

MEASUREMENT REPORT
of
***802.11n All-in-1 Wireless ADSL2/2+
Home Gateway***

Applicant : ASUSTek Computer Inc.
EUT : 802.11n All-in-1 Wireless ADSL2/2+ Home Gateway
Model No. : DSL-N13
FCC ID : MSQDSL N13

Tested by :

Training Research Co., Ltd.

TEL : 886-2-26935155

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No. 255, Nanyang Street, Shijr, Taipei Hsien 221, Taiwan, R.O.C.

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.

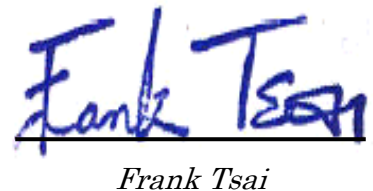
We further submit that the energy emitted by the sample EUT tested as described in the report is **in compliance with** the technical requirements set forth in the FCC Rules Part 15 Subpart C Section 15.247.

Applicant : ASUSTek Computer Inc.
Applicant Address : 4F, No. 150, Li-Te Rd., Peitou, Taipei, Taiwan, R.O.C.
Product Name : 802.11n All-in-1 Wireless ADSL2/2+ Home Gateway
Model : DSL-N13
Report No. : A5415070276
Test Date : December 19, 2007 ~ April 9, 2008

Prepared by:


Jack Tsai

Approved by:


Frank Tsai

Conditions of issue :

- (1) **This test report shall not be reproduced except in full, without written approval of TRC. And the test result contained within this report only relate to the sample submitted for testing.**
- (2) **This report must not be used by the client to claim product endorsement by NVLAP or any agency of U.S. Government.**
- (3) **This test report, measurements made by TRC are traceable to the NIST only Conducted and Radiated Method.**



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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 : MSQDSL13

Product Name : 802.11n All-in-1 Wireless ADSL2/2+ Home Gateway

Model Name : DSL-N13

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 : RJ45 cable x 1, 1.0m length, non-shielded, no ferrite core
RJ45 cable x 2, 1.5m length, non-shielded, no ferrite core
RJ45 cable x 1, 30m length, non-shielded, no ferrite core
RJ11 cable x 1, 30m length, non-shielded, no ferrite core
USB cable x 1, 3.0m length, shielded, with ferrite core

Power Type : Powered by the switching adapter,
Manufacture: AMIGO
Model: AMS3-1201200FU
I/P: 100 ~ 240VAC ~ 50/60Hz 0.5A
O/P: 12VDC 1.2A.
186cm 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 USB-downstream port is connected with a USB Flash Drive, another USB-downstream port is connected with the Printer.
- 1.3.3 The LAN1 port and ADSL port of EUT are connected to a LAN card and ADSL simulator.
- 1.3.4 The LAN2 and LAN3 ports are terminated by RJ45 cables.
- 1.3.5 Connected the LAN4 port of EUT with the LAN of PC. Using PC and software provided by the manufacturer to control EUT, the test is performed under the specific conditions.
- 1.3.6 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 : **Accex**
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

USB Game pad : **Padix, Rockfire**
Model No. : QF-305u, QF-337uv
Serial No. : 81100848, KR91379759
FCC ID : DoC Approved, None (CE approval)
BSMI : None, 3862A574
Power type : By PC
Data cable : Shielded, 1.76m length no ferrite core (1.81m with ferrite core)

USB Mouse : **HP**
Model No. : M-UAE86
Serial No. : F93A90A5BU10G7U
FCC ID : Doc Approved
BSMI : T41126
Power type : By PC
Power cord : Shielded, 1.83m length, Plastic hood, No ferrite core

PS2 Keyboard : **HP**
Model No. : 5187-0343, KB0133, 5181
Serial No. : BE21700404, 265987-AB1 Tch 323686-AB1, BE21700405
FCC ID : DoC Approved
BSMI : 3892C981, R31310, 3892C981
Power type : By PC
Data cable : Shielded, 1.85m length, with ferrite core

Notebook : **IBM Think Pad X20**
Model No. : 2662-11T
Serial No. : FX-1192200/09
FCC ID : N/A, Doc Approved
BSMI : 3892B565

Adaptor : **IBM**
Model No. : PA2450U
Serial No. : 02K6654
Power type : I/P: 100 ~ 240Vac, 50 ~ 60 Hz, 0.5A ~ 1.2A
O/P: 16Vdc, 4.5A
Power cord : Non-shielded, 1.80m length, Plastic, with ferrite core

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

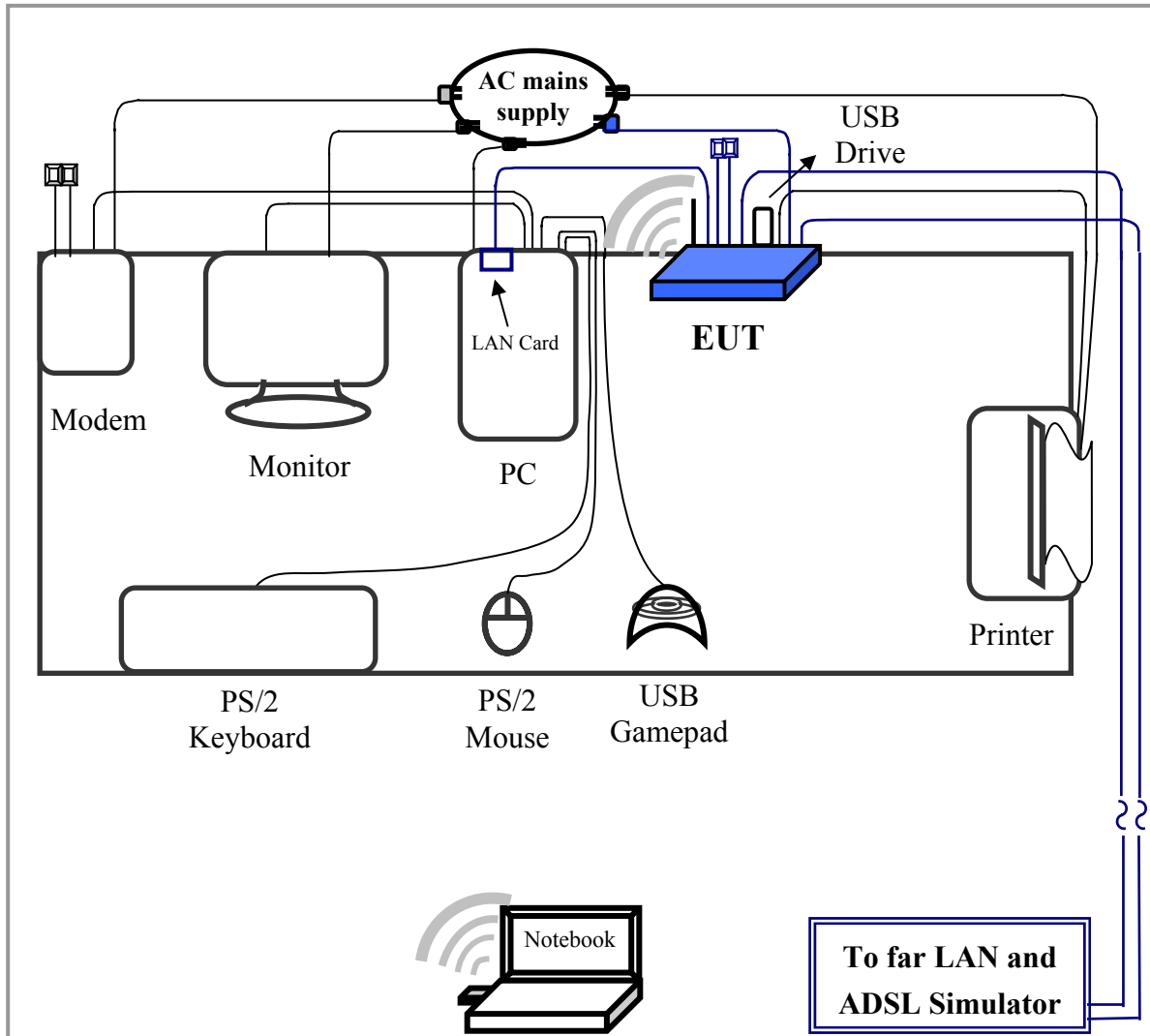
USB Flash Drive : **City-Netek Inc.**
Model No. : CN-2108
FCC ID : DoC Approved
Power cord : Shielded, 1.0m length, no ferrite core

ADSL

Emulator : **PARADYNE.**
Model No. : 2621-A3-431
Serial No. : 8075634
Power type : 100 ~ 240VAC / 50 ~ 60Hz, 1.0A, Switching

1.5 Configuration of System Under Test

1.5.1 Conducted and Radiated



Connections of Equipment

- PC:**
- *VGA Port a monitor
 - *Serial Port an external modem
 - *USB#1 Port a USB gamepad
 - *PS/2-key Port a PS/2 keyboard
 - *USB#2 Port a USB mouse
 - *LAN 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 LAN port.

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, 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 can be equipped with un-detachable antenna. The external antenna is affixed to the EUT (Integral antenna). The antenna requirement stated in Section 15.203 is inapplicable to this EUT.

The custom antenna specification of list as below:

1. Manufacture : CORTEC TECHNOLOGY INC.
Part No : AN2400-1701BX
Connector : I-PEX MHF Plug Connector
Antenna Type : Dipole Antenna
Antenna Gain : 3.7dBi
2. Manufacturer : CORTEC TECHNOLOGY INC.
Part No : AN2400-1702BX
Connector : I-PEX MHF Plug Connector
Antenna Type : Dipole Antenna
Antenna Gain : 3.7dBi

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

Instrument Name	Model No.	Brand	Calibration Date	
			Serial No.	Next time
EMI Receiver	8546A	HP	3520A00242	09/05/08
RF Filter Section	85460A	HP	3448A00217	09/05/08
LISN (EUT)	LISN-01	TRC	99-05	05/10/08
LISN (Support E.)	LISN-01	TRC	9912-03, 04	06/22/08
Pre-amplifier	15542 ZFL-500	Mini – Circuits	0 0117	05/04/08
6dB Attenuator	MCL BW-S6W2	Mini – Circuits	9915 – Conducted	04/10/08
10dB Attenuator	A5542 VAT010	Mini – Circuits	0215 – Conducted	04/10/08
Coaxial Cable (2 meter)	A30A30-0058-50FS-2M	Jyebao	SMA-08	04/10/08
Coaxial Cable (1.1 meter)	A30A30-0058-50FS-1M	Jyebao	SMA-09	04/10/08
Coaxial Cable (20 meter)	RG-214/U	Jyebao	NP-01	04/10/08
Coaxial Cable (20 meter)	RG-214/U	Jyebao	NP-02	04/10/08
Auto Switch Box (< 30MHz)	ASB-01	TRC	9904-01	04/10/08

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

<i>Power Connected Emissions</i>					<i>Class B</i>		
<i>Conductor</i>	<i>Frequency (KHz)</i>	<i>Peak (dBµV)</i>	<i>QP (dBµV)</i>	<i>Average (dBµV)</i>	<i>QP-limit (dBµV)</i>	<i>AVG-limit (dBµV)</i>	<i>Margin (dB)</i>
Line 1	405.995	55.43	52.80	38.27	58.83	48.83	-6.03
	472.615	53.25	50.50	35.95	56.97	46.97	-6.47
	517.640	55.60	51.21	40.16	56.00	46.00	-4.79
	692.860	56.18	52.86	34.52	56.00	46.00	-3.14
	818.510	54.67	50.89	33.29	56.00	46.00	-5.11
	1191.385	53.05	48.46	34.02	56.00	46.00	-7.54
Line 2	402.235	55.13	52.73	41.30	59.03	49.03	-6.30
	504.545	55.32	52.04	34.60	56.00	46.00	-3.96
	538.530	56.34	53.69	39.64	56.00	46.00	-2.31
	689.195	56.36	51.51	24.65	56.00	46.00	-4.49
	1259.060	53.26	48.87	36.06	56.00	46.00	-7.13
	4667.325	55.29	50.33	36.96	56.00	46.00	-5.67

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	401.180	60.96	50.08	39.82	58.83	48.83	-8.75
	441.695	52.47	50.14	36.03	57.63	47.63	-7.49
	567.560	52.40	50.21	34.16	56.00	46.00	-5.79
	820.310	48.76	46.00	28.85	56.00	46.00	-10.00
	1072.630	49.00	45.90	32.51	56.00	46.00	-10.10
	4981.180	51.61	47.63	35.37	60.00	50.00	-12.37
Line 2	403.250	52.71	50.82	38.05	58.83	48.83	-8.01
	441.875	53.00	50.73	36.99	57.63	47.63	-6.90
	535.695	52.47	50.30	37.65	56.00	46.00	-5.70
	567.335	52.68	50.42	34.54	56.00	46.00	-5.58
	696.530	49.96	46.19	32.13	56.00	46.00	-9.81
	902.270	50.67	45.88	35.14	56.00	46.00	-10.12

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	394.085	55.09	47.95	41.31	58.91	48.91	-7.60
	537.585	52.42	50.36	35.48	56.00	46.00	-5.64
	695.180	49.68	46.14	30.66	56.00	46.00	-9.86
	937.800	50.28	45.27	31.10	56.00	46.00	-10.73
	1128.625	48.69	42.45	31.44	56.00	46.00	-13.55
	3404.325	47.13	41.36	27.44	56.00	46.00	-14.64
Line 2	403.520	53.13	51.05	37.84	58.83	48.83	-7.78
	442.285	53.27	51.08	37.78	57.74	47.74	-6.66
	568.160	52.98	50.93	35.94	56.00	46.00	-5.07
	882.830	51.45	48.55	31.96	56.00	46.00	-7.45
	1074.025	50.88	47.50	35.63	56.00	46.00	-8.50
	1575.835	47.83	43.83	30.66	56.00	46.00	-12.17

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	501.430	55.49	52.60	37.78	56.03	46.03	-3.43
	664.875	55.50	52.80	36.75	56.00	46.00	-3.20
	686.245	56.33	53.05	34.20	56.00	46.00	-2.95
	751.440	54.82	51.65	34.91	56.00	46.00	-4.35
	1186.145	53.38	50.00	36.32	56.00	46.00	-6.00
	4847.855	55.53	49.84	34.27	56.00	46.00	-6.16
Line 2	398.425	54.88	52.37	39.58	59.11	49.11	-6.74
	517.280	56.78	52.01	41.96	56.00	46.00	-3.99
	686.425	56.45	53.08	34.49	56.00	46.00	-2.92
	1179.735	54.02	48.57	35.79	56.00	46.00	-7.43
	4498.670	54.57	50.17	37.12	56.00	46.00	-5.83
	4865.740	55.67	50.13	36.67	56.00	46.00	-5.87

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	334.000	47.31	---	---	60.74	50.74	-3.43
	464.650	55.01	52.76	43.07	56.97	46.97	-3.90
	576.590	50.74	47.19	38.08	56.00	46.00	-7.92
	994.760	50.03	45.69	33.26	56.00	46.00	-10.31
	1383.875	47.31	44.03	32.14	56.00	46.00	-11.97
	4958.505	50.76	45.49	33.33	56.00	46.00	-10.51
Line 2	454.425	54.57	51.44	44.37	57.51	47.51	-3.14
	659.955	49.81	47.01	37.04	56.00	46.00	-8.96
	936.820	48.87	46.52	31.69	56.00	46.00	-9.48
	1205.290	47.45	44.73	31.61	56.00	46.00	-11.27
	3549.560	46.59	40.55	28.20	56.00	46.00	-15.45
	4611.145	49.36	43.02	29.16	56.00	46.00	-12.98

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	317.000	46.17	---	---	61.23	51.23	-5.06
	403.520	53.03	50.93	37.91	58.83	48.83	-7.90
	554.270	52.42	28.60	18.98	56.00	46.00	-27.02
	882.615	51.22	47.91	30.83	56.00	46.00	-8.09
	1679.440	45.76	42.53	28.93	56.00	46.00	-13.47
	4857.570	51.62	46.64	33.80	56.00	46.00	-9.36
Line 2	403.580	53.19	51.05	37.93	58.91	48.91	-7.86
	538.215	53.59	51.00	35.65	56.00	46.00	-5.00
	895.430	50.60	45.69	33.53	56.00	46.00	-10.31
	3704.635	47.70	43.20	29.29	56.00	46.00	-12.80
	5127.225	50.72	44.77	33.49	60.00	50.00	-15.23
	8560.000	46.13	---	---	60.00	50.00	-3.87

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	534.210	58.70	53.57	37.35	56.00	46.00	-2.43
	664.020	55.43	52.85	37.14	56.00	46.00	-3.15
	686.515	56.29	53.00	34.05	56.00	46.00	-3.00
	812.320	54.88	51.29	32.41	56.00	46.00	-4.71
	1185.875	53.29	49.90	36.13	56.00	46.00	-6.10
	4778.835	55.39	49.24	31.63	56.00	46.00	-6.76
Line 2	459.110	57.54	50.16	38.41	57.11	47.11	-6.95
	512.460	56.48	51.91	41.80	56.00	46.00	-4.09
	750.045	55.02	52.11	33.93	56.00	46.00	-3.89
	1129.345	53.74	50.99	37.65	56.00	46.00	-5.01
	1186.010	54.21	50.89	37.56	56.00	46.00	-5.11
	4527.975	55.28	49.34	36.38	60.00	50.00	-6.66

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	403.985	53.78	51.58	38.06	58.91	48.91	-7.33
	567.515	52.65	50.34	34.68	56.00	46.00	-5.66
	878.385	51.50	42.51	29.46	56.00	46.00	-13.49
	1385.945	48.83	44.36	32.03	56.00	46.00	-11.64
	3204.055	46.09	40.86	27.95	56.00	46.00	-15.14
	4980.390	52.36	48.15	36.23	60.00	50.00	-11.85
Line 2	401.900	53.67	51.73	40.47	58.83	48.83	-7.01
	567.395	52.56	50.33	34.68	56.00	46.00	-5.67
	889.220	50.64	46.83	33.24	56.00	46.00	-9.17
	3504.375	47.14	41.96	27.38	56.00	46.00	-14.04
	4980.585	51.96	48.00	35.77	60.00	50.00	-12.00
	15515.625	39.47	33.82	25.70	60.00	50.00	-24.30

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	402.575	53.60	51.58	39.67	58.00	48.00	-7.25
	537.450	54.25	52.10	37.39	56.00	46.00	-3.90
	883.145	51.68	48.64	31.76	56.00	46.00	-7.36
	1392.510	49.50	43.83	33.29	56.00	46.00	-12.17
	3401.625	46.44	41.28	28.62	56.00	46.00	-14.72
	4852.530	52.16	47.17	34.87	56.00	46.00	-8.83
Line 2	403.520	53.62	51.55	38.41	58.83	48.83	-7.28
	567.605	52.86	50.44	35.05	56.00	46.00	-5.56
	882.515	51.01	47.38	29.55	56.00	46.00	-8.62
	1324.945	46.04	42.58	29.73	56.00	46.00	-13.42
	2872.000	42.53	---	---	56.00	46.00	-3.47
	4959.575	52.05	47.41	35.13	60.00	50.00	-12.59

Test mode: IEEE 802.11n 40M Channel 3

<i>Power Connected Emissions</i>					<i>Class B</i>		
<i>Conductor</i>	<i>Frequency (KHz)</i>	<i>Peak (dBμV)</i>	<i>QP (dBμV)</i>	<i>Average (dBμV)</i>	<i>QP-limit (dBμV)</i>	<i>AVG-limit (dBμV)</i>	<i>Margin (dB)</i>
Line 1	401.020	55.02	54.14	35.98	59.03	49.03	-7.89
	531.695	57.18	54.40	39.15	56.00	46.00	-1.60
	687.460	56.38	53.36	35.52	56.00	46.00	-2.64
	1062.825	53.45	49.98	35.45	56.00	46.00	-6.02
	3497.560	51.57	46.39	33.54	56.00	46.00	-9.61
	4558.105	54.62	49.32	35.50	56.00	46.00	-6.68
Line 2	400.210	54.77	51.67	36.74	59.03	49.03	-7.36
	532.100	57.32	54.41	38.89	56.00	46.00	-1.59
	687.260	56.40	53.37	35.35	56.00	46.00	-2.63
	1186.820	54.11	50.94	37.55	56.00	46.00	-5.06
	3557.885	50.74	46.42	32.12	56.00	46.00	-9.58
	4495.465	54.71	50.31	37.36	56.00	46.00	-5.69

Test mode: IEEE 802.11n 40M Channel 6

<i>Power Connected Emissions</i>					<i>Class B</i>		
<i>Conductor</i>	<i>Frequency (KHz)</i>	<i>Peak (dBμV)</i>	<i>QP (dBμV)</i>	<i>Average (dBμV)</i>	<i>QP-limit (dBμV)</i>	<i>AVG-limit (dBμV)</i>	<i>Margin (dB)</i>
Line 1	402.575	53.73	51.87	39.79	58.83	48.83	-6.96
	457.360	57.01	48.08	40.89	56.97	46.97	-6.08
	537.090	54.31	52.28	37.59	56.00	46.00	-3.72
	694.280	50.56	47.06	30.28	56.00	46.00	-8.94
	886.475	51.47	47.93	33.63	56.00	46.00	-8.07
	1071.890	50.59	47.46	34.78	56.00	46.00	-8.54
Line 2	402.820	53.49	51.77	39.31	59.03	49.03	-7.26
	467.080	51.78	48.99	38.32	56.97	46.97	-7.98
	536.505	54.09	52.17	37.92	56.00	46.00	-3.83
	882.245	51.11	47.30	29.52	56.00	46.00	-8.70
	1072.655	49.18	46.16	32.98	56.00	46.00	-9.84
	4916.605	52.26	47.80	35.33	56.00	46.00	-8.20

Test mode: IEEE 802.11n 40M Channel 9

<i>Power Connected Emissions</i>					<i>FCC Class B</i>		
<i>Conductor</i>	<i>Frequency (KHz)</i>	<i>Peak (dBμV)</i>	<i>QP (dBμV)</i>	<i>Average (dBμV)</i>	<i>QP-limit (dBμV)</i>	<i>AVG-limit (dBμV)</i>	<i>Margin (dB)</i>
Line 1	400.190	53.77	51.47	41.89	58.83	48.83	-6.94
	451.010	58.16	48.65	37.05	57.63	47.63	-6.40
	537.315	54.26	52.00	38.21	56.00	46.00	-4.00
	583.270	51.96	46.18	33.68	56.00	46.00	-7.79
	885.890	51.57	48.16	34.99	56.00	46.00	-7.84
	4916.995	52.14	48.06	35.66	56.00	46.00	-7.94
Line 2	403.400	53.85	51.53	38.58	58.91	48.91	-7.38
	442.510	52.36	50.14	37.17	57.74	47.74	-7.60
	537.455	54.06	51.96	37.05	56.00	46.00	-4.04
	693.560	50.09	46.10	27.31	56.00	46.00	-9.90
	882.650	50.99	47.12	29.87	56.00	46.00	-8.88
	1134.900	48.93	44.07	31.67	56.00	46.00	-11.93

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

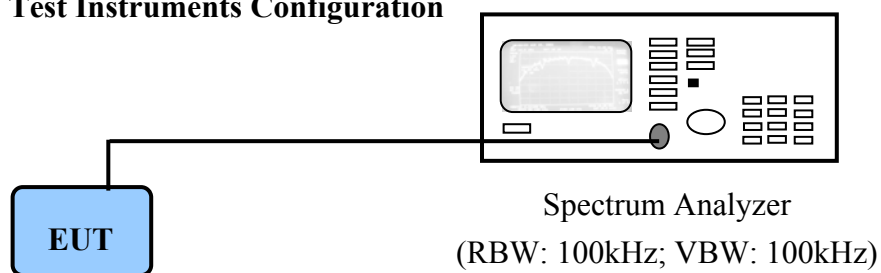
Direct Sequence System is a spread spectrum system in which the carrier has been modulated by a high speed spreading code and an information data stream. The high speed code sequence dominates the “modulating function” and is the direct cause of the wide spreading of the transmitted signal. In the operational 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	12/19/08

5.4 Test Result of Bandwidth

IEEE 802.11b

Channel	Limited (kHz)	Antenna(MHz)
CH01	≥ 500	12.20
CH06	≥ 500	12.20
CH11	≥ 500	12.20

IEEE 802.11g

CH01	≥ 500	16.80
CH06	≥ 500	16.80
CH11	≥ 500	16.80

IEEE 802.11n 20M

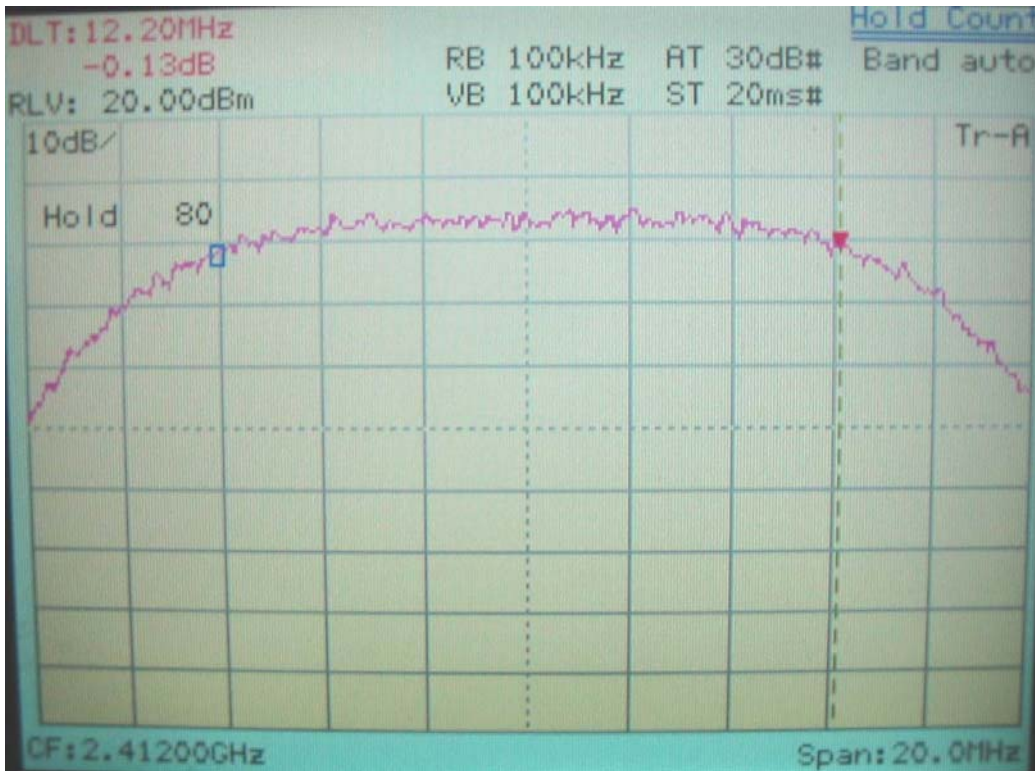
Channel	Limit (kHz)	Antenna#1(MHz)	Antwnna#2(MHz)
CH01	≥ 500	18.04	18.08
CH06	≥ 500	18.04	18.04
CH11	≥ 500	18.04	18.04

IEEE 802.11n 40M

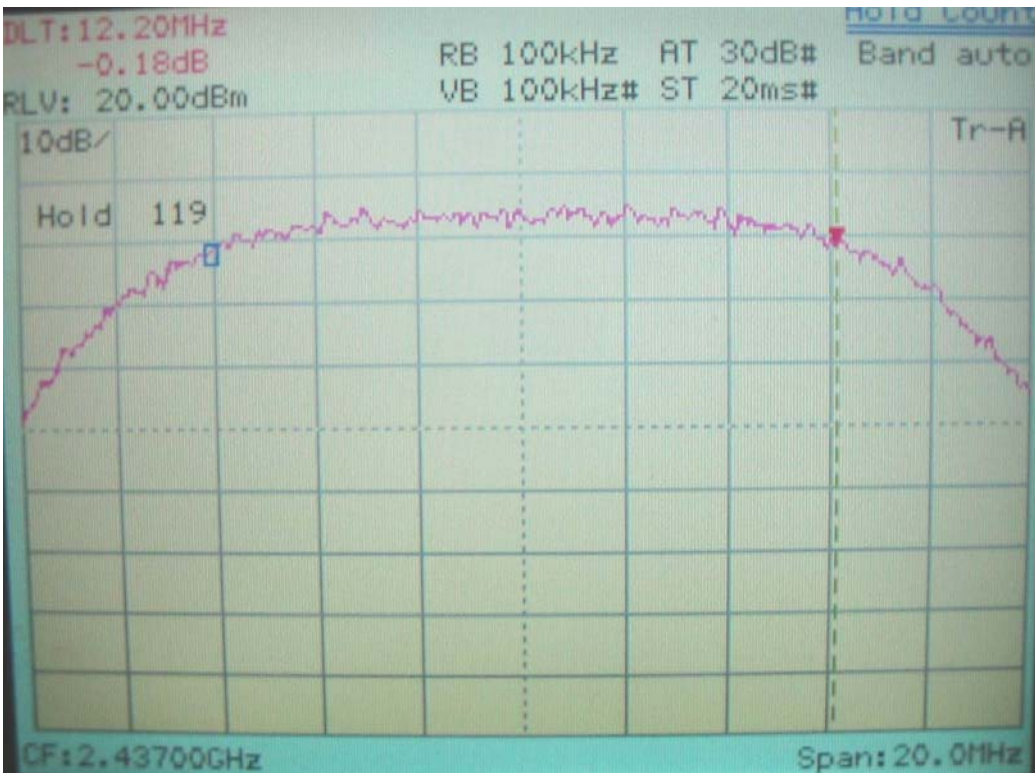
CH03	≥ 500	37.00	37.00
CH06	≥ 500	37.00	37.00
CH09	≥ 500	37.00	37.00

- 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



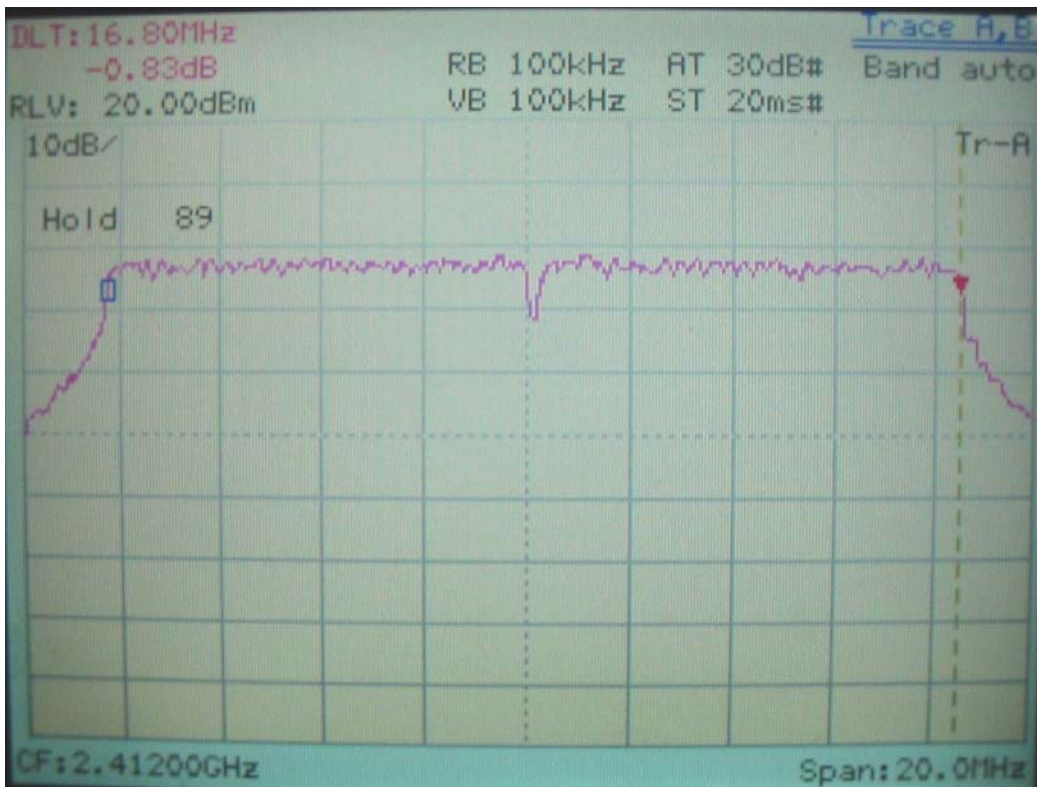
6dB Bandwidth of Channel CH06 IEEE 802.11b, 2437MHz



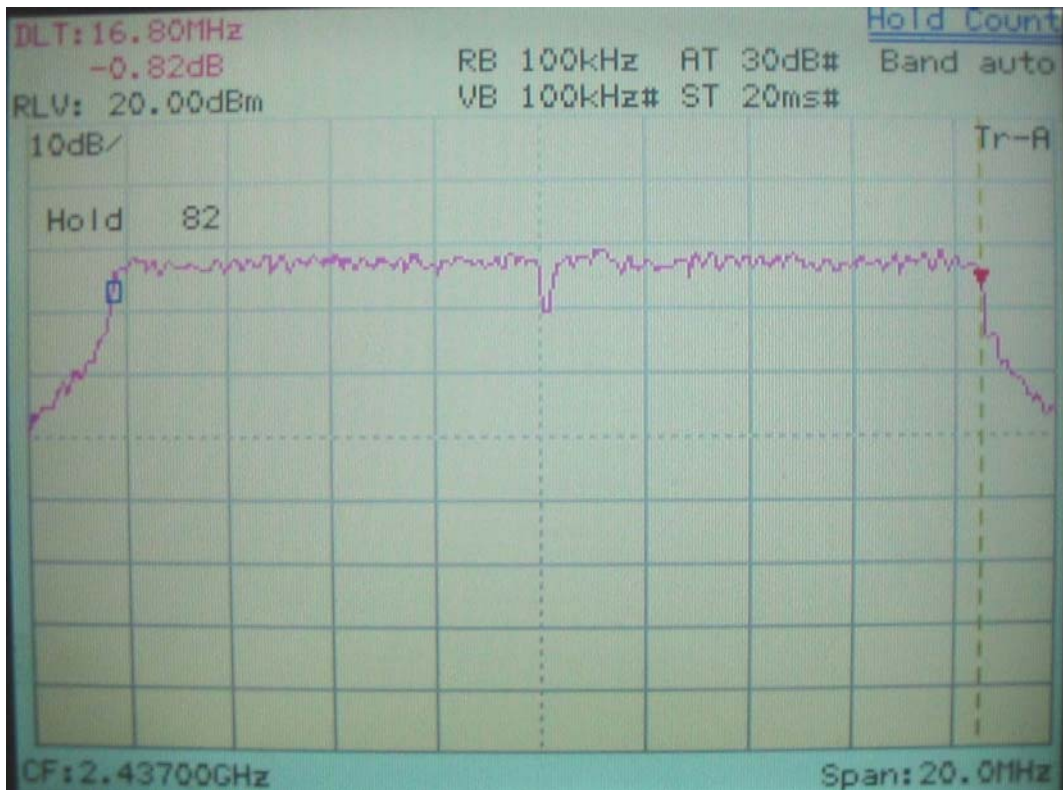
6dB Bandwidth of Channel CH11 IEEE 802.11b, 2462MHz



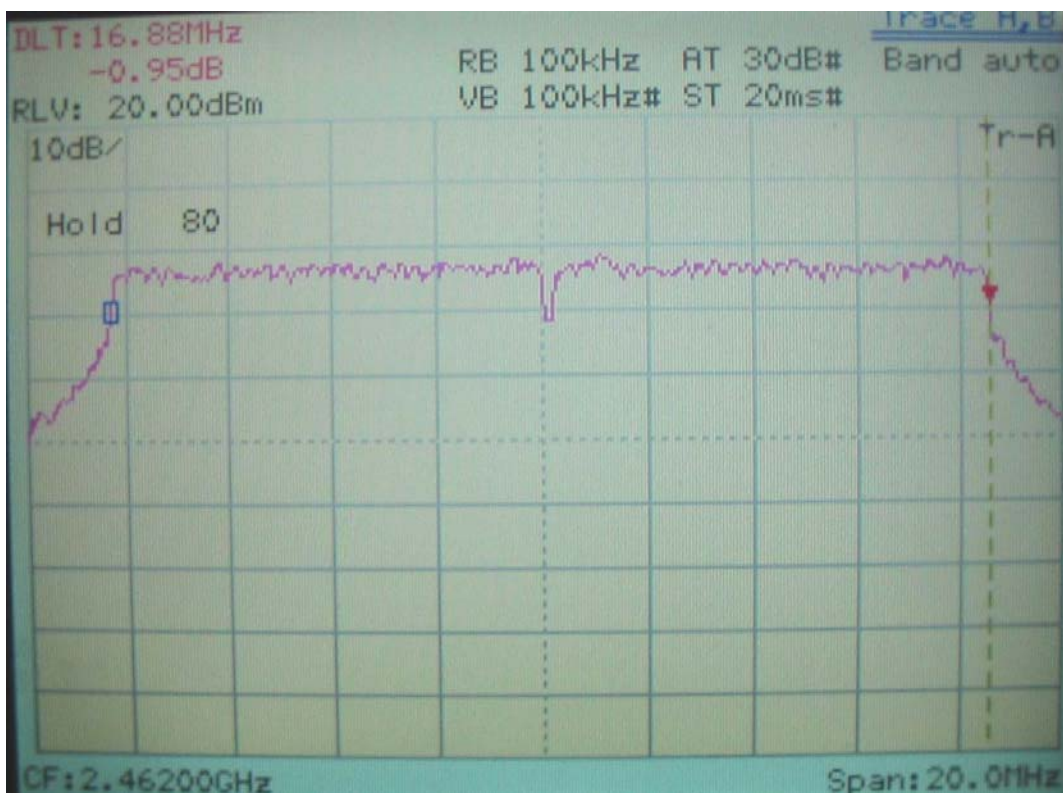
6dB Bandwidth of Channel CH01 IEEE 802.11g, 2412MHz



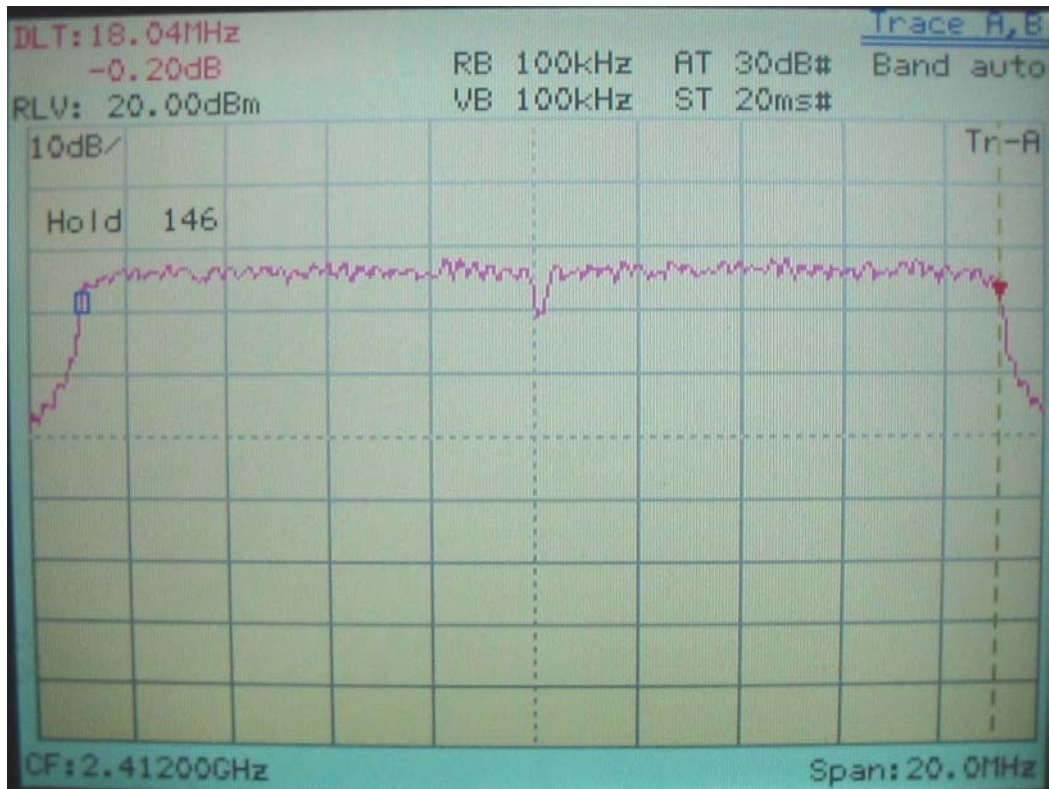
6dB Bandwidth of Channel CH06 IEEE 802.11g, 2437MHz



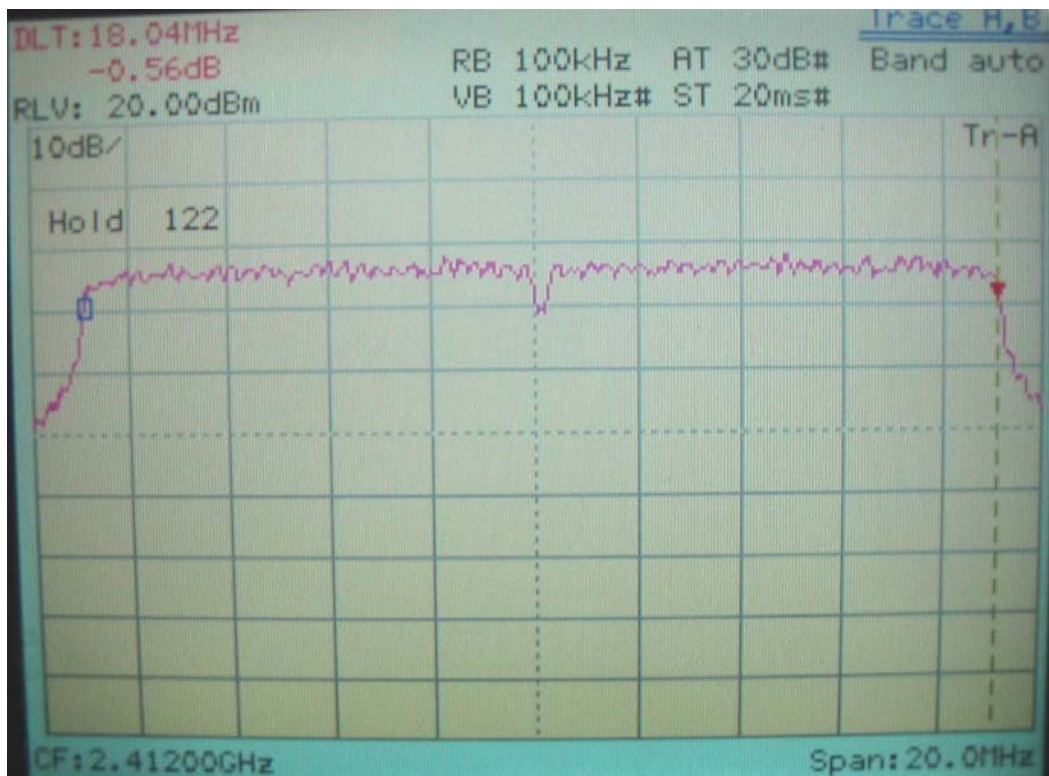
6dB Bandwidth of Channel CH11 IEEE 802.11g, 2462MHz



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

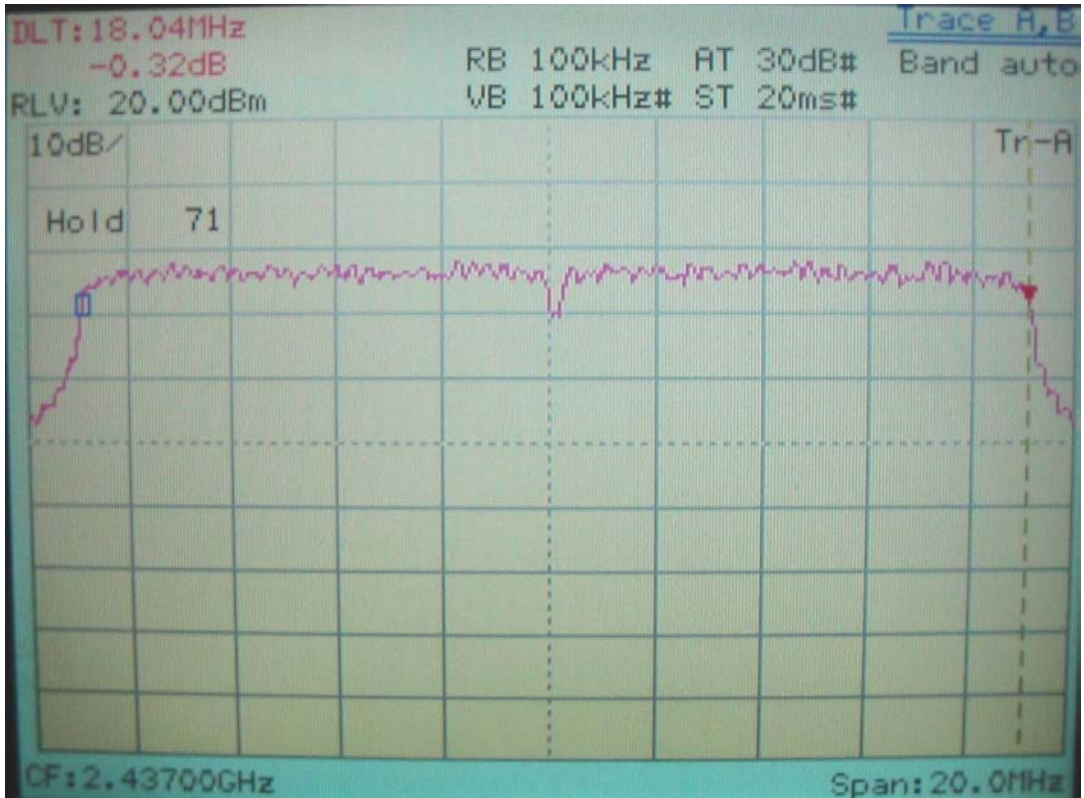


Ant#1

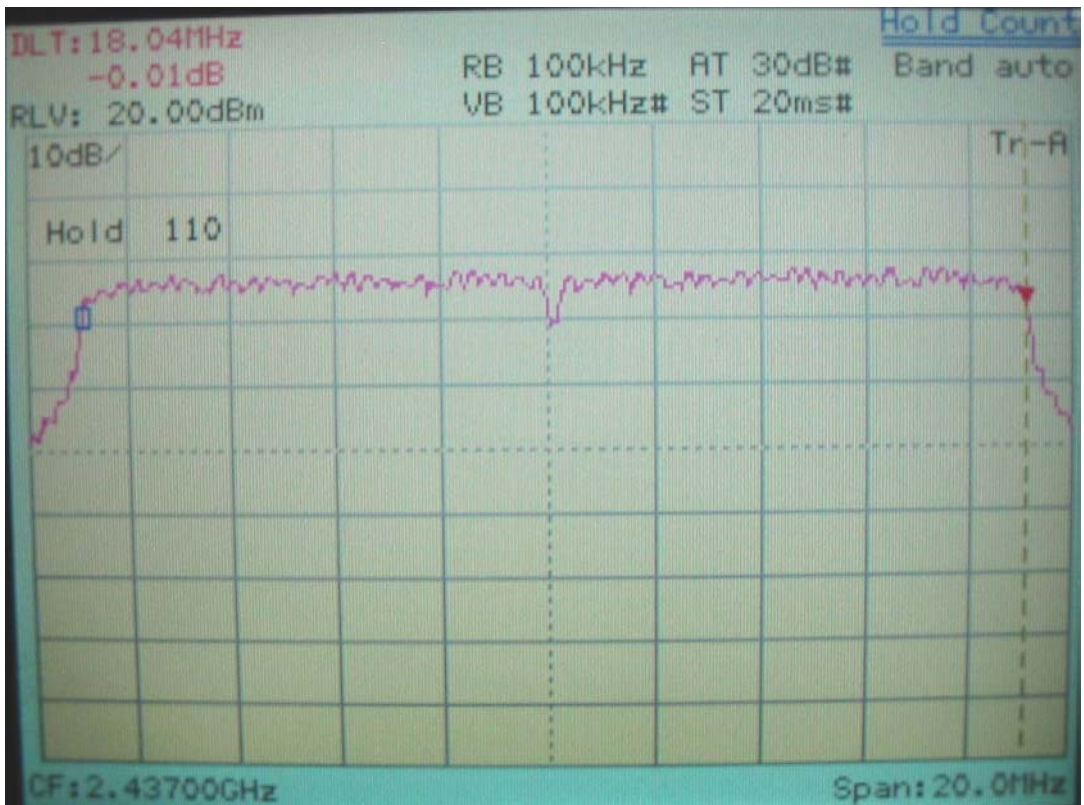


Ant#2

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

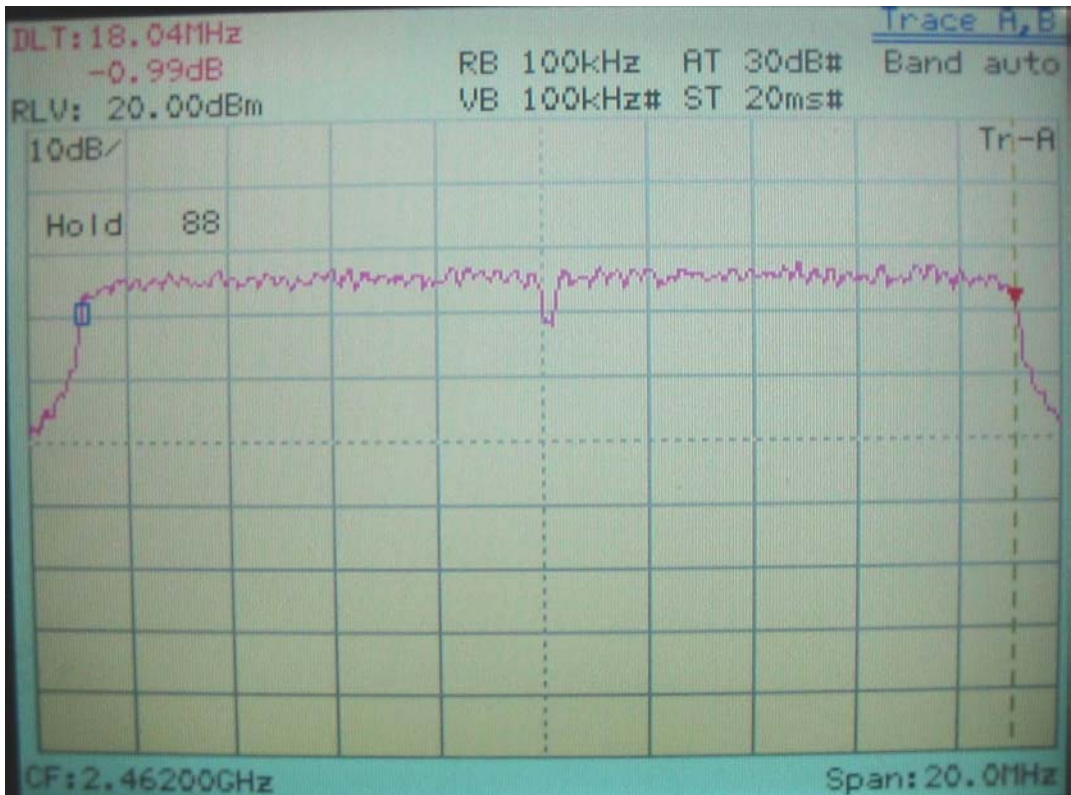


Ant#1

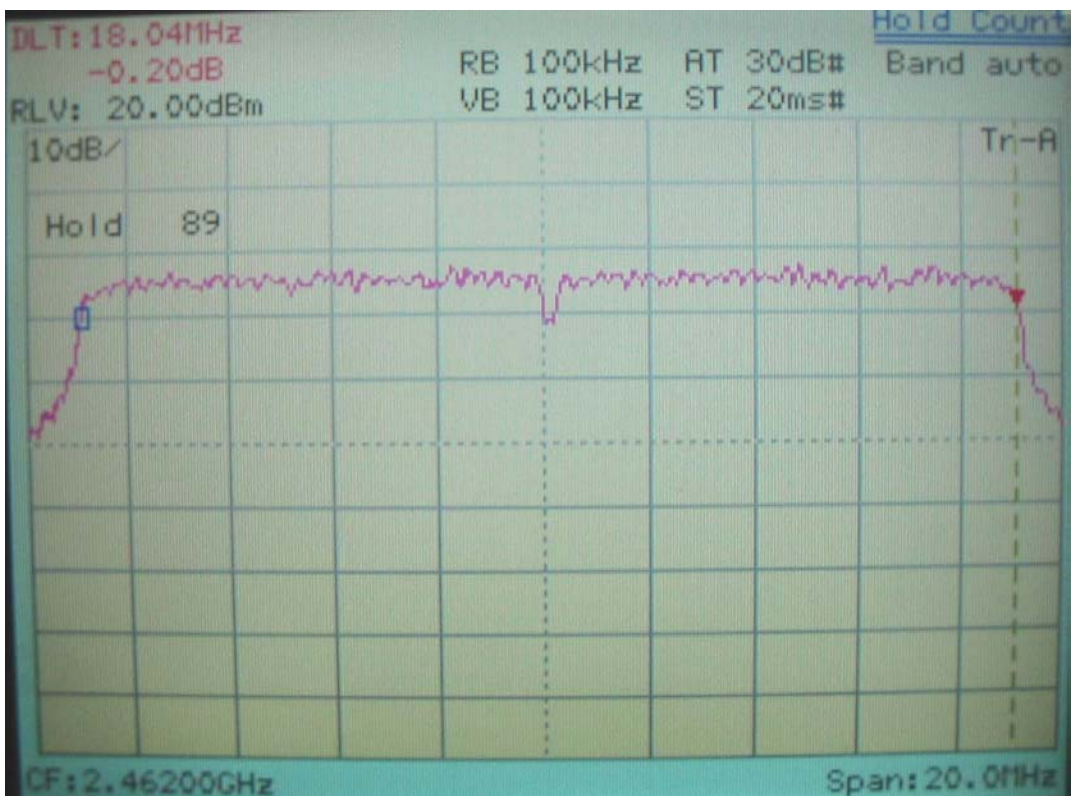


Ant#2

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

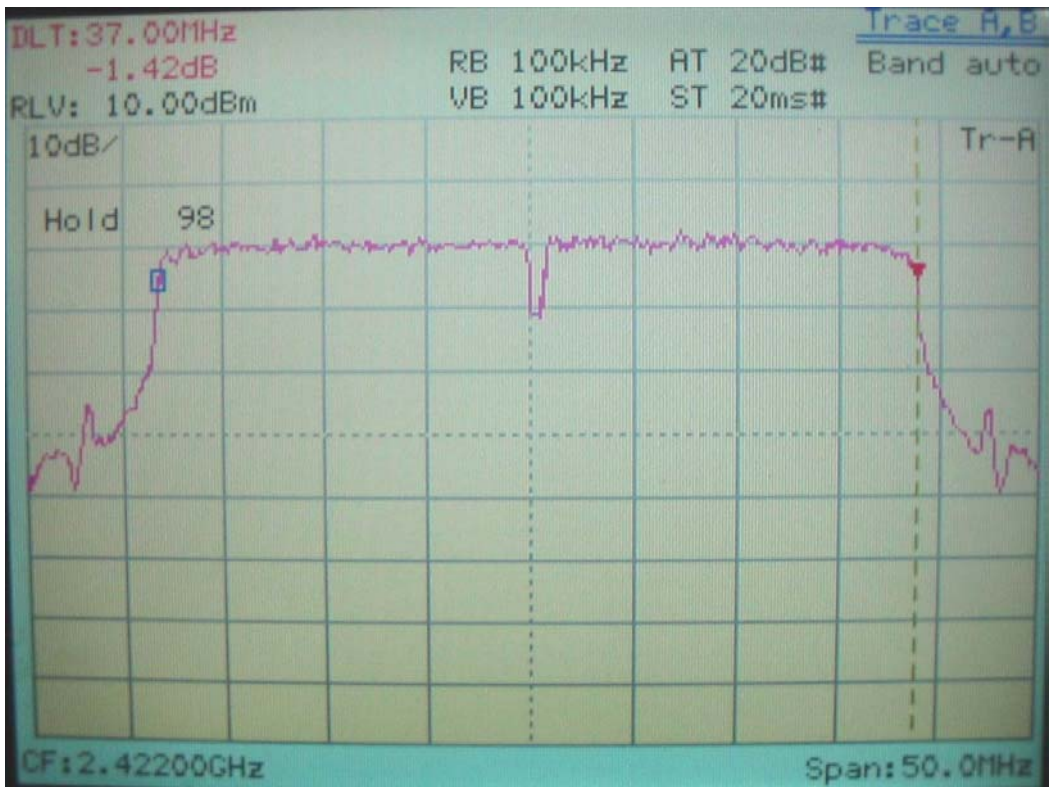


Ant#1

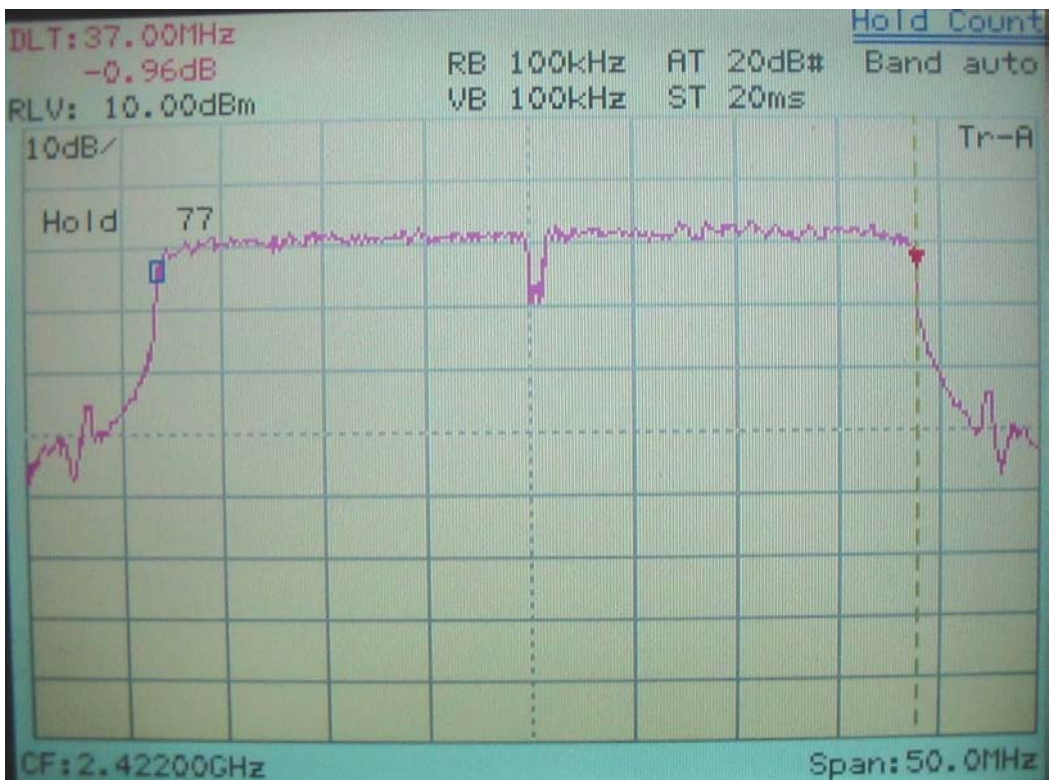


Ant#2

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

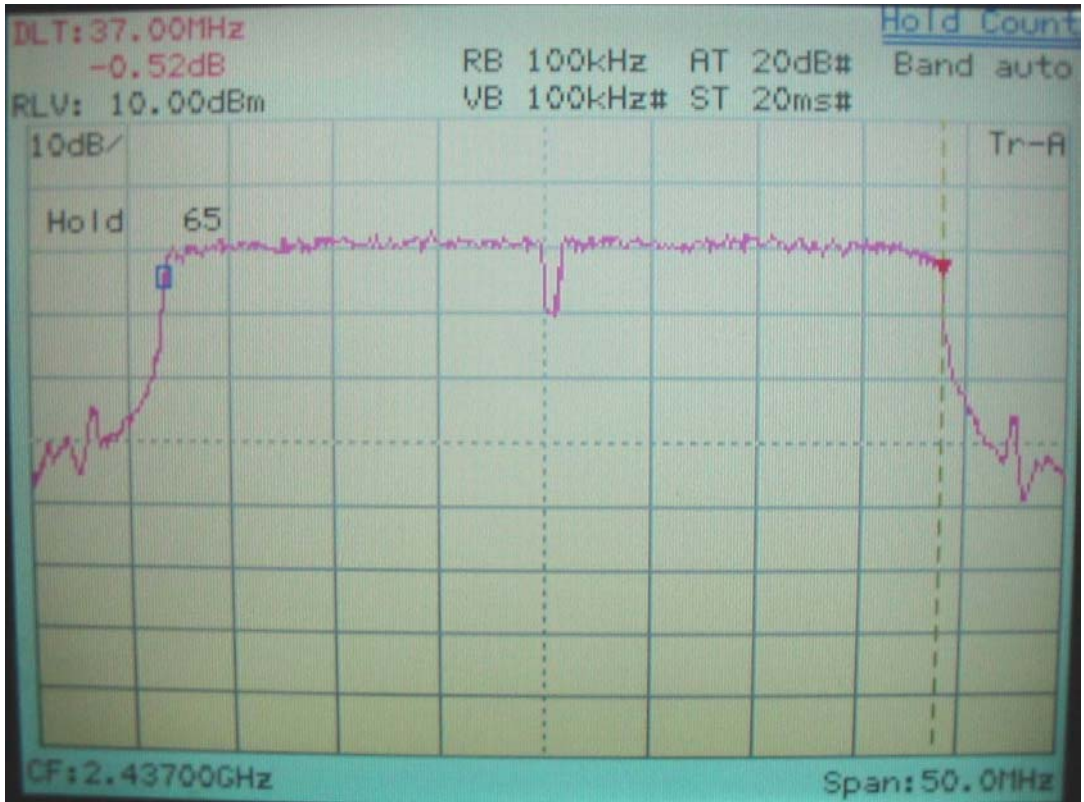


Ant#1



Ant#2

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

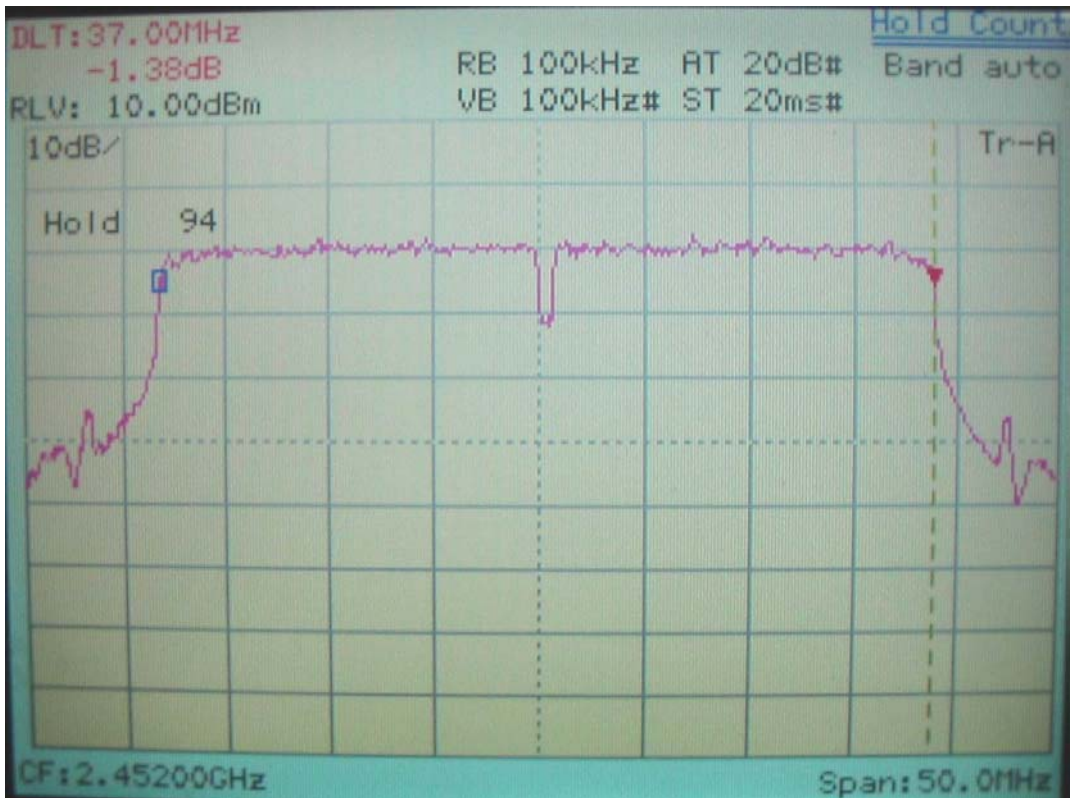


Ant#1

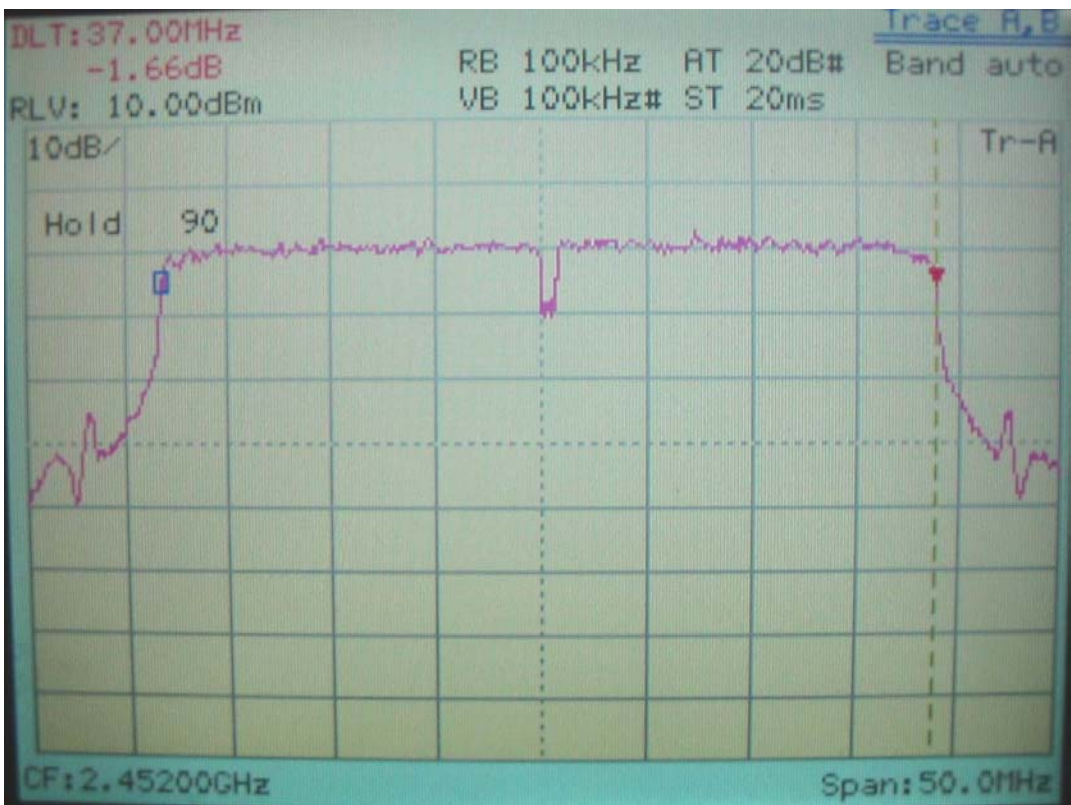


Ant#2

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



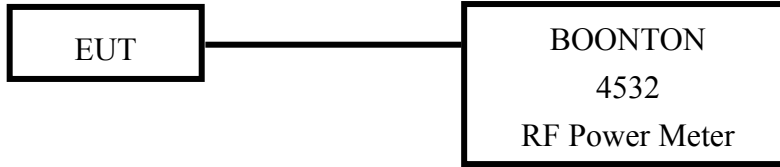
Ant#1



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	06/11/08
Peak Power Sensor	57340	BOONTON	2696	06/11/08

6.3 Test Result

Formula:

$$\text{RF Output of EUT} + |\text{Cable Loss}| = \text{Output Peak Power}$$

Channel (MHz)	Output Level	Cable Loss	Limit	Output Peak Power	
	dBm	dBm	(DSS)	dBm	mW

IEEE 802.11b

CH 01 /2412	20.69	1.00	30dBm	21.69	145.57
CH 06/2437	20.92	1.00	30dBm	21.92	155.60
CH 11/2462	20.71	1.00	30dBm	21.71	148.25

IEEE 802.11g

CH 01 /2412	22.62	1.00	30dBm	23.62	230.14
CH 06 /2437	23.01	1.00	30dBm	24.01	251.77
CH 11 /2462	22.89	1.00	30dBm	23.89	244.91

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	mW
	dBm	dBm	dB	(DSS)		

802.11n 20M

CH Lowest /2412	21.73	21.86	1.00	30dBm	25.81	380.70
CH Middle/2437	22.17	21.99	1.00	30dBm	26.09	406.56
CH Highest/2462	21.61	21.32	1.00	30dBm	25.48	353.00

802.11n 40M

CH Lowest /2422	19.09	19.64	1.00	30dBm	23.38	217.97
CH Middle/2437	19.66	19.61	1.00	30dBm	23.65	231.49
CH Highest/2452	19.18	19.14	1.00	30dBm	23.17	207.51

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 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 (dB μ V/m) is determined by algebraically adding the measured reading in dB μ V, 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

$$F_{Ia} \text{ (dBuV/m)} = F_{Ir} \text{ (dB}\mu\text{V)} + \text{Correction Factors}$$

F_{Ia} : Actual Field Intensity

F_{Ir} : Reading of the Field Intensity

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

For frequency between 1GHz to 25GHz

$$F_{Ia} \text{ (dB}\mu\text{V/m)} = F_{Ir} \text{ (dB}\mu\text{V)} + \text{Correction Factor}$$

F_{Ia} : Actual Field Intensity

F_{Ir} : Reading of the Field Intensity

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

7.2 List of Test Instruments

Instrument Name	Model No.	Brand	Calibration Date	
			Serial No.	Next time
EMI Receiver	8546A	HP	3520A00242	09/05/08
RF Filter Section	85460A	HP	3448A00217	09/05/08
Small Biconical Antenna	UBAA9114 & BBVU9135	SCHWARZECK	127	06/07/07
Pre-amplifier	PA1F	TRC	1FAC	05/08/08
Coaxial Cable (Double shielded, 15 meter)	A30A30-0058-50FS-15M	JYEBAO	SMA-01	05/08/08
Coaxial Cable (1.1 meter)	A30A30-0058-50FS-1M	JYEBAO	SMA-02	05/08/08
Spectrum Analyzer	8564E	HP	3720A00840	03/17/09
Microwave Preamplifier	84125C	HP	US36433002	11/07/08
Horn Antenna	3115	EMCO	9104-3668	05/05/08
Standard Guide Horn Antenna	84125-80008	HP	18-26.5GHz	12/14/08
Standard Guide Horn Antenna	84125-80001	HP	26.5-40GHz	12/14/08
Horn Antenna	1196E (3115)	HP (EMCO)	9704-5178	05/12/08
Pre-amplifier	PA2F	TRC	2F1GZ	04/10/08
Coaxial Cable (3 miter)	A30A30-0058-50FST118	JYEBAO	MSA-05	04/10/08
Coaxial Cable (1 meter)	A30A30-0058-50FST118	JYEBAO	MSA-04	04/10/08

7.3 Test Result of Spurious Radiated Emissions

The highest peak values of radiated emissions from 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 (dB)	Corrected Amplitude (dBμV/m)	Class B (3 m)	
Frequency (MHz)	Amplitude (dBμV)	Ant. H. (m)	Table ()			Limit (dBμV/m)	Margin (dB)
127.00	39.84	1.00	152	-2.84	37.00	43.50	-6.50
226.42	36.88	1.00	254	-3.79	33.09	46.00	-12.91
302.81	36.18	1.00	226	-2.86	33.32	46.00	-12.68
403.45	40.26	1.00	272	-0.92	39.34	46.00	-6.66
504.09	32.16	1.00	21	2.01	34.17	46.00	-11.83
801.15	23.01	1.00	135	11.67	34.68	46.00	-11.32

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

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dBμV/m)	Class B (3 m)	
Frequency (MHz)	Amplitude (dBμV)	Ant. H. (m)	Table ()			Limit (dBμV/m)	Margin (dB)
127.00	41.68	1.00	166	-2.84	38.84	43.50	-4.66
198.54	36.80	1.00	306	-3.36	33.44	43.50	-10.06
236.12	35.10	1.00	176	-3.77	31.33	46.00	-14.67
403.45	33.76	1.00	169	-0.92	32.84	46.00	-13.16
504.09	30.34	1.00	184	2.01	32.35	46.00	-13.65
801.15	25.67	1.00	266	11.67	37.34	46.00	-8.66

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		Correction Factor	Corrected Amplitude		Limit		Margin
			Peak / Ave.			Peak / Ave.		Peak / Ave.		
MHz	m	degree	dBµV		dB/m	dBµV/m		dBµV/m		dB
2141.67	1.00	353	40.00	---	8.49	48.49	---	73.96	53.96	-5.47
2675.00	1.00	249	36.83	---	9.82	46.65	---	73.96	53.96	-7.31
12061.04	1.00	333	37.60	---	9.81	47.41	---	73.96	53.96	-6.55
19296.25	1.00	122	46.96	---	1.60	48.56	---	73.96	53.96	-5.40
21708.12	1.00	242	44.41	---	2.87	47.28	---	73.96	53.96	-6.68
24120.00	1.00	158	44.52	---	3.40	47.92	---	73.96	53.96	-6.04

Test mode: IEEE 802.11b 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
2141.67	1.00	327	42.66	---	8.49	51.15	---	73.96	53.96	-2.81
2465.12	1.00	137	46.86	36.50	9.39	56.25	45.89	73.96	53.96	-8.07
12061.04	1.00	154	37.44	---	9.81	47.25	---	73.96	53.96	-6.71
19296.25	1.00	141	47.15	---	1.60	48.75	---	73.96	53.96	-5.21
21708.12	1.00	254	44.94	---	2.87	47.81	---	73.96	53.96	-6.15
24120.00	1.00	140	44.42	---	3.40	47.82	---	73.96	53.96	-6.14

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]

<i>Radiated Emission</i>				<i>Correction Factors</i>	<i>Corrected Amplitude</i>	<i>Class B (3 m)</i>	
<i>Frequency (MHz)</i>	<i>Amplitude (dBμV)</i>	<i>Ant. H. (m)</i>	<i>Table ()</i>			<i>Limit (dBμV/m)</i>	<i>Margin (dB)</i>
127.00	39.29	1.00	182	-2.84	36.45	43.50	-7.05
198.54	35.43	1.00	245	-3.36	32.07	43.50	-11.43
225.21	37.19	1.00	276	-3.78	33.41	46.00	-12.59
402.24	39.71	1.00	259	-0.98	38.73	46.00	-7.27
504.09	33.12	1.00	14	2.01	35.13	46.00	-10.87
801.15	22.66	1.00	133	11.67	34.33	46.00	-11.67

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

<i>Radiated Emission</i>				<i>Correction Factors</i>	<i>Corrected Amplitude</i>	<i>Class B (3 m)</i>	
<i>Frequency (MHz)</i>	<i>Amplitude (dBμV)</i>	<i>Ant. H. (m)</i>	<i>Table ()</i>			<i>Limit (dBμV/m)</i>	<i>Margin (dB)</i>
125.79	41.46	1.00	149	-2.76	38.70	43.50	-4.80
198.54	35.41	1.00	170	-3.36	32.05	43.50	-11.45
403.45	33.48	1.00	132	-0.92	32.56	46.00	-13.44
667.77	26.76	1.00	148	8.55	35.31	46.00	-10.69
801.15	24.63	1.00	263	11.67	36.30	46.00	-9.70

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

<i>Frequency</i>	<i>Ant. H.</i>	<i>Table</i>	<i>Amplitude</i>		<i>Correction Factor</i>	<i>Corrected Amplitude</i>		<i>Limit</i>		<i>Margin</i>
			<i>Peak / Ave.</i>			<i>Peak / Ave.</i>		<i>Peak / Ave.</i>		
<i>MHz</i>	<i>m</i>	<i>degree</i>	<i>dBμV</i>		<i>dB/m</i>	<i>dBμV/m</i>		<i>dBμV/m</i>		<i>dB</i>
2172.92	1.00	100	41.67	---	8.57	50.24		73.96	53.96	-3.72
9747.08	1.00	360	35.77	---	11.89	47.66	---	73.96	53.96	-6.30
12187.92	1.00	174	38.77	---	9.74	48.51	---	73.96	53.96	-5.45
19494.58	1.00	246	47.03	---	1.69	48.72	---	73.96	53.96	-5.24
21934.79	1.00	117	46.21	---	3.09	49.30	---	73.96	53.96	-4.66
24371.46	1.00	63	45.74	---	3.26	49.00	---	73.96	53.96	-4.96

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

<i>Frequency</i>	<i>Ant. H.</i>	<i>Table</i>	<i>Amplitude</i>		<i>Correction Factor</i>	<i>Corrected Amplitude</i>		<i>Limit</i>		<i>Margin</i>
			<i>Peak / Ave.</i>			<i>Peak / Ave.</i>		<i>Peak / Ave.</i>		
<i>MHz</i>	<i>m</i>	<i>degree</i>	<i>dBμV</i>		<i>dB/m</i>	<i>dBμV/m</i>		<i>dBμV/m</i>		<i>dB</i>
2171.69	1.00	313	45.34	34.33	8.57	53.91	42.90	73.96	53.96	-11.06
2515.82	1.00	155	45.46	36.33	9.52	54.98	45.85	73.96	53.96	-8.11
2701.82	1.00	172	44.66	37.33	9.87	54.53	47.20	73.96	53.96	-6.76
12187.92	1.00	0	39.60	---	9.74	49.34	---	73.96	53.96	-4.62
19494.58	1.00	236	47.46	---	1.69	49.15	---	73.96	53.96	-4.81
21934.79	1.00	127	46.27	---	3.09	49.36	---	73.96	53.96	-4.60

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 ()			Limit (dBμV/m)	Margin (dB)
127.00	39.89	1.00	192	-2.84	37.05	43.50	-6.45
198.54	35.74	1.00	241	-3.36	32.38	43.50	-11.12
214.30	36.37	1.00	248	-3.71	32.66	43.50	-10.84
379.20	35.52	1.00	220	-1.58	33.94	46.00	-12.06
403.45	39.42	1.00	276	-0.92	38.50	46.00	-7.50
801.15	22.16	1.00	147	11.67	33.83	46.00	-12.17

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 ()			Limit (dBμV/m)	Margin (dB)
127.00	35.64	1.00	159	-2.84	38.82	43.50	-4.68
198.54	35.64	1.00	294	-3.36	32.28	43.50	-11.22
403.45	33.48	1.00	142	-0.92	32.56	46.00	-13.44
534.40	28.37	1.00	212	4.02	32.39	46.00	-13.61
667.77	26.34	1.00	166	8.55	34.89	46.00	-11.11
801.15	25.21	1.00	266	11.67	36.88	46.00	-9.12

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

<i>Frequency</i>	<i>Ant. H.</i>	<i>Table</i>	<i>Amplitude</i>		<i>Correction Factor</i>	<i>Corrected Amplitude</i>		<i>Limit</i>		<i>Margin</i>
			<i>Peak / Ave.</i>			<i>Peak / Ave.</i>		<i>Peak / Ave.</i>		
<i>MHz</i>	<i>m</i>	<i>degree</i>	<i>dBμV</i>		<i>dB/m</i>	<i>dBμV/m</i>		<i>dBμV/m</i>		<i>dB</i>
2191.67	1.00	351	40.33	---	8.63	48.96	---	73.96	53.96	-5.00
2727.08	1.00	12	39.33	---	9.92	49.25	---	73.96	53.96	-4.71
12308.75	1.00	123	38.27	---	9.56	47.83	---	73.96	53.96	-6.13
19696.46	1.00	306	46.68	---	1.81	48.49	---	73.96	53.96	-5.47
22157.92	1.00	271	45.60	---	3.25	48.85	---	73.96	53.96	-5.11
24619.37	1.00	83	46.28	---	3.01	49.29	---	73.96	53.96	-4.67

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

<i>Frequency</i>	<i>Ant. H.</i>	<i>Table</i>	<i>Amplitude</i>		<i>Correction Factor</i>	<i>Corrected Amplitude</i>		<i>Limit</i>		<i>Margin</i>
			<i>Peak / Ave.</i>			<i>Peak / Ave.</i>		<i>Peak / Ave.</i>		
<i>MHz</i>	<i>m</i>	<i>degree</i>	<i>dBμV</i>		<i>dB/m</i>	<i>dBμV/m</i>		<i>dBμV/m</i>		<i>dB</i>
2195.83	1.00	70	41.00	---	8.64	49.64	---	73.96	53.96	-4.32
2538.46	1.00	43	45.00	36.33	9.56	54.56	45.89	73.96	53.96	-8.07
2726.60	1.00	42	43.83	36.83	9.92	53.75	46.75	73.96	53.96	-7.21
12308.75	1.00	342	37.94	---	9.56	47.50	---	73.96	53.96	-6.46
22157.92	1.00	279	45.62	---	3.25	48.87	---	73.96	53.96	-5.09
24619.37	1.00	89	46.24	---	3.01	49.25	---	73.96	53.96	-4.71

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 ()			Limit (dBμV/m)	Margin (dB)
127.00	38.24	1.00	189	-2.84	35.40	43.50	-8.10
198.54	36.99	1.00	253	-3.36	33.63	43.50	-9.87
403.45	41.42	1.00	278	-0.92	40.50	46.00	-5.50
504.09	33.54	1.00	4	2.01	35.55	46.00	-10.45
625.34	28.26	1.00	196	7.25	35.51	46.00	-10.49
801.15	25.09	1.00	138	11.67	36.76	46.00	-9.24

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 ()			Limit (dBμV/m)	Margin (dB)
100.32	39.40	1.00	85	-0.57	38.83	43.50	-4.67
128.21	42.71	1.00	162	-2.91	39.80	43.50	-3.70
198.54	37.41	1.00	318	-3.36	34.05	43.50	-9.45
403.45	35.45	1.00	176	-0.92	34.53	46.00	-11.47
504.09	32.40	1.00	180	2.01	34.41	46.00	-11.59
667.77	26.07	1.00	153	8.55	34.62	46.00	-11.38

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
2152.08	1.00	52	40.00	---	8.52	48.52	---	73.96	53.96	-5.44
9650.42	1.00	144	35.27	---	11.47	46.74	---	73.96	53.96	-7.22
12061.04	1.00	254	37.27	---	9.81	47.08	---	73.96	53.96	-6.88
19296.25	1.00	133	47.05	---	1.60	48.65	---	73.96	53.96	-5.31
21708.12	1.00	242	44.90	---	2.87	47.77	---	73.96	53.96	-6.19
24120.00	1.00	134	44.07	---	3.40	47.47	---	73.96	53.96	-6.49

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
2137.50	1.00	243	39.66	---	8.48	48.14	---	73.96	53.96	-5.82
2499.79	1.00	180	44.85	33.00	9.49	54.34	42.49	73.96	53.96	-11.47
12061.04	1.00	219	37.77	---	9.81	47.58	---	73.96	53.96	-6.38
19296.25	1.00	139	47.25	---	1.60	48.85	---	73.96	53.96	-5.11
21708.12	1.00	265	44.63	---	2.87	47.50	---	73.96	53.96	-6.46
24120.00	1.00	137	44.17	---	3.40	47.57	---	73.96	53.96	-6.39

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

<i>Radiated Emission</i>				<i>Correction Factors</i>	<i>Corrected Amplitude</i>	<i>Class B (3 m)</i>	
<i>Frequency (MHz)</i>	<i>Amplitude (dBμV)</i>	<i>Ant. H. (m)</i>	<i>Table ()</i>			<i>Limit (dBμV/m)</i>	<i>Margin (dB)</i>
127.00	39.98	1.00	145	-2.84	37.14	43.50	-6.36
216.72	38.30	1.00	272	-3.72	34.58	46.00	-11.42
379.20	36.04	1.00	212	-1.58	34.46	46.00	-11.54
403.45	39.54	1.00	35	-0.92	38.62	46.00	-7.38
502.87	33.66	1.00	28	1.93	35.59	46.00	-10.41
801.15	25.30	1.00	132	11.67	36.97	46.00	-9.03

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

<i>Radiated Emission</i>				<i>Correction Factors</i>	<i>Corrected Amplitude</i>	<i>Class B (3 m)</i>	
<i>Frequency (MHz)</i>	<i>Amplitude (dBμV)</i>	<i>Ant. H. (m)</i>	<i>Table ()</i>			<i>Limit (dBμV/m)</i>	<i>Margin (dB)</i>
127.00	43.22	1.00	140	-2.84	40.38	43.50	-3.12
183.99	37.24	1.00	171	-3.88	33.36	43.50	-10.14
198.54	37.49	1.00	287	-3.36	34.13	43.50	-9.37
403.45	34.58	1.00	80	-0.92	33.66	46.00	-12.34
667.77	26.20	1.00	166	8.55	34.75	46.00	-11.25
801.15	24.27	1.00	266	11.67	35.94	46.00	-10.06

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

<i>Frequency</i>	<i>Ant. H.</i>	<i>Table</i>	<i>Amplitude</i>		<i>Correction Factor</i>	<i>Corrected Amplitude</i>		<i>Limit</i>		<i>Margin</i>
			<i>Peak / Ave.</i>			<i>Peak / Ave.</i>		<i>Peak / Ave.</i>		
<i>MHz</i>	<i>m</i>	<i>degree</i>	<i>dBμV</i>		<i>dB/m</i>	<i>dBμV/m</i>		<i>dBμV/m</i>		<i>dB</i>
2170.83	1.00	328	38.33	---	8.57	46.90	---	73.96	53.96	-7.06
9747.08	1.00	11	34.60	---	11.89	46.49	---	73.96	53.96	-7.47
12187.92	1.00	0	38.27	---	9.74	48.01	---	73.96	53.96	-5.95
19494.58	1.00	253	47.11	---	1.69	48.80	---	73.96	53.96	-5.16
21934.79	1.00	121	45.74	---	3.09	48.83	---	73.96	53.96	-5.13
24371.46	1.00	73	46.19	---	3.26	49.45	---	73.96	53.96	-4.51

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

<i>Frequency</i>	<i>Ant. H.</i>	<i>Table</i>	<i>Amplitude</i>		<i>Correction Factor</i>	<i>Corrected Amplitude</i>		<i>Limit</i>		<i>Margin</i>
			<i>Peak / Ave.</i>			<i>Peak / Ave.</i>		<i>Peak / Ave.</i>		
<i>MHz</i>	<i>m</i>	<i>degree</i>	<i>dBμV</i>		<i>dB/m</i>	<i>dBμV/m</i>		<i>dBμV/m</i>		<i>dB</i>
2177.08	1.00	274	39.50	---	8.59	48.09	---	73.96	53.96	-5.87
2488.87	1.00	152	45.49	36.17	9.46	54.95	45.63	73.96	53.96	-8.33
12187.92	1.00	219	39.27	---	9.74	49.01	---	73.96	53.96	-4.95
19494.58	1.00	258	47.13	---	1.69	48.82	---	73.96	53.96	-5.14
21934.79	1.00	125	46.29	---	3.09	49.38	---	73.96	53.96	-4.58
24371.46	1.00	56	45.88	---	3.26	49.14	---	73.96	53.96	-4.82

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 ()			Limit (dBμV/m)	Margin (dB)
127.00	39.75	1.00	180	-2.84	36.91	43.50	-6.59
217.94	39.49	1.00	256	-3.72	35.77	46.00	-10.23
302.81	38.08	1.00	256	-2.86	35.22	46.00	-10.78
379.20	36.90	1.00	248	-1.58	35.32	46.00	-10.68
402.24	40.48	1.00	317	-0.98	39.50	46.00	-6.50
801.15	26.82	1.00	94	11.67	38.49	46.00	-7.51

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 ()			Limit (dBμV/m)	Margin (dB)
127.00	43.22	1.00	163	-2.84	40.38	43.50	-3.12
198.54	37.80	1.00	322	-3.36	34.44	43.50	-9.06
403.45	37.20	1.00	166	-0.92	36.28	46.00	-9.72
502.87	32.23	1.00	180	1.93	34.16	46.00	-11.84
667.77	26.76	1.00	149	8.55	35.31	46.00	-10.69
801.15	25.14	1.00	251	11.67	36.81	46.00	-9.19

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

<i>Frequency</i>	<i>Ant. H.</i>	<i>Table</i>	<i>Amplitude</i>		<i>Correction Factor</i>	<i>Corrected Amplitude</i>		<i>Limit</i>		<i>Margin</i>
			<i>Peak / Ave.</i>			<i>Peak / Ave.</i>		<i>Peak / Ave.</i>		
<i>MHz</i>	<i>m</i>	<i>degree</i>	<i>dBμV</i>		<i>dB/m</i>	<i>dBμV/m</i>		<i>dBμV/m</i>		<i>dB</i>
2187.50	1.00	125	37.66	---	8.62	46.28	---	73.96	53.96	-7.68
9849.79	1.00	300	34.94	---	11.93	46.87	---	73.96	53.96	-7.09
12308.75	1.00	305	37.44	---	9.56	47.00	---	73.96	53.96	-6.96
19696.46	1.00	310	46.76	---	1.81	48.57	---	73.96	53.96	-5.39
22157.92	1.00	283	45.83	---	3.25	49.08	---	73.96	53.96	-4.88
24619.37	1.00	85	46.71	---	3.01	49.72	---	73.96	53.96	-4.24

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

<i>Frequency</i>	<i>Ant. H.</i>	<i>Table</i>	<i>Amplitude</i>		<i>Correction Factor</i>	<i>Corrected Amplitude</i>		<i>Limit</i>		<i>Margin</i>
			<i>Peak / Ave.</i>			<i>Peak / Ave.</i>		<i>Peak / Ave.</i>		
<i>MHz</i>	<i>m</i>	<i>degree</i>	<i>dBμV</i>		<i>dB/m</i>	<i>dBμV/m</i>		<i>dBμV/m</i>		<i>dB</i>
2513.88	1.00	62	45.66	36.00	9.52	55.18	45.52	73.96	53.96	-8.44
2729.17	1.00	61	40.17	---	9.92	50.09	---	73.96	53.96	-3.87
9849.79	1.00	228	35.28	---	11.93	47.21	---	73.96	53.96	-6.75
19696.46	1.00	315	46.47	---	1.81	48.28	---	73.96	53.96	-5.68
22157.92	1.00	274	45.87	---	3.25	49.12	---	73.96	53.96	-4.84
24619.37	1.00	78	46.32	---	3.01	49.33	---	73.96	53.96	-4.63

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 ()			Limit (dBμV/m)	Margin (dB)
125.79	38.88	1.00	160	-2.76	36.12	43.50	-7.38
217.94	38.60	1.00	236	-3.72	34.88	46.00	-11.12
403.45	40.70	1.00	316	-0.92	39.78	46.00	-6.22
504.09	32.81	1.00	11	2.01	34.82	46.00	-11.18
625.34	27.44	1.00	224	7.25	34.69	46.00	-11.31
801.15	24.37	1.00	148	11.67	36.04	46.00	-9.96

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 ()			Limit (dBμV/m)	Margin (dB)
125.79	43.12	1.00	155	-2.76	40.36	43.50	-3.14
198.54	38.37	1.00	317	-3.36	35.01	43.50	-8.49
300.39	34.71	1.00	122	-2.90	31.81	46.00	-14.19
403.45	34.83	1.00	320	-0.92	33.91	46.00	-12.09
504.09	32.02	1.00	158	2.01	34.03	46.00	-11.97
667.77	25.98	1.00	162	8.55	34.53	46.00	-11.47

Test mode: IEEE 802.11n 20M 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
2608.33	1.00	105	38.00	---	9.69	47.69	---	73.96	53.96	-6.27
9650.42	1.00	63	36.27	---	11.47	47.74	---	73.96	53.96	-6.22
12061.02	1.00	322	37.60	---	9.81	47.41	---	73.96	53.96	-6.55
19296.25	1.00	140	46.82	---	1.60	48.42	---	73.96	53.96	-5.54
21708.12	1.00	252	44.88	---	2.87	47.75	---	73.96	53.96	-6.21
24120.00	1.00	153	44.25	---	3.40	47.65	---	73.96	53.96	-6.31

Test mode: IEEE 802.11n 20M 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
2147.92	1.00	292	41.67	---	8.50	50.17	---	73.96	53.96	-3.79
2491.68	1.00	43	45.33	34.33	9.47	54.80	43.80	73.96	53.96	-10.16
2683.07	1.00	43	44.17	34.67	9.83	54.00	44.50	73.96	53.96	-9.46
12061.04	1.00	221	37.27	---	9.81	47.08	---	73.96	53.96	-6.88
19296.25	1.00	114	46.92	---	1.60	48.52	---	73.96	53.96	-5.44
24120.00	1.00	143	44.58	---	3.40	47.98	---	73.96	53.96	-5.98

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 ()			Limit (dBμV/m)	Margin (dB)
127.00	39.29	1.00	189	-2.84	36.45	43.50	-7.05
198.54	36.71	1.00	255	-3.36	33.35	43.50	-10.15
217.94	38.69	1.00	265	-3.72	34.97	46.00	-11.03
402.24	41.13	1.00	280	-0.98	40.15	46.00	-5.85
504.09	32.49	1.00	11	2.01	34.50	46.00	-11.50
801.15	25.48	1.00	64	11.67	37.15	46.00	-8.85

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 ()			Limit (dBμV/m)	Margin (dB)
127.00	43.31	1.00	135	-2.84	40.47	43.50	-3.03
170.65	35.98	1.00	21	-4.11	31.87	43.50	-11.63
199.75	37.07	1.00	317	-3.31	33.76	43.50	-9.74
403.45	36.52	1.00	139	-0.92	35.60	46.00	-10.40
667.77	25.33	1.00	165	8.55	33.88	46.00	-12.12
801.15	24.30	1.00	268	11.67	35.97	46.00	-10.03

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
2166.67	1.00	70	39.16	---	8.56	47.72	---	73.96	53.96	-6.24
9747.08	1.00	88	35.94	---	11.89	47.83	---	73.96	53.96	-6.13
12187.92	1.00	120	37.77	---	9.74	47.51	---	73.96	53.96	-6.45
19494.58	1.00	250	47.18	---	1.69	48.87	---	73.96	53.96	-5.09
21934.79	1.00	115	45.90	---	3.09	48.99	---	73.96	53.96	-4.97
24371.46	1.00	52	45.76	---	3.26	49.02	---	73.96	53.96	-4.94

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
2175.00	1.00	180	40.67	---	8.58	49.25	---	73.96	53.96	-4.71
2488.60	1.00	62	48.50	38.83	9.46	57.96	48.29	73.96	53.96	-5.67
2695.86	1.00	282	43.51	33.17	9.86	53.37	43.03	73.96	53.96	-10.93
12187.92	1.00	193	39.27	---	9.74	49.01	---	73.96	53.96	-4.95
21934.79	1.00	142	46.29	---	3.09	49.38	---	73.96	53.96	-4.58
24371.46	1.00	54	45.72	---	3.26	48.98	---	73.96	53.96	-4.98

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 ()			Limit (dBμV/m)	Margin (dB)
127.00	39.40	1.00	152	-2.84	36.56	43.50	-6.94
197.32	38.16	1.00	251	-3.42	34.74	43.50	-8.76
219.15	39.00	1.00	251	-3.72	35.28	46.00	-10.72
402.24	40.64	1.00	318	-0.98	39.66	46.00	-6.34
504.09	32.35	1.00	21	2.01	34.36	46.00	-11.64
801.15	23.84	1.00	96	11.67	35.51	46.00	-10.49

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 ()			Limit (dBμV/m)	Margin (dB)
127.00	43.08	1.00	134	-2.84	40.24	43.50	-3.26
182.77	37.40	1.00	176	-3.91	33.49	43.50	-10.01
202.17	36.06	1.00	155	-3.39	32.67	43.50	-10.83
403.45	36.22	1.00	159	-0.92	35.30	46.00	-10.70
667.77	26.09	1.00	158	8.55	34.64	46.00	-11.36
801.15	24.72	1.00	261	11.67	36.39	46.00	-9.61

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

<i>Frequency</i>	<i>Ant. H.</i>	<i>Table</i>	<i>Amplitude</i>		<i>Correction Factor</i>	<i>Corrected Amplitude</i>		<i>Limit</i>		<i>Margin</i>
			<i>Peak / Ave.</i>			<i>Peak / Ave.</i>		<i>Peak / Ave.</i>		
<i>MHz</i>	<i>m</i>	<i>degree</i>	<i>dBμV</i>		<i>dB/m</i>	<i>dBμV/m</i>		<i>dBμV/m</i>		<i>dB</i>
2600.00	1.00	156	37.00	---	9.68	46.68	---	73.96	53.96	-7.28
7384.79	1.00	117	35.78	---	10.42	46.20	---	73.96	53.96	-7.76
12308.75	1.00	302	36.77	---	9.56	46.33	---	73.96	53.96	-7.63
19696.46	1.00	317	46.49	---	1.81	48.30	---	73.96	53.96	-5.66
22157.92	1.00	278	45.67	---	3.25	48.92	---	73.96	53.96	-5.04
24619.37	1.00	85	46.55	---	3.01	49.56	---	73.96	53.96	-4.40

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

<i>Frequency</i>	<i>Ant. H.</i>	<i>Table</i>	<i>Amplitude</i>		<i>Correction Factor</i>	<i>Corrected Amplitude</i>		<i>Limit</i>		<i>Margin</i>
			<i>Peak / Ave.</i>			<i>Peak / Ave.</i>		<i>Peak / Ave.</i>		
<i>MHz</i>	<i>m</i>	<i>degree</i>	<i>dBμV</i>		<i>dB/m</i>	<i>dBμV/m</i>		<i>dBμV/m</i>		<i>dB</i>
2200.00	1.00	217	40.50	---	8.65	49.15	---	73.96	53.96	-4.81
2530.86	1.00	226	45.66	34.33	9.55	55.21	43.88	73.96	53.96	-10.08
2733.33	1.00	226	41.50	---	9.93	51.43	---	73.96	53.96	-2.53
9849.79	1.00	69	34.94	---	11.93	46.87	---	73.96	53.96	-7.09
22157.92	1.00	274	45.52	---	3.25	48.77	---	73.96	53.96	-5.19
24619.37	1.00	72	46.63	---	3.01	49.64	---	73.96	53.96	-4.32

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 ()			Limit (dBμV/m)	Margin (dB)
127.00	39.71	1.00	169	-2.84	36.87	43.50	-6.63
219.15	38.70	1.00	272	-3.72	34.98	46.00	-11.02
403.45	40.37	1.00	33	-0.92	39.45	46.00	-6.55
502.87	33.38	1.00	202	1.93	35.31	46.00	-10.69
625.34	26.69	1.00	205	7.25	33.94	46.00	-12.06
801.15	24.32	1.00	159	11.67	35.99	46.00	-10.01

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 ()			Limit (dBμV/m)	Margin (dB)
127.00	42.59	1.00	182	-2.84	39.75	43.50	-3.75
185.20	37.98	1.00	192	-3.85	34.13	43.50	-9.37
198.54	36.66	1.00	322	-3.36	33.30	43.50	-10.20
403.45	36.71	1.00	154	-0.92	35.79	46.00	-10.21
504.09	31.65	1.00	157	2.01	33.66	46.00	-12.34
801.15	25.27	1.00	255	11.67	36.94	46.00	-9.06

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
2637.50	1.00	130	37.50	---	9.75	47.25	---	73.96	53.96	-6.71
9686.67	1.00	21	35.44	---	11.63	47.07	---	73.96	53.96	-6.89
12109.37	1.00	79	38.60	---	9.61	48.21	---	73.96	53.96	-5.75
19377.71	1.00	306	47.75	---	1.60	49.35	---	73.96	53.96	-4.61
21796.67	1.00	15	47.34	---	2.72	50.06	---	73.96	53.96	-3.90
24219.17	1.00	334	46.08	---	2.85	48.93	---	73.96	53.96	-5.03

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
2143.75	1.00	251	40.17	---	8.49	48.66	---	73.96	53.96	-5.30
2524.23	1.00	51	44.33	34.33	9.54	53.87	43.87	73.96	53.96	-10.09
9686.67	1.00	204	36.77	---	11.63	48.40	---	73.96	53.96	-5.56
19377.71	1.00	313	47.55	---	1.60	49.15	---	73.96	53.96	-4.81
21796.67	1.00	9	47.30	---	2.72	50.02	---	73.96	53.96	-3.94
24219.17	1.00	357	46.04	---	2.85	48.89	---	73.96	53.96	-5.07

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 ()			Limit (dBμV/m)	Margin (dB)
127.00	39.71	1.00	161	-2.84	36.87	43.50	-6.63
217.94	38.46	1.00	255	-3.72	34.74	46.00	-11.26
403.45	40.96	1.00	259	-0.92	40.04	46.00	-5.96
504.09	32.56	1.00	10	2.01	34.57	46.00	-11.43
625.34	26.44	1.00	202	7.25	33.69	46.00	-12.31
801.15	24.44	1.00	130	11.67	36.11	46.00	-9.89

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 ()			Limit (dBμV/m)	Margin (dB)
127.00	43.46	1.00	142	-2.84	40.62	43.50	-2.88
170.65	37.04	1.00	33	-4.11	32.93	43.50	-10.57
199.75	36.69	1.00	331	-3.31	33.38	43.50	-10.12
403.45	34.83	1.00	327	-0.92	33.91	46.00	-12.09
505.30	32.56	1.00	204	2.09	34.65	46.00	-11.35
667.77	25.77	1.00	160	8.55	34.32	46.00	-11.68

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
2595.83	1.00	26	37.17	---	9.67	46.84	---	73.96	53.96	-7.12
9747.08	1.00	21	35.77	---	11.89	47.66	---	73.96	53.96	-6.30
12187.92	1.00	79	38.77	---	9.74	48.51	---	73.96	53.96	-5.45
19494.58	1.00	255	47.01	---	1.69	48.70	---	73.96	53.96	-5.26
21934.79	1.00	120	46.05	---	3.09	49.14	---	73.96	53.96	-4.82
24371.46	1.00	69	45.94	---	3.26	49.20	---	73.96	53.96	-4.76

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
2592.72	1.00	63	43.65	32.50	9.66	53.31	42.16	73.96	53.96	-11.80
9747.08	1.00	17	36.77	---	11.89	48.66	---	73.96	53.96	-5.30
12187.92	1.00	203	39.27	---	9.74	49.01	---	73.96	53.96	-4.95
19494.58	1.00	240	47.07	---	1.69	48.76	---	73.96	53.96	-5.20
21934.79	1.00	143	48.09	---	1.09	49.18	---	73.96	53.96	-4.78
24371.46	1.00	72	46.25	---	3.26	49.51	---	73.96	53.96	-4.45

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 ()			Limit (dBμV/m)	Margin (dB)
127.00	39.24	1.00	152	-2.84	36.40	43.50	-7.10
217.94	38.99	1.00	235	-3.72	35.27	46.00	-10.73
270.07	40.02	1.00	93	-3.91	36.11	46.00	-9.89
403.45	40.58	1.00	260	-0.92	39.66	46.00	-6.34
502.87	33.42	1.00	21	1.93	35.35	46.00	-10.65
801.15	25.85	1.00	130	11.67	37.52	46.00	-8.48

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 ()			Limit (dBμV/m)	Margin (dB)
127.00	42.01	1.00	132	-2.84	39.17	43.50	-4.33
198.54	37.49	1.00	318	-3.36	34.13	43.50	-9.37
302.81	34.39	1.00	135	-2.86	31.53	46.00	-14.47
403.45	35.06	1.00	135	-0.92	34.14	46.00	-11.86
504.09	31.90	1.00	170	2.01	33.91	46.00	-12.09
801.15	24.70	1.00	288	11.67	36.37	46.00	-9.63

Test mode: IEEE 802.11n 40M CH09 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
1437.50	1.00	338	35.00	---	16.11	51.11	---	73.96	53.96	-2.85
2591.67	1.00	61	38.17	---	9.66	47.83	---	73.96	53.96	-6.13
12260.42	1.00	275	38.44	---	9.86	48.30	---	73.96	53.96	-5.66
19615.00	1.00	350	47.46	---	1.70	49.16	---	73.96	53.96	-4.80
22069.37	1.00	342	46.88	---	2.77	49.65	---	73.96	53.96	-4.31
24520.21	1.00	251	47.59	---	2.37	49.96	---	73.96	53.96	-4.00

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
2314.58	1.00	222	40.50	---	8.97	49.47	---	73.96	53.96	-4.49
2596.05	1.00	94	42.68	32.50	9.67	52.35	42.17	73.96	53.96	-11.79
2718.75	1.00	94	41.50	---	9.90	51.40	---	73.96	53.96	-2.56
12260.42	1.00	286	38.78	---	9.86	48.64	---	73.96	53.96	-5.32
22069.37	1.00	319	47.35	---	2.77	50.12	---	73.96	53.96	-3.84
24520.21	1.00	257	47.38	---	2.37	49.75	---	73.96	53.96	-4.21

7.4 Test Result of the Bandedge

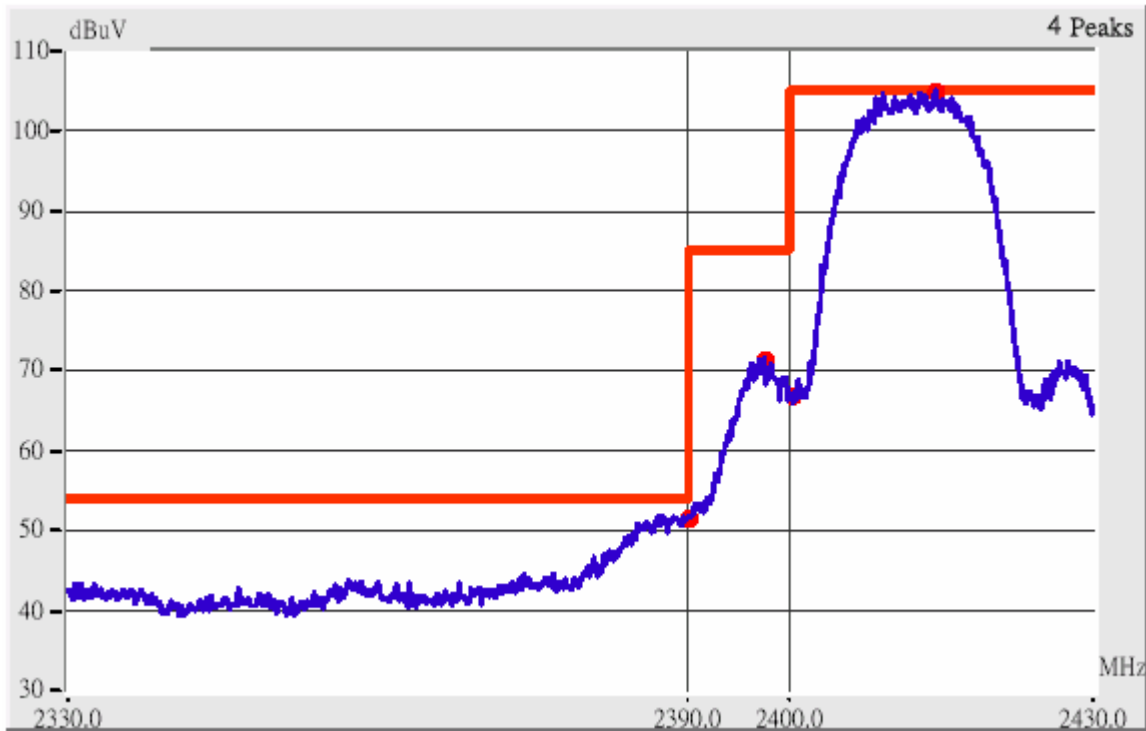
If any 100 kHz bandwidth outside these frequency bands, the radio frequency power that is produced by the modulation products of the spreading sequence, the information sequence and the carrier frequency shall be either *at least 20 dB below that in any 100 kHz bandwidth within the band that contains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

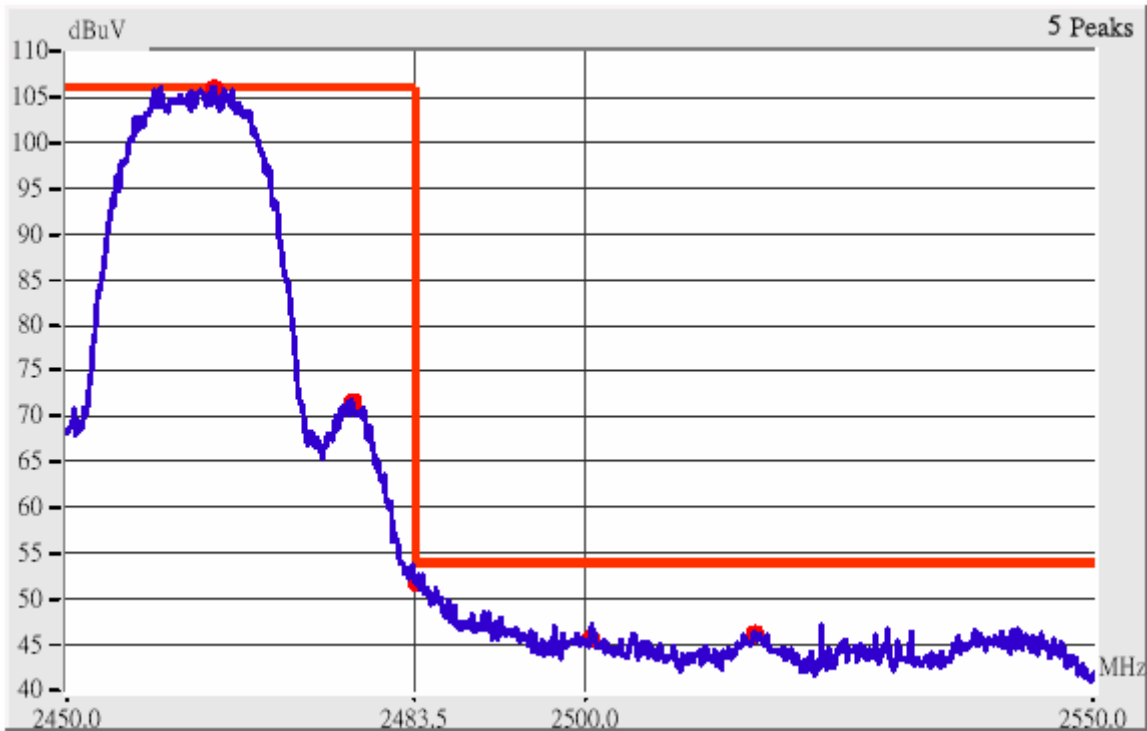


This is the hard copy of our bandedge measurement generated by our bandedge testing program. The plot shown above is the bandedge of channel 1.

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.

<i>Radiated Emission</i>					<i>Corrected Amplitude</i>		<i>Class B (3m)</i>		
<i>Frequency (MHz)</i>	<i>Ant. P.</i>	<i>Ant. H. (m)</i>	<i>Table ()</i>	<i>Factors (dB)</i>	<i>(dBµV/m)</i>		<i>Limit (dBµV/m)</i>		<i>Margin (dB)</i>
					<i>Peak</i>	<i>Average</i>	<i>Peak</i>	<i>Ave.</i>	
2385.34	Hor	1.00	203	9.17	54.17	43.34	73.96	53.96	-10.62
2390.26	Hor	1.00	203	9.18	55.52	44.85	73.96	53.96	-9.11
2385.53	Ver	1.00	100	9.17	60.84	50.17	73.96	53.96	-3.79
2390.11	Ver	1.00	5	9.18	62.35	52.01	73.96	53.96	-1.95

Channel 11 of IEEE 802.11b

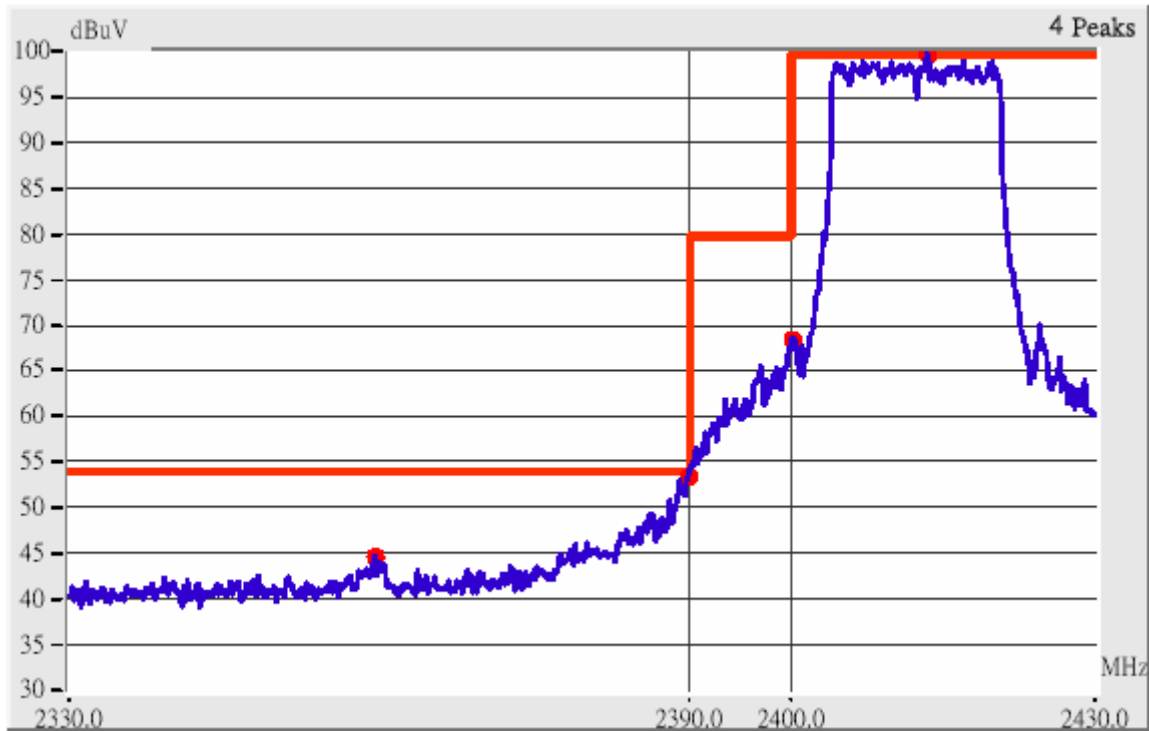


This is the hard copy of our bandedge measurement generated by our bandedge testing program. The plot shown above is the bandedge of channel 11.

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		Class B (3m)		
Frequency (MHz)	Ant. P.	Ant. H. (m)	Table (°)	Factors (dB)	(dBµV/m)		Limit (dBµV/m)		Margin (dB)
					Peak	Average	Peak	Ave.	
2483.11	Hor	1.00	334	9.44	53.44	43.61	73.96	53.96	-10.35
2487.53	Hor	1.00	334	9.46	50.12	---	73.96	53.96	-3.84
2500.01	Hor	1.00	332	9.49	46.32	---	73.96	53.96	-7.64
2516.34	Hor	1.00	232	9.52	47.69	---	73.96	53.96	-6.27
2482.99	Ver	1.00	93	9.44	61.11	52.77	73.96	53.96	-1.19
2484.57	Ver	1.00	298	9.45	61.45	50.62	73.96	53.96	-3.34
2499.80	Ver	1.00	95	9.49	55.99	45.66	73.96	53.96	-8.30
2515.63	Ver	1.00	6	9.52	56.85	45.32	73.96	53.96	-8.44

Channel 1 of IEEE 802.11g

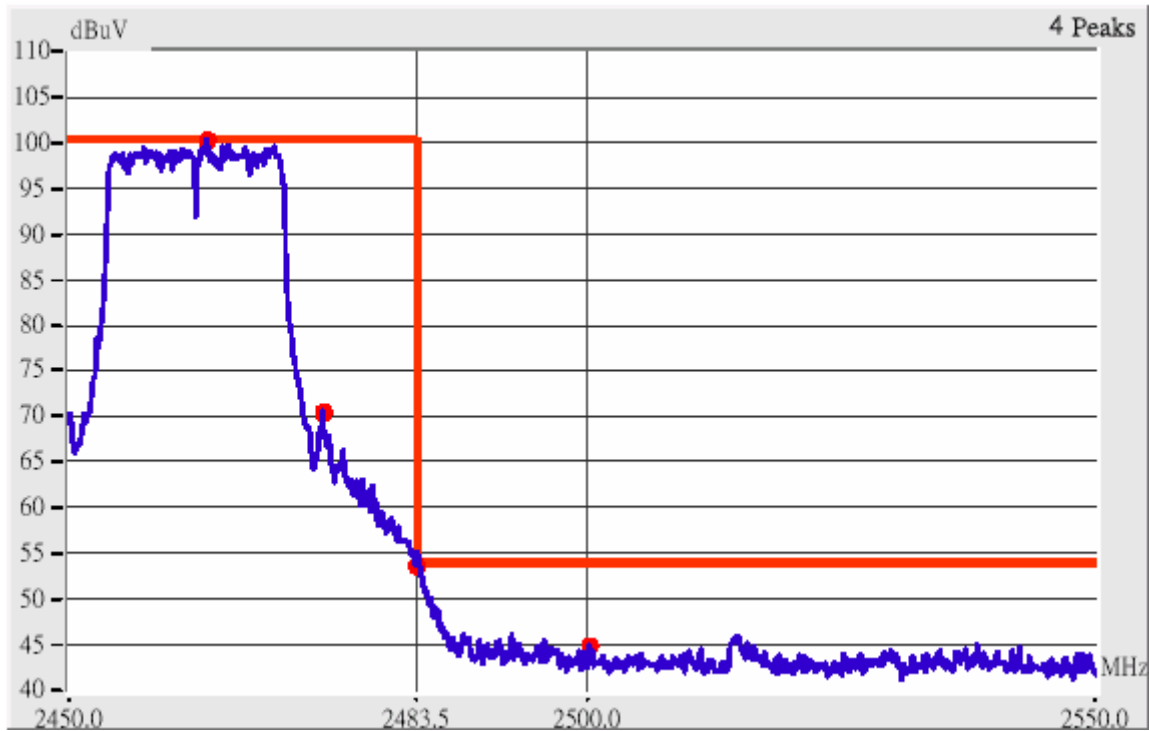


This is the hard copy of our bandedge measurement generated by our bandedge testing program. The plot shown above is the bandedge of channel 1.

- 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		Class B (3m)		
Frequency (MHz)	Ant. P.	Ant. H. (m)	Table ()	Factors (dB)	(dBµV/m)		Limit (dBµV/m)		Margin (dB)
					Peak	Average	Peak	Ave.	
2385.82	Hor	1.00	148	9.17	56.51	39.67	73.96	53.96	-14.29
2390.18	Hor	1.00	148	9.18	63.18	44.68	73.96	53.96	-9.28
2385.97	Ver	1.00	83	9.17	63.84	46.34	73.96	53.96	-7.62
2390.17	Ver	1.00	112	9.18	70.18	51.85	73.96	53.96	-2.11

Channel 11 of IEEE 802.11g

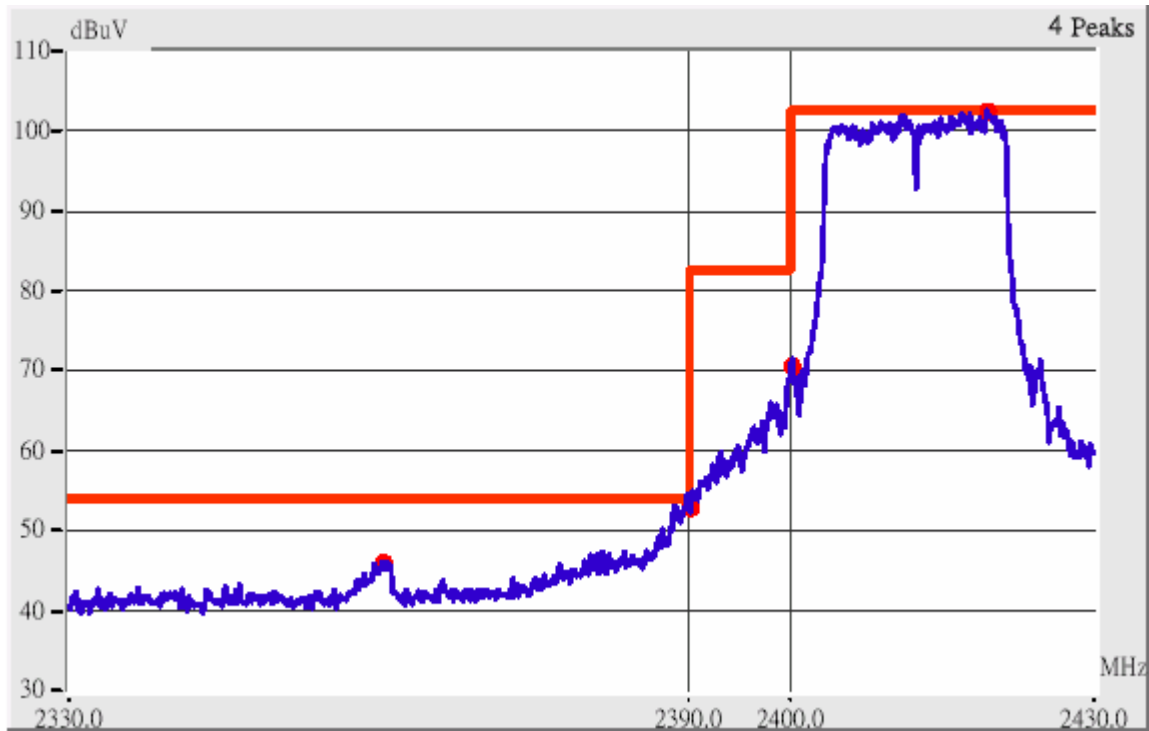


This is the hard copy of our bandedge measurement generated by our bandedge testing program. The plot shown above is the bandedge of channel 11.

- 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		Class B (3m)		
Frequency (MHz)	Ant. P.	Ant. H. (m)	Table ()	Factors (dB)	(dBµV/m)		Limit (dBµV/m)		Margin (dB)
					Peak	Average	Peak	Ave.	
2482.95	Hor	1.00	287	9.44	58.61	42.77	73.96	53.96	-11.19
2489.57	Hor	1.00	351	9.46	48.79	---	73.96	53.96	-5.17
2500.01	Hor	1.00	288	9.49	44.82	---	73.96	53.96	-9.14
2513.72	Hor	1.00	0	9.52	48.35	---	73.96	53.96	-5.61
2482.92	Ver	1.00	51	9.44	69.61	52.27	73.96	53.96	-1.69
2484.13	Ver	1.00	94	9.45	64.28	48.95	73.96	53.96	-5.01
2500.16	Ver	1.00	308	9.49	53.82	43.32	73.96	53.96	-10.64
2513.87	Ver	1.00	81	9.52	56.68	45.52	73.96	53.96	-8.44

Channel 01 of IEEE 802.11n 20M

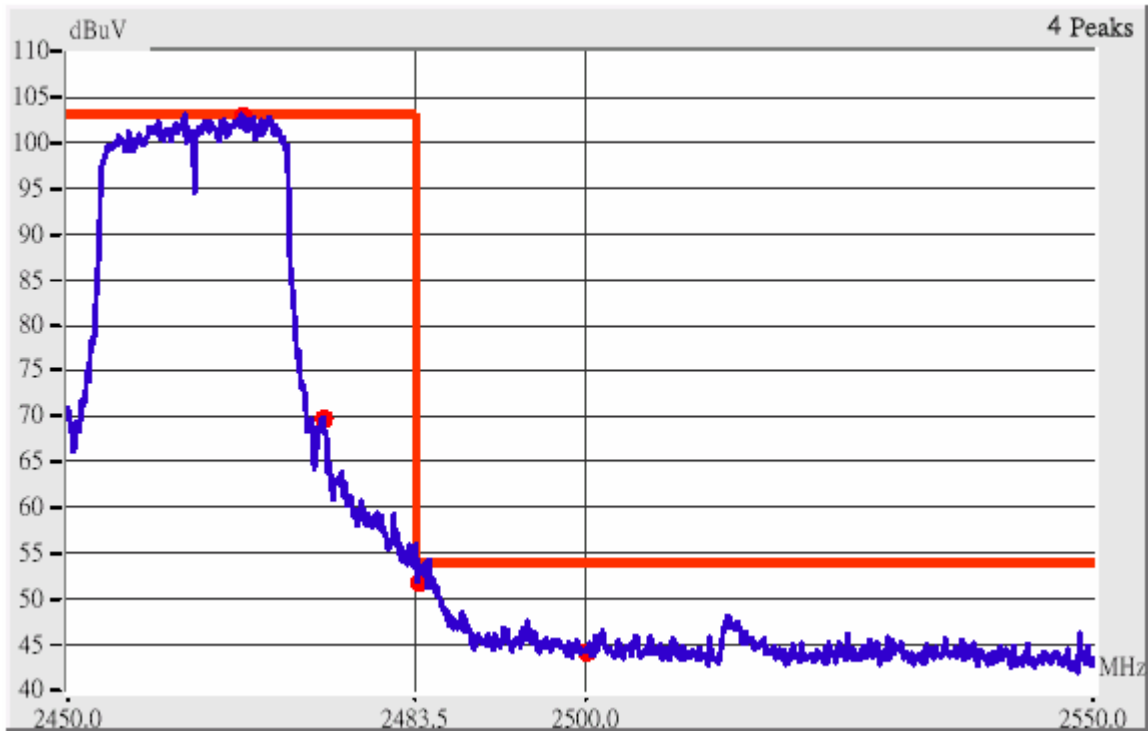


This is the hard copy of our bandedge measurement generated by our bandedge testing program. The plot shown above is the bandedge of channel 1.

- 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.

<i>Radiated Emission</i>					<i>Corrected Amplitude</i>		<i>Class B (3m)</i>		
<i>Frequency (MHz)</i>	<i>Ant. P.</i>	<i>Ant. H. (m)</i>	<i>Table ()</i>	<i>Factors (dB)</i>	<i>(dBµV/m)</i>		<i>Limit (dBµV/m)</i>		<i>Margin (dB)</i>
					<i>Peak</i>	<i>Average</i>	<i>Peak</i>	<i>Ave.</i>	
2387.63	Hor	1.00	108	9.18	51.18	---	73.96	53.96	-2.78
2390.24	Hor	1.00	238	9.18	59.02	43.18	73.96	53.96	-10.78
2388.23	Ver	1.00	81	9.18	64.51	50.18	73.96	53.96	-3.78
2389.84	Ver	1.00	83	9.18	70.85	52.35	73.96	53.96	-1.61

Channel 11 of IEEE 802.11n 20M

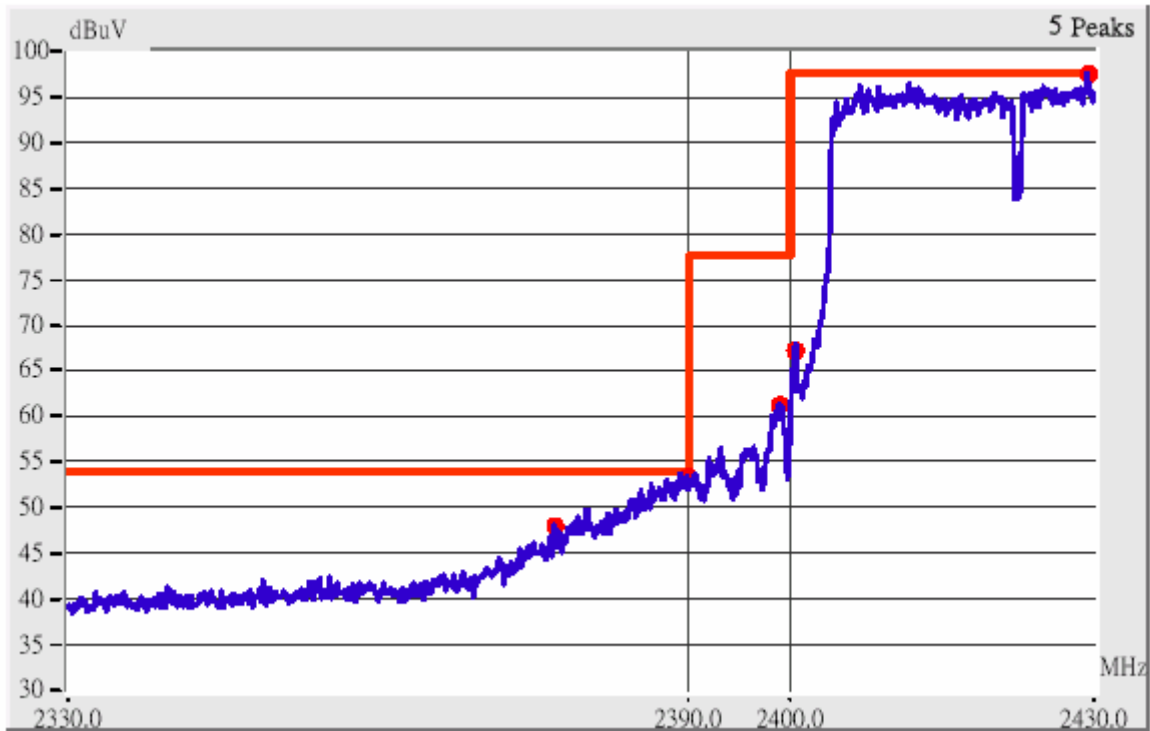


This is the hard copy of our bandedge measurement generated by our bandedge testing program. The plot shown above is the bandedge of channel 11.

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

Radiated Emission					Corrected Amplitude		Class B (3m)		
Frequency (MHz)	Ant. P.	Ant. H. (m)	Table (°)	Factors (dB)	(dBµV/m)		Limit (dBµV/m)		Margin (dB)
					Peak	Average	Peak	Ave.	
2483.50	Hor	1.00	232	9.44	59.78	42.11	73.96	53.96	-11.85
2485.07	Hor	1.00	287	9.45	56.28	40.12	73.96	53.96	-13.84
2500.01	Hor	1.00	346	9.49	45.82	---	73.96	53.96	-8.14
2513.89	Hor	1.00	229	9.52	49.18	---	73.96	53.96	-4.78
2483.82	Ver	1.00	0	9.44	70.78	51.61	73.96	53.96	-2.35
2485.52	Ver	1.00	0	9.45	67.28	49.28	73.96	53.96	-4.68
2500.66	Ver	1.00	359	9.49	53.49	44.49	73.96	53.96	-9.47
2513.25	Ver	1.00	240	9.51	58.02	46.51	73.96	53.96	-7.45

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 do comply with the Part 15.209(a) – as below.

Radiated Emission					Corrected Amplitude		Class B (3m)		
Frequency (MHz)	Ant. P.	Ant. H. (m)	Table (°)	Factors (dB)	(dBµV/m)		Limit (dBµV/m)		Margin (dB)
					Peak	Average	Peak	Ave.	
2386.04	Hor	1.00	234	9.17	55.84	42.00	73.96	53.96	-11.96
2389.80	Hor	1.00	227	9.18	55.85	43.18	73.96	53.96	-10.78
2384.80	Ver	1.00	290	9.17	63.17	49.84	73.96	53.96	-4.12
2390.17	Ver	1.00	108	9.18	65.35	52.35	73.96	53.96	-1.61

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

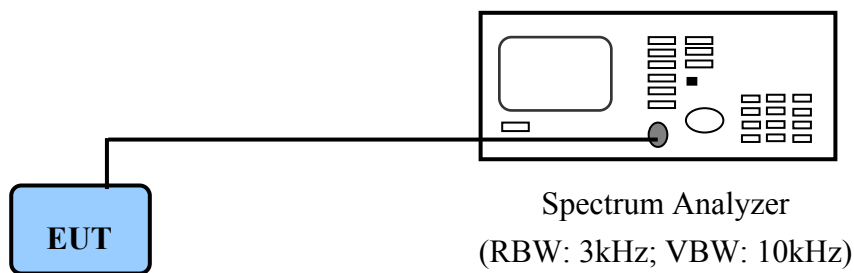
Radiated Emission					Corrected Amplitude		Class B (3m)		
Frequency (MHz)	Ant. P.	Ant. H. (m)	Table ()	Factors (dB)	(dBµV/m)		Limit (dBµV/m)		Margin (dB)
					Peak	Average	Peak	Ave.	
2483.55	Hor	1.00	228	9.44	55.11	42.77	73.96	53.96	-11.19
2487.34	Hor	1.00	284	9.45	55.12	42.45	73.96	53.96	-11.51
2500.01	Hor	1.00	229	9.49	46.32	---	73.96	53.96	-7.64
2505.03	Hor	1.00	281	9.50	48.17	---	73.96	53.96	-5.79
2483.83	Ver	1.00	346	9.44	64.44	52.61	73.96	53.96	-1.35
2487.61	Ver	1.00	352	9.46	65.46	51.96	73.96	53.96	-2.00
2499.82	Ver	1.00	308	9.49	56.32	45.82	73.96	53.96	-8.14
2504.15	Ver	1.00	355	9.50	56.33	44.33	73.96	53.96	-9.63

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	12/19/08

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

<i>Channel</i>	<i>Ppr (dBm)</i>	<i>Cable Loss (dB)</i>	<i>Ppq (dBm)</i>	<i>Limit (dB)</i>	<i>Margin (dB)</i>
CH 01	-9.65	6.57	-3.08	8.00	-11.08
CH 06	-9.27	6.53	-2.74	8.00	-10.74
CH 11	-9.52	6.74	-2.78	8.00	-10.78

IEEE 802.11g

<i>Channel</i>	<i>Ppr (dBm)</i>	<i>Cable Loss (dB)</i>	<i>Ppq (dBm)</i>	<i>Limit (dB)</i>	<i>Margin (dB)</i>
CH 01	-16.88	6.57	-10.31	8.00	-18.31
CH 06	-14.47	6.53	-7.94	8.00	-15.94
CH 11	-15.09	6.74	-8.35	8.00	-16.35

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

<i>Channel</i>	<i>Ant#1 Ppr</i>	<i>Ant#2 Ppr</i>	<i>Cable Loss</i>	<i>Ppq</i>	<i>Limit</i>	<i>Margin</i>
	<i>(dBm)</i>		<i>(dB)</i>	<i>(dBm)</i>	<i>(dB)</i>	<i>(dB)</i>
CH 01/2412	-14.88	-16.52	6.57	-6.04	8.00	-19.48
CH 06/2437	-14.11	-16.12	6.53	-5.46	8.00	-20.70
CH 11/2462	-16.63	-17.64	6.74	-7.36	8.00	-19.50

IEEE 802.11n 40M

<i>Channel</i>	<i>Ant#1 Ppr</i>	<i>Ant#2 Ppr</i>	<i>Cable Loss</i>	<i>Ppq</i>	<i>Limit</i>	<i>Margin</i>
	<i>(dBm)</i>		<i>(dB)</i>	<i>(dBm)</i>	<i>(dB)</i>	<i>(dB)</i>
CH 03/2412	-21.05	-19.91	6.57	-10.86	8.00	-23.59
CH 06/2437	-20.29	-20.31	6.53	-10.76	8.00	-22.68
CH 09/2452	-20.89	-20.66	6.74	-11.02	8.00	-21.91

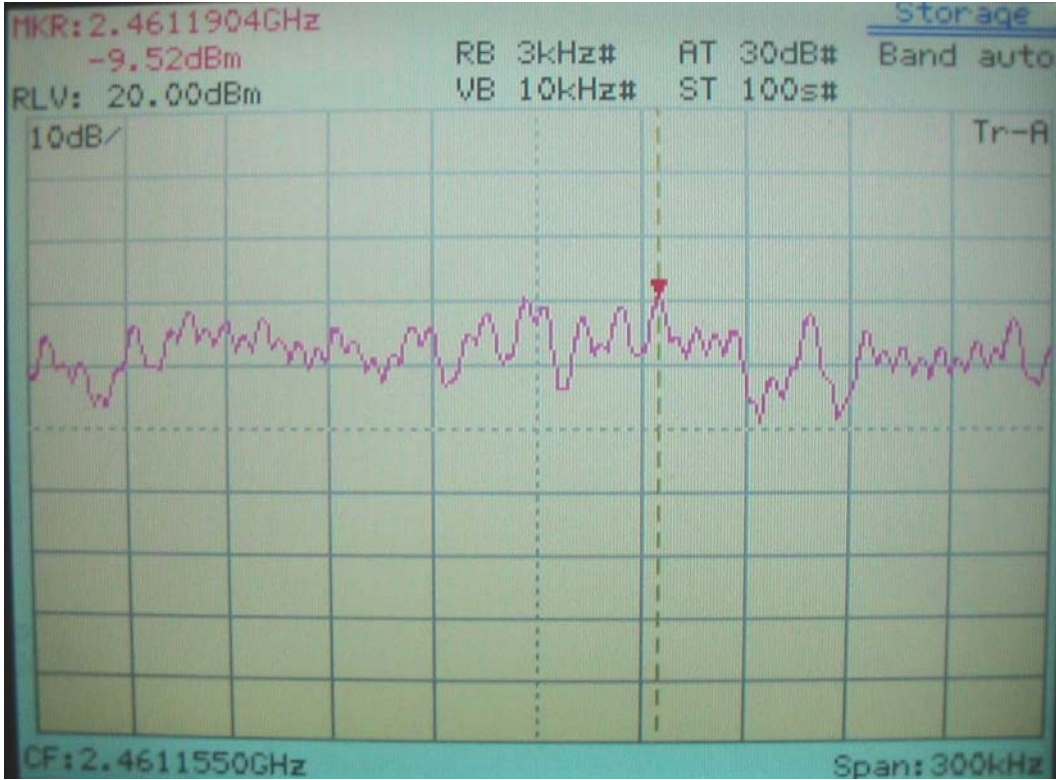
Power Spectral Density for IEEE 802.11b Channel 01, 2412MHz



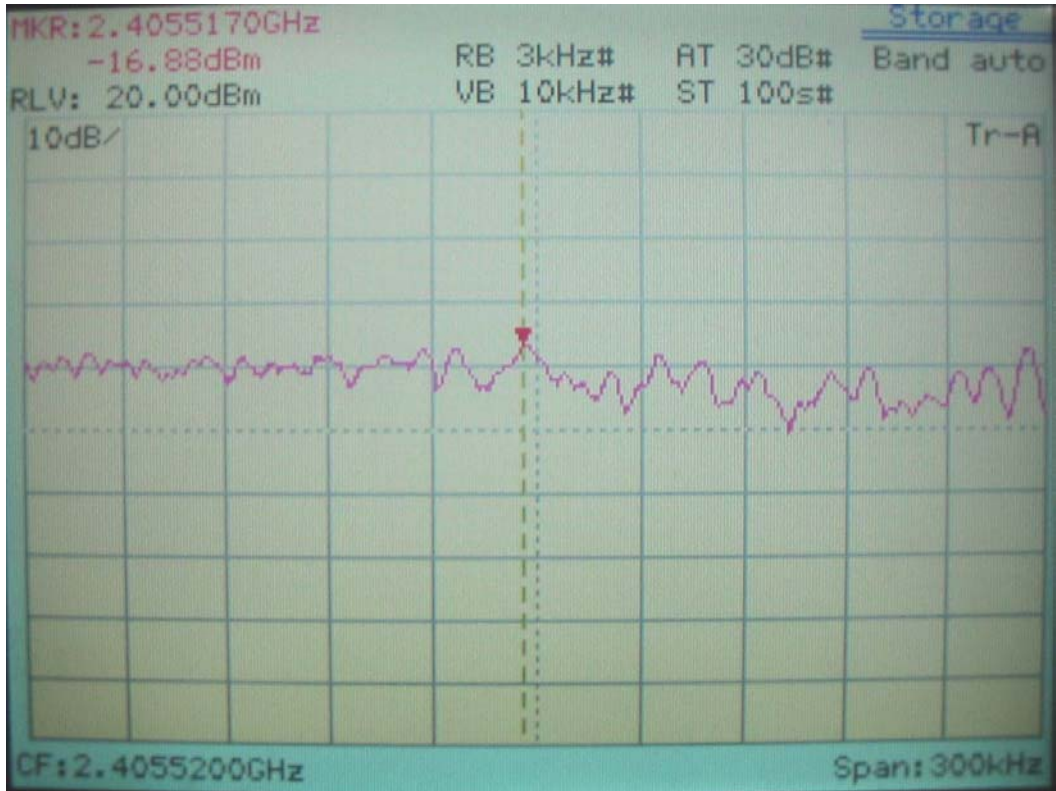
Power Spectral Density for IEEE 802.11b Channel 06, 2437MHz



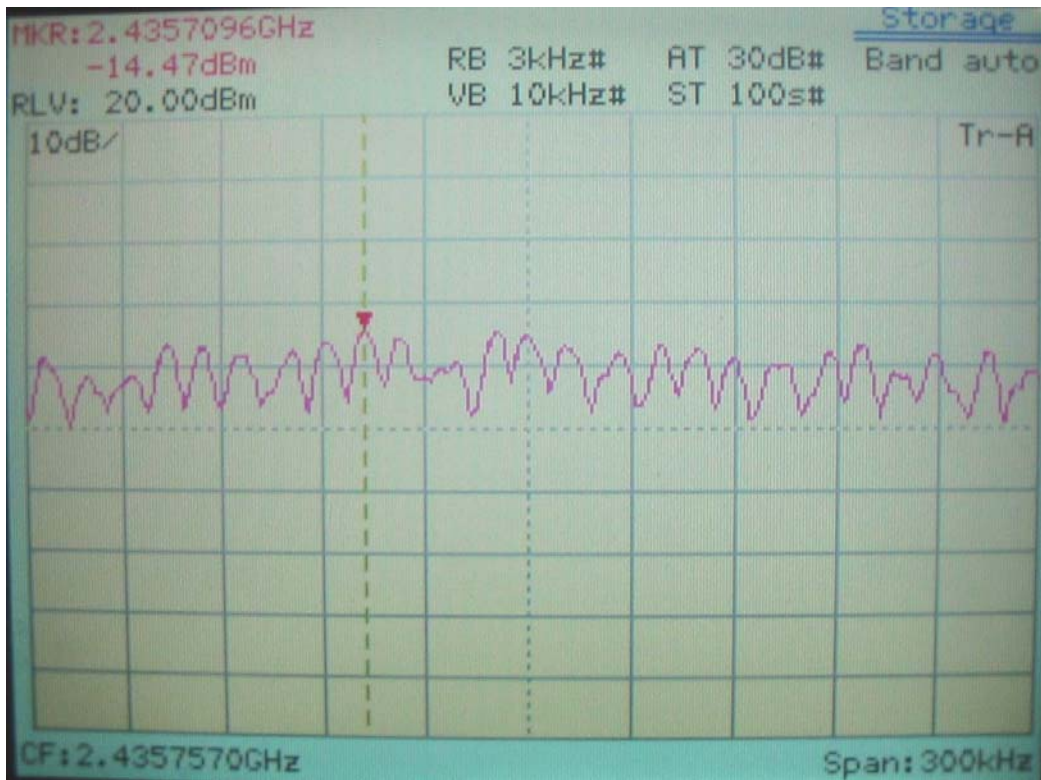
Power Spectral Density for IEEE 802.11b Channel 11, 2462MHz



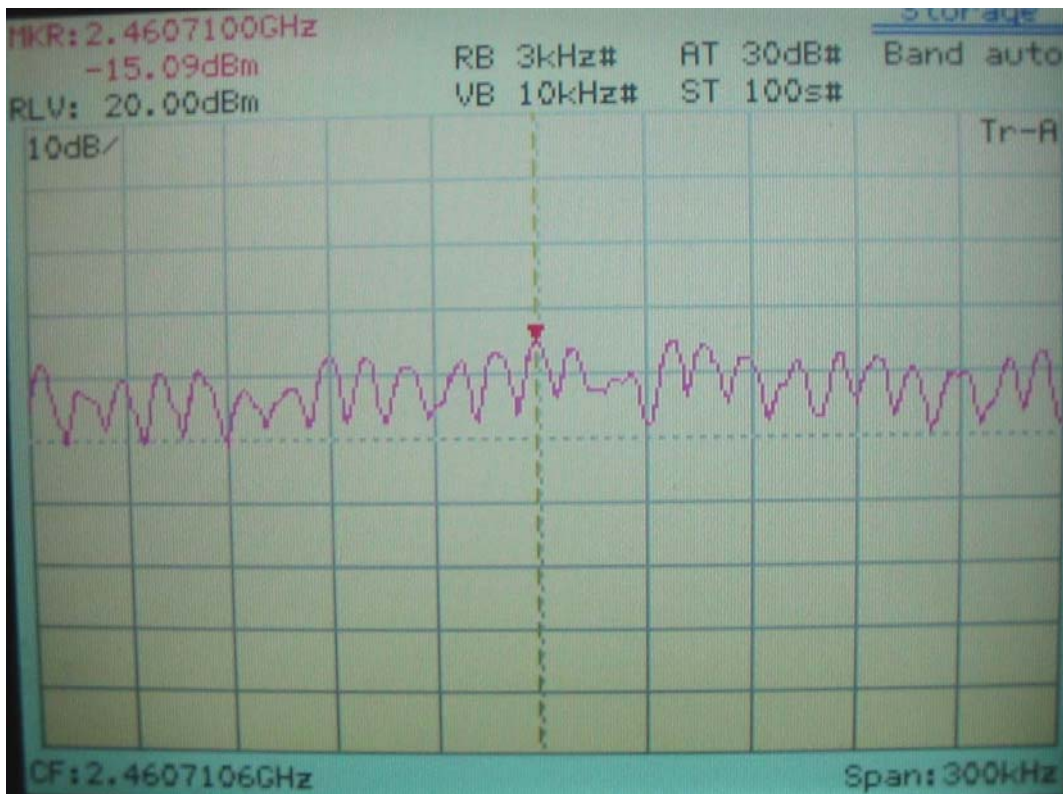
Power Spectral Density for IEEE 802.11g Channel 01, 2412MHz



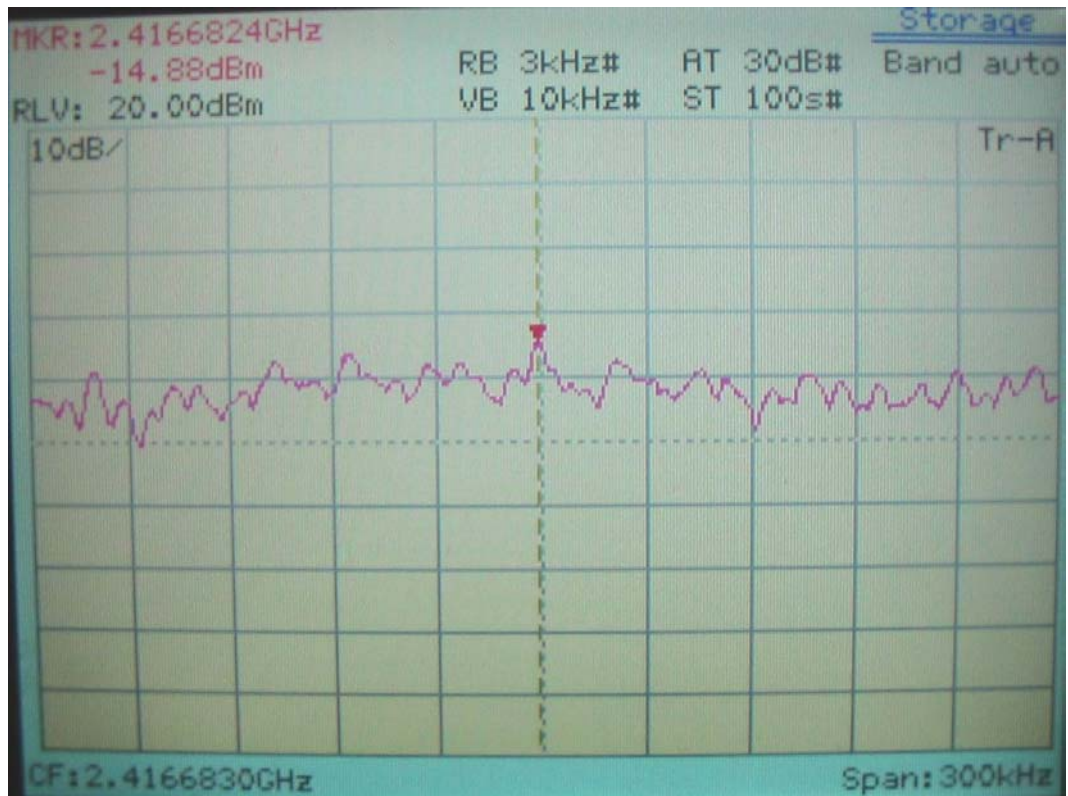
Power Spectral Density for IEEE 802.11g Channel 06, 2437MHz



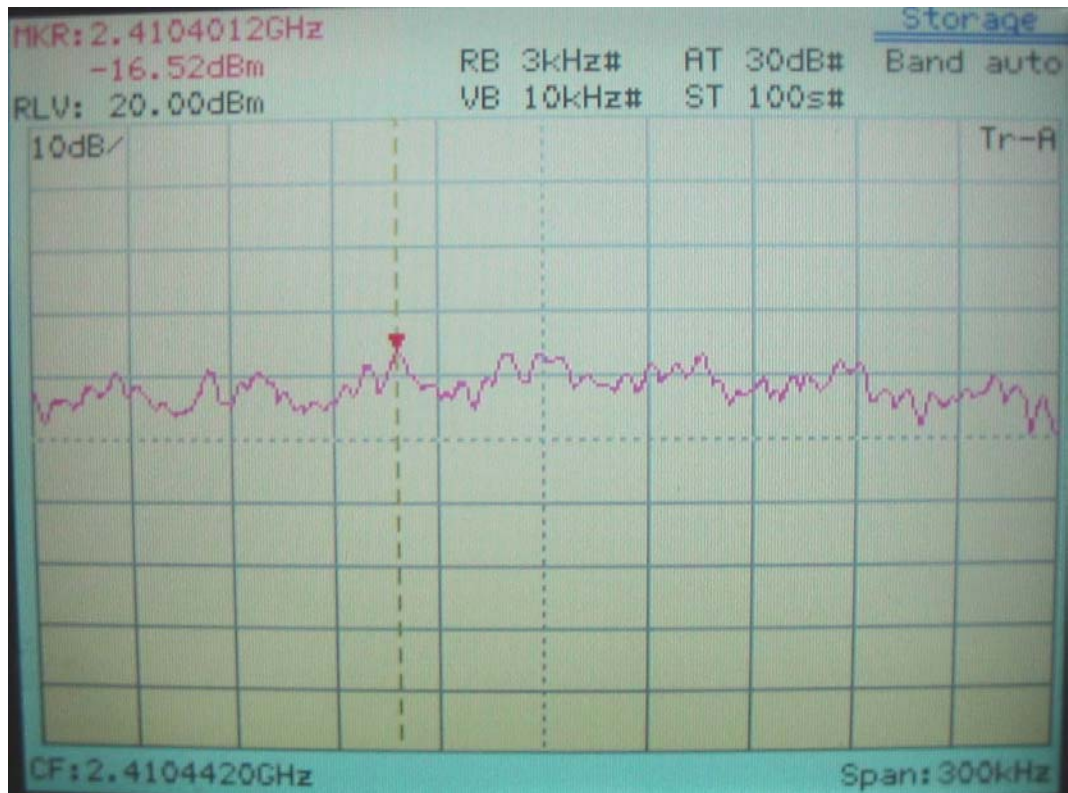
Power Spectral Density for IEEE 802.11g Channel 11, 2462MHz



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

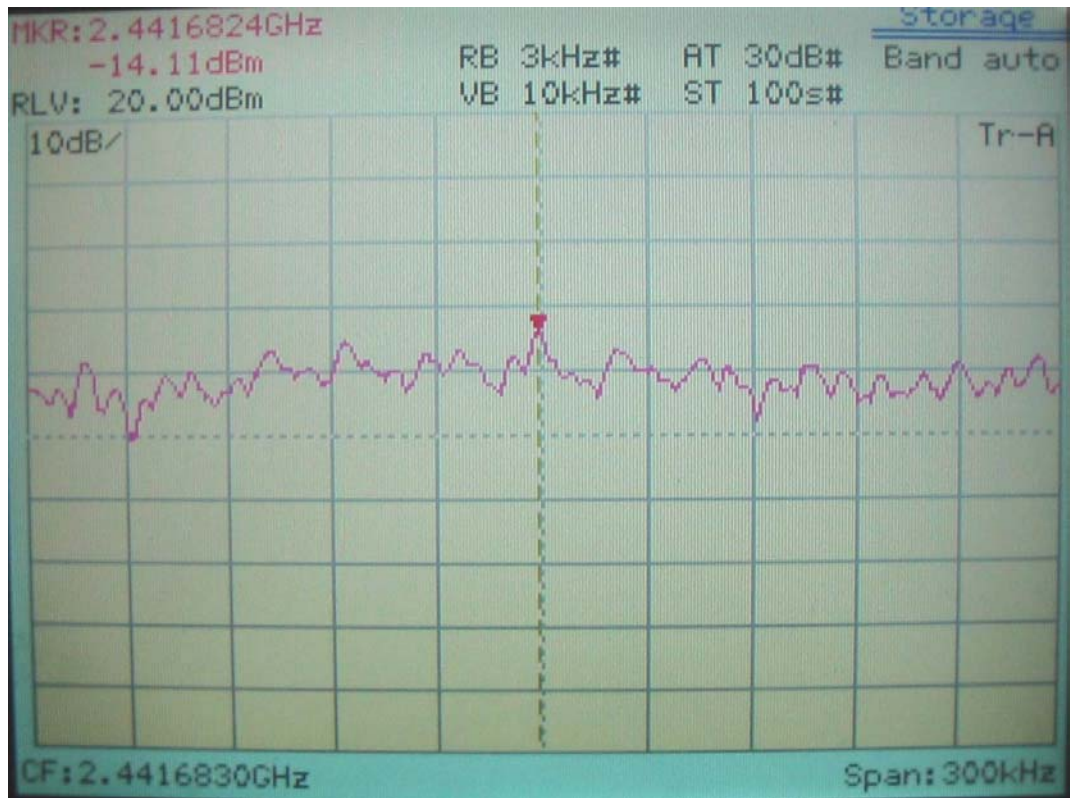


Ant #1

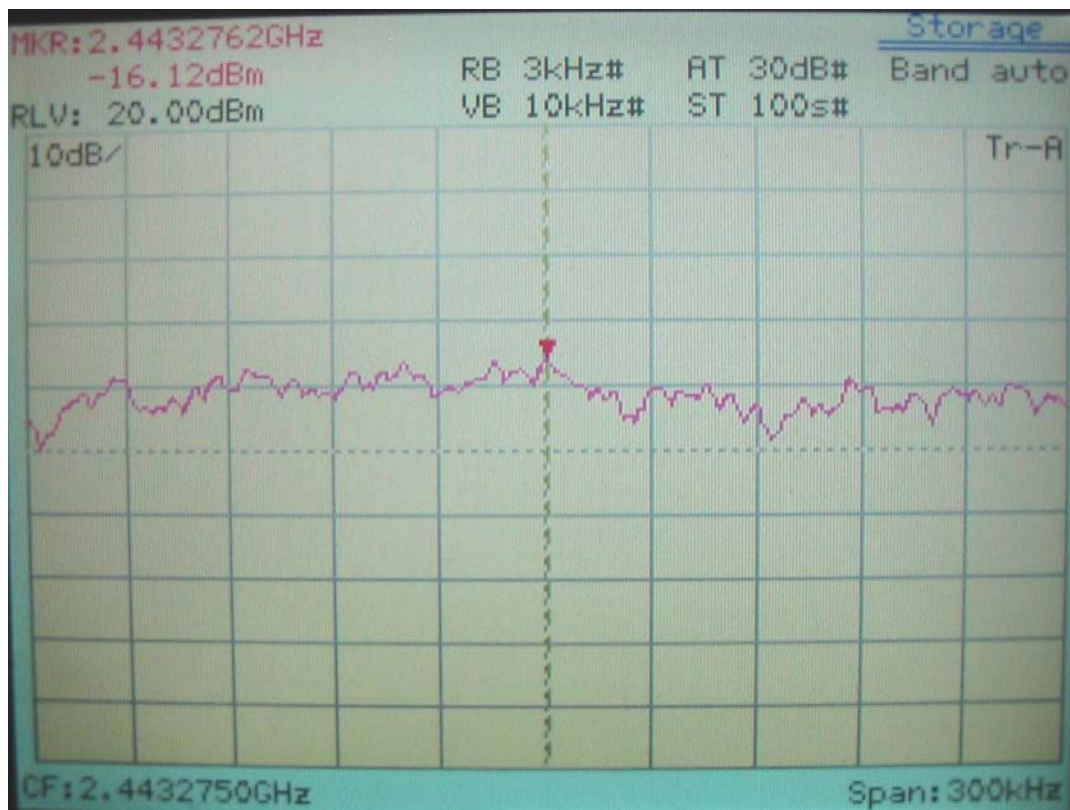


Ant #2

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

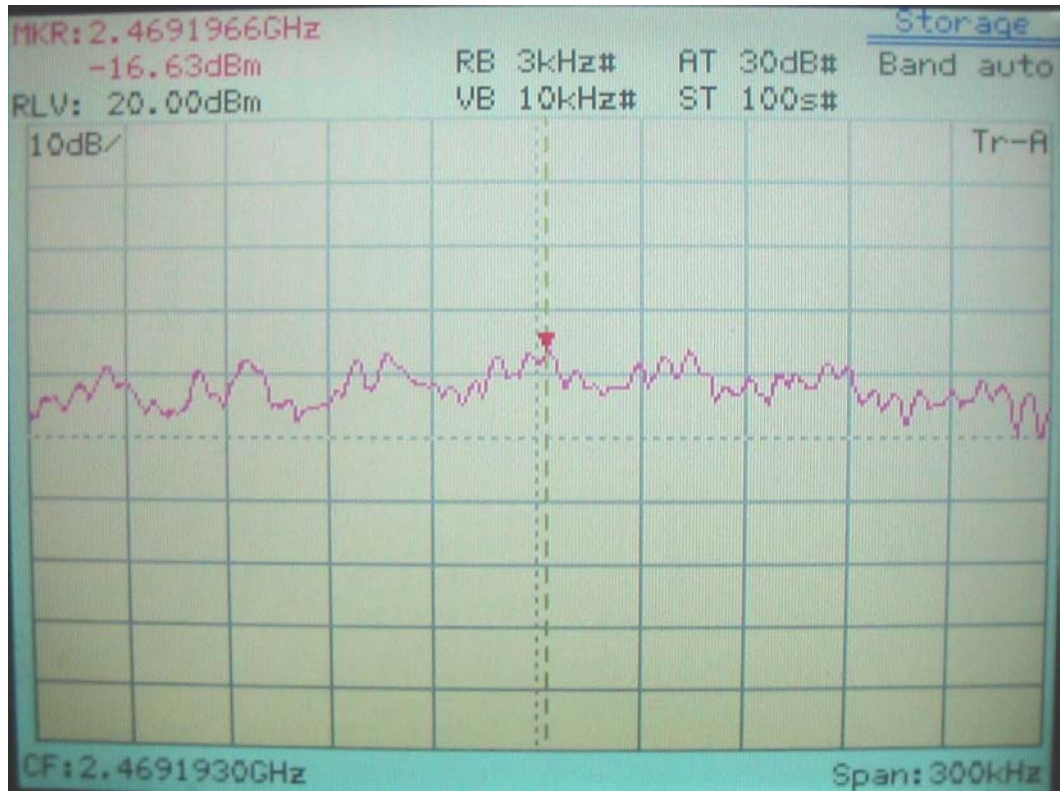


Ant #1

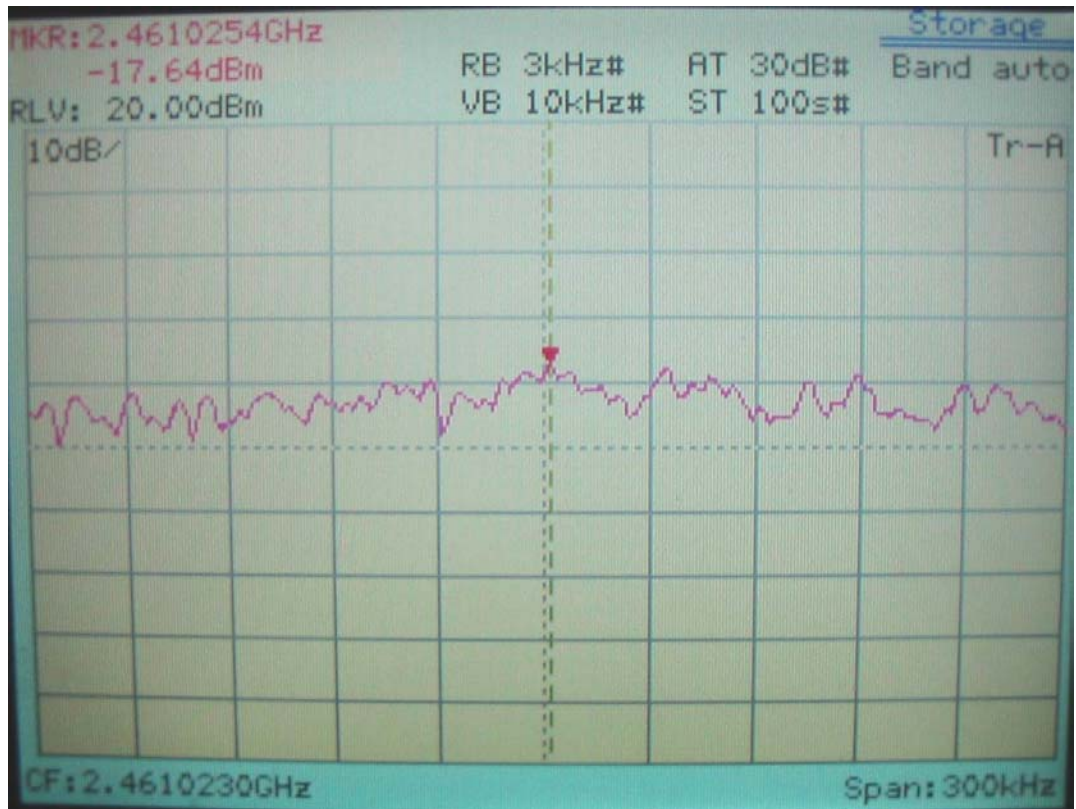


Ant #2

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

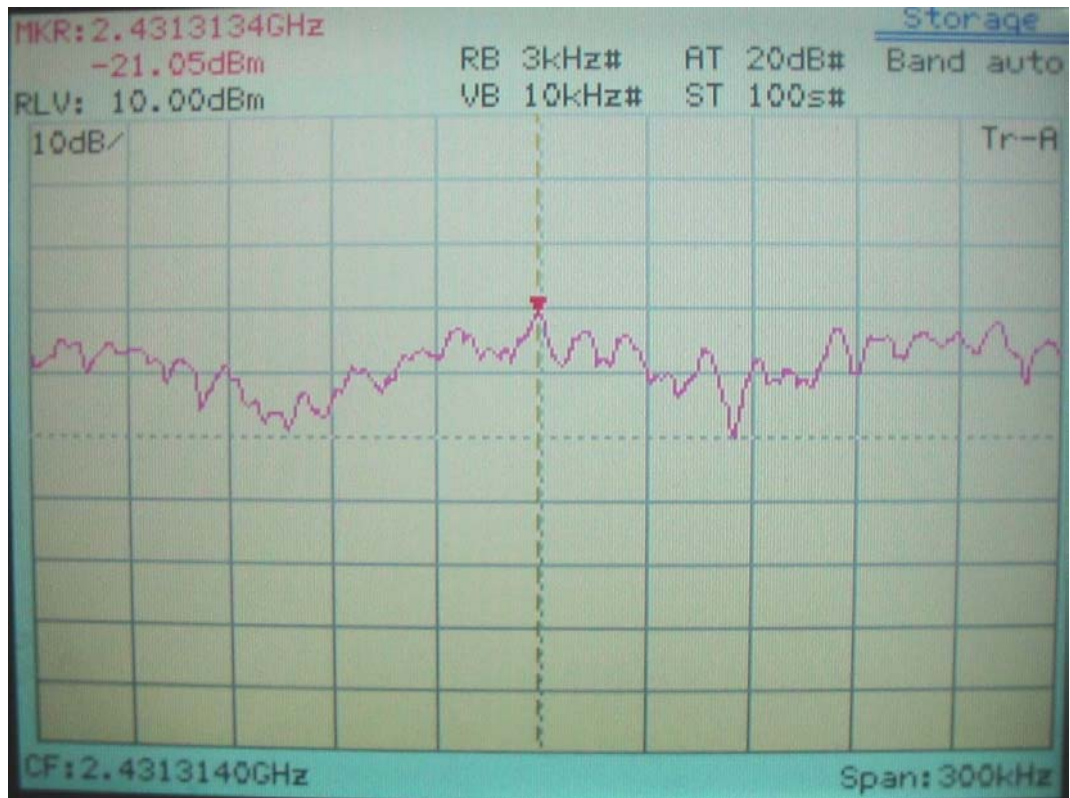


Ant #1

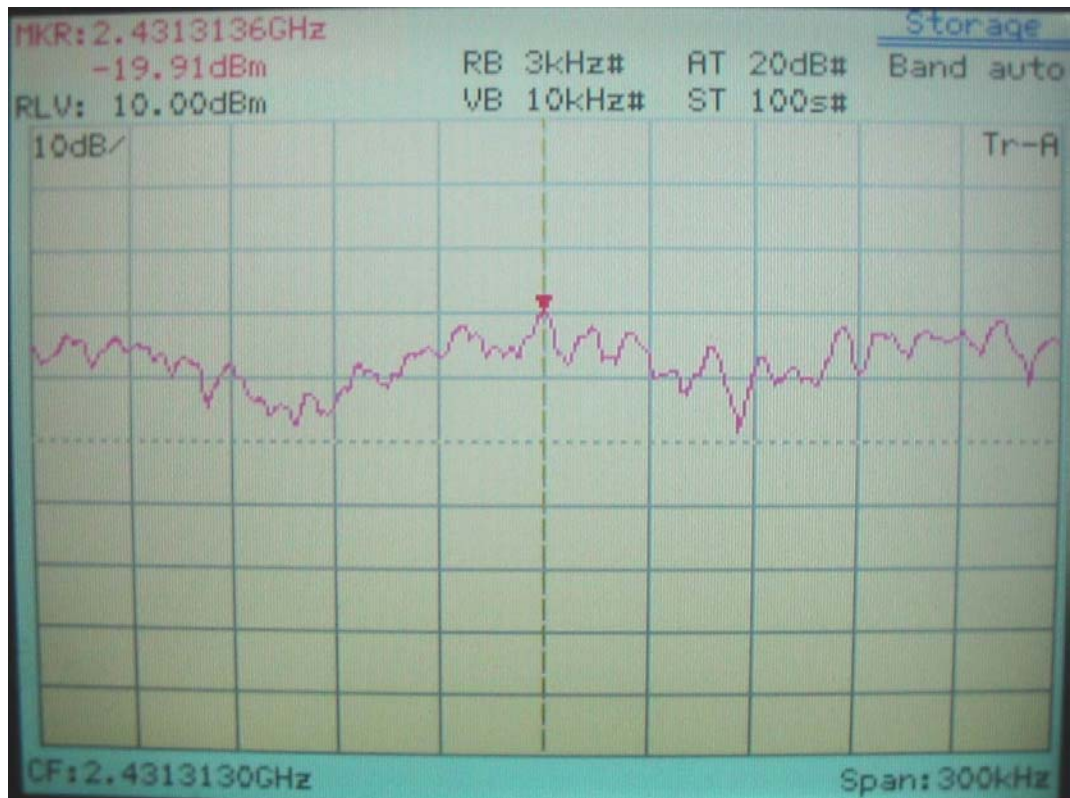


Ant #2

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

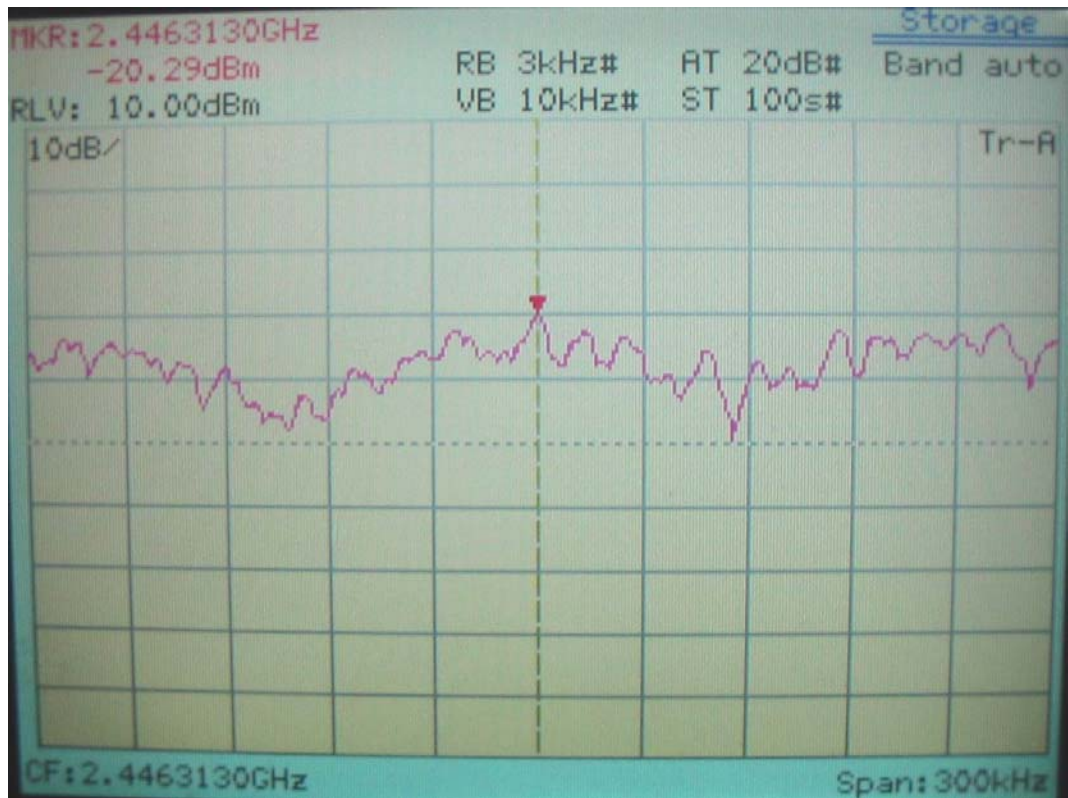


Ant #1

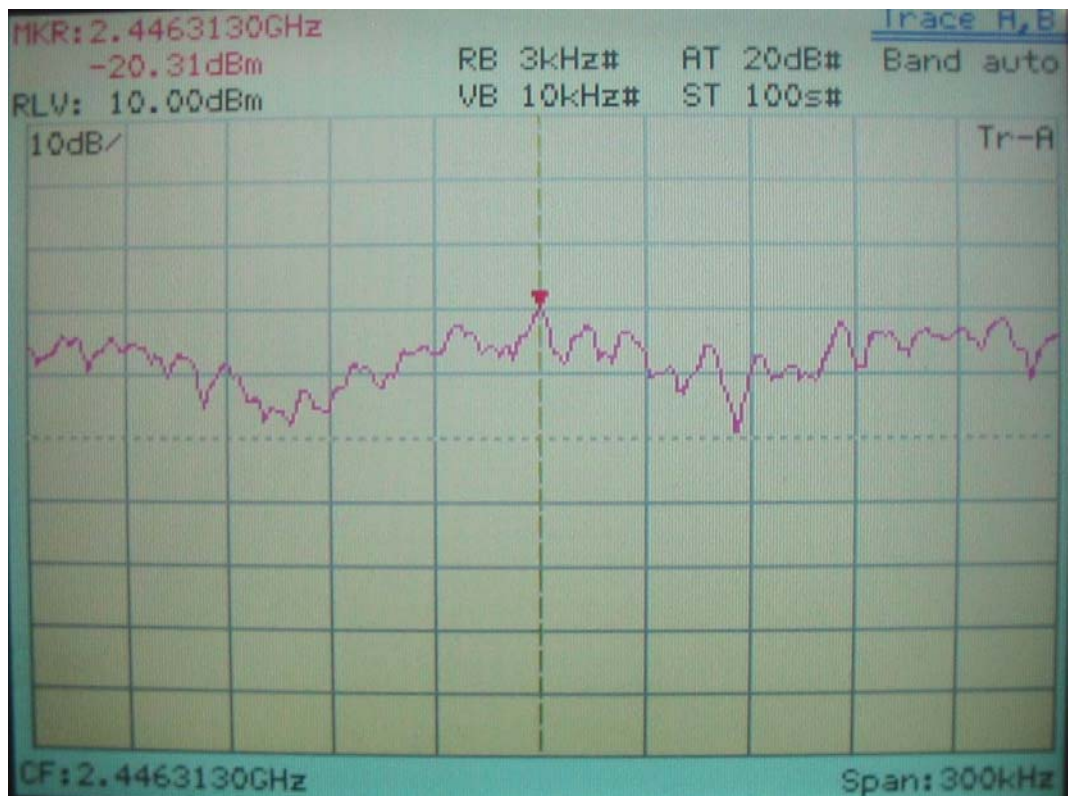


Ant #2

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

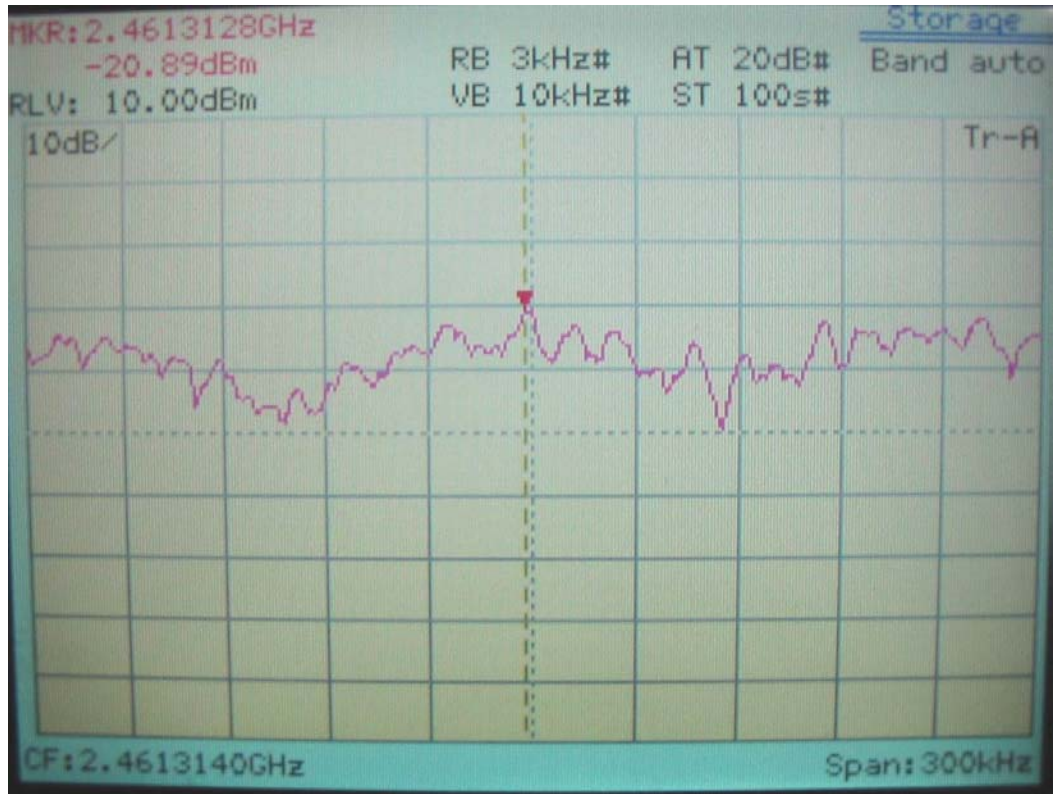


Ant #1

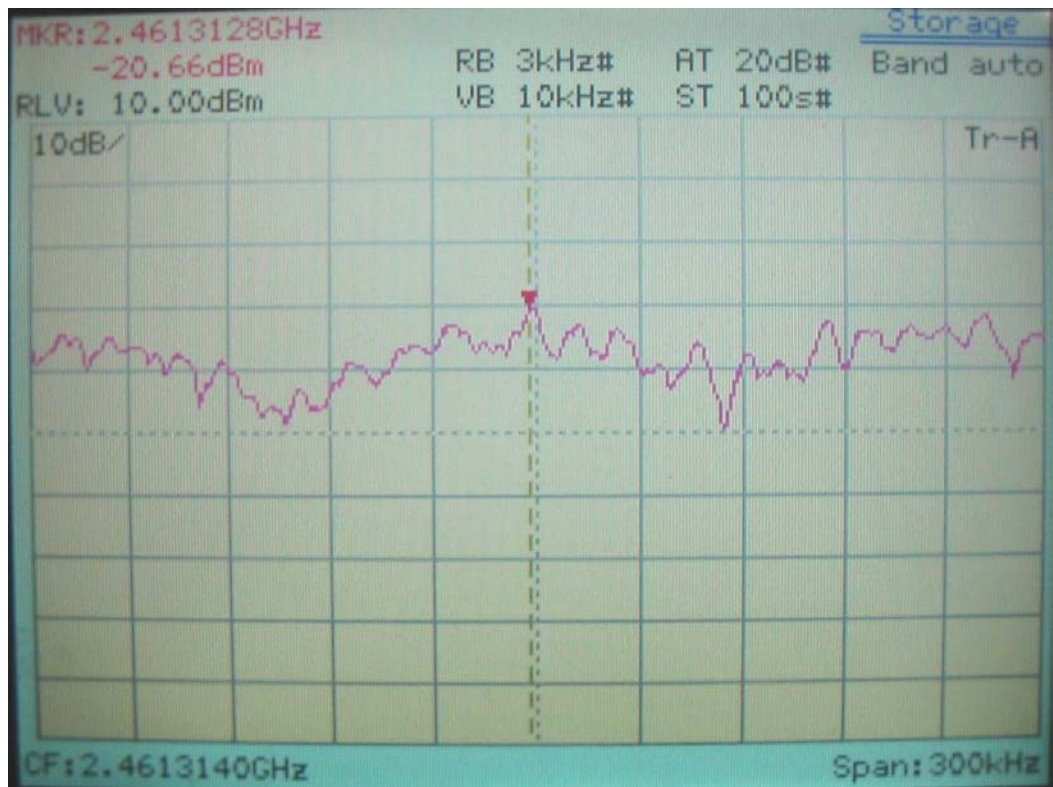


Ant #2

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



Ant #1



Ant #2