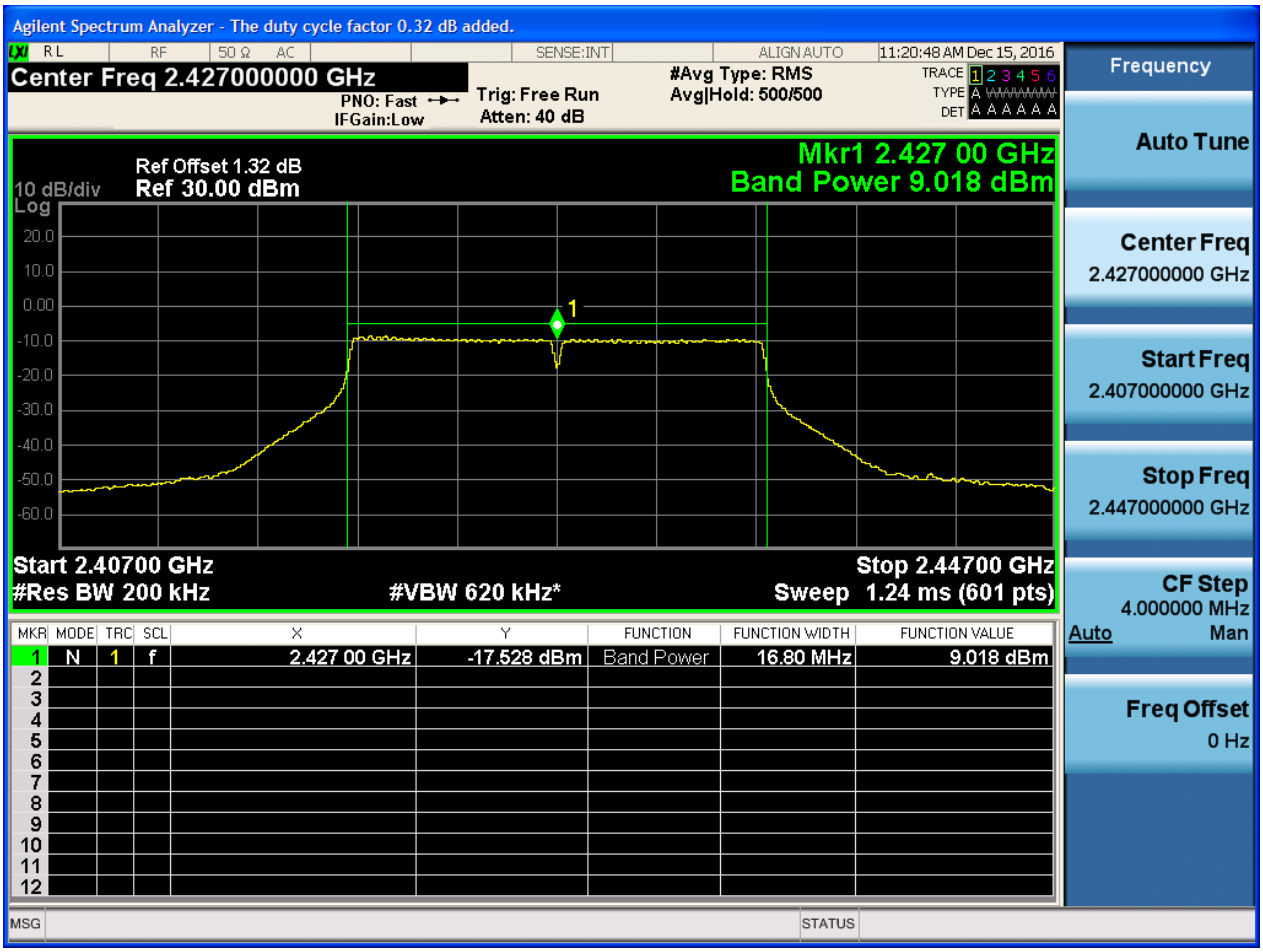
2.10 11G_M@Ant 2



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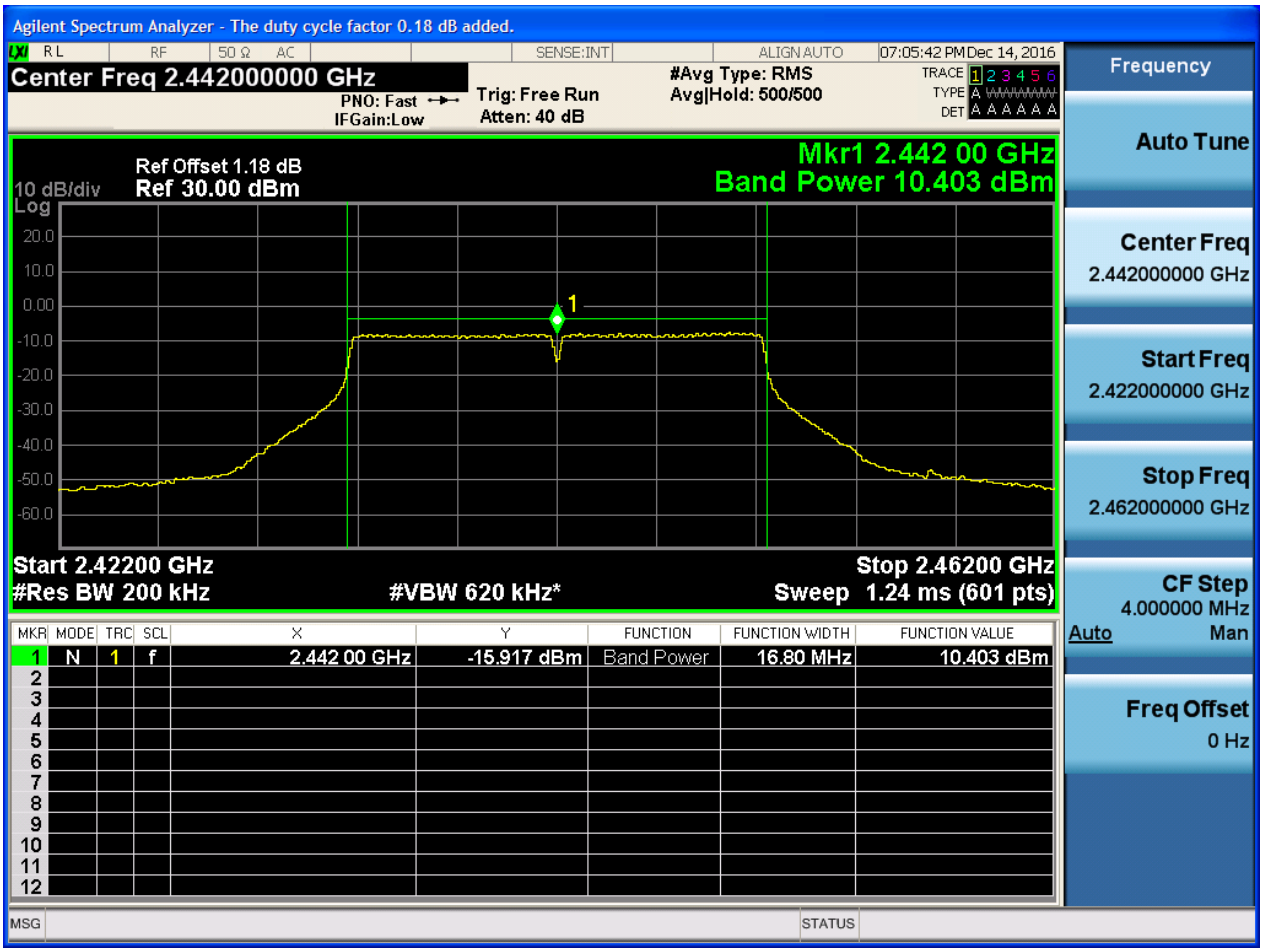
2.11 11G_H@Ant 1



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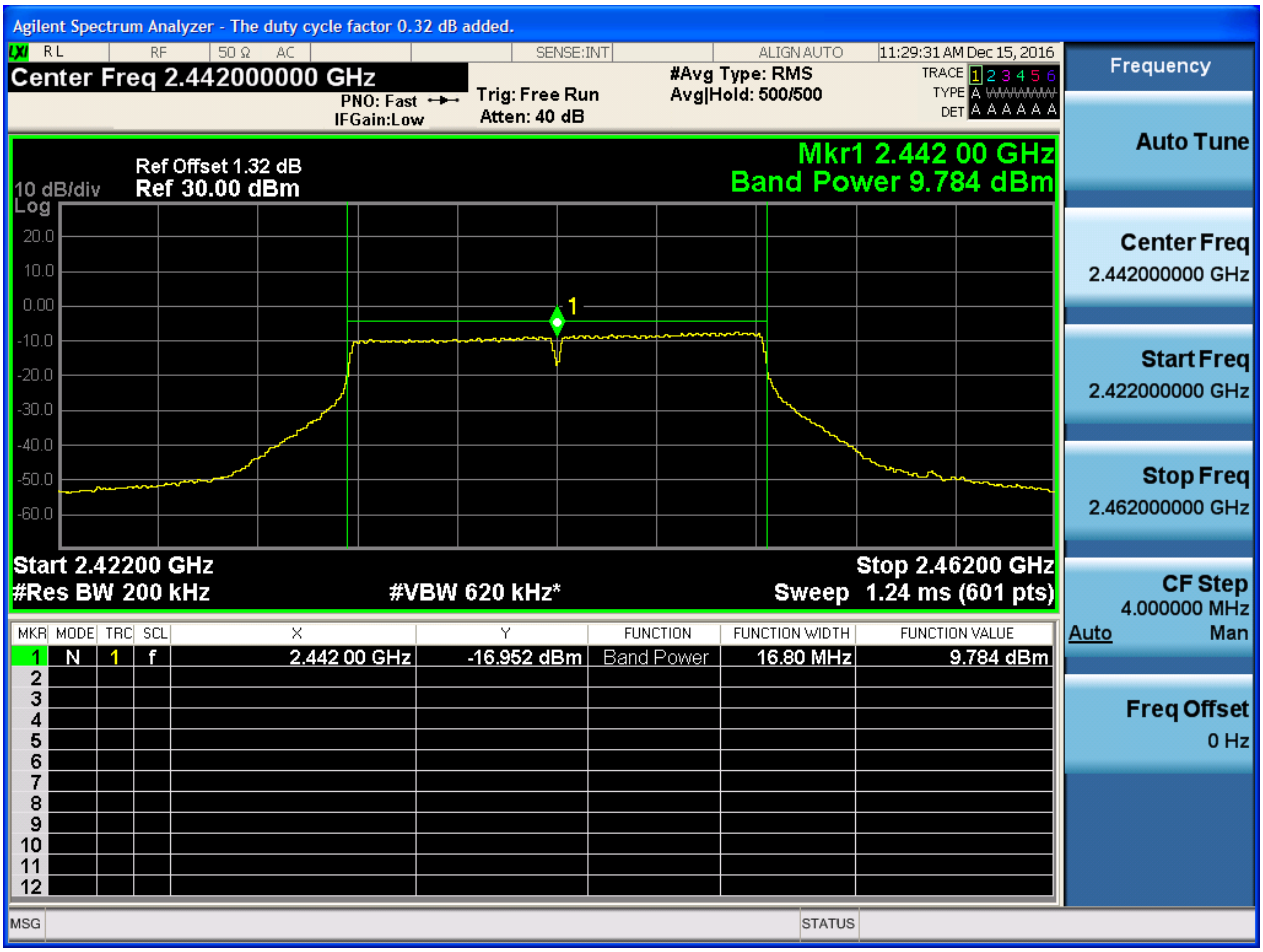
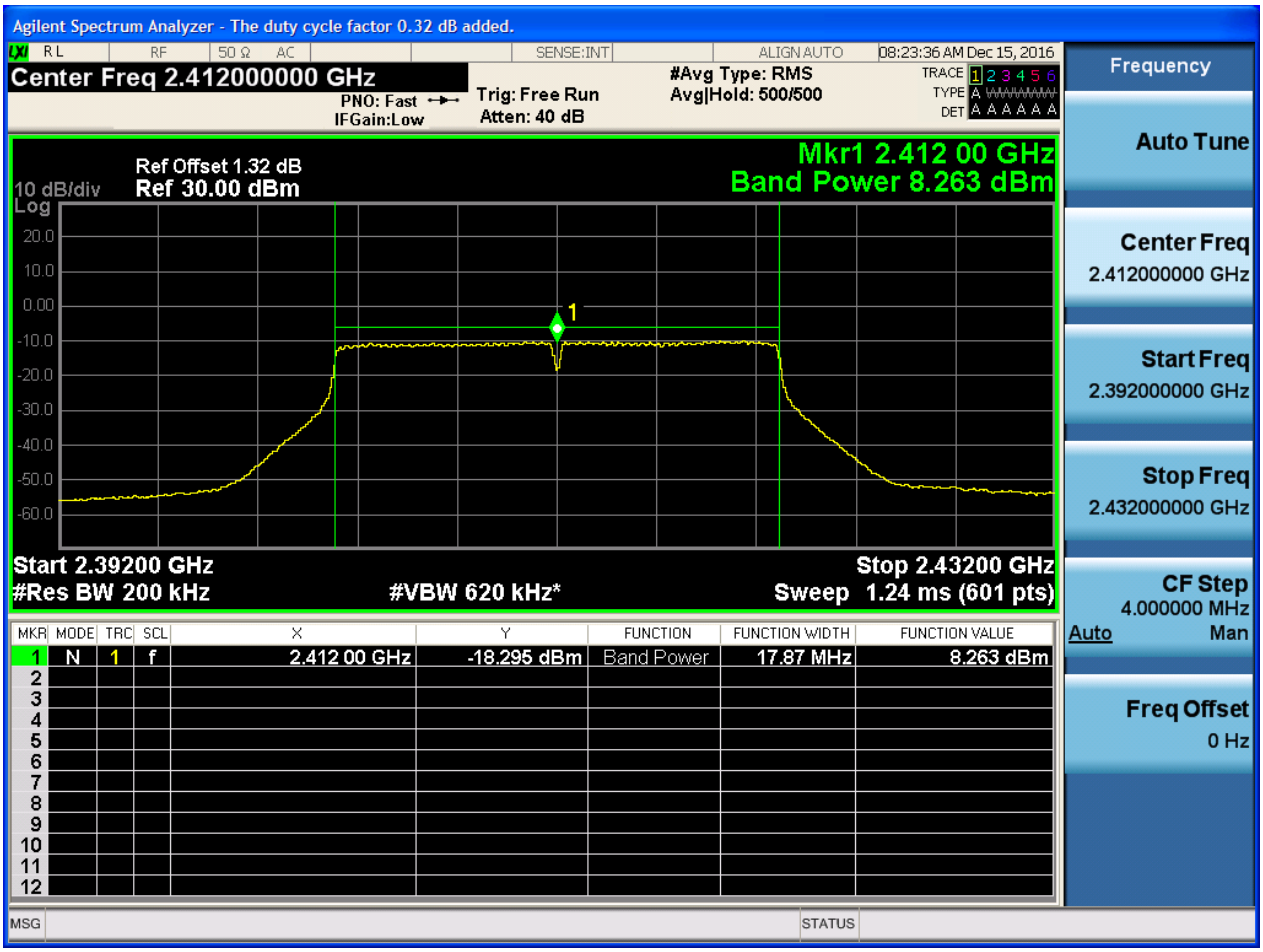
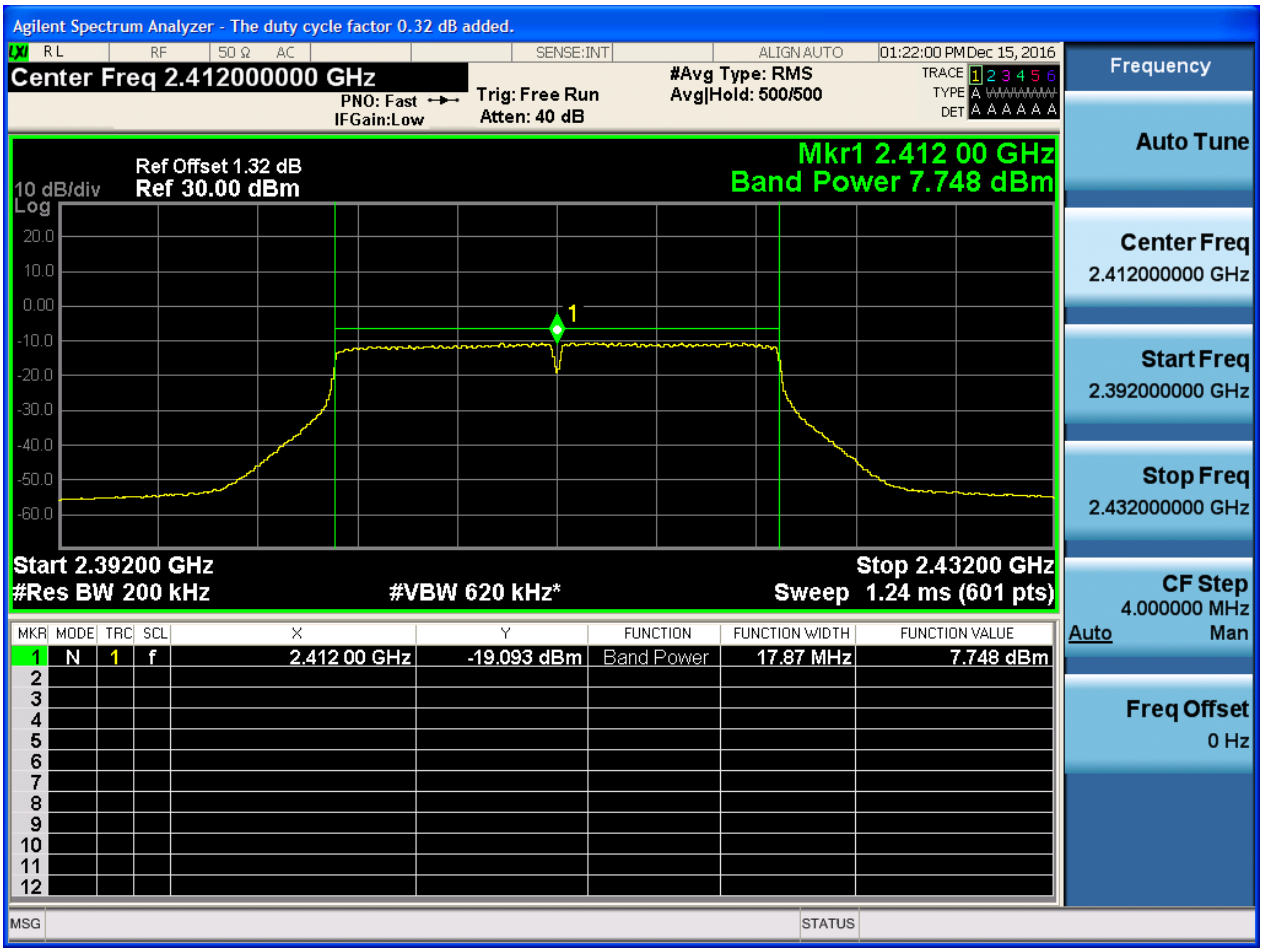
2.12 11G_H@Ant 2



2.13 11N20_L@Ant 1



2.14 11N20_L@Ant 2



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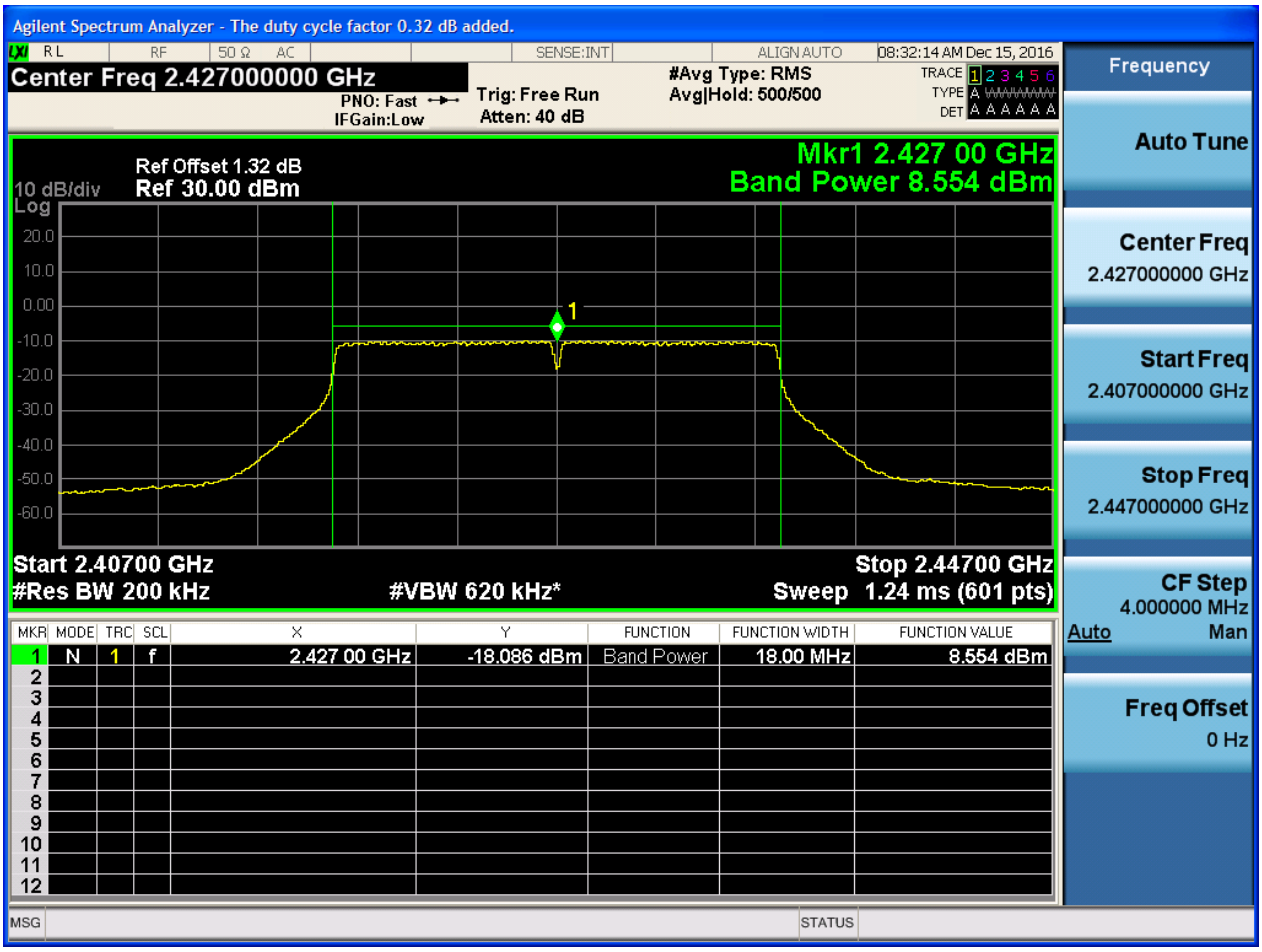
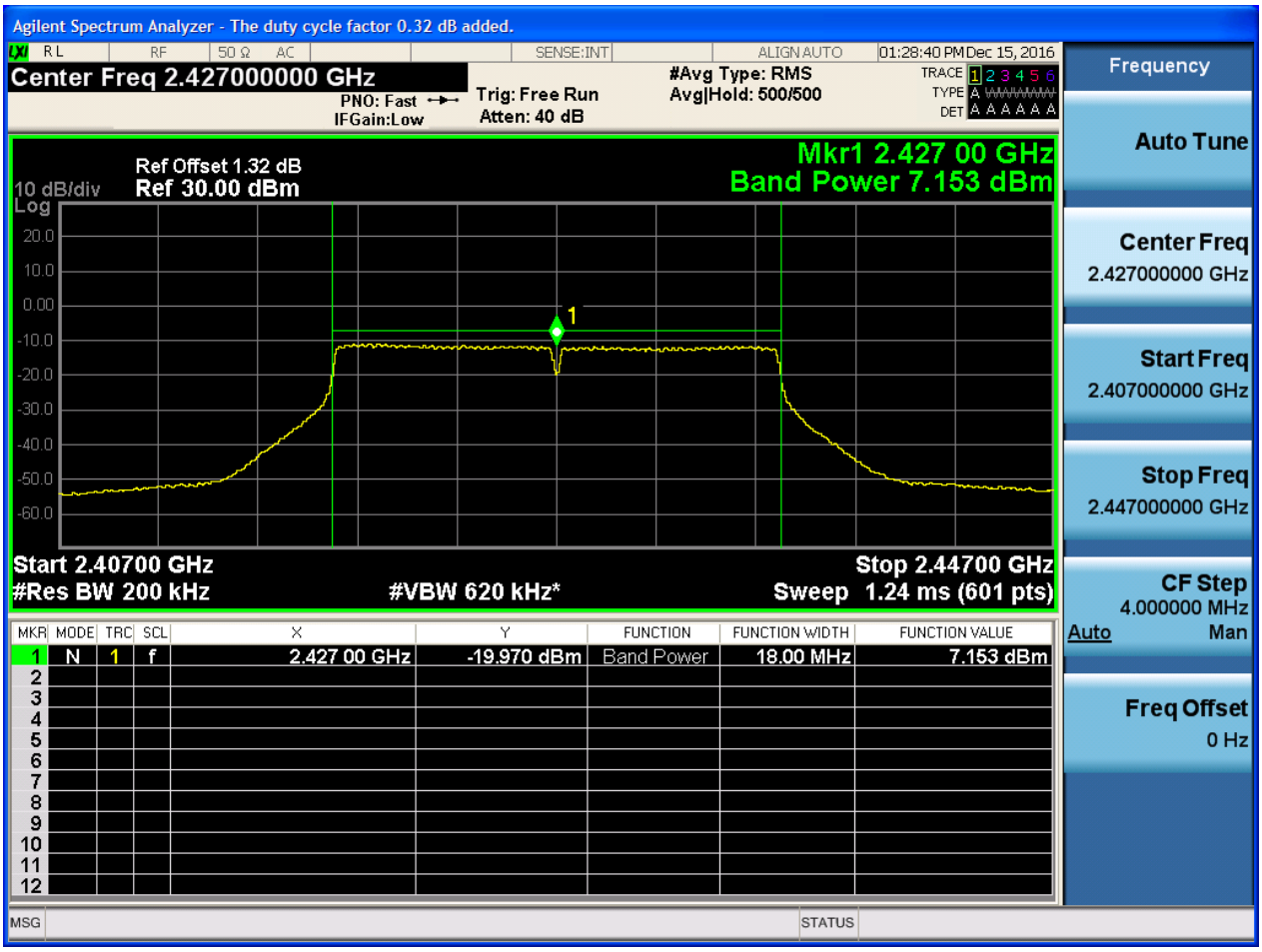
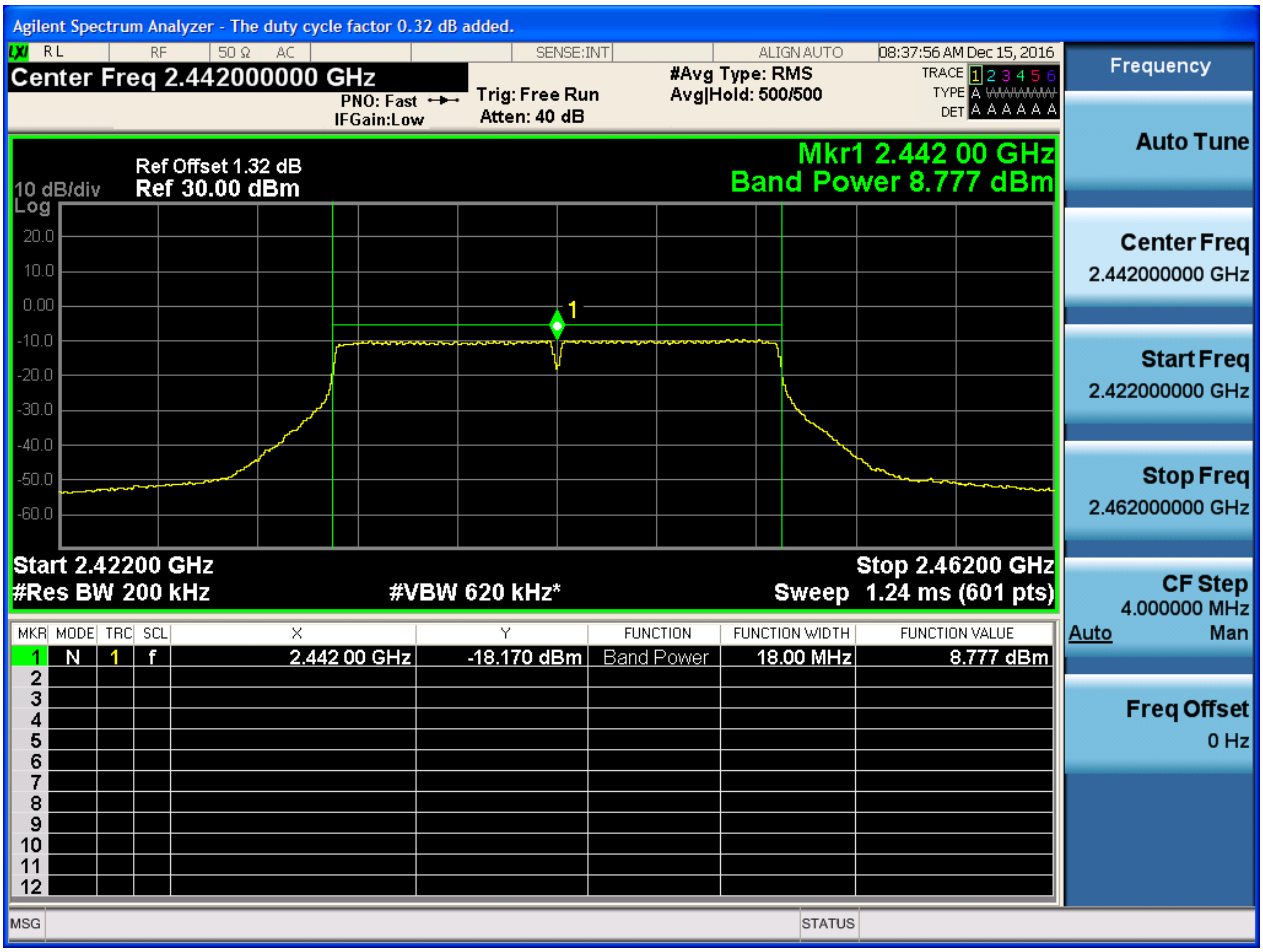
2.15 11N20_M@Ant 1



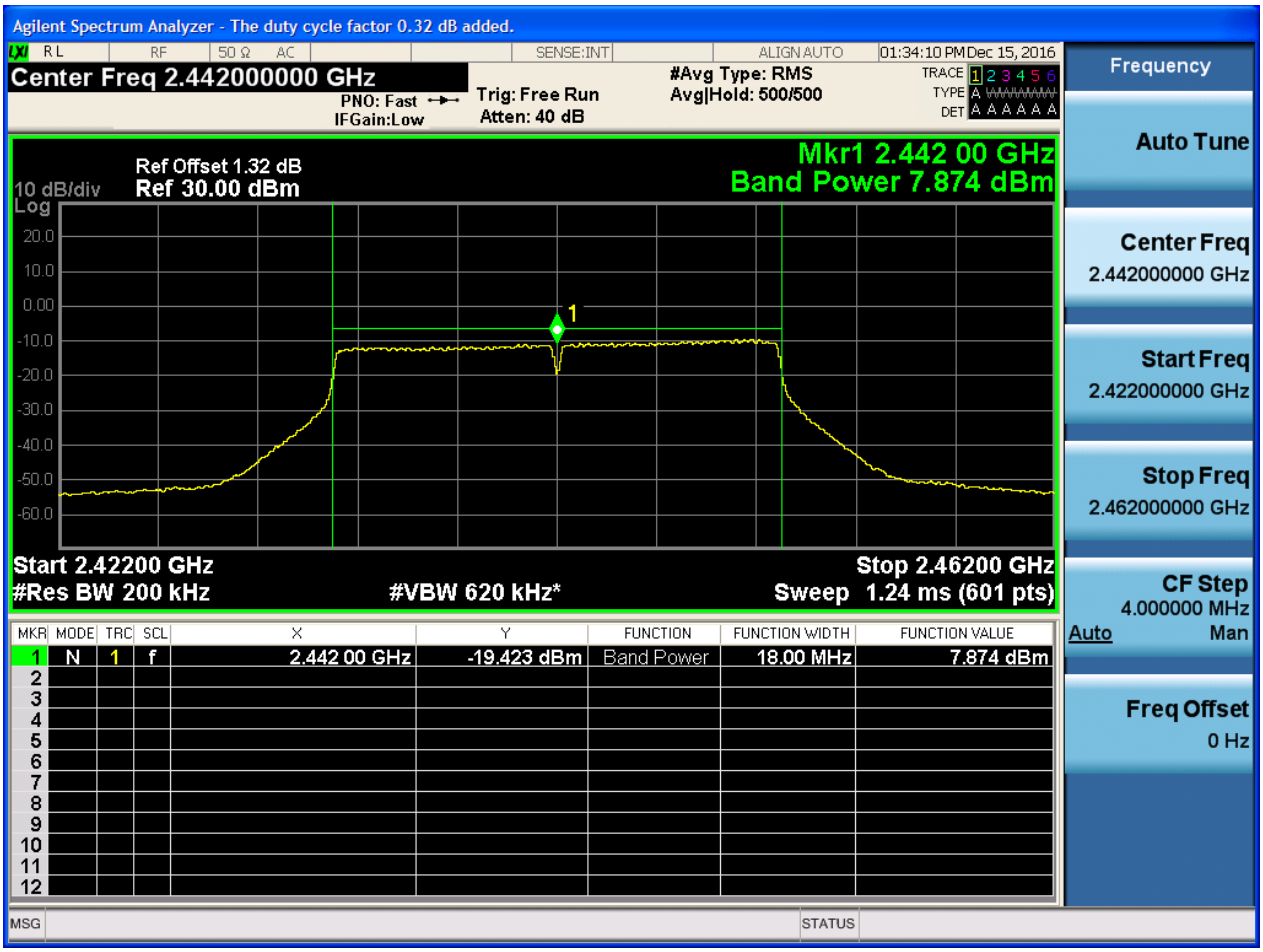
2.16 11N20_M@Ant 2



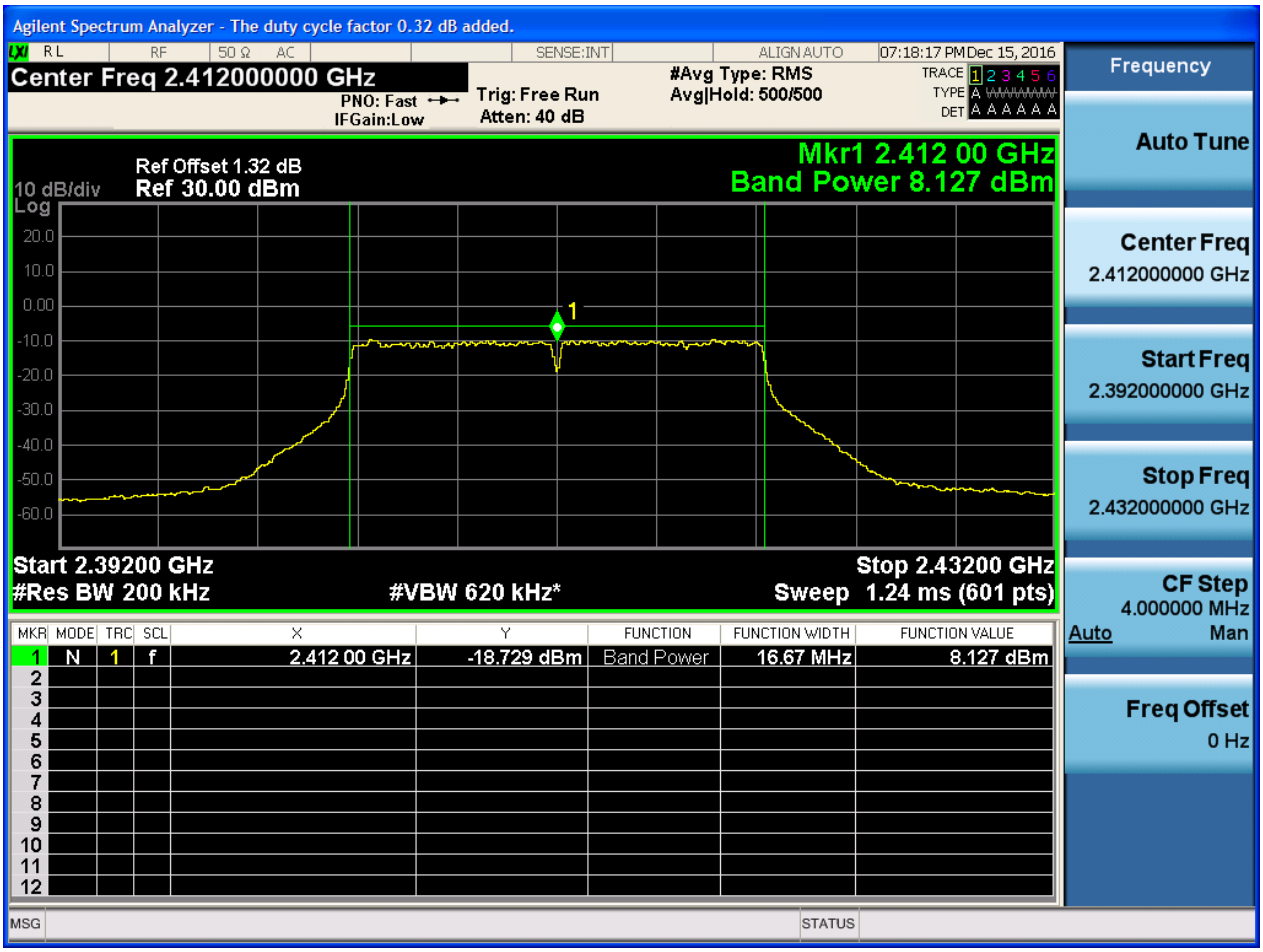
2.17 11N20_H@Ant 1



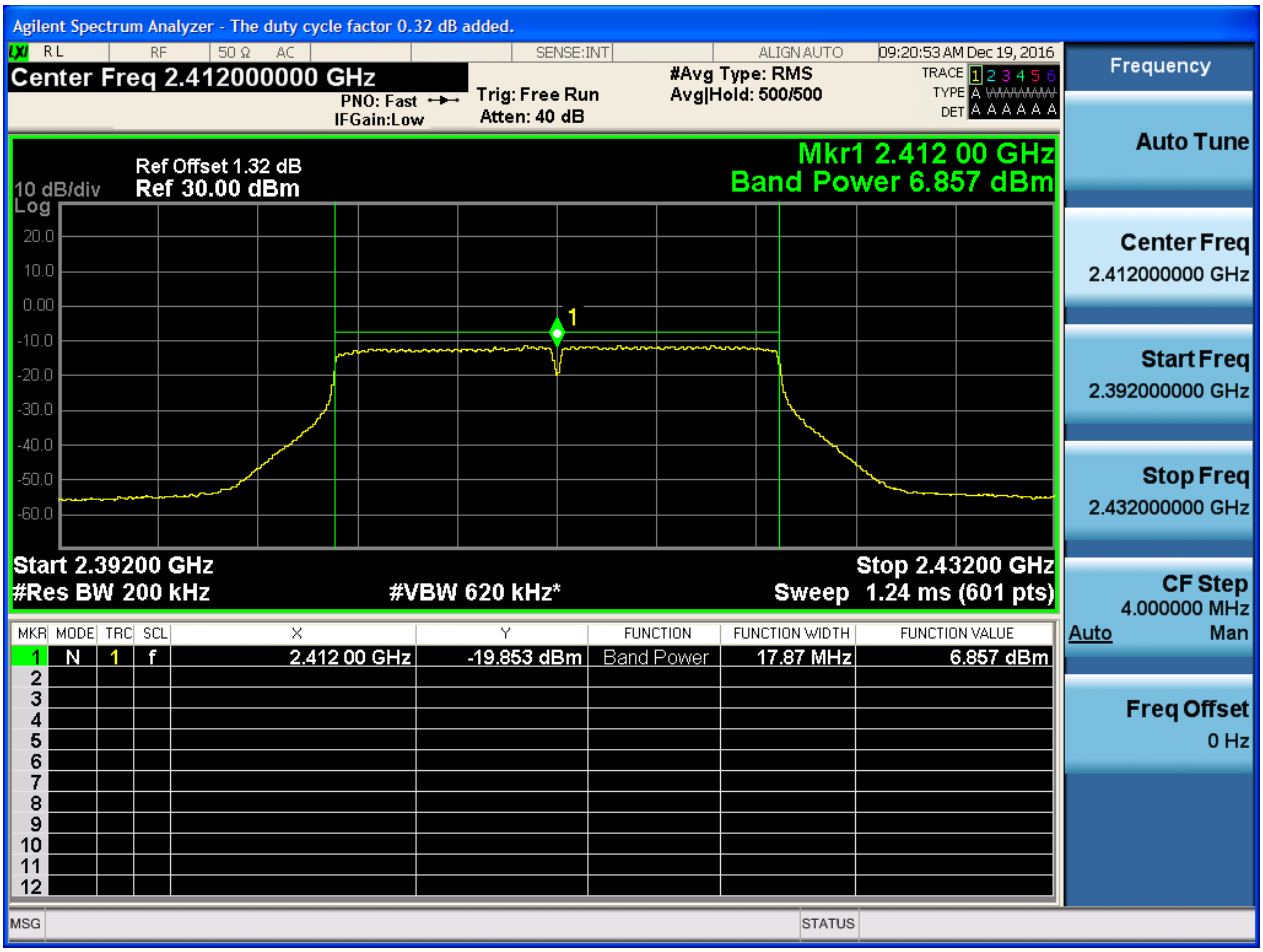
2.18 11N20_H@Ant 2



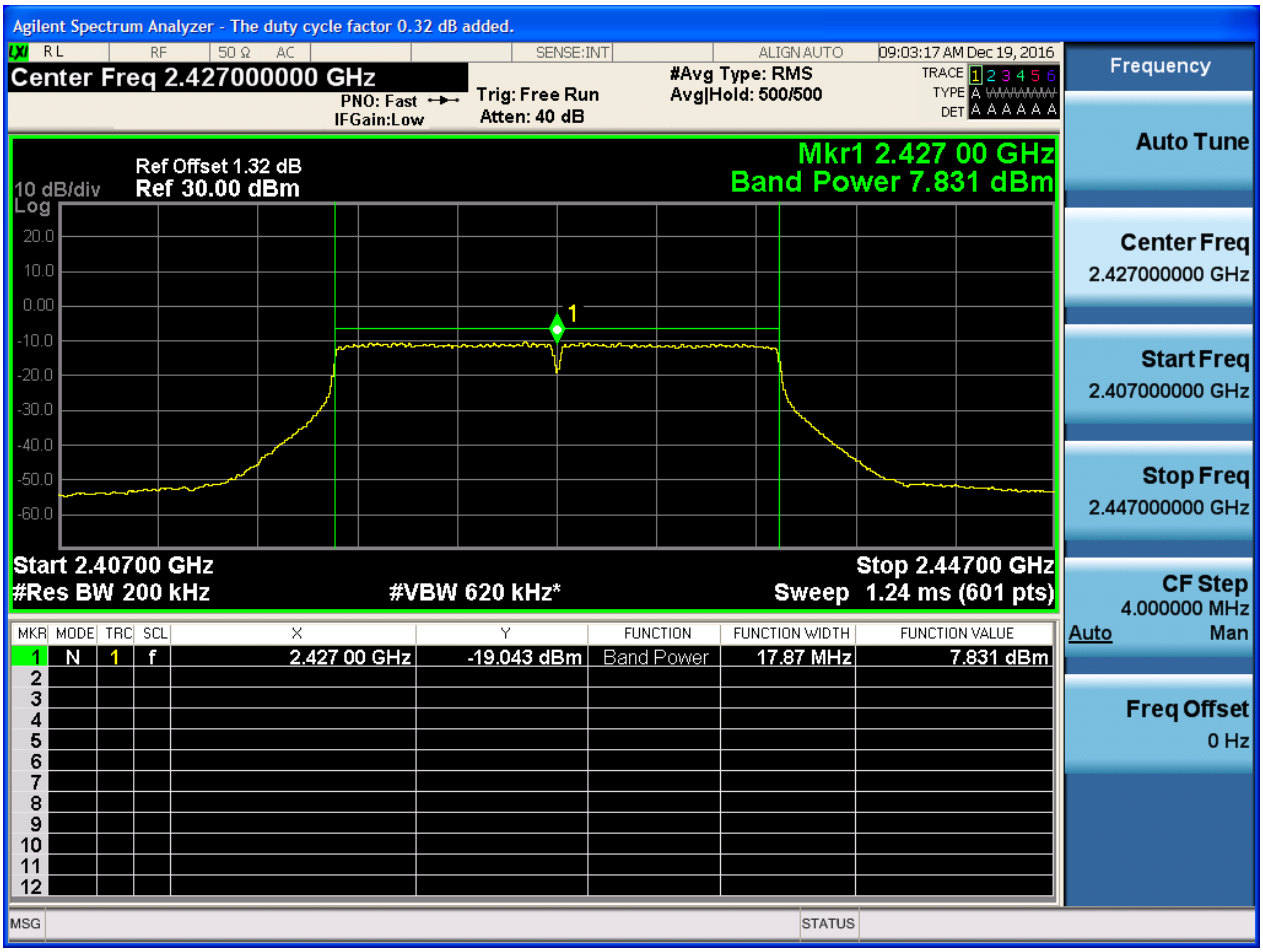
2.13 11N20m_L@Ant 1



2.14 11N20m_L@Ant 2



2.15 11N20m_M@Ant 1



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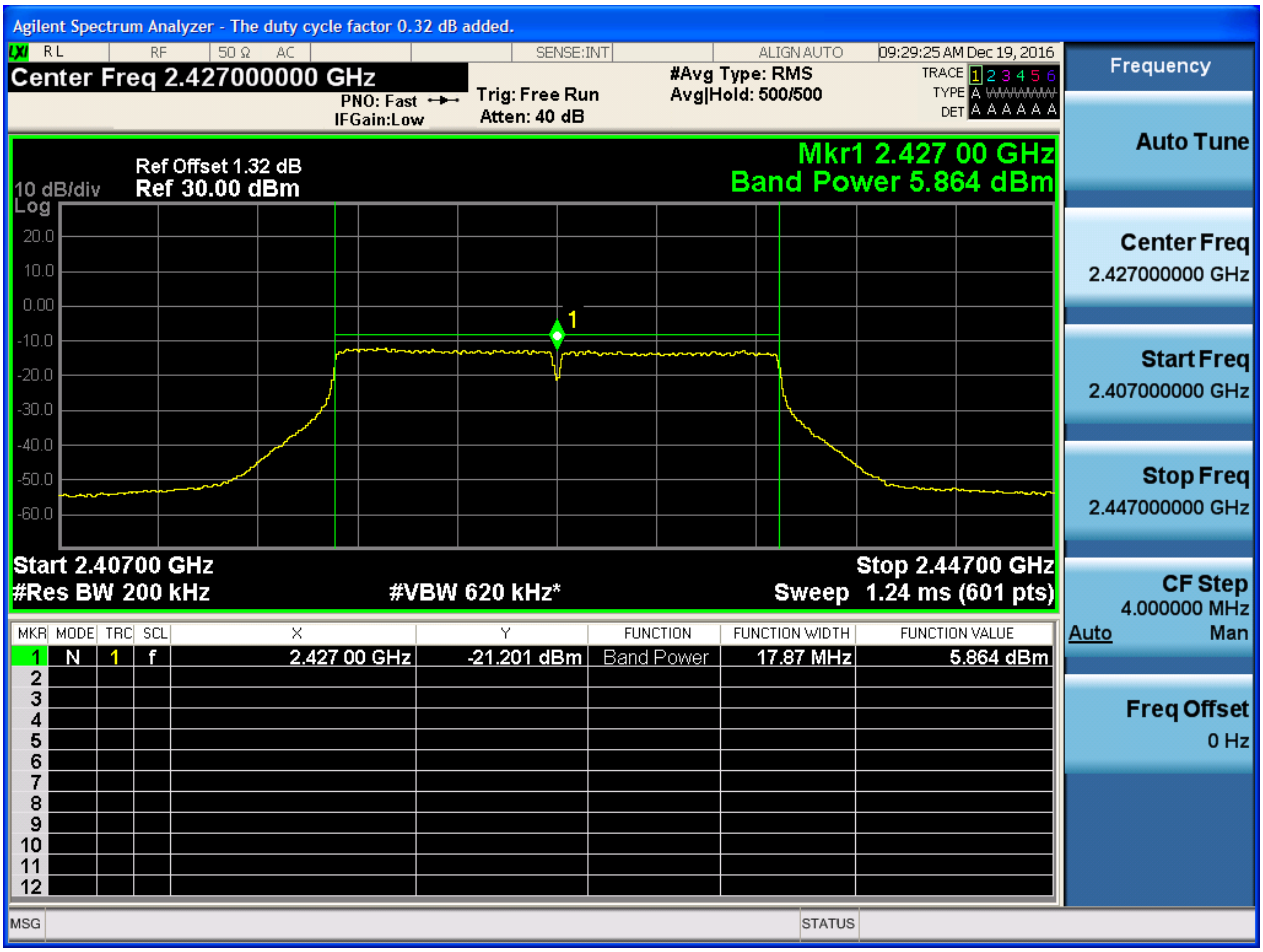
2.16 11N20m_M@Ant 2



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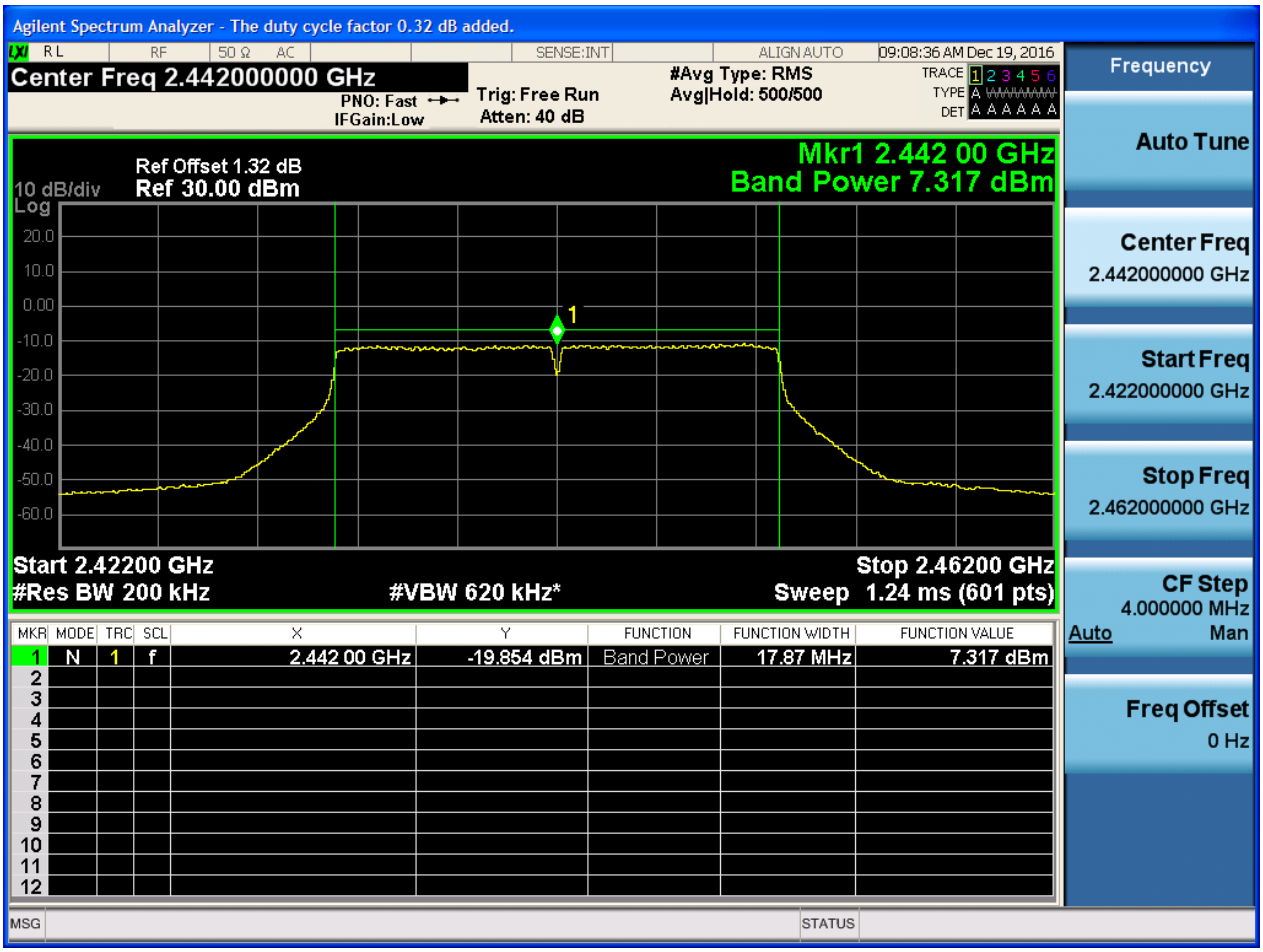
2.17 11N20m_H@Ant 1



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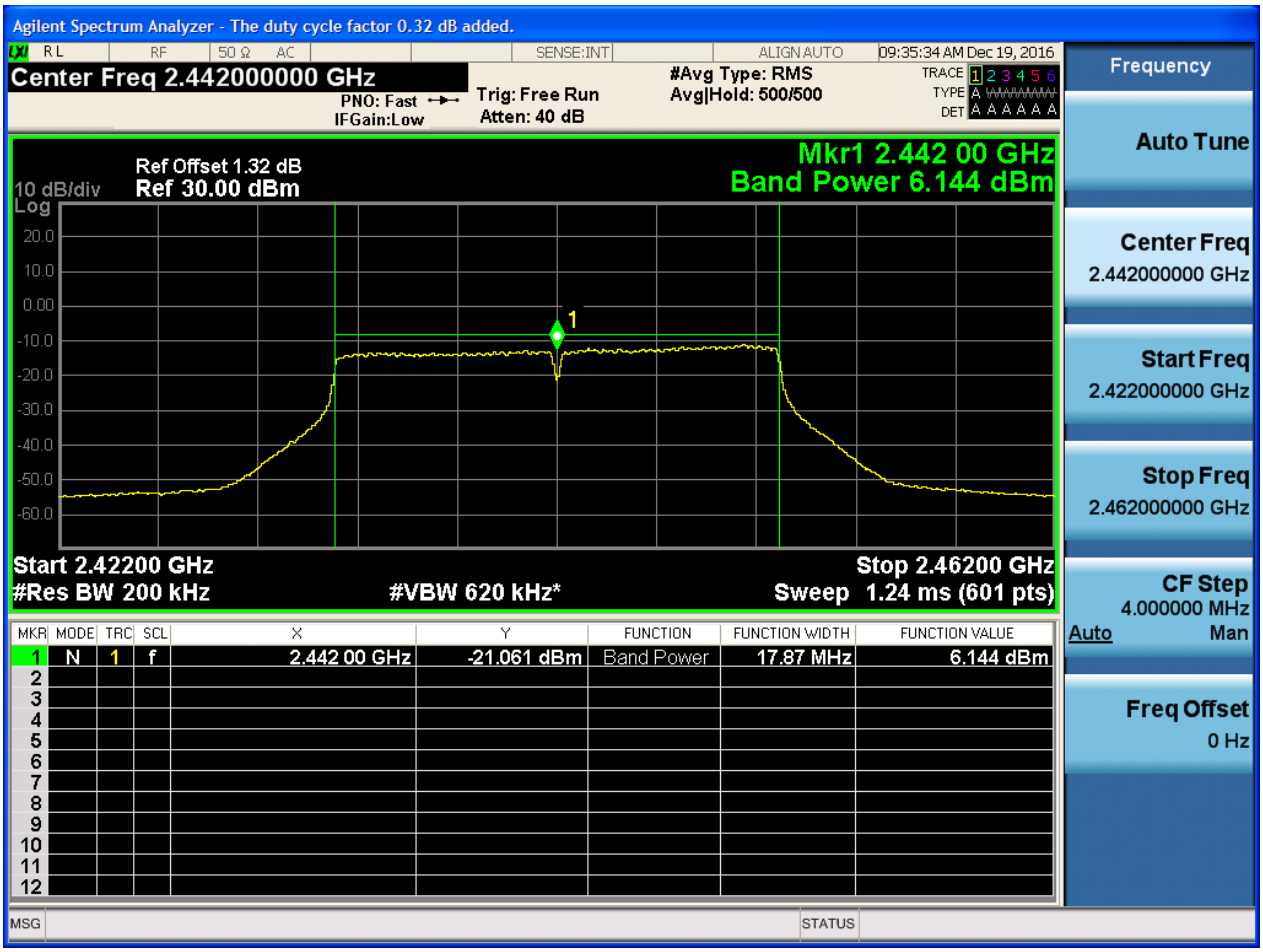
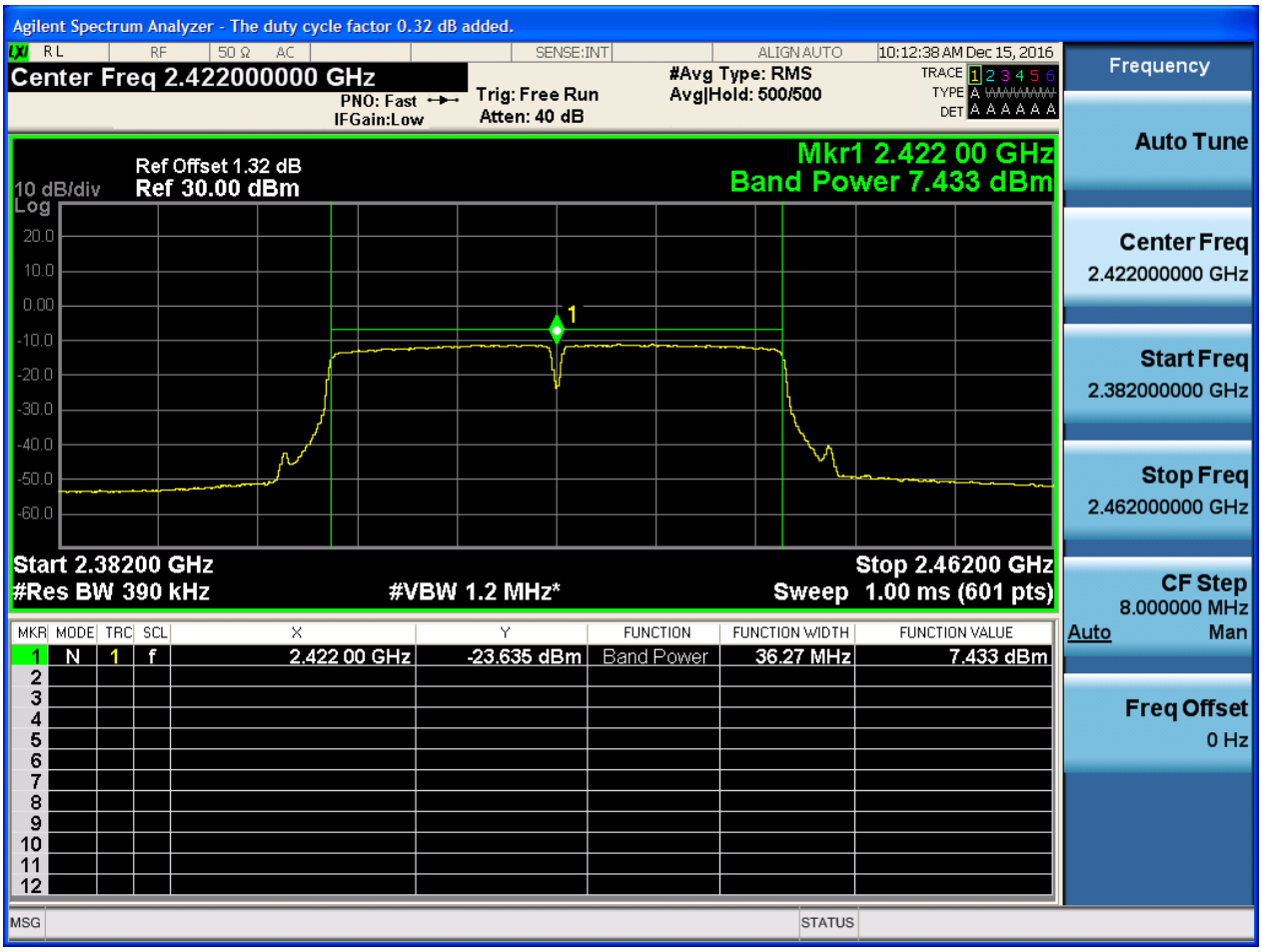
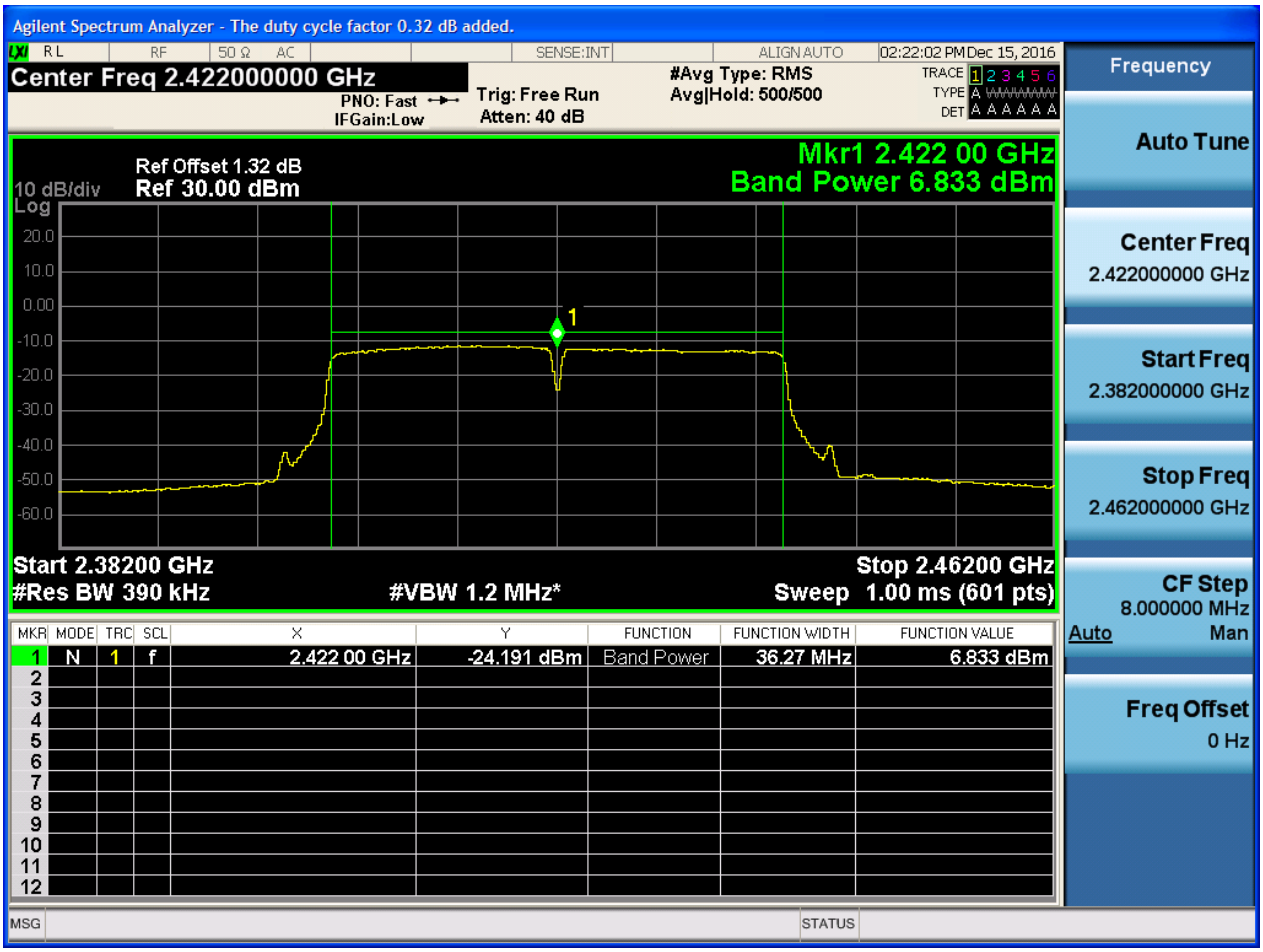
2.18 11N20m_H@Ant 2



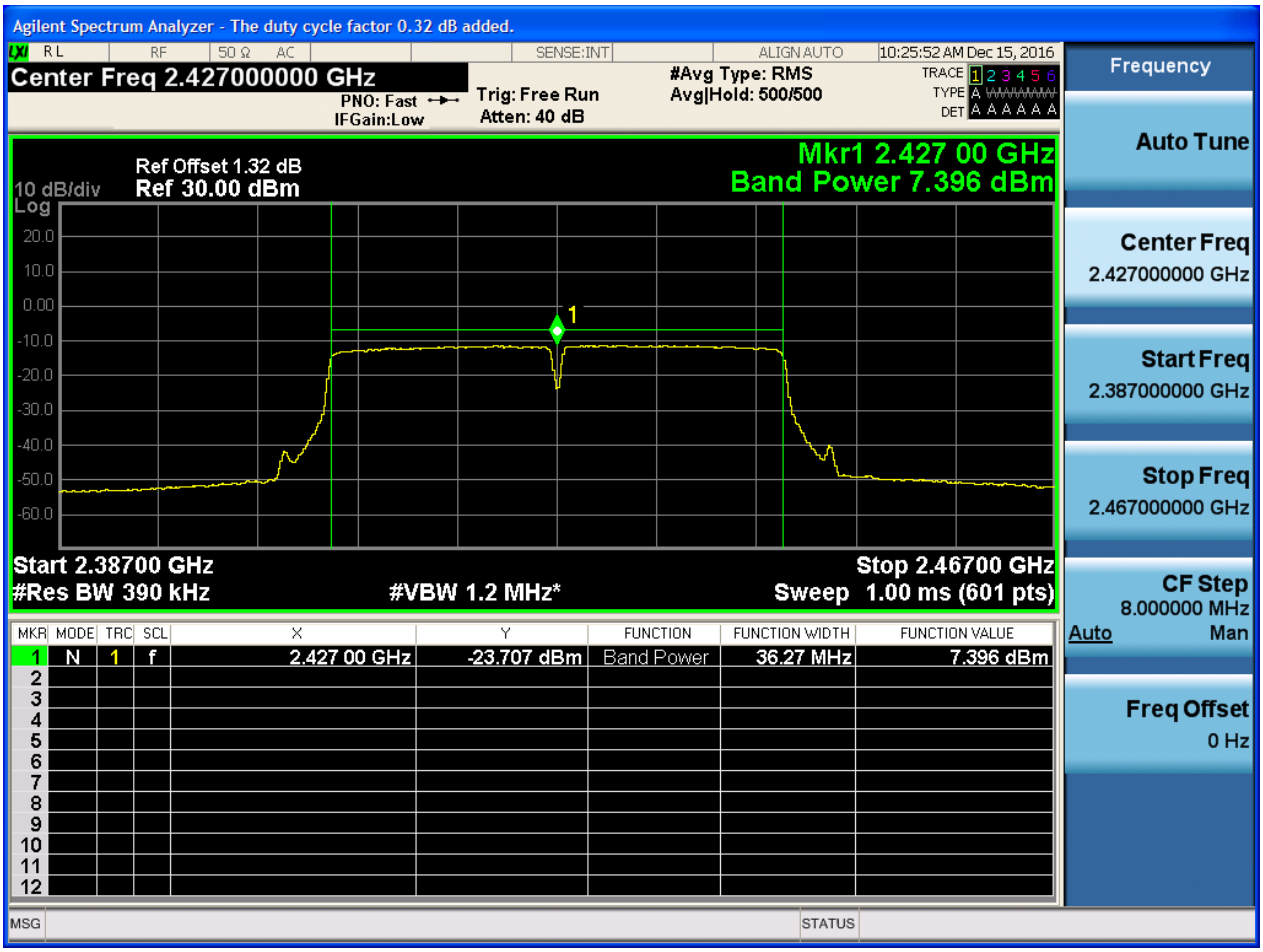
2.19 11N40_L@Ant 1



2.20 11N40_L@Ant 2



2.21 11N40_M@Ant 1



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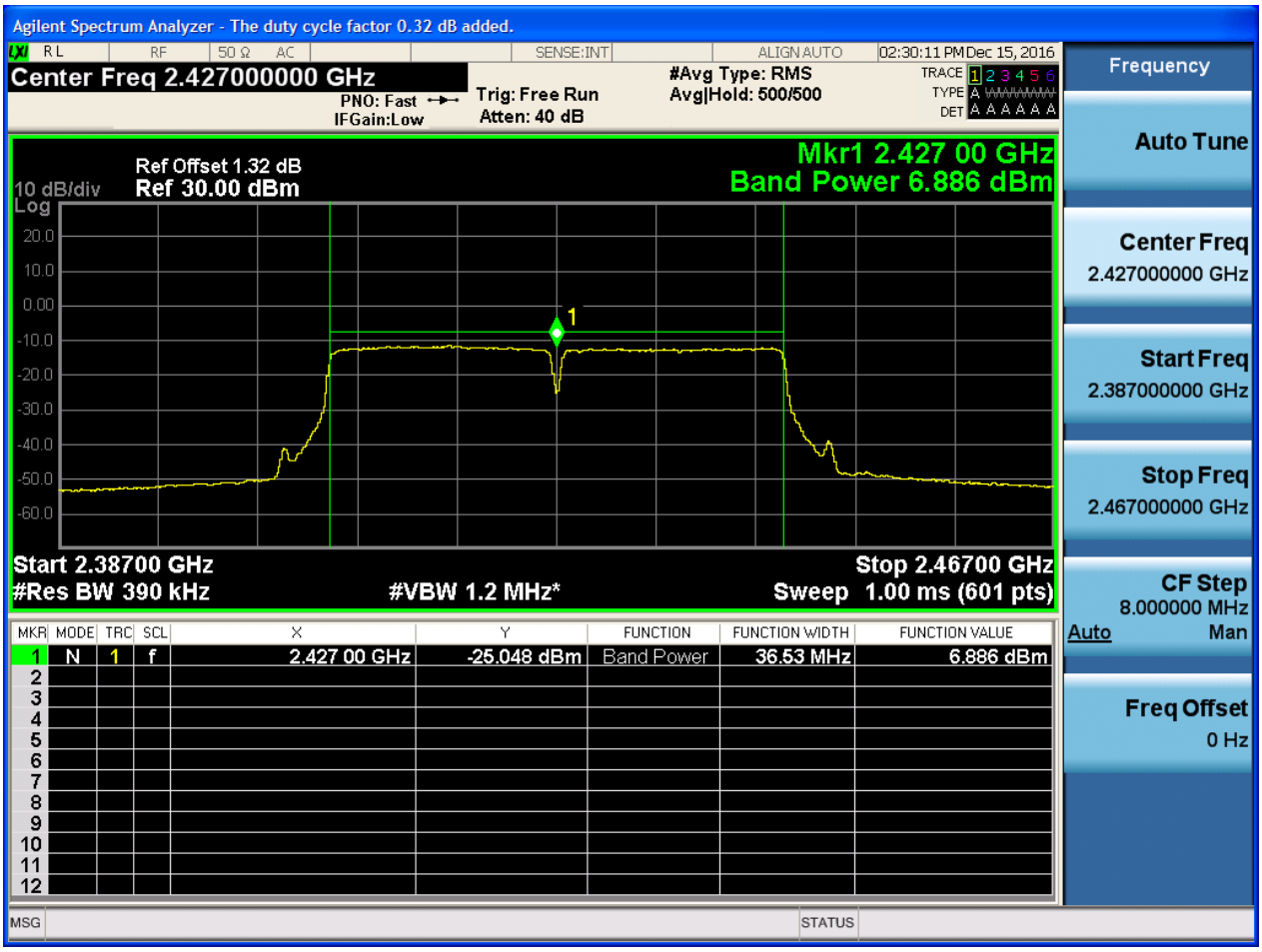
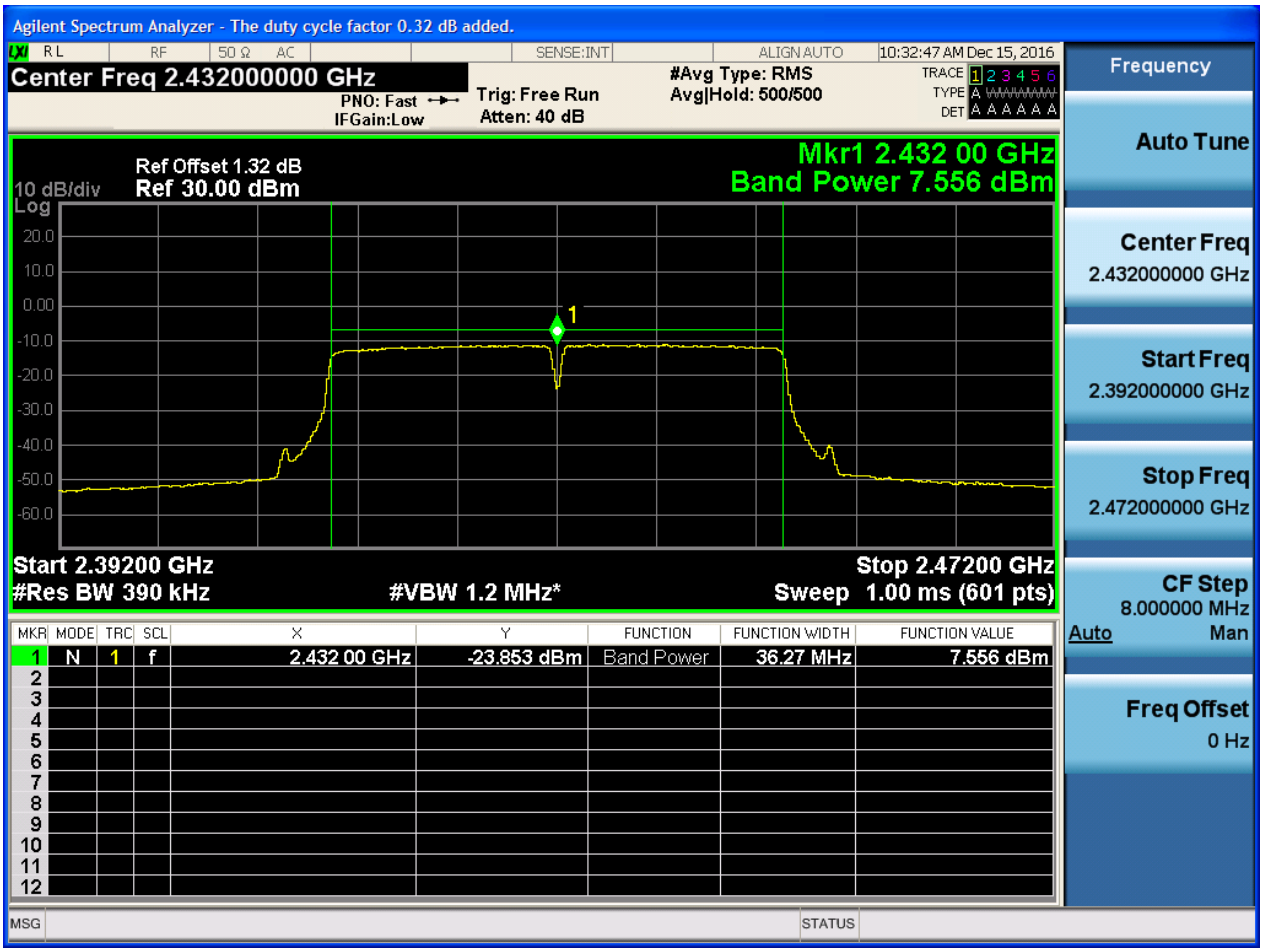
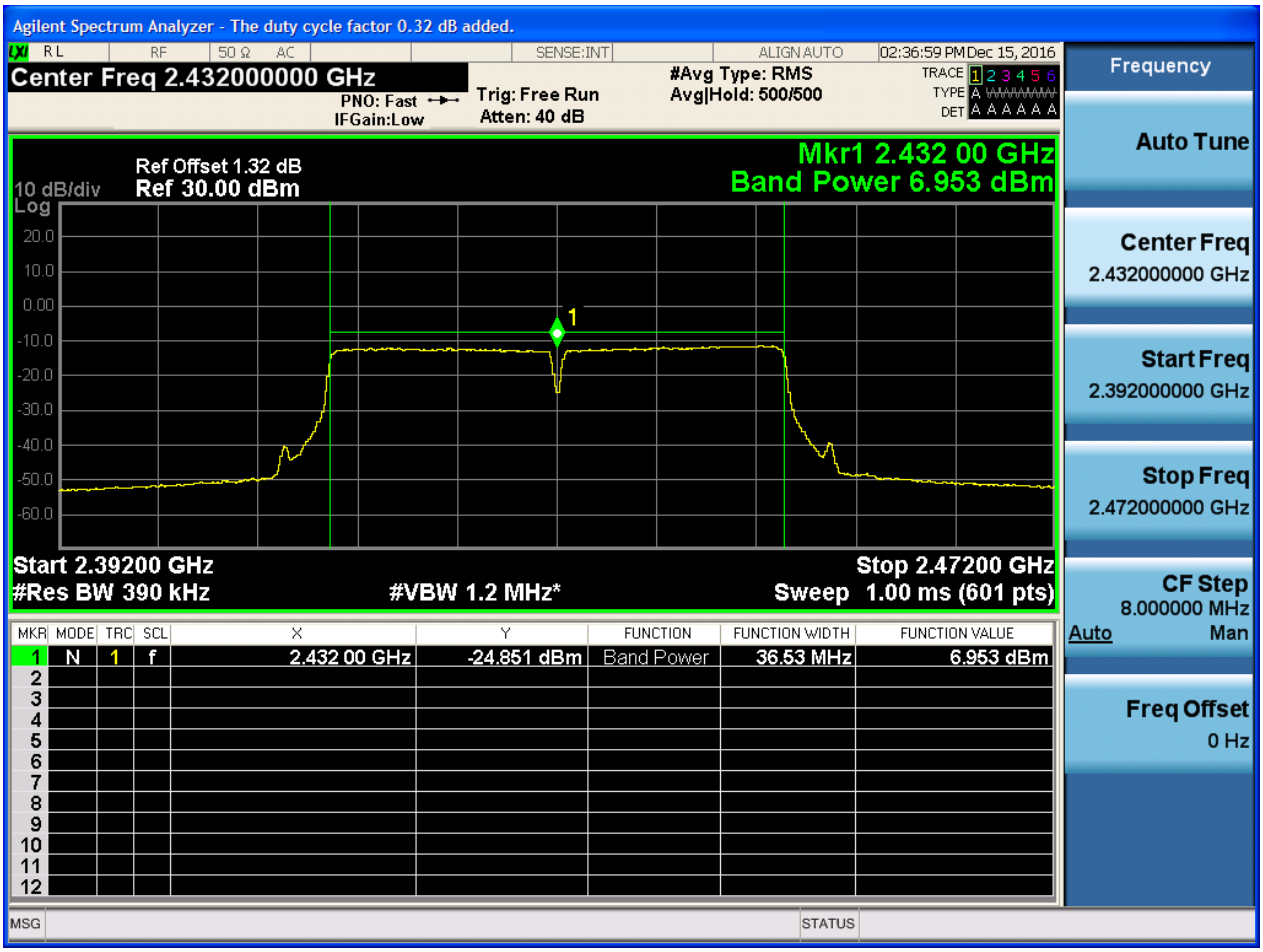
2.22 11N40_M@Ant 2



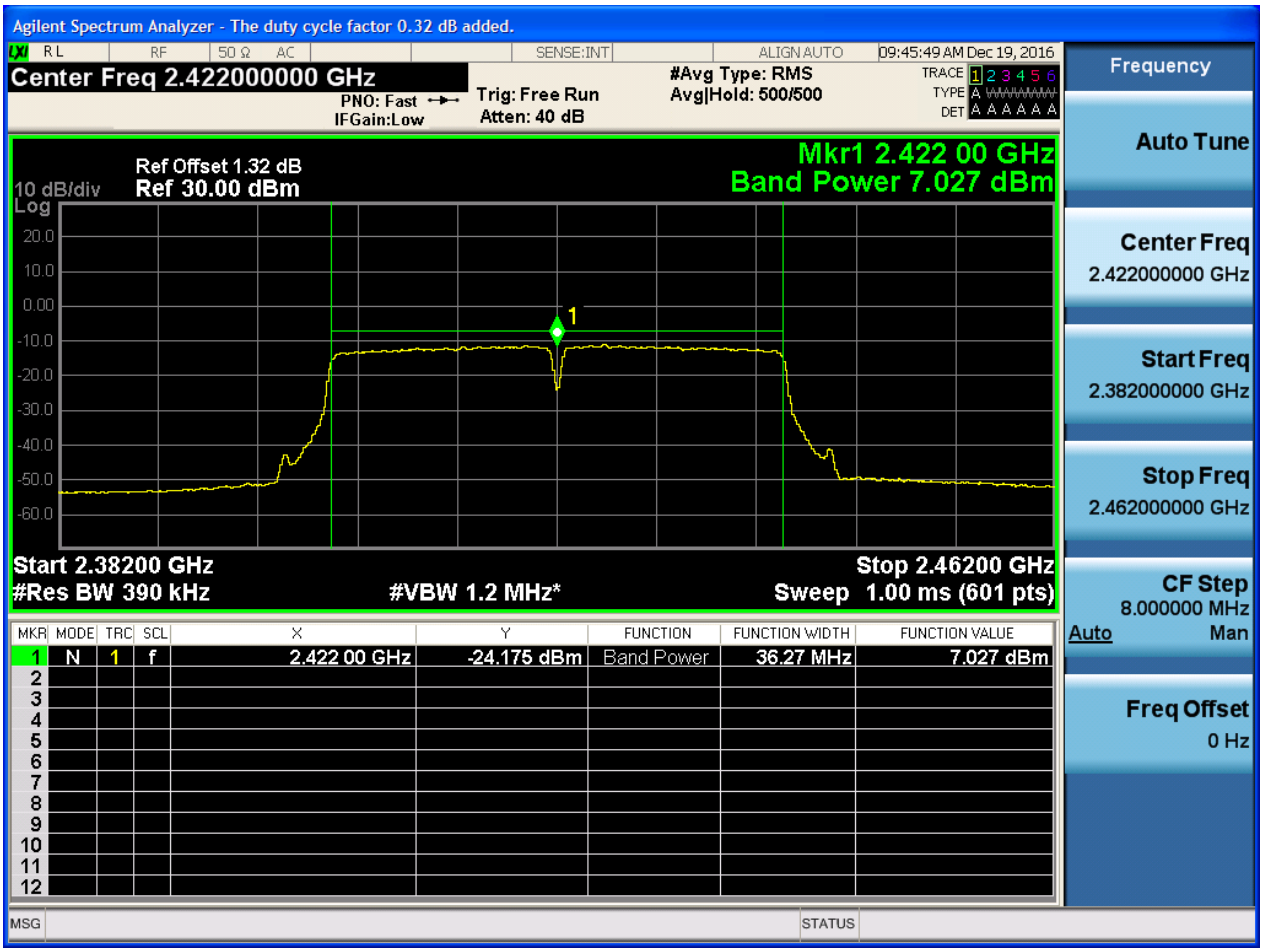
2.23 11N40_H@Ant 1



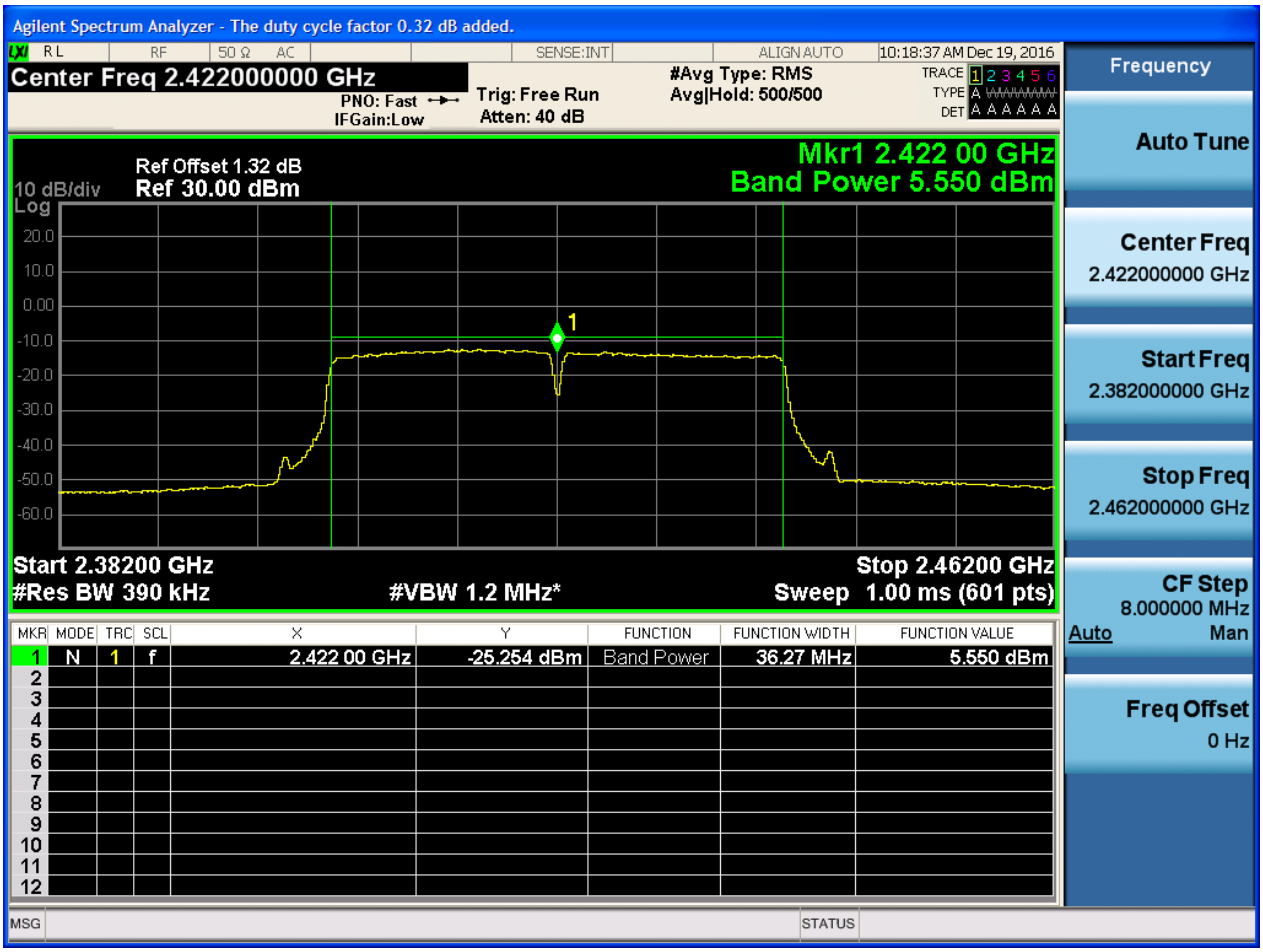
2.24 11N40_H@Ant 2



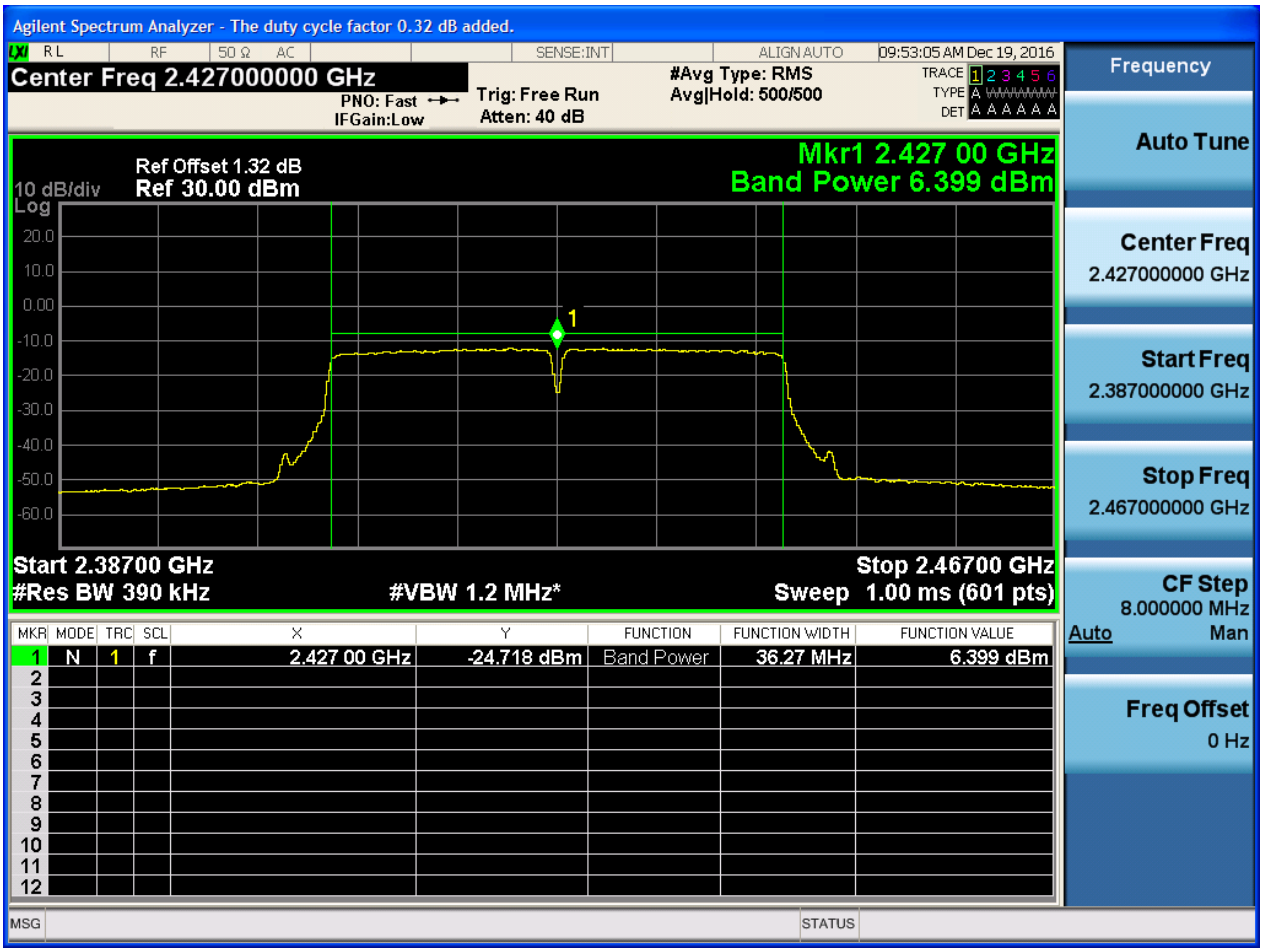
2.31 11N40m_L@Ant 1



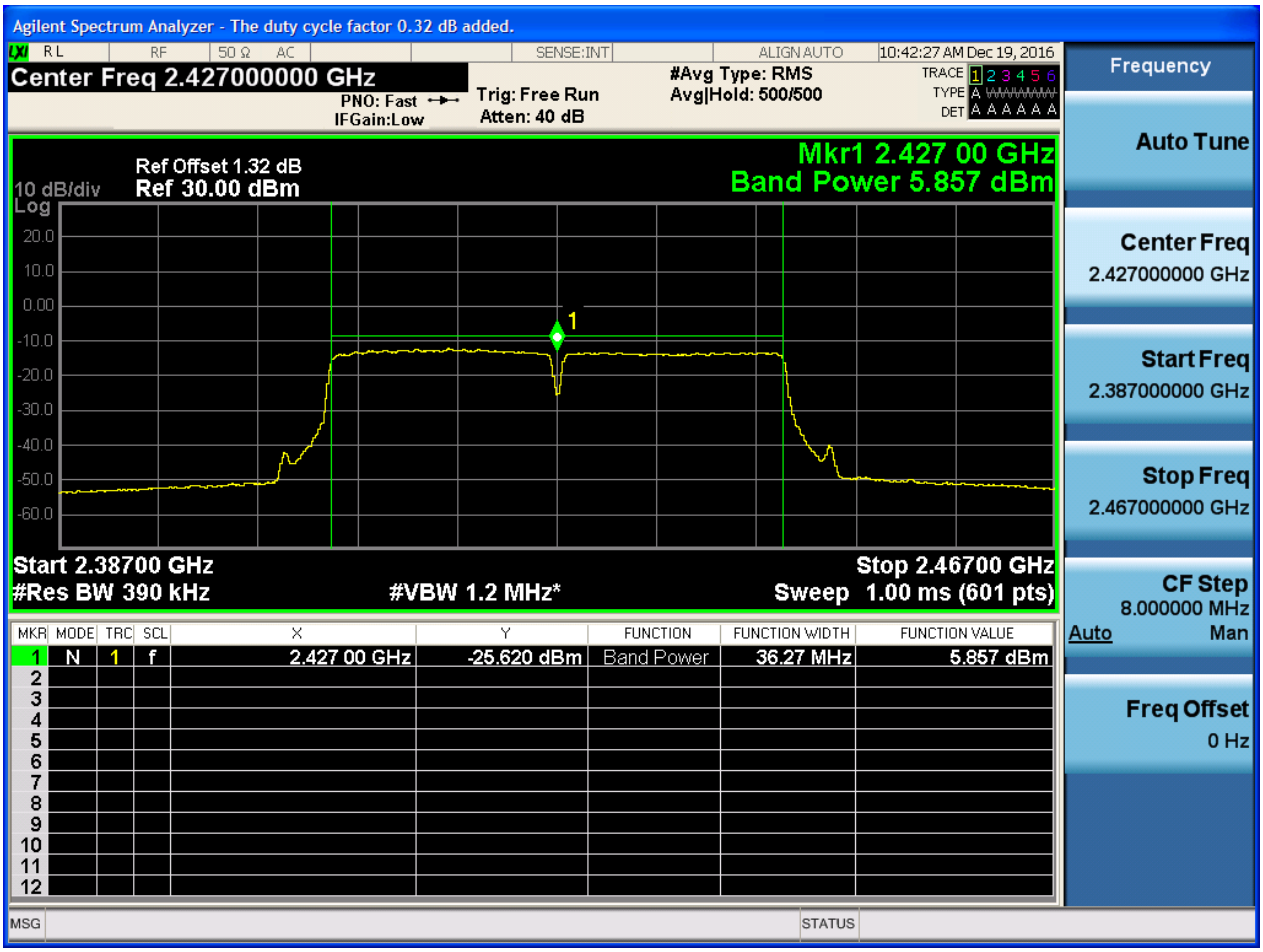
2.32 11N40m_L@Ant 2



2.33 11N40m_M@Ant 1



2.34 11N40m_M@Ant 2



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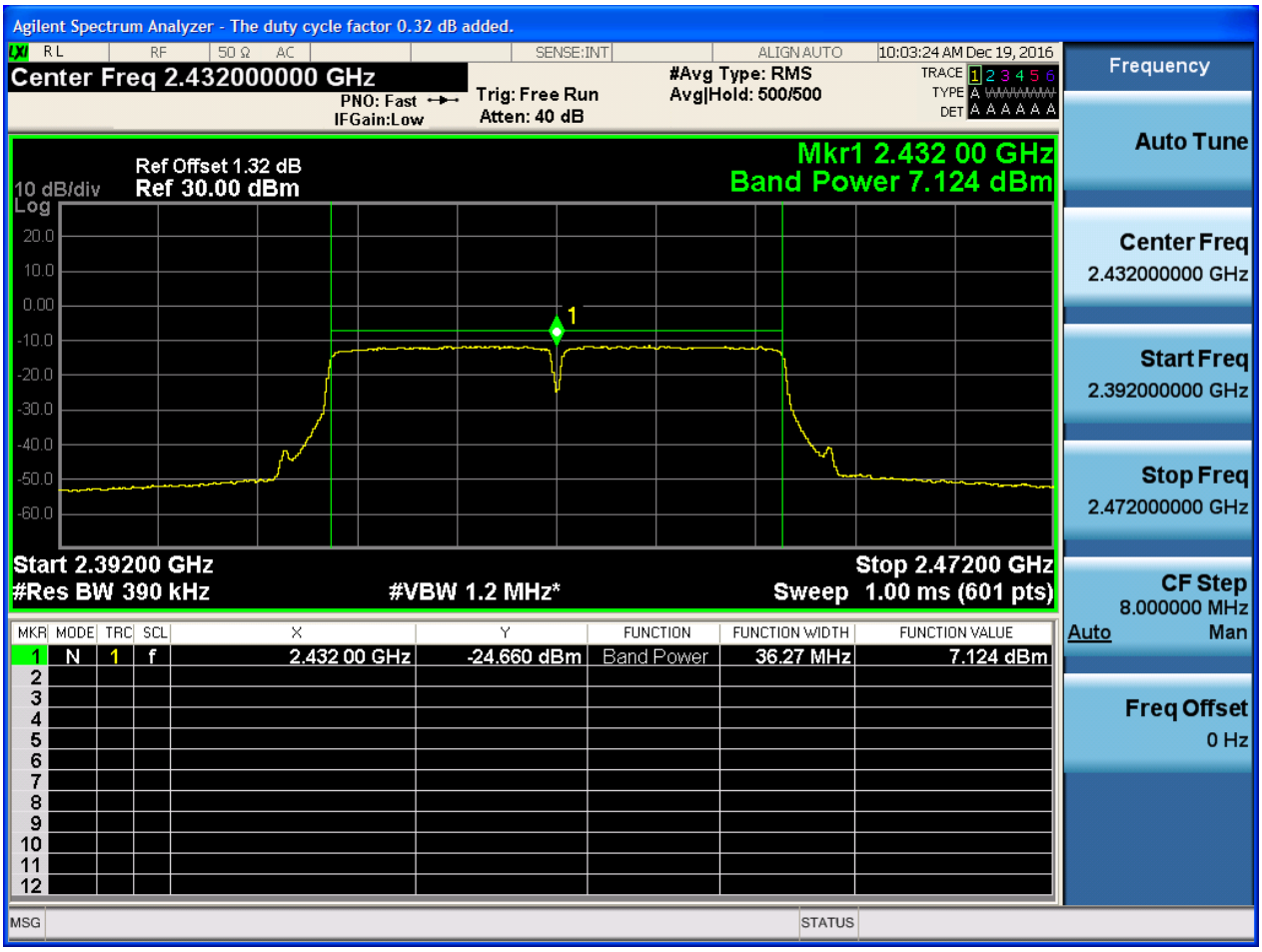
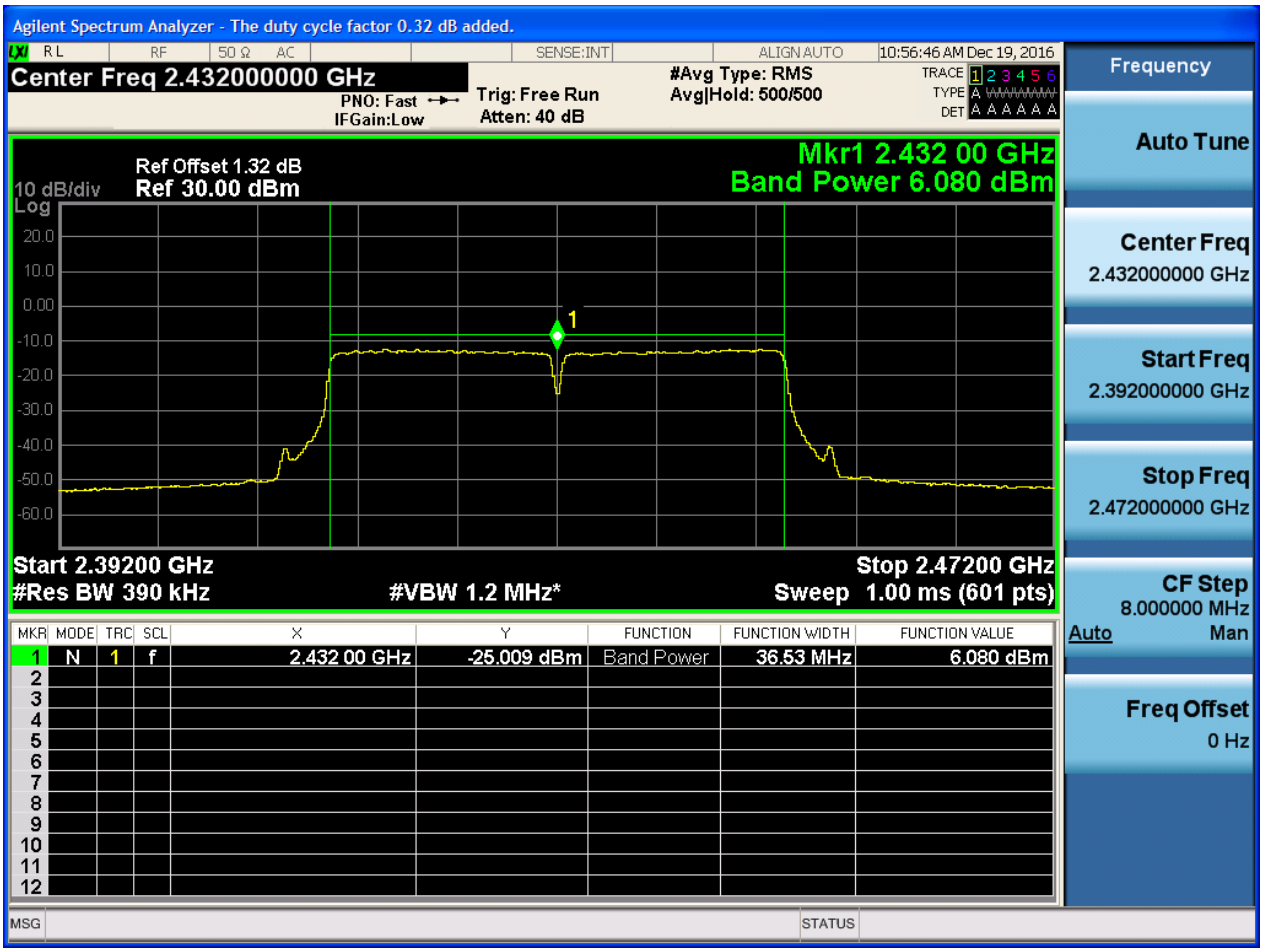
2.35 11N40m_H@Ant 1



2.36 11N40m_H@Ant 2



Appendix E: Maximum Power Spectral Density Level

Part I - Test Results

Test Mode	Test Channel	Frequency[MHz]	Ant	PD[MHz]	Verdict
11B	L	2412	Ant 1	-15.30	pass
11B	L	2412	Ant 2	-15.80	pass
11B	M	2427	Ant 1	-15.06	pass
11B	M	2427	Ant 2	-16.85	pass
11B	H	2442	Ant 1	-15.10	pass
11B	H	2442	Ant 2	-15.30	pass
11G	L	2412	Ant 1	-20.30	pass
11G	L	2412	Ant 2	-20.19	pass
11G	M	2427	Ant 1	-19.96	pass
11G	M	2427	Ant 2	-20.58	pass
11G	H	2442	Ant 1	-19.52	pass
11G	H	2442	Ant 2	-19.25	pass
11N20	L	2412	Ant 1	-22.00	pass
11N20	L	2412	Ant 2	-22.36	pass
11N20	M	2427	Ant 1	-21.79	pass
11N20	M	2427	Ant 2	-22.84	pass
11N20	H	2442	Ant 1	-21.35	pass
11N20	H	2442	Ant 2	-21.42	pass
11N20m	L	2412	Ant 1	-20.70	---
11N20m	L	2412	Ant 2	-21.79	---
11N20m	L	2412	Ant sum	-18.20	pass
11N20m	M	2427	Ant 1	-20.22	---
11N20m	M	2427	Ant 2	-24.46	---
11N20m	M	2427	Ant sum	-18.83	pass
11N20m	H	2442	Ant 1	-22.69	---
11N20m	H	2442	Ant 2	-23.23	---
11N20m	H	2442	Ant sum	-19.94	pass
11N40	L	2422	Ant 1	-25.88	pass
11N40	L	2422	Ant 2	-26.18	pass
11N40	M	2427	Ant 1	-25.88	pass
11N40	M	2427	Ant 2	-26.28	pass
11N40	H	2432	Ant 1	-25.88	pass
11N40	H	2432	Ant 2	-25.97	pass
11N40m	L	2422	Ant 1	-26.30	---
11N40m	L	2422	Ant 2	-27.38	---

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Test Mode	Test Channel	Frequency[MHz]	Ant	PD[MHz]	Verdict
11N40m	L	2422	Ant sum	-23.80	pass
11N40m	M	2427	Ant 1	-26.79	---
11N40m	M	2427	Ant 2	-27.45	---
11N40m	M	2427	Ant sum	-24.10	pass
11N40m	H	2432	Ant 1	-26.31	---
11N40m	H	2432	Ant 2	-27.32	---
11N40m	H	2432	Ant sum	-23.78	pass

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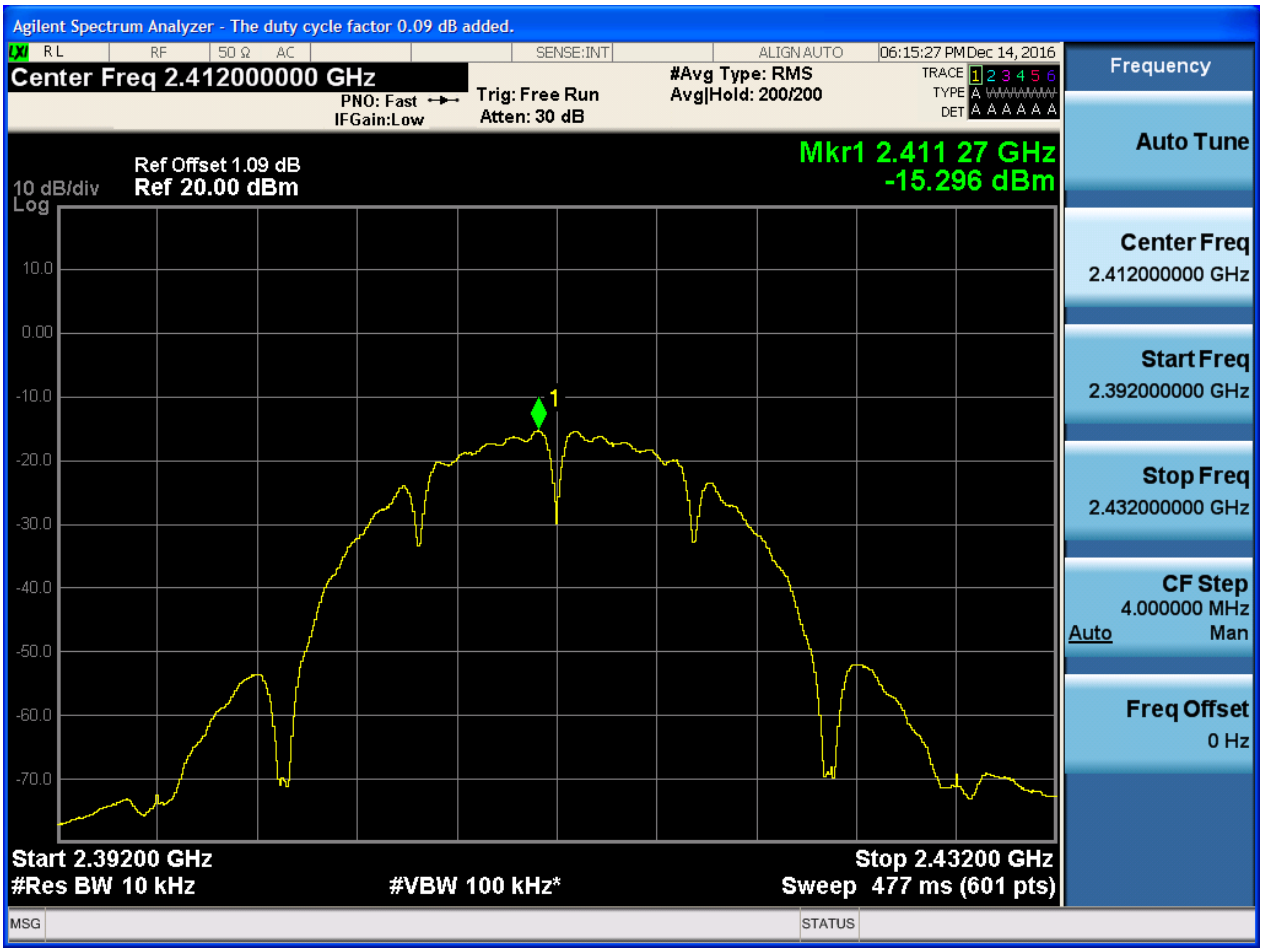
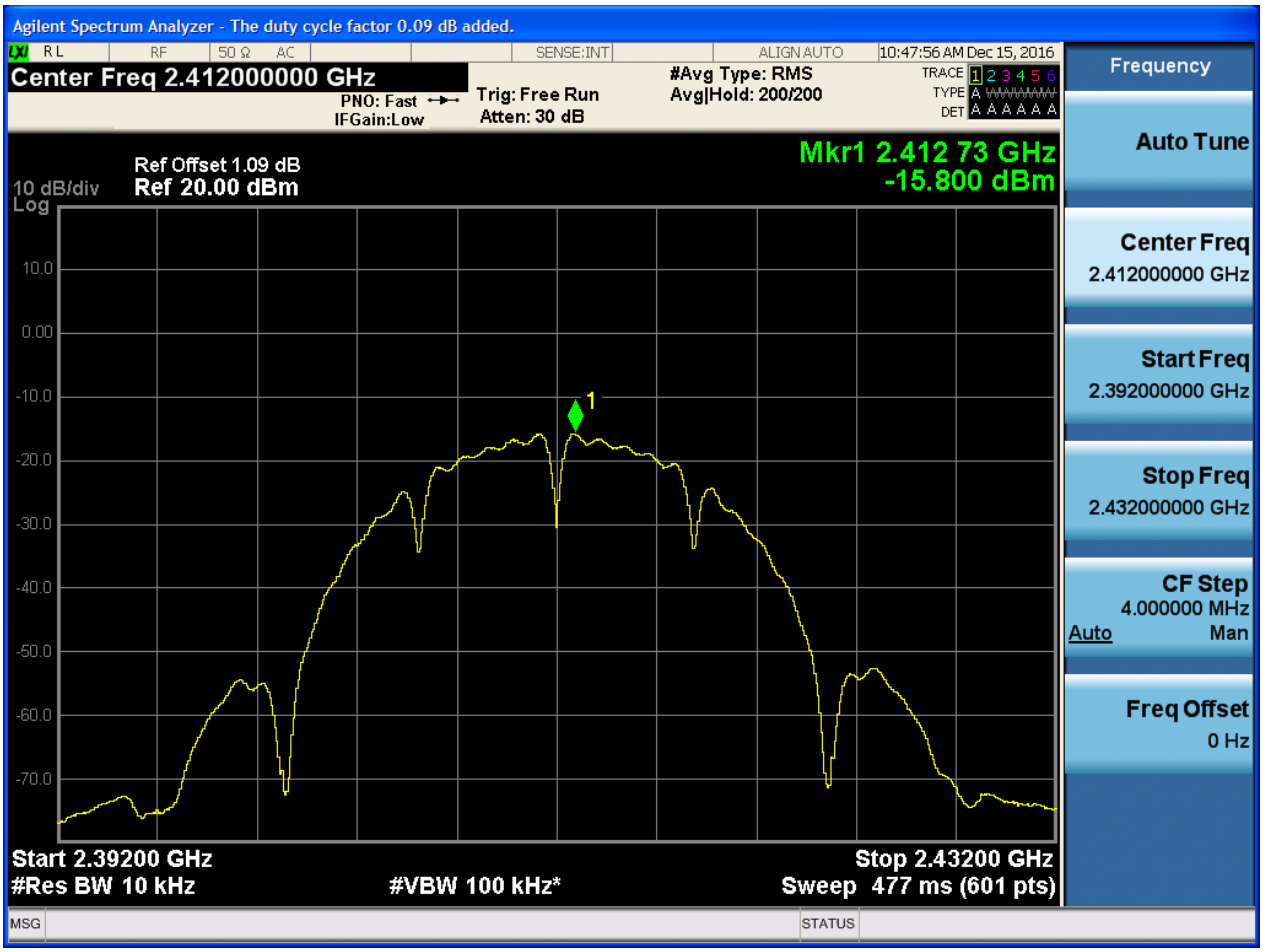
Part II - Test Plots

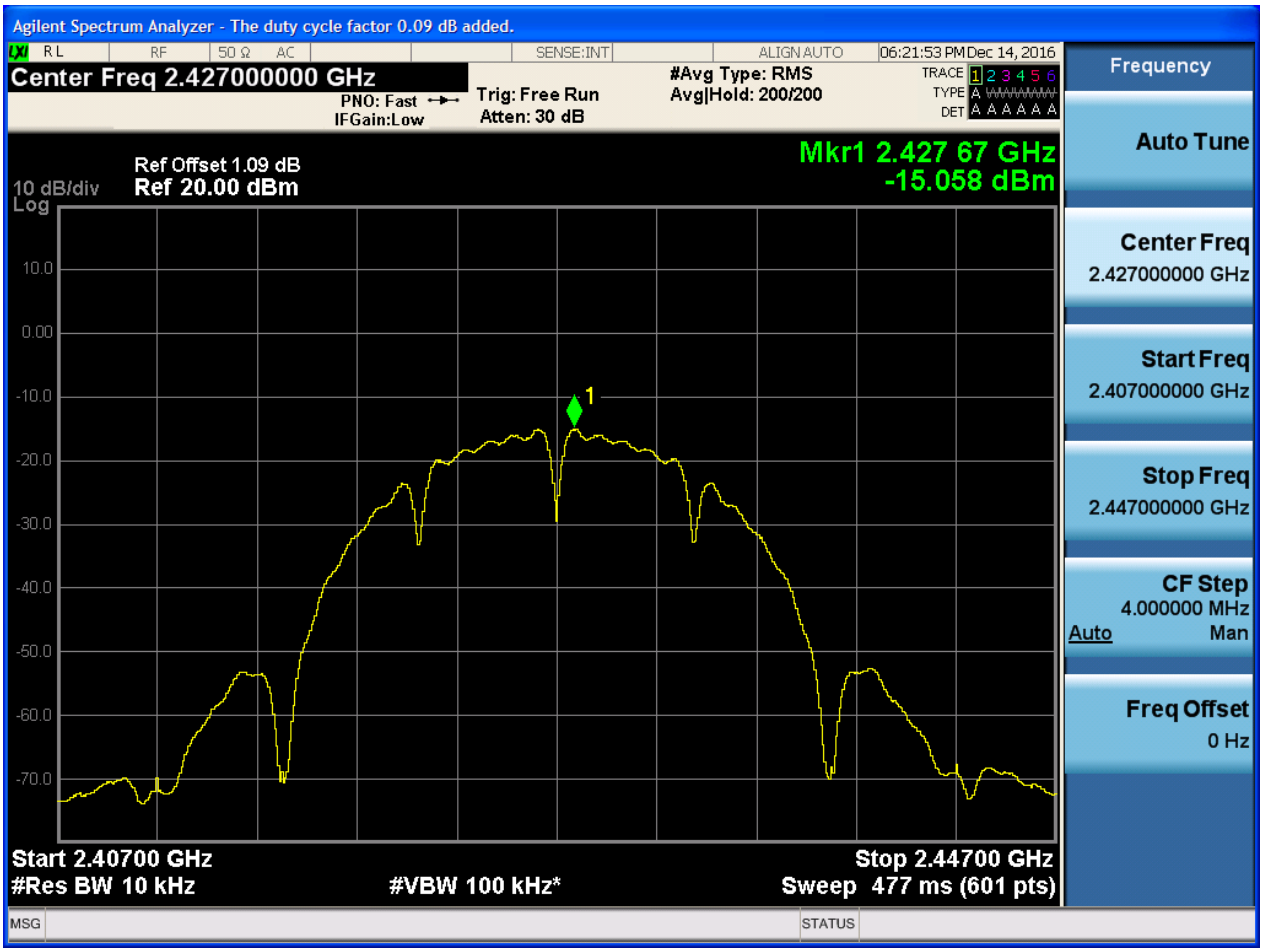
2.1 11B_L@Ant 1



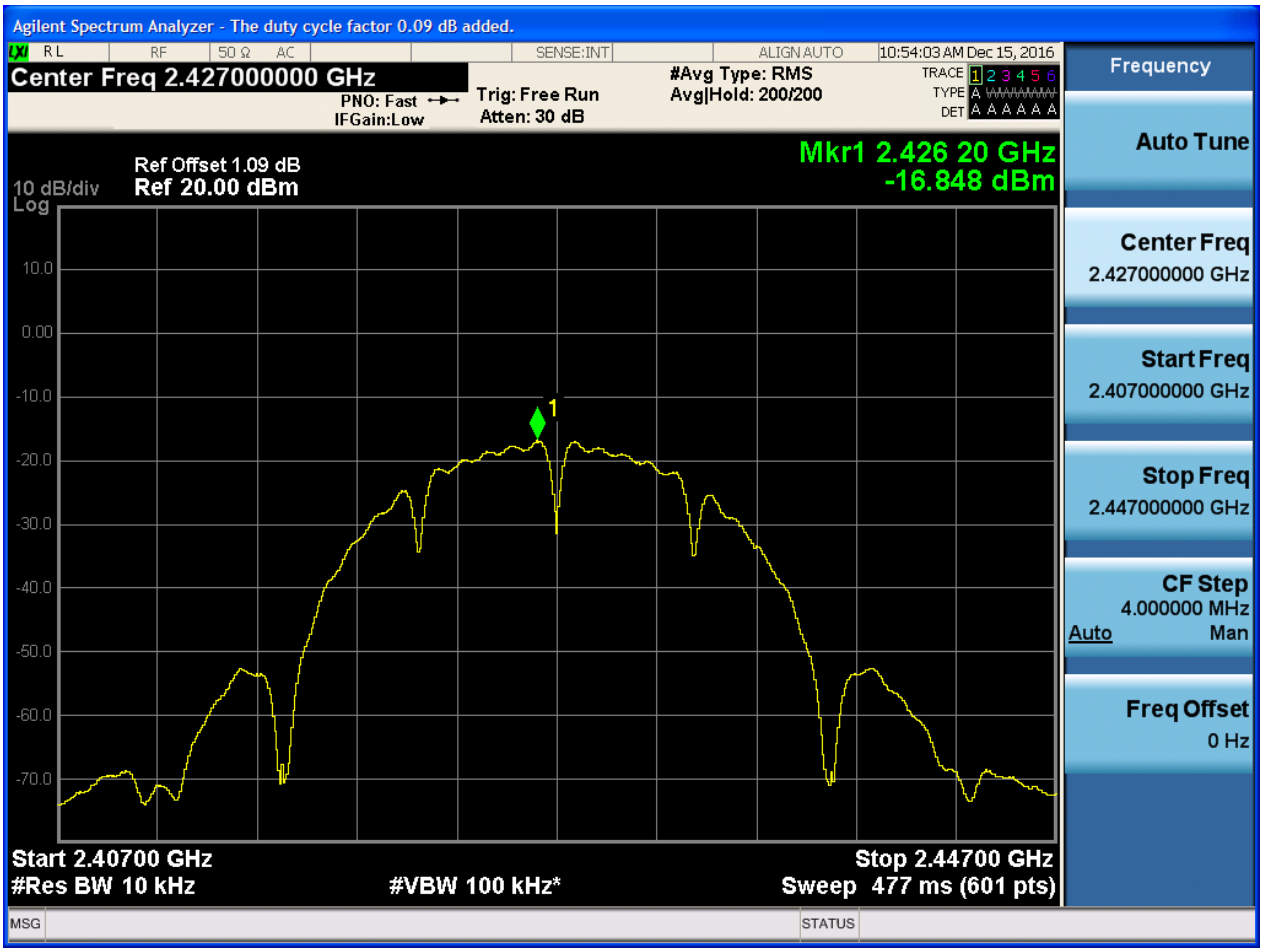
2.2 11B_L@Ant 2


Agilent Spectrum Analyzer - The duty cycle factor 0.09 dB added.
Center Freq 2.412000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 200/200
10:47:56 AM Dec 15, 2016
Ref Offset 1.09 dB
10 dB/div
Log
Ref 20.00 dBm
Mkr1 2.412 73 GHz
-15.800 dBm
Start 2.39200 GHz
#Res BW 10 kHz
#VBW 100 kHz*
Stop 2.43200 GHz
Sweep 477 ms (601 pts)
Frequency
Auto Tune
Center Freq
2.412000000 GHz
Start Freq
2.392000000 GHz
Stop Freq
2.432000000 GHz
CF Step
4.000000 MHz
Auto
Man
Freq Offset
0 Hz

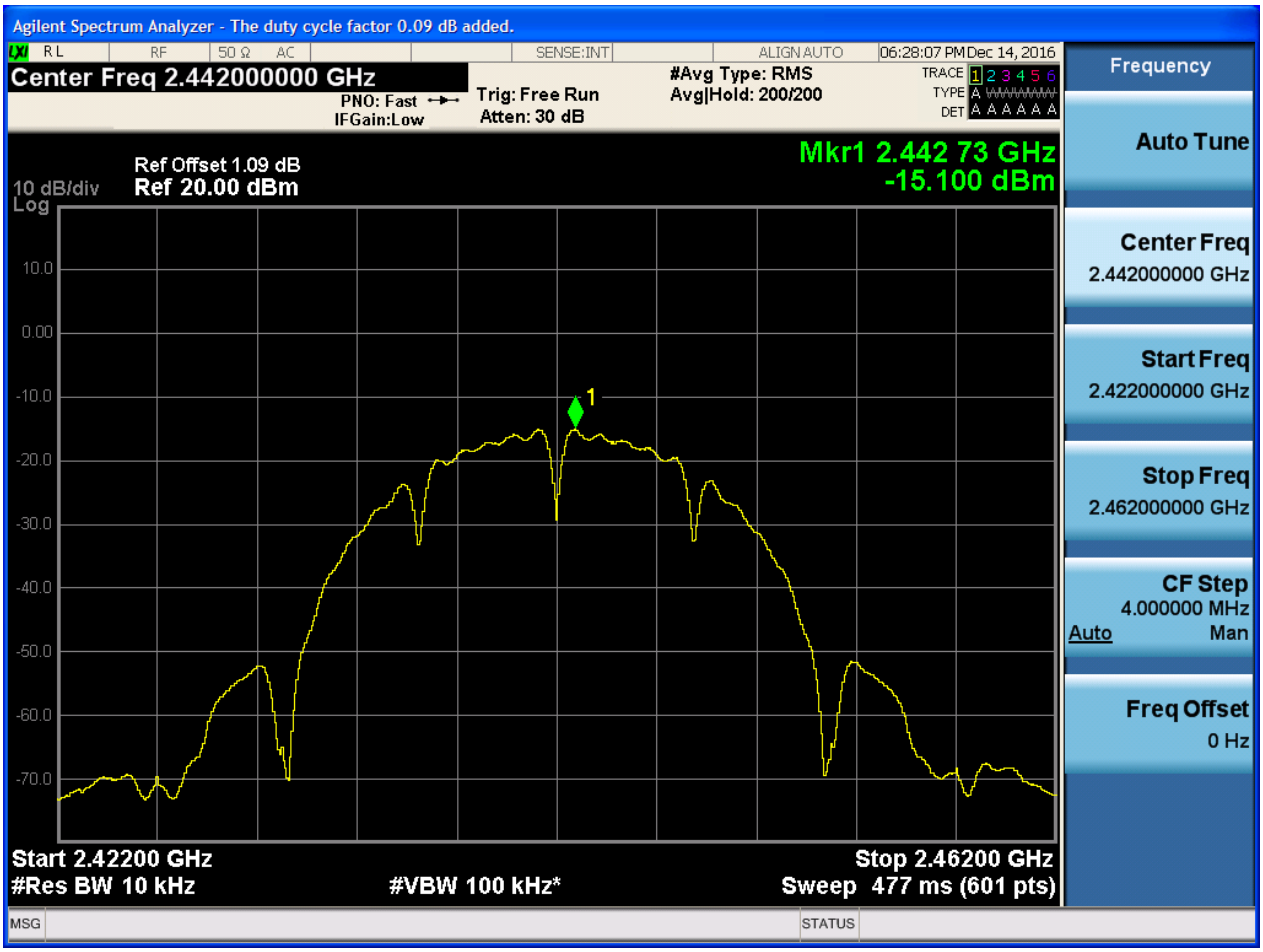
2.3 11B_M@Ant 1


Agilent Spectrum Analyzer - The duty cycle factor 0.09 dB added.
Center Freq 2.427000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 200/200
06:21:53 PM Dec 14, 2016
Ref Offset 1.09 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr1 2.427 67 GHz
-15.058 dBm
Start 2.40700 GHz
#Res BW 10 kHz
#VBW 100 kHz*
Stop 2.44700 GHz
Sweep 477 ms (601 pts)
Frequency
Auto Tune
Center Freq
2.427000000 GHz
Start Freq
2.407000000 GHz
Stop Freq
2.447000000 GHz
CF Step
4.000000 MHz
Auto
Man
Freq Offset
0 Hz

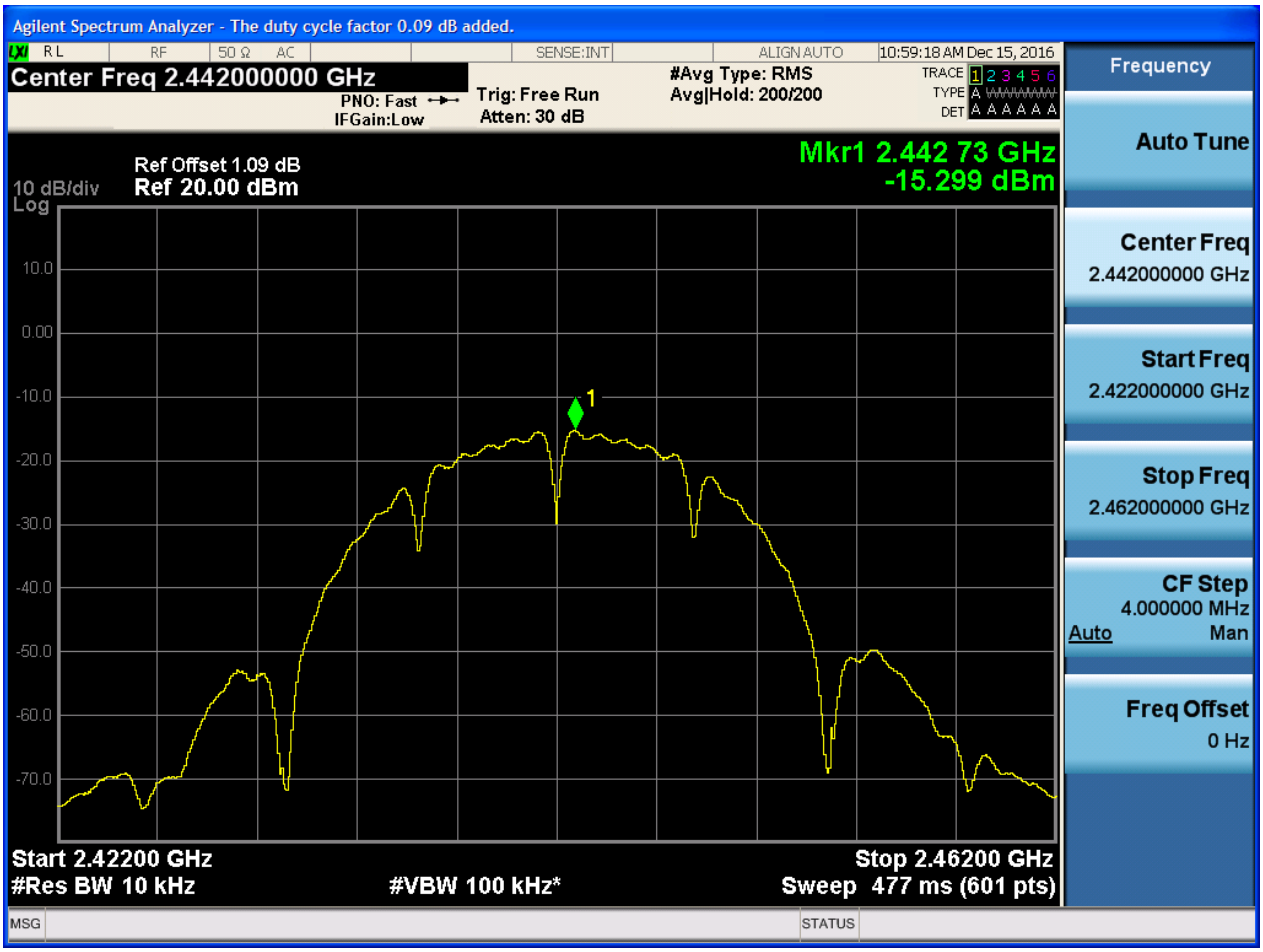
2.4 11B_M@Ant 2


Agilent Spectrum Analyzer - The duty cycle factor 0.09 dB added.
Center Freq 2.427000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 200/200
10:54:03 AM Dec 15, 2016
Ref Offset 1.09 dB
10 dB/div
Log
Ref 20.00 dBm
Mkr1 2.426 20 GHz
-16.848 dBm
Start 2.40700 GHz
#Res BW 10 kHz
#VBW 100 kHz*
Stop 2.44700 GHz
Sweep 477 ms (601 pts)
Frequency
Auto Tune
Center Freq
2.427000000 GHz
Start Freq
2.407000000 GHz
Stop Freq
2.447000000 GHz
CF Step
4.000000 MHz
Auto
Man
Freq Offset
0 Hz

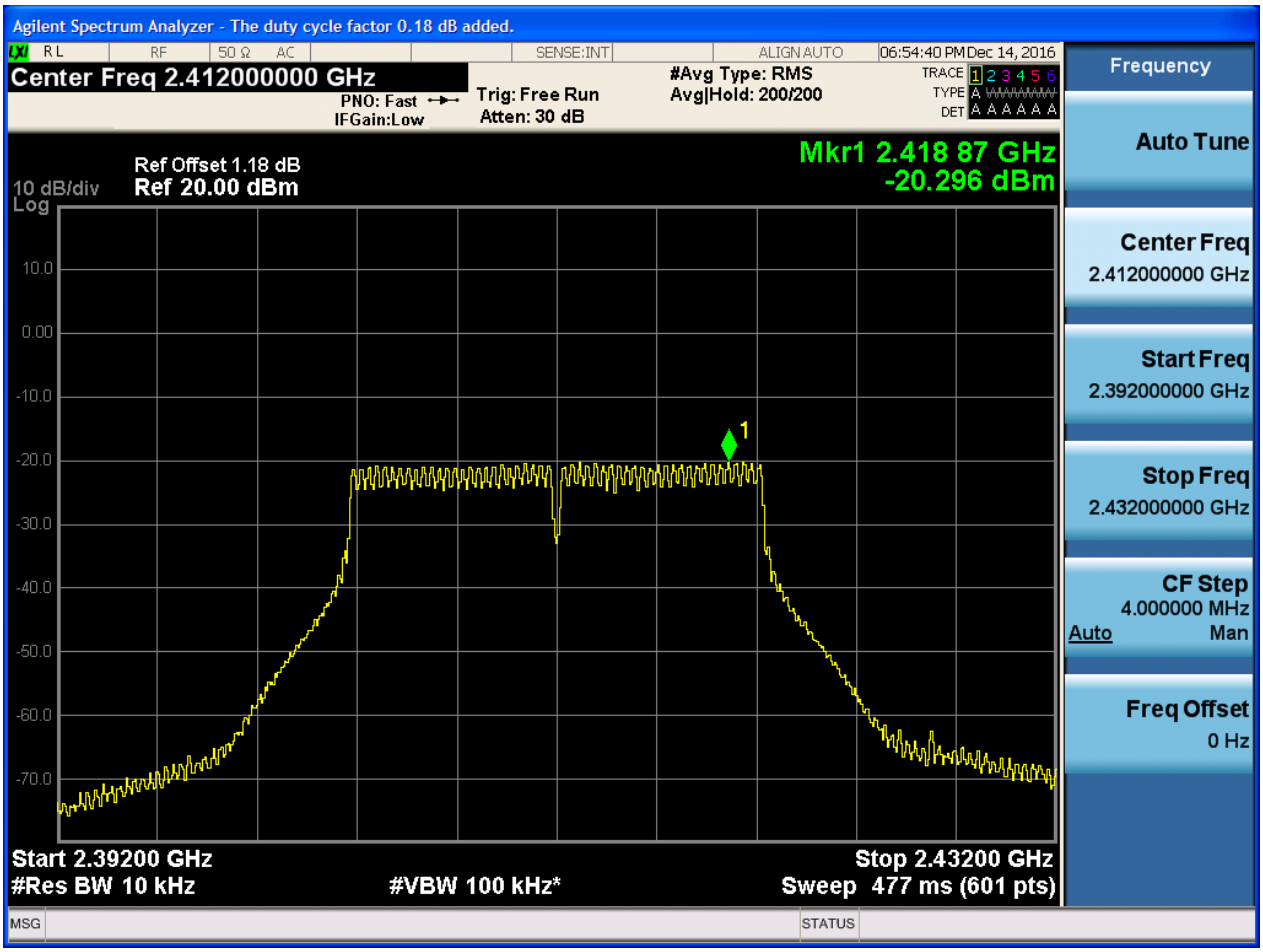
2.5 11B_H@Ant 1


Agilent Spectrum Analyzer - The duty cycle factor 0.09 dB added.
Center Freq 2.442000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 200/200
06:28:07 PM Dec 14, 2016
Ref Offset 1.09 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr1 2.442 73 GHz
-15.100 dBm
Start 2.42200 GHz
#Res BW 10 kHz
#VBW 100 kHz*
Stop 2.46200 GHz
Sweep 477 ms (601 pts)
Frequency
Auto Tune
Center Freq
2.442000000 GHz
Start Freq
2.422000000 GHz
Stop Freq
2.462000000 GHz
CF Step
4.000000 MHz
Auto
Man
Freq Offset
0 Hz

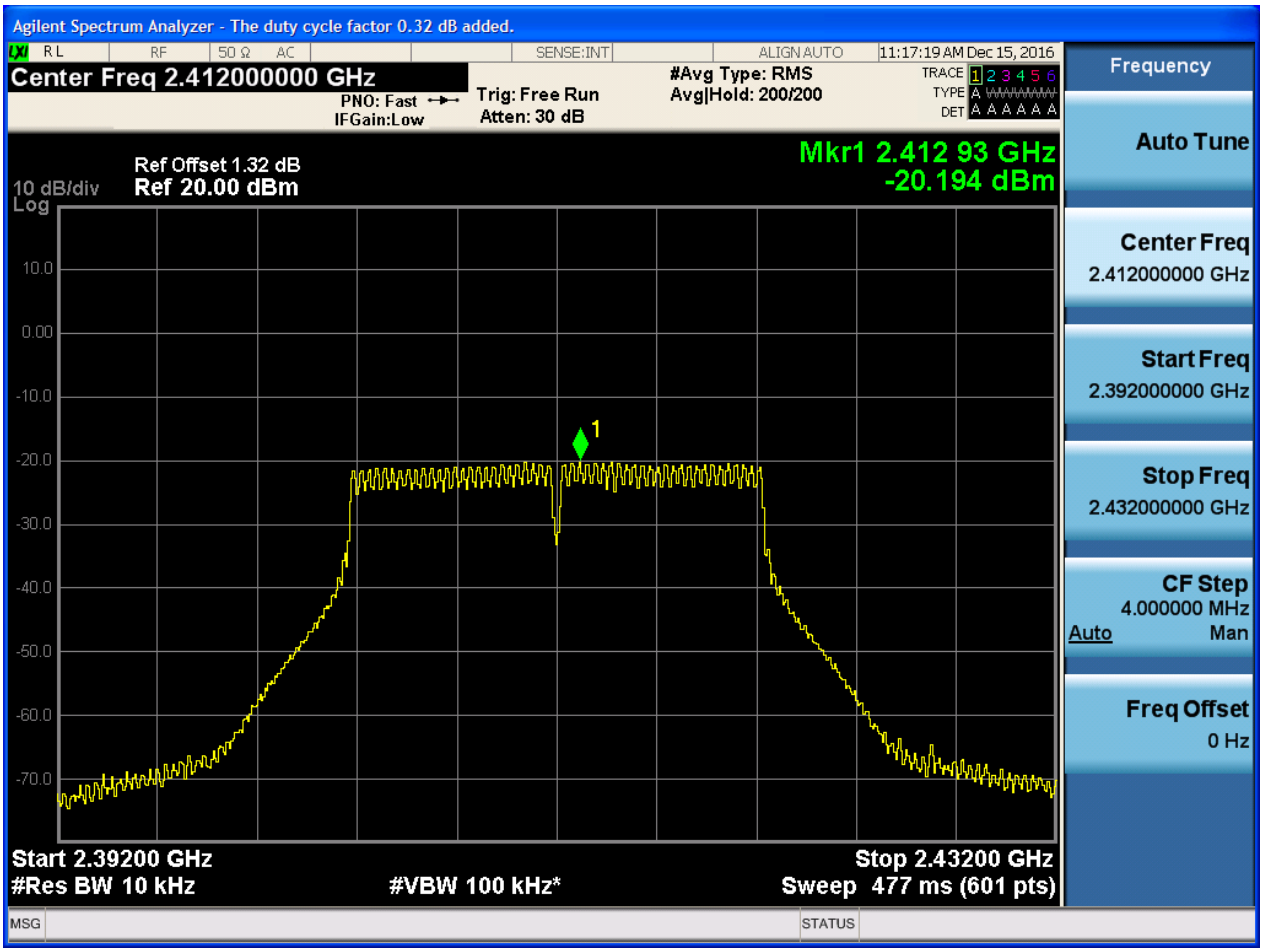
2.6 11B_H@Ant 2


Agilent Spectrum Analyzer - The duty cycle factor 0.09 dB added.
Center Freq 2.442000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 200/200
10:59:18 AM Dec 15, 2016
Ref Offset 1.09 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr1 2.442 73 GHz
-15.299 dBm
Start 2.42200 GHz
#Res BW 10 kHz
#VBW 100 kHz*
Stop 2.46200 GHz
Sweep 477 ms (601 pts)
Frequency
Auto Tune
Center Freq
2.442000000 GHz
Start Freq
2.422000000 GHz
Stop Freq
2.462000000 GHz
CF Step
4.000000 MHz
Auto
Man
Freq Offset
0 Hz

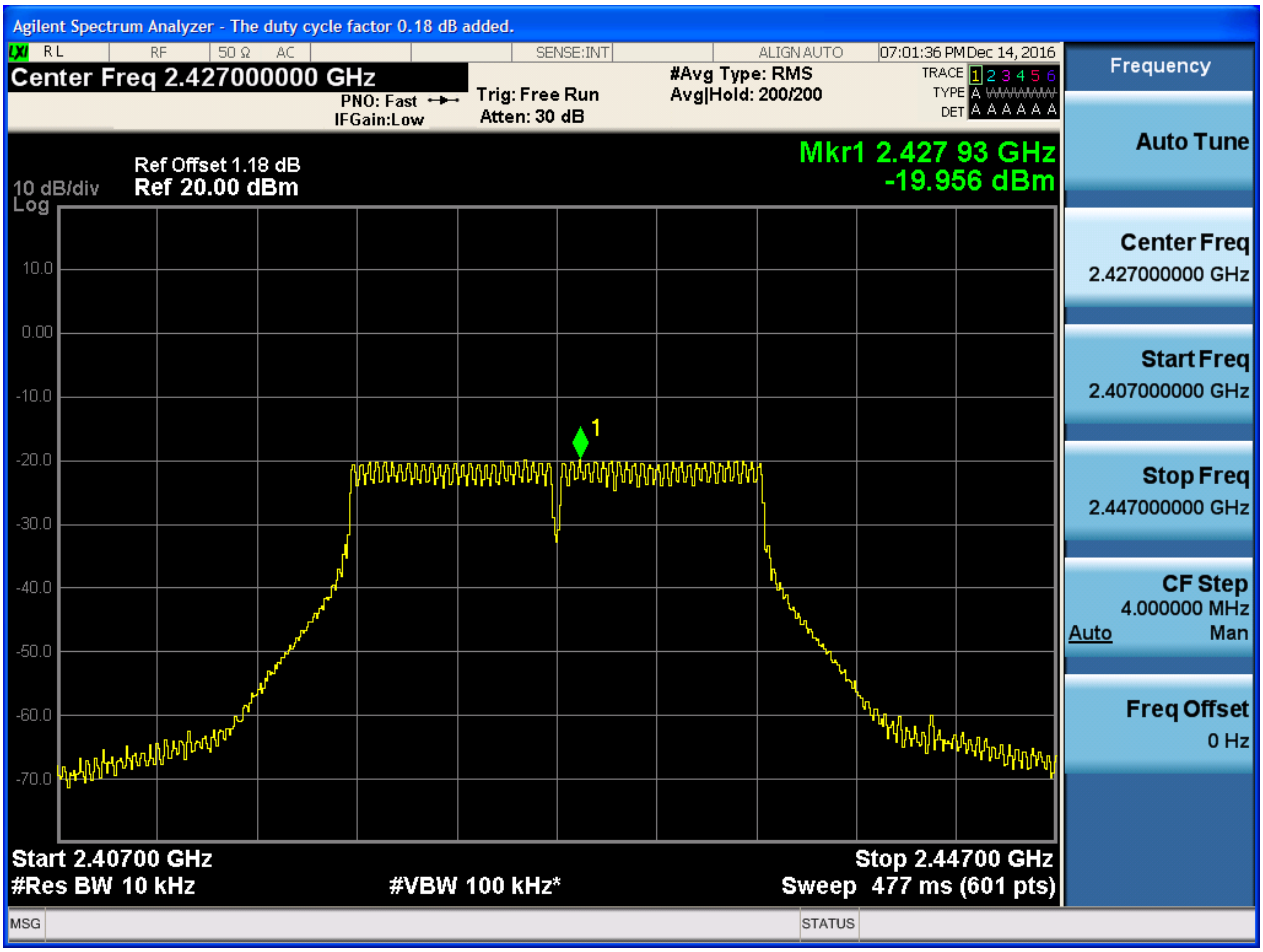
2.7 11G_L@Ant 1


Agilent Spectrum Analyzer - The duty cycle factor 0.18 dB added.
Center Freq 2.412000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 200/200
06:54:40 PM Dec 14, 2016
Ref Offset 1.18 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr1 2.418 87 GHz
-20.296 dBm
Start 2.39200 GHz
#Res BW 10 kHz
#VBW 100 kHz*
Stop 2.43200 GHz
Sweep 477 ms (601 pts)
Frequency
Auto Tune
Center Freq
2.412000000 GHz
Start Freq
2.392000000 GHz
Stop Freq
2.432000000 GHz
CF Step
4.000000 MHz
Auto
Man
Freq Offset
0 Hz

2.8 11G_L@Ant 2


Agilent Spectrum Analyzer - The duty cycle factor 0.32 dB added.
Center Freq 2.412000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 200/200
11:17:19 AM Dec 15, 2016
Ref Offset 1.32 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr1 2.412 93 GHz
-20.194 dBm
Start 2.39200 GHz
#Res BW 10 kHz
#VBW 100 kHz*
Stop 2.43200 GHz
Sweep 477 ms (601 pts)
Frequency
Auto Tune
Center Freq
2.412000000 GHz
Start Freq
2.392000000 GHz
Stop Freq
2.432000000 GHz
CF Step
4.000000 MHz
Auto
Man
Freq Offset
0 Hz

2.9 11G_M@Ant 1



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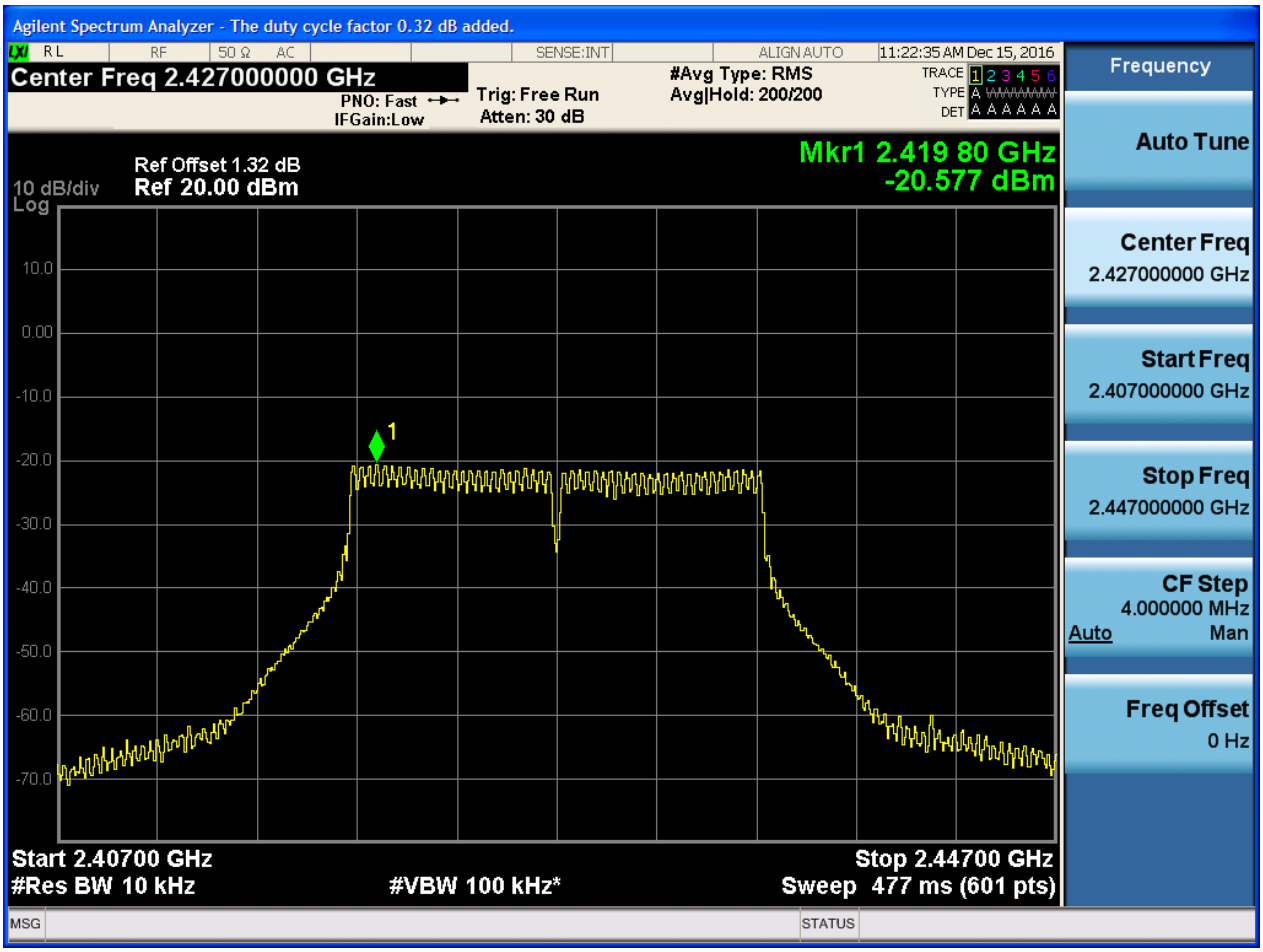
2.10 11G_M@Ant 2



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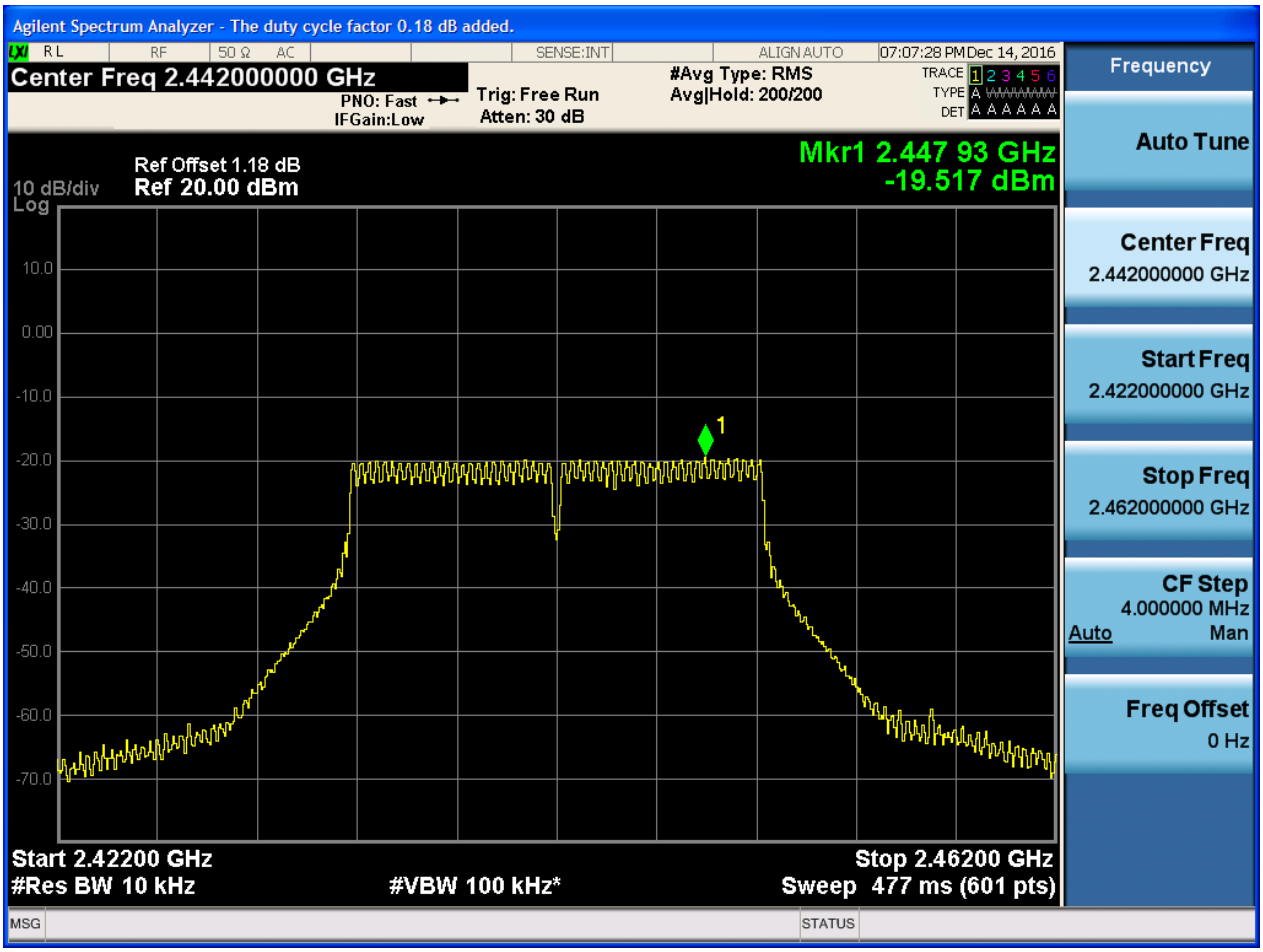
2.11 11G_H@Ant 1



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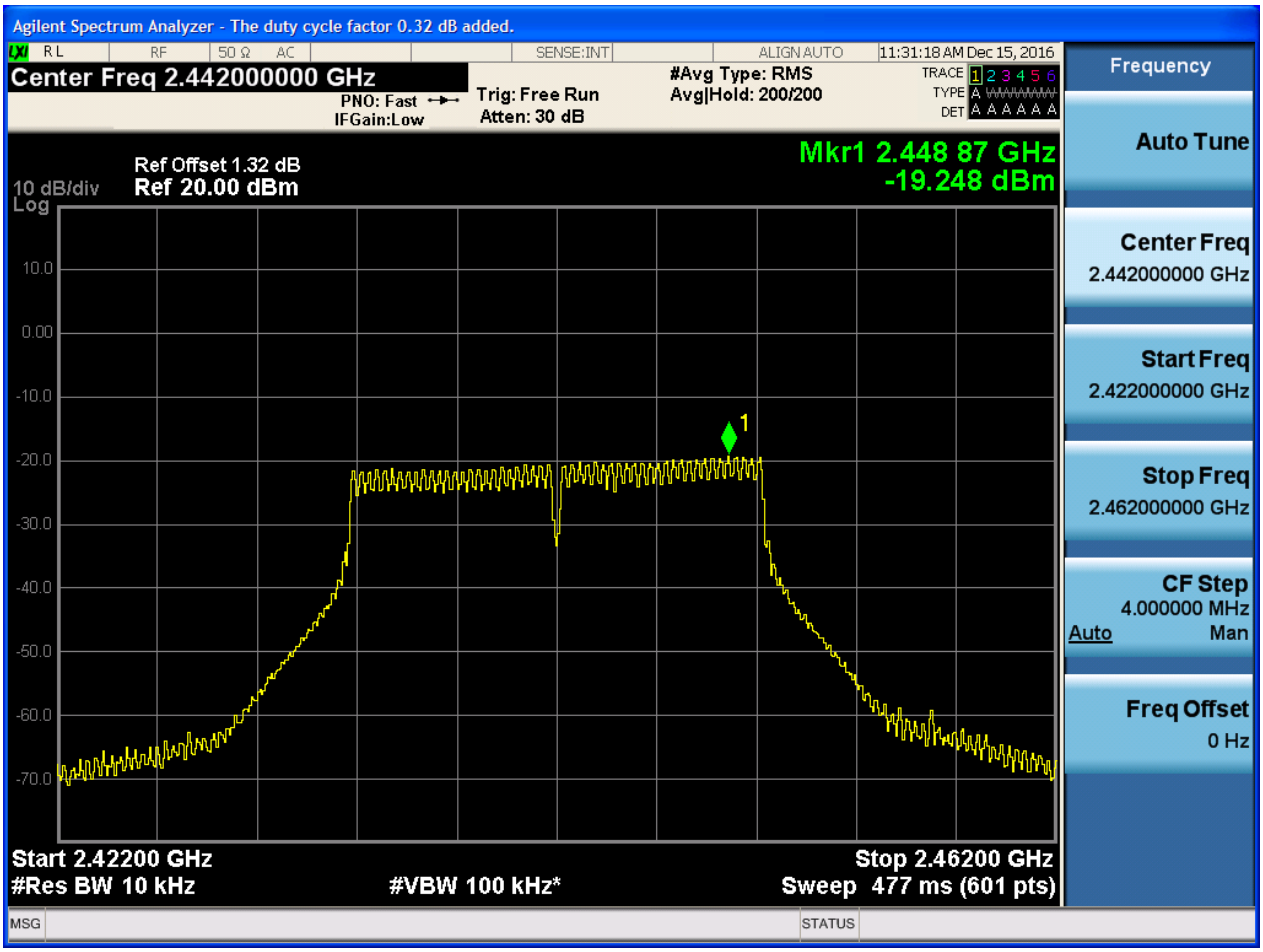
2.12 11G_H@Ant 2



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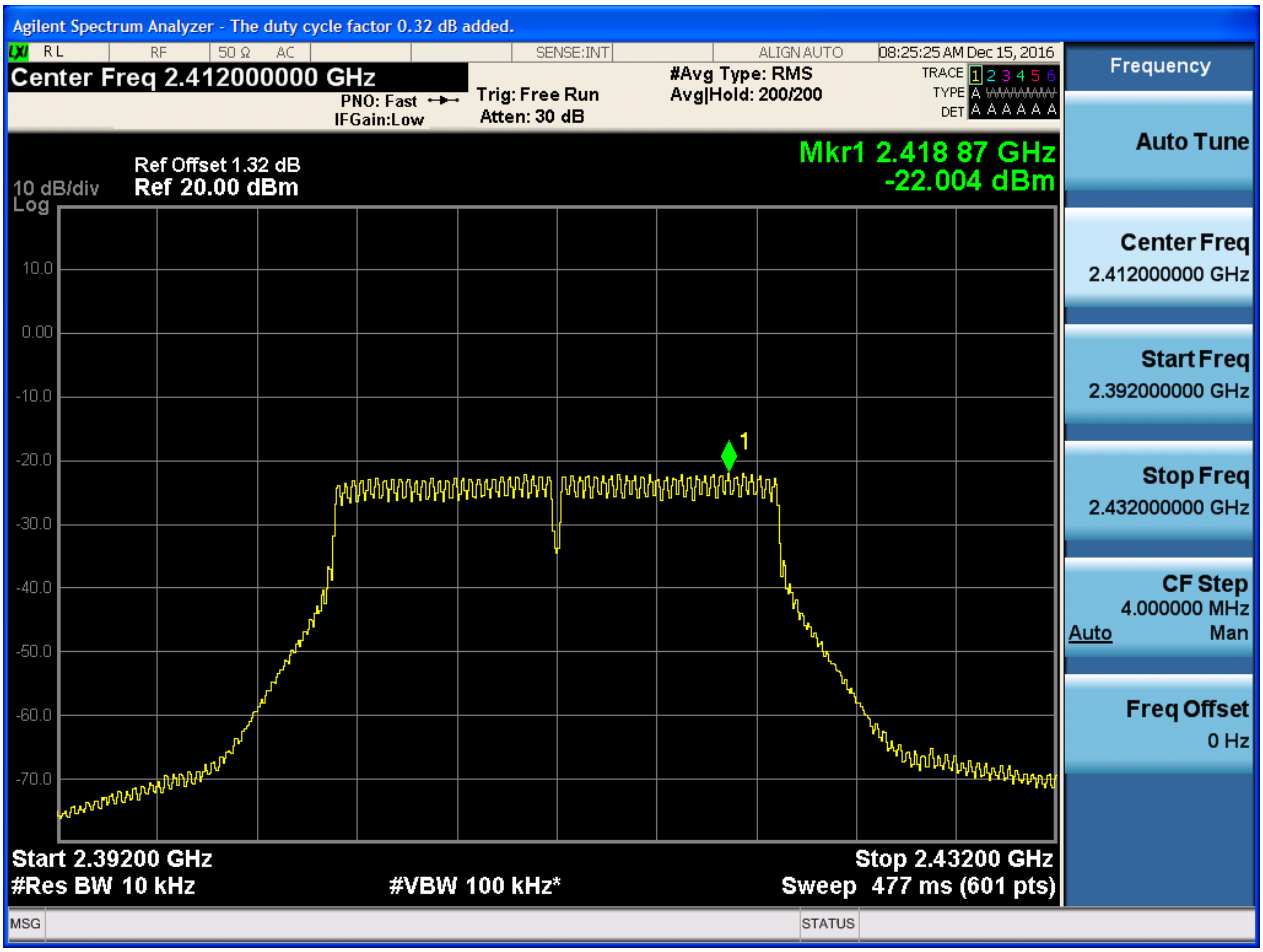
2.13 11N20_L@Ant 1



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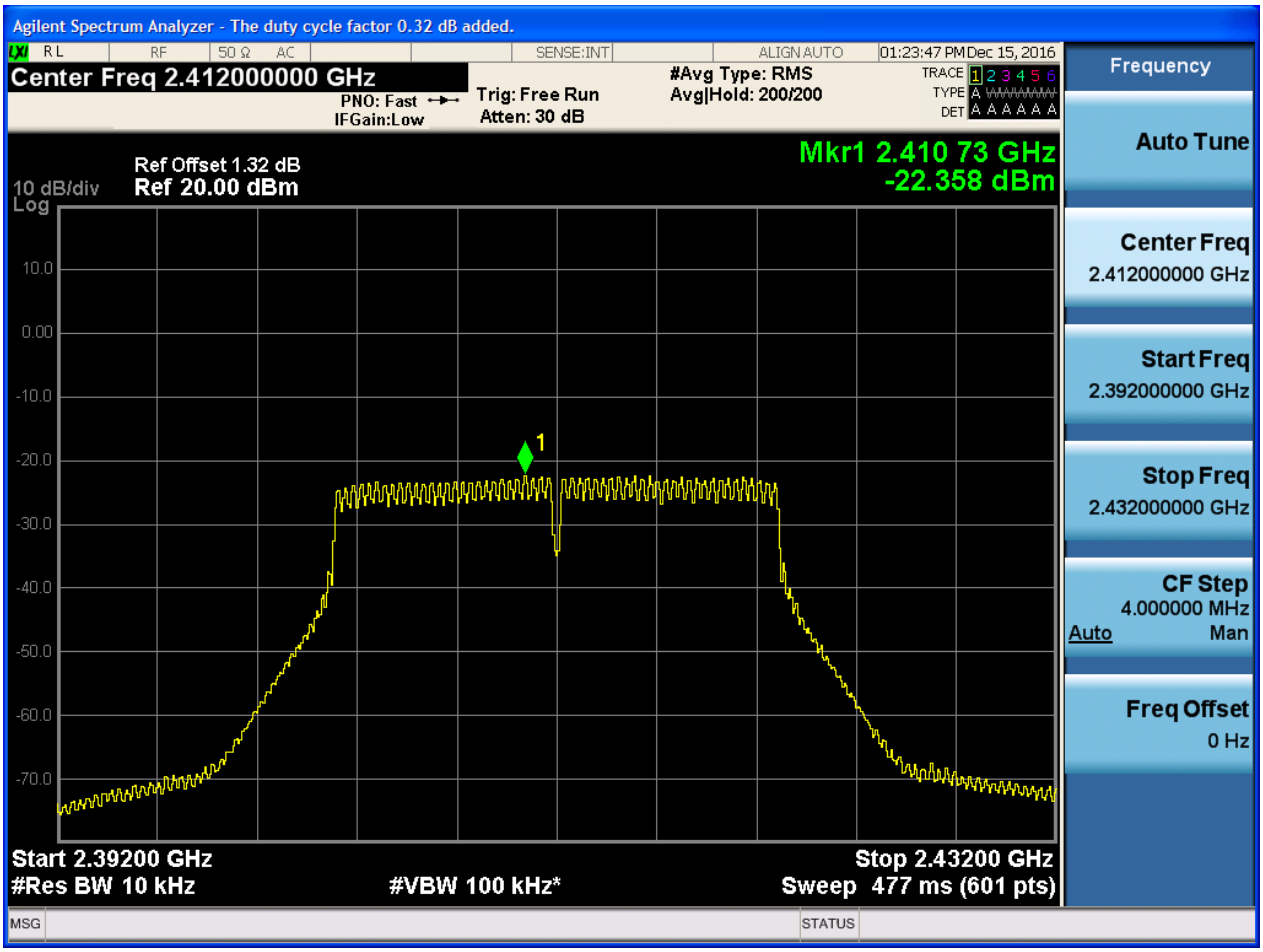
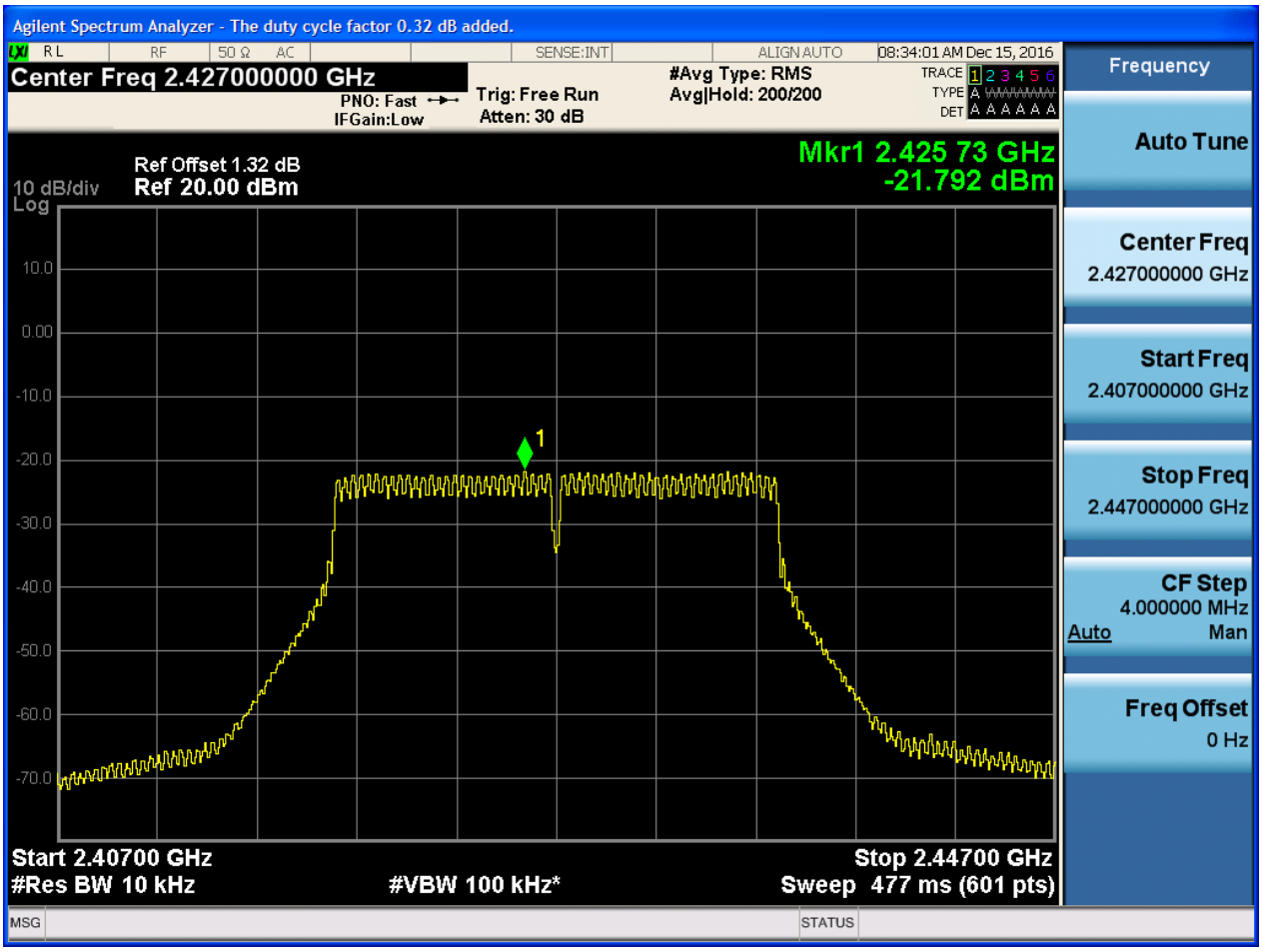
2.14 11N20_L@Ant 2



2.15 11N20_M@Ant 1



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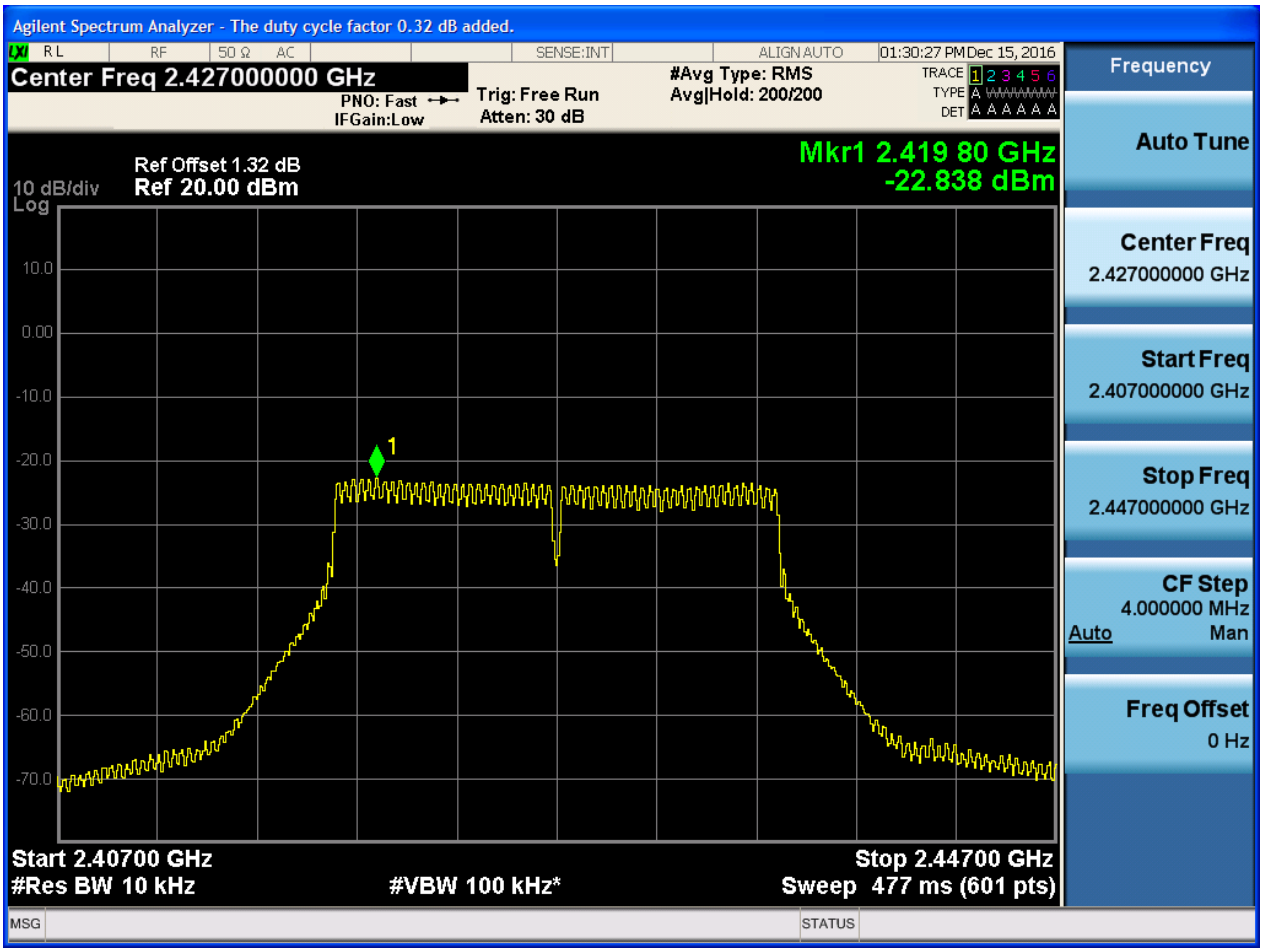
2.16 11N20_M@Ant 2



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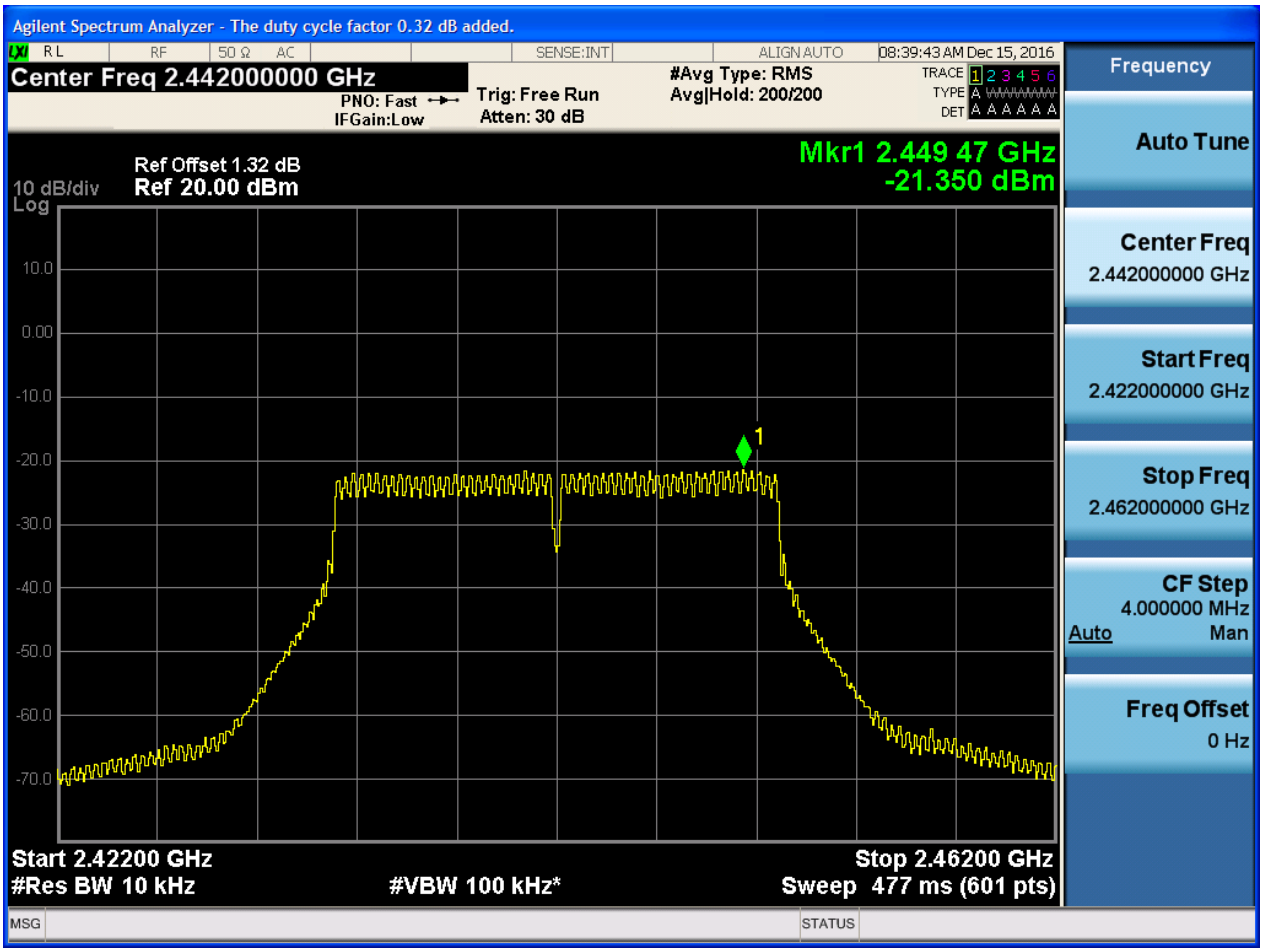
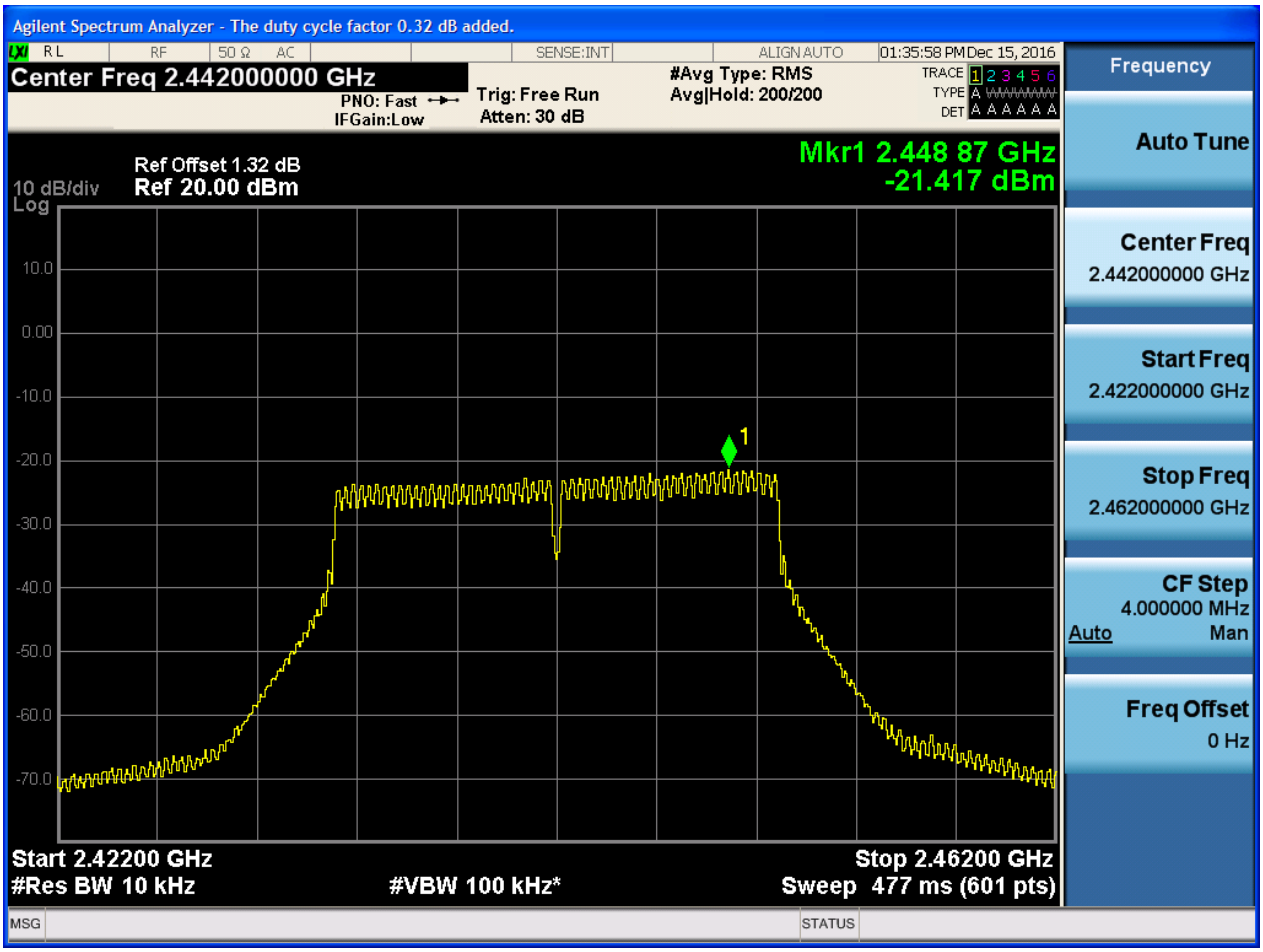
2.17 11N20_H@Ant 1



2.18 11N20_H@Ant 2



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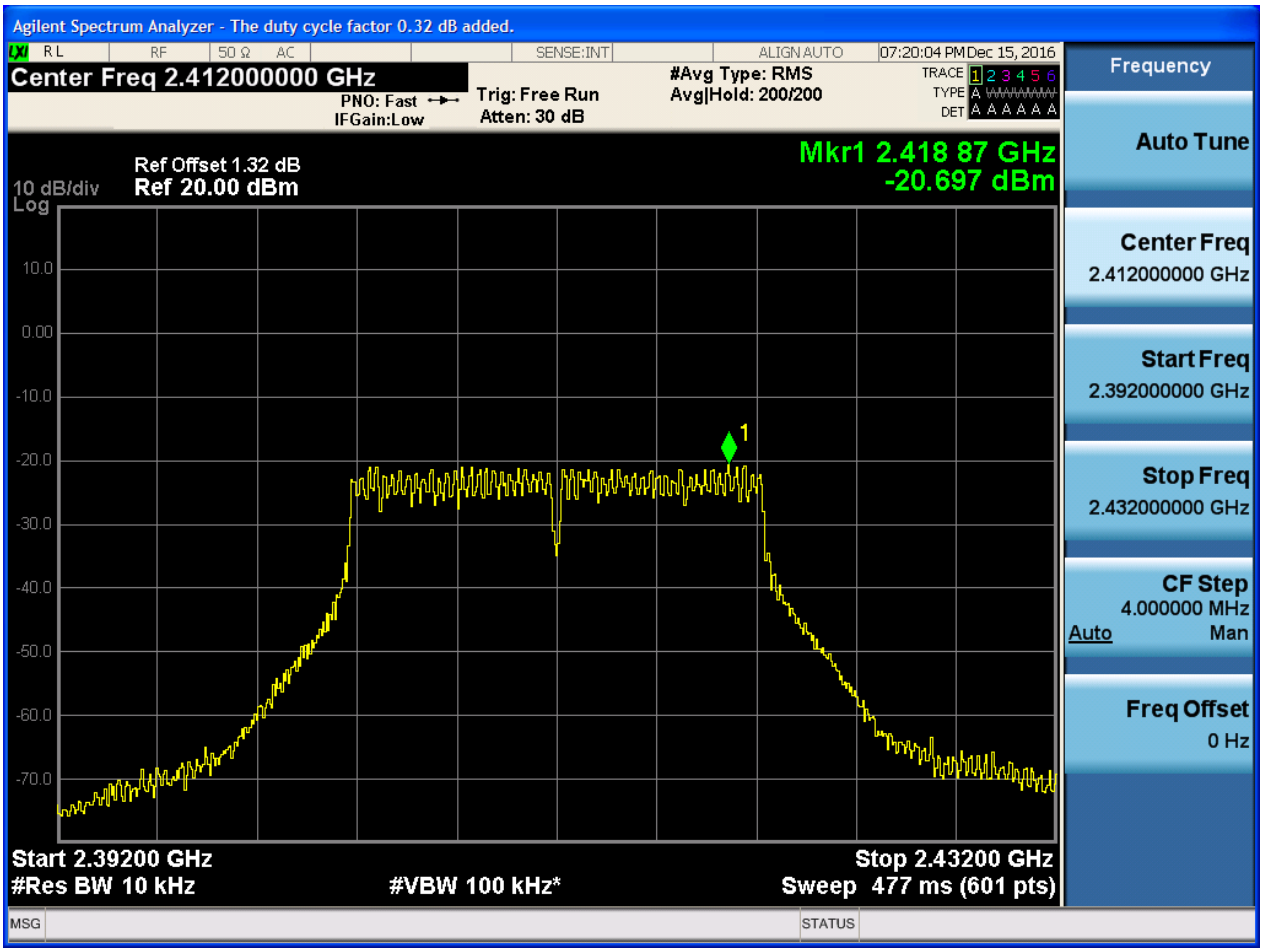
2.13 11N20m_L@Ant 1



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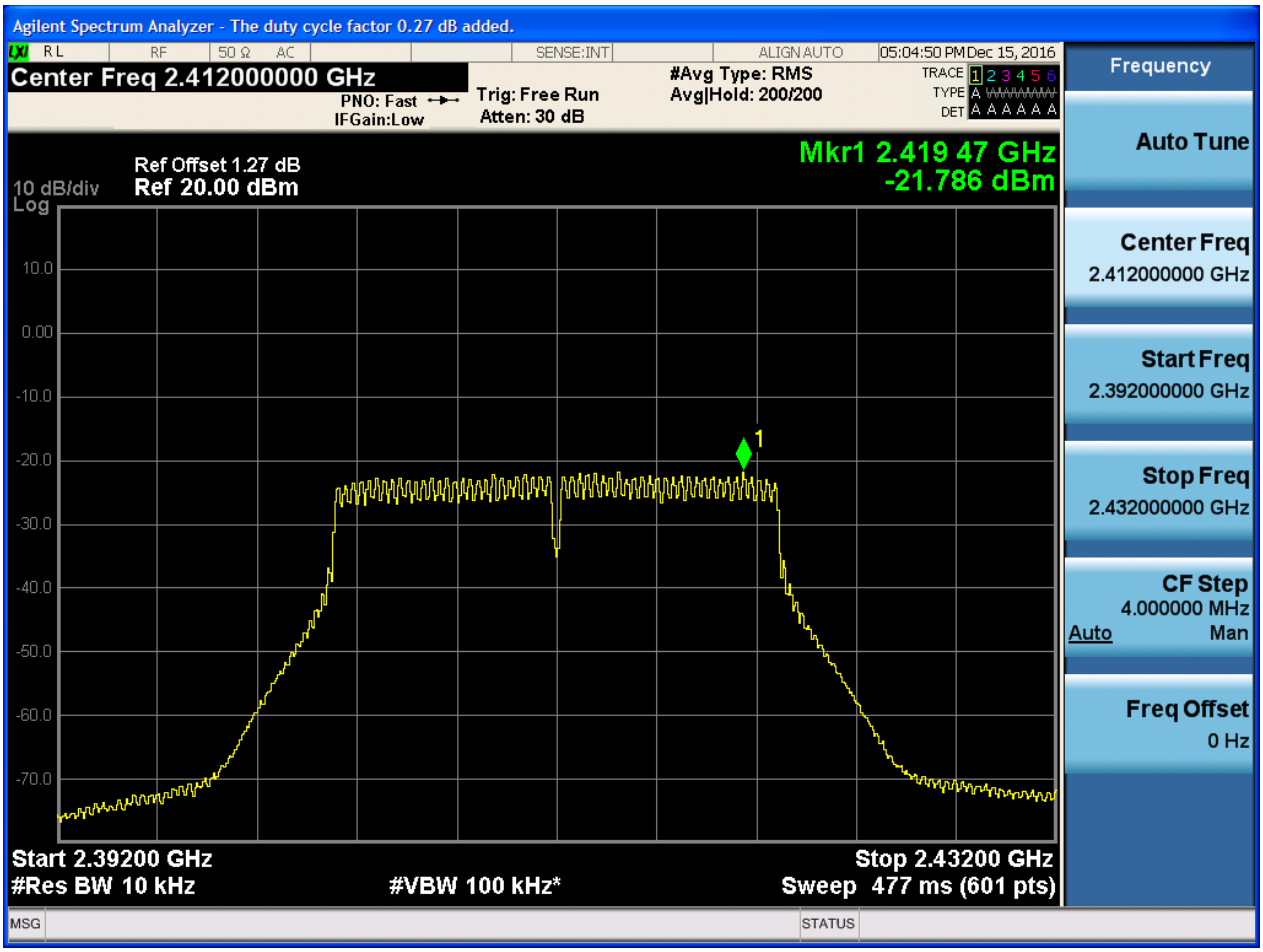
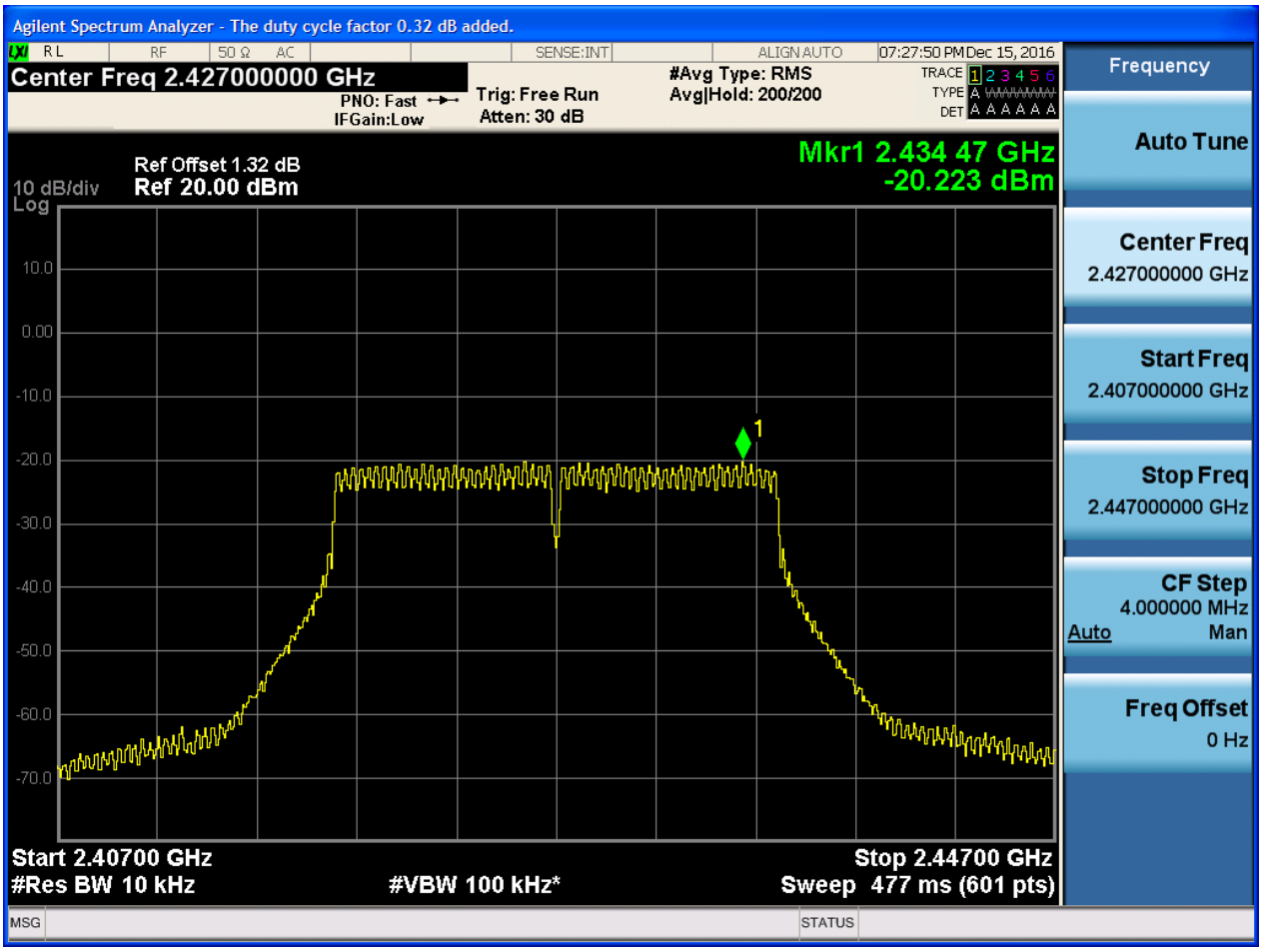
2.14 11N20m_L@Ant 2



2.15 11N20m_M@Ant 1



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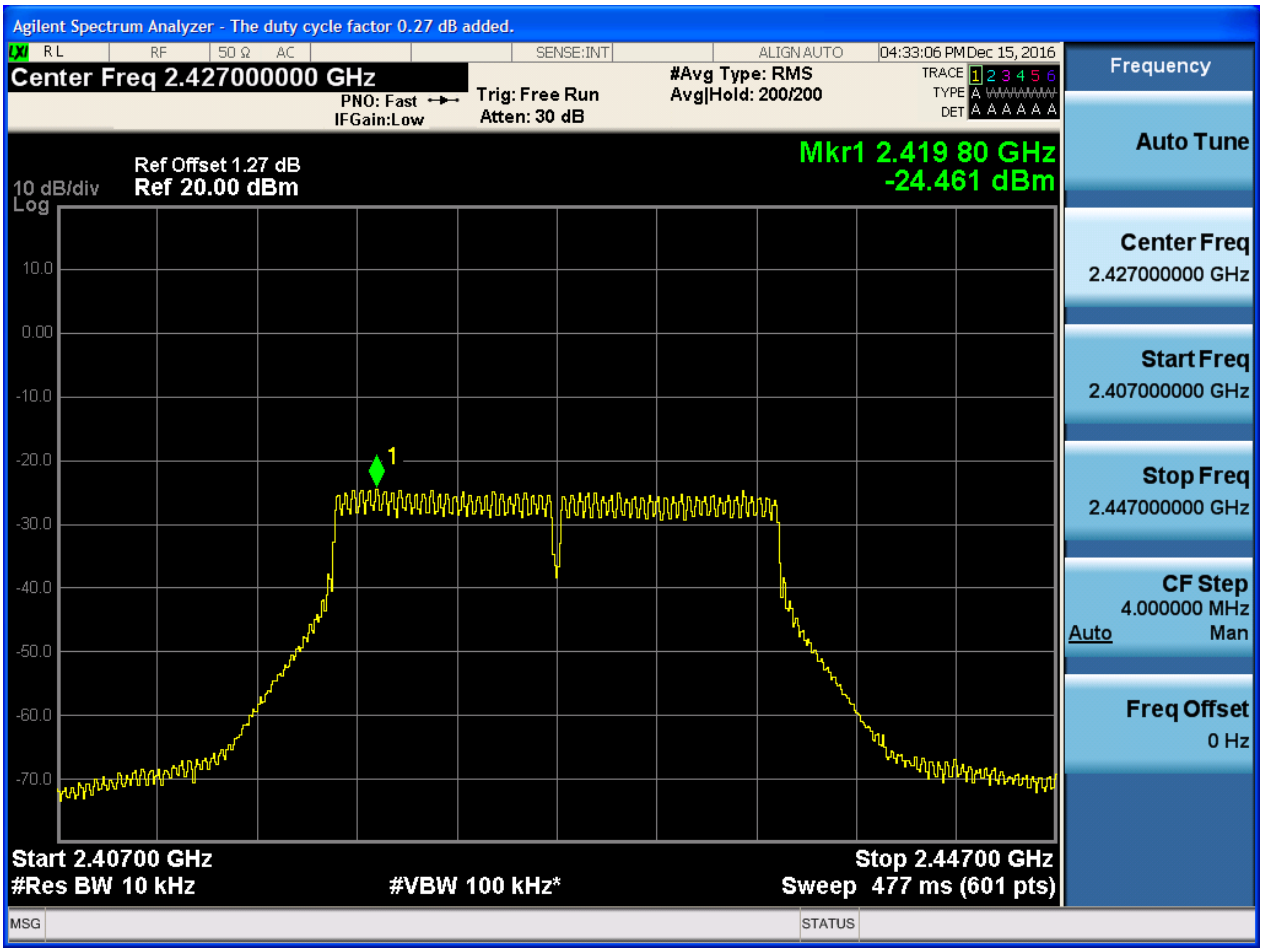
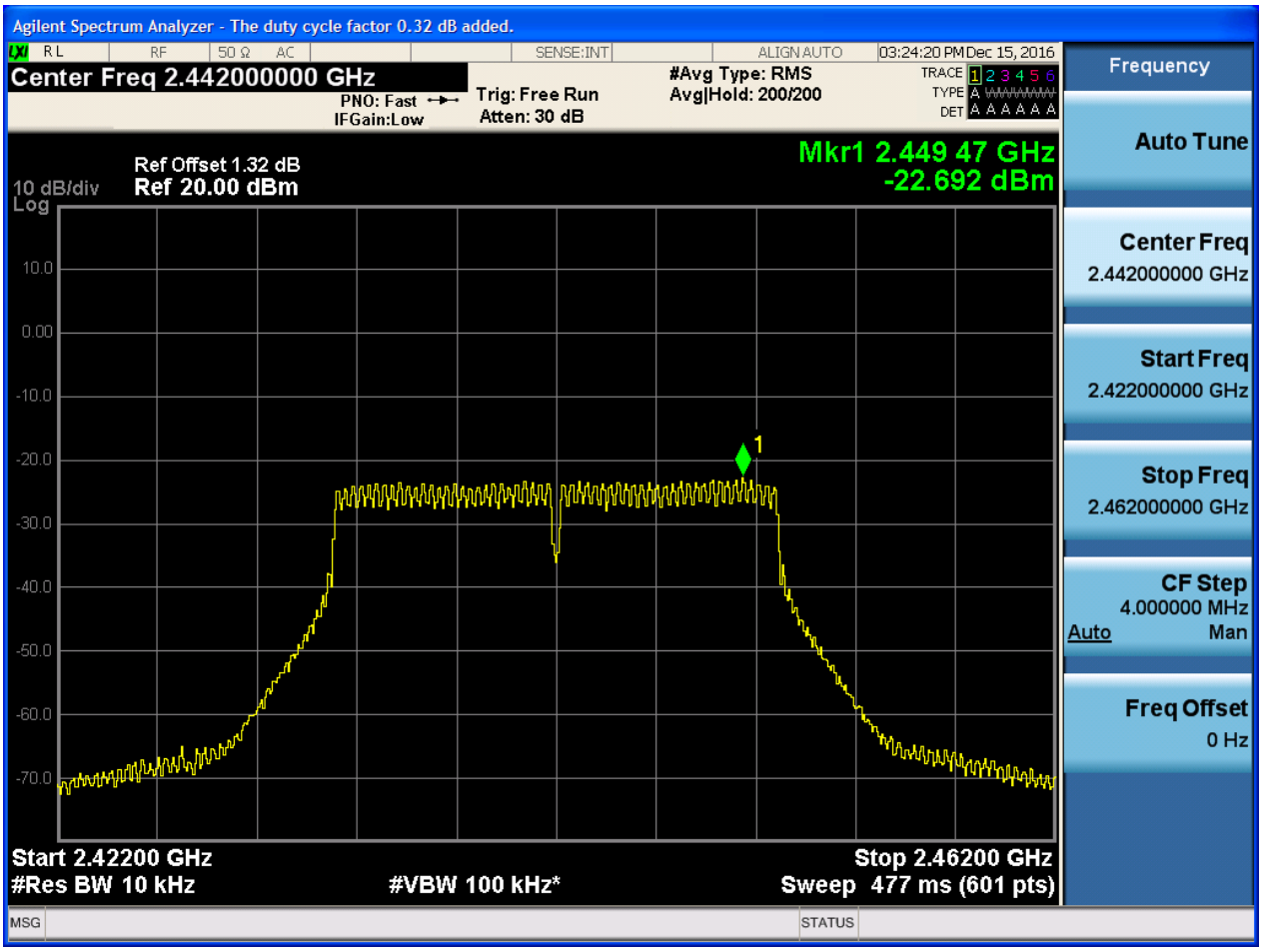
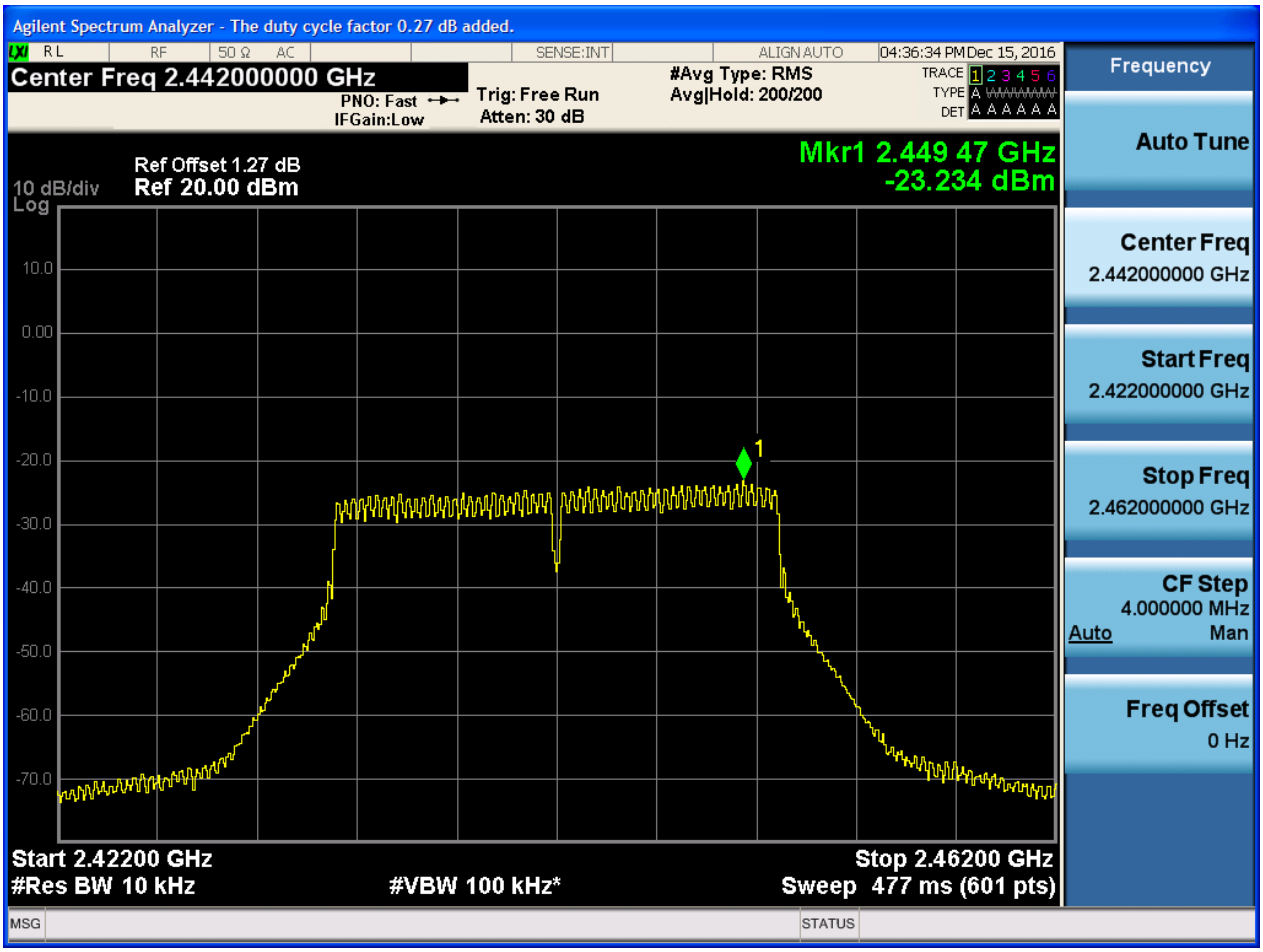
2.16 11N20m_M@Ant 2



2.17 11N20m_H@Ant 1



2.18 11N20m_H@Ant 2



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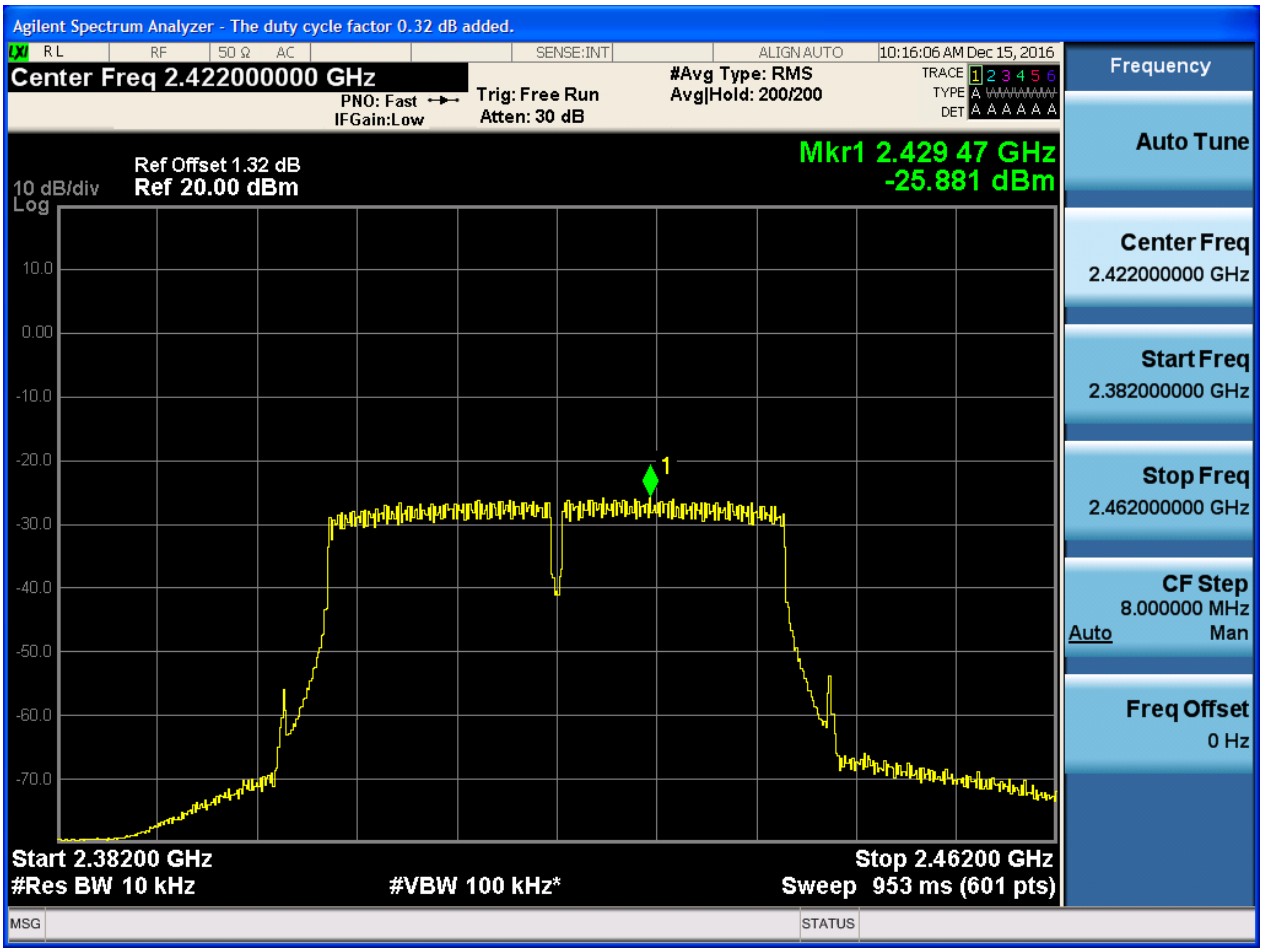
2.19 11N40_L@Ant 1



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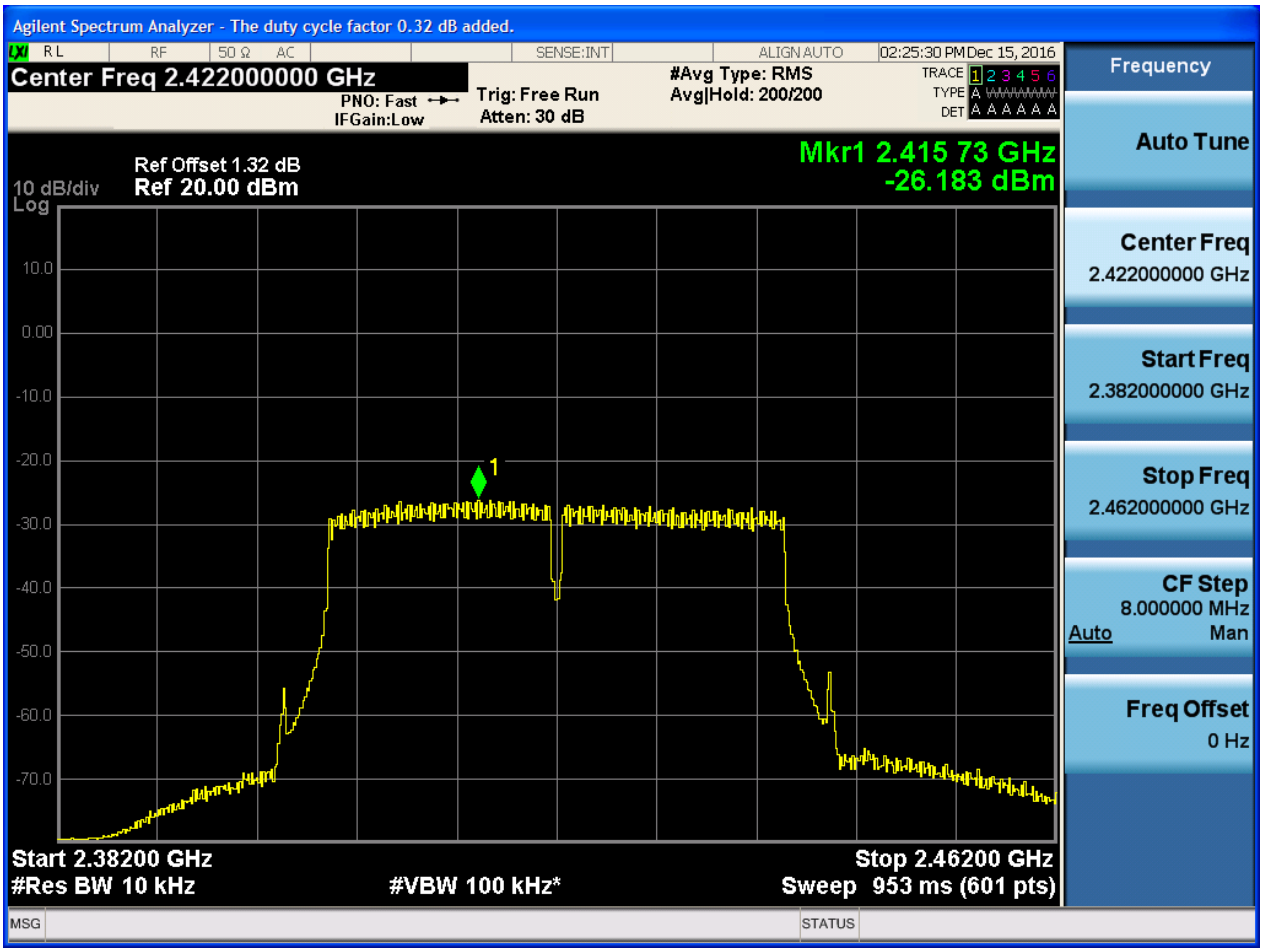
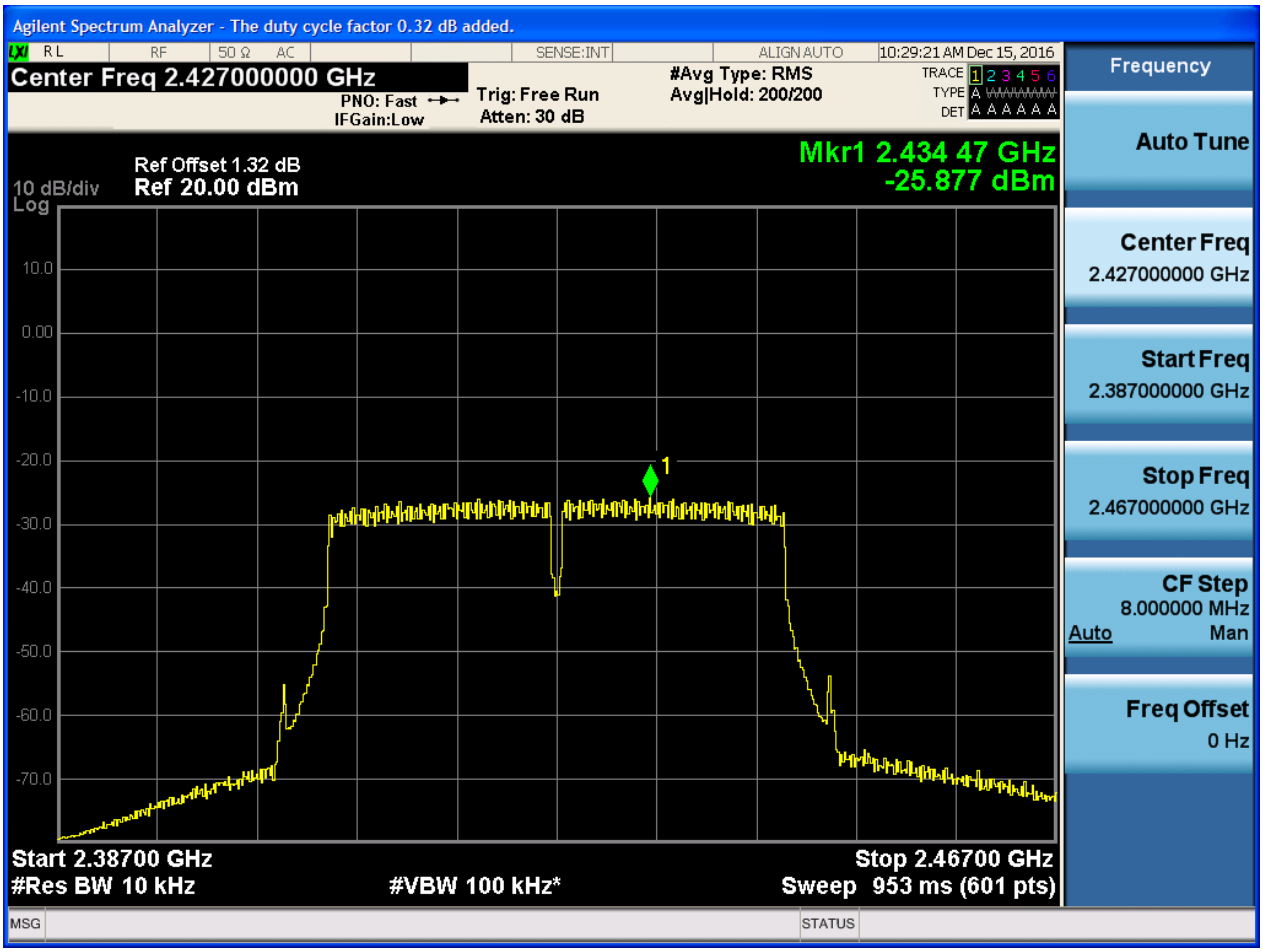
2.20 11N40_L@Ant 2



2.21 11N40_M@Ant 1



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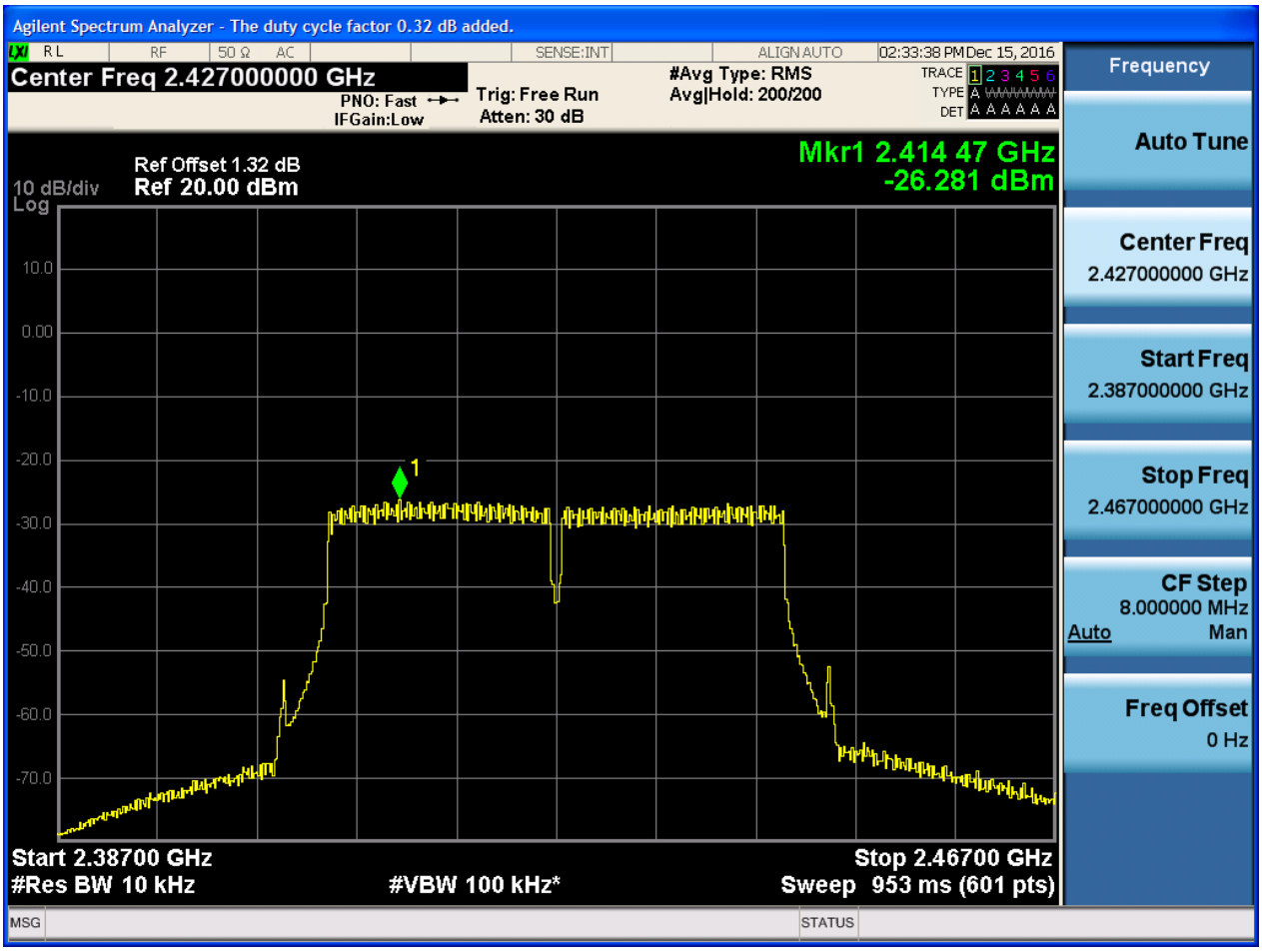
2.22 11N40_M@Ant 2



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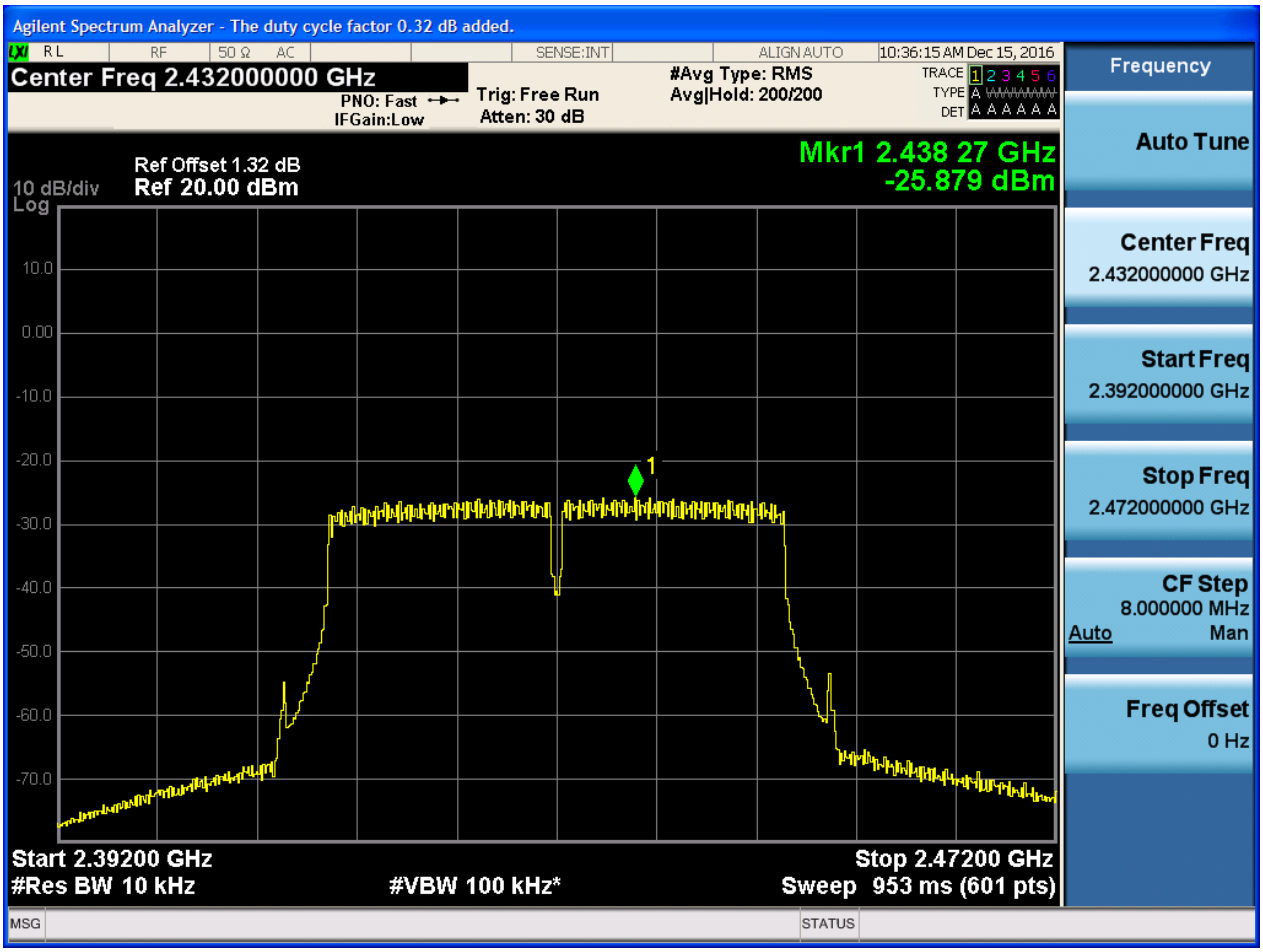
2.23 11N40_H@Ant 1



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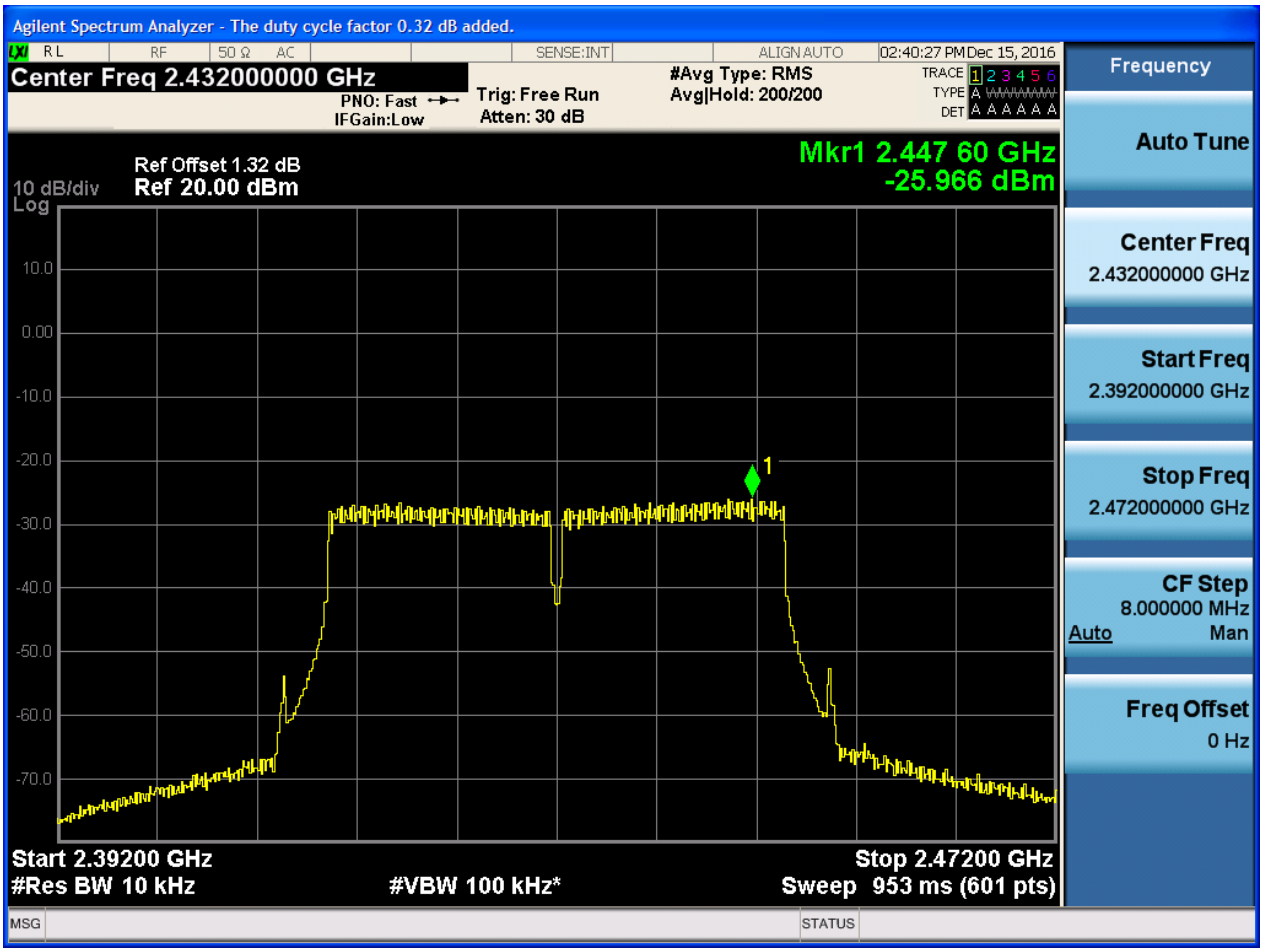
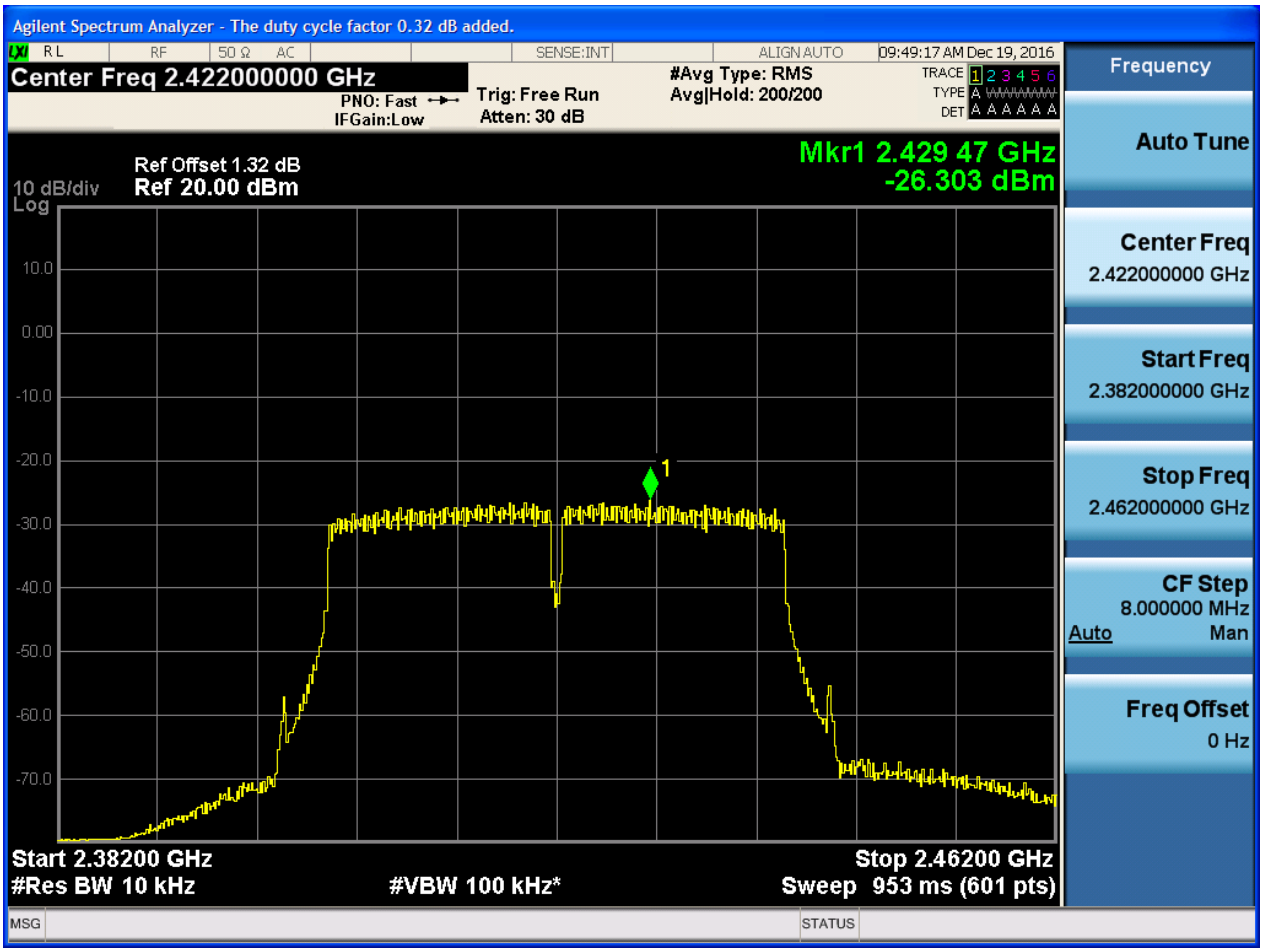
2.24 11N40_H@Ant 2



2.31 11N40m_L@Ant 1



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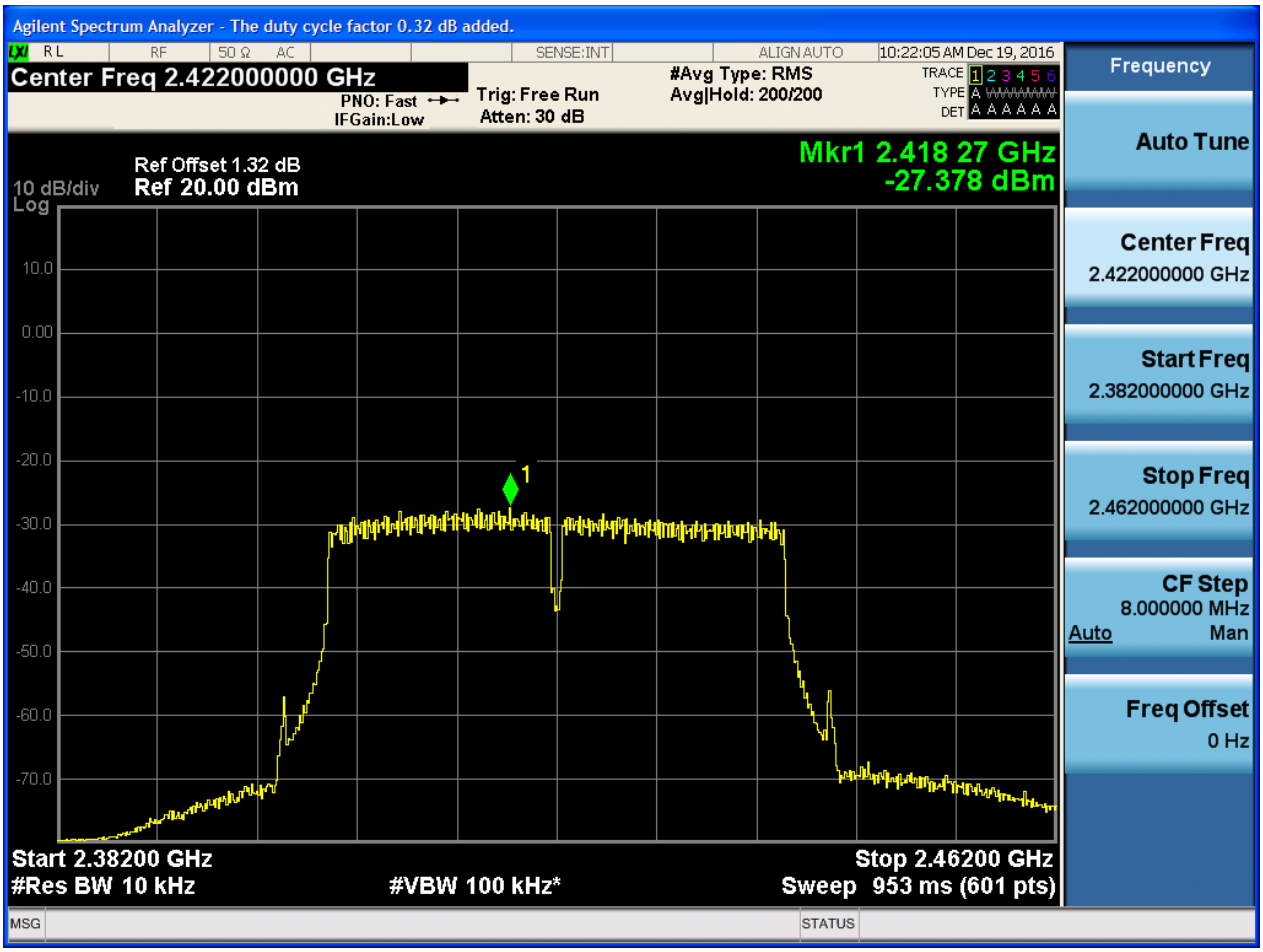
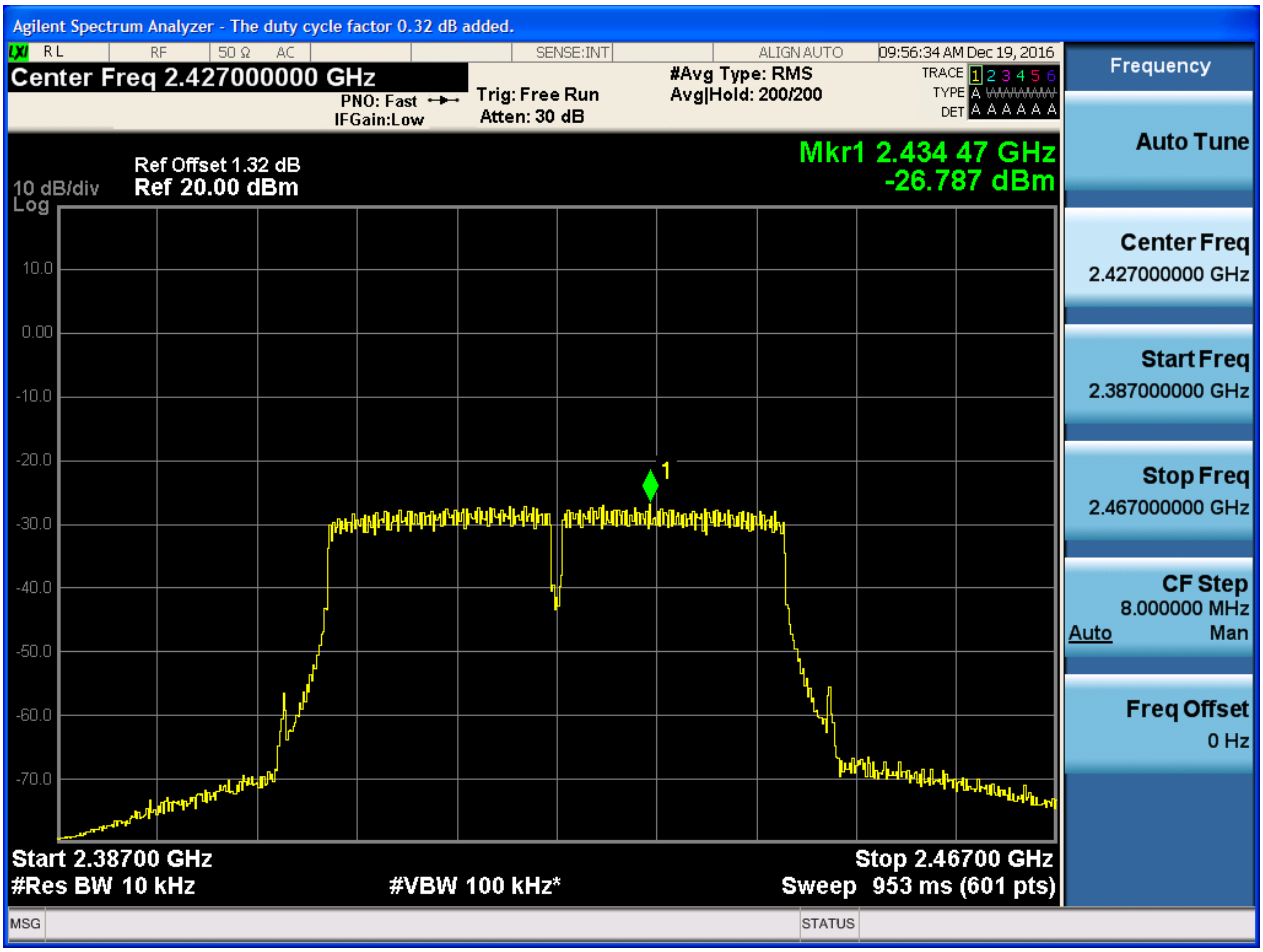
2.32 11N40m_L@Ant 2



2.33 11N40m_M@Ant 1



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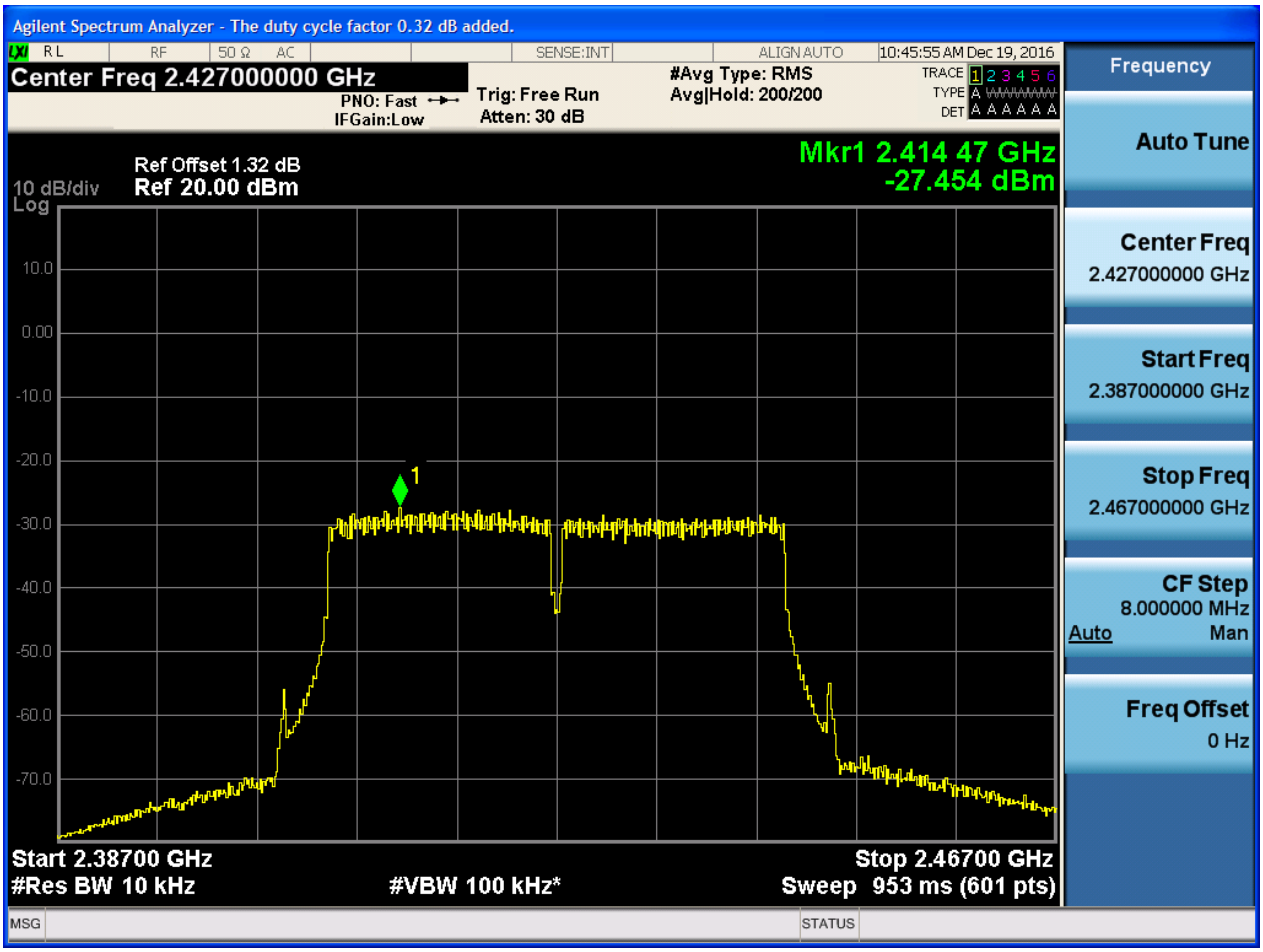
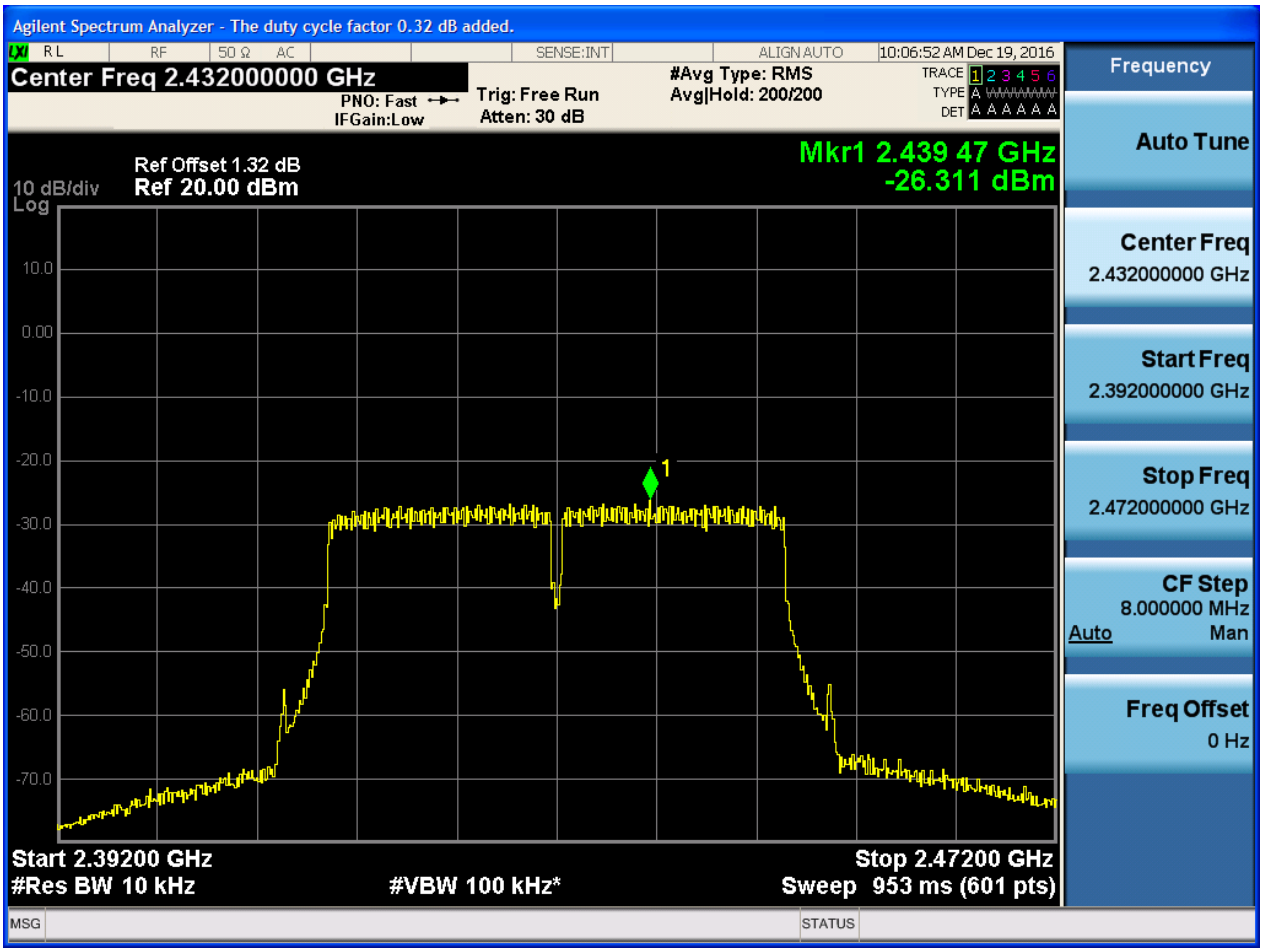
2.34 11N40m_M@Ant 2



2.35 11N40m_H@Ant 1



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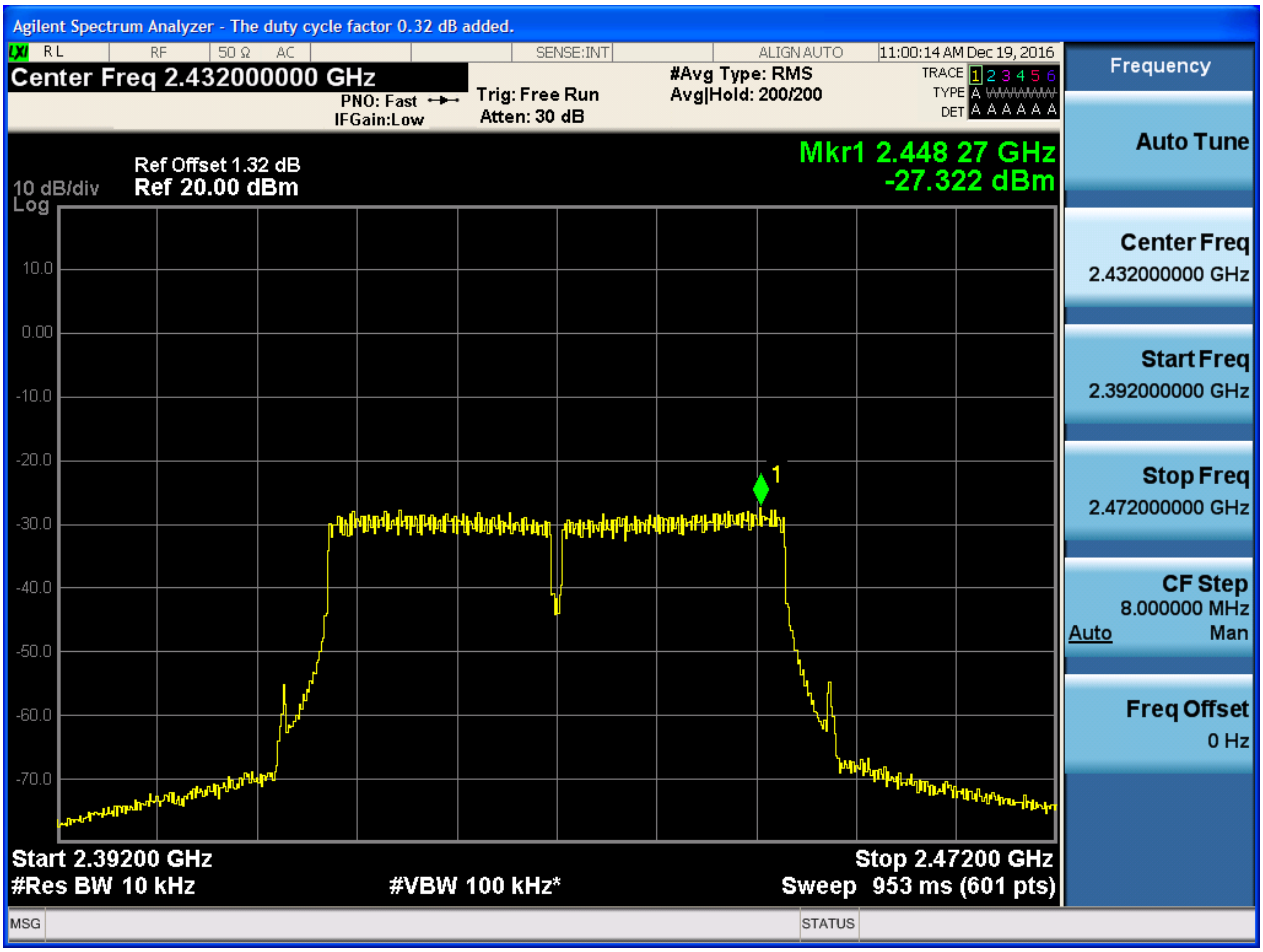
2.36 11N40m_H@Ant 2



Appendix F: Band Edges Compliance

Part I - Test Results

Test Mode	Test Channel	Frequency[MHz]	Ant	Carrier Power[dBm]	Max.Spurious Level[dBm]	Verdict
11B	L	2412	Ant 1	2.77	-49.11	pass
11B	L	2412	Ant 2	2.38	-50.83	pass
11B	H	2442	Ant 1	2.94	-49.86	pass
11B	H	2442	Ant 2	3.32	-50.04	pass
11G	L	2412	Ant 1	-1.32	-49.86	pass
11G	L	2412	Ant 2	-1.83	-50.18	pass
11G	H	2442	Ant 1	-0.67	-49.08	pass
11G	H	2442	Ant 2	-0.74	-49.40	pass
11N20	L	2412	Ant 1	-2.89	-49.60	pass
11N20	L	2412	Ant 2	-3.72	-50.58	pass
11N20	H	2442	Ant 1	-2.49	-49.05	pass
11N20	H	2442	Ant 2	-2.54	-50.26	pass
11N20m	L	2412	Ant 1	-1.47	-50.64	pass
11N20m	L	2412	Ant 2	-5.32	-50.31	pass
11N20m	H	2442	Ant 1	-4.02	-49.68	pass
11N20m	H	2442	Ant 2	-4.27	-49.47	pass
11N40	L	2422	Ant 1	-6.57	-50.37	pass
11N40	L	2422	Ant 2	-6.72	-50.04	pass
11N40	H	2432	Ant 1	-6.41	-49.22	pass
11N40	H	2432	Ant 2	-6.78	-49.36	pass
11N40m	L	2422	Ant 1	-7.30	-50.23	pass
11N40m	L	2422	Ant 2	-7.83	-50.36	pass
11N40m	H	2432	Ant 1	-7.46	-49.20	pass
11N40m	H	2432	Ant 2	-7.87	-49.54	pass

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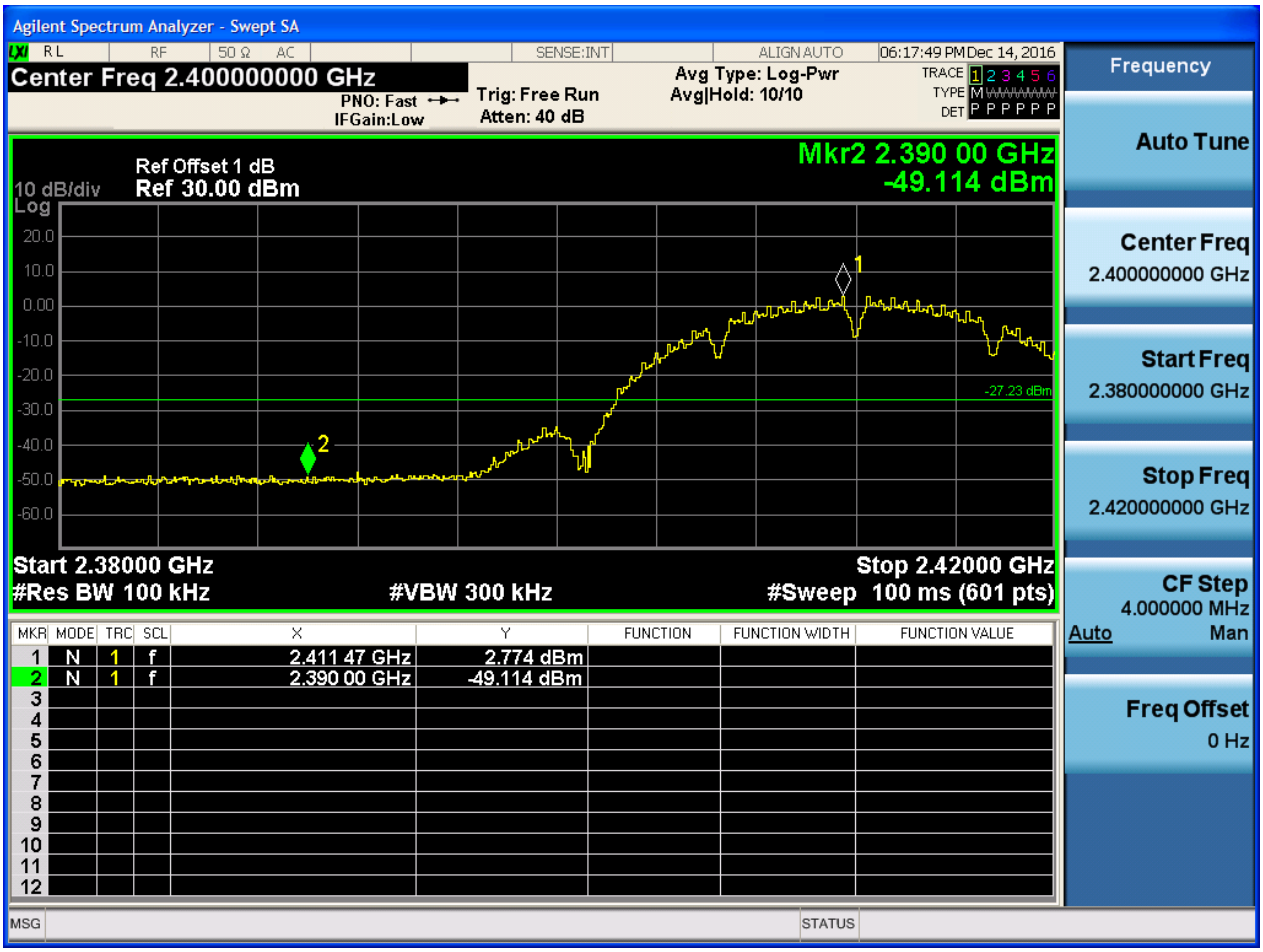
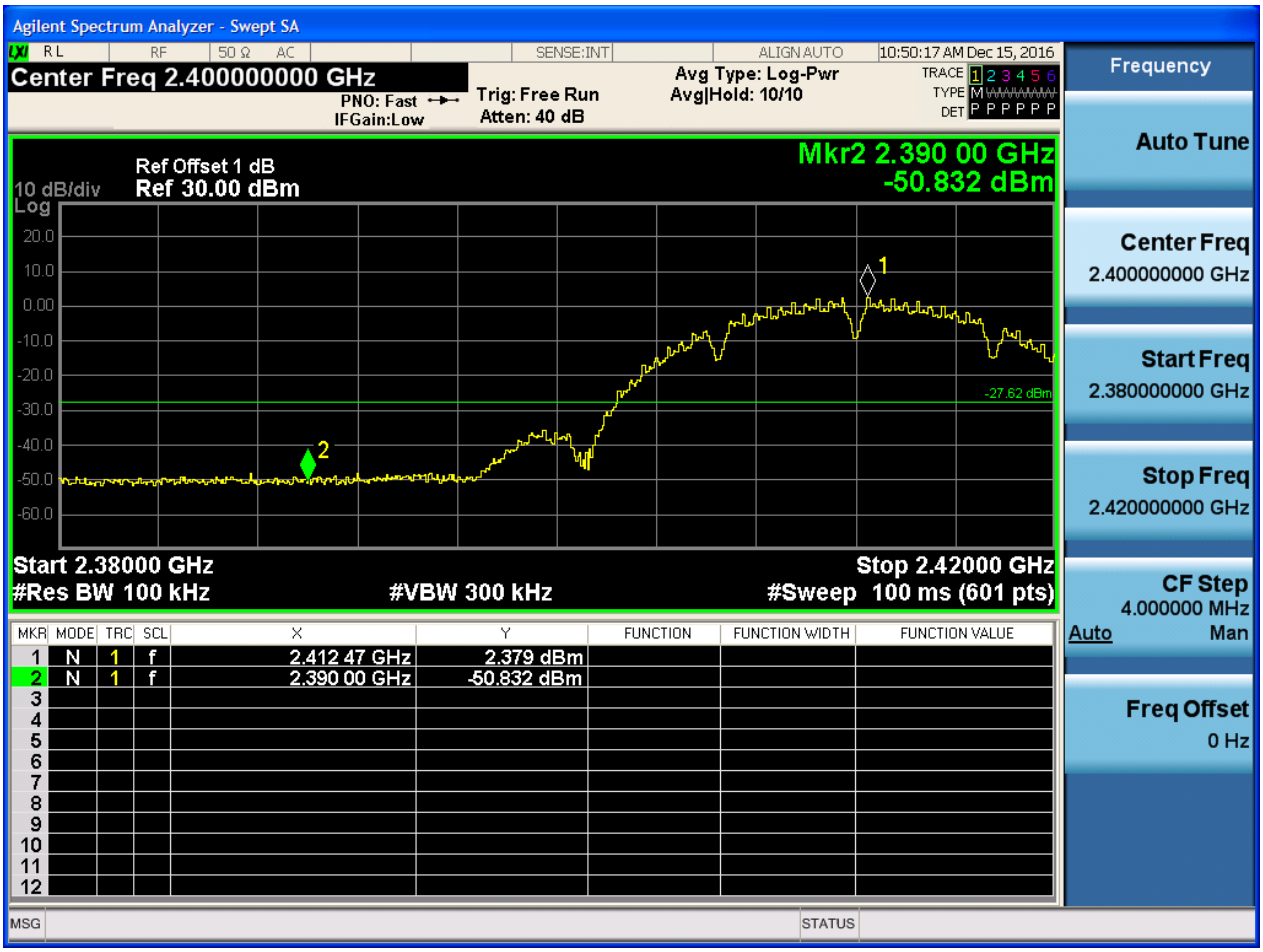
Part II - Test Plots

2.1 11B_L@Ant 1



2.2 11B_L@Ant 2



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2.3 11B_H@Ant 1

Agilent Spectrum Analyzer - Swept SA
Center Freq 2.462000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 40 dB
Avg Type: Log-Pwr
Avg|Hold: 100/100
06:43:25 PM Dec 14, 2016
Ref Offset 1 dB
10 dB/div
Ref 30.00 dBm
Log
Mkr2 2.483 5 GHz
-49.861 dBm
-27.06 dBm
Start 2.43200 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.49200 GHz
#Sweep 100 ms (601 pts)
1 N 1 f 2.442 5 GHz 2.943 dBm
2 N 1 f 2.483 5 GHz -49.861 dBm
Frequency
Auto Tune
Center Freq
2.462000000 GHz
Start Freq
2.432000000 GHz
Stop Freq
2.492000000 GHz
CF Step
6.000000 MHz
Auto Man
Freq Offset
0 Hz

2.4 11B_H@Ant 2

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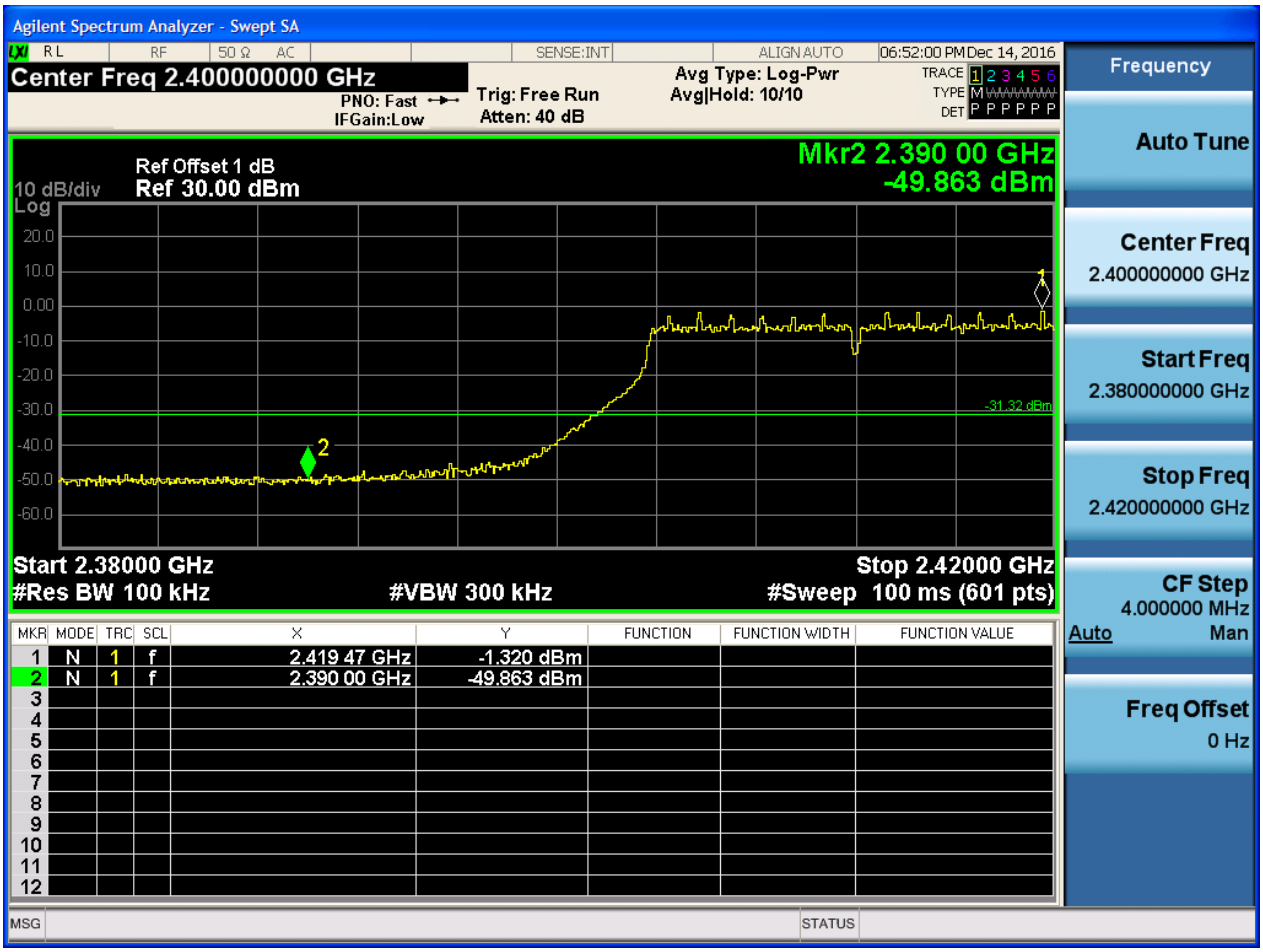
2.5 11G_L@Ant 1



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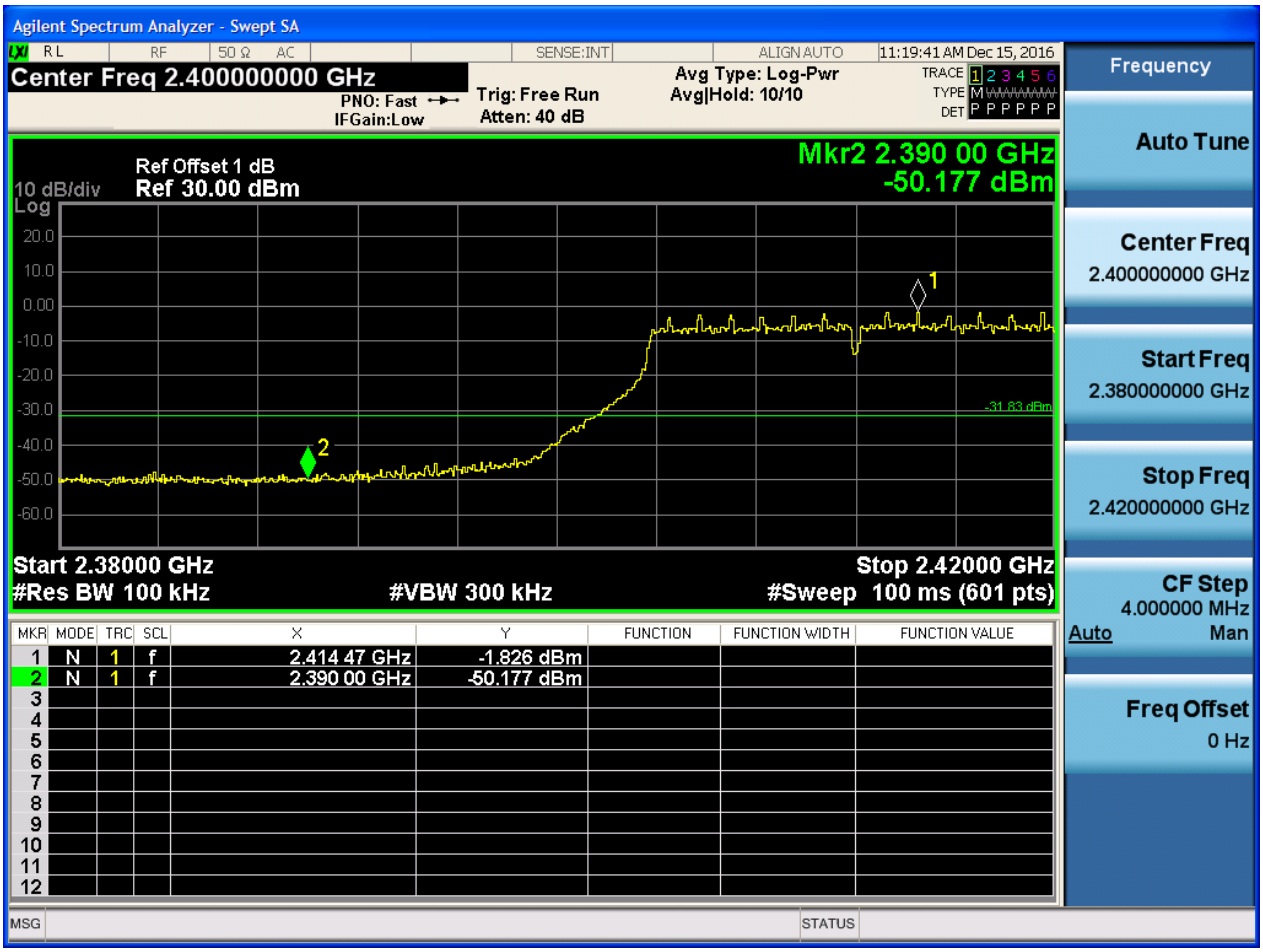
2.6 11G_L@Ant 2



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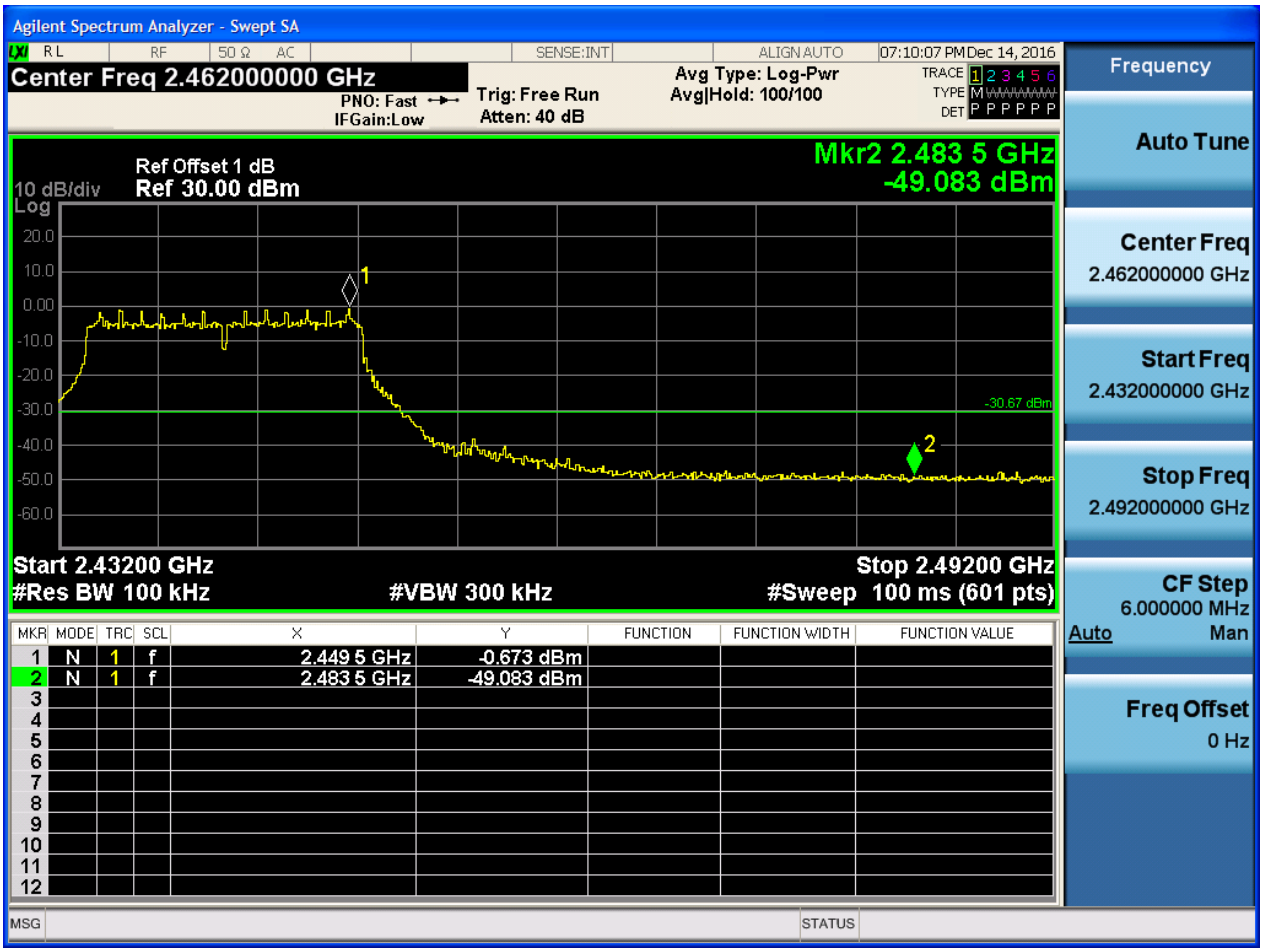
2.7 11G_H@Ant 1



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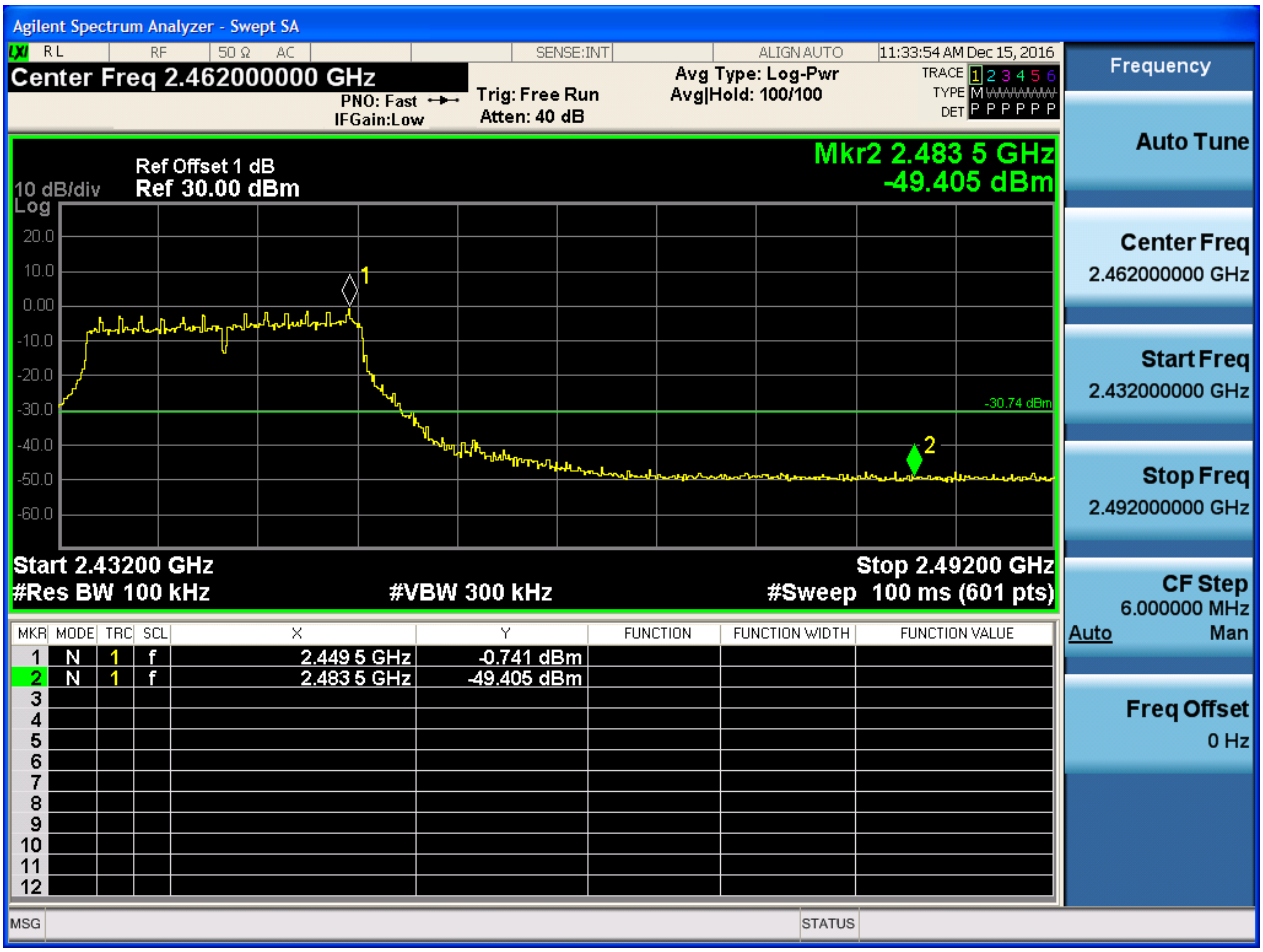
2.8 11G_H@Ant 2



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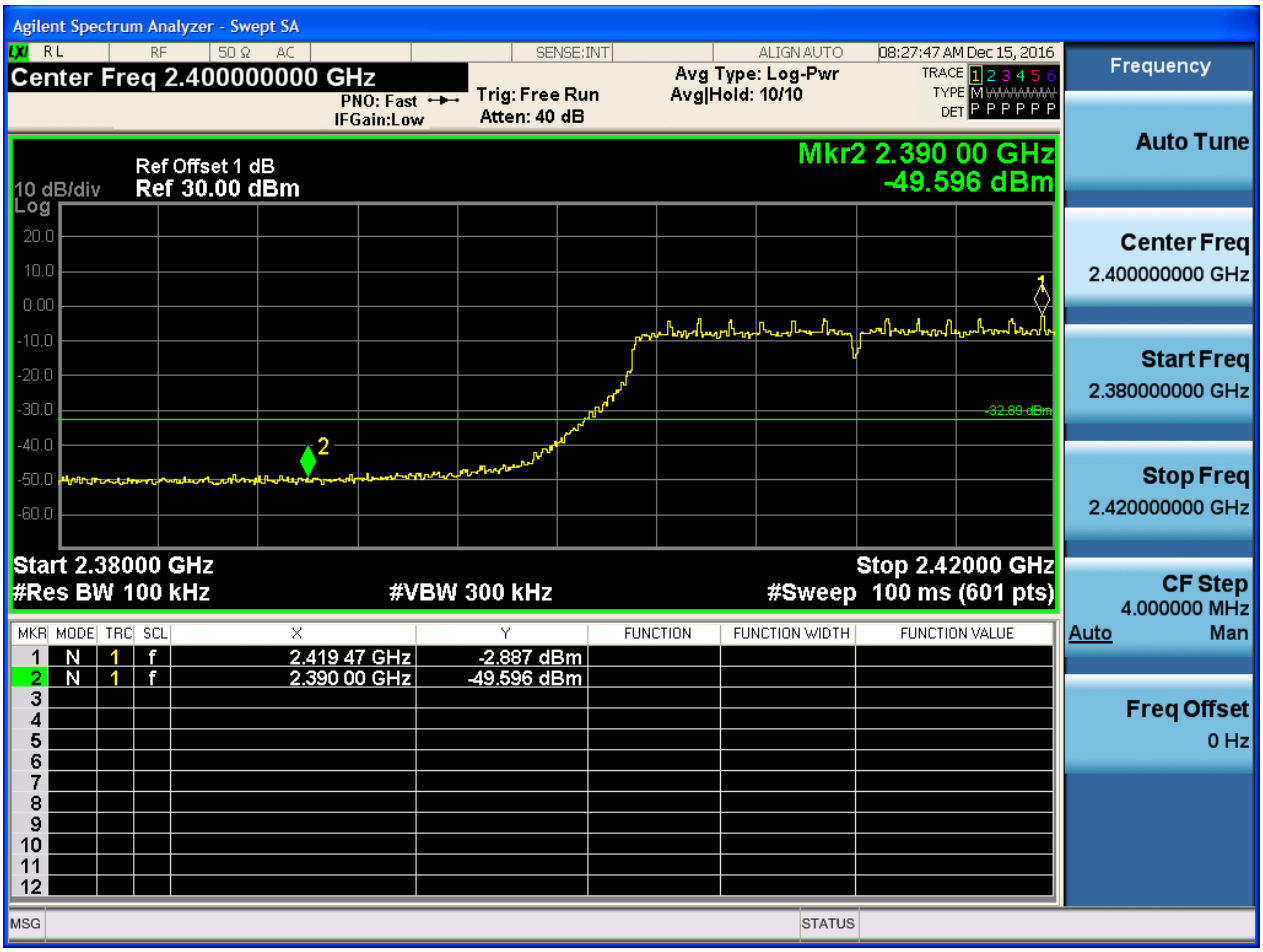
2.9 11N20_L@Ant 1



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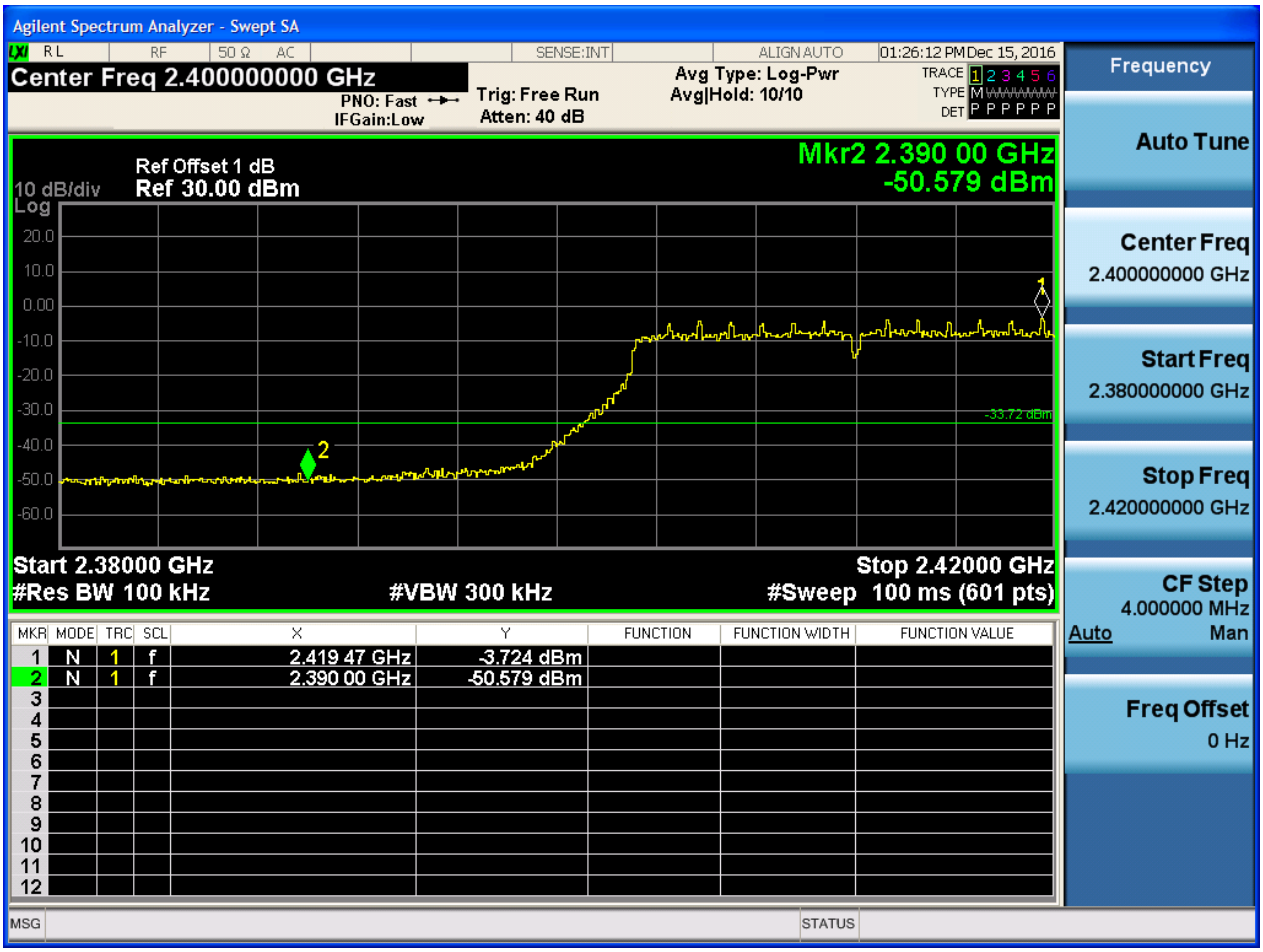
2.10 11N20_L@Ant 2



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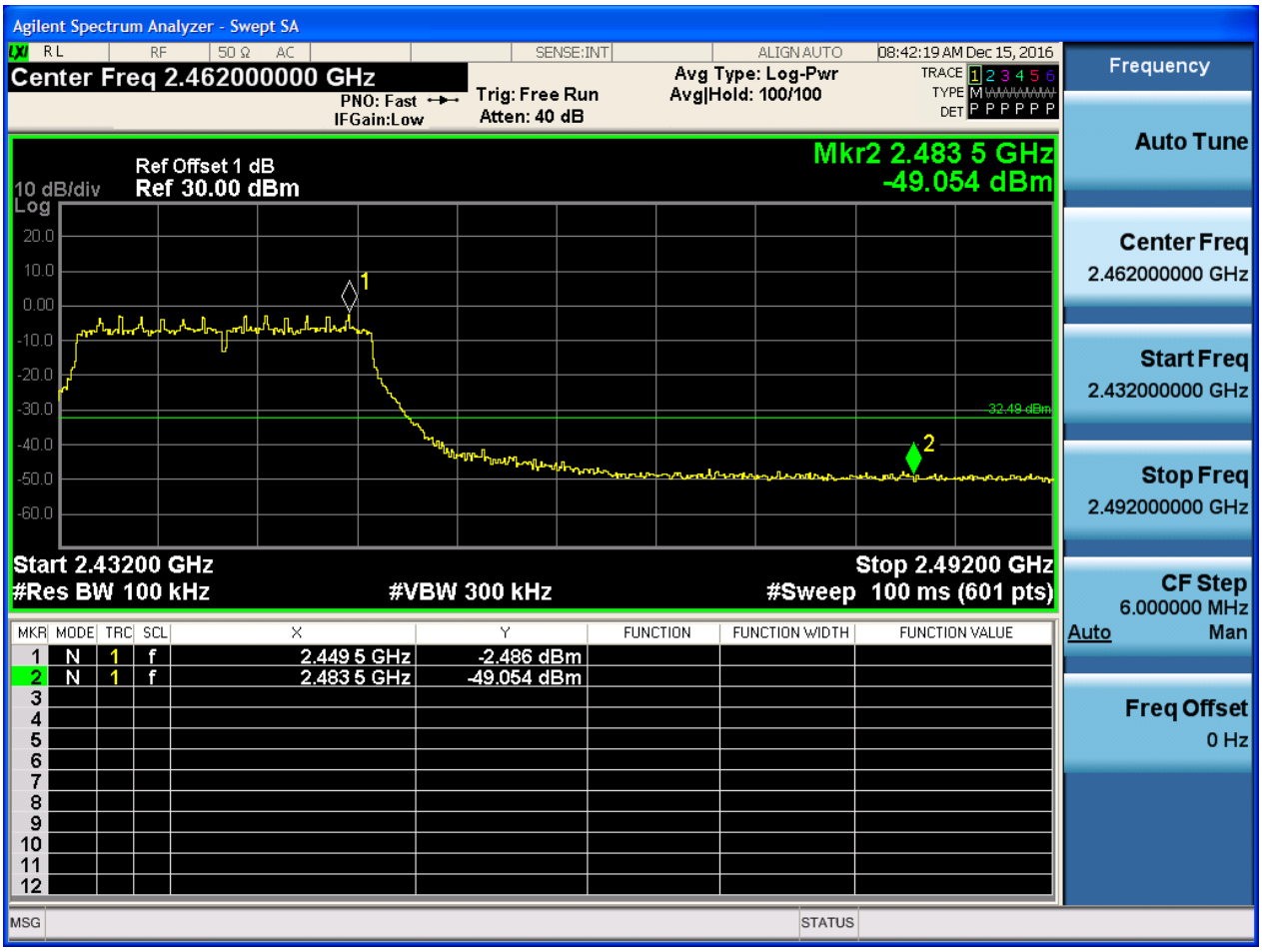
2.11 11N20_H@Ant 1



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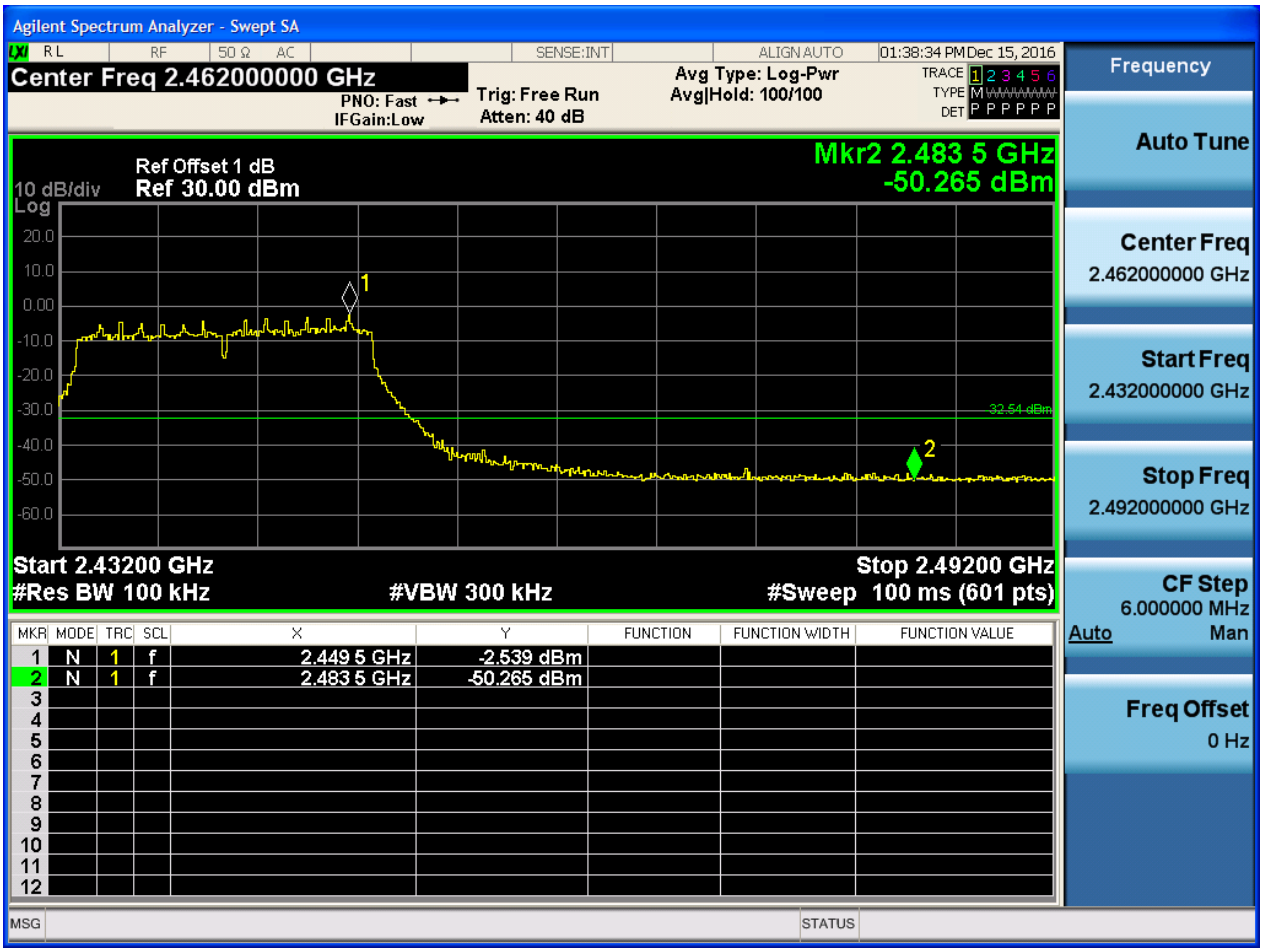
2.12 11N20_H@Ant 2



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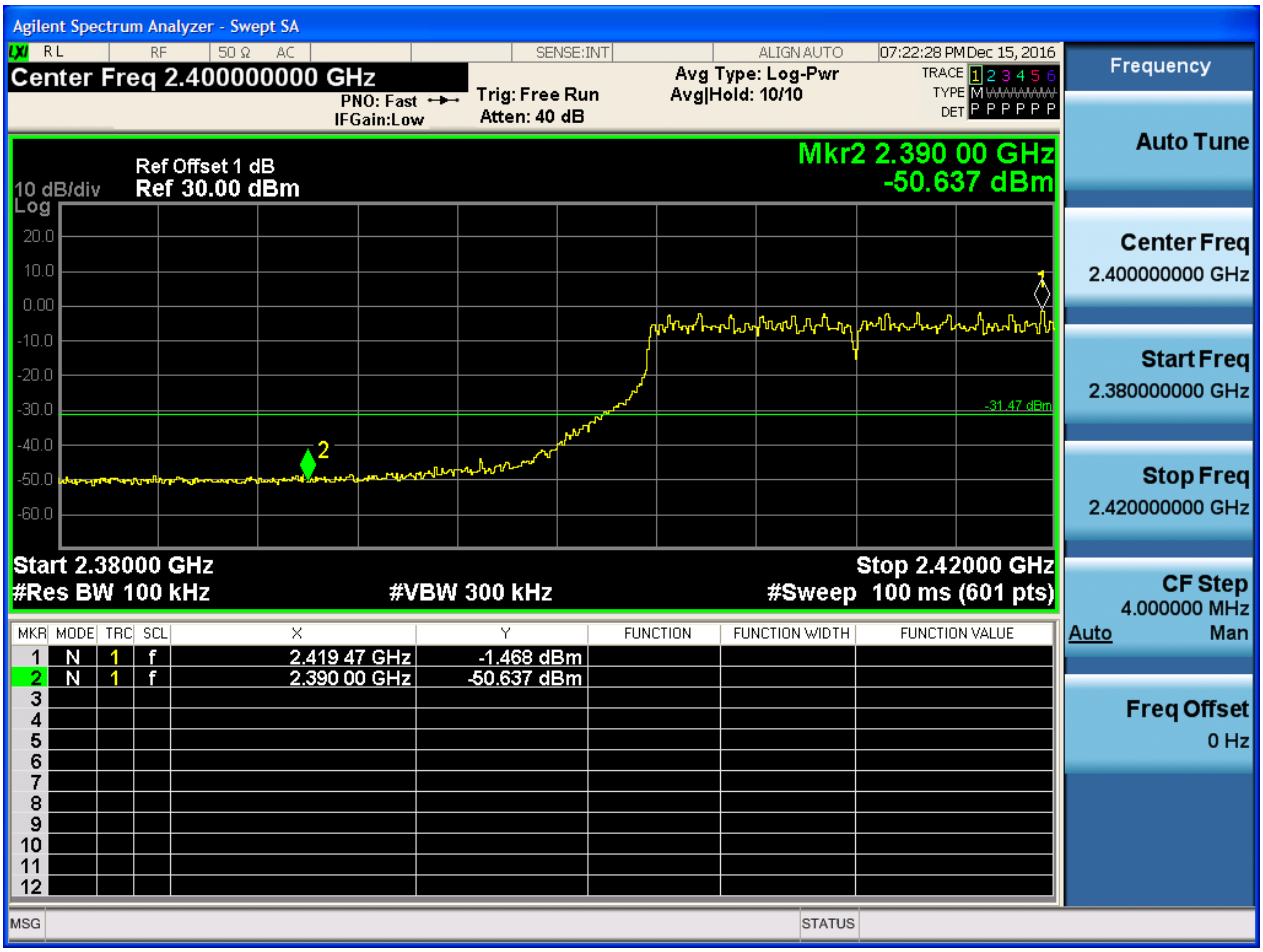
2.9 11N20m_L@Ant 1



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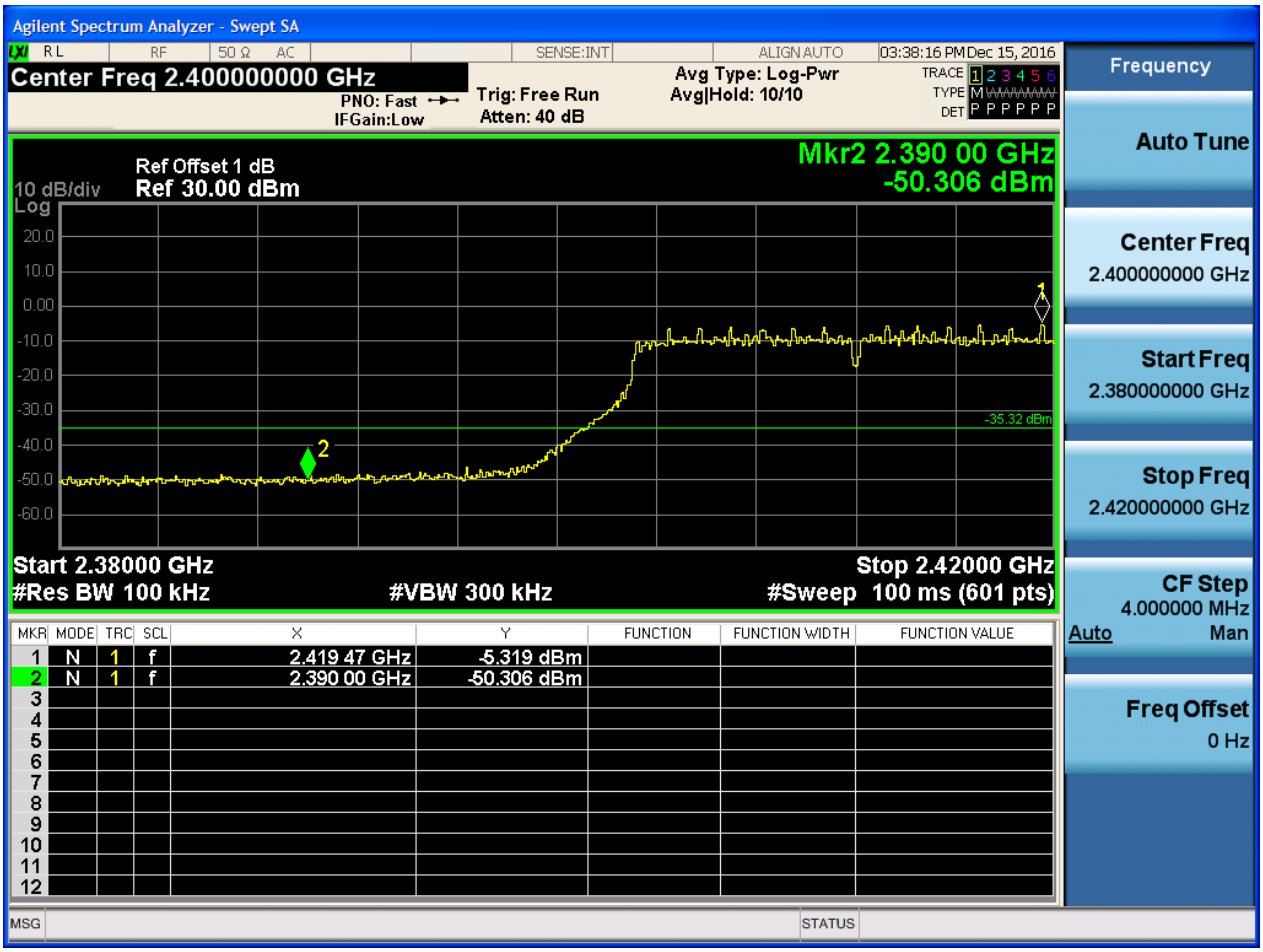
2.10 11N20m_L@Ant 2



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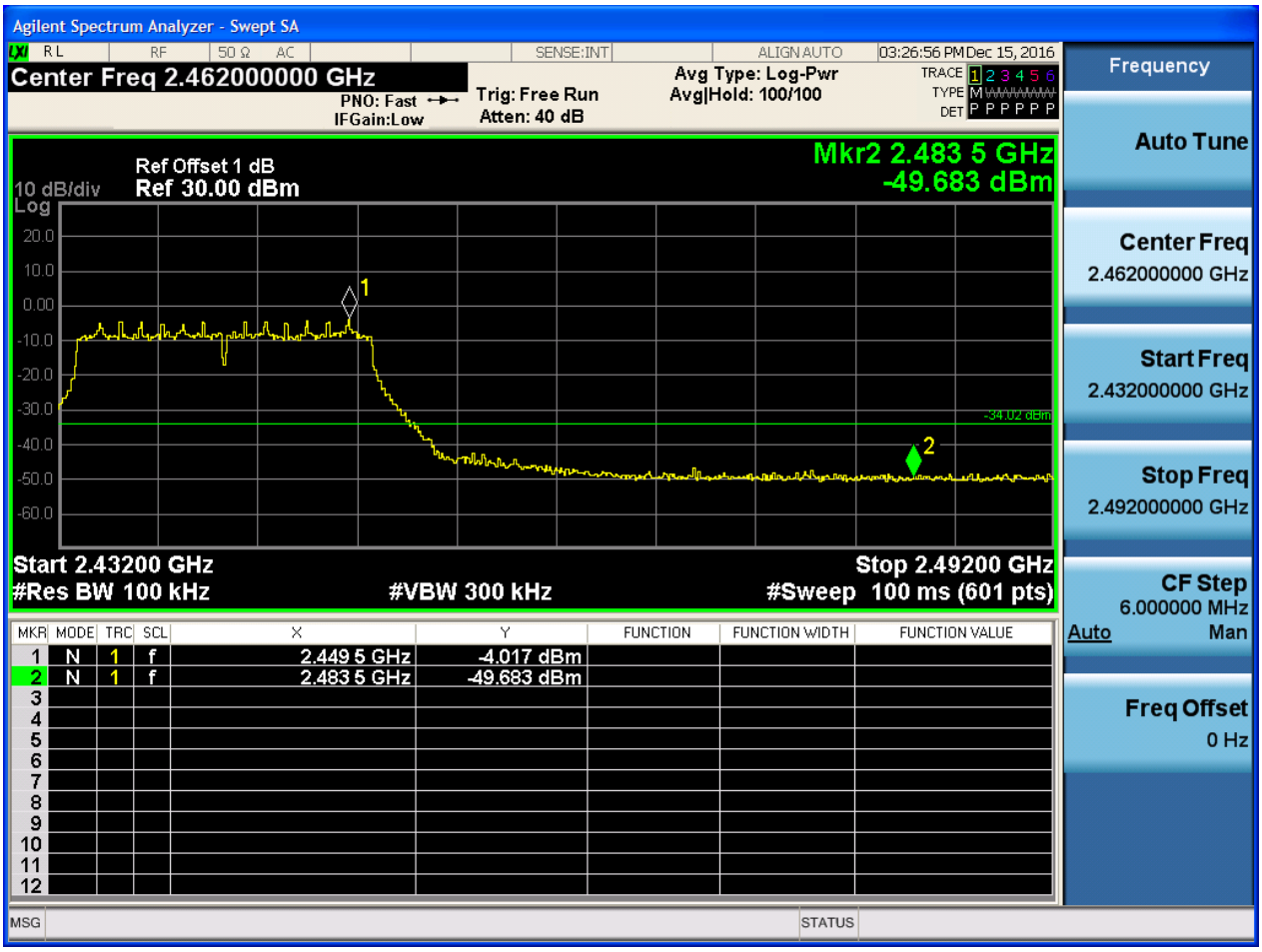
2.11 11N20m_H@Ant 1



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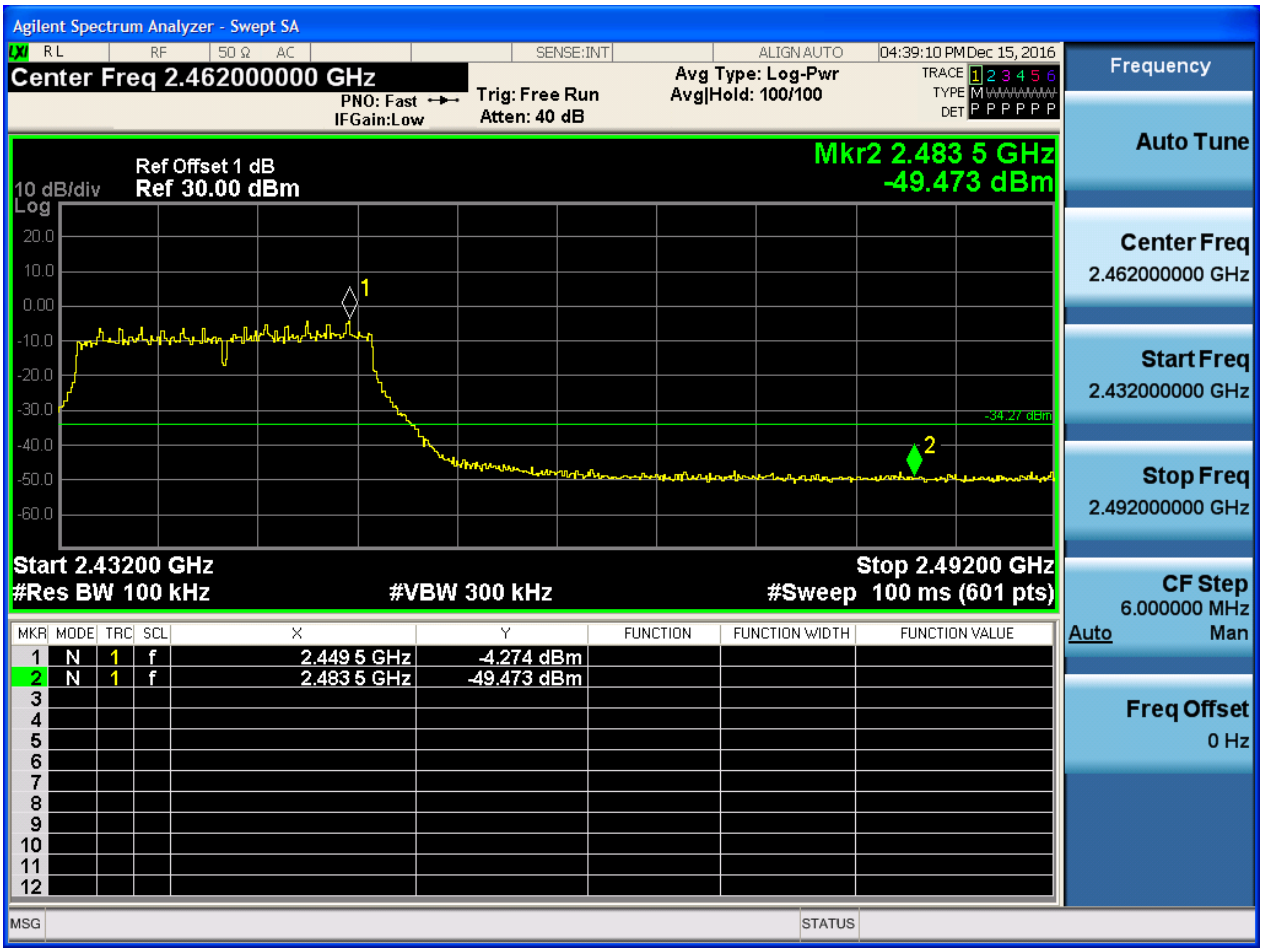

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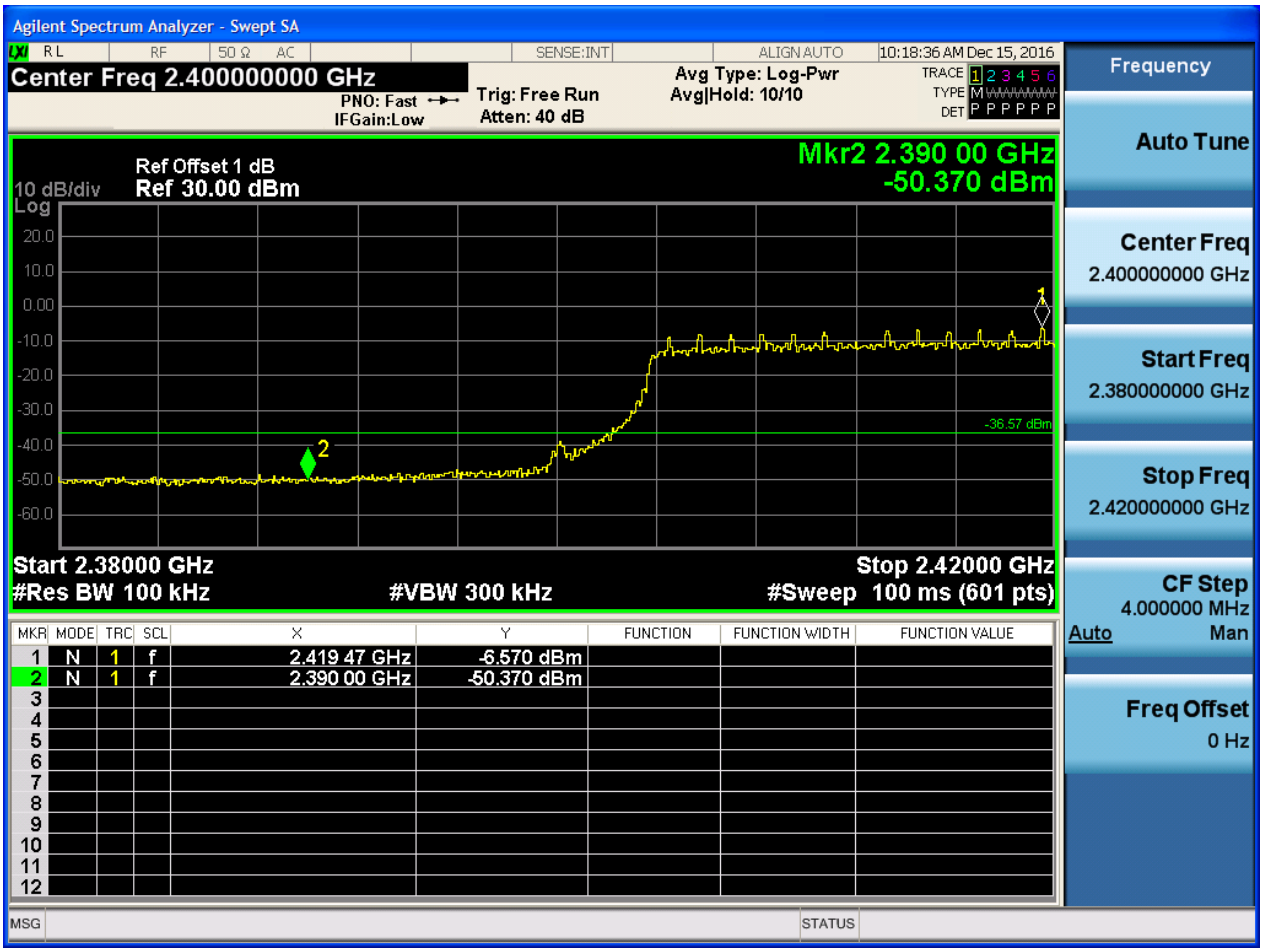

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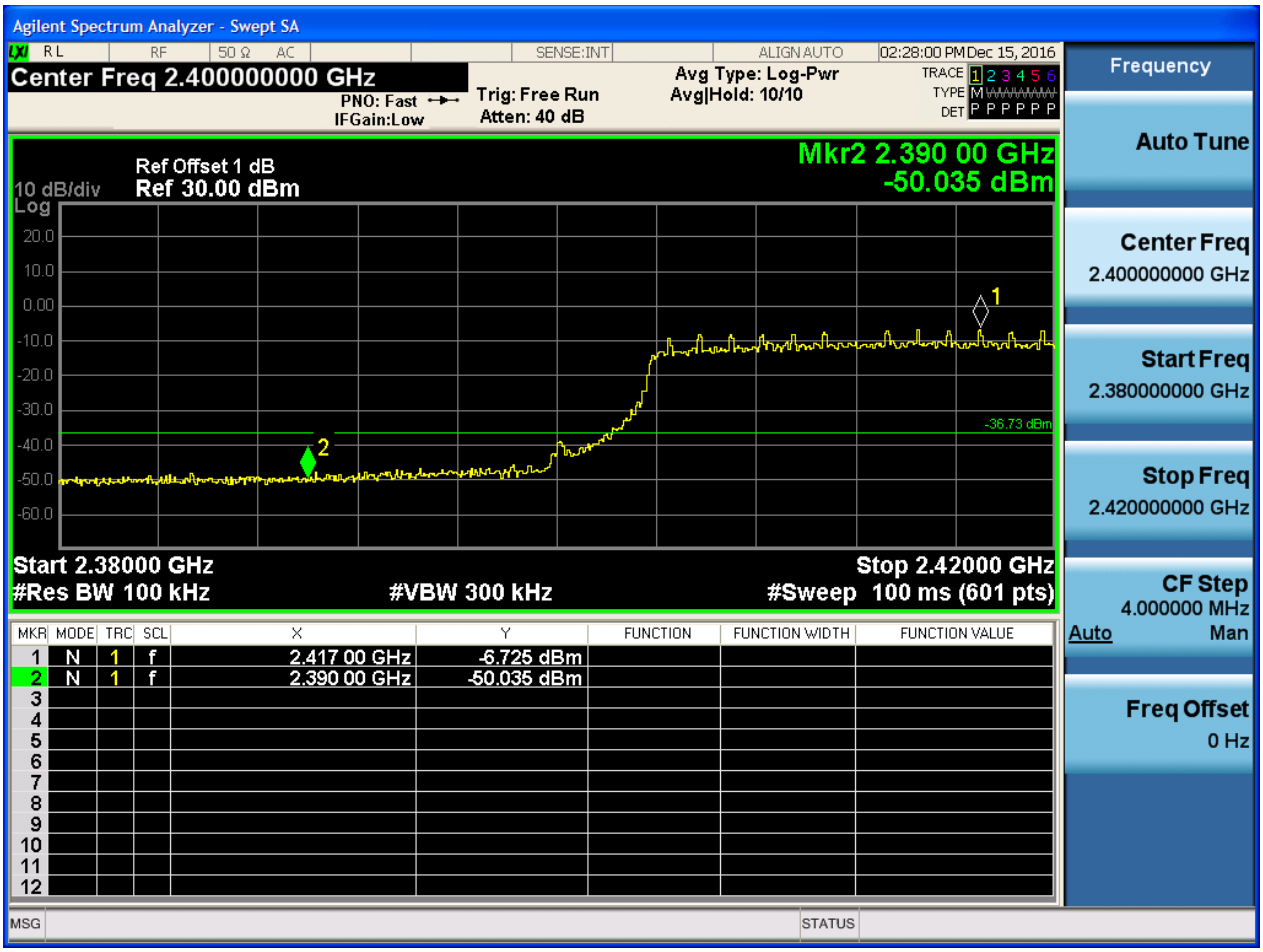

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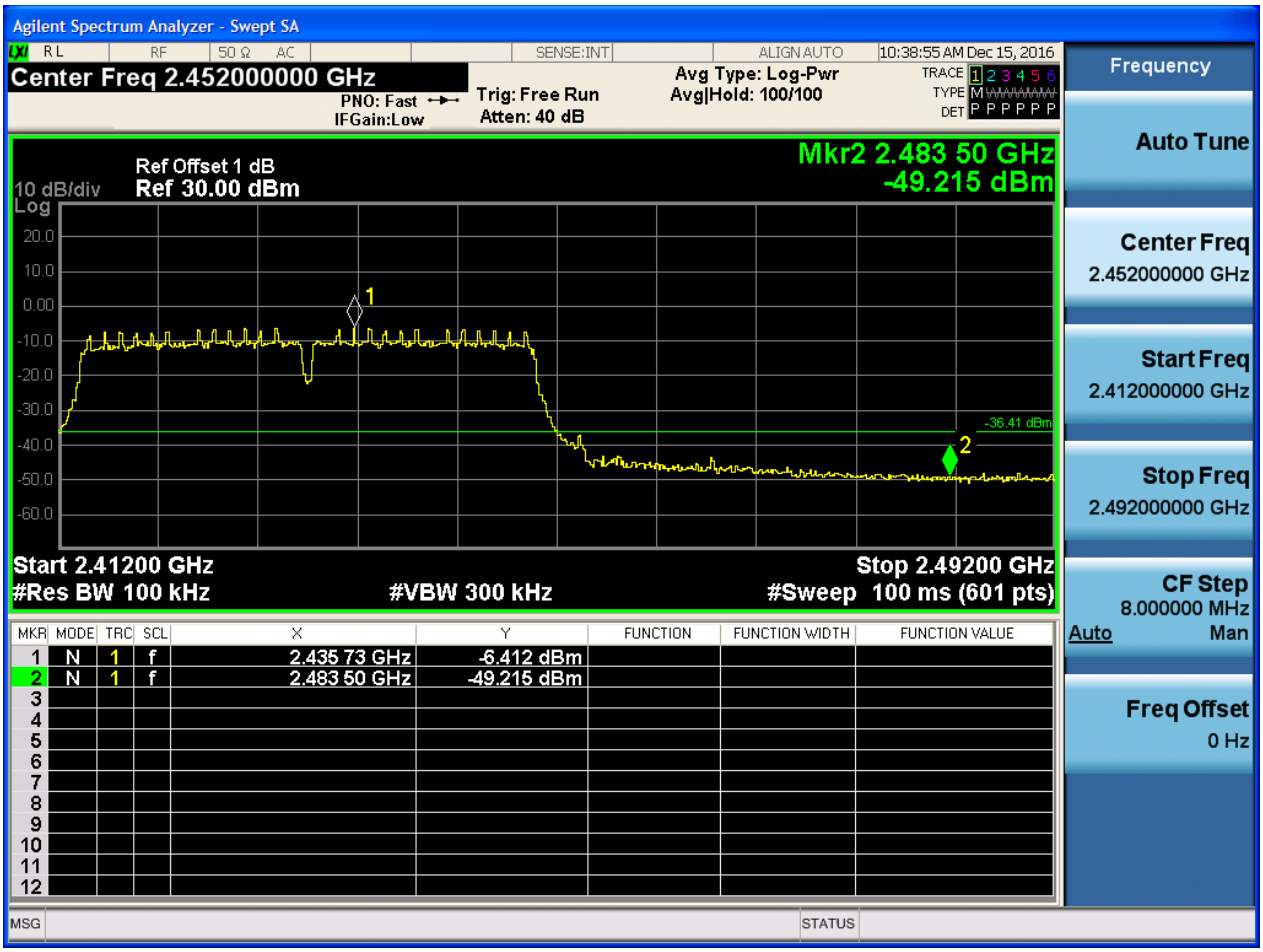

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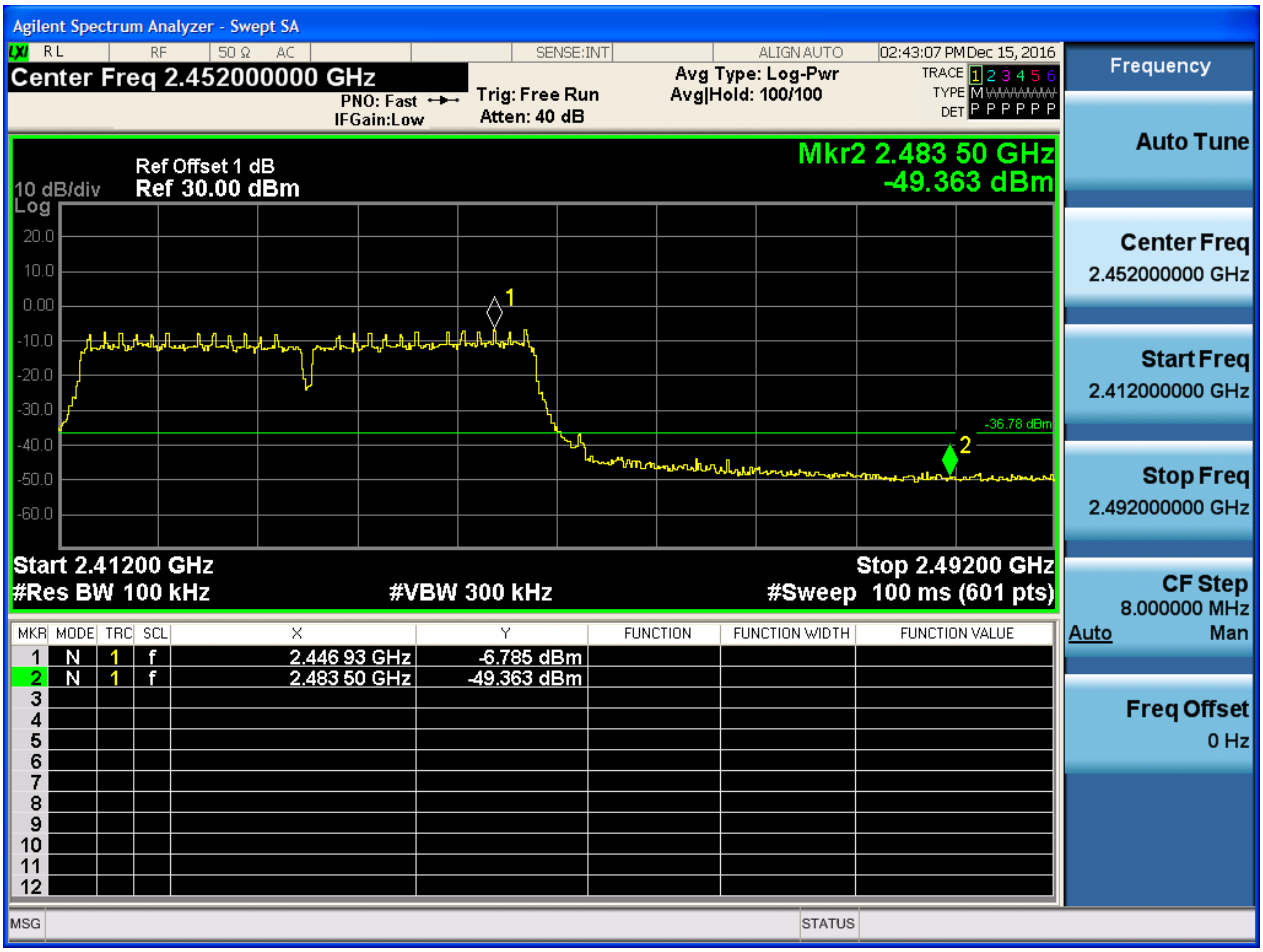

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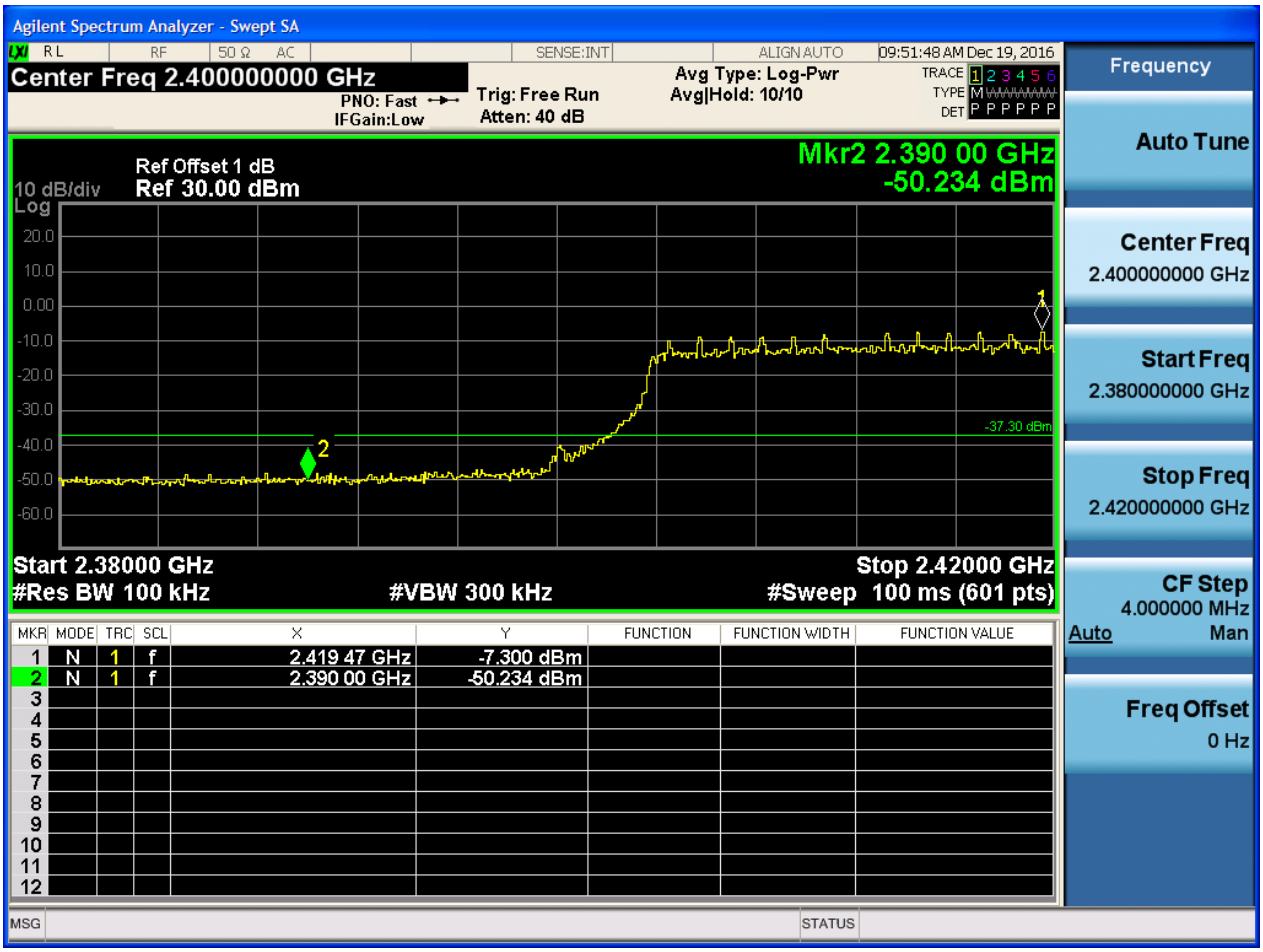

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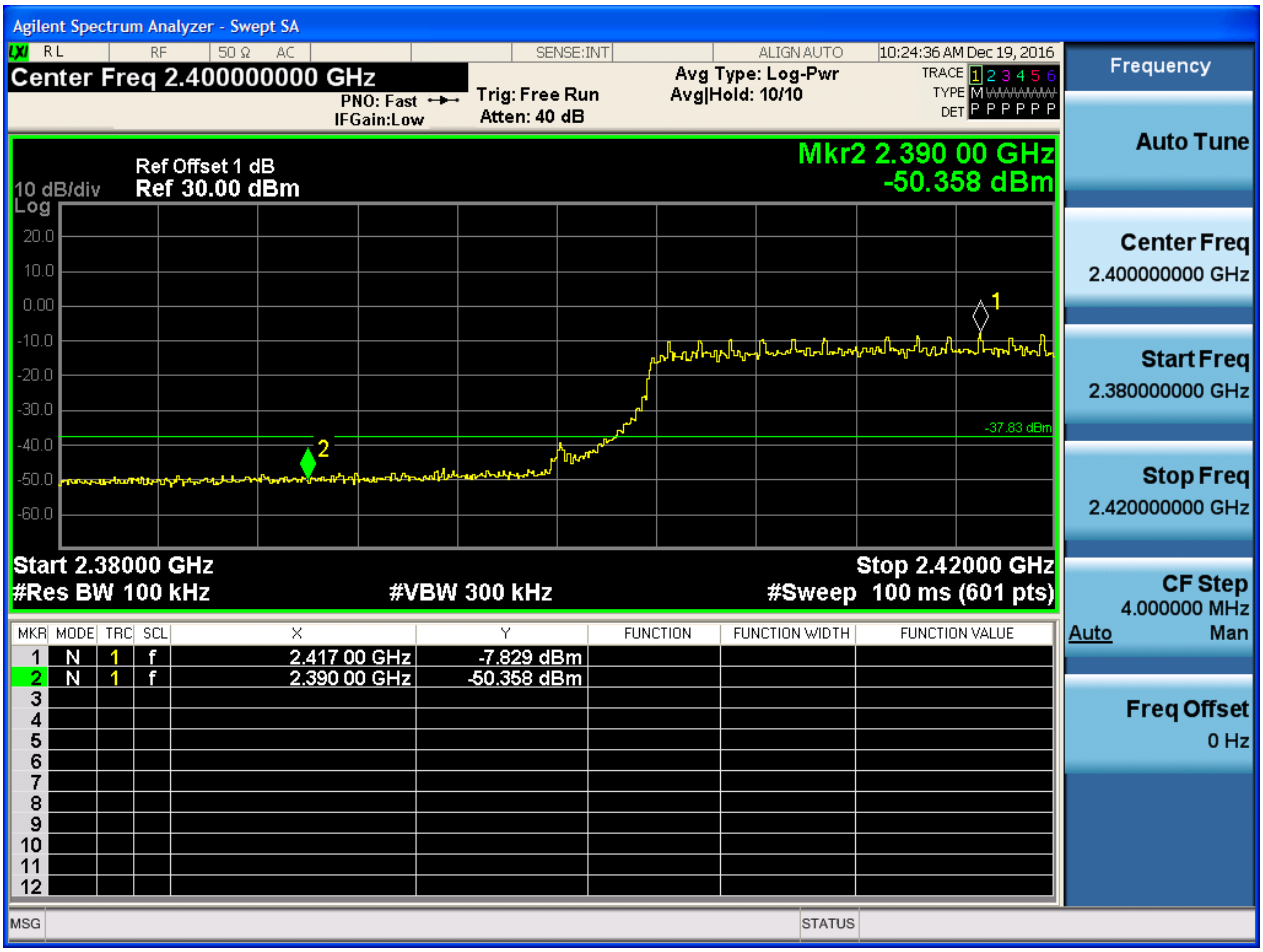

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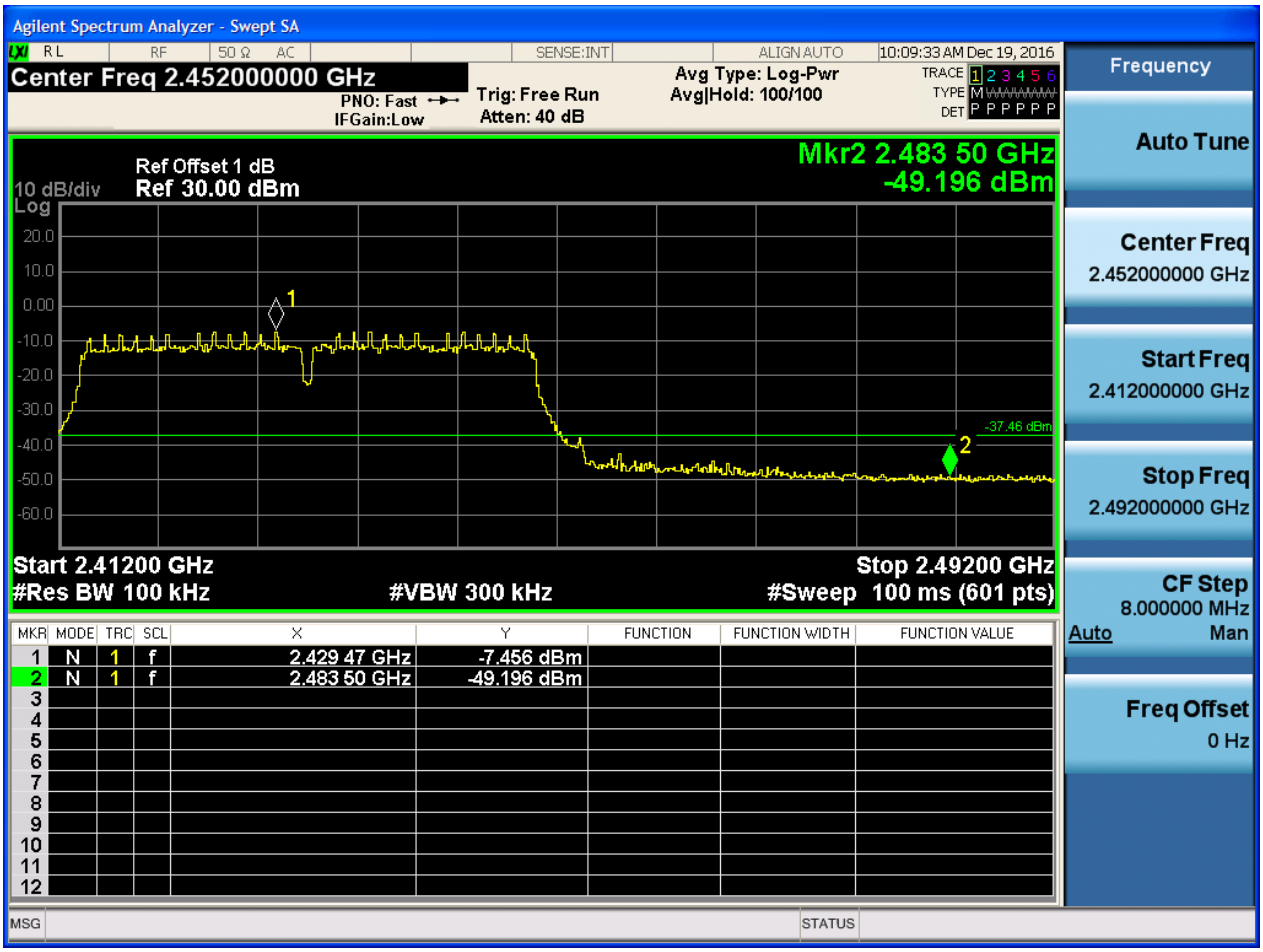

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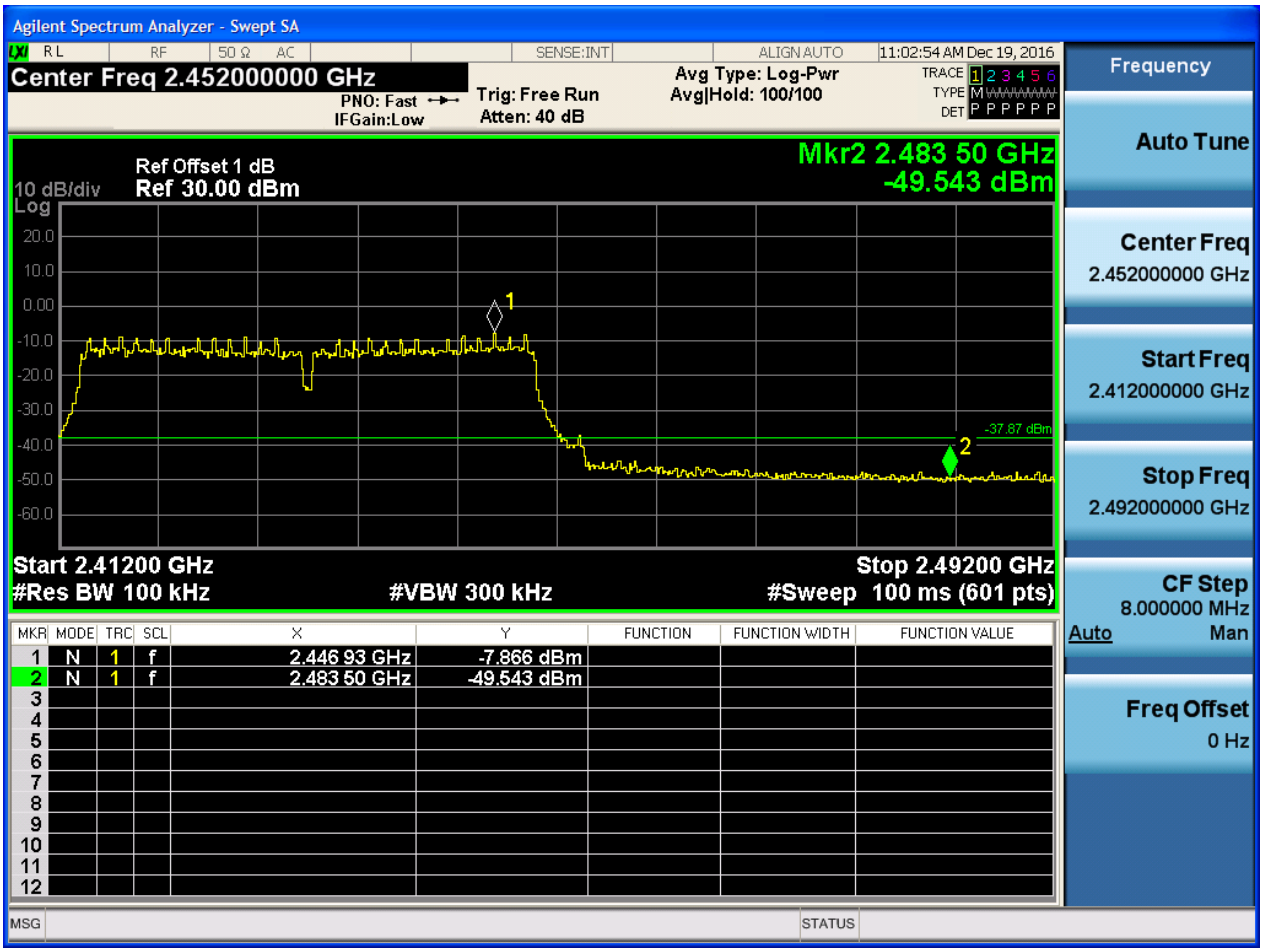

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Appendix G: Unwanted Emissions into Non-Restricted Frequency Bands

In this Appendix, the "Pref", which is used as the reference level, refers to the peak power level in any 100 kHz bandwidth within the fundamental emission, the "Puw" referrers to the maximum emission power in 100 kHz band segments outside of the authorized frequency band.

Considering that the higher ratio of RBW to the span for the frequency ranges below 30 MHz makes the results determination be complicated,a narrower RBW other than 100 kHz is used for these ranges. The measured value should add a RBW correction factor (RBWCF) where RBWCF [dB] = 10 x lg(100 [kHz]/narrower RBW [kHz]). As to this Appendix, the narrower RBW is 1 kHz and RBWCF is 20 dB for the frequency 9 kHz to 150 kHz, and the narrower RBW is 10 kHz and RBWCF is 10 dB for the frequency 150 kHz to 30 MHz.

For measurements on smart antenna systems (devices with multiple transmit chains), the test is performed at each chain and used as respective results for each chain, due to the relative-limit requirement.

In the result table, the "< Limit" denotes that "The Puw [dBm] is less than Pref[dBm]-30[dBm],see test plots for detailed".

Part I - Test Results

Test Mode	Test Channel	Frequency[MHz]	Ant	Pref[dBm]	Puw[dBm]	Verdict
11B	L	2412	Ant 1	3.21	<limit	pass
11B	L	2412	Ant 2	2.72	<limit	pass
11B	M	2427	Ant 1	3.42	<limit	pass
11B	M	2427	Ant 2	1.61	<limit	pass
11B	H	2442	Ant 1	3.38	<limit	pass
11B	H	2442	Ant 2	3.63	<limit	pass
11G	L	2412	Ant 1	-1.38	<limit	pass
11G	L	2412	Ant 2	-1.29	<limit	pass
11G	M	2427	Ant 1	-0.90	<limit	pass
11G	M	2427	Ant 2	-1.86	<limit	pass
11G	H	2442	Ant 1	-0.54	<limit	pass
11G	H	2442	Ant 2	-0.61	<limit	pass
11N20	L	2412	Ant 1	-2.70	<limit	pass
11N20	L	2412	Ant 2	-2.94	<limit	pass
11N20	M	2427	Ant 1	-2.88	<limit	pass
11N20	M	2427	Ant 2	-3.38	<limit	pass
11N20	H	2442	Ant 1	-2.32	<limit	pass

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Test Mode	Test Channel	Frequency[MHz]	Ant	Pref[dBm]	Puw[dBm]	Verdict
11N20	H	2442	Ant 2	-2.40	<limit	pass
11N20m	L	2412	Ant 1	-1.17	<limit	pass
11N20m	L	2412	Ant 2	-4.13	<limit	pass
11N20m	M	2427	Ant 1	-3.55	<limit	pass
11N20m	M	2427	Ant 2	-4.73	<limit	pass
11N20m	H	2442	Ant 1	-3.51	<limit	pass
11N20m	H	2442	Ant 2	-3.89	<limit	pass
11N40	L	2422	Ant 1	-5.96	<limit	pass
11N40	L	2422	Ant 2	-6.71	<limit	pass
11N40	M	2427	Ant 1	-5.94	<limit	pass
11N40	M	2427	Ant 2	-6.52	<limit	pass
11N40	H	2432	Ant 1	-5.99	<limit	pass
11N40	H	2432	Ant 2	-6.75	<limit	pass
11N40m	L	2422	Ant 1	-6.88	<limit	pass
11N40m	L	2422	Ant 2	-7.49	<limit	pass
11N40m	M	2427	Ant 1	-6.94	<limit	pass
11N40m	M	2427	Ant 2	-8.27	<limit	pass
11N40m	H	2432	Ant 1	-7.09	<limit	pass
11N40m	H	2432	Ant 2	-7.96	<limit	pass

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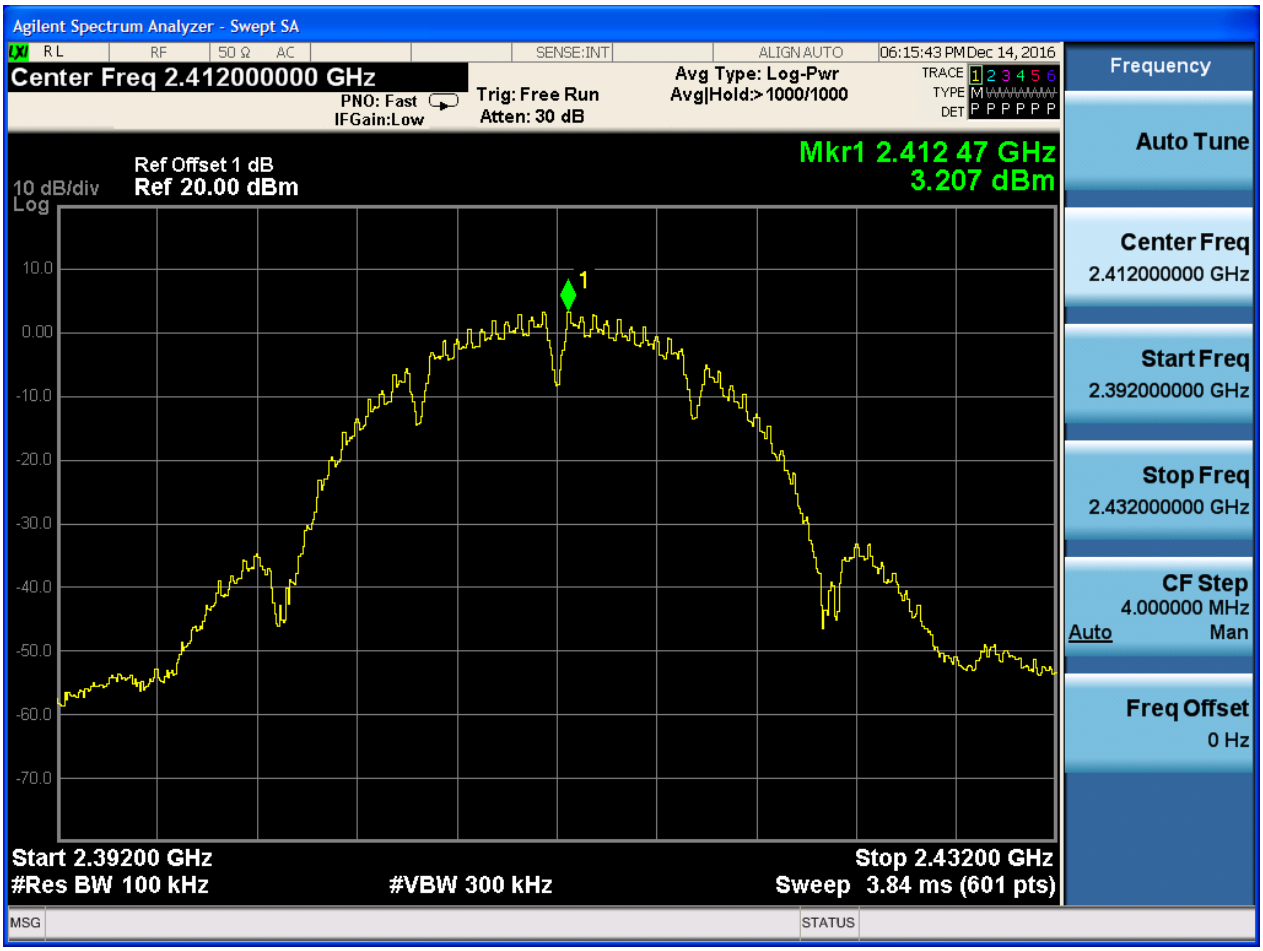
Part II - Test Plots

2.1 11B_L@Ant 1

Pref:



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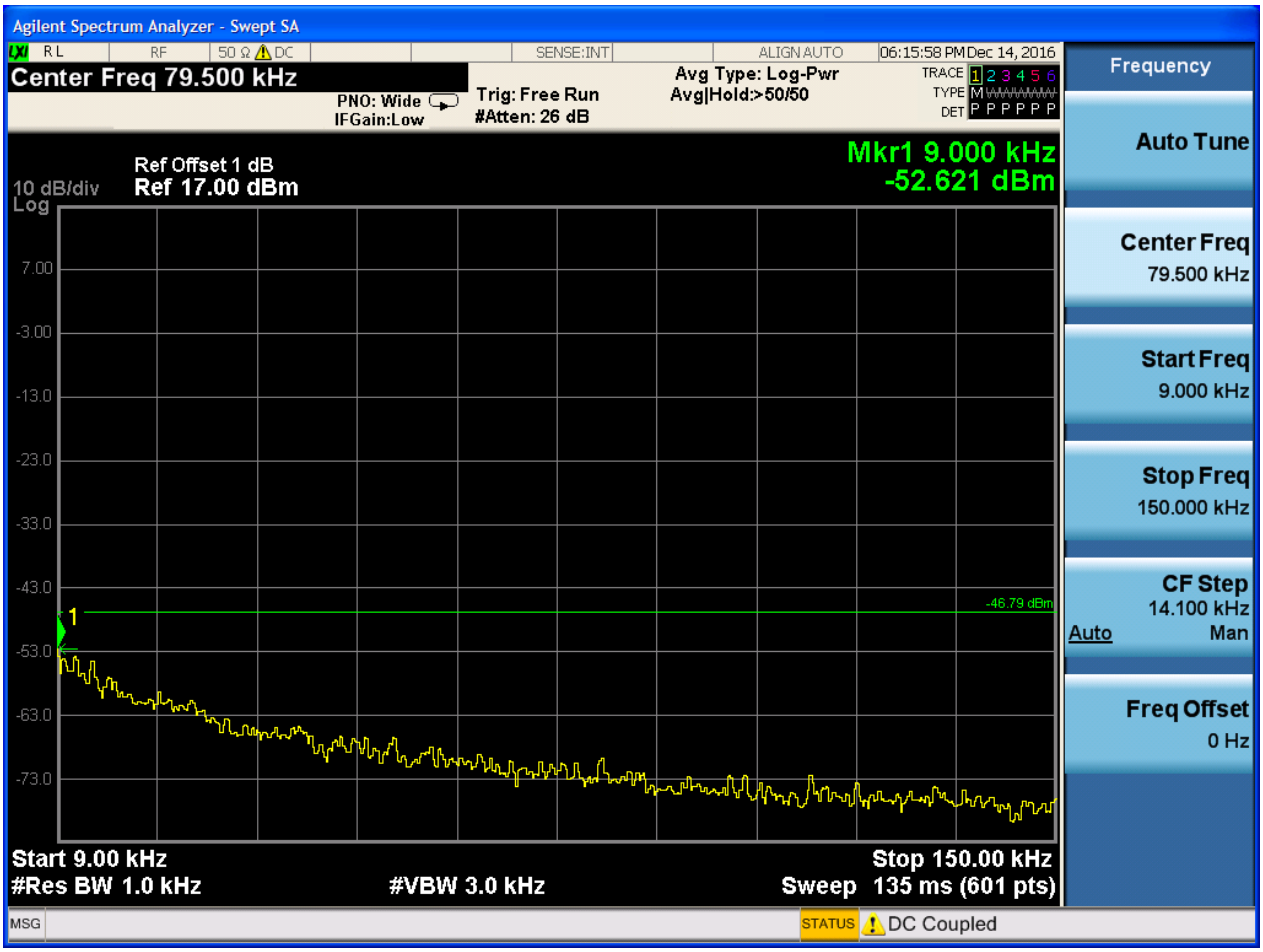
Puw:



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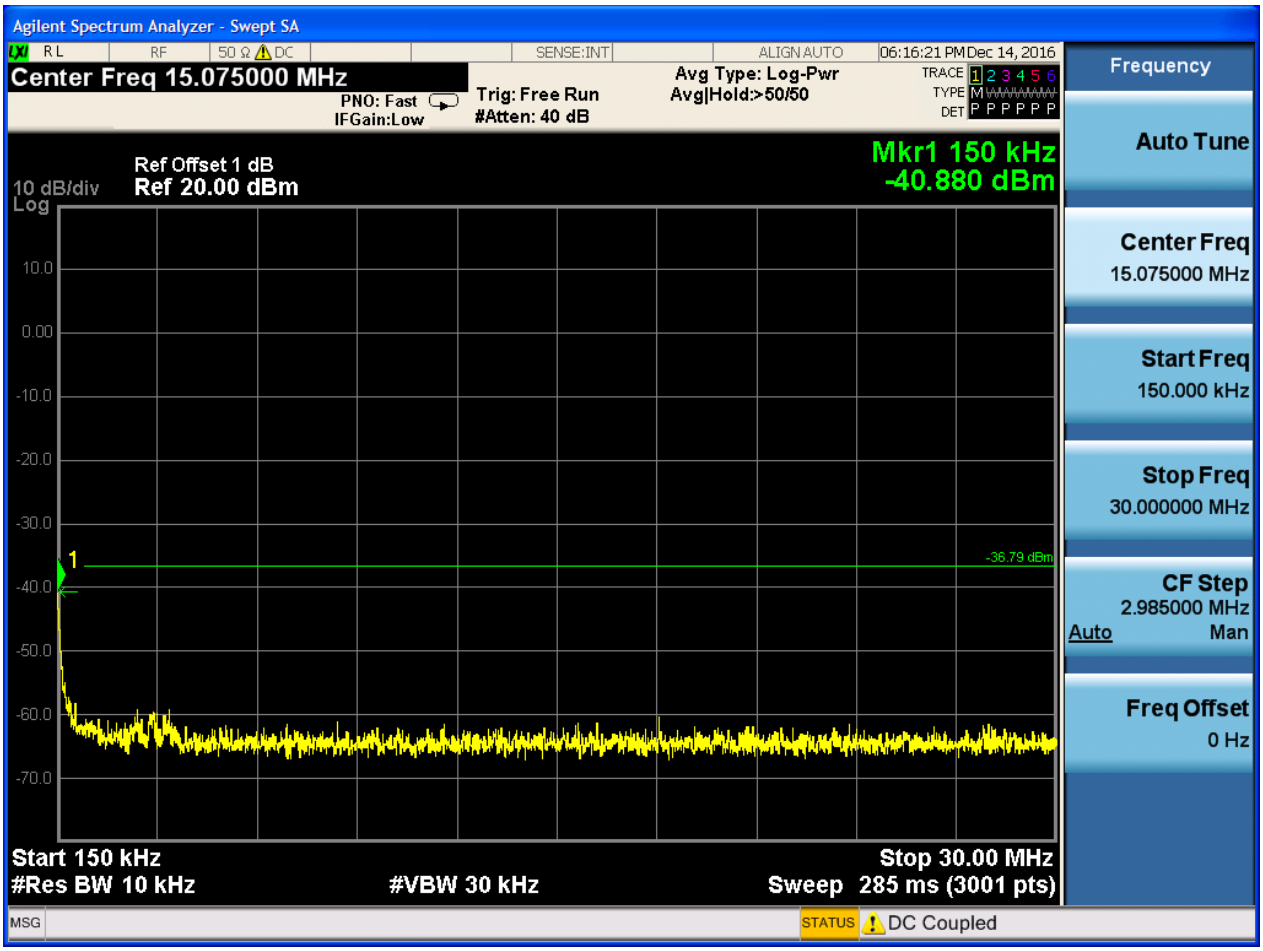

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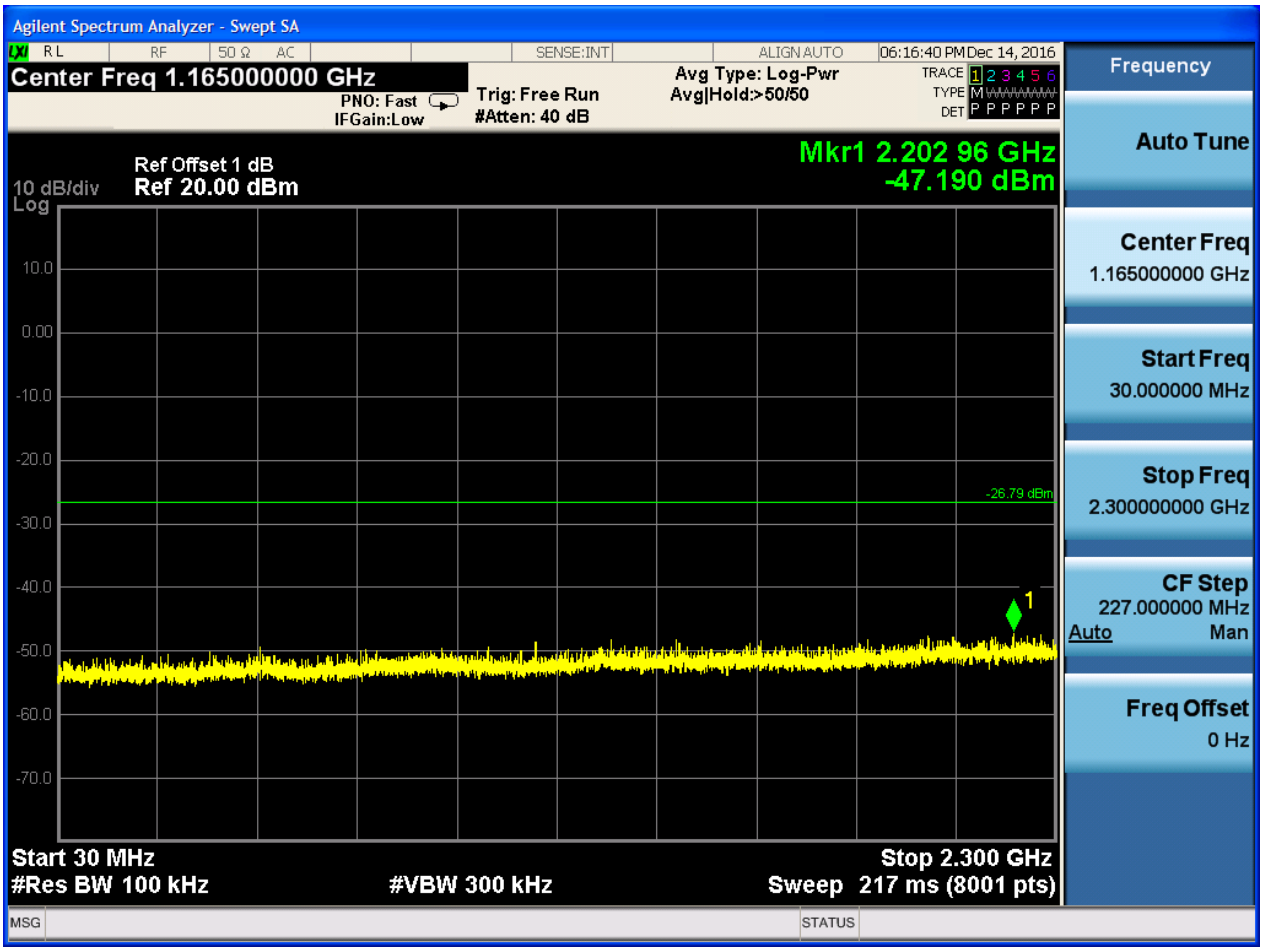

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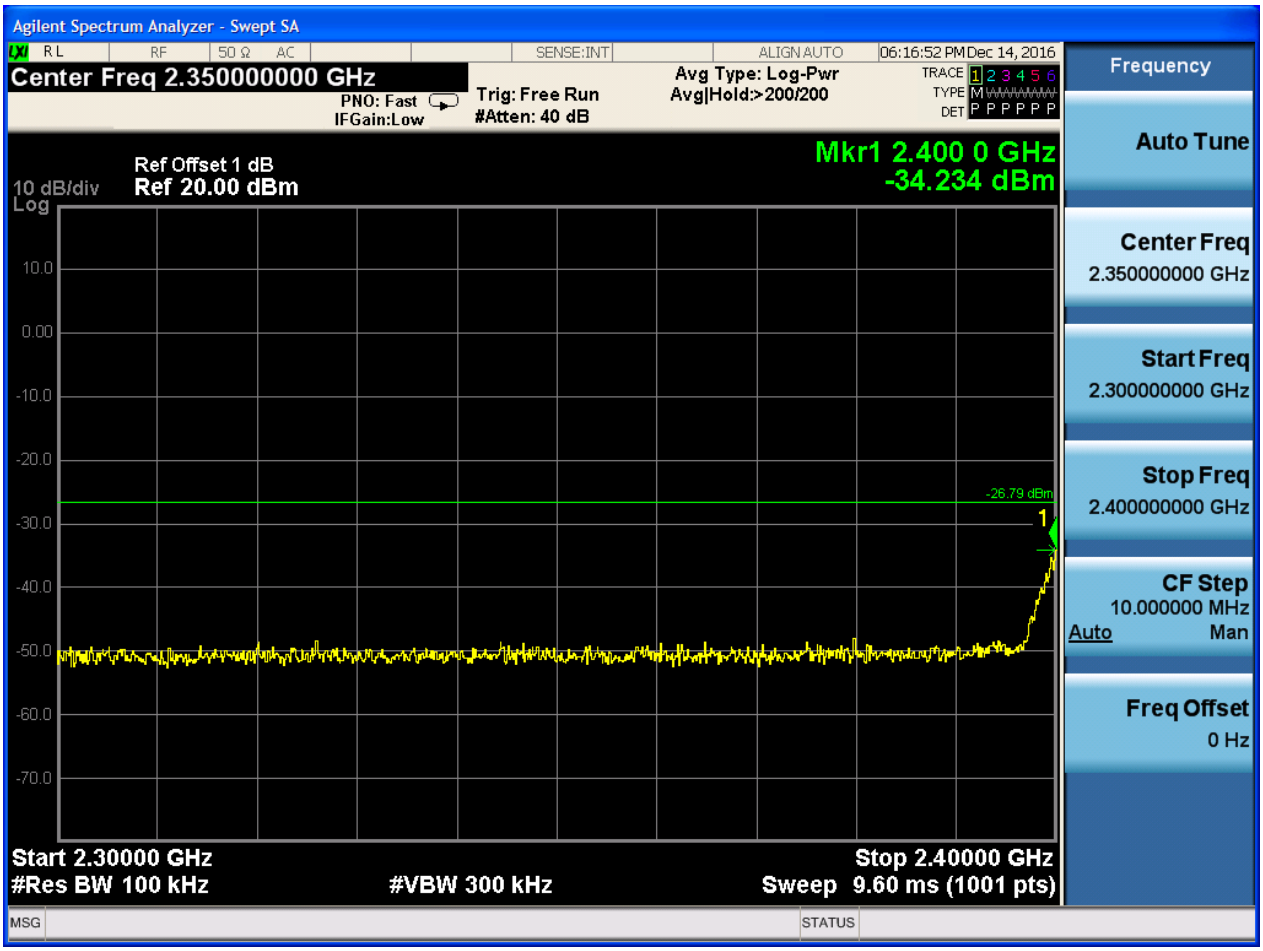

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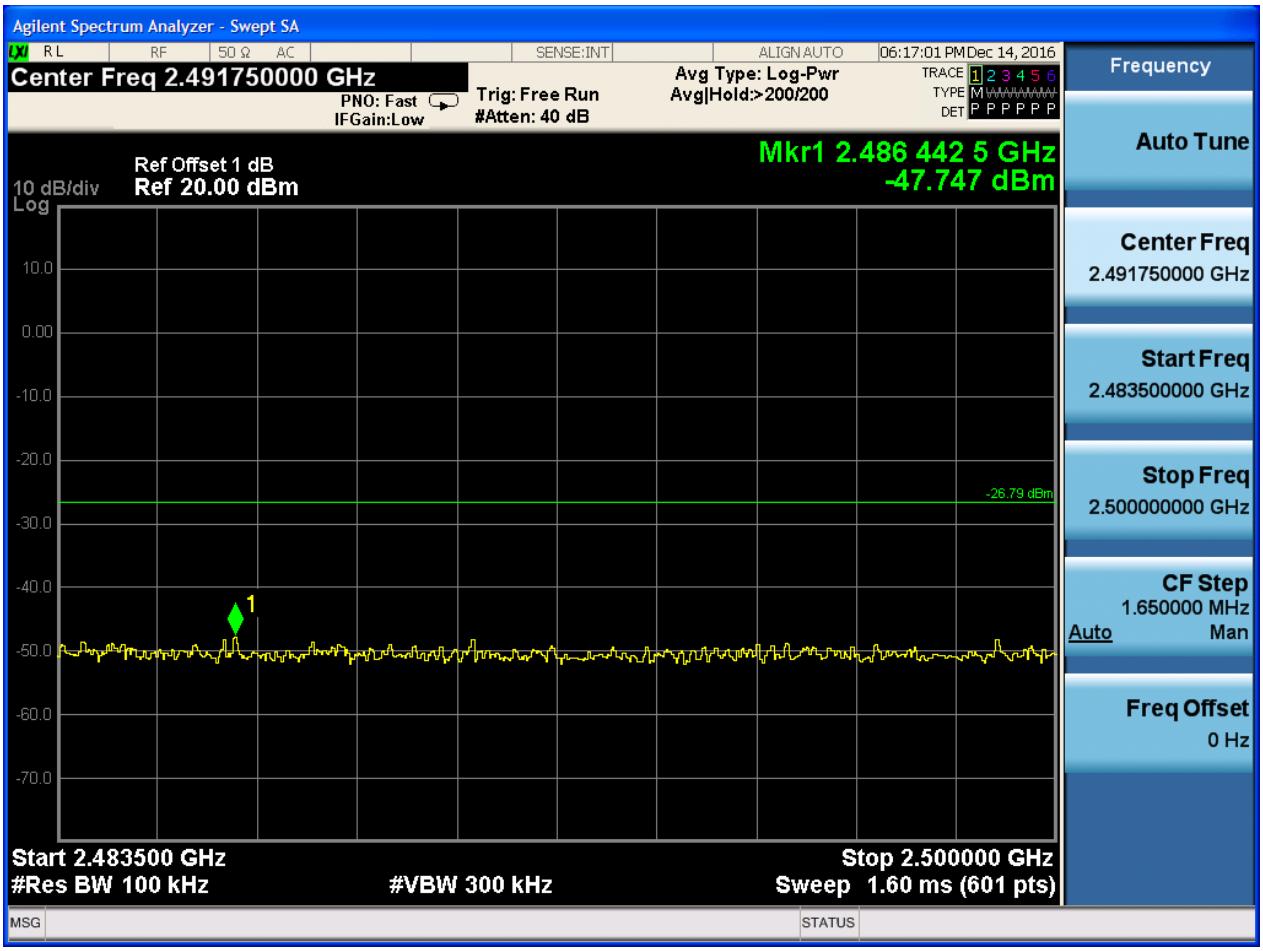

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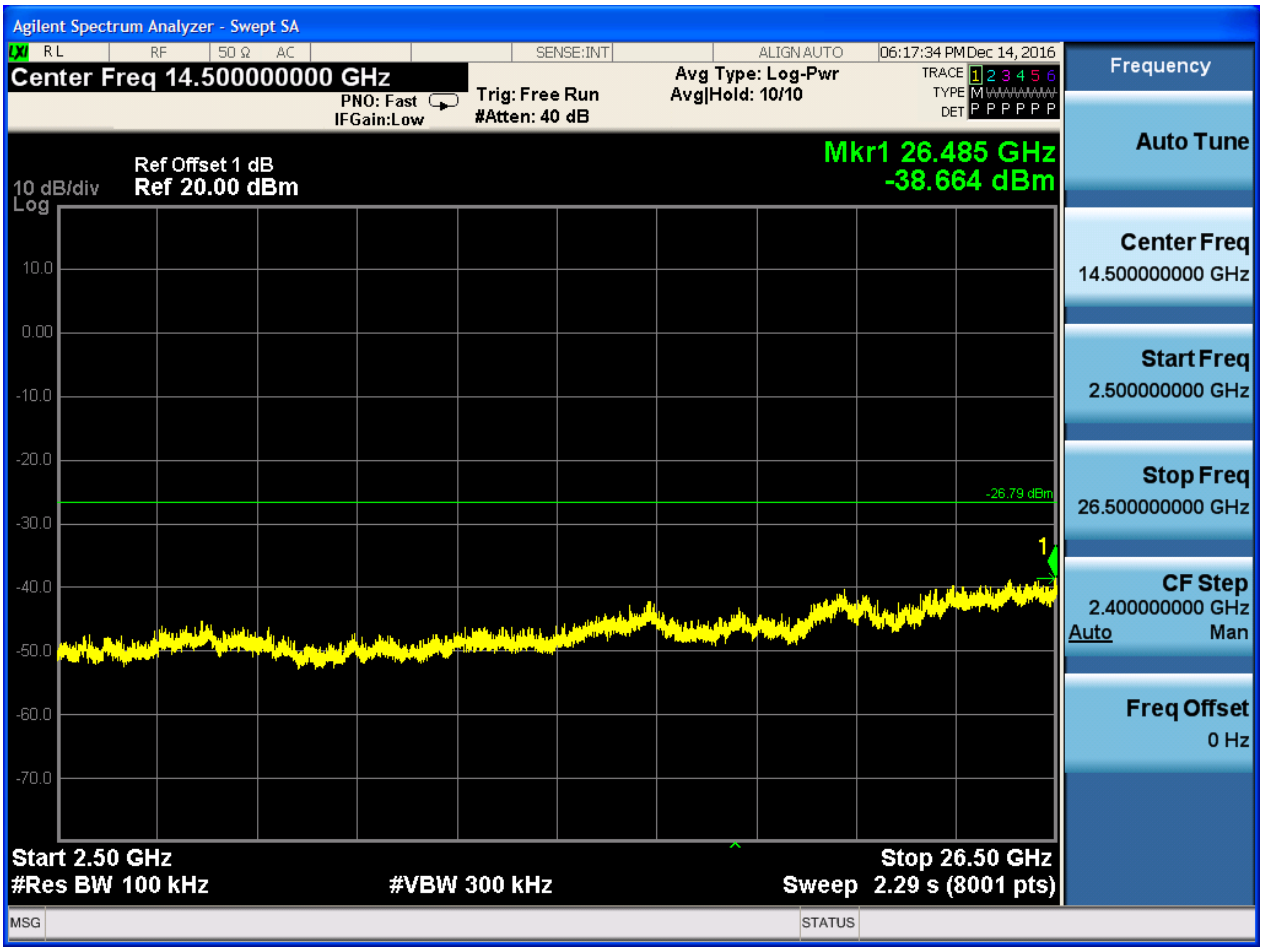

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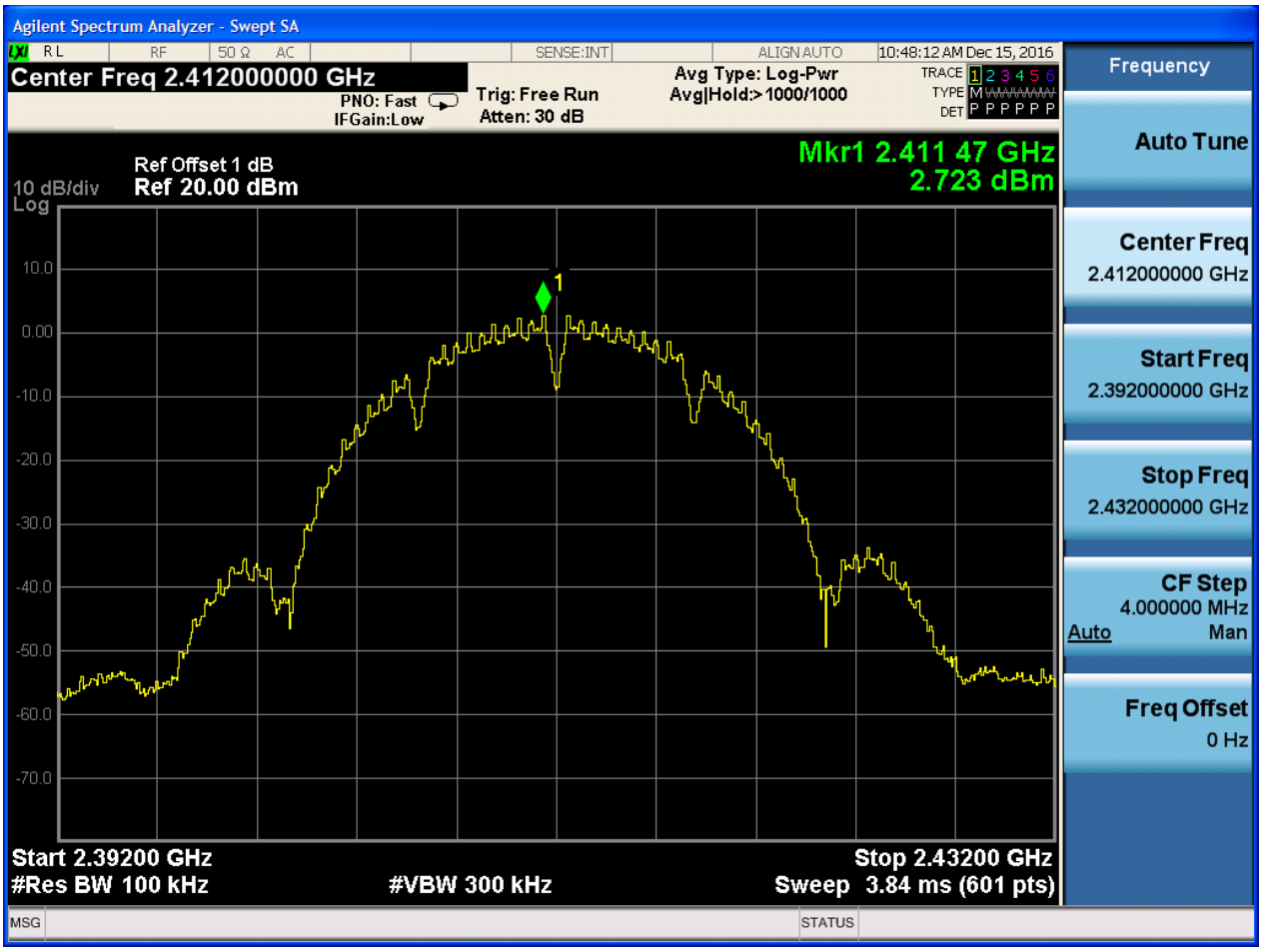
2.2 11B_L@Ant 2

Pref:



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