CERTIFICATION TEST REPORT

Report Number. : 12935947-E5V1

Applicant	:	Microsoft Corporation One Microsoft Way Redmond, WA 98052-6399 USA
Model	:	1872
FCC ID	:	C3K1872
IC ID	:	3048A-1872
EUT Description	:	Portable Computing Device
Test Standard(s)	:	FCC 47 CFR PART 15 SUBPART C ISED RSS-247 ISSUE 2 ISED RSS-GEN ISSUE 5

Date Of Issue:
September 10, 2019

Prepared by:
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NVLAP Lab code: 200065-0

REPORT REVISION HISTORY

Rev.	Issue Date	Revisions	Revised By
V1	8/29/2019	Initial Issue	---
V2	9/10/2019	Section 5.2: Power Table updated Section 5.3: 6dB note updated Section 5.6: Statements updated and added. Section 8.2.2: 99% OBW updated Section 10: Statement added, Setup photos Removed	Henry Lau

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: Microsoft Corporation
One Microsoft Way
Redmond, WA 98052-6399
USA

EUT DESCRIPTION: Portable Computing Device

MODEL: 1872

SERIAL NUMBER: 006404792757(Conducted),
013880192757(Conducted)
013885392757(Radiated),
014813492757(Radiated)

DATE TESTED: July 19, 2019 – September 10, 2019

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

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.

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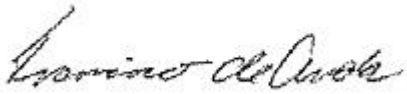
Approved & Released For
UL Verification Services Inc. By:



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2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC CFR 47 Part 2, FCC CFR 47 Part 15, ANSI C63.10-2013, and KDB 558074 D01 15.247 Meas Guidance v05r02, RSS-GEN Issue 5, and RSS-247 Issue 2.

The scope of this report covers the 802.11ax modes in the 2.4GHz band of Model 1872.

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 Road
☐ Chamber A	☐ Chamber D	☒ Chamber I
☐ Chamber B	☐ Chamber E	☒ Chamber J
☐ Chamber C	☐ Chamber F	☒ Chamber K
	☐ Chamber G	☐ Chamber L
	☐ Chamber H	☐ Chamber M

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 2324A.

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	2.52 dB
Worst Case Radiated Disturbance, 30 to 1000 MHz	4.88 dB
Worst Case Radiated Disturbance, 1000 to 18000 MHz	4.24 dB
Worst Case Radiated Disturbance, 18000 to 26000 MHz	4.37 dB
Worst Case Radiated Disturbance, 26000 to 40000 MHz	5.17 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 Portable Computing Device.

5.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum conducted output power as follows:

2.4GHz BAND 802.11 ax MODE

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
2TX			
2412 - 2472	802.11ax HE20 SU	26.12	409.26
2412 - 2472	802.11ax HE20 RU size 106T	26.64	461.32
2422 - 2462	802.11ax HE40 SU	25.21	331.89
2422 - 2462	802.11ax HE40 RU size 242T	26.26	422.67

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5.3. TEST REDUCTIONS CASES

99% Bandwidth:

- All tones were tested for each bandwidth.

6dB Bandwidth:

- 26 tone was tested for each bandwidth.
- As 26 Tone is the lowest bandwidth compared to the minimum 6 dB BW limit, 26 Tone is representative of all tones.

Output Power and Power Spectral Density

- All tones were tested for each bandwidth.

Radiated/Conducted Band Edge:

- All tones were tested for each bandwidth.
- The RU allocations closest to the band edge was tested to cover all other RU's.

Radiated/Conducted Spurious Emissions:

- 26T and 242T were investigated. It was determined that 26T at the highest power setting to be worst case thus 26T will be representative of all RU's at all tones at HE20 and HE40.

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5.4. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes two dual band PIFA antennas, with a maximum gain of:

Frequency Band (GHz)	Chain 0	Chain 1
	Antenna Gain (dBi)	Antenna Gain (dBi)
2412-2472	-2.2	1.6

NOTE:
Antenna 1 = Chain 0
Antenna 2 = Chain 1

5.5. SOFTWARE AND FIRMWARE

The operating system installed on the EUT is MTEOS 1.652.0.

The Wifi Driver installed on the EUT is version 99.0.43.8.

The test utility software used during testing was version 11.1916.0-09531

5.6. WORST-CASE CONFIGURATION AND MODE

Please refer to UL Report number: 12935947-E3 for worst case Radiated emissions below 30MHz, below 1GHz, above 18GHz, and power line conducted emissions.

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.

For all modes, tests were performed with the EUT set at the 2Tx MIMO mode with power setting equal to SISO modes as the worst case scenario thus MIMO is representative of SISO.

The EUT has one intended orientations, X; therefore, all final radiated testing was performed with the EUT in X orientation.

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

802.11ax HE20 mode: MCS0
802.11ax HE40 mode: MCS0

EUT does not employ CDD for HT, VHT and HE rates. CDD is supported for legacy modes only.

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5.7. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	**Manufacturer**	**Model**	**Serial Number**	**FCC ID**
AC DC Adapter	Microsoft	1706	0C130J02T8396	DoC
USB Mouse	Microsoft	1113	X821908-002	DoC
USB Type C to Audio Jack	SONY	A1-0231	N/A	DoC
Earphone	SONY	AG1100	N/A	DoC
Earphone	SONY	AG1100	N/A	DoC

I/O CABLES (CONDUCTED TEST)

I/O Cable List						
Cable No	**Port**	**# of identical ports**	**Connector Type**	**Cable Type**	**Cable Length (m)**	**Remarks**
1	AC	1	AC	Un-Shielded	0.2	to AC/DC Adaptor
2	DC	1	DC	Shielded	1	to Laptop, to EUT
3	Antenna	1	SMA	Un-Shielded	0.2	to Analyzer

I/O CABLES (RADIATED AND CONDUCTED EMISSIONS)

I/O Cable List						
Cable No	**Port**	**# of identical ports**	**Connector Type**	**Cable Type**	**Cable Length (m)**	**Remarks**
1	AC	1	Type C	Un-shielded	0.2	to AC/DC Adapter
2	DC	1	DC	Shielded	1	to EUT
3	USB	1	TYPE A	Shielded	1.5	EUT TO Mouse
4	USB	1	Type C	Shielded	0.1	EUT to earphone AUX
5	earphone	1	3.5mm	Un-shielded	1	EUT to earphone

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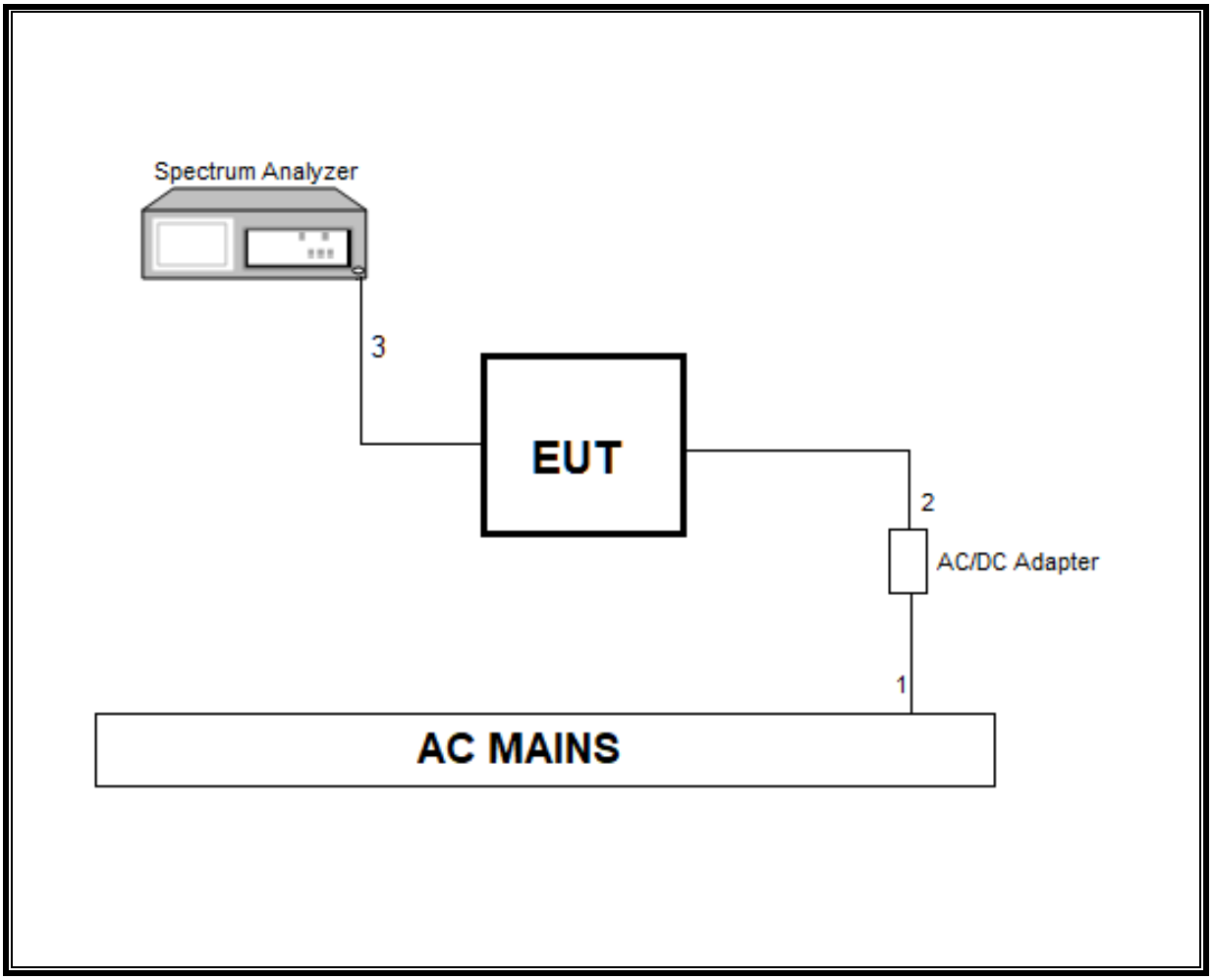
TEST SETUP

CONDUCTED TEST SETUP DIAGRAM



TEST SETUP

For conducted tests. the test software exercises the radio.

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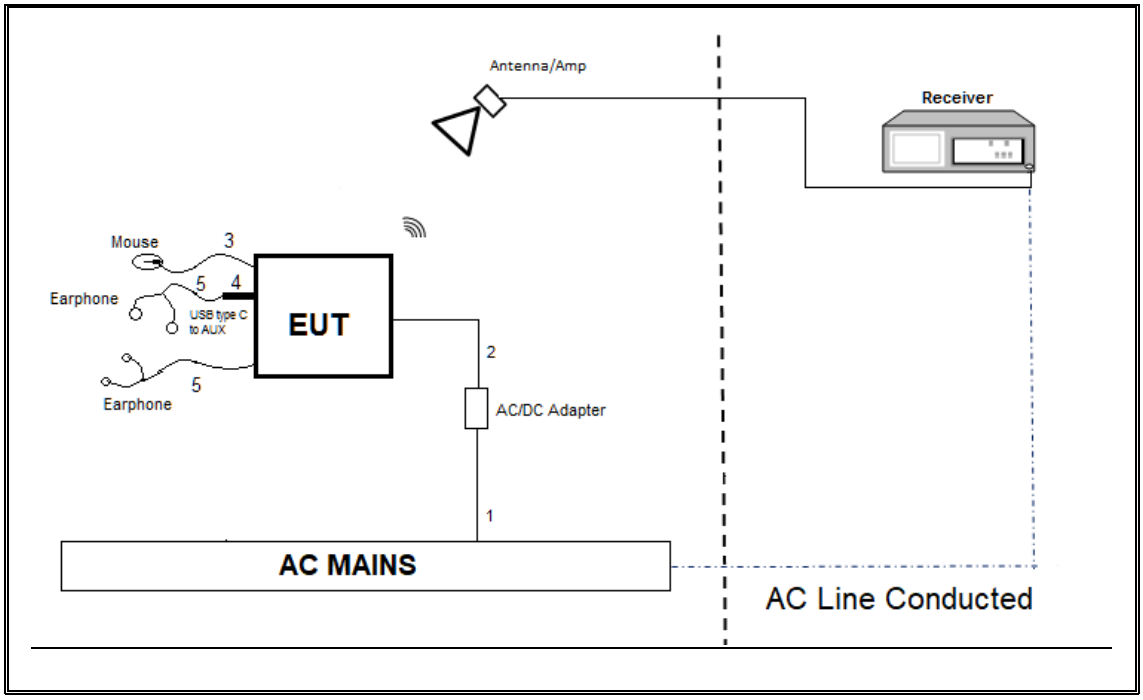
RADIATED AND AC LINE CONDUCTED EMISSIONS SETUP DIAGRAM



TEST SETUP

For radiated tests: EUT is connected to all support equipment. The test software exercises the radio.

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6. MEASUREMENT METHOD

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

Occupied BW (99%): ANSI C63.10-2013 Section 6.9.3

6 dB BW: ANSI C63.10 Subclause -11.8.1

Output Power: ANSI C63.10 Subclause-11.9.1.3 PKPM1 Peak power meter method

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

PSD: ANSI C63.10 Subclause -11.10.2 Method PKPSD (peak PSD)

Band-edge: ANSI C63.10 Subclause -11.13.3.4 Trace averaging across ON and OFF times of the EUT transmissions followed by duty cycle correction

Radiated emissions non-restricted frequency bands: ANSI C63.10 Subclause -11.11

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

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

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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**
Antenna, Passive Loop 30Hz to 1MHz	ELETRO METRICS	EM-6871	PRE0179465	05/31/2020	05/31/2019
Antenna, Passive Loop 100kHz to 30MHz	ELETRO METRICS	EM-6872	PRE0179467	05/31/2020	05/31/2019
Amplifier, 9KHz to 1GHz, 32dB	Sonoma Instrument	310	PRE0186650	12/13/2019	12/13/2018
Hybrid Antenna, 30MHz to 3GHz	Sunol Sciences Corp	JB3	PRE0184971	11/13/2019	11/13/2018
Amplifier, 9kHz to 1GHz, 32 dB	Sonoma Instrument	310	PRE0180175	06/29/2020	06/29/2019
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	EMC4294	06/14/2020	06/14/2019
Amplifier, 1 to18GHz, 35dB	AMPLICAL	AMP1G18-35	T1569	06/04/2020	06/04/2019
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	T862	06/05/2020	06/05/2019
Amplifier, 1 to18GHz	MITEQ	AFS42-00101800-25-S-42	PRE018078	08/01/2019	08/01/2018
Antenna, Horn 1-18GHz	AR	AMPL-ATH1G18	PRE0189055	04/20/2020	04/20/2018
Amplifier, 1 to 18GHz, 35dB	AMPLICAL	AMP1G18-35	T1571	05/28/2020	05/28/2019
Antenna, Horn 18 to 26.5GHz	ARA	MWH-1826/B	PRE0182188	08/29/2019	08/29/2018
Rf Amplifier, 18-26.5GHz, 60dB gain	Amplical	AMP18G26.5-60	PRE0181238	05/01/2020	05/01/2019
Power Meter, P-series single channel	Agilent (Keysight) Technologies	N1911A	T1265	01/29/2020	01/29/2019
Power Sensor, P-series, 50MHz to 18GHz, Wideband	Agilent (Keysight) Technologies	N1921A	T1227	02/05/2020	02/05/2019
EMI Test Receiver	Rohde & Schwarz	ESW44	PRE0179376	02/14/2020	02/14/2019
EMI Test Receiver	Rohde & Schwarz	ESW44	PRE0179372	02/16/2020	02/16/2019
EMI Test Receiver	Rohde & Schwarz	ESW44	PRE0179367	05/16/2020	05/16/2019
Spectrum Analyzer, PXA, 3Hz to 44GHz	Agilent (Keysight) Technologies	N9030A	T908	01/23/2020	01/23/2019
Spectrum Analyzer, PXA, 3Hz to 44GHz	Agilent (Keysight) Technologies	N9030A	T917	01/24/2020	01/24/2019
AC Line Conducted					
EMI Receiver	Rohde & Schwarz	ESR	T1436	02/14/2020	02/14/2019
LISN for Conducted Emissions CISPR-16	FCC INC.	FCC LISN 50/250	T1310	01/24/2020	01/24/2019
Test Software List					
Radiated Software	UL	UL EMC		Ver 9.5, June 22, 2018 & Jan 11, 2019	
Antenna Port Software	UL	UL RF		Ver 9.7, May 7, 2019	
AC Line Conducted Software	UL	UL EMC		Ver 9.5, May 26, 2015	

NOTES:

1. Equipment listed above that calibrated during the testing period was set for test after the calibration.
2. Equipment listed above that has a calibration due date during the testing period, the testing is completed before equipment expiration date.

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8. ANTENNA PORT TEST RESULTS

8.1. ON TIME AND DUTY CYCLE

LIMITS

None; for reporting purposes only.

PROCEDURE

KDB 558074 D01 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						
802.11ax HE20 OFDMA, RU size 242T	3.983	4.027	0.989	98.91%	0.00	0.010
802.11ax HE20 OFDMA, RU size 106T	3.976	4.032	0.986	98.61%	0.00	0.010
802.11ax HE20 OFDMA, RU size 52T	3.964	4.019	0.986	98.63%	0.00	0.010
802.11ax HE20 OFDMA, RU size 26T	3.976	4.031	0.986	98.64%	0.00	0.010
802.11ax HE40 OFDMA, RU size 484T	3.969	4.024	0.986	98.63%	0.00	0.010
802.11ax HE40 OFDMA, RU size 242T	3.971	4.016	0.989	98.88%	0.00	0.010
802.11ax HE40 OFDMA, RU size 106T	3.977	4.032	0.986	98.64%	0.00	0.010
802.11ax HE40 OFDMA, RU size 52T	3.971	4.015	0.989	98.90%	0.00	0.010
802.11ax HE40 OFDMA, RU size 26T	3.966	4.006	0.990	99.00%	0.00	0.010

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DUTY CYCLE PLOTS

802.11ax HE20 OFDMA, RU size 242T MODE

802.11ax HE20 OFDMA, RU size 106T MODE

802.11ax HE20 OFDMA, RU size 52T MODE

802.11ax HE20 OFDMA, RU size 26T MODE

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802.11ax HE40 OFDMA, RU size 484T MODE

802.11ax HE40 OFDMA, RU size 242T MODE

802.11ax HE40 OFDMA, RU size 106T MODE

802.11ax HE40 OFDMA, RU size 52T MODE

802.11ax HE40 OFDMA, RU size 26T MODE

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8.2. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

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8.2.1. 802.11ax HE20 MODE

2TX Antenna 1 + Antenna 2 OFDMA MODE: SU

Channel	Frequency (MHz)	99% Bandwidth Chain 0 (MHz)	99% Bandwidth Chain 1 (MHz)
Low 1	2412	19.054	18.972
Low 2	2417	19.076	18.992
Mid 6	2437	19.086	19.091
High 10	2457	18.986	19.011
High 11	2462	18.996	18.999
High 12	2467	19.026	19.042
High 13	2472	18.707	18.759

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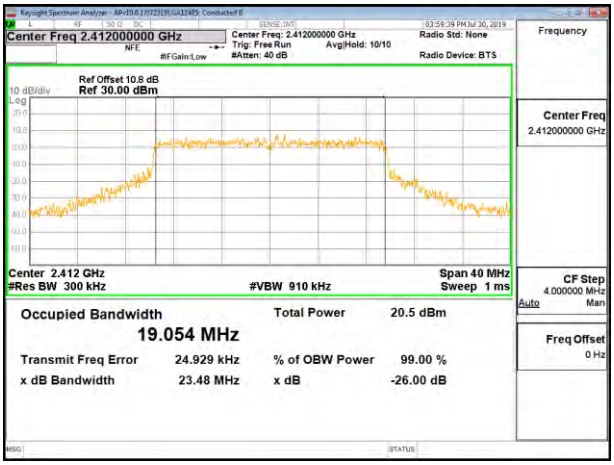
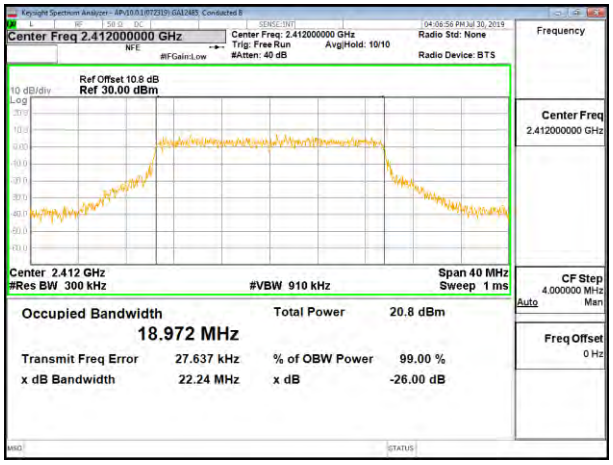
LOW CHANNEL 1

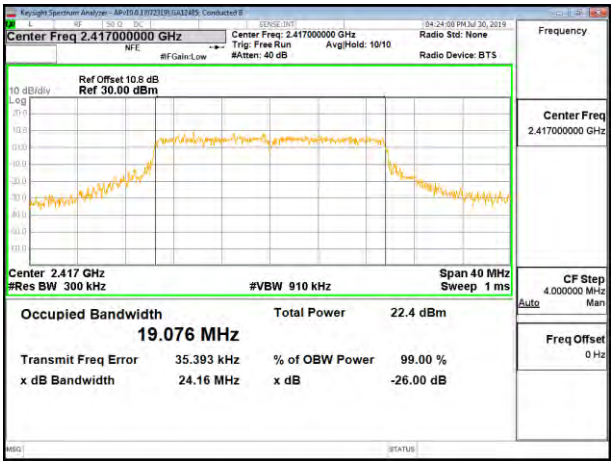


LOW CHANNEL 1 CHAIN 0

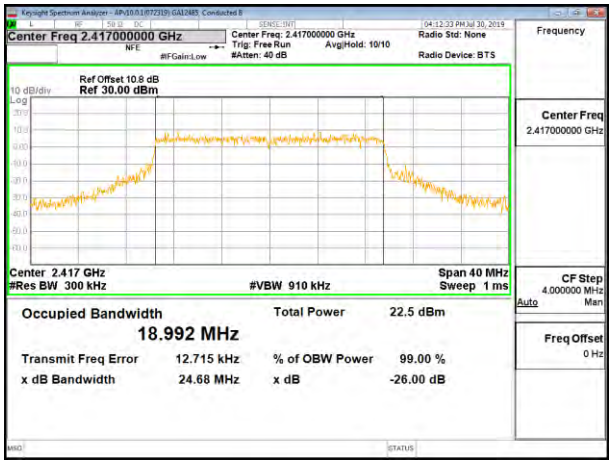


LOW CHANNEL 1 CHAIN 1

LOW CHANNEL 2



LOW CHANNEL 2 CHAIN 0



LOW CHANNEL 2 CHAIN 1

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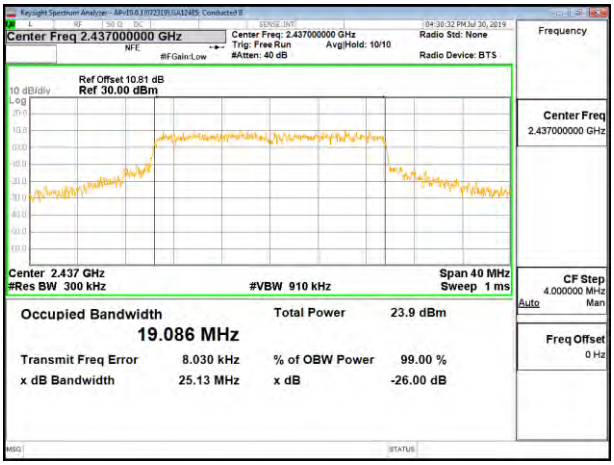
MID CHANNEL 6



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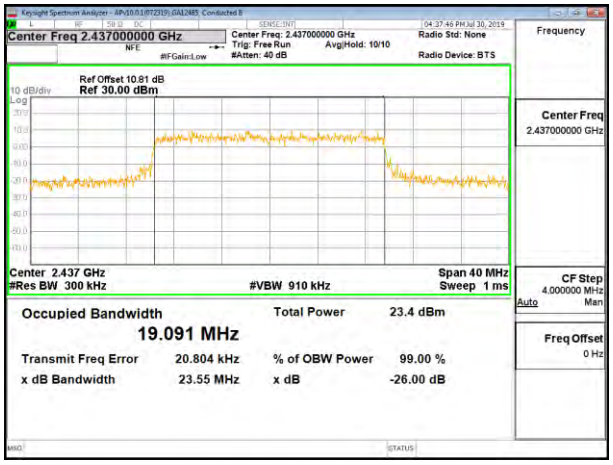
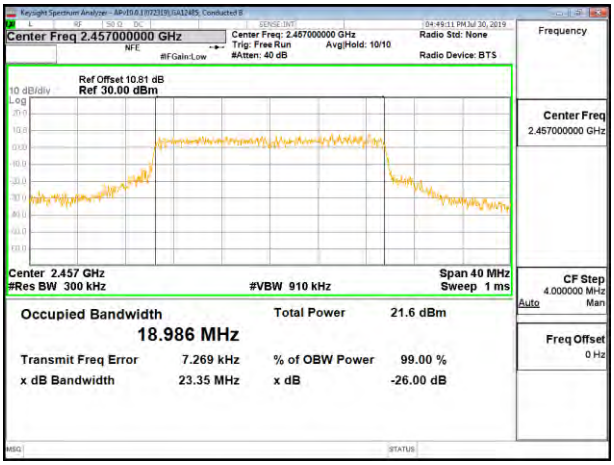


MID CHANNEL 6 CHAIN 1

HIGH CHANNEL 10



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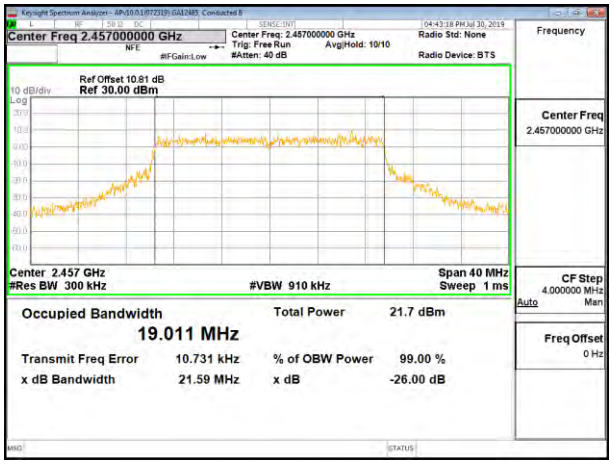

HIGH CHANNEL 10 CHAIN 1

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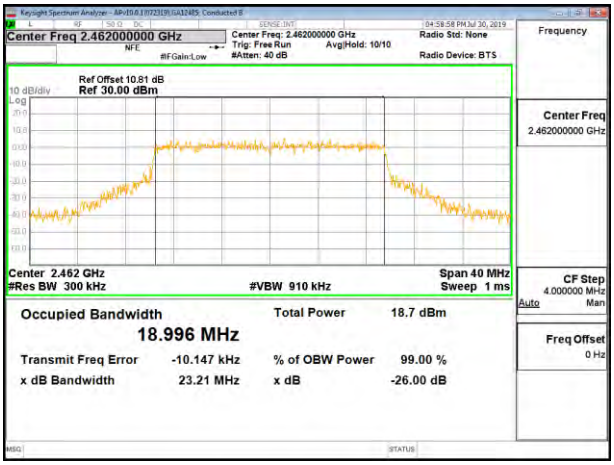
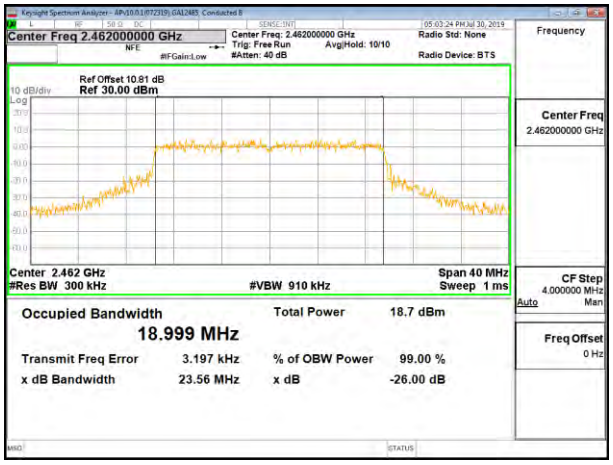
HIGH CHANNEL 11

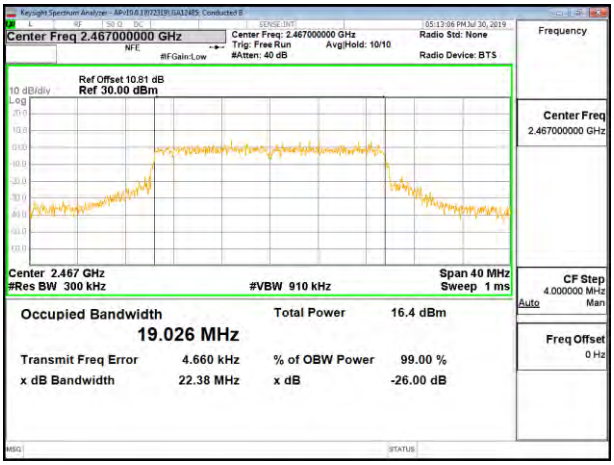


HIGH CHANNEL 11 CHAIN 0

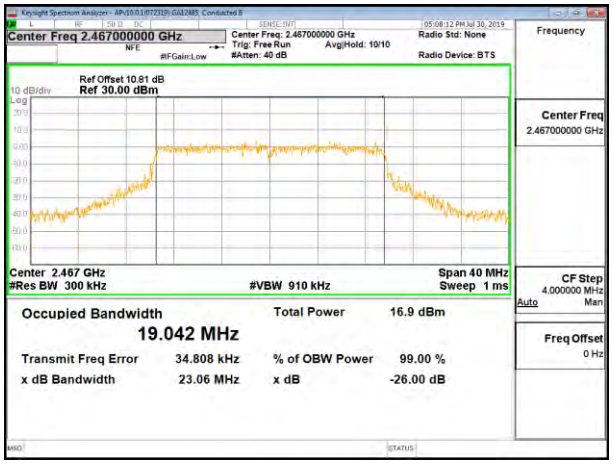


HIGH CHANNEL 11 CHAIN 1

HIGH CHANNEL 12



HIGH CHANNEL 12 CHAIN 0



HIGH CHANNEL 12 CHAIN 1

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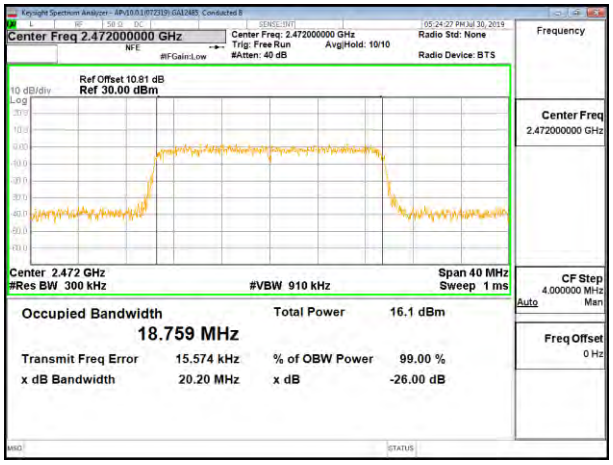
HIGH CHANNEL 13

HIGH CHANNEL 13 CHAIN 0



HIGH CHANNEL 13 CHAIN 1

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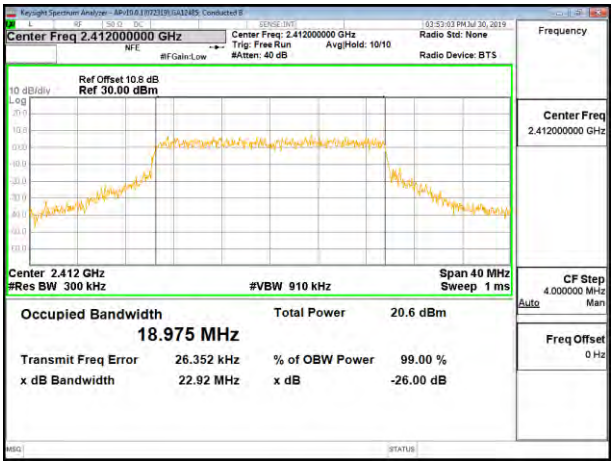
2TX Antenna 1 + Antenna 2 OFDMA MODE – 242-Tones, RU Index 61

Channel	Frequency (MHz)	99% Bandwidth Chain 0 (MHz)	99% Bandwidth Chain 1 (MHz)
Low 1	2412	18.975	18.953
Low 2	2417	19.036	19.044
Mid 6	2437	19.124	19.061
High 10	2457	19.124	18.965
High 11	2462	18.974	18.981
High 12	2467	19.012	18.987
High 13	2472	18.809	18.609

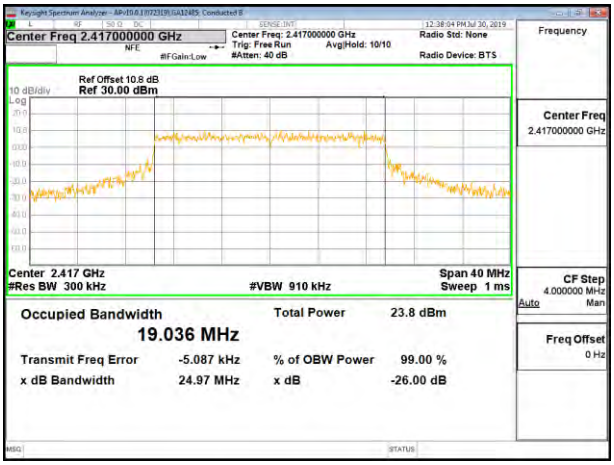
LOW CHANNEL 1



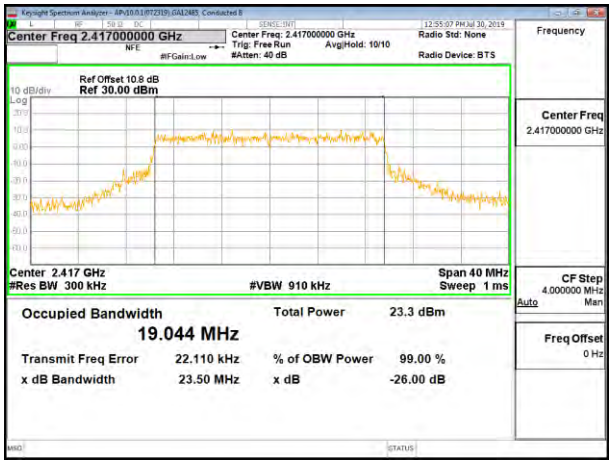
LOW CHANNEL 1 CHAIN 0

LOW CHANNEL 1 CHAIN 1

LOW CHANNEL 2



LOW CHANNEL 2 CHAIN 0



LOW CHANNEL 2 CHAIN 1

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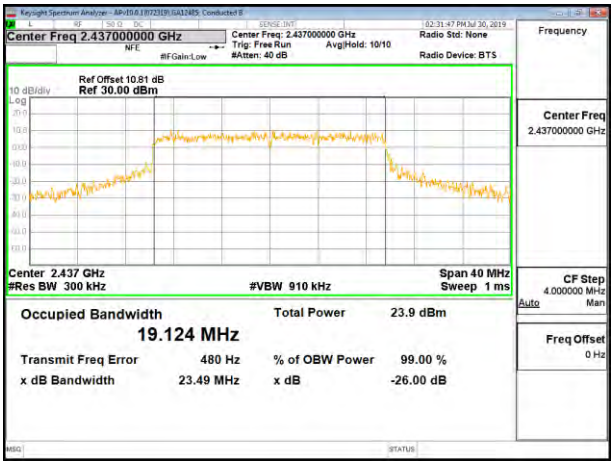
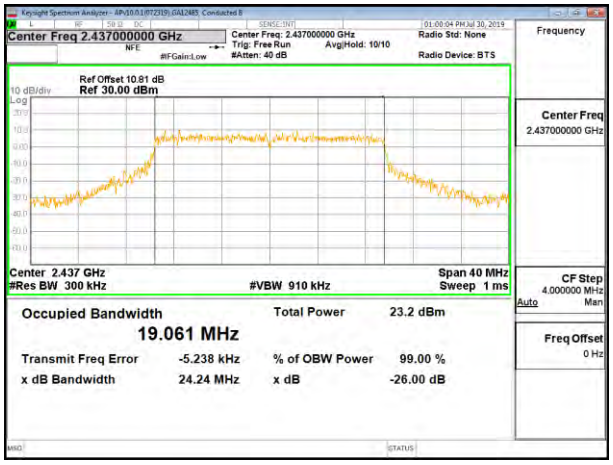
MID CHANNEL 6



MID CHANNEL 6 CHAIN 0



MID CHANNEL 6 CHAIN 1

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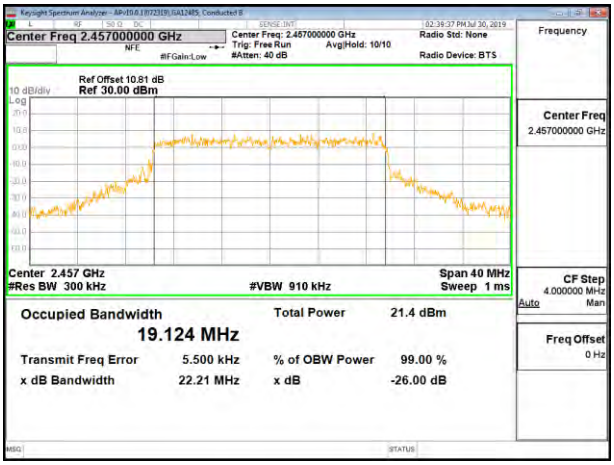
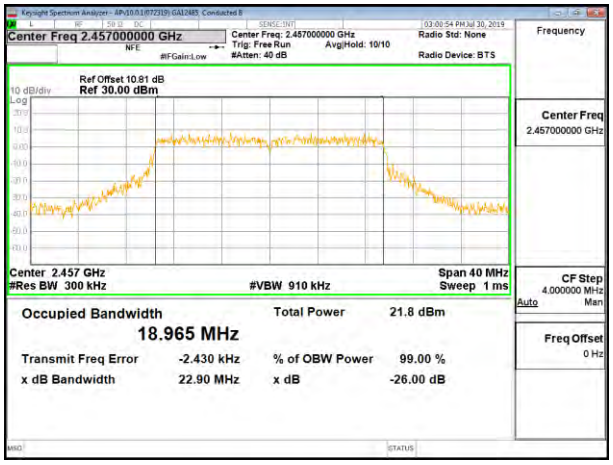
HIGH CHANNEL 10

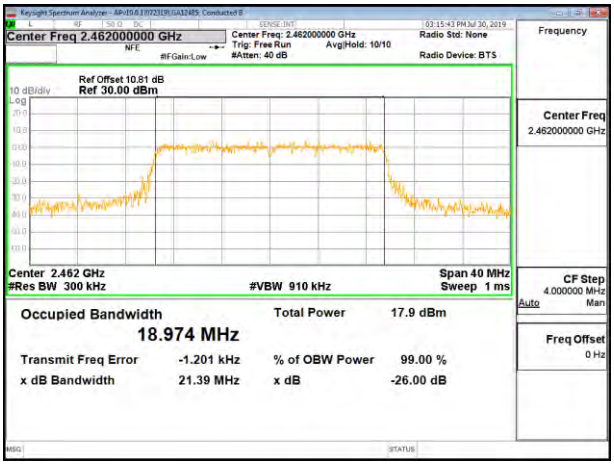


HIGH CHANNEL 10 CHAIN 0



HIGH CHANNEL 10 CHAIN 1

HIGH CHANNEL 11



HIGH CHANNEL 11 CHAIN 0

HIGH CHANNEL 11 CHAIN 1

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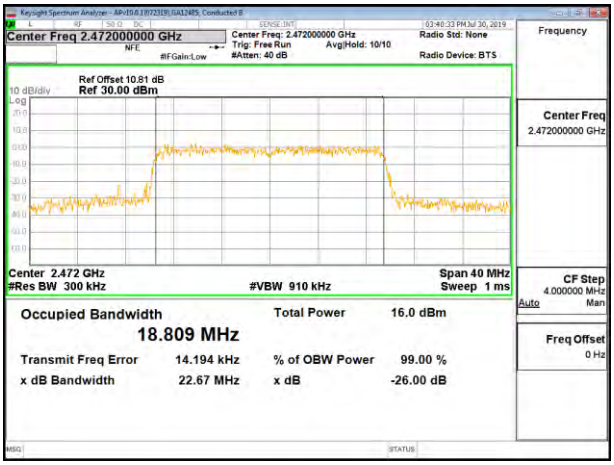
HIGH CHANNEL 12

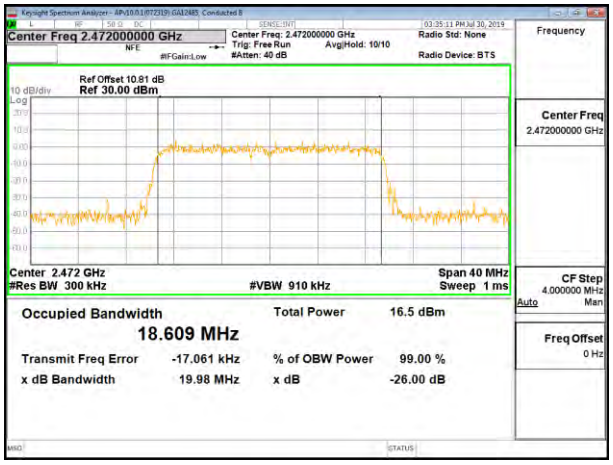
HIGH CHANNEL 12 CHAIN 0

HIGH CHANNEL 12 CHAIN 1

HIGH CHANNEL 13



HIGH CHANNEL 13 CHAIN 0



HIGH CHANNEL 13 CHAIN 1

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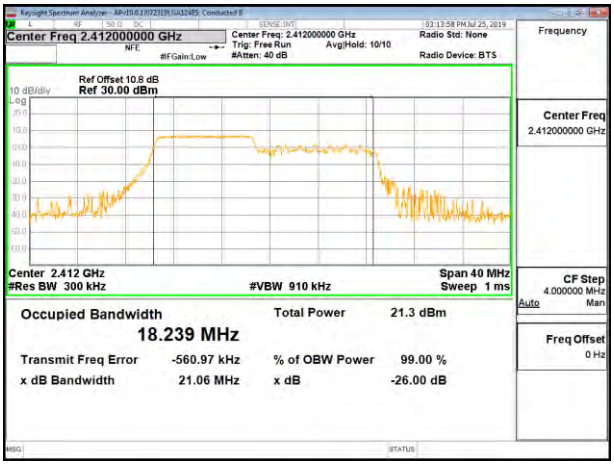
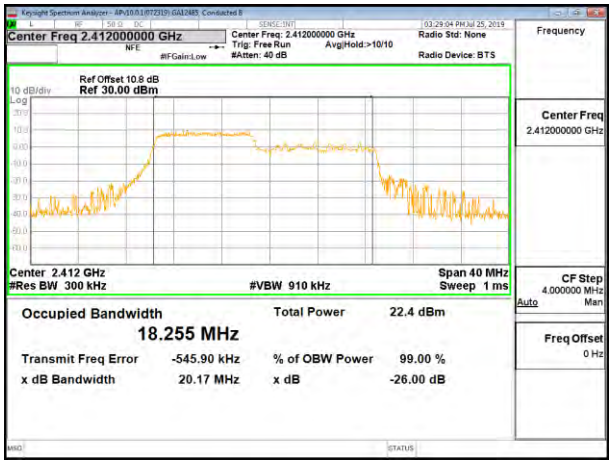
2TX Antenna 1 + Antenna 2 OFDMA MODE – 106-Tones, RU Index 53

Channel	Frequency (MHz)	99% Bandwidth Chain 0 (MHz)	99% Bandwidth Chain 1 (MHz)
Low 1	2412	18.239	18.255
Low 2	2417	18.358	18.290
Mid 6	2437	18.371	18.366
High 10	2457	18.225	18.293
High 11	2462	18.200	18.261
High 12	2467	18.210	18.272
High 13	2472	17.992	17.932

LOW CHANNEL 1

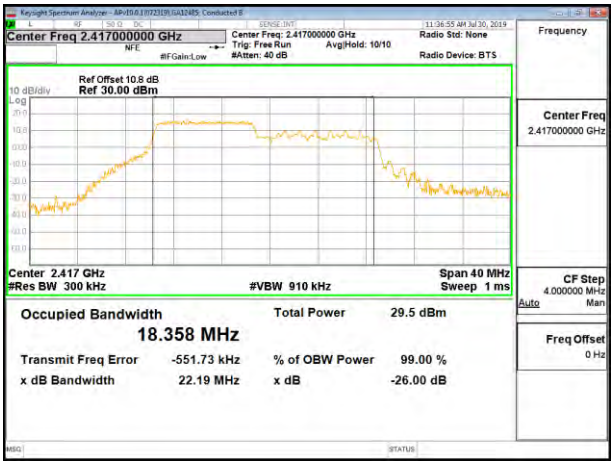


LOW CHANNEL 1 CHAIN 0

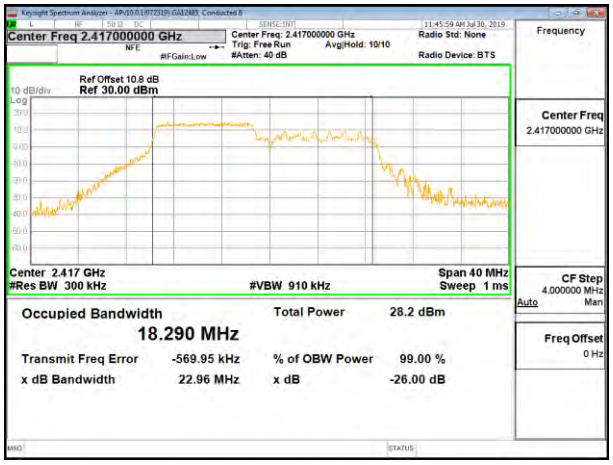


LOW CHANNEL 1 CHAIN 1

LOW CHANNEL 2



LOW CHANNEL 2 CHAIN 0



LOW CHANNEL 2 CHAIN 1

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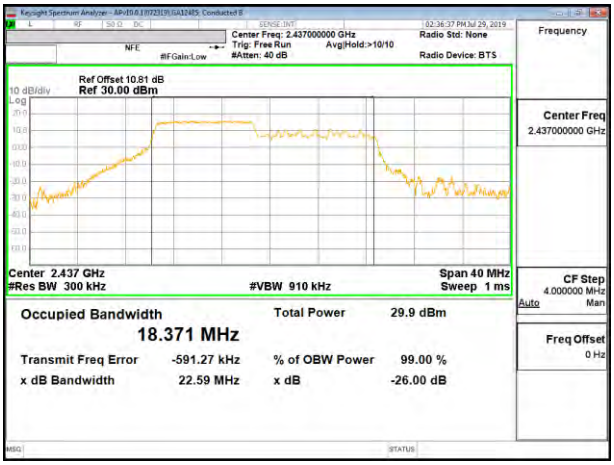
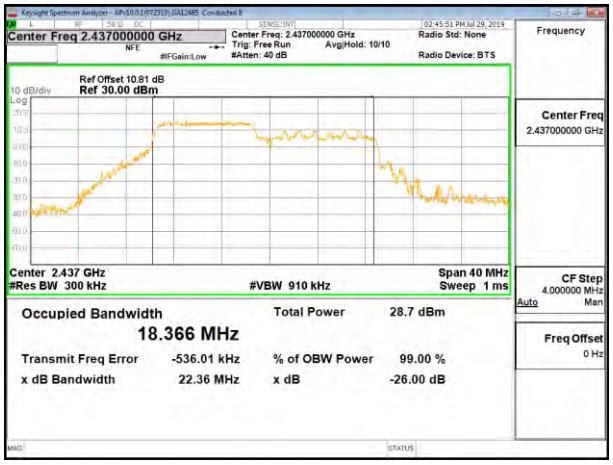
MID CHANNEL 6

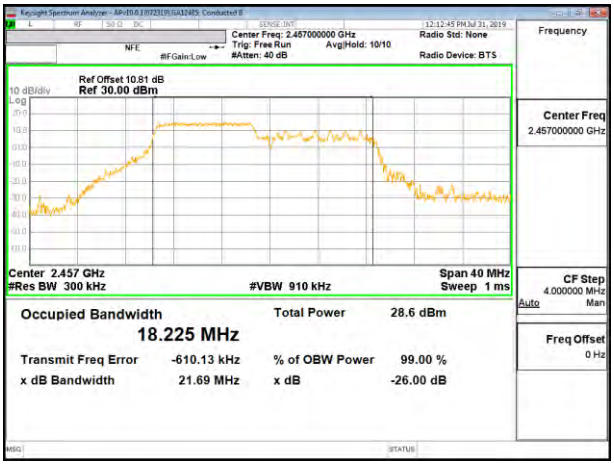


MID CHANNEL 6 CHAIN 0

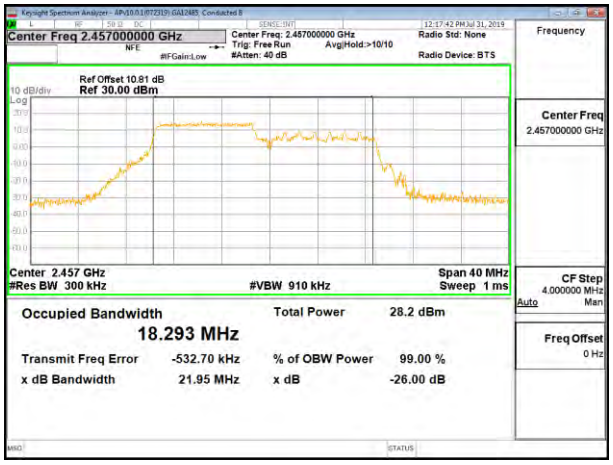


MID CHANNEL 6 CHAIN 1

HIGH CHANNEL 10



HIGH CHANNEL 10 CHAIN 0



HIGH CHANNEL 10 CHAIN 1

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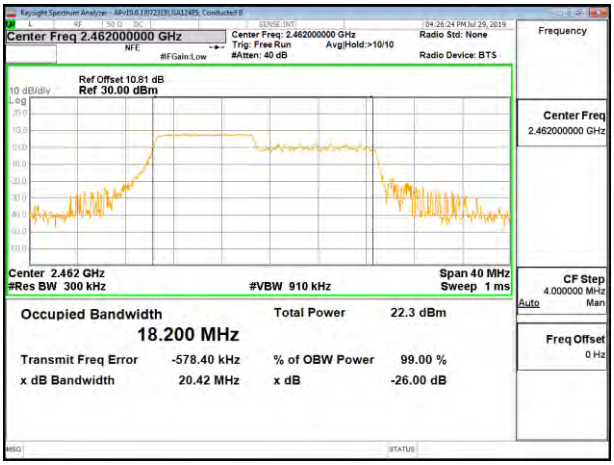
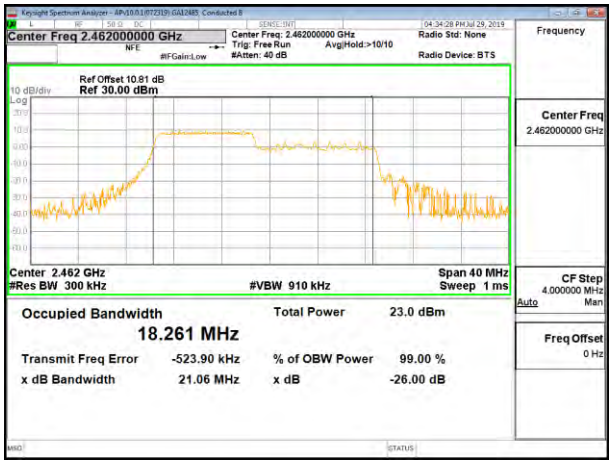
HIGH CHANNEL 11

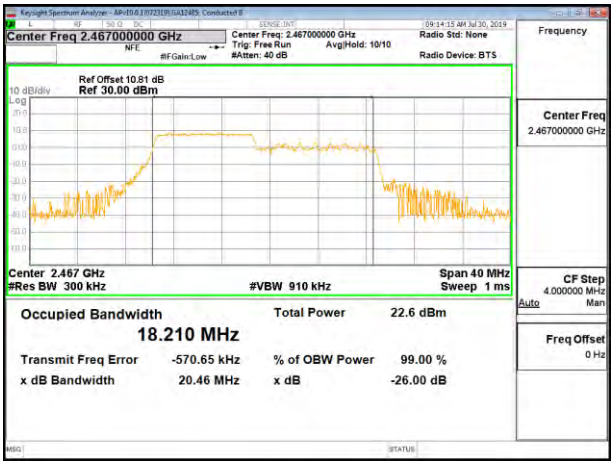


HIGH CHANNEL 11 CHAIN 0

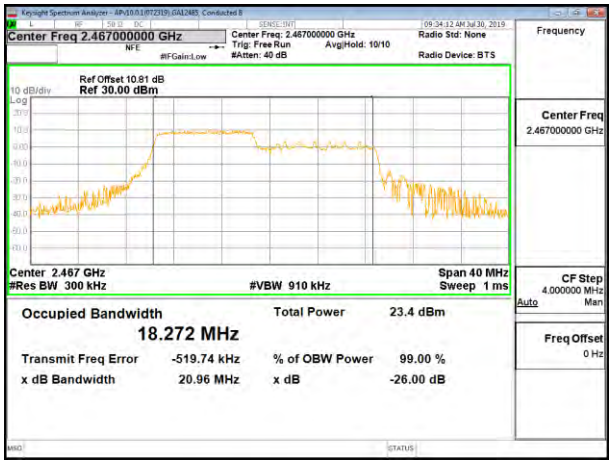


HIGH CHANNEL 11 CHAIN 1

HIGH CHANNEL 12



HIGH CHANNEL 12 CHAIN 0



HIGH CHANNEL 12 CHAIN 1

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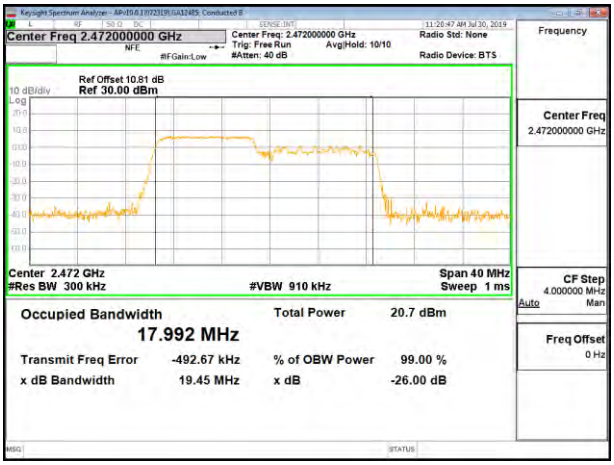
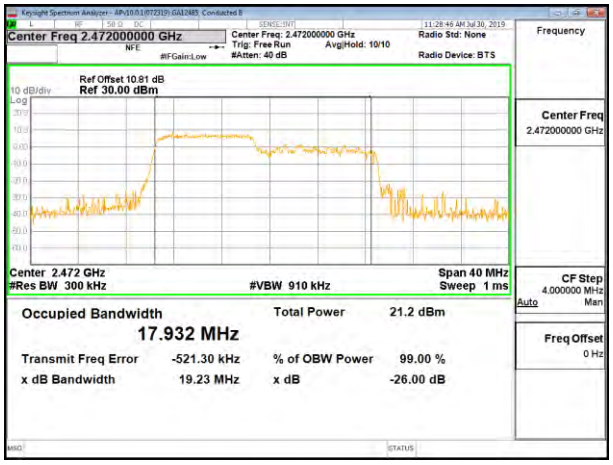
HIGH CHANNEL 13



HIGH CHANNEL 13 CHAIN 0



HIGH CHANNEL 13 CHAIN 1

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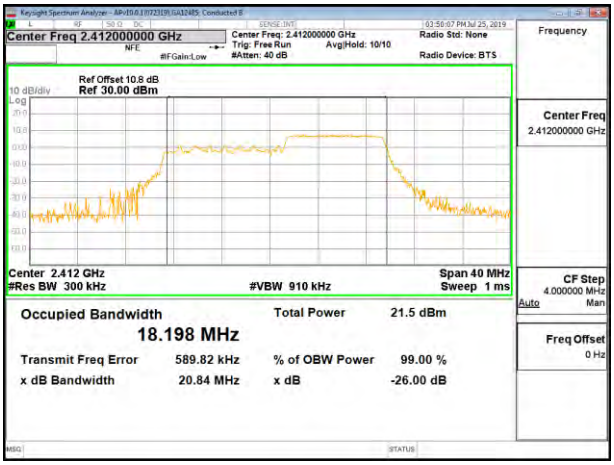
2TX Antenna 1 + Antenna 2 OFDMA MODE – 106-Tones, RU Index 54

Channel	Frequency (MHz)	99% Bandwidth Chain 0 (MHz)	99% Bandwidth Chain 1 (MHz)
Low 1	2412	18.198	18.174
Low 2	2417	18.301	18.355
Mid 6	2437	18.323	18.387
High 10	2457	18.270	18.363
High 11	2462	18.279	18.207
High 12	2467	17.989	18.282
High 13	2472	18.100	18.030

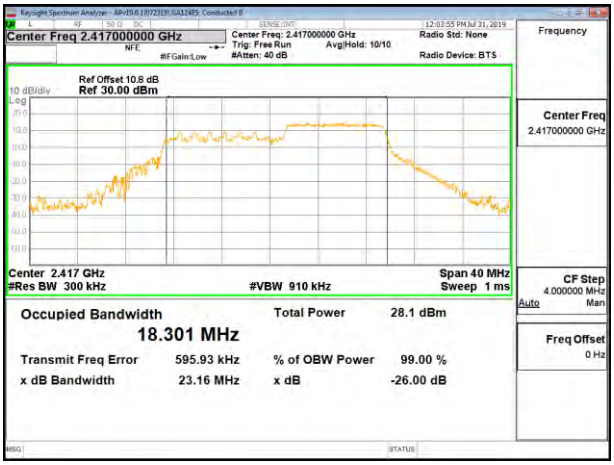
LOW CHANNEL 1



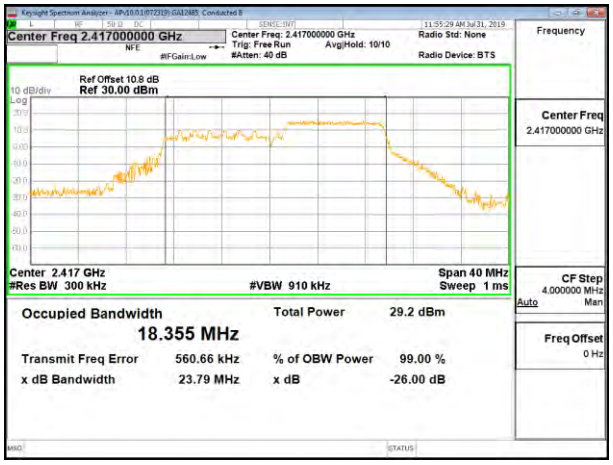
LOW CHANNEL 1 CHAIN 0

LOW CHANNEL 1 CHAIN 1

LOW CHANNEL 2



LOW CHANNEL 2 CHAIN 0



LOW CHANNEL 2 CHAIN 1

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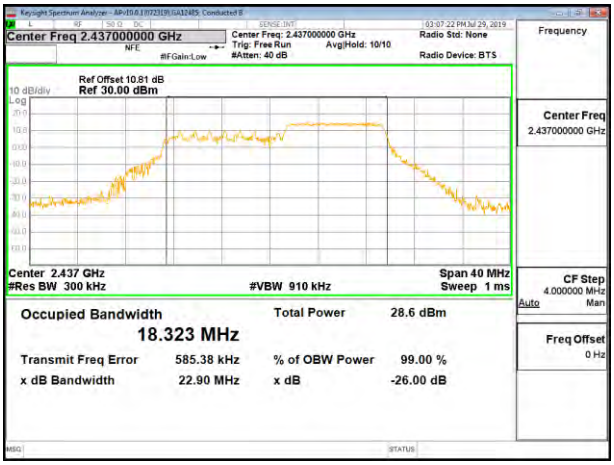
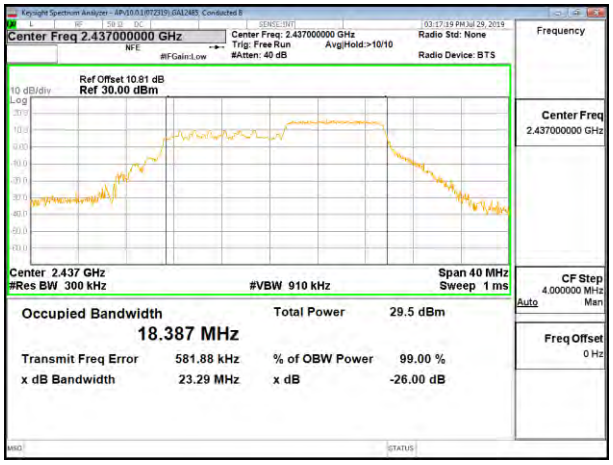
MID CHANNEL 6

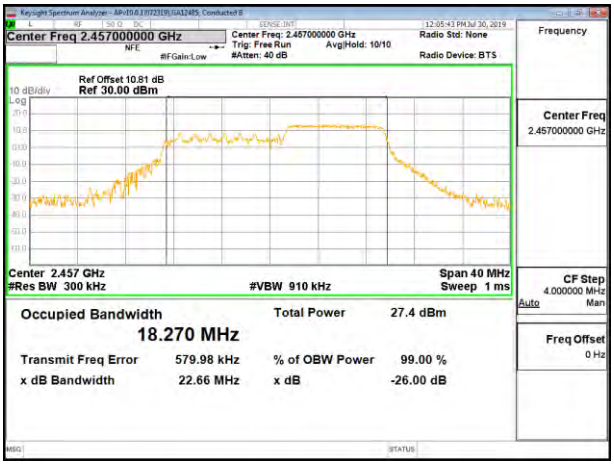


MID CHANNEL 6 CHAIN 0

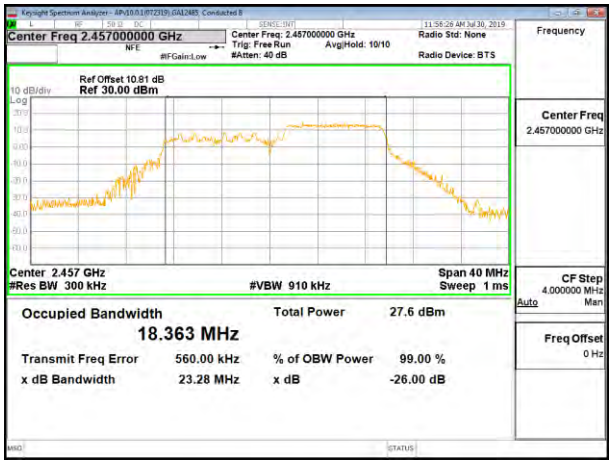


MID CHANNEL 6 CHAIN 1

HIGH CHANNEL 10



HIGH CHANNEL 10 CHAIN 0



HIGH CHANNEL 10 CHAIN 1

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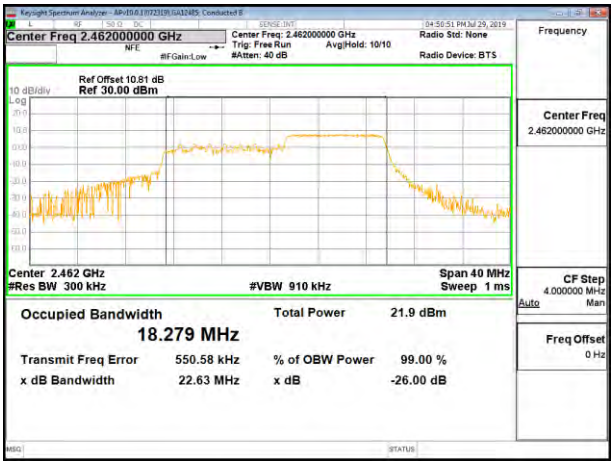
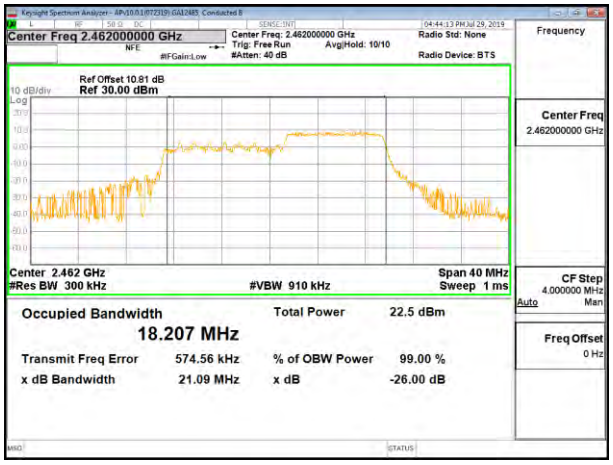
HIGH CHANNEL 11

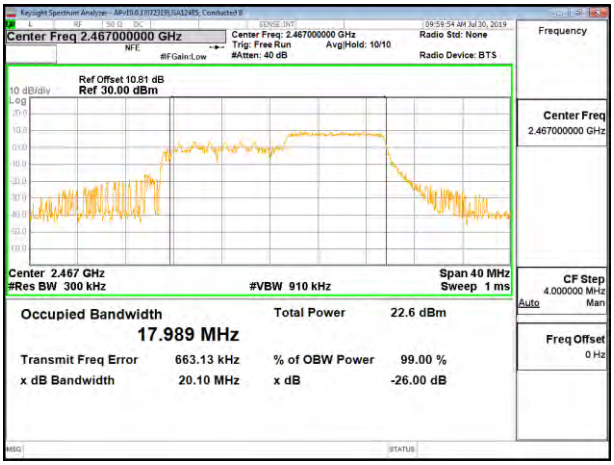


HIGH CHANNEL 11 CHAIN 0

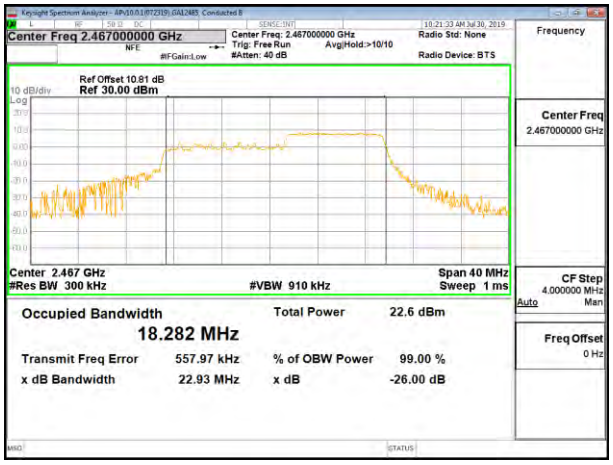


HIGH CHANNEL 11 CHAIN 1

HIGH CHANNEL 12



HIGH CHANNEL 12 CHAIN 0



HIGH CHANNEL 12 CHAIN 1

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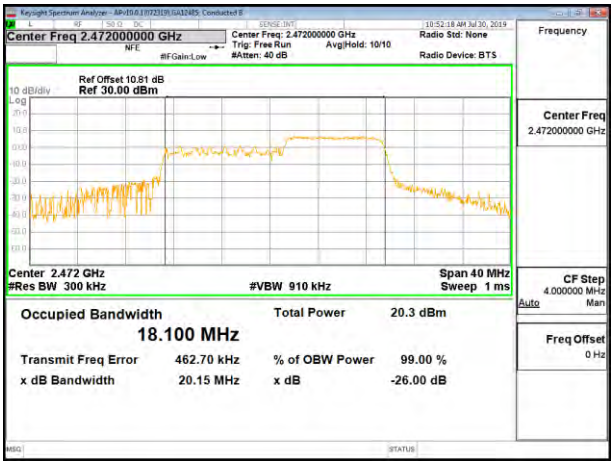
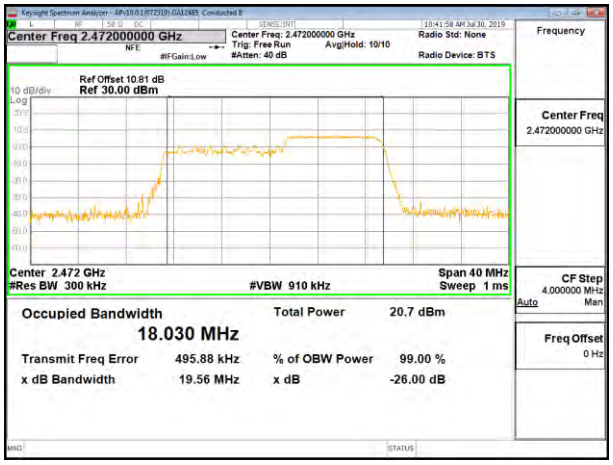
HIGH CHANNEL 13



HIGH CHANNEL 13 CHAIN 0



HIGH CHANNEL 13 CHAIN 1

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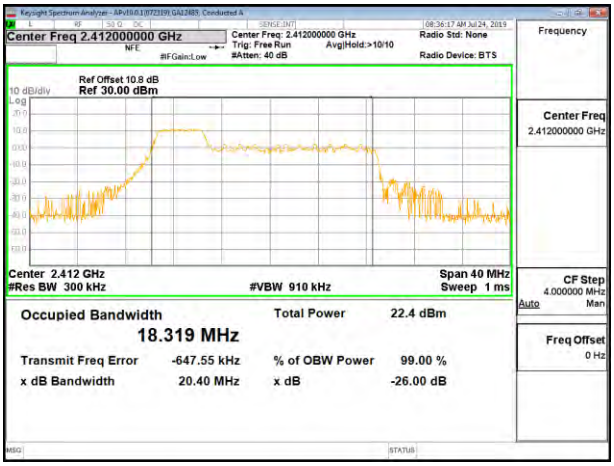
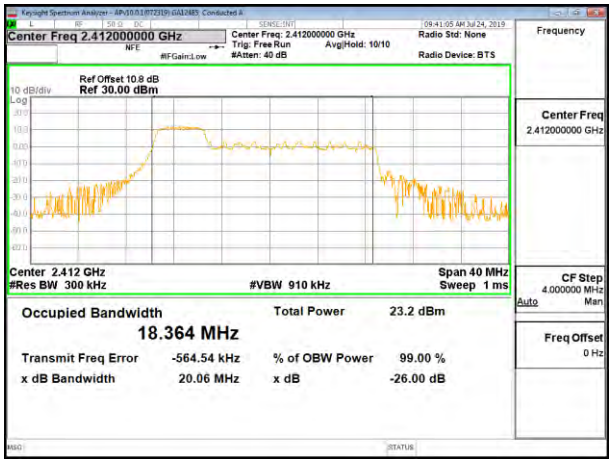
2TX Antenna 1 + Antenna 2 OFDMA MODE – 52-Tones, RU Index 37

Channel	Frequency (MHz)	99% Bandwidth Chain 0 (MHz)	99% Bandwidth Chain 1 (MHz)
Low 1	2412	18.319	18.364
Low 2	2417	18.495	18.461
Mid 6	2437	18.453	18.515
High 10	2457	18.351	18.493
High 11	2462	18.334	18.344
High 12	2467	18.300	18.315
High 13	2472	17.978	18.067

LOW CHANNEL 1

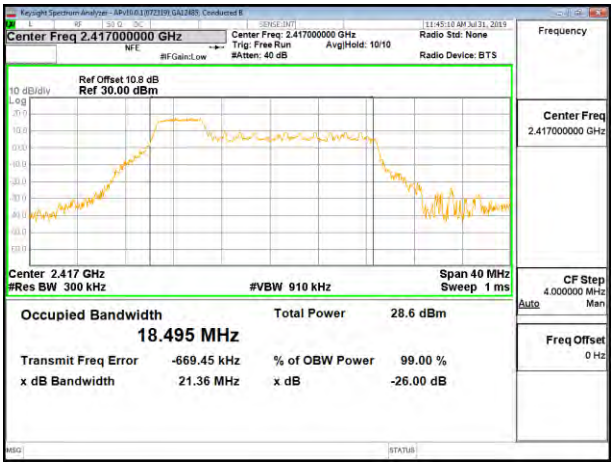


LOW CHANNEL 1 CHAIN 0

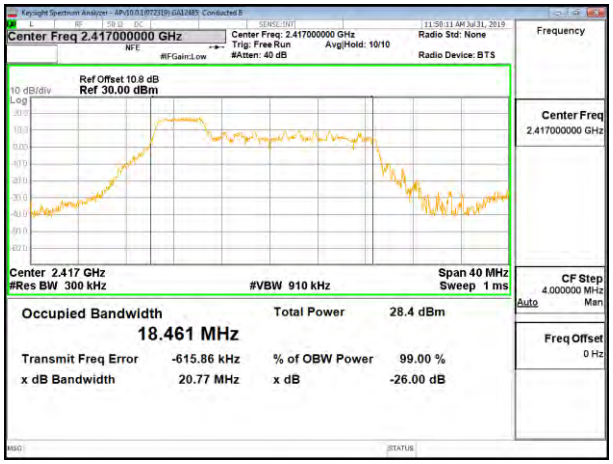


LOW CHANNEL 1 CHAIN 1

LOW CHANNEL 2



LOW CHANNEL 2 CHAIN 0



LOW CHANNEL 2 CHAIN 1

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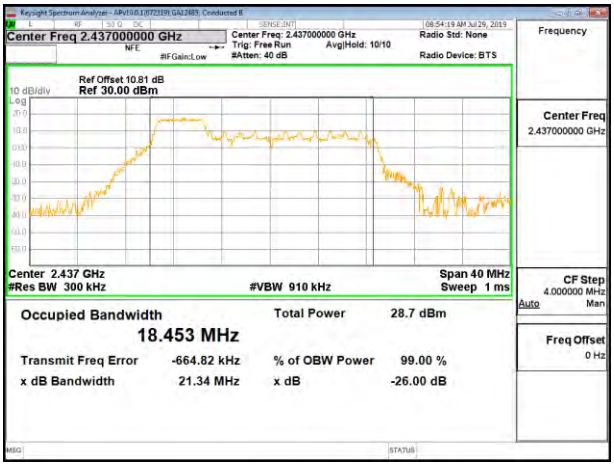
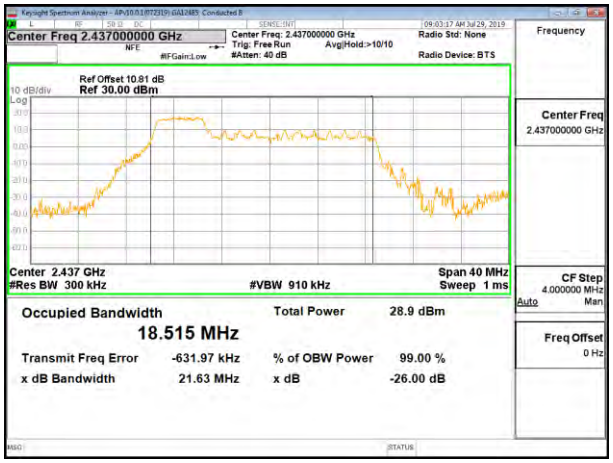
MID CHANNEL 6



MID CHANNEL 6 CHAIN 0



MID CHANNEL 6 CHAIN 1

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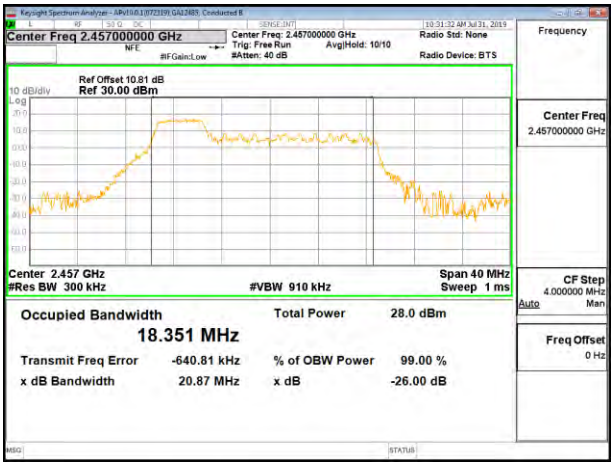
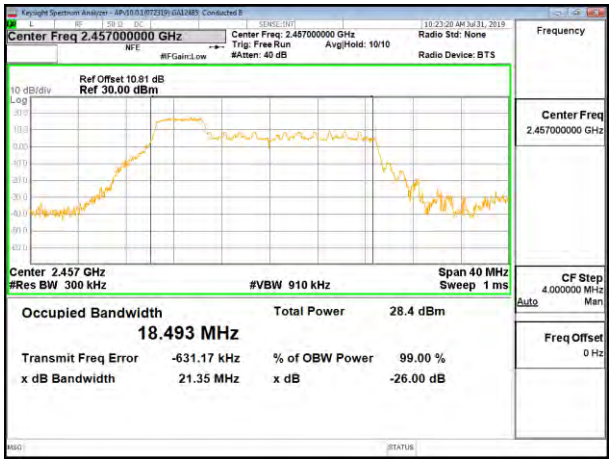
HIGH CHANNEL 10

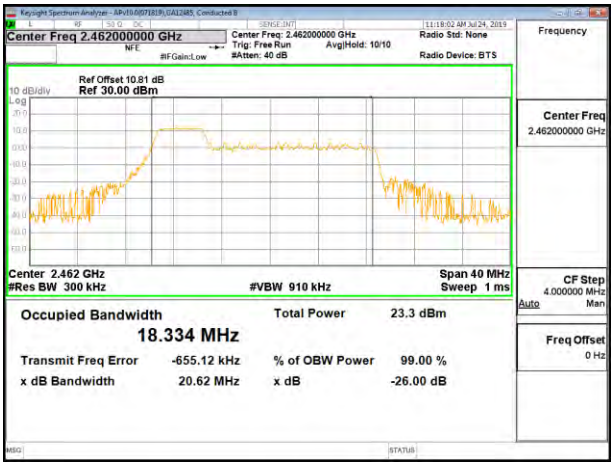


HIGH CHANNEL 10 CHAIN 0

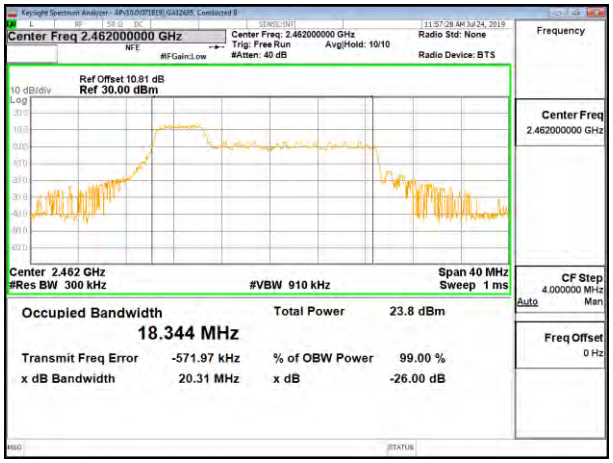


HIGH CHANNEL 10 CHAIN 1

HIGH CHANNEL 11



HIGH CHANNEL 11 CHAIN 0



HIGH CHANNEL 11 CHAIN 1

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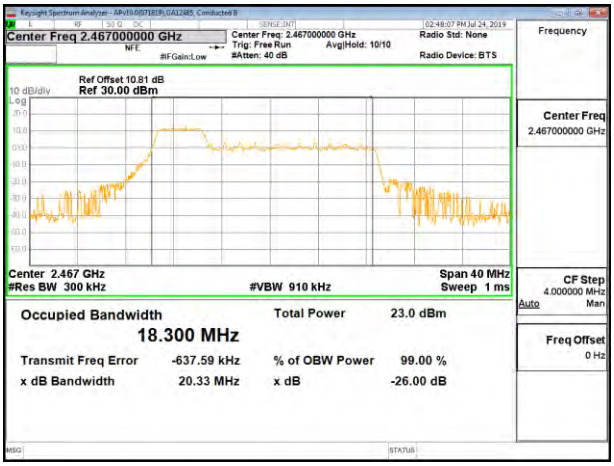
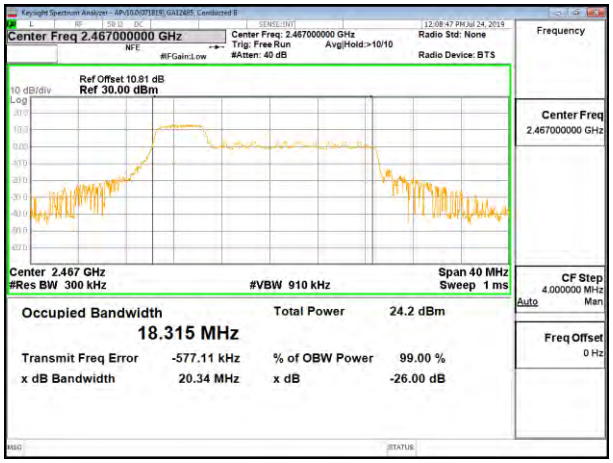
HIGH CHANNEL 12

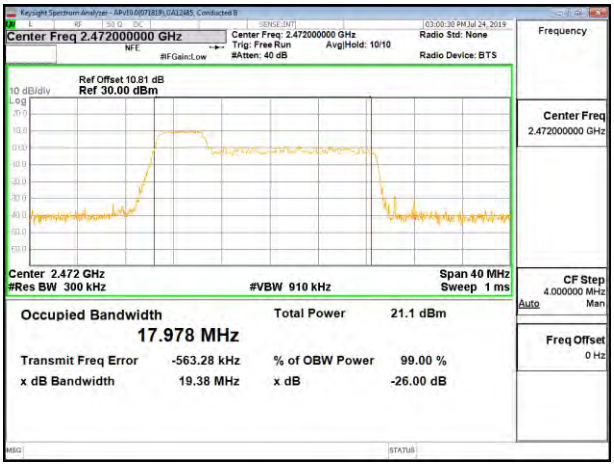


HIGH CHANNEL 12 CHAIN 0

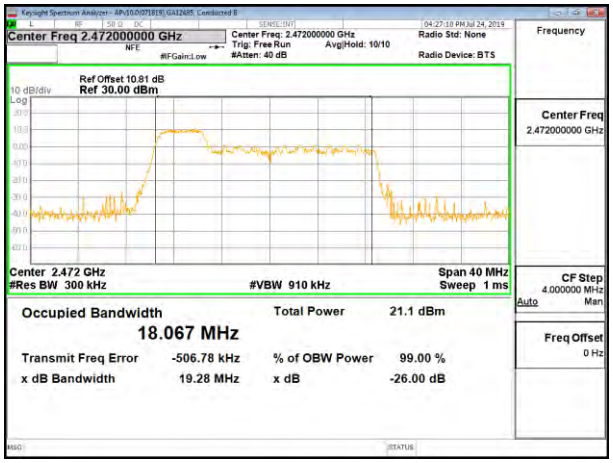


HIGH CHANNEL 12 CHAIN 1

HIGH CHANNEL 13



HIGH CHANNEL 13 CHAIN 0



HIGH CHANNEL 13 CHAIN 1

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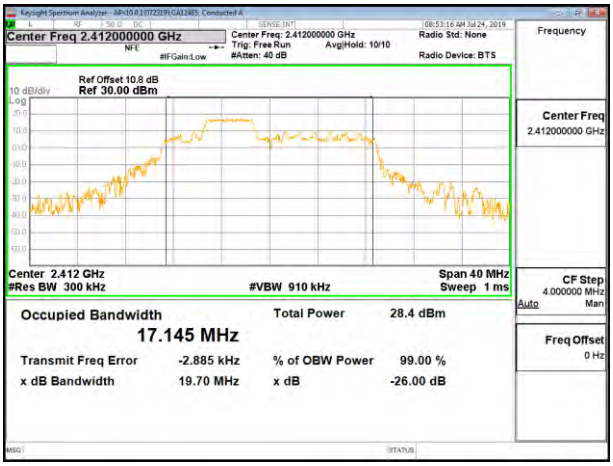
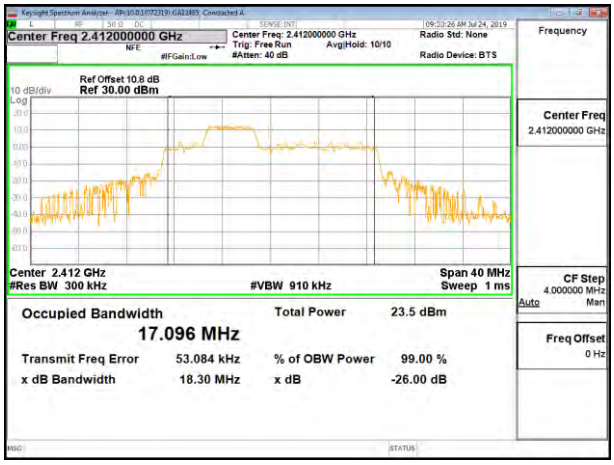
2TX Antenna 1 + Antenna 2 OFDMA MODE – 52-Tones, RU Index 38

Channel	Frequency (MHz)	99% Bandwidth Chain 0 (MHz)	99% Bandwidth Chain 1 (MHz)
Low 1	2412	17.145	17.096
Low 2	2417	17.140	17.202
Mid 6	2437	17.111	17.208
High 10	2457	17.129	17.174
High 11	2462	17.018	17.119
High 12	2467	17.004	17.153
High 13	2472	16.862	16.894

LOW CHANNEL 1

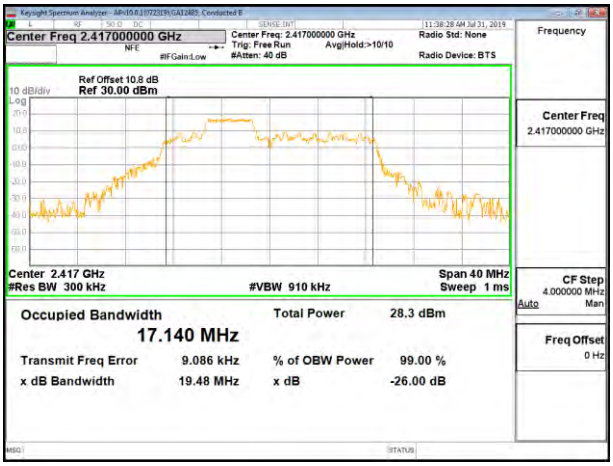


LOW CHANNEL 1 CHAIN 0

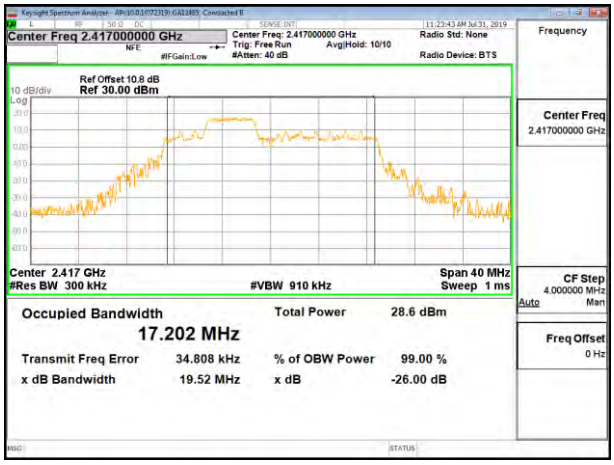


LOW CHANNEL 1 CHAIN 1

LOW CHANNEL 2



LOW CHANNEL 2 CHAIN 0



LOW CHANNEL 2 CHAIN 1

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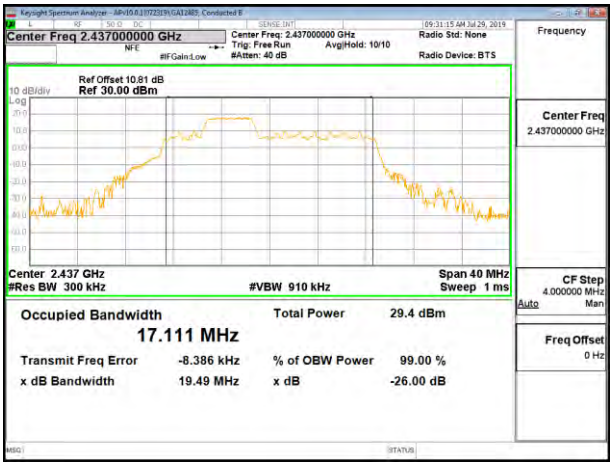
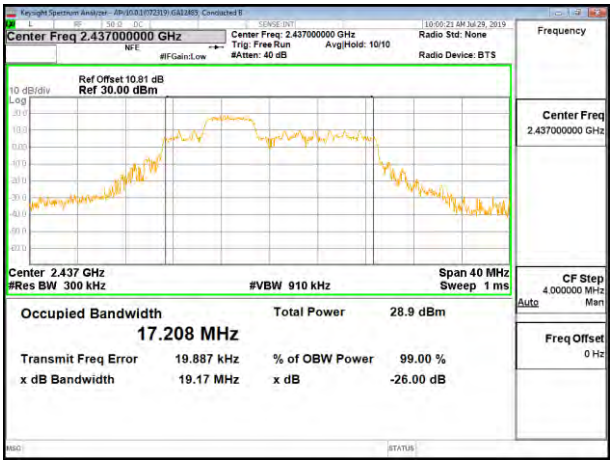
MID CHANNEL 6

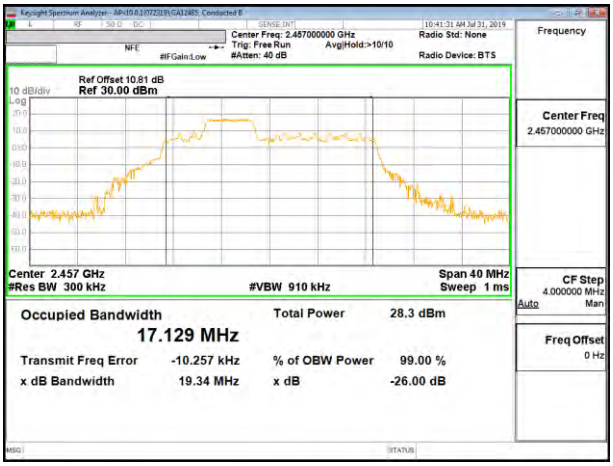


MID CHANNEL 6 CHAIN 0

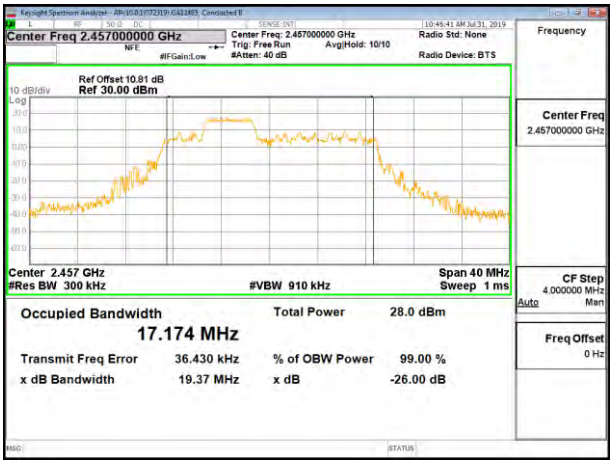


MID CHANNEL 6 CHAIN 1

HIGH CHANNEL 10



HIGH CHANNEL 10 CHAIN 0



HIGH CHANNEL 10 CHAIN 1

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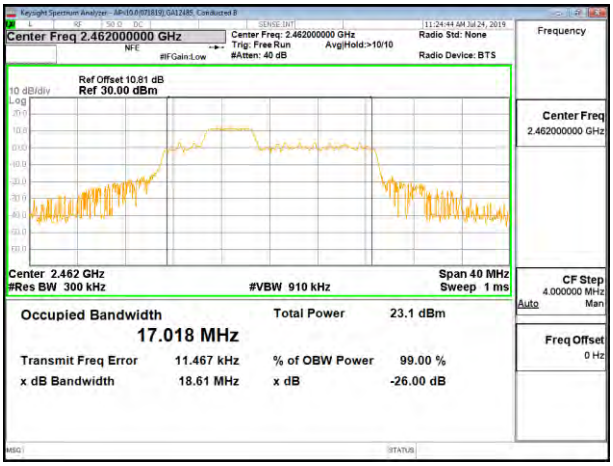
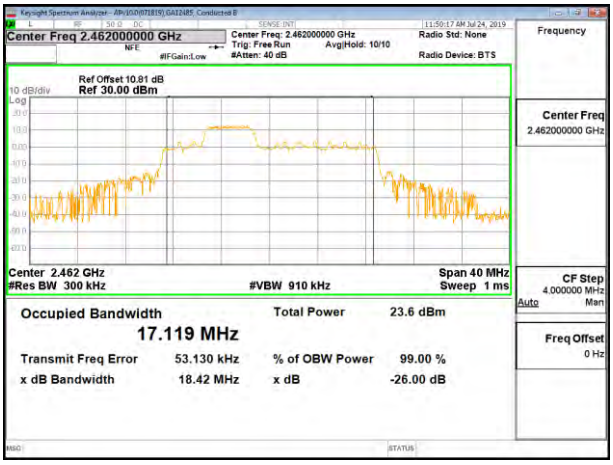
HIGH CHANNEL 11

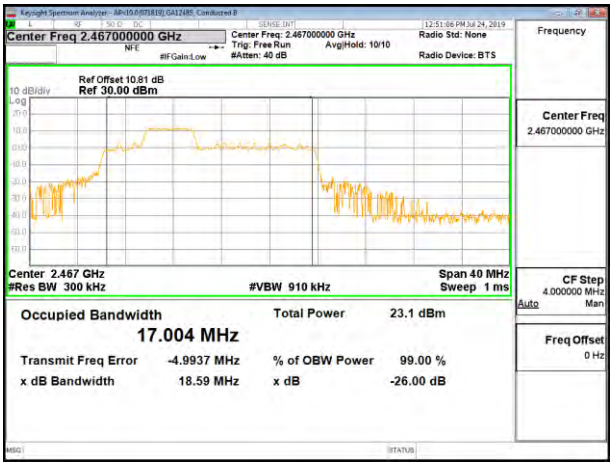


HIGH CHANNEL 11 CHAIN 0



HIGH CHANNEL 11 CHAIN 1

HIGH CHANNEL 12



HIGH CHANNEL 12 CHAIN 0

HIGH CHANNEL 12 CHAIN 1

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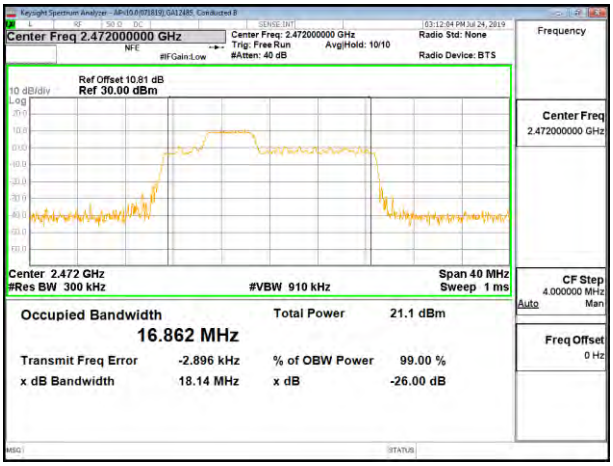
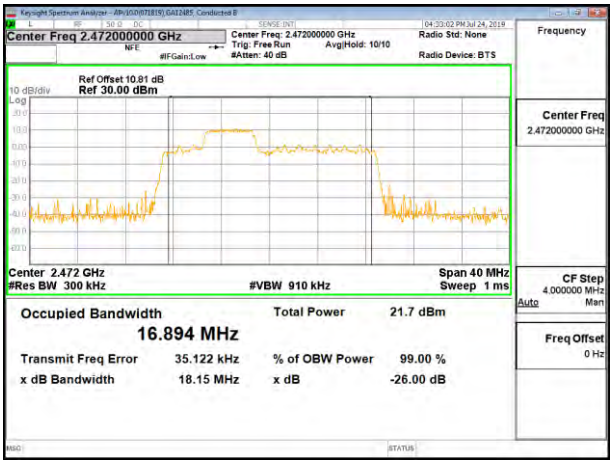
HIGH CHANNEL 13



HIGH CHANNEL 13 CHAIN 0



HIGH CHANNEL 13 CHAIN 1

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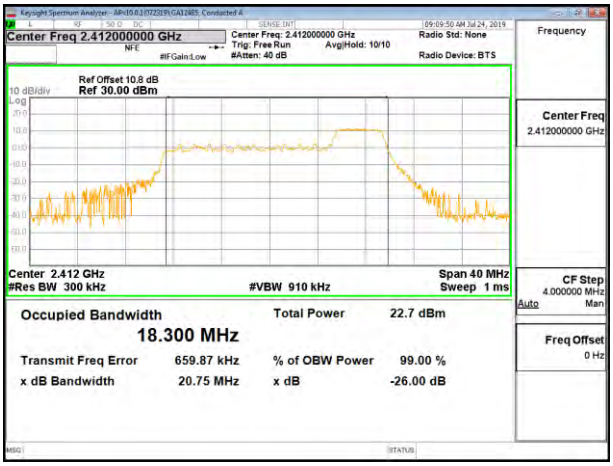
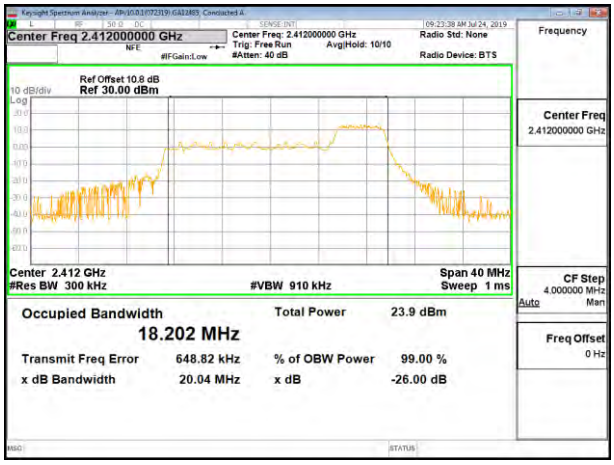
2TX Antenna 1 + Antenna 2 OFDMA MODE – 52-Tones, RU Index 40

Channel	Frequency (MHz)	99% Bandwidth Chain 0 (MHz)	99% Bandwidth Chain 1 (MHz)
Low 1	2412	18.300	18.202
Low 2	2417	18.478	18.420
Mid 6	2437	18.530	18.496
High 10	2457	18.436	18.444
High 11	2462	18.289	18.223
High 12	2467	18.375	18.244
High 13	2472	18.016	18.011

LOW CHANNEL 1

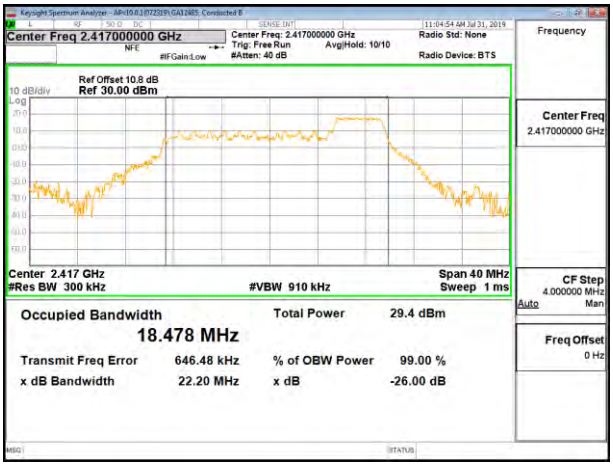


LOW CHANNEL 1 CHAIN 0

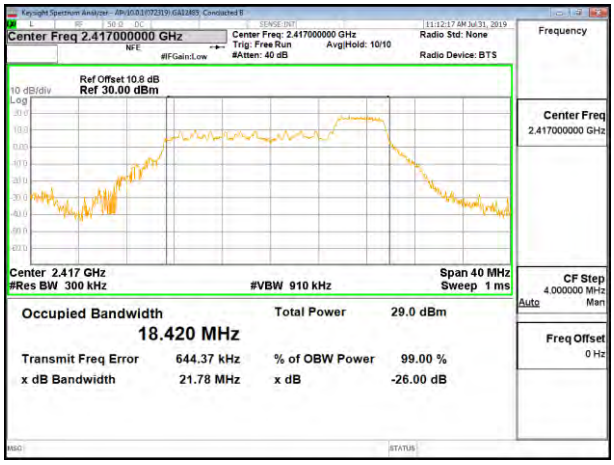


LOW CHANNEL 1 CHAIN 1

LOW CHANNEL 2



LOW CHANNEL 2 CHAIN 0



LOW CHANNEL 2 CHAIN 1

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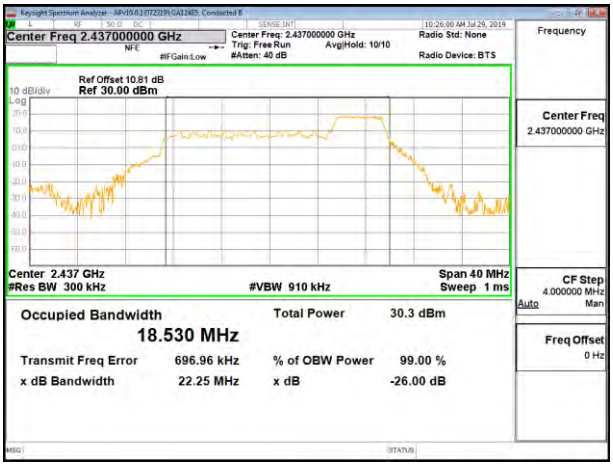
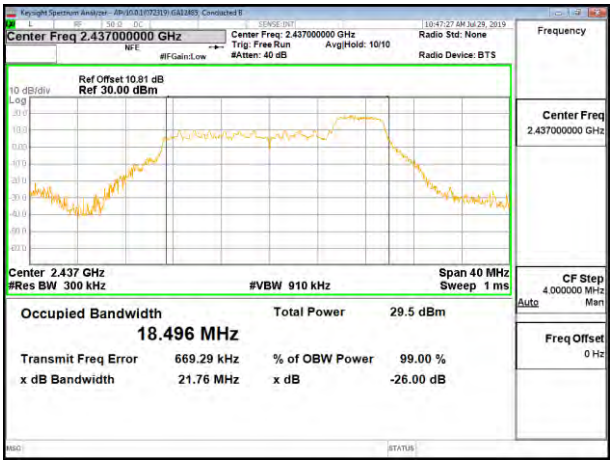
MID CHANNEL 6

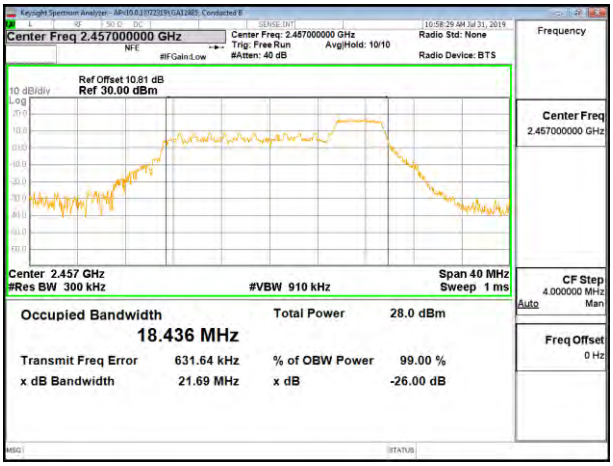


MID CHANNEL 6 CHAIN 0

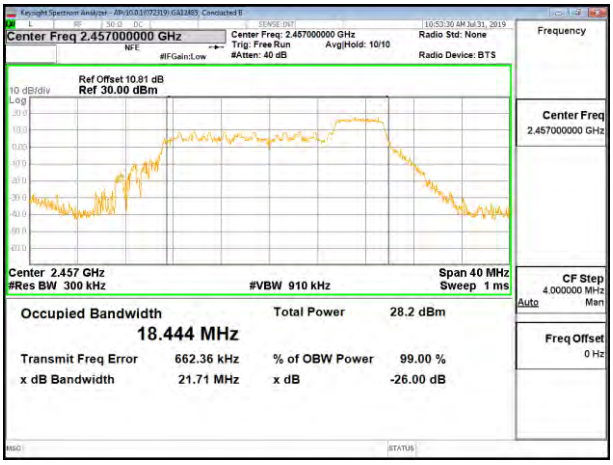


MID CHANNEL 6 CHAIN 1

HIGH CHANNEL 10



HIGH CHANNEL 10 CHAIN 0



HIGH CHANNEL 10 CHAIN 1

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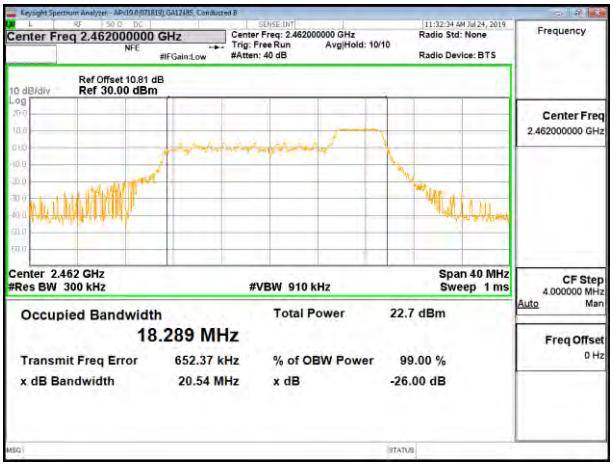
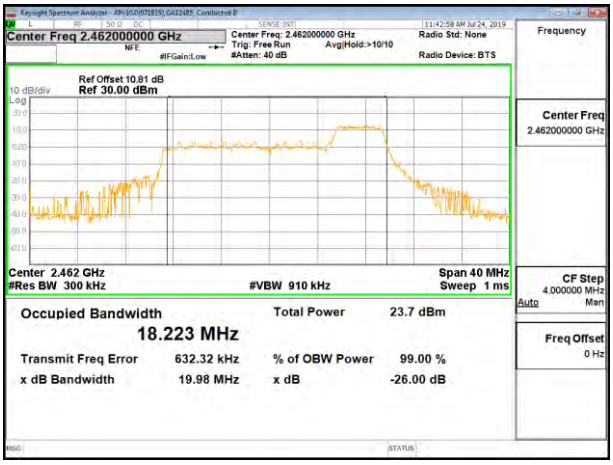
HIGH CHANNEL 11

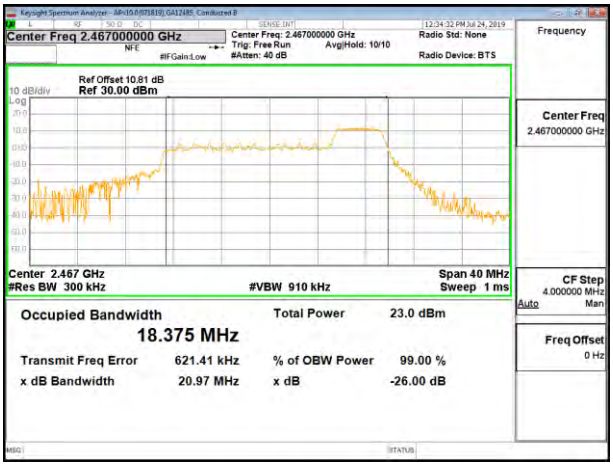


HIGH CHANNEL 11 CHAIN 0

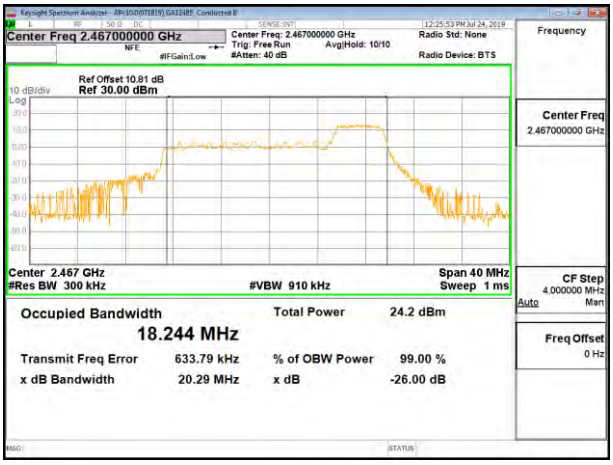


HIGH CHANNEL 11 CHAIN 1

HIGH CHANNEL 12



HIGH CHANNEL 12 CHAIN 0



HIGH CHANNEL 12 CHAIN 1

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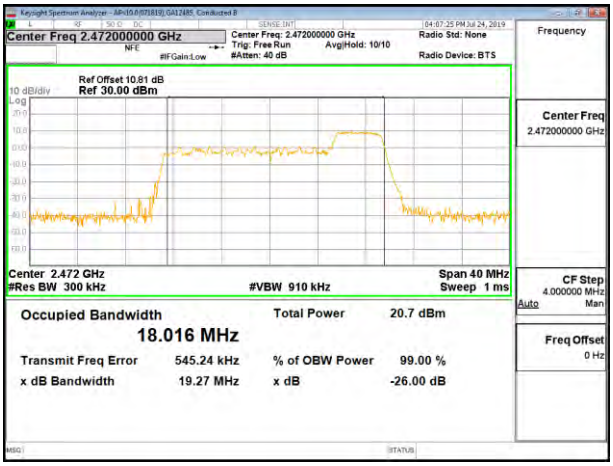
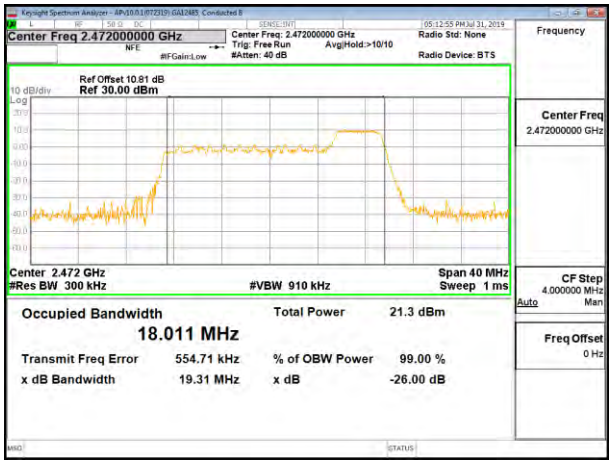
HIGH CHANNEL 13



HIGH CHANNEL 13 CHAIN 0



HIGH CHANNEL 13 CHAIN 1

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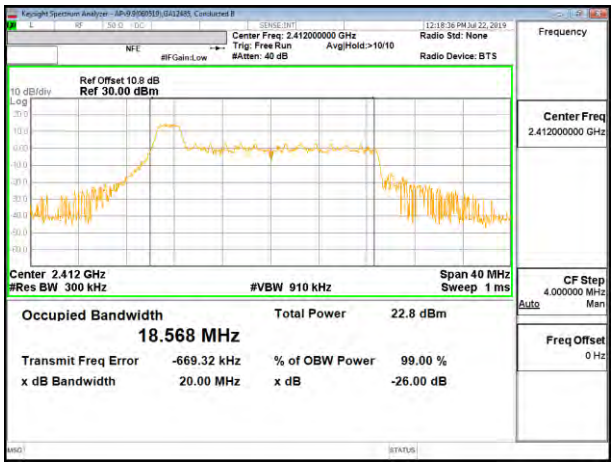
2TX Antenna 1 + Antenna 2 OFDMA MODE – 26-Tones, RU Index 0

Channel	Frequency (MHz)	99% Bandwidth Chain 0 (MHz)	99% Bandwidth Chain 1 (MHz)
Low 1	2412	18.449	18.568
Low 2	2417	18.634	18.624
Mid 6	2437	18.607	18.796
High 10	2457	18.634	18.745
High 11	2462	18.523	18.565
High 12	2467	18.480	18.528
High 13	2472	18.178	18.155

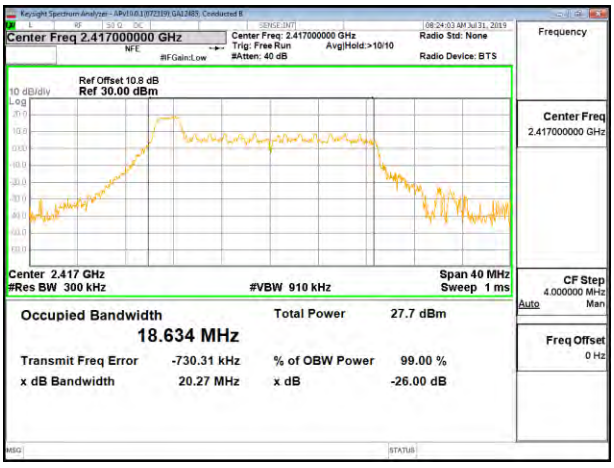
LOW CHANNEL 1

LOW CHANNEL 1 CHAIN 0

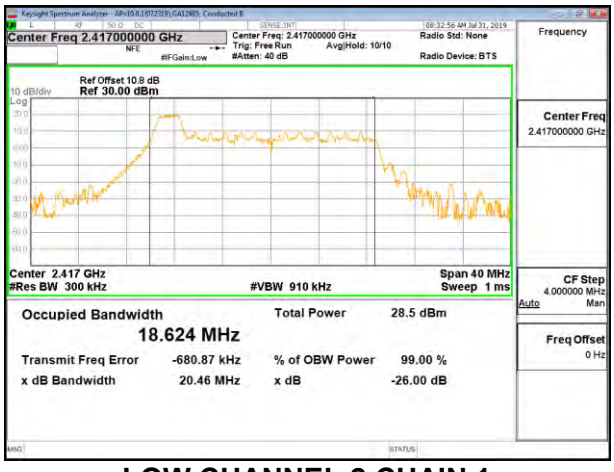


LOW CHANNEL 1 CHAIN 1

LOW CHANNEL 2



LOW CHANNEL 2 CHAIN 0



LOW CHANNEL 2 CHAIN 1

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