



FCC 47 CFR PART 15 SUBPART C

TEST REPORT

For

IEEE802.11 b/g/n USB Dongle

**Trade Name / Model:
LanReady / WUB1900,
PCI / GW-US300GXS**

Issued to

**LanReady Technologies Inc.
3F, No.116, Sinhu 2nd Rd., Neihu District,
Taipei City 114, Taiwan (R.O.C.)**

Issued by



**Compliance Certification Services Inc.
No. 81-1, Lane 210, Bade Rd. 2, Luchu Hsiang,
Taoyuan Hsien, (338) Taiwan, R.O.C.
<http://www.ccsemc.com.tw>
service@tw.ccsemc.com**



Note: This report shall not be reproduced except in full, without the written approval of Compliance Certification Services Inc. This document may be altered or revised by Compliance Certification Services Inc. personnel only, and shall be noted in the revision section of the document.



TABLE OF CONTENTS

1. TEST RESULT CERTIFICATION.....	3
2. EUT DESCRIPTION	4
3. TEST METHODOLOGY	5
3.1 EUT CONFIGURATION	5
3.2 EUT EXERCISE.....	5
3.3 GENERAL TEST PROCEDURES	5
3.4 FCC PART 15.205 RESTRICTED BANDS OF OPERATIONS	6
3.5 DESCRIPTION OF TEST MODES.....	7
4. INSTRUMENT CALIBRATION.....	8
4.1 MEASURING INSTRUMENT CALIBRATION	8
4.2 MEASUREMENT EQUIPMENT USED.....	8
5. FACILITIES AND ACCREDITATIONS	9
5.1 FACILITIES	9
5.2 EQUIPMENT	9
5.3 TABLE OF ACCREDITATIONS AND LISTINGS.....	10
6. SETUP OF EQUIPMENT UNDER TEST	11
6.1 SETUP CONFIGURATION OF EUT.....	11
6.2 SUPPORT EQUIPMENT	11
7. FCC PART 15.247 REQUIREMENTS.....	12
7.1 6DB BANDWIDTH	12
7.2 PEAK POWER.....	27
7.3 AVERAGE POWER	41
7.4 BAND EDGES MEASUREMENT	55
7.5 PEAK POWER SPECTRAL DENSITY	72
7.6 SPURIOUS EMISSIONS	93
7.7 RADIATED EMISSIONS	112
7.8 POWERLINE CONDUCTED EMISSIONS.....	128
APPENDIX I RADIO FREQUENCY EXPOSURE	131
APPENDIX II PHOTOGRAPHS OF TEST SETUP	132



1. TEST RESULT CERTIFICATION

Applicant: LanReady Technologies Inc.
3F, No.116, Sinhu 2nd Rd., Neihu District,
Taipei City 114, Taiwan (R.O.C.)

Equipment Under Test: IEEE802.11 b/g/n USB Dongle

Trade Name / Model Number: LanReady / WUB1900,
PCI / GW-US300GXS

Date of Test: October 29 ~ November 16, 2007

APPLICABLE STANDARDS	
STANDARD	TEST RESULT
FCC 47 CFR Part 15 Subpart C	No non-compliance noted

We hereby certify that:

The above equipment was tested by Compliance Certification Services Inc. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4: 2003 and the energy emitted by the sample EUT tested as described in this report is in compliance with the requirements of FCC Rules Part 15.207, 15.209, 15.247.

The test results of this report relate only to the tested sample EUT identified in this report.

Approved by:

Reviewed by:

Rex Lai
Section Manager
Compliance Certification Services Inc.

Amanda Wu
Section Manager
Compliance Certification Services Inc.



2. EUT DESCRIPTION

Product	IEEE802.11 b/g/n USB Dongle
Trade Name / Model Number	LanReady / WUB1900, PCI / GW-US300GXS
Model Discrepancy	All the specification and layout are identical except they come with different model numbers for marketing purposes.
Power Supply	Powered from host device.
Frequency Range	2412 ~ 2462 MHz
Transmit Power	IEEE 802.11b mode: 12.74 dBm IEEE 802.11g mode: 18.63 dBm draft 802.11n Standard-20 MHz Channel mode: 20.32 dBm draft 802.11n Wide-40 MHz Channel mode: 15.24 dBm
Modulation Technique	IEEE 802.11b mode: DSSS (1, 2, 5.5 and 11 Mbps) IEEE 802.11g mode: OFDM (6, 9, 12, 18, 24, 36, 48 and 54 Mbps) draft 802.11n Standard-20 MHz Channel mode: OFDM (6.5, 7.2, 13, 14.4, 14.44, 19.5, 21.7, 26, 28.89, 28.9, 39, 43.3, 43.33, 52, 57.78, 57.8, 58.5, 65.0, 72.2, 78, 86.67, 104, 115.56, 117, 130, 144.44 Mbps) draft 802.11n Wide-40 MHz Channel mode: OFDM (13.5, 15, 27, 30, 40.5, 45, 54, 60, 81, 90, 108, 120, 121.5, 135, 150, 162, 180, 216, 240, 243, 270, 300 Mbps)
Number of Channels	IEEE 802.11b/g mode: 11 Channels draft 802.11n Standard-20 MHz Channel mode: 11 Channels draft 802.11n Wide-40 MHz Channel mode: 7 Channels
Antenna Specification	PCB Antenna / Gain:-0.30 dBi Antenna Calculation for CDD Mode: $-0.30 \text{ dBi} + 10 \log (2) = 2.71 \text{ dBi}$ (Numeric gain: 1.86)

Remark:

1. The sample selected for test was engineering sample that approximated to production product and was provided by manufacturer.
2. This submittal(s) (test report) is intended for FCC ID: **SCD03003** filing to comply with Section 15.207, 15.209 and 15.247 of the FCC Part 15, Subpart C Rules.



3. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.4 and FCC CFR 47 2.1046, 2.1047, 2.1049, 2.1051, 2.1053, 2.1055, 2.1057, 15.207, 15.209 and 15.247.

3.1 EUT CONFIGURATION

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

3.2 EUT EXERCISE

The EUT was operated in the engineering mode to fix the TX frequency that was for the purpose of the measurements.

According to its specifications, the EUT must comply with the requirements of the Section 15.207, 15.209 and 15.247 under the FCC Rules Part 15 Subpart C.

3.3 GENERAL TEST PROCEDURES

Conducted Emissions

The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 13.1.4.1 of ANSI C63.4 Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-peak and average detector modes.

Radiated Emissions

The EUT is placed on a turn table, which is 0.8 m above ground plane. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna, which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the maximum emissions, exploratory radiated emission measurements were made according to the requirements in Section 13.1.4.1 of ANSI C63.4.



3.4 FCC PART 15.205 RESTRICTED BANDS OF OPERATIONS

- (a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 -	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.52525	2655 - 2900	22.01 - 23.12
8.41425 - 8.41475	156.7 - 156.9	3260 - 3267	23.6 - 24.0
12.29 - 12.293	162.0125 - 167.17	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	167.72 - 173.2	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	240 - 285	3600 - 4400	(²)
13.36 - 13.41	322 - 335.4		

¹ Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

² Above 38.6

- (b) Except as provided in paragraphs (d) and (e), the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.



3.5 DESCRIPTION OF TEST MODES

The EUT (model: WUB1900) had been tested under operating and standby condition.

The EUT is a 2x2 configuration spatial MIMO (2Tx & 2Rx) without beam forming function but with cyclic delay diversity function that operate in double TX chains and double RX chains. The 2x2 configuration is implemented with two outside TX & RX chains (Chain 0 and 2)

Software used to control the EUT for staying in continuous transmitting mode was programmed.

After verification, all tests were carried out with the worst case test modes as shown below except radiated spurious emission below 1GHz and power line conducted emissions below 30MHz, which worst case was in normal link mode only.

The USB slot could be in vertical and horizontal manner. After verification, all tests were carried out with the worst case test modes as shown below except radiated spurious emission below 1GHz, which worst case was in normal link mode only.

IEEE 802.11b mode:

Channel Low (2412MHz), Channel Mid (2437MHz) and Channel High (2462MHz) with 1Mbps data rate and cyclic delay diversity were chosen for full testing.

IEEE 802.11g mode:

Channel Low (2412MHz), Channel Mid (2437MHz) and Channel High (2462MHz) with 6Mbps data rate and cyclic delay diversity were chosen for full testing.

draft 802.11n Standard-20 MHz Channel mode:

Channel Low (2412MHz), Channel Mid (2437MHz) and Channel High (2462MHz) with 6.5Mbps data rate were chosen for full testing.

draft 802.11n Wide-40 MHz Channel mode:

Channel Low (2422MHz), Channel Mid (2437MHz) and Channel High (2452MHz) with 13.5Mbps data rate were chosen for full testing.



4. INSTRUMENT CALIBRATION

4.1 MEASURING INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which is traceable to recognized national standards.

4.2 MEASUREMENT EQUIPMENT USED

Equipment Used for Emissions Measurement

Remark: Each piece of equipment is scheduled for calibration once a year.

Conducted Emissions Test Site				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	MY43360131	01/30/2008

3M Semi Anechoic Chamber				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	US42510252	09/11/2008
Test Receiver	Rohde&Schwarz	ESCI	100064	11/13/2008
Switch Controller	TRC	Switch Controller	SC94050010	05/04/2008
4 Port Switch	TRC	4 Port Switch	SC94050020	05/04/2008
Horn Antenna	EMCO	3115	9903-5761	01/12/2008
Bilog- Antenna	Sunol Sciences	JB3	A030205	03/29/2008
Turn Table	Max-Full	MFT-120S	T120S940302	N.C.R.
Antenna Tower	Max-Full	MFA-430	A440940302	N.C.R.
Controller	Max-Full	MF-CM886	CC-C-1F-13	N.C.R.
Site NSA	CCS	N/A	FCC: 965860 IC: IC 6106	09/25/2008
Test S/W	LABVIEW (V 6.1)			

Remark: The measurement uncertainty is less than +/-2.0065dB (30MHz ~ 1GHz), +/-3.0958dB (Above 1GHz) which is evaluated as per the NAMAS NIS 81 and CISPR/A/291/CDV.

Powerline Conducted Emissions Test Site				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
EMI TEST RECEIVER 9kHz-30MHz	ROHDE & SCHWARZ	ESHS30	828144/003	10/31/2008
TWO-LINE V-NETWORK 9kHz-30MHz	SCHAFFNER	NNB41	03/10013	06/12/2008
LISN 10kHz-100MHz	EMCO	3825/2	9106-1809	03/19/2008
Test S/W	LABVIEW (V 6.1)			

Remark: The measurement uncertainty is less than +/- 2.81dB, which is evaluated as per the NAMAS NIS 81 and CISPR/A/291/CDV.



5. FACILITIES AND ACCREDITATIONS

5.1 FACILITIES

All measurement facilities used to collect the measurement data are located at

☐ No.199, Chunghsen Road, Hsintien City, Taipei Hsien, Taiwan, R.O.C.

Tel: 886-2-2217-0894 / Fax: 886-2-2217-1029

☒ No.11, Wugong 6th Rd., Wugu Industrial Park, Taipei Hsien 248, Taiwan

Tel: 886-2-2299-9720 / Fax: 886-2-2298-4045

☒ No.81-1, Lane 210, Bade 2nd Rd., Luchu Hsiang, Taoyuan Hsien 338, Taiwan

Tel: 886-3-324-0332 / Fax: 886-3-324-5235

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 and CISPR Publication 22.

5.2 EQUIPMENT







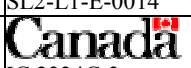
Radiated emissions are measured with one or more of the following types of linearly polarized antennas: tuned dipole, biconical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with pre-selectors and quasi-peak detectors are used to perform radiated measurements.

Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers.

Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

5.3 TABLE OF ACCREDITATIONS AND LISTINGS

Country	Agency	Scope of Accreditation	Logo
USA	A2LA	EN 55011, EN 55014-1/2, CISPR 11, CISPR 14-1/2, EN 55022, EN 55015, CISPR 22, CISPR 15, AS/NZS 3548, VCCI V3 (2001), CFR 47, FCC Part 15/18, CNS 13783-1, CNS 13439, CNS 13438, CNS 13803, CNS 14115, EN 55024, IEC 801-2, IEC 801-3, IEC 801-4, IEC/EN 61000-3-2, IEC/EN 61000-3-3, IEC/EN 61000-4-2/3/4/5/6/8/11, EN 50081-1/ EN 61000-6-3, EN 50081-2/EN 61000-6-4, EN 50081-2/EN 61000-6-1: 2001	 ACCREDITED TESTING CERT #0824.01
USA	FCC	3/10 meter Open Area Test Sites (93105, 90471) / 3M Semi Anechoic Chamber (965860) to perform FCC Part 15/18 measurements	 93105, 90471 965860
Japan	VCCI	3/10 meter Open Area Test Sites to perform conducted/radiated measurements	 R-393/1066/725/879 C-402/747/912
Norway	NEMKO	EN 50081-1/2, EN 50082-1/2, IEC 61000-6-1/2, EN 50091-2, EN 50130-4, EN 55011, EN 55013, EN 55014-1/2, EN 55015, EN 55022, EN 55024, EN 61000-3-2/3, EN 61326-1, IEC 61000-4-2/3/4/5/6/8/11, EN 60601-1-2, EN 300 328, EN 300 422-2, EN 301 419-1, EN 301 489-01/03/07/08/09/17, EN 301 419-2/3, EN 300 454-2, EN 301 357-2	 ELA 124a ELA 124b ELA 124c
Taiwan	TAF	EN 300 328, EN 300 220-1, EN 300 220-2, EN 300 220-3, 47 CFR FCC Part 15 Subpart C, EN 61000-3-2, EN 61000-3-3, CNS 13439, CNS 13783-1, CNS 14115, CNS 13438, AS/NZS CISPR 22, CNS 13022-1, IEC 61000-4-2/3/4/5/6/8/11, CNS 13022-2/3	 Testing Laboratory 0363
Taiwan	BSMI	CNS 13438, CNS 13783-1, CNS 13439, CNS 14115	 SL2-IS-E-0014 SL2-IN-E-0014 SL2-A1-E-0014 SL2-R1-E-0014 SL2-R2-E-0014 SL2-L1-E-0014
Canada	Industry Canada	3/10 meter Open Area Test Sites (IC 2324C-3, IC 2324C-5) / 3M Semi Anechoic Chamber (IC 6106)	 IC 2324C-3 IC 2324C-5 IC 6106

* No part of this report may be used to claim or imply product endorsement by A2LA or any agency of the US Government.



6. SETUP OF EQUIPMENT UNDER TEST

6.1 SETUP CONFIGURATION OF EUT

See test photographs attached in Appendix II for the actual connections between EUT and support equipment.

6.2 SUPPORT EQUIPMENT

No	Equipment	Brand	Model	Series No.	FCC ID	Data Cable	Power Cord
1.	Notebook PC	IBM	2672 (X31)	99KPZYN	WLAN: ANO20030400LEG Bluetooth: ANO20020100MTN	N/A	AC I/P: Unshielded, 1.8m DC O/P: Unshielded, 1.8m with a core
2.	Notebook PC	IBM	1951-I3V(T60)	L3B2188	FCC DoC	N/A	AC I/P: Unshielded, 1.8m DC O/P: Unshielded, 1.8m with a core
3.	Notebook PC	ASUS	M5200AE	5BN0AG019631	PD9WM3B2100	N/A	AC I/P: Unshielded, 1.8m with a core DC O/P: Unshielded, 1.8m
4.	LCD Monitor	LG	L1740PQ	503KGXA2K858	BEJL17NU	Shielded, 1.8m with 2 cores	AC I/P: Unshielded, 1.8m DC O/P: Unshielded, 1.8m with a core
5.	Printer	EPSON	STYLUS C60	DR3K041515	FCC DoC	Shielded, 1.8m	Unshielded, 1.8m
6.	Multimedia Earphone	Labtec	Axis-301	N/A	FCC DoC	Unshielded, 1.8m	N/A
7.	USB Mouse	Dell	MO56UO	408031121	FCC DoC	Shielded, 1.8m	N/A

Remark:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.



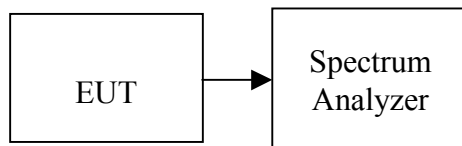
7. FCC PART 15.247 REQUIREMENTS

7.1 6DB BANDWIDTH

LIMIT

According to §15.247(a)(2), systems using digital modulation techniques may operate in the 902 - 928 MHz, 2400 - 2483.5 MHz, and 5725 - 5850 MHz bands. The minimum 6dB bandwidth shall be at least 500 kHz.

Test Configuration



TEST PROCEDURE

1. Place the EUT on the table and set it in the transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
3. Set the spectrum analyzer as RBW = 100 kHz, VBW = RBW, Span = 50 MHz, Sweep = auto.
4. Mark the peak frequency and -6dB (upper and lower) frequency.
5. Repeat until all the rest channels are investigated.



TEST RESULTS

No non-compliance noted

Test Data

Test mode: IEEE 802.11b mode / Chain 0

Channel	Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Result
Low	2412	10000	>500	PASS
Mid	2437	10920		PASS
High	2462	10170		PASS

Test mode: IEEE 802.11b mode / Chain 2

Channel	Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Result
Low	2412	9670	>500	PASS
Mid	2437	10250		PASS
High	2462	11080		PASS

Test mode: IEEE 802.11g mode / Chain 0

Channel	Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Result
Low	2412	15330	>500	PASS
Mid	2437	16420		PASS
High	2462	15920		PASS

Test mode: IEEE 802.11g mode / Chain 2

Channel	Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Result
Low	2412	16420	>500	PASS
Mid	2437	16330		PASS
High	2462	16000		PASS

**Test mode: draft 802.11n Standard-20 MHz Channel mode / Chain 0**

Channel	Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Result
Low	2412	17330	>500	PASS
Mid	2437	17250		PASS
High	2462	17750		PASS

Test mode: draft 802.11n Standard-20 MHz Channel mode / Chain 2

Channel	Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Result
Low	2412	16670	>500	PASS
Mid	2437	17000		PASS
High	2462	17250		PASS

Test mode: draft 802.11n Wide-40 MHz Channel mode / Chain 0

Channel	Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Result
Low	2422	31830	>500	PASS
Mid	2437	27170		PASS
High	2452	24750		PASS

Test mode: draft 802.11n Wide-40 MHz Channel mode / Chain 2

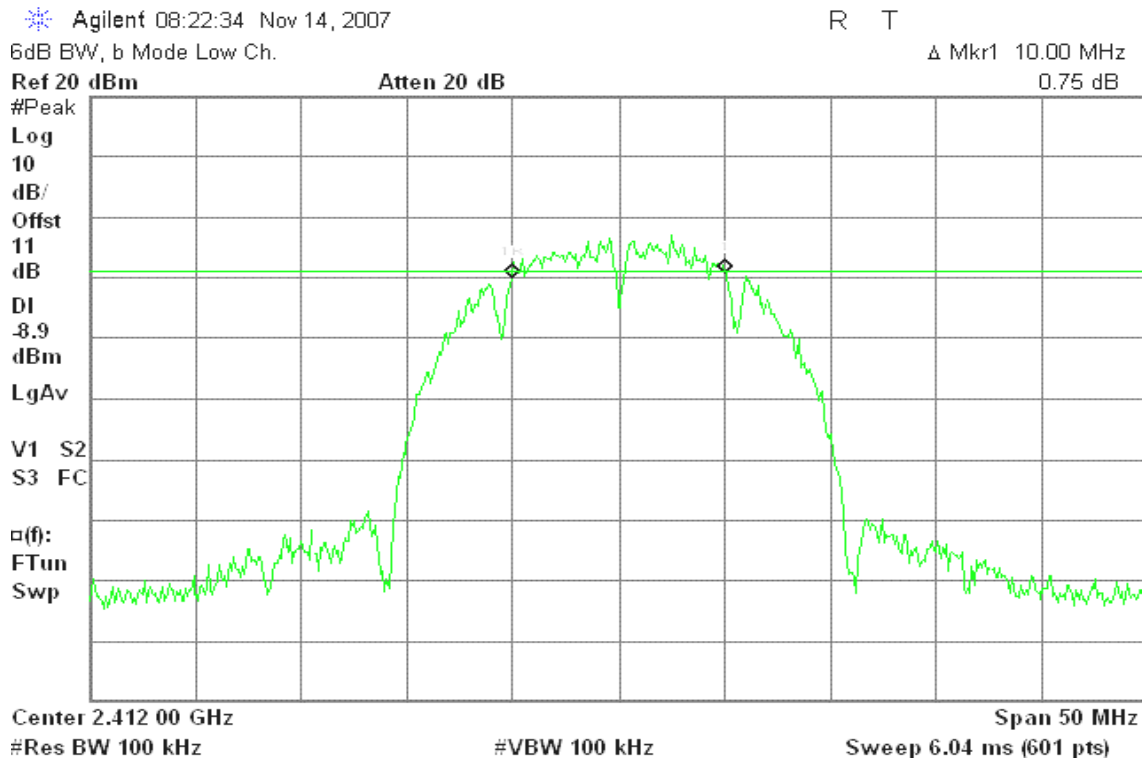
Channel	Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Result
Low	2422	28830	>500	PASS
Mid	2437	29670		PASS
High	2452	30580		PASS



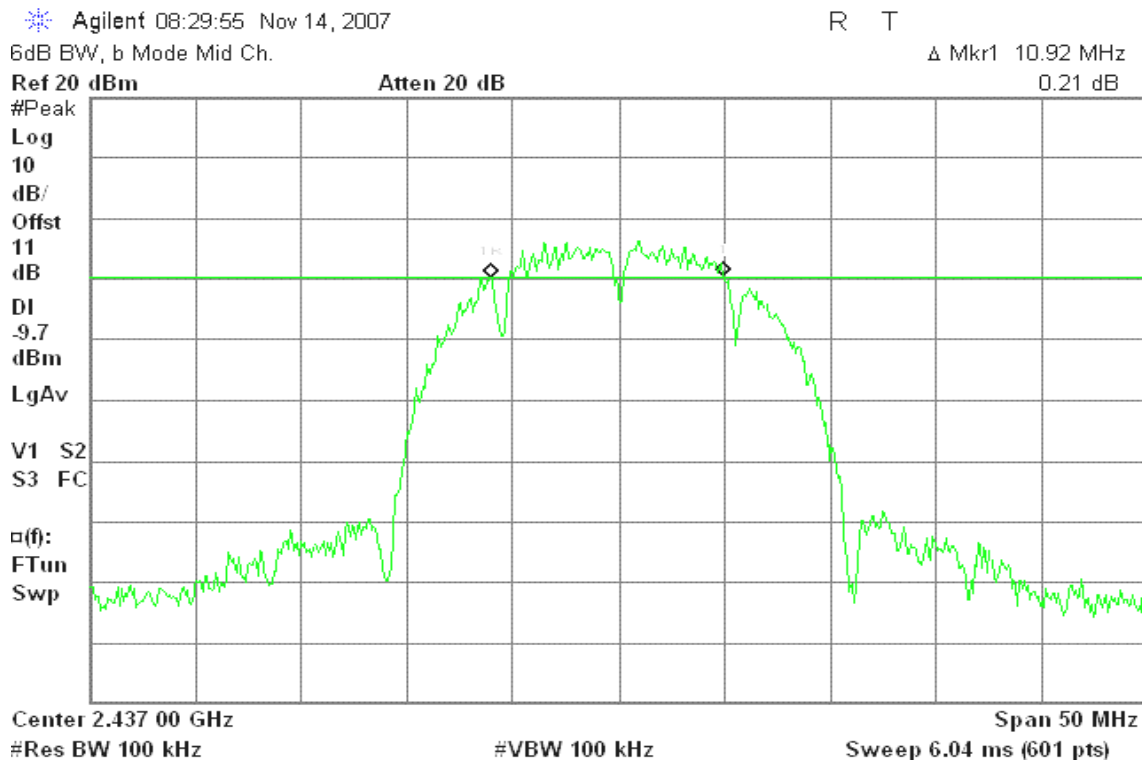
Test Plot

IEEE 802.11b mode / Chain 0

6dB Bandwidth (CH Low)



6dB Bandwidth (CH Mid)



**6dB Bandwidth (CH High)**

* Agilent 08:35:49 Nov 14, 2007

R T

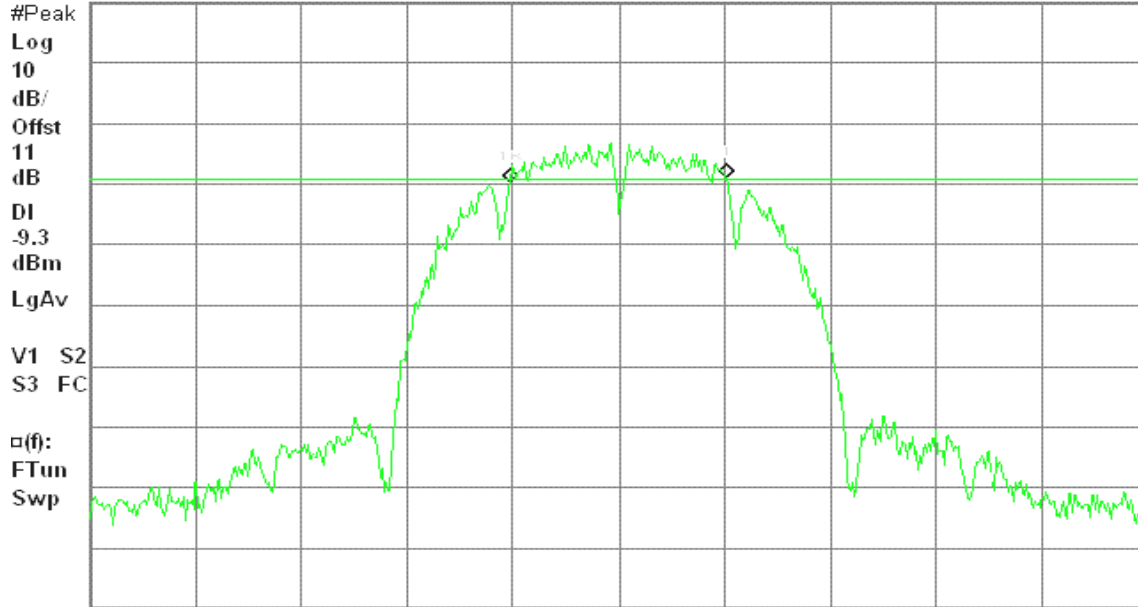
6dB BW, b Mode High Ch.

 Δ Mkr1 10.17 MHz

Ref 20 dBm

Atten 20 dB

0.94 dB



Center 2.462 00 GHz

Span 50 MHz

#Res BW 100 kHz

#VBW 100 kHz

Sweep 6.04 ms (601 pts)

IEEE 802.11b mode / Chain 2**6dB Bandwidth (CH Low)**

* Agilent 09:08:08 Nov 14, 2007

R T

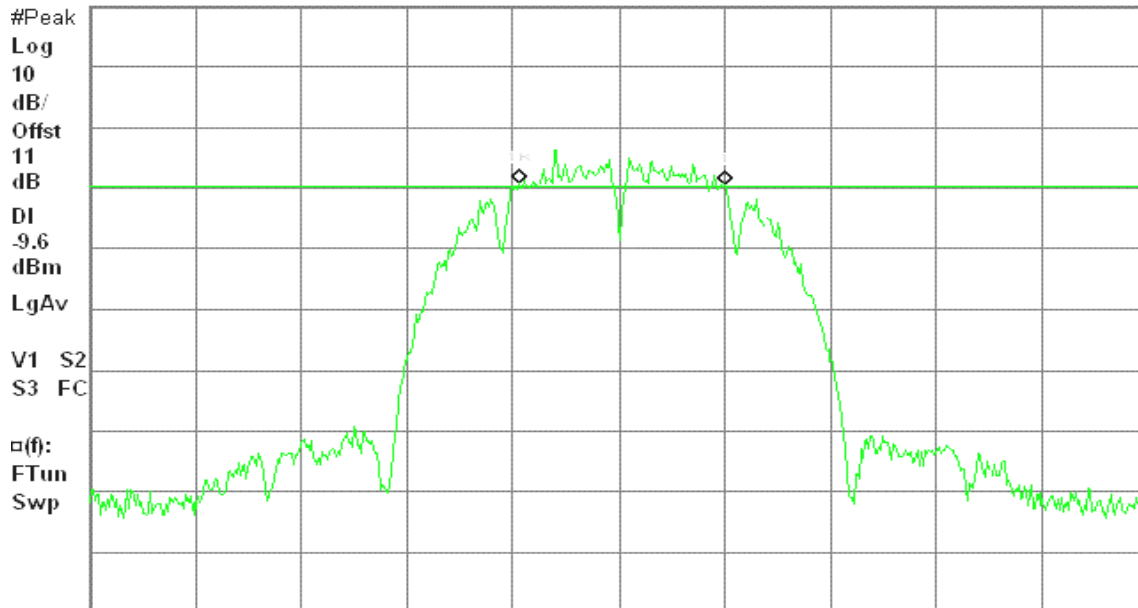
6dB BW, b Mode Low Ch.

 Δ Mkr1 9.67 MHz

Ref 20 dBm

Atten 20 dB

-0.02 dB



Center 2.412 00 GHz

Span 50 MHz

#Res BW 100 kHz

#VBW 100 kHz

Sweep 6.04 ms (601 pts)

**6dB Bandwidth (CH Mid)**

* Agilent 08:57:47 Nov 14, 2007

R T

6dB BW, b Mode Mid Ch.

 Δ Mkr1 10.25 MHz

Ref 20 dBm

Atten 20 dB

1.59 dB

#Peak

Log

10

dB/

Offst

11

dB

DI

-11.5

dBm

LgAv

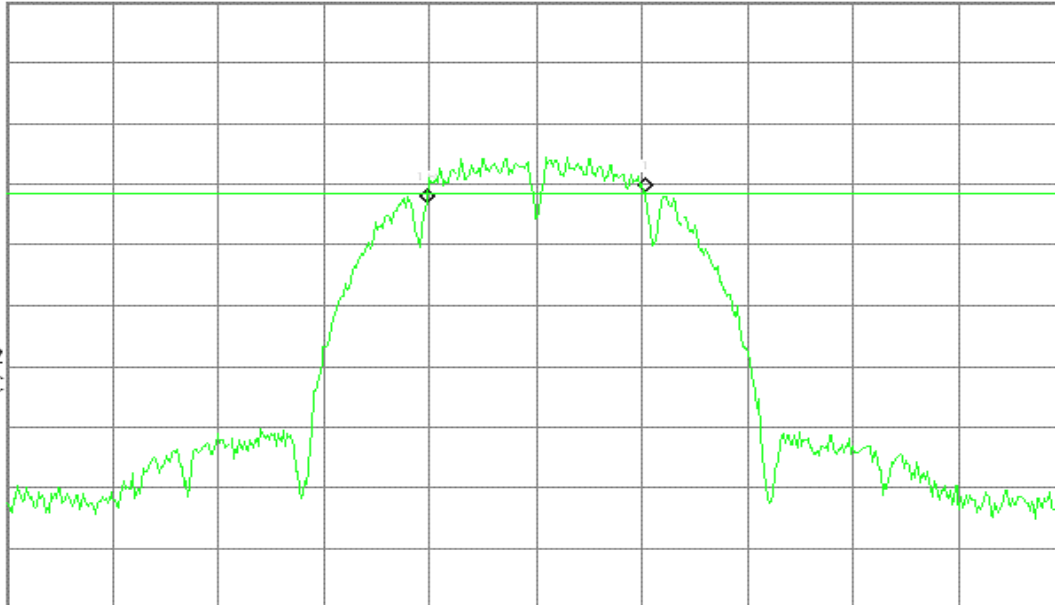
V1 S2

S3 FC

 $\square(f)$:

FTun

Swp



Center 2.437 00 GHz

Span 50 MHz

#Res BW 100 kHz

#VBW 100 kHz

Sweep 6.04 ms (601 pts)

6dB Bandwidth (CH High)

* Agilent 08:43:22 Nov 14, 2007

R T

6dB BW, b Mode High Ch.

 Δ Mkr1 11.08 MHz

Ref 20 dBm

Atten 20 dB

0.73 dB

#Peak

Log

10

dB/

Offst

11

dB

DI

-11.2

dBm

LgAv

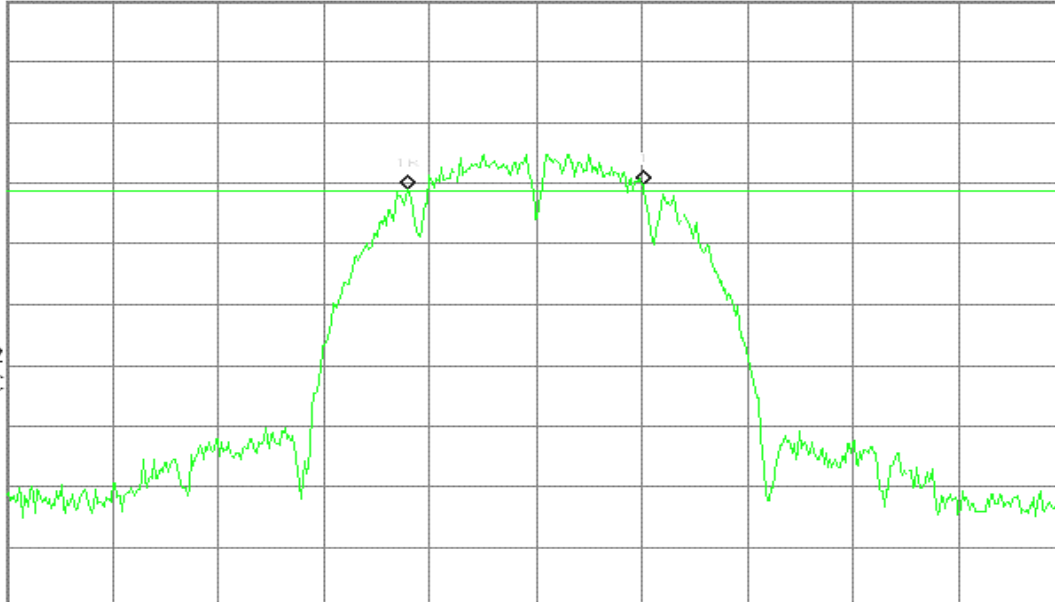
V1 S2

S3 FC

 $\square(f)$:

FTun

Swp



Center 2.462 00 GHz

Span 50 MHz

#Res BW 100 kHz

#VBW 100 kHz

Sweep 6.04 ms (601 pts)

**IEEE 802.11g mode / Chain 0****6dB Bandwidth (CH Low)**

Agilent 09:54:17 Nov 14, 2007

R L

6dB BW, g Mode Low Ch.

 Δ Mkr1 15.33 MHz

Ref 20 dBm

Atten 20 dB

1.27 dB

#Peak

Log

10

dB/

Offst

11

dB

DI

-4.5

dBm

LgAv

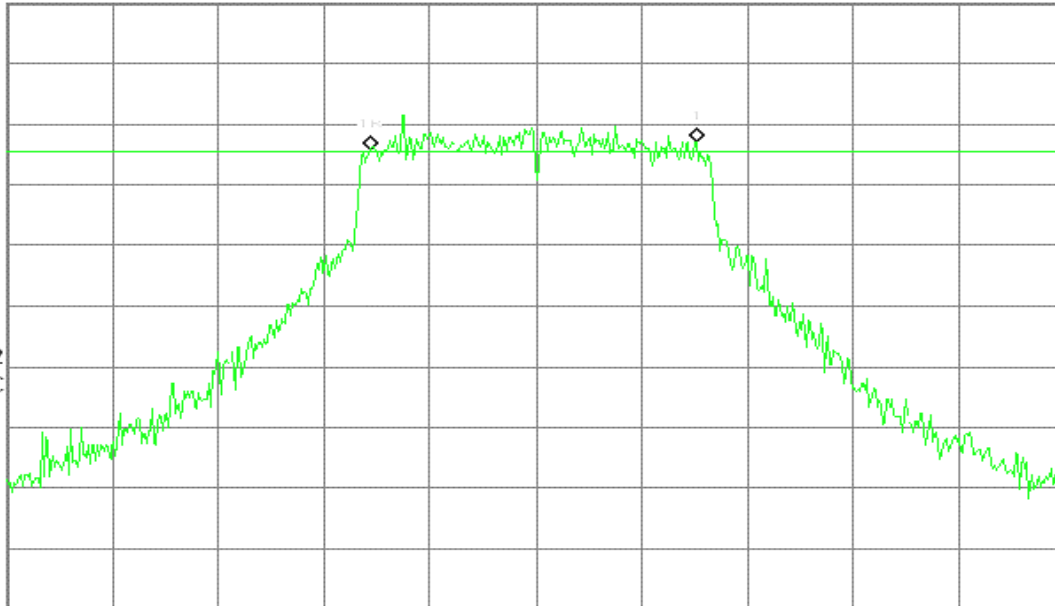
V1 S2

S3 FC

 $\alpha(f)$:

FTun

Swp



Center 2.412 00 GHz

Span 50 MHz

#Res BW 100 kHz

#VBW 100 kHz

Sweep 6.04 ms (601 pts)

6dB Bandwidth (CH Mid)

Agilent 09:47:57 Nov 14, 2007

R T

6dB BW, g Mode Mid Ch.

 Δ Mkr1 16.42 MHz

Ref 20 dBm

Atten 20 dB

-1.31 dB

#Peak

Log

10

dB/

Offst

11

dB

DI

-6.2

dBm

LgAv

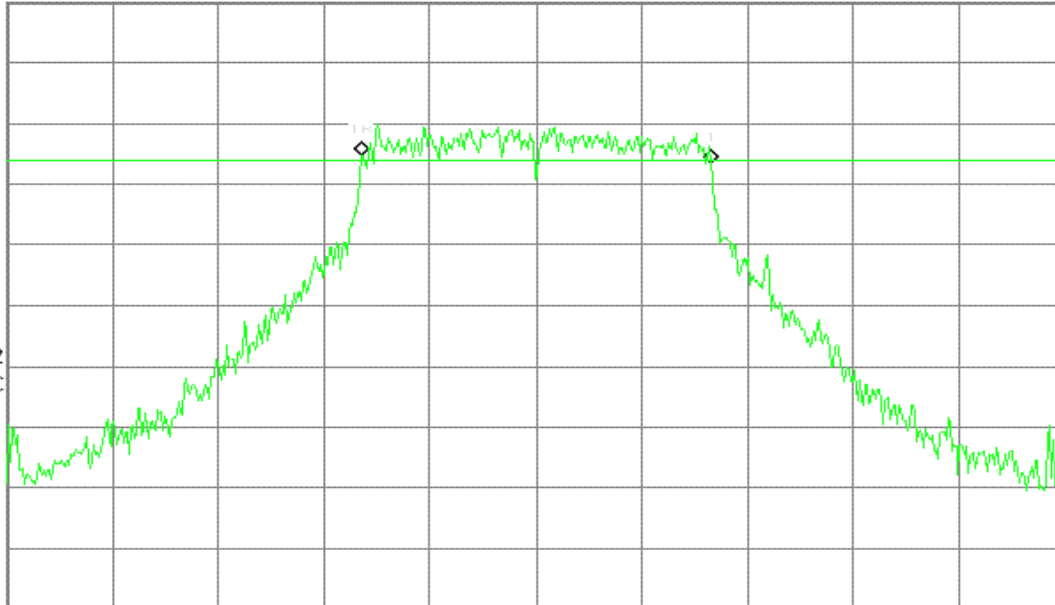
V1 S2

S3 FC

 $\alpha(f)$:

FTun

Swp



Center 2.437 00 GHz

Span 50 MHz

#Res BW 100 kHz

#VBW 100 kHz

Sweep 6.04 ms (601 pts)

**6dB Bandwidth (CH High)**

Agilent 09:41:26 Nov 14, 2007

R T

6dB BW, g Mode High Ch.

 Δ Mkr1 15.92 MHz

Ref 20 dBm

Atten 20 dB

0.69 dB

#Peak

Log

10

dB/

Offst

11

dB

DI

-5.6

dBm

LgAv

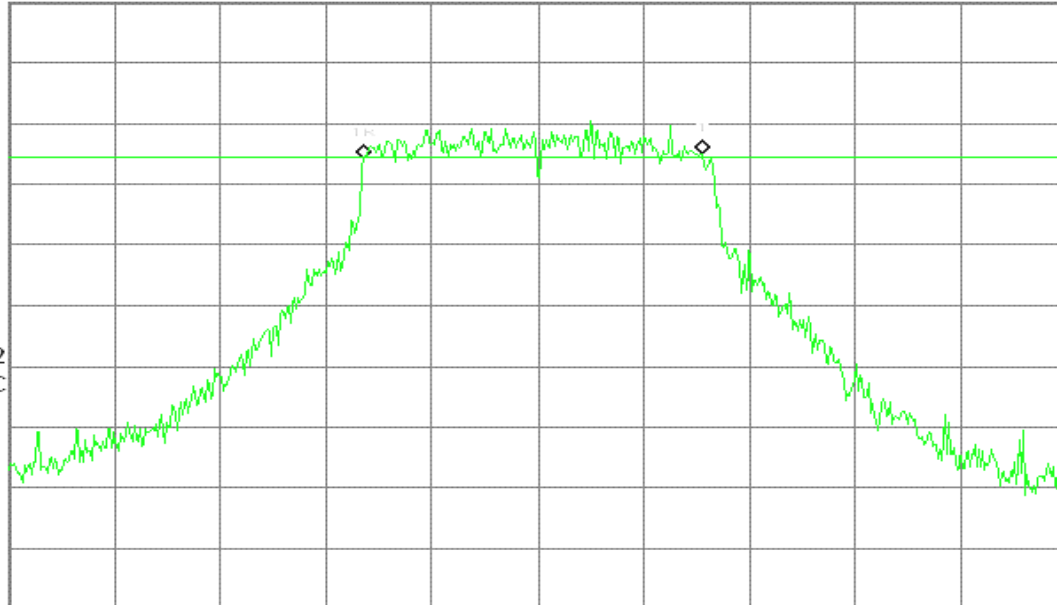
V1 S2

S3 FC

 $\alpha(f)$:

FTun

Swp



Center 2.462 00 GHz

Span 50 MHz

#Res BW 100 kHz

#VBW 100 kHz

Sweep 6.04 ms (601 pts)

IEEE 802.11g mode / Chain 2**6dB Bandwidth (CH Low)**

Agilent 09:18:05 Nov 14, 2007

R T

6dB BW, g Mode Low Ch.

 Δ Mkr1 16.42 MHz

Ref 20 dBm

Atten 20 dB

-1.39 dB

#Peak

Log

10

dB/

Offst

11

dB

DI

-6.9

dBm

LgAv

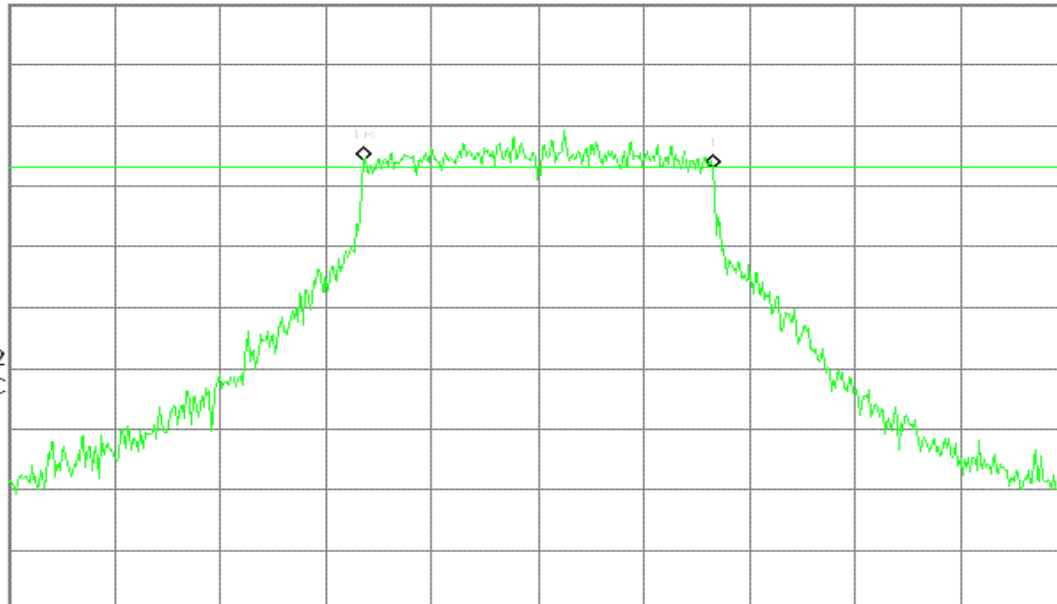
V1 S2

S3 FC

 $\alpha(f)$:

FTun

Swp



Center 2.412 00 GHz

Span 50 MHz

#Res BW 100 kHz

#VBW 100 kHz

Sweep 6.04 ms (601 pts)

**6dB Bandwidth (CH Mid)**

* Agilent 09:29:00 Nov 14, 2007

R T

6dB BW, g Mode Mid Ch.

 Δ Mkr1 16.33 MHz

Ref 20 dBm

Atten 20 dB

0.19 dB

#Peak

Log

10

dB/

Offst

11

dB

DI

-6.2

dBm

LgAv

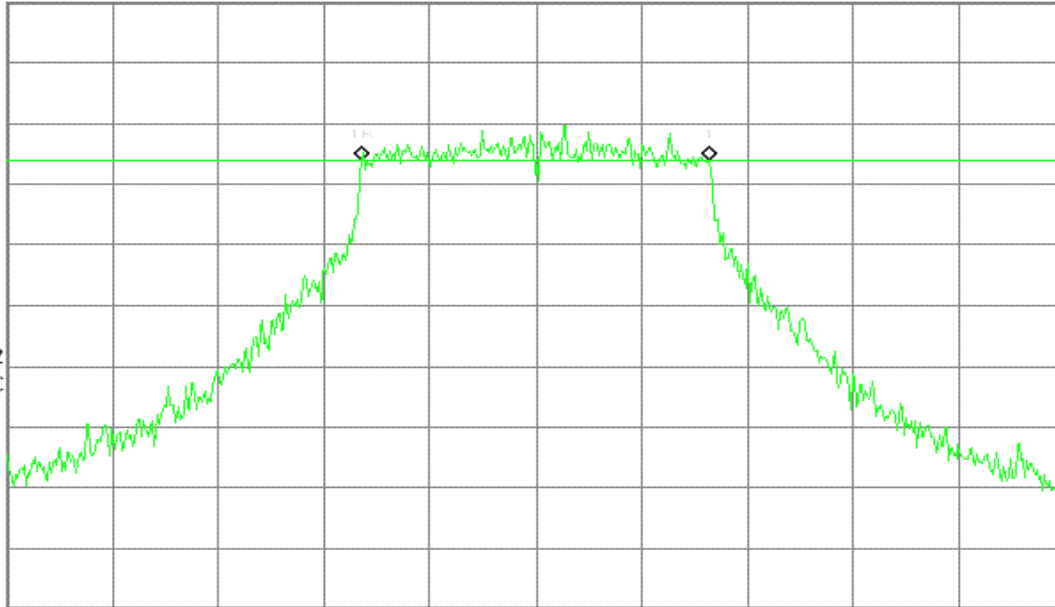
V1 S2

S3 FC

 $\square(f)$:

FTun

Swp



Center 2.437 00 GHz

Span 50 MHz

#Res BW 100 kHz

#VBW 100 kHz

Sweep 6.04 ms (601 pts)

6dB Bandwidth (CH High)

* Agilent 09:34:34 Nov 14, 2007

R T

6dB BW, g Mode High Ch.

 Δ Mkr1 16.00 MHz

Ref 20 dBm

Atten 20 dB

0.12 dB

#Peak

Log

10

dB/

Offst

11

dB

DI

-6.9

dBm

LgAv

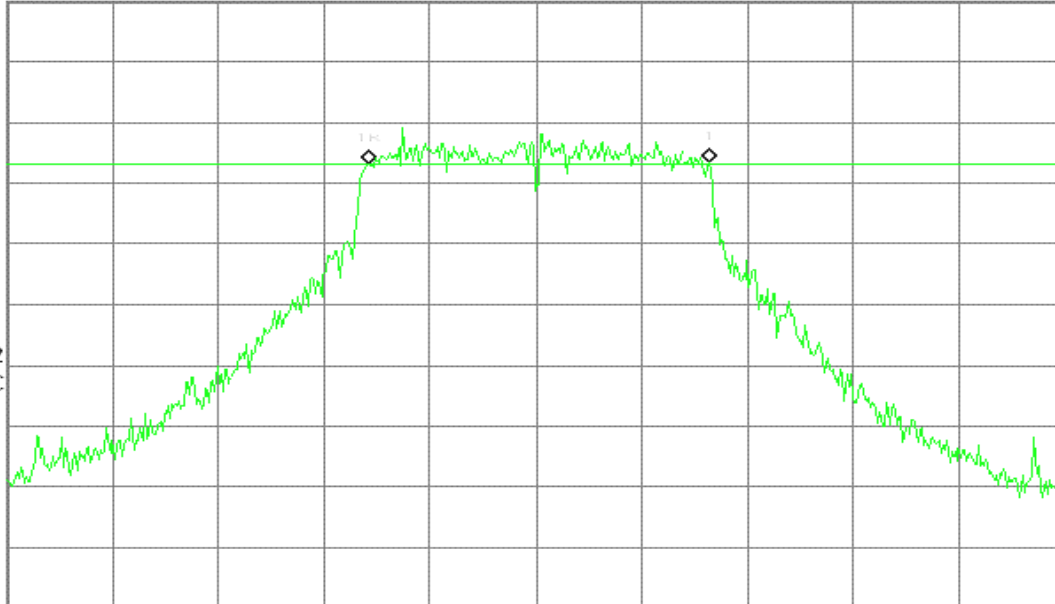
V1 S2

S3 FC

 $\square(f)$:

FTun

Swp



Center 2.462 00 GHz

Span 50 MHz

#Res BW 100 kHz

#VBW 100 kHz

Sweep 6.04 ms (601 pts)

**draft 802.11n Standard-20 MHz Channel mode / Chain 0****6dB Bandwidth (CH Low)**

Agilent 15:46:02 Nov 12, 2007

R T

6dB BW, g Mode Low Ch.

 Δ Mkr1 17.33 MHz

Ref 20 dBm

Atten 20 dB

-0.13 dB

#Peak

Log

10

dB/

Offst

11

dB

DI

-2.8

dBm

LgAv

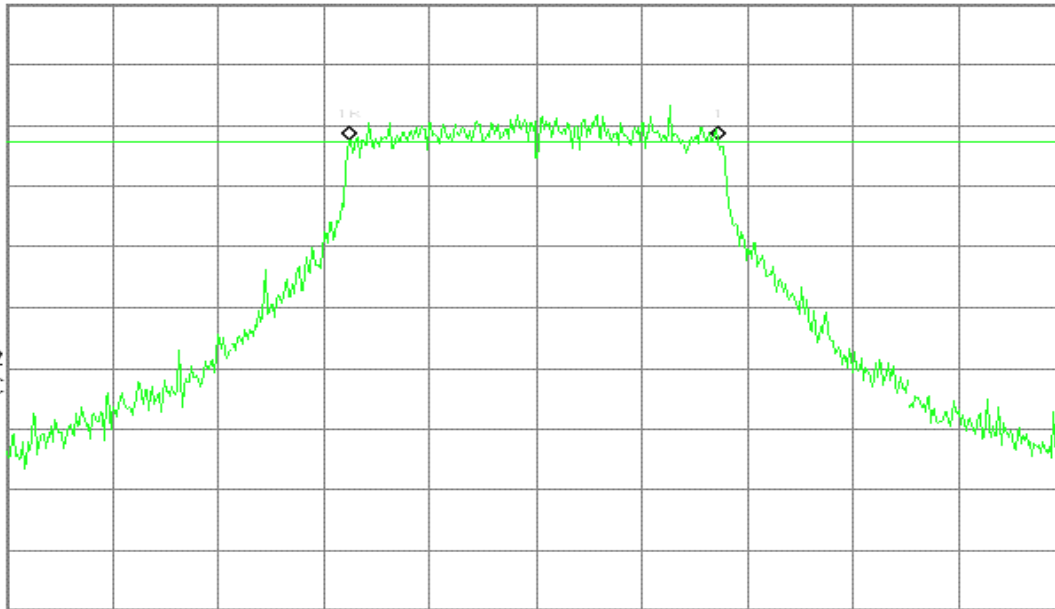
V1 S2

S3 FC

 $\alpha(f)$:

FTun

Swp



Center 2.412 00 GHz

Span 50 MHz

#Res BW 100 kHz

#VBW 100 kHz

Sweep 6.04 ms (601 pts)

6dB Bandwidth (CH Mid)

Agilent 15:39:12 Nov 12, 2007

R T

6dB BW, g Mode Mid Ch.

 Δ Mkr1 17.25 MHz

Ref 20 dBm

Atten 20 dB

-1.26 dB

#Peak

Log

10

dB/

Offst

11

dB

DI

-3.5

dBm

LgAv

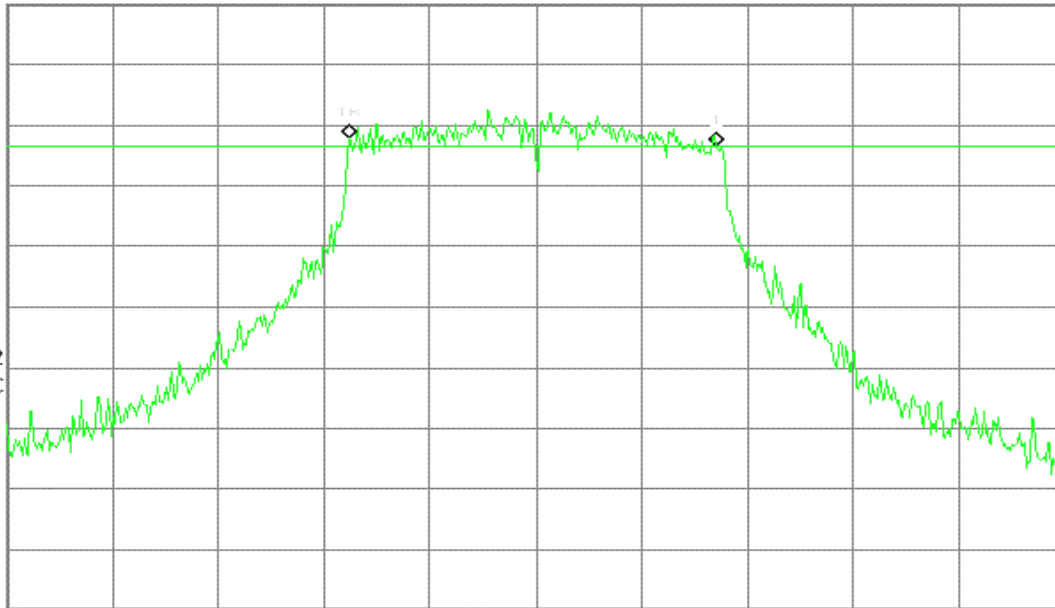
V1 S2

S3 FC

 $\alpha(f)$:

FTun

Swp



Center 2.437 00 GHz

Span 50 MHz

#Res BW 100 kHz

#VBW 100 kHz

Sweep 6.04 ms (601 pts)

**6dB Bandwidth (CH High)**

Agilent 15:33:26 Nov 12, 2007

R T

6dB BW, g Mode High Ch.

 Δ Mkr1 17.75 MHz

Ref 20 dBm

Atten 20 dB

-2.39 dB

#Peak

Log

10

dB/

Offst

11

dB

DI

-4.5

dBm

LgAv

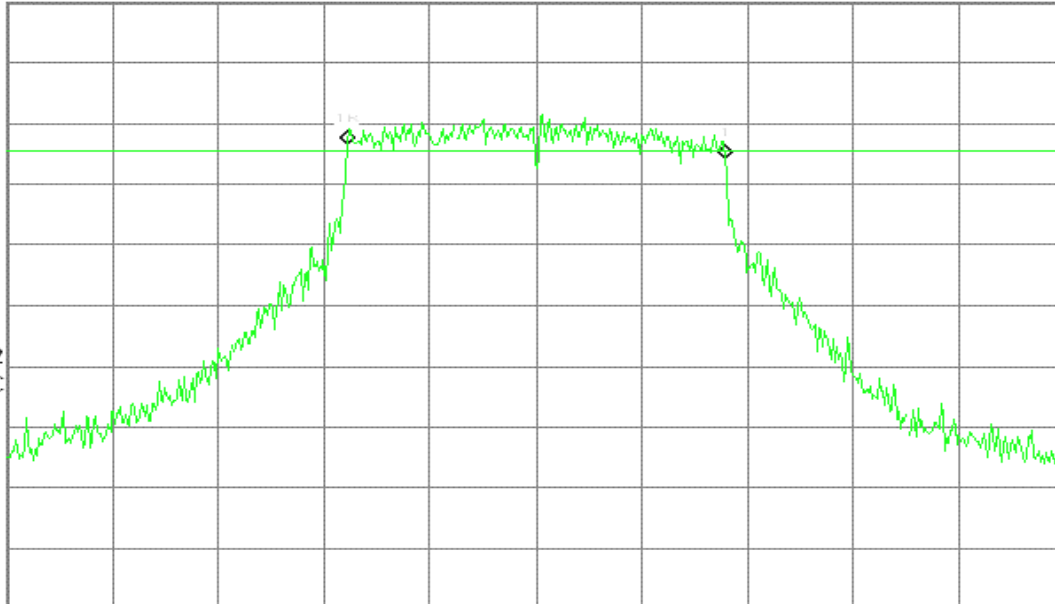
V1 S2

S3 FC

 $\square(f)$:

FTun

Swp



Center 2.462 00 GHz

Span 50 MHz

#Res BW 100 kHz

#VBW 100 kHz

Sweep 6.04 ms (601 pts)

draft 802.11n Standard-20 MHz Channel mode / Chain 2**6dB Bandwidth (CH Low)**

Agilent 15:03:27 Nov 12, 2007

R T

6dB BW, g Mode Low Ch.

 Δ Mkr1 16.67 MHz

Ref 20 dBm

Atten 20 dB

-0.44 dB

#Peak

Log

10

dB/

Offst

11

dB

DI

-4.3

dBm

LgAv

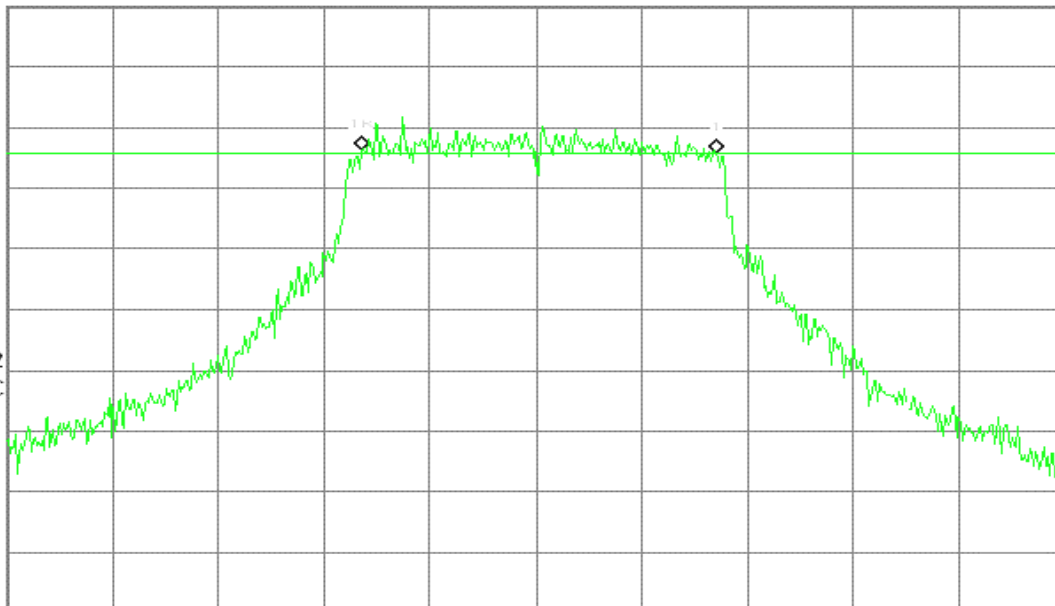
V1 S2

S3 FC

 $\square(f)$:

FTun

Swp



Center 2.412 00 GHz

Span 50 MHz

#Res BW 100 kHz

#VBW 100 kHz

Sweep 6.04 ms (601 pts)



6dB Bandwidth (CH Mid)

Agilent 15:20:23 Nov 12, 2007

R L

6dB BW, g Mode Mid Ch.

 Δ Mkr1 17.00 MHz

Ref 20 dBm

Atten 20 dB

-0.89 dB

#Peak

Log

10

dB/

Offst

11

dB

DI

-5.4

dBm

LgAv

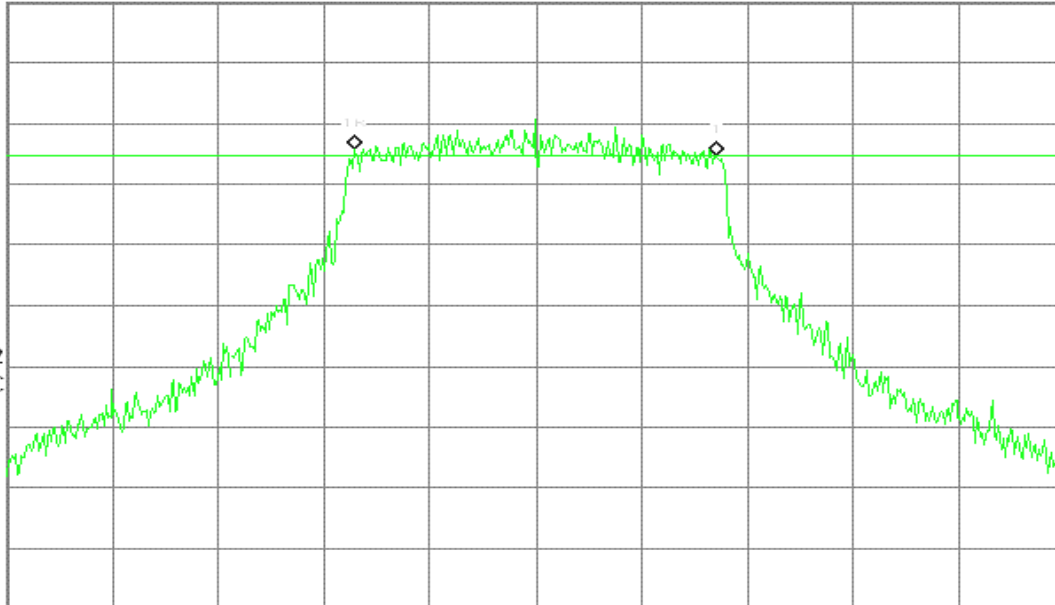
V1 S2

S3 FC

 $\square(f)$:

FTun

Swp



Center 2.437 00 GHz

Span 50 MHz

#Res BW 100 kHz

#VBW 100 kHz

Sweep 6.04 ms (601 pts)

6dB Bandwidth (CH High)

Agilent 15:27:07 Nov 12, 2007

R T

6dB BW, g Mode High Ch.

 Δ Mkr1 17.25 MHz

Ref 20 dBm

Atten 20 dB

-0.78 dB

#Peak

Log

10

dB/

Offst

11

dB

DI

-5.1

dBm

LgAv

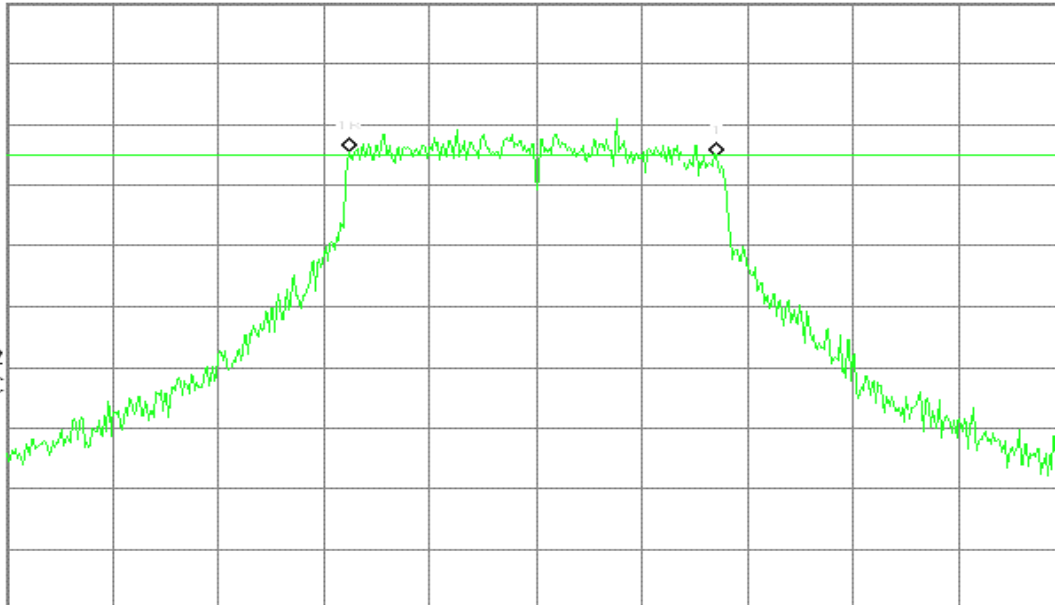
V1 S2

S3 FC

 $\square(f)$:

FTun

Swp



Center 2.462 00 GHz

Span 50 MHz

#Res BW 100 kHz

#VBW 100 kHz

Sweep 6.04 ms (601 pts)

**draft 802.11n Wide-40 MHz Channel mode / Chain 0****6dB Bandwidth (CH Low)**

* Agilent 16:06:01 Nov 12, 2007

R T

6dB BW, g Mode Low Ch.

 Δ Mkr1 31.83 MHz

Ref 20 dBm

Atten 20 dB

0.09 dB

#Peak

Log

10

dB/

Offst

11

dB

DI

-12.2

dBm

LgAv

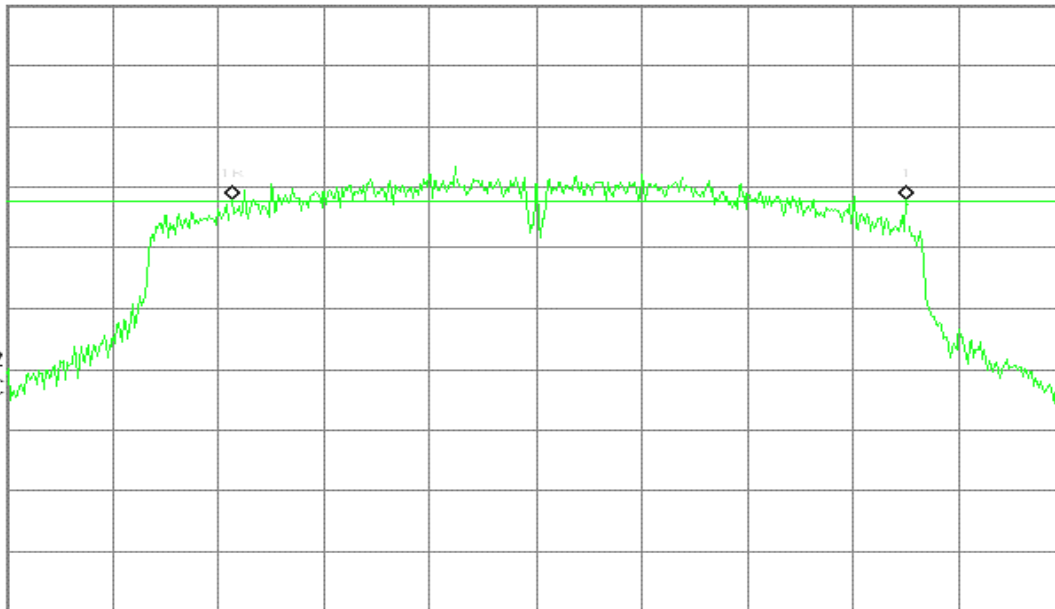
V1 S2

S3 FC

 $\square(f)$:

FTun

Swp



Center 2.422 00 GHz

Span 50 MHz

#Res BW 100 kHz

#VBW 100 kHz

Sweep 6.04 ms (601 pts)

6dB Bandwidth (CH Mid)

* Agilent 16:20:56 Nov 12, 2007

R T

6dB BW, g Mode Mid Ch.

 Δ Mkr1 27.17 MHz

Ref 20 dBm

Atten 20 dB

-2.72 dB

#Peak

Log

10

dB/

Offst

11

dB

DI

-9.3

dBm

LgAv

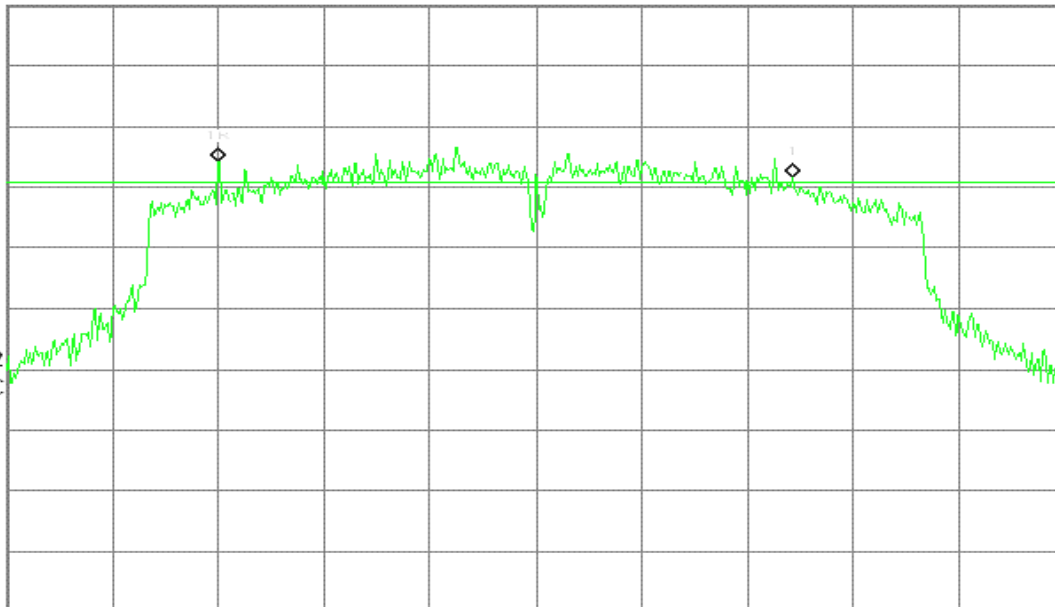
V1 S2

S3 FC

 $\square(f)$:

FTun

Swp



Center 2.437 00 GHz

Span 50 MHz

#Res BW 100 kHz

#VBW 100 kHz

Sweep 6.04 ms (601 pts)

**6dB Bandwidth (CH High)**

* Agilent 16:26:43 Nov 12, 2007

R L

6dB BW, g Mode High Ch.

 Δ Mkr1 24.75 MHz

Ref 20 dBm

Atten 20 dB

0.20 dB

#Peak

Log

10

dB/

Offst

11

dB

DI

-9.3

dBm

LgAv

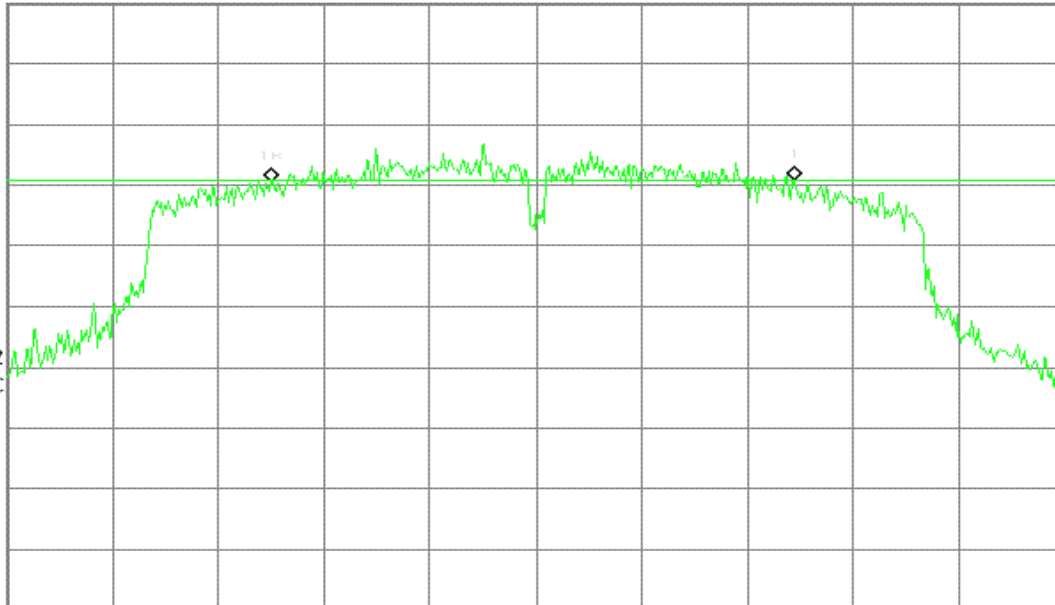
V1 S2

S3 FC

 $\alpha(f)$:

FTun

Swp



Center 2.452 00 GHz

Span 50 MHz

#Res BW 100 kHz

#VBW 100 kHz

Sweep 6.04 ms (601 pts)

draft 802.11n Wide-40 MHz Channel mode / Chain 2**6dB Bandwidth (CH Low)**

* Agilent 16:41:41 Nov 12, 2007

R T

6dB BW, g Mode Low Ch.

 Δ Mkr1 28.83 MHz

Ref 20 dBm

Atten 20 dB

0.07 dB

#Peak

Log

10

dB/

Offst

11

dB

DI

-14.7

dBm

LgAv

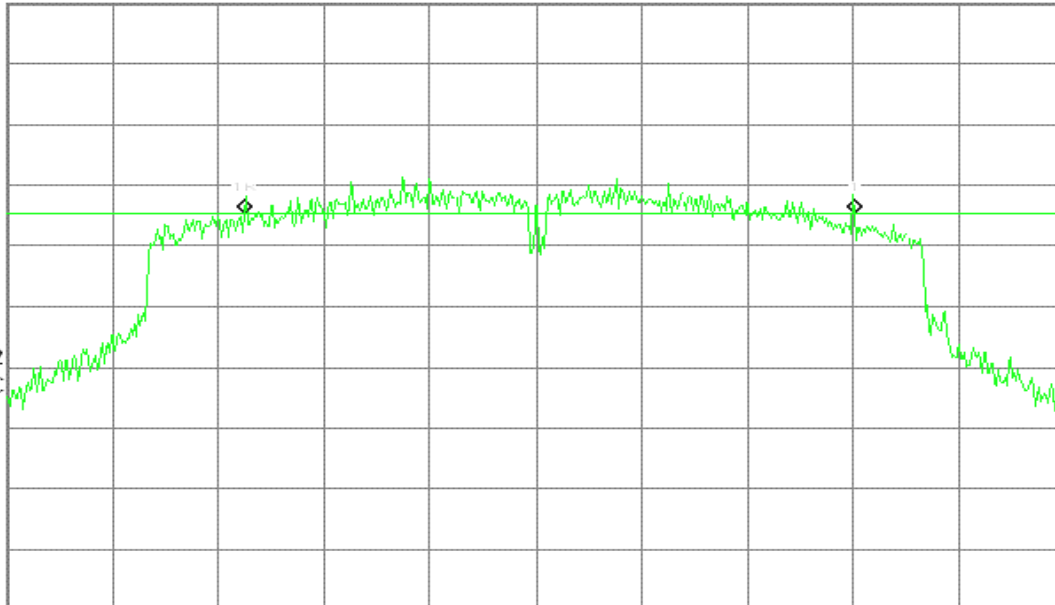
V1 S2

S3 FC

 $\alpha(f)$:

FTun

Swp



Center 2.422 00 GHz

Span 50 MHz

#Res BW 100 kHz

#VBW 100 kHz

Sweep 6.04 ms (601 pts)



6dB Bandwidth (CH Mid)

* Agilent 16:37:07 Nov 12, 2007

R T

6dB BW, g Mode Mid Ch.

 Δ Mkr1 29.67 MHz

Ref 20 dBm

Atten 20 dB

-0.27 dB

#Peak

Log

10

dB/

Offst

11

dB

DI

-13.0

dBm

LgAv

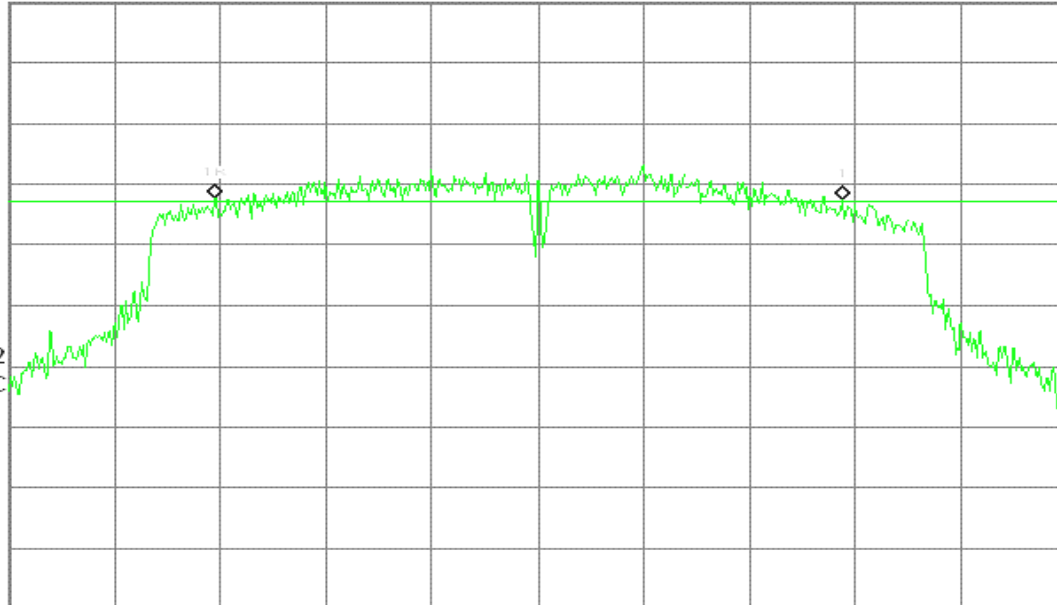
V1 S2

S3 FC

 $\square(f)$:

FTun

Swp



Center 2.437 00 GHz

Span 50 MHz

#Res BW 100 kHz

#VBW 100 kHz

Sweep 6.04 ms (601 pts)

6dB Bandwidth (CH High)

* Agilent 16:32:44 Nov 12, 2007

R T

6dB BW, g Mode High Ch.

 Δ Mkr1 30.58 MHz

Ref 20 dBm

Atten 20 dB

0.74 dB

#Peak

Log

10

dB/

Offst

11

dB

DI

-11.3

dBm

LgAv

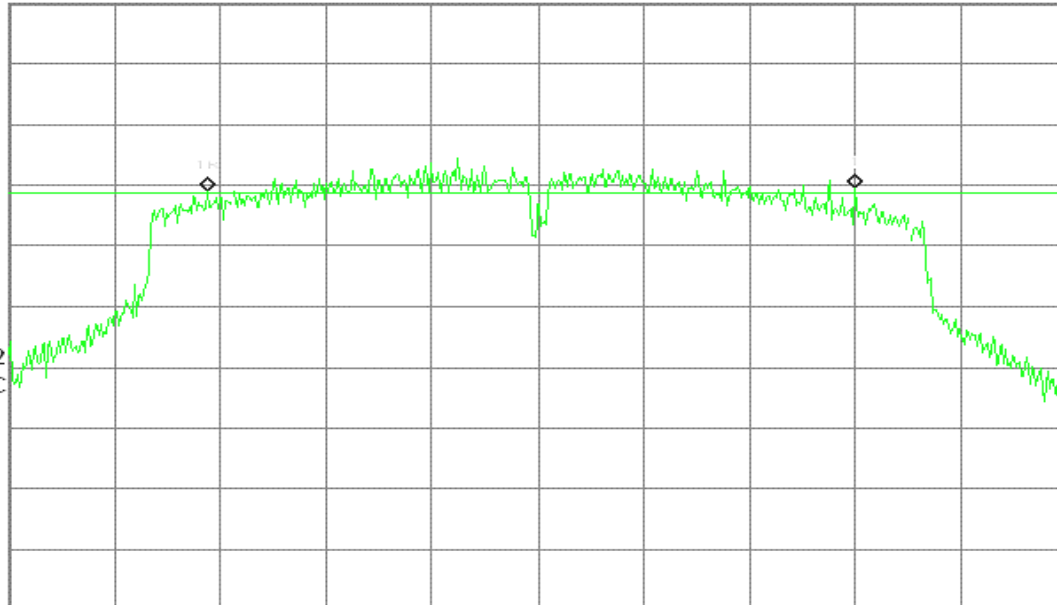
V1 S2

S3 FC

 $\square(f)$:

FTun

Swp



Center 2.452 00 GHz

Span 50 MHz

#Res BW 100 kHz

#VBW 100 kHz

Sweep 6.04 ms (601 pts)



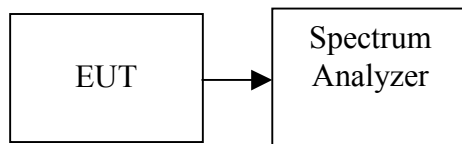
7.2 PEAK POWER

LIMIT

The maximum peak output power of the intentional radiator shall not exceed the following:

1. According to §15.247(b)(3), for systems using digital modulation in the bands of 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz: 1 Watt.
2. According to §15.247(b)(4), the conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Test Configuration



TEST PROCEDURE

1. Place the EUT on the table and set it in transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
3. Set the spectrum analyzer as RBW = 1 MHz, VBW \geq 3 MHz. in “Channel Power ” measurement.
4. Record the max reading.
5. Repeat the above procedure until the measurements for all frequencies are completed.



TEST RESULTS

No non-compliance noted

Test Data

Test mode: IEEE 802.11b mode

Channel	Frequency (MHz)	Chain 0 Output Power (dBm)	Chain 2 Output Power (dBm)	Total Output Power (dBm)	Output Power (W)	Limit (W)	Result
Low	2412	10.54	8.74	12.74	0.0188	1.00	PASS
Mid	2437	8.64	8.45	11.56	0.0143		PASS
High	2462	10.29	8.49	12.49	0.0178		PASS

Test mode: IEEE 802.11g mode

Channel	Frequency (MHz)	Chain 0 Output Power (dBm)	Chain 2 Output Power (dBm)	Total Output Power (dBm)	Output Power (W)	Limit (W)	Result
Low	2412	16.52	14.35	18.58	0.0721	1.00	PASS
Mid	2437	16.12	15.06	18.63	0.0730		PASS
High	2462	16.08	14.96	18.57	0.0719		PASS

Test mode: draft 802.11n Standard-20 MHz Channel mode

Channel	Frequency (MHz)	Chain 0 Output Power (dBm)	Chain 2 Output Power (dBm)	Total Output Power (dBm)	Output Power (W)	Limit (W)	Result
Low	2412	17.60	16.69	20.18	0.1042	1.00	PASS
Mid	2437	17.12	16.86	20.00	0.1001		PASS
High	2462	17.30	17.32	20.32	0.1077		PASS

Test mode: draft 802.11n Wide-40 MHz Channel mode

Channel	Frequency (MHz)	Chain 0 Output Power (dBm)	Chain 2 Output Power (dBm)	Total Output Power (dBm)	Output Power (W)	Limit (W)	Result
Low	2422	11.66	9.90	13.88	0.0244	1.00	PASS
Mid	2437	12.91	11.09	15.10	0.0324		PASS
High	2452	12.99	11.31	15.24	0.0334		PASS

Remark: Total Output Power (w) = Chain 0 ($10^{(Output\ Power / 10) / 1000}$) + Chain 2 ($10^{(Output\ Power / 10) / 1000}$)

**Test Plot****IEEE 802.11b mode / Chain 0****Peak Power (CH Low)**

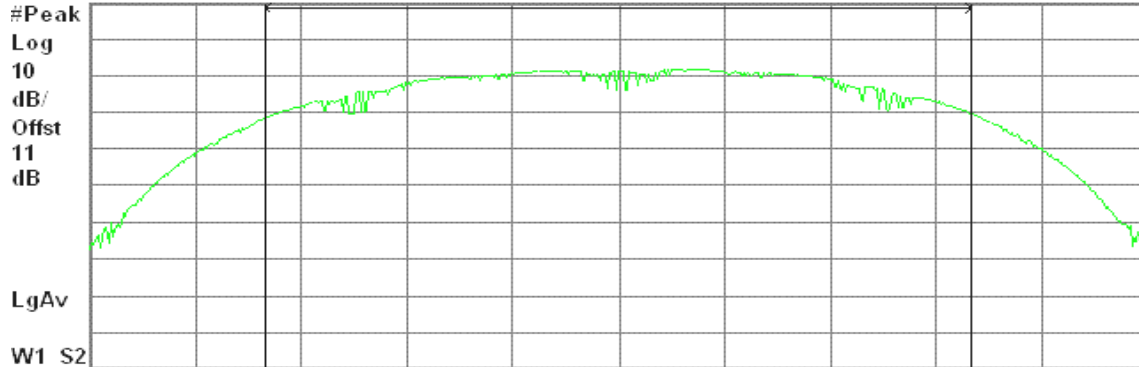
* Agilent 08:23:11 Nov 14, 2007

R T

Peak Output Power , b Mode Low Ch.

Ref 20 dBm

Atten 20 dB



Center 2.412 00 GHz

Span 22.74 MHz

#Res BW 1 MHz

#VBW 3 MHz

Sweep 1 ms (601 pts)

Channel Power

Power Spectral Density

10.54 dBm / 15.1590 MHz

-61.27 dBm/Hz

Peak Power (CH Mid)

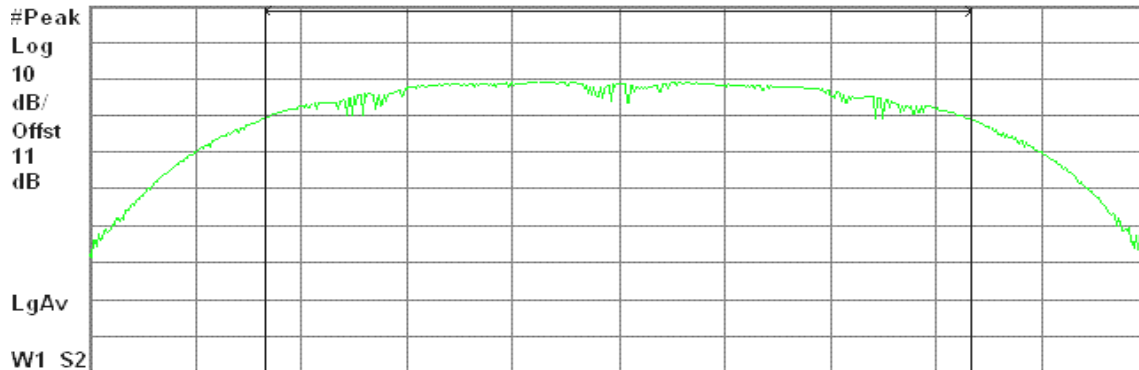
* Agilent 08:30:30 Nov 14, 2007

R T

Peak Output Power , b Mode Mid Ch.

Ref 20 dBm

Atten 20 dB



Center 2.437 00 GHz

Span 22.8 MHz

#Res BW 1 MHz

#VBW 3 MHz

Sweep 1 ms (601 pts)

Channel Power

Power Spectral Density

8.64 dBm / 15.1980 MHz

-63.18 dBm/Hz

**Peak Power (CH High)**

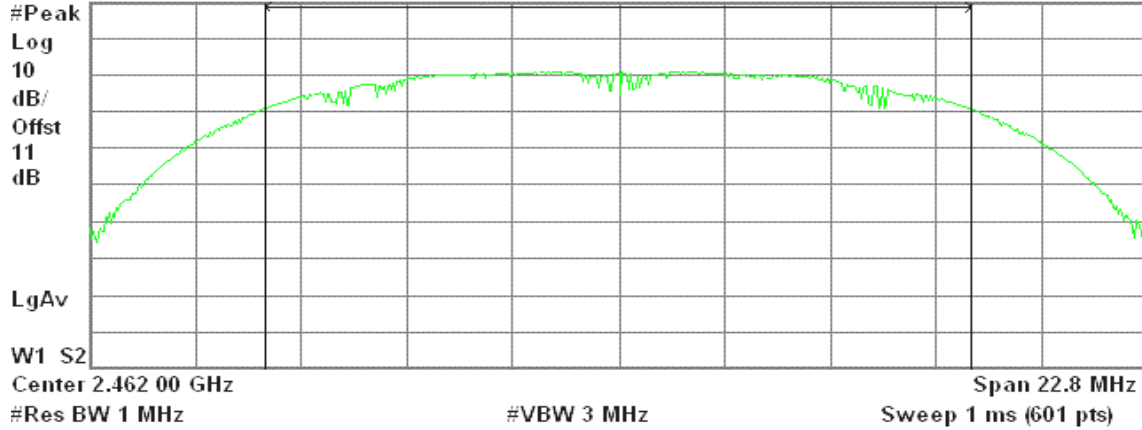
* Agilent 08:36:31 Nov 14, 2007

R T

Peak Output Power , b Mode High Ch.

Ref 20 dBm

Atten 20 dB



Channel Power

10.29 dBm / 15.2000 MHz

Power Spectral Density

-61.53 dBm/Hz

IEEE 802.11b mode / Chain 2**Peak Power (CH Low)**

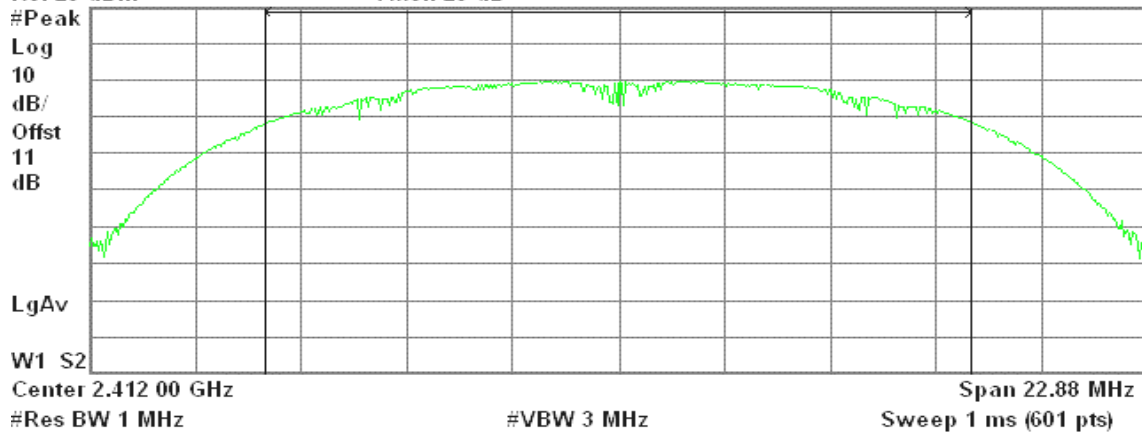
* Agilent 09:10:16 Nov 14, 2007

R T

Peak Output Power , b Mode Low Ch.

Ref 20 dBm

Atten 20 dB



Channel Power

8.74 dBm / 15.2520 MHz

Power Spectral Density

-63.09 dBm/Hz

**Peak Power (CH Mid)**

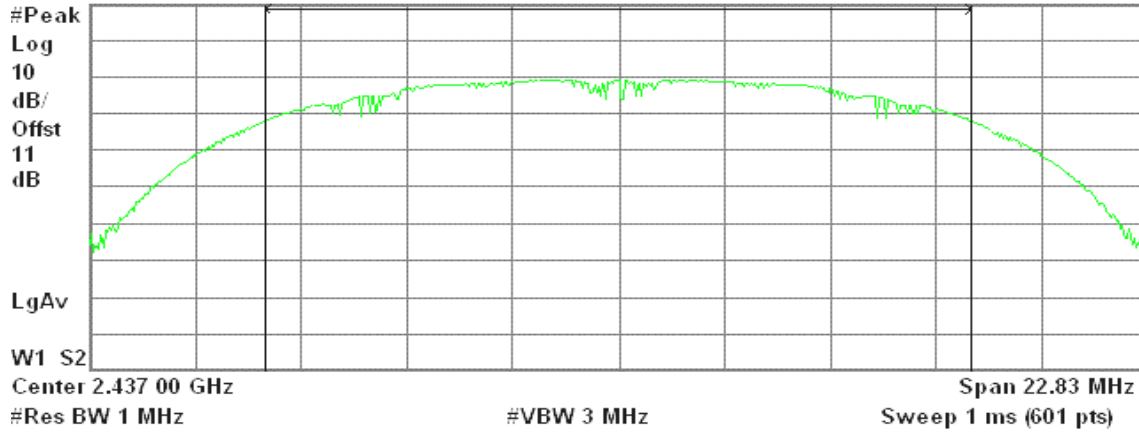
* Agilent 08:58:46 Nov 14, 2007

R L

Peak Output Power , b Mode Mid Ch.

Ref 20 dBm

Atten 20 dB



Channel Power

8.45 dBm / 15.2170 MHz

Power Spectral Density

-63.37 dBm/Hz

Peak Power (CH High)

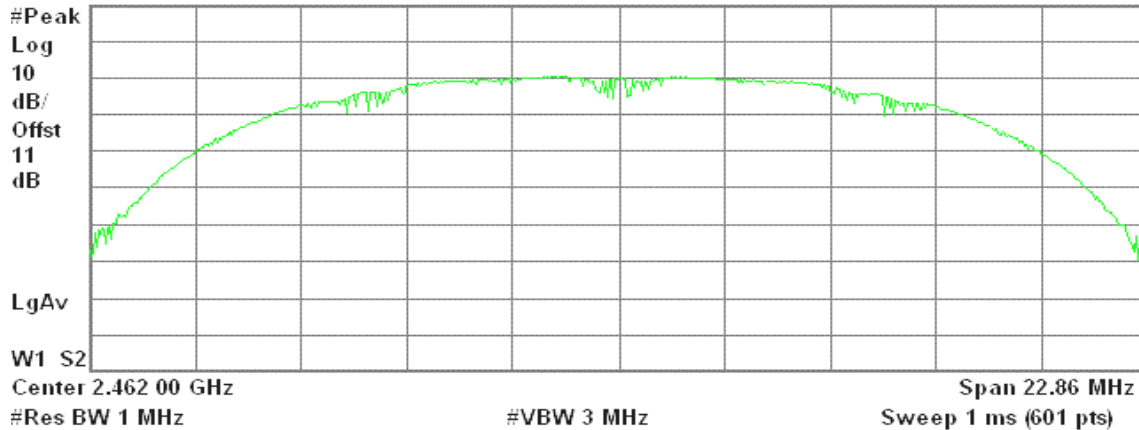
* Agilent 08:46:04 Nov 14, 2007

R T

Peak Output Power , b Mode High Ch.

Ref 20 dBm

Atten 20 dB



Channel Power

8.49 dBm / 15.1270 MHz

Power Spectral Density

-63.31 dBm/Hz

**IEEE 802.11g mode / Chain 0****Peak Power (CH Low)**

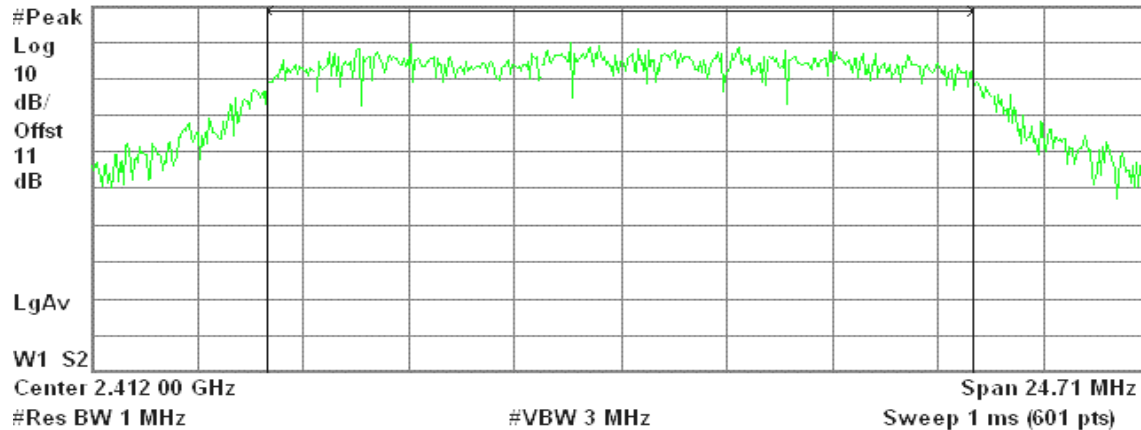
* Agilent 10:00:11 Nov 14, 2007

R T

Peak Output Power , g Mode Low Ch.

Ref 20 dBm

Atten 20 dB



Channel Power

Power Spectral Density

16.52 dBm / 16.4710 MHz

-55.64 dBm/Hz

Peak Power (CH Mid)

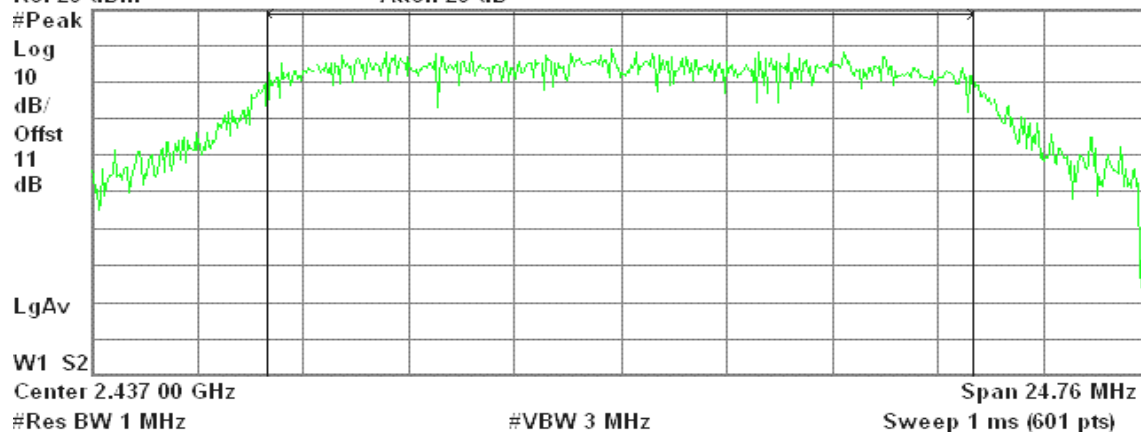
* Agilent 09:48:35 Nov 14, 2007

R T

Peak Output Power , g Mode Mid Ch.

Ref 20 dBm

Atten 20 dB



Channel Power

Power Spectral Density

16.12 dBm / 16.5060 MHz

-56.06 dBm/Hz

**Peak Power (CH High)**

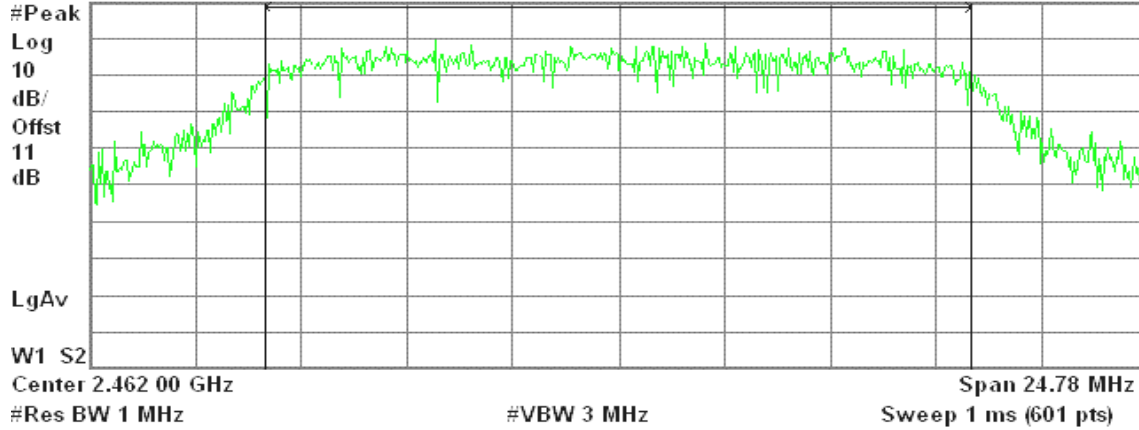
* Agilent 09:42:32 Nov 14, 2007

R T

Peak Output Power , g Mode High Ch.

Ref 20 dBm

Atten 20 dB



Channel Power

Power Spectral Density

16.08 dBm / 16.5220 MHz

-56.11 dBm/Hz

IEEE 802.11g mode / Chain 2**Peak Power (CH Low)**

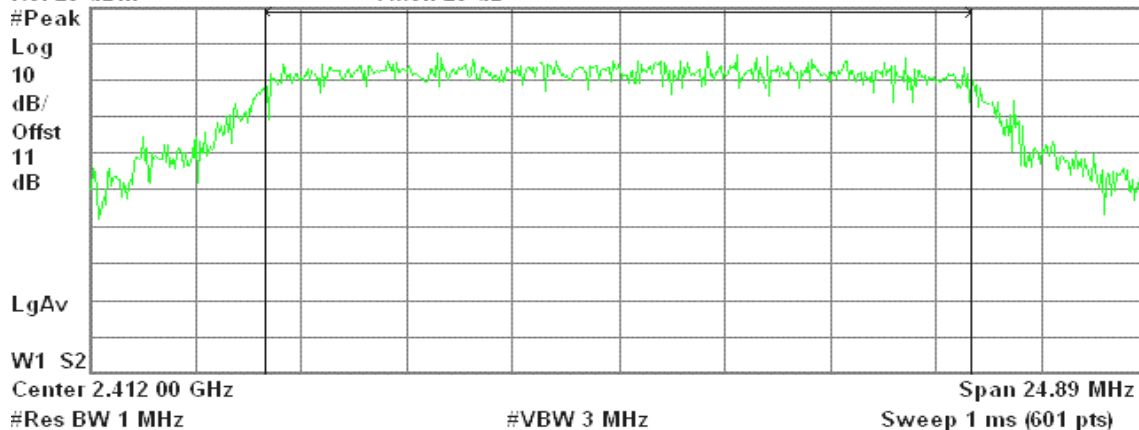
* Agilent 09:22:40 Nov 14, 2007

R T

Peak Output Power , g Mode Low Ch.

Ref 20 dBm

Atten 20 dB



Channel Power

Power Spectral Density

14.35 dBm / 16.5950 MHz

-57.85 dBm/Hz

**Peak Power (CH Mid)**

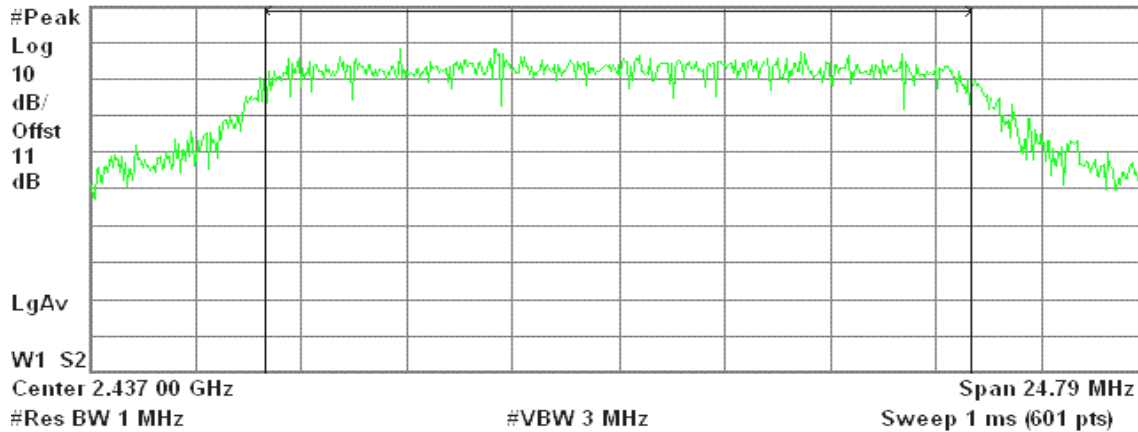
* Agilent 09:29:38 Nov 14, 2007

R T

Peak Output Power , g Mode Mid Ch.

Ref 20 dBm

Atten 20 dB



Channel Power

Power Spectral Density

15.06 dBm / 16.5270 MHz

-57.12 dBm/Hz

Peak Power (CH High)

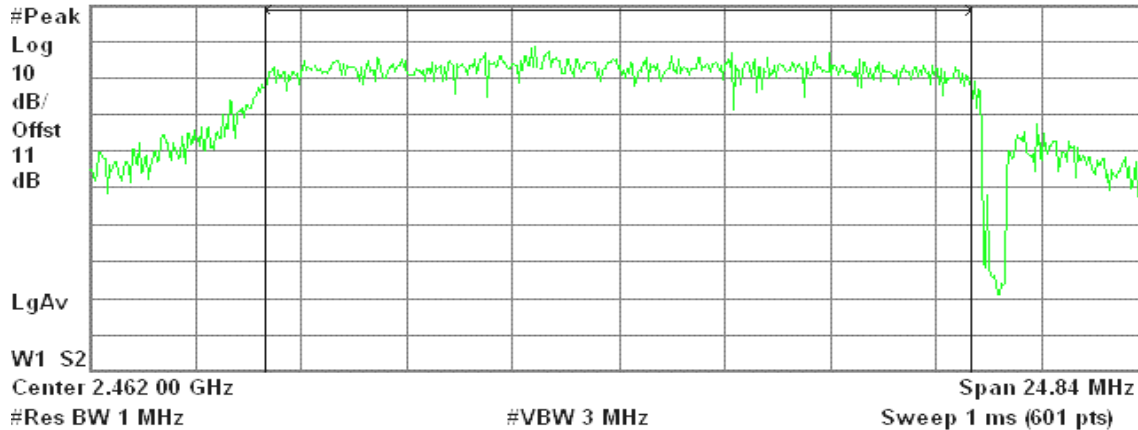
* Agilent 09:35:06 Nov 14, 2007

R T

Peak Output Power , g Mode High Ch.

Ref 20 dBm

Atten 20 dB



Channel Power

Power Spectral Density

14.96 dBm / 16.5620 MHz

-57.23 dBm/Hz

**draft 802.11n Standard-20 MHz Channel mode / Chain 0****Peak Power (CH Low)**

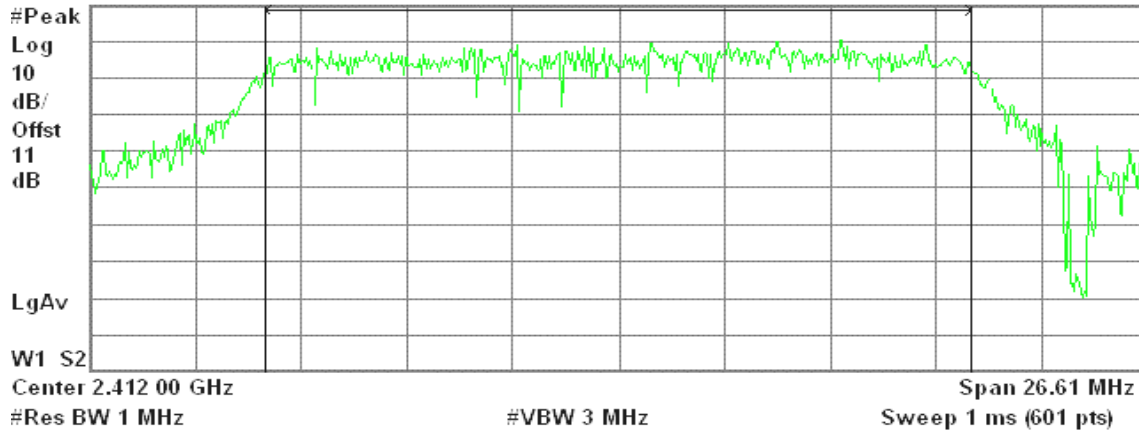
* Agilent 13:14:09 Nov 16, 2007

R L

Peak Output Power , g Mode Low Ch.

Ref 20 dBm

Atten 20 dB



Channel Power

Power Spectral Density

17.60 dBm / 17.7400 MHz

-54.89 dBm/Hz

Peak Power (CH Mid)

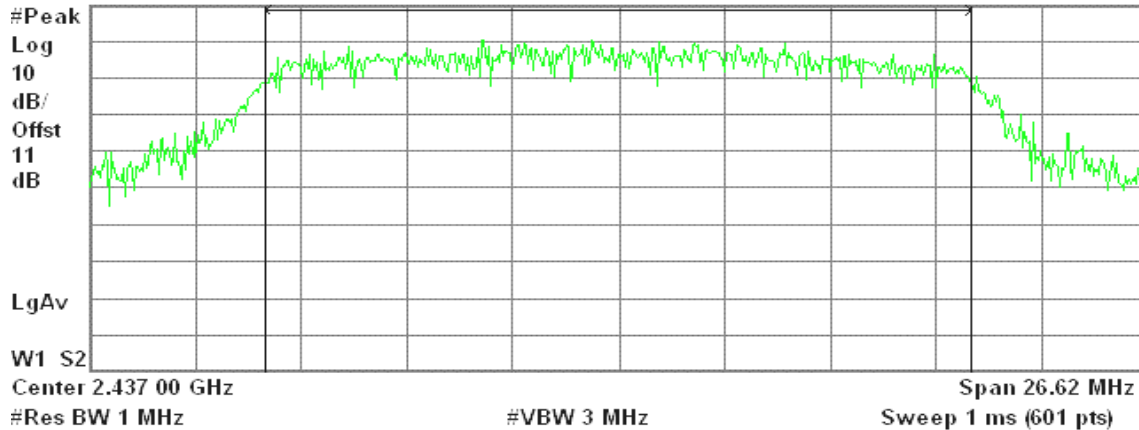
* Agilent 13:12:41 Nov 16, 2007

R T

Peak Output Power , g Mode Mid Ch.

Ref 20 dBm

Atten 20 dB



Channel Power

Power Spectral Density

17.72 dBm / 17.7480 MHz

-54.77 dBm/Hz

**Peak Power (CH High)**

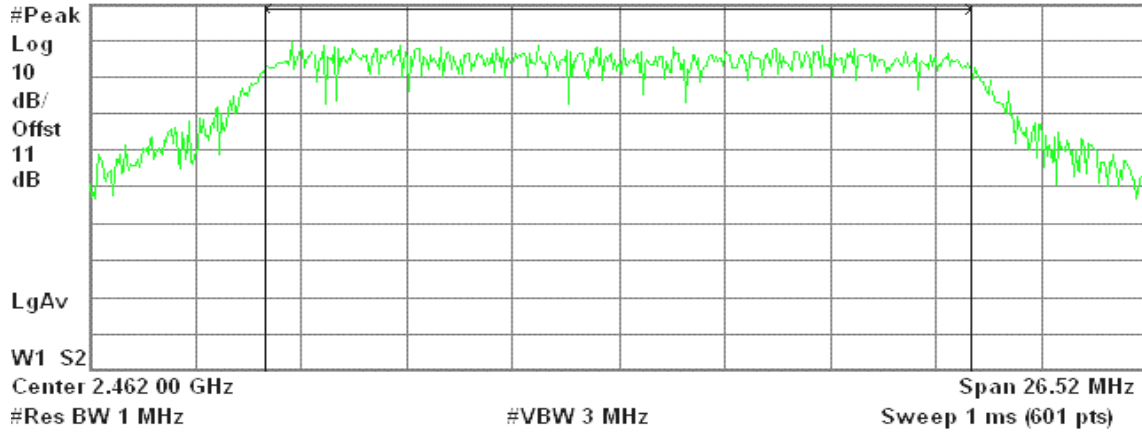
* Agilent 13:11:00 Nov 16, 2007

R T

Peak Output Power , g Mode High Ch.

Ref 20 dBm

Atten 20 dB



Channel Power

17.30 dBm / 17.6790 MHz

Power Spectral Density

-55.18 dBm/Hz

draft 802.11n Standard-20 MHz Channel mode / Chain 2**Peak Power (CH Low)**

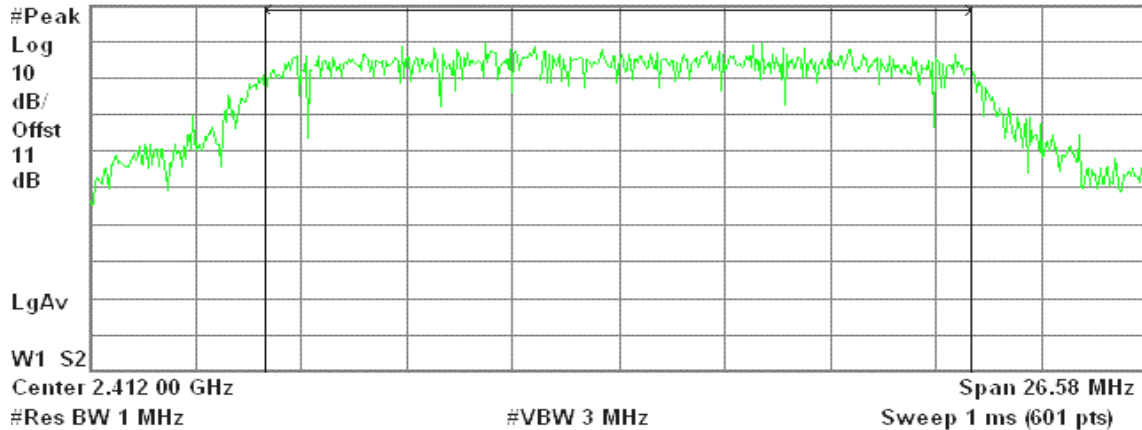
* Agilent 13:15:36 Nov 16, 2007

R T

Peak Output Power , g Mode Low Ch.

Ref 20 dBm

Atten 20 dB



Channel Power

16.69 dBm / 17.7230 MHz

Power Spectral Density

-55.80 dBm/Hz

**Peak Power (CH Mid)**

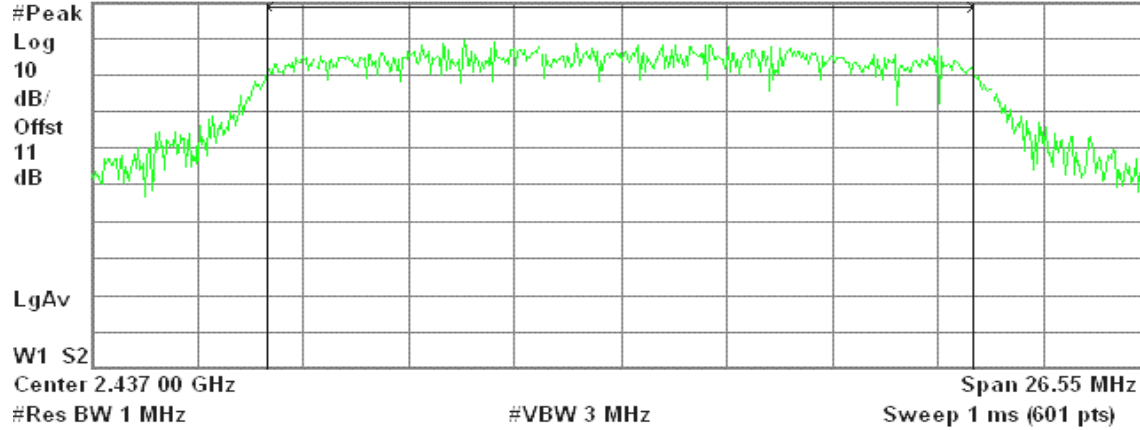
* Agilent 13:16:53 Nov 16, 2007

R T

Peak Output Power , g Mode Mid Ch.

Ref 20 dBm

Atten 20 dB



Channel Power

Power Spectral Density

16.86 dBm / 17.6970 MHz

-55.62 dBm/Hz

Peak Power (CH High)

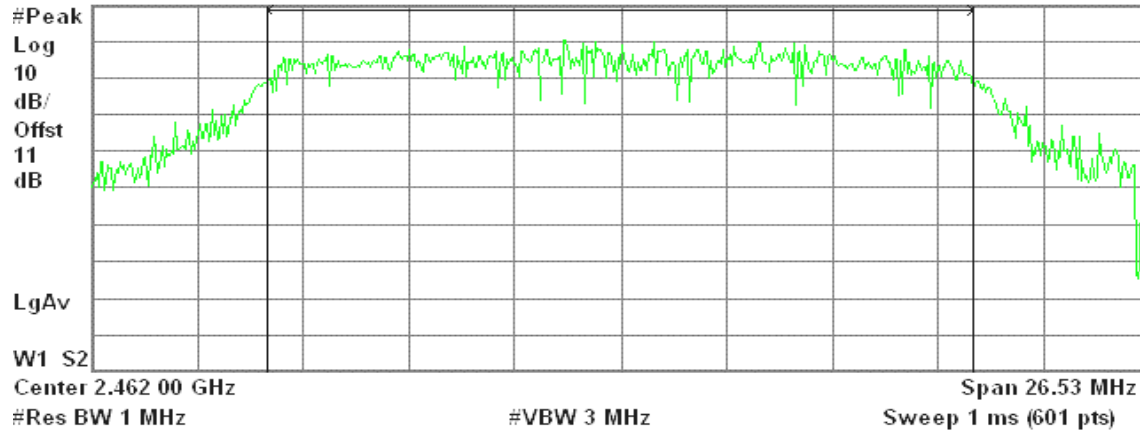
* Agilent 13:18:07 Nov 16, 2007

R T

Peak Output Power , g Mode High Ch.

Ref 20 dBm

Atten 20 dB



Channel Power

Power Spectral Density

17.32 dBm / 17.6840 MHz

-55.15 dBm/Hz

**draft 802.11n Wide-40 MHz Channel mode / Chain 0****Peak Power (CH Low)**

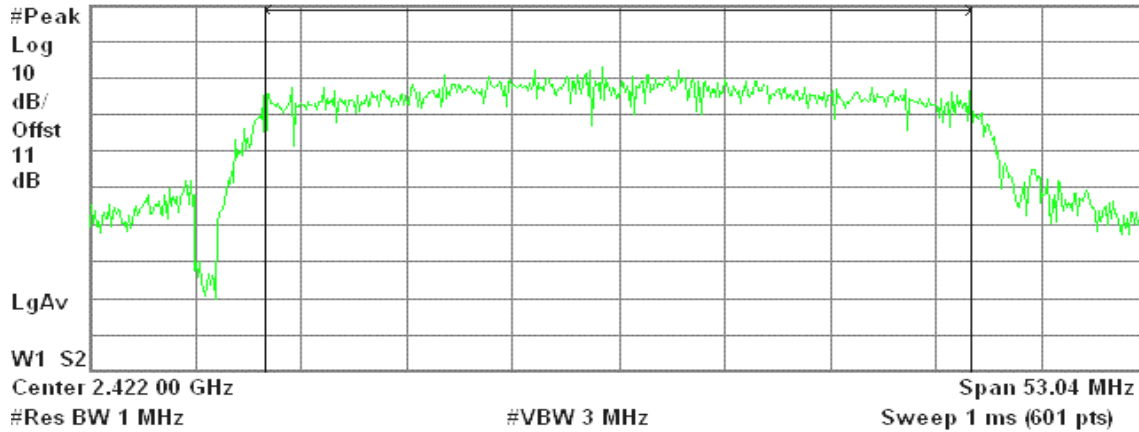
* Agilent 16:06:51 Nov 12, 2007

R T

Peak Output Power , g Mode Low Ch.

Ref 20 dBm

Atten 20 dB



Channel Power

Power Spectral Density

11.66 dBm / 35.3610 MHz

-63.83 dBm/Hz

Peak Power (CH Mid)

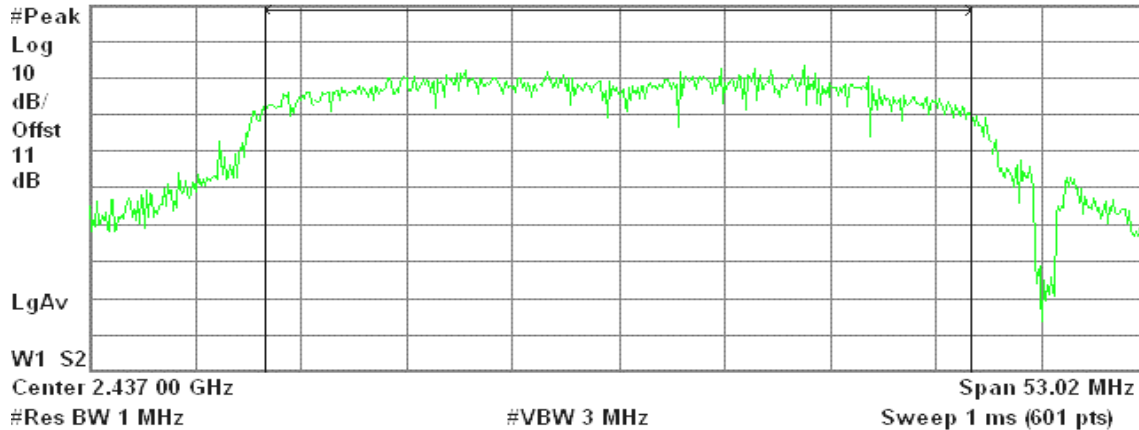
* Agilent 12:52:40 Nov 16, 2007

R T

Peak Output Power , g Mode Mid Ch.

Ref 20 dBm

Atten 20 dB



Channel Power

Power Spectral Density

12.91 dBm / 35.3480 MHz

-62.58 dBm/Hz

**Peak Power (CH High)**

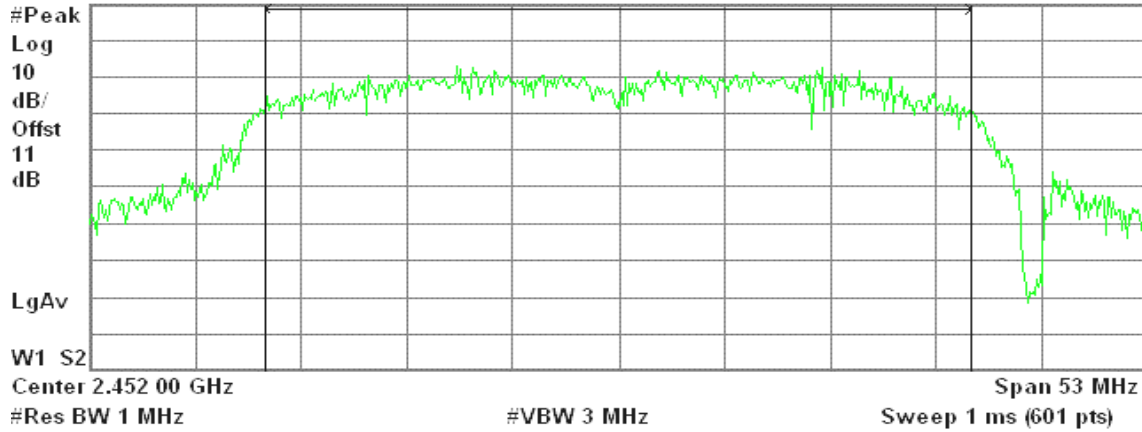
* Agilent 12:50:32 Nov 16, 2007

R T

Peak Output Power , g Mode High Ch.

Ref 20 dBm

Atten 20 dB



Channel Power

12.99 dBm / 35.3360 MHz

Power Spectral Density

-62.49 dBm/Hz

draft 802.11n Wide-40 MHz Channel mode / Chain 2**Peak Power (CH Low)**

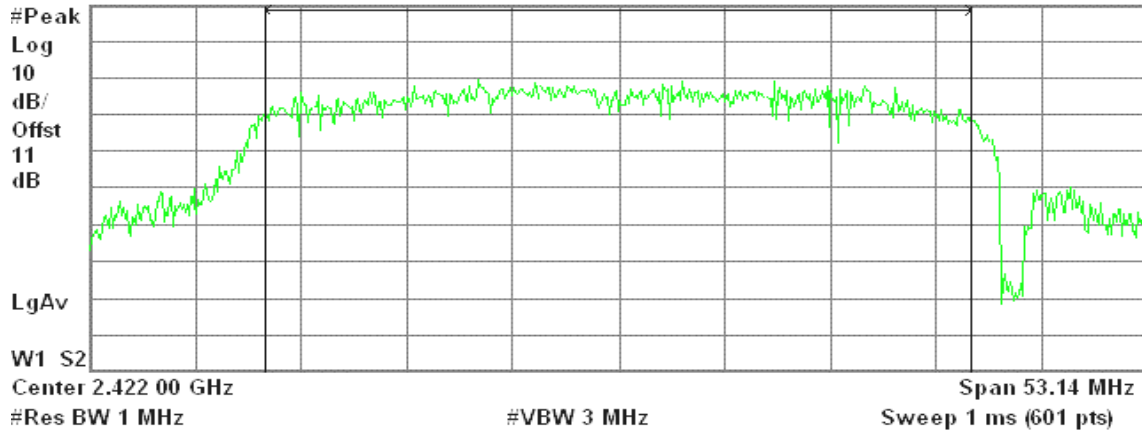
* Agilent 16:42:15 Nov 12, 2007

R L

Peak Output Power , g Mode Low Ch.

Ref 20 dBm

Atten 20 dB



Channel Power

9.90 dBm / 35.4240 MHz

Power Spectral Density

-65.59 dBm/Hz

**Peak Power (CH Mid)**

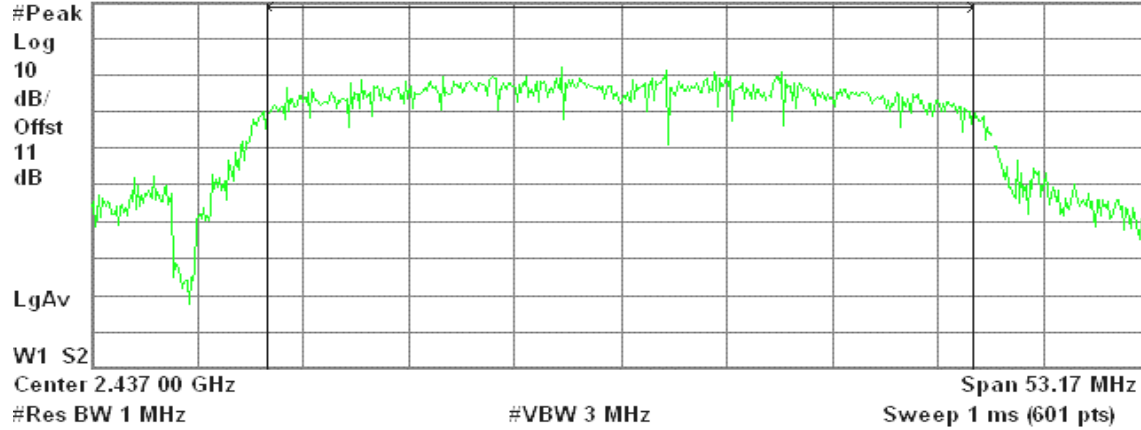
* Agilent 12:54:39 Nov 16, 2007

R T

Peak Output Power , g Mode Mid Ch.

Ref 20 dBm

Atten 20 dB



Channel Power

Power Spectral Density

11.09 dBm / 35.4480 MHz

-64.41 dBm/Hz

Peak Power (CH High)

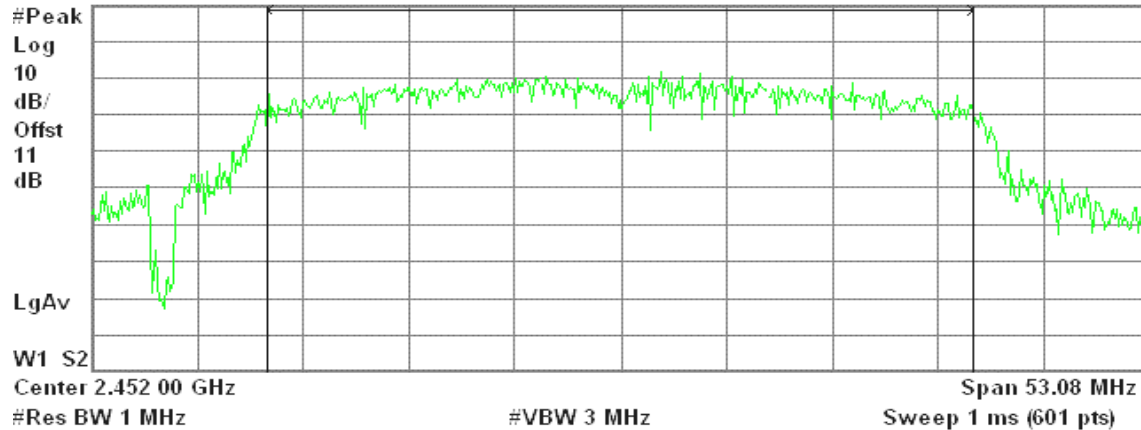
* Agilent 12:56:15 Nov 16, 2007

R T

Peak Output Power , g Mode High Ch.

Ref 20 dBm

Atten 20 dB



Channel Power

Power Spectral Density

11.31 dBm / 35.3840 MHz

-64.18 dBm/Hz

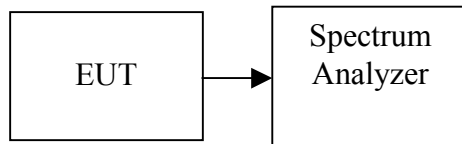


7.3 AVERAGE POWER

LIMIT

None; for reporting purposes only.

Test Configuration



TEST PROCEDURE

The transmitter output is connected to the Spectrum analyzer. The Spectrum analyzer is set to the average power detection.



TEST RESULTS

No non-compliance noted.

Test Data

Test mode: IEEE 802.11b mode

Channel	Frequency (MHz)	Chain 0 Output Power (dBm)	Chain 2 Output Power (dBm)	Output Power (dBm)	Output Power (W)	Limit (W)	Result
Low	2412	7.97	6.45	10.29	0.0107	1.00	PASS
Mid	2437	7.51	6.25	9.94	0.0099		PASS
High	2462	8.08	6.81	10.50	0.0112		PASS

Test mode: IEEE 802.11g mode

Channel	Frequency (MHz)	Chain 0 Output Power (dBm)	Chain 2 Output Power (dBm)	Output Power (dBm)	Output Power (W)	Limit (W)	Result
Low	2412	12.68	11.45	15.12	0.0325	1.00	PASS
Mid	2437	12.82	11.52	15.23	0.0333		PASS
High	2462	12.71	11.01	14.95	0.0313		PASS

Test mode: draft 802.11n Standard-20 MHz Channel mode

Channel	Frequency (MHz)	Chain 0 Output Power (dBm)	Chain 2 Output Power (dBm)	Output Power (dBm)	Output Power (W)	Limit (W)	Result
Low	2412	14.03	13.33	16.70	0.0468	1.00	PASS
Mid	2437	14.41	13.33	16.91	0.0491		PASS
High	2462	14.37	13.65	17.04	0.0505		PASS

Test mode: draft 802.11n Wide-40 MHz Channel mode

Channel	Frequency (MHz)	Chain 0 Output Power (dBm)	Chain 2 Output Power (dBm)	Output Power (dBm)	Output Power (W)	Limit (W)	Result
Low	2422	8.03	6.60	10.38	0.0109	1.00	PASS
Mid	2437	9.45	8.78	12.14	0.0164		PASS
High	2452	8.71	8.57	11.65	0.0146		PASS

Remark: Total Output Power (w) = Chain 0 ($10^{(\text{Output Power}/10)/1000}$) + Chain 2 ($10^{(\text{Output Power}/10)/1000}$)

**Test Plot****IEEE 802.11b mode / Chain 0****Average Power (CH Low)**

* Agilent 08:23:55 Nov 14, 2007

R T

avg Output Power , b Mode Low Ch.

Ref 30 dBm

Atten 30 dB

#Samp

Log

10

dB/

Offst

11

dB

#PAvg

72

V1 S2

Center 2.412 00 GHz

#Res BW 1 MHz

#VBW 3 MHz

Span 22.74 MHz

Sweep 1 ms (601 pts)

Channel Power

Power Spectral Density

7.97 dBm / 15.1590 MHz

-63.84 dBm/Hz

Average Power (CH Mid)

* Agilent 08:31:20 Nov 14, 2007

R T

avg Output Power , b Mode Mid Ch.

Ref 30 dBm

Atten 30 dB

#Samp

Log

10

dB/

Offst

11

dB

#PAvg

100

V1 S2

Center 2.437 00 GHz

#Res BW 1 MHz

#VBW 3 MHz

Span 22.8 MHz

Sweep 1 ms (601 pts)

Channel Power

Power Spectral Density

7.51 dBm / 15.1980 MHz

-64.30 dBm/Hz

**Average Power (CH High)**

* Agilent 08:39:00 Nov 14, 2007

R T

avg Output Power , b Mode High Ch.

Ref 30 dBm

Atten 30 dB

#Samp

Log

10

dB/

Offst

11

dB

#PAvg

71

V1 S2

Center 2.462 00 GHz

#Res BW 1 MHz

#VBW 3 MHz

Span 22.8 MHz

Sweep 1 ms (601 pts)

Channel Power

8.02 dBm / 15.2000 MHz

Power Spectral Density

-63.79 dBm/Hz

IEEE 802.11b mode / Chain 2**Average Power (CH Low)**

* Agilent 09:12:51 Nov 14, 2007

R T

avg Output Power , b Mode Low Ch.

Ref 30 dBm

Atten 30 dB

#Samp

Log

10

dB/

Offst

11

dB

#PAvg

65

V1 S2

Center 2.412 00 GHz

#Res BW 1 MHz

#VBW 3 MHz

Span 22.88 MHz

Sweep 1 ms (601 pts)

Channel Power

6.45 dBm / 15.2520 MHz

Power Spectral Density

-65.38 dBm/Hz

**Average Power (CH Mid)**

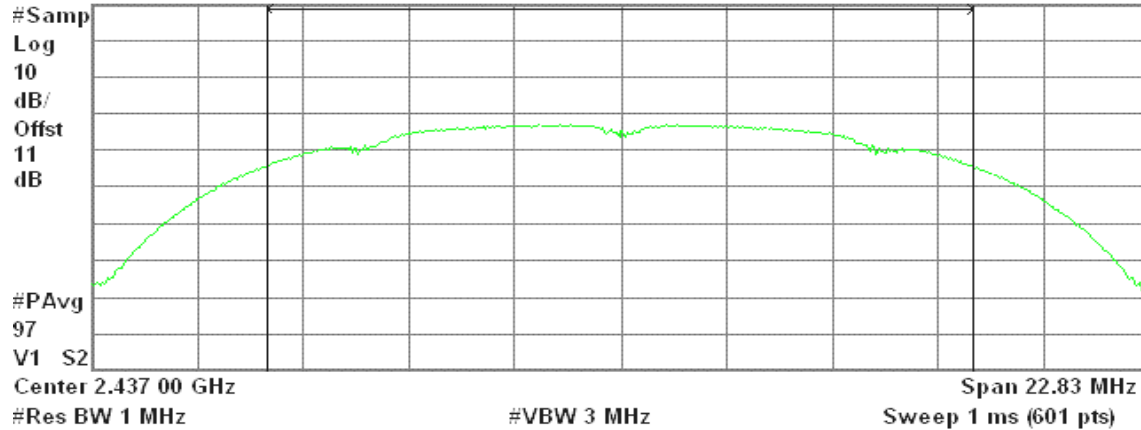
* Agilent 09:02:51 Nov 14, 2007

R T

avg Output Power , b Mode Mid Ch.

Ref 30 dBm

Atten 30 dB



Channel Power

6.25 dBm / 15.2170 MHz

Power Spectral Density

-65.57 dBm/Hz

Average Power (CH High)

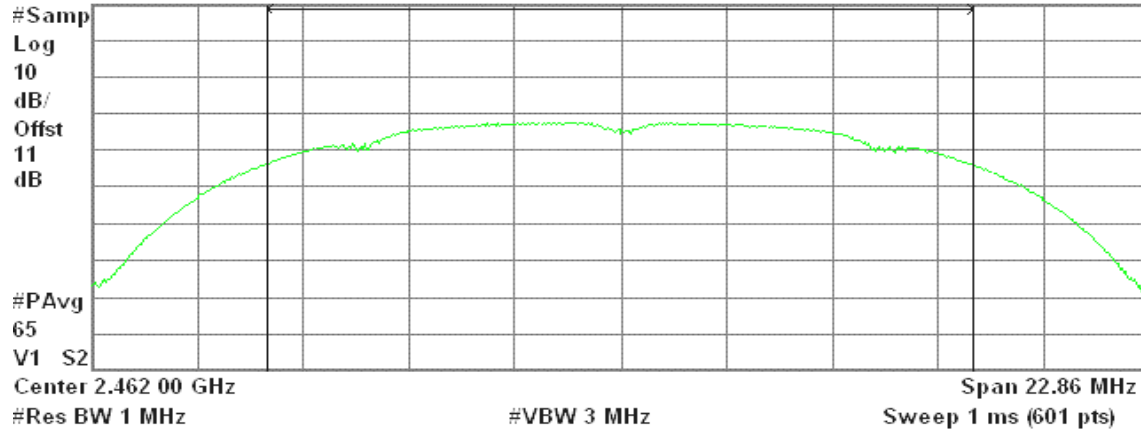
* Agilent 08:46:37 Nov 14, 2007

R T

avg Output Power , b Mode High Ch.

Ref 30 dBm

Atten 30 dB



Channel Power

6.81 dBm / 15.2430 MHz

Power Spectral Density

-65.02 dBm/Hz

**IEEE 802.11g mode / Chain 0****Average Power (CH Low)**

* Agilent 10:00:44 Nov 14, 2007

R T

avg Output Power, g Mode Low Ch.

Ref 30 dBm

Atten 30 dB

#Samp

Log

10

dB/

Offst

11

dB

#PAvg

54

V1 S2

Center 2.412 00 GHz

Span 24.71 MHz

#Res BW 1 MHz

#VBW 3 MHz

Sweep 1 ms (601 pts)

Channel Power

Power Spectral Density

12.68 dBm / 16.4710 MHz

-59.49 dBm/Hz

Average Power (CH Mid)

* Agilent 09:49:09 Nov 14, 2007

R T

avg Output Power, g Mode Mid Ch.

Ref 30 dBm

Atten 30 dB

#Samp

Log

10

dB/

Offst

11

dB

#PAvg

58

V1 S2

Center 2.437 00 GHz

Span 24.76 MHz

#Res BW 1 MHz

#VBW 3 MHz

Sweep 1 ms (601 pts)

Channel Power

Power Spectral Density

12.82 dBm / 16.5060 MHz

-59.36 dBm/Hz

**Average Power (CH High)**

* Agilent 09:43:22 Nov 14, 2007

R T

avg Output Power , g Mode High Ch.

Ref 30 dBm

Atten 30 dB

#Samp

Log

10

dB/

Offst

11

dB

#PAvg

64

V1 S2

Center 2.462 00 GHz

#Res BW 1 MHz

#VBW 3 MHz

Span 24.78 MHz

Sweep 1 ms (601 pts)

Channel Power

12.71 dBm / 16.5220 MHz

Power Spectral Density

-59.47 dBm/Hz

IEEE 802.11g mode / Chain 2**Average Power (CH Low)**

* Agilent 09:43:22 Nov 14, 2007

R T

avg Output Power , g Mode High Ch.

Ref 30 dBm

Atten 30 dB

#Samp

Log

10

dB/

Offst

11

dB

#PAvg

64

V1 S2

Center 2.462 00 GHz

#Res BW 1 MHz

#VBW 3 MHz

Span 24.78 MHz

Sweep 1 ms (601 pts)

Channel Power

12.71 dBm / 16.5220 MHz

Power Spectral Density

-59.47 dBm/Hz

**Average Power (CH Mid)**

* Agilent 09:30:17 Nov 14, 2007

R T

avg Output Power , g Mode Mid Ch.

Ref 30 dBm

Atten 30 dB

#Samp

Log

10

dB/

Offst

11

dB

#PAvg

58

V1 S2

Center 2.437 00 GHz

#VBW 3 MHz

Span 24.79 MHz

Sweep 1 ms (601 pts)

Channel Power

Power Spectral Density

11.52 dBm / 16.5270 MHz

-60.66 dBm/Hz

Average Power (CH High)

* Agilent 09:35:45 Nov 14, 2007

R T

avg Output Power , g Mode High Ch.

Ref 30 dBm

Atten 30 dB

#Samp

Log

10

dB/

Offst

11

dB

#PAvg

48

V1 S2

Center 2.462 00 GHz

#VBW 3 MHz

Span 24.84 MHz

Sweep 1 ms (601 pts)

Channel Power

Power Spectral Density

11.01 dBm / 16.5620 MHz

-61.19 dBm/Hz

**draft 802.11n Standard-20 MHz Channel mode / Chain 0****Average Power (CH Low)**

* Agilent 13:14:42 Nov 16, 2007

R T

AVG Output Power , g Mode Low Ch.

Ref 30 dBm

Atten 30 dB

#Samp

Log

10

dB/

Offst

11

dB

#PAvg

42

V1 S2

Center 2.412 00 GHz

Span 26.61 MHz

#Res BW 1 MHz

#VBW 3 MHz

Sweep 1 ms (601 pts)

Channel Power

Power Spectral Density

14.03 dBm / 17.7400 MHz

-58.46 dBm/Hz

Average Power (CH Mid)

* Agilent 13:13:15 Nov 16, 2007

R T

AVG Output Power , g Mode Mid Ch.

Ref 30 dBm

Atten 30 dB

#Samp

Log

10

dB/

Offst

11

dB

#PAvg

57

V1 S2

Center 2.437 00 GHz

Span 26.62 MHz

#Res BW 1 MHz

#VBW 3 MHz

Sweep 1 ms (601 pts)

Channel Power

Power Spectral Density

14.41 dBm / 17.7480 MHz

-58.08 dBm/Hz

**Average Power (CH High)**

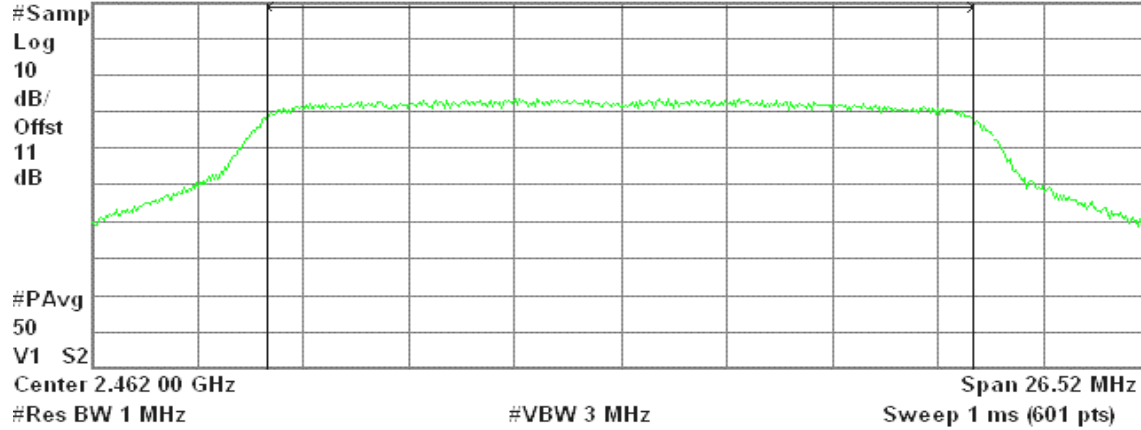
* Agilent 13:11:30 Nov 16, 2007

R T

AVG Output Power , g Mode High Ch.

Ref 30 dBm

Atten 30 dB



Channel Power

14.37 dBm / 17.6790 MHz

Power Spectral Density

-58.10 dBm/Hz

draft 802.11n Standard-20 MHz Channel mode / Chain 2**Average Power (CH Low)**

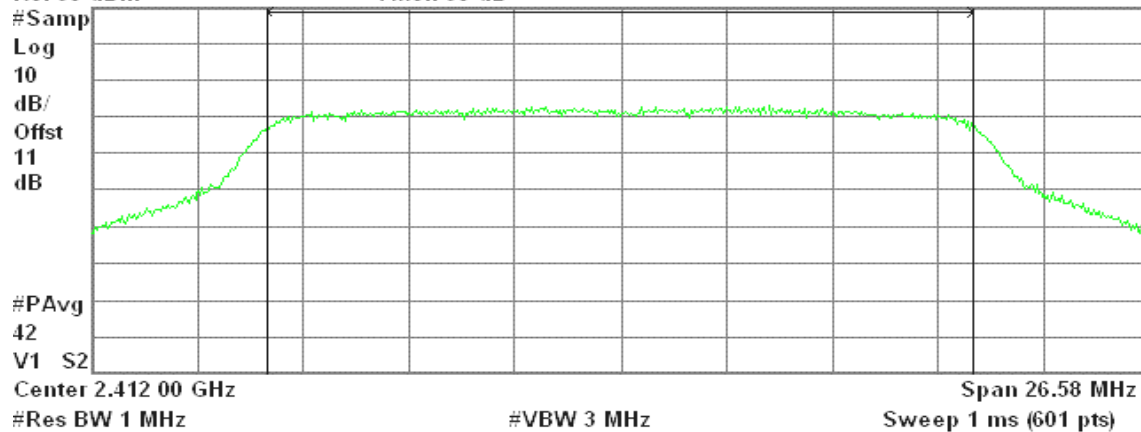
* Agilent 13:16:05 Nov 16, 2007

R T

AVG Output Power , g Mode Low Ch.

Ref 30 dBm

Atten 30 dB



Channel Power

13.33 dBm / 17.7230 MHz

Power Spectral Density

-59.16 dBm/Hz

**Average Power (CH Mid)**

* Agilent 13:17:24 Nov 16, 2007

R T

AVG Output Power , g Mode Mid Ch.

Ref 30 dBm

Atten 30 dB

#Samp

Log

10

dB/

Offst

11

dB

#PAvg

46

V1 S2

Center 2.437 00 GHz

#VBW 3 MHz

Span 26.55 MHz

Sweep 1 ms (601 pts)

Channel Power

Power Spectral Density

13.33 dBm / 17.6970 MHz

-59.15 dBm/Hz

Average Power (CH High)

* Agilent 13:18:36 Nov 16, 2007

R T

AVG Output Power , g Mode High Ch.

Ref 30 dBm

Atten 30 dB

#Samp

Log

10

dB/

Offst

11

dB

#PAvg

55

V1 S2

Center 2.462 00 GHz

#VBW 3 MHz

Span 26.53 MHz

Sweep 1 ms (601 pts)

Channel Power

Power Spectral Density

13.65 dBm / 17.6840 MHz

-58.83 dBm/Hz

**draft 802.11n Wide-40 MHz Channel mode / Chain 0****Average Power (CH Low)**

* Agilent 16:07:25 Nov 12, 2007

R T

avg Output Power , g Mode Low Ch.

Ref 30 dBm

Atten 30 dB

#Samp

Log

10

dB/

Offst

11

dB

#PAvg

64

V1 S2

Center 2.422 00 GHz

Span 53.04 MHz

#Res BW 1 MHz

#VBW 3 MHz

Sweep 1 ms (601 pts)

Channel Power

Power Spectral Density

8.03 dBm / 35.3610 MHz

-67.46 dBm/Hz

Average Power (CH Mid)

* Agilent 12:53:11 Nov 16, 2007

R T

AVG Output Power , g Mode Mid Ch.

Ref 30 dBm

Atten 30 dB

#Samp

Log

10

dB/

Offst

11

dB

#PAvg

54

V1 S2

Center 2.437 00 GHz

Span 53.02 MHz

#Res BW 1 MHz

#VBW 3 MHz

Sweep 1 ms (601 pts)

Channel Power

Power Spectral Density

9.45 dBm / 35.3480 MHz

-66.03 dBm/Hz

**Average Power (CH High)**

* Agilent 12:51:06 Nov 16, 2007

R T

AVG Output Power , g Mode High Ch.

Ref 30 dBm

Atten 30 dB

#Samp

Log

10

dB/

Offst

11

dB

#PAvg

52

V1 S2

Center 2.452 00 GHz

#Res BW 1 MHz

#VBW 3 MHz

Span 53 MHz

Sweep 1 ms (601 pts)

Channel Power

8.71 dBm / 35.3360 MHz

Power Spectral Density

-66.77 dBm/Hz

draft 802.11n Wide-40 MHz Channel mode / Chain 2**Average Power (CH Low)**

* Agilent 16:42:48 Nov 12, 2007

R T

avg Output Power , g Mode Low Ch.

Ref 30 dBm

Atten 30 dB

#Samp

Log

10

dB/

Offst

11

dB

#PAvg

53

V1 S2

Center 2.422 00 GHz

#Res BW 1 MHz

#VBW 3 MHz

Span 53.14 MHz

Sweep 1 ms (601 pts)

Channel Power

6.60 dBm / 35.4240 MHz

Power Spectral Density

-68.89 dBm/Hz

**Average Power (CH Mid)**

* Agilent 12:55:14 Nov 16, 2007

R T

AVG Output Power , g Mode Mid Ch.

Ref 30 dBm

Atten 30 dB

#Samp

Log

10

dB/

Offst

11

dB

#PAvg

62

V1 S2

Center 2.437 00 GHz

#VBW 3 MHz

Span 53.17 MHz

Sweep 1 ms (601 pts)

Channel Power

8.78 dBm / 35.4480 MHz

Power Spectral Density

-66.71 dBm/Hz

Average Power (CH High)

* Agilent 12:56:50 Nov 16, 2007

R T

AVG Output Power , g Mode High Ch.

Ref 30 dBm

Atten 30 dB

#Samp

Log

10

dB/

Offst

11

dB

#PAvg

51

V1 S2

Center 2.452 00 GHz

#VBW 3 MHz

Span 53.08 MHz

Sweep 1 ms (601 pts)

Channel Power

8.57 dBm / 35.3840 MHz

Power Spectral Density

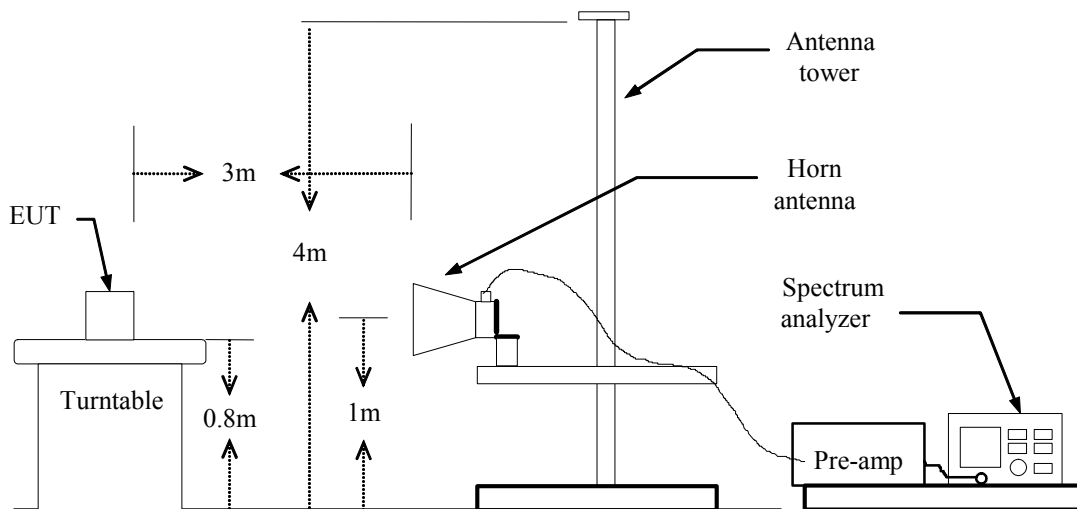
-66.92 dBm/Hz

7.4 BAND EDGES MEASUREMENT

LIMIT

According to §15.247(d), in any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in 15.209(a) (see Section 15.205(c)).

Test Configuration



TEST PROCEDURE

1. The EUT is placed on a turntable, which is 0.8m above the ground plane.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
4. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:
 - (a) PEAK: RBW=VBW=1MHz / Sweep=AUTO
 - (b) AVERAGE: RBW=1MHz / VBW=10Hz / Sweep=AUTO
5. Repeat the procedures until all the PEAK and AVERAGE versus POLARIZATION are measured.

TEST RESULTS

Refer to attach spectrum analyzer data chart.

**Band Edges (IEEE 802.11b mode / CH Low)****Detector mode: Peak****Polarity: Vertical**

* Agilent 09:55:22 Nov 14, 2007

R L

Mkr1 2.390 0 GHz
53.74 dB μ VRef 121 dB μ V

#Atten 14 dB

Peak

Log

10

dB/

Offst

10

dB

DI

74.0

dB μ V

LgAv

M1 S2

S3 FC

A AA

E(f):

FTun

Swp

Start 2.310 0 GHz

#Res BW 1 MHz

#VBW 1 MHz

Stop 2.420 0 GHz

#Sweep 100 ms (601 pts)

Detector mode: Average**Polarity: Vertical**

* Agilent 19:21:17 Nov 13, 2007

R T

Mkr1 2.390 0 GHz
43.79 dB μ VRef 121 dB μ V

#Atten 14 dB

#Peak

Log

10

dB/

Offst

10

dB

DI

54.0

dB μ V

LgAv

M1 S2

S3 FC

A AA

E(f):

FTun

Swp

Start 2.310 0 GHz

#Res BW 1 MHz

#VBW 10 Hz

Stop 2.420 0 GHz

Sweep 8.577 s (601 pts)

**Detector mode: Peak****Polarity: Horizontal**

* Agilent 09:50:48 Nov 14, 2007

R L

Mkr1 2.390 0 GHz
54.37 dB μ VRef 121 dB μ V

#Atten 14 dB

Peak

Log

10

dB/

Offst

10

dB

DI

74.0

dB μ V

LgAv

M1 S2

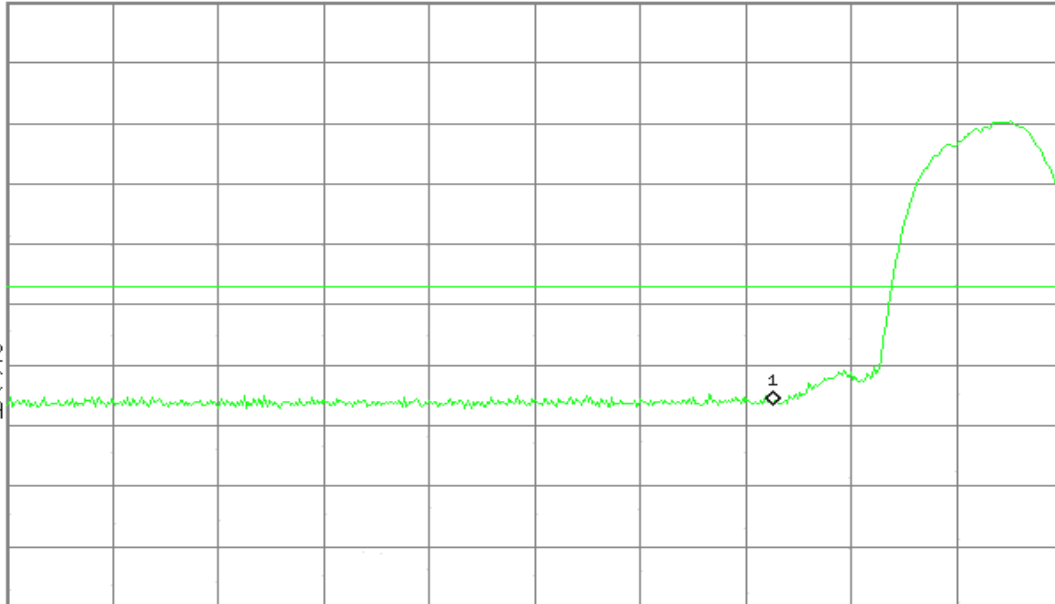
S3 FC

A AA

E(f):

FTun

Swp



Start 2.310 0 GHz

#Res BW 1 MHz

#VBW 1 MHz

Stop 2.420 0 GHz

#Sweep 100 ms (601 pts)

Detector mode: Average**Polarity: Horizontal**

* Agilent 09:52:11 Nov 14, 2007

R L

Mkr1 2.390 0 GHz
42.31 dB μ VRef 121 dB μ V

#Atten 14 dB

Peak

Log

10

dB/

Offst

10

dB

DI

54.0

dB μ V

LgAv

M1 S2

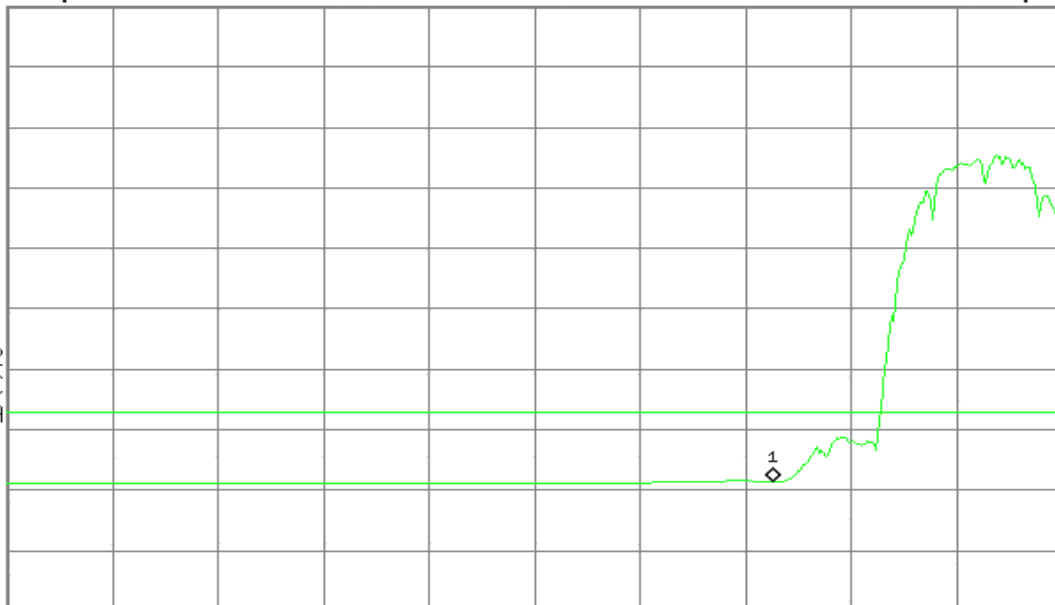
S3 FC

A AA

E(f):

FTun

Swp



Start 2.310 0 GHz

#Res BW 1 MHz

#VBW 10 Hz

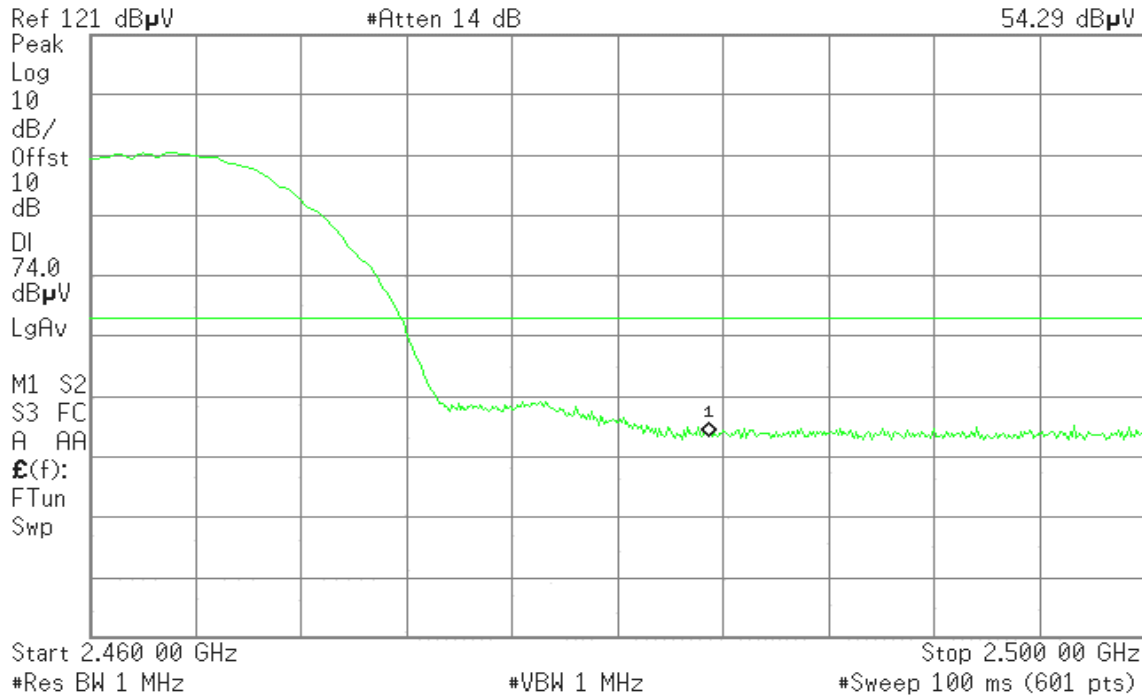
Stop 2.420 0 GHz

Sweep 8.577 s (601 pts)

**Band Edges (IEEE 802.11b mode / CH High)****Detector mode: Peak****Polarity: Vertical**

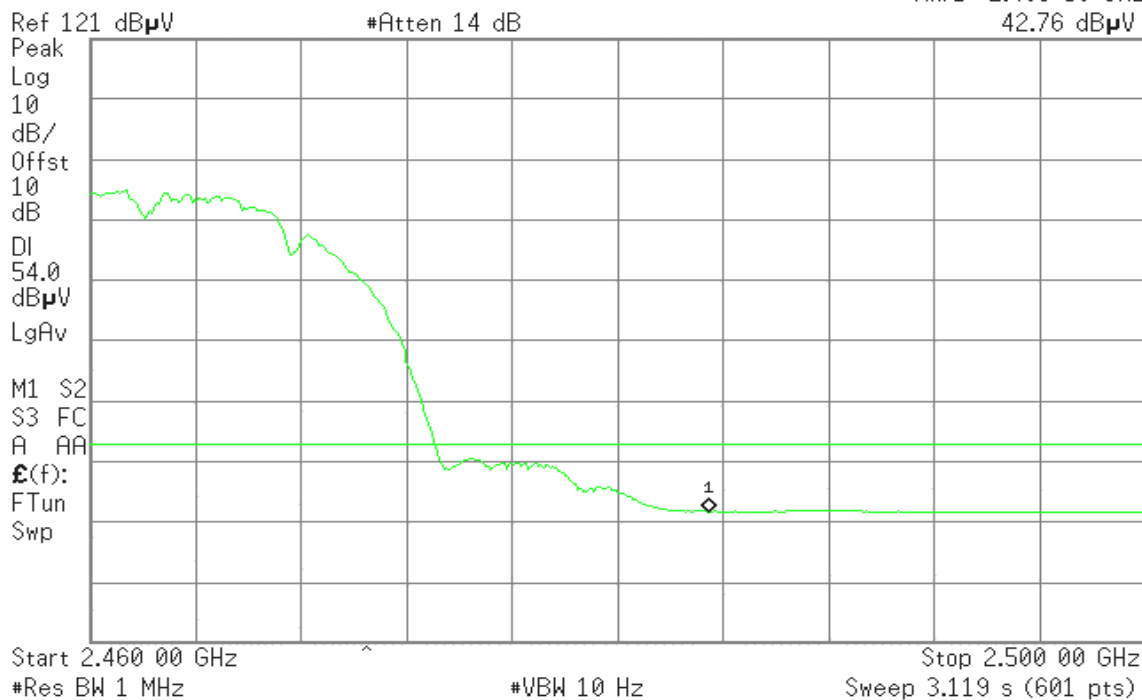
* Agilent 10:01:07 Nov 14, 2007

R T

Mkr1 2.483 50 GHz
54.29 dB μ V**Detector mode: Average****Polarity: Vertical**

* Agilent 10:02:03 Nov 14, 2007

R T

Mkr1 2.483 50 GHz
42.76 dB μ V

**Detector mode: Peak****Polarity: Horizontal**

* Agilent 10:04:41 Nov 14, 2007

R L

Mkr1 2.483 50 GHz
55.03 dB μ VRef 121 dB μ V

#Atten 14 dB

Peak

Log

10

dB/

Offst

10

dB

DI

74.0

dB μ V

LgAv

M1 S2

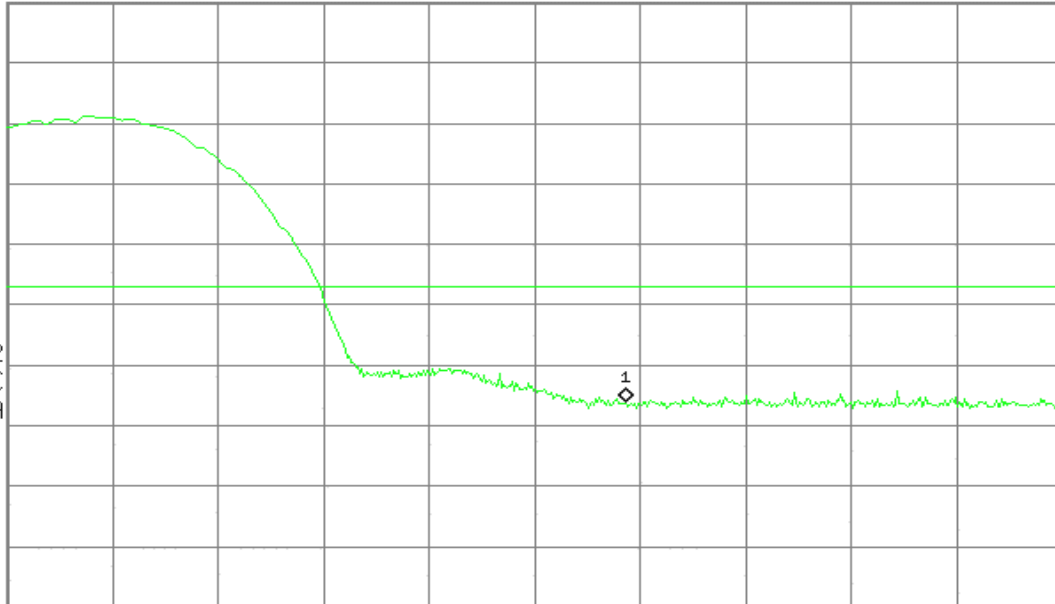
S3 FC

A AA

E(f):

FTun

Swp



Start 2.460 00 GHz

#Res BW 1 MHz

#VBW 1 MHz

Stop 2.500 00 GHz

#Sweep 100 ms (601 pts)

Detector mode: Average**Polarity: Horizontal**

* Agilent 10:06:23 Nov 14, 2007

R L

Mkr1 2.483 50 GHz
42.88 dB μ VRef 121 dB μ V

#Atten 14 dB

Peak

Log

10

dB/

Offst

10

dB

DI

54.0

dB μ V

LgAv

M1 S2

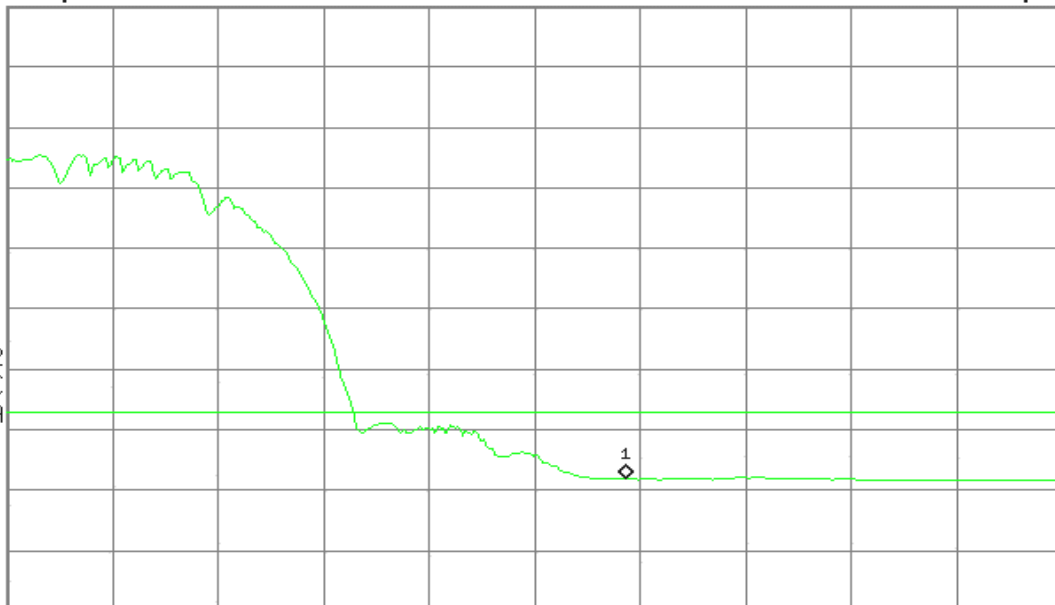
S3 FC

A AA

E(f):

FTun

Swp



Start 2.460 00 GHz

#Res BW 1 MHz

#VBW 10 Hz

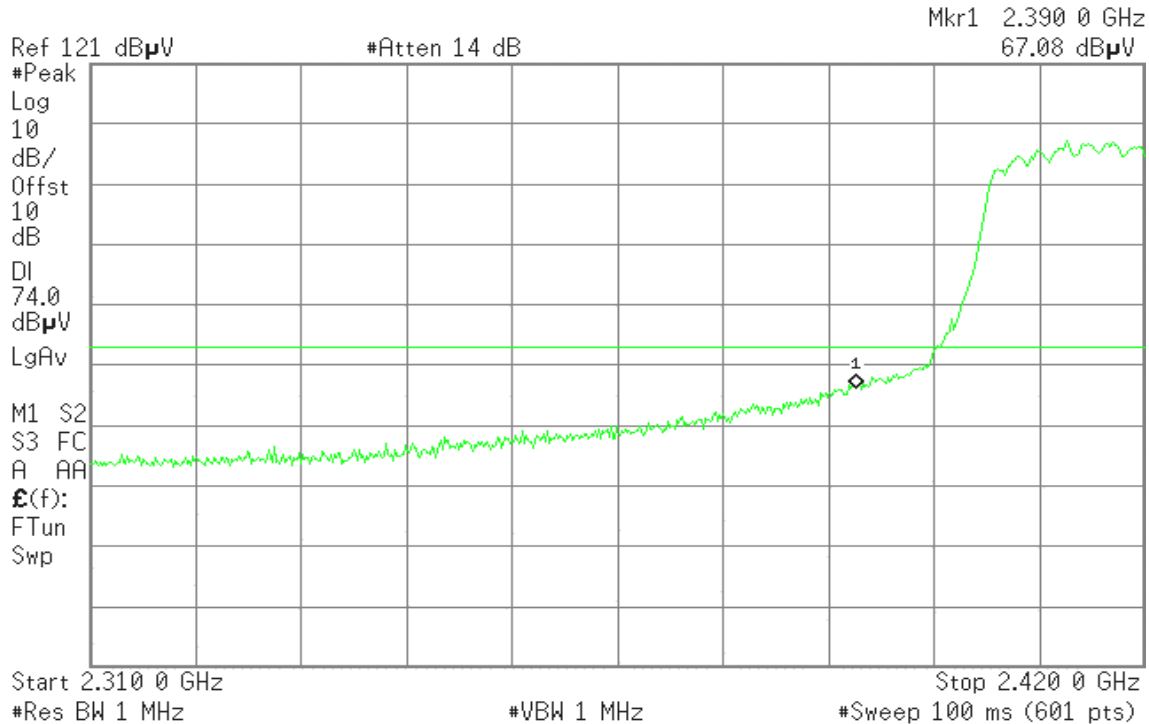
Stop 2.500 00 GHz

Sweep 3.119 s (601 pts)

**Band Edges (IEEE 802.11g mode / CH Low)****Detector mode: Peak****Polarity: Vertical**

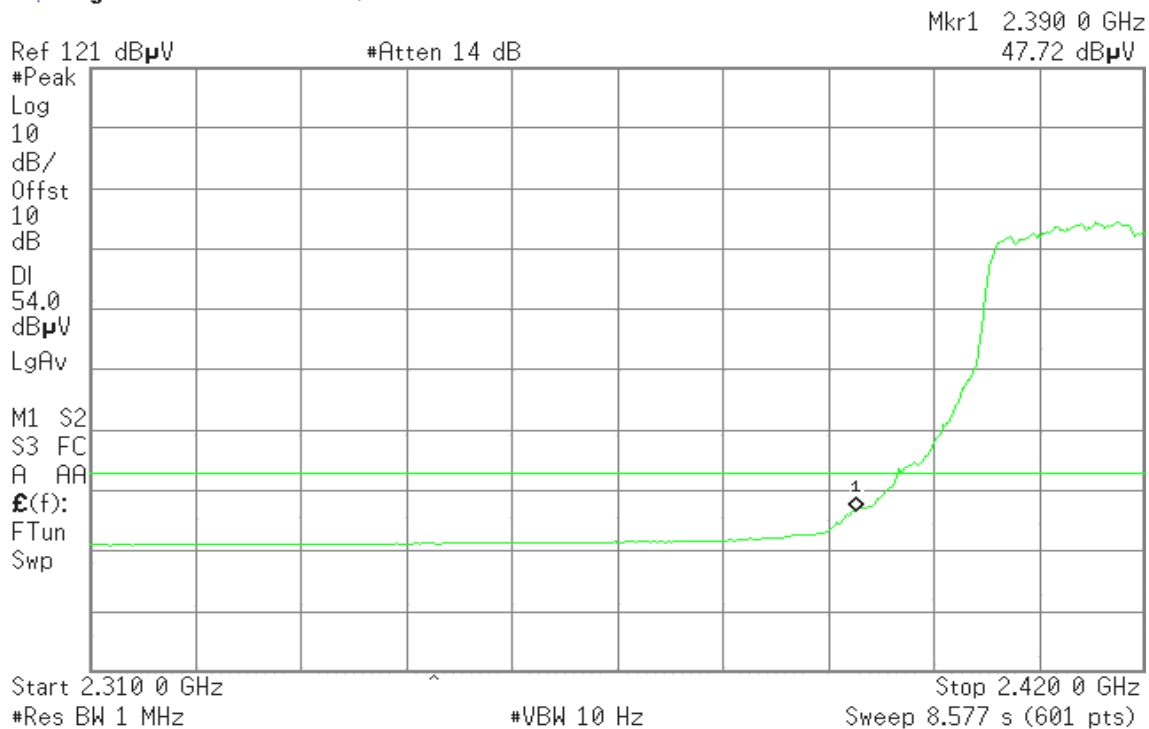
* Agilent 19:04:15 Nov 13, 2007

R T

**Detector mode: Average****Polarity: Vertical**

* Agilent 19:04:55 Nov 13, 2007

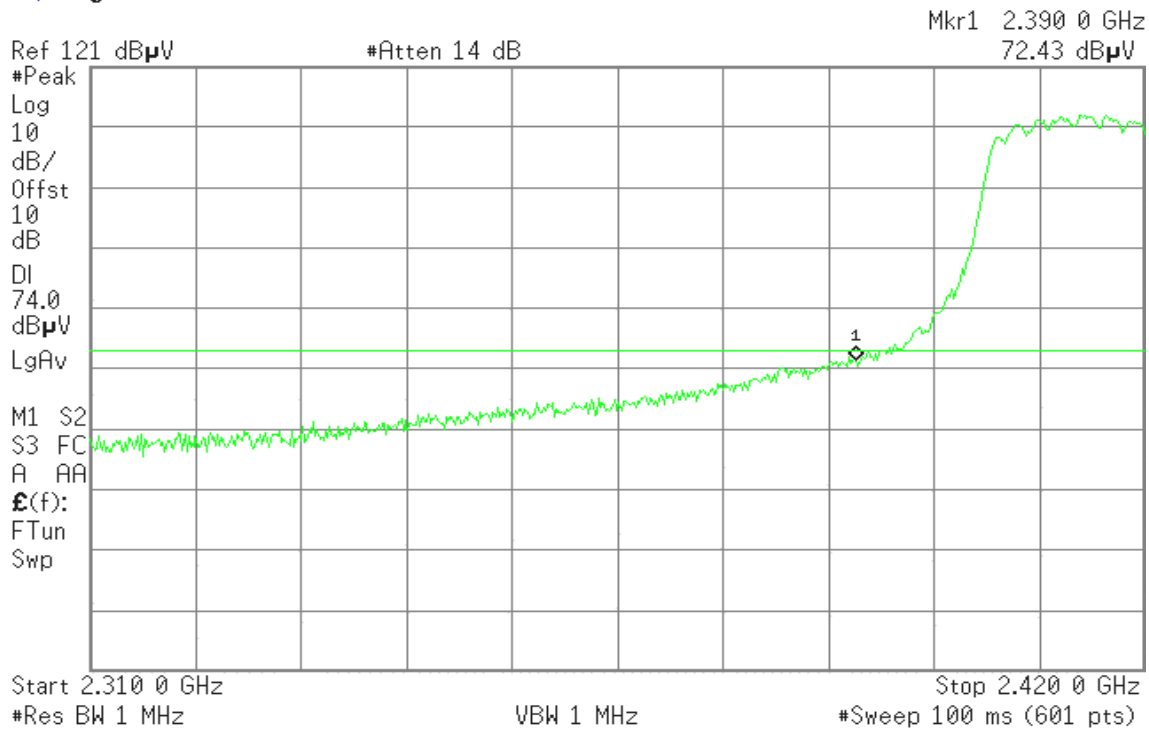
R T



**Detector mode: Peak****Polarity: Horizontal**

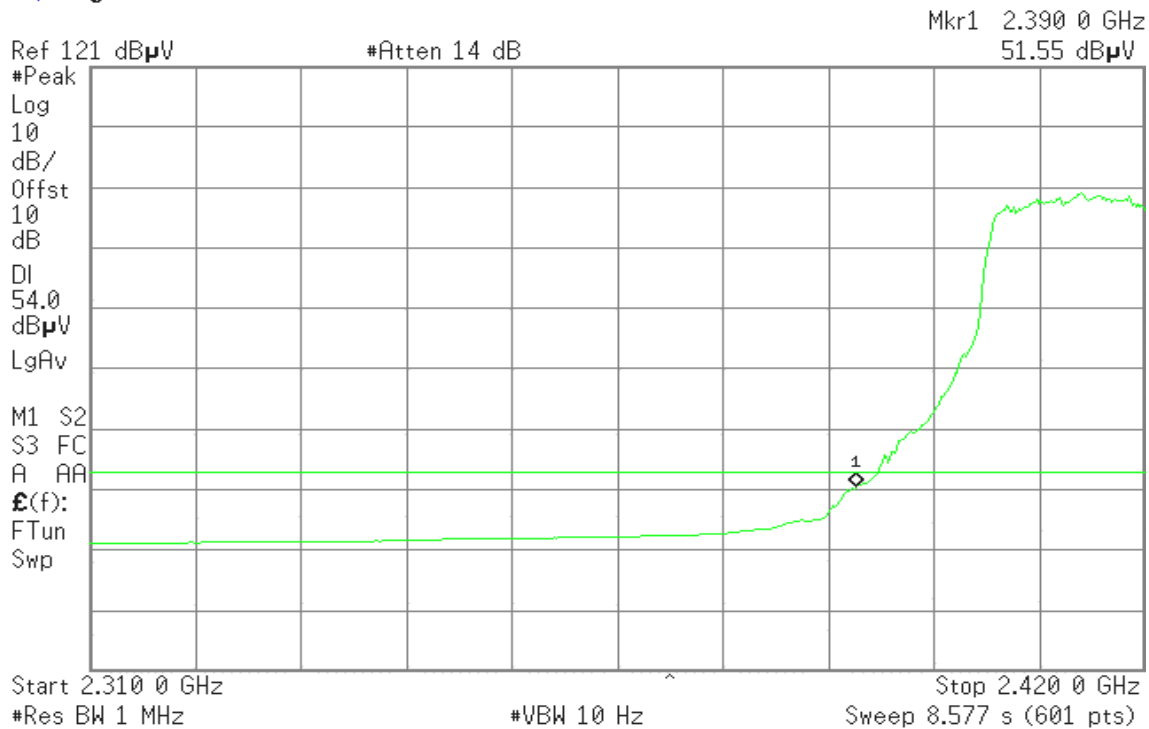
* Agilent 18:57:22 Nov 13, 2007

R T

**Detector mode: Average****Polarity: Horizontal**

* Agilent 18:58:00 Nov 13, 2007

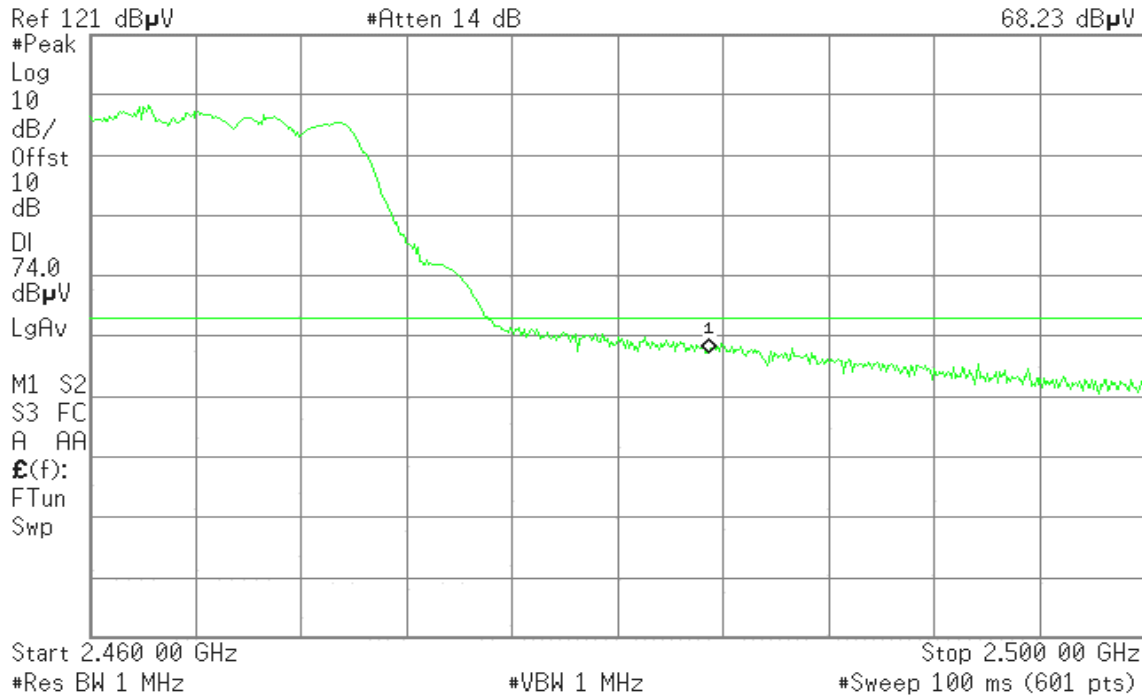
R T



**Band Edges (IEEE 802.11g mode / CH High)****Detector mode: Peak****Polarity: Vertical**

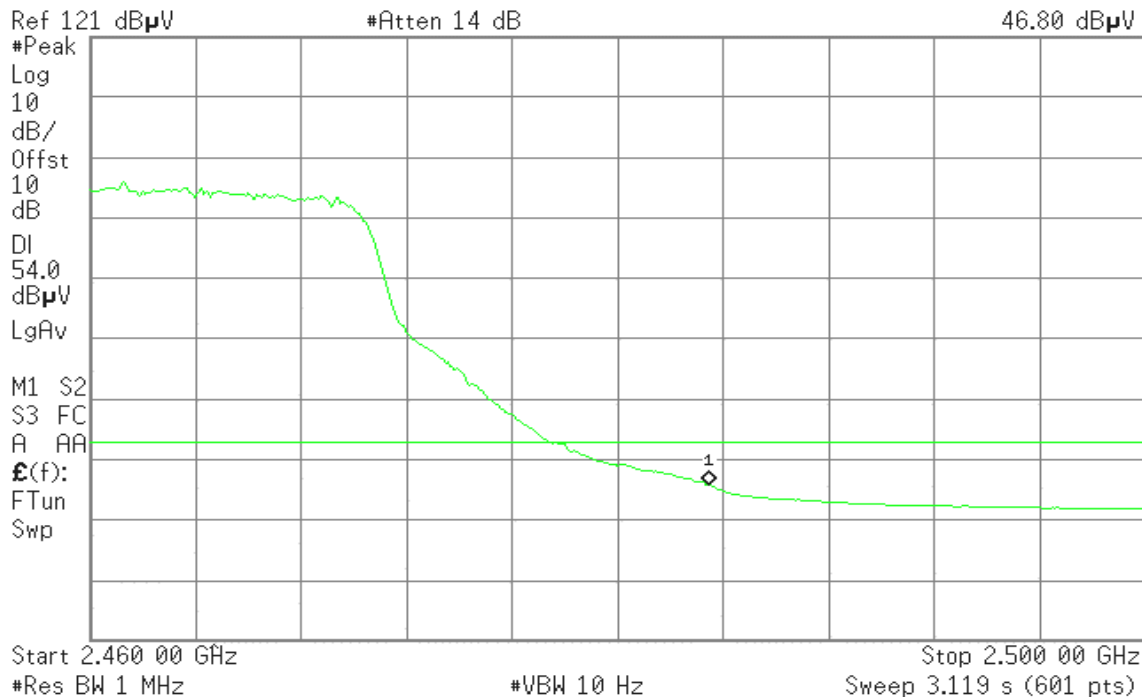
* Agilent 19:49:06 Nov 13, 2007

R T

Mkr1 2.483 50 GHz
68.23 dB μ V**Detector mode: Average****Polarity: Vertical**

* Agilent 19:49:36 Nov 13, 2007

R T

Mkr1 2.483 50 GHz
46.80 dB μ V

**Detector mode: Peak****Polarity: Horizontal**

* Agilent 19:45:18 Nov 13, 2007

R T

Mkr1 2.483 50 GHz
70.35 dB μ VRef 121 dB μ V

#Atten 14 dB

#Peak

Log

10

dB/

Offst

10

dB

DI

74.0

dB μ V

LgAv

M1 S2

S3 FC

A AA

E(f):

FTun

Swp

Start 2.460 00 GHz

#Res BW 1 MHz

#VBW 1 MHz

Stop 2.500 00 GHz

#Sweep 100 ms (601 pts)

Detector mode: Average**Polarity: Horizontal**

* Agilent 19:46:10 Nov 13, 2007

R T

Mkr1 2.483 50 GHz
47.23 dB μ VRef 121 dB μ V

#Atten 14 dB

#Peak

Log

10

dB/

Offst

10

dB

DI

54.0

dB μ V

LgAv

M1 S2

S3 FC

A AA

E(f):

FTun

Swp

Start 2.460 00 GHz

#Res BW 1 MHz

#VBW 10 Hz

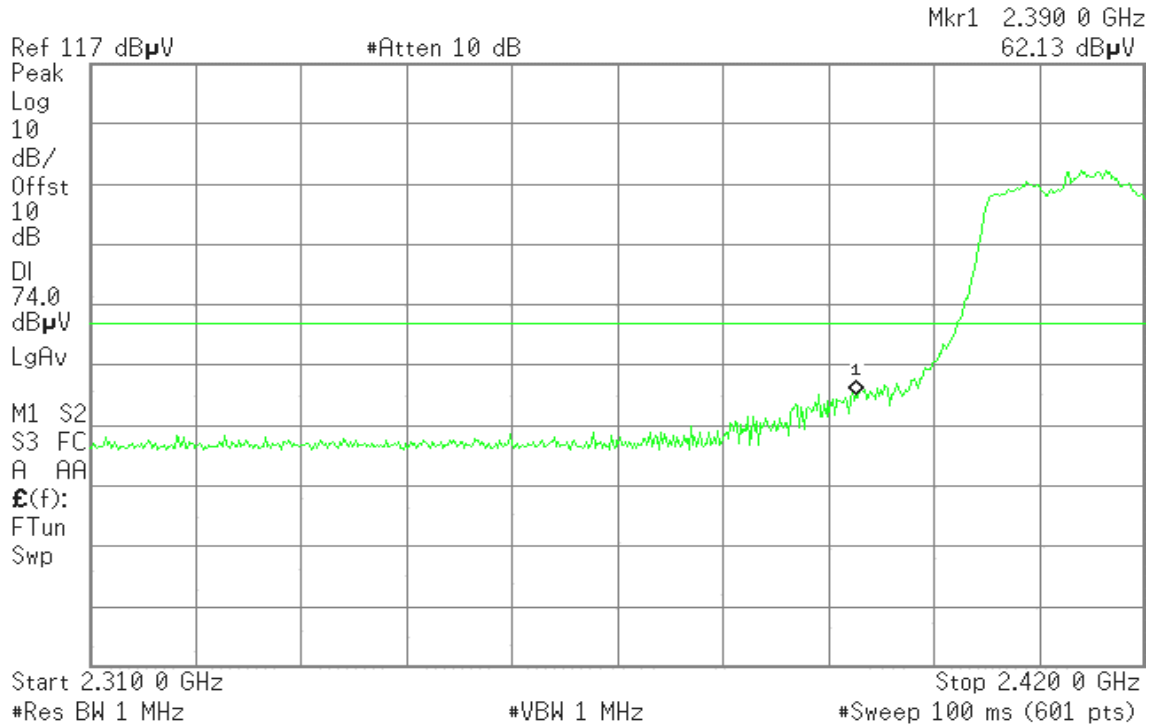
Stop 2.500 00 GHz

Sweep 11.03 s (601 pts)

**Band Edges (draft 802.11n Standard-20 MHz Channel mode / CH Low)****Detector mode: Peak****Polarity: Vertical**

* Agilent 16:55:23 Nov 8, 2007

R T

**Detector mode: Average****Polarity: Vertical**

* Agilent 16:55:00 Nov 8, 2007

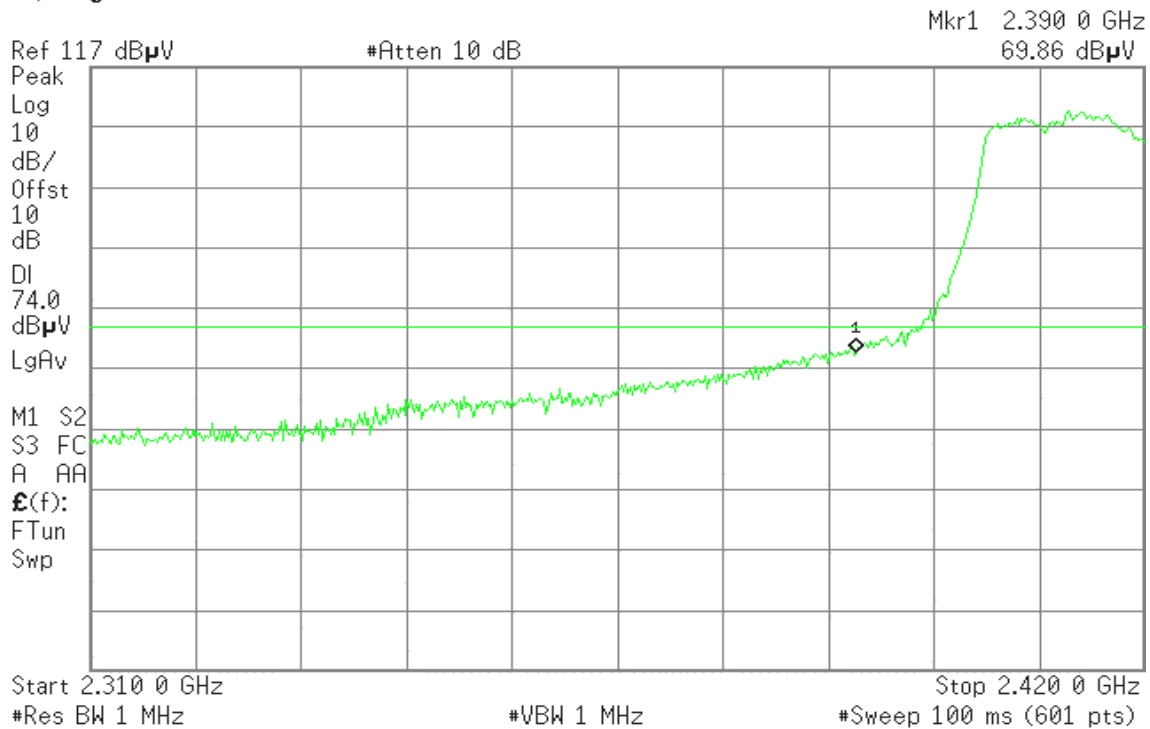
R T



**Detector mode: Peak****Polarity: Horizontal**

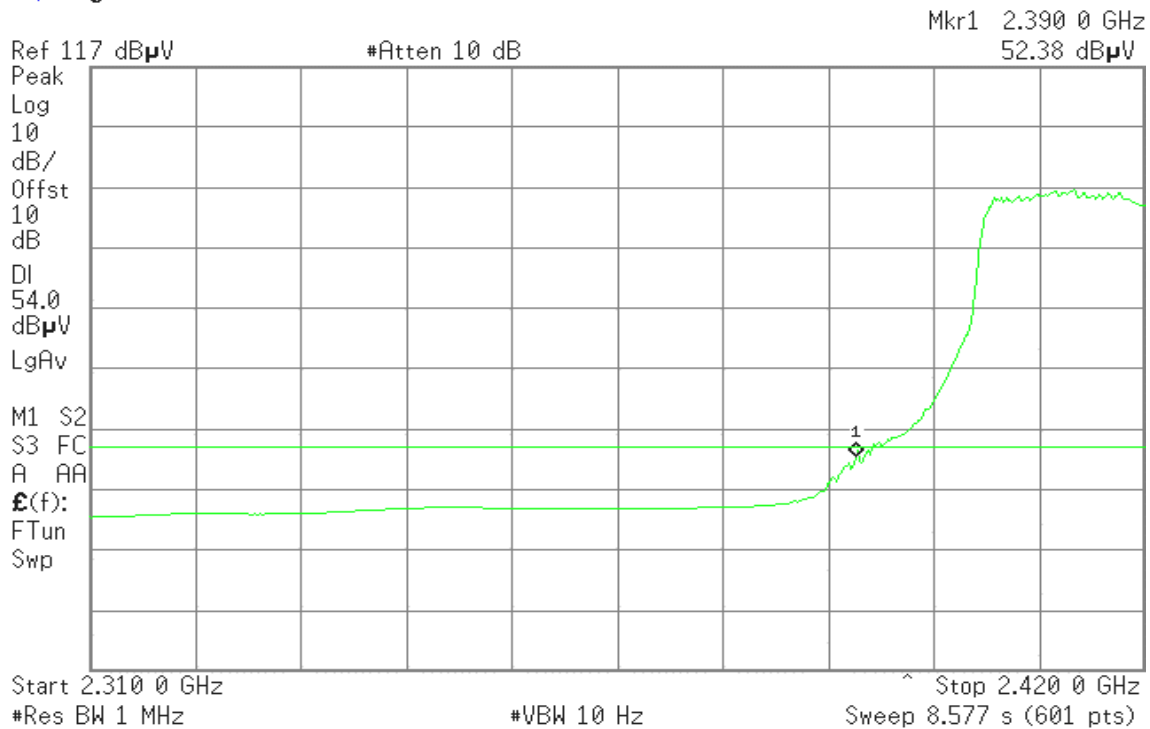
* Agilent 16:45:15 Nov 8, 2007

R T

**Detector mode: Average****Polarity: Horizontal**

* Agilent 16:44:27 Nov 8, 2007

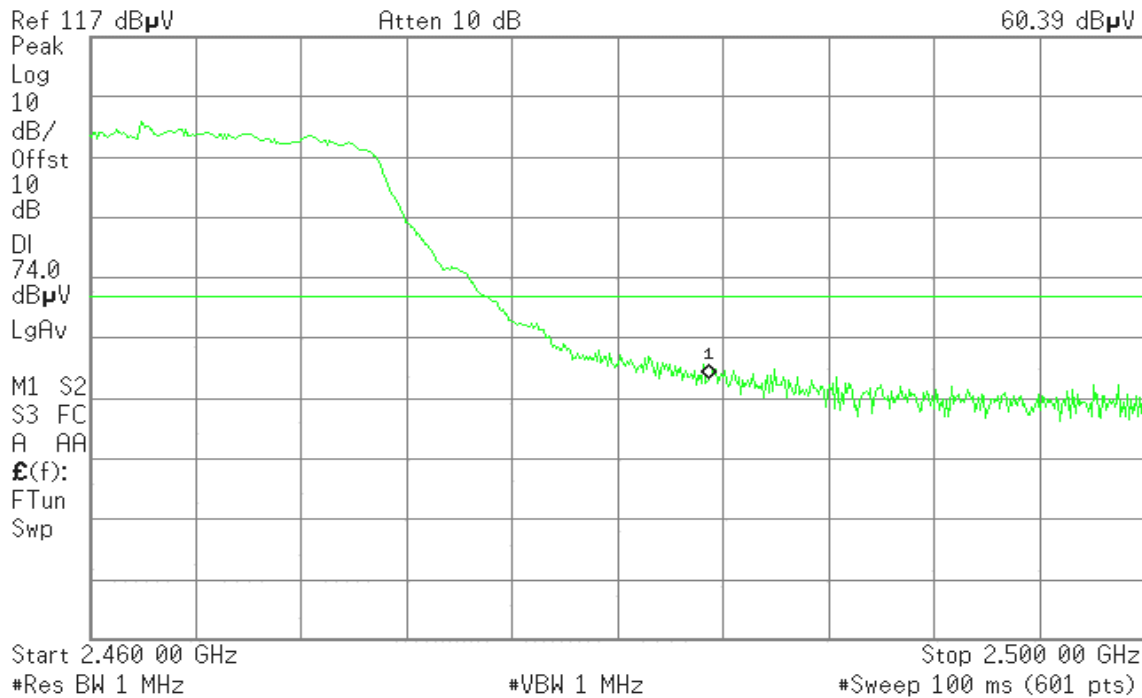
R T



**Band Edges (draft 802.11n Standard-20 MHz Channel mode / CH High)****Detector mode: Peak****Polarity: Vertical**

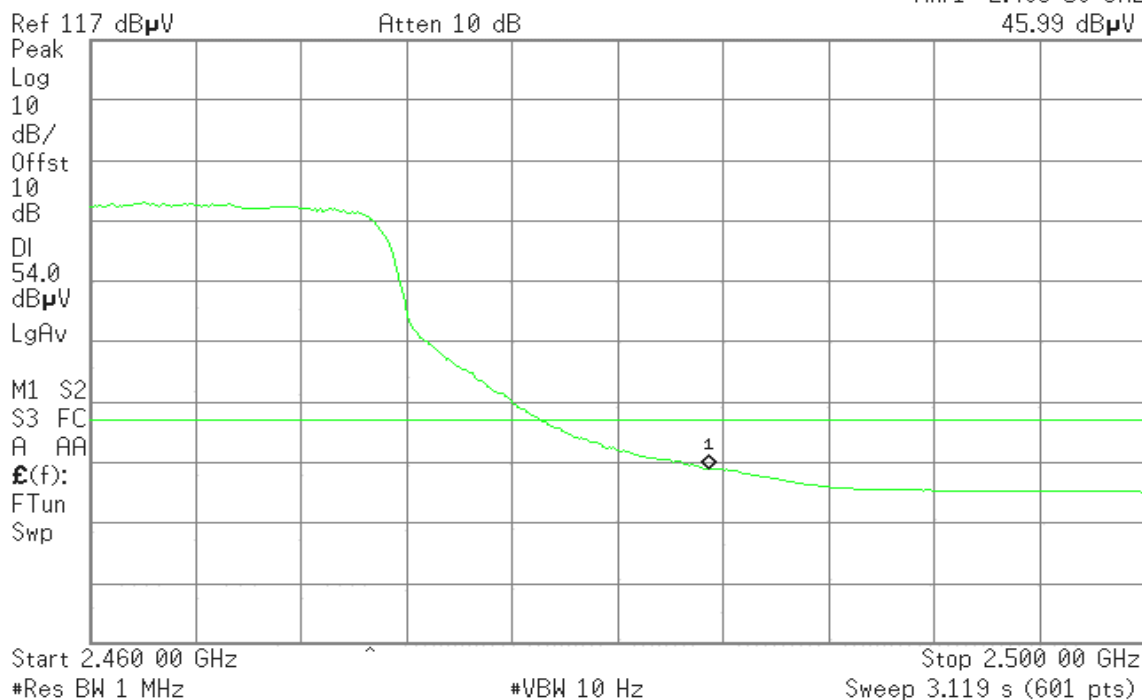
* Agilent 17:19:08 Nov 8, 2007

R T

Mkr1 2.483 50 GHz
60.39 dB μ V**Detector mode: Average****Polarity: Vertical**

* Agilent 17:18:50 Nov 8, 2007

R T

Mkr1 2.483 50 GHz
45.99 dB μ V

**Detector mode: Peak****Polarity: Horizontal**

* Agilent 17:16:19 Nov 8, 2007

R T

Mkr1 2.483 50 GHz
67.13 dB μ VRef 117 dB μ V

Atten 10 dB

Peak

Log

10

dB/

Offst

10

dB

DI

74.0

dB μ V

LgAv

M1 S2

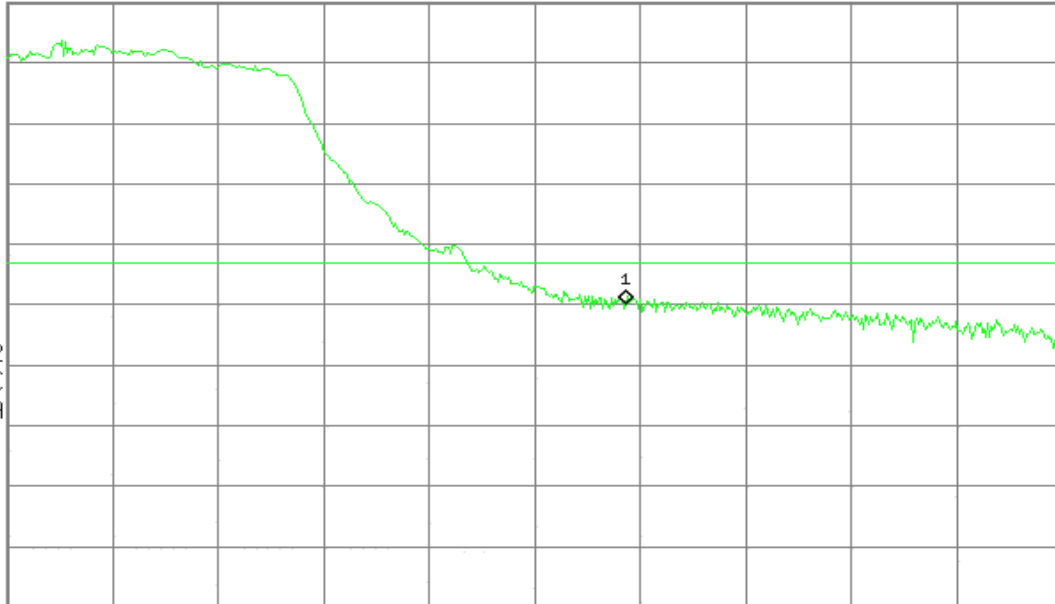
S3 FC

A AA

E(f):

FTun

Swp



Start 2.460 00 GHz

#Res BW 1 MHz

#VBW 1 MHz

Stop 2.500 00 GHz

#Sweep 100 ms (601 pts)

Detector mode: Average**Polarity: Horizontal**

* Agilent 17:15:56 Nov 8, 2007

R T

Mkr1 2.483 50 GHz
52.27 dB μ VRef 117 dB μ V

Atten 10 dB

Peak

Log

10

dB/

Offst

10

dB

DI

54.0

dB μ V

LgAv

M1 S2

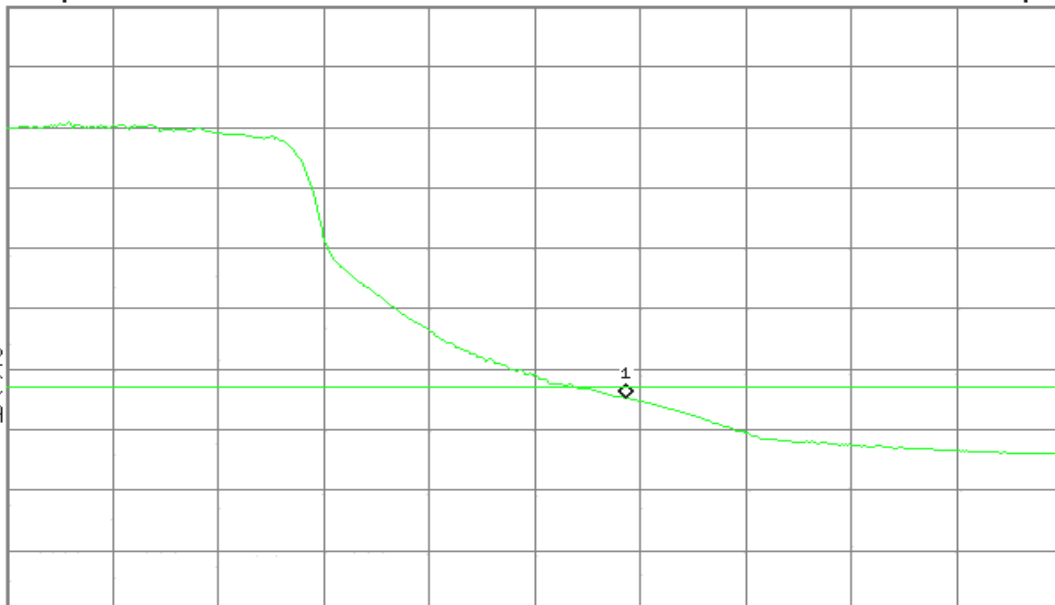
S3 FC

A AA

E(f):

FTun

Swp



Start 2.460 00 GHz

#Res BW 1 MHz

#VBW 10 Hz

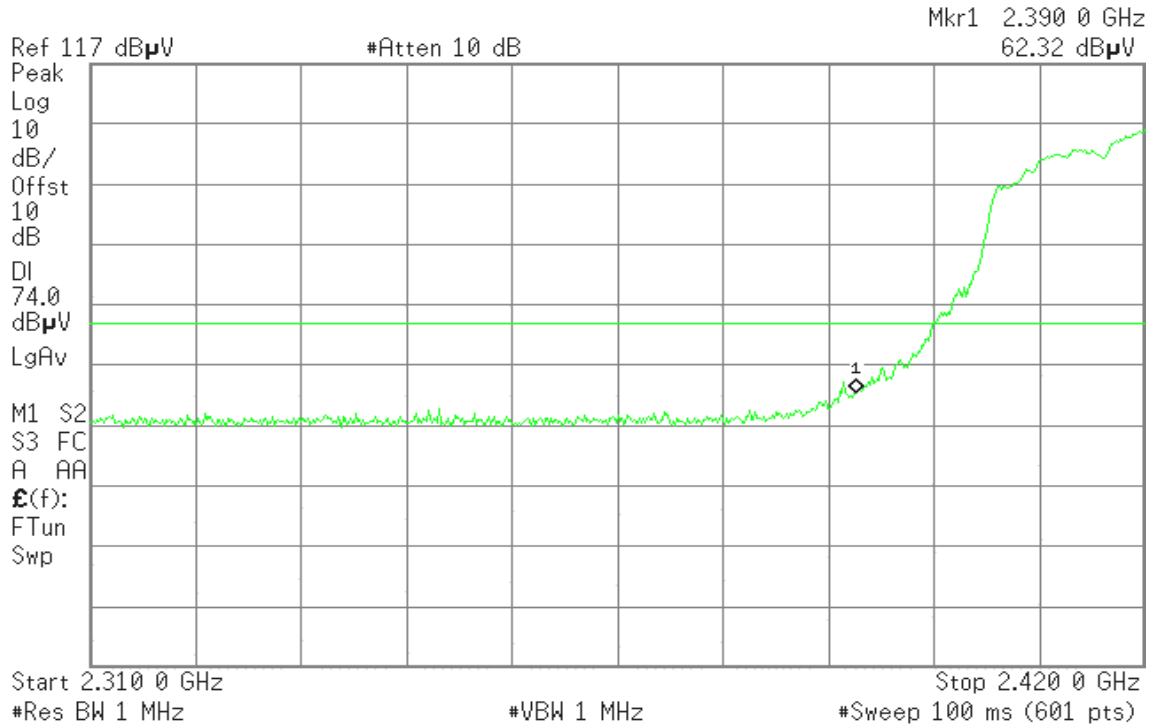
Stop 2.500 00 GHz

Sweep 3.119 s (601 pts)

**Band Edges (draft 802.11n Wide-40 MHz Channel mode / CH Low)****Detector mode: Peak****Polarity: Vertical**

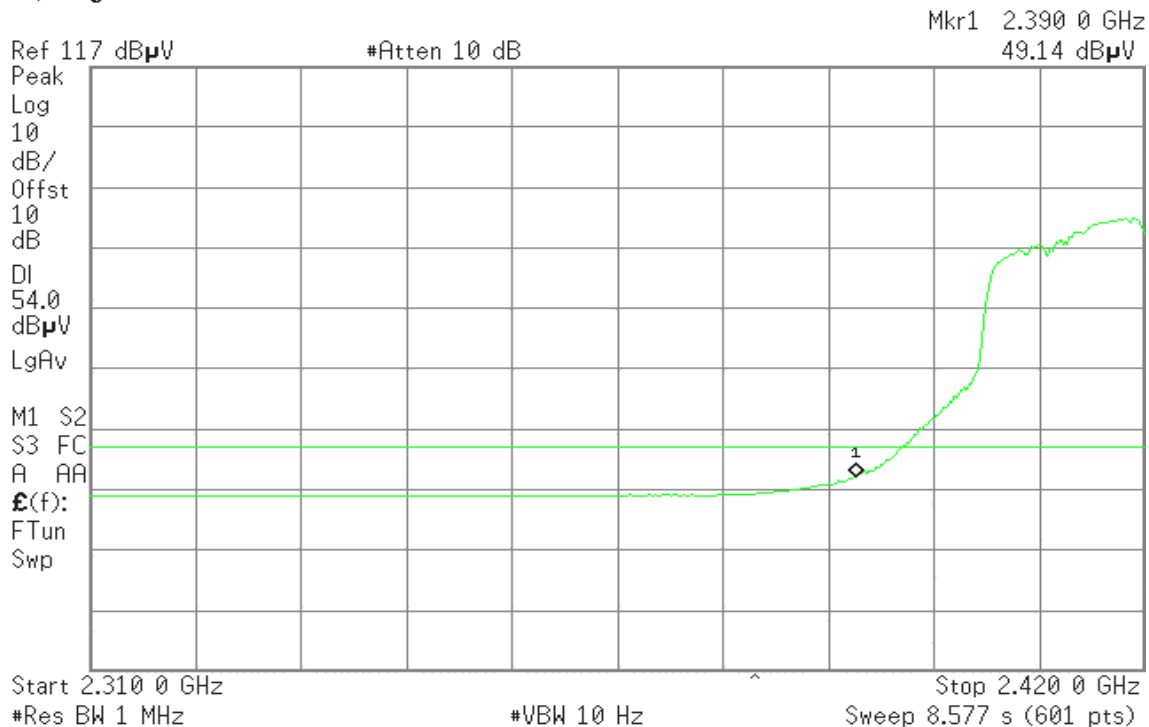
* Agilent 14:09:30 Nov 9, 2007

R T

**Detector mode: Average****Polarity: Vertical**

* Agilent 14:09:13 Nov 9, 2007

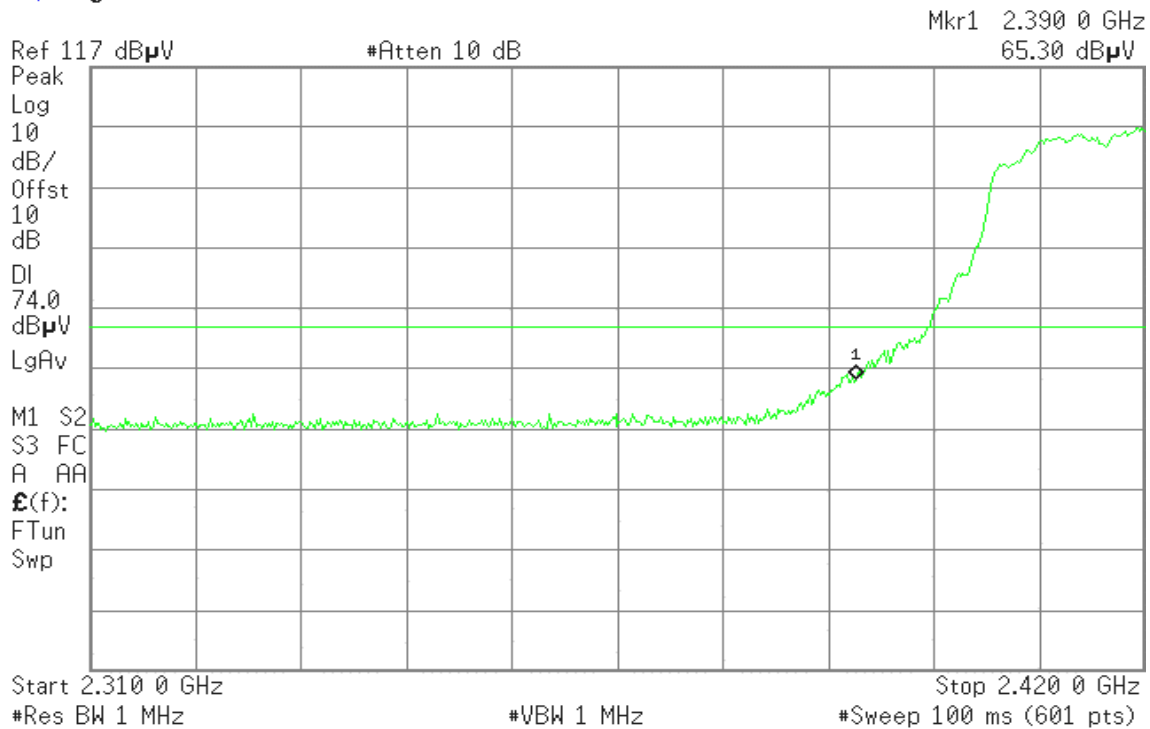
R T



**Detector mode: Peak****Polarity: Horizontal**

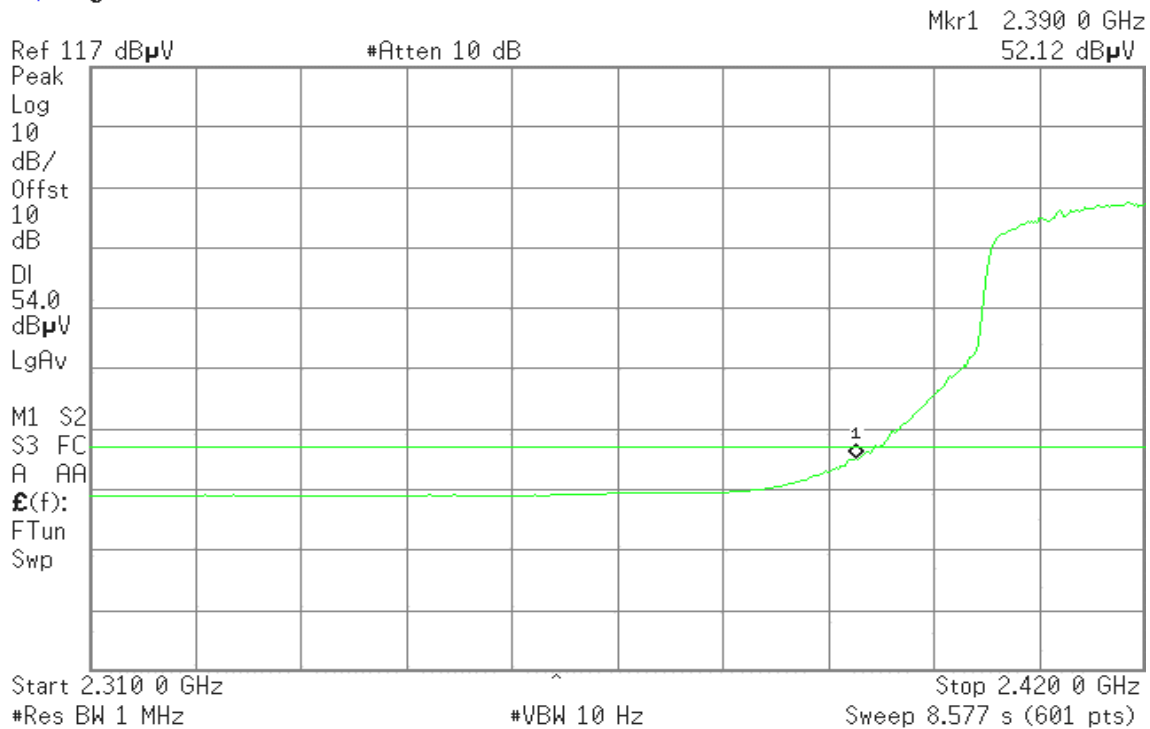
* Agilent 14:04:29 Nov 9, 2007

R T

**Detector mode: Average****Polarity: Horizontal**

* Agilent 14:04:13 Nov 9, 2007

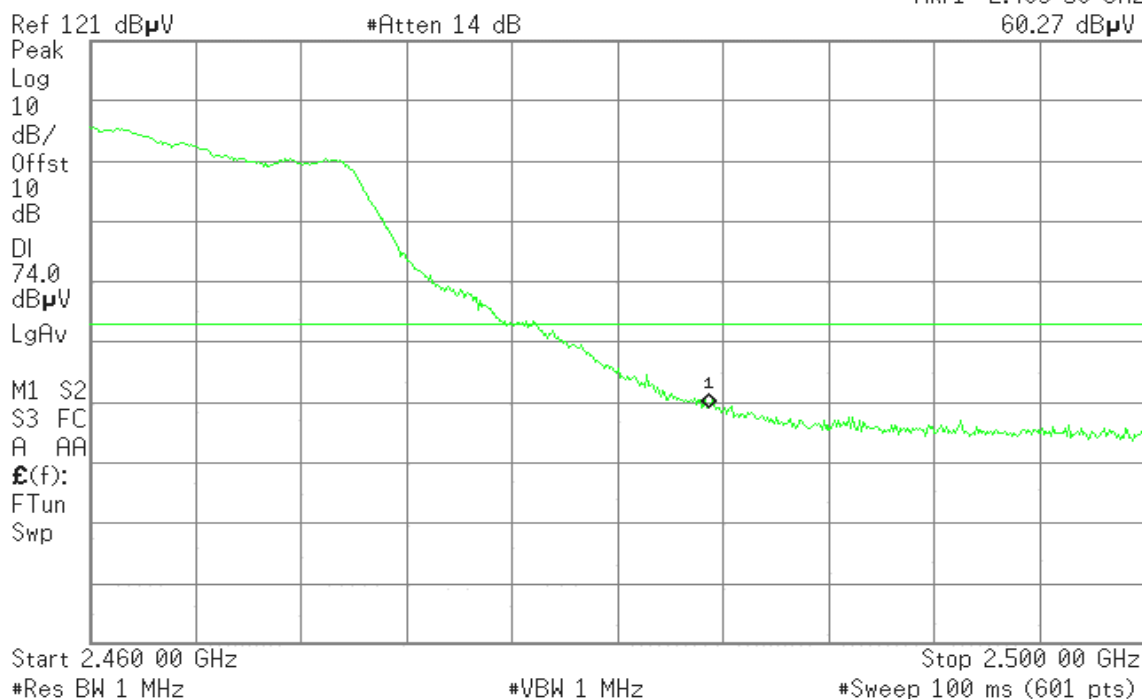
R T



**Band Edges (draft 802.11n Wide-40 MHz Channel mode / CH High)****Detector mode: Peak****Polarity: Vertical**

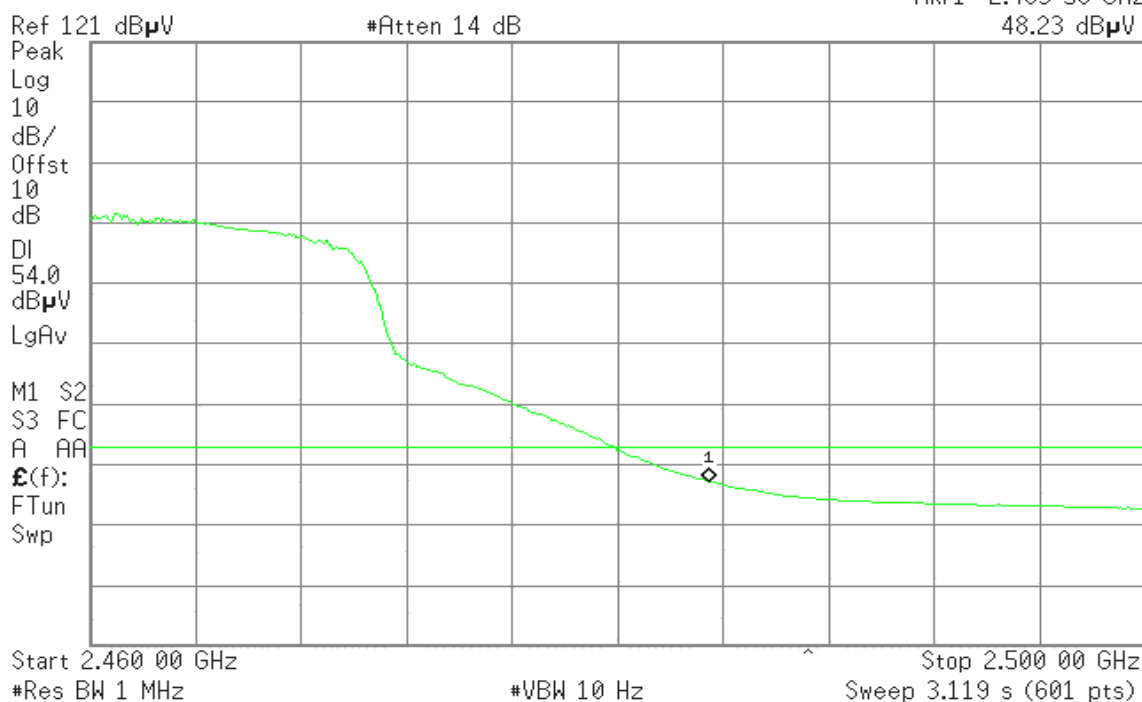
* Agilent 14:26:45 Nov 9, 2007

R T

Mkr1 2.483 50 GHz
60.27 dB μ V**Detector mode: Average****Polarity: Vertical**

* Agilent 14:26:29 Nov 9, 2007

R T

Mkr1 2.483 50 GHz
48.23 dB μ V

**Detector mode: Peak****Polarity: Horizontal**

* Agilent 14:22:07 Nov 9, 2007

R T

Mkr1 2.483 50 GHz
64.45 dB μ VRef 121 dB μ V

#Atten 14 dB

Peak

Log

10

dB/

Offst

10

dB

DI

74.0

dB μ V

LgAv

M1 S2

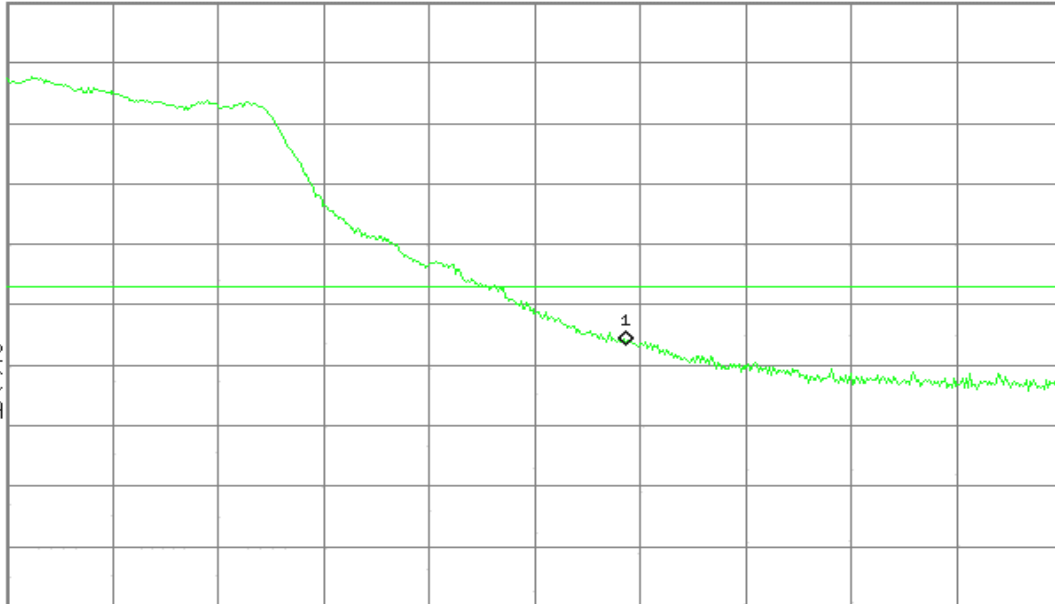
S3 FC

A AA

E(f):

FTun

Swp



Start 2.460 00 GHz

#Res BW 1 MHz

#VBW 1 MHz

Stop 2.500 00 GHz

#Sweep 100 ms (601 pts)

Detector mode: Average**Polarity: Horizontal**

* Agilent 14:21:50 Nov 9, 2007

R L

Mkr1 2.483 50 GHz
52.60 dB μ VRef 121 dB μ V

#Atten 14 dB

Peak

Log

10

dB/

Offst

10

dB

DI

54.0

dB μ V

LgAv

M1 S2

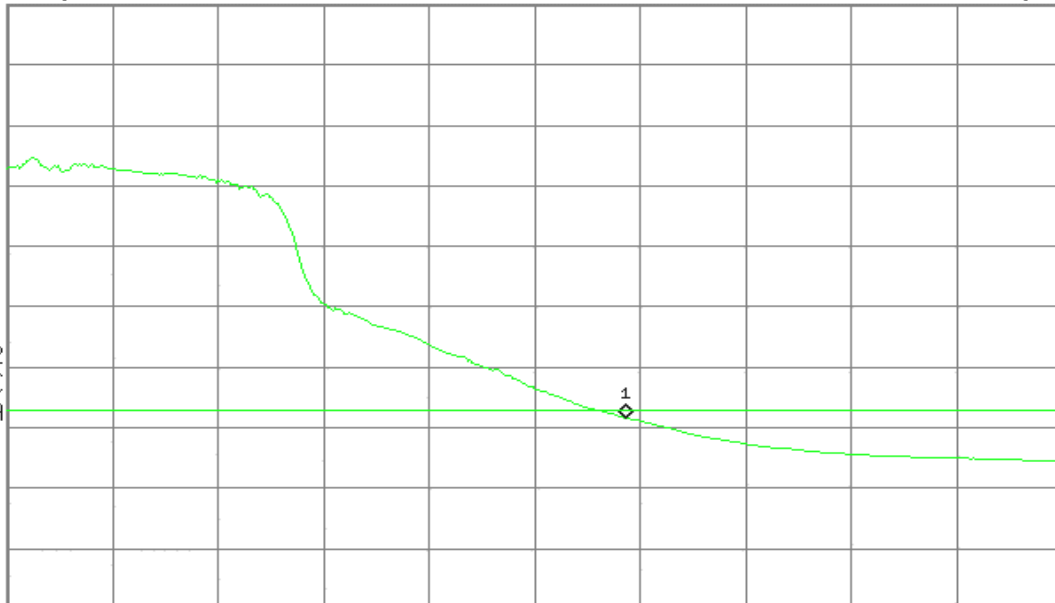
S3 FC

A AA

E(f):

FTun

Swp



Start 2.460 00 GHz

#Res BW 1 MHz

#VBW 10 Hz

Stop 2.500 00 GHz

Sweep 3.119 s (601 pts)