



Appendix for Testreport

Appendix A: DTS (6 dB) Bandwidth

In this document, the "DTS6dBBW" refers to the measured "DTS (6 dB) Bandwidth" value. In this Appendix, the "fc(DTS6dBBW)" refers to the centre of the measured "DTS6dBBW". The introduction of the "fc(DTS6dBBW)" is due to that other measurements use it as the spectrum analyzer setting.

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.

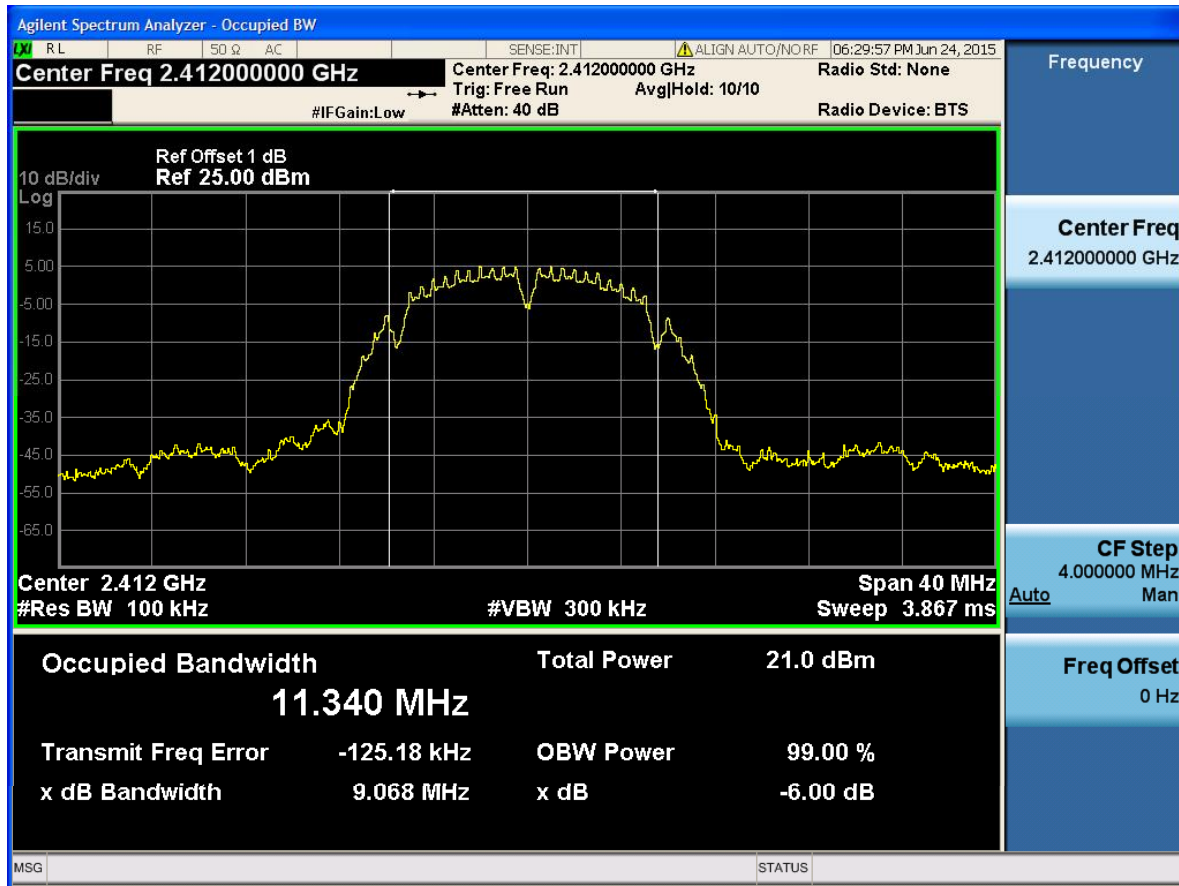
Part I - Test Results

Test Mode	Test Channel	Frequency[MHz]	Ant	DTS6dBBW[MHz]	Verdict
11B	L	2412	Ant 1	9.07	pass
11B	L	2412	Ant 2	9.10	pass
11B	M	2437	Ant 1	8.13	pass
11B	M	2437	Ant 2	8.63	pass
11B	H	2462	Ant 1	8.61	pass
11B	H	2462	Ant 2	8.64	pass
11G	L	2412	Ant 1	16.41	pass
11G	L	2412	Ant 2	16.41	pass
11G	M	2437	Ant 1	16.34	pass
11G	M	2437	Ant 2	16.38	pass
11G	H	2462	Ant 1	16.40	pass
11G	H	2462	Ant 2	16.15	pass
11N20	L	2412	Ant 1	17.63	pass
11N20	L	2412	Ant 2	17.65	pass
11N20	M	2437	Ant 1	17.61	pass
11N20	M	2437	Ant 2	17.62	pass
11N20	H	2462	Ant 1	17.66	pass
11N20	H	2462	Ant 2	17.63	pass
11N20m	L	2412	Ant 1	17.68	pass
11N20m	L	2412	Ant 2	17.69	pass
11N20m	M	2437	Ant 1	17.65	pass
11N20m	M	2437	Ant 2	17.66	pass
11N20m	H	2462	Ant 1	17.71	pass
11N20m	H	2462	Ant 2	17.39	pass
11N40	L	2422	Ant 1	36.17	pass
11N40	L	2422	Ant 2	35.75	pass
11N40	M	2437	Ant 1	35.96	pass
11N40	M	2437	Ant 2	36.02	pass
11N40	H	2452	Ant 1	35.90	pass
11N40	H	2452	Ant 2	36.01	pass
11N40m	L	2422	Ant 1	36.38	pass
11N40m	L	2422	Ant 2	35.50	pass
11N40m	M	2437	Ant 1	35.47	pass
11N40m	M	2437	Ant 2	35.94	pass
11N40m	H	2452	Ant 1	35.82	pass
11N40m	H	2452	Ant 2	36.09	pass



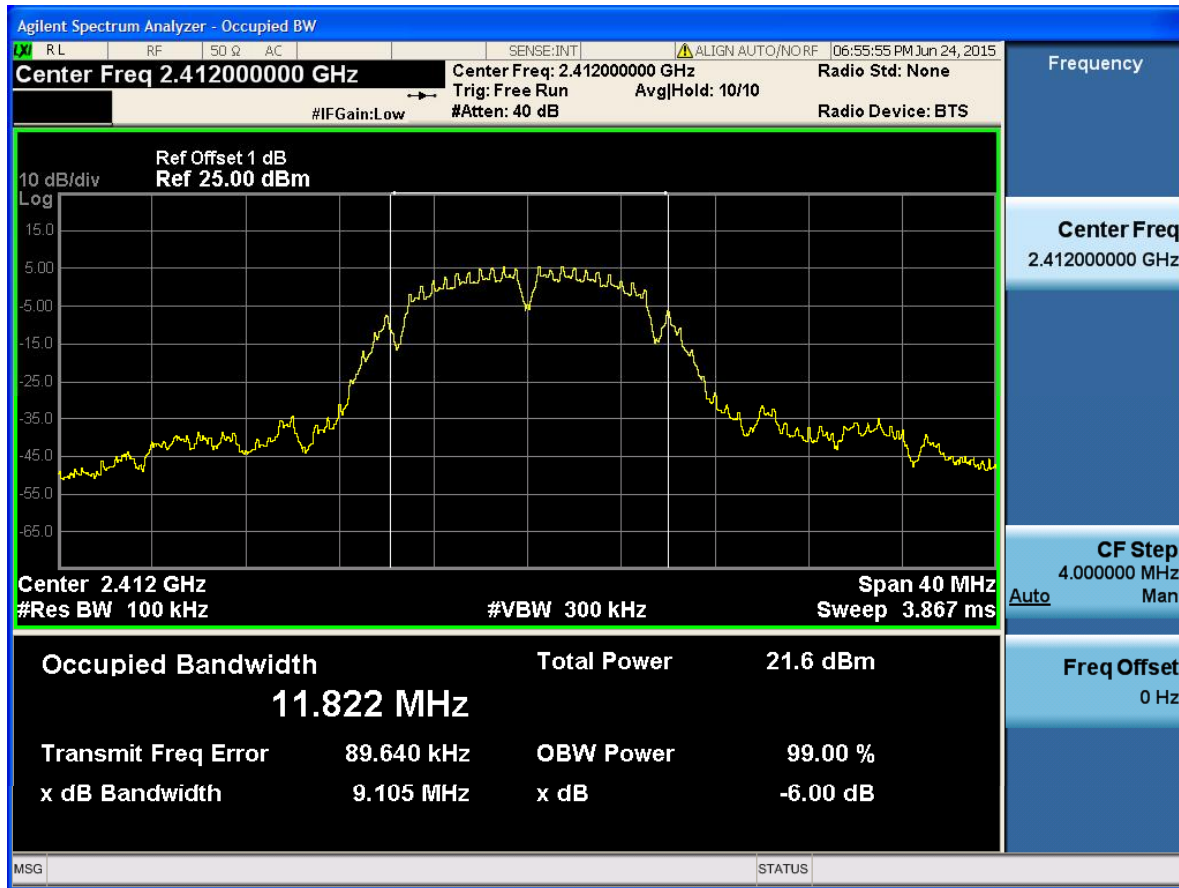
Part II - Test Plots

2.1 11B_L@Ant 1



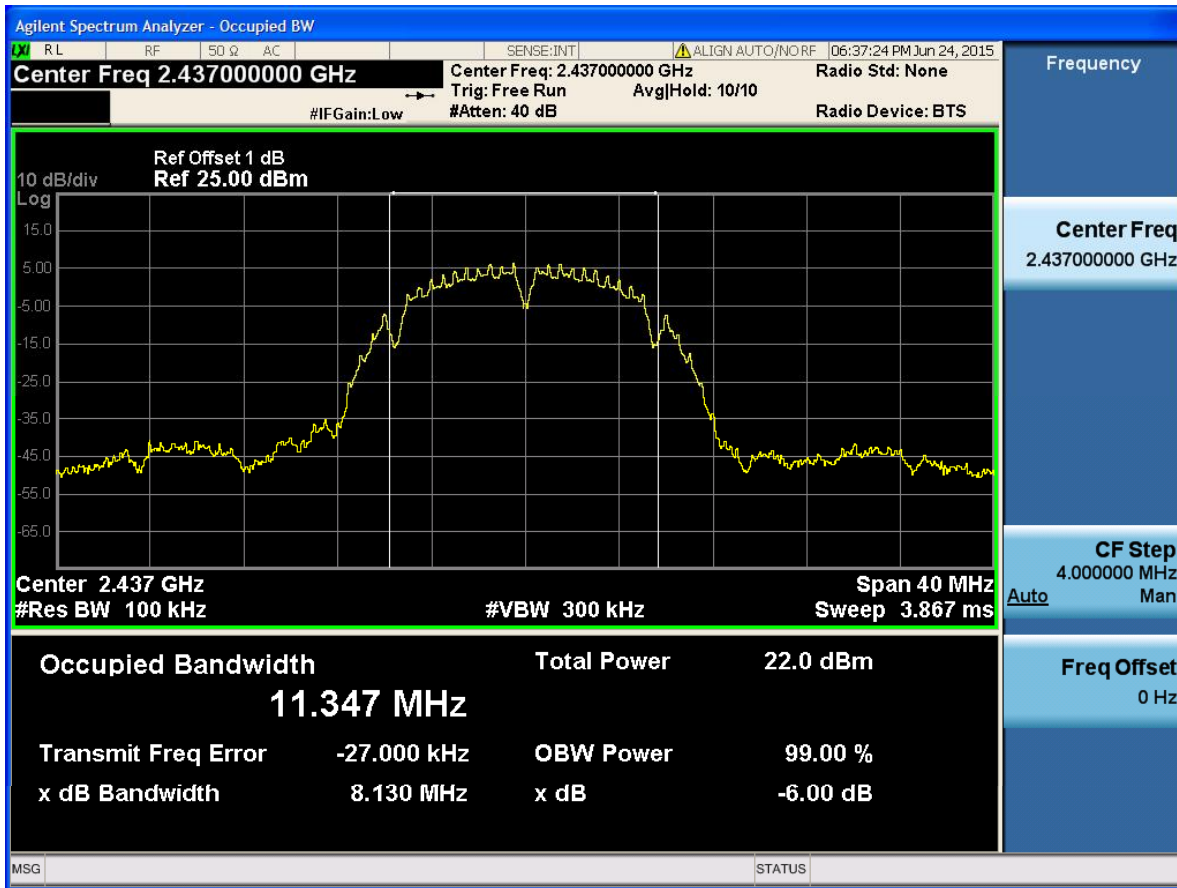


2.2 11B_L@Ant 2



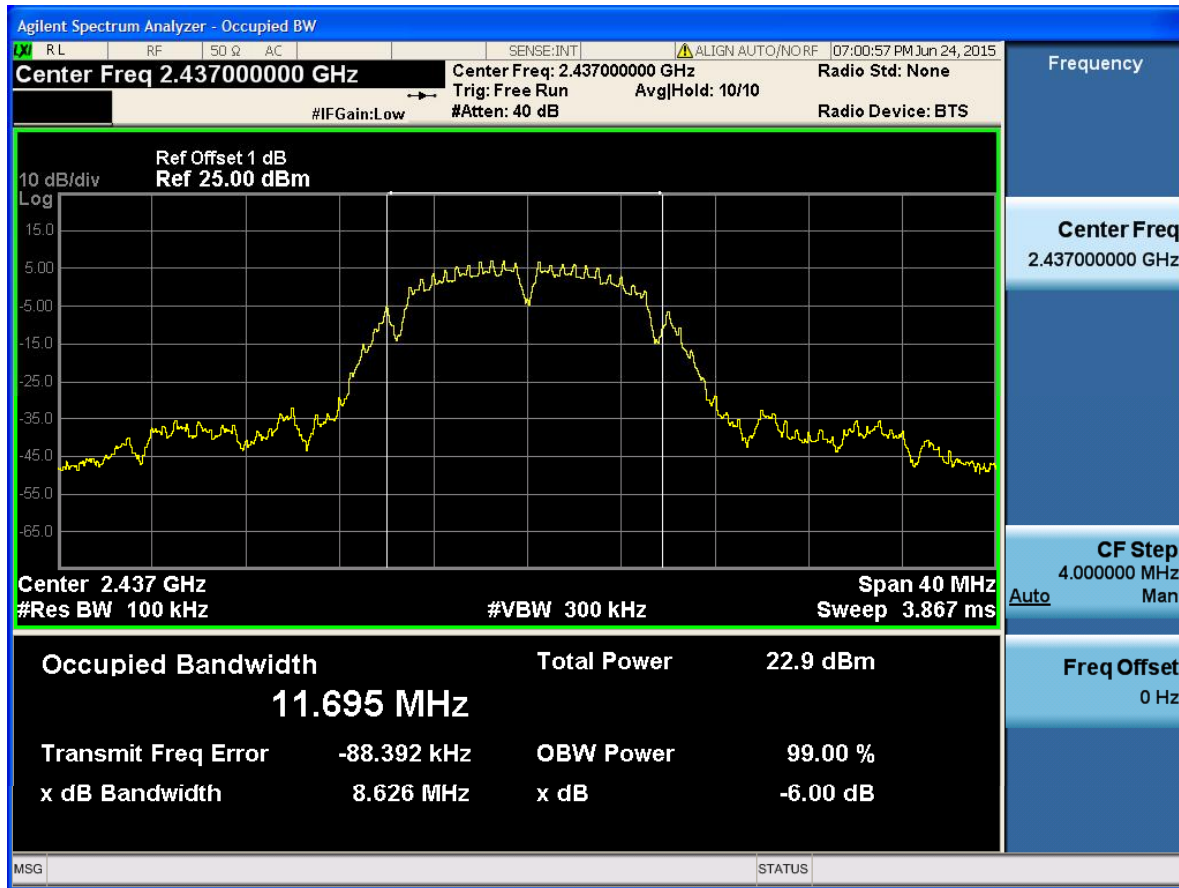


2.3 11B_M@Ant 1



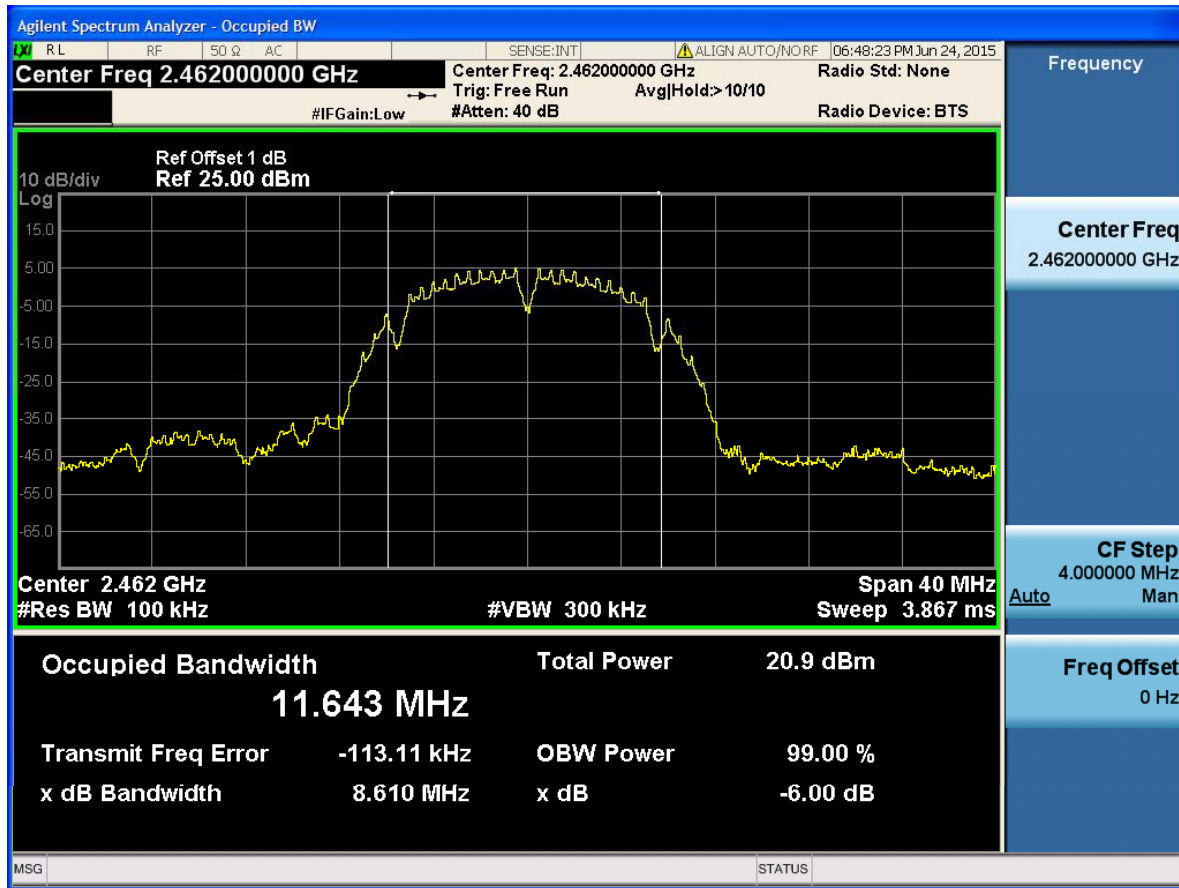


2.4 11B_M@Ant 2



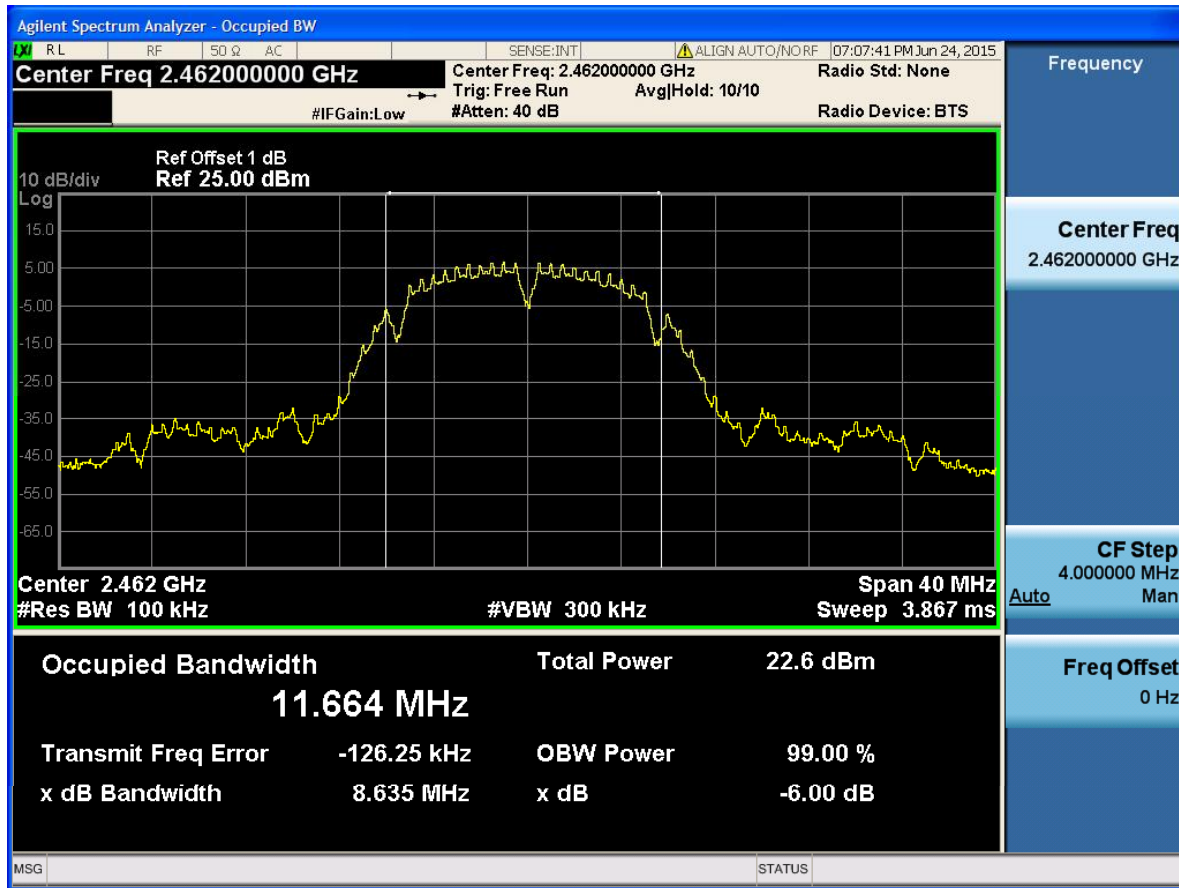


2.5 11B_H@Ant 1



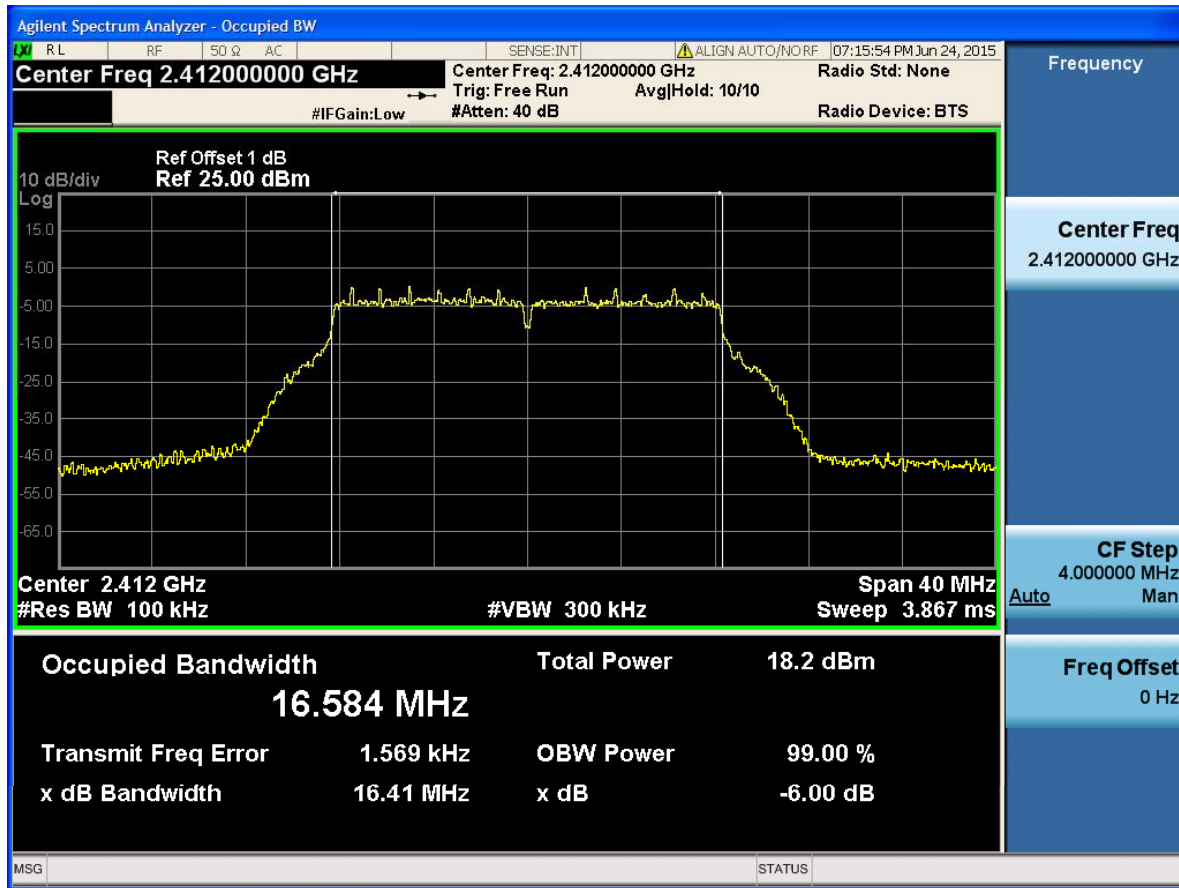


2.6 11B_H@Ant 2



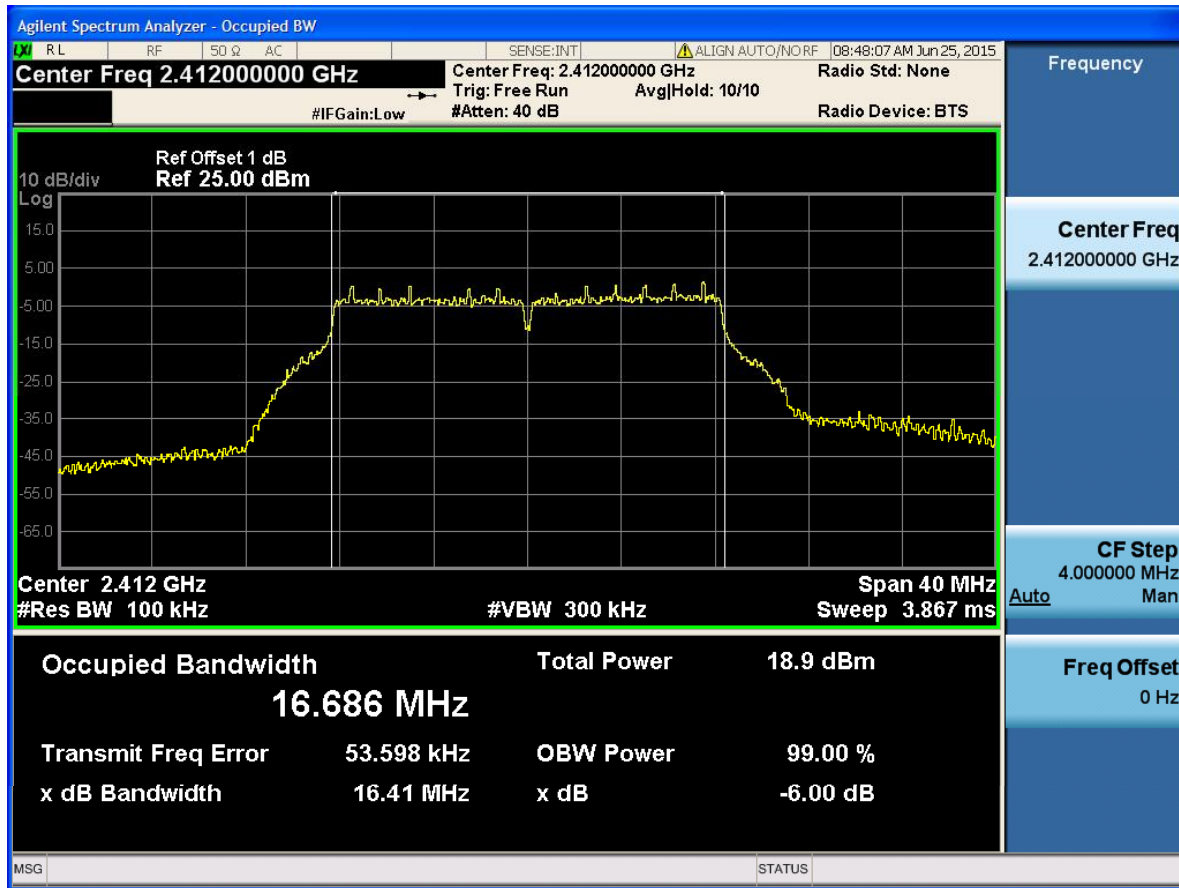


2.7 11G_L@Ant 1



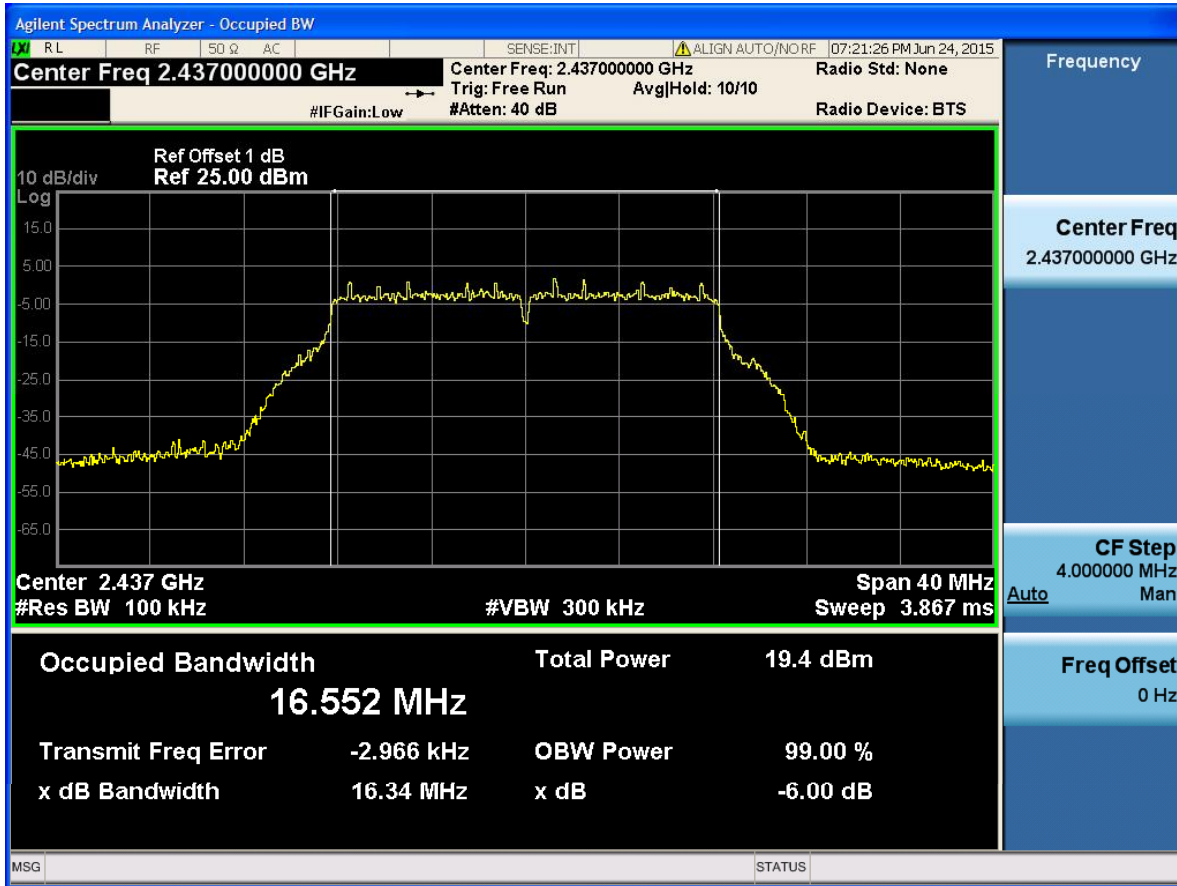


2.8 11G_L@Ant 2



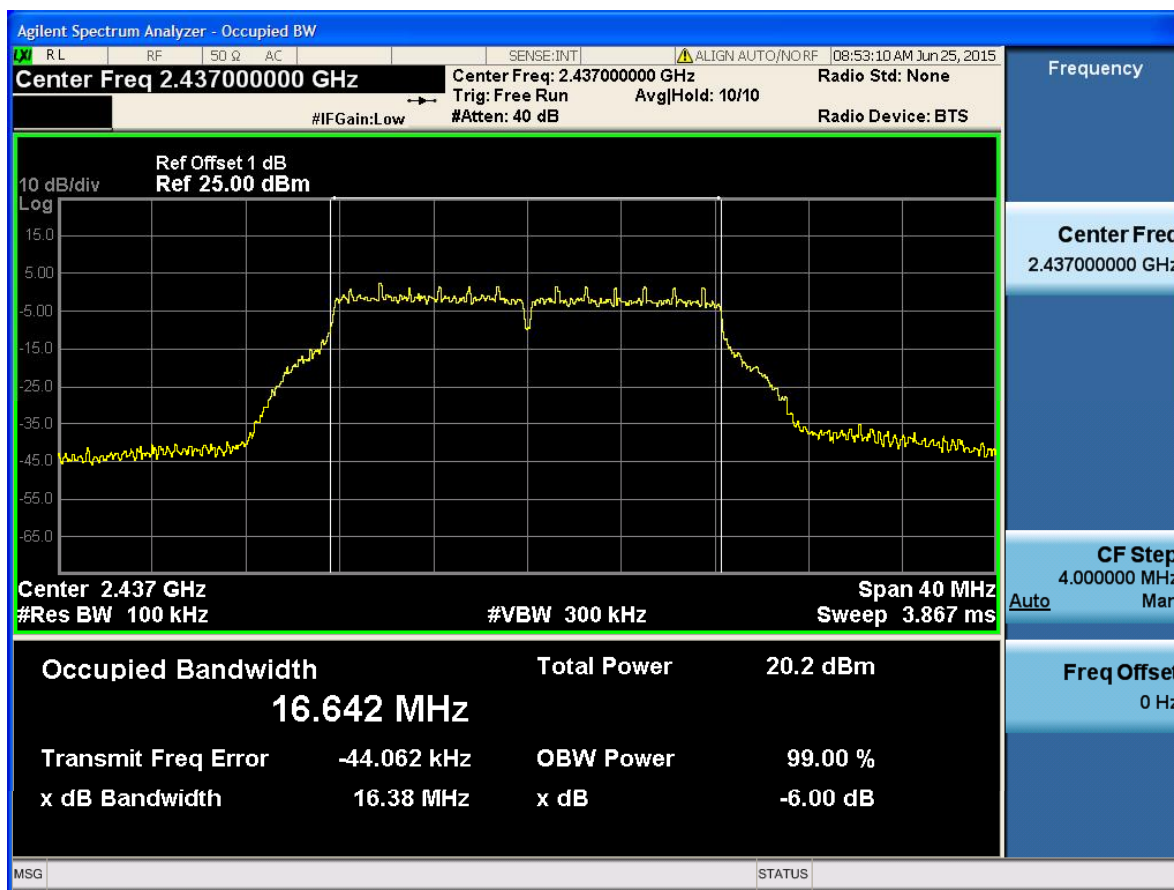


2.9 11G_M@Ant 1



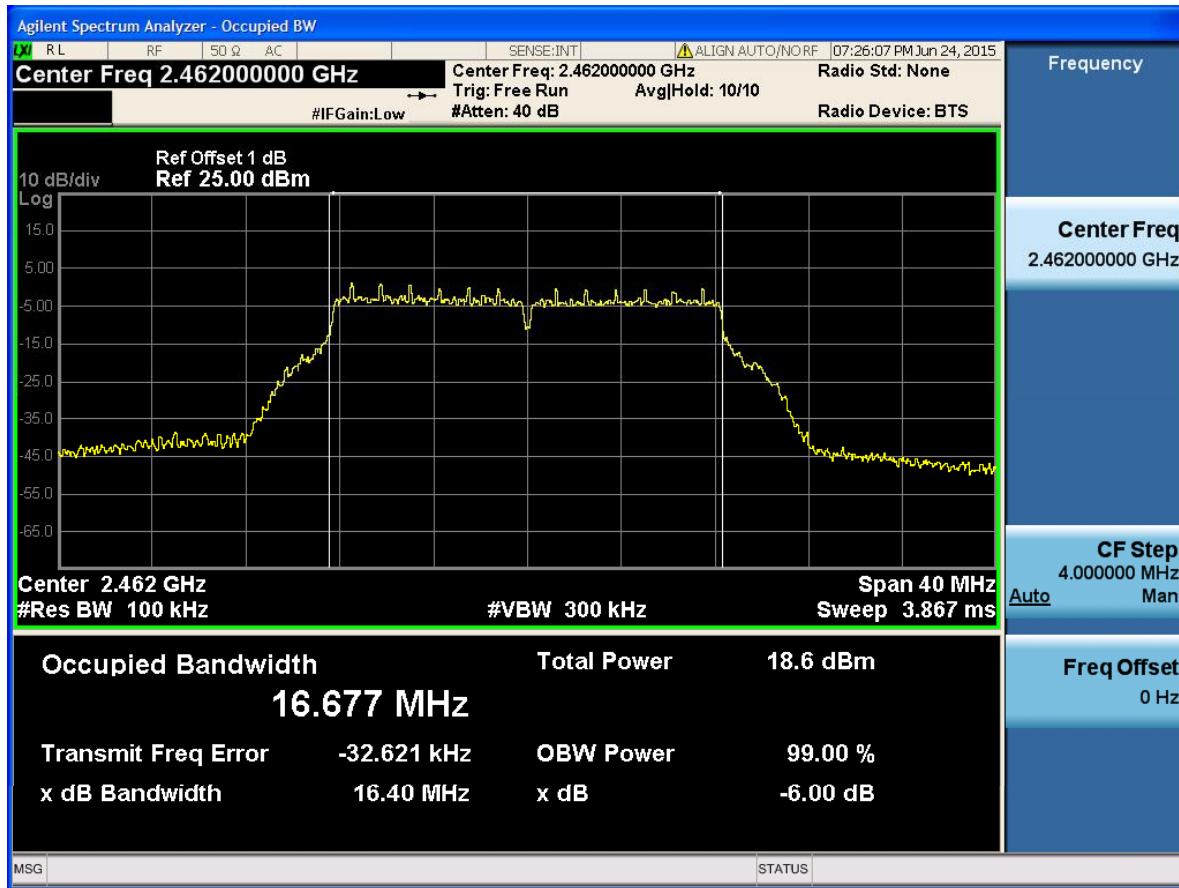


2.10 11G_M@Ant 2



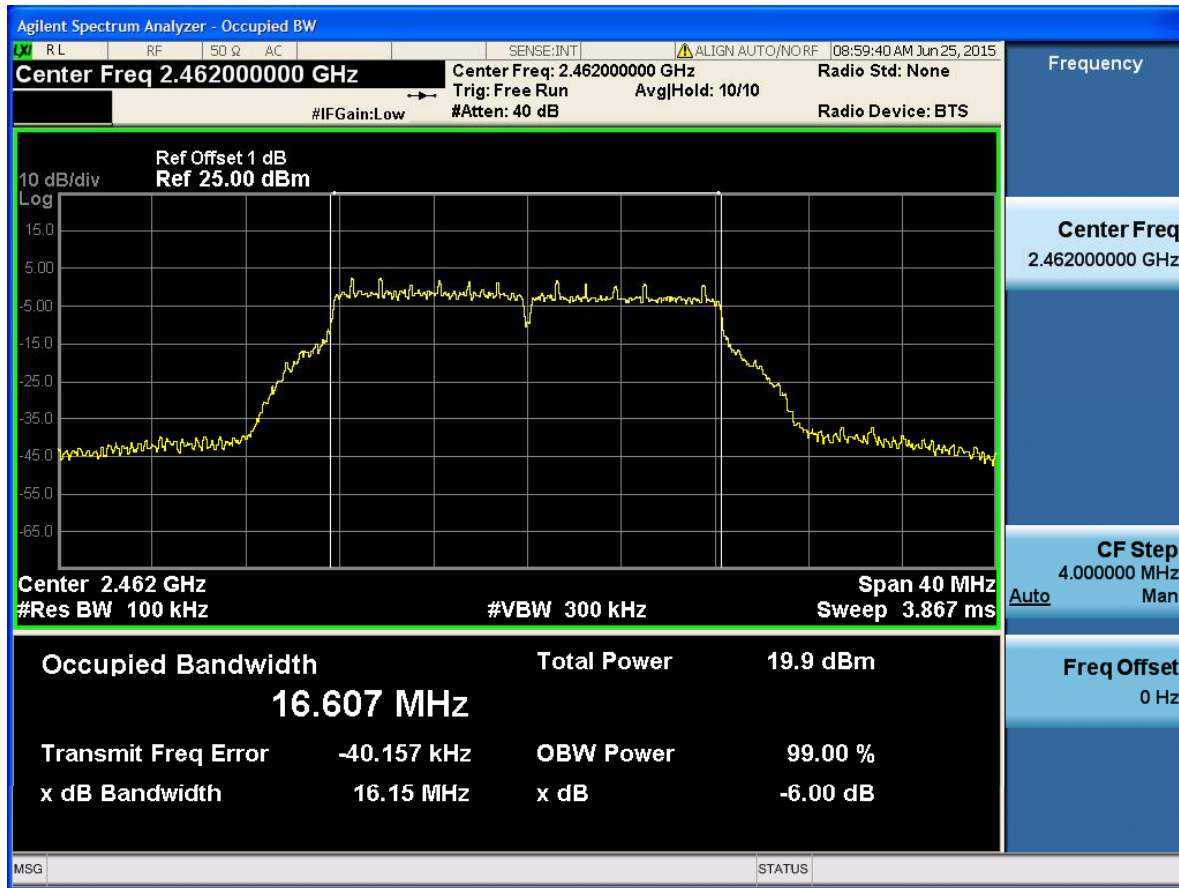


2.11 11G_H@Ant 1



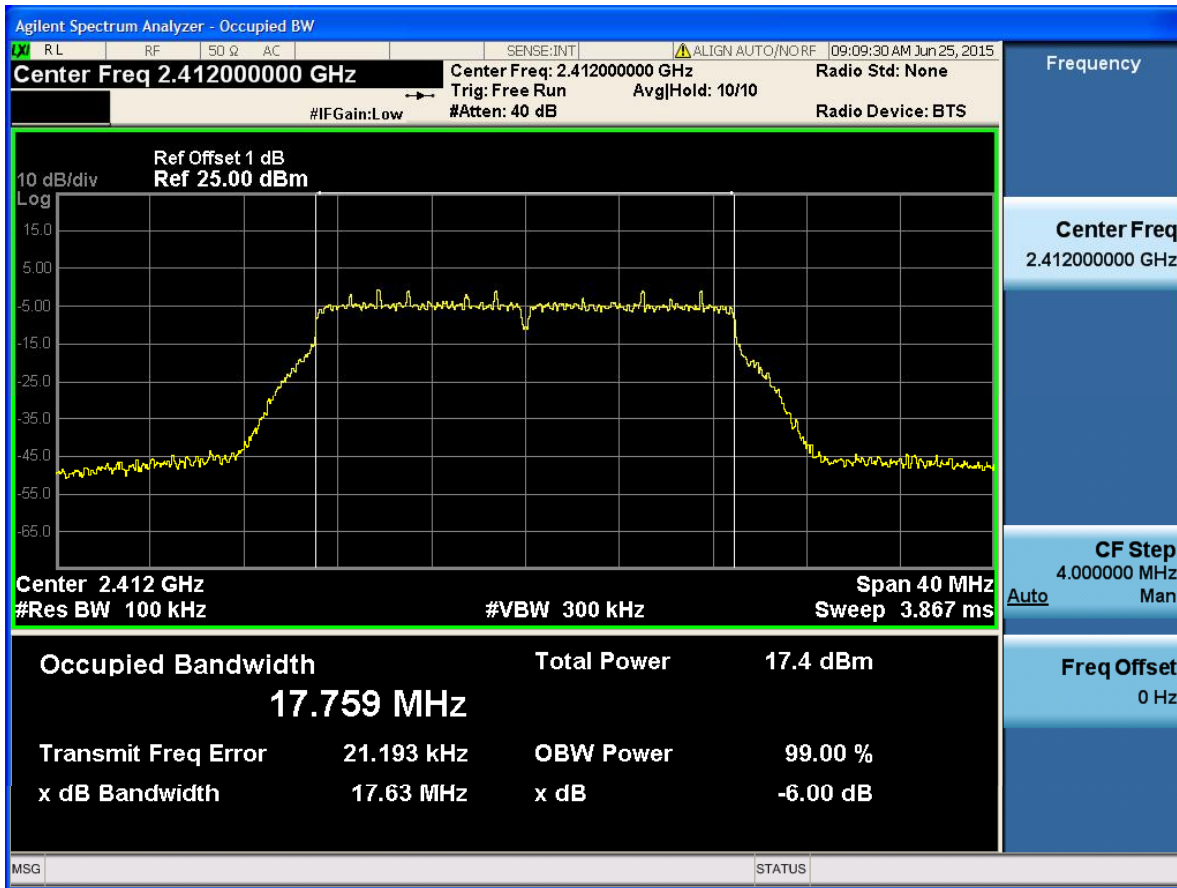


2.12 11G_H@Ant 2



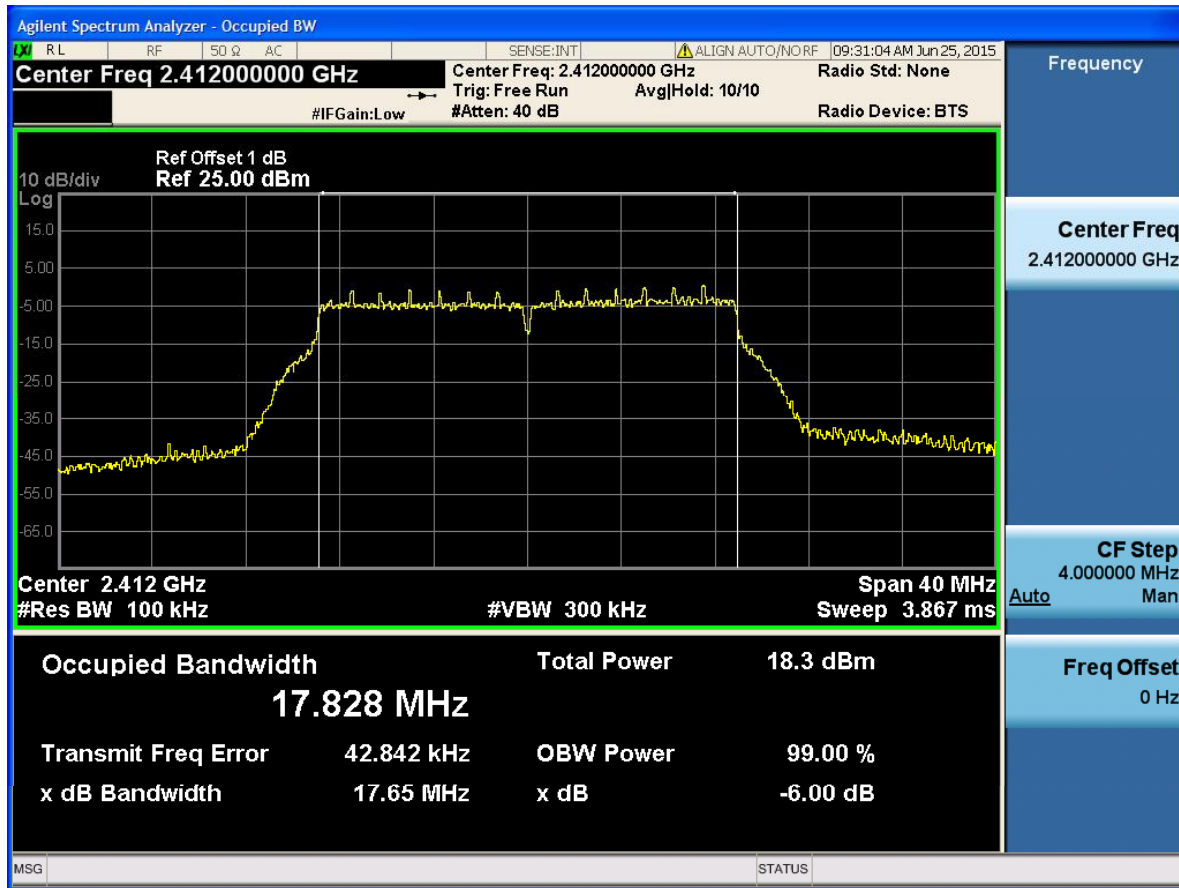


2.13 11N20_L@Ant 1



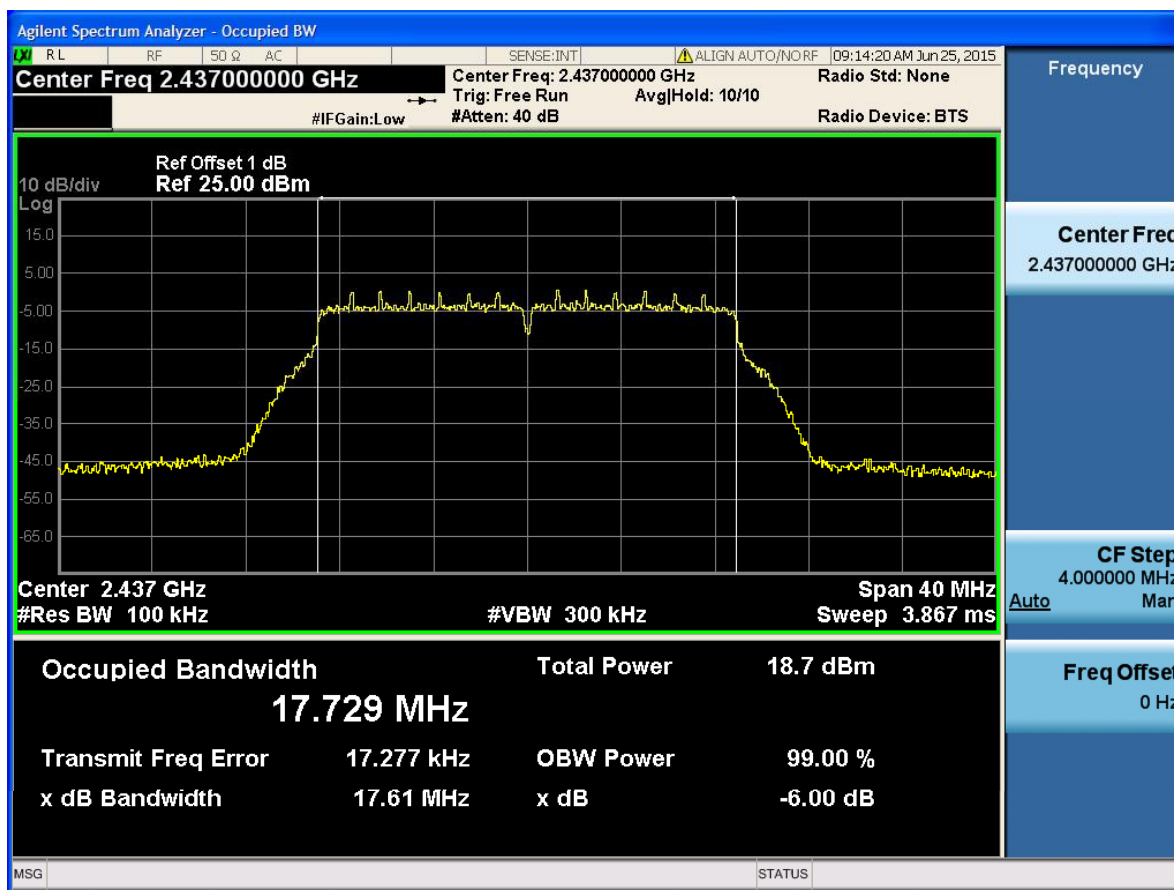


2.14 11N20_L@Ant 2



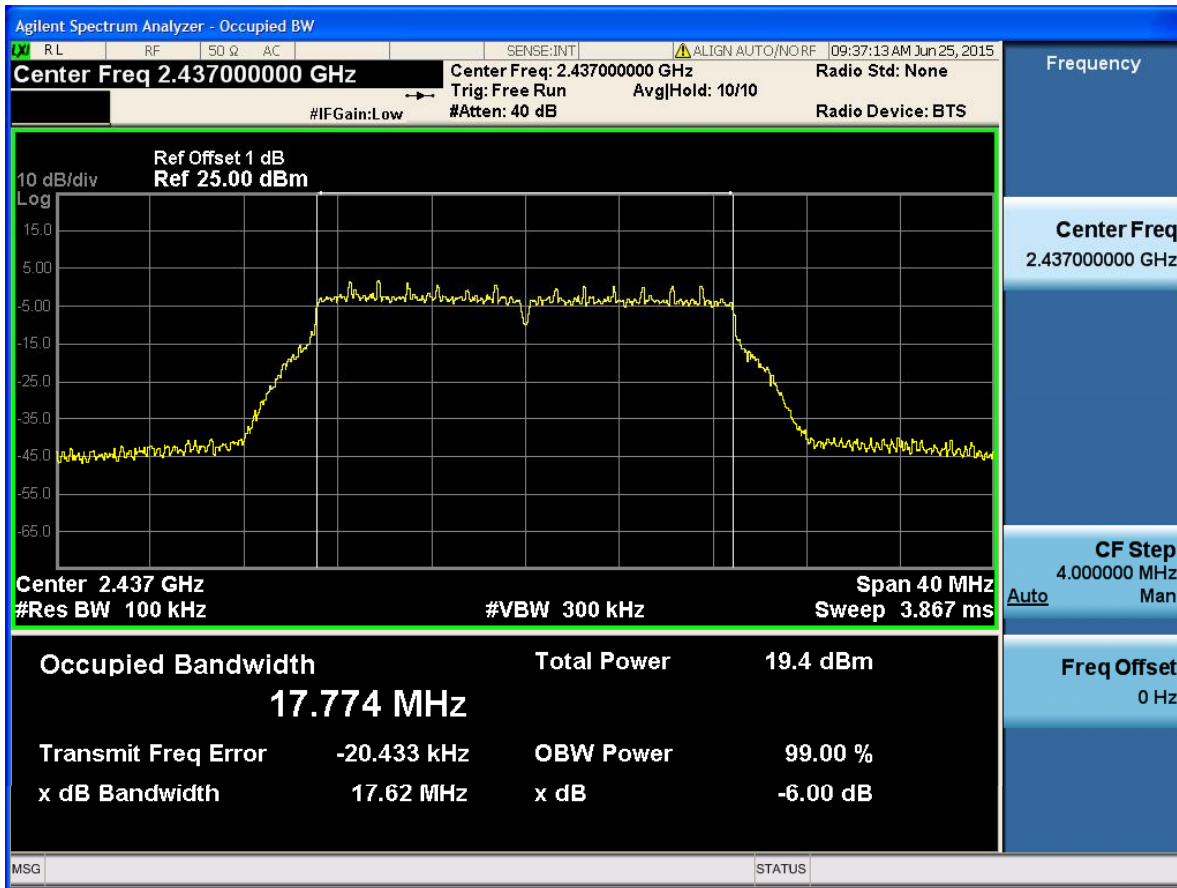


2.15 11N20_M@Ant 1



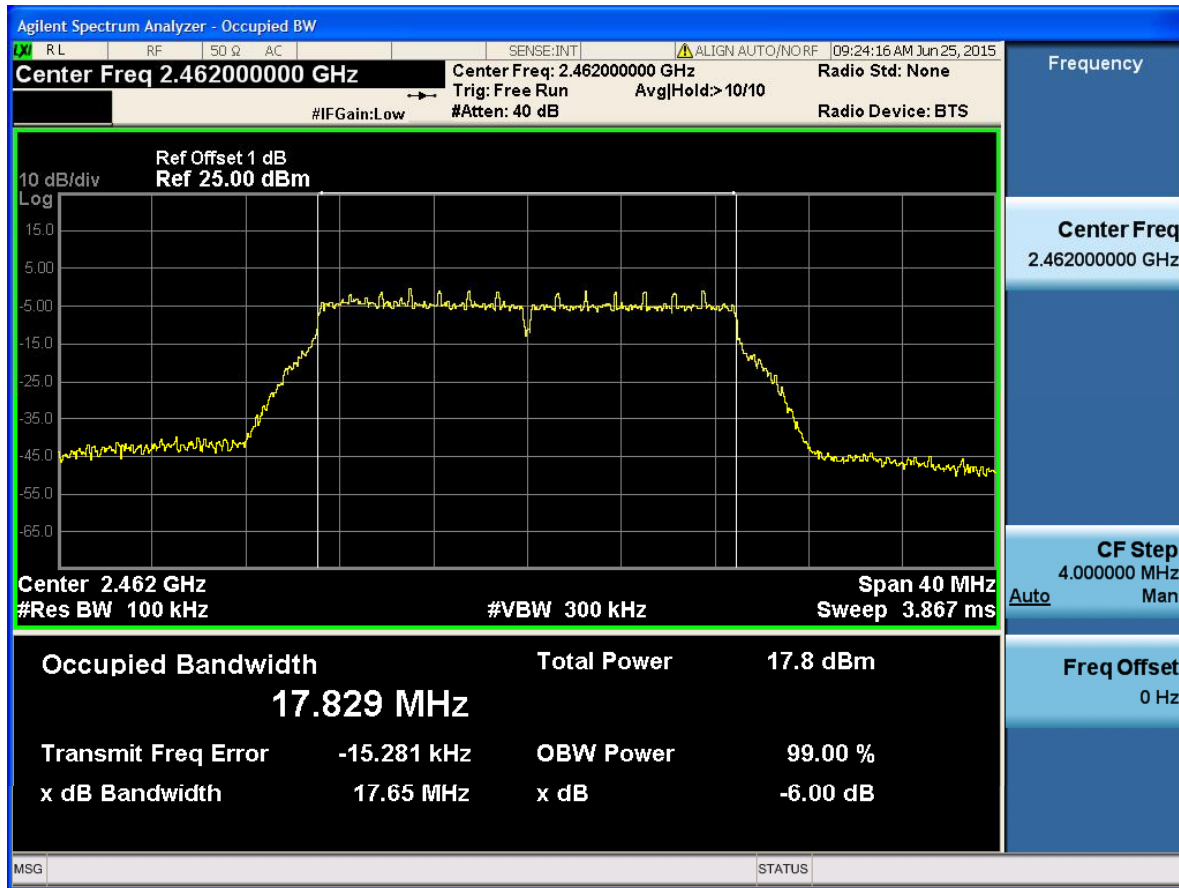


2.16 11N20_M@Ant 2



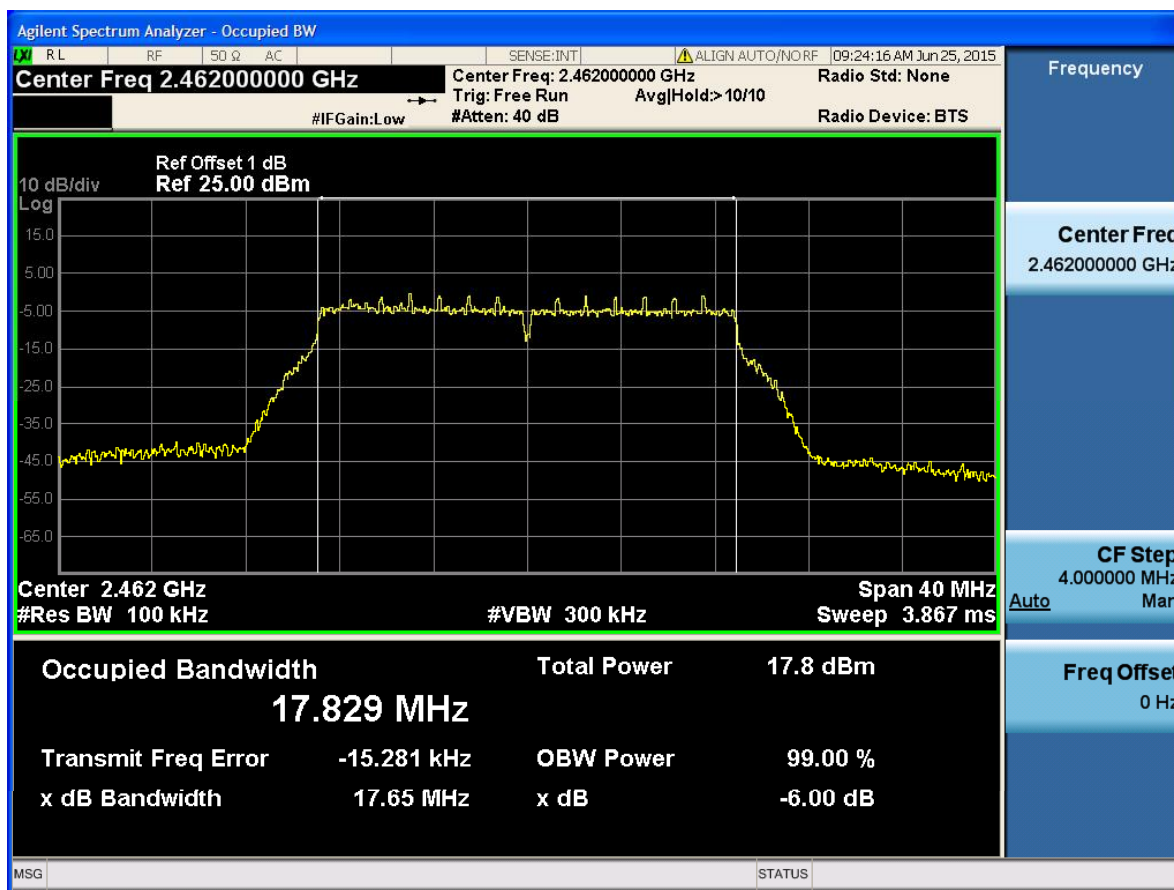


2.17 11N20_H@Ant 1



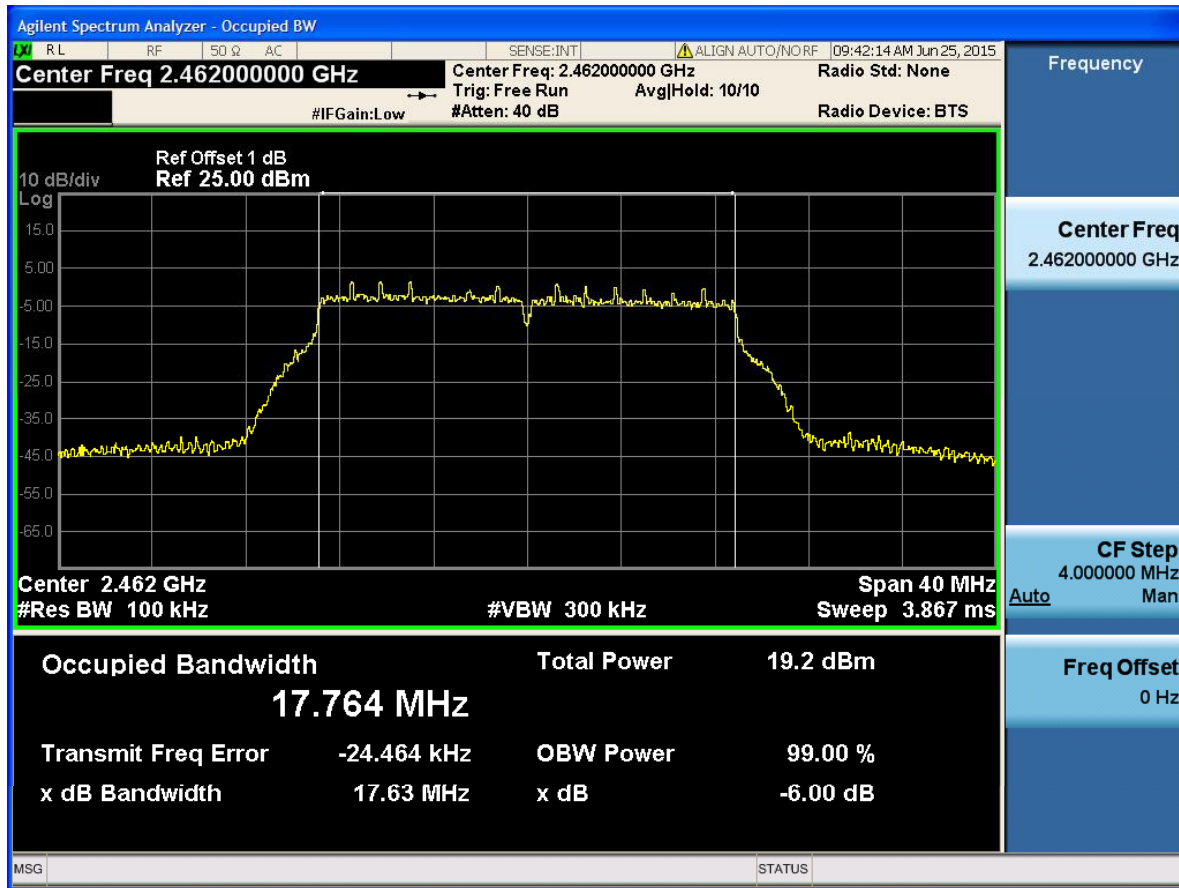


2.17 11N20_H@Ant 1



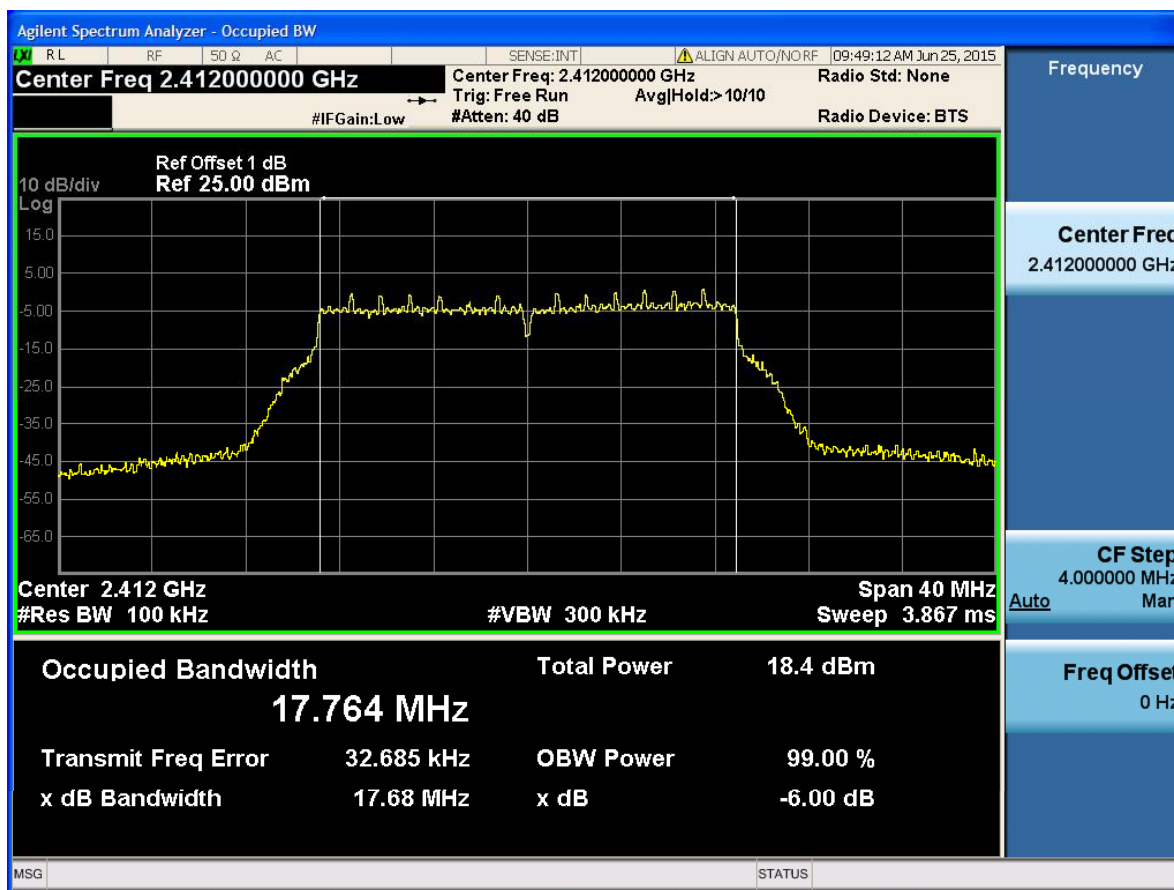


2.18 11N20_H@Ant 2



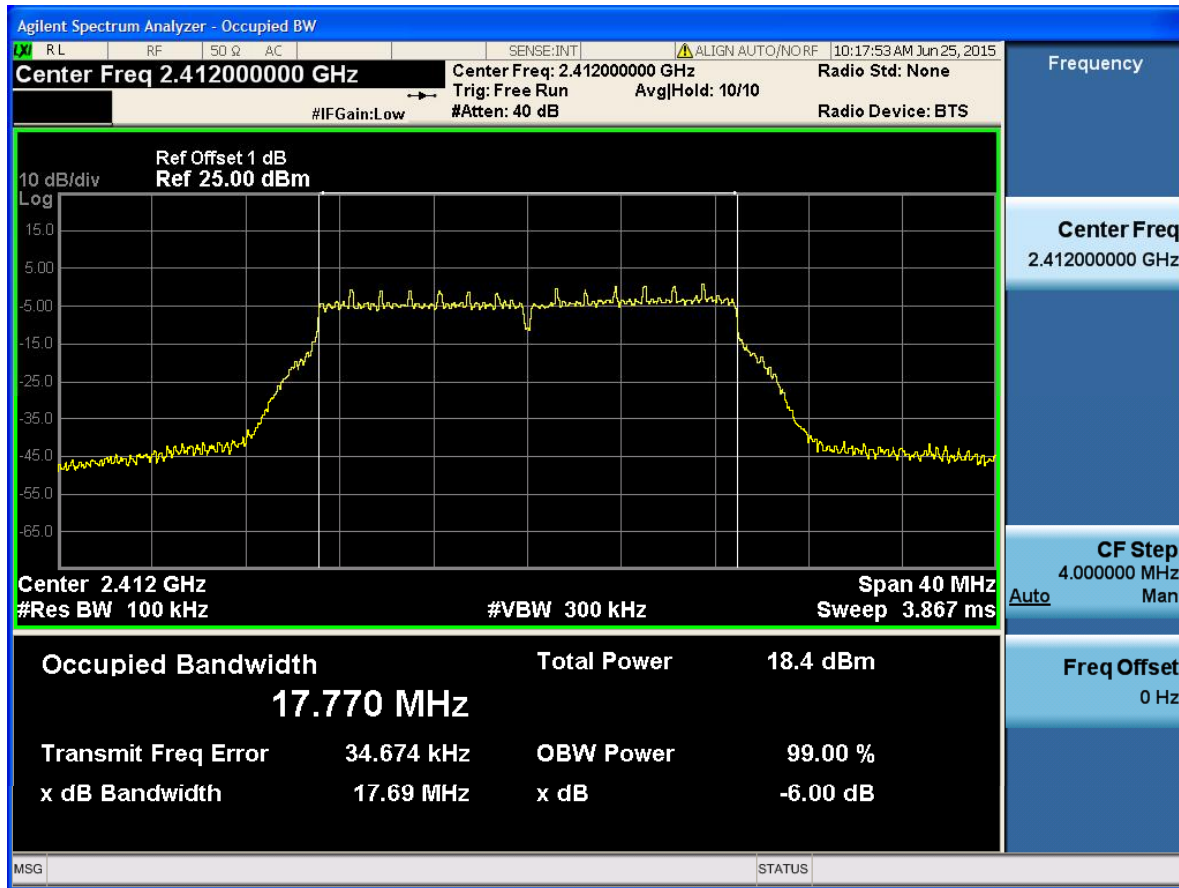


2.19 11N20m_L@Ant 1



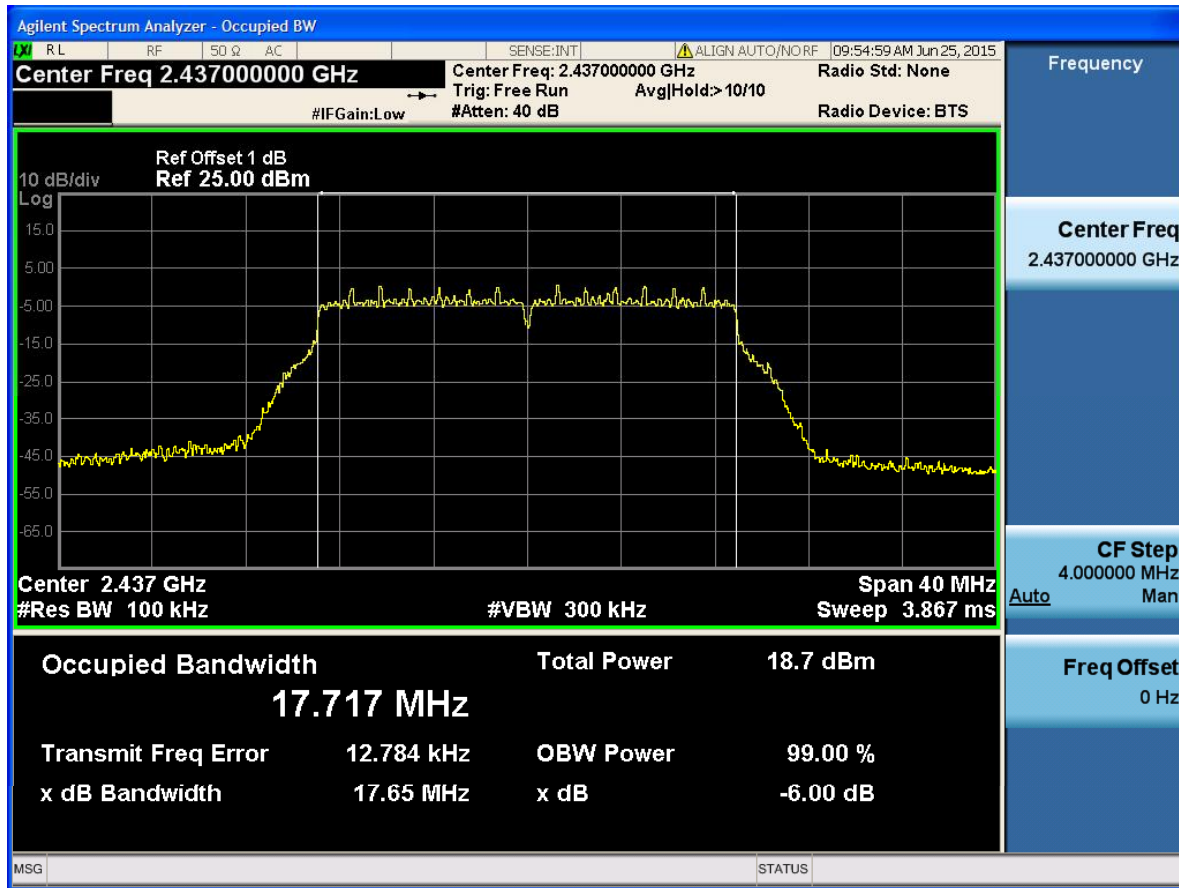


2.20 11N20m_L@Ant 2



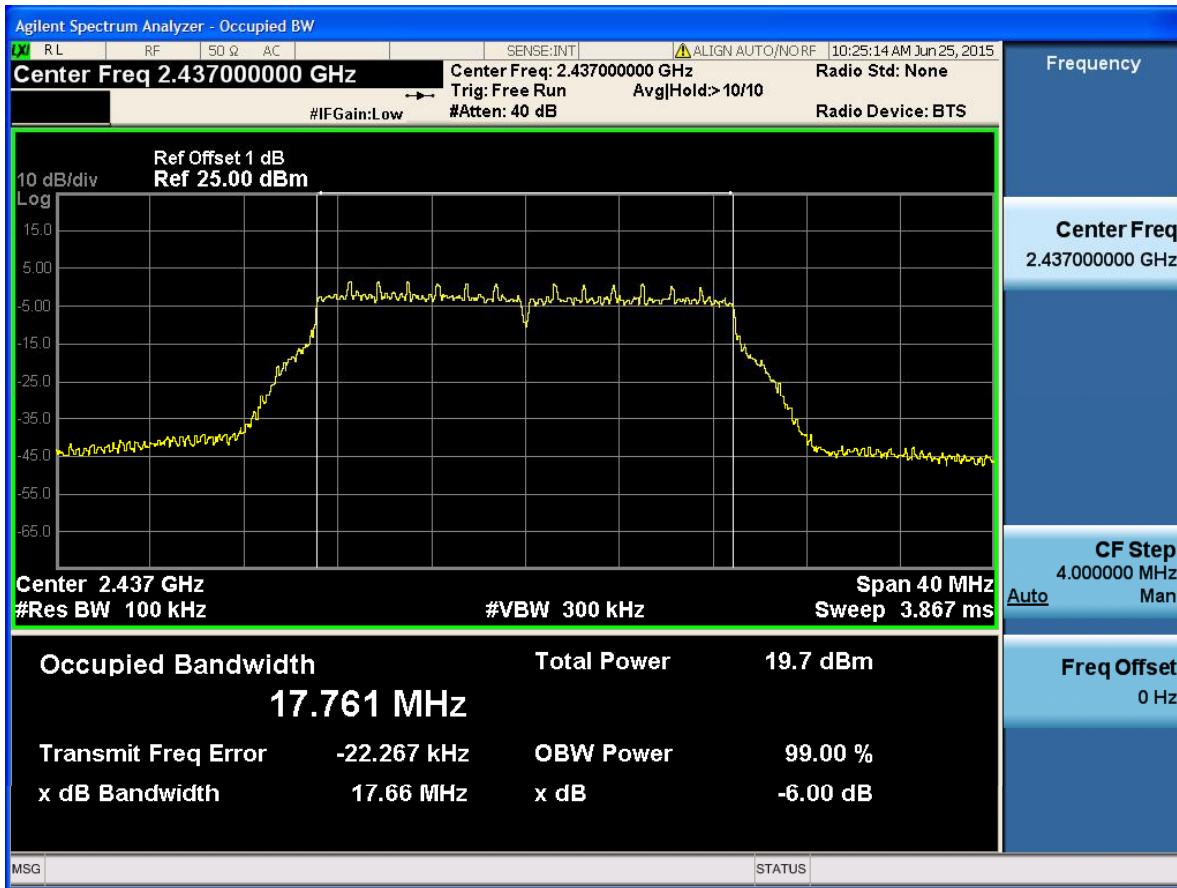


2.21 11N20m_M@Ant 1

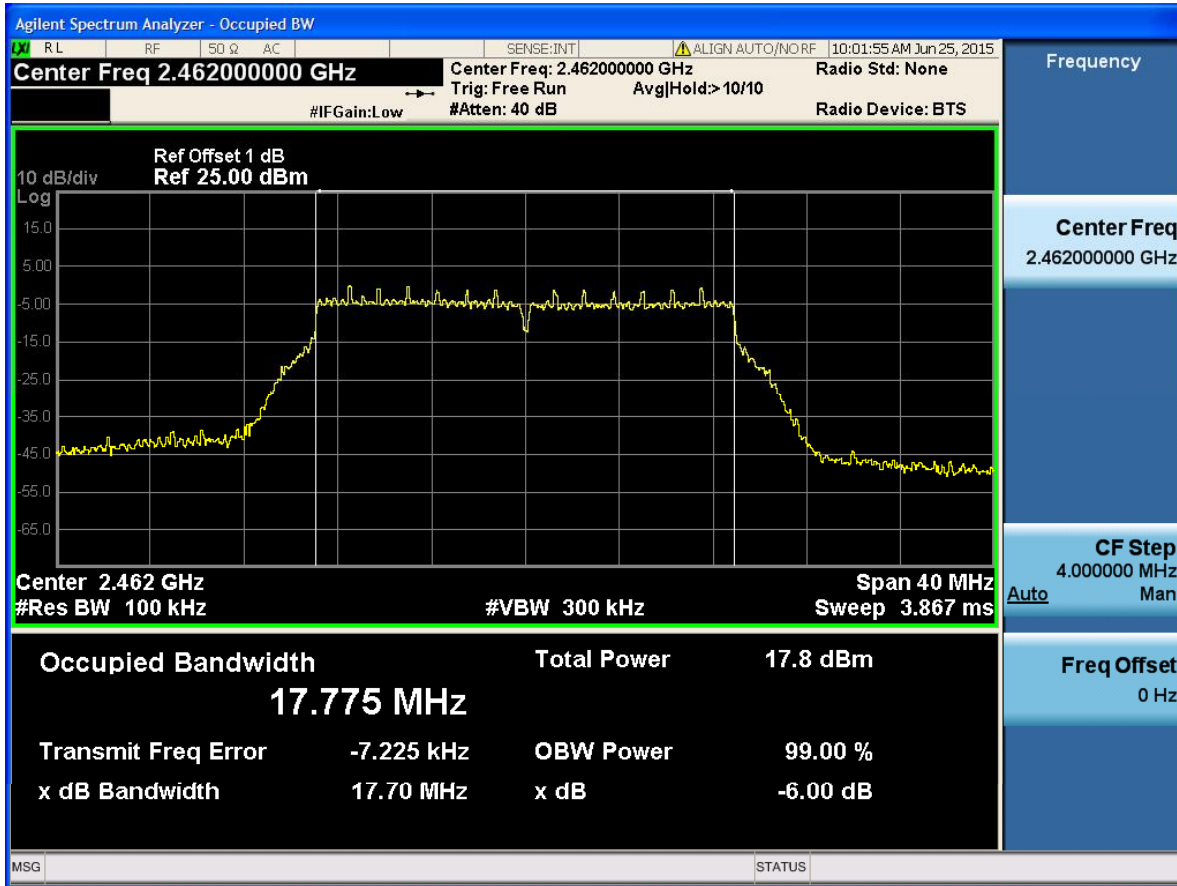




2.22 11N20m_M@Ant 2

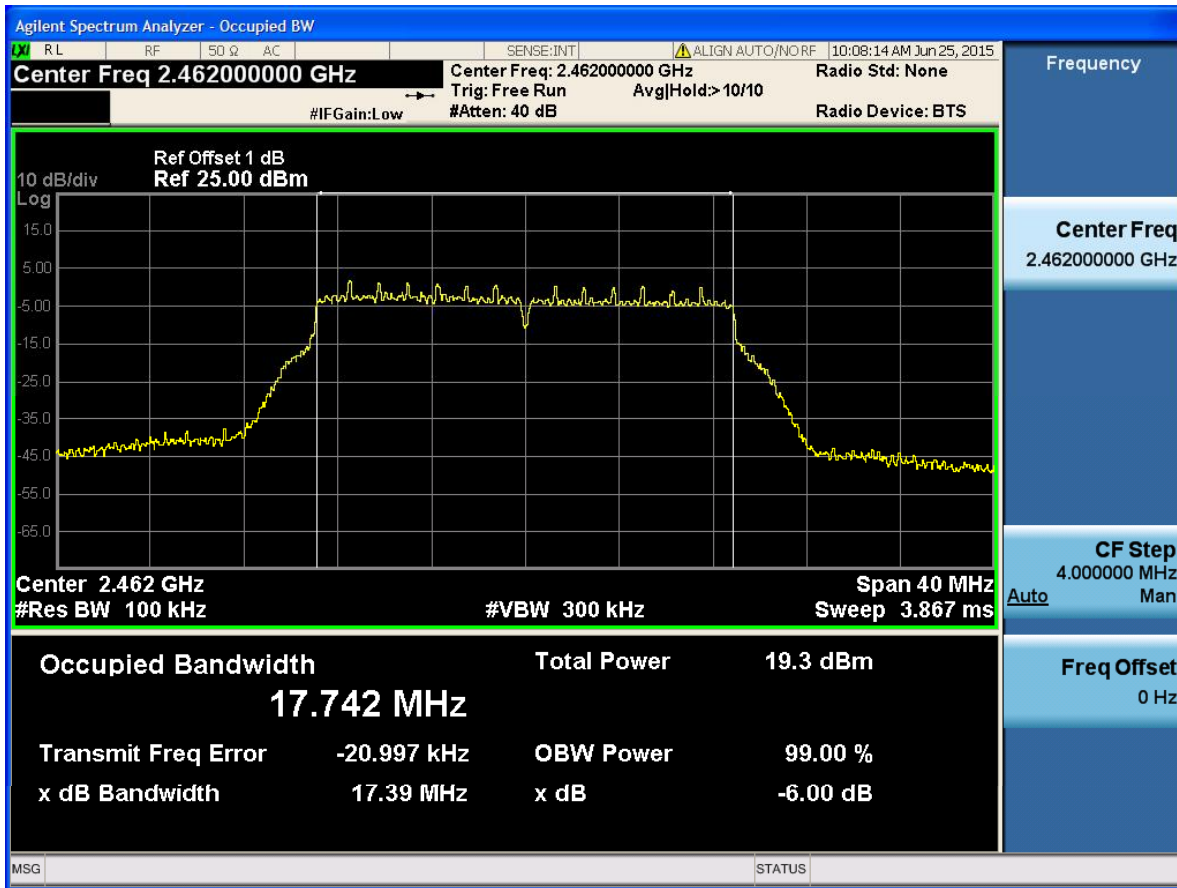


2.23 11N20m_H@Ant 1



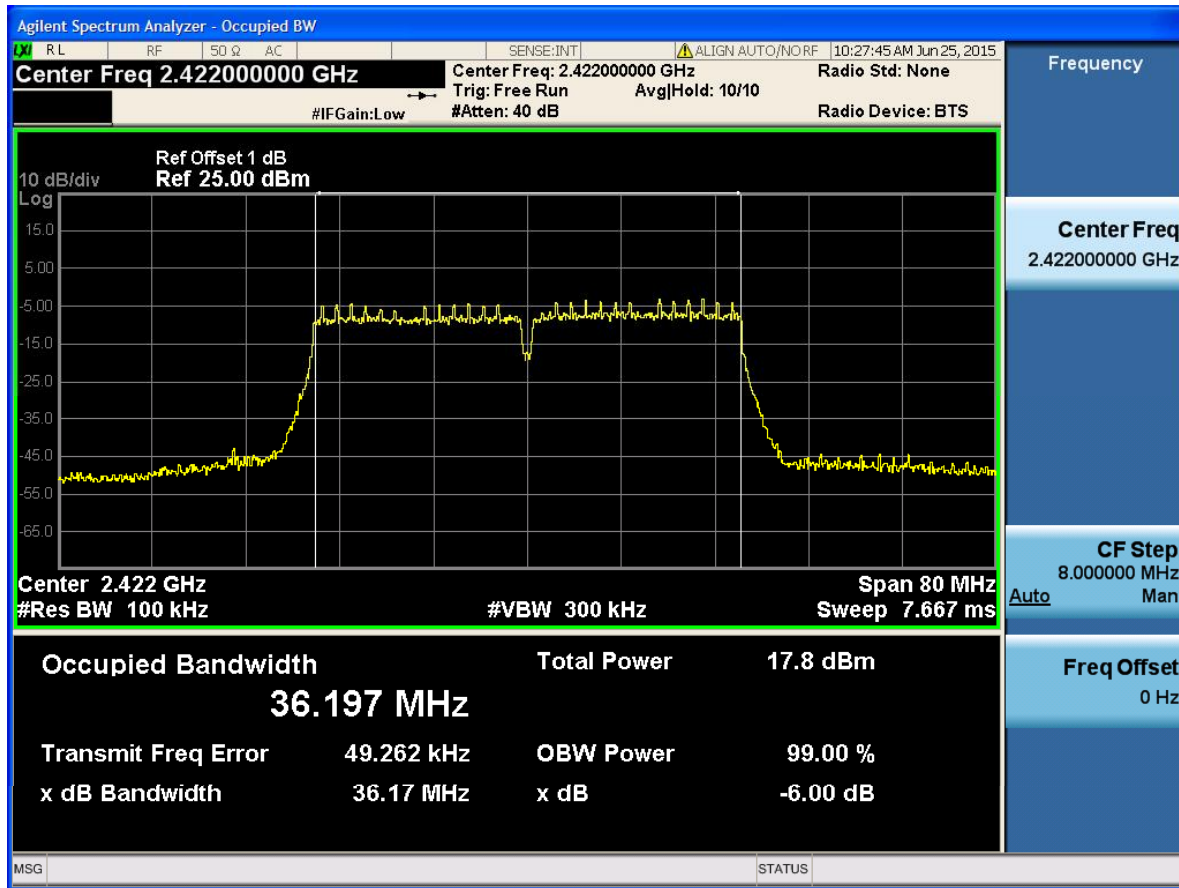


2.24 11N20m_H@Ant 2

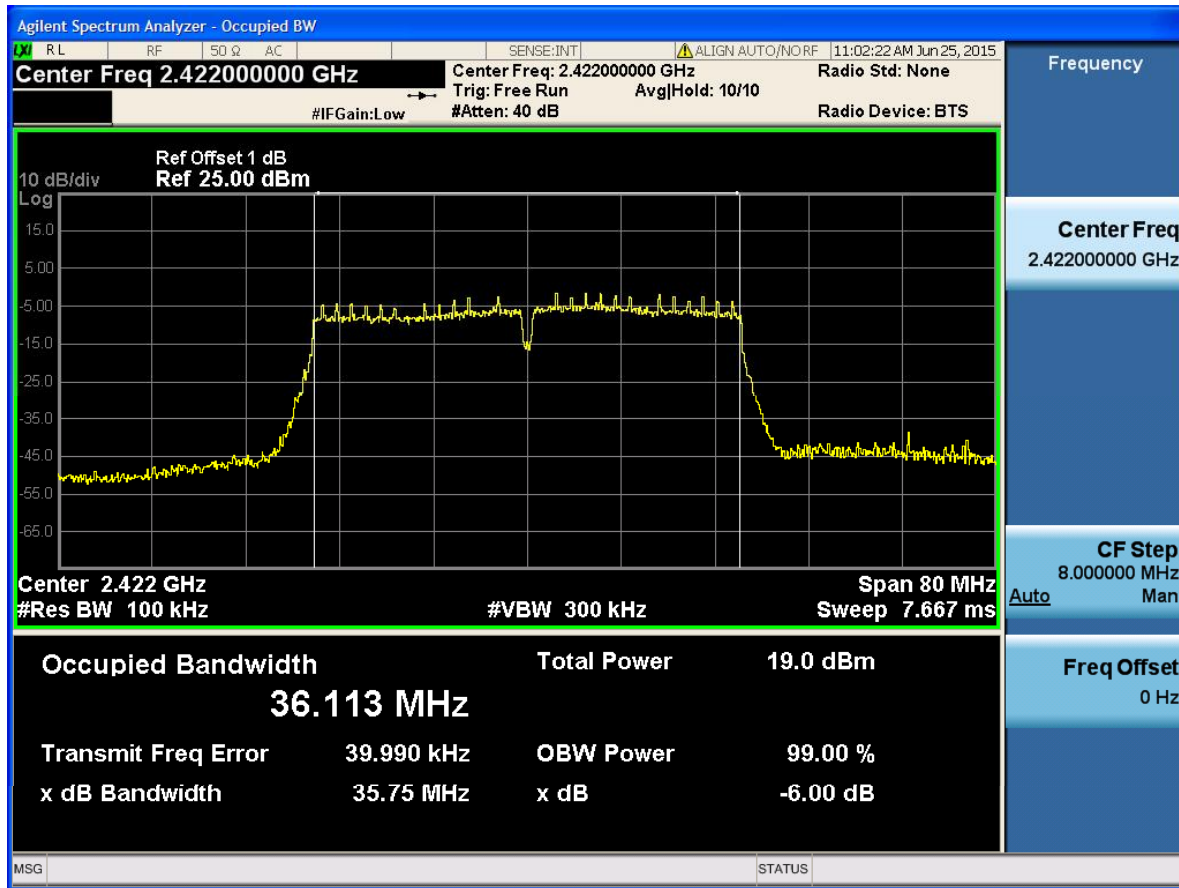




2.25 11N40_L@Ant 1

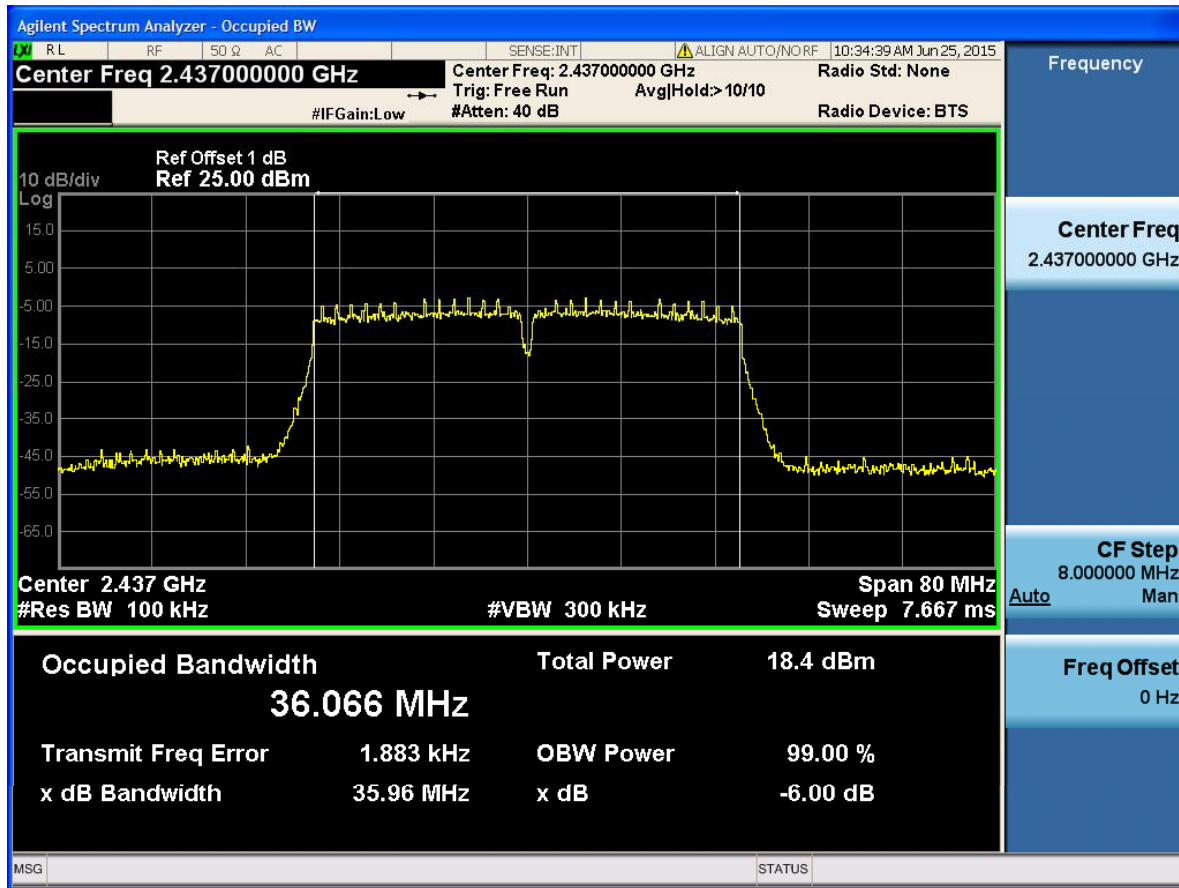


2.26 11N40_L@Ant 2



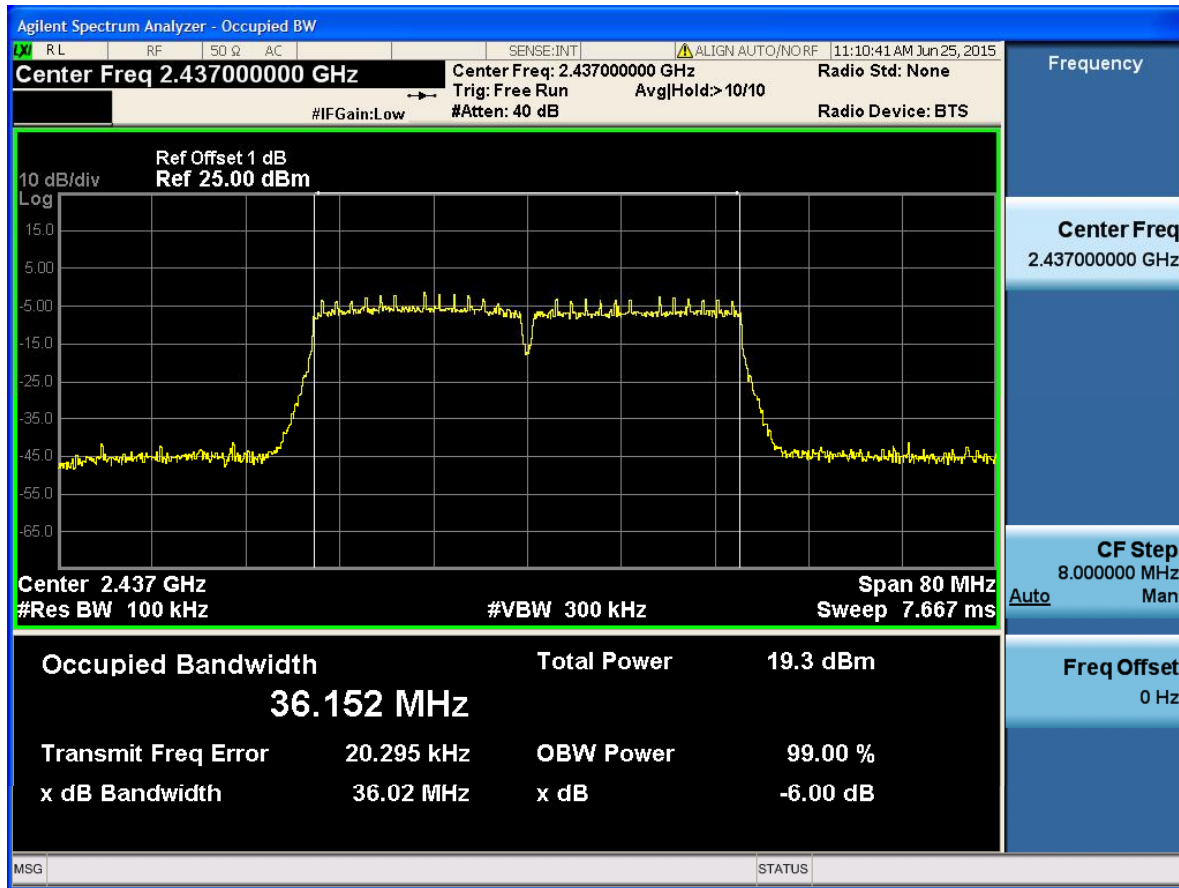


2.27 11N40_M@Ant 1



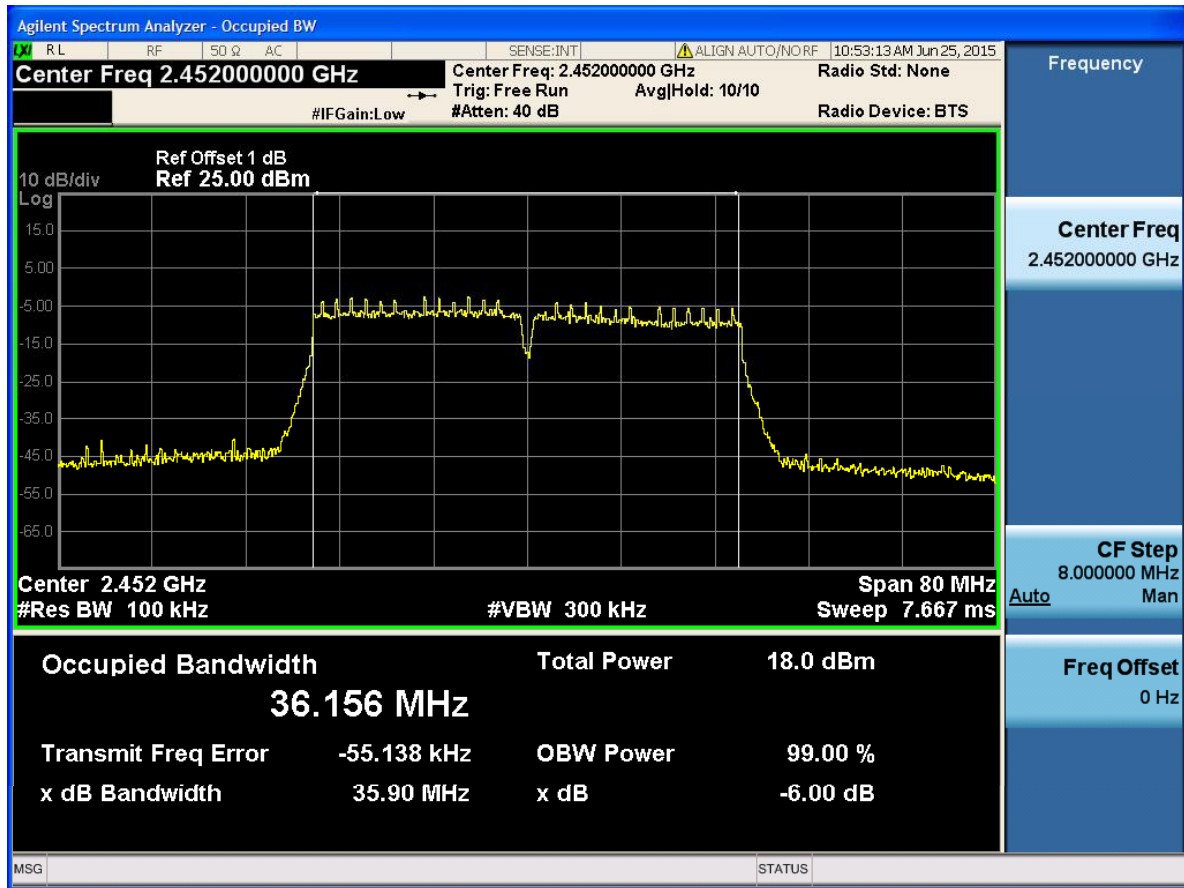


2.28 11N40_M@Ant 2



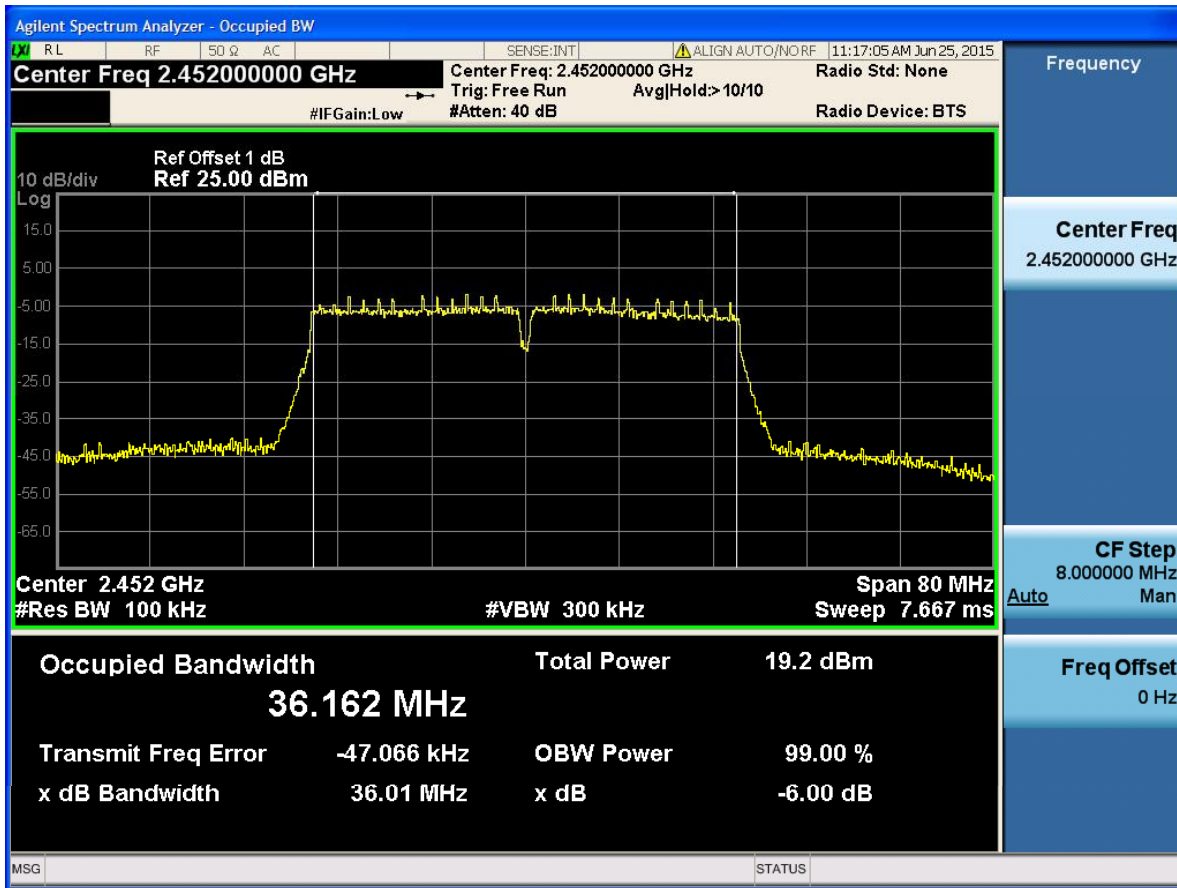


2.29 11N40_H@Ant 1



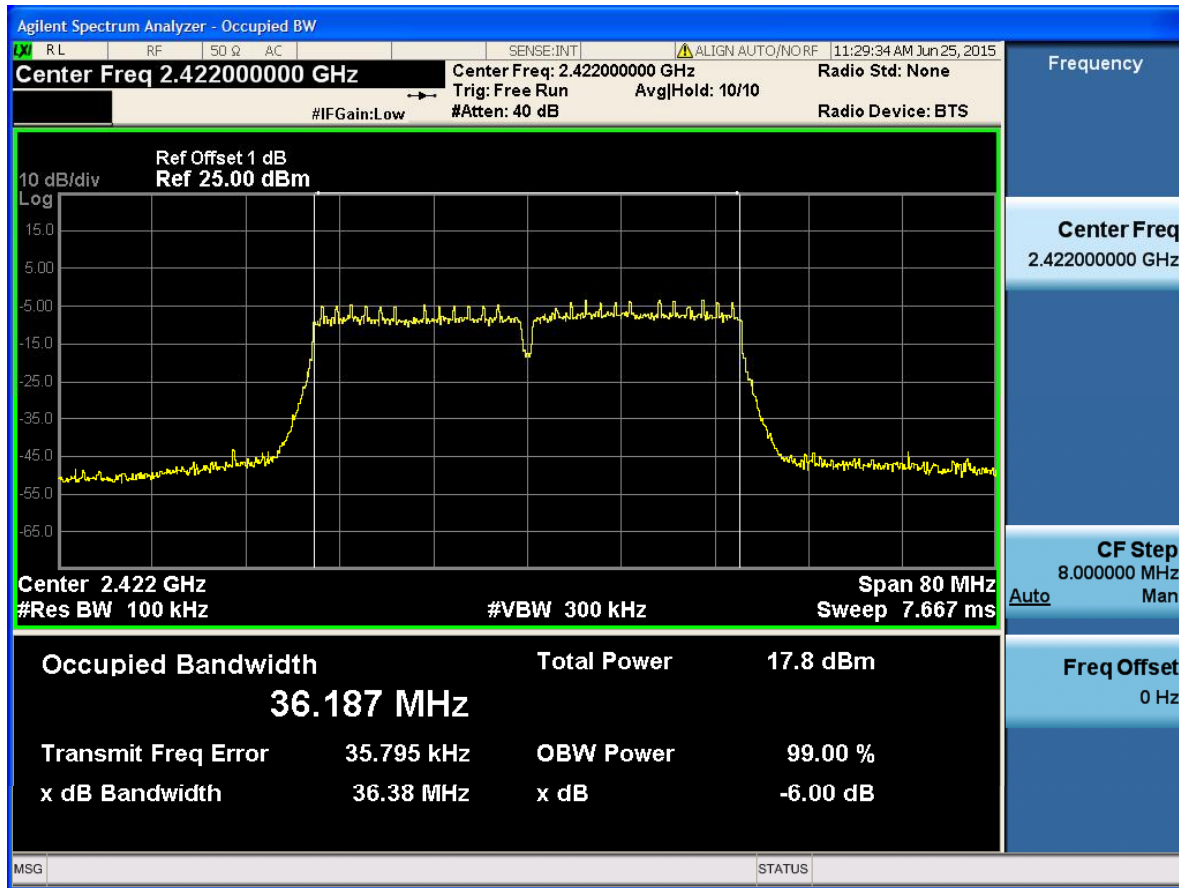


2.30 11N40_H@Ant 2



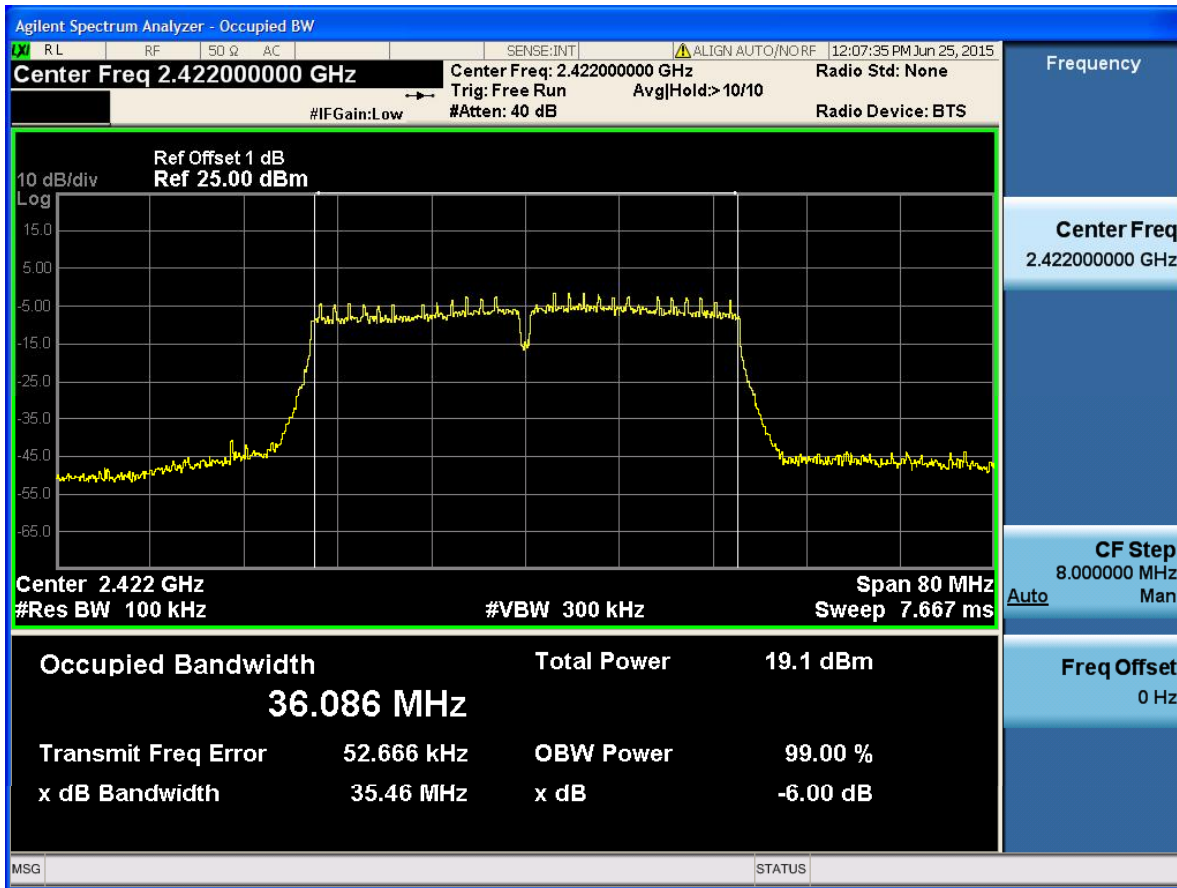


2.31 11N40m_L@Ant 1



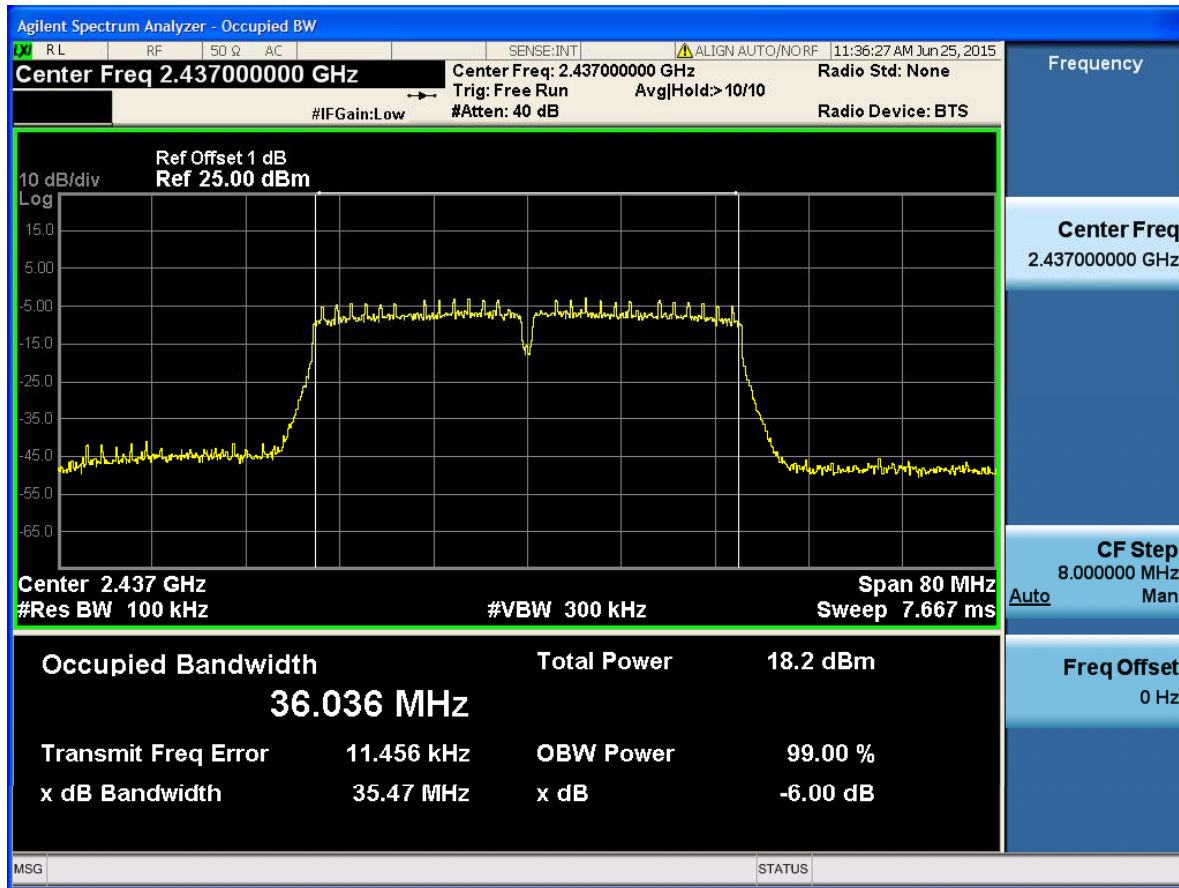


2.32 11N40m_L@Ant 2



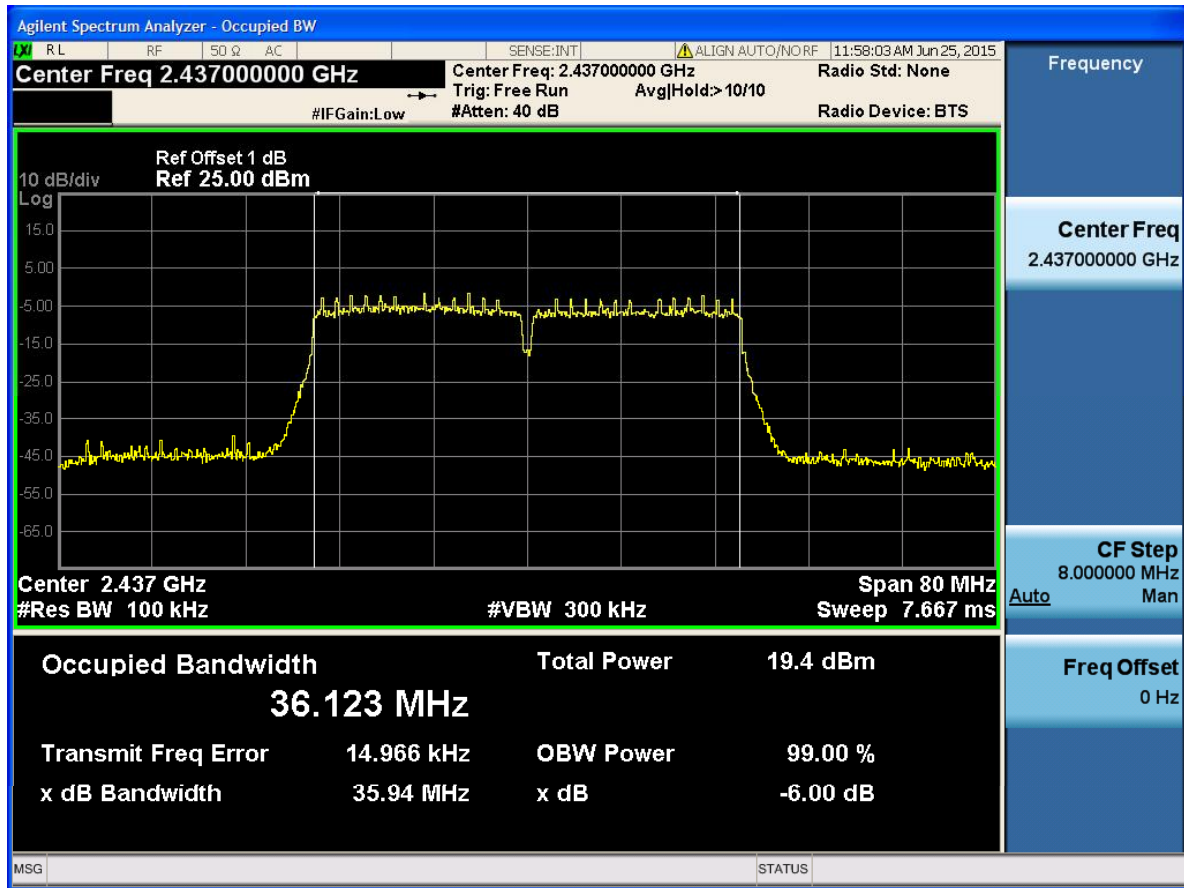


2.33 11N40m_M@Ant 1



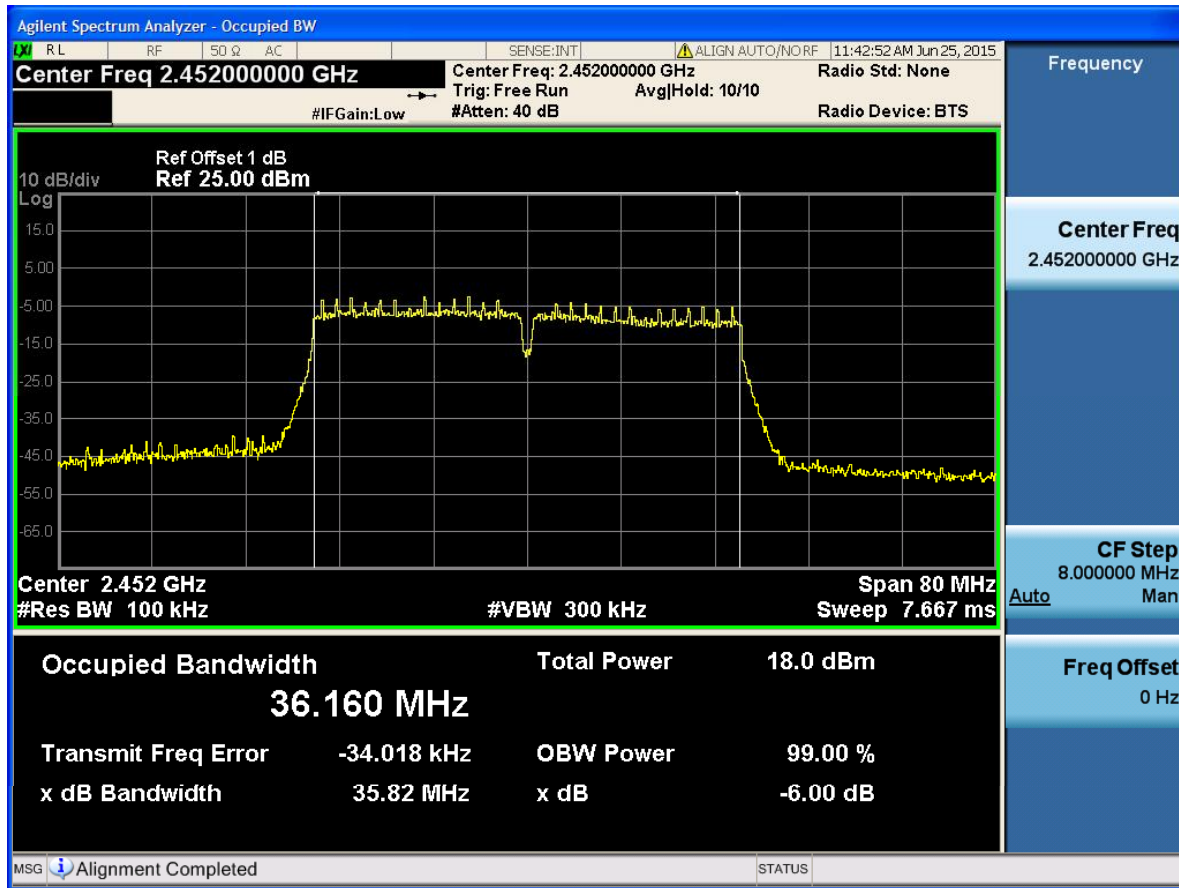


2.34 11N40m_M@Ant 2



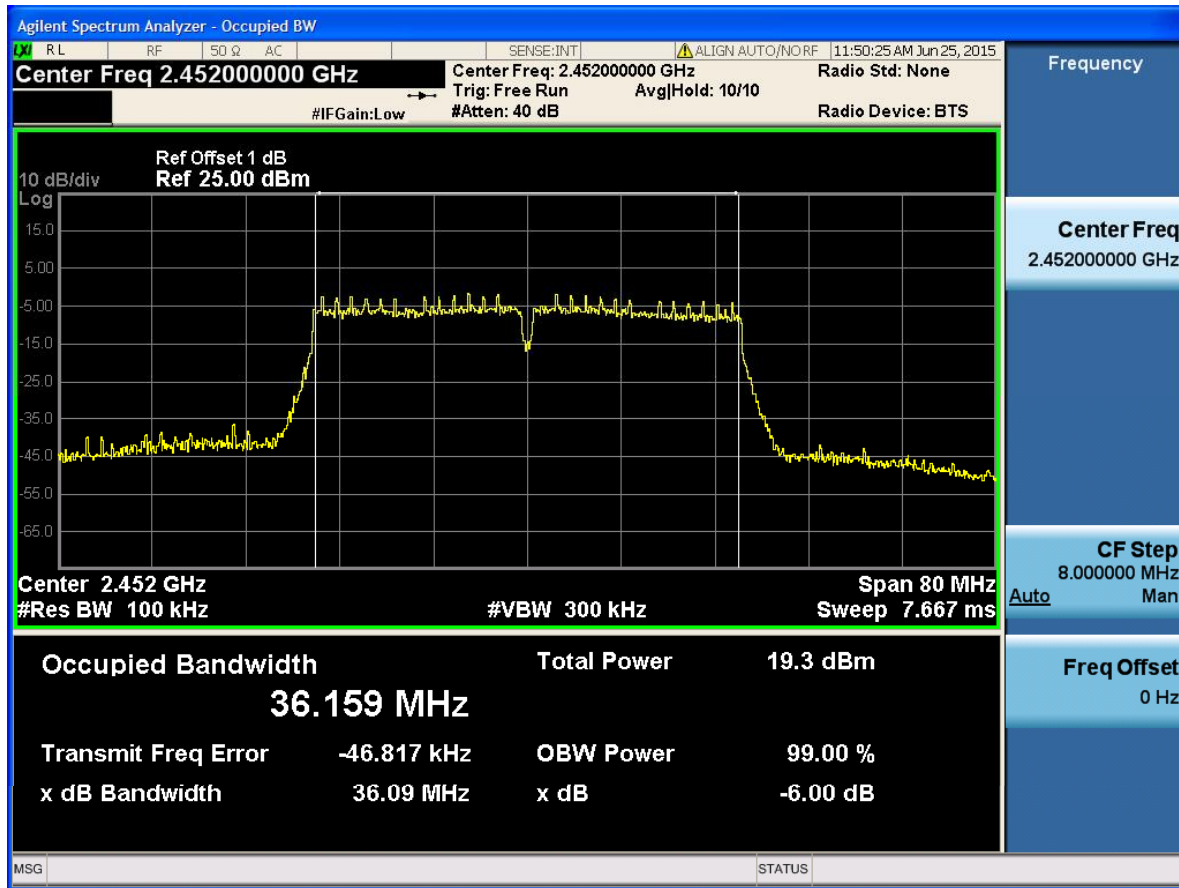


2.35 11N40m_H@Ant 1





2.36 11N40m_H@Ant 2



Appendix B: Occupied Bandwidth

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.

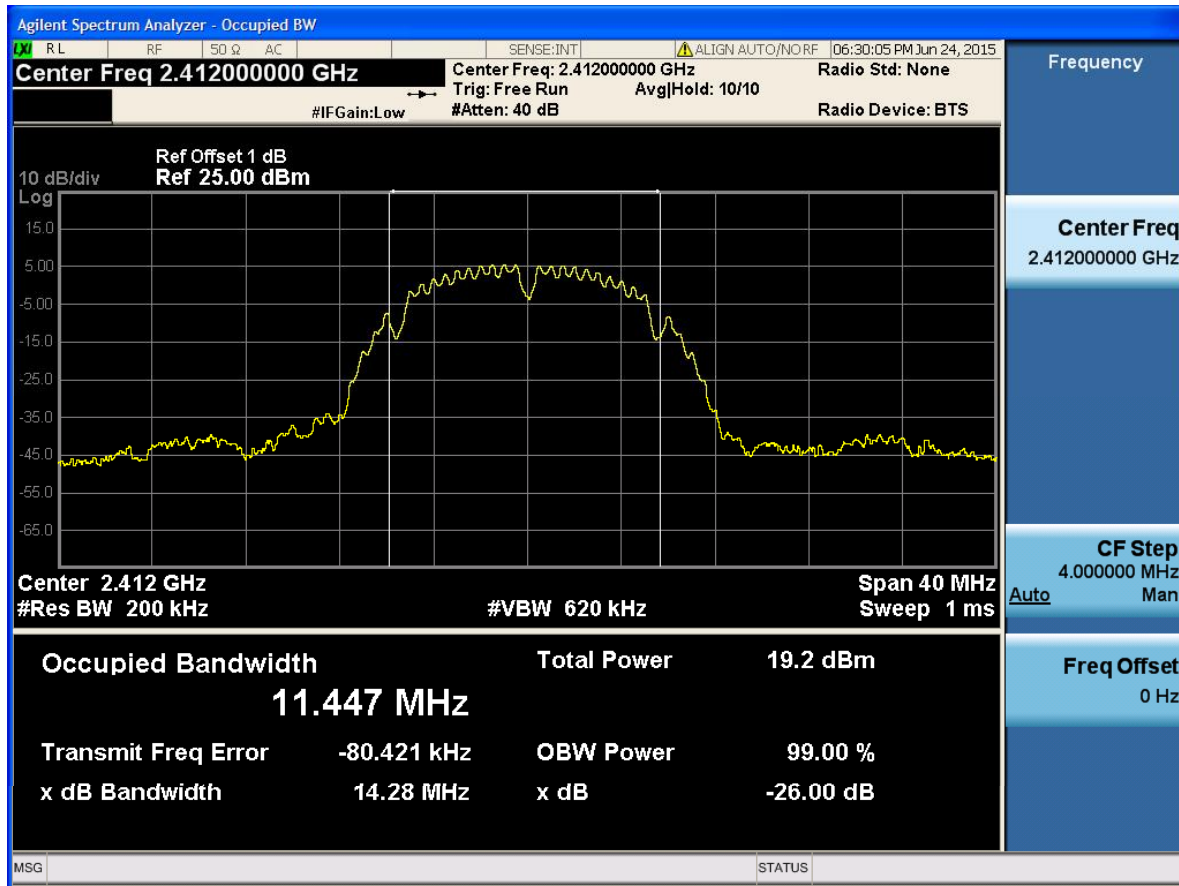
Part I - Test Results

Test Mode	Test Channel	Frequency[MHz]	Ant	Occupied Bandwidth [MHz]	Verdict
11B	L	2412	Ant 1	11.45	pass
11B	L	2412	Ant 2	11.83	pass
11B	M	2437	Ant 1	11.31	pass
11B	M	2437	Ant 2	11.73	pass
11B	H	2462	Ant 1	11.65	pass
11B	H	2462	Ant 2	11.72	pass
11G	L	2412	Ant 1	16.85	pass
11G	L	2412	Ant 2	17.05	pass
11G	M	2437	Ant 1	16.79	pass
11G	M	2437	Ant 2	16.93	pass
11G	H	2462	Ant 1	17.00	pass
11G	H	2462	Ant 2	16.92	pass
11N20	L	2412	Ant 1	17.93	pass
11N20	L	2412	Ant 2	18.11	pass
11N20	M	2437	Ant 1	17.92	pass
11N20	M	2437	Ant 2	17.94	pass
11N20	H	2462	Ant 1	18.06	pass
11N20	H	2462	Ant 2	17.94	pass
11N20m	L	2412	Ant 1	17.95	pass
11N20m	L	2412	Ant 2	17.96	pass
11N20m	M	2437	Ant 1	17.84	pass
11N20m	M	2437	Ant 2	17.96	pass
11N20m	H	2462	Ant 1	18.00	pass
11N20m	H	2462	Ant 2	17.88	pass
11N40	L	2422	Ant 1	36.32	pass
11N40	L	2422	Ant 2	36.29	pass
11N40	M	2437	Ant 1	36.15	pass
11N40	M	2437	Ant 2	36.29	pass
11N40	H	2452	Ant 1	36.29	pass
11N40	H	2452	Ant 2	36.29	pass
11N40m	L	2422	Ant 1	36.36	pass
11N40m	L	2422	Ant 2	36.19	pass
11N40m	M	2437	Ant 1	36.20	pass
11N40m	M	2437	Ant 2	36.28	pass
11N40m	H	2452	Ant 1	36.34	pass
11N40m	H	2452	Ant 2	36.27	pass



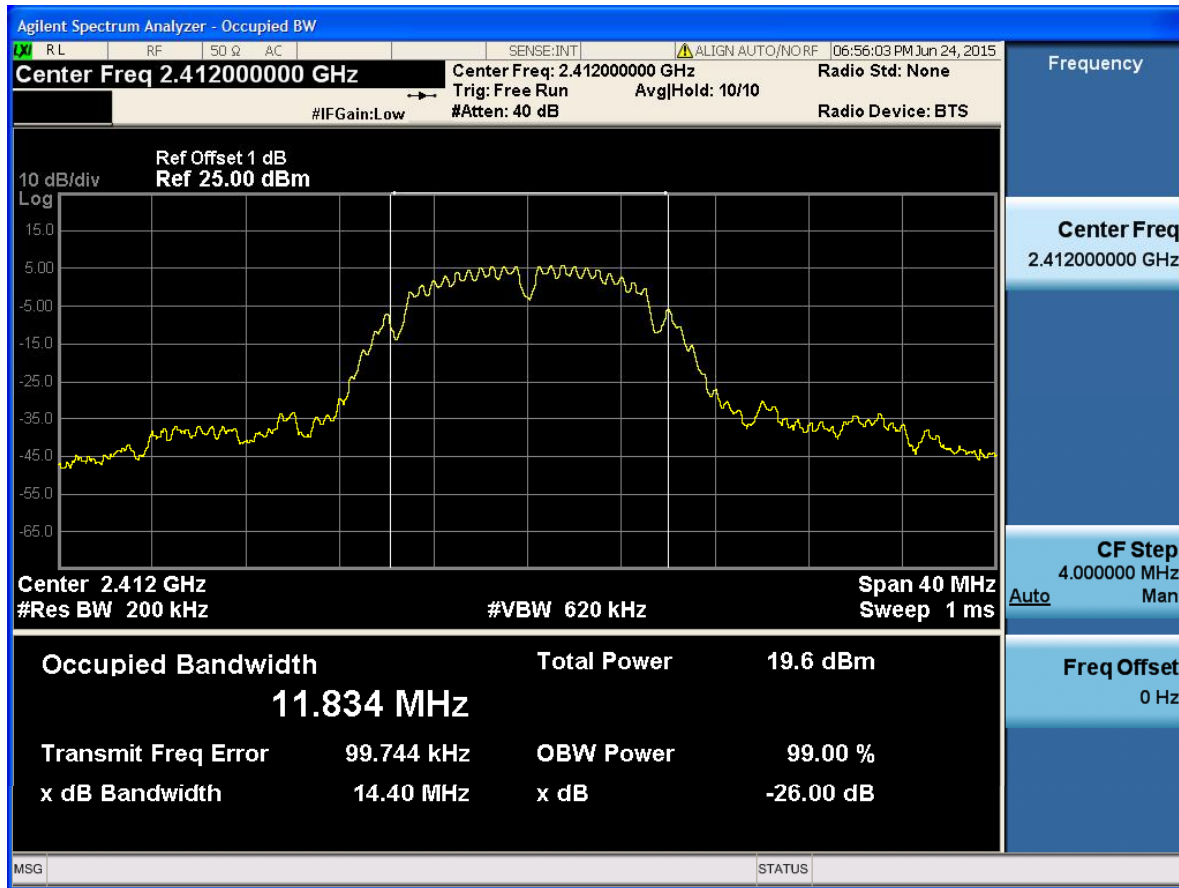
Part II - Test Plots

2.1 11B_L@Ant 1

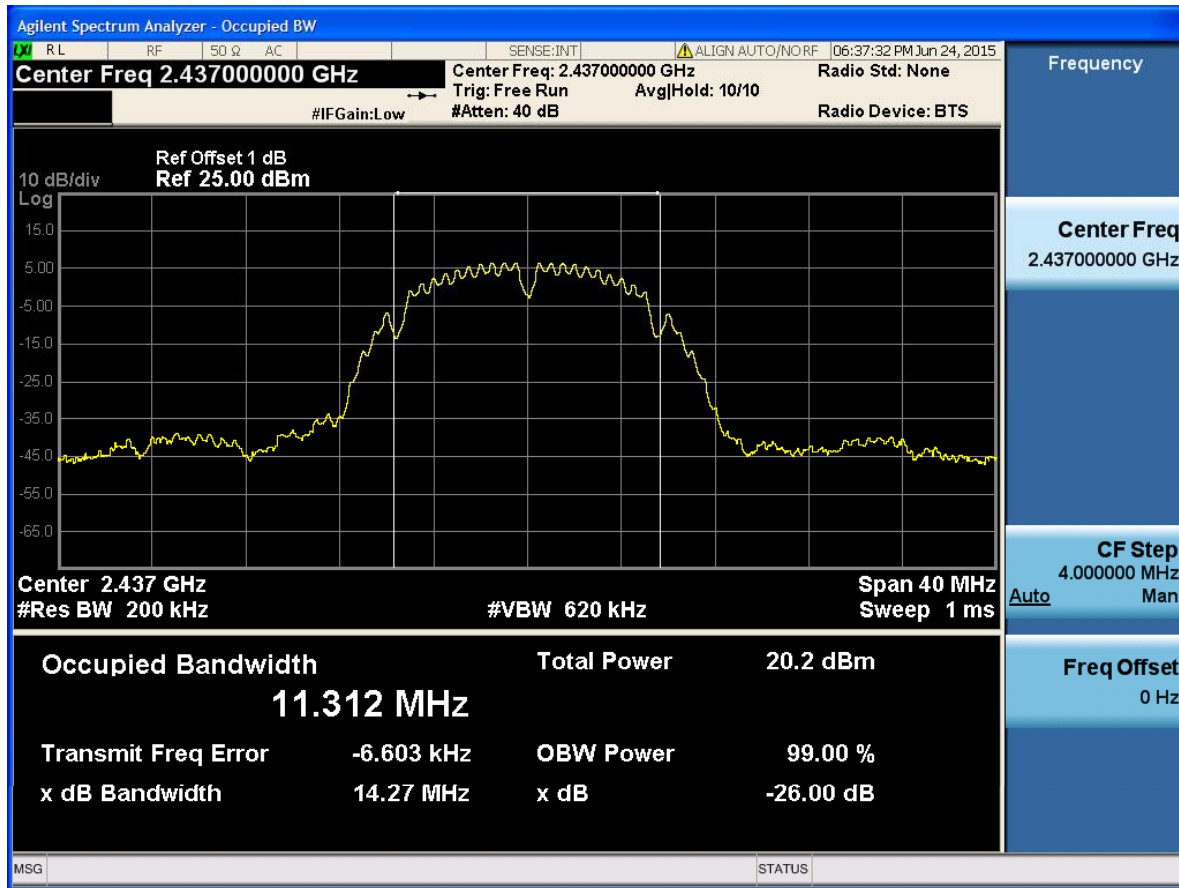




2.2 11B_L@Ant 2

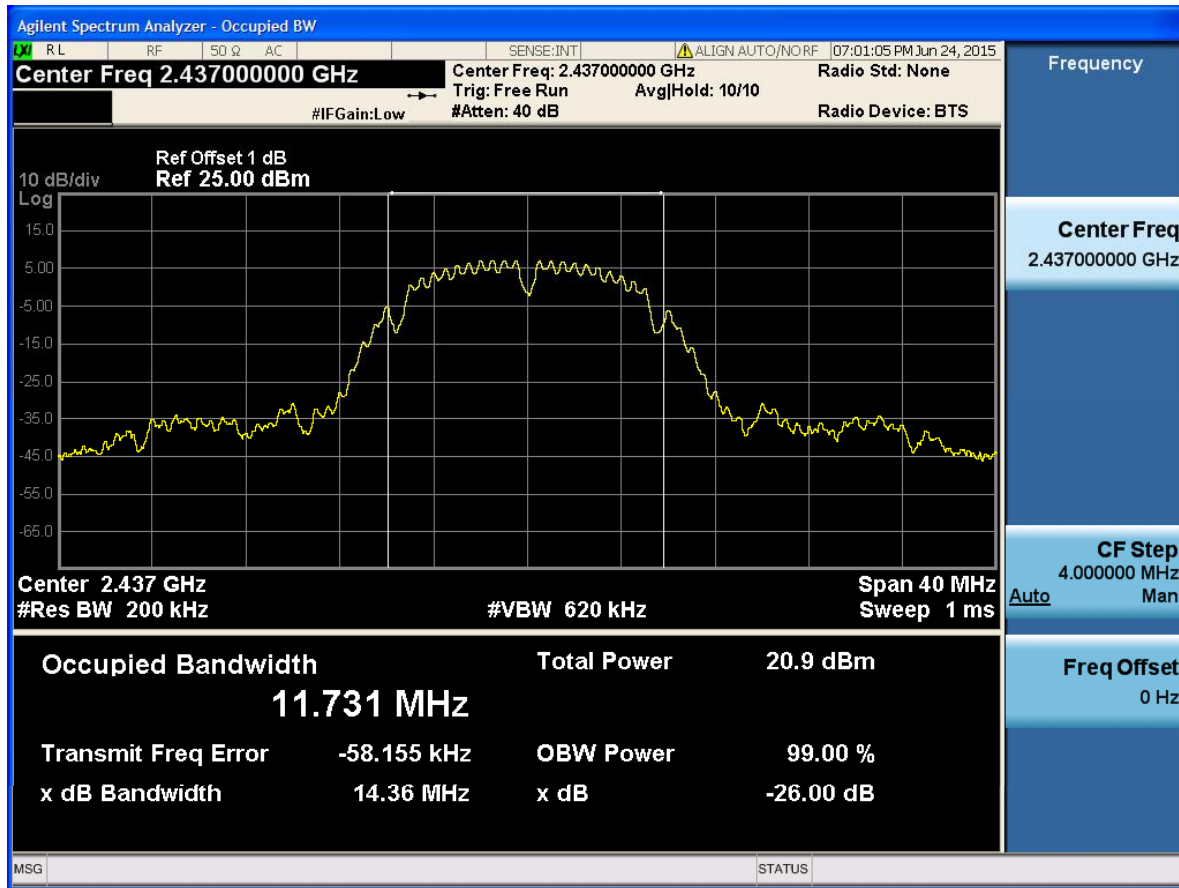


2.3 11B_M@Ant 1



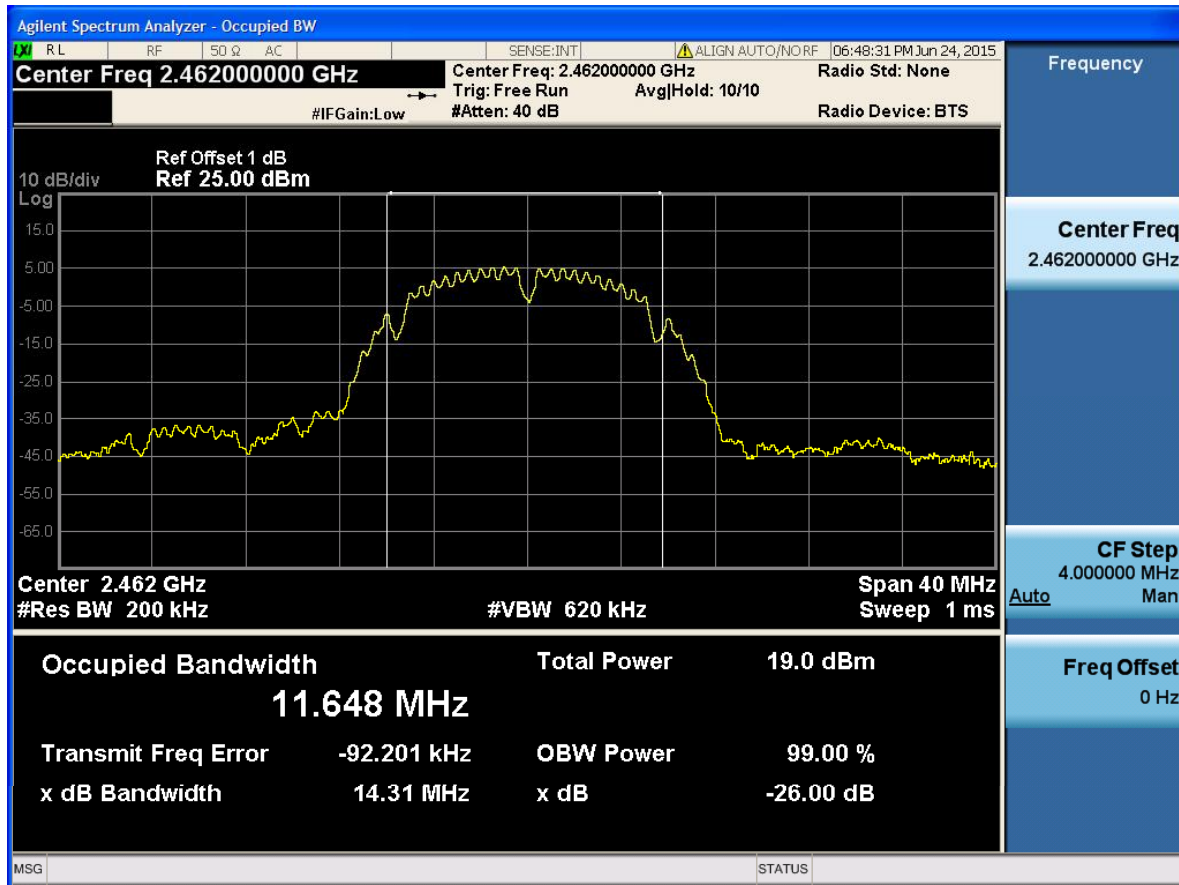


2.4 11B_M@Ant 2



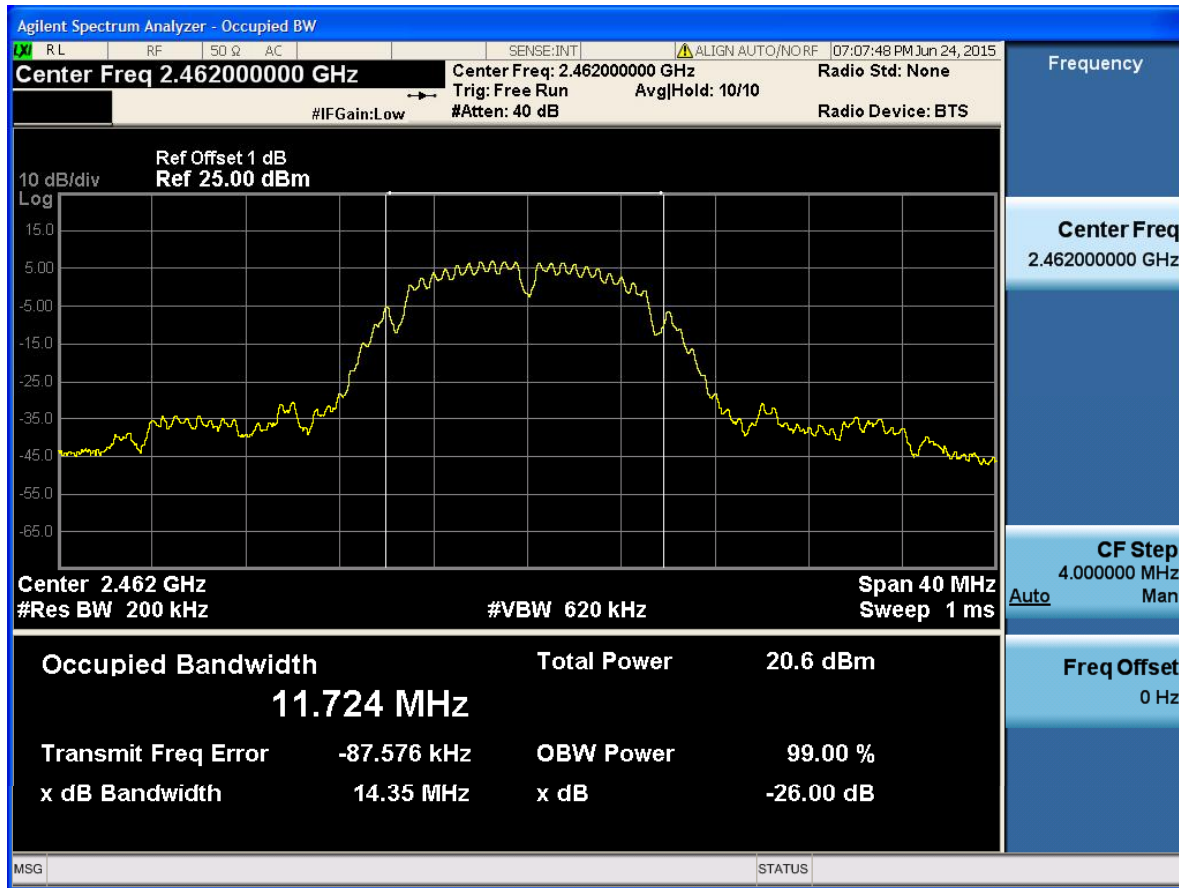


2.5 11B_H@Ant 1



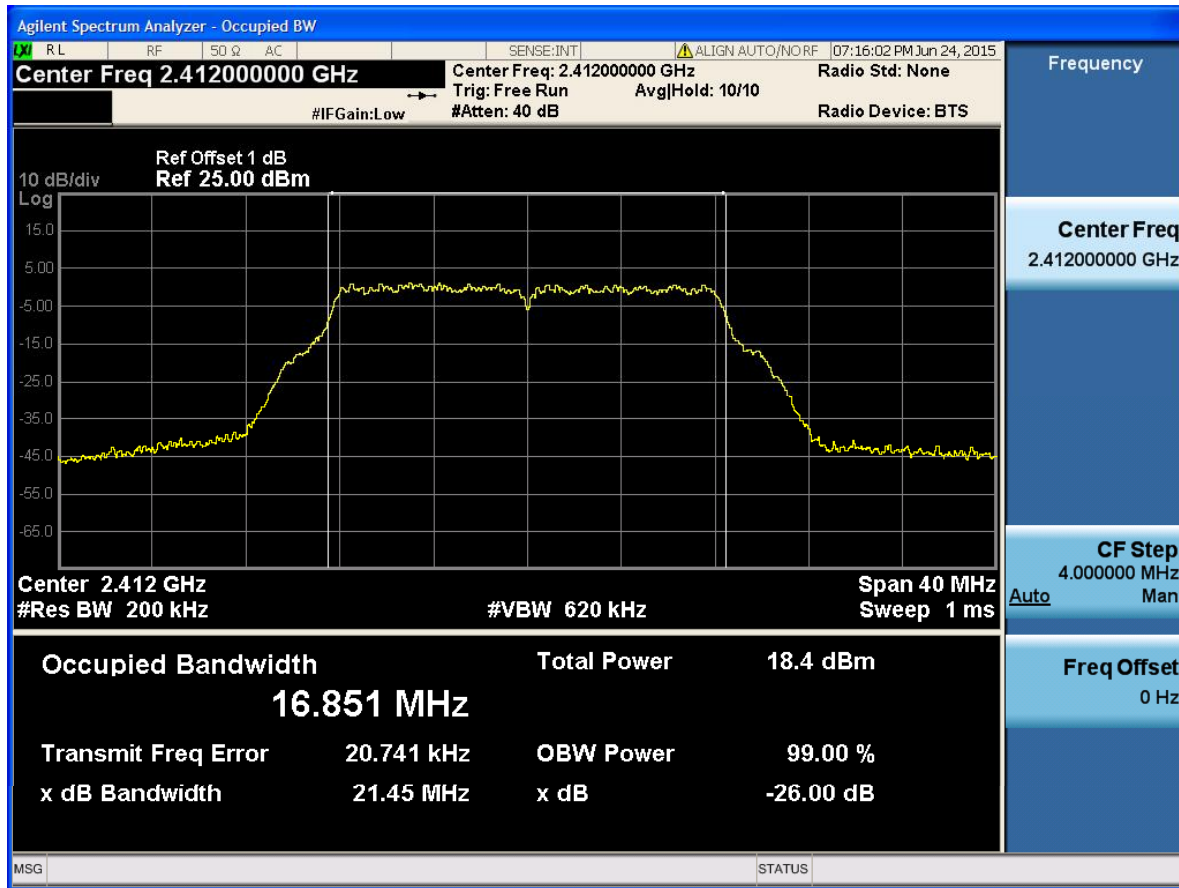


2.6 11B_H@Ant 2



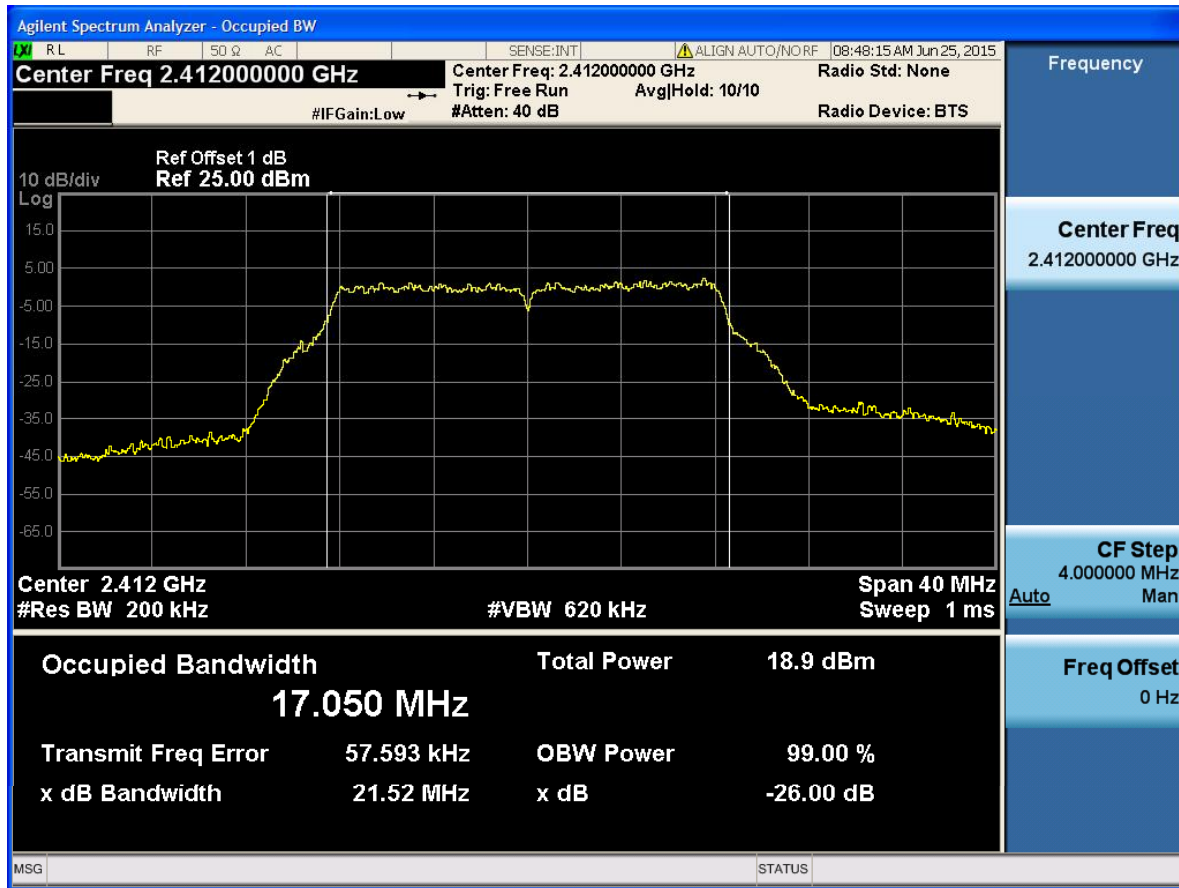


2.7 11G_L@Ant 1



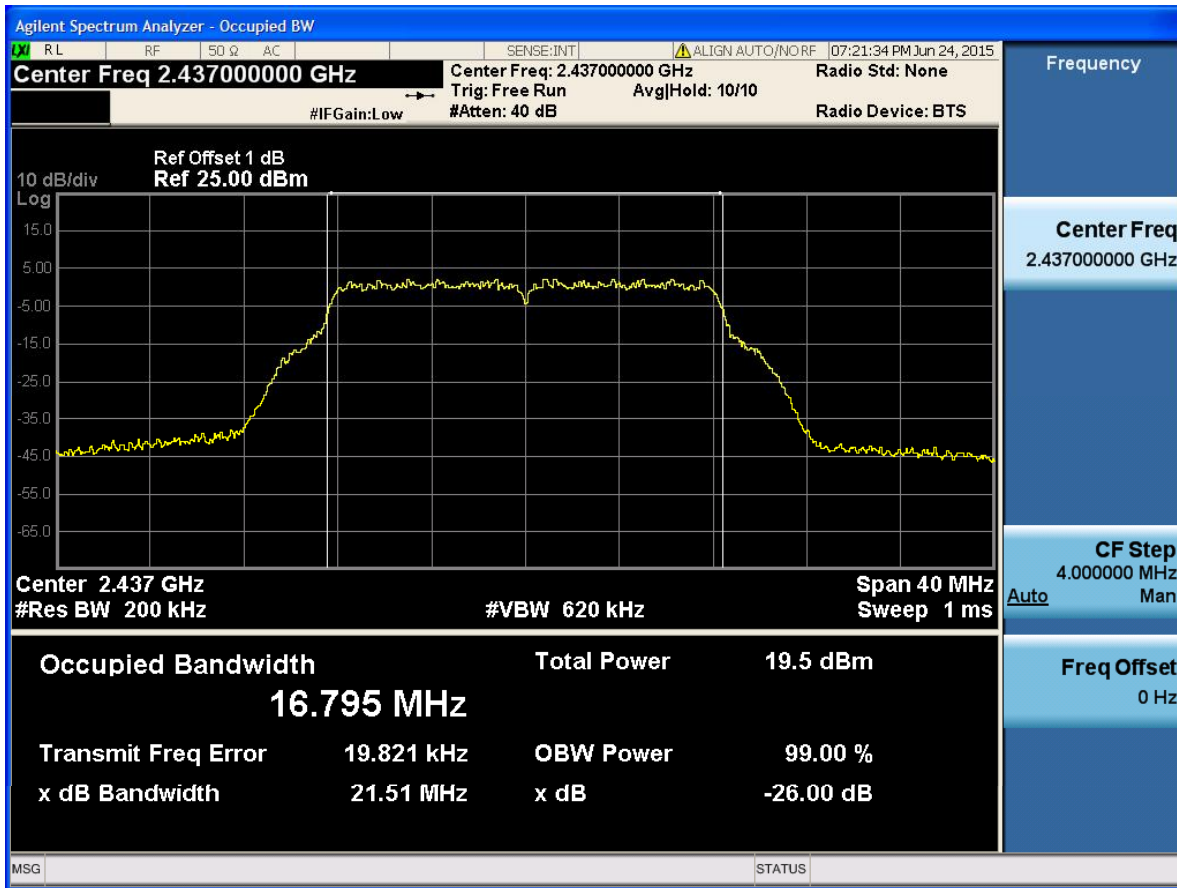


2.8 11G_L@Ant 2



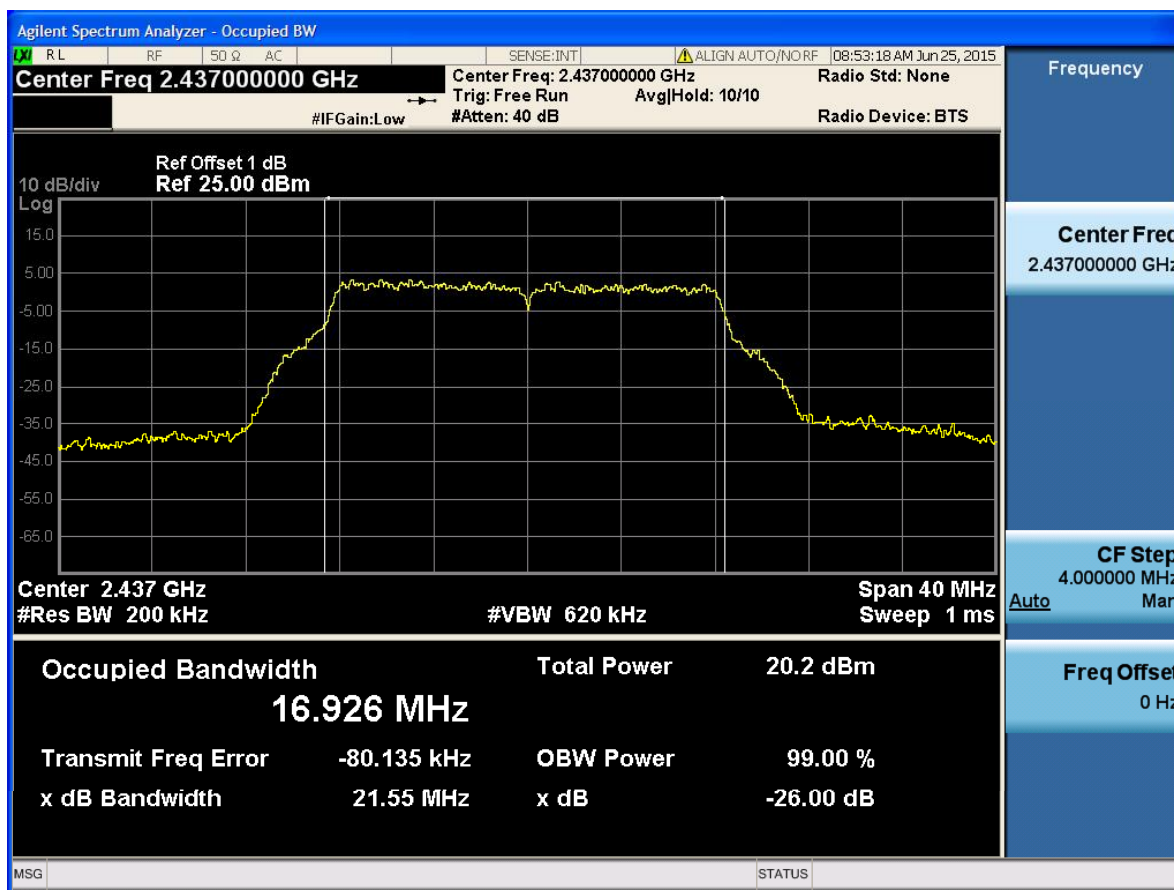


2.9 11G_M@Ant 1



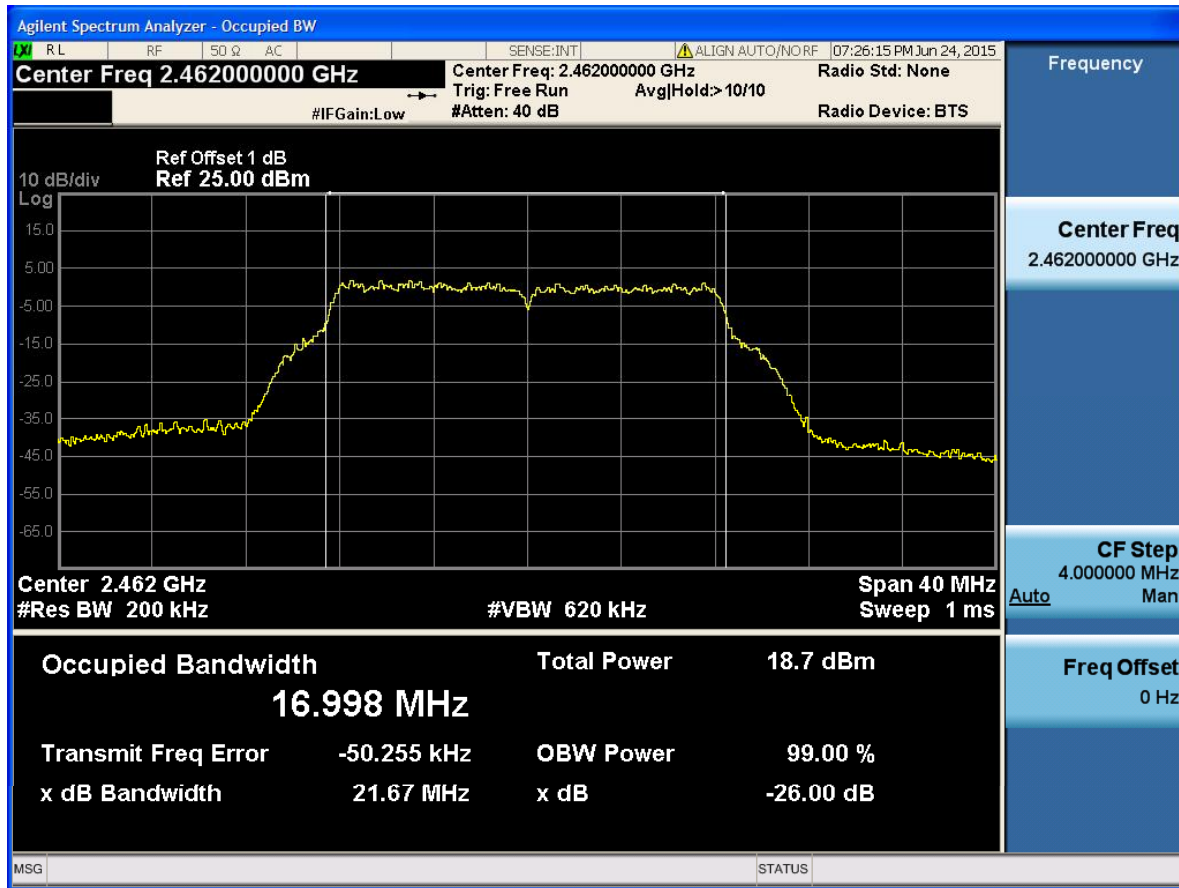


2.10 11G_M@Ant 2



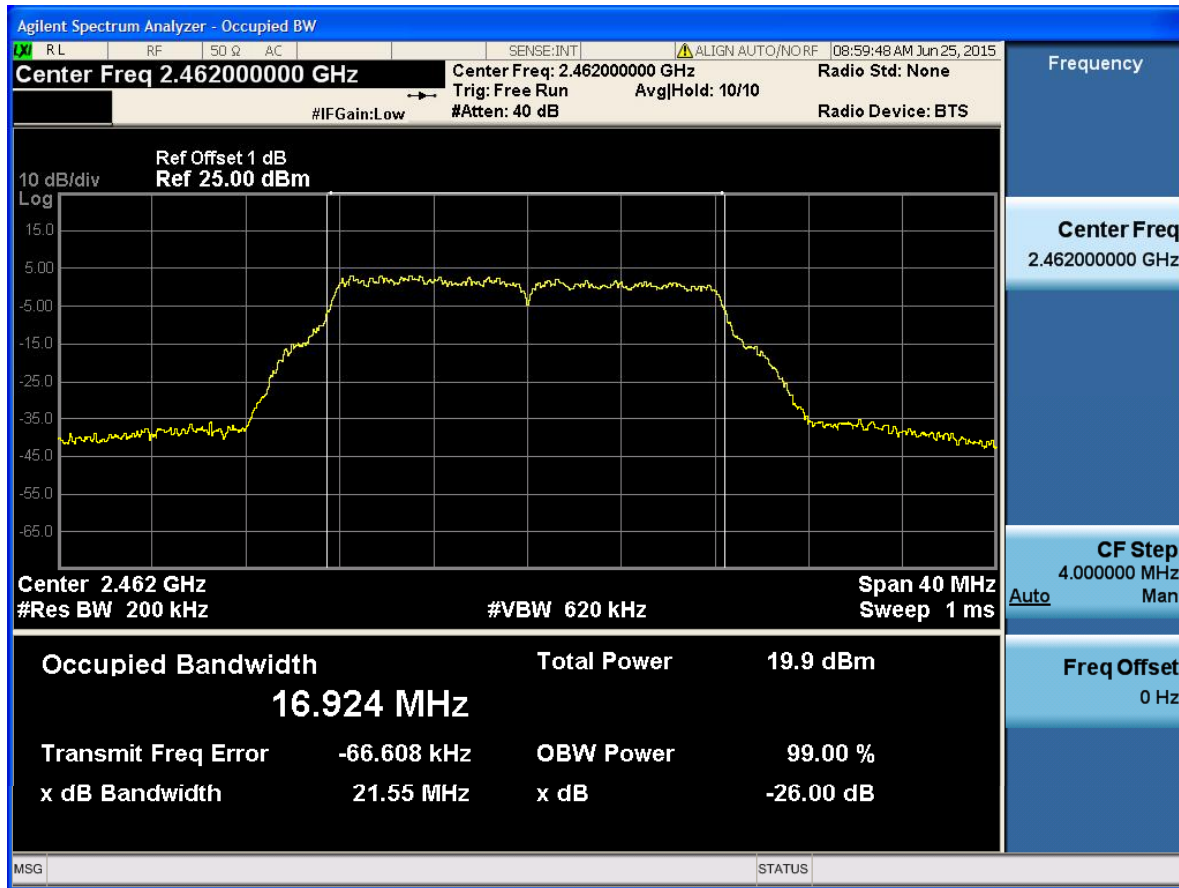


2.11 11G_H@Ant 1



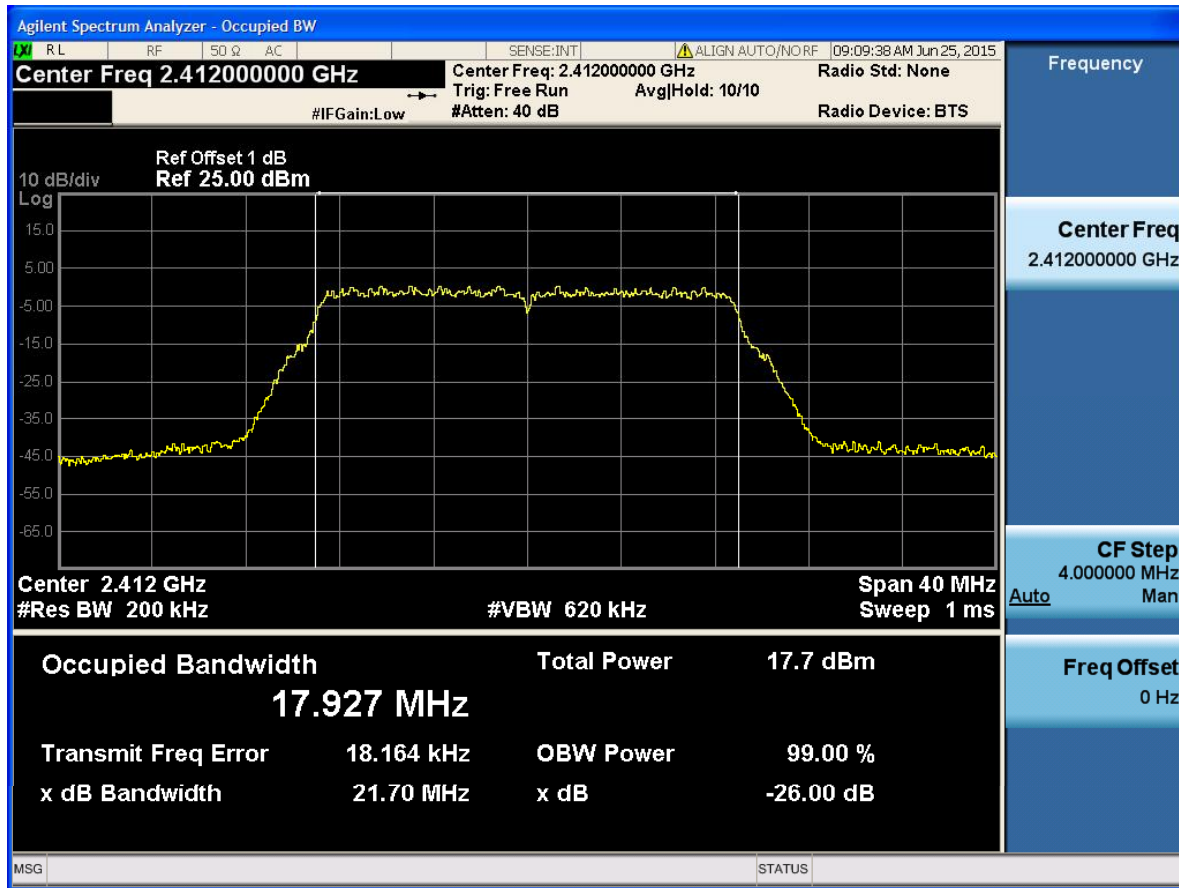


2.12 11G_H@Ant 2



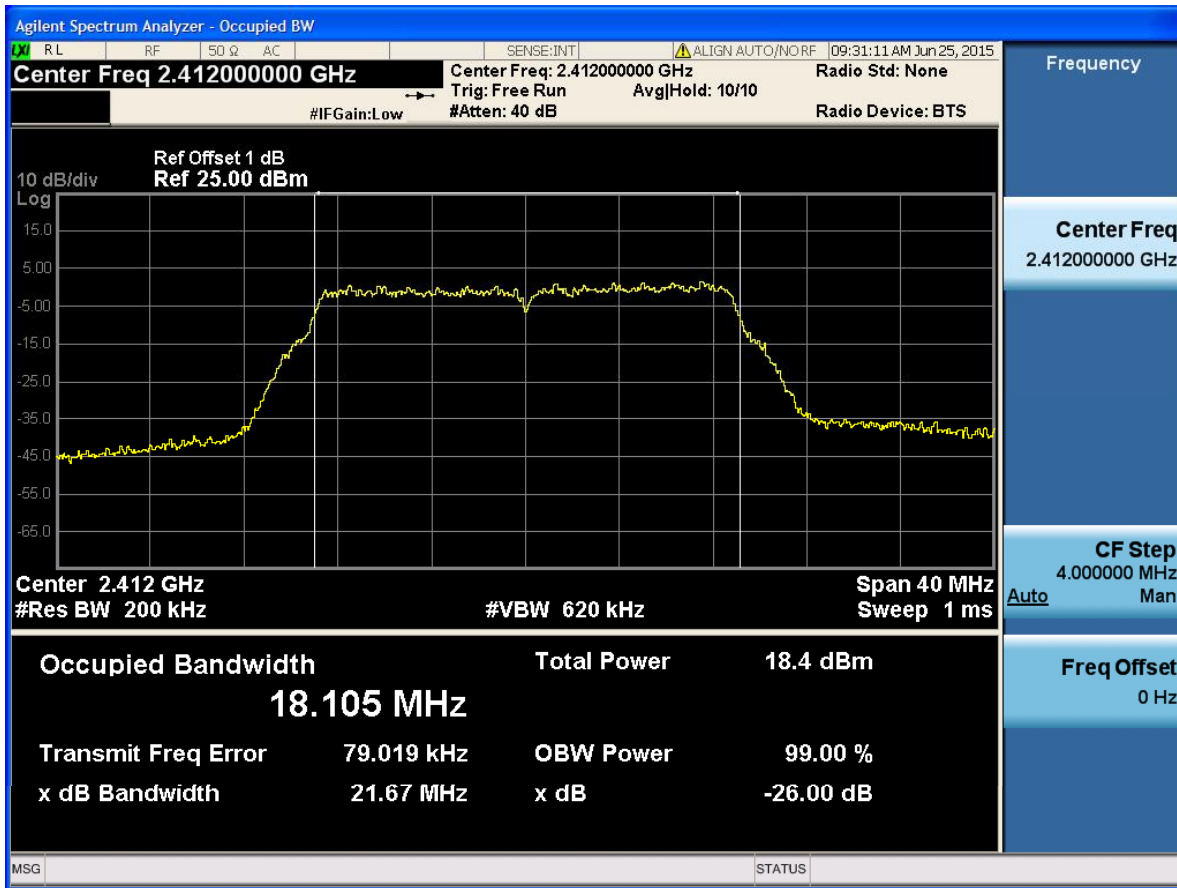


2.13 11N20_L@Ant 1



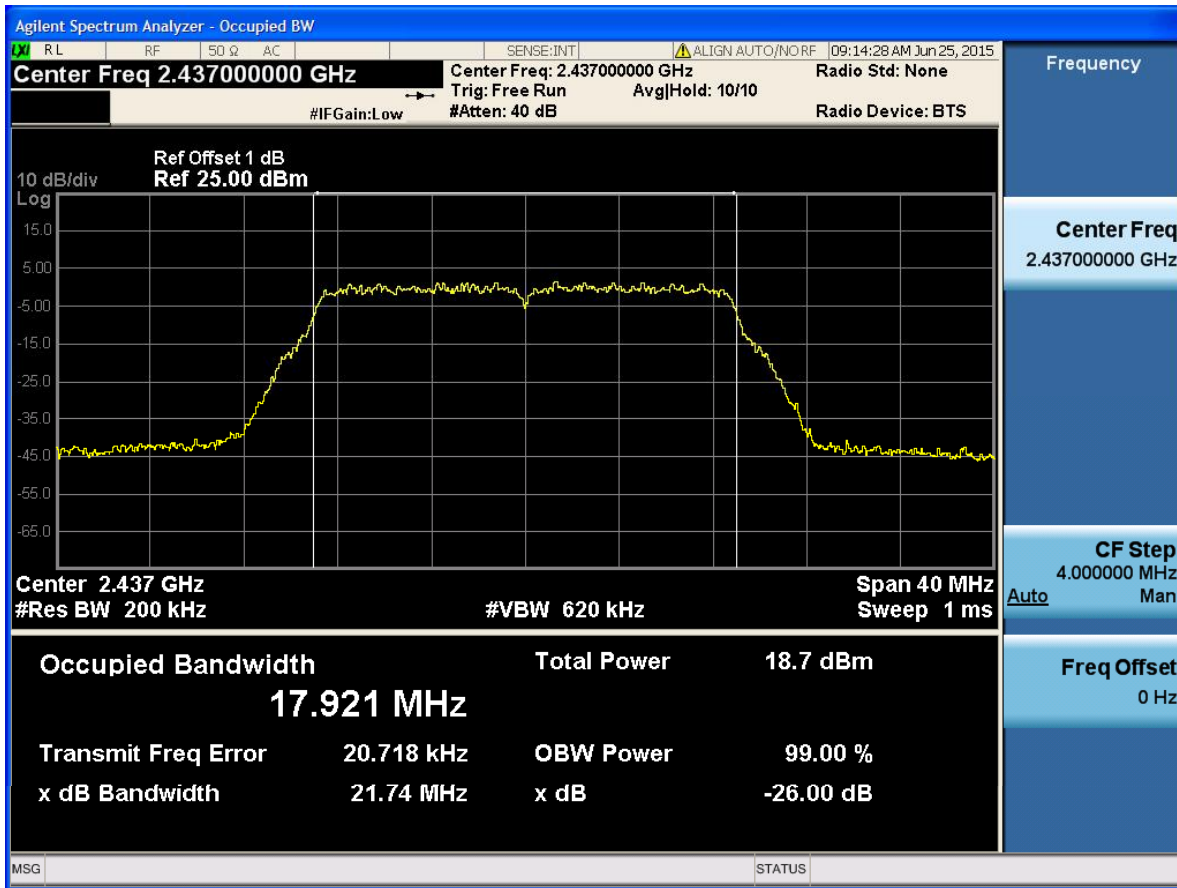


2.14 11N20_L@Ant 2



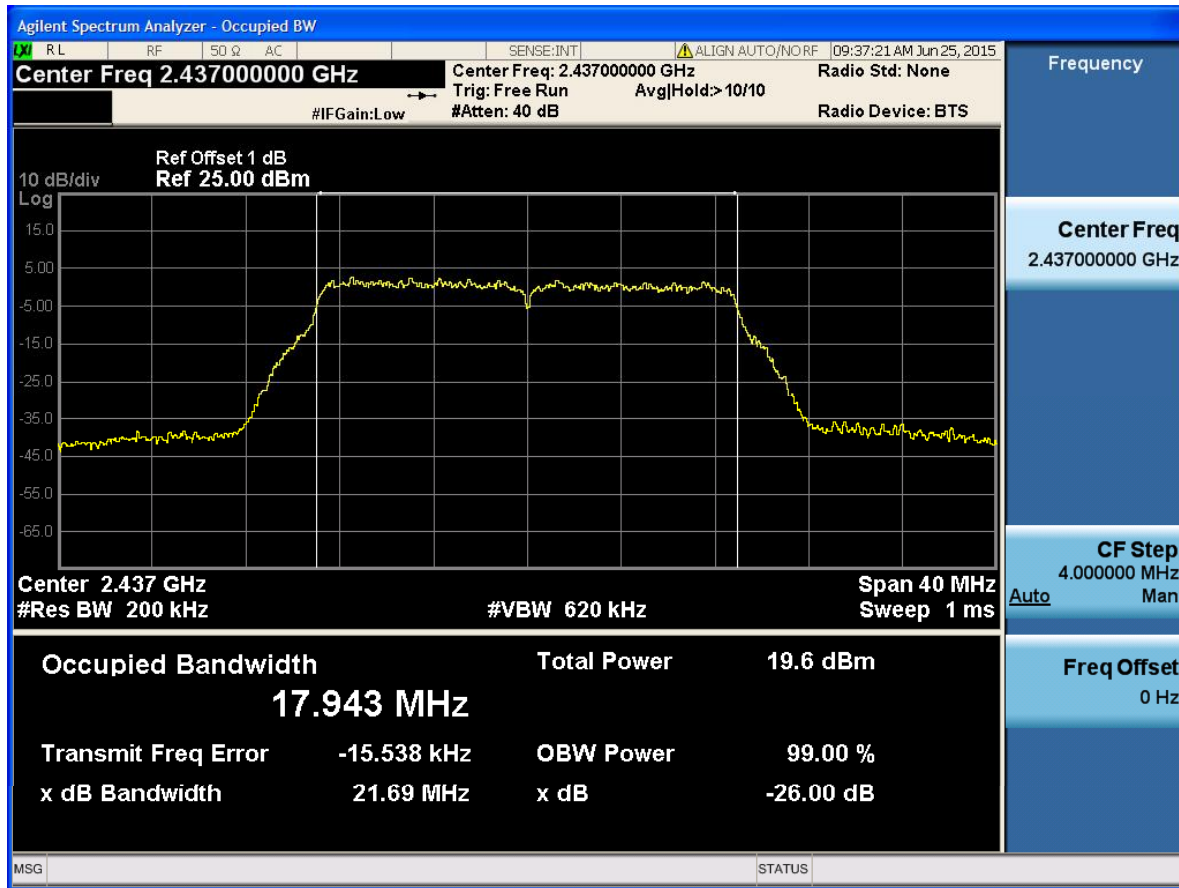


2.15 11N20_M@Ant 1



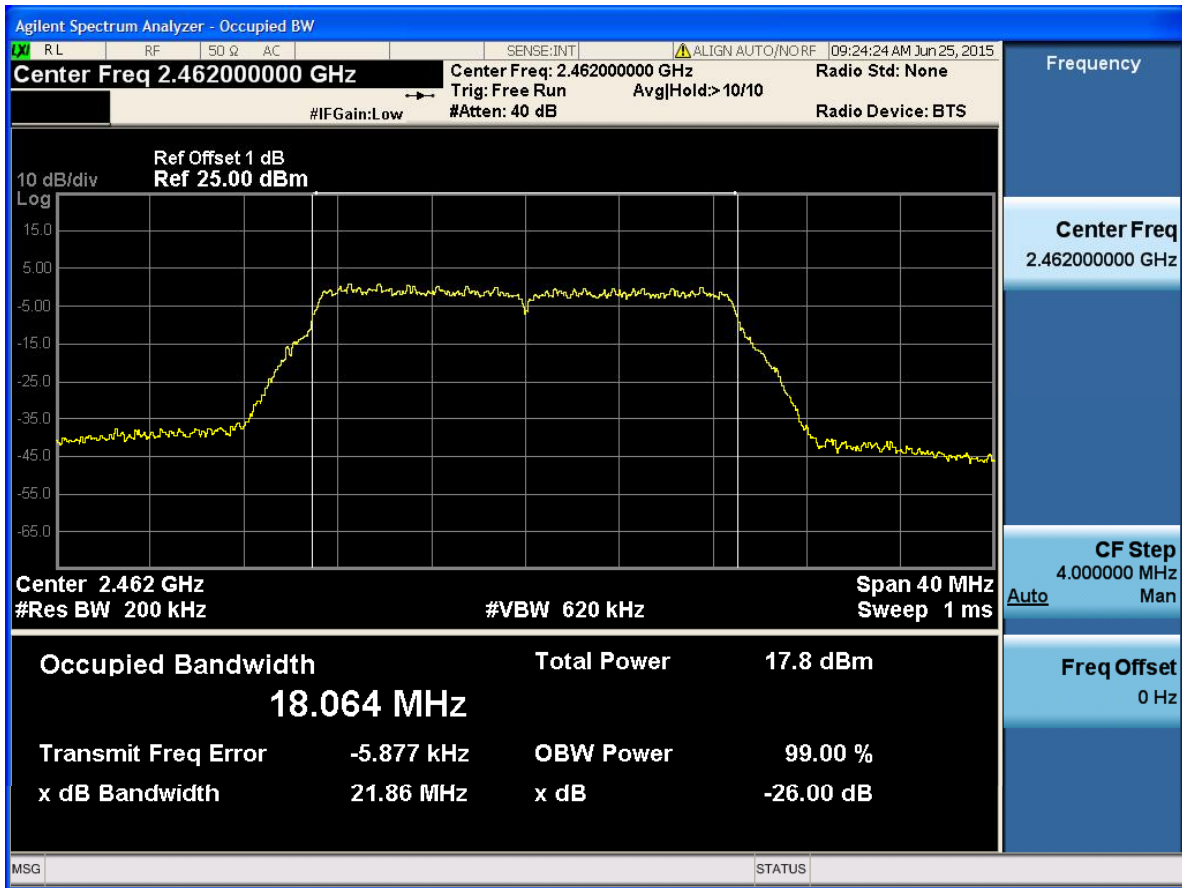


2.16 11N20_M@Ant 2



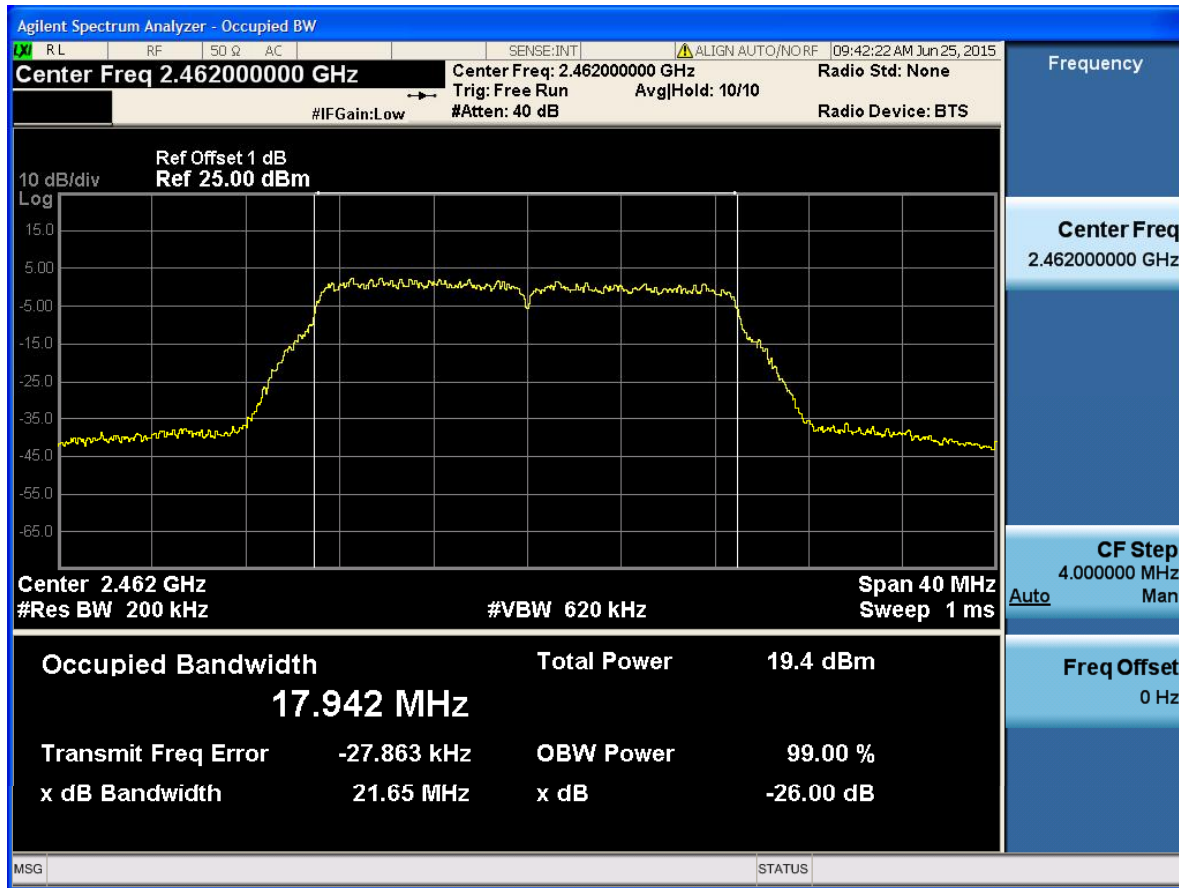


2.17 11N20_H@Ant 1



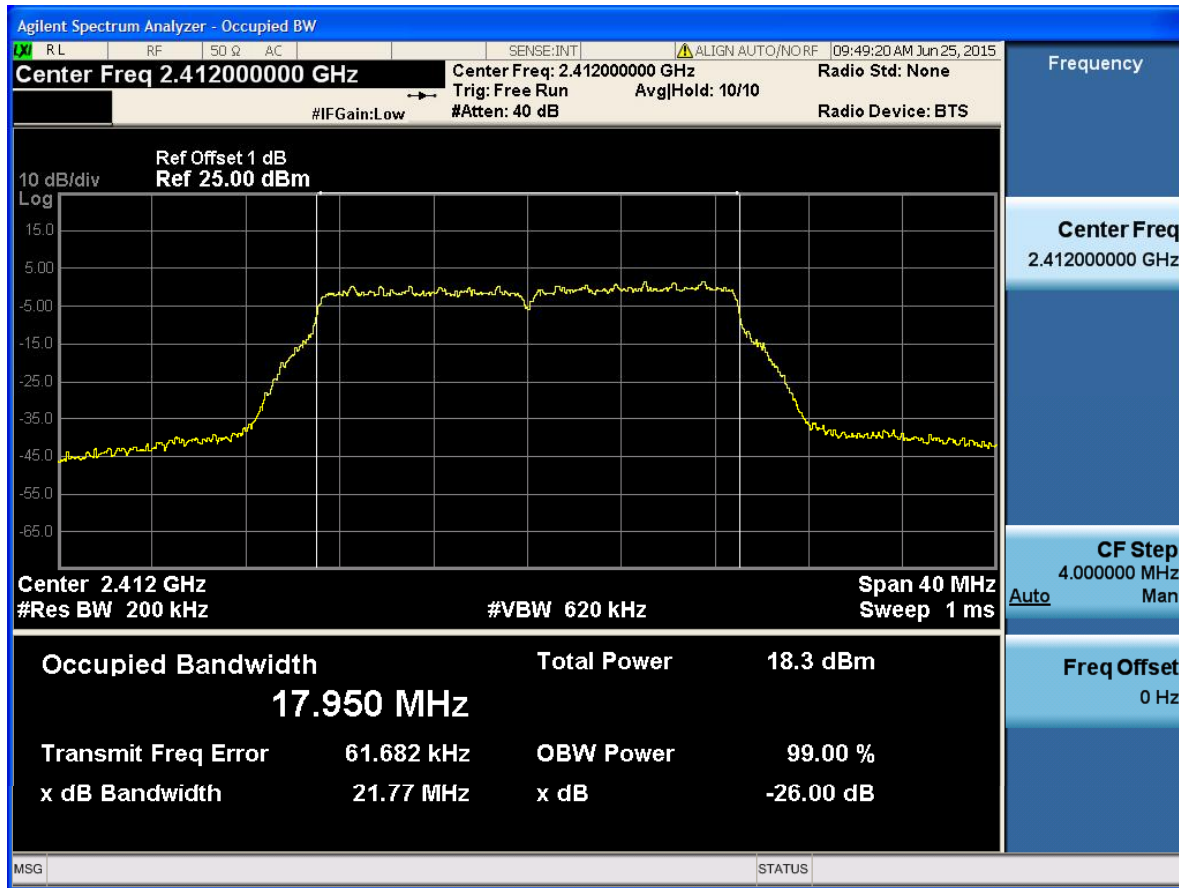


2.18 11N20_H@Ant 2



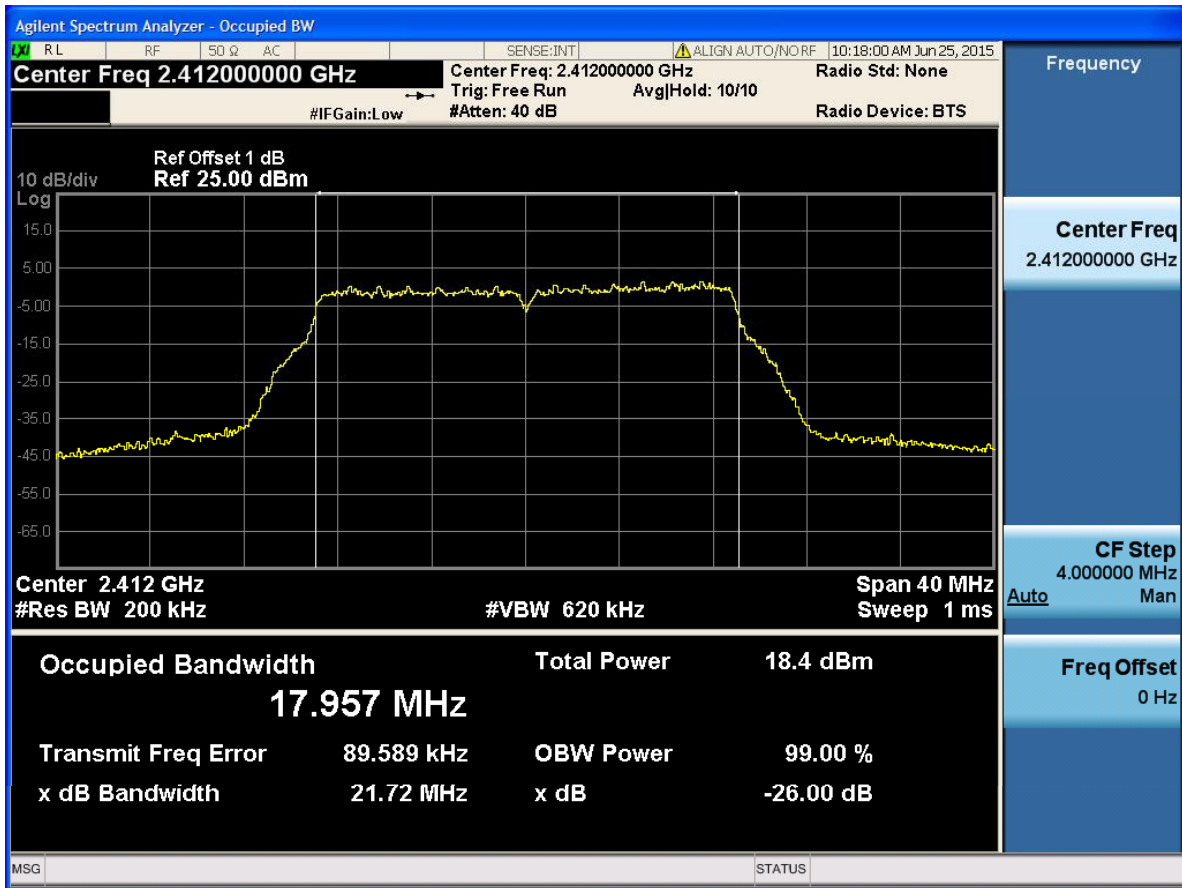


2.19 11N20m_L@Ant 1



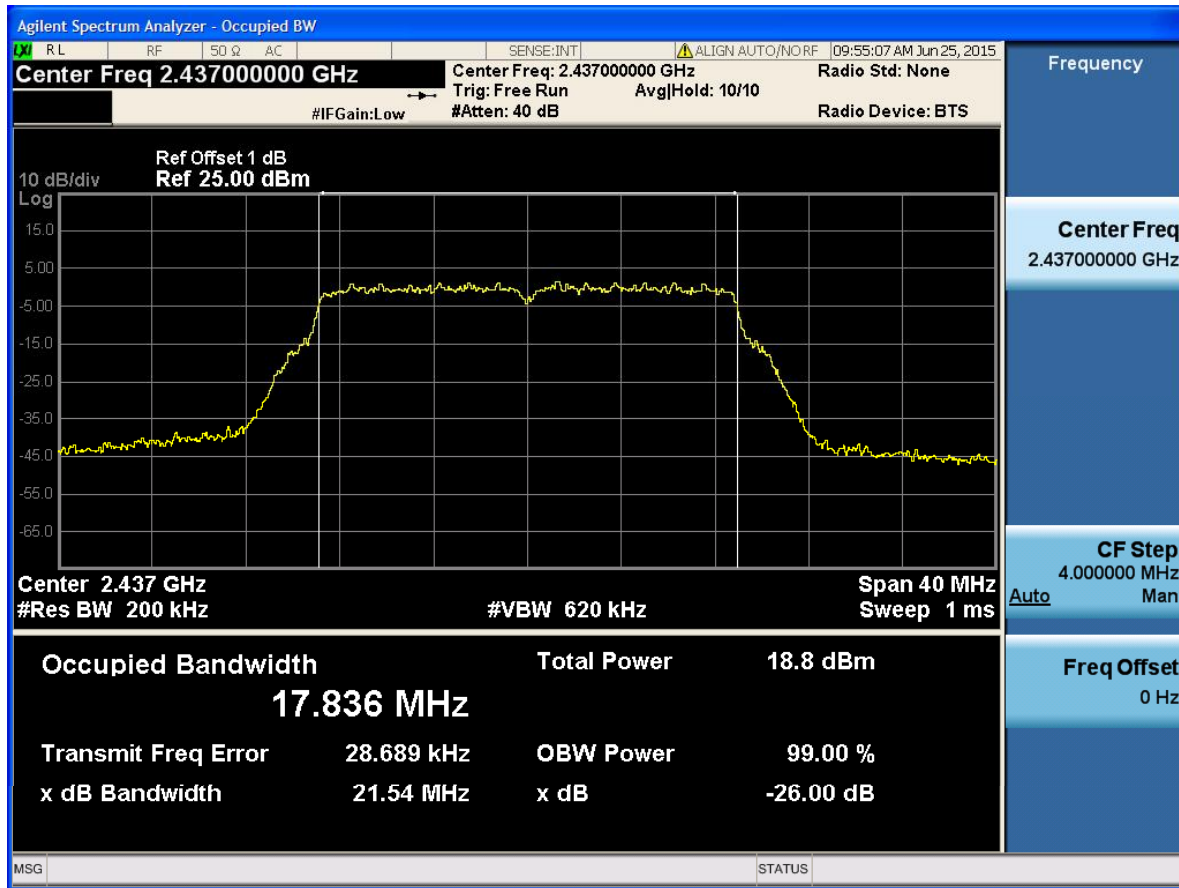


2.20 11N20m_L@Ant 2



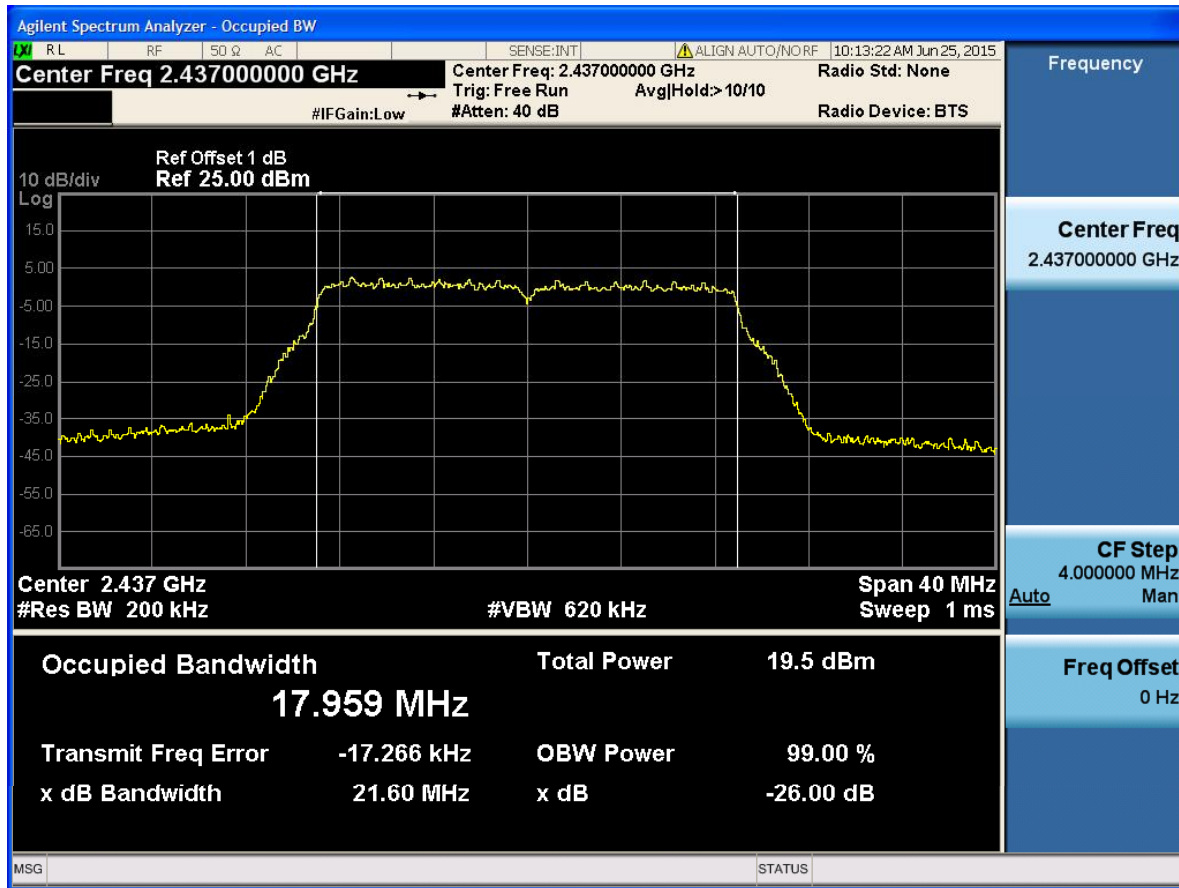


2.21 11N20m_M@Ant 1



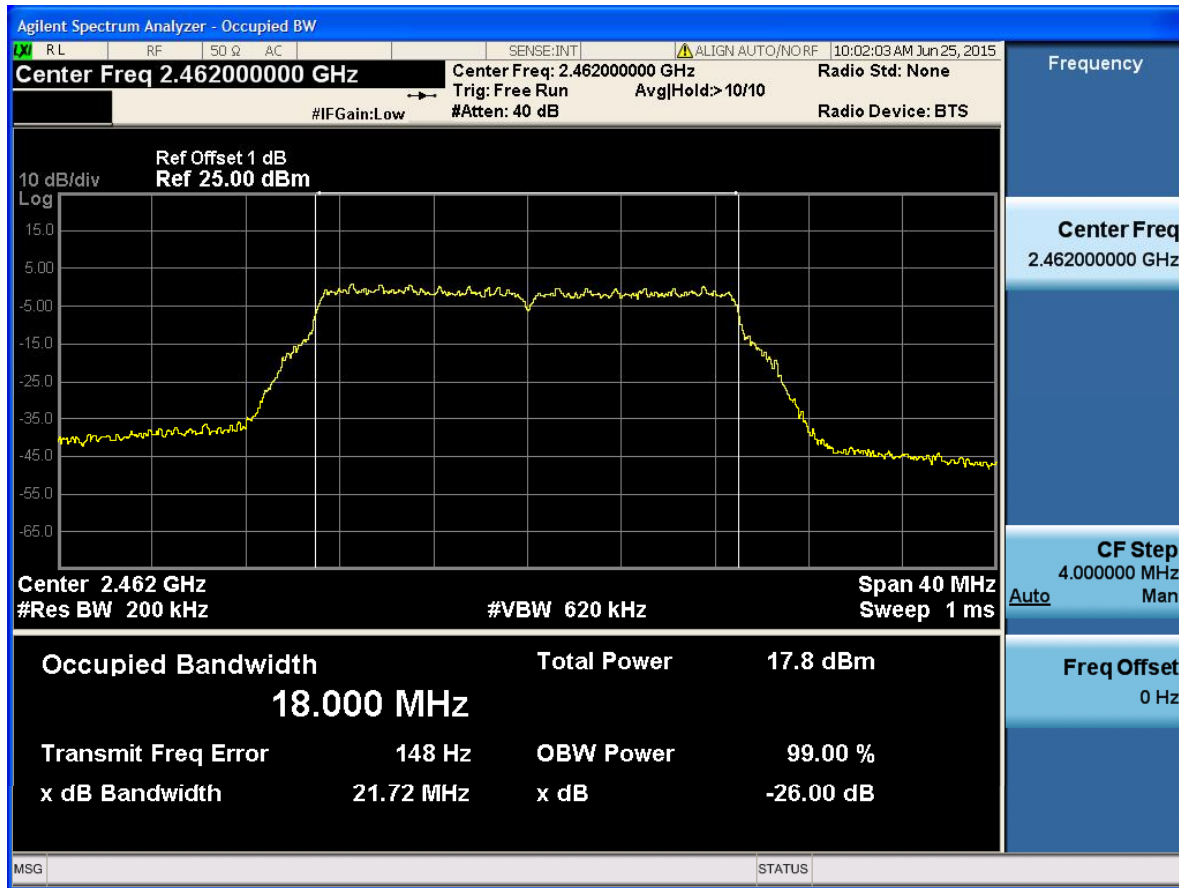


2.22 11N20m_M@Ant 2



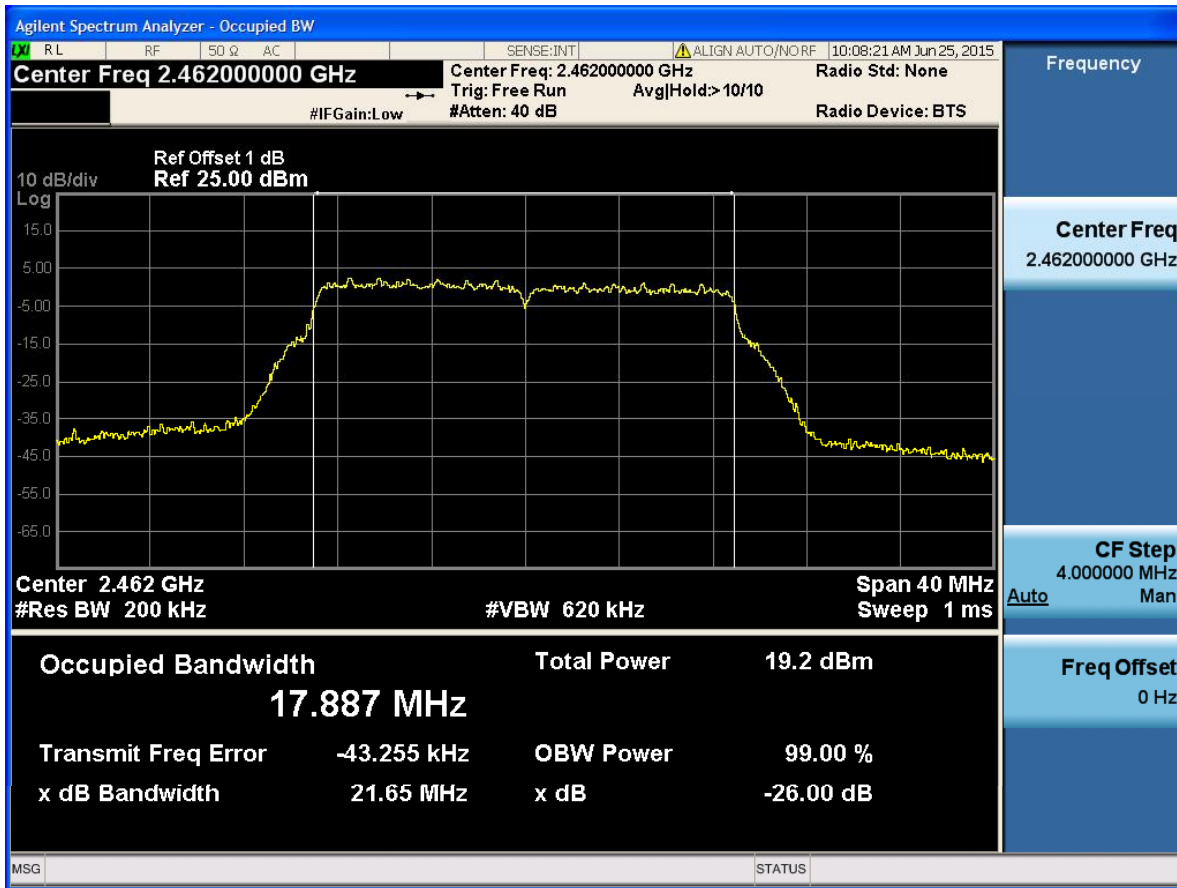


2.23 11N20m_H@Ant 1



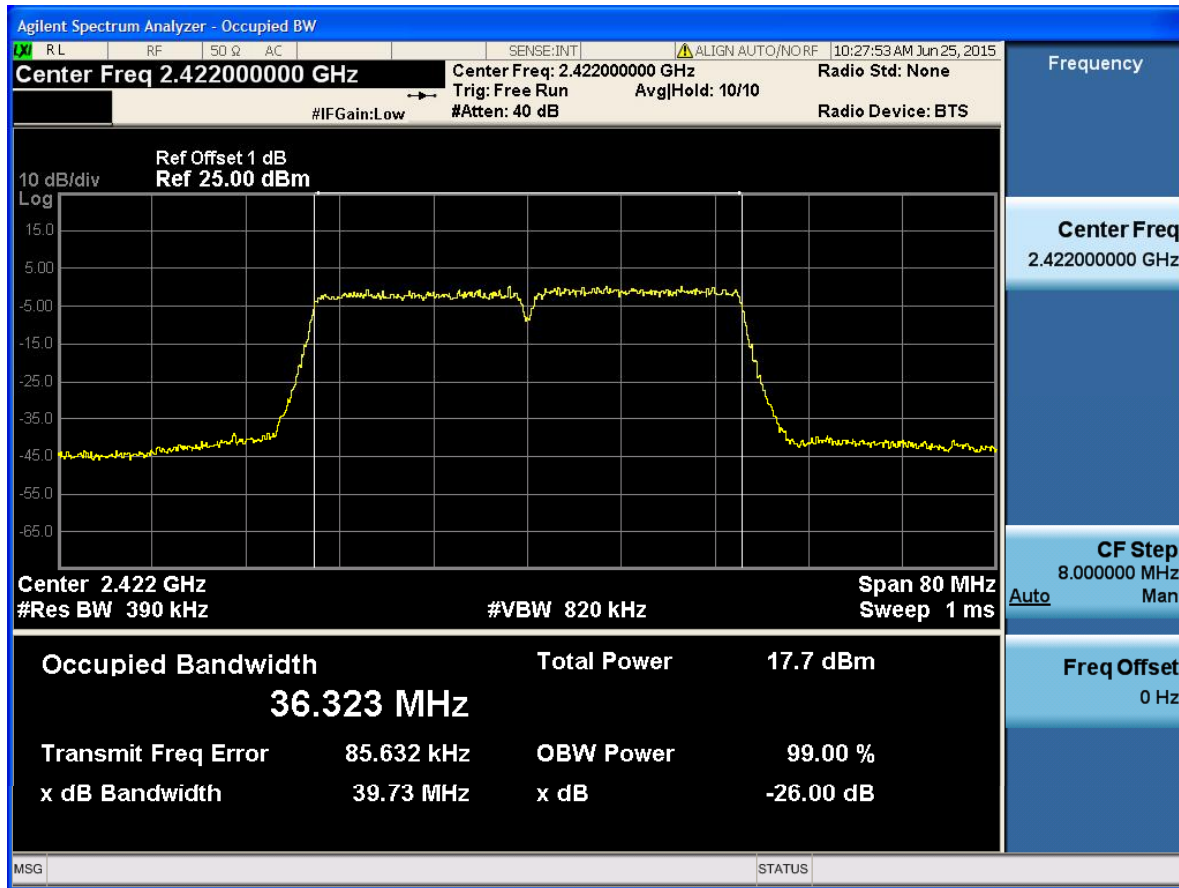


2.24 11N20m_H@Ant 2



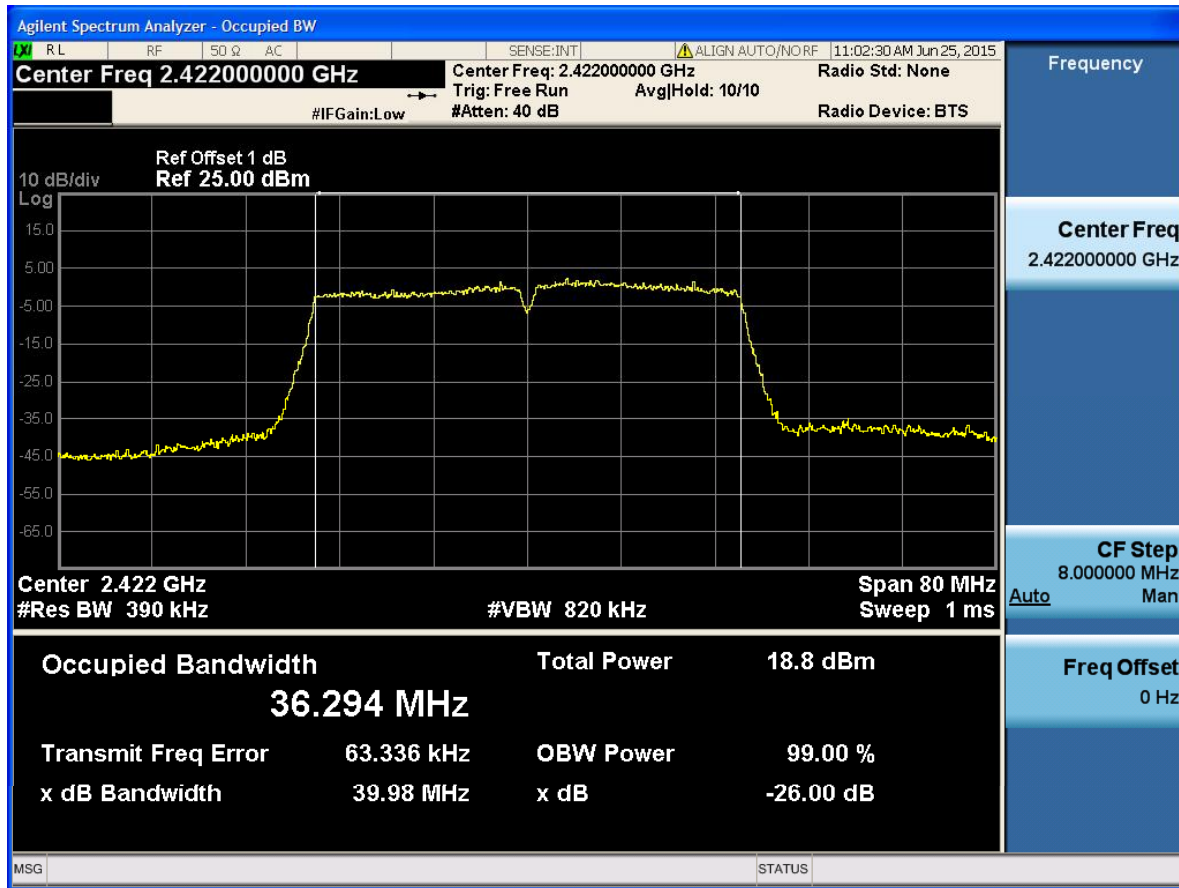


2.25 11N40_L@Ant 1



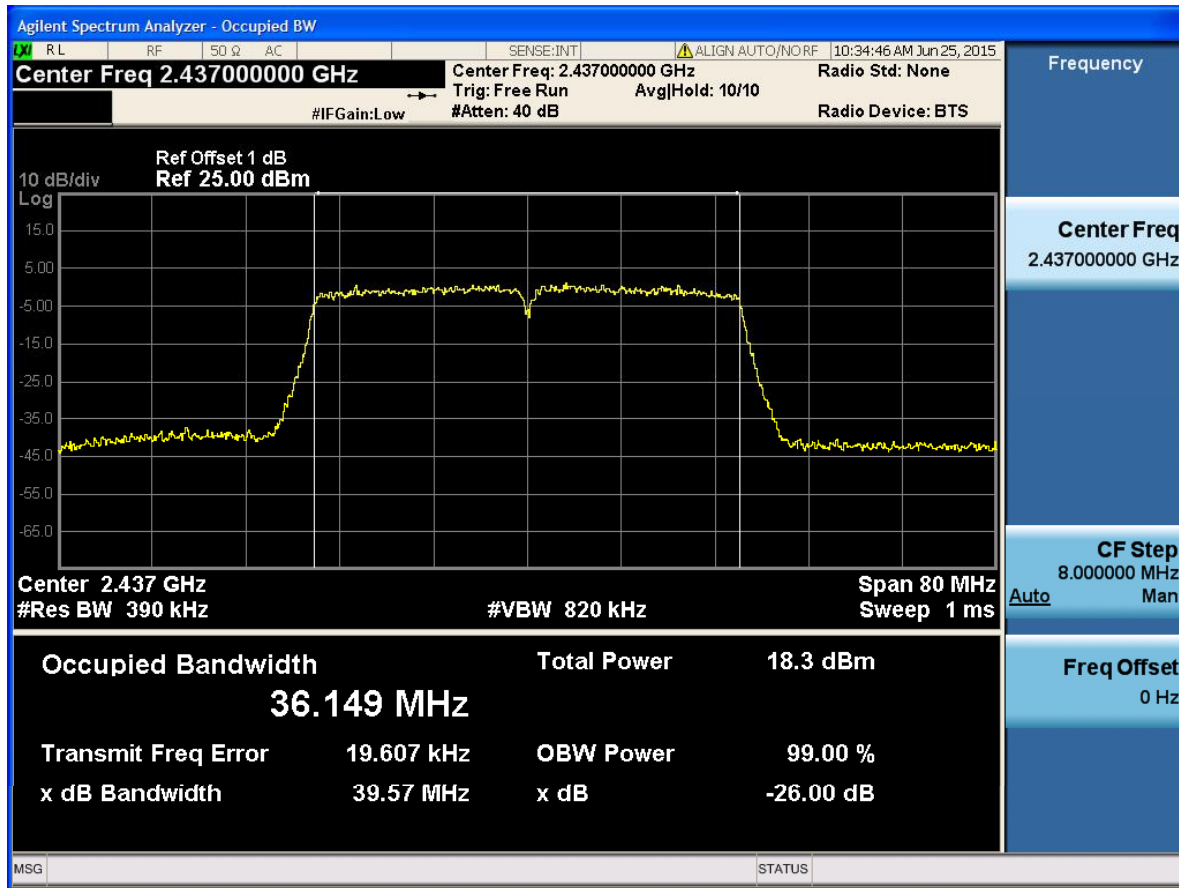


2.26 11N40_L@Ant 2



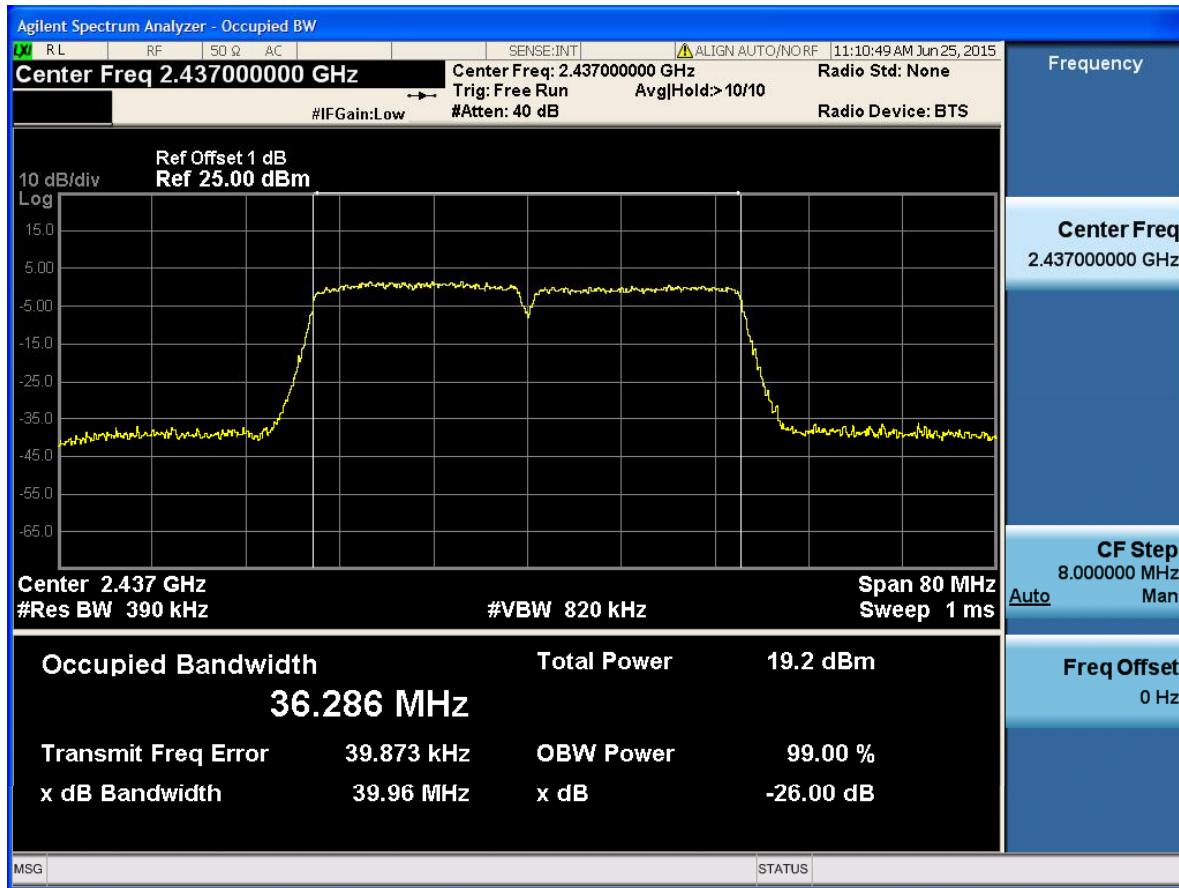


2.27 11N40_M@Ant 1



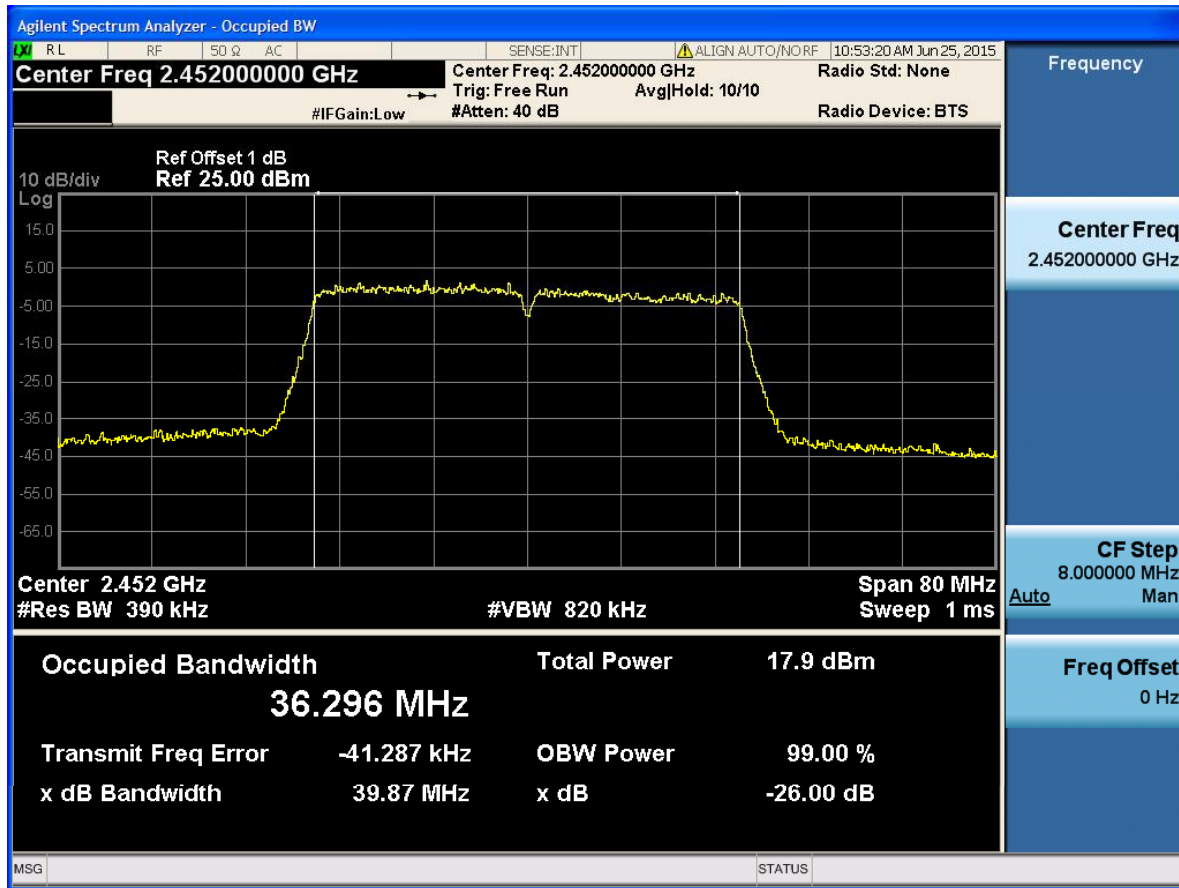


2.28 11N40_M@Ant 2



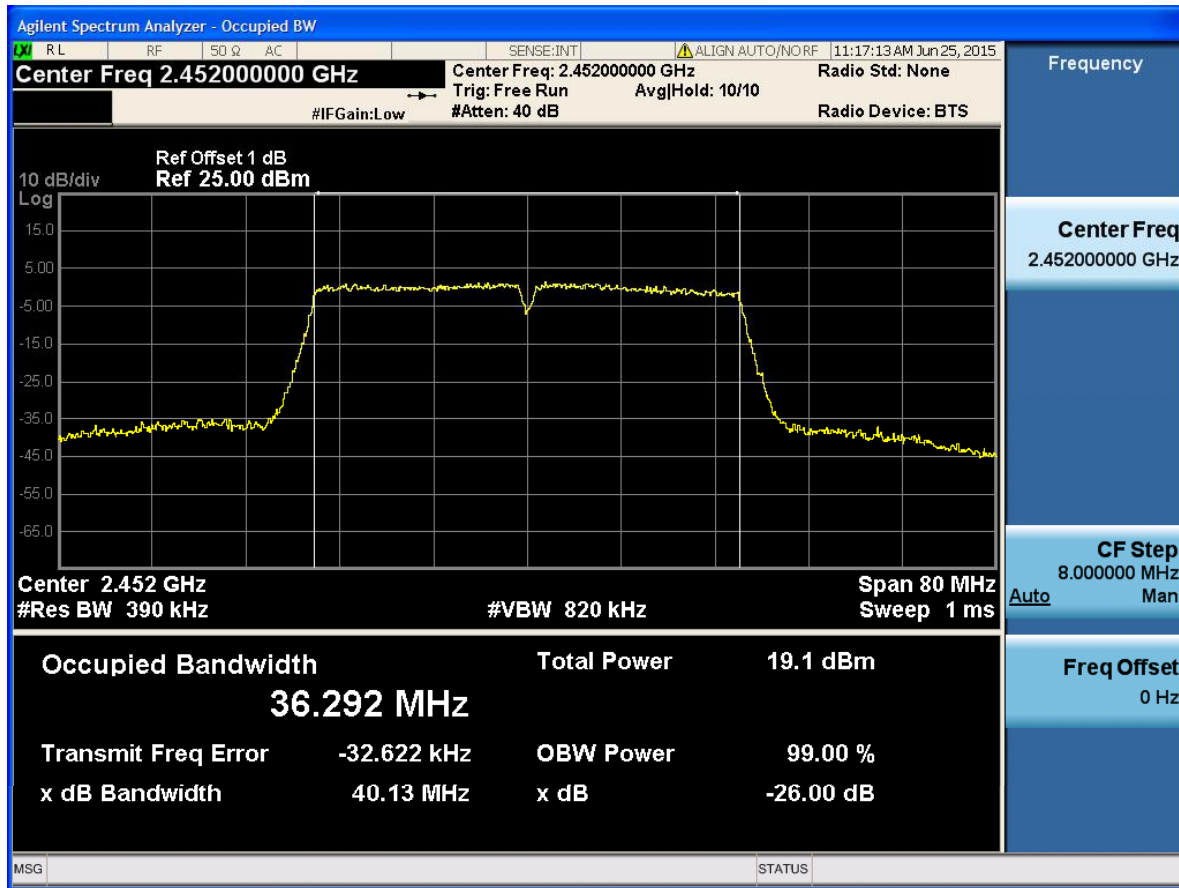


2.29 11N40_H@Ant 1



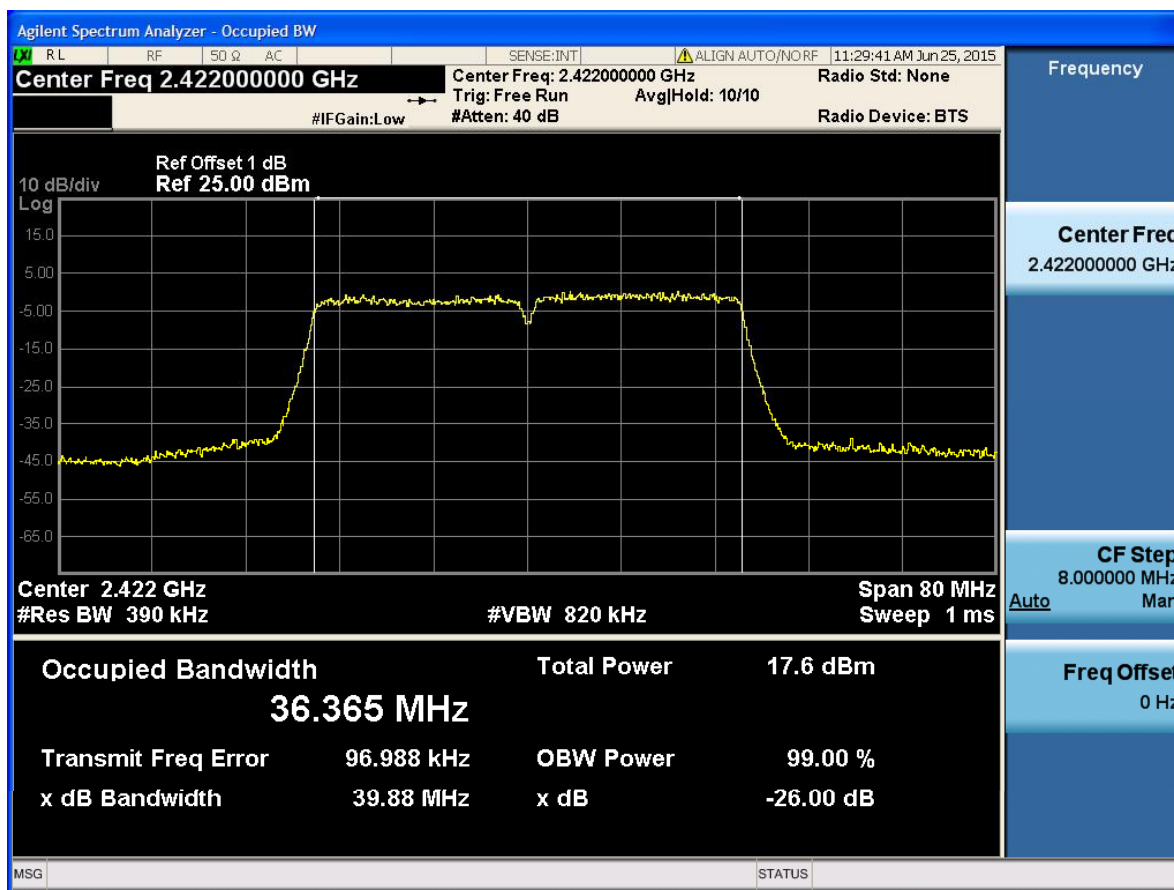


2.30 11N40_H@Ant 2



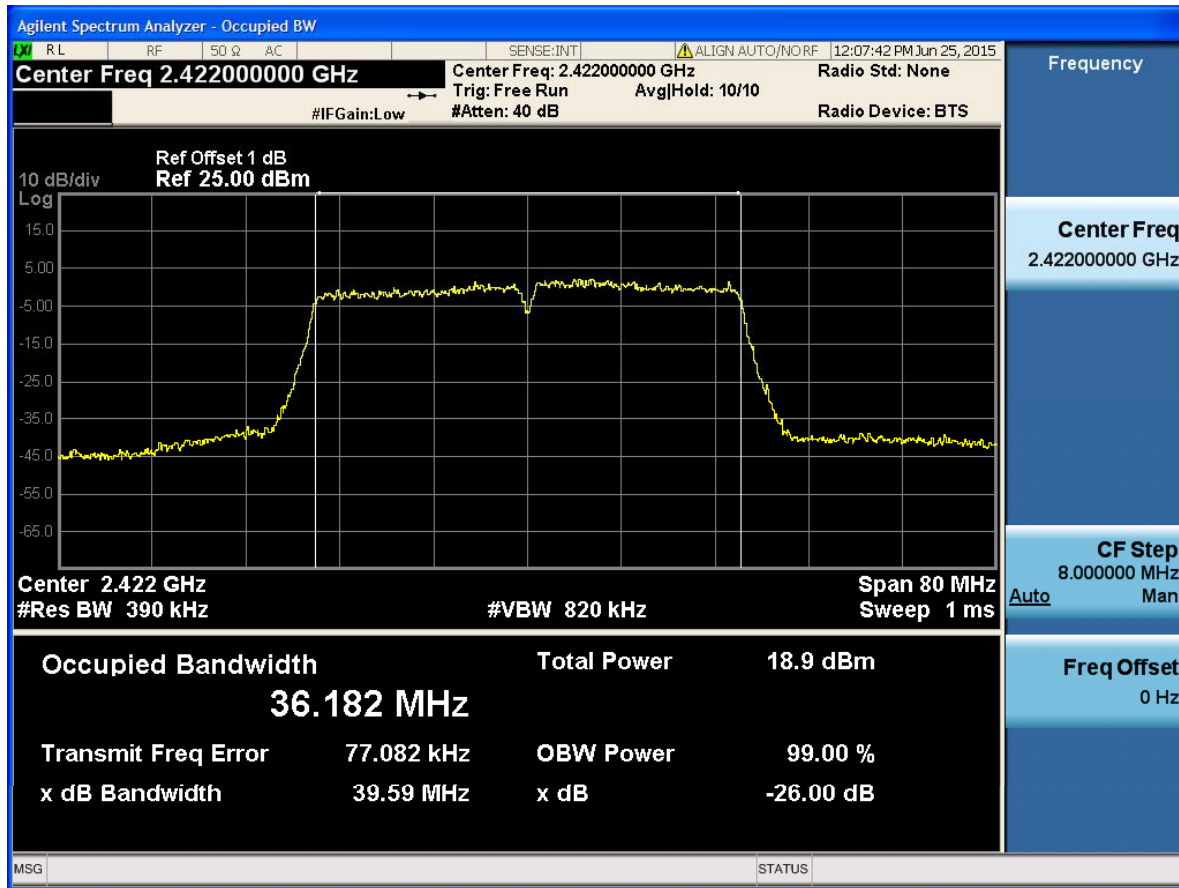


2.31 11N40m_L@Ant 1



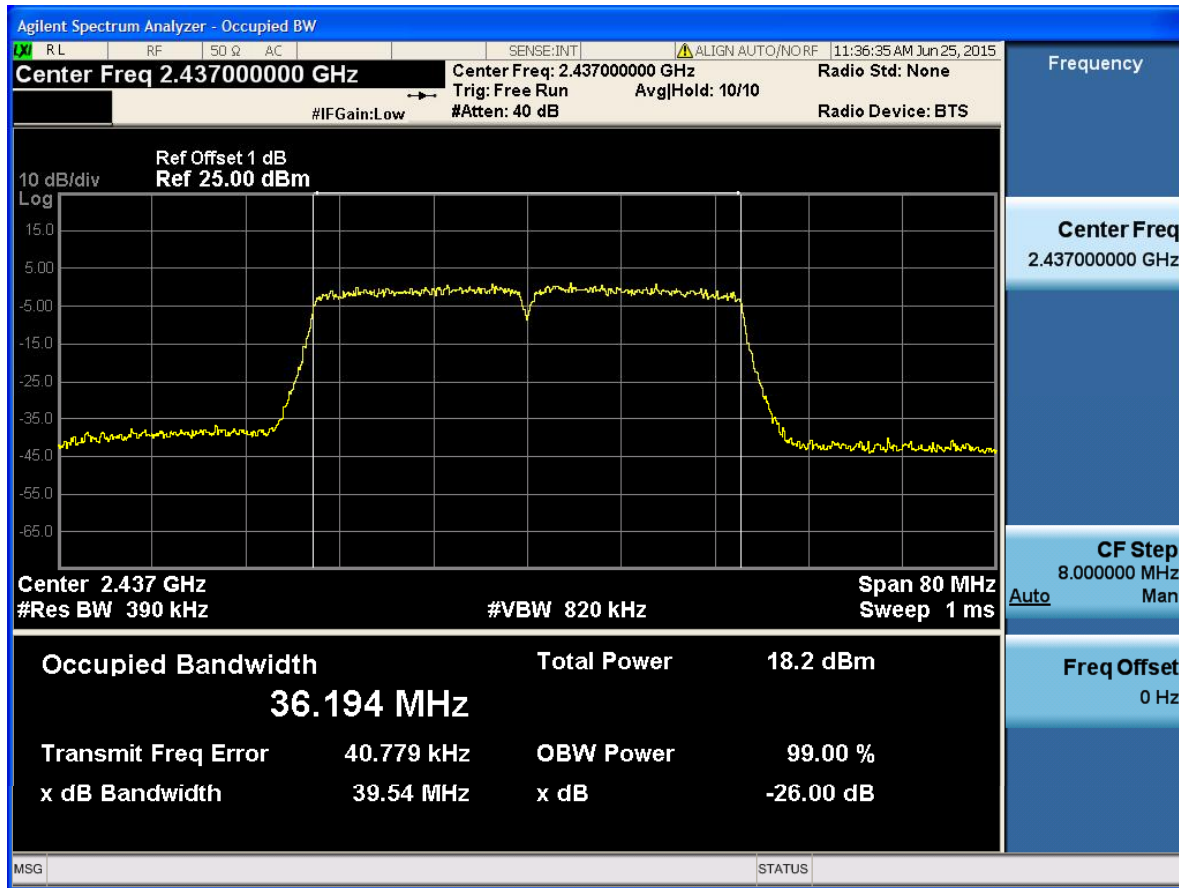


2.32 11N40m_L@Ant 2



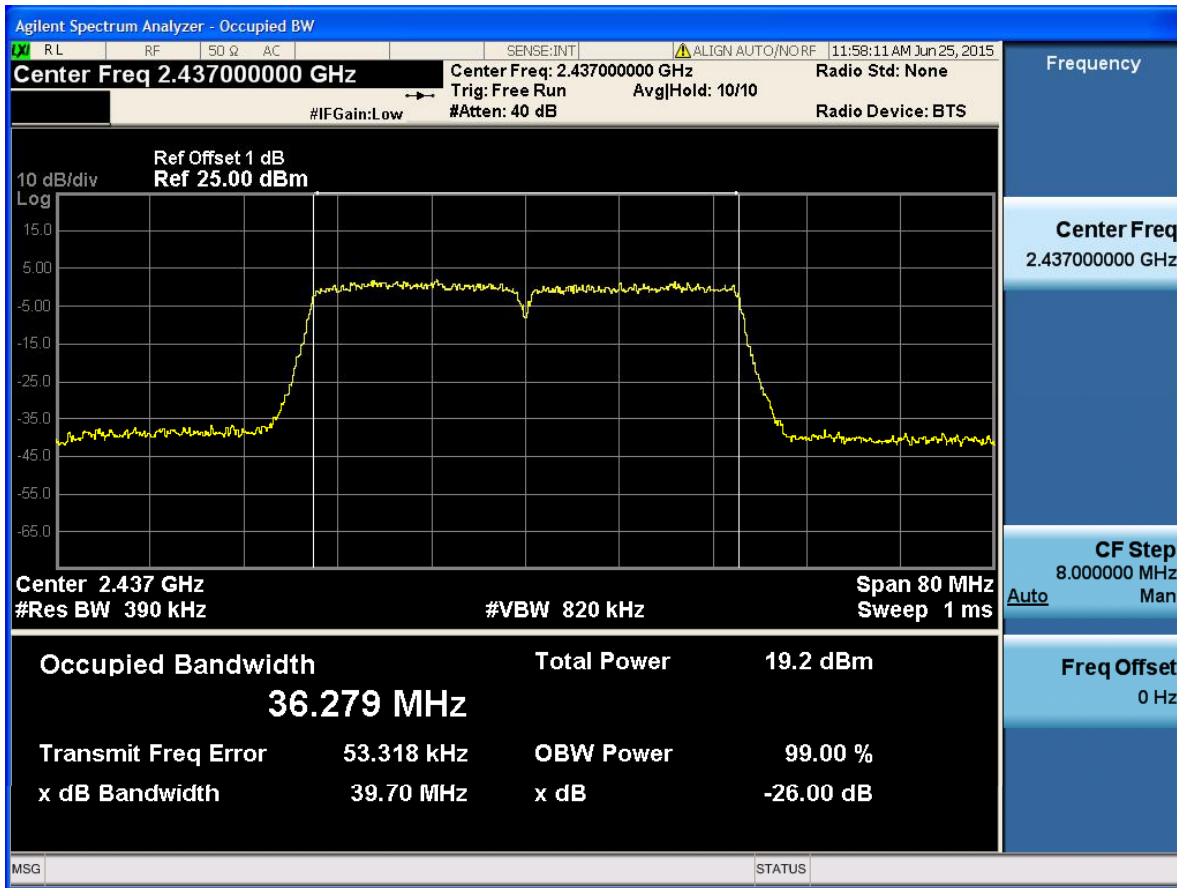


2.33 11N40m_M@Ant 1



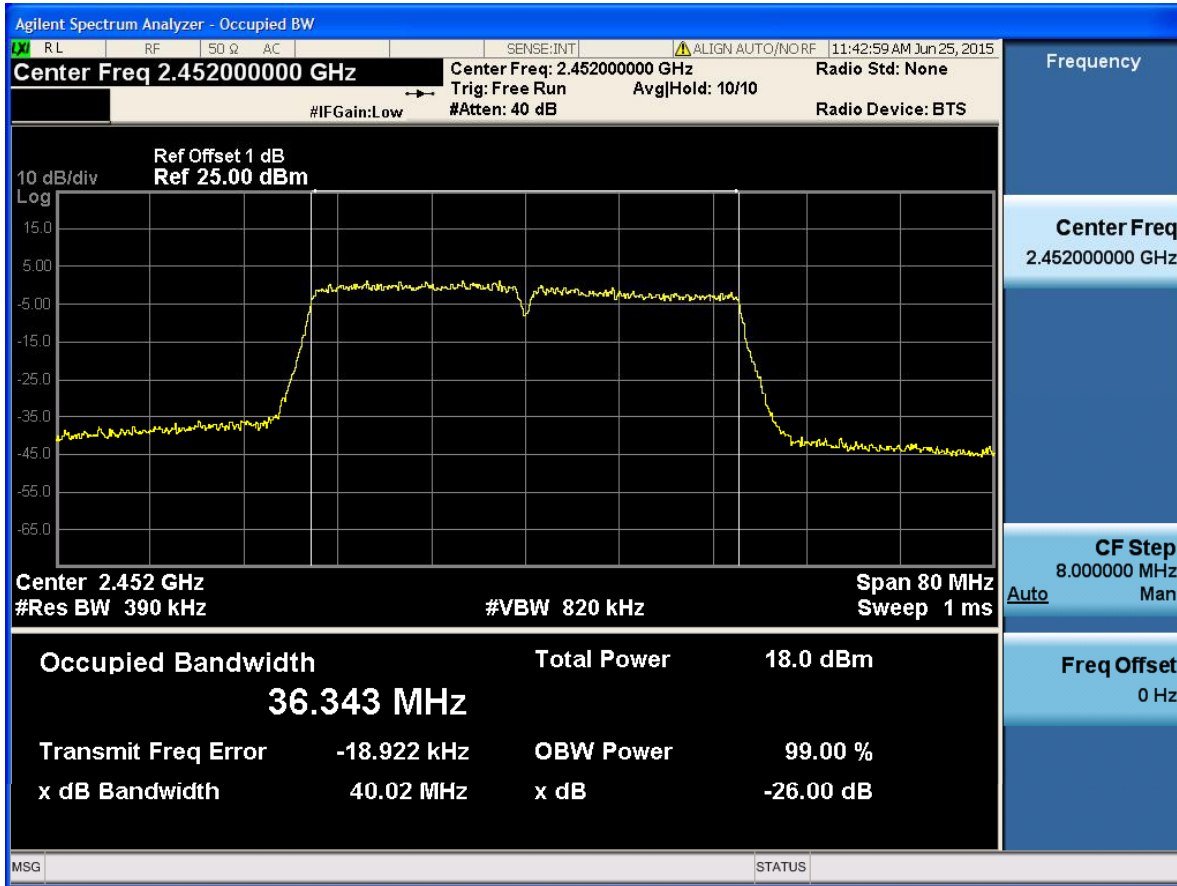


2.34 11N40m_M@Ant 2



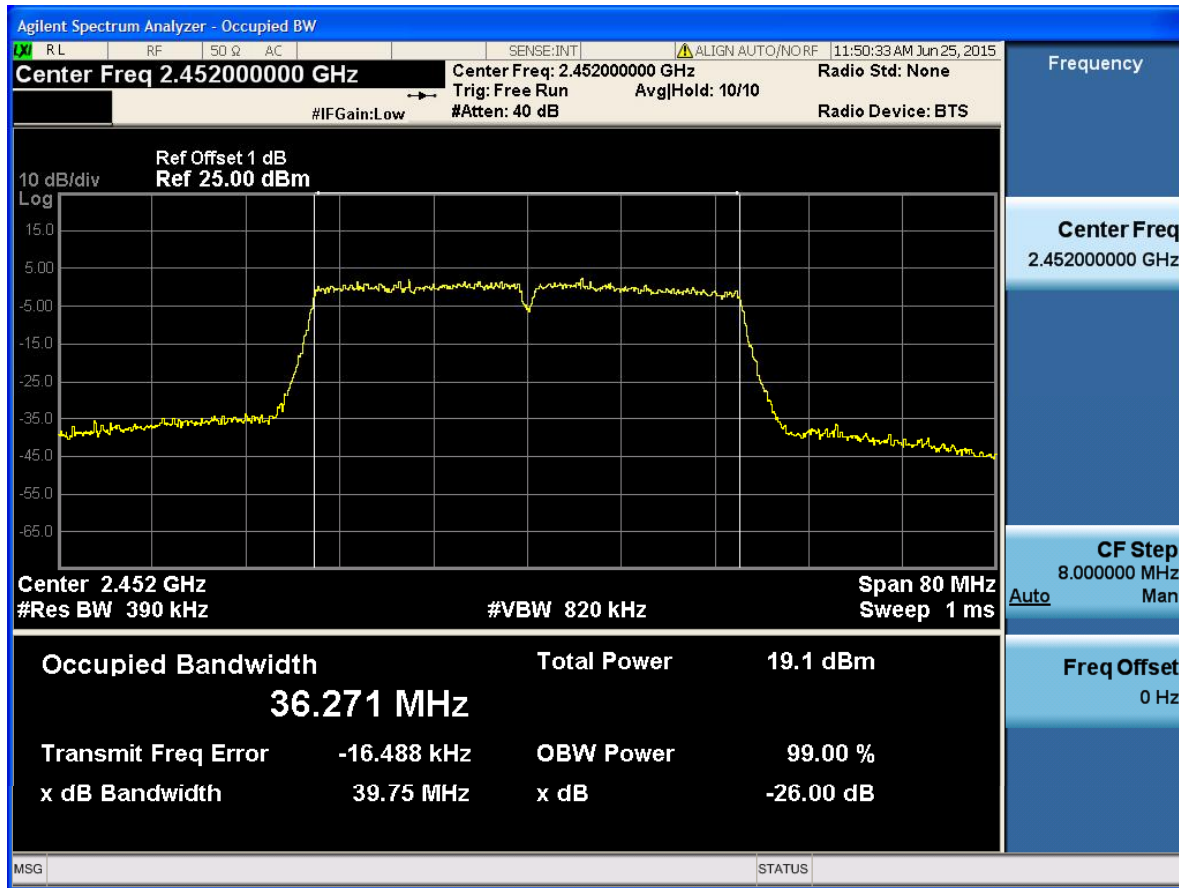


2.35 11N40m_H@Ant 1





2.36 11N40m_H@Ant 2





Appendix C: Duty Cycle

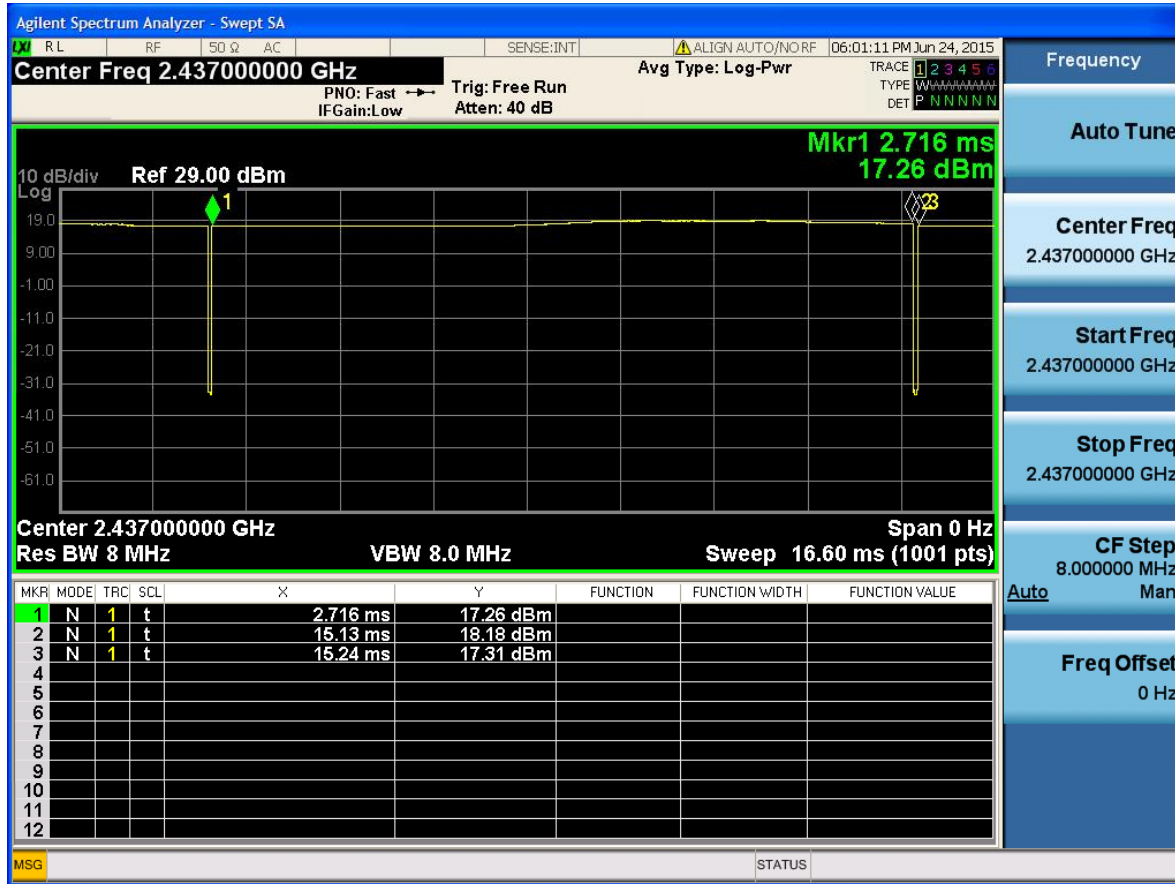
Part I - Test Results

Test Mode	TX Freq. [MHz]	Duty cycle [%]
11B	Ant 1: CH1,CH6,CH11 Ant 2: CH1,CH6,CH11	99
11G	Ant 1: CH1,CH6,CH11 Ant 2: CH1,CH6,CH11	95
11N_20M_SISO	Ant 1: CH1,CH6,CH11 Ant 2: CH1,CH6,CH11	94
11N_20M_MIMO	Ant 1: CH1,CH6,CH11 Ant 2: CH1,CH6,CH11	90
11N_40M_SISO	Ant 1: CH3,CH6,CH9 Ant 2: CH3,CH6,CH9	89
11N_40M_MIMO	Ant 1: CH3,CH6,CH9 Ant 2: CH3,CH6,CH9	82

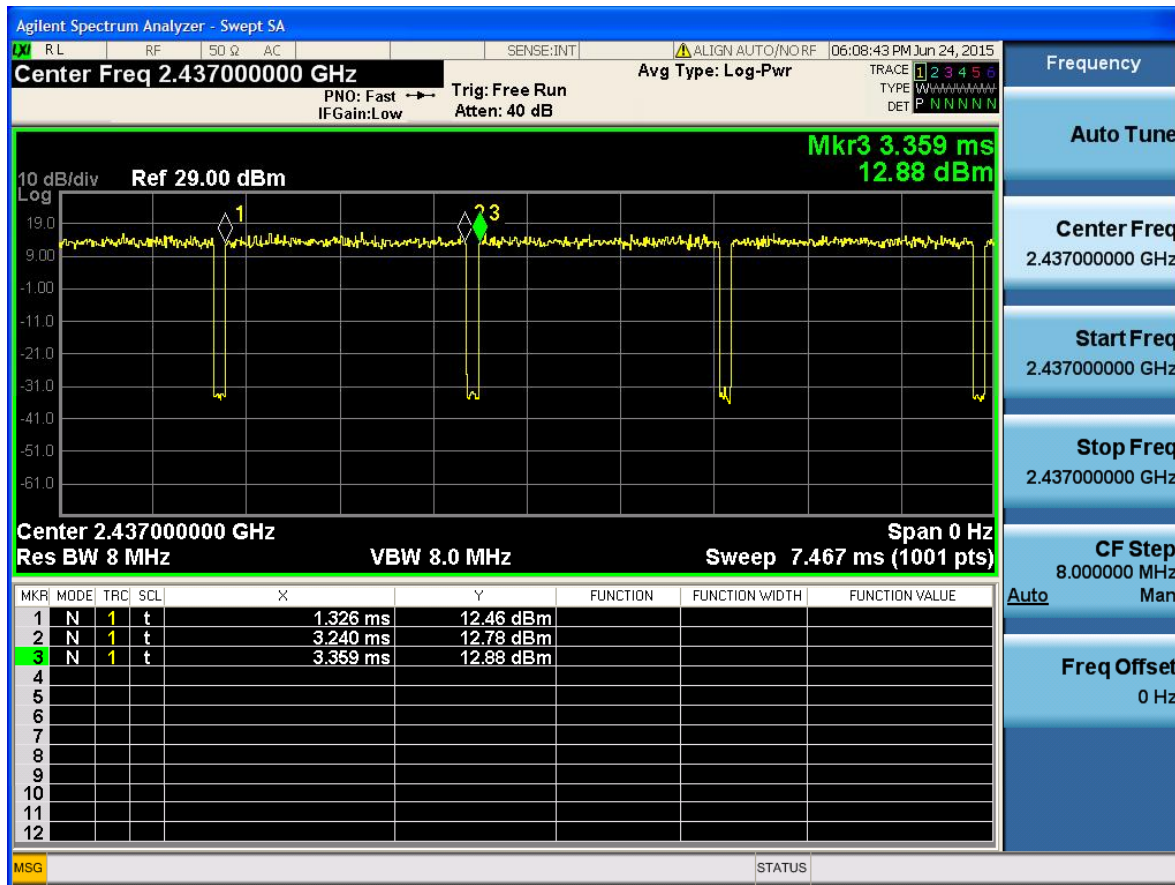


Part II - Test Plots

2.1 11B

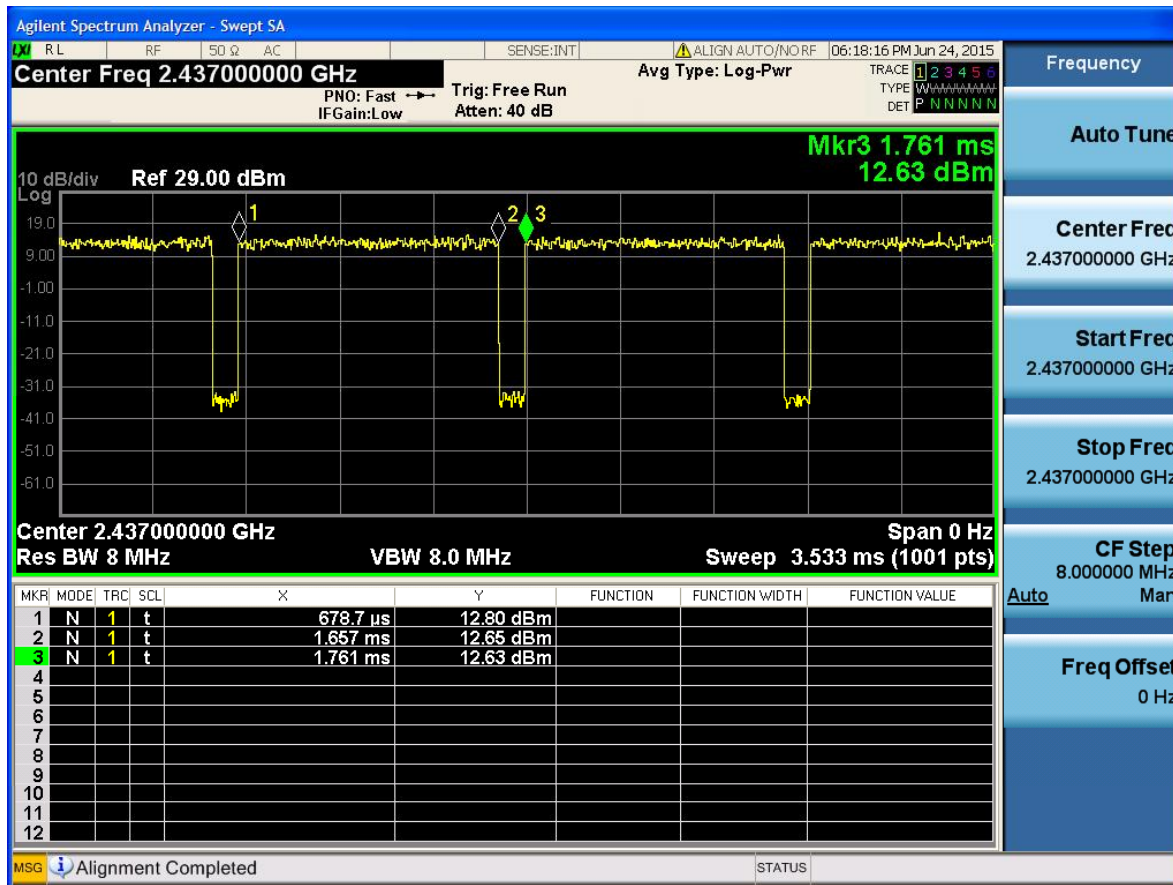


2.3 11N20





2.4 11N20m





Agilent Spectrum Analyzer - Swept SA

Center Freq 2.43700000 GHz

Trig: Free Run
Atten: 40 dB

Avg Type: Log-Pwr

Trace 1 2 3 4 5 6
Type W W W W W W
Det P N N N N N

10 dB/div Ref 29.00 dBm

Mkr2 1.939 ms
10.39 dBm

Center 2.43700000 GHz
Res BW 8 MHz
Span 0 Hz
VBW 8.0 MHz
Sweep 3.533 ms (1001 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t	993.1 μ s	2.12 dBm			
2	N	1	t	1.939 ms	10.39 dBm			
3	N	1	t	2.047 ms	5.30 dBm			
4								
5								
6								
7								
8								
9								
10								
11								
12								

MSG STATUS

Frequency

Auto Tune

Center Freq
2.43700000 GHz

Start Freq
2.43700000 GHz

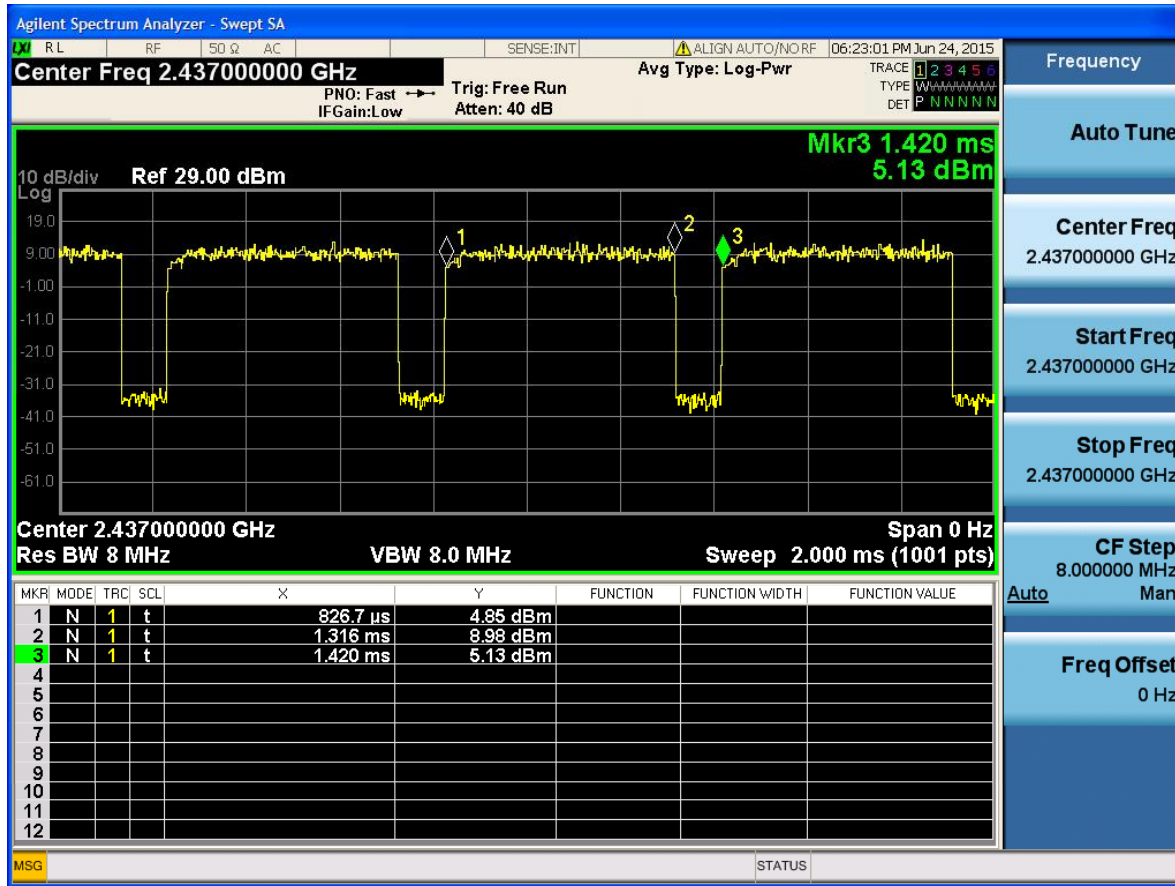
Stop Freq
2.43700000 GHz

CF Step
8.000000 MHz
Mar

Freq Offset
0 Hz



2.6 11N40m



Appendix D: Maximum Conducted Average Output Power

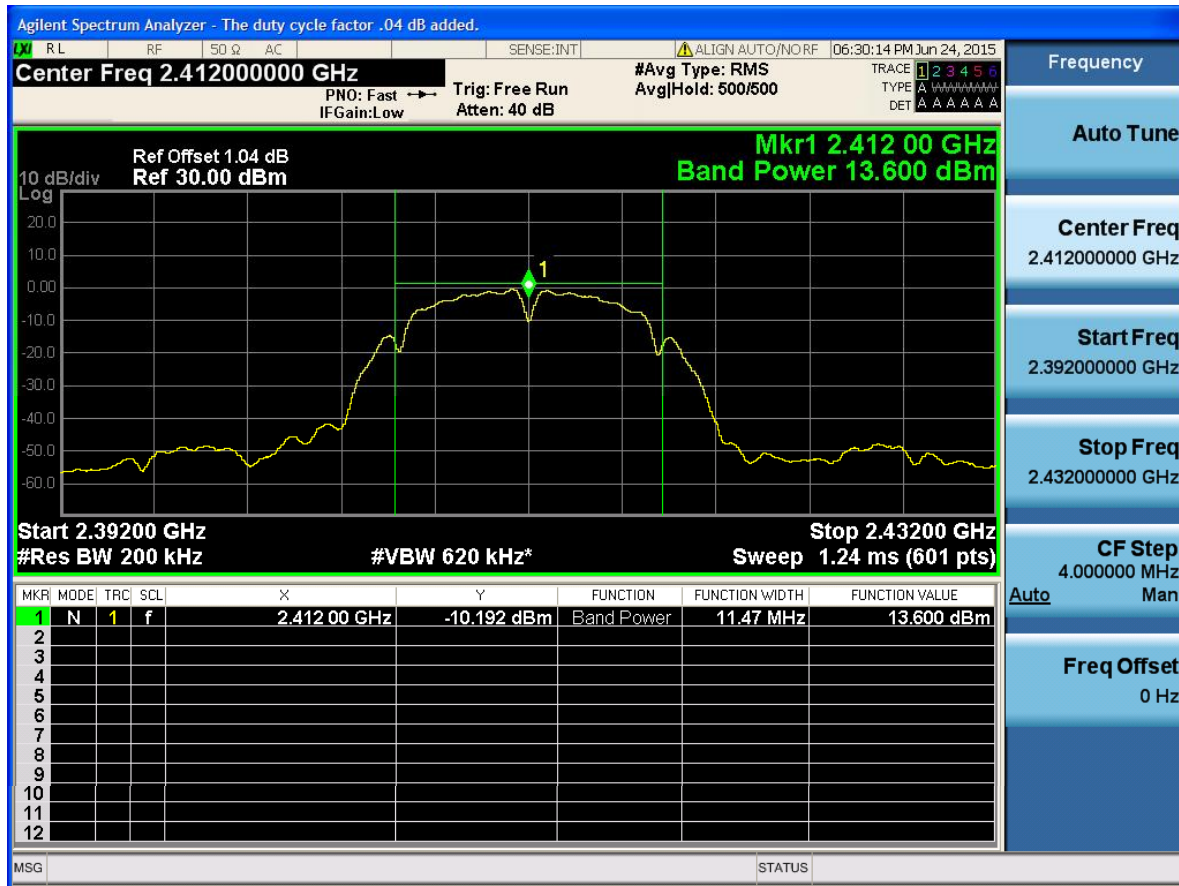
Part I - Test Results

Test Mode	Test Channel	Frequency[MHz]	Ant	Power[dBm]	Verdict
11B	L	2412	Ant 1	13.60	pass
11B	L	2412	Ant 2	14.06	pass
11B	M	2437	Ant 1	14.62	pass
11B	M	2437	Ant 2	15.37	pass
11B	H	2462	Ant 1	13.43	pass
11B	H	2462	Ant 2	15.05	pass
11G	L	2412	Ant 1	11.23	pass
11G	L	2412	Ant 2	11.92	pass
11G	M	2437	Ant 1	12.32	pass
11G	M	2437	Ant 2	13.23	pass
11G	H	2462	Ant 1	11.54	pass
11G	H	2462	Ant 2	12.83	pass
11N20	L	2412	Ant 1	10.24	pass
11N20	L	2412	Ant 2	10.96	pass
11N20	M	2437	Ant 1	11.28	pass
11N20	M	2437	Ant 2	12.20	pass
11N20	H	2462	Ant 1	10.41	pass
11N20	H	2462	Ant 2	11.95	pass
11N20m	L	2412	Ant 2	10.87	pass
11N20m	L	2412	Ant 1	10.27	pass
11N20m	L	2412	sum	13.59	pass
11N20m	M	2437	Ant 2	12.15	pass
11N20m	M	2437	Ant 1	11.34	pass
11N20m	M	2437	sum	14.77	pass
11N20m	H	2462	Ant 2	11.95	pass
11N20m	H	2462	Ant 1	10.25	pass
11N20m	H	2462	sum	14.19	pass
11N40	L	2422	Ant 1	10.60	pass
11N40	L	2422	Ant 2	11.31	pass
11N40	M	2437	Ant 1	10.99	pass
11N40	M	2437	Ant 2	11.82	pass
11N40	H	2452	Ant 1	10.99	pass
11N40	H	2452	Ant 2	11.84	pass
11N40m	L	2422	Ant 1	10.45	pass
11N40m	L	2422	Ant 2	11.38	pass
11N40m	L	2422	Sum	13.95	pass
11N40m	M	2437	Ant 1	10.91	pass
11N40m	M	2437	Ant 2	11.61	pass
11N40m	M	2437	sum	14.28	pass
11N40m	H	2452	Ant 1	11.03	pass
11N40m	H	2452	Ant 2	11.82	pass
11N40m	H	2452	sum	14.45	pass



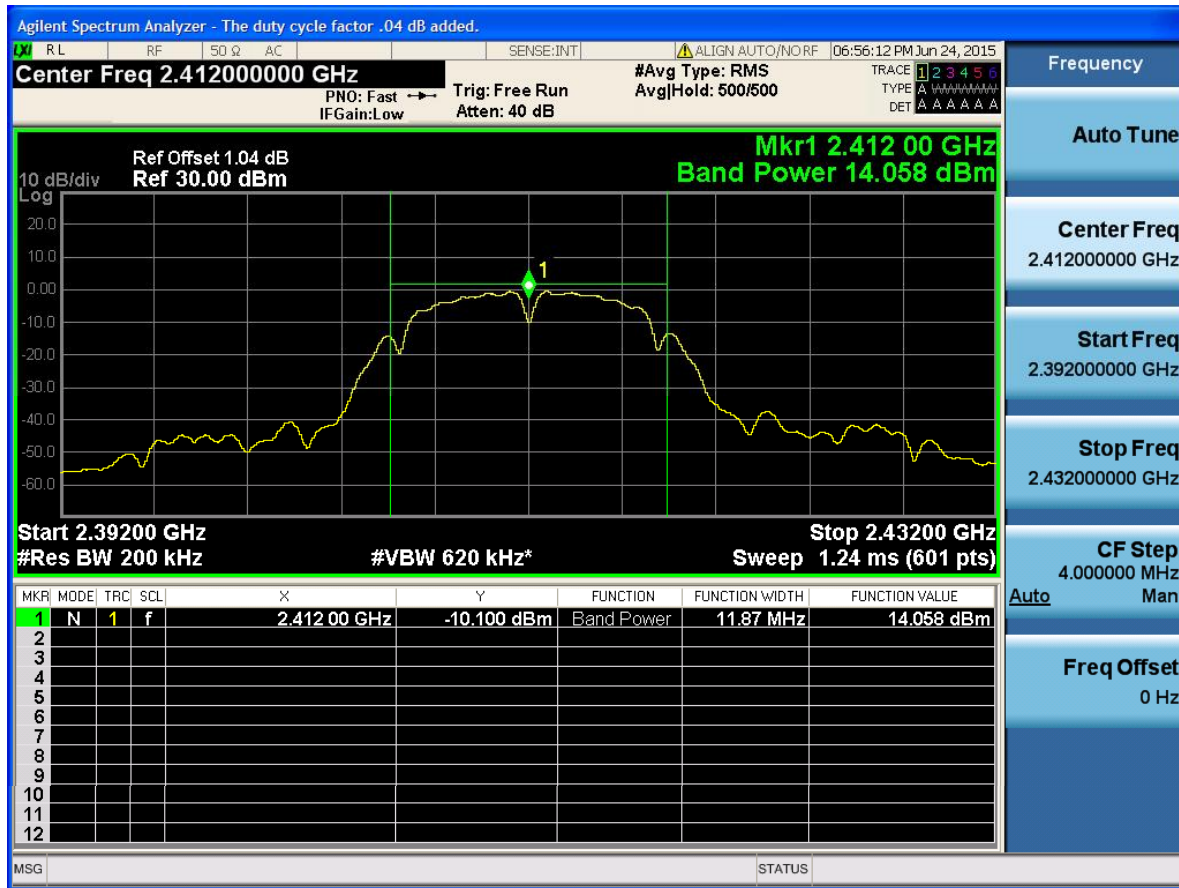
Part II - Test Plots

2.1 11B_L@Ant 1



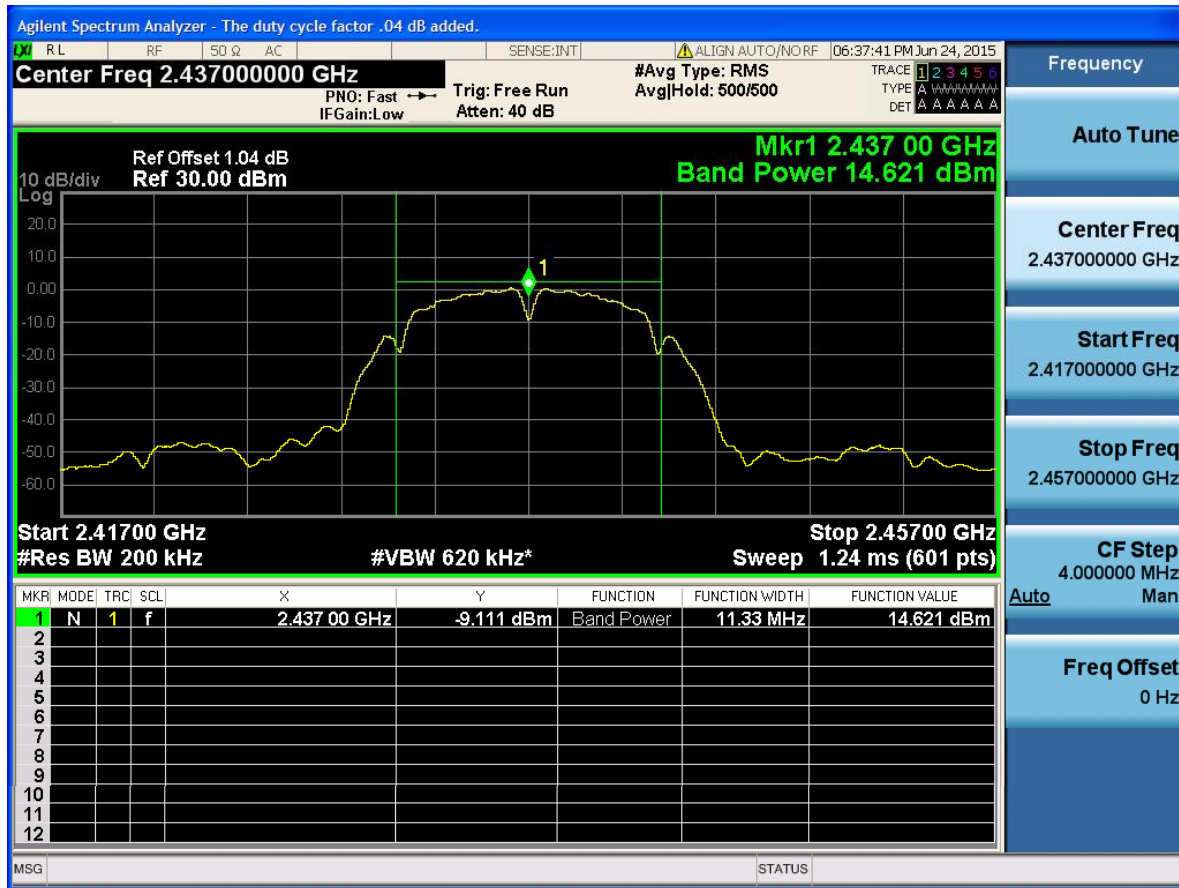


2.2 11B_L@Ant 2



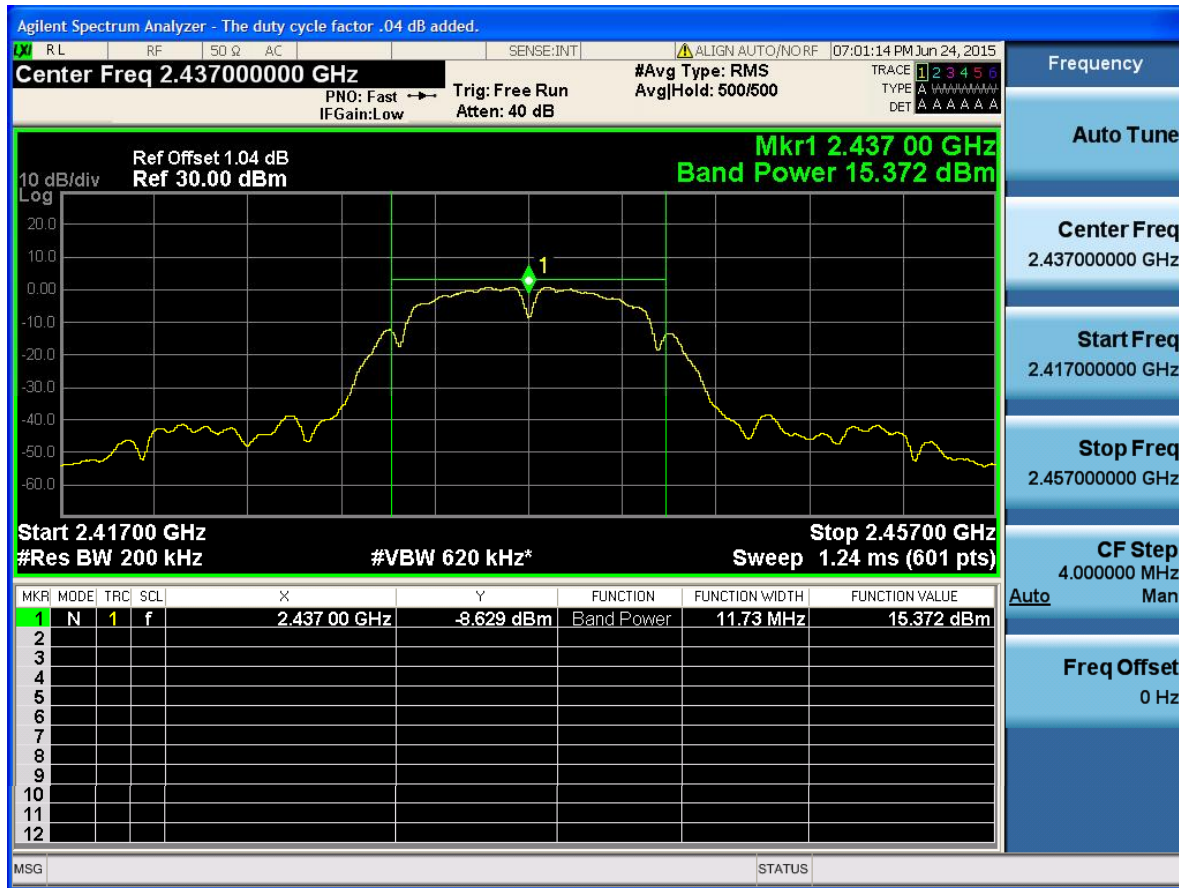


2.3 11B_M@Ant 1



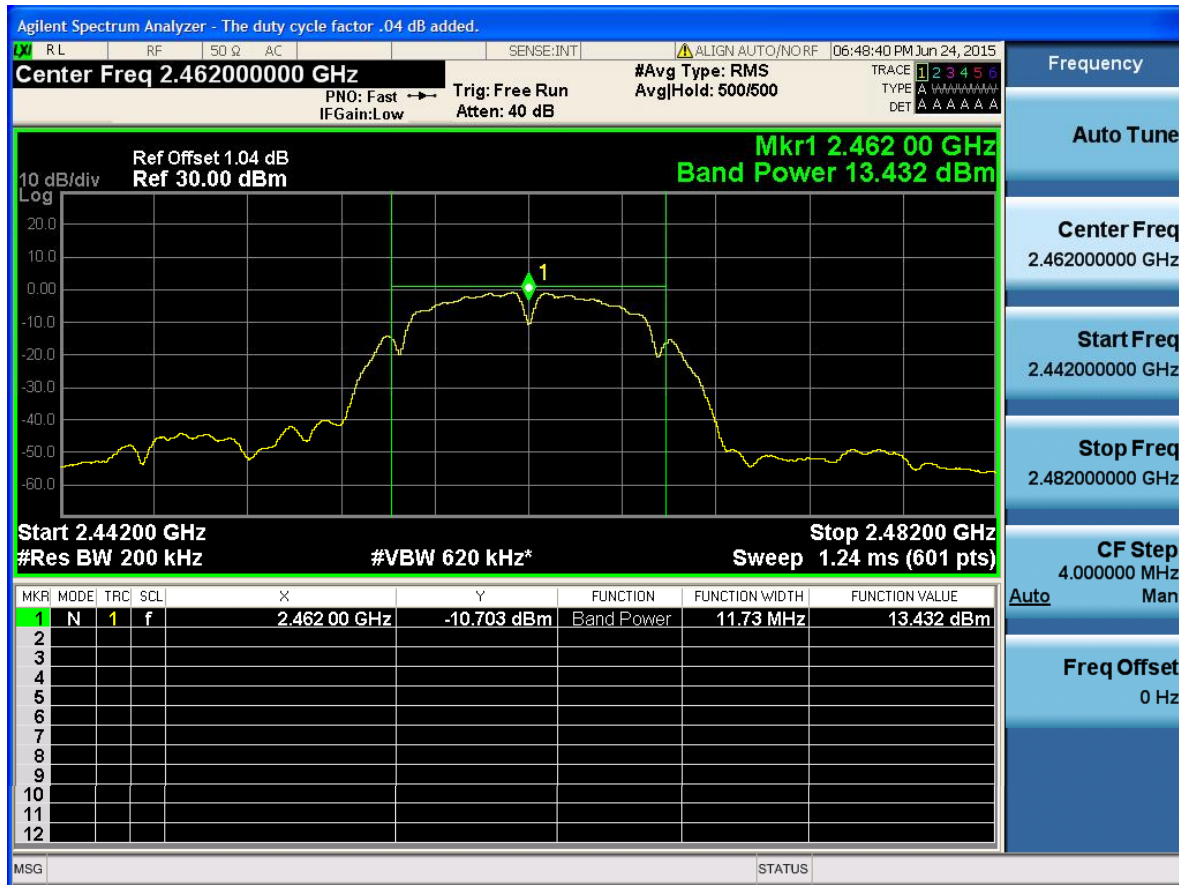


2.4 11B_M@Ant 2



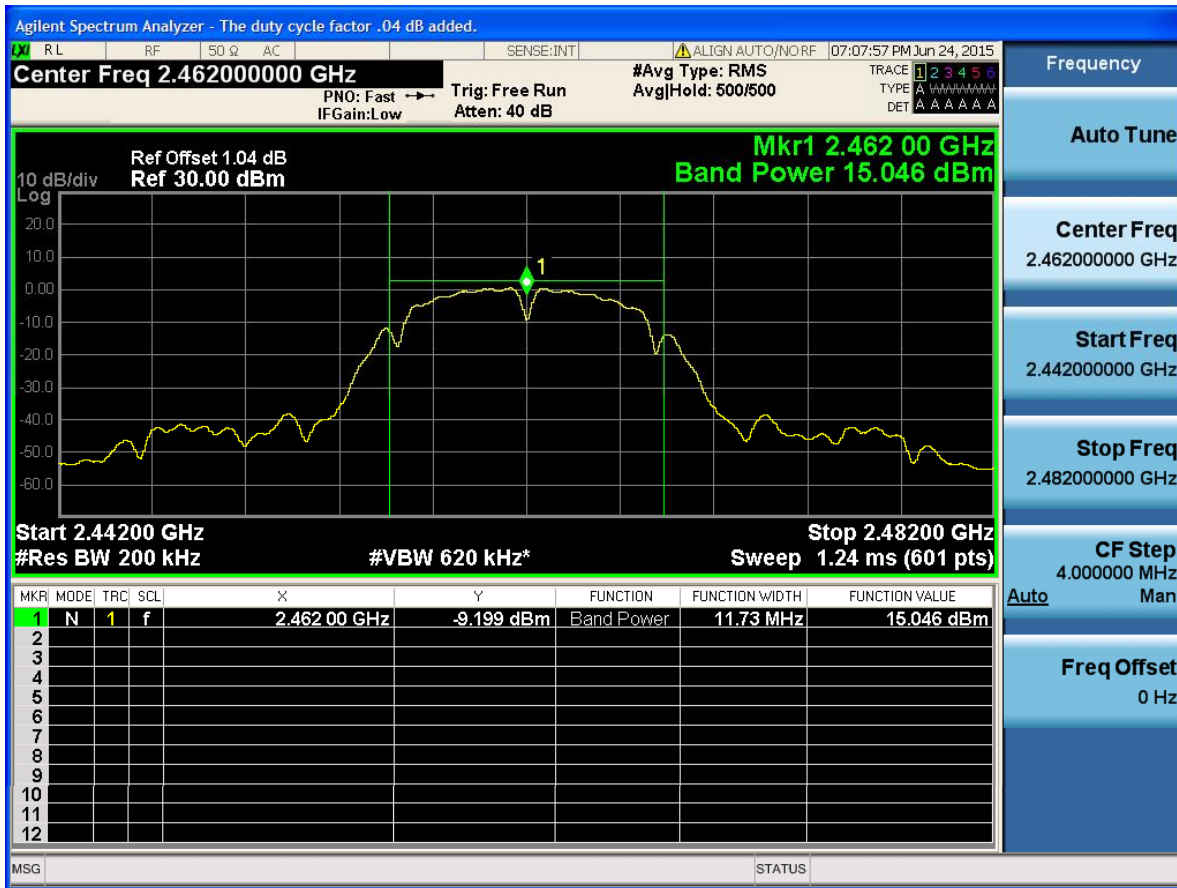


2.5 11B_H@Ant 1



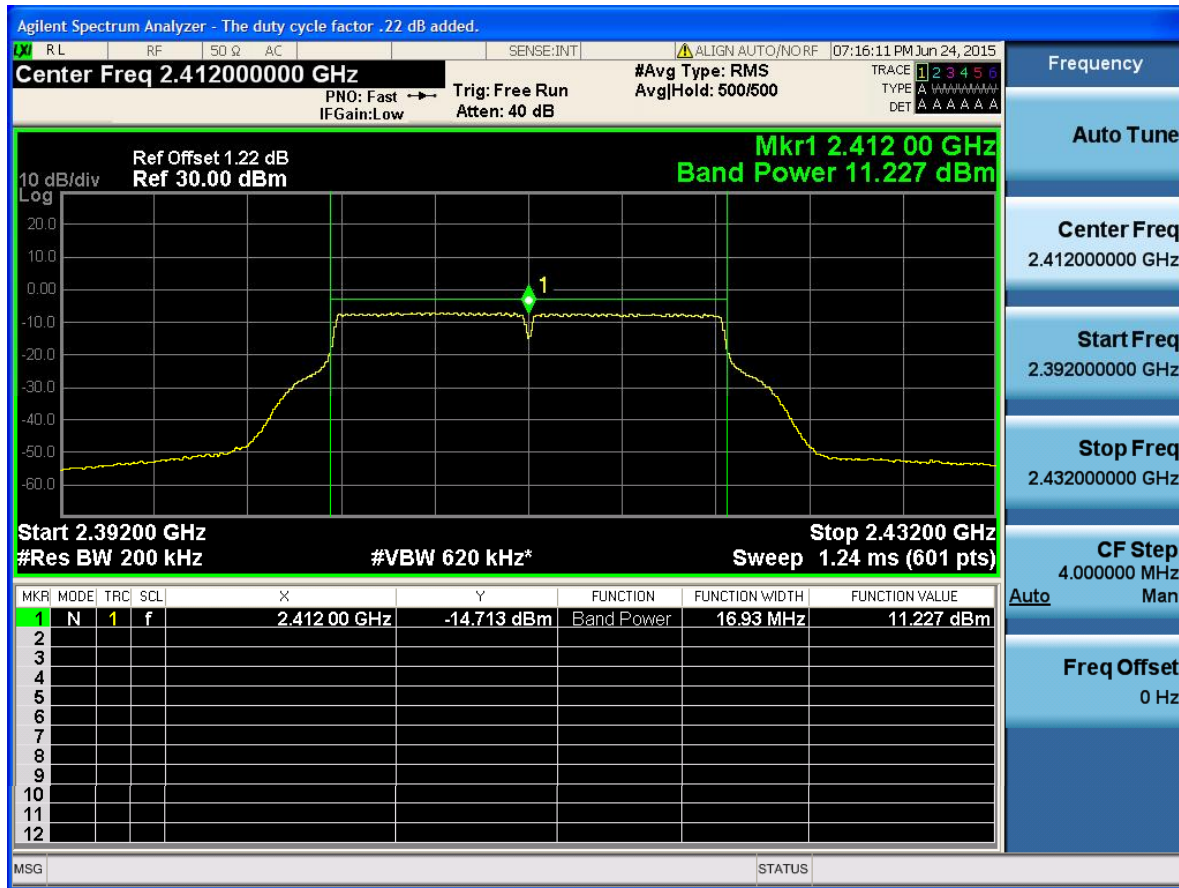


2.6 11B_H@Ant 2



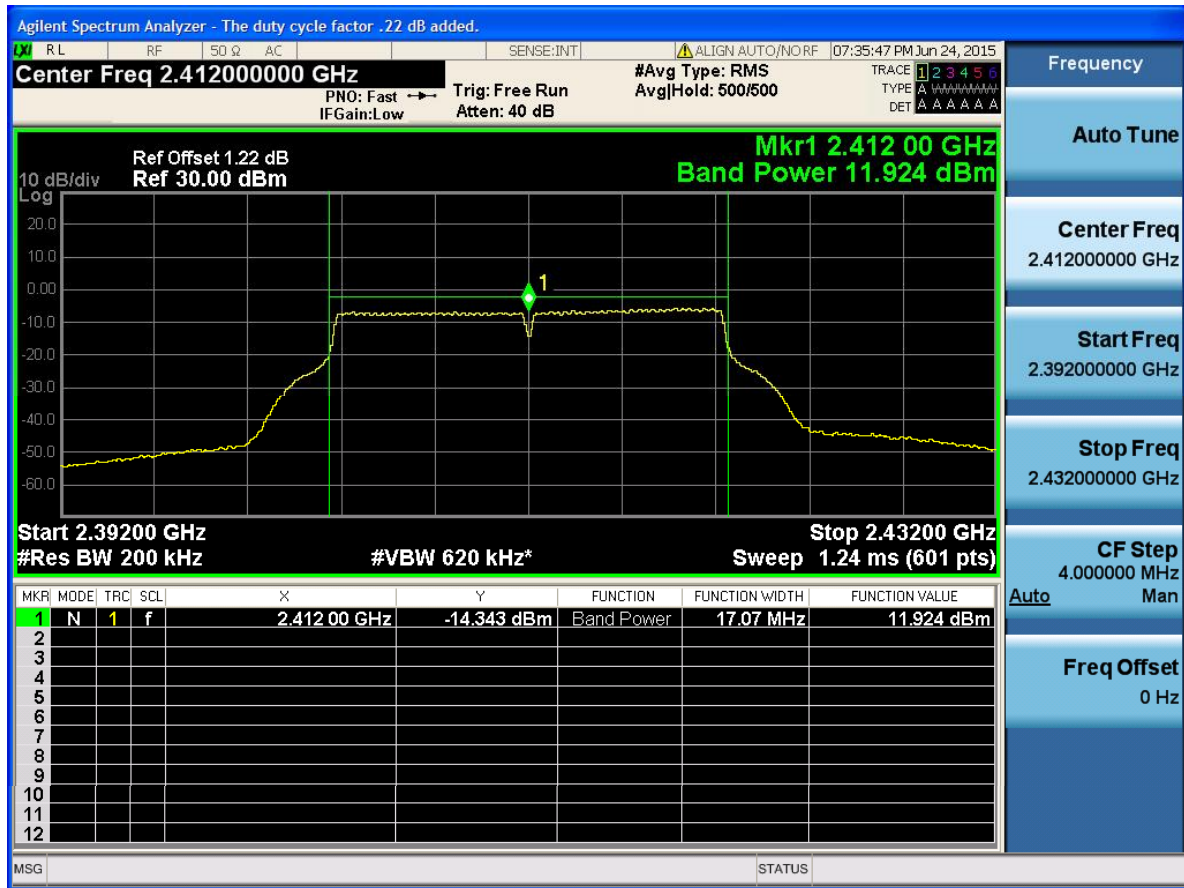


2.7 11G_L@Ant 1



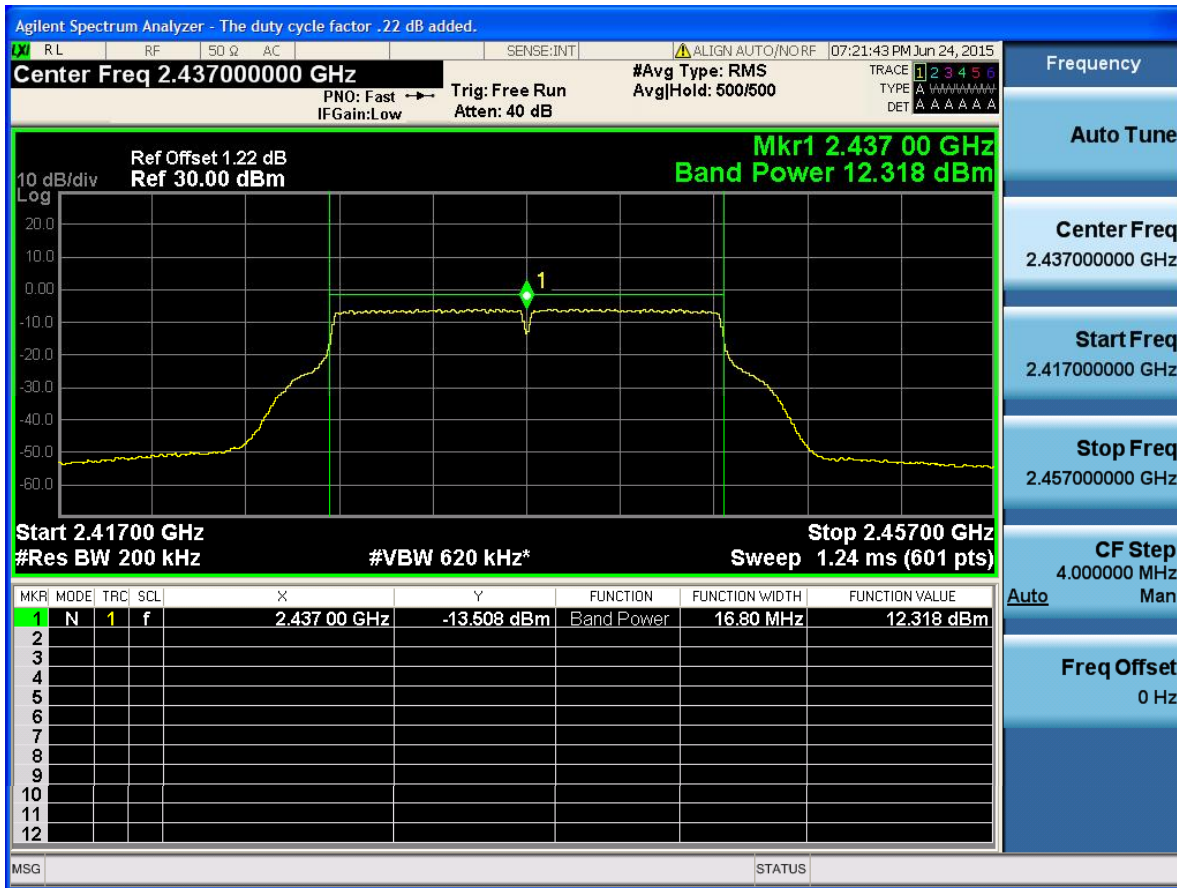


2.8 11G_L@Ant 2



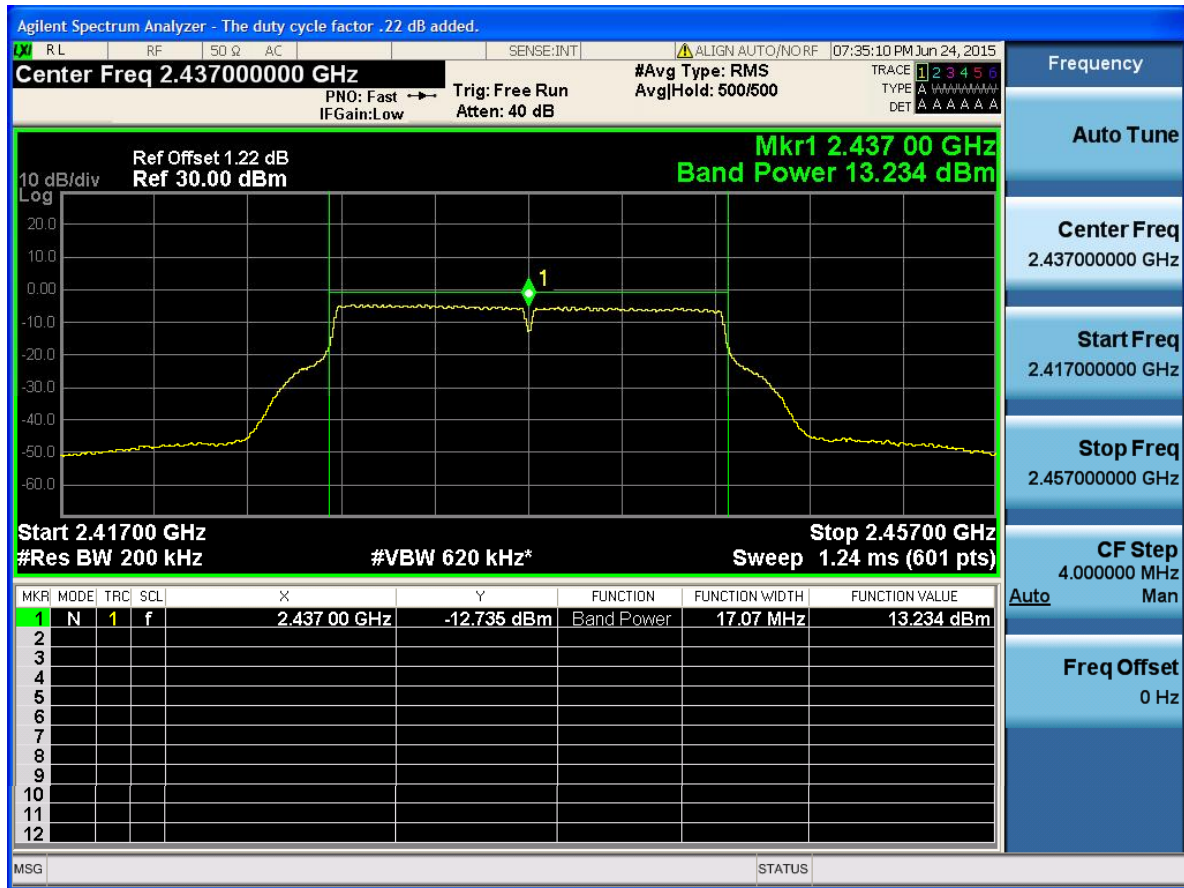


2.9 11G_M@Ant 1



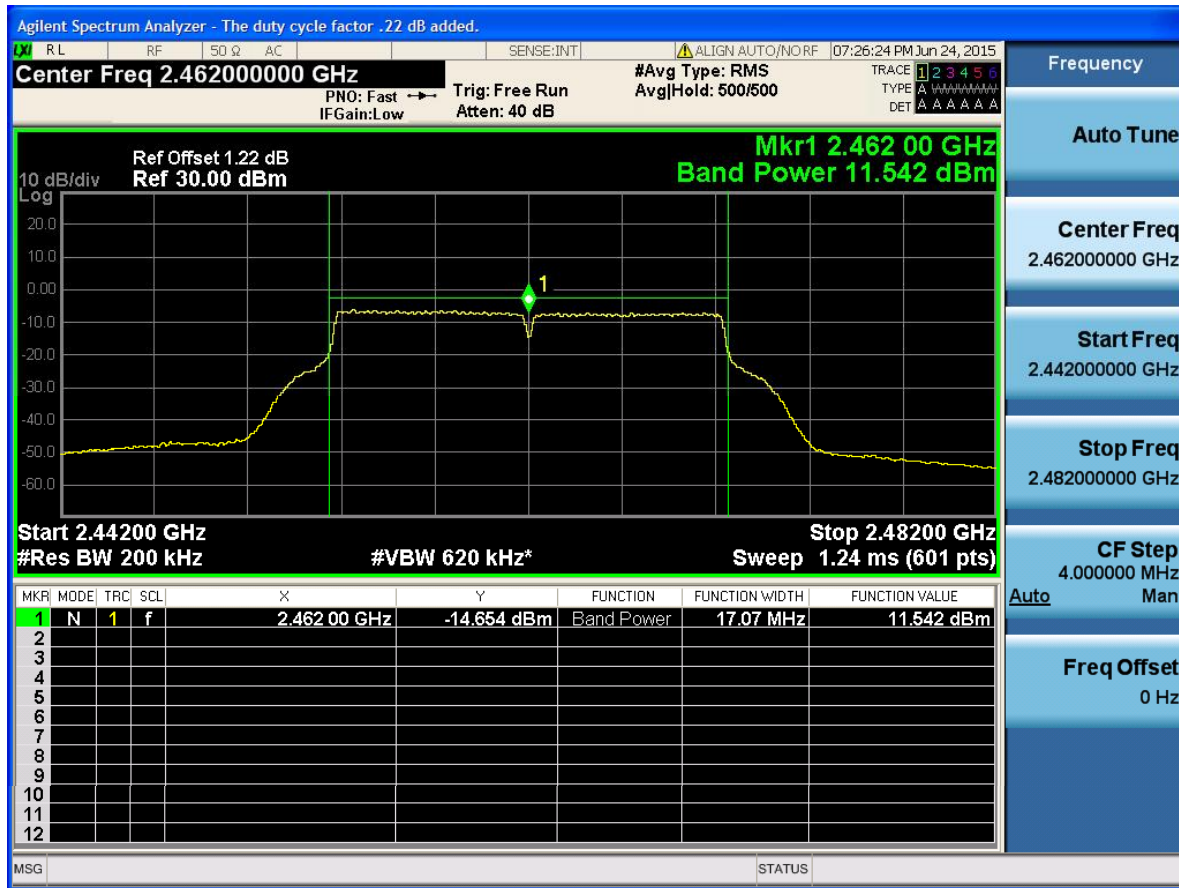


2.10 11G_M@Ant 2



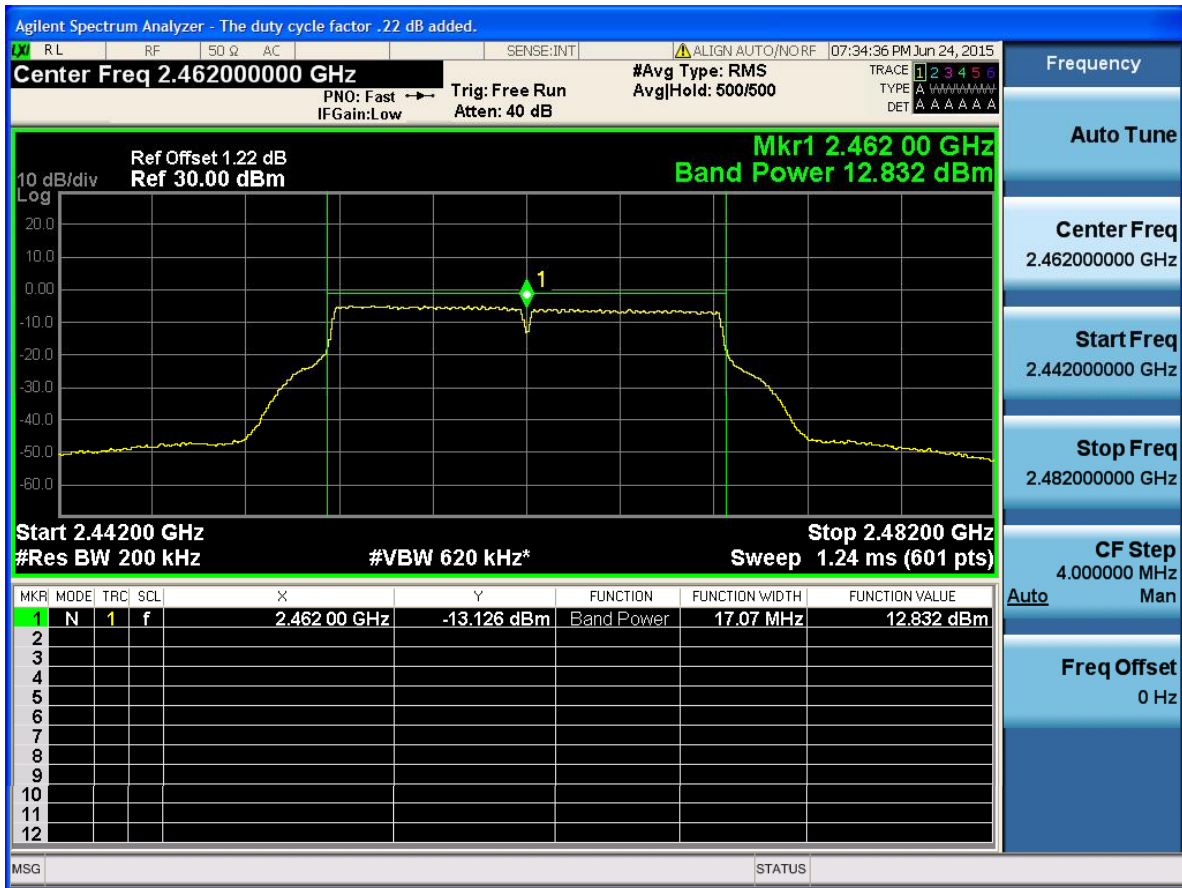


2.11 11G_H@Ant 1



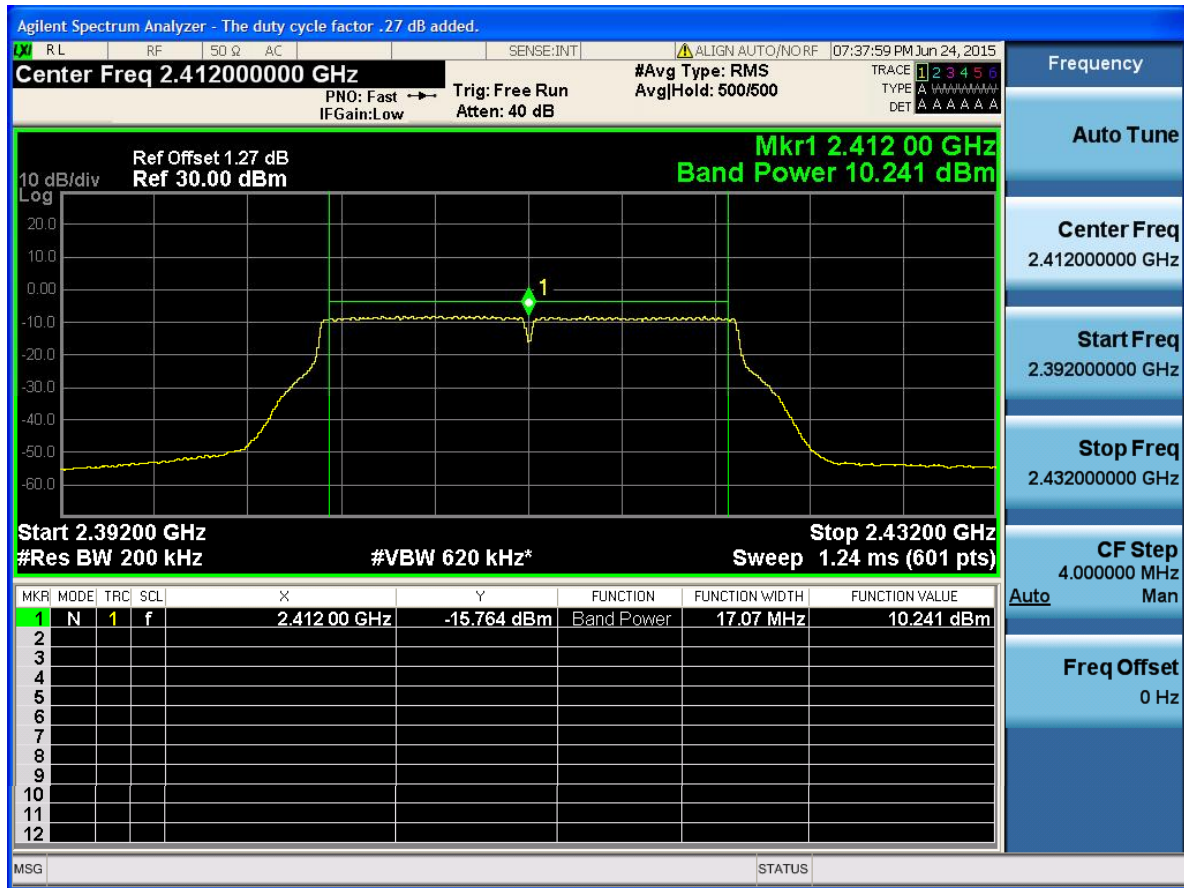


2.12 11G_H@Ant 2



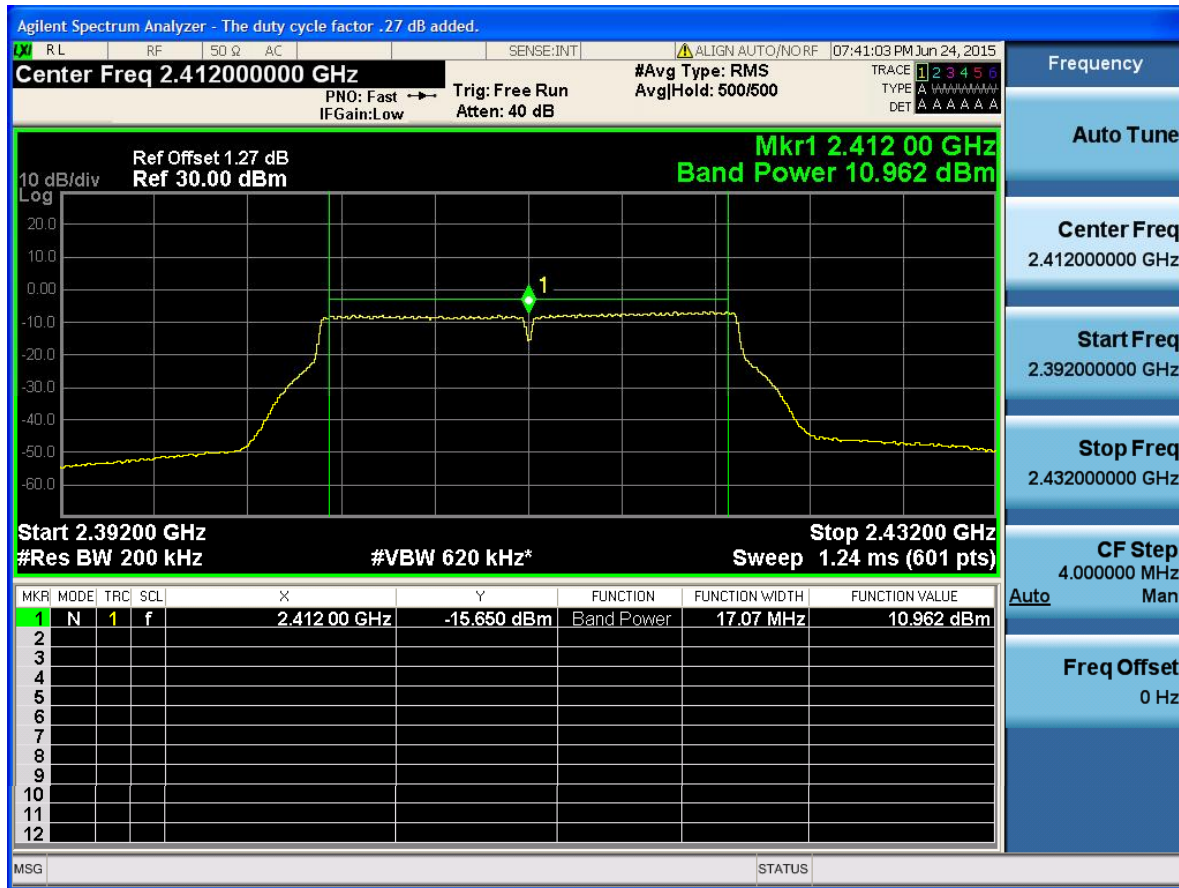


2.13 11N20_L@Ant 1



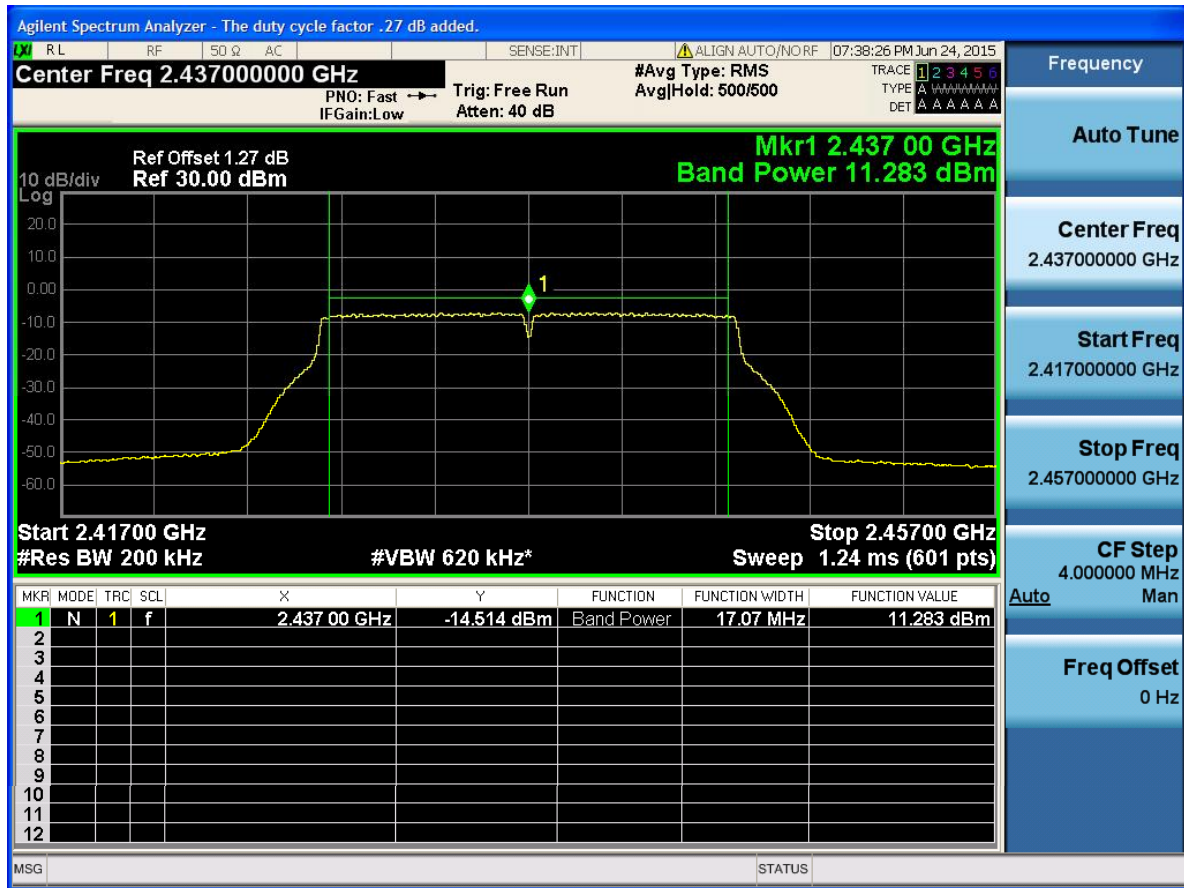


2.14 11N20_L@Ant 2





2.15 11N20_M@Ant 1





2.16 11N20_M@Ant 2

