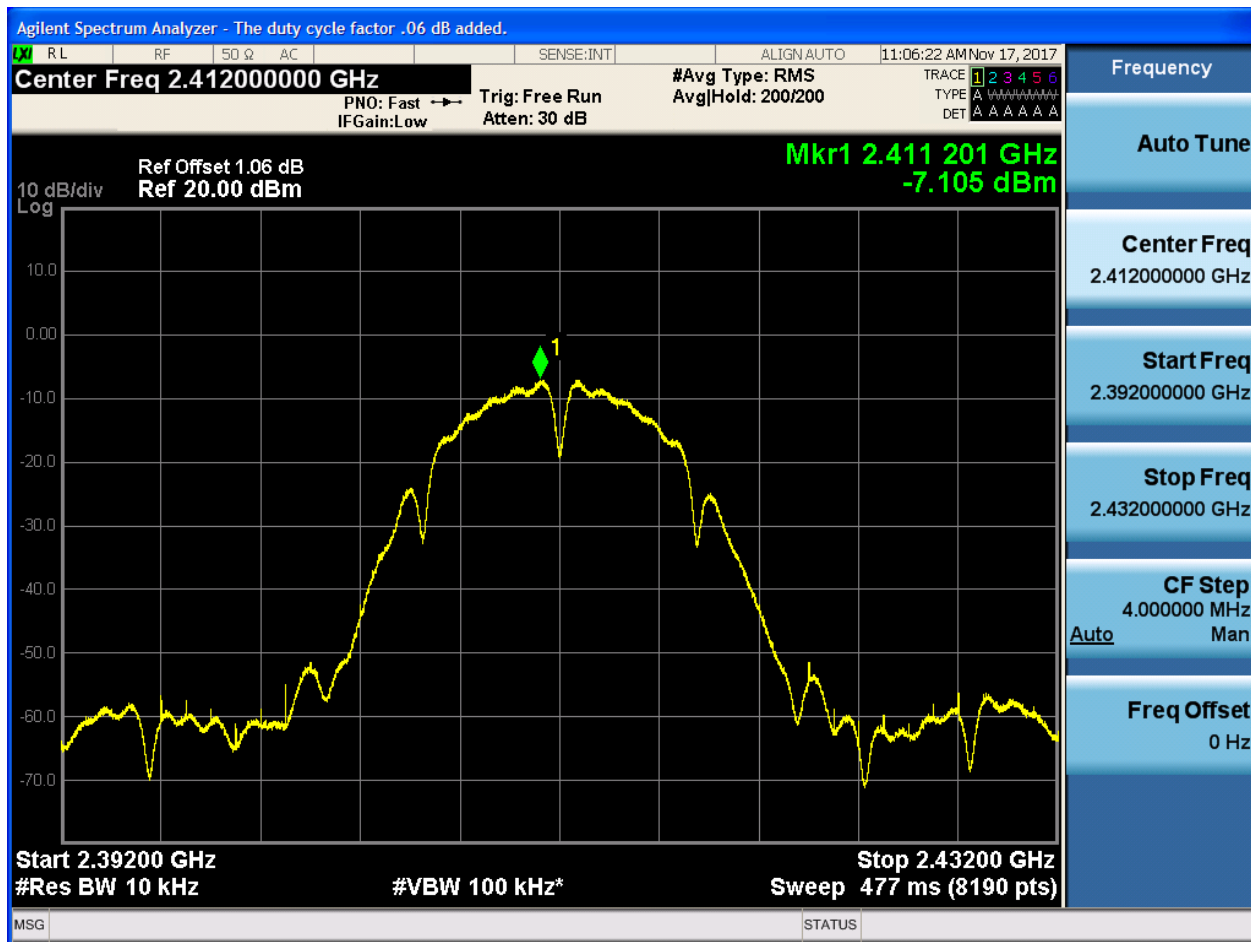


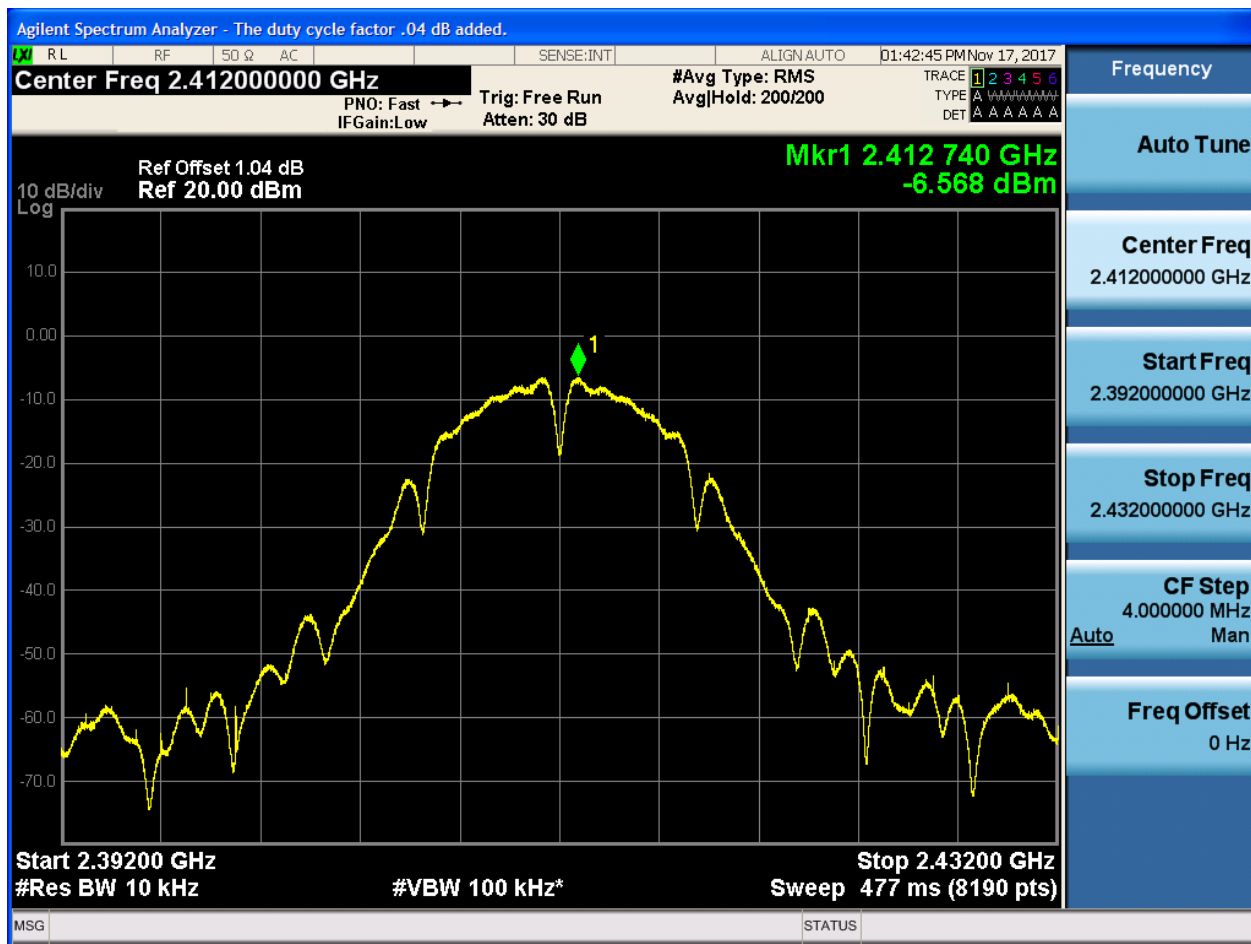
Part II - Test Plots

2.1 11B_L@Ant 1



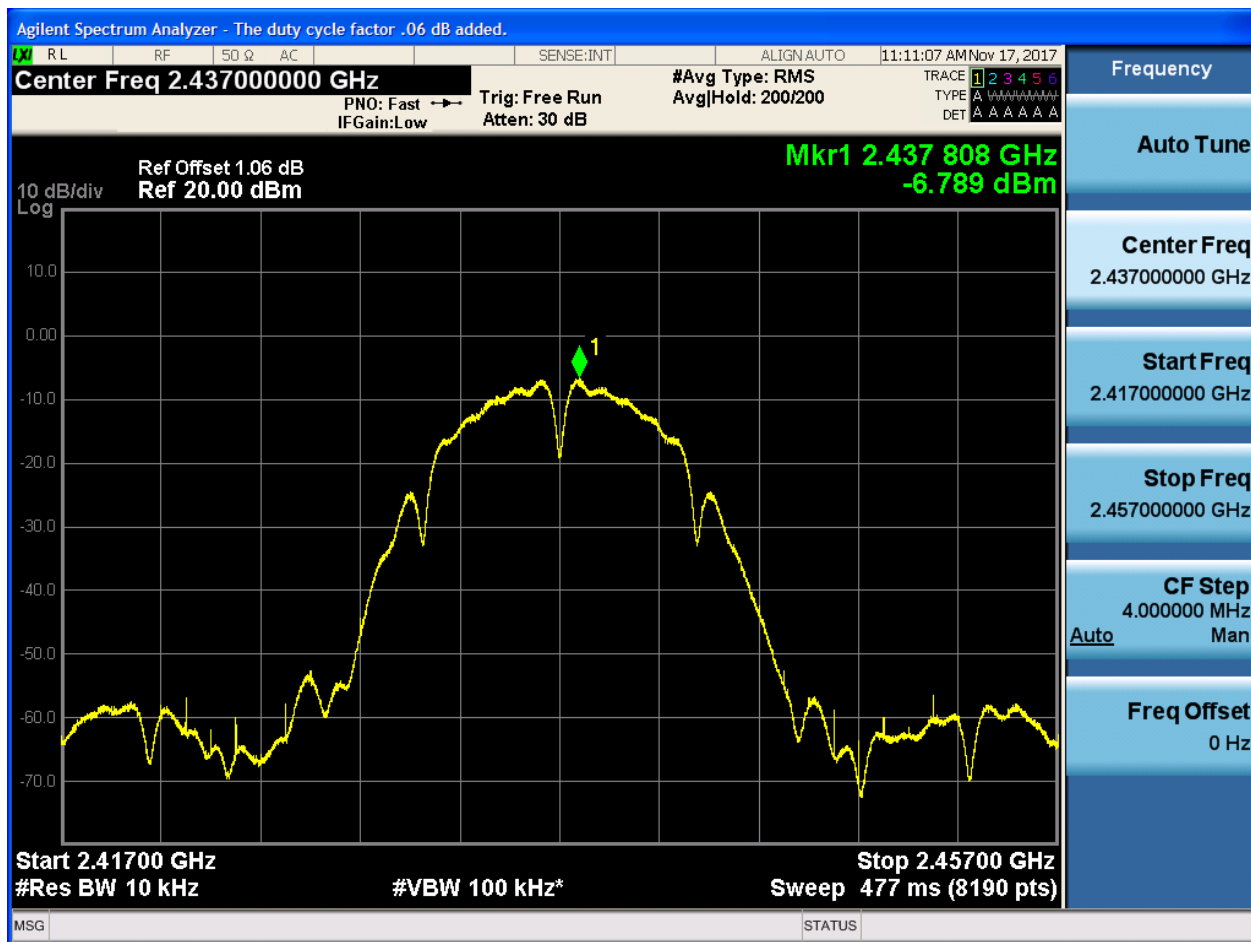


2.2 11B_L@Ant 2



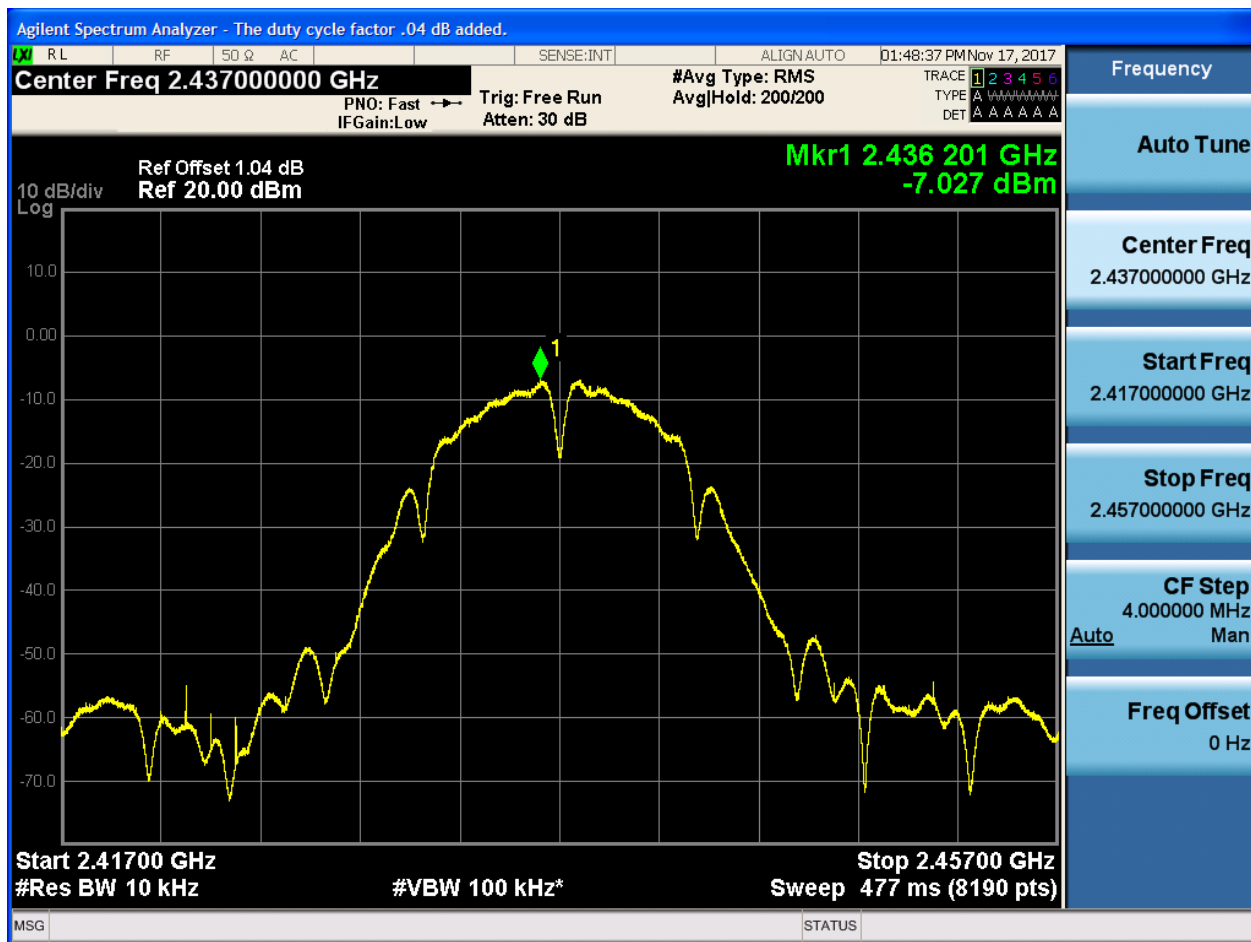


2.3 11B_M@Ant 1



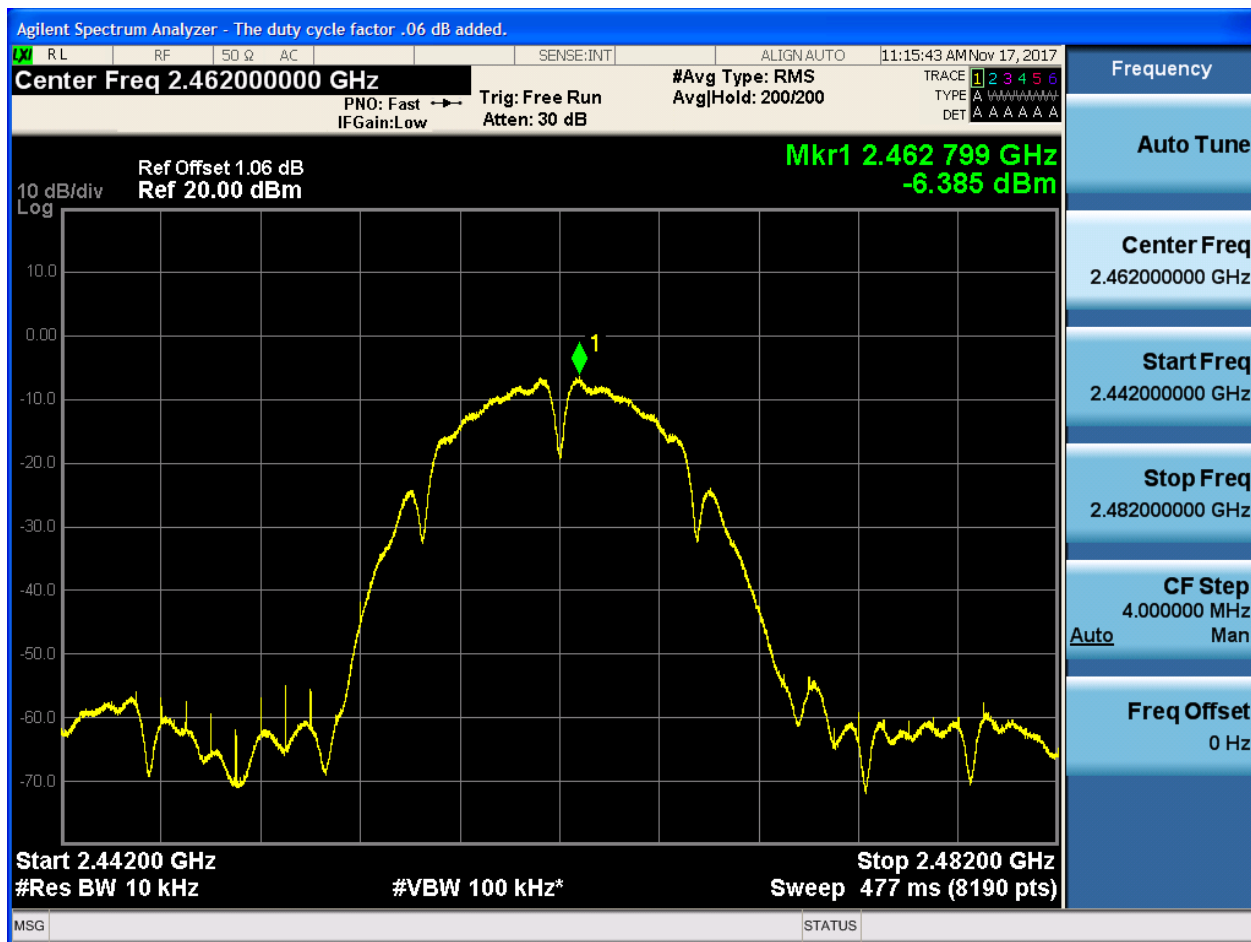


2.4 11B_M@Ant 2



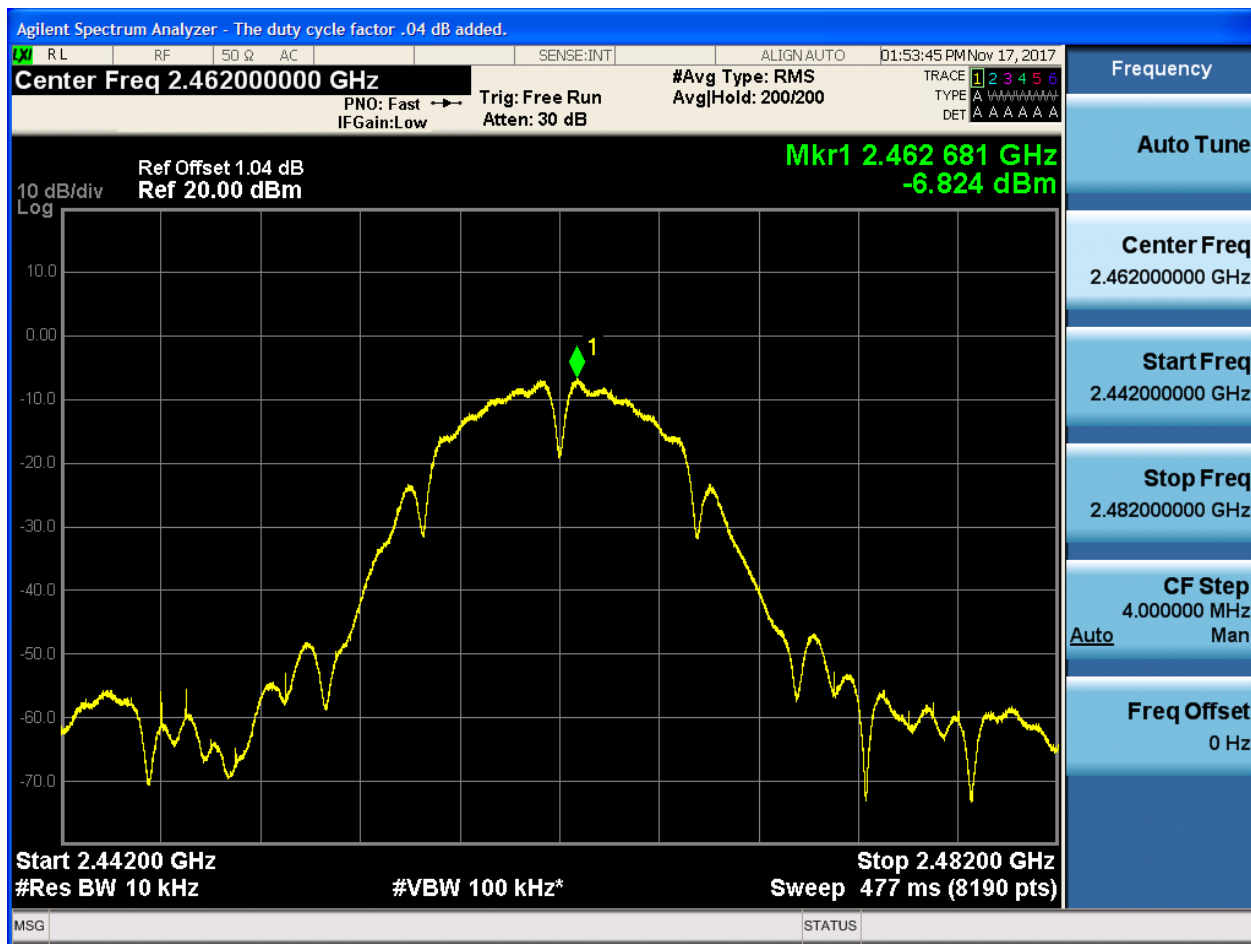


2.5 11B_H@Ant 1



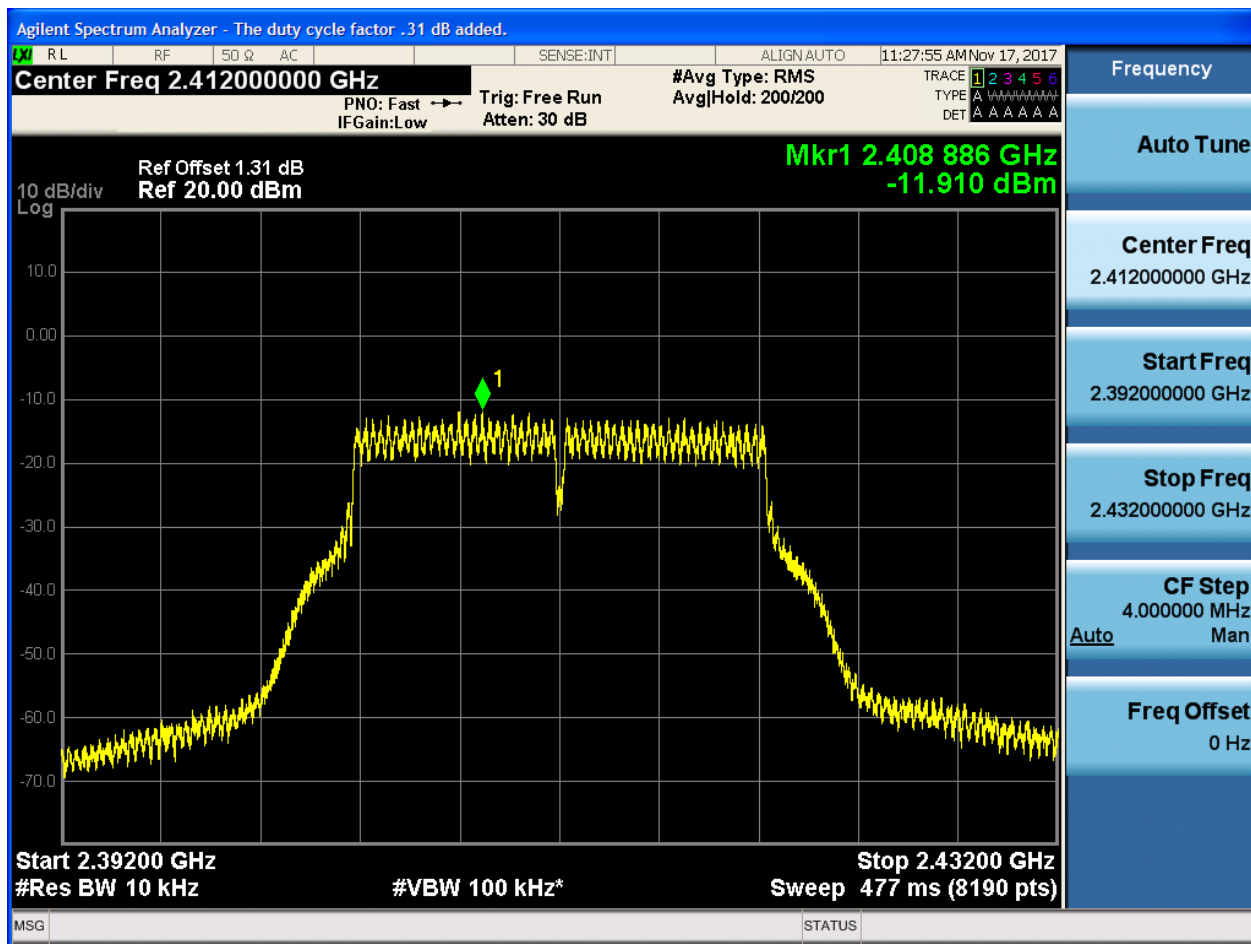


2.6 11B_H@Ant 2



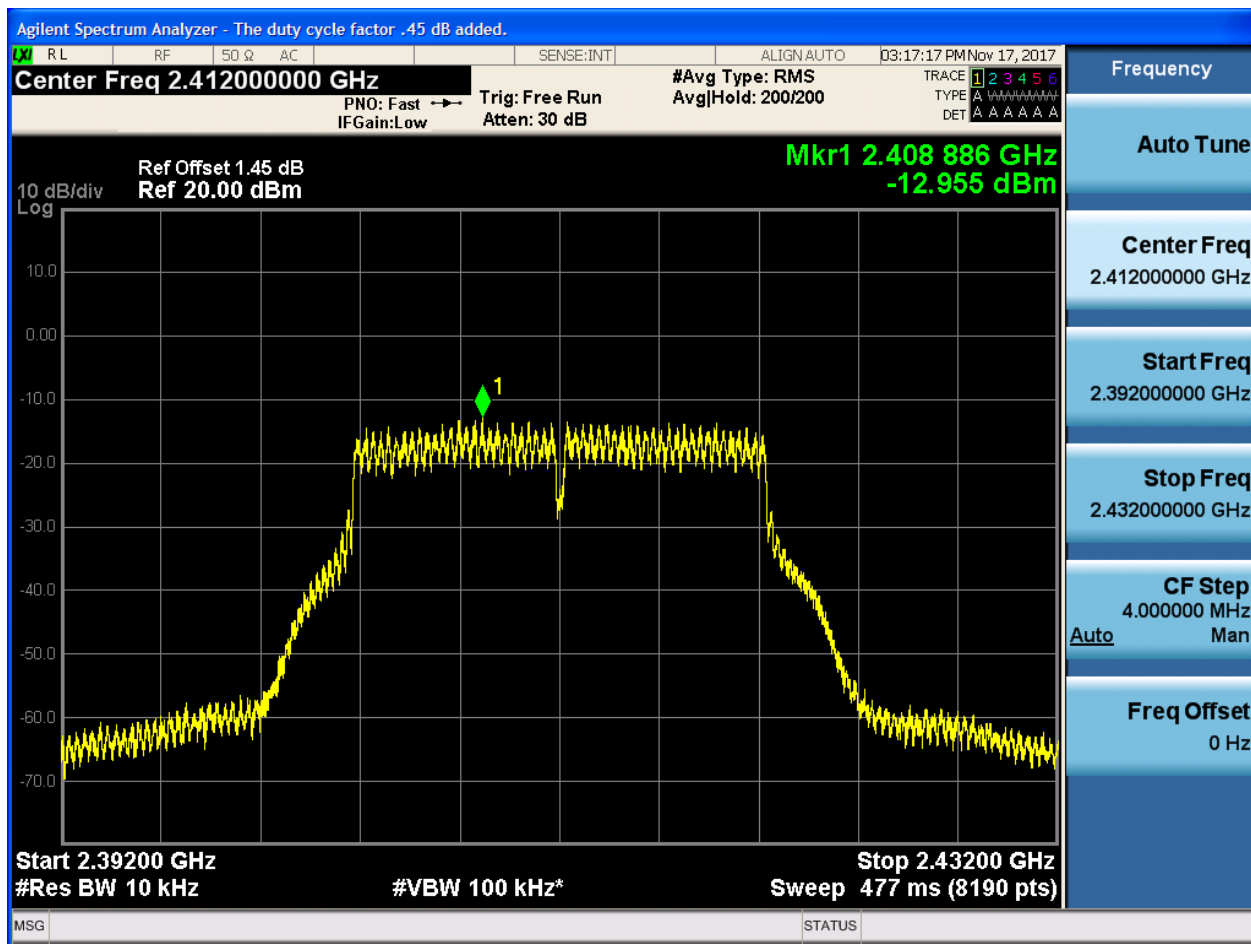


2.7 11G_L@Ant 1



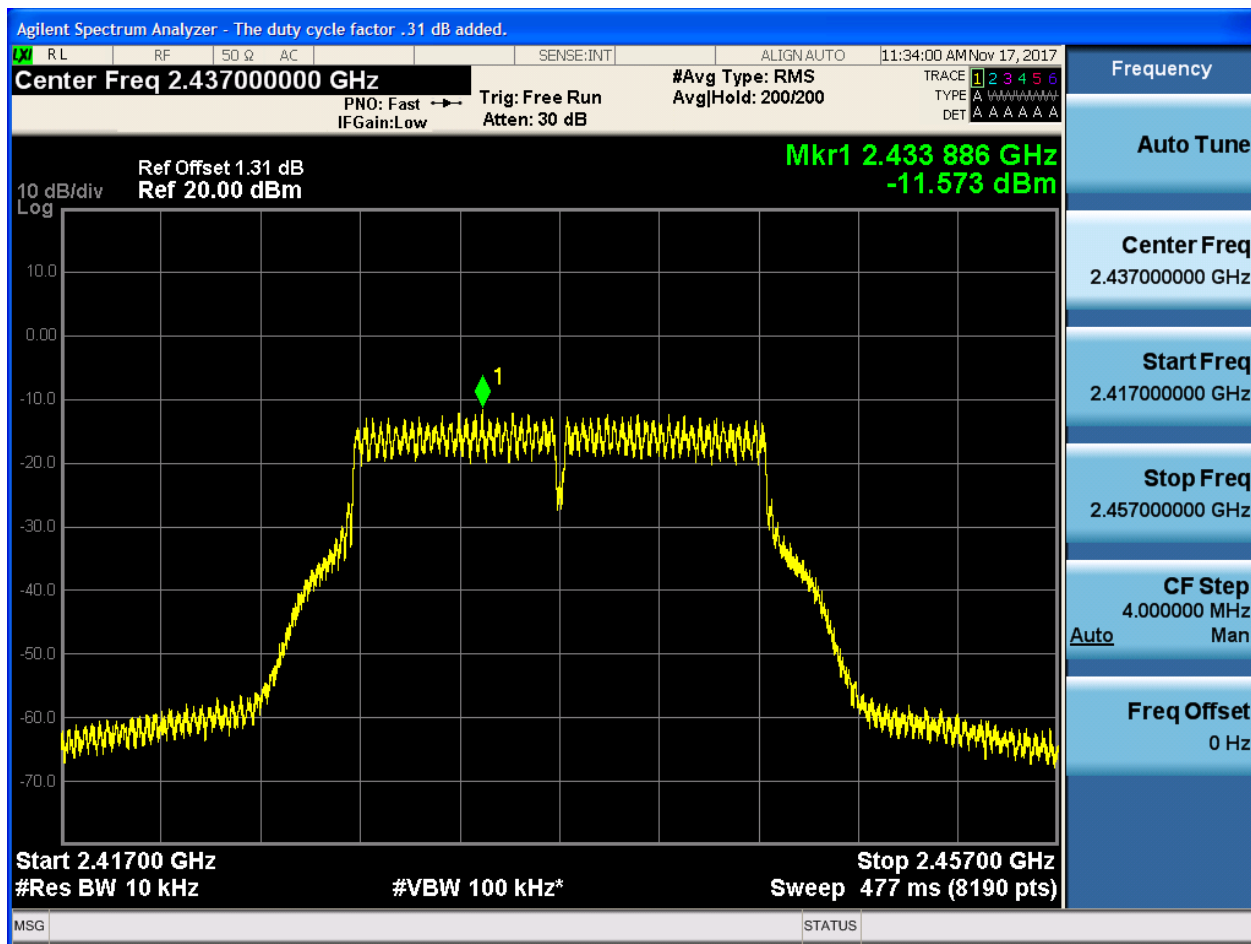


2.8 11G_L@Ant 2



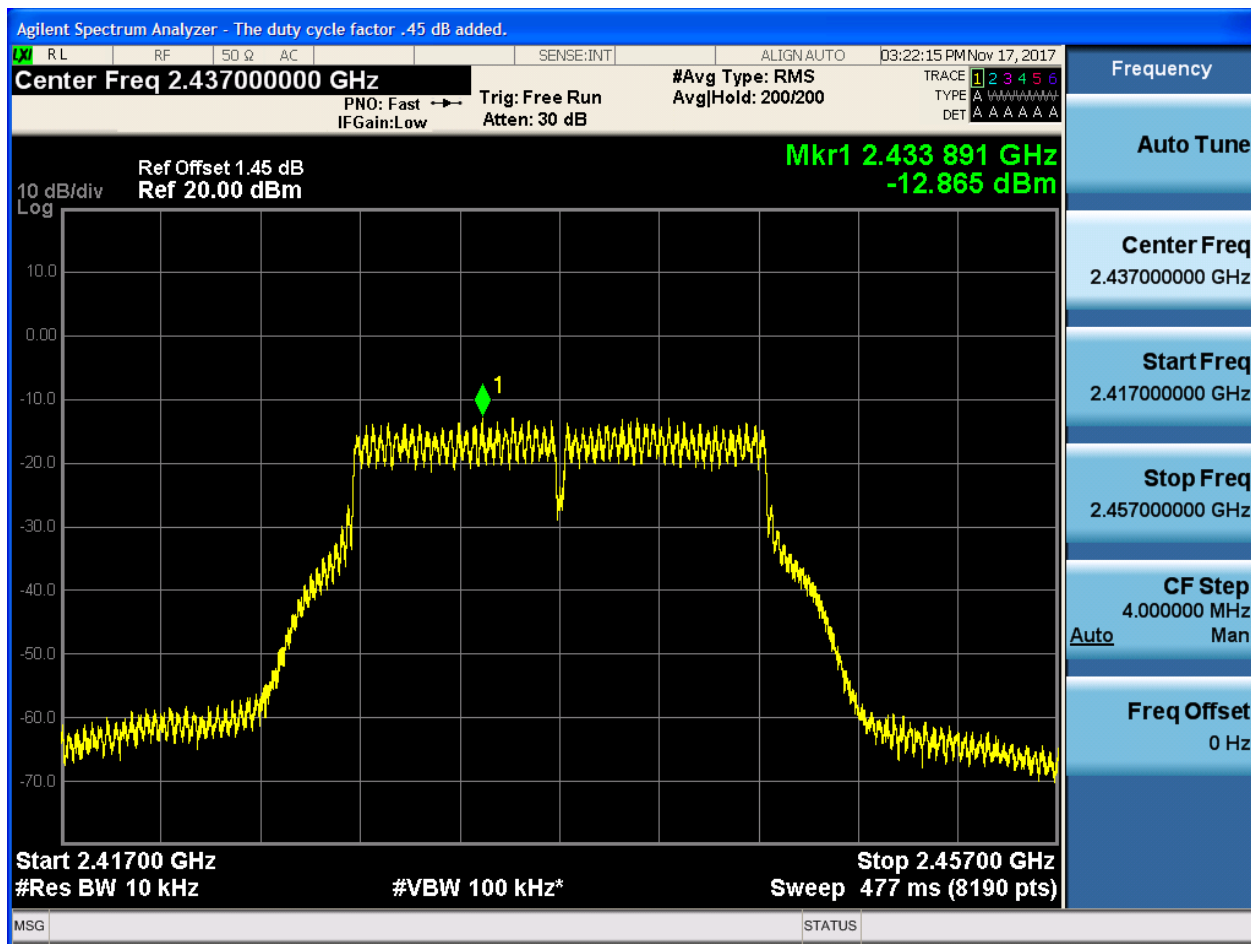


2.9 11G_M@Ant 1



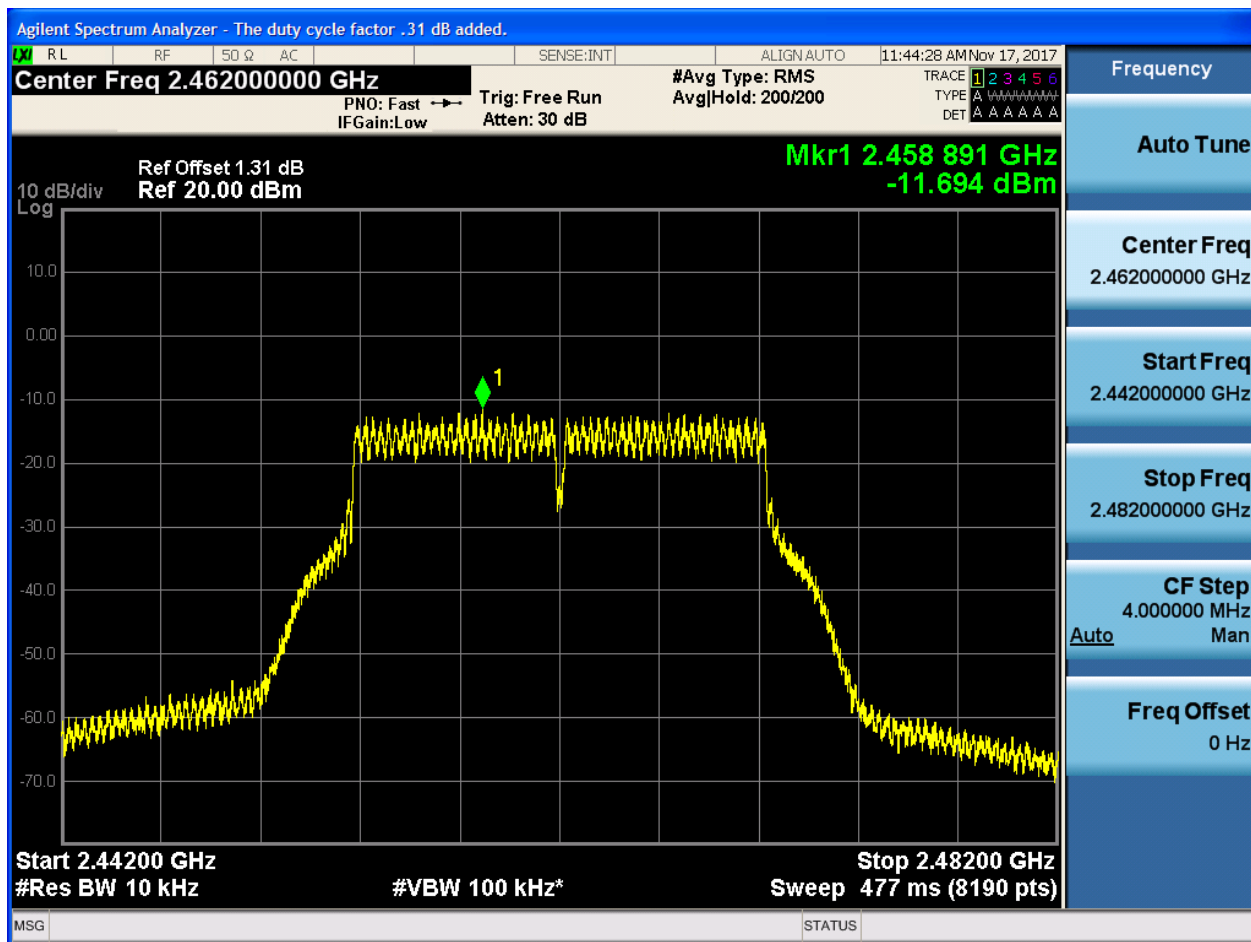


2.10 11G_M@Ant 2



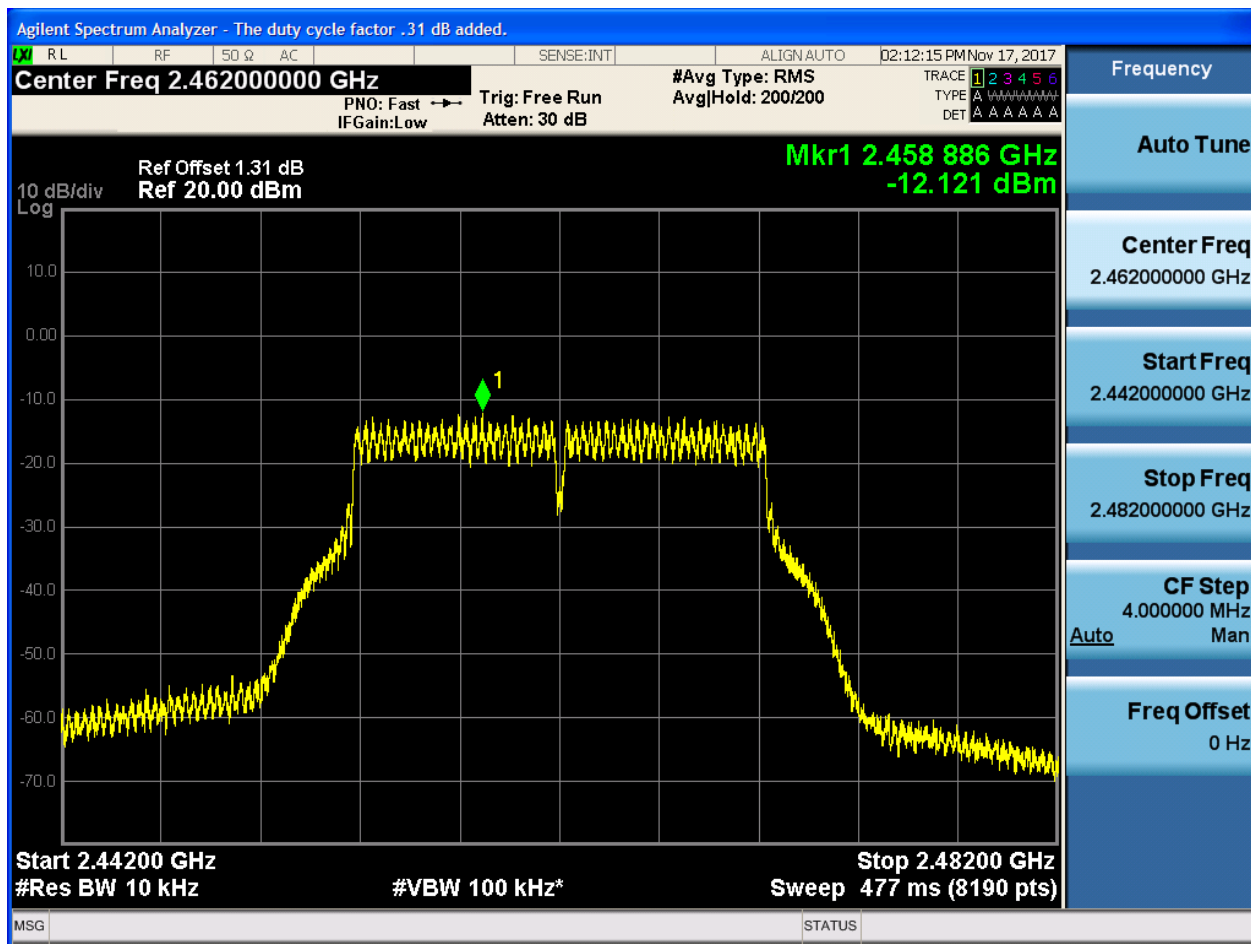


2.11 11G_H@Ant 1



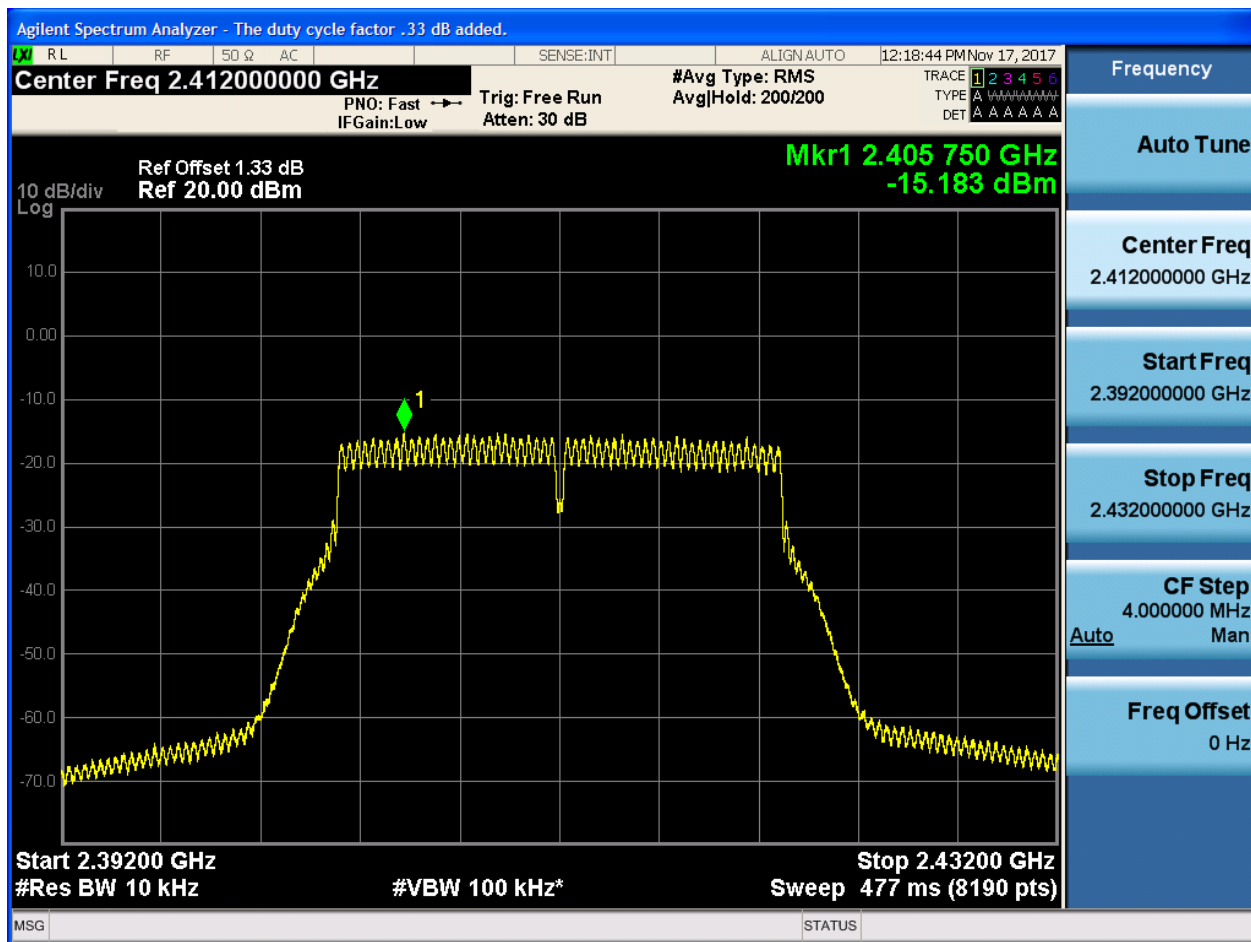


2.12 11G_H@Ant 2



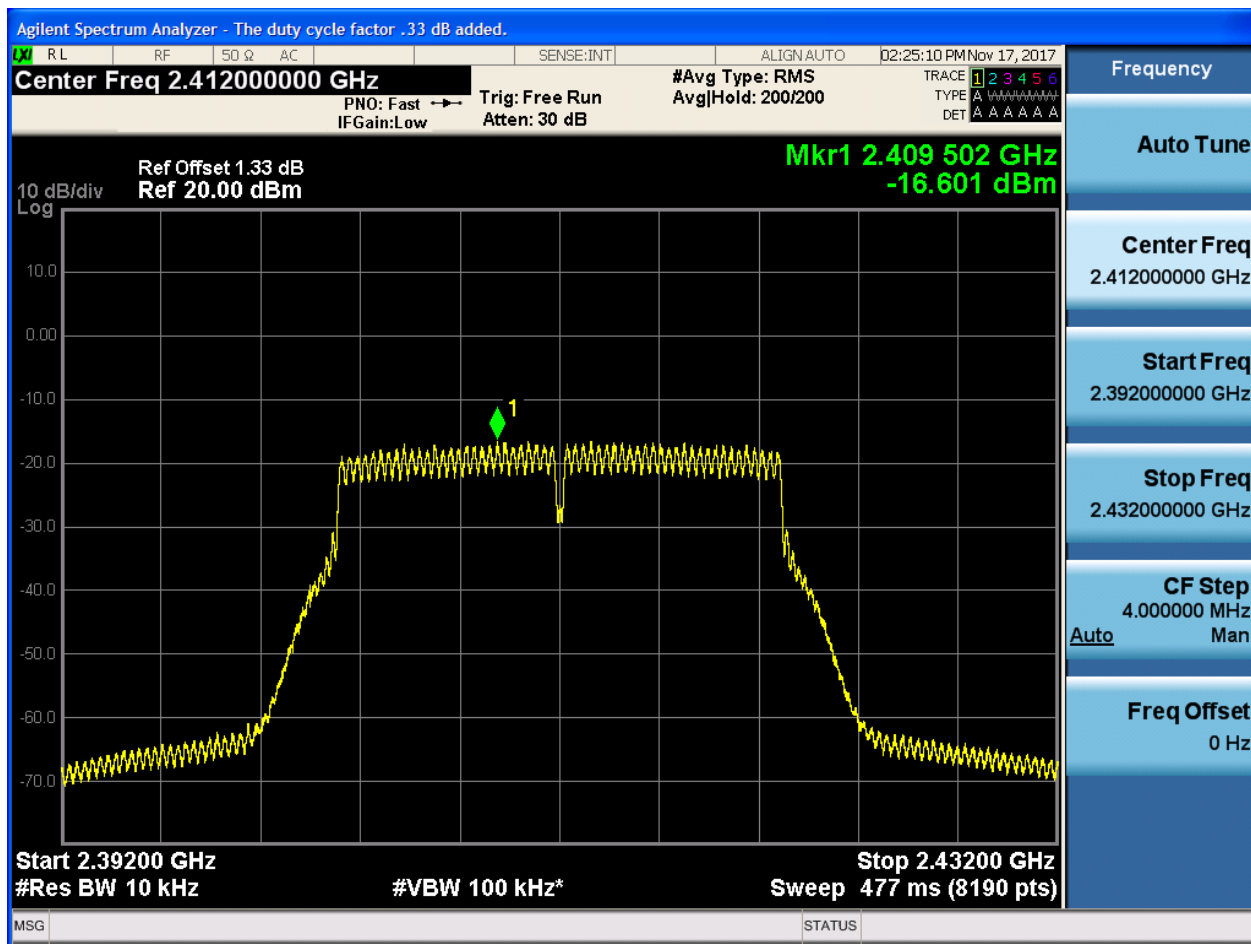


2.13 11N20_L@Ant 1



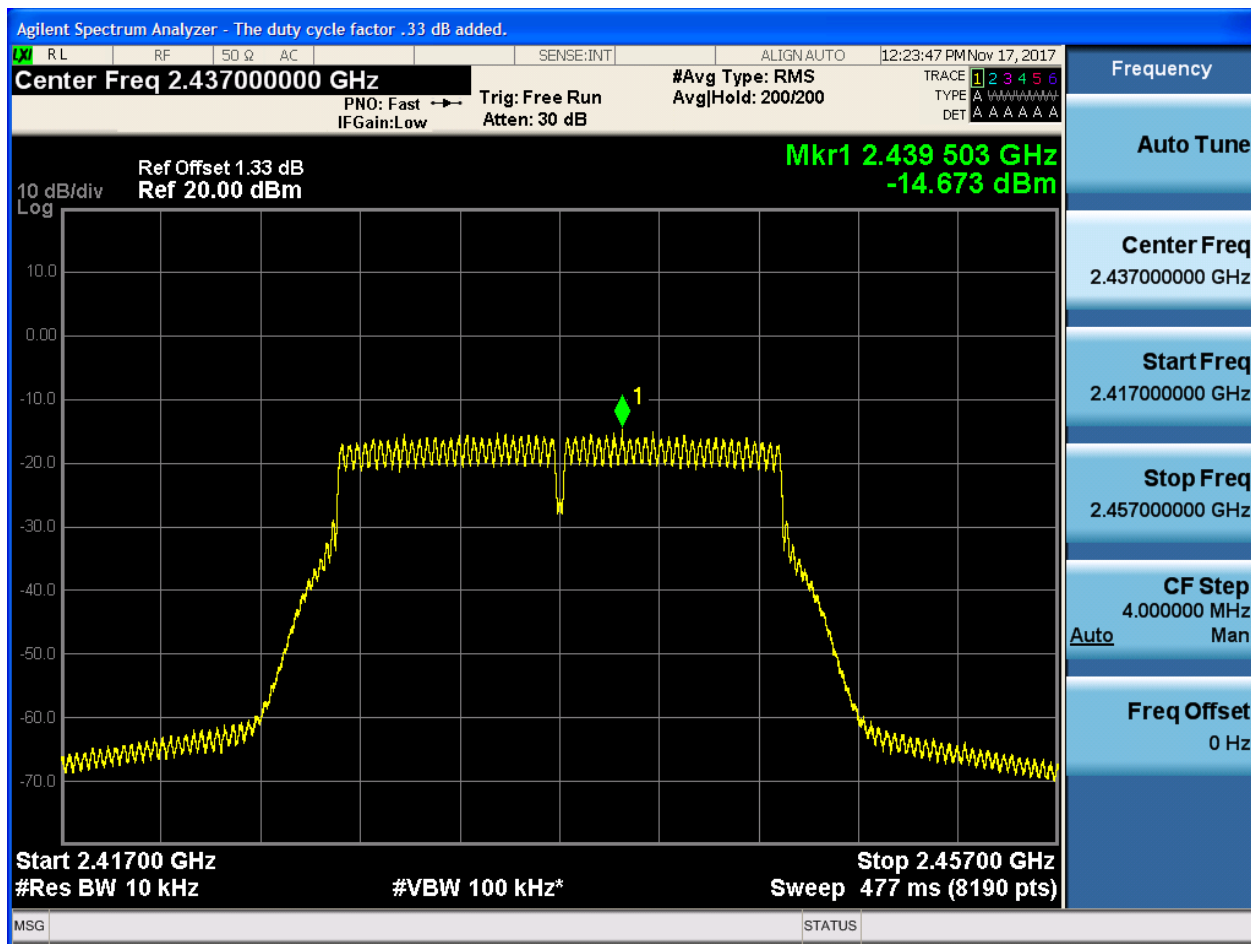


2.14 11N20_L@Ant 2



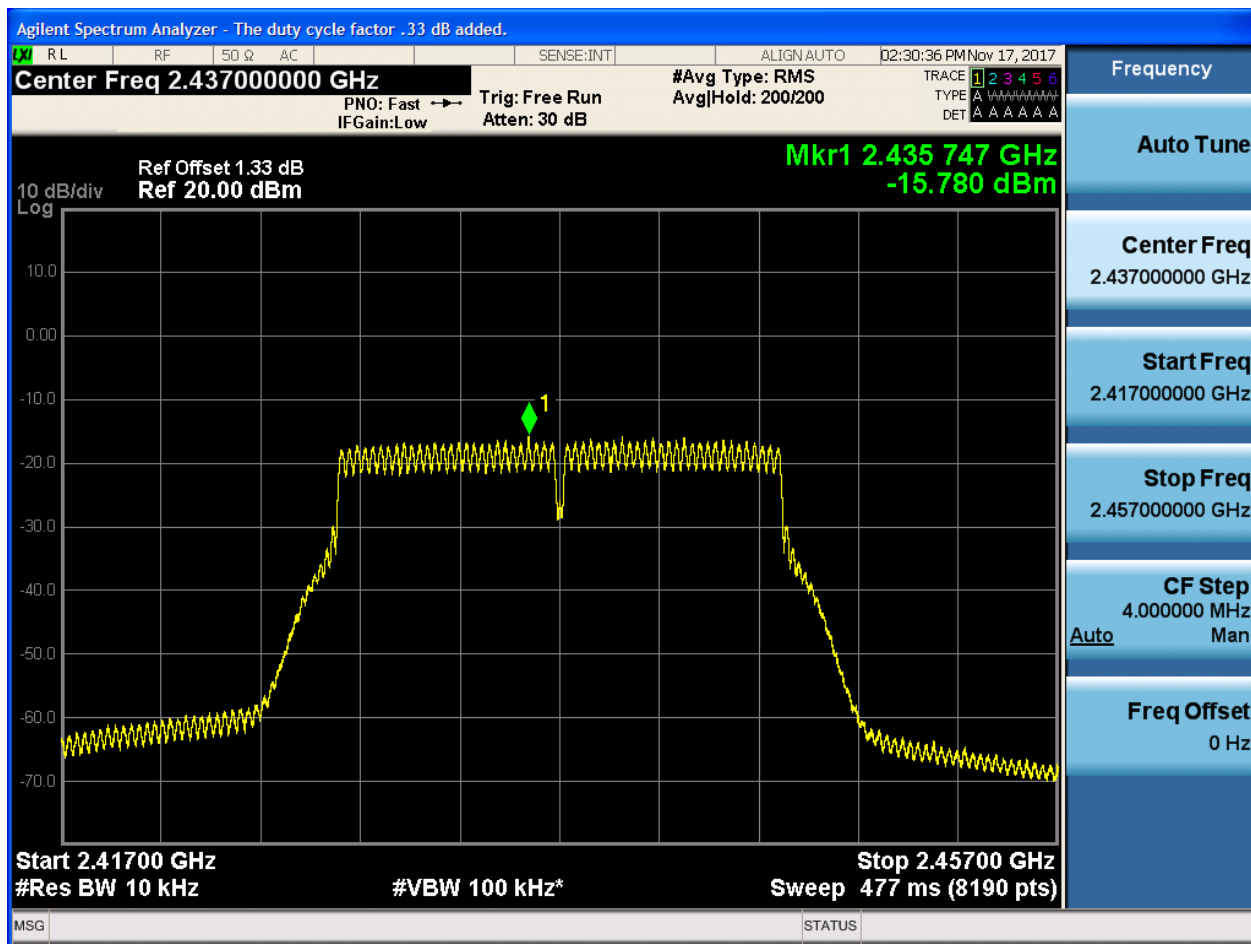


2.15 11N20_M@Ant 1



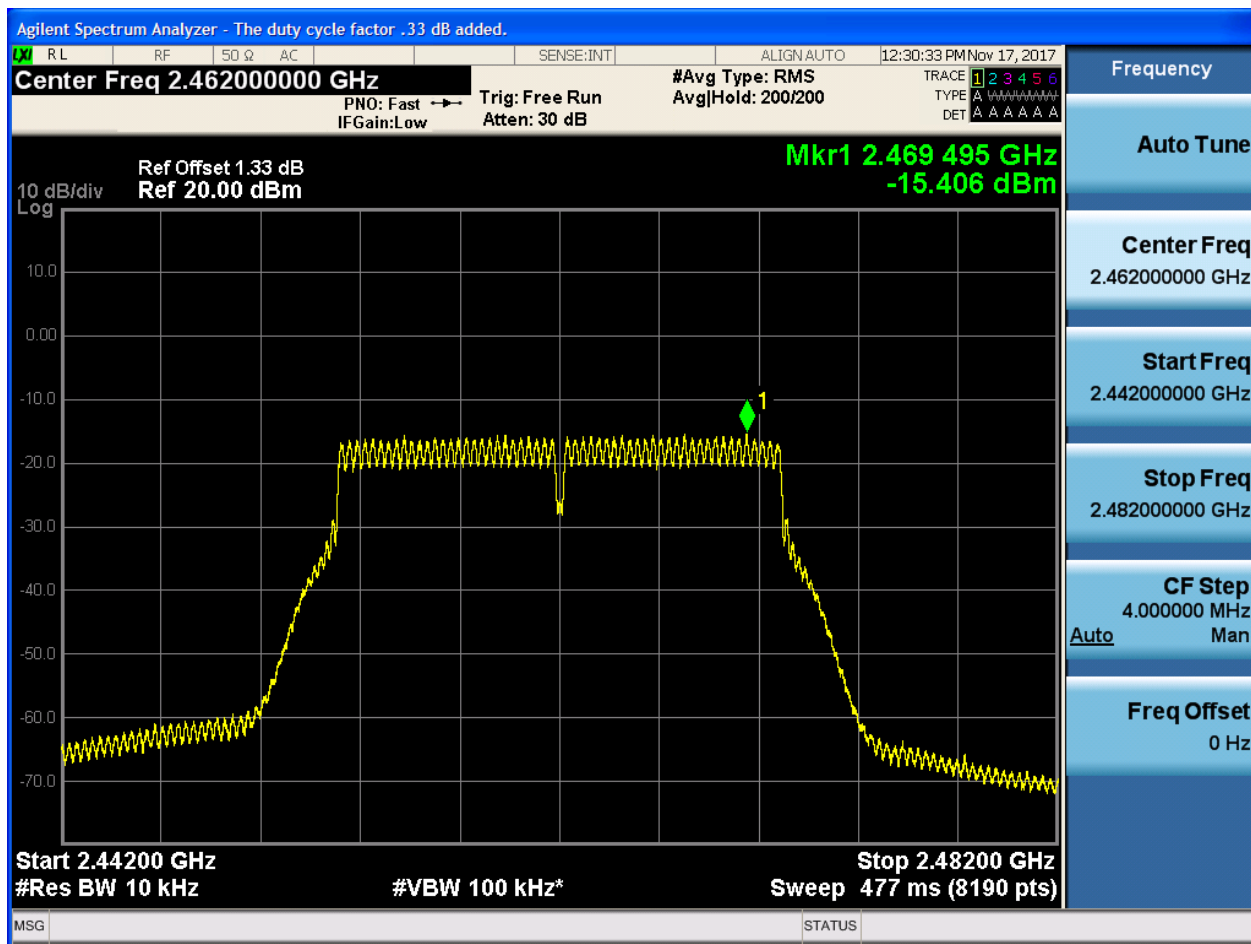


2.16 11N20_M@Ant 2



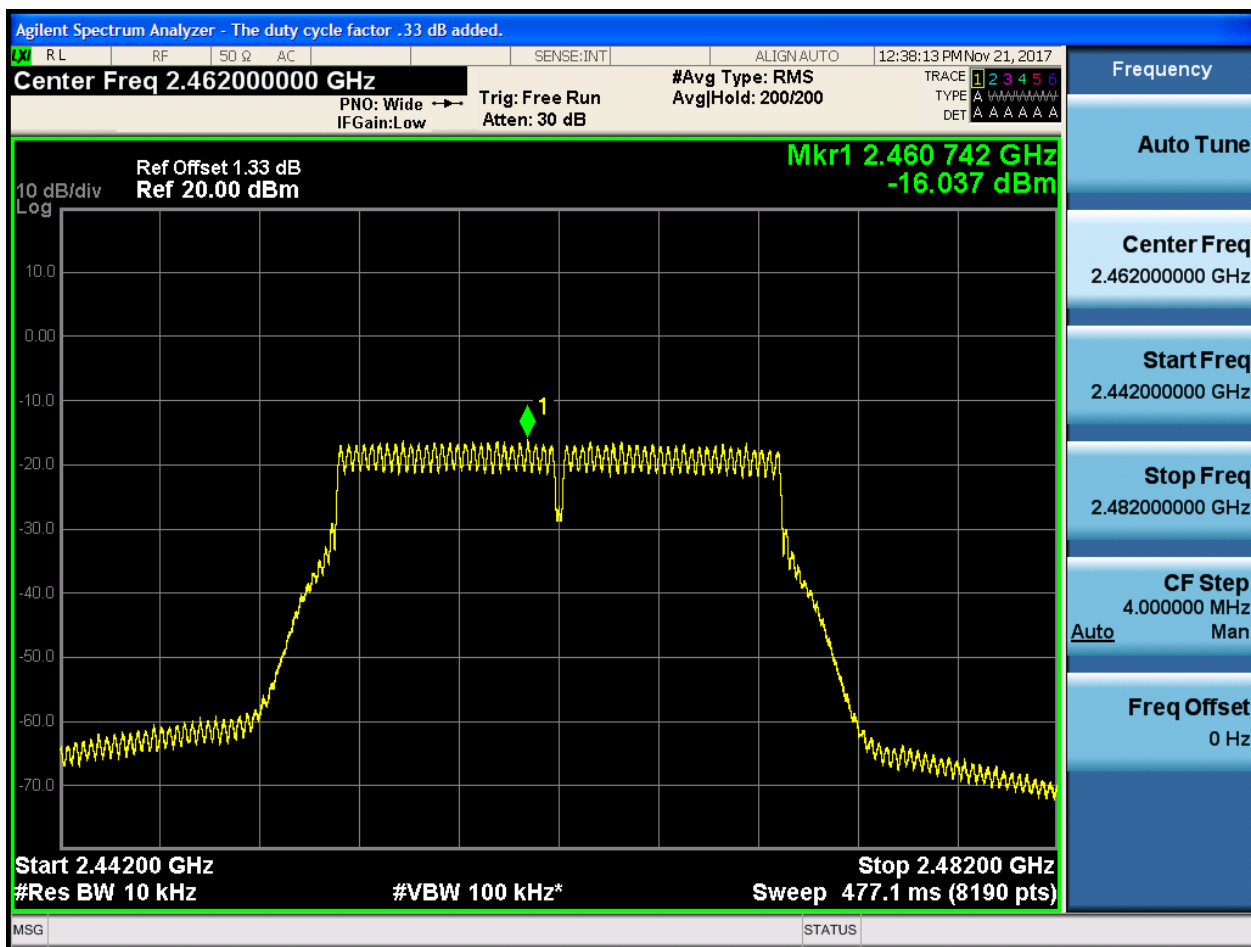


2.17 11N20_H@Ant 1



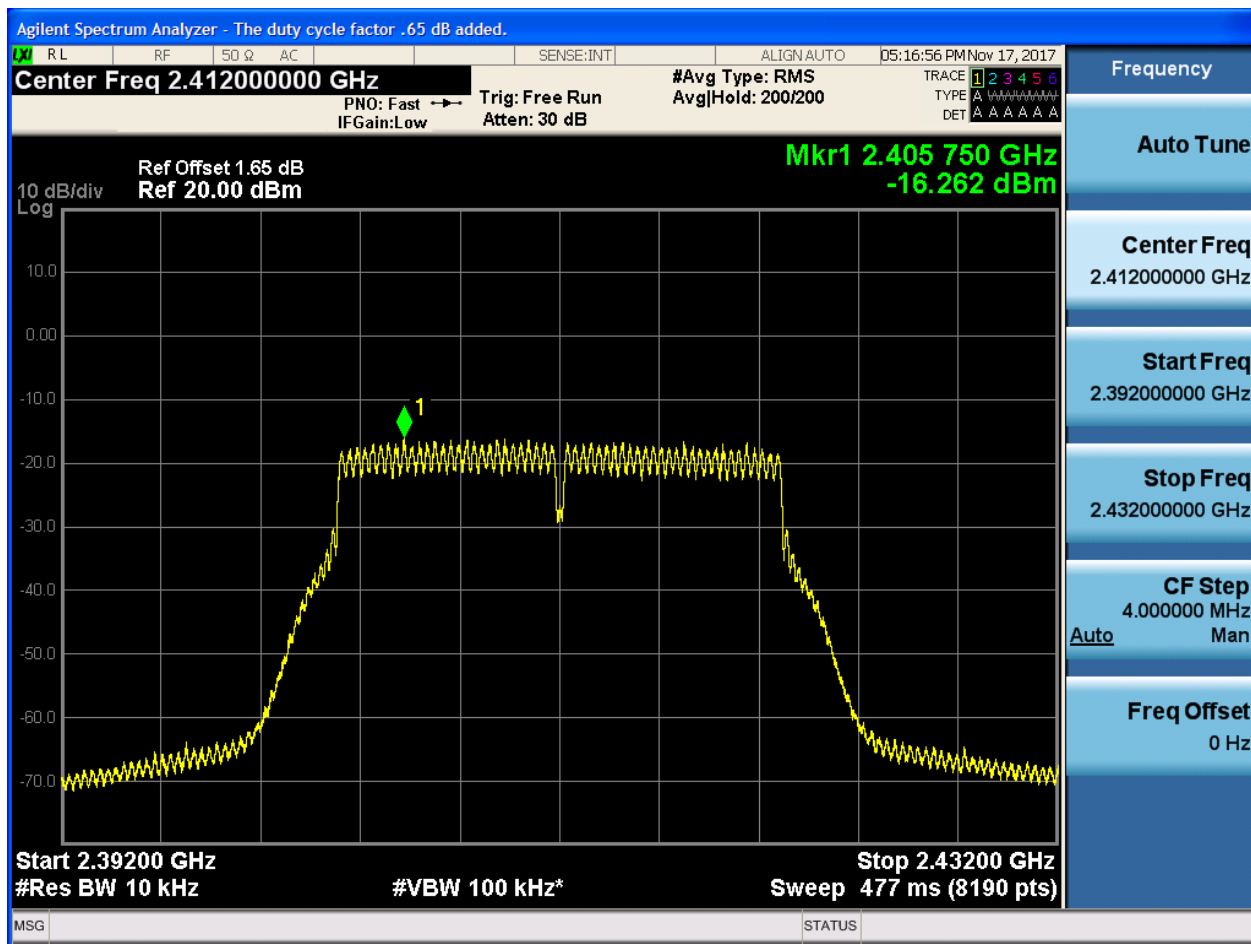


2.18 11N20_H@Ant 2



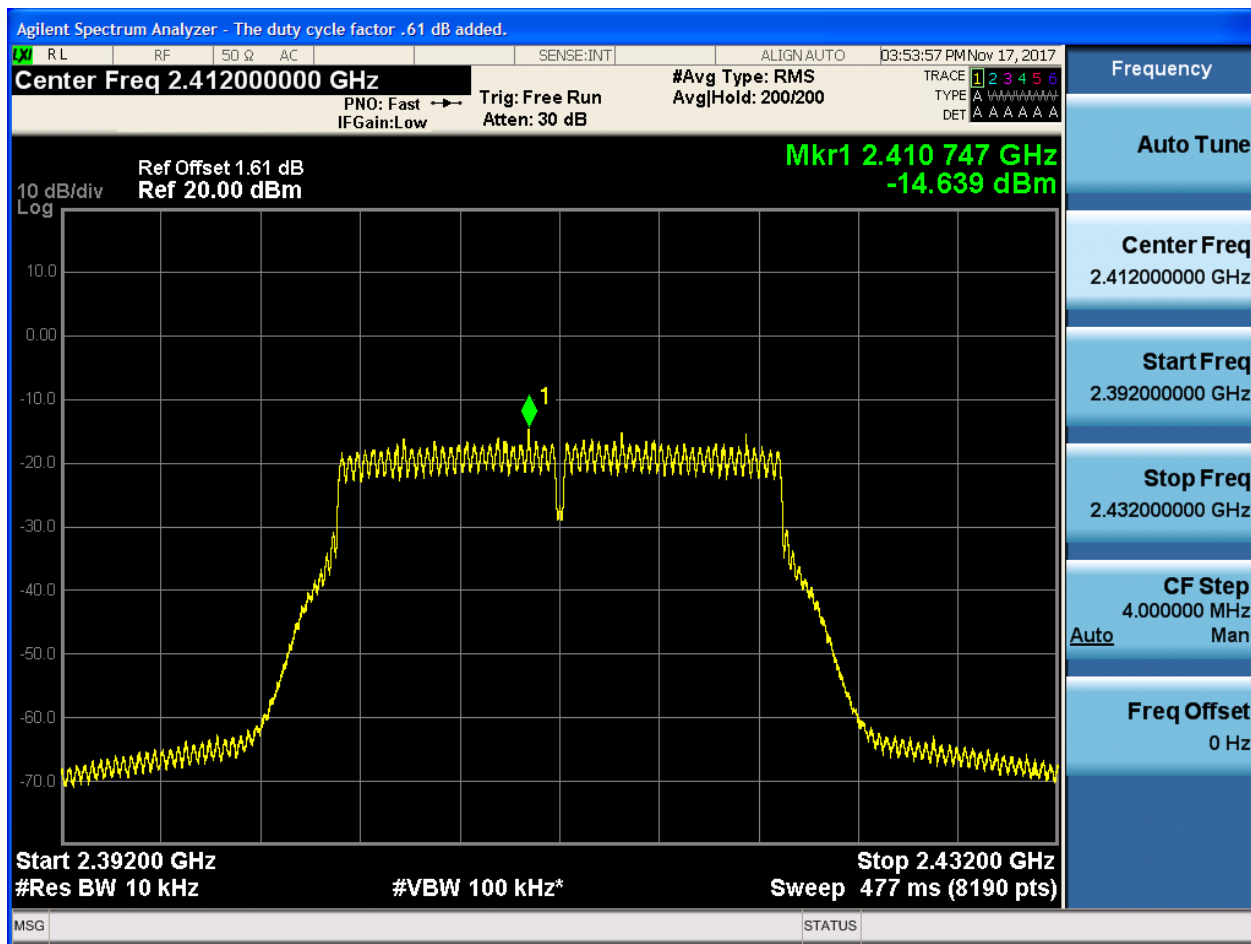


2.19 11N20m_L@Ant 1



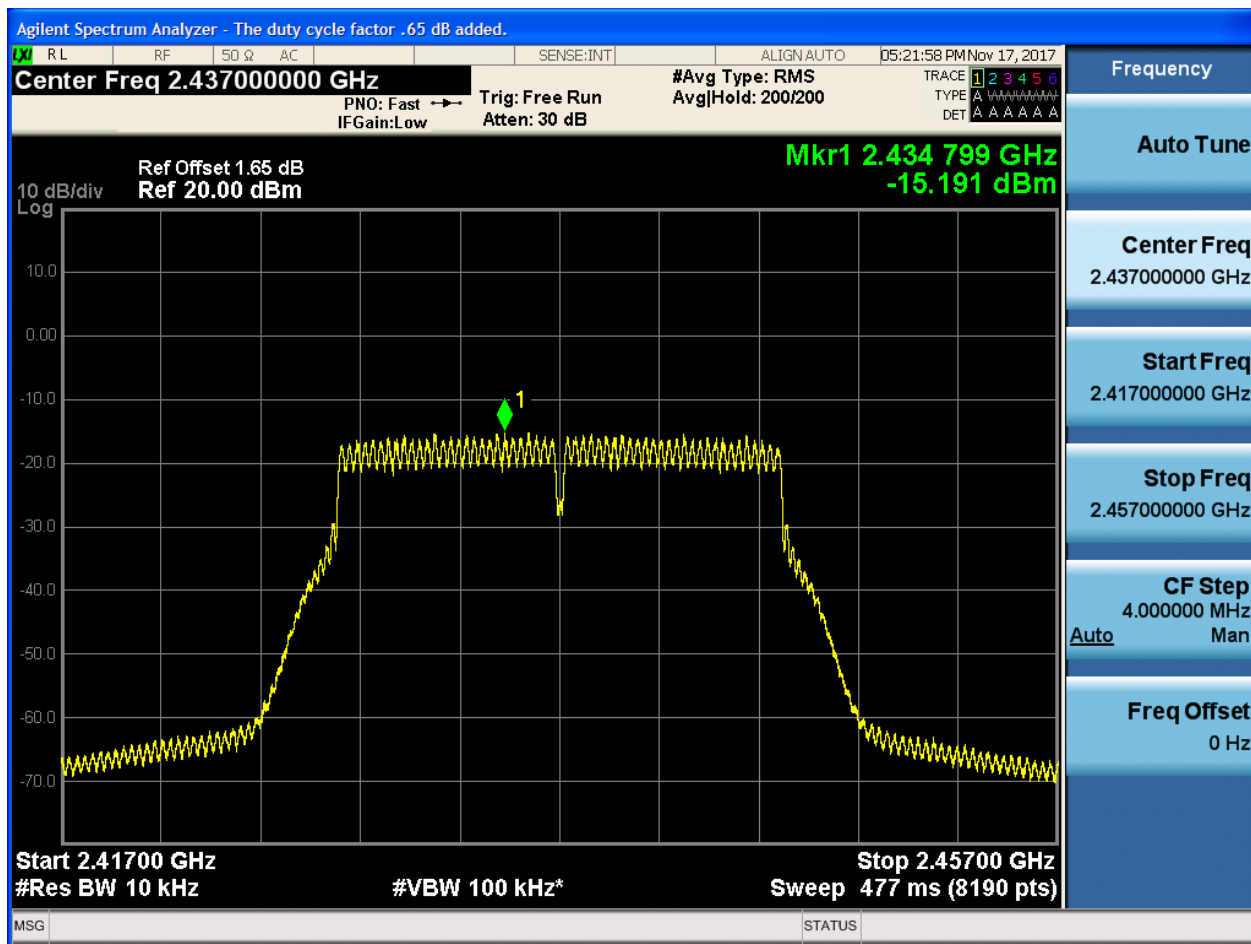


2.20 11N20m_L@Ant 2



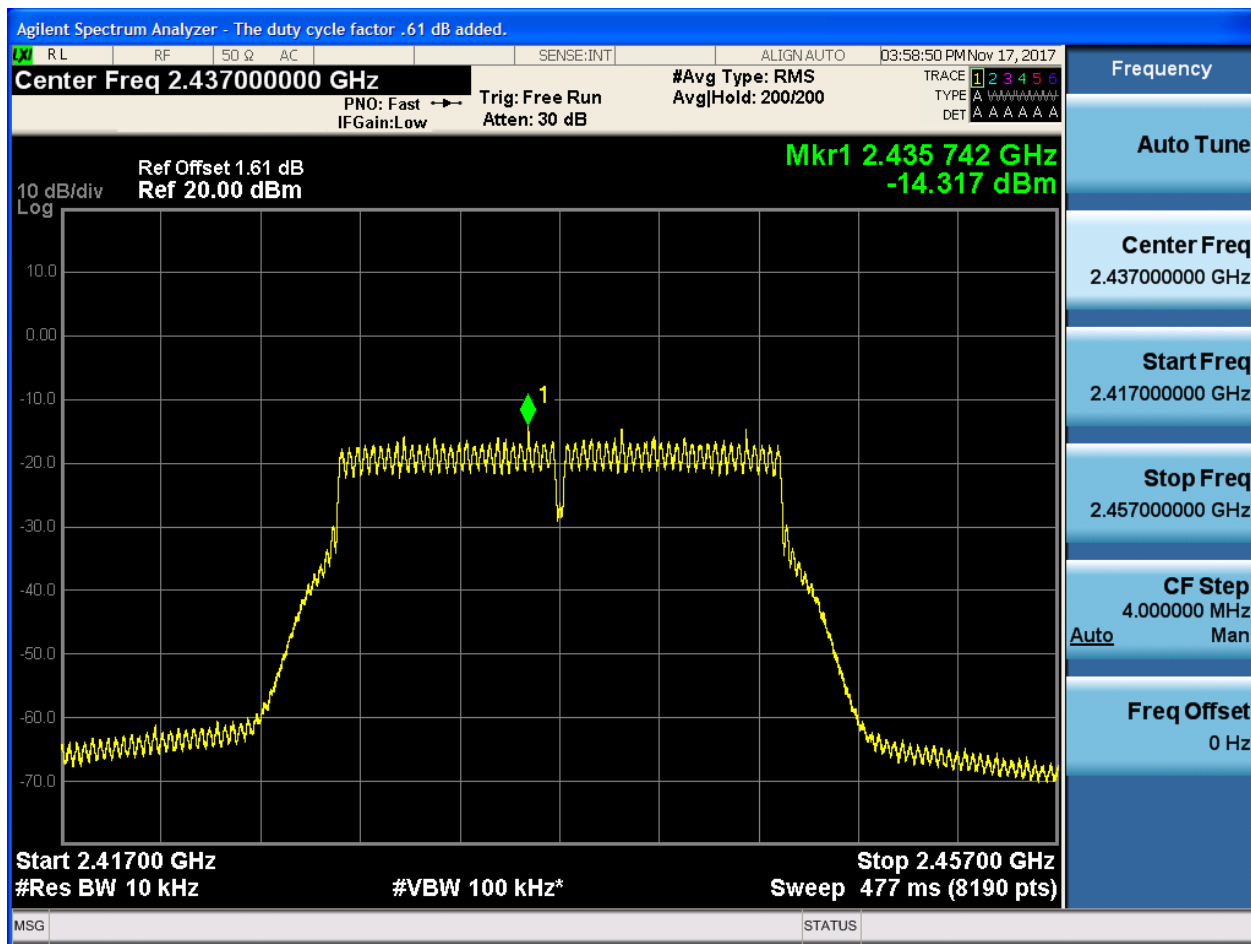


2.21 11N20m_M@Ant 1



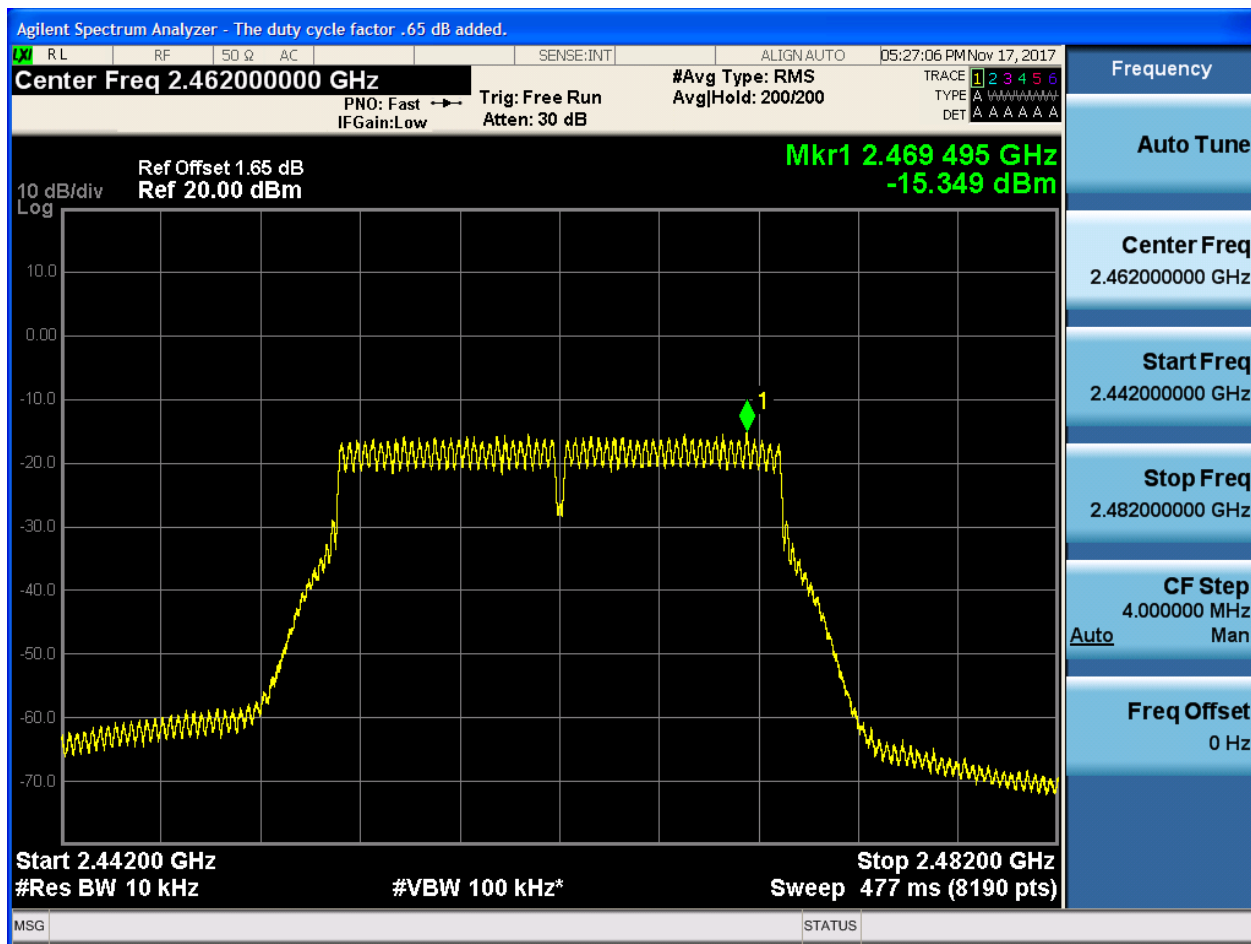


2.22 11N20m_M@Ant 2



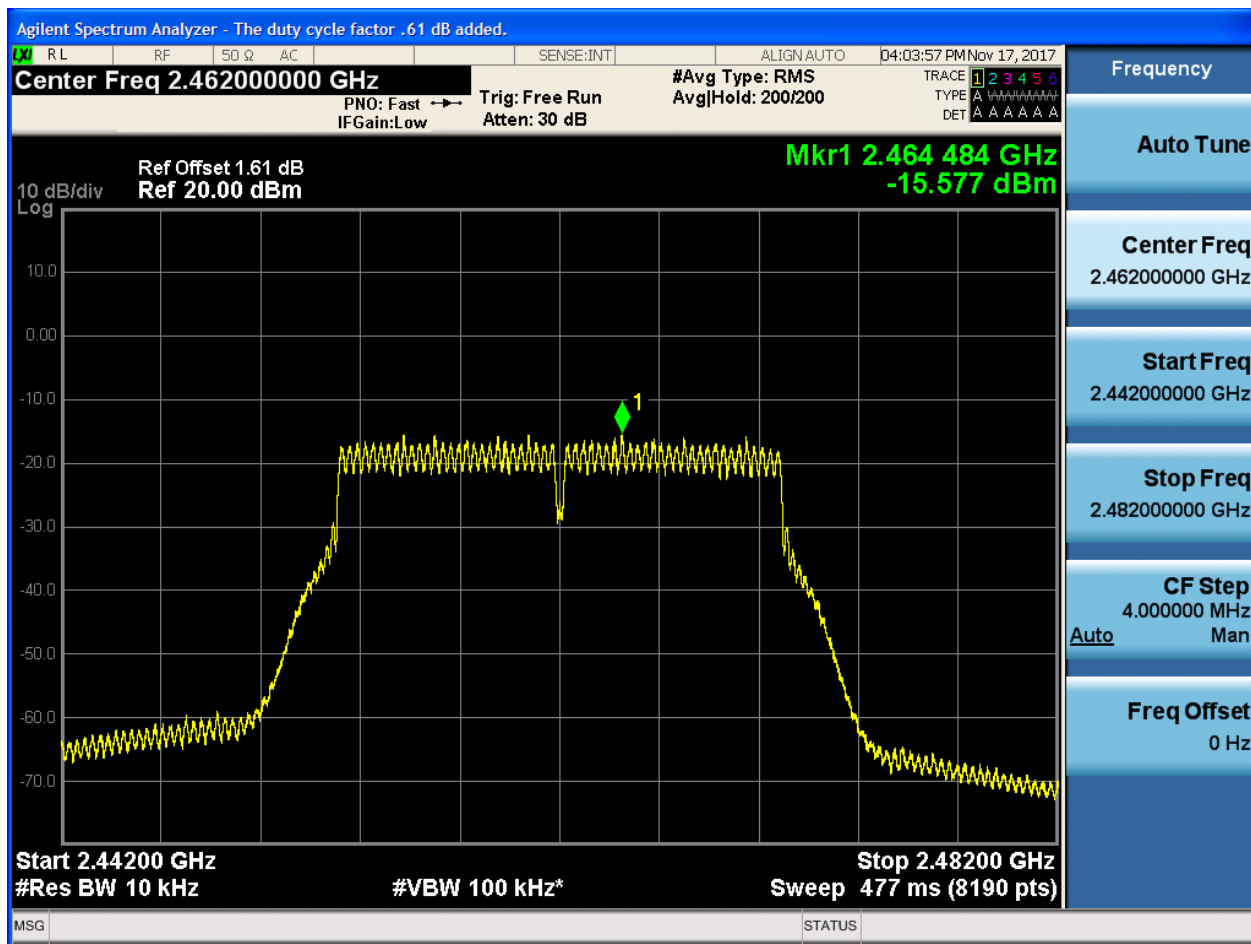


2.23 11N20m_H@Ant 1



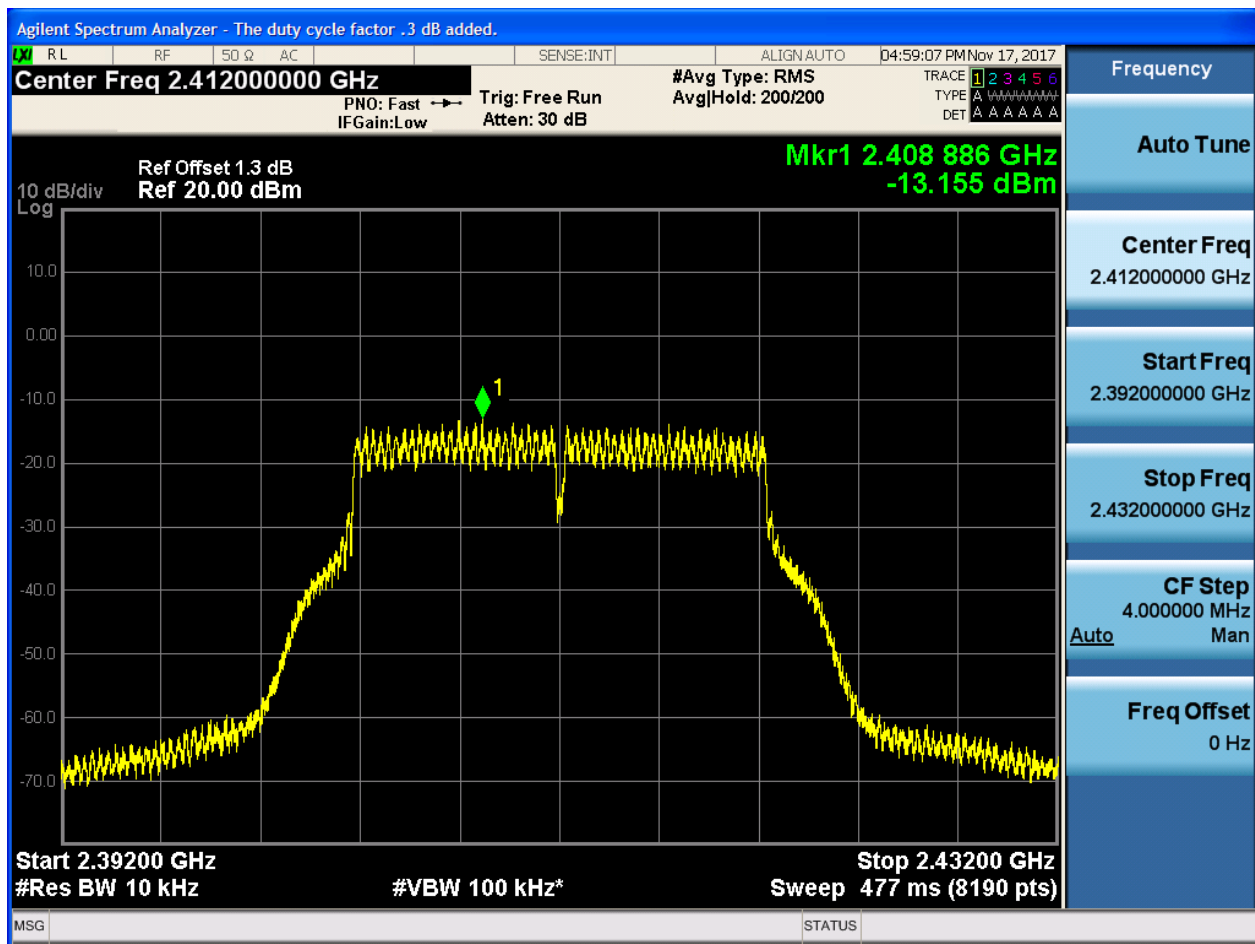


2.24 11N20m_H@Ant 2



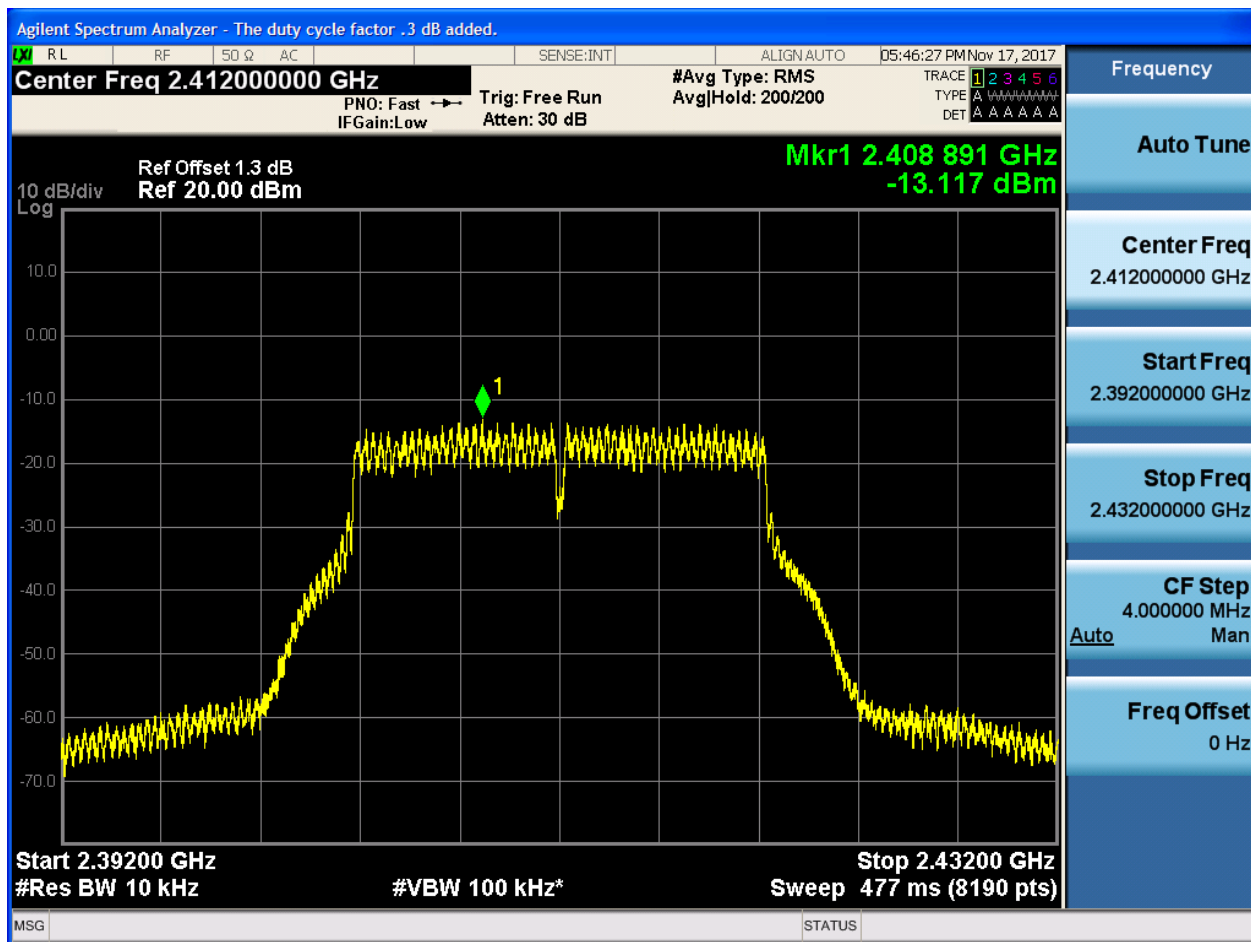


2.25 11G CDD__L@Ant 1



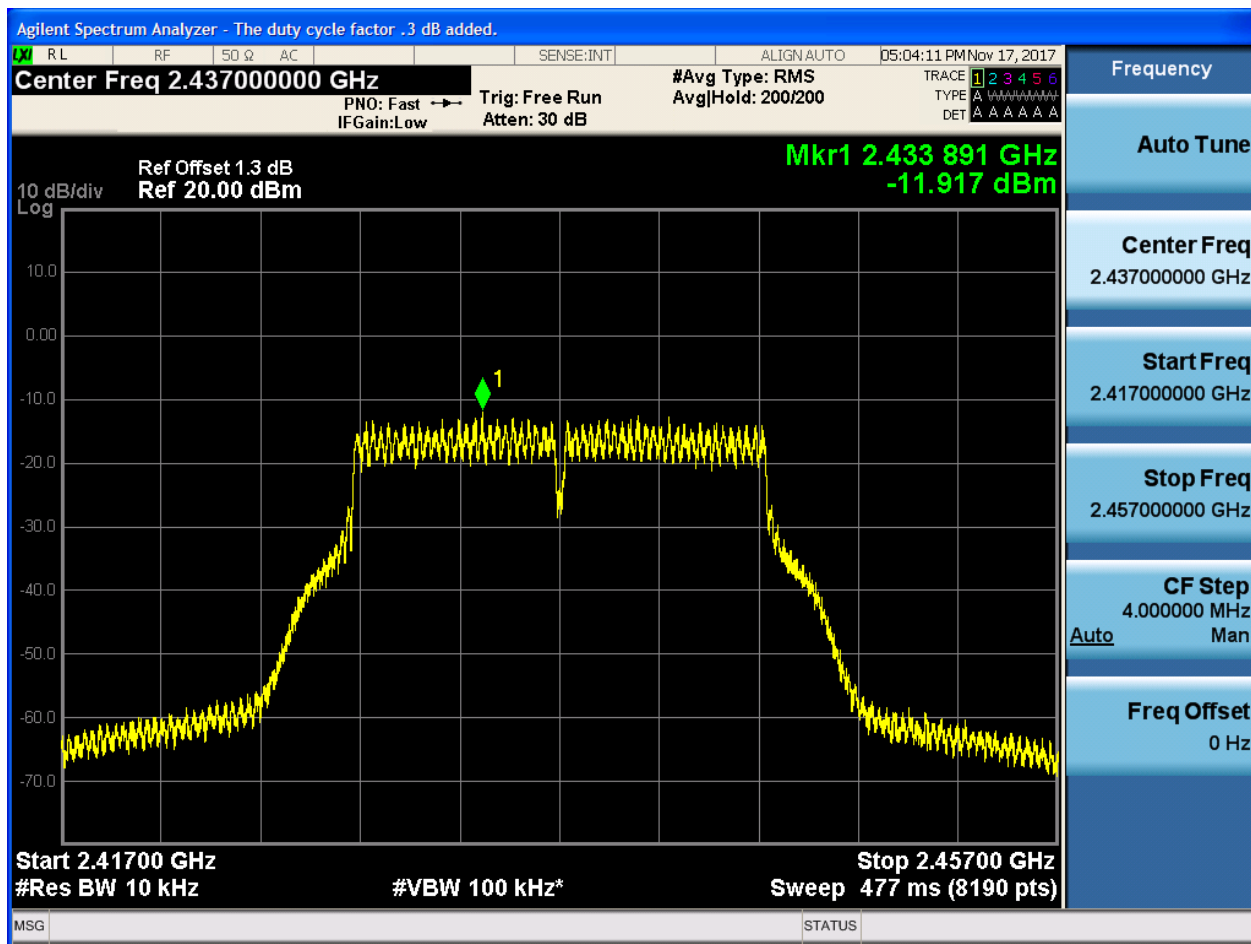


2.26 11G CDD__L@Ant 2



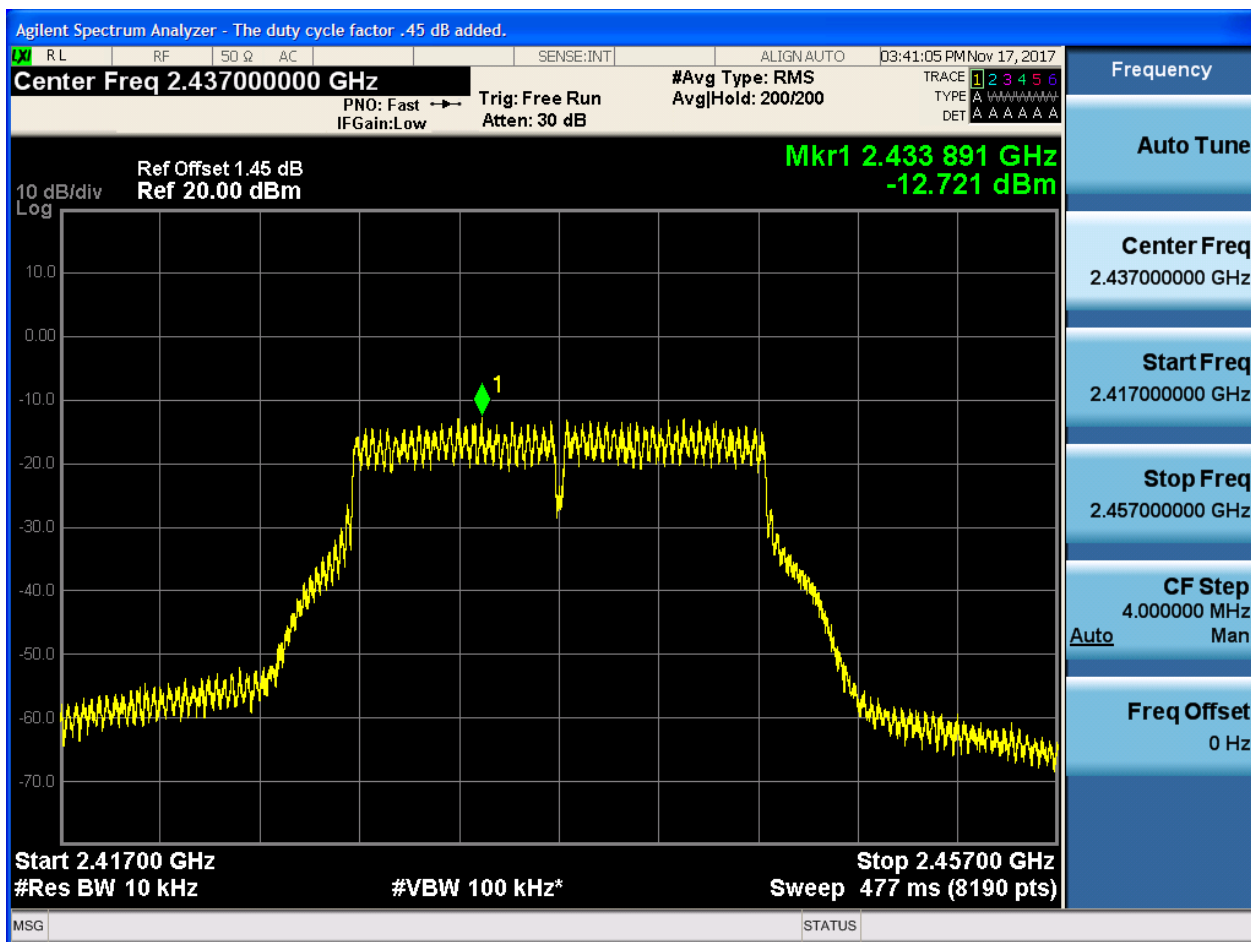


2.27 11G CDD__M@Ant 1



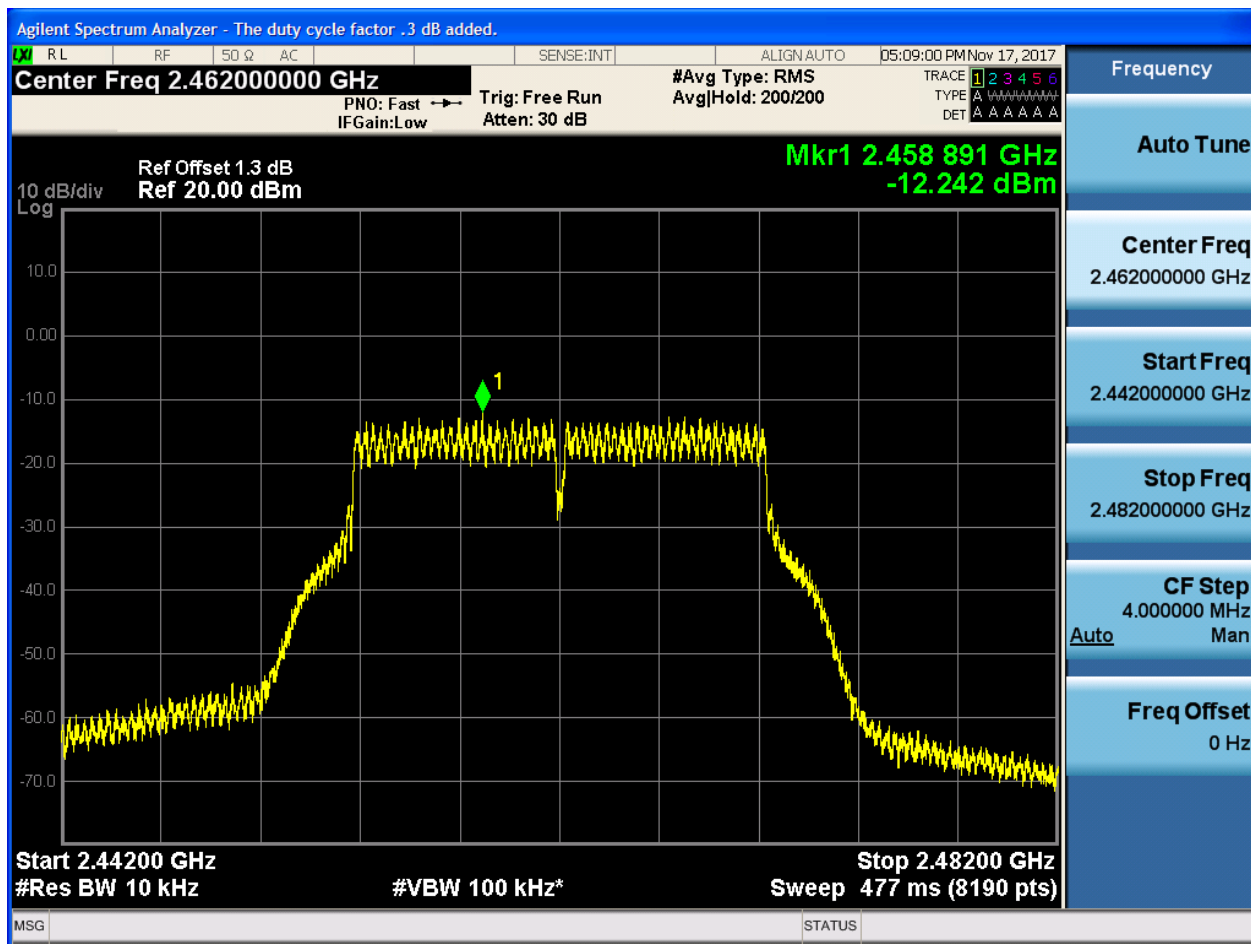


2.28 11G CDD__M@Ant 2



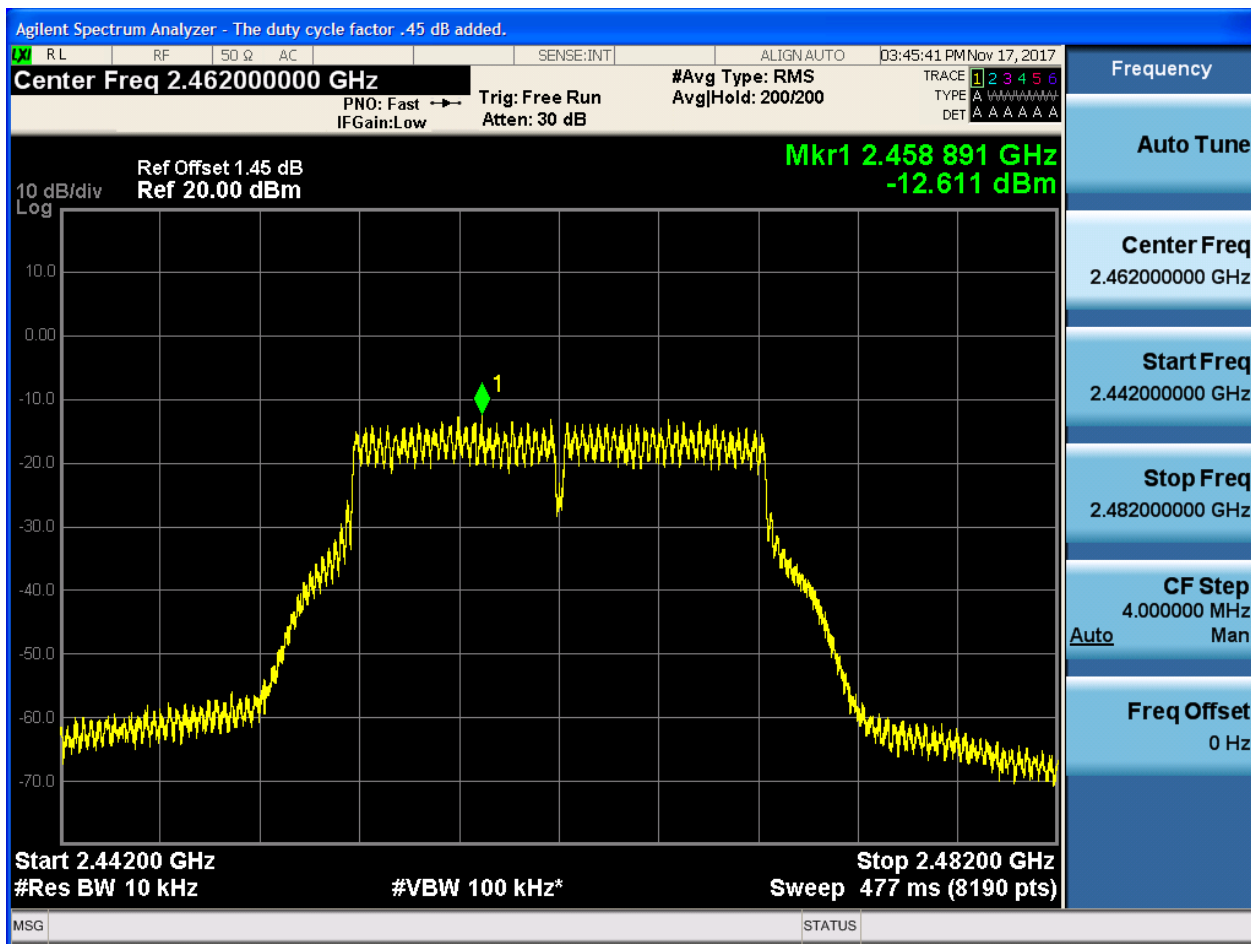


2.29 11G CDD__H@Ant 1





2.30 11G CDD__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	11.41	-40.73	pass
11B	L	2412	Ant 2	12.00	-33.30	pass
11B	H	2462	Ant 1	11.77	-47.14	pass
11B	H	2462	Ant 2	11.18	-49.41	pass
11G	L	2412	Ant 1	4.23	-37.84	pass
11G	L	2412	Ant 2	3.20	-38.22	pass
11G	H	2462	Ant 1	4.61	-43.80	pass
11G	H	2462	Ant 2	4.00	-44.59	pass
11N20	L	2412	Ant 1	2.99	-39.24	pass
11N20	L	2412	Ant 2	2.54	-39.87	pass
11N20	H	2462	Ant 1	2.66	-46.88	pass
11N20	H	2462	Ant 2	2.35	-48.97	pass
11N20m	L	2412	Ant 1	1.65	-41.15	pass
11N20m	L	2412	Ant 2	1.59	-41.47	pass
11N20m	H	2462	Ant 1	2.50	-48.59	pass
11N20m	H	2462	Ant 2	2.12	-47.31	pass
11G CDD	L	2412	Ant 1	3.01	-40.31	pass
11G CDD	L	2412	Ant 2	3.15	-39.69	pass
11G CDD	H	2462	Ant 1	4.04	-47.18	pass
11G CDD	H	2462	Ant 2	3.60	-45.63	pass



Part II - Test Plots

2.1 11B_L@Ant 1





2.2 11B_L@Ant 2





2.3 11B_H@Ant 1





2.4 11B_H@Ant 2





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 11:31:04 AM Nov 17, 2017

Center Freq 2.40000000 GHz Avg Type: Log-Pwr Avg|Hold: 10/10

PN0: Fast $\rightarrow$ Trig: Free Run IF Gain: Low Atten: 40 dB

TRACE 1 2 3 4 5 6
TYPE M W W W W W W W W W
DET P P P P P P P

Ref Offset 1 dB
Ref 30.00 dBm

Mkr2 2.400 00 GHz
-37.841 dBm

10 dB/div
Log

Start 2.38000 GHz Stop 2.42000 GHz
#Res BW 100 kHz #VBW 300 kHz #Sweep 100 ms (601 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.405 73 GHz	4.232 dBm			
2	N	1	f	2.400 00 GHz	-37.841 dBm			
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								

MSG STATUS

Frequency

Auto Tune

Center Freq
2.40000000 GHz

Start Freq
2.38000000 GHz

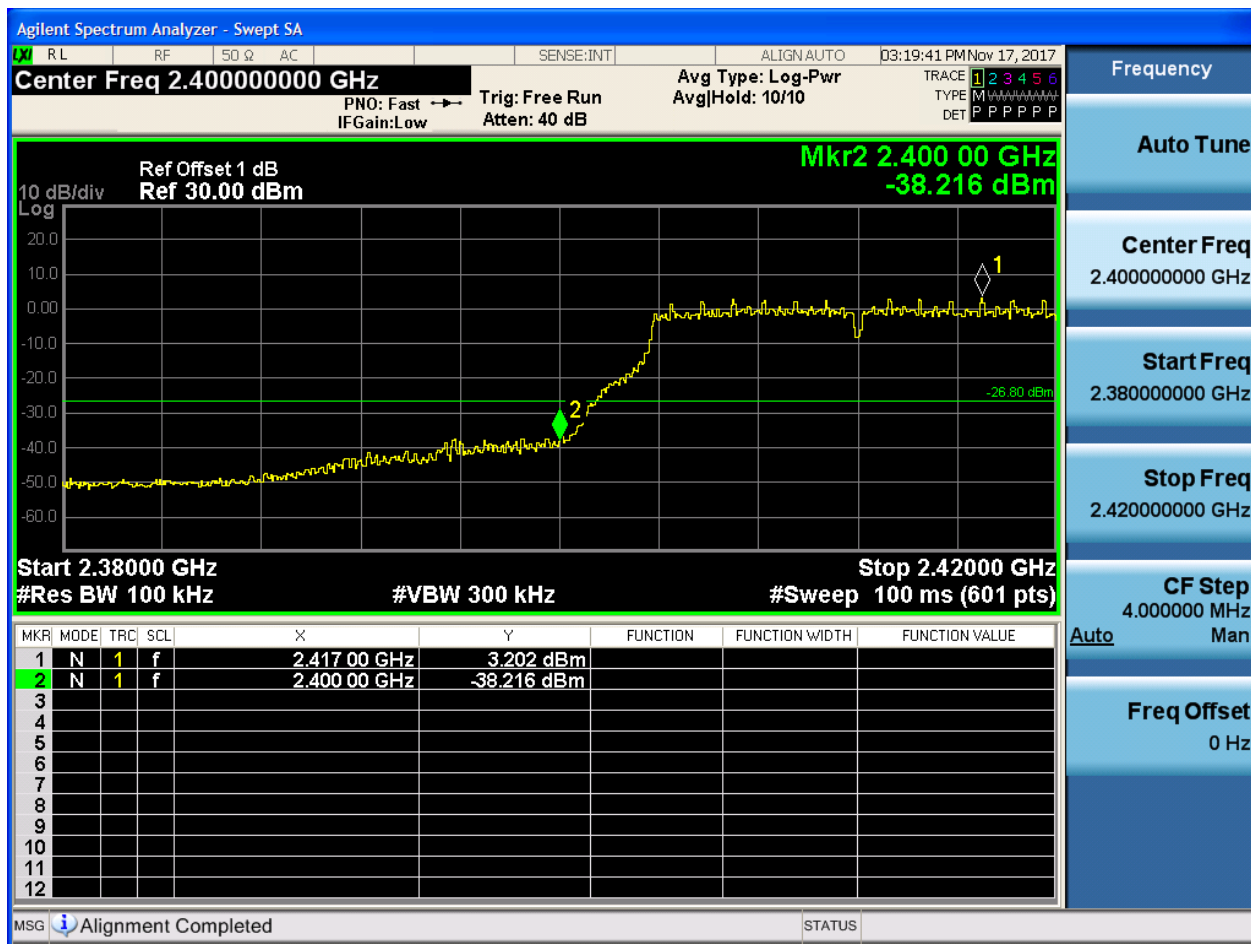
Stop Freq
2.42000000 GHz

CF Step
4.000000 MHz
Man

Freq Offset
0 Hz



2.6 11G_L@Ant 2





2.7 11G_H@Ant 1





2.8 11G_H@Ant 2





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN:AUTO 12:21:05 PM Nov 17, 2017

Center Freq 2.400000000 GHz Avg Type: Log-Pwr Avg/Hold: 10/10

PNO: Fast → Trig: Free Run IFGain: Low Atten: 40 dB

TRACE 1 2 3 4 5 6 TYPE M W W W W W W W W W DET P P P P P P

Ref Offset 1 dB Ref 30.00 dBm

Mkr2 2.400 00 GHz -39.242 dBm

10 dB/div Log

Start 2.38000 GHz Stop 2.42000 GHz

#Res BW 100 kHz #VBW 300 kHz #Sweep 100 ms (601 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.405 73 GHz	2.985 dBm			
2	N	1	f	2.400 00 GHz	-39.242 dBm			
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								

MSG STATUS

Frequency

Auto Tune

Center Freq
2.400000000 GHz

Start Freq
2.380000000 GHz

Stop Freq
2.420000000 GHz

CF Step
4.000000 MHz
Man

Freq Offset
0 Hz



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 02:27:32 PM Nov 17, 2017

Center Freq 2.400000000 GHz Avg Type: Log-Pwr Avg/Hold: 10/10

PNO: Fast Trig: Free Run IF Gain: Low Atten: 40 dB

TRACE 1 2 3 4 5 6
TYPE M W W W W W W W W W
DET P P P P P P

Ref Offset 1 dB
Ref 30.00 dBm

Mkr2 2.400 00 GHz
-39.865 dBm

10 dB/div
Log

Start 2.38000 GHz Stop 2.42000 GHz
#Res BW 100 kHz #VBW 300 kHz #Sweep 100 ms (601 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.410 73 GHz	2.537 dBm			
2	N	1	f	2.400 00 GHz	-39.865 dBm			
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								

MSG STATUS

Frequency

Auto Tune

Center Freq
2.400000000 GHz

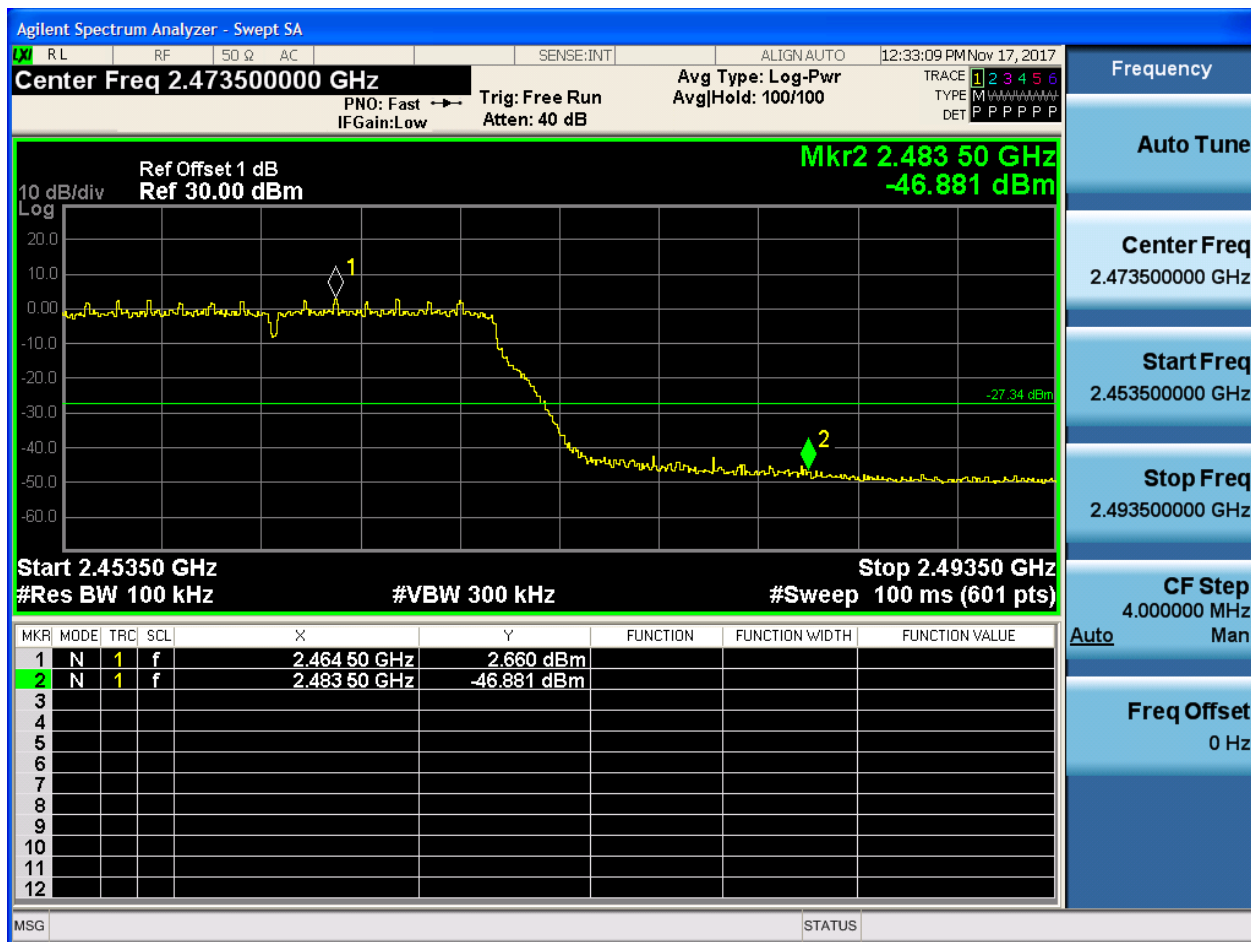
Start Freq
2.380000000 GHz

Stop Freq
2.420000000 GHz

CF Step
4.000000 MHz
Man

Freq Offset
0 Hz

2.11 11N20_H@Ant 1





2.12 11N20_H@Ant 2





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 05:19:18 PM Nov 17, 2017

Center Freq 2.40000000 GHz Avg Type: Log-Pwr Mkr2 2.400 00 GHz
 PNO: Fast Trig: Free Run Atten: 40 dB Avg|Hold: 10/10
 IF Gain: Low

Ref Offset 1 dB Ref 30.00 dBm

10 dB/div Log

Start 2.38000 GHz Stop 2.42000 GHz
 #Res BW 100 kHz #VBW 300 kHz #Sweep 100 ms (601 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.405 73 GHz	1.648 dBm			
2	N	1	f	2.400 00 GHz	-41.149 dBm			
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								

MSG STATUS

Frequency

Auto Tune

Center Freq 2.40000000 GHz

Start Freq 2.38000000 GHz

Stop Freq 2.42000000 GHz

CF Step 4.00000 MHz

Auto Man

Freq Offset 0 Hz



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 03:56:19 PM Nov 17, 2017

Center Freq 2.40000000 GHz Avg Type: Log-Pwr Mkr2 2.400 00 GHz
 PNO: Fast Trig: Free Run Atten: 40 dB Avg|Hold: 10/10
 IF Gain: Low

Ref Offset 1 dB Ref 30.00 dBm

10 dB/div Log

Start 2.38000 GHz Stop 2.42000 GHz
 #Res BW 100 kHz #VBW 300 kHz #Sweep 100 ms (601 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.414 47 GHz	1.591 dBm			
2	N	1	f	2.400 00 GHz	-41.466 dBm			
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								

MSG STATUS

Frequency Auto Tune Center Freq 2.40000000 GHz Start Freq 2.38000000 GHz Stop Freq 2.42000000 GHz CF Step 4.000000 MHz Freq Offset 0 Hz



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 05:29:44 PM Nov 17, 2017

Center Freq 2.473500000 GHz Avg Type: Log-Pwr Avg/Hold: 100/100

PNO: Fast → Trig: Free Run IF Gain: Low Atten: 40 dB

TRACE 1 2 3 4 5 6
TYPE M W W W W W W W W W
DET P P P P P P

Ref Offset 1 dB
Ref 30.00 dBm

**Mkr2 2.483 50 GHz
-48.592 dBm**

10 dB/div
Log

Start 2.45350 GHz Stop 2.49350 GHz
#Res BW 100 kHz #VBW 300 kHz #Sweep 100 ms (601 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.466 97 GHz	2.500 dBm			
2	N	1	f	2.483 50 GHz	-48.592 dBm			
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								

MSG STATUS

Frequency

Auto Tune

Center Freq
2.473500000 GHz

Start Freq
2.453500000 GHz

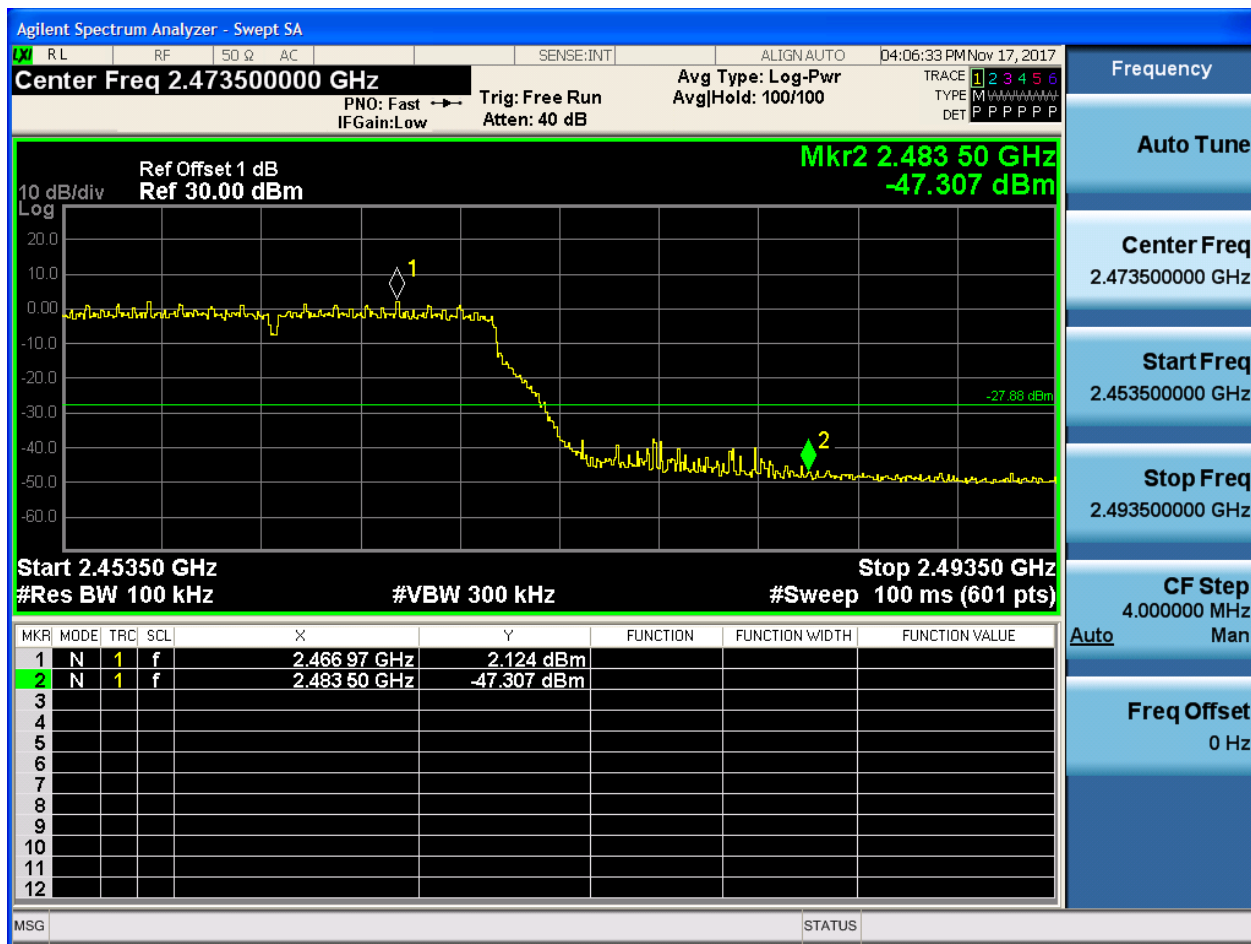
Stop Freq
2.493500000 GHz

CF Step
4.000000 MHz
Man

Freq Offset
0 Hz

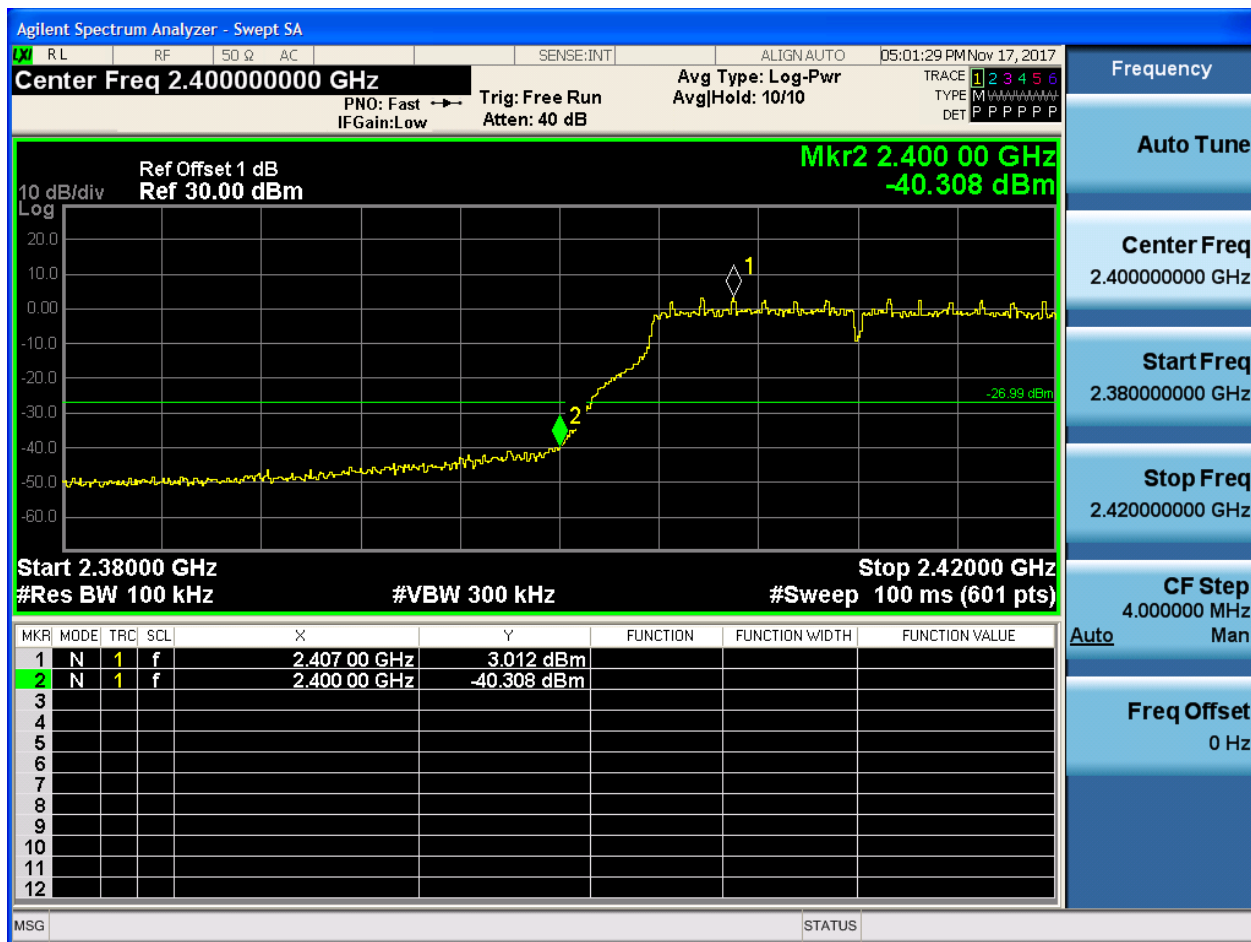


2.16 11N20m_H@Ant 2



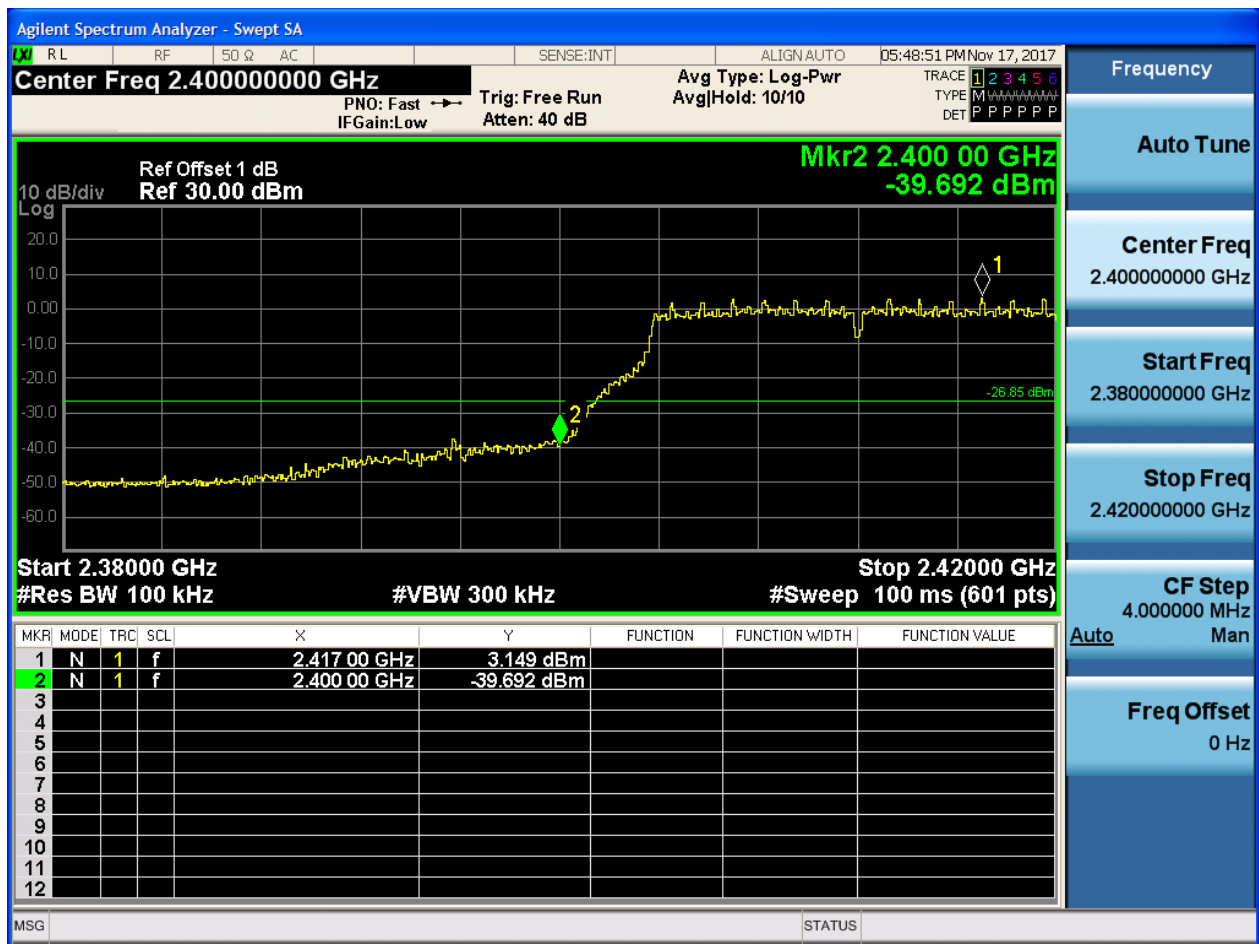


2.17 11G CDD__L@Ant 1





2.18 11G CDD__L@Ant 2





2.19 11G CDD__H@Ant 1





2.20 11G CDD__H@Ant 2



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" refers 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 $RBWCF [dB] = 10 \times \lg(100 [kHz]/\text{narrower RBW} [kHz])$. 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	11.01	<limit	pass
11B	L	2412	Ant 2	11.95	<limit	pass
11B	M	2437	Ant 1	11.52	<limit	pass
11B	M	2437	Ant 2	11.39	<limit	pass
11B	H	2462	Ant 1	11.63	<limit	pass
11B	H	2462	Ant 2	11.44	<limit	pass
11G	L	2412	Ant 1	4.40	<limit	pass
11G	L	2412	Ant 2	3.53	<limit	pass
11G	M	2437	Ant 1	4.88	<limit	pass
11G	M	2437	Ant 2	3.63	<limit	pass
11G	H	2462	Ant 1	5.07	<limit	pass
11G	H	2462	Ant 2	4.28	<limit	pass
11N20	L	2412	Ant 1	3.18	<limit	pass
11N20	L	2412	Ant 2	3.14	<limit	pass
11N20	M	2437	Ant 1	3.20	<limit	pass
11N20	M	2437	Ant 2	2.41	<limit	pass
11N20	H	2462	Ant 1	3.17	<limit	pass

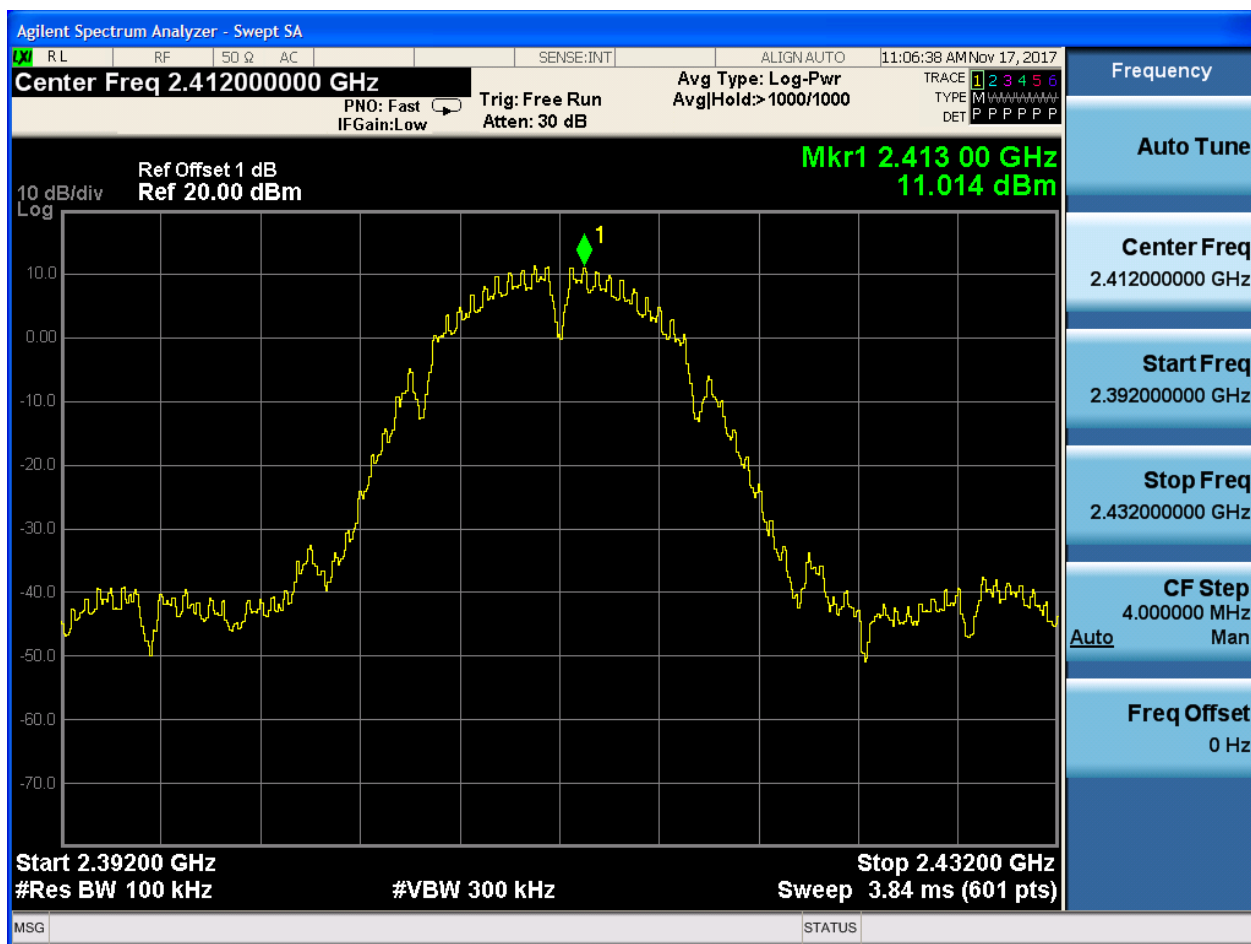
Test Mode	Test Channel	Frequency[MHz]	Ant	Pref[dBm]	Puw[dBm]	Verdict
11N20	H	2462	Ant 2	2.11	<limit	pass
11N20m	L	2412	Ant 1	1.94	<limit	pass
11N20m	L	2412	Ant 2	1.83	<limit	pass
11N20m	M	2437	Ant 1	3.00	<limit	pass
11N20m	M	2437	Ant 2	2.25	<limit	pass
11N20m	H	2462	Ant 1	2.79	<limit	pass
11N20m	H	2462	Ant 2	2.21	<limit	pass
11G CDD	L	2412	Ant 1	3.29	<limit	pass
11G CDD	L	2412	Ant 2	3.54	<limit	pass
11G CDD	M	2437	Ant 1	4.28	<limit	pass
11G CDD	M	2437	Ant 2	3.89	<limit	pass
11G CDD	H	2462	Ant 1	4.23	<limit	pass
11G CDD	H	2462	Ant 2	3.73	<limit	pass



Part II - Test Plots

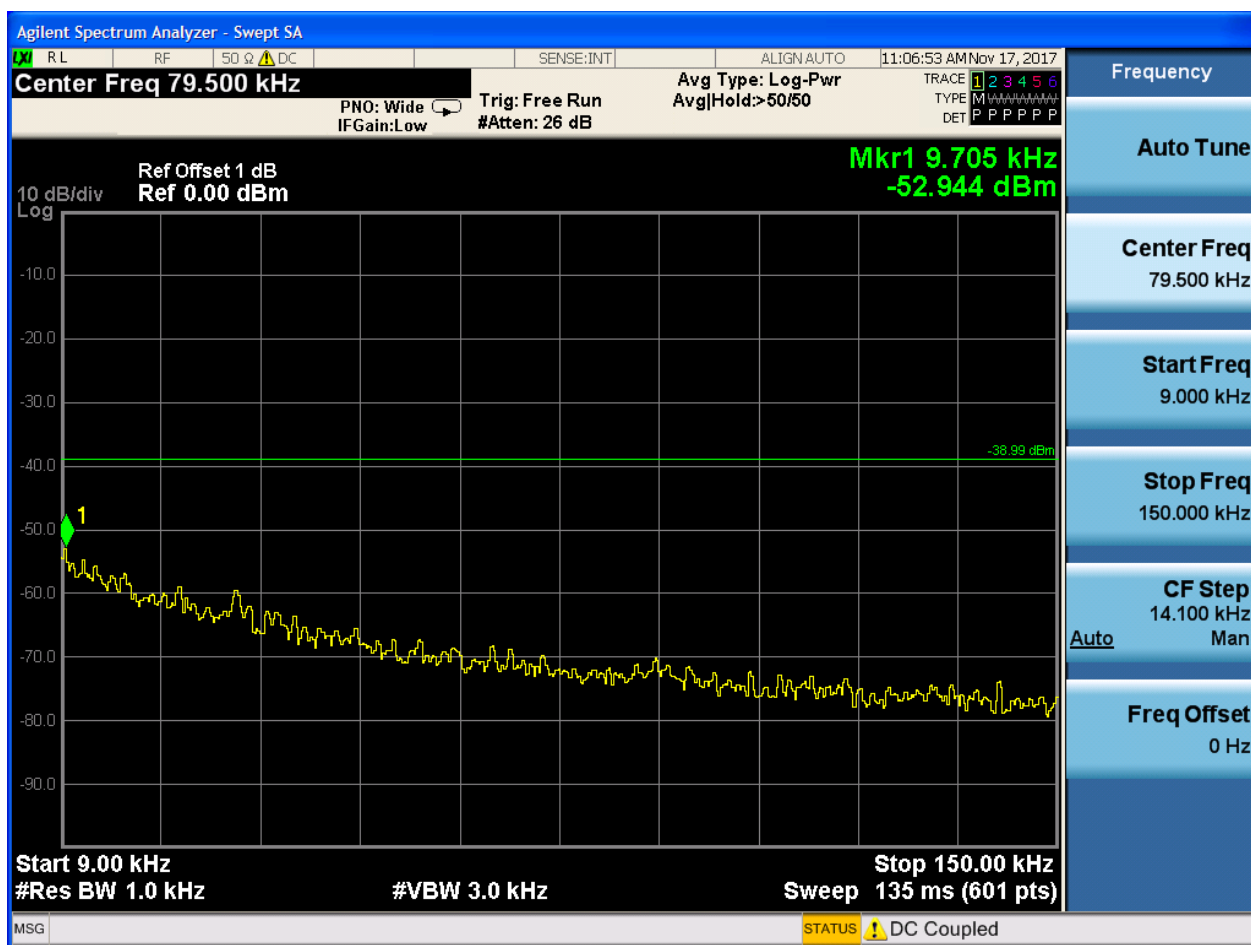
2.1 11B_L@Ant 1

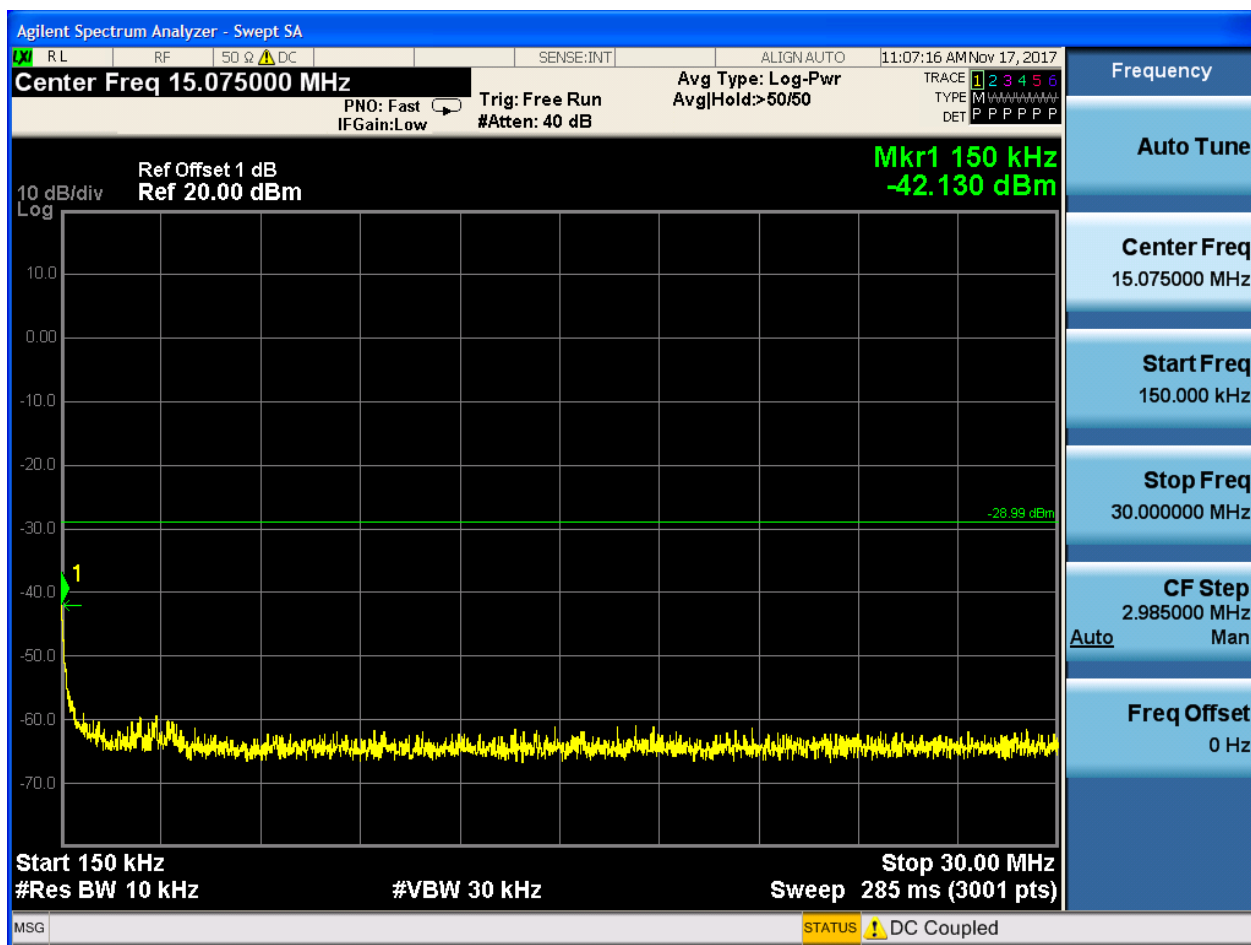
Pref:

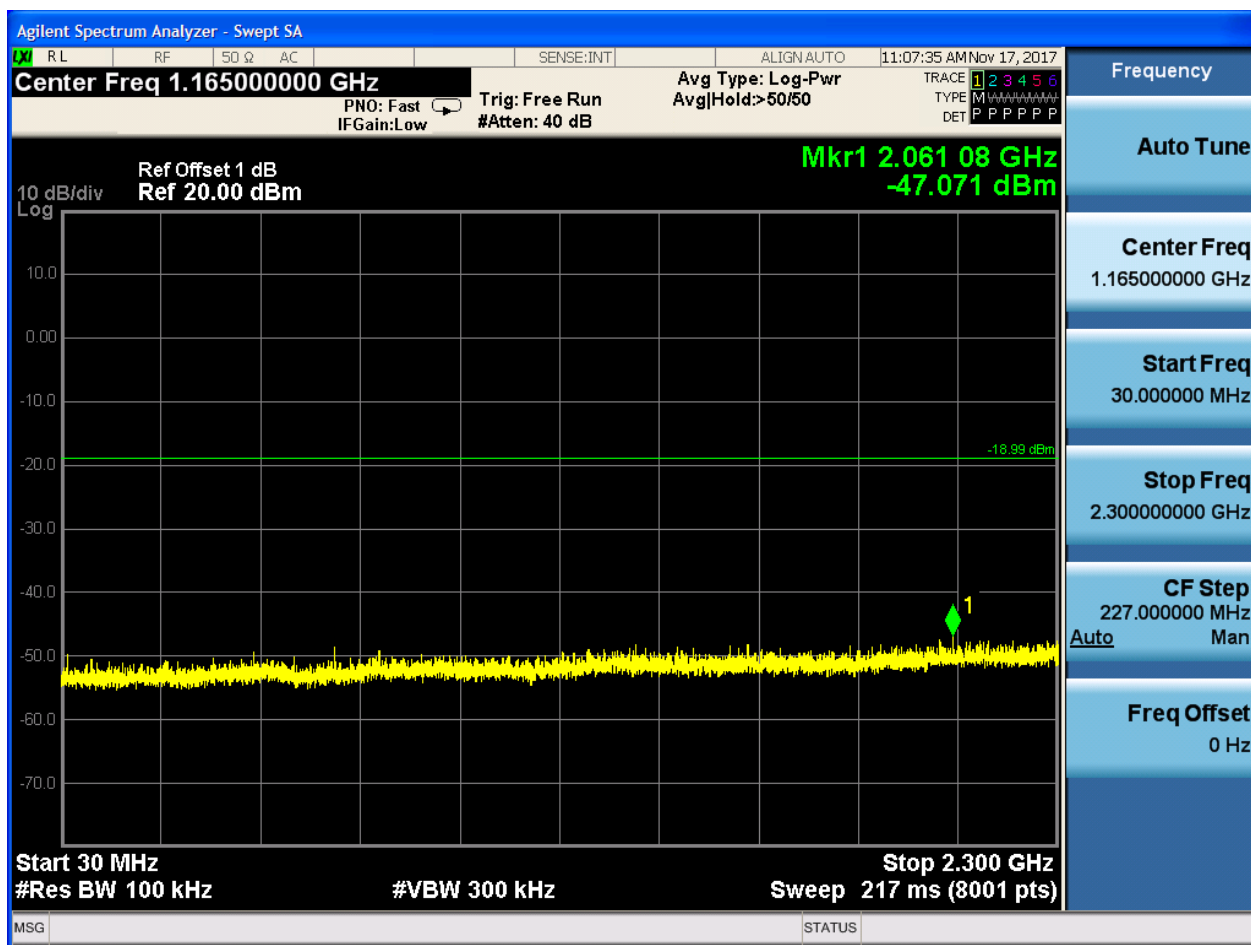


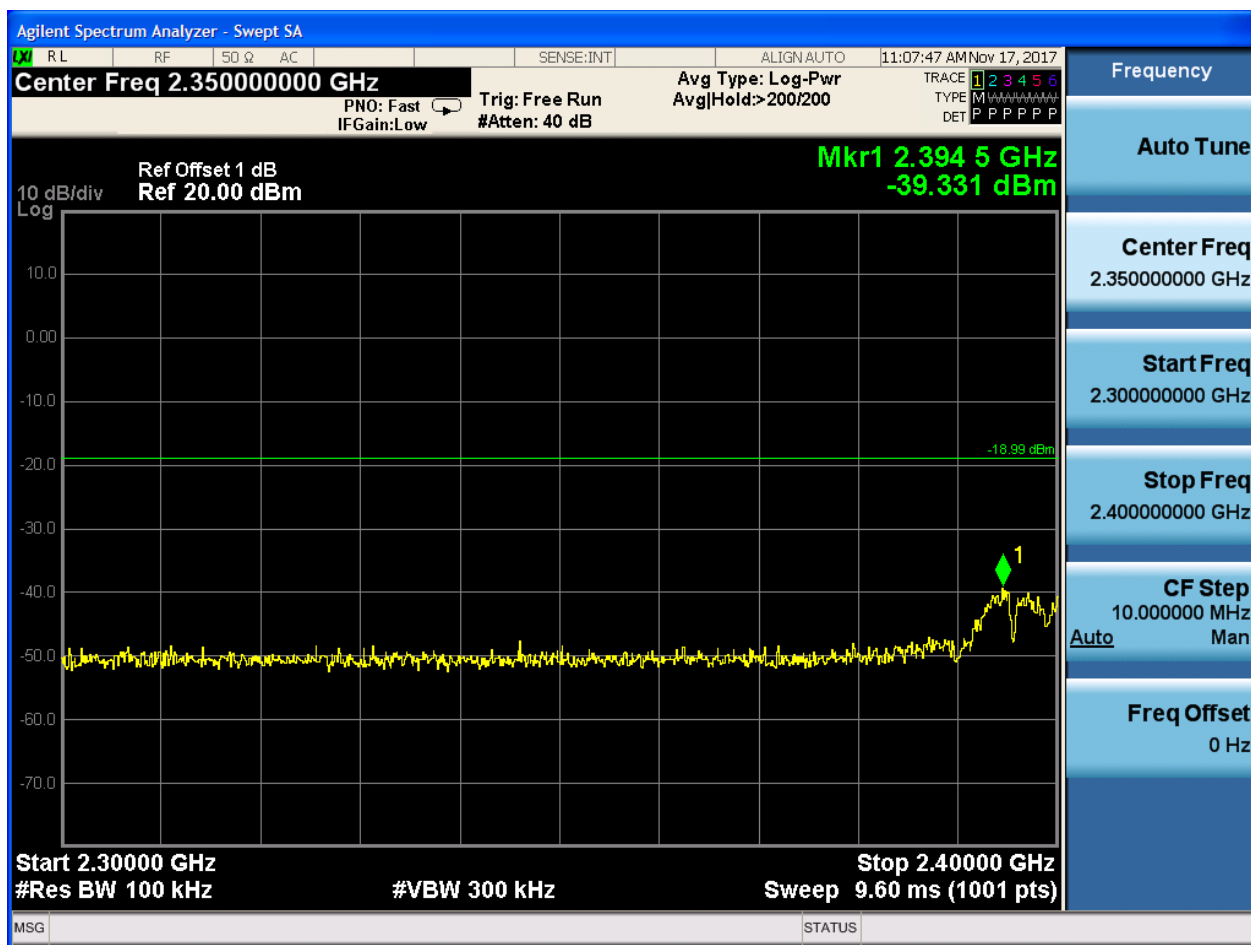


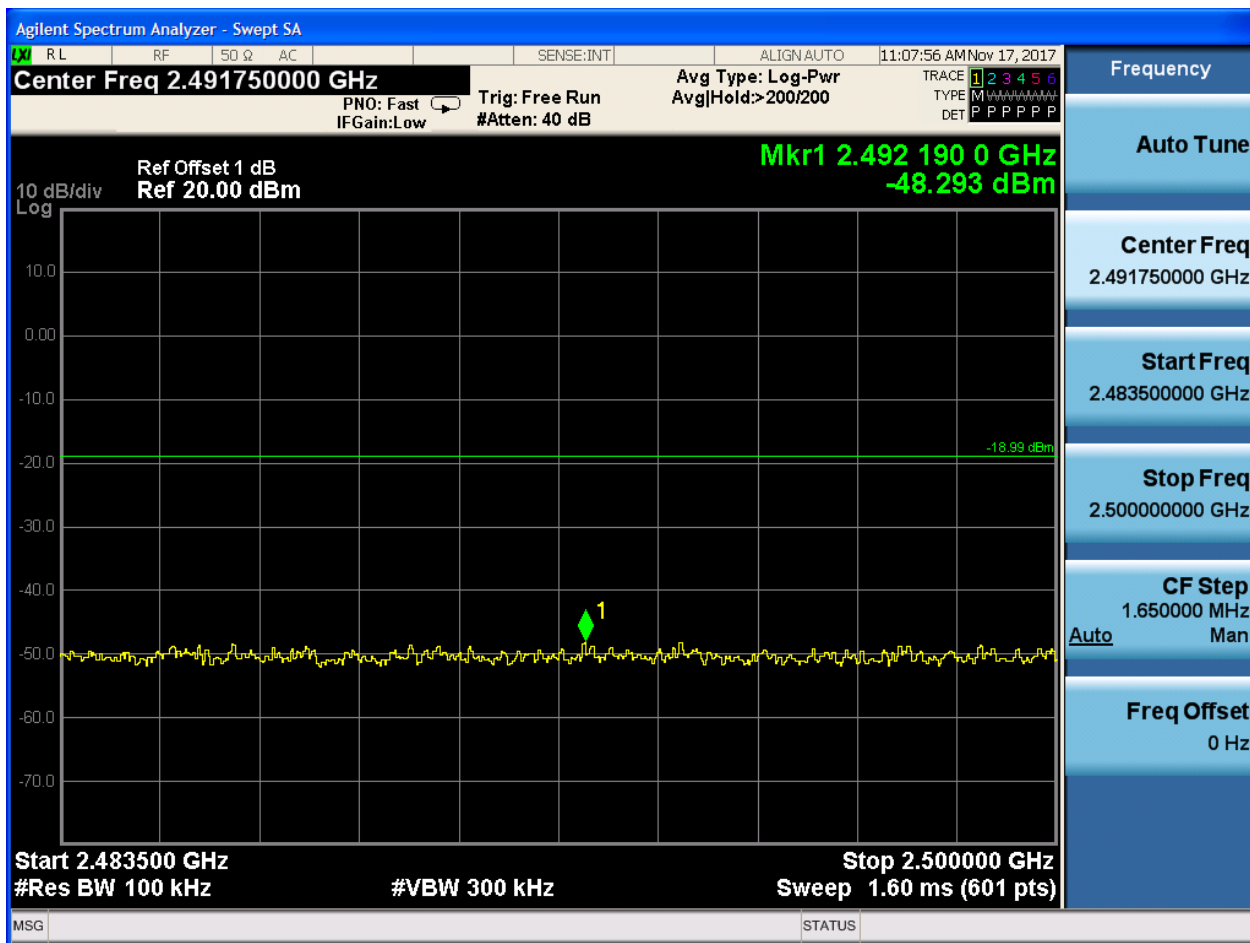
Puw:

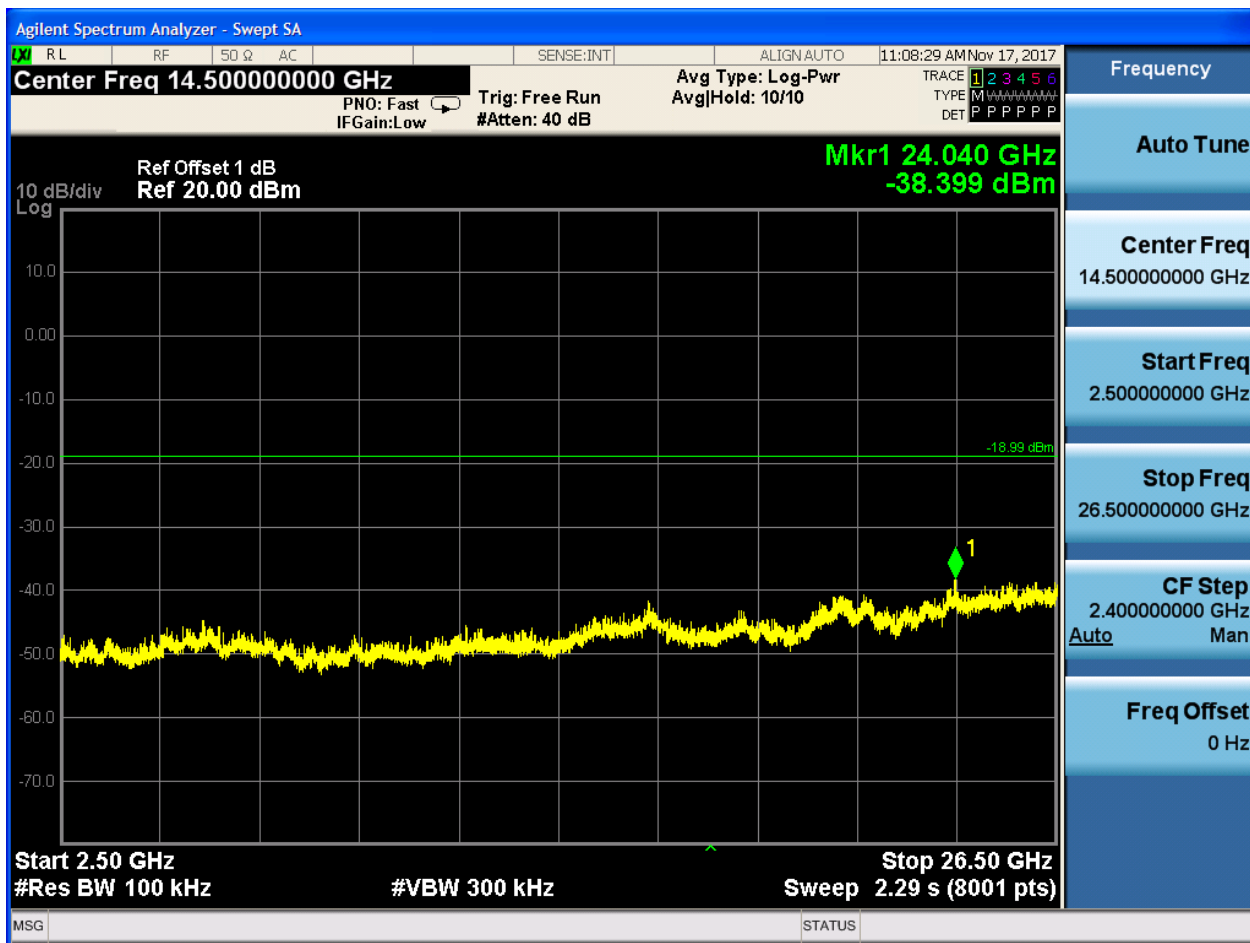








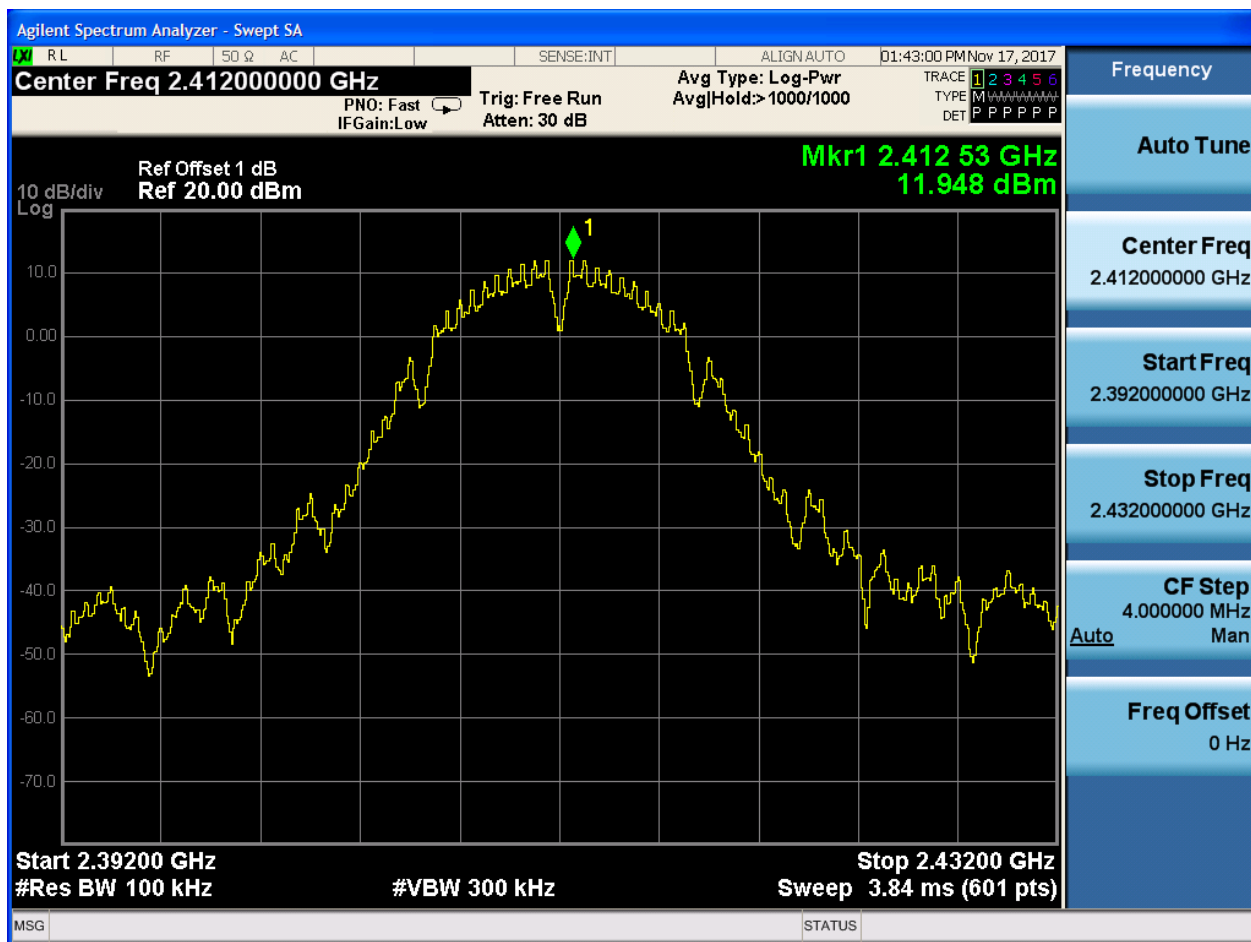






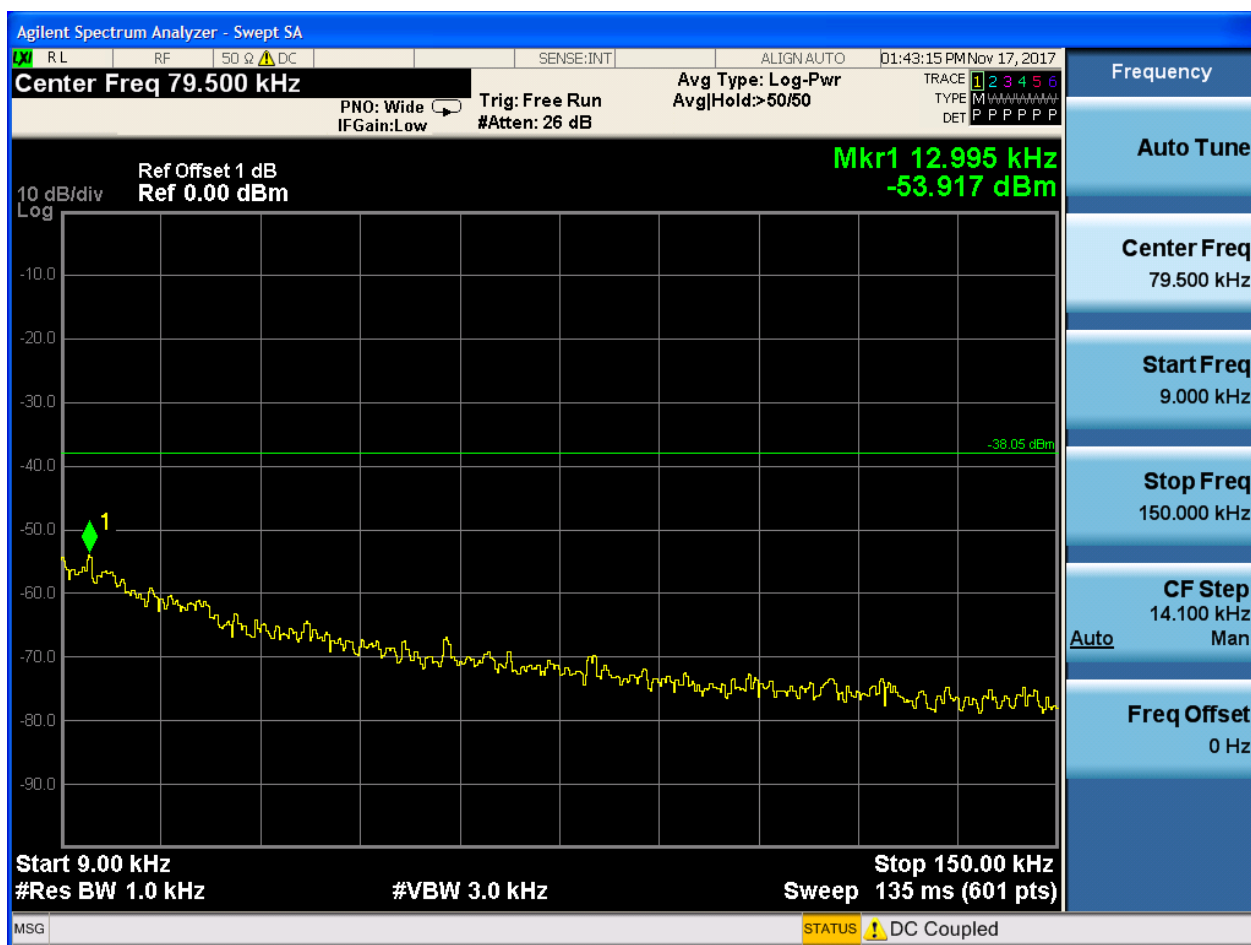
2.2 11B_L@Ant 2

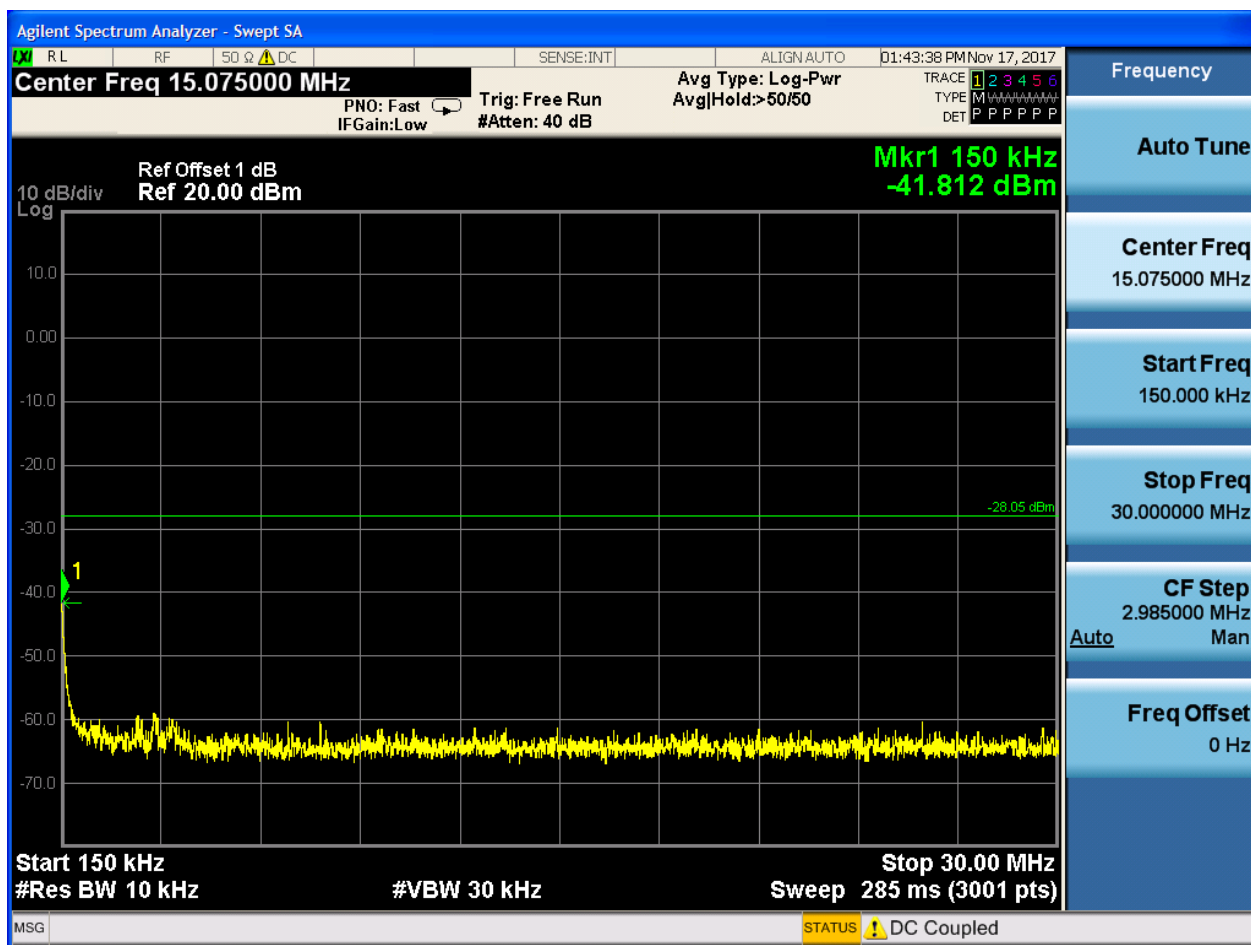
Pref:

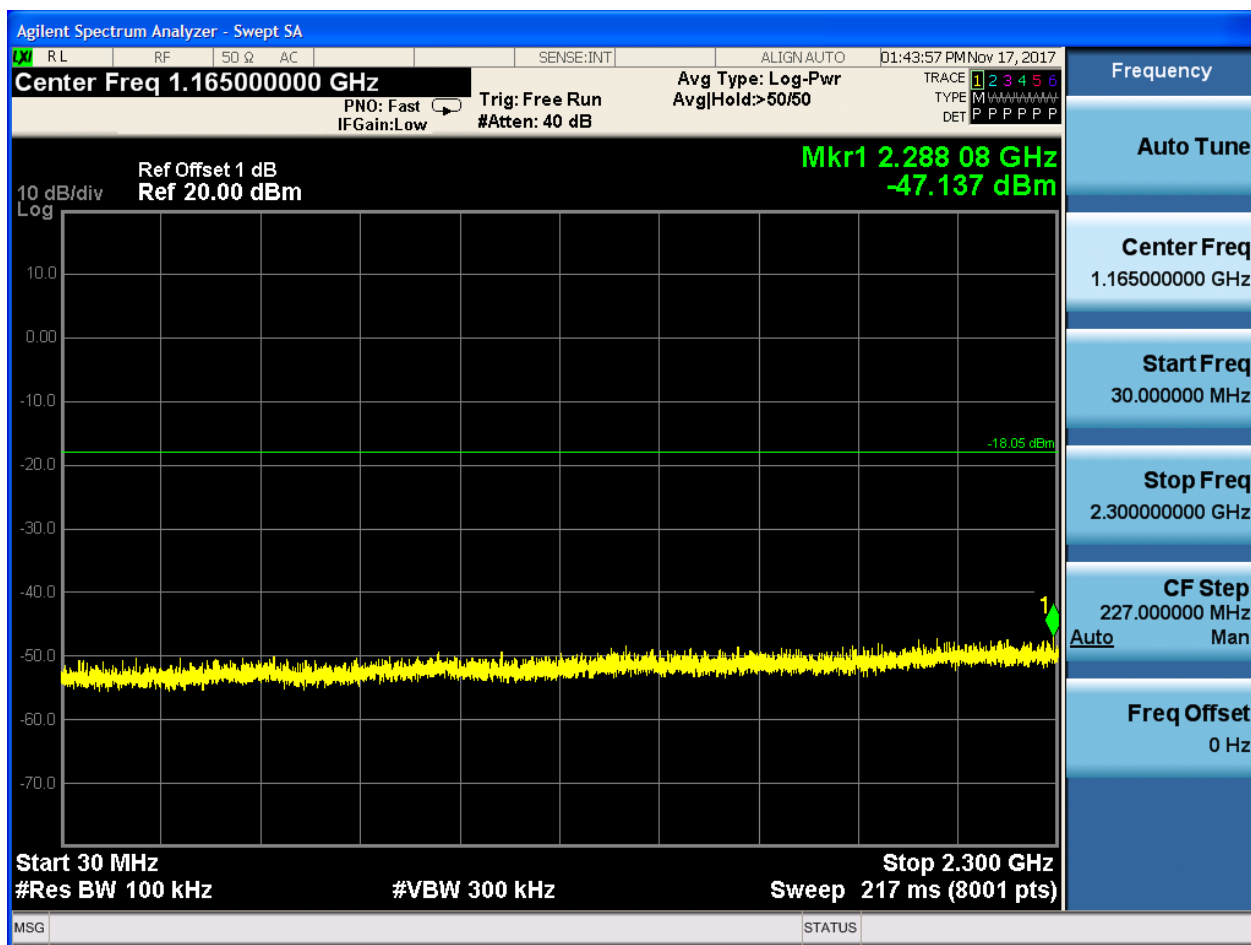


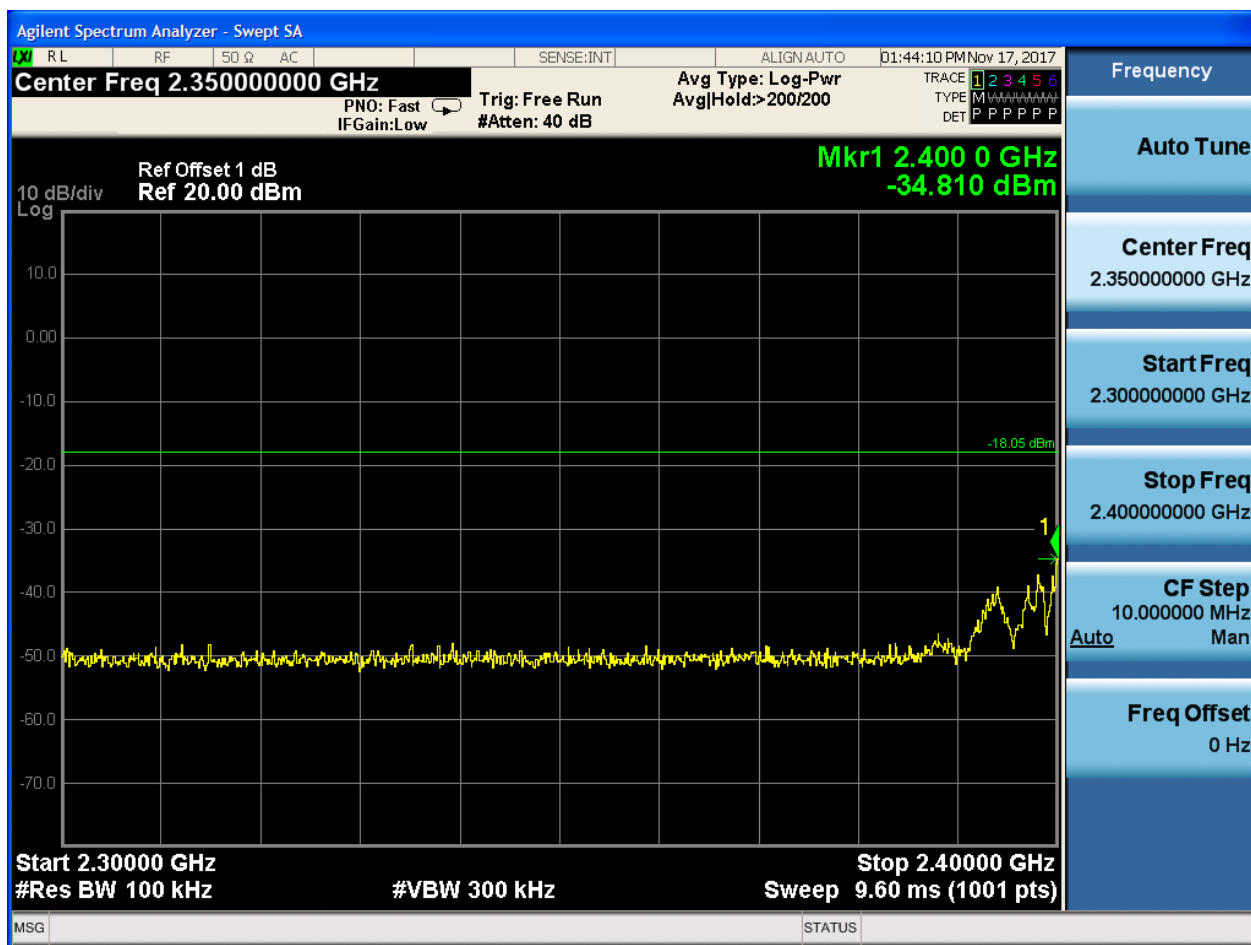


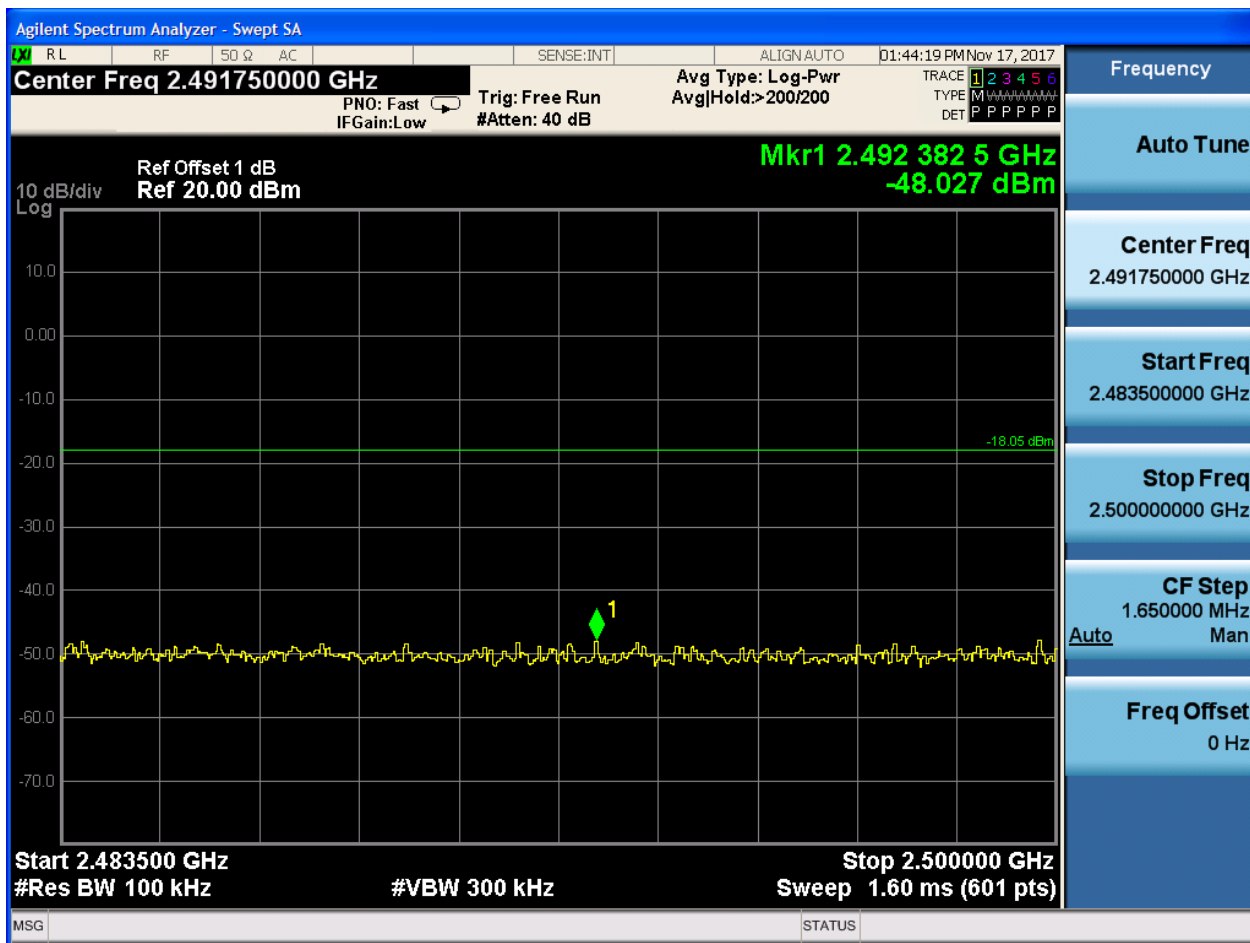
Puw:

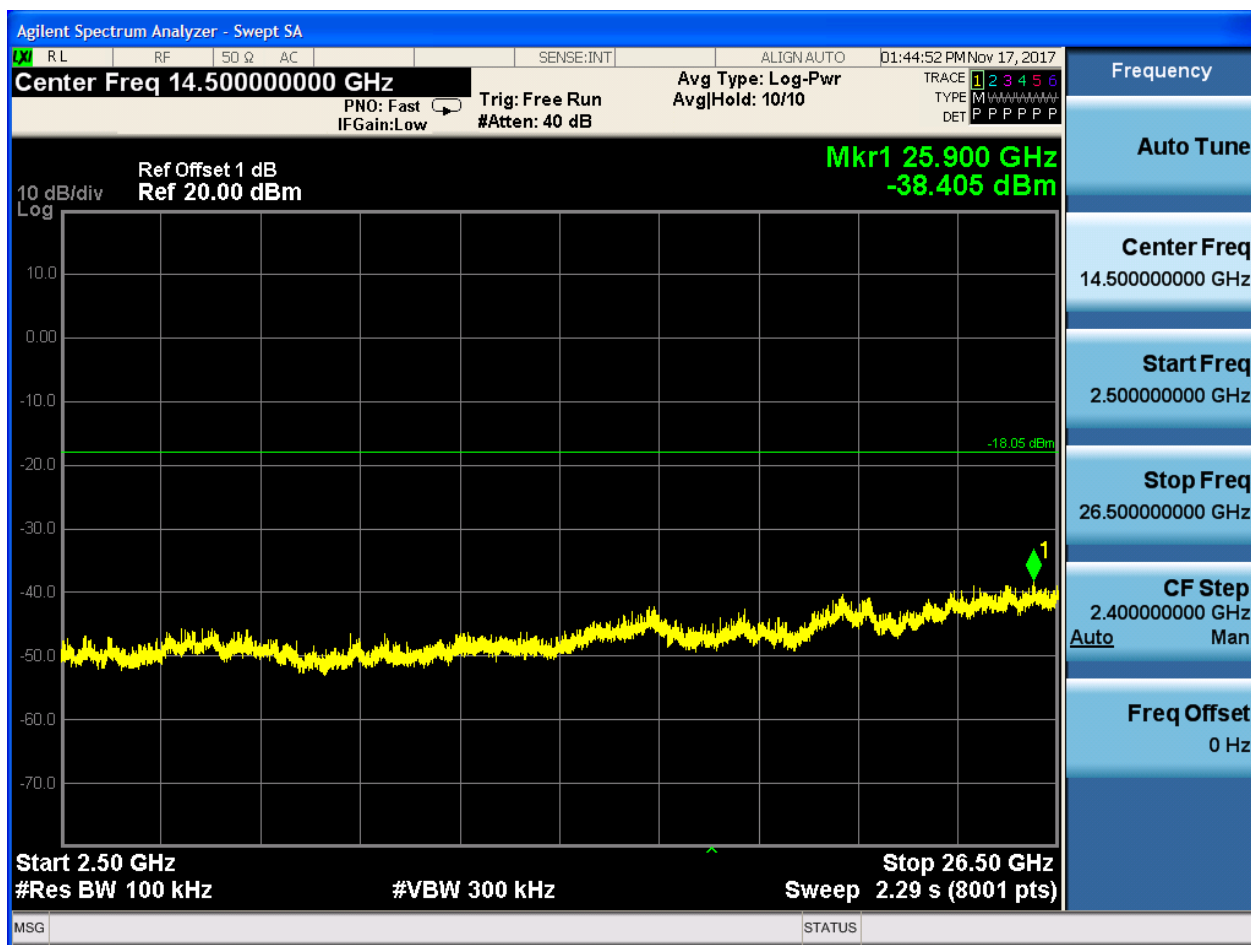








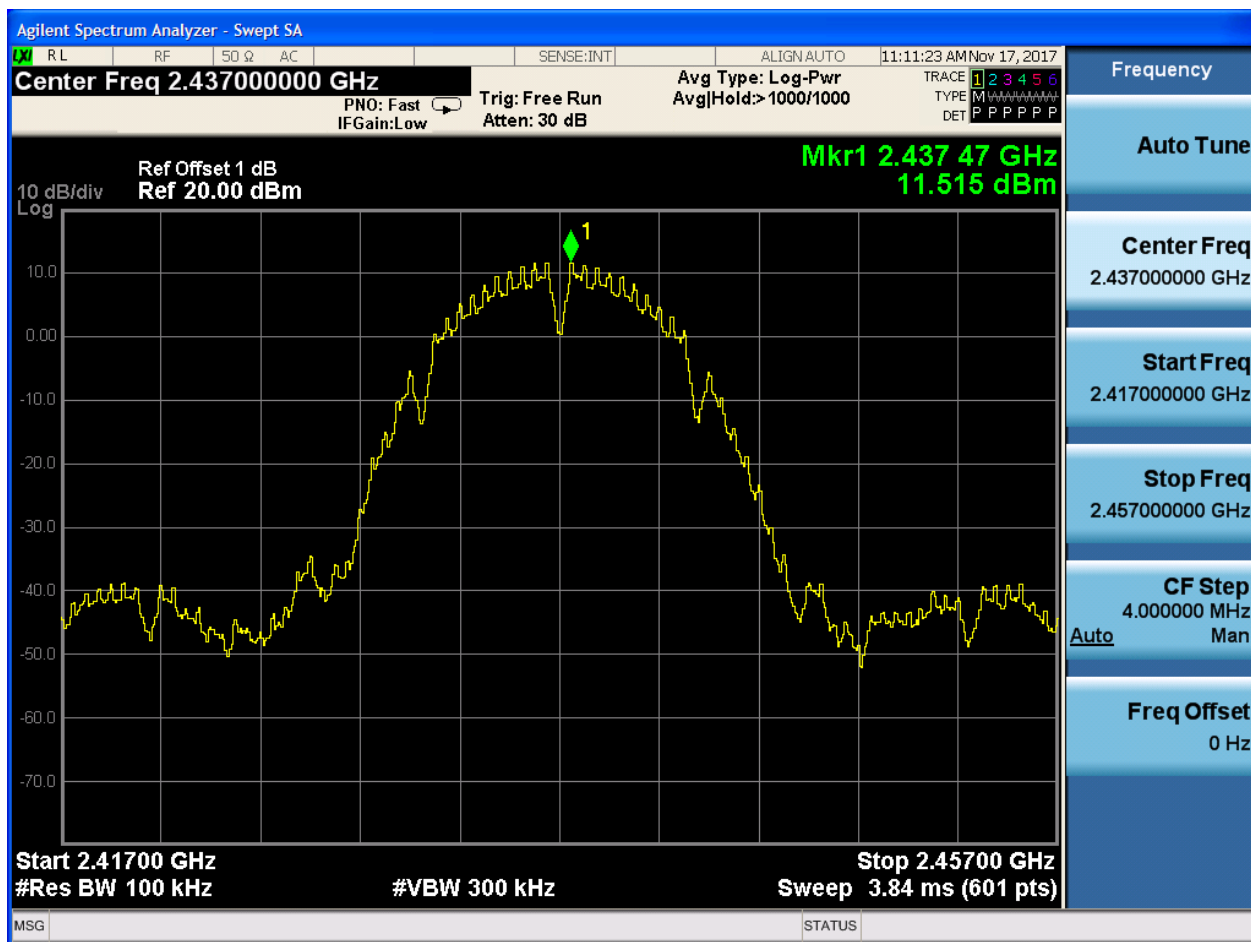






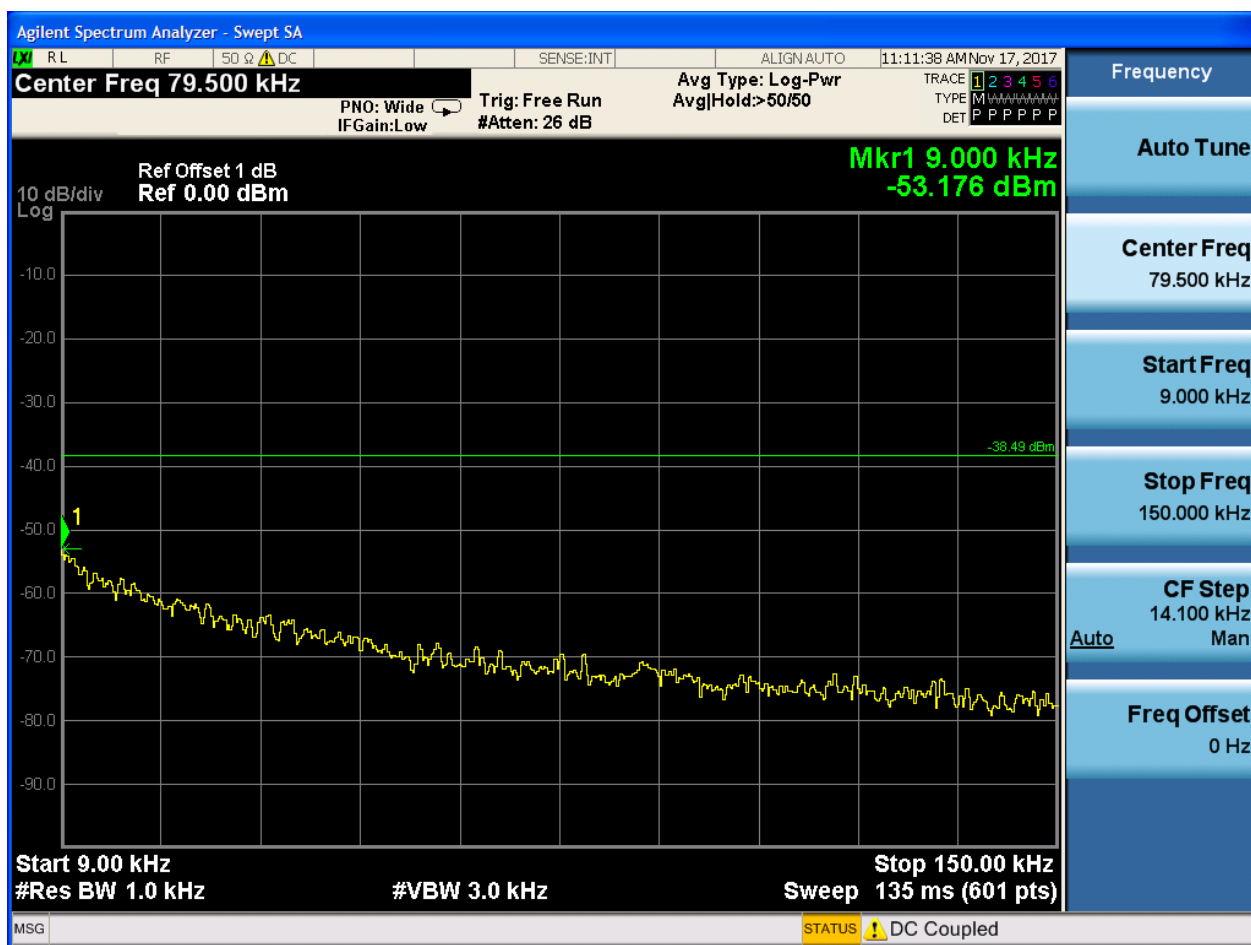
2.3 11B_M@Ant 1

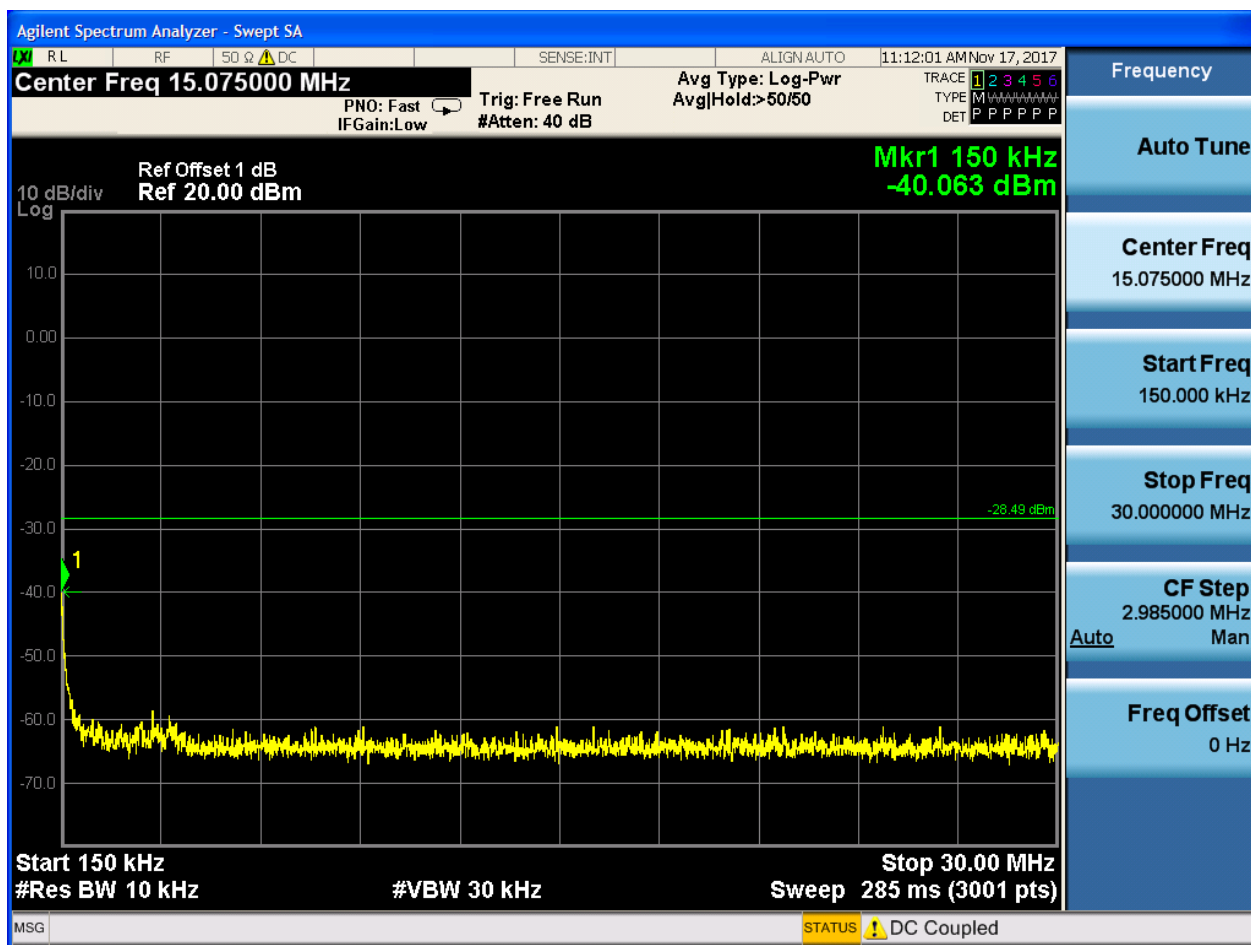
Pref:

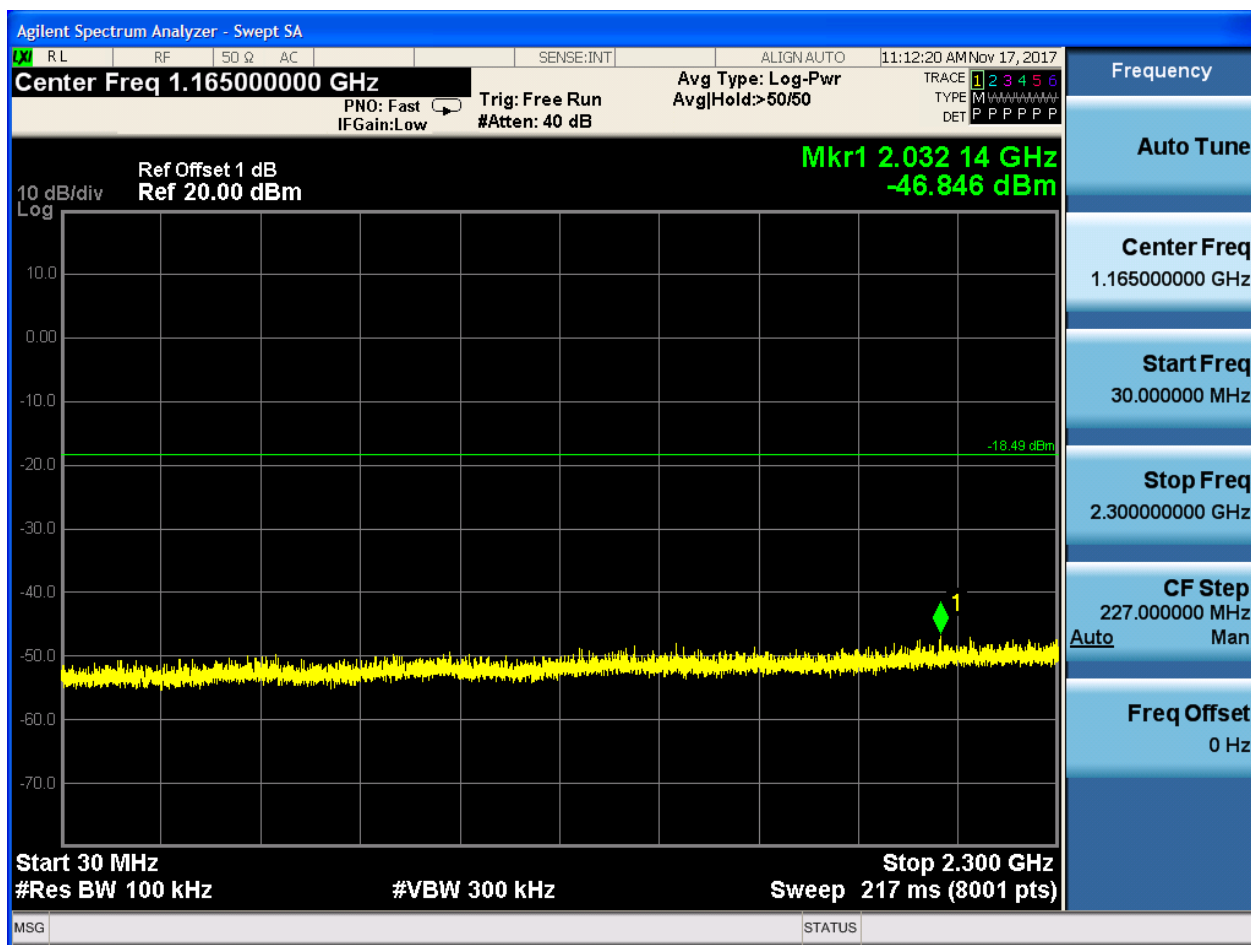


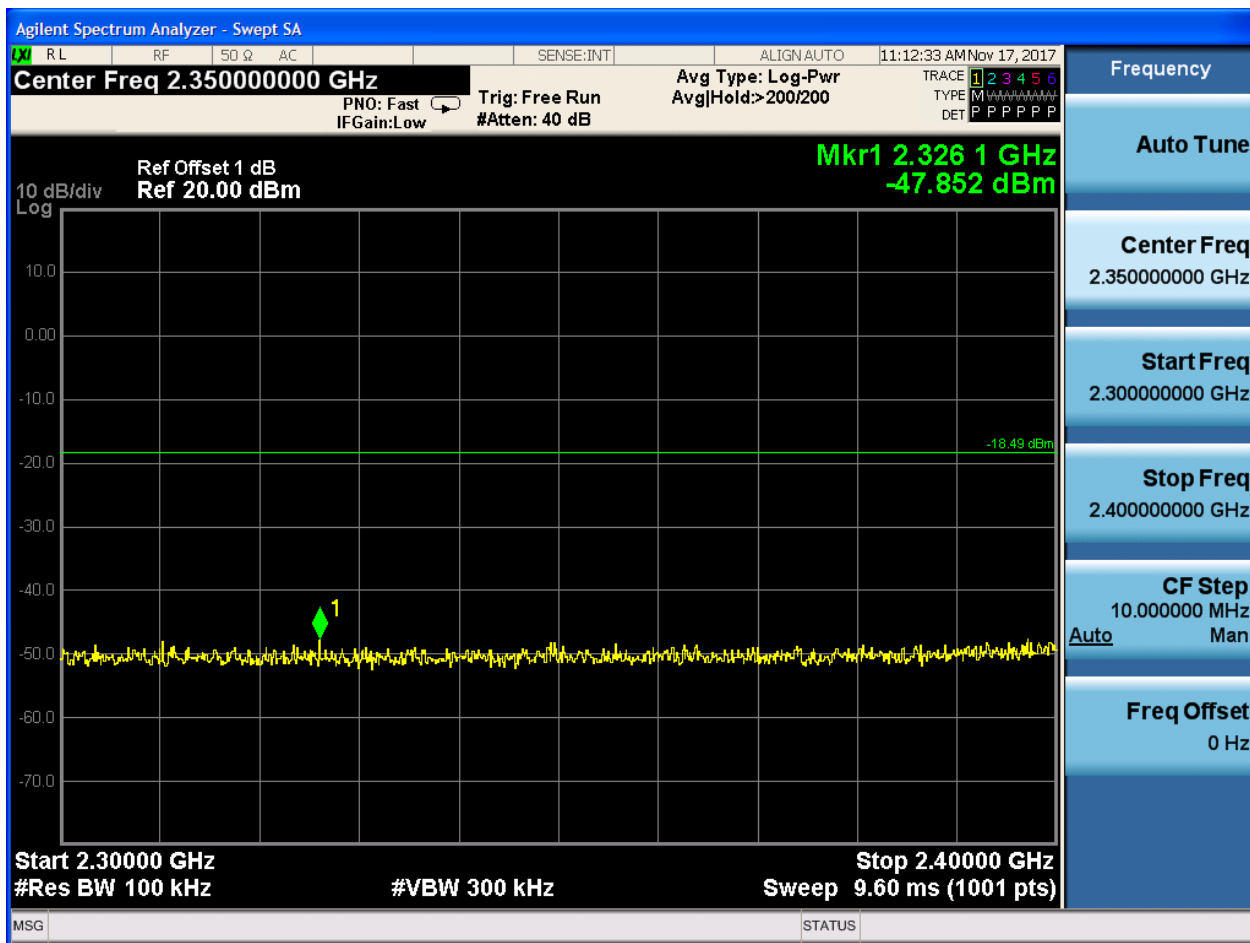


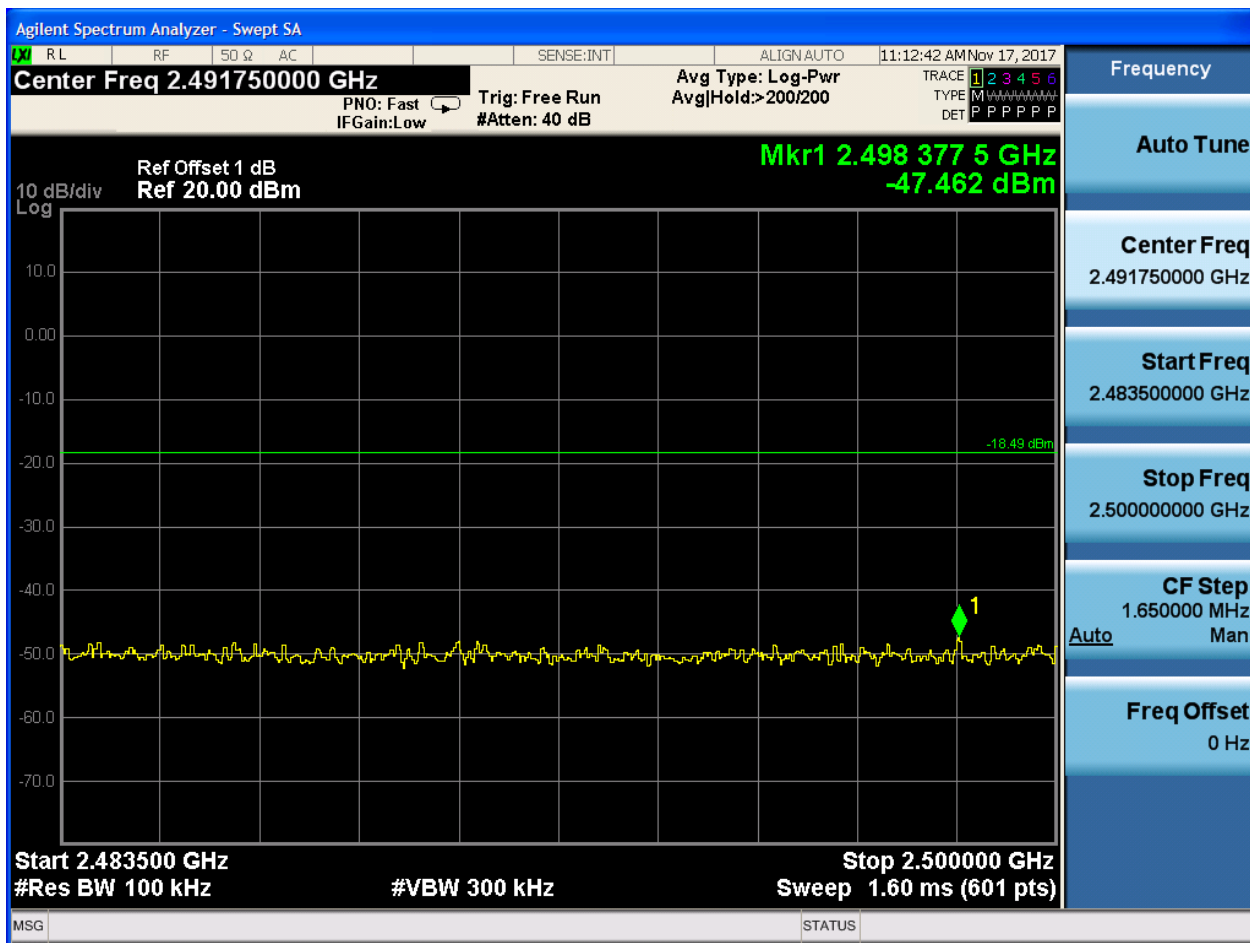
Puw:

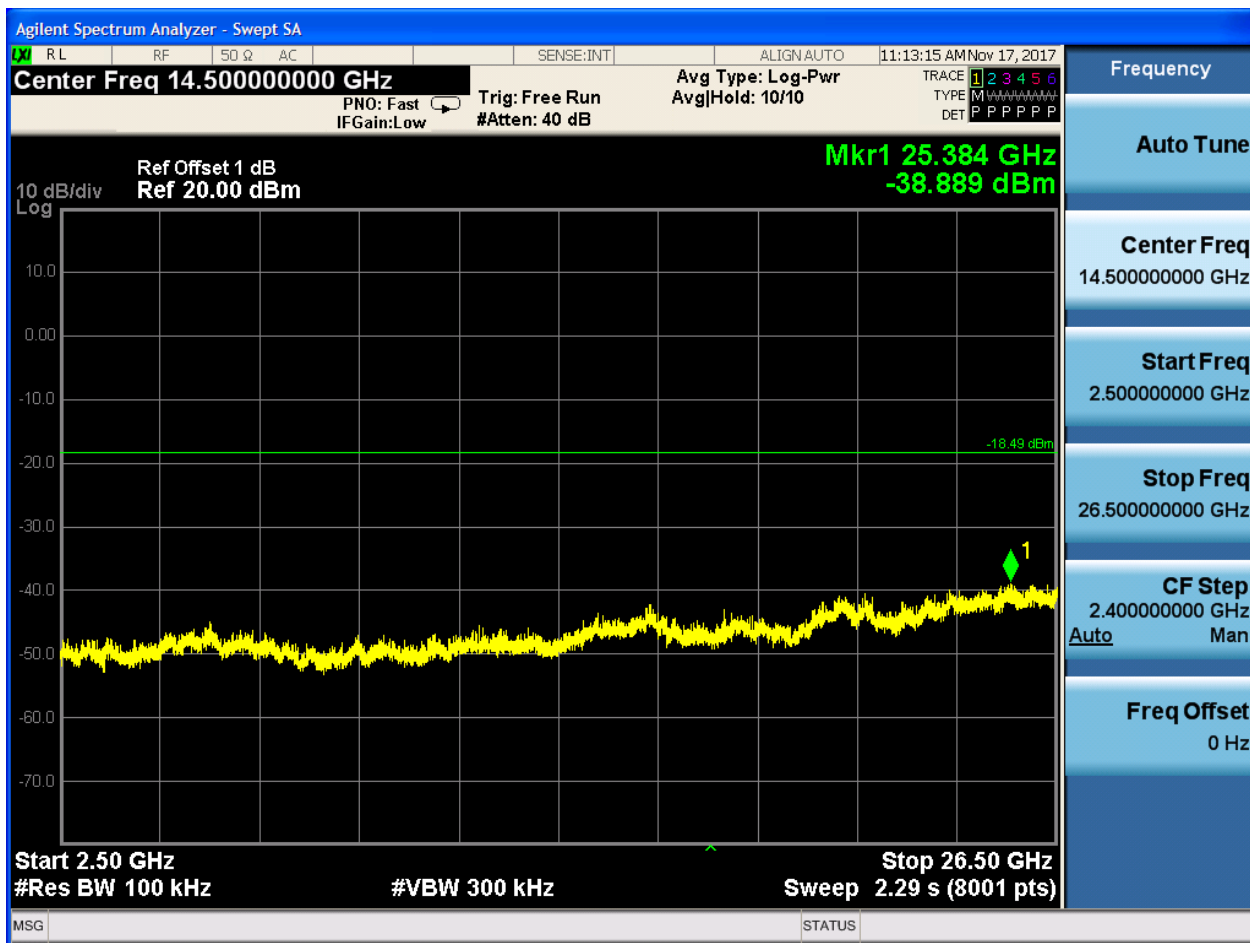








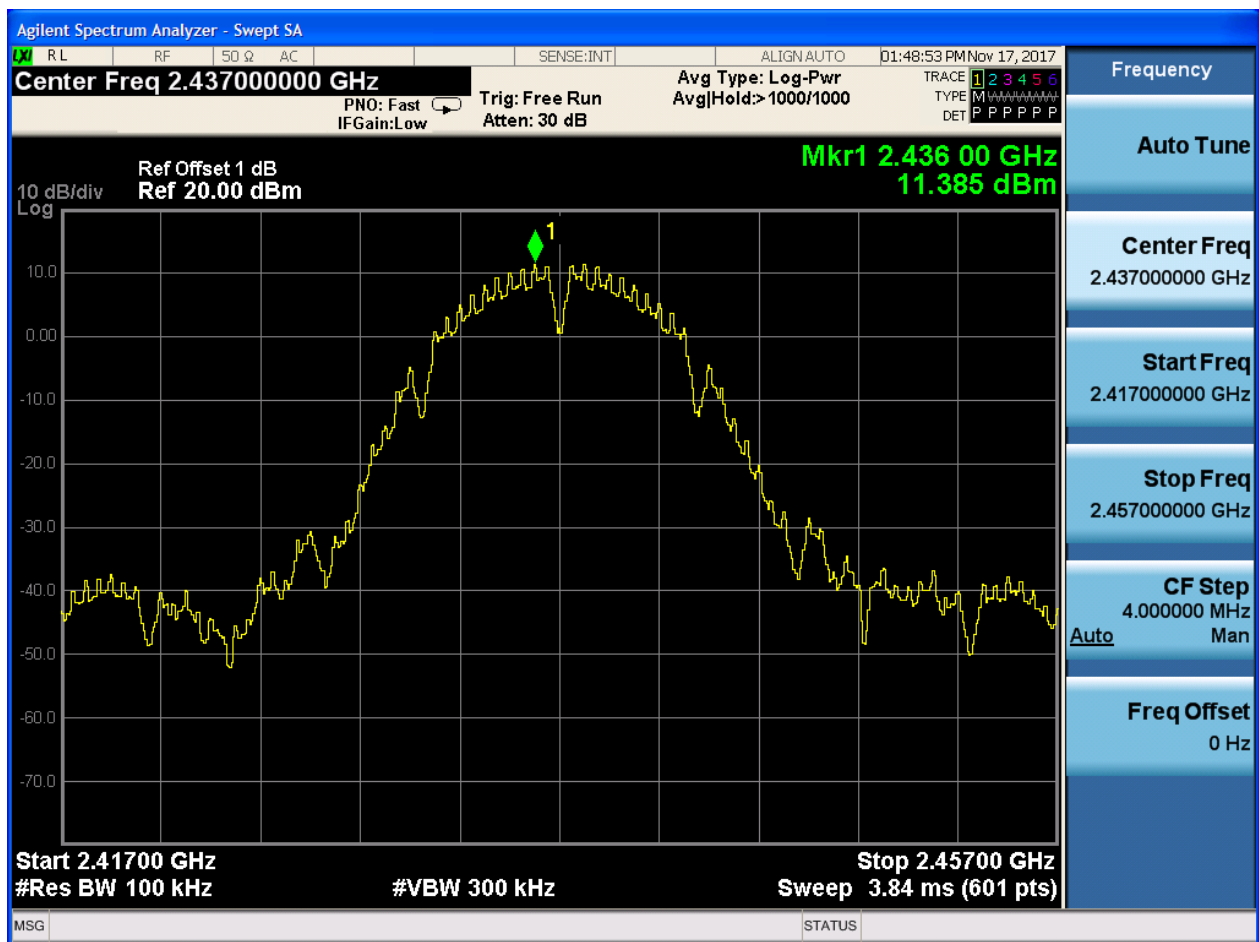






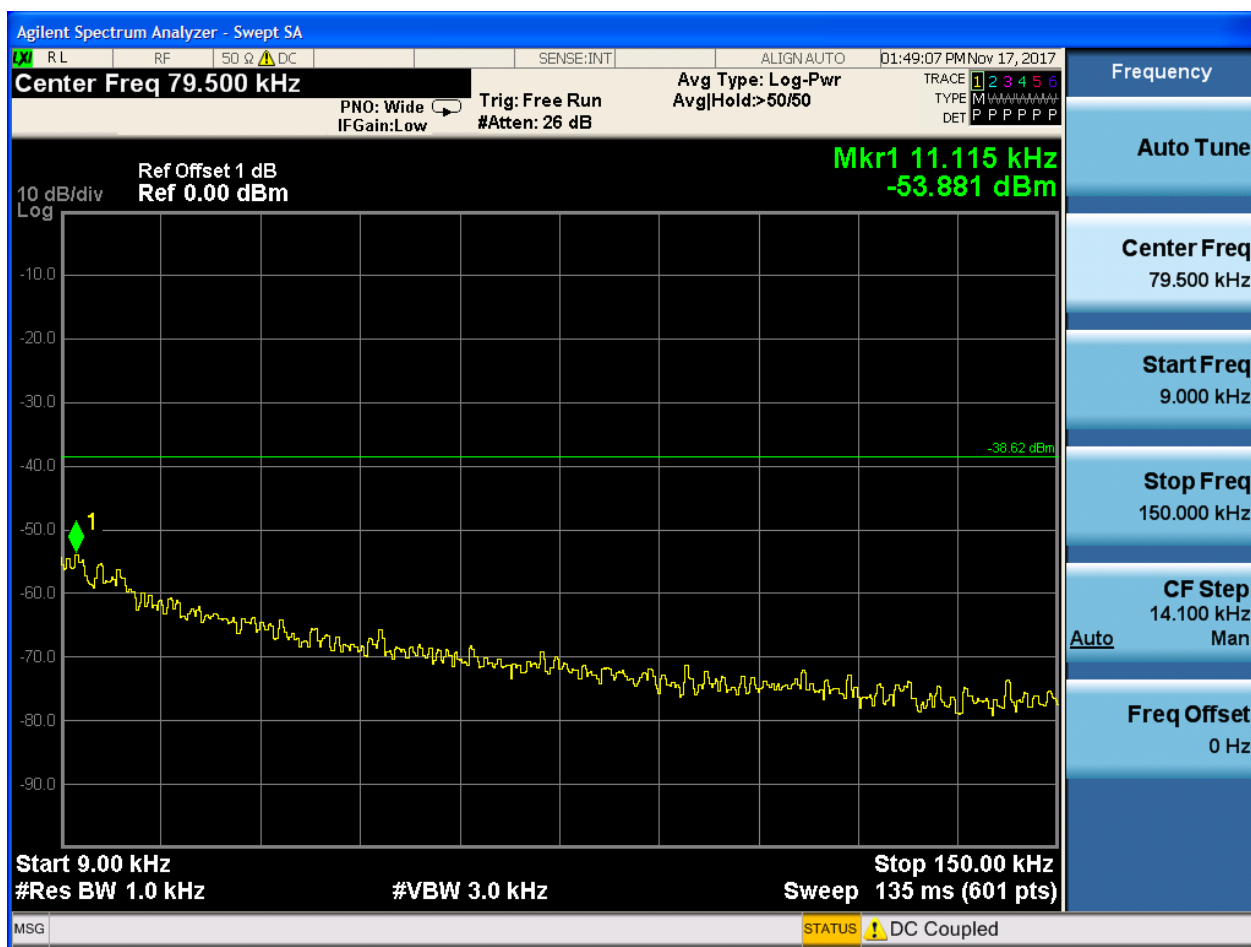
2.4 11B_M@Ant 2

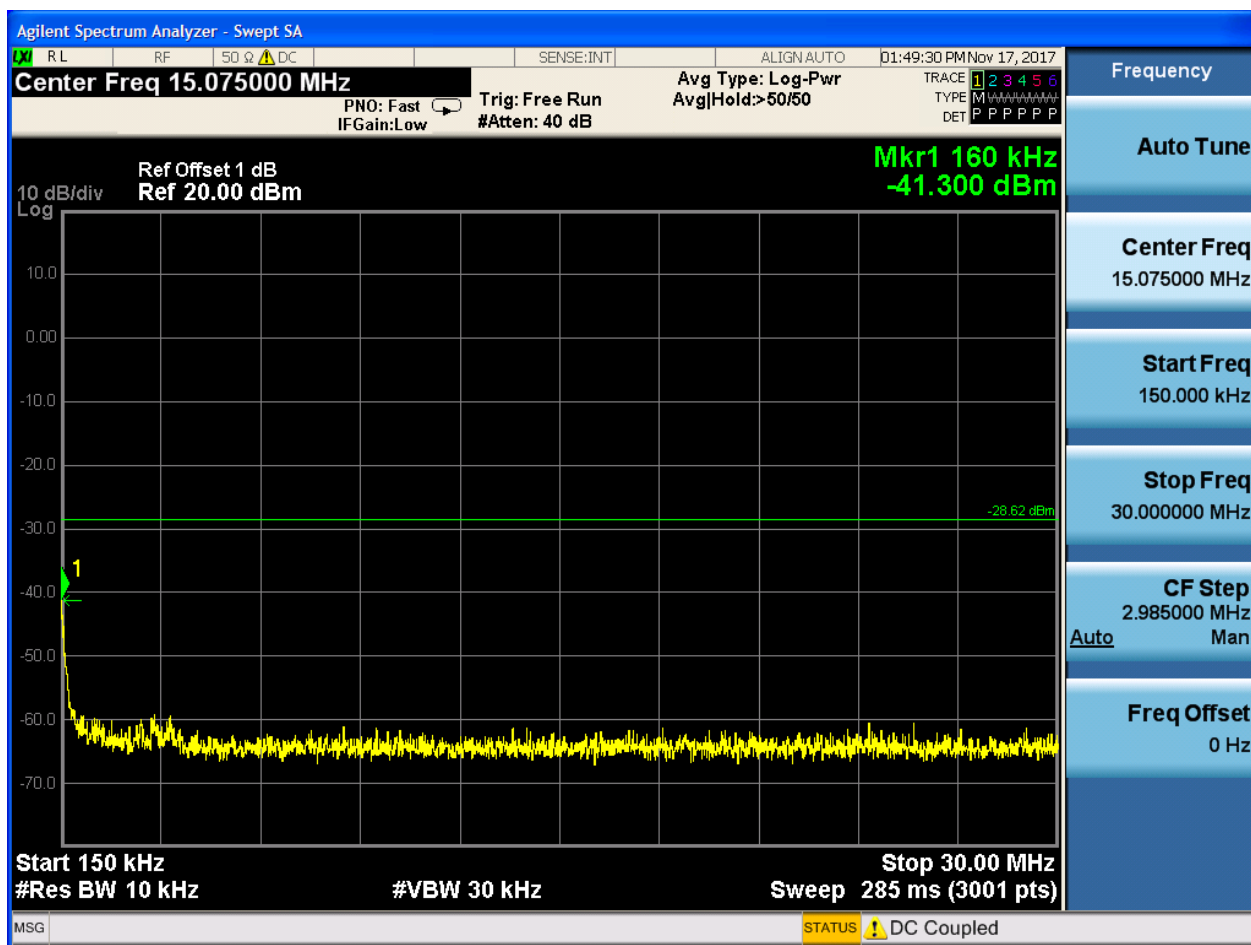
Pref:

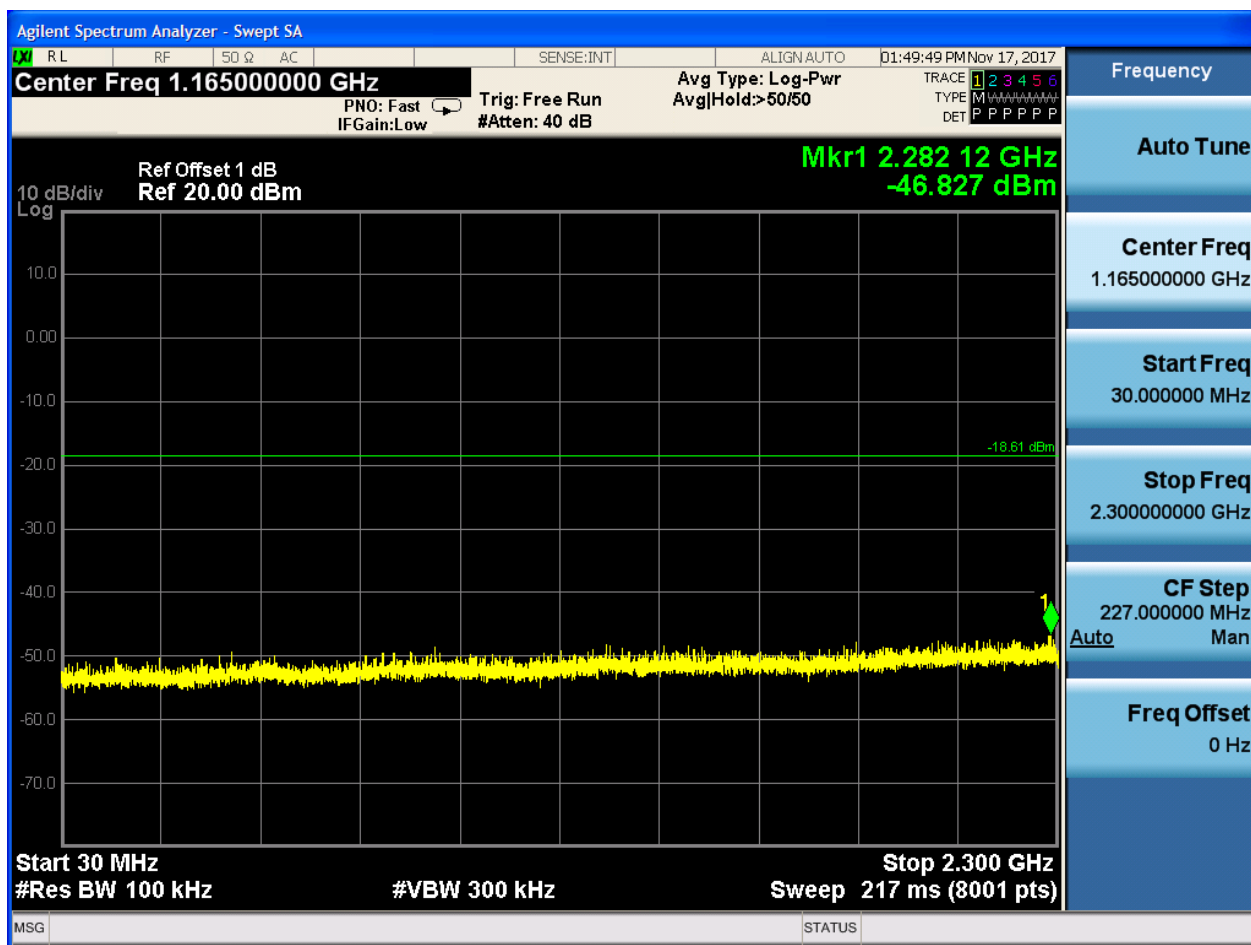


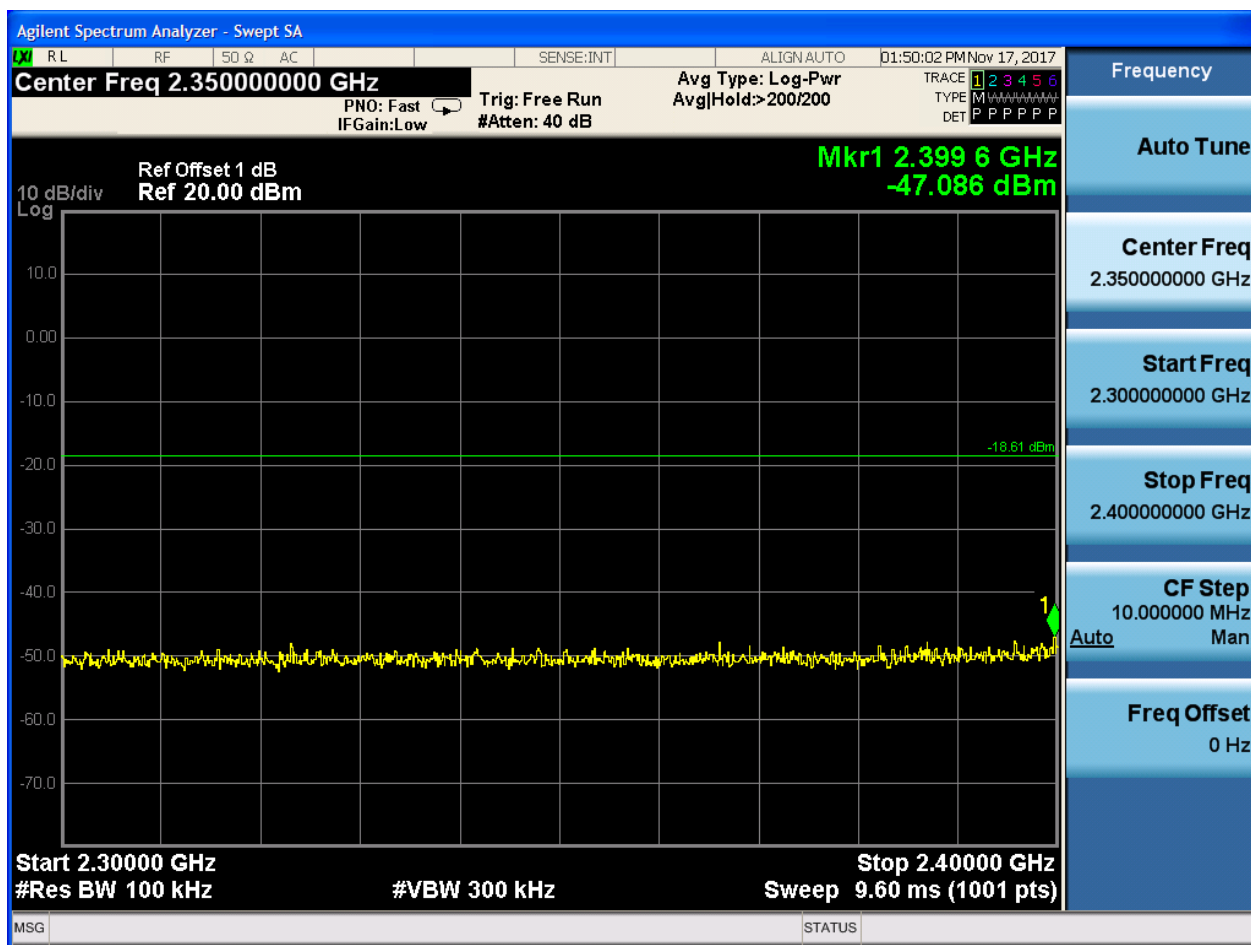


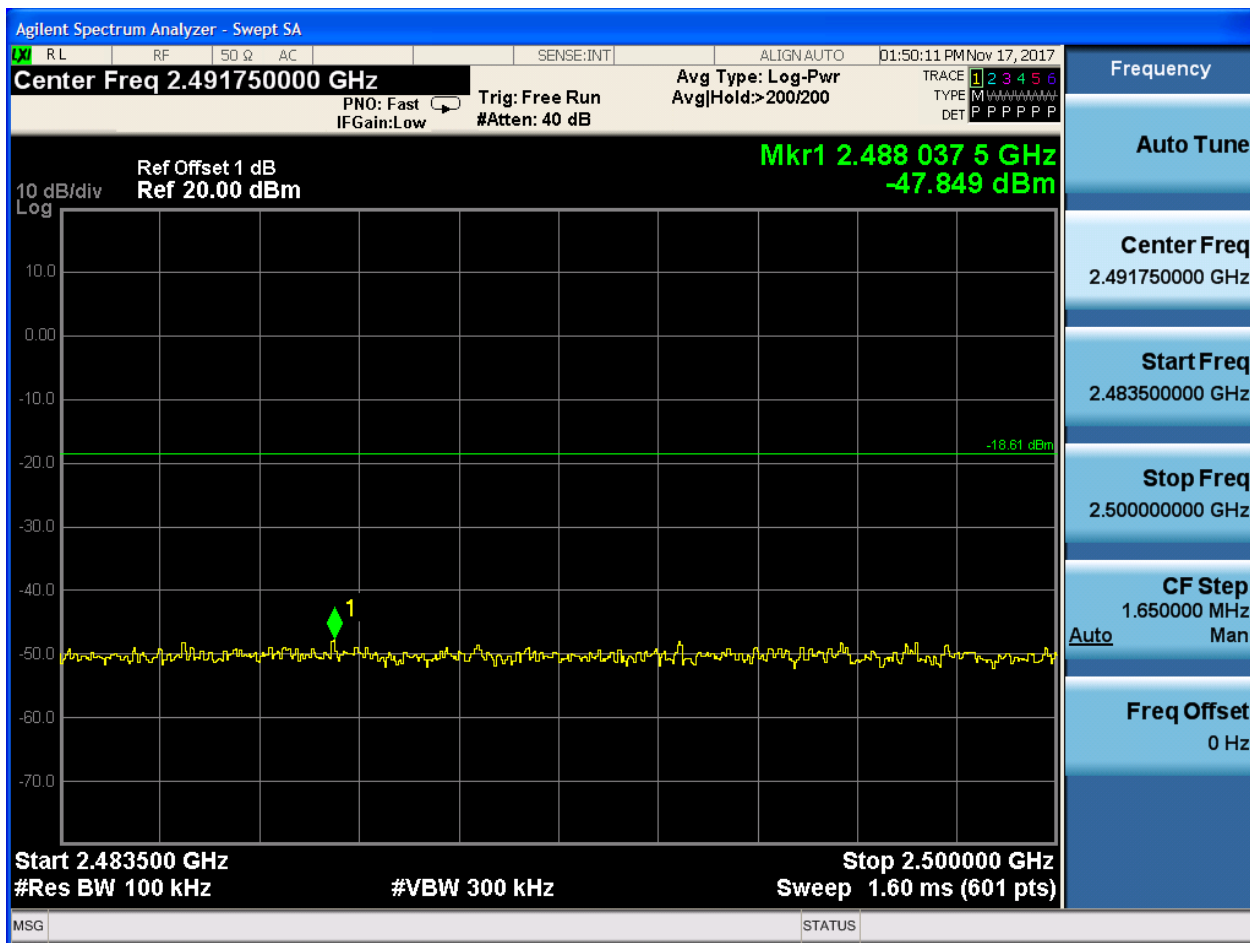
Puw:

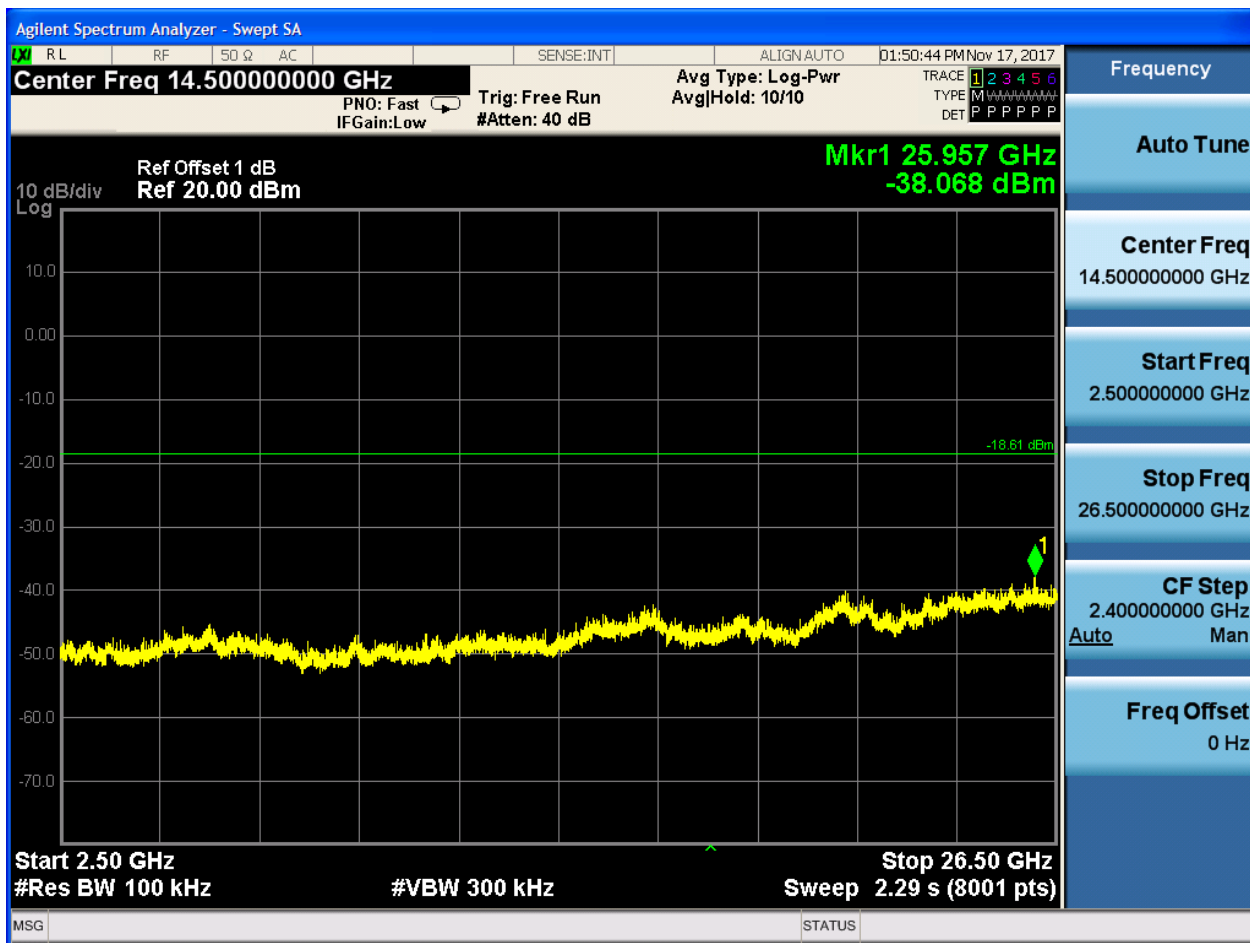








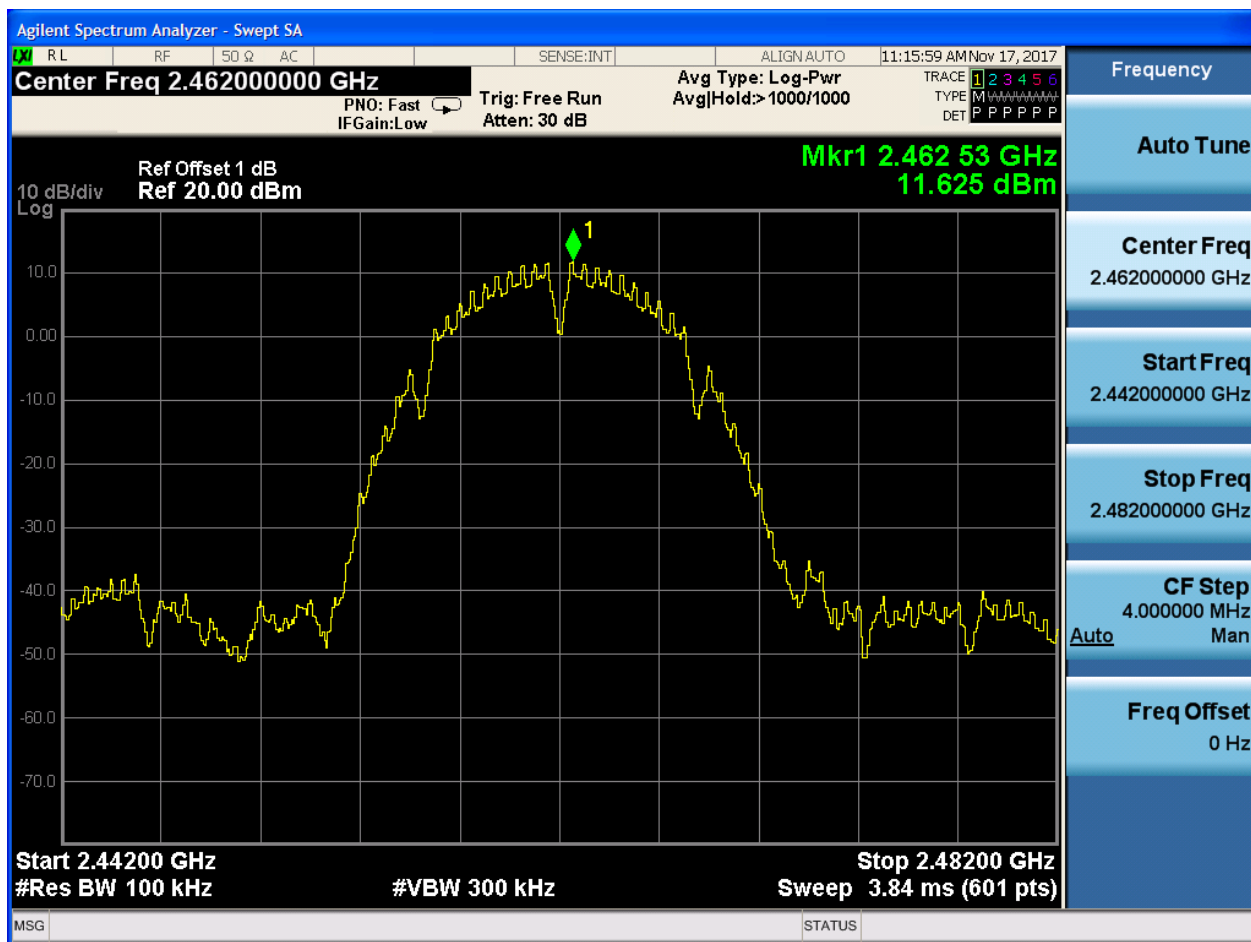






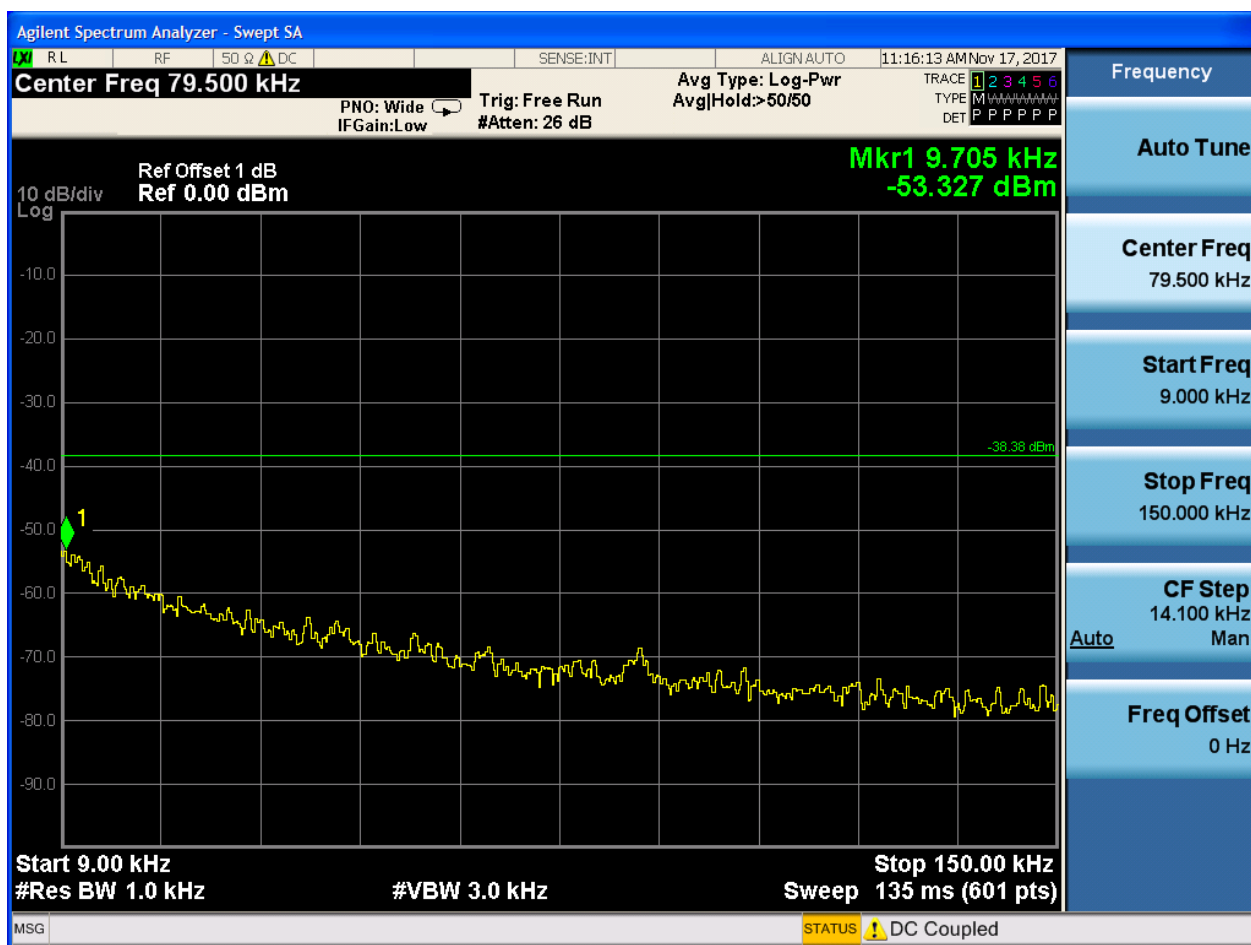
2.5 11B_H@Ant 1

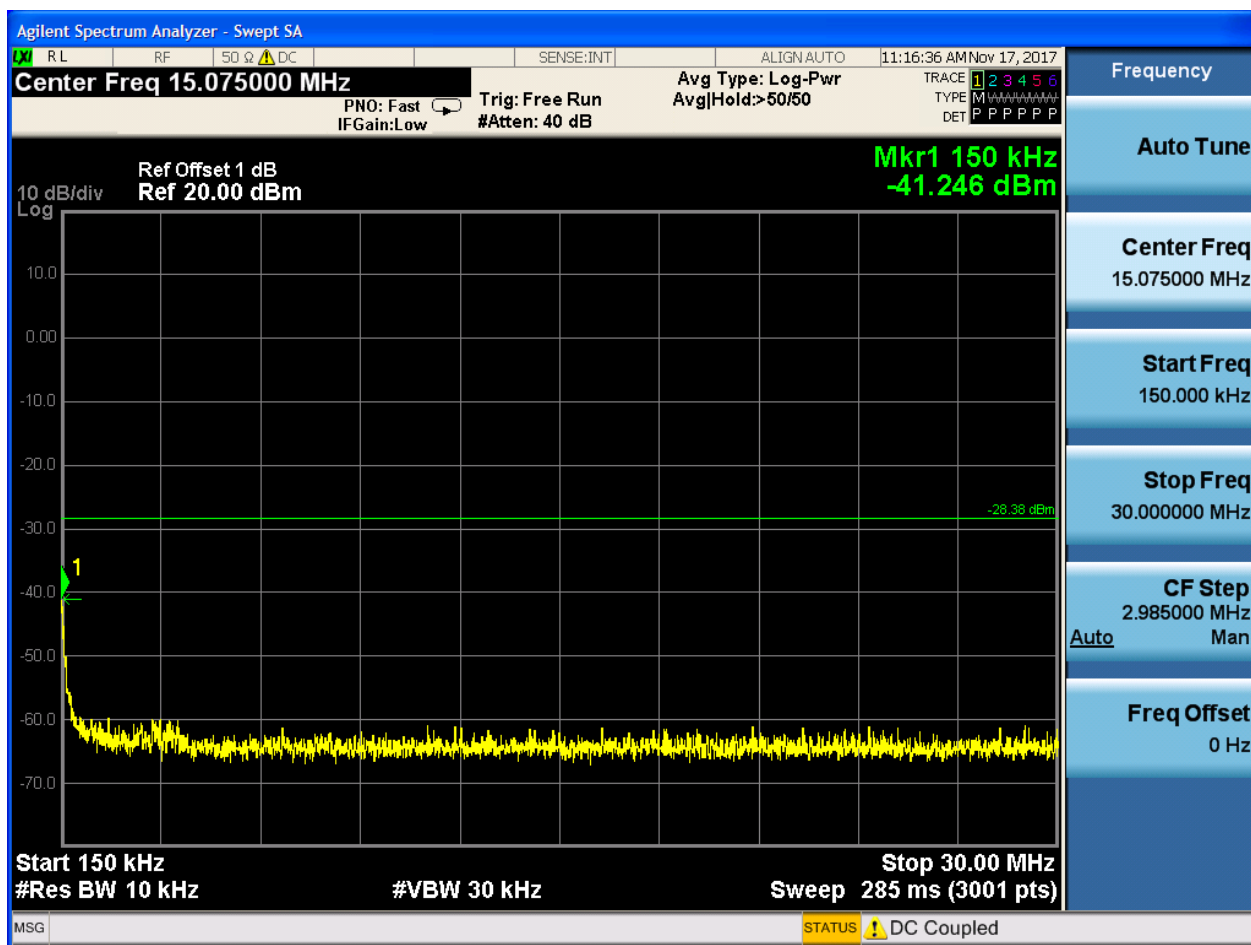
Pref:

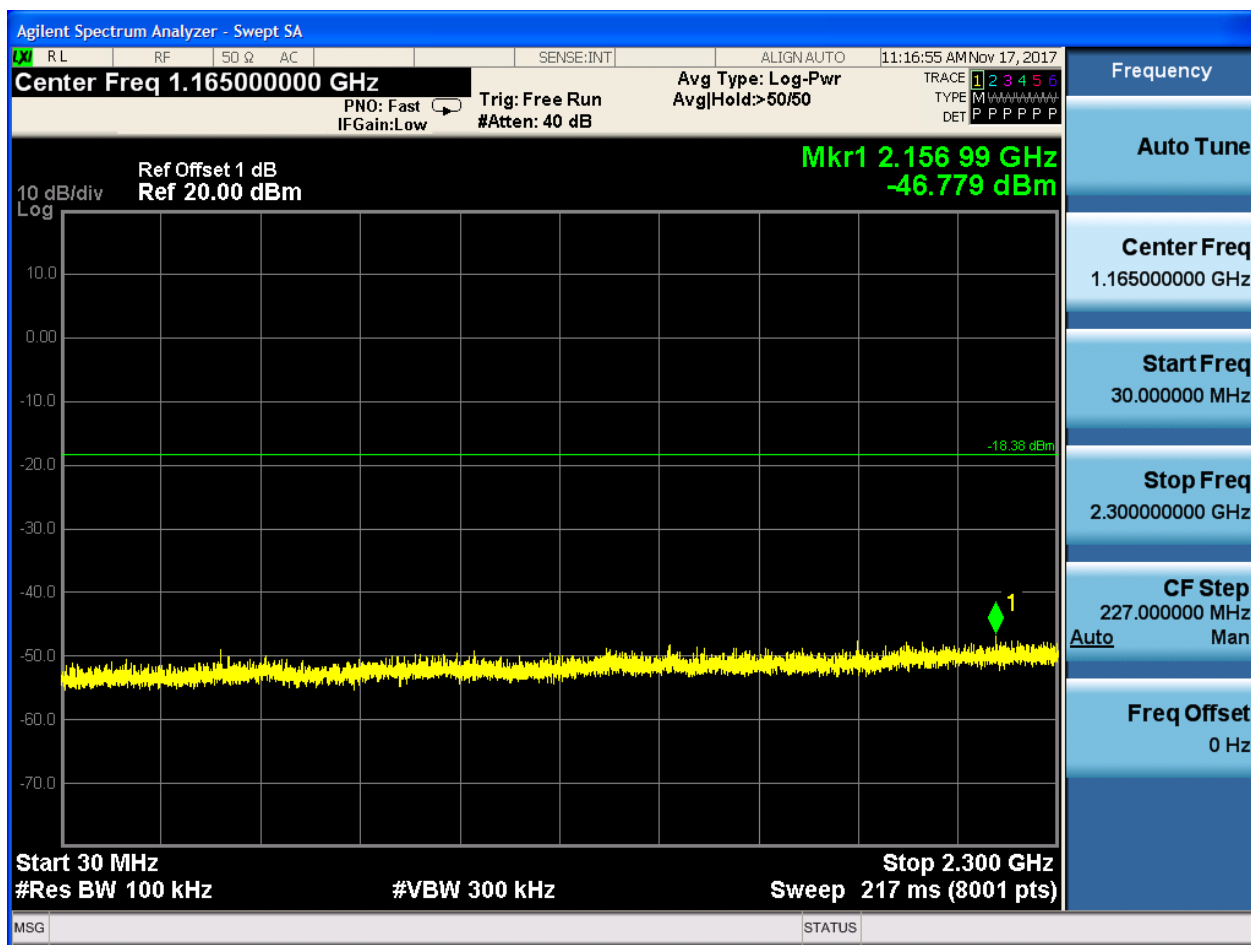


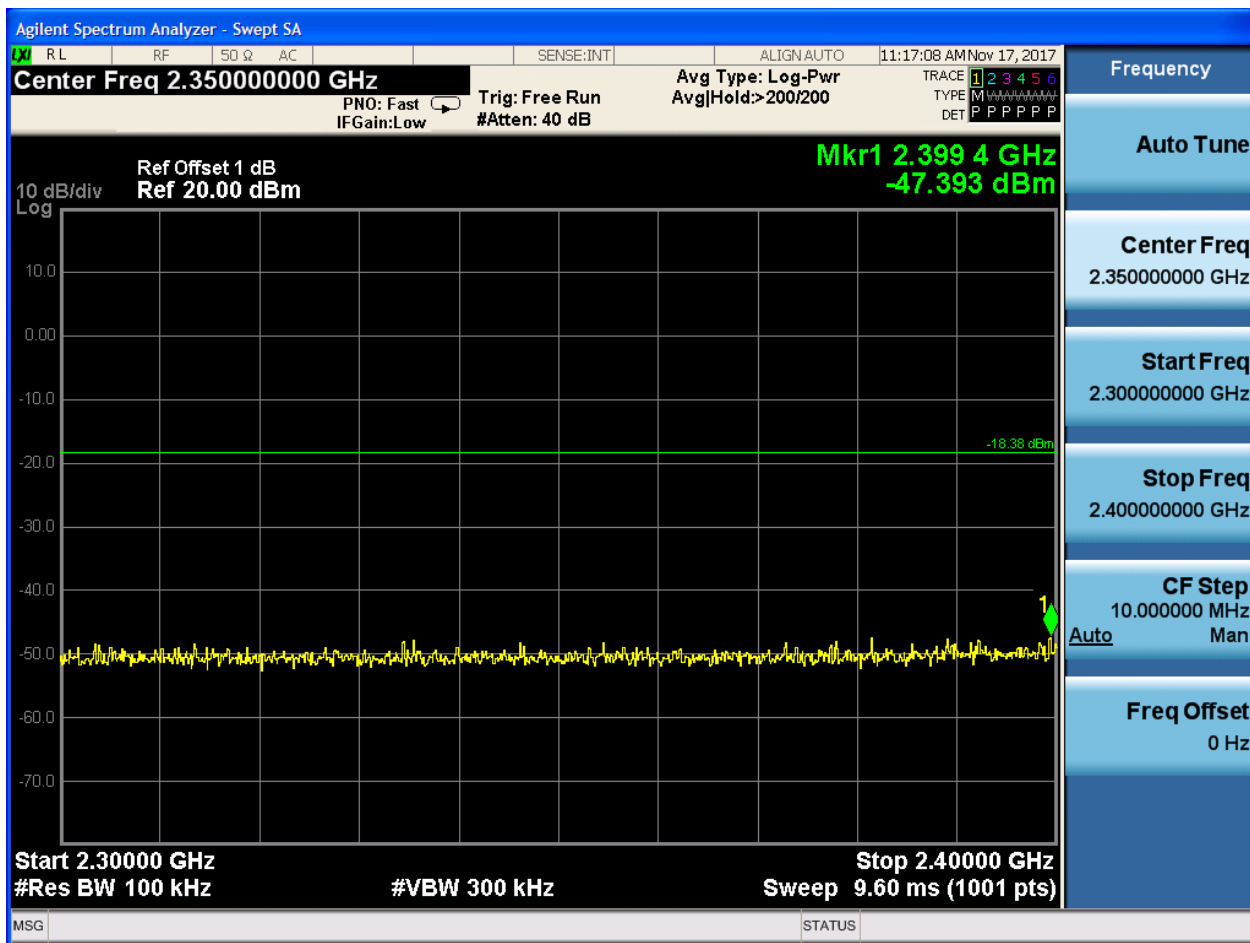


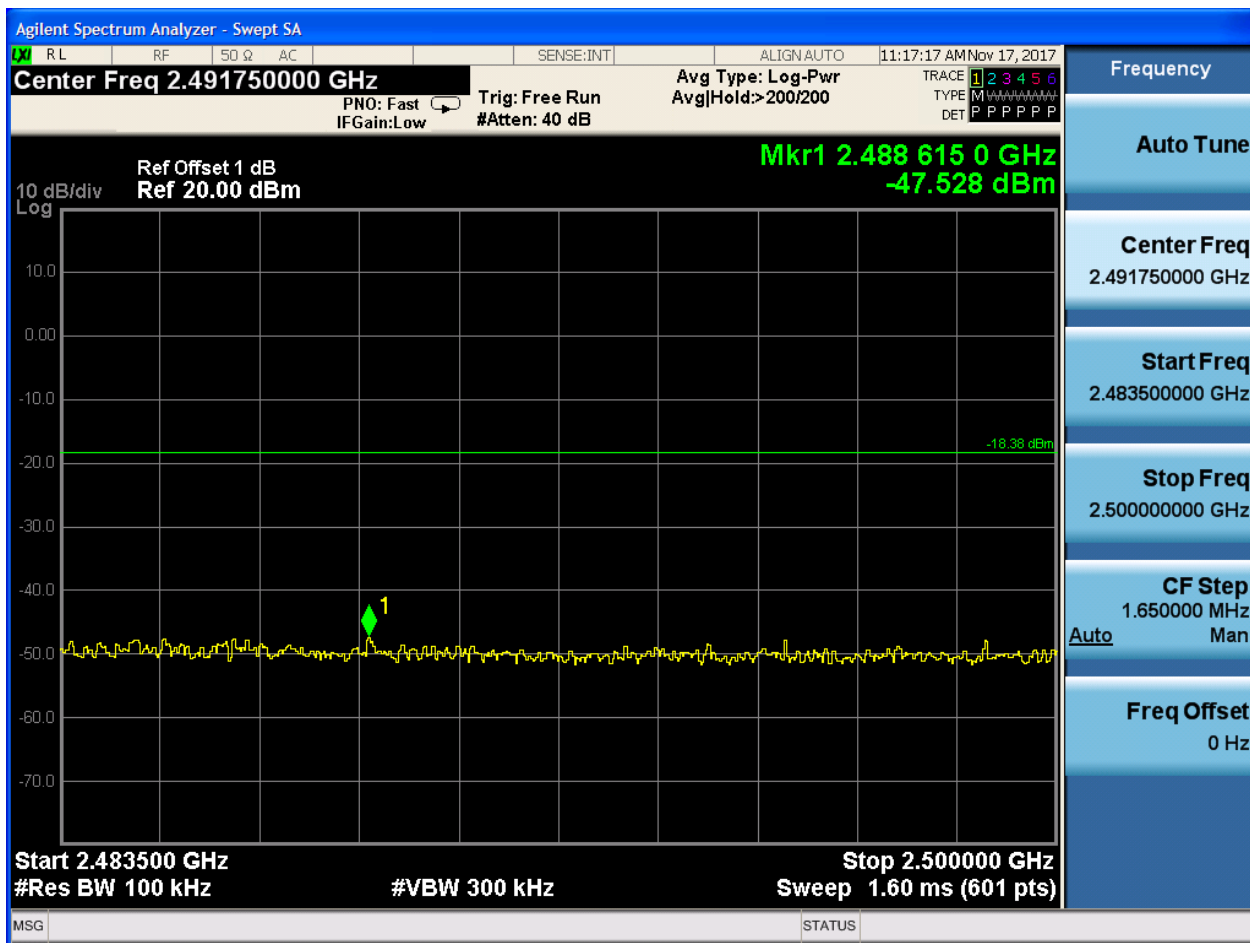
Puw:







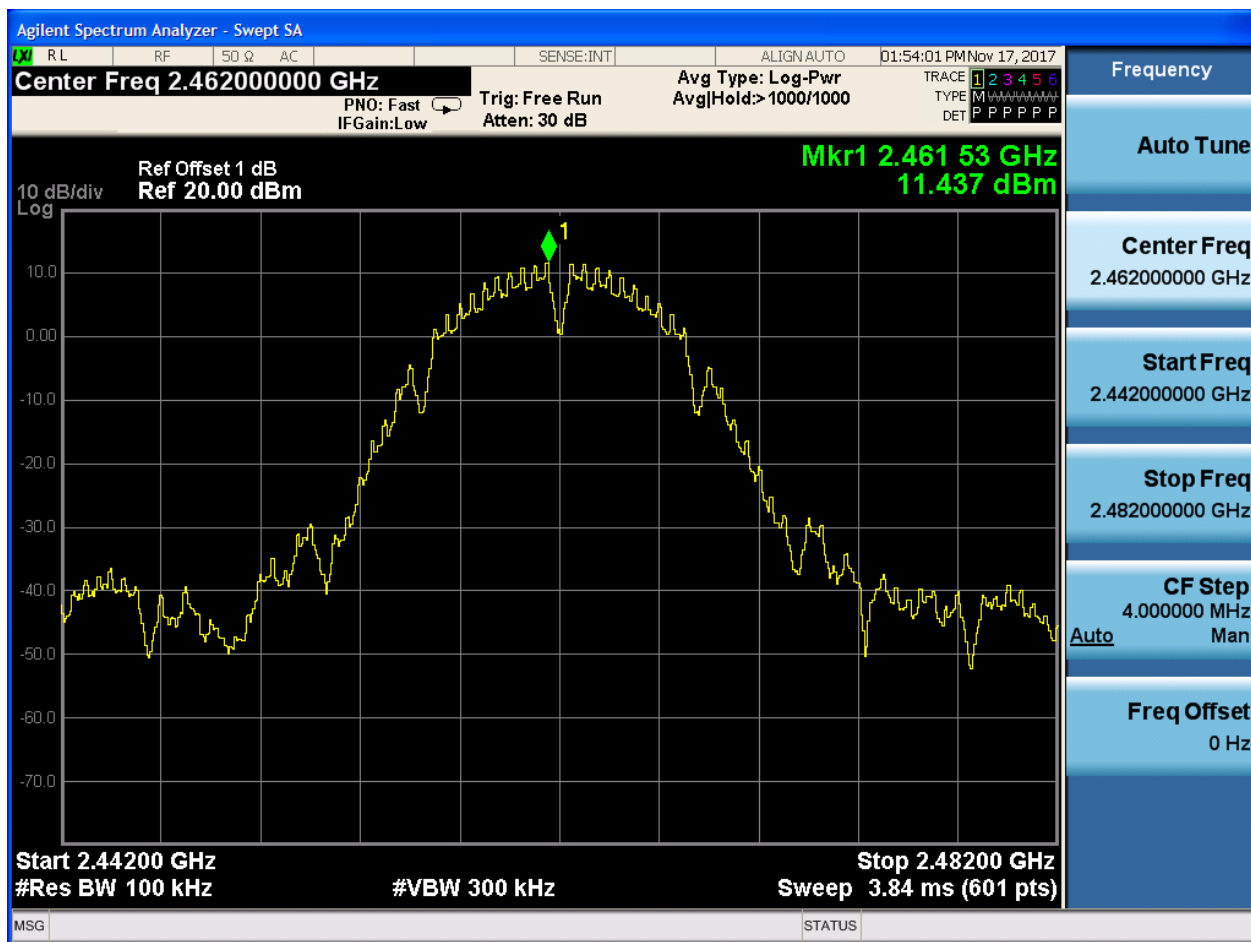






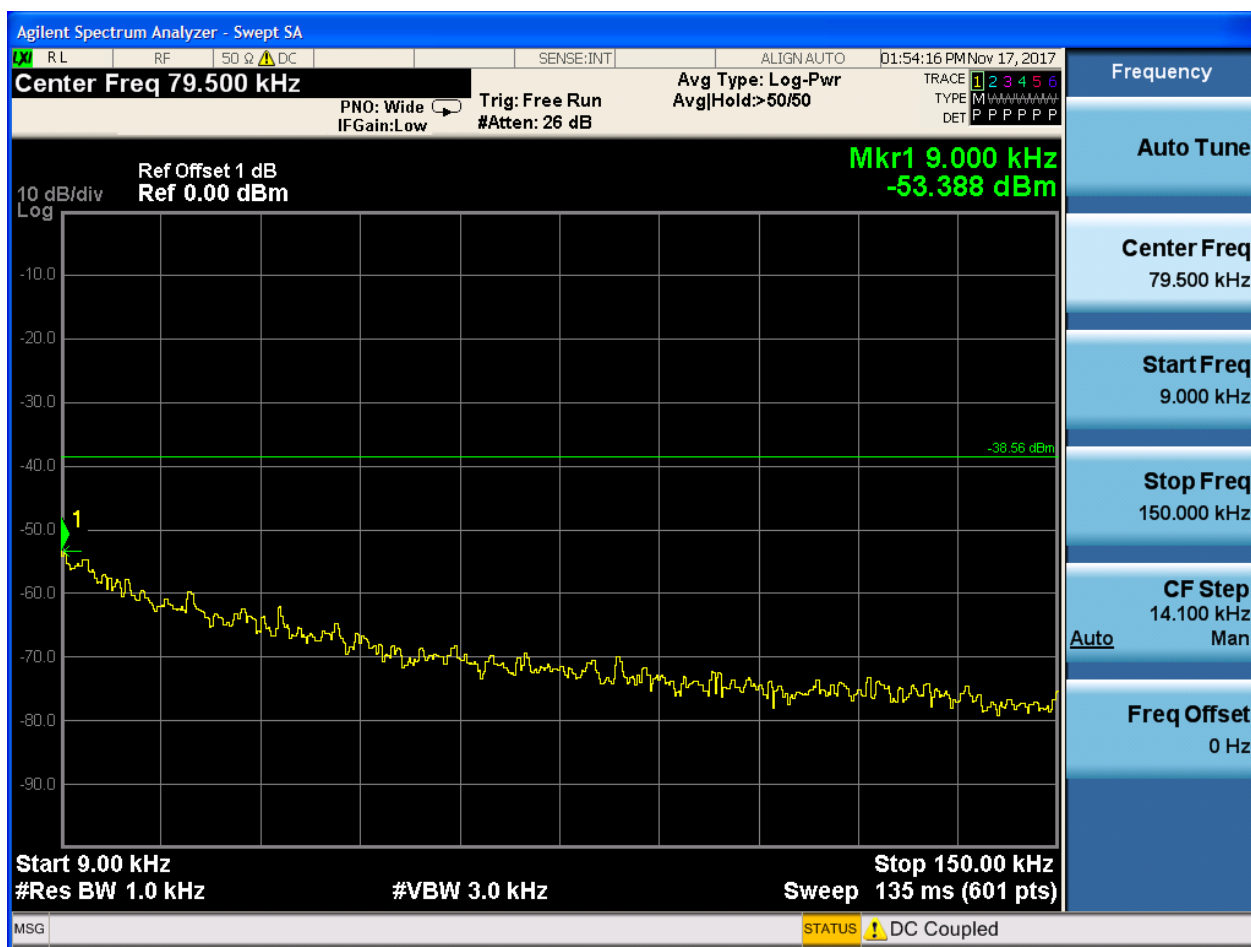
2.6 11B_H@Ant 2

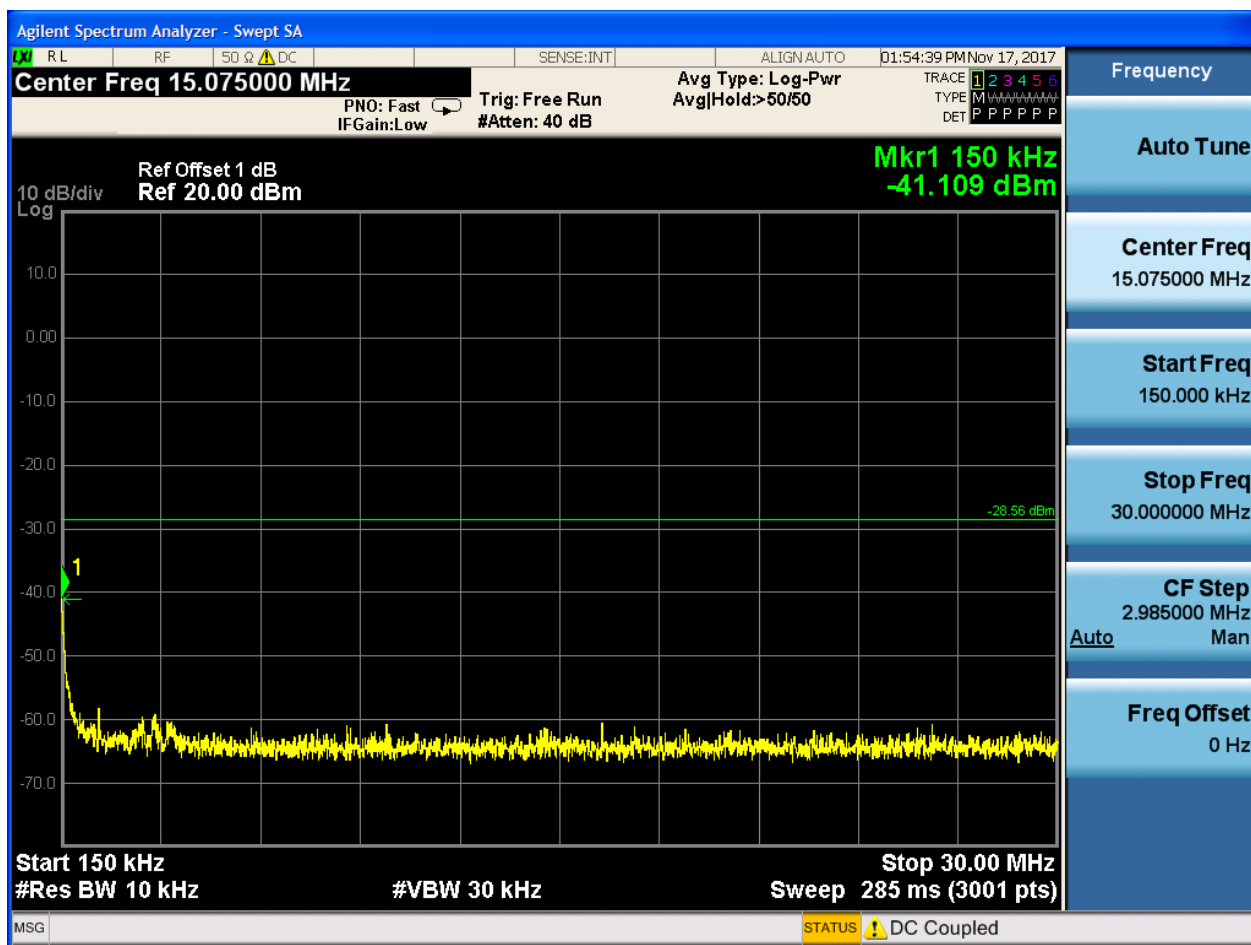
Pref:

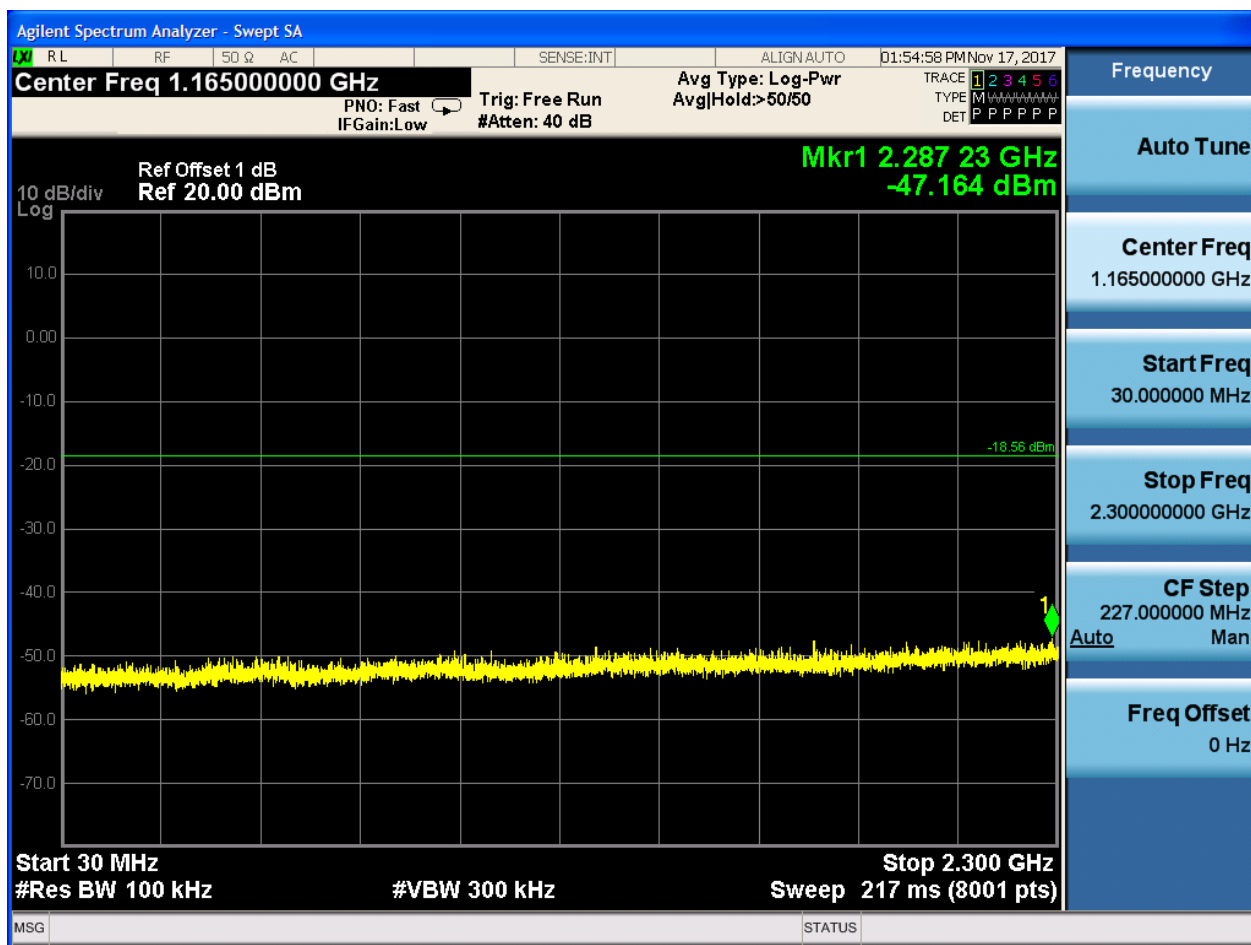


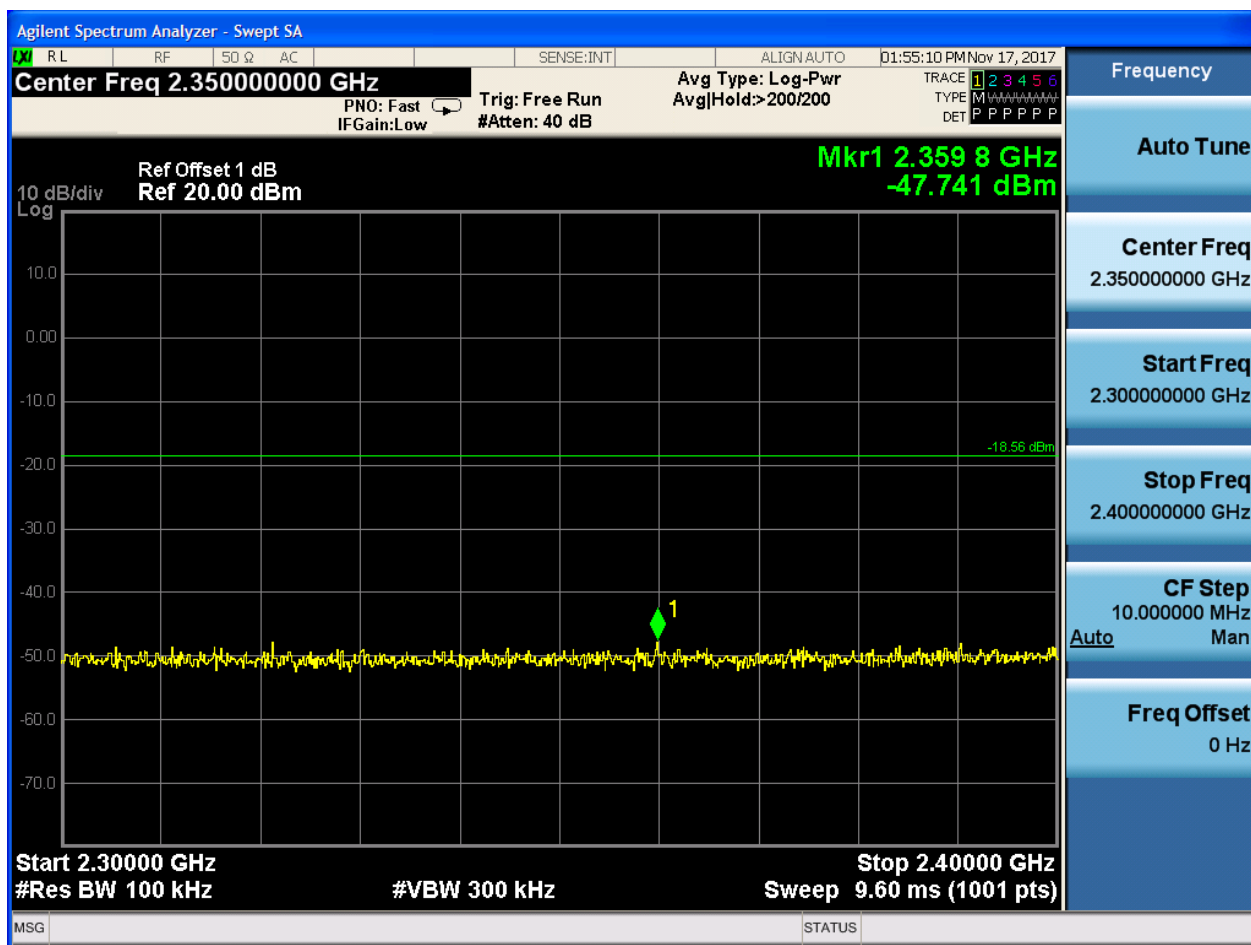


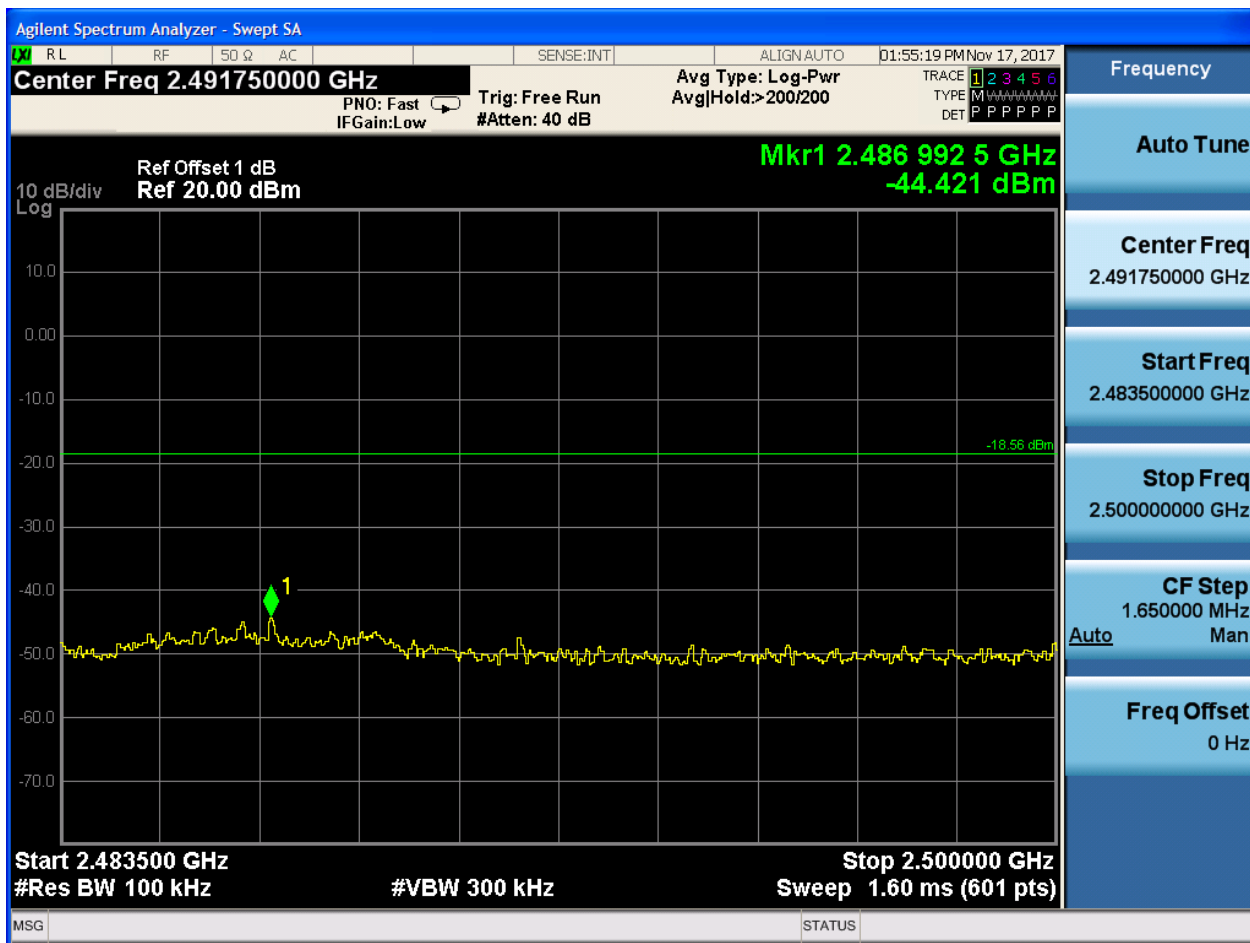
Puw:

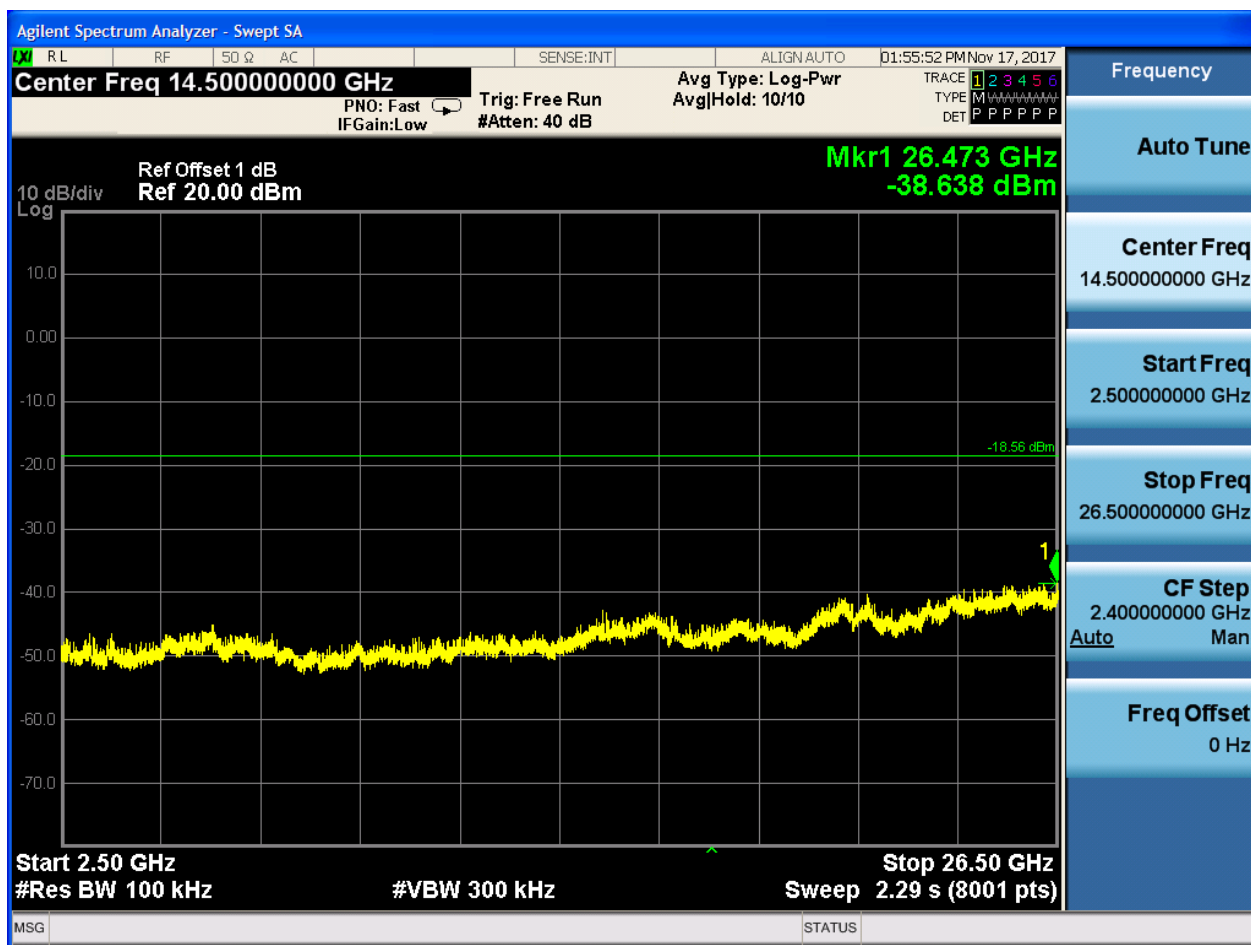








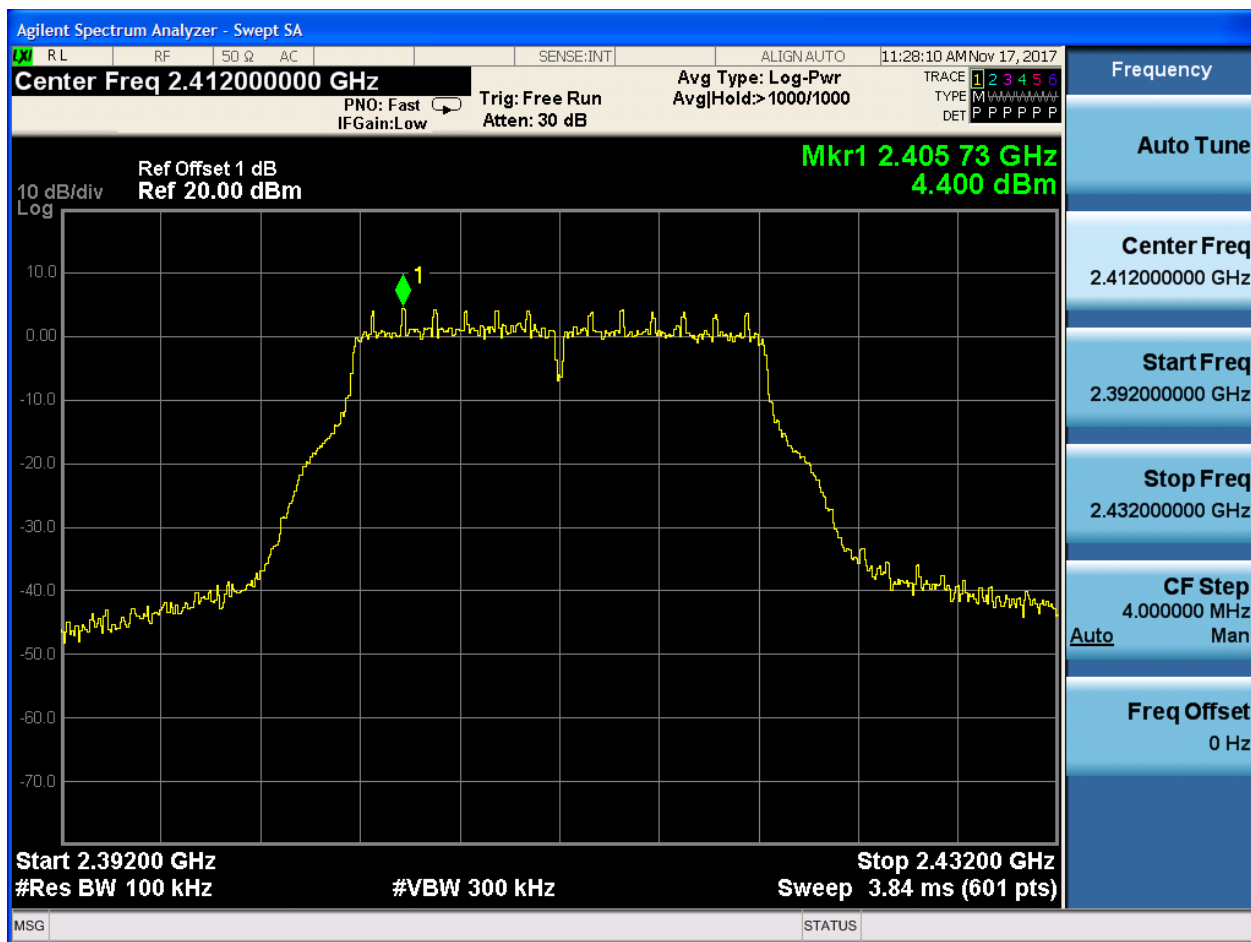






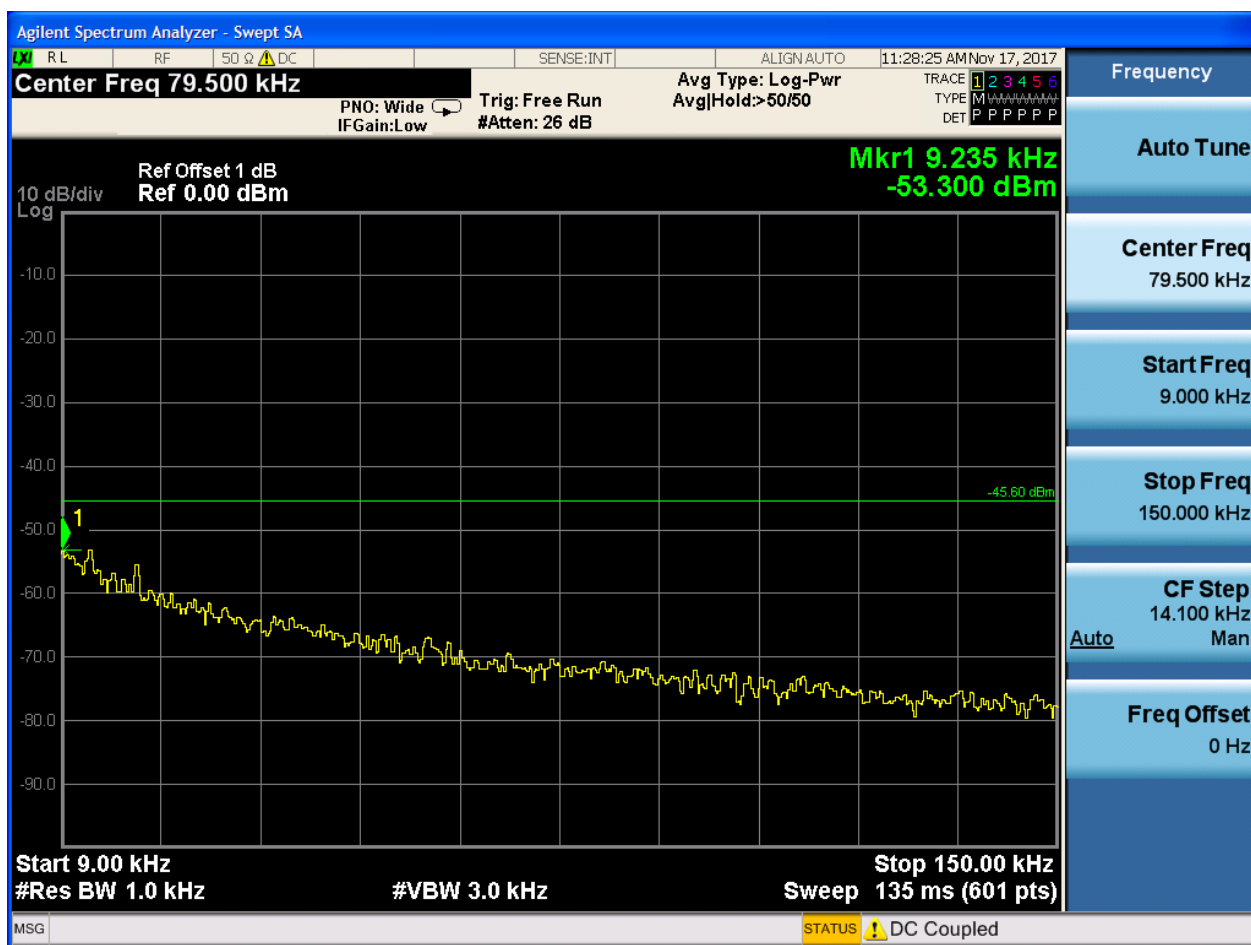
2.7 11G_L@Ant 1

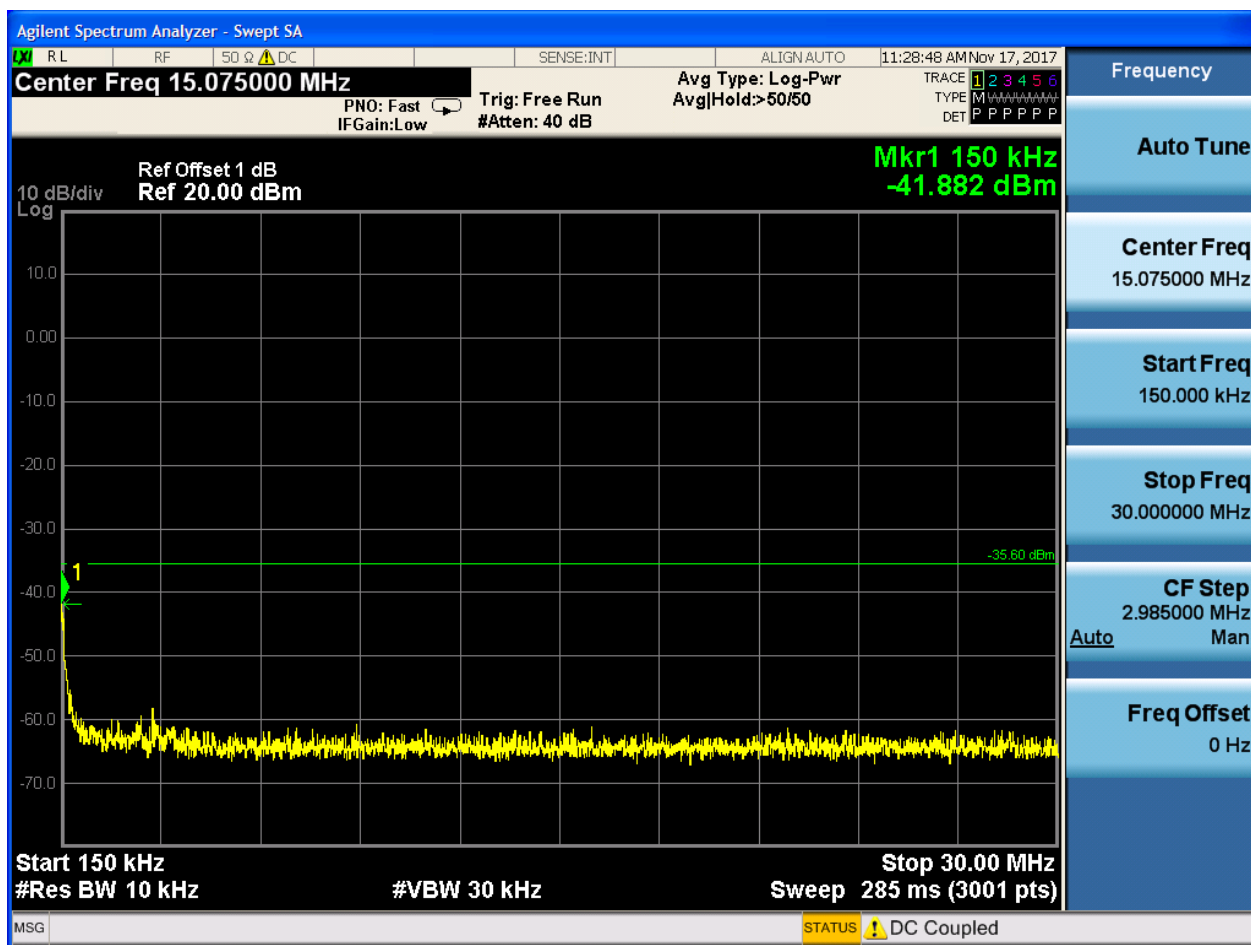
Pref:

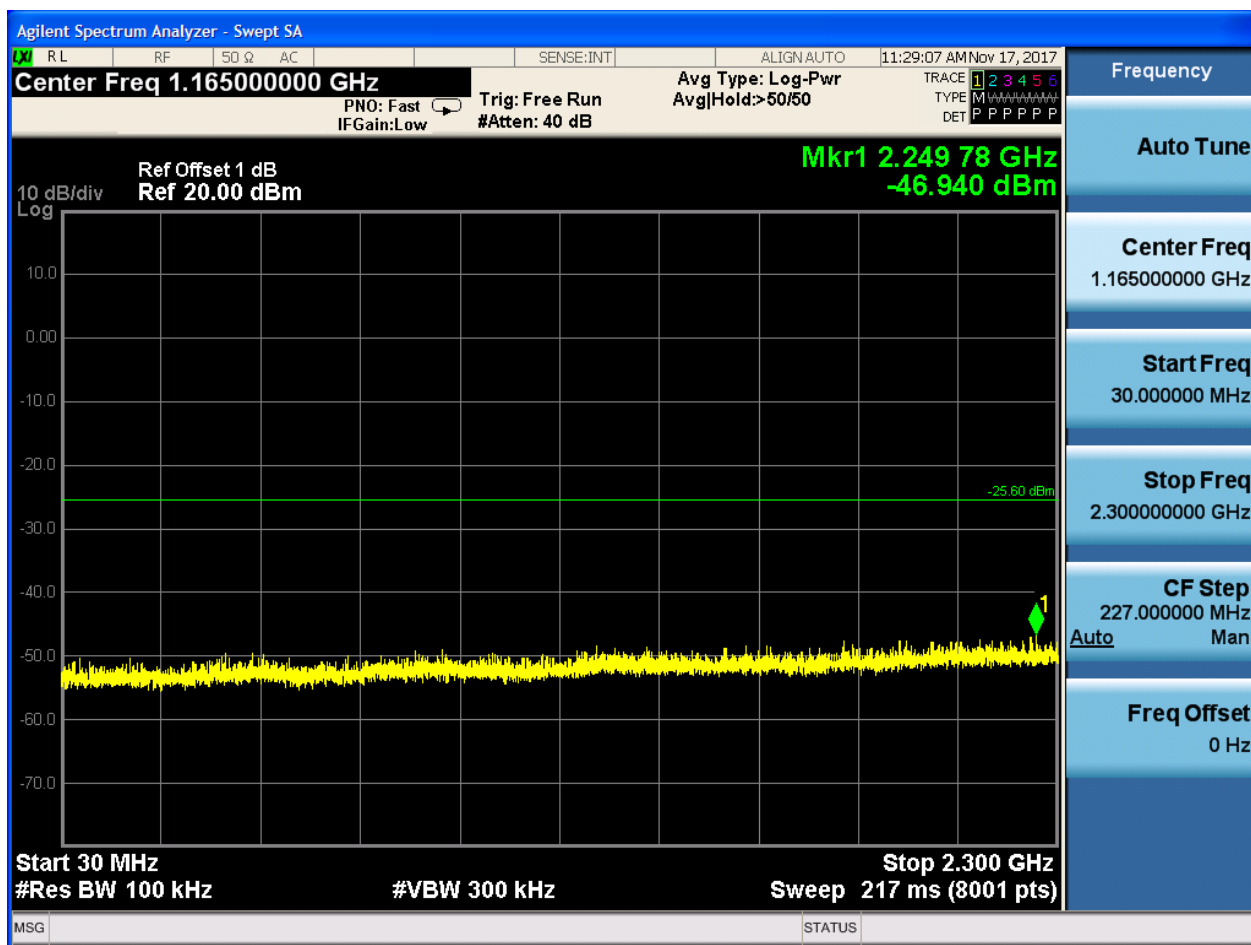


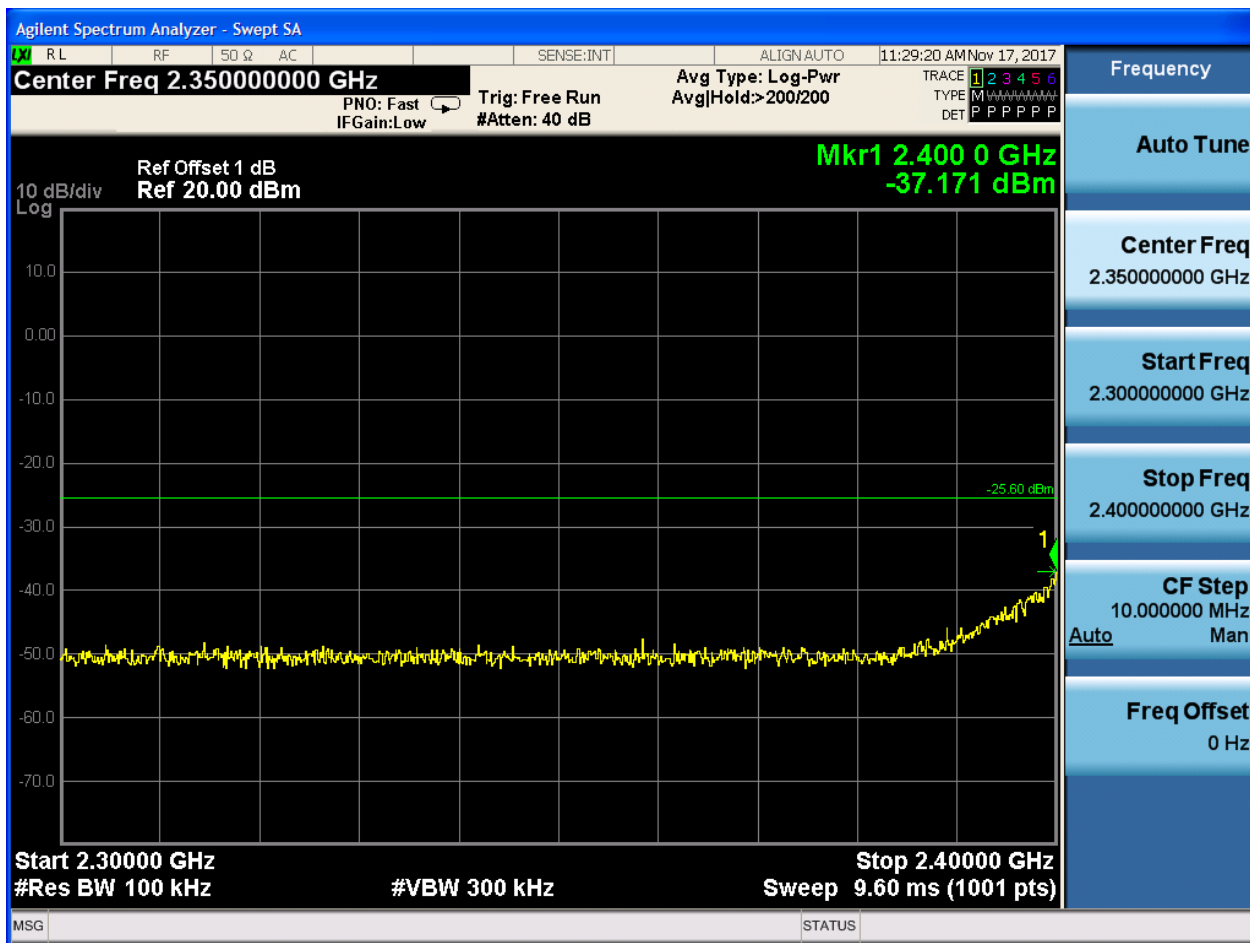


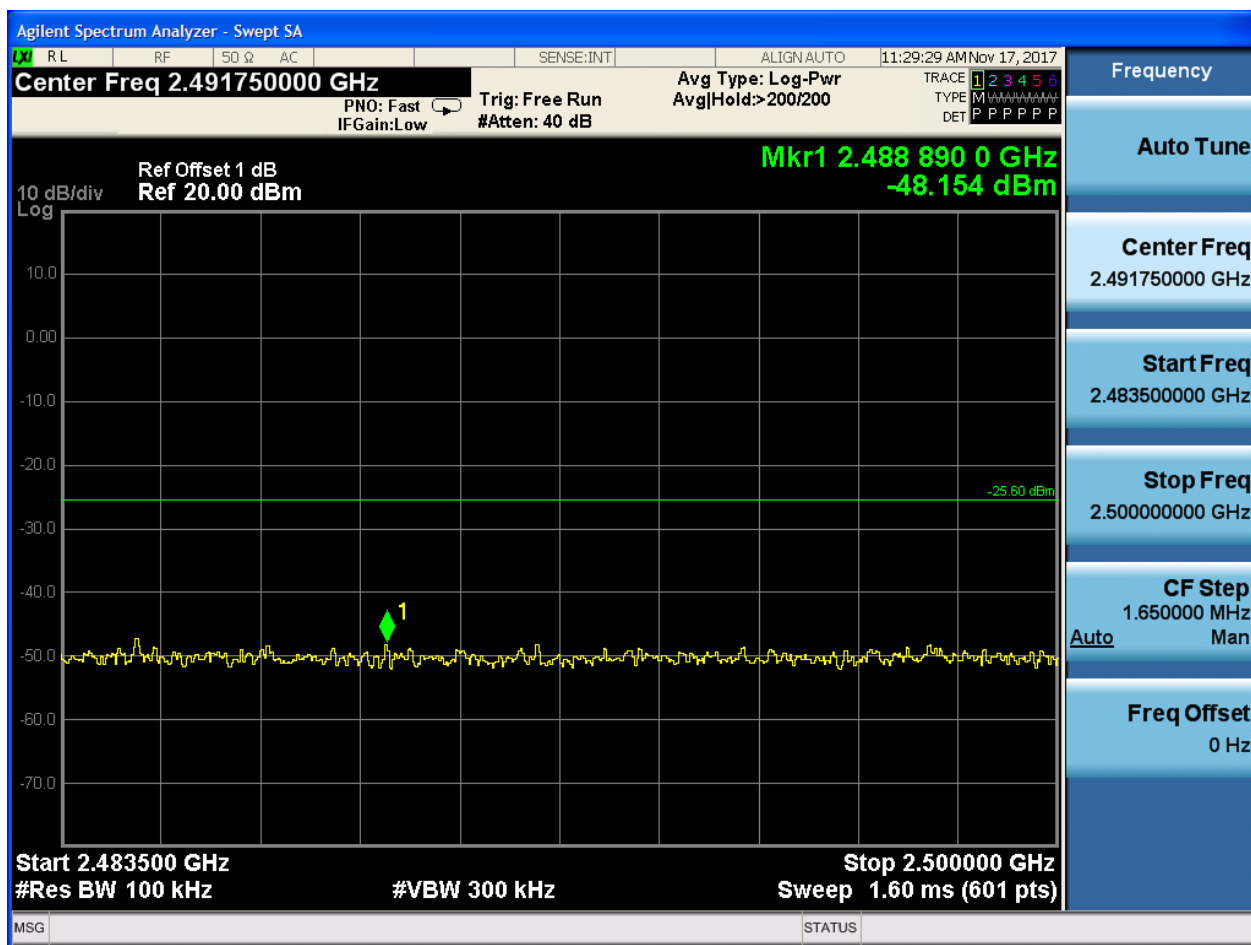
Puw:

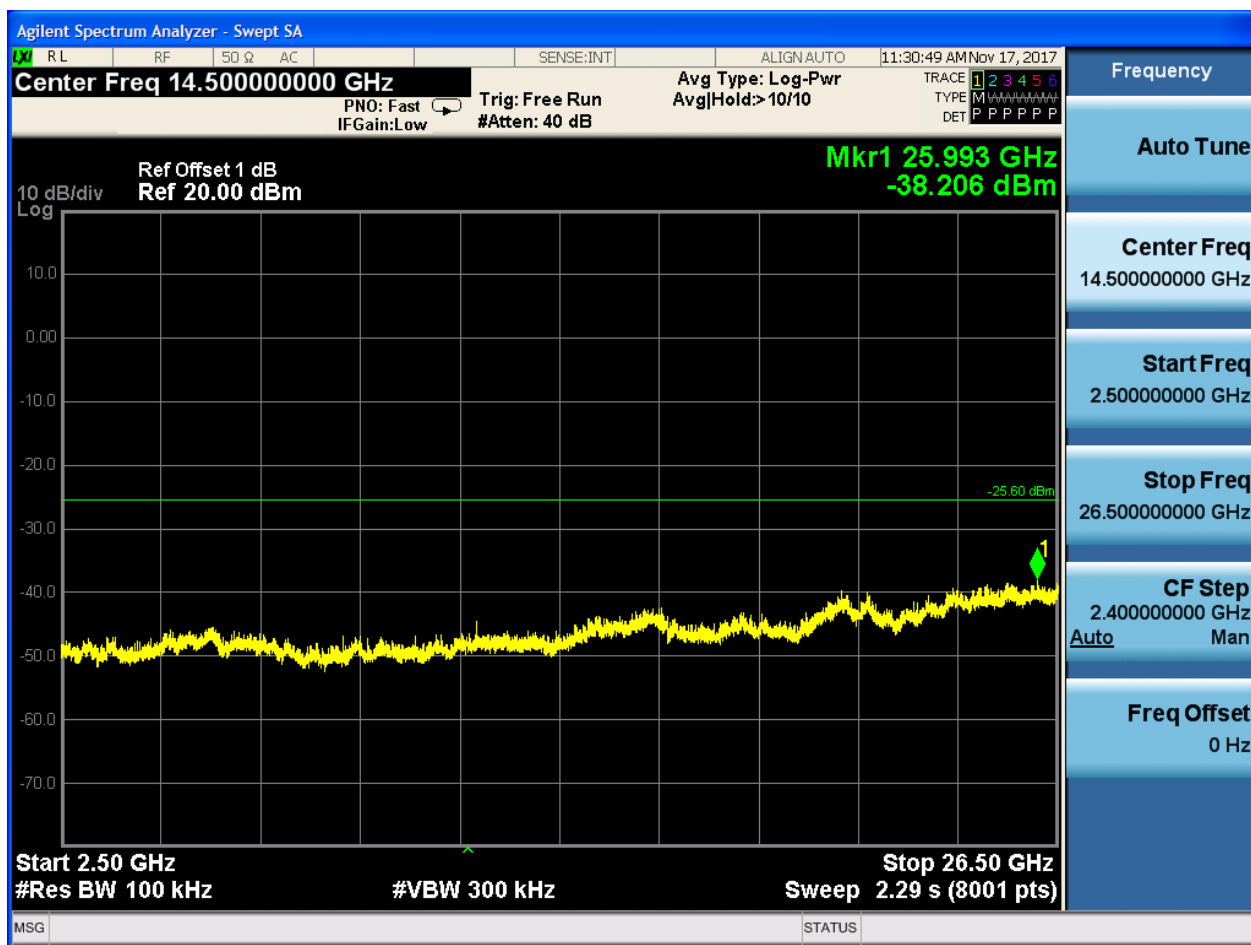








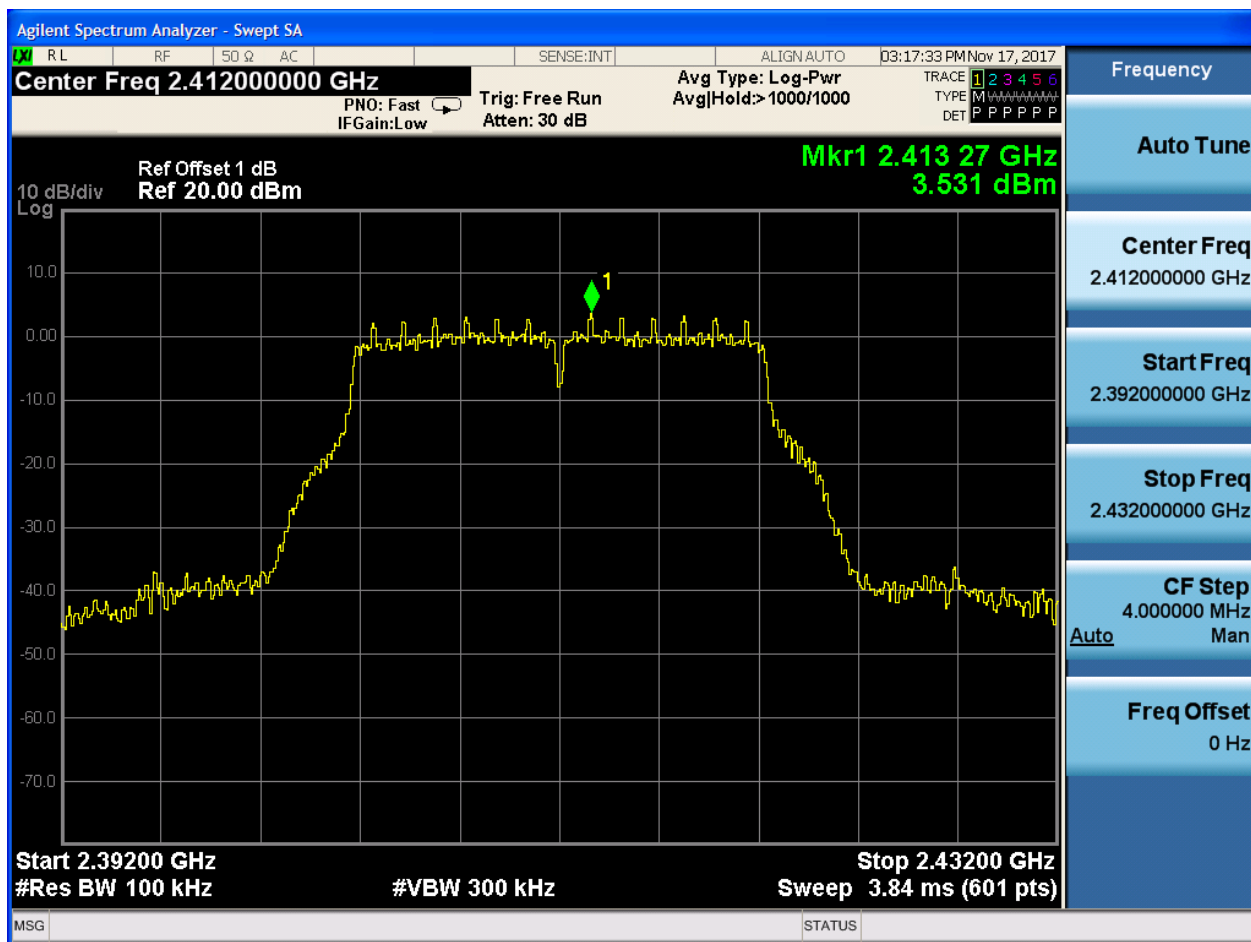






2.8 11G_L@Ant 2

Pref:





Puw:

