



FCC 47 CFR PART 15 SUBPART C

CERTIFICATION TEST REPORT

FOR

802.11a/g/n/ac WLAN + Bluetooth PCI-E Custom Combination Card

MODEL NUMBER: BCM943602CS

FCC ID: QDS-BRCM1080

REPORT NUMBER: 13U16561-65, Revision C

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Prepared for
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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
--	05/28/14	Initial Issue	F. Ibrahim
A	06/03/14	Add a Second Set of Antenna in Section 5.3	F. Ibrahim
B	06/05/14	Revised section 5.3	F. Ibrahim
C	06/16/14	Removed Regression Data	F. Ibrahim

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: BROADCOM CORPORATION
190 MATHILDA PLACE
SUNNYVALE, CA 94086, U.S.A.

EUT DESCRIPTION: 802.11a/g/n/ac WLAN + Bluetooth PCI-E Custom Combination Card

MODEL: BCM943602CS

SERIAL NUMBER: 318 (Radiated Sample) and 339 (Conducted Sample)

DATE TESTED: Feb 24 – May 7, 2014

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

UL Verification Services Inc. 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 Verification Services Inc. 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 Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. 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 Verification Services Inc. By:



FRANK IBRAHIM
PROGRAM MANAGER
UL Verification Services Inc.

Tested By:



THANH PHAM
EMC LAB ENGINEER
UL Verification Services Inc.

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC CFR 47 Part 2, FCC CFR 47 Part 15, ANSI C63.10-2009, 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.

47173 Benicia Street	47266 Benicia Street
☒ Chamber A	☐ Chamber D
☐ Chamber B	☐ Chamber E
☐ Chamber C	☐ Chamber F

UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at <http://ts.nist.gov/standards/scopes/2000650.htm>.

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:

$$\begin{aligned}\text{Field Strength (dBuV/m)} &= \text{Measured Voltage (dBuV)} + \text{Antenna Factor (dB/m)} + \\ &\text{Cable Loss (dB)} - \text{Preamp Gain (dB)} \\ 36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} &= 28.9 \text{ dBuV/m}\end{aligned}$$

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 an 802.11a/g/n/ac WLAN + Bluetooth PCI-E Custom Combination Card.

The radio module is manufactured by Broadcom.

5.2. MAXIMUM OUTPUT POWER

2400 - 2483.5 MHz Authorized Frequency Band						
Frequency Range (MHz)	Mode	Power, Chain 0 (dBm)	Power, Chain 1 (dBm)	Power, Chain 2 (dBm)	Total power (dBm)	Total power (mW)
2412 - 2462	802.11b CDD 3TX	21.12	21.37	21.15	25.99	396.82
2412 - 2462	802.11g Legacy	20.78			20.78	119.67
2412 - 2462	802.11n HT20 CDD 3TX	21.48	21.11	21.40	26.10	407.77
2412 - 2462	802.11n HT20 BF 3TX	21.00	21.20	21.40	25.97	395.76

List of test reduction (Non Beam-Forming modes)

Antenna Port Testing		
Band	Mode	Covered by
2.4 GHz band	802.11b Legacy 1TX	802.11b HT20 CDD 3TX
2.4 GHz band	802.11b CDD 2TX	802.11b HT20 CDD 3TX
2.4 GHz band	802.11g CDD 2TX	802.11n HT20 CDD 3TX
2.4 GHz band	802.11g CDD 3TX	802.11n HT20 CDD 3TX
2.4 GHz band	802.11n HT20 1TX	802.11g Legacy 1TX
2.4 GHz band	802.11n HT20 CDD/SDM 2TX	802.11n HT20 CDD 3TX

Radiated Testing		
Band	Mode	Covered by
2.4 GHz band	802.11b Legacy 1TX	802.11b HT20 CDD 3TX
2.4 GHz band	802.11b CDD 2TX	802.11b HT20 CDD 3TX
2.4 GHz band	802.11g CDD 2TX	802.11n HT20 CDD 3TX
2.4 GHz band	802.11g CDD 3TX	802.11n HT20 CDD 3TX
2.4 GHz band	802.11n HT20 1TX	802.11g Legacy 1TX
2.4 GHz band	802.11n HT20 CDD/SDM 2TX	802.11n HT20 CDD 3TX
2.4 GHz band	802.11g Legacy 1TX (Harmonics)	802.11n HT20 CDD 3TX (Harmonics)

List of test reduction (Beam-Forming modes)

Antenna Port Testing		
Band	Mode	Covered by
2.4 GHz band	802.11n HT20 BF 2Tx	802.11n HT20 CDD 3Tx
2.4 GHz band	802.11n HT20 BF 2Tx	802.11n HT20 CDD 3Tx

Radiated Testing		
Band	Mode	Covered by
2.4 GHz band	802.11g BF 2Tx	802.11n HT20 BF 3Tx
2.4 GHz band	802.11g BF 3Tx	802.11n HT20 BF 3Tx
2.4 GHz band	802.11n HT20 BF 1Tx	802.11n HT20 BF 3Tx
2.4 GHz band	802.11n HT20 BF 2Tx	802.11n HT20 BF 3Tx

5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The EUT utilizes the following antennas:

First set (used for testing) except for BT/BLE where we used 4.82 dBi worst case antenna.

Antenna Type	Model	Peak Gain @ 2412, 2422, 2432MHz	Peak Gain (5150 - 5250 MHz) @ 5200MHz	Peak Gain (5250 - 5350 MHz) @ 5320MHz	Peak Gain (5479 - 5725 MHz) @5500, 5700 MHz	Peak Gain (5725 - 5850MHz) @5785, 5805 MHz
802.11 abgn WLAN Antenna	613 -1143 WiFi 1	0.12	7.04	7.09	5.03	2.66
802.11 abgn WLAN Antenna	613 -1143 WiFi 2	5.3	6.7	7.06	6.66	5.93
802.11 abgn WLAN / BT Antenna	613 -1143 WiFi 3 & BlueTooth	4.69	3.79	3.58	3.94	6.04

Second set:

Antenna Type	Model	Peak gain @ 2412, 2422, 2432MHz,	Peak gain (5150- 5250MHz) @5200MHz	Peak gain (5250- 5350MHz) @5320MHz	Peak gain (5470- 5725MHz) @5500, 5700MHz	Peak gain (5725- 5850MHz) @5785, 5805MHz
802.11abgn WLAN Antenna	613-1631 Wi-Fi1	2.47	4.18	3.35	3.32	3.56
802.11abgn WLAN Antenna	613-1631 Wi-Fi2	2.64	4.22	3.44	2.41	3.68
802.11abgn WLAN Antenna	613-1631 Wi-Fi3 & Bluetooth	4.82	4.63	3.01	4.63	4.31

WiFi: For SISO radiated testing, the antenna with highest gain from set 1 was used as worst-case representative for other antennas. For MIMO radiated modes, the antennas from set 1 were used as worst-case representative for other modes.

BT/BLE: for radiated testing, the antenna from set 2 which has higher gain than the BT/BLE antenna in set 1 was used as worst-case representative for the other antenna

5.4. SOFTWARE AND FIRMWARE

The firmware installed in the EUT during testing was Broadcom, rev. 7.16.27.0.

The test utility software used during testing was BCM Internal, rev. 7.16.RC27.0.

5.5. WORST-CASE CONFIGURATION AND MODE

The EUT was tested as an external module installed in a test jig board connected to a host Laptop PC.

EUT is for desktop applications; there is only one orientation for the antenna, the EUT was tested with normal antenna orientation.

Radiated emission below 1 GHz and power line conducted emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario.

Worst-Case data rates, as provided by the client, were as follows:

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

For MIMO modes, the 3TX emission testing was considered as a worst case scenario and was performed at power levels, per transmit chain, greater than or equal to the maximum power in any 1TX mode.

For all modes with single chain, chain 0 (connector J0) was selected per the software provided by the client. Based on the client a preliminary investigation was performed on the three chains and chain 0 was found to be worst-case.

For radiated BE for HT20 CDD 3TX in the 2.4 GHz band, the results for CH1 showed that vertical polarization is worst case; therefore, the rest of radiated BE for this mode in 2.4 GHz band was performed with vertical polarization.

Based on client's input, there is no colocation among different radios.

5.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
Laptop	Dell	Latitude E6400	2477655473	DoC
AC Adapter	Dell	DA90PE3-00	CN-0WTC00V-48661	DoC
Catalyst PCIe. Board	Enterprises Inc.	NA	NA	DoC
X29T Adaptor Board	Broadcom	BCM94331C5AD	NA	DoC
Laptop	Dell	Latitude E6400	6MYFMJ1	DoC
AC Adapter	Dell	PA2 /CF745	CN-0CF745-48661	DoC
Catalyst PCIe. Board	Enterprises Inc.	NA	NA	DoC
Laptop	Lenovo	G560	CB06427681	DoC
AC Adapter	Lenovo	Adp-65KH B	36001646	DoC

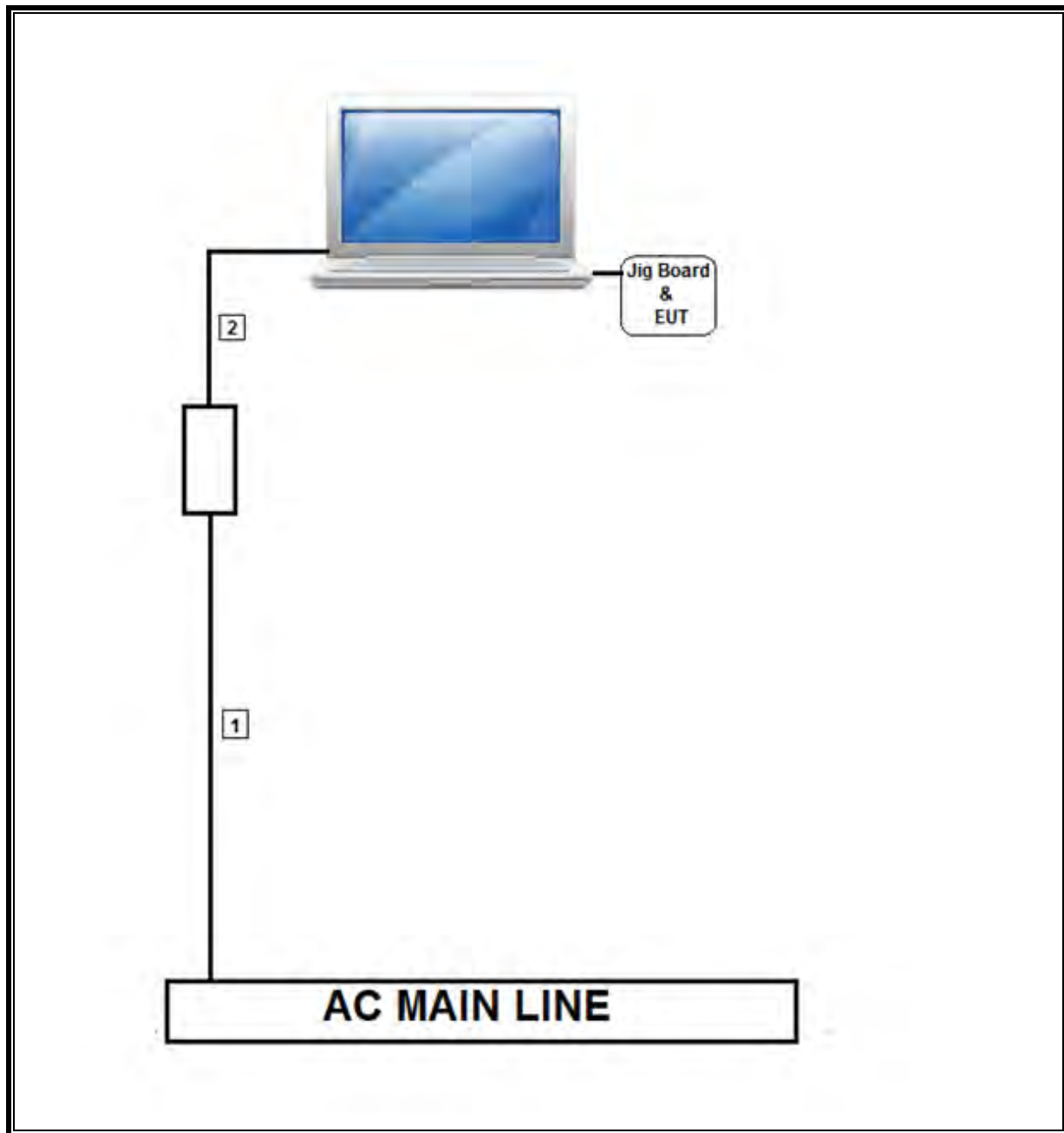
I/O CABLES

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	AC	1	US 115V	Un-Shielded	1.0m	NA
2	DC	1	19.5 Vdc	Un-Shielded	0.8m	NA

TEST SETUP

The EUT is attached to a jig board which is installed in the PCMCIA slot of a host laptop computer during the tests. Test software exercised the radio card.

SETUP DIAGRAM FOR TESTS



6. TEST AND MEASUREMENT EQUIPMENT

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

Test Equipment List					
Description	Manufacturer	Model	Asset	Cal Date	Cal Due
Spectrum Analyzer, 26.5 GHz	Agilent / HP	E4446A	C00996	05/22/13	05/22/14
Spectrum Analyzer, 40 GHz	Agilent	E4446A	T99	05/22/13	05/22/14
PXA Signal Analyzer	Agilent	N9030A	T339	12/10/13	12/10/14
Horn Antenna, 1GHz-18GHz	ETS Lindgren	3117	T119	01/06/14	01/06/15
Antenna, Horn, 18 GHz	EMCO	3115	C01218	01/18/14	01/18/15
Antenna, Horn, 26.5 GHz	ARA	MWH-1826/B	C00980	11/14/13	11/14/14
Antenna, Horn, 40 GHz	ARA	MWH-2640/B	C00981	06/28/13	06/28/14
Antenna, Bilog, 30MHz-1 GHz	Sunol Sciences	JB1	C01016	08/22/13	08/22/14
Preamplifier, 26.5 GHz	Agilent / HP	8449B	C00749	10/19/13	10/19/14
Preamplifier, 40 GHz	Miteq	NSP4000-SP2	C00990	08/20/13	08/20/14
Peak Power Meter	Agilent / HP	E9323A	F00051	10/04/13	10/04/14
Preamplifier, 1300 MHz	Agilent / HP	8447D	C00885	01/16/14	01/16/15
5GHz Low Pass Filter	Micro-Tronics	LPS17541	F00219	06/26/13	06/26/14
3GHz High Pass Filter	Micro-Tronics	HPS17542	F00222	06/26/13	06/26/14
6GHz High Pass Filter	Micro-Tronics	HPM17543	F00224	06/26/13	06/26/14

7. ON TIME, DUTY CYCLE AND MEASUREMENT METHODS

LIMITS

None; for reporting purposes only.

PROCEDURE

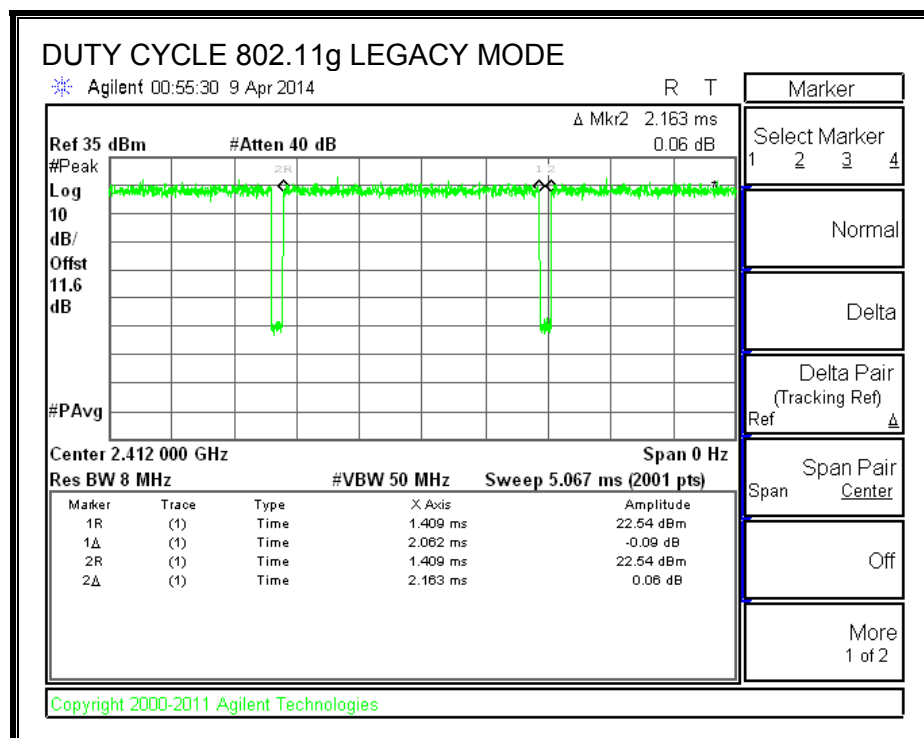
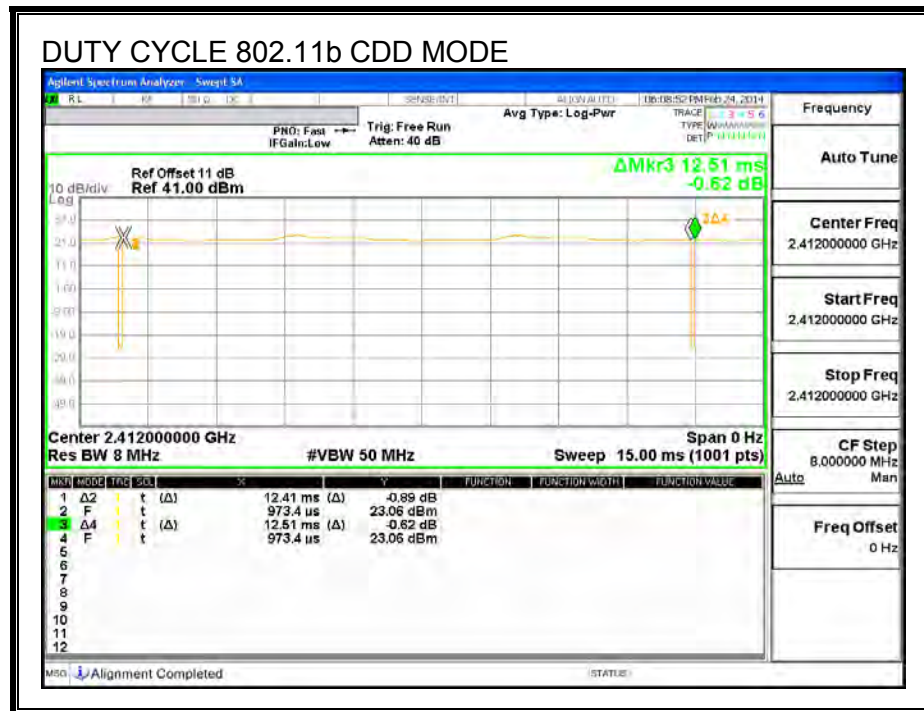
KDB 558074 Zero-Span Spectrum Analyzer Method.

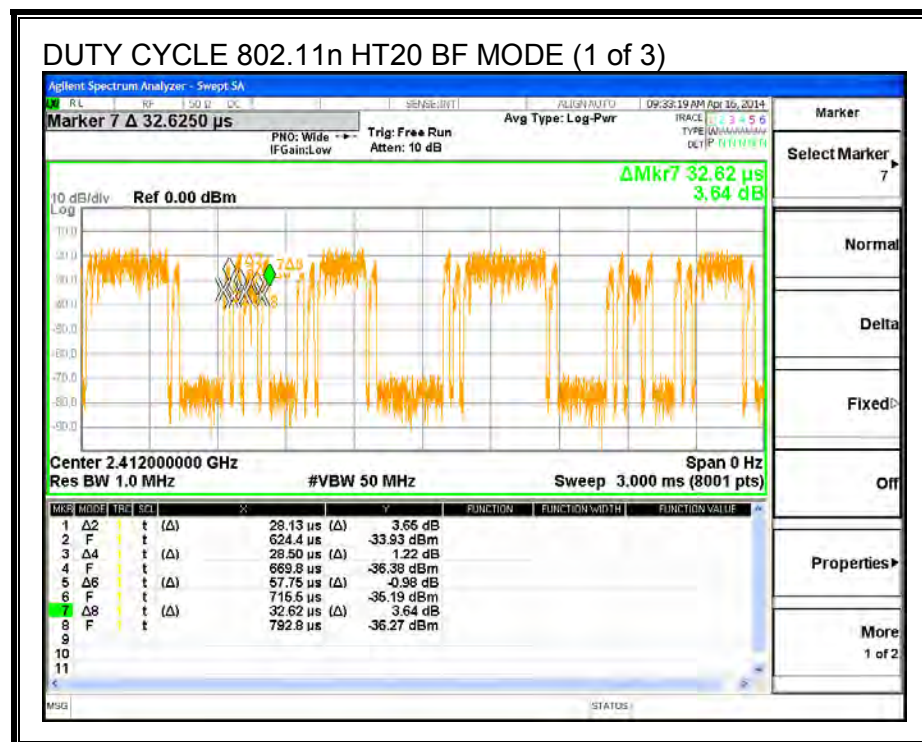
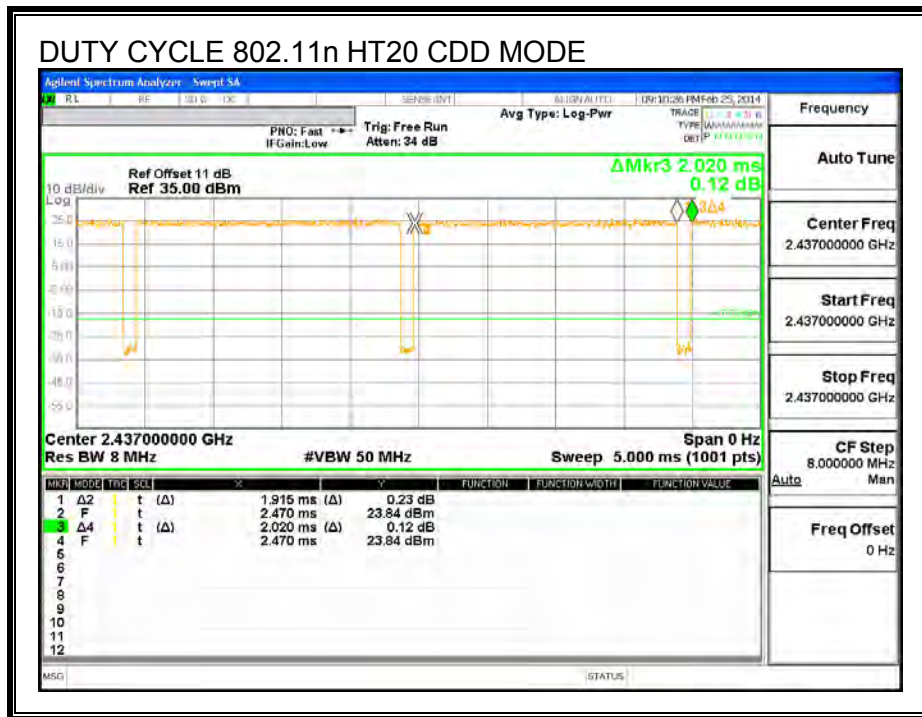
7.1. ON TIME AND DUTY CYCLE RESULTS

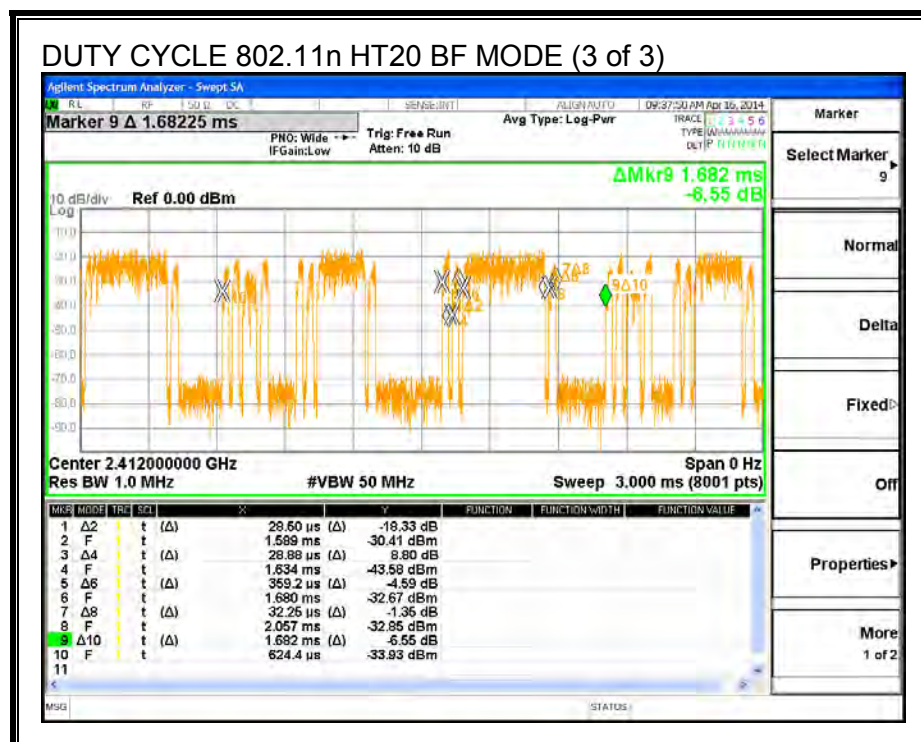
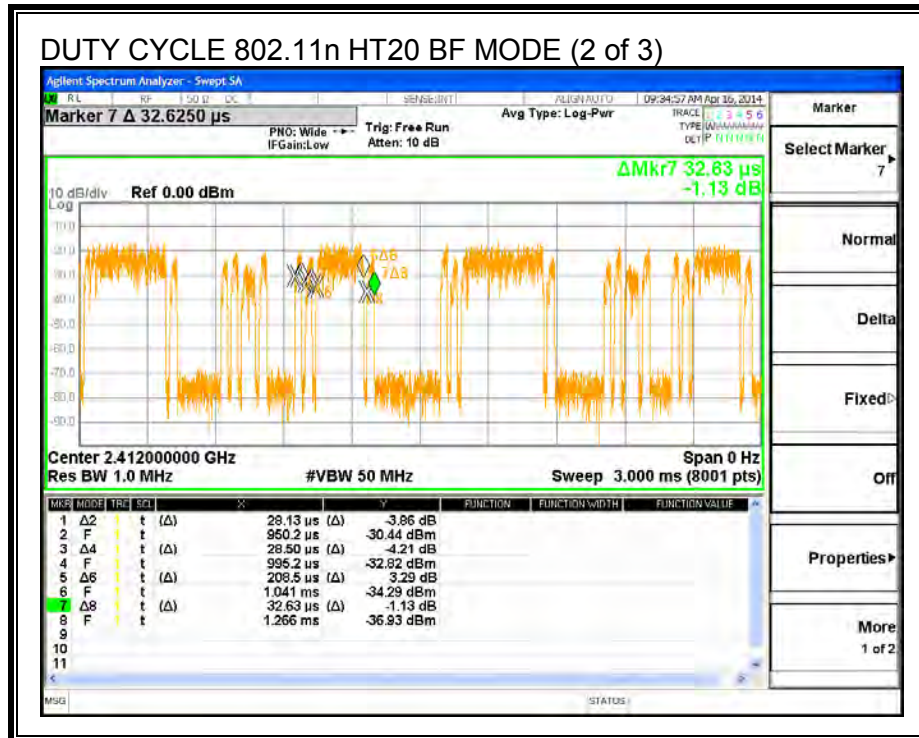
Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
2.4GHz Band						
802.11b CDD	12.410	12.510	0.992	99.20%	0.00	0.010
802.11g Legacy	2.062	2.163	0.953	95.33%	0.21	0.485
802.11n HT20 CDD	1.915	2.020	0.948	94.80%	0.23	0.522
802.11n HT20 TxBF	0.894	1.682	0.532	53.15%	2.74	1.119

Note: CDD mode was also used for conducted BF testing. DCCF for BF was only used for radiated testing.

7.2. DUTY CYCLE PLOTS







7.3. MEASUREMENT METHODS

6 dB BW: KDB 558074 D01 v03r01 Section 8.1.

Output Power: KDB 558074 D01 v03r01 Section 9.2.3.2.

Power Spectral Density: KDB 558074 D01 v03r01 Section 10.3 and 10.5.

Out-of-band emissions in non-restricted bands: KDB 558074 D01 v03r01 Section 11.

Out-of-band emissions in restricted bands: KDB 558074 D01 v03r01 Section 12.1.

8. ANTENNA PORT TEST RESULTS

8.1. 802.11b CDD 3TX MODE IN THE 2.4 GHz BAND

8.1.1 6 dB BANDWIDTH

LIMITS

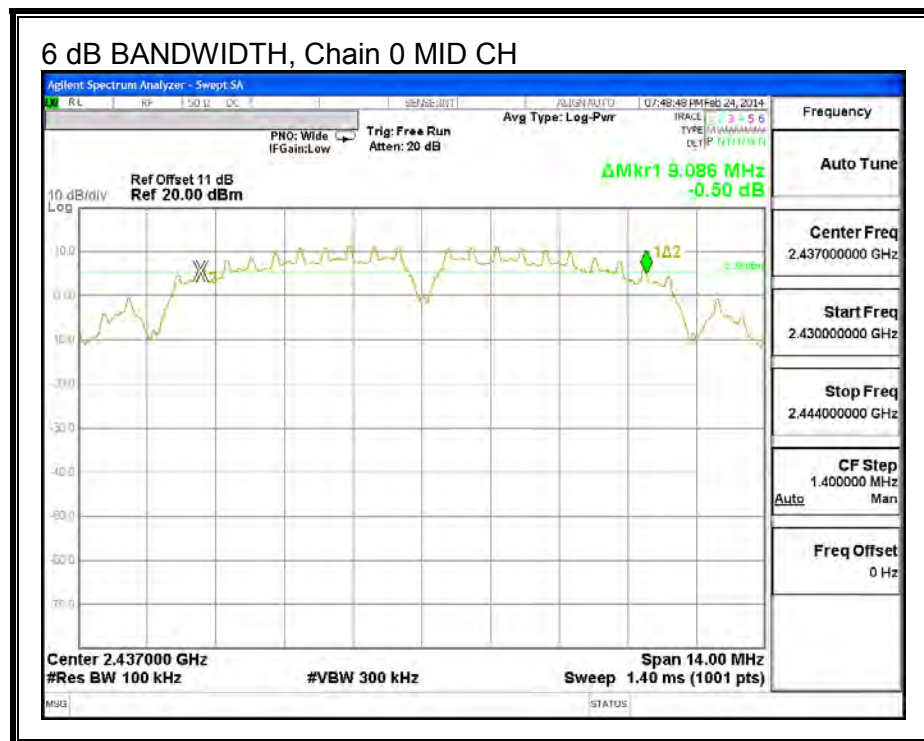
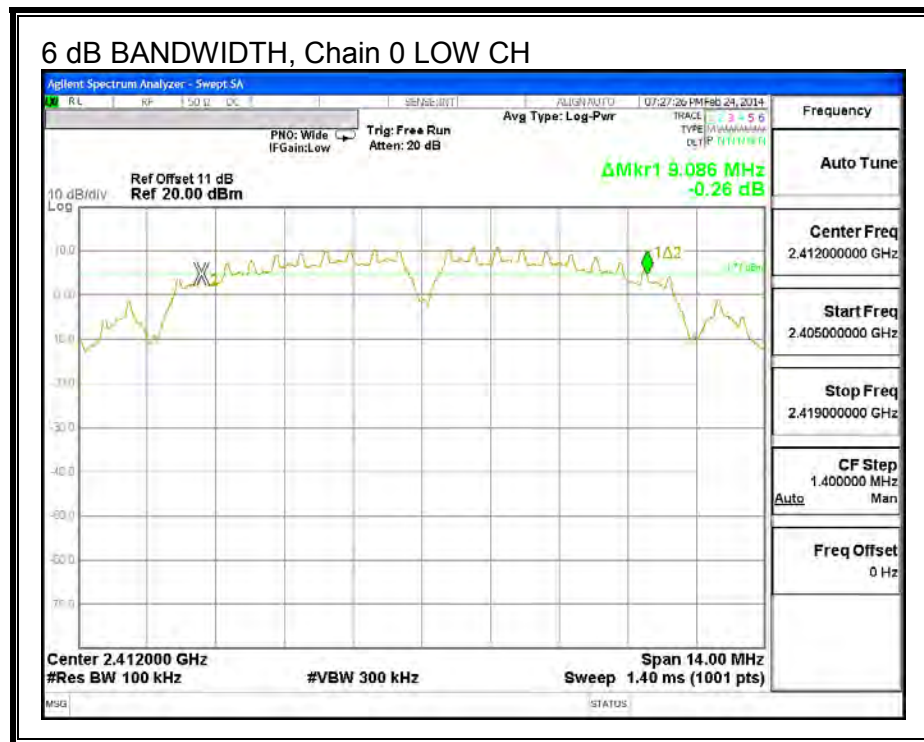
FCC §15.247 (a) (2)

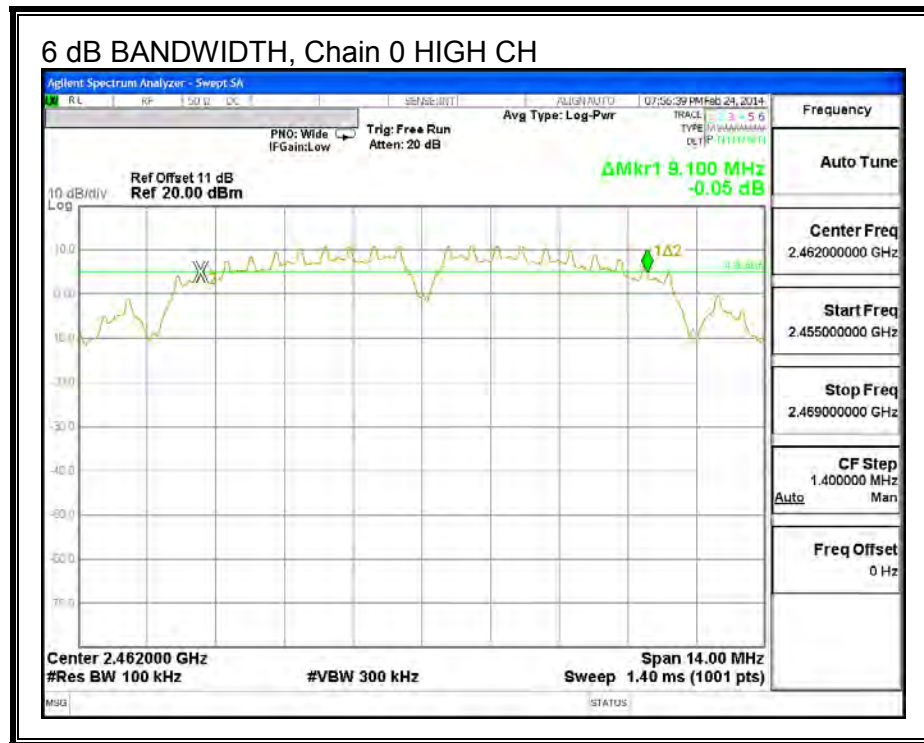
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

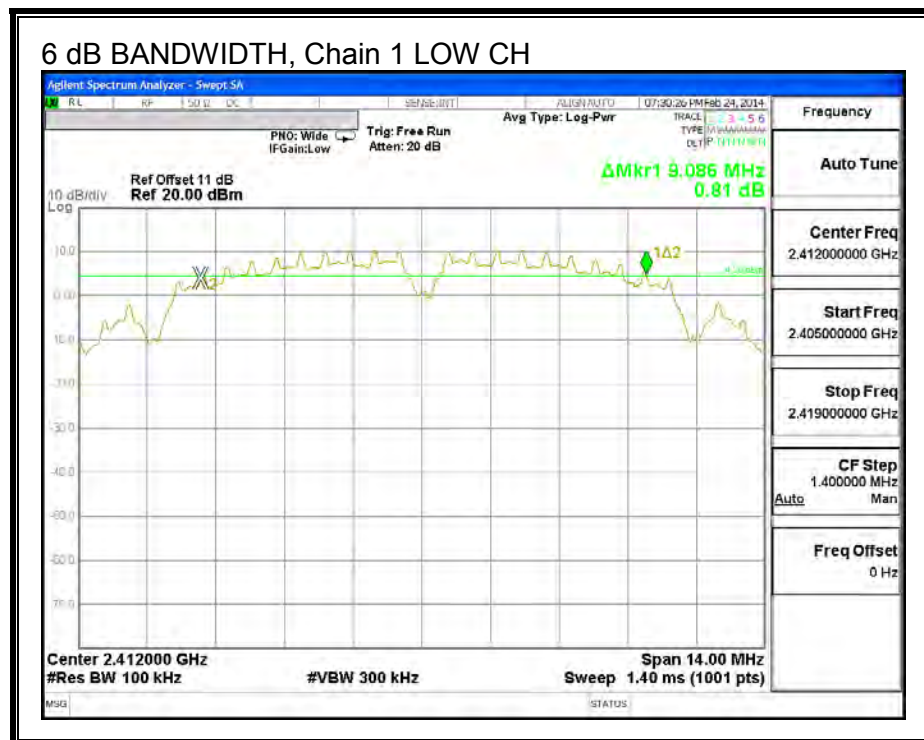
Channel	Frequency (MHz)	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	6 dB BW Chain 2 (MHz)	Minimum Limit (MHz)
Low	2412	9.086	9.086	9.086	0.5
Mid	2437	9.086	9.086	9.100	0.5
High	2462	9.100	9.100	9.072	0.5

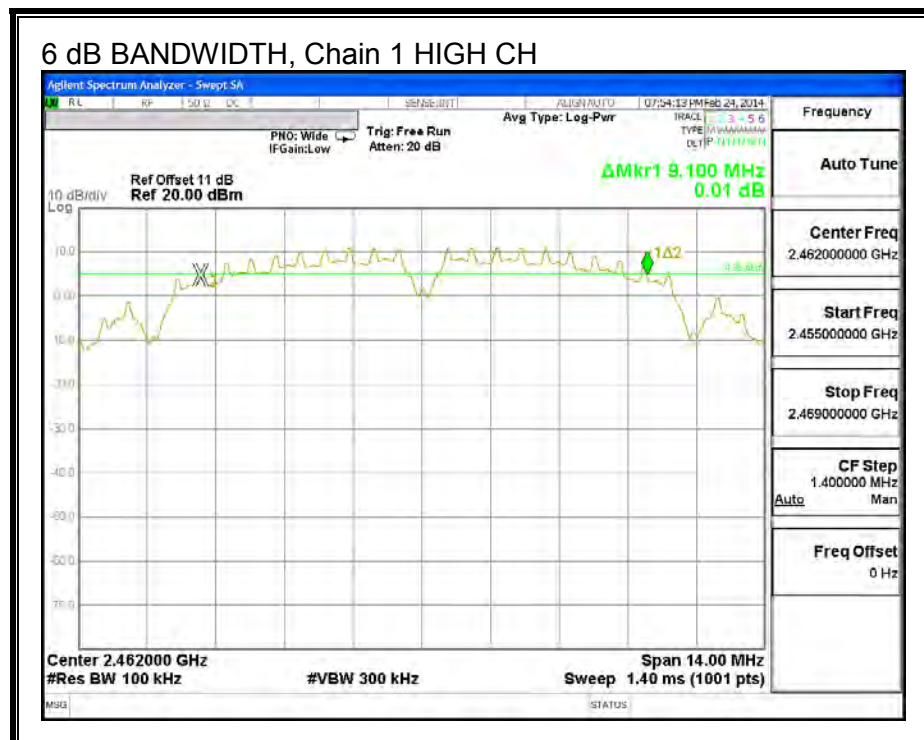
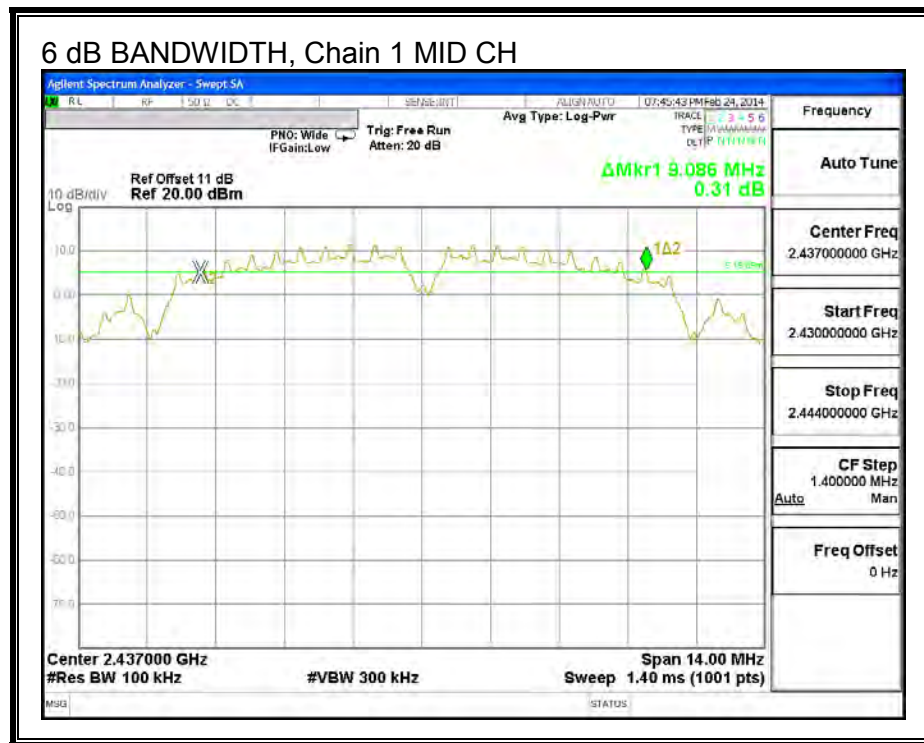
6 dB BANDWIDTH, Chain 0



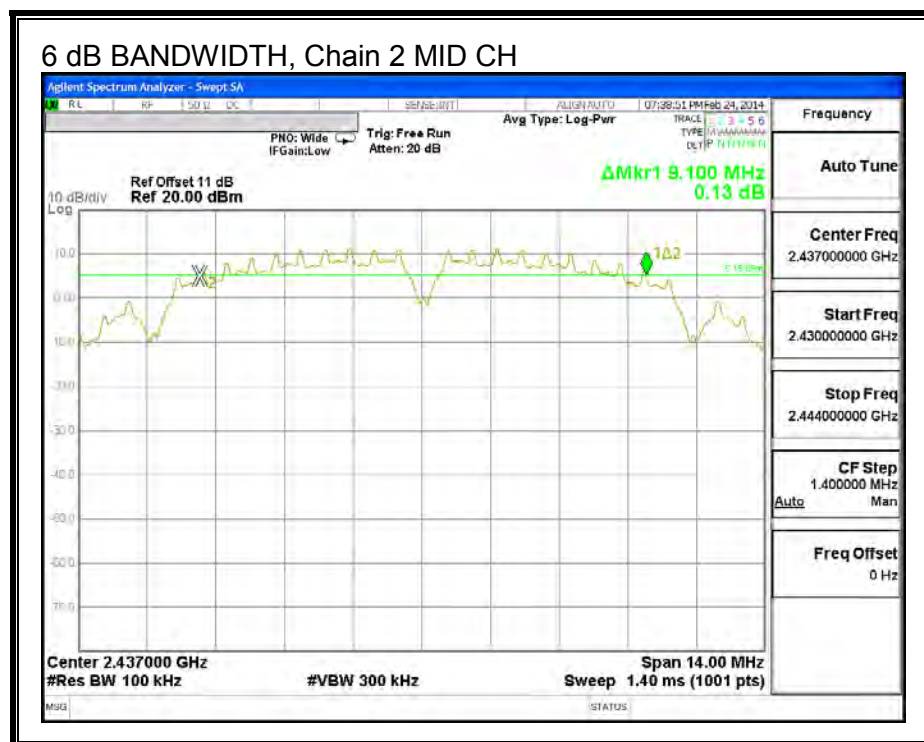
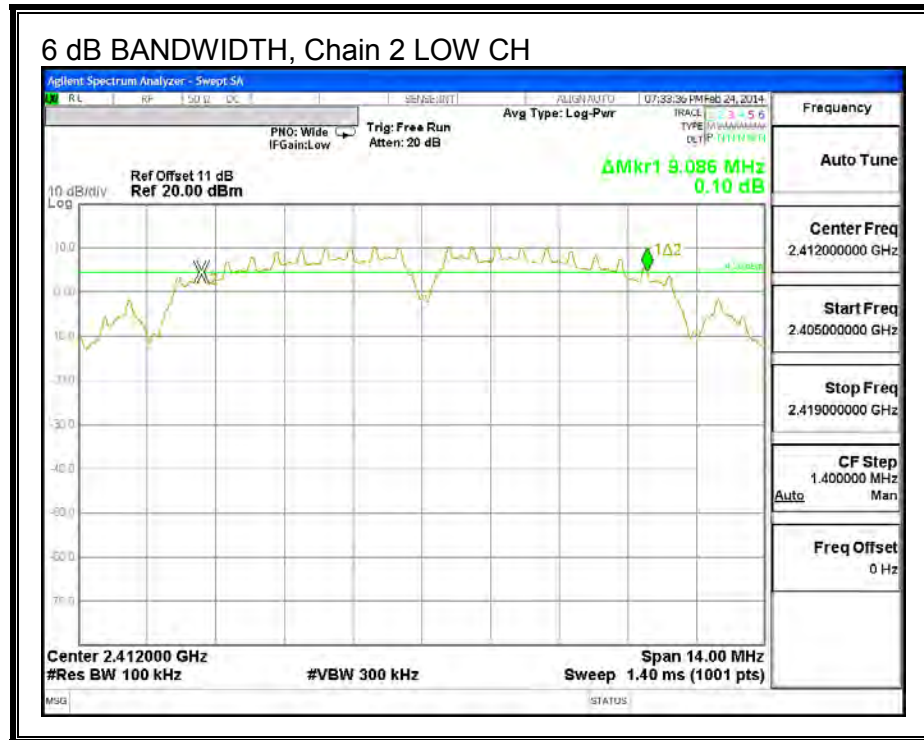


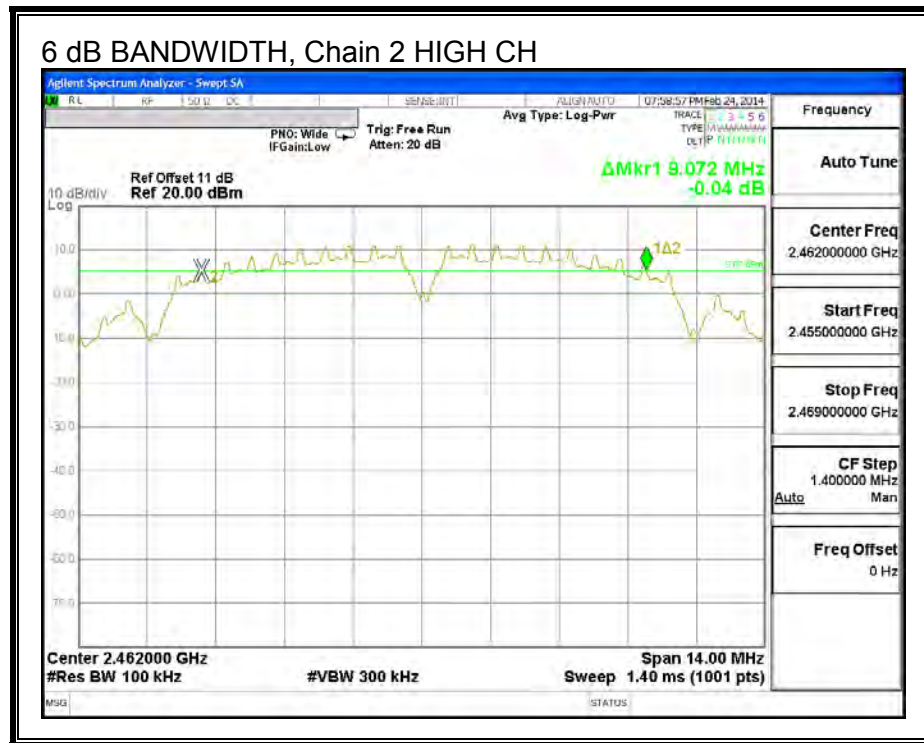
6 dB BANDWIDTH, Chain 1





6 dB BANDWIDTH, Chain 2





8.1.2 99% BANDWIDTH

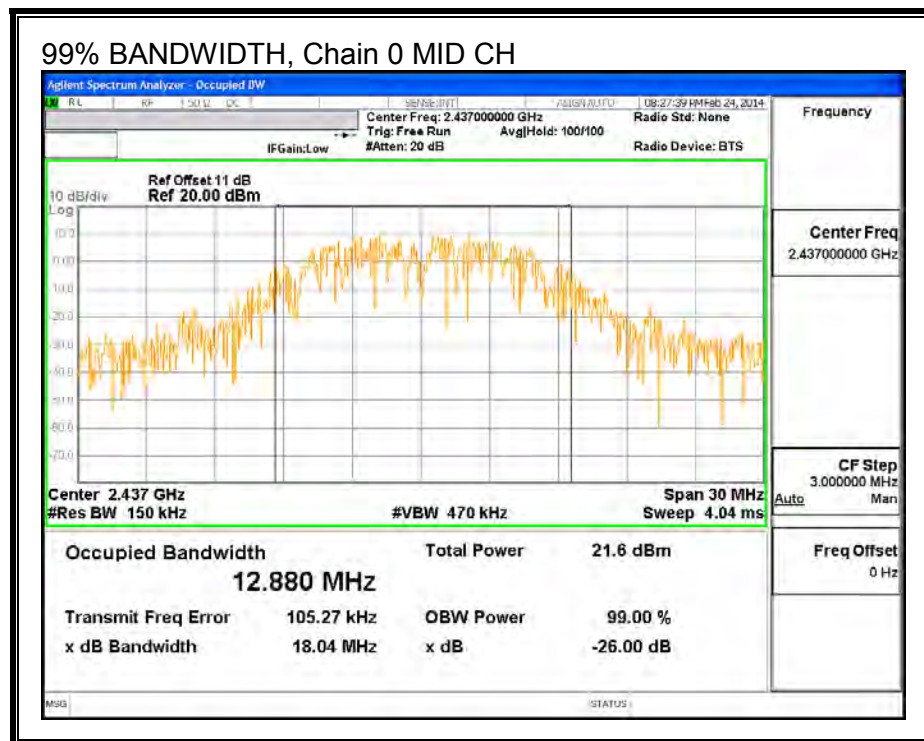
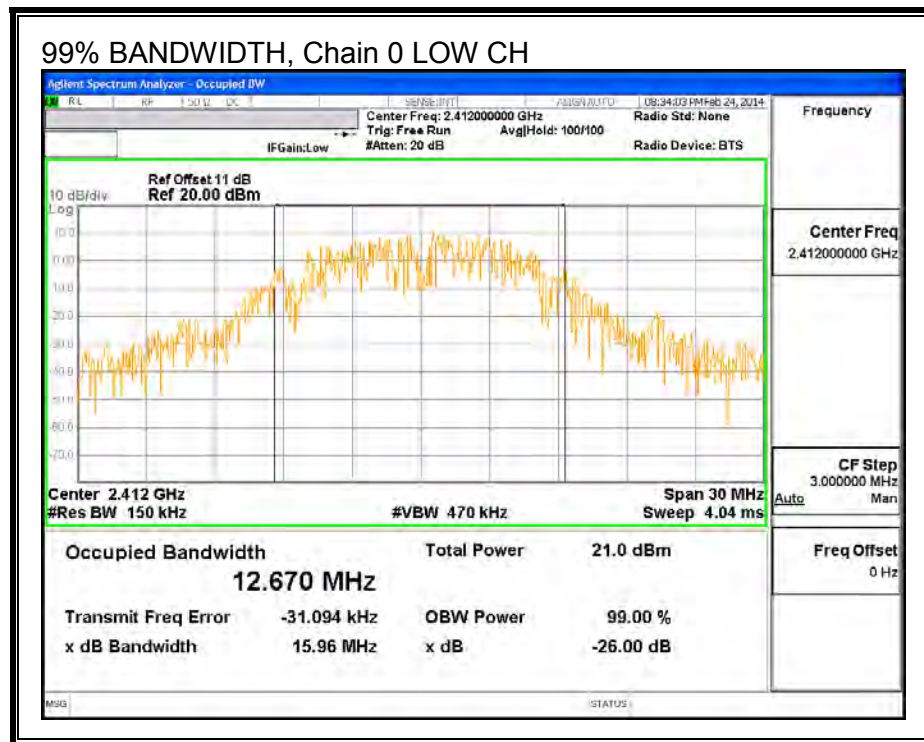
LIMITS

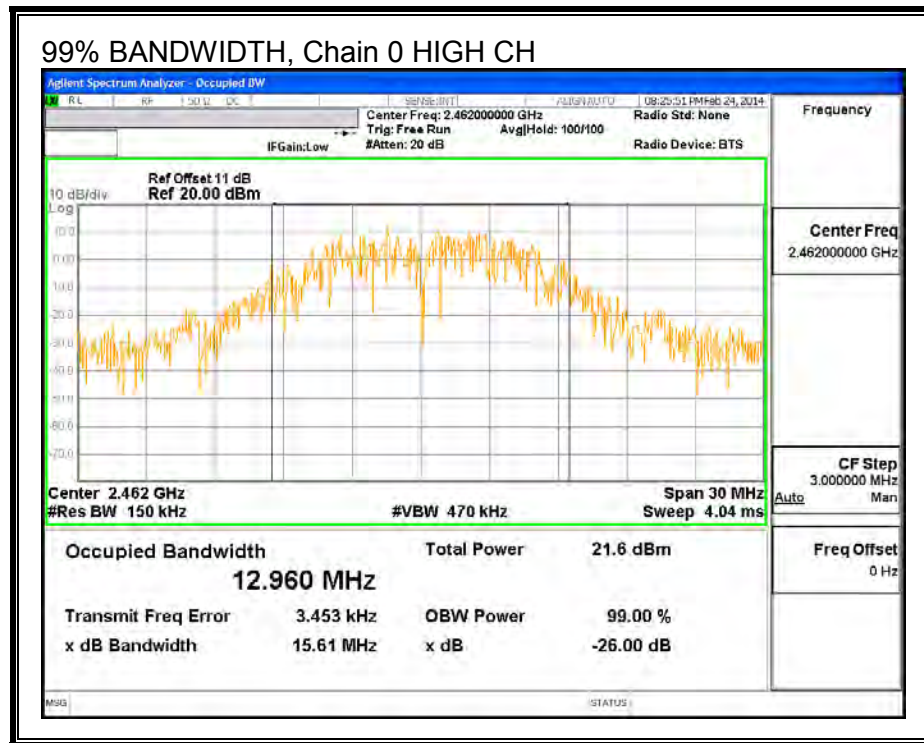
None; for reporting purposes only.

RESULTS

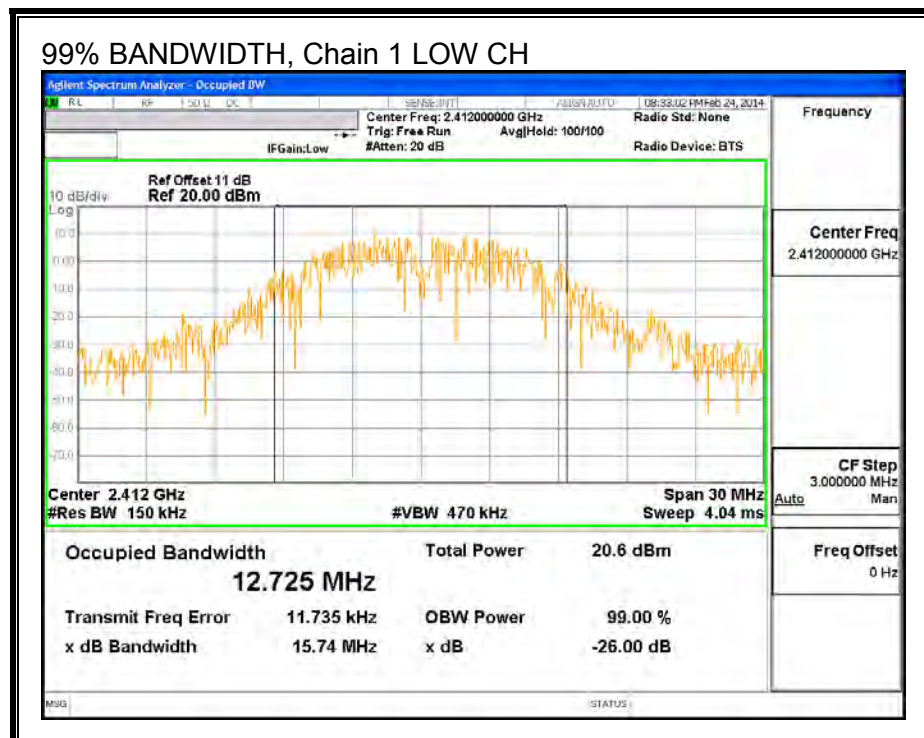
Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)	99% BW Chain 2 (MHz)
Low	2412	12.670	12.725	12.577
Mid	2437	12.880	12.790	12.554
High	2462	12.960	13.028	13.077

99% BANDWIDTH, Chain 0

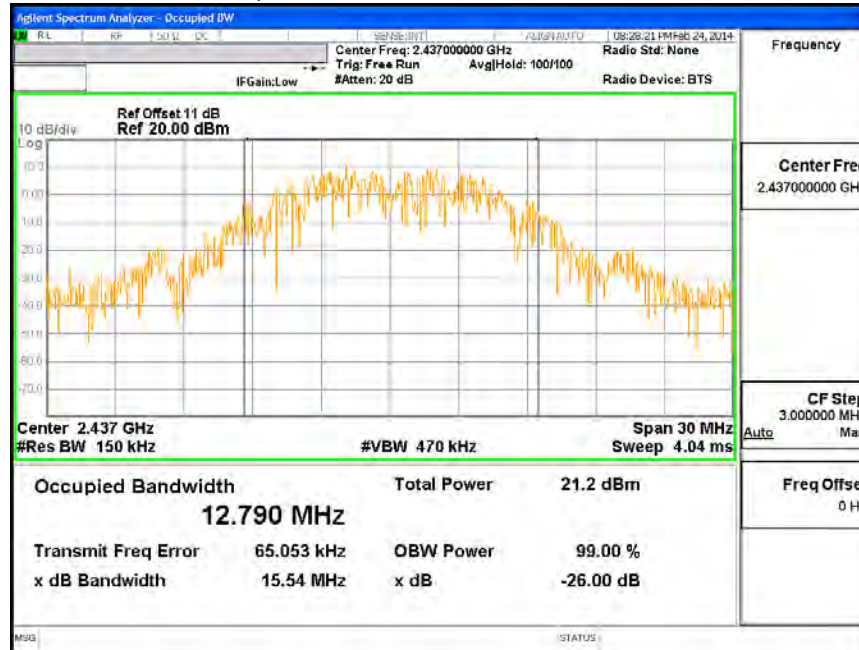




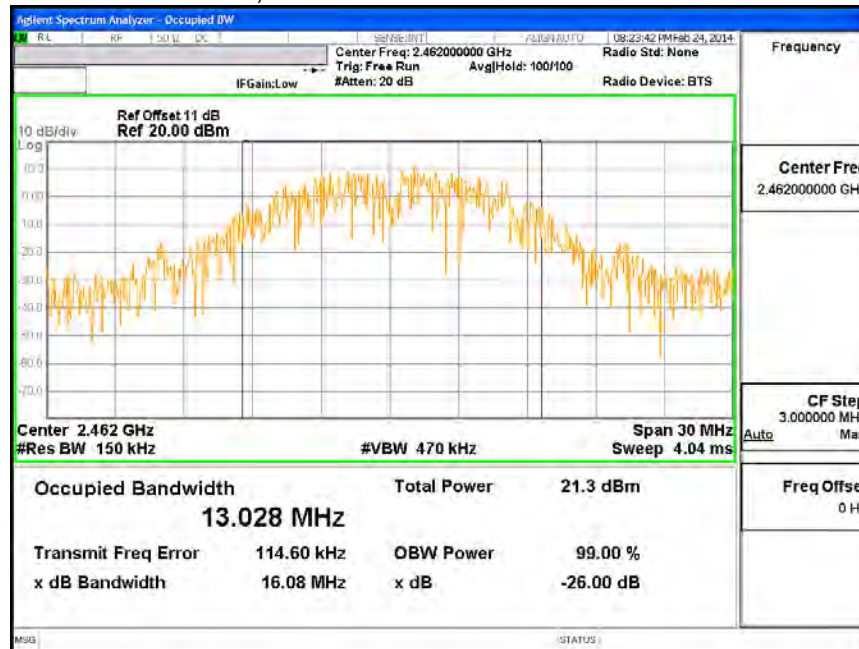
99% BANDWIDTH, Chain 1



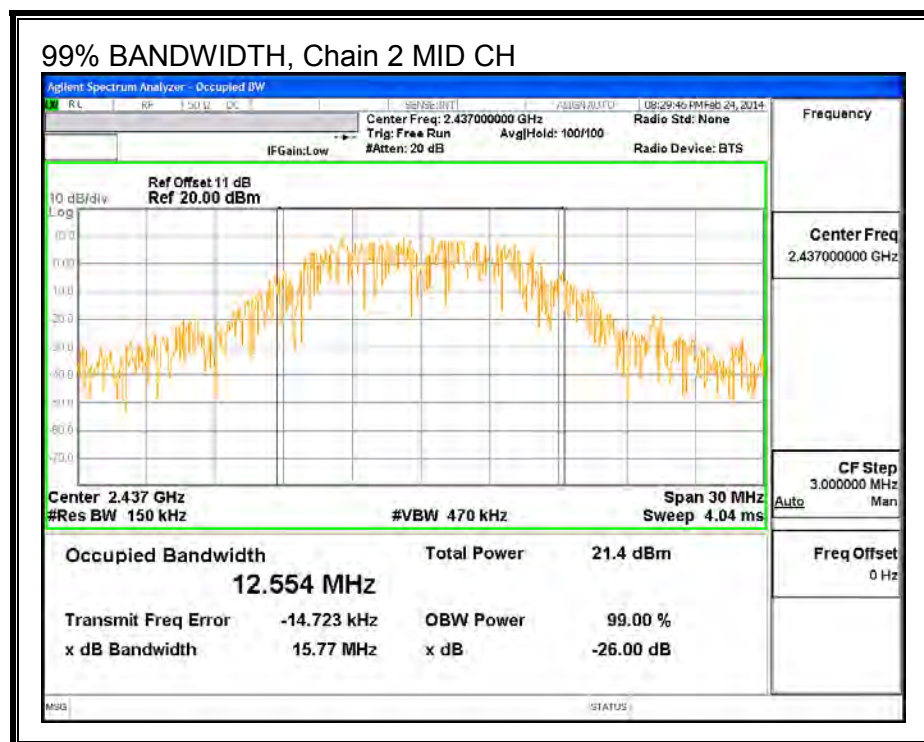
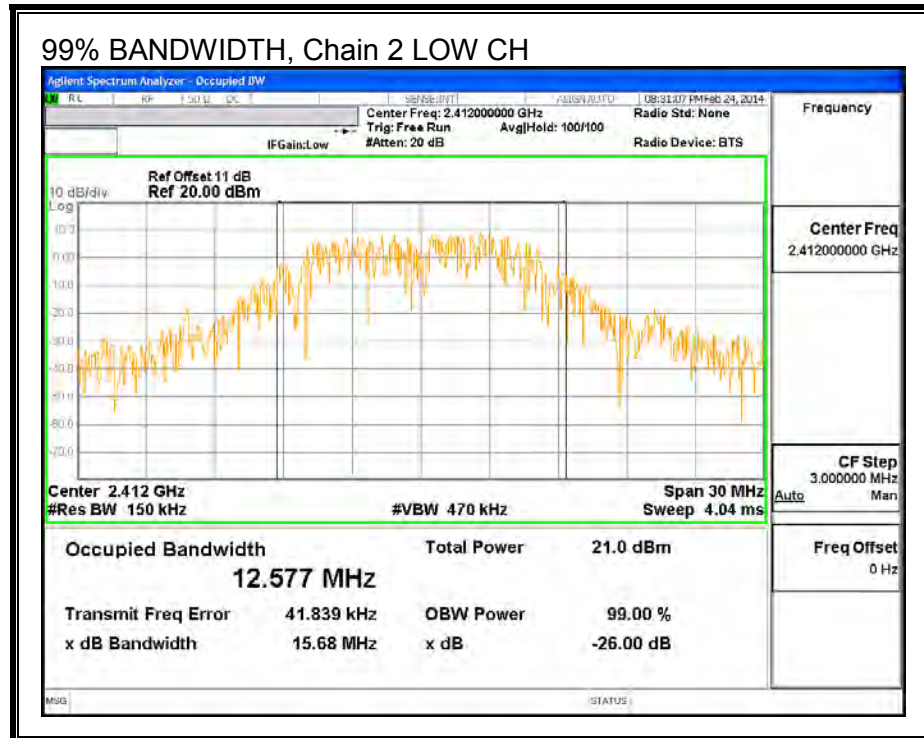
99% BANDWIDTH, Chain 1 MID CH

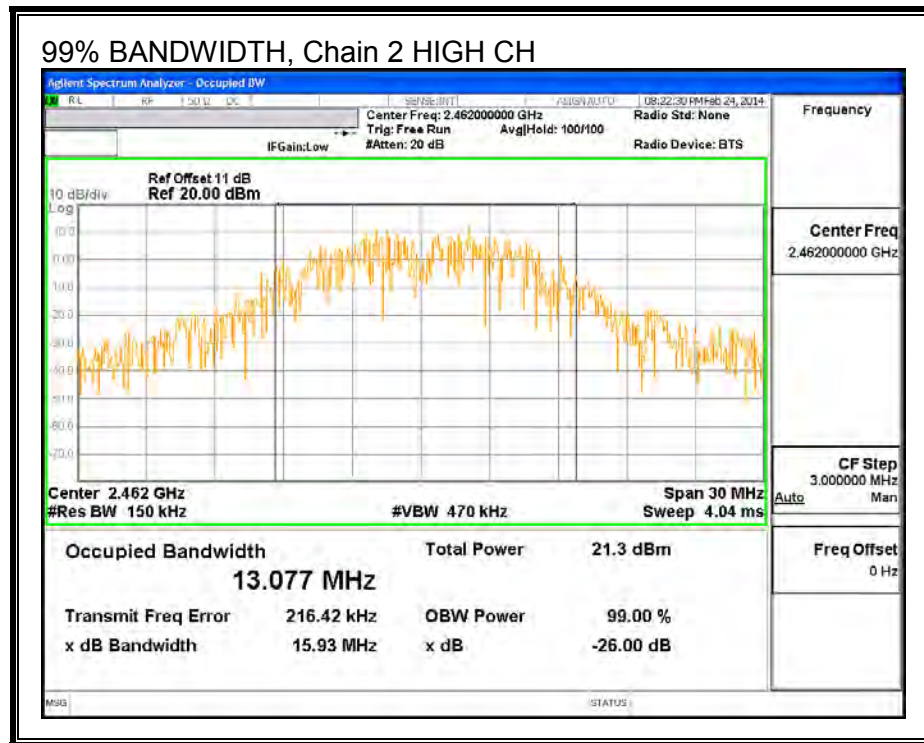


99% BANDWIDTH, Chain 1 HIGH CH



99% BANDWIDTH, Chain 2





8.1.3 OUTPUT POWER

LIMITS

FCC §15.247

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

The TX chains are uncorrelated and the antenna gain is unequal among the chains. The directional gain is:

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
0.12	5.30	4.69	3.90

RESULTS

Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
1	2412	3.90	30.00	30	36	30.00
6	2437	3.90	30.00	30	36	30.00
11	2462	3.90	30.00	30	36	30.00
12	2467	3.90	30.00	30	36	30.00
13	2472	3.90	30.00	30	36	30.00

Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
1	2412	21.12	21.37	21.15	25.99	30.00	-4.01
6	2437	21.03	20.76	20.55	25.56	30.00	-4.44
11	2462	19.56	19.18	19.25	24.10	30.00	-5.90
12	2467	19.50	19.50	20.30	24.55	30.00	-5.45
13	2472	15.20	15.20	16.00	20.25	30.00	-9.75

Note: the power readings above are measured with gated method, and the measurement was taken only during the ON time. No duty cycle correction was necessary.

8.1.4 POWER SPECTRAL DENSITY

LIMITS

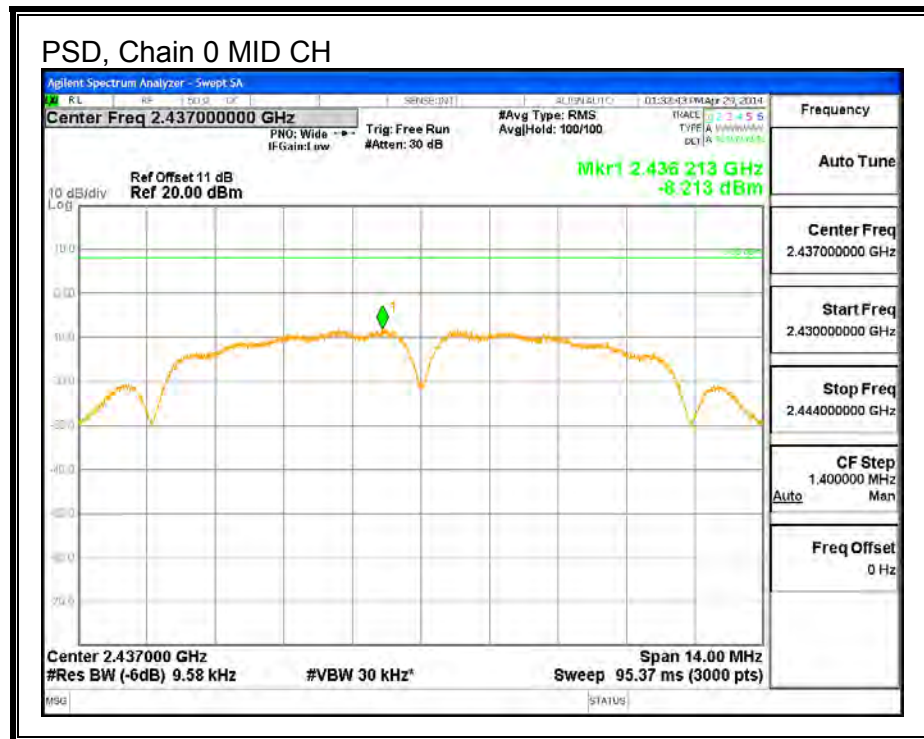
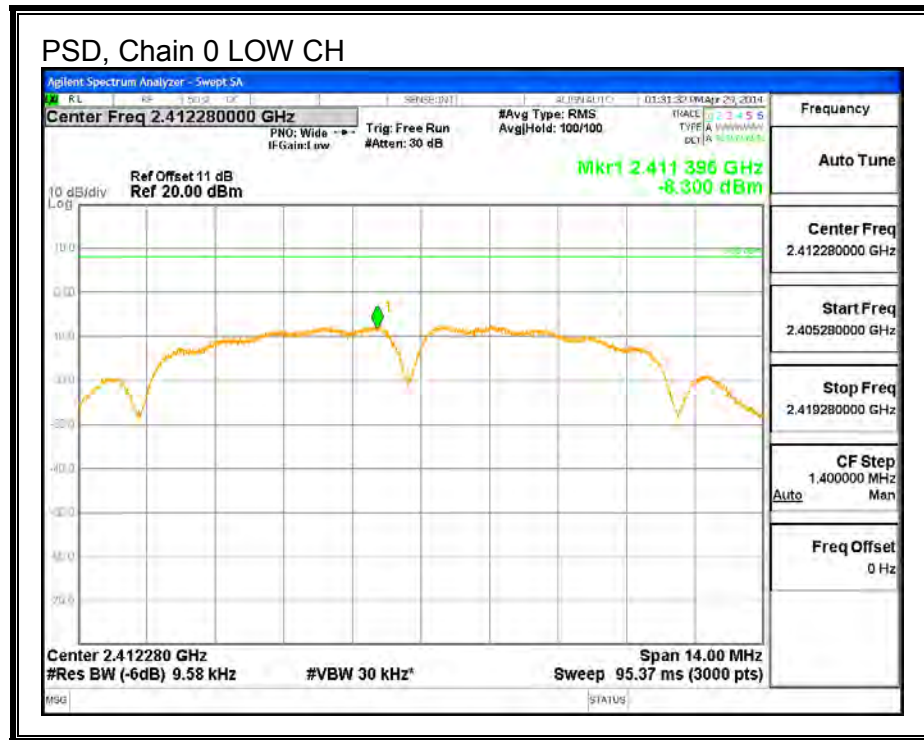
FCC §15.247

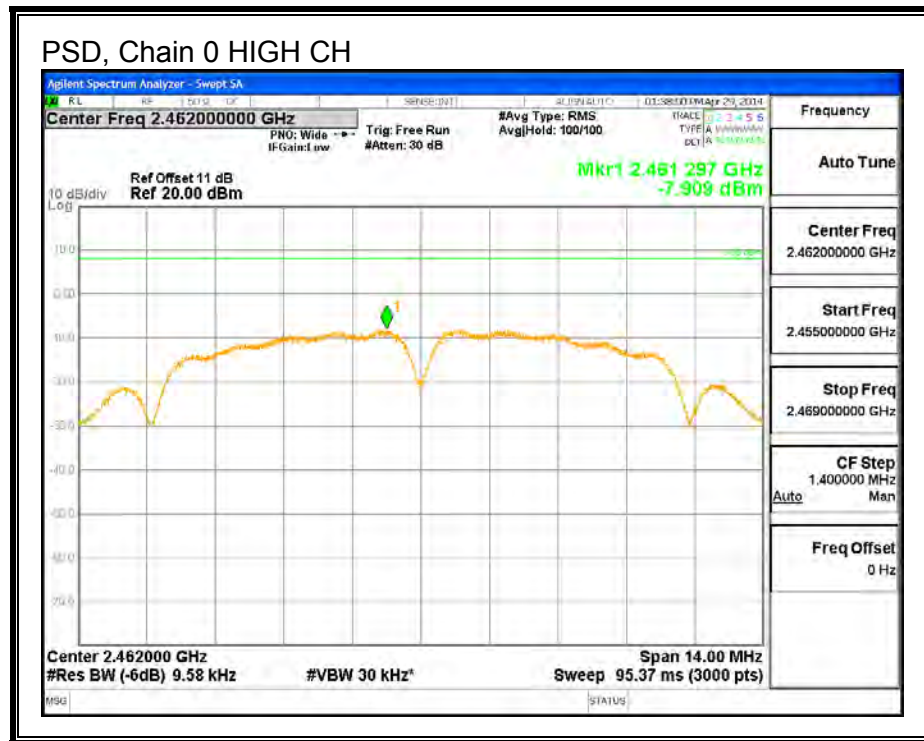
RESULTS

PSD Results

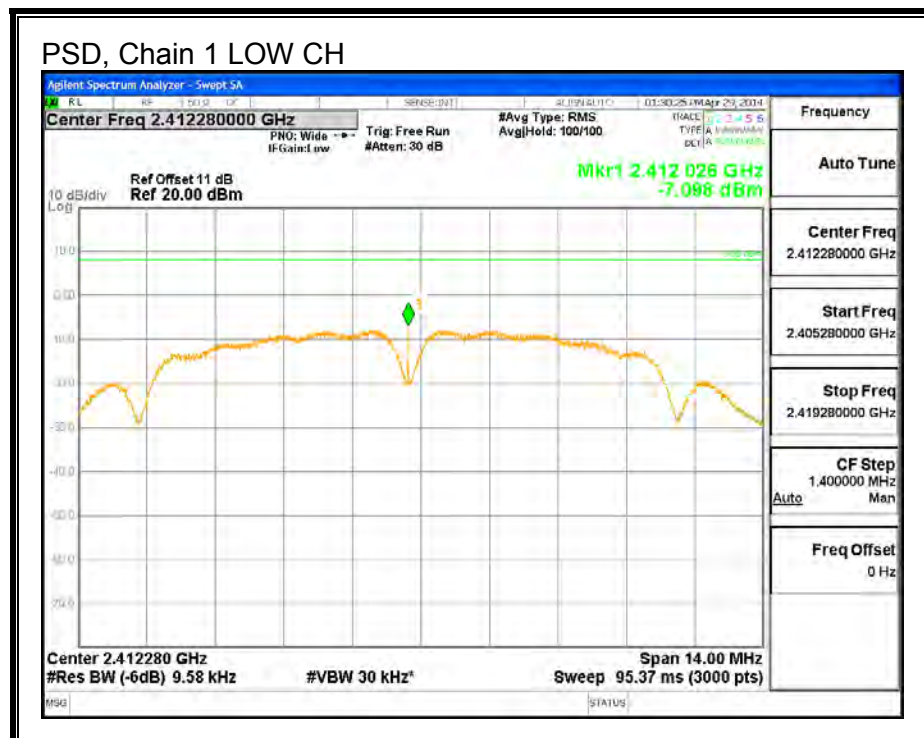
Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Chain 1 Meas (dBm)	Chain 2 Meas (dBm)	Total PSD (dBm)	Limit (dBm)	Margin (dB)
Low	2412	-8.300	-7.098	-8.032	-3.01	8.0	-11.0
Mid	2437	-8.213	-7.332	-8.262	-3.14	8.0	-11.1
High	2462	-7.909	-8.839	-8.052	-3.48	8.0	-11.5

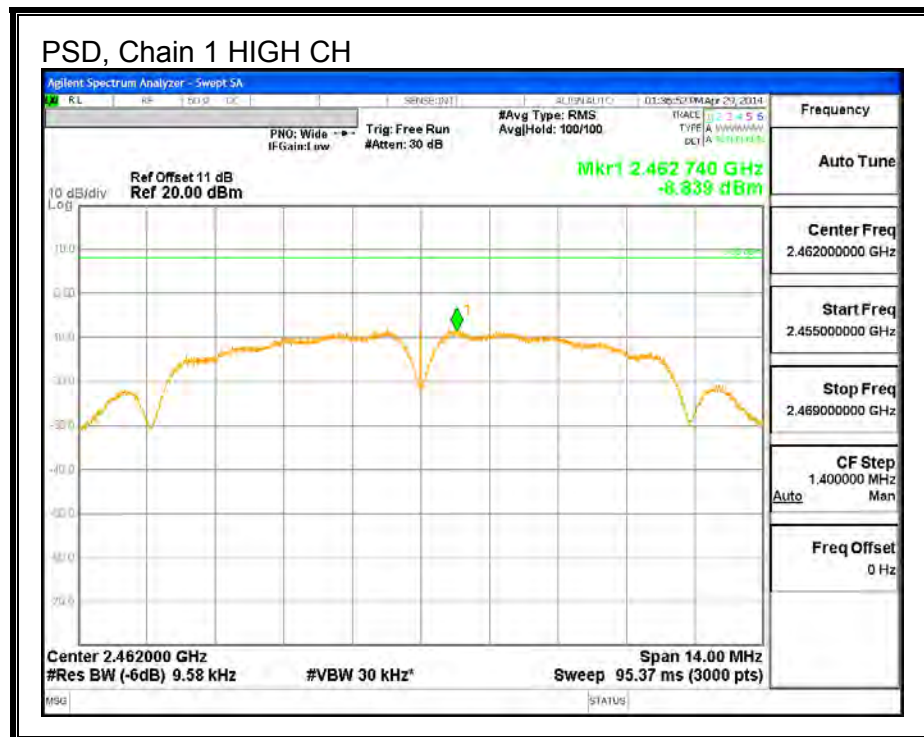
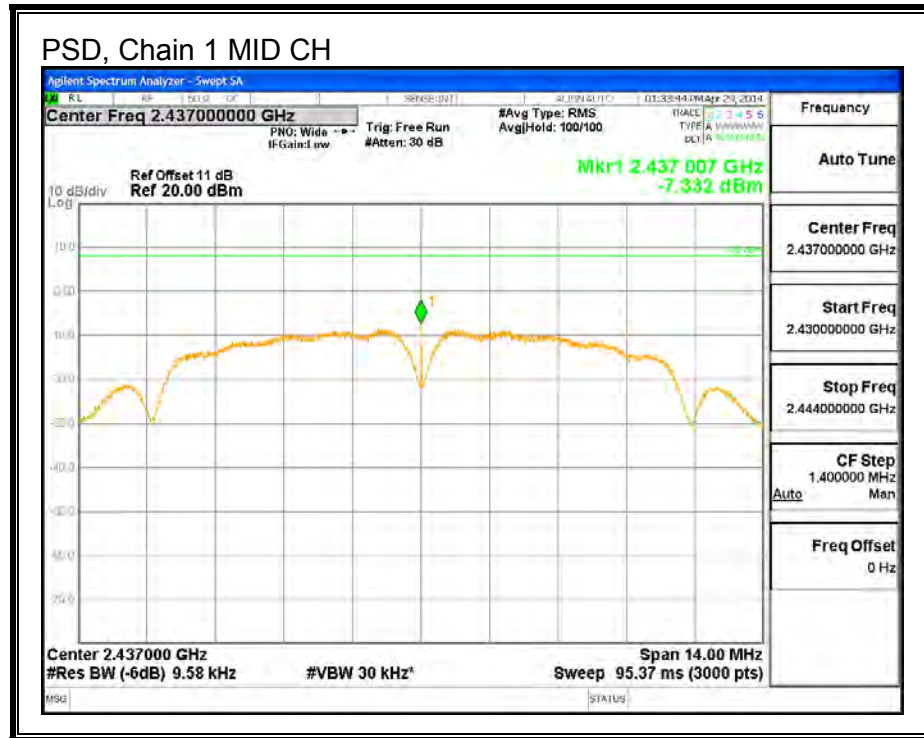
PSD, Chain 0



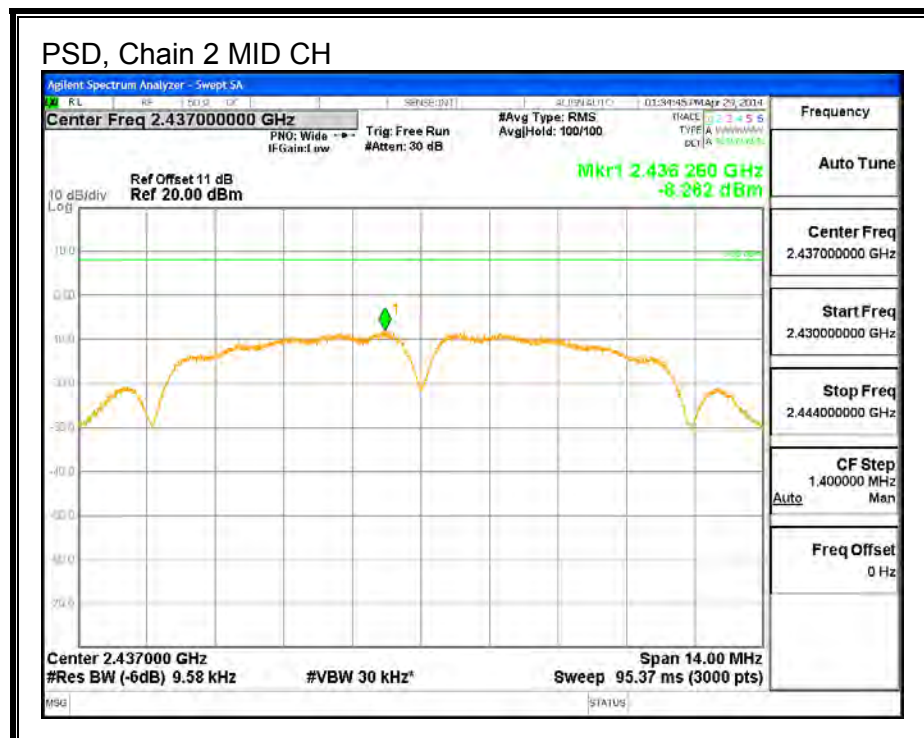
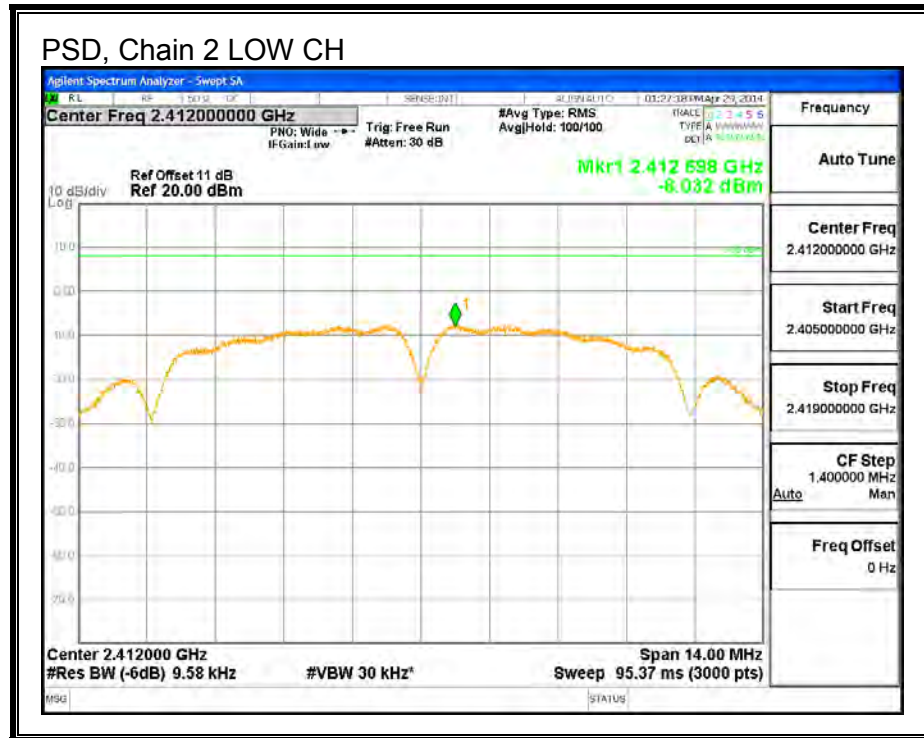


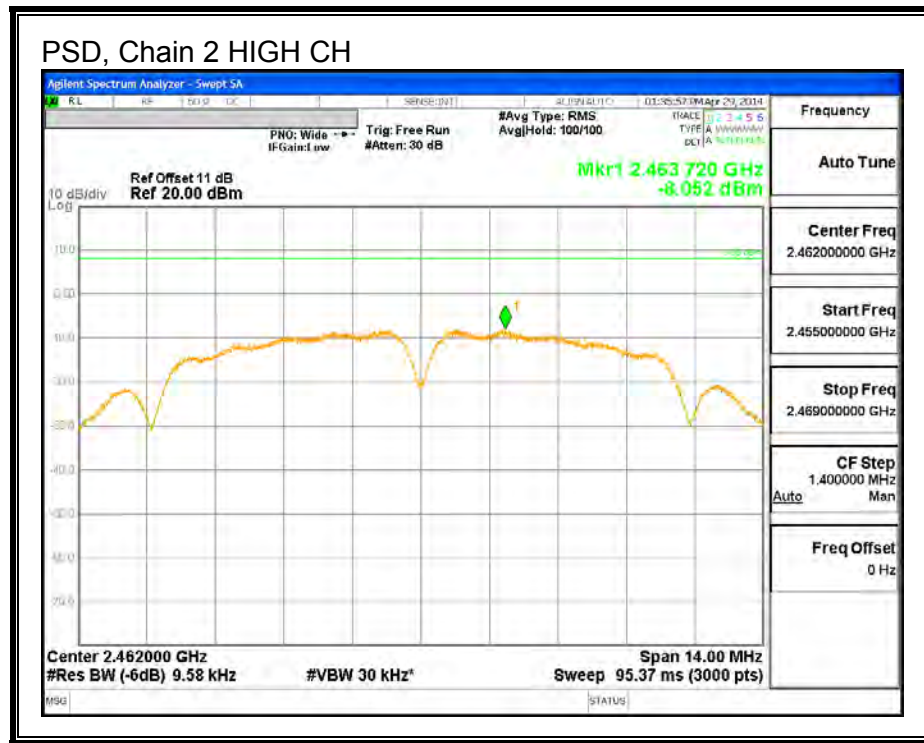
PSD, Chain 1





PSD, Chain 2





8.1.5 OUT-OF-BAND EMISSIONS

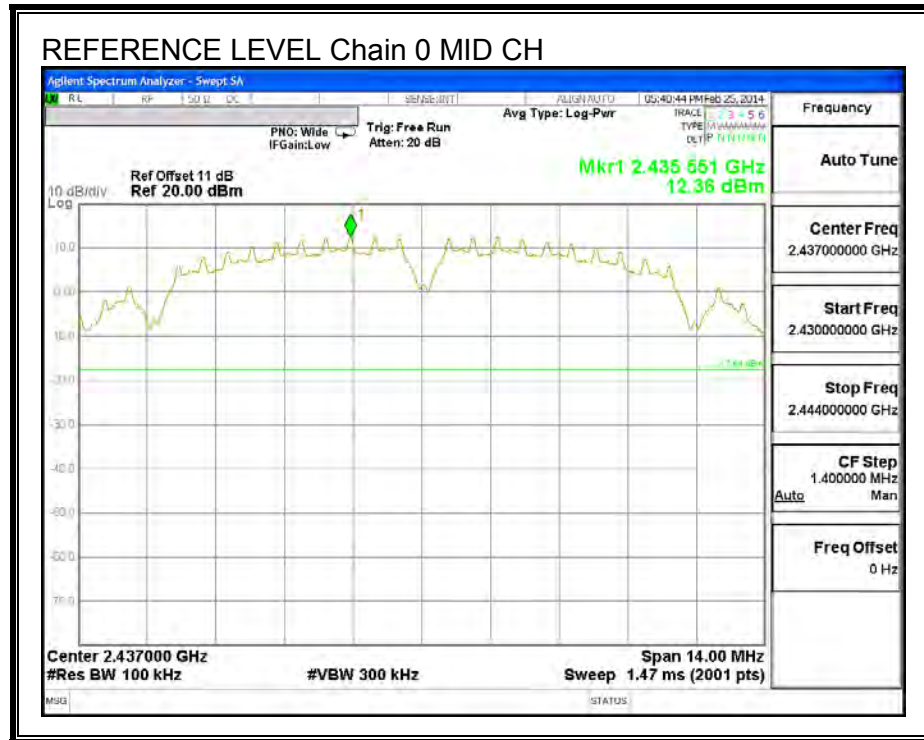
LIMITS

FCC §15.247 (d)

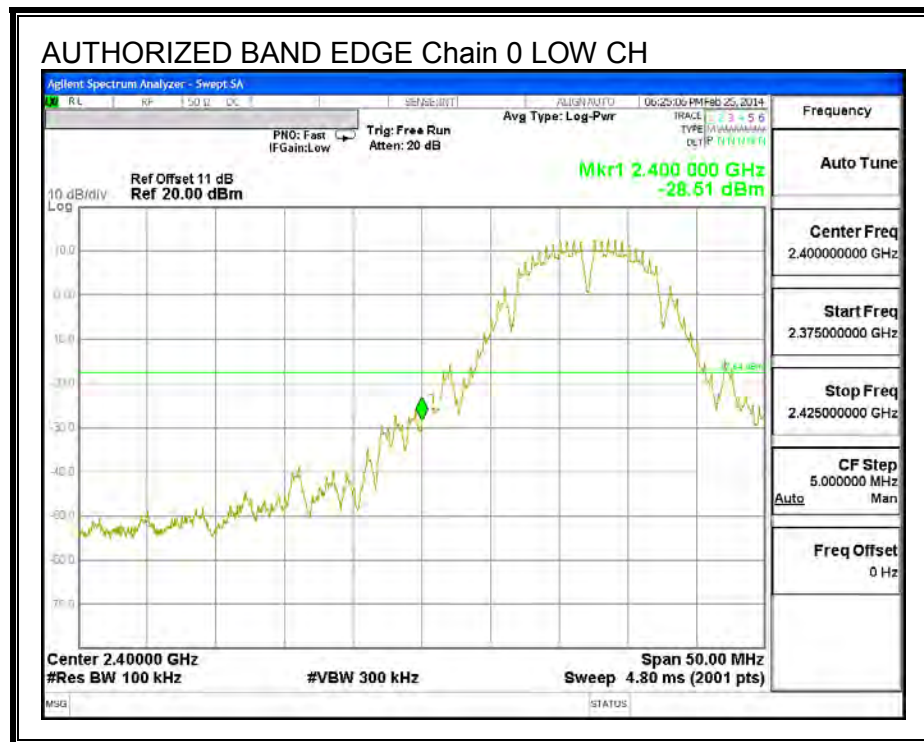
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the 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.

RESULTS

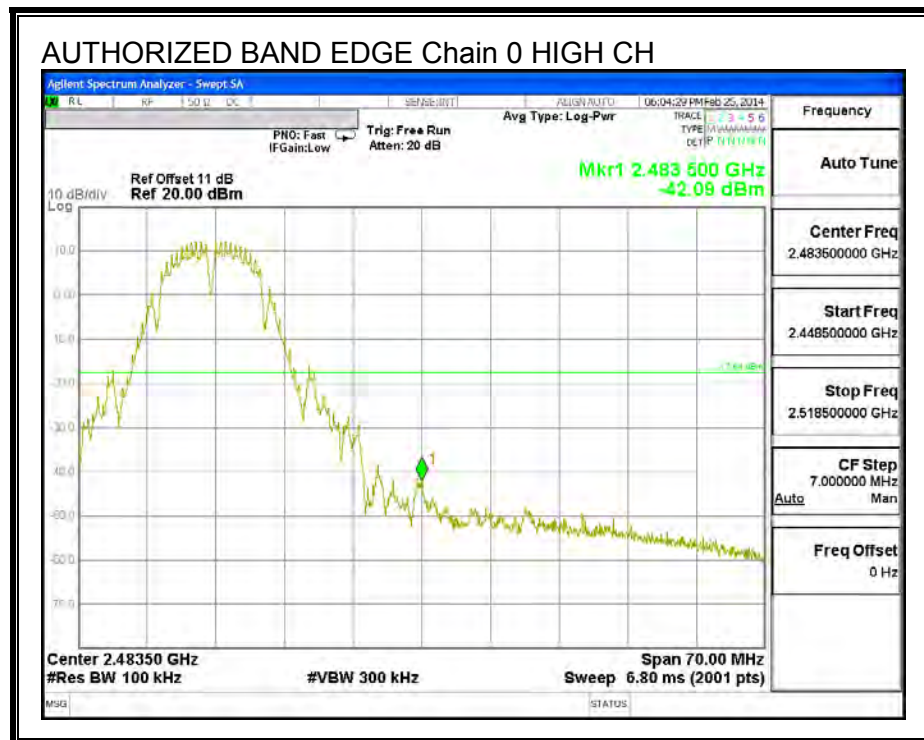
IN-BAND REFERENCE LEVEL, Chain 0



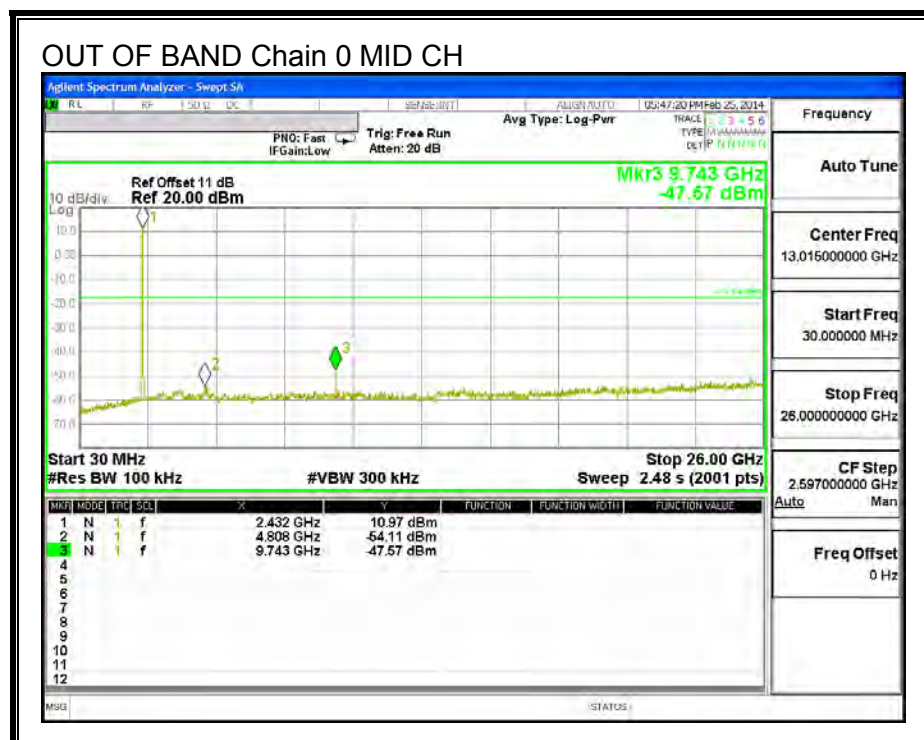
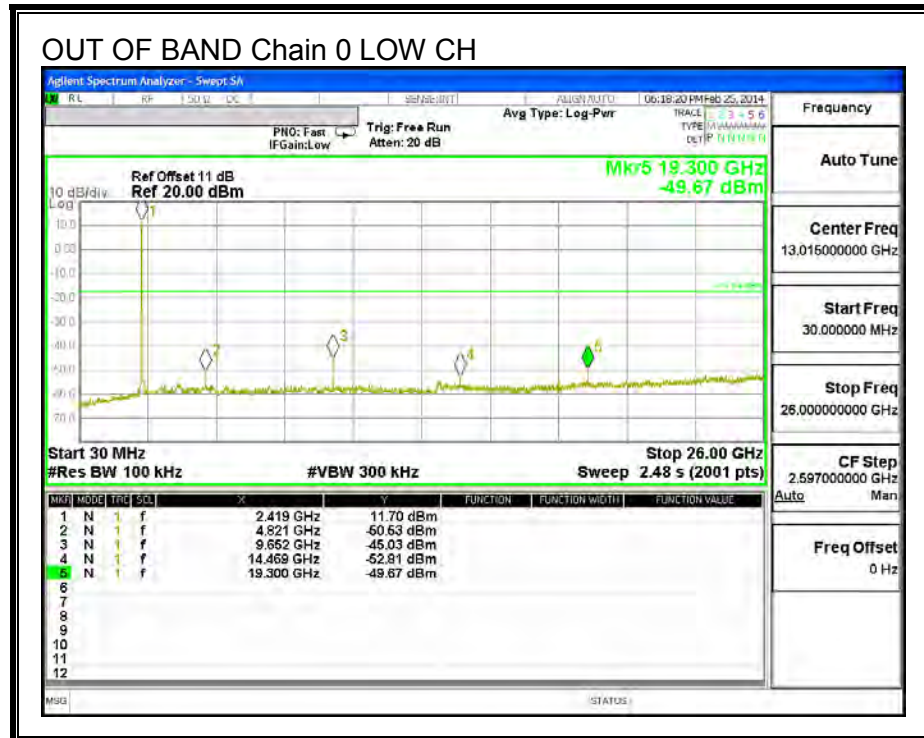
LOW CHANNEL BANDEDGE, Chain 0

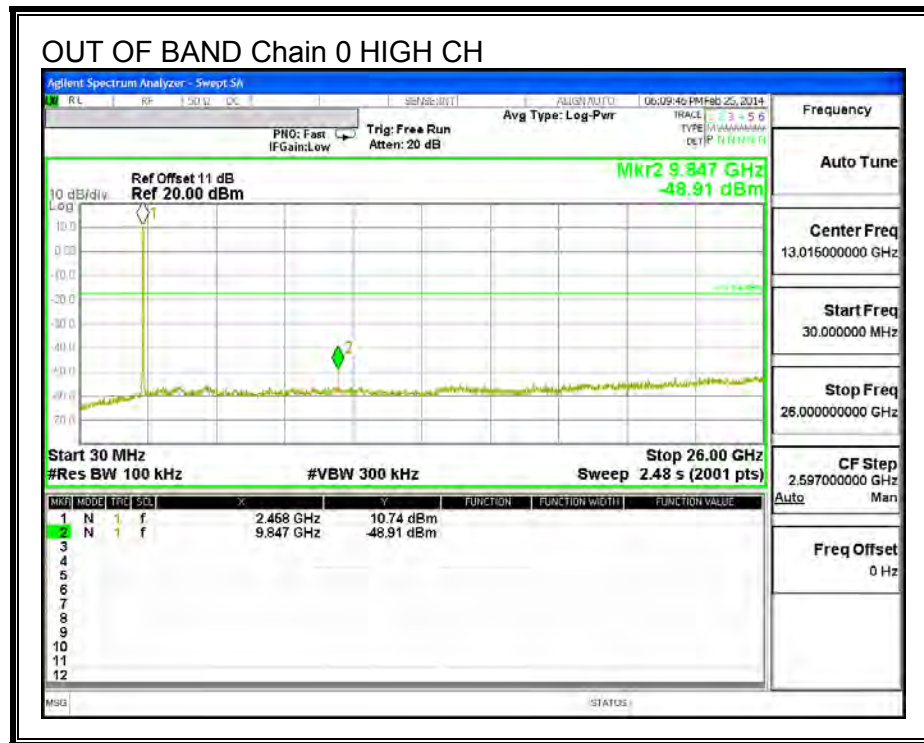


HIGH CHANNEL BANDEDGE, Chain 0

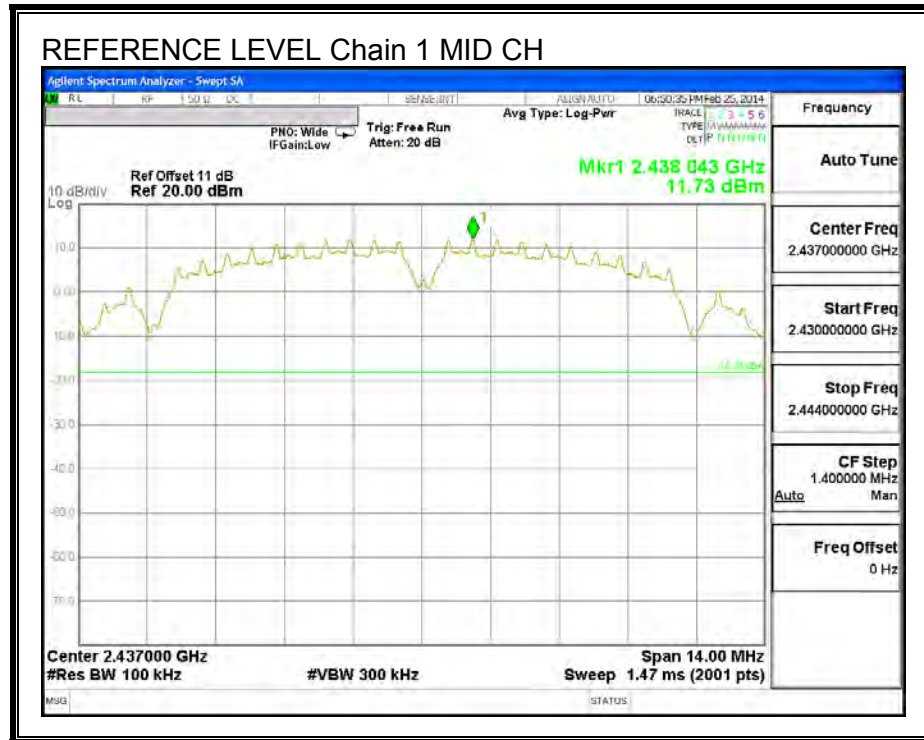


OUT-OF-BAND EMISSIONS, Chain 0

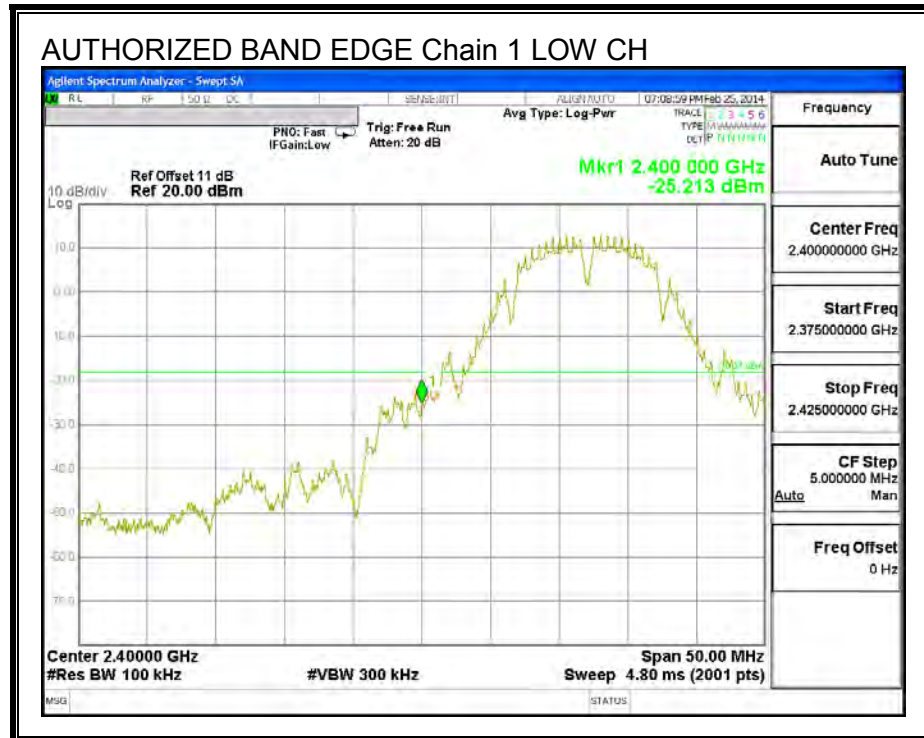




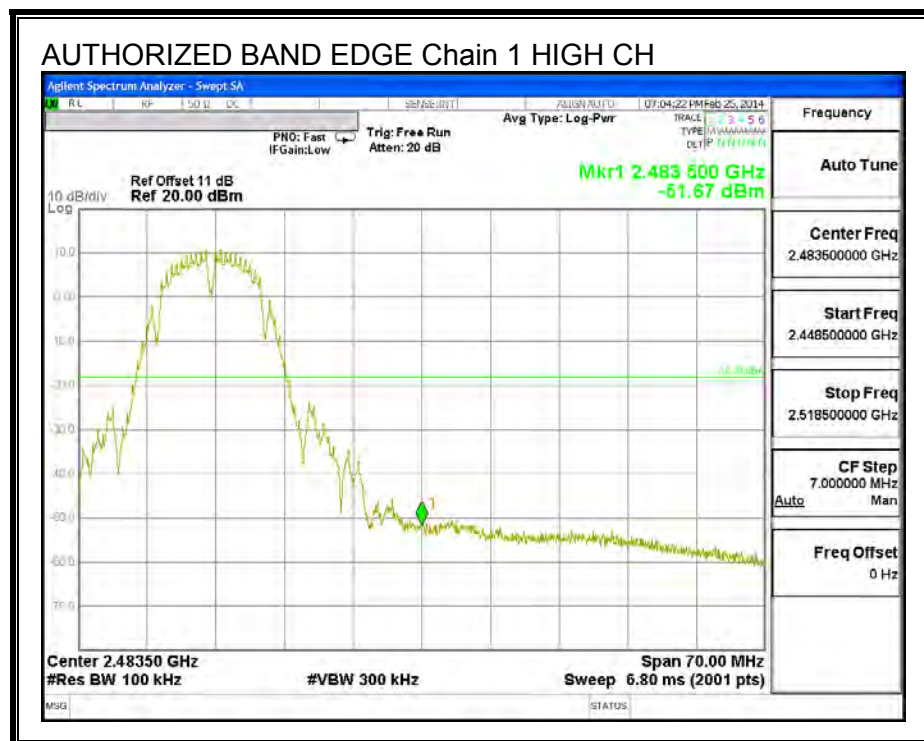
IN-BAND REFERENCE LEVEL, Chain 1



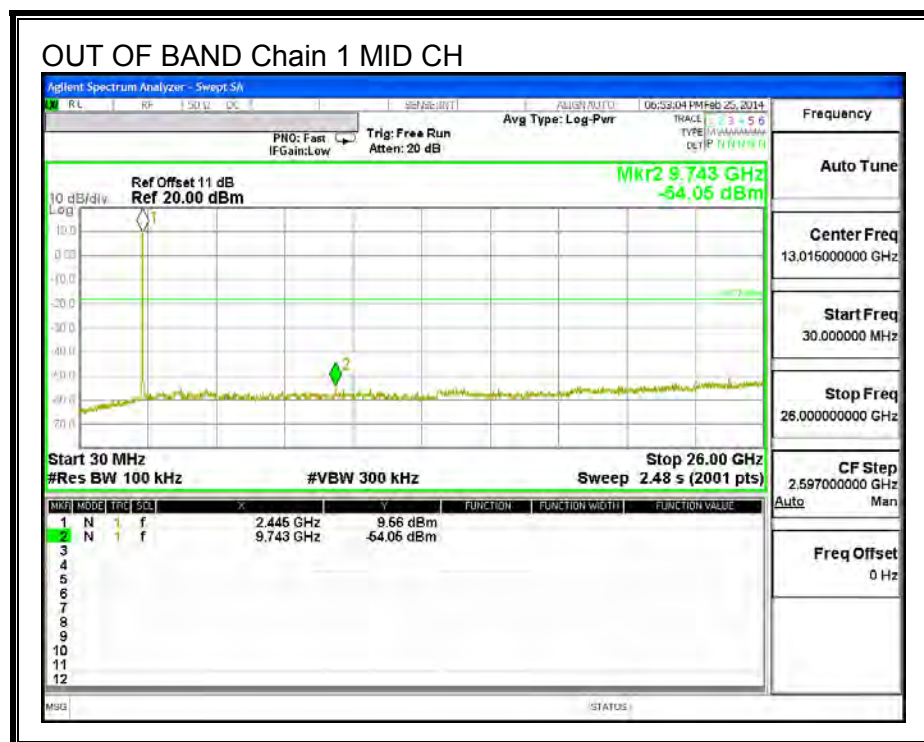
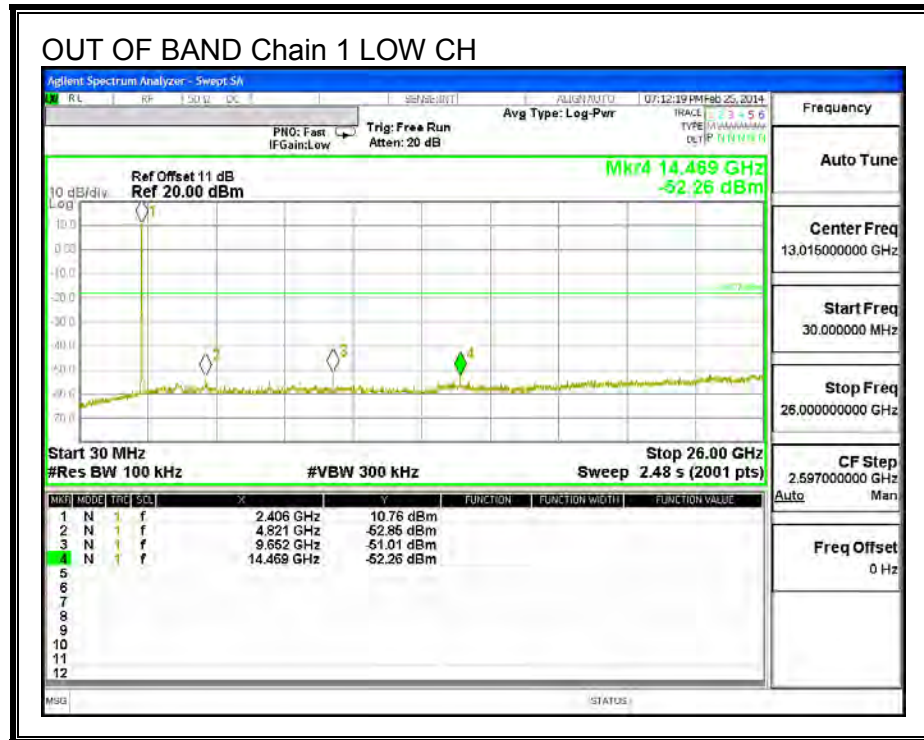
LOW CHANNEL BANDEDGE, Chain 1

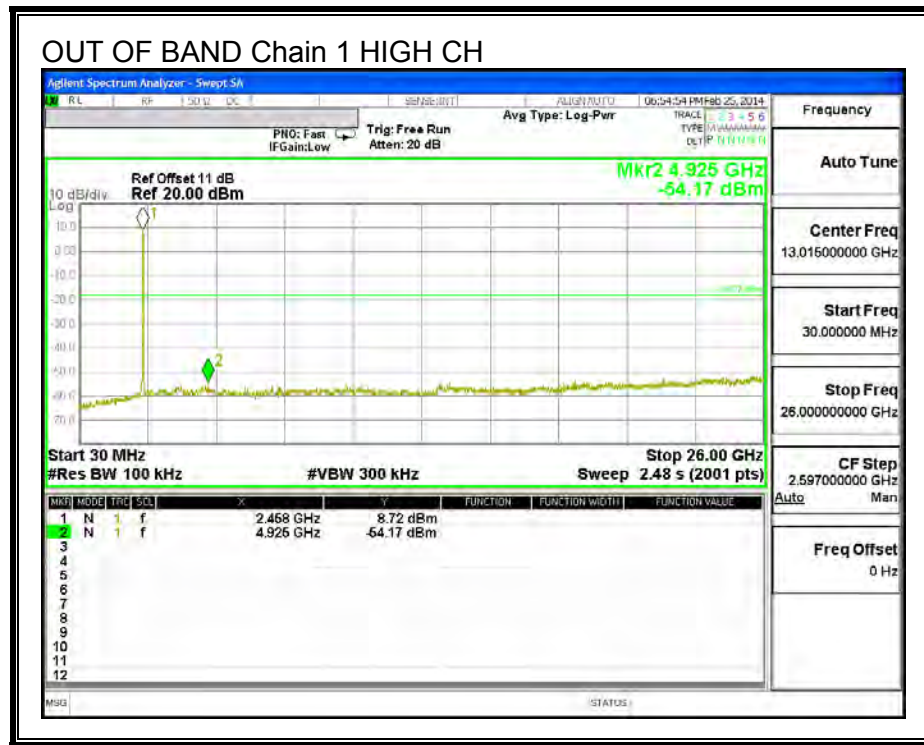


HIGH CHANNEL BANDEDGE, Chain 1

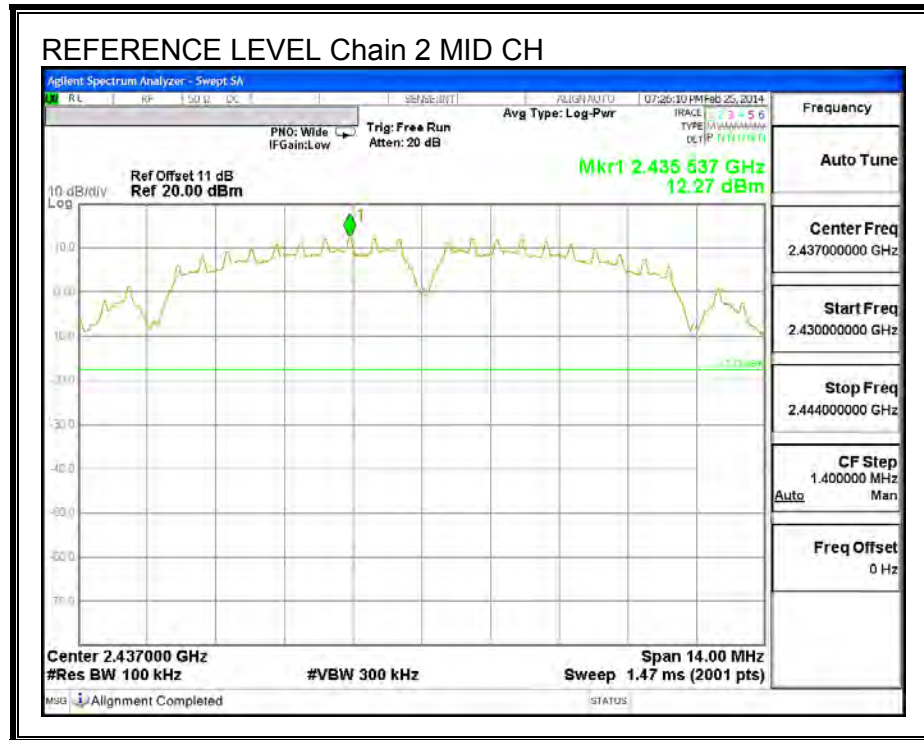


OUT-OF-BAND EMISSIONS, Chain 1

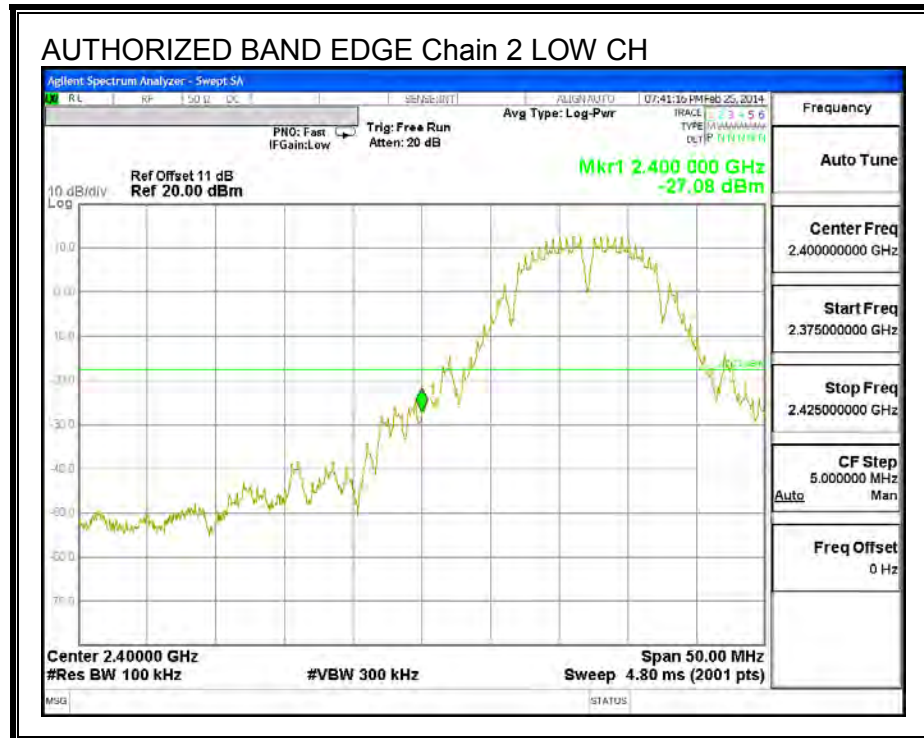




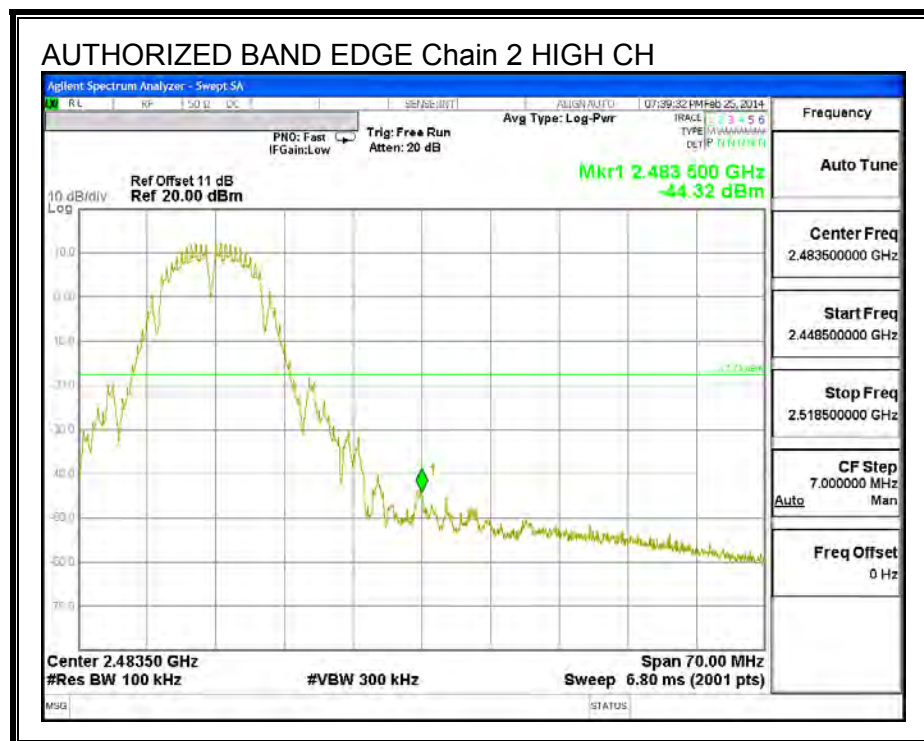
IN-BAND REFERENCE LEVEL, Chain 2



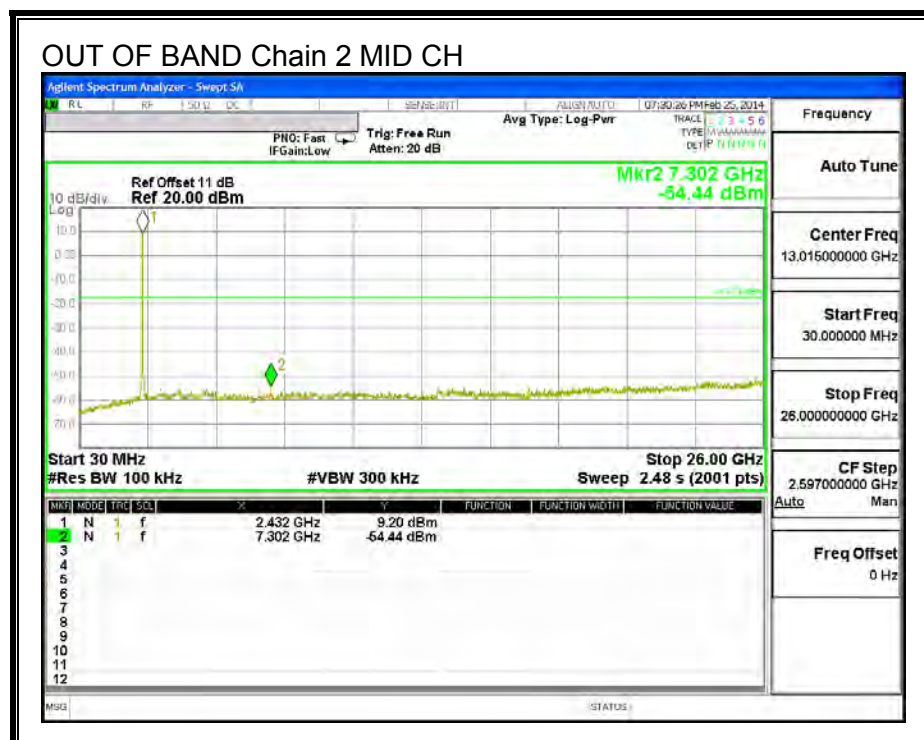
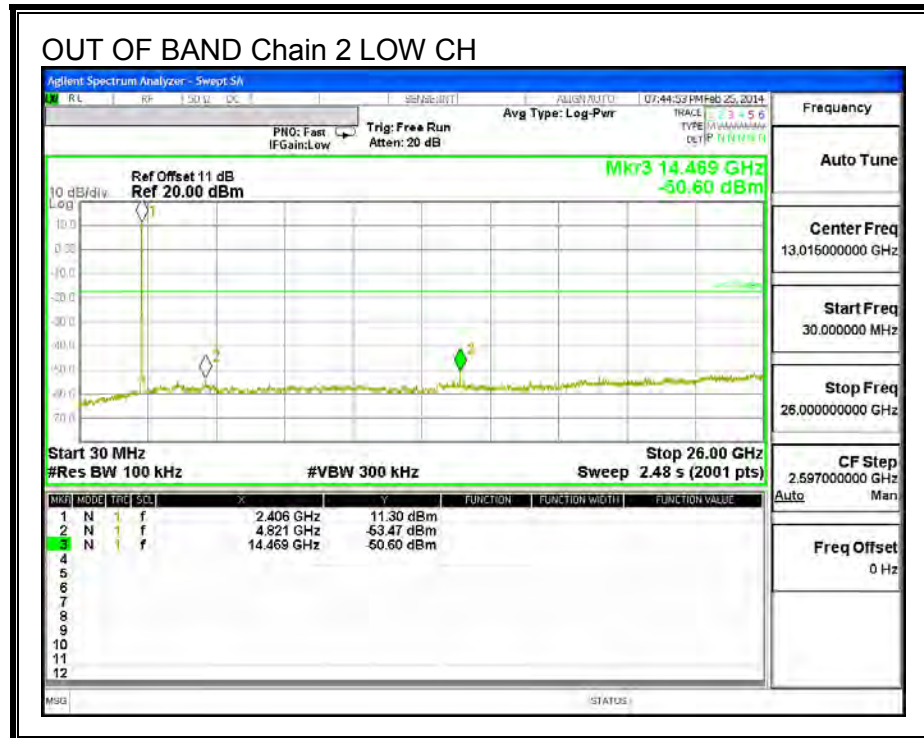
LOW CHANNEL BANDEDGE, Chain 2

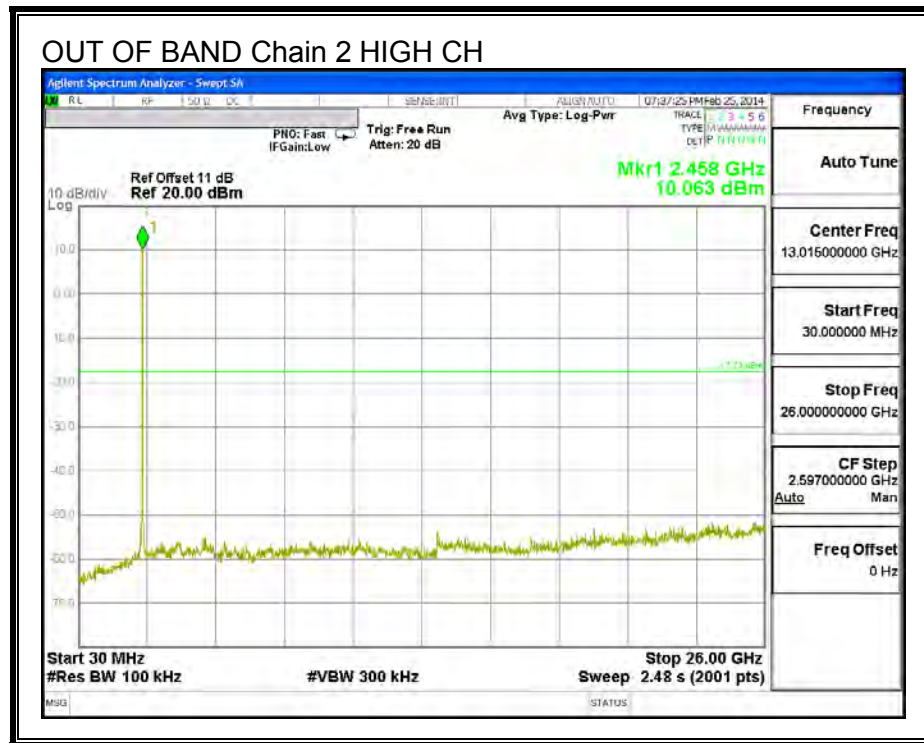


HIGH CHANNEL BANDEDGE, Chain 2



OUT-OF-BAND EMISSIONS, Chain 2





8.2 802.11g Legacy MODE IN THE 2.4 GHz BAND

8.2.1 OUTPUT POWER

LIMITS

FCC §15.247

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

This is SISO mode, AG is the highest (worst-case) = 5.3 dBi

RESULTS

Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
1	2412	5.30	30.00	30	36	30.00
2	2417	5.30	30.00	30	36	30.00
10	2457	5.30	30.00	30	36	30.00
11	2462	5.30	30.00	30	36	30.00
12	2467	5.30	30.00	30	36	30.00
13	2472	5.30	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)
1	2412	18.18	18.18	30.00	-11.82
2	2417	20.78	20.78	30.00	-9.22
10	2457	19.78	19.78	30.00	-10.22
11	2462	16.34	16.34	30.00	-13.66
12	2467	13.18	13.18	30.00	-16.82
13	2472	9.01	9.01	30.00	-20.99

Note: the power readings above are measured with gated method, and the measurement was taken only during the ON time. No duty cycle correction was necessary.

8.3 802.11n HT20 CDD 3TX MODE IN THE 2.4 GHz BAND

8.3.1 6 dB BANDWIDTH

LIMITS

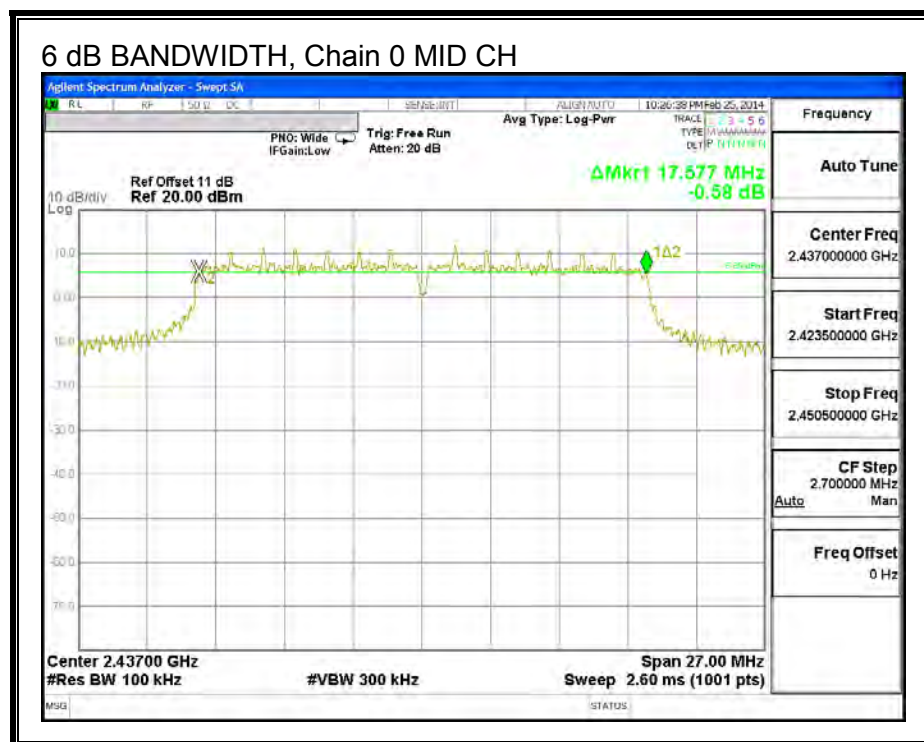
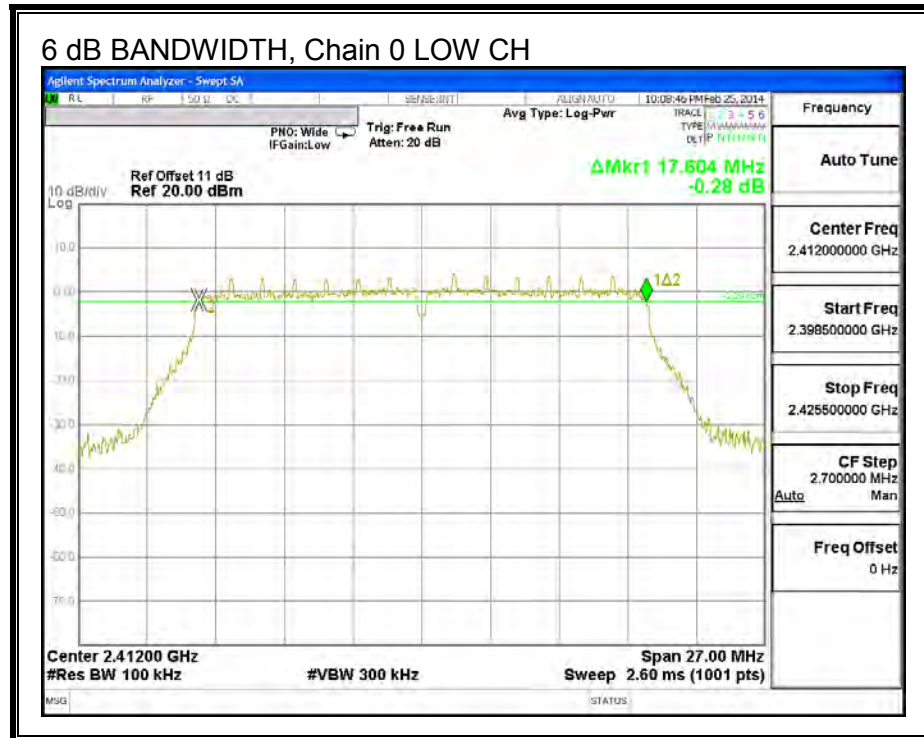
FCC §15.247 (a) (2)

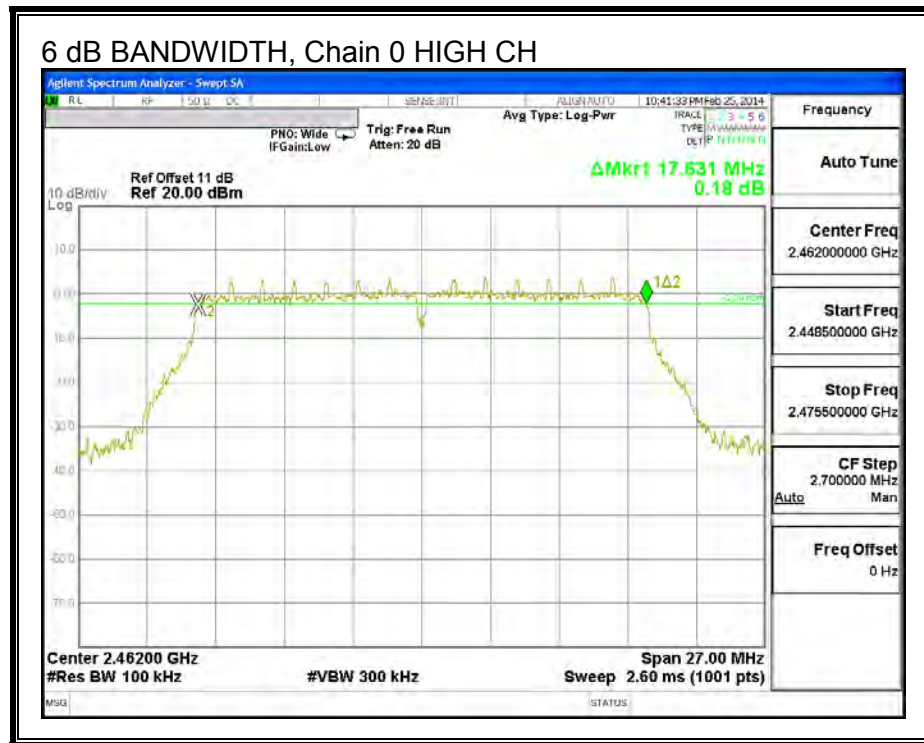
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

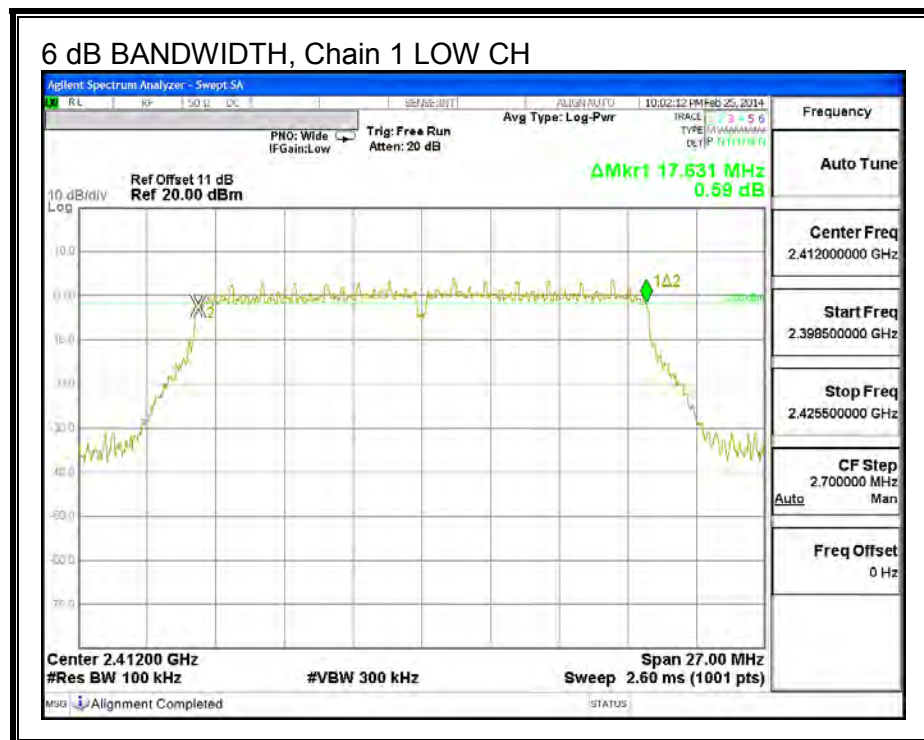
Channel	Frequency (MHz)	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	6 dB BW Chain 2 (MHz)	Minimum Limit (MHz)
Low	2412	17.604	17.631	17.631	0.5
Mid	2437	17.577	17.631	17.604	0.5
High	2462	17.631	17.658	17.631	0.5

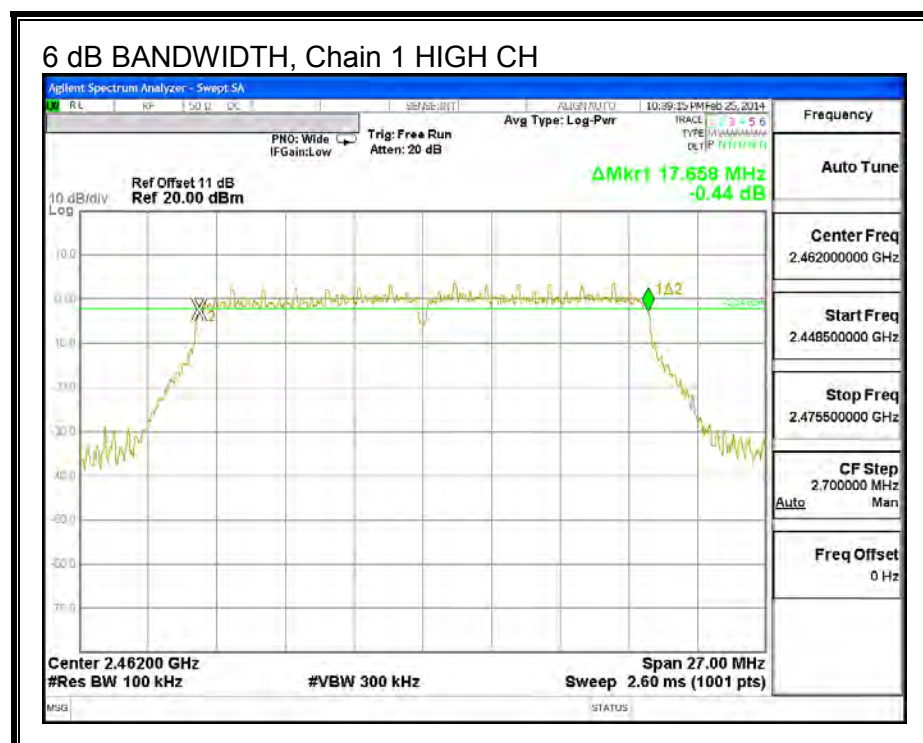
6 dB BANDWIDTH, Chain 0



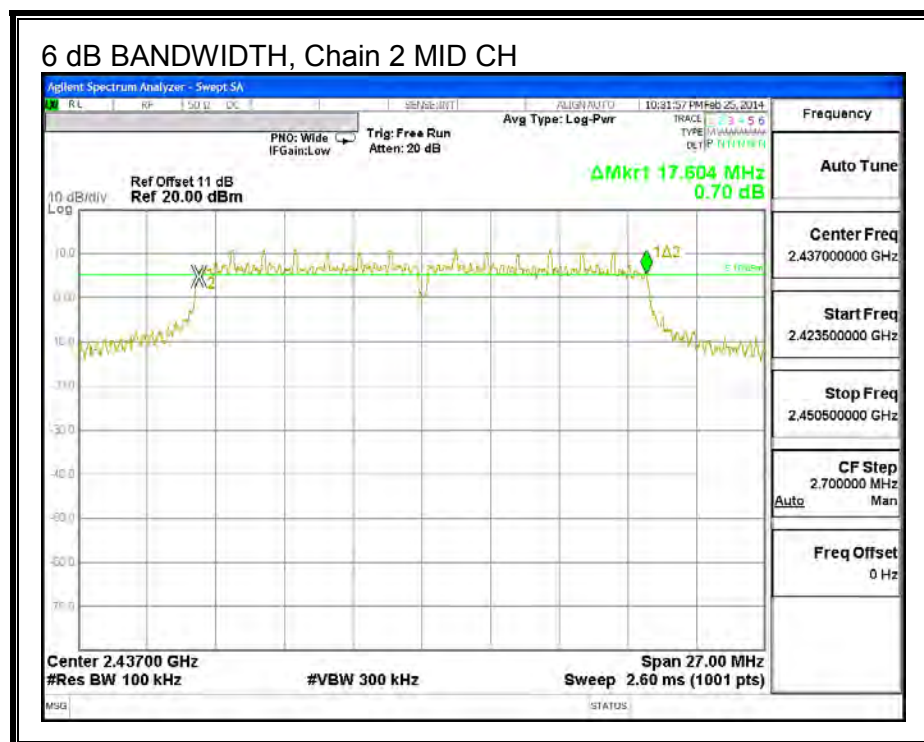
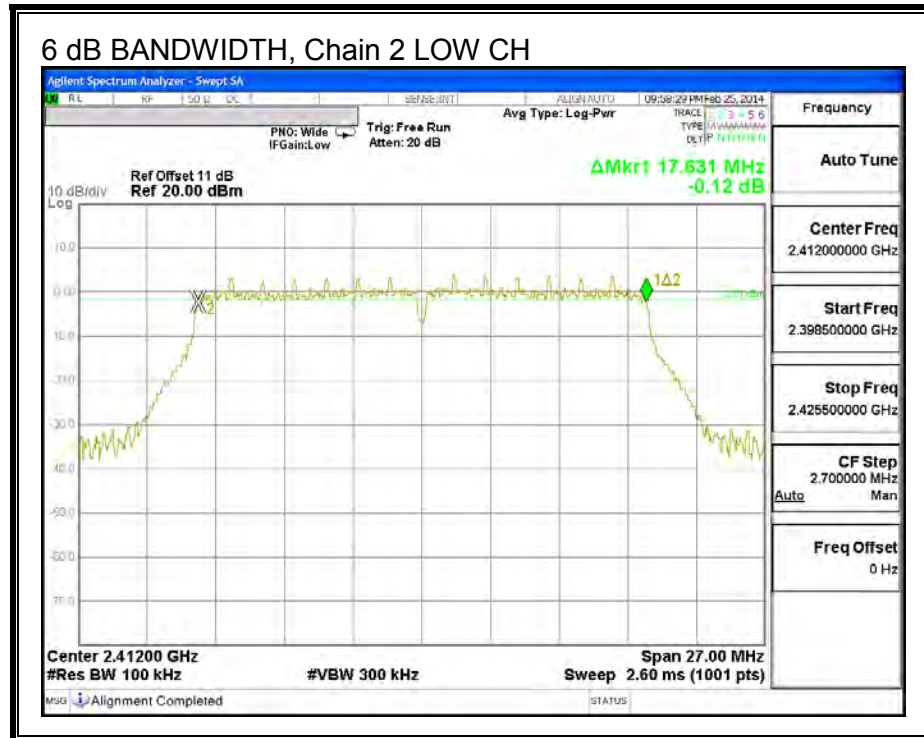


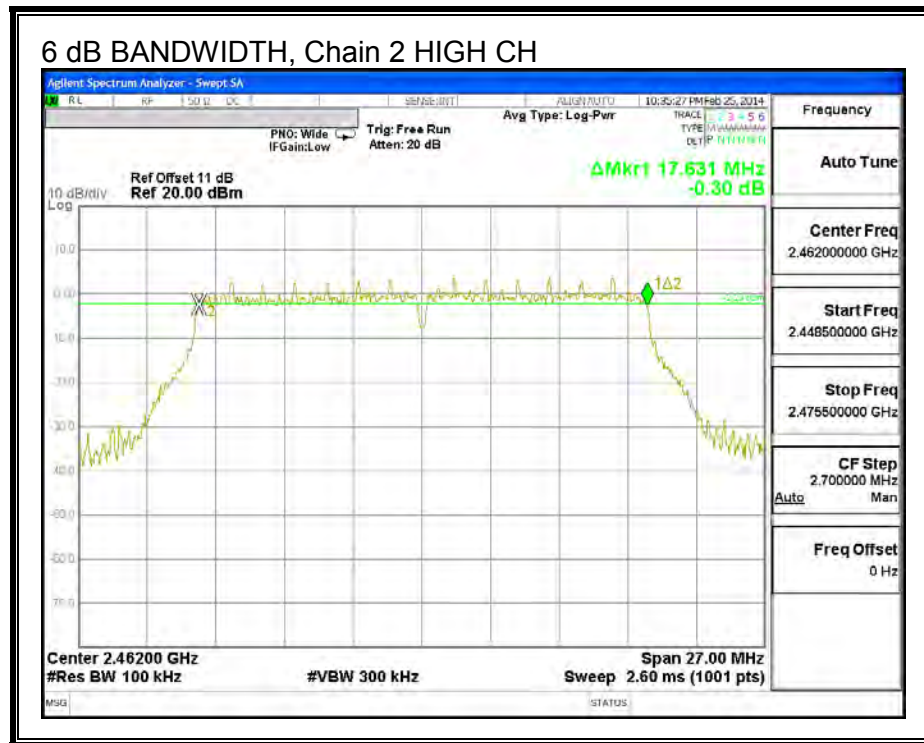
6 dB BANDWIDTH, Chain 1





6 dB BANDWIDTH, Chain 2





8.3.2 99% BANDWIDTH

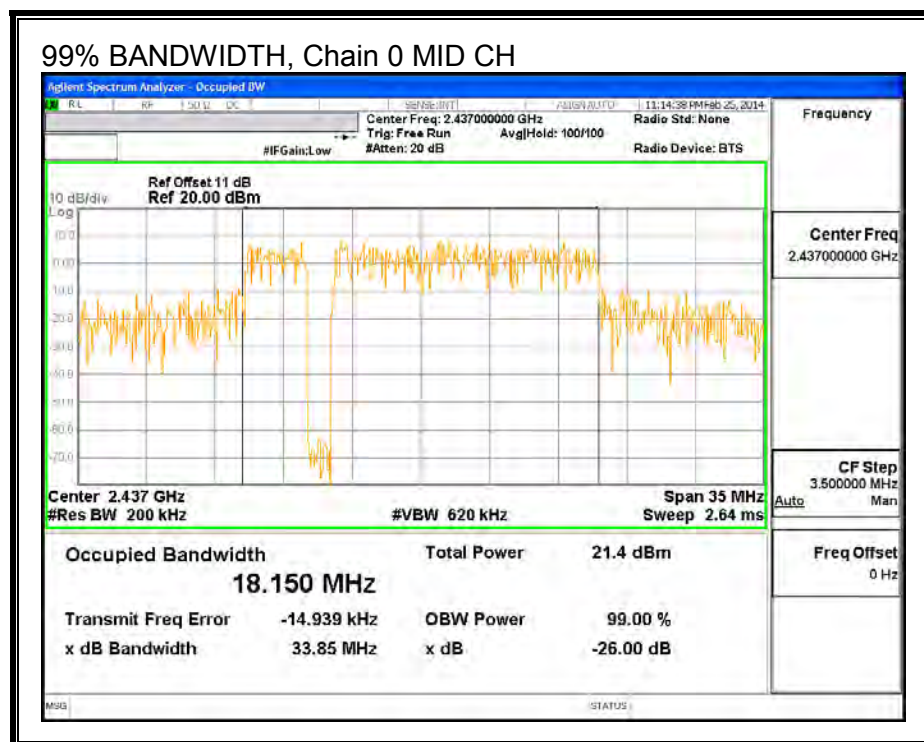
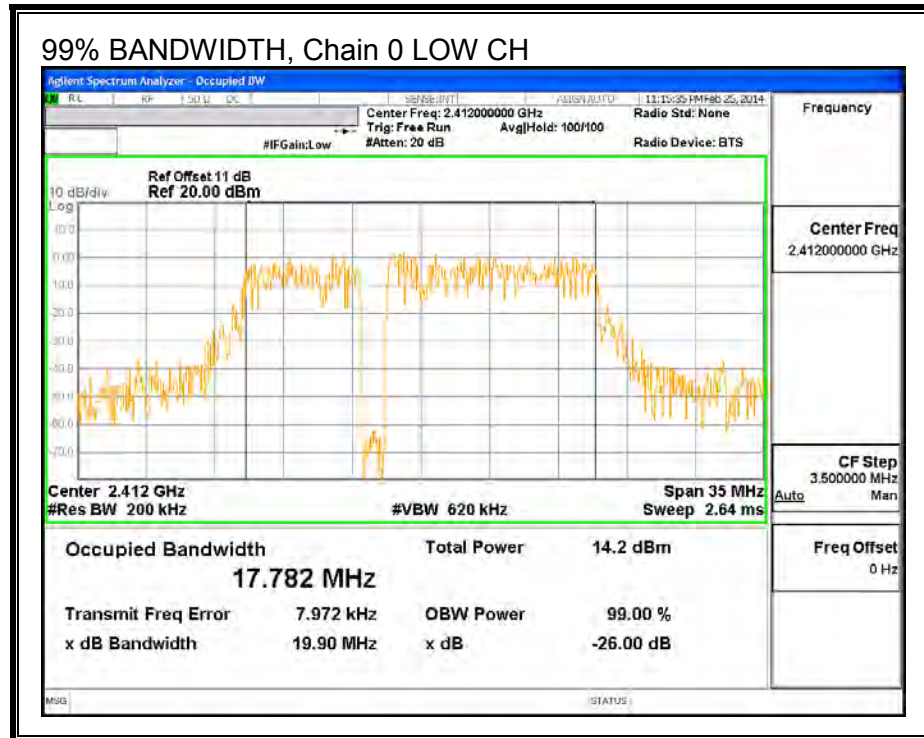
LIMITS

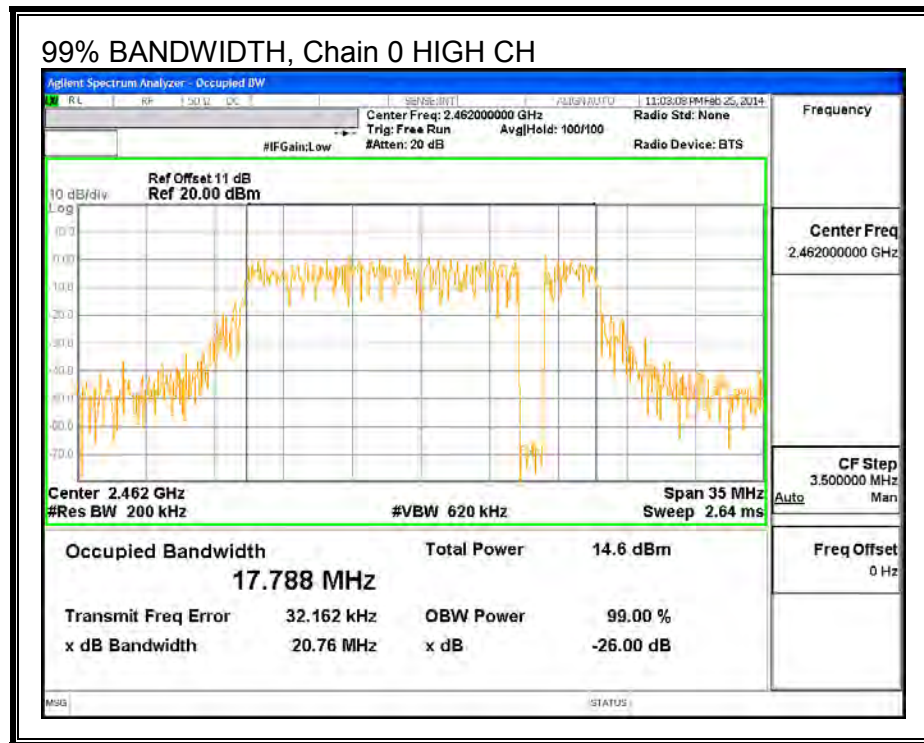
None; for reporting purposes only.

RESULTS

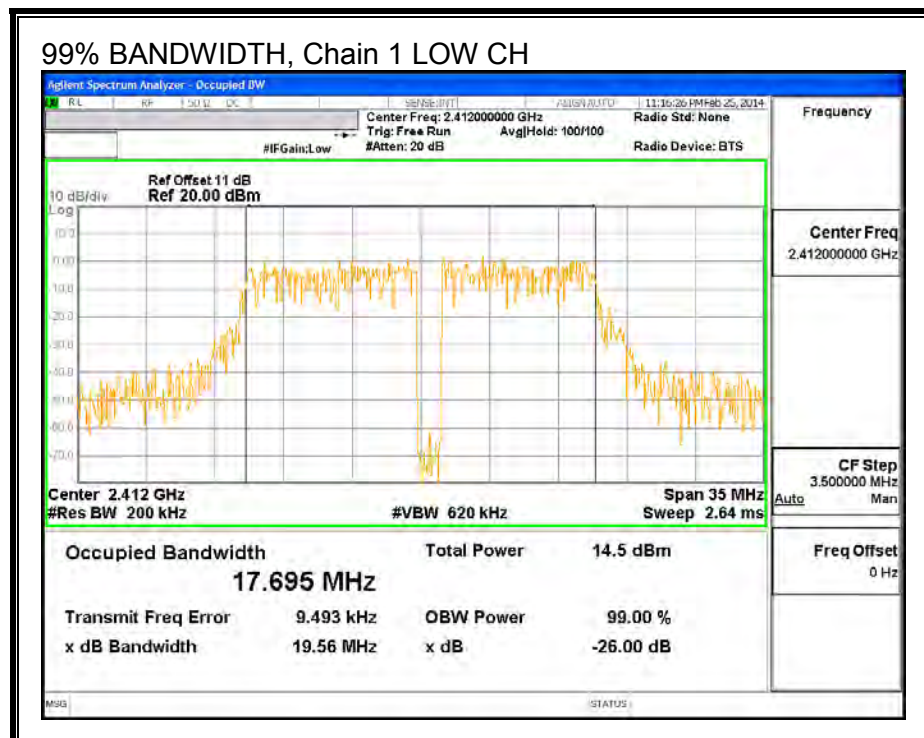
Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)	99% BW Chain 2 (MHz)
Low	2412	17.782	17.695	17.739
Mid	2437	18.150	18.204	18.463
High	2462	17.788	17.699	17.726

99% BANDWIDTH, Chain 0

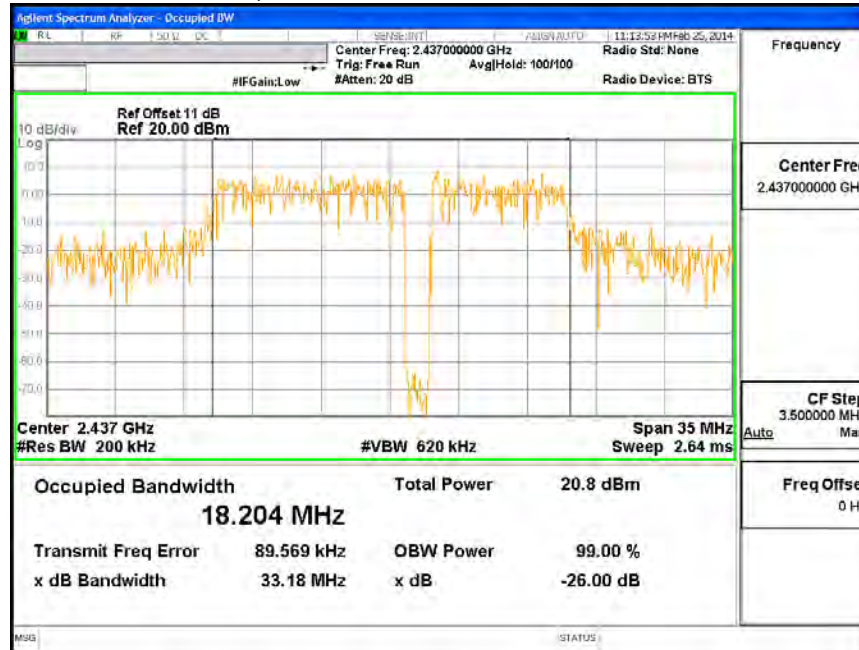




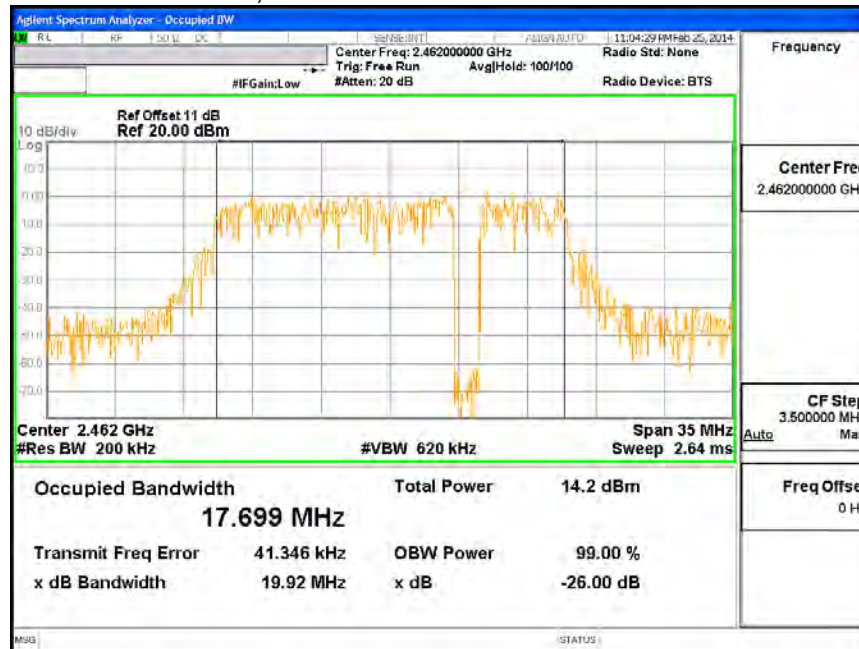
99% BANDWIDTH, Chain 1



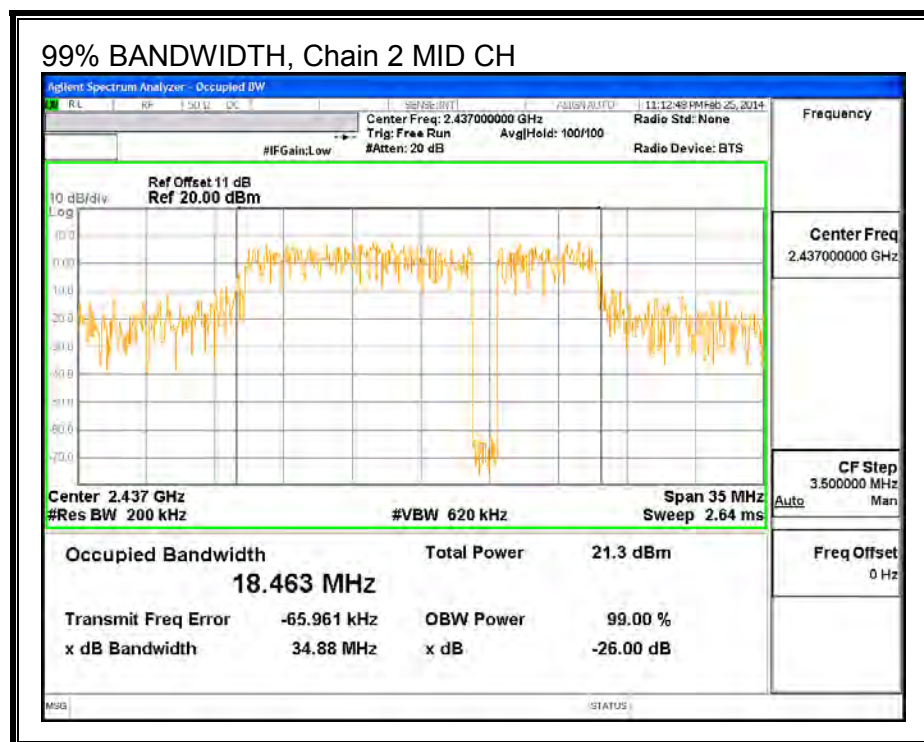
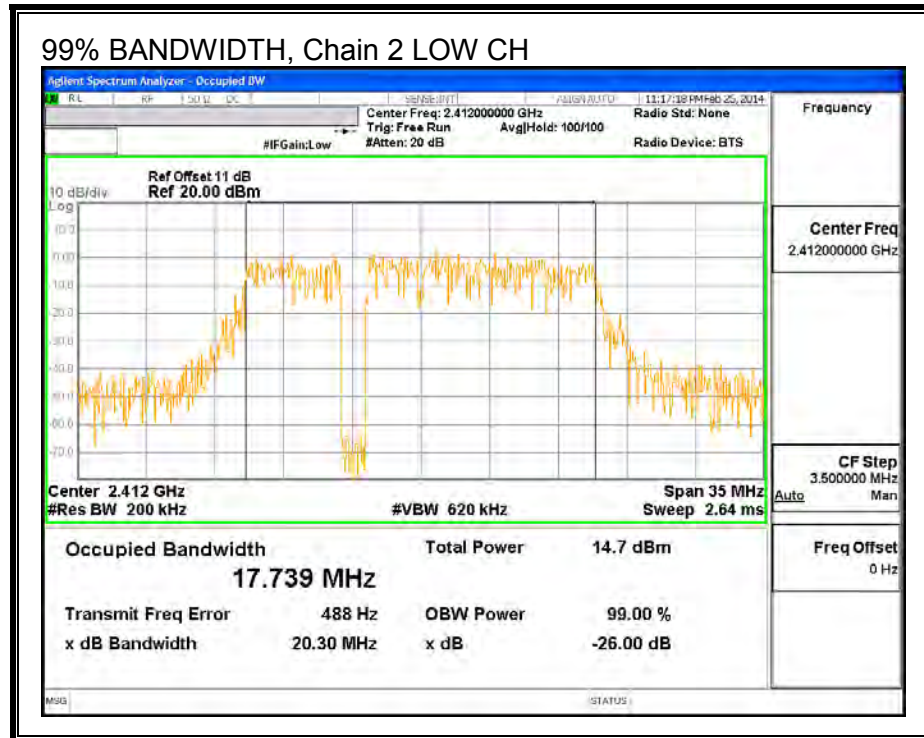
99% BANDWIDTH, Chain 1 MID CH

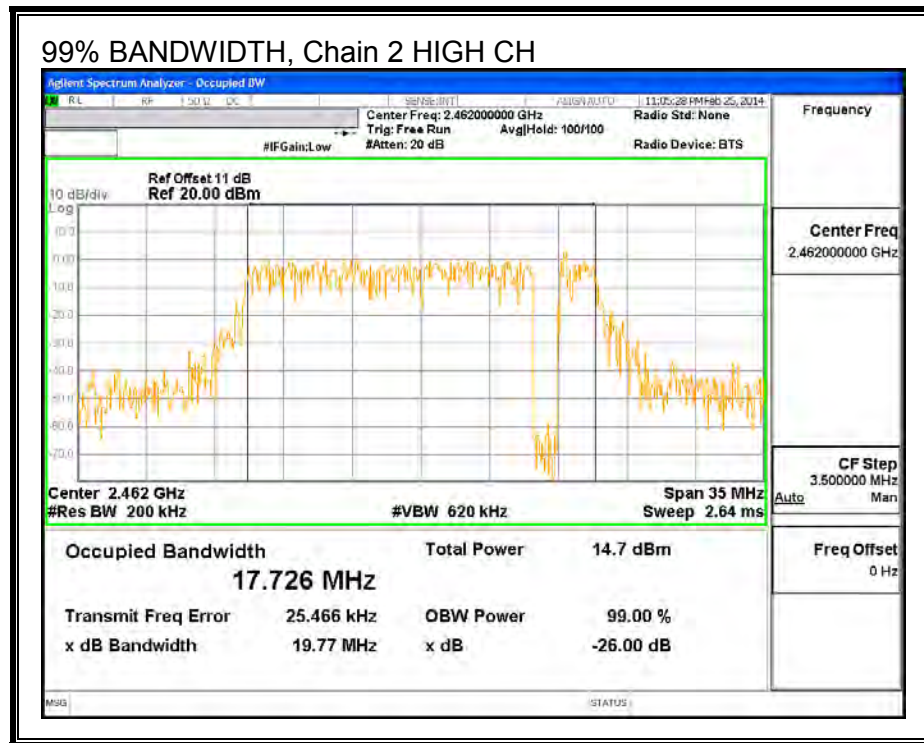


99% BANDWIDTH, Chain 1 HIGH CH



99% BANDWIDTH, Chain 2





8.3.3 OUTPUT POWER

LIMITS

FCC §15.247

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

The TX chains are uncorrelated and the antenna gain is unequal among the chains. The directional gain is:

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
0.12	5.30	4.69	3.90

RESULTS

Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
1	2412	3.90	30.00	30	36	30.00
2	2417	3.90	30.00	30	36	30.00
6	2437	3.90	30.00	30	36	30.00
10	2457	3.90	30.00	30	36	30.00
11	2462	3.90	30.00	30	36	30.00
12	2467	3.90	30.00	30	36	30.00
13	2472	3.90	30.00	30	36	30.00

Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
1	2412	14.45	14.21	14.38	19.12	30.00	-10.88
2	2417	18.20	18.20	19.00	23.25	30.00	-6.75
6	2437	21.48	21.11	21.40	26.10	30.00	-3.90
10	2457	17.60	17.80	18.50	22.76	30.00	-7.24
11	2462	13.40	13.50	14.10	18.45	30.00	-11.55
12	2467	11.30	11.50	12.30	16.49	30.00	-13.51
13	2472	7.60	7.70	7.60	12.40	30.00	-17.60

Note: the power readings above are measured with gated method, and the measurement was taken only during the ON time. No duty cycle correction was necessary.

8.3.4 POWER SPECTRAL DENSITY

LIMITS

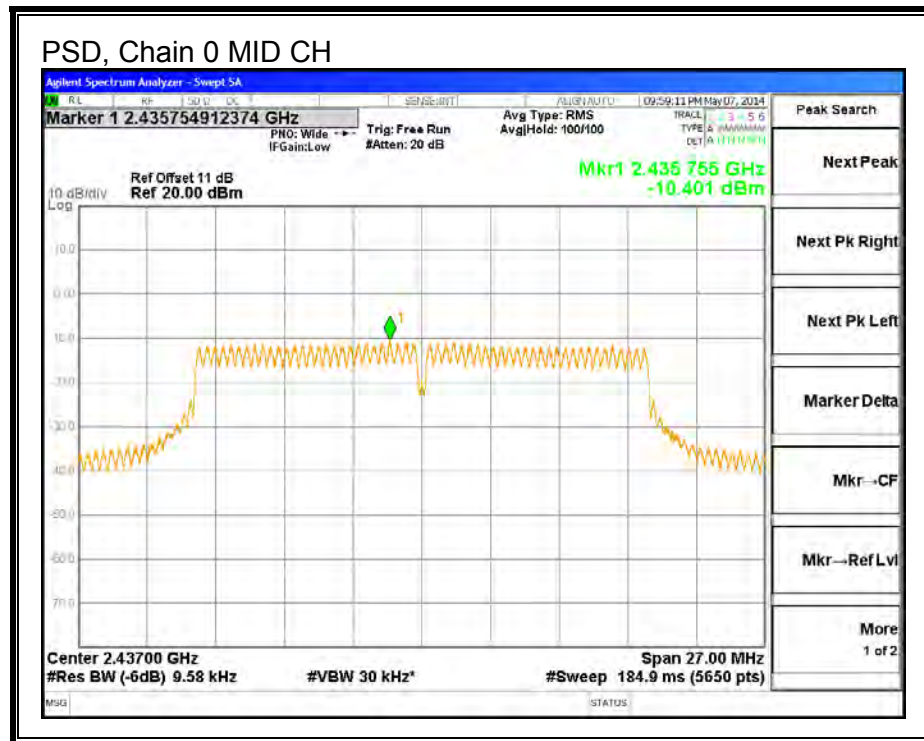
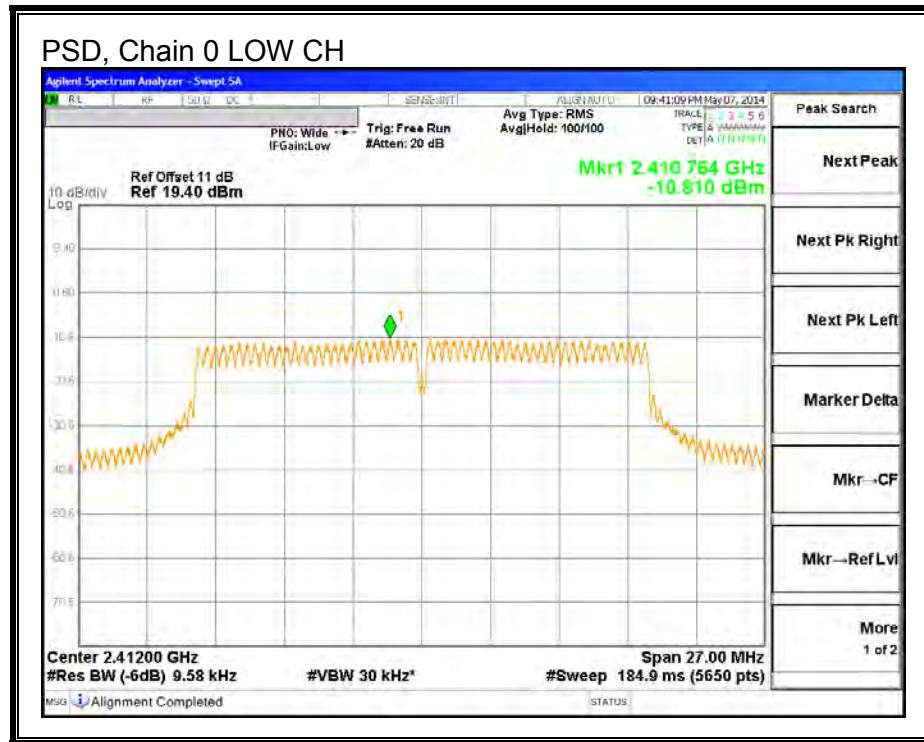
FCC §15.247

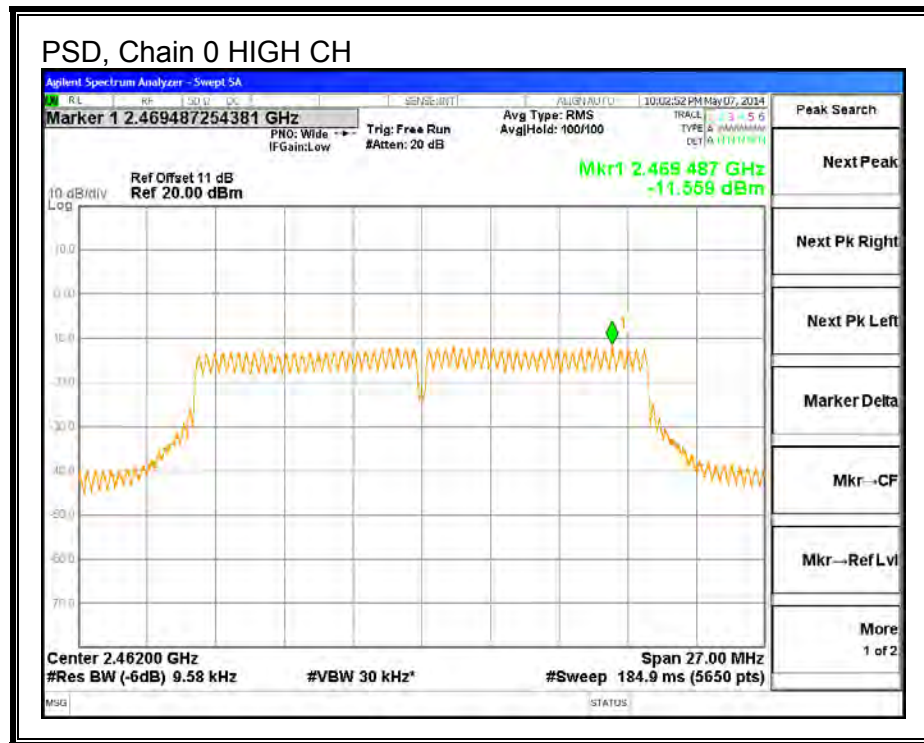
RESULTS

PSD Results

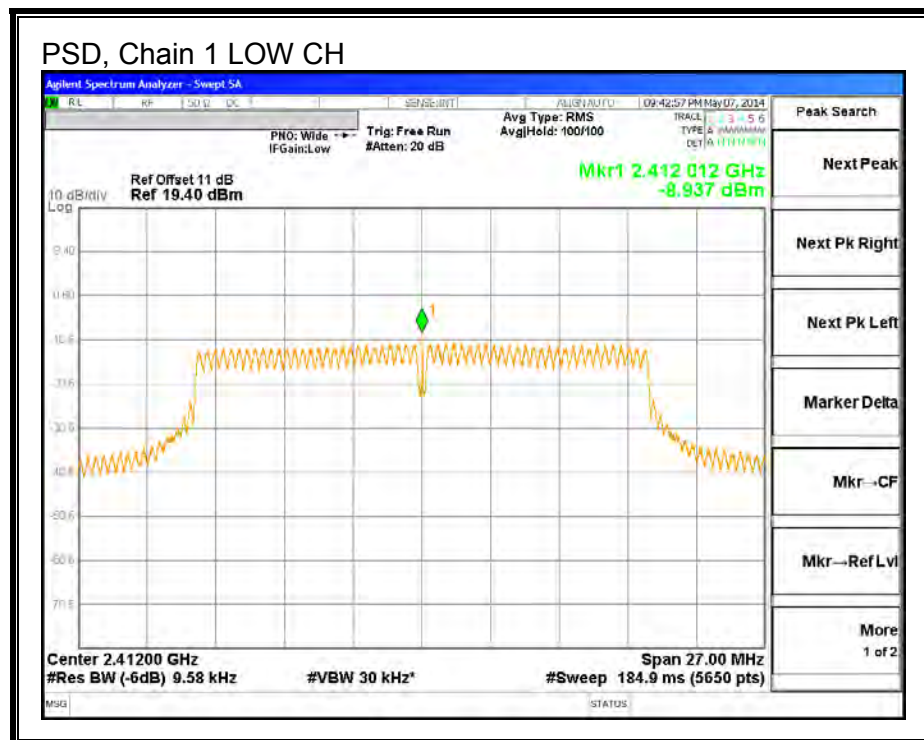
Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Chain 1 Meas (dBm)	Chain 2 Meas (dBm)	Total PSD (dBm)	Limit (dBm)	Margin (dB)
Low	2412	-10.810	-8.937	-10.789	-5.31	8.0	-13.3
Mid	2437	-10.401	-8.084	-10.568	-4.76	8.0	-12.8
High	2462	-11.559	-10.681	-11.555	-6.47	8.0	-14.5

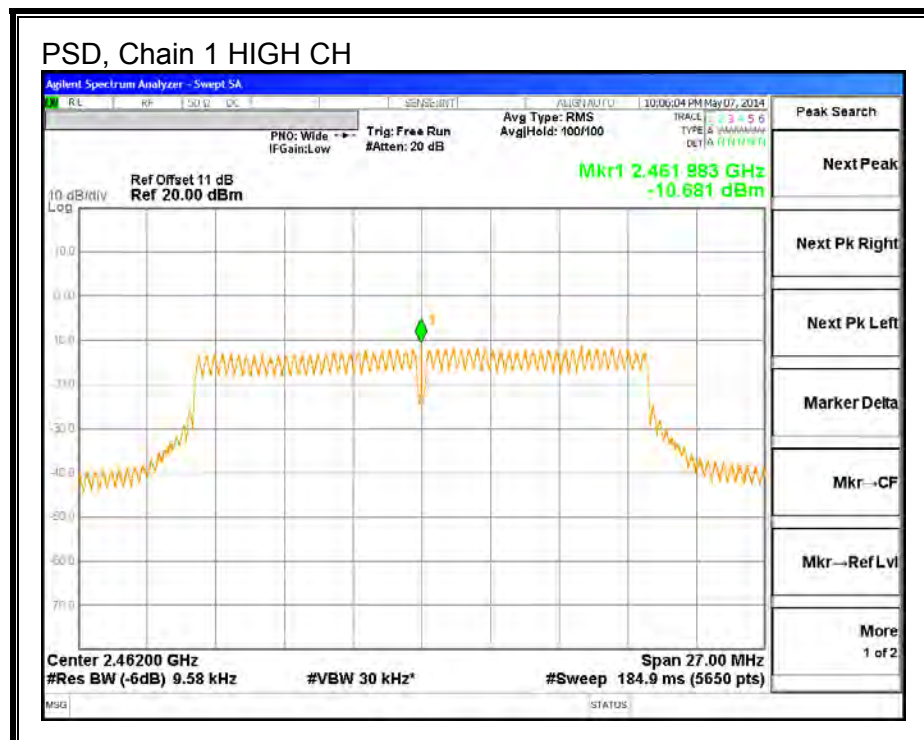
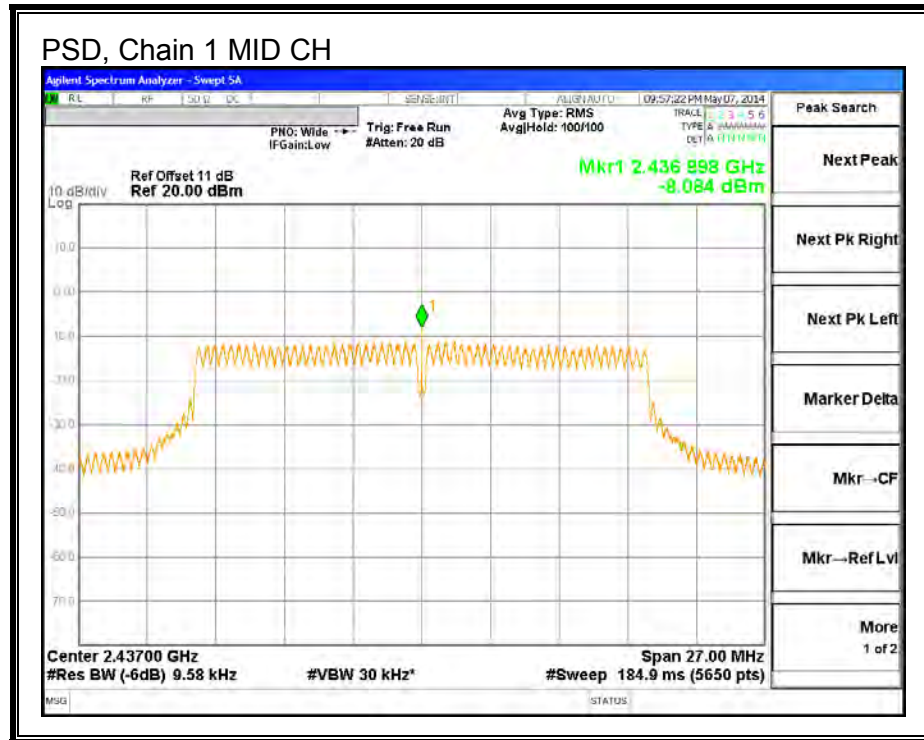
PSD, Chain 0



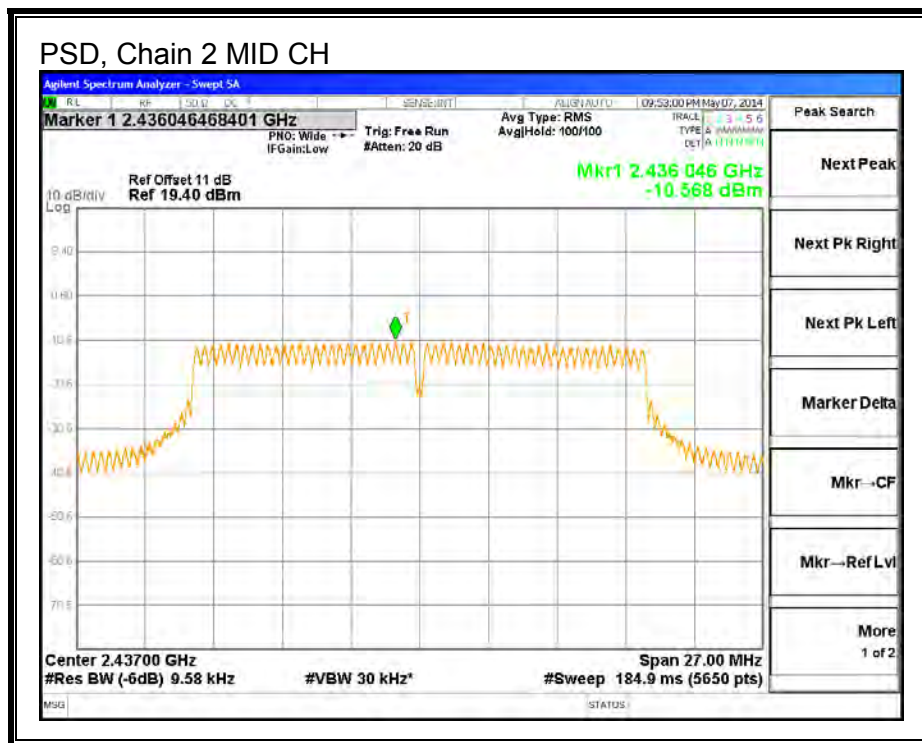
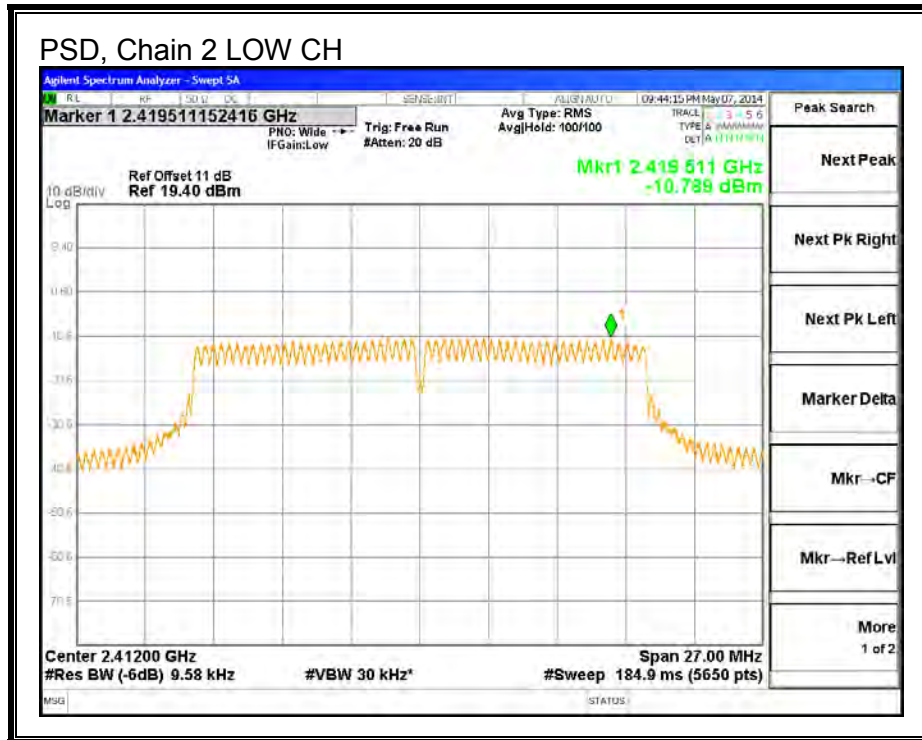


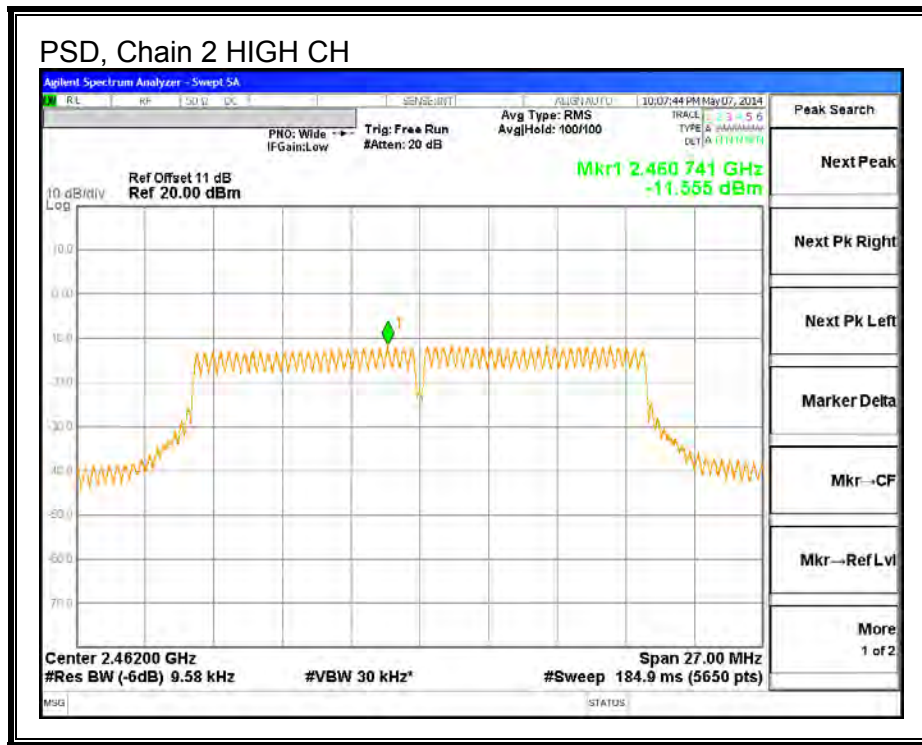
PSD, Chain 1





PSD, Chain 2





8.3.5 OUT-OF-BAND EMISSIONS

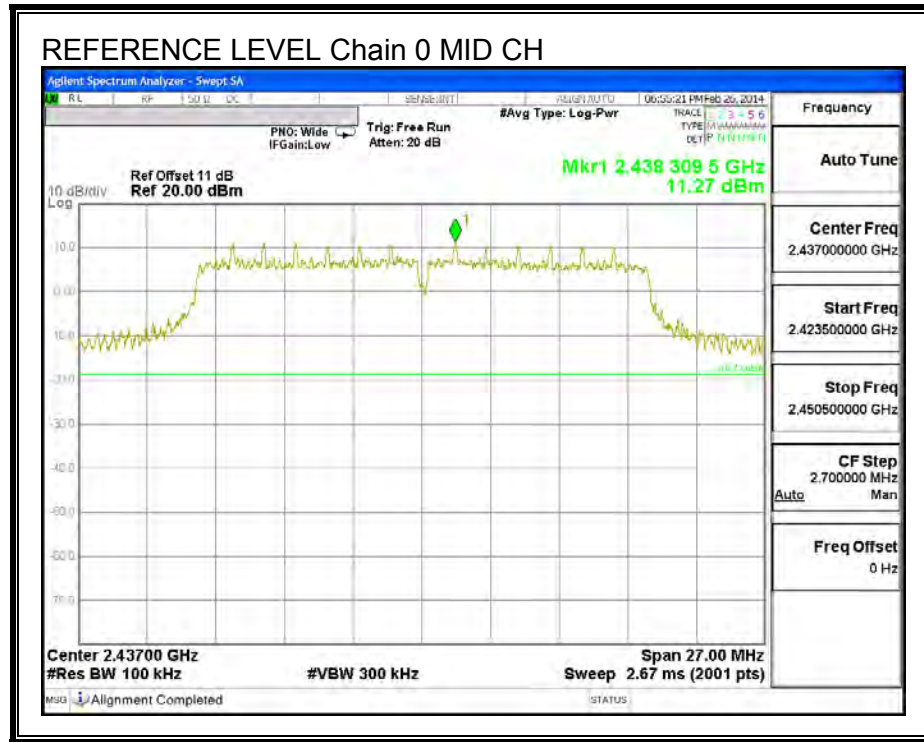
LIMITS

FCC §15.247 (d)

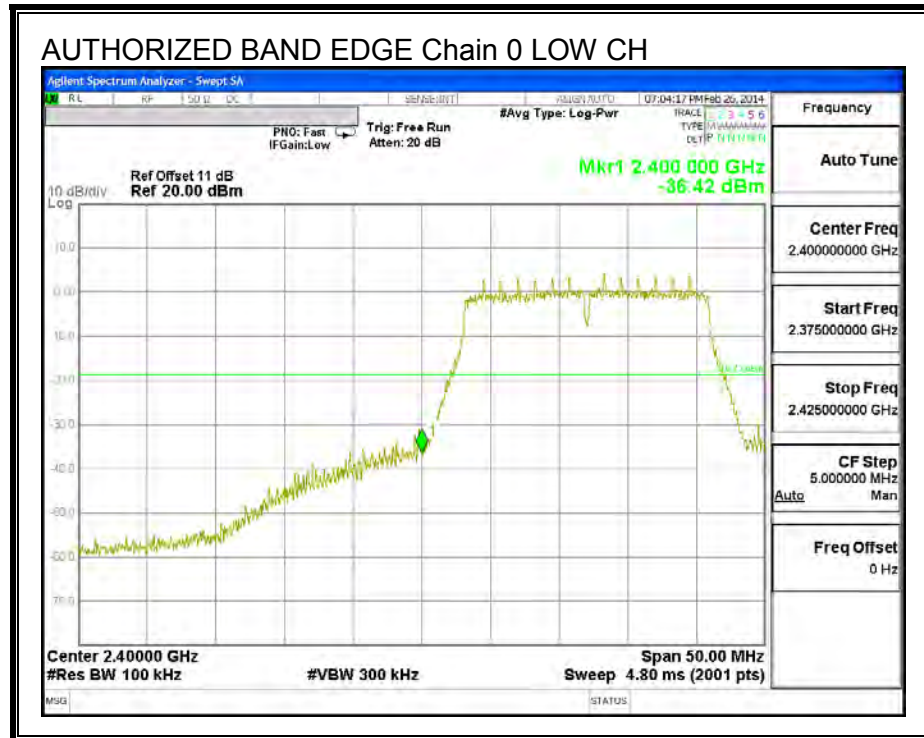
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the 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.

RESULTS

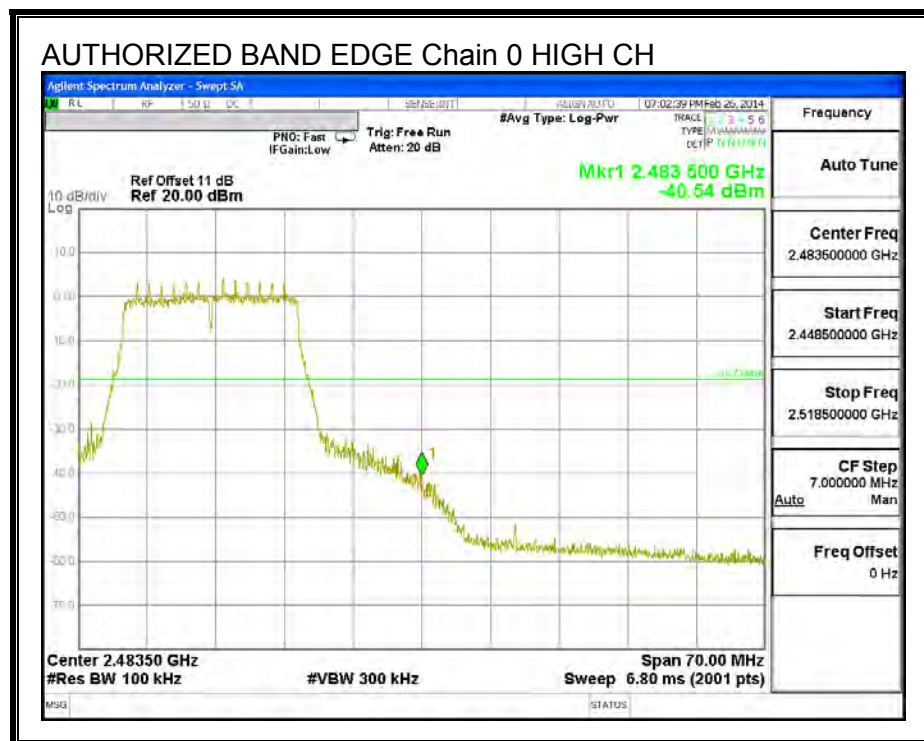
IN-BAND REFERENCE LEVEL, Chain 0



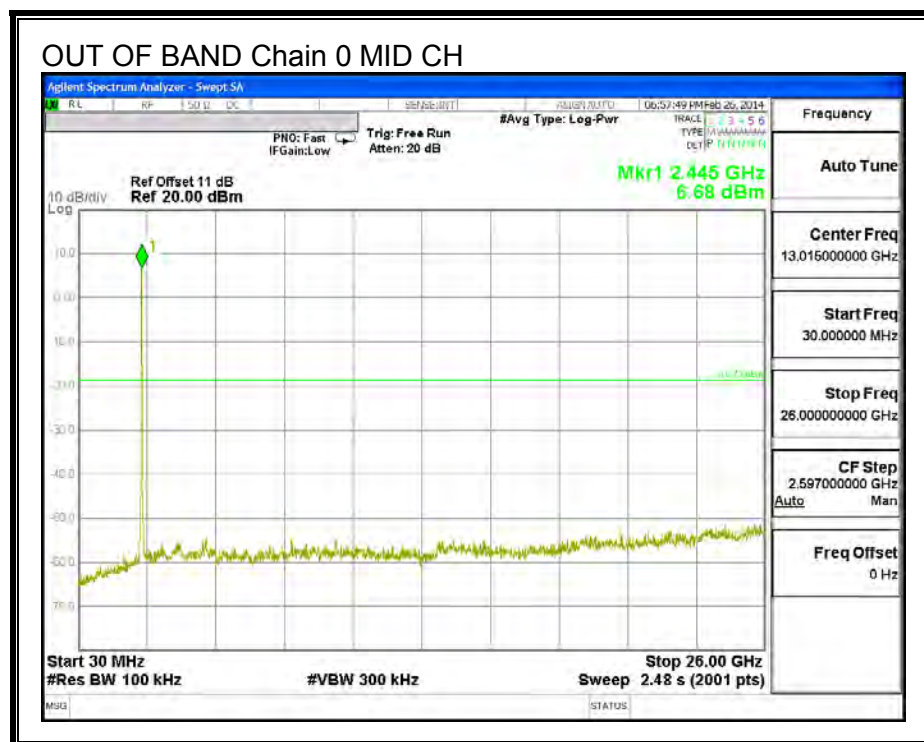
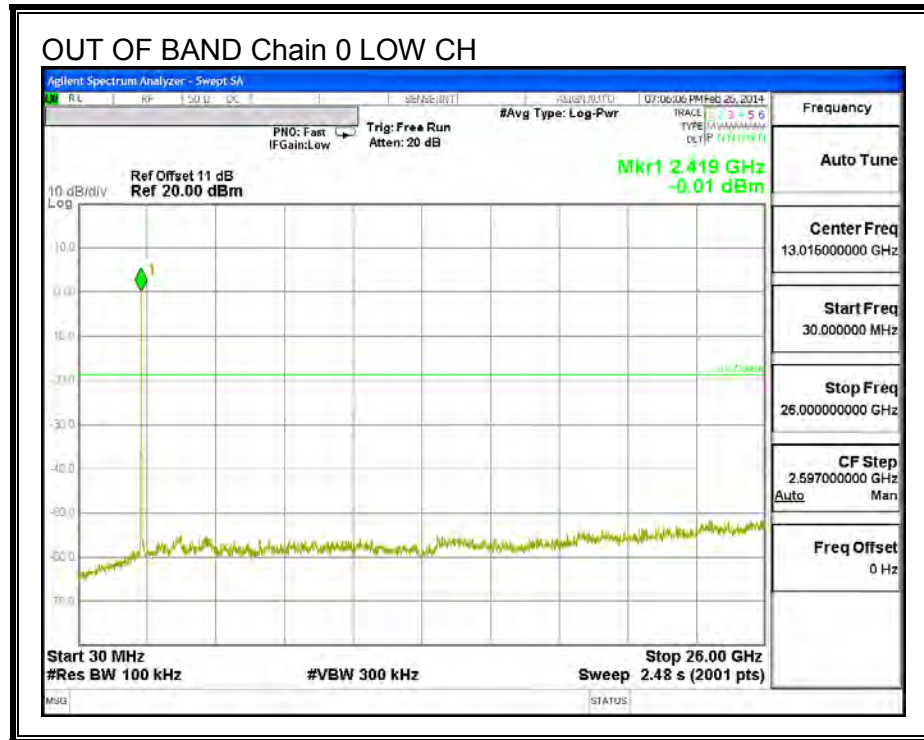
LOW CHANNEL BANDEDGE, Chain 0



HIGH CHANNEL BANDEDGE, Chain 0

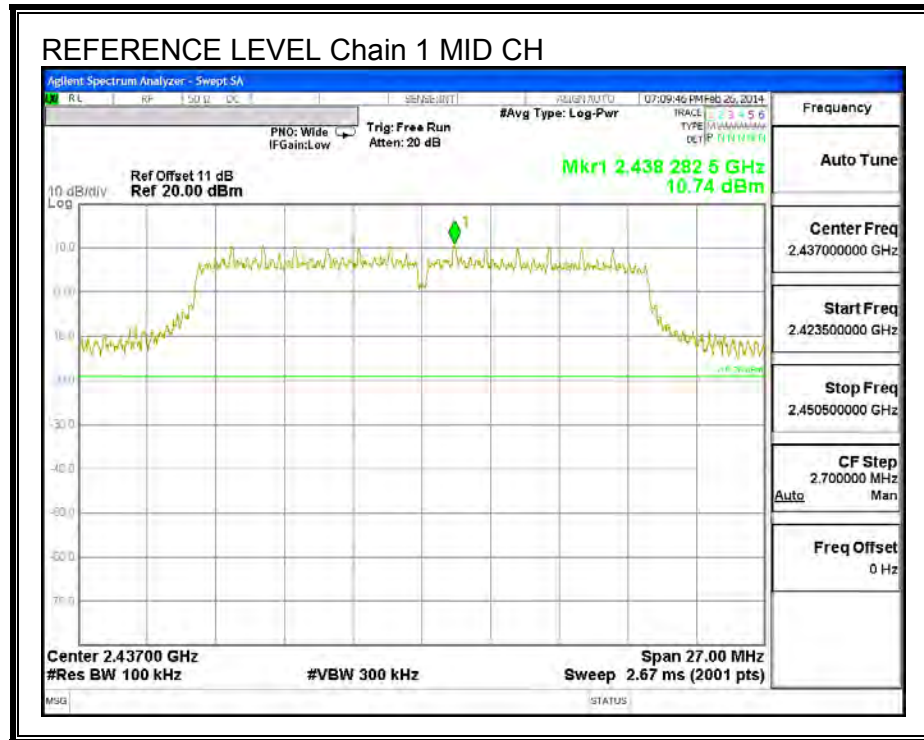


OUT-OF-BAND EMISSIONS, Chain 0

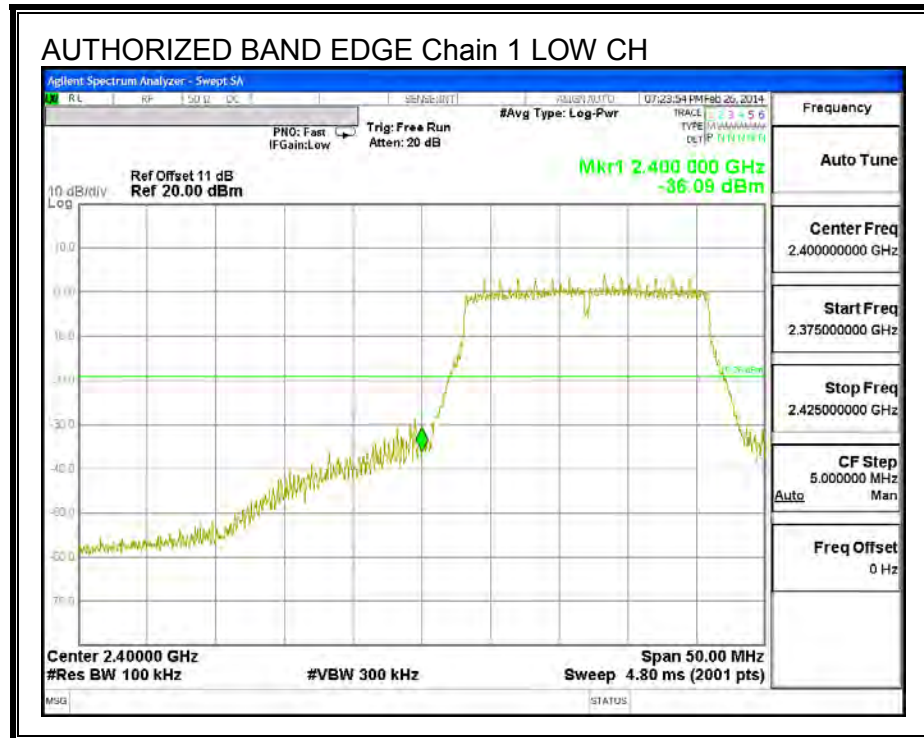




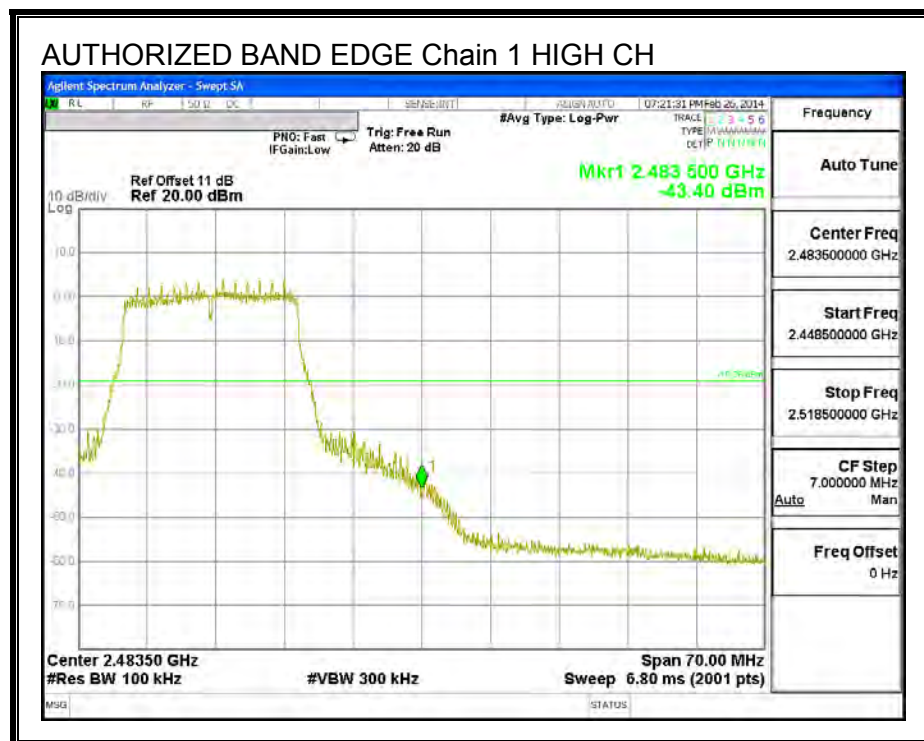
IN-BAND REFERENCE LEVEL, Chain 1



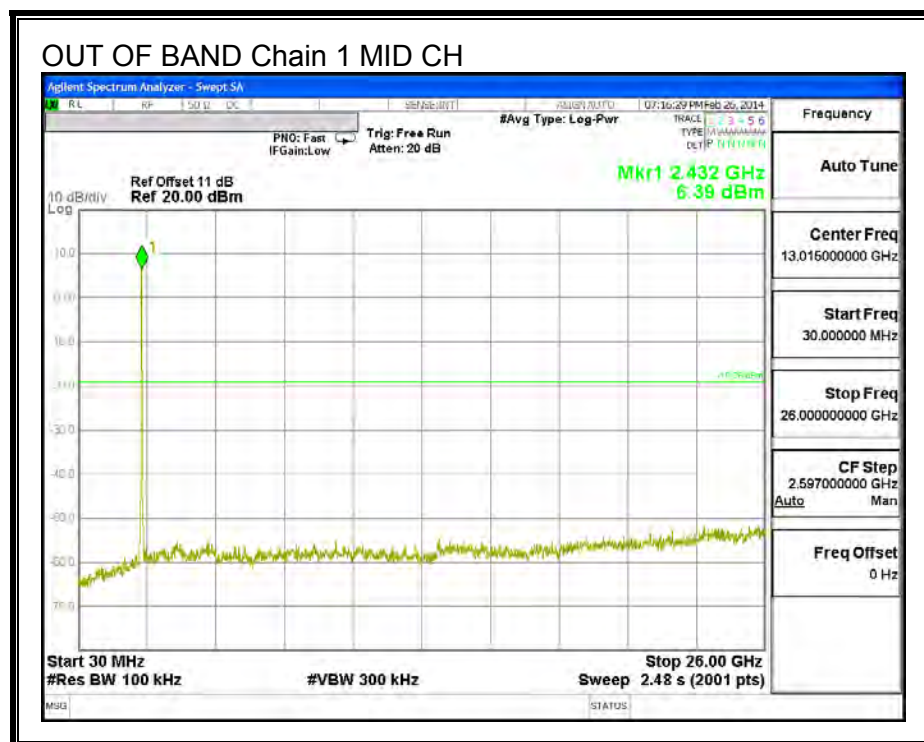
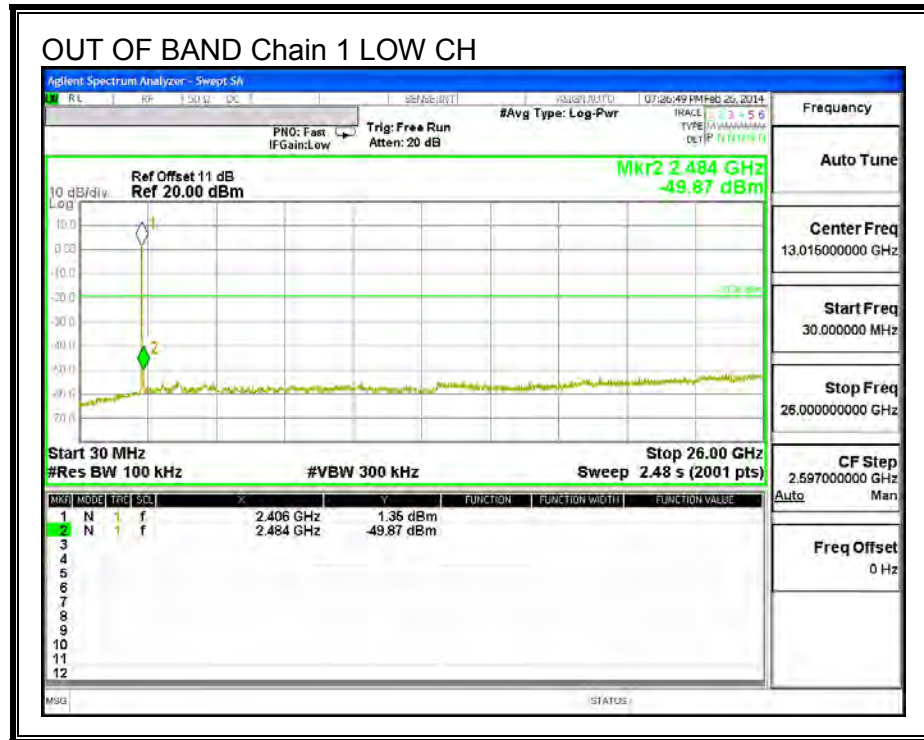
LOW CHANNEL BANDEDGE, Chain 1

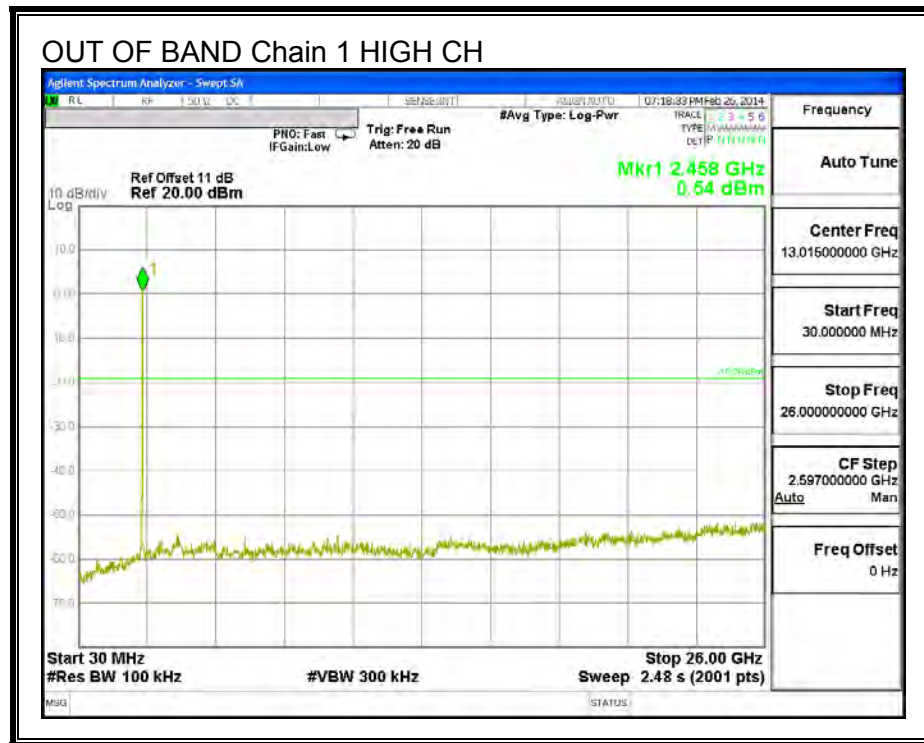


HIGH CHANNEL BANDEDGE, Chain 1

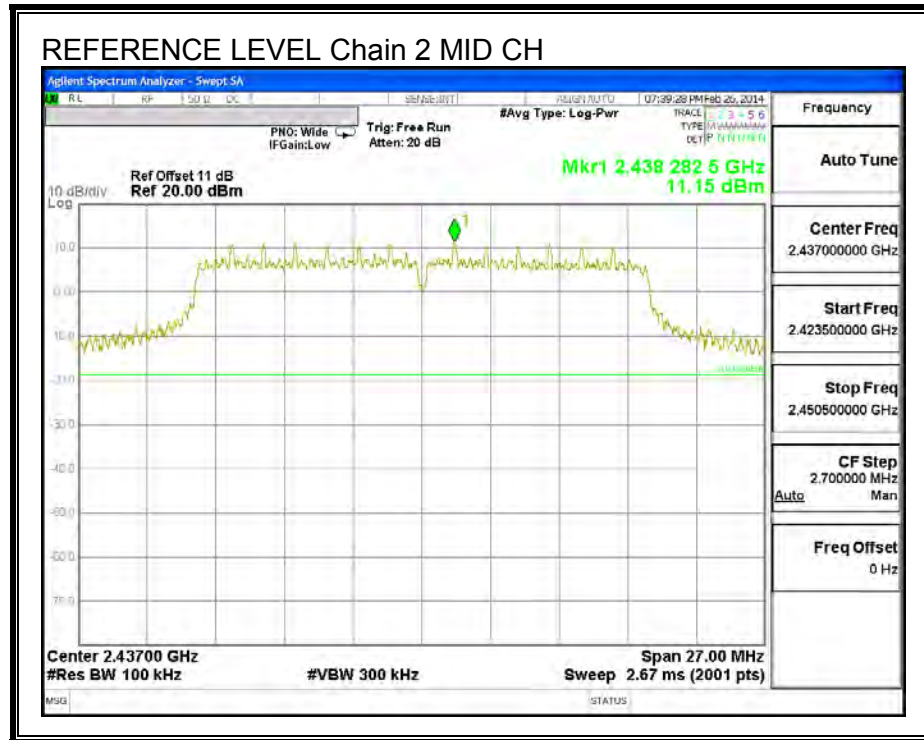


OUT-OF-BAND EMISSIONS, Chain 1

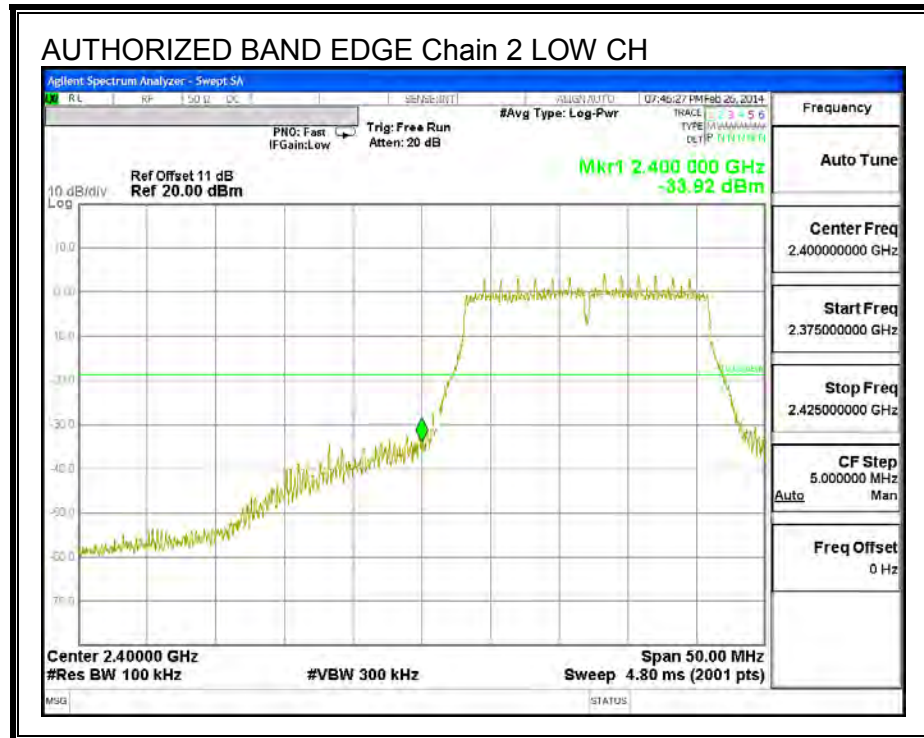




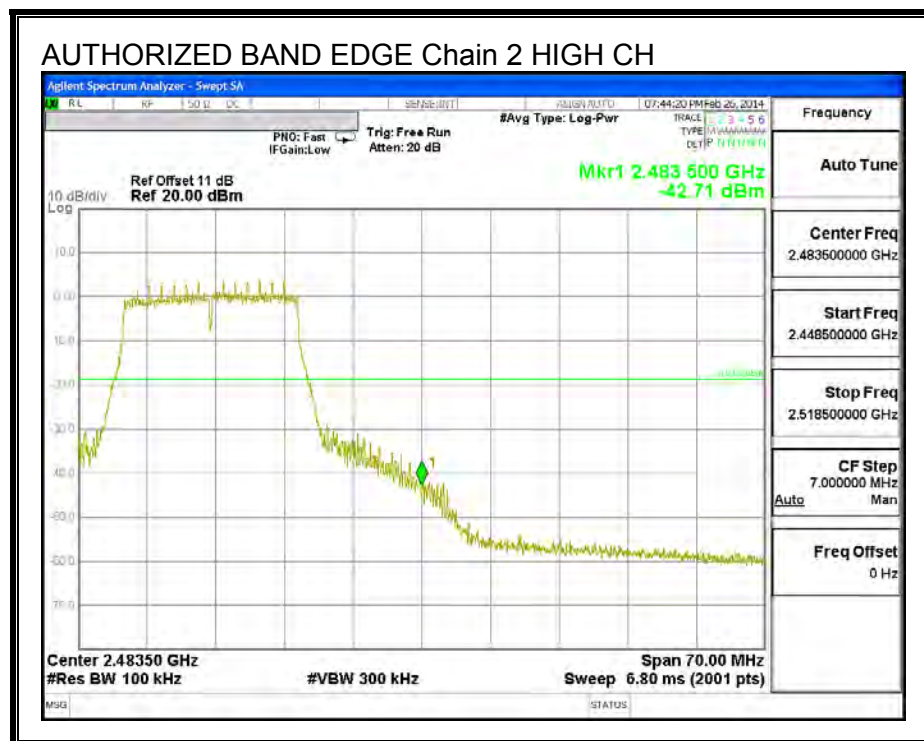
IN-BAND REFERENCE LEVEL, Chain 2



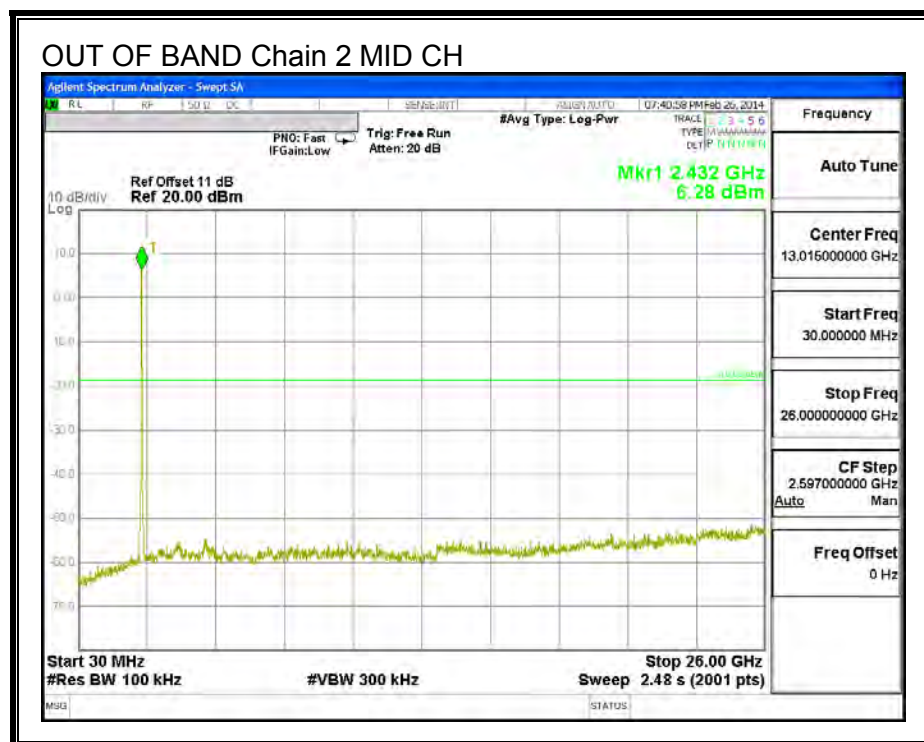
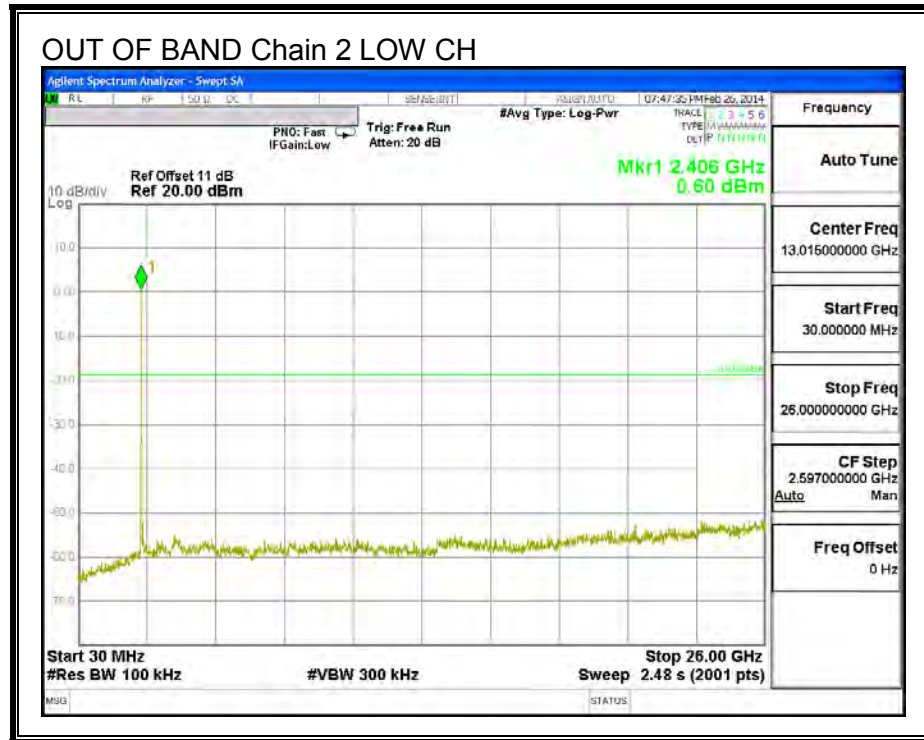
LOW CHANNEL BANDEDGE, Chain 2

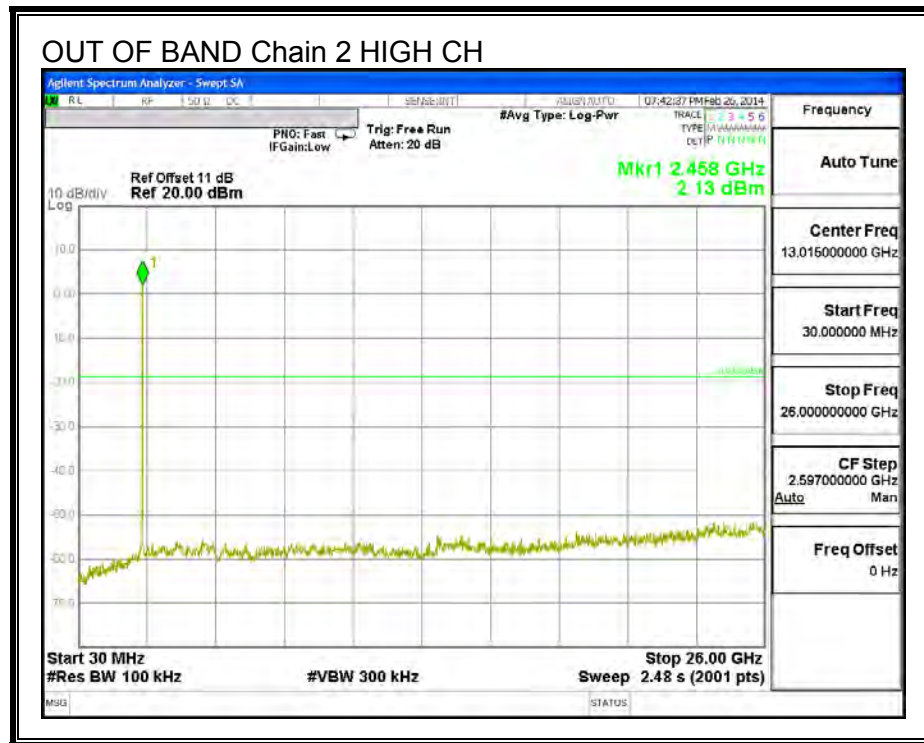


HIGH CHANNEL BANDEDGE, Chain 2



OUT-OF-BAND EMISSIONS, Chain 2





8.4 802.11n HT20 BF 3Tx MODE IN THE 2.4 GHz BAND

8.4.1 OUTPUT POWER

LIMITS

FCC §15.247

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

The TX chains are correlated and the antenna gain is unequal among the chains. The directional gain is:

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
0.12	5.30	4.69	8.43

RESULTS

Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
1	2412	8.43	27.57	30	36	27.57
2	2417	8.43	27.57	30	36	27.57
6	2437	8.43	27.57	30	36	27.57
10	2457	8.43	27.57	30	36	27.57
11	2462	8.43	27.57	30	36	27.57
12	2467	8.43	27.57	30	36	27.57
13	2472	8.43	27.57	30	36	27.57

Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
1	2412	17.40	17.60	17.80	22.37	27.57	-5.20
2	2417	19.60	19.70	20.00	24.54	27.57	-3.03
6	2437	21.00	21.20	21.40	25.97	27.57	-1.60
10	2457	18.90	18.70	19.20	23.71	27.57	-3.86
11	2462	15.30	15.50	15.70	20.27	27.57	-7.30
12	2467	14.20	14.30	14.60	19.14	27.57	-8.43
13	2472	9.90	9.90	10.30	14.81	27.57	-12.76

Note: the power readings above are measured with gated method, and the measurement was taken only during the ON time. No duty cycle correction was necessary.

9 RADIATED TEST RESULTS

9.1 LIMITS AND PROCEDURE

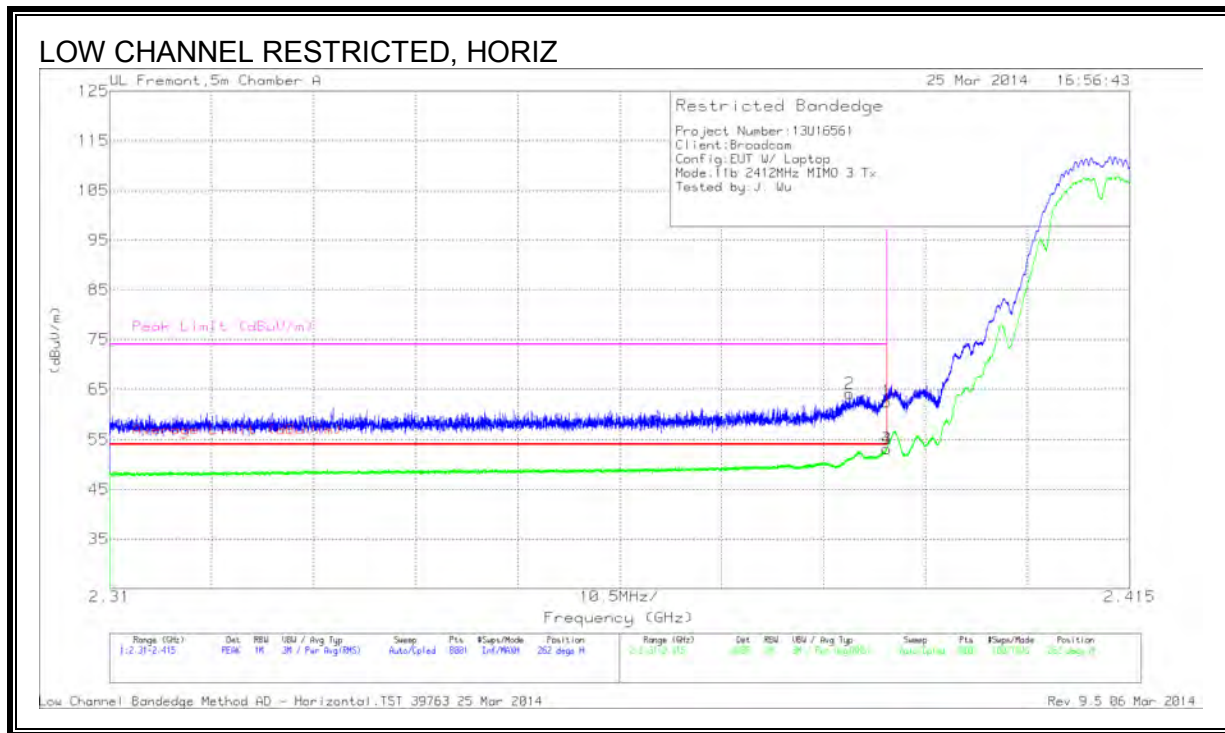
LIMITS

FCC §15.205 and §15.209

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

9.2 TX ABOVE 1 GHz 802.11b CDD 3TX MODE IN THE 2.4 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)



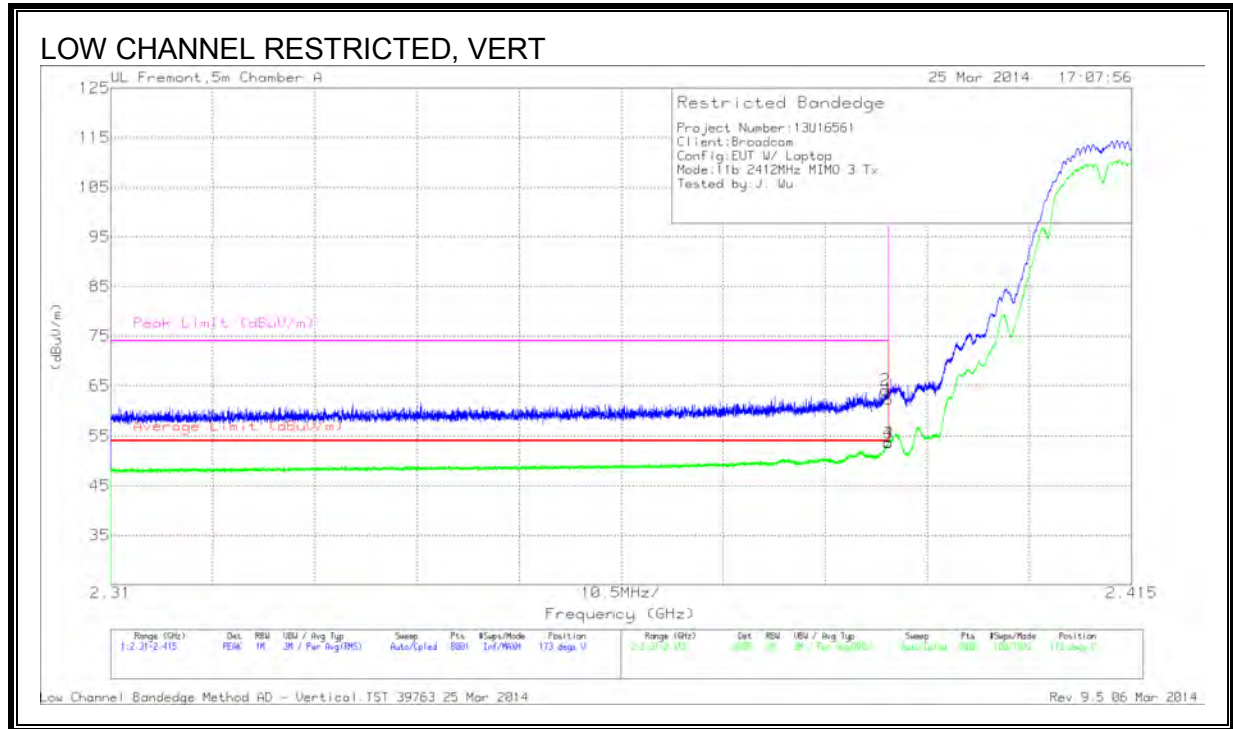
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Bypass (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	*2.386	27.06	PK	32.2	4.9	64.16	-	-	74	-9.84	262	290	H
3	*2.39	16.07	RMS	32.2	4.9	53.17	54	-83	-	-	262	290	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection



Trace Markers

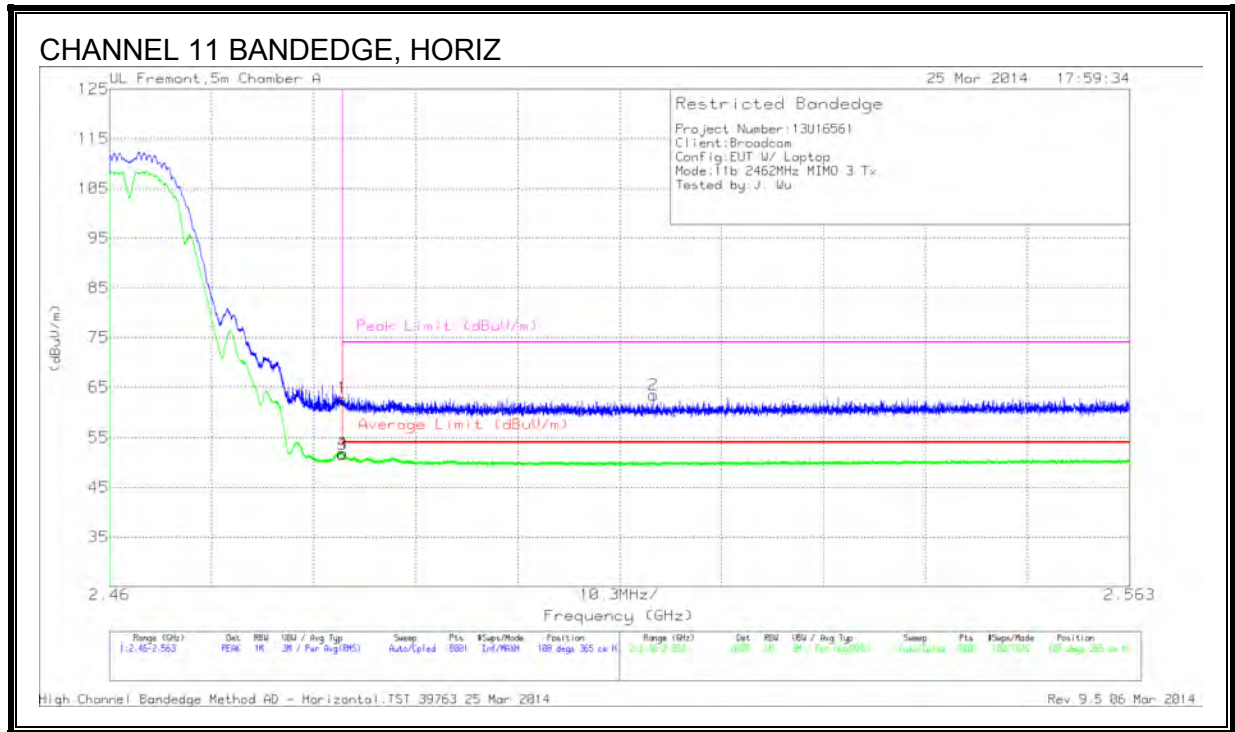
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Bypass (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	*2.39	27.05	PK	32.2	4.9	64.15	-	-	74	-9.85	173	365	V
4	*2.39	16.64	RMS	32.2	4.9	53.74	54	-26	-	-	173	365	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (CHANNEL 11)



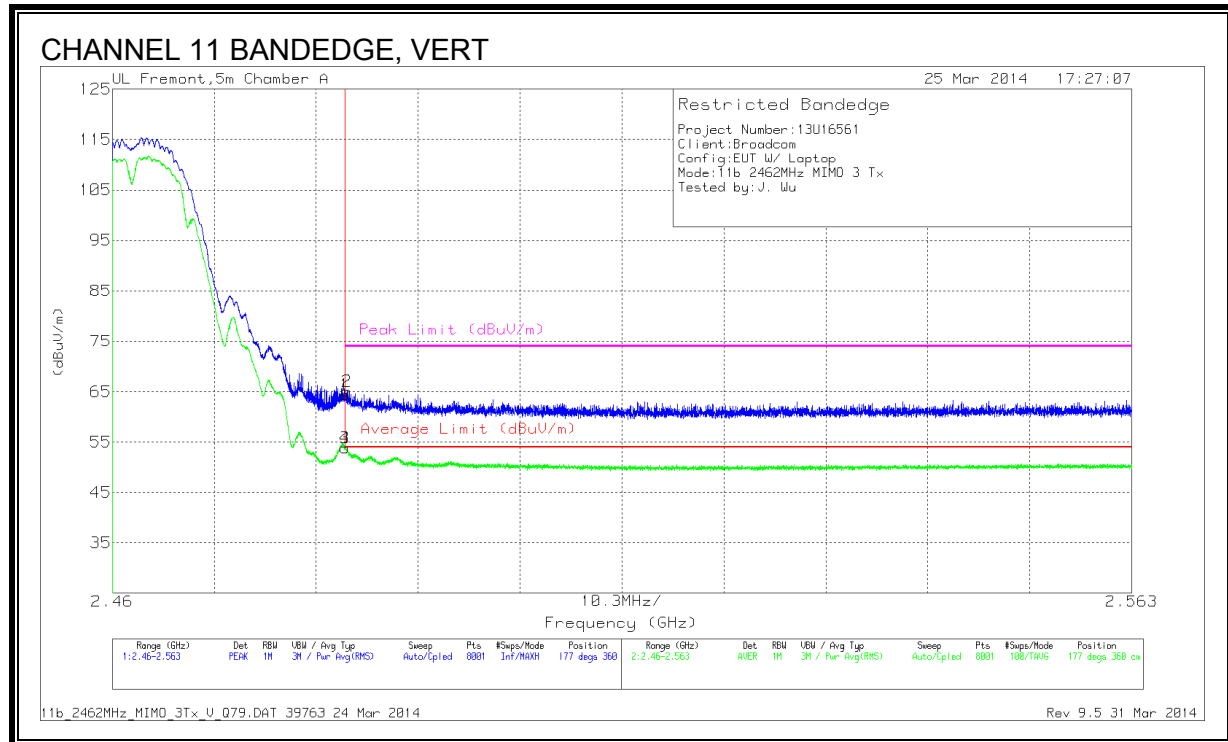
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	*2.484	14.06	RMS	32.7	5.1	0	51.86	54	-2.14	-	-	108	365	H
1	*2.515	25.63	PK	32.8	5.1	0	63.53	-	-	74	-10.47	108	365	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection



Trace Markers

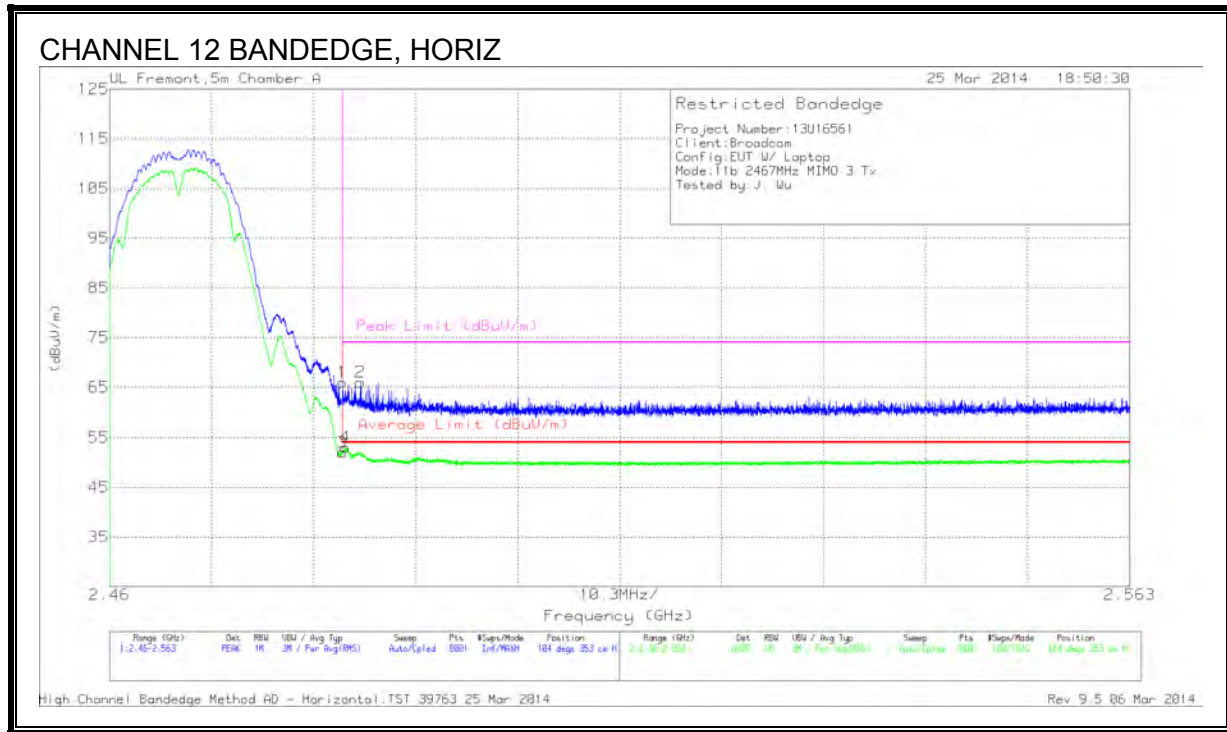
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*2.484	27.27	PK	32.7	5.1	0	65.07	-	-	74	-8.93	177	360	V
2	*2.484	16.01	RMS	32.7	5.1	0	53.81	54	-19	-	-	177	360	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (CHANNEL 12)



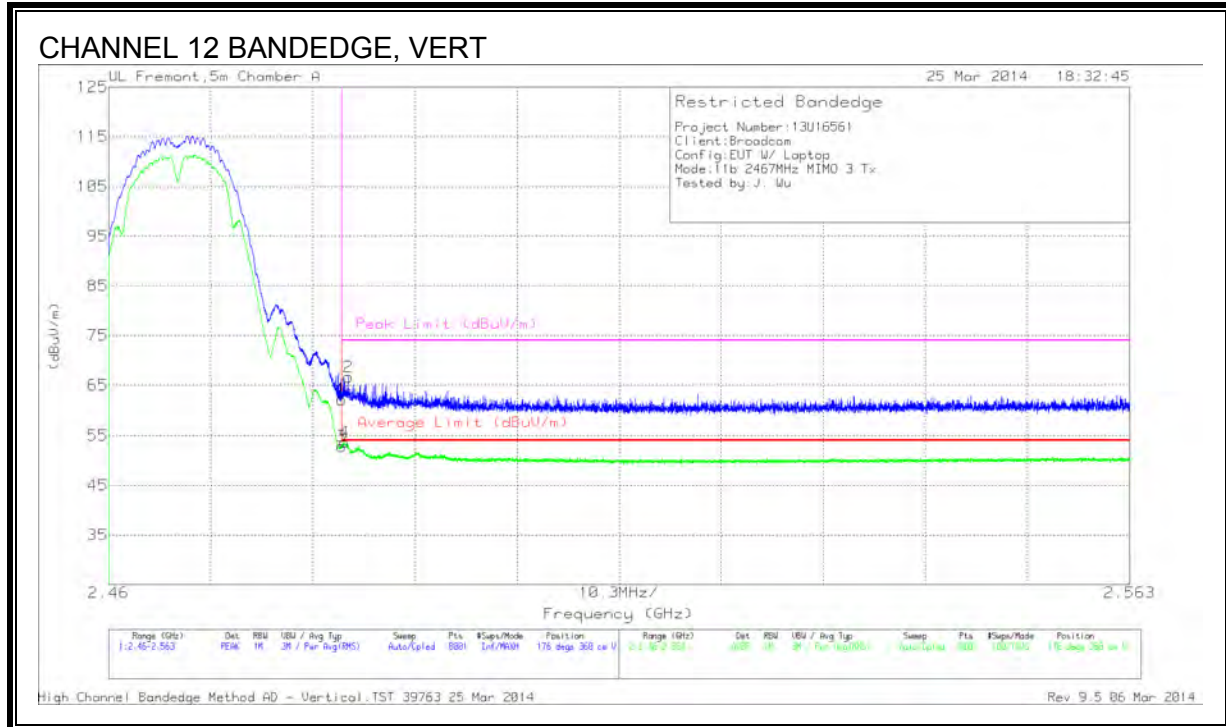
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*2.485	28.23	PK	32.7	5.1	0	66.03	-	-	74	-7.97	104	353	H
2	*2.484	15.25	RMS	32.7	5.1	0	53.05	54	-0.95	-	-	104	353	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection



Trace Markers

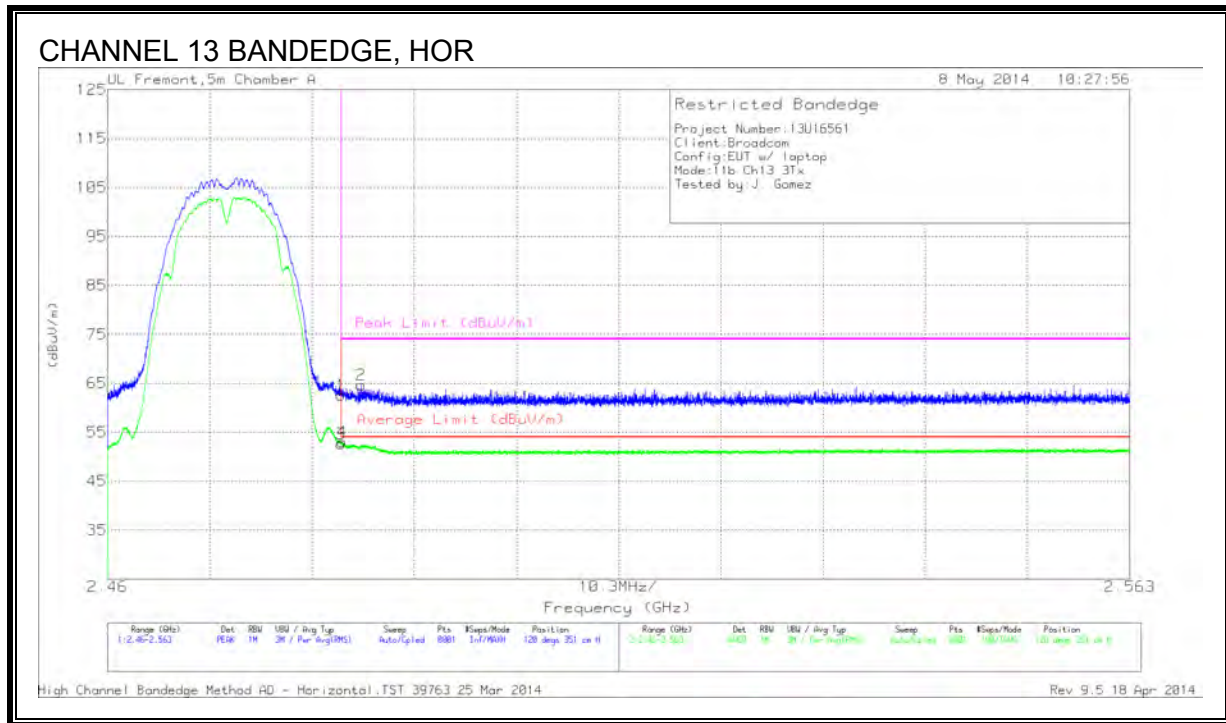
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	*2.484	28.86	PK	32.7	5.1	0	66.66	-	-	74	-7.34	176	360	V
4	*2.484	15.85	RMS	32.7	5.1	0	53.65	54	-1.35	-	-	176	360	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (CHANNEL 13)



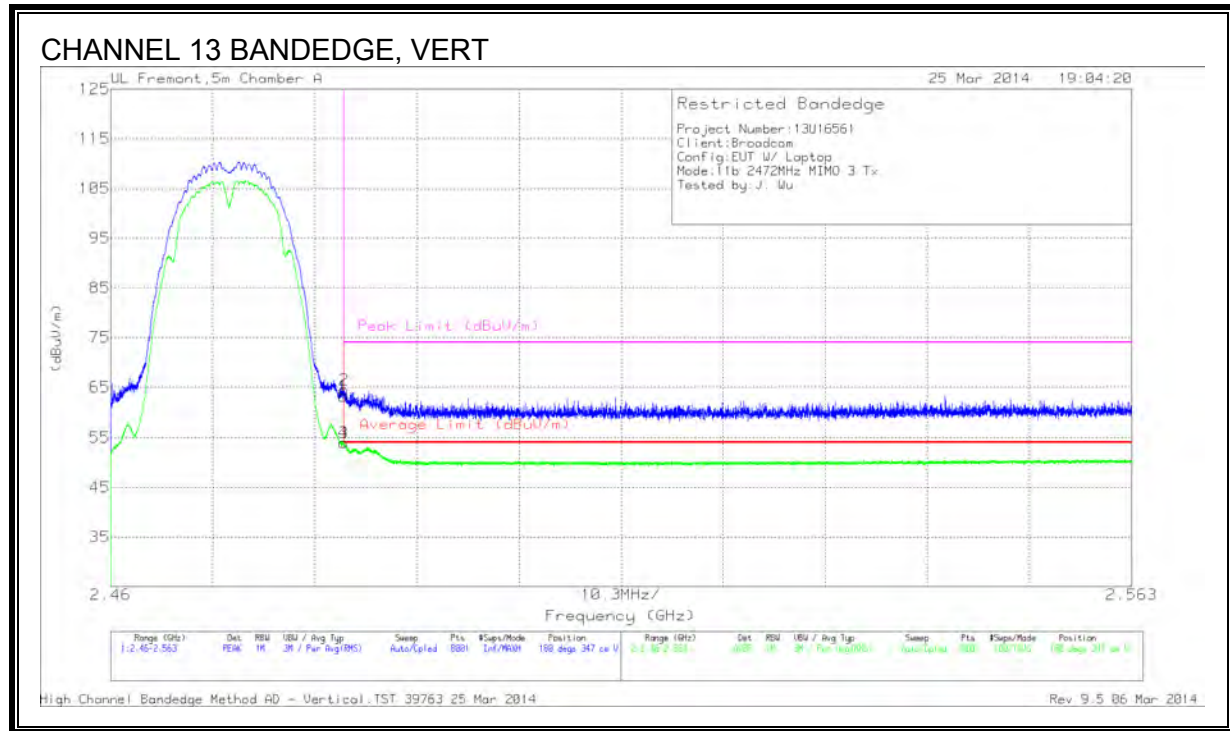
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.484	24.73	PK	32.7	5.1	0	62.53	-	-	74	-11.47	120	351	H
4	2.484	15.25	RMS	32.7	5.1	0	53.05	54	-95	-	-	120	351	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	*2.484	26.67	PK	32.7	5.1	0	64.47	-	-	74	-9.53	180	347	V
3	*2.484	16.19	RMS	32.7	5.1	0	53.99	54	-0.01	-	-	180	347	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

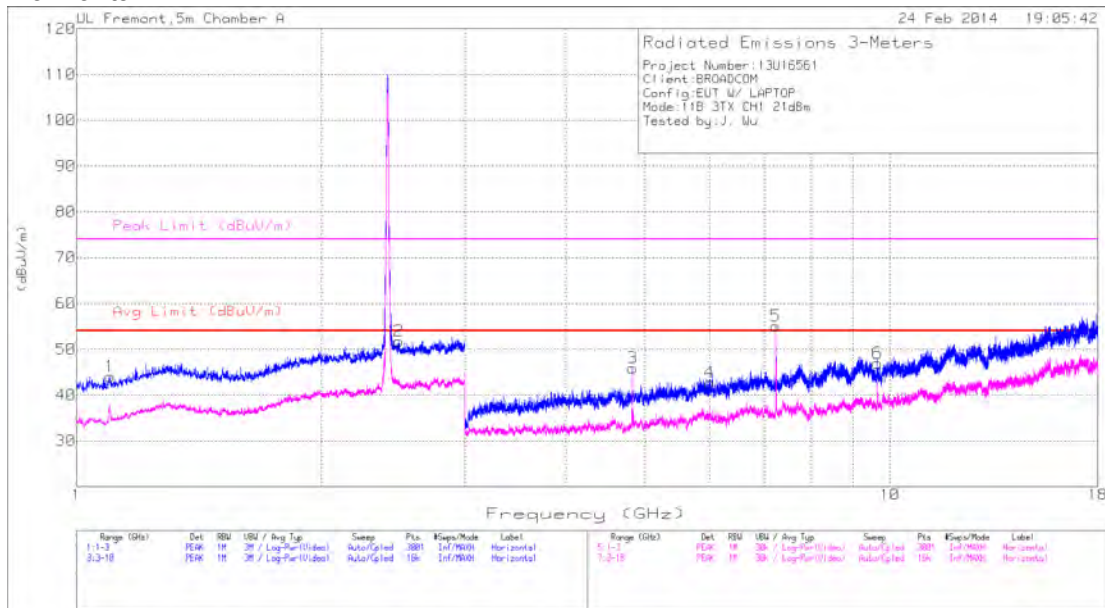
PK - Peak detector

RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

Low Channel-2412MHz- 11b-MIMO

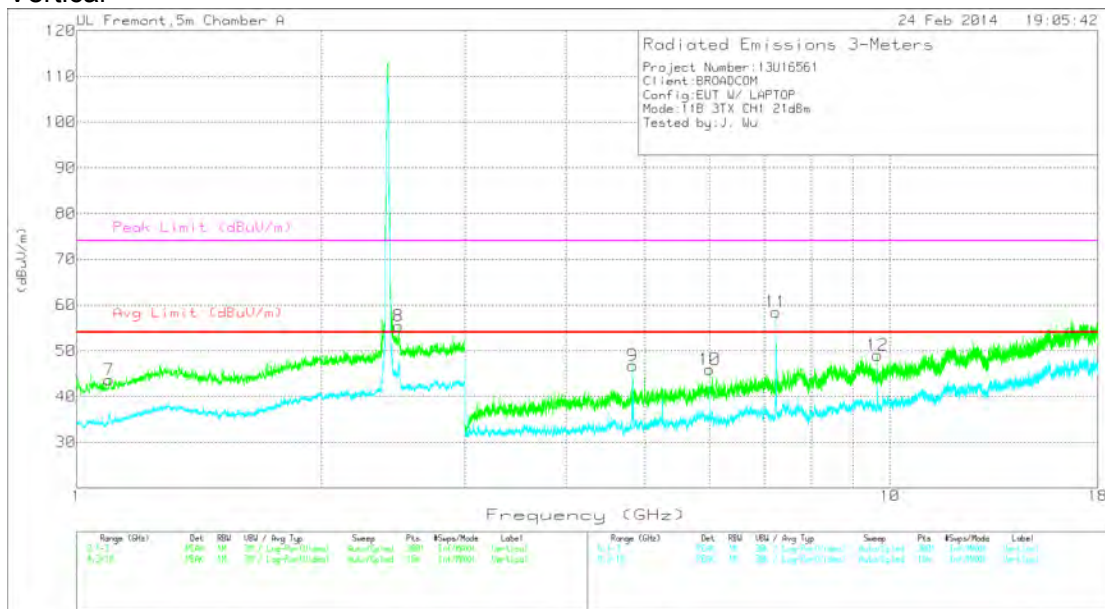
Horizontal



FCC Part15 Subpart C 2400MHz Spurious Emissions with Average Scan.TST 30915 14 Feb 2014

Rev 9.5 07 Feb 2014

Vertical



FCC Part15 Subpart C 2400MHz Spurious Emissions with Average Scan.TST 30915 14 Feb 2014

Rev 9.5 07 Feb 2014

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/ Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
7	* 1.097	43.71	PK	27.2	-27.3	43.61	54	-10.39	74	-30.39	0-360	200	V
1	* 1.1	44.11	PK	27.2	-27.3	44.01	54	-9.99	74	-29.99	0-360	100	H
8	* 2.488	48.57	PK2	32.3	-23.4	57.47	-	-	74	-16.53	201	345	V
	* 2.487	38.76	MAV1	32.3	-23.4	47.66	54	-6.34	-	-	201	345	V
2	* 2.49	43.97	PK2	32.3	-23.4	52.87	-	-	74	-21.13	203	266	H
	* 2.49	34.36	MAV1	32.3	-23.4	43.26	54	-10.74	-	-	203	266	H
3	* 4.824	41.34	PK	34	-29.4	45.94	54	-8.06	74	-28.06	0-360	200	H
9	* 4.824	42.16	PK	34	-29.4	46.76	54	-7.24	74	-27.24	0-360	201	V
10	6	39.41	PK	35.3	-28.8	45.91	-	-	-	-	0-360	101	V
4	6.002	36.23	PK	35.3	-28.8	42.73	-	-	-	-	0-360	101	H
5	7.234	45.75	PK	35.6	-26.3	55.05	-	-	-	-	0-360	200	H
11	7.236	48.96	PK	35.6	-26.1	58.46	-	-	-	-	0-360	201	V
6	9.647	34.38	PK	36.8	-24.2	46.98	-	-	-	-	0-360	200	H
12	9.647	36.43	PK	36.8	-24.2	49.03	-	-	-	-	0-360	201	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

-Compliance for emissions in non-restricted bands is shown in conducted out of band testing

PK – Peak detector

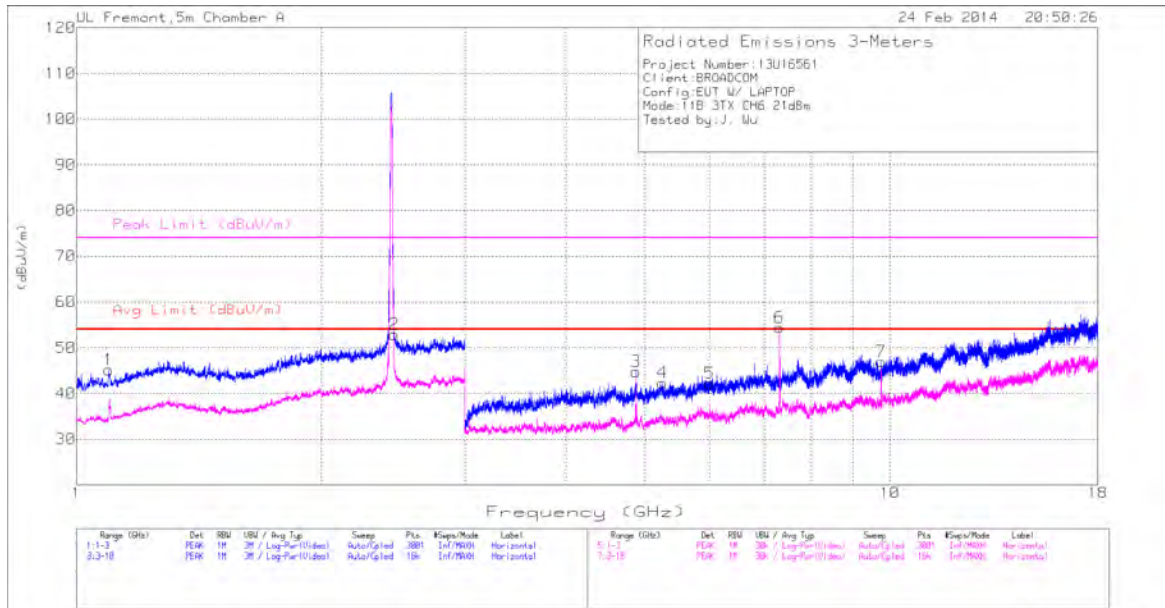
PK2 - KDB558074 Method: Maximum Peak

MAV1 - KDB558074 Option 1 Maximum RMS Average

Note: Signals in non-restricted bands are covered by -30 dBc antenna port spurious testing.

Middle Channel-2437MHz- 11b-MIMO

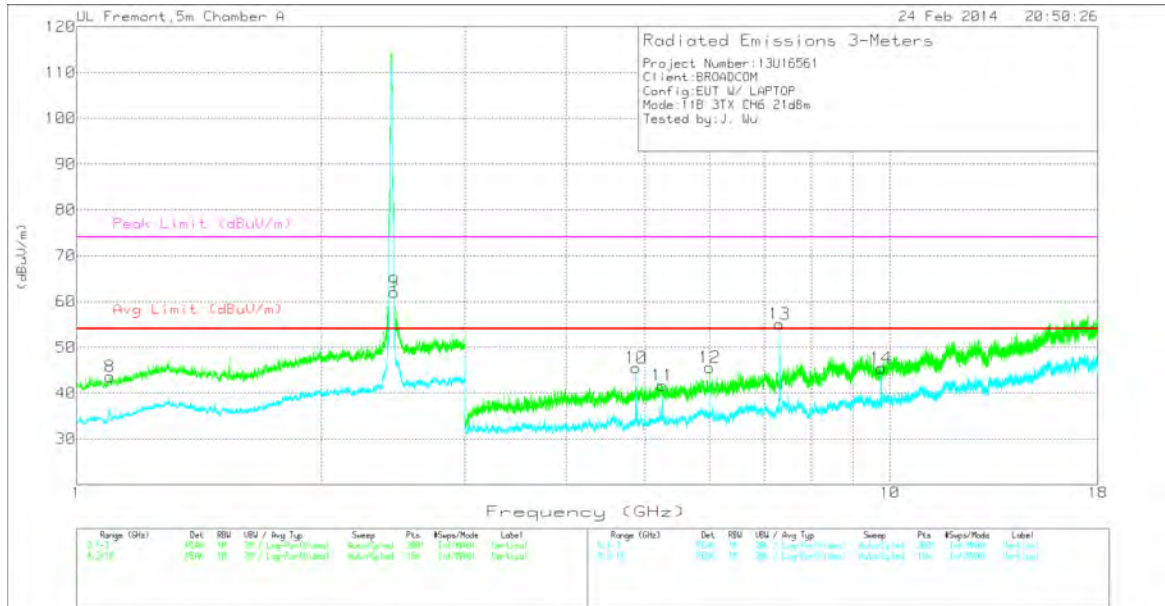
Horizontal



FCC Part15 Subpart C 2400MHz Spurious Emissions with Average Scan.TST 30915 14 Feb 2014

Rev 9.5 07 Feb 2014

Vertical



FCC Part15 Subpart C 2400MHz Spurious Emissions with Average Scan.TST 30915 14 Feb 2014

Rev 9.5 07 Feb 2014

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.095	45.28	PK	27.2	-27.3	45.18	54	-8.82	74	-28.82	0-360	100	H
8	* 1.099	43.68	PK	27.2	-27.3	43.58	54	-10.42	74	-30.42	0-360	201	V
3	* 4.874	39.1	PK	34	-28.3	44.8	54	-9.2	74	-29.2	0-360	200	H
10	* 4.874	39.77	PK	34	-28.3	45.47	54	-8.53	74	-28.53	0-360	201	V
6	* 7.3112	44.73	PK2	35.6	-27.2	53.13	-	-	74	-20.87	167	215	H
	* 7.3119	39.59	MAv1	35.6	-27.1	48.09	54	-5.91	-	-	167	215	H
13	* 7.3121	47.79	PK2	35.6	-27.1	56.29	-	-	74	-17.71	202	233	V
	* 7.3102	42.97	MAv1	35.6	-27.2	51.37	54	-2.63	-	-	202	233	V
9	2.457	53.56	PK	32.2	-23.7	62.06	-	-	-	-	0-360	201	V
2	2.458	44.38	PK	32.2	-23.7	52.88	-	-	-	-	0-360	100	H
4	5.25	36.62	PK	34.3	-28.6	42.32	-	-	-	-	0-360	101	H
11	5.25	35.92	PK	34.3	-28.6	41.62	-	-	-	-	0-360	100	V
5	6	35.74	PK	35.3	-28.8	42.24	-	-	-	-	0-360	200	H
12	6	39.07	PK	35.3	-28.8	45.57	-	-	-	-	0-360	100	V
7	9.748	34.56	PK	36.9	-24.5	46.96	-	-	-	-	0-360	200	H
14	9.748	33.05	PK	36.9	-24.5	45.45	-	-	-	-	0-360	201	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

-Compliance for emissions in non-restricted bands is shown in conducted out of band testing

PK – Peak detector

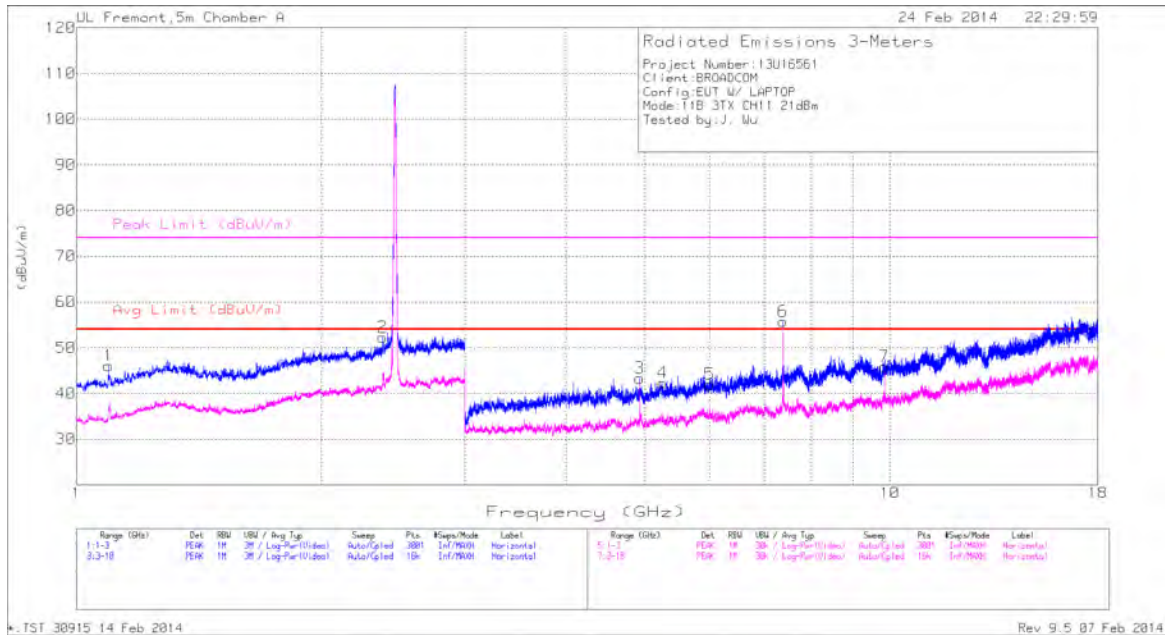
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

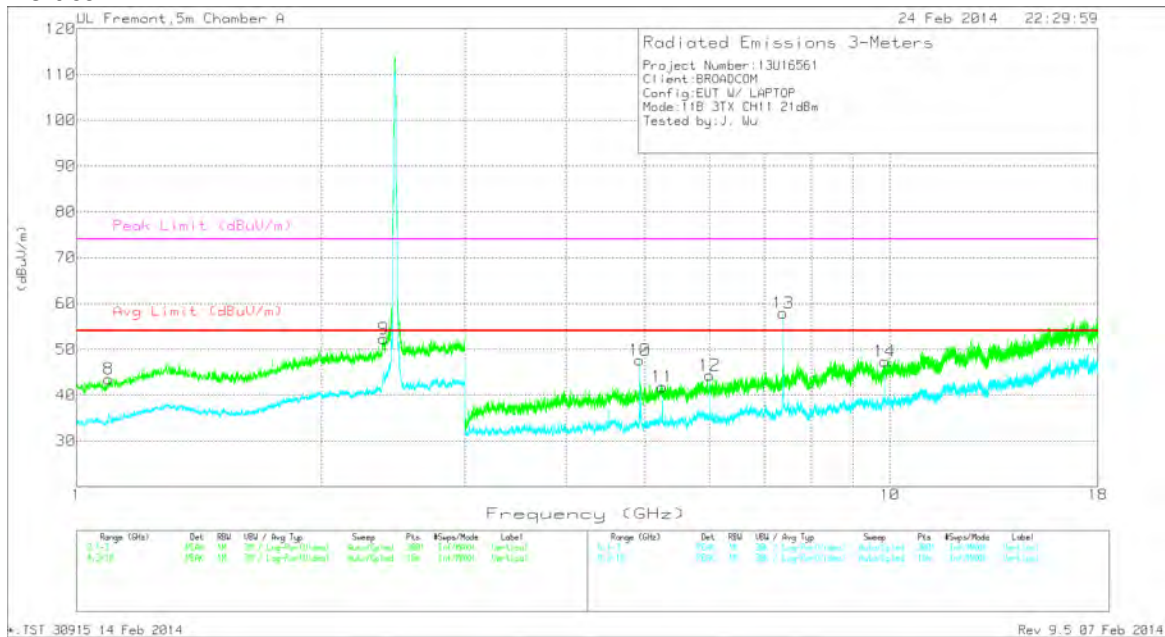
Note: Signals in non-restricted bands are covered by -30 dBc antenna port spurious testing.

Channel 11-2462MHz- 11b-MIMO

Horizontal



Vertical



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/ Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.095	46.26	PK	27.2	-27.4	46.06	54	-7.94	74	-27.94	0-360	101	H
8	* 1.095	43.61	PK	27.2	-27.3	43.51	54	-10.49	74	-30.49	0-360	201	V
2	* 2.383	47.06	PK2	32.1	-23.7	55.46	-	-	74	-18.54	288	367	H
	* 2.384	37.19	MAV1	32.1	-23.8	45.49	54	-8.51	-	-	288	367	H
9	* 2.386	46.79	PK2	32.1	-24	54.89	-	-	74	-19.11	207	247	V
	* 2.385	36.96	MAV1	32.1	-23.9	45.16	54	-8.84	-	-	207	247	V
10	* 4.924	42.6	PK	34	-29	47.6	54	-6.4	74	-26.4	0-360	201	V
3	* 4.925	38.32	PK	34	-29	43.32	54	-10.68	74	-30.68	0-360	200	H
6	* 7.3847	46.87	PK2	35.7	-24.3	58.27	-	-	74	-15.73	196	311	H
	* 7.387	41.86	MAV1	35.7	-24.3	53.26	54	-0.74	-	-	196	311	H
13	* 7.386	46.72	PK2	35.7	-24.3	58.12	-	-	74	-15.88	168	291	V
	* 7.3872	42.27	MAV1	35.7	-24.3	53.67	54	-0.33	-	-	168	291	V
11	5.25	36.1	PK	34.3	-28.6	41.8	-	-	-	-	0-360	201	V
4	5.254	36.5	PK	34.3	-28.5	42.3	-	-	-	-	0-360	101	H
12	6	37.79	PK	35.3	-28.8	44.29	-	-	-	-	0-360	101	V
5	6.002	35.51	PK	35.3	-28.8	42.01	-	-	-	-	0-360	200	H
7	9.847	31.41	PK	36.9	-22.4	45.91	-	-	-	-	0-360	200	H
14	9.848	32.73	PK	36.9	-22.3	47.33	-	-	-	-	0-360	201	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

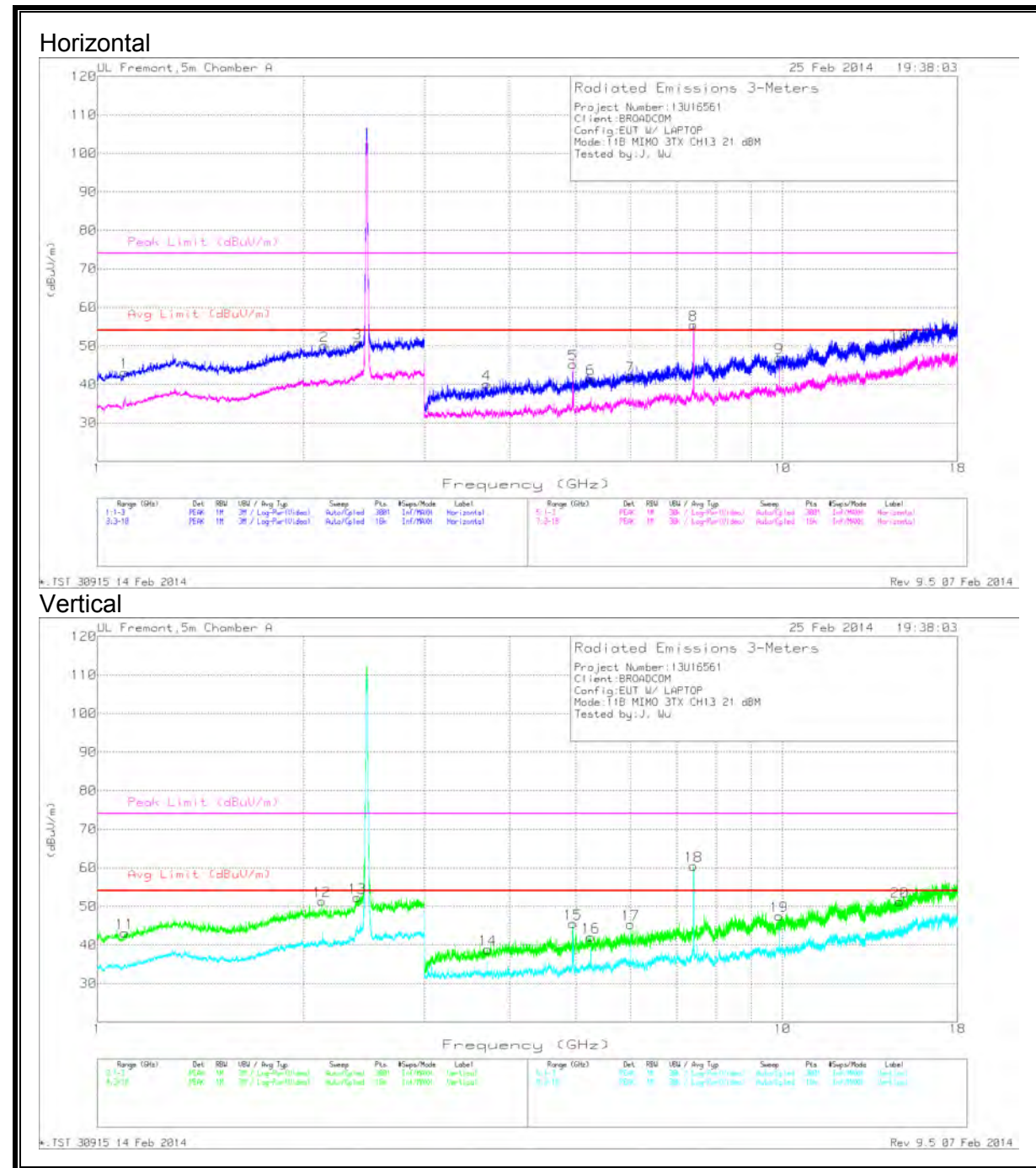
PK – Peak detector

PK2 - KDB558074 Method: Maximum Peak

MAV1 - KDB558074 Option 1 Maximum RMS Average

Note: Signals in non-restricted bands are covered by -30 dBc antenna port spurious testing.

HIGH Channel -2472MHz- 11b-MIMO



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/ Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.096	43.23	PK	27.2	-27.3	43.13	54	-10.87	74	-30.87	0-360	200	H
11	* 1.096	43.18	PK	27.2	-27.3	43.08	54	-10.92	74	-30.92	0-360	101	V
4	* 3.702	37.73	PK	33.2	-30.9	40.03	54	-13.97	74	-33.97	0-360	101	H
5	* 4.943	40.07	PK	34	-28.8	45.27	54	-8.73	74	-28.73	0-360	200	H
8	* 7.416	45.75	PK2	35.7	-25.1	56.35	-	-	74	-17.65	180	279	H
	* 7.417	40.9	MAv1	35.7	-25.1	51.5	54	-2.5	-	-	180	279	H
14	* 3.712	36.62	PK	33.2	-31	38.82	54	-15.18	74	-35.18	0-360	100	V
15	* 4.943	40.31	PK	34	-28.8	45.51	54	-8.49	74	-28.49	0-360	201	V
18	* 7.416	48.03	PK2	35.7	-25.1	58.63	-	-	74	-15.37	186	264	V
	* 7.417	43.37	MAv1	35.7	-25.1	53.97	54	-.03	-	-	186	264	V
12	2.127	44.29	PK	31.6	-24.5	51.39	-	-	-	-	0-360	101	V
2	2.143	42.67	PK	31.6	-24.2	50.07	-	-	-	-	0-360	100	H
13	2.396	44.39	PK	32.1	-24.2	52.29	-	-	-	-	0-360	200	V
3	2.4	42.35	PK	32.1	-23.7	50.75	-	-	-	-	0-360	100	H
6	5.249	35.79	PK	34.3	-28.6	41.49	-	-	-	-	0-360	101	H
16	5.25	36.36	PK	34.3	-28.6	42.06	-	-	-	-	0-360	201	V
7	6	35.74	PK	35.3	-28.8	42.24	-	-	-	-	0-360	101	H
17	6	38.81	PK	35.3	-28.8	45.31	-	-	-	-	0-360	100	V
9	9.887	33	PK	36.9	-23	46.9	-	-	-	-	0-360	200	H
19	9.887	33.64	PK	36.9	-23	47.54	-	-	-	-	0-360	201	V
10	14.832	34.38	PK	39.7	-23.4	50.68	-	-	-	-	0-360	200	H
20	14.832	34.95	PK	39.7	-23.4	51.25	-	-	-	-	0-360	201	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

-Compliance for emissions in non-restricted bands is shown in conducted out of band testing

PK – Peak detector

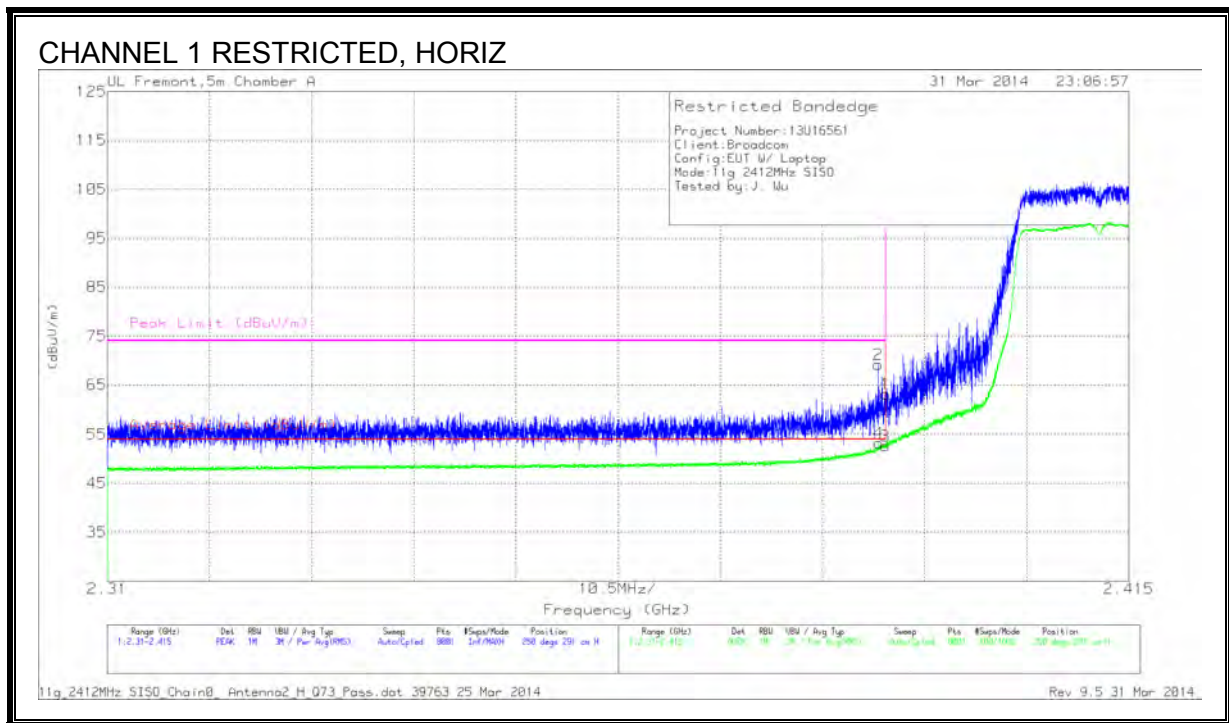
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

Note: Signals in non-restricted bands are covered by -30 dBc antenna port spurious testing.

9.3 TX ABOVE 1 GHz 802.11g Legacy MODE IN THE 2.4 GHz BAND

RESTRICTED BANDEDGE (CHANNEL 1)



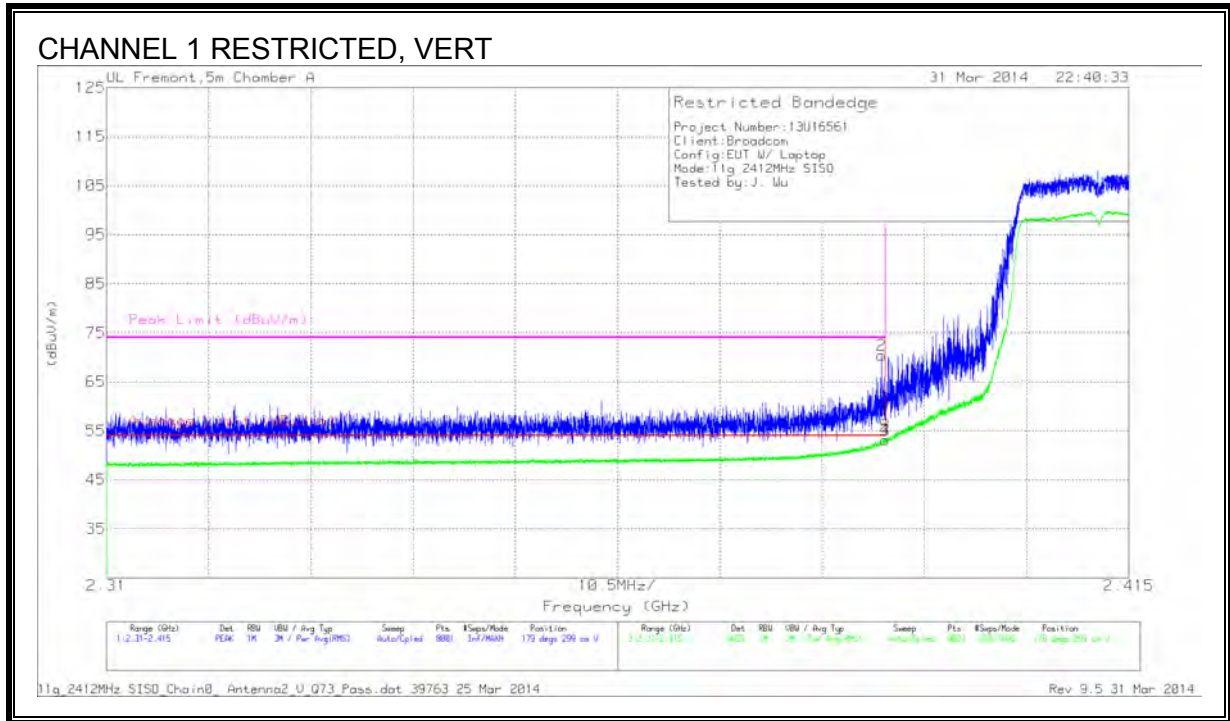
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	*2.389	32.06	PK	32.2	4.9	0	69.16	-	-	74	-4.84	250	291	H
4	*2.389	16.18	RMS	32.2	4.9	0.21	53.49	54	-0.51	-	-	250	291	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection



Trace Markers

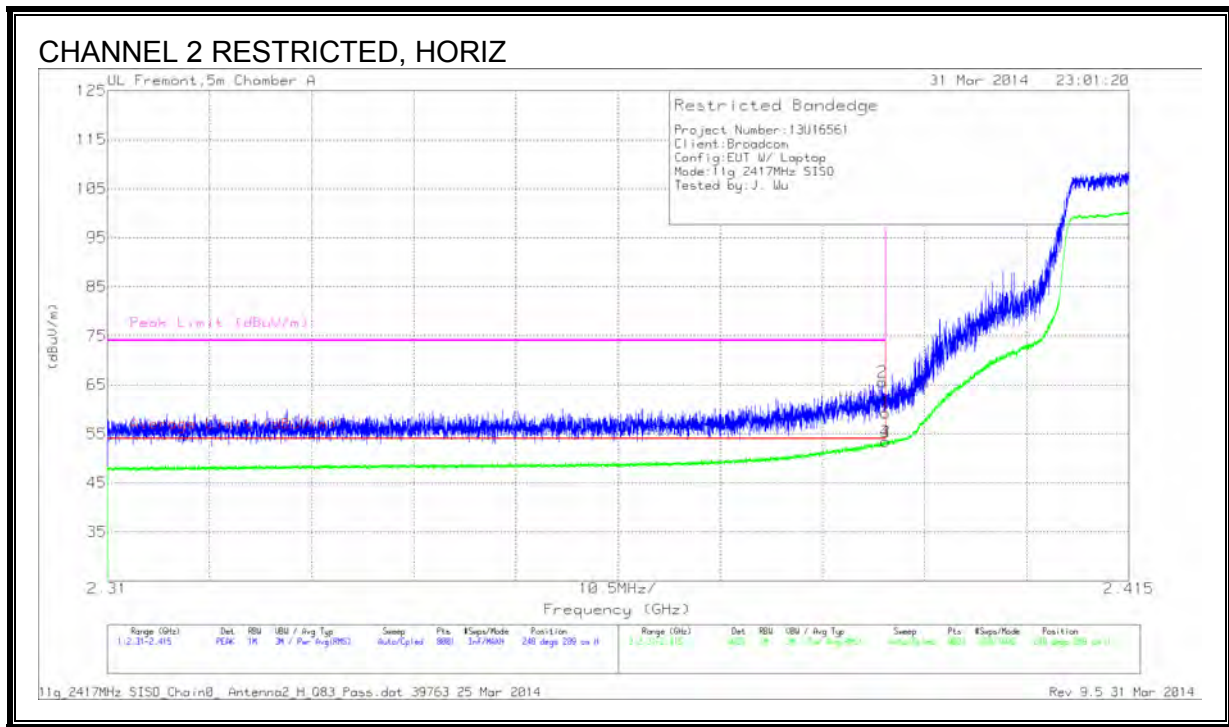
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.39	33.26	PK	32.2	4.9	0	70.36	-	-	74	-3.64	179	299	V
3	2.39	16.07	RMS	32.2	4.9	.2	53.37	54	-.63	-	-	179	299	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

RESTRICTED BANDEDGE (CHANNEL 2)



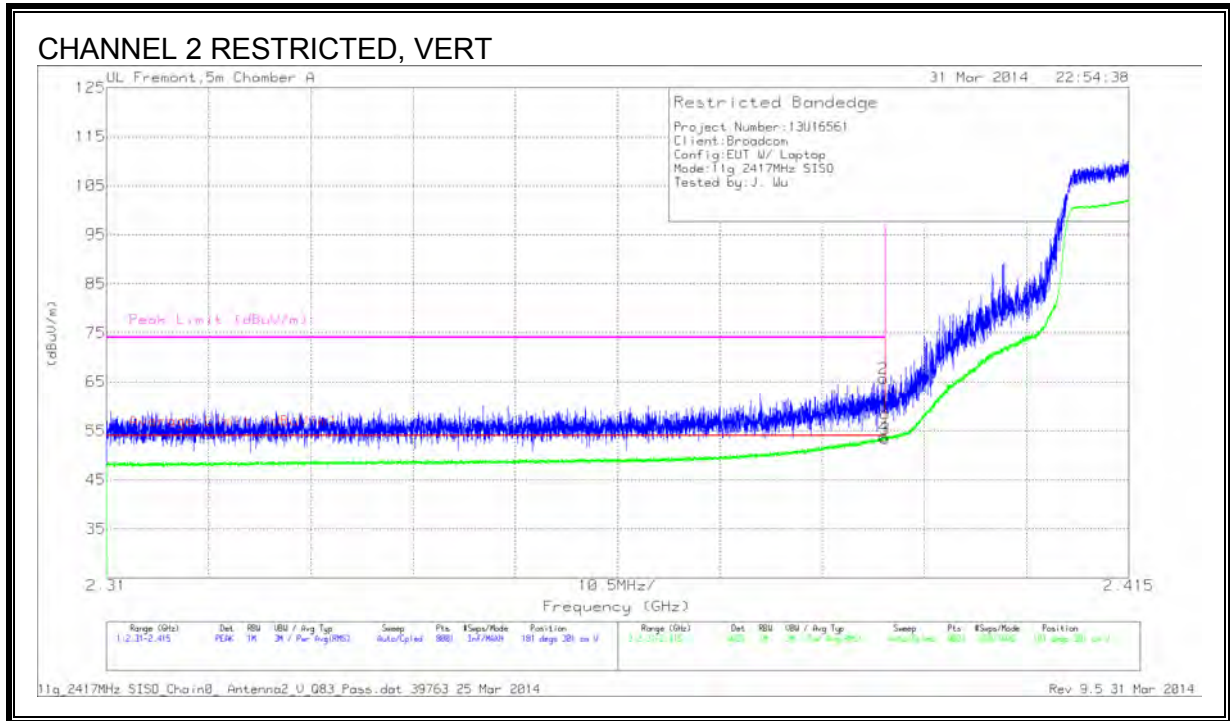
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.39	28.52	PK	32.2	4.9	0	65.62	-	-	74	-8.38	248	289	H
3	2.39	16.29	RMS	32.2	4.9	0.2	53.59	54	-41	-	-	248	289	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

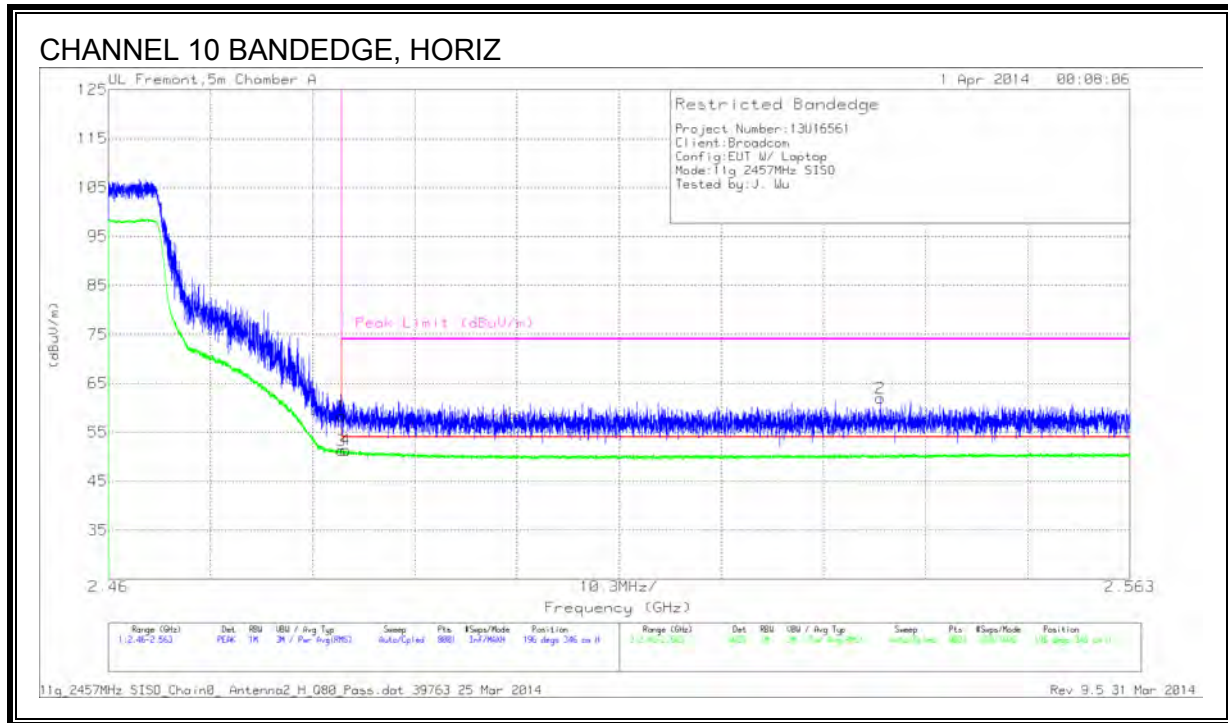


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.39	28.57	PK	32.2	4.9	0	65.67	-	-	74	-8.33	181	301	V
4	2.39	16.5	RMS	32.2	4.9	.2	53.8	54	-.2	-	-	181	301	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
PK - Peak detector
RMS - RMS detection

AUTHORIZED BANDEDGE (CHANNEL 10)



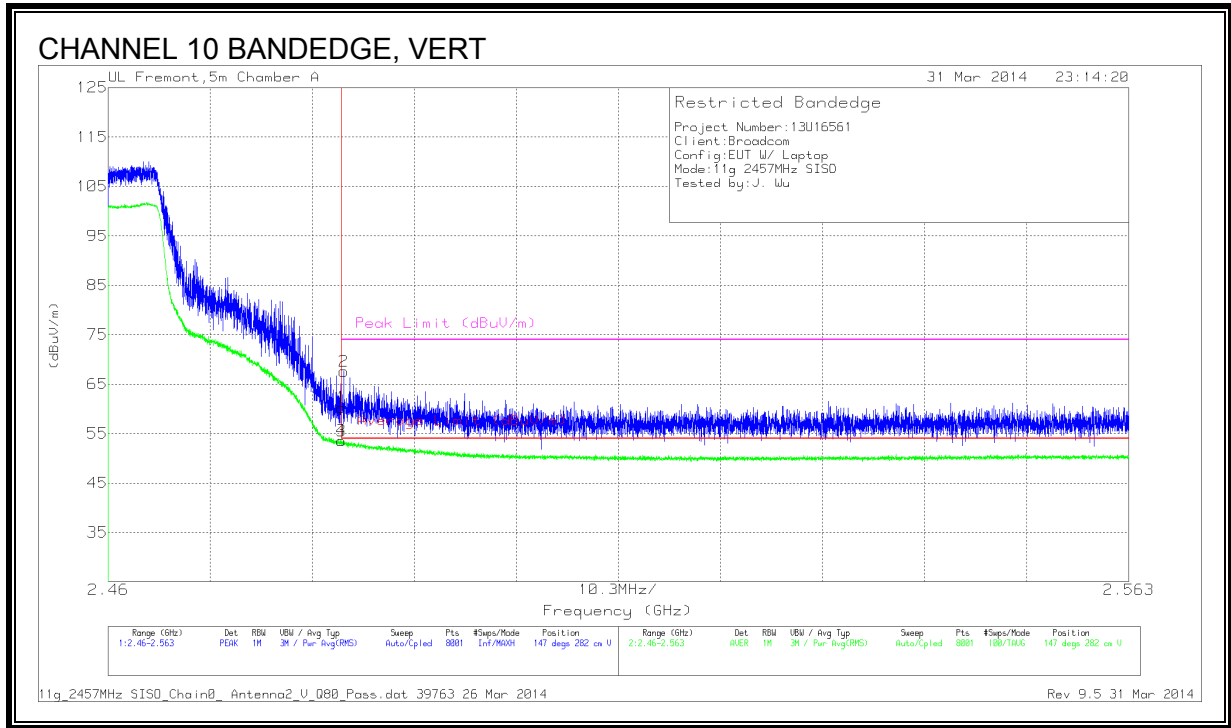
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	*2.484	13.35	RMS	32.7	5.1	.2	51.35	54	-2.65	-	-	196	346	H
2	*2.538	23.81	PK	32.9	5.2	0	61.91	-	-	74	-12.09	196	346	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection



Trace Markers

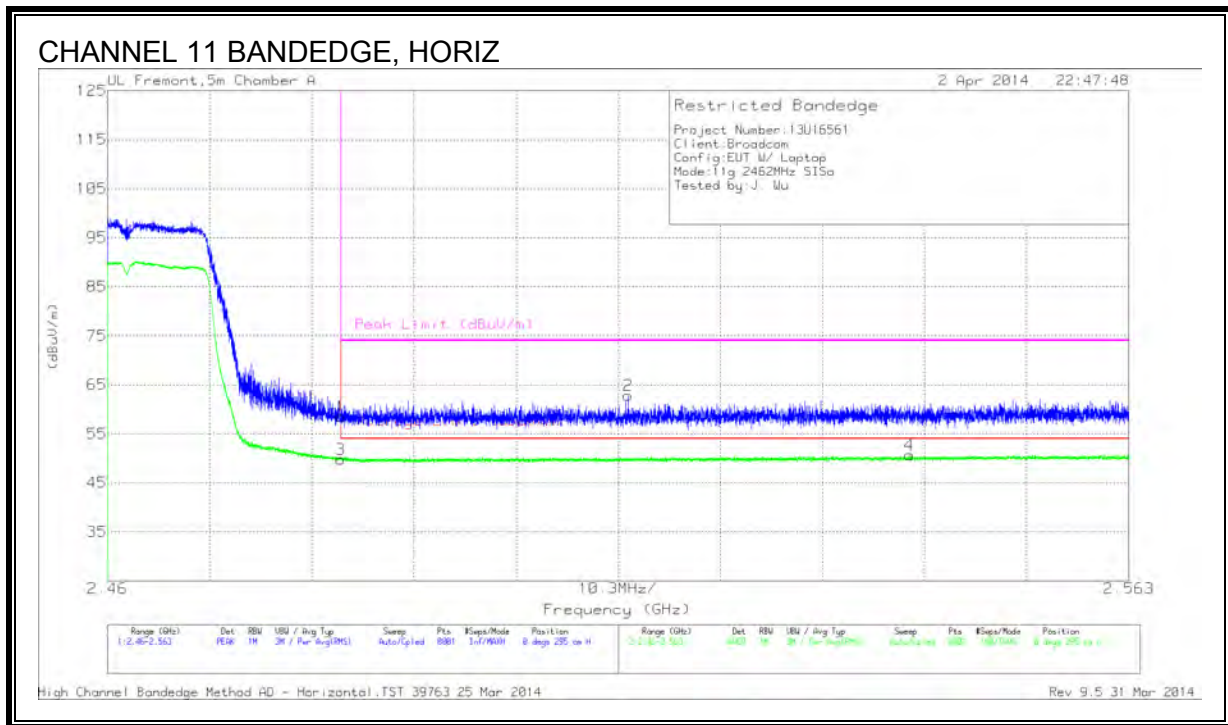
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	*2.484	29.79	PK	32.7	5.1	0	67.59	-	-	74	-6.41	147	282	V
3	*2.484	15.57	RMS	32.7	5.1	.2	53.57	54	-43	-	-	147	282	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (CHANNEL 11)



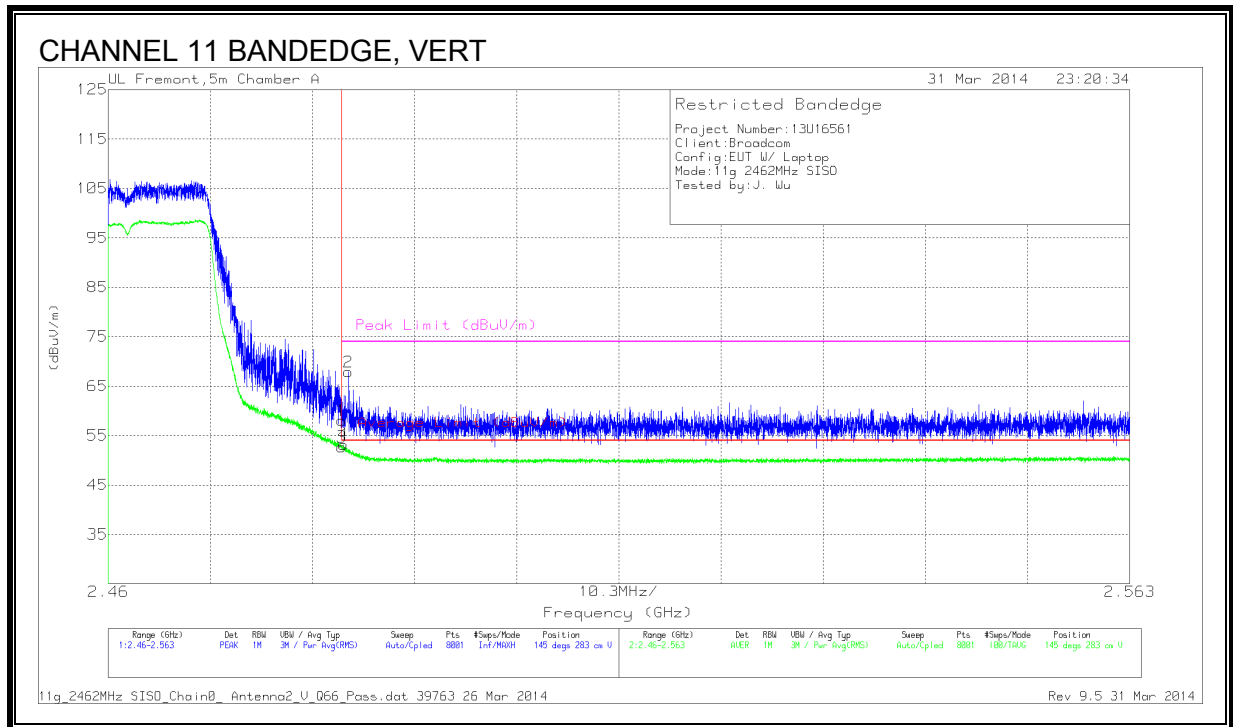
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.484	20.71	PK	32.7	5.1	0	58.51	-	-	74	-15.49	0	295	H
3	2.484	11.98	RMS	32.7	5.1	0.2	49.98	54	-4.02	-	-	0	295	H
2	2.512	24.9	PK	32.8	5.1	0	62.8	-	-	74	-11.2	0	295	H
4	2.541	12.59	RMS	32.9	5.2	0.2	50.89	54	-3.11	-	-	0	295	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection



Trace Markers

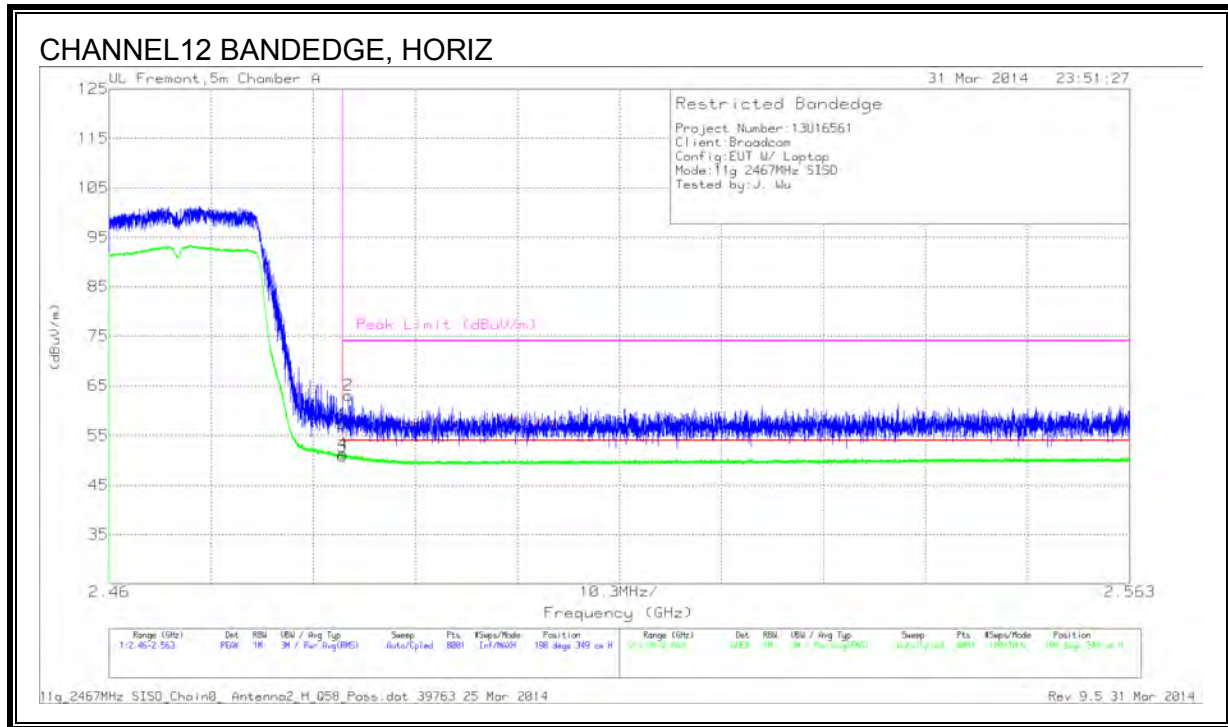
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.484	30.07	PK	32.7	5.1	0	67.87	-	-	74	-6.13	145	283	V
4	2.484	15.21	RMS	32.7	5.1	.2	53.21	54	-.79	-	-	145	283	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (CHANNEL 12)



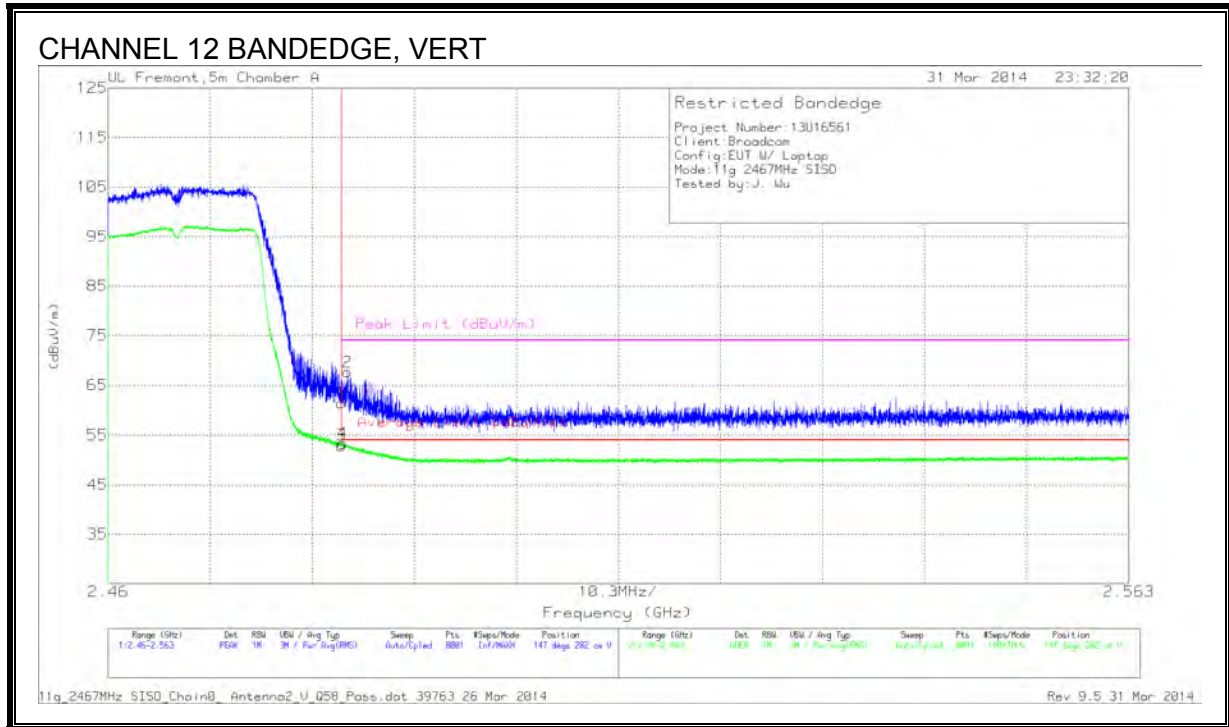
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.484	25.28	PK	32.7	5.1	0	63.08	-	-	74	-10.92	198	349	H
4	2.484	13.55	RMS	32.7	5.1	.2	51.55	54	-2.45	-	-	198	349	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection



Trace Markers

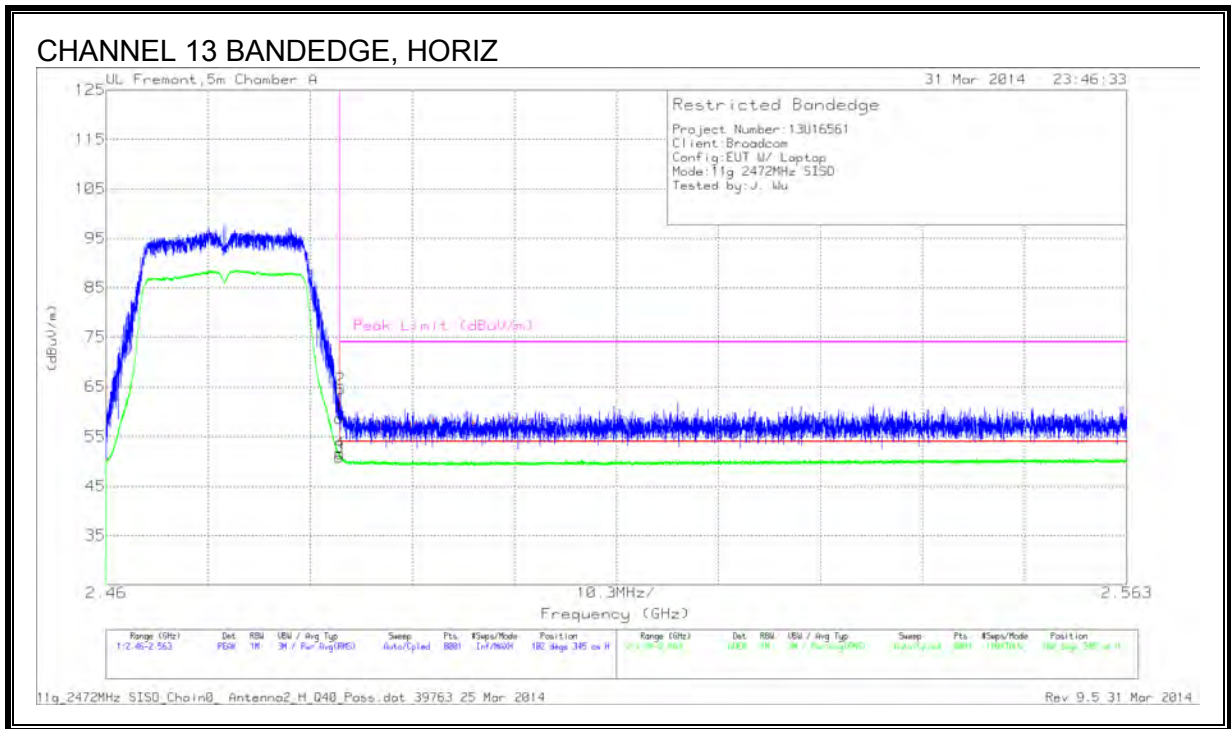
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.484	29.83	PK	32.7	5.1	0	67.63	-	-	74	-6.37	147	282	V
4	2.484	15.35	RMS	32.7	5.1	.2	53.35	54	-65	-	-	147	282	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (CHANNEL 13)



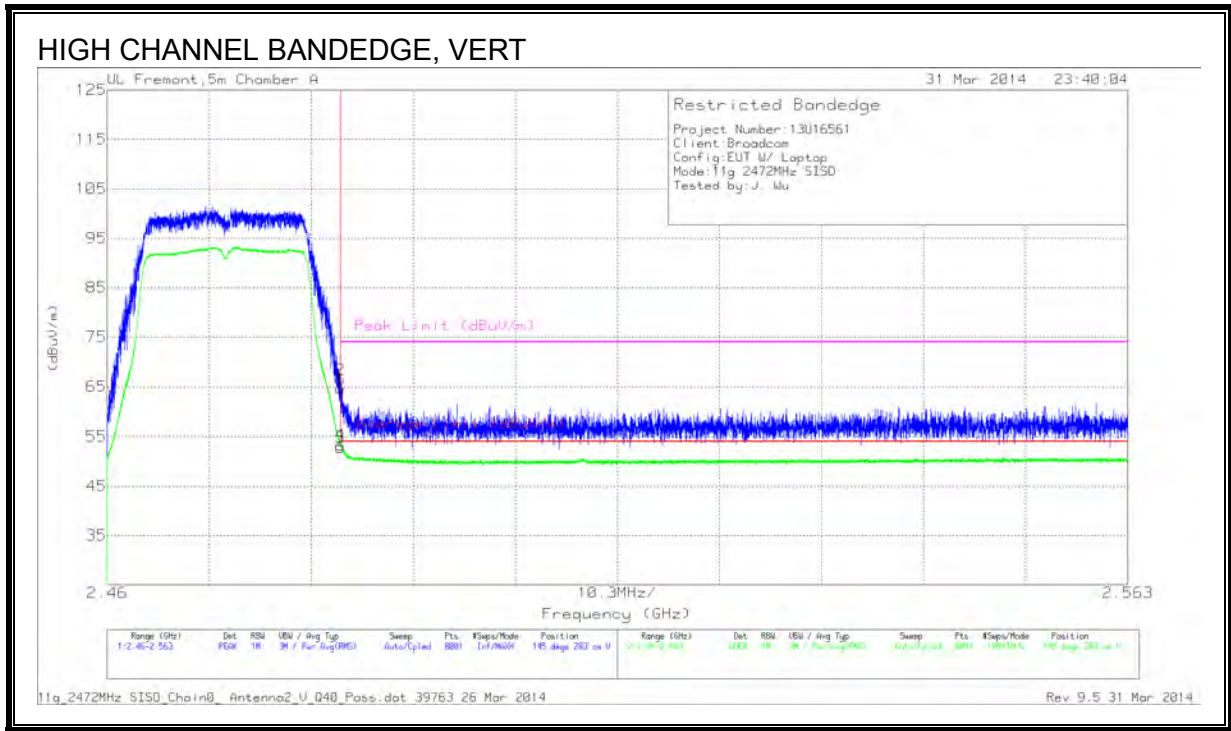
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.484	26.69	PK	32.7	5.1	0	64.49	-	-	74	-9.51	102	345	H
4	2.484	13.83	RMS	32.7	5.1	.2	51.83	54	-2.17	-	-	102	345	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.484	28.62	PK	32.7	5.1	0	66.42	-	-	74	-7.58	145	283	V
4	2.484	15.34	RMS	32.7	5.1	.2	53.34	54	-66	-	-	145	283	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

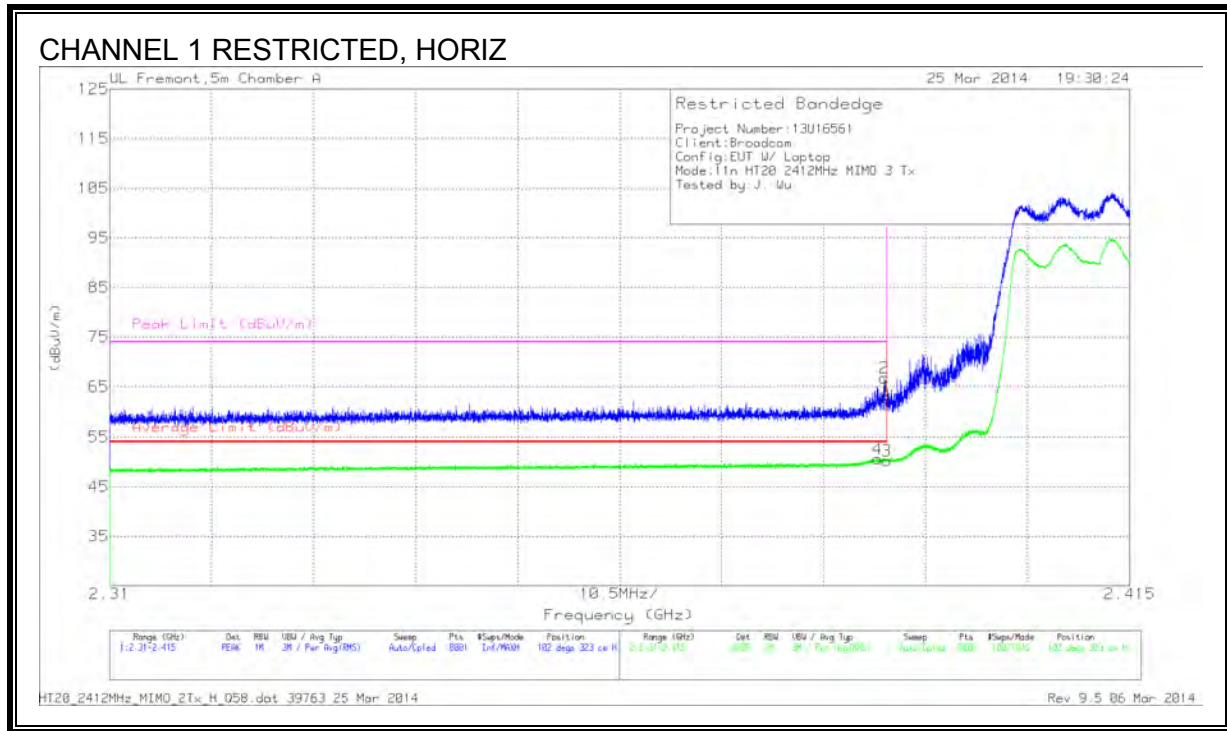
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

Covered by worst case testing to 802.11n HT20 CDD 3TX mode at power levels, per transmit chain, greater than or equal to the maximum power in any 1TX mode.

9.4 TX ABOVE 1 GHz 802.11n HT20 CDD 3TX MODE IN THE 2.4 GHz BAND

RESTRICTED BANDEDGE (CHANNEL 1)



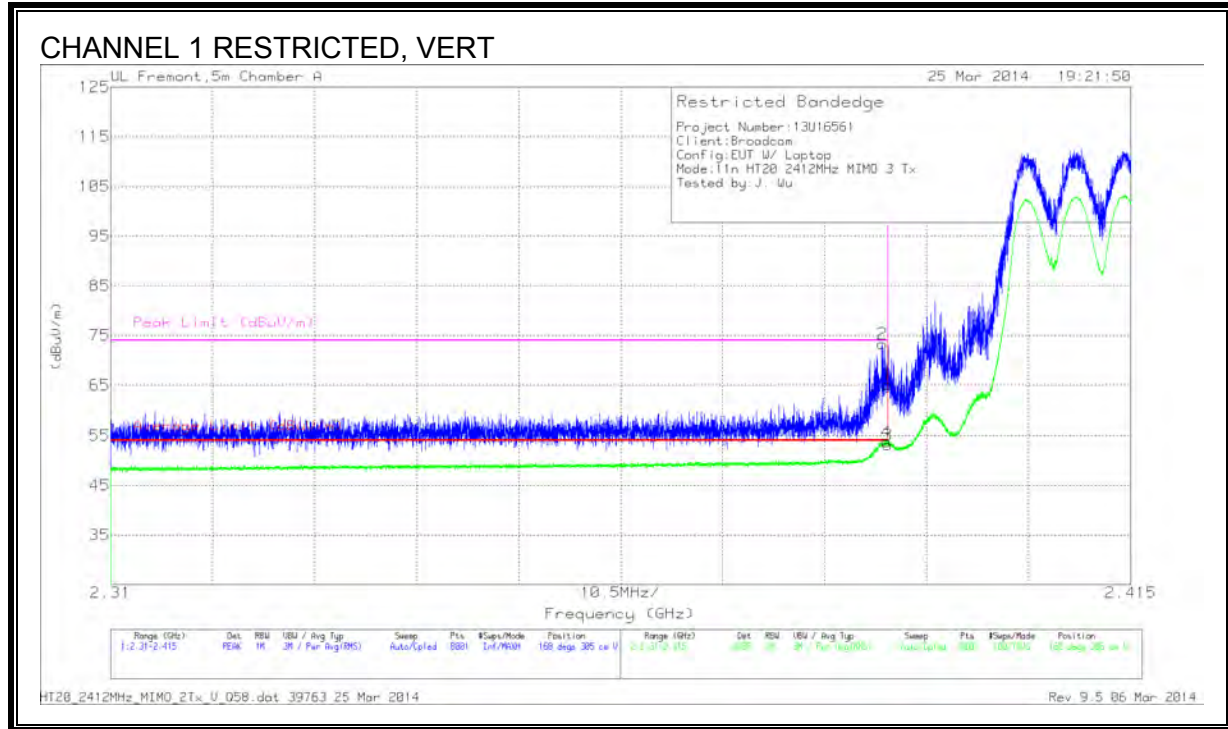
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	*2.389	13.46	RMS	32.2	4.9	.23	50.79	54	-3.21	-	-	102	323	H
2	*2.39	29.67	PK	32.2	4.9	0	66.77	-	-	74	-7.23	102	323	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

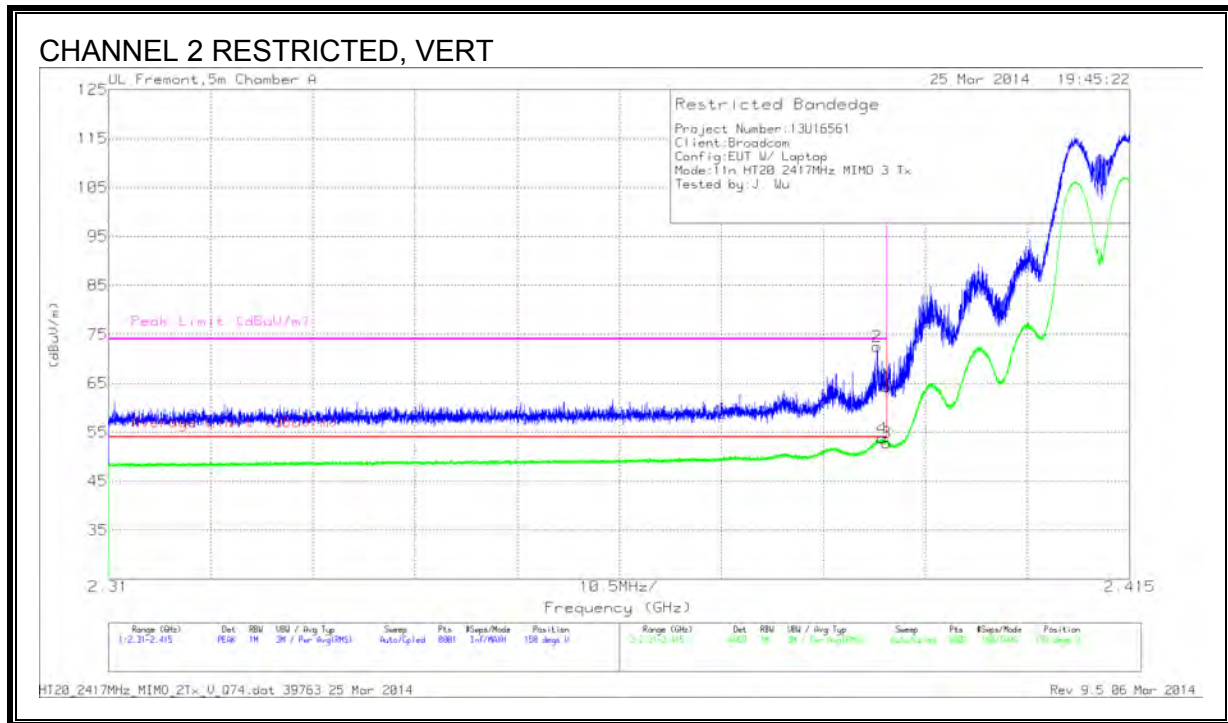


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.389	36.24	PK	32.2	4.9	0	73.34	-	-	74	-66	160	305	V
4	2.39	16.66	RMS	32.2	4.9	.23	53.99	54	-.01	-	-	160	305	V

PK - Peak detector
RMS - RMS detection

RESTRICTED BANDEDGE (CHANNEL 2)



Trace Markers

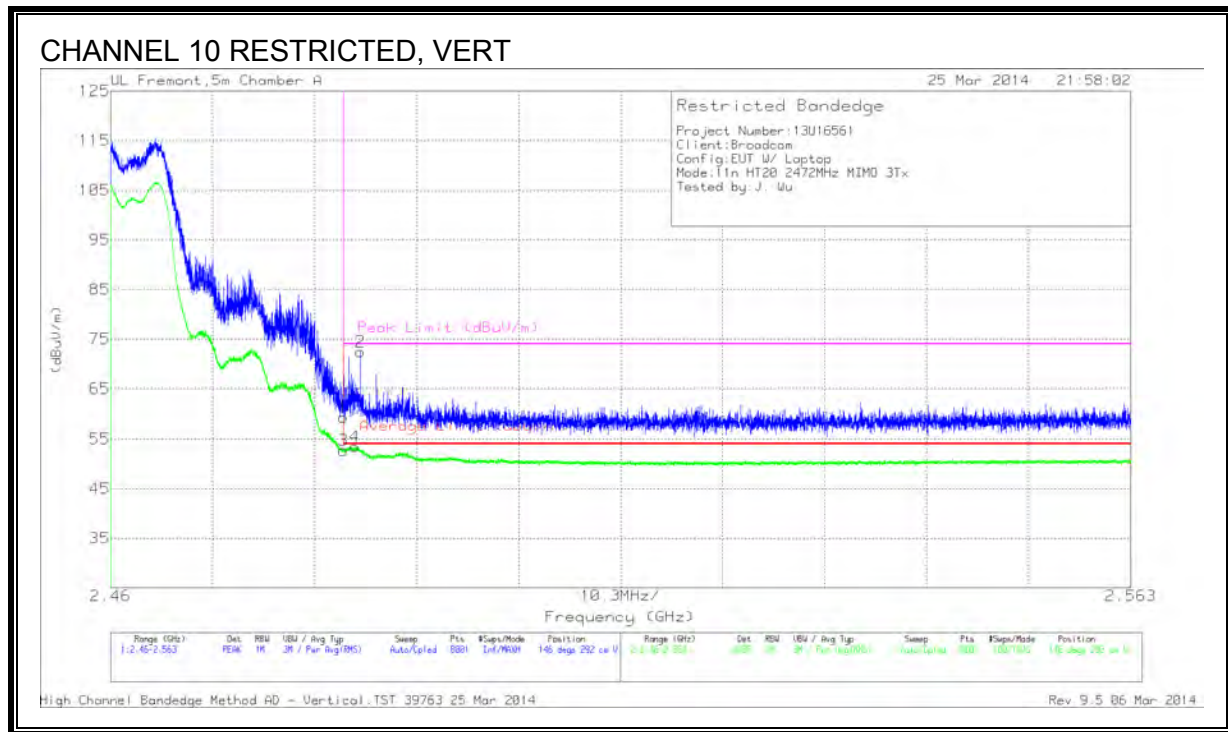
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	*2.389	35.4	PK	32.2	4.9	0	72.5	-	-	74	-1.5	158	297	V
4	*2.39	16.42	RMS	32.2	4.9	.23	53.75	54	-25	-	-	158	297	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (CHANNEL 10)



Trace Markers

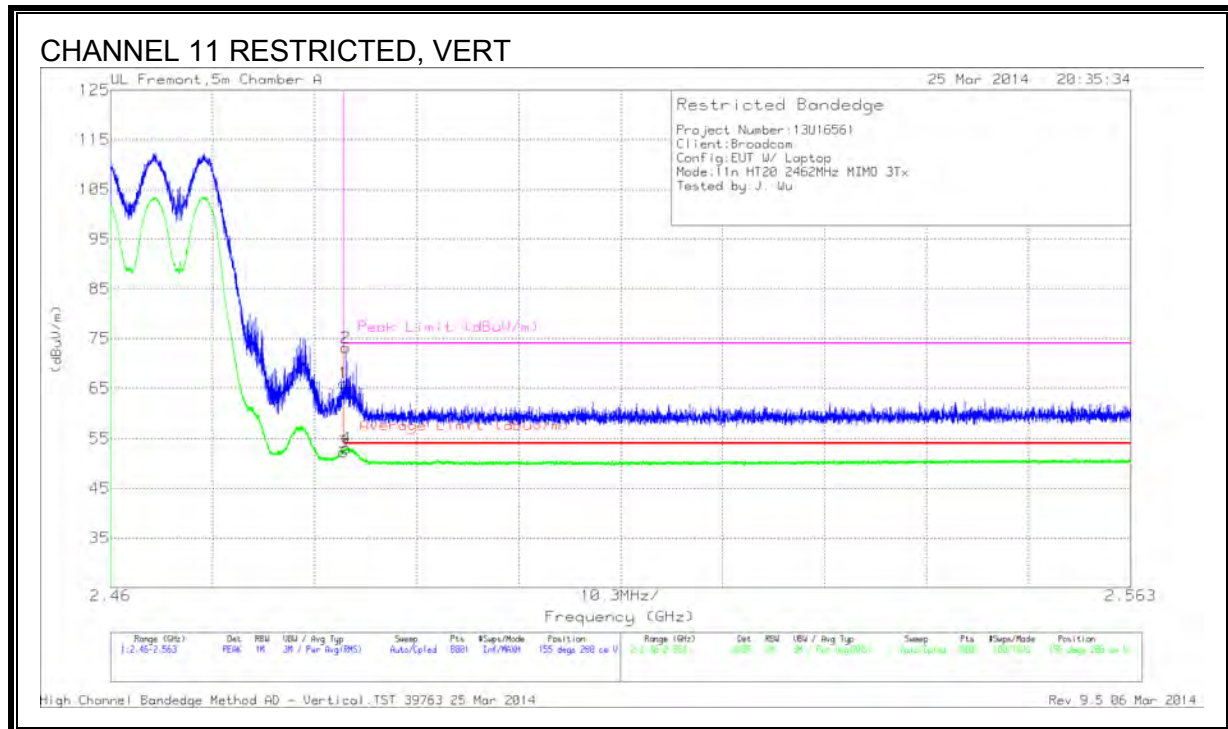
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	*2.485	34.66	PK	32.7	5.1	0	72.46	-	-	74	-1.54	146	292	V
4	*2.485	15.5	RMS	32.7	5.1	.23	53.53	54	-0.47	-	-	146	292	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (CHANNEL 11)



Trace Markers

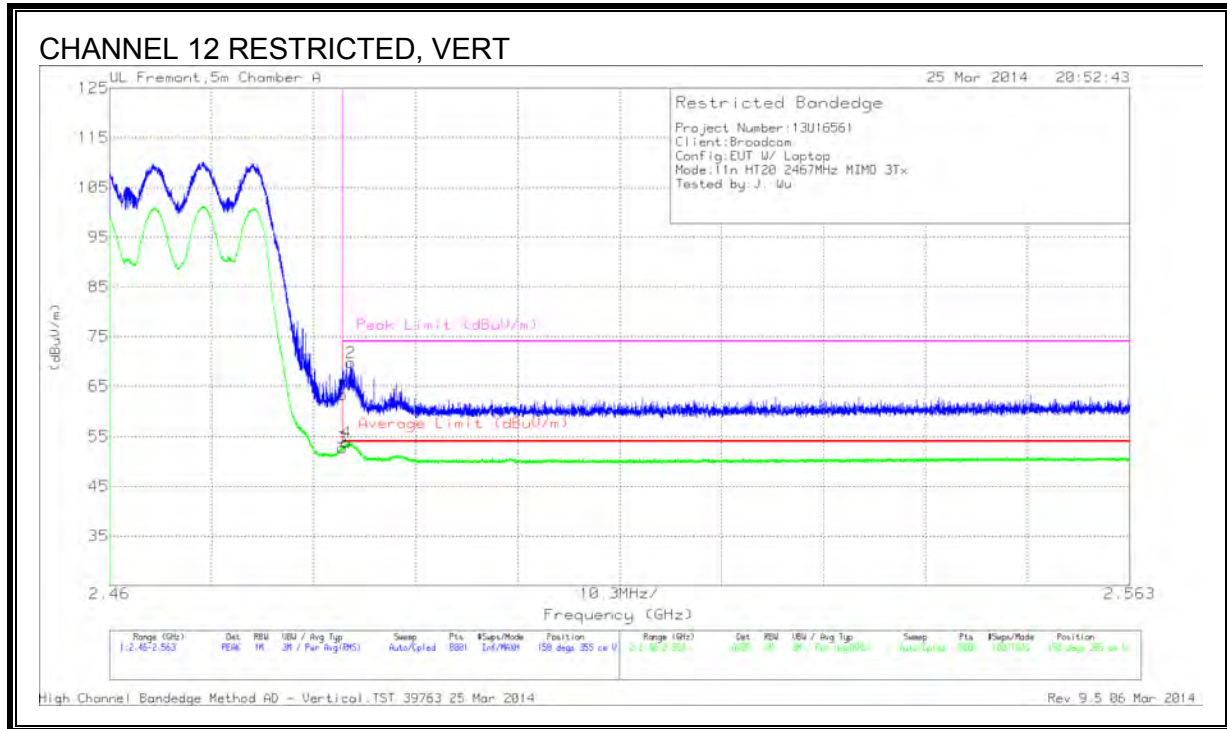
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	*2.484	35.36	PK	32.7	5.1	0	73.16	-	-	74	-84	155	280	V
4	*2.484	15.08	RMS	32.7	5.1	.23	53.11	54	-0.89	-	-	155	280	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (CHANNEL 12)



Trace Markers

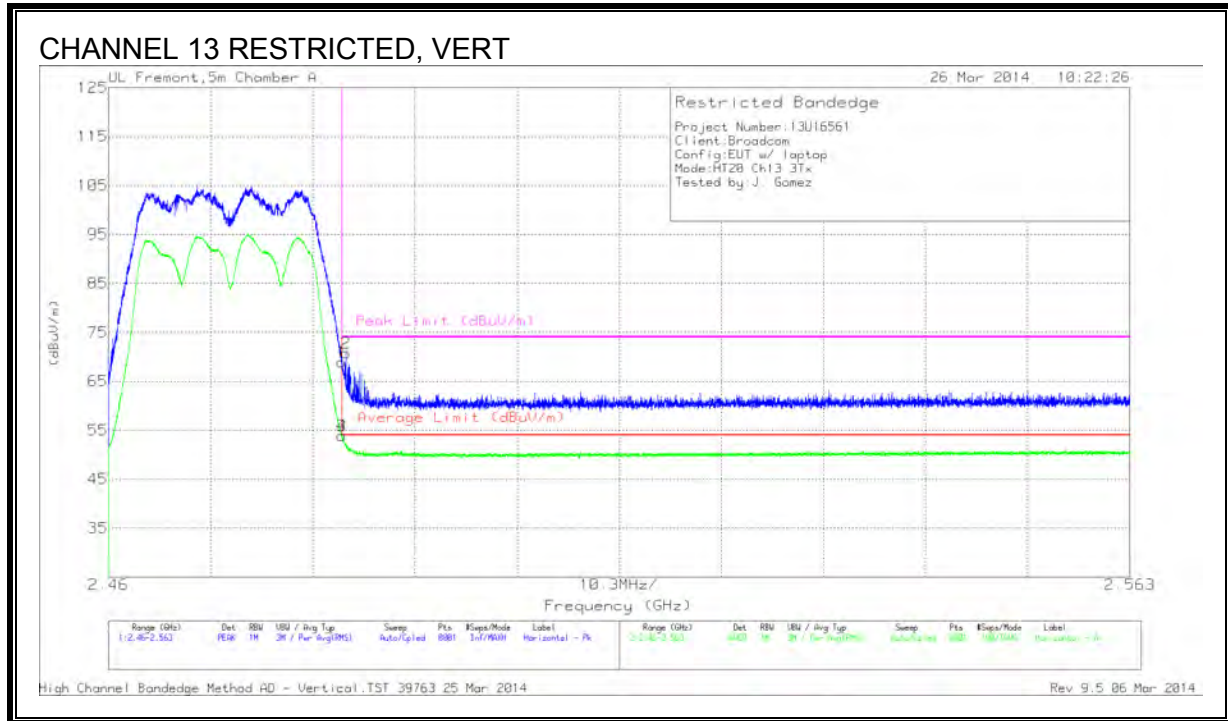
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	*2.484	31.96	PK	32.7	5.1	0	69.76	-	-	74	-4.24	150	355	V
4	*2.484	15.85	RMS	32.7	5.1	.23	53.88	54	-0.12	-	-	150	355	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (CHANNEL 13)



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	*2.484	33.02	PK	32.7	5.1	0	70.82	-	-	74	-3.18	4	258	V
3	*2.484	15.92	RMS	32.7	5.1	.23	53.95	54	-0.05	-	-	4	258	V

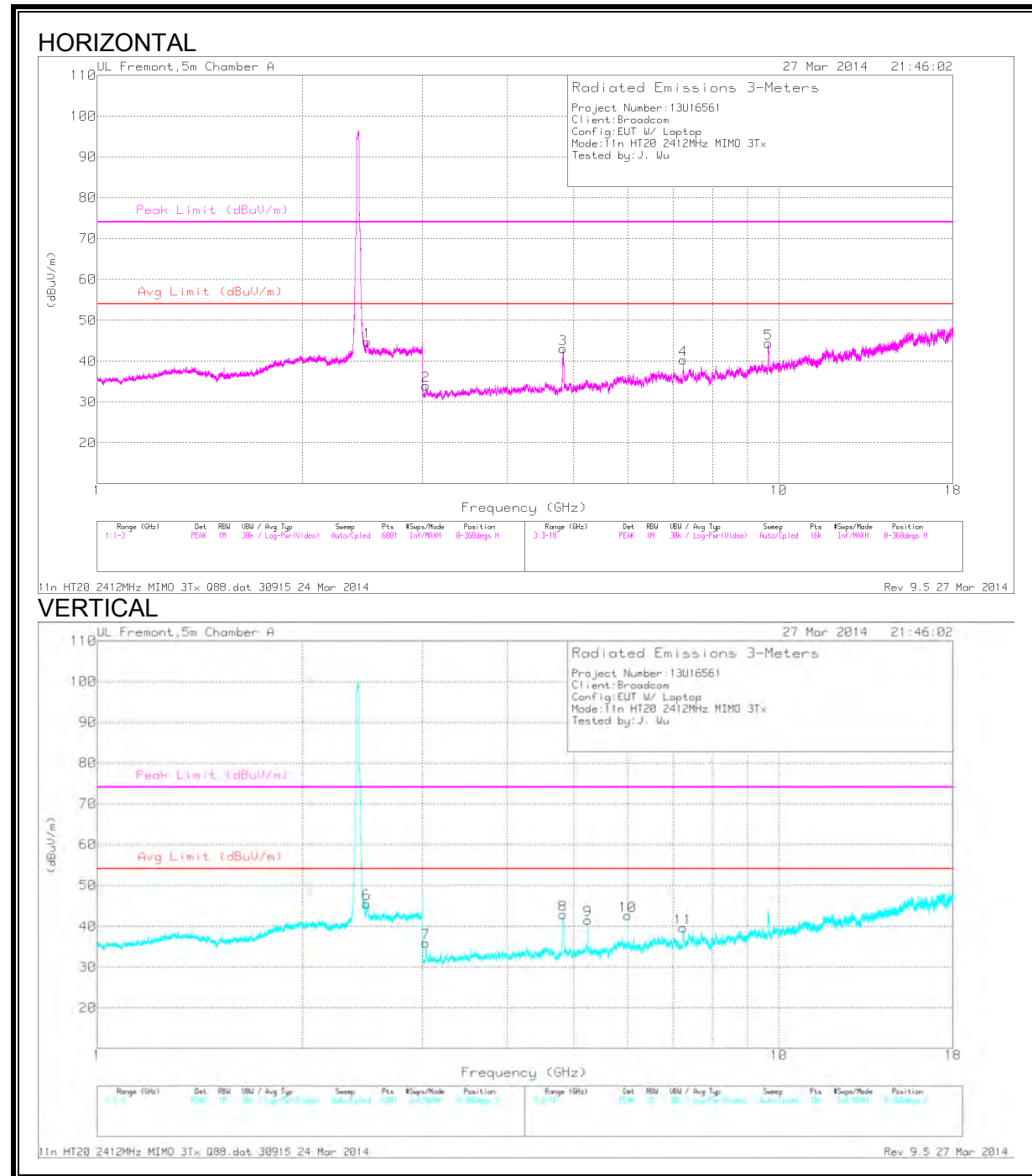
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cb/Fitr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4873	50.2	PK1	32.8	-23.4	0	59.6	-	-	74	-14.4	112	342	H
	* 2.4875	39.17	AD1	32.8	-23.4	0.23	48.80	54	-5.2	74	-25.43	112	342	H
6	* 2.4875	50.44	PK1	32.8	-23.4	0	59.84	-	-	74	-14.16	141	219	V
	* 2.4874	40.22	AD1	32.8	-23.4	0.23	49.85	54	-4.15	74	-24.38	141	219	V
3	* 4.827	41.63	PK2	34	-29.3	0	46.33	-	-	74	-27.67	352	104	H
	* 4.825	30.76	MAV1	34	-29.4	.23	35.59	54	-18.41	-	-	352	104	H
8	* 4.827	41.63	PK2	34	-29.3	0	46.33	-	-	74	-27.67	352	104	H
	* 4.825	30.76	MAV1	34	-29.4	.23	35.59	54	-18.41	-	-	352	104	H
2	3.037	31.88	PK	32.8	-30.7	0	33.98	-	-	-	-	0-360	200	H
7	3.037	33.85	PK	32.8	-30.7	0	35.95	-	-	-	-	0-360	100	V
9	5.25	35.99	PK	34.2	-28.6	0	41.59	-	-	-	-	0-360	100	V
10	6	36.14	PK	35.3	-28.8	0	42.64	-	-	-	-	0-360	201	V
11	7.235	30.64	PK	35.2	-26.2	0	39.64	-	-	-	-	0-360	201	V
4	7.244	31.3	PK	35.2	-26.2	0	40.3	-	-	-	-	0-360	200	H
5	9.646	31.65	PK	36.8	-24.1	0	44.35	-	-	-	-	0-360	200	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

-Compliance for emissions in non-restricted bands is shown in conducted out of band testing

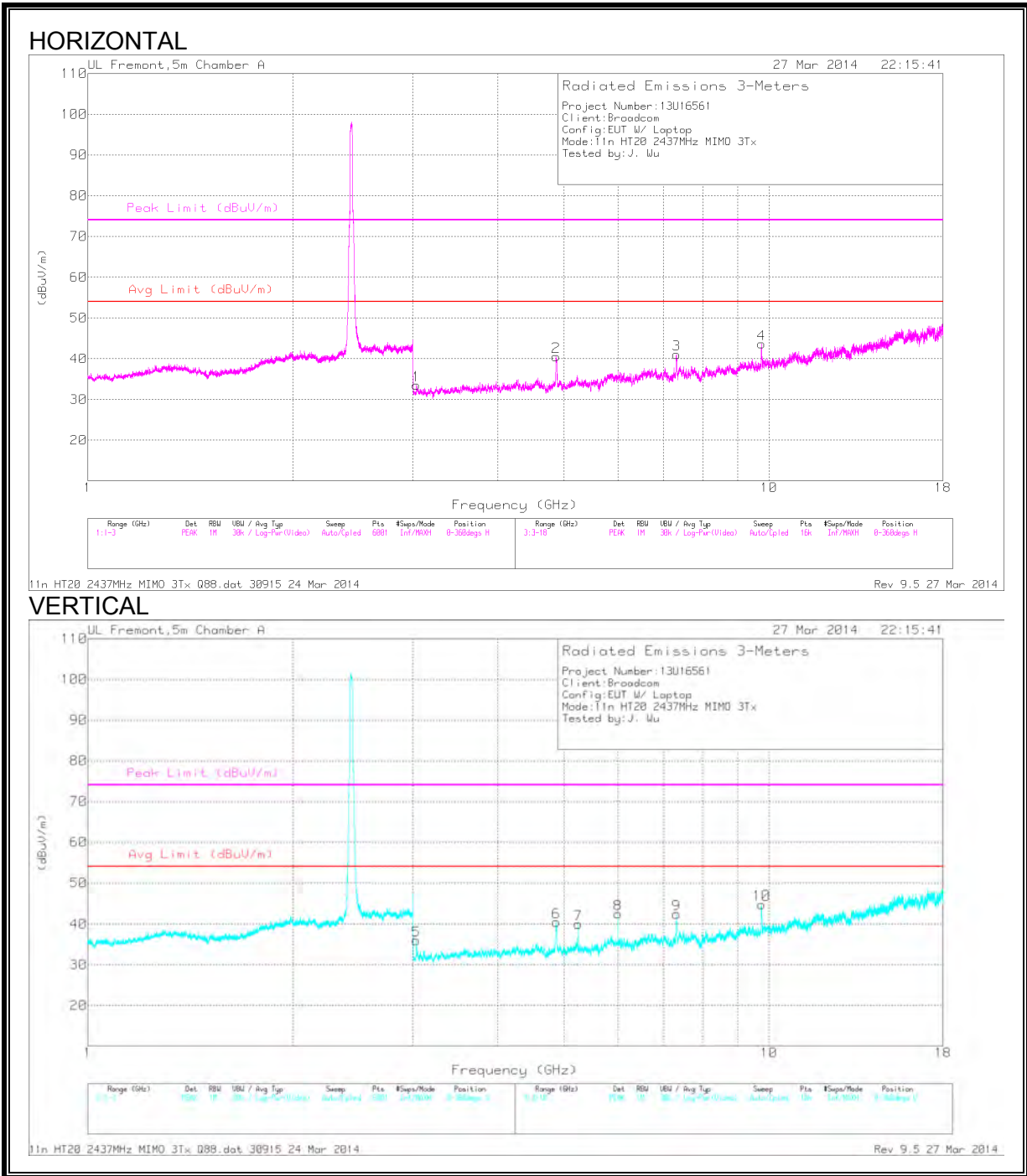
PK – Peak detector

PK2 - KDB558074 Method: Maximum Peak

MAV1 - KDB558074 Option 1 Maximum RMS Average

Note: Signals in non-restricted bands are covered by -30 dBc antenna port spurious testing.

MID CHANNEL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cb/Fitr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 4.864	44.5	PK2	34	-28.5	0	50	-	-	74	-24	131	215	H
	* 4.869	31.98	MAv1	34	-28.5	.23	37.71	54	-16.29	-	-	131	215	H
3	* 7.319	41.96	PK2	35.2	-26.7	0	50.46	-	-	74	-23.54	160	250	H
	* 7.316	31.87	MAv1	35.2	-26.9	.23	40.4	54	-13.6	-	-	160	250	H
6	* 4.871	45.35	PK2	34	-28.4	0	50.95	-	-	74	-23.05	79	150	V
	* 4.873	33.79	MAv1	34	-28.3	.23	39.72	54	-14.28	-	-	79	150	V
9	* 7.312	40.81	PK2	35.2	-27.1	0	48.91	-	-	74	-25.09	0	165	V
	* 7.312	30.6	MAv1	35.2	-27.2	.23	38.83	54	-15.17	-	-	0	165	V
1	3.037	31.45	PK	32.8	-30.7	0	33.55	-	-	-	-	0-360	200	H
5	3.037	33.89	PK	32.8	-30.7	0	35.99	-	-	-	-	0-360	200	V
7	5.25	34.39	PK	34.2	-28.6	0	39.99	-	-	-	-	0-360	100	V
8	6	36.01	PK	35.3	-28.8	0	42.51	-	-	-	-	0-360	100	V
4	9.751	31.35	PK	36.9	-24.6	0	43.65	-	-	-	-	0-360	200	H
10	9.751	32.5	PK	36.9	-24.6	0	44.8	-	-	-	-	0-360	200	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

-Compliance for emissions in non-restricted bands is shown in conducted out of band testing

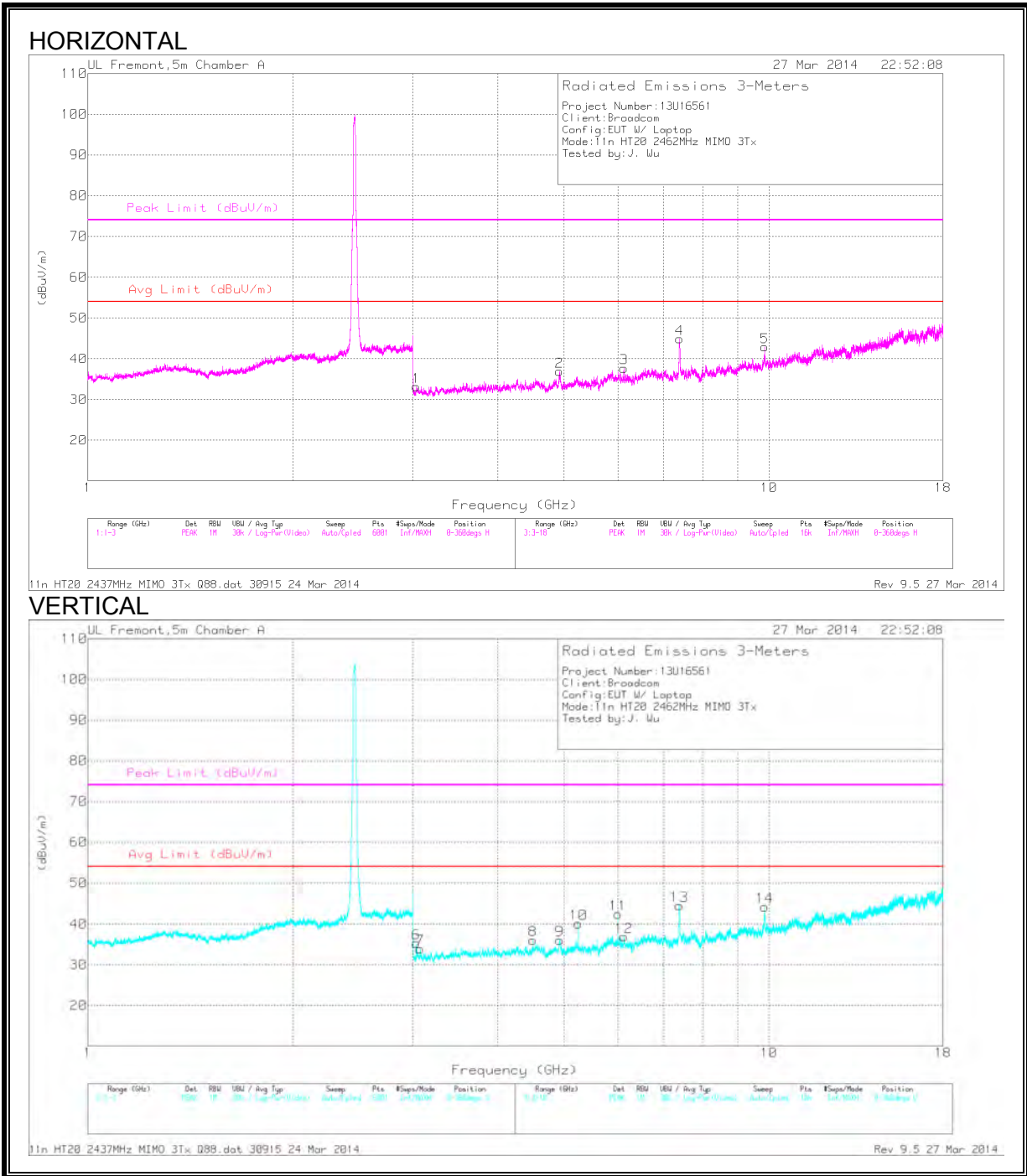
PK – Peak detector

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

Note: Signals in non-restricted bands are covered by -30 dBc antenna port spurious testing.

HIGH CHANNEL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cb/Filtr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 4.923	41.29	PK2	33.9	-29	0	46.19	-	-	74	-27.81	256	235	H
	* 4.927	29.89	MAv1	33.9	-29	.23	35.02	54	-18.98	-	-	256	235	H
4	* 7.393	44.39	PK2	35.3	-24.7	0	54.99	-	-	74	-19.01	215	223	H
	* 7.39	33.33	MAv1	35.3	-24.5	.23	44.36	54	-9.64	-	-	215	223	H
9	* 4.924	41.95	PK2	33.9	-29	0	46.85	-	-	74	-27.15	266	198	V
	* 4.926	30.16	MAv1	33.9	-29	.23	35.29	54	-18.71	-	-	266	198	V
13	* 7.393	45.18	PK2	35.3	-24.7	0	55.78	-	-	74	-18.22	236	288	V
	* 7.39	34.63	MAv1	35.3	-24.5	.23	45.66	54	-8.34	-	-	236	288	V
1	3.037	31.03	PK	32.8	-30.7	0	33.13	-	-	-	-	0-360	200	H
6	3.037	33.25	PK	32.8	-30.7	0	35.35	-	-	-	-	0-360	201	V
7	3.075	31.75	PK	32.8	-30.6	0	33.95	-	-	-	-	0-360	201	V
8	4.5	32.59	PK	33.9	-30.4	0	36.09	-	-	-	-	0-360	100	V
10	5.25	34.5	PK	34.2	-28.6	0	40.1	-	-	-	-	0-360	100	V
11	6	35.97	PK	35.3	-28.8	0	42.47	-	-	-	-	0-360	100	V
3	6.122	30.91	PK	35.4	-28.6	0	37.71	-	-	-	-	0-360	100	H
12	6.122	30.09	PK	35.4	-28.6	0	36.89	-	-	-	-	0-360	201	V
14	9.848	29.53	PK	37	-22.3	0	44.23	-	-	-	-	0-360	201	V
5	9.855	28.18	PK	37	-22.3	0	42.88	-	-	-	-	0-360	200	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

-Compliance for emissions in non-restricted bands is shown in conducted out of band testing

PK – Peak detector

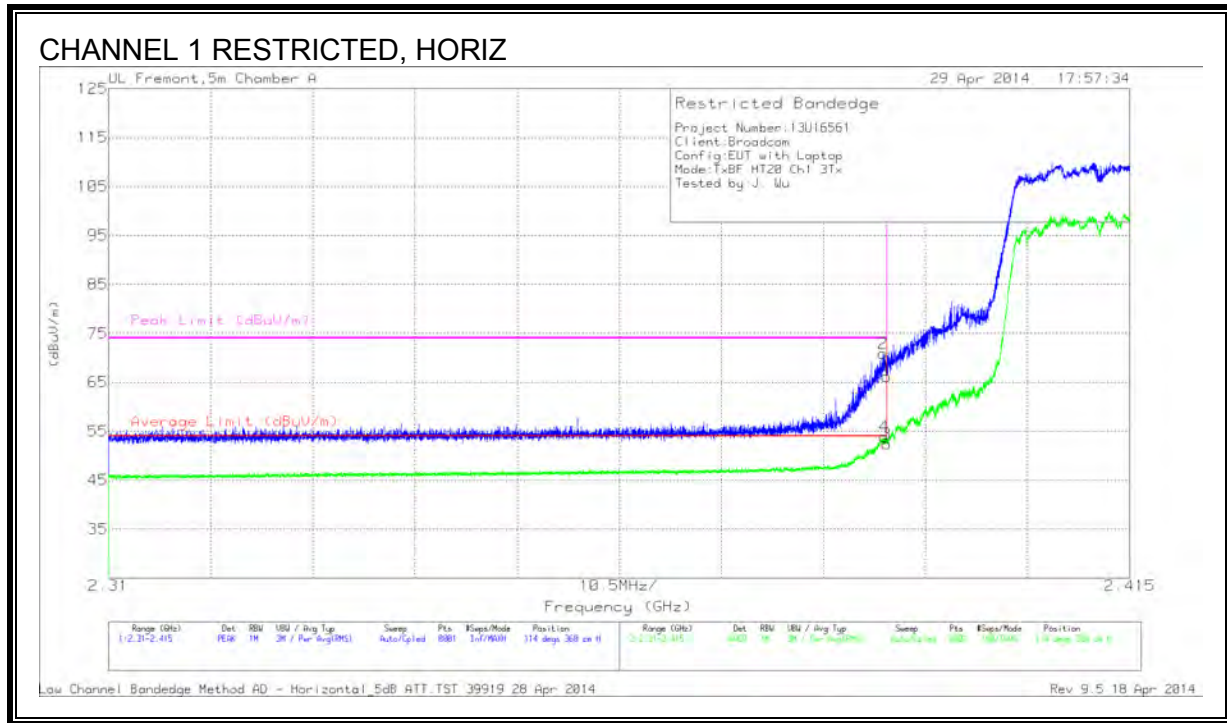
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

Note: Signals in non-restricted bands are covered by -30 dBc antenna port spurious testing.

9.5 TX ABOVE 1 GHz 802.11n HT20 BF 3TX MODE IN THE 2.4 GHz BAND

RESTRICTED BANDEDGE (CHANNEL 1)



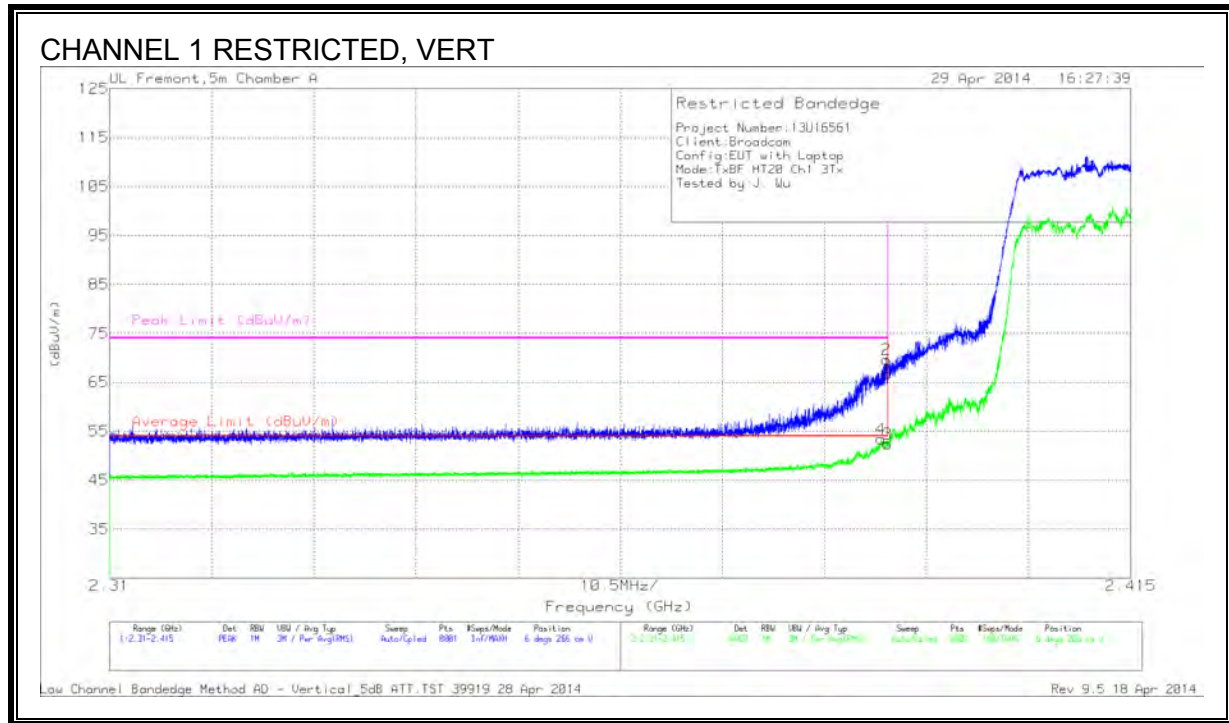
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.39	33.8	PK	32.2	4.9	0	70.9	-	-	74	-3.1	114	368	H
4	2.39	14.15	RMS	32.2	4.9	2.74	53.99	54	-0.1	-	-	114	368	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

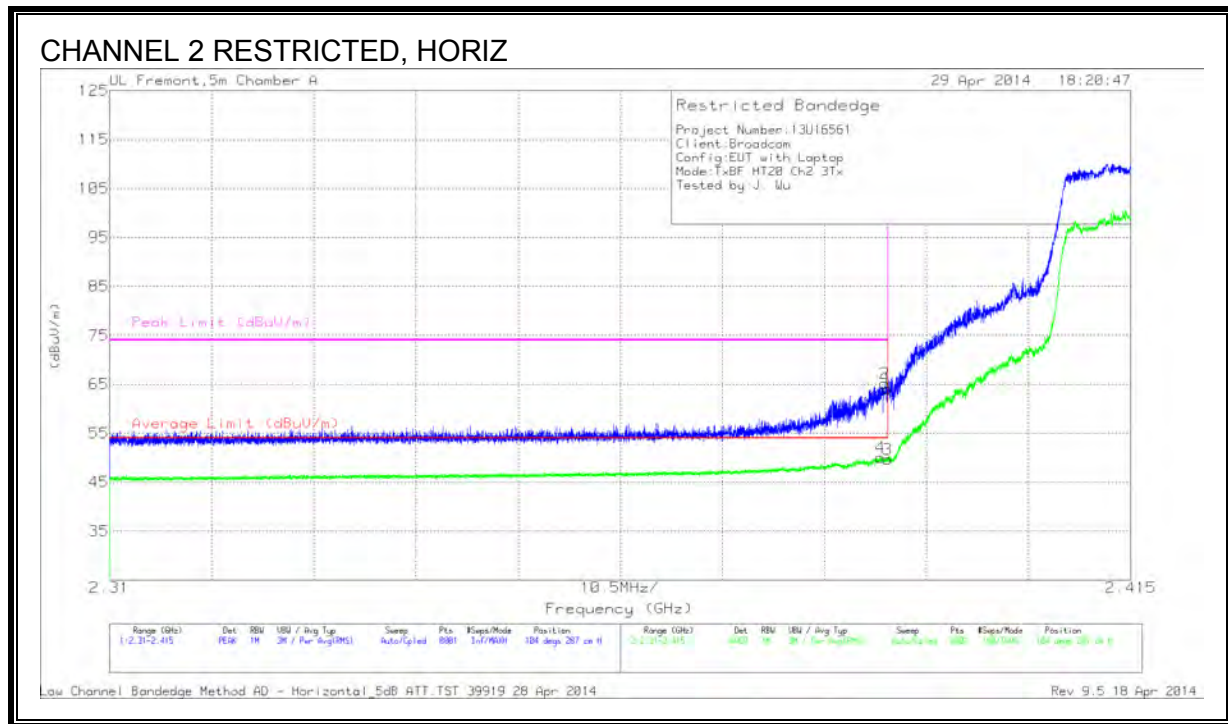


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	2.389	13.61	RMS	32.2	4.9	2.74	53.45	54	-55	-	-	6	266	V
2	2.39	32.57	PK	32.2	4.9	0	69.67	-	-	74	-4.33	6	266	V

PK - Peak detector
RMS - RMS detection

RESTRICTED BANDEDGE (CHANNEL 2)



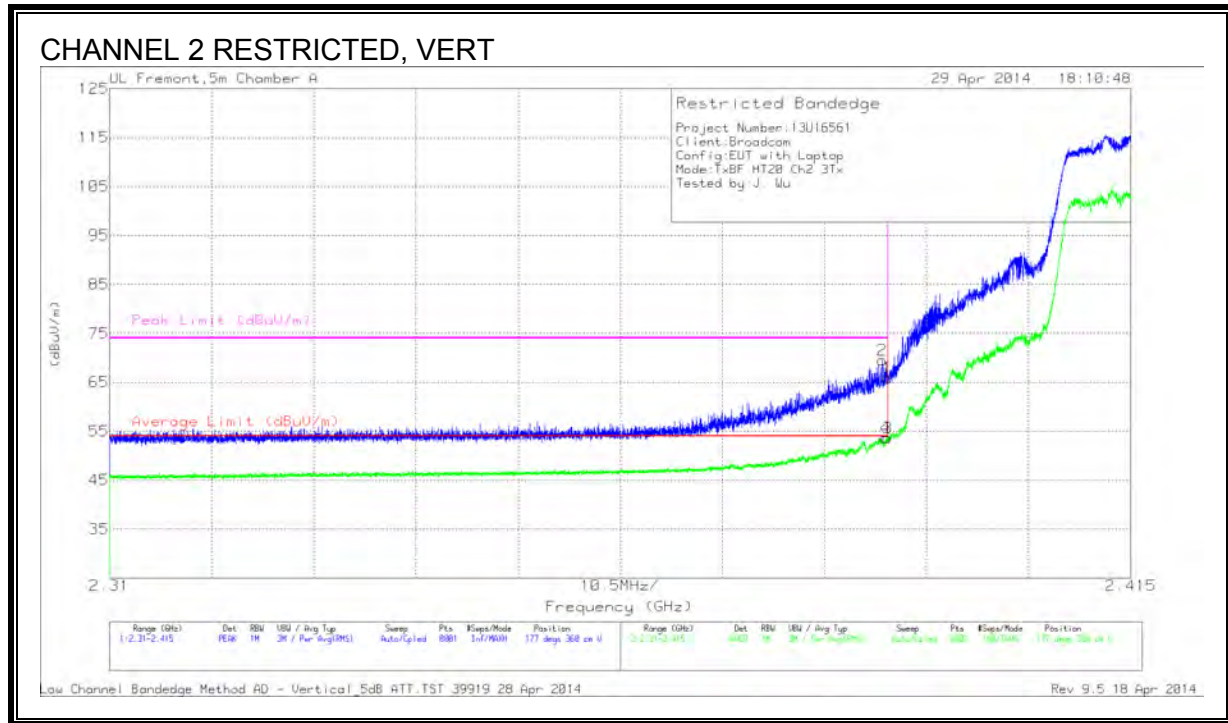
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	2.389	10.29	RMS	32.2	4.9	2.74	50.13	54	-3.87	-	-	104	287	H
2	2.39	28.13	PK	32.2	4.9	0	65.23	-	-	74	-8.77	104	287	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection



Trace Markers

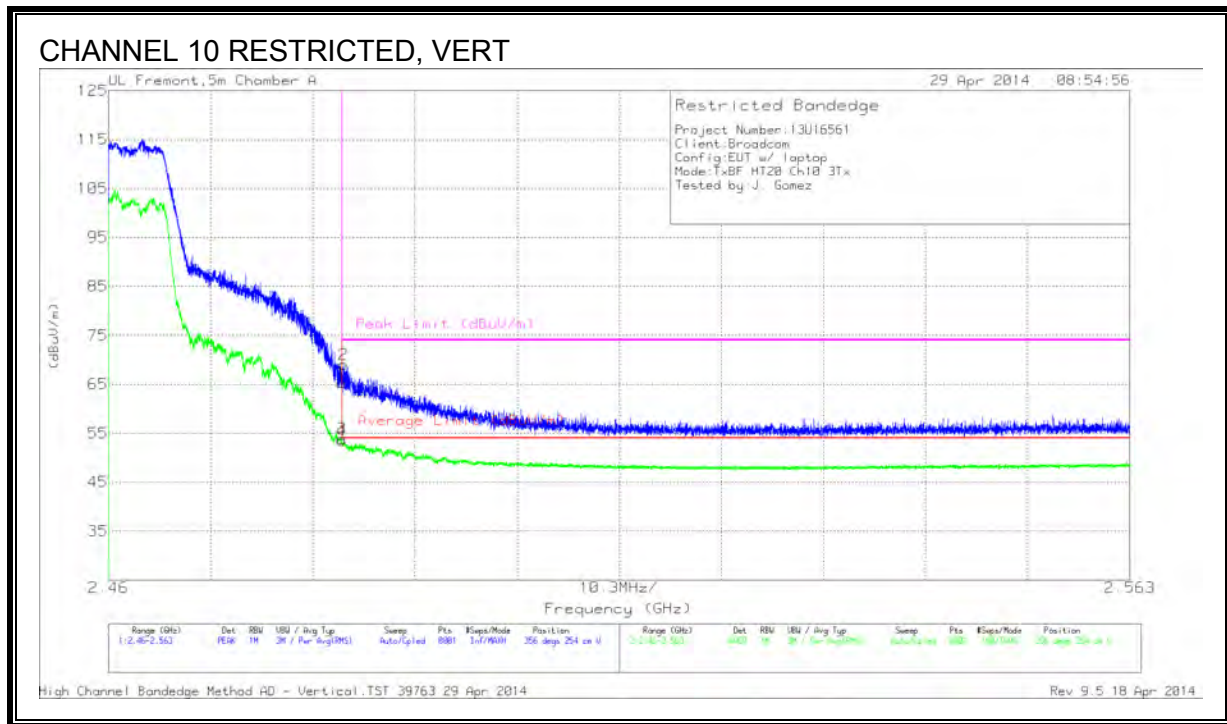
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.389	32.39	PK	32.2	4.9	0	69.49	-	-	74	-4.51	177	360	V
3	2.39	13.81	RMS	32.2	4.9	2.74	53.65	54	-35	-	-	177	360	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (CHANNEL 10)



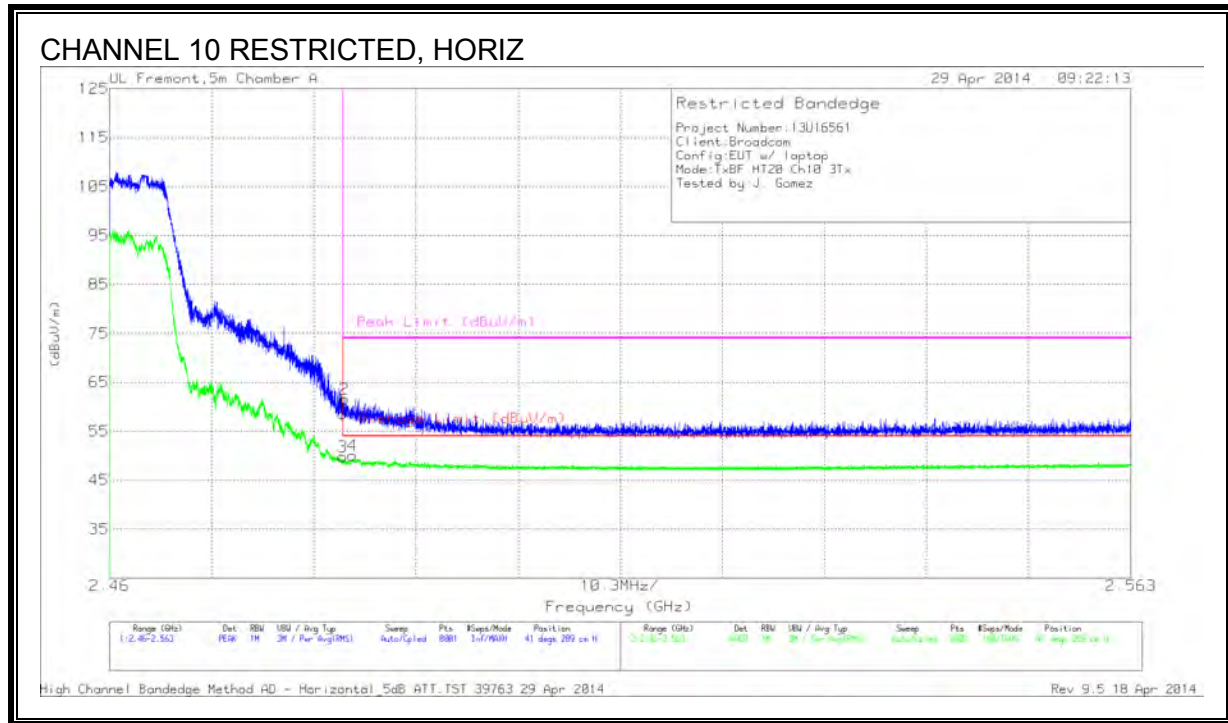
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	*2.484	31.19	PK	32.7	5.1	0	68.99	-	-	74	-5.01	356	254	V
3	*2.484	13.4	RMS	32.7	5.1	2.74	53.94	54	-0.06	-	-	356	254	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection



Trace Markers

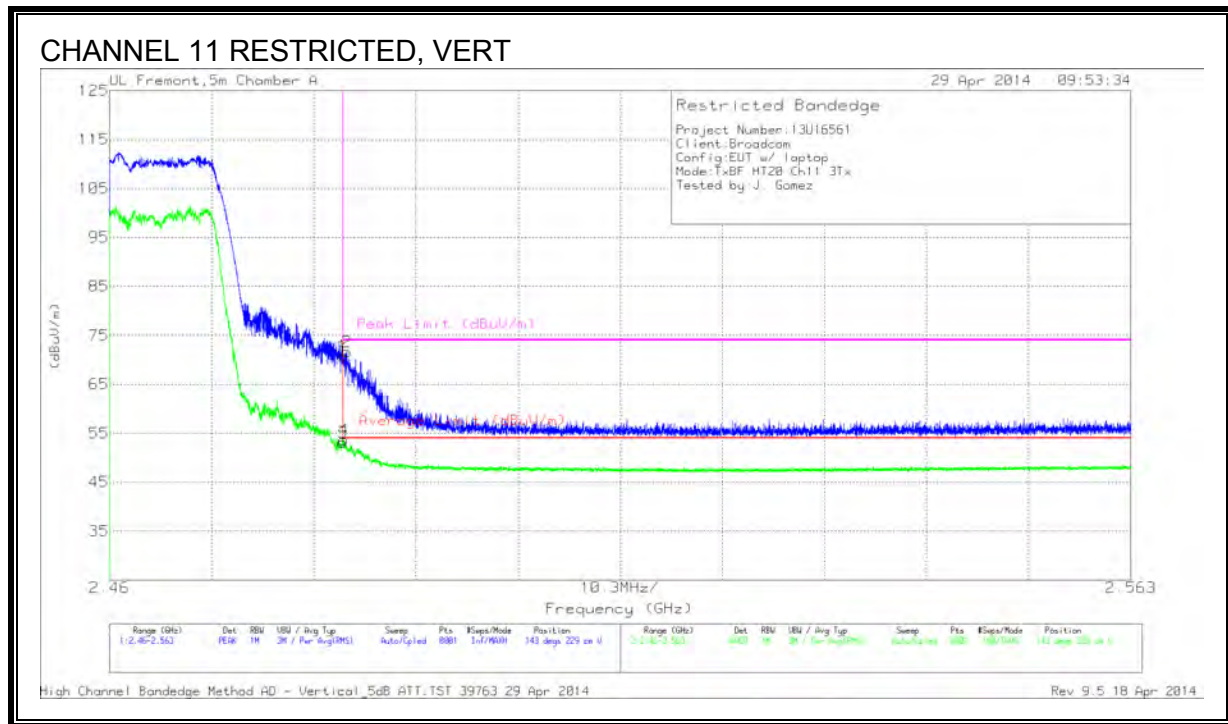
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	*2.484	23.8	PK	32.7	5.1	0	61.6	-	-	74	-12.4	41	289	H
4	*2.485	8.74	RMS	32.7	5.1	2.74	49.28	54	-4.72	-	-	41	289	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (CHANNEL 11)



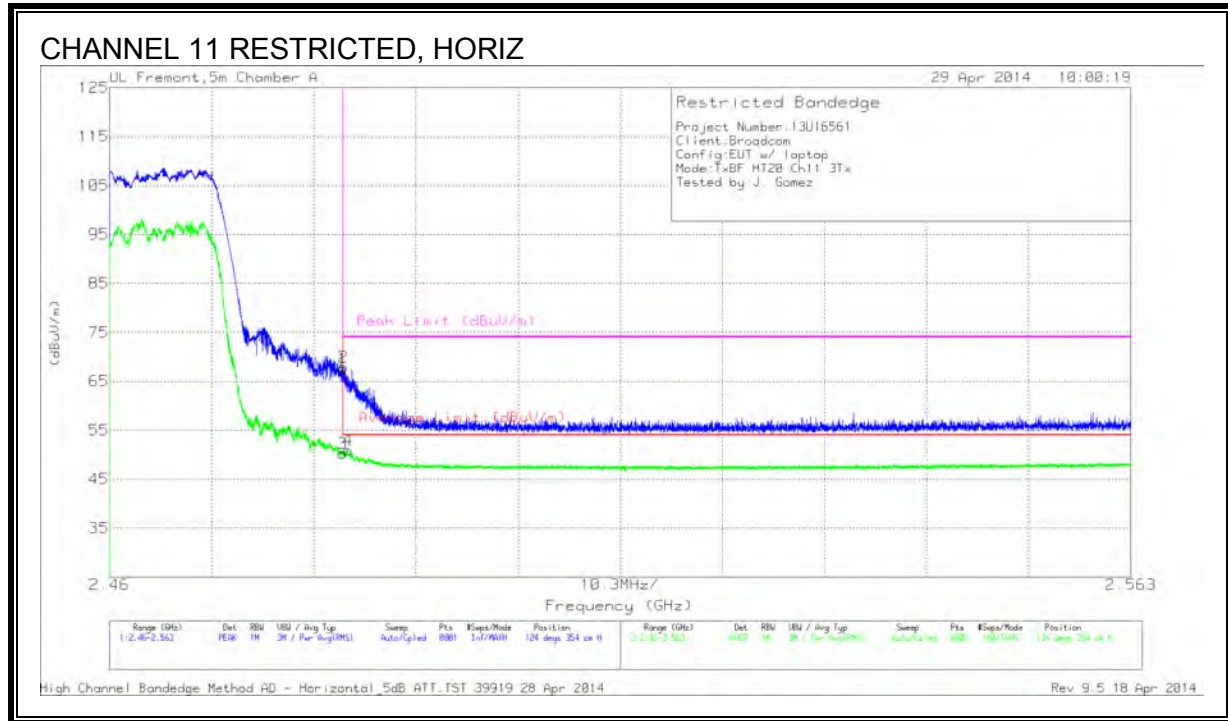
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.484	33.82	PK	32.7	5.1	0	71.62	-	-	74	-2.38	143	229	V
4	2.484	13.19	RMS	32.7	5.1	2.74	53.73	54	-27	-	-	143	229	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection



Trace Markers

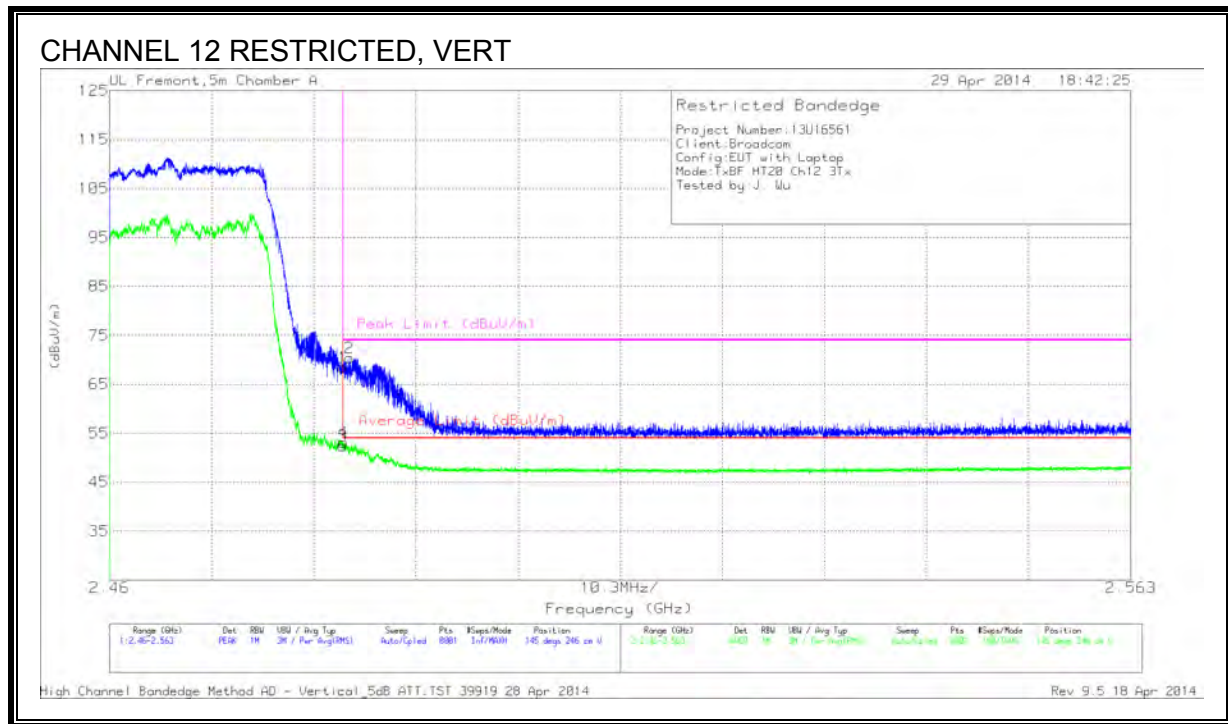
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.484	30.13	PK	32.7	5.1	0	67.93	-	-	74	-6.07	124	354	H
4	2.484	10.38	RMS	32.7	5.1	2.74	50.92	54	-3.08	-	-	124	354	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (CHANNEL 12)



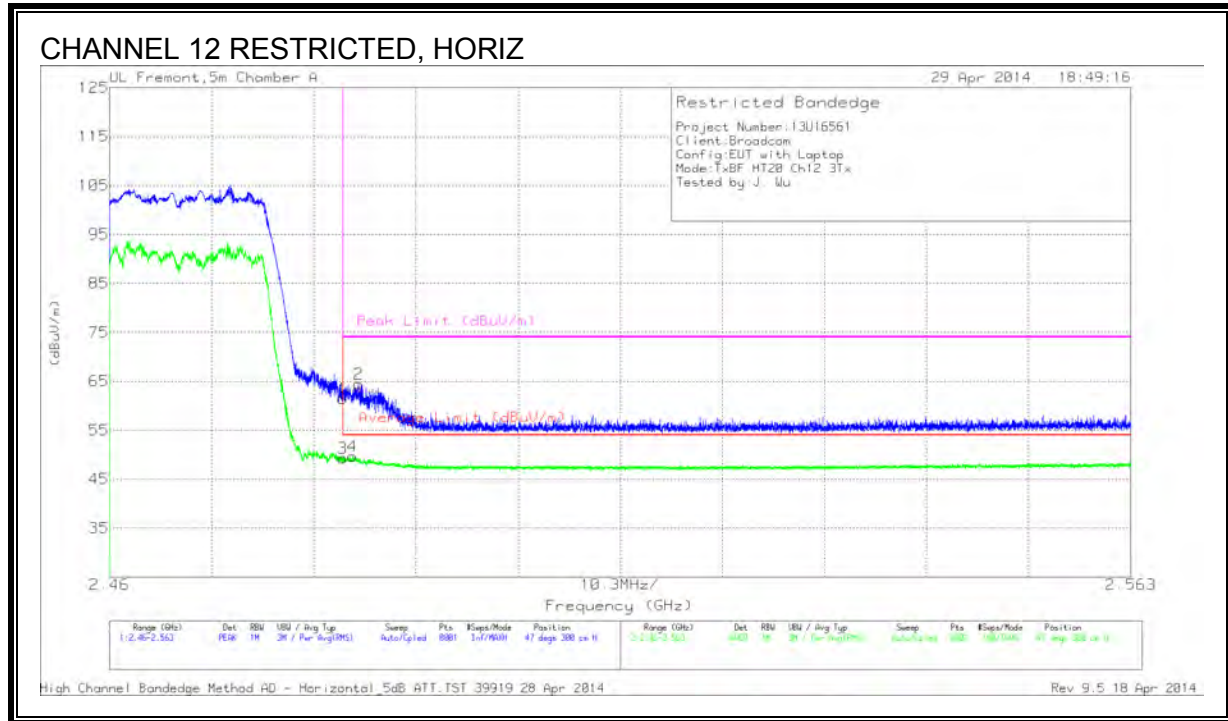
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.484	32.64	PK	32.7	5.1	0	70.44	-	-	74	-3.56	145	246	V
4	2.484	12.63	RMS	32.7	5.1	2.74	53.17	54	-0.83	-	-	145	246	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection



Trace Markers

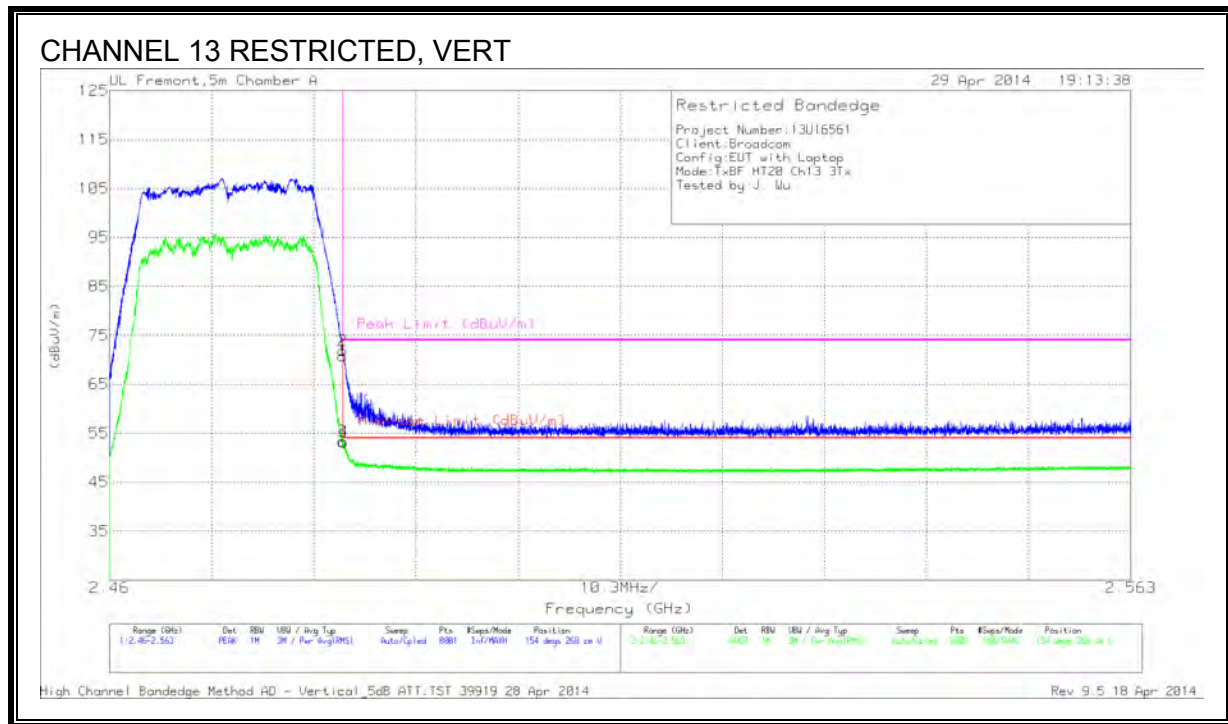
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.485	26.62	PK	32.7	5.1	0	64.42	-	-	74	-9.58	47	300	H
4	2.485	9.2	RMS	32.7	5.1	2.74	49.74	54	-4.26	-	-	47	300	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (CHANNEL 13)



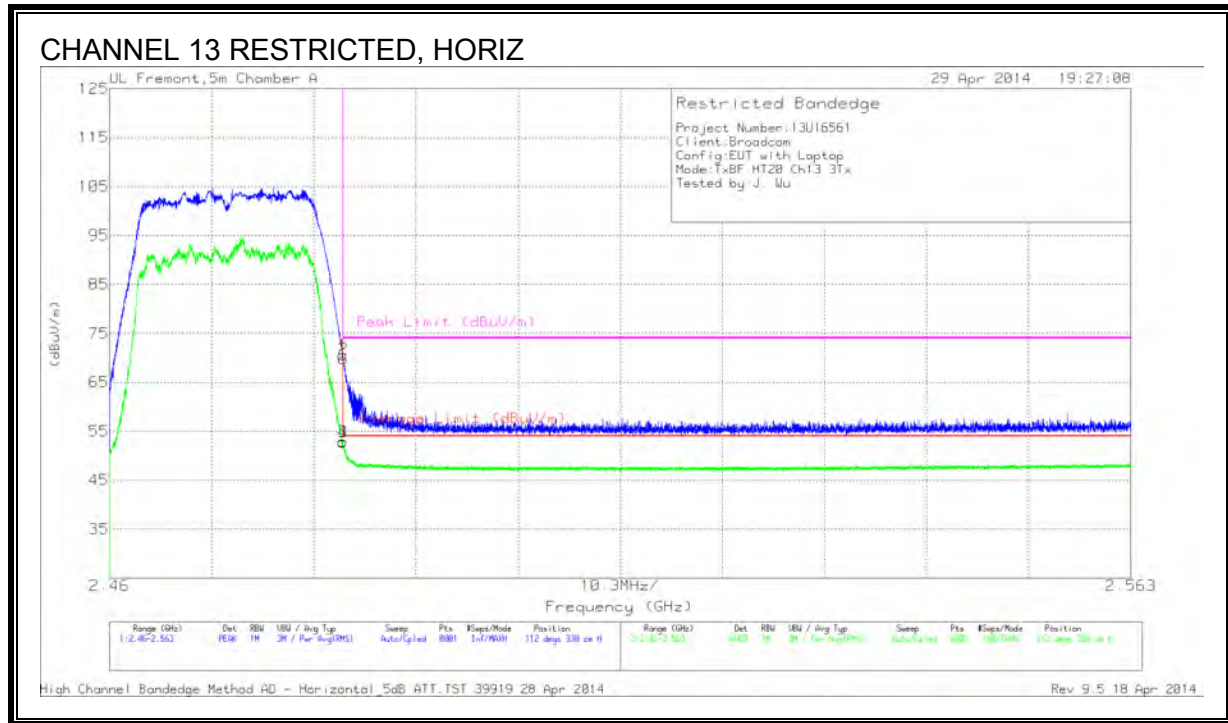
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.484	34.15	PK	32.7	5.1	0	71.95	-	-	74	-2.05	154	268	V
3	2.484	12.89	RMS	32.7	5.1	2.74	53.43	54	-57	-	-	154	268	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.484	32.76	PK	32.7	5.1	0	70.56	-	-	74	-3.44	112	338	H
3	2.484	12.43	RMS	32.7	5.1	2.74	52.97	54	-1.03	-	-	112	338	H

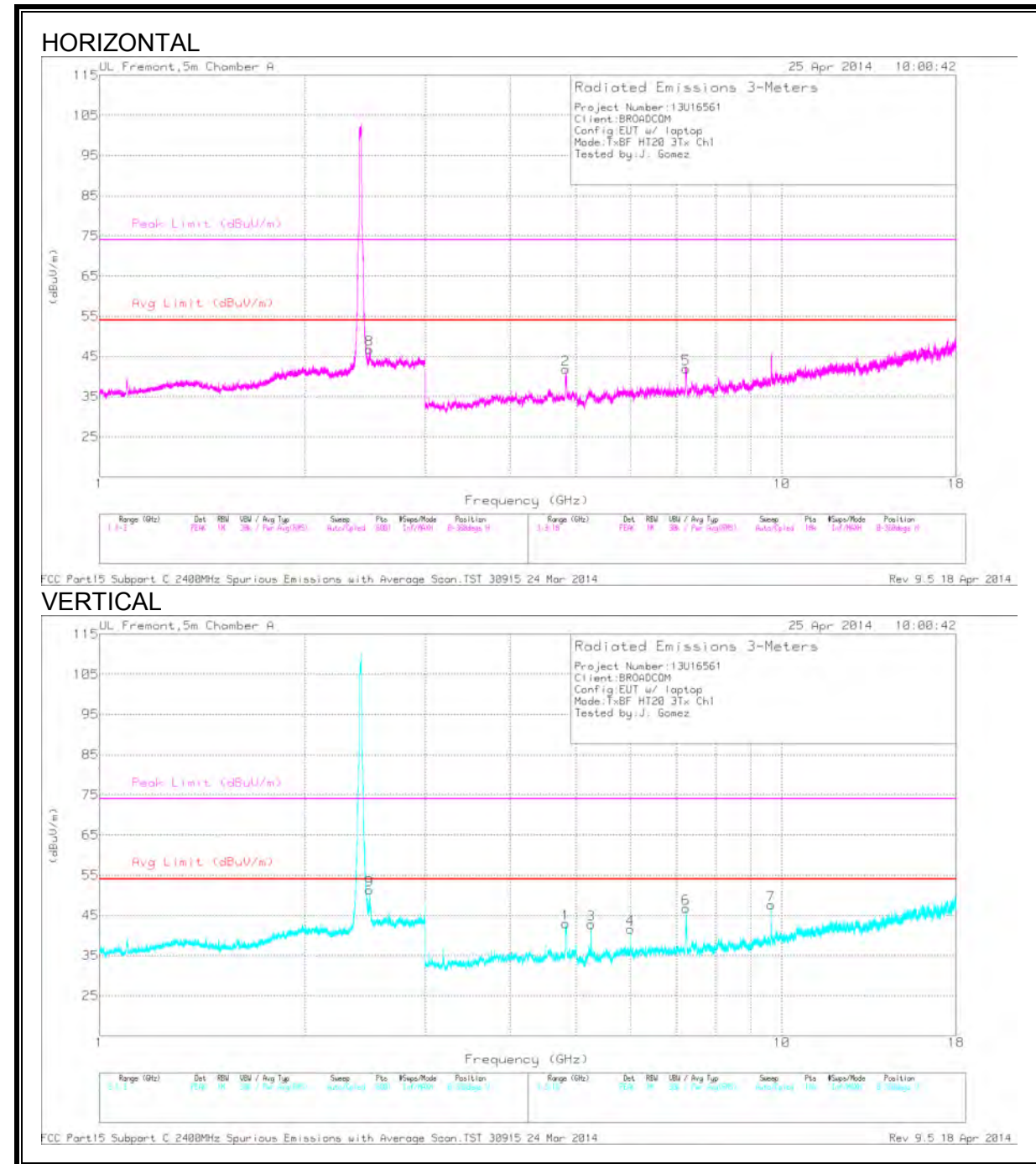
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cb/Fitr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
8	* 2.488	47.32	PK2	32.8	-23.4	0	56.72	-	-	74	-17.28	54	235	H
	* 2.487	34.86	MAV1	32.8	-23.4	2.74	47.0	54	-7.0	-	-	54	235	H
9	* 2.487	51.83	PK2	32.8	-23.4	0	61.23	-	-	74	-12.77	149	266	V
	* 2.487	40.6	MAV1	32.8	-23.4	2.74	52.74	54	-1.26	-	-	149	266	V
2	* 4.824	48.13	PK2	34	-29.4	0	52.73	-	-	74	-21.27	260	244	H
	* 4.822	34.38	MAV1	34	-29.5	2.74	41.62	54	-12.38	-	-	260	244	H
1	* 4.826	49.36	PK2	34	-29.4	0	53.96	-	-	74	-20.04	233	338	V
	* 4.825	35.54	MAV1	34	-29.4	2.74	42.88	54	-11.12	-	-	233	338	V
5	* 7.251	42.36	PK2	35.2	-26.3	0	51.26	-	-	74	-22.74	163	219	H
	* 7.25	28.29	MAV1	35.2	-26.3	2.74	39.93	54	-14.07	-	-	163	219	H
6	* 7.251	44.45	PK2	35.2	-26.3	0	53.35	-	-	74	-20.65	309	276	V
	* 7.251	30.08	MAV1	35.2	-26.3	2.74	41.72	54	-12.28	-	-	309	276	V
3	5.25	37.15	PK	34.2	-28.6	0	42.75	-	-	-	-	0-360	100	V
4	6	35.04	PK	35.3	-28.8	0	41.54	-	-	-	-	0-360	100	V
7	9.647	34.88	PK	36.8	-24.1	0	47.58	-	-	-	-	0-360	200	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

-Compliance for emissions in non-restricted bands is shown in conducted out of band testing

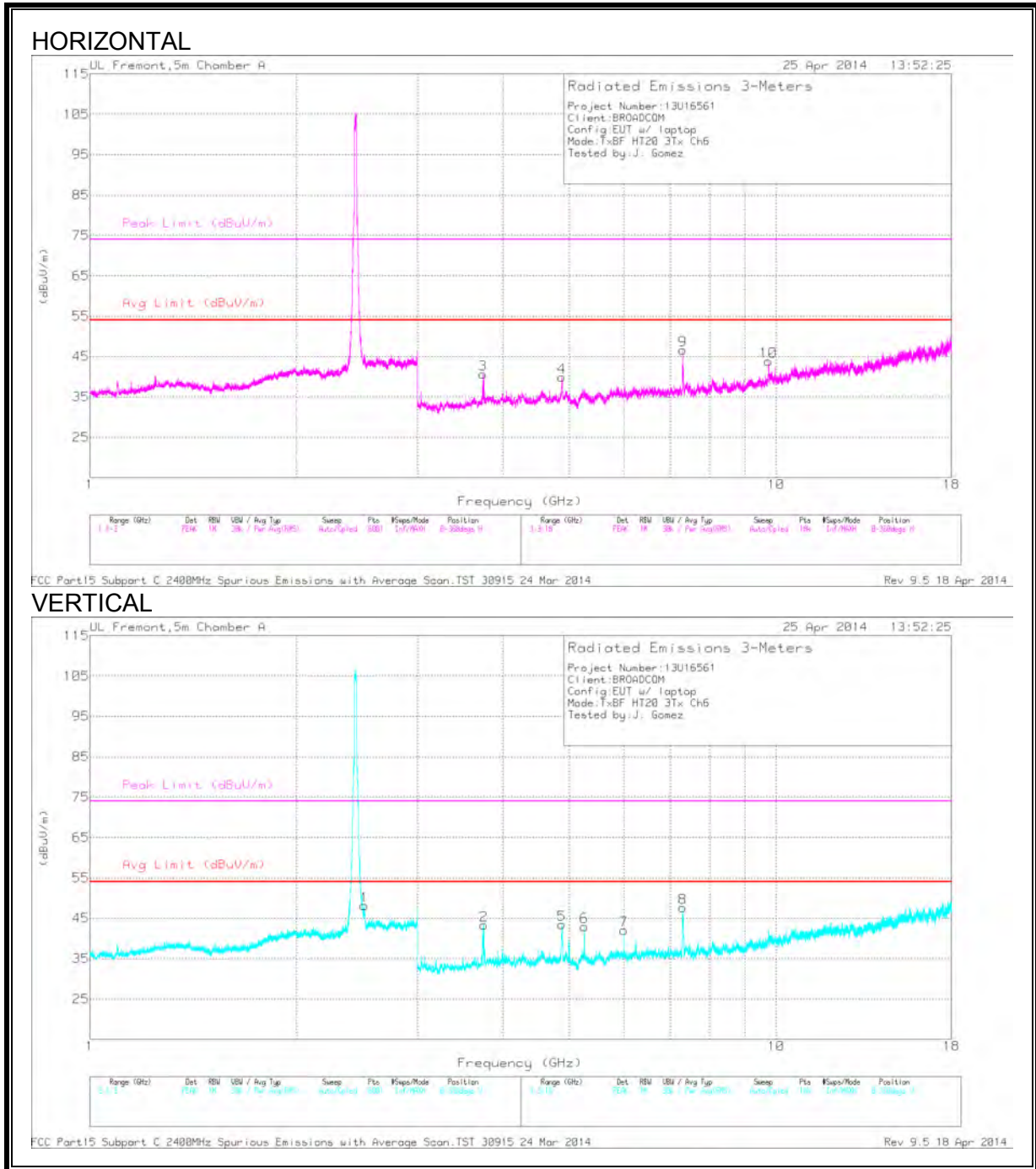
PK – Peak detector

PK2 - KDB558074 Method: Maximum Peak

MAV1 - KDB558074 Option 1 Maximum RMS Average

Note: Signals in non-restricted bands are covered by -30 dBc antenna port spurious testing.

MID CHANNEL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cb/Filtr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 3.747	47	PK2	33.5	-30.8	0	49.7	-	-	74	-24.3	227	117	H
	* 3.748	29.54	MAv1	33.5	-30.8	2.74	34.98	54	-19.02	-	-	227	117	H
4	* 4.877	47.12	PK2	34	-28.1	0	53.02	-	-	74	-20.98	259	269	H
	* 4.873	32.39	MAv1	34	-28.3	2.74	40.83	54	-13.17	-	-	259	269	H
9	* 7.302	47.05	PK2	35.2	-27.1	0	55.15	-	-	74	-18.85	159	205	H
	* 7.311	33.49	MAv1	35.2	-27.2	2.74	44.23	54	-9.77	-	-	159	205	H
2	* 3.733	48.77	PK2	33.5	-30.9	0	51.37	-	-	74	-22.63	270	162	V
	* 3.747	30.92	MAv1	33.5	-30.8	2.74	36.36	54	-17.64	-	-	270	162	V
5	* 4.871	44.95	PK2	34	-28.4	0	50.55	-	-	74	-23.45	338	288	V
	* 4.875	31.56	MAv1	34	-28.2	2.74	40.1	54	-13.9	-	-	338	288	V
8	* 7.311	51.22	PK2	35.2	-27.2	0	59.22	-	-	74	-14.78	239	260	V
	* 7.311	37.01	MAv1	35.2	-27.2	2.74	47.75	54	-6.25	-	-	239	260	V
1	2.511	39.09	PK	32.8	-23.7	0	48.19	-	-	-	-	0-360	200	V
6	5.25	37.37	PK	34.2	-28.6	0	42.97	-	-	-	-	0-360	100	V
7	6	35.53	PK	35.3	-28.8	0	42.03	-	-	-	-	0-360	100	V
10	9.74	31.29	PK	36.9	-24.4	0	43.79	-	-	-	-	0-360	201	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

-Compliance for emissions in non-restricted bands is shown in conducted out of band testing

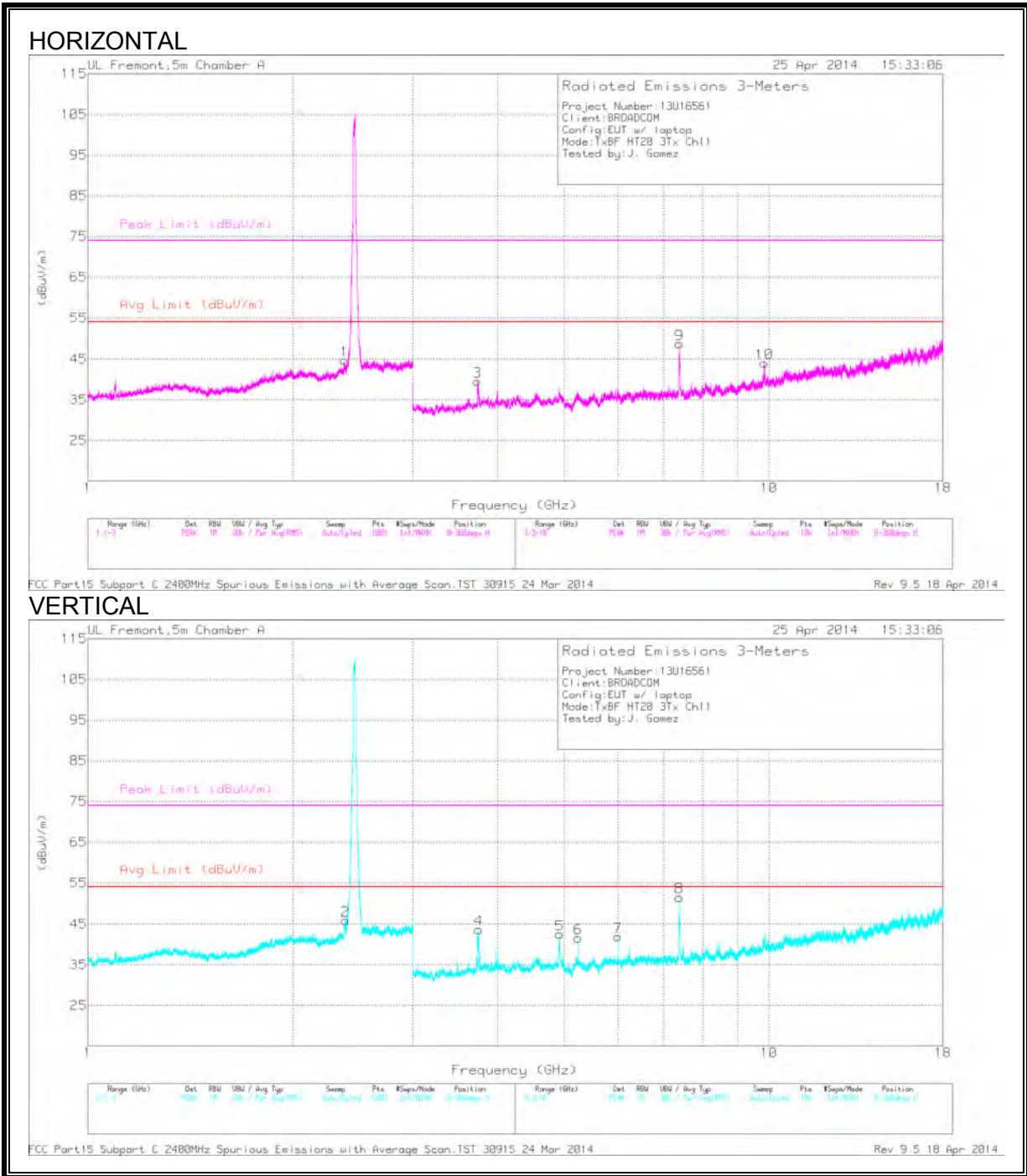
PK – Peak detector

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

Note: Signals in non-restricted bands are covered by -30 dBc antenna port spurious testing.

HIGH CHANNEL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cb/Fitr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.386	44.55	PK2	32.2	-24	0	52.75	-	-	74	-21.25	57	316	H
	* 2.388	32.03	MAv1	32.2	-24.2	2.74	42.77	54	-11.23	-	-	57	316	H
2	* 2.389	47.82	PK2	32.2	-24.4	0	55.62	-	-	74	-18.38	188	191	V
	* 2.387	34.3	MAv1	32.2	-24.1	2.74	45.14	54	-8.86	-	-	188	191	V
3	* 3.734	44.67	PK2	33.5	-30.9	0	47.27	-	-	74	-26.73	266	191	H
	* 3.733	29	MAv1	33.5	-31	2.74	34.24	54	-19.76	-	-	266	191	H
9	* 7.385	44.82	PK2	35.3	-24.3	0	55.82	-	-	74	-18.18	337	202	H
	* 7.386	31.34	MAv1	35.3	-24.2	2.74	45.18	54	-8.82	-	-	337	202	H
4	* 3.743	49.6	PK2	33.5	-30.6	0	52.5	-	-	74	-21.5	86	233	V
	* 3.733	31.17	MAv1	33.5	-30.9	2.74	36.51	54	-17.49	-	-	86	233	V
5	* 4.926	44.91	PK2	33.9	-29	0	49.81	-	-	74	-24.19	226	195	V
	* 4.924	30.78	MAv1	33.9	-29	2.74	38.42	54	-15.58	-	-	226	195	V
8	* 7.387	49.57	PK2	35.3	-24.3	0	60.57	-	-	74	-13.43	230	383	V
	* 7.386	34.86	MAv1	35.3	-24.3	2.74	48.6	54	-5.4	-	-	230	383	V
6	5.25	36.01	PK	34.2	-28.6	0	41.61	-	-	-	-	0-360	100	V
7	6	35.42	PK	35.3	-28.8	0	41.92	-	-	-	-	0-360	100	V
10	9.844	29.89	PK	37	-22.8	0	44.09	-	-	-	-	0-360	201	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

-Compliance for emissions in non-restricted bands is shown in conducted out of band testing

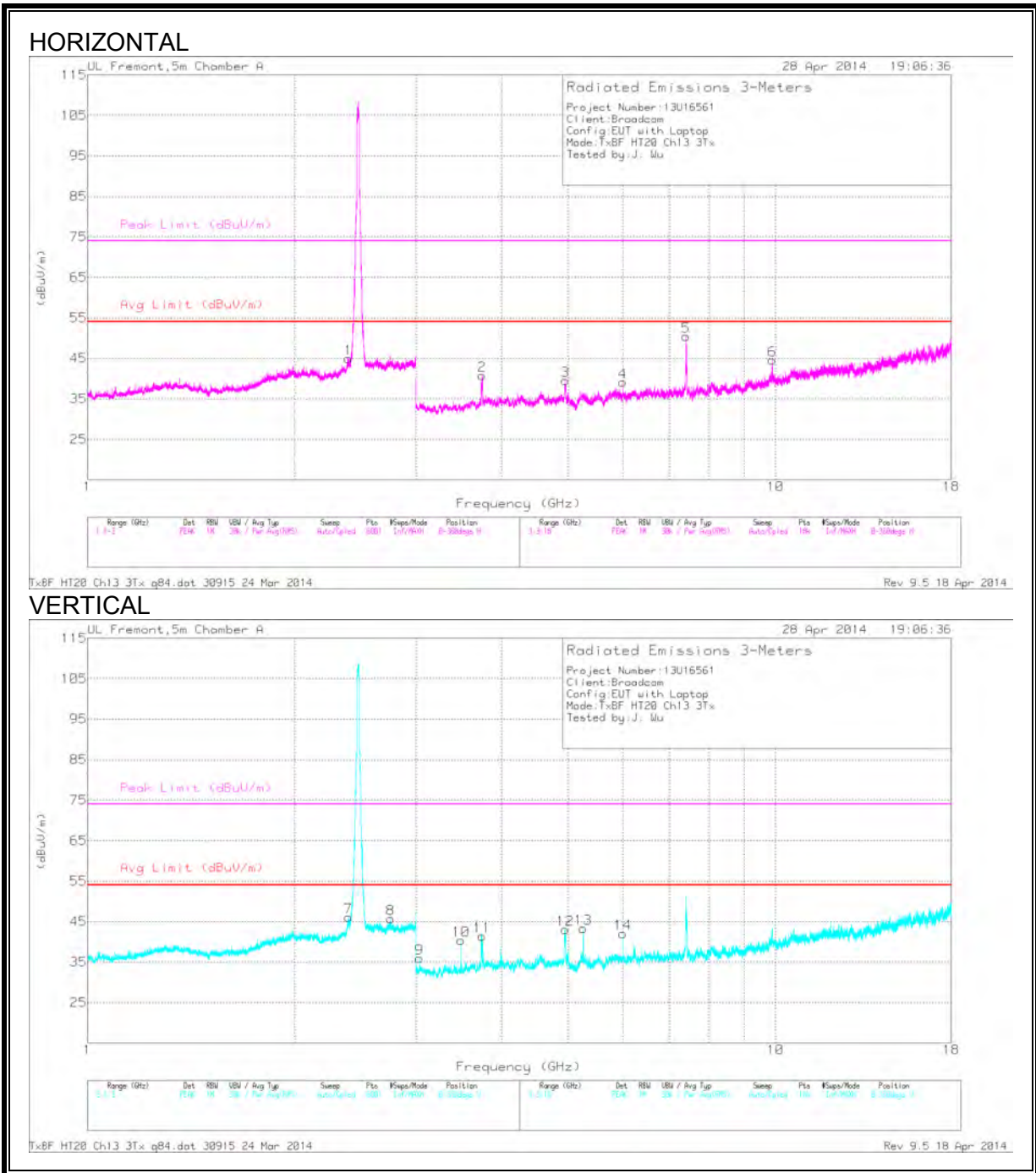
PK – Peak detector

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

Note: Signals in non-restricted bands are covered by -30 dBc antenna port spurious testing.

Channel 13



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cb/Filtr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
8	* 2.748	43.25	PK2	32.7	-22.6	0	53.35	-	-	74	-20.65	225	139	V
	* 2.748	30.51	MAv1	32.7	-22.6	2.74	43.43	54	-10.65	-	-	225	139	V
2	* 3.744	45.99	PK2	33.5	-30.6	0	48.89	-	-	74	-25.11	339	367	H
	* 3.748	29.48	MAv1	33.5	-30.8	2.74	34.92	54	-19.08	-	-	339	367	H
3	* 4.942	41.14	PK2	33.9	-28.8	0	46.24	-	-	74	-27.76	321	324	H
	* 4.944	29.2	MAv1	33.9	-28.9	2.74	36.94	54	-17.06	-	-	321	324	H
5	* 7.416	49.32	PK2	35.3	-25.1	0	59.52	-	-	74	-14.48	149	245	H
	* 7.416	37.67	MAv1	35.3	-25.1	2.74	50.61	54	-3.39	-	-	149	245	H
11	* 3.749	45.6	PK2	33.5	-30.9	0	48.2	-	-	74	-25.8	113	168	V
	* 3.746	29.19	MAv1	33.5	-30.7	2.74	34.73	54	-19.27	-	-	113	168	V
12	* 4.947	40.74	PK2	33.9	-29	0	45.64	-	-	74	-28.36	312	193	V
	* 4.946	28.66	MAv1	33.9	-29	2.74	36.3	54	-17.7	-	-	312	193	V
1	2.394	37.09	PK	32.3	-24.4	0	44.99	-	-	-	-	0-360	361	H
7	2.394	38.25	PK	32.3	-24.4	0	46.15	-	-	-	-	0-360	200	V
9	3.037	33.81	PK	32.8	-30.7	0	35.91	-	-	-	-	0-360	200	V
10	3.489	38.74	PK	33	-31.3	0	40.44	-	-	-	-	0-360	200	V
13	5.25	37.68	PK	34.2	-28.6	0	43.28	-	-	-	-	0-360	100	V
4	6	32.6	PK	35.3	-28.8	0	39.1	-	-	-	-	0-360	200	H
14	6	35.51	PK	35.3	-28.8	0	42.01	-	-	-	-	0-360	100	V
6	9.895	30.63	PK	37	-23	0	44.63	-	-	-	-	0-360	200	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

-Compliance for emissions in non-restricted bands is shown in conducted out of band testing

PK – Peak detector

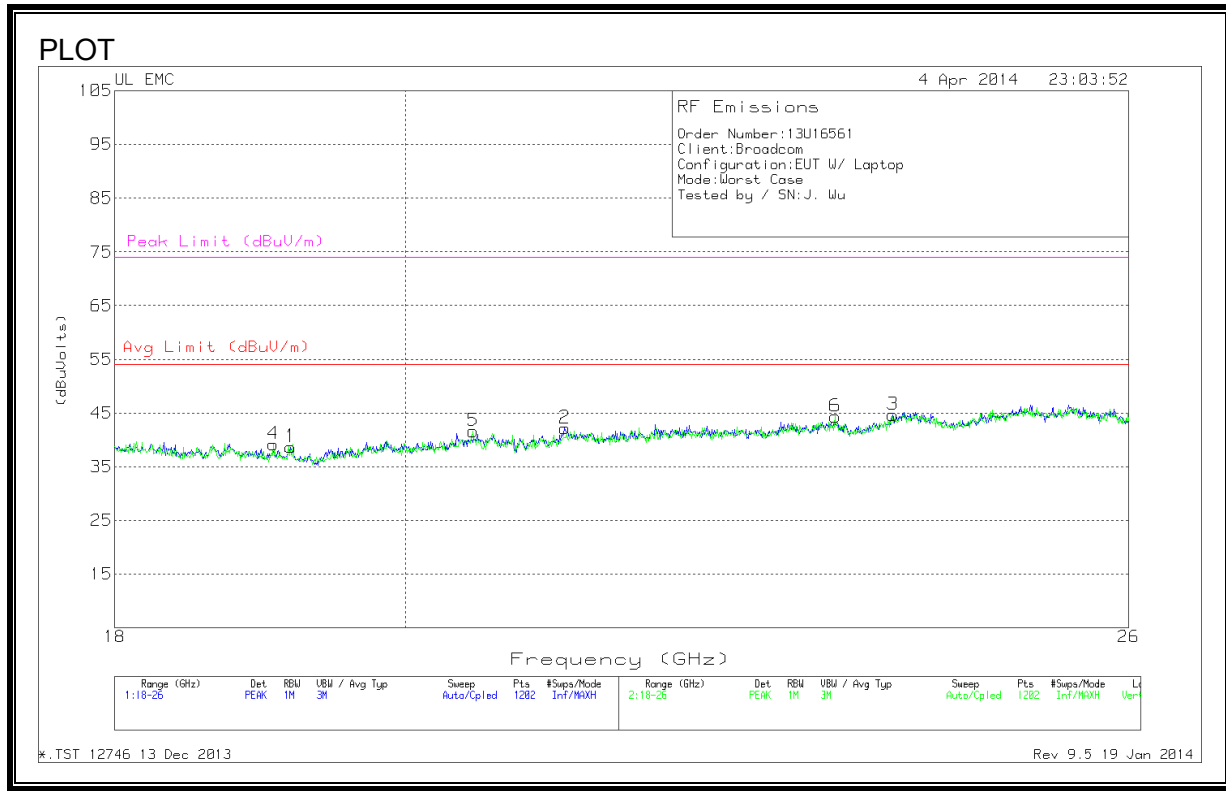
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

Note: Signals in non-restricted bands are covered by -30 dBc antenna port spurious testing.

9.6 WORST-CASE 18-26 GHz

HARMONICS AND SPURIOUS EMISSIONS



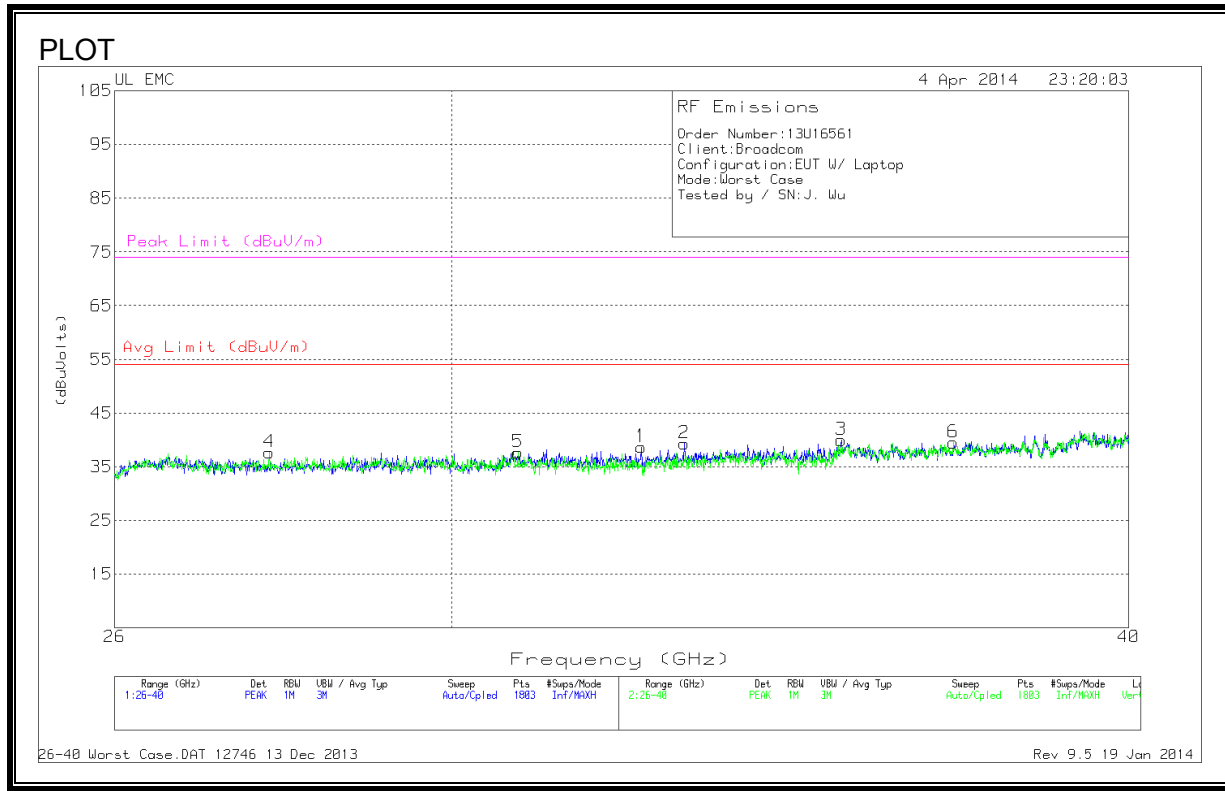
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T89 (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Corrected Reading (dBuVolts)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)
1	19.186	39.17	PK	32.5	-23.5	-9.5	38.67	54	-15.33	74	-35.33
2	21.191	42.17	PK	33	-23.5	-9.5	42.17	54	-11.833	74	-31.83
3	23.868	43.07	PK	33.7	-22.6	-9.5	44.67	54	-9.33	74	-29.33
4	19.066	40.27	PK	32.5	-24.1	-9.5	39.17	54	-14.83	74	-34.83
5	20.498	42.27	PK	32.8	-23.9	-9.5	41.67	54	-12.33	74	-32.33
6	23.376	43.23	PK	33.4	-22.8	-9.5	44.33	54	-9.67	74	-29.67

PK - Peak detector

9.7 WORST-CASE 26-40 GHz

HARMONICS AND SPURIOUS EMISSIONS



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	T90 AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Corrected Reading (dBuVolts)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)
1	32.518	47.67	PK	36.2	-35.7	-9.5	38.67	54	-15.34	74	-35.33
2	33.117	48.43	PK	36.8	-36.4	-9.5	39.33	54	-14.67	74	-34.67
3	35.401	49.4	PK	37.8	-37.7	-9.5	40	54	-14	74	-34
4	27.764	45.77	PK	35.8	-34.4	-9.5	37.67	54	-16.33	74	-36.33
5	30.856	46.97	PK	36	-35.8	-9.5	37.67	54	-16.33	74	-36.33
6	37.125	49.3	PK	37.2	-37.5	-9.5	39.5	54	-14.5	74	-34.5

PK - Peak detector

9.8 WORST-CASE BELOW 1 GHz

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

Frequency (MHz)	Meter Reading (dBuV)	Det	AF T130 (dB/m)	Amp/Cbl (dB/m)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 133	55.3	PK	13.8	-30.4	38.7	43.52	-4.82	304	199	H
* 133.0766	54.3	QP	13.8	-30.4	37.7	43.52	-5.82	304	199	H
* 133.0766	49.69	PK	13.8	-30.4	33.09	43.52	-10.43	202	256	V
* 133.0806	48.4	QP	13.8	-30.4	31.8	43.52	-11.72	202	256	V
398.795	39.96	PK	15.6	-28.9	26.66	46.02	-19.36	87	225	V
398.8195	40.53	QP	15.6	-28.9	27.23	46.02	-18.79	87	225	V
398.9395	44.18	PK	15.6	-28.9	30.88	46.02	-15.14	313	101	H
398.9405	46.1	QP	15.6	-28.9	32.8	46.02	-13.22	313	101	H
698.1742	42.09	QP	20.3	-28.3	34.09	46.02	-11.93	177	112	H
698.27	43.62	PK	20.3	-28.3	35.62	46.02	-10.4	177	112	H
698.6088	39.62	QP	20.3	-28.3	31.62	46.02	-14.4	17	116	V
698.6342	39.92	PK	20.3	-28.3	31.92	46.02	-14.1	17	116	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

QP - Quasi-Peak detector

Note: Signals in non-restricted bands are covered by -30 dBc antenna port spurious testing. However, they are also shown to pass the limit in this table.

10 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

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.4.

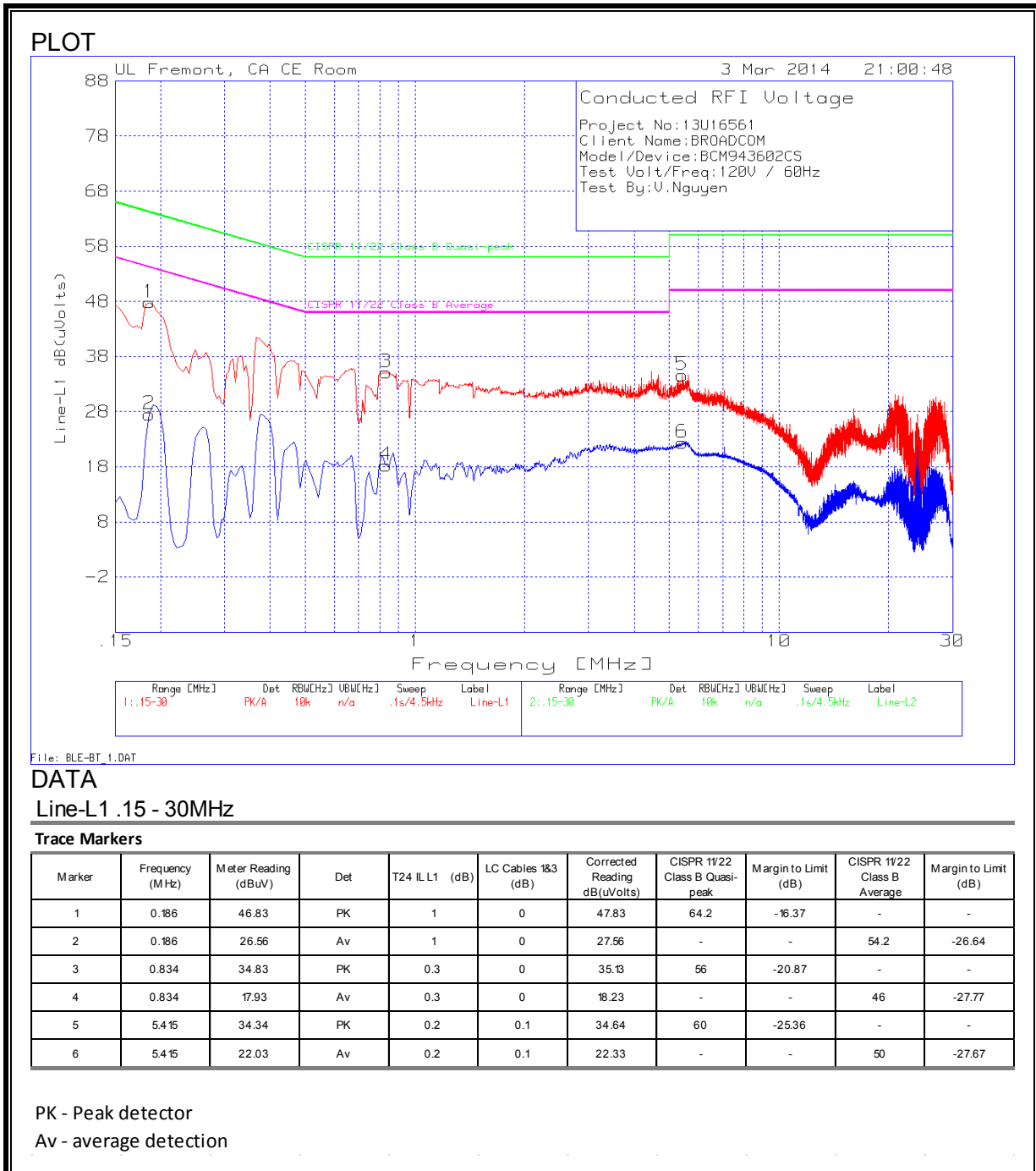
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

Line conducted data is recorded for both NEUTRAL and HOT lines.

RESULTS

6 WORST EMISSIONS

LINE 1 RESULTS



LINE 2 RESULTS

