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

CERTIFICATION TEST REPORT

FOR

CDMA/ 1x EVDO PHONE WITH 802.11 B/G AND BLUETOOTH

MODEL NUMBER: P102EWW

FCC ID: O8F-ROAE
IC: 3905A-ROAE

REPORT NUMBER: 10U13270-1, REVISION A

ISSUE DATE: SEPTEMBER 24, 2010

Prepared for
PALM
950 W. MAUDE AVENUE
SUNNYVALE, CA 94085, U.S.A.

Prepared by
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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
--	07/23/10	Initial Issue	T. Chan
A	09/24/10	Added “Average Time Of Occupancy” Measurement	Tom Chen

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: PALM
950 W. MAUDE AVENUE
SUNNYVALE, CA 94085, U.S.A.

EUT DESCRIPTION: CDMA/ 1x EVDO PHONE WITH 802.11 B/G AND BLUETOOTH

MODEL: P102EWW

SERIAL NUMBER: Radiated: RD1B4024, Conducted: RD1B5029

DATE TESTED: JUNE 30 – JULY 14, and SEPTEMBER 21, 2010

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
CFR 47 Part 15 Subpart C	Pass
INDUSTRY CANADA RSS-210 Issue 7 Annex 8	Pass
INDUSTRY CANADA RSS-GEN Issue 2	Pass

Compliance Certification Services, Inc. (CCS) tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by CCS based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. 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 CCS and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by CCS will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

Approved & Released For CCS By:

THU CHAN
ENGINEERING MANAGER
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 C63.10-2009, 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. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)
36.5 dBuV + 18.7 dB/m + 0.6 dB – 26.9 dB = 28.9 dBuV/m

4.3. MEASUREMENT UNCERTAINTY

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

PARAMETER	UNCERTAINTY
Conducted Disturbance, 0.15 to 30 MHz	3.52 dB
Radiated Disturbance, 30 to 1000 MHz	4.94 dB

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

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

EUT is a CDMA/ 1x EVDO phone with 802.11b/g and Bluetooth feature that manufactured by Palm.

GENERAL INFORMATION

Power Requirements	100-240 VAC / 50-60 Hz
List of frequencies generated or used by the EUT	1000 MHz

ACCESSORIES

The EUT was constructed and using the following accessories:

Accessories Description	Manufacturer/ Trademark	Part Number
AC Power Adapter source Input Rating: 100–240 Vac, 50/60Hz, 0.2A Output Rating: 5Vdc, 1000mA	Palm	157-10124-00
Inductive Charging Dock Input Rating: 5Vdc, 1000mA	Palm	157-10123-00
Battery Type: Rechargeable Li-ion Polymer Rating: 3.7Vdc, 1150mAh (minimum)	Palm	157-10119-00
Wired Stereo Headset	Palm	180-10632-00
USB cable	Palm	180-10646-00

5.2. TEST CONFIGURATIONS

The following configurations were investigated during testing:

AC Power Adapter Source Part Number: 157-10124-00

Configuration	Description	Mode
1	EUT (Inductive backcover) powered by AC adapter	Transmit mode
2	EUT (Inductive backcover) powered by Inductive Charging Dock. Note: Inductive Charging Dock connected to AC adapter.	Transmit mode
3	EUT(Inductive backcover) powered by PC through USB cable	Transmit mode

5.3. 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	14.54	28.44
2412 - 2462	802.11g	17.50	56.23
2402 - 2480	GFSK	0.76	1.19
2402 - 2480	8PSK	0.28	1.07

5.4. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes a Stamped Metal Monopole antenna, with a maximum gain of -0.5 dBi.

802.11bg and Bluetooth transmitters share a common antenna.

5.5. SOFTWARE AND FIRMWARE

The test utility software used during testing was wifi-mfg-labtool.

5.6. WORST-CASE CONFIGURATION AND MODE

The worst-case data rate for each mode is determined to be as follows, based on preliminary tests of the chipset utilized in this radio.

All final tests in the 802.11b mode were made at 1 Mb/s.
All final tests in the 802.11g mode were made at 6 Mb/s.

All final tests in the GFSK mode were made at 1 Mb/s.
All final tests in the 8PSK mode were made at 3 Mb/s.

For radiated emissions below 1 GHz the worst-case configuration is determined to be the mode and channel with the highest output power.

The worst-case channel is determined as the channel with the AC Power Adapter Part Number: 157-10124-00 and Configuration 1: EUT (Inductive backcover) powered by AC adapter

The EUT is a portable device that has three orientations; therefore X, Y and Z orientations have been investigated. The worst case was found to be X orientation.

5.7. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

PERIPHERAL SUPPORT EQUIPMENT LIST			
Description	**Manufacturer**	**Model**	**Serial Number**
AC Power Adapter	Palm	157-10124-00	NA
Inductive Charging Dock	Palm	157-10123-00	NA
EarPhone	Palm	180-10632-00	NA
Laptop PC	DELL	Latitude D400	601405
AC Power Adapter	DELL	LA90PS0-00	C266N-0DF71615-735

I/O CABLES

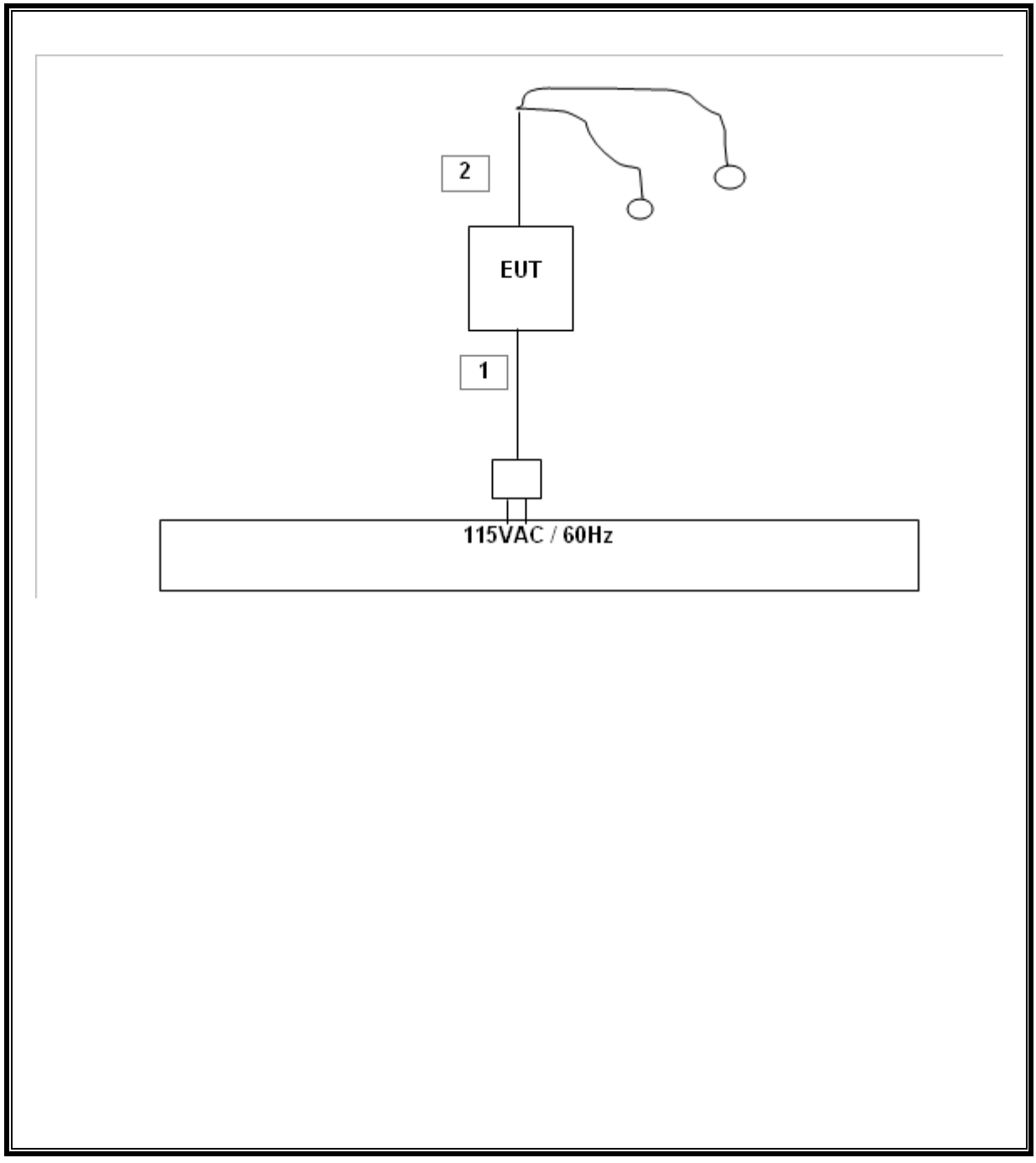
I/O CABLE LIST						
Cable No.	**Port**	**# of Identica Ports**	**Connector Type**	**Cable Type**	**Cable Length**	**Remarks**
1	Link	1	USB	Un-shielded	1.5m	N/A
2	Ear phone	1	Jack	Un-shielded	1.2m	N/A
3	DC	1	DC	Unshielded	1.8 m	N/A
4	AC	1	AC	Unshielded	0.9 m	N/A

TEST SETUP

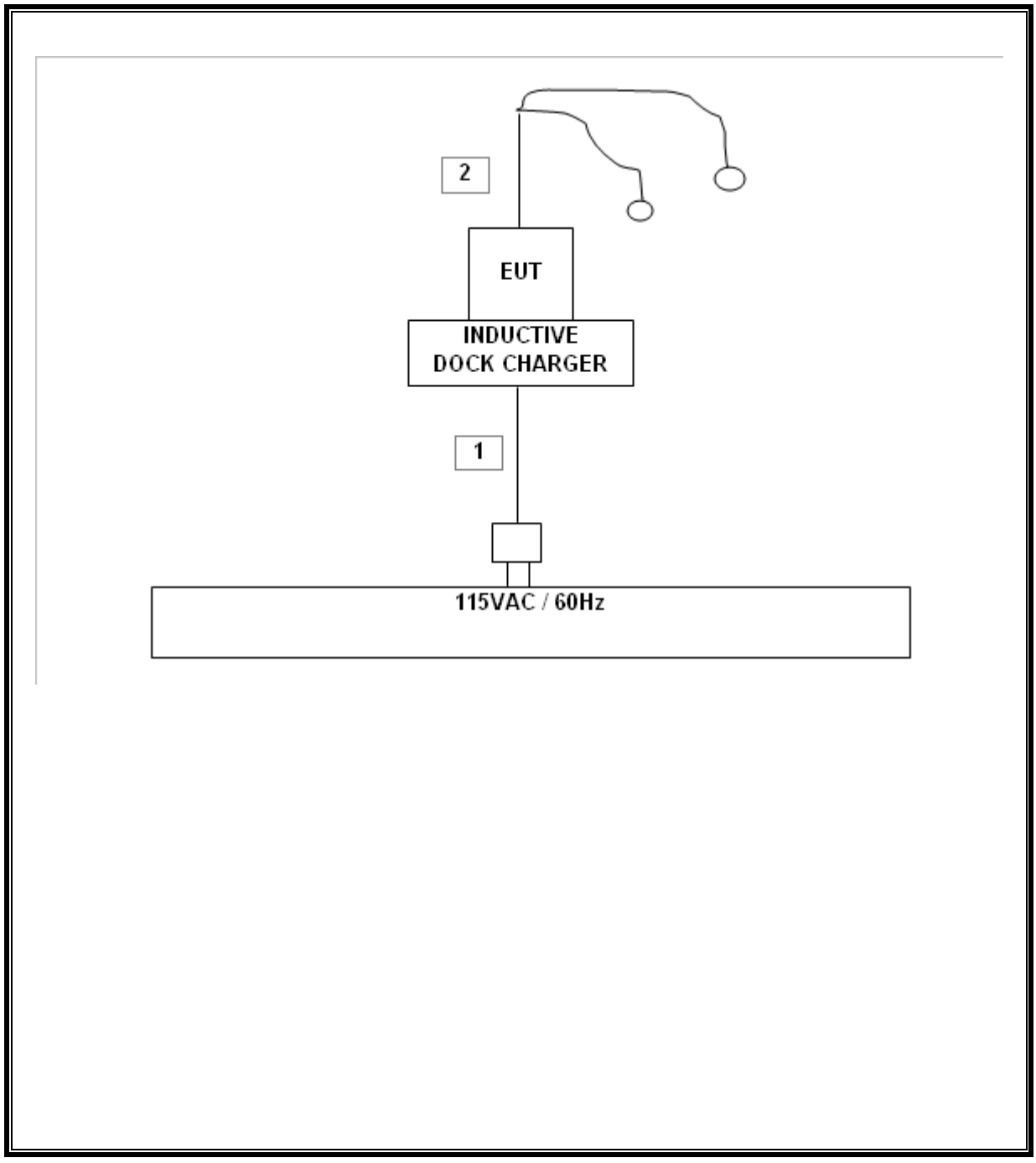
The EUT is installed in a host device during the tests. Test software exercised the radio card.

TEST SETUP DIAGRAM

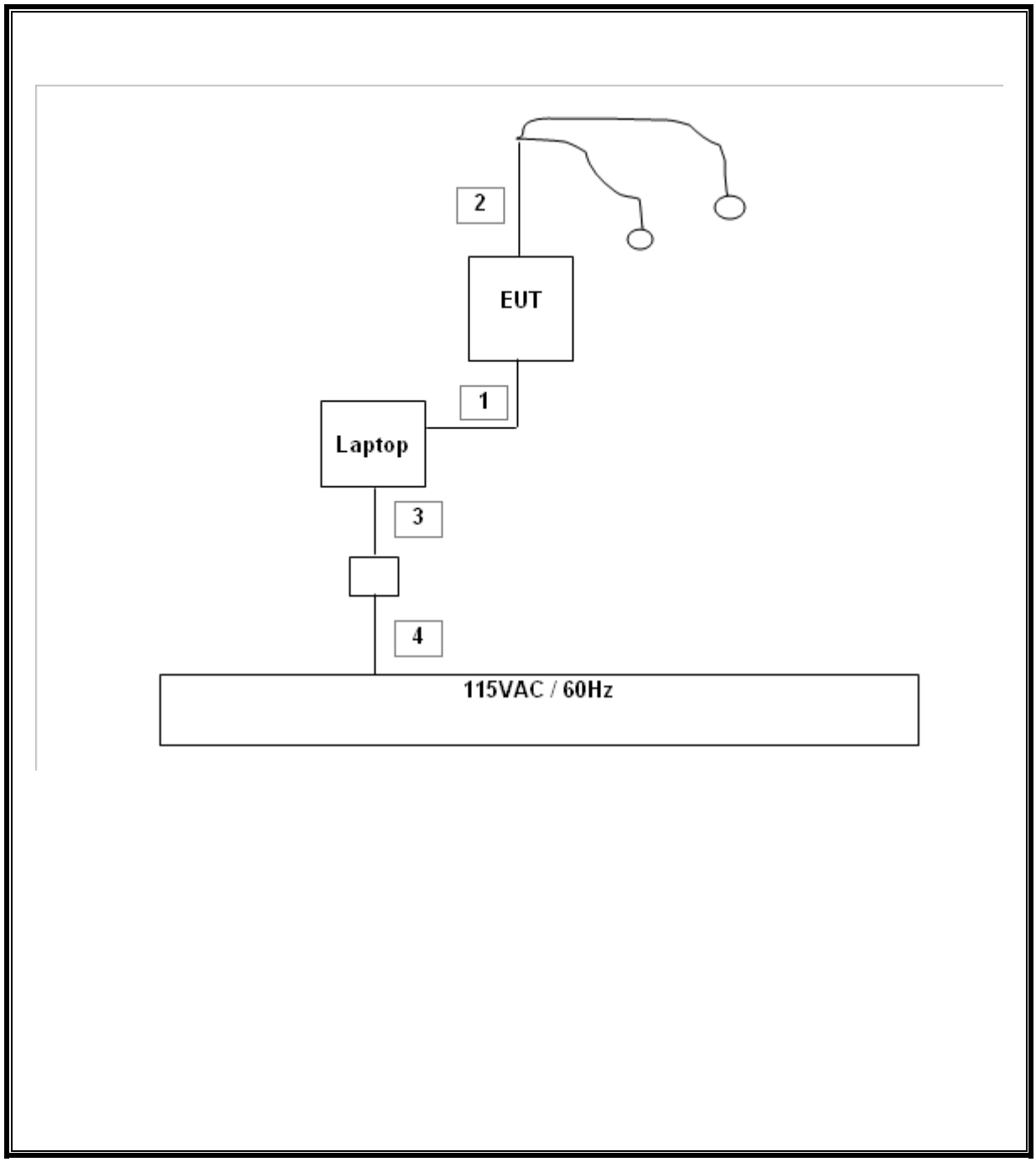
Configuration 1: EUT (Inductive backcover) powered by AC adapter (WORST CASE)



Configuration 2: EUT (Inductive backcover) powered by Inductive Charging Dock
Note: Inductive Charging Dock connected to AC adapter



Configuration 3: EUT (Inductive backcover) powered by PC through USB cable



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 Due**
Peak Power Meter	Boonton	4541	C01189	02/26/11
Peak Power Sensor	Boonton	57006	C01202	02/23/11
Spectrum Analyzer, 26.5 GHz	Agilent / HP	E4440A	C01178	08/31/11
Antenna, Horn, 18 GHz	EMCO	3115	C00783	07/29/11
Preamplifier, 26.5 GHz	Agilent / HP	8449B	C01052	08/04/11
Spectrum Analyzer, 44 GHz	Agilent / HP	E4446A	C01159	05/08/11
Antenna, Bilog, 2 GHz	Sunol Sciences	JB1	C01016	07/14/11
Preamplifier, 1300 MHz	Agilent / HP	8447D	C00778	07/06/11
LISN, 30 MHz	FCC	LISN-50/250-25-2	N02625	11/06/10
EMI Test Receiver, 30 MHz	R & S	ESHS 20	N02396	05/06/11

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.

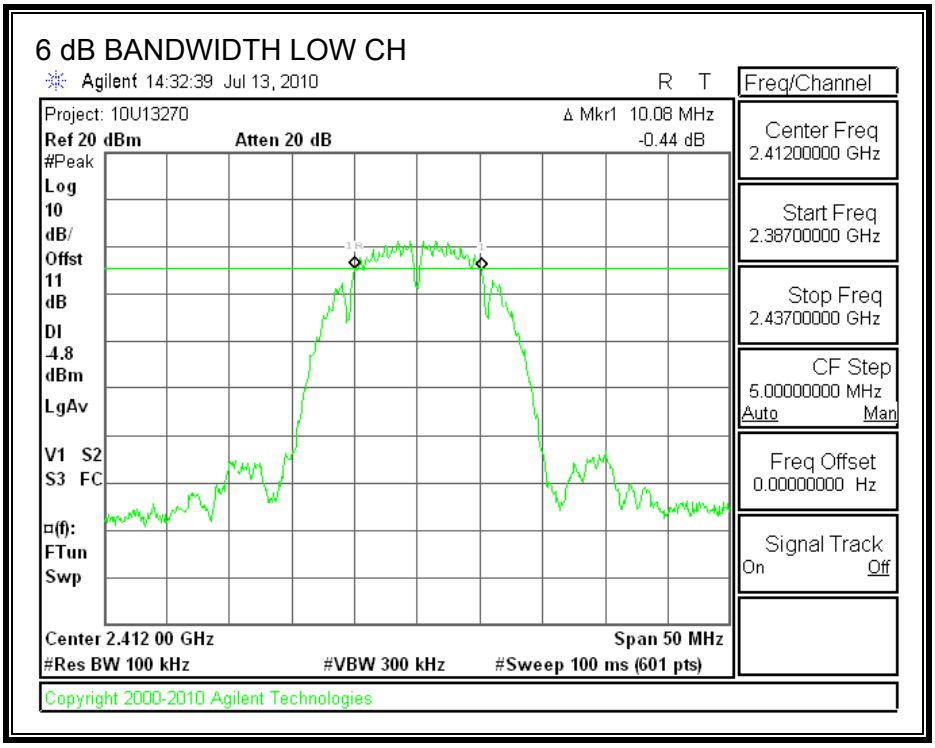
TEST PROCEDURE

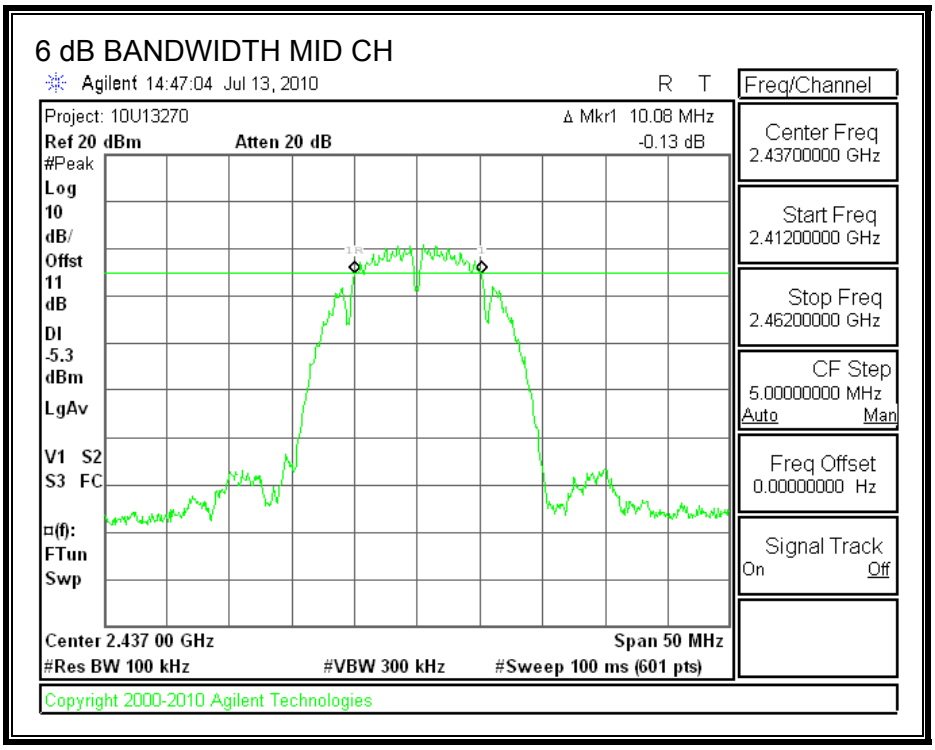
The transmitter output is connected to a spectrum analyzer. The RBW is set to 100 kHz and the VBW is set to 300 kHz. The sweep time is coupled.

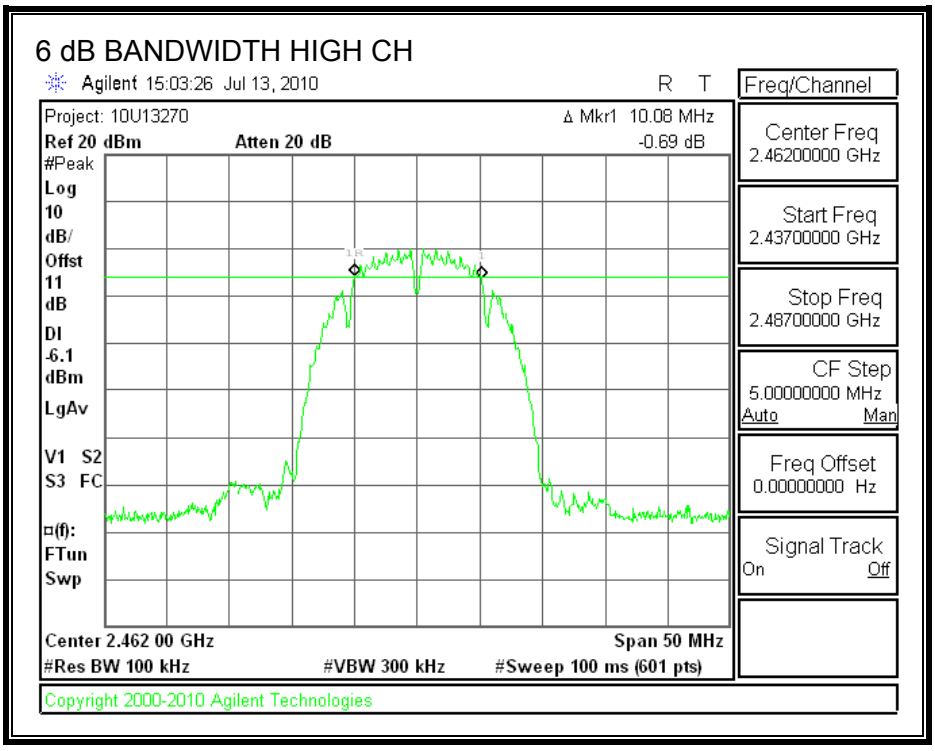
RESULTS

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2412	10.08	0.5
Middle	2437	10.08	0.5
High	2462	10.08	0.5

6 dB BANDWIDTH







7.1.2. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

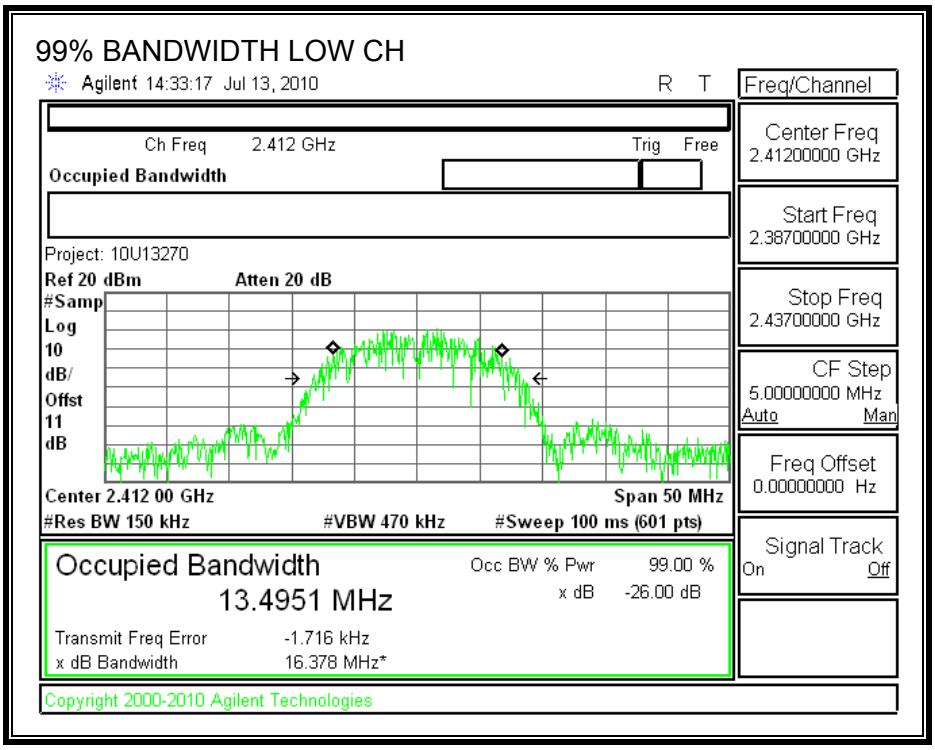
TEST PROCEDURE

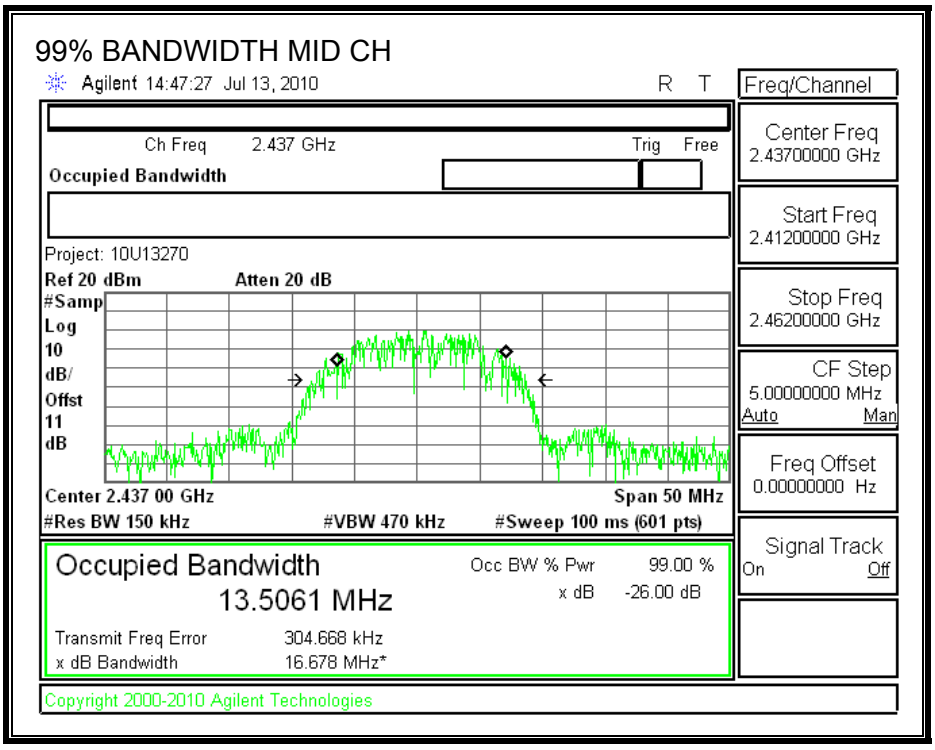
The transmitter output is connected to the spectrum analyzer. The RBW is set to 1% to 3% of the 99 % bandwidth. The VBW is set to 3 times the RBW. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth function is utilized.

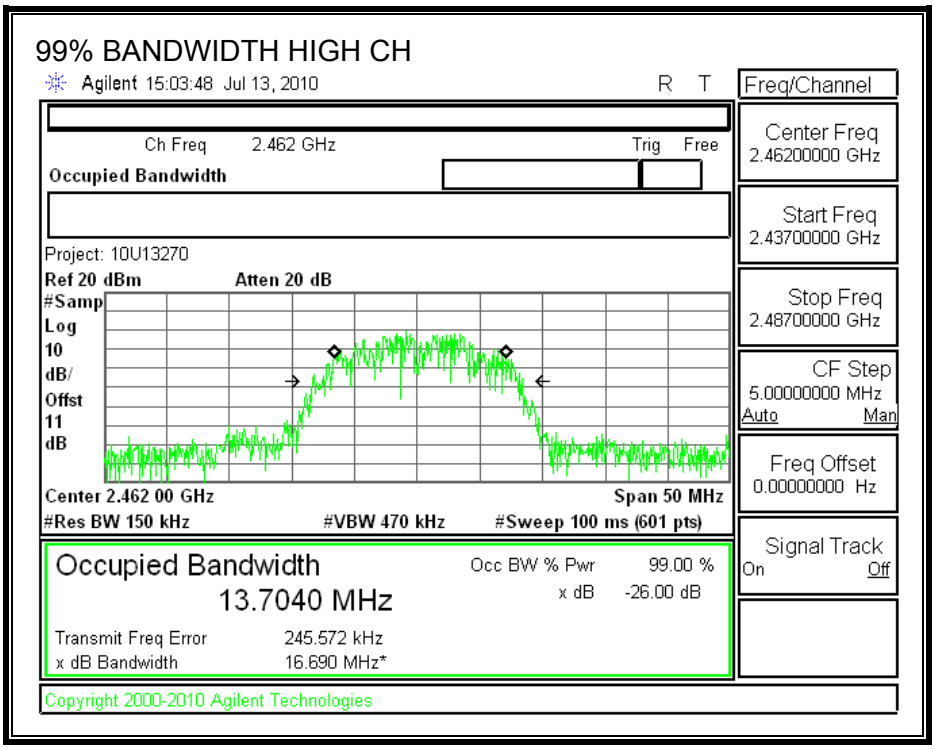
RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2412	13.495
Middle	2437	13.506
High	2462	13.704

99% BANDWIDTH







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

The transmitter output is connected to a power meter.

RESULTS

The cable assembly insertion loss of 10.3dB (including 10 dB pad and 0.3 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	14.39
Middle	2437	14.54
High	2462	14.43

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 10.3dB (including 10 dB pad and 0.3 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	11.80
Middle	2437	11.90
High	2462	11.80

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.

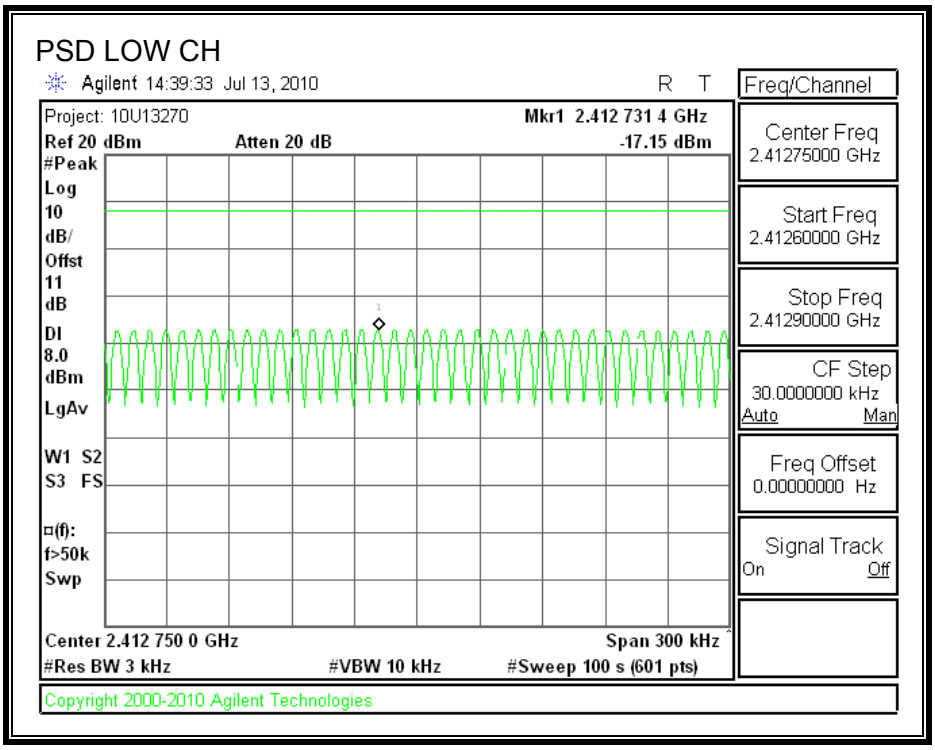
TEST PROCEDURE

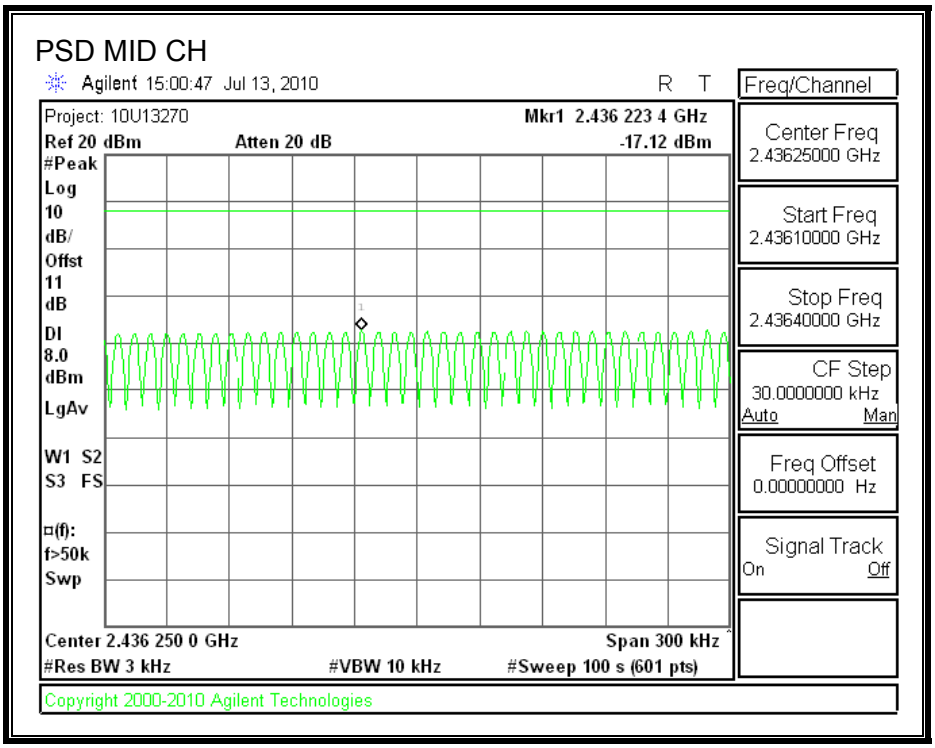
Output power was measured based on the use of a peak measurement, therefore the power spectral density was measured using PSD Option 1 in accordance with FCC document "Measurement of Digital Transmission Systems Operating under Section 15.247", March 23, 2005.

RESULTS

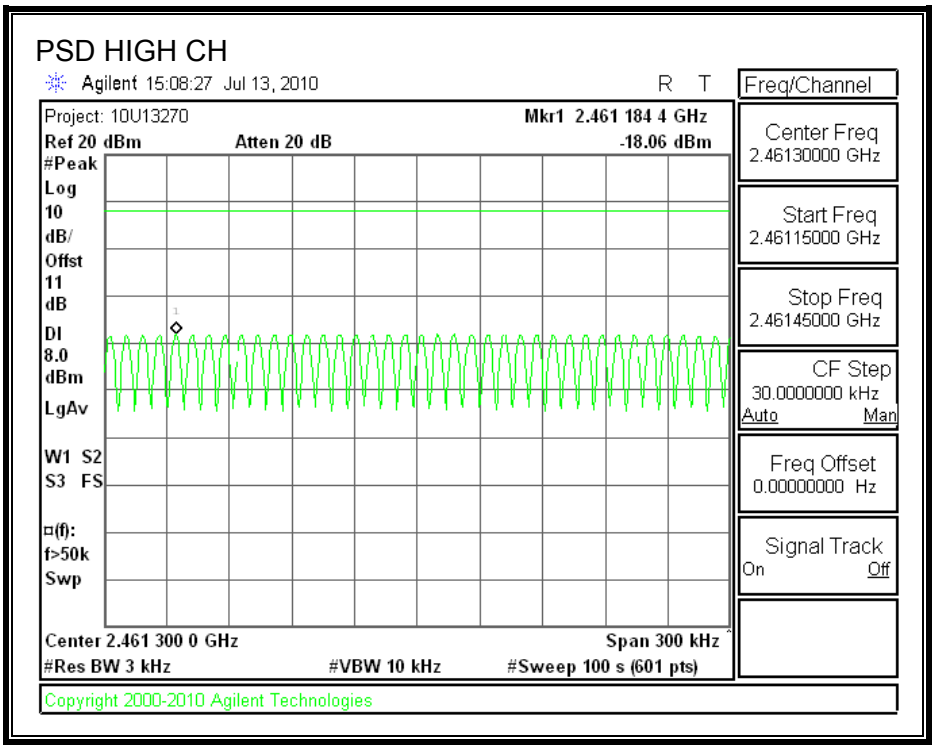
Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Margin (dB)
Low	2412	-17.15	8	-25.15
Middle	2437	-17.12	8	-25.12
High	2462	-18.06	8	-26.06

POWER SPECTRAL DENSITY





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.

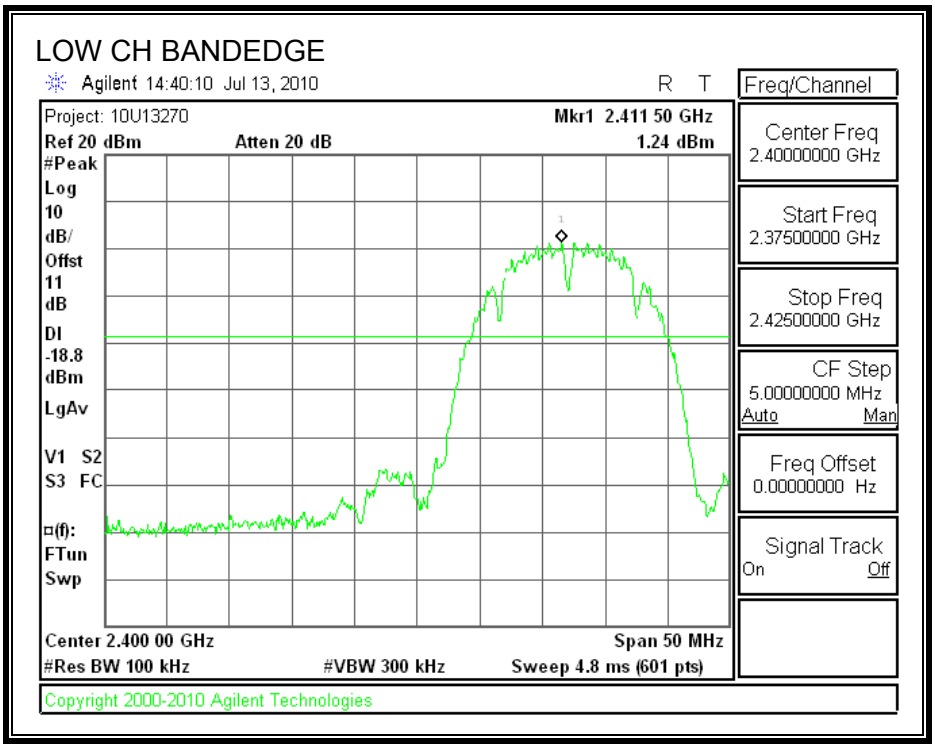
TEST PROCEDURE

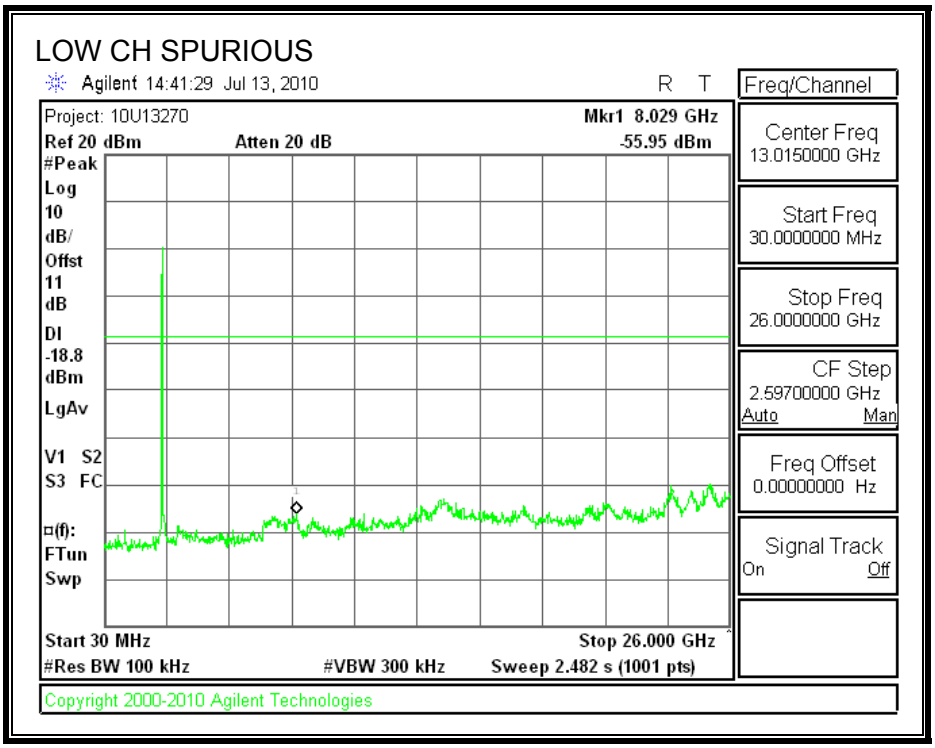
The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

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

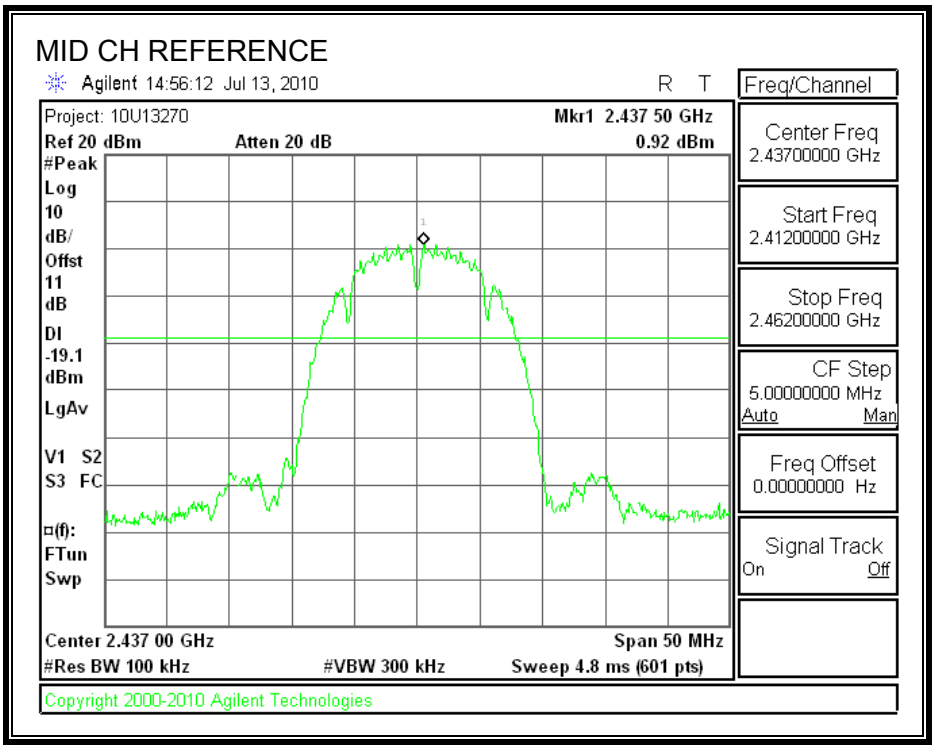
RESULTS

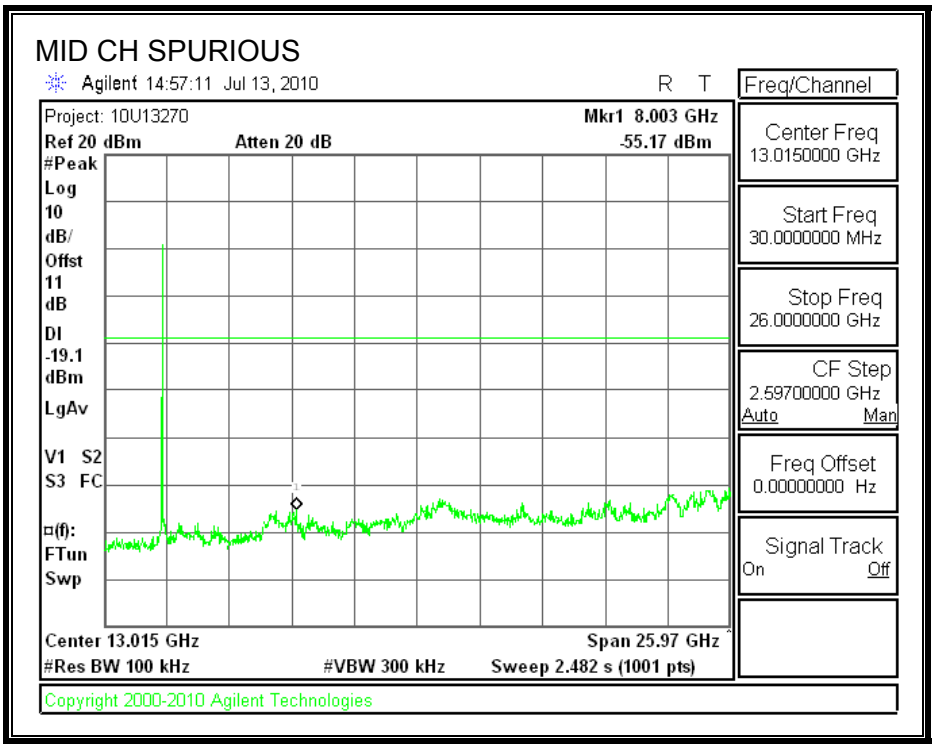
SPURIOUS EMISSIONS, LOW CHANNEL



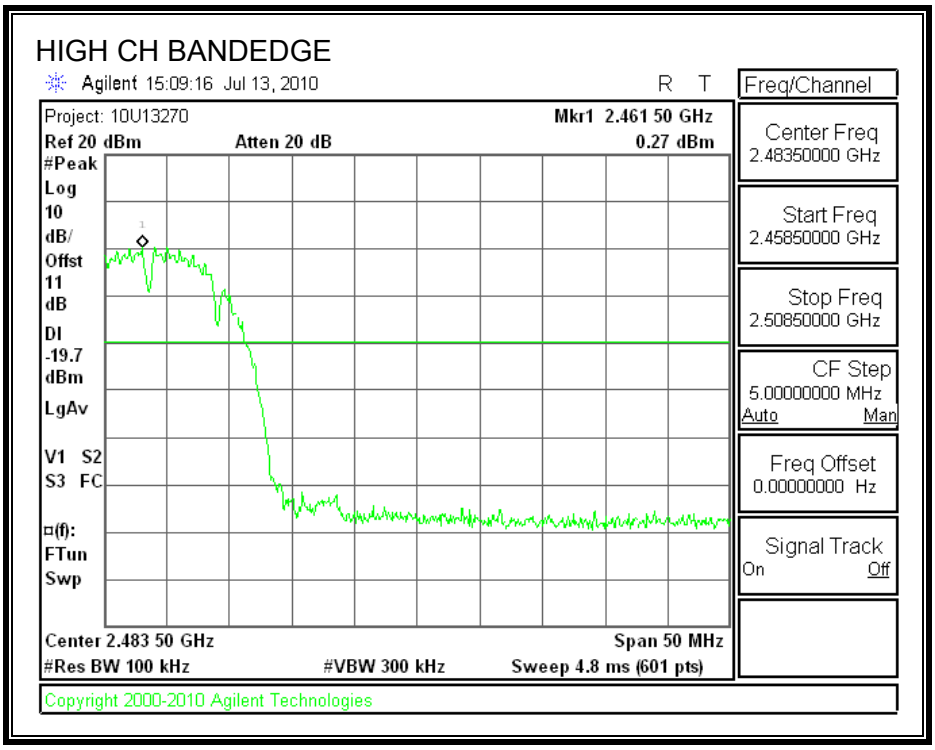


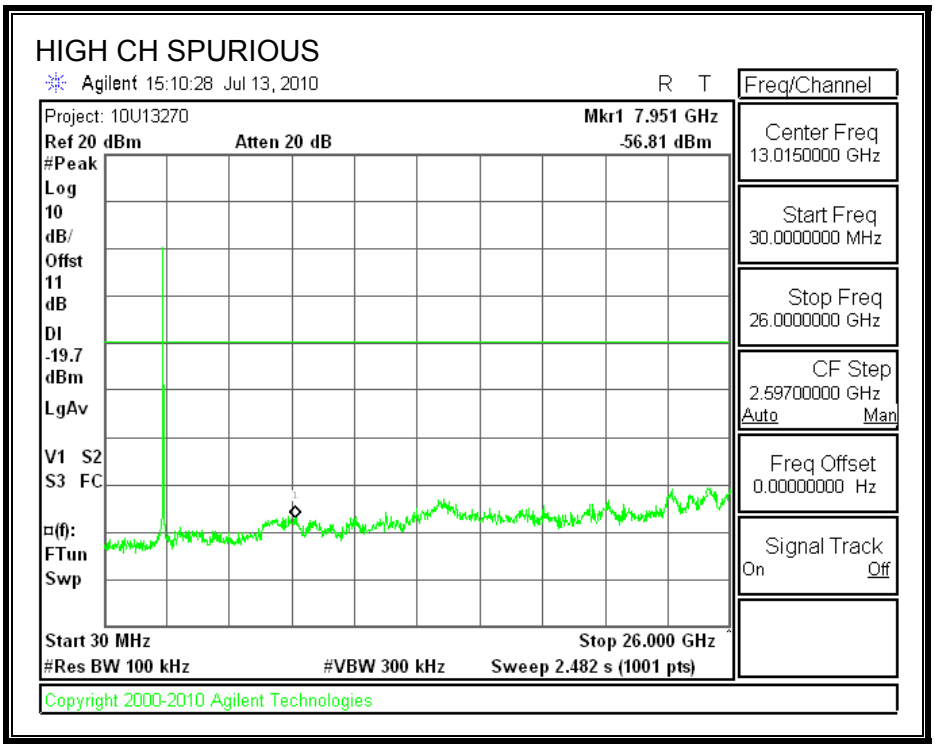
SPURIOUS EMISSIONS, MID CHANNEL





SPURIOUS EMISSIONS, HIGH CHANNEL





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.

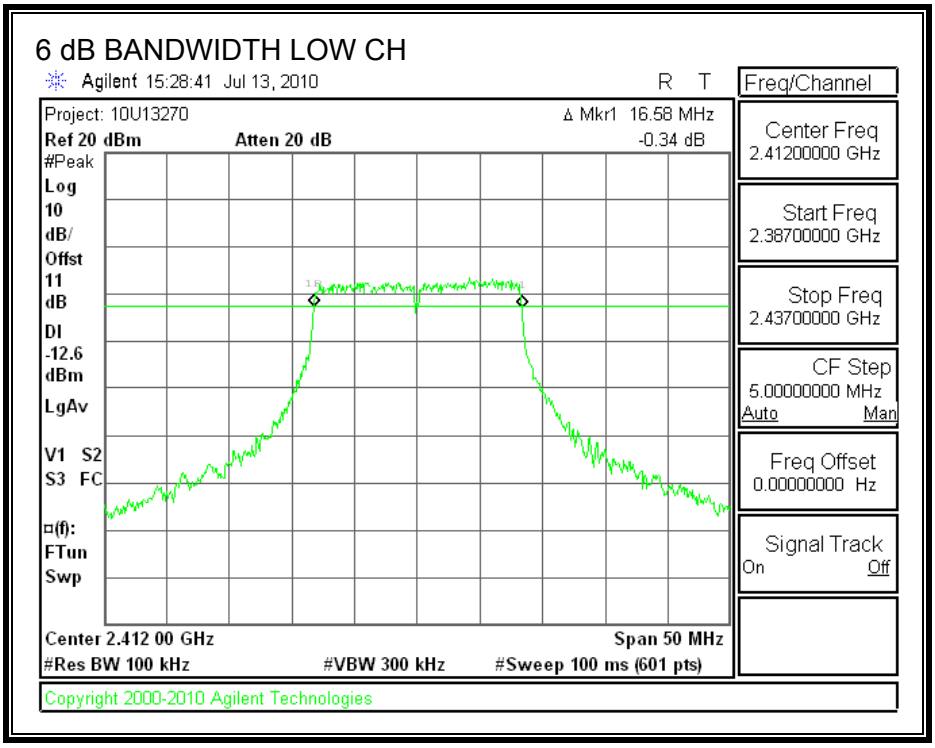
TEST PROCEDURE

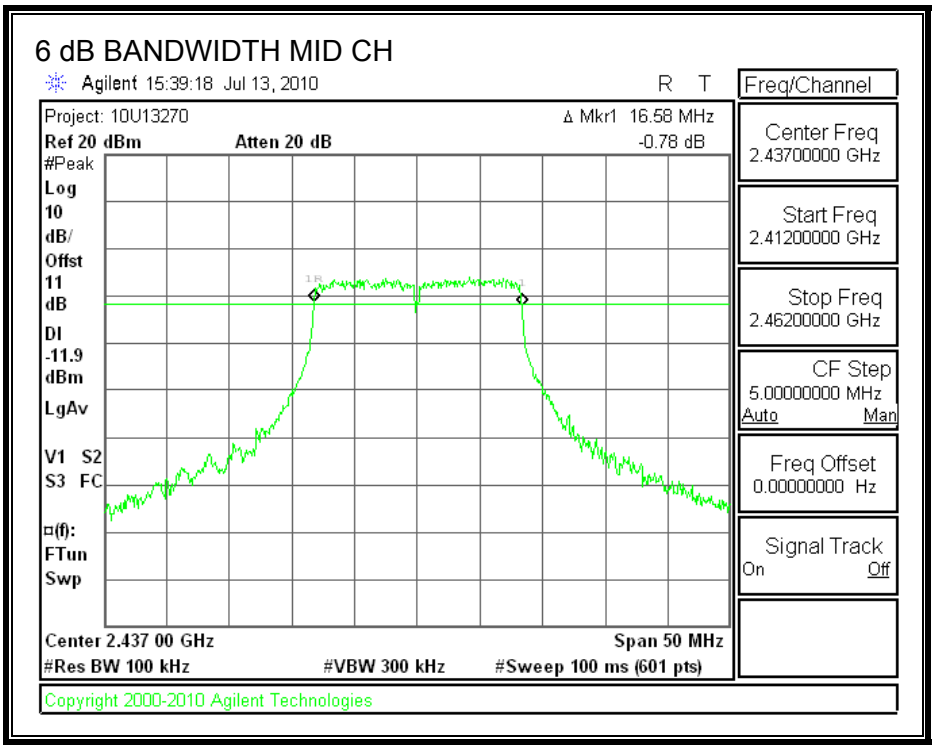
The transmitter output is connected to a spectrum analyzer. The RBW is set to 100 kHz and the VBW is set to 300 kHz. The sweep time is coupled.

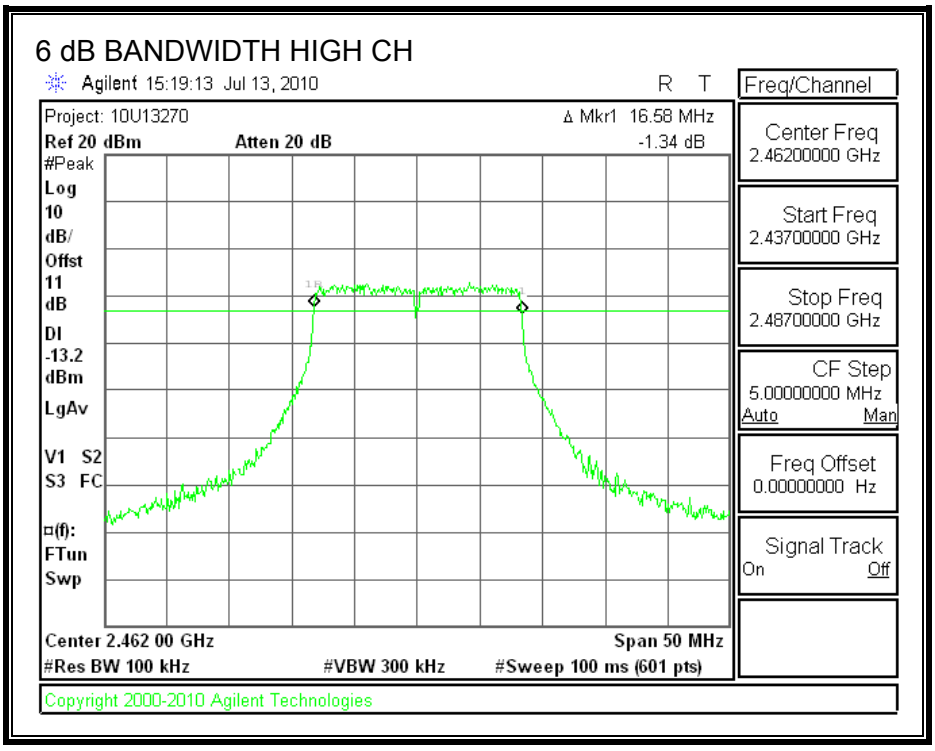
RESULTS

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2412	16.58	0.5
Middle	2437	16.58	0.5
High	2462	16.58	0.5

6 dB BANDWIDTH







7.2.2. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

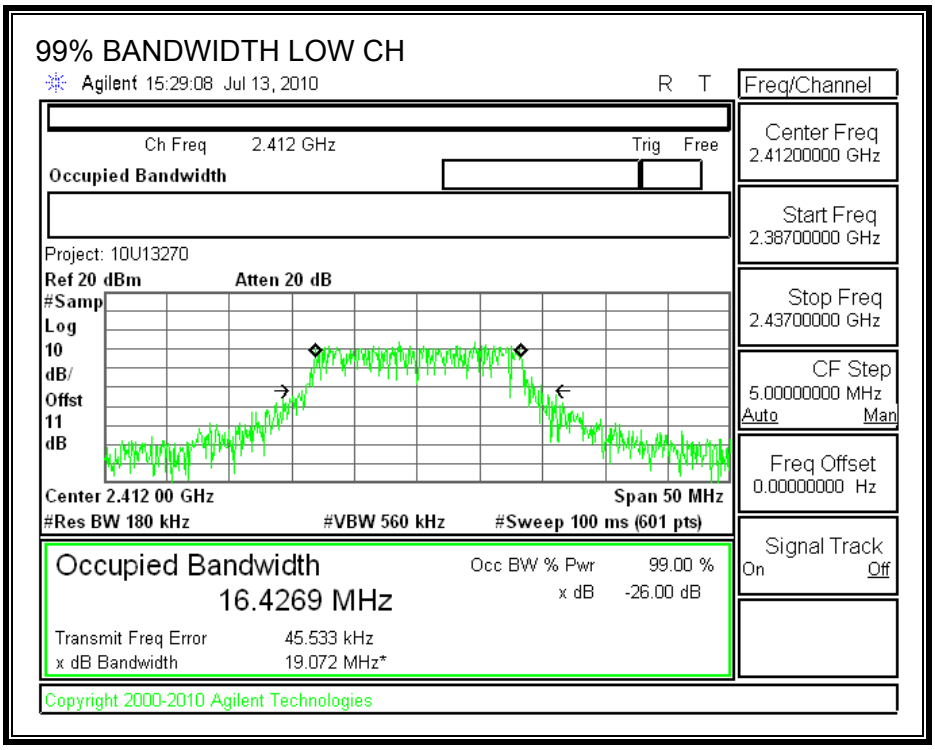
TEST PROCEDURE

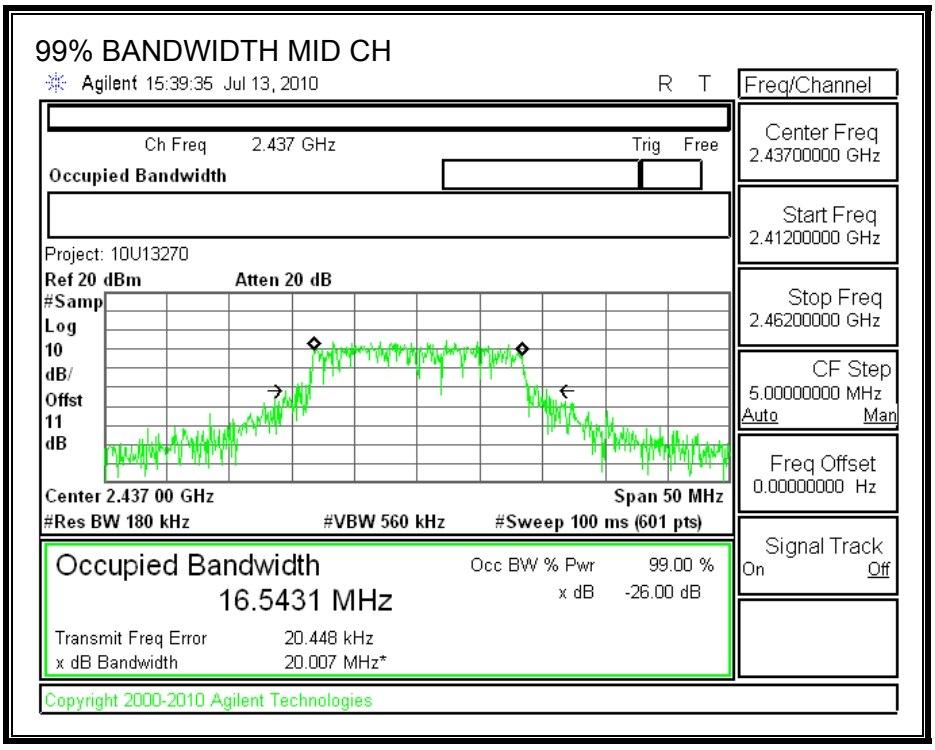
The transmitter output is connected to the spectrum analyzer. The RBW is set to 1% to 3% of the 99 % bandwidth. The VBW is set to 3 times the RBW. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth function is utilized.

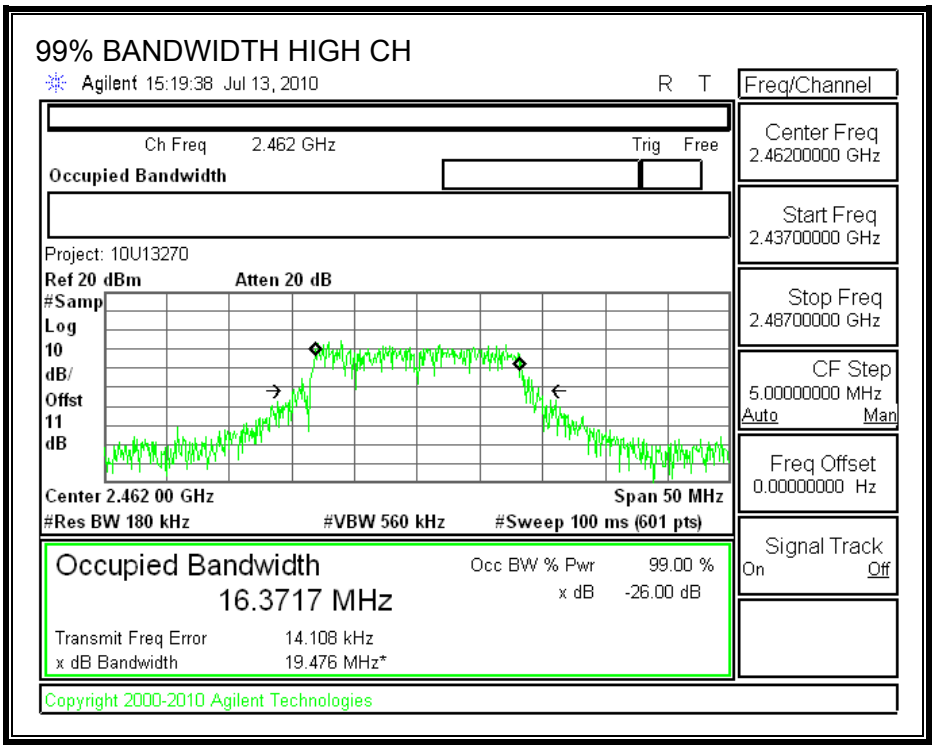
RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2412	16.427
Middle	2437	16.543
High	2462	16.372

99% BANDWIDTH







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

The transmitter output is connected to a power meter.

RESULTS

The cable assembly insertion loss of 10.3 dB (including 10 dB pad and 0.3 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	16.76
Middle	2437	17.50
High	2462	17.43

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 10.3 dB (including 10 dB pad and 0.3 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	9.80
Middle	2437	10.10
High	2462	10.10

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.

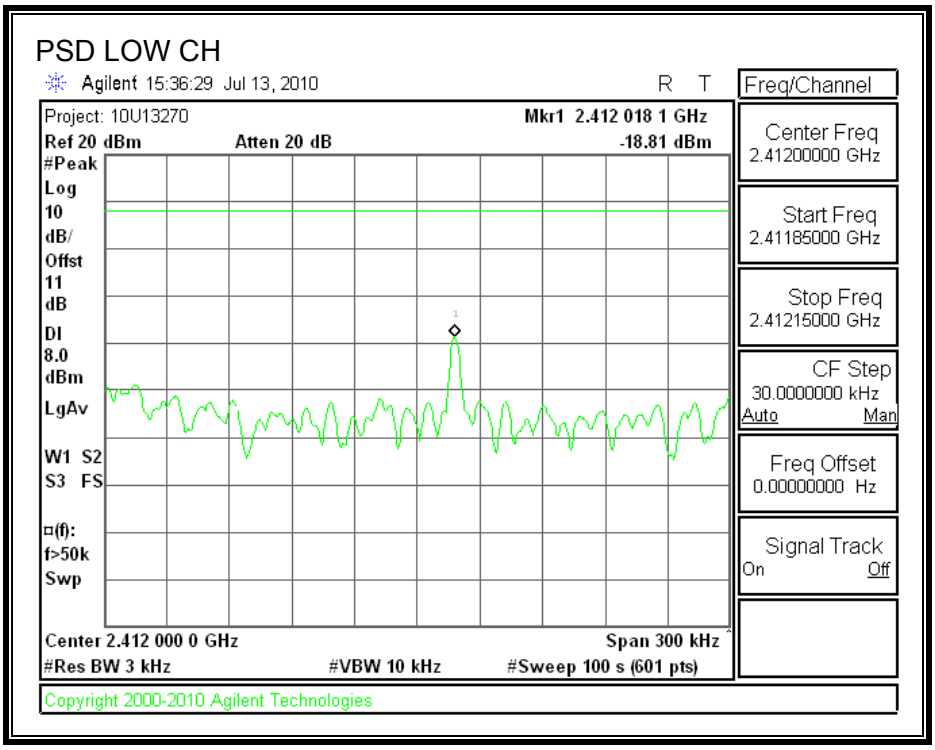
TEST PROCEDURE

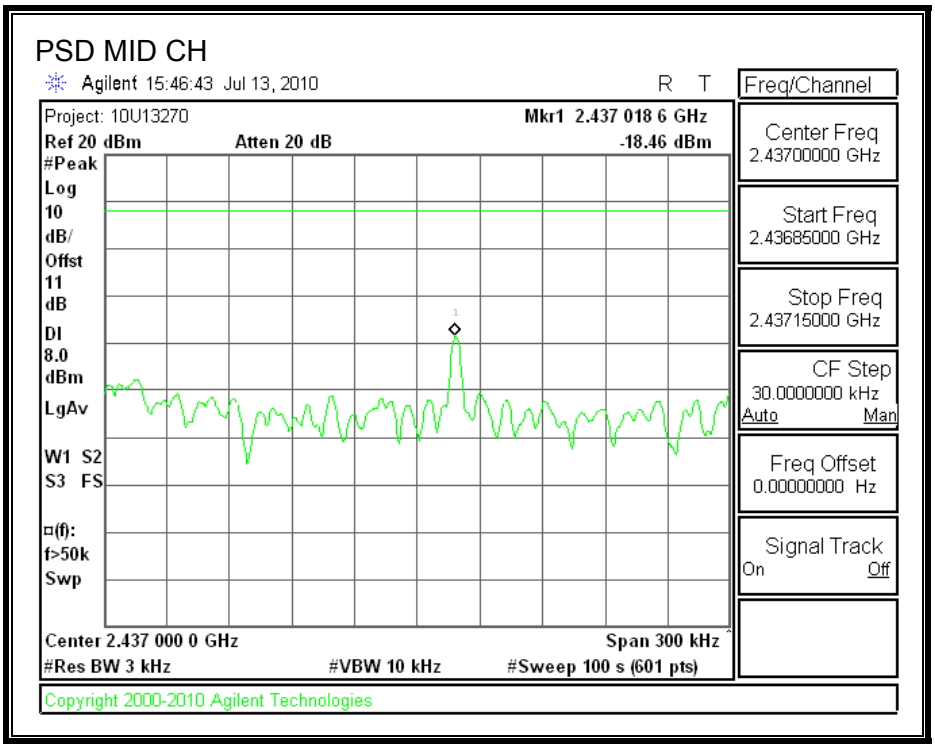
Output power was measured based on the use of a peak measurement, therefore the power spectral density was measured using PSD Option 1 in accordance with FCC document "Measurement of Digital Transmission Systems Operating under Section 15.247", March 23, 2005.

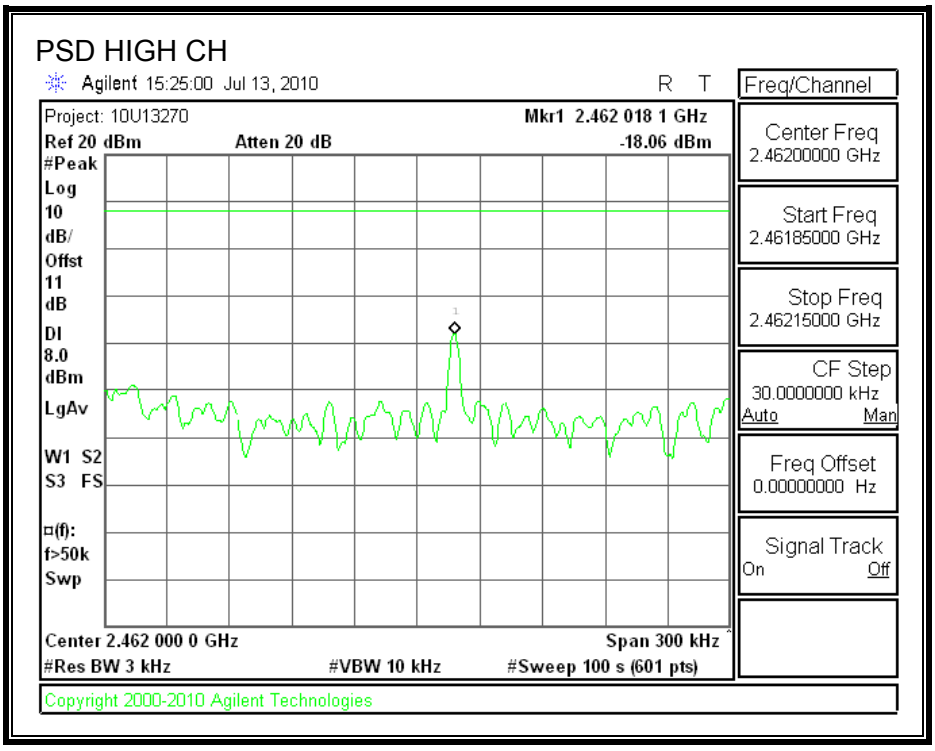
RESULTS

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Margin (dB)
Low	2412	-18.81	8	-26.81
Middle	2437	-18.46	8	-26.46
High	2462	-18.06	8	-26.06

POWER SPECTRAL DENSITY







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.

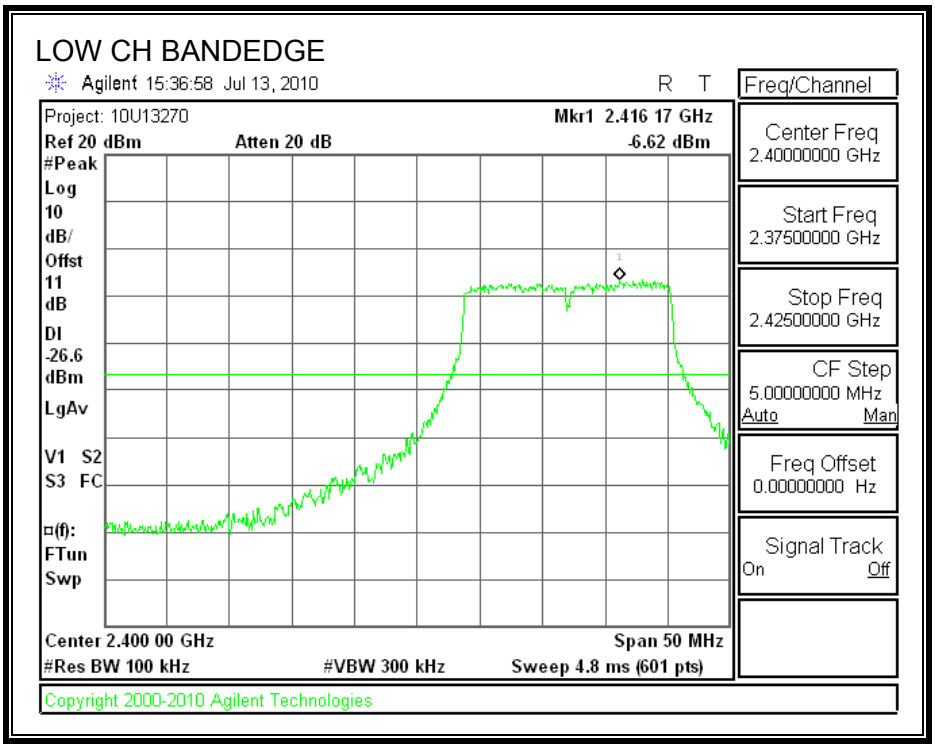
TEST PROCEDURE

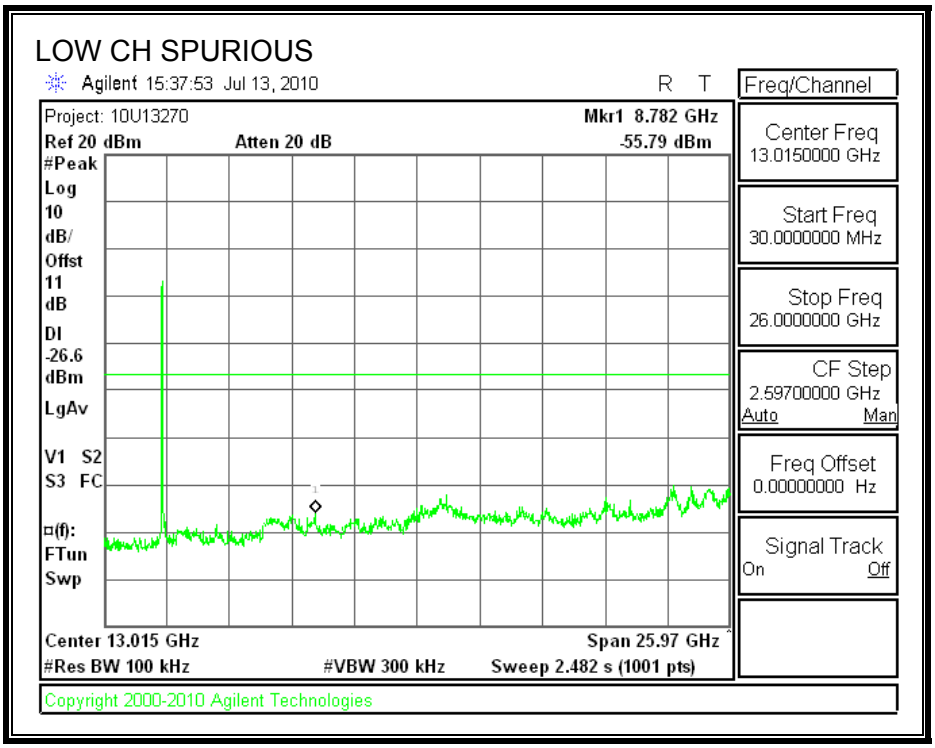
The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

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

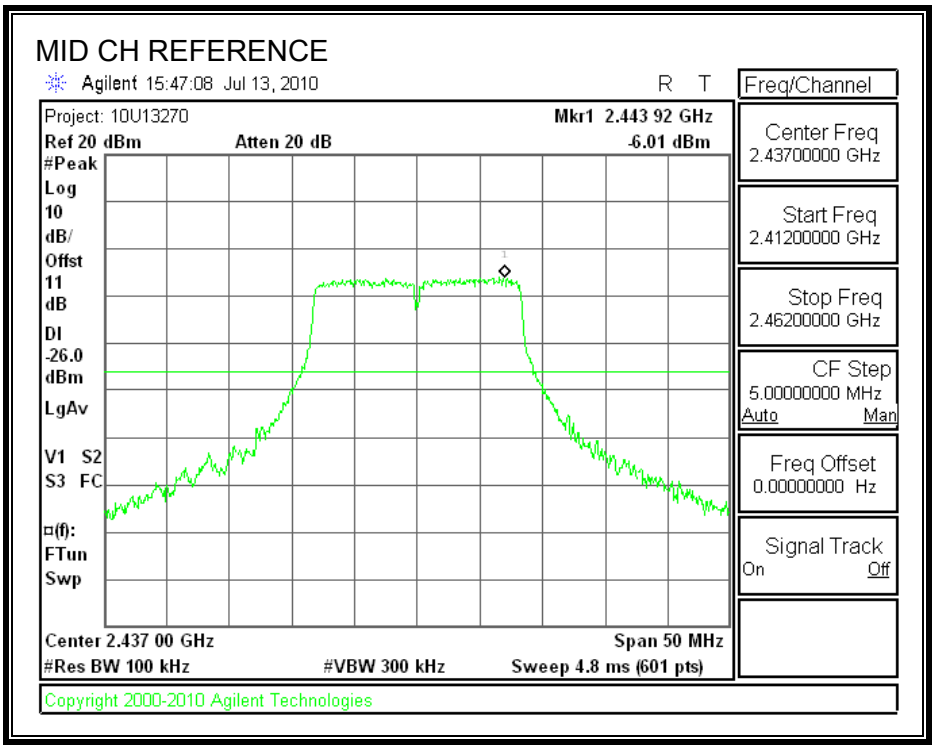
RESULTS

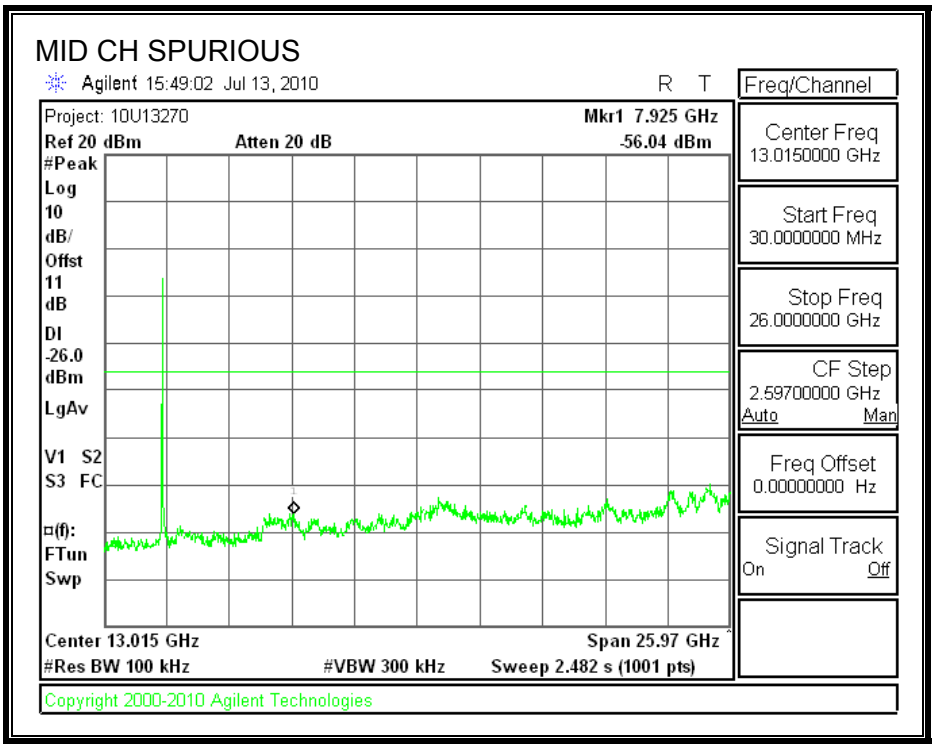
SPURIOUS EMISSIONS, LOW CHANNEL



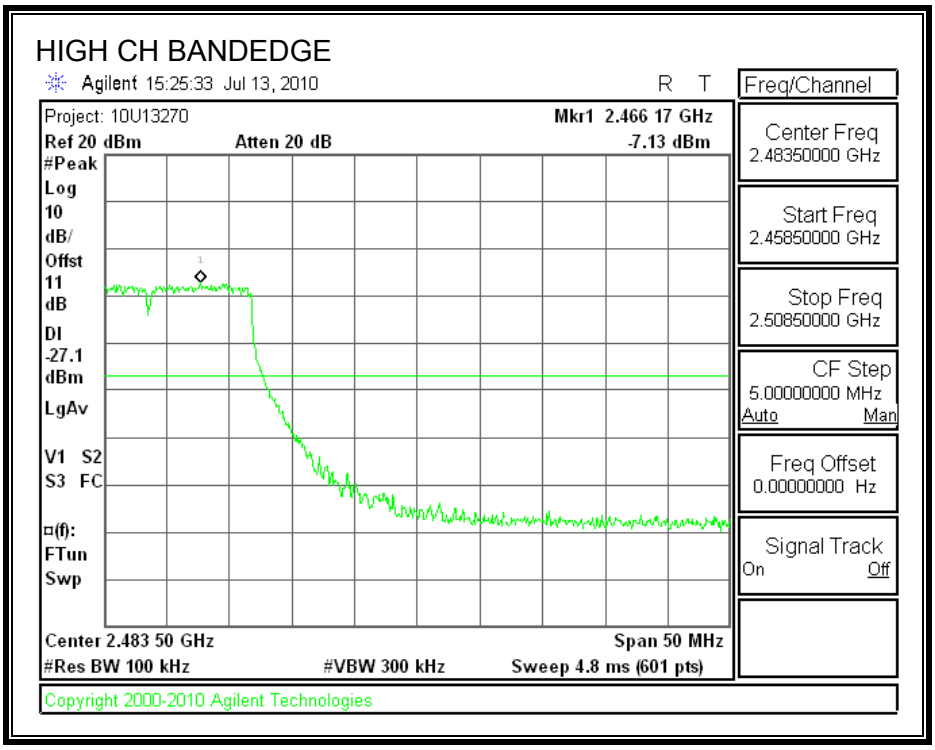


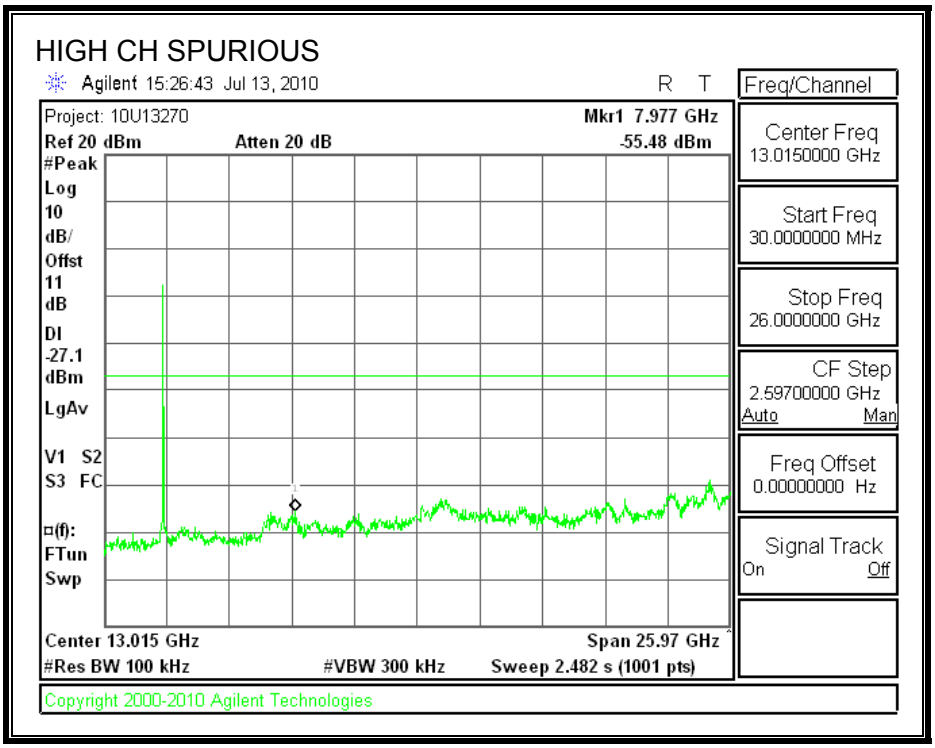
SPURIOUS EMISSIONS, MID CHANNEL





SPURIOUS EMISSIONS, HIGH CHANNEL





7.3. BLUETOOTH GFSK MODE IN THE 2.4 GHz BAND

7.3.1. AVERAGE TIME OF OCCUPANCY

LIMIT

FCC §15.247 (a) (1) (iii)

IC RSS-210 A8.1 (d)

The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The span is set to 0 Hz, centered on a single, selected hopping channel. The width of a single pulse is measured in a fast scan. The number of pulses is measured in a 3.16 second scan, to enable resolution of each occurrence.

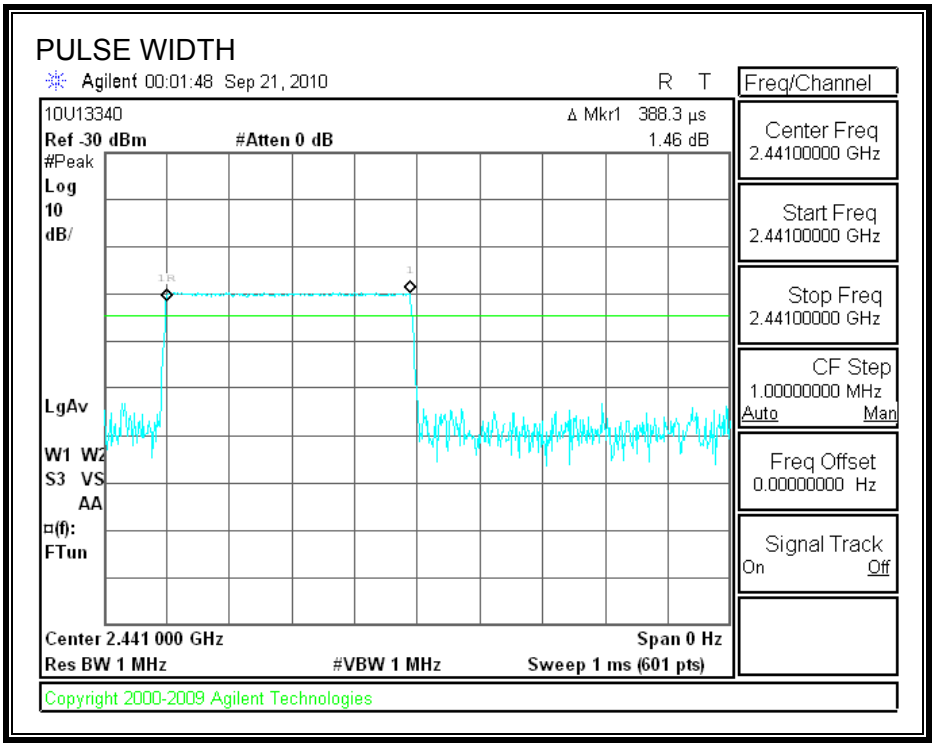
The average time of occupancy in the specified 31.6 second period (79 channels * 0.4 s) is equal to 10 * (# of pulses in 3.16 s) * pulse width.

RESULTS

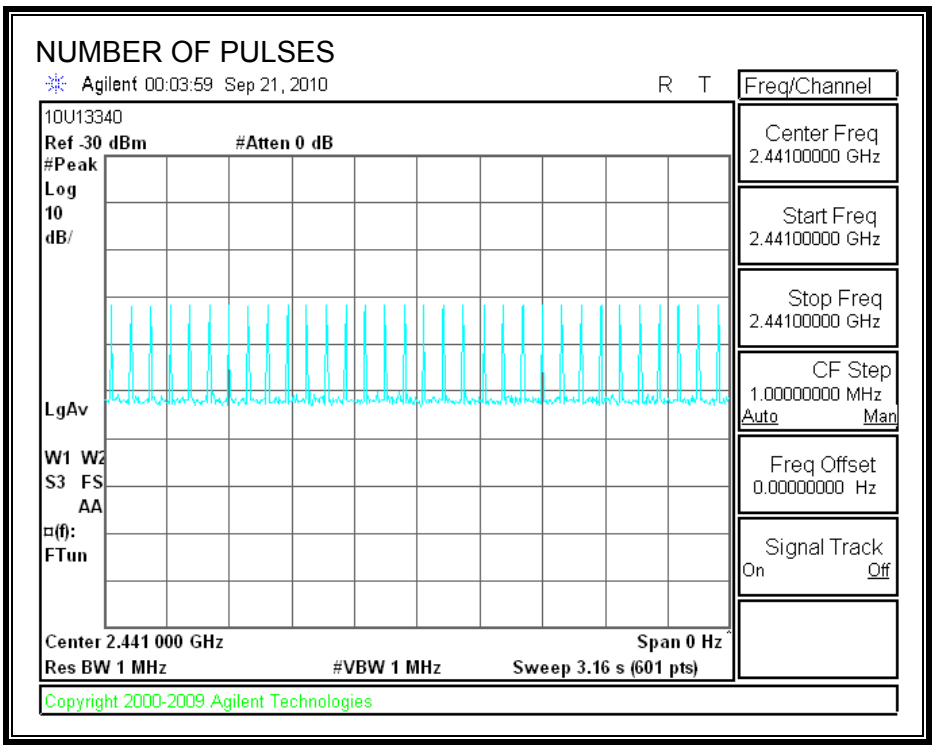
GFSK Mode

DH Packet	Pulse Width (msec)	Number of Pulses in 3.16 seconds	Average Time of (sec)	Limit (sec)	Margin (sec)
DH1	0.388	32	0.124	0.4	0.276
DH3	1.655	16	0.265	0.4	0.135
DH5	2.900	11	0.319	0.4	0.081

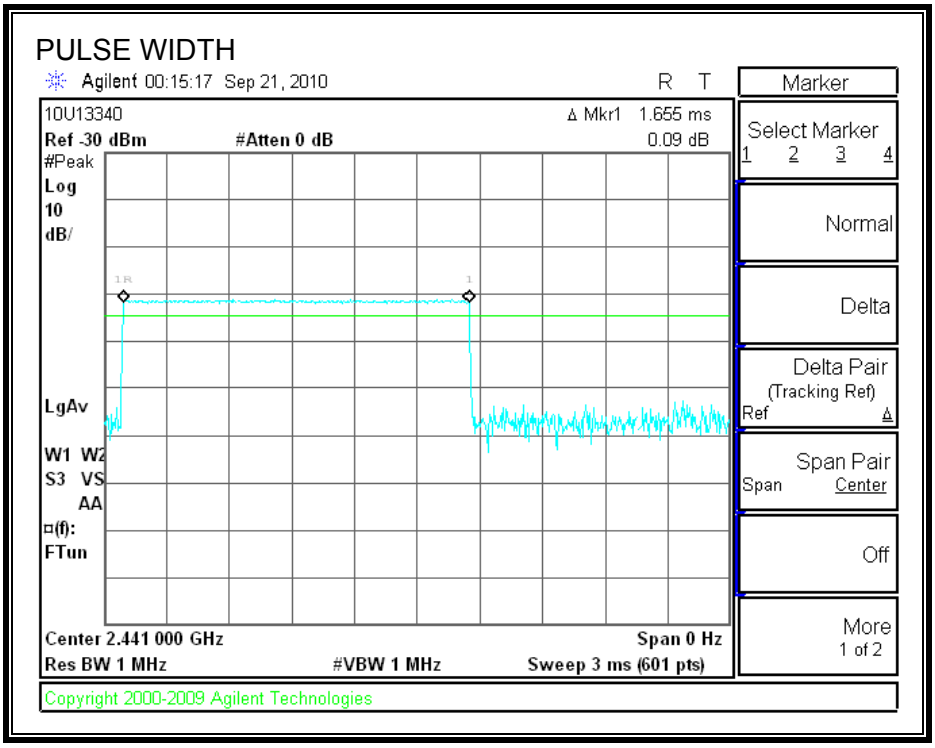
DH1 PULSE WIDTH



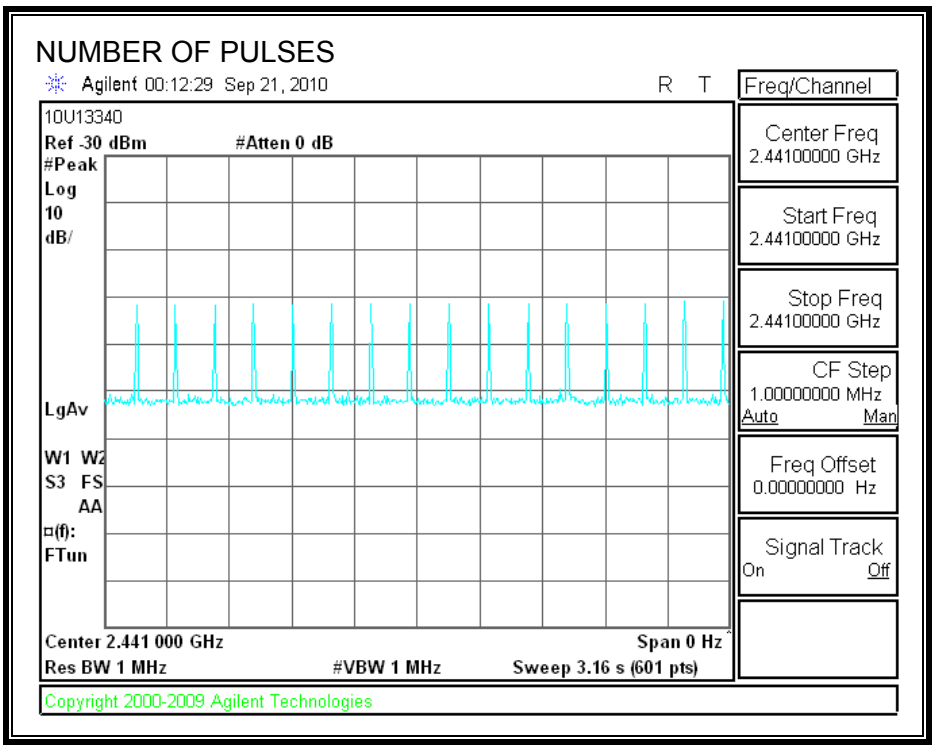
NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD



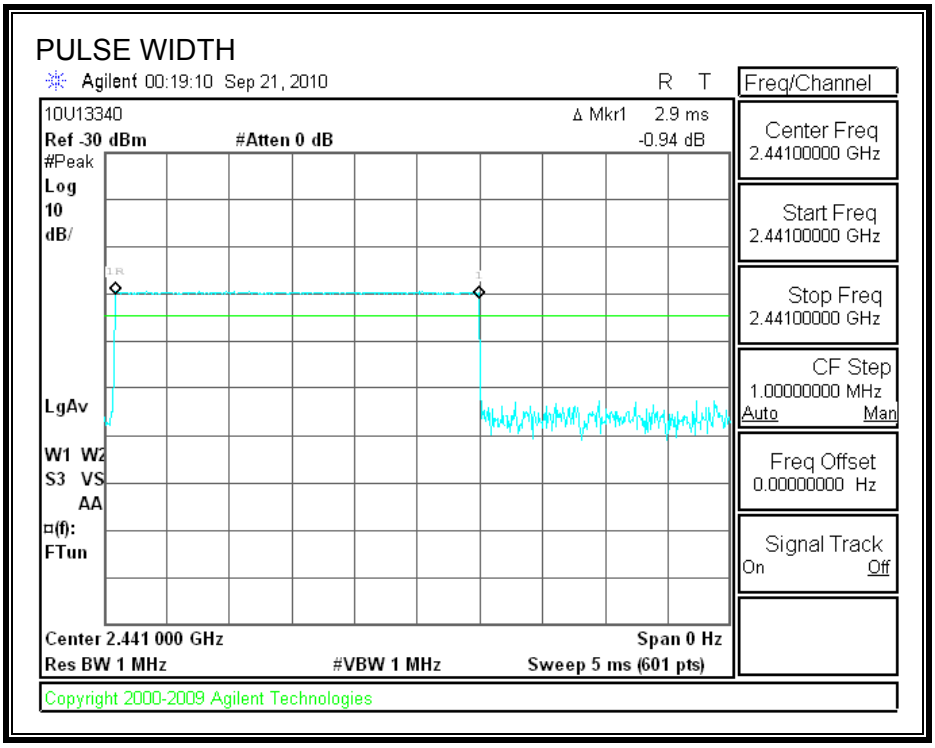
DH3 PULSE WIDTH



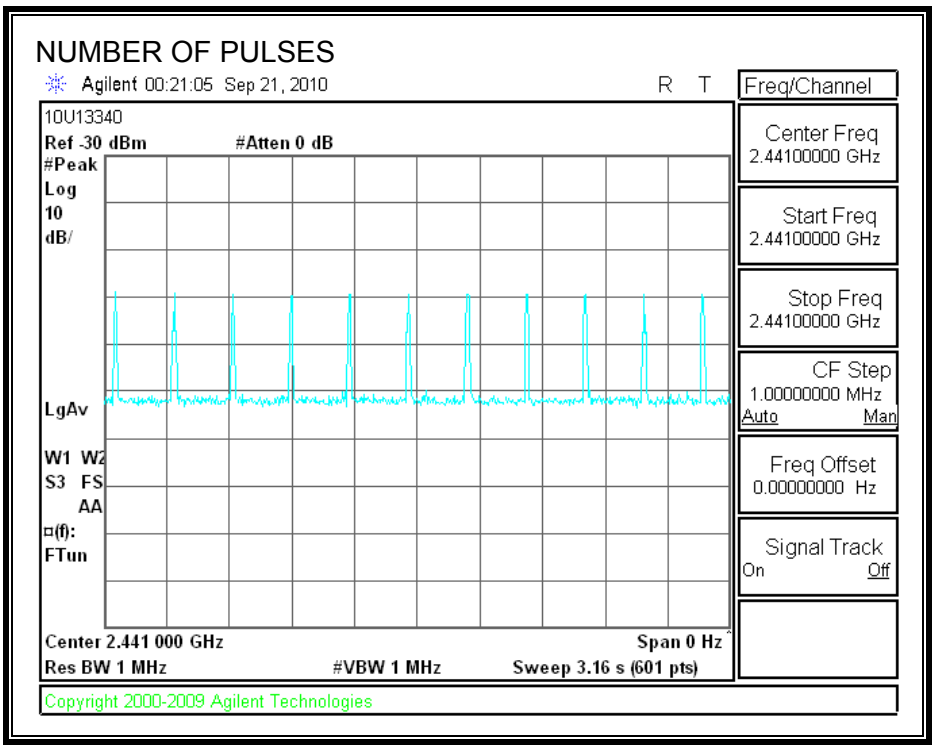
NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD



DH5 PULSE WIDTH



NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD



7.3.2. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

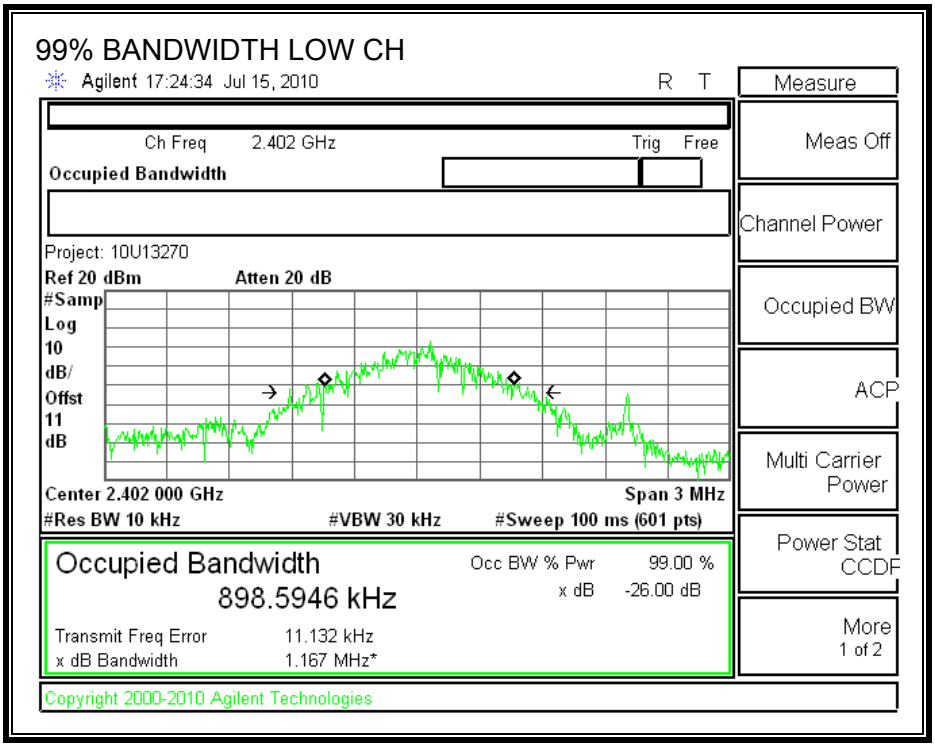
TEST PROCEDURE

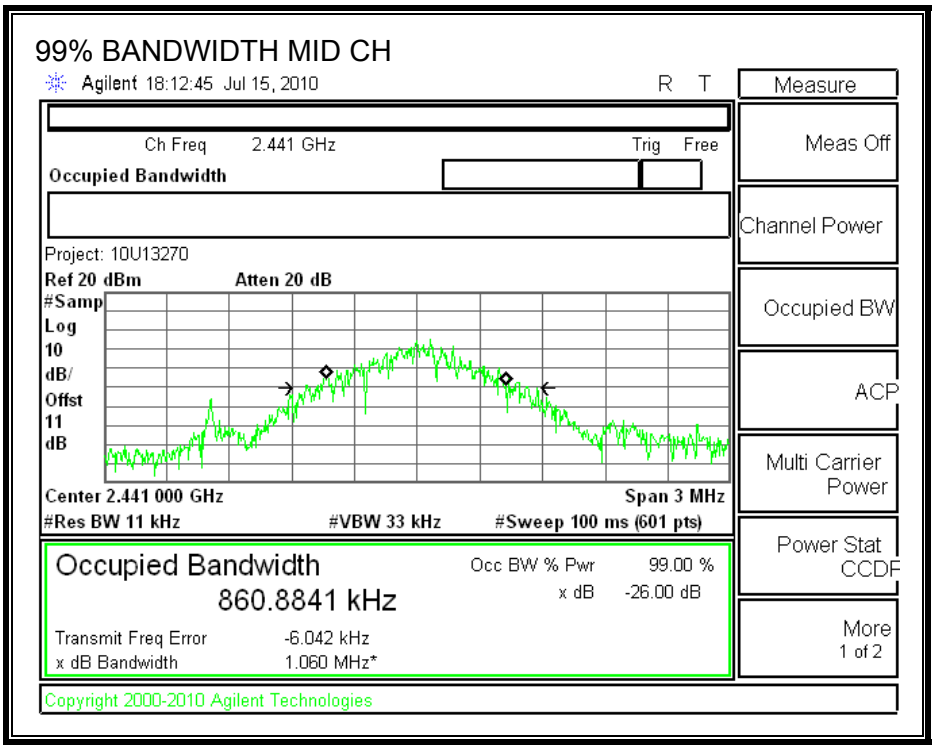
The transmitter output is connected to the spectrum analyzer. The RBW is set to 1% to 3% of the 99 % bandwidth. The VBW is set to 3 times the RBW. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth function is utilized.

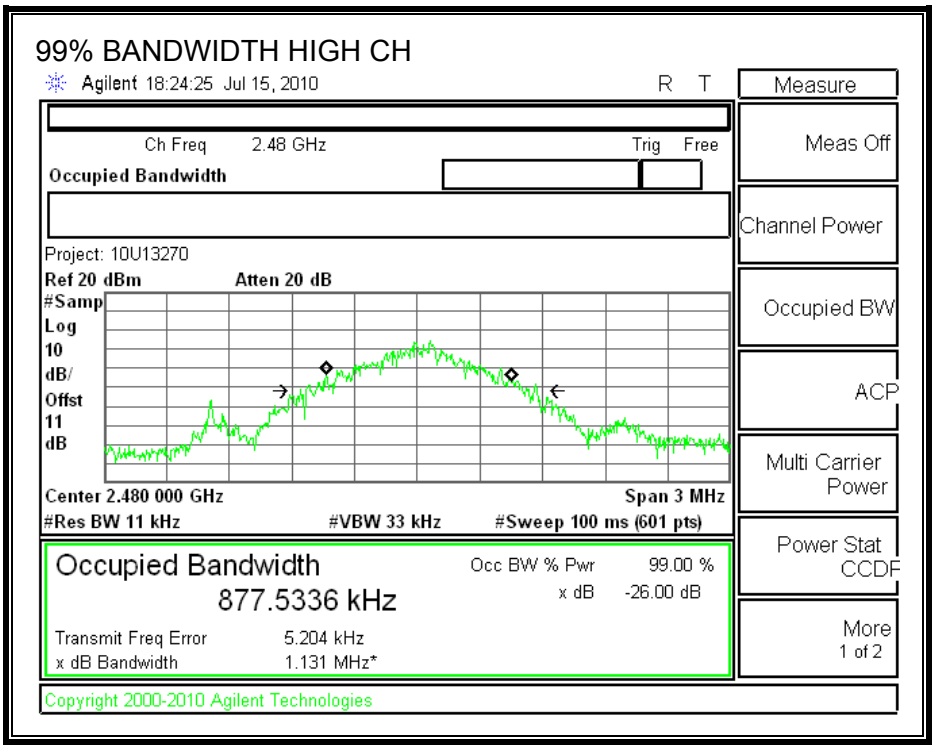
RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2402	0.899
Middle	2441	0.861
High	2480	0.878

99% BANDWIDTH







7.3.3. 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

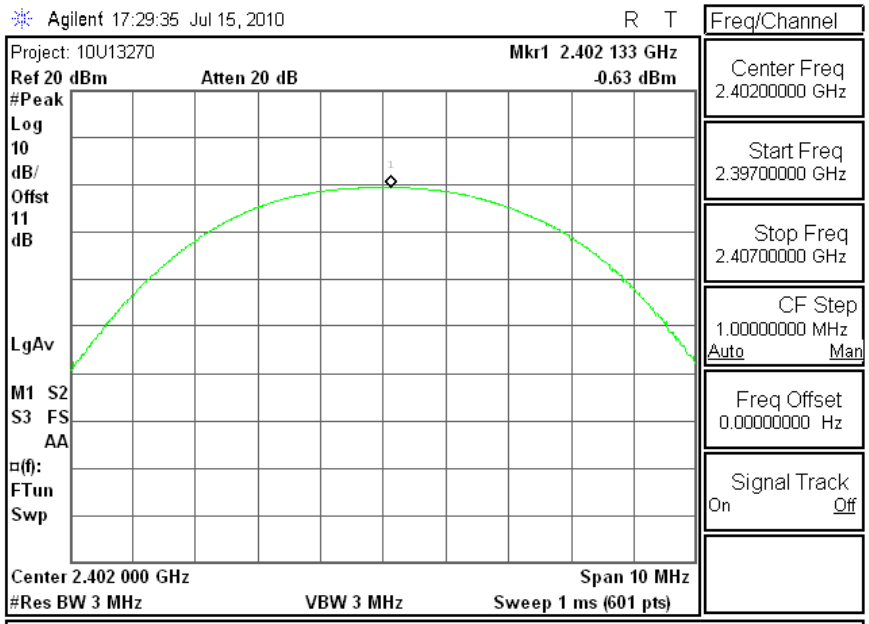
Peak power is measured using the Channel bandwidth Alternative peak output power procedure specified in "TCB Training for Devices covered under Scopes A1 - A4" by Joe Dichoso, May 2003.

RESULTS

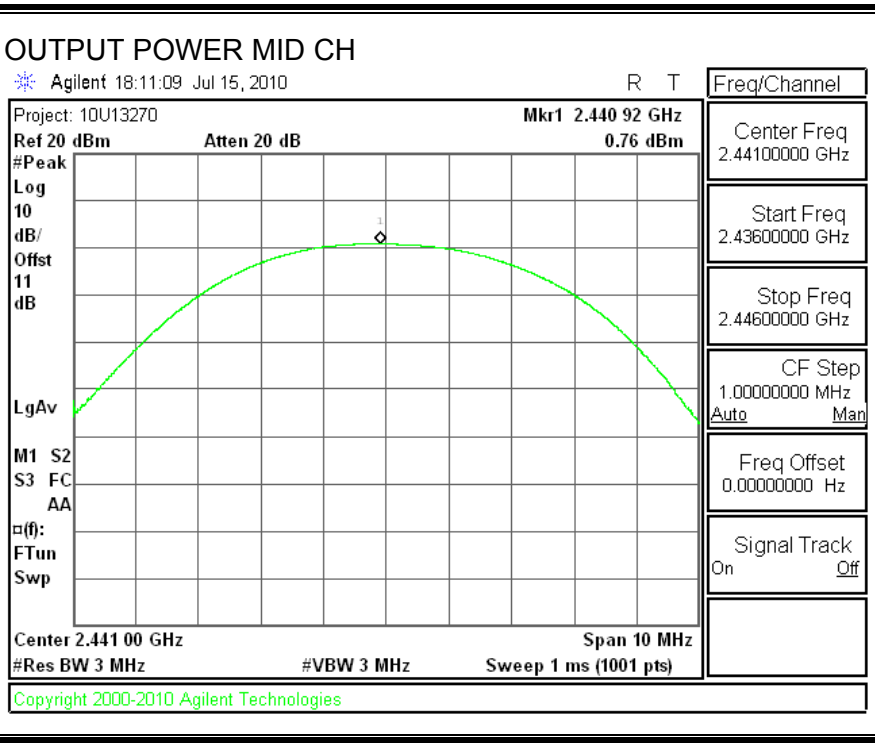
Channel	Frequency (MHz)	Spectrum Analyzer Reading (dBm)	Limit (dBm)	Margin (dB)
Low	2402	-0.63	30	-30.63
Middle	2441	0.76	30	-29.24
High	2480	0.62	30	-29.38

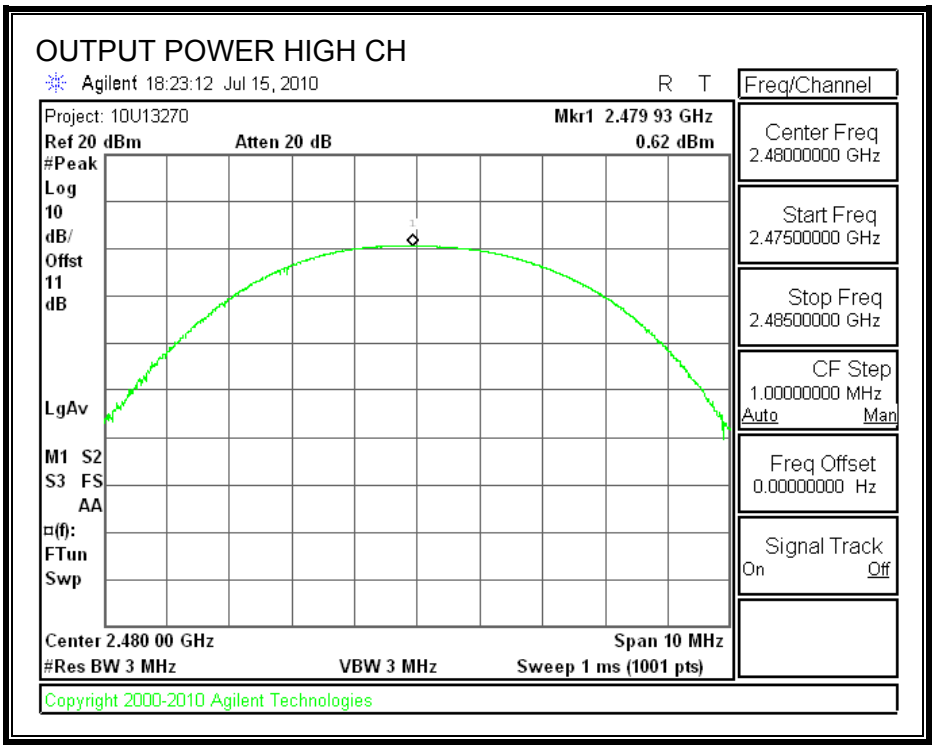
OUTPUT POWER

OUTPUT POWER LOW CH



OUTPUT POWER MID CH





7.3.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter with gate control.

RESULTS

The cable assembly insertion loss of 10.3 dB (including 10 dB pad and 0.3 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

Channel	Frequency (MHz)	Power (dBm)
Low	2402	-0.71
Middle	2441	0.04
High	2480	0.04

7.3.5. 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.

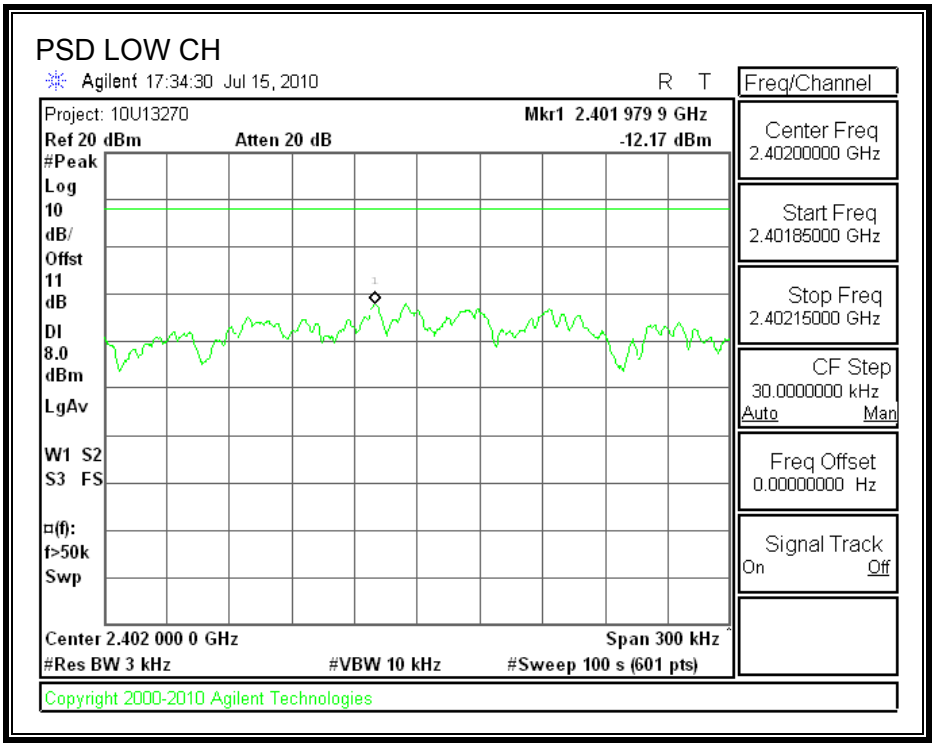
TEST PROCEDURE

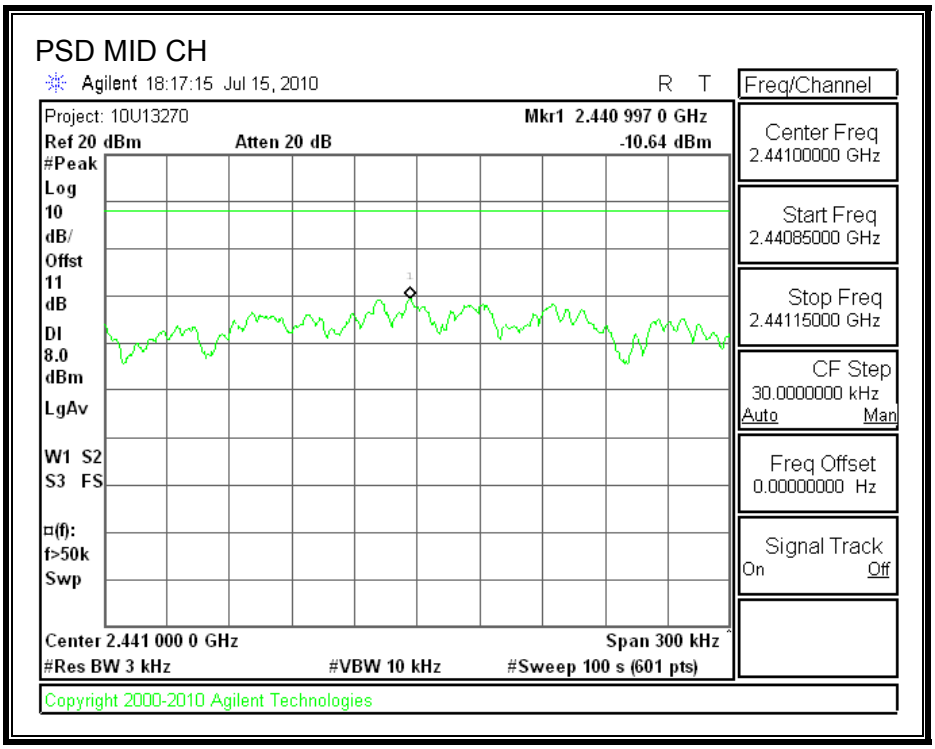
Output power was measured based on the use of a peak measurement, therefore the power spectral density was measured using PSD Option 1 in accordance with FCC document "Measurement of Digital Transmission Systems Operating under Section 15.247", March 23, 2005.

RESULTS

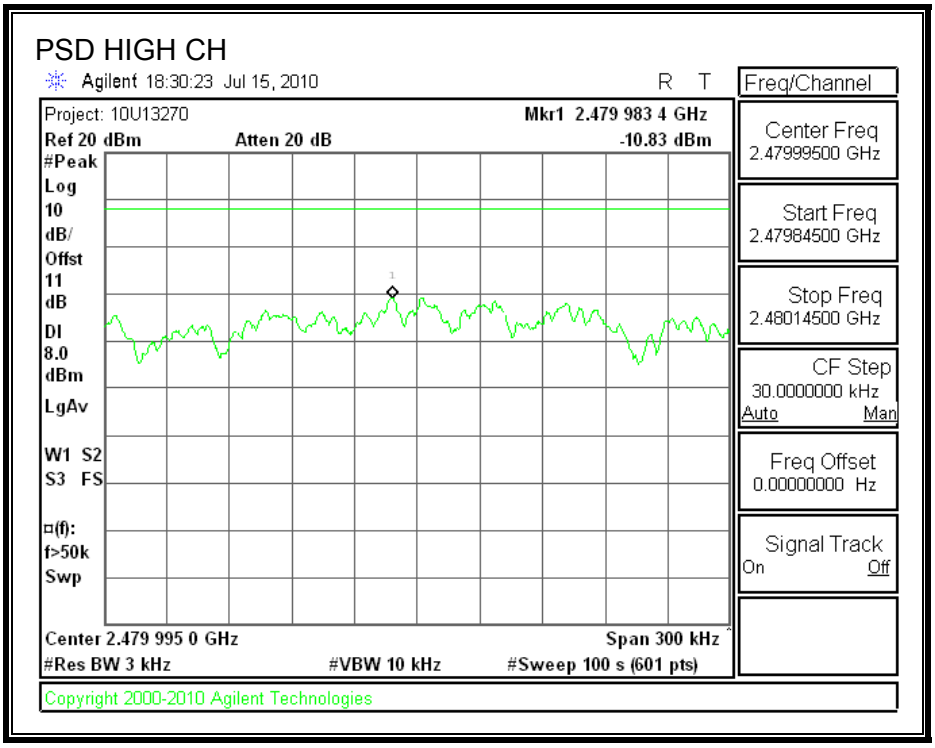
Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Margin (dB)
Low	2402	-12.17	8	-20.17
Middle	2441	-10.64	8	-18.64
High	2480	-10.83	8	-18.83

POWER SPECTRAL DENSITY





PSD HIGH CH



7.3.6. 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.

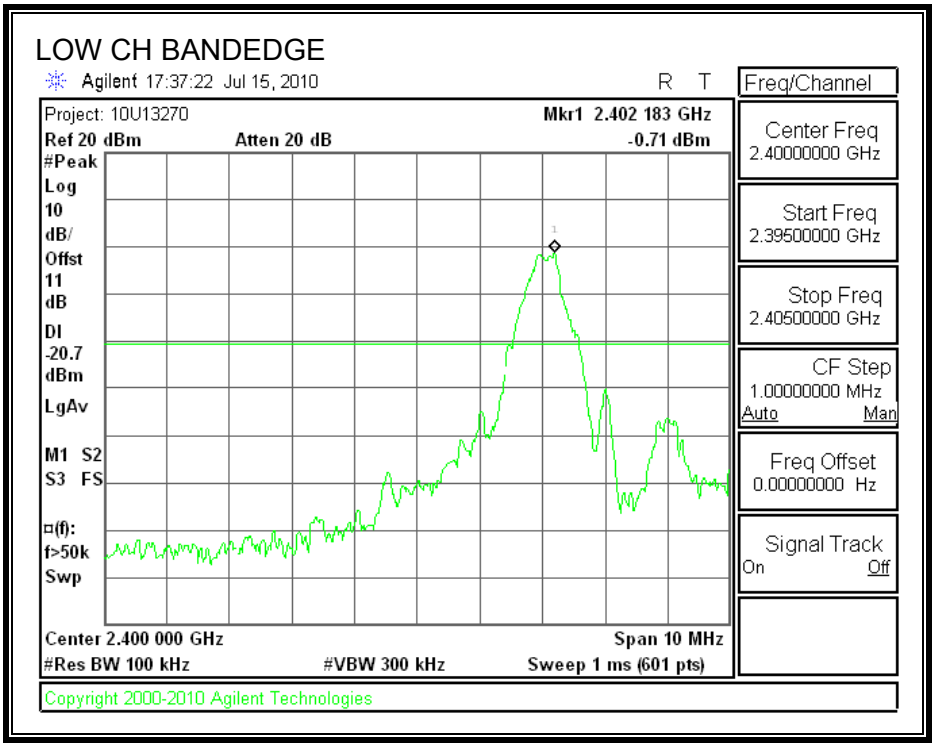
TEST PROCEDURE

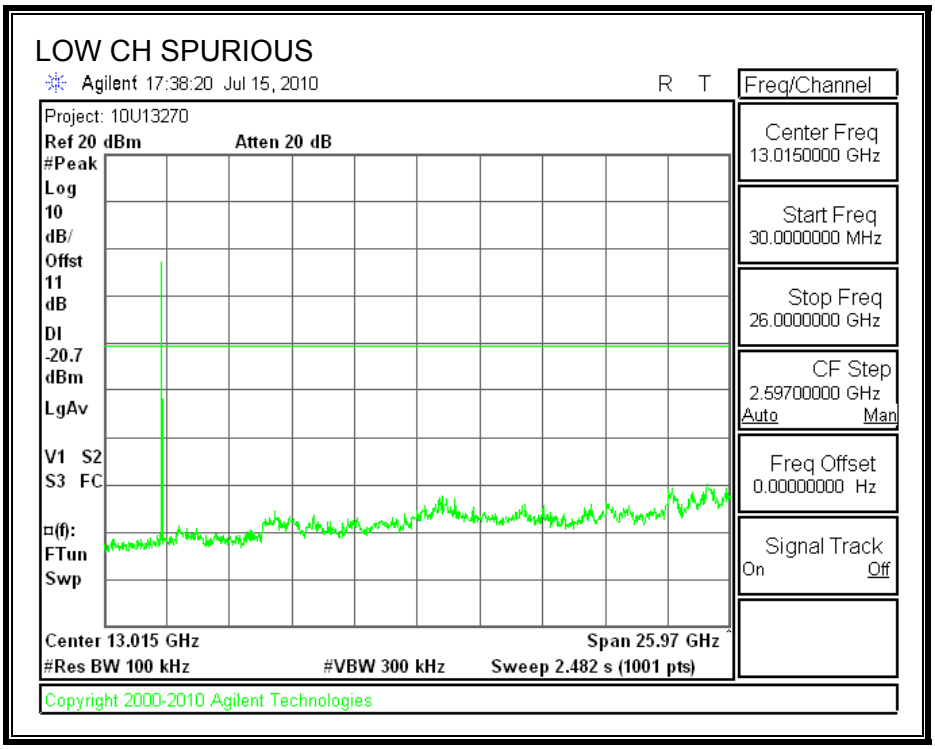
The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

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

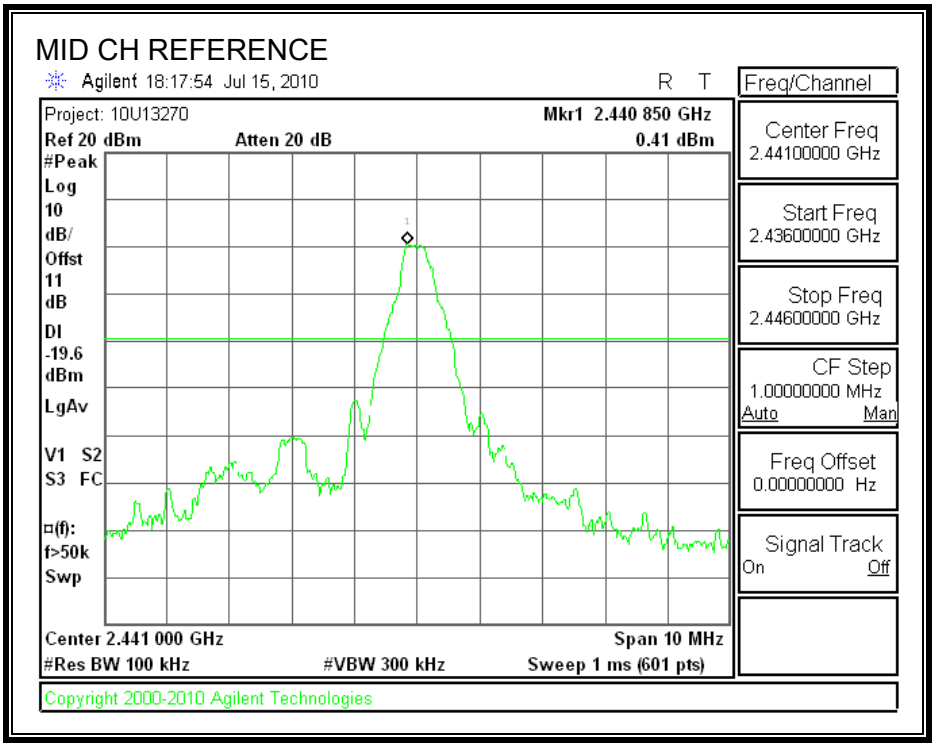
RESULTS

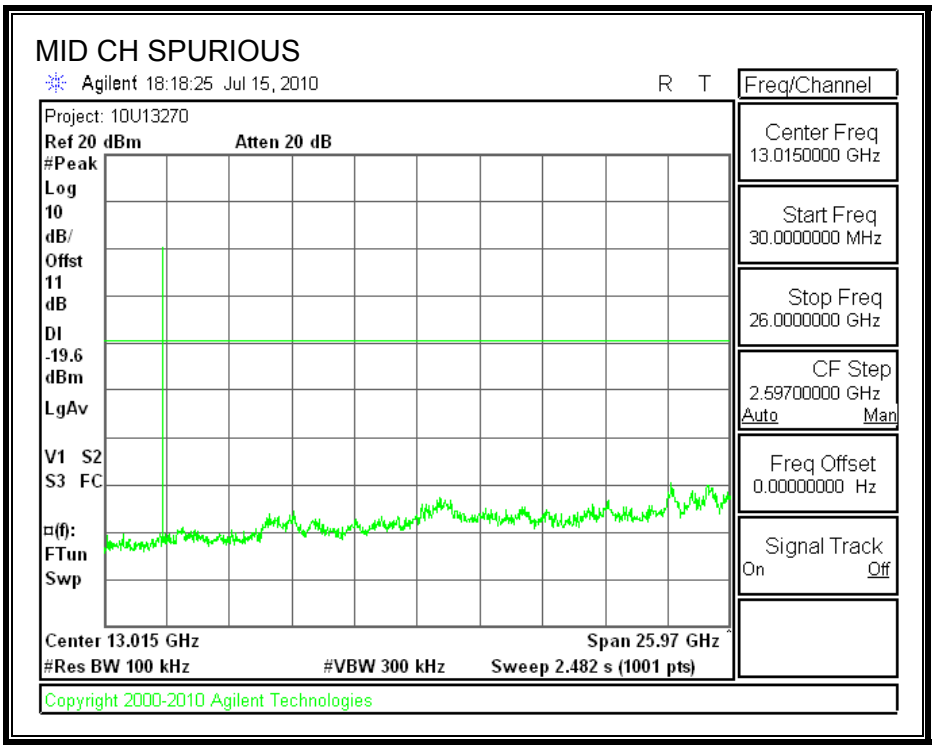
SPURIOUS EMISSIONS, LOW CHANNEL



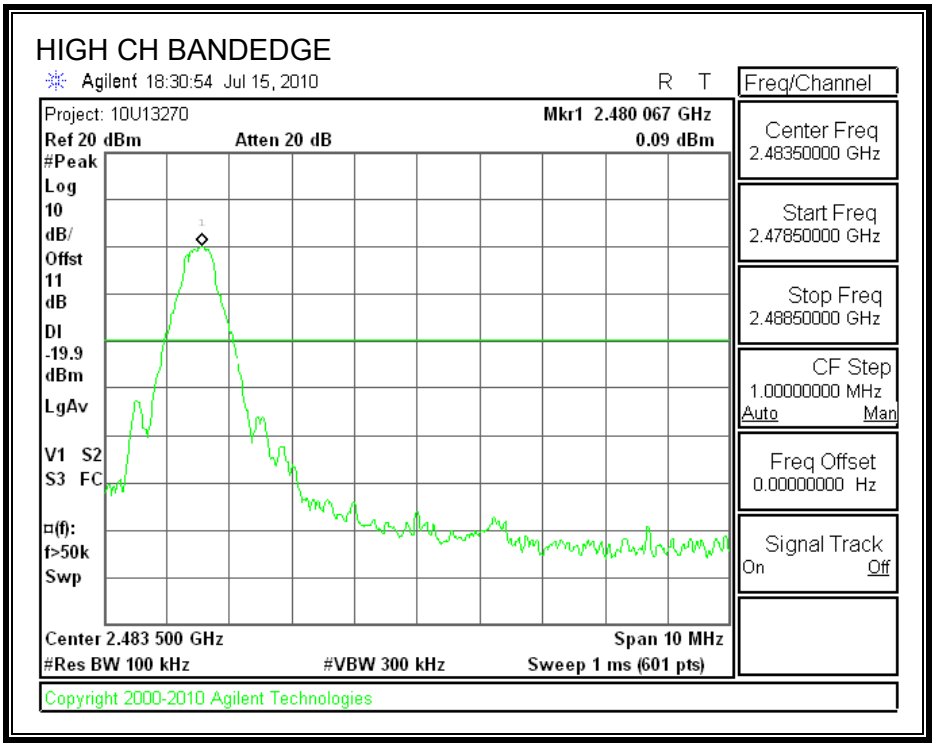


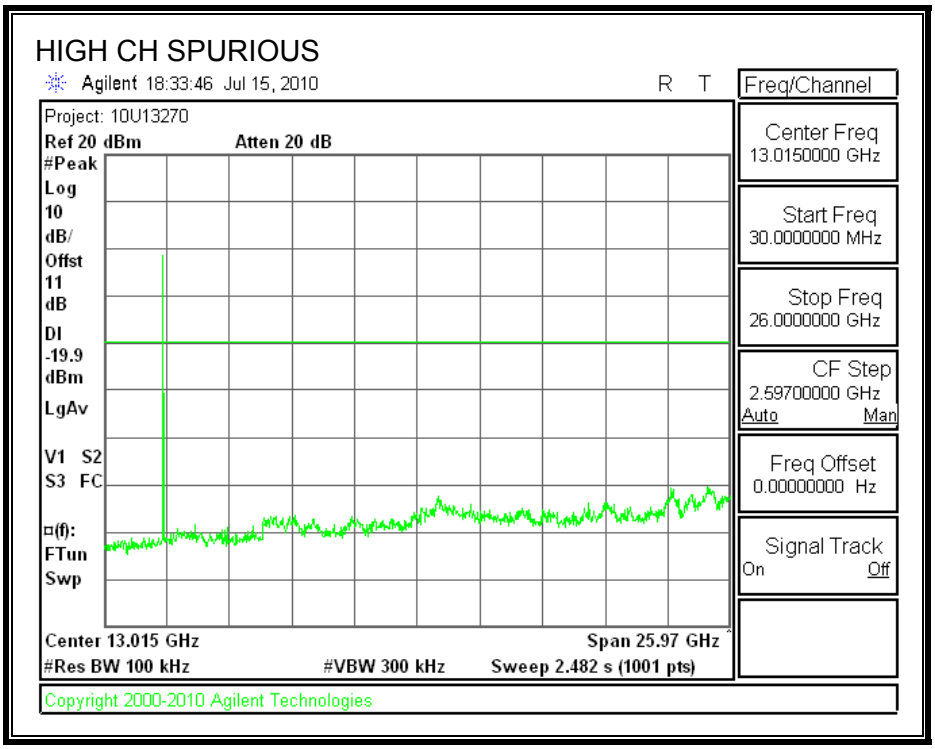
SPURIOUS EMISSIONS, MID CHANNEL





SPURIOUS EMISSIONS, HIGH CHANNEL





7.4. BLUETOOTH 8PSK MODE IN THE 2.4 GHz BAND

7.4.1. AVERAGE TIME OF OCCUPANCY

LIMIT

FCC §15.247 (a) (1) (iii)

IC RSS-210 A8.1 (d)

The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The span is set to 0 Hz, centered on a single, selected hopping channel. The width of a single pulse is measured in a fast scan. The number of pulses is measured in a 3.16 second scan, to enable resolution of each occurrence.

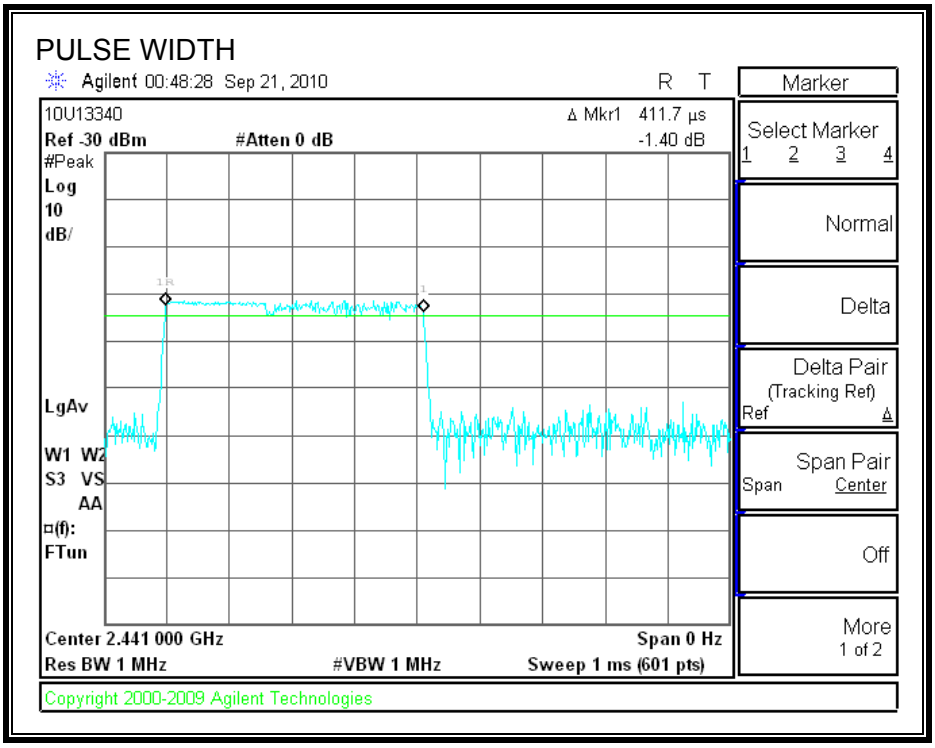
The average time of occupancy in the specified 31.6 second period (79 channels * 0.4 s) is equal to 10 * (# of pulses in 3.16 s) * pulse width.

RESULTS

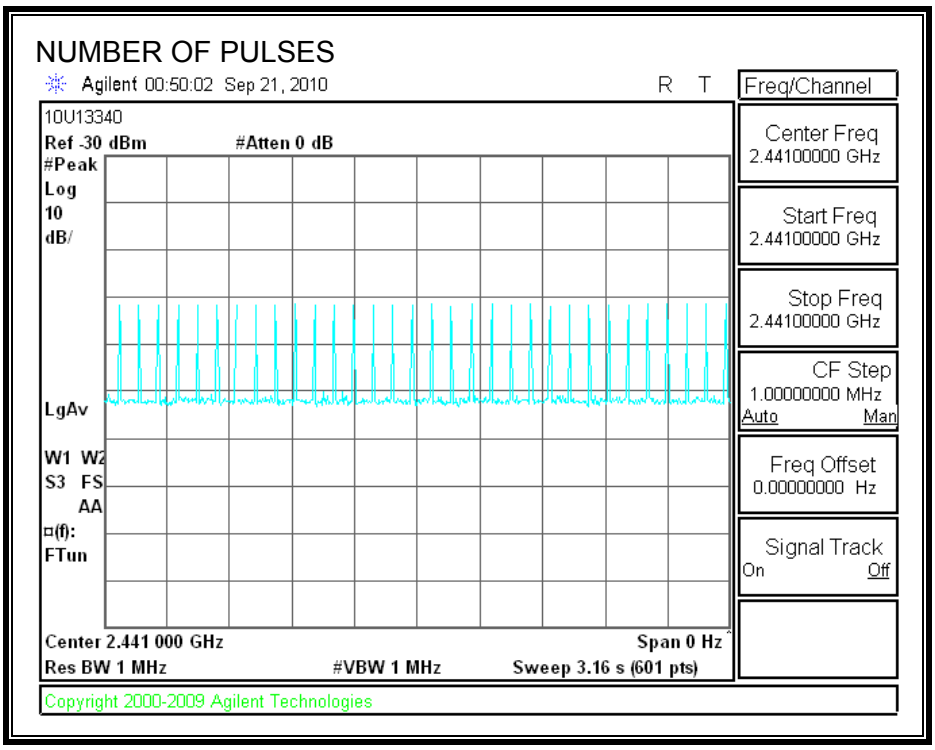
8PSK

DH Packet	Pulse Width (msec)	Number of Pulses in 3.16 seconds	Average Time of (sec)	Limit (sec)	Margin (sec)
DH1	0.411	32	0.132	0.4	0.268
DH3	1.660	16	0.266	0.4	0.134
DH5	2.908	11	0.320	0.4	0.080

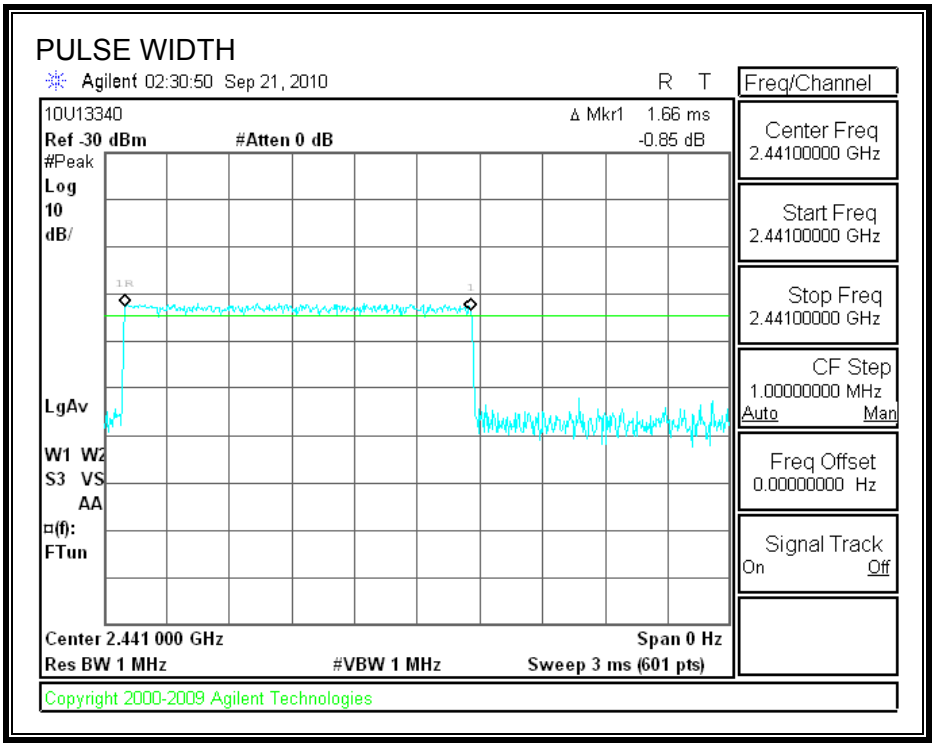
DH1 PULSE WIDTH



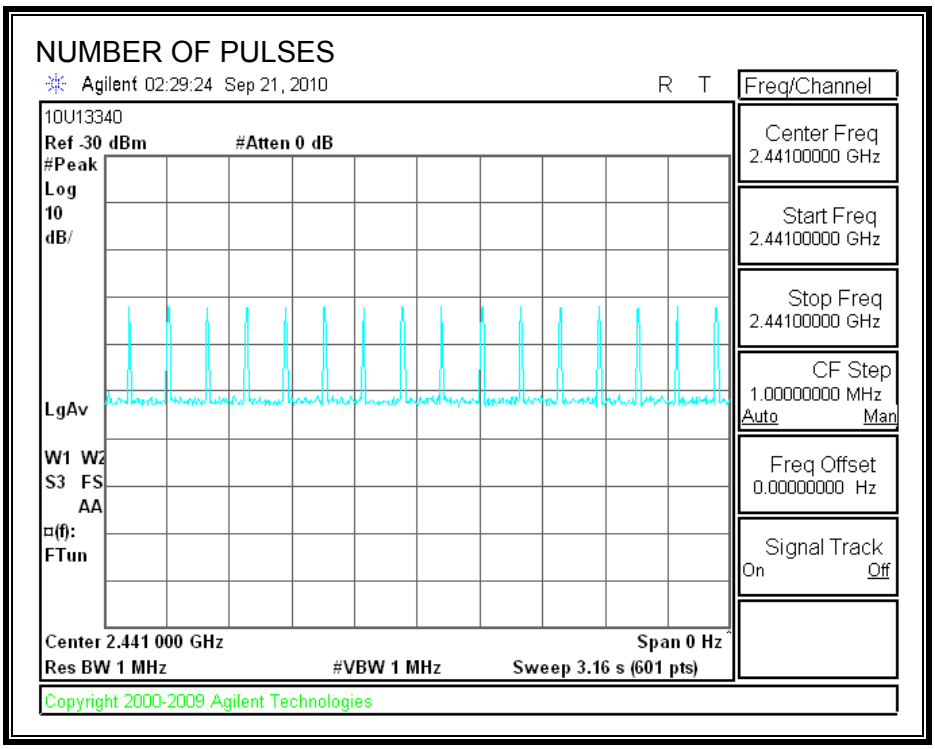
NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD



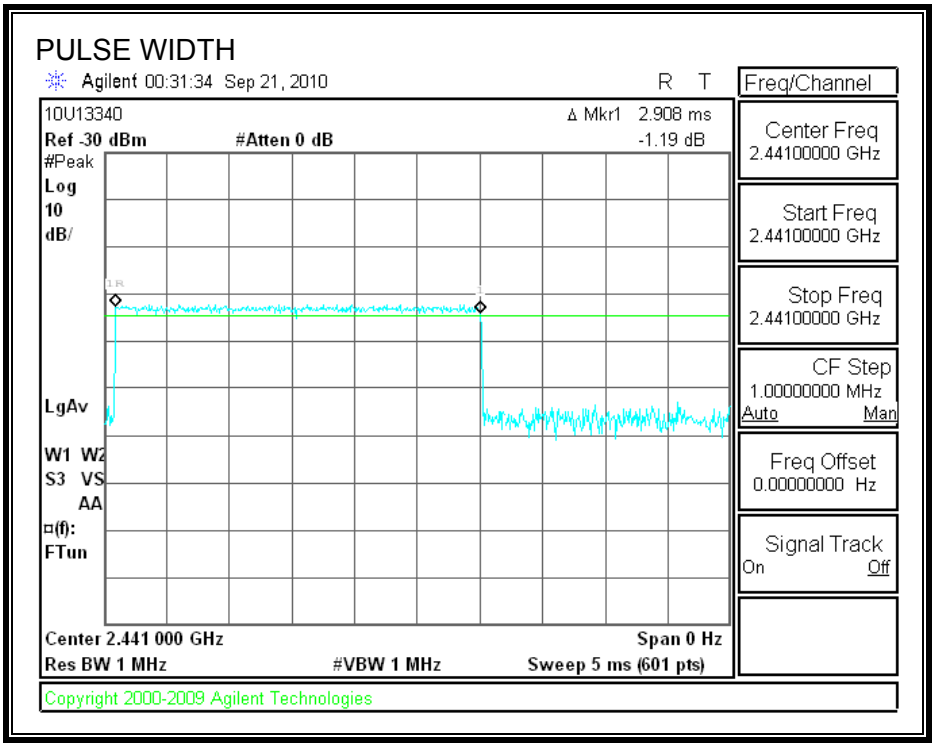
DH3 PULSE WIDTH



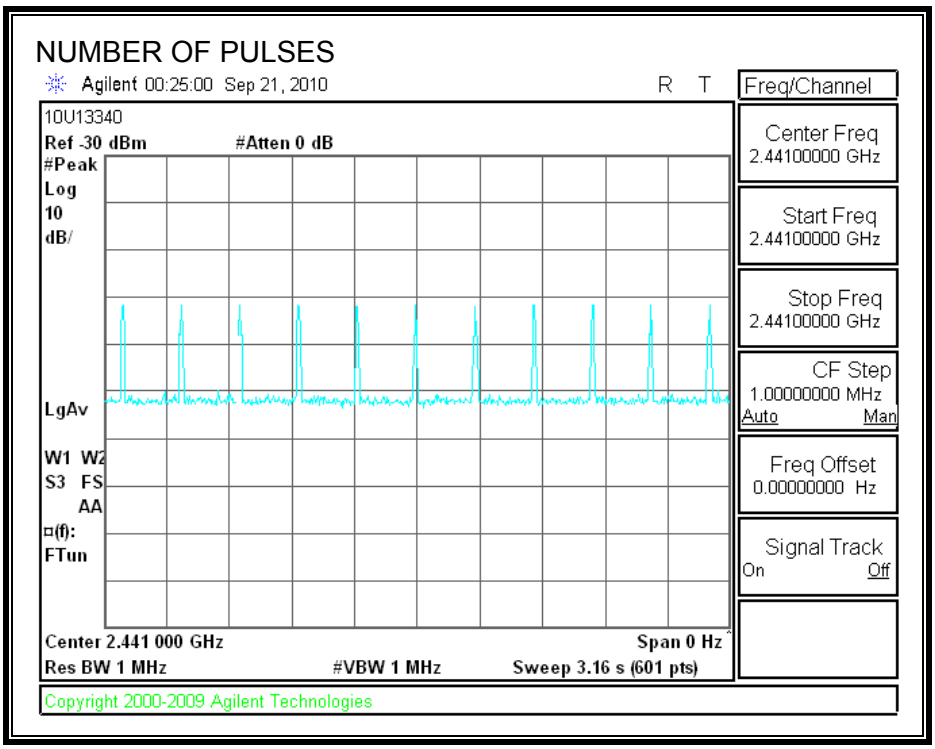
NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD



DH5 PULSE WIDTH



NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD



7.4.2. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

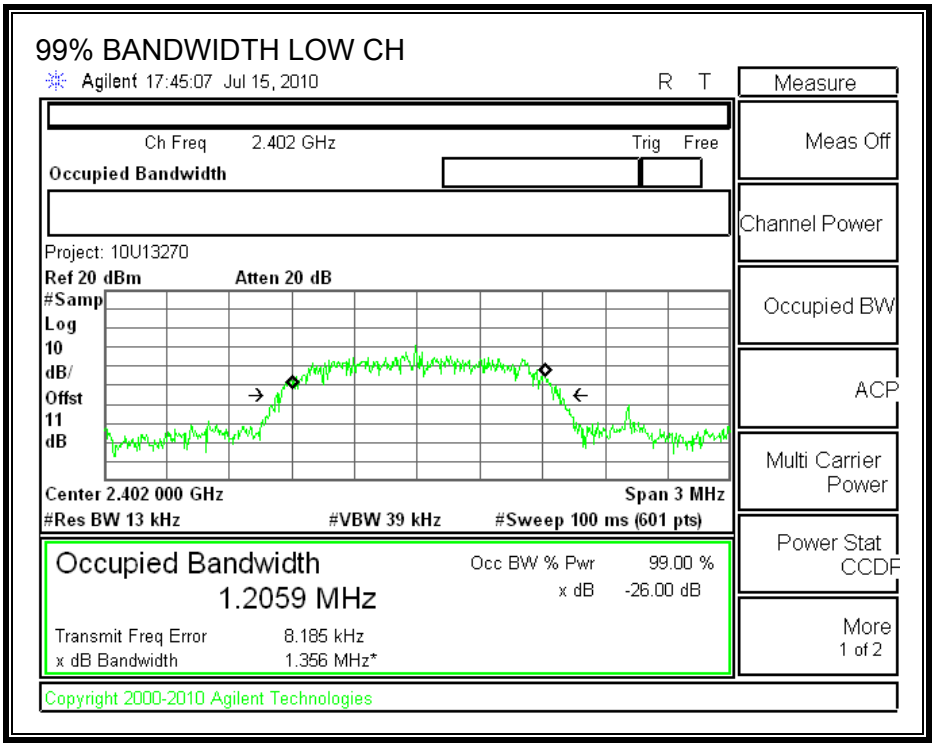
TEST PROCEDURE

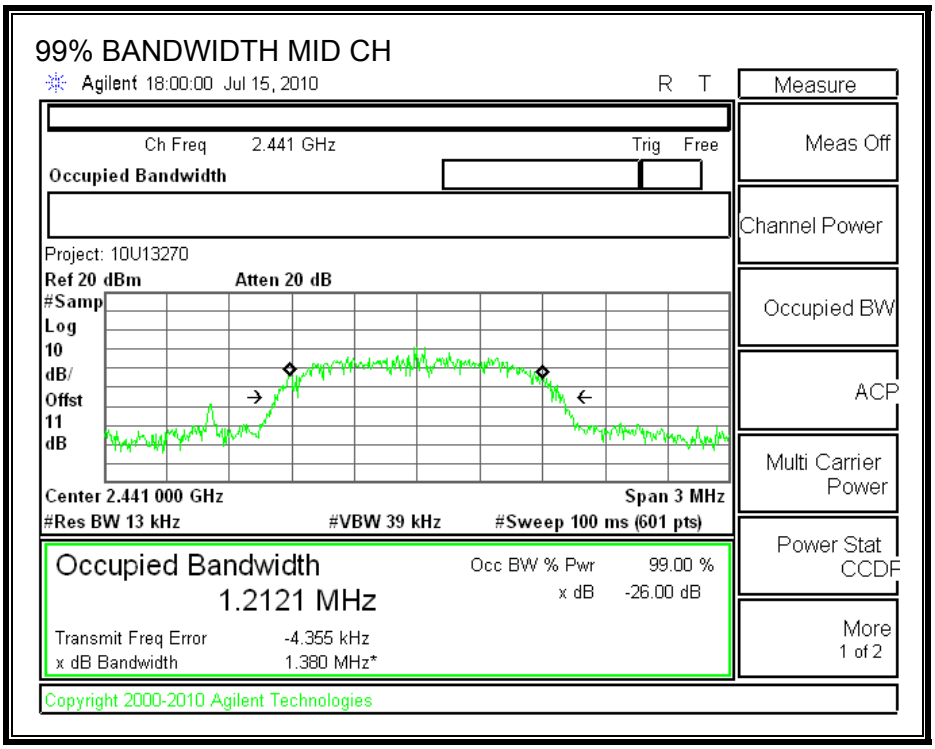
The transmitter output is connected to the spectrum analyzer. The RBW is set to 1% to 3% of the 99 % bandwidth. The VBW is set to 3 times the RBW. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth function is utilized.

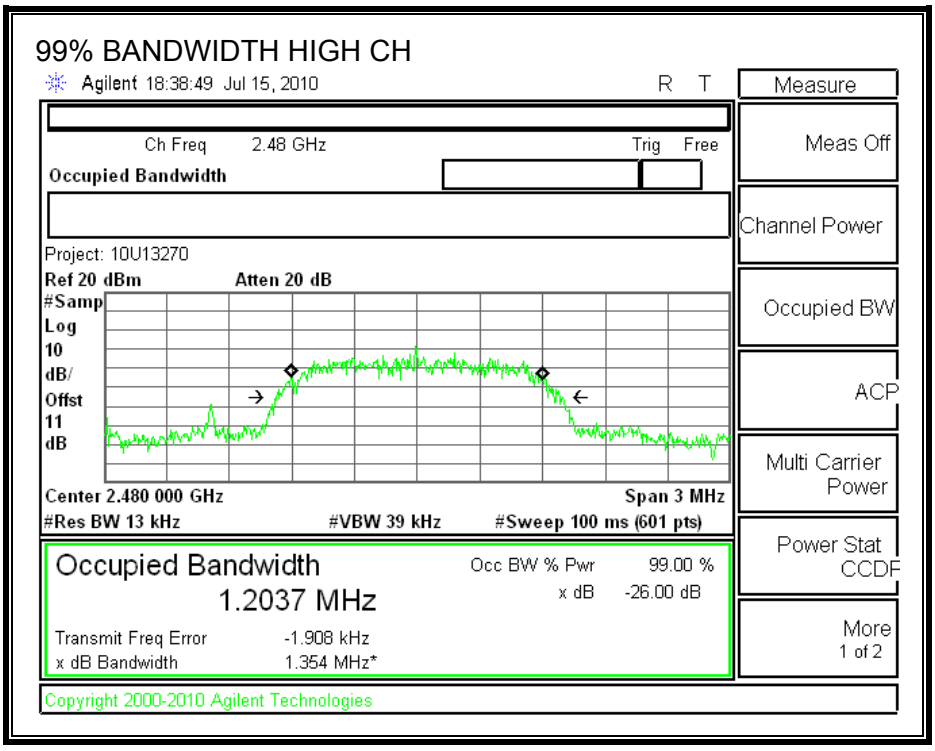
RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2402	1.206
Middle	2441	1.212
High	2480	1.204

99% BANDWIDTH







7.4.3. 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.

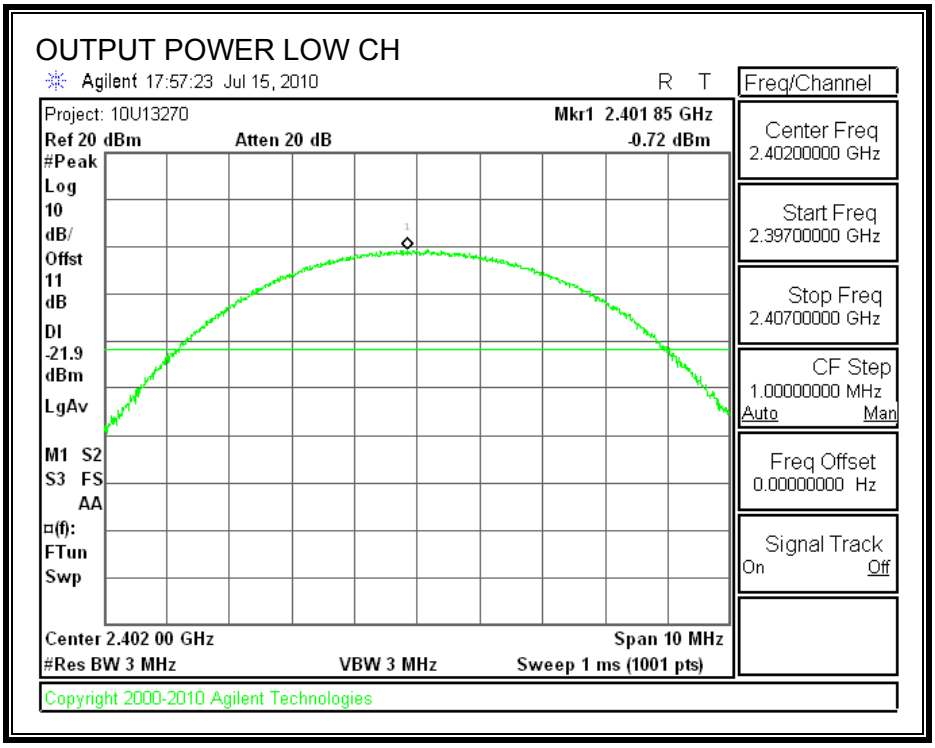
TEST PROCEDURE

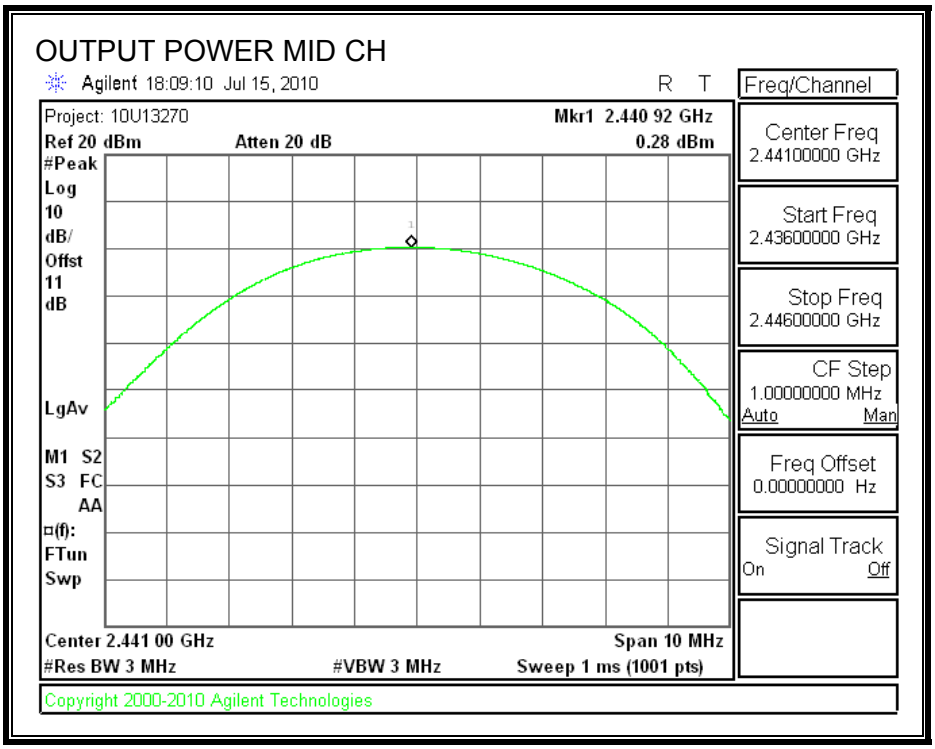
Peak power is measured using the Channel bandwidth Alternative peak output power procedure specified in "TCB Training for Devices covered under Scopes A1 - A4" by Joe Dichoso, May 2003.

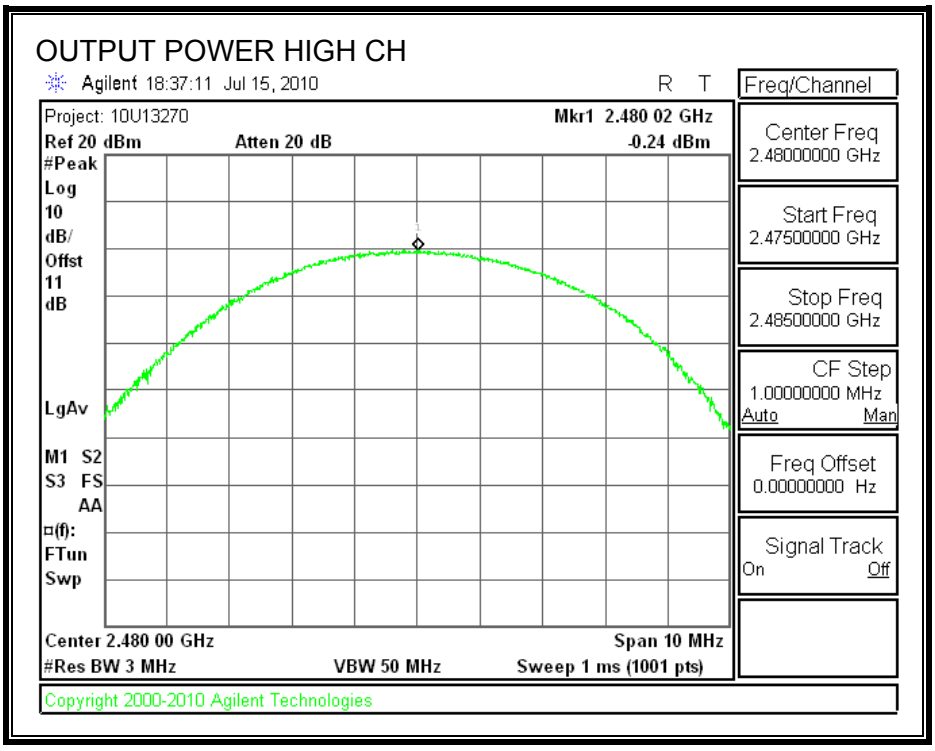
RESULTS

Channel	Frequency (MHz)	Spectrum Analyzer Reading (dBm)	Limit (dBm)	Margin (dB)
Low	2402	-0.72	21	-21.72
Middle	2441	0.28	21	-20.72
High	2480	-0.24	21	-21.24

OUTPUT POWER







7.4.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter with gate control.

RESULTS

The cable assembly insertion loss of 10.3 dB (including 10 dB pad and 0.3 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

Channel	Frequency (MHz)	Power (dBm)
Low	2402	-2.00
Middle	2441	-1.99
High	2480	-2.37

7.4.5. 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

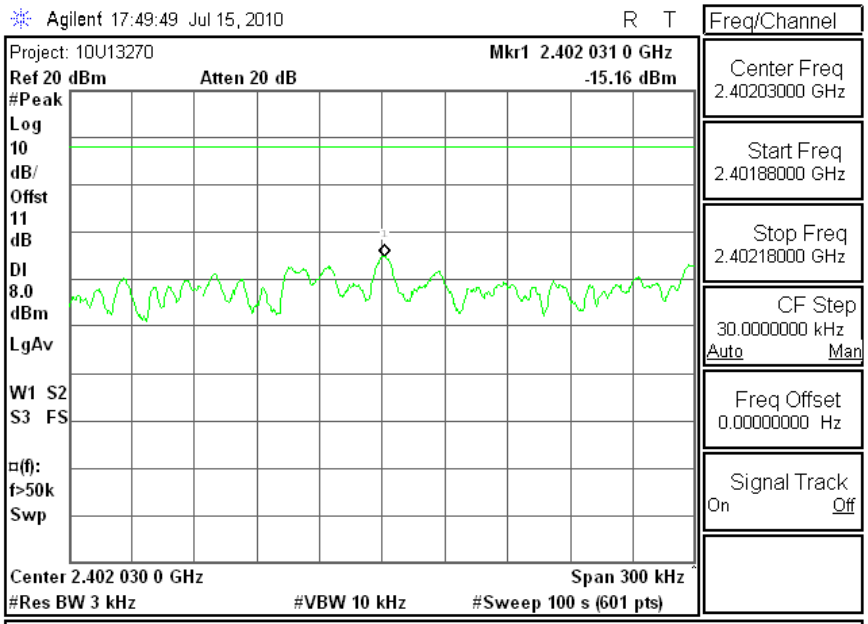
Output power was measured based on the use of a peak measurement, therefore the power spectral density was measured using PSD Option 1 in accordance with FCC document "Measurement of Digital Transmission Systems Operating under Section 15.247", March 23, 2005.

RESULTS

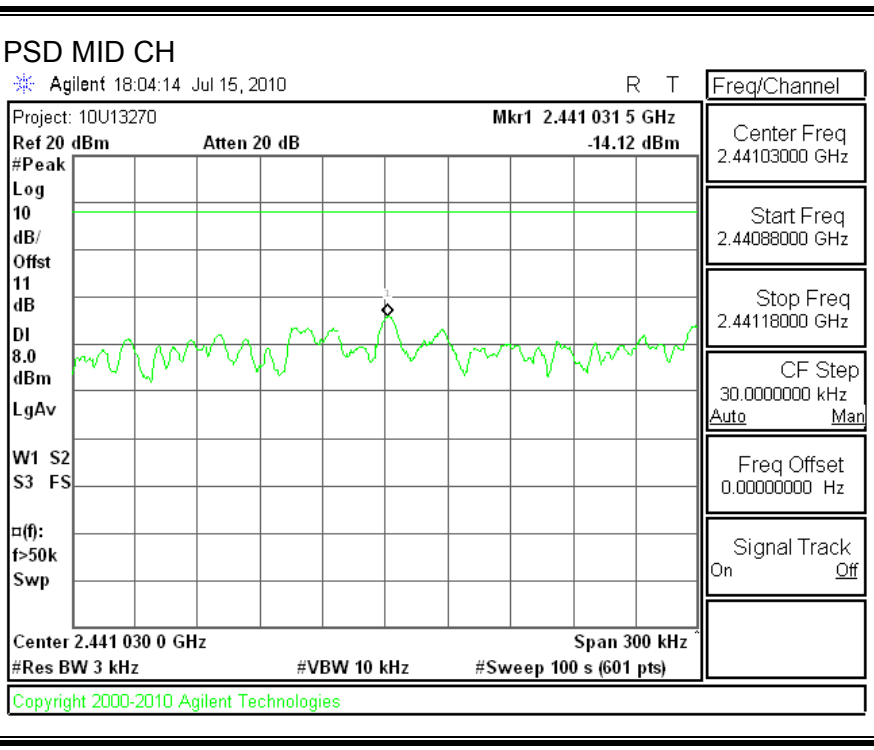
Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Margin (dB)
Low	2402	-15.16	8	-23.16
Middle	2441	-14.12	8	-22.12
High	2480	-15.70	8	-23.70

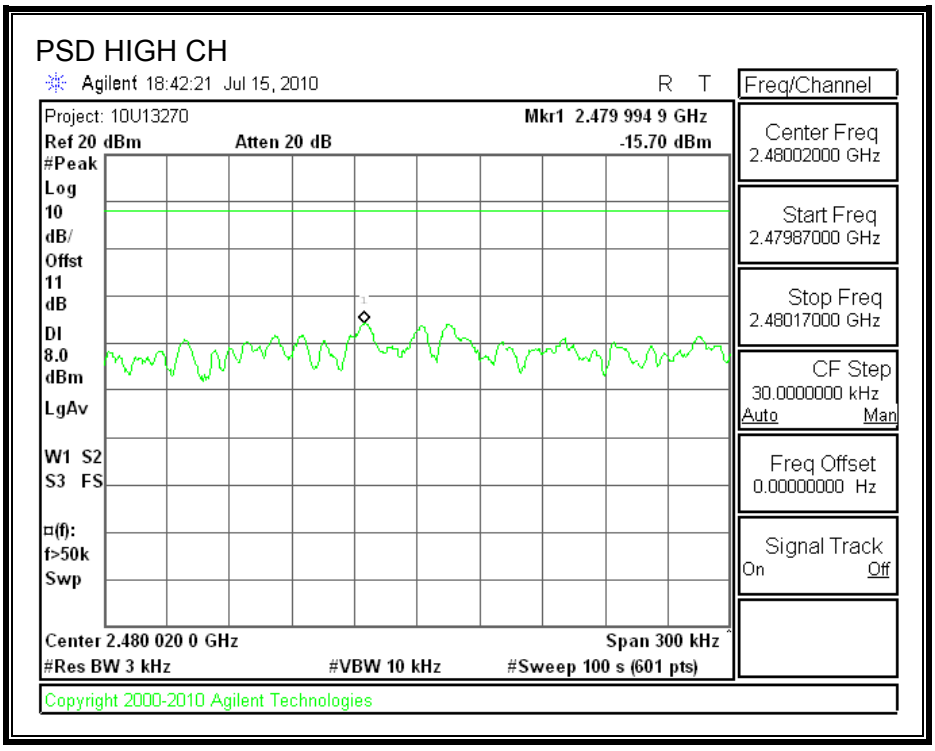
POWER SPECTRAL DENSITY

PSD LOW CH



PSD MID CH





7.4.6. 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.

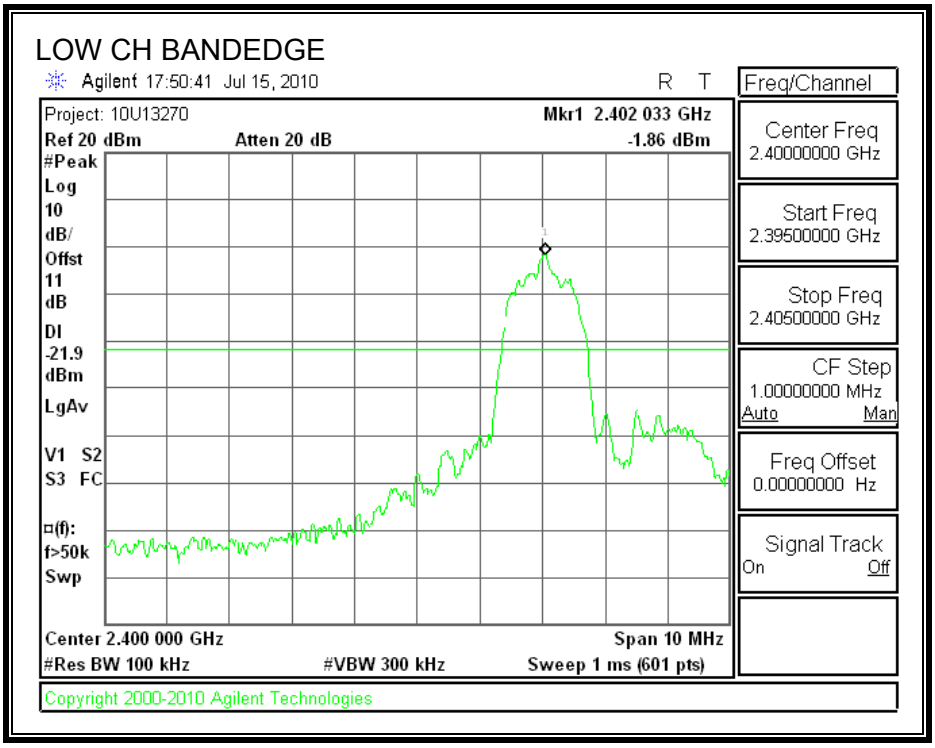
TEST PROCEDURE

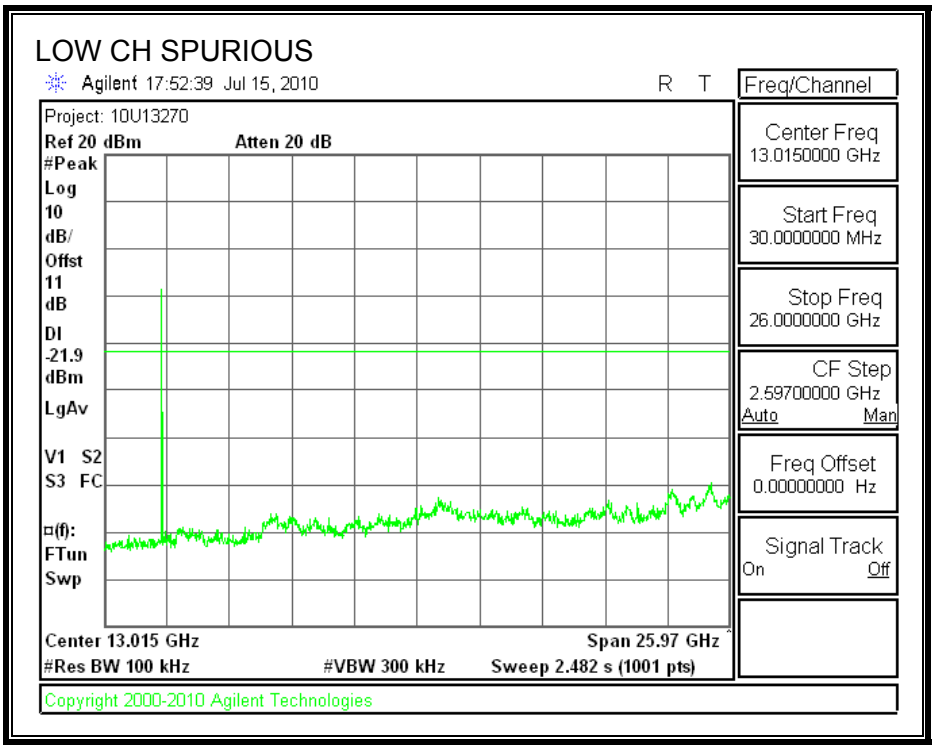
The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

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

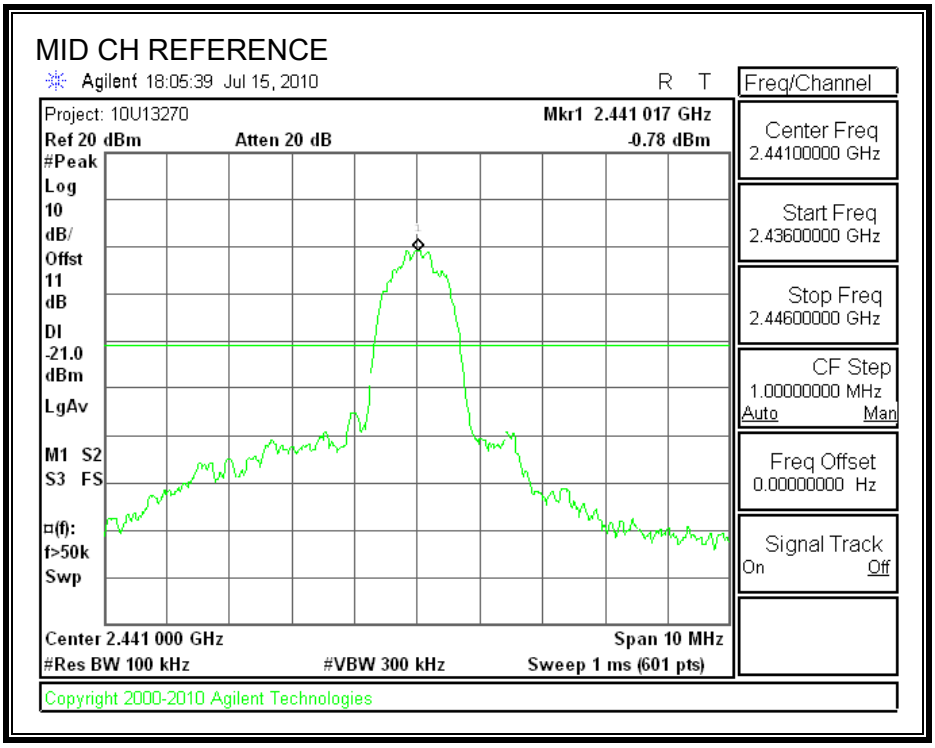
RESULTS

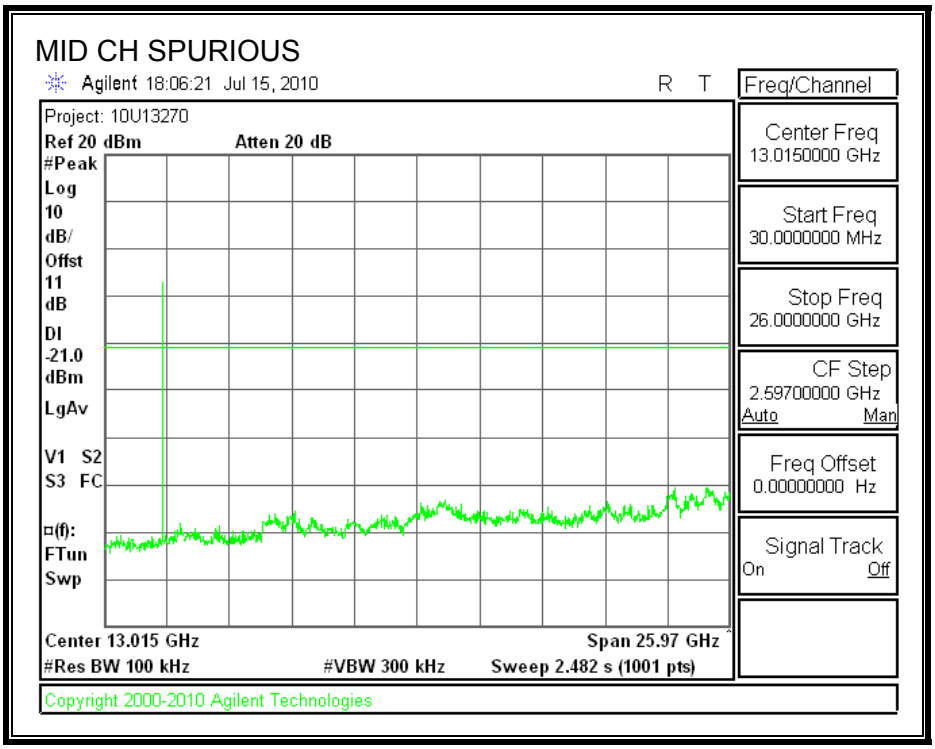
SPURIOUS EMISSIONS, LOW CHANNEL



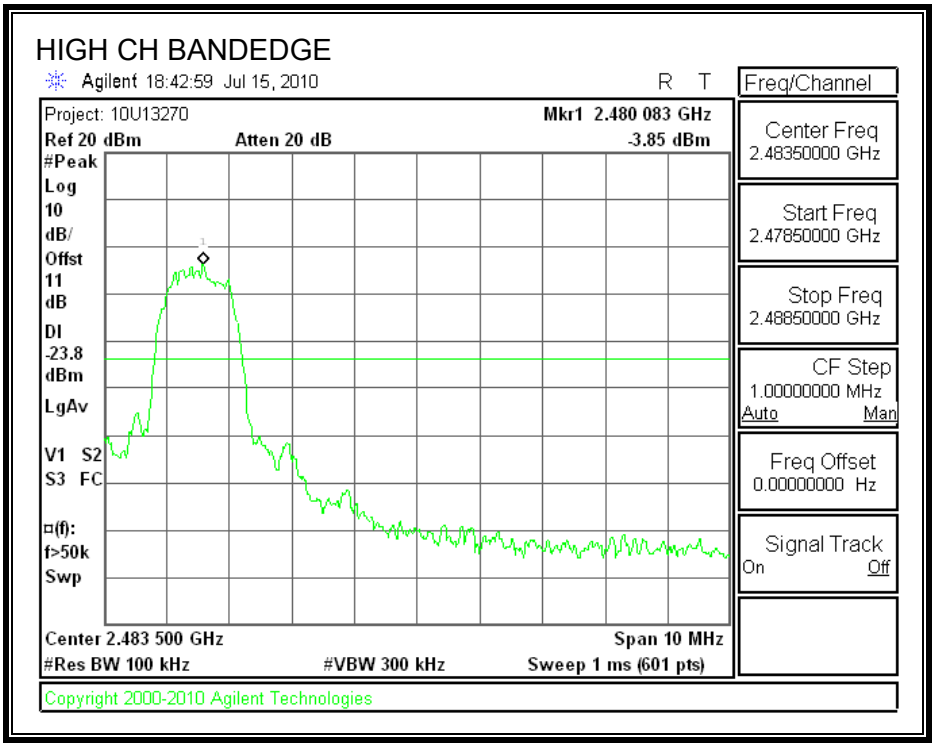


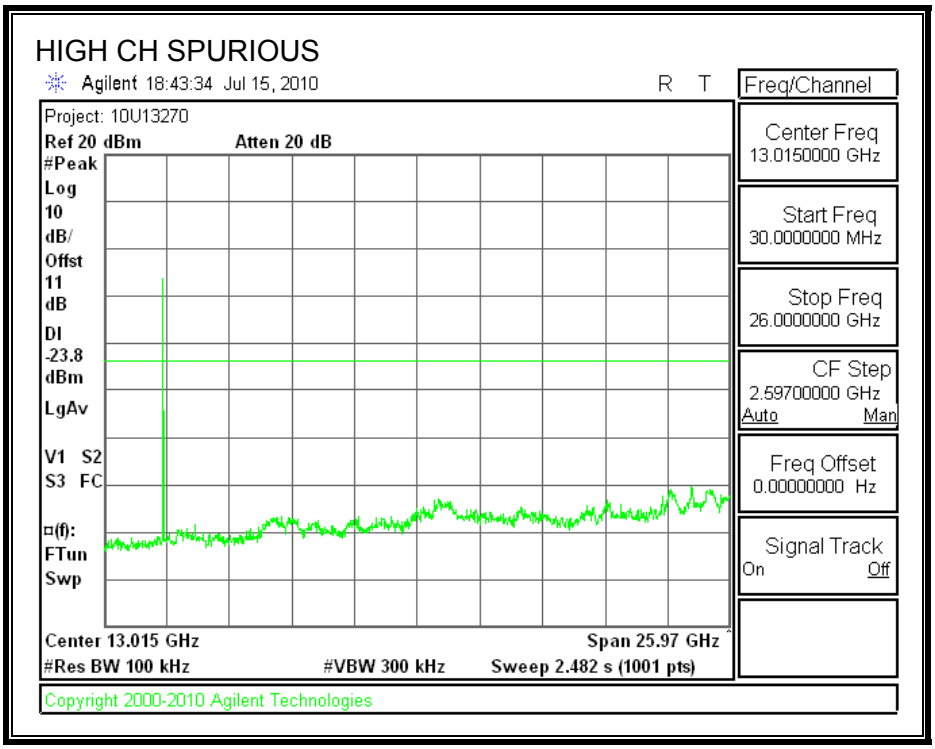
SPURIOUS EMISSIONS, MID CHANNEL





SPURIOUS EMISSIONS, HIGH CHANNEL





7.5. CO-LOCATED TRANSMITTER RADIATED EMISSIONS (WORST CASE)

7.5.1. 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.

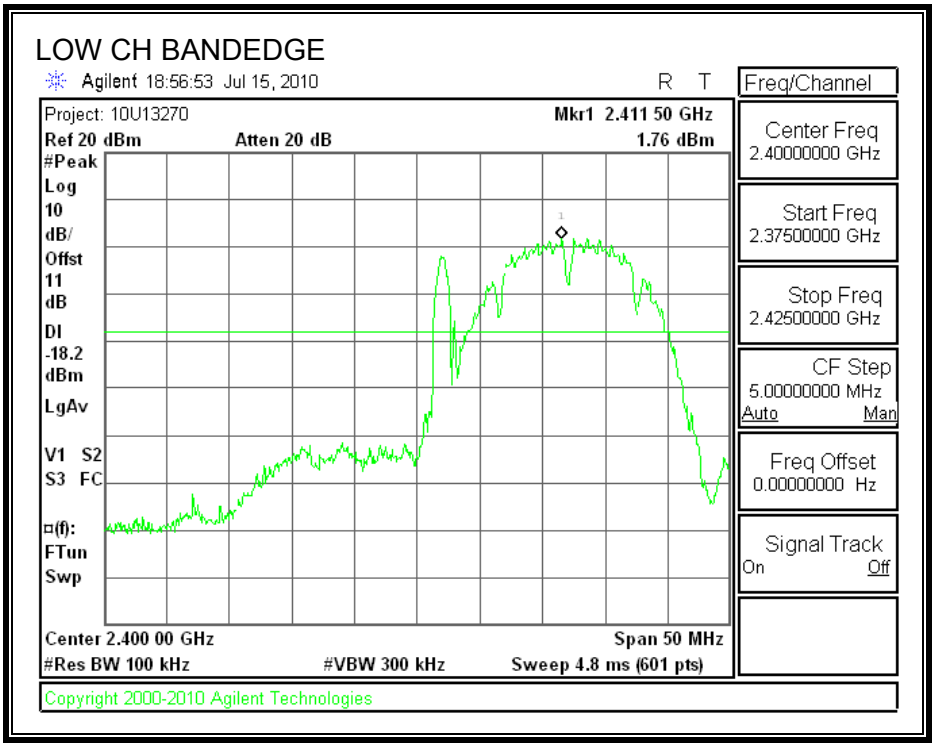
TEST PROCEDURE

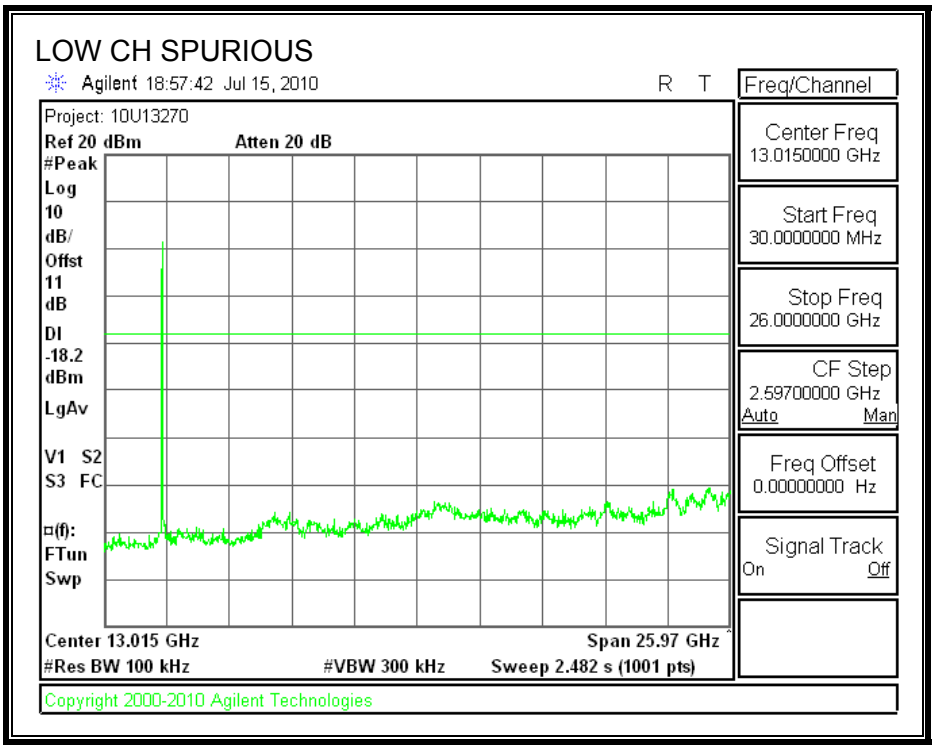
The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

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

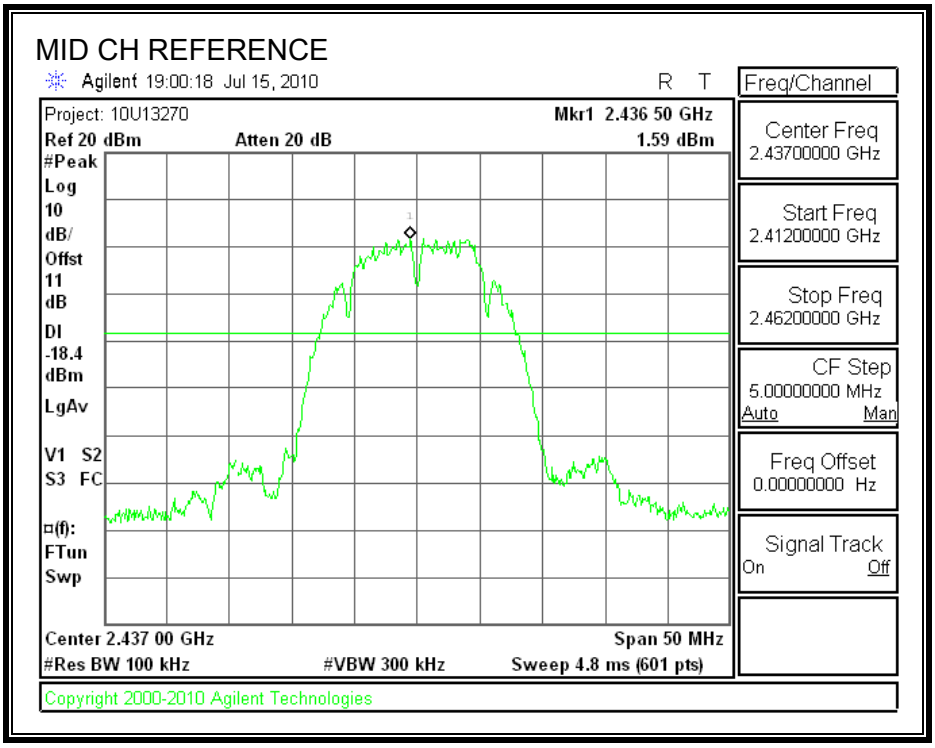
RESULTS

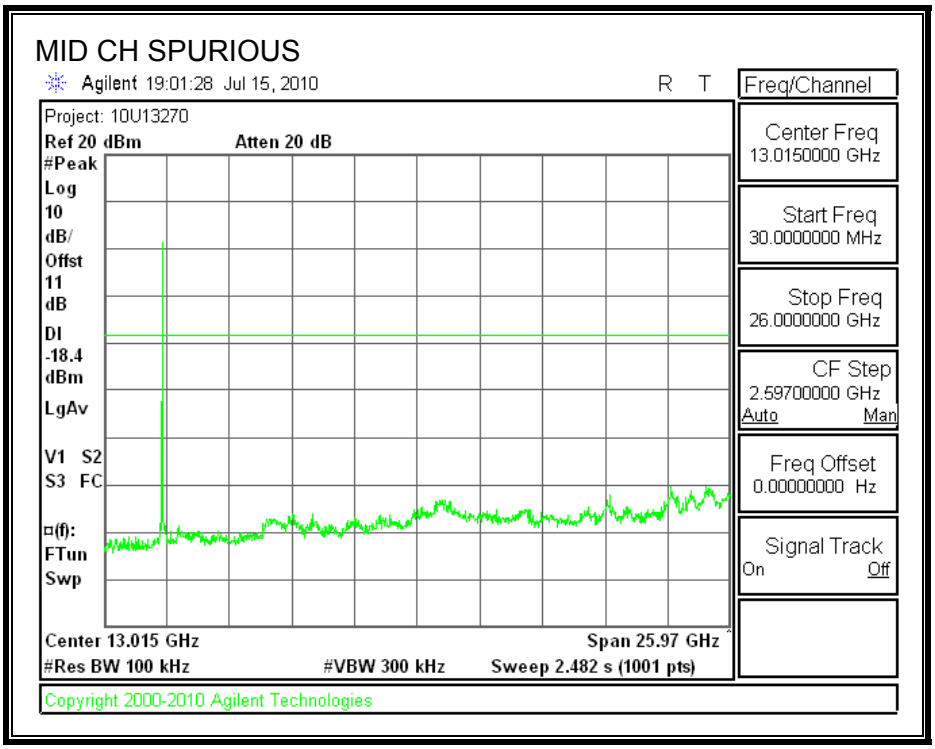
SPURIOUS EMISSIONS, LOW CHANNEL



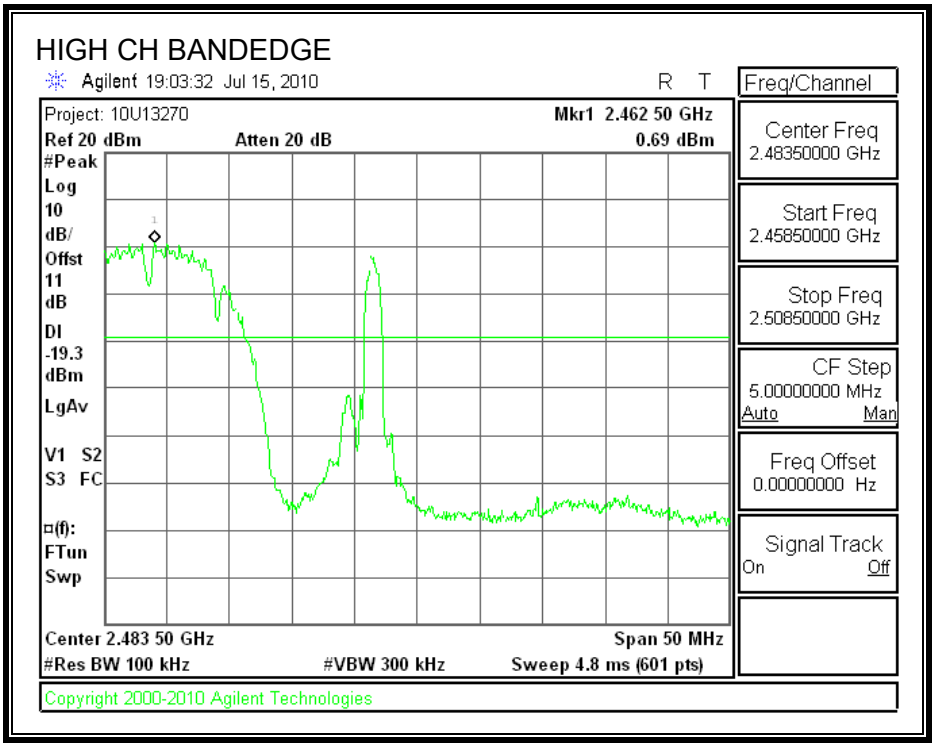


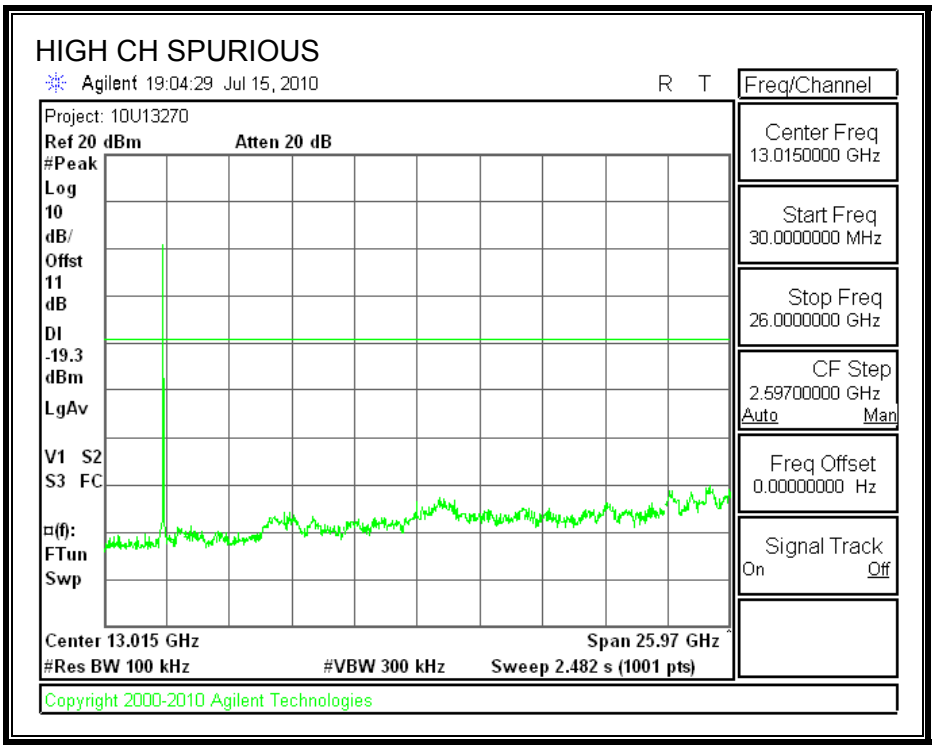
SPURIOUS EMISSIONS, MID CHANNEL





SPURIOUS EMISSIONS, HIGH CHANNEL





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 spectrum from 30 MHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each appplicable band.

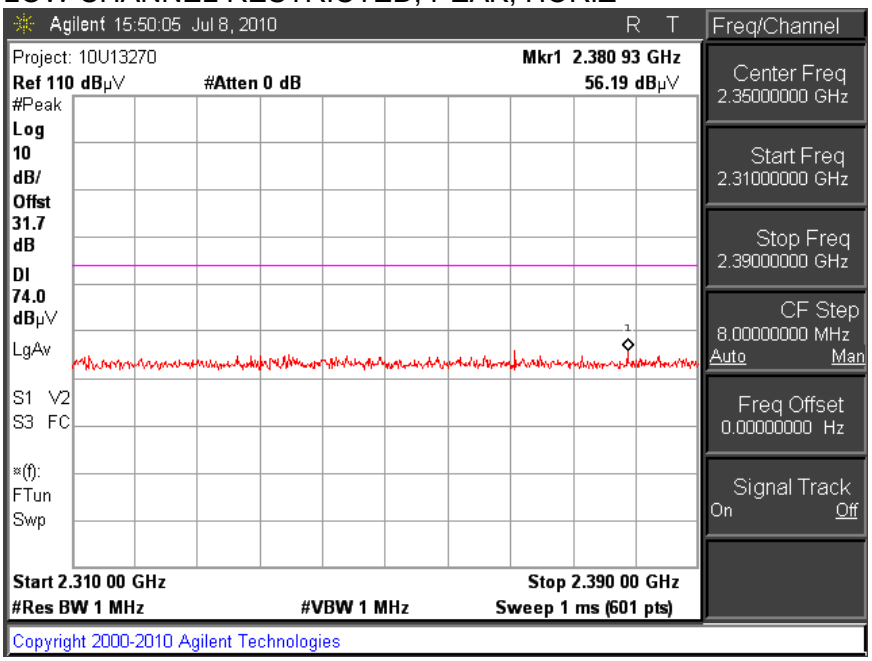
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized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

8.2. TRANSMITTER ABOVE 1 GHz

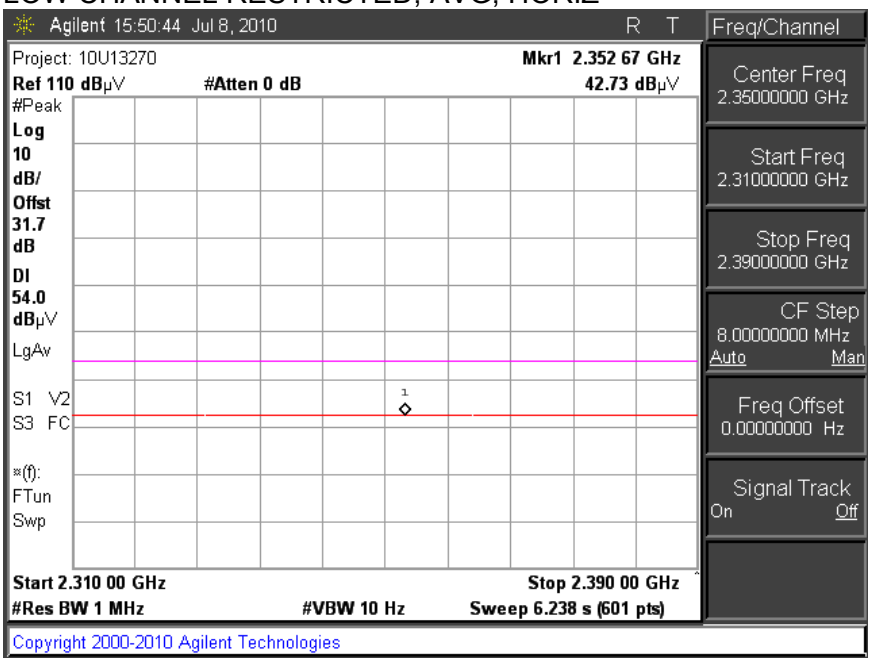
8.2.1. TRANSMITTER ABOVE 1 GHz FOR 802.11b MODE IN THE 2.4 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

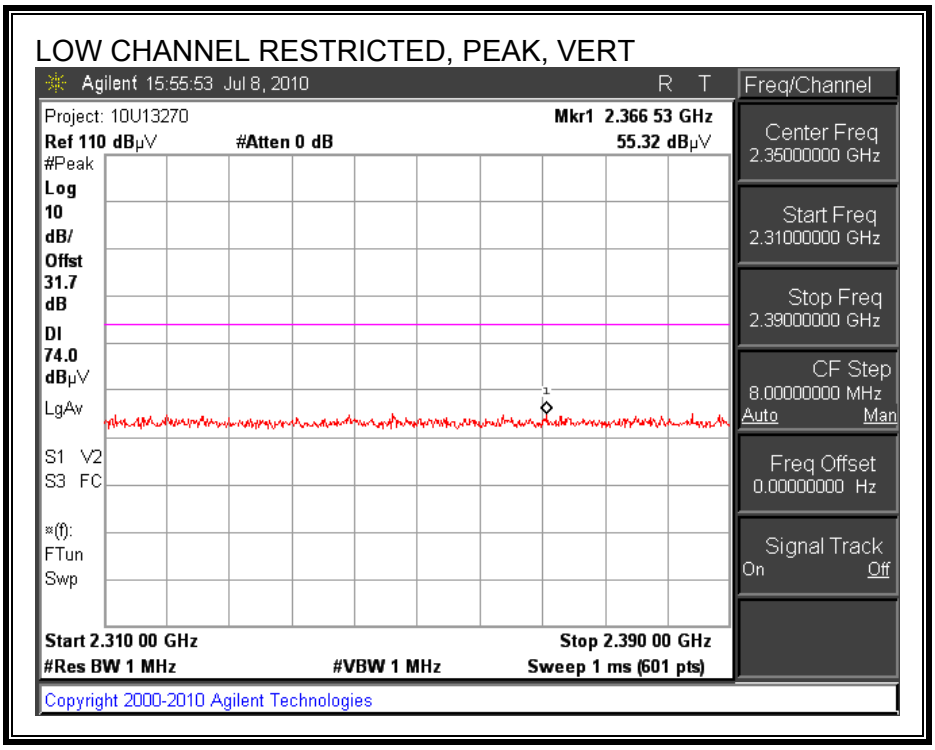
LOW CHANNEL RESTRICTED, PEAK, HORIZ



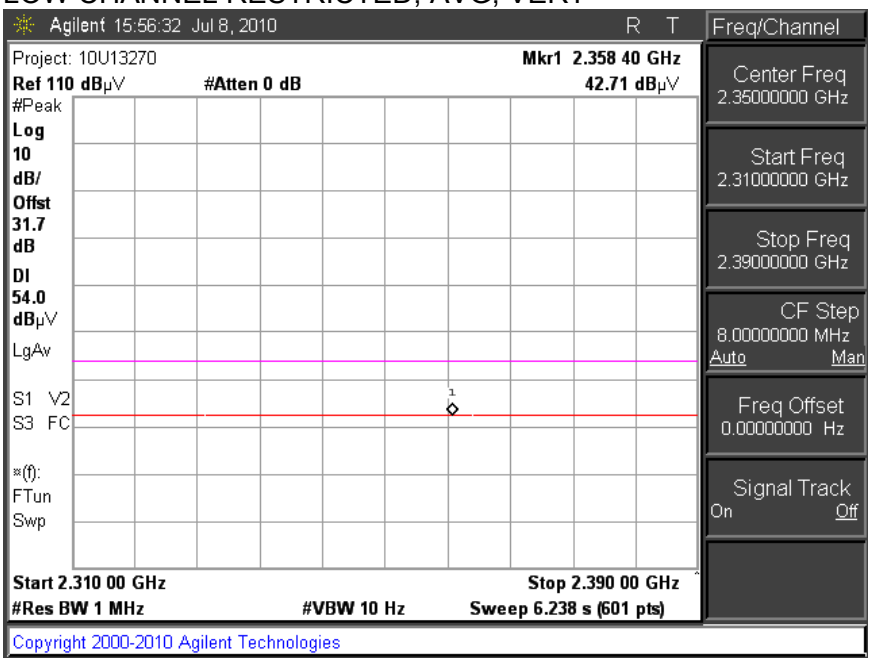
LOW CHANNEL RESTRICTED, AVG, HORIZ



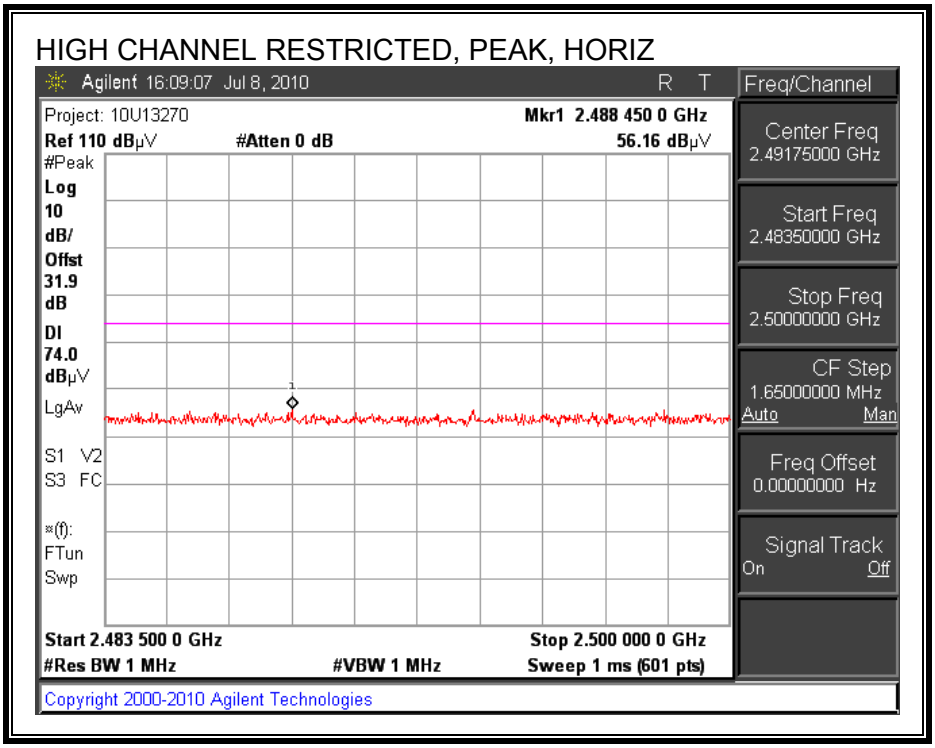
RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



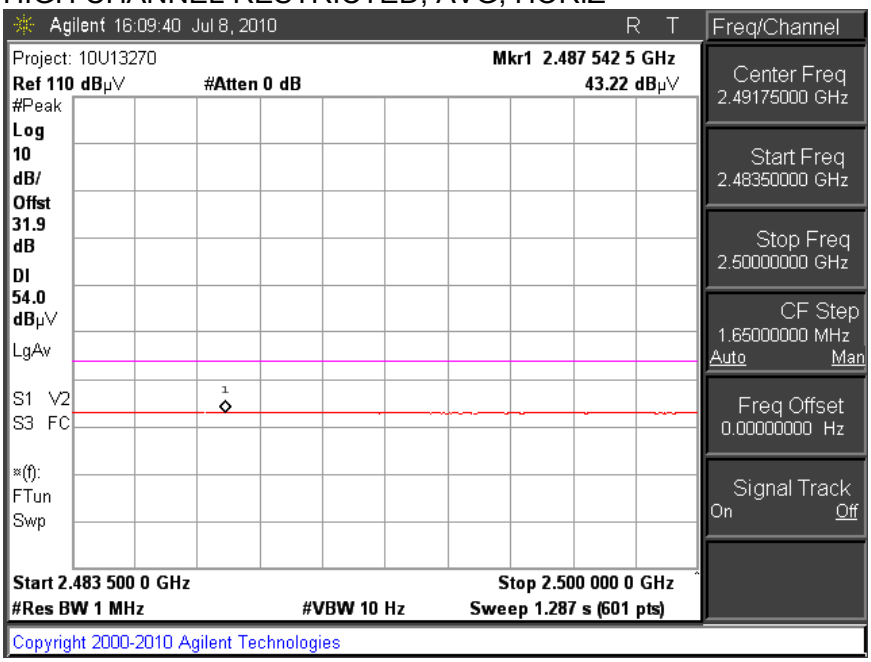
LOW CHANNEL RESTRICTED, AVG, VERT



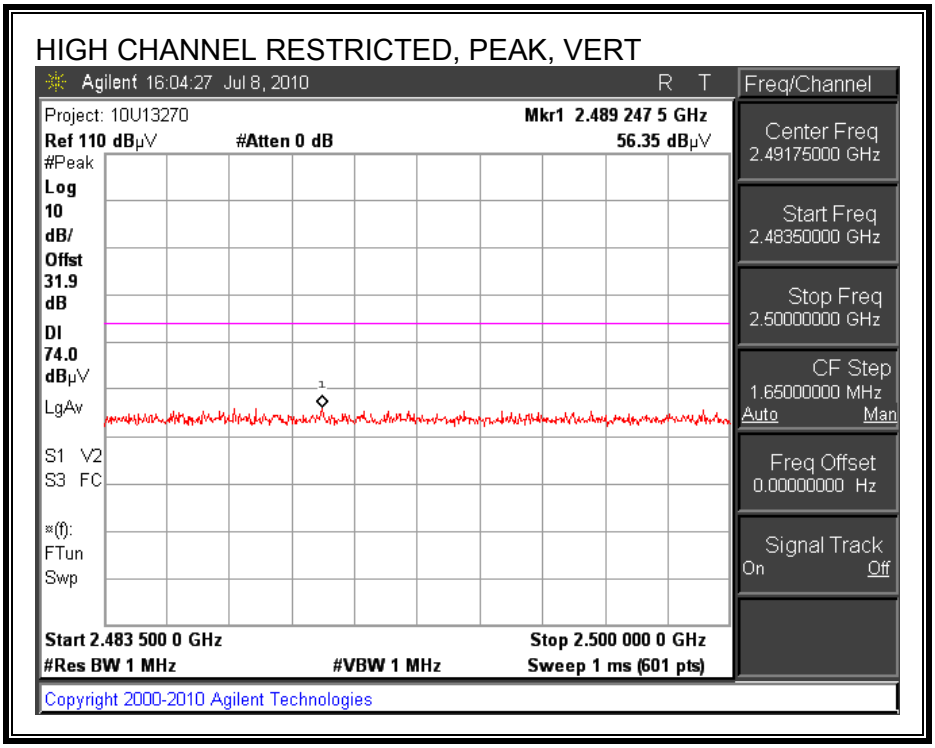
RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)



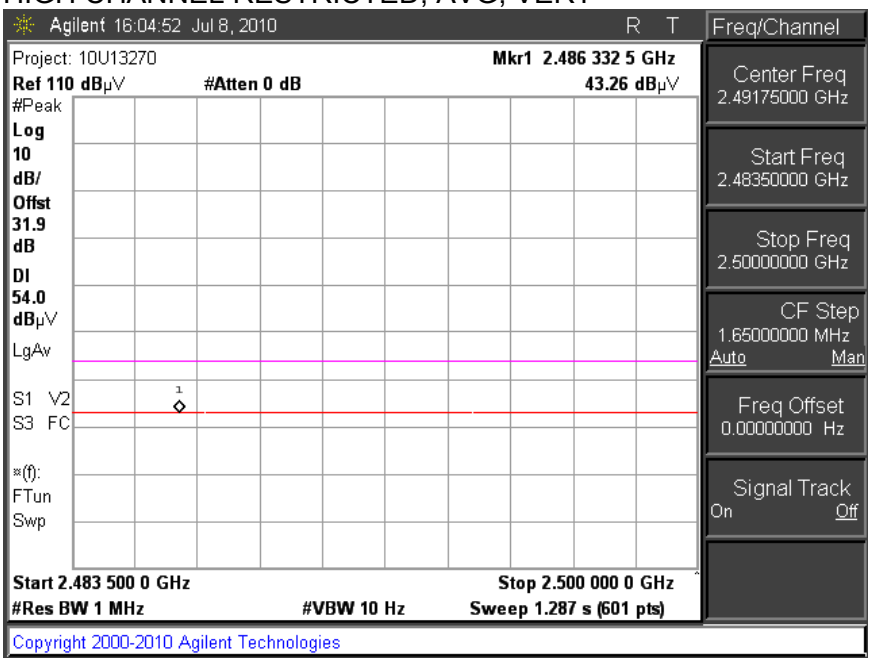
HIGH CHANNEL RESTRICTED, AVG, HORIZ



RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)



HIGH CHANNEL RESTRICTED, AVG, VERT



HARMONICS AND SPURIOUS EMISSIONS

High Frequency Measurement
Compliance Certification Services, Fremont 5m Chamber

Test Engr: Tom Chen
Date: 07/09/10
Project #: 10U13270
Company: Plam
EUT Description: CDMA 1X EVDO Phone with 802.11 b /g and Bluetooth
EUT M/N: EUT with eraphone only
Test Target: FCC Class B
Mode Oper: 802.11 b, Test mode

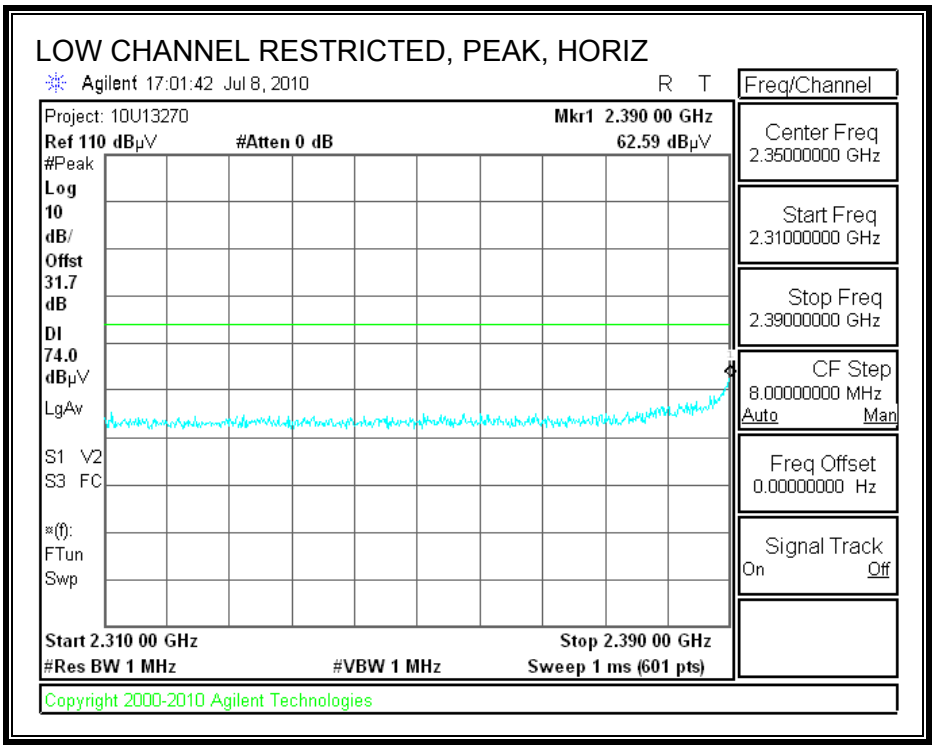
f	Measurement Frequency	Amp	Preamp Gain		Average Field Strength Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters		Peak Field Strength Limit
Read	Analyzer Reading	Avg	Average Field Strength @ 3 m		Margin vs. Average Limit
AF	Antenna Factor	Peak	Calculated Peak Field Strength		Margin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

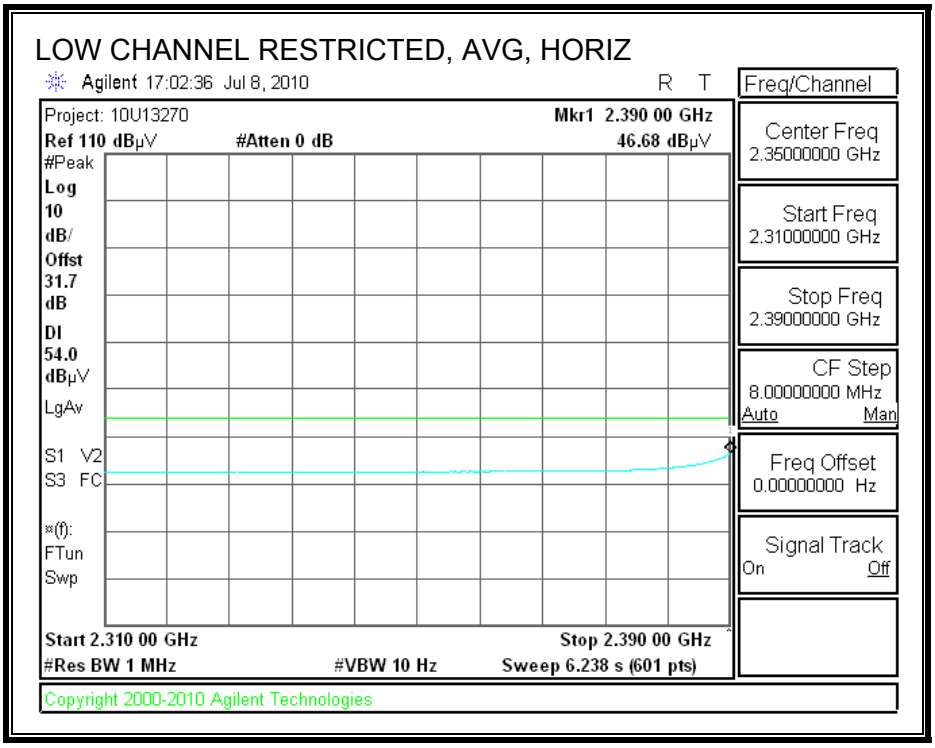
f GHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Fltr dB	Corr. dBuV/m	Limit dBuV/m	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Notes
2412 MHz Low CH													
4.824	3.0	52.4	32.8	5.8	-34.8	0.0	0.0	56.2	74.0	-17.8	H	P	Hori
4.824	3.0	40.2	32.8	5.8	-34.8	0.0	0.0	43.9	54.0	-10.1	H	A	Hori
7.236	3.0	50.7	35.1	7.2	-34.7	0.0	0.0	58.4	74.0	-15.6	H	P	Hori
7.236	3.0	39.0	35.1	7.2	-34.7	0.0	0.0	46.6	54.0	-7.4	H	A	Hori
4.824	3.0	52.9	32.8	5.8	-34.8	0.0	0.0	56.6	74.0	-17.4	V	P	Vert
4.824	3.0	40.2	32.8	5.8	-34.8	0.0	0.0	43.9	54.0	-10.1	V	A	Vert
7.236	3.0	51.0	35.1	7.2	-34.7	0.0	0.0	58.7	74.0	-15.3	V	P	Vert
7.236	3.0	39.0	35.1	7.2	-34.7	0.0	0.0	46.7	54.0	-7.3	V	A	Vert
2437 MHz Mid CH													
4.874	3.0	52.6	32.8	5.8	-34.9	0.0	0.0	56.4	74.0	-17.6	H	P	Hori
4.874	3.0	39.8	32.8	5.8	-34.9	0.0	0.0	43.5	54.0	-10.5	H	A	Hori
7.311	3.0	51.3	35.2	7.3	-34.7	0.0	0.0	59.1	74.0	-14.9	H	P	Hori
7.311	3.0	39.1	35.2	7.3	-34.7	0.0	0.0	46.9	54.0	-7.1	H	A	Hori
4.874	3.0	52.2	32.8	5.8	-34.9	0.0	0.0	56.0	74.0	-18.0	V	P	Vert
4.874	3.0	39.7	32.8	5.8	-34.9	0.0	0.0	43.5	54.0	-10.5	V	A	Vert
7.311	3.0	51.2	35.2	7.3	-34.7	0.0	0.0	59.0	74.0	-15.0	V	P	Vert
7.311	3.0	39.1	35.2	7.3	-34.7	0.0	0.0	46.9	54.0	-7.1	V	A	Vert
2462 MHz High CH													
4.924	3.0	39.0	32.8	5.9	-34.9	0.0	0.0	42.9	74.0	-31.1	H	P	Hori
4.924	3.0	26.4	32.8	5.9	-34.9	0.0	0.0	30.2	54.0	-23.8	H	A	Hori
7.386	3.0	42.2	35.3	7.3	-34.6	0.0	0.0	50.2	74.0	-23.8	H	P	Hori
7.386	3.0	29.5	35.3	7.3	-34.6	0.0	0.0	37.4	54.0	-16.6	H	A	Hori
4.924	3.0	38.6	32.8	5.9	-34.9	0.0	0.0	42.5	74.0	-31.5	V	P	Vert
4.924	3.0	26.4	32.8	5.9	-34.9	0.0	0.0	30.2	54.0	-23.8	V	A	Vert
7.386	3.0	41.7	35.3	7.3	-34.6	0.0	0.0	49.6	74.0	-24.4	V	P	Vert
7.386	3.0	29.5	35.3	7.3	-34.6	0.0	0.0	37.4	54.0	-16.6	V	A	Vert

Rev. 4.1.2.7
Note: No other emissions were detected above the system noise floor.

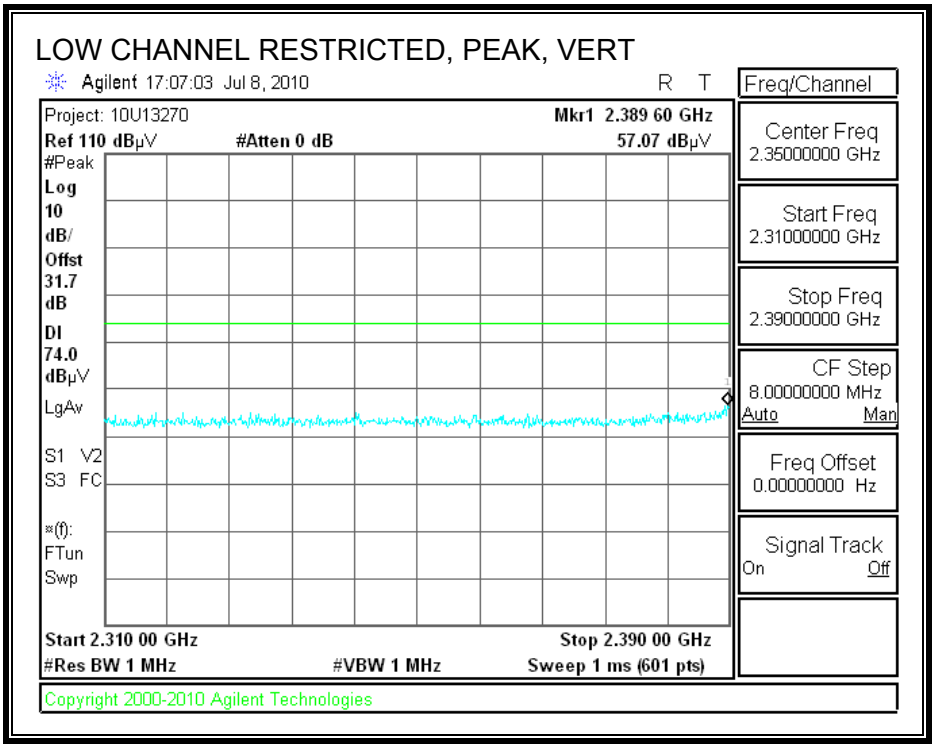
8.2.2. TRANSMITTER ABOVE 1 GHz FOR 802.11g MODE IN THE 2.4 GHz BAND

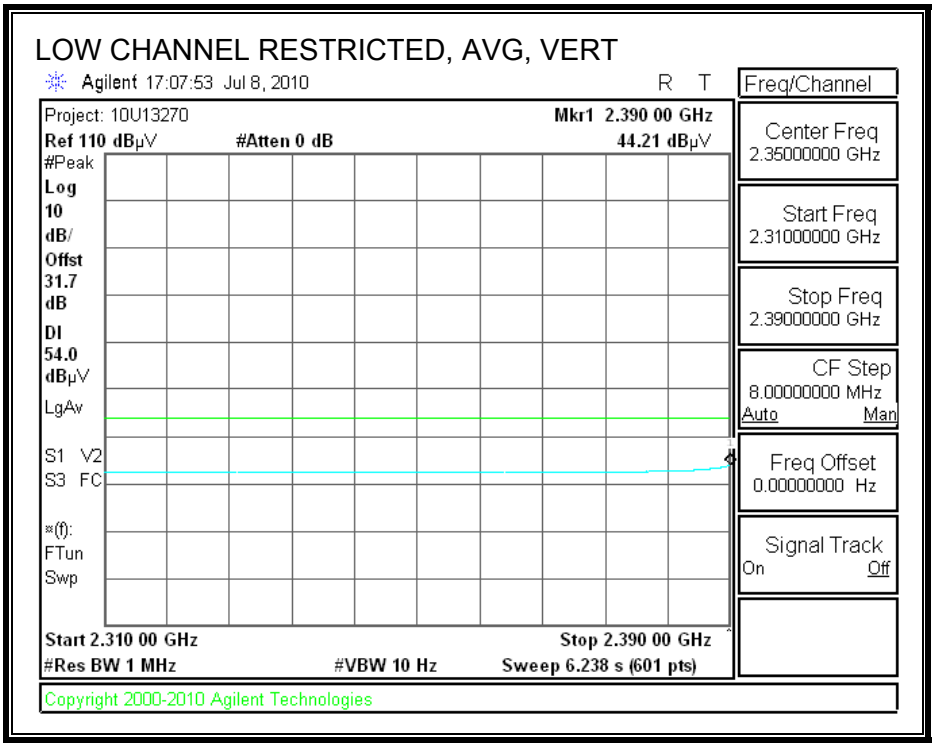
RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



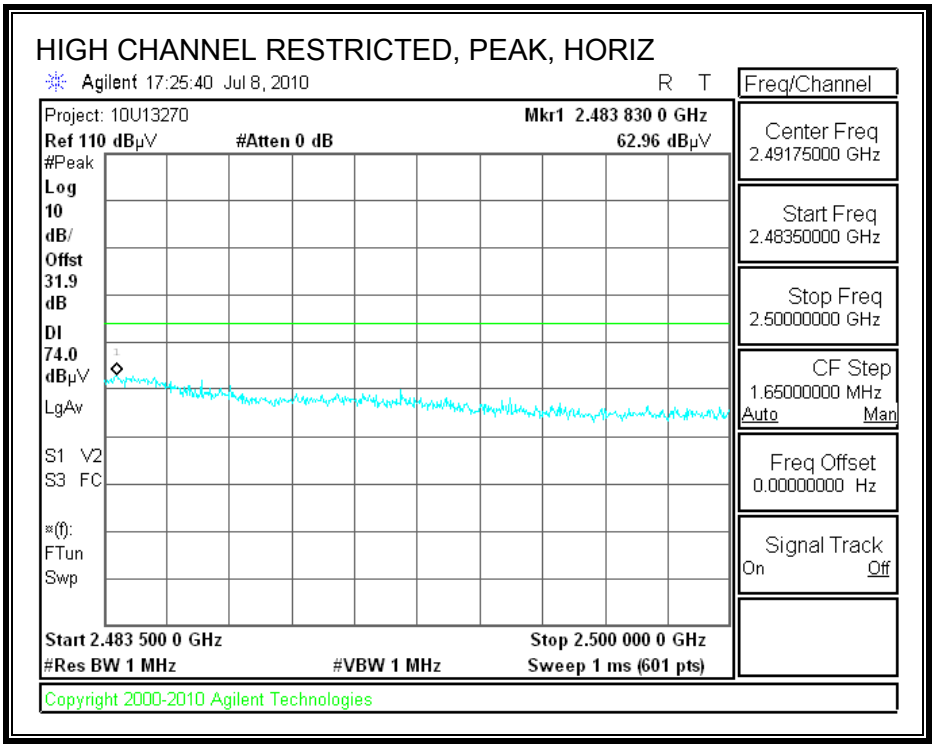


RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

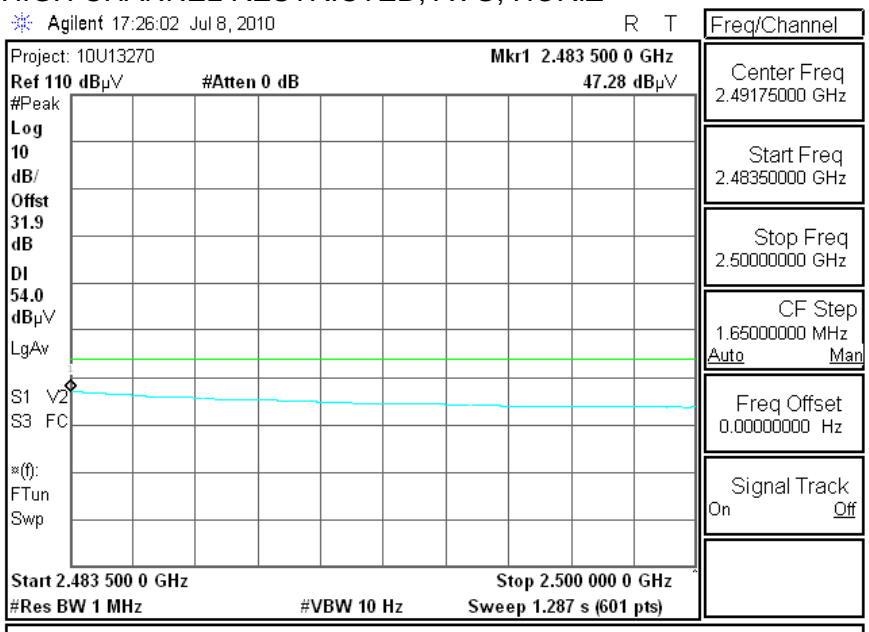




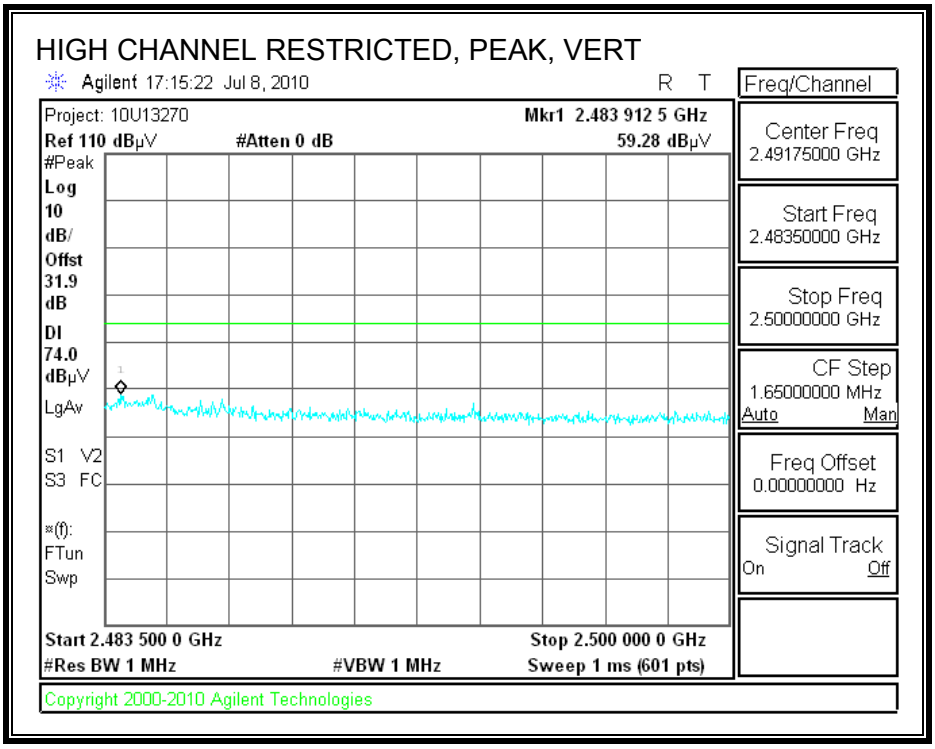
RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)

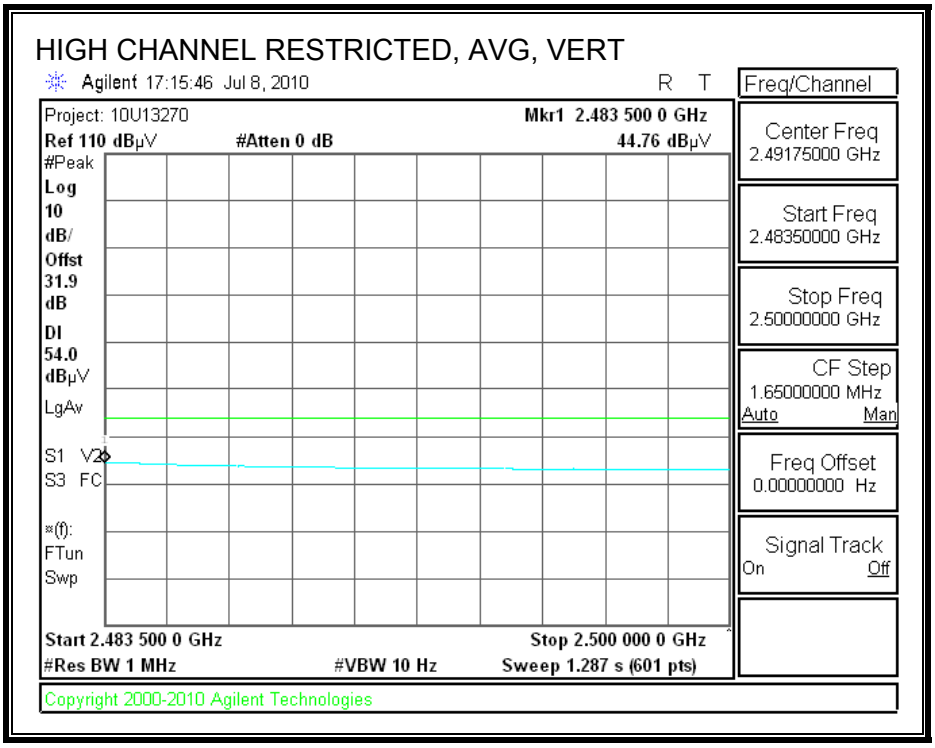


HIGH CHANNEL RESTRICTED, AVG, HORIZ



RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)





HARMONICS AND SPURIOUS EMISSIONS

High Frequency Measurement
Compliance Certification Services, Fremont 5m Chamber

Test Engr: Tom Chen
Date: 07/09/10
Project #: 10U13270
Company: Plam
EUT Description: CDMA 1X EVDO Phone with 802.11 b /g and Bluetooth
EUT M/N: EUT with eraphone only
Test Target: FCC Class B
Mode Oper: 802.11 g, Test mode

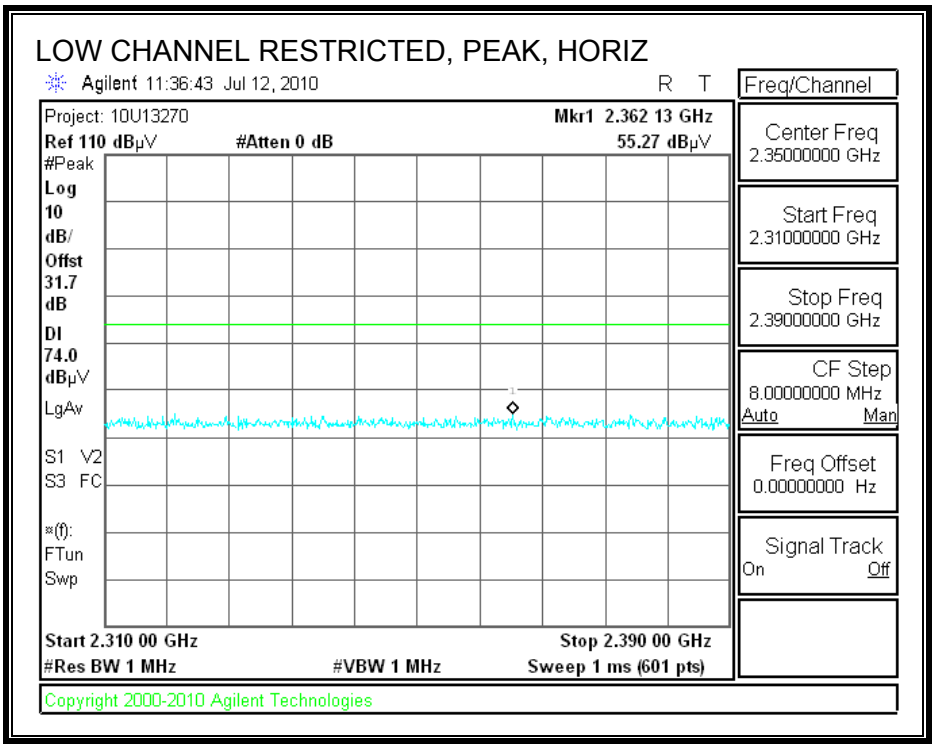
f	Measurement Frequency	Amp	Preamp Gain	Average Field Strength Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters	Peak Field Strength Limit
Read	Analyzer Reading	Avg	Average Field Strength @ 3 m	Margin vs. Average Limit
AF	Antenna Factor	Peak	Calculated Peak Field Strength	Margin vs.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

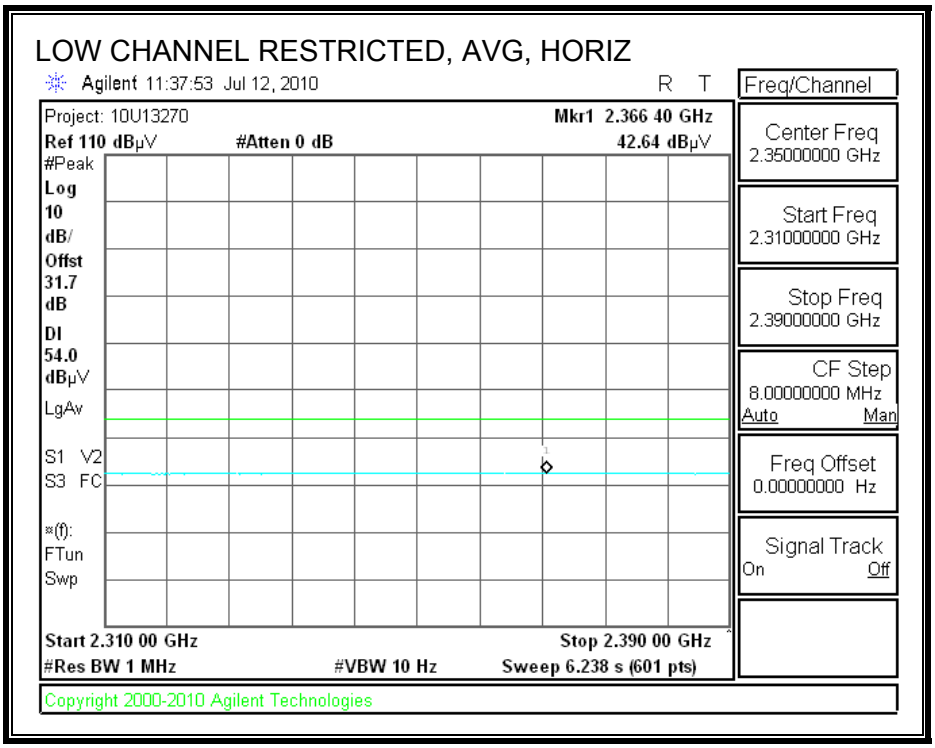
f GHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Fltr dB	Corr. dBuV/m	Limit dBuV/m	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Notes
2412 MHz Low CH													
4.824	3.0	38.9	32.8	5.8	-34.8	0.0	0.0	42.6	74.0	-31.4	H	P	Hori
4.824	3.0	26.2	32.8	5.8	-34.8	0.0	0.0	29.9	54.0	-24.1	H	A	Hori
7.236	3.0	42.8	35.1	7.2	-34.7	0.0	0.0	50.4	74.0	-23.6	H	P	Hori
7.236	3.0	30.2	35.1	7.2	-34.7	0.0	0.0	37.8	54.0	-16.2	H	A	Hori
4.824	3.0	38.4	32.8	5.8	-34.8	0.0	0.0	42.1	74.0	-31.9	V	P	Vert
4.824	3.0	26.2	32.8	5.8	-34.8	0.0	0.0	29.9	54.0	-24.1	V	A	Vert
7.236	3.0	42.2	35.1	7.2	-34.7	0.0	0.0	49.8	74.0	-24.2	V	P	Vert
7.236	3.0	30.2	35.1	7.2	-34.7	0.0	0.0	37.8	54.0	-16.2	V	A	Vert
2437 MHz Mid CH													
4.874	3.0	38.7	32.8	5.8	-34.9	0.0	0.0	42.5	74.0	-31.5	H	P	Hori
4.874	3.0	26.3	32.8	5.8	-34.9	0.0	0.0	30.1	54.0	-23.9	H	A	Hori
7.311	3.0	41.8	35.2	7.3	-34.7	0.0	0.0	49.6	74.0	-24.4	H	P	Hori
7.311	3.0	30.0	35.2	7.3	-34.7	0.0	0.0	37.8	54.0	-16.2	H	A	Hori
4.874	3.0	39.5	32.8	5.8	-34.9	0.0	0.0	43.3	74.0	-30.7	V	P	Vert
4.874	3.0	26.3	32.8	5.8	-34.9	0.0	0.0	30.1	54.0	-23.9	V	A	Vert
7.311	3.0	42.3	35.2	7.3	-34.7	0.0	0.0	50.1	74.0	-23.9	V	P	Vert
7.311	3.0	30.0	35.2	7.3	-34.7	0.0	0.0	37.8	54.0	-16.2	V	A	Vert
2462 MHz High CH													
4.924	3.0	39.1	32.8	5.9	-34.9	0.0	0.0	42.9	74.0	-31.1	H	P	Hori
4.924	3.0	26.4	32.8	5.9	-34.9	0.0	0.0	30.3	54.0	-23.7	H	A	Hori
7.386	3.0	41.7	35.3	7.3	-34.6	0.0	0.0	49.6	74.0	-24.4	H	P	Hori
7.386	3.0	29.5	35.3	7.3	-34.6	0.0	0.0	37.5	54.0	-16.5	H	A	Hori
4.924	3.0	38.7	32.8	5.9	-34.9	0.0	0.0	42.6	74.0	-31.4	V	P	Vert
4.924	3.0	26.4	32.8	5.9	-34.9	0.0	0.0	30.3	54.0	-23.7	V	A	Vert
7.386	3.0	41.8	35.3	7.3	-34.6	0.0	0.0	49.8	74.0	-24.2	V	P	Vert
7.386	3.0	29.5	35.3	7.3	-34.6	0.0	0.0	37.5	54.0	-16.5	V	A	Vert

Rev. 4.1.2.7
Note: No other emissions were detected above the system noise floor.

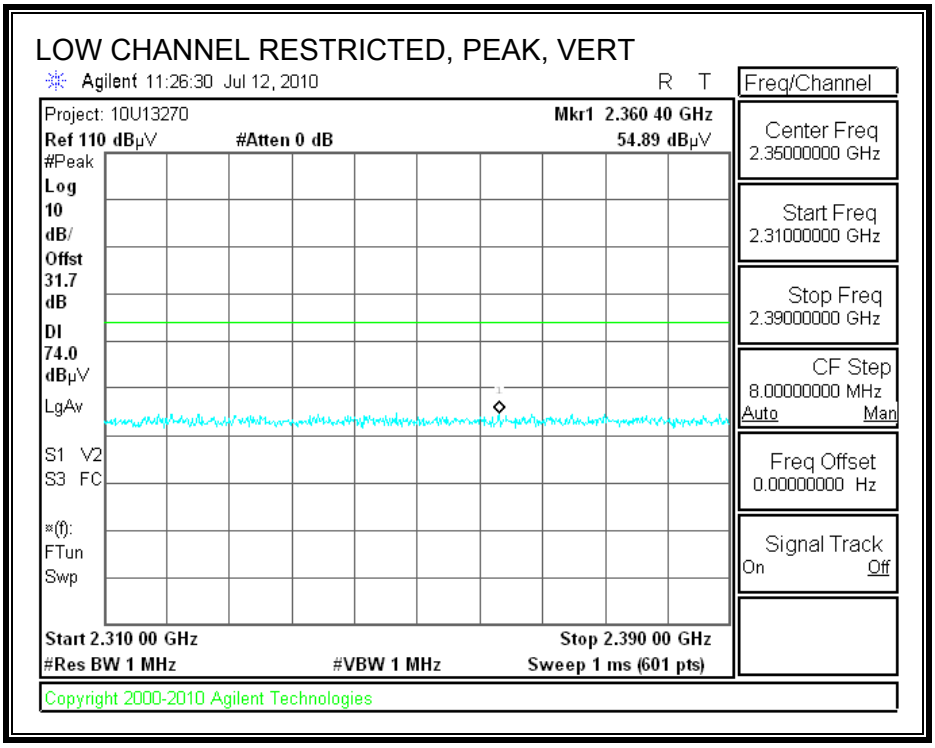
8.2.3. TRANSMITTER ABOVE 1 GHz FOR BLUETOOTH GFSK MODE

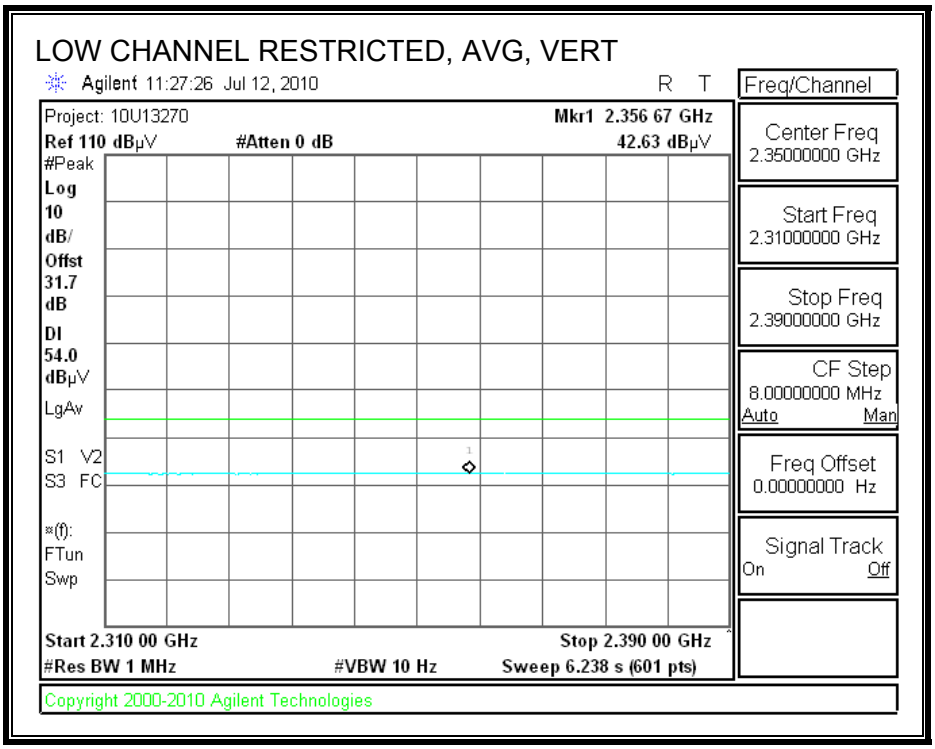
RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



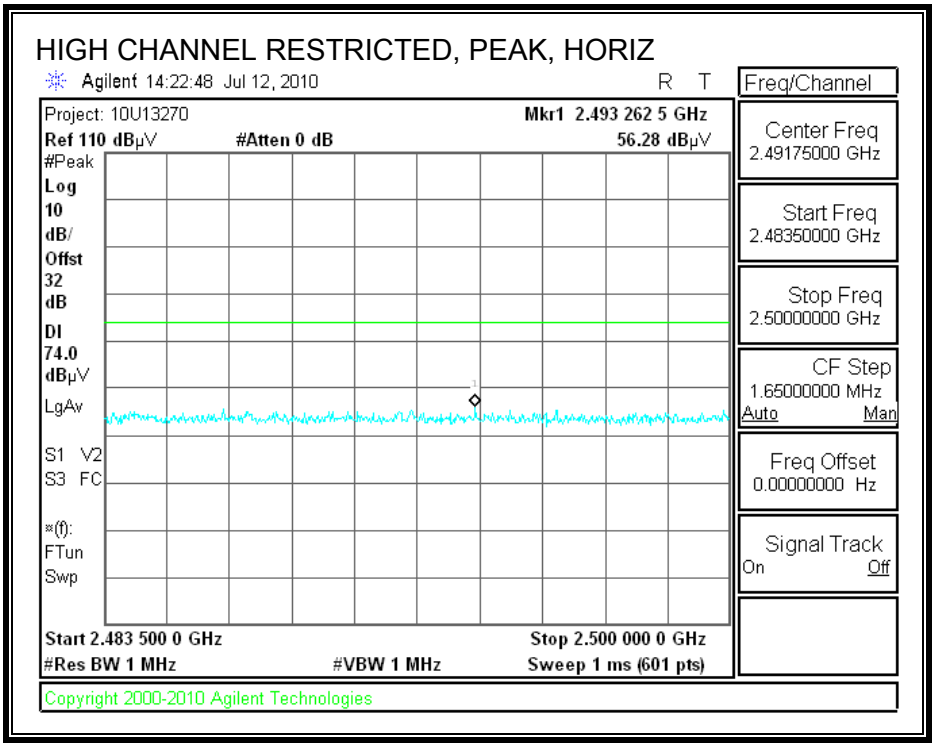


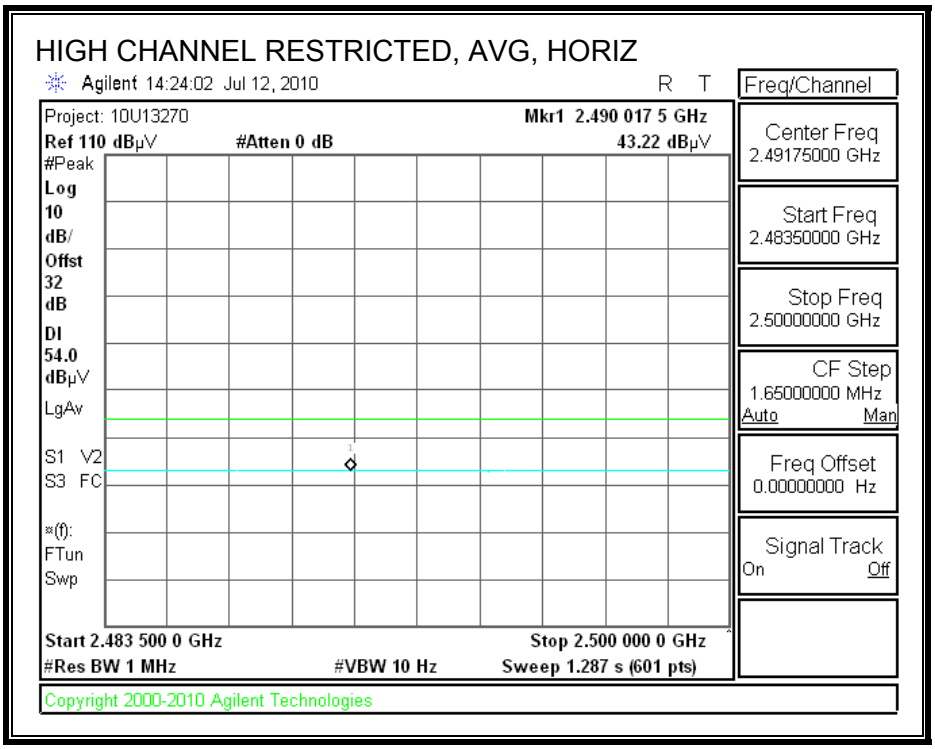
RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



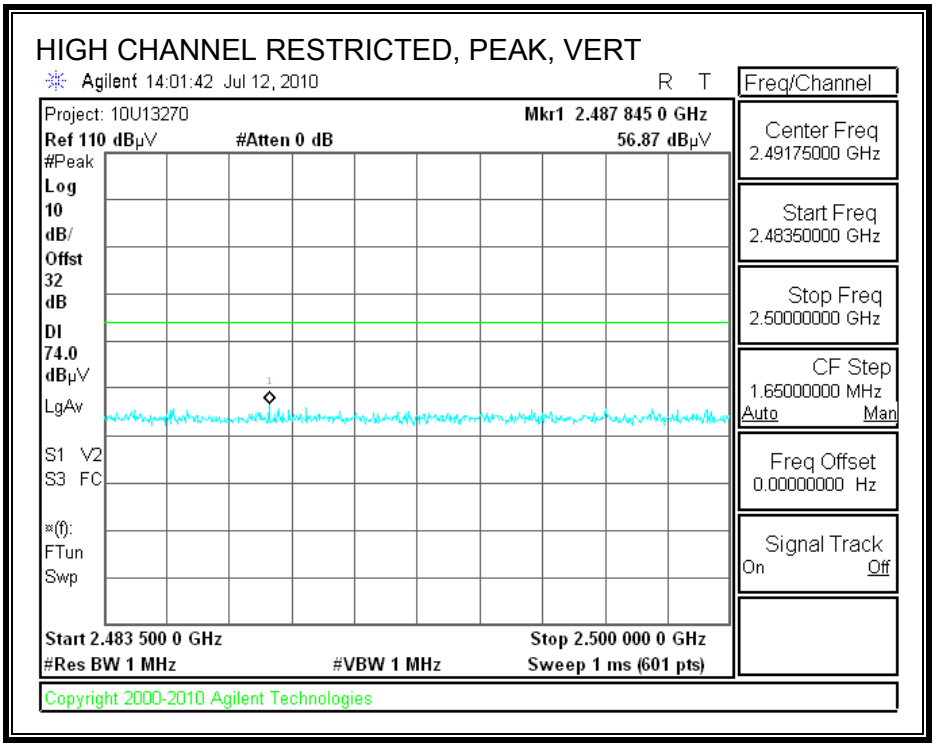


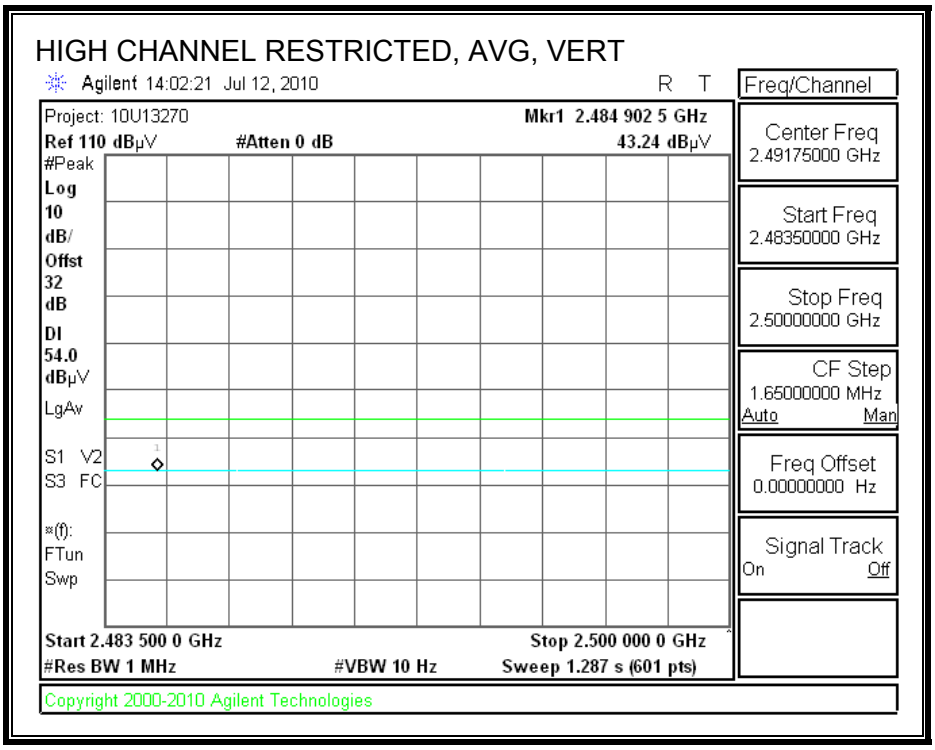
RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)





RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)





HARMONICS AND SPURIOUS EMISSIONS

High Frequency Measurement
Compliance Certification Services, Fremont 5m Chamber

Test Engr: Tom Chen
Date: 07/10/10
Project #: 10U13270
Company: Plam
EUT Description: CDMA 1X EVDO Phone with 802.11 b /g and Bluetooth
EUT M/N: EUT with eraphone only
Test Target: FCC Class B
Mode Oper: GFSK, Test mode

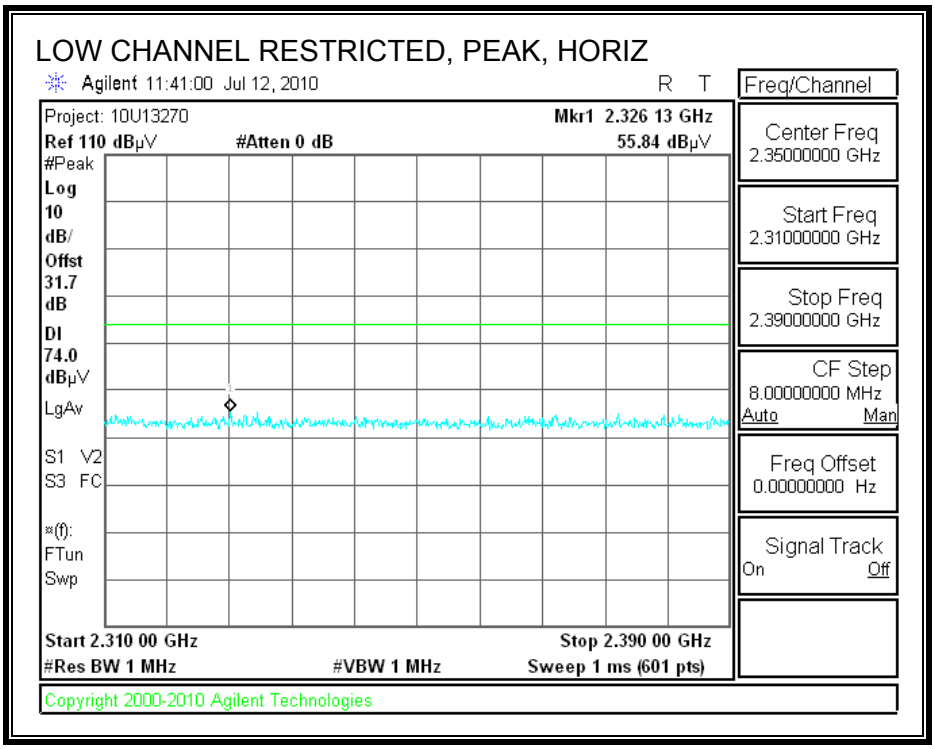
f	Measurement Frequency	Amp	Preamp Gain		Average Field Strength Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters		Peak Field Strength Limit
Read	Analyzer Reading	Avg	Average Field Strength @ 3 m		Margin vs. Average Limit
AF	Antenna Factor	Peak	Calculated Peak Field Strength		Margin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

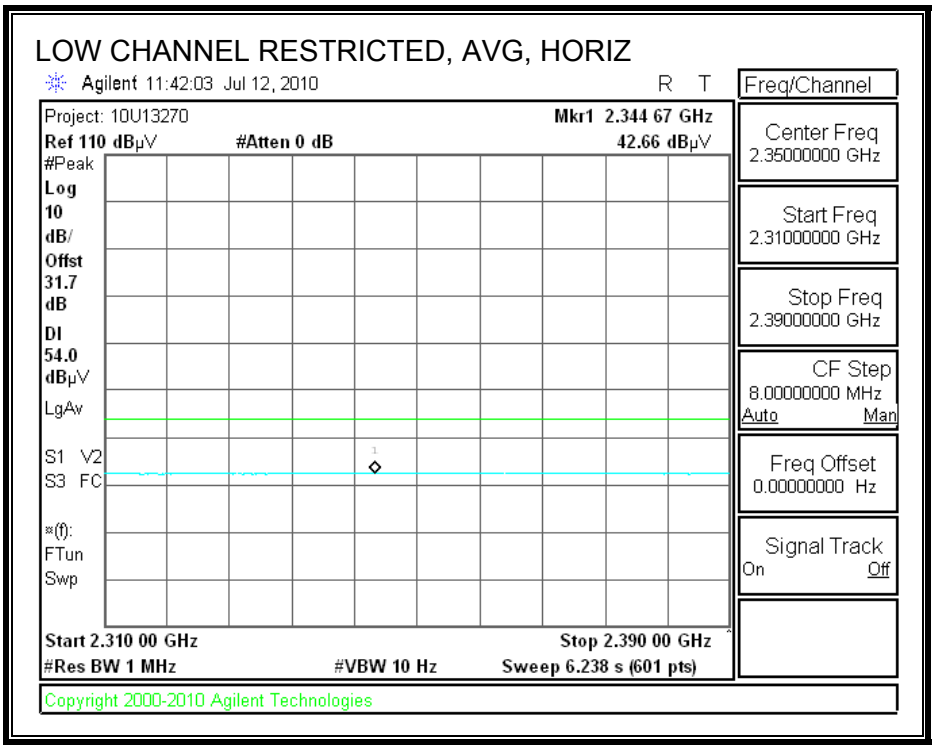
f GHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Fltr dB	Corr. dBuV/m	Limit dBuV/m	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Notes
2402 MHz Low CH													
4.804	3.0	38.8	32.8	5.8	-34.8	0.0	0.0	42.5	74.0	-31.5	H	P	Hori
4.804	3.0	26.0	32.8	5.8	-34.8	0.0	0.0	29.7	54.0	-24.3	H	A	Hori
7.206	3.0	37.1	35.0	7.2	-34.7	0.0	0.0	44.6	74.0	-29.4	H	P	Hori
7.206	3.0	24.8	35.0	7.2	-34.7	0.0	0.0	32.4	54.0	-21.6	H	A	Hori
4.804	3.0	38.3	32.8	5.8	-34.8	0.0	0.0	42.0	74.0	-32.0	V	P	Vert
4.804	3.0	26.0	32.8	5.8	-34.8	0.0	0.0	29.7	54.0	-24.3	V	A	Vert
7.206	3.0	38.0	35.0	7.2	-34.7	0.0	0.0	45.6	74.0	-28.4	V	P	Vert
7.206	3.0	24.8	35.0	7.2	-34.7	0.0	0.0	32.4	54.0	-21.6	V	A	Vert
2441 MHz Mid CH													
4.882	3.0	38.2	32.8	5.8	-34.9	0.0	0.0	42.0	74.0	-32.0	V	P	Vert
4.882	3.0	25.6	32.8	5.8	-34.9	0.0	0.0	29.4	54.0	-24.6	V	A	Vert
7.323	3.0	36.6	35.2	7.3	-34.7	0.0	0.0	44.4	74.0	-29.6	V	P	Vert
7.323	3.0	24.7	35.2	7.3	-34.7	0.0	0.0	32.6	54.0	-21.4	V	A	Vert
4.882	3.0	37.9	32.8	5.8	-34.9	0.0	0.0	41.7	74.0	-32.3	H	P	Hori
4.882	3.0	25.6	32.8	5.8	-34.9	0.0	0.0	29.4	54.0	-24.6	H	A	Hori
7.323	3.0	36.8	35.2	7.3	-34.7	0.0	0.0	44.7	74.0	-29.3	H	P	Hori
7.323	3.0	24.7	35.2	7.3	-34.7	0.0	0.0	32.5	54.0	-21.5	H	A	Hori
2480 MHz High CH													
4.960	3.0	37.7	32.9	5.9	-34.9	0.0	0.0	41.6	74.0	-32.4	H	P	Hori
4.960	3.0	25.3	32.9	5.9	-34.9	0.0	0.0	29.2	54.0	-24.8	H	A	Hori
7.440	3.0	36.9	35.4	7.3	-34.6	0.0	0.0	45.0	74.0	-29.0	H	P	Hori
7.440	3.0	24.6	35.4	7.3	-34.6	0.0	0.0	32.7	54.0	-21.3	H	A	Hori
4.960	3.0	37.4	32.9	5.9	-34.9	0.0	0.0	41.3	74.0	-32.7	V	P	Vert
4.960	3.0	25.3	32.9	5.9	-34.9	0.0	0.0	29.2	54.0	-24.8	V	A	Vert
7.440	3.0	37.1	35.4	7.3	-34.6	0.0	0.0	45.2	74.0	-28.8	V	P	Vert
7.440	3.0	24.6	35.4	7.3	-34.6	0.0	0.0	32.7	54.0	-21.3	V	A	Vert

Rev. 4.1.2.7
Note: No other emissions were detected above the system noise floor.

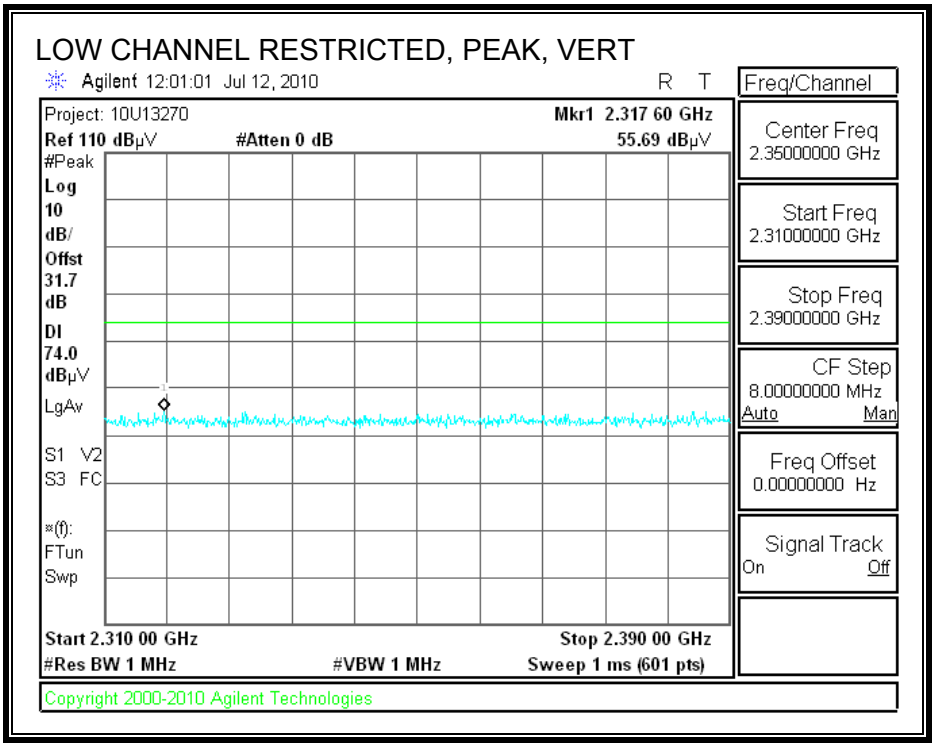
8.2.4. TRANSMITTER ABOVE 1 GHz FOR BLUETOOTH 8PSK MODE

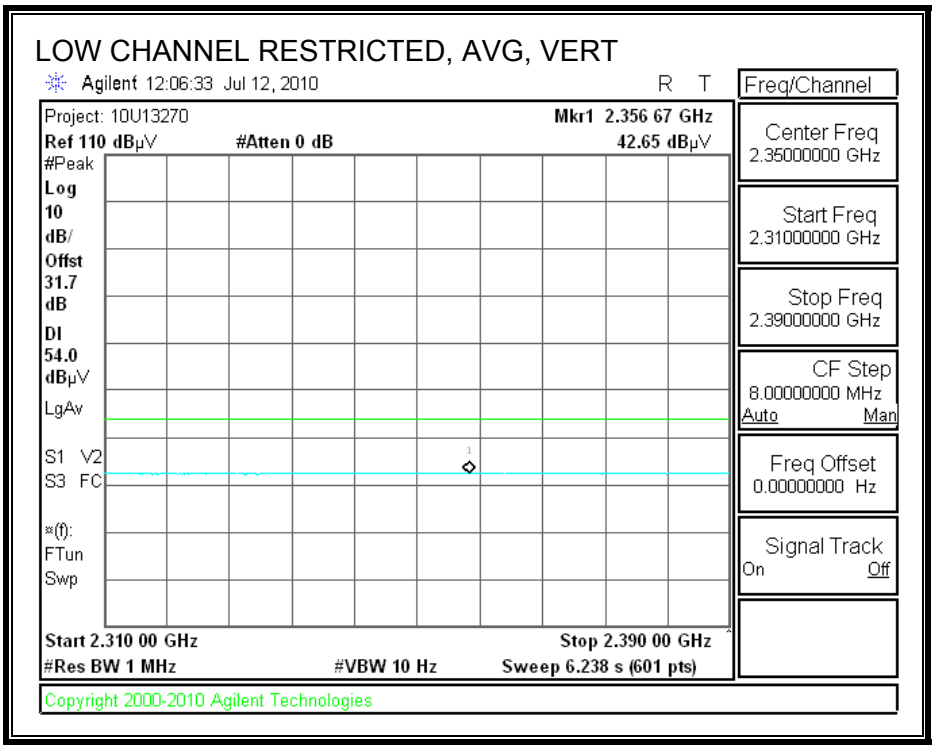
RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



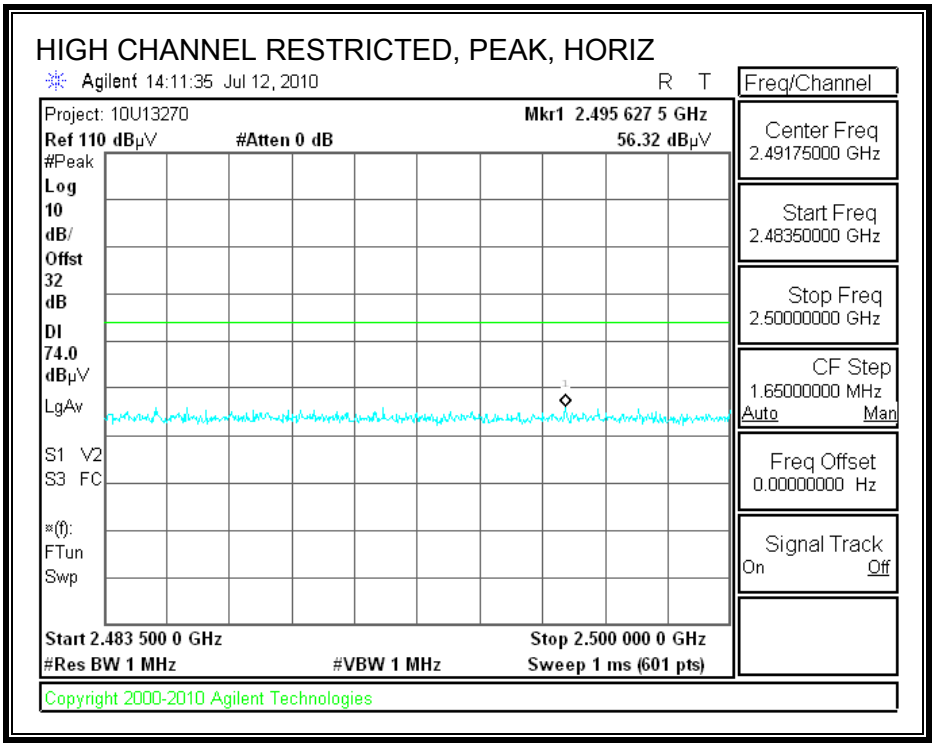


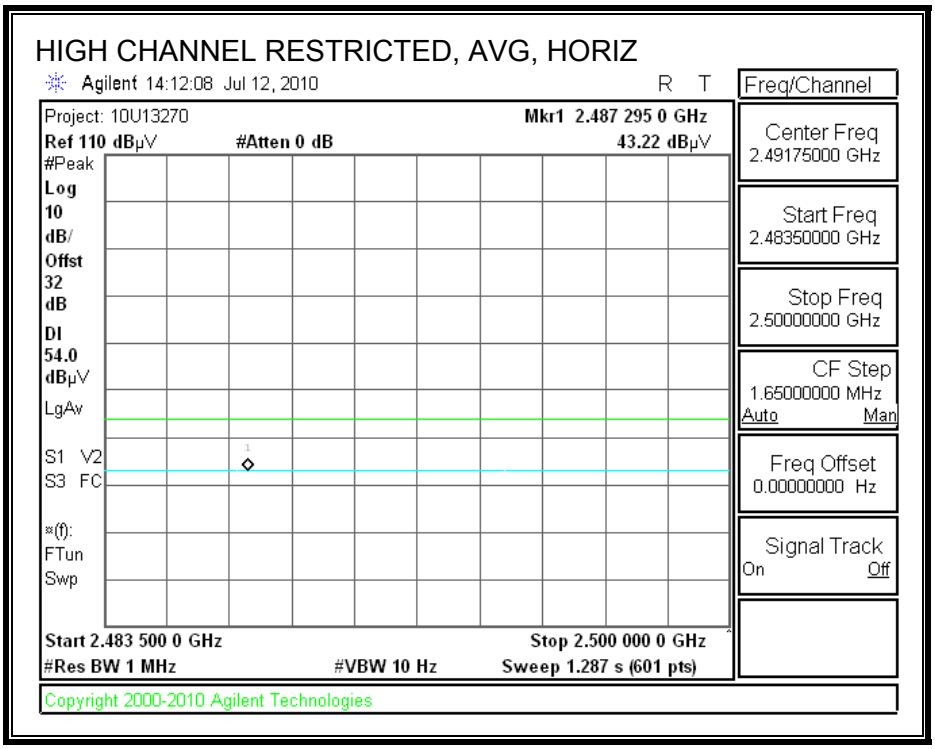
RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



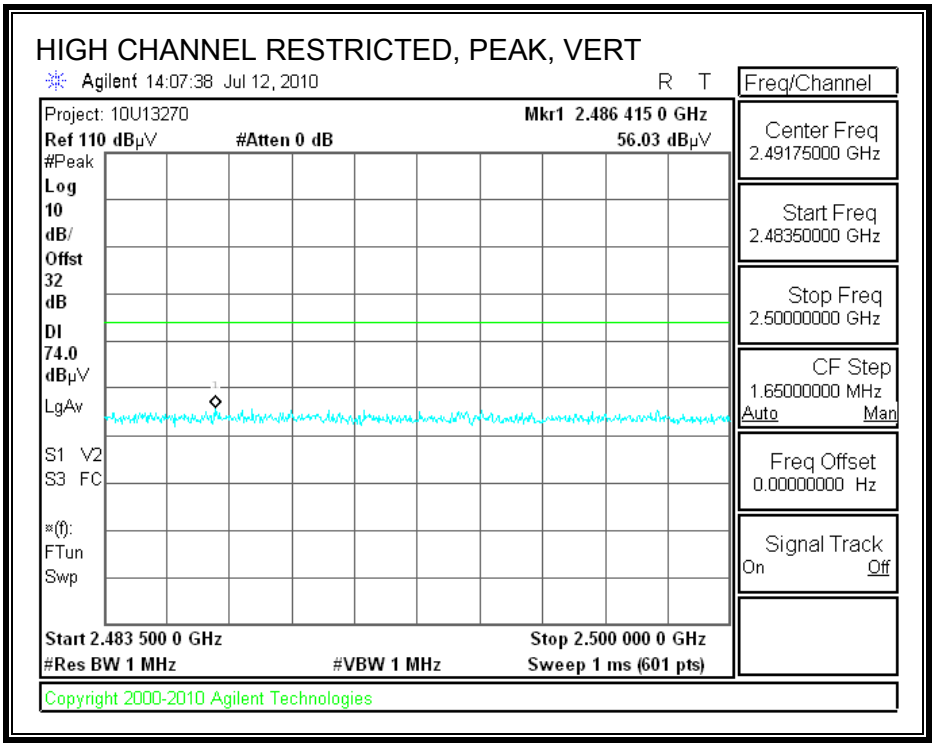


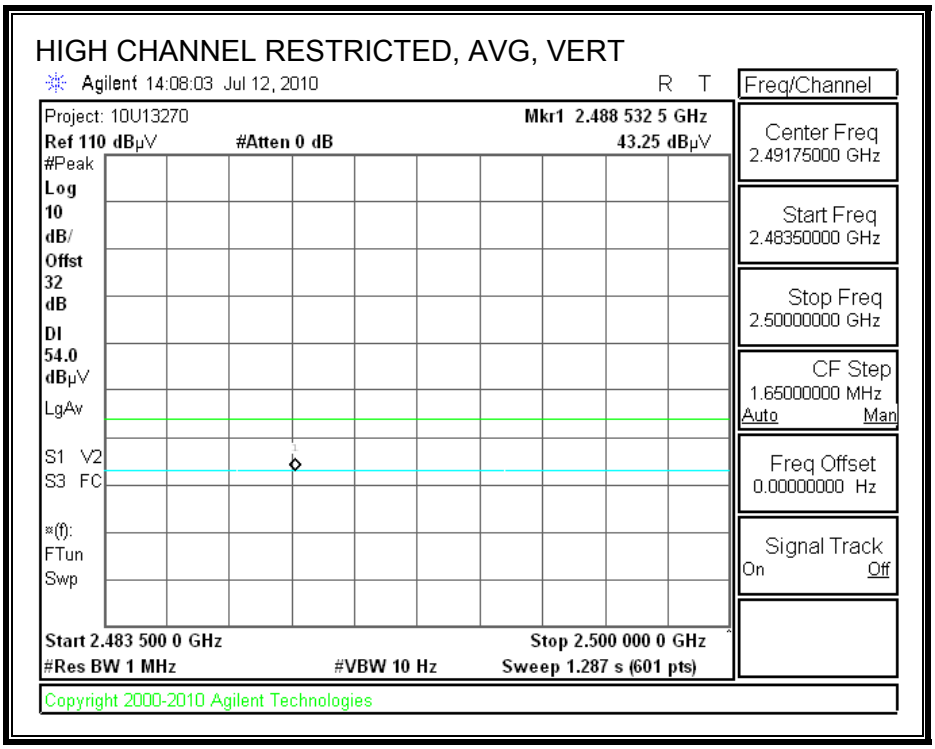
RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)





RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)





HARMONICS AND SPURIOUS EMISSIONS

High Frequency Measurement
Compliance Certification Services, Fremont 5m Chamber

Test Engr: Tom Chen
Date: 07/10/10
Project #: 10U13270
Company: Plam
EUT Description: CDMA 1X EVDO Phone with 802.11 b /g and Bluetooth
EUT M/N: EUT with eraphone only
Test Target: FCC Class B
Mode Oper: 8PSK, Test mode

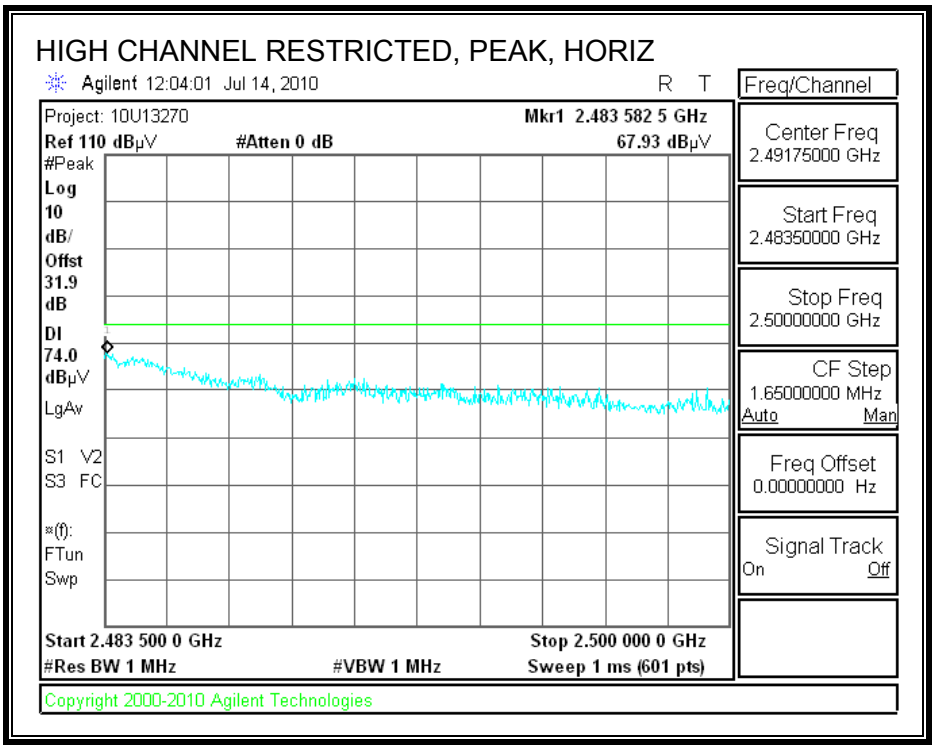
	f	Measurement Frequency	Amp	Preamp Gain	Average Field Strength Limit
	Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters	Peak Field Strength Limit
	Read	Analyzer Reading	Avg	Average Field Strength @ 3 m	Margin vs. Average Limit
	AF	Antenna Factor	Peak	Calculated Peak Field Strength	Margin vs.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

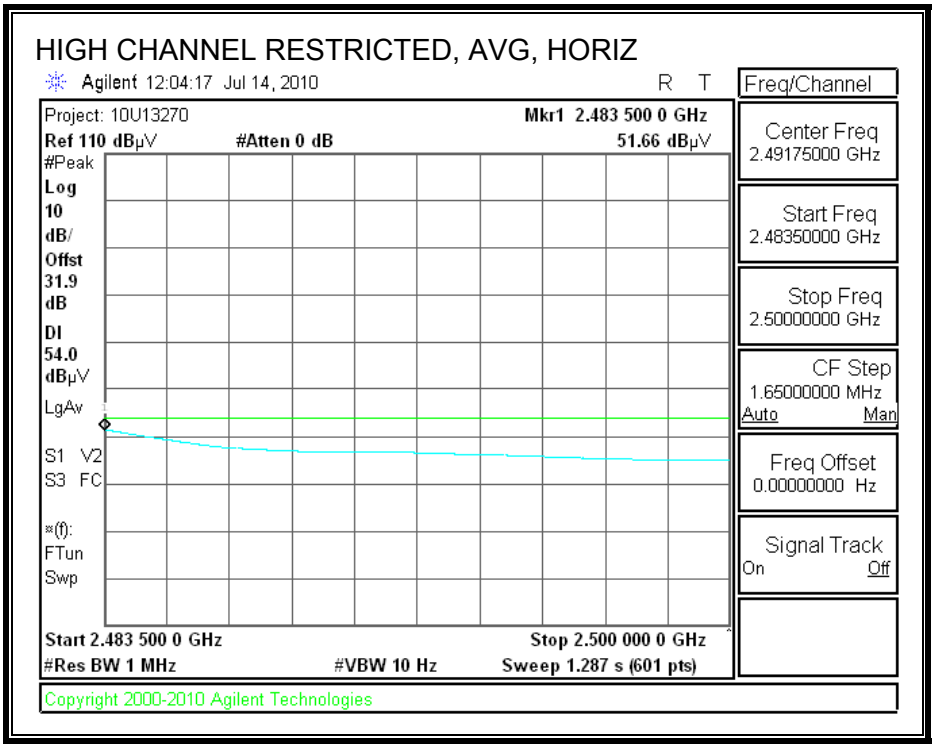
f GHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Fltr dB	Corr. dBuV/m	Limit dBuV/m	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Notes
2402 MHz Low CH													
4.804	3.0	38.8	32.8	5.8	-34.8	0.0	0.0	42.5	74.0	-31.5	H	P	Hori
4.804	3.0	25.8	32.8	5.8	-34.8	0.0	0.0	29.5	54.0	-24.5	H	A	Hori
7.206	3.0	37.3	35.0	7.2	-34.7	0.0	0.0	44.9	74.0	-29.1	H	P	Hori
7.206	3.0	24.6	35.0	7.2	-34.7	0.0	0.0	32.2	54.0	-21.8	H	A	Hori
4.804	3.0	37.9	32.8	5.8	-34.8	0.0	0.0	41.6	74.0	-32.4	V	P	Vert
4.804	3.0	25.8	32.8	5.8	-34.8	0.0	0.0	29.5	54.0	-24.5	V	A	Vert
7.206	3.0	37.6	35.0	7.2	-34.7	0.0	0.0	45.2	74.0	-28.8	V	P	Vert
7.206	3.0	24.6	35.0	7.2	-34.7	0.0	0.0	32.1	54.0	-21.9	V	A	Vert
2441 MHz Mid CH													
4.882	3.0	38.0	32.8	5.8	-34.9	0.0	0.0	41.8	74.0	-32.2	H	P	Hori
4.882	3.0	25.5	32.8	5.8	-34.9	0.0	0.0	29.3	54.0	-24.7	H	A	Hori
7.323	3.0	36.9	35.2	7.3	-34.7	0.0	0.0	44.7	74.0	-29.3	H	P	Hori
7.323	3.0	24.5	35.2	7.3	-34.7	0.0	0.0	32.4	54.0	-21.6	H	A	Hori
4.882	3.0	37.9	32.8	5.8	-34.9	0.0	0.0	41.7	74.0	-32.3	V	P	Vert
4.882	3.0	25.5	32.8	5.8	-34.9	0.0	0.0	29.3	54.0	-24.7	V	A	Vert
7.323	3.0	36.5	35.2	7.3	-34.7	0.0	0.0	44.3	74.0	-29.7	V	P	Vert
7.323	3.0	24.5	35.2	7.3	-34.7	0.0	0.0	32.4	54.0	-21.6	V	A	Vert
2480 MHz High CH													
4.960	3.0	38.0	32.9	5.9	-34.9	0.0	0.0	41.9	74.0	-32.1	H	P	Hori
4.960	3.0	25.3	32.9	5.9	-34.9	0.0	0.0	29.3	54.0	-24.7	H	A	Hori
7.440	3.0	37.1	35.4	7.3	-34.6	0.0	0.0	45.2	74.0	-28.8	H	P	Hori
7.440	3.0	24.6	35.4	7.3	-34.6	0.0	0.0	32.7	54.0	-21.3	H	A	Hori
4.960	3.0	37.5	32.9	5.9	-34.9	0.0	0.0	41.4	74.0	-32.6	V	P	Vert
4.960	3.0	25.3	32.9	5.9	-34.9	0.0	0.0	29.2	54.0	-24.8	V	A	Vert
7.440	3.0	37.5	35.4	7.3	-34.6	0.0	0.0	45.6	74.0	-28.4	V	P	Vert
7.440	3.0	24.6	35.4	7.3	-34.6	0.0	0.0	32.7	54.0	-21.3	V	A	Vert

Rev. 4.1.2.7
Note: No other emissions were detected above the system noise floor.

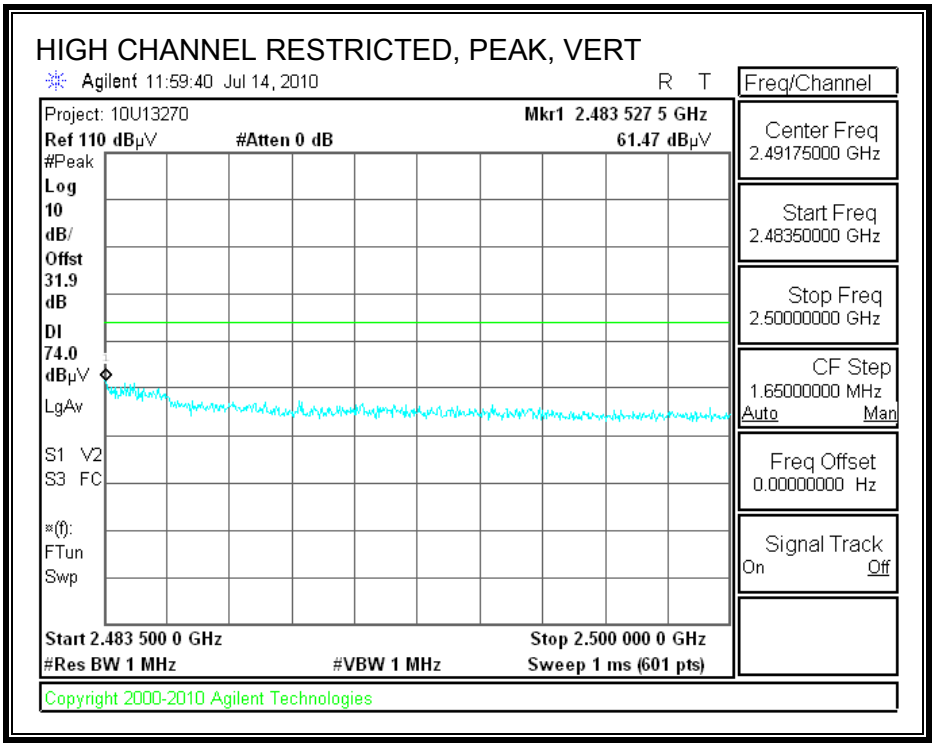
8.2.5. CO-LOCATED TRANSMITTER RADIATED EMISSIONS (WORST CASE)

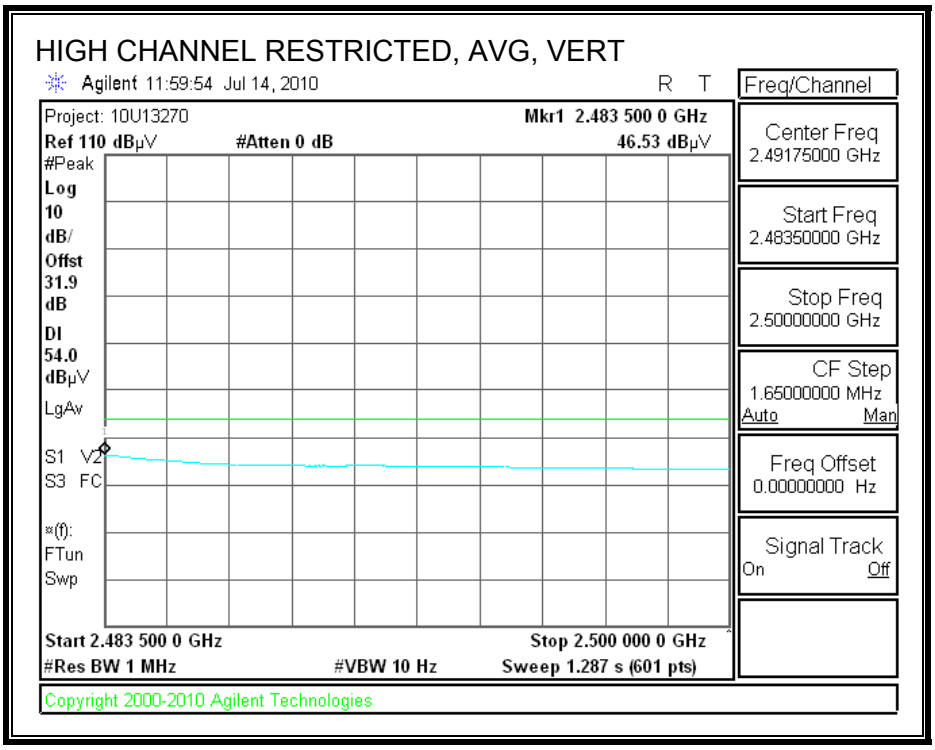
RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)





RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)





HARMONICS AND SPURIOUS EMISSIONS

High Frequency Measurement
Compliance Certification Services, Fremont 5m Chamber

Test Engr: Tom Chen
Date: 07/14/10
Project #: 10U13270
Company: Plam
EUT Description: CDMA 1X EVDO Phone with 802.11 b /g and Bluetooth
EUT M/N: EUT with eraphone only
Test Target: FCC Class B
Mode Oper: 802.11 g, BT High CH, Test mode , Colocated

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

f GHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Fltr dB	Corr. dBuV/m	Limit dBuV/m	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Ant.High cm	Table Angle Degree	Notes
Colocated															
4.924	3.0	38.8	33.1	5.3	-36.5	0.0	0.0	40.8	74.0	-33.2	H	P	195.9	140.4	Hori
4.924	3.0	26.2	33.1	5.3	-36.5	0.0	0.0	28.2	54.0	-25.8	H	A	195.9	140.4	Hori
7.386	3.0	38.1	35.4	6.6	-36.2	0.0	0.0	43.8	74.0	-30.2	H	P	195.9	140.4	Hori
7.386	3.0	25.3	35.4	6.6	-36.2	0.0	0.0	31.1	54.0	-22.9	H	A	195.9	140.4	Hori
4.924	3.0	38.8	33.1	5.3	-36.5	0.0	0.0	40.8	74.0	-33.2	V	P	197.5	250.5	Vert
4.924	3.0	26.2	33.1	5.3	-36.5	0.0	0.0	28.2	54.0	-25.8	V	A	197.5	250.5	Vert
7.386	3.0	37.6	35.4	6.6	-36.2	0.0	0.0	43.4	74.0	-30.6	V	P	197.5	250.5	Vert
7.386	3.0	25.3	35.4	6.6	-36.2	0.0	0.0	31.0	54.0	-23.0	V	A	197.5	250.5	Vert

Rev. 4.1.2.7
Note: No other emissions were detected above the system noise floor.

8.3. RECEIVER ABOVE 1 GHz

8.3.1. RECEIVER ABOVE 1 GHz FOR WLAN (WORST CASE)

High Frequency Measurement
Compliance Certification Services, Fremont 5m Chamber

Company: Palm
Project #: 10U13270
Date: 7/9/2010
Test Engineer: Tom Chen
Configuration: EUT with eraphone only
Mode: RX mode

Test Equipment:

Horn 1-18GHz	Pre-amplifer 1-26GHz	Pre-amplifer 26-40GHz	Horn > 18GHz	Limit
T59; S/N: 3245 @3m	T145 Agilent 3008A0056			RX RSS 210

Hi Frequency Cables

3' cable 22807700	12' cable 22807600	20' cable 22807500	HPF	Reject Filter
3' cable 22807700	12' cable 22807600	20' cable 22807500		

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)
1.015	3.0	46.8	28.1	24.0	2.4	-36.1	0.0	0.0	37.0	18.3	74	54	-37.0	-35.7	V
2.275	3.0	45.6	26.9	28.0	3.7	-35.2	0.0	0.0	42.1	23.4	74	54	-31.9	-30.6	V
3.880	3.0	42.2	23.5	31.9	5.1	-34.8	0.0	0.0	44.3	25.6	74	54	-29.7	-28.4	V
5.275	3.0	40.8	22.1	33.3	6.1	-34.8	0.0	0.0	45.4	26.7	74	54	-28.6	-27.3	V
1.045	3.0	47.5	28.8	24.1	2.4	-36.1	0.0	0.0	37.9	19.2	74	54	-36.1	-34.8	H
3.070	3.0	44.1	25.4	30.2	4.4	-35.2	0.0	0.0	43.4	24.7	74	54	-30.6	-29.3	H
5.275	3.0	41.9	23.2	33.3	6.1	-34.8	0.0	0.0	46.5	27.8	74	54	-27.5	-26.2	H
7.915	3.0	40.7	22.0	36.0	7.6	-34.6	0.0	0.0	49.8	31.1	74	54	-24.2	-22.9	H
Note: No other emissions were detected above the system noise floor.															

Rev. 07.22.09

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. RECEIVER ABOVE 1 GHz FOR BLUETOOTH (WORST CASE)

High Frequency Measurement
Compliance Certification Services, Fremont 5m Chamber

Company: Palm
Project #: 10U13270
Date: 7/14/2010
Test Engineer: Tom Chen
Configuration: EUT with eraphone only
Mode: Bluetooth RX mode

Test Equipment:

Horn 1-18GHz	Pre-amplifer 1-26GHz	Pre-amplifer 26-40GHz	Horn > 18GHz	Limit
T73; S/N: 6717 @3m	T144 Miteq 3008A00931			RX RSS 210

Hi Frequency Cables

3' cable 22807700	12' cable 22807600	20' cable 22807500	HPF	Reject Filter
3' cable 22807700	12' cable 22807600	20' cable 22807500		

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)
1.315	3.0	48.3	33.0	24.9	2.7	-39.0	0.0	0.0	36.9	21.6	74	54	-37.1	-32.4	V
3.250	3.0	43.7	28.4	30.6	4.6	-37.2	0.0	0.0	41.6	26.3	74	54	-32.4	-27.7	V
4.570	3.0	42.7	27.4	32.8	5.6	-36.5	0.0	0.0	44.6	29.3	74	54	-29.4	-24.7	V
5.950	3.0	40.1	24.8	34.0	6.5	-36.3	0.0	0.0	44.3	29.0	74	54	-29.7	-25.0	V
1.150	3.0	48.6	33.3	24.4	2.5	-39.3	0.0	0.0	36.2	20.9	74	54	-37.8	-33.1	H
2.440	3.0	47.9	32.6	28.3	3.9	-37.5	0.0	0.0	42.6	27.3	74	54	-31.4	-26.7	H
4.015	3.0	43.3	28.0	32.3	5.2	-36.6	0.0	0.0	44.1	28.8	74	54	-29.9	-25.2	H
6.355	3.0	41.1	25.8	34.3	6.7	-36.3	0.0	0.0	45.9	30.6	74	54	-28.1	-23.4	H
Note: No other emissions were detected above the system noise floor.															

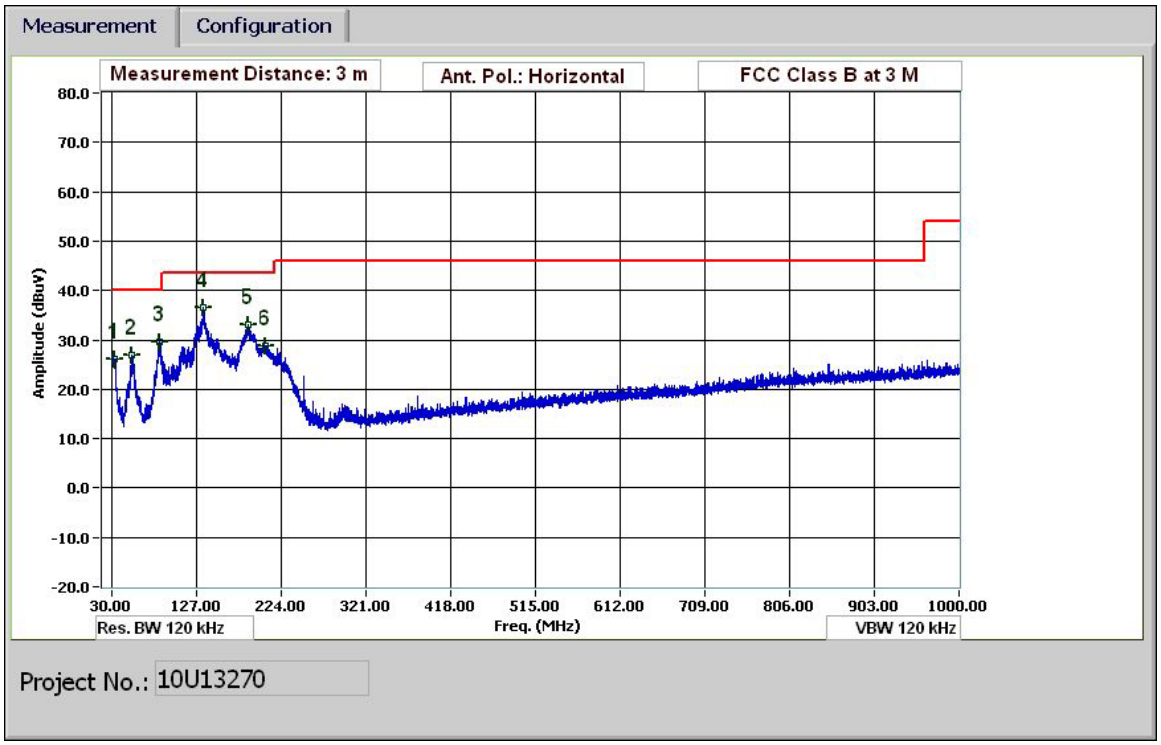
Rev. 07.22.09

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

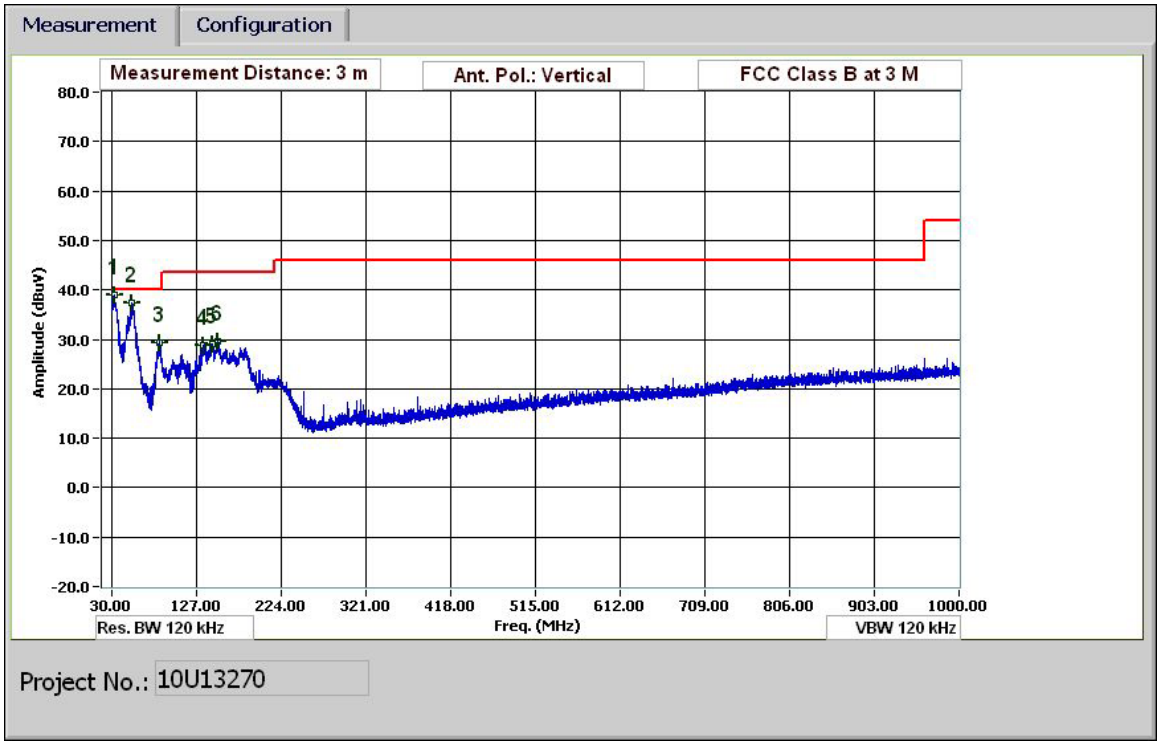
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)

HORIZONTAL PLOT



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

VERTICAL PLOT



HORIZONTAL AND VERTICAL DATA

30-1000MHz Frequency Measurement
Compliance Certification Services, Fremont 5m Chamber

Test Engr: Tom Chen
Date: 07/09/10
Project #: 10U13270
Company: Plam
EUT Description: CDMA 1X EVDO Phone with 802.11 b /g and Bluetooth
EUT M/N: EUT with eraphone and inductive charger
Test Target: FCC Class B
Mode Oper: 802.11 b, Test mode

f	Measurement Frequency	Amp	Preamp Gain	Margin	Margin vs. Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters		
Read	Analyzer Reading	Filter	Filter Insert Loss		
AF	Antenna Factor	Corr.	Calculated Field Strength		
CL	Cable Loss	Limit	Field Strength Limit		

f MHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Filter dB	Corr. dBuV/m	Limit dBuV/m	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Notes
EUT with Inductive Charger													
33.720	3.0	36.6	18.6	0.5	29.7	0.0	0.0	26.1	40.0	-13.9	H	P	
53.401	3.0	48.0	7.9	0.6	29.6	0.0	0.0	26.9	40.0	-13.1	H	P	
84.602	3.0	50.9	7.5	0.8	29.6	0.0	0.0	29.7	40.0	-10.3	H	P	
135.124	3.0	51.5	13.4	1.0	29.4	0.0	0.0	36.6	43.5	-6.9	H	P	
185.886	3.0	49.9	11.1	1.2	29.0	0.0	0.0	33.2	43.5	-10.3	H	P	
205.447	3.0	44.3	12.0	1.3	28.9	0.0	0.0	28.7	43.5	-14.8	H	P	
EUT with Inductive Charger													
33.360	3.0	49.4	18.8	0.5	29.7	0.0	0.0	39.0	40.0	-1.0	V	P	
52.201	3.0	58.4	8.0	0.6	29.6	0.0	0.0	37.4	40.0	-2.6	V	P	
84.602	3.0	50.6	7.5	0.8	29.6	0.0	0.0	29.4	40.0	-10.6	V	P	
134.644	3.0	43.7	13.4	1.0	29.4	0.0	0.0	28.8	43.5	-14.7	V	P	
144.485	3.0	44.5	12.9	1.1	29.3	0.0	0.0	29.2	43.5	-14.3	V	P	
151.325	3.0	45.4	12.4	1.1	29.3	0.0	0.0	29.5	43.5	-14.0	V	P	

Rev. 1.27.09
Note: No other emissions were detected above the system noise floor.

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

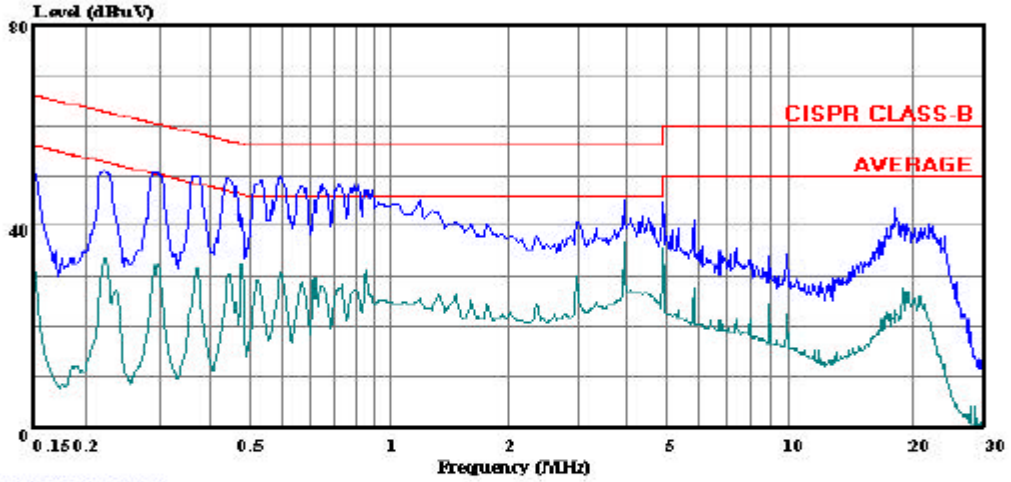
6 WORST EMISSIONS

CONDUCTED EMISSIONS DATA (115VAC 60Hz)									
Freq.	Reading			Closs	Limit	EN_B	Margin		Remark
(MHz)	PK (dBuV)	QP (dBuV)	AV (dBuV)	(dB)	QP	AV	QP (dB)	AV (dB)	L1 / L2
0.44	49.38	--	27.67	0.00	57.06	47.06	-7.68	-19.39	L1
0.53	49.12	--	27.09	0.00	56.00	46.00	-6.88	-18.91	L1
0.60	49.36	--	30.64	0.00	56.00	46.00	-6.64	-15.36	L1
0.45	49.14	--	29.76	0.00	56.80	46.80	-7.66	-17.04	L2
0.53	49.16	--	30.18	0.00	56.00	46.00	-6.84	-15.82	L2
0.60	48.23	--	32.26	0.00	56.00	46.00	-7.77	-13.74	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#: 10U13270 LC.EMI Date: 07-14-2010 Time: 15:39:38



(Line Conduction)

Trace: 5 Ref Trace:

Condition: CISPR CLASS-B
Test Operator: : Tom Chen
Project #: : 10U13270
Company: : Palm Inc,.
EUT Description:: CDMA 1X EVDO PHONE /w 802.11 b/g
: AND BLUETOOTH
Configuration: : EUT with Inductive charger
Mode: : TX Worst Case
Target: : FCC Class B
Voltage: : 115VAC / 60 Hz
: Line 1: Peak (Blue), Average (Green)

LINE 2 RESULTS