CERTIFICATION TEST REPORT

Report Number. : 12494553-E1V1

Applicant	:	IKEA OF SWEDEN AB Box 702 SE-34381 Älmhult, SWEDEN
Model	:	E1801
FCC ID	:	FHO-E1801
IC	:	10912A-E1801
EUT Description	:	Wireless Speaker Symfonisk
Test Standard(s)	:	FCC 47 CFR PART 15 SUBPART C ISED RSS-247 ISSUE 2 ISED RSS-GEN ISSUE 5

Date Of Issue:
February 19, 2019

Prepared by:
UL Verification Services Inc.
47173 Benicia Street
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NVLAP Lab code: 200065-0

REPORT REVISION HISTORY

Rev.	Issue Date	Revisions	Revised By
V1	10/18/2018	Initial Issue	
V2	2/19/2019	Updated Section 8.5, 8.6 and 9.2	K.Kedida

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UL VERIFICATION SERVICES INC.
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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: Ikea of Sweden AB
Box 702
SE-34381 Älmhult, SWEDEN

EUT DESCRIPTION: Wireless Speaker Symfonisk

MODEL: E1801

SERIAL NUMBER: Conducted: 34-7E-5C-30-01-3E
Radiated: 34-7E-5C-30-01-26-9, 34-7E-5C-30-01-30-2

DATE TESTED: September 10 – 25, 2018

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
CFR 47 Part 15 Subpart C	Compliant
ISED RSS-247 Issue 2	Compliant
ISED RSS-GEN Issue 5	Compliant

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

The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. All samples tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise.

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 the U.S. government.

Approved & Released For
UL Verification Services Inc. By:

DAN CORONIA
CONSUMER TECHNOLOGY DIVISION
OPERATIONS LEADER
UL Verification Services Inc.

Reviewed By:

Kiya Kedida
CONSUMER TECHNOLOGY DIVISION
PROJECT 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, KDB 558074 D01 v05, KDB 662911 D01 v02r01, 662911 D02 MIMO v01, ANSI C63.10-2013, RSS-GEN Issue 5, and RSS-247 Issue 2.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 and 47266 Benicia Street, and 47658 Kato Road, Fremont, California, USA. Line conducted emissions are measured only at the 47173 address. The following table identifies which facilities were utilized for radiated emission measurements documented in this report. Specific facilities are also identified in the test results sections.

47173 Benicia Street	47266 Benicia Street	47658 Kato Rd.
☐ Chamber A (IC:2324B-1)	☐ Chamber D (IC:22541-1)	☐ Chamber I (IC: 2324A-5)
☒ Chamber B (IC:2324B-2)	☐ Chamber E (IC:22541-2)	☐ Chamber J (IC: 2324A-6)
☒ Chamber C (IC:2324B-3)	☐ Chamber F (IC:22541-3)	☐ Chamber K (IC: 2324A-1)
	☐ Chamber G (IC:22541-4)	☐ Chamber L (IC: 2324A-3)
	☐ Chamber H (IC:22541-5)	

The above test sites and facilities are covered under FCC Test Firm Registration # 208313. Chambers above are covered under Industry Canada company address and respective code

UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0

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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

RADIATED EMISSIONS

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

MAINS CONDUCTED EMISSIONS

Where relevant, the following sample calculation is provided:
Final Voltage (dBuV) = Measured Voltage (dBuV) + Cable Loss (dB) + Limiter Factor (dB) + LISN Insertion Loss.
36.5 dBuV + 0 dB +10.1 dB+ 0 dB = 46.6 dBuV

4.3. MEASUREMENT UNCERTAINTY

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

PARAMETER	UNCERTAINTY
Worst Case Conducted Disturbance, 9KHz to 0.15 MHz	3.84 dB
Worst Case Conducted Disturbance, 0.15 to 30 MHz	3.65 dB
Worst Case Radiated Disturbance, 9KHz to 30 MHz	3.15 dB
Worst Case Radiated Disturbance, 30 to 1000 MHz	5.36 dB
Worst Case Radiated Disturbance, 1000 to 18000 MHz	4.32 dB
Worst Case Radiated Disturbance, 18000 to 26000 MHz	4.45 dB
Worst Case Radiated Disturbance, 26000 to 40000 MHz	5.24 dB

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

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5. EQUIPMENT UNDER TEST

5.1. EUT DESCRIPTION

The EUT is a Wireless Speaker Symfonisk.

5.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum conducted output power as follows:

2.4GHz BAND

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
2Tx			
2412 - 2462	802.11b	24.07	255.27
2412 - 2462	802.11g	23.69	233.88
2412 - 2462	802.11n HT20	23.72	235.50

5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes the antennas with maximums gain per chain as follows:

Frequency (MHz)	Peak Antenna Gain (dBi)	
	Chain 0 (Horizontal Polarization)	Chain 1 (Vertical Polarization)
2400 – 2483.5	3.8	4.1

5.4. SOFTWARE AND FIRMWARE

The firmware installed in the EUT during testing was 46.0-54150.

The test utility software used during testing was ART2-GUI v2.3.

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5.5. WORST-CASE CONFIGURATION AND MODE

Radiated emissions below 1GHz, above 18GHz, and power line conducted emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario.

Band edge and radiated emissions between 1GHz and 18GHz were performed with the EUT set to transmit at the highest power on low, middle and high channels.

The fundamental of the EUT was investigated in two orientations vertical and horizontal orientation, it was determined that vertical orientation was worst-case orientation; therefore, all final radiated testing was performed with the EUT in vertical orientation.

Worst-case data rates as provided by the client were:

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

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5.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	**Manufacturer**	**Model**	**Serial Number**	**FCC ID**
Laptop	Lenovo	X201	SON-00000964	N/A
AC Adapter	Lenovo	ADLX65NLT2A	11S36200291ZZ200315AJU	N/A
Charging Base	Lenovo	X200	1S43R8781R934HPB	N/A

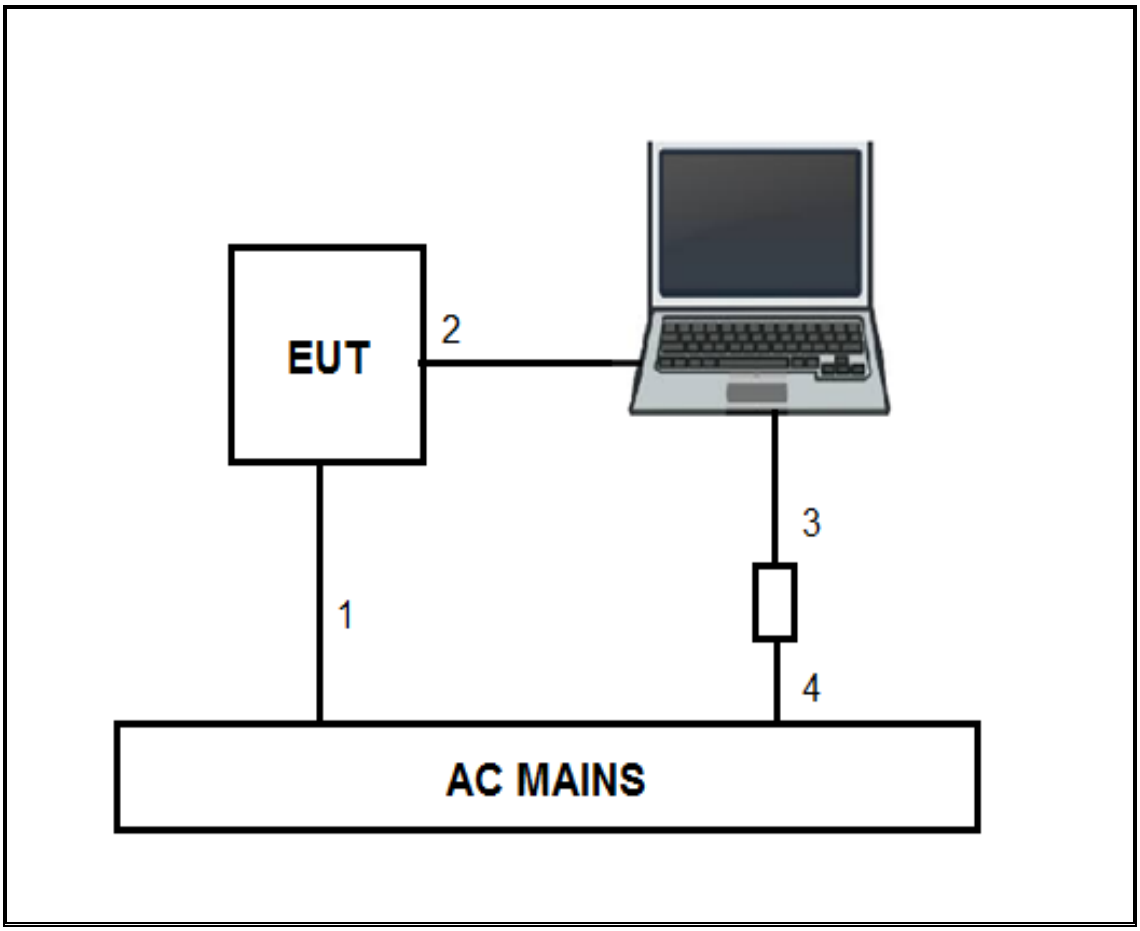
I/O CABLES

I/O Cable List						
Cable No	**Port**	**# of identical ports**	**Connector Type**	**Cable Type**	**Cable Length (m)**	**Remarks**
1	AC Power	1	AC	Unshielded	2	AC Mains to EUT
2	Ethernet	1	RJ45	Unshielded	10	EUT to Laptop
3	DC Power	1	DC	Shielded	1.2	AC/DC Adapter to Laptop
4	AC Power	1	AC	Unshielded	1	AC Mains to AC/DC Adapter

TEST SETUP

The EUT is a stand-alone unit, and the radio is exercised by Sonos Compliance GUI V2.2 test utility software via Ethernet.

SETUP DIAGRAM



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6. MEASUREMENT METHOD

On Time and Duty Cycle: ANSI C63.10-2013 Section 11.6.

6 dB BW: ANSI C63.10 Section 11.8.1. Option 1

Output Power: ANSI C63.10 Section 11.9.2.3.2 Method AVGPM-G (Measurement using a gated RF average-reading power meter)

Power Spectral Density: ANSI C63.10 Section 11.10.3 Method AVGPSD-1.

Radiated emissions non-restricted frequency bands: ANSI C63.10 Section 11.12.1

Radiated emissions restricted frequency bands: ANSI C63.10 Section 11.12.1.

Conducted emissions in restricted frequency bands: ANSI C63.10 Section 11.12.2.

Band-edge: ANSI C63.10 Subclause -11.13.3.4 Integration method -Trace averaging across ON and OFF times DC correction

AC Power Line Conducted Emissions: ANSI C63.10-2013, Section 6.2.

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7. 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**	**ID Num**	**Cal Due**	**Last Cal**
Amplifier, 10KHz to 1GHz, 32dB	Agilent (Keysight) Technologies	8447D	T10	02/14/2019	02/14/2018
Antenna, Broadband Hybrid, 30MHz to 2000MHz	Sunol Sciences Corp.	JB3	T407	05/10/2019	05/10/2018
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	T863	06/21/2019	06/21/2018
RF Amplifier	MITEQ	AFS42-00101800-25-S-42	T493	08/30/2019	08/30/2018
Amplifier, 1 to 8GHz, 35dB	MITEQ	AMF-4D-01000800-30-29P	T1156	08/30/2019	08/30/2018
Filter, HPF 3.0GHz	MICRO-TRONICS	HPM17543	T485	08/30/2019	08/30/2018
Power Meter, P-series single channel	Agilent (Keysight) Technologies	N1911A	T1271	07/17/2019	07/17/2018
Power Sensor, P-series, 50MHz to 18GHz, Wideband	Agilent (Keysight) Technologies	N1921A	T1225	04/10/2019	04/10/2018
Antenna, Active Loop 9kHz-30MHz	Com-Power Corp.	AL-130R	T1866	10/10/2018	10/10/2017
18 - 26.5 GHz Horn Antenna	Seavey Division	MWH-1826/B	T89	01/18/2019	01/18/2018
Pre-Amp 1-26.5 GHz	Agilent	8449B	T404	03/09/2019	03/09/2018
Spectrum Analyzer	Agilent (Keysight) Technologies	N9030A	T200	10/18/2018	10/18/2017
Spectrum Analyzer, PXA, 3Hz to 44GHz	Agilent (Keysight) Technologies	N9030A	T1113	12/21/2018	12/21/2017
Spectrum Analyzer, PXA, 3Hz to 44GHz	Agilent (Keysight) Technologies	N9030A	T1450	02/05/2019	02/05/2018
Spectrum Analyzer, PXA, 3Hz to 44GHz	Agilent (Keysight) Technologies	N9030A	T1454	01/08/2019	01/08/2018
EMI Reciever	Rohde & Schwarz	ESR	T1436	02/23/2019	02/23/2018
L.I.S.N.	FCC INC.	FCC LISN 50/250	T1310	06/15/2019	06/15/2018

Test Software List			
Description	**Manufacturer**	**Model**	**Version**
Radiated Software	UL	UL EMC	Ver 9.5, Dec 01, 2016
Antenna Port Software	UL	UL RF	Ver 8.8, Sep 19, 2018

8. ANTENNA PORT TEST RESULTS

8.1. ON TIME AND DUTY CYCLE

LIMITS

None; for reporting purposes only.

PROCEDURE

KDB 789033 Zero-Span Spectrum Analyzer Method.

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 1TX	12.200	12.240	0.997	99.67%	0.00	0.010
802.11g 1TX	2.025	2.075	0.976	97.59%	0.11	0.494
802.11n HT20 1TX	1.890	1.940	0.974	97.42%	0.11	0.529

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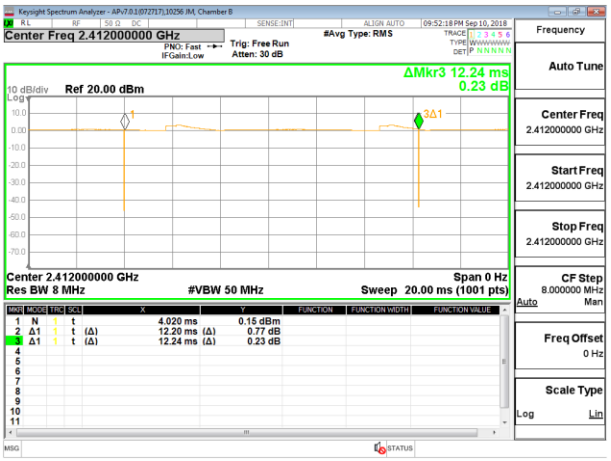
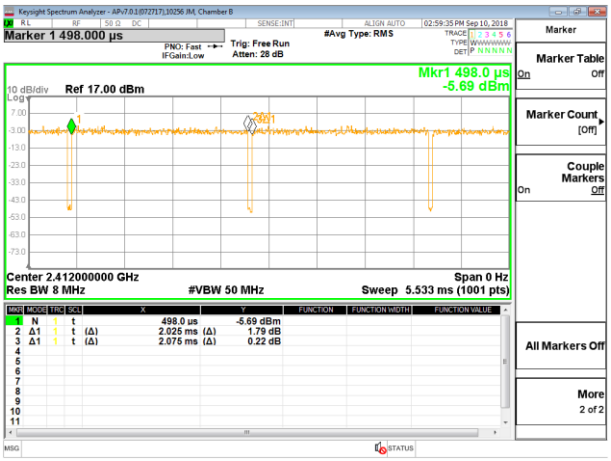
DUTY CYCLE PLOTS



DUTY CYCLE 802.11a 1TX MODE



DUTY CYCLE 802.11g 1TX MODE

DUTY CYCLE 802.11n HT20 1TX MODE

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8.2. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

8.2.1. 802.11b MODE

Channel	Frequency (MHz)	99% Bandwidth Antenna 1 (MHz)	99% Bandwidth Antenna 2 (MHz)
Low 1	2412	13.9521	13.9059
Low 2	2417	14.1480	13.9852
Mid 6	2437	14.1536	14.0786
High 10	2457	13.9352	13.8288
High 11	2462	13.8868	13.7849

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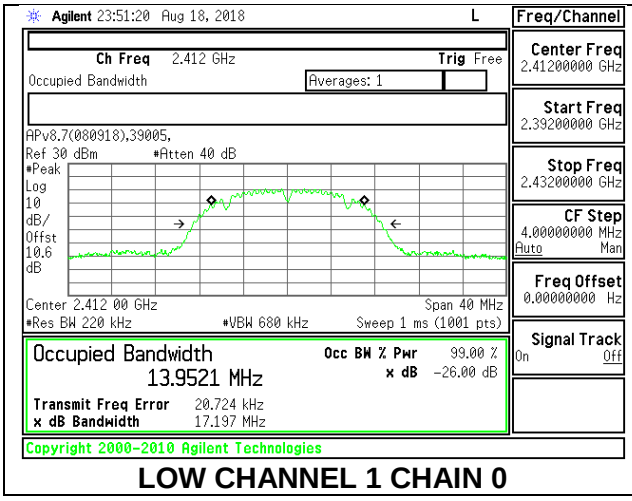
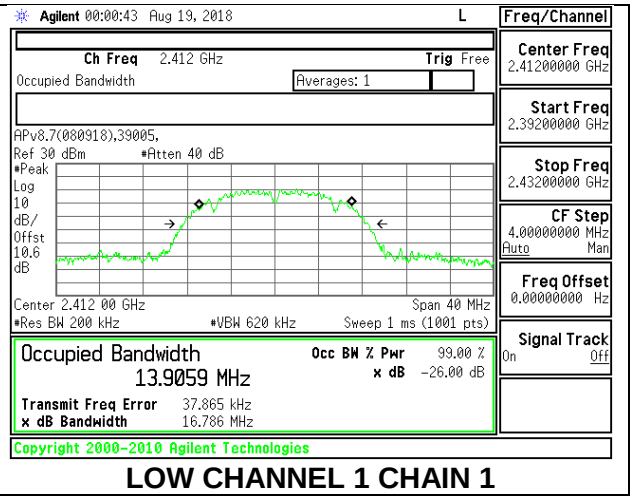
LOW CHANNEL 1

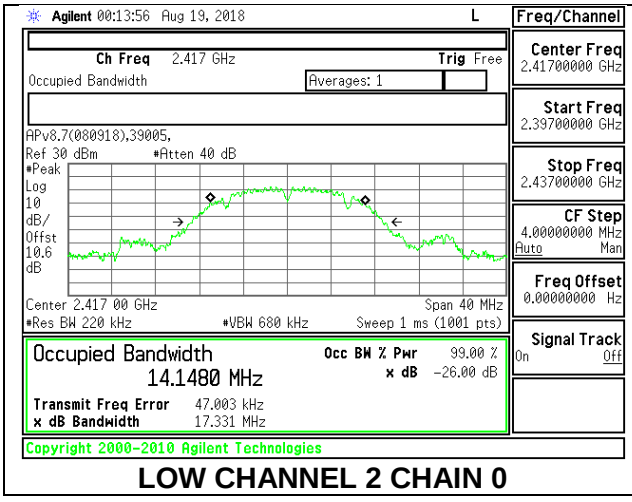


LOW CHANNEL 1 CHAIN 0



LOW CHANNEL 1 CHAIN 1

LOW CHANNEL 2



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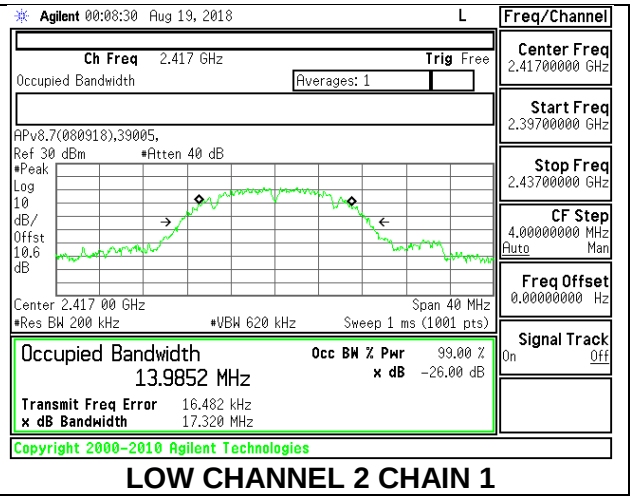
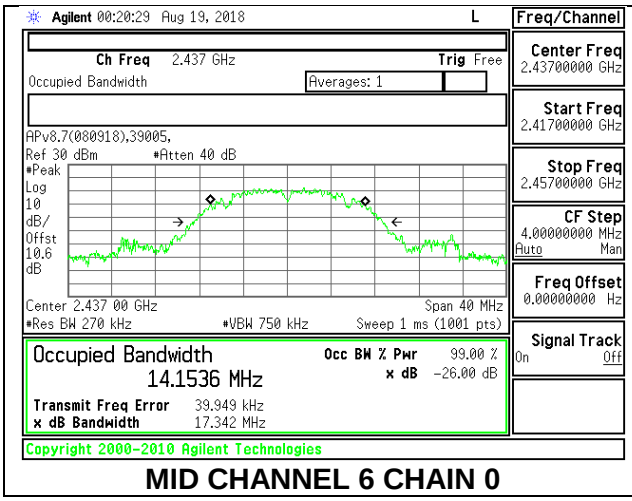
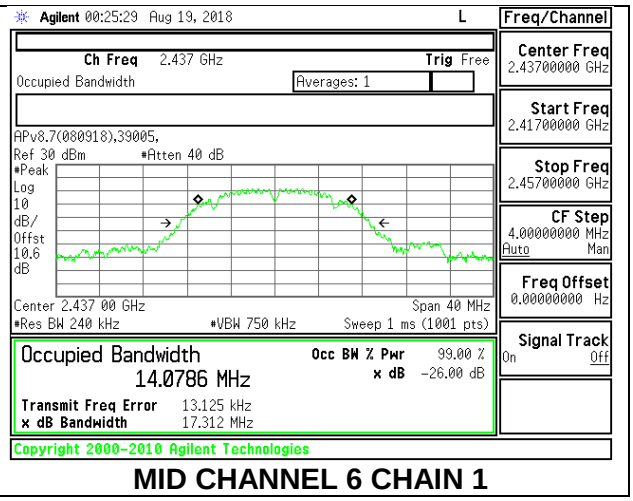


LOW CHANNEL 2 CHAIN 1

MID CHANNEL 6

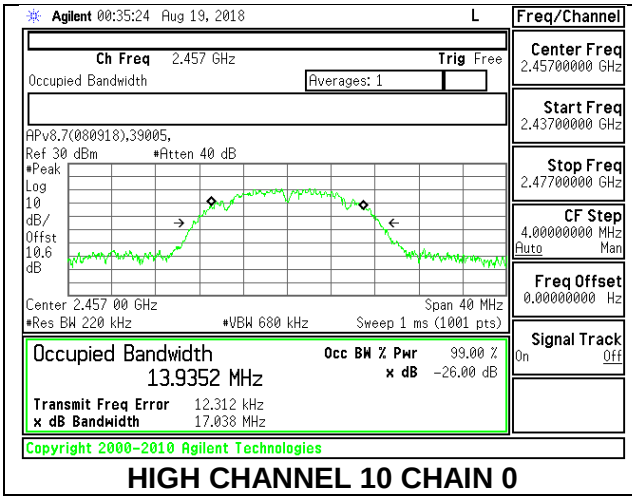


MID CHANNEL 6 CHAIN 0

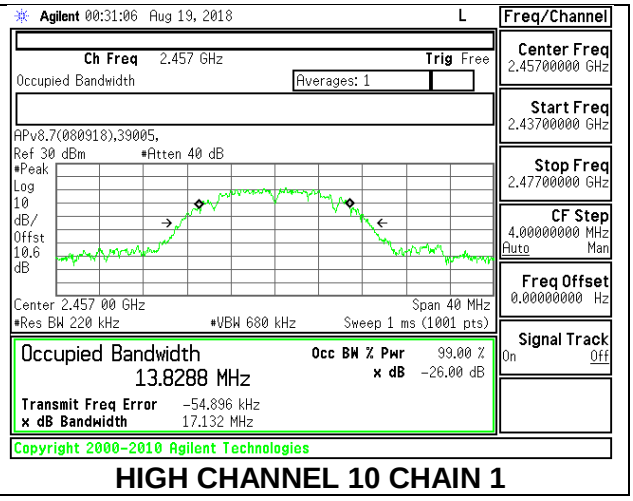


MID CHANNEL 6 CHAIN 1

HIGH CHANNEL 10

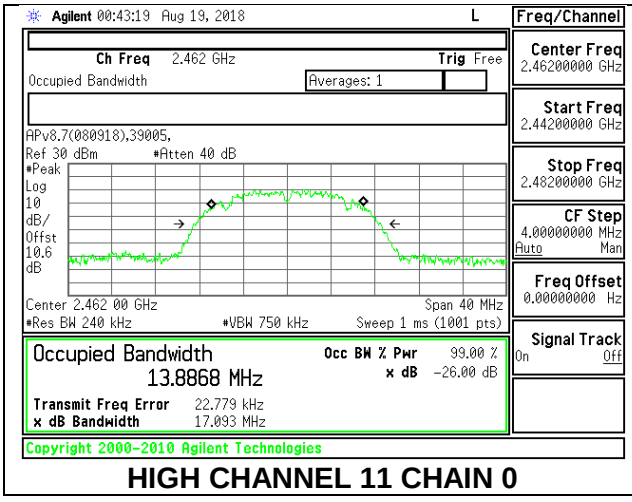


HIGH CHANNEL 10 CHAIN 0

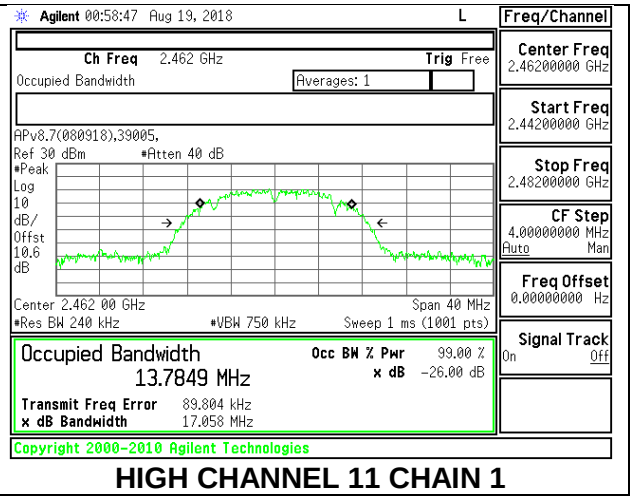


HIGH CHANNEL 10 CHAIN 1

HIGH CHANNEL 11



HIGH CHANNEL 11 CHAIN 0

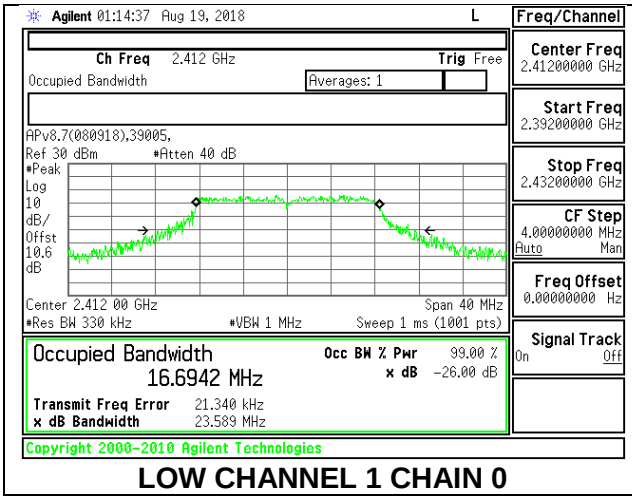


HIGH CHANNEL 11 CHAIN 1

8.2.2. 802.11g MODE

Channel	Frequency (MHz)	99% Bandwidth Antenna 1 (MHz)	99% Bandwidth Antenna 2 (MHz)
Low 1	2412	16.6942	16.7322
Low 2	2417	16.8111	16.7538
Low 3	2422	16.6260	16.7168
Low 4	2427	16.7460	16.7178
Low 5	2432	16.9787	16.9811
Mid 6	2437	16.9950	16.9944
High 7	2442	16.9207	16.9595
High 8	2447	16.9567	16.8146
High 9	2452	16.8377	16.7107
High 10	2457	16.6770	16.6945
High 11	2462	16.6509	16.6893

LOW CHANNEL 1



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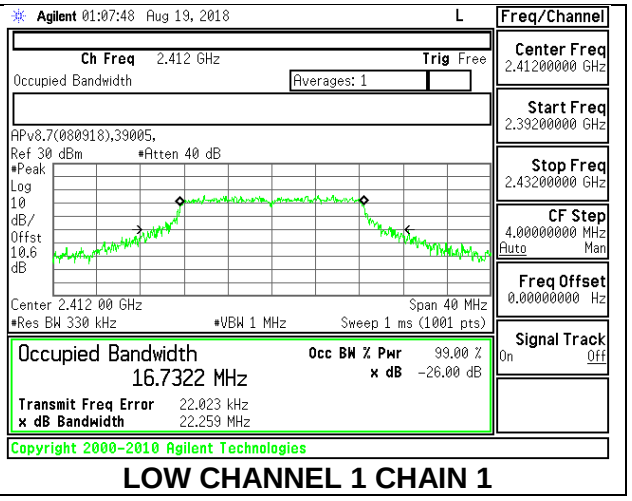
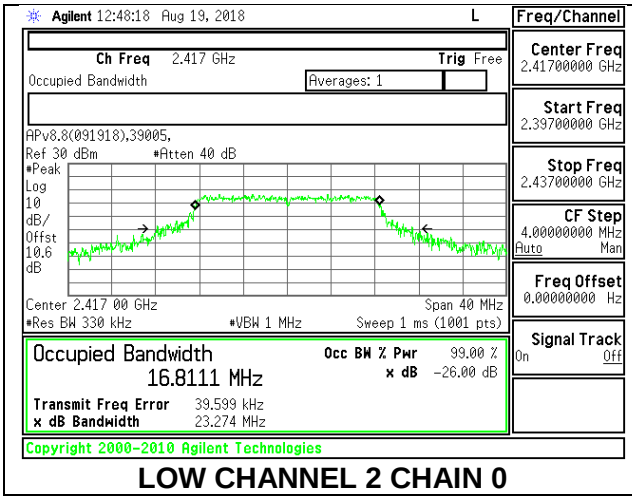
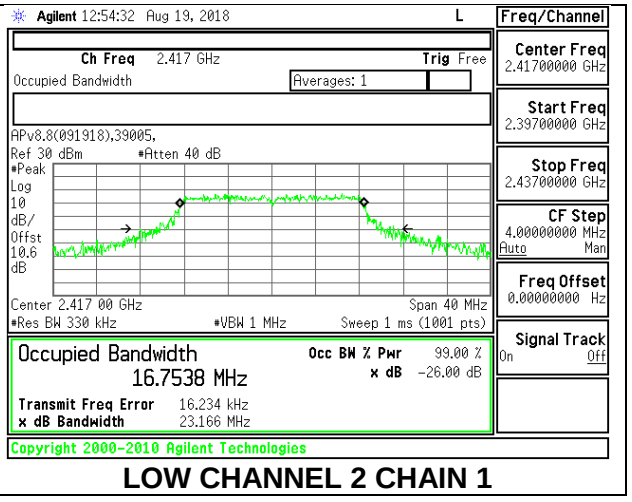


LOW CHANNEL 1 CHAIN 1

LOW CHANNEL 2

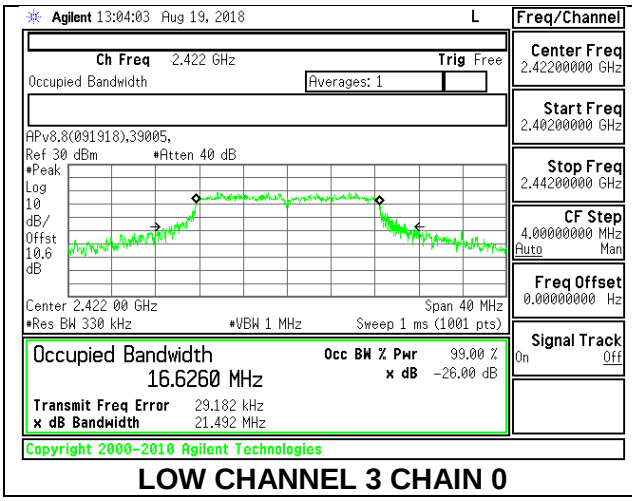


LOW CHANNEL 2 CHAIN 0



LOW CHANNEL 2 CHAIN 1

LOW CHANNEL 3



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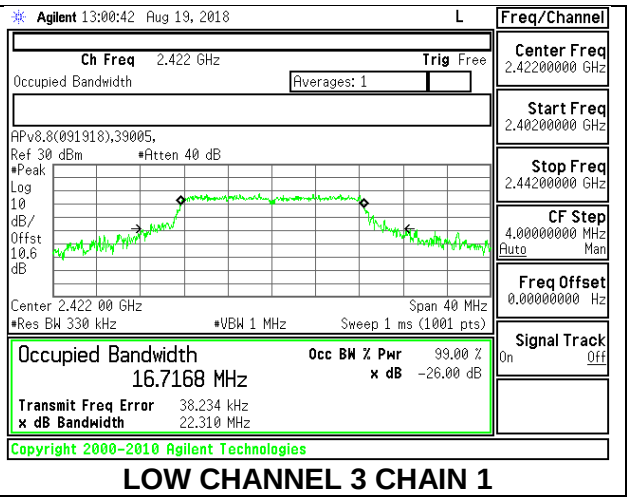
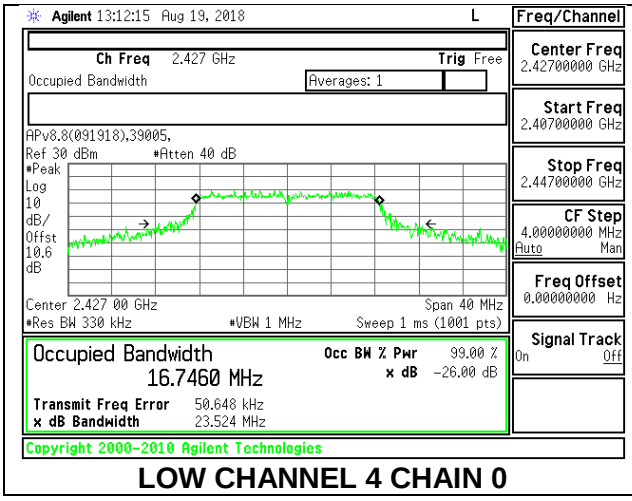


LOW CHANNEL 3 CHAIN 1

LOW CHANNEL 4



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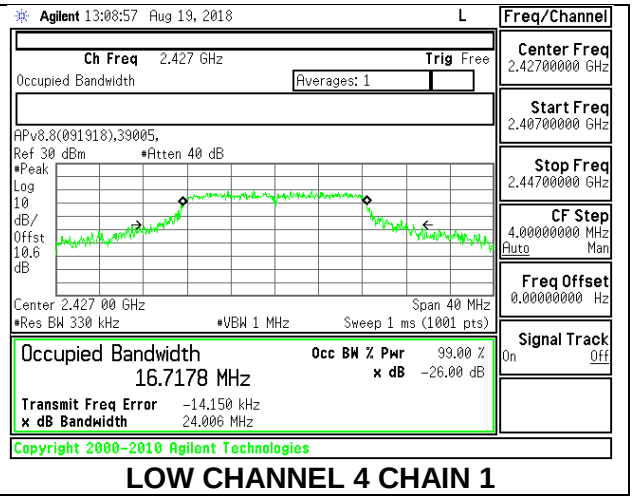
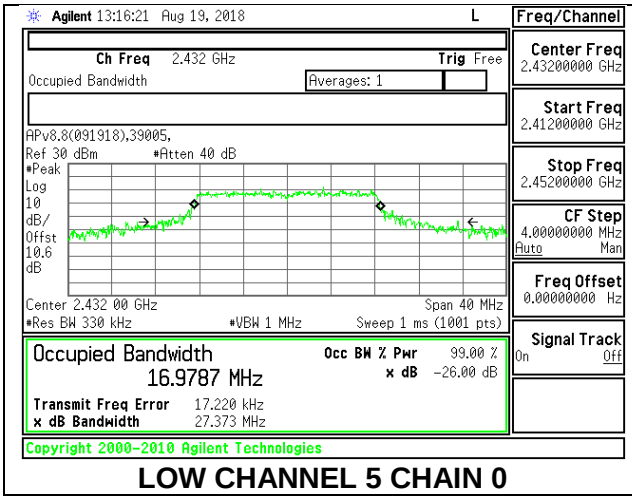


LOW CHANNEL 4 CHAIN 1

LOW CHANNEL 5



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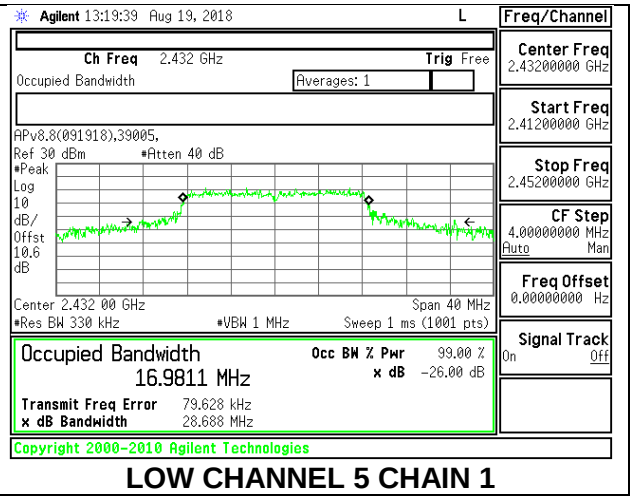
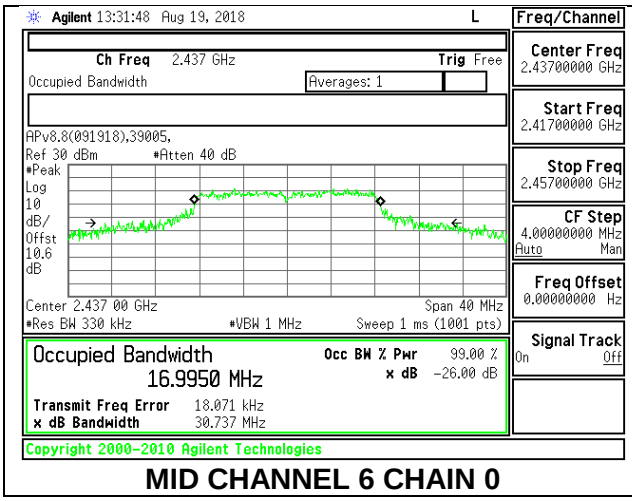
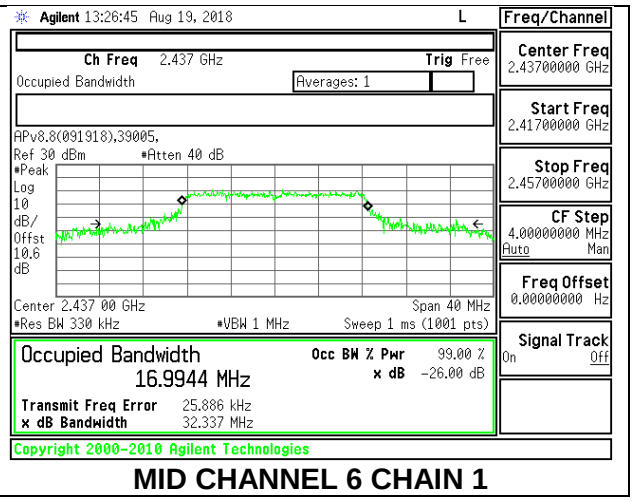


LOW CHANNEL 5 CHAIN 1

MID CHANNEL 6

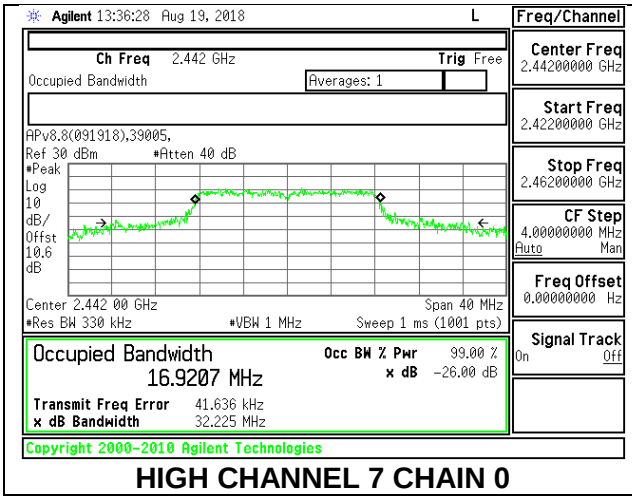


MID CHANNEL 6 CHAIN 0

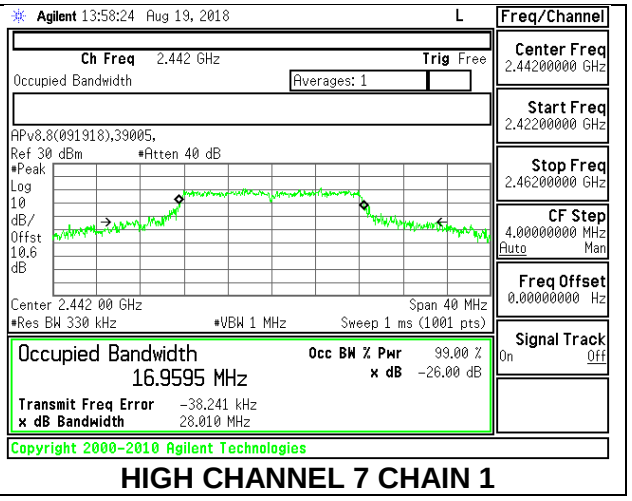


MID CHANNEL 6 CHAIN 1

HIGH CHANNEL 7

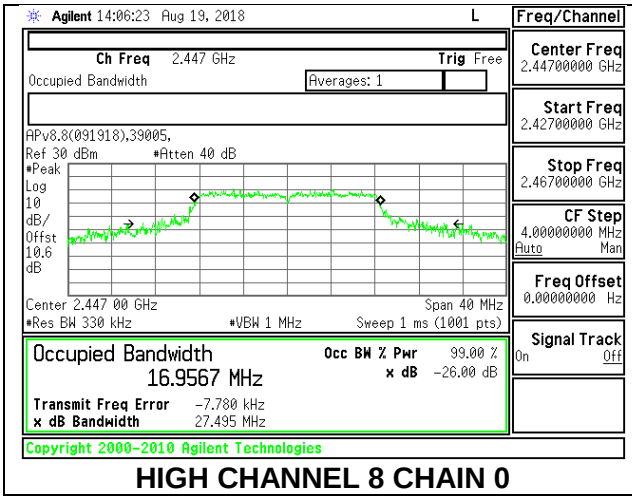


HIGH CHANNEL 7 CHAIN 0

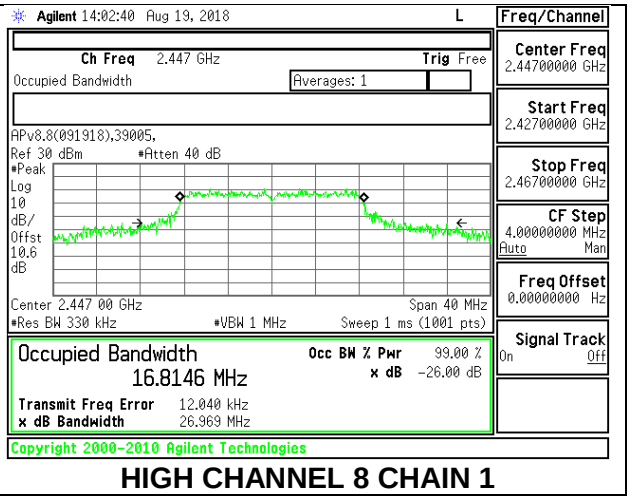


HIGH CHANNEL 7 CHAIN 1

HIGH CHANNEL 8

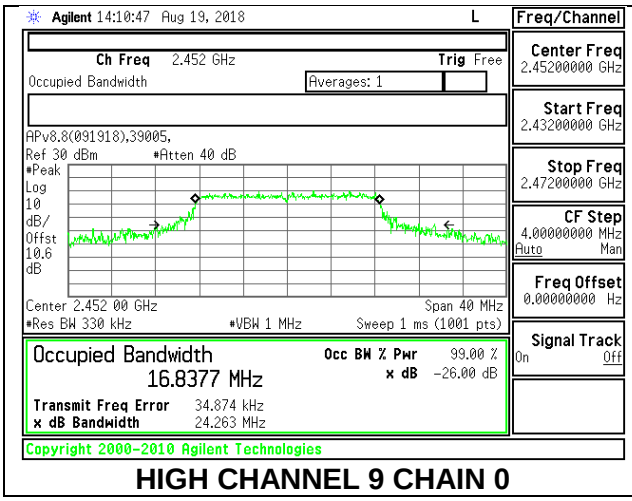


HIGH CHANNEL 8 CHAIN 0

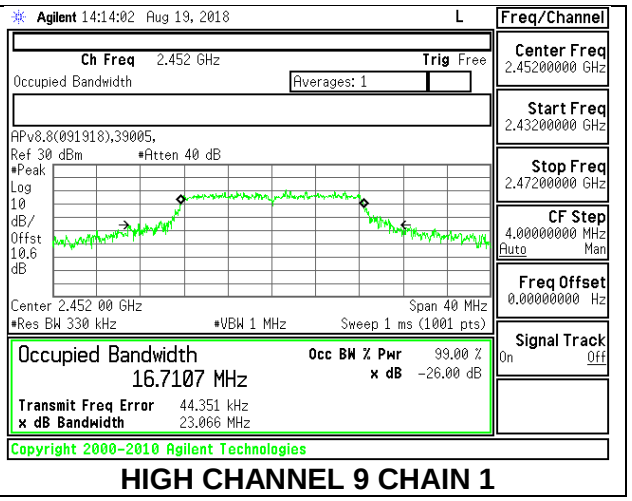


HIGH CHANNEL 8 CHAIN 1

HIGH CHANNEL 9

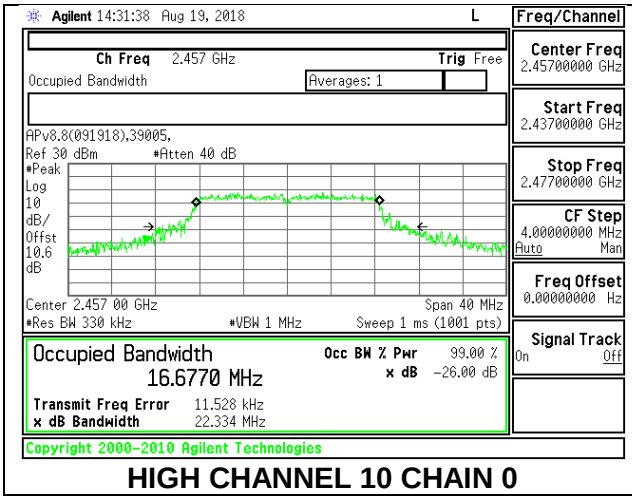


HIGH CHANNEL 9 CHAIN 0

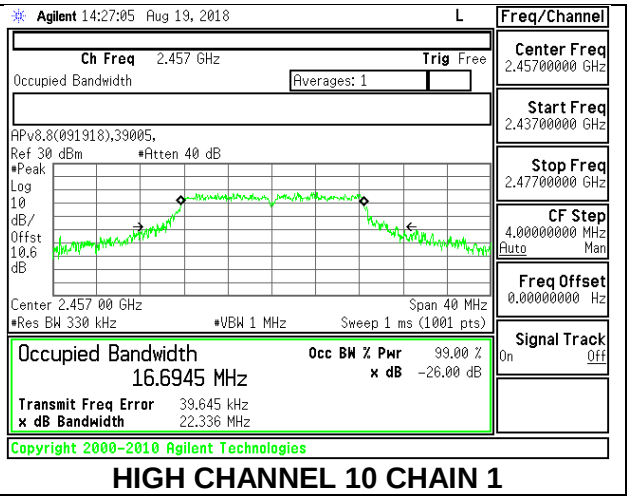


HIGH CHANNEL 9 CHAIN 1

HIGH CHANNEL 10

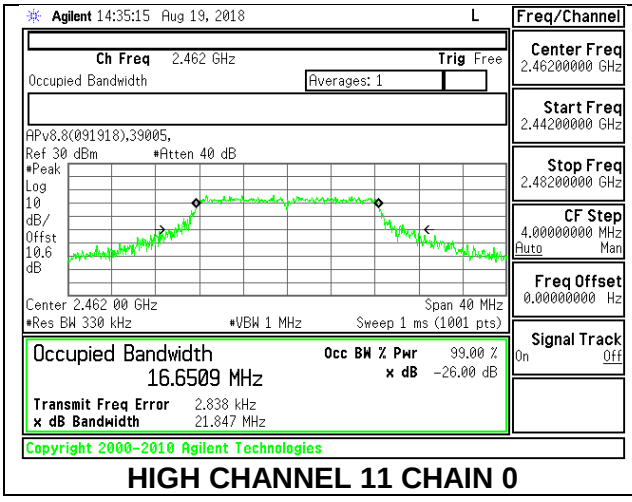


HIGH CHANNEL 10 CHAIN 0

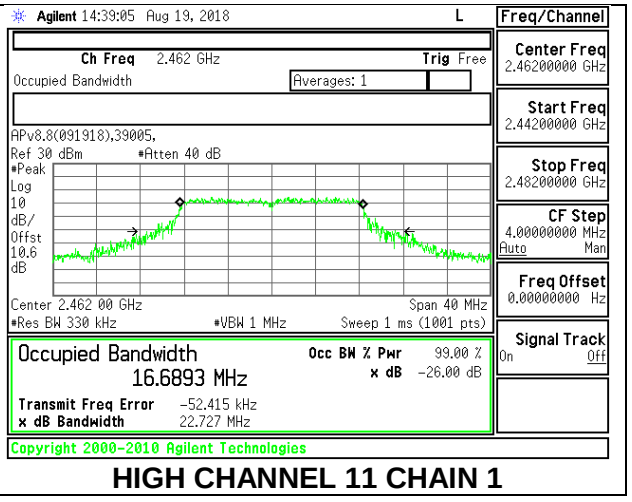


HIGH CHANNEL 10 CHAIN 1

HIGH CHANNEL 11



HIGH CHANNEL 11 CHAIN 0

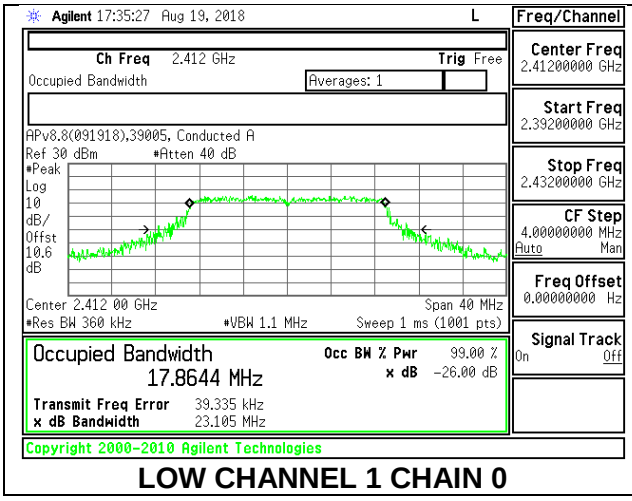


HIGH CHANNEL 11 CHAIN 1

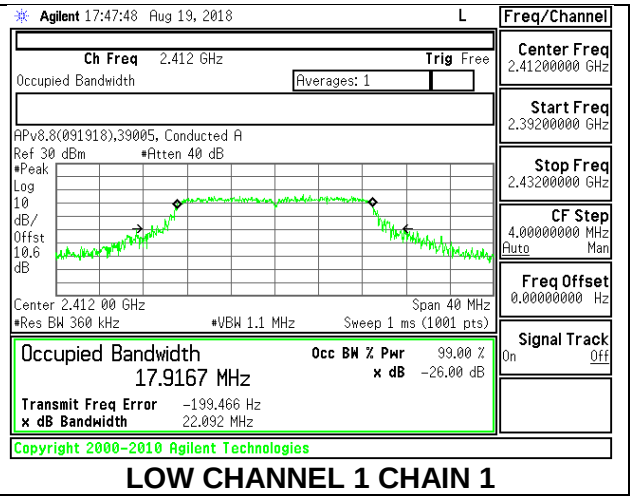
8.2.3. 802.11n HT20 MODE

Channel	Frequency (MHz)	99% Bandwidth Antenna 1 (MHz)	99% Bandwidth Antenna 2 (MHz)
Low 1	2412	17.8644	17.9167
Low 2	2417	17.8929	17.8667
Low 3	2422	17.9492	17.8034
Low 4	2427	17.9103	17.9819
Low 5	2432	18.0588	18.2323
Mid 6	2437	18.0146	18.2124
High 7	2442	18.1084	18.1286
High 8	2447	17.9448	17.8412
High 9	2452	17.8723	17.8872
High 10	2457	17.9503	17.8312
High 11	2462	17.8224	17.8648

LOW CHANNEL 1

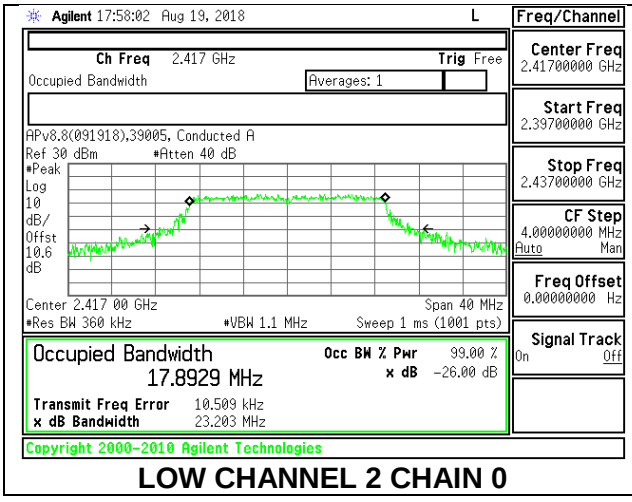


LOW CHANNEL 1 CHAIN 0

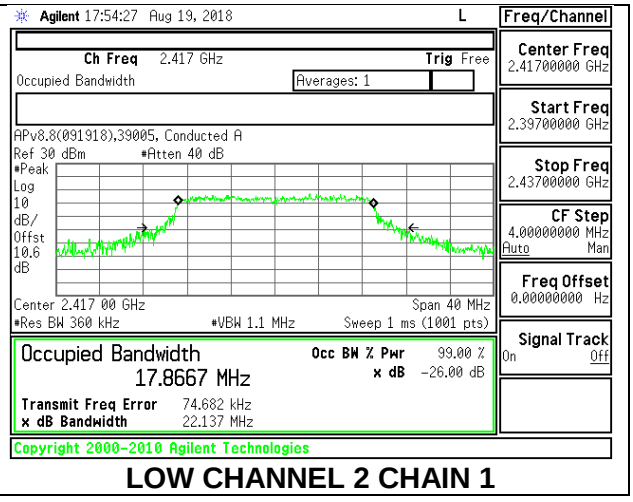


LOW CHANNEL 1 CHAIN 1

LOW CHANNEL 2

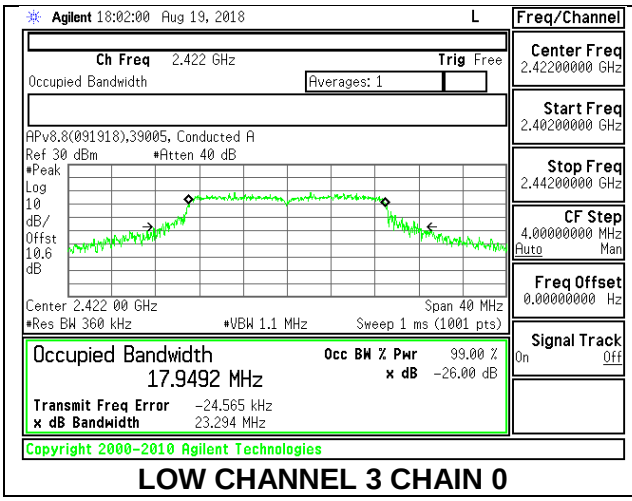


LOW CHANNEL 2 CHAIN 0

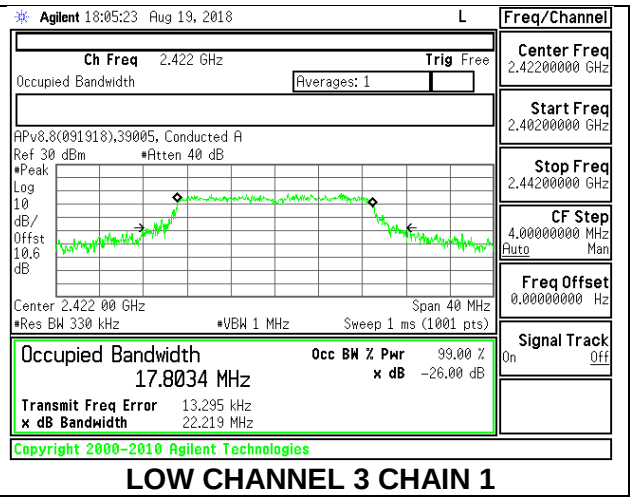


LOW CHANNEL 2 CHAIN 1

LOW CHANNEL 3

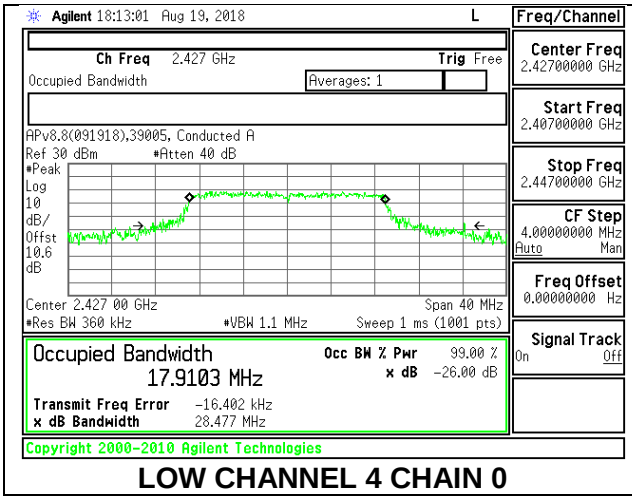


LOW CHANNEL 3 CHAIN 0

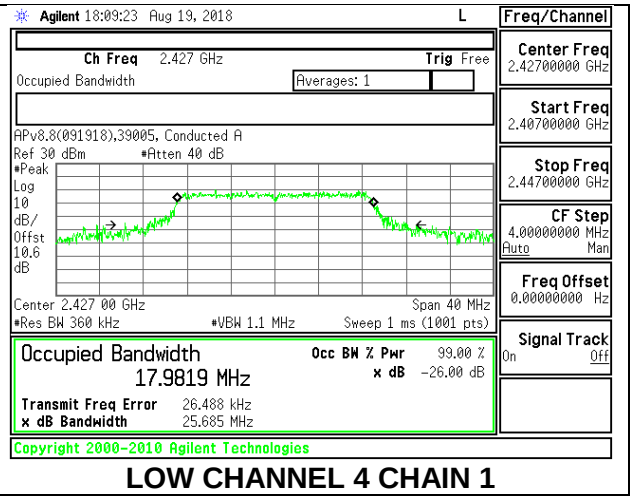


LOW CHANNEL 3 CHAIN 1

LOW CHANNEL 4

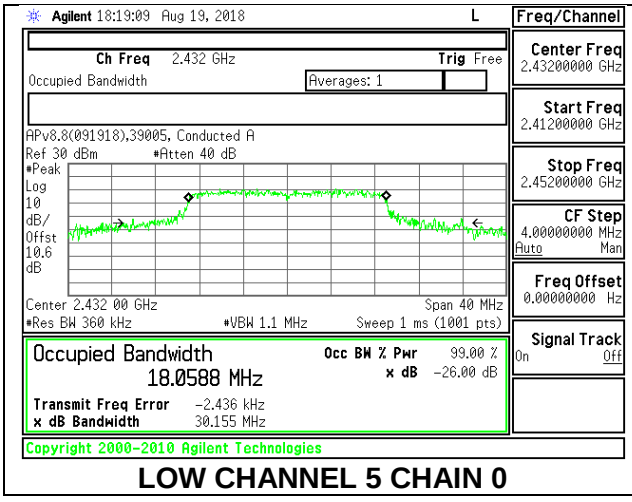


LOW CHANNEL 4 CHAIN 0

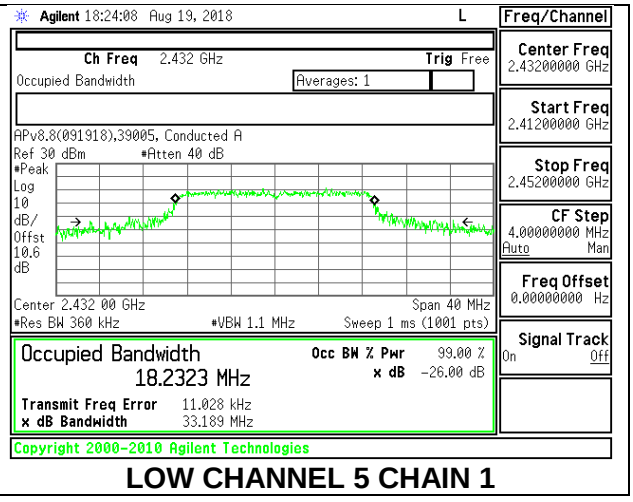


LOW CHANNEL 4 CHAIN 1

LOW CHANNEL 5

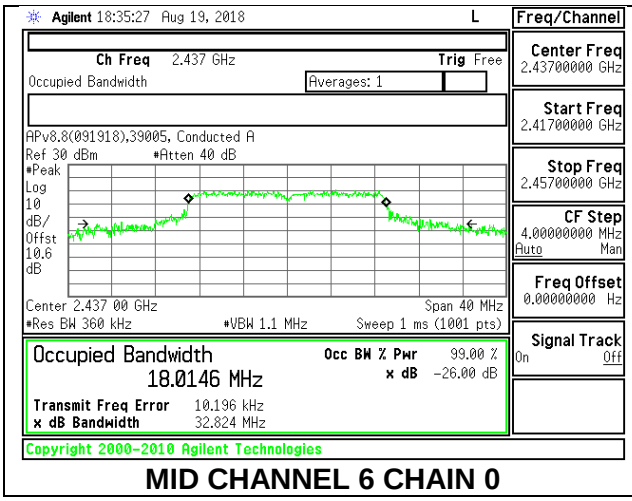


LOW CHANNEL 5 CHAIN 0

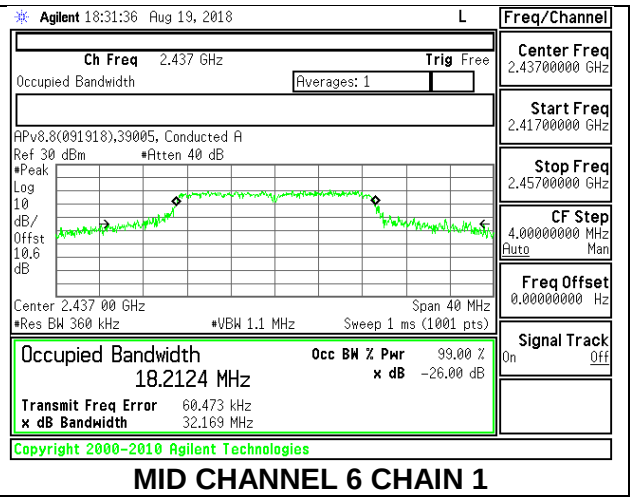


LOW CHANNEL 5 CHAIN 1

MID CHANNEL 6

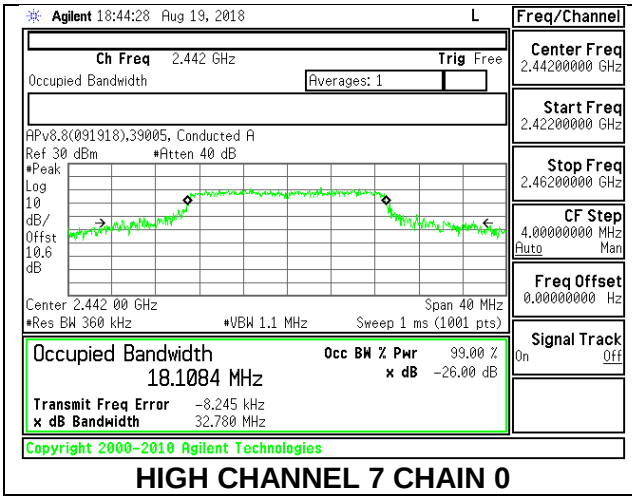


MID CHANNEL 6 CHAIN 0

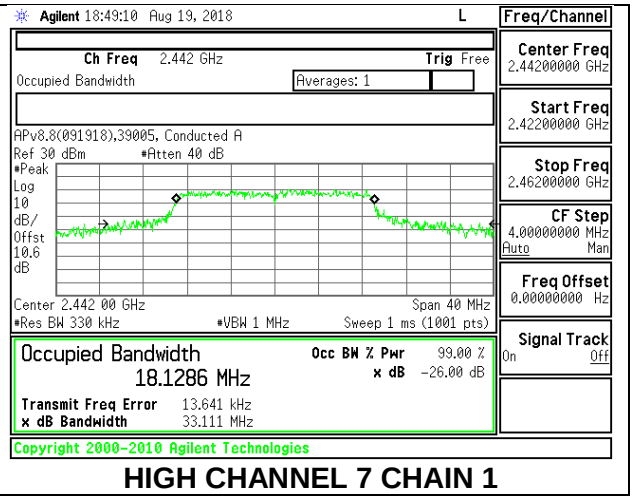


MID CHANNEL 6 CHAIN 1

HIGH CHANNEL 7

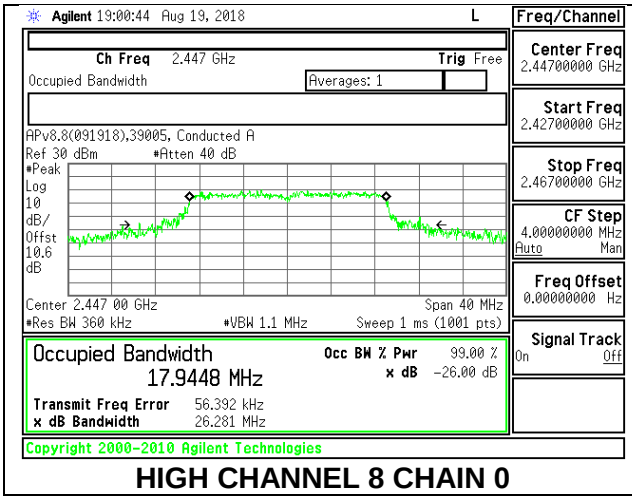


HIGH CHANNEL 7 CHAIN 0

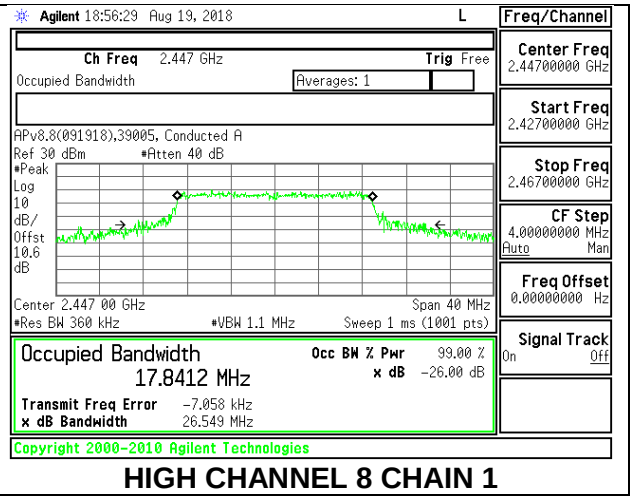


HIGH CHANNEL 7 CHAIN 1

HIGH CHANNEL 8

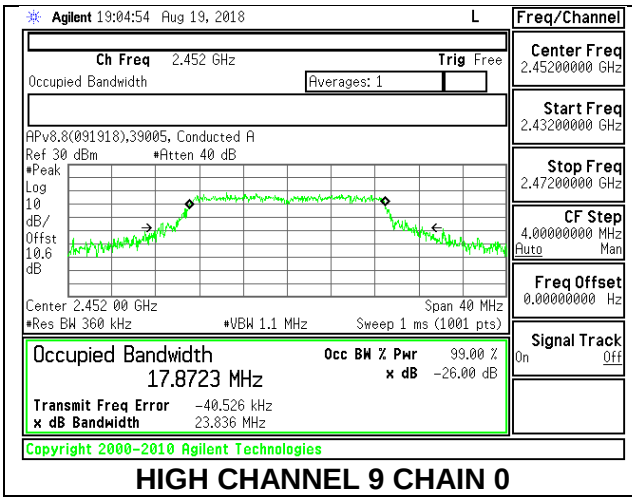


HIGH CHANNEL 8 CHAIN 0

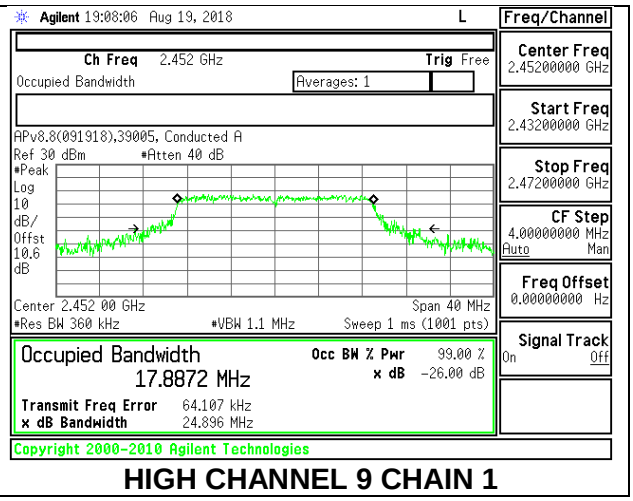


HIGH CHANNEL 8 CHAIN 1

HIGH CHANNEL 9

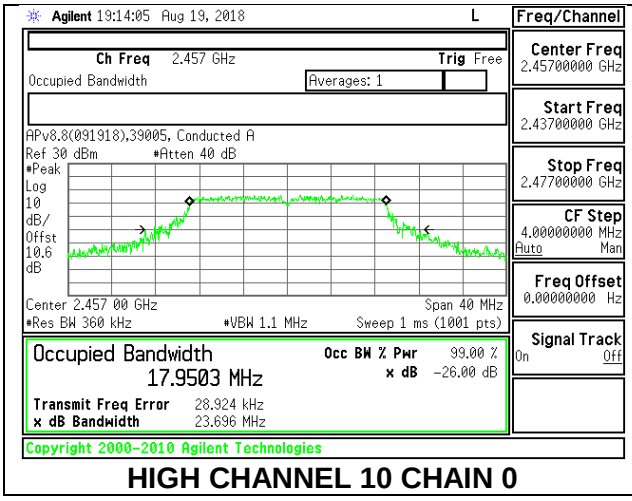


HIGH CHANNEL 9 CHAIN 0

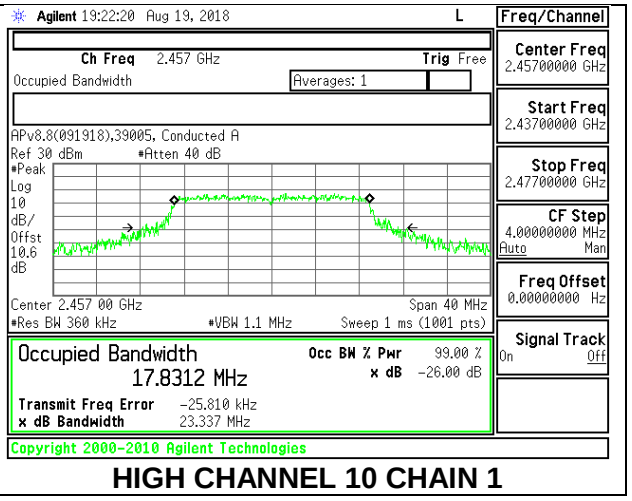


HIGH CHANNEL 9 CHAIN 1

HIGH CHANNEL 10

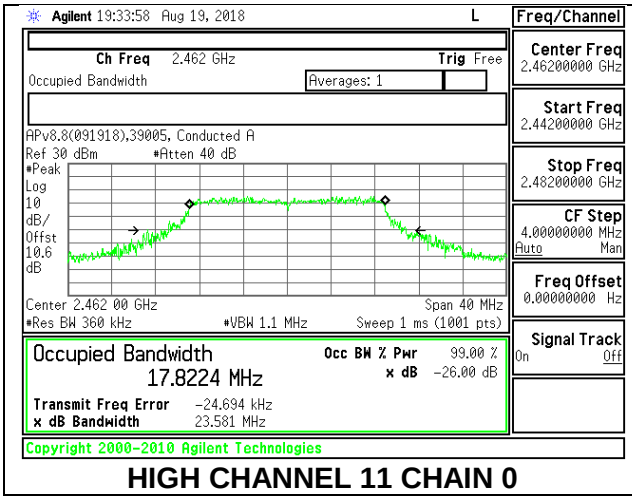


HIGH CHANNEL 10 CHAIN 0

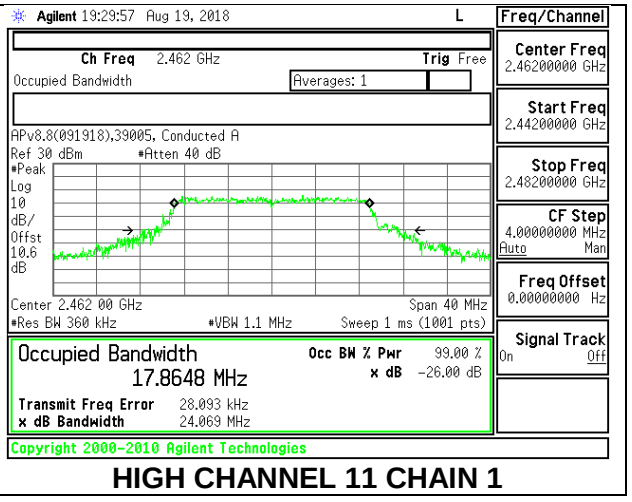


HIGH CHANNEL 10 CHAIN 1

HIGH CHANNEL 11



HIGH CHANNEL 11 CHAIN 0



HIGH CHANNEL 11 CHAIN 1

8.3. 6 dB BANDWIDTH

LIMITS

FCC §15.247 (a) (2)

RSS-247 5.2 (a)

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

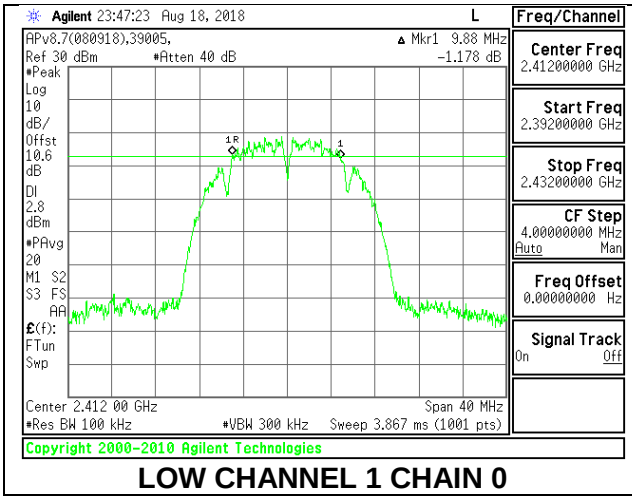
RESULTS

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 771-1000 FAX:(510) 661-0888

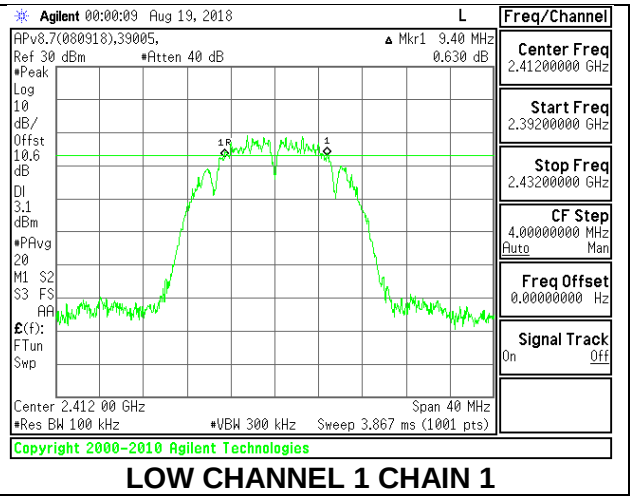
8.3.1. 802.11b MODE

Channel	Frequency (MHz)	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	Minimum Limit (MHz)
Low 1	2412	9.88	9.40	0.5
Low 2	2417	9.60	9.76	0.5
Mid 6	2437	9.80	9.96	0.5
High 10	2457	10.00	9.84	0.5
High 11	2462	9.64	9.60	0.5

LOW CHANNEL 1

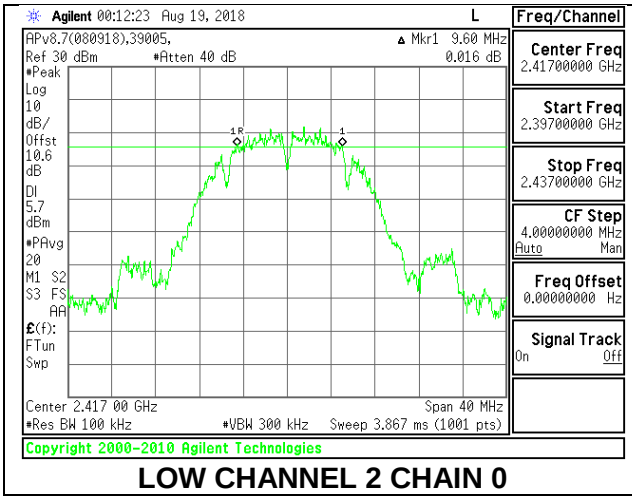


LOW CHANNEL 1 CHAIN 0

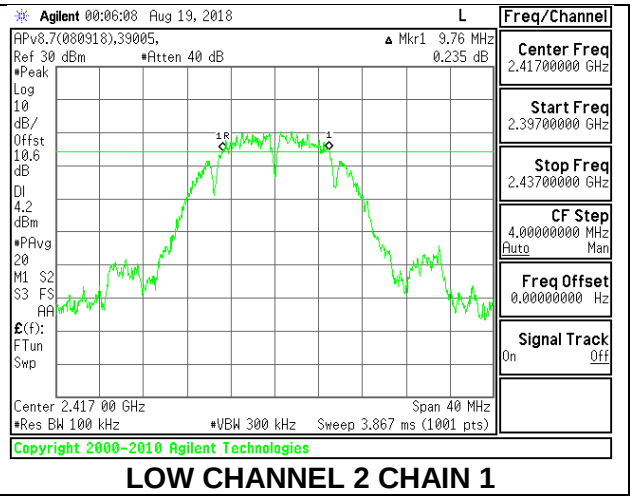


LOW CHANNEL 1 CHAIN 1

LOW CHANNEL 2

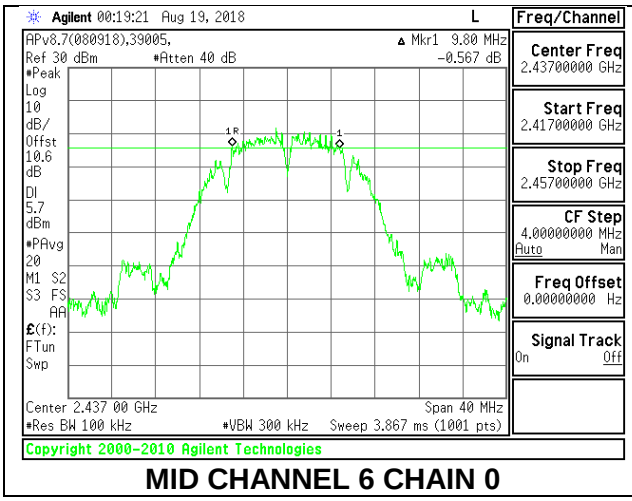


LOW CHANNEL 2 CHAIN 0

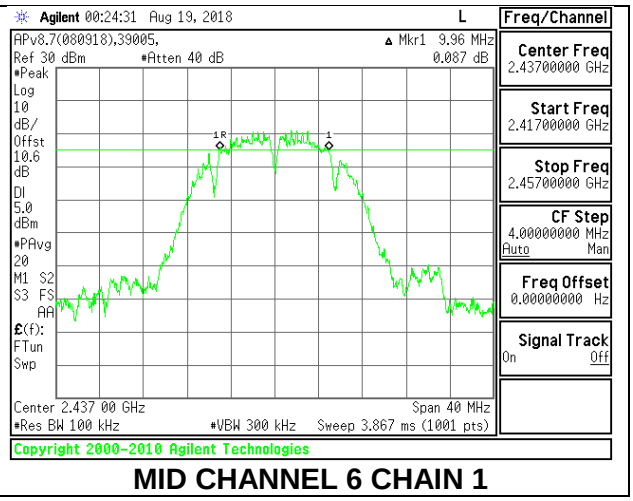


LOW CHANNEL 2 CHAIN 1

MID CHANNEL 6

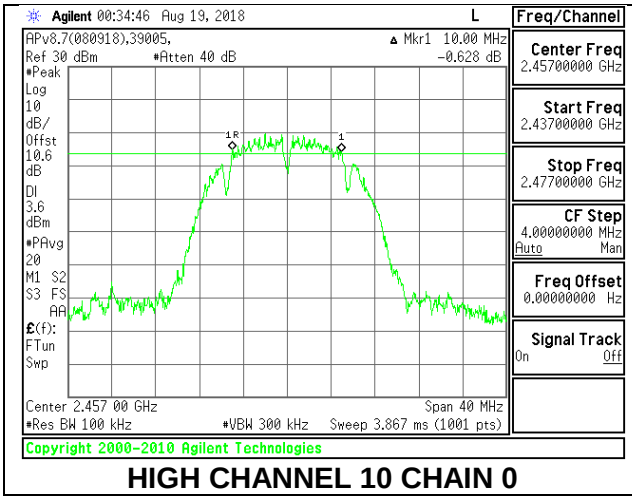


MID CHANNEL 6 CHAIN 0

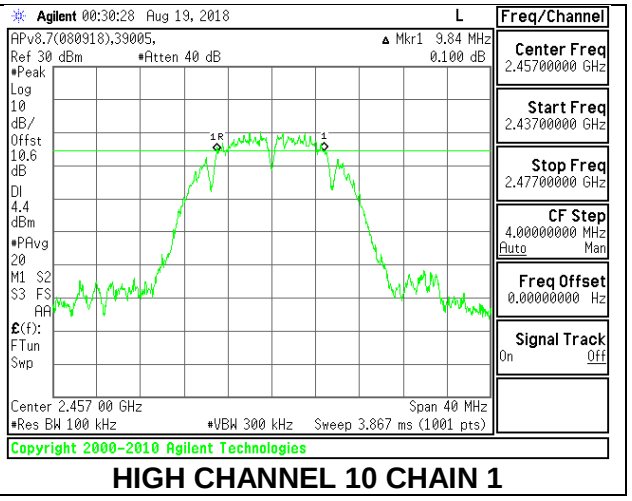


MID CHANNEL 6 CHAIN 1

HIGH CHANNEL 10

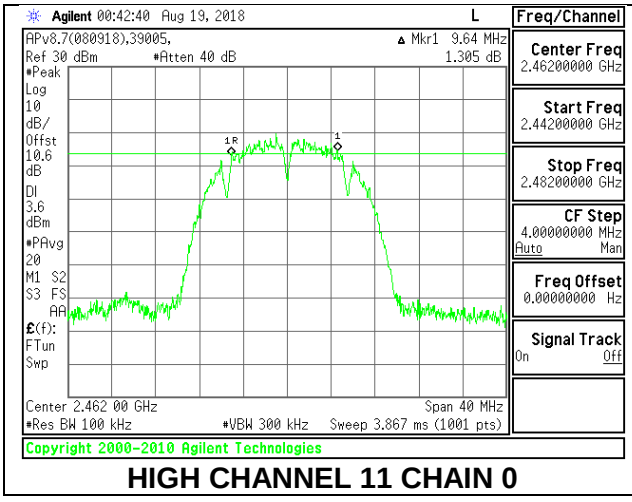


HIGH CHANNEL 10 CHAIN 0

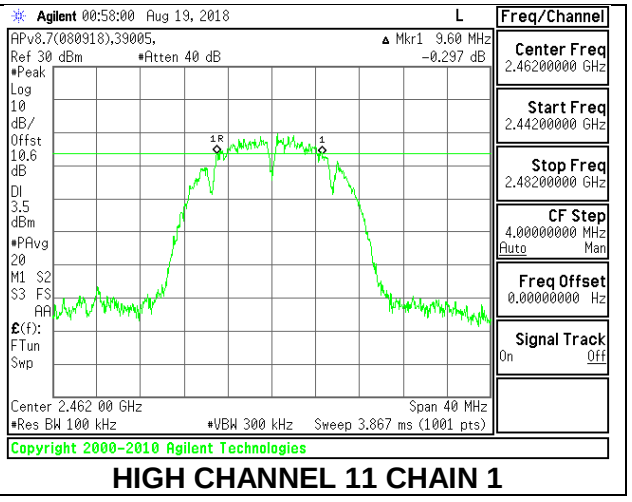


HIGH CHANNEL 10 CHAIN 1

HIGH CHANNEL 11



HIGH CHANNEL 11 CHAIN 0



HIGH CHANNEL 11 CHAIN 1

8.3.2. 802.11g MODE

Channel	Frequency (MHz)	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	Minimum Limit (MHz)
Low 1	2412	16.40	16.36	0.5
Low 2	2417	16.36	16.40	0.5
Low 3	2422	16.48	16.40	0.5
Low 4	2427	16.40	16.40	0.5
Low 5	2432	16.40	16.40	0.5
Mid 6	2437	16.44	16.32	0.5
High 7	2442	16.40	16.32	0.5
High 8	2447	16.40	16.40	0.5
High 9	2452	16.40	16.36	0.5
High 10	2457	16.52	16.40	0.5
High 11	2462	16.44	16.40	0.5

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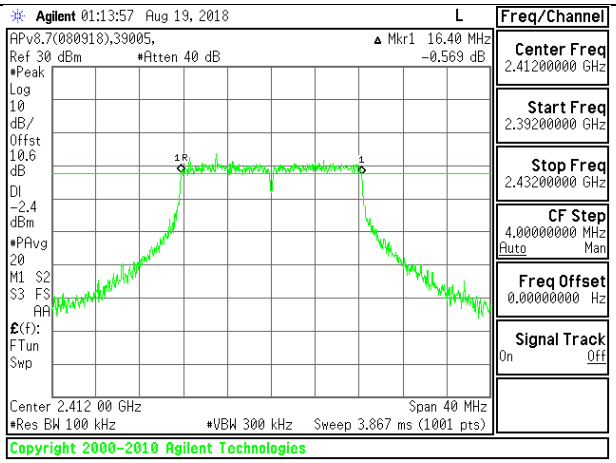
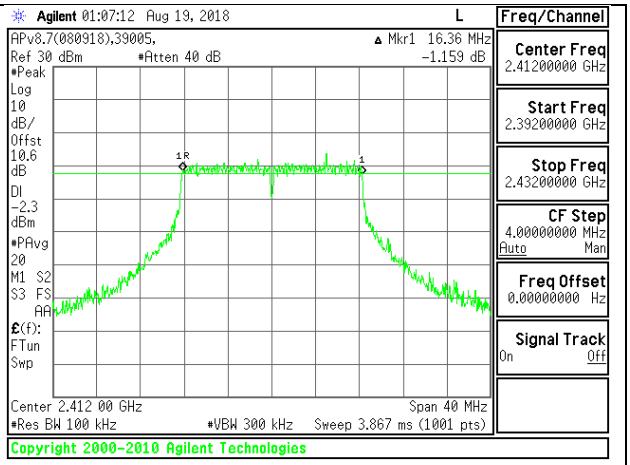
LOW CHANNEL 1

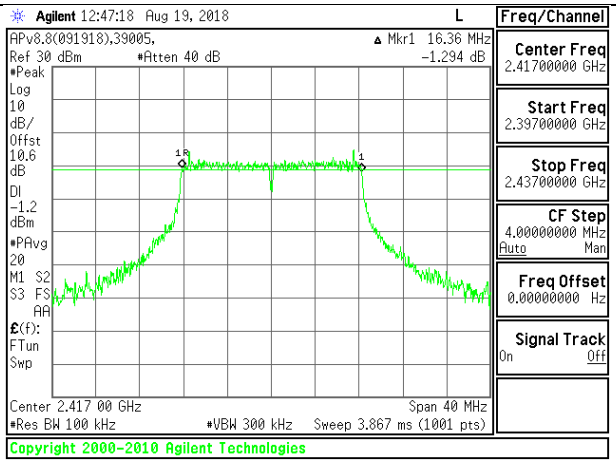


LOW CHANNEL 1 CHAIN 0

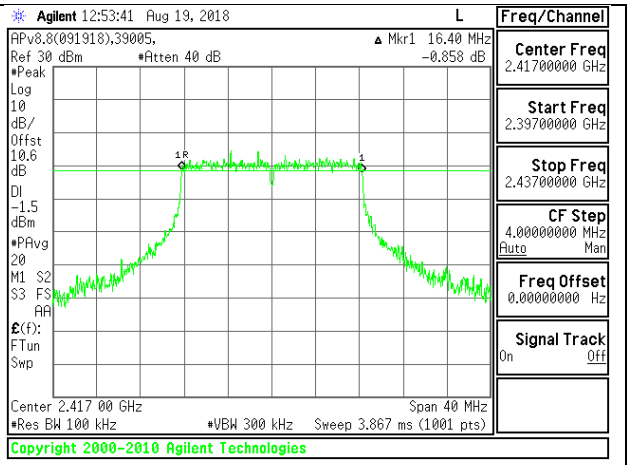


LOW CHANNEL 1 CHAIN 1

LOW CHANNEL 2

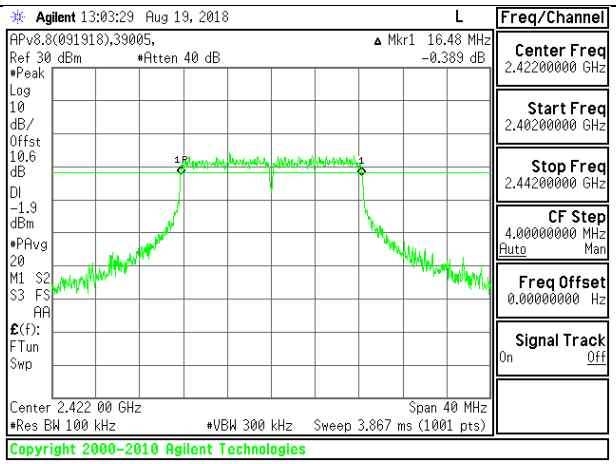


LOW CHANNEL 2 CHAIN 0

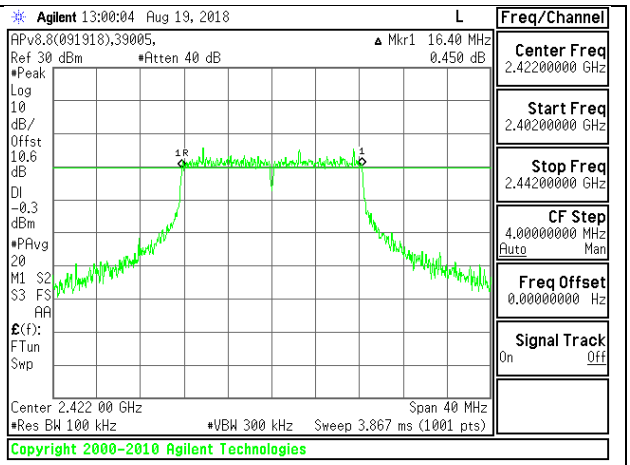


LOW CHANNEL 2 CHAIN 1

LOW CHANNEL 3

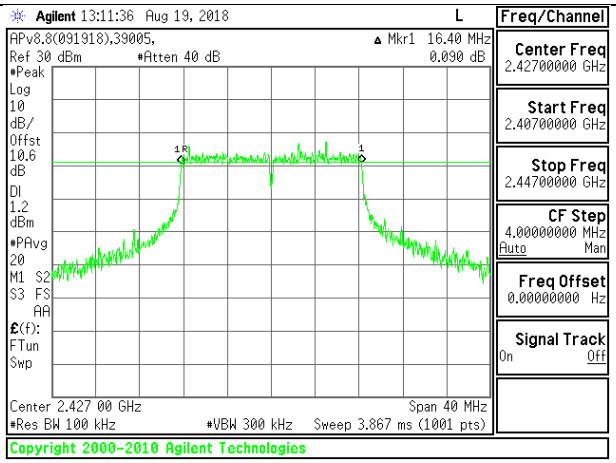


LOW CHANNEL 3 CHAIN 0

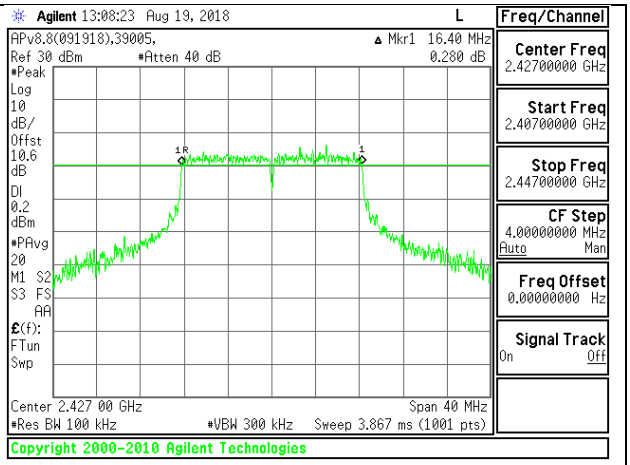


LOW CHANNEL 3 CHAIN 1

LOW CHANNEL 4

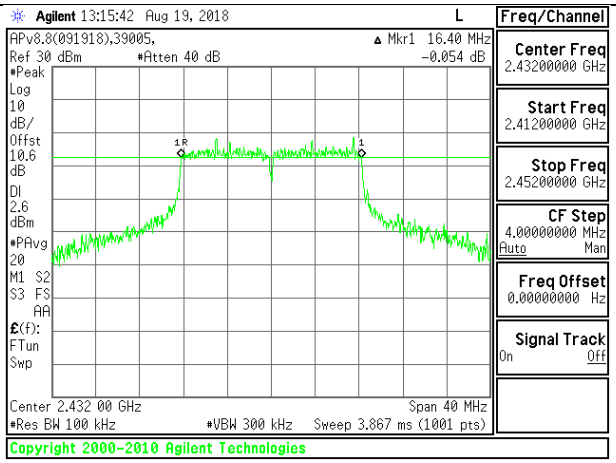


LOW CHANNEL 4 CHAIN 0

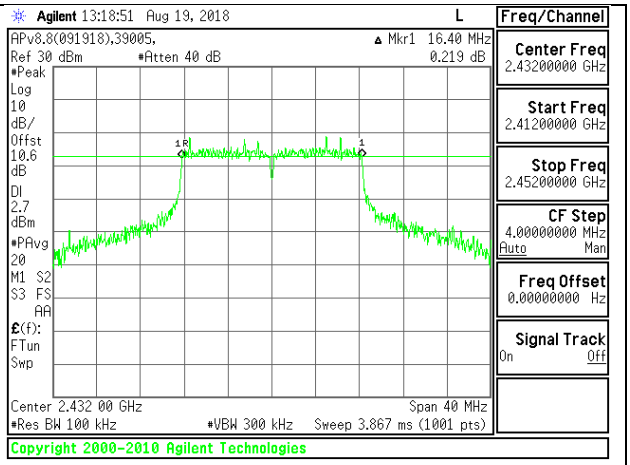


LOW CHANNEL 4 CHAIN 1

LOW CHANNEL 5

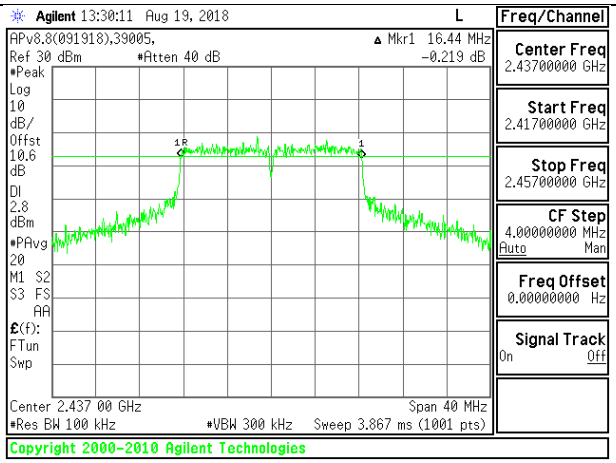


LOW CHANNEL 5 CHAIN 0

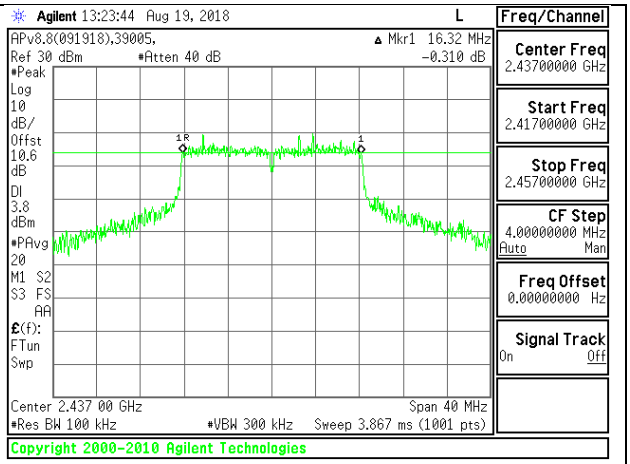


LOW CHANNEL 5 CHAIN 1

MID CHANNEL 6

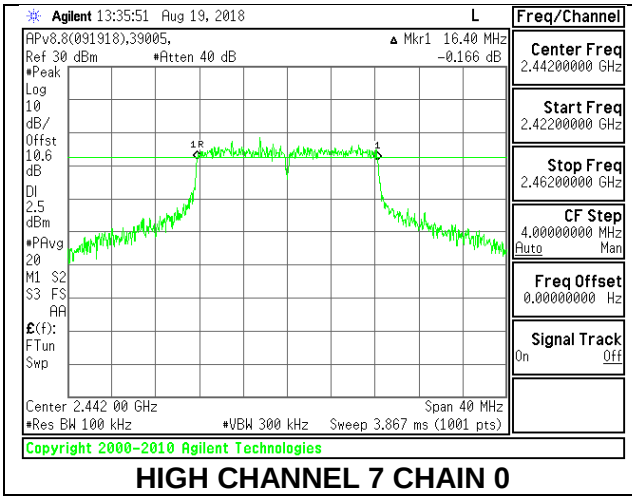


MID CHANNEL 6 CHAIN 0

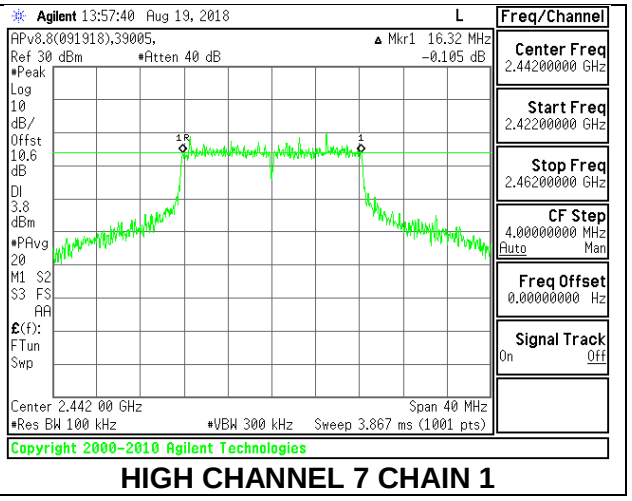


MID CHANNEL 6 CHAIN 1

HIGH CHANNEL 7

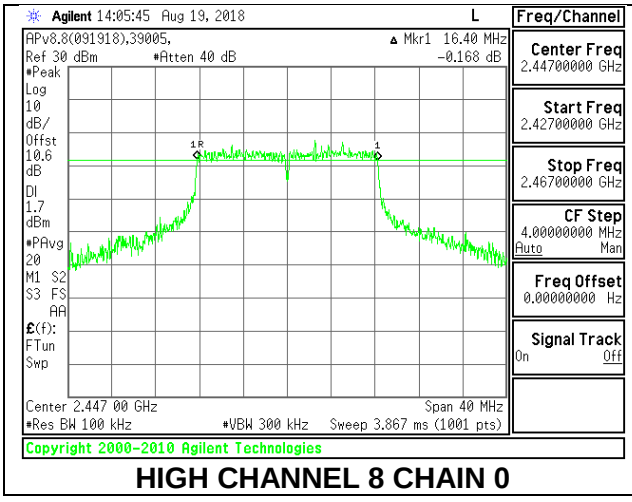


HIGH CHANNEL 7 CHAIN 0

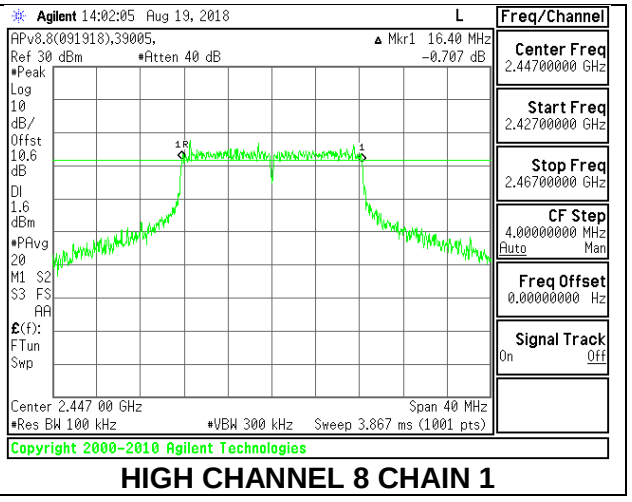


HIGH CHANNEL 7 CHAIN 1

HIGH CHANNEL 8

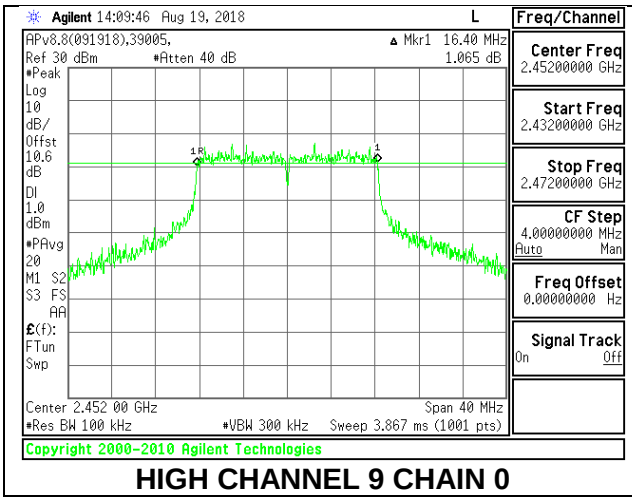


HIGH CHANNEL 8 CHAIN 0

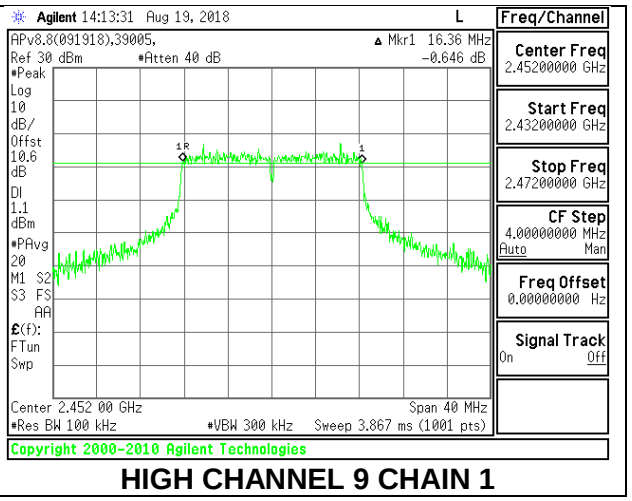


HIGH CHANNEL 8 CHAIN 1

HIGH CHANNEL 9

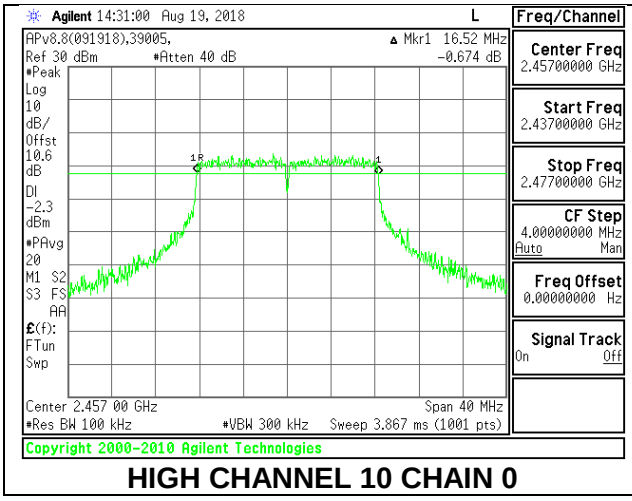


HIGH CHANNEL 9 CHAIN 0

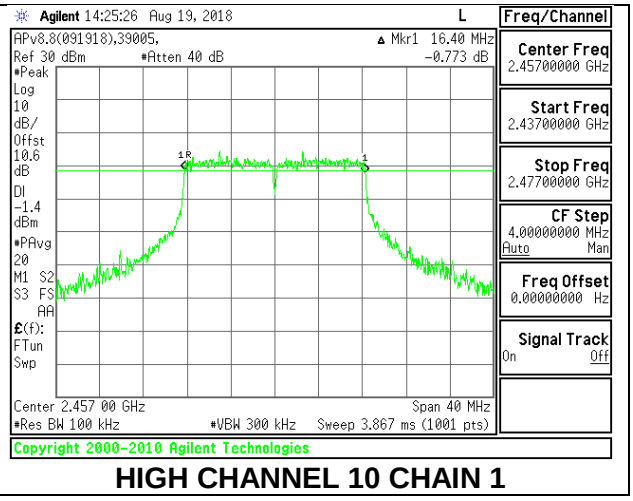


HIGH CHANNEL 9 CHAIN 1

HIGH CHANNEL 10

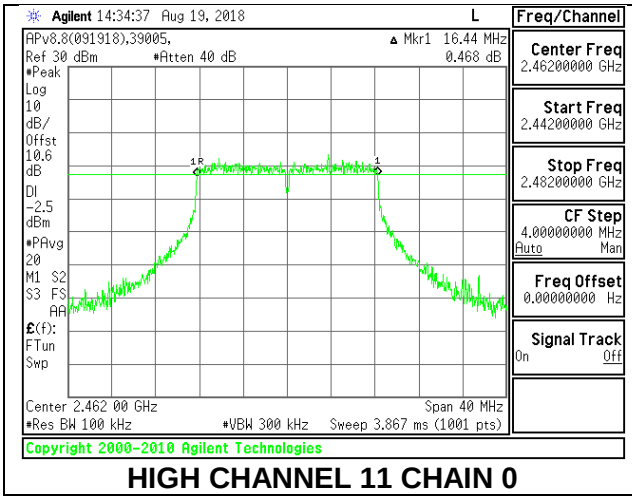


HIGH CHANNEL 10 CHAIN 0

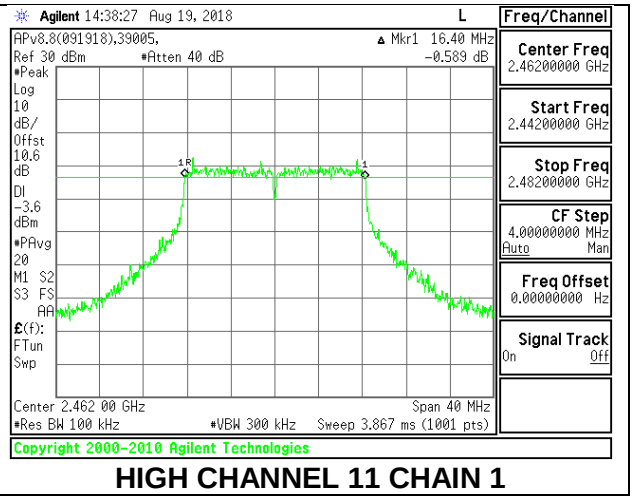


HIGH CHANNEL 10 CHAIN 1

HIGH CHANNEL 11



HIGH CHANNEL 11 CHAIN 0



HIGH CHANNEL 11 CHAIN 1

8.3.3. 802.11n HT20 MODE

Channel	Frequency (MHz)	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	Minimum Limit (MHz)
Low 1	2412	17.56	17.64	0.5
Low 2	2417	17.56	17.60	0.5
Low 3	2422	17.60	17.60	0.5
Low 4	2427	17.56	17.60	0.5
Low 5	2432	17.64	17.68	0.5
Mid 6	2437	17.64	17.60	0.5
High 7	2442	17.72	17.32	0.5
High 8	2447	17.36	17.56	0.5
High 9	2452	17.60	17.68	0.5
High 10	2457	17.40	17.60	0.5
High 11	2462	17.76	17.60	0.5

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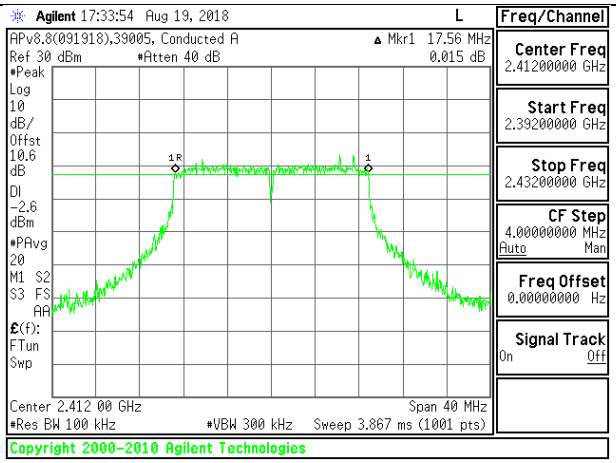
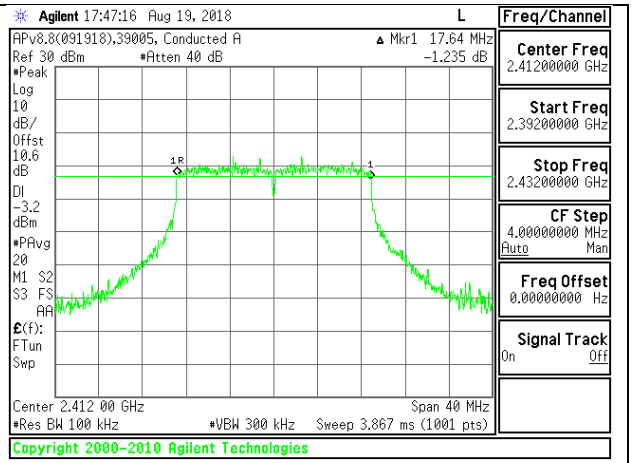
LOW CHANNEL 1

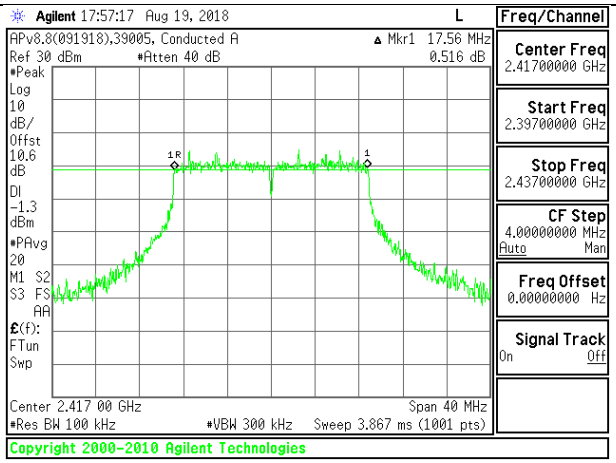


LOW CHANNEL 1 CHAIN 0

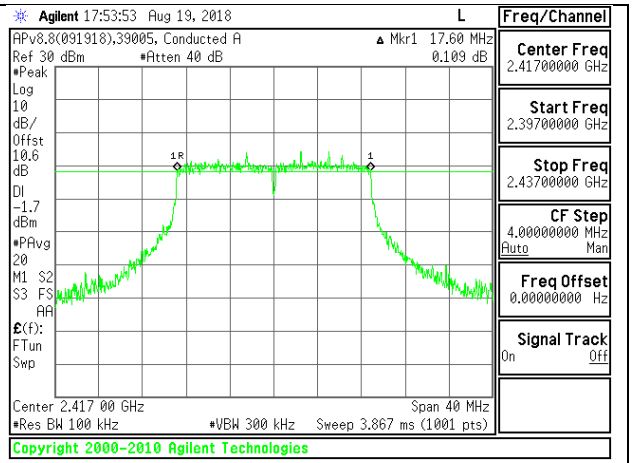


LOW CHANNEL 1 CHAIN 1

LOW CHANNEL 2

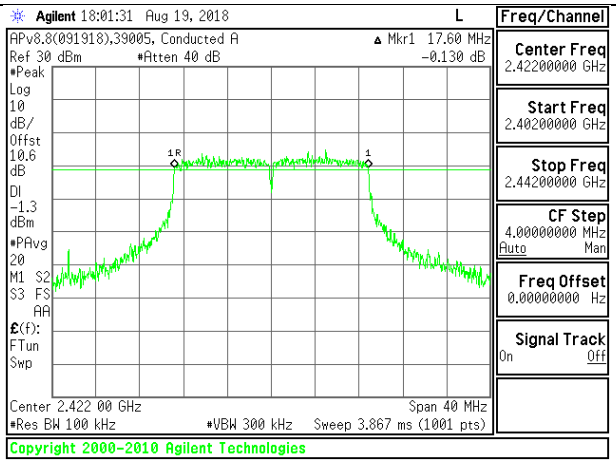


LOW CHANNEL 2 CHAIN 0

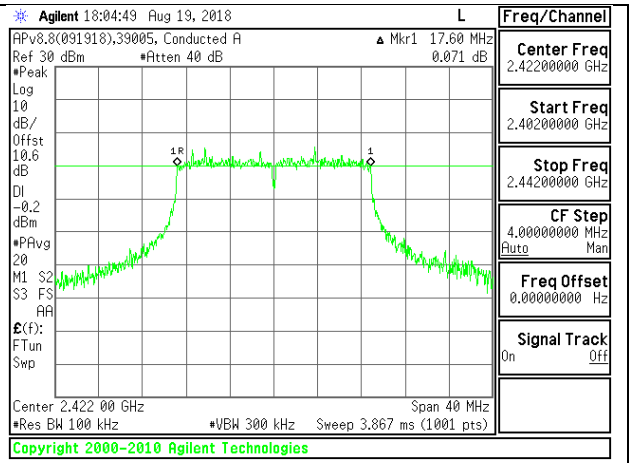


LOW CHANNEL 2 CHAIN 1

LOW CHANNEL 3

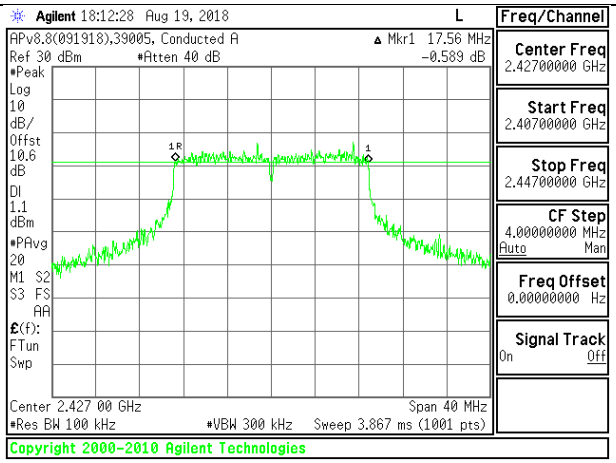


LOW CHANNEL 3 CHAIN 0

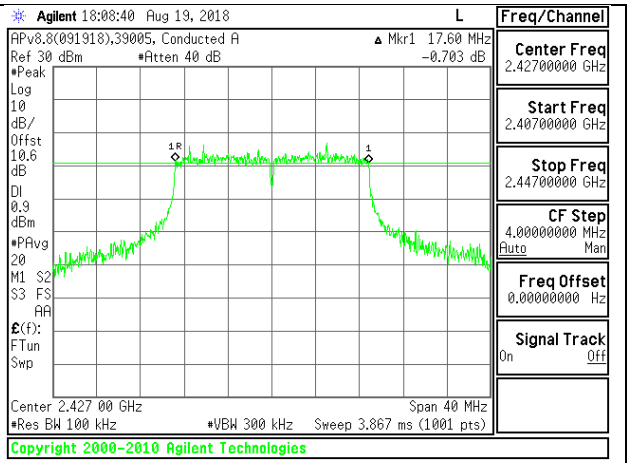


LOW CHANNEL 3 CHAIN 1

LOW CHANNEL 4

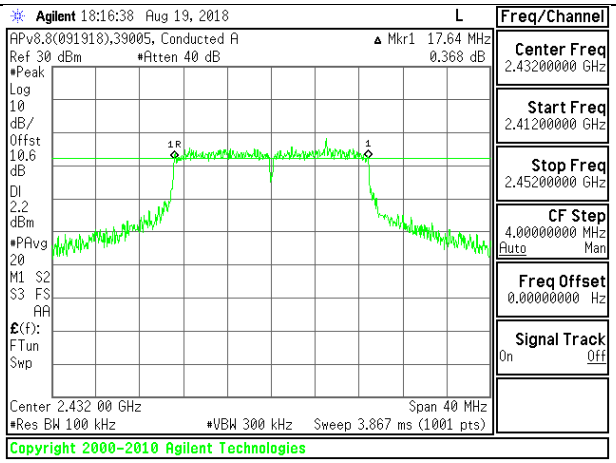


LOW CHANNEL 4 CHAIN 0

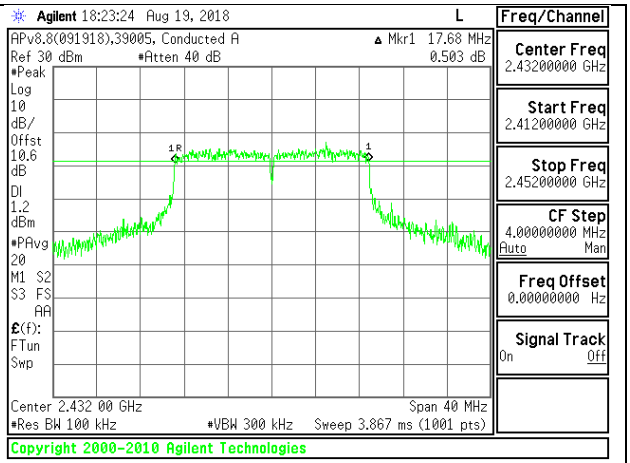


LOW CHANNEL 4 CHAIN 1

LOW CHANNEL 5

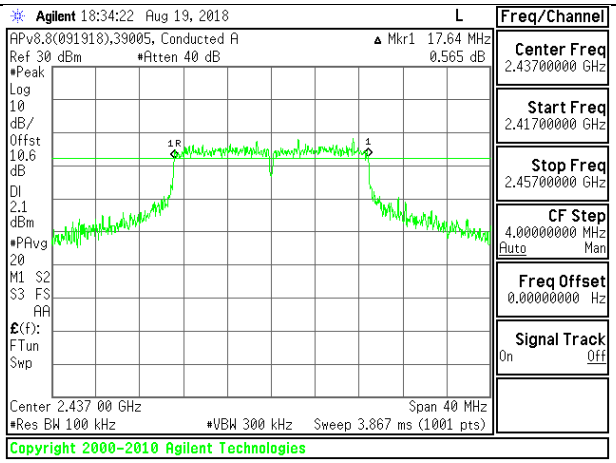


LOW CHANNEL 5 CHAIN 0

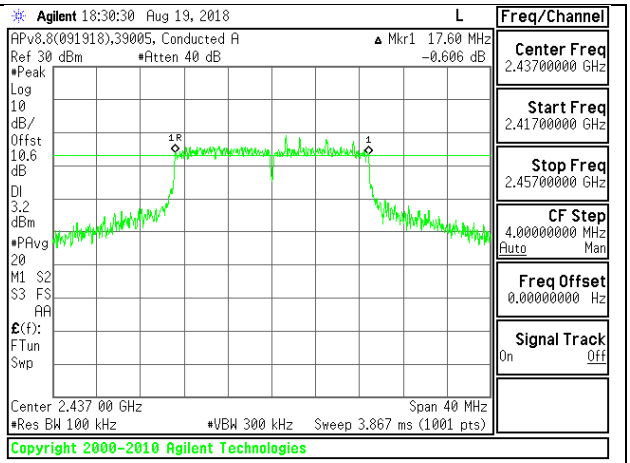


LOW CHANNEL 5 CHAIN 1

MID CHANNEL 6

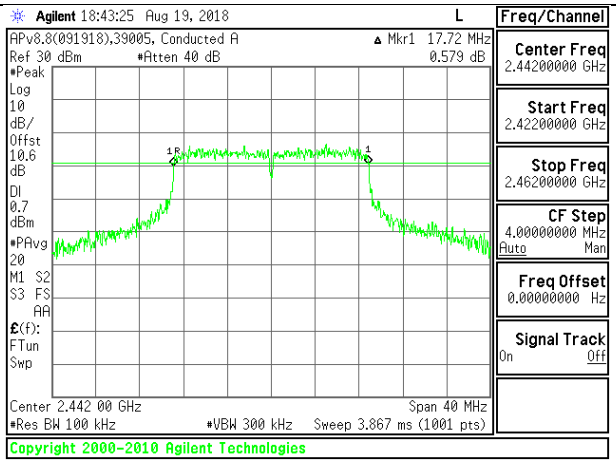


MID CHANNEL 6 CHAIN 0

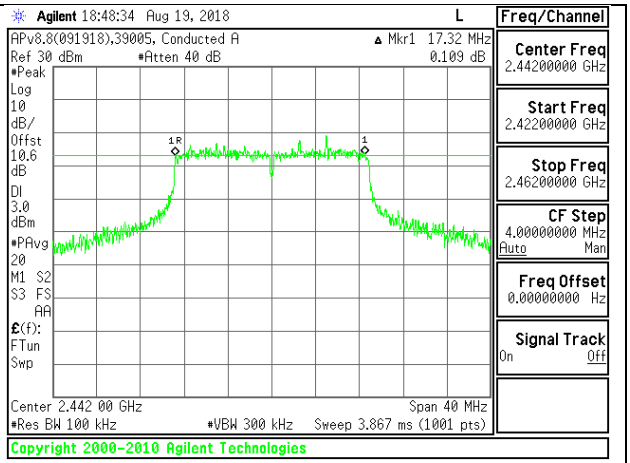


MID CHANNEL 6 CHAIN 1

HIGH CHANNEL 7

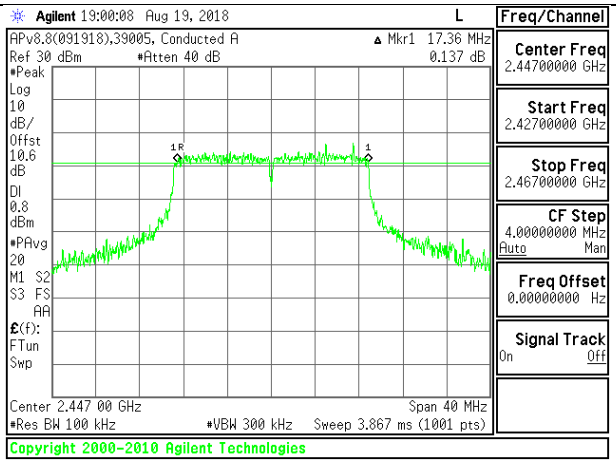


HIGH CHANNEL 7 CHAIN 0

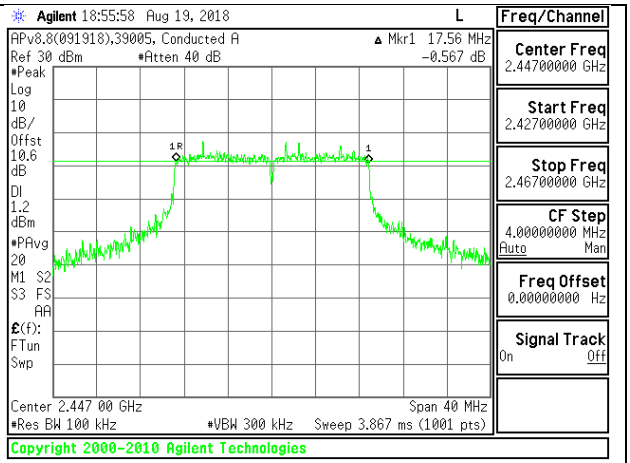


HIGH CHANNEL 7 CHAIN 1

HIGH CHANNEL 8

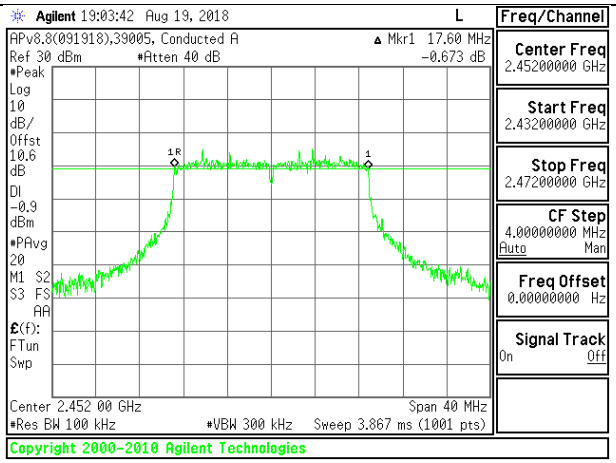


HIGH CHANNEL 8 CHAIN 0

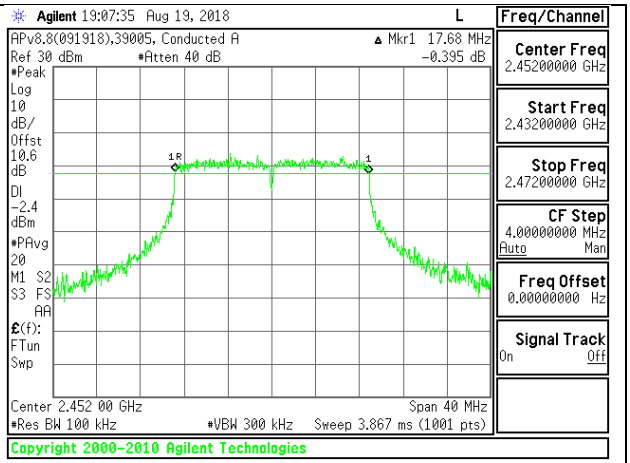


HIGH CHANNEL 8 CHAIN 1

HIGH CHANNEL 9

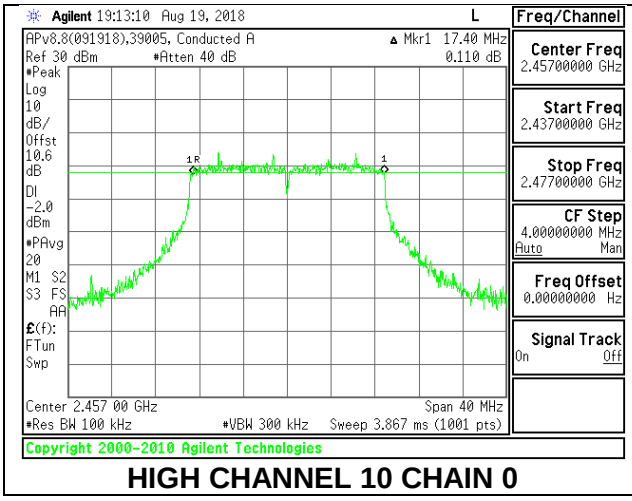


HIGH CHANNEL 9 CHAIN 0

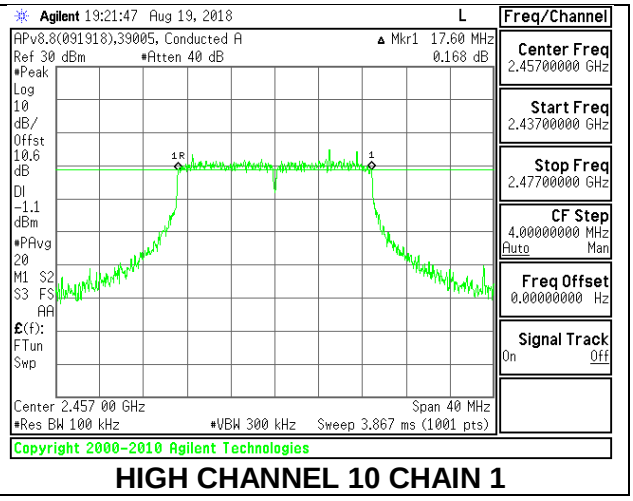


HIGH CHANNEL 9 CHAIN 1

HIGH CHANNEL 10

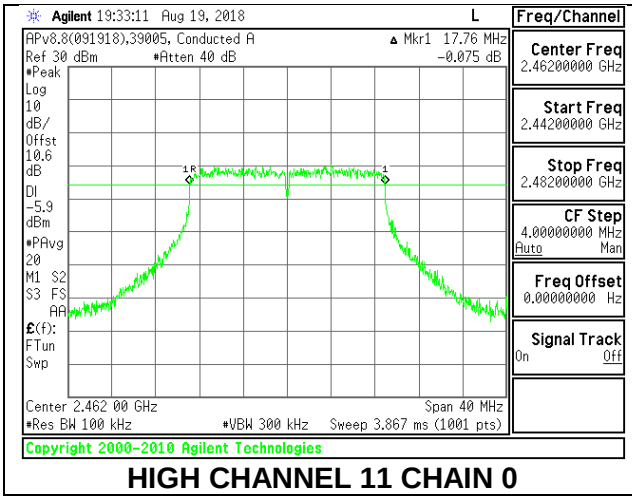


HIGH CHANNEL 10 CHAIN 0

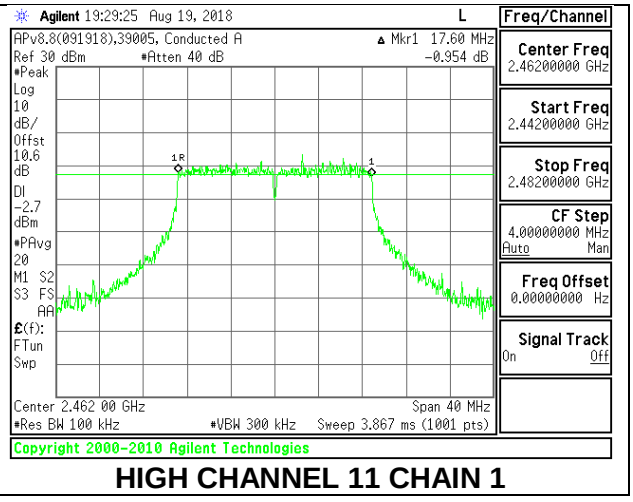


HIGH CHANNEL 10 CHAIN 1

HIGH CHANNEL 11



HIGH CHANNEL 11 CHAIN 0



HIGH CHANNEL 11 CHAIN 1

8.4. OUTPUT POWER

LIMITS

FCC §15.247 (b) (3)

RSS-247 5.4 (d)

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.

TEST PROCEDURE

The transmitter output is connected to a power meter. The cable assembly insertion loss of was entered as an offset in the power meter to allow for a gated Average reading of power.

DIRECTIONAL ANTENNA GAIN

Chain / Antenna Gain	Horizontal Polarization	Vertical Polarization
Chain 0_Antenna Gain (dBi)	3.80	
Chain 1_Antenna Gain (dBi)_***Worst-case***		4.10

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RESULTS

8.4.1. 802.11b MODE

Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC/ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Max Power (dBm)
Low 1	2412	4.10	30.00	36	30.00
Low 2	2417	4.10	30.00	36	30.00
Mid 6	2437	4.10	30.00	36	30.00
High 10	2457	4.10	30.00	36	30.00
High 11	2462	4.10	30.00	36	30.00

Results

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
Low 1	2412	19.40	19.35	22.39	30.00	-7.61
Low 2	2417	21.12	21.00	24.07	30.00	-5.93
Mid 6	2437	21.00	20.70	23.86	30.00	-6.14
High 10	2457	20.30	20.42	23.37	30.00	-6.63
High 11	2462	19.50	19.65	22.59	30.00	-7.41

8.4.2. 802.11g MODE

Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC/ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Max Power (dBm)
Low 1	2412	4.10	30.00	36	30.00
Low 2	2417	4.10	30.00	36	30.00
Low 3	2422	4.10	30.00	36	30.00
Low 4	2427	4.10	30.00	36	30.00
Low 5	2432	4.10	30.00	36	30.00
Mid 6	2437	4.10	30.00	36	30.00
High 7	2442	4.10	30.00	36	30.00
High 8	2447	4.10	30.00	36	30.00
High 9	2452	4.10	30.00	36	30.00
High 10	2457	4.10	30.00	36	30.00
High 11	2462	4.10	30.00	36	30.00

Results

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
Low 1	2412	15.20	15.17	18.20	30.00	-11.80
Low 2	2417	16.15	16.14	19.16	30.00	-10.84
Low 3	2422	17.10	17.08	20.10	30.00	-9.90
Low 4	2427	18.50	18.48	21.50	30.00	-8.50
Low 5	2432	20.20	20.10	23.16	30.00	-6.84
Mid 6	2437	20.75	20.61	23.69	30.00	-6.31
High 7	2442	20.25	20.20	23.24	30.00	-6.76
High 8	2447	19.11	19.10	22.12	30.00	-7.88
High 9	2452	18.52	18.50	21.52	30.00	-8.48
High 10	2457	16.54	16.52	19.54	30.00	-10.46
High 11	2462	14.45	14.50	17.49	30.00	-12.51

8.4.3. 802.11n HT20 MODE

Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC/ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Max Power (dBm)
Low 1	2412	4.10	30.00	36	30.00
Low 2	2417	4.10	30.00	36	30.00
Low 3	2422	4.10	30.00	36	30.00
Low 4	2427	4.10	30.00	36	30.00
Low 5	2432	4.10	30.00	36	30.00
Mid 6	2437	4.10	30.00	36	30.00
High 7	2442	4.10	30.00	36	30.00
High 8	2447	4.10	30.00	36	30.00
High 9	2452	4.10	30.00	36	30.00
High 10	2457	4.10	30.00	36	30.00
High 11	2462	4.10	30.00	36	30.00

Results

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
Low 1	2412	15.23	15.20	18.23	30.00	-11.77
Low 2	2417	16.20	16.16	19.19	30.00	-10.81
Low 3	2422	17.23	17.18	20.22	30.00	-9.78
Low 4	2427	18.75	18.71	21.74	30.00	-8.26
Low 5	2432	20.00	19.98	23.00	30.00	-7.00
Mid 6	2437	20.73	20.68	23.72	30.00	-6.28
High 7	2442	20.00	19.98	23.00	30.00	-7.00
High 8	2447	18.60	18.58	21.60	30.00	-8.40
High 9	2452	17.06	17.04	20.06	30.00	-9.94
High 10	2457	16.20	16.20	19.21	30.00	-10.79
High 11	2462	14.50	14.62	17.57	30.00	-12.43

8.5. POWER SPECTRAL DENSITY

LIMITS

FCC §15.247 (e)

RSS-247 (5.2) (b)

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

RESULTS

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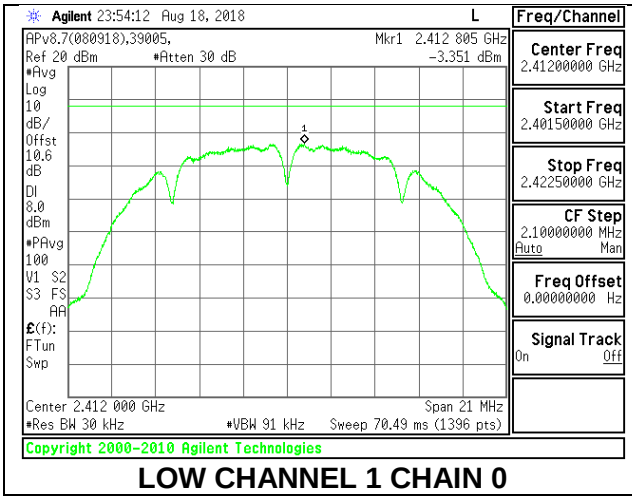
8.5.1. 802.11b MODE

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD

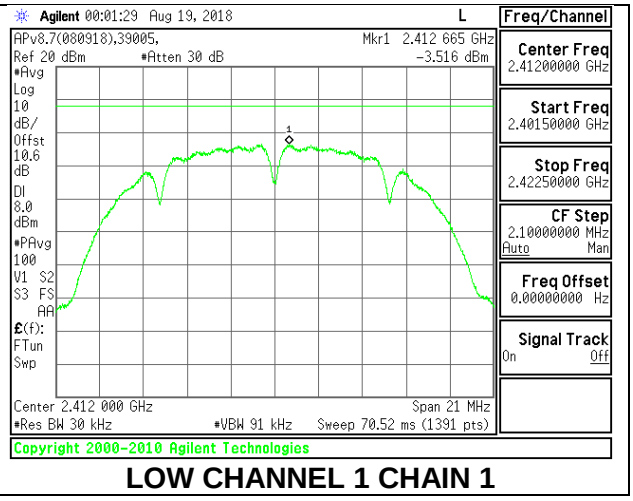
PSD Results

Channel	Frequency (MHz)	Chain 0 (dBm/ 30kHz)	Chain 1 (dBm/ 30kHz)	Total Corr'd PSD (dBm/ 30kHz)	Limit (dBm/ 30kHz)	Margin (dB)
Low 1	2412	-3.351	-3.516	-0.42	8.0	-8.4
Low 2	2417	-1.696	-2.304	1.02	8.0	-7.0
Mid 6	2437	-1.983	-2.012	1.01	8.0	-7.0
High 10	2457	-2.335	-2.539	0.57	8.0	-7.4
High 11	2462	-3.750	-3.205	-0.46	8.0	-8.5

LOW CHANNEL 1

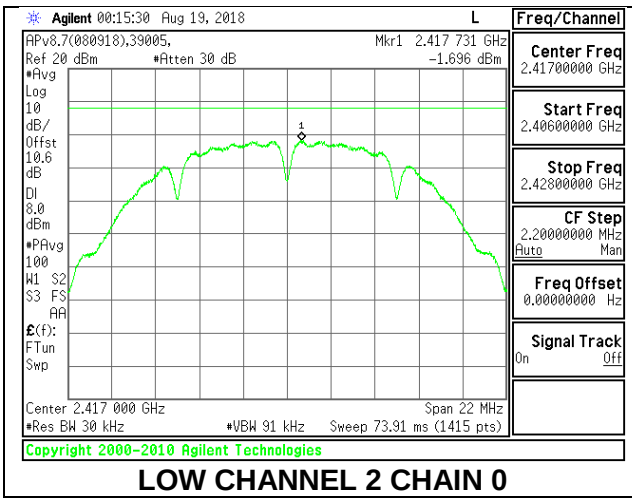


LOW CHANNEL 1 CHAIN 0

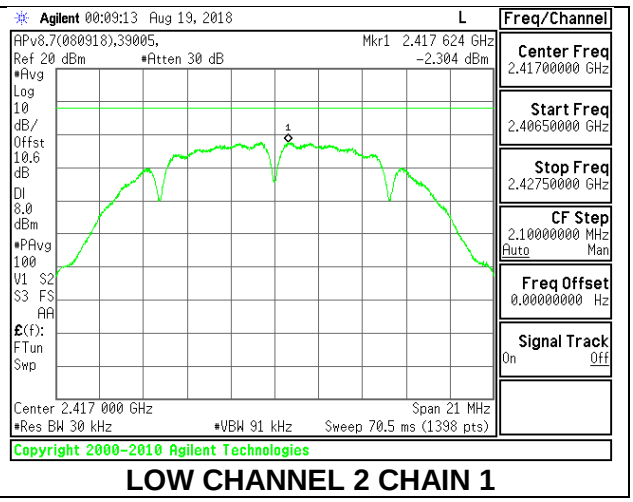


LOW CHANNEL 1 CHAIN 1

LOW CHANNEL 2

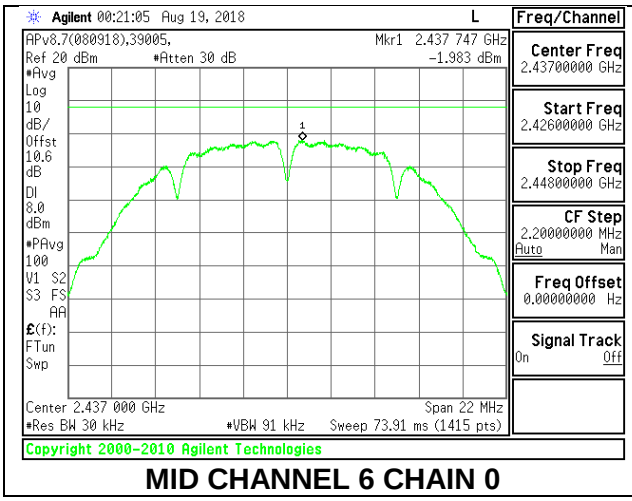


LOW CHANNEL 2 CHAIN 0

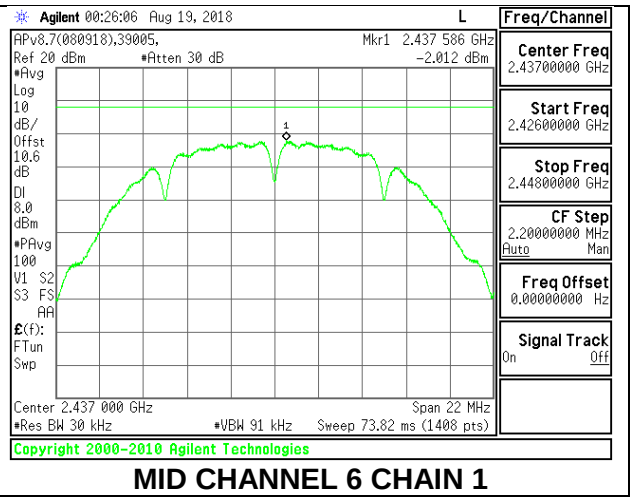


LOW CHANNEL 2 CHAIN 1

MID CHANNEL 6

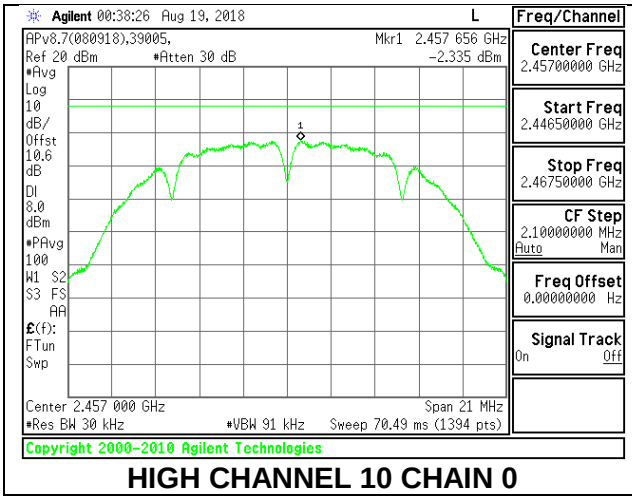


MID CHANNEL 6 CHAIN 0

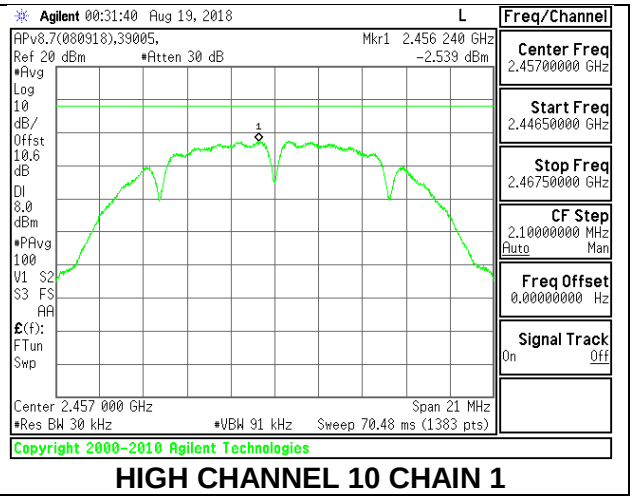


MID CHANNEL 6 CHAIN 1

HIGH CHANNEL 10

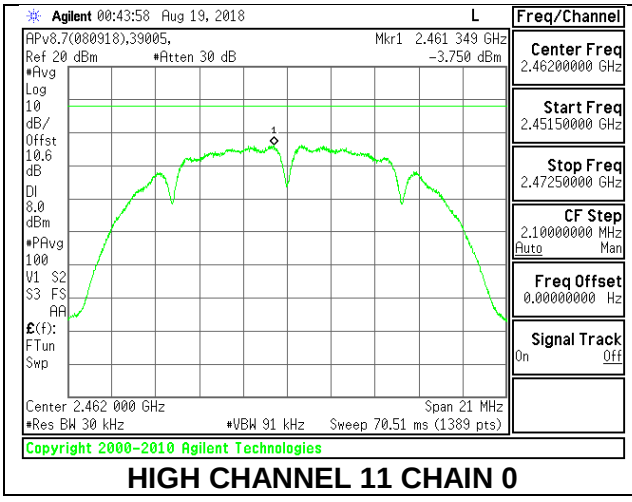


HIGH CHANNEL 10 CHAIN 0

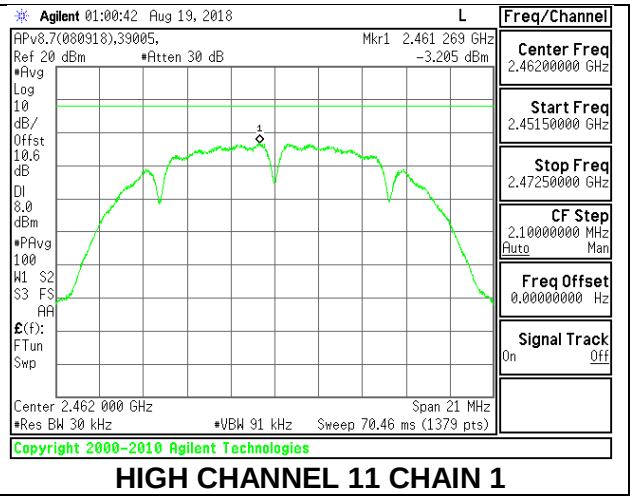


HIGH CHANNEL 10 CHAIN 1

HIGH CHANNEL 11



HIGH CHANNEL 11 CHAIN 0



HIGH CHANNEL 11 CHAIN 1

8.5.2. 802.11g MODE

Duty Cycle CF (dB)	0.11	Included in Calculations of Corr'd PSD

PSD Results

Channel	Frequency (MHz)	Chain 0 (dBm/ 30kHz)	Chain 1 (dBm/ 30kHz)	Total Corr'd PSD (dBm/ 30kHz)	Limit (dBm/ 30kHz)	Margin (dB)
Low 1	2412	-9.509	-9.663	-6.47	8.0	-14.5
Low 2	2417	-8.435	-8.643	-5.42	8.0	-13.4
Low 3	2422	-7.660	-7.721	-4.57	8.0	-12.6
Low 4	2427	-6.601	-6.629	-3.49	8.0	-11.5
Low 5	2432	-5.109	-5.114	-1.99	8.0	-10.0
Mid 6	2437	-4.077	-4.444	-1.14	8.0	-9.1
High 7	2442	-4.851	-4.868	-1.74	8.0	-9.7
High 8	2447	-5.685	-5.599	-2.52	8.0	-10.5
High 9	2452	-6.299	-6.360	-3.21	8.0	-11.2
High 10	2457	-7.991	-7.950	-4.85	8.0	-12.9
High 11	2462	-9.790	-10.207	-6.87	8.0	-14.9

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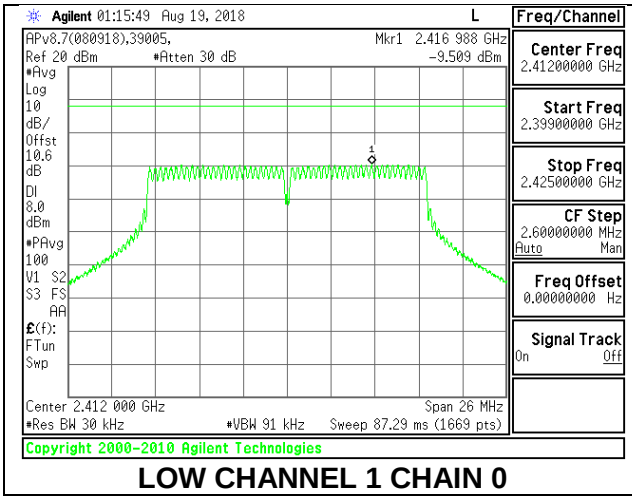
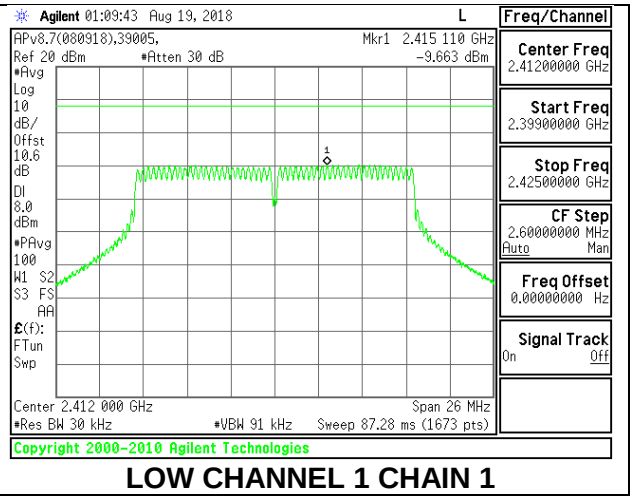
LOW CHANNEL 1

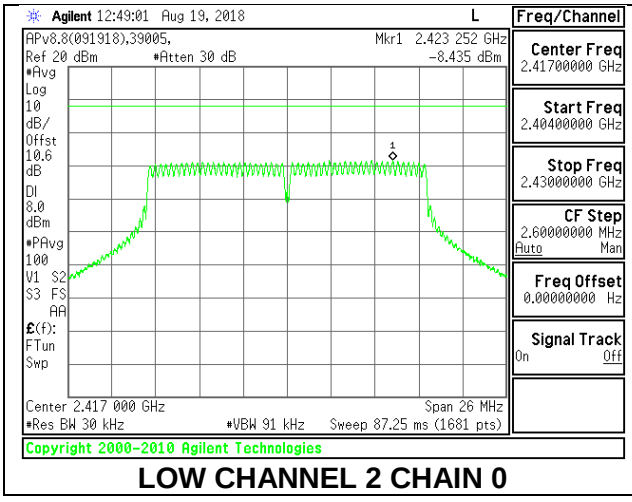


LOW CHANNEL 1 CHAIN 0

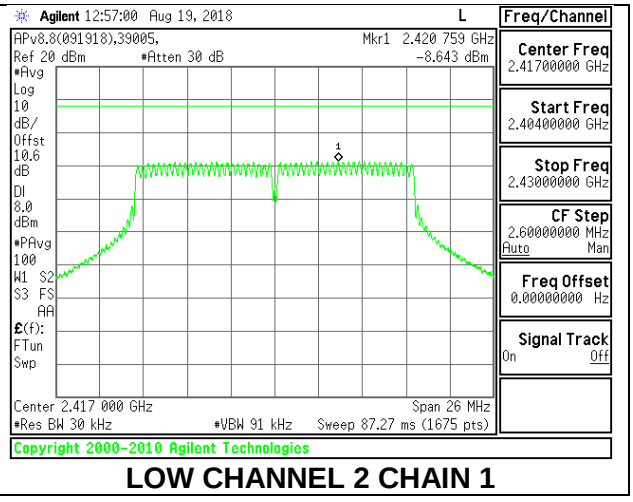


LOW CHANNEL 1 CHAIN 1

LOW CHANNEL 2

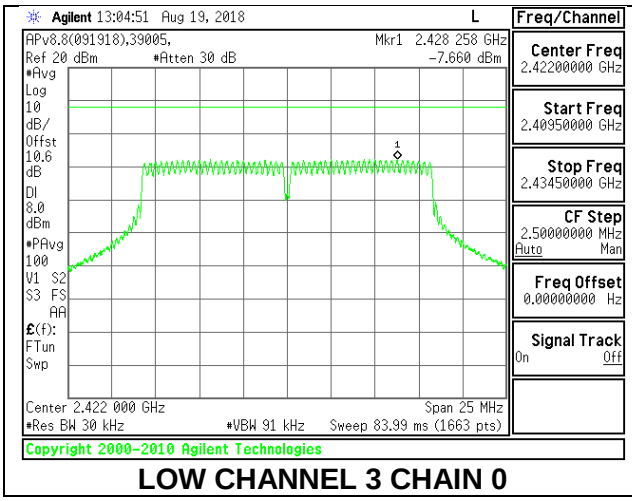


LOW CHANNEL 2 CHAIN 0

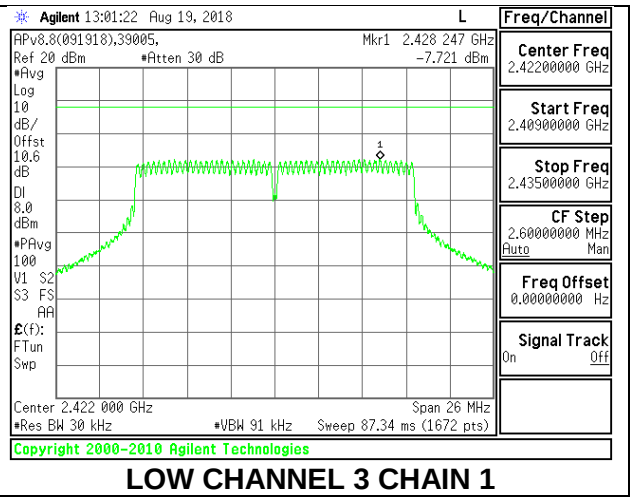


LOW CHANNEL 2 CHAIN 1

LOW CHANNEL 3

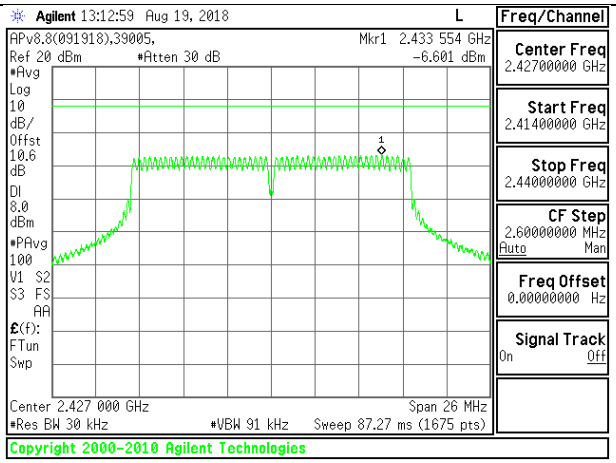


LOW CHANNEL 3 CHAIN 0

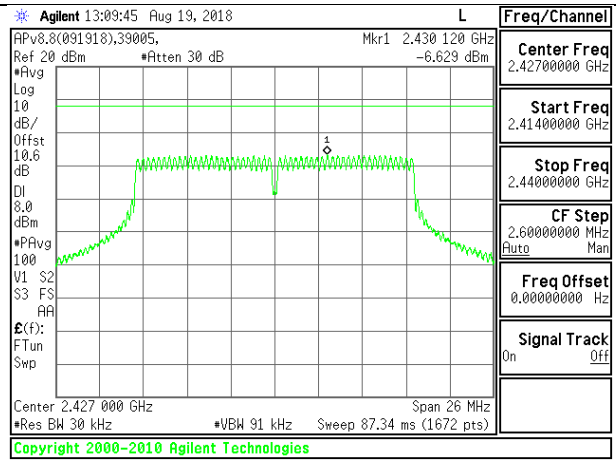


LOW CHANNEL 3 CHAIN 1

LOW CHANNEL 4

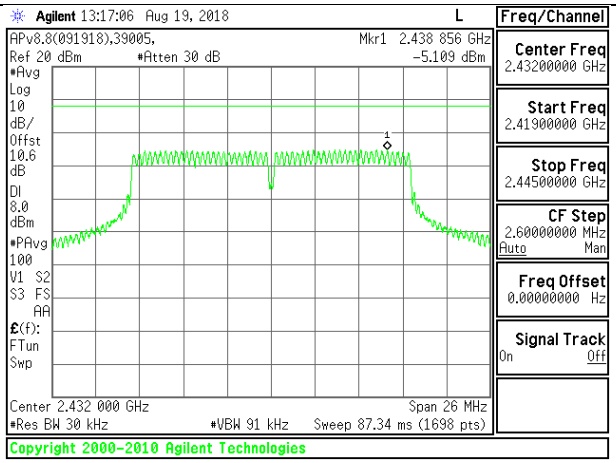


LOW CHANNEL 4 CHAIN 0

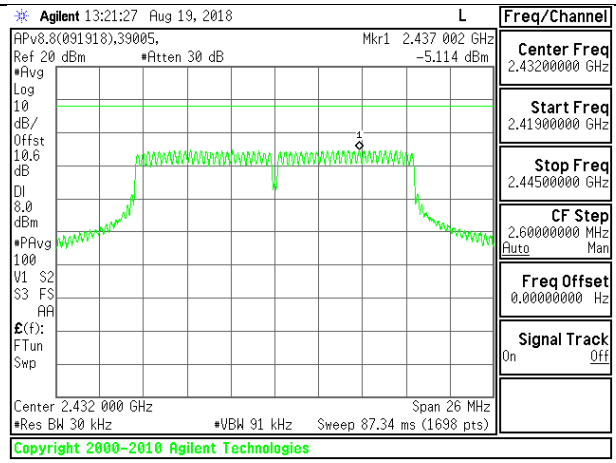


LOW CHANNEL 4 CHAIN 1

LOW CHANNEL 5

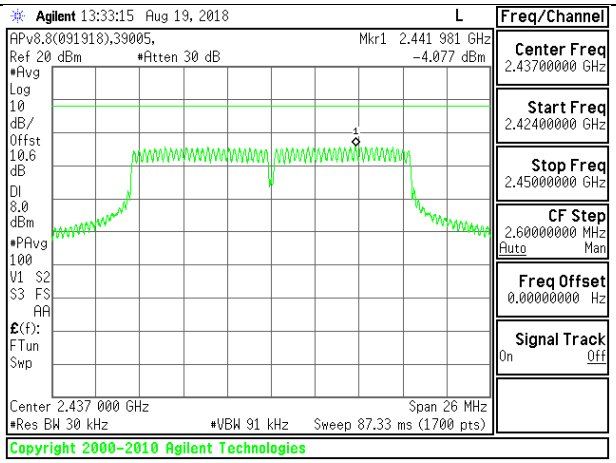


LOW CHANNEL 5 CHAIN 0

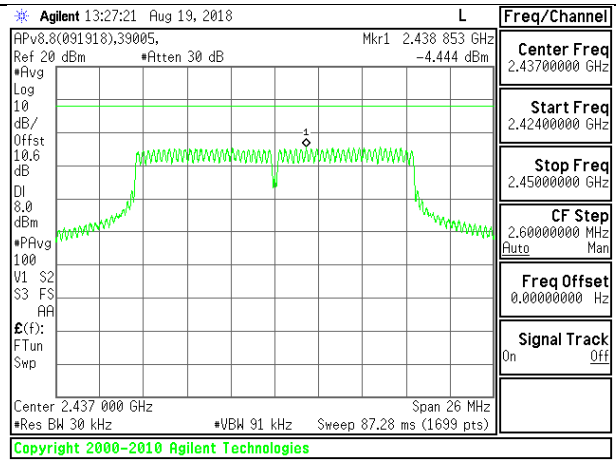


LOW CHANNEL 5 CHAIN 1

MID CHANNEL 6

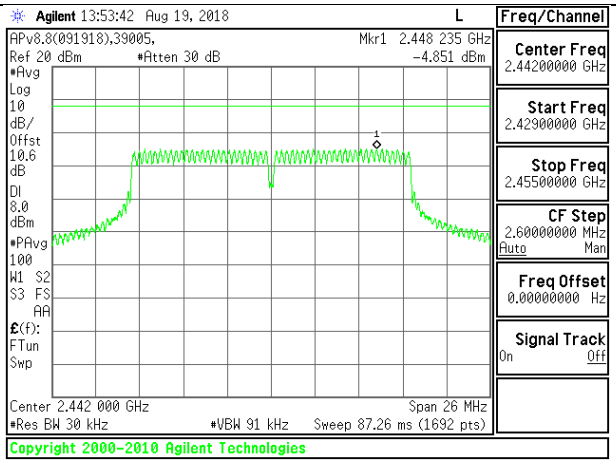


MID CHANNEL 6 CHAIN 0

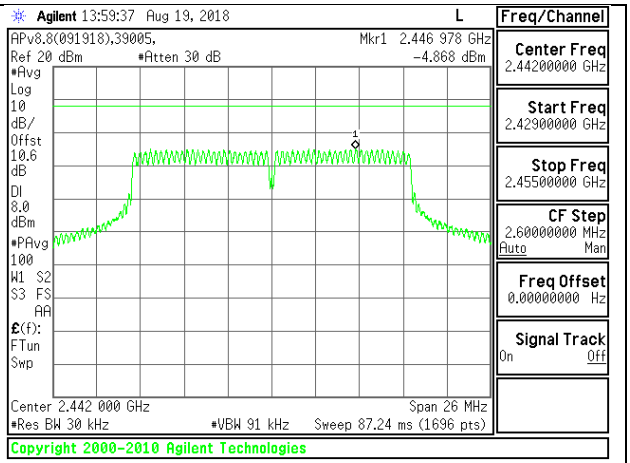


MID CHANNEL 6 CHAIN 1

HIGH CHANNEL 7

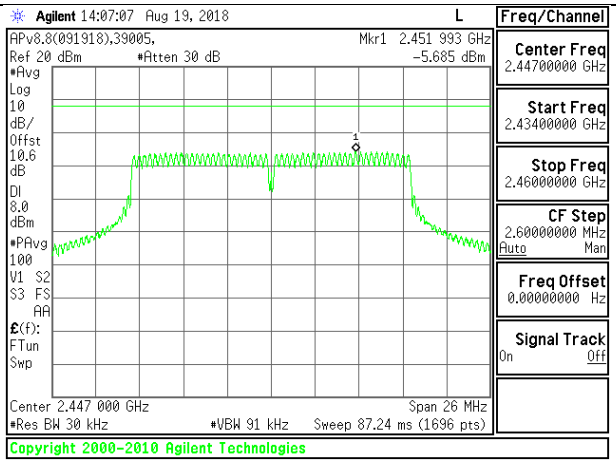


HIGH CHANNEL 7 CHAIN 0

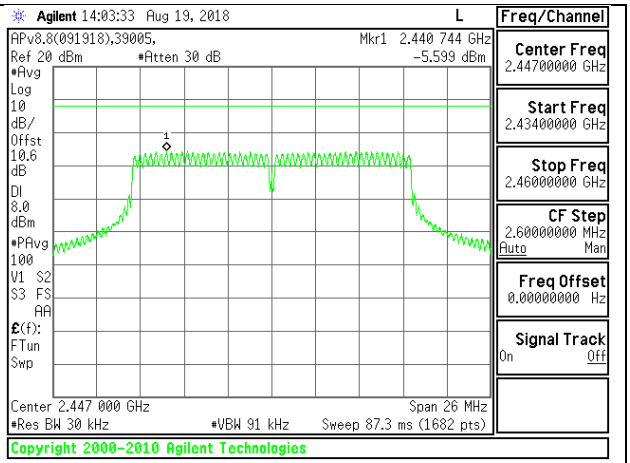


HIGH CHANNEL 7 CHAIN 1

HIGH CHANNEL 8

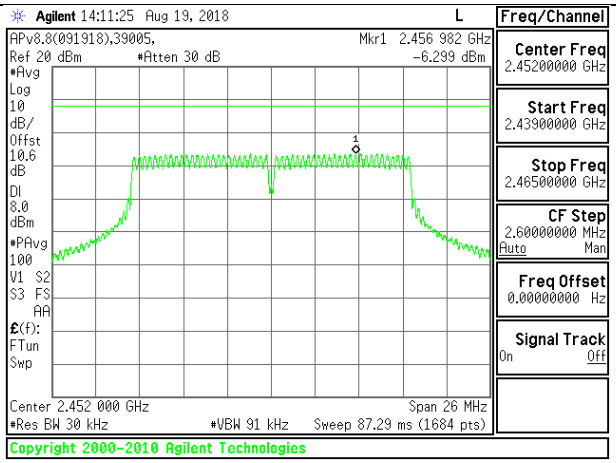


HIGH CHANNEL 8 CHAIN 0

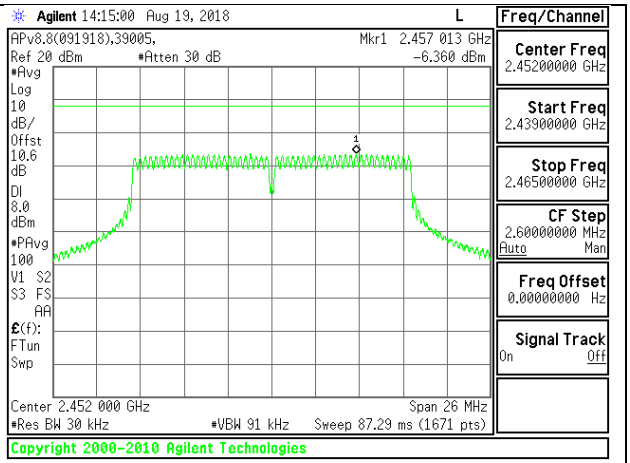


HIGH CHANNEL 8 CHAIN 1

HIGH CHANNEL 9

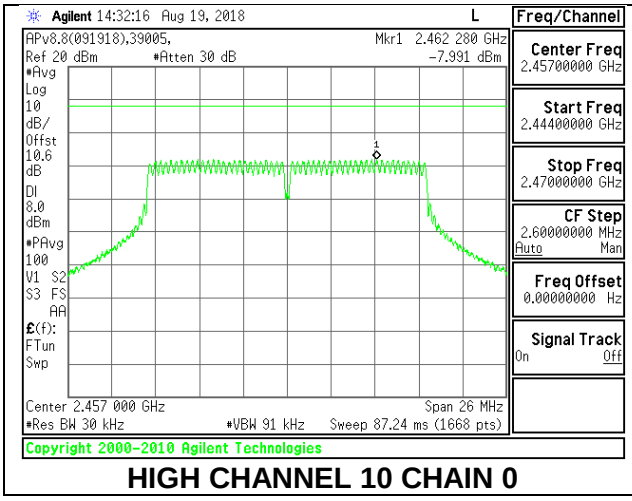


HIGH CHANNEL 9 CHAIN 0

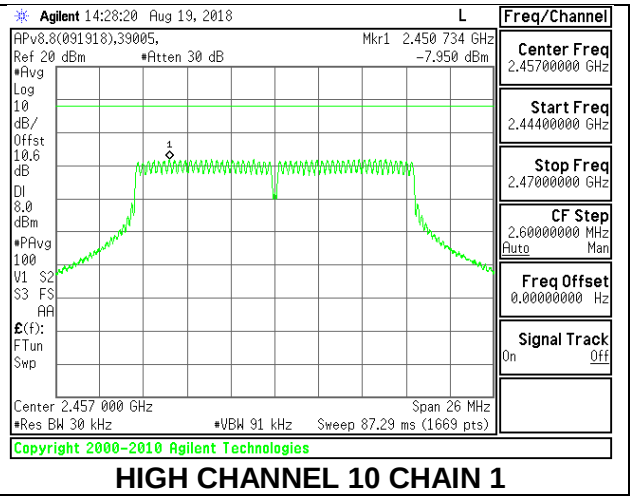


HIGH CHANNEL 9 CHAIN 1

HIGH CHANNEL 10

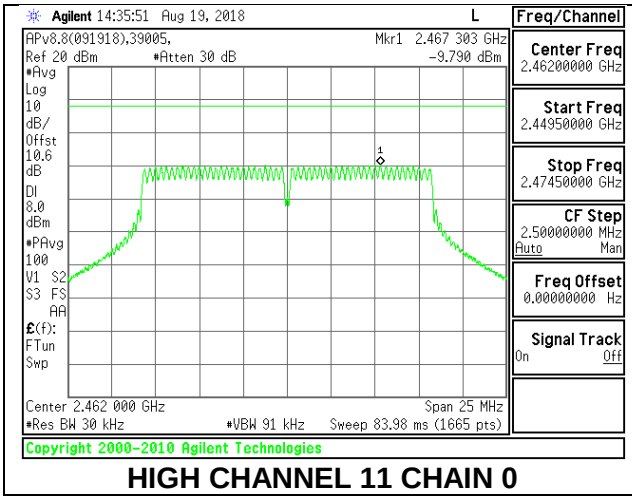


HIGH CHANNEL 10 CHAIN 0

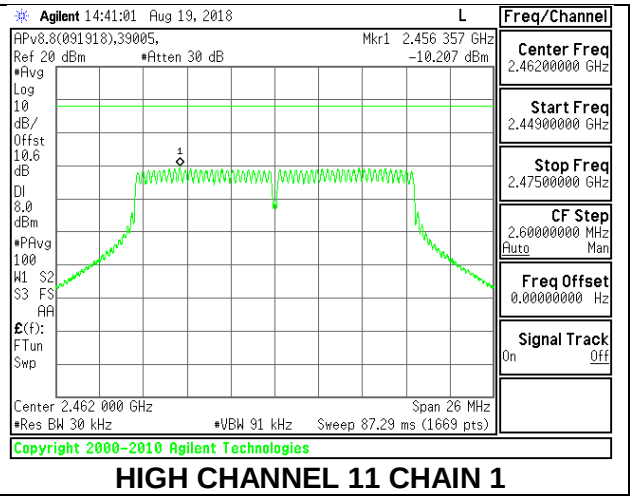


HIGH CHANNEL 10 CHAIN 1

HIGH CHANNEL 11



HIGH CHANNEL 11 CHAIN 0



HIGH CHANNEL 11 CHAIN 1

8.5.3. 802.11n HT20 MODE

Duty Cycle CF (dB)	0.11	Included in Calculations of Corr'd PSD

PSD Results

Channel	Frequency (MHz)	Chain 0 (dBm/ 30kHz)	Chain 1 (dBm/ 30kHz)	Total Corr'd PSD (dBm/ 30kHz)	Limit (dBm/ 30kHz)	Margin (dB)
Low 1	2412	-9.705	-10.051	-6.75	8.0	-14.8
Low 2	2417	-8.605	-8.879	-5.62	8.0	-13.6
Low 3	2422	-7.899	-8.021	-4.84	8.0	-12.8
Low 4	2427	-6.546	-6.630	-3.47	8.0	-11.5
Low 5	2432	-5.151	-5.377	-2.14	8.0	-10.1
Mid 6	2437	-4.169	-4.433	-1.18	8.0	-9.2
High 7	2442	-4.932	-5.043	-1.87	8.0	-9.9
High 8	2447	-6.578	-6.300	-3.32	8.0	-11.3
High 9	2452	-8.288	-8.205	-5.13	8.0	-13.1
High 10	2457	-8.910	-8.792	-5.73	8.0	-13.7
High 11	2462	-10.366	-10.230	-7.18	8.0	-15.2

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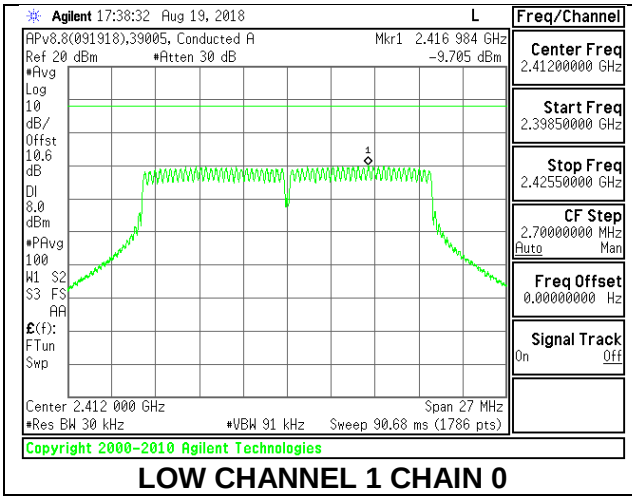
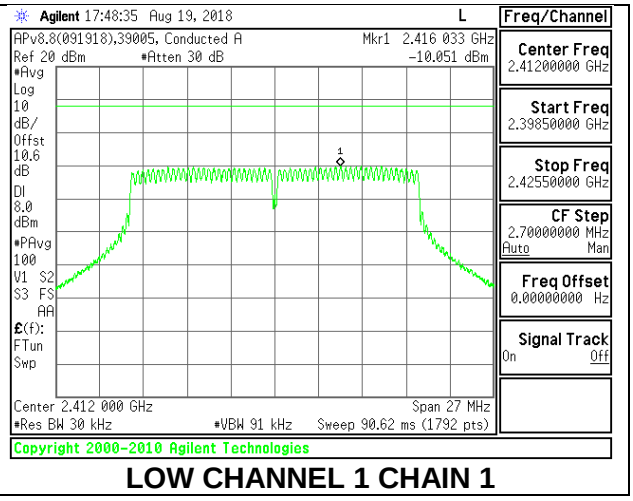
LOW CHANNEL 1

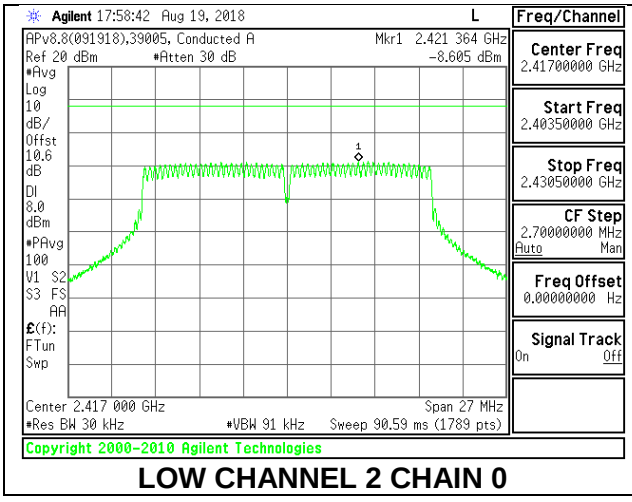


LOW CHANNEL 1 CHAIN 0

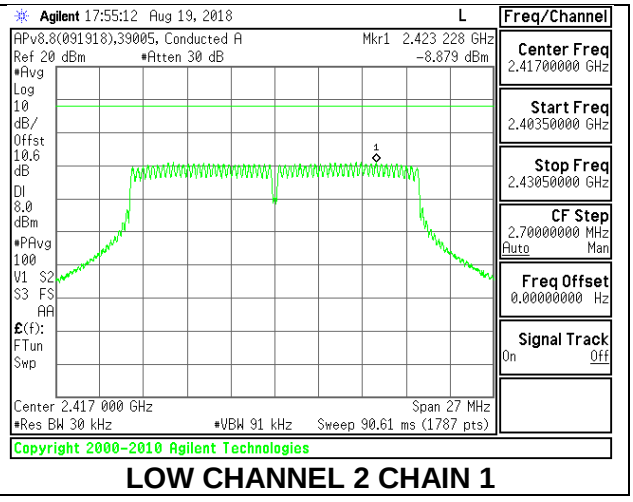


LOW CHANNEL 1 CHAIN 1

LOW CHANNEL 2

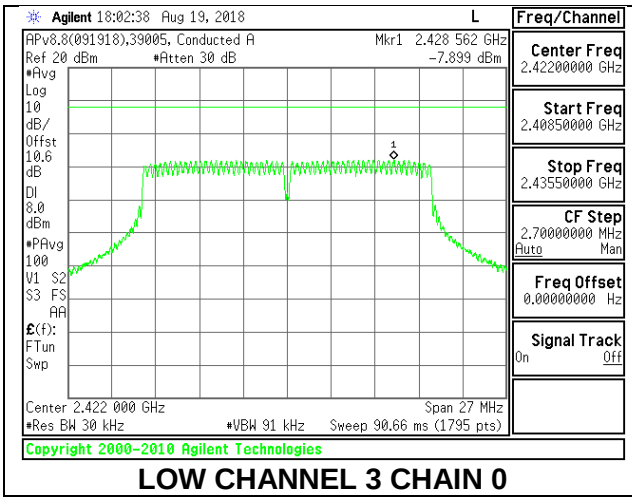


LOW CHANNEL 2 CHAIN 0

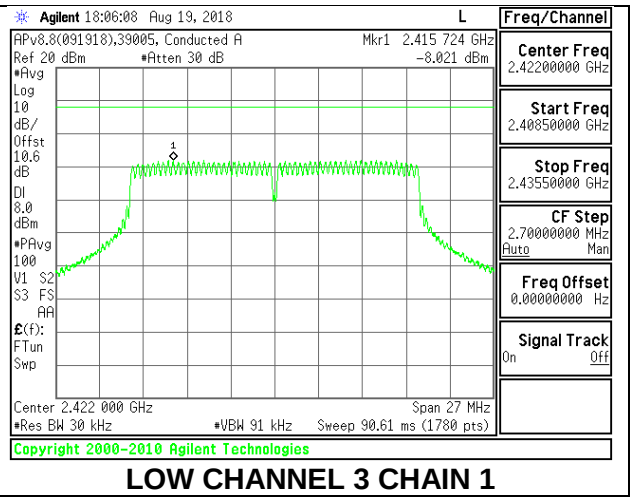


LOW CHANNEL 2 CHAIN 1

LOW CHANNEL 3

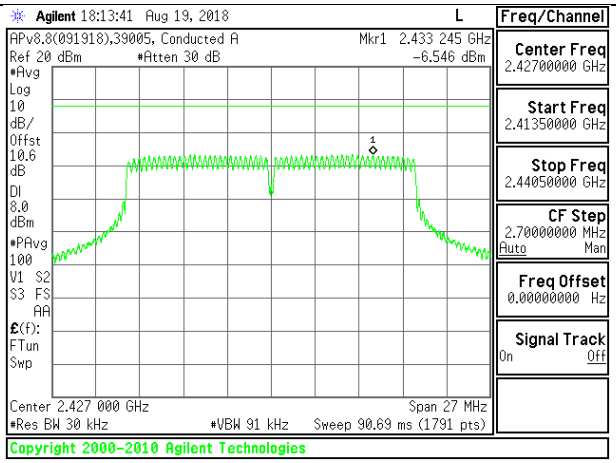


LOW CHANNEL 3 CHAIN 0

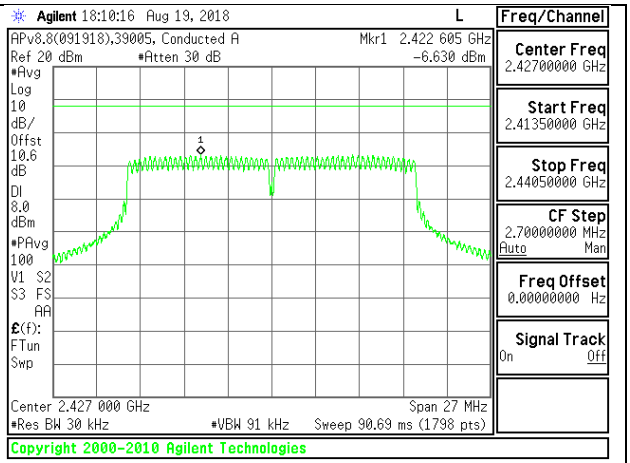


LOW CHANNEL 3 CHAIN 1

LOW CHANNEL 4

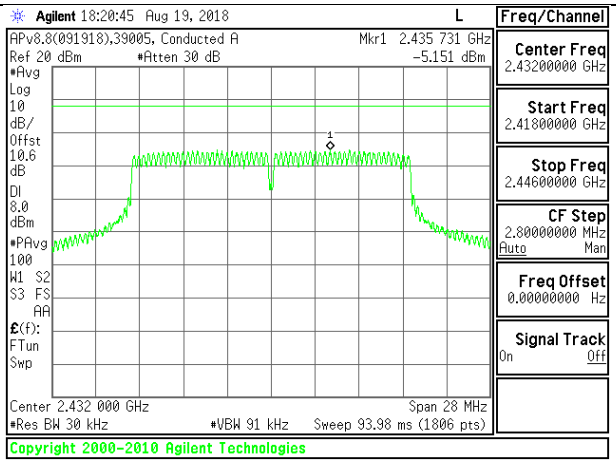


LOW CHANNEL 4 CHAIN 0

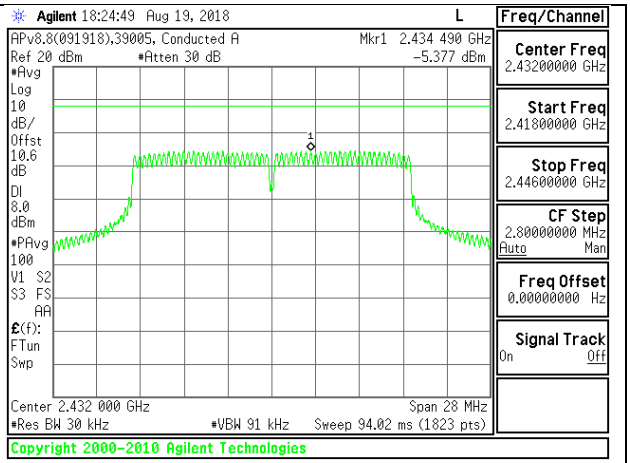


LOW CHANNEL 4 CHAIN 1

LOW CHANNEL 5

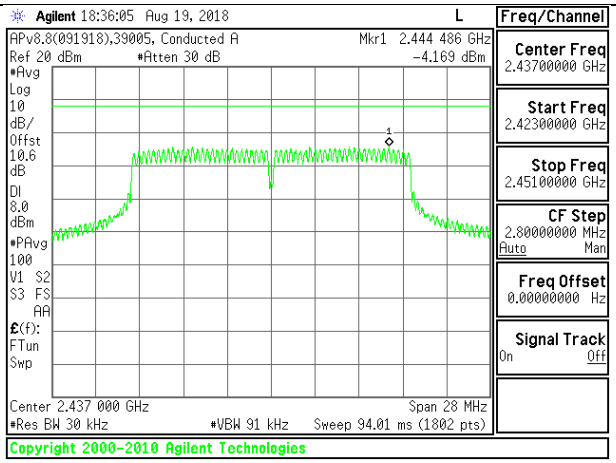


LOW CHANNEL 5 CHAIN 0

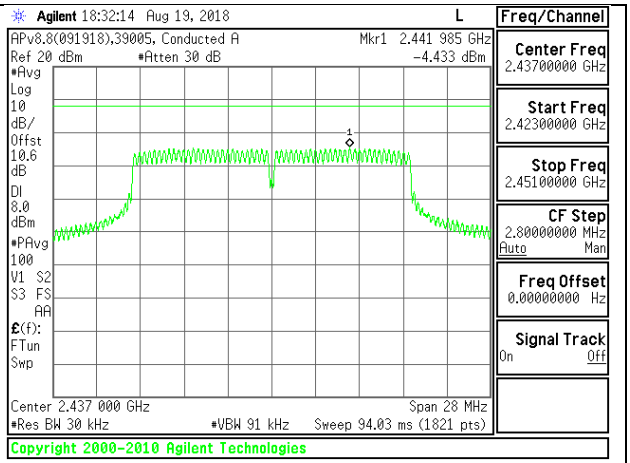


LOW CHANNEL 5 CHAIN 1

MID CHANNEL 6

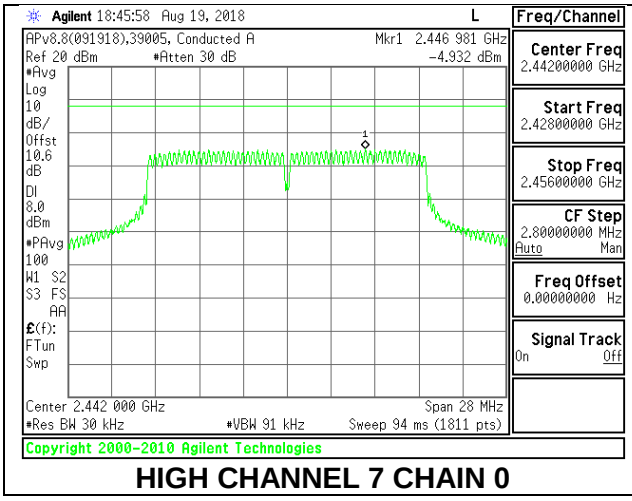


MID CHANNEL 6 CHAIN 0

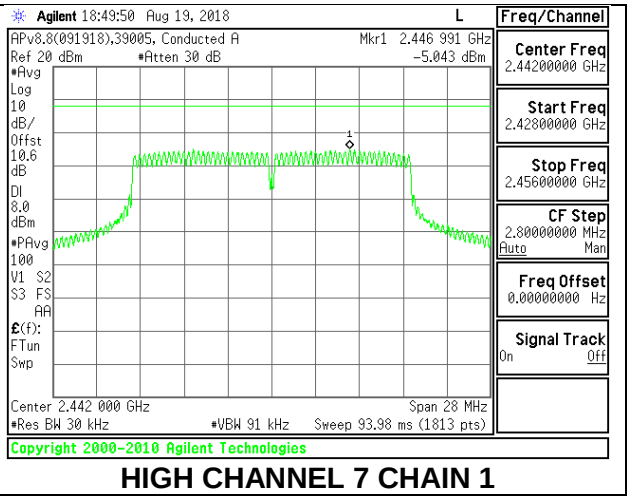


MID CHANNEL 6 CHAIN 1

HIGH CHANNEL 7

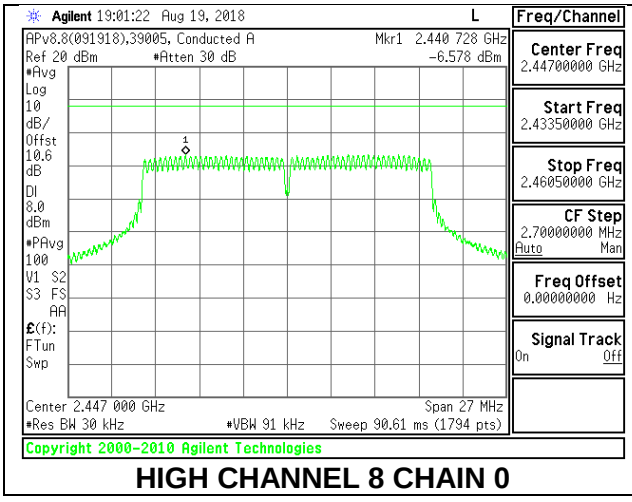


HIGH CHANNEL 7 CHAIN 0

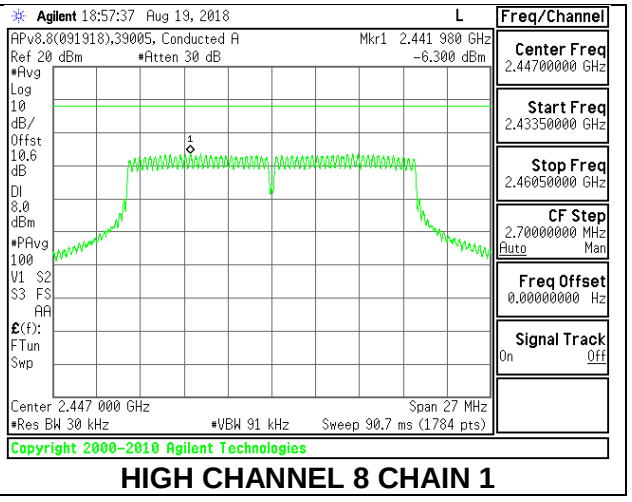


HIGH CHANNEL 7 CHAIN 1

HIGH CHANNEL 8

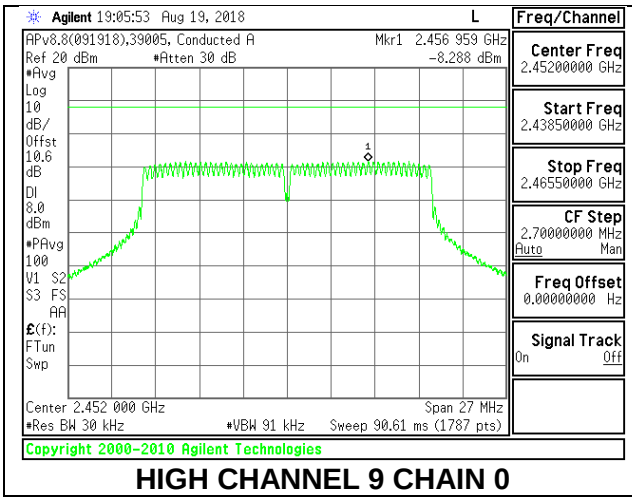


HIGH CHANNEL 8 CHAIN 0

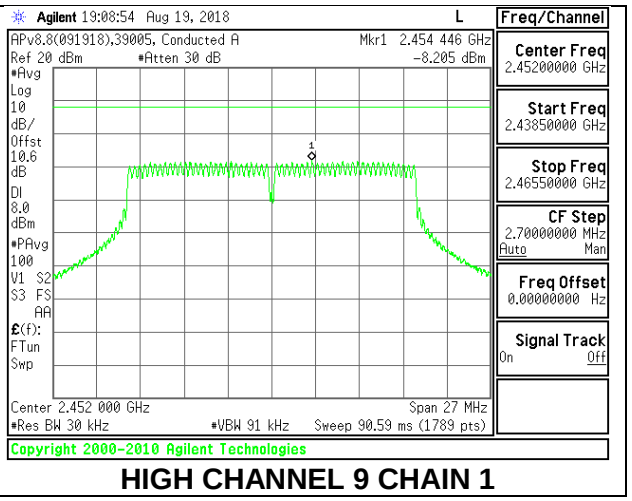


HIGH CHANNEL 8 CHAIN 1

HIGH CHANNEL 9

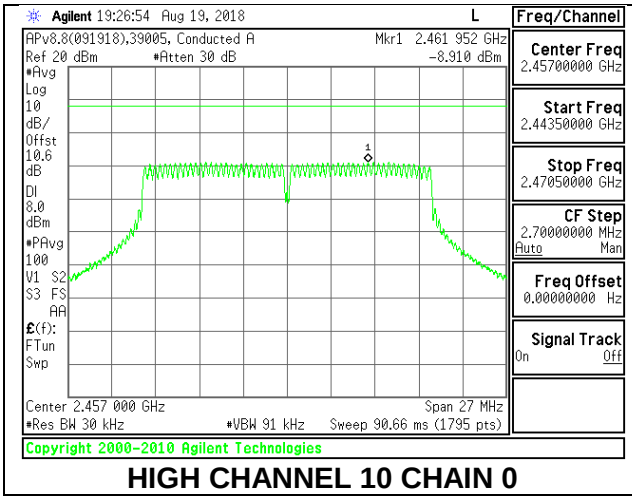


HIGH CHANNEL 9 CHAIN 0

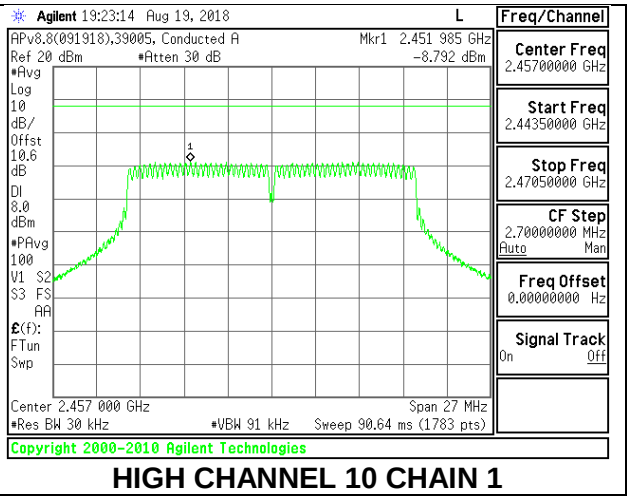


HIGH CHANNEL 9 CHAIN 1

HIGH CHANNEL 10

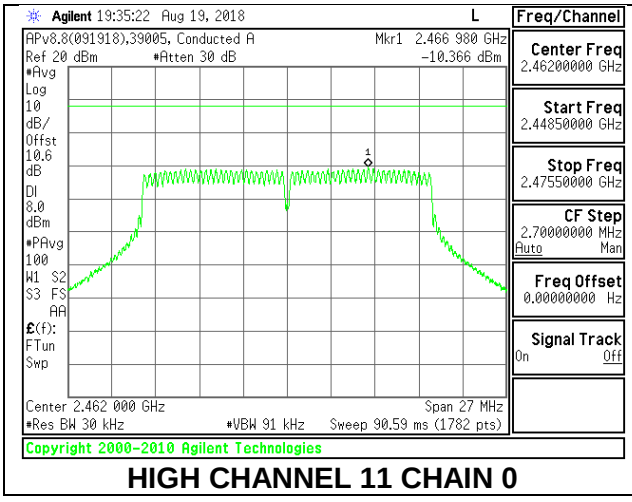


HIGH CHANNEL 10 CHAIN 0

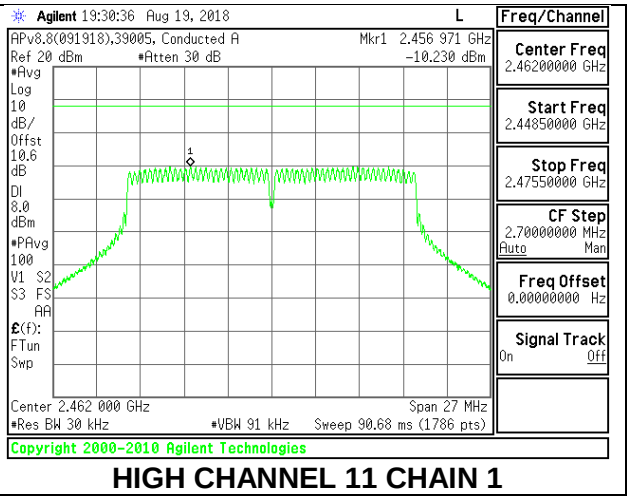


HIGH CHANNEL 10 CHAIN 1

HIGH CHANNEL 11



HIGH CHANNEL 11 CHAIN 0



HIGH CHANNEL 11 CHAIN 1

8.6. CONDUCTED SPURIOUS EMISSIONS

LIMITS

FCC §15.247 (d)

RSS-247 5.5

Output power was measured based on the use of peak measurement, therefore the required attenuation is 30 dB.

RESULTS

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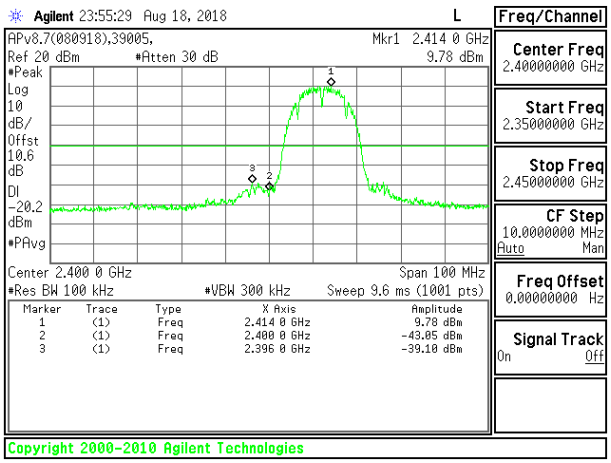
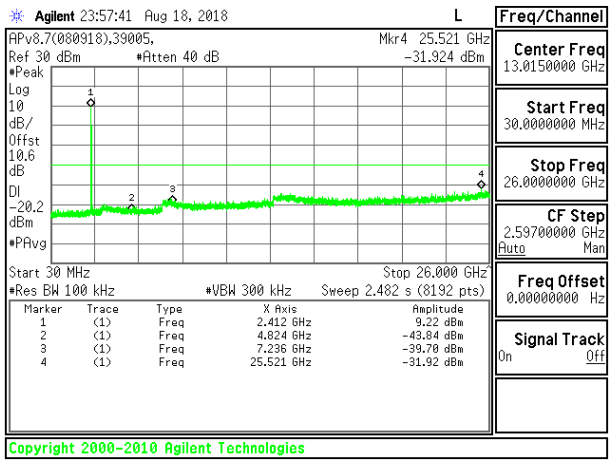
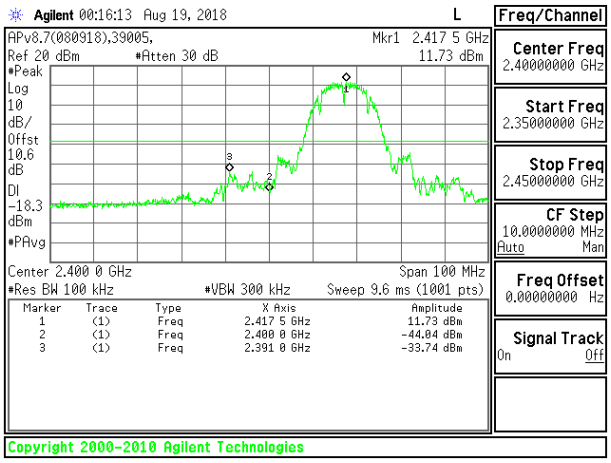
8.6.1. 802.11b MODE



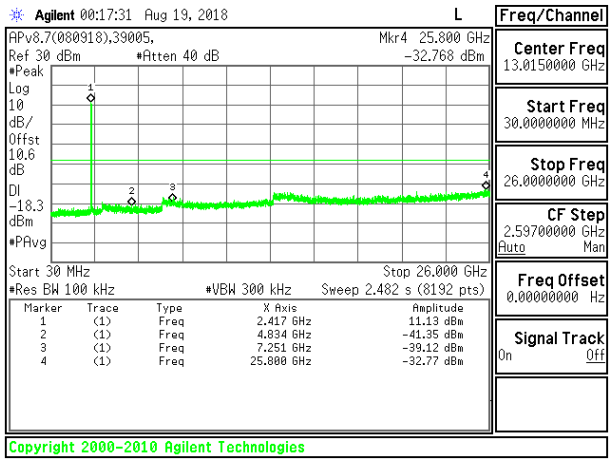
LOW CHANNEL 1 BANDEDGE CHAIN 0



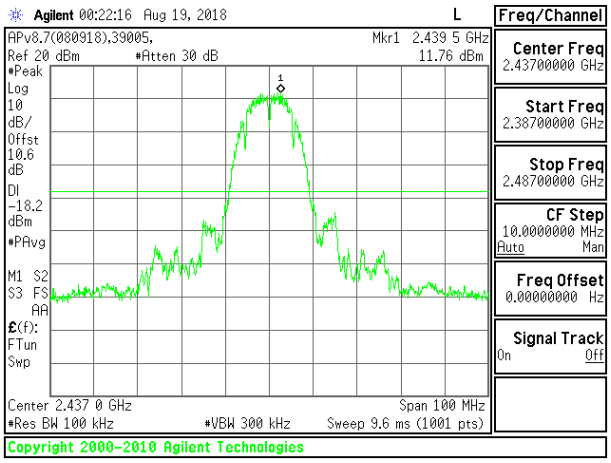
OUT-OF-BAND LOW CHANNEL 1 CHAIN 0



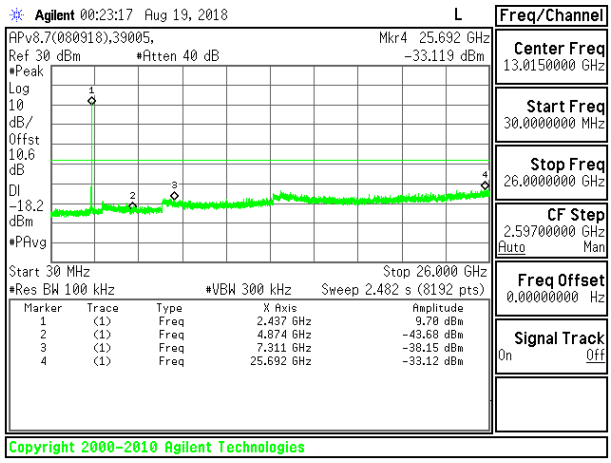
LOW CHANNEL 2 BANDEDGE CHAIN 0



OUT-OF-BAND LOW CHANNEL 2 CHAIN 0



IN-BAND REFERENCE LEVEL CHAIN 0



OUT-OF-BAND MID CHANNEL CHAIN 0

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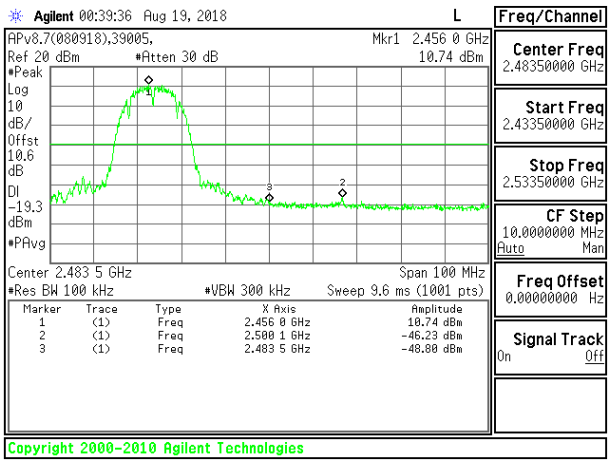
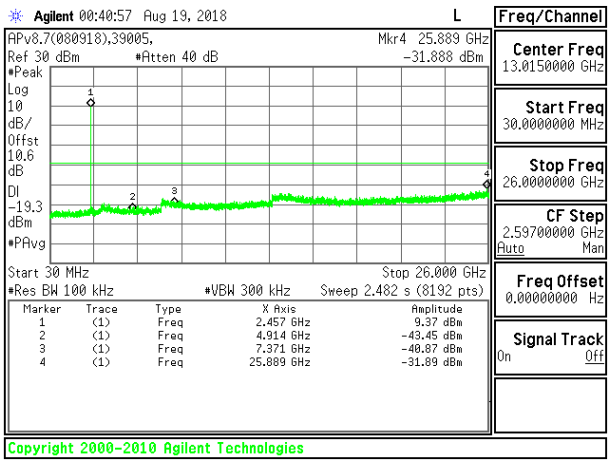
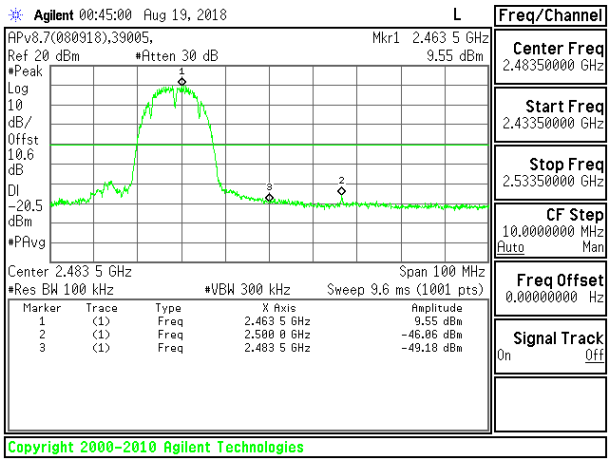


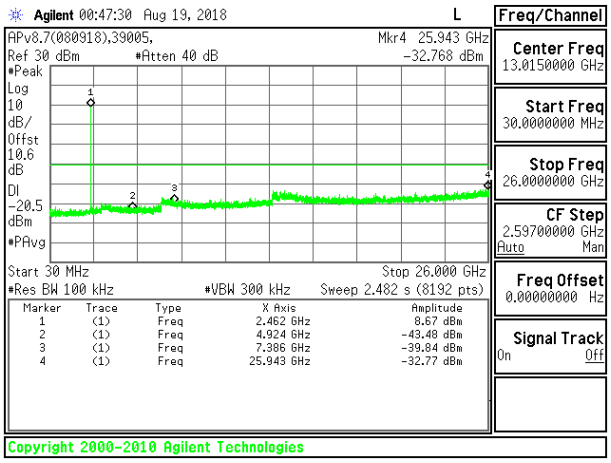
HIGH CHANNEL 10 BANDEDGE CHAIN 0



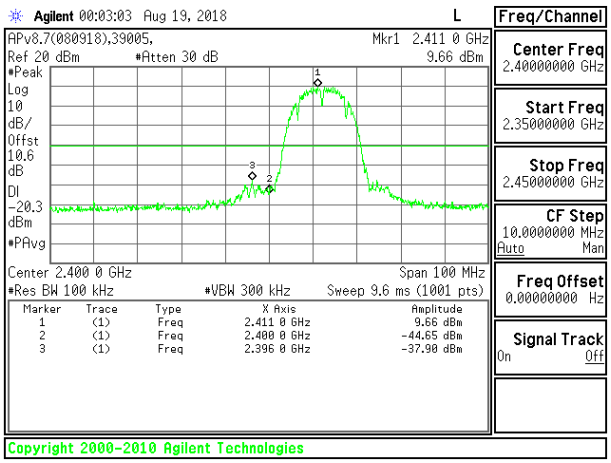
OUT-OF-BAND HIGH CHANNEL 10 CHAIN 0



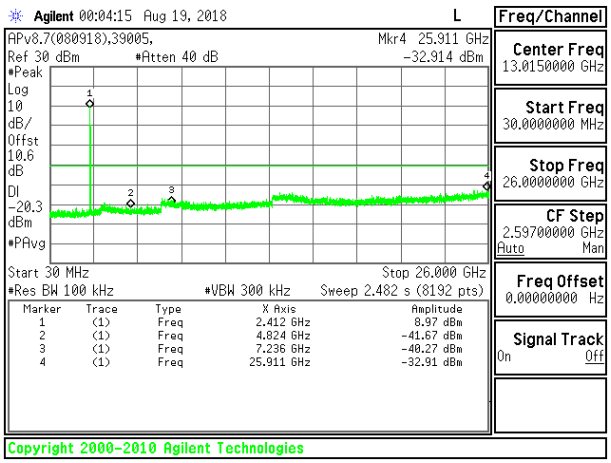
HIGH CHANNEL 11 BANDEDGE CHAIN 0



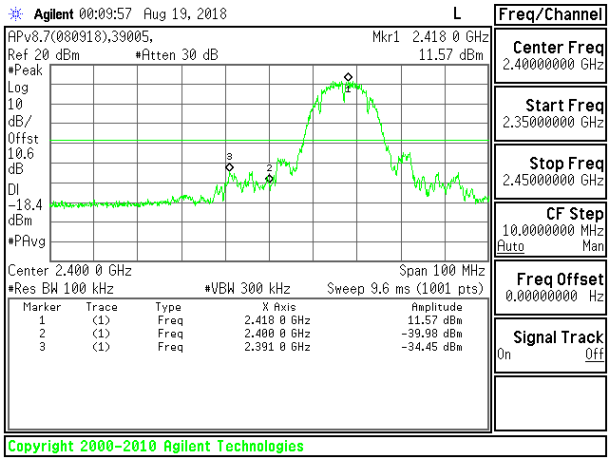
OUT-OF-BAND HIGH CHANNEL 11 CHAIN 0



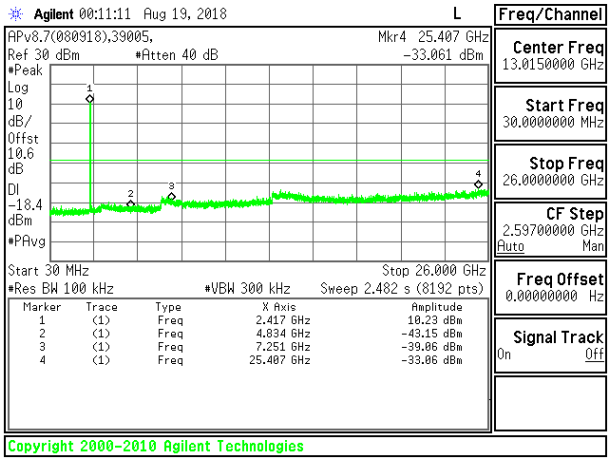
LOW CHANNEL 1 BANDEDGE CHAIN 1



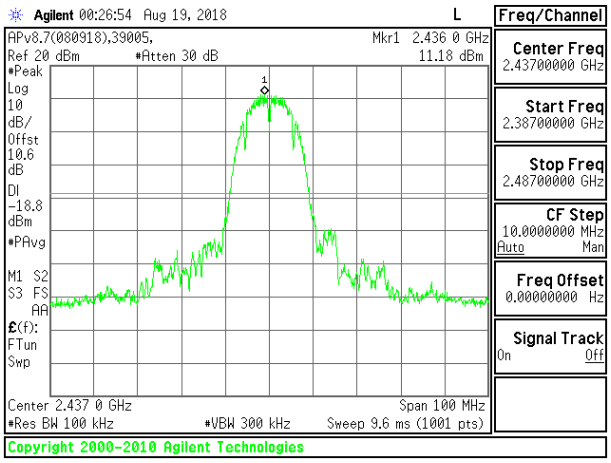
OUT-OF-BAND LOW CHANNEL 1 CHAIN 1



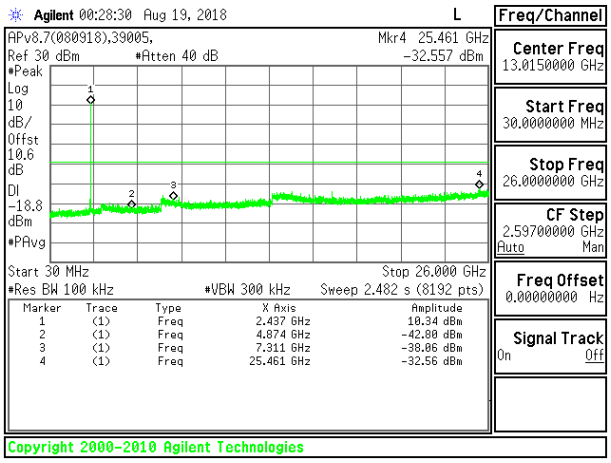
LOW CHANNEL 2 BANDEDGE CHAIN 1



OUT-OF-BAND LOW CHANNEL 2 CHAIN 1



IN-BAND REFERENCE LEVEL CHAIN 1



OUT-OF-BAND MID CHANNEL CHAIN 1

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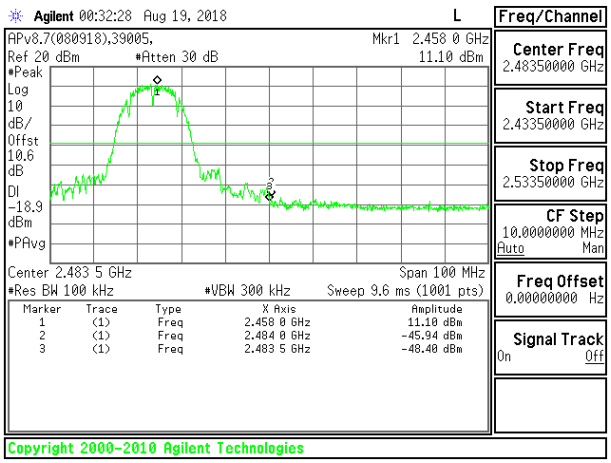
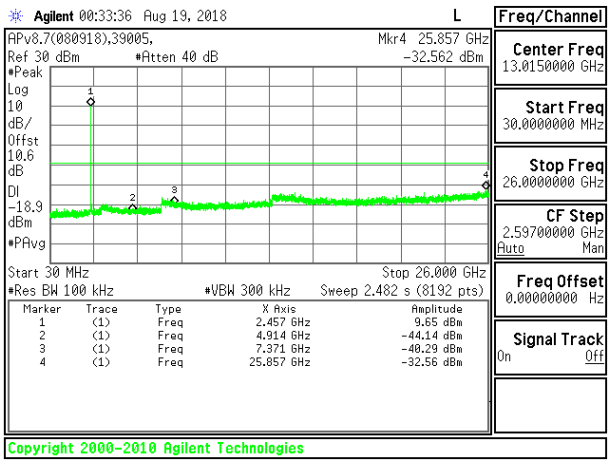
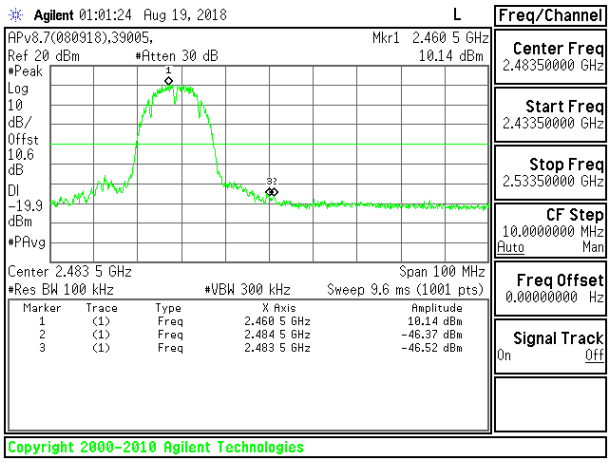


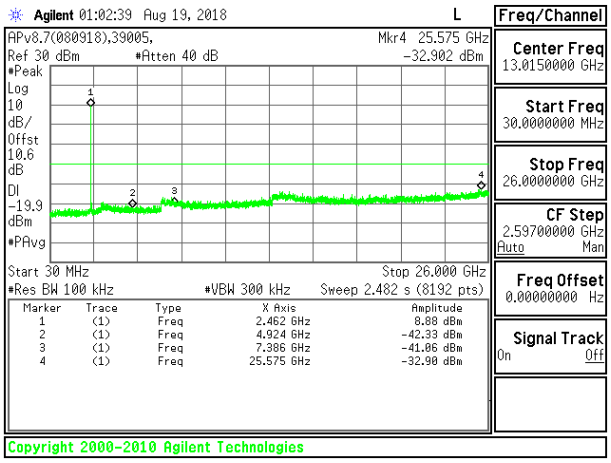
HIGH CHANNEL 10 BANDEDGE CHAIN 1



OUT-OF-BAND HIGH CHANNEL 10 CHAIN 1

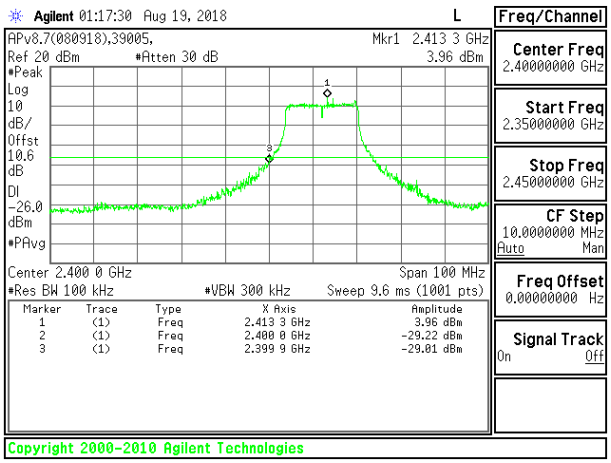


HIGH CHANNEL 11 BANDEDGE CHAIN 1

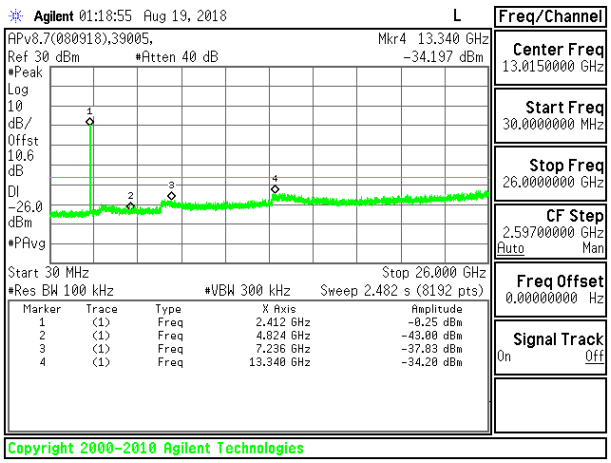


OUT-OF-BAND HIGH CHANNEL 11 CHAIN 1

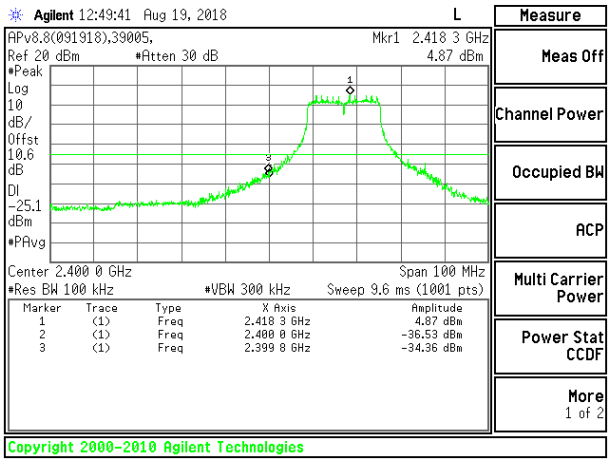
8.6.2. 802.11g MODE



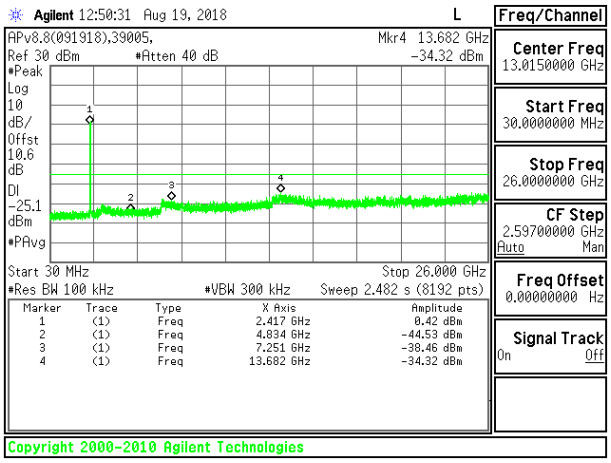
LOW CHANNEL 1 BANDEDGE CHAIN 0



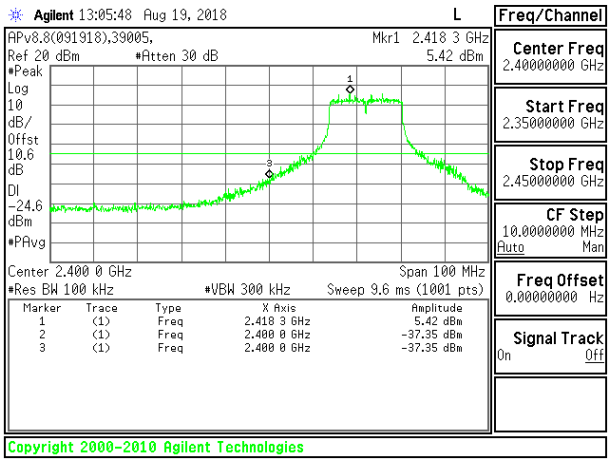
OUT-OF-BAND LOW CHANNEL 1 CHAIN 0



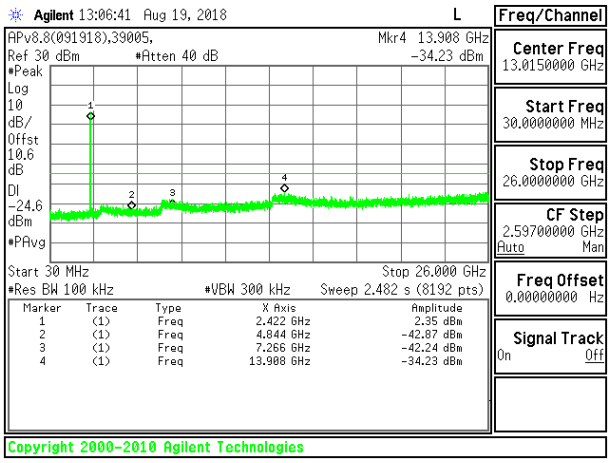
LOW CHANNEL 2 BANDEDGE CHAIN 0



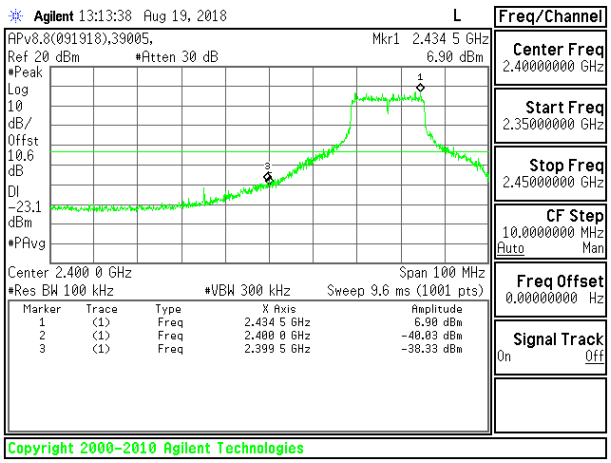
OUT-OF-BAND LOW CHANNEL 2 CHAIN 0



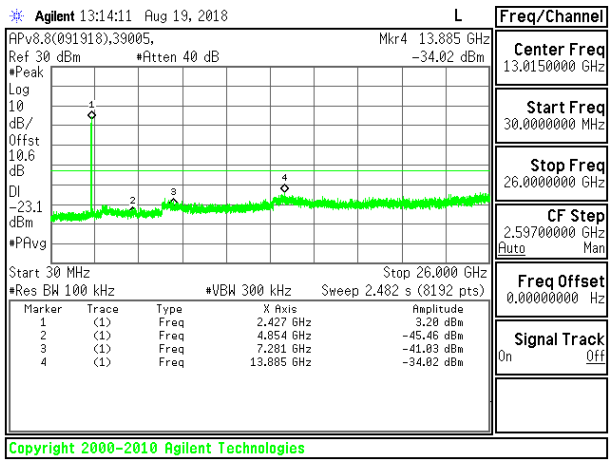
LOW CHANNEL 3 BANDEDGE CHAIN 0



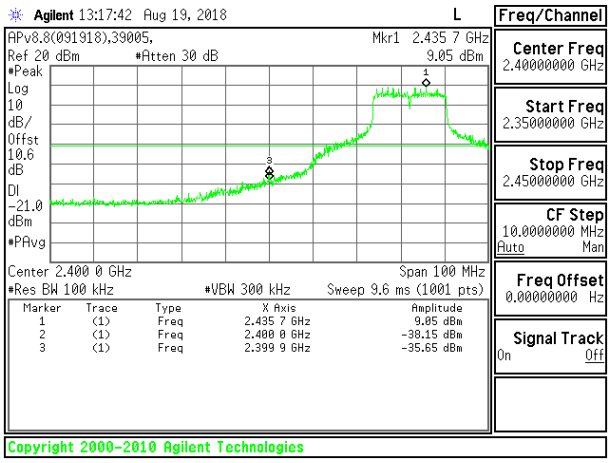
OUT-OF-BAND LOW CHANNEL 3 CHAIN 0



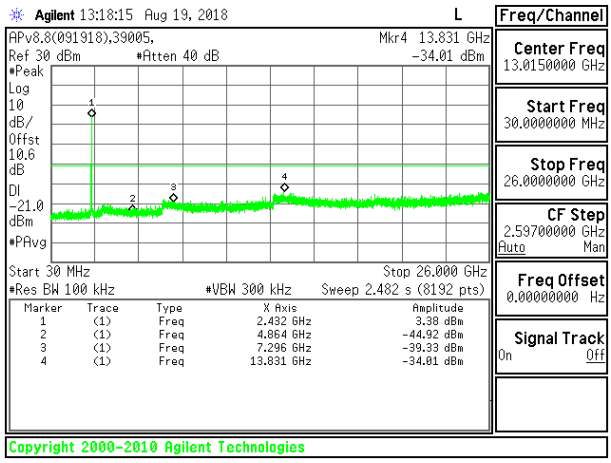
LOW CHANNEL 4 BANDEDGE CHAIN 0



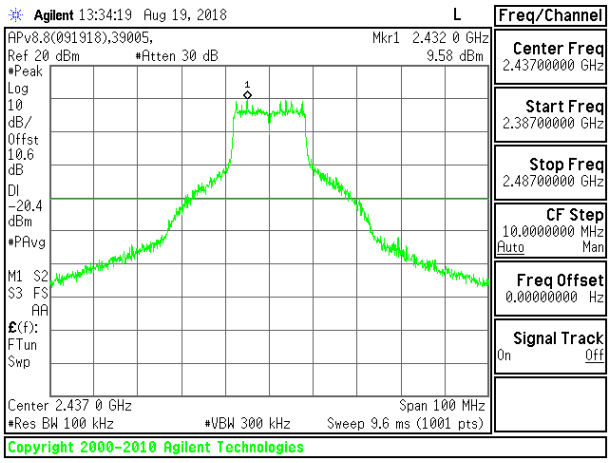
OUT-OF-BAND LOW CHANNEL 4 CHAIN 0



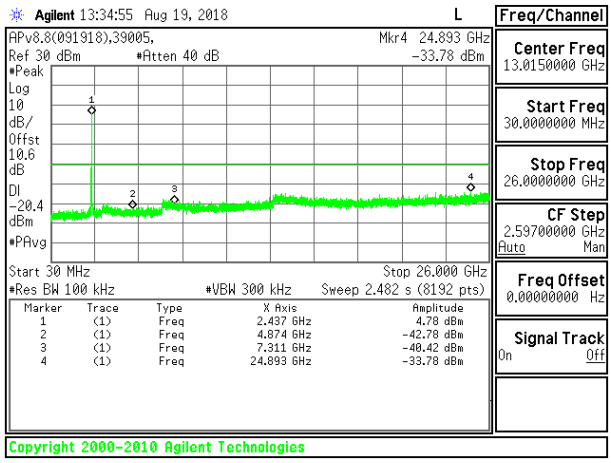
LOW CHANNEL 5 BANDEDGE CHAIN 0



OUT-OF-BAND LOW CHANNEL 5 CHAIN 0



IN-BAND REFERENCE LEVEL CHAIN 0



OUT-OF-BAND MID CHANNEL CHAIN 0

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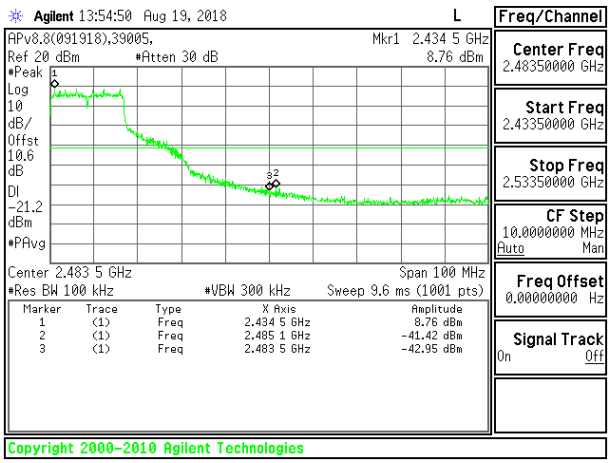
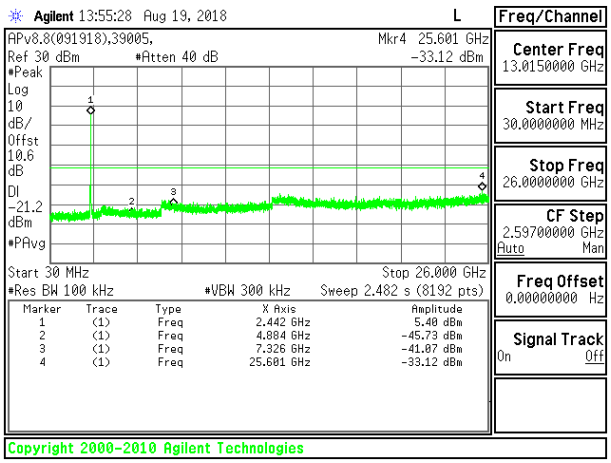
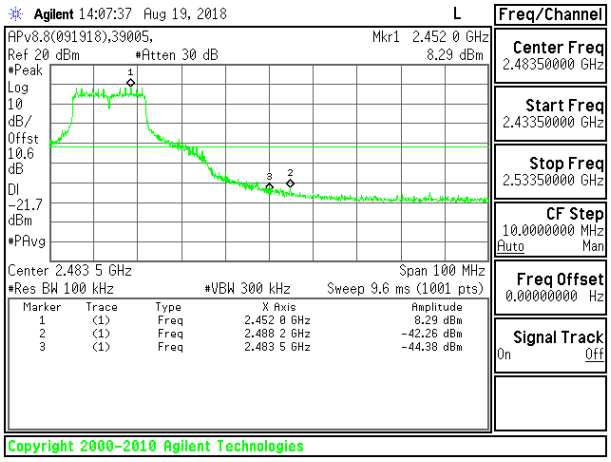


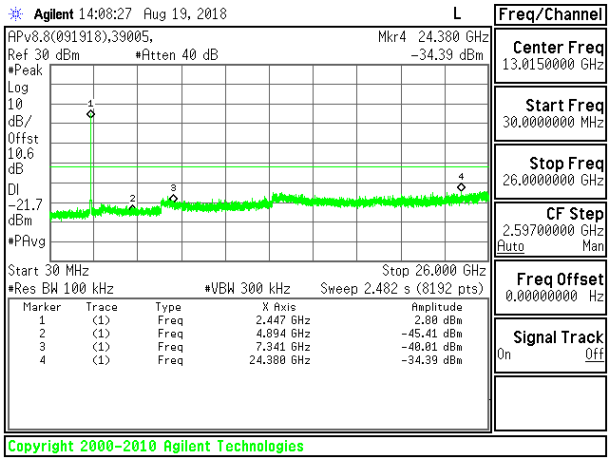
HIGH CHANNEL 7 BANDEDGE CHAIN 0



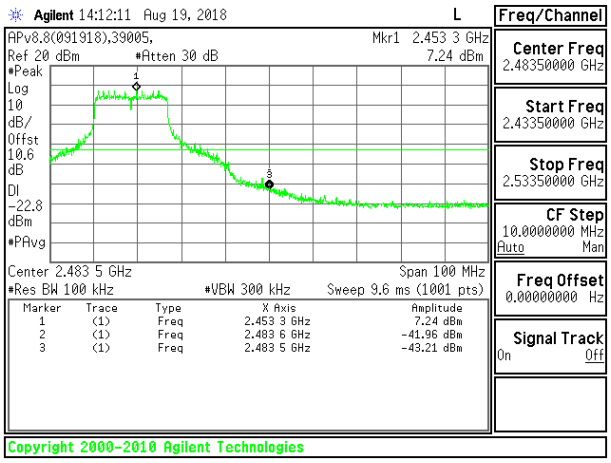
OUT-OF-BAND HIGH CHANNEL 7 CHAIN 0



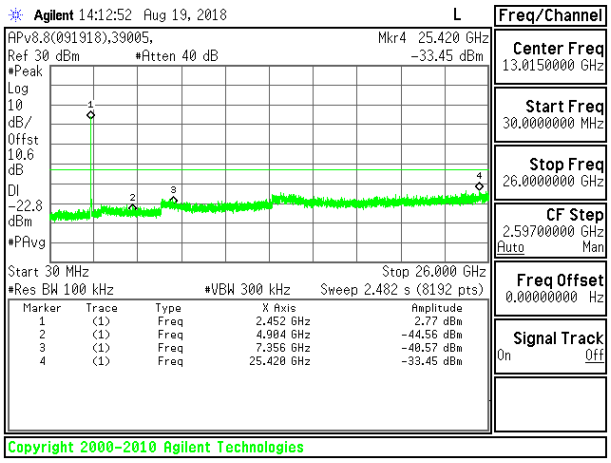
HIGH CHANNEL 8 BANDEDGE CHAIN 0



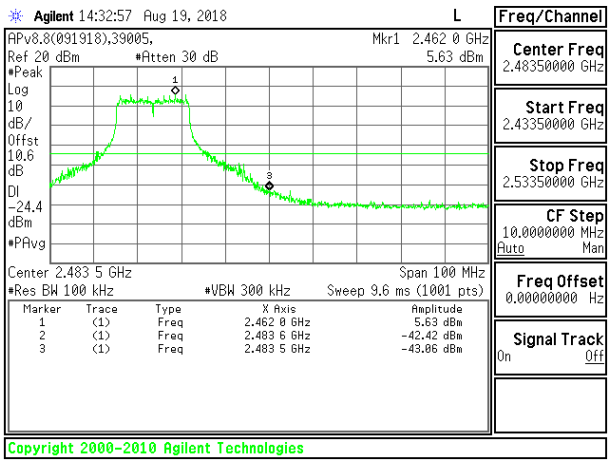
OUT-OF-BAND HIGH CHANNEL 8 CHAIN 0



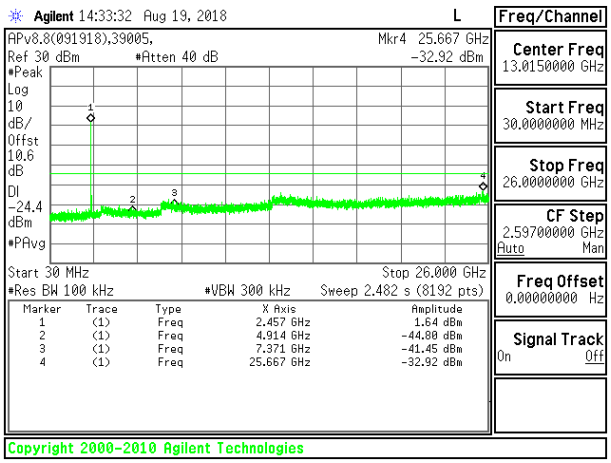
HIGH CHANNEL 9 BANDEDGE CHAIN 0



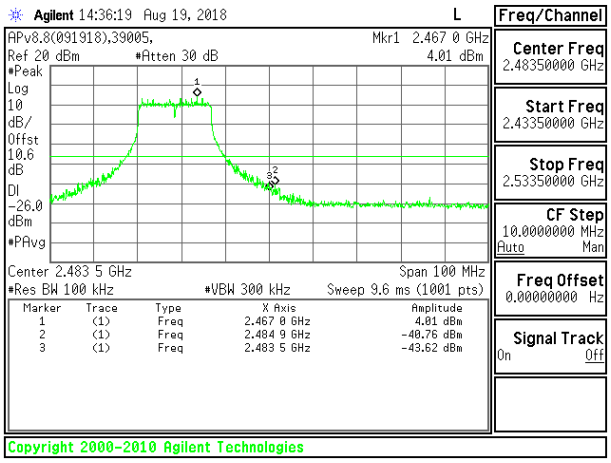
OUT-OF-BAND HIGH CHANNEL 9 CHAIN 0



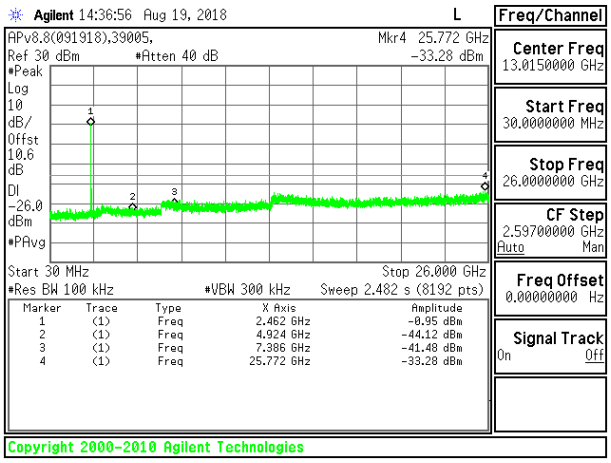
HIGH CHANNEL 10 BANDEDGE CHAIN 0



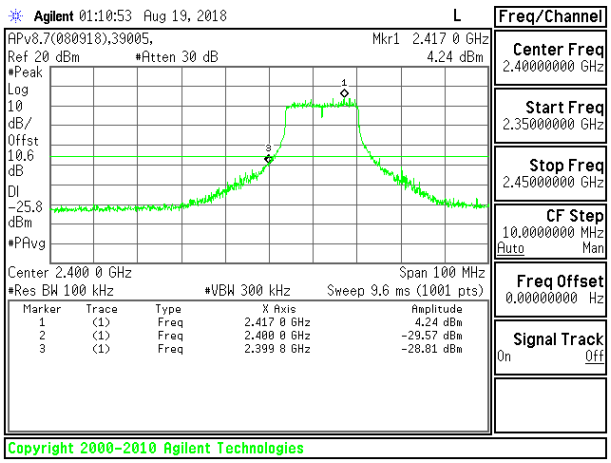
OUT-OF-BAND HIGH CHANNEL 10 CHAIN 0



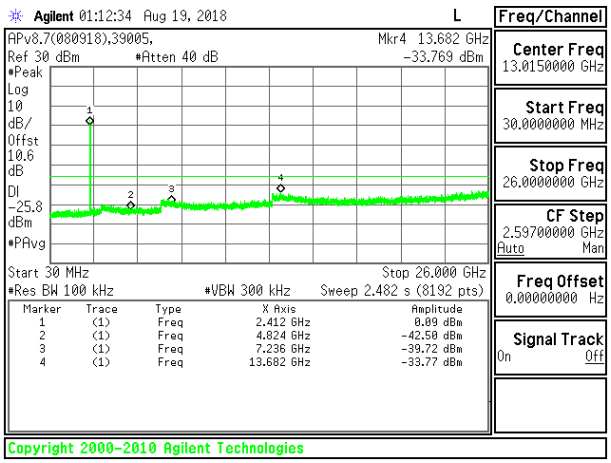
HIGH CHANNEL 11 BANDEDGE CHAIN 0



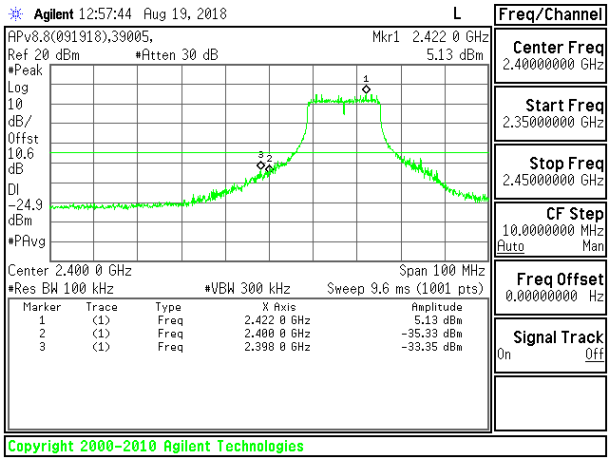
OUT-OF-BAND HIGH CHANNEL 11 CHAIN 0



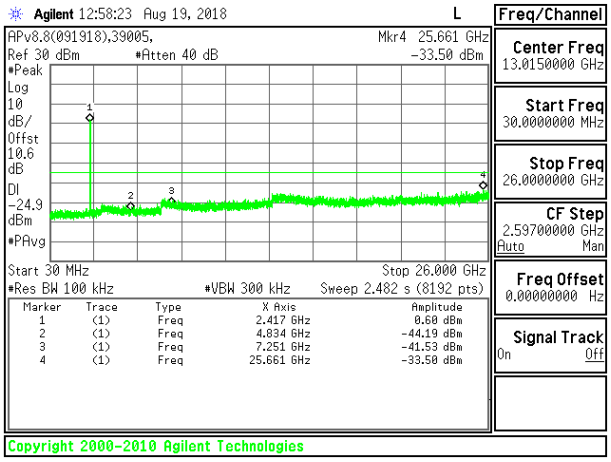
LOW CHANNEL 1 BANDEDGE CHAIN 1



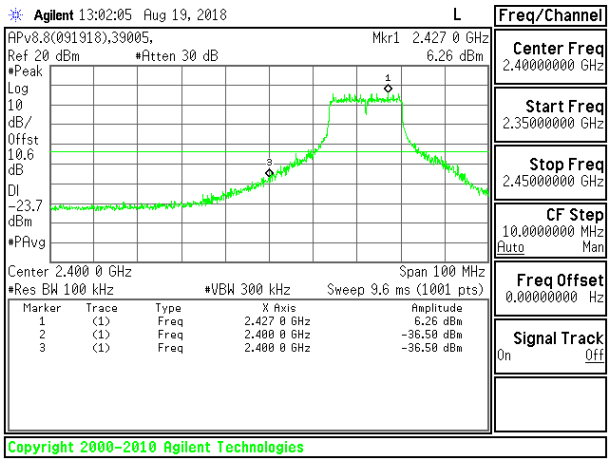
OUT-OF-BAND LOW CHANNEL 1 CHAIN 1



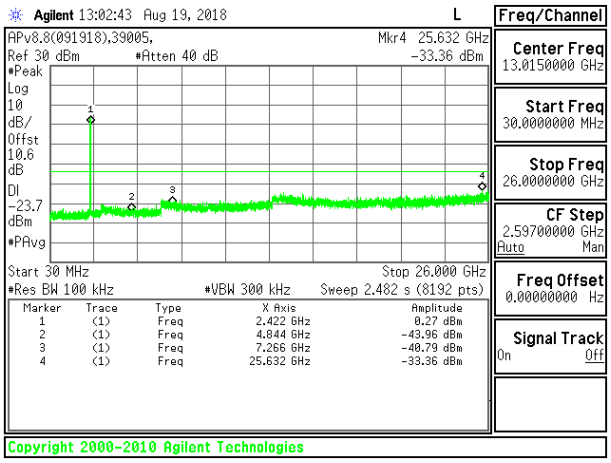
LOW CHANNEL 2 BANDEDGE CHAIN 1



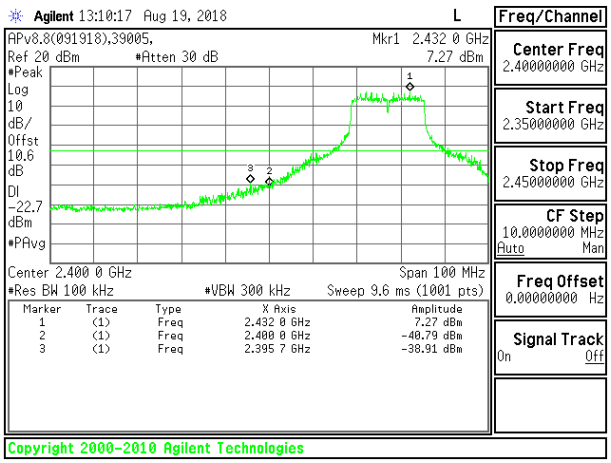
OUT-OF-BAND LOW CHANNEL 2 CHAIN 1



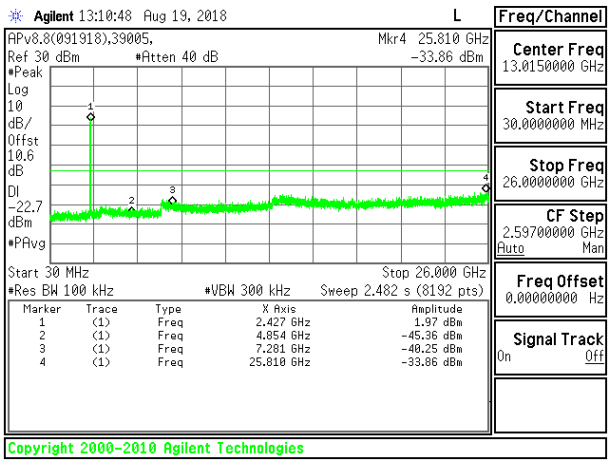
LOW CHANNEL 3 BANDEDGE CHAIN 1



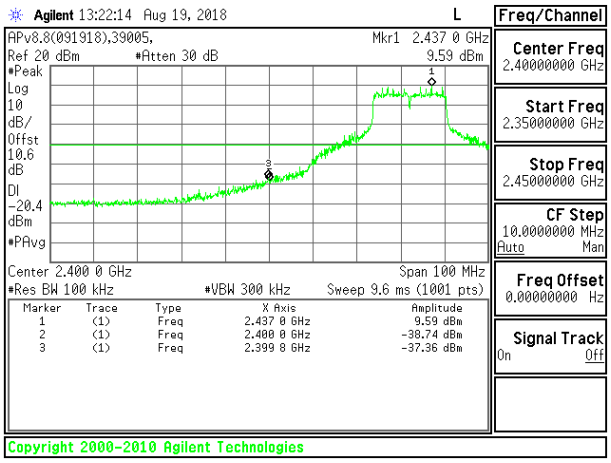
OUT-OF-BAND LOW CHANNEL 3 CHAIN 1



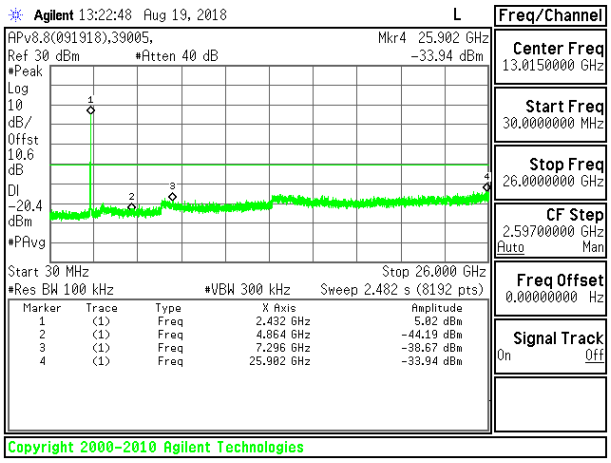
LOW CHANNEL 4 BANDEDGE CHAIN 1



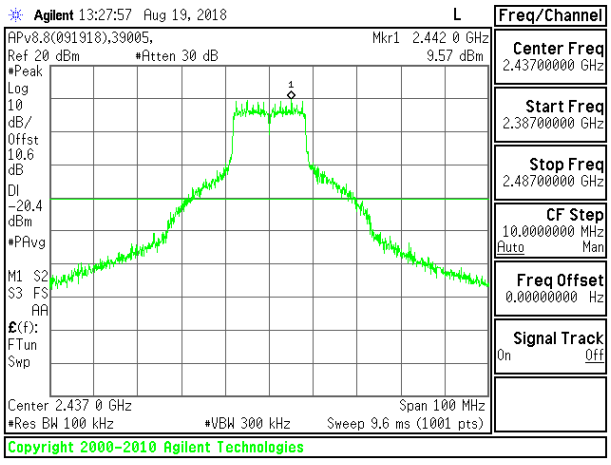
OUT-OF-BAND LOW CHANNEL 4 CHAIN 1



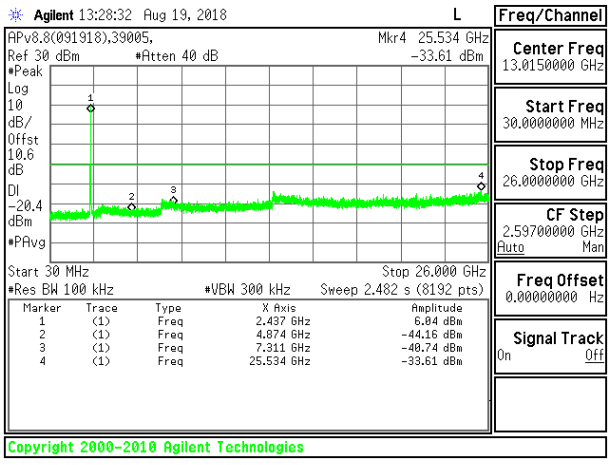
LOW CHANNEL 5 BANDEDGE CHAIN 1



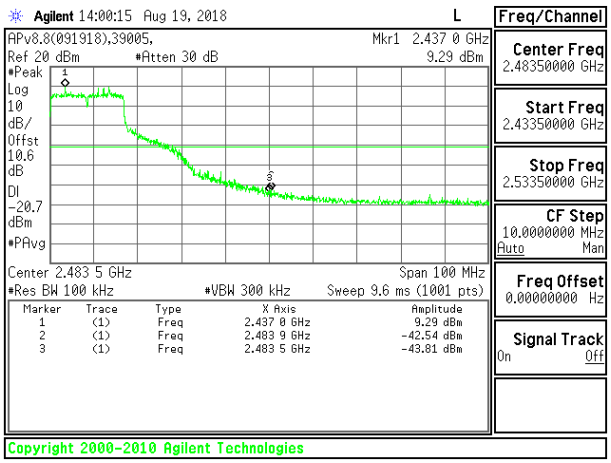
OUT-OF-BAND LOW CHANNEL 5 CHAIN 1



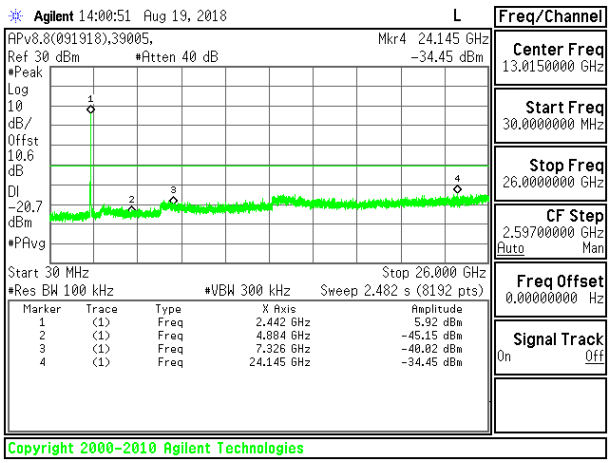
IN-BAND REFERENCE LEVEL CHAIN 1



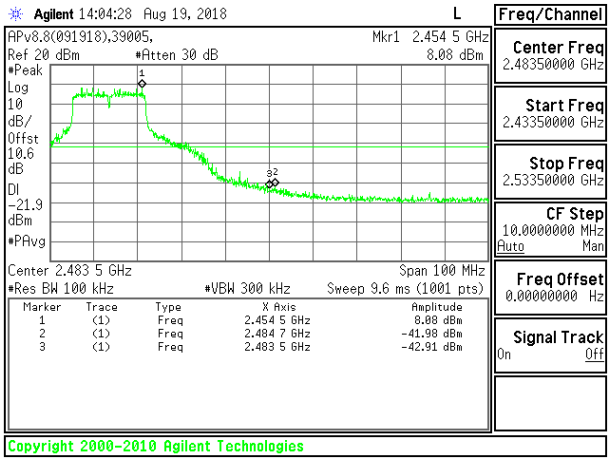
OUT-OF-BAND MID CHANNEL CHAIN 1



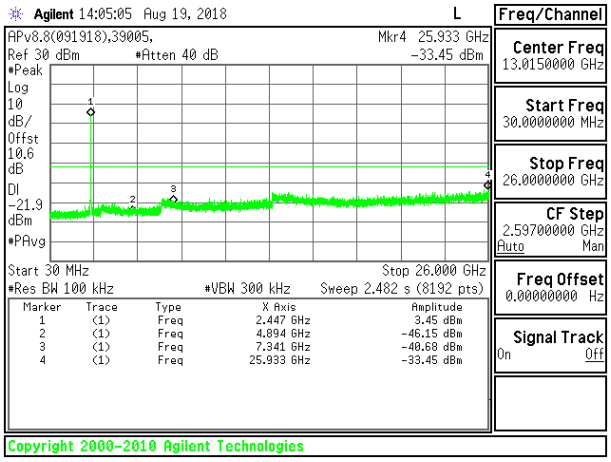
HIGH CHANNEL 7 BANDEDGE CHAIN 1



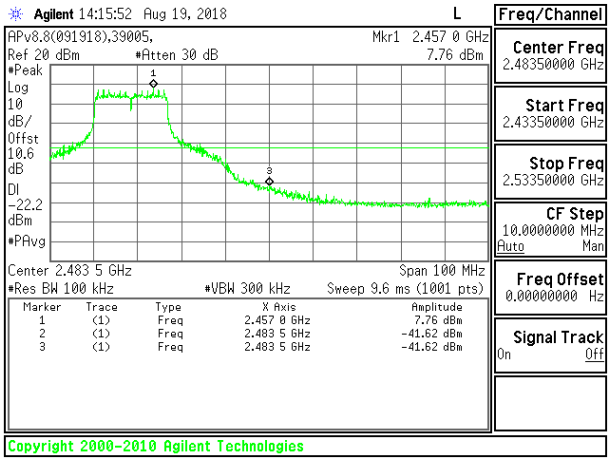
OUT-OF-BAND HIGH CHANNEL 7 CHAIN 1



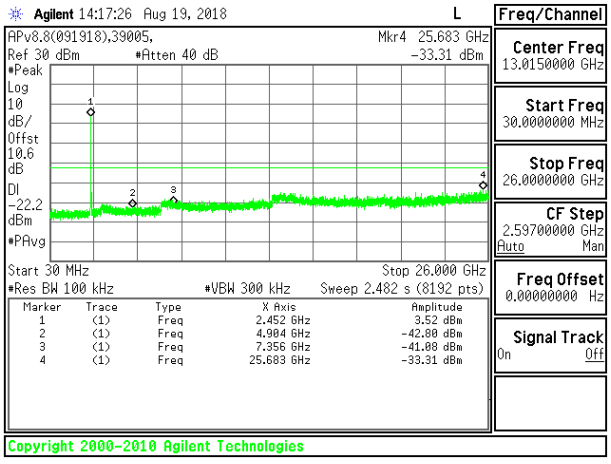
HIGH CHANNEL 8 BANDEDGE CHAIN 1



OUT-OF-BAND HIGH CHANNEL 8 CHAIN 1



HIGH CHANNEL 9 BANDEDGE CHAIN 1



OUT-OF-BAND HIGH CHANNEL 9 CHAIN 1

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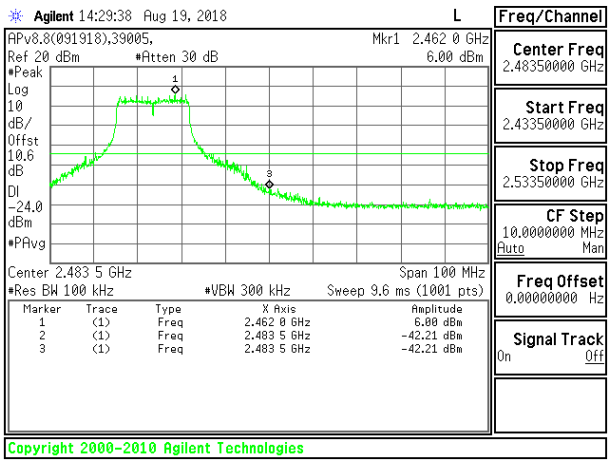
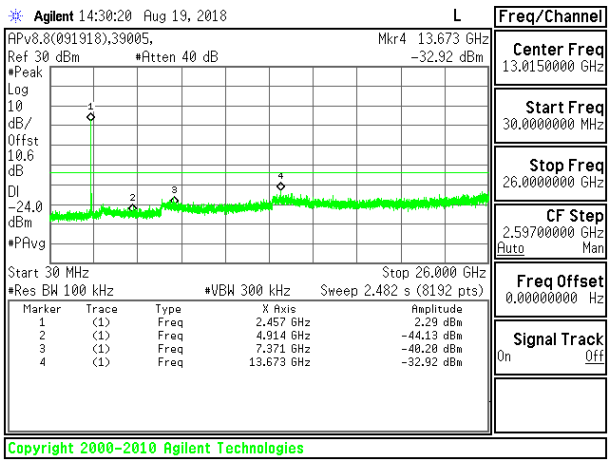
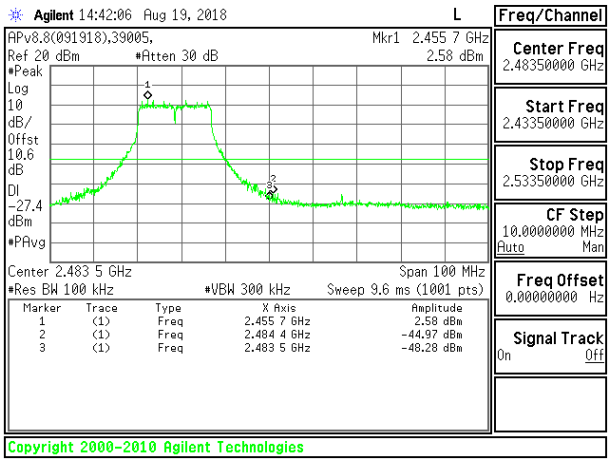


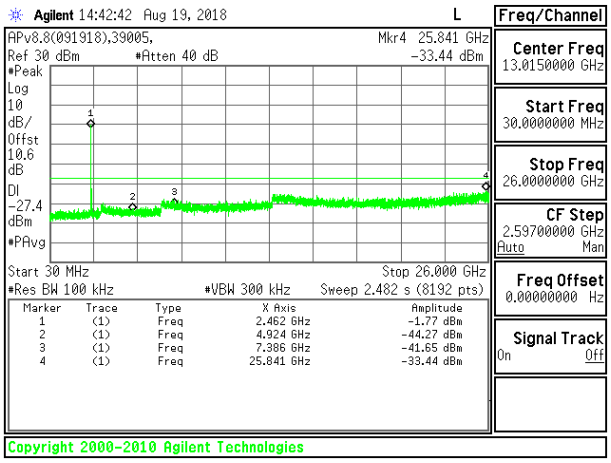
HIGH CHANNEL 10 BANDEDGE CHAIN 1



OUT-OF-BAND HIGH CHANNEL 10 CHAIN 1

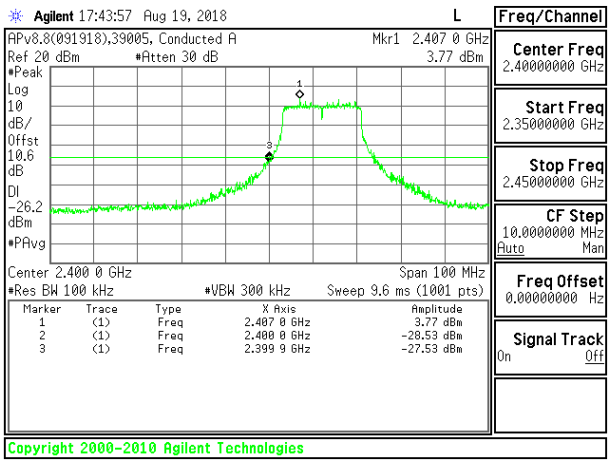


HIGH CHANNEL 11 BANDEDGE CHAIN 1

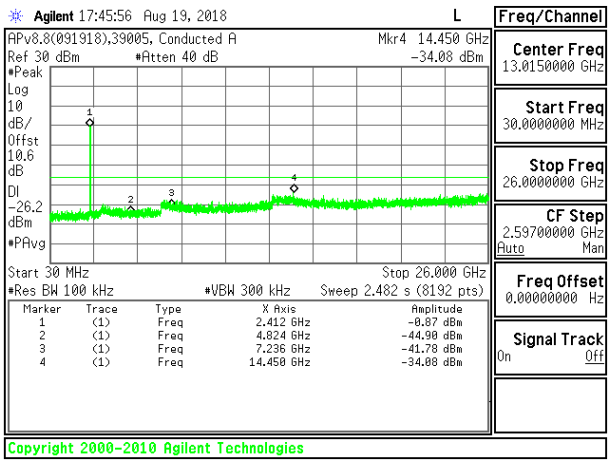


OUT-OF-BAND HIGH CHANNEL 11 CHAIN 1

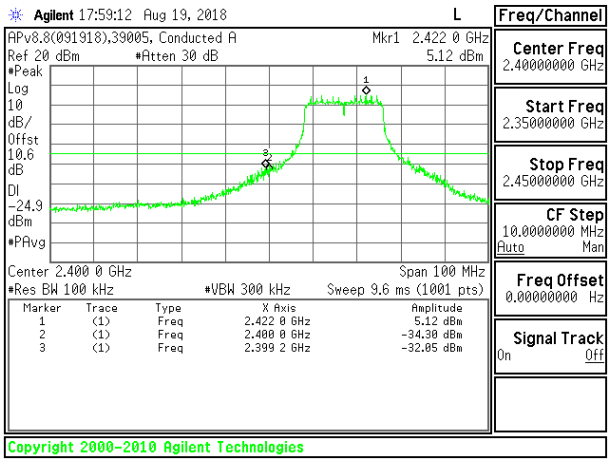
8.6.3. 802.11n HT20 MODE



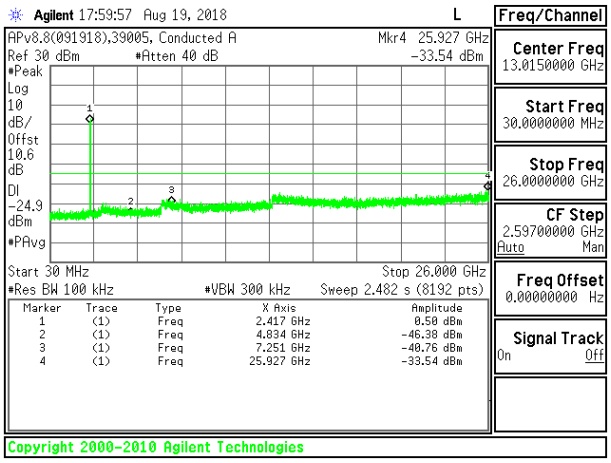
LOW CHANNEL 1 BANDEDGE CHAIN 0



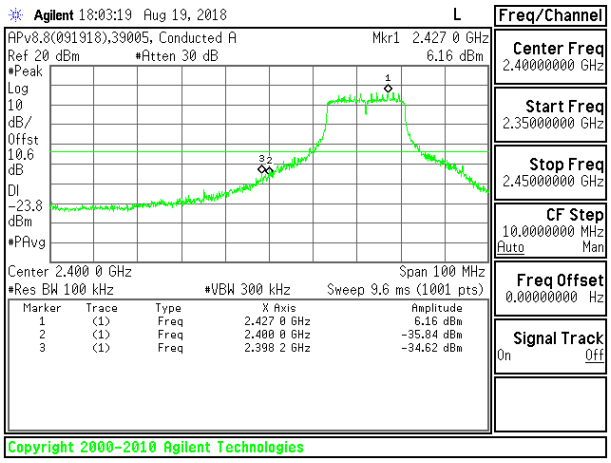
OUT-OF-BAND LOW CHANNEL 1 CHAIN 0



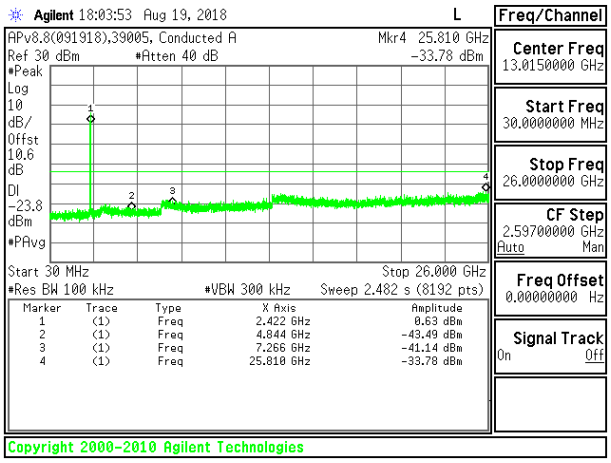
LOW CHANNEL 2 BANDEDGE CHAIN 0



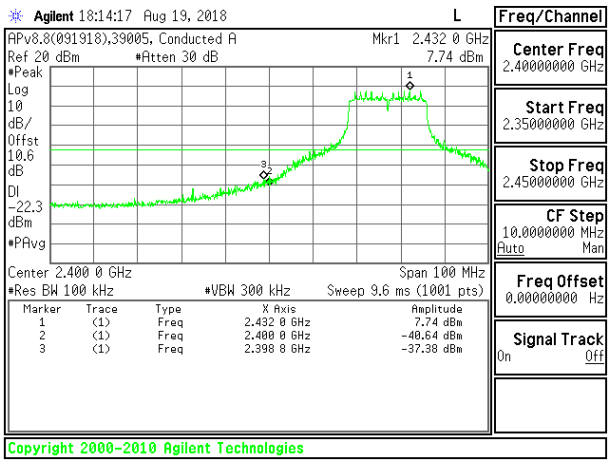
OUT-OF-BAND LOW CHANNEL 2 CHAIN 0



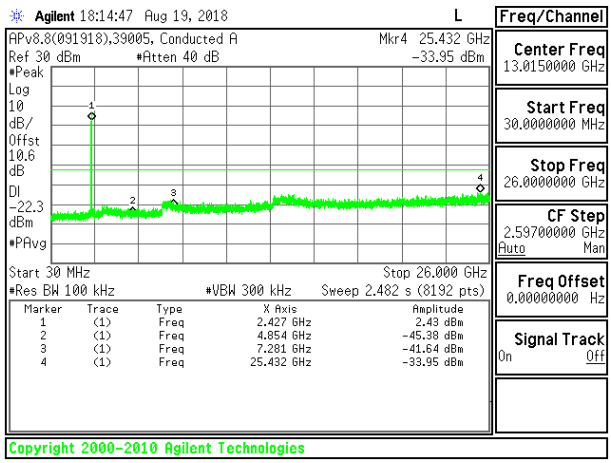
LOW CHANNEL 3 BANDEDGE CHAIN 0



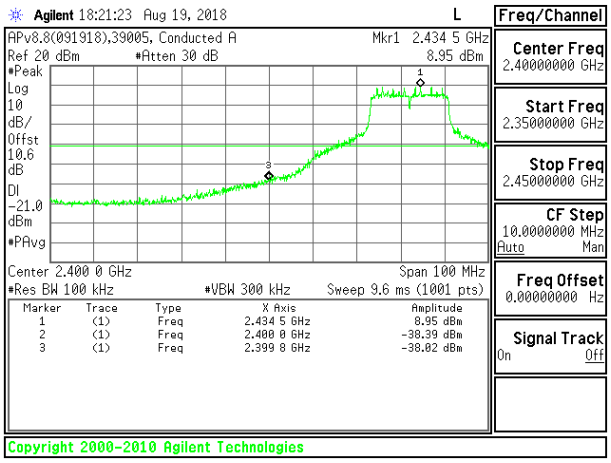
OUT-OF-BAND LOW CHANNEL 3 CHAIN 0



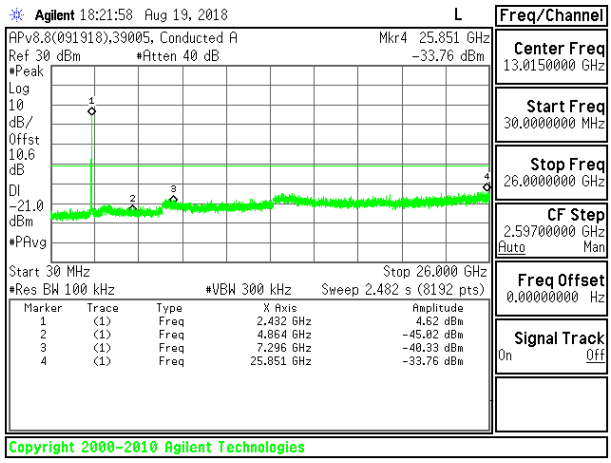
LOW CHANNEL 4 BANDEDGE CHAIN 0



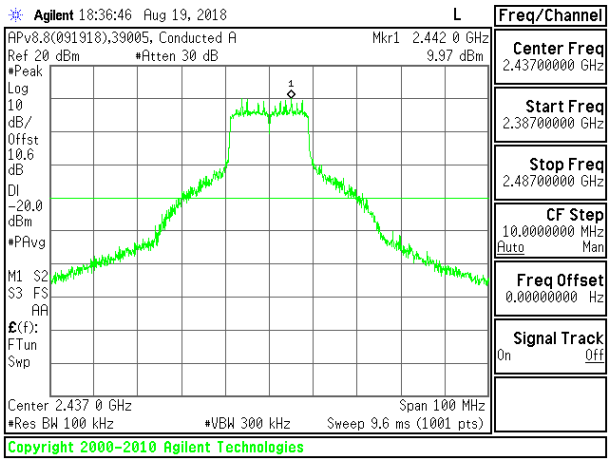
OUT-OF-BAND LOW CHANNEL 4 CHAIN 0



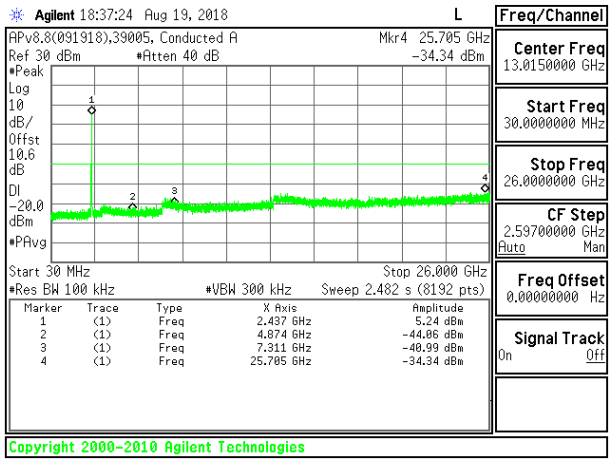
LOW CHANNEL 5 BANDEDGE CHAIN 0



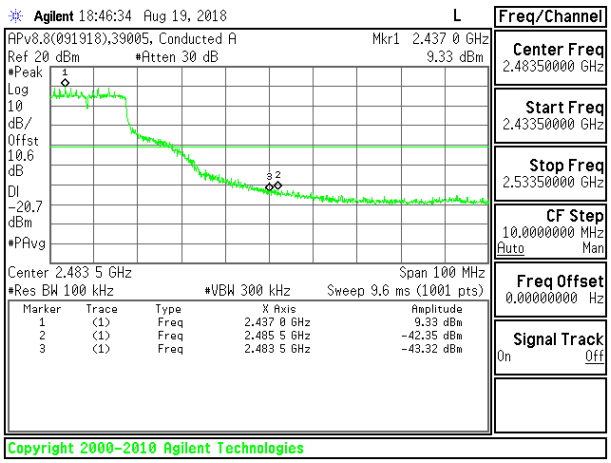
OUT-OF-BAND LOW CHANNEL 5 CHAIN 0



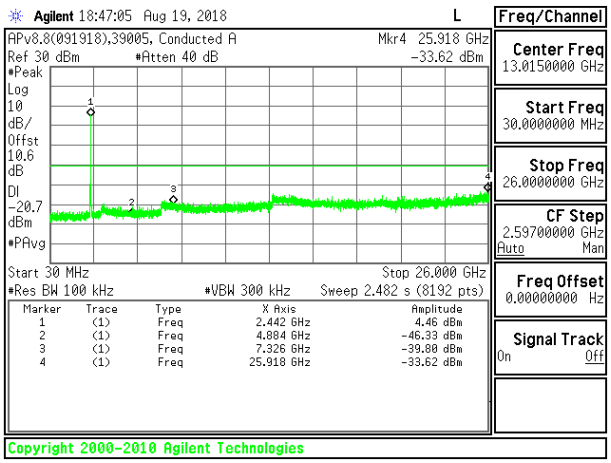
IN-BAND REFERENCE LEVEL CHAIN 0



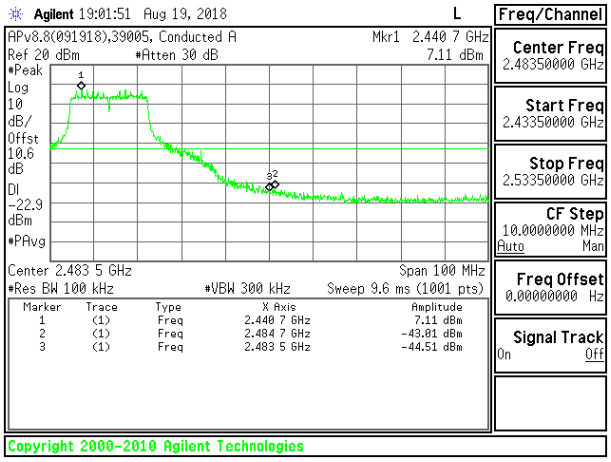
OUT-OF-BAND MID CHANNEL CHAIN 0



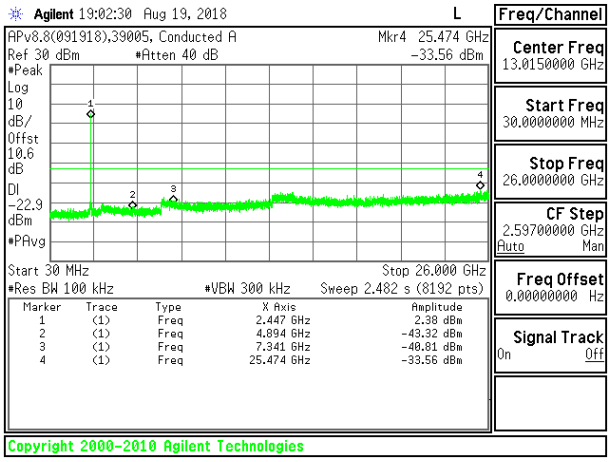
HIGH CHANNEL 7 BANDEDGE CHAIN 0



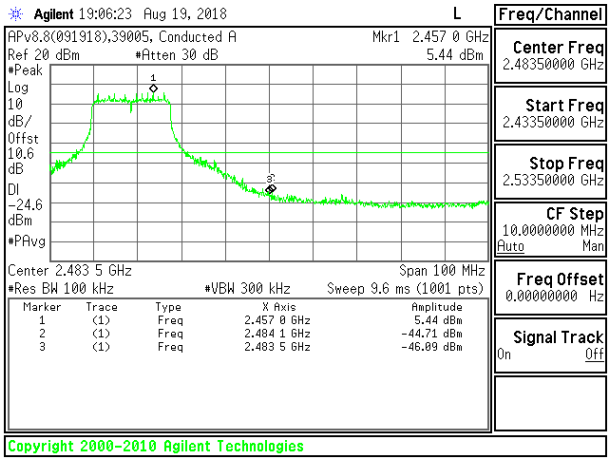
OUT-OF-BAND HIGH CHANNEL 7 CHAIN 0



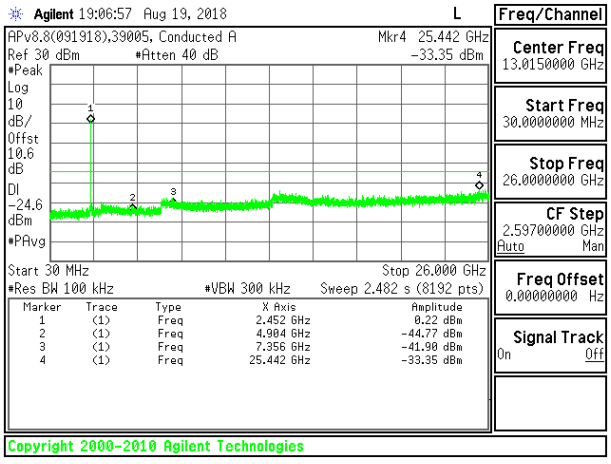
HIGH CHANNEL 8 BANDEDGE CHAIN 0



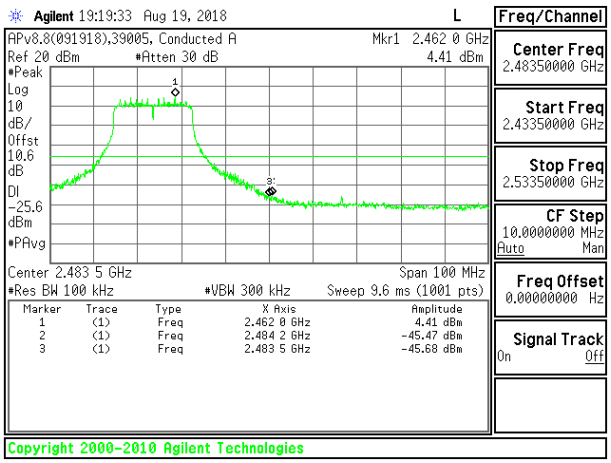
OUT-OF-BAND HIGH CHANNEL 8 CHAIN 0



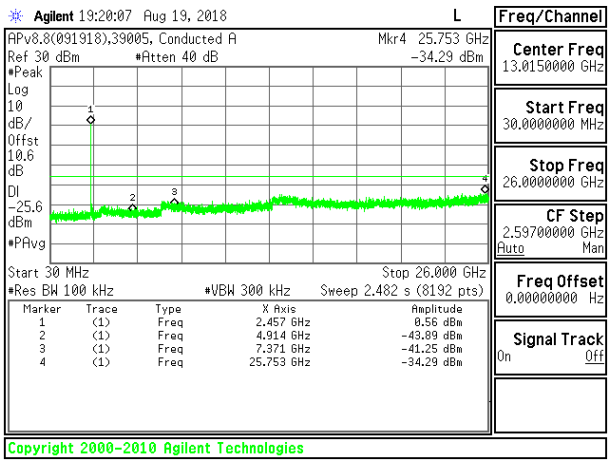
HIGH CHANNEL 9 BANDEDGE CHAIN 0



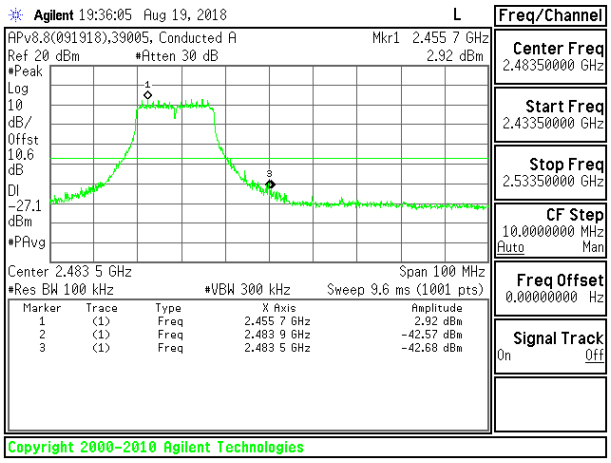
OUT-OF-BAND HIGH CHANNEL 9 CHAIN 0



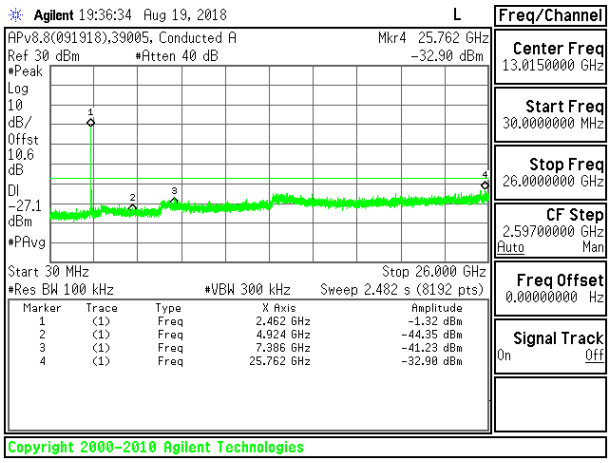
HIGH CHANNEL 10 BANDEDGE CHAIN 0



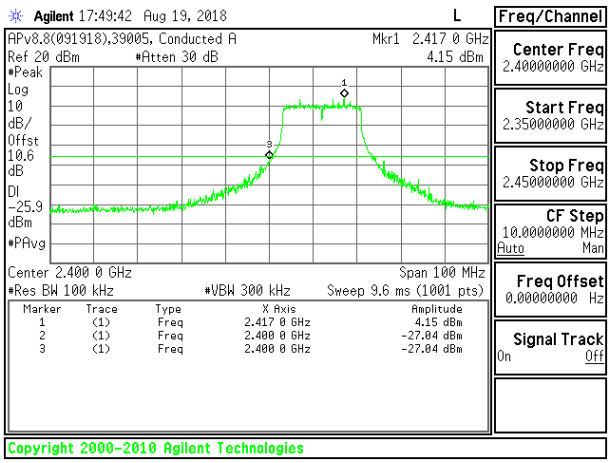
OUT-OF-BAND HIGH CHANNEL 10 CHAIN 0



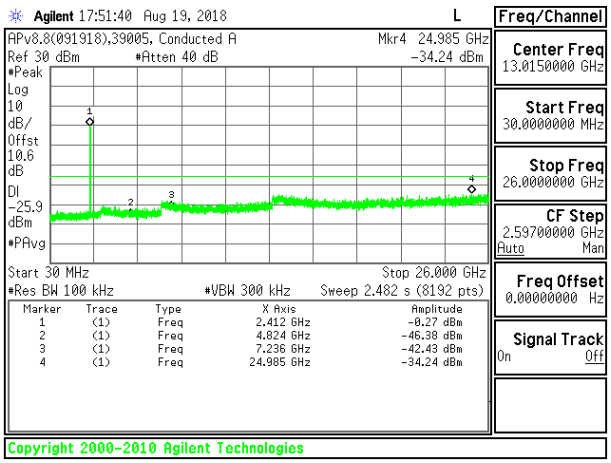
HIGH CHANNEL 11 BANDEDGE CHAIN 0



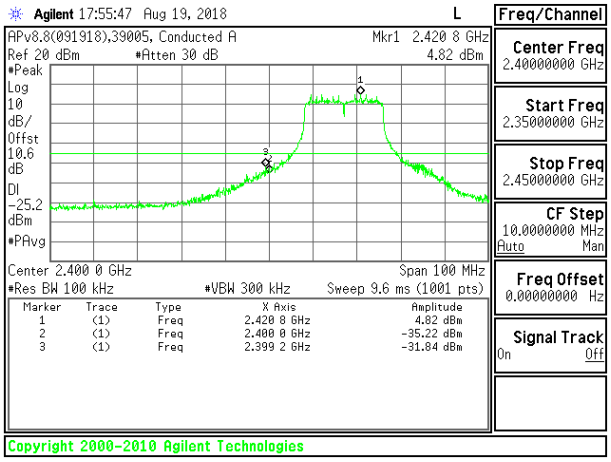
OUT-OF-BAND HIGH CHANNEL 11 CHAIN 0



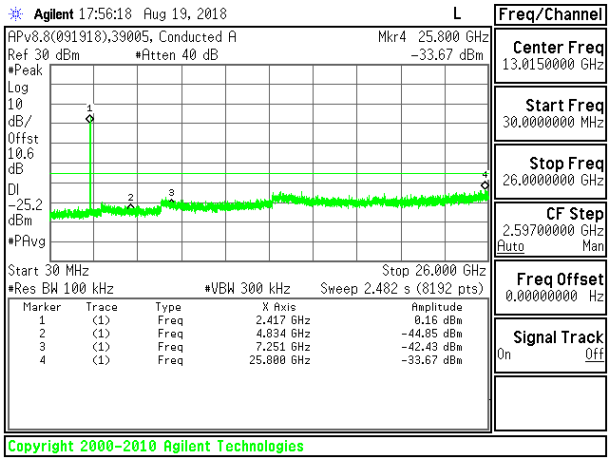
LOW CHANNEL 1 BANDEDGE CHAIN 1



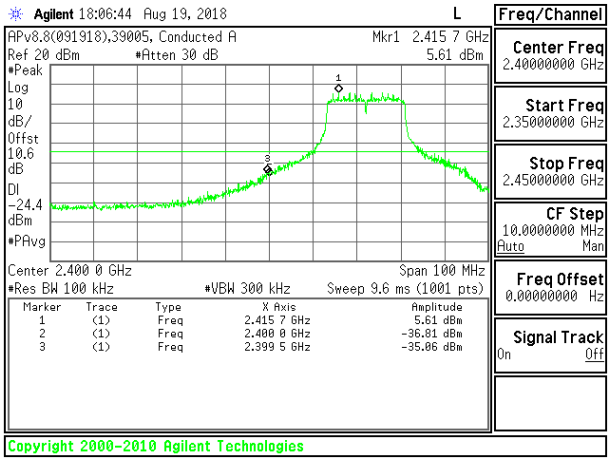
OUT-OF-BAND LOW CHANNEL 1 CHAIN 1



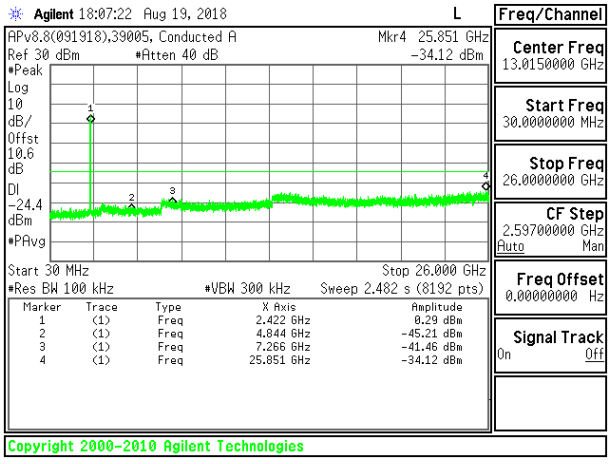
LOW CHANNEL 2 BANDEDGE CHAIN 1



OUT-OF-BAND LOW CHANNEL 2 CHAIN 1



LOW CHANNEL 3 BANDEDGE CHAIN 1



OUT-OF-BAND LOW CHANNEL 3 CHAIN 1

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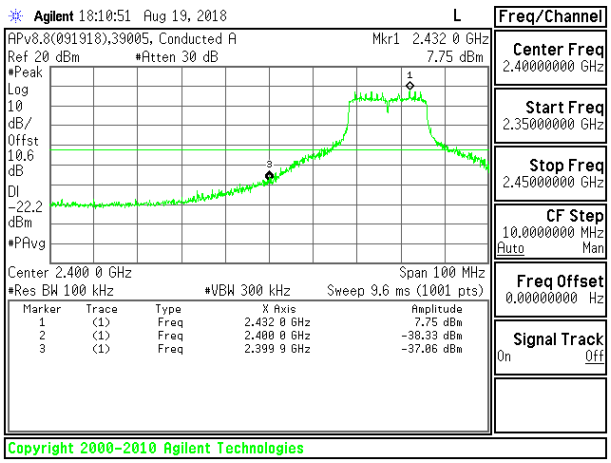
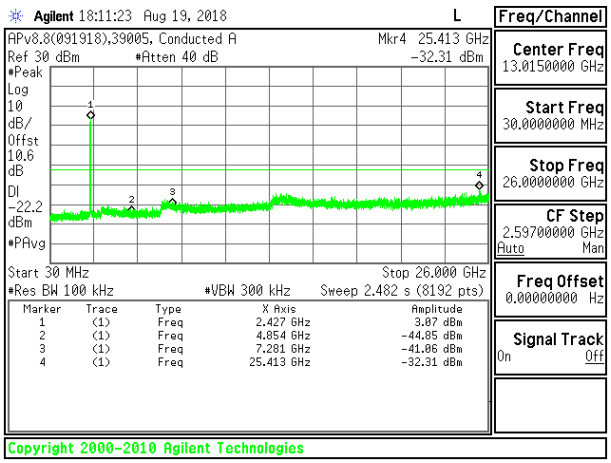
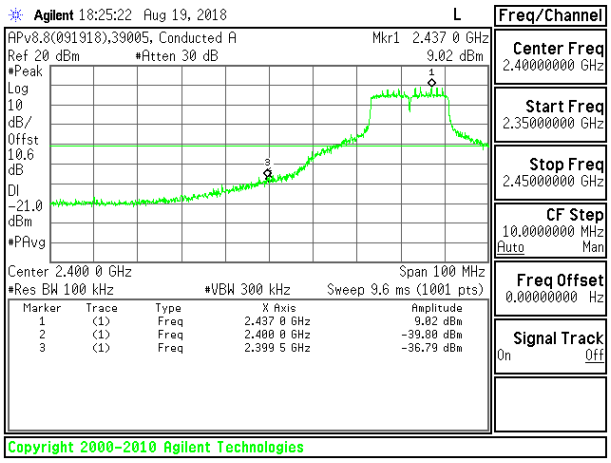


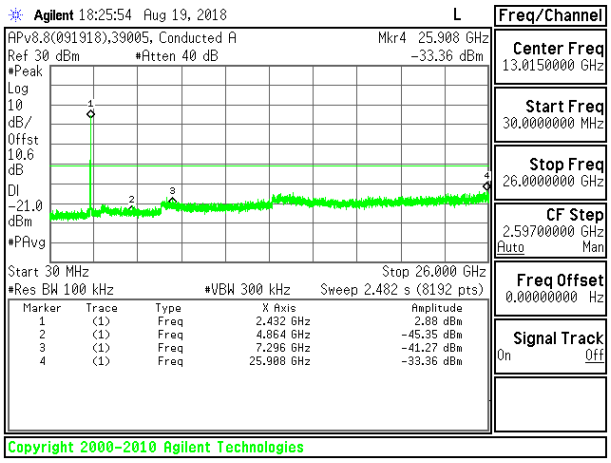
LOW CHANNEL 4 BANDEDGE CHAIN 1



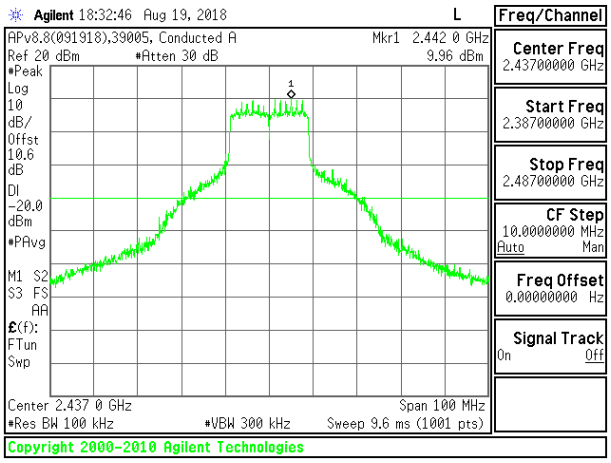
OUT-OF-BAND LOW CHANNEL 4 CHAIN 1



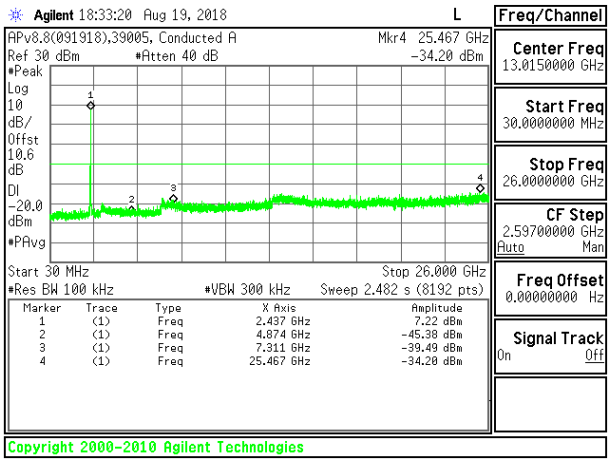
LOW CHANNEL 5 BANDEDGE CHAIN 1



OUT-OF-BAND LOW CHANNEL 5 CHAIN 1



IN-BAND REFERENCE LEVEL CHAIN 1



OUT-OF-BAND MID CHANNEL CHAIN 1

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