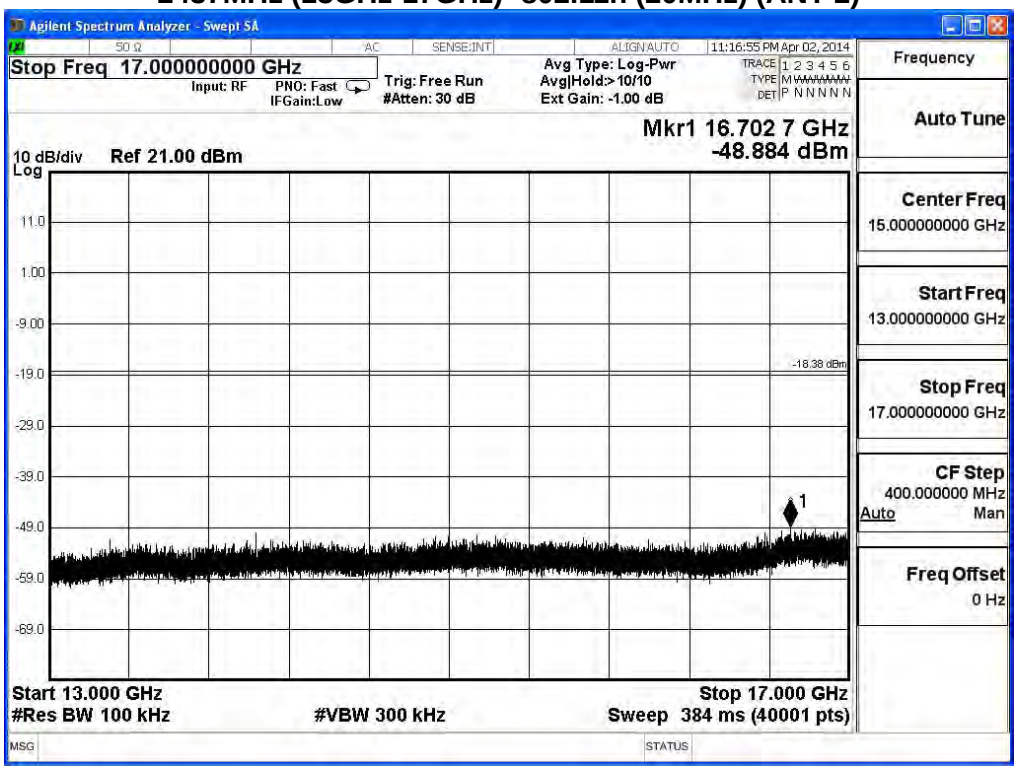
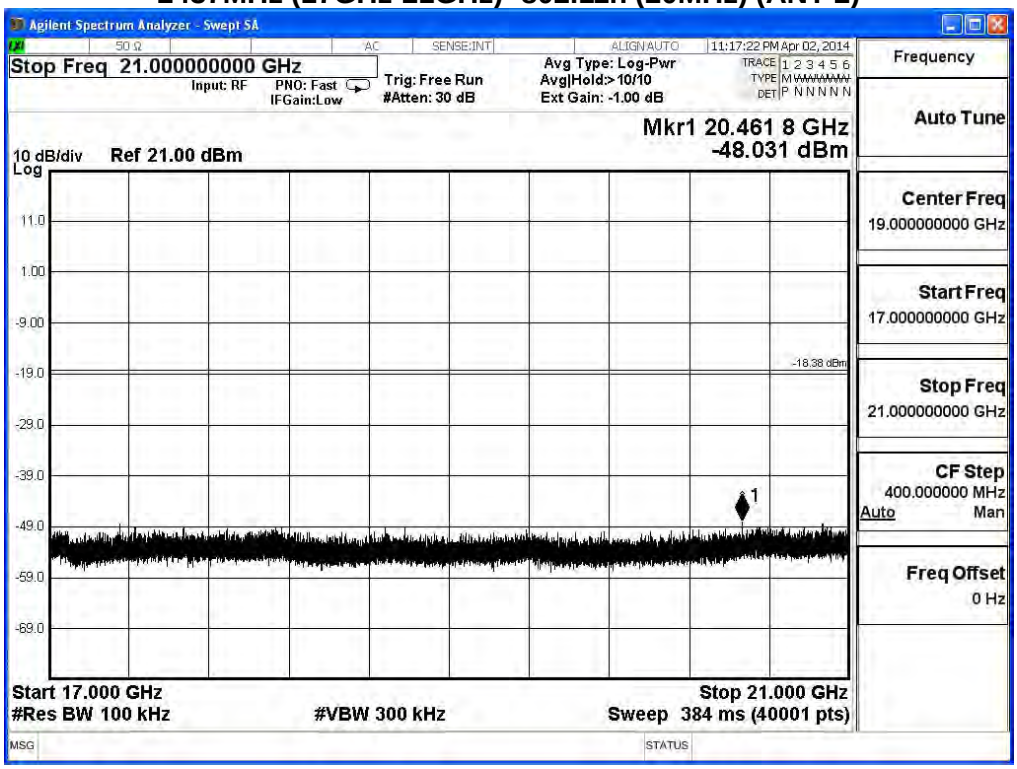
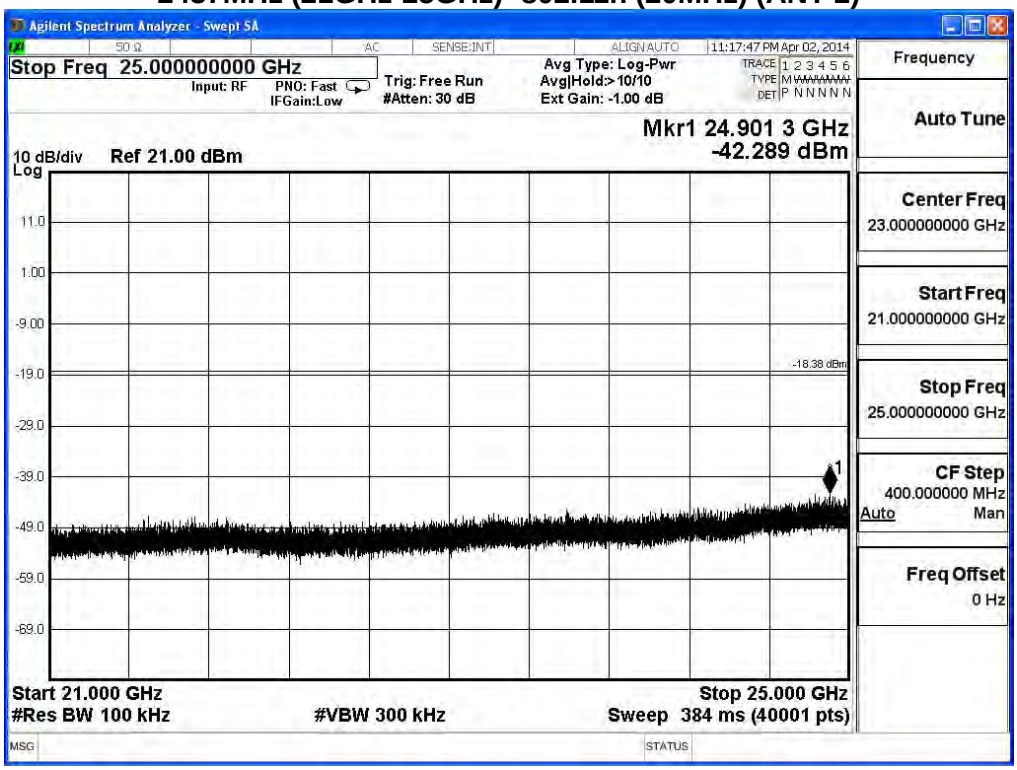
2437MHz (13GHz-17GHz) -802.11n (20MHz) (ANT 2)



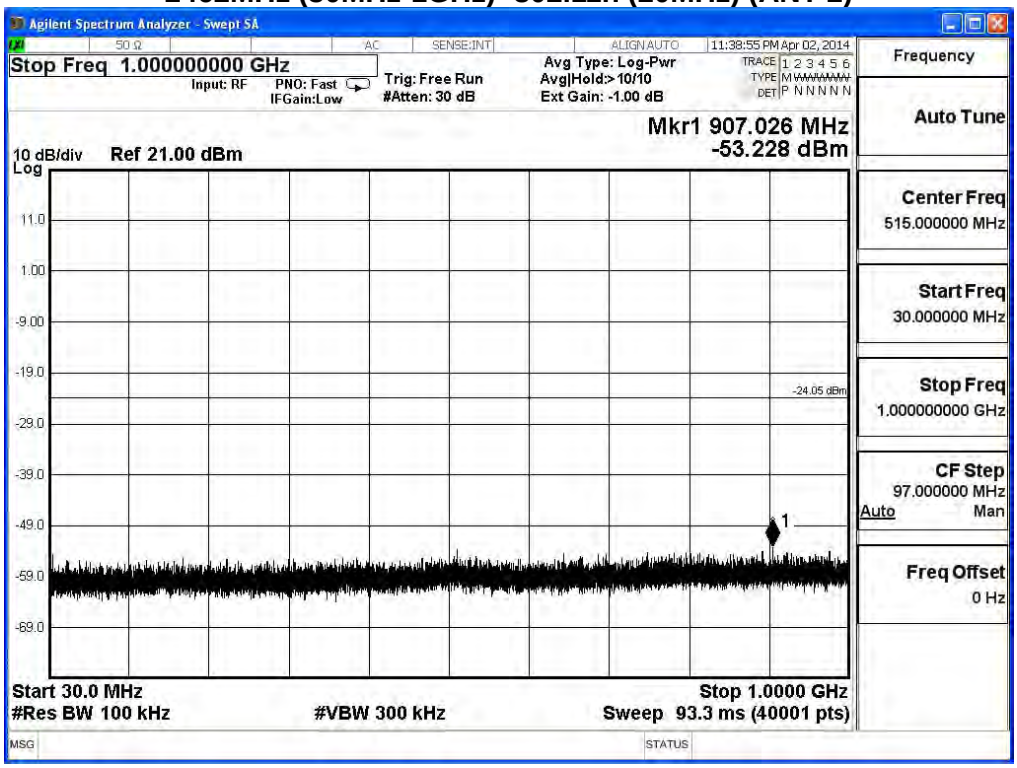
2437MHz (17GHz-21GHz) -802.11n (20MHz) (ANT 2)



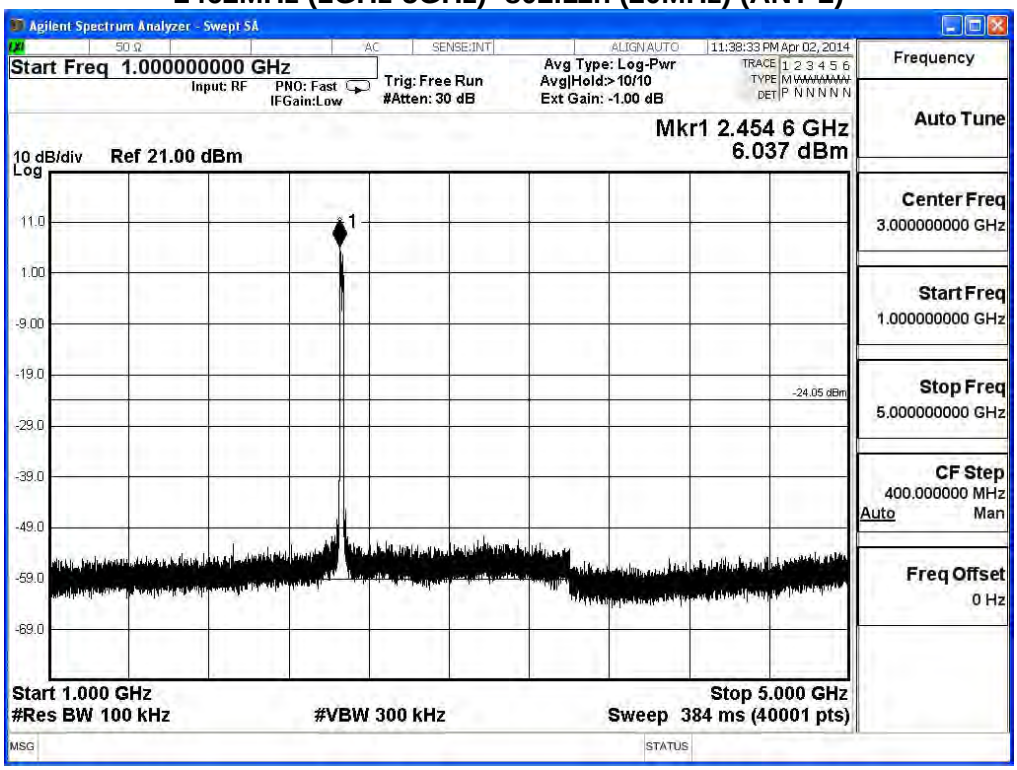
2437MHz (21GHz-25GHz) -802.11n (20MHz) (ANT 2)



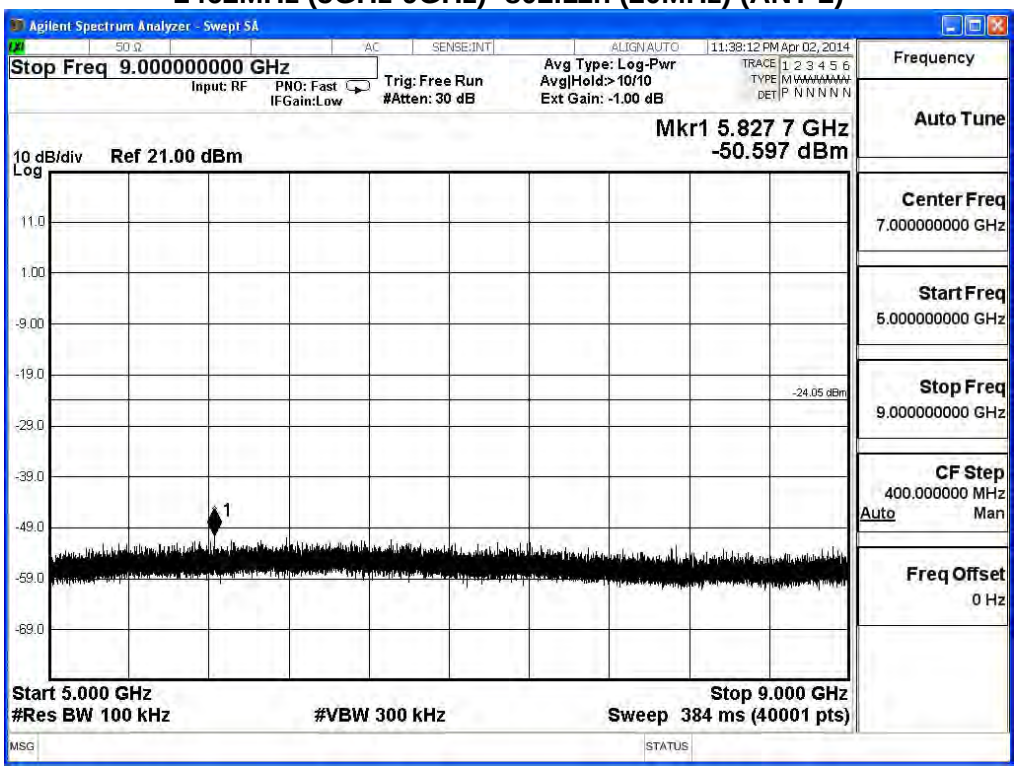
2462MHz (30MHz-1GHz)- 802.11n (20MHz) (ANT 2)



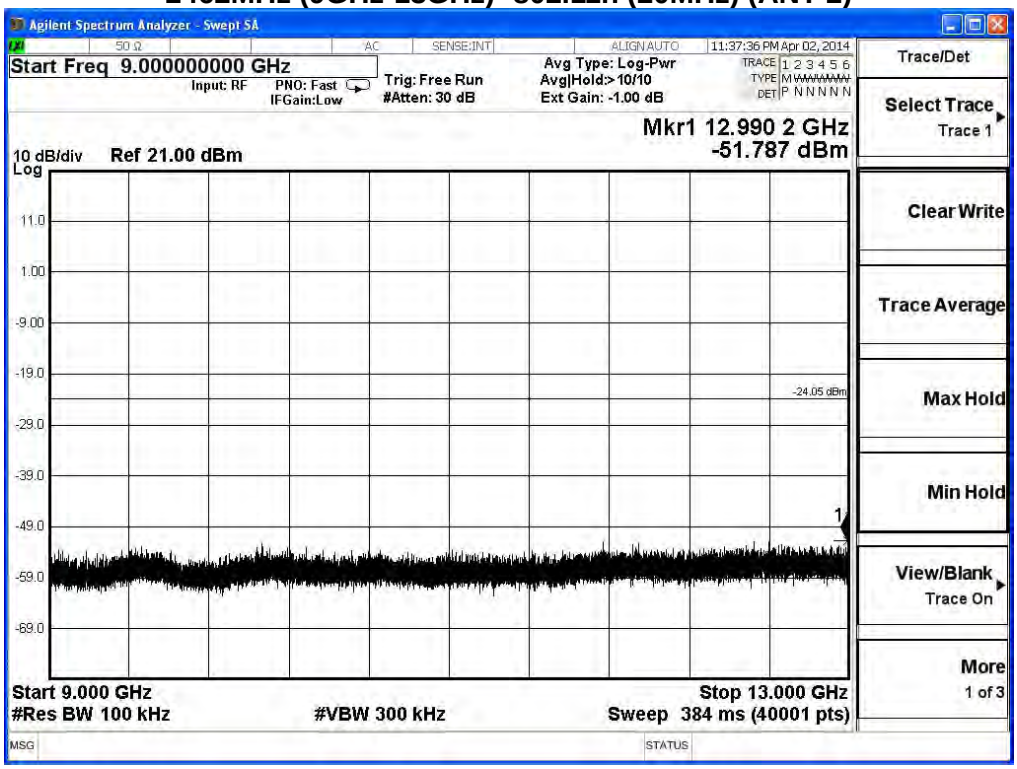
2462MHz (1GHz-5GHz) -802.11n (20MHz) (ANT 2)



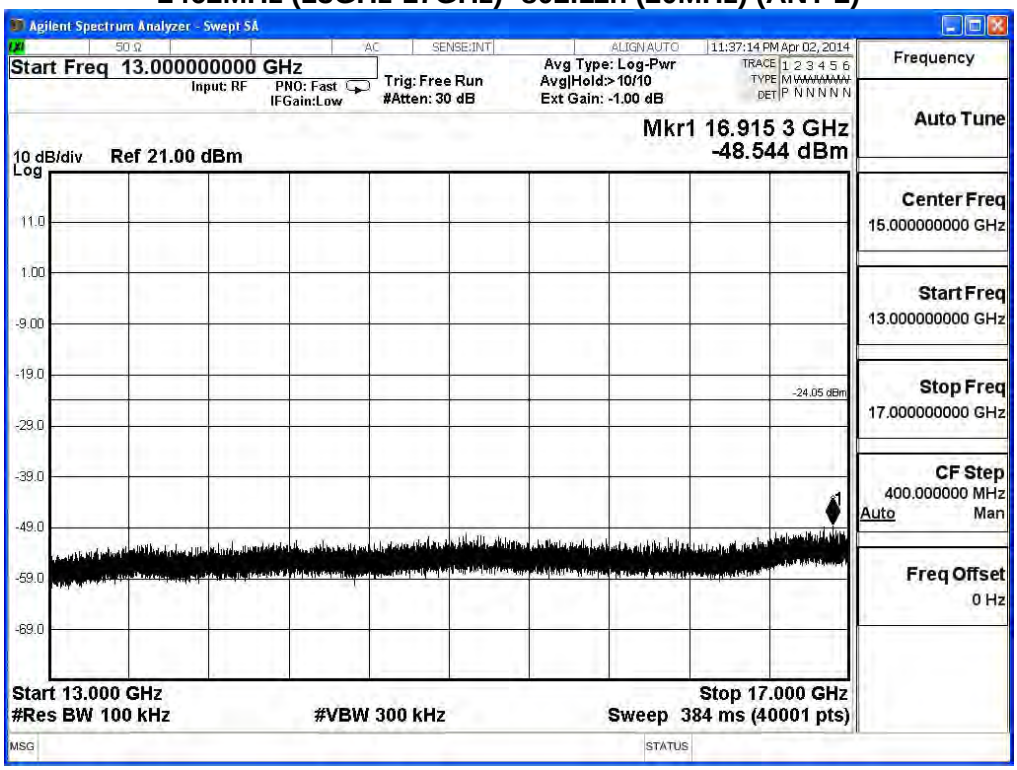
2462MHz (5GHz-9GHz) -802.11n (20MHz) (ANT 2)



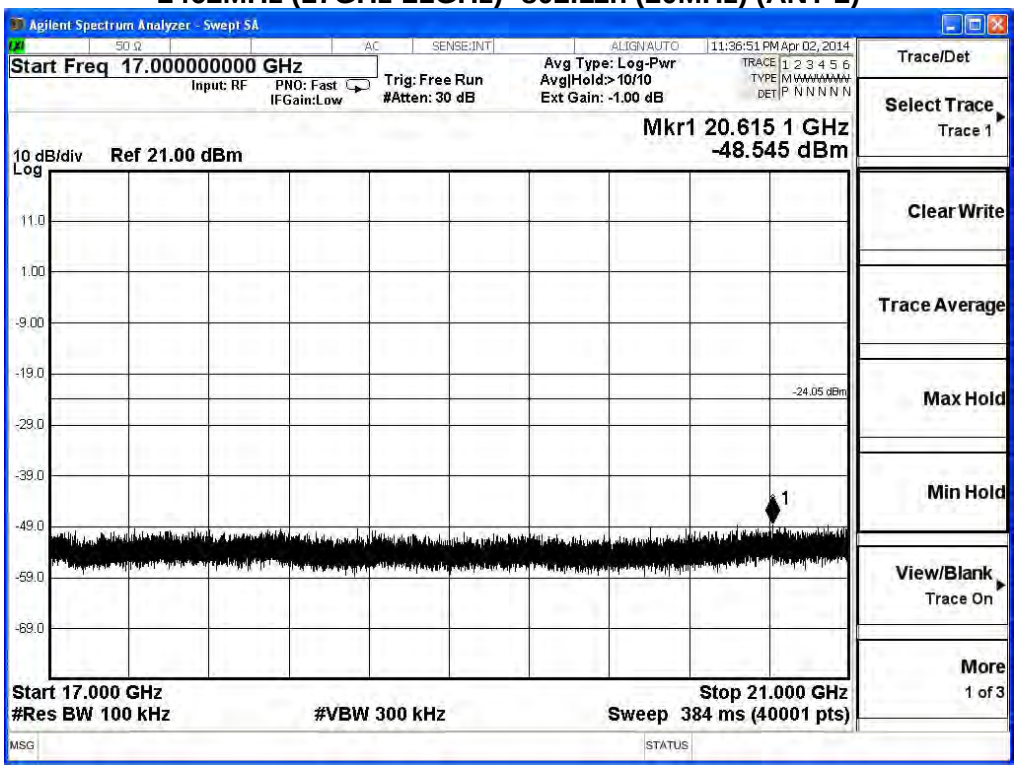
2462MHz (9GHz-13GHz) -802.11n (20MHz) (ANT 2)



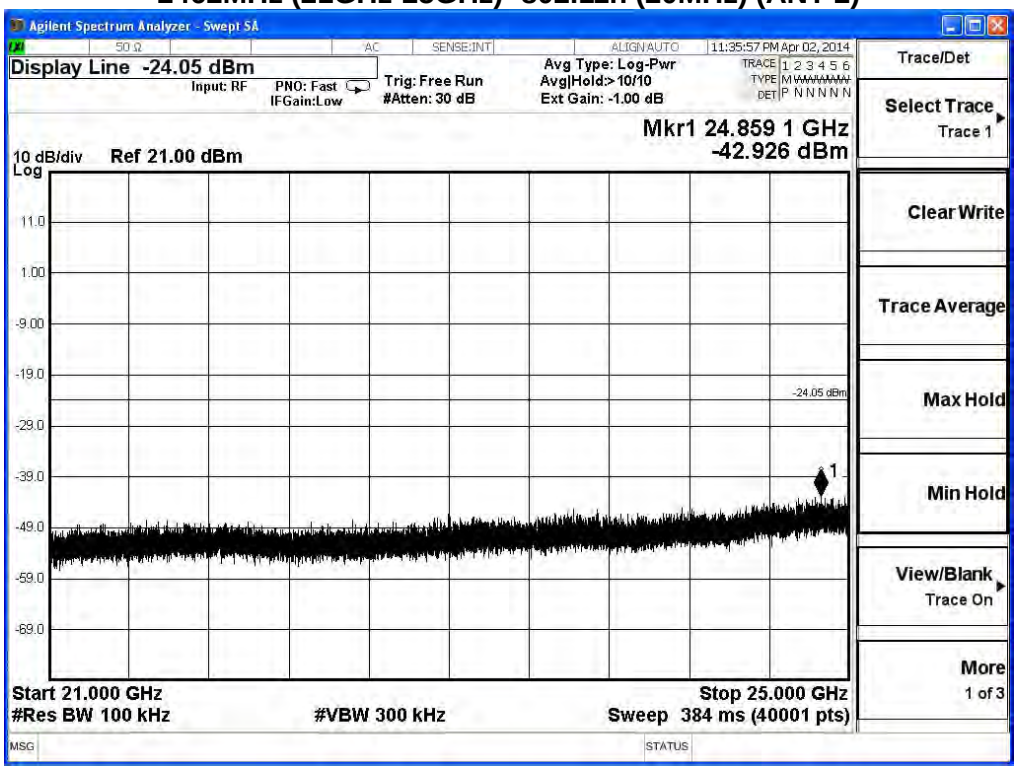
2462MHz (13GHz-17GHz) -802.11n (20MHz) (ANT 2)



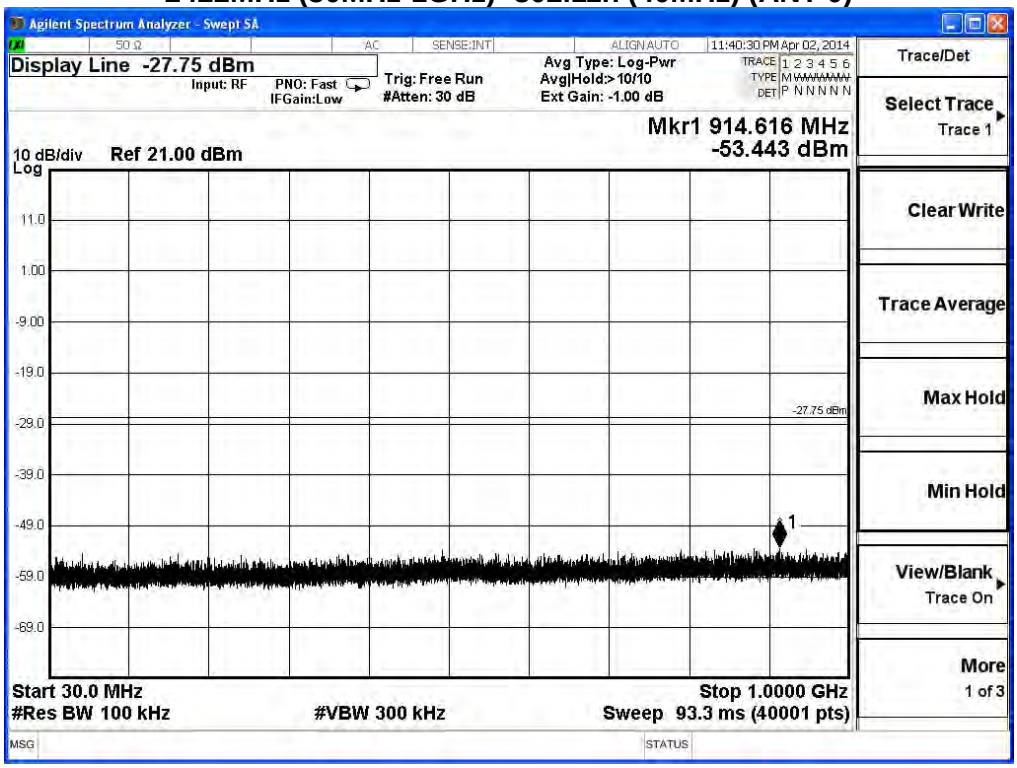
2462MHz (17GHz-21GHz) -802.11n (20MHz) (ANT 2)



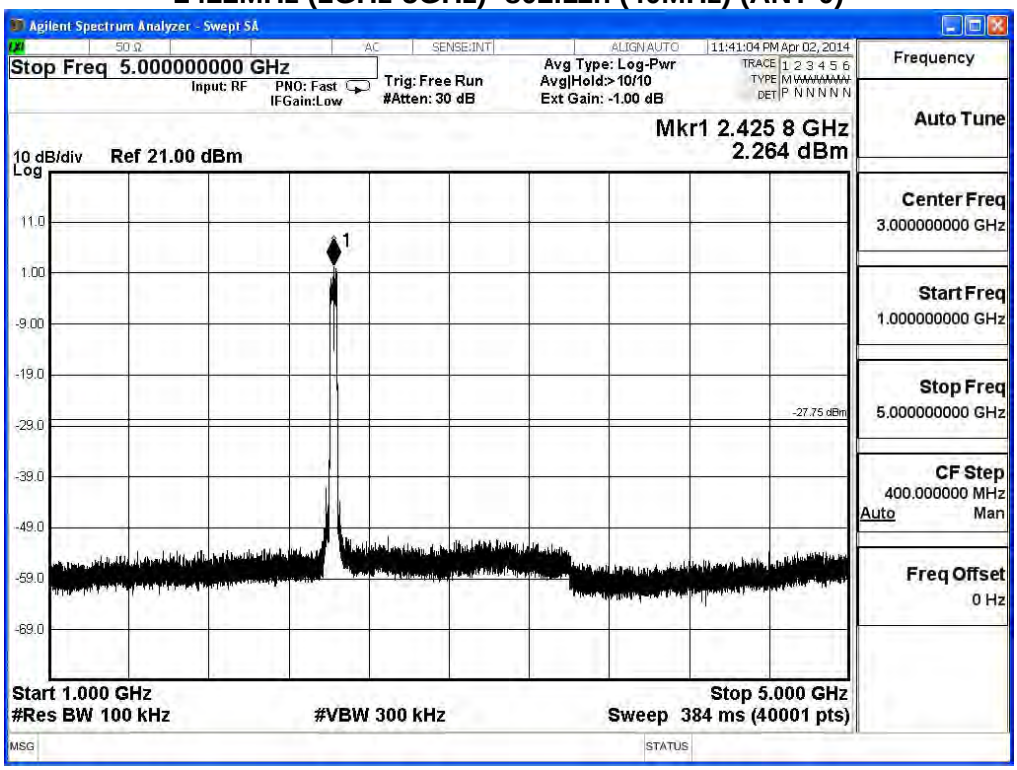
2462MHz (21GHz-25GHz) -802.11n (20MHz) (ANT 2)



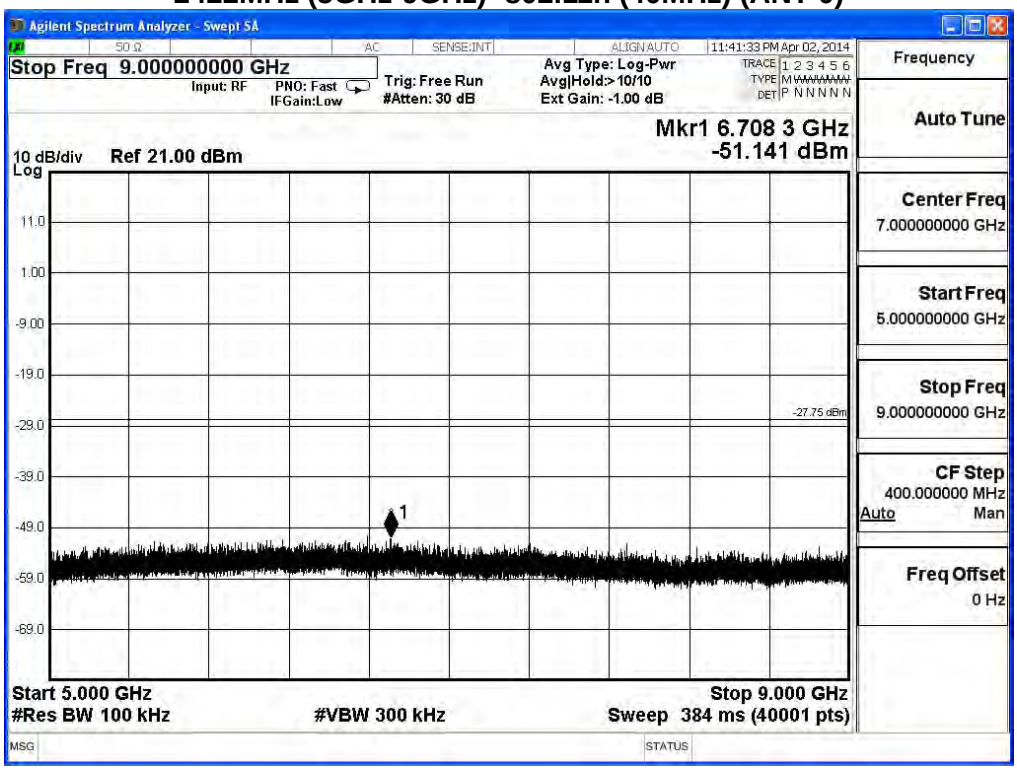
2422MHz (30MHz-1GHz)- 802.11n (40MHz) (ANT 0)



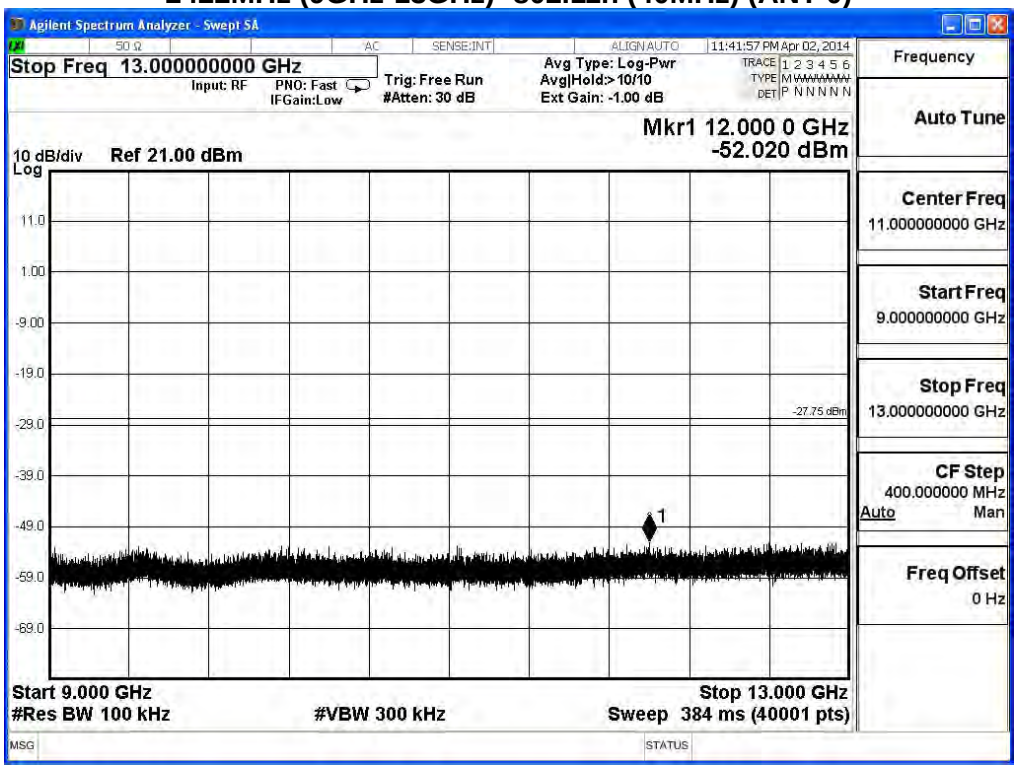
2422MHz (1GHz-5GHz) -802.11n (40MHz) (ANT 0)



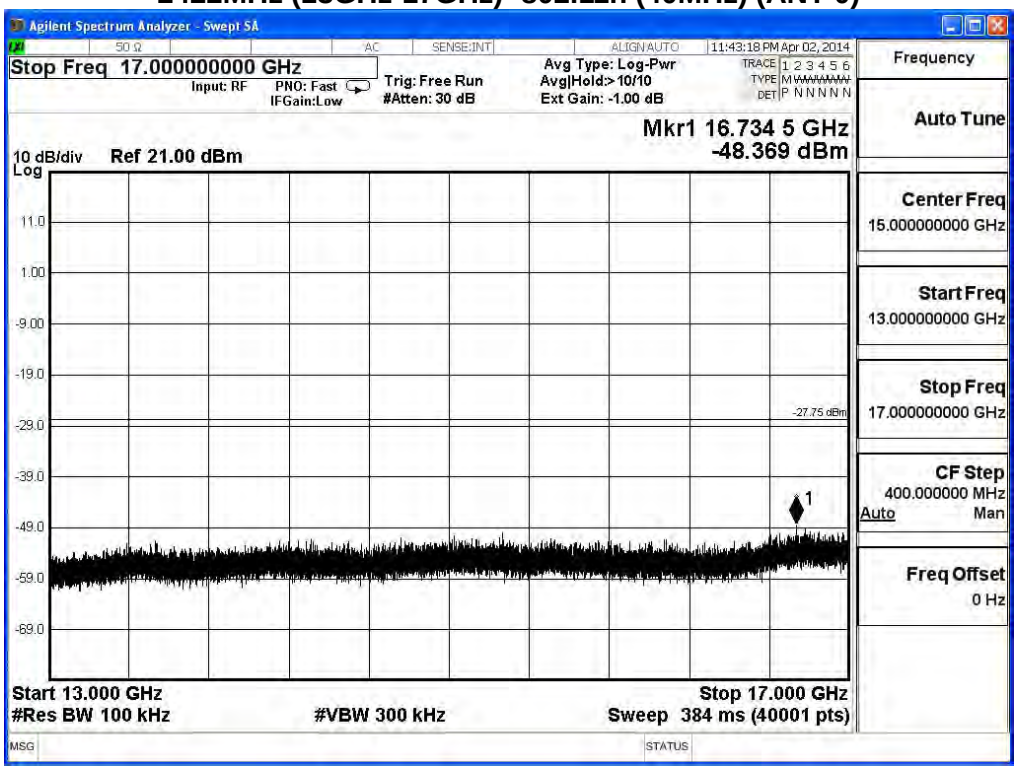
2422MHz (5GHz-9GHz) -802.11n (40MHz) (ANT 0)



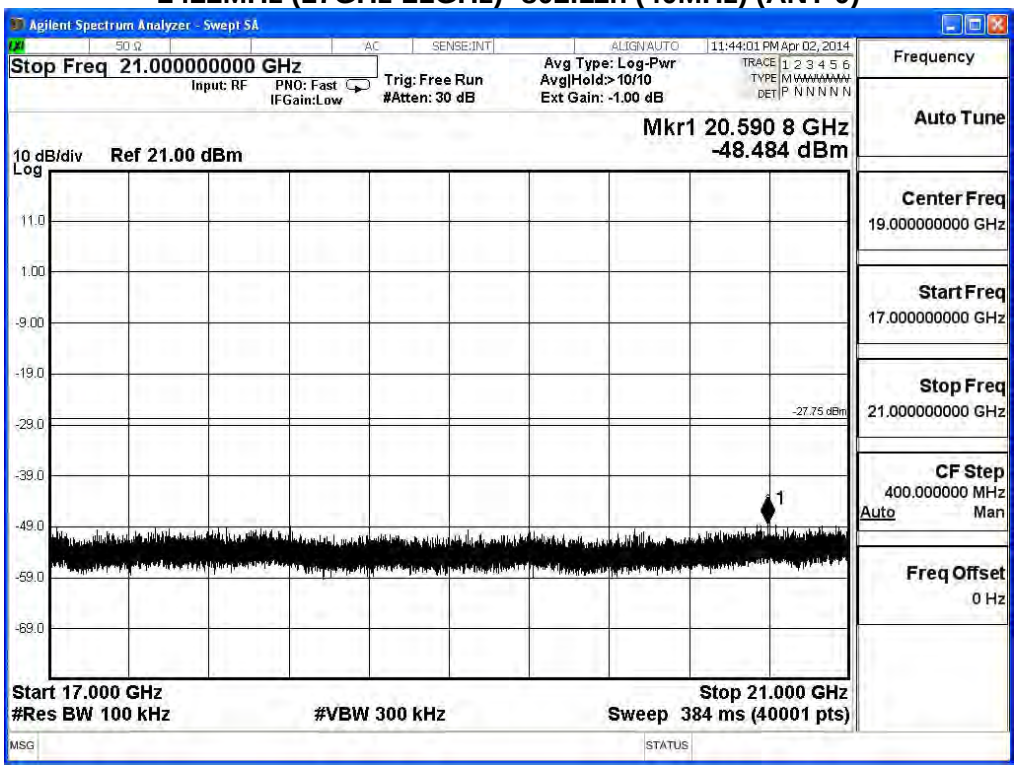
2422MHz (9GHz-13GHz) -802.11n (40MHz) (ANT 0)



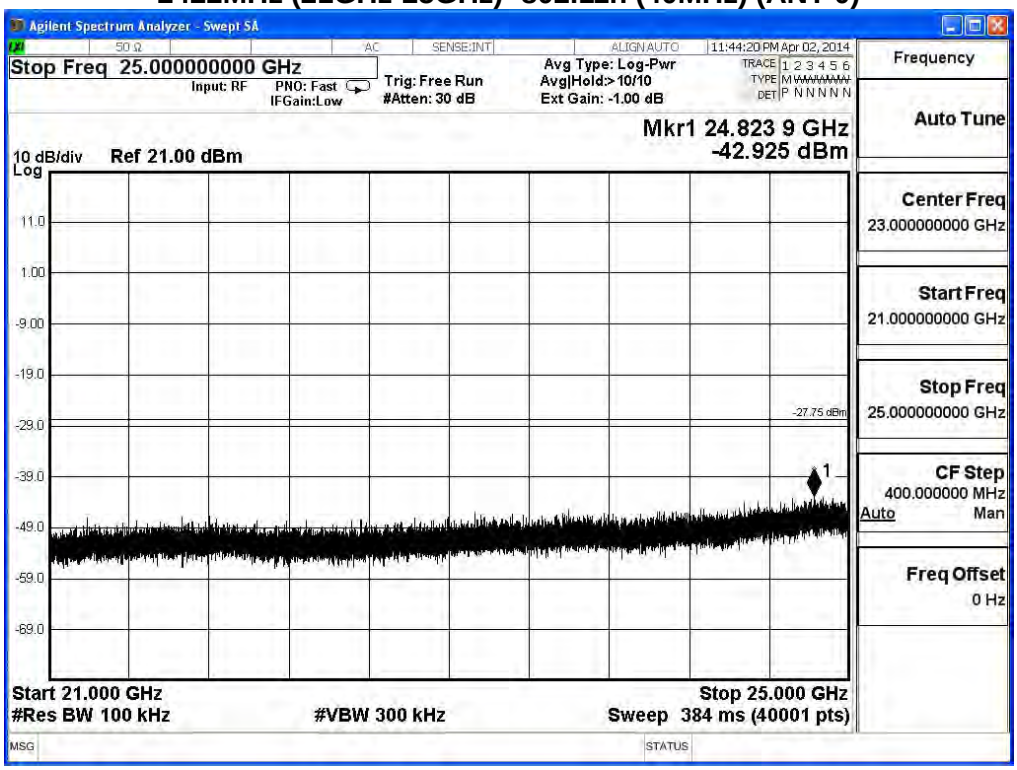
2422MHz (13GHz-17GHz) -802.11n (40MHz) (ANT 0)



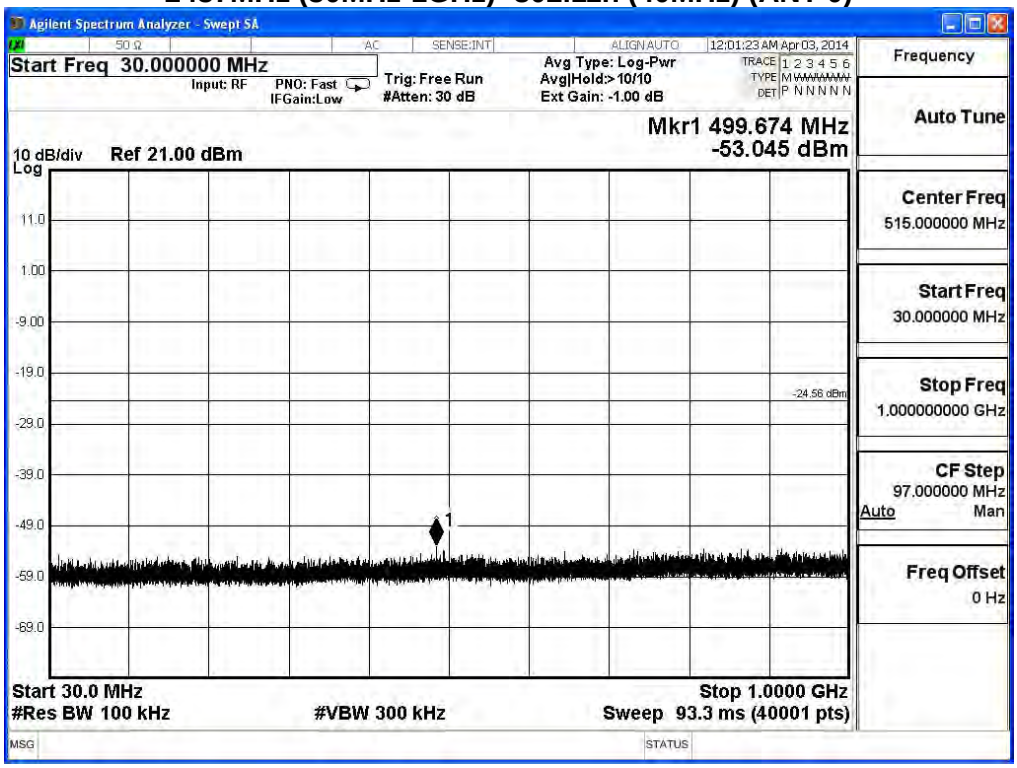
2422MHz (17GHz-21GHz) -802.11n (40MHz) (ANT 0)



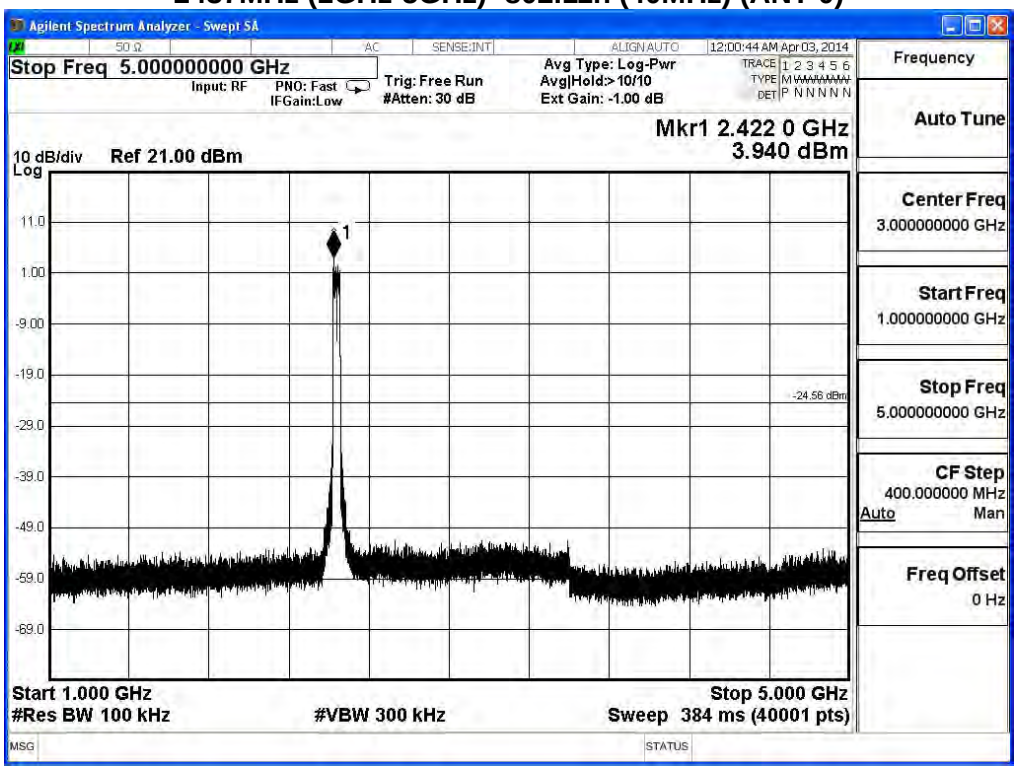
2422MHz (21GHz-25GHz) -802.11n (40MHz) (ANT 0)



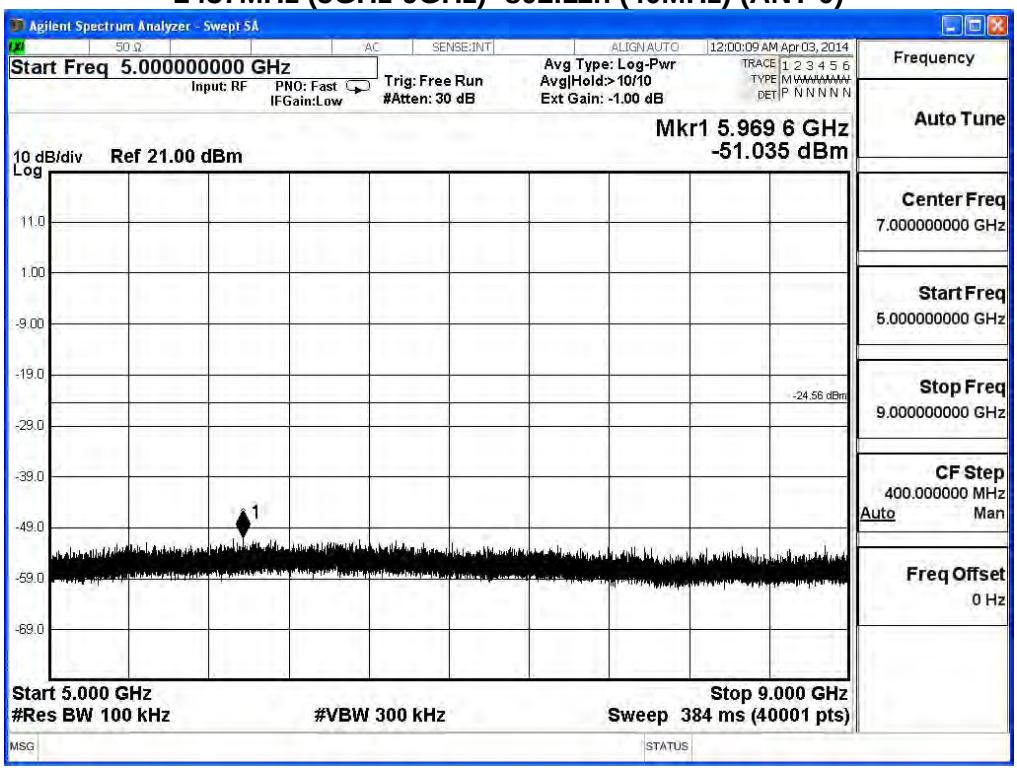
2437MHz (30MHz-1GHz)- 802.11n (40MHz) (ANT 0)



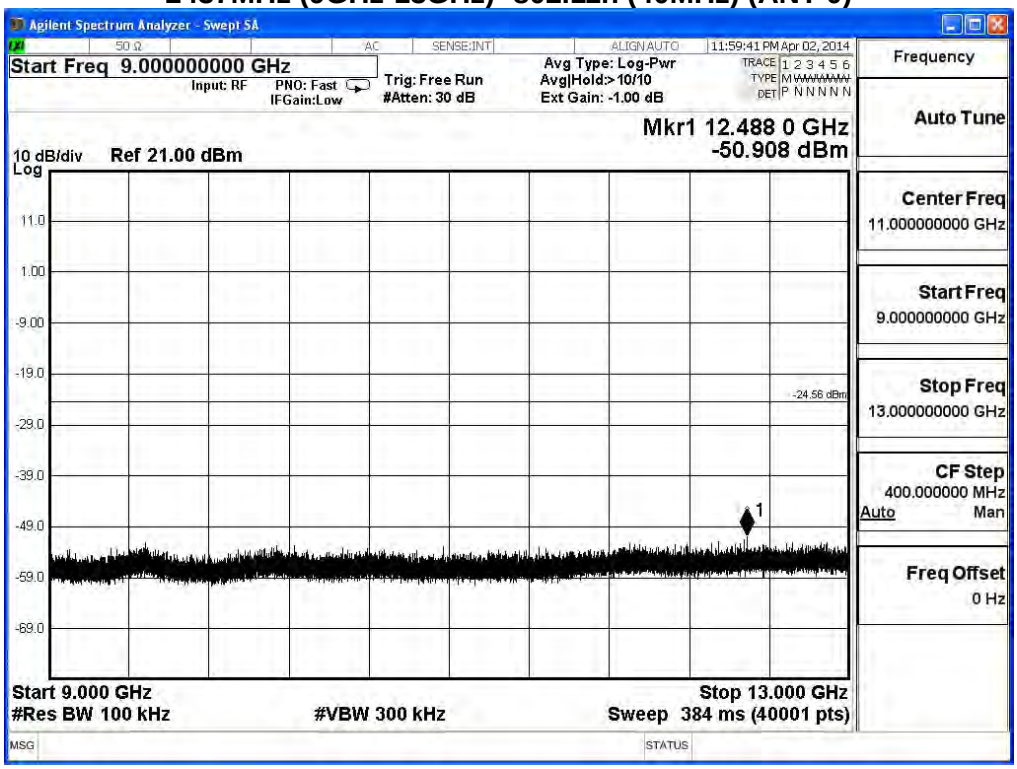
2437MHz (1GHz-5GHz) -802.11n (40MHz) (ANT 0)



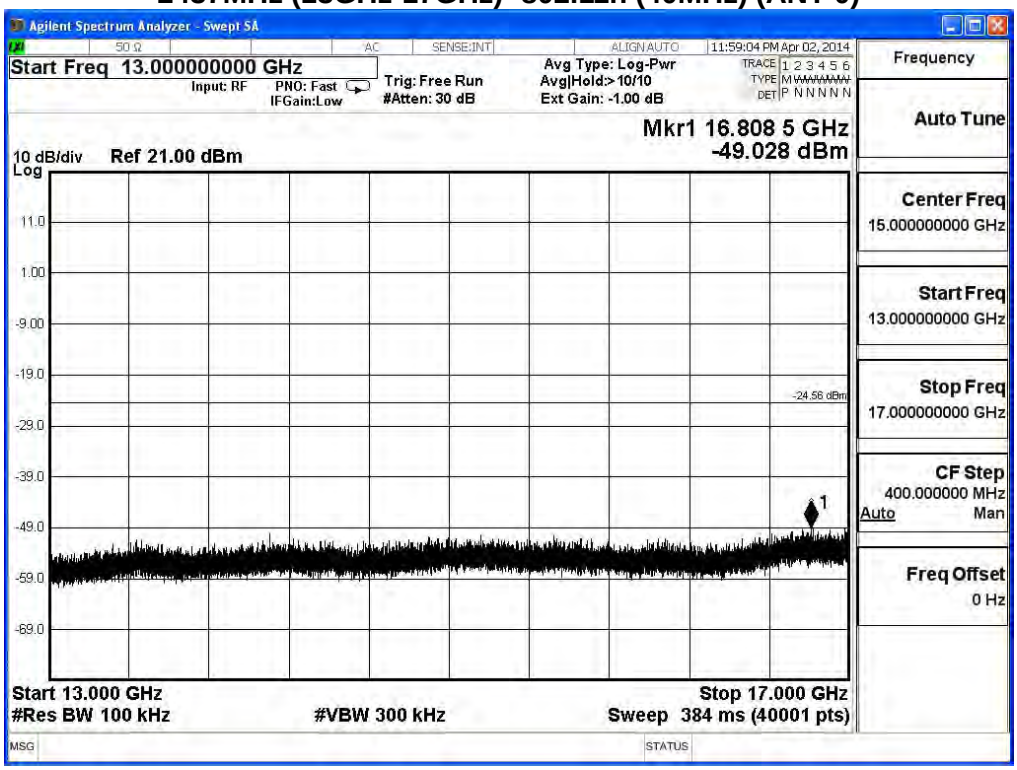
2437MHz (5GHz-9GHz) -802.11n (40MHz) (ANT 0)



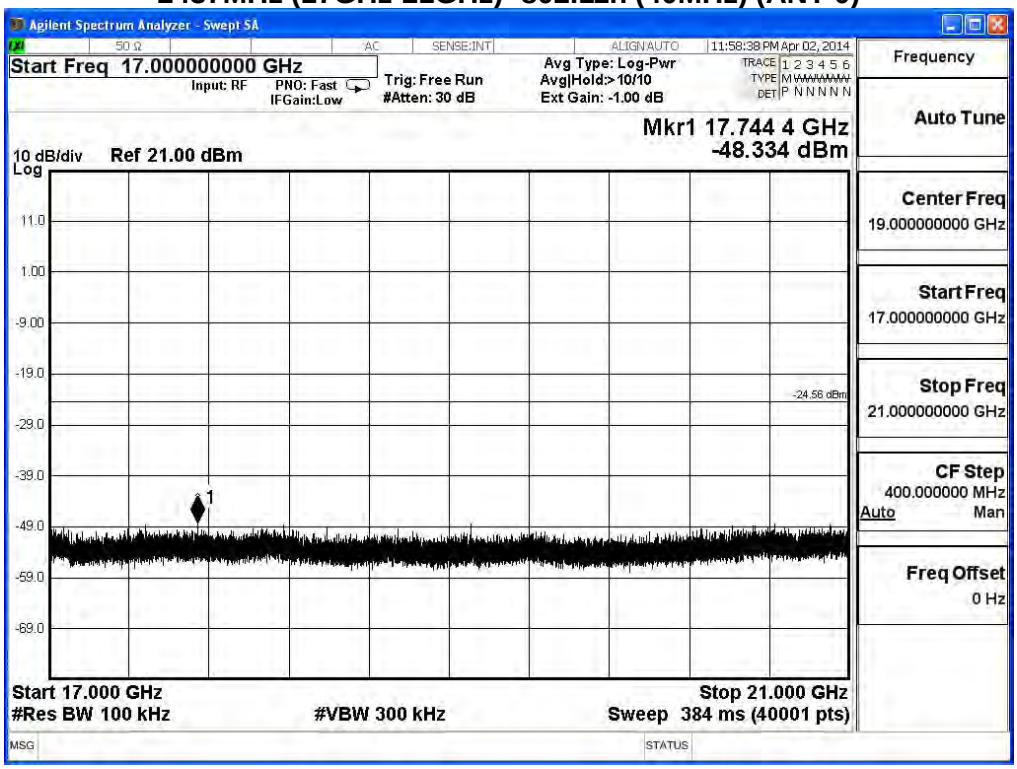
2437MHz (9GHz-13GHz) -802.11n (40MHz) (ANT 0)



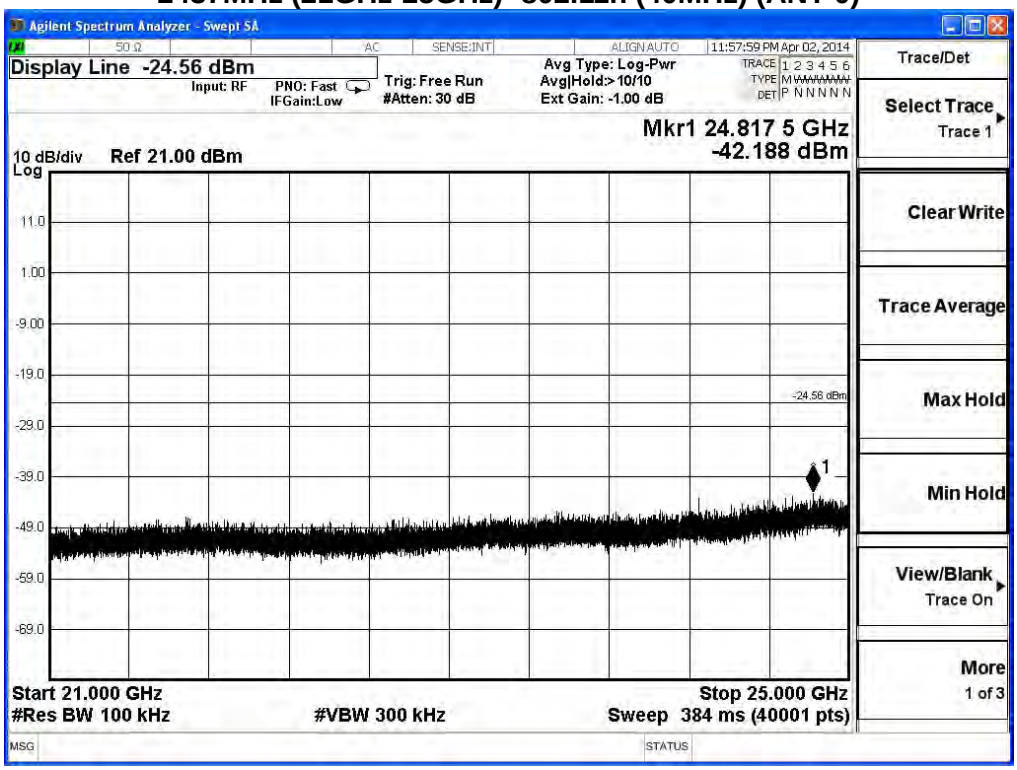
2437MHz (13GHz-17GHz) -802.11n (40MHz) (ANT 0)



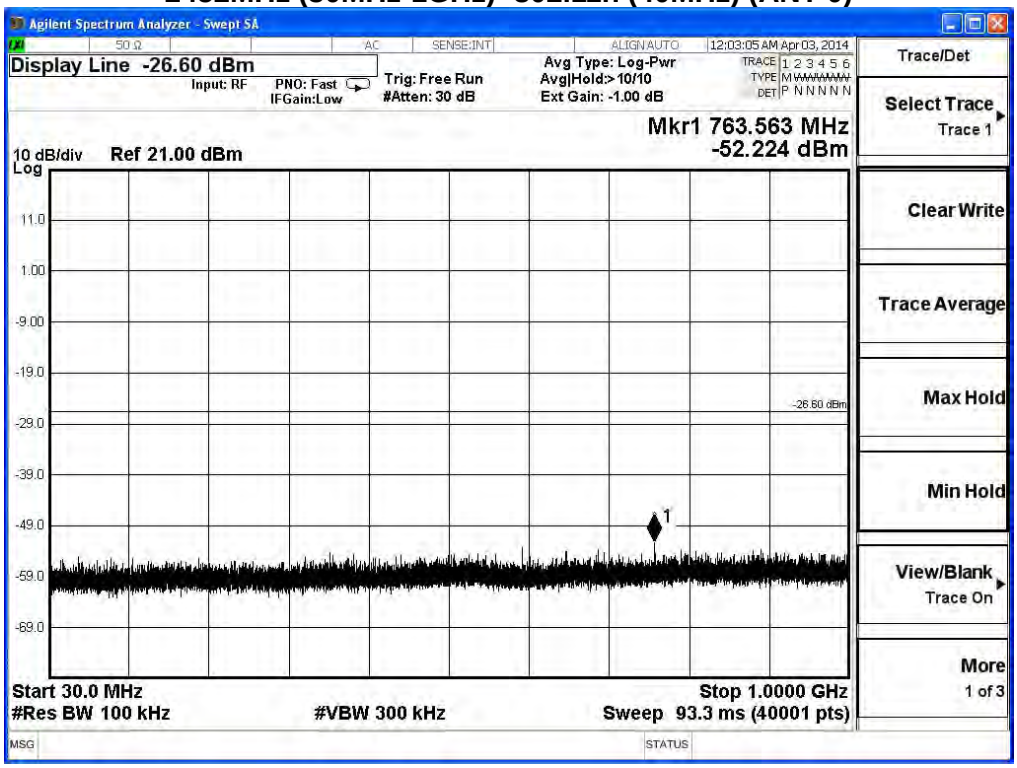
2437MHz (17GHz-21GHz) -802.11n (40MHz) (ANT 0)



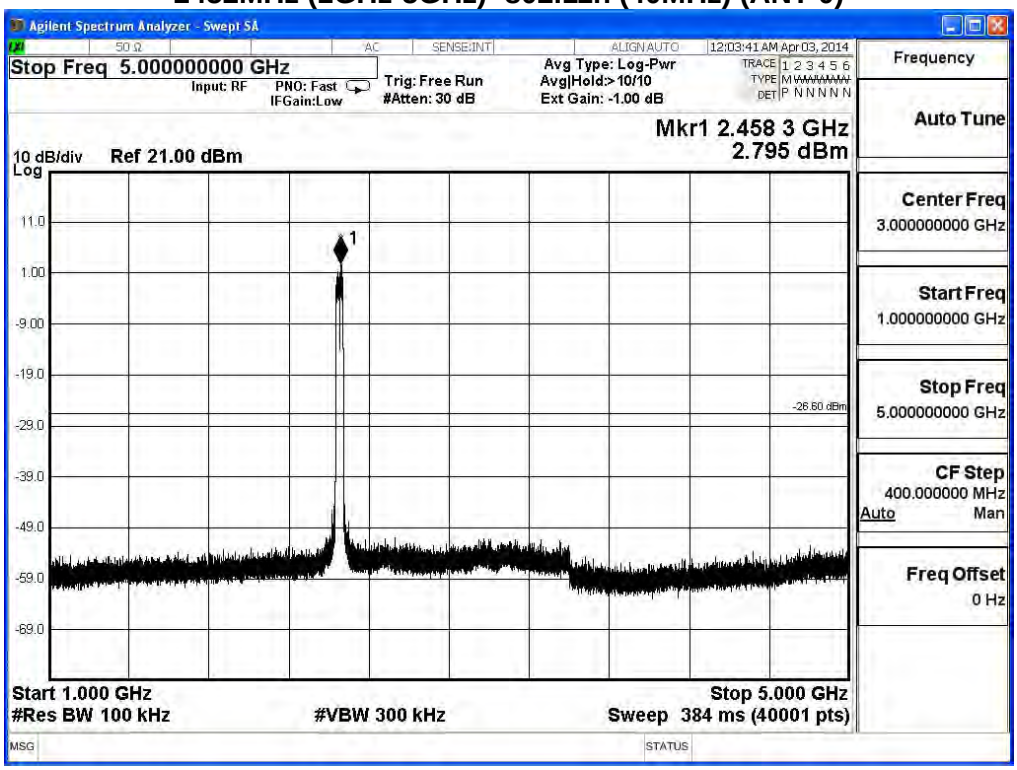
2437MHz (21GHz-25GHz) -802.11n (40MHz) (ANT 0)



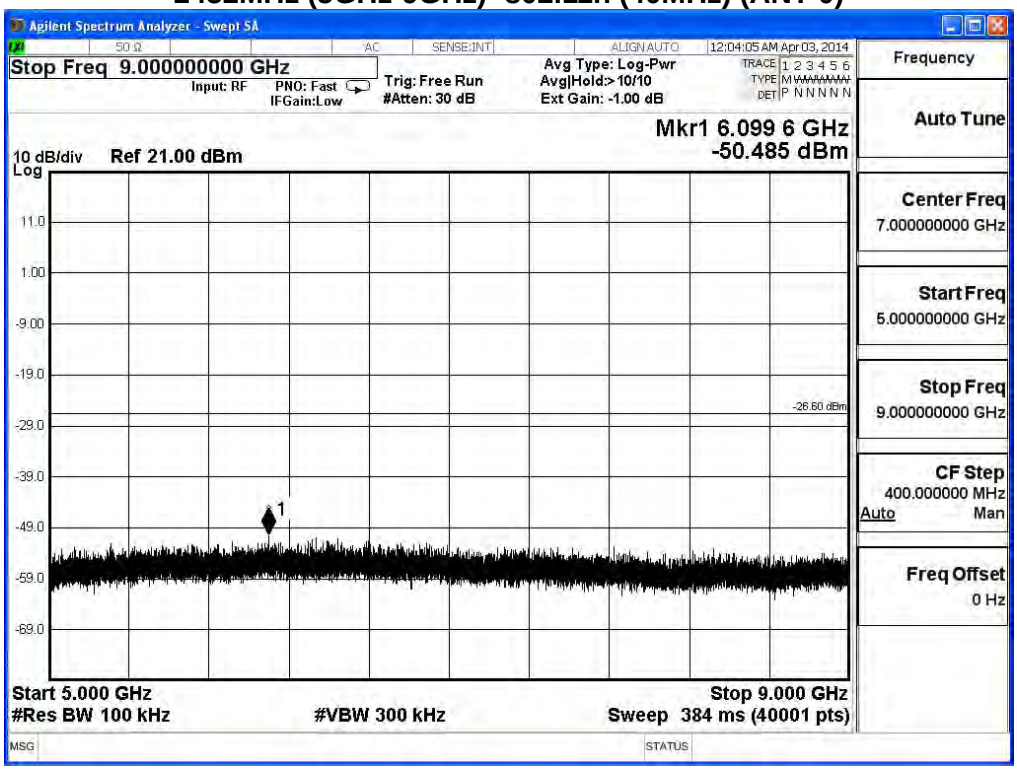
2452MHz (30MHz-1GHz)- 802.11n (40MHz) (ANT 0)



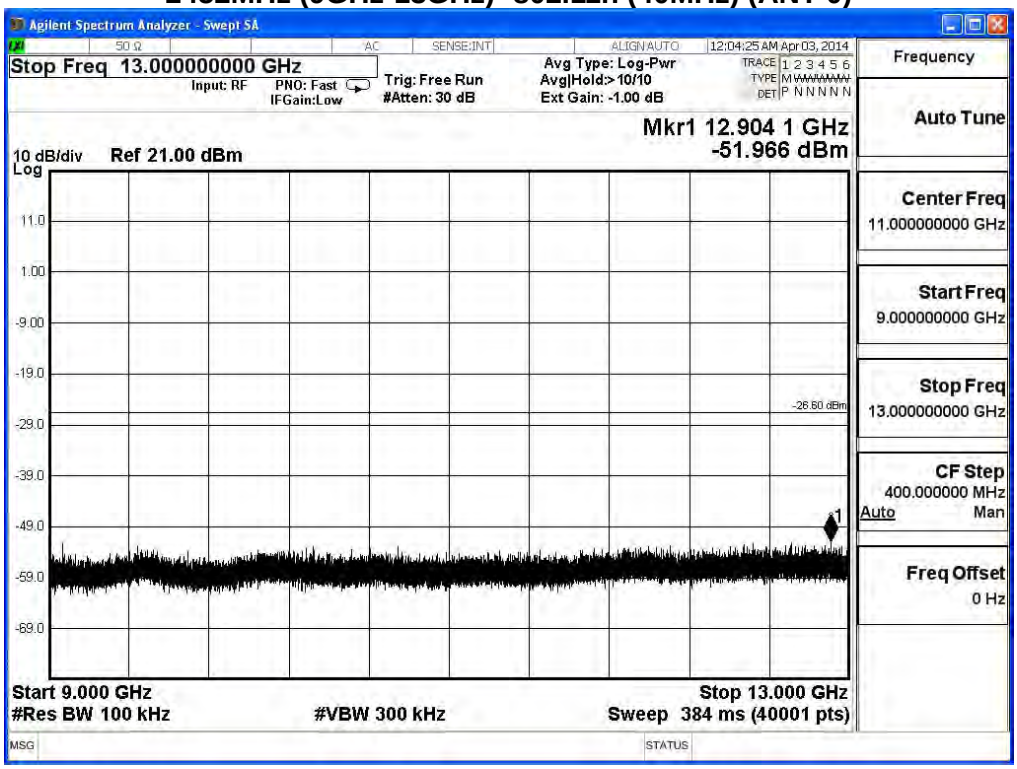
2452MHz (1GHz-5GHz) -802.11n (40MHz) (ANT 0)



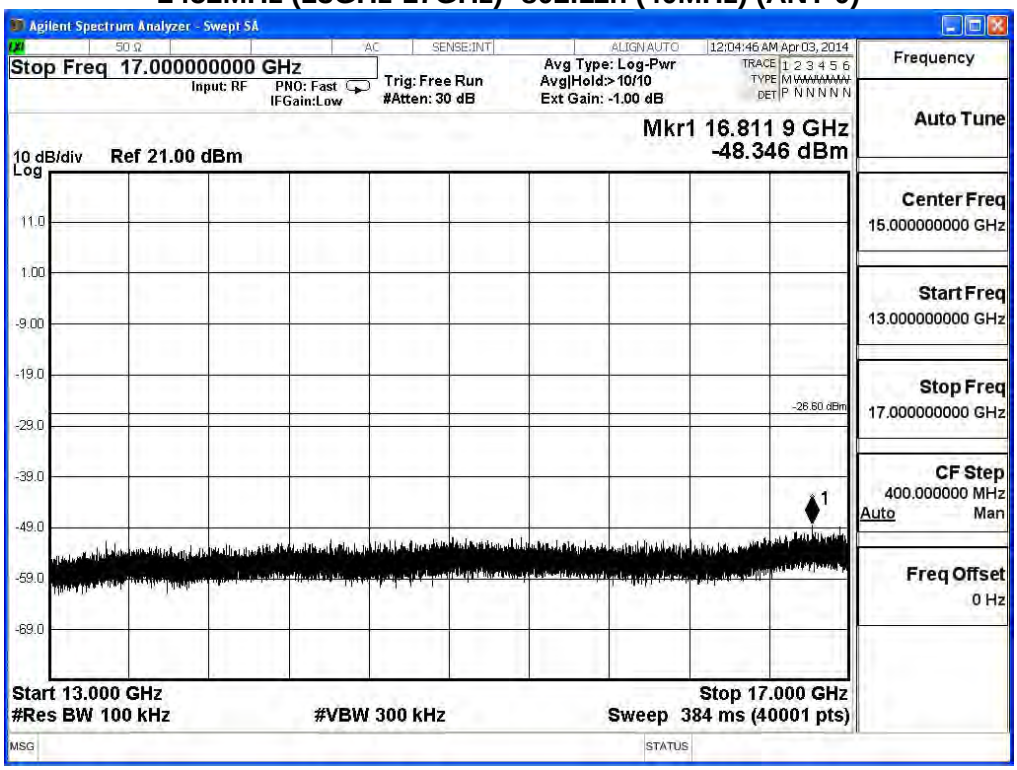
2452MHz (5GHz-9GHz) -802.11n (40MHz) (ANT 0)



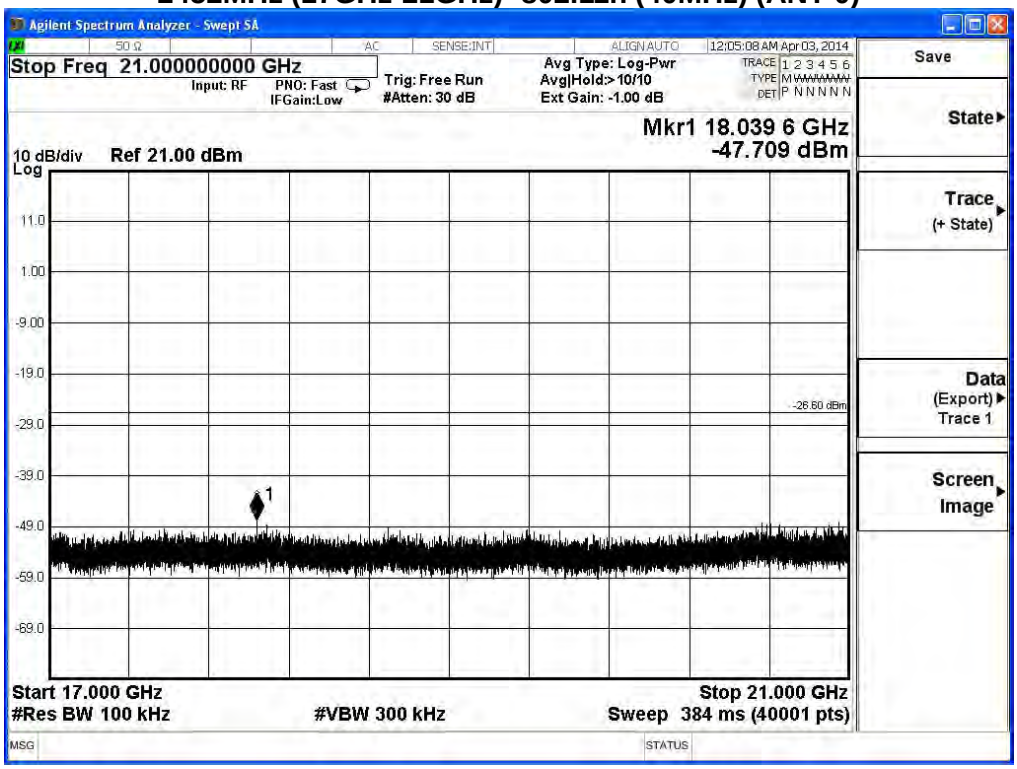
2452MHz (9GHz-13GHz) -802.11n (40MHz) (ANT 0)



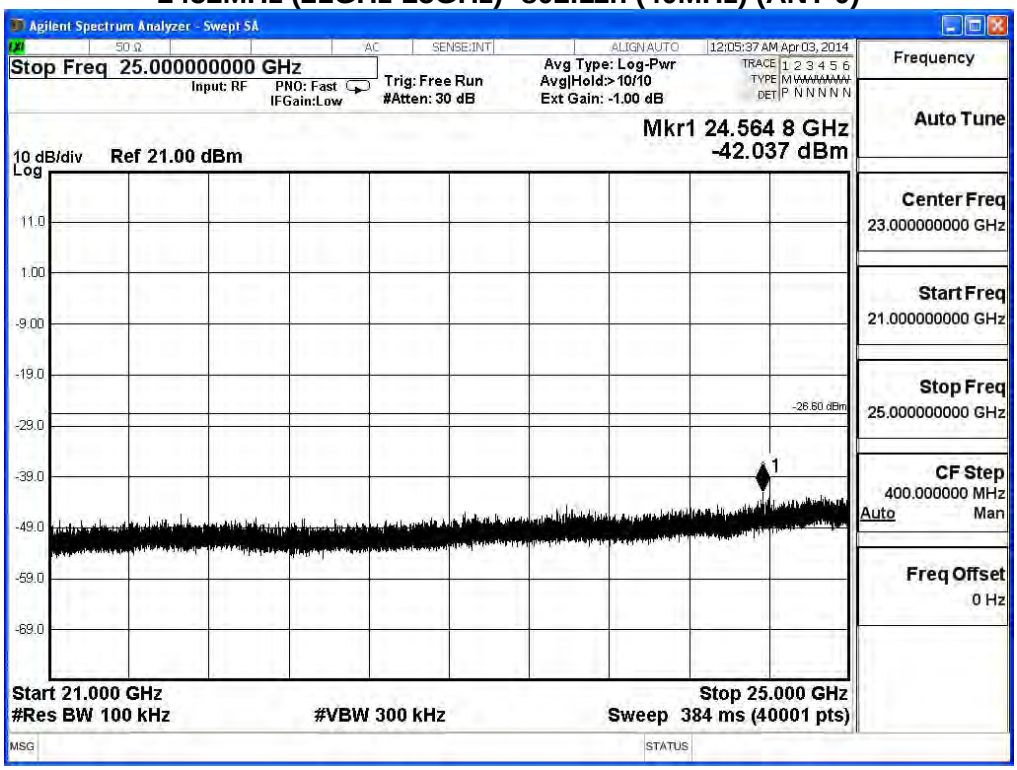
2452MHz (13GHz-17GHz) -802.11n (40MHz) (ANT 0)



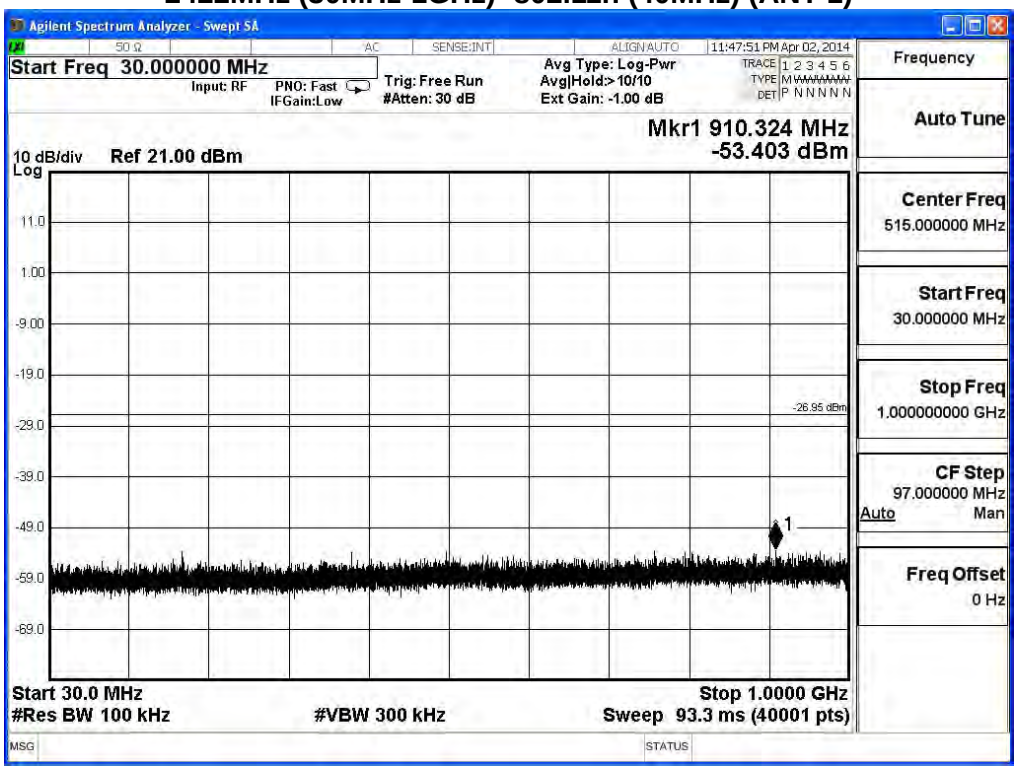
2452MHz (17GHz-21GHz) -802.11n (40MHz) (ANT 0)



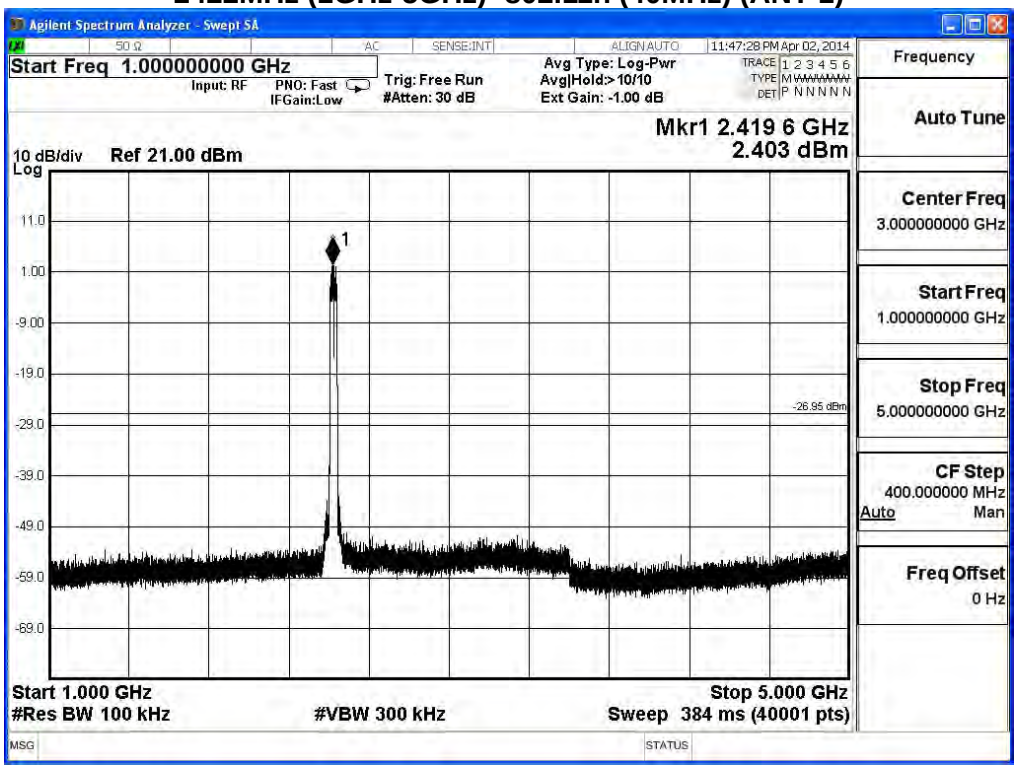
2452MHz (21GHz-25GHz) -802.11n (40MHz) (ANT 0)



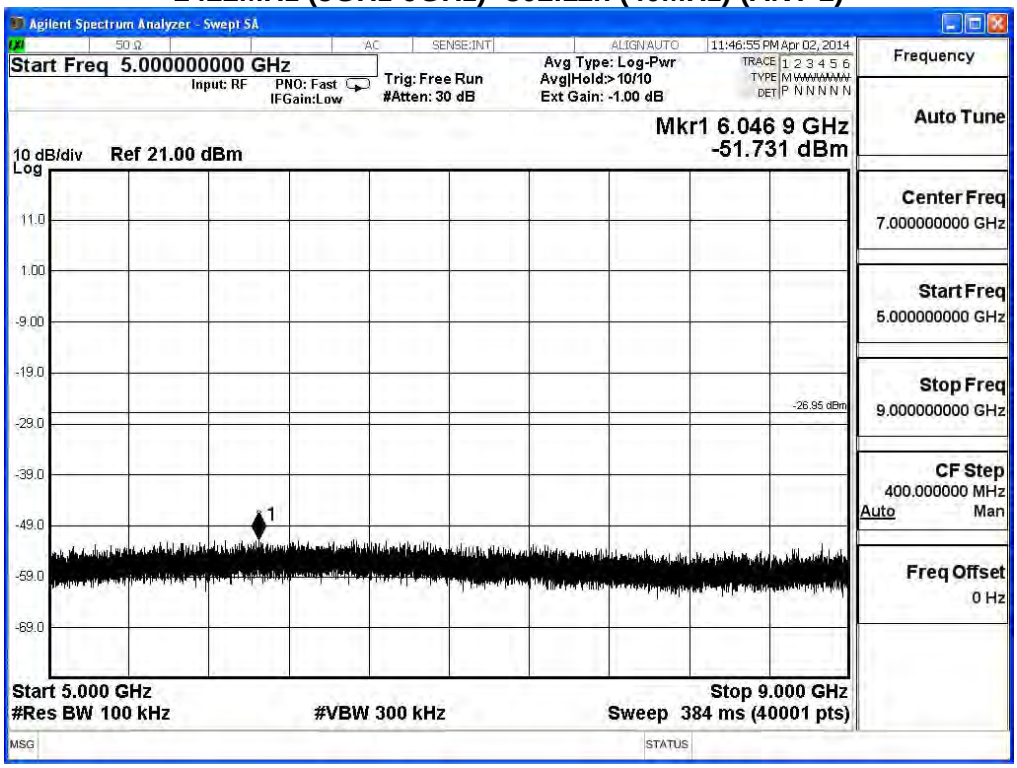
2422MHz (30MHz-1GHz)- 802.11n (40MHz) (ANT 1)



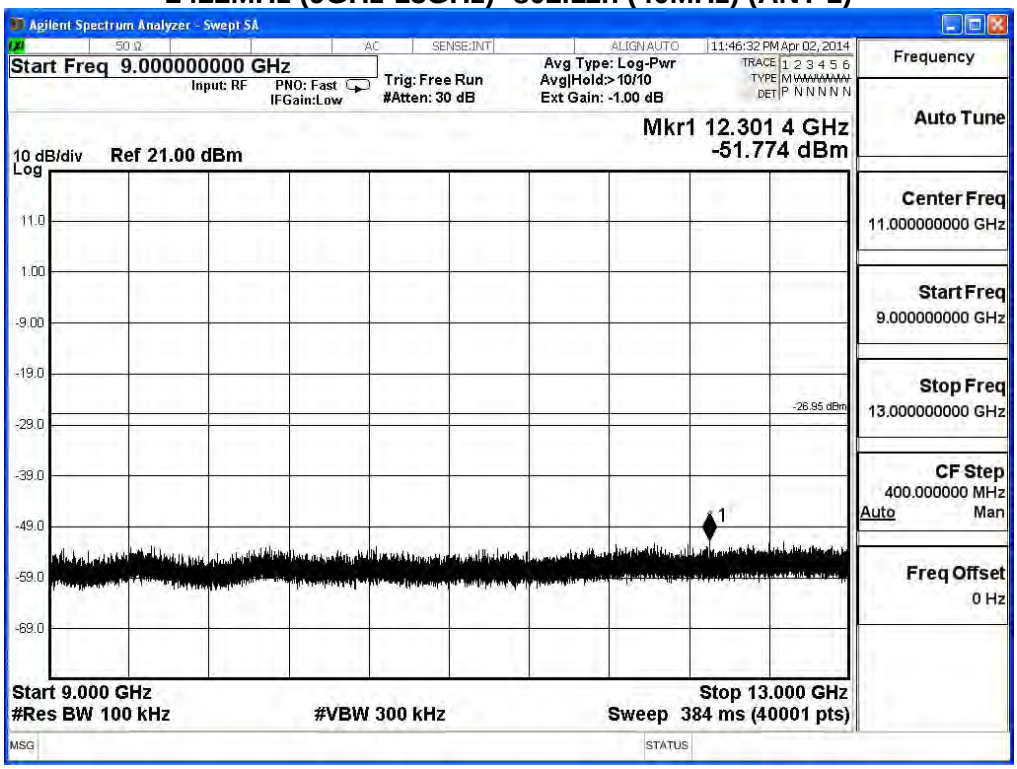
2422MHz (1GHz-5GHz) -802.11n (40MHz) (ANT 1)



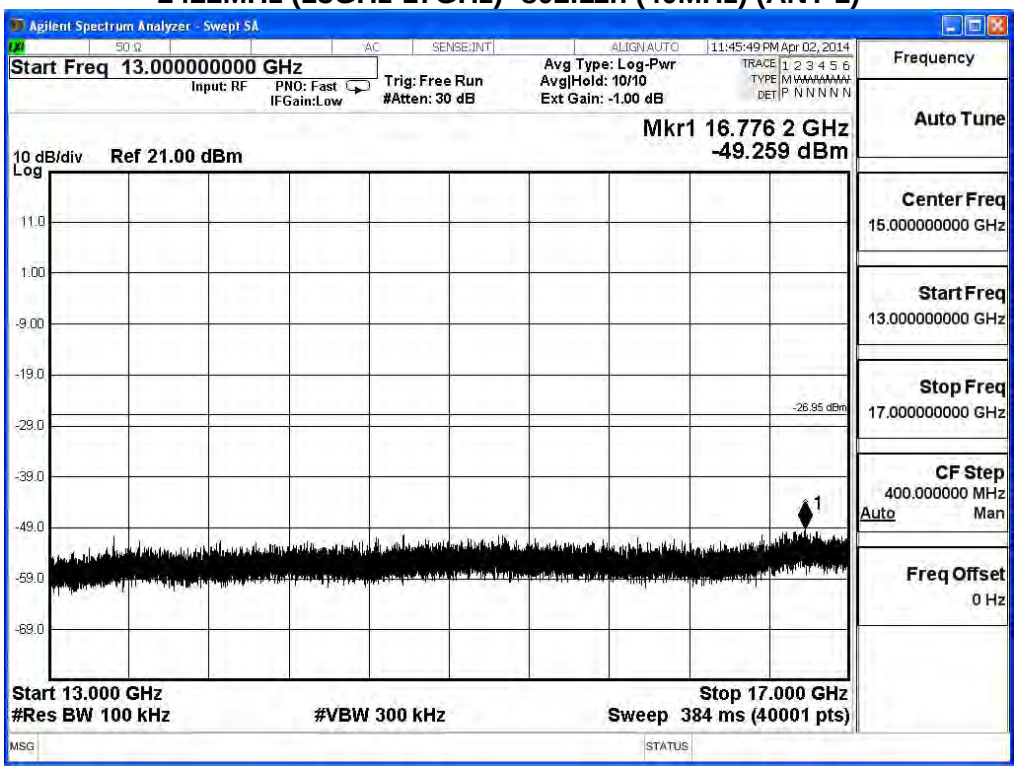
2422MHz (5GHz-9GHz) -802.11n (40MHz) (ANT 1)



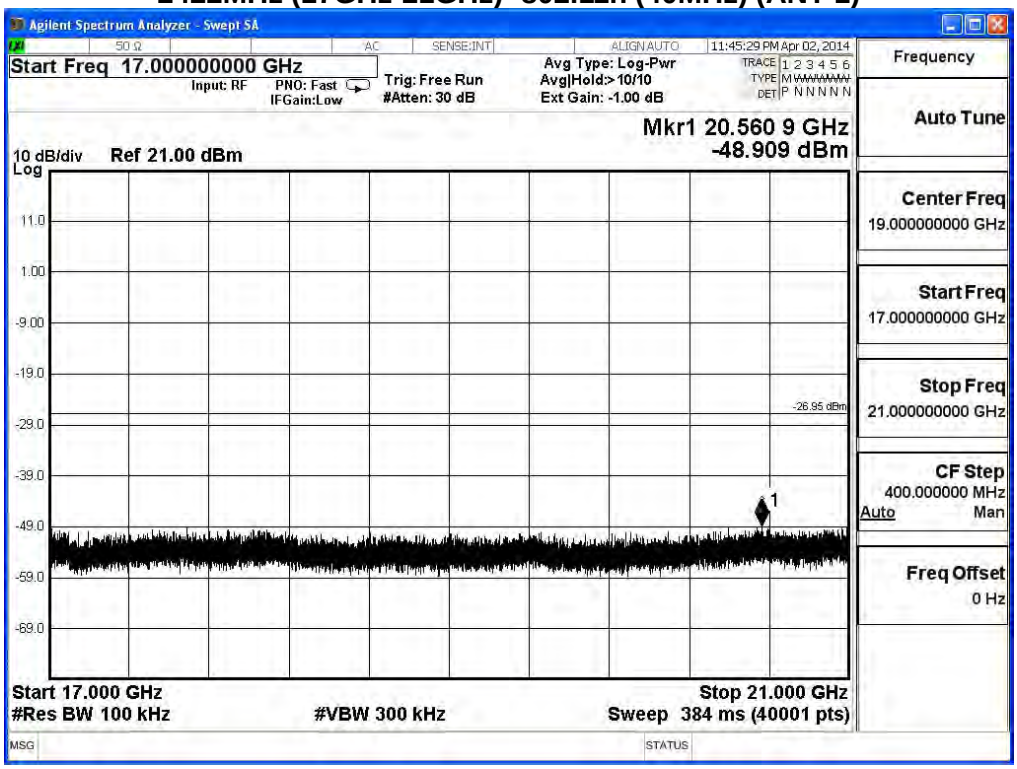
2422MHz (9GHz-13GHz) -802.11n (40MHz) (ANT 1)



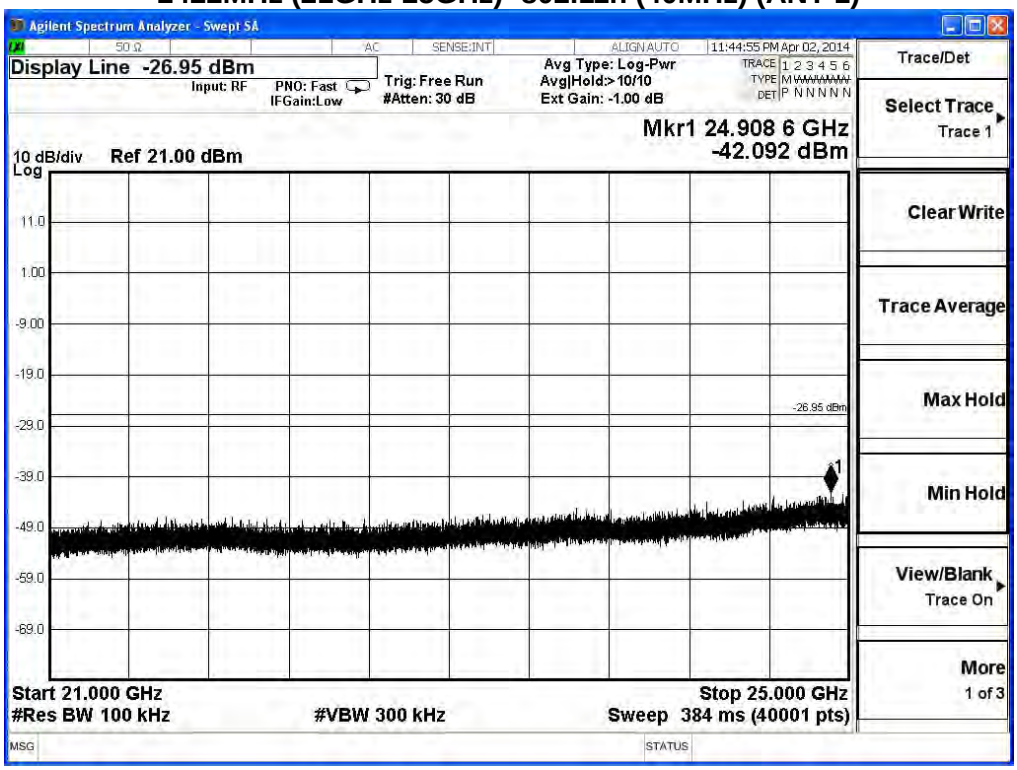
2422MHz (13GHz-17GHz) -802.11n (40MHz) (ANT 1)



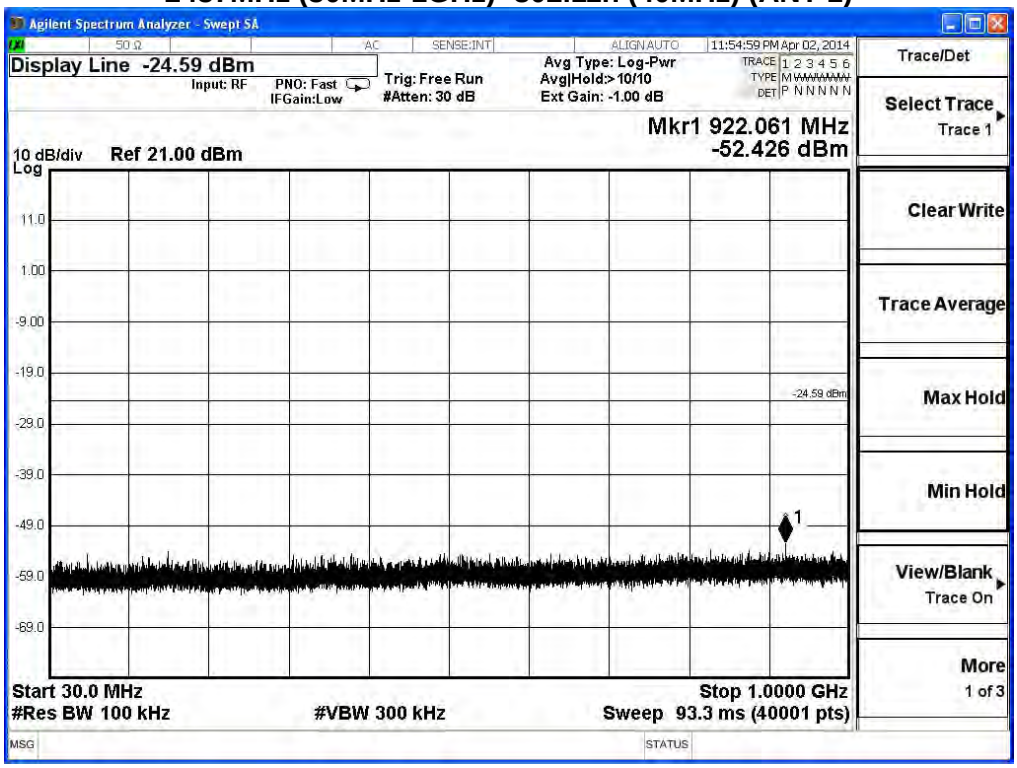
2422MHz (17GHz-21GHz) -802.11n (40MHz) (ANT 1)



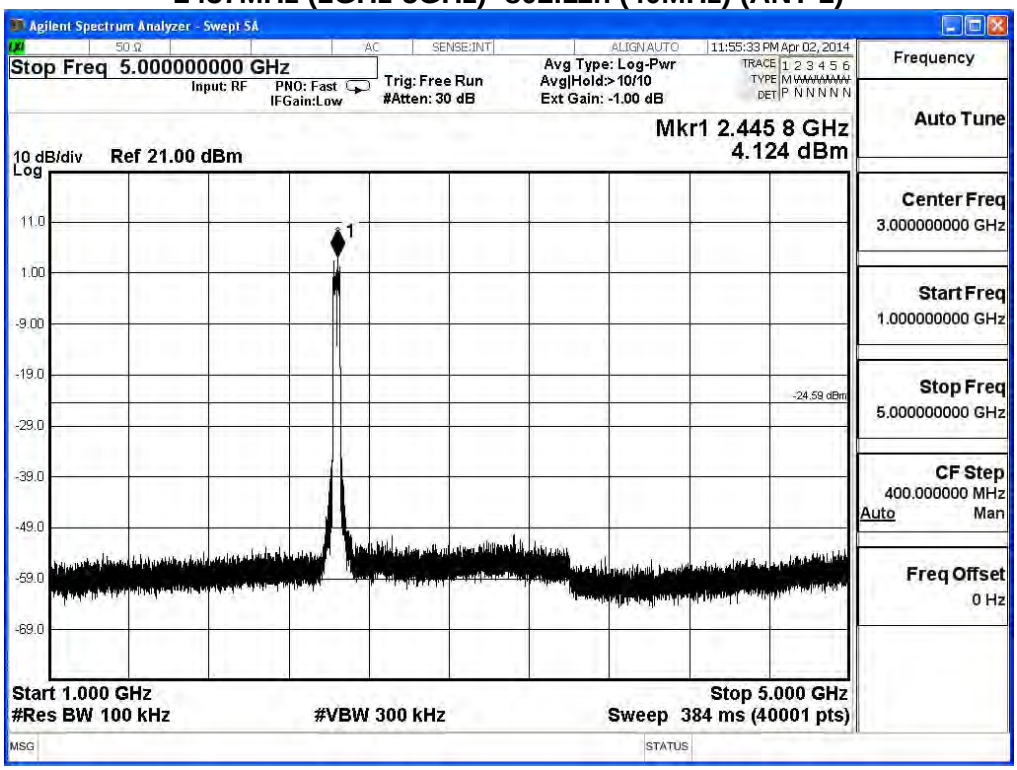
2422MHz (21GHz-25GHz) -802.11n (40MHz) (ANT 1)



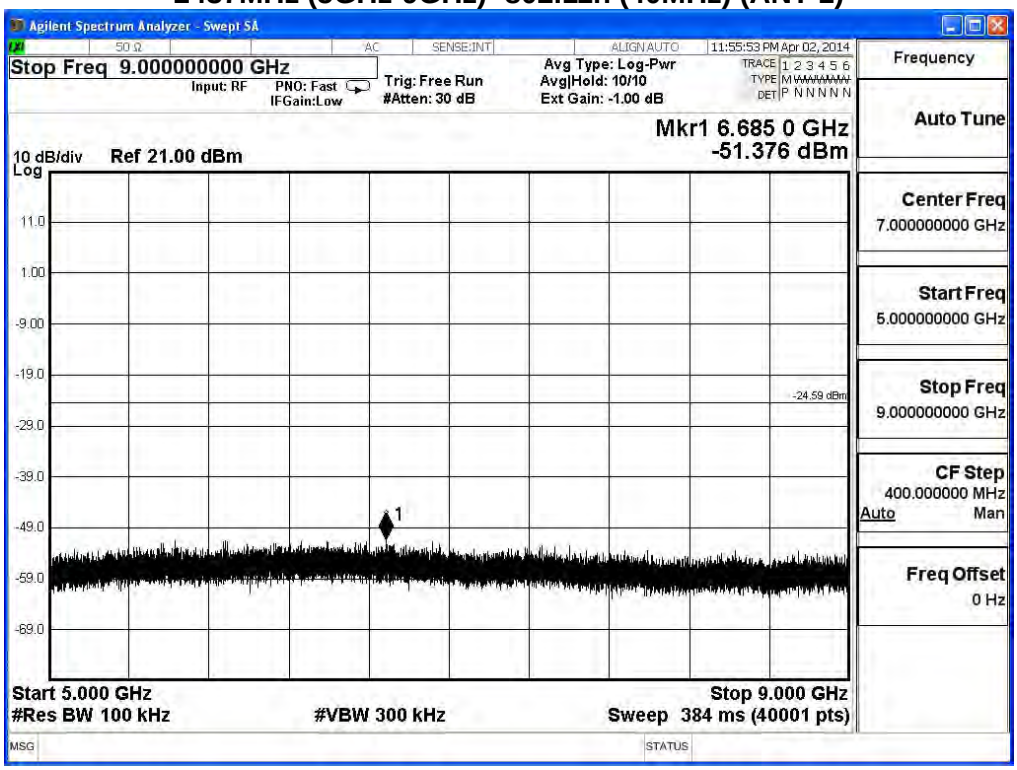
2437MHz (30MHz-1GHz)- 802.11n (40MHz) (ANT 1)



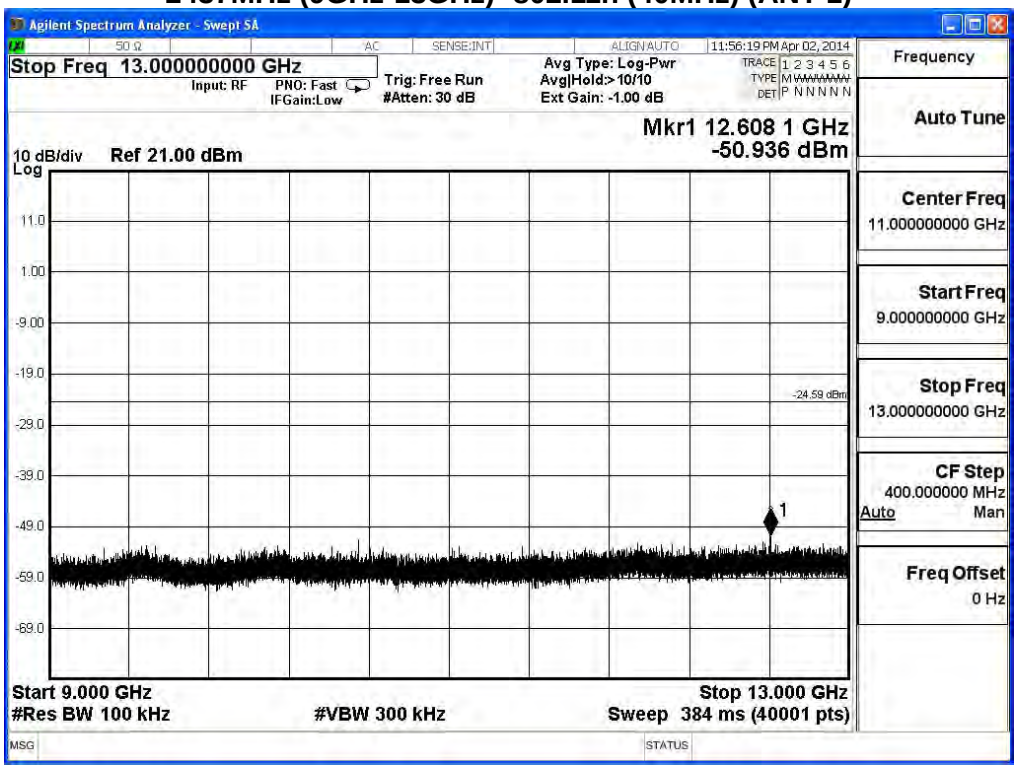
2437MHz (1GHz-5GHz) -802.11n (40MHz) (ANT 1)



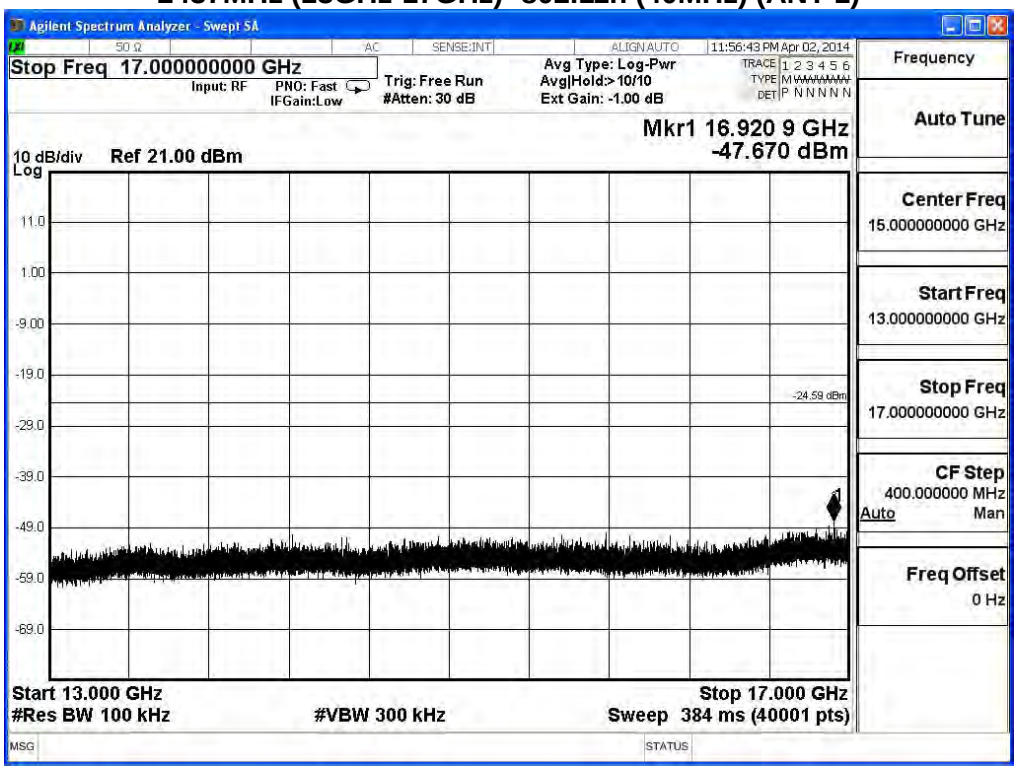
2437MHz (5GHz-9GHz) -802.11n (40MHz) (ANT 1)



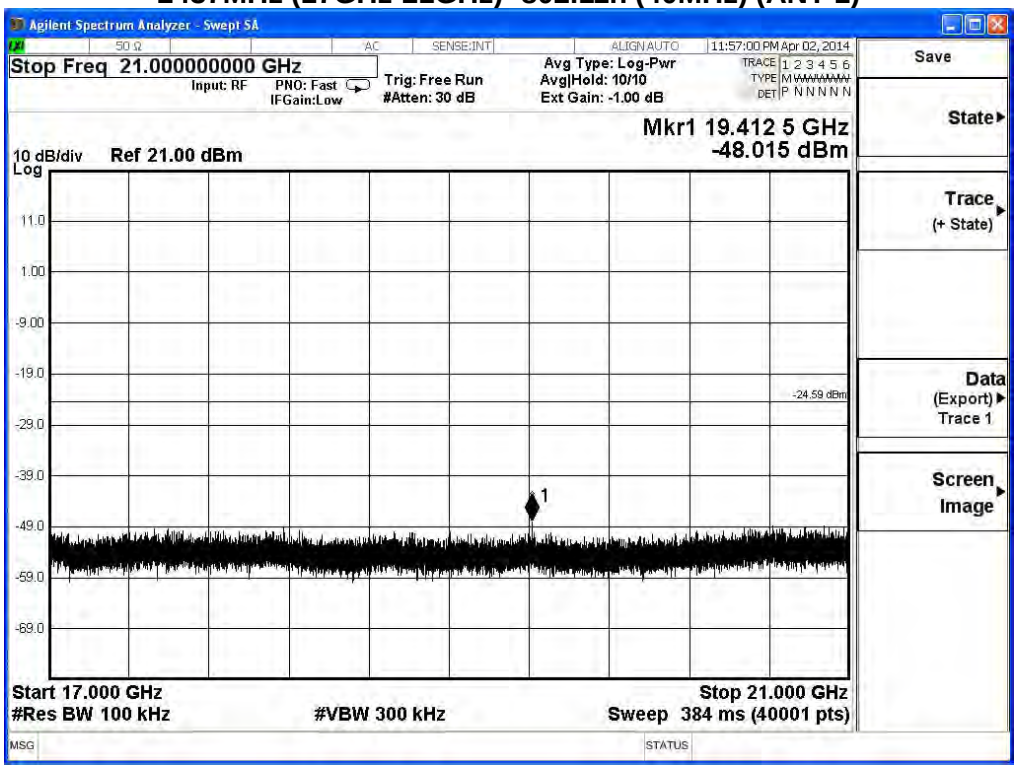
2437MHz (9GHz-13GHz) -802.11n (40MHz) (ANT 1)



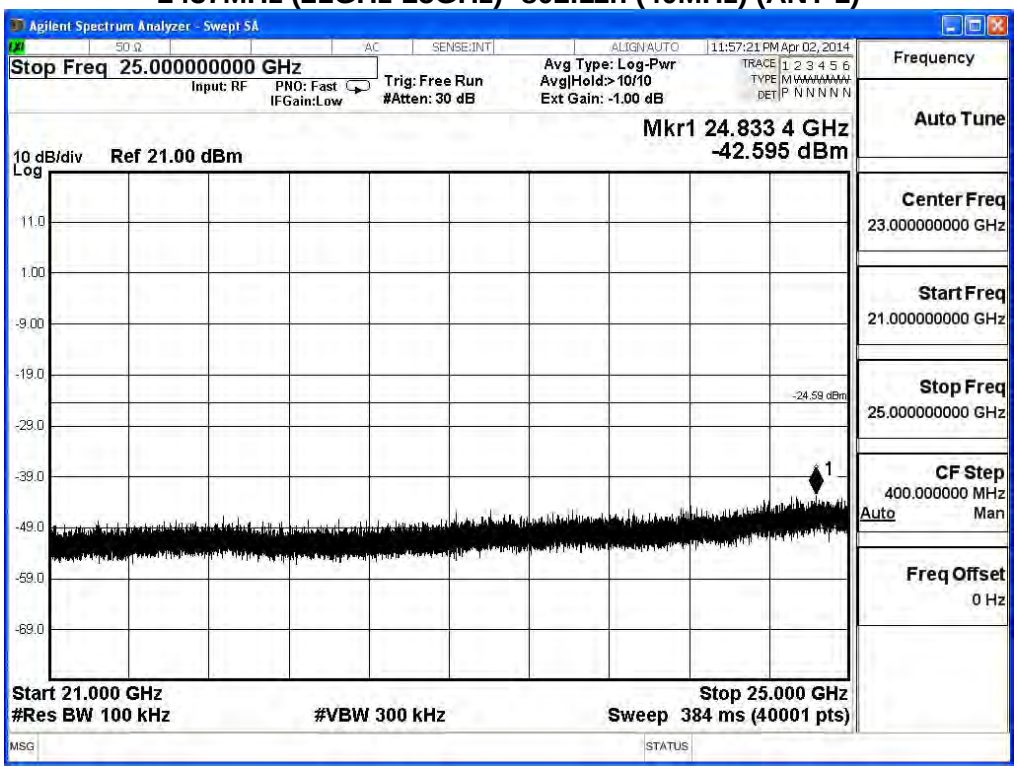
2437MHz (13GHz-17GHz) -802.11n (40MHz) (ANT 1)



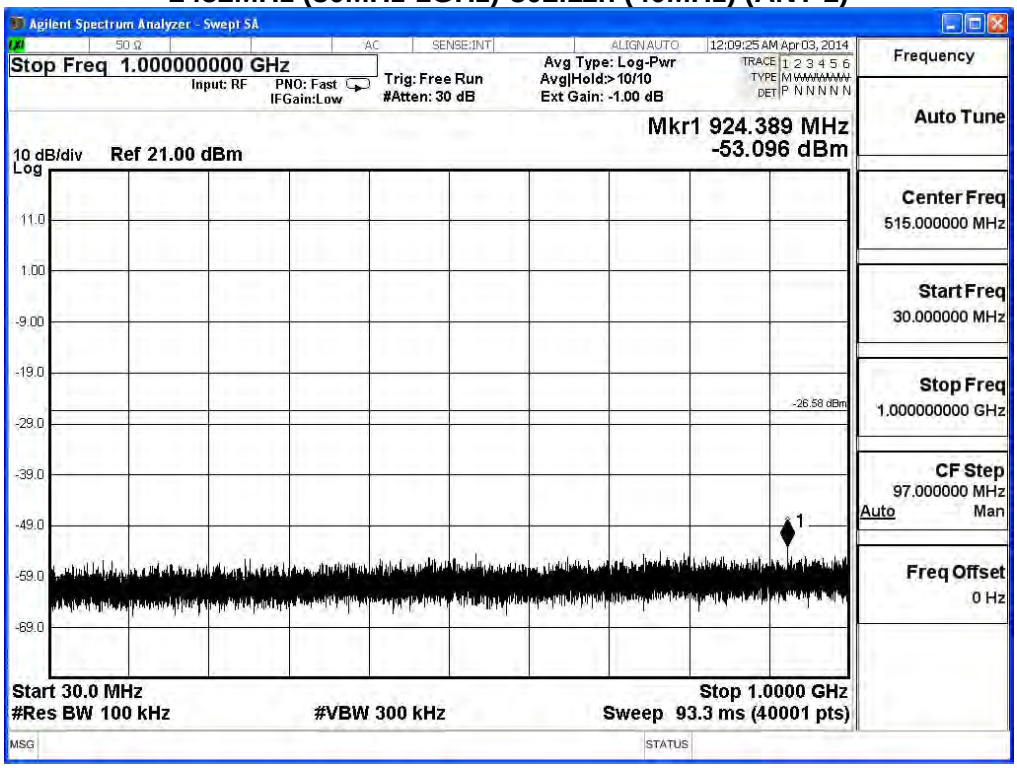
2437MHz (17GHz-21GHz) -802.11n (40MHz) (ANT 1)



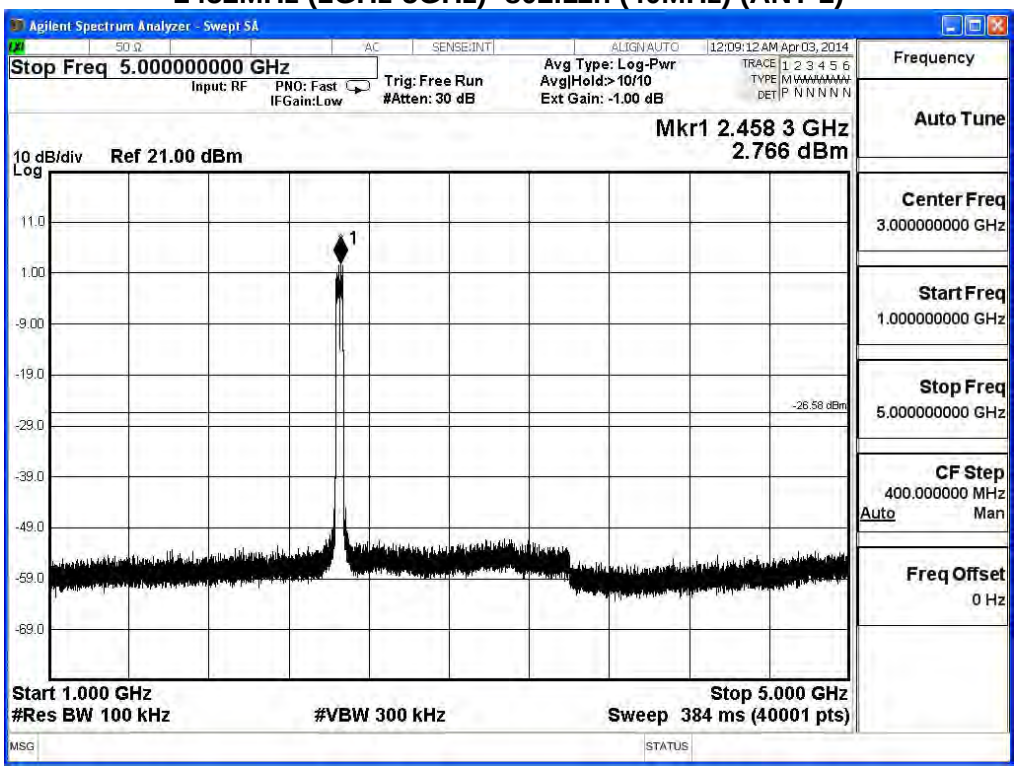
2437MHz (21GHz-25GHz) -802.11n (40MHz) (ANT 1)



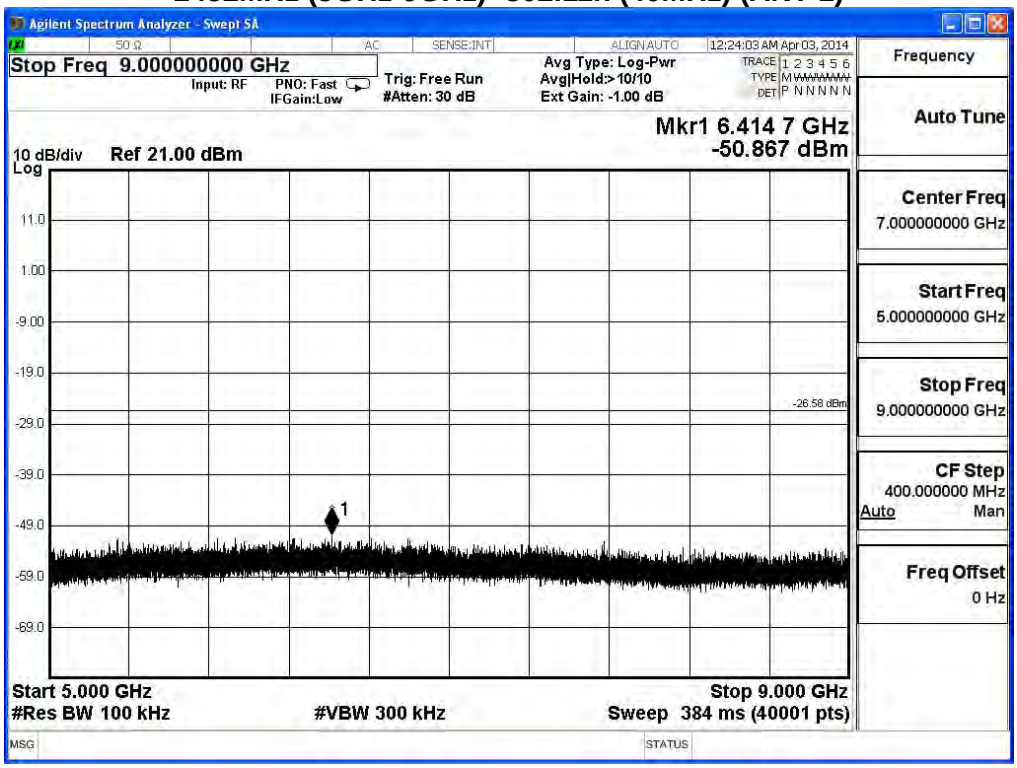
2452MHz (30MHz-1GHz)-802.11n (40MHz) (ANT 1)



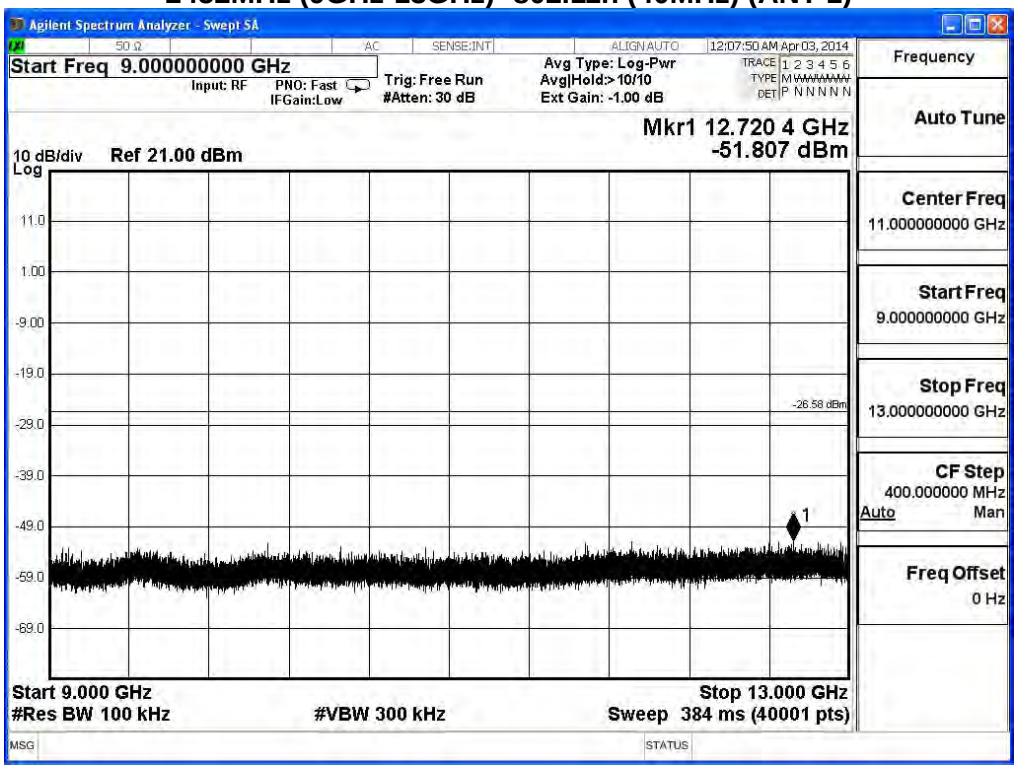
2452MHz (1GHz-5GHz) -802.11n (40MHz) (ANT 1)



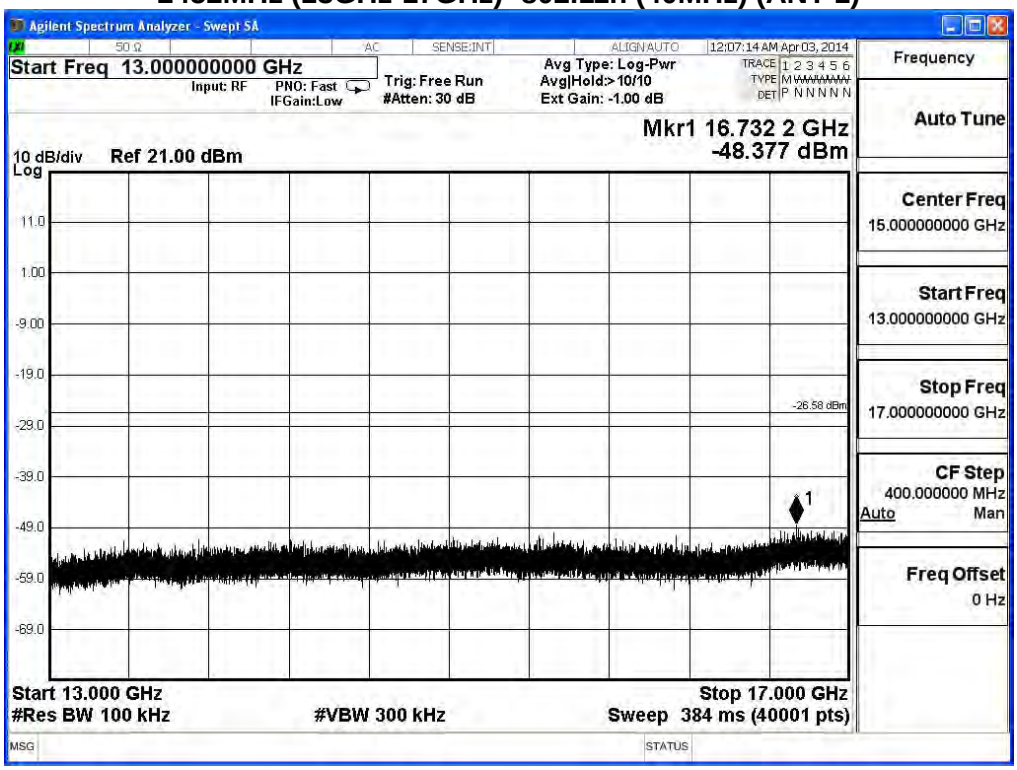
2452MHz (5GHz-9GHz) -802.11n (40MHz) (ANT 1)



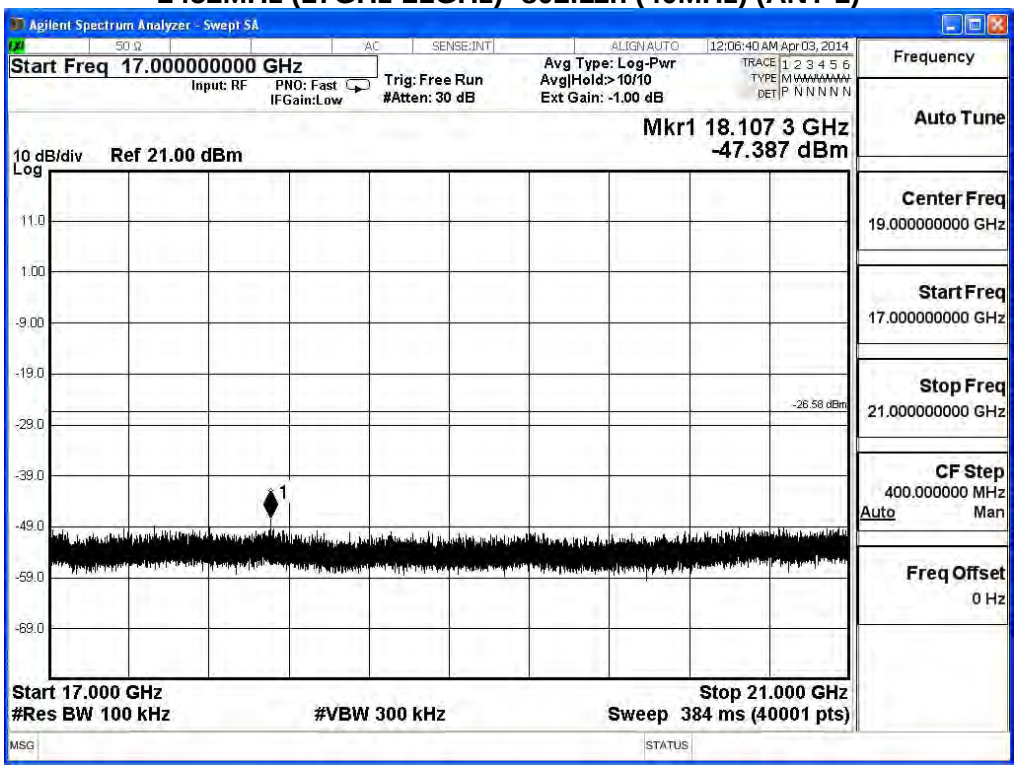
2452MHz (9GHz-13GHz) -802.11n (40MHz) (ANT 1)



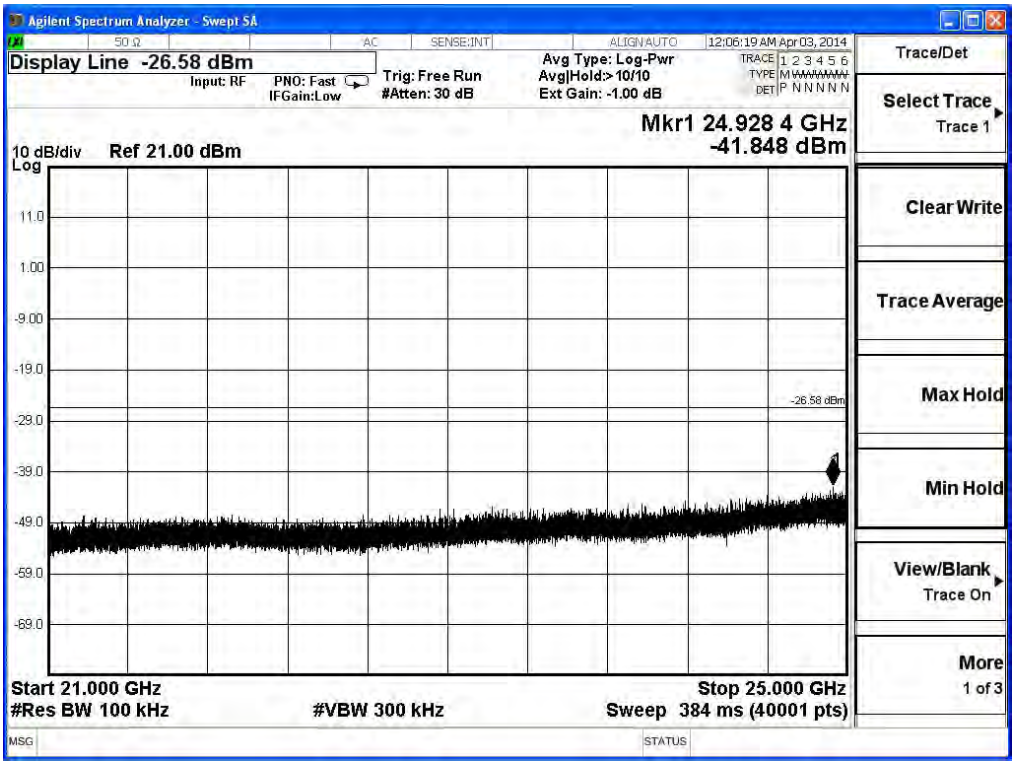
2452MHz (13GHz-17GHz) -802.11n (40MHz) (ANT 1)



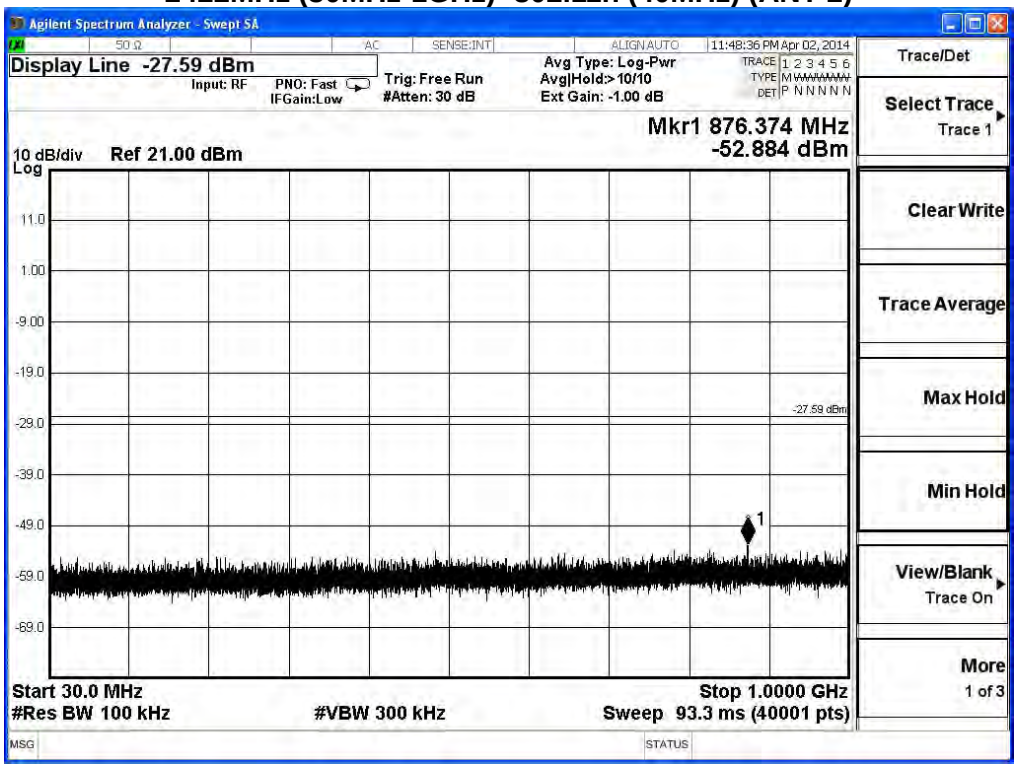
2452MHz (17GHz-21GHz) -802.11n (40MHz) (ANT 1)



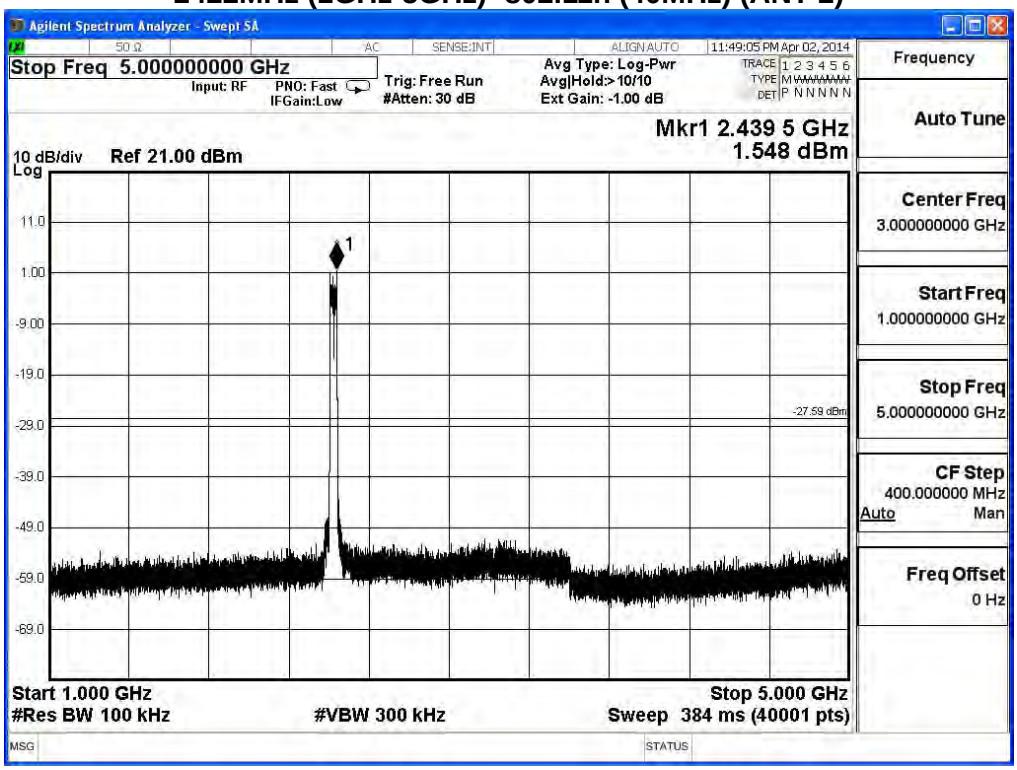
2452MHz (21GHz-25GHz) -802.11n (40MHz) (ANT 1)



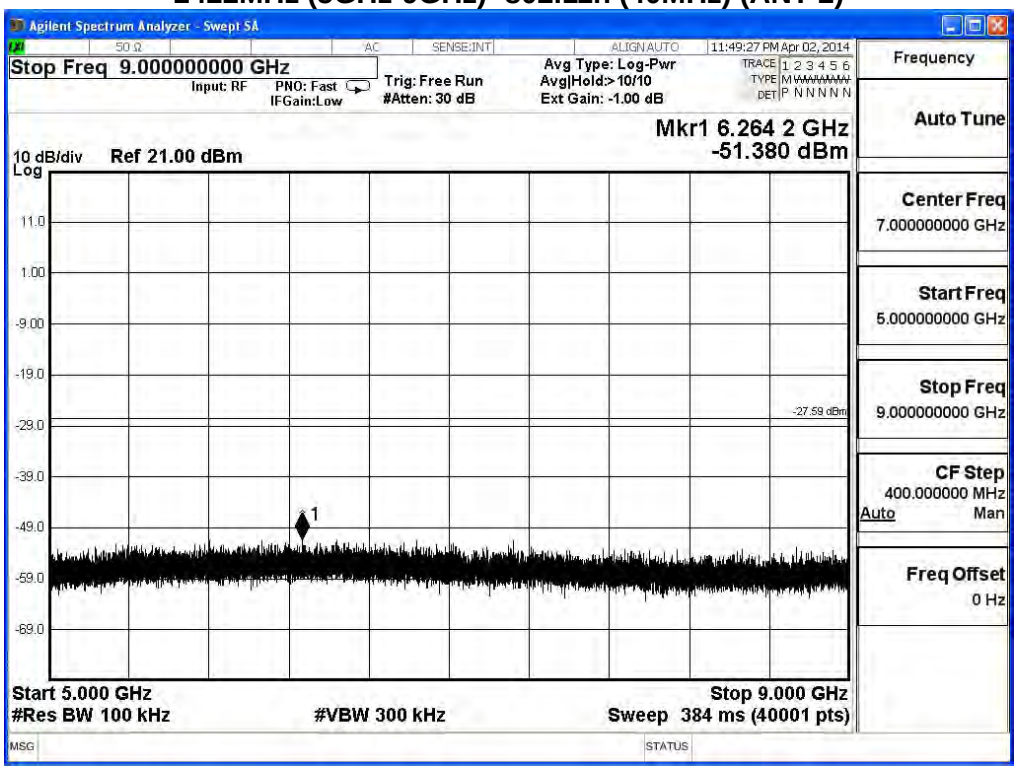
2422MHz (30MHz-1GHz)- 802.11n (40MHz) (ANT 2)



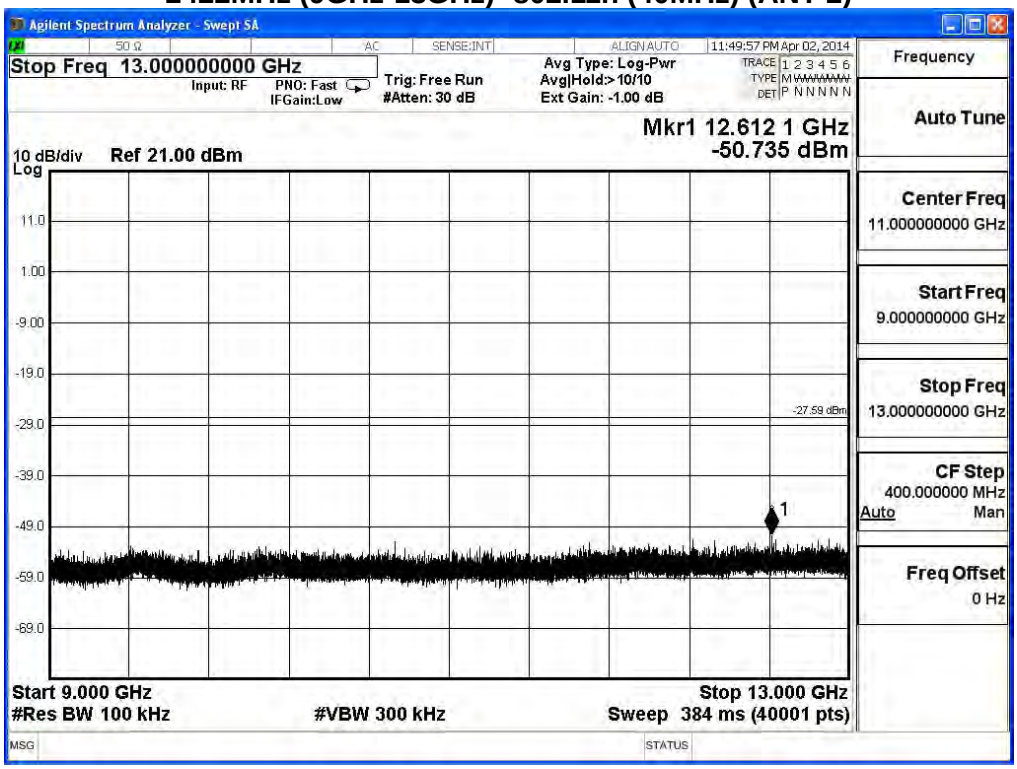
2422MHz (1GHz-5GHz) -802.11n (40MHz) (ANT 2)



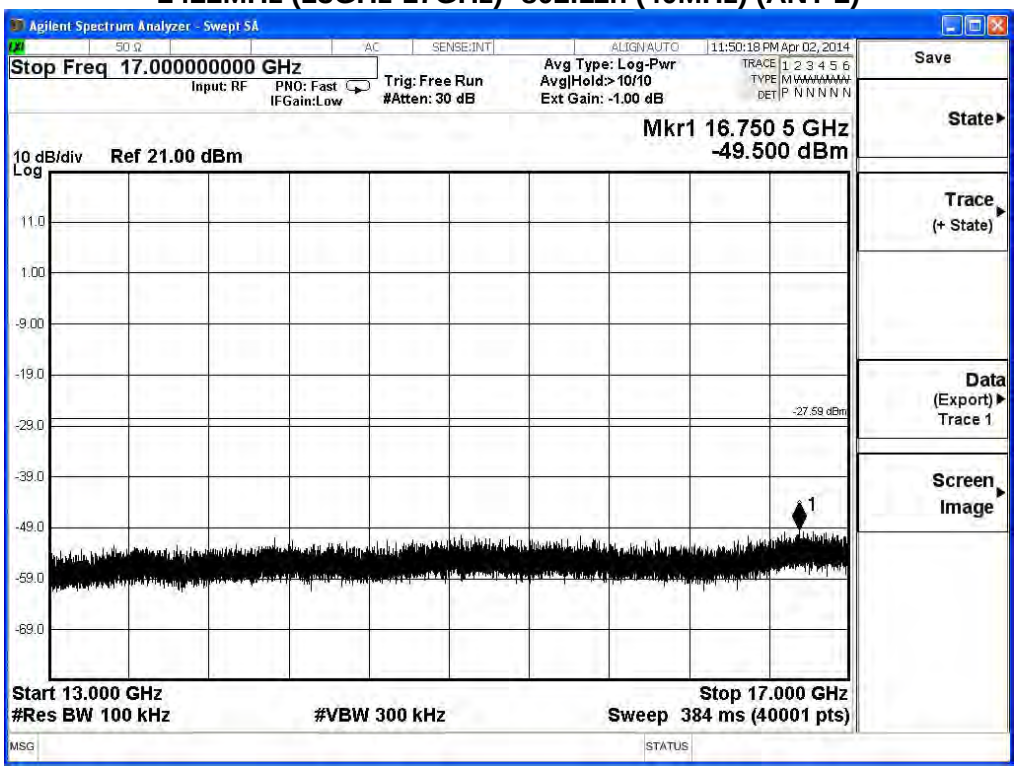
2422MHz (5GHz-9GHz) -802.11n (40MHz) (ANT 2)



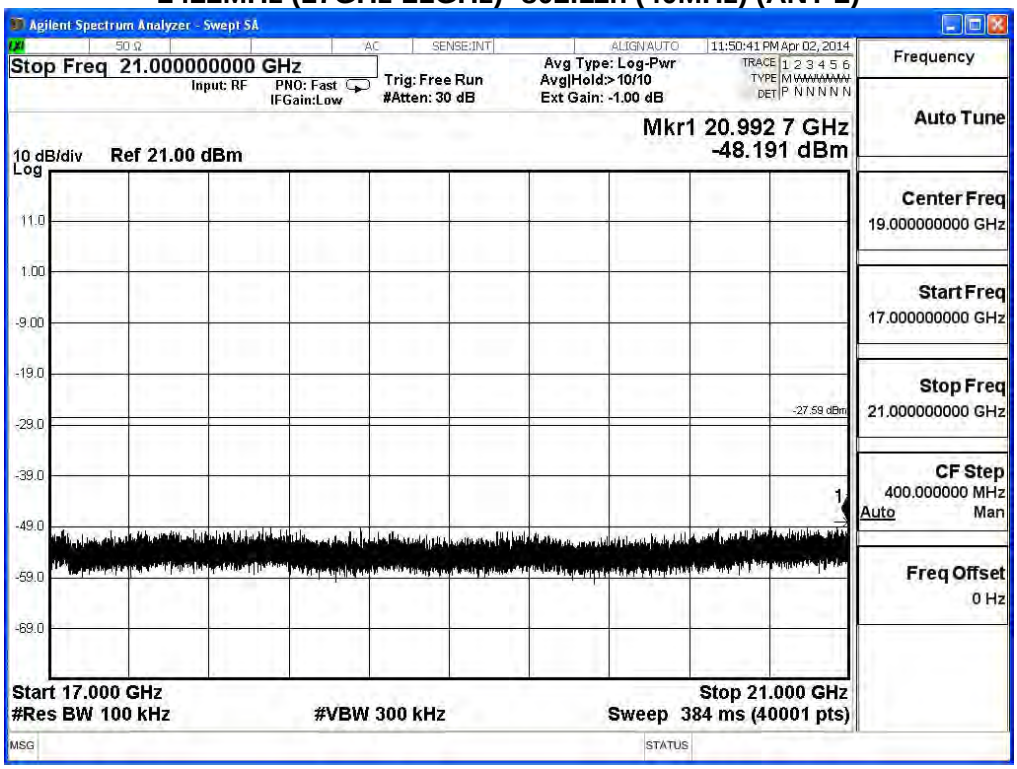
2422MHz (9GHz-13GHz) -802.11n (40MHz) (ANT 2)



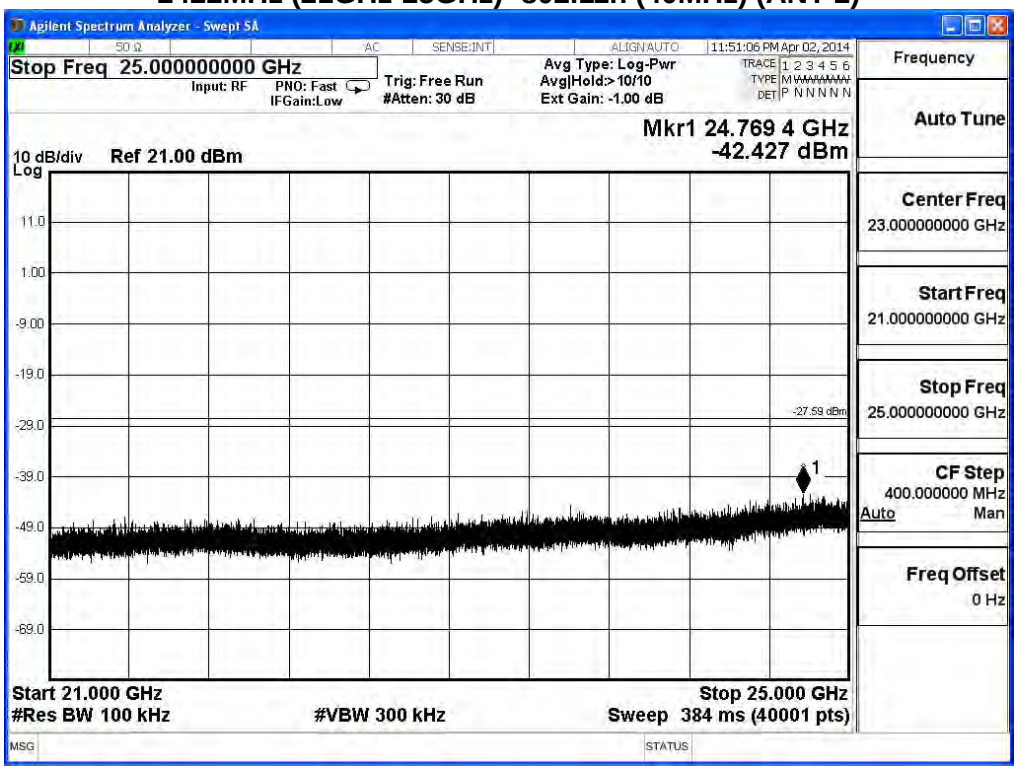
2422MHz (13GHz-17GHz) -802.11n (40MHz) (ANT 2)



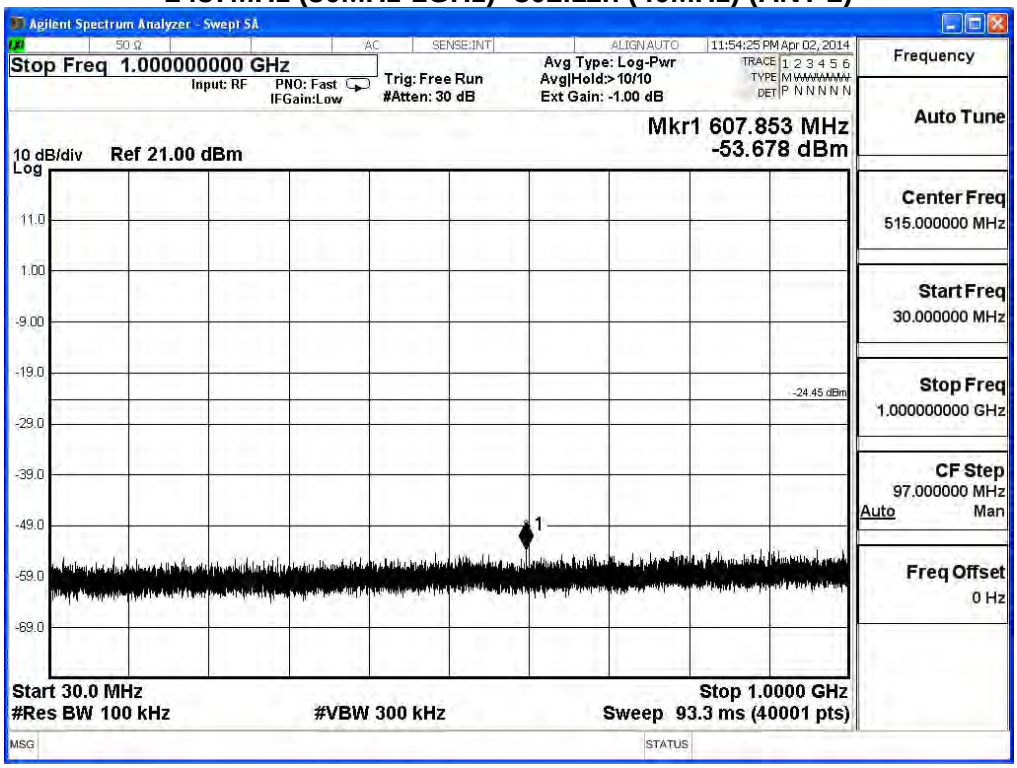
2422MHz (17GHz-21GHz) -802.11n (40MHz) (ANT 2)



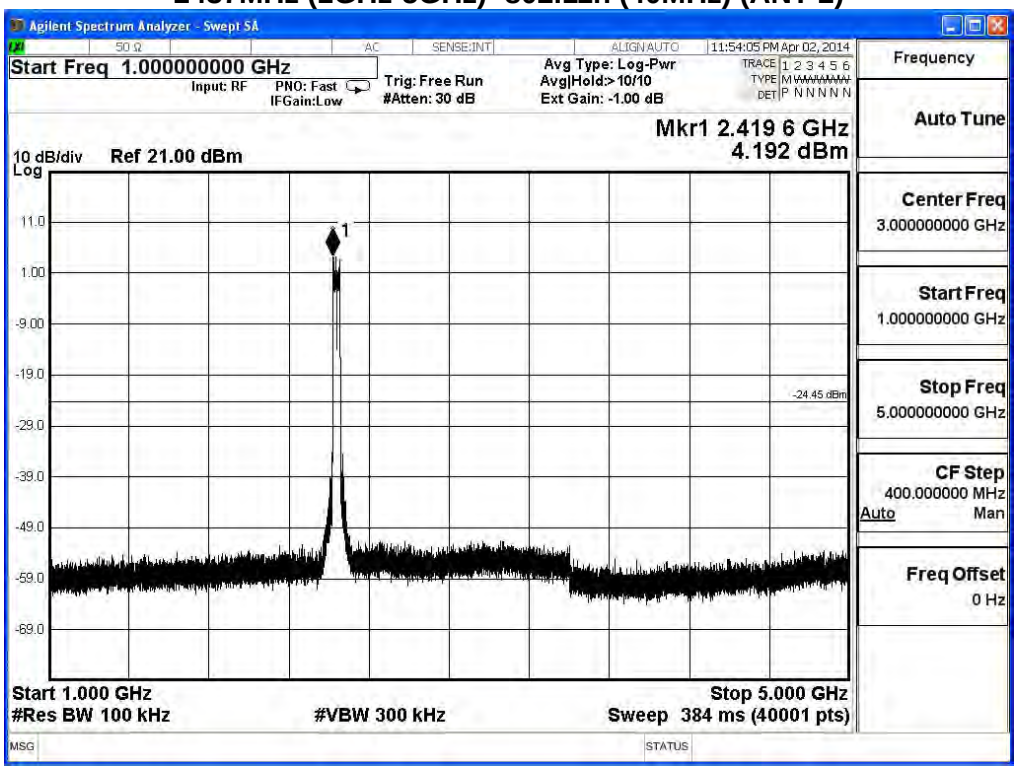
2422MHz (21GHz-25GHz) -802.11n (40MHz) (ANT 2)



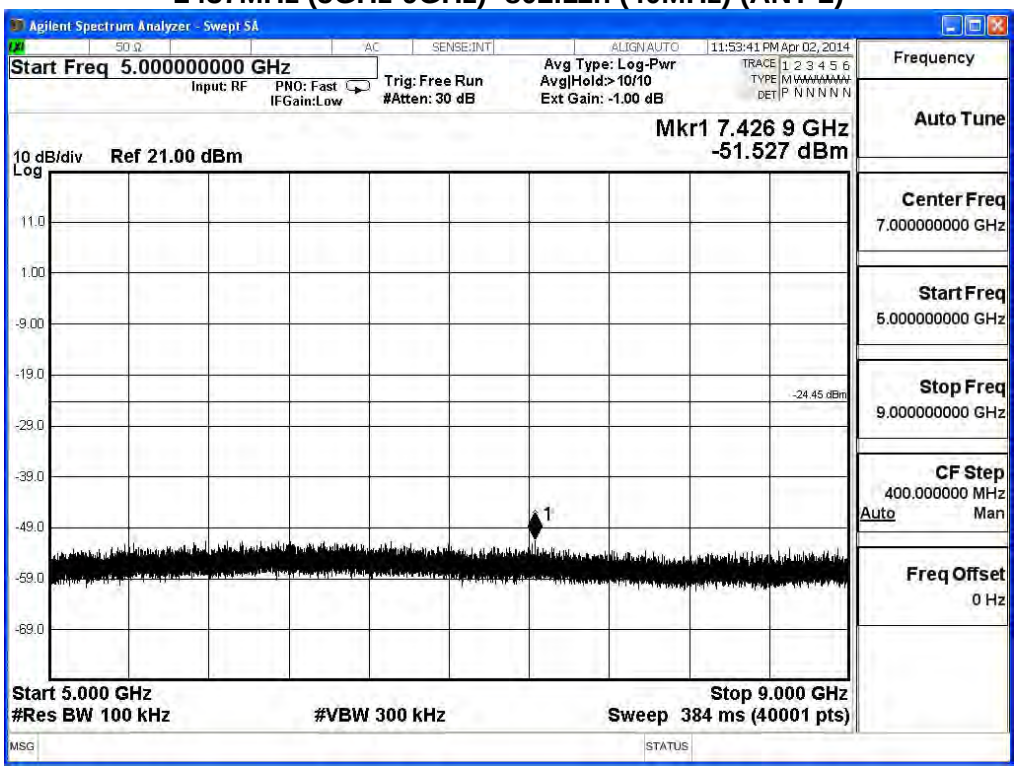
2437MHz (30MHz-1GHz)- 802.11n (40MHz) (ANT 2)



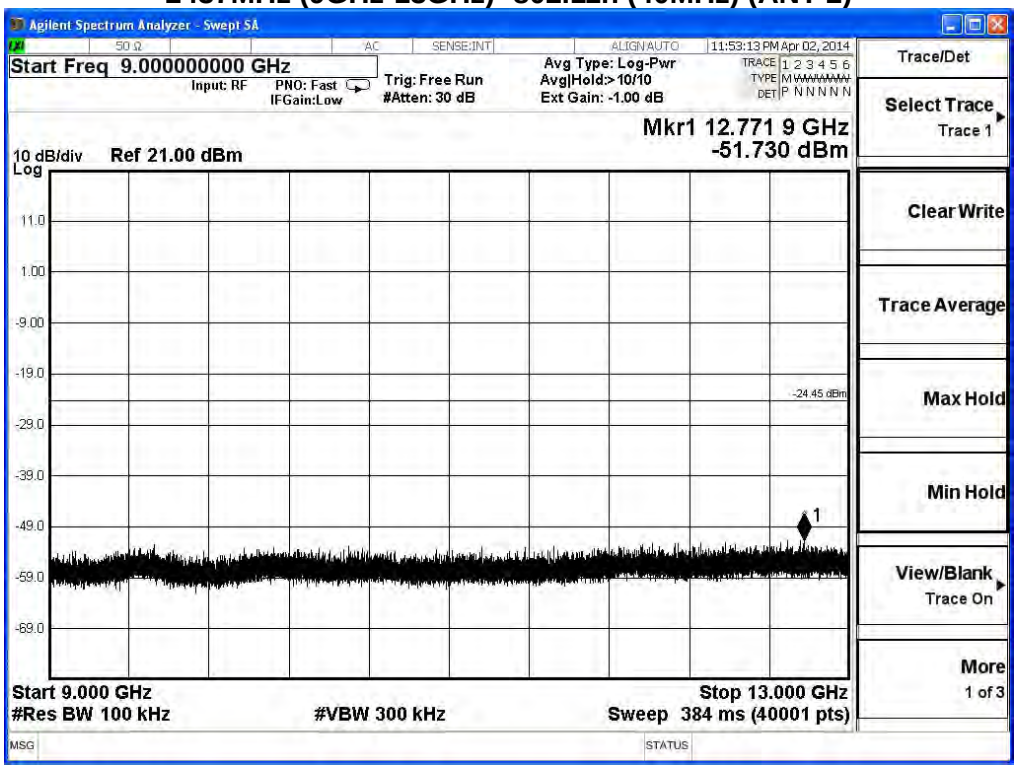
2437MHz (1GHz-5GHz) -802.11n (40MHz) (ANT 2)



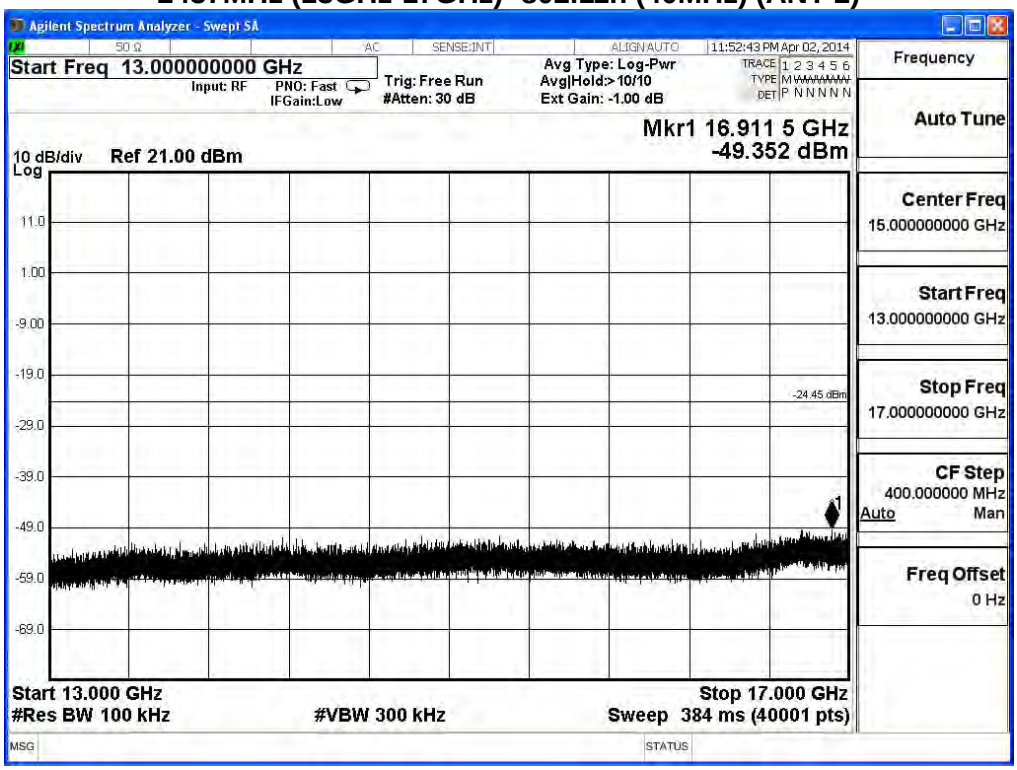
2437MHz (5GHz-9GHz) -802.11n (40MHz) (ANT 2)



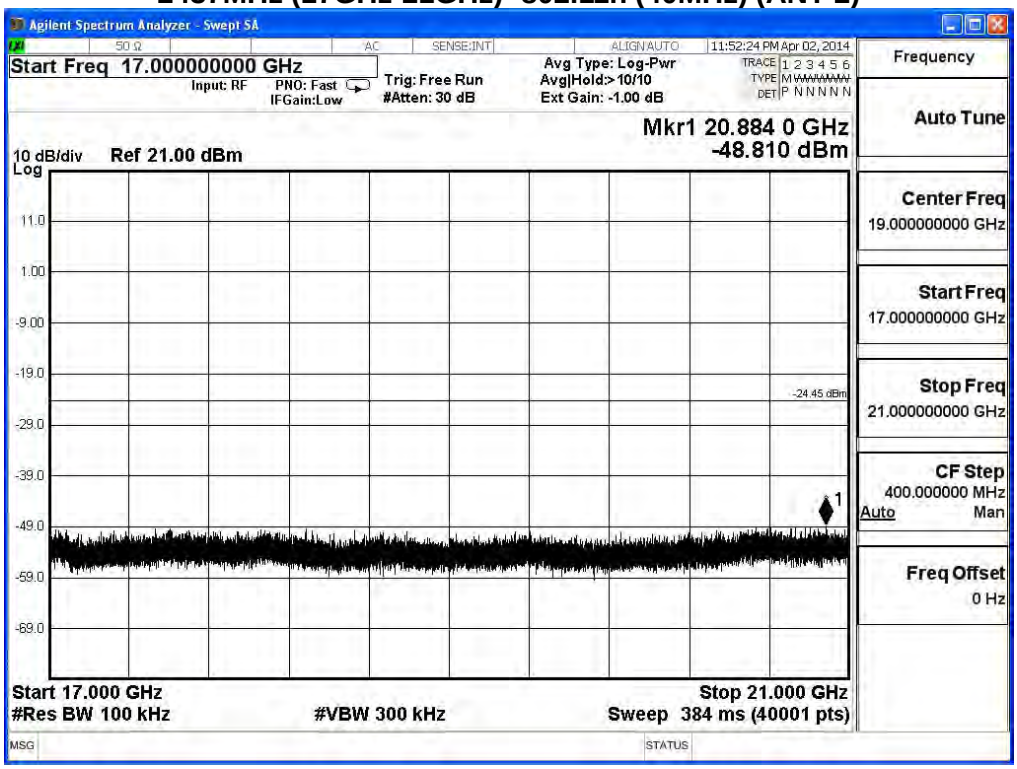
2437MHz (9GHz-13GHz) -802.11n (40MHz) (ANT 2)



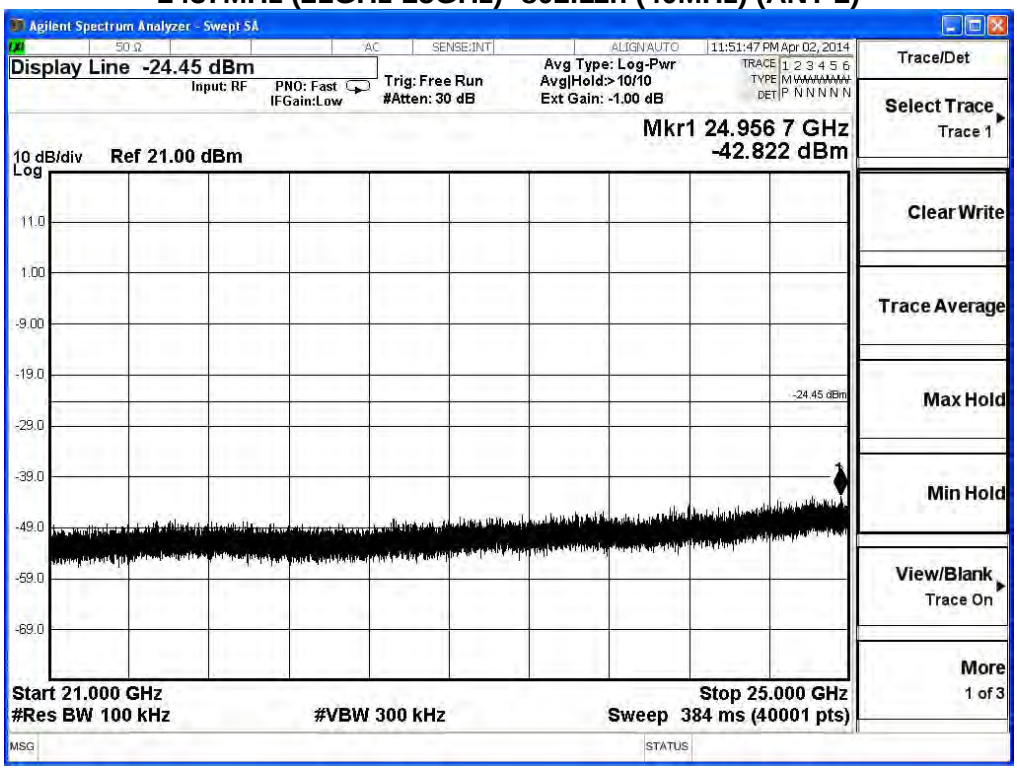
2437MHz (13GHz-17GHz) -802.11n (40MHz) (ANT 2)



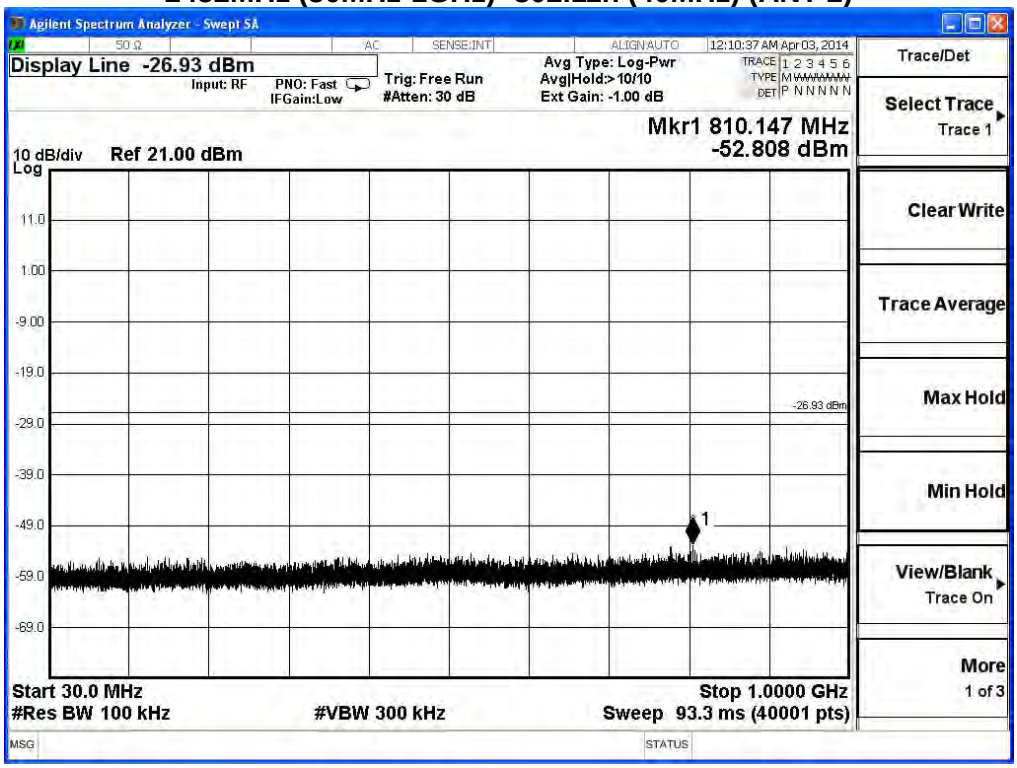
2437MHz (17GHz-21GHz) -802.11n (40MHz) (ANT 2)



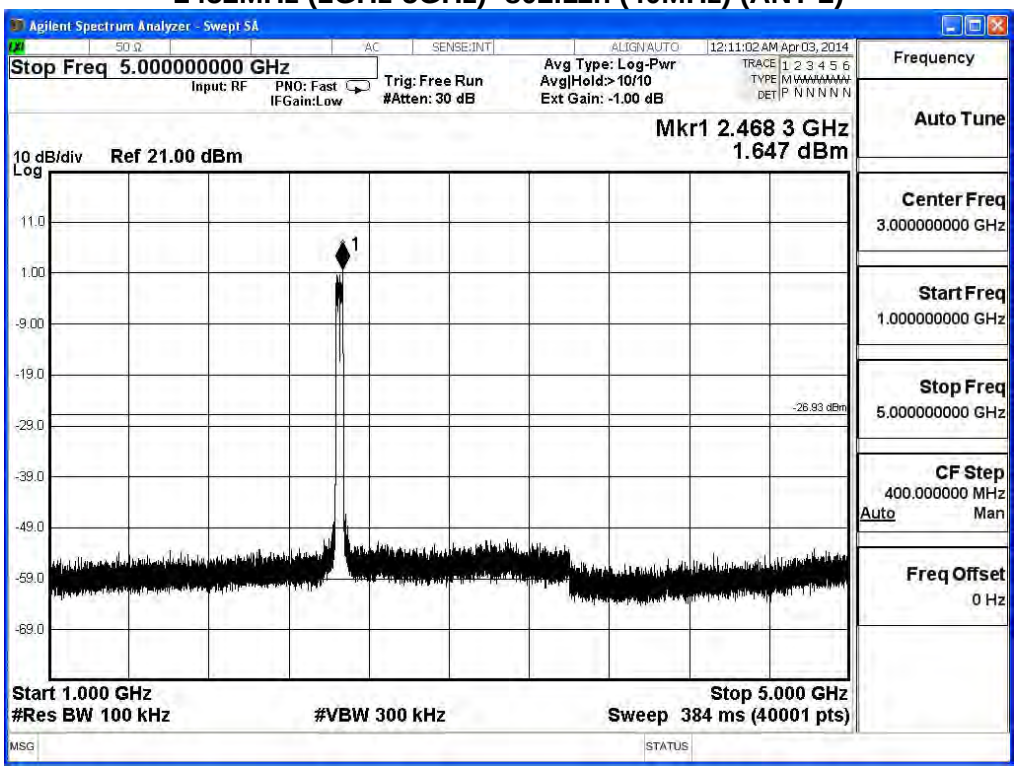
2437MHz (21GHz-25GHz) -802.11n (40MHz) (ANT 2)



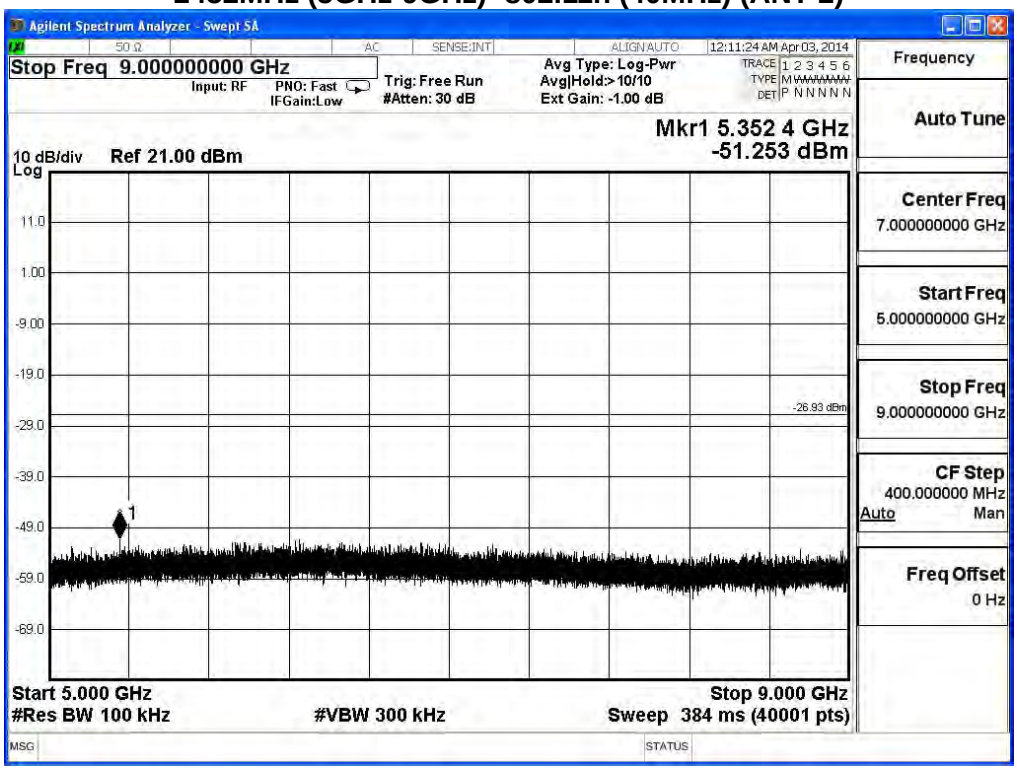
2452MHz (30MHz-1GHz)- 802.11n (40MHz) (ANT 2)



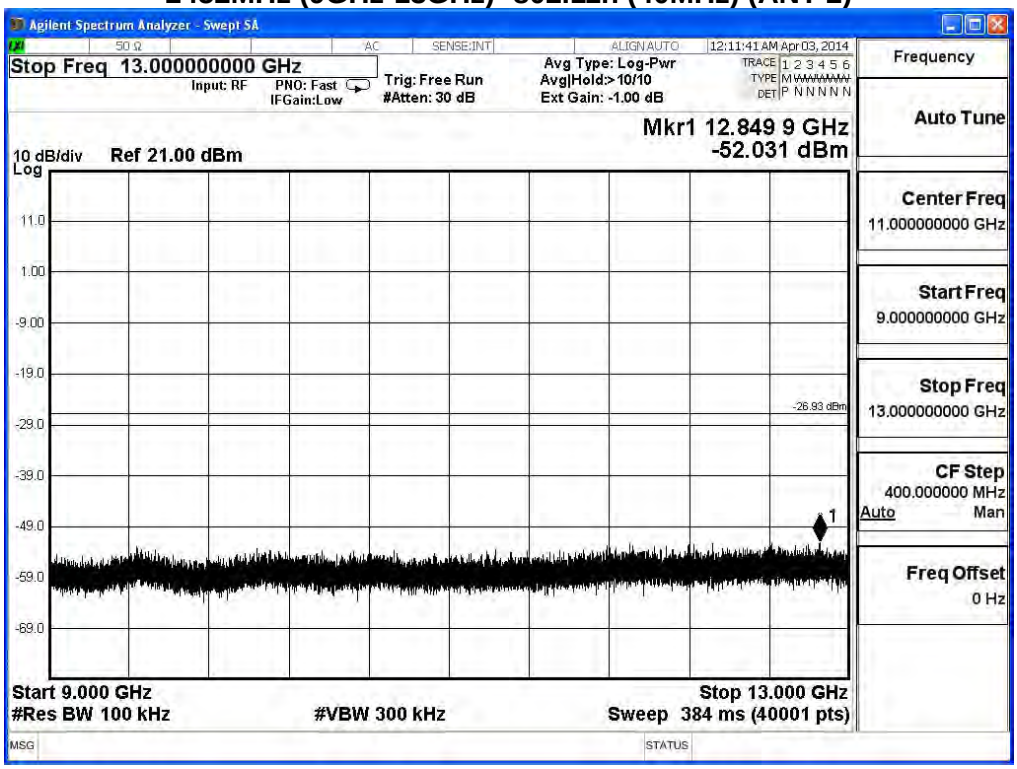
2452MHz (1GHz-5GHz) -802.11n (40MHz) (ANT 2)



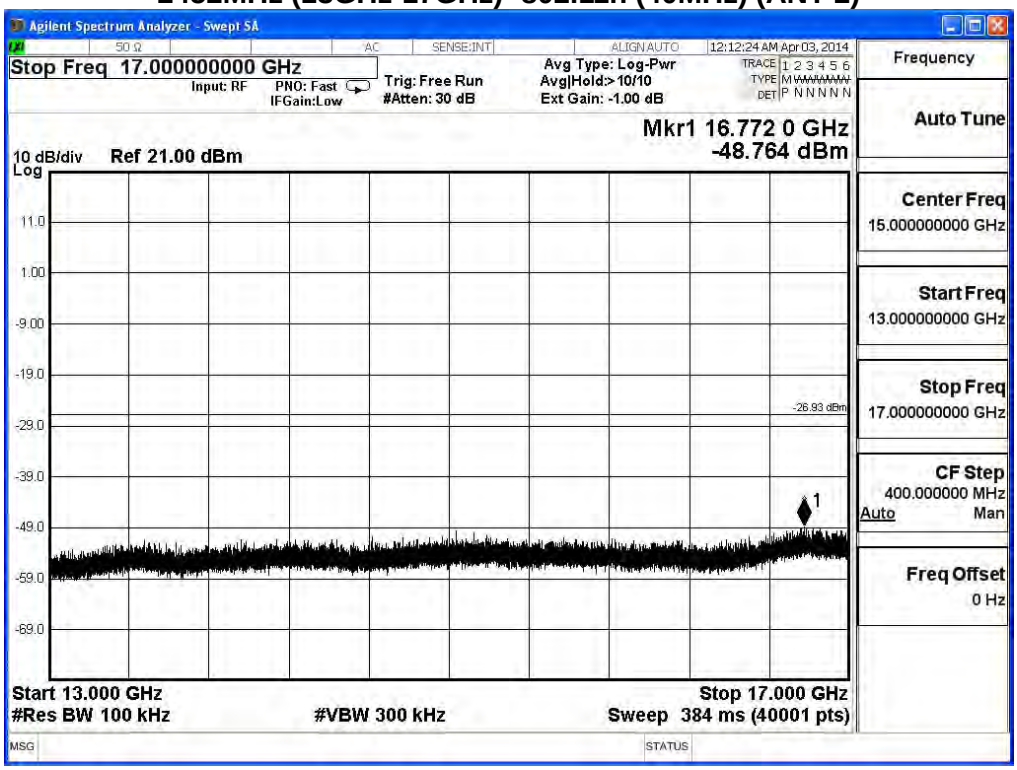
2452MHz (5GHz-9GHz) -802.11n (40MHz) (ANT 2)



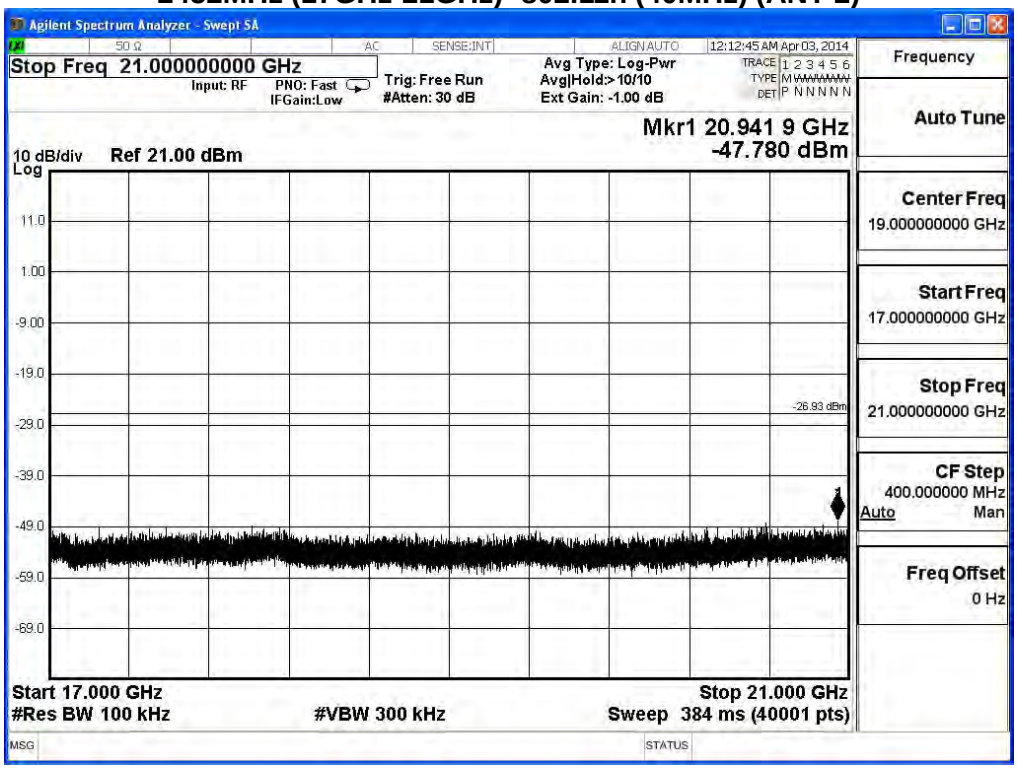
2452MHz (9GHz-13GHz) -802.11n (40MHz) (ANT 2)



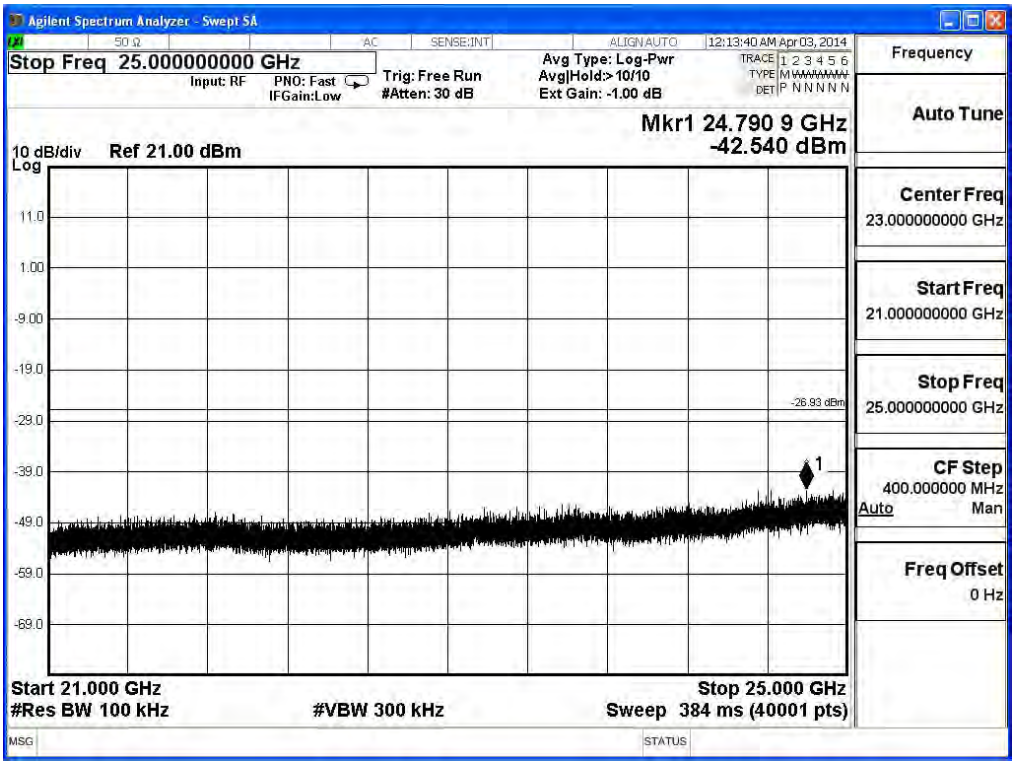
2452MHz (13GHz-17GHz) -802.11n (40MHz) (ANT 2)



2452MHz (17GHz-21GHz) -802.11n (40MHz) (ANT 2)



2452MHz (21GHz-25GHz) -802.11n (40MHz) (ANT 2)



6. Radiated Emission Band Edge

6.1. Test Equipment

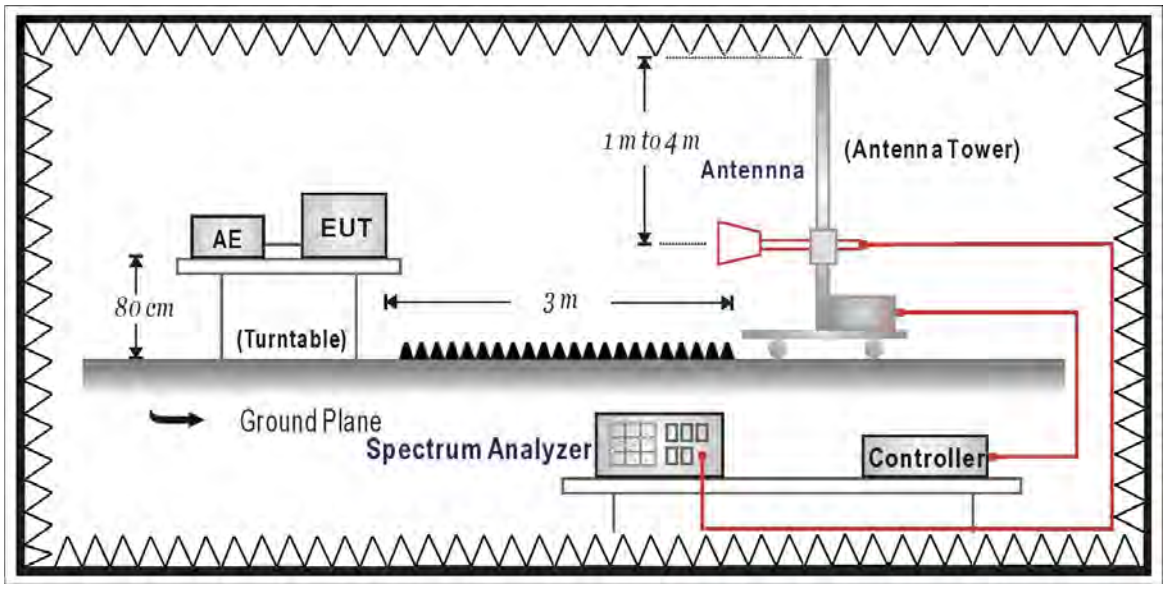
The following test equipments are used during the test:

Radiated Emission Band Edge / CB1

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Double Ridged Guide Horn Antenna	Schwarzback	BBHA 9120	D743	2015/02/12
Spectrum Analyzer	Agilent	E4440A	MY46187335	2015/01/12
k Type Cable	Huber Suhner	Sucoflex 102	25623/2	2015/02/10

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

6.2. Test Setup



6.3. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

6.4. Test Procedure

The EUT was setup according to ANSI C63.4: 2009 and tested according to DTS test procedure of KDB558074 v03r01 for compliance to FCC 47CFR 15.247 requirements.
The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4: 2009 on radiated measurement.

6.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2013

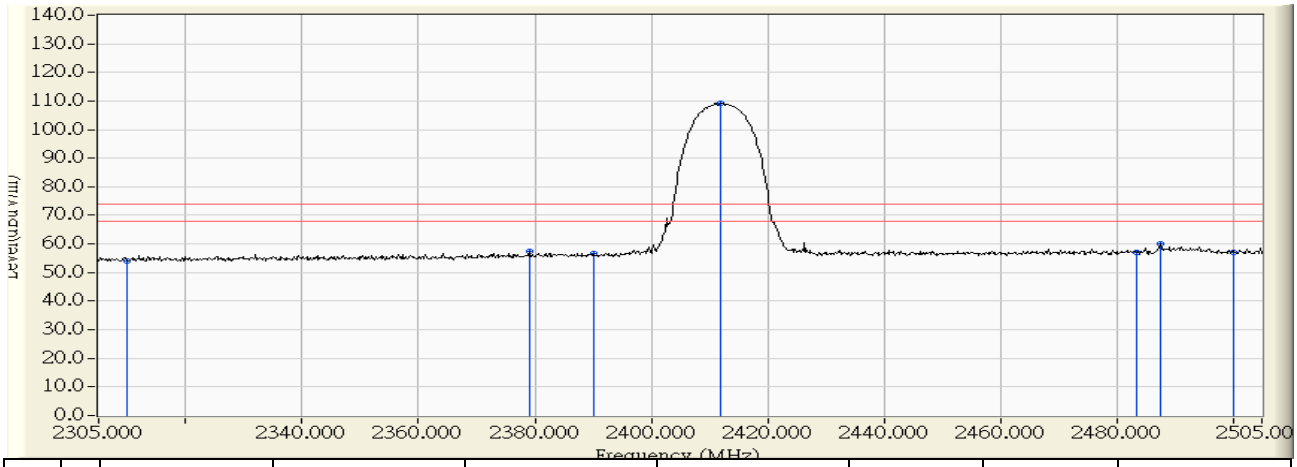
6.6. Uncertainty

The measurement uncertainty
± 3.9 dB above 1GHz

6.7. Test Result

Radiated is defined as

Site : CB1	**Time : 2014/03/20 - 19:24**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : AC 120V/ 60Hz**
EUT : RT-N18U 2.4GHz 600Mbps High Power Router	**Note : Mode1: Transmit_CDD Mode(Adapter:CWT,CAP018121)_802.11b_2412MHz**

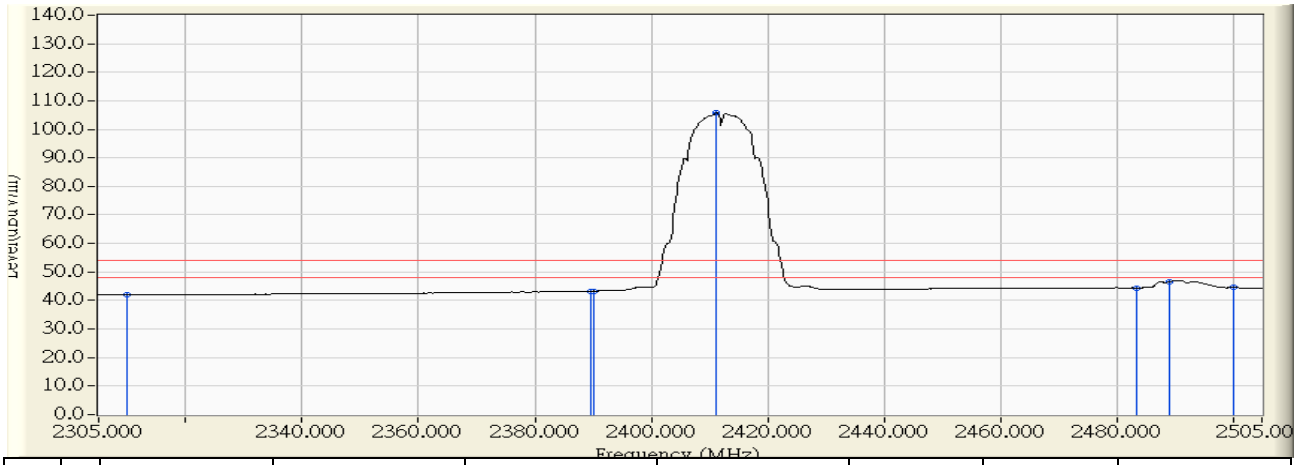


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	30.059	24.169	54.228	-19.772	74.000	PEAK
2		2379.000	30.774	26.714	57.488	-16.512	74.000	PEAK
3		2390.000	30.888	25.968	56.856	-17.144	74.000	PEAK
4	*	2412.000	31.116	78.166	109.282	35.282	74.000	PEAK
5		2483.500	31.858	25.265	57.123	-16.877	74.000	PEAK
6		2487.600	31.901	27.982	59.882	-14.118	74.000	PEAK
7		2500.000	31.988	25.134	57.123	-16.877	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2014/03/20 - 19:25**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : AC 120V/ 60Hz**
EUT : RT-N18U 2.4GHz 600Mbps High Power Router	**Note : Mode1: Transmit_CDD Mode(Adapter:CWT,CAP018121)_802.11b_2412MHz**

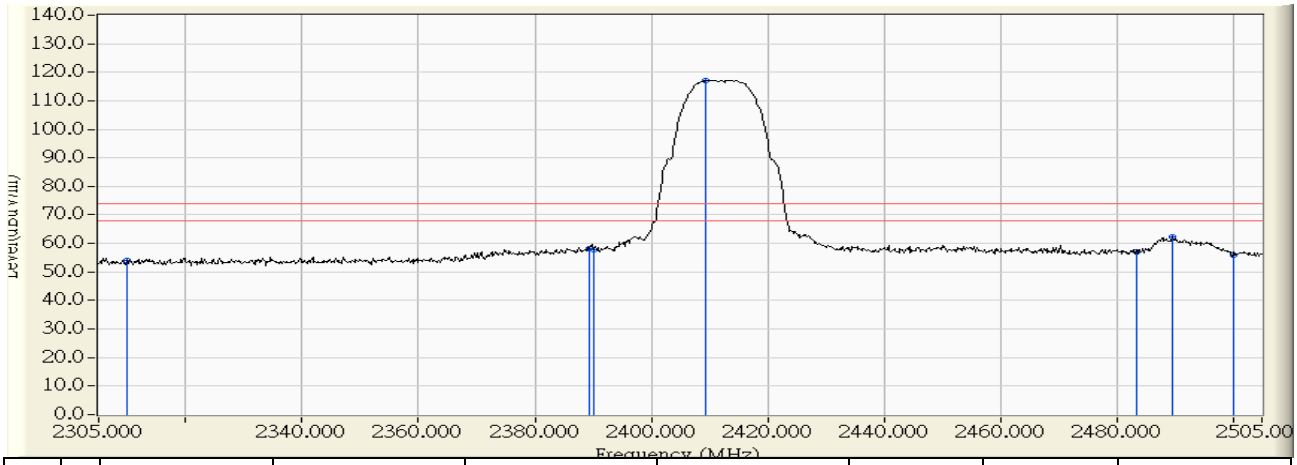


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	30.059	11.919	41.978	-12.022	54.000	AVERAGE
2		2389.600	30.884	12.451	43.335	-10.665	54.000	AVERAGE
3		2390.000	30.888	12.450	43.338	-10.662	54.000	AVERAGE
4	*	2411.200	31.108	74.675	105.783	51.783	54.000	AVERAGE
5		2483.500	31.858	12.592	44.450	-9.550	54.000	AVERAGE
6		2489.000	31.915	14.542	46.457	-7.543	54.000	AVERAGE
7		2500.000	31.988	12.668	44.657	-9.343	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2014/03/27 - 10:01**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : AC 120V/ 60Hz**
EUT : RT-N18U 2.4GHz 600Mbps High Power Router	**Note : Mode1: Transmit_CDD Mode(Adapter:CWT,CAP018121)_802.11b_2412MHz**

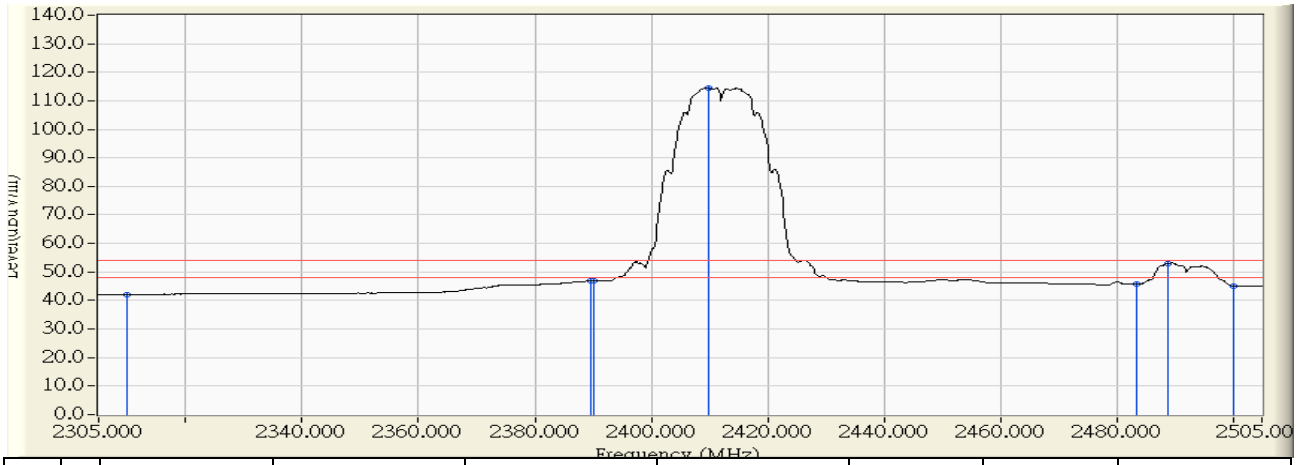


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	30.059	23.816	53.875	-20.125	74.000	PEAK
2		2389.400	30.882	27.438	58.320	-15.680	74.000	PEAK
3		2390.000	30.888	26.760	57.648	-16.352	74.000	PEAK
4	*	2409.400	31.089	86.198	117.288	43.288	74.000	PEAK
5		2483.500	31.858	25.347	57.205	-16.795	74.000	PEAK
6		2489.600	31.921	30.343	62.264	-11.736	74.000	PEAK
7		2500.000	31.988	23.773	55.762	-18.238	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2014/03/27 - 10:00**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : AC 120V/ 60Hz**
EUT : RT-N18U 2.4GHz 600Mbps High Power Router	**Note : Mode1: Transmit_CDD Mode(Adapter:CWT,CAP018121)_802.11b_2412MHz**

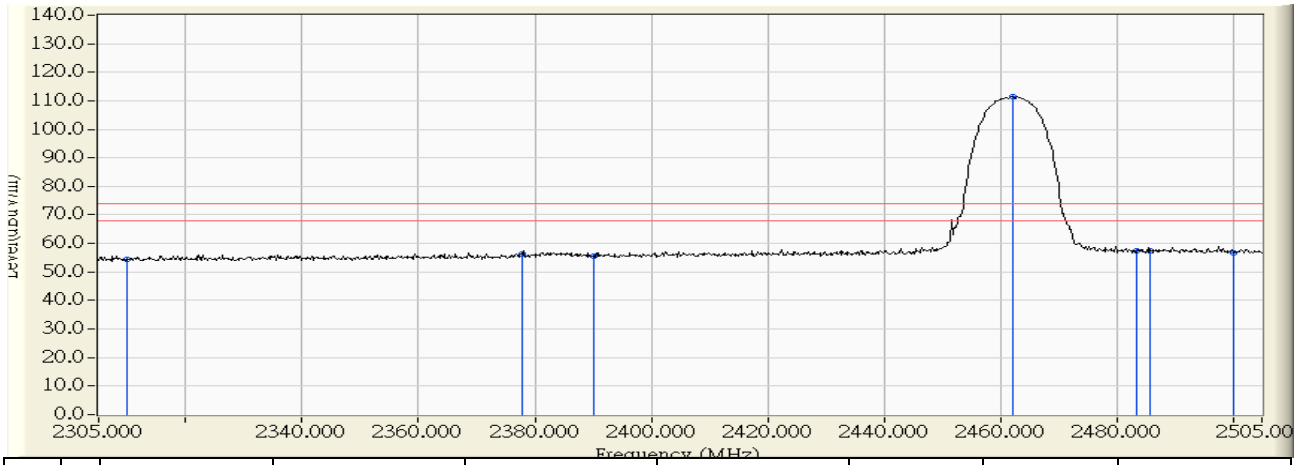


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	30.059	12.052	42.111	-11.889	54.000	AVERAGE
2		2389.600	30.884	16.038	46.922	-7.078	54.000	AVERAGE
3		2390.000	30.888	15.991	46.879	-7.121	54.000	AVERAGE
4	*	2409.800	31.093	83.463	114.557	60.557	54.000	AVERAGE
5		2483.500	31.858	13.877	45.735	-8.265	54.000	AVERAGE
6		2488.800	31.913	20.969	52.882	-1.118	54.000	AVERAGE
7		2500.000	31.988	13.199	45.188	-8.812	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2014/03/20 - 20:10**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : AC 120V/ 60Hz**
EUT : RT-N18U 2.4GHz 600Mbps High Power Router	**Note : Mode1: Transmit_CDD Mode(Adapter:CWT,CAP018121)_802.11b_2462MHz**

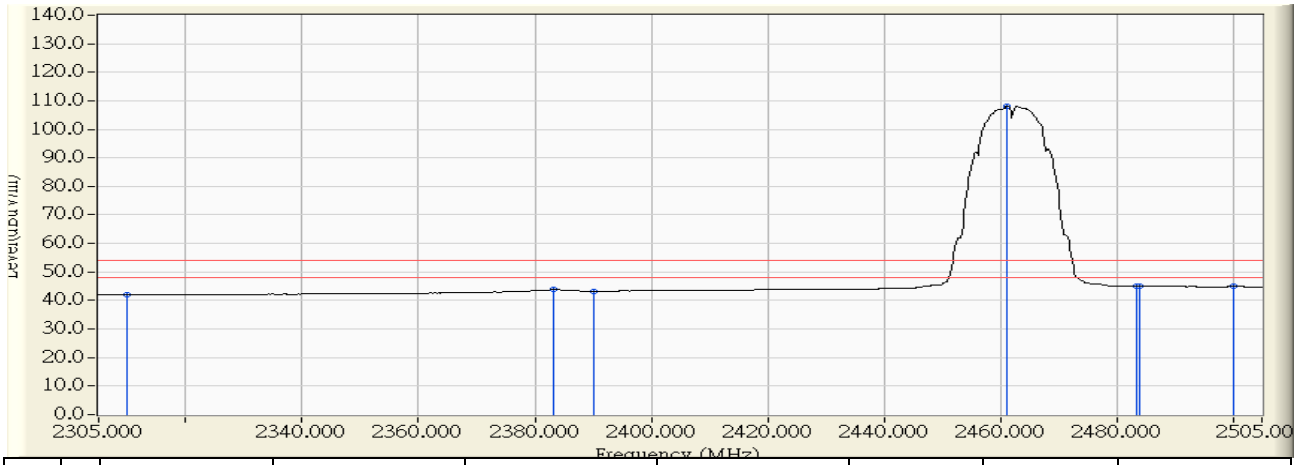


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	30.059	24.248	54.307	-19.693	74.000	PEAK
2		2377.800	30.762	25.709	56.471	-17.529	74.000	PEAK
3		2390.000	30.888	24.743	55.631	-18.369	74.000	PEAK
4	*	2462.200	31.637	79.825	111.462	37.462	74.000	PEAK
5		2483.500	31.858	25.383	57.241	-16.759	74.000	PEAK
6		2485.800	31.881	25.697	57.579	-16.421	74.000	PEAK
7		2500.000	31.988	24.838	56.827	-17.173	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2014/03/20 - 20:11**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : AC 120V/ 60Hz**
EUT : RT-N18U 2.4GHz 600Mbps High Power Router	**Note : Mode1: Transmit_CDD Mode(Adapter:CWT,CAP018121)_802.11b_2462MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	30.059	11.901	41.960	-12.040	54.000	AVERAGE
2		2383.200	30.817	12.926	43.744	-10.256	54.000	AVERAGE
3		2390.000	30.888	12.410	43.298	-10.702	54.000	AVERAGE
4	*	2461.200	31.627	76.583	108.210	54.210	54.000	AVERAGE
5		2483.500	31.858	13.112	44.970	-9.030	54.000	AVERAGE
6		2484.000	31.863	13.107	44.970	-9.030	54.000	AVERAGE
7		2500.000	31.988	13.040	45.029	-8.971	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.