FCC CFR47 PART 15 SUBPART C

CERTIFICATION TEST REPORT

FOR

TRI-BAND PHONE WITH WLAN, BLUETOOTH, BLE, AND NFC

MODEL NUMBER: LG870, LG-LG870, LGLG870

FCC ID: ZNFLG870

REPORT NUMBER: 13U14917-2

ISSUE DATE: APRIL 05, 2013

Prepared for
LG ELECTRONICS MOBILECOMM U.S.A., INC.
1000 SYLVAN AVENUE
ENGLEWOOD CLIFFS, NJ 07632

Prepared by
UL CCS
47173 BENICIA STREET
FREMONT, CA 94538, U.S.A.
TEL: (510) 771-1000
FAX: (510) 661-0888

NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
-	04/05/13	Original	T. LEE

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS

COMPANY NAME:	LG ELECTRONICS MOBLILECOMM USA,INC. 1000 SYLVAN AVENUE ENGLEWOOD, NJ 07632, USA
EUT DESCRIPTION:	LTE PHONE BLUETOOTH AND WLAN
MODEL:	LG870, LG-LG870, LGLG870
SERIAL NUMBER:	99000250000211 (CONDUCTED) AND 256691464000002160 (RADIATED)
DATE TESTED:	JANUARY 7 TO 25 AND MARCH 14 TO 25, 2013

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
CFR 47 Part 15 Subpart C	Pass

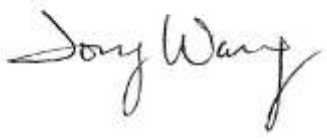
UL CCS tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL CCS based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and 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 UL CCS and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL 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 UL CCS By:

TIM LEE
WiSE PROGRAM MANAGER
UL CCS

Tested By:



TONY WANG
EMC ENGINEER
UL CCS

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 3, and RSS-210 Issue 8.

3. FACILITIES AND ACCREDITATION

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

UL 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

The EUT is a Dual Band phone that also supports BLUETOOTH, WLAN and NFC.

5.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum conducted output power as follows:

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
2412 - 2462	802.11b	18.76	75.16
2412 - 2462	802.11g	22.16	164.44
2412 - 2462	802.11n HT20	20.92	123.59
5745 - 5825	802.11a	19.38	86.70
5745 - 5825	802.11n HT20	18.26	66.99
5755 - 5795	802.11n HT40	17.55	56.89

5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes a PIFA antenna, with a maximum gain of -1.64 dBi for 2.4GHz and -2.1 dBI for 5GHz.

5.4. SOFTWARE AND FIRMWARE

The firmware installed in the EUT during testing was Kernel, Version 3.4.0

The EUT driver software installed during testing was Android Version 4.1.2

The test utility software used during testing was LG870_LAP8960JR121210A

5.5. WORST-CASE CONFIGURATION AND MODE

Radiated emission and power line conducted emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario.

For the fundamental investigation, since the EUT is a portable device that has three orientations; X, Y and Z orientations have been investigated, also with AC adapter, and earphone, and the worst case was found to be at X orientation with AC adapter and earphone for both 2.4GHz and 5GHz band.

For Radiated Emissions below 1 GHz and Power line Conducted Emissions, the channel with the highest conducted output power was selected as a worst-case scenario:

802.11b mode: 1 Mbps
802.11g mode: 6 Mbps
802.11a mode: 6 Mbps
802.11n HT20mode: MCS0
802.11n HT40mode: MCS0

5.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Description	Manufacturer	Model	Serial Number	FCC ID
AC Adapter	LG	MCS-01WR	EAY62768913	N/A
Earphone	I-SOUND CO. LTD	HC-MYD-LG113	N/A	N/A

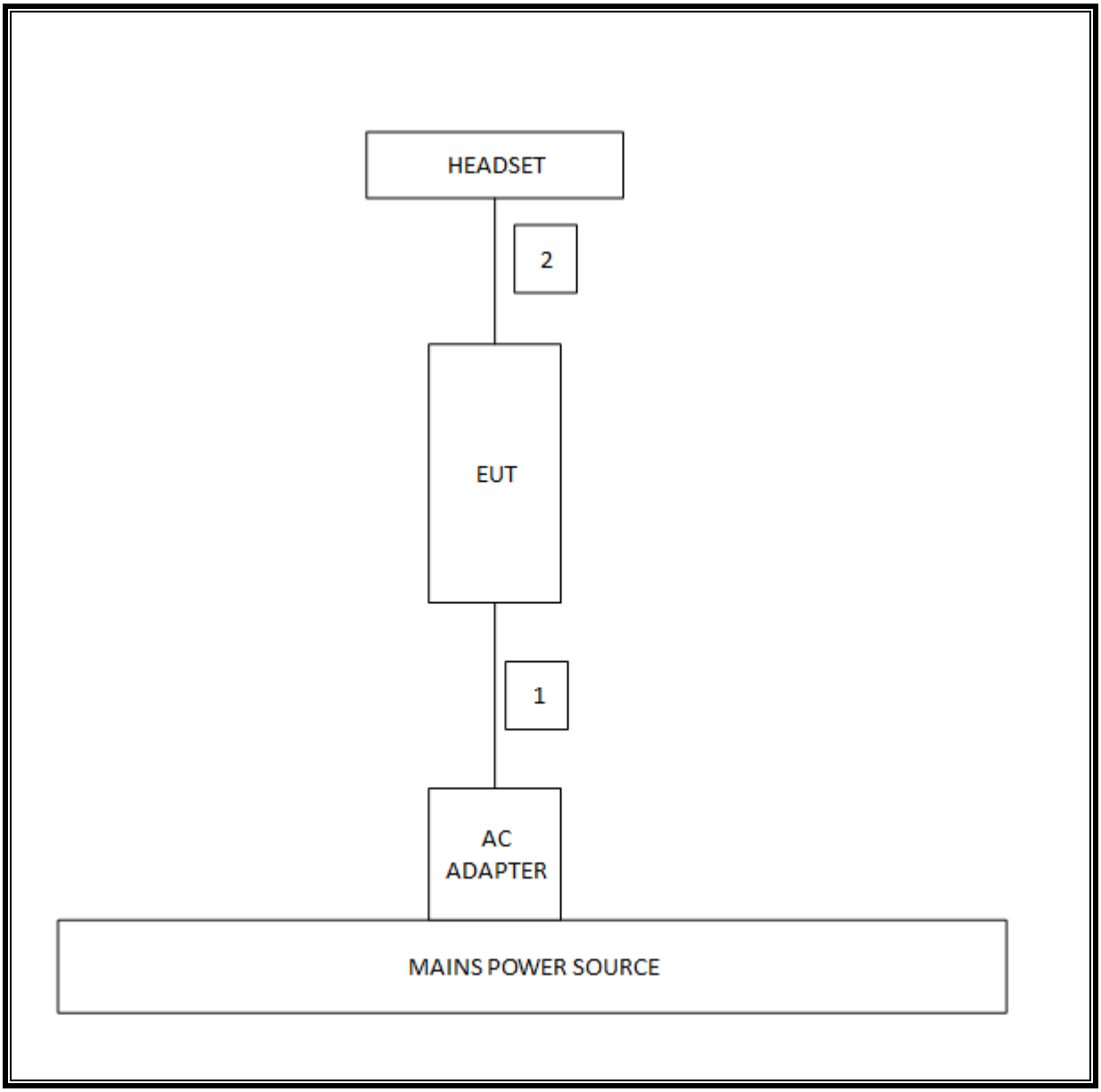
I/O CABLES

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	DC Power	1	Mini-USB	Shielded	1.2m	N/A
2	Audio	1	Mini-Jack	Unshielded	1.0m	N/A

TEST SETUP

The EUT is setup to transmit continuously.

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 Due**
Spectrum Analyzer, 44 GHz	Agilent / HP	E4446A	C00986	4/22/2013
Spectrum Analyzer, 26.5 GHz	Agilent / HP	E4440A	C01179	2/26/2014
EMI Test Receiver, 30 MHz	R & S	ESHS 20	N02396	8/8/2013
Preamplifier, 1300 MHz	Agilent / HP	8447D	C00580	1/28/2014
Preamplifier, 26.5 GHz	Agilent / HP	8449B	C01063	10/22/2013
Preamplifier, 40 GHz	Miteq	NSP4000-SP2	C00990	8/2/2013
Antenna, Bilog, 30MHz-1 GHz	Sunol Sciences	JB1	N/A	3/6/2014
Antenna, Horn, 18 GHz	ETS	3117	C01022	2/21/2014
Antenna, Horn, 26.5 GHz	ARA	MWH-1826/B	C00589	12/17/2013
Peak Power Meter	Agilent / HP	E4416A	C00963	5/13/2013
Peak / Average Power Sensor	Agilent / HP	E9327A	C00964	5/13/2013
LISN, 30 MHz	FCC	50/250-25-2	C00626	01/14/14
Reject Filter, 2.4-2.5 GHz	Micro-Tronics	BRC13192	N02683	CNR
Reject Filter, 5.725-5.825 GHz	Micro-Tronics	BRC13192	N02676	CNR

7. ON TIME, DUTY CYCLE AND MEASUREMENT METHODS

LIMITS

None; for reporting purposes only.

PROCEDURE

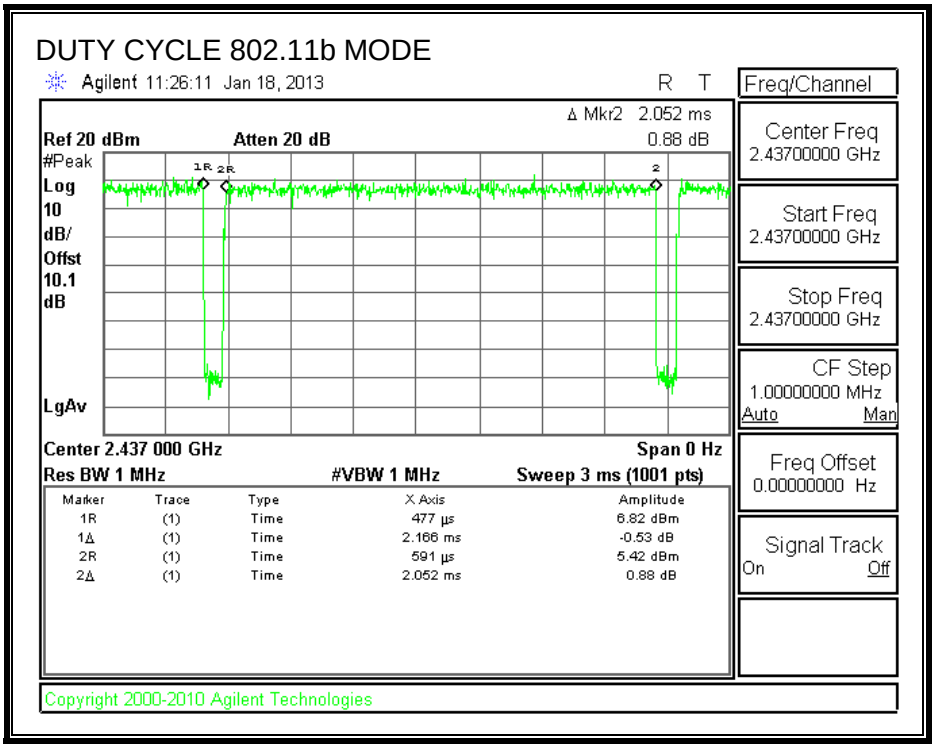
KDB 789033 Zero-Span Spectrum Analyzer Method.

7.1. ON TIME AND DUTY CYCLE RESULTS

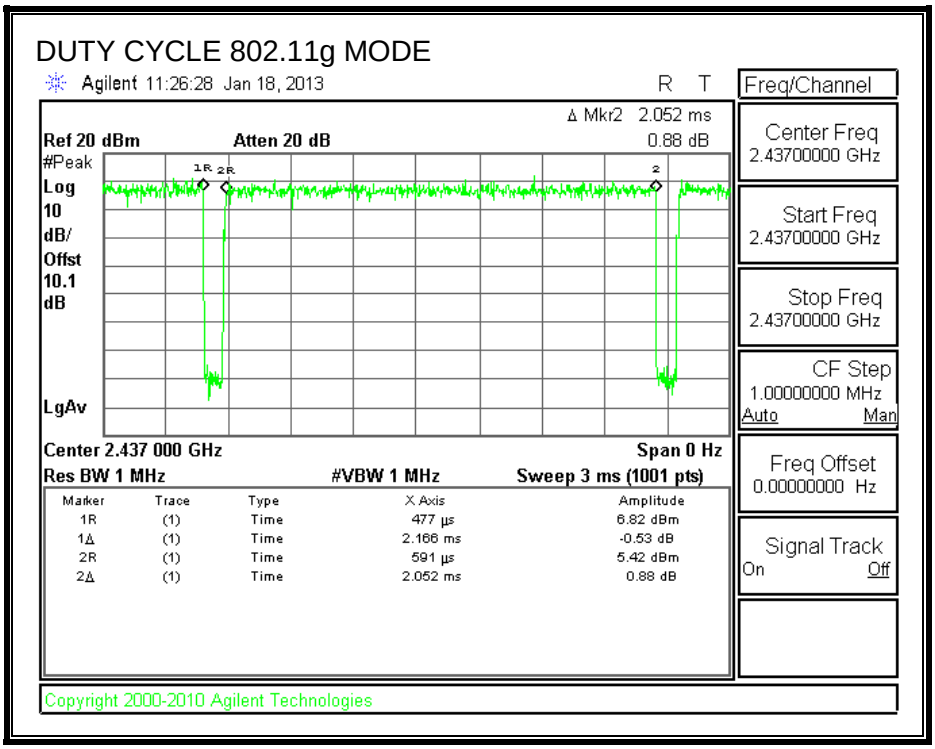
Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
802.11b	2.05	2	0.977	97.7%	0.10	0.487
802.11g	2.05	2	0.947	94.7%	0.23	0.487
802.11n 20 MHz	1.91	2	0.947	94.7%	0.24	0.522
802.11a 20 MHz	2.07	2	0.954	95.4%	0.21	0.484
802.11n HT20	1.92	2	0.950	95.0%	0.22	0.521
802.11n HT40	0.99	1	0.956	95.6%	0.20	1.005

7.2. 2.4 GHz DUTY CYCLE PLOTS

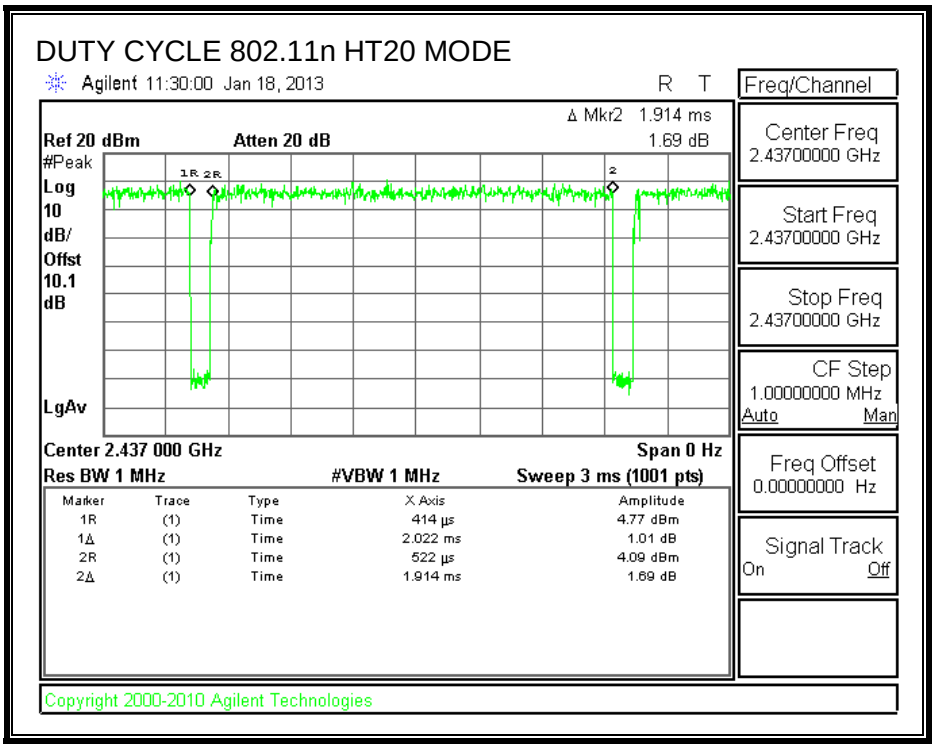
DUTY CYCLE 802.11b MODE



DUTY CYCLE 802.11g MODE

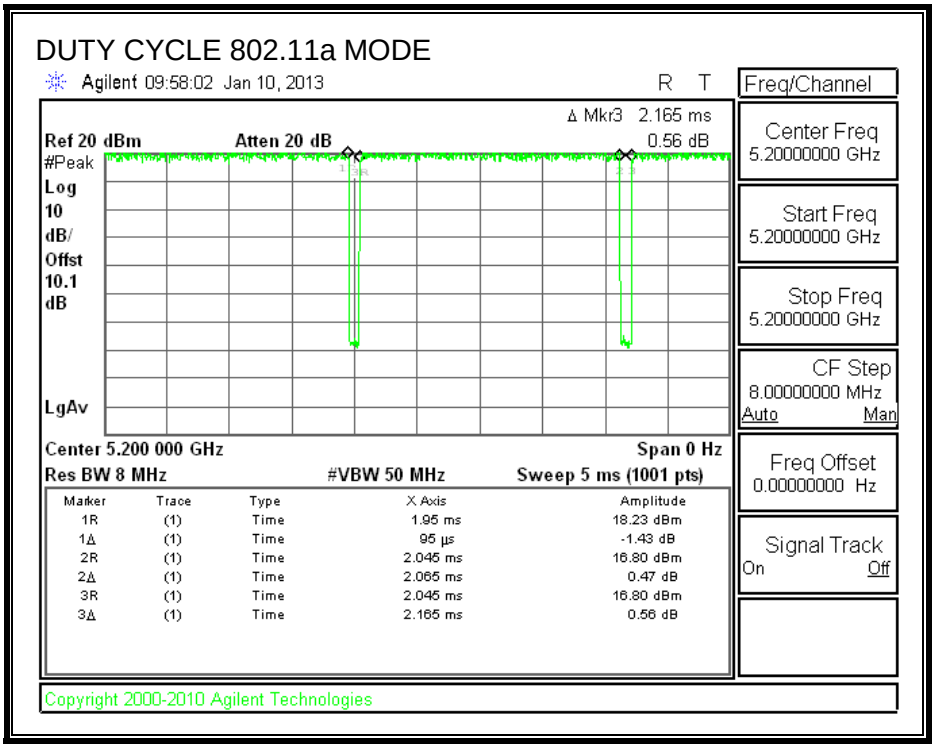


DUTY CYCLE 802.11n HT20 MODE

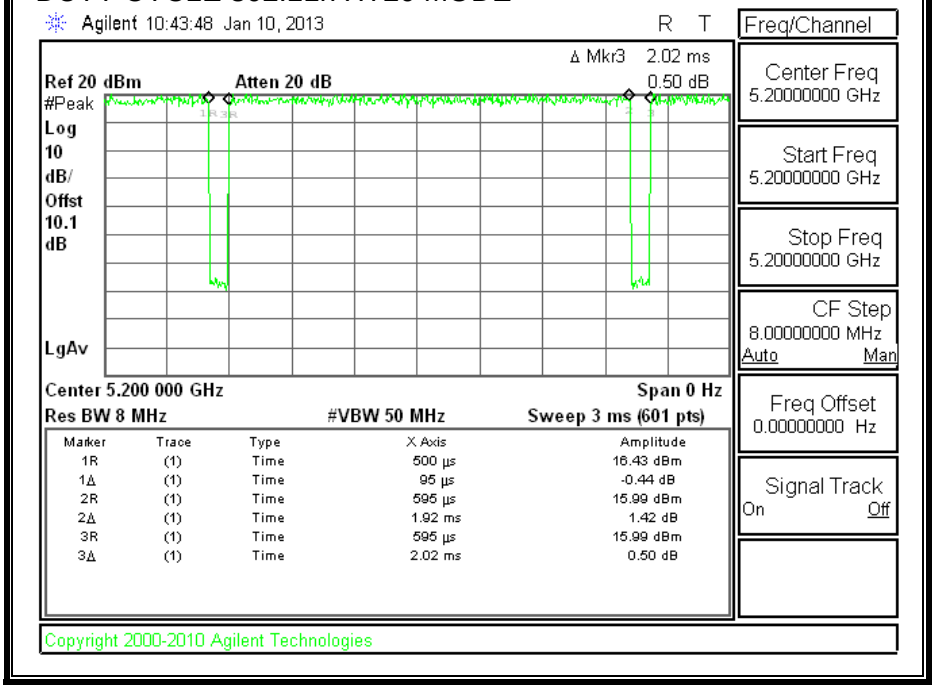


7.3. 5.8 GHz DUTY CYCLE PLOTS

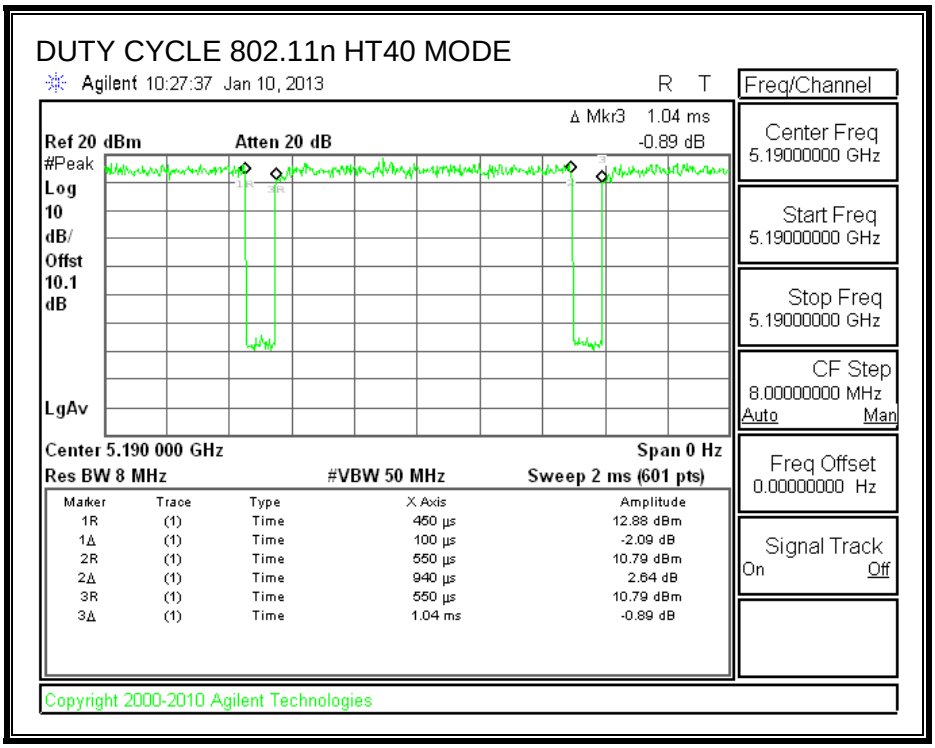
DUTY CYCLE 802.11a MODE



DUTY CYCLE 802.11n HT20 MODE



DUTY CYCLE 802.11n HT40 MODE



8. MEASUREMENT METHOD

The Duty Cycle is less than 98% and consistent therefore KDB 789033 Method SA-2 is used for power add PPSD.

The Duty Cycle is less than 98% and consistent, KDB 789033 Method VB with Power RMS Averaging is used for spurious emissions above 1GHz

9. ANTENNA PORT TEST RESULTS

9.1. 802.11b MODE IN THE 2.4 GHz BAND

9.1.1. 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.

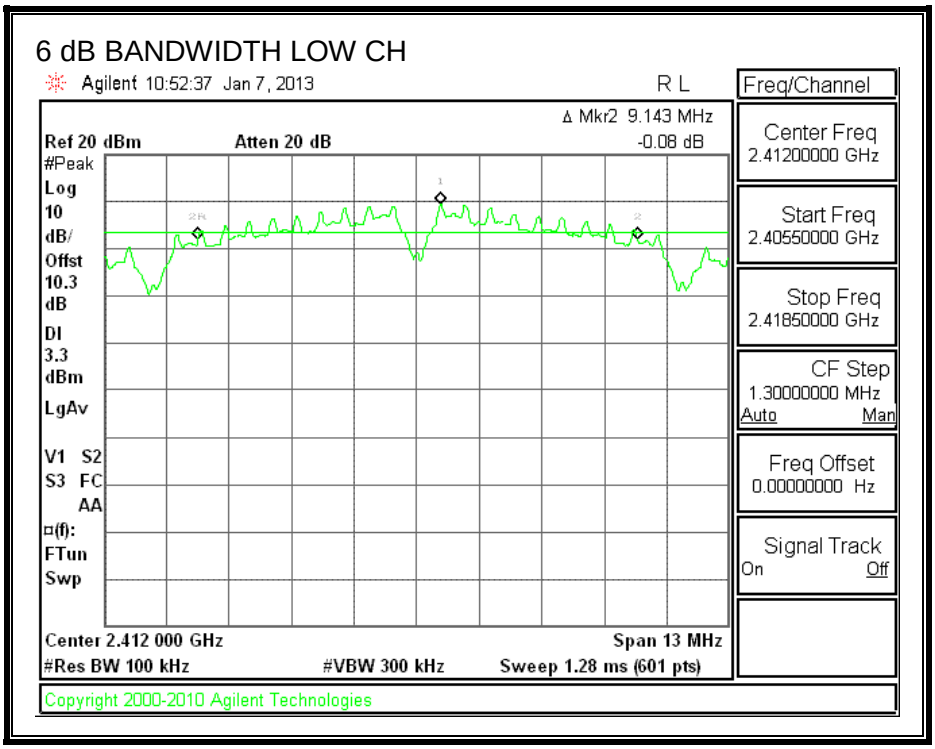
TEST PROCEDURE

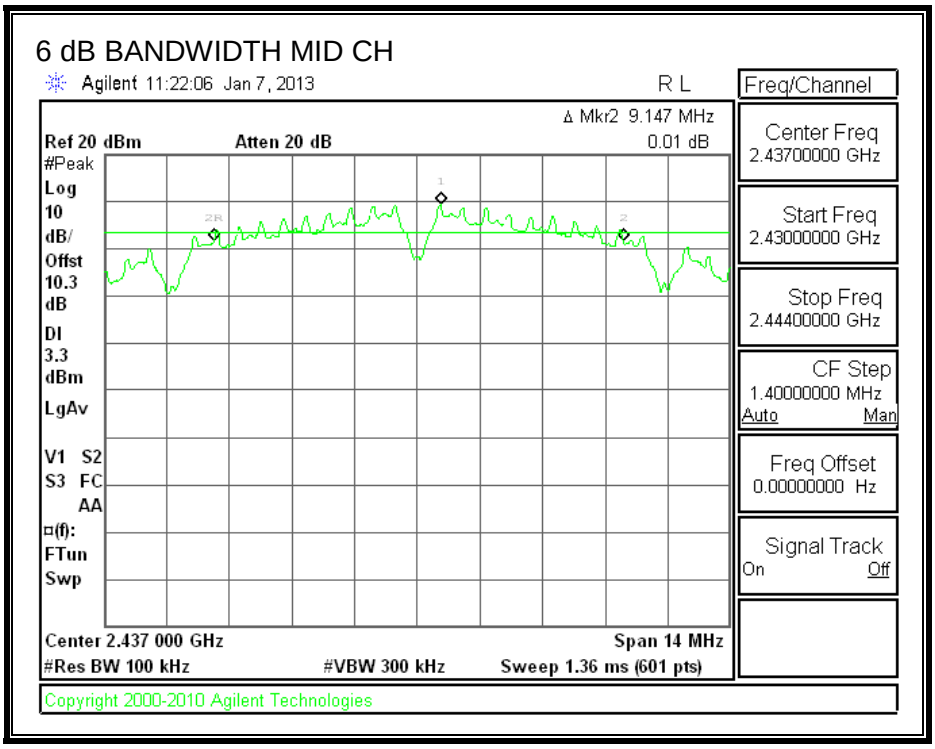
The transmitter output is connected to a spectrum analyzer with the RBW set between 1% and 5% of the EBW, the VBW >= 3 x RBW, peak detector and max hold.

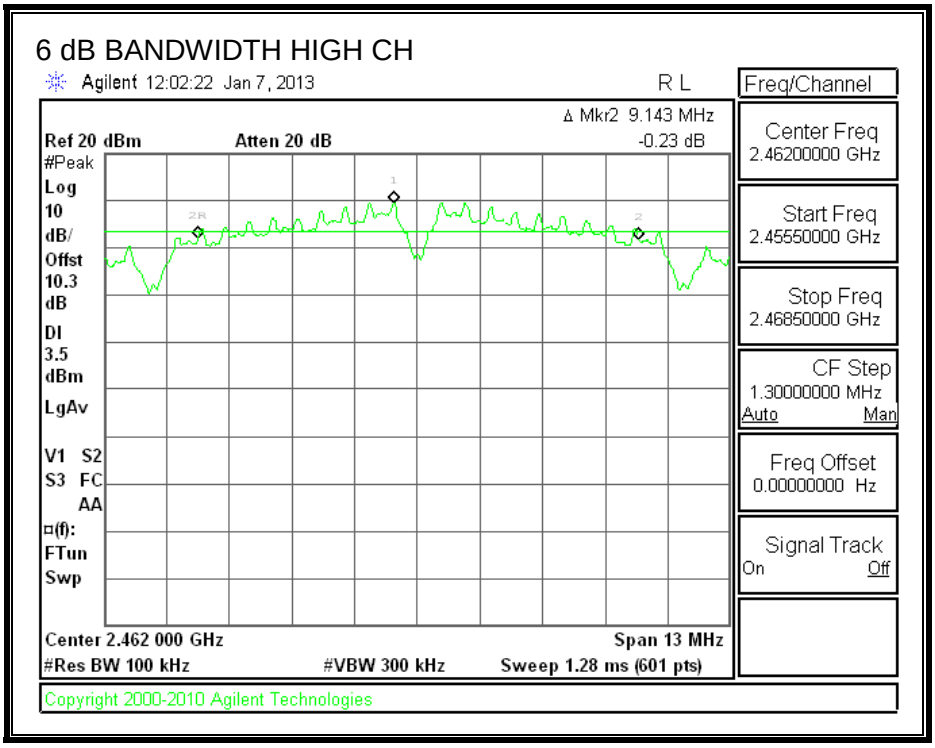
RESULTS

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2412	9.143	0.5
Mid	2437	9.147	0.5
High	2462	9.143	0.5

6 dB BANDWIDTH







9.1.2. 99% BANDWIDTH

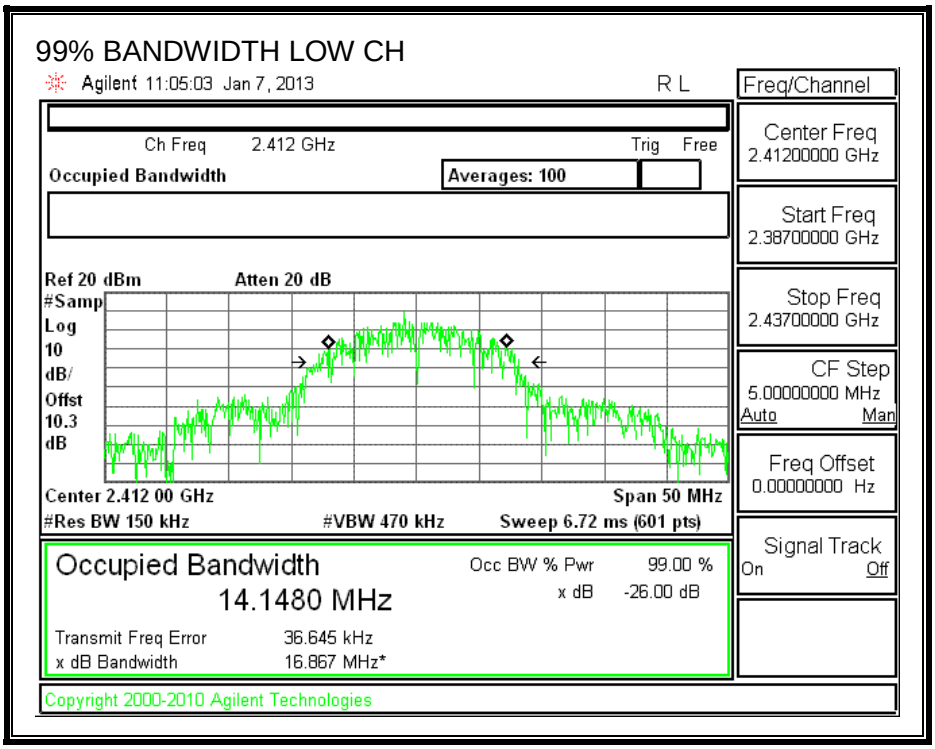
LIMITS

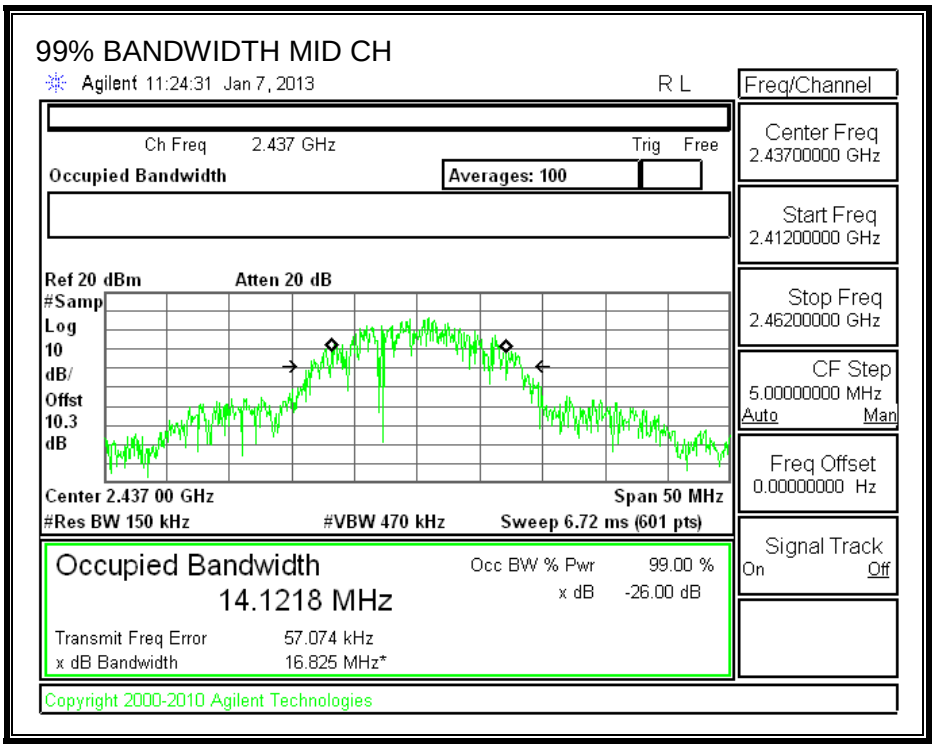
None; for reporting purposes only.

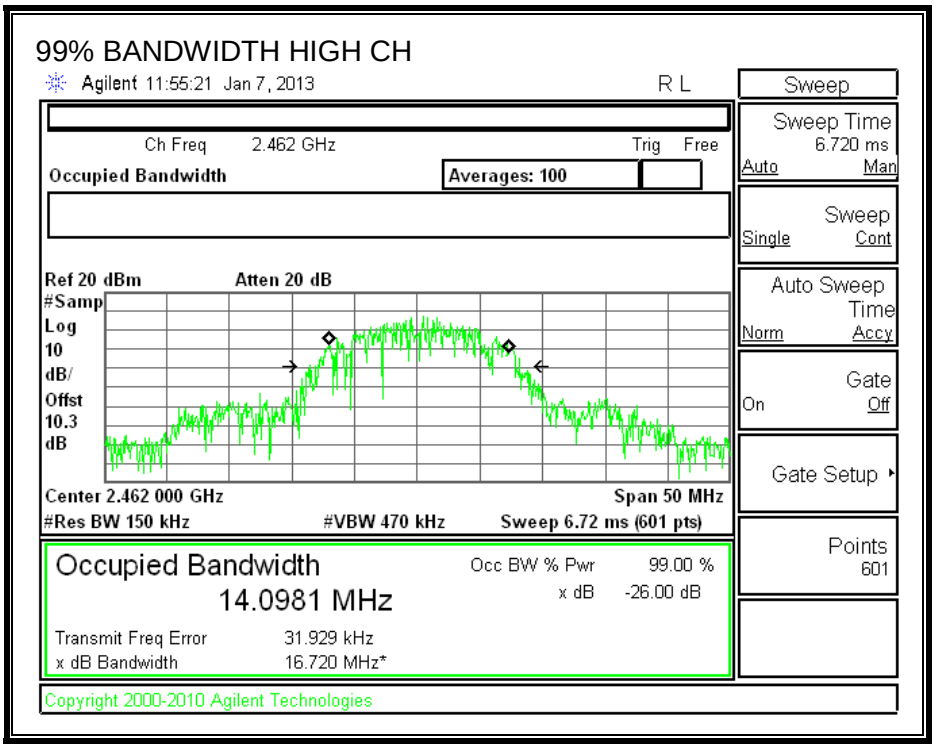
RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2412	14.1480
Mid	2437	14.1218
High	2462	14.0981

99% BANDWIDTH







9.1.3. OUTPUT POWER

LIMITS

FCC §15.247

IC RSS-210 A8.4

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt, based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

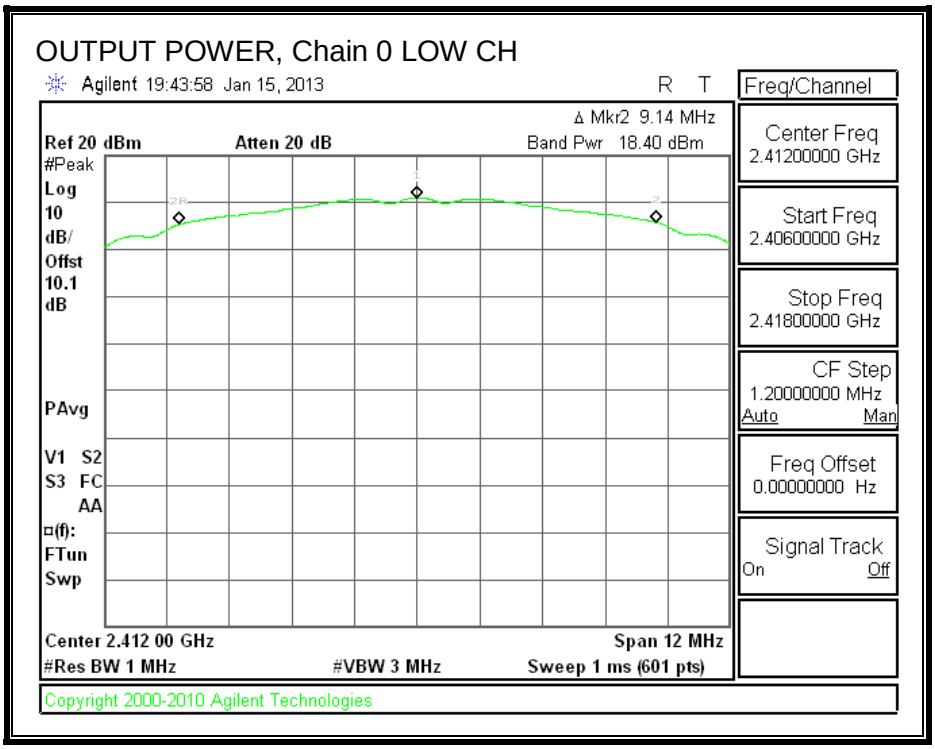
Limits

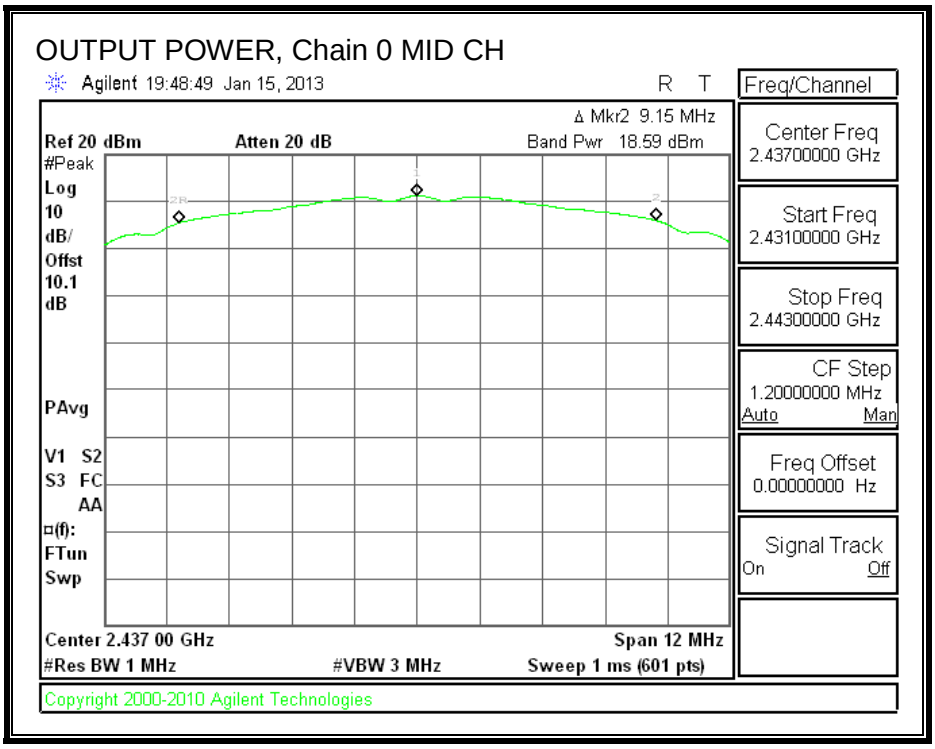
Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
Low	2412	-5.90	30.00	30	36	30.00
Mid	2437	-5.90	30.00	30	36	30.00
High	2462	-5.90	30.00	30	36	30.00

Results

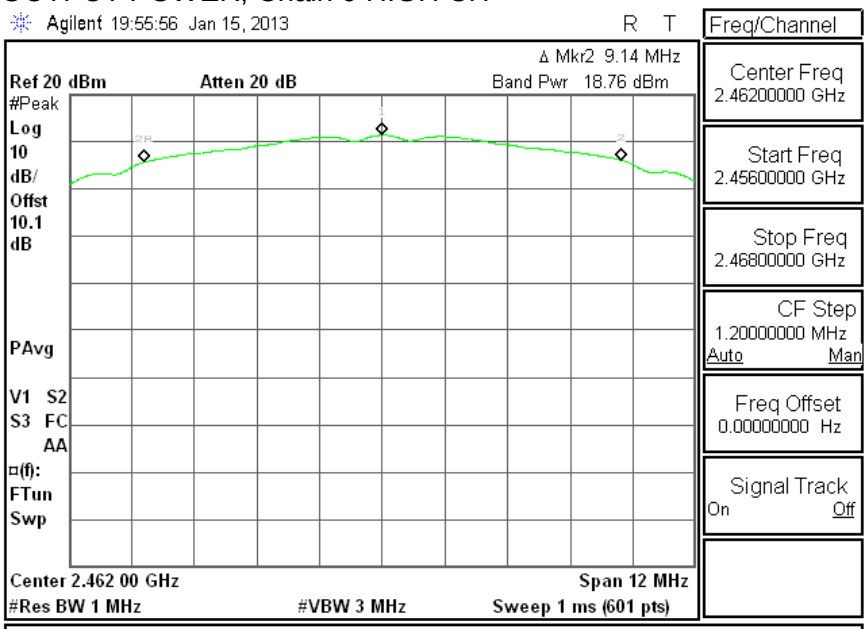
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
Low	2412	18.40	18.40	30.00	-11.60
Mid	2437	18.59	18.59	30.00	-11.41
High	2462	18.76	18.76	30.00	-11.24

OUTPUT POWER, Chain 0





OUTPUT POWER, Chain 0 HIGH CH



9.1.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Channel	Frequency (MHz)	Power (dBm)
Low	2412	15.70
Mid	2437	15.80
High	2462	15.80

9.1.5. PSD

LIMITS

FCC §15.247

IC RSS-210 A8.2

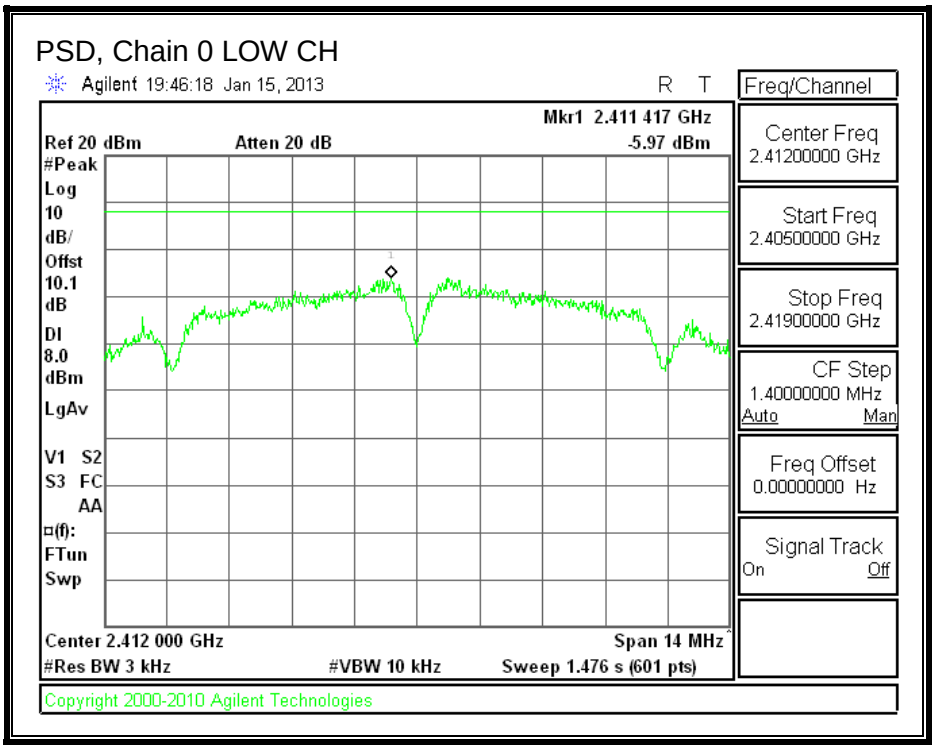
The power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

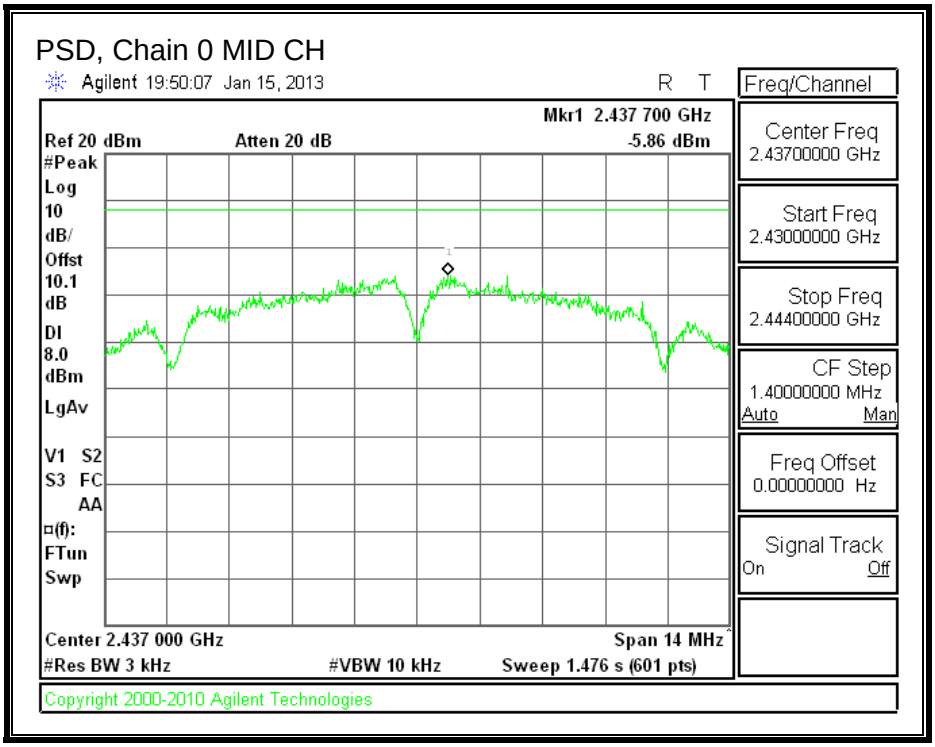
RESULTS

PSD Results

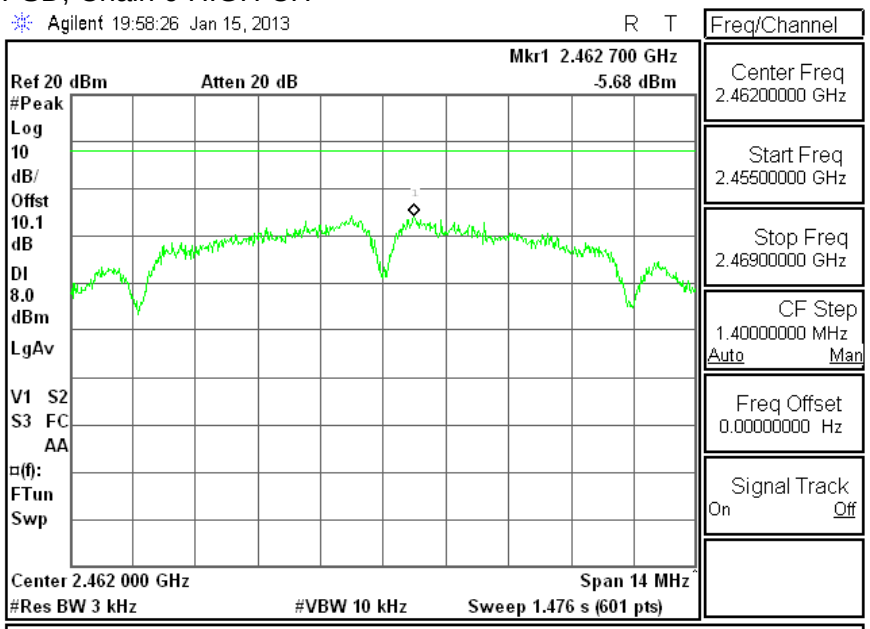
Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Limit (dBm)	Margin (dB)
Low	2412	-5.97	8.0	-14.0
Mid	2437	-5.86	8.0	-13.9
High	2462	-5.68	8.0	-13.7

PSD, Chain 0





PSD, Chain 0 HIGH CH



9.1.6. OUT-OF-BAND EMISSIONS

LIMITS

FCC §15.247 (d)

IC RSS-210 A8.5

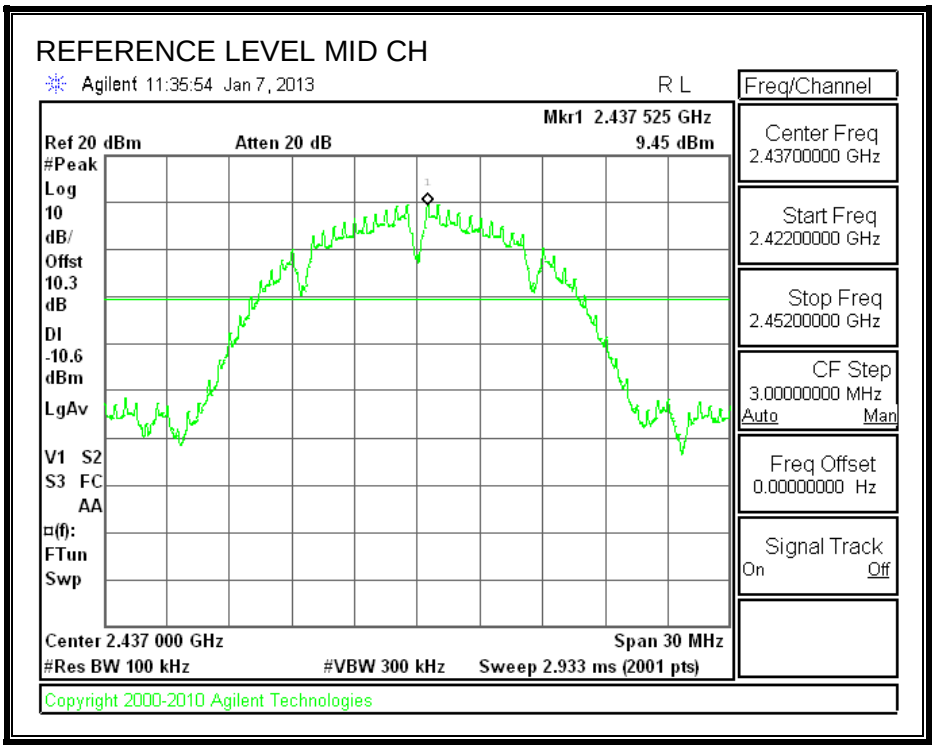
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required.

TEST PROCEDURE

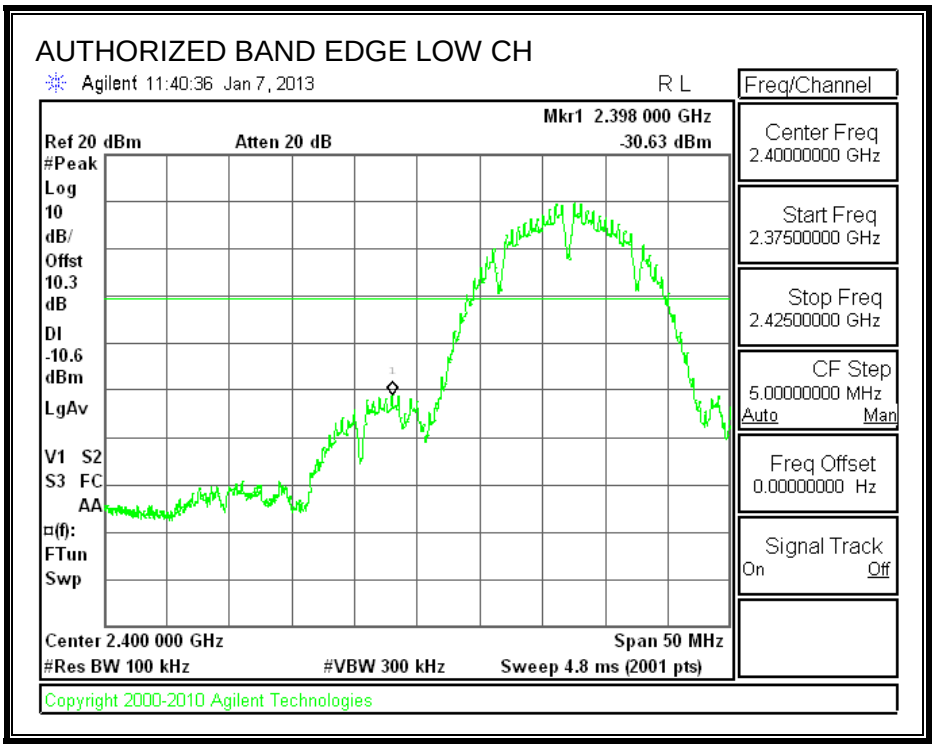
The transmitter output is connected to a spectrum analyzer with RBW = 100 kHz, VBW = 300 kHz, peak detector, and max hold. Measurements utilizing these settings are made of the in-band reference level, bandedge (where measurements to the general radiated limits will not be made) and out-of-band emissions.

RESULTS

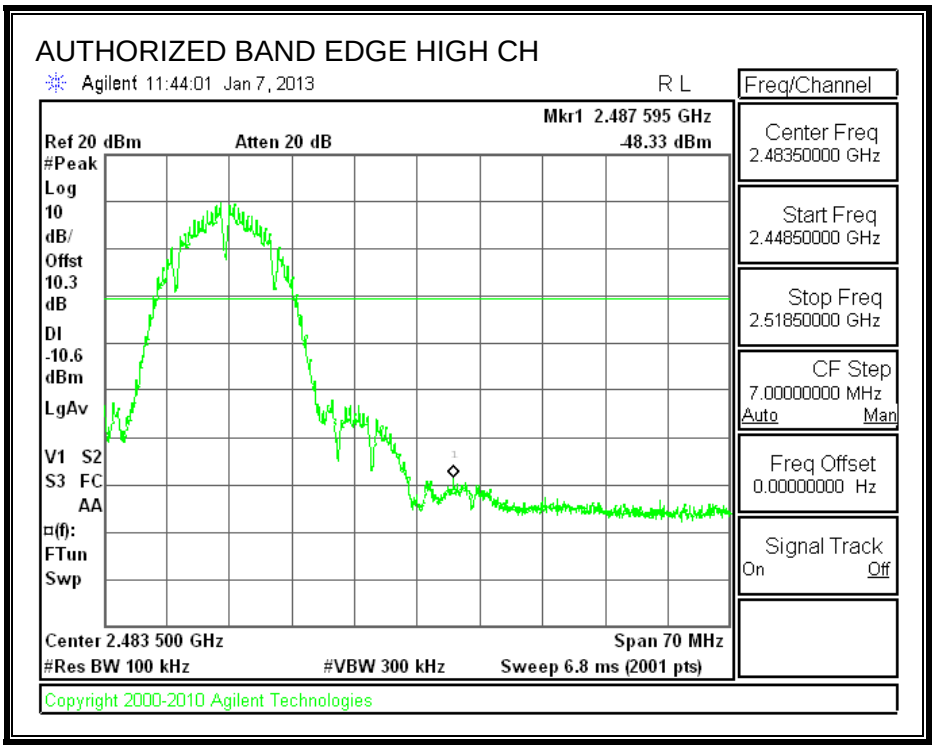
IN-BAND REFERENCE LEVEL



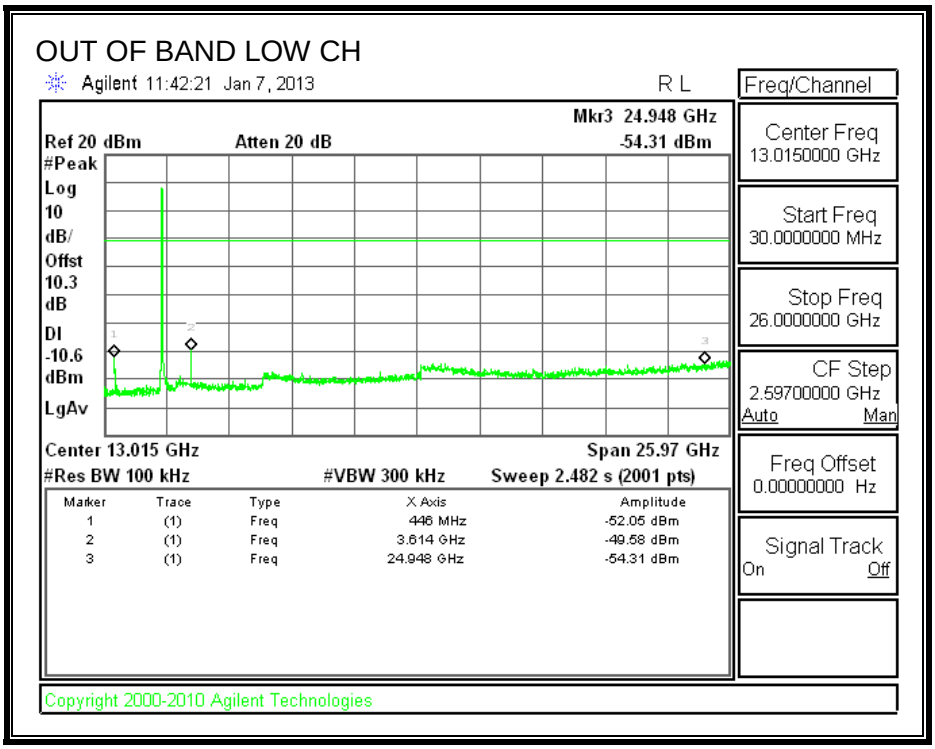
LOW CHANNEL BANDEDGE



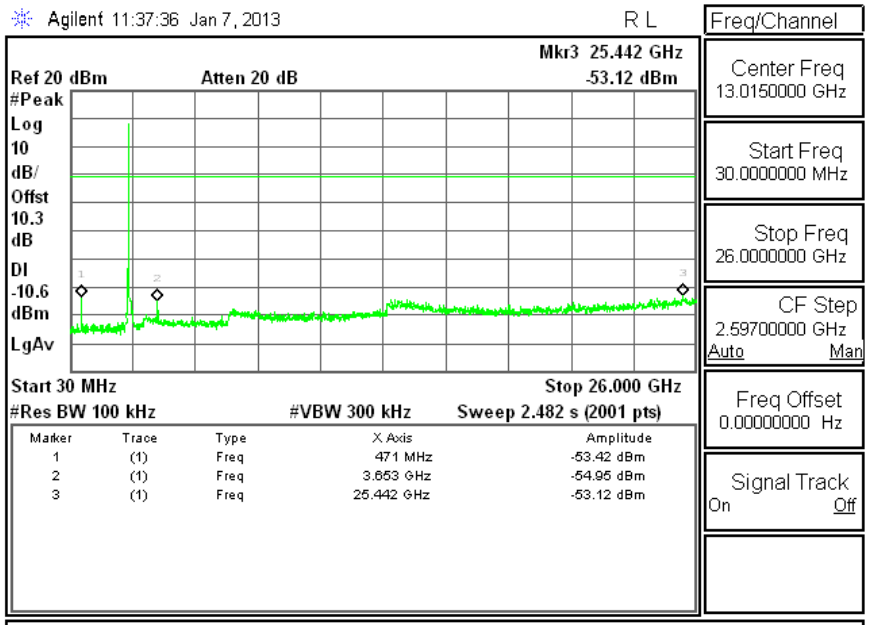
HIGH CHANNEL BANDEDGE



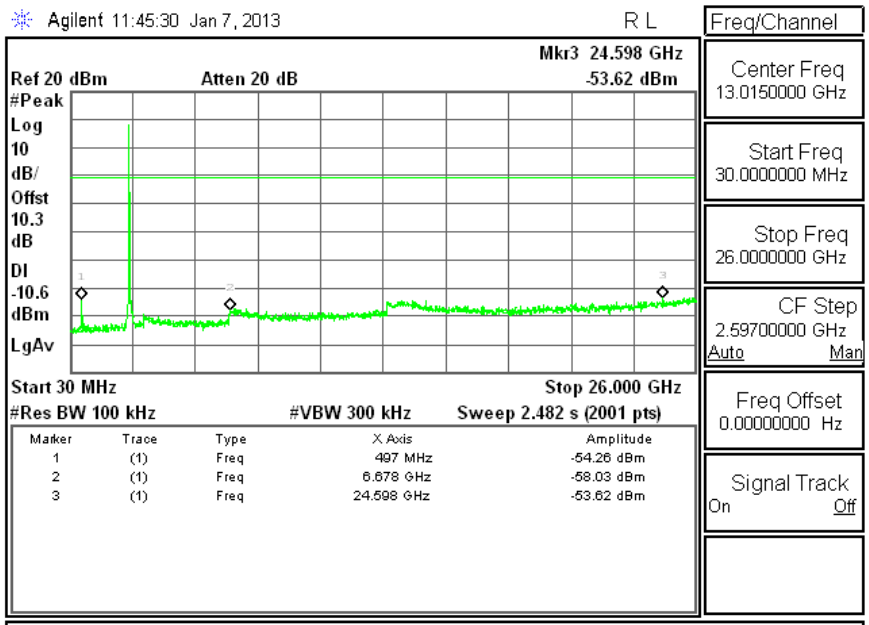
OUT-OF-BAND EMISSIONS



OUT OF BAND MID CH



OUT OF BAND HIGH CH



9.2. 802.11g MODE IN THE 2.4 GHz BAND

9.2.1. 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.

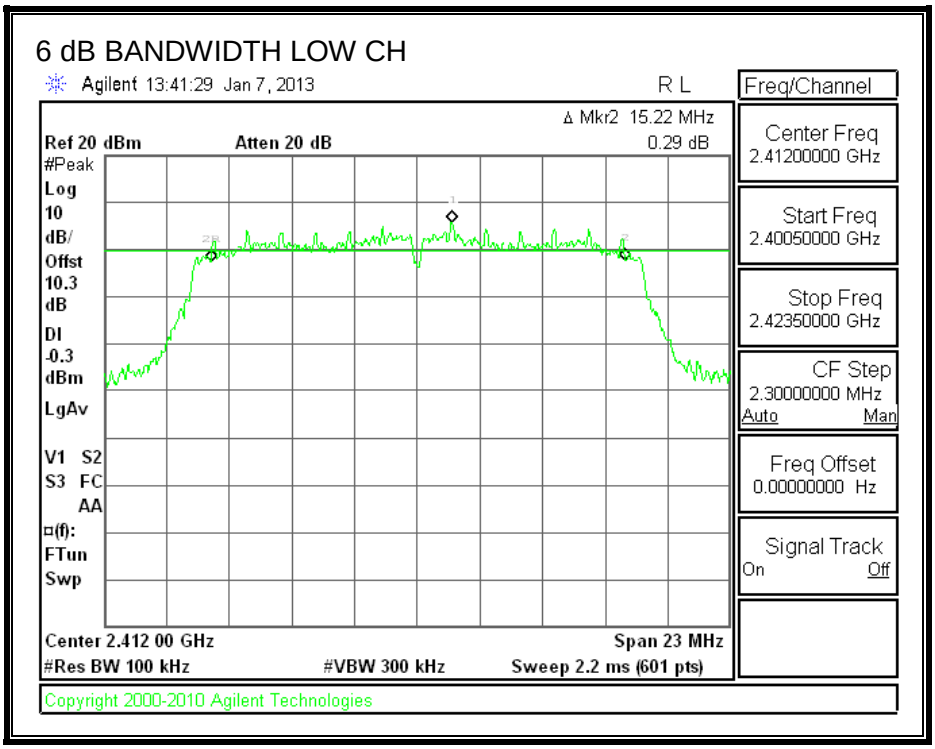
TEST PROCEDURE

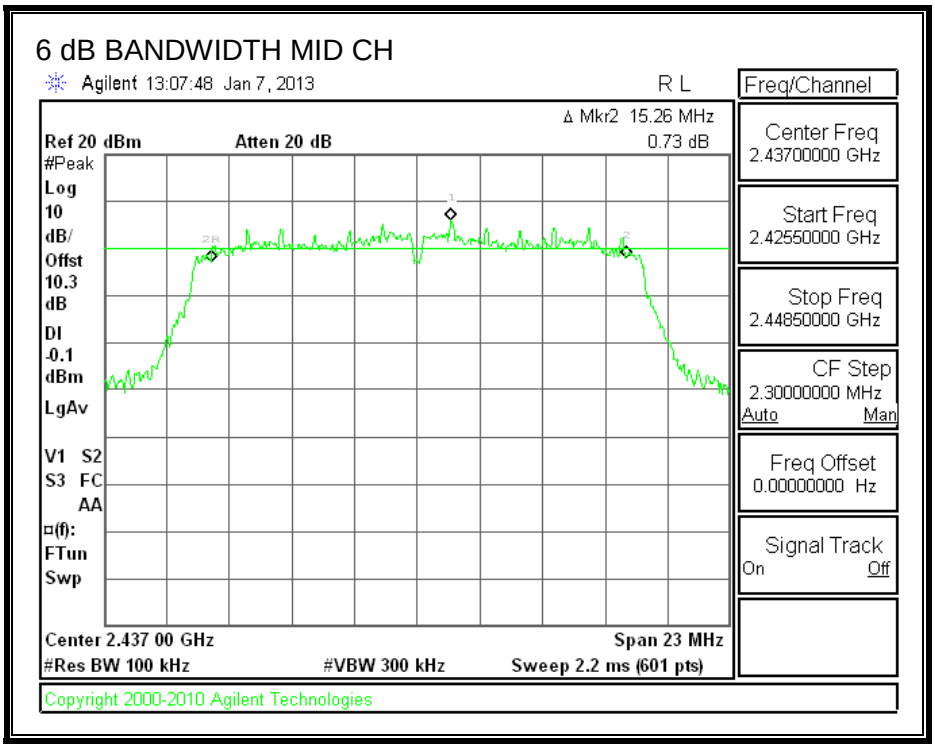
The transmitter output is connected to a spectrum analyzer with the RBW set between 1% and 5% of the EBW, the VBW >= 3 x RBW, peak detector and max hold.

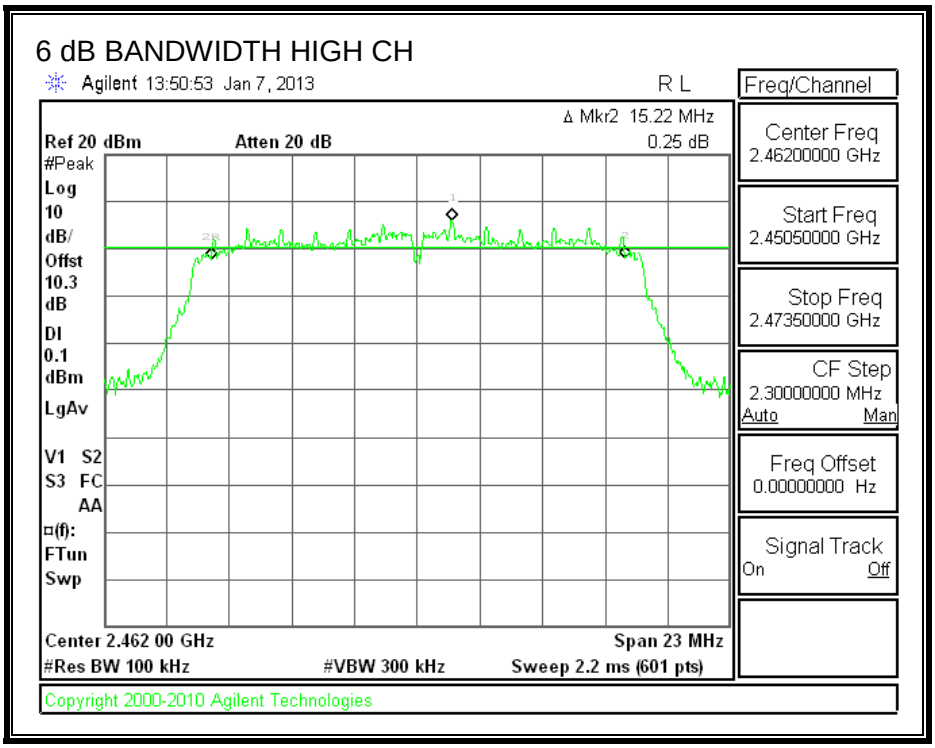
RESULTS

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2412	15.220	0.5
Mid	2437	15.260	0.5
High	2462	15.220	0.5

6 dB BANDWIDTH







9.2.2. 99% BANDWIDTH

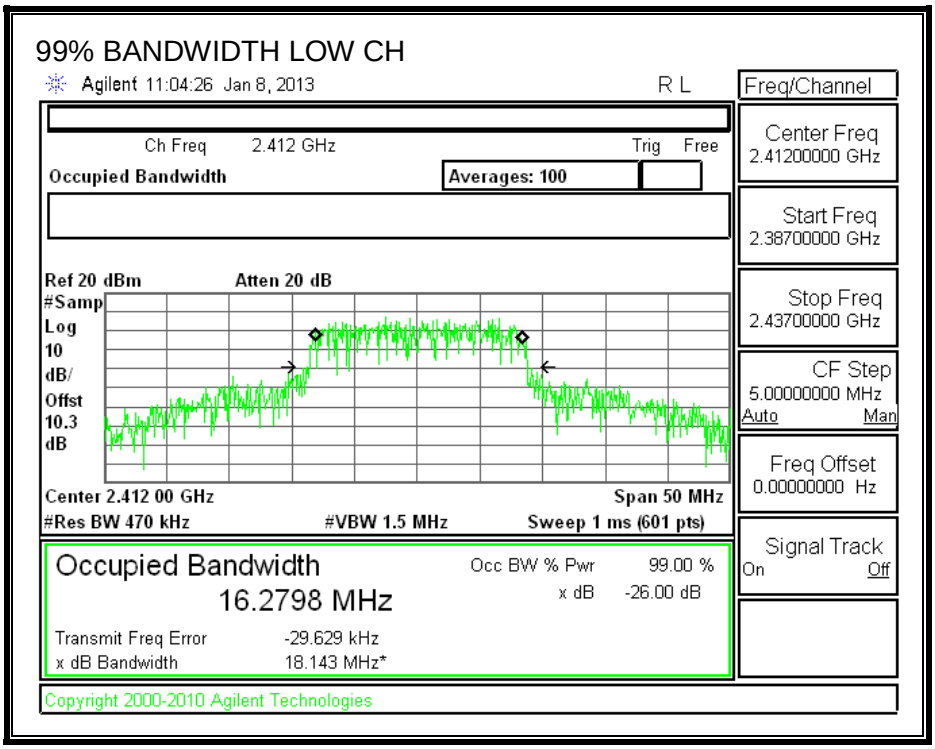
LIMITS

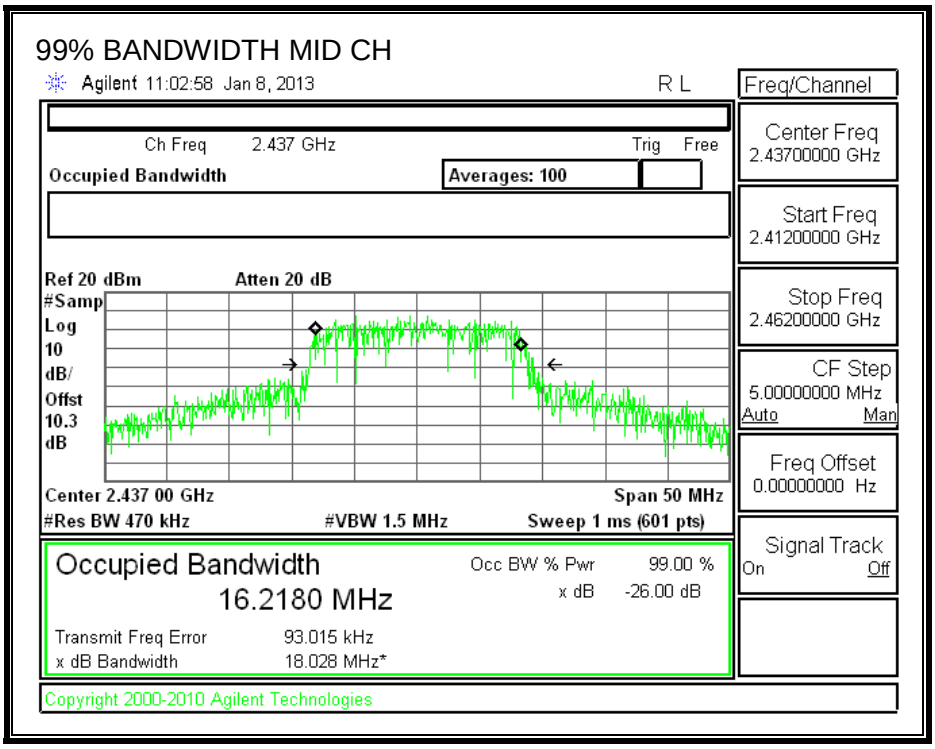
None; for reporting purposes only.

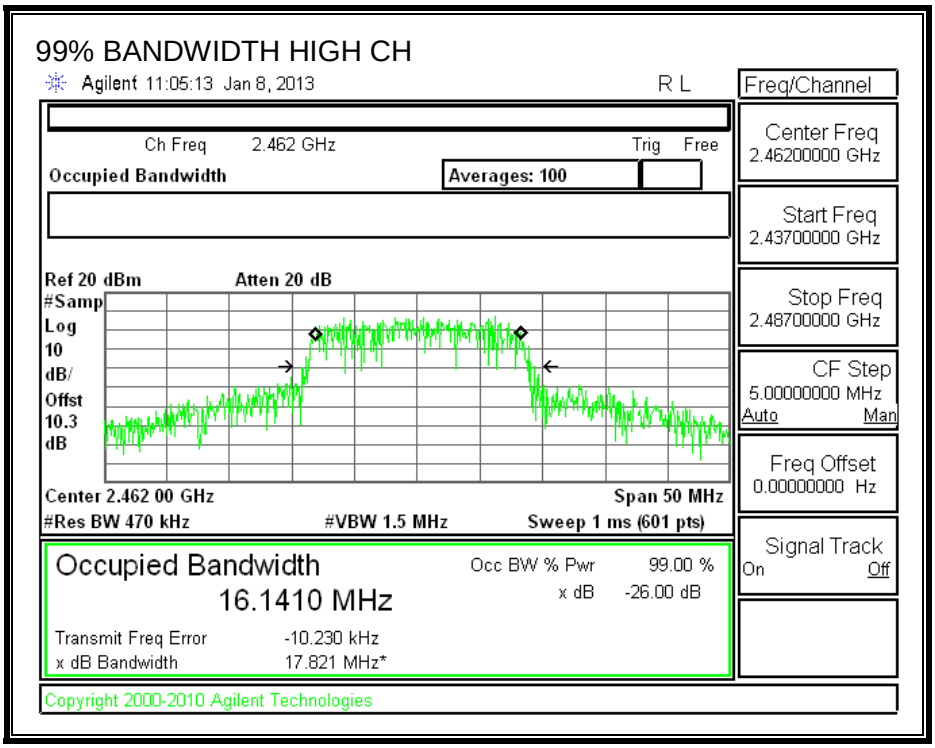
RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2412	16.2798
Mid	2437	16.2180
High	2462	16.1410

99% BANDWIDTH







9.2.3. OUTPUT POWER

LIMITS

FCC §15.247

IC RSS-210 A8.4

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt, based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

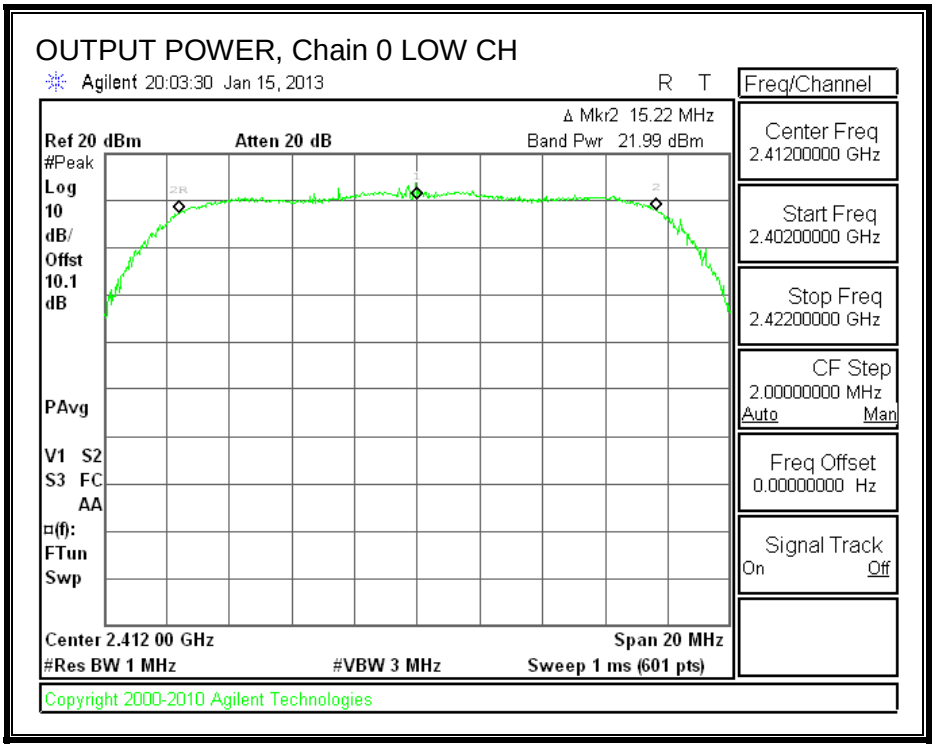
Limits

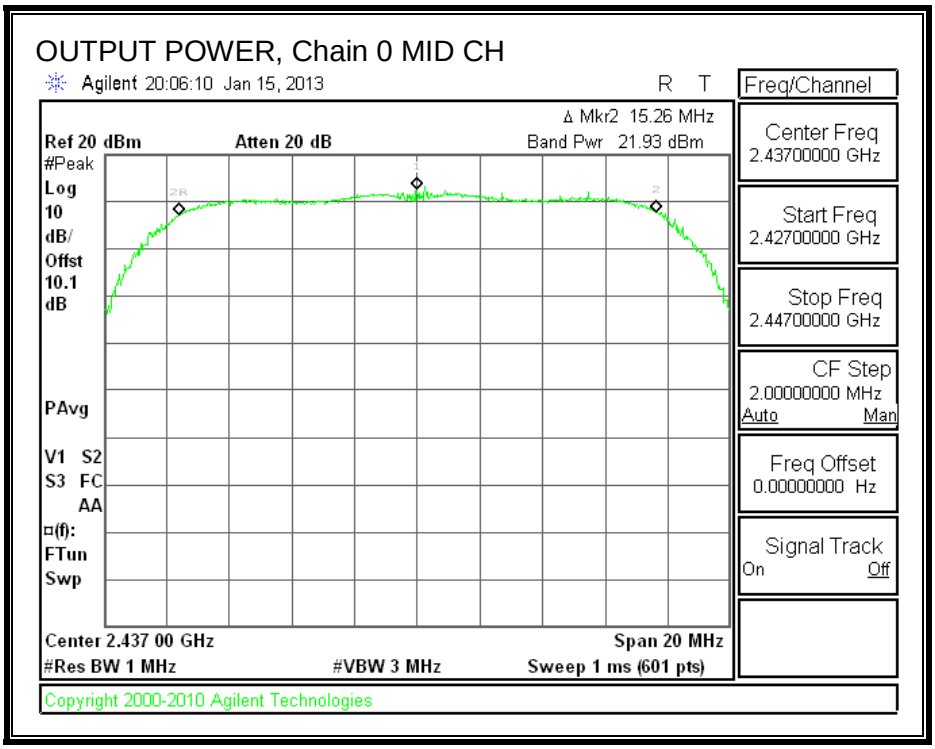
Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
Low	2412	-5.90	30.00	30	36	30.00
Mid	2437	-5.90	30.00	30	36	30.00
High	2462	-5.90	30.00	30	36	30.00

Results

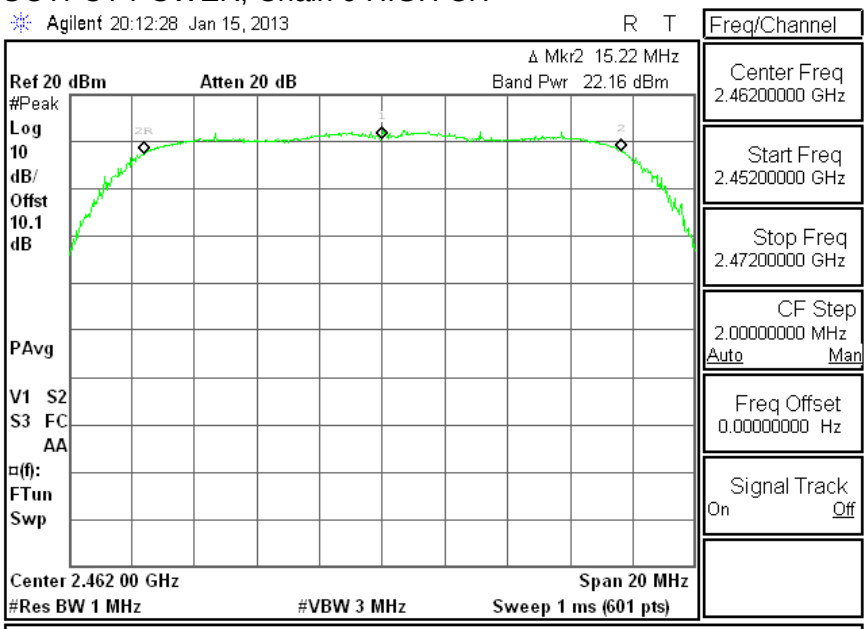
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
Low	2412	21.99	21.99	30.00	-8.01
Mid	2437	21.93	21.93	30.00	-8.07
High	2462	22.16	22.16	30.00	-7.84

OUTPUT POWER, Chain 0





OUTPUT POWER, Chain 0 HIGH CH



9.2.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Channel	Frequency (MHz)	Power (dBm)
Low	2412	13.90
Mid	2437	13.90
High	2462	13.80

9.2.5. PSD

LIMITS

FCC §15.247

IC RSS-210 A8.2

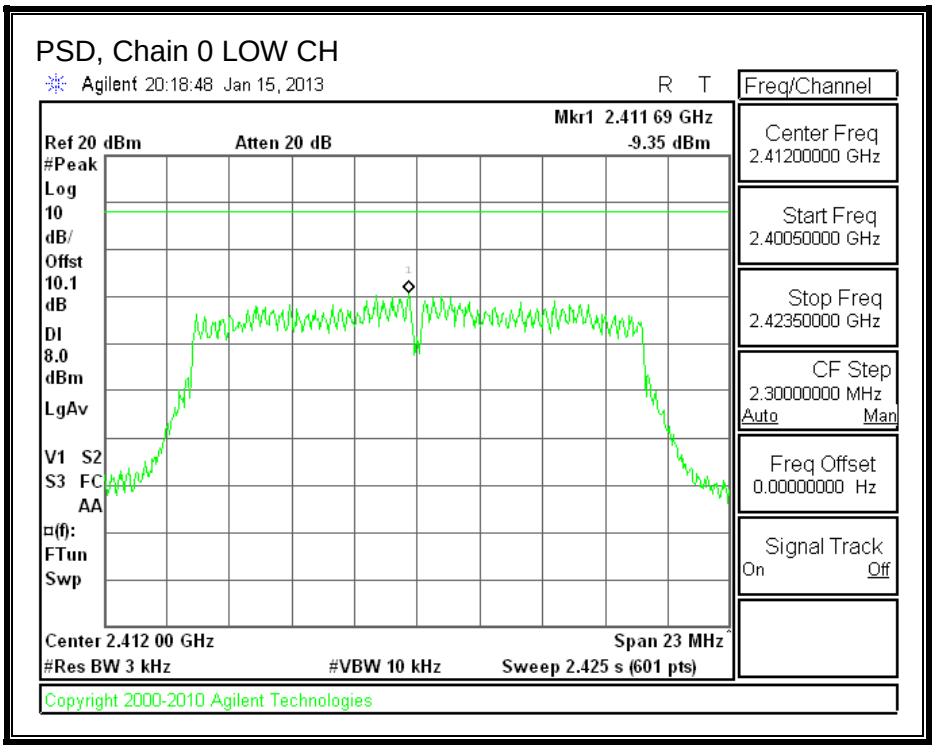
The power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

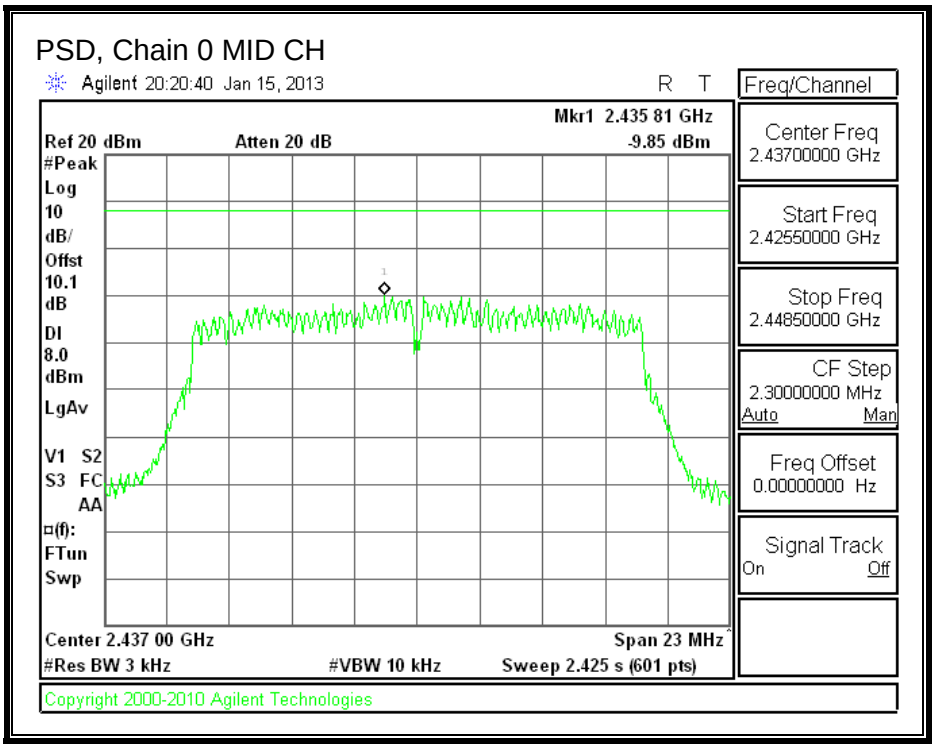
RESULTS

PSD Results

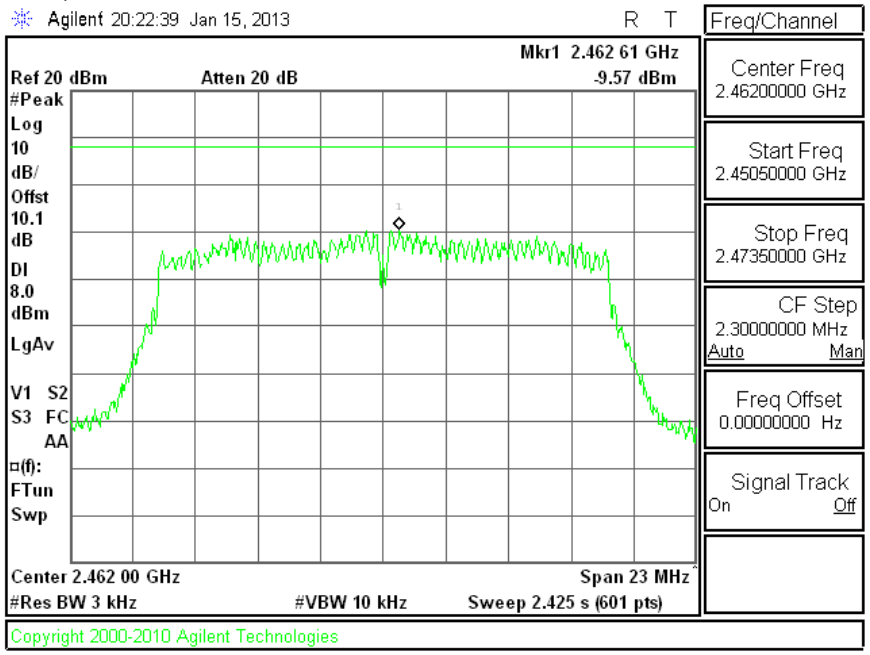
Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Limit (dBm)	Margin (dB)
Low	2412	-9.35	8.0	-17.4
Mid	2437	-9.85	8.0	-17.9
High	2462	-9.57	8.0	-17.6

PSD, Chain 0





PSD, Chain 0 HIGH CH



9.2.6. OUT-OF-BAND EMISSIONS

LIMITS

FCC §15.247 (d)

IC RSS-210 A8.5

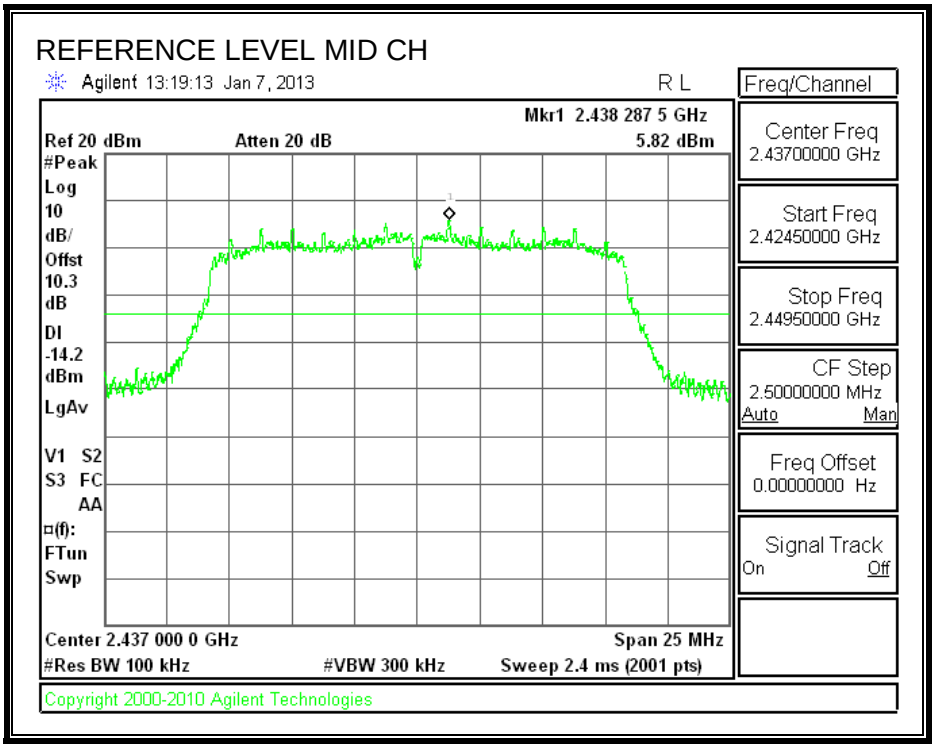
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required.

TEST PROCEDURE

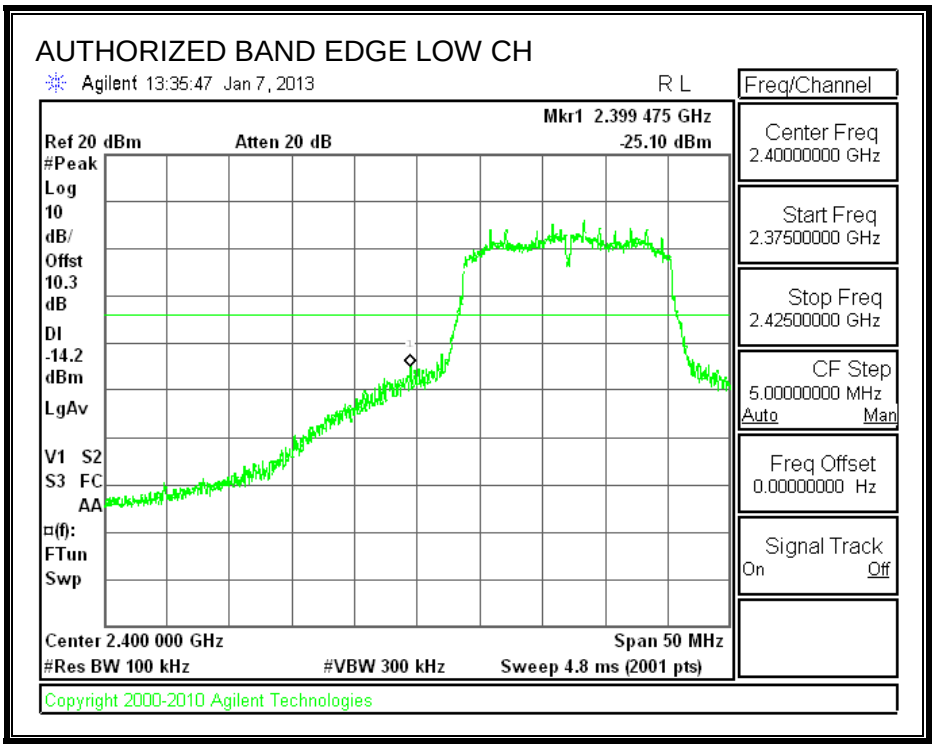
The transmitter output is connected to a spectrum analyzer with RBW = 100 kHz, VBW = 300 kHz, peak detector, and max hold. Measurements utilizing these settings are made of the in-band reference level, bandedge (where measurements to the general radiated limits will not be made) and out-of-band emissions.

RESULTS

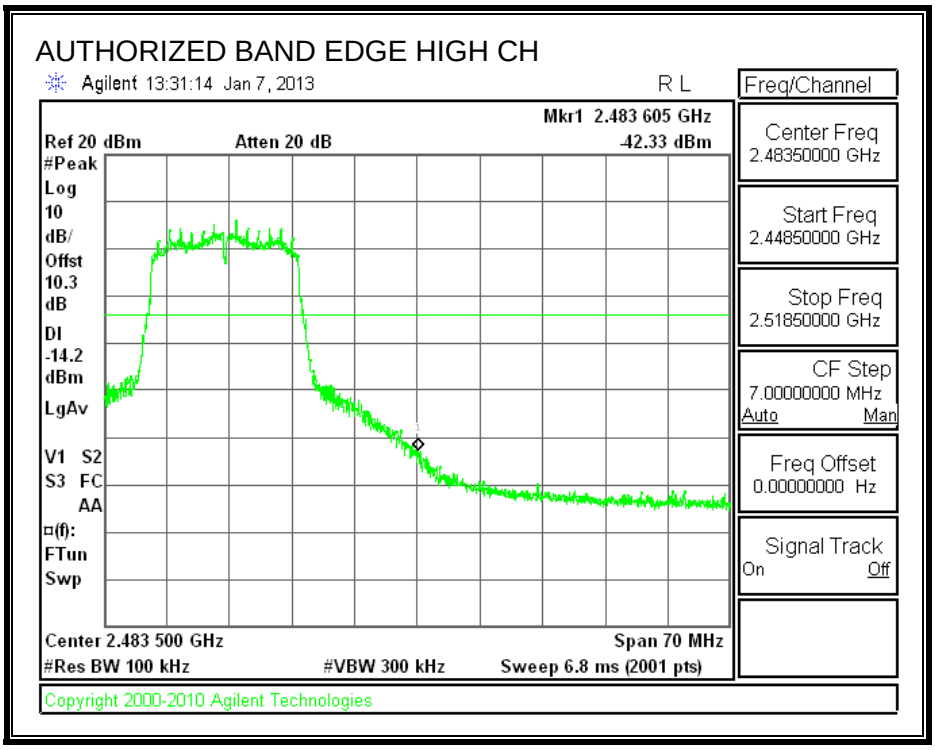
IN-BAND REFERENCE LEVEL



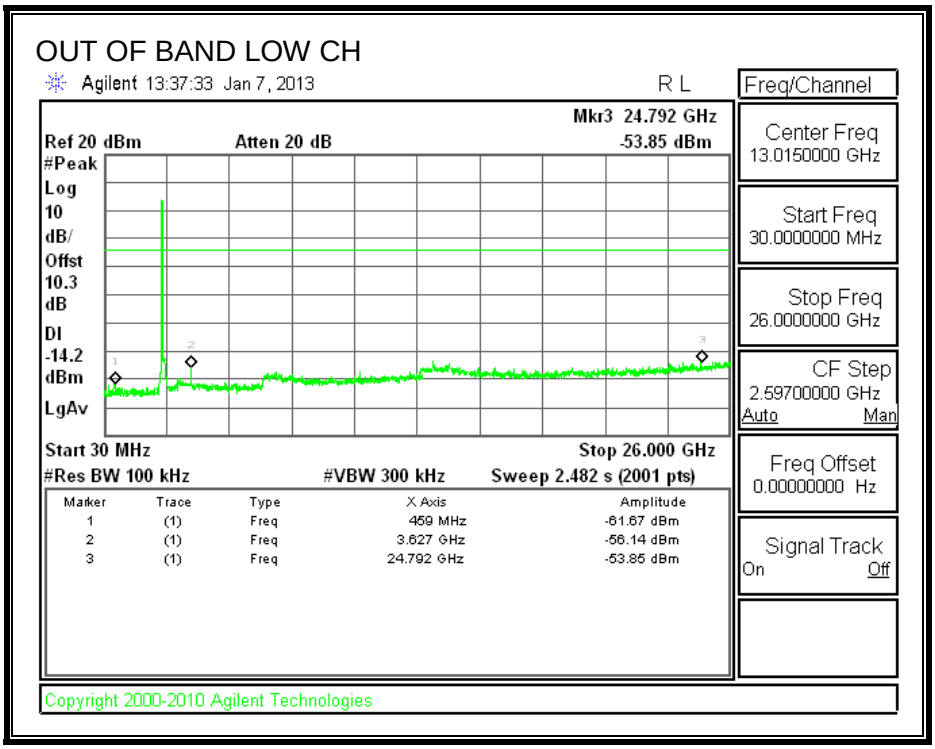
LOW CHANNEL BANDEDGE



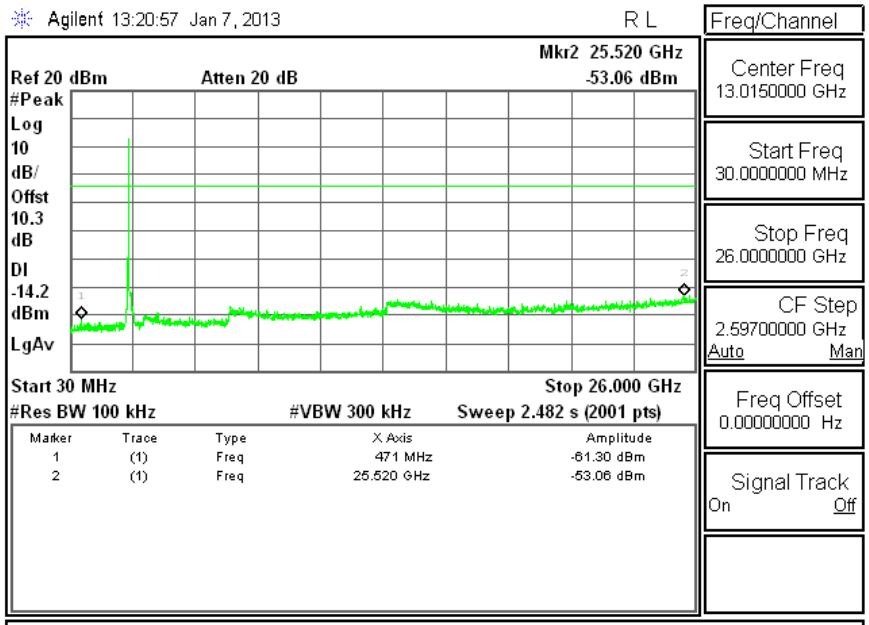
HIGH CHANNEL BANDEDGE



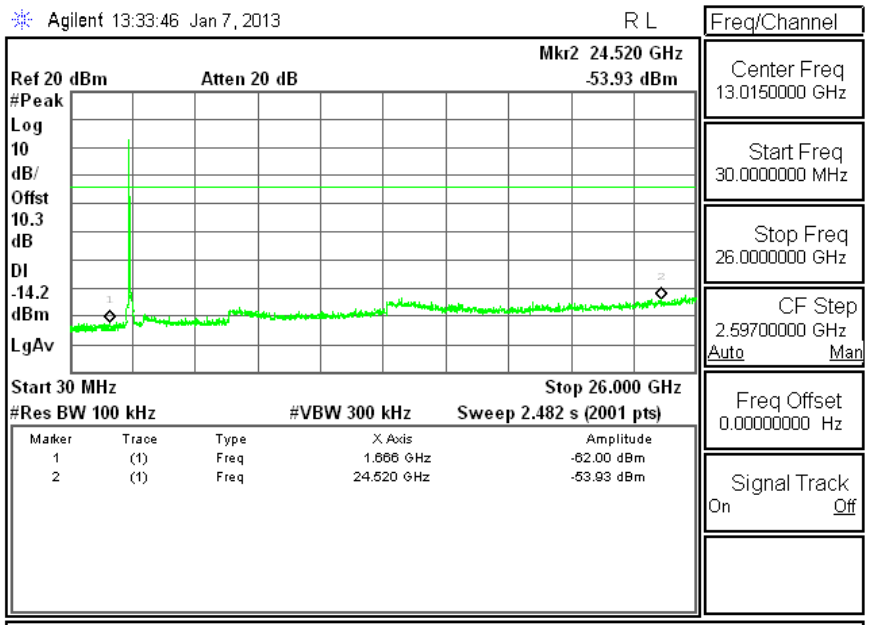
OUT-OF-BAND EMISSIONS



OUT OF BAND MID CH



OUT OF BAND HIGH CH



9.3. 802.11n HT20 MODE IN THE 2.4 GHz BAND

9.3.1. 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.

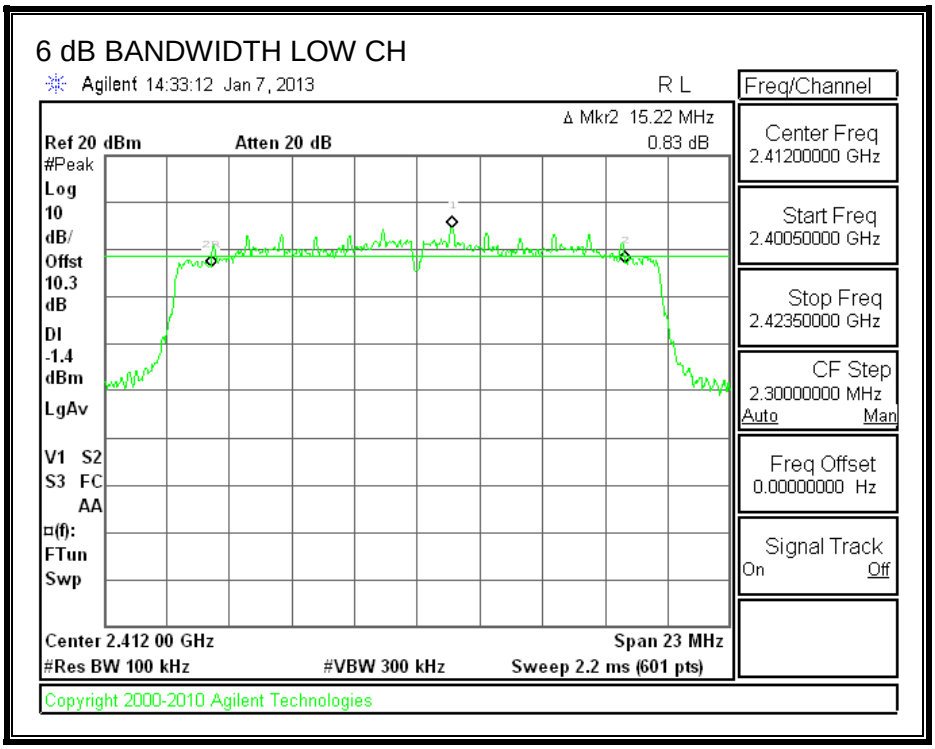
TEST PROCEDURE

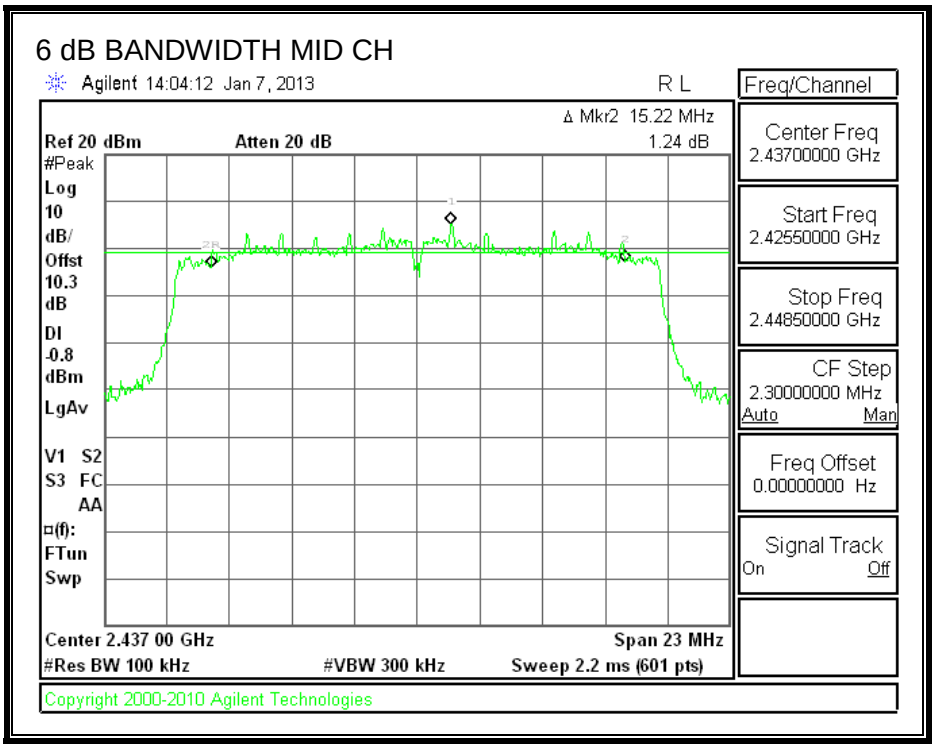
The transmitter output is connected to a spectrum analyzer with the RBW set between 1% and 5% of the EBW, the VBW >= 3 x RBW, peak detector and max hold.

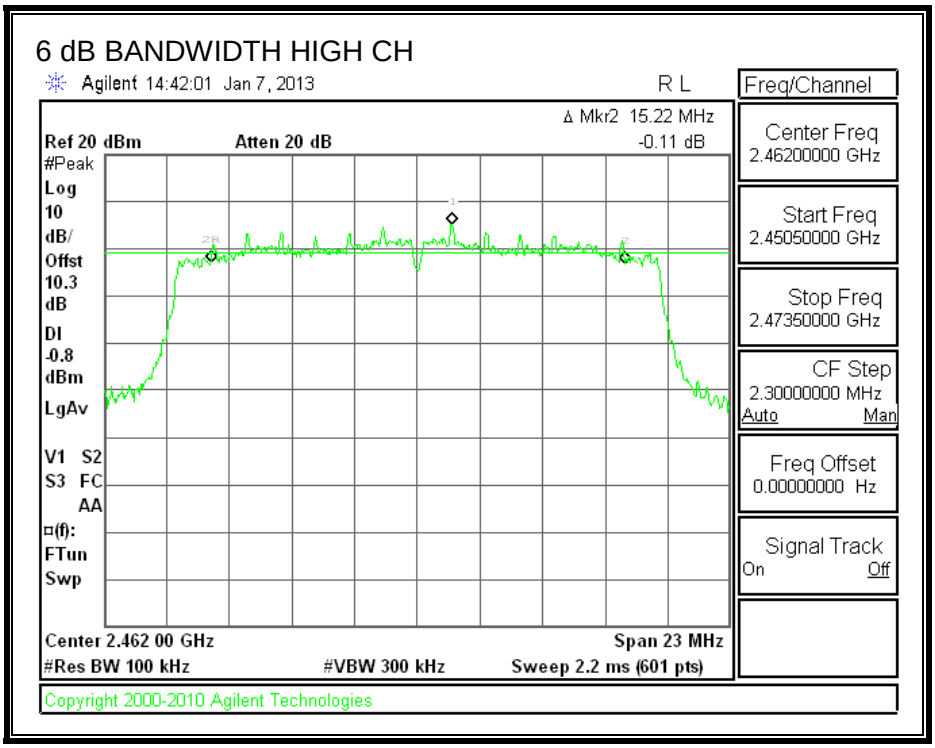
RESULTS

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2412	15.220	0.5
Mid	2437	15.220	0.5
High	2462	15.220	0.5

6 dB BANDWIDTH







9.3.2. 99% BANDWIDTH

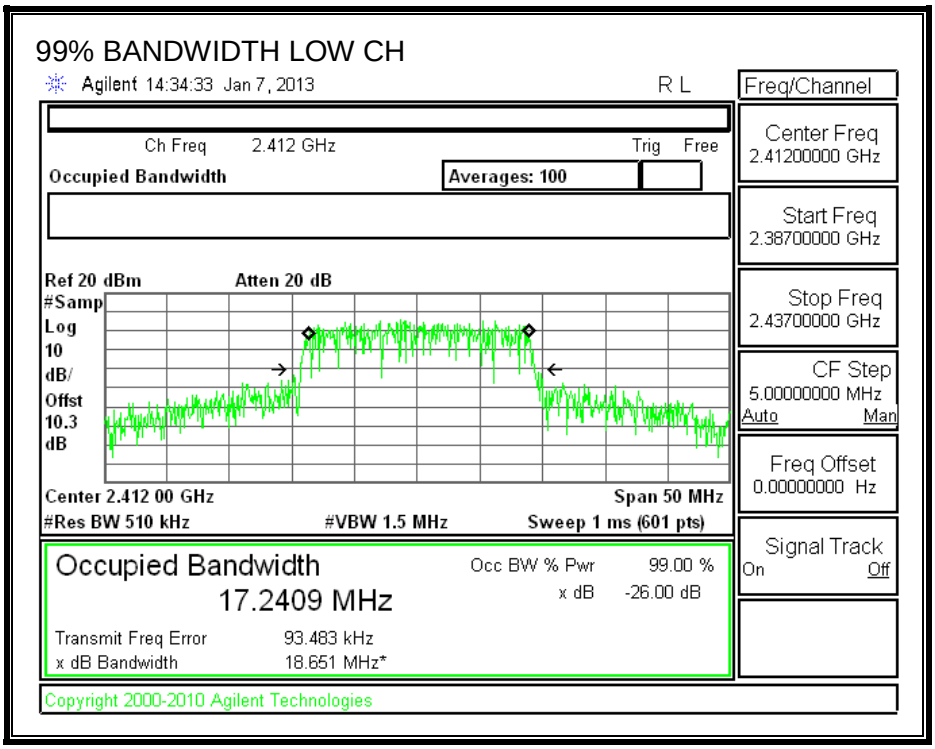
LIMITS

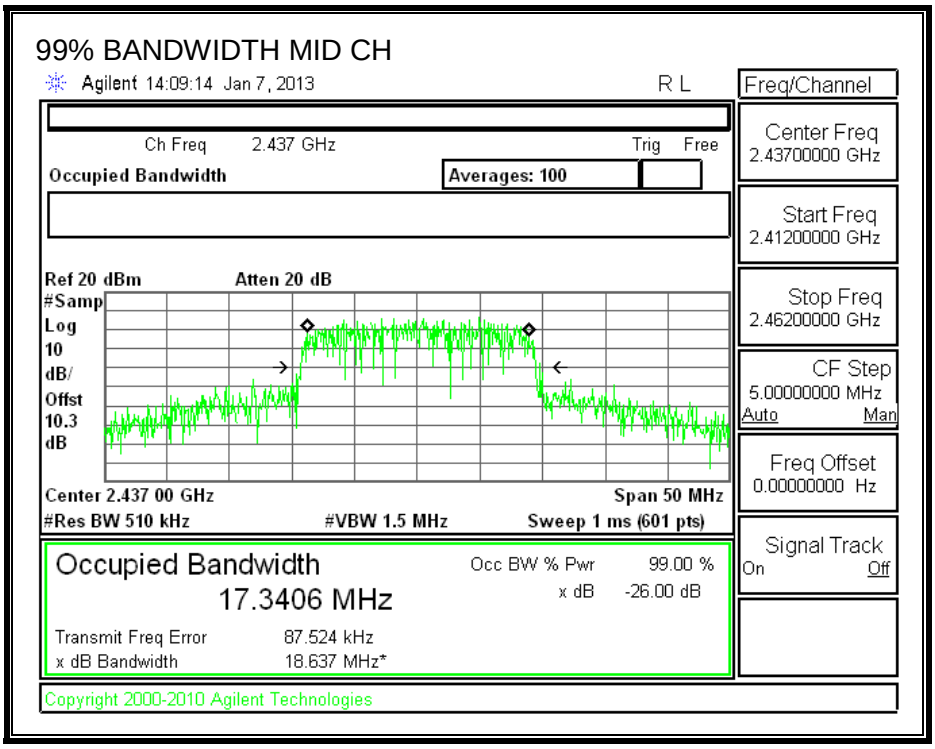
None; for reporting purposes only.

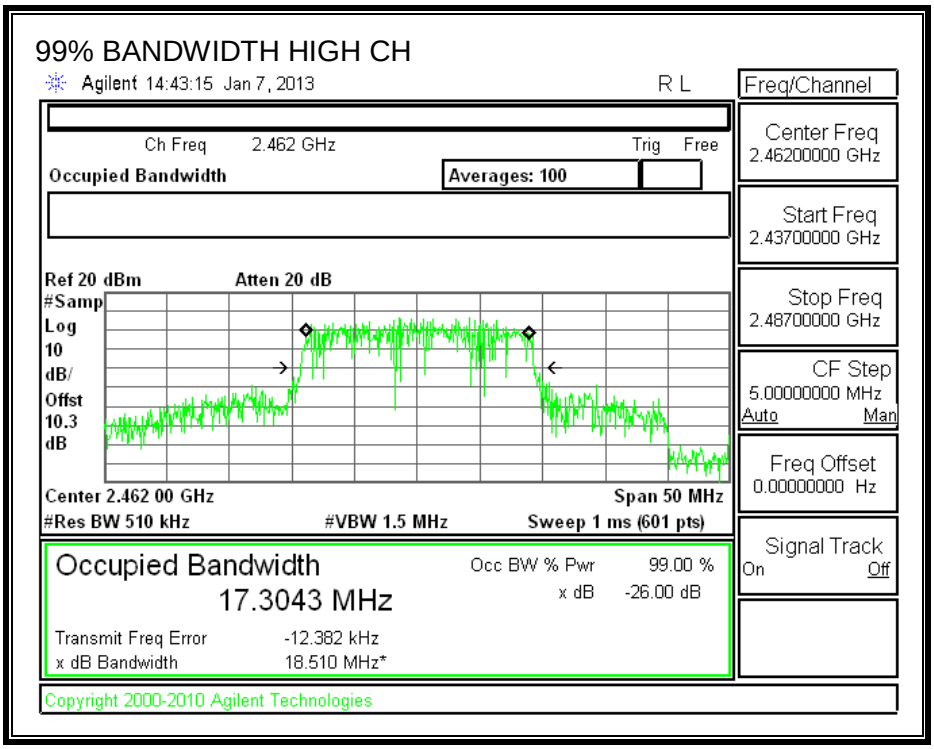
RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2412	17.2409
Mid	2437	17.3406
High	2462	17.3043

99% BANDWIDTH







9.3.3. OUTPUT POWER

LIMITS

FCC §15.247

IC RSS-210 A8.4

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt, based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

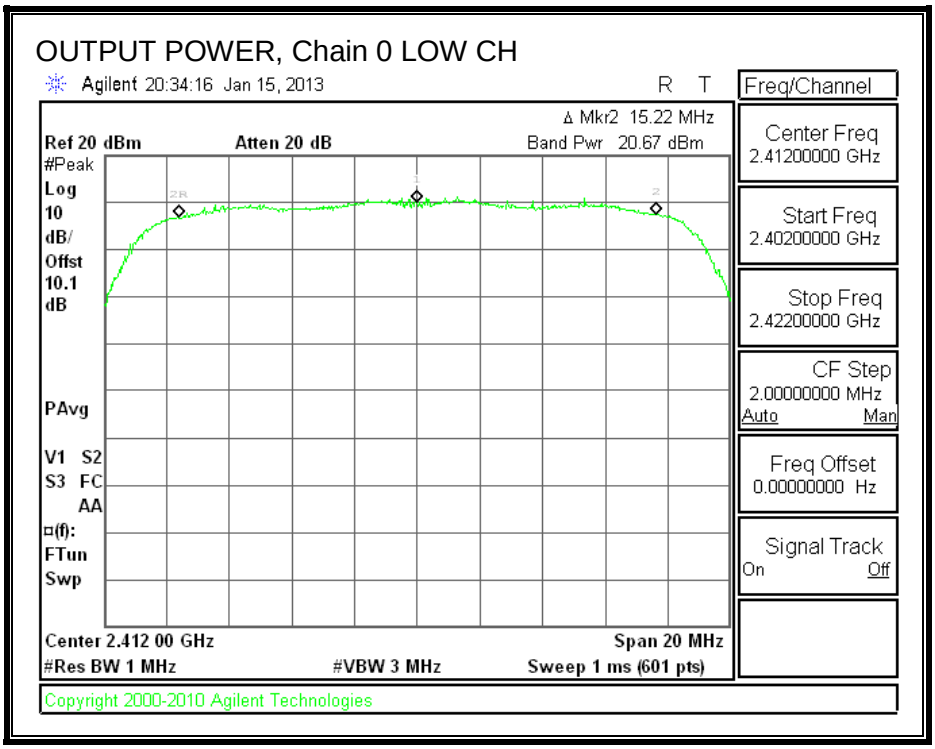
Limits

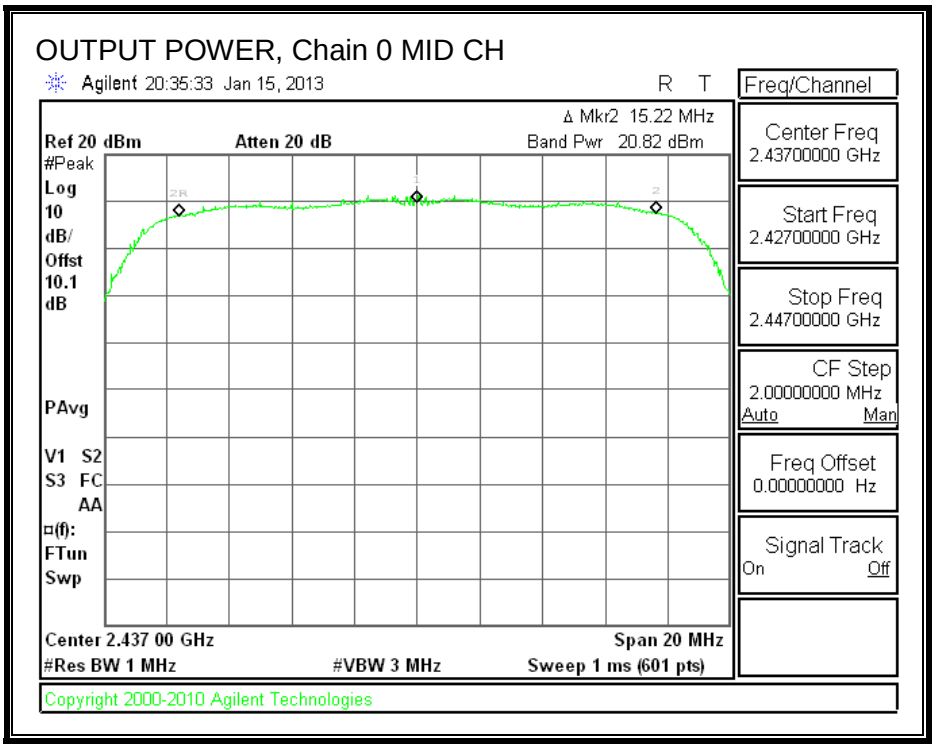
Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
Low	2412	-5.90	30.00	30	36	30.00
Mid	2437	-5.90	30.00	30	36	30.00
High	2462	-5.90	30.00	30	36	30.00

Results

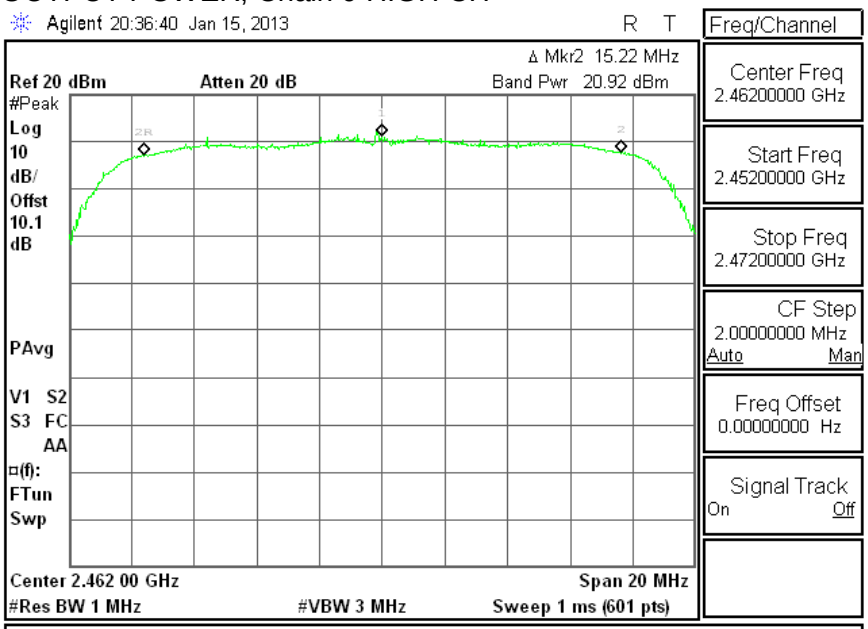
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
Low	2412	20.67	20.67	30.00	-9.33
Mid	2437	20.82	20.82	30.00	-9.18
High	2462	20.92	20.92	30.00	-9.08

OUTPUT POWER, Chain 0





OUTPUT POWER, Chain 0 HIGH CH



9.3.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Channel	Frequency (MHz)	Power (dBm)
Low	2412	12.80
Mid	2437	12.90
High	2462	13.00

9.3.5. PSD

LIMITS

FCC §15.247

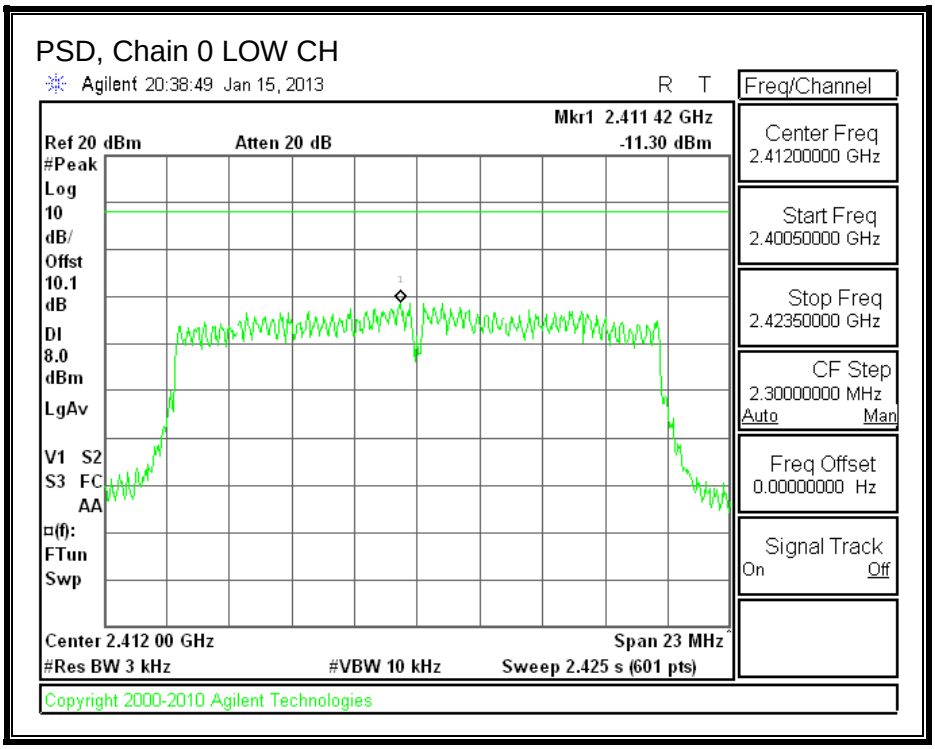
IC RSS-210 A8.2

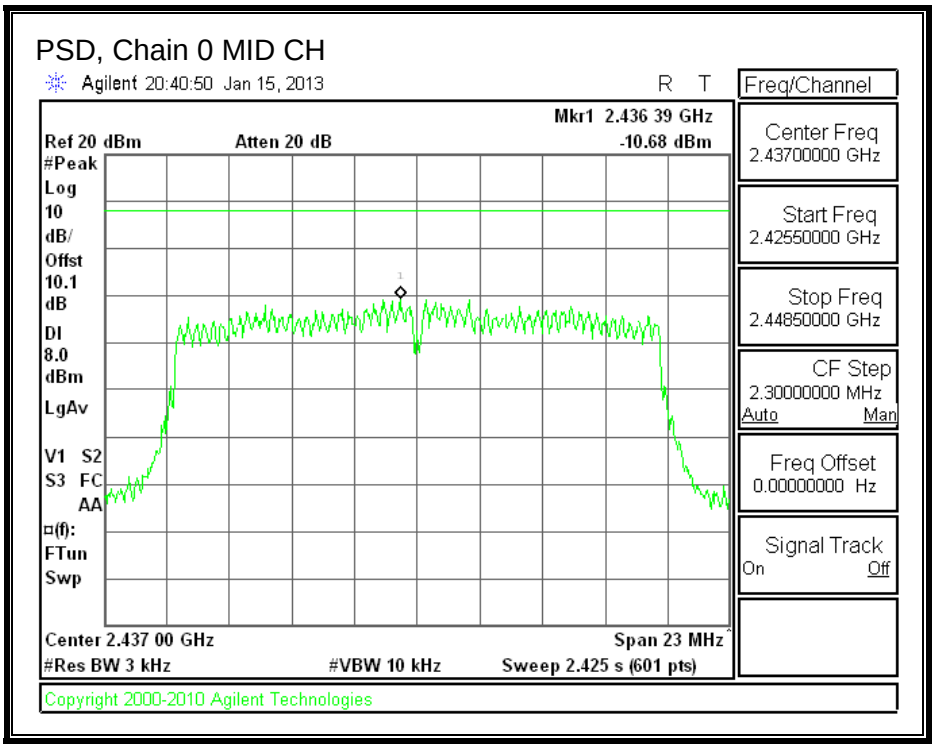
The power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

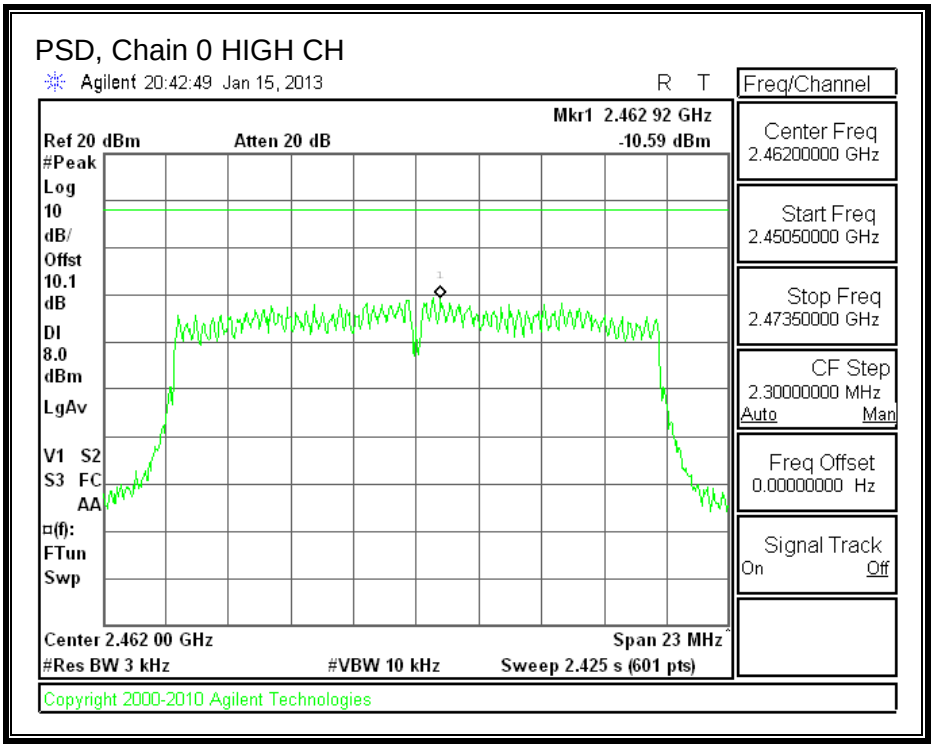
RESULTS

Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Limit (dBm)	Margin (dB)
Low	2412	-11.30	8.0	-19.3
Mid	2437	-10.68	8.0	-18.7
High	2462	-10.59	8.0	-18.6

PSD, Chain 0







9.3.6. OUT-OF-BAND EMISSIONS

LIMITS

FCC §15.247 (d)

IC RSS-210 A8.5

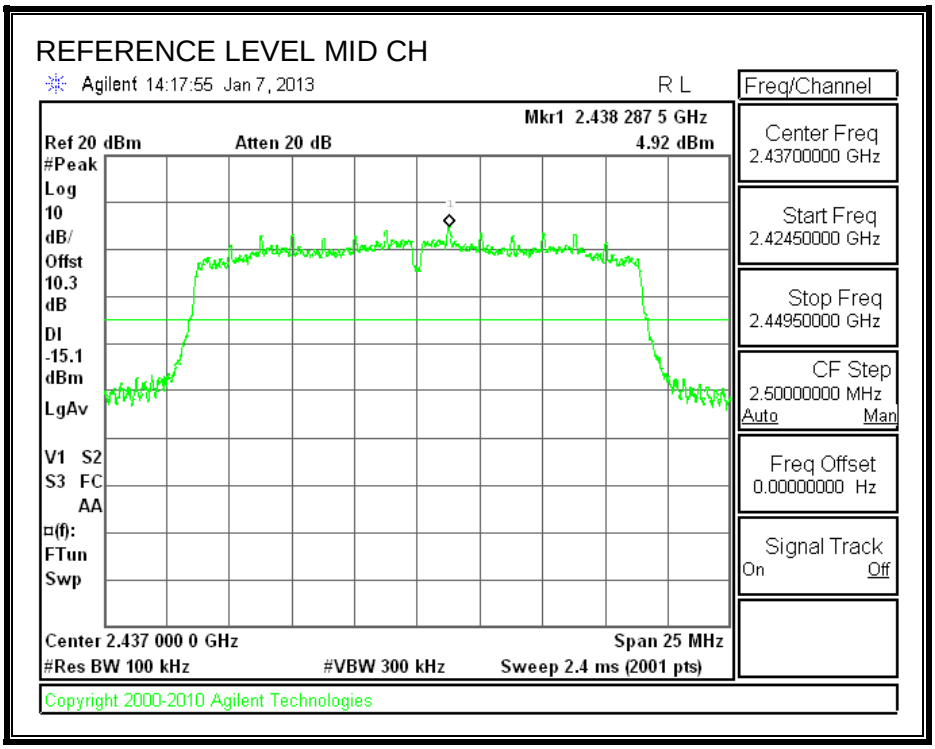
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required.

TEST PROCEDURE

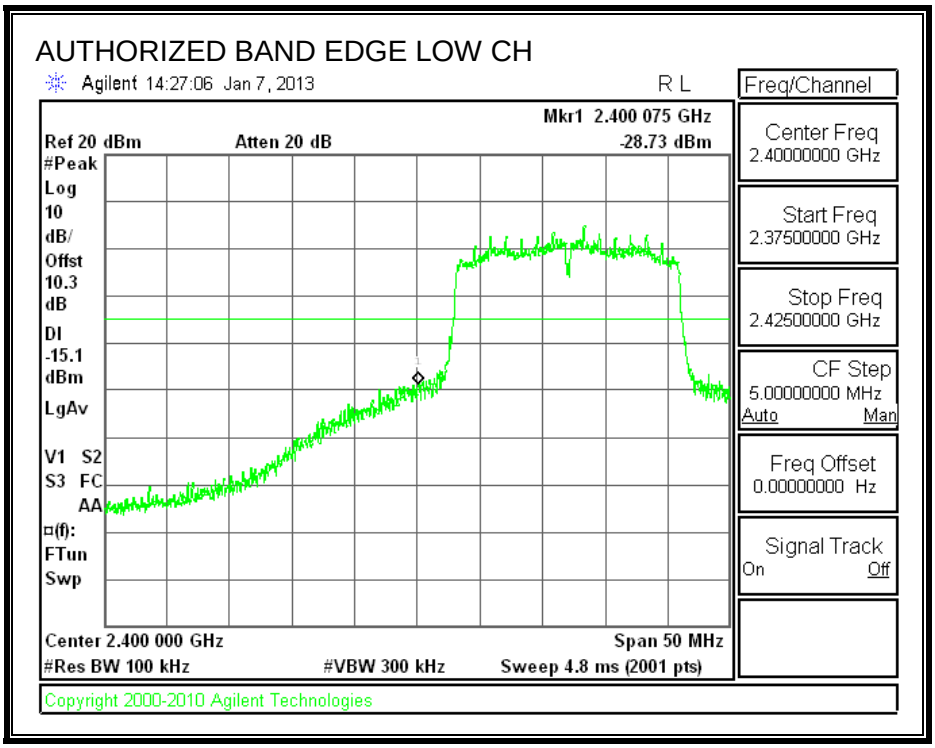
The transmitter output is connected to a spectrum analyzer with RBW = 100 kHz, VBW = 300 kHz, peak detector, and max hold. Measurements utilizing these settings are made of the in-band reference level, bandedge (where measurements to the general radiated limits will not be made) and out-of-band emissions.

RESULTS

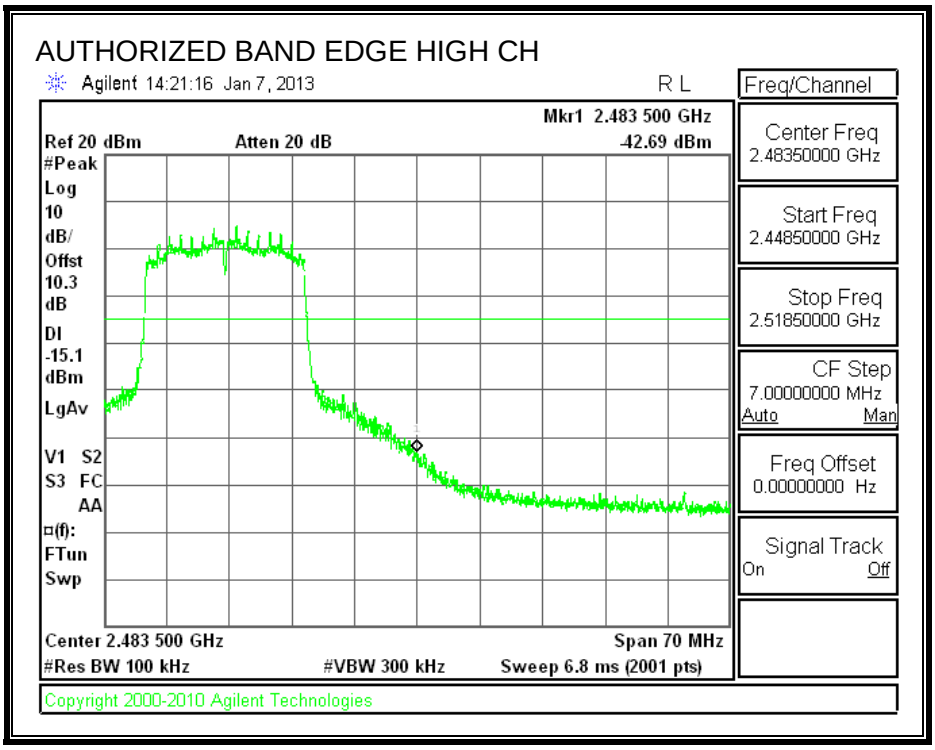
IN-BAND REFERENCE LEVEL



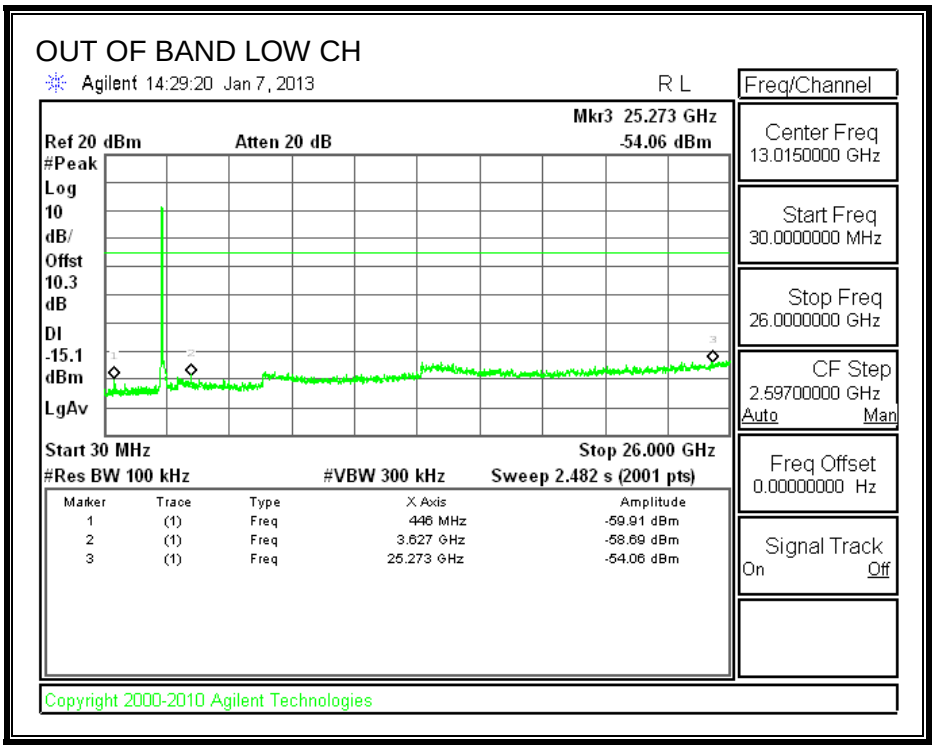
LOW CHANNEL BANDEDGE



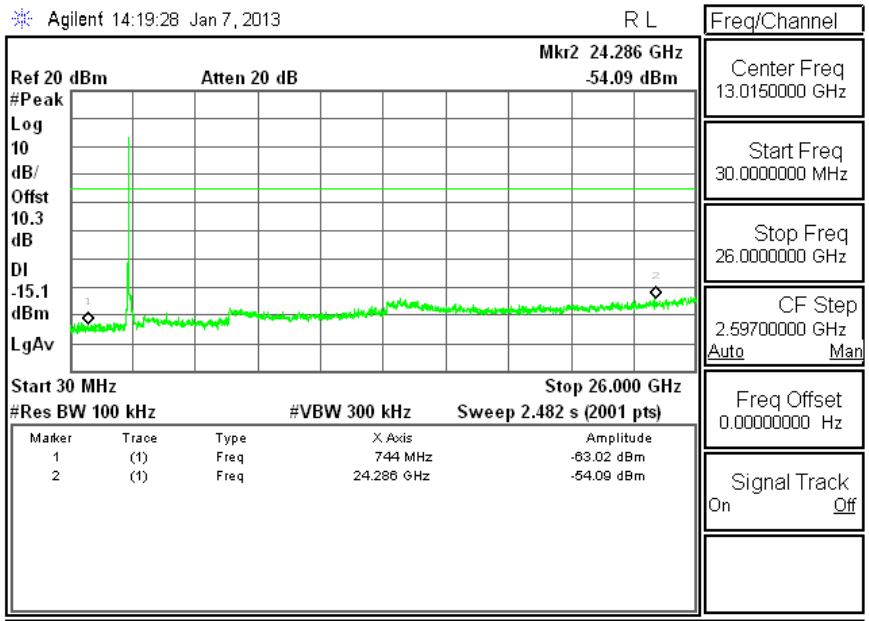
HIGH CHANNEL BANDEDGE



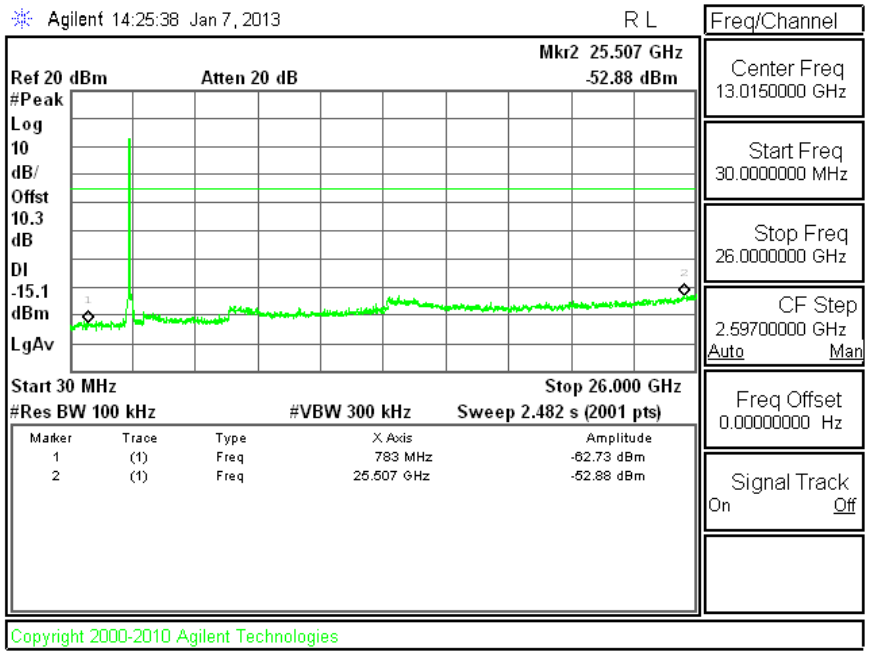
OUT-OF-BAND EMISSIONS



OUT OF BAND MID CH



OUT OF BAND HIGH CH



9.4. 802.11a MODE IN THE 5.8 GHz BAND

9.4.1. 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.

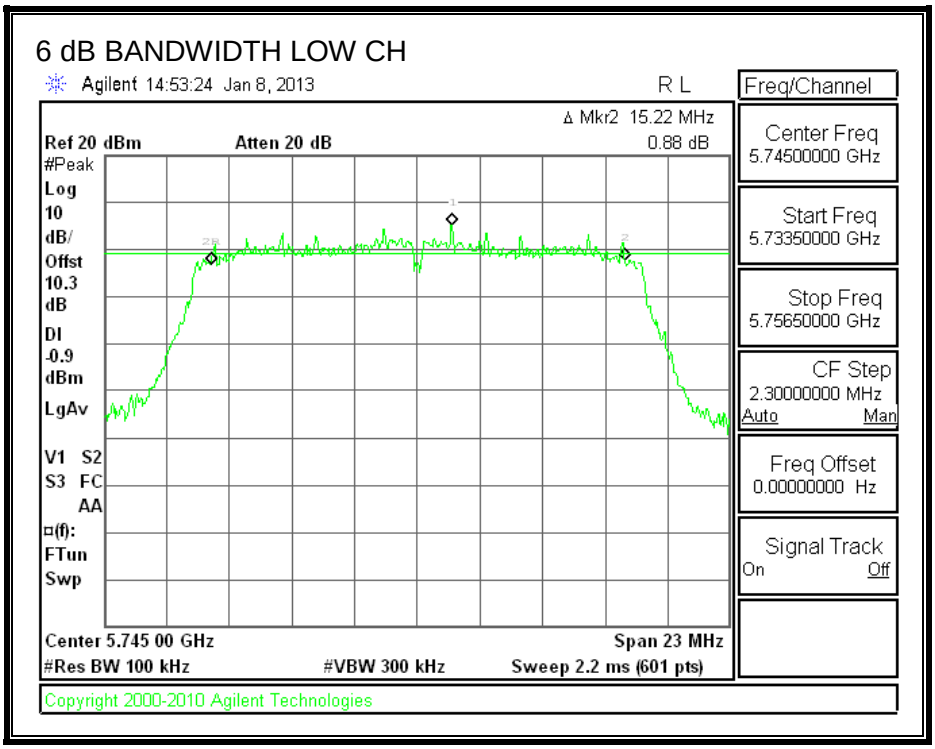
TEST PROCEDURE

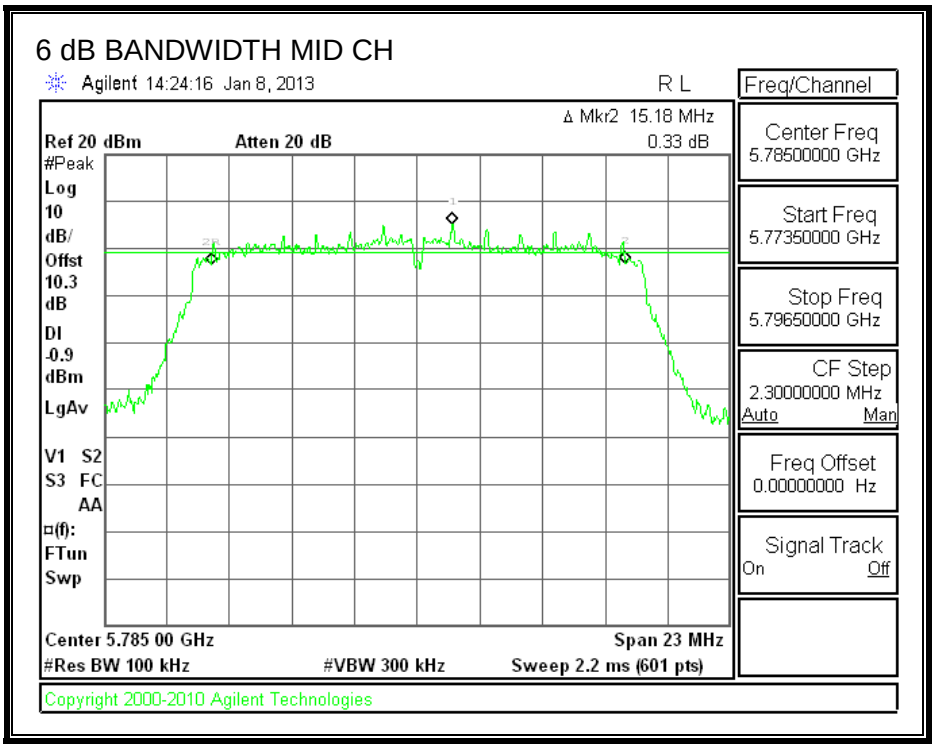
The transmitter output is connected to a spectrum analyzer with the RBW set between 1% and 5% of the EBW, the VBW >= 3 x RBW, peak detector and max hold.

RESULTS

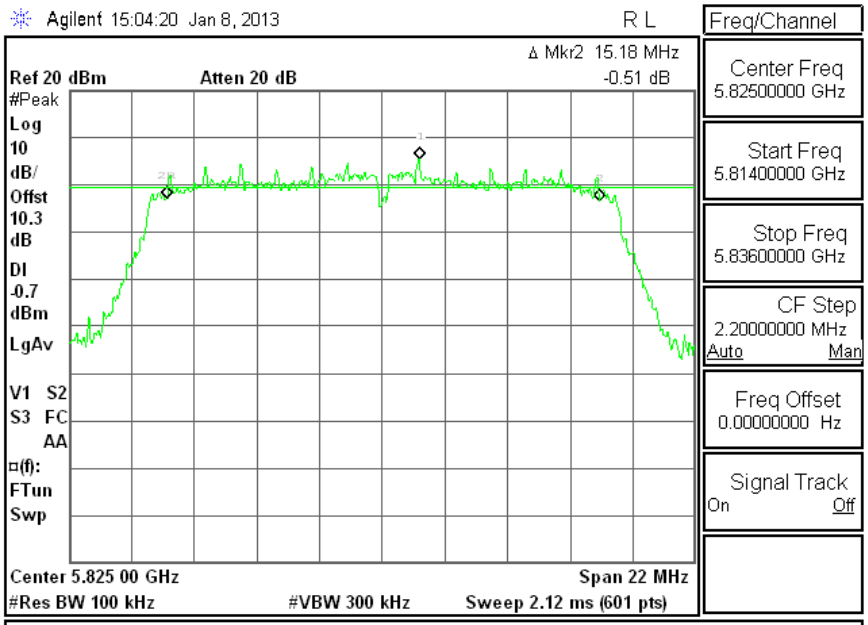
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5745	15.220	0.5
Mid	5785	15.180	0.5
High	5825	15.180	0.5

6 dB BANDWIDTH





6 dB BANDWIDTH HIGH CH



9.4.2. 99% BANDWIDTH

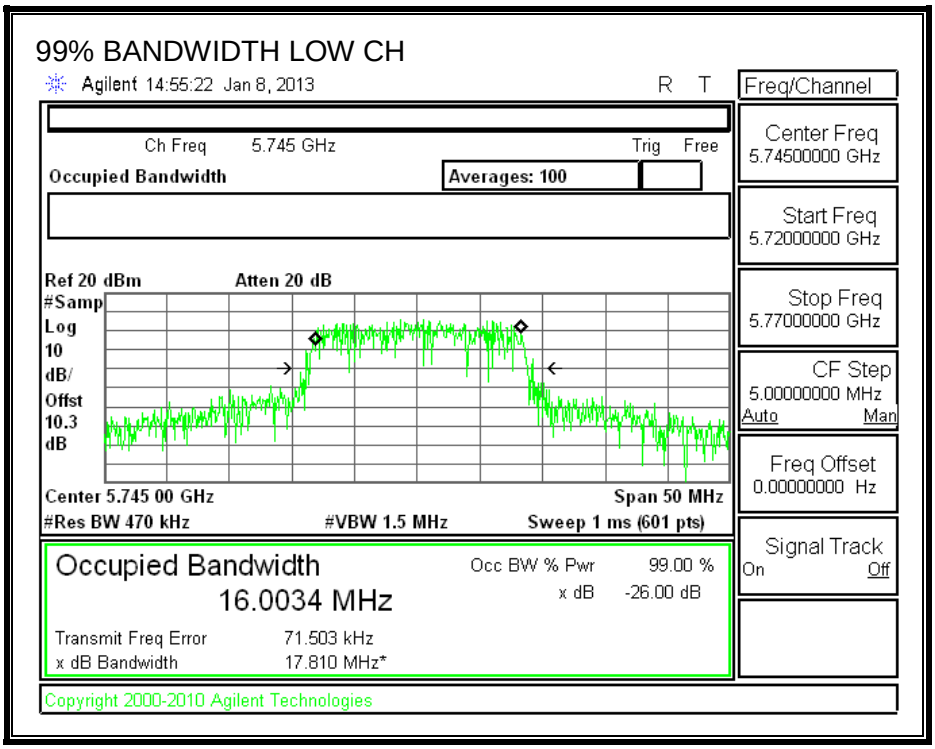
LIMITS

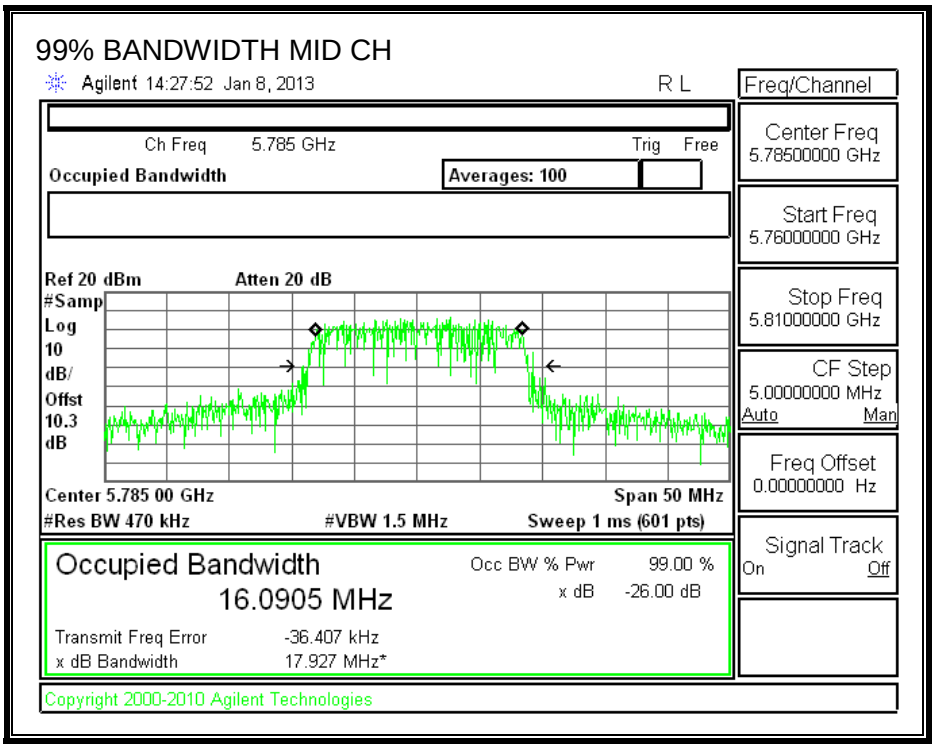
None; for reporting purposes only.

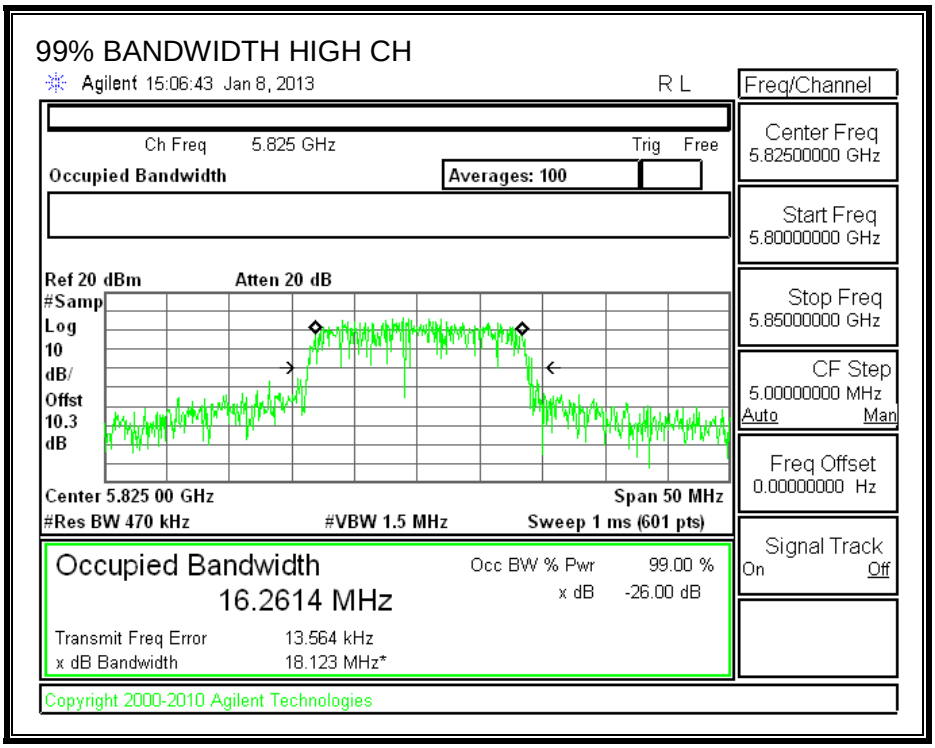
RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5745	16.0034
Mid	5785	16.0905
High	5825	16.2614

99% BANDWIDTH







9.4.3. OUTPUT POWER

LIMITS

FCC §15.247

IC RSS-210 A8.4

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt, based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

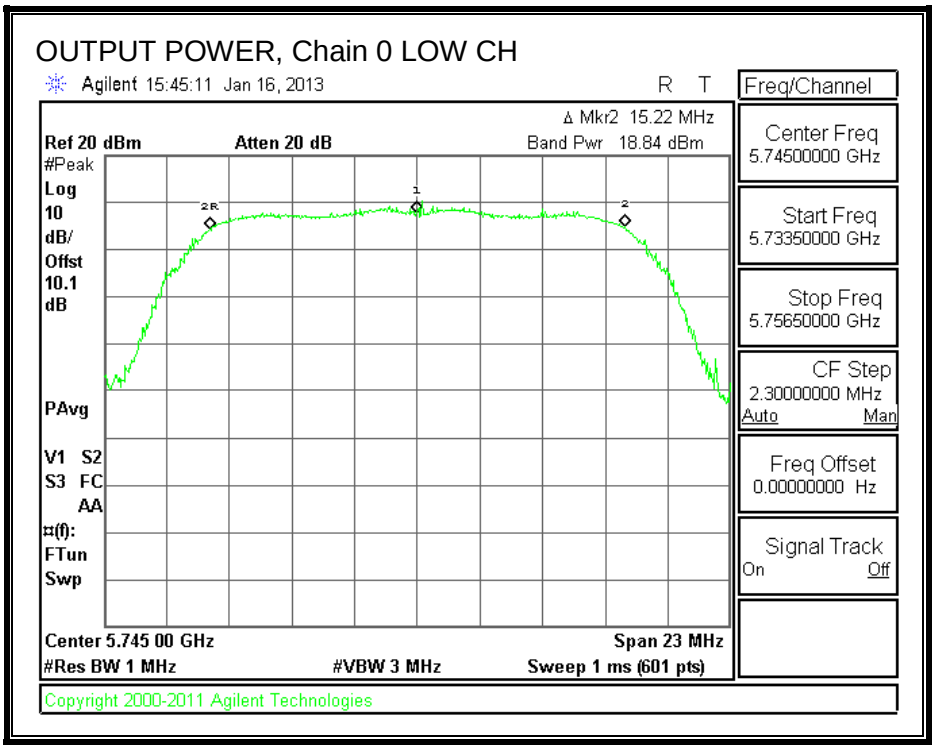
Limits

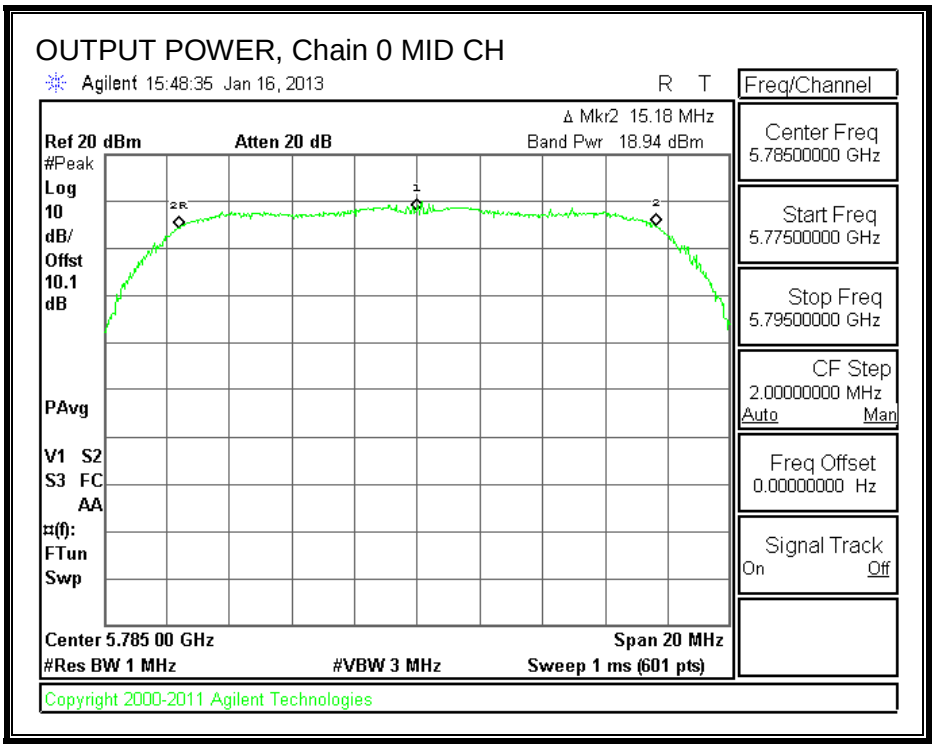
Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
Low	5745	-6.40	30.00	30	36	30.00
Mid	5785	-6.40	30.00	30	36	30.00
High	5825	-6.40	30.00	30	36	30.00

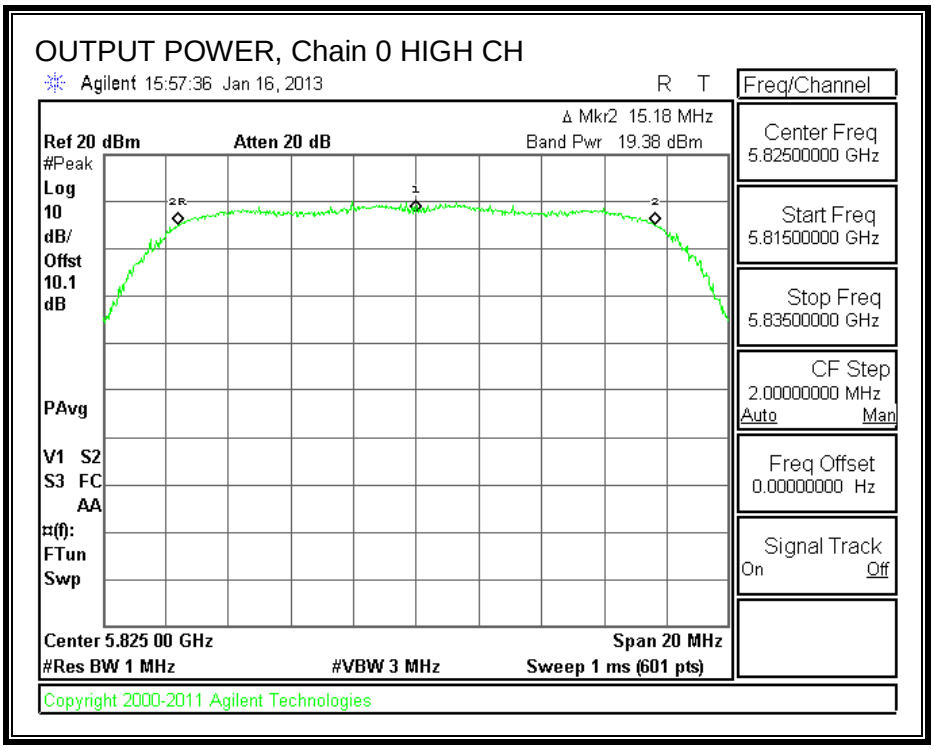
Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
Low	5745	18.84	18.84	30.00	-11.16
Mid	5785	18.94	18.94	30.00	-11.06
High	5825	19.38	19.38	30.00	-10.62

OUTPUT POWER, Chain 0







9.4.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Channel	Frequency (MHz)	Power (dBm)
Low	5745	11.80
Mid	5785	11.90
High	5825	11.90

9.4.5. PSD

LIMITS

FCC §15.247

IC RSS-210 A8.2

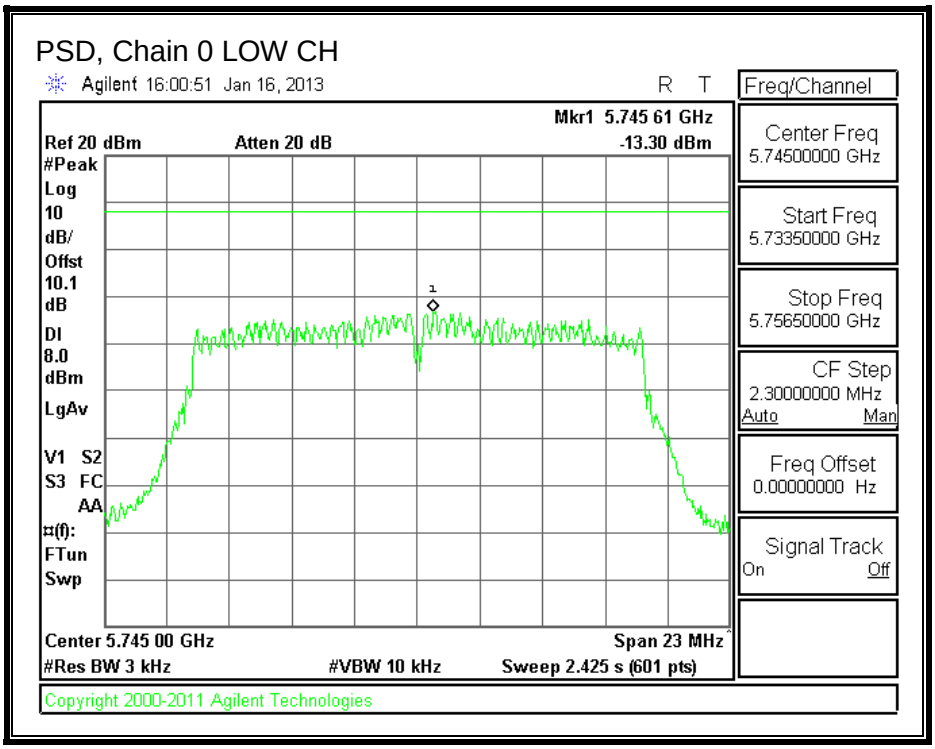
The power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

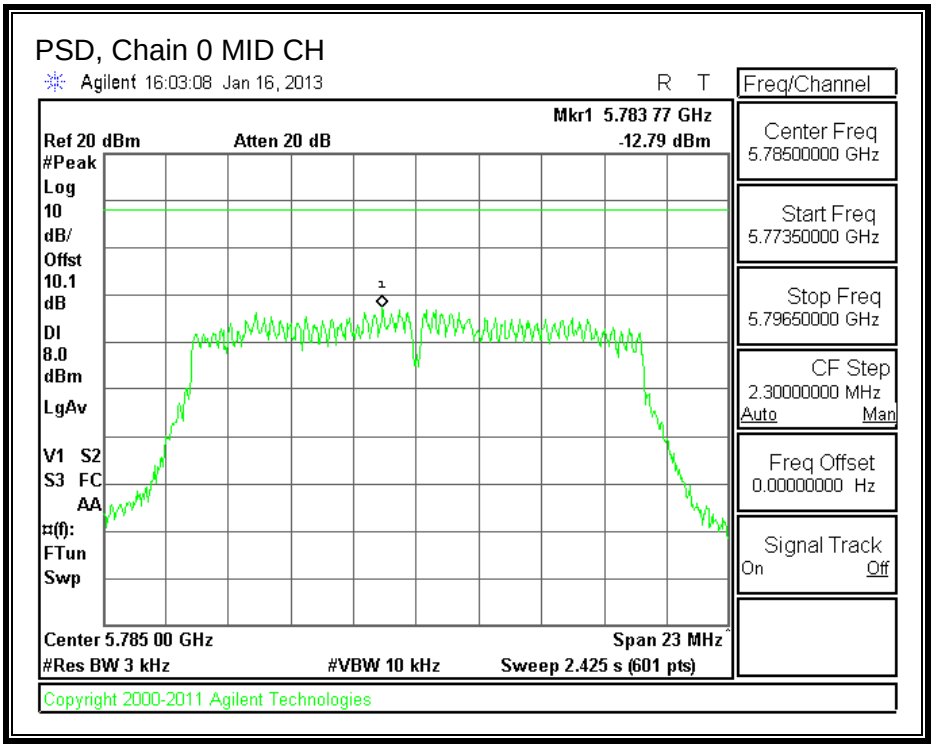
RESULTS

PSD Results

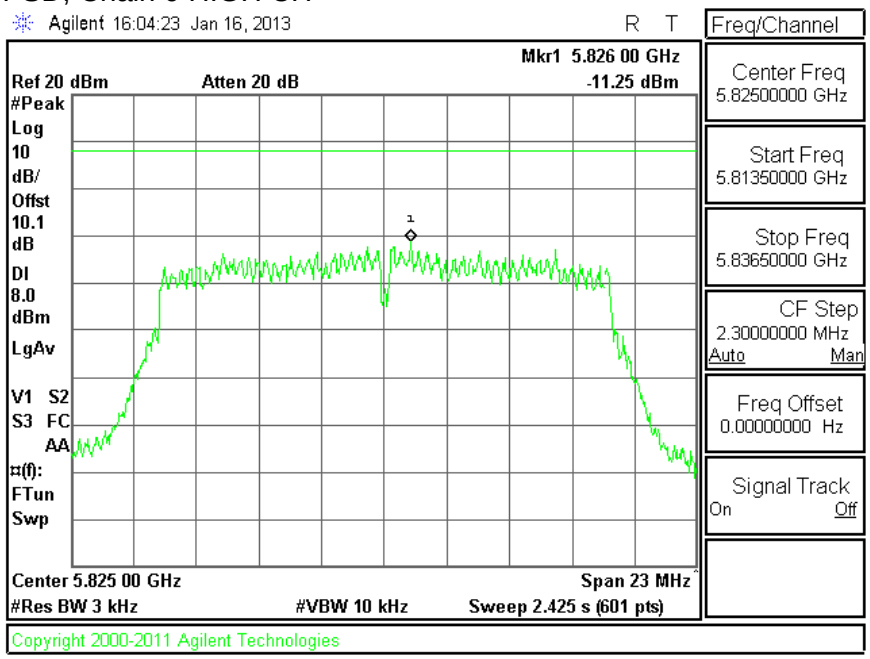
Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Limit (dBm)	Margin (dB)
Low	5745	-13.30	8.0	-21.3
Mid	5785	-12.79	8.0	-20.8
High	5825	-11.25	8.0	-19.3

PSD, Chain 0





PSD, Chain 0 HIGH CH



9.4.6. OUT-OF-BAND EMISSIONS

LIMITS

FCC §15.247 (d)

IC RSS-210 A8.5

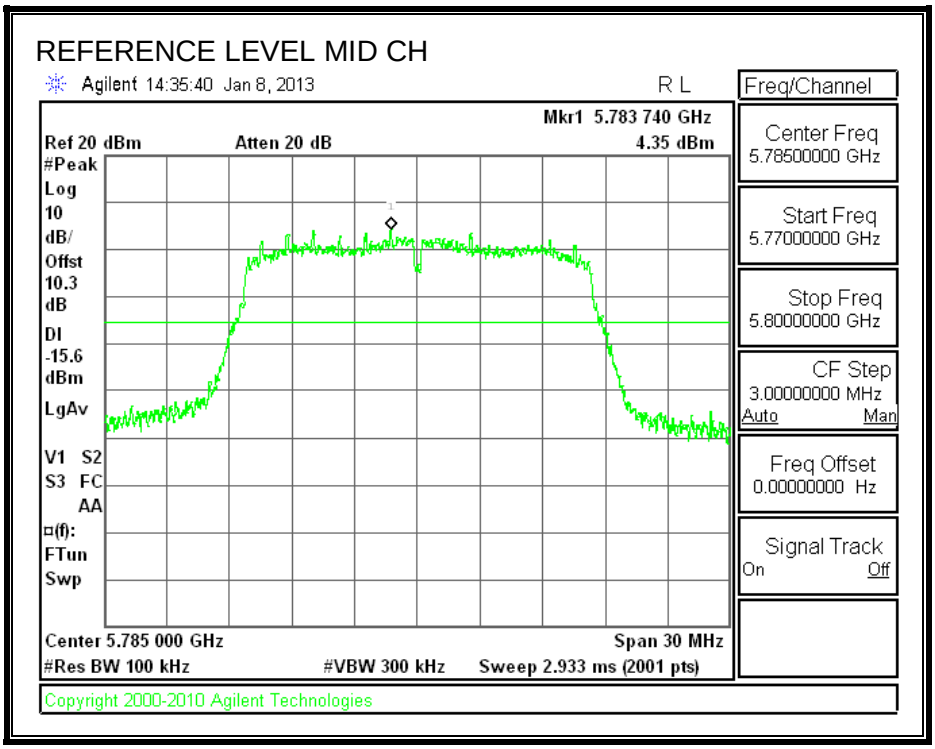
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required.

TEST PROCEDURE

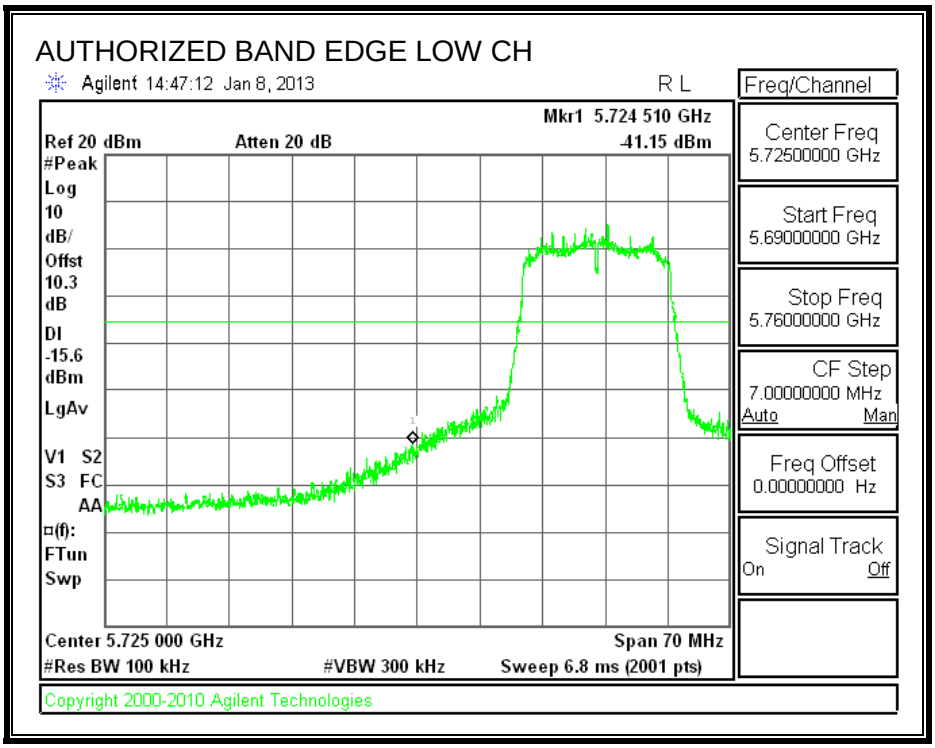
The transmitter output is connected to a spectrum analyzer with RBW = 100 kHz, VBW = 300 kHz, peak detector, and max hold. Measurements utilizing these settings are made of the in-band reference level, bandedge (where measurements to the general radiated limits will not be made) and out-of-band emissions.

RESULTS

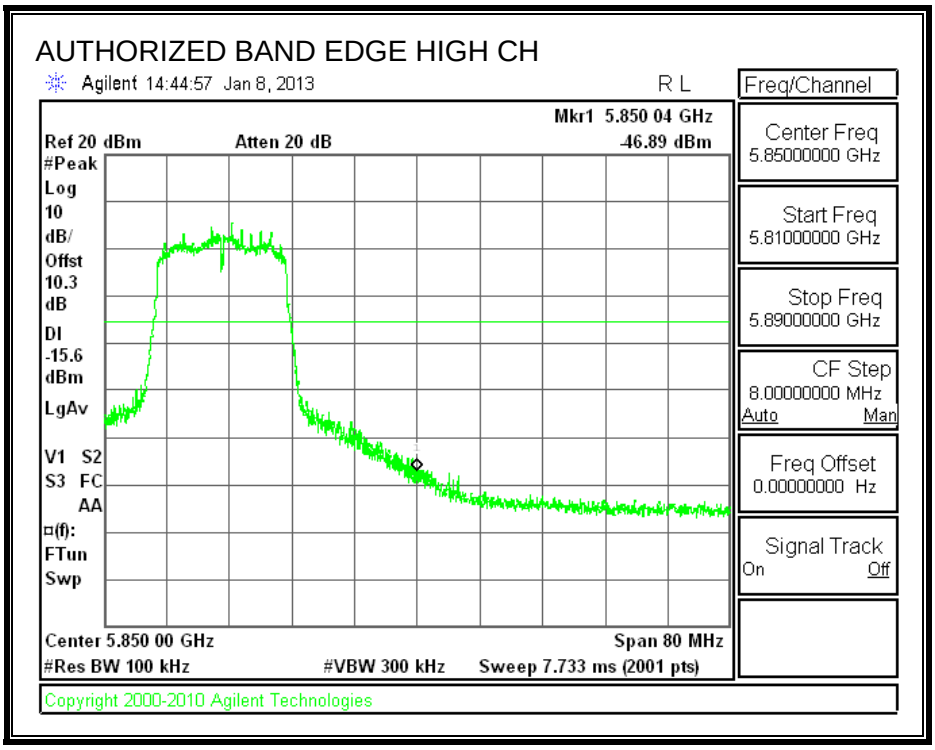
IN-BAND REFERENCE LEVEL



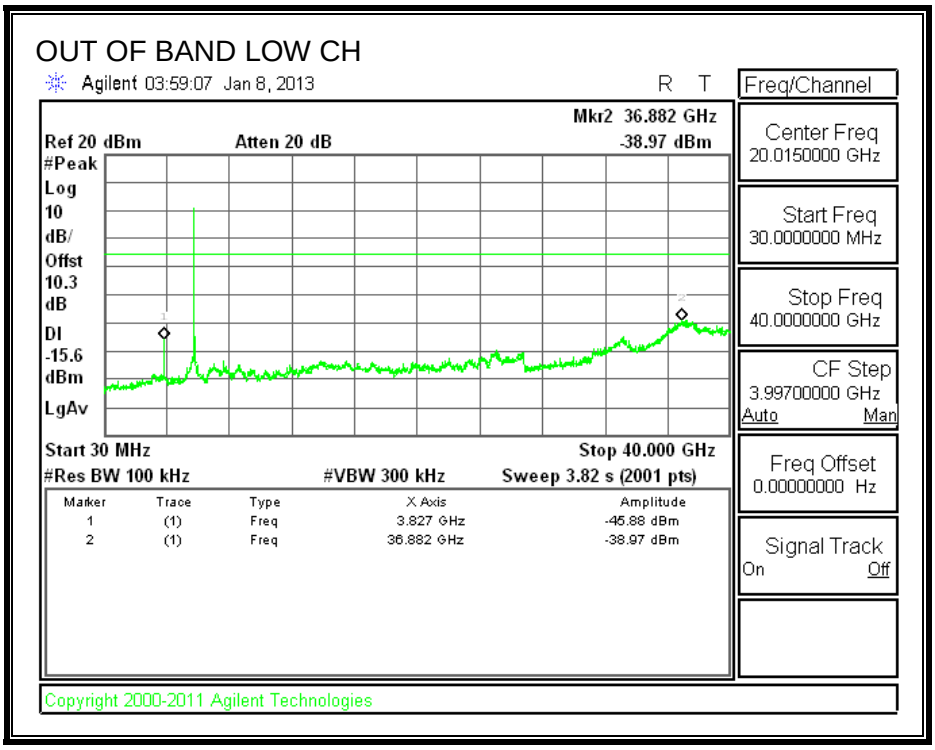
LOW CHANNEL BANDEDGE



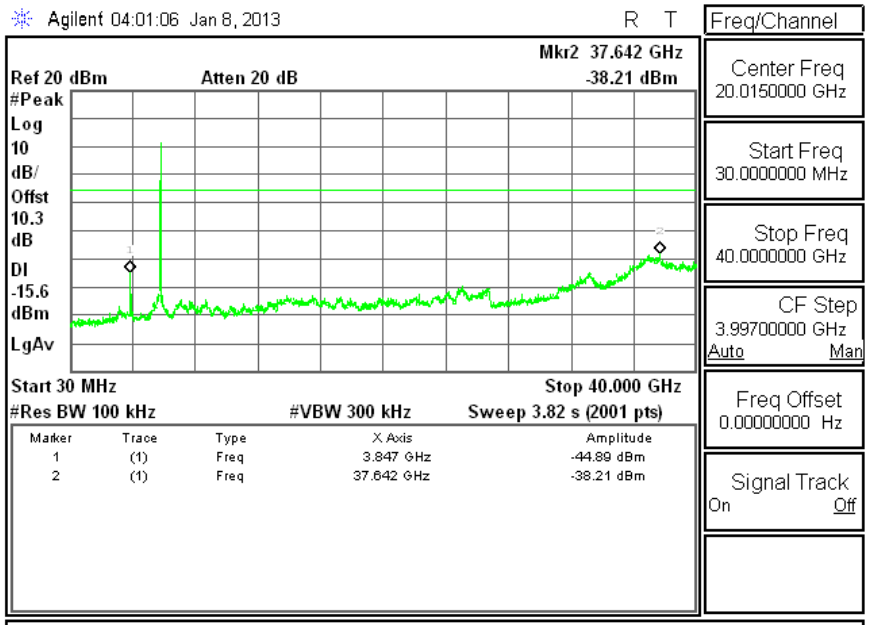
HIGH CHANNEL BANDEDGE



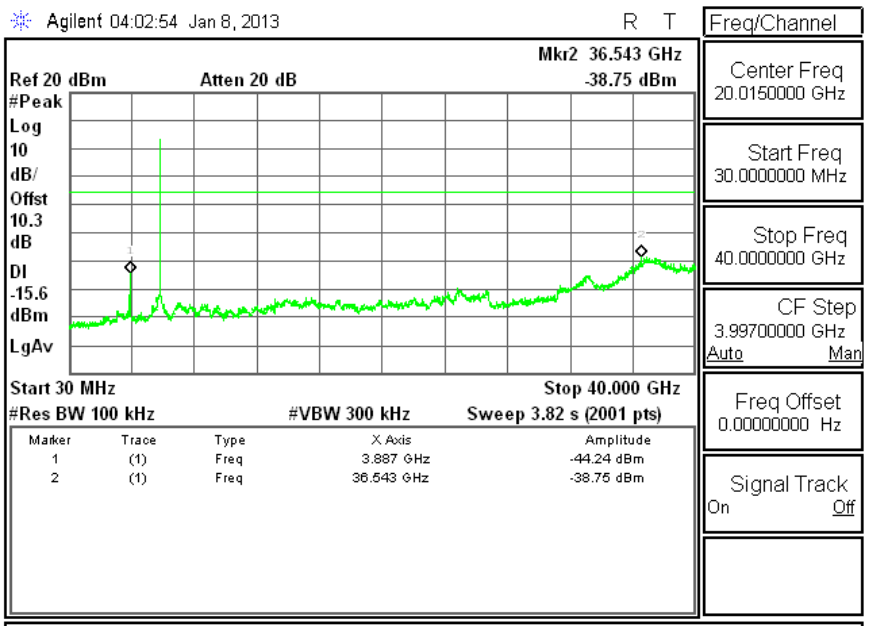
OUT-OF-BAND EMISSIONS



OUT OF BAND MID CH



OUT OF BAND HIGH CH



9.5. 802.11n HT20 MODE IN THE 5.8 GHz BAND

9.5.1. 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.

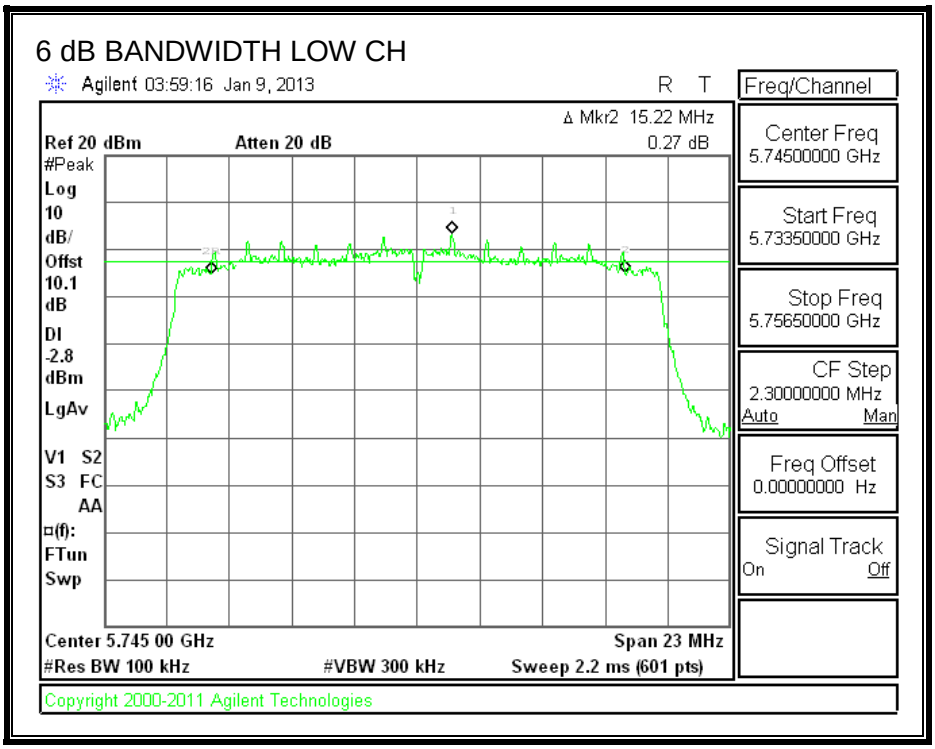
TEST PROCEDURE

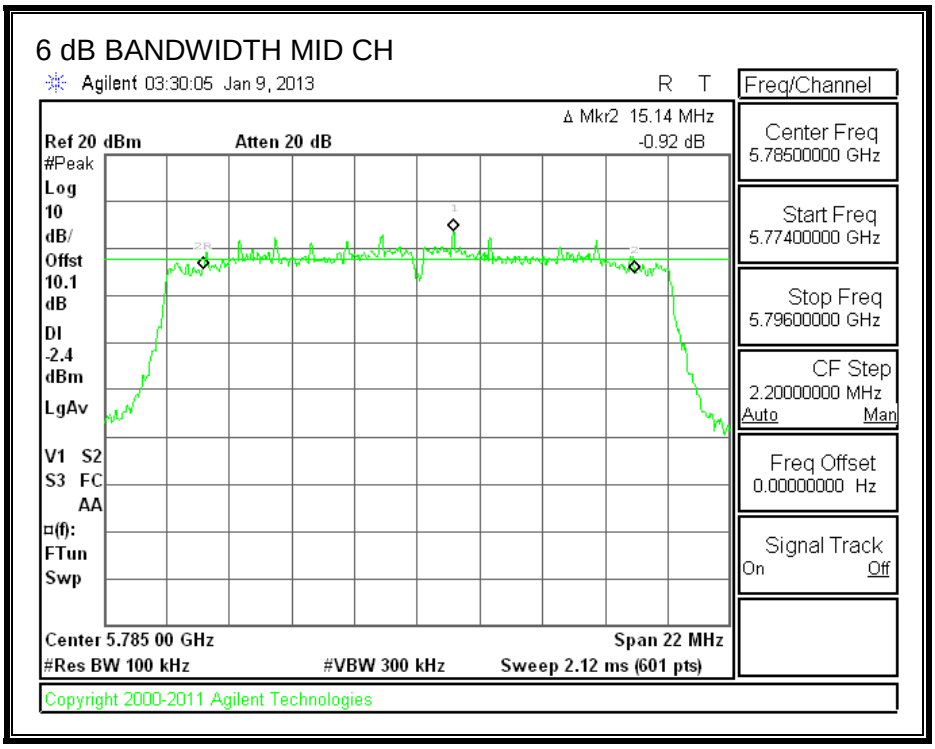
The transmitter output is connected to a spectrum analyzer with the RBW set between 1% and 5% of the EBW, the VBW >= 3 x RBW, peak detector and max hold.

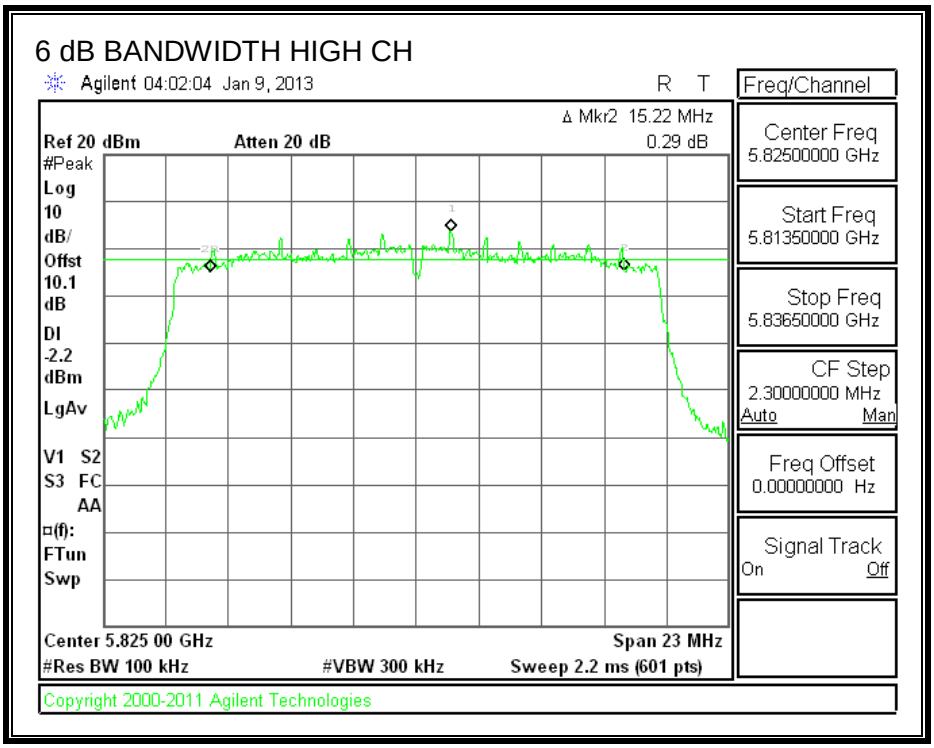
RESULTS

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5745	15.220	0.5
Mid	5785	15.140	0.5
High	5825	15.220	0.5

6 dB BANDWIDTH







9.5.2. 99% BANDWIDTH

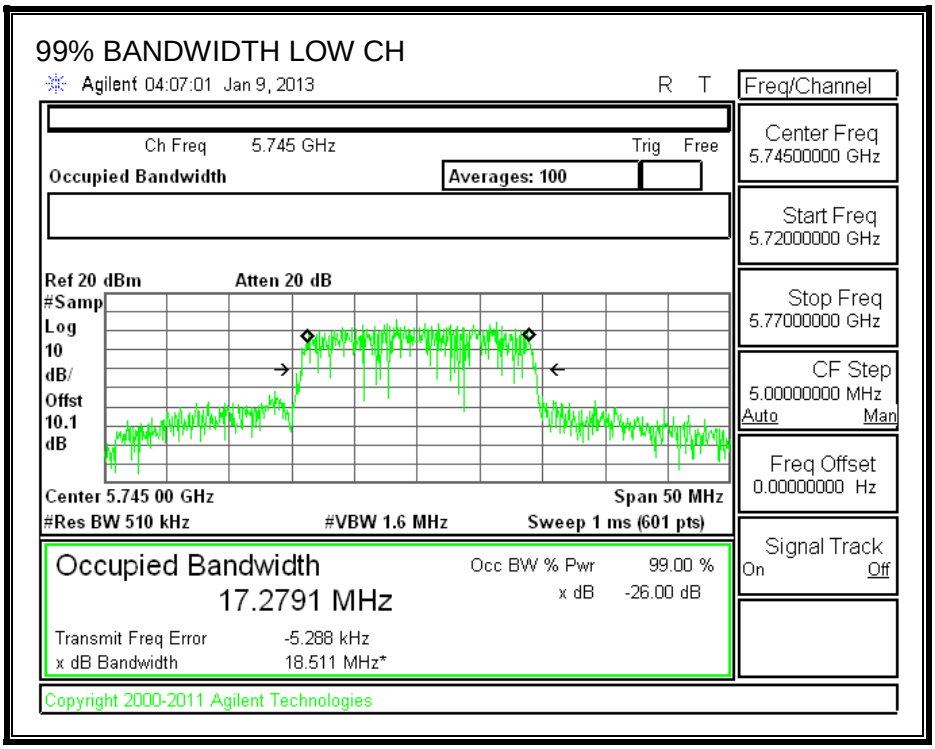
LIMITS

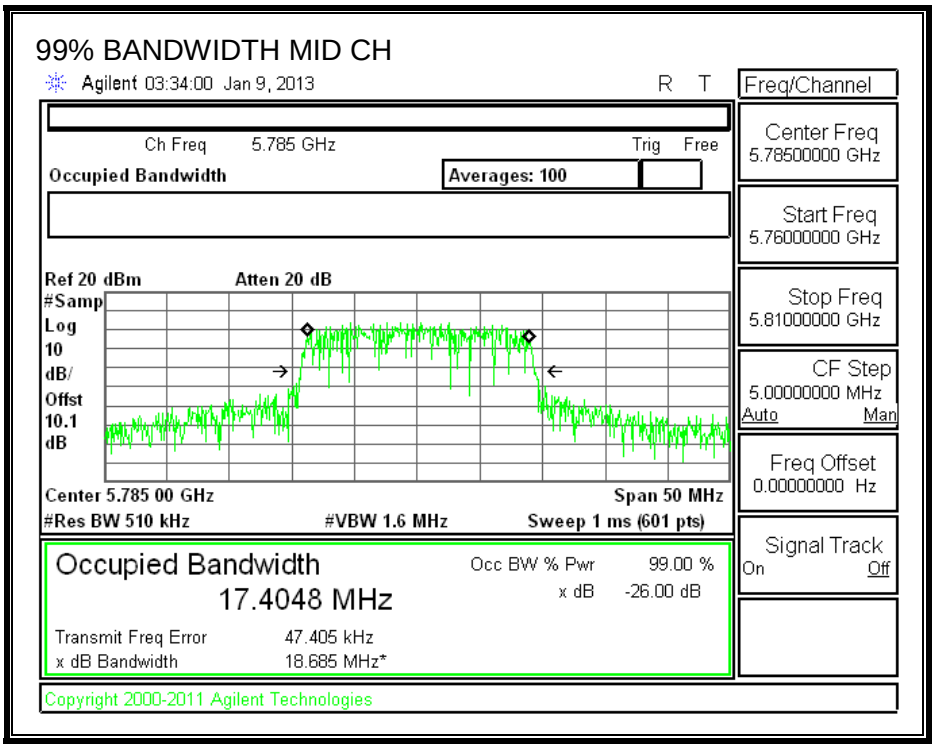
None; for reporting purposes only.

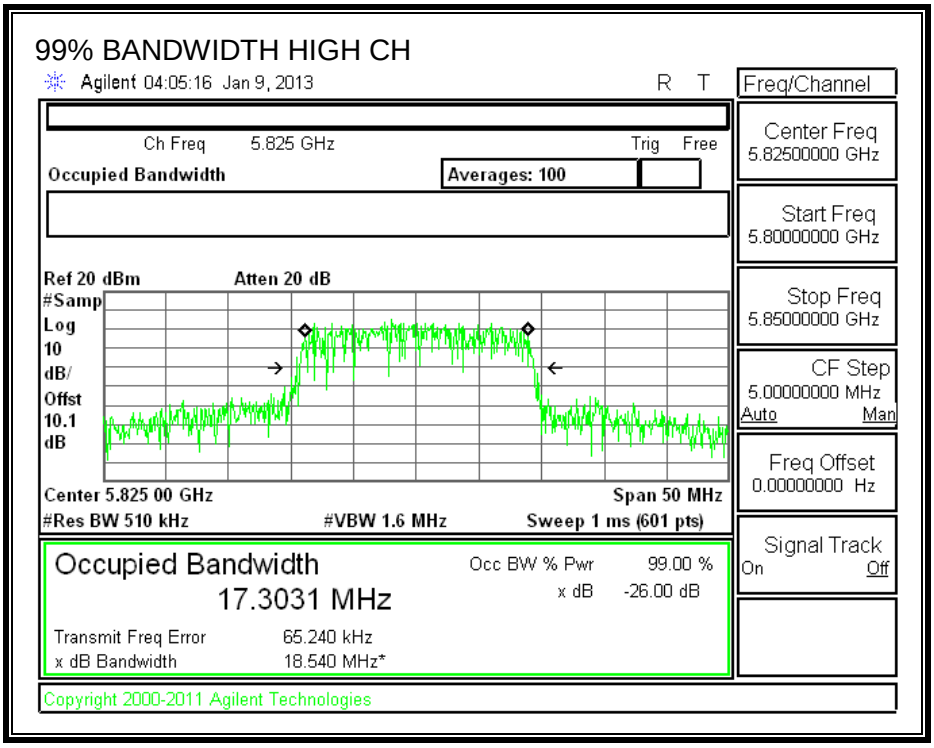
RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5745	17.2791
Mid	5785	17.4048
High	5825	17.3031

99% BANDWIDTH







9.5.3. OUTPUT POWER

LIMITS

FCC §15.247

IC RSS-210 A8.4

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt, based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

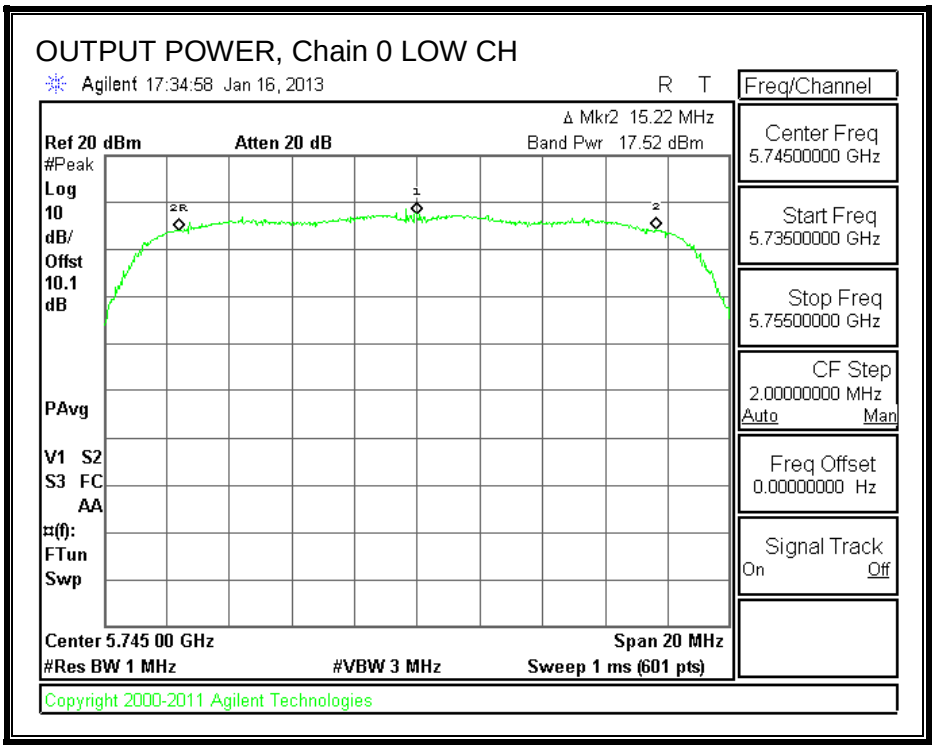
Limits

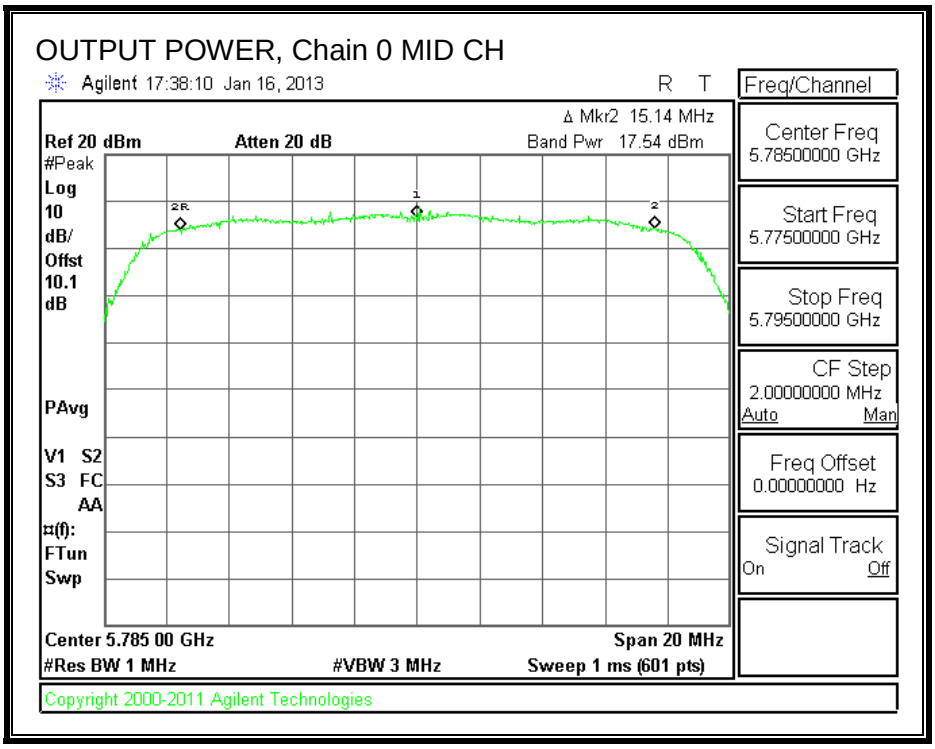
Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
Low	5745	-6.40	30.00	30	36	30.00
Mid	5785	-6.40	30.00	30	36	30.00
High	5825	-6.40	30.00	30	36	30.00

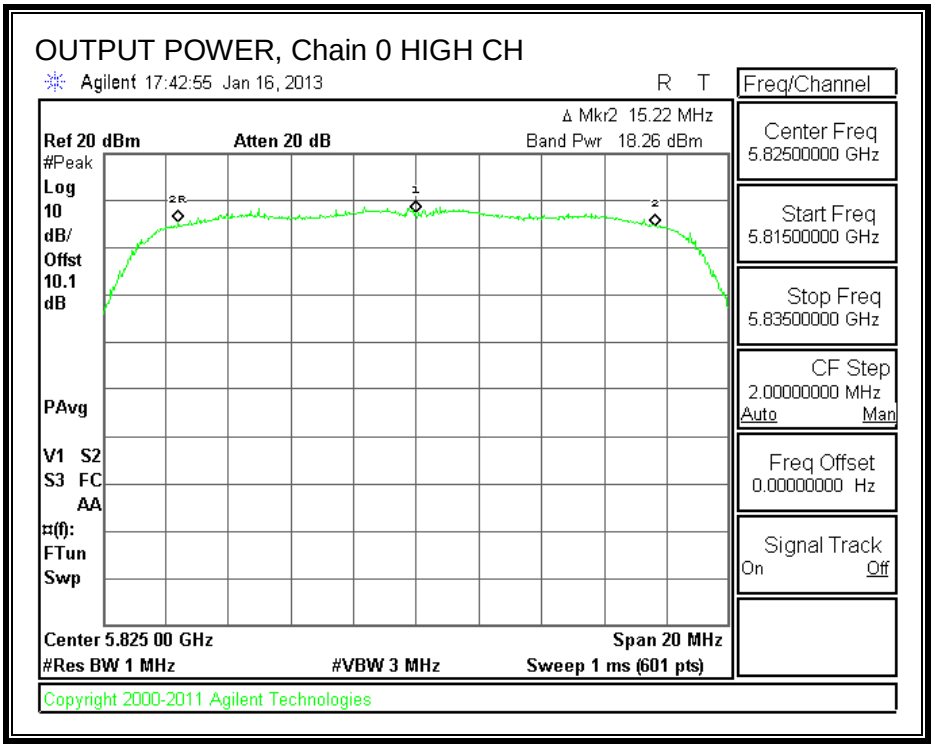
Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
Low	5745	17.52	17.52	30.00	-12.48
Mid	5785	17.54	17.54	30.00	-12.46
High	5825	18.26	18.26	30.00	-11.74

OUTPUT POWER, Chain 0







9.5.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Channel	Frequency (MHz)	Power (dBm)
Low	5745	10.60
Mid	5785	10.60
High	5825	10.70

9.5.5. PSD

LIMITS

FCC §15.247

IC RSS-210 A8.2

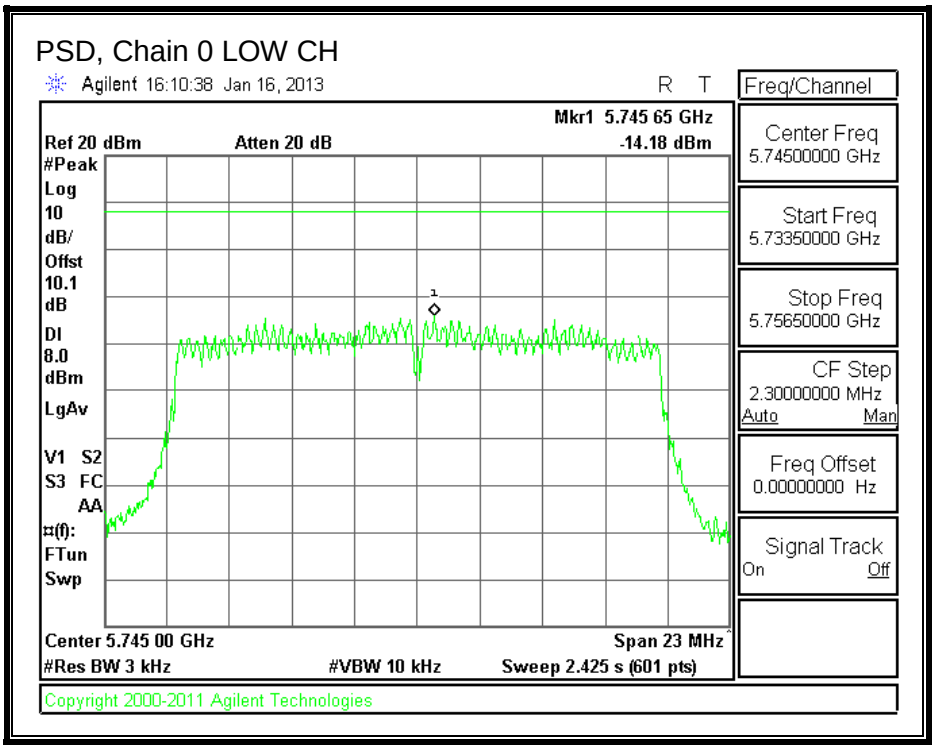
The power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

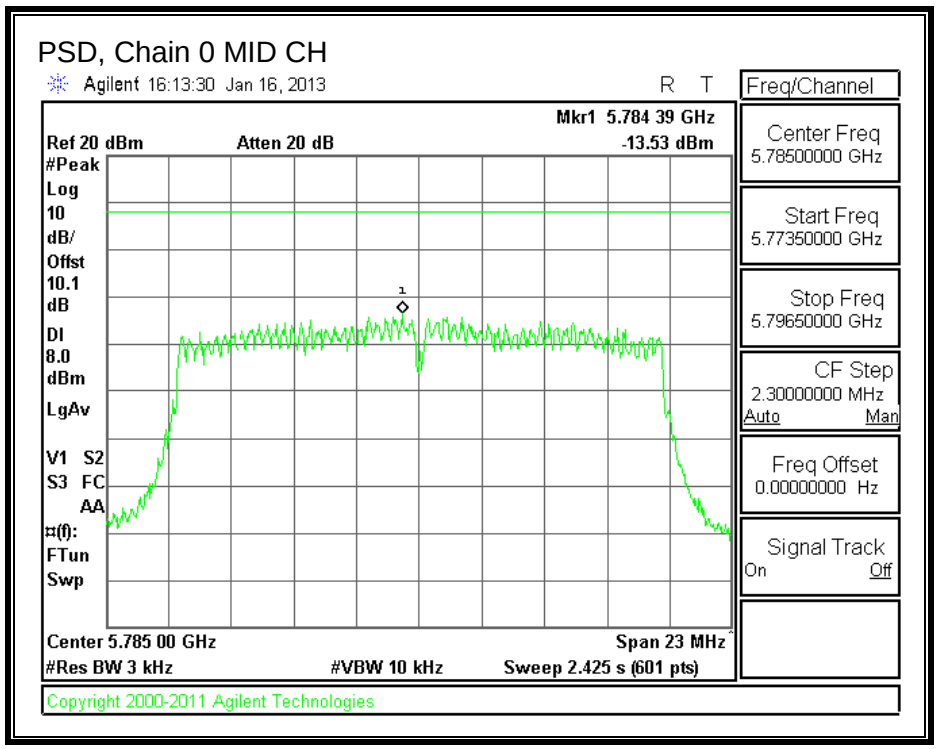
RESULTS

PSD Results

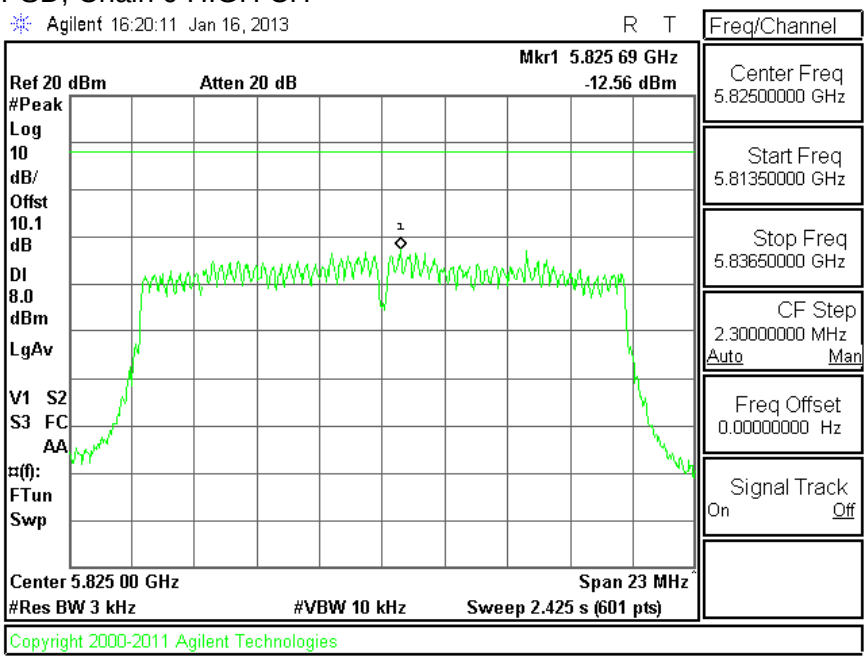
Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Limit (dBm)	Margin (dB)
Low	5745	-14.18	8.0	-22.2
Mid	5785	-13.53	8.0	-21.5
High	5825	-12.56	8.0	-20.6

PSD, Chain 0





PSD, Chain 0 HIGH CH



9.5.6. OUT-OF-BAND EMISSIONS

LIMITS

FCC §15.247 (d)

IC RSS-210 A8.5

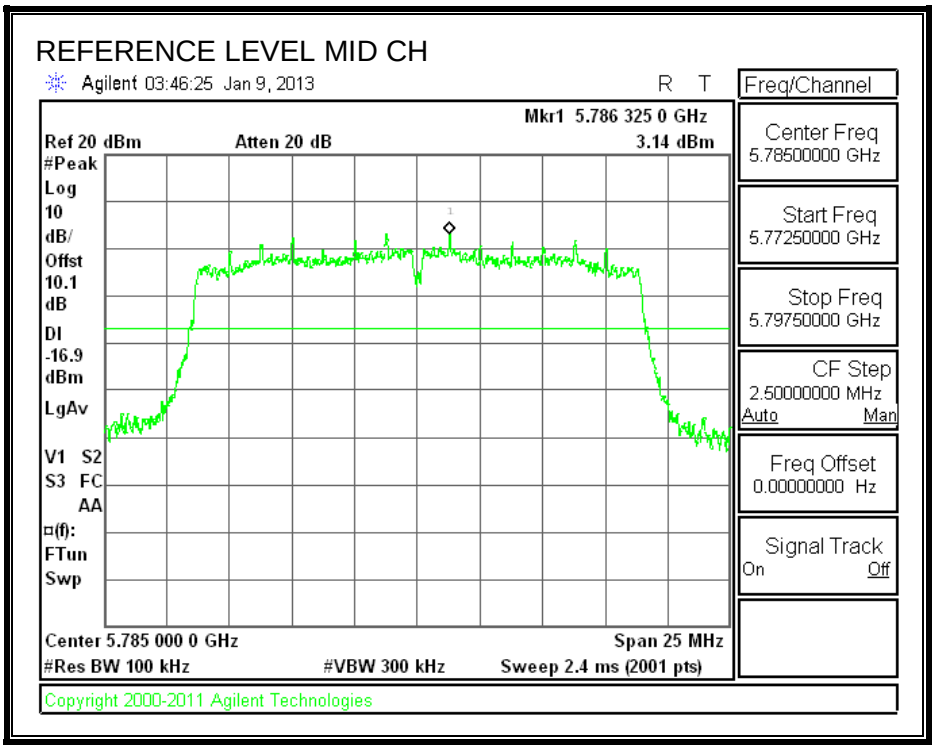
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required.

TEST PROCEDURE

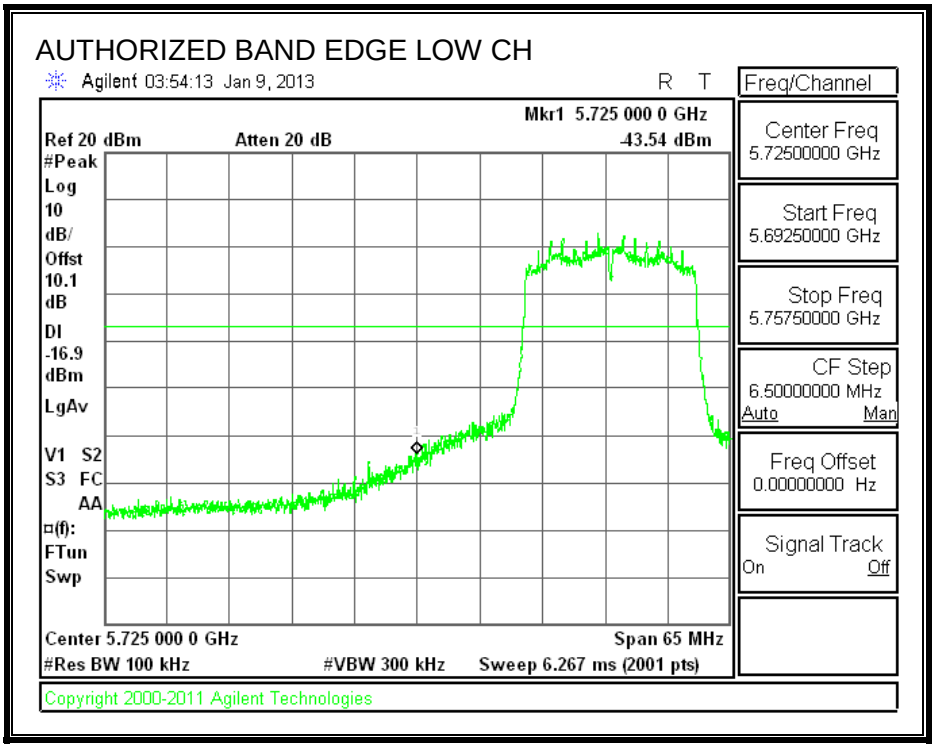
The transmitter output is connected to a spectrum analyzer with RBW = 100 kHz, VBW = 300 kHz, peak detector, and max hold. Measurements utilizing these settings are made of the in-band reference level, bandedge (where measurements to the general radiated limits will not be made) and out-of-band emissions.

RESULTS

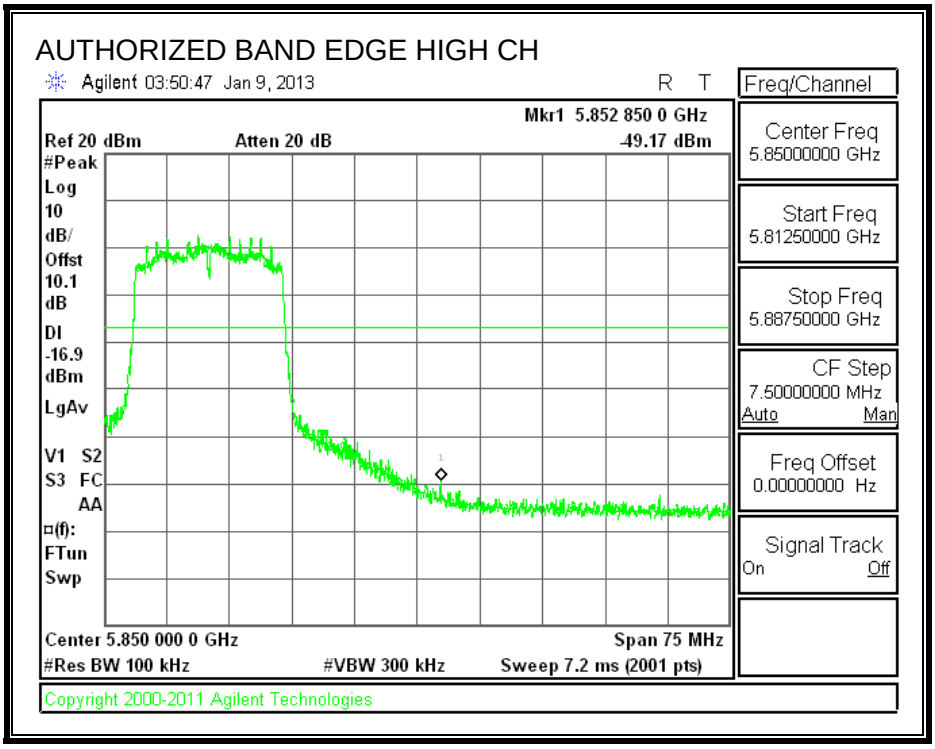
IN-BAND REFERENCE LEVEL



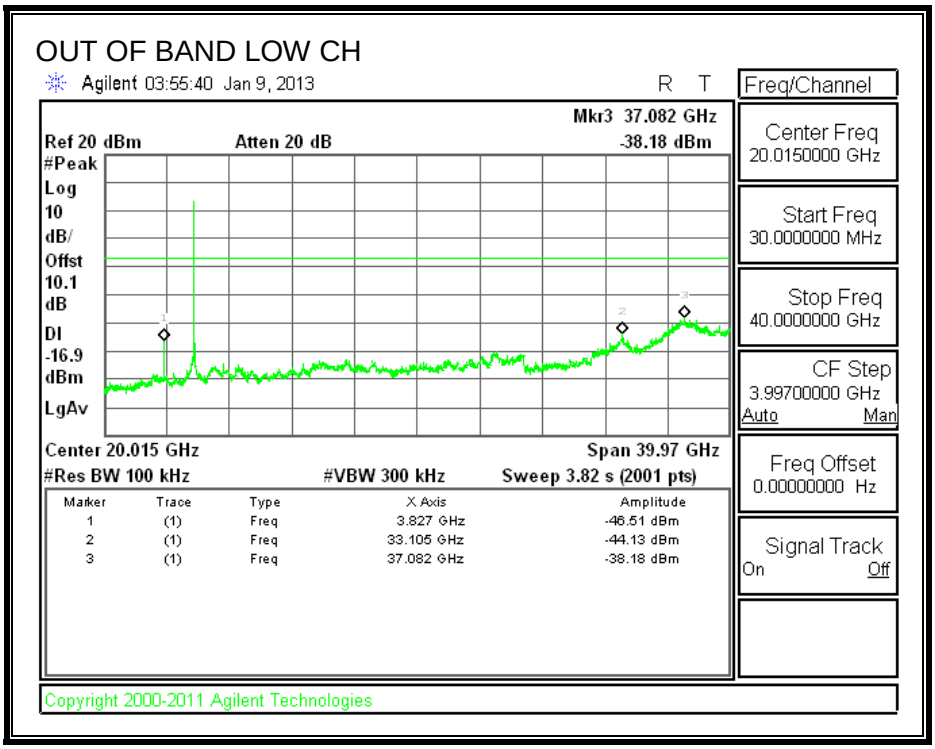
LOW CHANNEL BANDEDGE



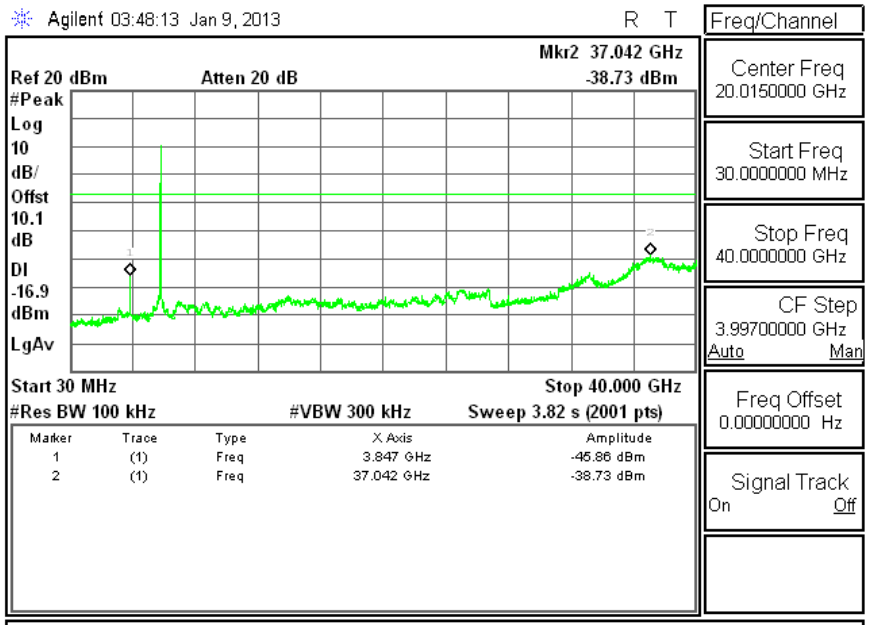
HIGH CHANNEL BANDEDGE



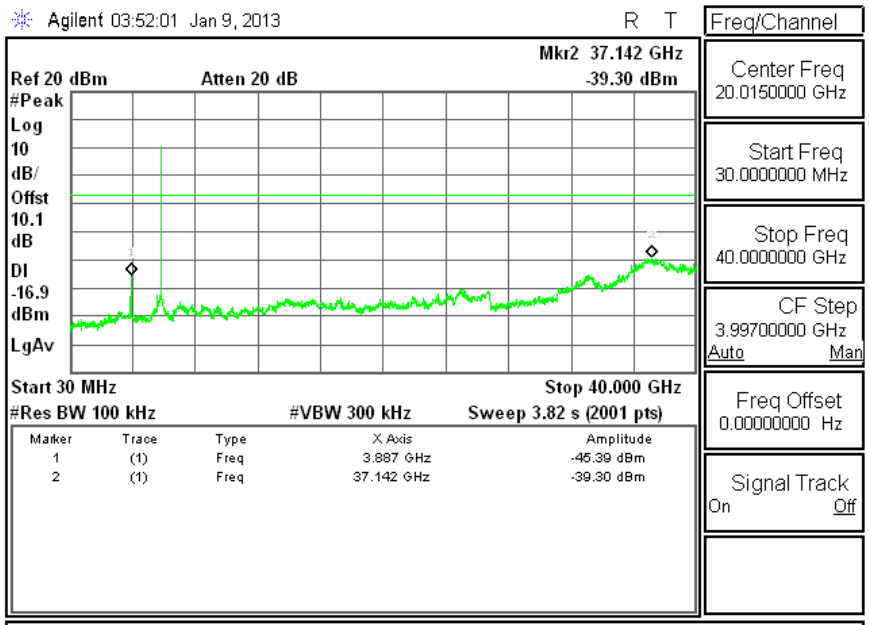
OUT-OF-BAND EMISSIONS



OUT OF BAND MID CH



OUT OF BAND HIGH CH



9.6. 802.11n HT40 MODE IN THE 5.8 GHz BAND

9.6.1. 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.

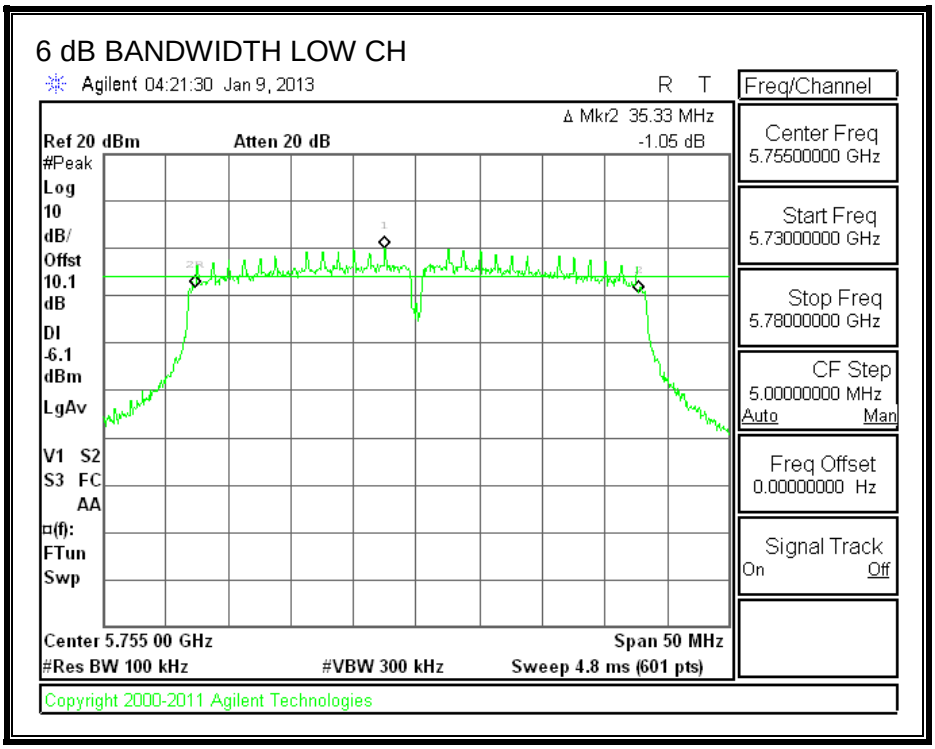
TEST PROCEDURE

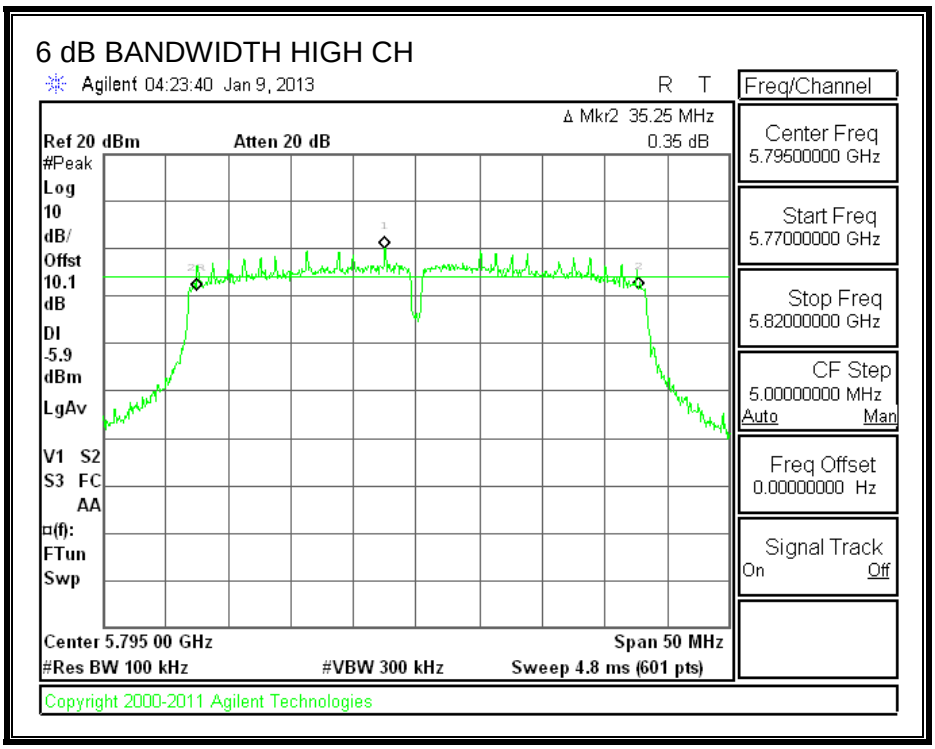
The transmitter output is connected to a spectrum analyzer with the RBW set between 1% and 5% of the EBW, the VBW >= 3 x RBW, peak detector and max hold.

RESULTS

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	35.330	0.5
High	5795	35.250	0.5

6 dB BANDWIDTH





9.6.2. 99% BANDWIDTH

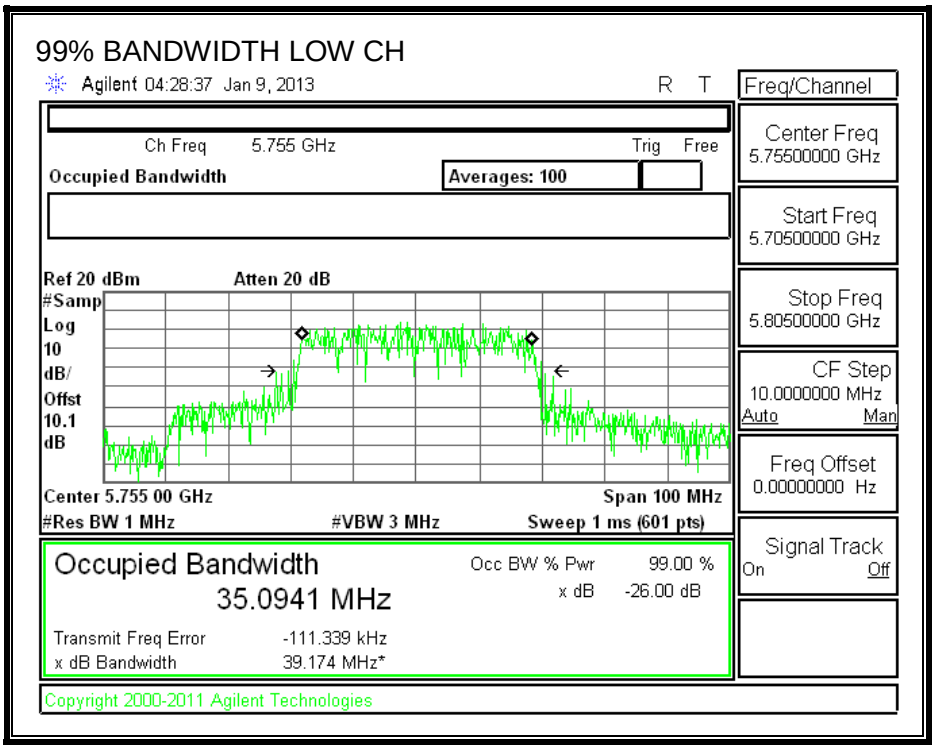
LIMITS

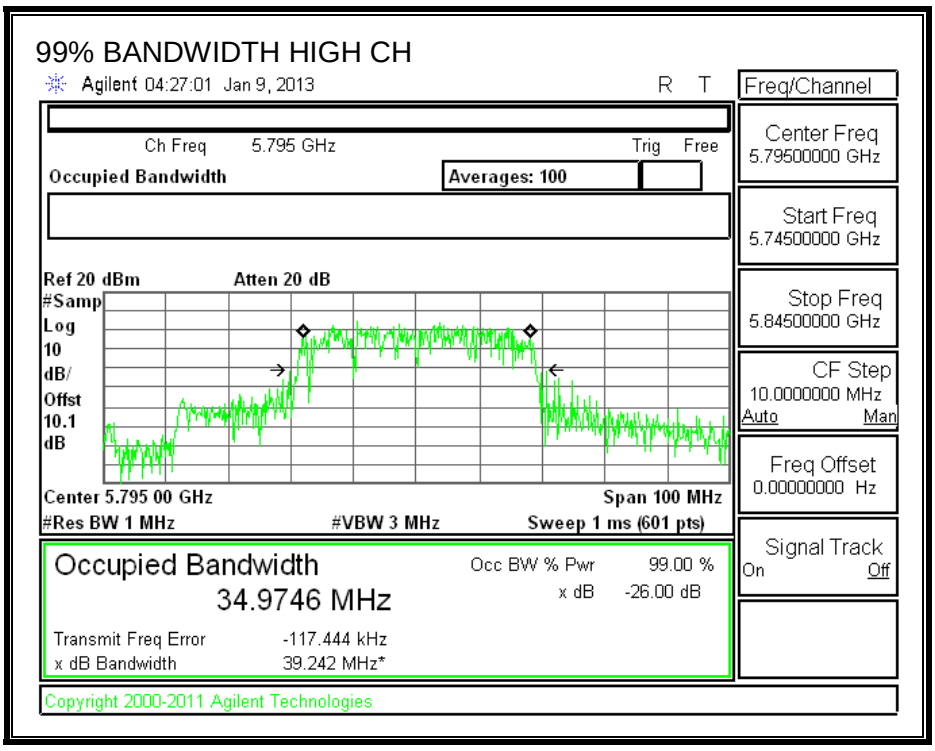
None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5755	35.0941
High	5795	34.9746

99% BANDWIDTH





9.6.3. OUTPUT POWER

LIMITS

FCC §15.247

IC RSS-210 A8.4

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt, based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

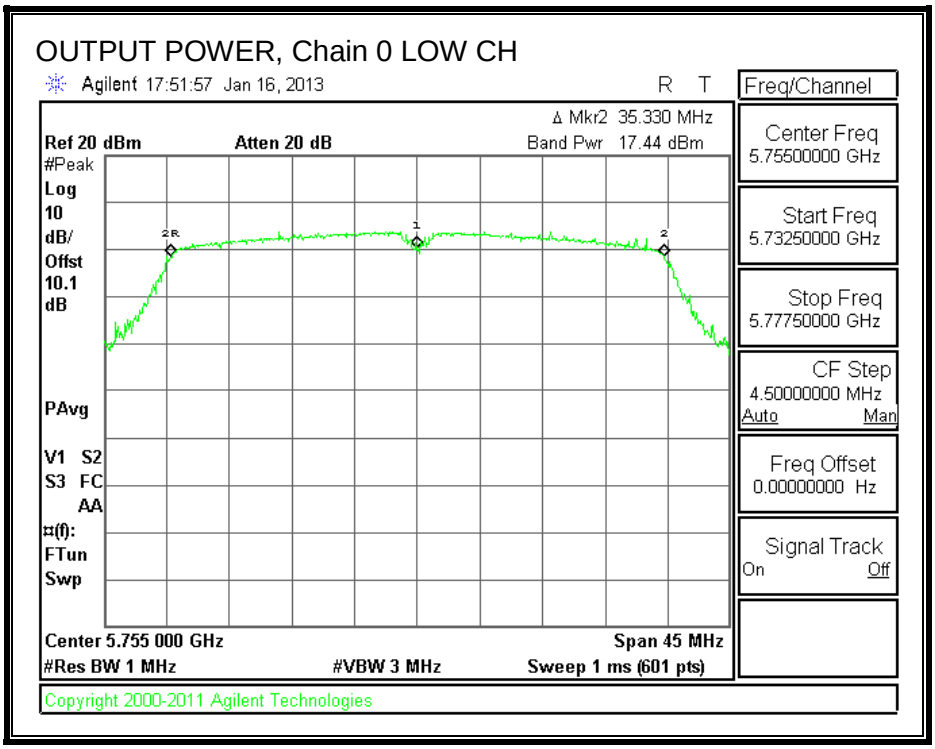
Limits

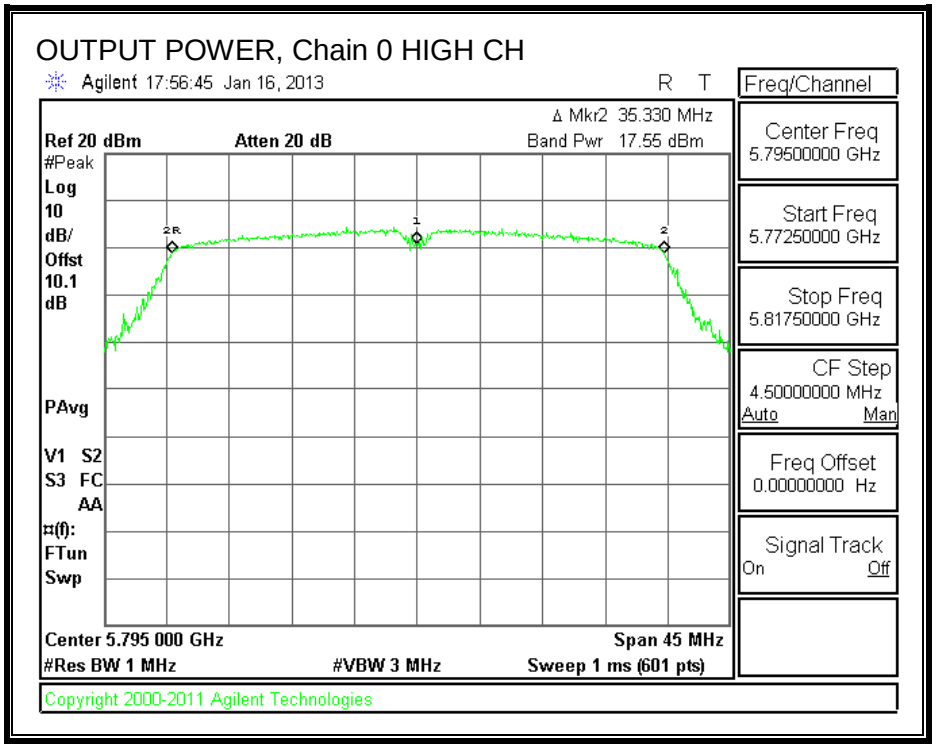
Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
Low	5755	-6.40	30.00	30	36	30.00
High	5795	-6.40	30.00	30	36	30.00

Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
Low	5755	17.44	17.44	30.00	-12.56
High	5795	17.55	17.55	30.00	-12.45

OUTPUT POWER, Chain 0





9.6.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Channel	Frequency (MHz)	Power (dBm)
Low	5755	10.30
High	5795	10.30

9.6.5. PSD

LIMITS

FCC §15.247

IC RSS-210 A8.2

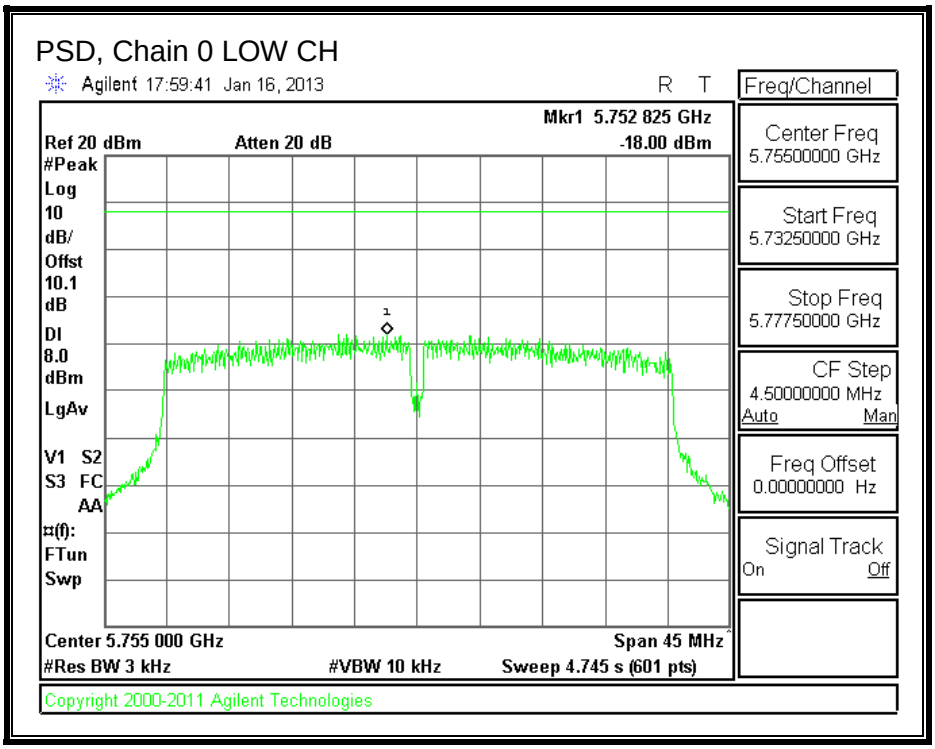
The power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

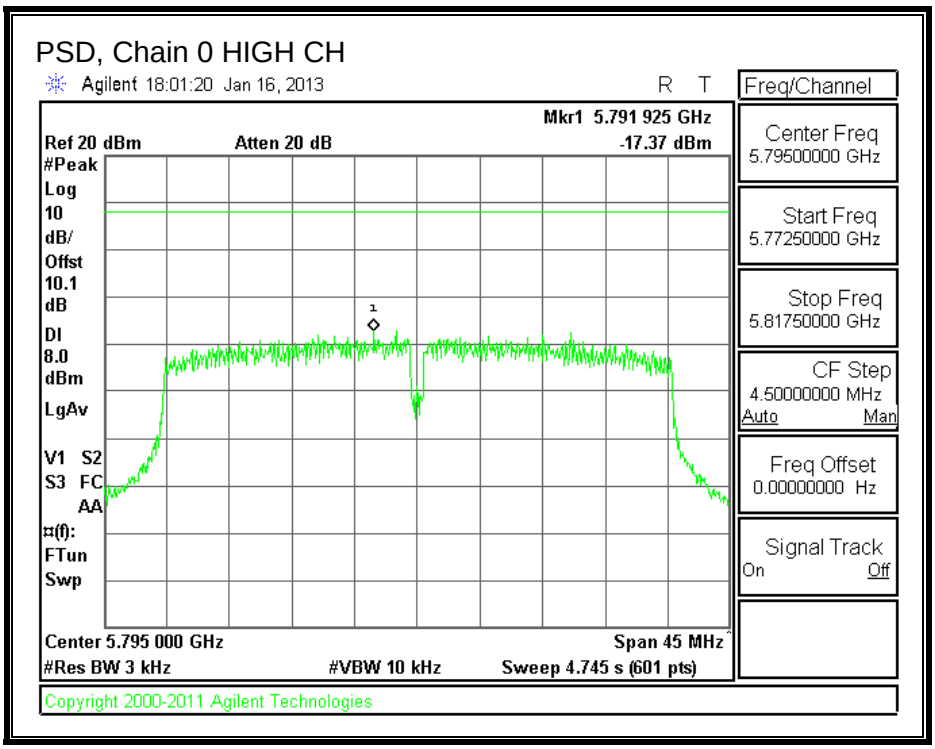
RESULTS

PSD Results

Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Limit (dBm)	Margin (dB)
Low	5755	-18.00	8.0	-26.0
High	5795	-17.37	8.0	-25.4

PSD, Chain 0





9.6.6. OUT-OF-BAND EMISSIONS

LIMITS

FCC §15.247 (d)

IC RSS-210 A8.5

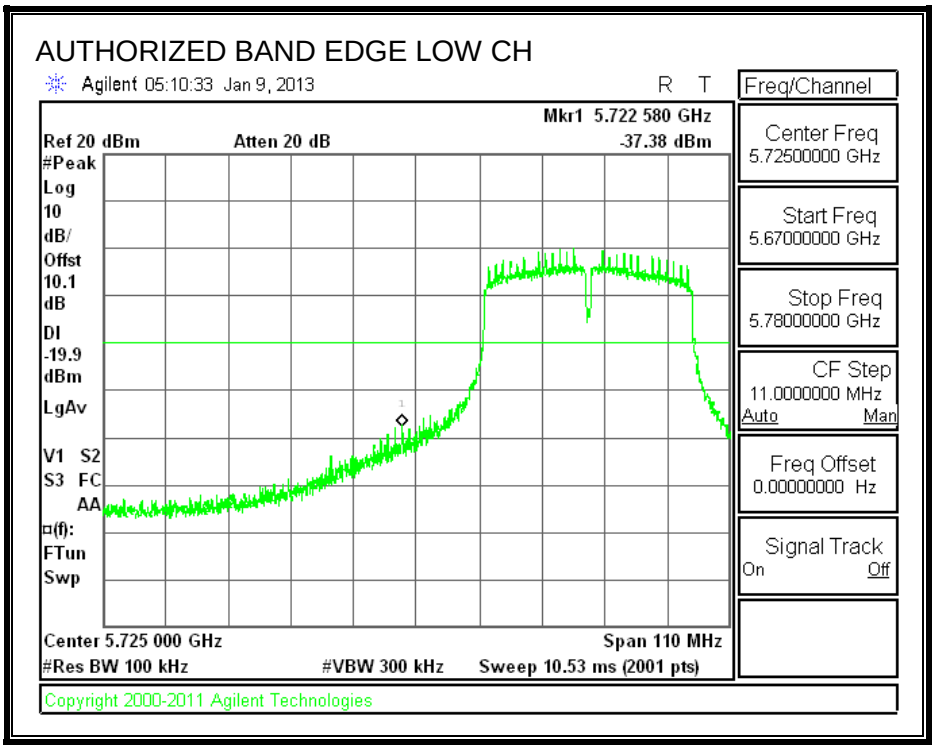
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required.

TEST PROCEDURE

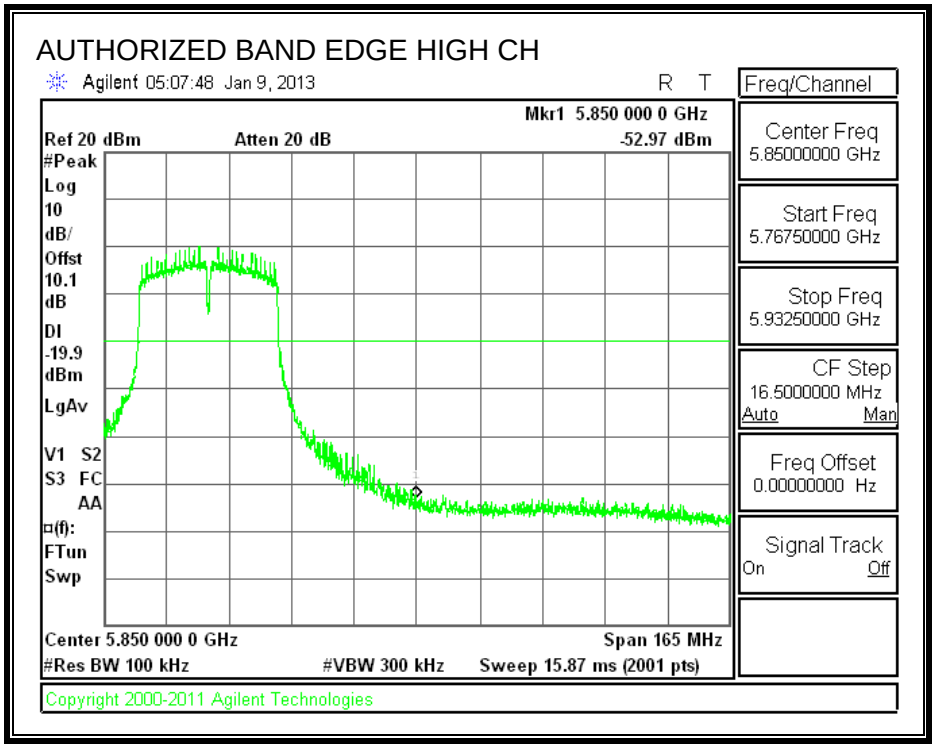
The transmitter output is connected to a spectrum analyzer with RBW = 100 kHz, VBW = 300 kHz, peak detector, and max hold. Measurements utilizing these settings are made of the in-band reference level, bandedge (where measurements to the general radiated limits will not be made) and out-of-band emissions.

RESULTS

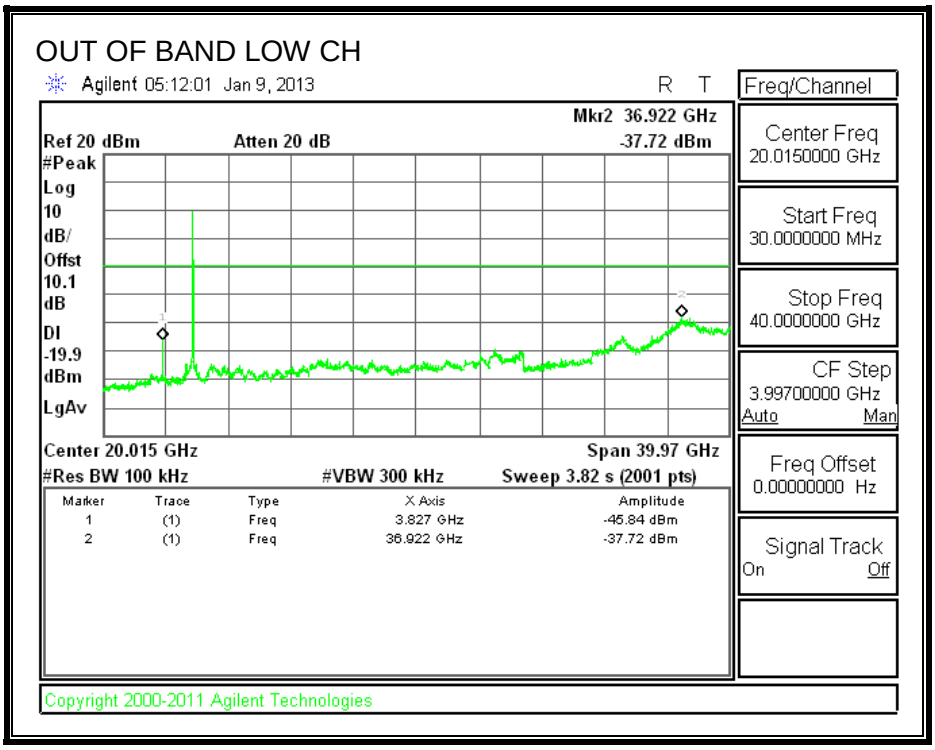
LOW CHANNEL BANDEDGE

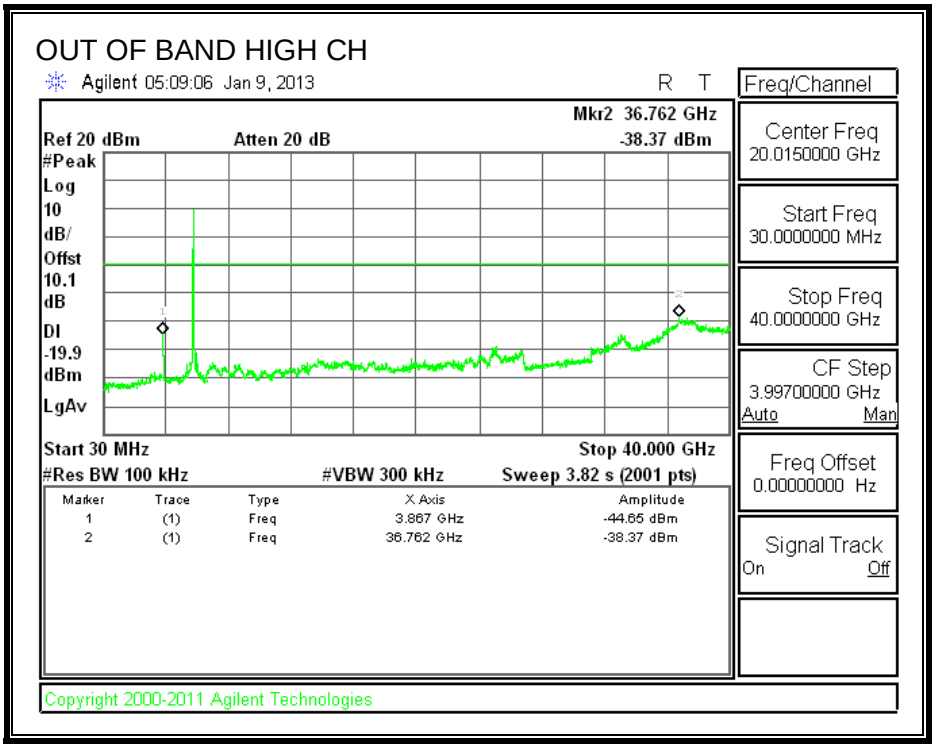


HIGH CHANNEL BANDEDGE



OUT-OF-BAND EMISSIONS





10. RADIATED TEST RESULTS

10.1. 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 applicable band.

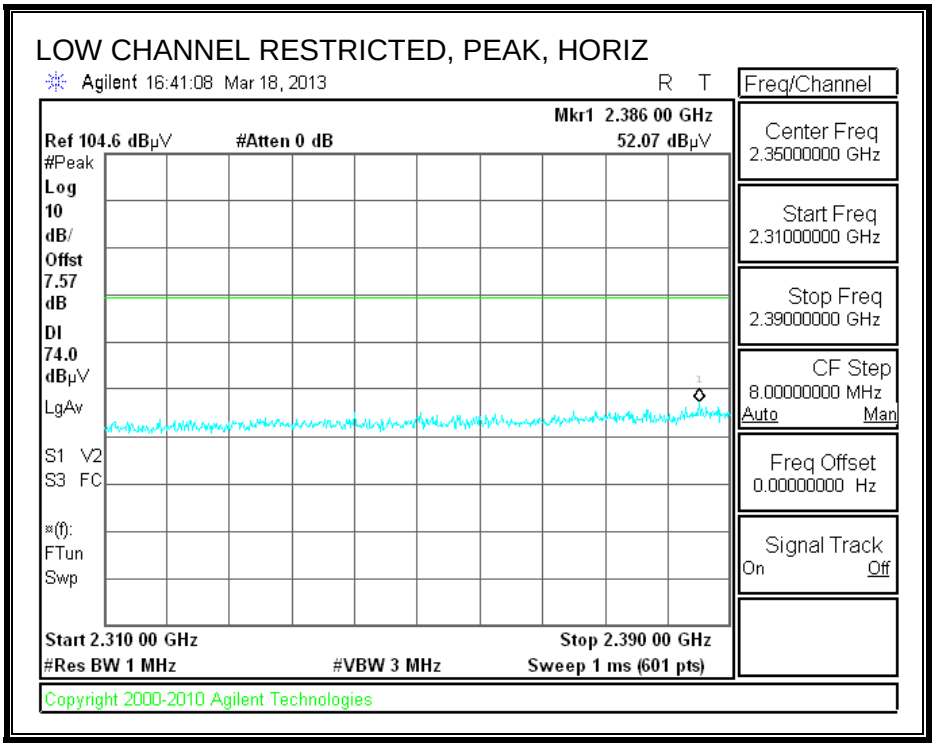
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized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

Duty Cycle correction factor is included in the offset.

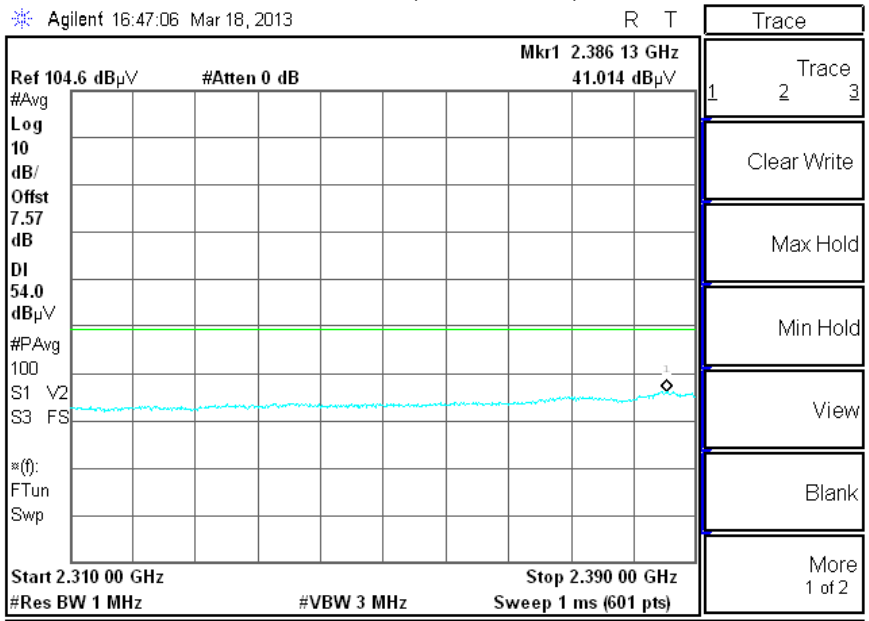
10.2. TRANSMITTER ABOVE 1 GHz

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

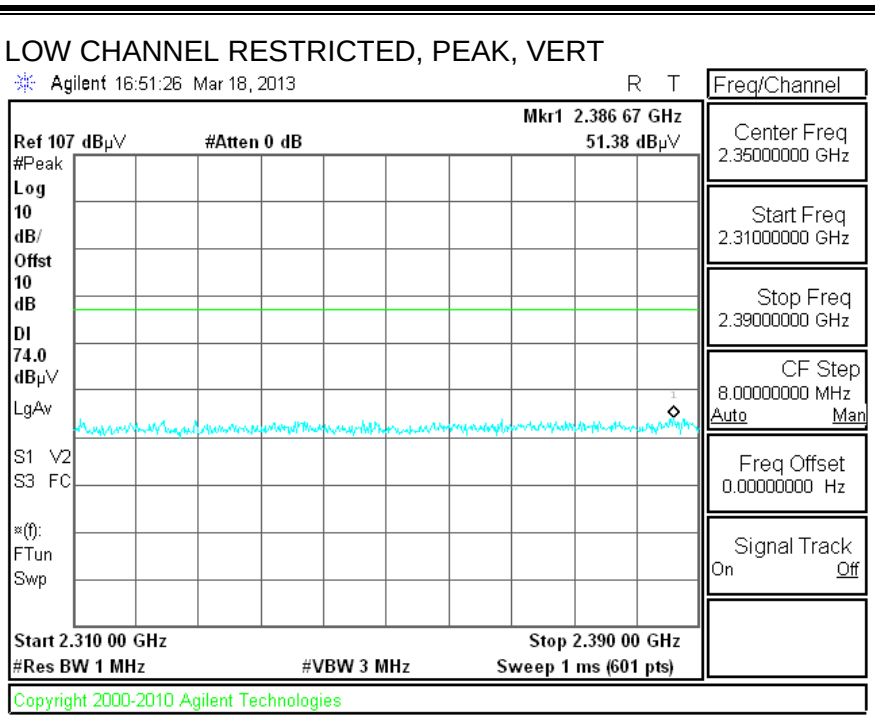
RESTRICTED BANDEDGE (LOW CHANNEL)

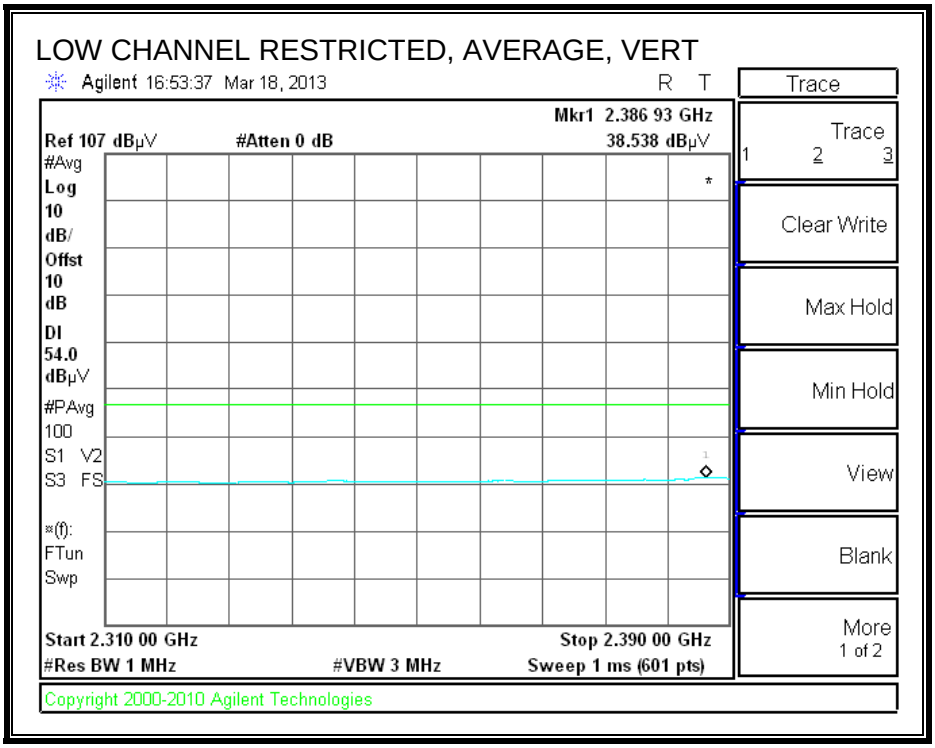


LOW CHANNEL RESTRICTED, AVERAGE, HORIZ

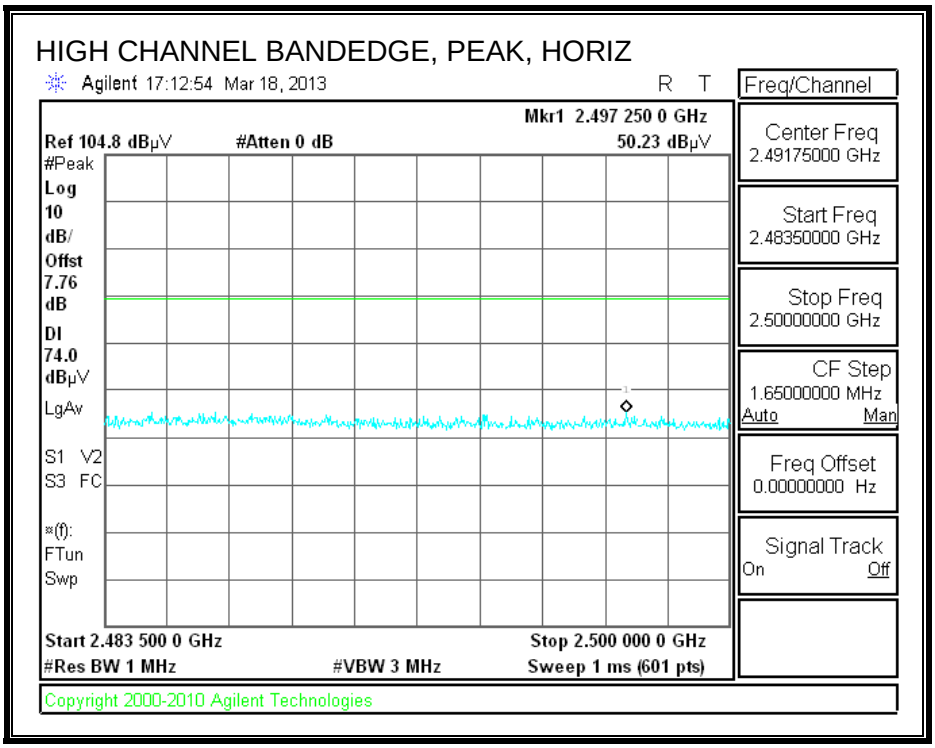


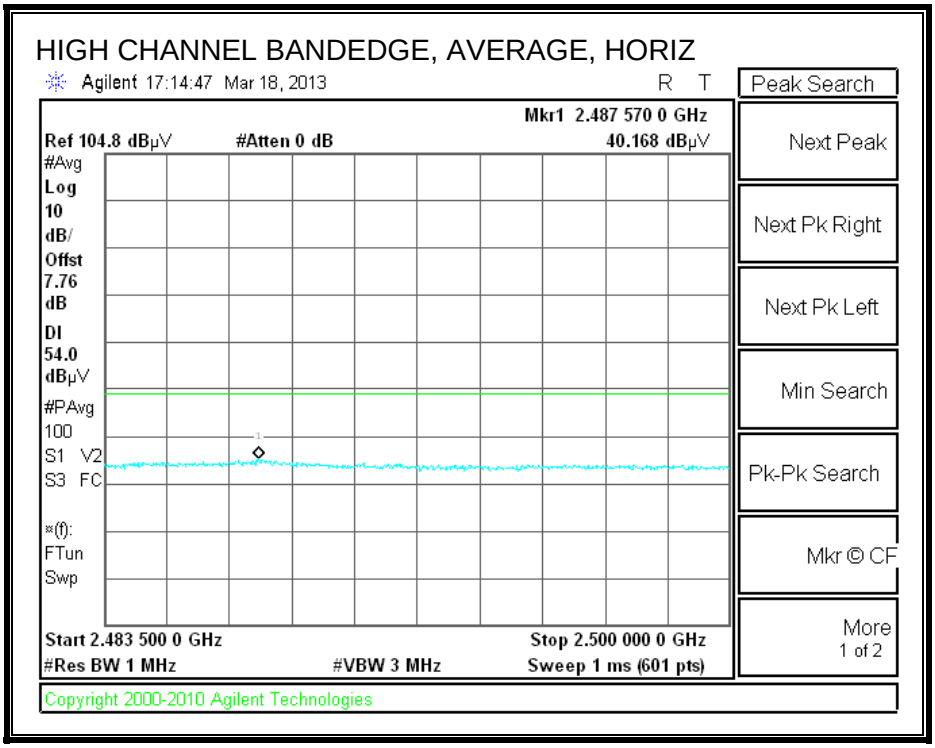
LOW CHANNEL RESTRICTED, PEAK, VERT



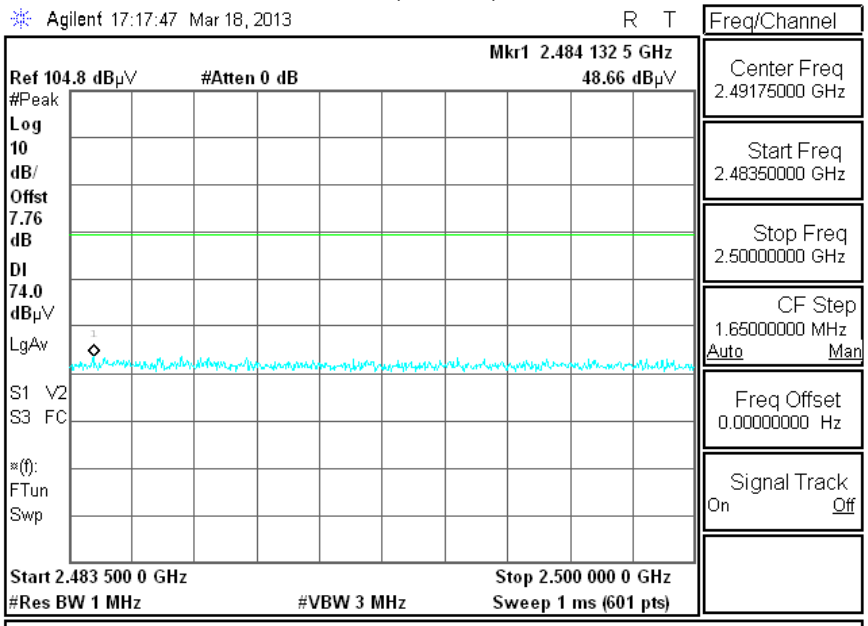


AUTHORIZED BANDEDGE (HIGH CHANNEL)

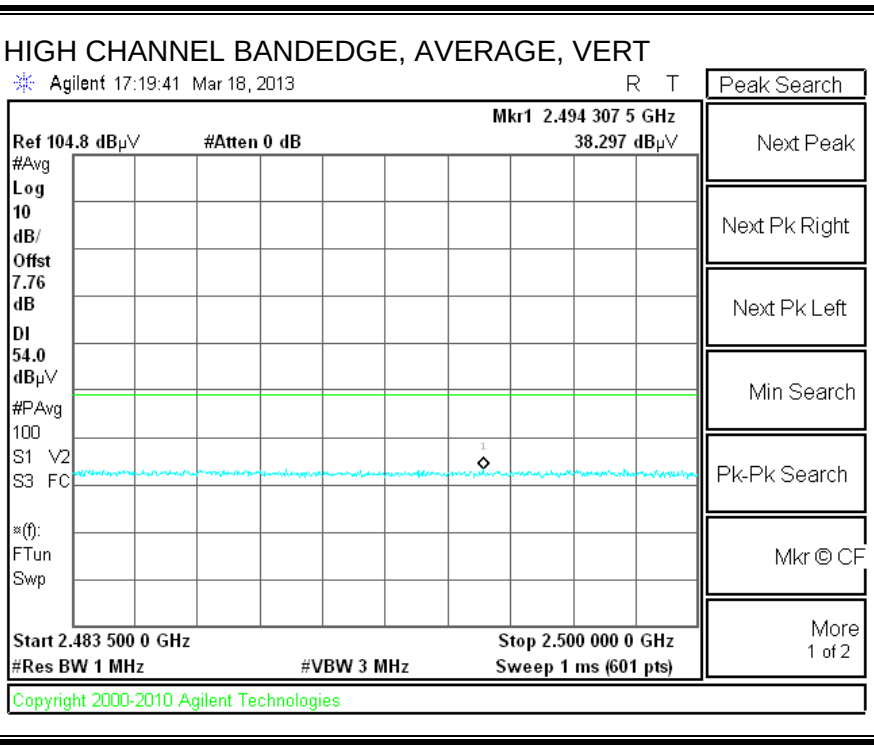




HIGH CHANNEL BANDEDGE, PEAK, VERT



HIGH CHANNEL BANDEDGE, AVERAGE, VERT



HARMONICS AND SPURIOUS EMISSIONS

LOW CH

Project No:13U14917
Client Name:LG
Model / Device:US870
Config / Other:EUT with AC Adapter, Low Ch
Test By:Chin Pang

Range 1 1000 - 18000MHz

Marker No.	Test Frequency	Meter Reading	Detector	T119	Loop w/T34	T166 BRF 2.4-2.5 GHz	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
1	2409.943	42.97	PK	32.1	-29.7	0.5	45.87	74	-28.13	54	-8.13	100	Horz
2	2719.96	41.84	PK	32.6	-29	0.5	45.94	74	-28.06	54	-8.06	201	Horz
3	7081.439	34.79	PK	35.6	-23.1	0.5	47.79	74	-26.21	54	-6.21	100	Horz

Range:2 1000 - 18000MHz

Marker No.	Test Frequency	Meter Reading	Detector	T119	Loop w/T34	T166 BRF 2.4-2.5 GHz	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
4	2397.202	42.41	PK	32.1	-29.7	0.5	45.31	74	-28.69	54	-8.69	201	Vert
5	2685.986	41.38	PK	32.6	-29	0.5	45.48	74	-28.52	54	-8.52	201	Vert
6	6988.009	35.3	PK	35.6	-23.2	0.5	48.2	74	-25.8	54	-5.8	201	Vert

Range:3 10000 - 18000MHz

Marker No.	Test Frequency	Meter Reading	Detector	T119	Loop w/T34	T166 BRF 2.4-2.5 GHz	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
7	17784.108	20.35	PK	41.5	-14.1	0.5	48.25	74	-25.75	54	-5.75	99	Horz

Range:4 10000 - 18000MHz

8	17580.21	20.38	PK	41.4	-14.3	0.5	47.98	74	-26.02	54	-6.02	99	Vert

HARMONICS AND SPURIOUS EMISSIONS

MID CH

Project No:13U14917													
Client Name:LG													
Model / Device:US870													
Config / Other:EUT/ AC Adapter, b mode mid Ch													
Test By:Chin Pang													
Range 1 1000 - 18000MHz													
Marker No.	**Test Frequency**	**Meter Reading**	**Detector**	**T119**	**Loop w/T34**	**T166 BRF 2.4-2.5 GHz**	**(dBuVolts)**	**FCC Part 15C Peak**	**Margin**	**Fcc Part 15C 15.209 Avg 3m**	**Margin**	**Height [cm]**	**Polarity**
1	2435.423	43.18	PK	32.2	-29.6	0.5	46.28	74	-27.72	54	-7.72	201	Horz
2	2715.713	40.88	PK	32.6	-29	0.5	44.98	74	-29.02	54	-9.02	201	Horz
3	7743.942	34.43	PK	35.8	-22.7	0.5	48.03	74	-25.97	54	-5.97	100	Horz
Range:2 1000 - 18000MHz													
Marker No.	**Test Frequency**	**Meter Reading**	**Detector**	**T119**	**Loop w/T34**	**T166 BRF 2.4-2.5 GHz**	**(dBuVolts)**	**FCC Part 15C Peak**	**Margin**	**Fcc Part 15C 15.209 Avg 3m**	**Margin**	**Height [cm]**	**Polarity**
4	2435.423	42.3	PK	32.2	-29.6	0.5	45.4	74	-28.6	54	-8.6	201	Vert
5	2732.7	39.88	PK	32.7	-28.9	0.5	44.18	74	-29.82	54	-9.82	100	Vert
6	7837.372	34.54	PK	35.8	-22.7	0.5	48.14	74	-25.86	54	-5.86	201	Vert
Range:3 10000 - 18000MHz													
Marker No.	**Test Frequency**	**Meter Reading**	**Detector**	**T119**	**Loop w/T34**	**T166 BRF 2.4-2.5 GHz**	**(dBuVolts)**	**FCC Part 15C Peak**	**Margin**	**Fcc Part 15C 15.209 Avg 3m**	**Margin**	**Height [cm]**	**Polarity**
7	17784.108	20.54	PK	41.5	-14.1	0.5	48.44	74	-25.56	54	-5.56	99	Horz
Range:4 10000 - 18000MHz													
Marker No.	**Test Frequency**	**Meter Reading**	**Detector**	**T119**	**Loop w/T34**	**T166 BRF 2.4-2.5 GHz**	**(dBuVolts)**	**FCC Part 15C Peak**	**Margin**	**Fcc Part 15C 15.209 Avg 3m**	**Margin**	**Height [cm]**	**Polarity**
8	17924.038	20.68	PK	41.6	-13.9	0.5	48.88	74	-25.12	54	-5.12	101	Vert

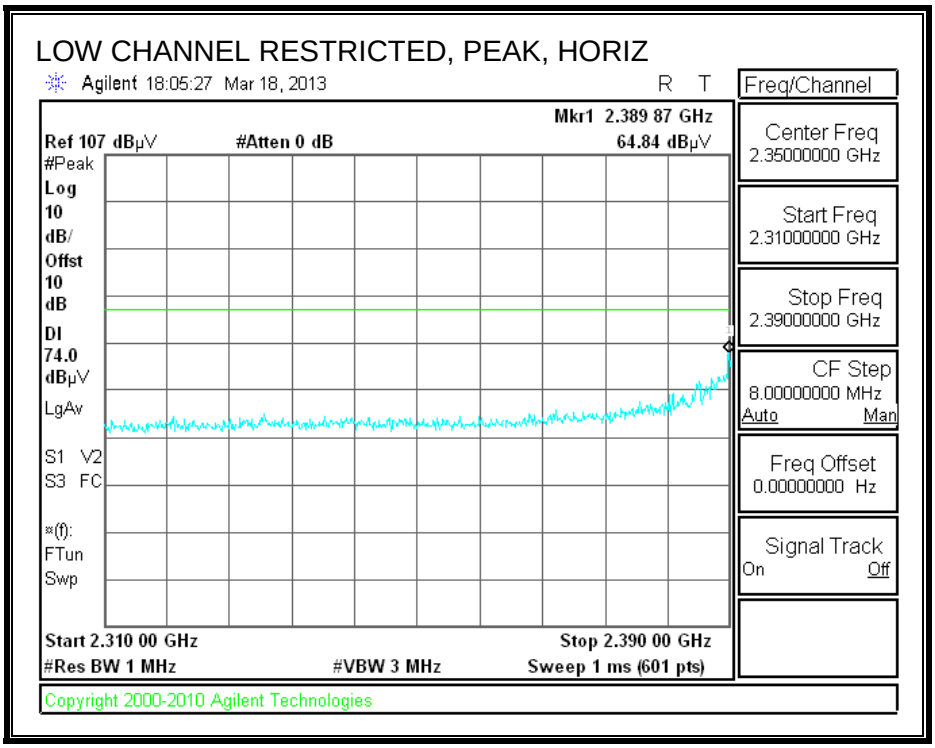
HARMONICS AND SPURIOUS EMISSIONS

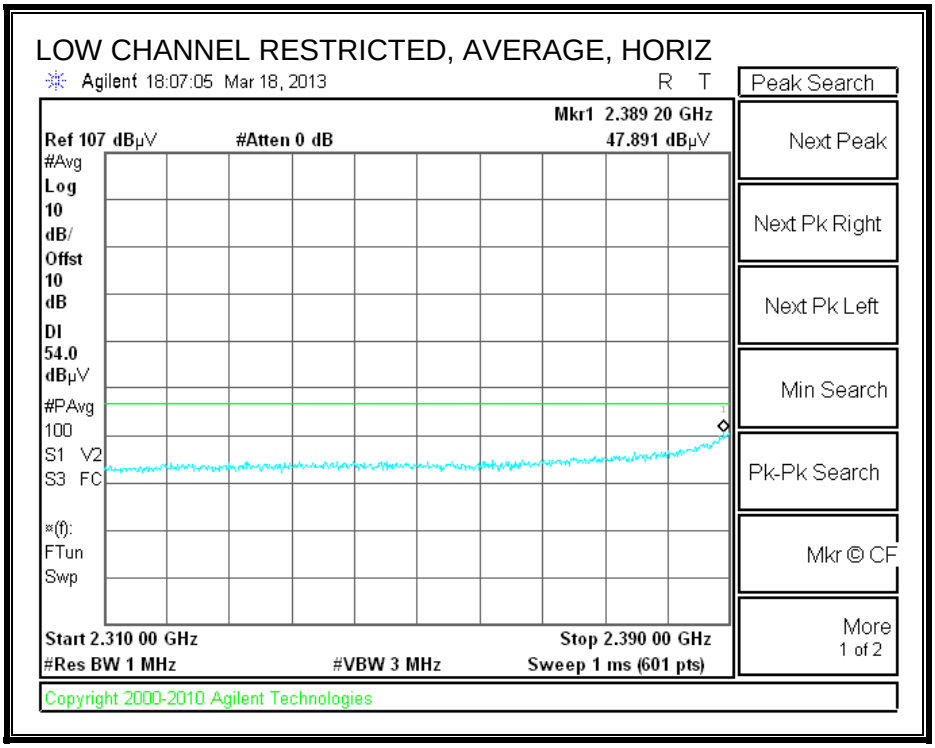
HIGH CH

Project No:13U14917													
Client Name:LG													
Model / Device:US870													
Config / Other:EUT/ AC Adapter, b mode high Ch													
Test By:Chin Pang													
Range 1 1000 - 18000MHz													
Marker No.	Test Frequency	Meter Reading	Detector	T119	Loop w/T34	T166 BRF 2.4-2.5 GHz	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
1	2380.215	42.2	PK	32.1	-29.7	0.5	45.1	74	-28.9	54	-8.9	101	Horz
2	5268.049	37.04	PK	34.3	-24.6	0.5	47.24	74	-26.76	54	-6.76	101	Horz
3	6321.259	36.2	PK	35.4	-23.7	0.5	48.4	74	-25.6	54	-5.6	200	Horz
Range:2 1000 - 18000MHz													
Marker No.	Test Frequency	Meter Reading	Detector	T119	Loop w/T34	T166 BRF 2.4-2.5 GHz	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
4	2465.151	42.67	PK	32.2	-29.6	0.5	45.77	74	-28.23	54	-8.23	201	Vert
5	2711.466	41.01	PK	32.6	-29	0.5	45.11	74	-28.89	54	-8.89	201	Vert
6	7013.49	33.86	PK	35.6	-23.2	0.5	46.76	74	-27.24	54	-7.24	100	Vert
Range:3 10000 - 18000MHz													
Marker No.	Test Frequency	Meter Reading	Detector	T119	Loop w/T34	T166 BRF 2.4-2.5 GHz	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
7	17992.004	20.03	PK	41.6	-13.9	0.5	48.23	74	-25.77	54	-5.77	201	Horz
Range:4 10000 - 18000MHz													
Marker No.	Test Frequency	Meter Reading	Detector	T119	Loop w/T34	T166 BRF 2.4-2.5 GHz	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
8	17830.085	20.38	PK	41.5	-14	0.5	48.38	74	-25.62	54	-5.62	201	Vert

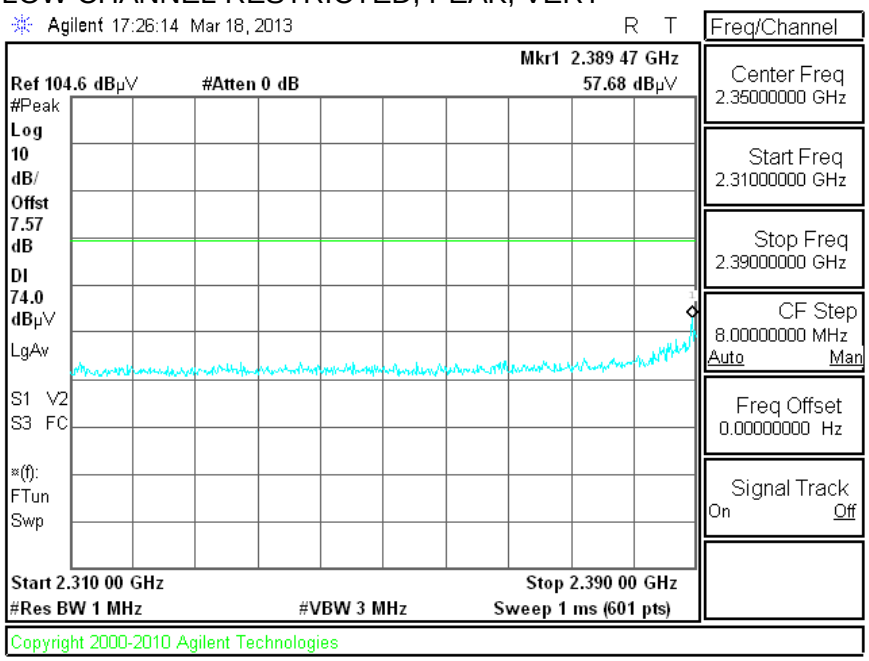
10.2.2. TX ABOVE 1 GHz FOR 802.11g 1TX MODE IN THE 2.4 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

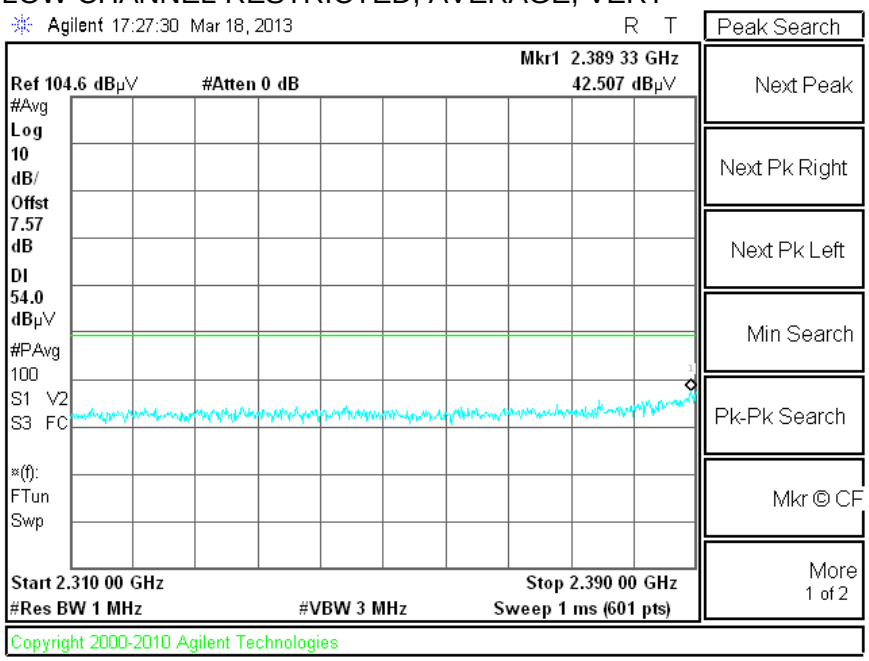




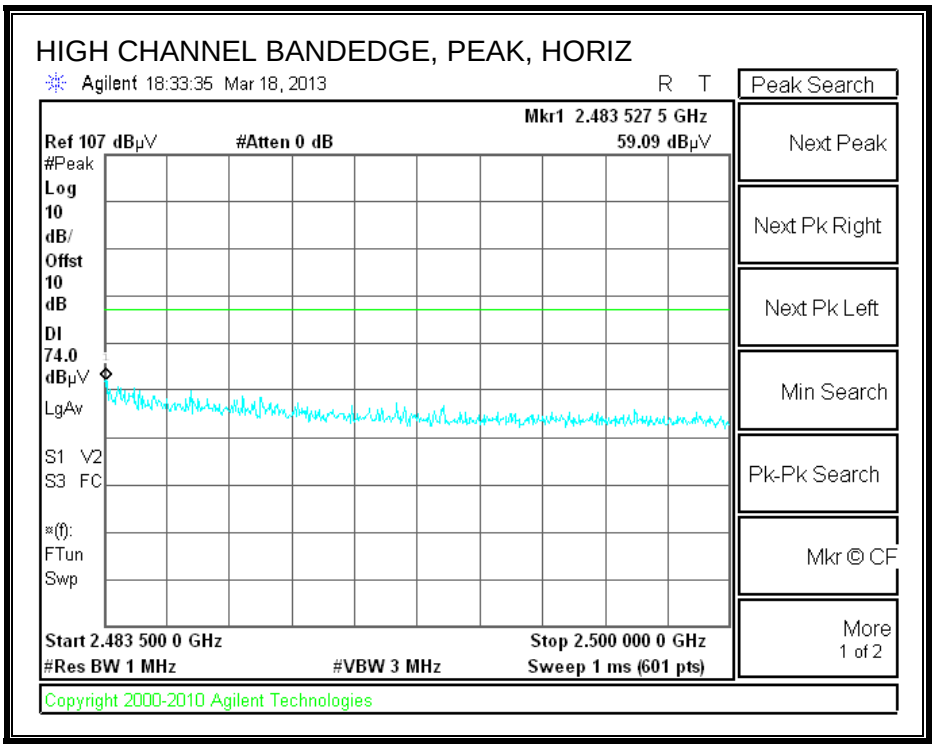
LOW CHANNEL RESTRICTED, PEAK, VERT

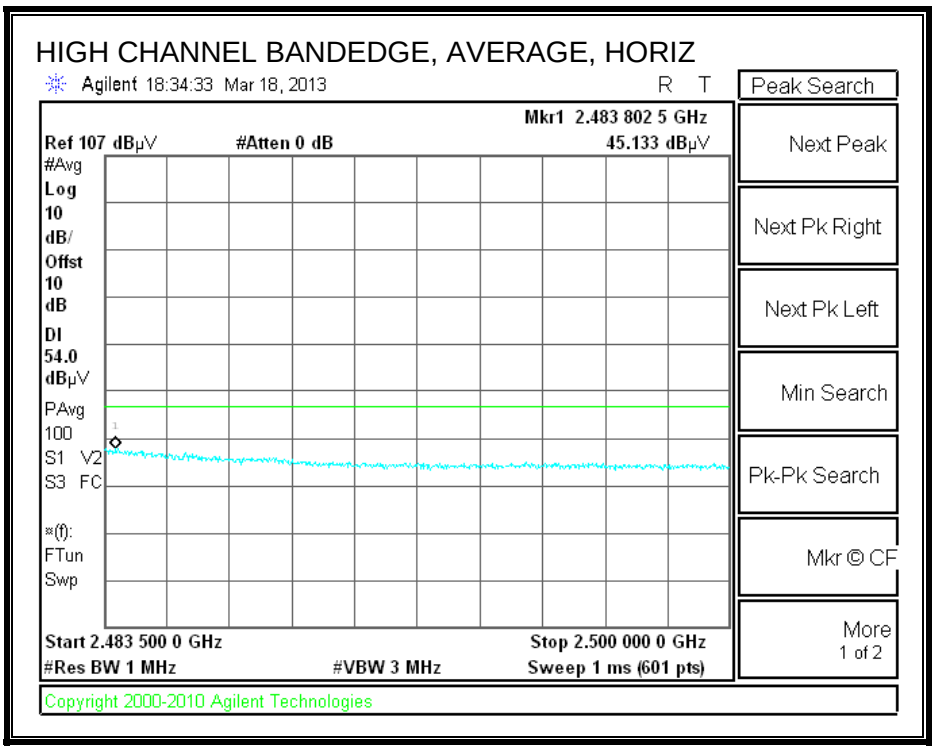


LOW CHANNEL RESTRICTED, AVERAGE, VERT

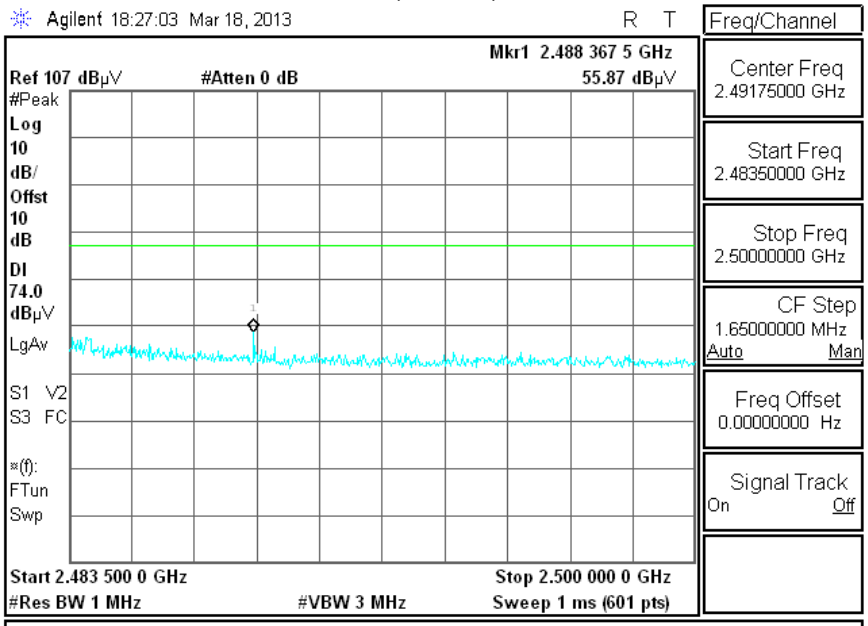


AUTHORIZED BANDEDGE (HIGH CHANNEL)

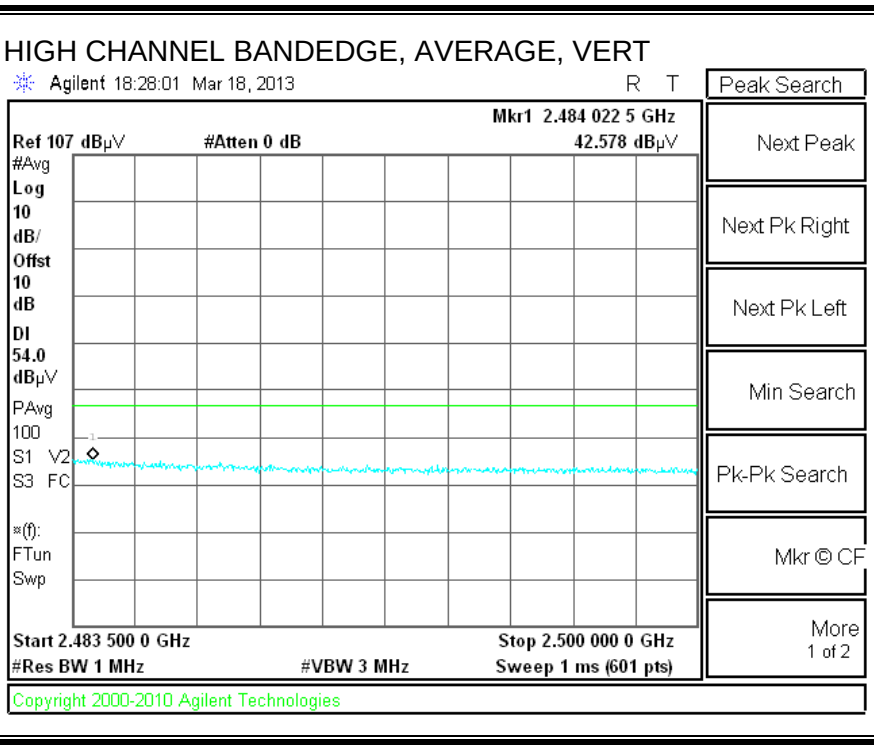




HIGH CHANNEL BANDEDGE, PEAK, VERT



HIGH CHANNEL BANDEDGE, AVERAGE, VERT



HARMONICS AND SPURIOUS EMISSIONS

LOW CH

Project :13u14917
Company Name:LG
Model / Config:LG870(C2PC)
Mode:TX g mode Low CH
Test By:Tony Wang

Horizontal 1000 - 18000MHz														
Marker No.	Test Frequency	Meter Reading	Detector	T345 Antenna Factor	T145 Preamp	Cable Factor	T186 BRF 2.4-2.5GHz	dB(uVolts/meter)	FCC Part 15C 15.209 Avg	Margin	FCC Part 15C Peak	Margin	Height [cm]	Polarity
1	2410.295	46.31	PK	32.4	-35	4.6	0.5	48.81	54	-5.19	74	-25.19	114	Horz
2	2784.108	41.35	PK	32.8	-35.1	5	0.5	44.55	54	-9.45	74	-29.45	200	Horz
3	4415.292	40.42	PK	34.4	-34.9	6.6	0.5	47.02	54	-6.98	74	-26.98	114	Horz
Vertical 1000 - 18000MHz														
Marker No.	Test Frequency	Meter Reading	Detector	T345 Antenna Factor	T145 Preamp	Cable Factor	T186 BRF 2.4-2.5GHz	dB(uVolts/meter)	FCC Part 15C 15.209 Avg	Margin	FCC Part 15C Peak	Margin	Height [cm]	Polarity
4	2410.295	46.69	PK	32.4	-35	4.6	0.5	49.19	54	-4.81	74	-24.81	200	Vert
5	2758.621	43.19	PK	32.8	-35.1	5	0.5	46.39	54	-7.61	74	-27.61	100	Vert
6	3574.213	40.94	PK	33.4	-35	5.8	0.5	45.64	54	-8.36	74	-28.36	100	Vert
7	4500.25	39.09	PK	34.5	-34.9	6.7	0.5	45.89	54	-8.11	74	-28.11	200	Vert

HARMONICS AND SPURIOUS EMISSIONS

MID CH

Project :13u14917
Company Name:LG
Model / Config:LG870(C2PC)
Mode:TX g mode Mid CH
Test By:Tony Wang

Horizontal 1000 - 18000MHz

Marker No.	Test Frequency	Meter Reading	Detector	T345 Antenna Factor	T145 Preamp	Cable Factor	T186 BRF 2.4-2.5GHz	dB(uVolts/meter)	FCC Part 15C 15.209 Avg	Margin	FCC Part 15C Peak	Margin	Height [cm]	Polarity
1	2435.782	46.07	PK	32.4	-35	4.7	0.5	48.67	54	-5.33	74	-25.33	100	Horz
2	5706.647	39.1	PK	35.1	-34.9	7.7	0.5	47.5	54	-6.5	74	-26.5	200	Horz
3	6887.556	37.95	PK	35.9	-35	8.6	0.5	47.95	54	-6.05	74	-26.05	100	Horz
4	9368.316	37.32	PK	37	-35.1	10.1	0.5	49.82	54	-4.18	74	-24.18	100	Horz

Vertical 1000 - 18000MHz

Marker No.	Test Frequency	Meter Reading	Detector	T345 Antenna Factor	T145 Preamp	Cable Factor	T186 BRF 2.4-2.5GHz	dB(uVolts/meter)	FCC Part 15C 15.209 Avg	Margin	FCC Part 15C Peak	Margin	Height [cm]	Polarity
5	2435.782	46.52	PK	32.4	-35	4.7	0.5	49.12	54	-4.88	74	-24.88	200	Vert
6	4211.394	39.23	PK	34.1	-34.8	6.4	0.5	45.43	54	-8.57	74	-28.57	200	Vert
7	4942.029	39.2	PK	34.6	-34.9	7.2	0.5	46.6	54	-7.4	74	-27.4	200	Vert
8	7550.225	38.14	PK	36	-35	9	0.5	48.64	54	-5.36	74	-25.36	200	Vert

HARMONICS AND SPURIOUS EMISSIONS

HIGH CH

Project :13u14917
Company Name:LG
Model / Config:LG870(C2PC)
Mode:TX g mode High CH
Test By:Tony Wang

Horizontal 1000 - 18000MHz

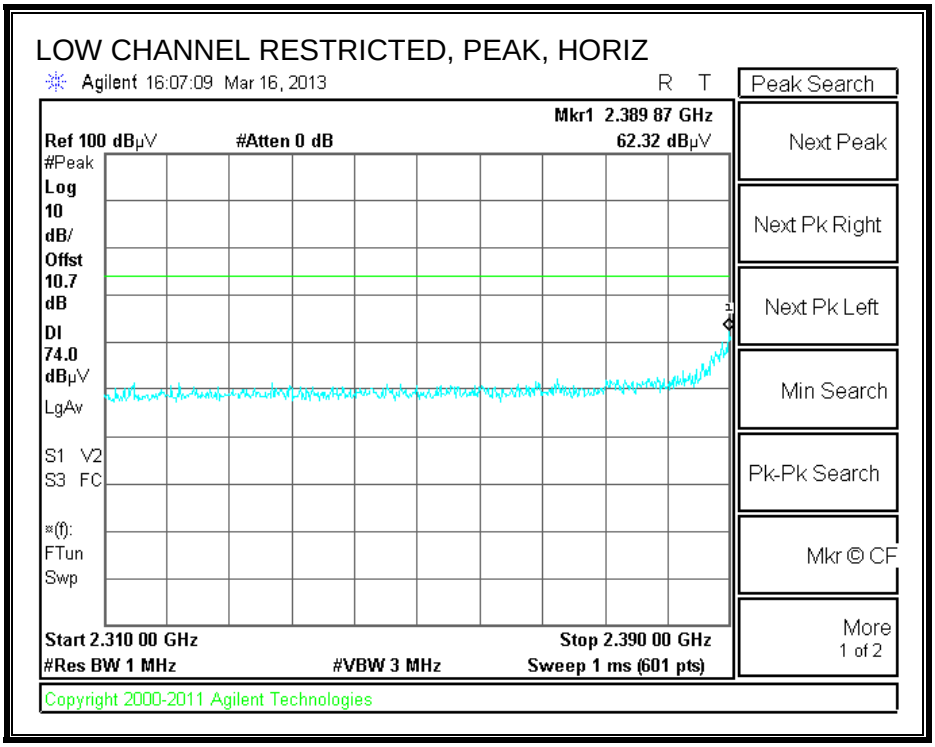
Marker No.	Test Frequency	Meter Reading	Detector	T345 Antenna Factor	T145 Preamp	Cable Factor	T186 BRF 2.4-2.5GHz	dB(uVolts/meter)	FCC Part 15C 15.209 Avg	Margin	FCC Part 15C Peak	Margin	Height [cm]	Polarity
1	2452.774	43.94	PK	32.4	-35	4.7	0.5	46.54	54	-7.46	74	-27.46	100	Horz
2	2767.116	41.93	PK	32.8	-35.1	5	0.5	45.13	54	-8.87	74	-28.87	200	Horz
3	5188.406	39.06	PK	34.8	-34.9	7.4	0.5	46.86	54	-7.14	74	-27.14	200	Horz
4	7609.695	37.2	PK	36.1	-35.1	9.1	0.5	47.8	54	-6.2	74	-26.2	100	Horz
5	3149.425	39.01	PK	33.2	-35.2	5.4	0.5	42.91	54	-11.09	74	-31.09	100	Horz

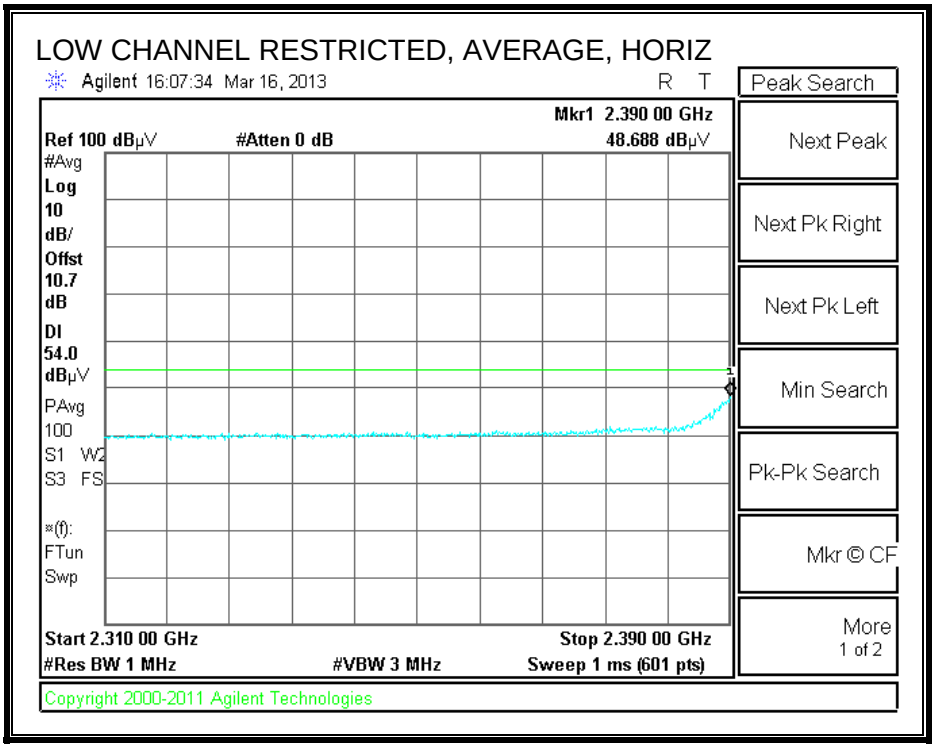
Vertical 1000 - 18000MHz

Marker No.	Test Frequency	Meter Reading	Detector	T345 Antenna Factor	T145 Preamp	Cable Factor	T186 BRF 2.4-2.5GHz	dB(uVolts/meter)	FCC Part 15C 15.209 Avg	Margin	FCC Part 15C Peak	Margin	Height [cm]	Polarity
6	2452.774	43.13	PK	32.4	-35	4.7	0.5	45.73	54	-8.27	74	-28.27	100	Vert
7	3106.947	38.63	PK	33.2	-35.2	5.4	0.5	42.53	54	-11.47	74	-31.47	200	Vert
8	3565.717	39.79	PK	33.4	-35	5.8	0.5	44.49	54	-9.51	74	-29.51	200	Vert
9	9189.905	36.01	PK	36.9	-35.2	10	0.5	48.21	54	-5.79	74	-25.79	100	Vert

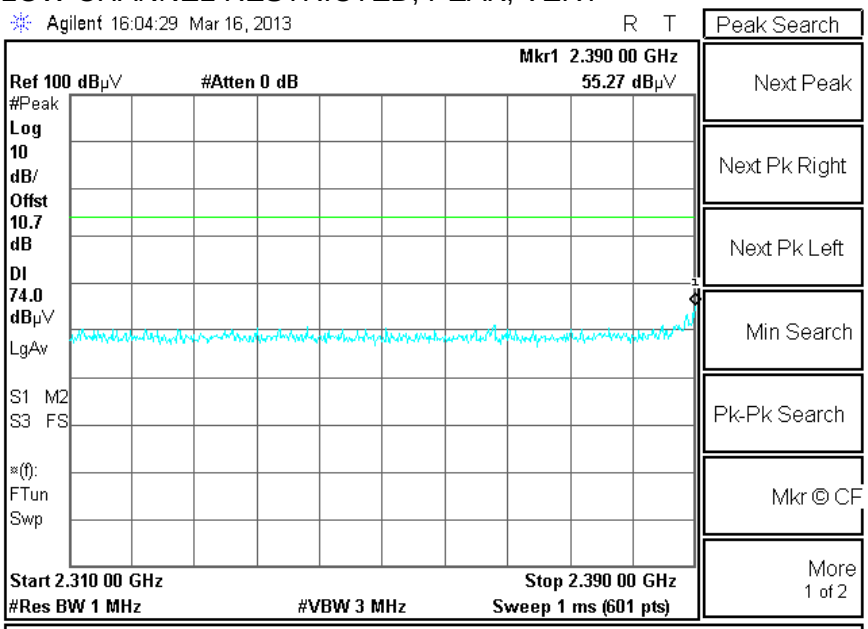
10.2.3. TX ABOVE 1 GHz FOR 802.11n HT20 1TX MODE IN THE 2.4 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

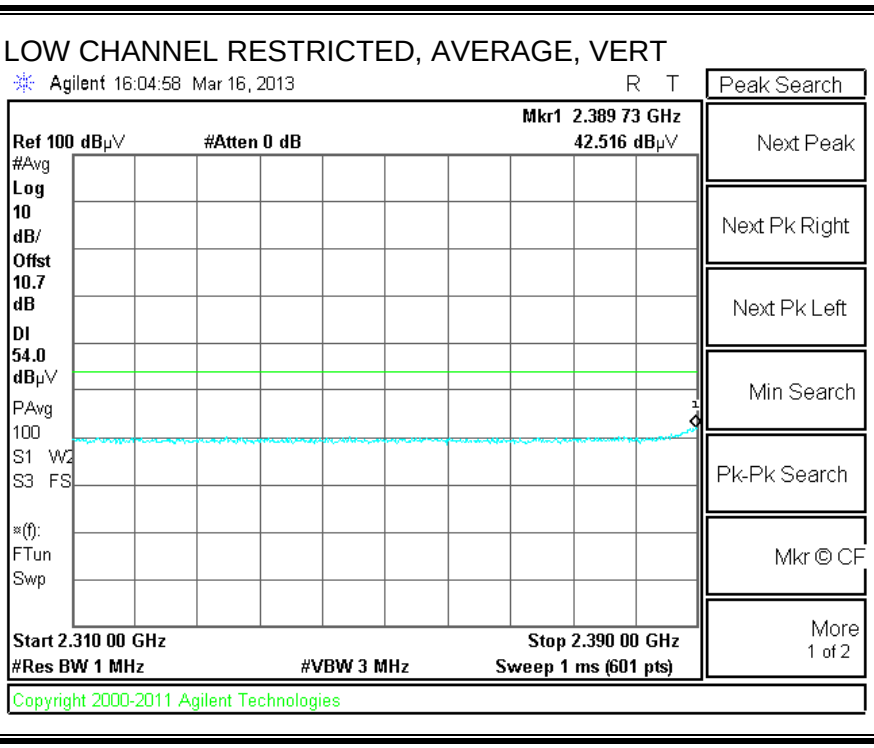




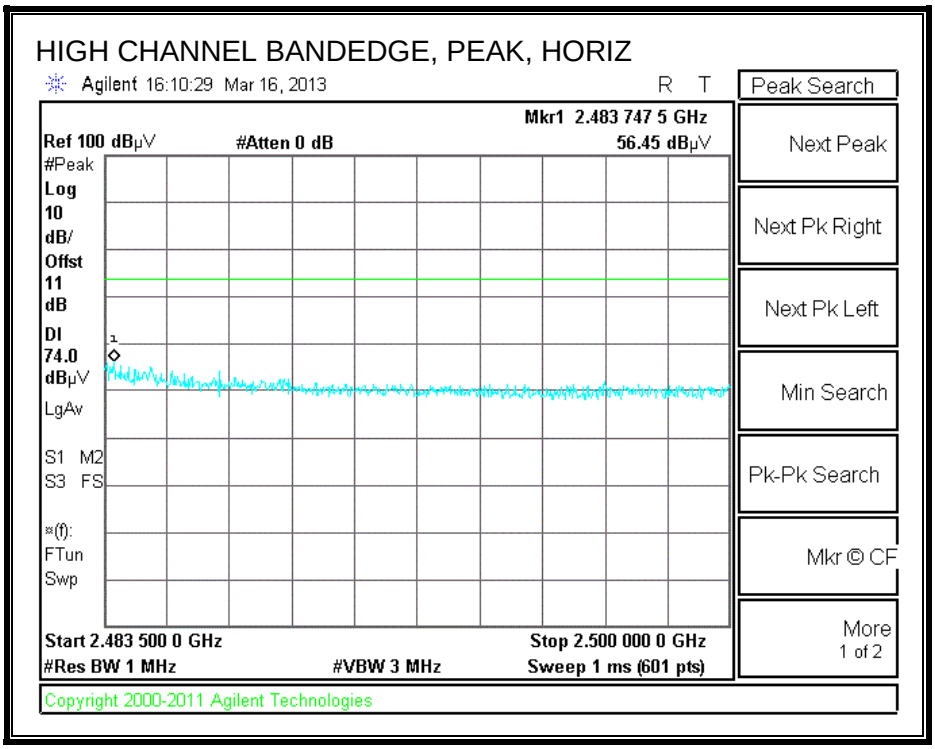
LOW CHANNEL RESTRICTED, PEAK, VERT

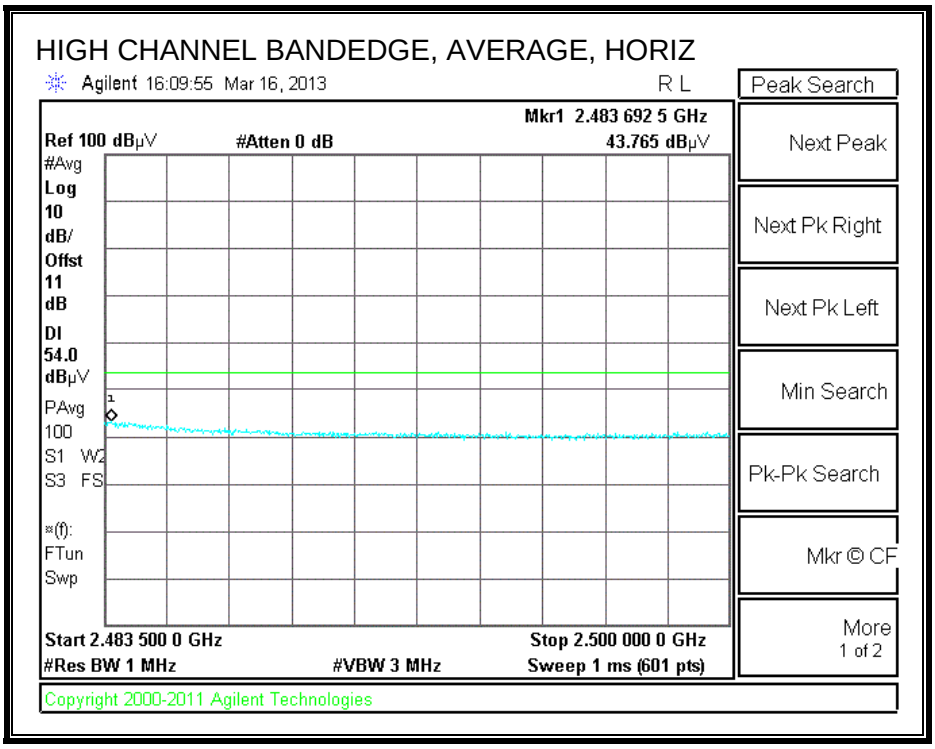


LOW CHANNEL RESTRICTED, AVERAGE, VERT

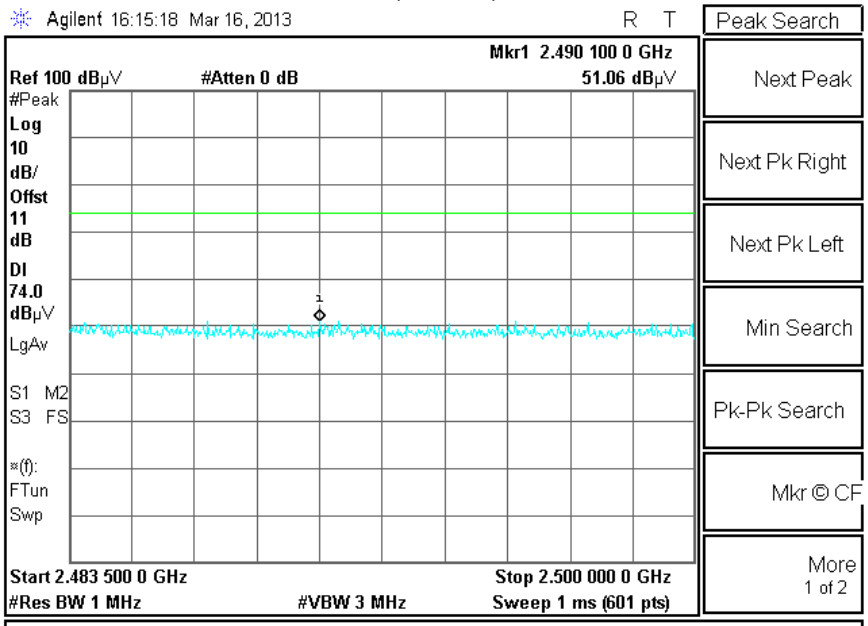


AUTHORIZED BANDEDGE (HIGH CHANNEL)

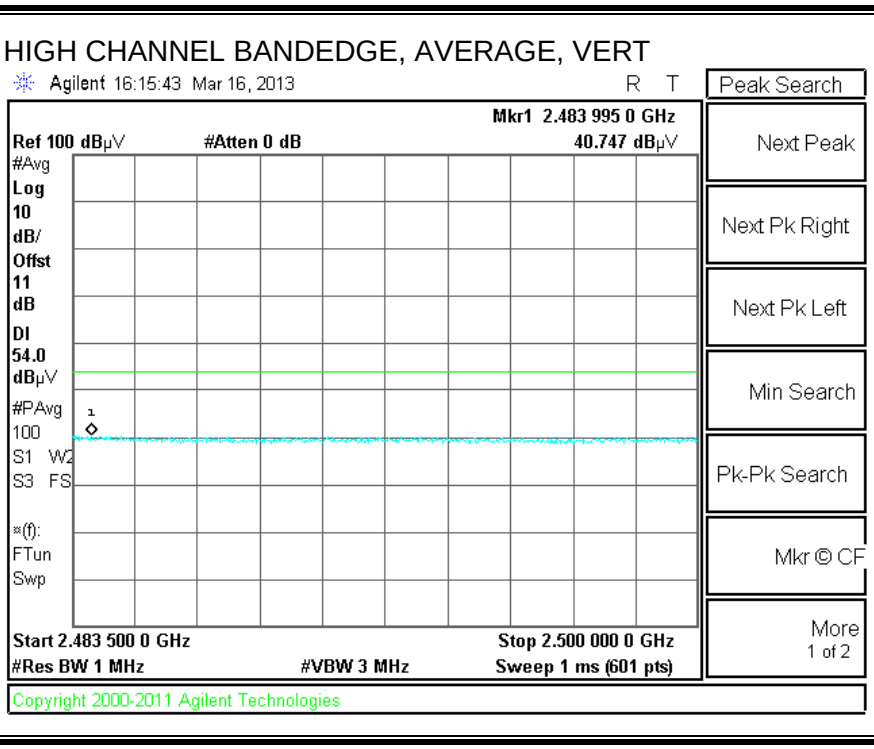




HIGH CHANNEL BANDEDGE, PEAK, VERT



HIGH CHANNEL BANDEDGE, AVERAGE, VERT



HARMONICS AND SPURIOUS EMISSIONS

LOW CH

Project :13u14917
Company Name:LG
Model / Config:LG870(C2PC)
Mode:Tx 11n mode Low ch
Test By:Tony Wang

Horizontal 1000 - 18000MHz

Marker No.	Test Frequency	Meter Reading	Detector	T345 Antenna Factor	T145 Preamp	Cable Factor	T186 BRF 2.4-2.5GHz	dB(uVolts/meter)	FCC Part 15C 15.209 Avg	Margin	FCC Part 15C Peak	Margin	Height [cm]	Polarity
1	2410.295	46.09	PK	32.4	-35	4.6	0.5	48.59	54	-5.41	74	-25.41	100	Horz
2	6564.718	38.52	PK	35.9	-35	8.4	0.5	48.32	54	-5.68	74	-25.68	200	Horz
3	7618.191	38.23	PK	36.1	-35.1	9.1	0.5	48.83	54	-5.17	74	-25.17	100	Horz
4	8331.834	38.23	PK	36.1	-35.2	9.5	0.5	49.13	54	-4.87	74	-24.87	100	Horz

Vertical 1000 - 18000MHz

Marker No.	Test Frequency	Meter Reading	Detector	T345 Antenna Factor	T145 Preamp	Cable Factor	T186 BRF 2.4-2.5GHz	dB(uVolts/meter)	FCC Part 15C 15.209 Avg	Margin	FCC Part 15C Peak	Margin	Height [cm]	Polarity
5	2410.295	45.45	PK	32.4	-35	4.6	0.5	47.95	54	-6.05	74	-26.05	200	Vert
6	5987.006	37.41	PK	35.9	-34.9	7.9	0.5	46.81	54	-7.19	74	-27.19	200	Vert
7	6887.556	37.84	PK	35.9	-35	8.6	0.5	47.84	54	-6.16	74	-26.16	100	Vert
8	9104.948	36.34	PK	36.8	-35.2	10	0.5	48.44	54	-5.56	74	-25.56	100	Vert

HARMONICS AND SPURIOUS EMISSIONS

MID CH

Project :13u14917
Company Name:LG
Model / Config:LG870(C2PC)
Mode:Tx 11n mode Mid ch
Test By:Tony Wang

Horizontal 1000 - 18000MHz

Marker No.	Test Frequency	Meter Reading	Detector	T345 Antenna Factor	T145 Preamp	Cable Factor	T186 BRF 2.4-2.5GHz	dB(uVolts/meter)	FCC Part 15C 15.209 Avg	Margin	FCC Part 15C Peak	Margin	Height [cm]	Polarity
1	2435.782	45.56	PK	32.4	-35	4.7	0.5	48.16	54	-5.84	74	-25.84	100	Horz
2	3659.17	40.44	PK	33.6	-35	5.9	0.5	45.44	54	-8.56	74	-28.56	200	Horz
3	6190.905	37.77	PK	36	-34.9	8.1	0.5	47.47	54	-6.53	74	-26.53	200	Horz
4	7541.729	38.33	PK	36	-35	9	0.5	48.83	54	-5.17	74	-25.17	200	Horz

Vertical 1000 - 18000MHz

Marker No.	Test Frequency	Meter Reading	Detector	T345 Antenna Factor	T145 Preamp	Cable Factor	T186 BRF 2.4-2.5GHz	dB(uVolts/meter)	FCC Part 15C 15.209 Avg	Margin	FCC Part 15C Peak	Margin	Height [cm]	Polarity
5	2435.782	45.8	PK	32.4	-35	4.7	0.5	48.4	54	-5.6	74	-25.6	100	Vert
6	5834.083	38.32	PK	35.4	-34.9	7.8	0.5	47.12	54	-6.88	74	-26.88	200	Vert
7	6921.539	37.53	PK	35.9	-35	8.6	0.5	47.53	54	-6.47	74	-26.47	100	Vert
8	9521.239	36.69	PK	37.2	-35.1	10.2	0.5	49.49	54	-4.51	74	-24.51	100	Vert

HARMONICS AND SPURIOUS EMISSIONS

HIGH CH

Project :13u14917
Company Name:LG
Model / Config:LG870(C2PC)
Mode:Tx 11n mode High ch
Test By:Tony Wang

Horizontal 1000 - 18000MHz

Marker No.	Test Frequency	Meter Reading	Detector	T345 Antenna Factor	T145 Preamp	Cable Factor	T186 BRF 2.4-2.5GHz	dB(uVolts/meter)	FCC Part 15C 15.209 Avg	Margin	FCC Part 15C Peak	Margin	Height [cm]	Polarity
1	2461.269	44.32	PK	32.4	-35	4.7	0.5	46.92	54	-7.08	74	-27.08	100	Horz
2	3344.828	40.71	PK	33.3	-35.1	5.6	0.5	45.01	54	-8.99	74	-28.99	200	Horz
3	5902.049	38.39	PK	35.6	-34.9	7.9	0.5	47.49	54	-6.51	74	-26.51	200	Horz
4	7592.704	38.47	PK	36.1	-35.1	9	0.5	48.97	54	-5.03	74	-25.03	200	Horz

Vertical 1000 - 18000MHz

Marker No.	Test Frequency	Meter Reading	Detector	T345 Antenna Factor	T145 Preamp	Cable Factor	T186 BRF 2.4-2.5GHz	dB(uVolts/meter)	FCC Part 15C 15.209 Avg	Margin	FCC Part 15C Peak	Margin	Height [cm]	Polarity
5	2461.269	43.4	PK	32.4	-35	4.7	0.5	46	54	-8	74	-28	200	Vert
6	5290.355	38.64	PK	34.9	-34.9	7.4	0.5	46.54	54	-7.46	74	-27.46	200	Vert
7	6862.069	38.56	PK	35.8	-35	8.6	0.5	48.46	54	-5.54	74	-25.54	100	Vert
8	9070.965	37.2	PK	36.8	-35.2	9.9	0.5	49.2	54	-4.8	74	-24.8	100	Vert

10.2.4. TX ABOVE 1 GHz FOR 802.11a MODE IN THE 5.8 GHz BAND

HARMONICS AND SPURIOUS EMISSIONS

High Frequency Measurement
Compliance Certification Services, Fremont 5m Chamber-B

Company: LG
Project #: 13U14917
Date: 3/20/2013
Test Engineer: Tony wang
Configuration: LG870 with Headset & AC Adaoter
Mode: Tx 11a HT20 5.8Ghz

Test Equipment:

Horn 1-18GHz	Pre-amplifer 1-26GHz	Pre-amplifer 26-40GHz	Horn > 18GHz	Limit
T136; M/N: 3117 @3m	T145 Agilent 3008A005E	T88 Miteq 26-40GHz	T39; ARA 18-26GHz; S/N:1013	FCC 15.205

Hi Frequency Cables

3' cable 22807700	12' cable 22807600	20' cable 22807500	HPF	Reject Filter
3' cable 22807700	12' cable 22807600	20' cable 22807500	HPF_7.6GHz	

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. 5745MHz															
11.490	3.0	36.2	23.3	38.1	11.3	-33.7	0.0	0.7	52.5	39.6	74	54	-21.5	-14.4	H
11.490	3.0	35.3	23.4	38.1	11.3	-33.7	0.0	0.7	51.6	39.7	74	54	-22.4	-14.3	V
Mid ch. 5785MHz															
11.570	3.0	36.0	23.4	38.1	11.3	-33.7	0.0	0.7	52.5	39.9	74	54	-21.5	-14.1	H
11.570	3.0	35.1	24.1	38.1	11.3	-33.7	0.0	0.7	51.6	40.6	74	54	-22.4	-13.4	V
High ch. 5825MHz															
11.650	3.0	35.9	23.7	38.2	11.4	-33.6	0.0	0.7	52.6	40.4	74	54	-21.4	-13.6	H
11.650	3.0	34.9	24.4	38.2	11.4	-33.6	0.0	0.7	51.6	41.1	74	54	-22.4	-12.9	V

10.2.5. TX ABOVE 1 GHz FOR 802.11n HT20 MODE IN THE 5.8 GHz BAND

HARMONICS AND SPURIOUS EMISSIONS

High Frequency Measurement
Compliance Certification Services, Fremont 5m Chamber-B

Company: LG
Project #: 13U14917
Date: 3/20/2013
Test Engineer: Tony wang
Configuration: LG870 with Headset & AC Adaoter
Mode: Tx 11n HT20 5.8Ghz

Test Equipment:

Horn 1-18GHz	Pre-amplifer 1-26GHz	Pre-amplifer 26-40GHz	Horn > 18GHz	Limit
T136; M/N: 3117 @3m	T145 Agilent 3008A0056	T88 Mitoq 26-40GHz	T39; ARA 18-26GHz; S/N:1013	FCC 15.205

Hi Frequency Cables

3' cable 22807700	12' cable 22807600	20' cable 22807500	HPF	Reject Filter
3' cable 22807700	12' cable 22807600	20' cable 22807500	HPF_7.6GHz	

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. 5745MHz															
11.490	3.0	35.6	23.5	38.1	11.3	-33.7	0.0	0.7	51.9	39.8	74	54	-22.1	-14.2	H
11.490	3.0	35.5	23.6	38.1	11.3	-33.7	0.0	0.7	51.8	39.9	74	54	-22.2	-14.1	V
Mid ch. 5785MHz															
11.570	3.0	35.3	23.6	38.1	11.3	-33.7	0.0	0.7	51.8	40.1	74	54	-22.2	-13.9	H
11.570	3.0	35.7	23.6	38.1	11.3	-33.7	0.0	0.7	52.2	40.1	74	54	-21.8	-13.9	V
High ch. 5825MHz															
11.650	3.0	35.9	23.7	38.2	11.4	-33.6	0.0	0.7	52.6	40.4	74	54	-21.4	-13.6	H
11.650	3.0	35.7	23.5	38.2	11.4	-33.6	0.0	0.7	52.4	40.2	74	54	-21.6	-13.8	V

10.2.6. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.8 GHz BAND

HARMONICS AND SPURIOUS EMISSIONS

High Frequency Measurement
Compliance Certification Services, Fremont 5m Chamber-B

Company: LG
Project #: 13U14917
Date: 3/20/2013
Test Engineer: Tony wang
Configuration: LG870 with Headset & AC Adaoter
Mode: Tx 11n HT40 5.8Ghz

Test Equipment:

Horn 1-18GHz	Pre-amplifer 1-26GHz	Pre-amplifer 26-40GHz	Horn > 18GHz	Limit
T136; M/N: 3117 @3m	T145 Agilent 3008A0056	T88 Miteq 26-40GHz	T39; ARA 18-26GHz; S/N:1013	FCC 15.205

Hi Frequency Cables

3' cable 22807700	12' cable 22807600	20' cable 22807500	HPF	Reject Filter
3' cable 22807700	12' cable 22807600	20' cable 22807500	HPF_7.6GHz	

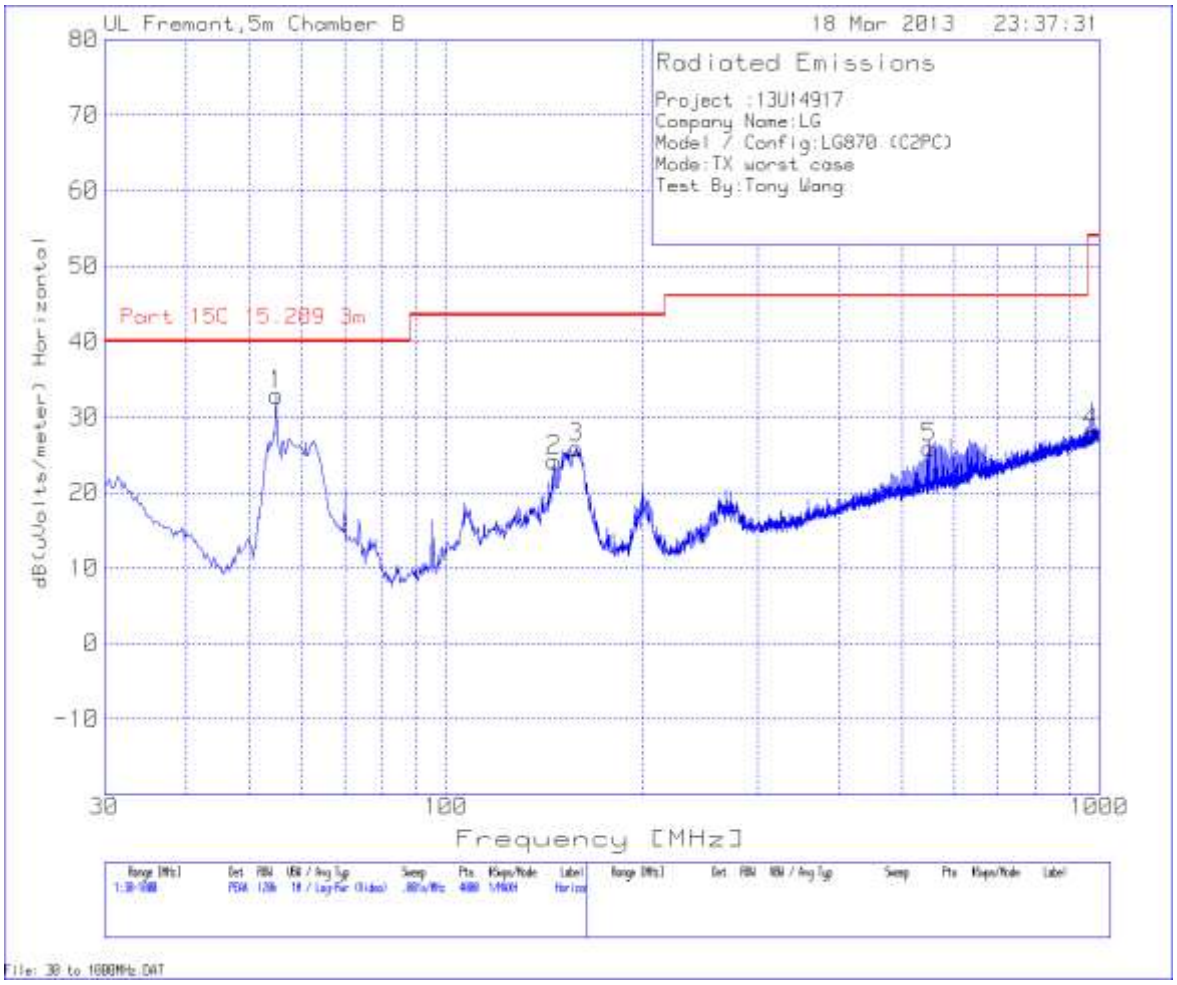
Peak Measurements
RBW=VBW=1MHz
Average Measurements
RBW=1MHz ; VBW=10Hz

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. 5755MHz															
11.510	3.0	34.4	24.5	38.1	11.3	-33.7	0.0	0.7	50.8	40.8	74	54	-23.2	-13.2	H
11.510	3.0	35.1	24.8	38.1	11.3	-33.7	0.0	0.7	51.4	41.1	74	54	-22.6	-12.9	V
High ch. 5795MHz															
11.590	3.0	35.5	24.1	38.2	11.3	-33.7	0.0	0.7	52.0	40.6	74	54	-22.0	-13.4	H
11.590	3.0	34.5	24.8	38.2	11.3	-33.7	0.0	0.7	51.0	41.3	74	54	-23.0	-12.7	V

10.3. 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

Project :13U14917
Company Name:LG
Model / Config:LG870 (C2PC)
Mode:TX worst case
Test By:Tony Wang

Horizontal 30 - 1000MHz

Marker No.	Test Frequency	Meter Reading	Detector	T243 Hybrid	T10 preamp/ Cable loss loop	dB(uVolts/meter)	Part 15C 15.209 3m	Margin	Height [cm]	Polarity
1	54.9588	54.9	PK	6.8	-28.8	32.9	40	-7.1	400	Horz
2	146.3128	39.54	PK	12.5	-27.8	24.24	43.5	-19.26	100	Horz
3	158.4287	41.41	PK	12.1	-27.6	25.91	43.5	-17.59	200	Horz
4	973.8296	28.39	PK	22.9	-23.4	27.89	54	-26.11	300	Horz
5	550.4996	33.9	PK	18.3	-26.3	25.9	46	-20.1	200	Horz

Vertical 30 - 1000MHz

Marker No.	Test Frequency	Meter Reading	Detector	T243 Hybrid	T10 preamp/ Cable loss loop	dB(uVolts/meter)	Part 15C 15.209 3m	Margin	Height [cm]	Polarity
6	56.655	49.21	PK	6.9	-28.8	27.31	40	-12.69	200	Vert
7	62.713	48.11	PK	7.4	-28.8	26.71	40	-13.29	300	Vert
8	59.8051	48.17	PK	7.1	-28.8	26.47	40	-13.53	300	Vert

11. 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

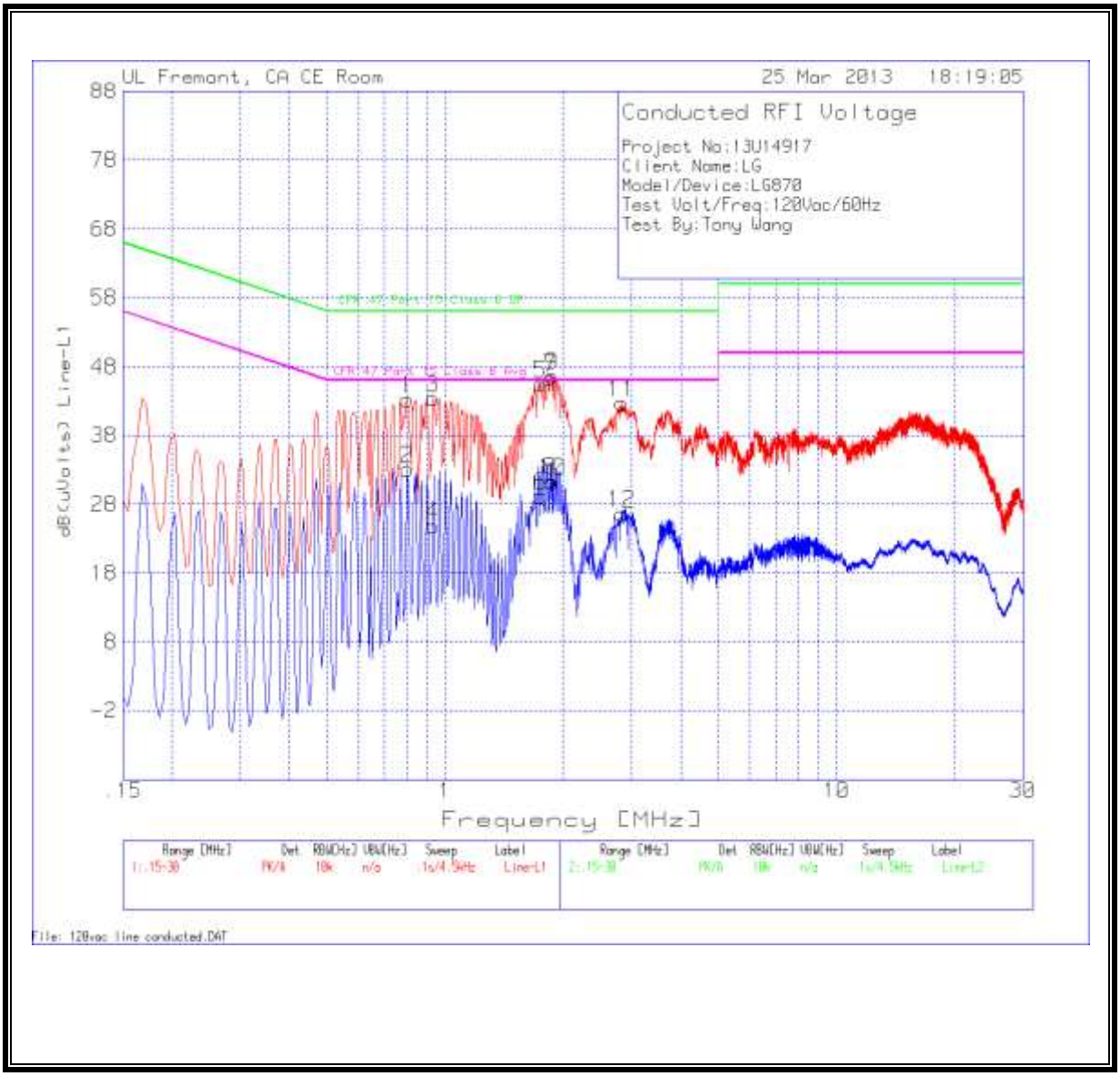
ANSI C63.4

RESULTS

6 WORST EMISSIONS

Project No:13U14917									
Client Name:LG									
Model/Device:LG870									
Test Volt/Freq:120Vac/60Hz									
Test By:Tony Wang									
Line-L1 .15 - 30MHz									
Test Frequency	**Meter Reading**	**Detector**	**T24 IL L1.TXT (dB)**	**LC Cables 1&3.TXT (dB)**	**dB(uVolts)**	**CFR 47 Part 15 Class B QP**	**Margin**	**CFR 47 Part 15 Class B Avg**	**Margin**
0.8025	43.2	PK	0.1	0	43.3	56	-12.7	-	-
0.8025	32.95	Av	0.1	0	33.05	-	-	46	-12.95
1.8555	46.17	PK	0.1	0.1	46.37	56	-9.63	-	-
1.8555	31.2	Av	0.1	0.1	31.4	-	-	46	-14.6
1.8735	46.47	PK	0.1	0.1	46.67	56	-9.33	-	-
1.8735	31.08	Av	0.1	0.1	31.28	-	-	46	-14.72
Line-L2 .15 - 30MHz									
Test Frequency	**Meter Reading**	**Detector**	**T24 IL L1.TXT (dB)**	**LC Cables 1&3.TXT (dB)**	**dB(uVolts)**	**CFR 47 Part 15 Class B QP**	**Margin**	**CFR 47 Part 15 Class B Avg**	**Margin**
0.4785	41.23	PK	0.1	0	41.33	56.4	-15.07	-	-
0.4785	35.75	Av	0.1	0	35.85	-	-	46.4	-10.55
1.7835	43.76	PK	0.1	0.1	43.96	56	-12.04	-	-
1.7835	23.78	Av	0.1	0.1	23.98	-	-	46	-22.02
0.807	41.4	PK	0.1	0	41.5	56	-14.5	-	-
0.807	31.24	Av	0.1	0	31.34	-	-	46	-14.66

LINE 1 RESULTS



LINE 2 RESULTS