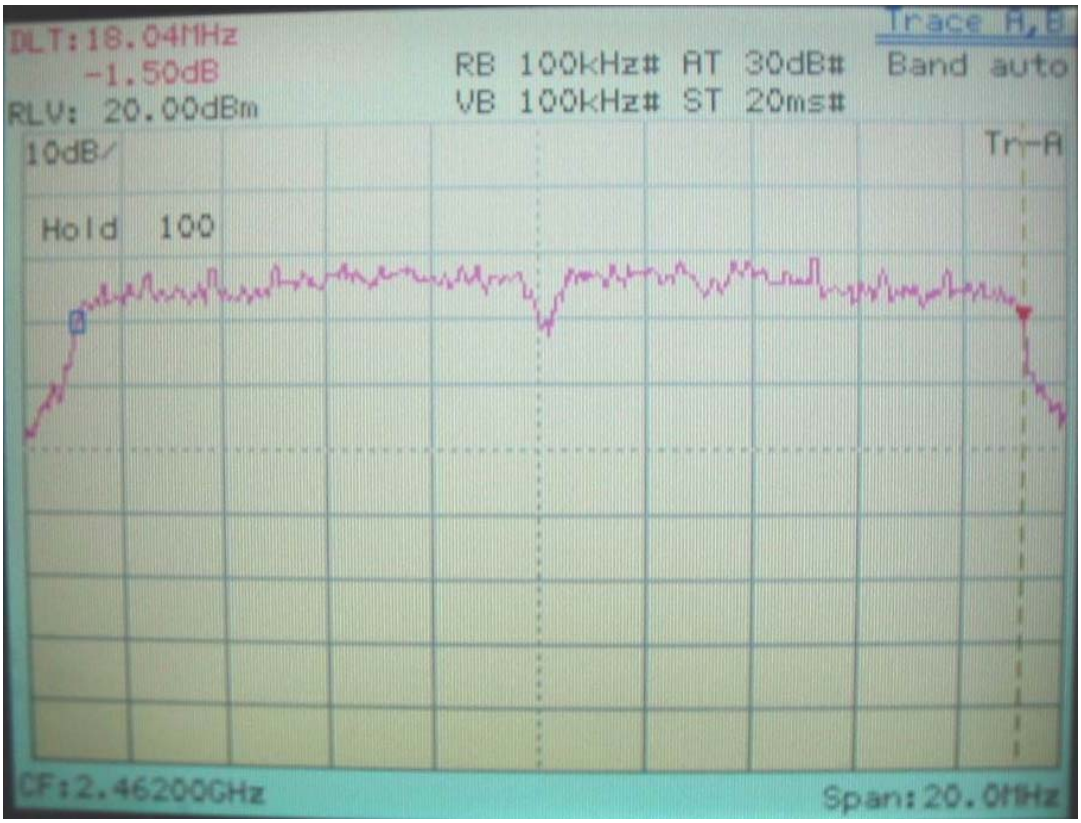


6dB Bandwidth of Channel 11 IEEE 802.11n 20M, 2462MHz

Ant#1

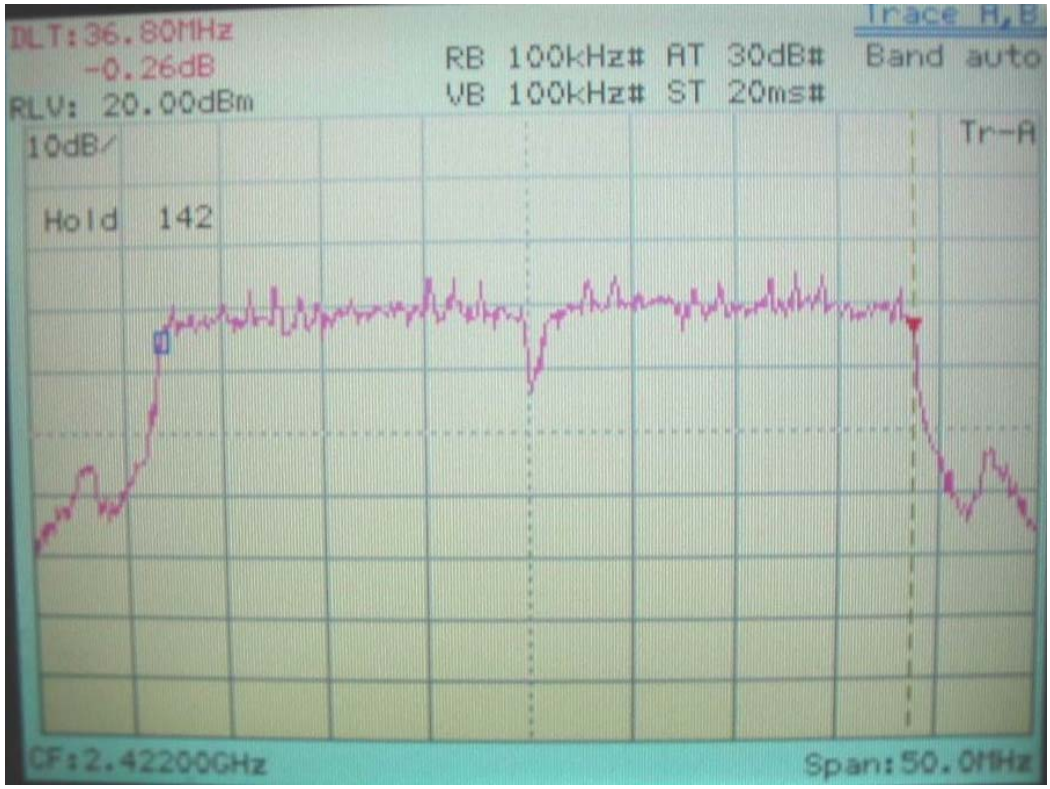


Ant#2

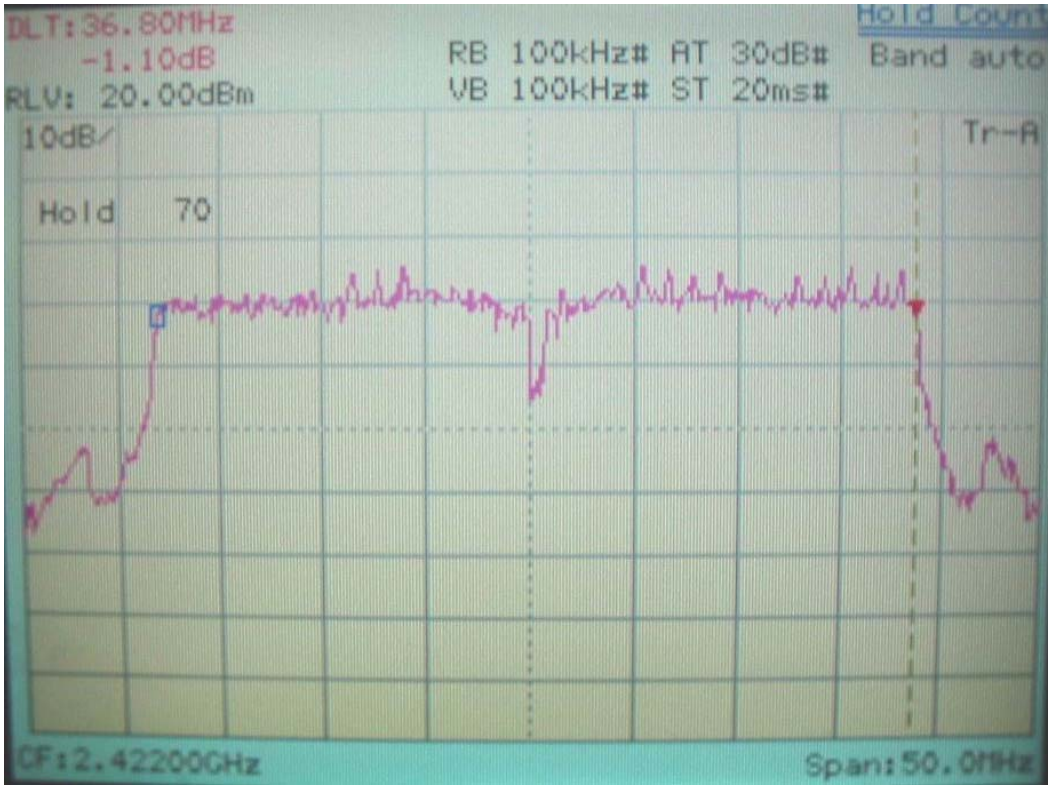


6dB Bandwidth of Channel 03 IEEE 802.11n 40M, 2422MHz

Ant#1

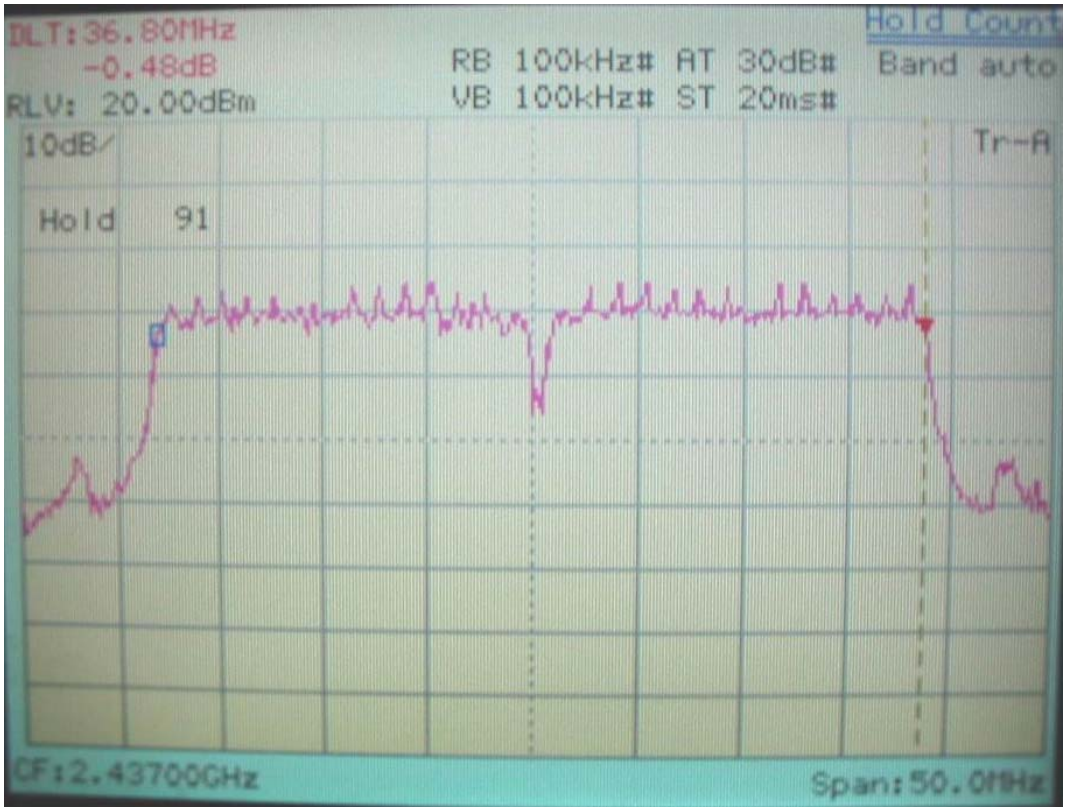


Ant#2

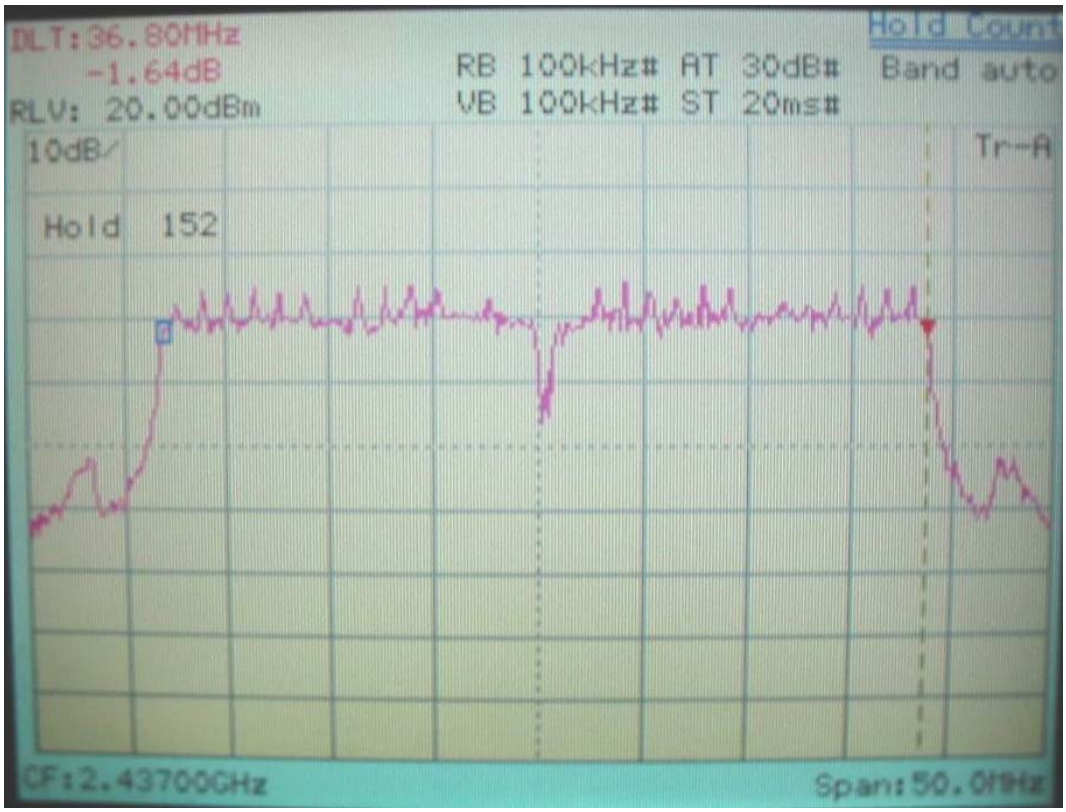


6dB Bandwidth of Channel 06 IEEE 802.11n 40M, 2437MHz

Ant#1

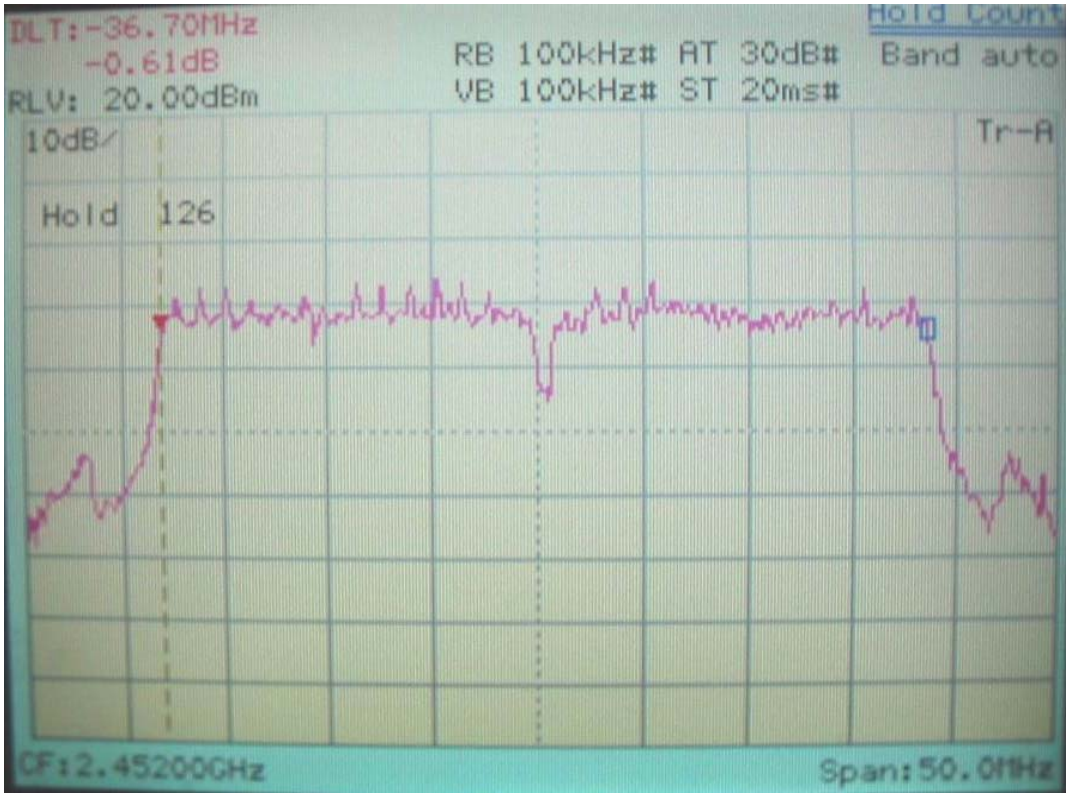


Ant#2

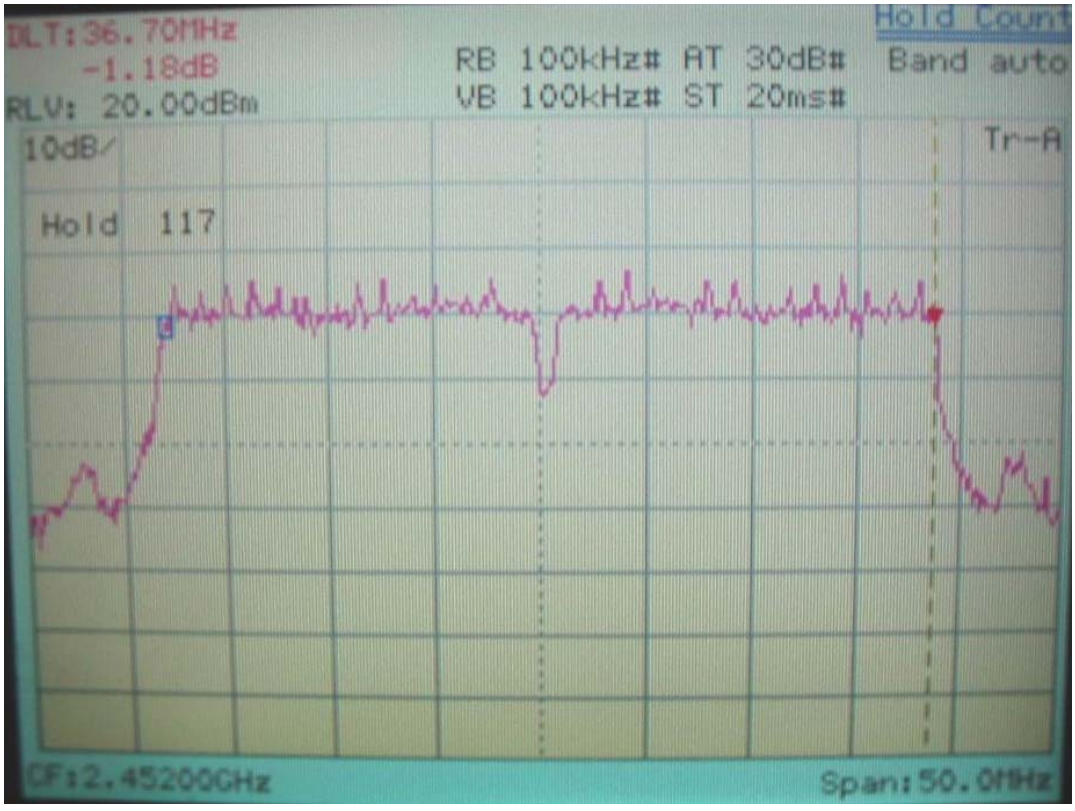


6dB Bandwidth of Channel 09 IEEE 802.11n 40M, 2452MHz

Ant#1

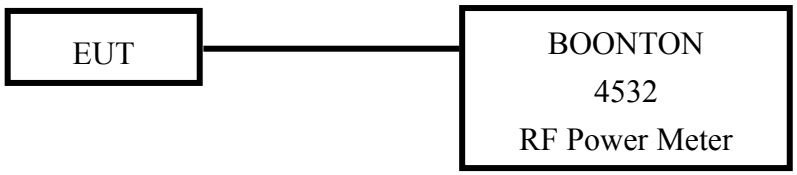


Ant#2



VI. Section 15.247(b): Power Output

6.1 Test Condition & Setup



1. The output of the transmitter is connected to the BOONTON RF Power Meter.
2. The calibration is performed before every test. The values of the output power of the EUT will shown in the dBm directly are the transmitter output peak power. Recording as follows.

6.2 List of Test Instruments

Instrument Name	Model	Brand	Serial No.	Next time
RF Power Meter	4532	BOONTON	117501	03/11/09
Peak Power Sensor	57340	BOONTON	2696	03/11/09

6.3 Test Result

Formula:
RF Output of EUT + |Cable Loss| = Output Peak Power

Channel (MHz)	Output Level	Cable Loss	Limit	Output Peak Power	
	dBm	**dBm**	**(DSS)**	**dBm**	**mW**
IEEE 802.11b					
CH 01 /2412	22.85	1.00	30dBm	23.85	242.66
CH 06 /2437	22.70	1.00	30dBm	23.70	234.42
CH 11 /2462	22.62	1.00	30dBm	23.62	230.14
IEEE 802.11g					
CH 01 /2412	22.69	1.00	30dBm	23.69	233.88
CH 06 /2437	22.62	1.00	30dBm	23.62	230.14
CH 11 /2462	22.57	1.00	30dBm	23.57	227.51

Formula:
Total Power = 10 log (10^ (Ant#1 Power / 10) + 10^ (Ant#2 Power / 10))

Channel (MHz)	Output Level		Cable Loss	Limit	Total Output Peak Power	
	Ant#1	Ant#2				
	dBm	**dBm**	**dB**	**(DSS)**	**dBm**	**mW**
802.11n 20M						
CH Lowest/2412	21.68	21.50	1.00	30dBm	25.60	363.18
CH Middle/2437	22.79	22.61	1.00	30dBm	26.71	468.95
CH Highest/2462	21.36	21.27	1.00	30dBm	25.33	340.84
802.11n 40M						
CH Lowest /2422	20.72	20.53	1.00	30dBm	24.64	290.83
CH Middle/2437	20.18	19.86	1.00	30dBm	24.03	253.12
CH Highest/2452	20.05	19.61	1.00	30dBm	23.85	242.43

VII. Section 15.247 (C): Spurious Emissions (Radiated)

7.1 Test Condition & Setup

We'd performed the test by the *radiated emission* skill: The EUT was placed in an semi-anechoic chamber, and set the EUT transmitting continuously and scanned at 3-meter distance to determine its emission characteristics. The physical arrangement of the EUT was varied (within the scope of arrangements likely to be encountered in actual use) to determine the effect on the unit's emanations in amplitude, directivity, and frequency. The exact system configuration, which produced the highest emissions was noted so it could be reproduced later during the final tests. For the measurement above 1GHz, according to the guidance we'd set the spectrum analyzer's 6dB bandwidth RBW to 1MHz.

This was done to ensure that the final measurements would demonstrate the worst-case interference potential of the EUT.

Final radiation measurements were made on a three-meter, anechoic chamber. The EUT system was placed on a nonconductive turntable, which is 0.8 meters height, top surface 1.0 x 1.5 meter.

The spectrum was examined from 30MHz to 1000MHz using an Hewlett Packard 85460A EMI Receiver, SCHWARZECK whole range Small Biconical Antenna (Model No.: UBAA9114 & BBVU9135) is used to measure frequency from 30 MHz to 1GHz. The final test is used the HP 85460A spectrum and 8564E spectrum was examined from 1GHz to 25GHz using an Hewlett Packard Spectrum Analyzer, EMCO/HP Horn Antenna (Model 3115 / 84125-80008) for 1G - 25GHz.

At each frequency, the EUT was rotated 360 degrees, and the antenna was raised and lowered from one to four meters to find the maximum emission levels. Measurements were taken using both horizontal and vertical antenna polarization.

Appropriate preamplifiers were used for improving sensitivity and precautions were taken to avoid overloading or desensitizing the spectrum analyzer. There are two spectrum analyzers use on this testing, HP 85460A for frequency 30MHz to 1000MHz, and 8564E for frequency 1GHz to 25GHz. No post-detector video filters were used in the test. The spectrum analyzer's 6dB bandwidth was set to 120KHz (spectrum was examined from 30 MHz to 1000 MHz), the spectrum analyzer's 6 dB bandwidth was set to 1 MHz (spectrum was examined from 1GHz to 25GHz) and the analyzer was operated in the maximum hold mode. There is a test condition applies in this test item, the test procedure description as the following:

Three channels were tested, one in the top, one in the middle and the other in bottom. The setting up procedure is recorded on <1.3>

With the transmitter operating from a AC source and using the internal of EUT, radiates spurious emissions falling within the restricted bands of 15.209 were measured at operating frequencies corresponding to upper, middle and bottom channels in the 2400 ~ 2483.5 MHz band.

The actual field intensity in decibels referenced to 1 microvolt per meter (dBμV/m) is determined by algebraically adding the measured reading in dBμV, the antenna factor (dB), and cable loss (dB) at the appropriate frequency. Since the EUT was set to transmit continuously, no *duty cycle* is present.

For frequency between 30MHz to 1000MHz

FIa (dBuV/m) = FIr (dBμV) + Correction Factors

FIa : Actual Field Intensity

FIr : Reading of the Field Intensity

Correction Factors = Antenna Factor + (Cable Loss – Amplifier Gain) + Switching Box Loss

For frequency between 1GHz to 25GHz

FIa (dBμV/m) = FIr (dBμV) + Correction Factor

FIa : Actual Field Intensity

FIr : Reading of the Field Intensity

Correction Factors = Antenna Factor + (Cable Loss – Amplifier Gain) + Switching Box Loss

7.2 List of Test Instruments

Calibration Date

Instrument Name	Model No.	Brand	Serial No.	Next time
EMI Receiver	8546A	HP	3520A00242	04/15/09
RF Filter Section	85460A	HP	3448A00217	04/15/09
Small Biconical Antenna	UBAA9114 & BBVU9135	SCHWARZECK	127	04/10/09
Pre-amplifier	PA1F	TRC	1FAC	04/10/09
Coaxial Cable (Double shielded, 15 meter)	A30A30-0058-50FS-15M	JYEBAO	SMA-01	04/10/09
Coaxial Cable (1.1 meter)	A30A30-0058-50FS-1M	JYEBAO	SMA-02	04/10/09
Spectrum Analyzer	8564E	HP	3720A00840	03/17/09
Microwave Preamplifier	84125C	HP	US36433002	02/05/09
Horn Antenna	3115	EMCO	9104-3668	08/06/09
Standard Guide Horn Antenna	84125-80008	HP	18-26.5GHz	03/14/09
Standard Guide Horn Antenna	84125-80001	HP	26.5-40GHz	02/12/09
Horn Antenna	1196E (3115)	HP (EMCO)	9704-5178	08/13/09
Pre-amplifier	PA2F	TRC	2F1GZ	04/10/09
Coaxial Cable (3 miter)	A30A30-0058-50FST118	JYEBAO	MSA-05	04/10/09
Coaxial Cable (1 meter)	A30A30-0058-50FST118	JYEBAO	MSA-04	04/10/09

7.3 Test Result of Spurious Radiated Emissions

The highest peak values of radiated emissions form the EUT at various antenna heights, antenna polarizations, EUT orientation, etc. are recorded on the following.

Test Conditions: Temperature : 25 ° C Humidity : 73 % RH

Test mode: IEEE 802.11b CH01 for 30MHz to 1GHz [Horizontal]

Radiated Emission				*Correction Factors*	*Corrected Amplitude*	*Class B (3 m)*	
Frequency (MHz)	*Amplitude (dBμV)*	*Ant. H. (m)*	*Table ( )*	*(dB)*	*(dBμV/m)*	*Limit (dBμV/m)*	*Margin (dB)*
197.32	41.28	1.00	202	-3.42	37.86	43.50	-5.64
251.89	37.55	1.00	165	-3.29	34.26	46.00	-11.74
376.77	41.39	1.00	145	-1.63	39.76	46.00	-6.24
426.49	41.93	1.00	24	0.12	42.05	46.00	-3.95
500.45	38.84	1.00	266	1.77	40.61	46.00	-5.39
799.94	29.89	1.00	42	11.63	41.52	46.00	-4.48

Test mode: IEEE 802.11b CH01 for 30MHz to 1GHz [Vertical]

Radiated Emission				*Correction Factors*	*Corrected Amplitude*	*Class B (3 m)*	
Frequency (MHz)	*Amplitude (dBμV)*	*Ant. H. (m)*	*Table ( )*	*(dB)*	*(dBμV/m)*	*Limit (dBμV/m)*	*Margin (dB)*
196.11	44.92	1.00	170	-3.47	41.45	43.50	-2.05
228.85	40.09	1.00	194	-3.82	36.27	46.00	-9.73
401.02	35.42	1.00	292	-1.03	34.39	46.00	-11.61
501.66	33.82	1.00	14	1.85	35.67	46.00	-10.33
534.40	31.63	1.00	168	4.02	35.65	46.00	-10.35
799.94	28.45	1.00	70	11.63	40.08	46.00	-5.92

Note:

1. Margin = Amplitude – limit, *if margin is minus means under limit.*
2. Corrected Amplitude = Reading Amplitude + Correction Factors
3. Correction factor = Antenna factor + (Cable Loss – Amplitude gain) + Switching Box Loss

Test mode: IEEE 802.11b CH01 for 1GHz to 26.5GHz [Horizontal]

Frequency	*Ant. H.*	*Table*	*Amplitude Peak / Ave.*		*Correction Factor*	*Corrected Amplitude Peak / Ave.*		*Limit Peak / Ave.*		*Margin*
MHz	*m*	*degree*	*dBμV*		*dB/m*	*dBμV/m*		*dBμV/m*		*dB*
2525.00	1.00	115	38.00	---	9.54	47.54	---	73.96	53.96	-6.42
9650.42	1.00	213	36.61	---	11.47	48.08	---	73.96	53.96	-5.88
12061.04	1.00	297	38.44	---	9.81	48.25	---	73.96	53.96	-5.71
19296.25	1.00	85	45.61	---	1.60	47.21	---	73.96	53.96	-6.75
21708.12	1.00	121	45.61	---	2.87	48.48	---	73.96	53.96	-5.48
24120.00	1.00	186	45.08	---	3.40	48.48	---	73.96	53.96	-5.48

Test mode: IEEE 802.11b CH01 for 1GHz to 26.5GHz [Vertical]

Frequency	*Ant. H.*	*Table*	*Amplitude Peak / Ave.*		*Correction Factor*	*Corrected Amplitude Peak / Ave.*		*Limit Peak / Ave.*		*Margin*
MHz	*m*	*degree*	*dBμV*		*dB/m*	*dBμV/m*		*dBμV/m*		*dB*
2537.50	1.00	129	41.67	---	9.56	51.23	---	73.96	53.96	-2.73
9650.42	1.00	49	35.94	---	11.47	47.41	---	73.96	53.96	-6.55
12061.04	1.00	230	37.60	---	9.81	47.41	---	73.96	53.96	-6.55
19296.25	1.00	95	45.43	---	1.60	47.03	---	73.96	53.96	-6.93
21708.12	1.00	142	45.45	---	2.87	48.32	---	73.96	53.96	-5.64
24120.00	1.00	185	45.39	---	3.40	48.79	---	73.96	53.96	-5.17

Note:

1. Margin = Corrected - Limit.
2. The EUT utilizes a *permanently attached antenna*. In addition the spurious RF radiated emissions levels do comply with the *20dBc limit* both at its bandedges and other spurious emissions.
3. As stated in Section 15.35(b), for any frequencies above 1000MHz, radiated limits shown are based upon the use of measurement instrumentation employing an average detector function. As the results of our test, the peak amplitudes are already below the FCC limit. Thus the average amplitudes of the rest are omitted.

Test mode: IEEE 802.11b CH06 for 30MHz to 1GHz [Horizontal]

Radiated Emission				Correction Factors	Corrected Amplitude	Class B (3 m)	
Frequency (MHz)	Amplitude (dBμV)	Ant. H. (m)	Table (°)	(dB)	(dBμV/m)	Limit (dBμV/m)	Margin (dB)
197.32	41.99	1.00	207	-3.42	38.57	43.50	-4.93
253.10	38.02	1.00	170	-3.38	34.64	46.00	-11.36
377.99	40.63	1.00	211	-1.60	39.03	46.00	-6.97
425.27	43.78	1.00	173	0.07	43.85	46.00	-2.15
502.87	39.47	1.00	258	1.93	41.40	46.00	-4.60
799.94	29.23	1.00	31	11.63	40.86	46.00	-5.14

Test mode: IEEE 802.11b CH06 for 30MHz to 1GHz [Vertical]

Radiated Emission				Correction Factors	Corrected Amplitude	Class B (3 m)	
Frequency (MHz)	Amplitude (dBμV)	Ant. H. (m)	Table (°)	(dB)	(dBμV/m)	Limit (dBμV/m)	Margin (dB)
197.32	44.56	1.00	177	-3.42	41.14	43.50	-2.36
230.06	39.48	1.00	200	-3.83	35.65	46.00	-10.35
401.02	36.13	1.00	255	-1.03	35.10	46.00	-10.90
501.66	34.79	1.00	14	1.85	36.64	46.00	-9.36
534.40	31.21	1.00	175	4.02	35.23	46.00	-10.77
799.94	31.24	1.00	105	11.63	42.87	46.00	-3.13

Test mode: IEEE 802.11b CH06 for 1GHz to 26.5GHz [Horizontal]

Frequency	*Ant. H.*	*Table*	*Amplitude Peak / Ave.*		*Correction Factor*	*Corrected Amplitude Peak / Ave.*		*Limit Peak / Ave.*		*Margin*
MHz	*m*	*degree*	*dBμV*		*dB/m*	*dBμV/m*		*dBμV/m*		*dB*
2558.33	1.00	141	39.50	---	9.60	49.10		73.96	53.96	-4.86
9747.08	1.00	224	36.77	---	11.89	48.66	---	73.96	53.96	-5.30
12187.92	1.00	218	39.10	---	9.74	48.84	---	73.96	53.96	-5.12
19494.58	1.00	115	46.93	---	1.69	48.62	---	73.96	53.96	-5.34
21934.79	1.00	37	46.22	---	3.09	49.31	---	73.96	53.96	-4.65
24371.46	1.00	299	45.64	---	3.26	48.90	---	73.96	53.96	-5.06

Test mode: IEEE 802.11b CH06 for 1GHz to 26.5GHz [Vertical]

Frequency	*Ant. H.*	*Table*	*Amplitude Peak / Ave.*		*Correction Factor*	*Corrected Amplitude Peak / Ave.*		*Limit Peak / Ave.*		*Margin*
MHz	*m*	*degree*	*dBμV*		*dB/m*	*dBμV/m*		*dBμV/m*		*dB*
2152.08	1.00	239	41.50	---	8.52	50.02		73.96	53.96	-3.94
2310.42	1.00	88	39.83	---	8.96	48.79	---	73.96	53.96	-5.17
2558.33	1.00	101	39.50	---	9.60	49.10	---	73.96	53.96	-4.86
12187.92	1.00	110	39.27	---	9.74	49.01	---	73.96	53.96	-4.95
21934.79	1.00	47	46.39	---	3.09	49.48	---	73.96	53.96	-4.48
24371.46	1.00	318	45.67	---	3.26	48.93	---	73.96	53.96	-5.03

Test mode: IEEE 802.11b CH11 for 30MHz to 1GHz [Horizontal]

Radiated Emission				Correction Factors	Corrected Amplitude	Class B (3 m)	
Frequency (MHz)	Amplitude (dBμV)	Ant. H. (m)	Table (°)	(dB)	(dBμV/m)	Limit (dBμV/m)	Margin (dB)
197.32	40.70	1.00	206	-3.42	37.28	43.50	-6.22
251.89	38.80	1.00	182	-3.29	35.51	46.00	-10.49
377.99	40.38	1.00	147	-1.60	38.78	46.00	-7.22
427.70	41.61	1.00	171	0.18	41.79	46.00	-4.21
502.87	40.14	1.00	261	1.93	42.07	46.00	-3.93
799.94	31.31	1.00	45	11.63	42.94	46.00	-3.06

Test mode: IEEE 802.11b CH11 for 30MHz to 1GHz [Vertical]

Radiated Emission				Correction Factors	Corrected Amplitude	Class B (3 m)	
Frequency (MHz)	Amplitude (dBμV)	Ant. H. (m)	Table (°)	(dB)	(dBμV/m)	Limit (dBμV/m)	Margin (dB)
197.32	39.11	1.00	185	-3.42	41.16	43.50	-2.34
230.06	39.11	1.00	185	-3.83	35.28	46.00	-10.72
401.02	36.11	1.00	250	-1.03	35.08	46.00	-10.92
501.66	35.76	1.00	14	1.85	37.61	46.00	-8.39
534.40	31.77	1.00	156	4.02	35.79	46.00	-10.21
799.94	30.76	1.00	107	11.63	42.39	46.00	-3.61

Test mode: IEEE 802.11b CH11 for 1GHz to 26.5GHz [Horizontal]

Frequency	*Ant. H.*	*Table*	*Amplitude*		*Correction Factor*	*Corrected Amplitude*		*Limit*		*Margin*
			Peak / Ave.			*Peak / Ave.*		*Peak / Ave.*		
MHz	*m*	*degree*	*dBμV*		*dB/m*	*dBμV/m*		*dBμV/m*		*dB*
2158.33	1.00	0	40.17	---	8.53	48.70	---	73.96	53.96	-5.26
2618.75	1.00	79	40.50	---	9.71	50.21	---	73.96	53.96	-3.75
9849.79	1.00	219	35.44	---	11.93	47.37	---	73.96	53.96	-6.59
19696.46	1.00	56	46.66	---	1.81	48.47	---	73.96	53.96	-5.49
22157.92	1.00	233	45.78	---	3.25	49.03	---	73.96	53.96	-4.93
24619.37	1.00	57	46.46	---	3.01	49.47	---	73.96	53.96	-4.49

Test mode: IEEE 802.11b CH11 for 1GHz to 26.5GHz [Vertical]

Frequency	*Ant. H.*	*Table*	*Amplitude*		*Correction Factor*	*Corrected Amplitude*		*Limit*		*Margin*
			Peak / Ave.			*Peak / Ave.*		*Peak / Ave.*		
MHz	*m*	*degree*	*dBμV*		*dB/m*	*dBμV/m*		*dBμV/m*		*dB*
2620.83	1.00	89	40.50	---	9.72	50.22	---	73.96	53.96	-3.74
9849.79	1.00	196	35.61	---	11.93	47.54	---	73.96	53.96	-6.42
12308.75	1.00	0	38.27	---	9.56	47.83	---	73.96	53.96	-6.13
19696.46	1.00	53	46.56	---	1.81	48.37	---	73.96	53.96	-5.59
22157.92	1.00	227	45.61	---	3.25	48.86	---	73.96	53.96	-5.10
24619.37	1.00	49	46.73	---	3.01	49.74	---	73.96	53.96	-4.22

Test mode: IEEE 802.11g CH01 for 30MHz to 1GHz [Horizontal]

Radiated Emission				Correction Factors	Corrected Amplitude	Class B (3 m)	
Frequency (MHz)	Amplitude (dBμV)	Ant. H. (m)	Table (°)	(dB)	(dBμV/m)	Limit (dBμV/m)	Margin (dB)
197.32	41.14	1.00	206	-3.42	37.72	43.50	-5.78
376.77	41.18	1.00	147	-1.63	39.55	46.00	-6.45
401.02	41.18	1.00	247	-1.03	40.15	46.00	-5.85
426.49	41.36	1.00	171	0.12	41.48	46.00	-4.52
502.87	40.00	1.00	261	1.93	41.93	46.00	-4.07
799.94	29.91	1.00	32	11.63	41.54	46.00	-4.46

Test mode: IEEE 802.11g CH01 for 30MHz to 1GHz [Vertical]

Radiated Emission				Correction Factors	Corrected Amplitude	Class B (3 m)	
Frequency (MHz)	Amplitude (dBμV)	Ant. H. (m)	Table (°)	(dB)	(dBμV/m)	Limit (dBμV/m)	Margin (dB)
196.11	43.41	1.00	180	-3.47	39.94	43.50	-3.56
228.85	38.32	1.00	204	-3.82	34.50	46.00	-11.50
403.45	35.36	1.00	258	-0.92	34.44	46.00	-11.56
502.87	36.59	1.00	14	1.93	38.52	46.00	-7.48
534.40	31.61	1.00	140	4.02	35.63	46.00	-10.37
799.94	29.06	1.00	91	11.63	40.69	46.00	-5.31

Test mode: IEEE 802.11g CH01 for 1GHz to 26.5GHz [Horizontal]

Frequency	*Ant. H.*	*Table*	*Amplitude*		*Correction Factor*	*Corrected Amplitude*		*Limit*		*Margin*
			Peak / Ave.			*Peak / Ave.*		*Peak / Ave.*		
MHz	*m*	*degree*	*dBμV*		*dB/m*	*dBμV/m*		*dBμV/m*		*dB*
2493.75	1.00	133	40.17	---	9.47	49.64	---	73.96	53.96	-4.32
9650.42	1.00	243	34.77	---	11.47	46.24	---	73.96	53.96	-7.72
12061.04	1.00	41	38.94	---	9.81	48.75	---	73.96	53.96	-5.21
19296.25	1.00	86	45.24	---	1.60	46.84	---	73.96	53.96	-7.12
21708.12	1.00	126	45.35	---	2.87	48.22	---	73.96	53.96	-5.74
24120.00	1.00	191	45.47	---	3.40	48.87	---	73.96	53.96	-5.09

Test mode: IEEE 802.11g CH01 for 1GHz to 26.5GHz [Vertical]

Frequency	*Ant. H.*	*Table*	*Amplitude*		*Correction Factor*	*Corrected Amplitude*		*Limit*		*Margin*
			Peak / Ave.			*Peak / Ave.*		*Peak / Ave.*		
MHz	*m*	*degree*	*dBμV*		*dB/m*	*dBμV/m*		*dBμV/m*		*dB*
2564.58	1.00	94	39.17	---	9.61	48.78	---	73.96	53.96	-5.18
9650.42	1.00	211	35.61	---	11.47	47.08	---	73.96	53.96	-6.88
12061.04	1.00	208	37.94	---	9.81	47.75	---	73.96	53.96	-6.21
19296.25	1.00	100	45.57	---	1.60	47.17	---	73.96	53.96	-6.79
21708.12	1.00	138	45.33	---	2.87	48.20	---	73.96	53.96	-5.76
24120.00	1.00	187	45.04	---	3.40	48.44	---	73.96	53.96	-5.52

Test mode: IEEE 802.11g CH06 for 30MHz to 1GHz [Horizontal]

Radiated Emission				Correction Factors	Corrected Amplitude	Class B (3 m)	
Frequency (MHz)	Amplitude (dBμV)	Ant. H. (m)	Table (°)	(dB)	(dBμV/m)	Limit (dBμV/m)	Margin (dB)
196.11	41.32	1.00	205	-3.47	37.85	43.50	-5.65
253.10	38.14	1.00	171	-3.38	34.76	46.00	-11.24
376.77	40.83	1.00	208	-1.63	39.20	46.00	-6.80
426.49	41.78	1.00	163	0.12	41.90	46.00	-4.10
502.87	40.18	1.00	254	1.93	42.11	46.00	-3.89
799.94	30.41	1.00	36	11.63	42.04	46.00	-3.96

Test mode: IEEE 802.11g CH06 for 30MHz to 1GHz [Vertical]

Radiated Emission				Correction Factors	Corrected Amplitude	Class B (3 m)	
Frequency (MHz)	Amplitude (dBμV)	Ant. H. (m)	Table (°)	(dB)	(dBμV/m)	Limit (dBμV/m)	Margin (dB)
196.11	44.20	1.00	189	-3.47	40.73	43.50	-2.77
230.06	38.52	1.00	202	-3.83	34.69	46.00	-11.31
253.10	36.48	1.00	315	-3.38	33.10	46.00	-12.90
402.24	34.58	1.00	281	-0.98	33.60	46.00	-12.40
501.66	37.22	1.00	10	1.85	39.07	46.00	-6.93
799.94	30.14	1.00	77	11.63	41.77	46.00	-4.23

Test mode: IEEE 802.11g CH06 for 1GHz to 26.5GHz [Horizontal]

Frequency	*Ant. H.*	*Table*	*Amplitude*		*Correction Factor*	*Corrected Amplitude*		*Limit*		*Margin*
			Peak / Ave.			*Peak / Ave.*		*Peak / Ave.*		
MHz	*m*	*degree*	*dBμV*		*dB/m*	*dBμV/m*		*dBμV/m*		*dB*
2102.08	1.00	230	38.33	---	8.38	46.71	---	73.96	53.96	-7.25
9747.08	1.00	27	36.10	---	11.89	47.99	---	73.96	53.96	-5.97
12187.92	1.00	310	39.44	---	9.74	49.18	---	73.96	53.96	-4.78
19494.58	1.00	336	47.23	---	1.69	48.92	---	73.96	53.96	-5.04
21934.79	1.00	35	45.67	---	3.09	48.76	---	73.96	53.96	-5.20
24371.46	1.00	215	47.31	---	3.26	50.57	---	73.96	53.96	-3.39

Test mode: IEEE 802.11g CH06 for 1GHz to 26.5GHz [Vertical]

Frequency	*Ant. H.*	*Table*	*Amplitude*		*Correction Factor*	*Corrected Amplitude*		*Limit*		*Margin*
			Peak / Ave.			*Peak / Ave.*		*Peak / Ave.*		
MHz	*m*	*degree*	*dBμV*		*dB/m*	*dBμV/m*		*dBμV/m*		*dB*
2597.92	1.00	177	37.17	---	9.67	46.84	---	73.96	53.96	-7.12
9747.08	1.00	158	35.60	---	11.89	47.49	---	73.96	53.96	-6.47
12187.92	1.00	48	39.44	---	9.74	49.18	---	73.96	53.96	-4.78
19494.58	1.00	342	47.27	---	1.69	48.96	---	73.96	53.96	-5.00
21934.79	1.00	42	45.50	---	3.09	48.59	---	73.96	53.96	-5.37
24371.46	1.00	232	47.23	---	3.26	50.49	---	73.96	53.96	-3.47

Test mode: IEEE 802.11g CH11 for 30MHz to 1GHz [Horizontal]

Radiated Emission				Correction Factors	Corrected Amplitude	Class B (3 m)	
Frequency (MHz)	Amplitude (dBμV)	Ant. H. (m)	Table (°)	(dB)	(dBμV/m)	Limit (dBμV/m)	Margin (dB)
197.32	41.99	1.00	200	-3.42	38.57	43.50	-4.93
253.10	38.47	1.00	166	-3.38	35.09	46.00	-10.91
376.77	40.55	1.00	143	-1.63	38.92	46.00	-7.08
402.24	41.11	1.00	228	-0.98	40.13	46.00	-5.87
422.85	41.16	1.00	24	-0.04	41.12	46.00	-4.88
501.66	39.75	1.00	258	1.85	41.60	46.00	-4.40

Test mode: IEEE 802.11g CH11 for 30MHz to 1GHz [Vertical]

Radiated Emission				Correction Factors	Corrected Amplitude	Class B (3 m)	
Frequency (MHz)	Amplitude (dBμV)	Ant. H. (m)	Table (°)	(dB)	(dBμV/m)	Limit (dBμV/m)	Margin (dB)
197.32	43.95	1.00	182	-3.42	40.53	43.50	-2.97
228.85	38.72	1.00	192	-3.82	34.90	46.00	-11.10
253.10	37.33	1.00	130	-3.38	33.95	46.00	-12.05
402.24	34.88	1.00	254	-0.98	33.90	46.00	-12.10
502.87	36.69	1.00	24	1.93	38.62	46.00	-7.38
799.94	30.57	1.00	204	11.63	42.20	46.00	-3.80

Test mode: IEEE 802.11g CH11 for 1GHz to 26.5GHz [Horizontal]

Frequency	*Ant. H.*	*Table*	*Amplitude*		*Correction Factor*	*Corrected Amplitude*		*Limit*		*Margin*
			Peak / Ave.			*Peak / Ave.*		*Peak / Ave.*		
MHz	*m*	*degree*	*dBμV*		*dB/m*	*dBμV/m*		*dBμV/m*		*dB*
2102.08	1.00	213	38.83	---	8.38	47.21	---	73.96	53.96	-6.75
9849.79	1.00	214	36.28	---	11.93	48.21	---	73.96	53.96	-5.75
12308.75	1.00	0	38.11	---	9.56	47.67	---	73.96	53.96	-6.29
19696.46	1.00	52	46.79	---	1.81	48.60	---	73.96	53.96	-5.36
22157.92	1.00	217	45.45	---	3.25	48.70	---	73.96	53.96	-5.26
24619.37	1.00	45	46.91	---	3.01	49.92	---	73.96	53.96	-4.04

Test mode: IEEE 802.11g CH11 for 1GHz to 26.5GHz [Vertical]

Frequency	*Ant. H.*	*Table*	*Amplitude*		*Correction Factor*	*Corrected Amplitude*		*Limit*		*Margin*
			Peak / Ave.			*Peak / Ave.*		*Peak / Ave.*		
MHz	*m*	*degree*	*dBμV*		*dB/m*	*dBμV/m*		*dBμV/m*		*dB*
2154.17	1.00	160	37.67	---	8.52	46.19	---	73.96	53.96	-7.77
9849.79	1.00	84	35.61	---	11.93	47.54	---	73.96	53.96	-6.42
12308.75	1.00	339	38.11	---	9.56	47.67	---	73.96	53.96	-6.29
19696.46	1.00	58	46.54	---	1.81	48.35	---	73.96	53.96	-5.61
22157.92	1.00	228	45.59	---	3.25	48.84	---	73.96	53.96	-5.12
24619.37	1.00	59	46.38	---	3.01	49.39	---	73.96	53.96	-4.57

Test mode: IEEE 802.11n 20M CH01 for 30MHz to 1GHz [Horizontal]

Radiated Emission				Correction Factors	Corrected Amplitude	Class B (3 m)	
Frequency (MHz)	Amplitude (dBμV)	Ant. H. (m)	Table (°)	(dB)	(dBμV/m)	Limit (dBμV/m)	Margin (dB)
197.32	41.38	1.00	206	-3.42	37.96	43.50	-5.54
376.77	41.46	1.00	147	-1.63	39.83	46.00	-6.17
420.42	44.12	1.00	10	-0.15	43.97	46.00	-2.03
502.87	36.15	1.00	261	1.93	38.08	46.00	-7.92
625.34	29.08	1.00	168	7.25	36.33	46.00	-9.67
799.94	26.99	1.00	336	11.63	38.62	46.00	-7.38

Test mode: IEEE 802.11n 20M CH01 for 30MHz to 1GHz [Vertical]

Radiated Emission				Correction Factors	Corrected Amplitude	Class B (3 m)	
Frequency (MHz)	Amplitude (dBμV)	Ant. H. (m)	Table (°)	(dB)	(dBμV/m)	Limit (dBμV/m)	Margin (dB)
197.32	44.56	1.00	178	-3.42	41.14	43.50	-2.36
230.06	38.97	1.00	233	-3.83	35.14	46.00	-10.86
402.24	37.67	1.00	247	-0.98	36.69	46.00	-9.31
425.27	35.09	1.00	237	0.07	35.16	46.00	-10.84
534.40	31.90	1.00	175	4.02	35.92	46.00	-10.08
799.94	30.10	1.00	210	11.63	41.73	46.00	-4.27

Test mode: IEEE 802.11n 20M CH01 for 1GHz to 26.5GHz [Horizontal]

Frequency	*Ant. H.*	*Table*	*Amplitude Peak / Ave.*		*Correction Factor*	*Corrected Amplitude Peak / Ave.*		*Limit Peak / Ave.*		*Margin*
MHz	*m*	*degree*	*dBμV*		*dB/m*	*dBμV/m*		*dBμV/m*		*dB*
2327.08	1.00	149	39.33	---	9.01	48.34	---	73.96	53.96	-5.62
9650.42	1.00	51	35.77	---	11.47	47.24	---	73.96	53.96	-6.72
12061.04	1.00	50	37.77	---	9.81	47.58	---	73.96	53.96	-6.38
19296.25	1.00	246	47.54	---	1.60	49.14	---	73.96	53.96	-4.82
21708.12	1.00	40	45.91	---	2.87	48.78	---	73.96	53.96	-5.18
24120.00	1.00	272	46.50	---	3.40	49.90	---	73.96	53.96	-4.06

Test mode: IEEE 802.11n 20M CH01 for 1GHz to 26.5GHz [Vertical]

Frequency	*Ant. H.*	*Table*	*Amplitude Peak / Ave.*		*Correction Factor*	*Corrected Amplitude Peak / Ave.*		*Limit Peak / Ave.*		*Margin*
MHz	*m*	*degree*	*dBμV*		*dB/m*	*dBμV/m*		*dBμV/m*		*dB*
2700.00	1.00	170	33.16	---	9.87	43.03	---	73.96	53.96	-10.93
9650.42	1.00	115	35.77	---	11.47	47.24	---	73.96	53.96	-6.72
12061.04	1.00	207	37.77	---	9.81	47.58	---	73.96	53.96	-6.38
19296.25	1.00	240	47.52	---	1.60	49.12	---	73.96	53.96	-4.84
21708.12	1.00	35	45.66	---	2.87	48.53	---	73.96	53.96	-5.43
24120.00	1.00	263	46.62	---	3.40	50.02	---	73.96	53.96	-3.94

Test mode: IEEE 802.11n 20M CH06 for 30MHz to 1GHz [Horizontal]

Radiated Emission				Correction Factors	Corrected Amplitude	Class B (3 m)	
Frequency (MHz)	Amplitude (dBμV)	Ant. H. (m)	Table (°)	(dB)	(dBμV/m)	Limit (dBμV/m)	Margin (dB)
197.32	40.63	1.00	200	-3.42	37.21	43.50	-6.29
377.99	40.77	1.00	156	-1.60	39.17	46.00	-6.83
424.06	44.67	1.00	329	0.01	44.68	46.00	-1.32
502.87	34.91	1.00	258	1.93	36.84	46.00	-9.16
625.34	28.49	1.00	159	7.25	35.74	46.00	-10.26
799.94	29.93	1.00	28	11.63	41.56	46.00	-4.44

Test mode: IEEE 802.11n 20M CH06 for 30MHz to 1GHz [Vertical]

Radiated Emission				Correction Factors	Corrected Amplitude	Class B (3 m)	
Frequency (MHz)	Amplitude (dBμV)	Ant. H. (m)	Table (°)	(dB)	(dBμV/m)	Limit (dBμV/m)	Margin (dB)
196.11	45.17	1.00	191	-3.47	41.70	43.50	-1.80
228.85	39.79	1.00	214	-3.82	35.97	46.00	-10.03
251.89	36.49	1.00	146	-3.29	33.20	46.00	-12.80
401.02	36.29	1.00	274	-1.03	35.26	46.00	-10.74
425.27	33.35	1.00	319	0.07	33.42	46.00	-12.58
502.87	37.33	1.00	22	1.93	39.26	46.00	-6.74

Test mode: IEEE 802.11n 20M CH06 for 1GHz to 26.5GHz [Horizontal]

Frequency	*Ant. H.*	*Table*	*Amplitude*		*Correction Factor*	*Corrected Amplitude*		*Limit*		*Margin*
			Peak / Ave.			*Peak / Ave.*		*Peak / Ave.*		
MHz	*m*	*degree*	*dBμV*		*dB/m*	*dBμV/m*		*dBμV/m*		*dB*
2593.75	1.00	98	40.33	---	9.67	50.00	---	73.96	53.96	-3.96
9747.08	1.00	228	37.44	---	11.89	49.33	---	73.96	53.96	-4.63
12187.92	1.00	333	38.94	---	9.74	48.68	---	73.96	53.96	-5.28
19494.58	1.00	93	47.05	---	1.69	48.74	---	73.96	53.96	-5.22
21934.79	1.00	38	46.04	---	3.09	49.13	---	73.96	53.96	-4.83
24371.46	1.00	313	45.69	---	3.26	48.95	---	73.96	53.96	-5.01

Test mode: IEEE 802.11n 20M CH06 for 1GHz to 26.5GHz [Vertical]

Frequency	*Ant. H.*	*Table*	*Amplitude*		*Correction Factor*	*Corrected Amplitude*		*Limit*		*Margin*
			Peak / Ave.			*Peak / Ave.*		*Peak / Ave.*		
MHz	*m*	*degree*	*dBμV*		*dB/m*	*dBμV/m*		*dBμV/m*		*dB*
2233.33	1.00	232	38.00	---	8.74	46.74	---	73.96	53.96	-7.22
9747.08	1.00	25	35.77	---	11.89	47.66	---	73.96	53.96	-6.30
12187.92	1.00	255	40.10	---	9.74	49.84	---	73.96	53.96	-4.12
19494.58	1.00	103	46.99	---	1.69	48.68	---	73.96	53.96	-5.28
21934.79	1.00	54	46.12	---	3.09	49.21	---	73.96	53.96	-4.75
24371.46	1.00	293	45.83	---	3.26	49.09	---	73.96	53.96	-4.87

Test mode: IEEE 802.11n 20M CH11 for 30MHz to 1GHz [Horizontal]

Radiated Emission				Correction Factors	Corrected Amplitude	Class B (3 m)	
Frequency (MHz)	Amplitude (dBμV)	Ant. H. (m)	Table (°)	(dB)	(dBμV/m)	Limit (dBμV/m)	Margin (dB)
197.32	41.61	1.00	204	-3.42	38.19	43.50	-5.31
251.89	38.76	1.00	180	-3.29	35.47	46.00	-10.53
377.99	41.42	1.00	146	-1.60	39.82	46.00	-6.18
425.27	44.15	1.00	34	0.07	44.22	46.00	-1.78
502.87	33.38	1.00	258	1.93	35.31	46.00	-10.69
799.94	27.99	1.00	28	11.63	39.62	46.00	-6.38

Test mode: IEEE 802.11n 20M CH11 for 30MHz to 1GHz [Vertical]

Radiated Emission				Correction Factors	Corrected Amplitude	Class B (3 m)	
Frequency (MHz)	Amplitude (dBμV)	Ant. H. (m)	Table (°)	(dB)	(dBμV/m)	Limit (dBμV/m)	Margin (dB)
196.11	44.48	1.00	190	-3.47	41.01	43.50	-2.49
230.06	39.62	1.00	204	-3.83	35.79	46.00	-10.21
401.02	35.76	1.00	241	-1.03	34.73	46.00	-11.27
424.06	34.82	1.00	231	0.01	34.83	46.00	-11.17
502.87	37.51	1.00	14	1.93	39.44	46.00	-6.56
534.40	30.87	1.00	175	4.02	34.89	46.00	-11.11

Test mode: IEEE 802.11n 20M CH11 for 1GHz to 26.5GHz [Horizontal]

Frequency	*Ant. H.*	*Table*	*Amplitude*		*Correction Factor*	*Corrected Amplitude*		*Limit*		*Margin*
			Peak / Ave.			*Peak / Ave.*		*Peak / Ave.*		
MHz	*m*	*degree*	*dBμV*		*dB/m*	*dBμV/m*		*dBμV/m*		*dB*
2156.25	1.00	290	42.16	---	8.53	50.69	---	73.96	53.96	-3.27
2620.83	1.00	171	40.00	---	9.72	49.72	---	73.96	53.96	-4.24
12308.75	1.00	50	38.61	---	9.56	48.17	---	73.96	53.96	-5.79
19696.46	1.00	58	46.44	---	1.81	48.25	---	73.96	53.96	-5.71
22157.92	1.00	226	45.70	---	3.25	48.95	---	73.96	53.96	-5.01
24619.37	1.00	51	46.83	---	3.01	49.84	---	73.96	53.96	-4.12

Test mode: IEEE 802.11n 20M CH11for 1GHz to 26.5GHz [Vertical]

Frequency	*Ant. H.*	*Table*	*Amplitude*		*Correction Factor*	*Corrected Amplitude*		*Limit*		*Margin*
			Peak / Ave.			*Peak / Ave.*		*Peak / Ave.*		
MHz	*m*	*degree*	*dBμV*		*dB/m*	*dBμV/m*		*dBμV/m*		*dB*
2339.58	1.00	134	39.00	---	9.04	48.04	---	73.96	53.96	-5.92
7384.79	1.00	112	37.11	---	10.42	47.53	---	73.96	53.96	-6.43
9849.79	1.00	74	35.94	---	11.93	47.87	---	73.96	53.96	-6.09
19696.46	1.00	52	46.60	---	1.81	48.41	---	73.96	53.96	-5.55
22157.92	1.00	243	45.90	---	3.25	49.15	---	73.96	53.96	-4.81
24619.37	1.00	47	46.69	---	3.01	49.70	---	73.96	53.96	-4.26

Test mode: IEEE 802.11n 40M CH03 for 30MHz to 1GHz [Horizontal]

Radiated Emission				Correction Factors	Corrected Amplitude	Class B (3 m)	
Frequency (MHz)	Amplitude (dBμV)	Ant. H. (m)	Table (°)	(dB)	(dBμV/m)	Limit (dBμV/m)	Margin (dB)
202.17	42.94	1.00	212	-3.39	39.55	43.50	-3.95
301.60	37.30	1.00	262	-2.88	34.42	46.00	-11.58
403.45	41.99	1.00	239	-0.92	41.07	46.00	-4.93
434.97	44.21	1.00	30	0.51	44.72	46.00	-1.28
501.66	37.67	1.00	256	1.85	39.52	46.00	-6.48
799.94	30.14	1.00	28	11.63	41.77	46.00	-4.23

Test mode: IEEE 802.11n 40M CH03 for 30MHz to 1GHz [Vertical]

Radiated Emission				Correction Factors	Corrected Amplitude	Class B (3 m)	
Frequency (MHz)	Amplitude (dBμV)	Ant. H. (m)	Table (°)	(dB)	(dBμV/m)	Limit (dBμV/m)	Margin (dB)
198.54	44.02	1.00	194	-3.36	40.66	43.50	-2.84
230.06	39.34	1.00	217	-3.83	35.51	46.00	-10.49
402.24	37.40	1.00	258	-0.98	36.42	46.00	-9.58
424.06	35.63	1.00	319	0.01	35.64	46.00	-10.36
534.40	32.23	1.00	170	4.02	36.25	46.00	-9.75
799.94	28.34	1.00	107	11.63	39.97	46.00	-6.03

Test mode: IEEE 802.11n 40M CH03 for 1GHz to 26.5GHz [Horizontal]

Frequency	*Ant. H.*	*Table*	*Amplitude*		*Correction Factor*	*Corrected Amplitude*		*Limit*		*Margin*
			Peak / Ave.			*Peak / Ave.*		*Peak / Ave.*		
MHz	*m*	*degree*	*dBμV*		*dB/m*	*dBμV/m*		*dBμV/m*		*dB*
2579.17	1.00	63	38.67	---	9.64	48.31	---	73.96	53.96	-5.65
9686.67	1.00	16	36.10	---	11.63	47.73	---	73.96	53.96	-6.23
12109.37	1.00	357	37.94	---	9.61	47.55	---	73.96	53.96	-6.41
19374.71	1.00	295	45.02	---	1.60	46.62	---	73.96	53.96	-7.34
21796.67	1.00	176	44.78	---	2.72	47.50	---	73.96	53.96	-6.46
24219.17	1.00	308	45.25	---	2.85	48.10	---	73.96	53.96	-5.86

Test mode: IEEE 802.11n 40M CH03 for 1GHz to 26.5GHz [Vertical]

Frequency	*Ant. H.*	*Table*	*Amplitude*		*Correction Factor*	*Corrected Amplitude*		*Limit*		*Margin*
			Peak / Ave.			*Peak / Ave.*		*Peak / Ave.*		
MHz	*m*	*degree*	*dBμV*		*dB/m*	*dBμV/m*		*dBμV/m*		*dB*
2152.08	1.00	199	37.00	---	8.52	45.52	---	73.96	53.96	-8.44
9686.67	1.00	212	36.10	---	11.63	47.73	---	73.96	53.96	-6.23
12109.37	1.00	256	37.94	---	9.61	47.55	---	73.96	53.96	-6.41
19374.17	1.00	299	45.28	---	1.60	46.88	---	73.96	53.96	-7.08
21796.67	1.00	201	44.60	---	2.72	47.32	---	73.96	53.96	-6.64
24219.17	1.00	317	45.25	---	2.85	48.10	---	73.96	53.96	-5.86

Test mode: IEEE 802.11n 40M CH06 for 30MHz to 1GHz [Horizontal]

Radiated Emission				Correction Factors	Corrected Amplitude	Class B (3 m)	
Frequency (MHz)	Amplitude (dBμV)	Ant. H. (m)	Table (°)	(dB)	(dBμV/m)	Limit (dBμV/m)	Margin (dB)
197.32	41.35	1.00	209	-3.42	37.93	43.50	-5.57
251.89	38.92	1.00	182	-3.29	35.63	46.00	-10.37
302.81	36.84	1.00	96	-2.86	33.98	46.00	-12.02
376.77	40.94	1.00	134	-1.63	39.31	46.00	-6.69
419.24	39.78	1.00	21	-0.21	39.57	46.00	-6.43
799.94	29.49	1.00	52	11.63	41.12	46.00	-4.88

Test mode: IEEE 802.11n 40M CH06 for 30MHz to 1GHz [Vertical]

Radiated Emission				Correction Factors	Corrected Amplitude	Class B (3 m)	
Frequency (MHz)	Amplitude (dBμV)	Ant. H. (m)	Table (°)	(dB)	(dBμV/m)	Limit (dBμV/m)	Margin (dB)
197.32	44.28	1.00	173	-3.42	40.86	43.50	-2.64
230.06	39.29	1.00	221	-3.83	35.46	46.00	-10.54
421.64	35.67	1.00	238	-0.10	35.57	46.00	-10.43
501.66	33.66	1.00	357	1.85	35.51	46.00	-10.49
534.40	31.56	1.00	185	4.02	35.58	46.00	-10.42
799.94	31.10	1.00	98	11.63	42.73	46.00	-3.27

Test mode: IEEE 802.11n 40M CH06 for 1GHz to 26.5GHz [Horizontal]

Frequency	*Ant. H.*	*Table*	*Amplitude*		*Correction Factor*	*Corrected Amplitude*		*Limit*		*Margin*
			Peak / Ave.			*Peak / Ave.*		*Peak / Ave.*		
MHz	*m*	*degree*	*dBμV*		*dB/m*	*dBμV/m*		*dBμV/m*		*dB*
2158.33	1.00	281	38.84	---	8.53	47.37	---	73.96	53.96	-6.59
9747.08	1.00	211	35.94	---	11.89	47.83	---	73.96	53.96	-6.13
12187.92	1.00	271	39.27	---	9.74	49.01	---	73.96	53.96	-4.95
19494.58	1.00	98	46.50	---	1.69	48.19	---	73.96	53.96	-5.77
21934.79	1.00	25	45.81	---	3.09	48.90	---	73.96	53.96	-5.06
24371.46	1.00	114	45.17	---	3.26	48.43	---	73.96	53.96	-5.53

Test mode: IEEE 802.11n 40M CH06 for 1GHz to 26.5GHz [Vertical]

Frequency	*Ant. H.*	*Table*	*Amplitude*		*Correction Factor*	*Corrected Amplitude*		*Limit*		*Margin*
			Peak / Ave.			*Peak / Ave.*		*Peak / Ave.*		
MHz	*m*	*degree*	*dBμV*		*dB/m*	*dBμV/m*		*dBμV/m*		*dB*
2606.25	1.00	111	38.00	---	9.69	47.69	---	73.96	53.96	-6.27
9747.08	1.00	64	35.94	---	11.89	47.83	---	73.96	53.96	-6.13
12187.92	1.00	331	39.60	---	9.74	49.34	---	73.96	53.96	-4.62
19494.58	1.00	123	46.75	---	1.69	48.44	---	73.96	53.96	-5.52
21934.79	1.00	19	45.56	---	3.09	48.65	---	73.96	53.96	-5.31
24371.46	1.00	121	45.36	---	3.26	48.62	---	73.96	53.96	-5.34

Test mode: IEEE 802.11n 40M CH09 for 30MHz to 1GHz [Horizontal]

Radiated Emission				Correction Factors	Corrected Amplitude	Class B (3 m)	
Frequency (MHz)	Amplitude (dBμV)	Ant. H. (m)	Table (°)	(dB)	(dBμV/m)	Limit (dBμV/m)	Margin (dB)
197.32	42.99	1.00	206	-3.42	39.57	43.50	-3.93
253.10	38.91	1.00	182	-3.38	35.53	46.00	-10.47
376.77	40.25	1.00	147	-1.63	38.62	46.00	-7.38
420.42	44.73	1.00	333	-0.15	44.58	46.00	-1.42
502.87	37.08	1.00	261	1.93	39.01	46.00	-6.99
799.94	28.66	1.00	35	11.63	40.29	46.00	-5.71

Test mode: IEEE 802.11n 40M CH09 for 30MHz to 1GHz [Vertical]

Radiated Emission				Correction Factors	Corrected Amplitude	Class B (3 m)	
Frequency (MHz)	Amplitude (dBμV)	Ant. H. (m)	Table (°)	(dB)	(dBμV/m)	Limit (dBμV/m)	Margin (dB)
197.32	43.91	1.00	185	-3.42	40.49	43.50	-3.01
230.06	39.62	1.00	209	-3.83	35.79	46.00	-10.21
424.06	35.26	1.00	226	0.01	35.27	46.00	-10.73
502.87	33.28	1.00	350	1.93	35.21	46.00	-10.79
534.40	31.06	1.00	177	4.02	35.08	46.00	-10.92
799.94	30.30	1.00	260	11.63	41.93	46.00	-4.07

Test mode: IEEE 802.11n 40M CH09for 1GHz to 26.5GHz [Horizontal]

Frequency	*Ant. H.*	*Table*	*Amplitude*		*Correction Factor*	*Corrected Amplitude*		*Limit*		*Margin*
			Peak / Ave.			*Peak / Ave.*		*Peak / Ave.*		
MHz	*m*	*degree*	*dBμV*		*dB/m*	*dBμV/m*		*dBμV/m*		*dB*
2156.25	1.00	259	37.33	---	8.53	45.86	---	73.96	53.96	-8.10
9807.50	1.00	197	35.61	---	11.92	47.53	---	73.96	53.96	-6.43
12260.42	1.00	302	38.94	---	9.86	48.80	---	73.96	53.96	-5.16
19618.54	1.00	134	45.72	---	1.70	47.42	---	73.96	53.96	-6.54
22069.37	1.00	31	45.10	---	2.77	47.87	---	73.96	53.96	-6.09
24520.21	1.00	126	45.93	---	2.37	48.30	---	73.96	53.96	-5.66

Test mode: IEEE 802.11n 40M CH09 for 1GHz to 26.5GHz [Vertical]

Frequency	*Ant. H.*	*Table*	*Amplitude*		*Correction Factor*	*Corrected Amplitude*		*Limit*		*Margin*
			Peak / Ave.			*Peak / Ave.*		*Peak / Ave.*		
MHz	*m*	*degree*	*dBμV*		*dB/m*	*dBμV/m*		*dBμV/m*		*dB*
2150.00	1.00	312	38.00	---	8.51	46.51	---	73.96	53.96	-7.45
9807.50	1.00	360	36.11	---	11.92	48.03	---	73.96	53.96	-5.93
1260.42	1.00	321	38.28	---	9.86	48.14	---	73.96	53.96	-5.82
19618.54	1.00	131	46.05	---	1.70	47.75	---	73.96	53.96	-6.21
22069.37	1.00	12	44.77	---	2.77	47.54	---	73.96	53.96	-6.42
24520.21	1.00	148	45.85	---	2.37	48.22	---	73.96	53.96	-5.74

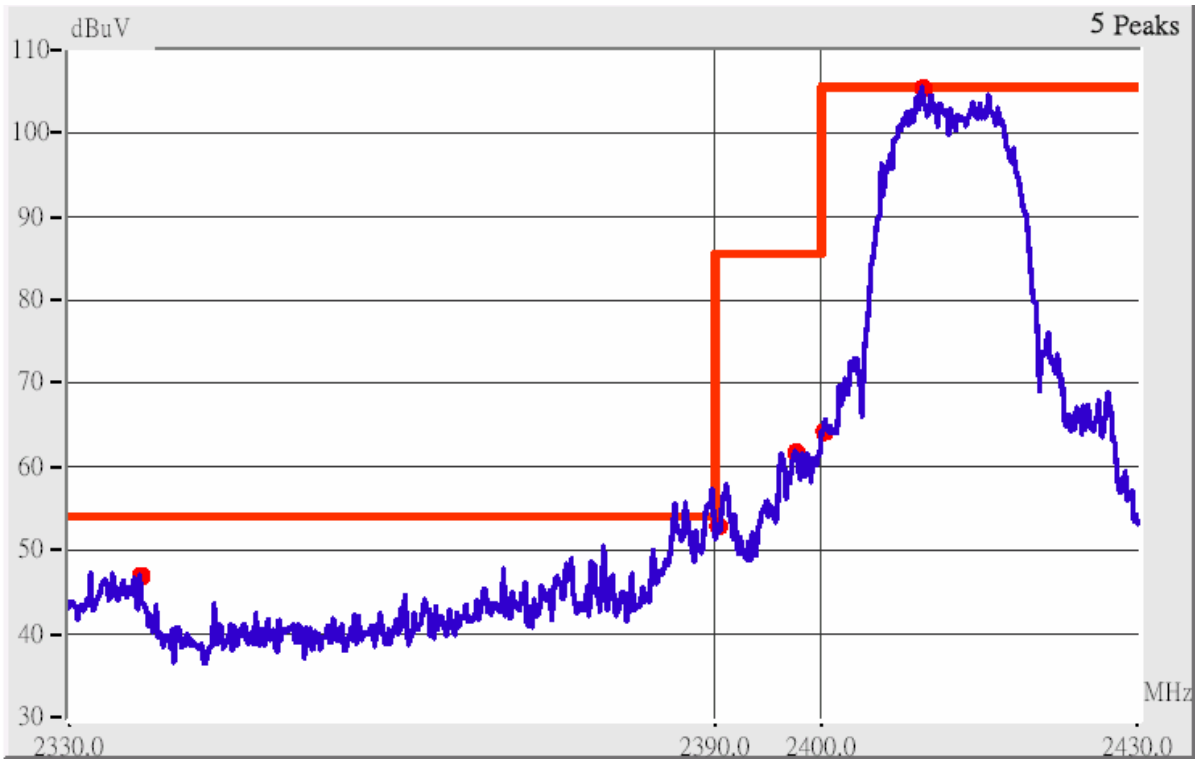
7.4 Test Result of the Bandedge

If any 100 kHz bandwidth outside these frequency bands, the radio frequency power that is produced by the modulation products of the spreading sequence, the information sequence and the carrier frequency shall be either *at least 20 dB below that in any 100 kHz bandwidth within the band that contains the highest level of the desired power or shall not exceed the general levels specified id §15.209(a)*,

We perform this section by the *radiated manner*, the RBW is set to 100kHz and VBW>RBW. We'd made the observation *up to 10th harmonics and the criterion is all the harmonic/spurious emissions must be 20dB below the highest emission level measured.* If the emissions fall in the restricted bands stated in the Part15.205(a) must also *comply with the radiated emission limits specified in Part15.209(a). (Peak mode: RBW=VBW=1MHz, Average mode: RBW=1MHz; VBW=10Hz)*

The following pages show our observations referring to the channel 1 and 11 respectively.
Test Condition & Setup: same as < 8.1 >

Channel 1 of IEEE 802.11b



This is the hard copy of our bandedge measurement generated by our bandedge testing program. The plot shown above is the bandedge of channel 1.

1. The lobe left by the fundamental side is already 20dB below the highest emission level.
2. The emissions recorded in the restricted band is do comply with the Part 15.209(a) – as below.

Radiated Emission					*Corrected Amplitude (dBμV/m)*		*Class B (3m)*		
Frequency (MHz)	*Ant. P.*	*Ant. H. (m)*	*Table ( )*	*Factors (dB)*	*Peak*	*Average*	*Limit (dBμV/m) Peak*	*Ave.*	*Margin (dB)*
2385.98	Hor	1.00	266	9.17	60.50	43.67	73.96	53.96	-10.29
2390.48	Hor	1.00	234	9.18	60.18	45.18	73.96	53.96	-8.78
2386.98	Ver	1.00	8	9.17	58.84	41.84	73.96	53.96	-12.12
2390.51	Ver	1.00	250	9.18	60.18	42.68	73.96	53.96	-11.28

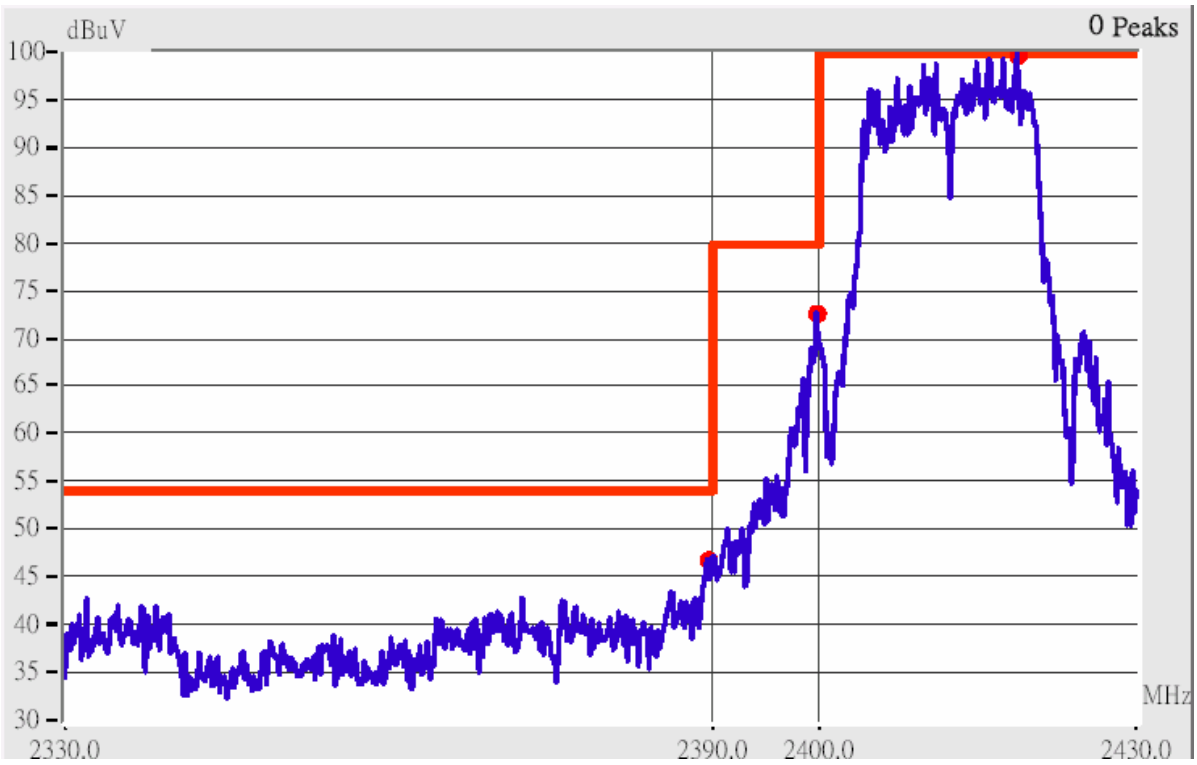
Channel 11 of IEEE 802.11b

This is the hard copy of our bandedge measurement generated by our bandedge testing program. The plot shown above is the bandedge of channel 11.

3. The lobe right by the fundamental side is already 20dB below the highest emission level.
4. The emissions recorded in the restricted band is do comply with the Part 15.209(a) – as below

Radiated Emission					*Corrected Amplitude (dBμV/m)*		*Class B (3m)*		
Frequency (MHz)	*Ant. P.*	*Ant. H. (m)*	*Table ( )*	*Factors (dB)*	*Peak*	*Average*	*Limit (dBμV/m) Peak*	*Ave.*	*Margin (dB)*
2483.36	Hor	1.00	65	9.44	58.78	44.27	73.96	53.96	-9.69
2484.57	Hor	1.00	354	9.45	57.61	38.95	73.96	53.96	-15.01
2499.98	Hor	1.00	357	9.49	53.99	36.49	73.96	53.96	-17.47
2505.54	Hor	1.00	76	9.50	55.83	36.50	73.96	53.96	-17.46
2483.62	Ver	1.00	134	9.44	52.44	40.11	73.96	53.96	-13.85
2484.75	Ver	1.00	116	9.45	55.78	40.12	73.96	53.96	-13.84
2499.97	Ver	1.00	315	9.49	53.16	39.99	73.96	53.96	-13.97
2505.85	Ver	1.00	151	9.50	55.00	38.33	73.96	53.96	-15.63

Channel 1 of IEEE 802.11g

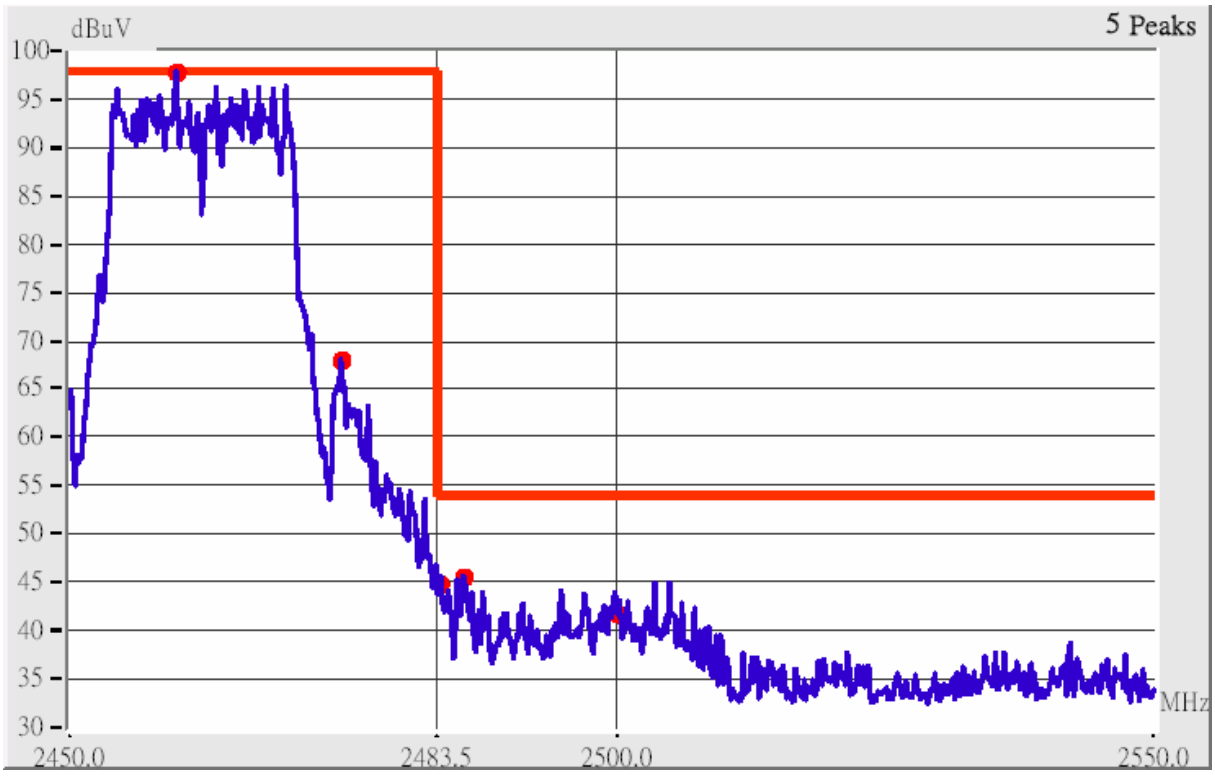


This is the hard copy of our bandedge measurement generated by our bandedge testing program. The plot shown above is the bandedge of channel 1.

5. The lobe left by the fundamental side is already 20dB below the highest emission level.
6. The emissions recorded in the restricted band is do comply with the Part 15.209(a) – as below.

Radiated Emission					*Corrected Amplitude (dBμV/m)*		*Class B (3m)*		
Frequency (MHz)	*Ant. P.*	*Ant. H. (m)*	*Table ( )*	*Factors (dB)*	*Peak*	*Average*	*Limit (dBμV/m) Peak*	*Ave.*	*Margin (dB)*
2387.88	Hor	1.00	180	9.18	57.01	33.18	73.96	53.96	-16.95
2389.78	Hor	1.00	180	9.18	63.52	33.68	73.96	53.96	-10.44
2387.99	Ver	1.00	146	9.18	56.17	32.68	73.96	53.96	-17.79
2389.77	Ver	1.00	173	9.18	56.35	33.18	73.96	53.96	-17.61

Channel 11 of IEEE 802.11g

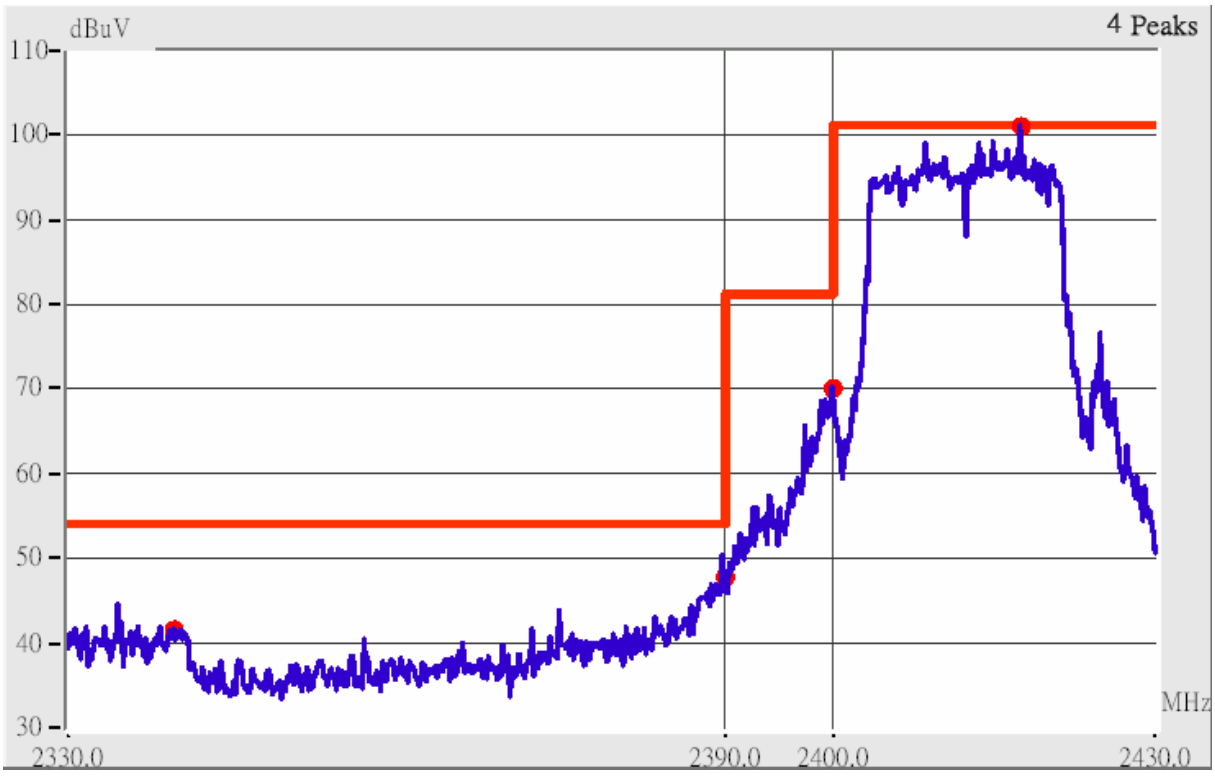


This is the hard copy of our bandedge measurement generated by our bandedge testing program. The plot shown above is the bandedge of channel 11.

7. The lobe right by the fundamental side is already 20dB below the highest emission level.
8. The emissions recorded in the restricted band is do comply with the Part 15.209(a) – as below

Radiated Emission					*Corrected Amplitude (dBμV/m)*		*Class B (3m)*		
Frequency (MHz)	*Ant. P.*	*Ant. H. (m)*	*Table ( )*	*Factors (dB)*	*Peak*	*Average*	*Limit (dBμV/m) Peak*	*Ave.*	*Margin (dB)*
2483.26	Hor	1.00	103	9.44	59.11	33.94	73.96	53.96	-14.85
2485.09	Hor	1.00	104	9.45	56.95	33.78	73.96	53.96	-17.01
2499.92	Hor	1.00	92	9.49	52.16	33.32	73.96	53.96	-20.64
2502.22	Hor	1.00	92	9.49	50.83	---	73.96	53.96	-3.13
2483.51	Ver	1.00	117	9.44	53.28	33.44	73.96	53.96	-20.52
2485.43	Ver	1.00	274	9.45	55.62	33.28	73.96	53.96	-18.34
2500.01	Ver	1.00	106	9.49	48.82	---	73.96	53.96	-5.14
2508.00	Ver	1.00	340	9.51	47.67	---	73.96	53.96	-6.29

Channel 01 of IEEE 802.11n 20M

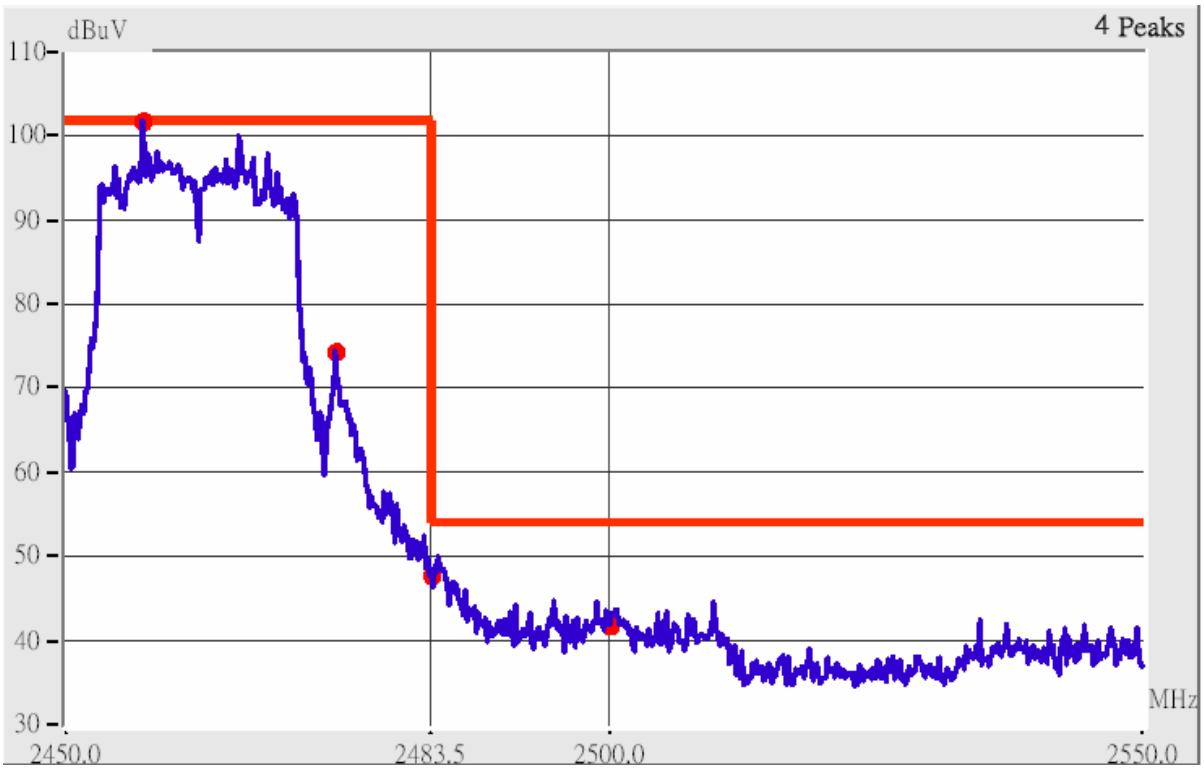


This is the hard copy of our bandedge measurement generated by our bandedge testing program. The plot shown above is the bandedge of channel 1.

9. The lobe left by the fundamental side is already 20dB below the highest emission level.
10. The emissions recorded in the restricted band is do comply with the Part 15.209(a) – as below.

Radiated Emission					*Corrected Amplitude (dBμV/m)*		*Class B (3m)*		
Frequency (MHz)	*Ant. P.*	*Ant. H. (m)*	*Table ( )*	*Factors (dB)*	*Peak*	*Average*	*Limit (dBμV/m) Peak*	*Ave.*	*Margin (dB)*
2387.71	Hor	1.00	254	9.18	56.51	34.51	73.96	53.96	-17.45
2390.36	Hor	1.00	12	9.18	56.18	34.68	73.96	53.96	-17.78
2388.78	Ver	1.00	241	9.18	57.85	34.01	73.96	53.96	-16.11
2390.09	Ver	1.00	130	9.18	60.35	34.35	73.96	53.96	-13.61

Channel 11 of IEEE 802.11n 20M



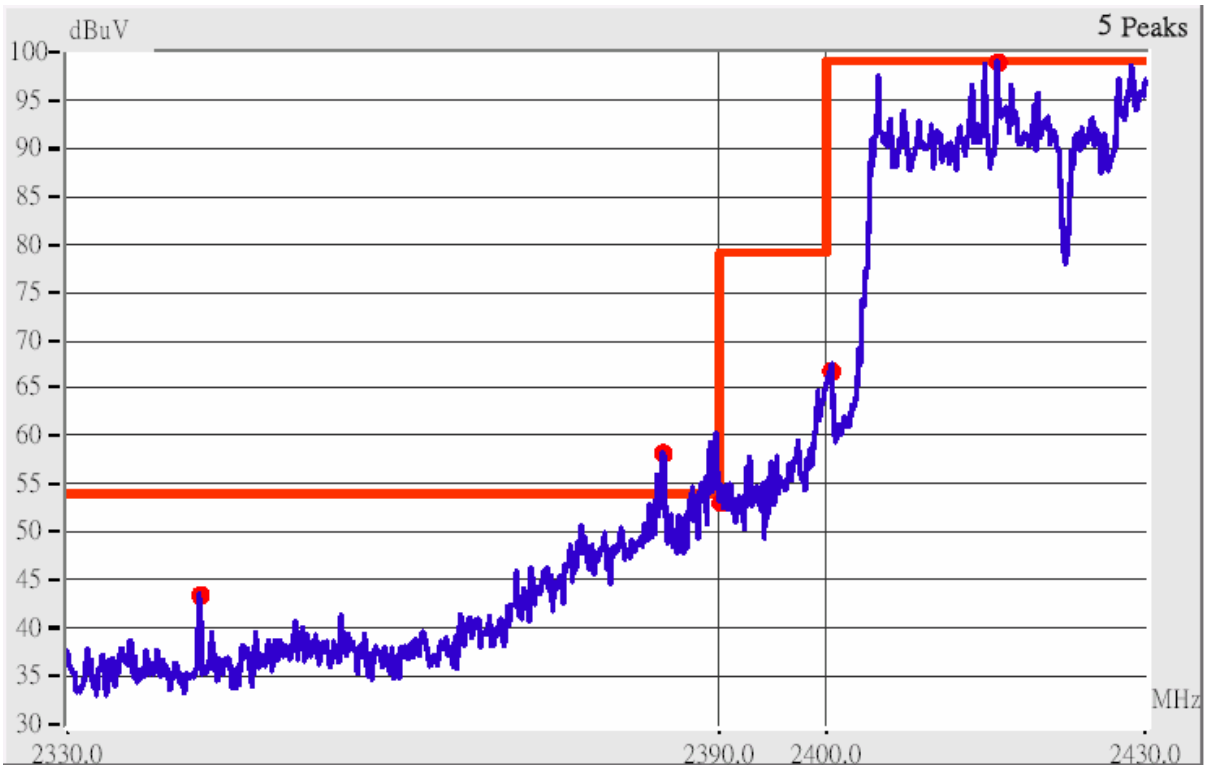
This is the hard copy of our bandedge measurement generated by our bandedge testing program. The plot shown above is the bandedge of channel 11.

11.The lobe right by the fundamental side is already 20dB below the highest emission level.

12.The emissions recorded in the restricted band is do comply with the Part 15.209(a) – as below

Radiated Emission					*Corrected Amplitude (dBμV/m)*		*Class B (3m)*		
Frequency (MHz)	*Ant. P.*	*Ant. H. (m)*	*Table ( )*	*Factors (dB)*	*Peak*	*Average*	*Limit (dBμV/m) Peak*	*Ave.*	*Margin (dB)*
2483.22	Hor	1.00	303	9.44	55.11	35.77	73.96	53.96	-18.19
2484.83	Hor	1.00	342	9.45	60.62	35.45	73.96	53.96	-13.34
2500.01	Hor	1.00	301	9.49	46.16	---	73.96	53.96	-7.80
2505.20	Hor	1.00	335	9.50	49.50	---	73.96	53.96	-4.46
2482.90	Ver	1.00	353	9.44	59.94	34.94	73.96	53.96	-14.02
2485.47	Ver	1.00	73	9.45	56.28	34.95	73.96	53.96	-17.68
2500.01	Ver	1.00	126	9.49	48.32	---	73.96	53.96	-5.64
2509.98	Ver	1.00	106	9.51	51.01	---	73.96	53.96	-2.95

Channel CH03 of IEEE 802.11n 40M



This is the hard copy of our bandedge measurement generated by our bandedge testing program. The plot shown above is the bandedge of channel 3.

13.The lobe left by the fundamental side is already 20dB below the highest emission level.

14.The emissions recorded in the restricted band is do comply with the Part 15.209(a) – as below.

Radiated Emission					*Corrected Amplitude (dBμV/m)*		*Class B (3m) Limit (dBμV/m)*		*Margin (dB)*
Frequency (MHz)	*Ant. P.*	*Ant. H. (m)*	*Table ( )*	*Factors (dB)*	*Peak*	*Average*	*Peak*	*Ave.*	
2387.59	Hor	1.00	238	9.18	67.51	41.01	73.96	53.96	-6.45
2389.79	Hor	1.00	238	9.18	62.35	38.68	73.96	53.96	-11.61
2388.34	Ver	1.00	25	9.18	62.68	38.51	73.96	53.96	-11.28
2390.38	Ver	1.00	53	9.18	56.52	40.01	73.96	53.96	-13.95

Channel 09 of IEEE 802.11n 40M

This is the hard copy of our bandedge measurement generated by our bandedge testing program. The plot shown above is the bandedge of channel 09.

15.The lobe right by the fundamental side is already 20dB below the highest emission level.

16.The emissions recorded in the restricted band is do comply with the Part 15.209(a) – as below

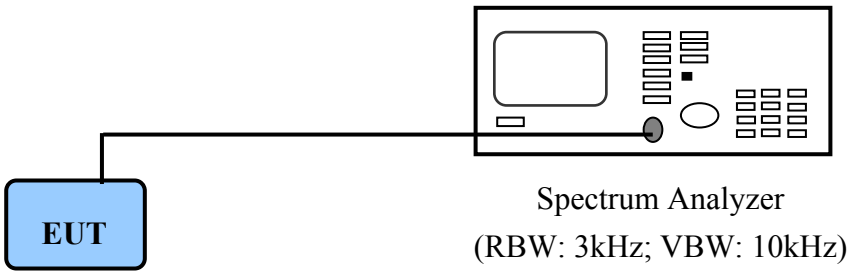
Radiated Emission					*Corrected Amplitude (dBμV/m)*		*Class B (3m)*		
Frequency (MHz)	*Ant. P.*	*Ant. H. (m)*	*Table (°)*	*Factors (dB)*	*Peak*	*Average*	*Limit (dBμV/m) Peak*	*Ave.*	*Margin (dB)*
2483.87	Hor	1.00	161	9.44	57.94	41.44	73.96	53.96	-12.52
2488.31	Hor	1.00	310	9.46	57.62	40.13	73.96	53.96	-13.83
2499.51	Hor	1.00	78	9.49	55.32	36.49	73.96	53.96	-17.47
2504.38	Hor	1.00	111	9.50	49.50	---	73.96	53.96	-4.46
2483.21	Ver	1.00	88	9.44	59.28	37.11	73.96	53.96	-14.68
2487.30	Ver	1.00	352	9.45	61.29	33.62	73.96	53.96	-12.67
2499.42	Ver	1.00	359	9.49	52.49	38.66	73.96	53.96	-15.30
2502.75	Ver	1.00	315	9.50	50.16	---	73.96	53.96	-3.80

VIII. Section 15.247(d): Power Spectral Density

8.1 Test Condition & Setup

The tests below are running with the EUT transmitter set at high power in TDD mode. The EUT is needed to force selection of output power level and channel number. While testing, the EUT was set to transmit continuously and to be tested by the contact manner with the spectrum analyzer.

8.2 Test Instruments Configuration



PC to control the EUT at maximal power output and channel number and set antenna kit

8.3 List of Test Instruments

Instrument Name	Model No.	Brand	Serial No.	Next time
Spectrum Analyzer	MS2665C	ANRITSU	6200175476	03/19/09

8.4 Test Result of Power spectral density

The following table shows a summary of the test results of the Power Spectral Density.

IEEE 802.11b

Channel	*Ppr (dBm)*	*Cable Loss (dB)*	*Ppq (dBm)*	*Limit (dB)*	*Margin (dB)*
CH 01	-6.41	1.00	-5.41	8.00	-13.41
CH 06	-6.93	1.00	-5.93	8.00	-13.93
CH 11	-6.98	1.00	-5.98	8.00	-13.98

IEEE 802.11g

Channel	*Ppr (dBm)*	*Cable Loss (dB)*	*Ppq (dBm)*	*Limit (dB)*	*Margin (dB)*
CH 01	-11.23	1.00	-10.23	8.00	-18.23
CH 06	-11.04	1.00	-10.04	8.00	-18.04
CH 11	-11.50	1.00	-10.50	8.00	-18.50

Note:

1. The following pages show the results of spectrum reading.
2. Ppr: spectrum read power density (using peak search mode),
   Ppq: actual peak power density in the spread spectrum band.
3. Ppq = Ppr + |Cable Loss|

Formula:

Total PPSD (Ppq) = 10 log (10^ (Ant#1 Ppr + cable loss / 10) + 10^ (Ant#2 Ppr + cable loss/ 10))

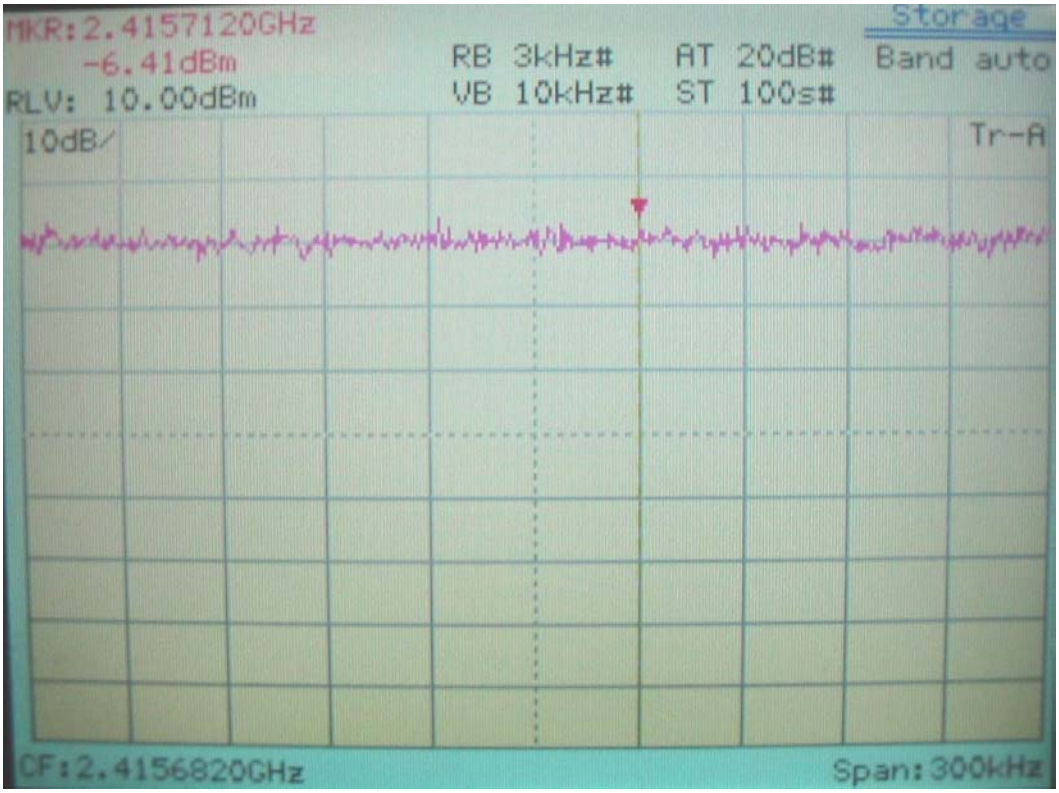
IEEE 802.11n 20M

Channel	*Ant#1 Ppr*	*Ant#2 Ppr*	*Cable Loss*	*Ppq*	*Limit*	*Margin*
	(dBm)		*(dB)*	*(dBm)*	*(dB)*	*(dB)*
CH 01/2412	-13.58	-13.43	1.00	-9.49	8.00	-17.49
CH 06/2437	-13.95	-13.12	1.00	-9.50	8.00	-17.50
CH 11/2462	-13.80	-13.70	1.00	-9.74	8.00	-17.74

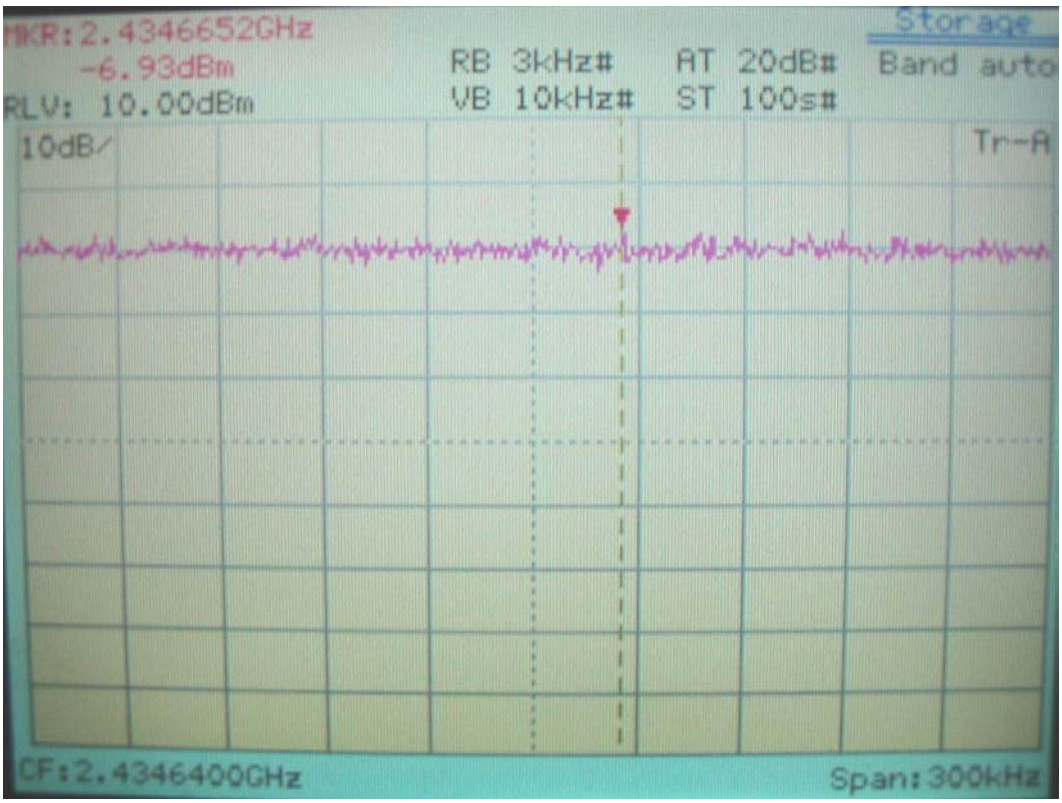
IEEE 802.11n 40M

Channel	*Ant#1 Ppr*	*Ant#2 Ppr*	*Cable Loss*	*Ppq*	*Limit*	*Margin*
	(dBm)		*(dB)*	*(dBm)*	*(dB)*	*(dB)*
CH 03/2412	-18.55	-18.79	1.00	-14.66	8.00	-22.66
CH 06/2437	-18.02	-18.78	1.00	-14.37	8.00	-22.37
CH 09/2452	-18.70	-19.02	1.00	-14.85	8.00	-22.85

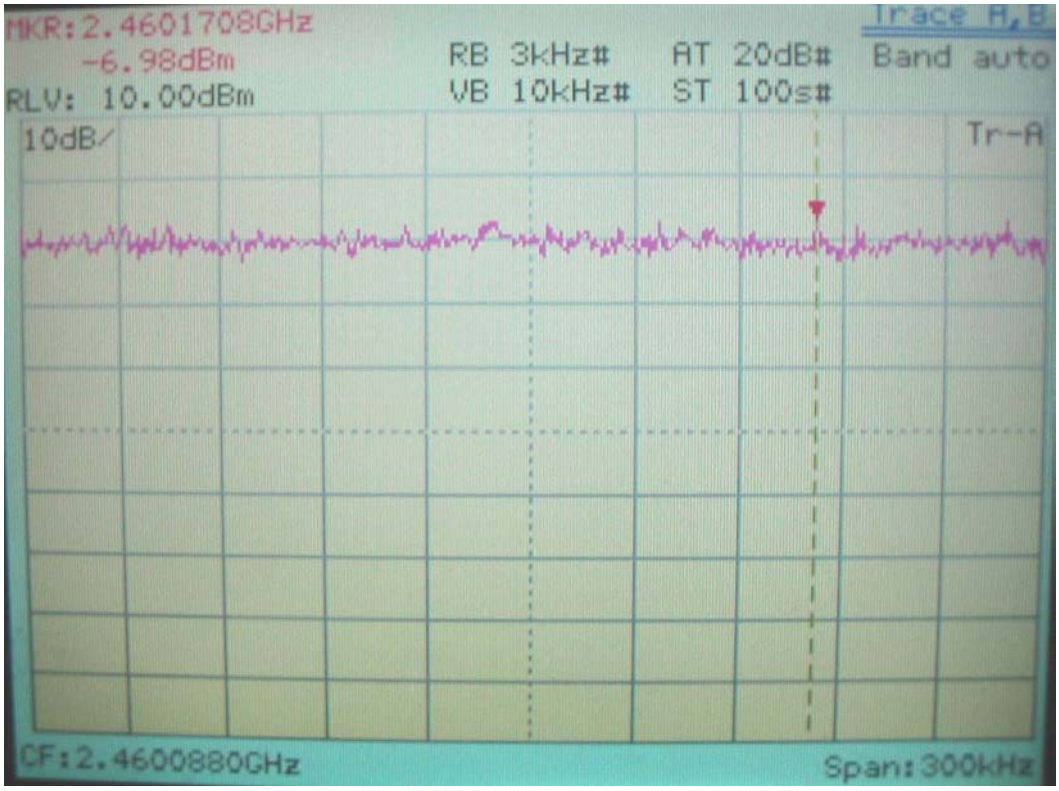
Power Spectral Density for IEEE 802.11b Channel 01, 2412MHz



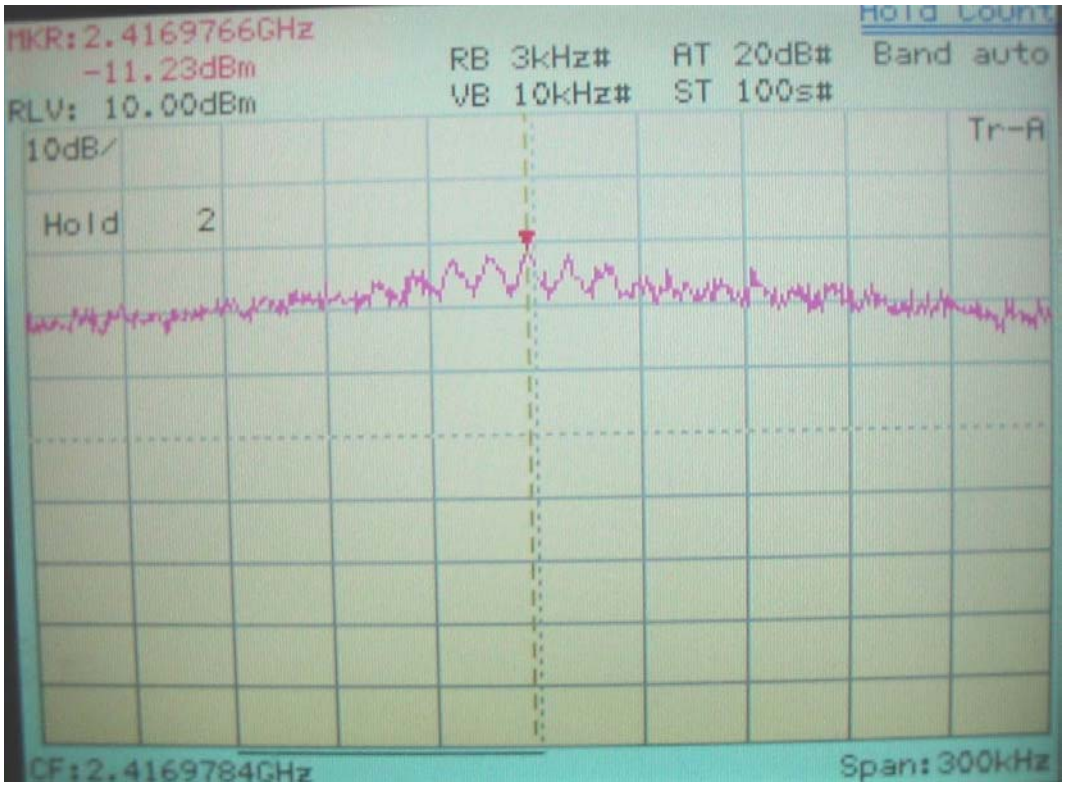
Power Spectral Density for IEEE 802.11b Channel 06, 2437MHz



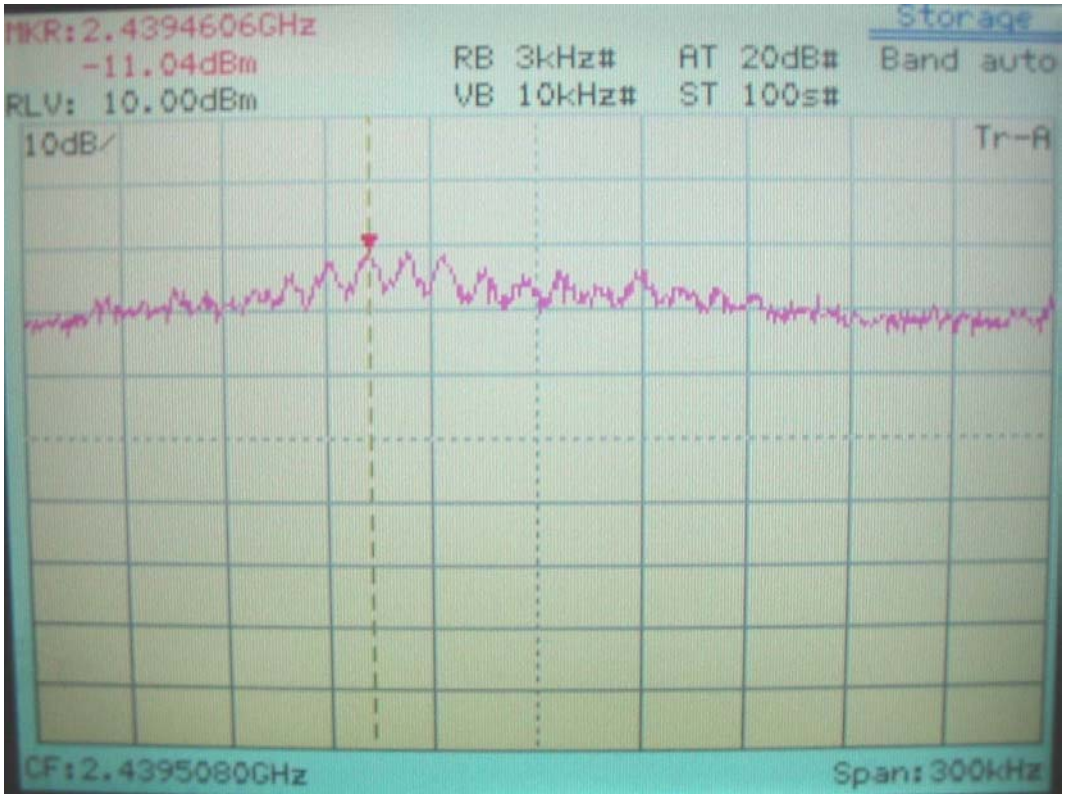
Power Spectral Density for IEEE 802.11b Channel 11, 2462MHz



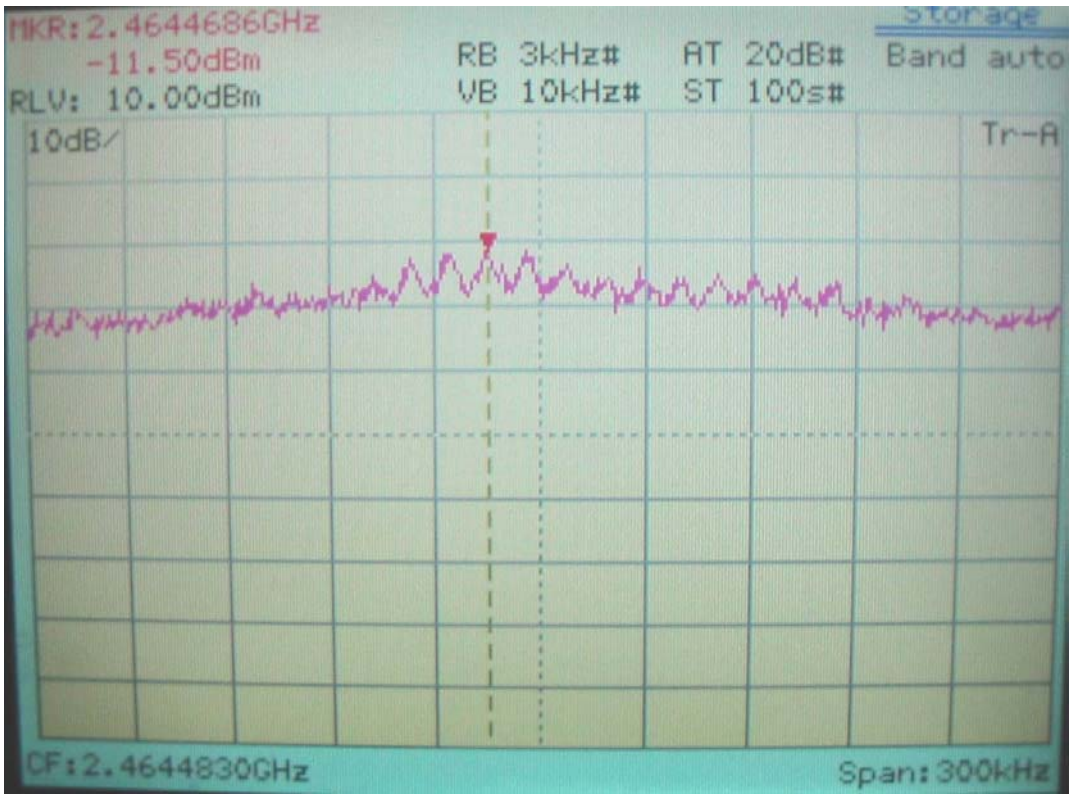
Power Spectral Density for IEEE 802.11g Channel 01, 2412MHz



Power Spectral Density for IEEE 802.11g Channel 06, 2437MHz

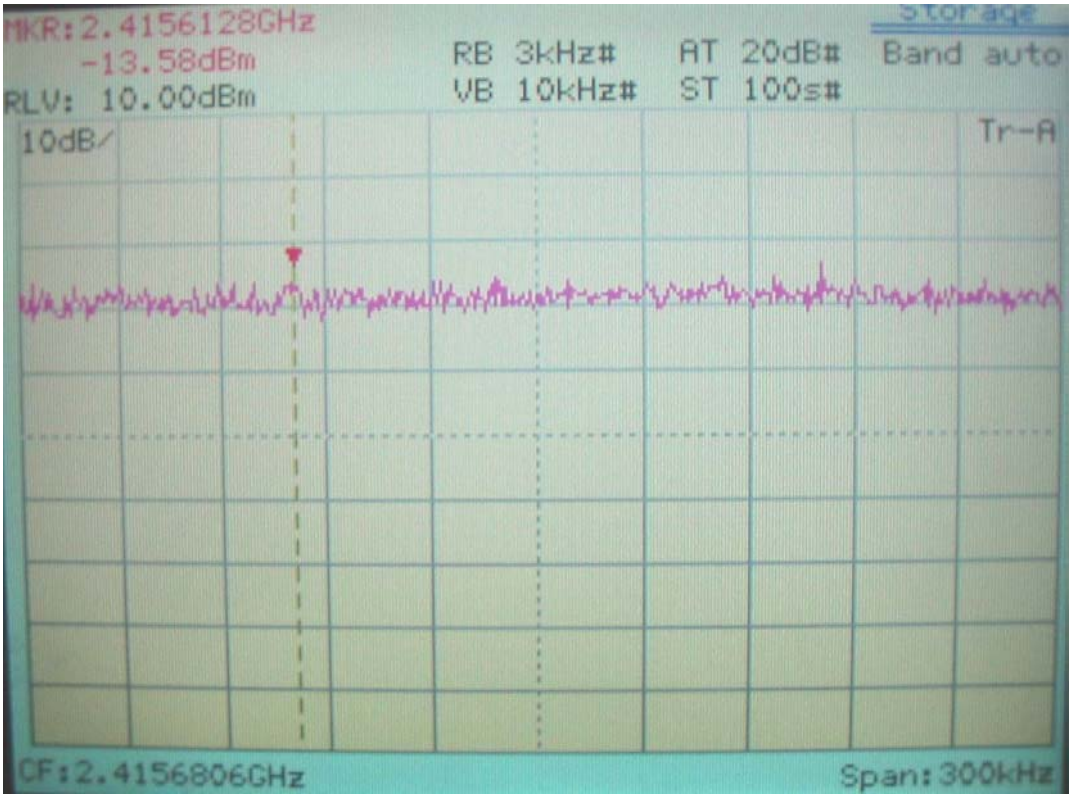


Power Spectral Density for IEEE 802.11g Channel 11, 2462MHz

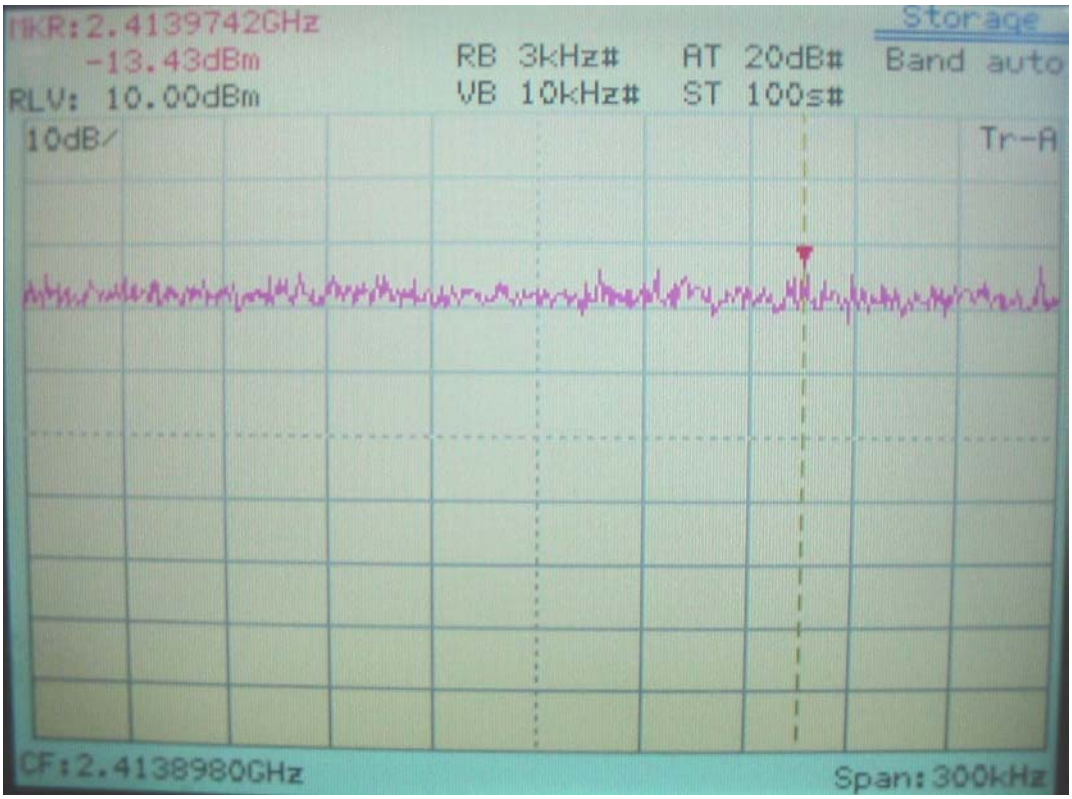


Power Spectral Density for IEEE 802.11n 20M Channel 01, 2412MHz

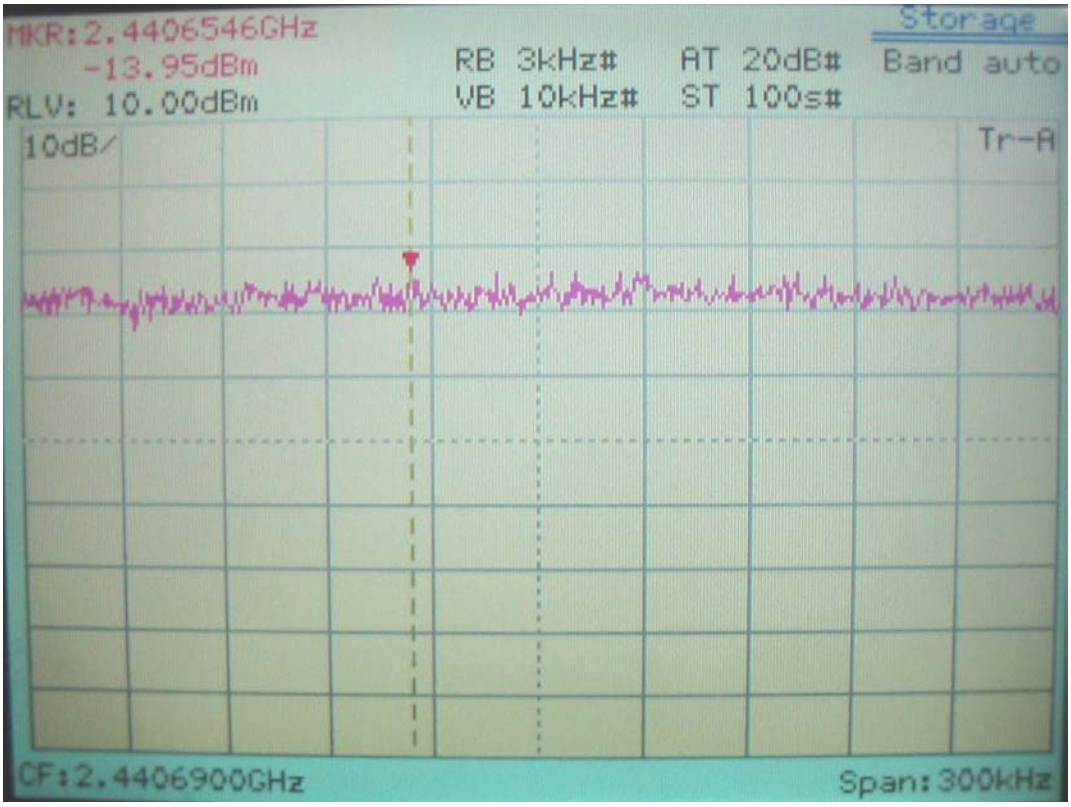
Ant #1



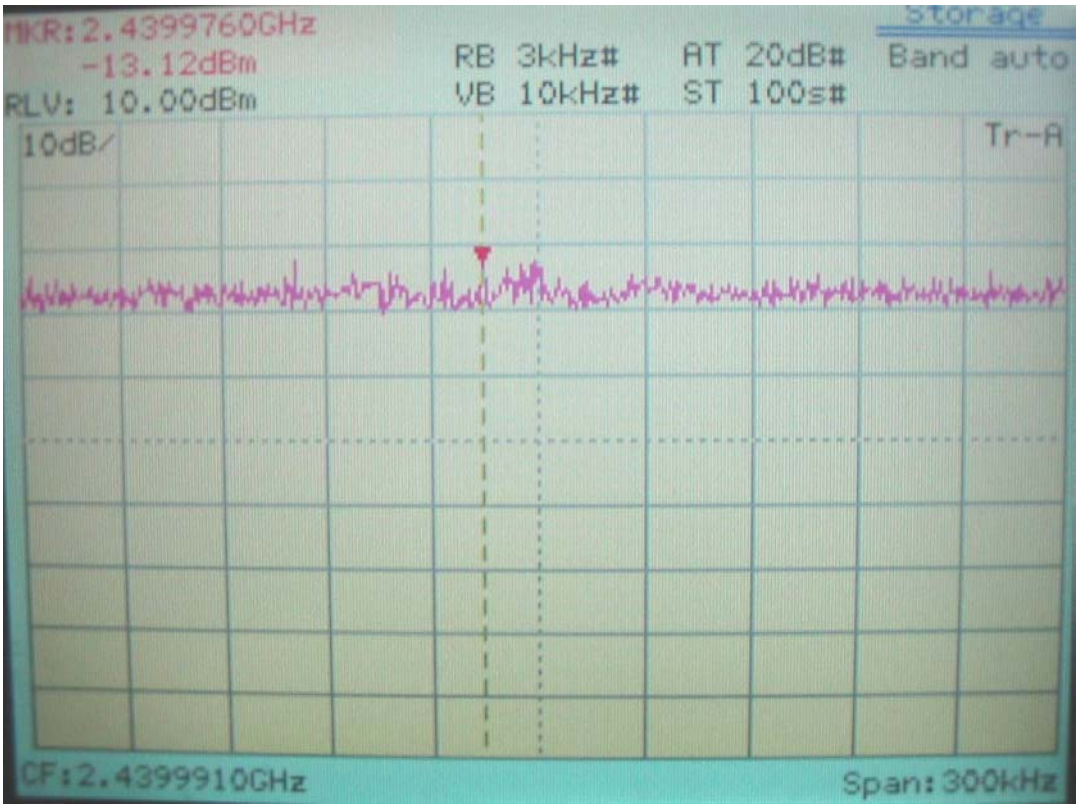
Ant #2



Power Spectral Density for IEEE 802.11n 20M Channel 06, 2437MHz



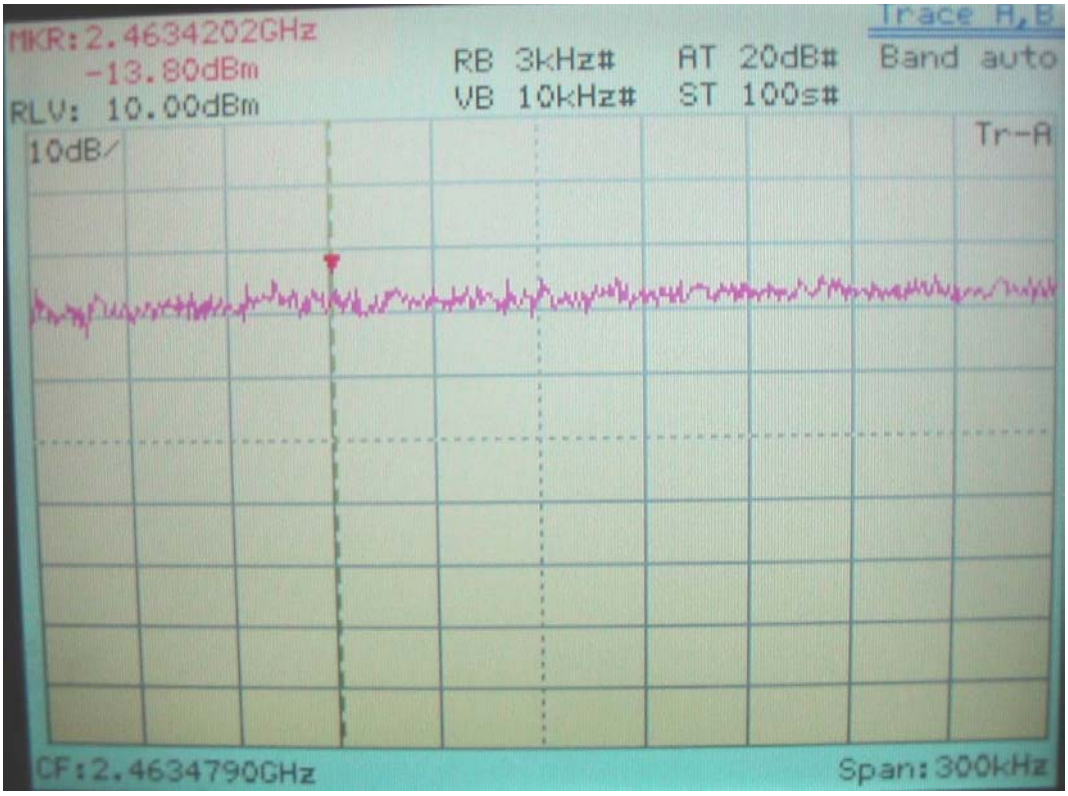
Ant #1



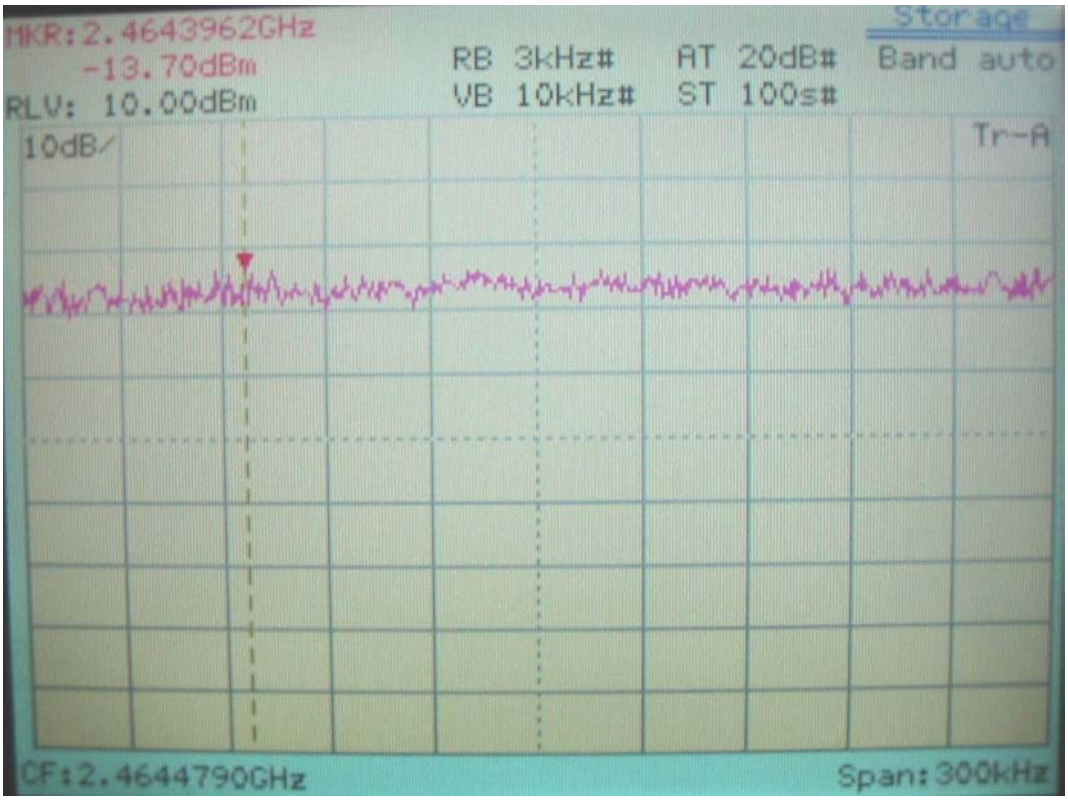
Ant #2

Power Spectral Density for IEEE 802.11n 20M Channel 11, 2462MHz

Ant #1

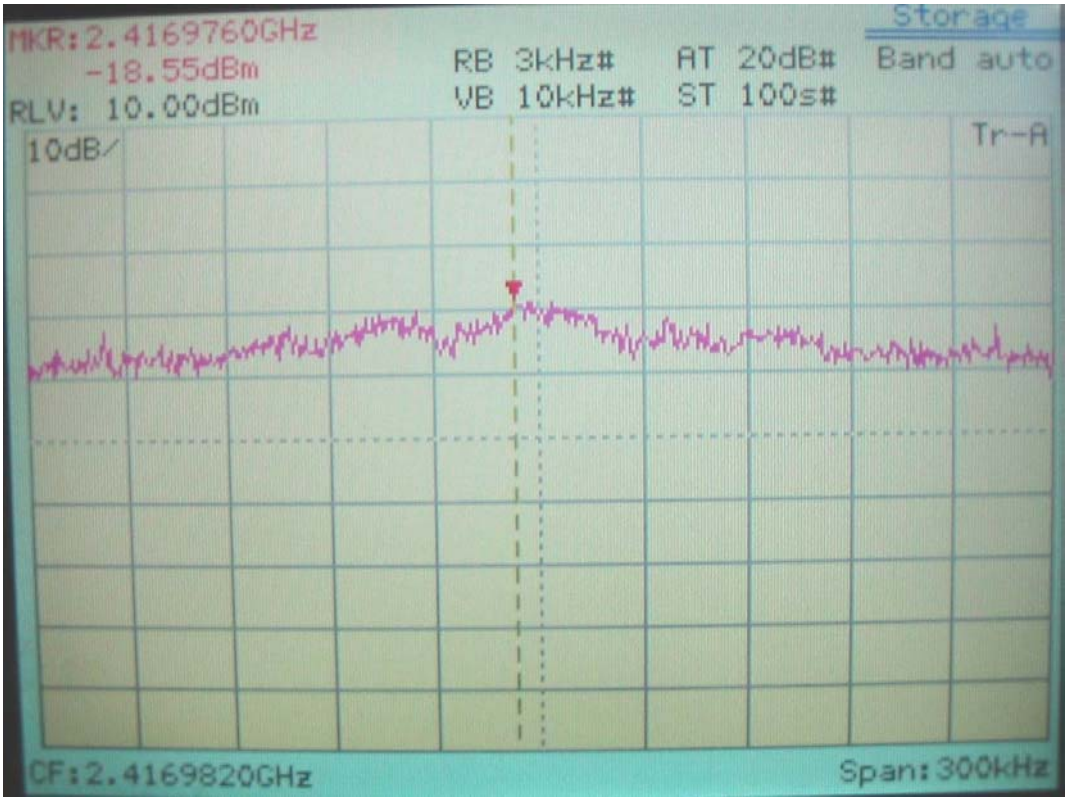


Ant #2

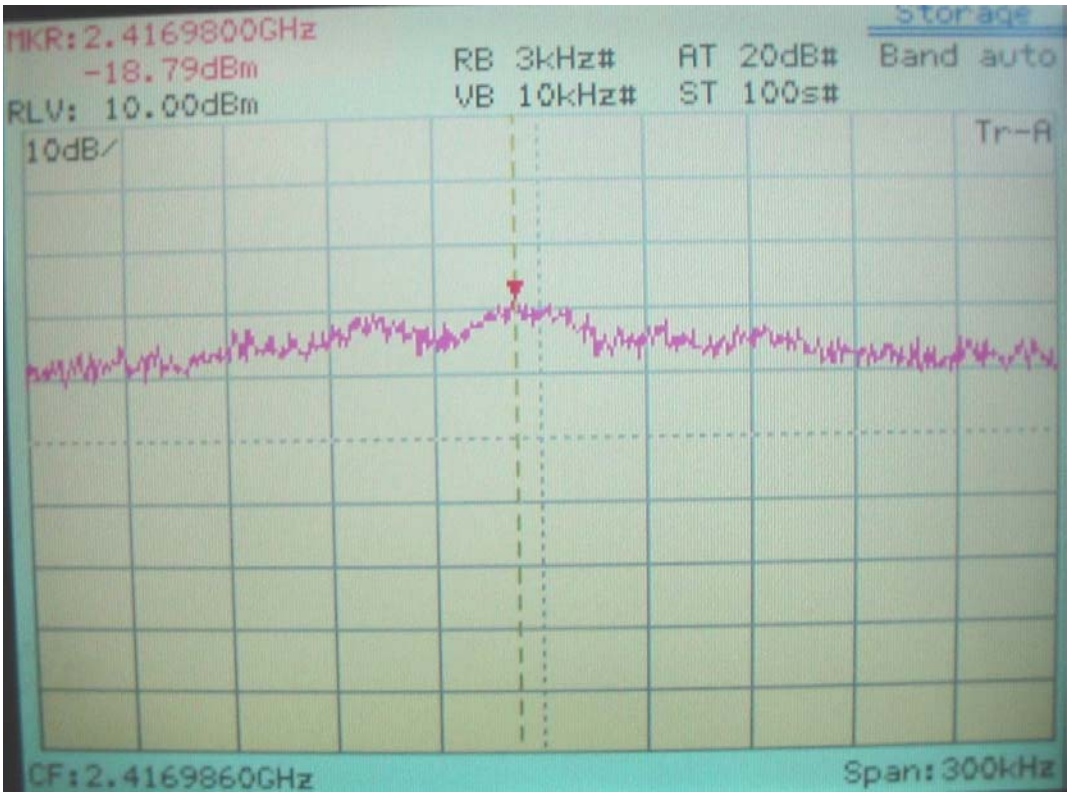


Power Spectral Density for IEEE 802.11n 40M Channel 03, 2422MHz

Ant #1

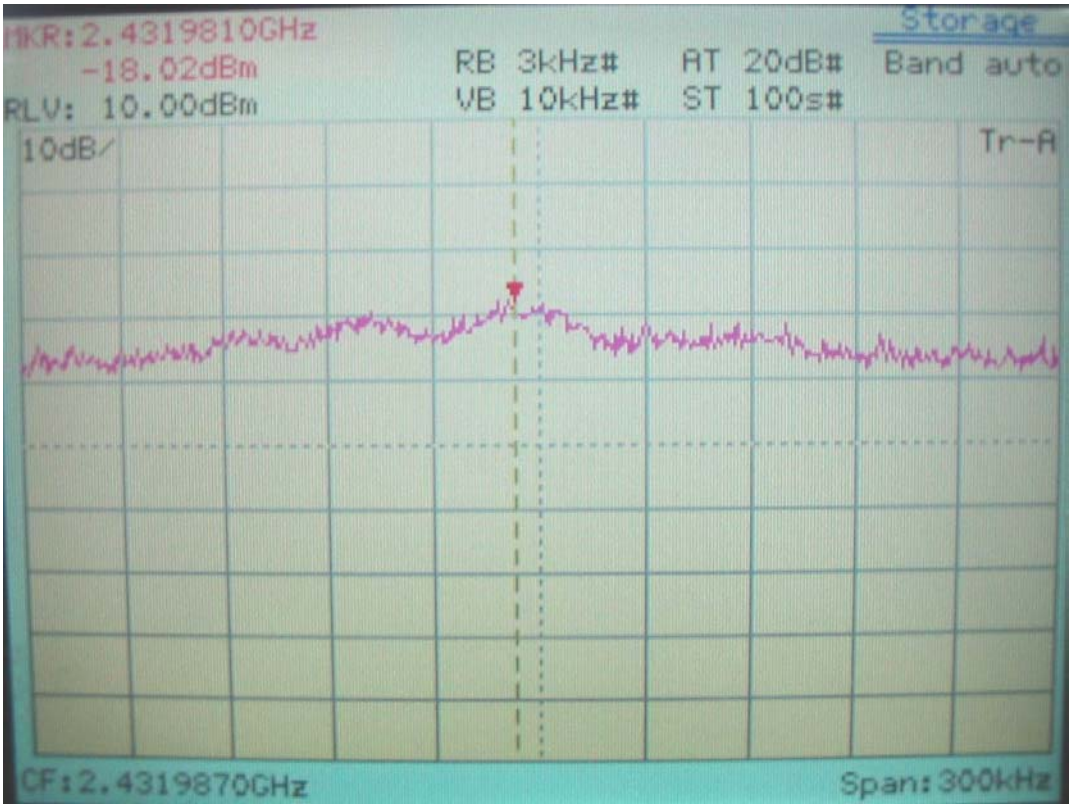


Ant #2

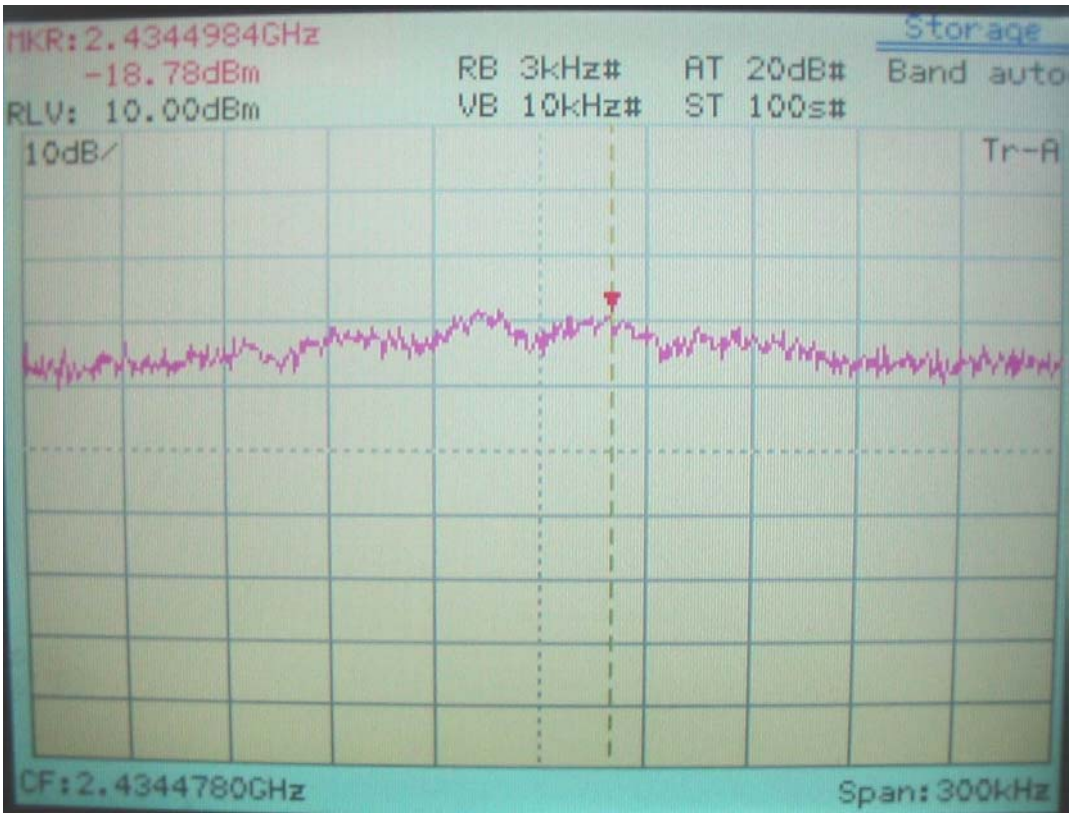


Power Spectral Density for IEEE 802.11n 40M Channel 06, 2437MHz

Ant #1

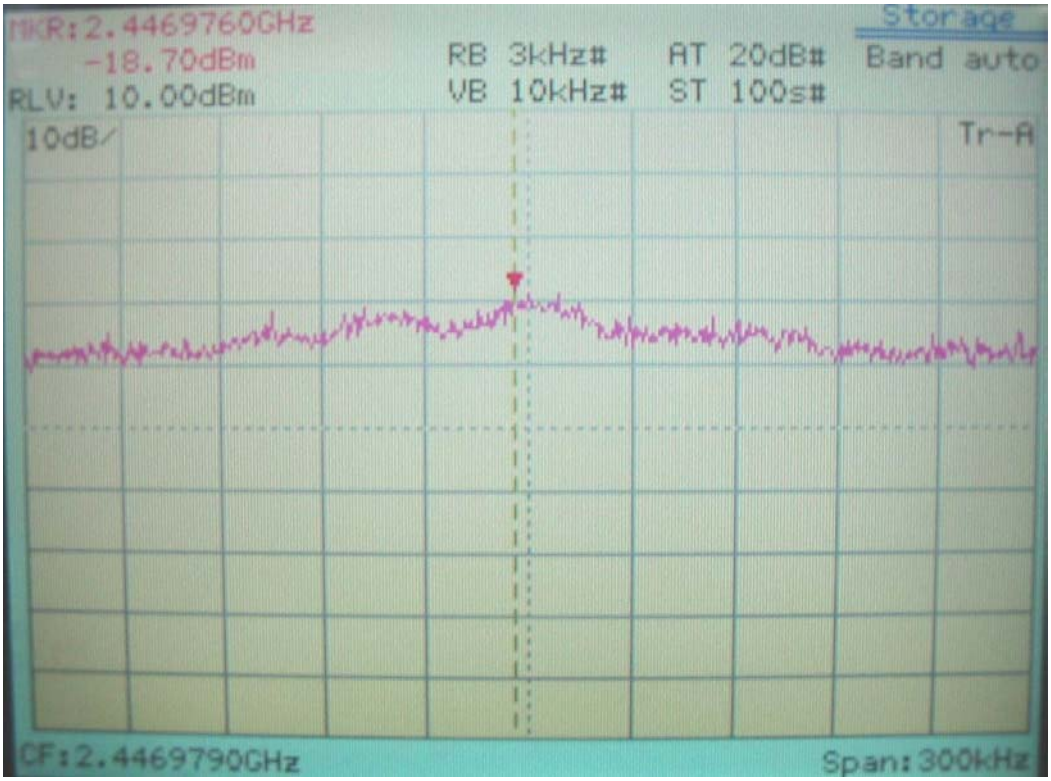


Ant #2



Power Spectral Density for IEEE 802.11n 40M Channel 09, 2452MHz

Ant #1



Ant #2