FCC CFR47 PART 15 SUBPART C
INDUSTRY CANADA RSS-210 ISSUE 7
CERTIFICATION TEST REPORT

FOR

SYNCHRONOUS NETWORK ANALOG CLOCK (BATTERY &AC POWERED)

MODEL NUMBER*: SNS4Z155, SNS4Z157, SNS4Z159, SNS7A306, SNS4Z164, SNS7A330, SNS4Z163, SNS4Z176, SNS4Z177, SNS4Z512, SNS4Z180, SNS4Z227

FCC ID: PZ3-SNSA
IC: 4256A-SNSA

REPORT NUMBER: 07U11496-1

ISSUE DATE: APRIL 2, 2008

Prepared for

PRIMEX WIRELESS, INC.
965 WELLS STREET
LAKE GENEVA, WI 53147, U.S.A.

Prepared by

COMPLIANCE CERTIFICATION SERVICES
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*Details of specific model(s) and model tested are listed in the body of this report

NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
--	04/2/08	Initial Issue	F. Ibrahim

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS

COMPANY NAME:	PRIMEX WIRELESS, INC. 965 WELLS STREET LAKE GENEVA, WI 53147, U.S.A.
EUT DESCRIPTION:	SYNCHRONOUS NETWORK ANALOG CLOCK (BATTERY &AC POWERED)
MODELS:	SNS7A330, SNS4Z176
SERIAL NUMBER:	CS02091, CS02092
DATE TESTED:	JANUARY 23 - MARCH 19, 2008

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
CFR 47 Part 15 Subpart C and Subpart E	No Non-Compliance Noted
RSS-210 Issue 7 Annex 8 and RSS-GEN Issue 2	No Non-Compliance Noted

Compliance Certification Services, Inc. tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by Compliance Certification Services and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by Compliance Certification Services will constitute fraud and shall nullify the document. No part of this report may be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any government agency.

Approved & Released For CCS By:

FRANK IBRAHIM
EMC SUPERVISOR
COMPLIANCE CERTIFICATION SERVICES

Tested By:

TOM CHEN
EMC ENGINEER
COMPLIANCE CERTIFICATION SERVICES

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.4-2003, FCC CFR 47 Part 2, FCC CFR 47 Part 15, RSS-GEN Issue 2, and RSS-210 Issue 7.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 Benicia Street, Fremont, California, USA.

CCS is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at http://www.ccsemc.com.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	UNCERTAINTY
Power Line Conducted Emission	+/- 2.3 dB
Radiated Emission	+/- 3.4 dB

Uncertainty figures are valid to a confidence level of 95%.

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a Synchronous Network Analog Clocks.

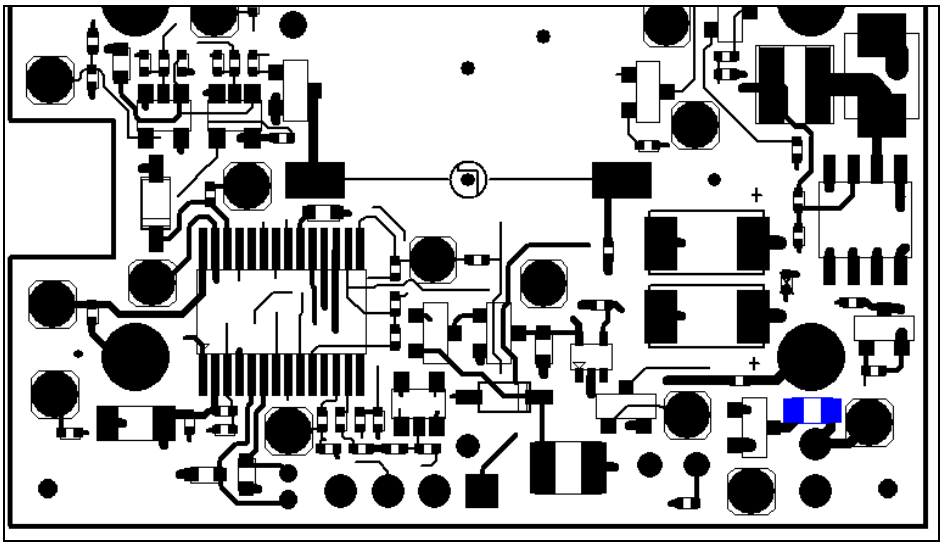
The radio module is manufactured by Universal Electronics.

5.2. MODIFICATION (S)

The following modification was implemented in order to pass radiated emission testing:

1) 25 MHz oscillator was replaced with 25 MHz crystal, and two size 0402 capacitors were added to match the reference circuit. See detailed diagram on the following page for details.

2) Description: Ferrite Chip Bead, 600 Ohms@100MHz, 500mA, 0.30 Ohms DCR (SMD)
Manufacturer: Steward
Part Number: HZ0805E601R-10
Alternate Manufacturer: Taiyo Yuden
Alternate Part Number: BK2125HS601-T

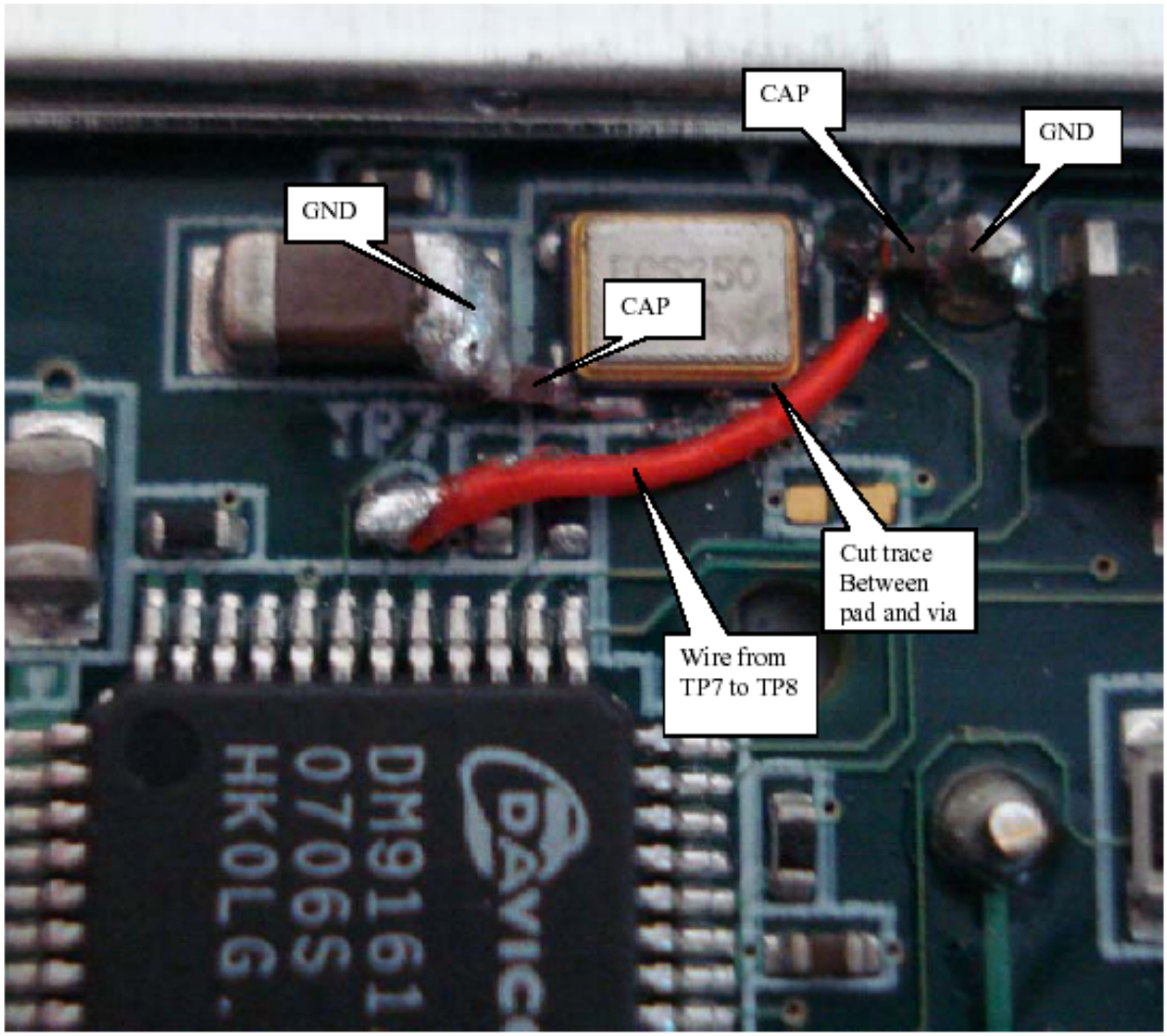


Description of Modification: To suppress the 276MHz harmonic before it reached the power wires and radiate a ferrite bead was added to the board positioned above the positive battery terminal (shown above in blue) directly in line with the positive voltage supply line for the PCB. Adding this Ferrite Bead in this location helps to reduce the 276MHz harmonic from being conducted into the battery wires.

MODIFICATION (1)

Crystal Modification

The crystal is ECS-250-20-33-TR DigiKey # XC1142CT-ND . The capacitors are 12pF 0402.



5.3. DESCRIPTION OF MODEL DIFFERENCES

Part #	Description	Colors	Sample Picture	Lens	Back	Bezel	Power Supply	Notes
SNS4Z155, SNS4Z157, SNS4Z159	CLOCK 12.5" TRADITIONAL	Black, Taupe, White		Plastic	Plastic	Plastic	Battery Pack	12.5" Standard Clock. This is our main offering.
SNS7A306	CLOCK 12.5" AC	Black		Plastic	Plastic	Plastic	Switching 110VAC/220VAC Power Supply	Same as SNS4Z155 12.5" Traditional clock except instead of batteries there is an AC power supply and a power cable with a North America style plug.
SNS4Z164	12.5" DUAL SIDED CLOCK	Black		Plastic	Plastic	Plastic	Battery Pack	This is comprised of 2 SNS4Z155 12.5" Traditional Clocks that "lock" into a plastic wall hanger.
SNS7A330	12.5" DUAL AC WALL	Black		Plastic	Plastic	Plastic	Switching 110VAC/220VAC Power Supply	Same as SNS4Z164 12.5" Dual Sided Clock except instead of batteries there is an AC power supply and a power cable with a North America style plug.
SNS4Z163	CLOCK 16" TRADITION	Black		Plastic	Plastic	Plastic	Battery Pack	16" Standard Clock. Very similar to the SNS4Z155 12.5" Clock except the size is different.
SNS4Z176, SNS4Z177	CLOCK 16" WOOD	Oak, Cherry		Glass	Plastic	Wood	Battery Pack	16" Wooden Clock. Very Similar to the SNS4Z163 16" Clock except a wood bezel is used.
SNS4Z512	CLOCK 13.75" PLATINUM SERIES	Silver		Plastic	Plastic	Plastic	Battery Pack	Similar to the SNS4Z155 12.5" Traditional Clock except it is in a 13.75" version.
SNS4Z180	CLOCK 12.5" BRUSHED ALUMINUM	Aluminum		Glass	Plastic	Aluminum	Battery Pack	Aluminum Version.
SNS4Z227	CLOCK 15" DUAL BRUSHED ALUMINUM	Aluminum		Plastic	Plastic	Aluminum	Battery Pack	Dual sided Aluminum Clock.

SNS7A330 (AC-powered clock), and **SNS4Z176** (Battery-powered clock) were the representative models that were tested.

5.4. MAXIMUM OUTPUT POWER

The transmitter has a maximum peak conducted output power as follows:

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
2412 - 2462	802.11b	18.85	76.74
2412 - 2462	802.11g	25.42	348.34

5.5. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes a PCB Trace antenna, with a maximum gain of –1.2 dBi.

5.6. SOFTWARE AND FIRMWARE

The firmware installed in the EUT during testing was Atheros AR2315 single chip 2.4GHz Access Point Solution.

The test utility software used during testing was art.exe, rev 5.2.

5.7. WORST-CASE CONFIGURATION AND MODE

Worst-case channel is the channel with highest output power, the channel with highest output power was determined to be mid channel in 11g mode; therefore, radiated emission below 1 GHz was performed while EUT is transmitting at mid channel in 11g mode.

5.8. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

PERIPHERAL SUPPORT EQUIPMENT LIST			
Description	**Manufacturer**	**Model**	**Serial Number**
Laptop PC	Dell	INSPIRON 6400	UT153A01
AC Adapter	Dell	LA65NS-00	CN-0DF2637161572M2925
AC Adapter	Universal Electronics	N/A	N/A

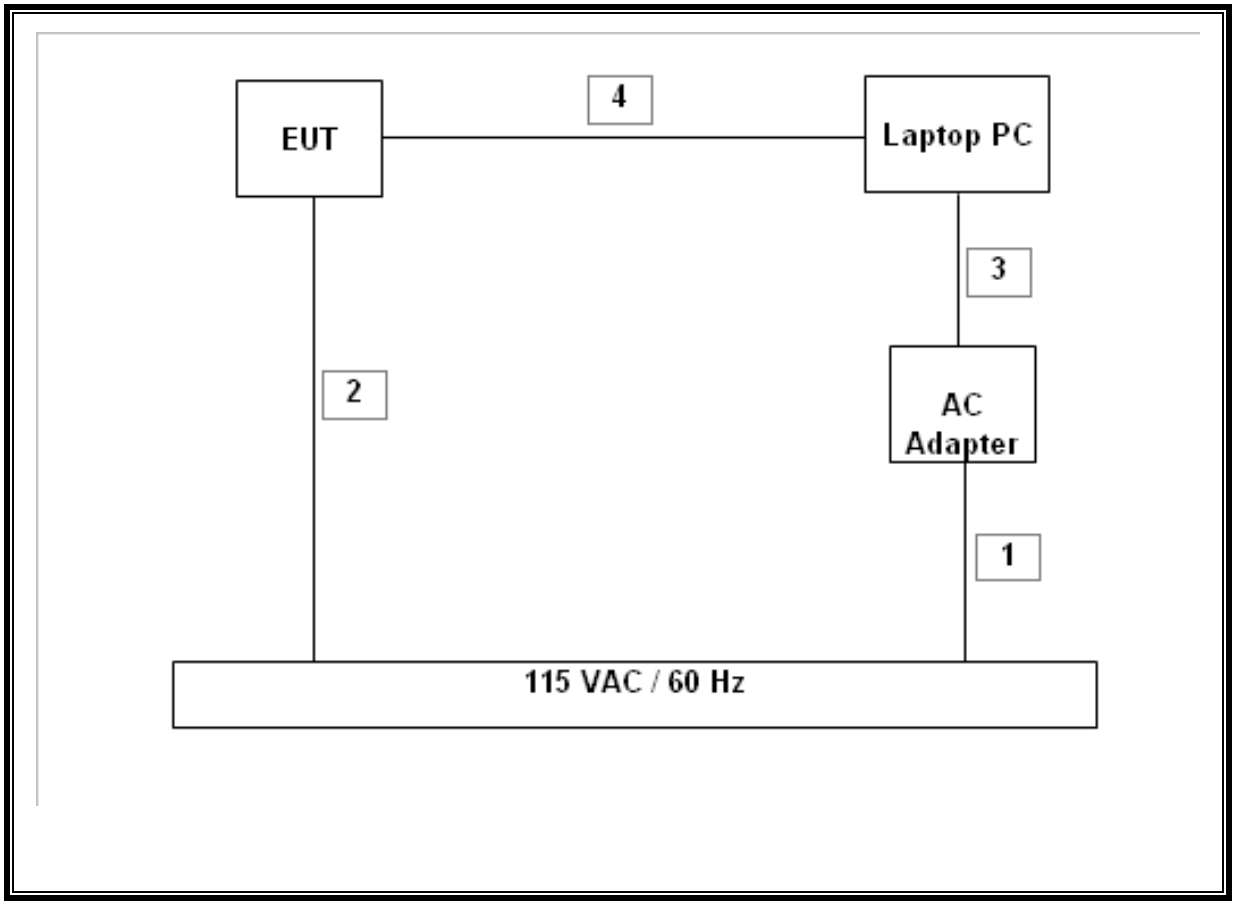
I/O CABLES

I/O CABLE LIST						
Cable No.	**Port**	**# of Identica Ports**	**Connector Type**	**Cable Type**	**Cable Length**	**Remarks**
1	AC	1	AC	Unshielded	1.0 m	N/A
2	AC	1	AC	Unshielded	0.8 m	N/A
3	DC	1	DC	Unshielded	1.5 m	N/A
4	Ethernet	1	RJ45	Unshielded	1m	N/A

TEST SETUP

The EUT was connected to a laptop PC via Ethernet port, and test software was used to control the channels selection and output power of the EUT.

SETUP DIAGRAM FOR TESTS



6. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

TEST EQUIPMENT LIST					
Description	**Manufacturer**	**Model**	**Asset**	**Cal Date**	**Cal Due**
Attenuators	Weinschel	56-10	N/A	N/A	N/A
Power Meter	Agilent / HP	438A	C01068	11/29/06	09/12/08
Antenna, Horn, 18 GHz	EMCO	3115	C00945	04/15/07	04/15/08
Preamp, 1000MHz	Sonoma	310N	N/A	1/23/2008	01/23/09
Preamplifier, 26.5 GHz	Agilent / HP	8449B	C01052	08/03/07	08/03/08
Antenna, Bilog, 2 GHz	Sunol Sciences	JB1	C01016	09/28/07	09/28/08
RF Filter Section, 2.9 GHz	Agilent / HP	85420E	C00958	02/06/07	06/12/08
EMI Receiver, 2.9 GHz	Agilent / HP	8542E	C00957	02/06/07	06/12/08
Spectrum Analyzer, 44 GHz	Agilent / HP	E4446A	C01012	05/02/06	08/07/08
Power Sensor, 18 GHz	Agilent / HP	8481A	N02784	01/12/07	04/22/08
LISN, 30 MHz	FCC	LISN-50/250-25-2	N02625	09/15/06	09/15/08
EMI Test Receiver, 30 MHz	R & S	ESHS 20	N02396	02/06/08	08/06/09
Pre-amplifier	Miteq	NSP4000-SP2	C00990	10/11/07	10/11/08
Horn Antenna	ARA	MWH-1826/B	C00980	09/29/07	09/29/08
Horn Antenna	ARA	MWH-2640/B	C00981	04/11/07	04/11/08

7. ANTENNA PORT TEST RESULTS

7.1. 802.11b MODE IN THE 2.4 GHz BAND

7.1.1. 6 dB BANDWIDTH

LIMITS

FCC §15.247 (a) (2)

IC RSS-210 A8.2 (a)

The minimum 6 dB bandwidth shall be at least 500 kHz.

TEST PROCEDURE

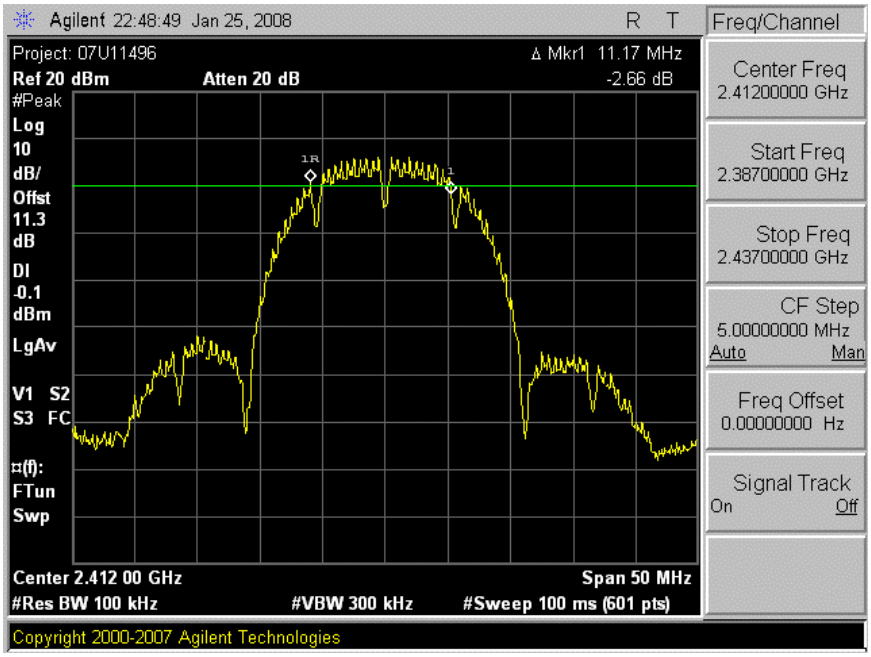
The transmitter output is connected to a spectrum analyzer. The RBW is set to 100 kHz and the VBW is set to 300 kHz. The sweep time is coupled.

RESULTS

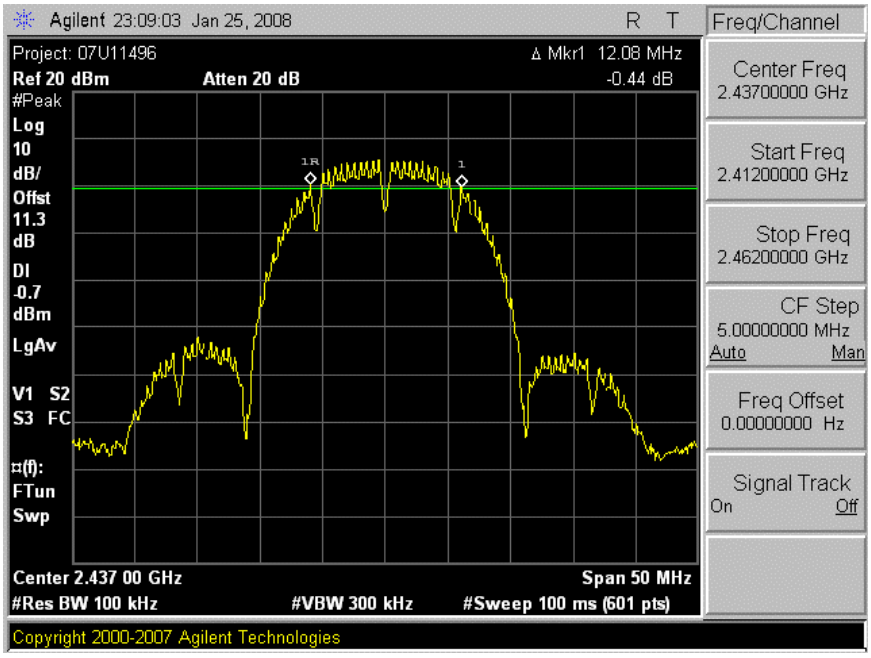
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2412	11.17	0.5
Middle	2437	12.08	0.5
High	2462	12.08	0.5

6 dB BANDWIDTH

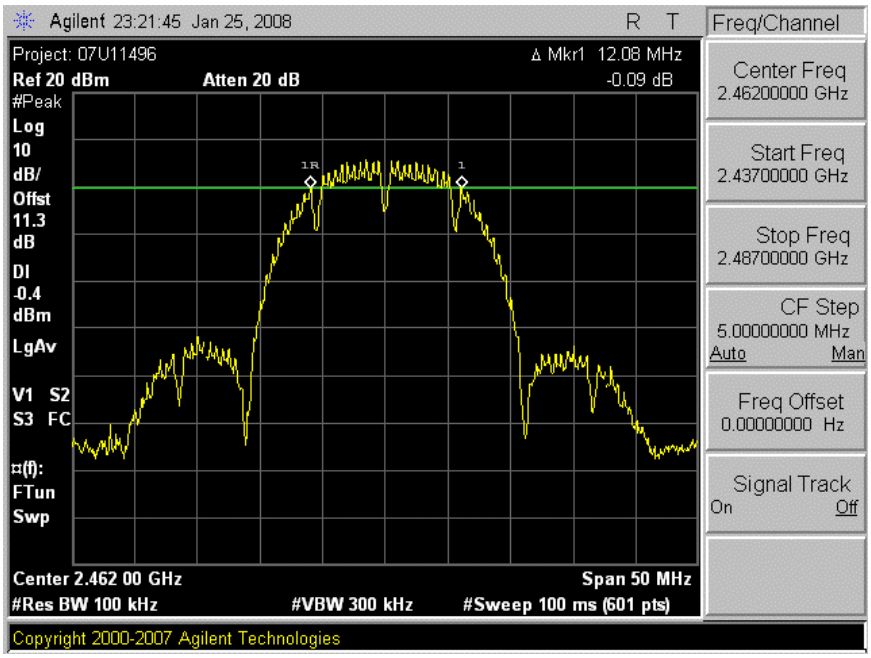
6 dB BANDWIDTH LOW CH



6 dB BANDWIDTH MID CH



6 dB BANDWIDTH HIGH CH



7.1.2. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

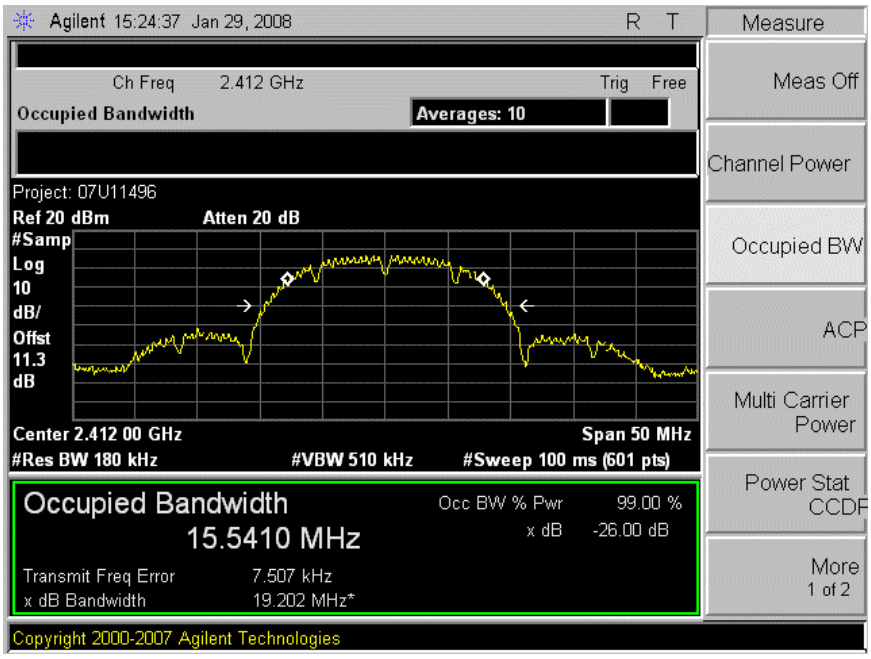
The transmitter output is connected to the spectrum analyzer. The RBW is set to 1% to 3% of the 99 % bandwidth. The VBW is set to 3 times the RBW. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth function is utilized.

RESULTS

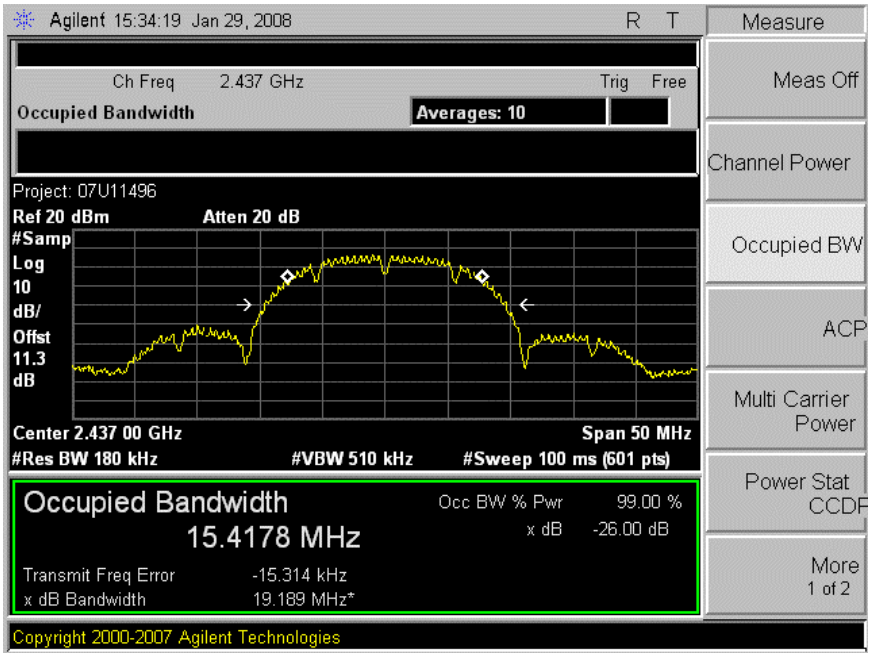
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2412	15.5410
Middle	2437	15.4178
High	2462	15.5232

99% BANDWIDTH

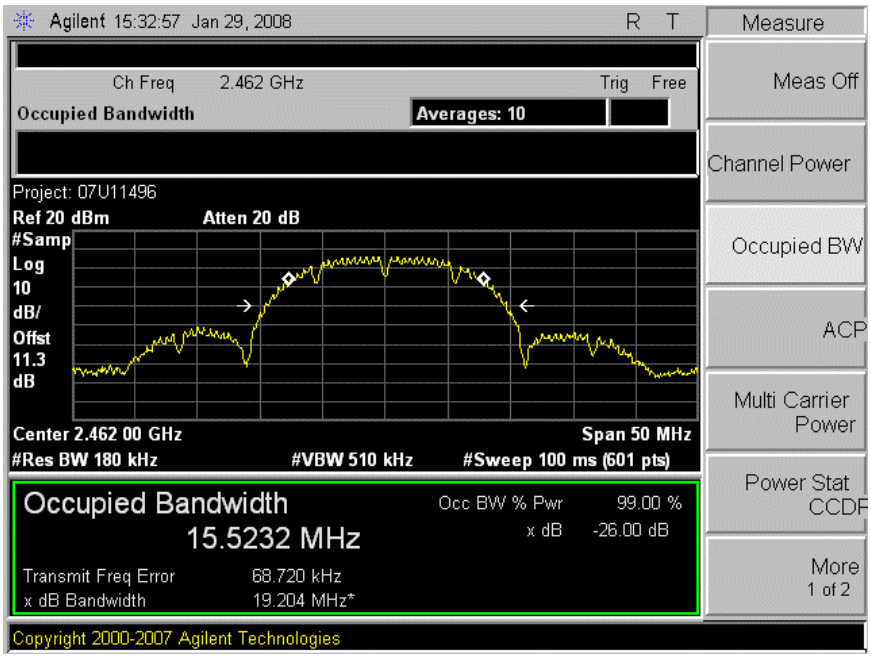
99% BANDWIDTH LOW CH



99% BANDWIDTH MID CH



99% BANDWIDTH HIGH CH



7.1.3. OUTPUT POWER

LIMITS

FCC §15.247 (b)

IC RSS-210 A8.4

The maximum antenna gain is less than or equal to 6 dBi, therefore the limit is 30 dBm.

TEST PROCEDURE

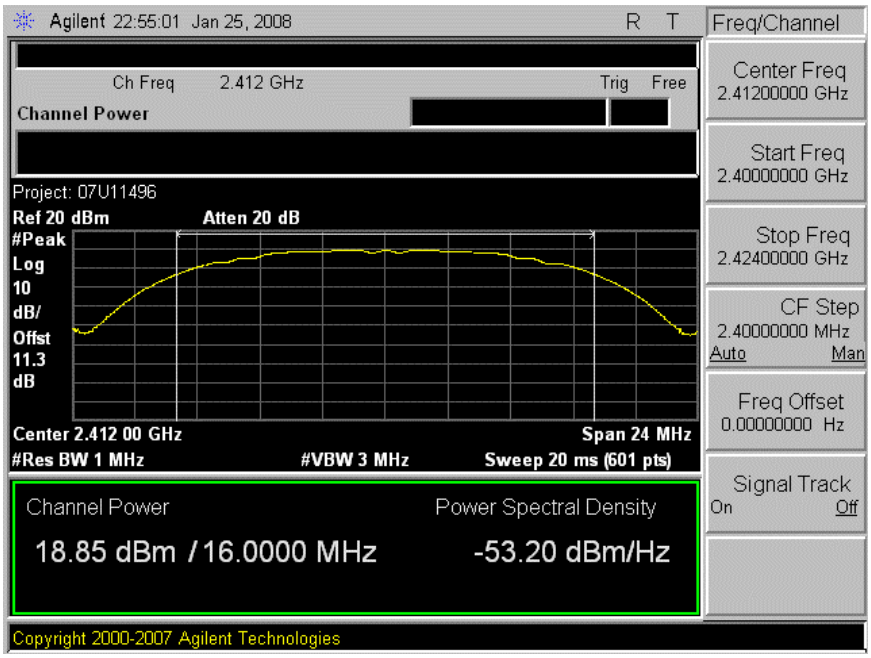
Peak power is measured using the spectrum analyzer's internal channel power integration function. Power is integrated over a bandwidth greater than or equal to the 99% bandwidth.

RESULTS

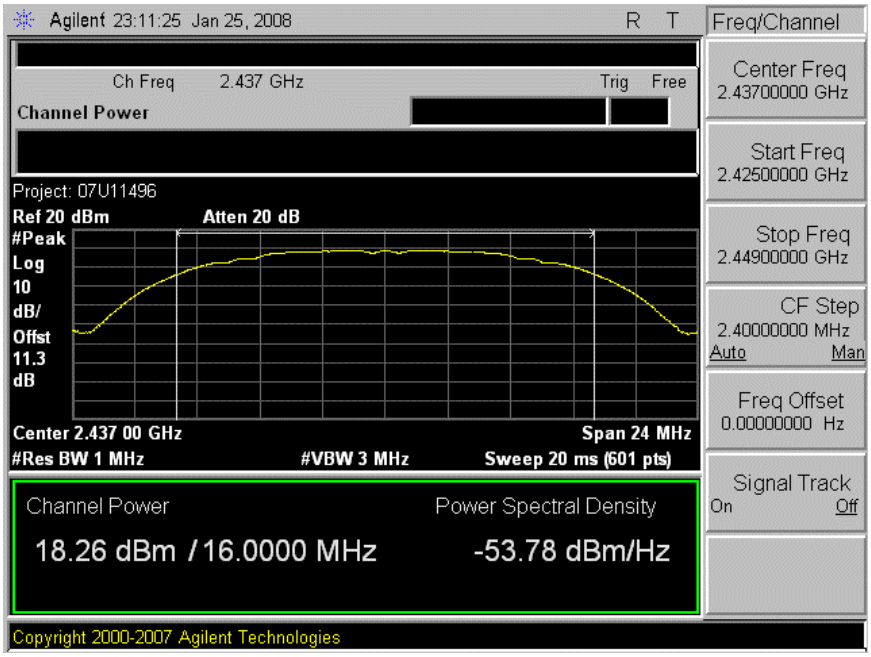
Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Margin (dB)
Low	2412	18.85	30	-11.15
Middle	2437	18.26	30	-11.74
High	2462	18.27	30	-11.73

OUTPUT POWER

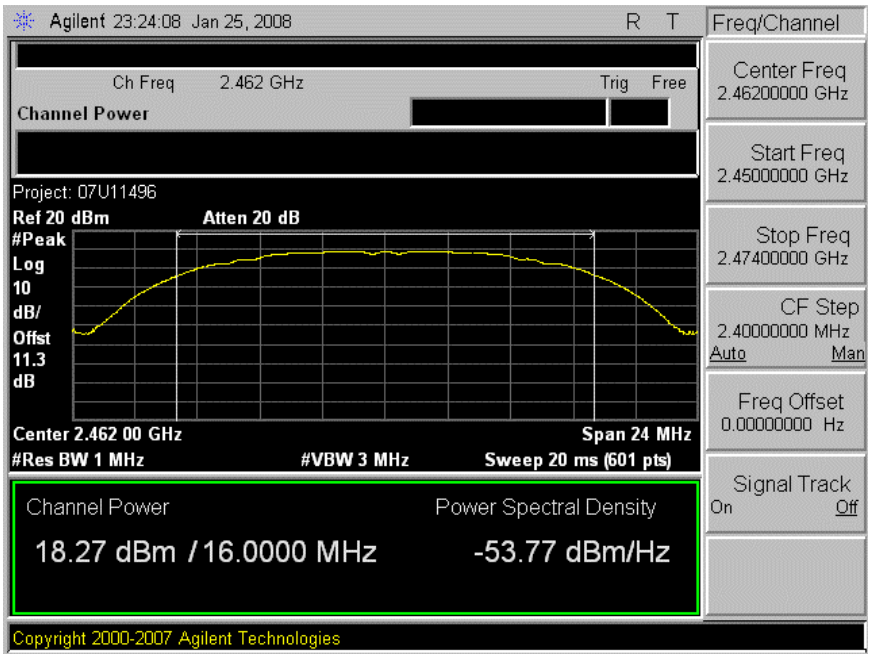
OUTPUT POWER LOW CH



OUTPUT POWER MID CH



OUTPUT POWER HIGH CH



7.1.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

RESULTS

The cable assembly insertion loss of 11.3 dB (including 10 dB pad and 1.3 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

Channel	Frequency (MHz)	Power (dBm)
Low	2412	15.20
Middle	2437	15.30
High	2462	15.40

7.1.5. POWER SPECTRAL DENSITY

LIMITS

FCC §15.247 (e)

IC RSS-210 A8.2 (b)

The power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

TEST PROCEDURE

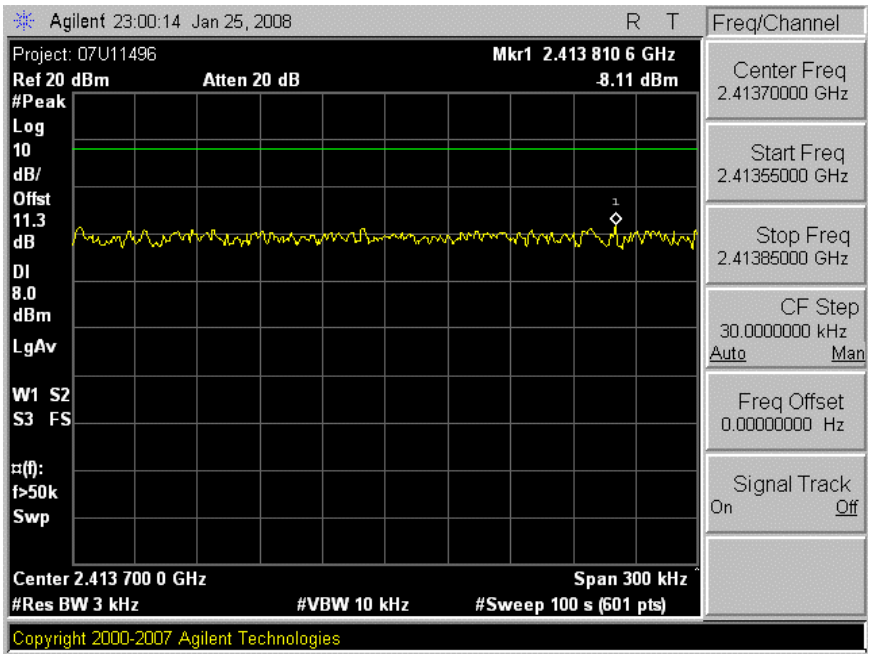
Output power was measured based on the use of a peak measurement, therefore the power spectral density was measured using PSD Option 1 in accordance with FCC document "Measurement of Digital Transmission Systems Operating under Section 15.247", March 23, 2005.

RESULTS

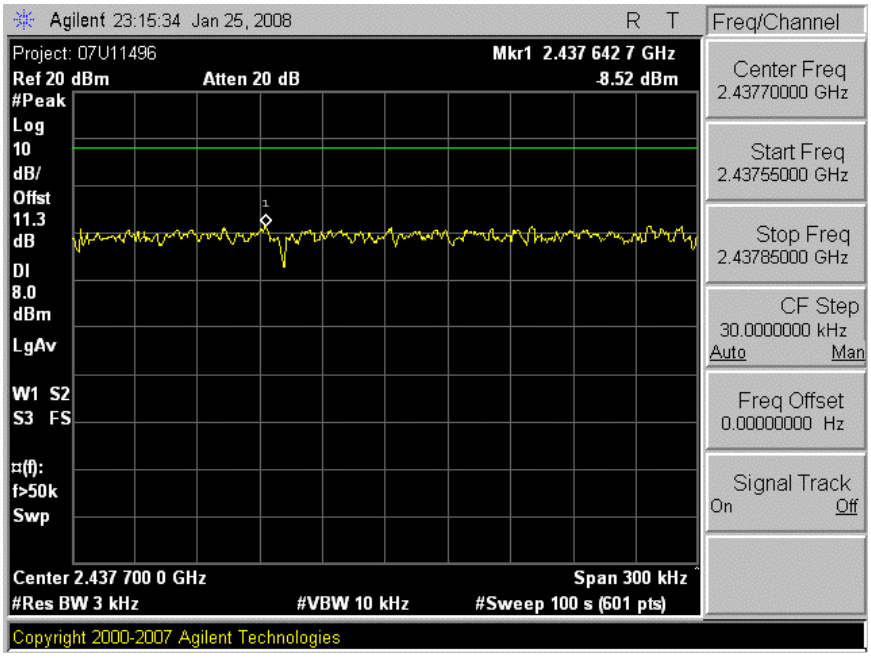
Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Margin (dB)
Low	2412	-8.11	8	-16.11
Middle	2437	-8.52	8	-16.52
High	2462	-9.09	8	-17.09

POWER SPECTRAL DENSITY

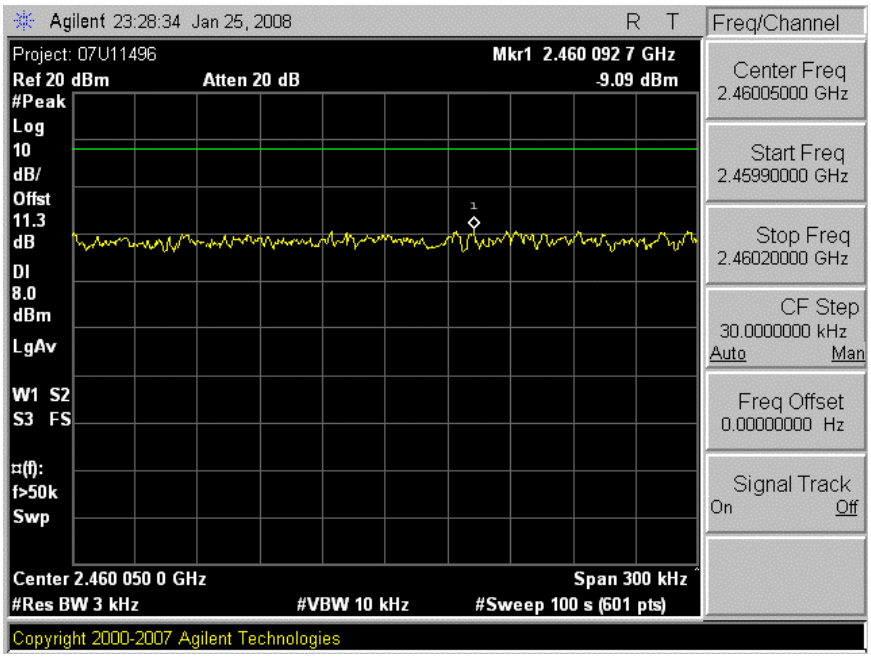
PSD LOW CH



PSD MID CH



PSD HIGH CH



7.1.6. CONDUCTED SPURIOUS EMISSIONS

LIMITS

FCC §15.247 (d)

IC RSS-210 A8.5

Output power was measured based on the use of a peak measurement, therefore the required attenuation is 20 dB.

TEST PROCEDURE

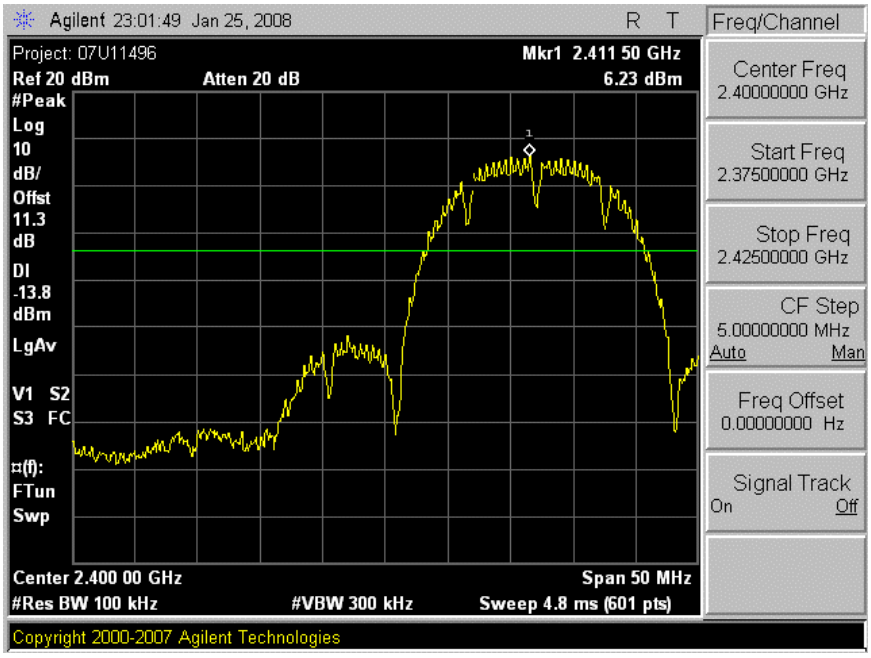
The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels.

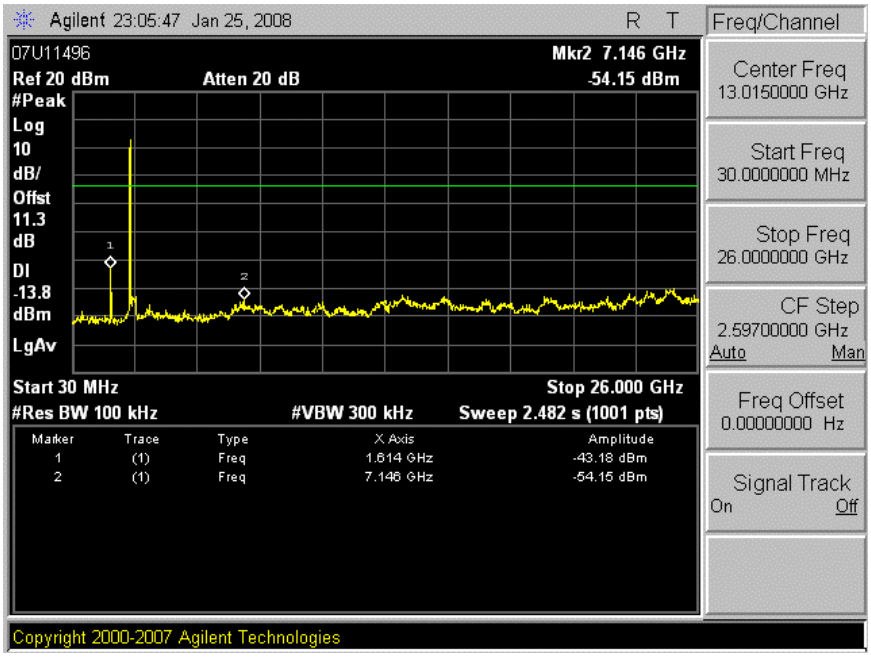
RESULTS

SPURIOUS EMISSIONS, LOW CHANNEL

LOW CH BANDEDGE

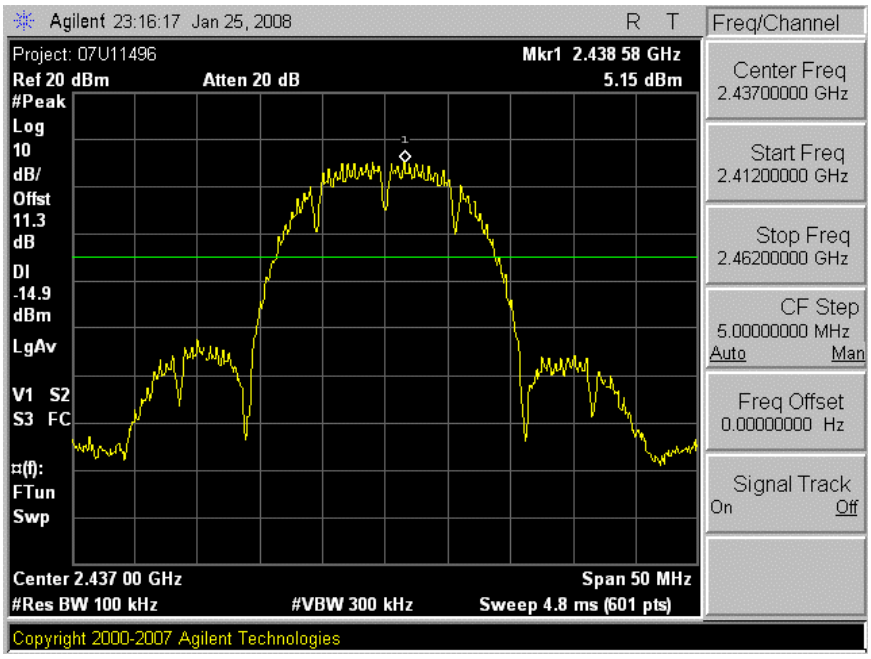


LOW CH SPURIOUS

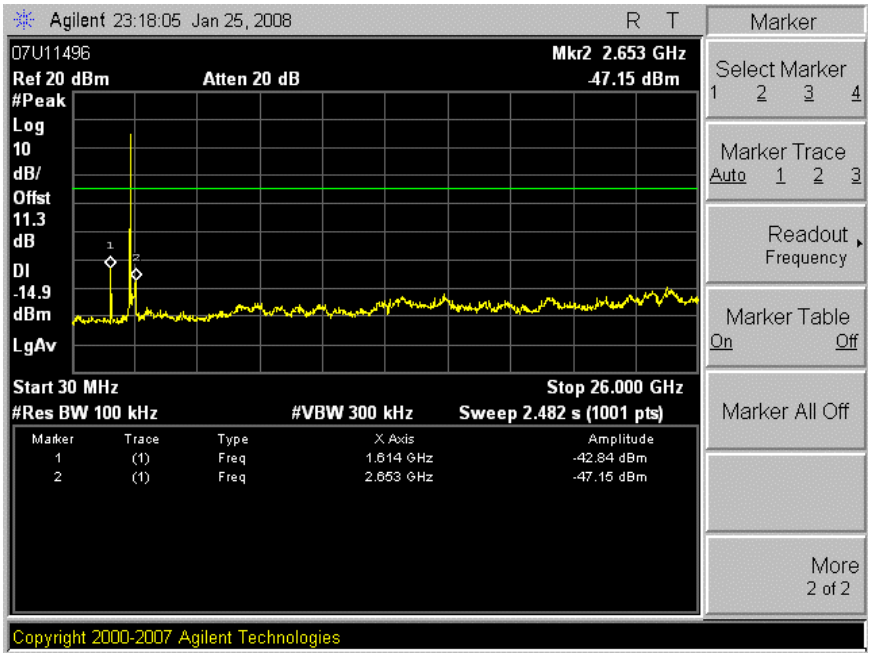


SPURIOUS EMISSIONS, MID CHANNEL

MID CH REFERENCE

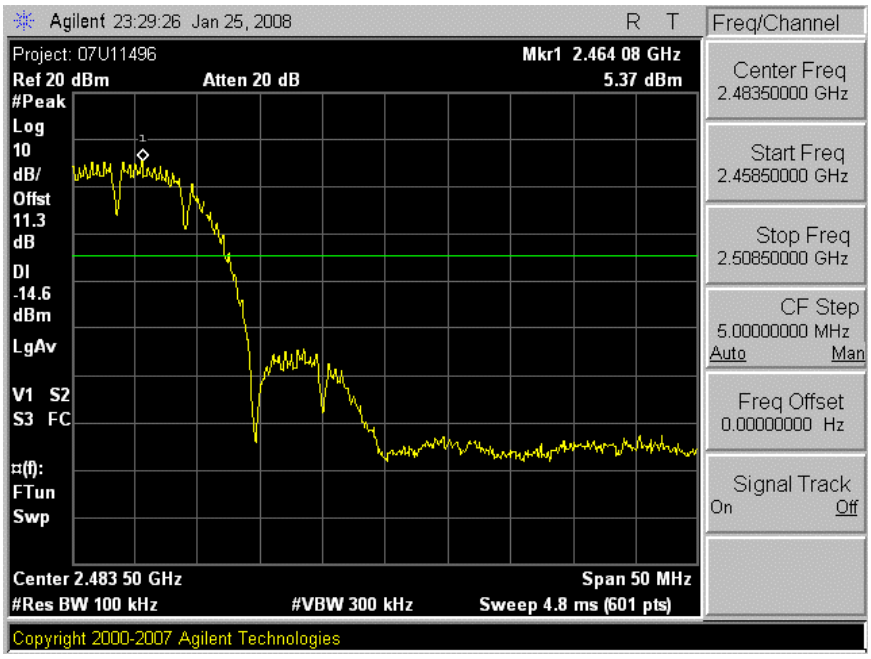


MID CH SPURIOUS

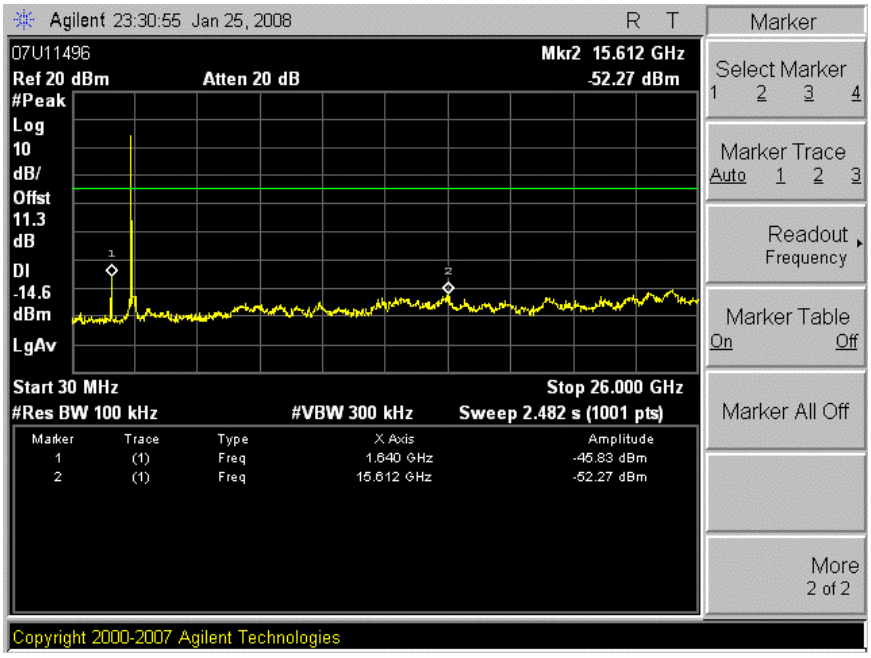


SPURIOUS EMISSIONS, HIGH CHANNEL

HIGH CH BANDEDGE



HIGH CH SPURIOUS



7.2. 802.11g MODE IN THE 2.4 GHz BAND

7.2.1. 6 dB BANDWIDTH

LIMITS

FCC §15.247 (a) (2)

IC RSS-210 A8.2 (a)

The minimum 6 dB bandwidth shall be at least 500 kHz.

TEST PROCEDURE

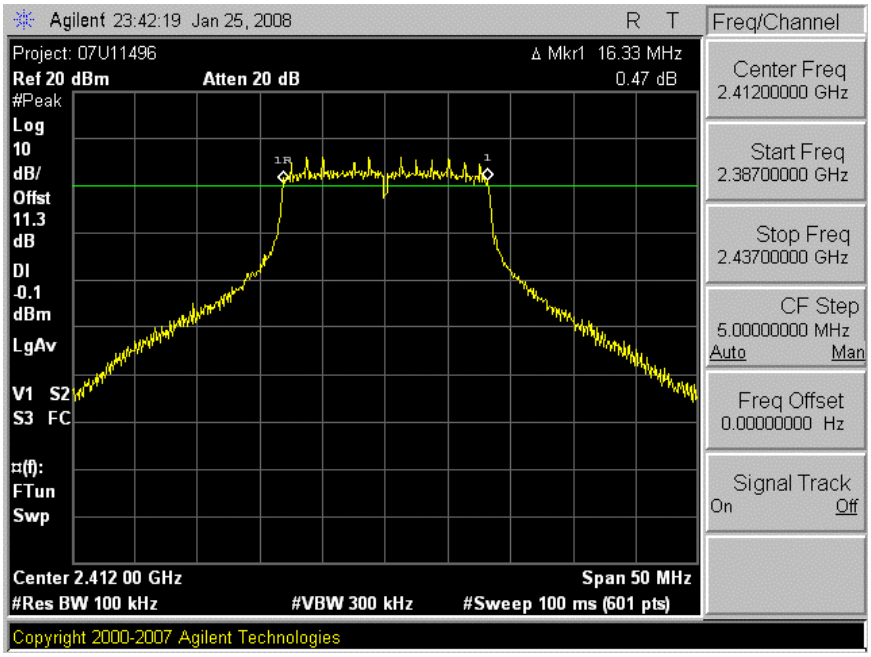
The transmitter output is connected to a spectrum analyzer. The RBW is set to 100 kHz and the VBW is set to 300 kHz. The sweep time is coupled.

RESULTS

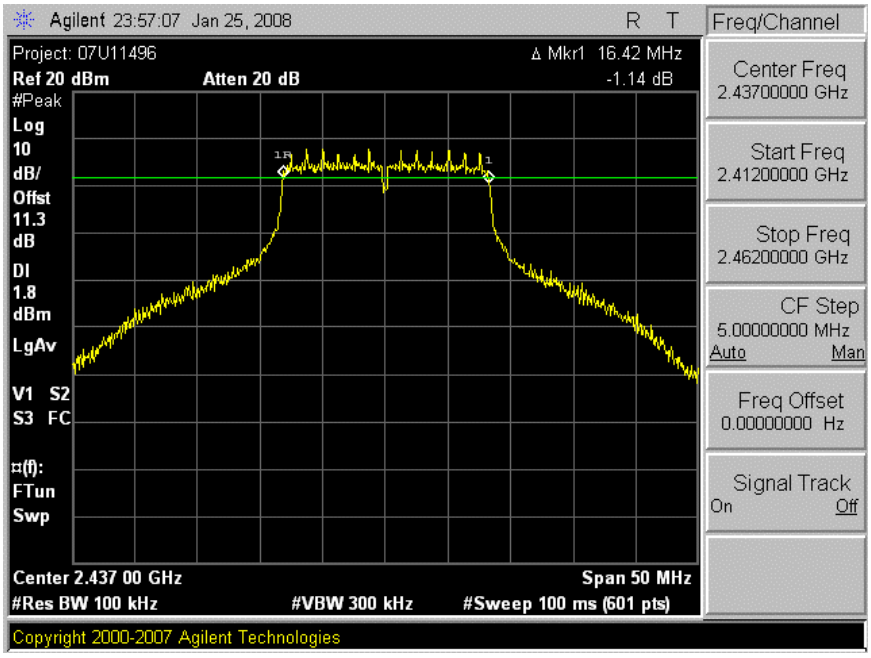
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2412	16.33	0.5
Middle	2437	16.42	0.5
High	2462	16.42	0.5

6 dB BANDWIDTH

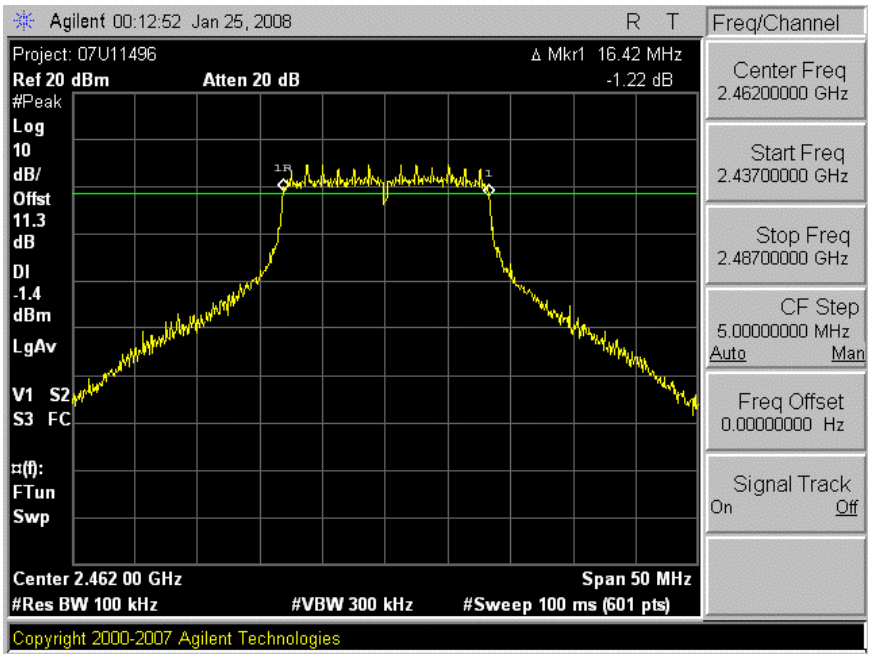
6 dB BANDWIDTH LOW CH



6 dB BANDWIDTH MID CH



6 dB BANDWIDTH HIGH CH



7.2.2. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

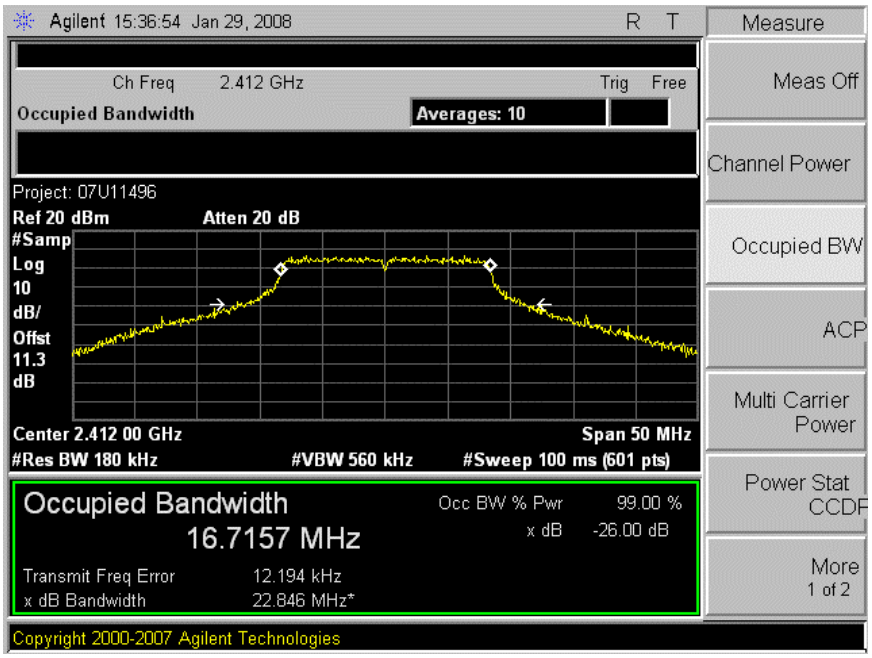
The transmitter output is connected to the spectrum analyzer. The RBW is set to 1% to 3% of the 99 % bandwidth. The VBW is set to 3 times the RBW. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth function is utilized.

RESULTS

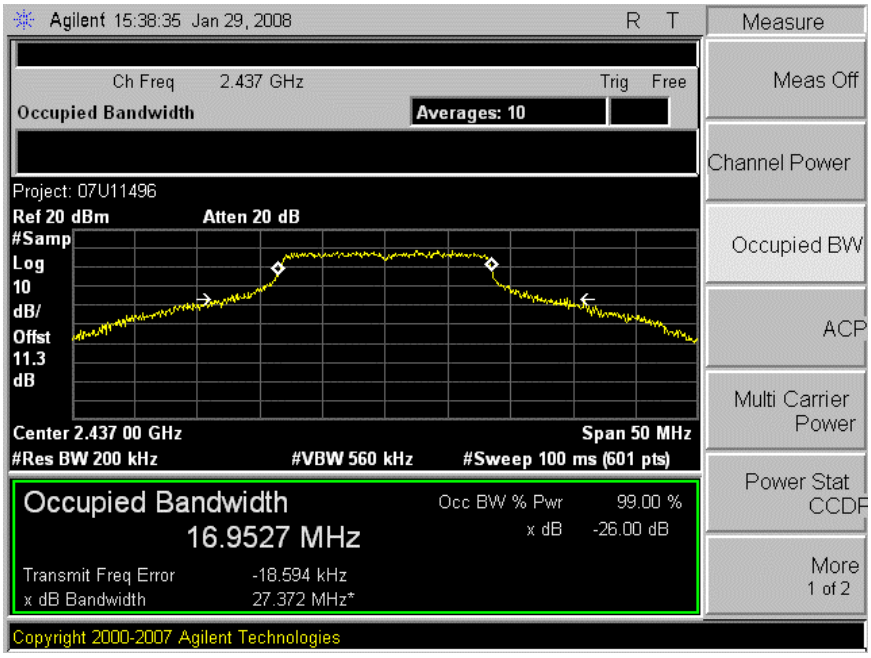
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2412	16.7157
Middle	2437	16.9527
High	2462	16.7031

99% BANDWIDTH

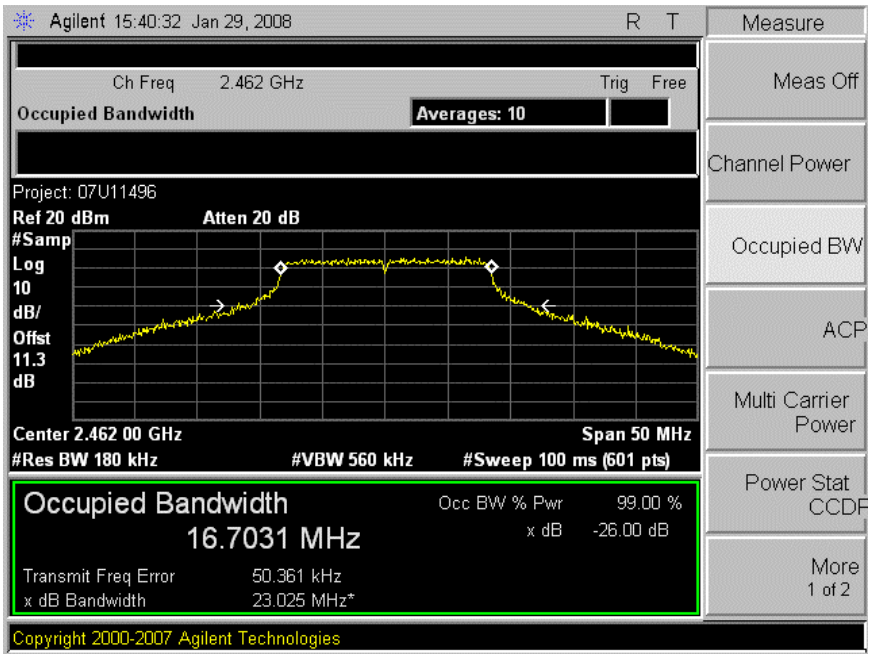
99% BANDWIDTH LOW CH



99% BANDWIDTH MID CH



99% BANDWIDTH HIGH CH



7.2.3. OUTPUT POWER

LIMITS

FCC §15.247 (b)

IC RSS-210 A8.4

The maximum antenna gain is less than or equal to 6 dBi, therefore the limit is 30 dBm.

TEST PROCEDURE

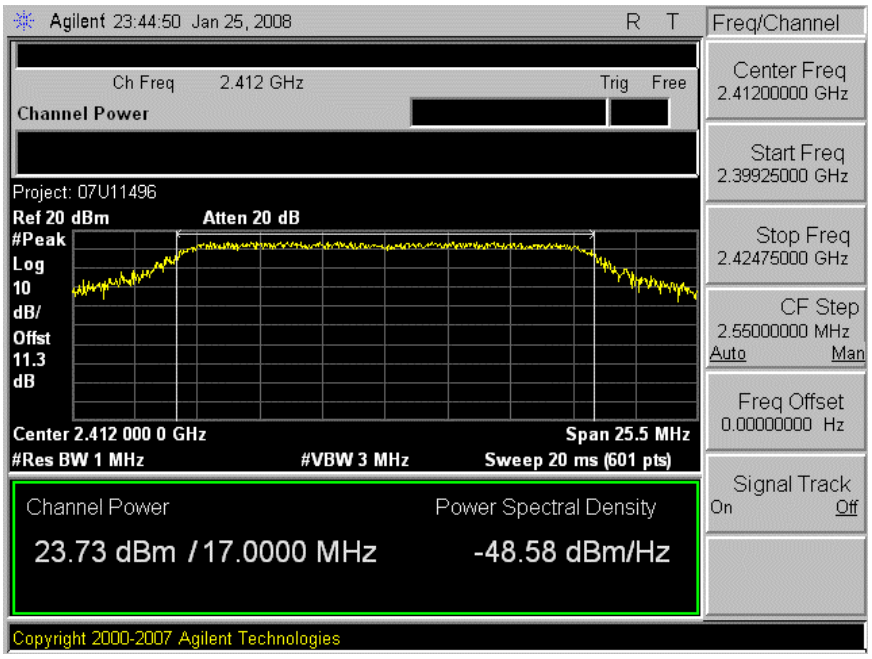
Peak power is measured using the spectrum analyzer's internal channel power integration function. Power is integrated over a bandwidth greater than or equal to the 99% bandwidth.

RESULTS

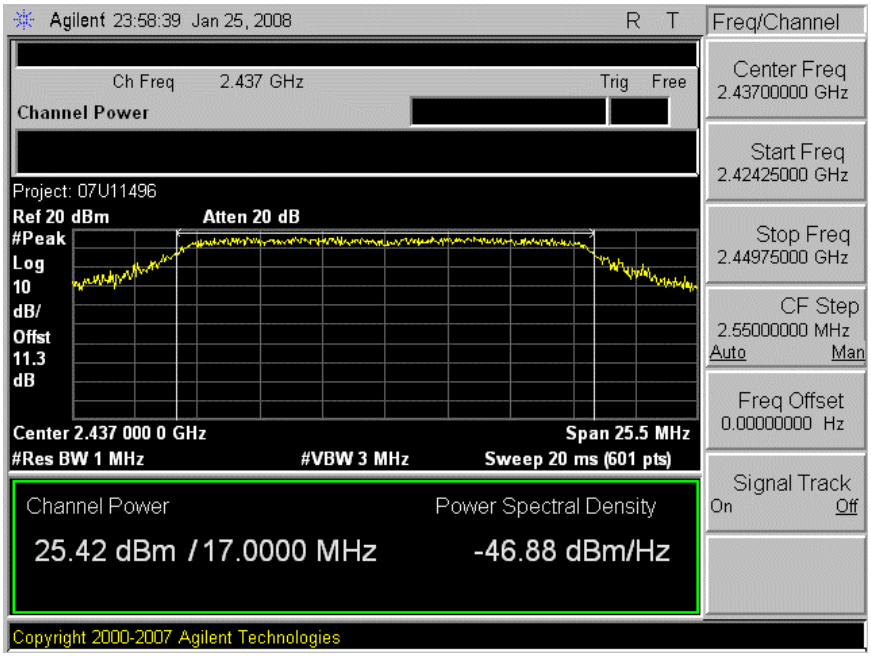
Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Margin (dB)
Low	2412	23.73	30	-6.27
Middle	2437	25.42	30	-4.58
High	2462	22.50	30	-7.50

OUTPUT POWER

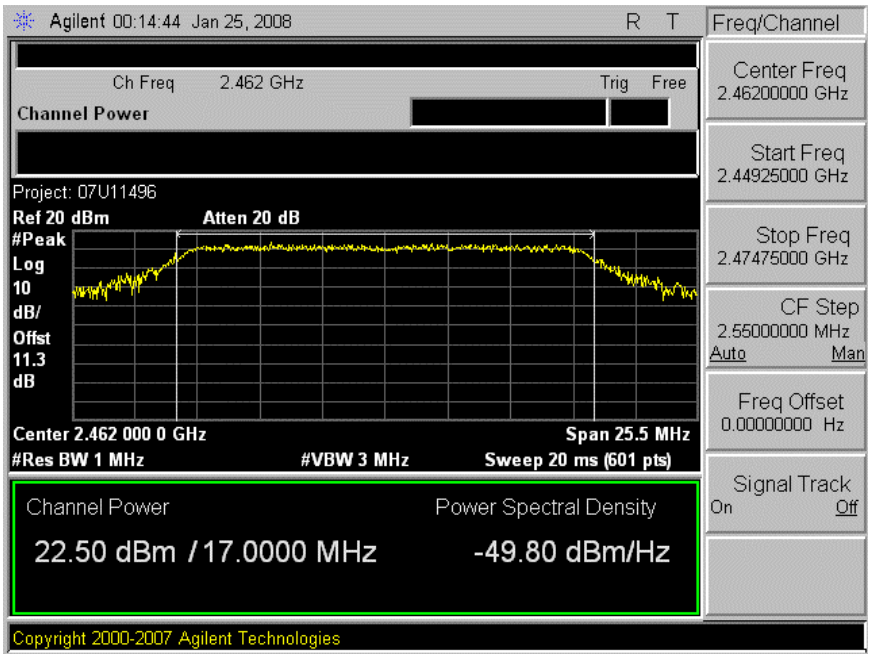
OUTPUT POWER LOW CH



OUTPUT POWER MID CH



OUTPUT POWER HIGH CH



7.2.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

RESULTS

The cable assembly insertion loss of 11.3 dB (including 10 dB pad and 1.3 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

Channel	Frequency (MHz)	Power (dBm)
Low	2412	17.30
Middle	2437	18.90
High	2462	16.30

7.2.5. POWER SPECTRAL DENSITY

LIMITS

FCC §15.247 (e)

IC RSS-210 A8.2 (b)

The power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

TEST PROCEDURE

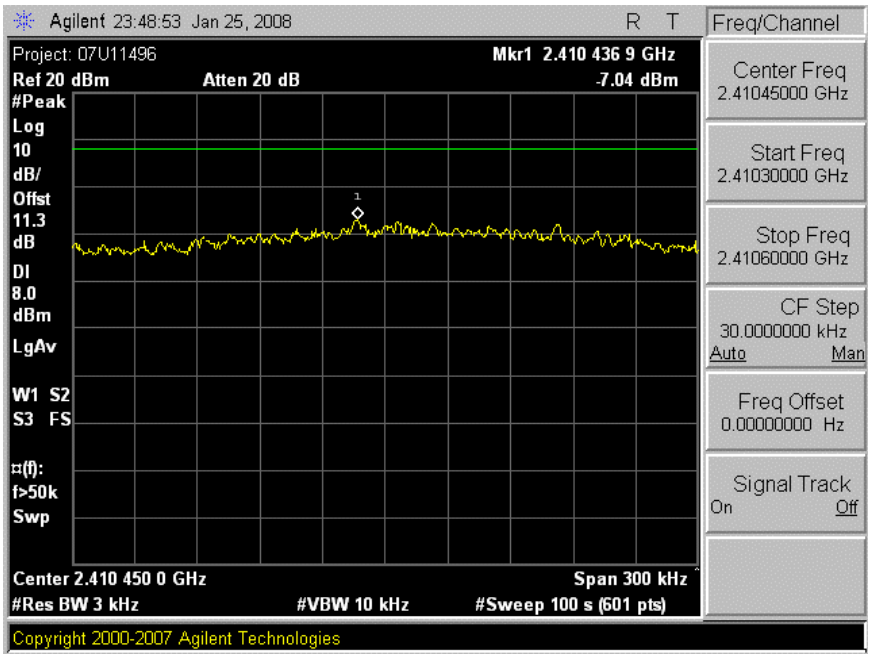
Output power was measured based on the use of a peak measurement, therefore the power spectral density was measured using PSD Option 1 in accordance with FCC document "Measurement of Digital Transmission Systems Operating under Section 15.247", March 23, 2005.

RESULTS

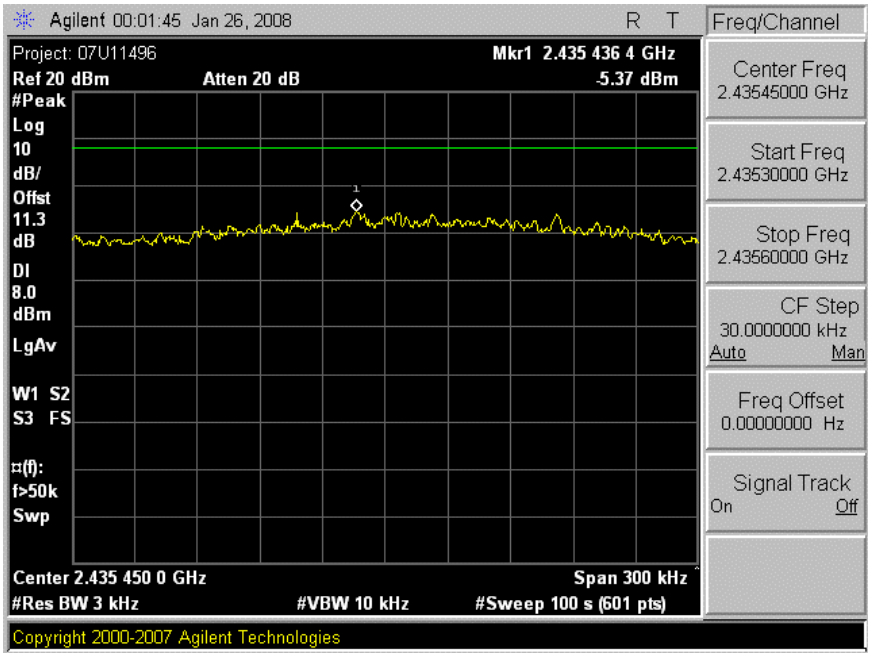
Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Margin (dB)
Low	2412	-7.04	8	-15.04
Middle	2437	-5.37	8	-13.37
High	2462	-8.35	8	-16.35

POWER SPECTRAL DENSITY

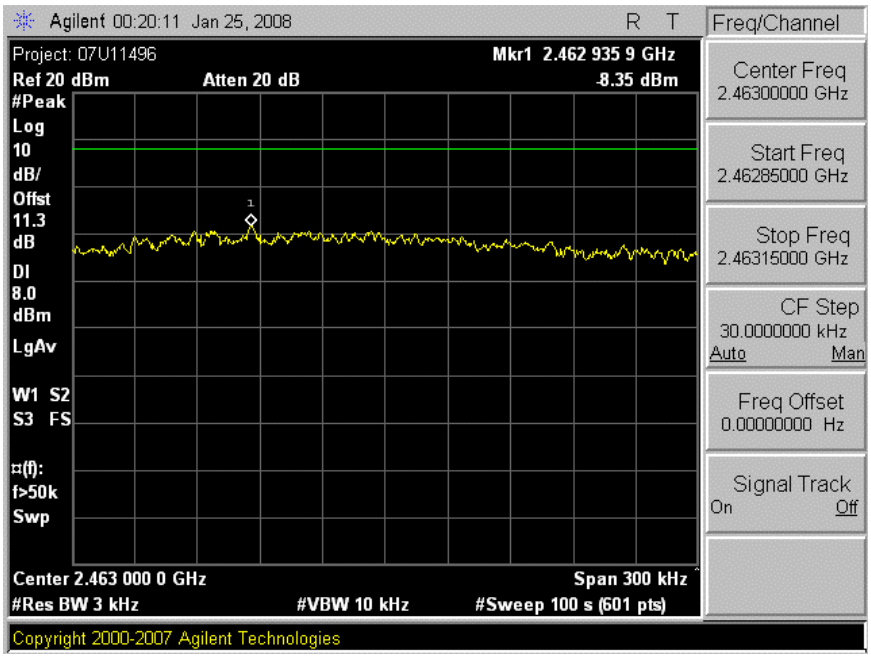
PSD LOW CH



PSD MID CH



PSD HIGH CH



7.2.6. CONDUCTED SPURIOUS EMISSIONS

LIMITS

FCC §15.247 (d)

IC RSS-210 A8.5

Output power was measured based on the use of a peak measurement, therefore the required attenuation is 20 dB.

TEST PROCEDURE

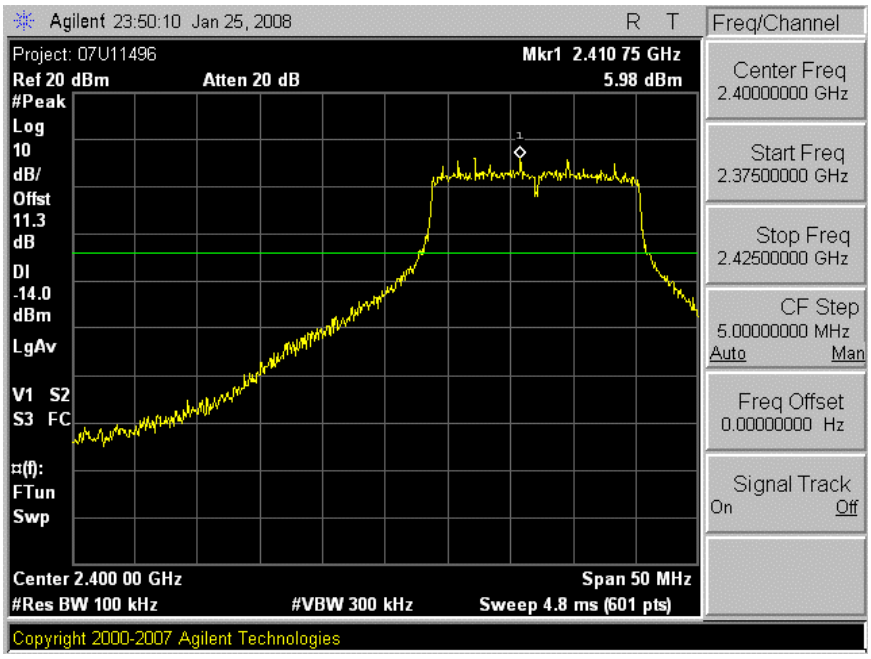
The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels.

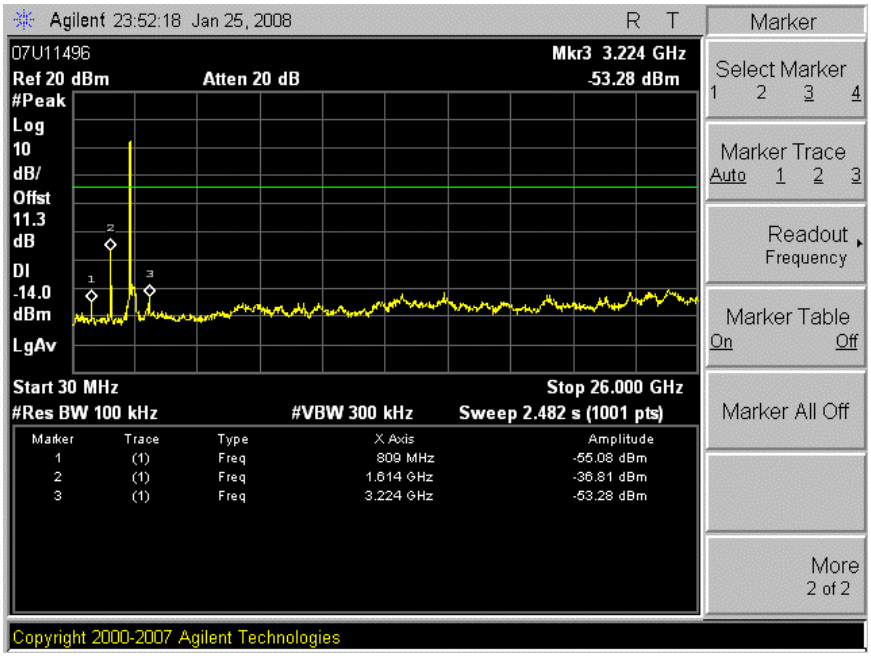
RESULTS

SPURIOUS EMISSIONS, LOW CHANNEL

LOW CH BANDEDGE

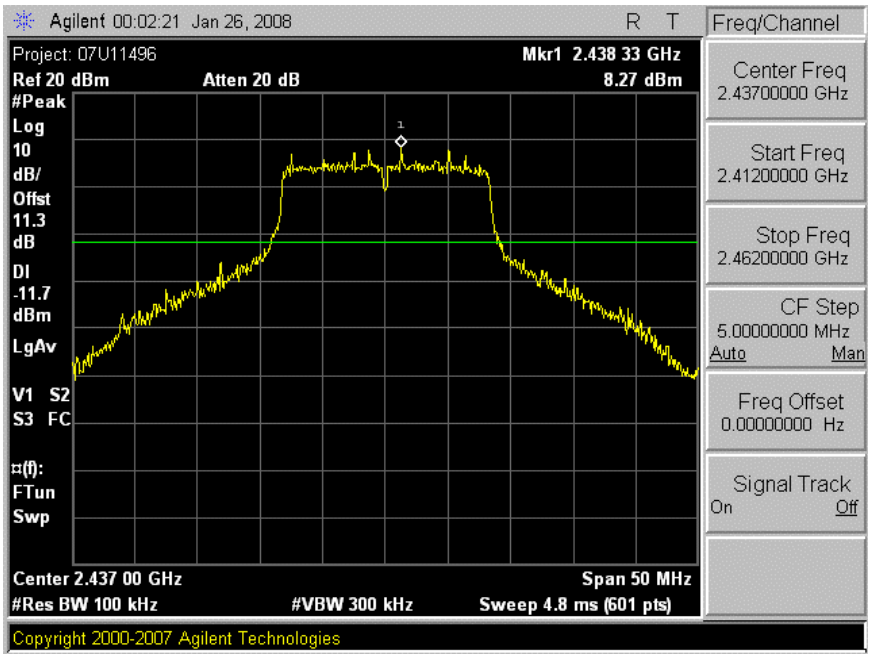


LOW CH SPURIOUS

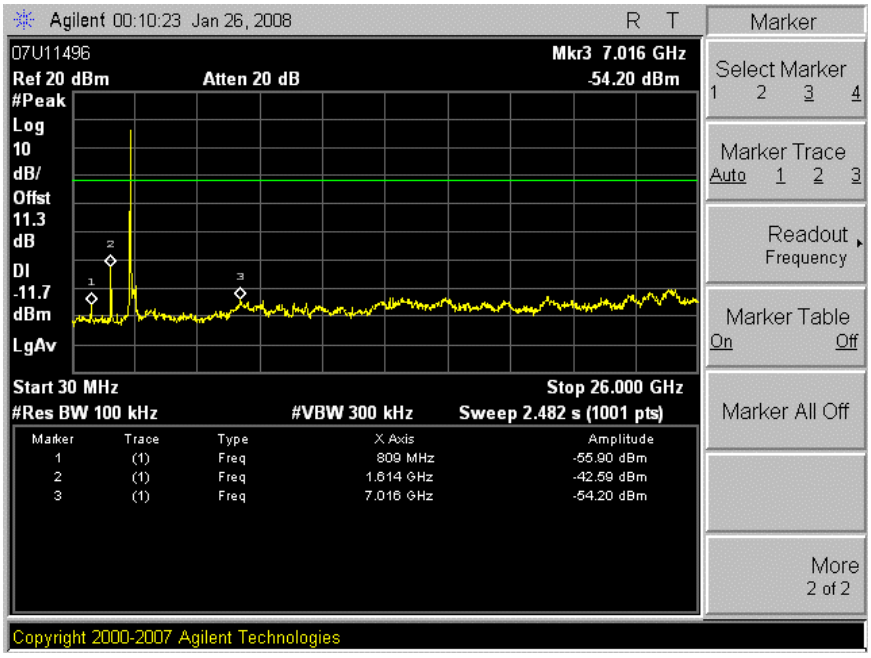


SPURIOUS EMISSIONS, MID CHANNEL

MID CH REFERENCE

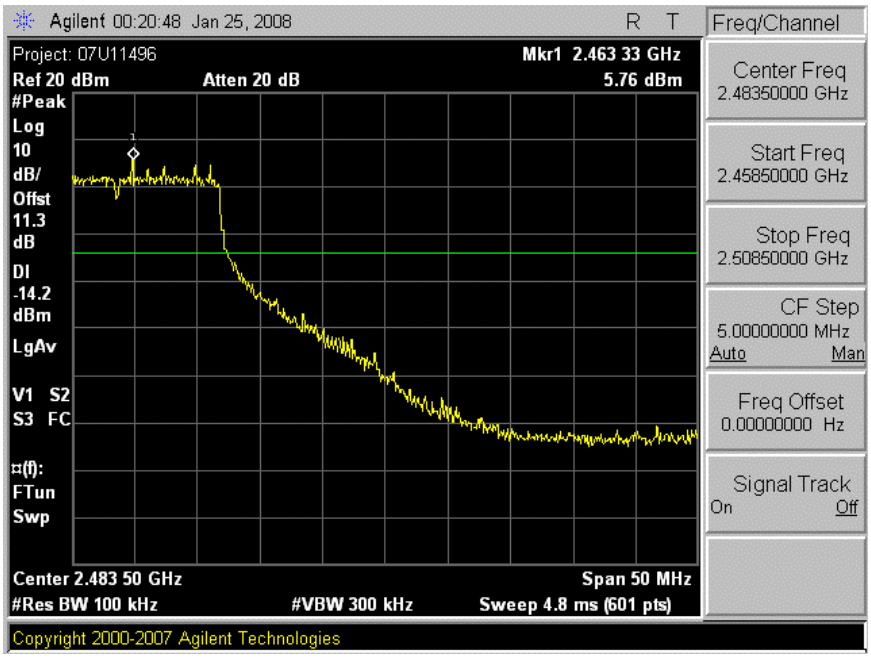


MID CH SPURIOUS

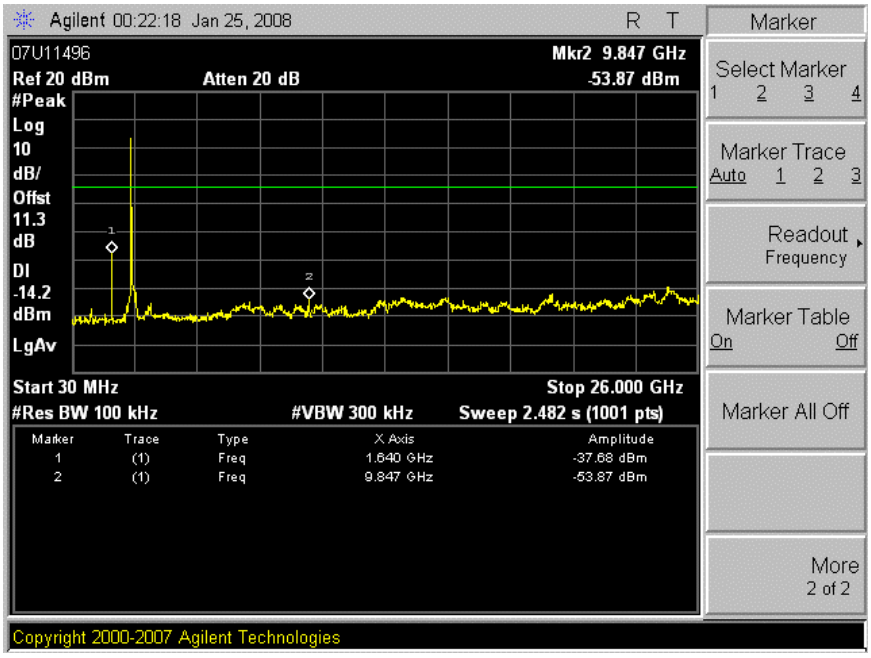


SPURIOUS EMISSIONS, HIGH CHANNEL

HIGH CH BANDEDGE



HIGH CH SPURIOUS



8. RADIATED TEST RESULTS

8.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

IC RSS-210 Clause 2.6 (Transmitter)

IC RSS-GEN Clause 6 (Receiver)

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.4. The EUT is set to transmit in a continuous mode.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 1 MHz for peak measurements and 10 Hz for average measurements.

The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in the 2.4 GHz band.

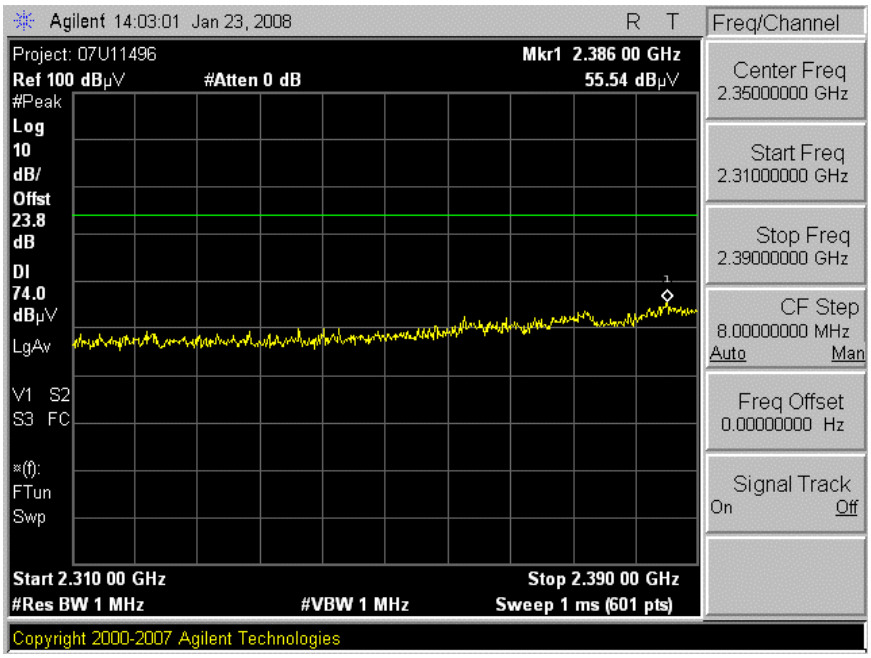
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

8.2. TRANSMITTER ABOVE 1 GHz

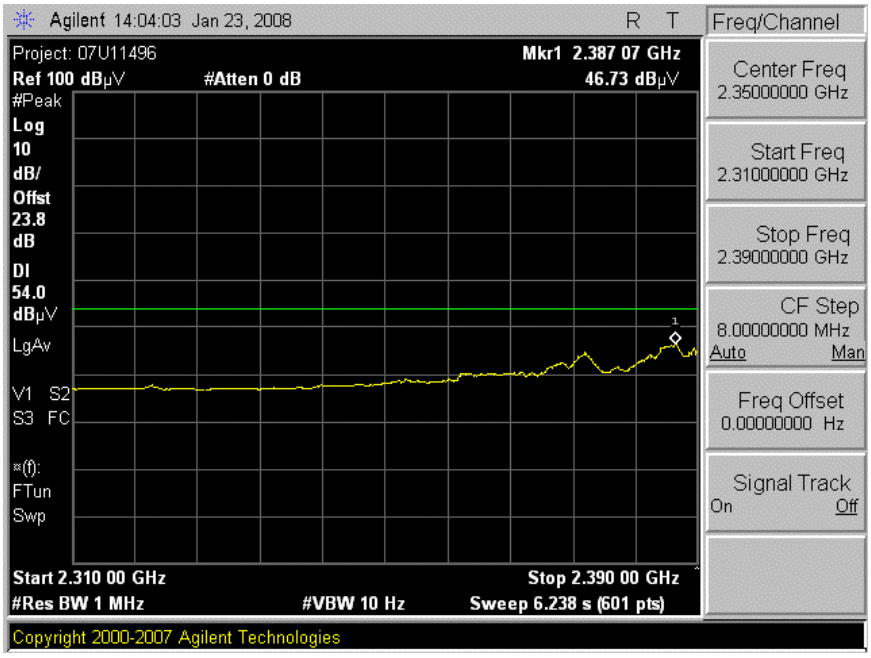
8.2.1. TX ABOVE 1 GHz FOR 802.11b MODE IN THE 2.4 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

LOW CHANNEL RESTRICTED, PEAK, HORIZ

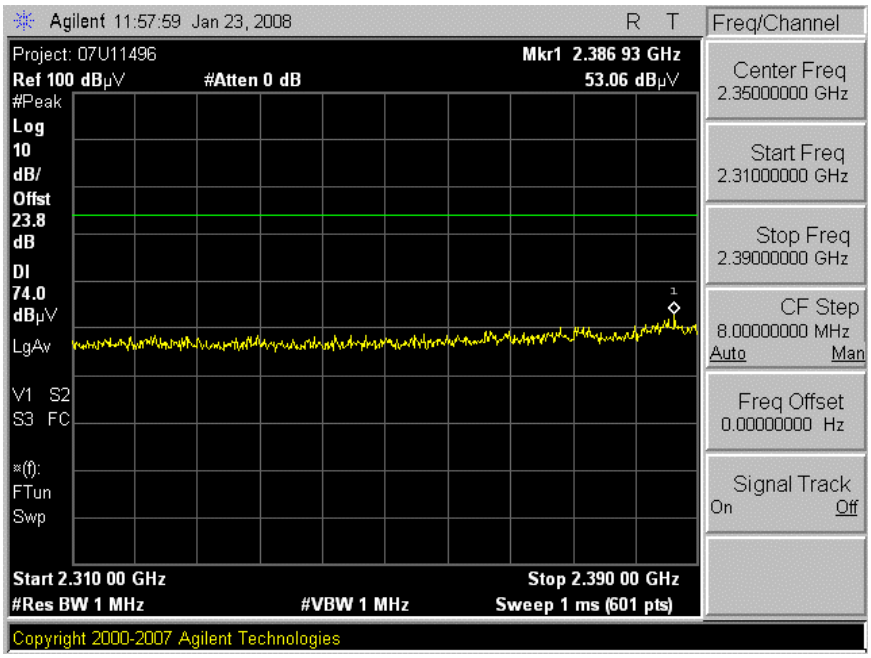


LOW CHANNEL RESTRICTED, AVG, HORIZ

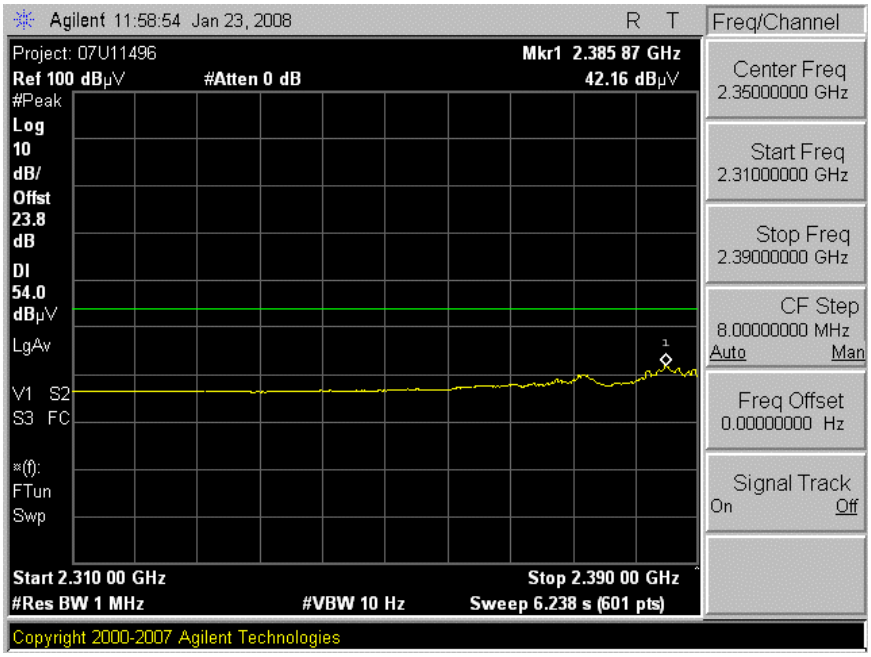


RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

LOW CHANNEL RESTRICTED, PEAK, VERT

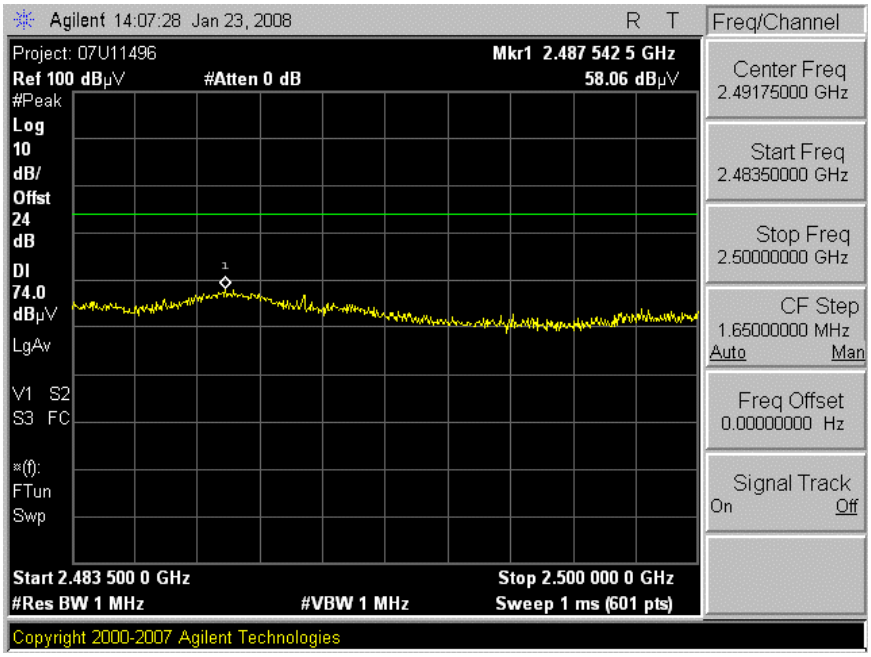


LOW CHANNEL RESTRICTED, AVG, VERT

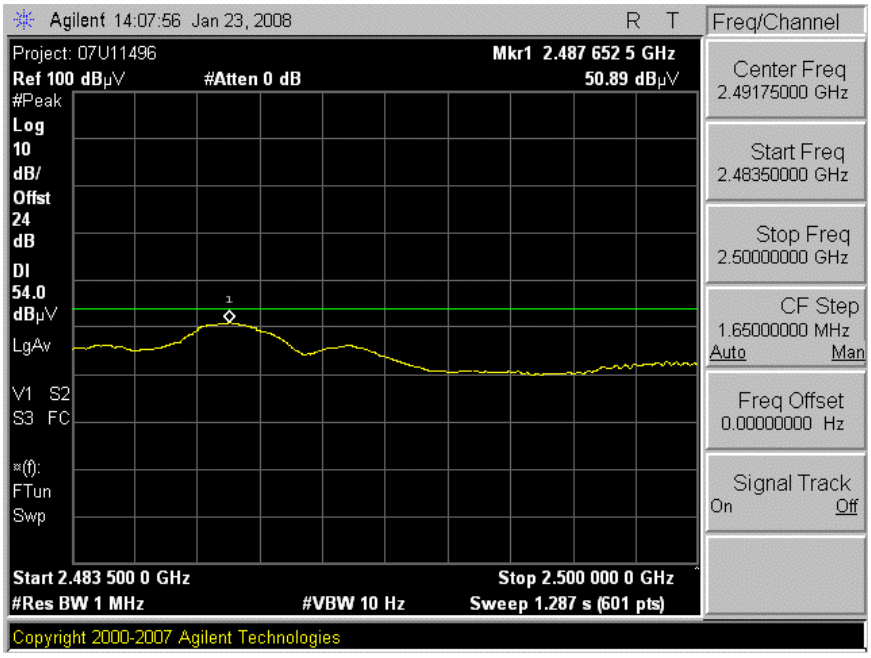


RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)

HIGH CHANNEL RESTRICTED, PEAK, HORIZ

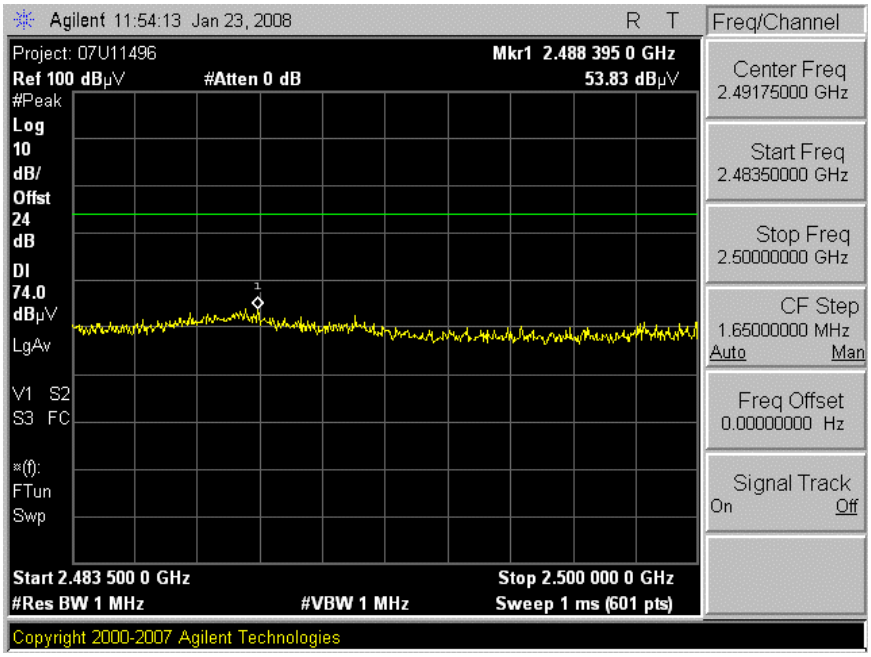


HIGH CHANNEL RESTRICTED, AVG, HORIZ

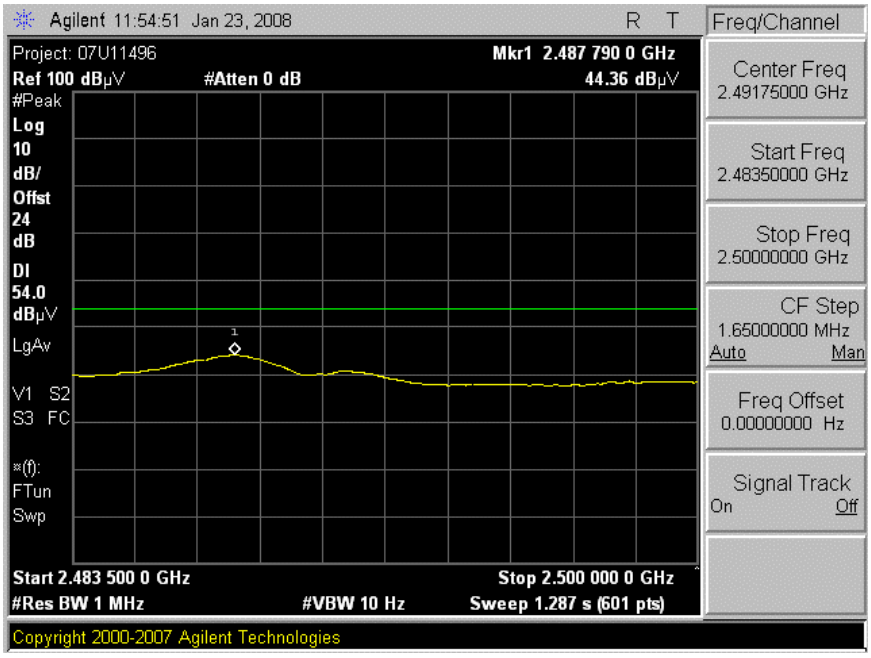


RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

HIGH CHANNEL RESTRICTED, PEAK, VERT



HIGH CHANNEL RESTRICTED, AVG, VERT



HARMONICS AND SPURIOUS EMISSIONS

High Frequency Measurement
Compliance Certification Services, Fremont 5m Chamber

Company: Primex Wireless
Project #: 07U11496
Date: 01/23/08
Test Engineer: Tom Chen
Configuration: Stand-alone AC powered EUT, model: SNS7A330
Mode: Transmitting in 11b mode

Test Equipment:

Horn 1-18GHz	Pre-amplifer 1-26GHz	Pre-amplifer 26-40GHz	Horn > 18GHz	Limit
T59; S/N: 3245 @3m	T144 Miteq 3008A00931		T89; ARA 18-26GHz; S/N:1049	FCC 15.205

Hi Frequency Cables

2 foot cable	3 foot cable	12 foot cable	HPF	Reject Filter
		A-5m Chamber		R_001

Peak Measurements
RBW=VBW=1MHz
Average Measurements
RBW=1MHz ; VBW=10Hz

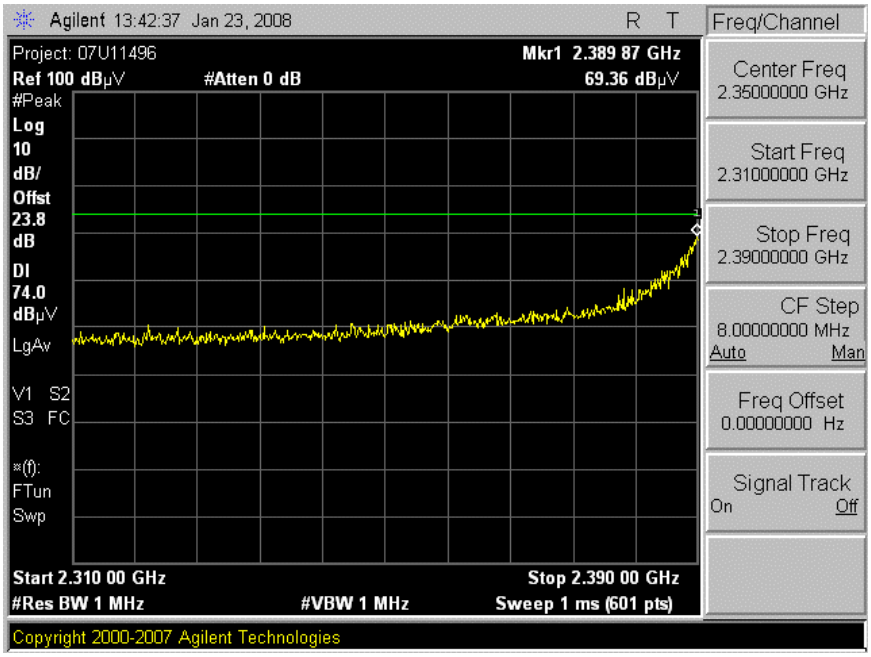
f GHz	Dist (m)	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Fltr dB	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes (V/H)
Low Ch.2412 MHz															
4.824	3.0	53.1	49.4	33.9	3.0	-36.5	0.0	0.0	53.5	49.8	74	54	-20.5	-4.2	V, ART=19
4.824	3.0	51.2	49.2	33.9	6.9	-36.5	0.0	0.0	55.5	53.5	74	54	-18.5	-0.5	H, ART=15
Mid Ch. 2437 MHz															
4.874	3.0	53.3	49.0	34.0	6.9	-36.5	0.0	0.0	57.7	53.4	74	54	-16.3	-0.6	V, ART=18
7.311	3.0	37.1	27.3	36.4	8.4	-36.2	0.0	0.0	45.7	35.9	74	54	-28.3	-18.1	V, ART=18
4.874	3.0	51.0	49.0	34.0	6.9	-36.5	0.0	0.0	55.4	53.4	74	54	-18.6	-0.6	H, ART=15
7.311	3.0	42.7	35.6	36.4	8.4	-36.2	0.0	0.0	51.3	44.2	74	54	-22.7	-9.8	H, ART=19
High Ch. 2462 MHz															
4.924	3.0	50.2	48.5	34.0	7.0	-36.5	0.0	0.0	54.7	53.0	74	54	-19.3	-1.0	V, ART=17
7.356	3.0	37.3	26.5	36.5	8.4	-36.2	0.0	0.0	46.1	35.2	74	54	-27.9	-18.8	V, ART=17
4.924	3.0	51.7	49.3	34.0	7.0	-36.5	0.0	0.0	56.2	53.8	74	54	-17.8	-0.2	H, ART=15
7.356	3.0	40.4	31.0	36.5	8.4	-36.2	0.0	0.0	49.1	39.7	74	54	-24.9	-14.3	H, ART=19

f	Measurement Frequency	Amp	Preamp Gain	Avg Lim	Average Field Strength Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters	Pk Lim	Peak Field Strength Limit
Read	Analyzer Reading	Avg	Average Field Strength @ 3 m	Avg Mar	Margin vs. Average Limit
AF	Antenna Factor	Peak	Calculated Peak Field Strength	Pk Mar	Margin vs. Peak Limit
CL	Cable Loss	HPF	High Pass Filter		

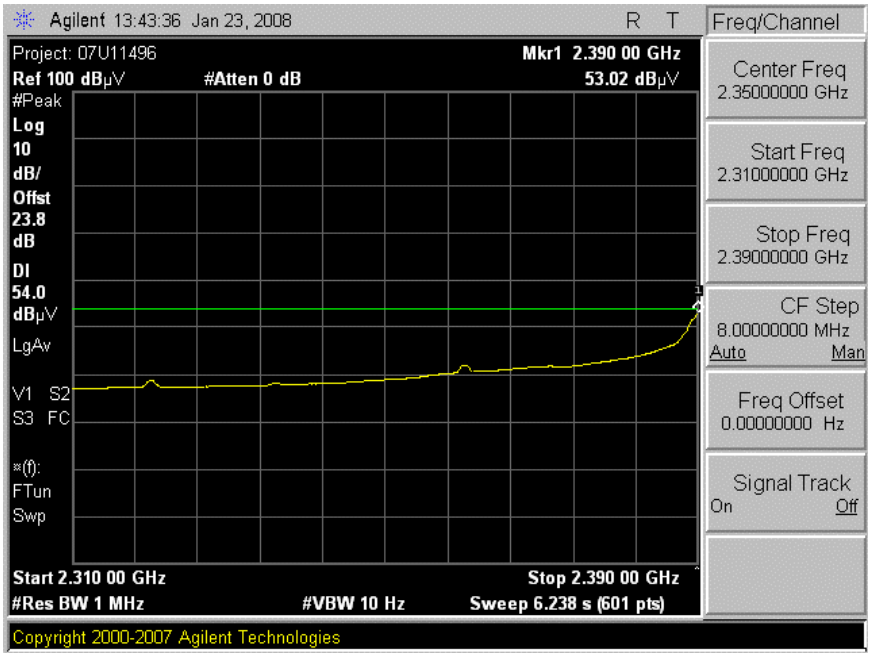
8.2.2. TX ABOVE 1 GHz FOR 802.11g MODE IN THE 2.4 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

LOW CHANNEL RESTRICTED, PEAK, HORIZ

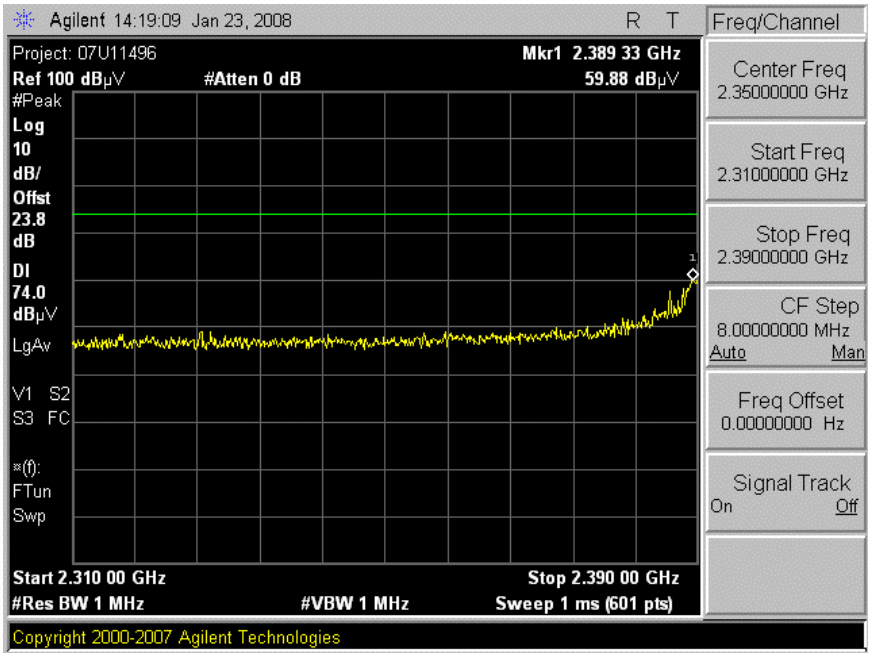


LOW CHANNEL RESTRICTED, AVG, HORIZ

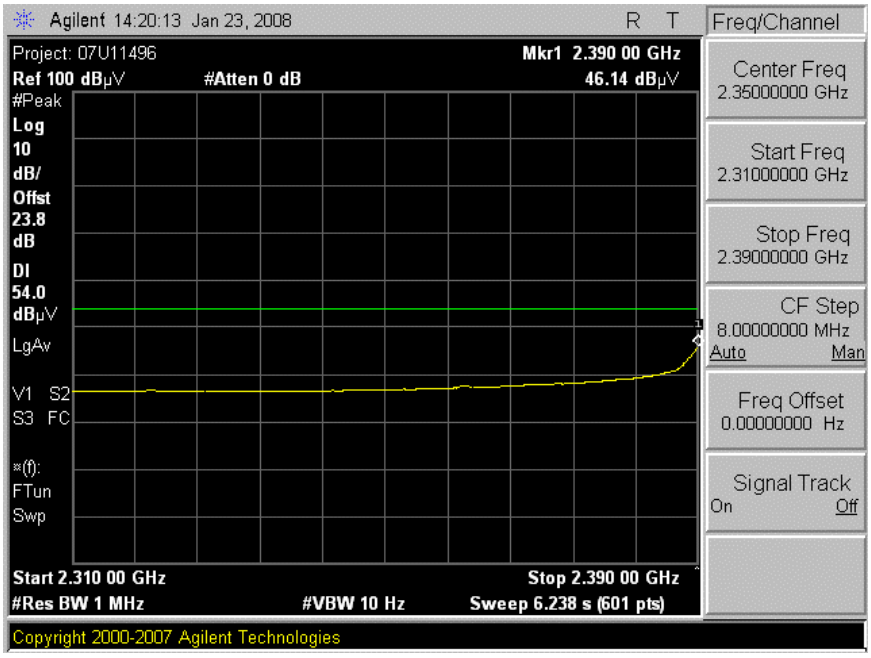


RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

LOW CHANNEL RESTRICTED, PEAK, VERT

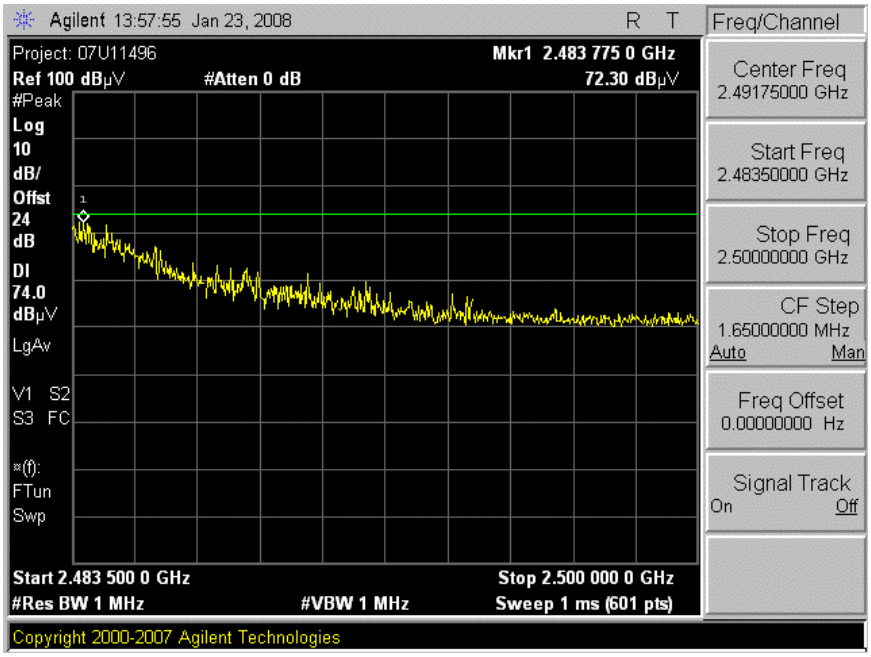


LOW CHANNEL RESTRICTED, AVG, VERT

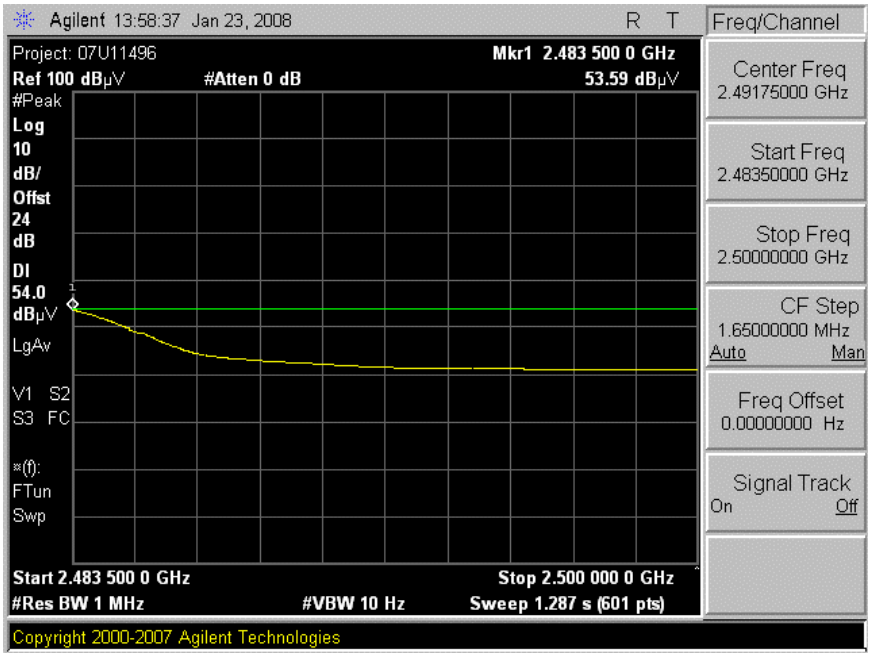


RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)

HIGH CHANNEL RESTRICTED, PEAK, HORIZ

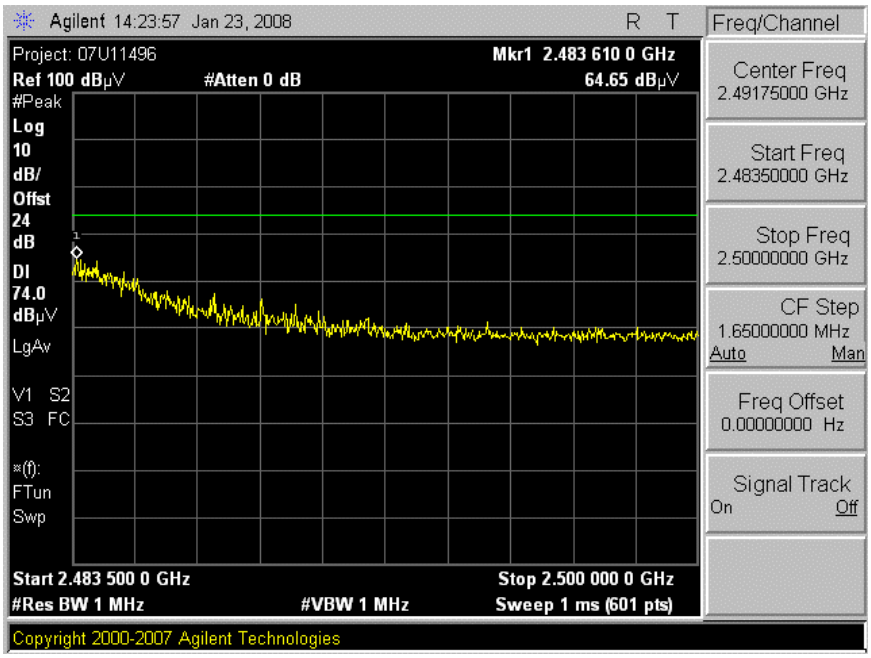


HIGH CHANNEL RESTRICTED, AVG, HORIZ

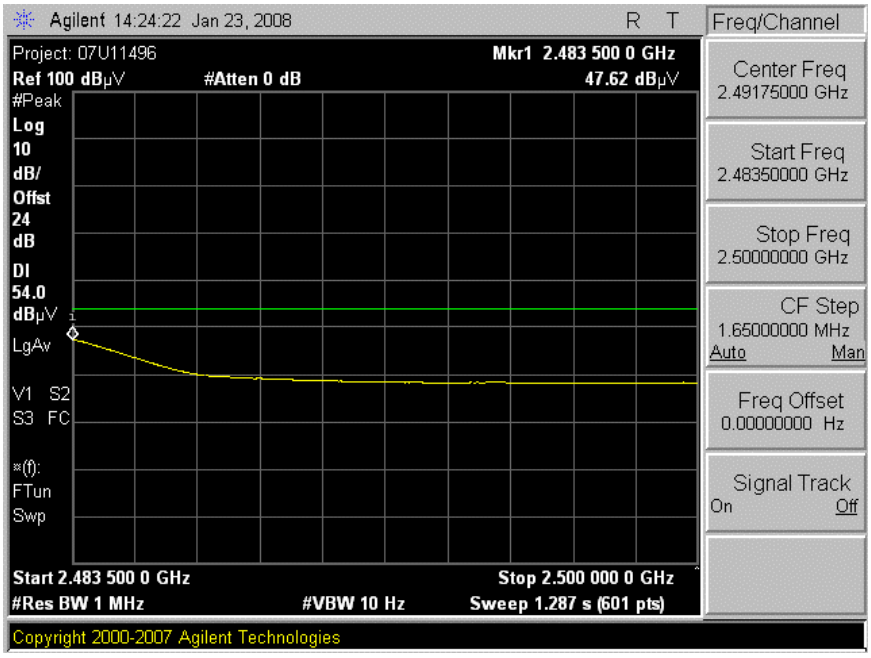


RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

HIGH CHANNEL RESTRICTED, PEAK, VERT



HIGH CHANNEL RESTRICTED, AVG, VERT



HARMONICS AND SPURIOUS EMISSIONS

High Frequency Measurement
Compliance Certification Services, Fremont 5m Chamber

Company: Primex Wireless
Project #: 07U11496
Date: 01/23/08
Test Engineer: Tom Chen
Configuration: Stand-alone AC powered EUT, model: SNS7A330
Mode: Transmitting in 11g mode

Test Equipment:

Horn 1-18GHz	Pre-amplifer 1-26GHz	Pre-amplifer 26-40GHz	Horn > 18GHz	Limit
T59; S/N: 3245 @3m	T144 Miteq 3008A00931		T89; ARA 18-26GHz; S/N:1049	FCC 15.205

Hi Frequency Cables

2 foot cable	3 foot cable	12 foot cable	HPF	Reject Filter
		A-5m Chamber		R_001

Peak Measurements
RBW=VBW=1MHz
Average Measurements
RBW=1MHz ; VBW=10Hz

f GHz	Dist (m)	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Fltr dB	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes (V/H)
Low Ch.2412 MHz															
4.824	3.0	48.3	34.4	33.9	3.0	-36.5	0.0	0.0	48.7	34.8	74	54	-25.3	-19.2	V, ART=17
4.824	3.0	56.3	41.9	33.9	6.9	-36.5	0.0	0.0	60.6	46.2	74	54	-13.4	-7.8	H, ART=19
Mid Ch. 2437 MHz															
4.874	3.0	49.1	37.2	34.0	6.9	-36.5	0.0	0.0	53.5	41.6	74	54	-20.5	-12.4	V, ART=18
7.311	3.0	48.4	35.6	36.4	8.4	-36.2	0.0	0.0	57.0	44.2	74	54	-17.0	-9.8	V, ART=18
4.874	3.0	59.2	44.9	34.0	6.9	-36.5	0.0	0.0	63.6	49.3	74	54	-10.4	-4.7	H, ART=19
7.311	3.0	44.1	33.2	36.4	8.4	-36.2	0.0	0.0	52.7	41.8	74	54	-21.3	-12.2	H, ART=19
High Ch. 2462 MHz															
4.924	3.0	45.9	33.5	34.0	7.0	-36.5	0.0	0.0	50.4	38.0	74	54	-23.6	-16.0	V, ART=16
7.356	3.0	42.7	30.1	36.5	8.4	-36.2	0.0	0.0	51.4	38.8	74	54	-22.6	-15.2	V, ART=19
4.904	3.0	62.0	46.1	34.0	7.0	-36.5	0.0	0.0	66.5	50.6	74	54	-7.5	-3.4	H, ART=19
7.356	3.0	47.0	34.7	36.5	8.4	-36.2	0.0	0.0	55.7	43.4	74	54	-18.3	-10.6	H, ART=19

f	Measurement Frequency	Amp	Preamp Gain	Avg Lim	Average Field Strength Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters	Pk Lim	Peak Field Strength Limit
Read	Analyzer Reading	Avg	Average Field Strength @ 3 m	Avg Mar	Margin vs. Average Limit
AF	Antenna Factor	Peak	Calculated Peak Field Strength	Pk Mar	Margin vs. Peak Limit
CL	Cable Loss	HPF	High Pass Filter		

8.3. RECEIVER ABOVE 1 GHz

8.3.1. RX ABOVE 1 GHz FOR 11B MODE

High Frequency Measurement
Compliance Certification Services, Fremont 5m Chamber

Company: Primex Wireless
Project #: 07U11496
Date: 01/24/08
Test Engineer: Tom Chen
Configuration: Stand-alone AC powered EUT, model: SNS7A330
Mode: Receiving in 11b mode, mid channel

Test Equipment:

Horn 1-18GHz	Pre-amplifer 1-26GHz	Pre-amplifer 26-40GHz	Horn > 18GHz	Limit
T59; S/N: 3245 @3m	T144 Miteq 3008A00931		T89; ARA 18-26GHz; S/N:1049	RX RSS 210

Hi Frequency Cables

2 foot cable	3 foot cable	12 foot cable	HPF	Reject Filter
		A-5m Chamber		

Peak Measurements
RBW=VBW=1MHz
Average Measurements
RBW=1MHz ; VBW=10Hz

f GHz	Dist (m)	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Fltr dB	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes (V/H)
1.050	3.0	52.0	40.7	25.8	3.0	-39.4	0.0	0.0	41.4	30.1	74	54	-32.6	-23.9	V
1.177	3.0	49.3	38.3	26.2	3.0	-39.2	0.0	0.0	39.3	28.3	74	54	-34.7	-25.7	V
1.250	3.0	55.7	44.1	26.4	3.0	-39.1	0.0	0.0	46.0	34.4	74	54	-28.0	-19.6	V
1.050	3.0	51.5	40.6	25.8	3.0	-39.4	0.0	0.0	40.9	30.0	74	54	-33.1	-24.0	H
1.150	3.0	49.1	38.7	26.1	3.0	-39.3	0.0	0.0	38.9	28.5	74	54	-35.1	-25.5	H
1.250	3.0	53.5	42.1	26.4	3.0	-39.1	0.0	0.0	43.8	32.4	74	54	-30.2	-21.6	H

f	Measurement Frequency	Amp	Preamp Gain	Avg Lim	Average Field Strength Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters	Pk Lim	Peak Field Strength Limit
Read	Analyzer Reading	Avg	Average Field Strength @ 3 m	Avg Mar	Margin vs. Average Limit
AF	Antenna Factor	Peak	Calculated Peak Field Strength	Pk Mar	Margin vs. Peak Limit
CL	Cable Loss	HPF	High Pass Filter		

8.3.2. RX ABOVE 1 GHz FOR 11G MODE

High Frequency Measurement
Compliance Certification Services, Fremont 5m Chamber

Company: Primex Wireless
Project #: 07U11496
Date: 01/24/08
Test Engineer: Tom Chen
Configuration: Stand-alone AC powered EUT, model: SNS7A330
Mode: Receiving in 11g mode, mid channel

Test Equipment:

Horn 1-18GHz	Pre-amplifer 1-26GHz	Pre-amplifer 26-40GHz	Horn > 18GHz	Limit
T59; S/N: 3245 @3m	T144 Miteq 3008A00931		T89; ARA 18-26GHz; S/N:1049	RX RSS 210

Hi Frequency Cables

2 foot cable	3 foot cable	12 foot cable	HPF	Reject Filter
		A-5m Chamber		

Peak Measurements
RBW=VBW=1MHz
Average Measurements
RBW=1MHz ; VBW=10Hz

f GHz	Dist (m)	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Fltr dB	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes (V/H)
1.050	3.0	52.2	40.9	25.8	3.0	-39.4	0.0	0.0	41.6	30.3	74	54	-32.4	-23.7	V
1.177	3.0	49.4	38.4	26.2	3.0	-39.2	0.0	0.0	39.4	28.4	74	54	-34.6	-25.6	V
1.250	3.0	56.0	44.4	26.4	3.0	-39.1	0.0	0.0	46.3	34.7	74	54	-27.7	-19.3	V
1.050	3.0	51.7	40.8	25.8	3.0	-39.4	0.0	0.0	41.1	30.2	74	54	-32.9	-23.8	H
1.150	3.0	49.2	38.8	26.1	3.0	-39.3	0.0	0.0	39.0	28.6	74	54	-35.0	-25.4	H
1.250	3.0	53.8	42.4	26.4	3.0	-39.1	0.0	0.0	44.1	32.7	74	54	-29.9	-21.3	H

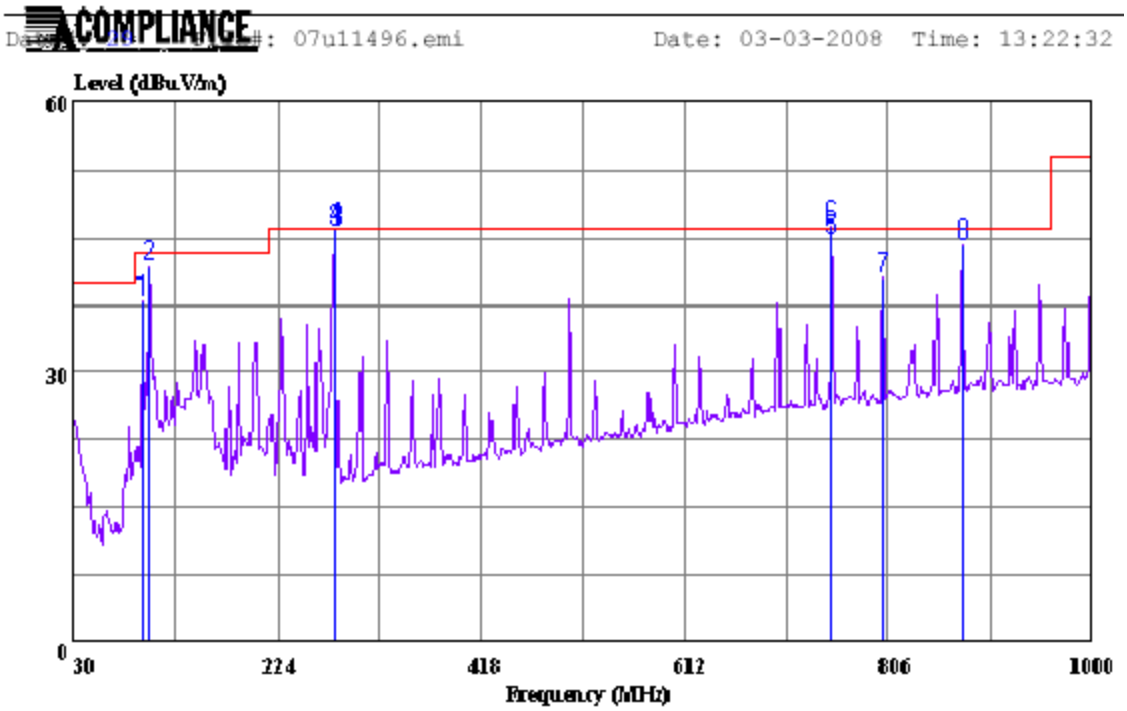
f	Measurement Frequency	Amp	Preamp Gain	Avg Lim	Average Field Strength Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters	Pk Lim	Peak Field Strength Limit
Read	Analyzer Reading	Avg	Average Field Strength @ 3 m	Avg Mar	Margin vs. Average Limit
AF	Antenna Factor	Peak	Calculated Peak Field Strength	Pk Mar	Margin vs. Peak Limit
CL	Cable Loss	HPF	High Pass Filter		

8.4. WORST-CASE BELOW 1 GHz

SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)

AC-powered clock:

HORIZONTAL PLOT



Trace: 26 Ref Trace:

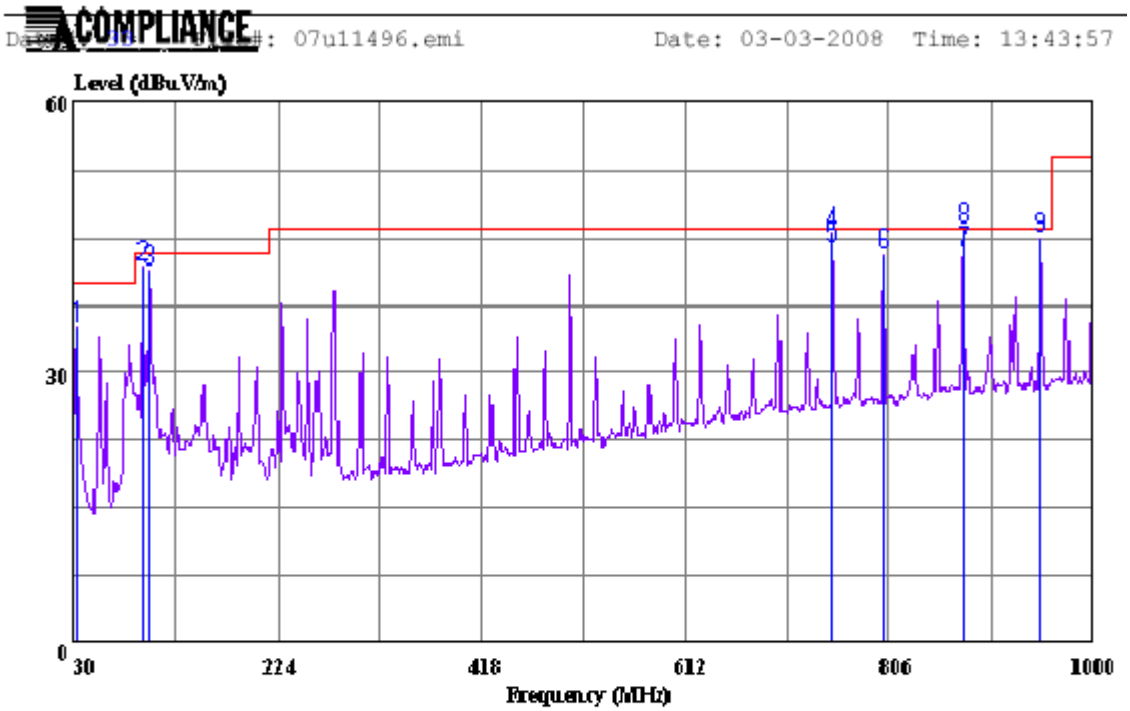
Condition: FCC CLASS-B HORIZONTAL
Test Operator: Tom Chen
Project # : 07U11496
Company : Primex wireless
Config : EUT only ,without RJ-45 cable
Mode : Normal mode
Target : FCC Class B
: With Extend cable

HORIZONTAL DATA

		Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1		94.990	56.09	-18.29	37.80	43.50	-5.70	Peak
2		101.780	58.56	-16.82	41.74	43.50	-1.76	Peak
3		279.290	58.70	-13.03	45.67	46.00	-0.33	QP
4	*	279.290	59.07	-13.03	46.04	46.00	0.04	Peak
5		751.680	47.40	-2.74	44.66	46.00	-1.34	QP
6	*	751.680	48.92	-2.74	46.18	46.00	0.18	Peak
7		800.180	42.55	-2.06	40.49	46.00	-5.51	Peak
8		875.840	45.36	-1.32	44.04	46.00	-1.96	Peak

SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, VERTICAL)

VERTICAL PLOT



Trace: 30 Ref Trace:

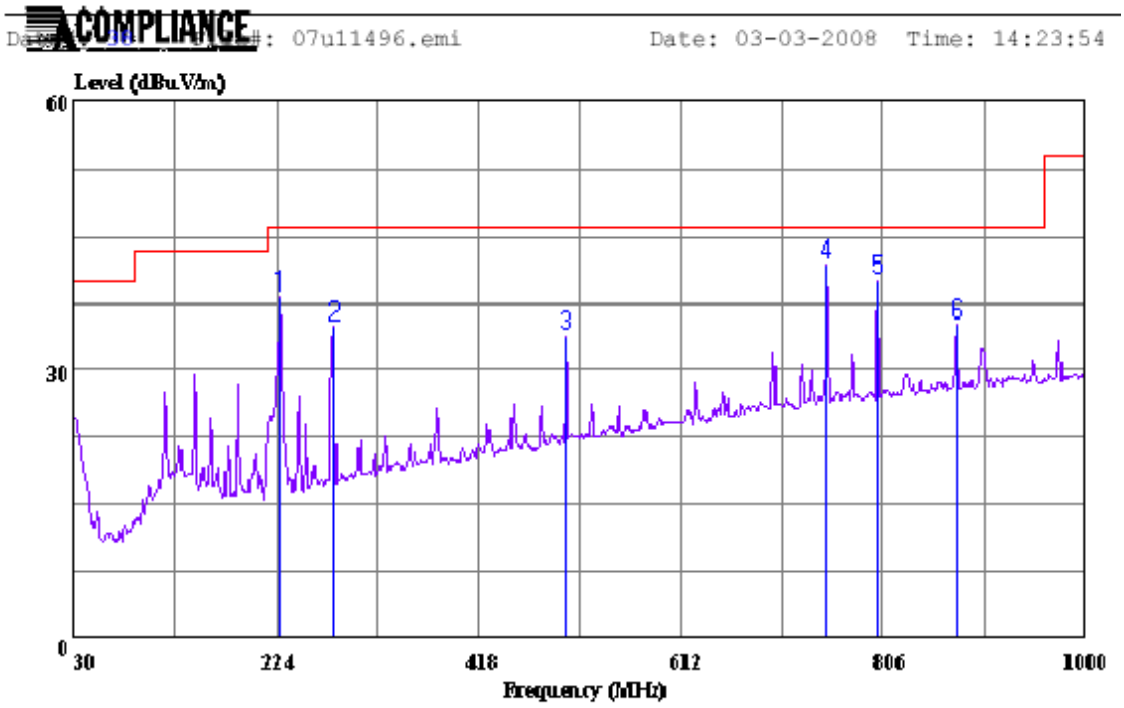
Condition: FCC CLASS-B VERTICAL
Test Operator: Tom Chen
Project # : 07U11496
Company : Primex wireless
Config : EUT only ,without RJ-45 cable
Mode : Normal mode
Target : FCC Class B
: With Extend cable

VERTICAL DATA

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	31.940	41.76	-6.60	35.16	40.00	-4.84	Peak
2	94.990	60.04	-18.29	41.75	43.50	-1.75	Peak
3	101.780	58.01	-16.82	41.19	43.50	-2.31	Peak
4	751.680	48.29	-2.74	45.55	46.00	-0.45	Peak
5	751.680	46.60	-2.74	43.86	46.00	-2.14	QP
6	800.180	45.09	-2.06	43.03	46.00	-2.97	Peak
7	875.840	44.60	-1.32	43.28	46.00	-2.72	QP
8	875.840	47.21	-1.32	45.89	46.00	-0.11	Peak
9	950.530	45.66	-0.82	44.84	46.00	-1.16	Peak

Battery-powered clock:

HORIZONTAL PLOT



Trace: 36 Ref Trace:

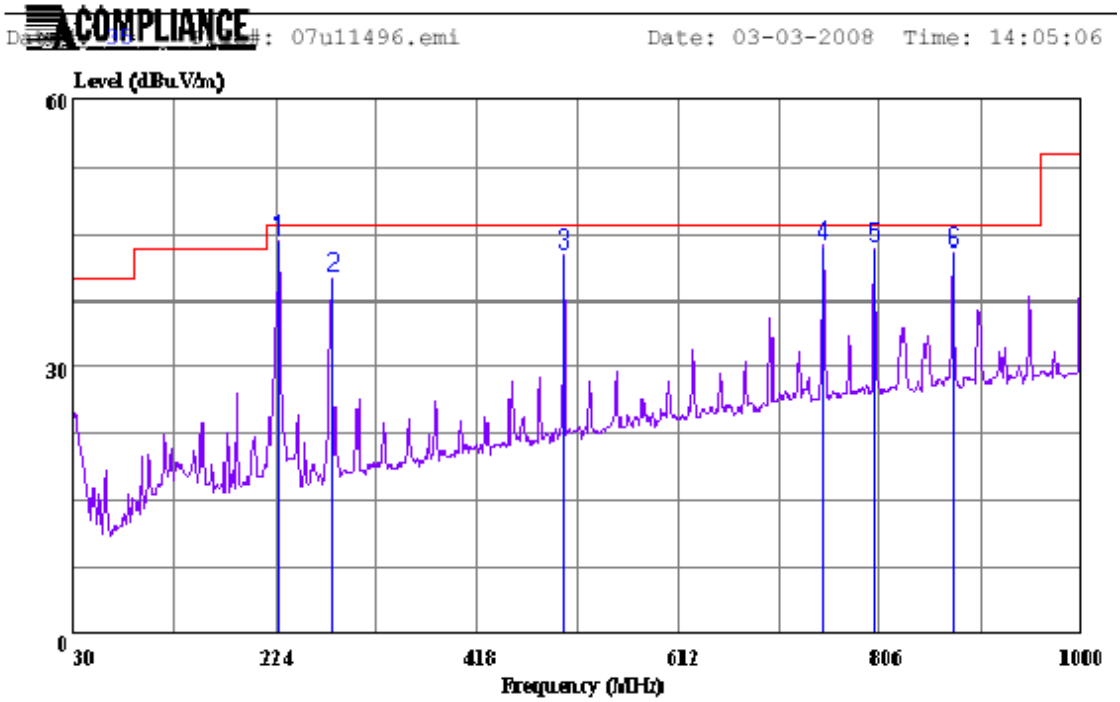
Condition: FCC CLASS-B HORIZONTAL
Test Operator: Tom Chen
Project # : 07U11496
Company : Primex wireless
Config : EUT only ,without RJ-45 cable
Mode : Normal mode (Battery Power)
Target : FCC Class B

HORIZONTAL DATA

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	227.880	53.09	-14.93	38.16	46.00	-7.84	Peak
2	279.290	47.71	-13.03	34.68	46.00	-11.32	Peak
3	502.390	40.98	-7.34	33.64	46.00	-12.36	Peak
4	751.680	44.47	-2.74	41.73	46.00	-4.27	Peak
5	800.180	42.15	-2.06	40.09	46.00	-5.91	Peak
6	875.840	36.30	-1.32	34.98	46.00	-11.02	Peak

SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, VERTICAL)

VERTICAL PLOT



Trace: 34 Ref Trace:

Condition: FCC CLASS-B VERTICAL
Test Operator: Tom Chen
Project # : 07U11496
Company : Primex wireless
Config : EUT only ,without RJ-45 cable
Mode : Normal mode (Battery Power)
Target : FCC Class B

VERTICAL DATA

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	227.880	59.03	-14.93	44.10	46.00	-1.90	Peak
2	279.290	53.09	-13.03	40.06	46.00	-5.94	Peak
3	502.390	49.91	-7.34	42.57	46.00	-3.43	Peak
4	751.680	46.32	-2.74	43.58	46.00	-2.42	Peak
5	800.180	45.53	-2.06	43.47	46.00	-2.53	Peak
6	875.840	44.07	-1.32	42.75	46.00	-3.25	Peak

9. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 7.2.2

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56 *	56 to 46 *
0.5-5	56	46
5-30	60	50

* Decreases with the logarithm of the frequency.

TEST PROCEDURE

ANSI C63.4

RESULTS

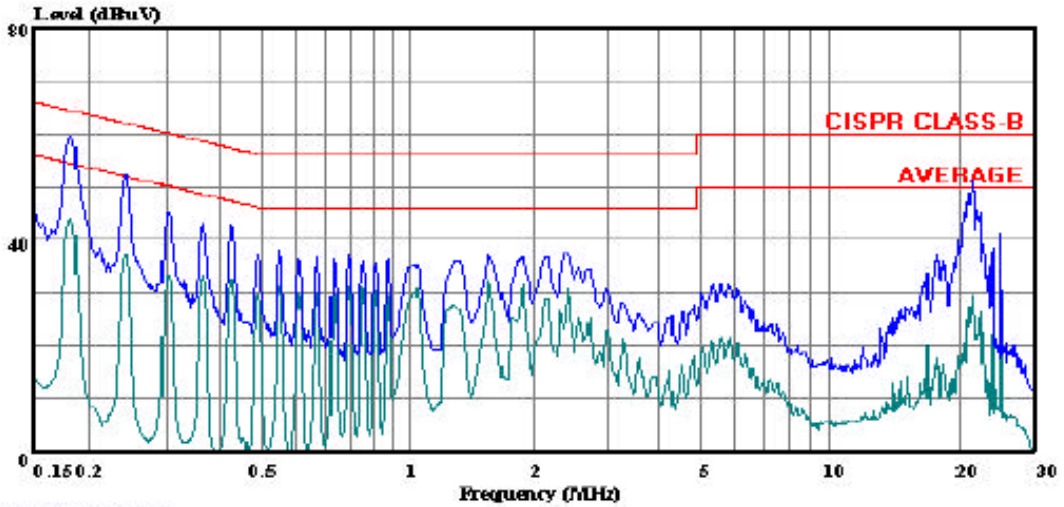
6 WORST EMISSIONS

CONDUCTED EMISSIONS DATA (115VAC 60Hz)									
Freq.	Reading			Closs	Limit	FCC_B	Margin		Remark
(MHz)	PK (dBuV)	QP (dBuV)	AV (dBuV)	(dB)	QP	AV	QP (dB)	AV (dB)	L1 / L2
0.18	59.68	--	43.42	0.00	64.39	54.39	-4.71	-10.97	L1
0.24	52.37	--	37.21	0.00	62.03	52.03	-9.66	-14.82	L1
21.49	51.27	--	29.38	0.00	60.00	50.00	-8.73	-20.62	L1
0.18	57.81	--	41.97	0.00	64.39	54.39	-6.58	-12.42	L2
0.24	50.60	--	35.83	0.00	62.03	52.03	-11.43	-16.20	L2
21.49	51.98	--	35.66	0.00	60.00	50.00	-8.02	-14.34	L2
6 Worst Data									

LINE 1 RESULTS

Compliance Certification Services
47173 Benicia Street
Fremont, CA 94538
Tel: (510) 771-1000
Fax: (510) 661-0888

Data#: 7 File#: 07U11496 LC.EMI Date: 03-19-2008 Time: 07:59:53



(Line Conduction)

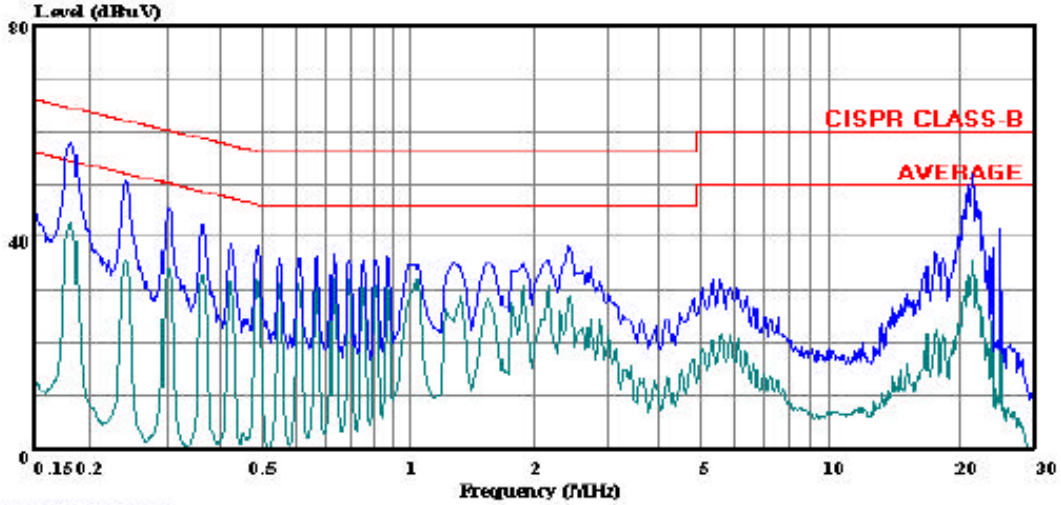
Trace: 5 Ref Trace:

Condition: CISPR CLASS-B
Test Operator:: Tom Chen
Project #: : 07U11496
Company: : Primex Wireless
Configuration:: EUT only (AC Power)
Mode: : TX ON
Target: : FCC Class B
Voltage: : 115VAC/ 60Hz
: Line 1: Peak (Blue); Average (Green)

LINE 2 RESULTS

Compliance Certification Services
47173 Benicia Street
Fremont, CA 94538
Tel: (510) 771-1000
Fax: (510) 661-0888

Data#: 14 File#: 07U11496 LC.EMI Date: 03-19-2008 Time: 08:08:32



(Line Conduction)

Trace: 12 Ref Trace:

Condition: CISPR CLASS-B
Test Operator:: Tom Chen
Project #: : 07U11496
Company: : Primex Wireless
Configuration:: EUT only (AC Power)
Mode: : TX ON
Target: : FCC Class B
Voltage: : 115VAC/ 60Hz
: Line 2: Peak (Blue); Average (Green)

10. MAXIMUM PERMISSIBLE EXPOSURE

FCC RULES

§1.1310 The criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio-frequency (RF) radiation as specified in §1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of §2.1093 of this chapter.

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3–3.0	614	1.63	*(100)	6
3.0–30	1842/f	4.89/f	*($900/f^2$)	6
30–300	61.4	0.163	1.0	6
300–1500			f/300	6
1500–100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*($180/f^2$)	30

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)—Continued

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
30–300	27.5	0.073	0.2	30
300–1500			f/1500	30
1500–100,000			1.0	30

f = frequency in MHz
* = Plane-wave equivalent power density
NOTE 1 TO TABLE 1: Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.
NOTE 2 TO TABLE 1: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

IC RULES

IC Safety Code 6, Section 2.2.1 (a) A person other than an RF and microwave exposed worker shall not be exposed to electromagnetic radiation in a frequency band listed in Column 1 of Table 5, if the field strength exceeds the value given in Column 2 or 3 of Table 5, when averaged spatially and over time, or if the power density exceeds the value given in Column 4 of Table 5, when averaged spatially and over time.

Table 5
Exposure Limits for Persons Not Classed As RF and Microwave Exposed Workers (Including the General Public)

1 Frequency (MHz)	2 Electric Field Strength; rms (V/m)	3 Magnetic Field Strength; rms (A/m)	4 Power Density (W/m^2)	5 Averaging Time (min)
0.003–1	280	2.19		6
1–10	$280/f$	$2.19/f$		6
10–30	28	$2.19/f$		6
30–300	28	0.073	2*	6
300–1 500	$1.585f^{0.5}$	$0.0042f^{0.5}$	$f/150$	6
1 500–15 000	61.4	0.163	10	6
15 000–150 000	61.4	0.163	10	$616\,000/f^{1.2}$
150 000–300 000	$0.158f^{0.5}$	$4.21 \times 10^{-4}f^{0.5}$	$6.67 \times 10^{-5}f$	$616\,000/f^{1.2}$

* Power density limit is applicable at frequencies greater than 100 MHz.

Notes: 1. Frequency, f, is in MHz.
2. A power density of 10 W/m^2 is equivalent to 1 mW/cm^2.
3. A magnetic field strength of 1 A/m corresponds to 1.257 microtesla (μT) or 12.57 milligauss (mG).

CALCULATIONS

Given

$E = \sqrt{(30 * P * G)} / d$

and

$S = E ^ 2 / 3770$

where

E = Field Strength in Volts/meter

P = Power in Watts

G = Numeric antenna gain

d = Distance in meters

S = Power Density in milliwatts/square centimeter

Combining equations, rearranging the terms to express the distance as a function of the remaining variables, changing to units of Power to mW and Distance to cm, and substituting the logarithmic form of power and gain yields:

$d = 0.282 * 10 ^ ((P + G) / 20) / \sqrt{S}$

where

d = MPE distance in cm

P = Power in dBm

G = Antenna Gain in dBi

S = Power Density Limit in mW/cm^2

Rearranging terms to calculate the power density at a specific distance yields

$S = 0.0795 * 10 ^ ((P + G) / 10) / (d^2)$

The power density in units of mW/cm^2 is converted to units of W/m^2 by multiplying by a factor of 10.

LIMITS

From FCC §1.1310 Table 1 (B), the maximum value of S = 1.0 mW/cm^2

From IC Safety Code 6, Section 2.2 Table 5 Column 4, S = 10 W/m^2

RESULTS

(MPE distance is equal to 20 cm)

Mode	Band	MPE Distance (cm)	Output Power (dBm)	Antenna Gain (dBi)	FCC Power Density (mW/cm^2)	IC Power Density (W/m^2)
WLAN	2.4 GHz	20.0	25.42	-1.20	0.05	0.53