

Appendix C

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: 300 Mbps Wireless Broadband Router

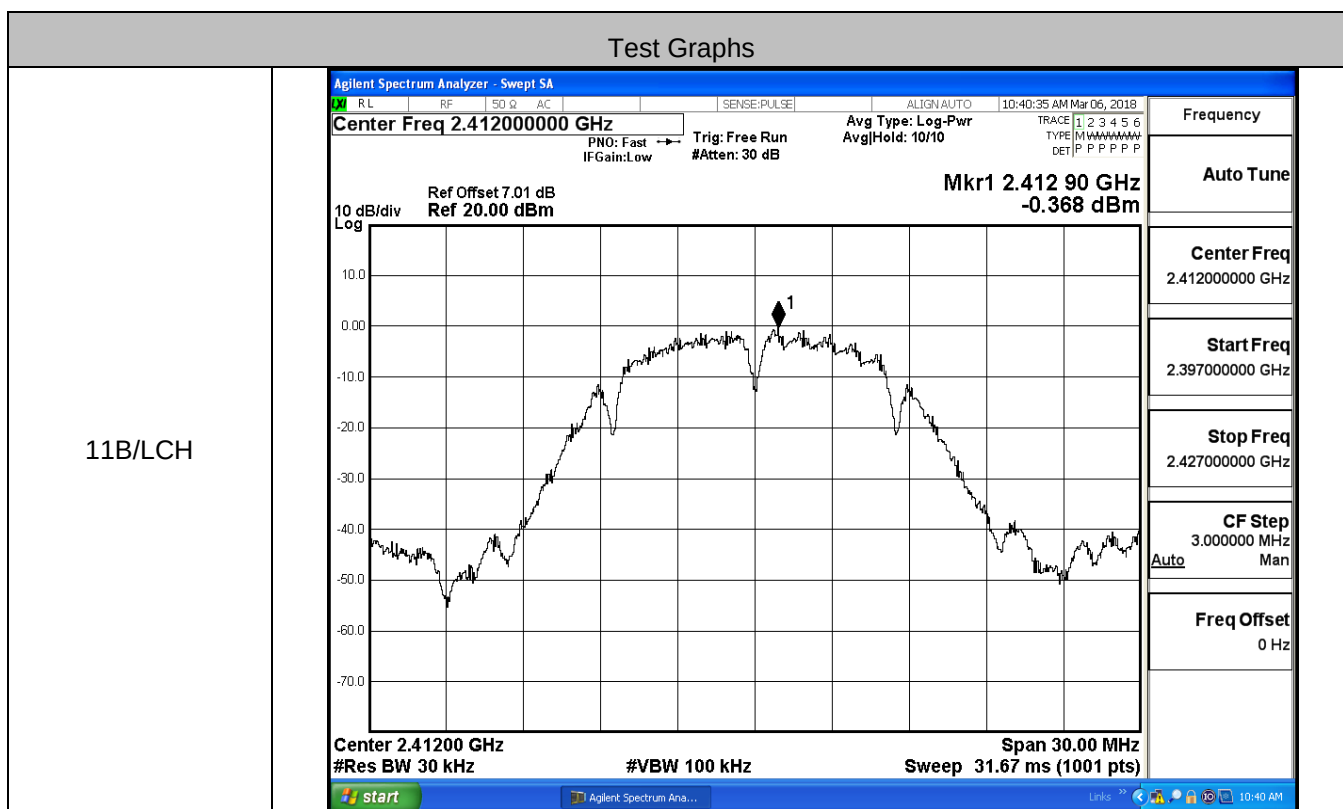
Trade Mark: Perfect

Test Model: PFTP-WR300

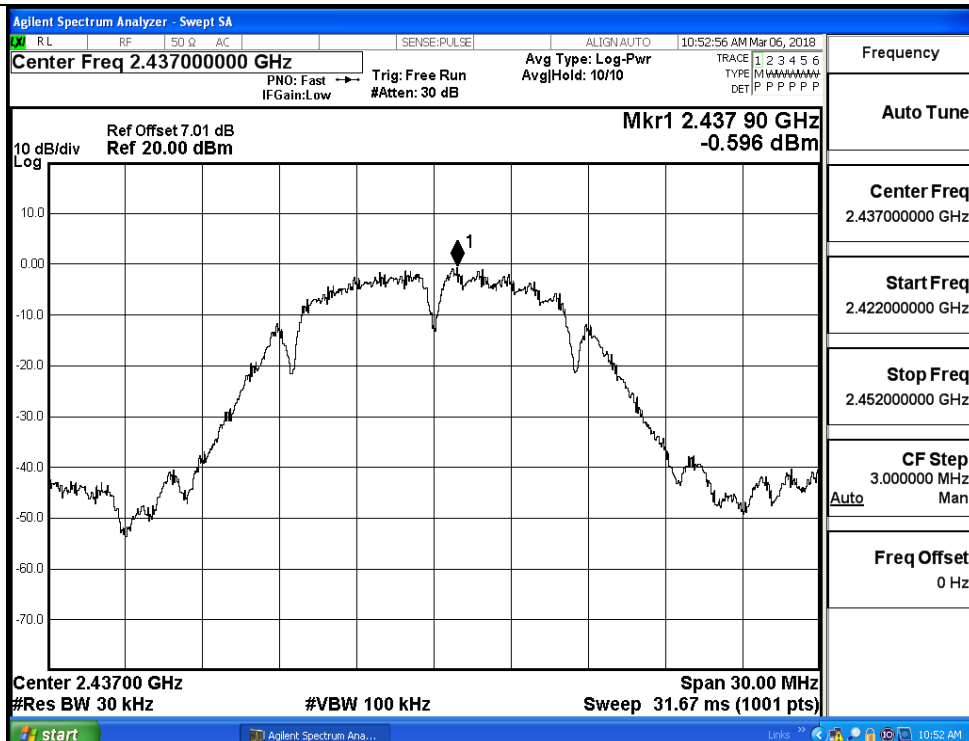
Environmental Conditions

Temperature:	23.4 ° C
Relative Humidity:	52.6%
ATM Pressure:	100.0 kPa
Test Engineer:	Mina.xu
Supervised by:	Tom.Liu

A.1 Maximum Power Spectral Density



11B/MCH



Frequency

Auto Tune

Center Freq
2.437000000 GHz

Start Freq
2.422000000 GHz

Stop Freq
2.452000000 GHz

CF Step
3.000000 MHz
Auto Man

Freq Offset
0 Hz

11B/HCH



Frequency

Auto Tune

Center Freq
2.462000000 GHz

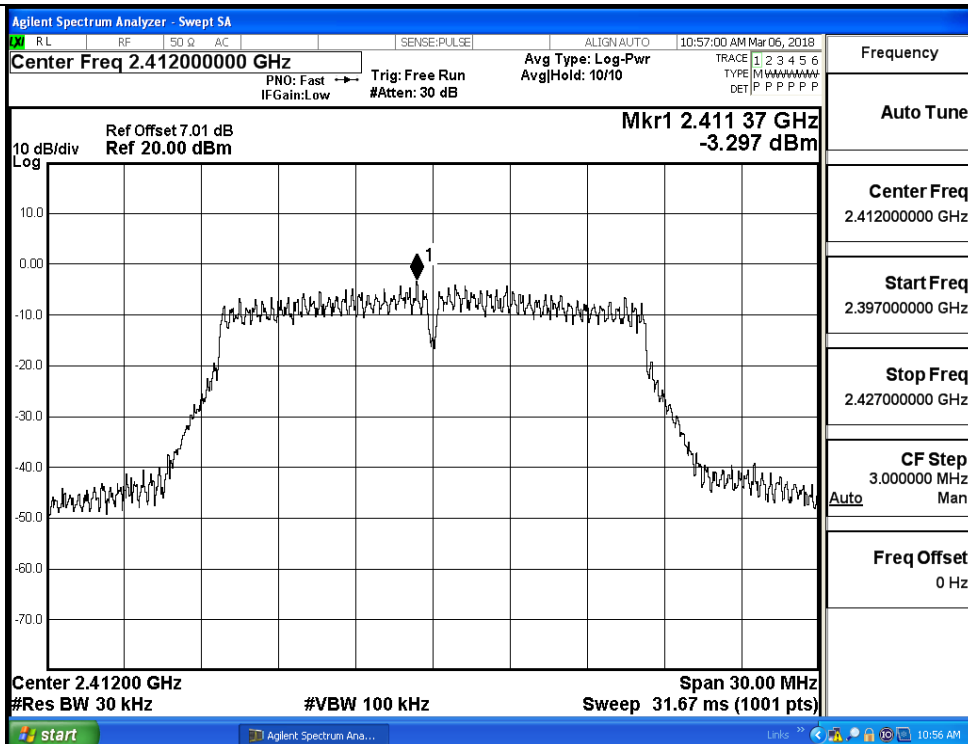
Start Freq
2.447000000 GHz

Stop Freq
2.477000000 GHz

CF Step
3.000000 MHz
Auto Man

Freq Offset
0 Hz

11G/LCH



Frequency

Auto Tune

Center Freq
2.41200000 GHz

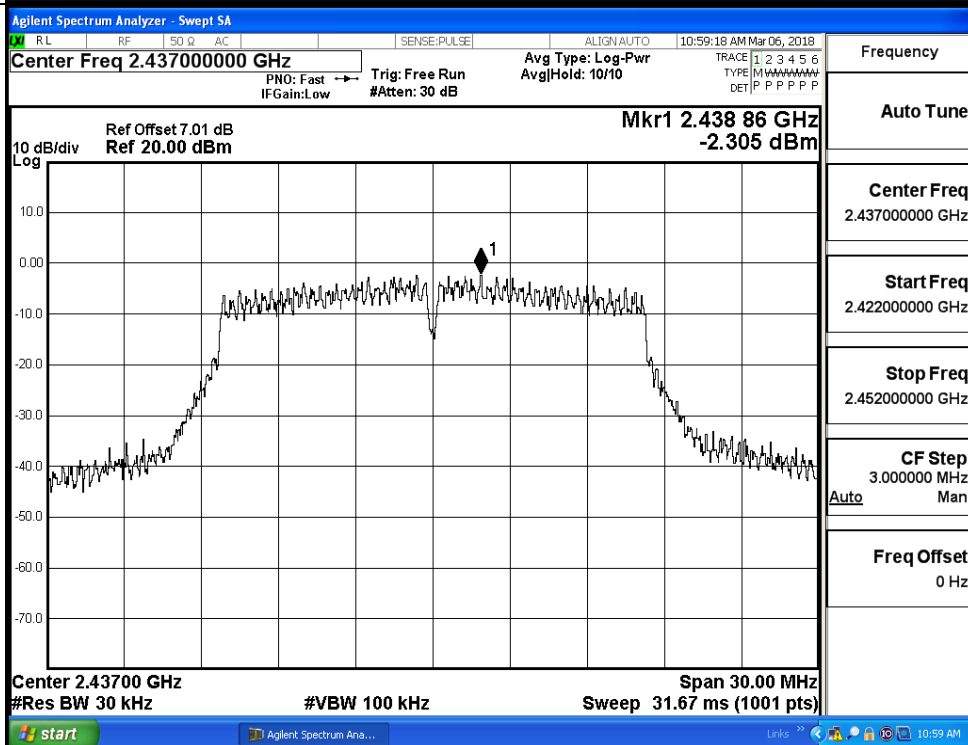
Start Freq
2.397000000 GHz

Stop Freq
2.427000000 GHz

CF Step
3.000000 MHz
Auto Man

Freq Offset
0 Hz

11G/MCH



Frequency

Auto Tune

Center Freq
2.43700000 GHz

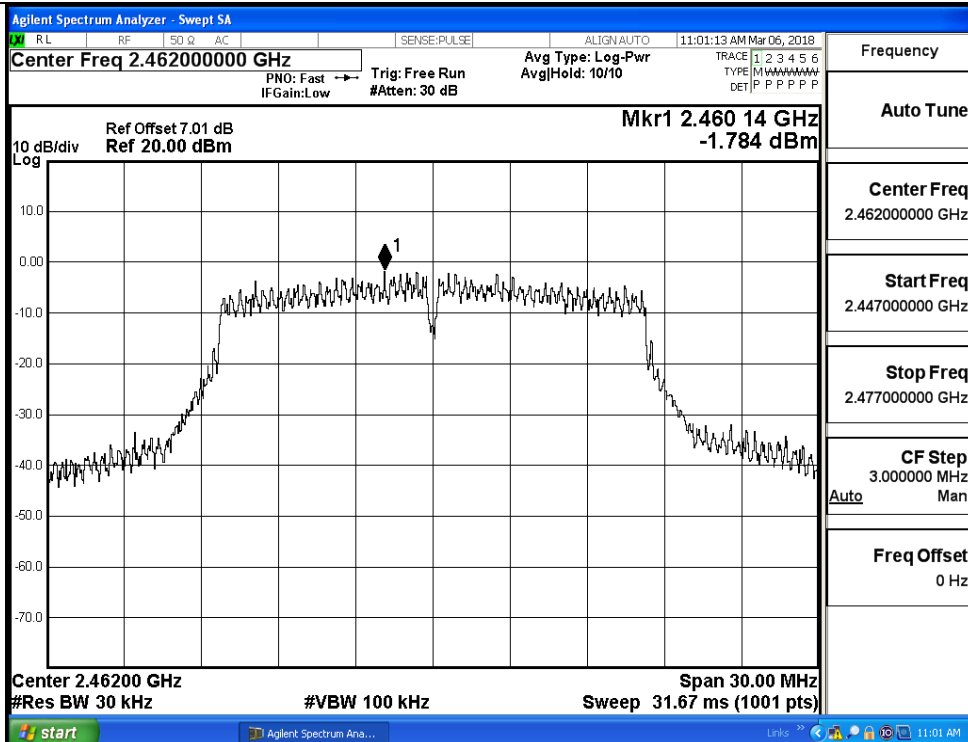
Start Freq
2.422000000 GHz

Stop Freq
2.452000000 GHz

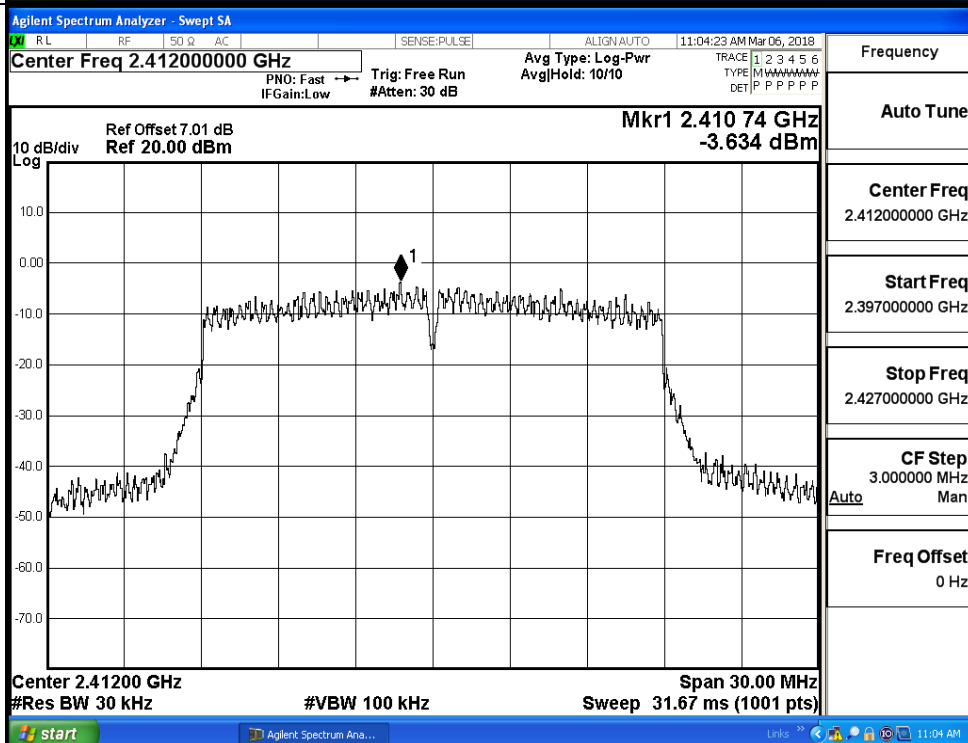
CF Step
3.000000 MHz
Auto Man

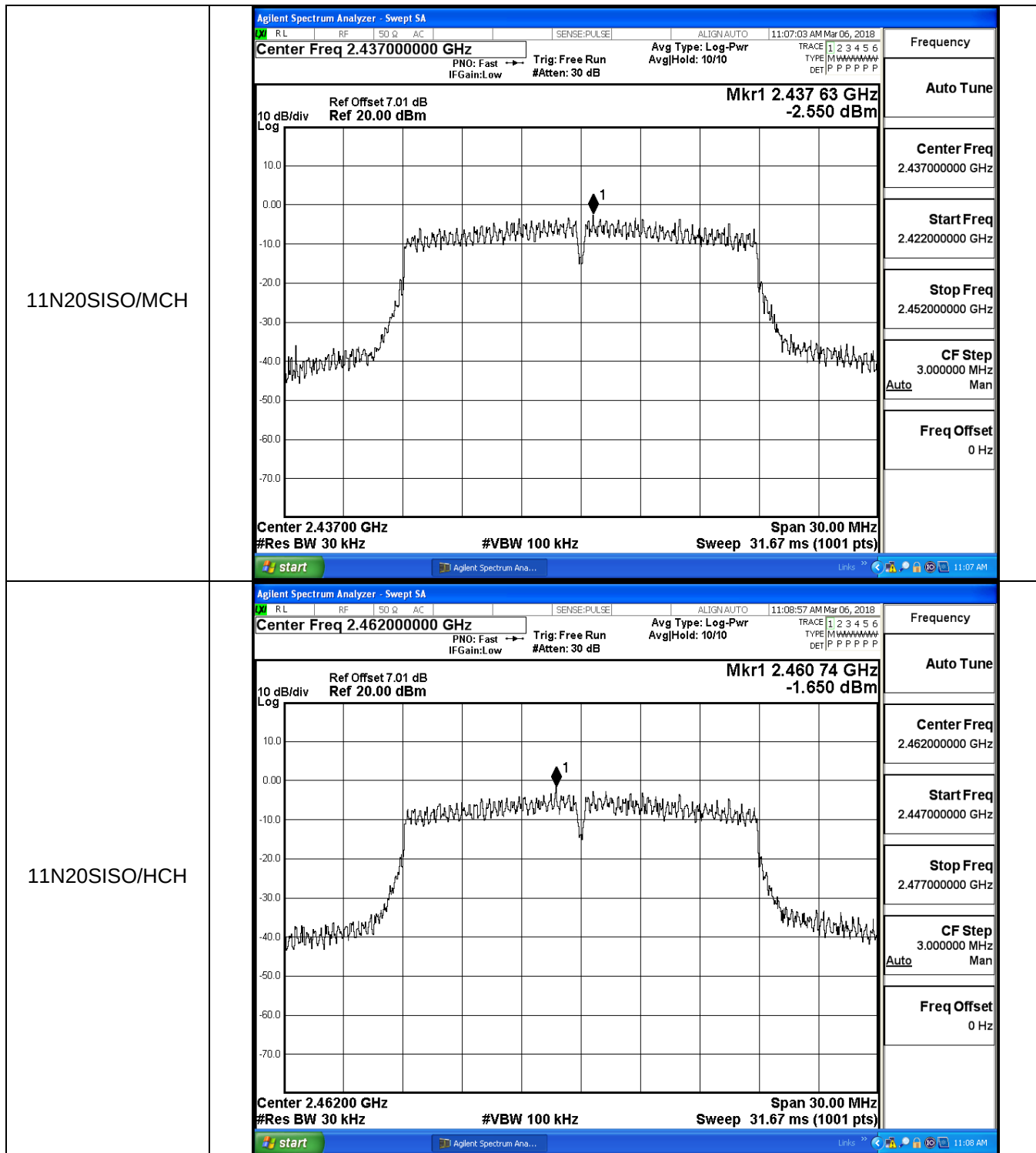
Freq Offset
0 Hz

11G/HCH

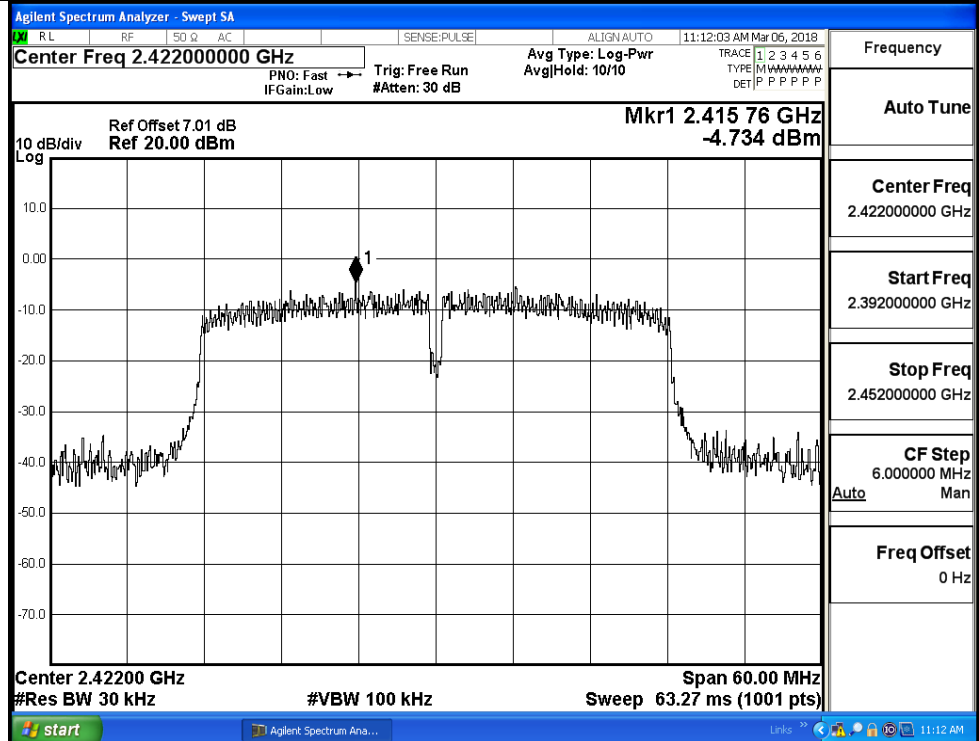


11N20SISO/LCH

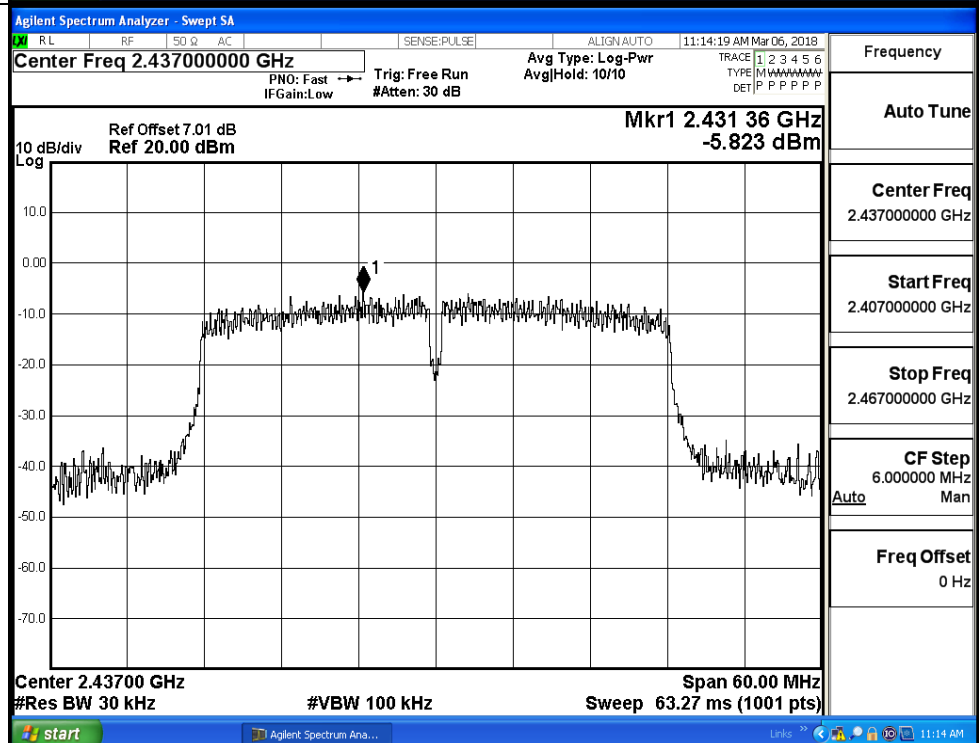




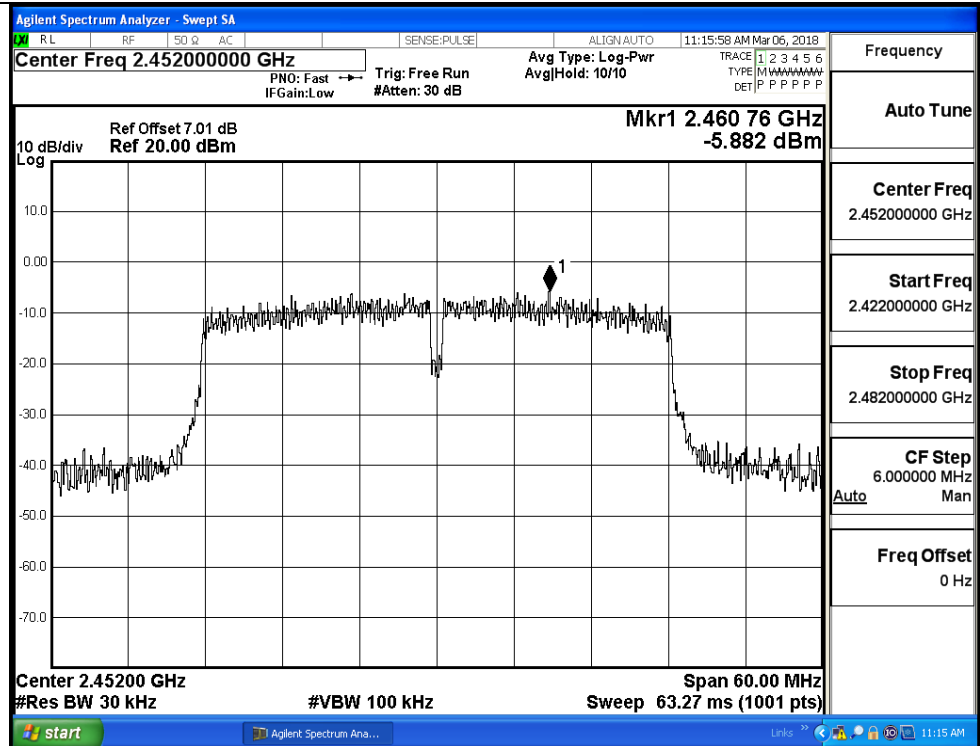
11N40SISO/LCH



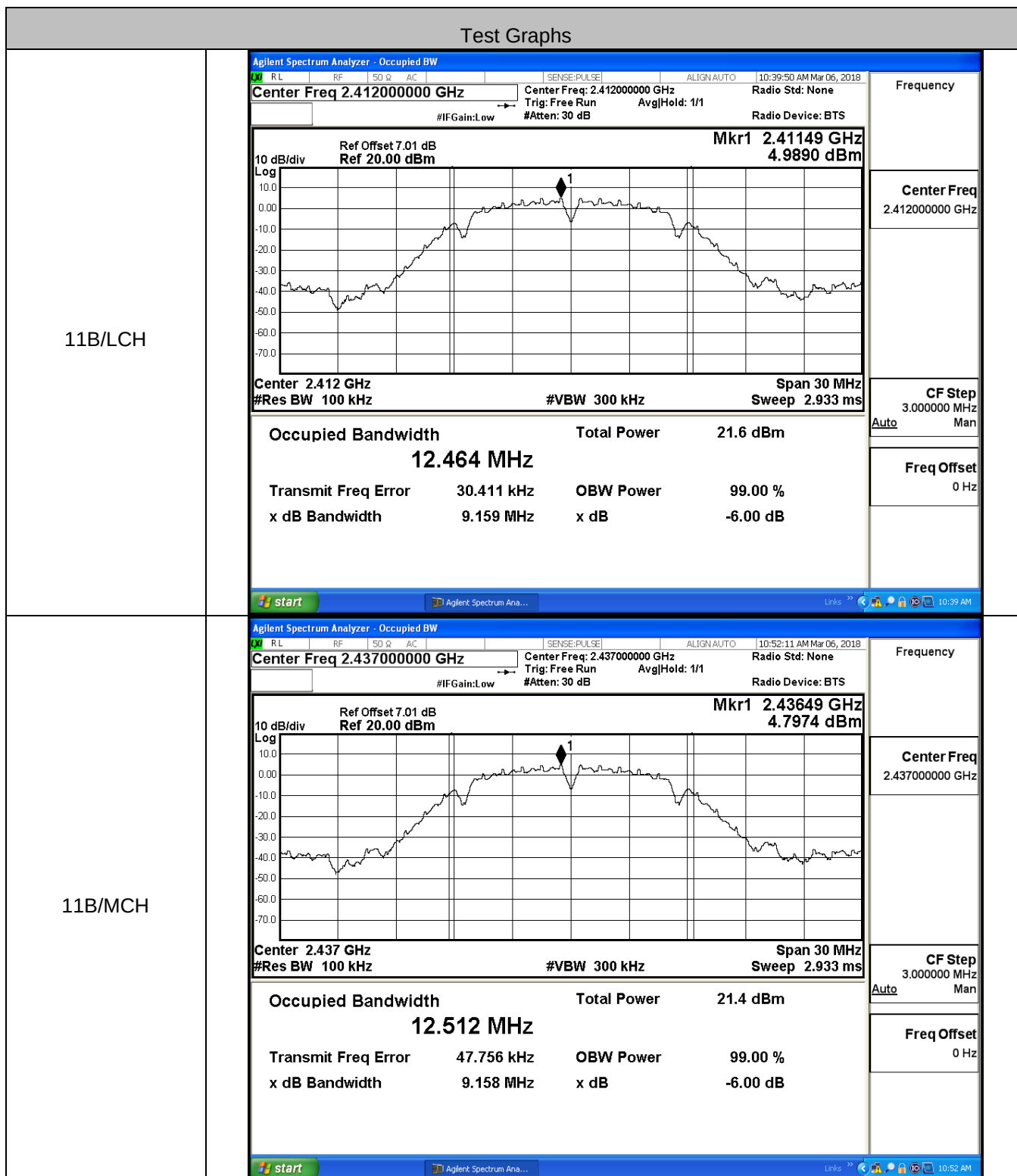
11N40SISO/MCH



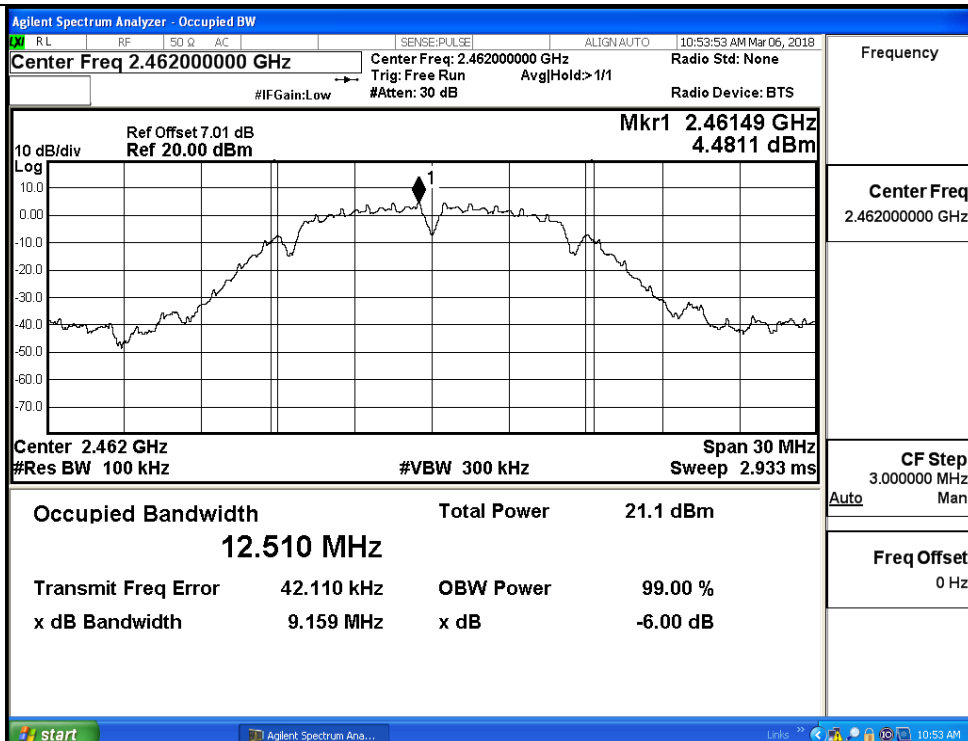
11N40SISO/HCH



A.2 6dB Bandwidth



11B/HCH



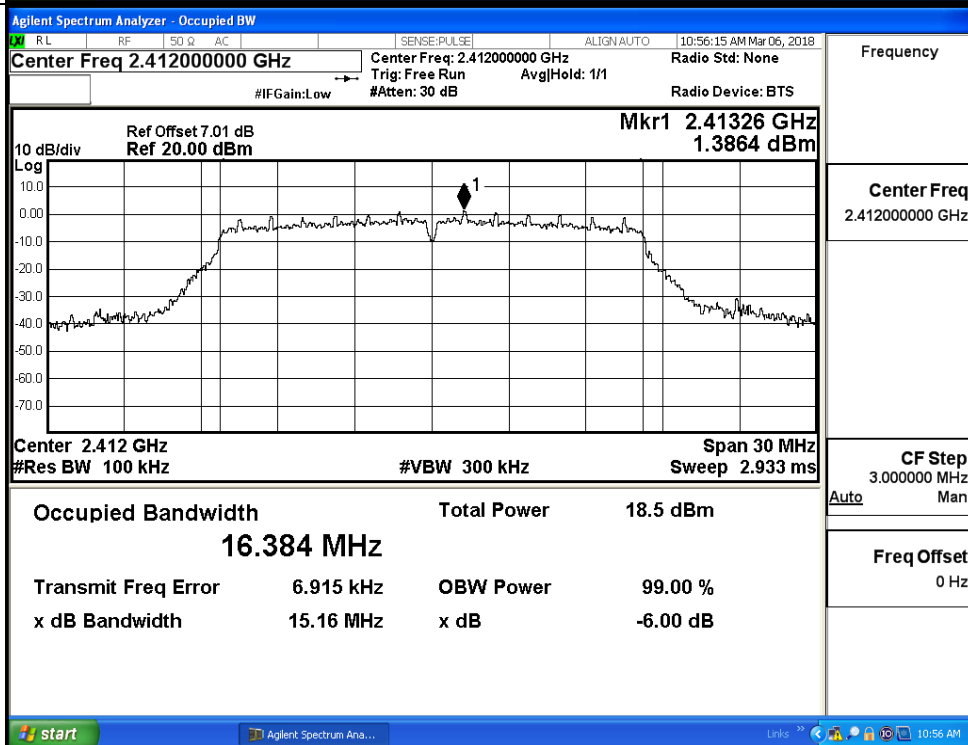
Frequency

Center Freq
2.462000000 GHz

CF Step
3.000000 MHz
Auto Man

Freq Offset
0 Hz

11G/LCH



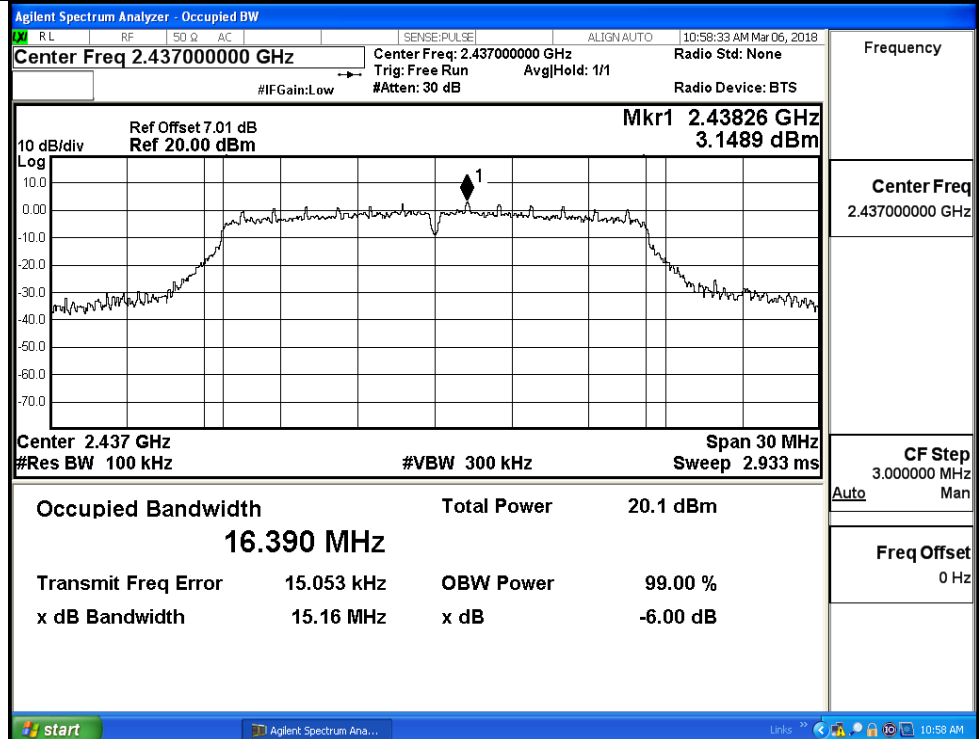
Frequency

Center Freq
2.412000000 GHz

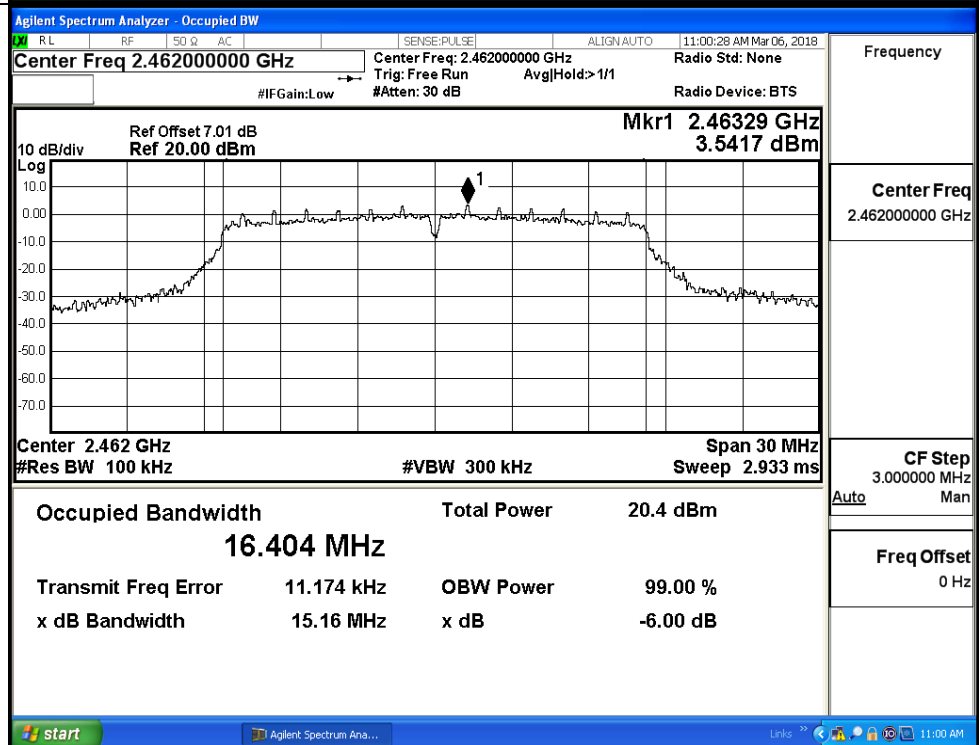
CF Step
3.000000 MHz
Auto Man

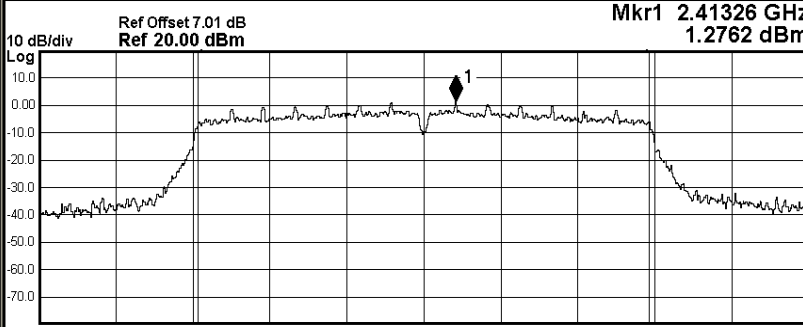
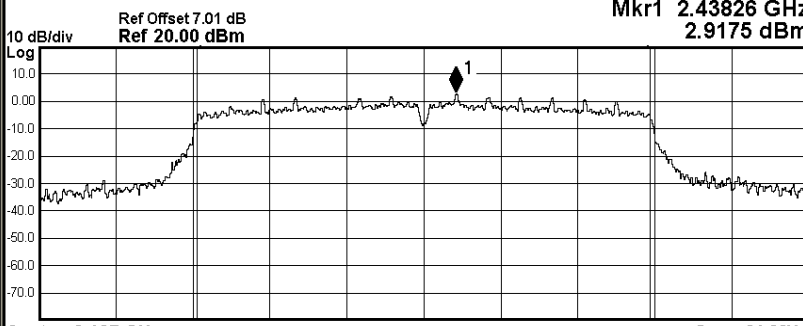
Freq Offset
0 Hz

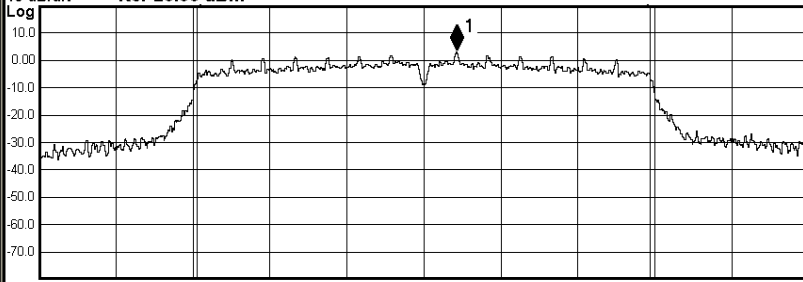
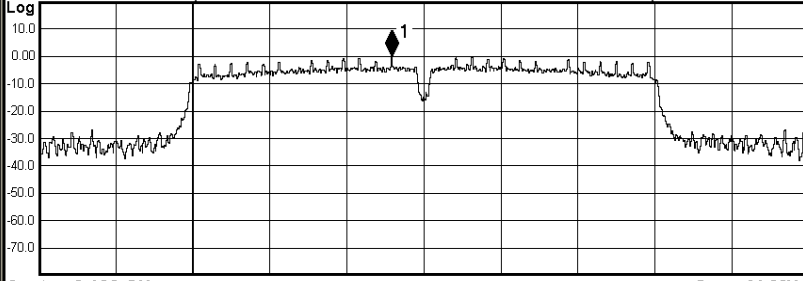
11G/MCH



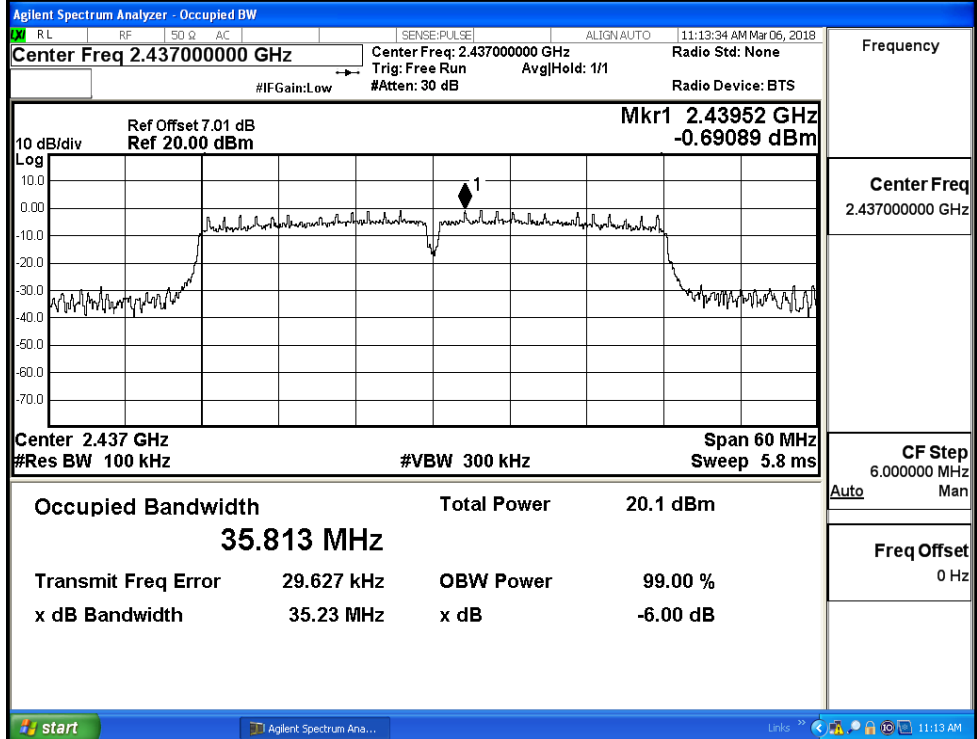
11G/HCH



11N20SISO/LCH	Agilent Spectrum Analyzer - Occupied BW Center Freq 2.412000000 GHz Ref Offset 7.01 dB Ref 20.00 dBm  Center 2.412 GHz #Res BW 100 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth 17.543 MHz Total Power 18.5 dBm Transmit Freq Error 8.160 kHz OBW Power 99.00 % x dB Bandwidth 15.15 MHz x dB -6.00 dB Frequency Center Freq 2.412000000 GHz CF Step 3.000000 MHz Freq Offset 0 Hz
11N20SISO/MCH	Agilent Spectrum Analyzer - Occupied BW Center Freq 2.437000000 GHz Ref Offset 7.01 dB Ref 20.00 dBm  Center 2.437 GHz #Res BW 100 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth 17.559 MHz Total Power 19.8 dBm Transmit Freq Error 17.232 kHz OBW Power 99.00 % x dB Bandwidth 15.16 MHz x dB -6.00 dB Frequency Center Freq 2.437000000 GHz CF Step 3.000000 MHz Freq Offset 0 Hz

11N20SISO/HCH	Agilent Spectrum Analyzer - Occupied BW Center Freq 2.462000000 GHz Center Freq: 2.462000000 GHz Trig: Free Run #IFGain: Low #Atten: 30 dB Radio Std: None Radio Device: BTS Ref Offset 7.01 dB Ref 20.00 dBm Mkr1 2.46329 GHz 3.2418 dBm  Center 2.462 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth 17.559 MHz Total Power 19.9 dBm Transmit Freq Error 16.796 kHz OBW Power 99.00 % x dB Bandwidth 15.10 MHz x dB -6.00 dB Frequency Center Freq 2.462000000 GHz CF Step 3.000000 MHz Auto Man Freq Offset 0 Hz
11N40SISO/LCH	Agilent Spectrum Analyzer - Occupied BW Center Freq 2.422000000 GHz Center Freq: 2.422000000 GHz Trig: Free Run #IFGain: Low #Atten: 30 dB Radio Std: None Radio Device: BTS Ref Offset 7.01 dB Ref 20.00 dBm Mkr1 2.41948 GHz -0.38271 dBm  Center 2.422 GHz #Res BW 100 kHz #VBW 300 kHz Span 60 MHz Sweep 5.8 ms Occupied Bandwidth 35.811 MHz Total Power 20.4 dBm Transmit Freq Error 29.746 kHz OBW Power 99.00 % x dB Bandwidth 35.24 MHz x dB -6.00 dB Frequency Center Freq 2.422000000 GHz CF Step 6.000000 MHz Auto Man Freq Offset 0 Hz

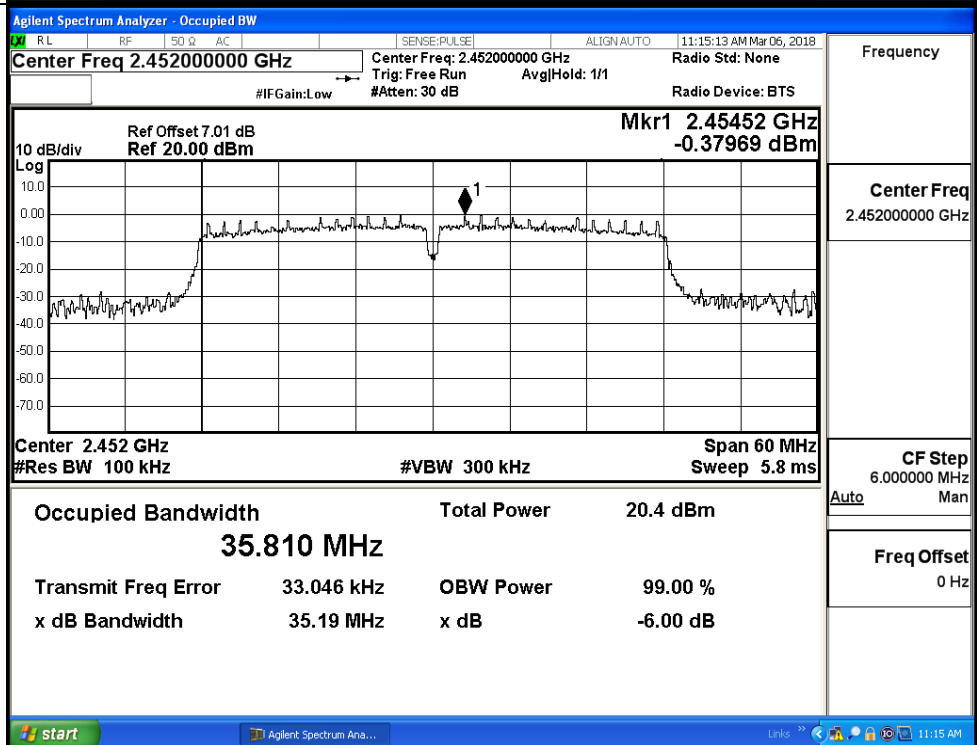
11N40SISO/MCH



Frequency

Center Freq
2.437000000 GHzCF Step
6.000000 MHz
Auto ManFreq Offset
0 Hz

11N40SISO/HCH



Frequency

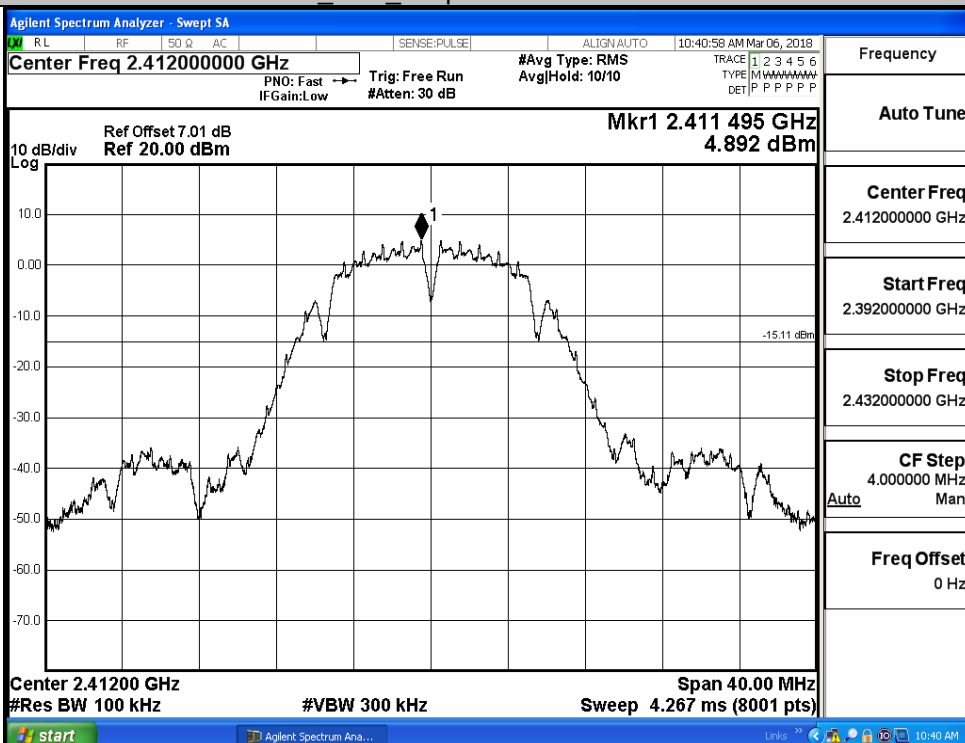
Center Freq
2.452000000 GHzCF Step
6.000000 MHz
Auto ManFreq Offset
0 Hz

A.3 RF Conducted Spurious Emissions

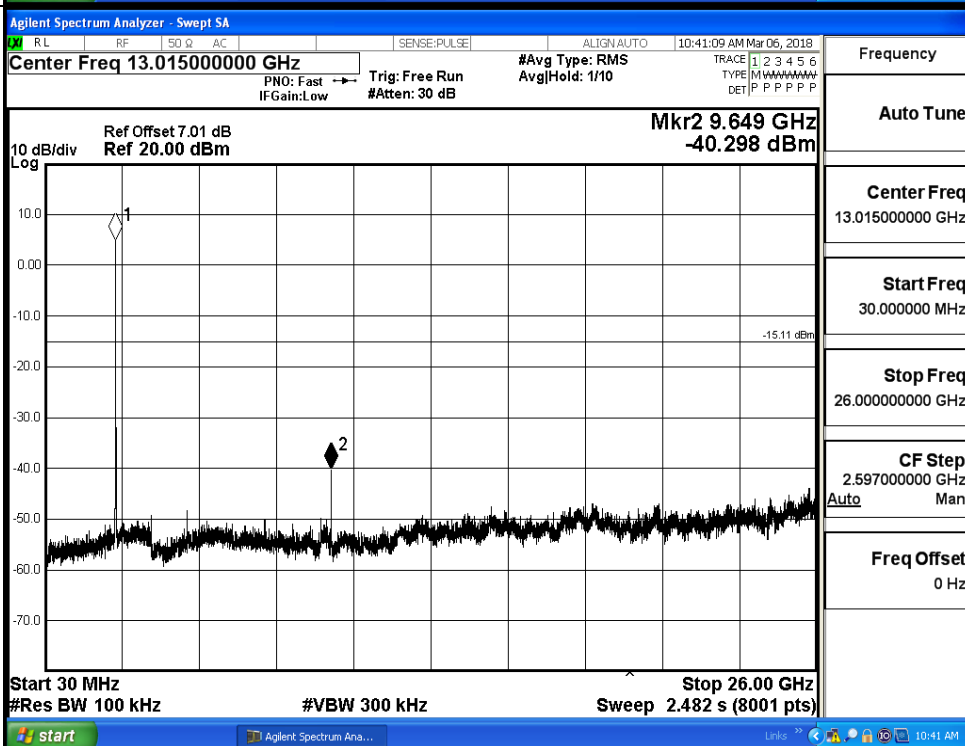
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
11B	LCH	4.892	-40.298	-15.108	PASS
	MCH	4.703	-43.174	-15.297	PASS
	HCH	4.508	-44.538	-15.492	PASS
11G	LCH	0.804	-44.517	-19.196	PASS
	MCH	1.86	-45.377	-18.140	PASS
	HCH	3.045	-44.226	-16.955	PASS
11N20 SISO	LCH	1.4	-44.919	-18.600	PASS
	MCH	2.697	-44.062	-17.303	PASS
	HCH	2.541	-44.326	-17.459	PASS
11N40 SISO	LCH	-0.196	-44.488	-20.196	PASS
	MCH	-0.762	-44.854	-20.762	PASS
	HCH	-0.407	-45.198	-20.407	PASS

11B LCH Graphs

Pref/11B/LCH

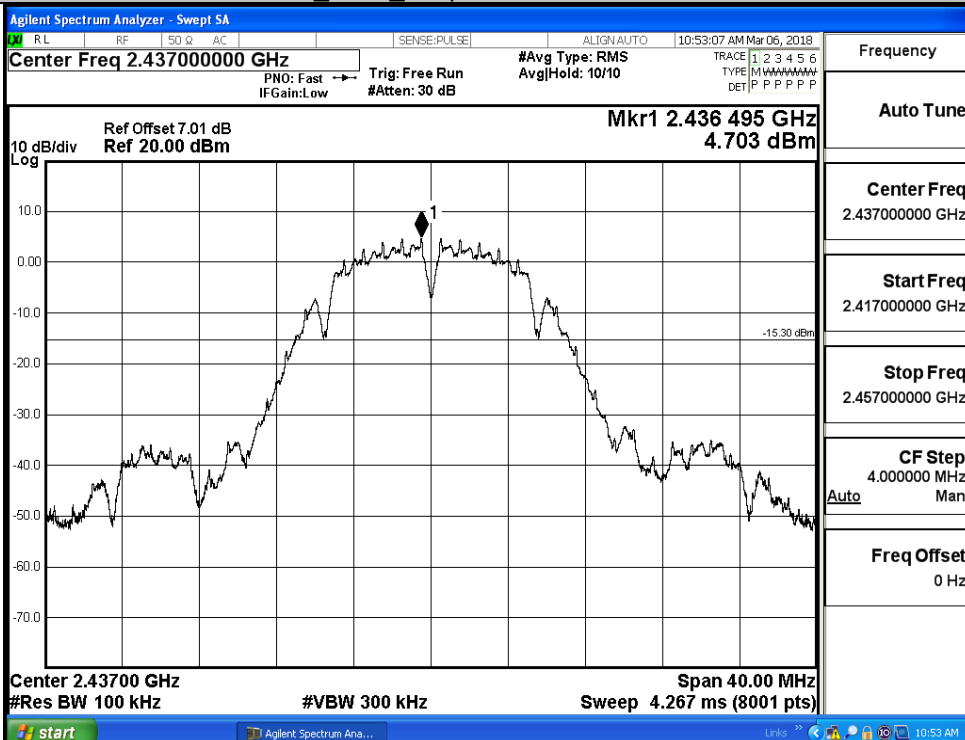


Puw/11B/LCH

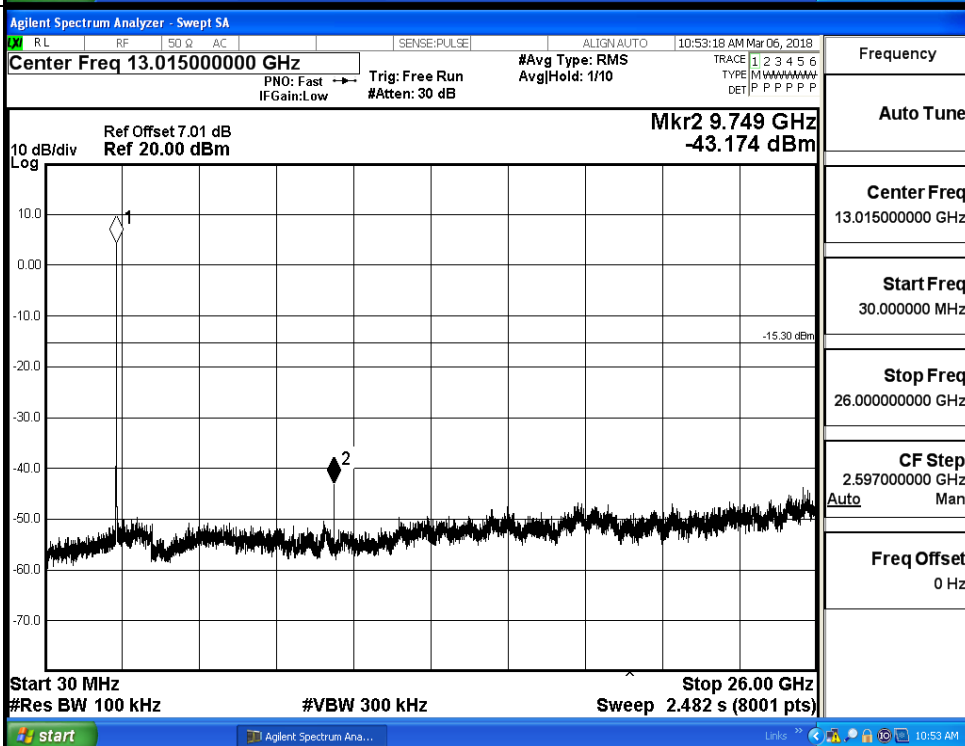


11B MCH Graphs

Pref/11B/MCH

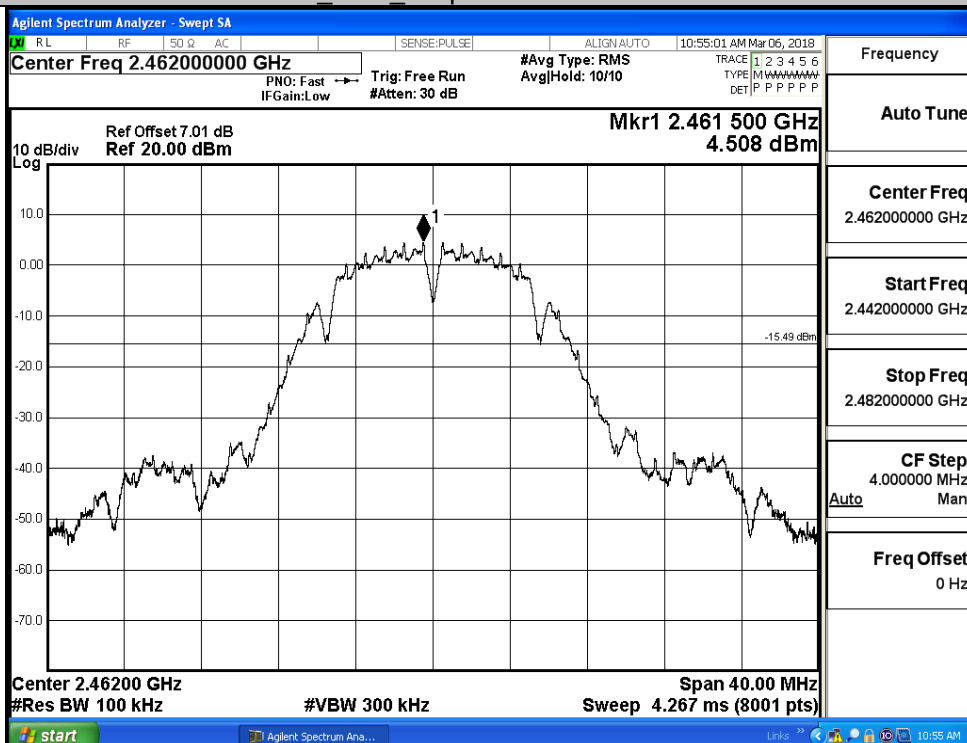


Puw/11B/MCH

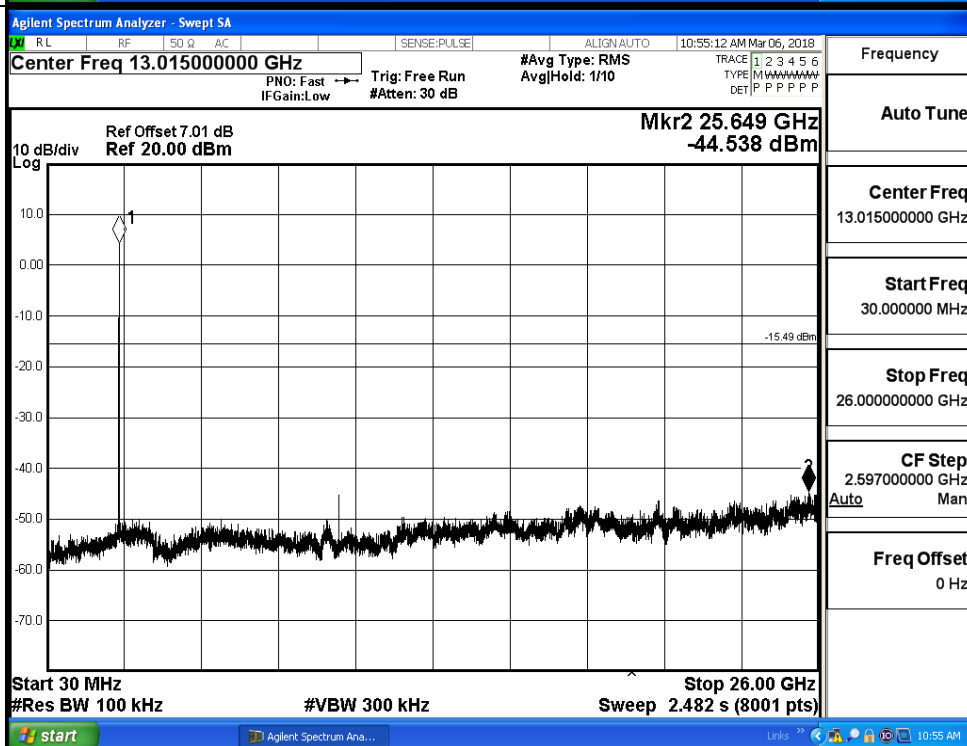


11B HCH Graphs

Pref/11B/HCH

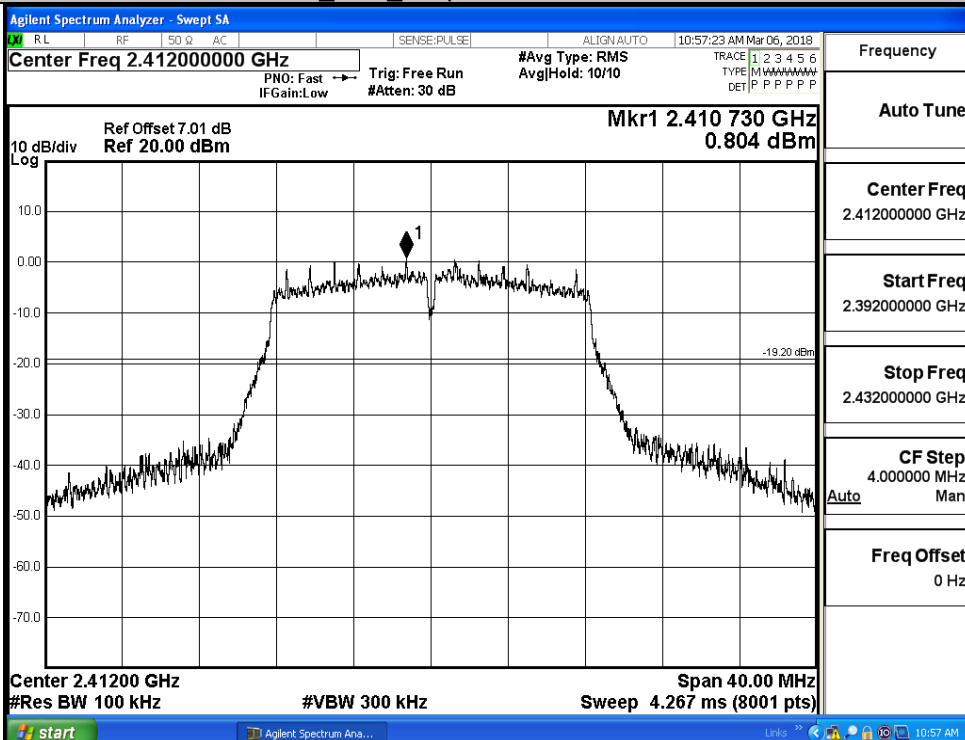


Puw/11B/HCH

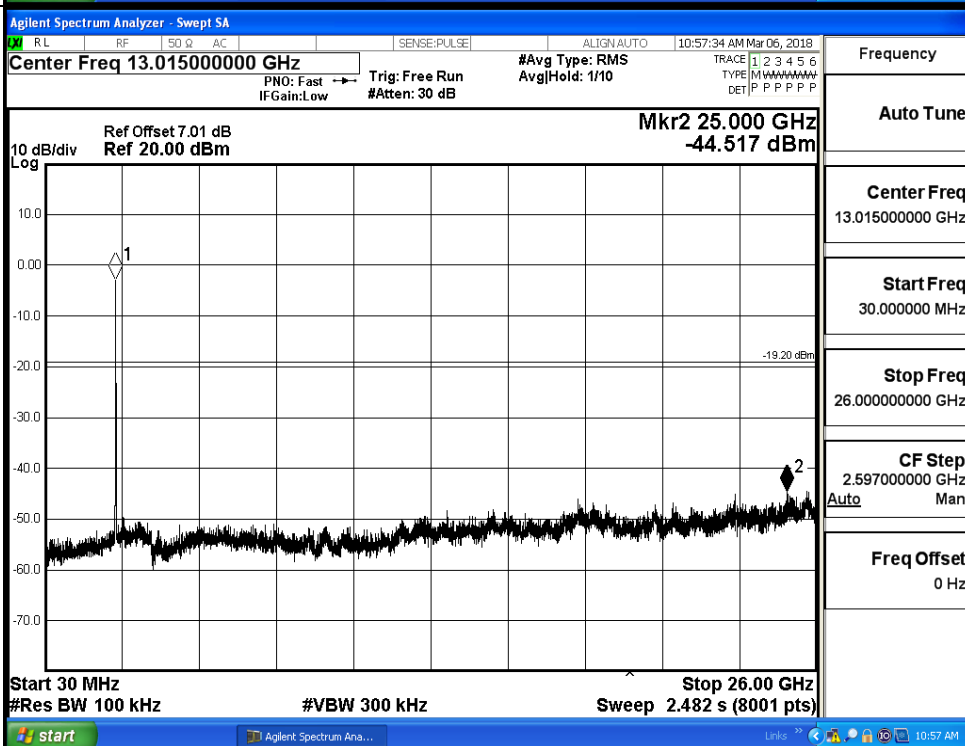


11G LCH Graphs

Pref/11G/LCH

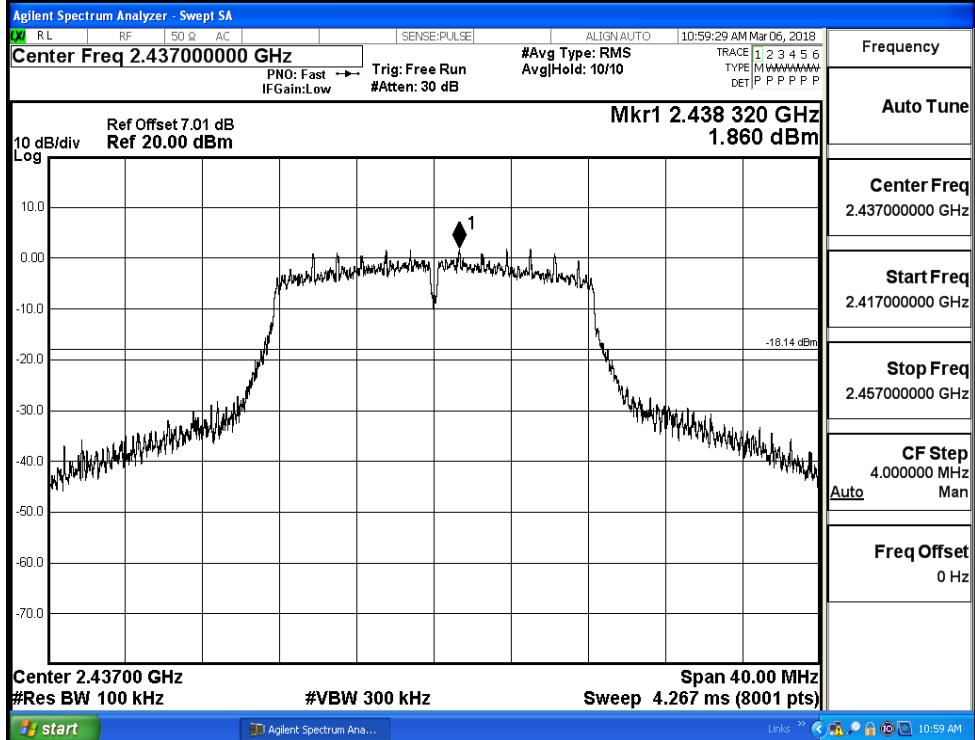


Puw/11G/LCH

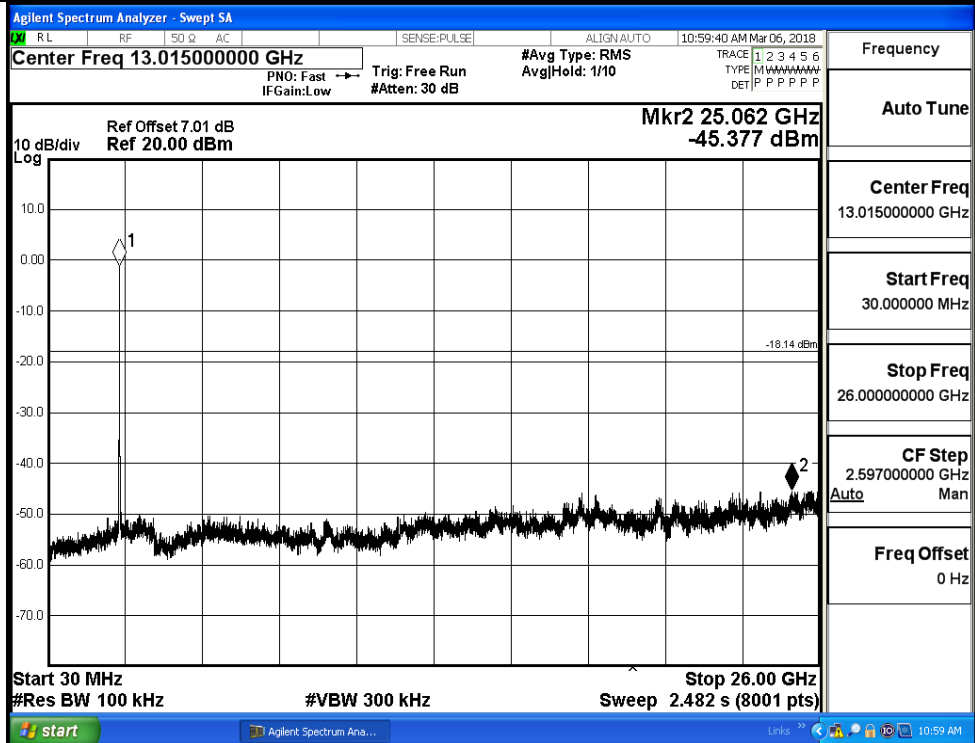


11G MCH Graphs

Pref/11G/MCH

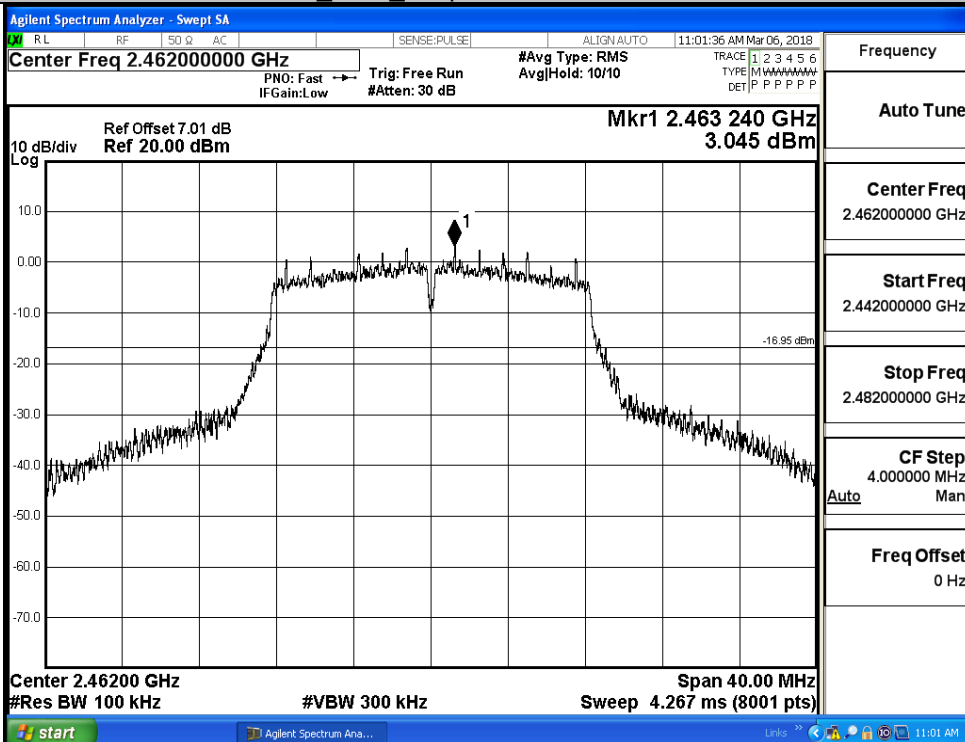


Puw/11G/MCH

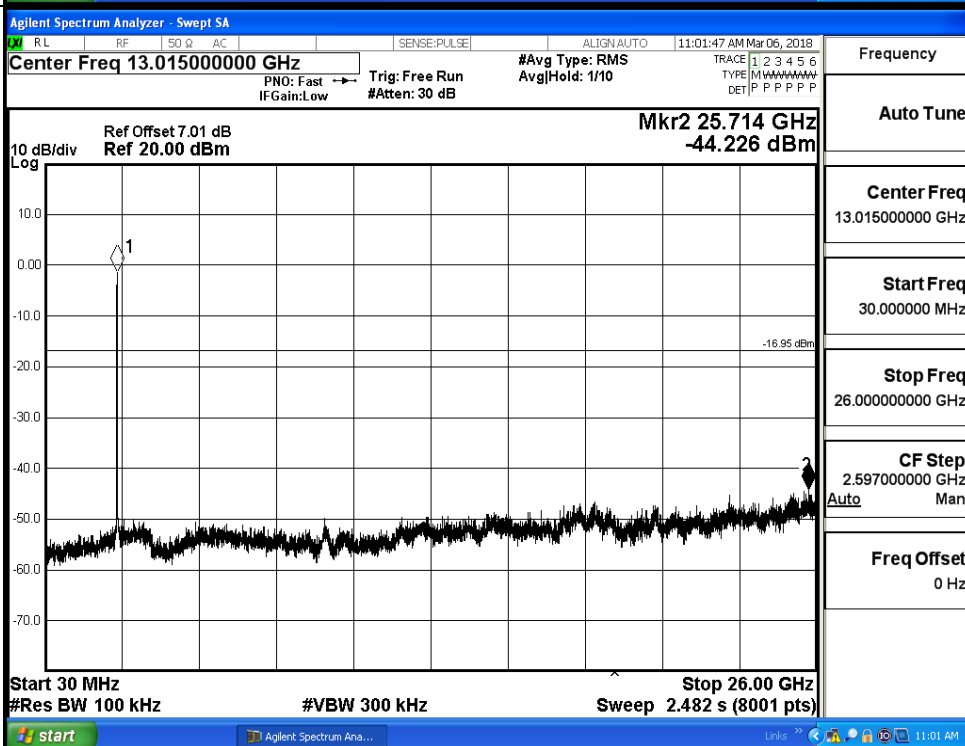


11G HCH Graphs

Pref/11G/HCH

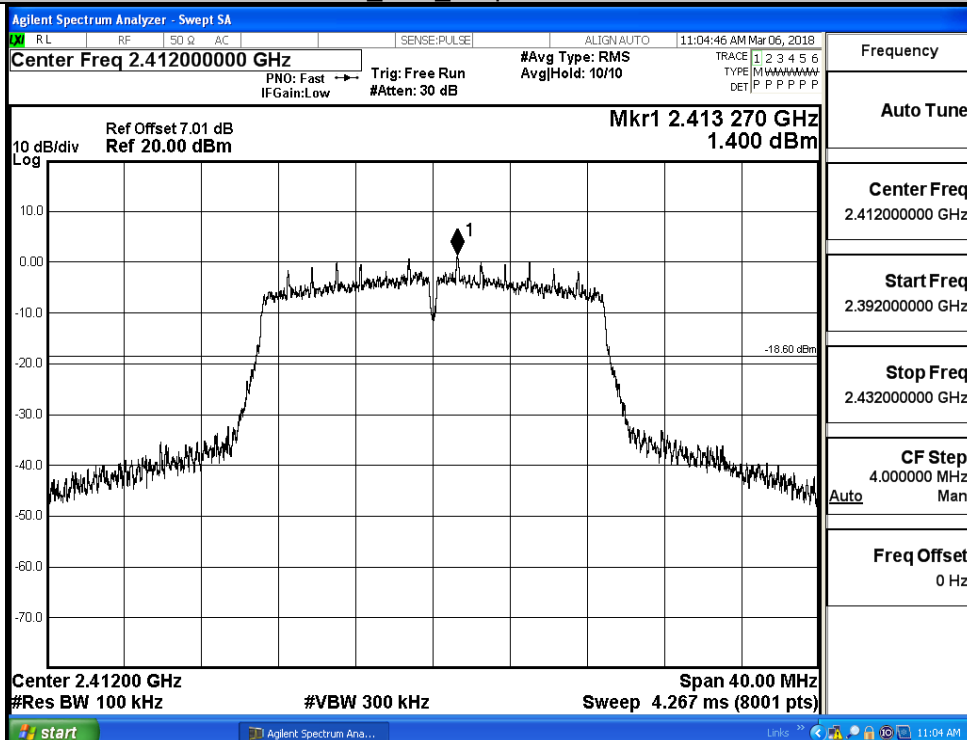


Puw/11G/HCH

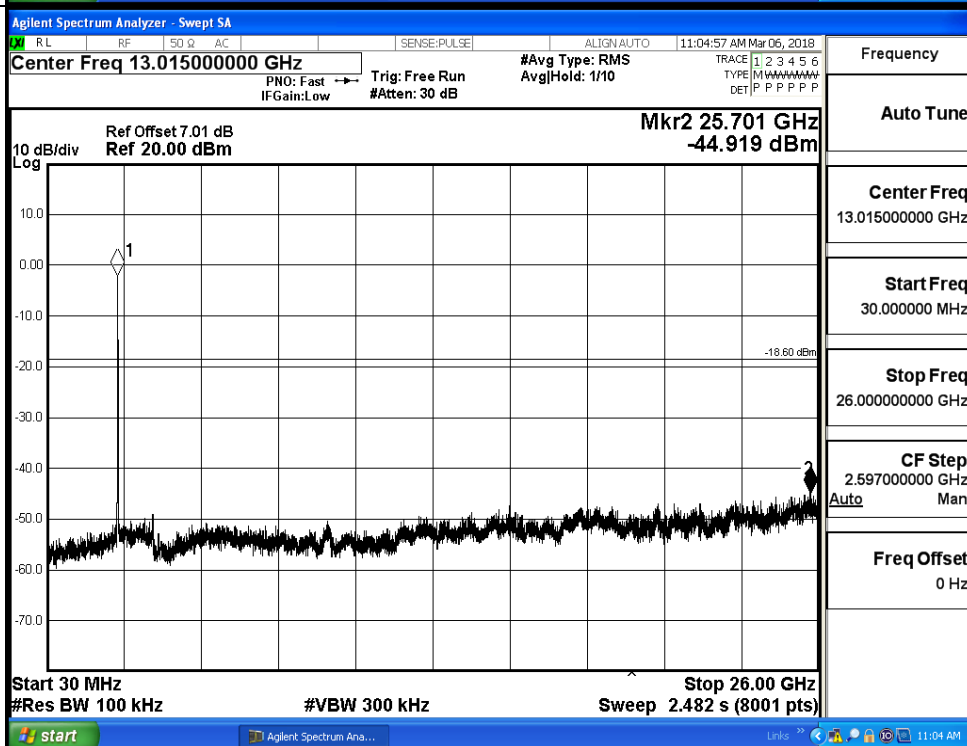


11N20SISO LCH Graphs

Pref/11N20SIS
O/LCH

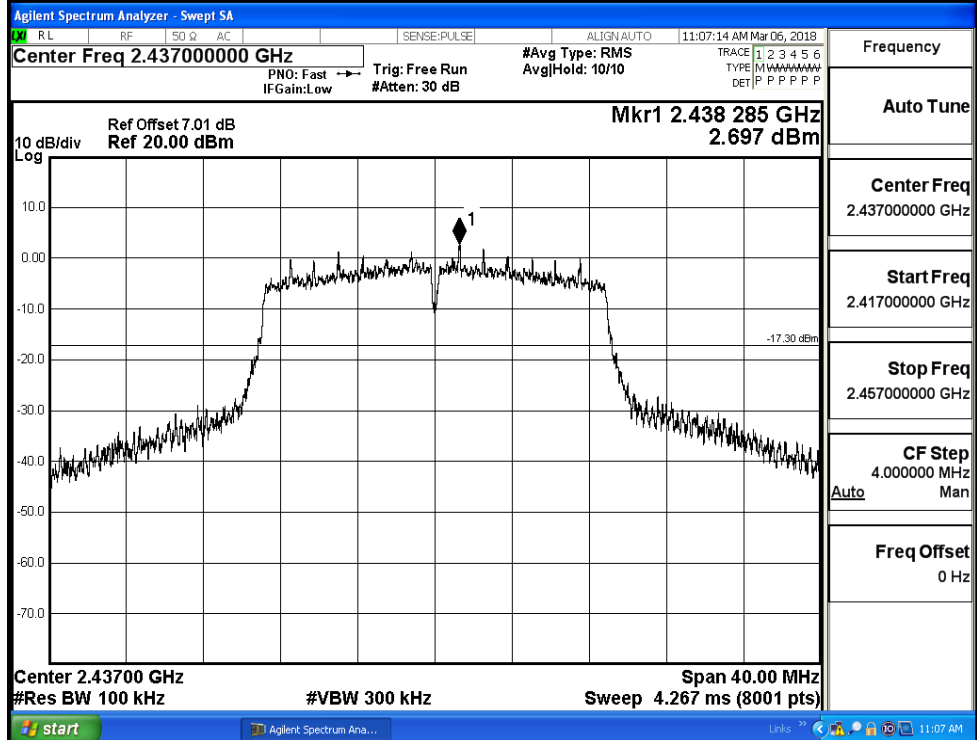


Puw/11N20
SISO/LCH

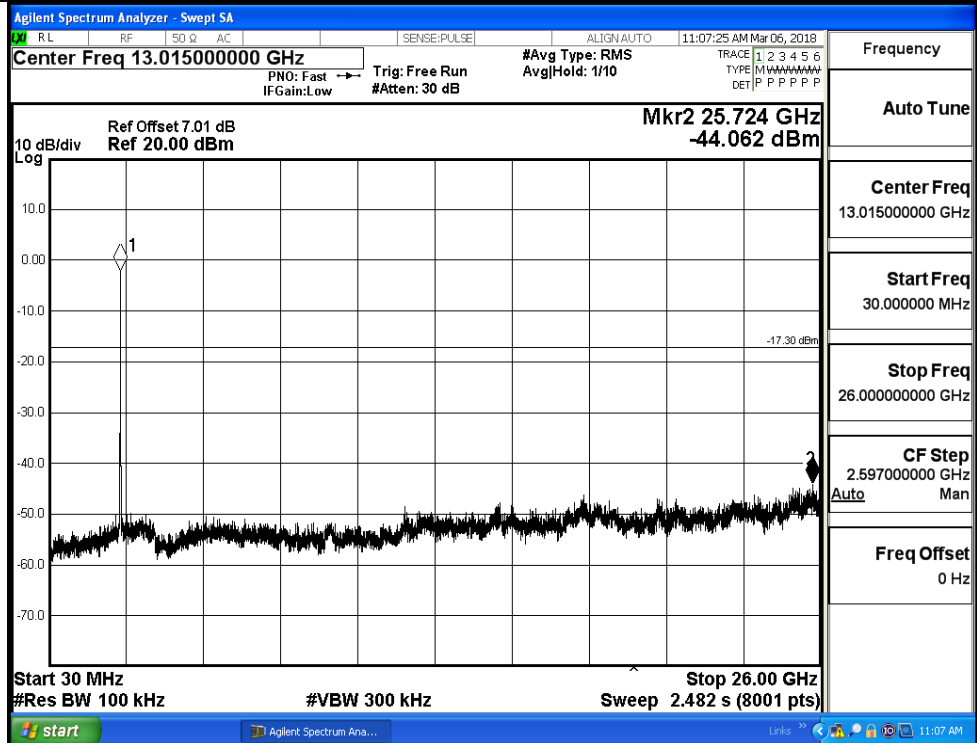


11N20SISO MCH Graphs

Pref/11N20
SISO/MCH

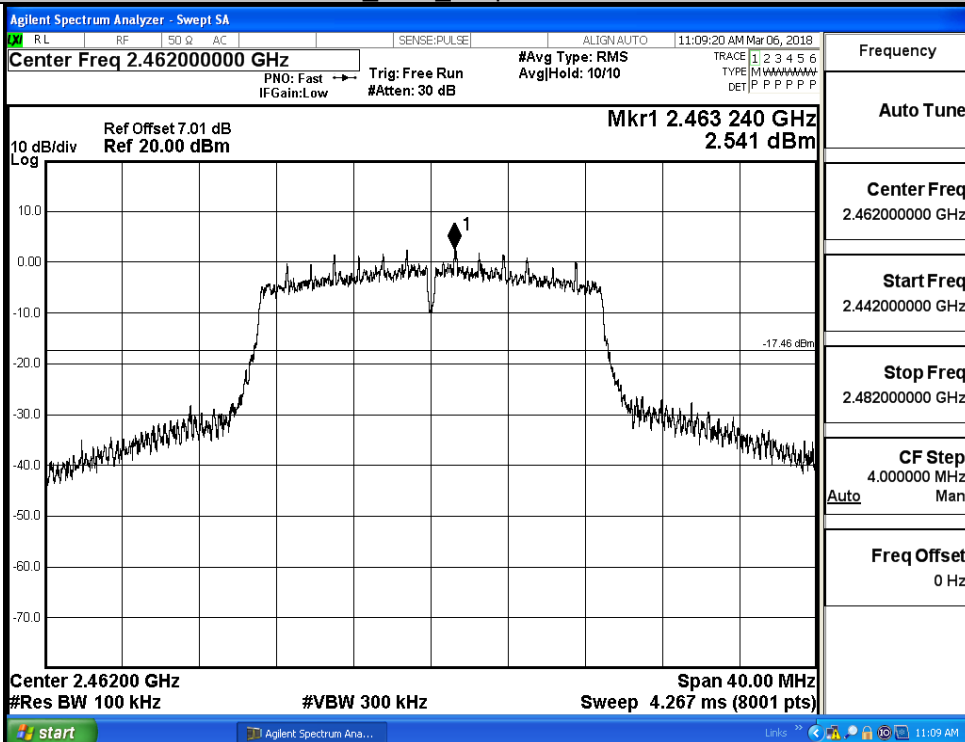


Puw/11N20
SISO/MCH



11N20SISO HCH Graphs

Pref/11N20
SISO/HCH



Frequency

Auto Tune

Center Freq
2.462000000 GHz

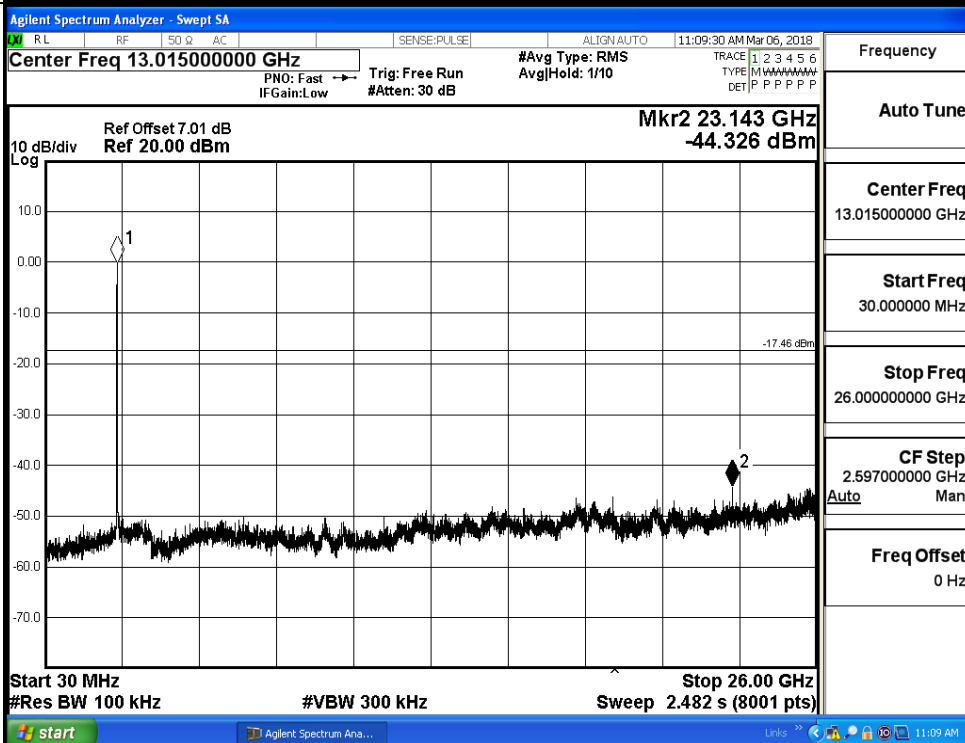
Start Freq
2.442000000 GHz

Stop Freq
2.482000000 GHz

CF Step
4.000000 MHz
Auto

Freq Offset
0 Hz

Puw/11N20
SISO/HCH



Frequency

Auto Tune

Center Freq
13.015000000 GHz

Start Freq
30.000000 MHz

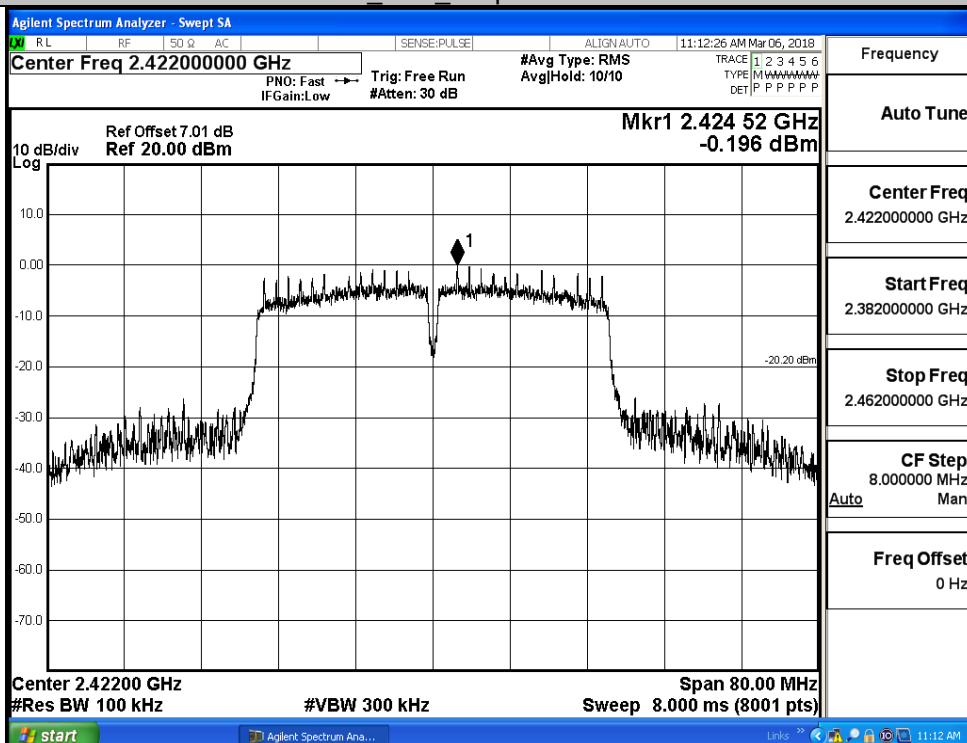
Stop Freq
26.000000000 GHz

CF Step
2.597000000 GHz
Auto

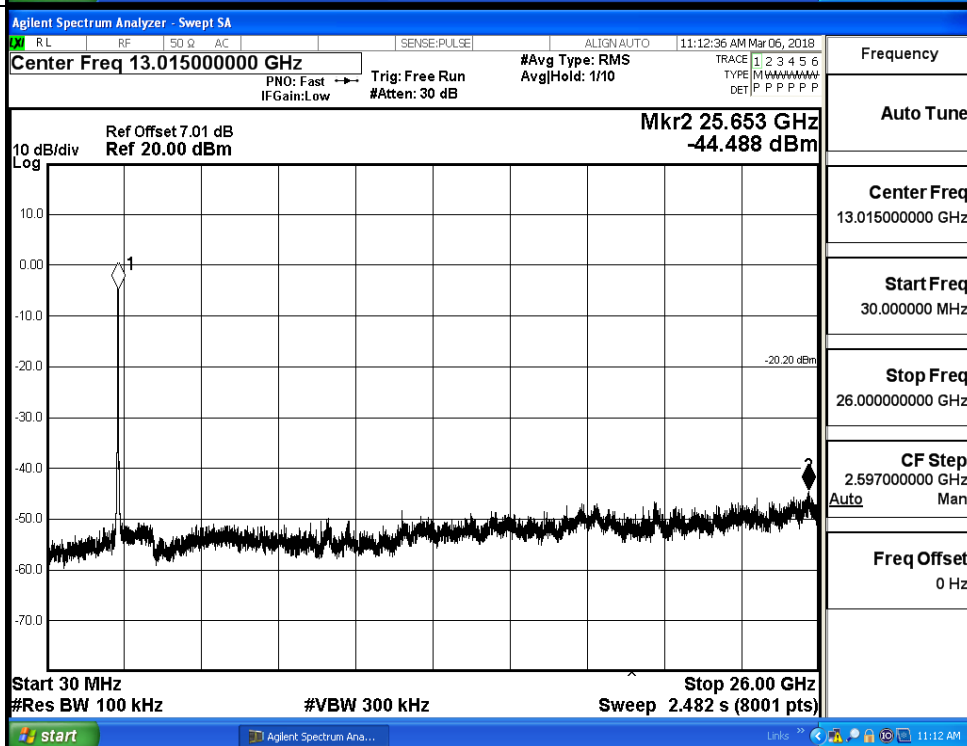
Freq Offset
0 Hz

11N40SISO LCH Graphs

Pref/11N40
SISO/LCH

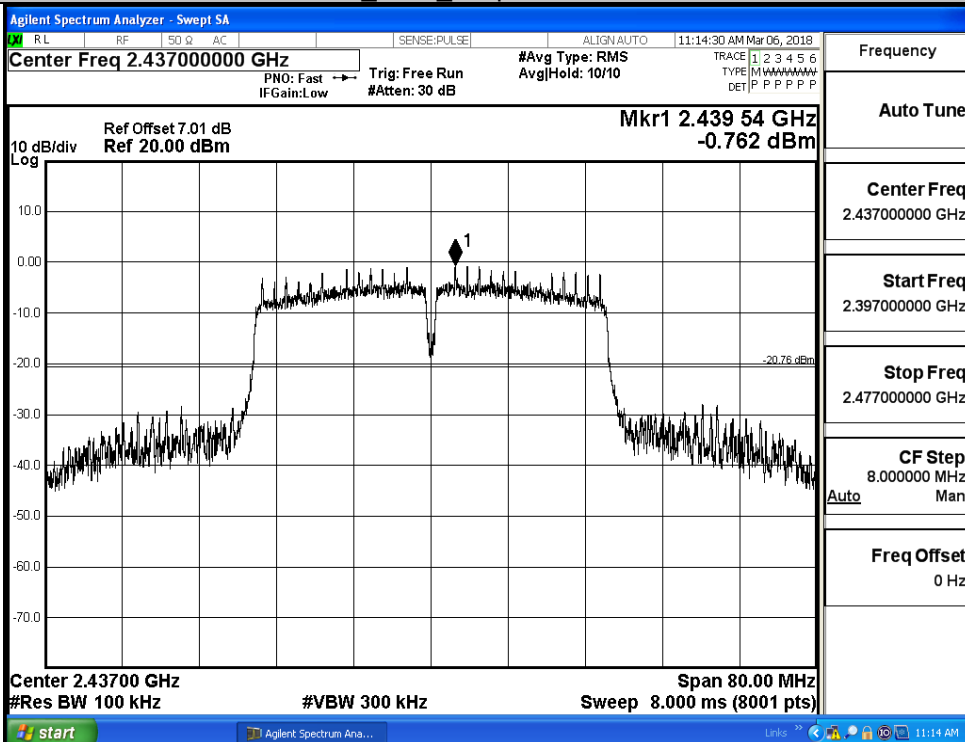


Puw/11N40
SISO/LCH



11N40SISO MCH_Graphs

Pref/11N40
SISO/MCH



Frequency

Auto Tune

Center Freq
2.437000000 GHz

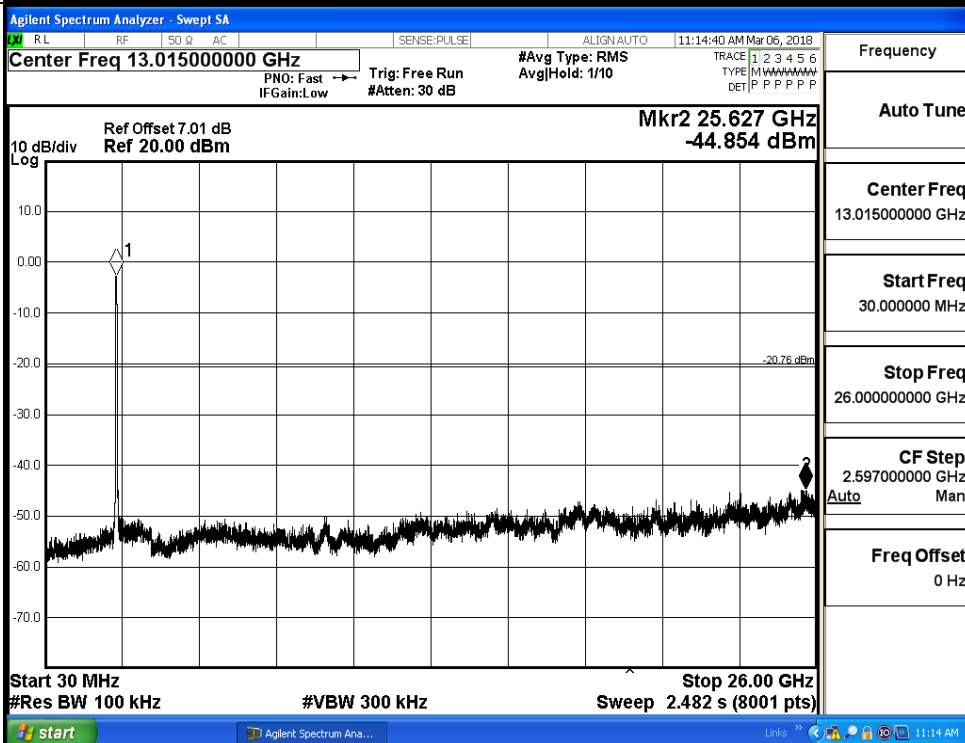
Start Freq
2.397000000 GHz

Stop Freq
2.477000000 GHz

CF Step
8.000000 MHz
Auto

Freq Offset
0 Hz

Puw/11N40
SISO/MCH



Frequency

Auto Tune

Center Freq
13.015000000 GHz

Start Freq
30.000000 MHz

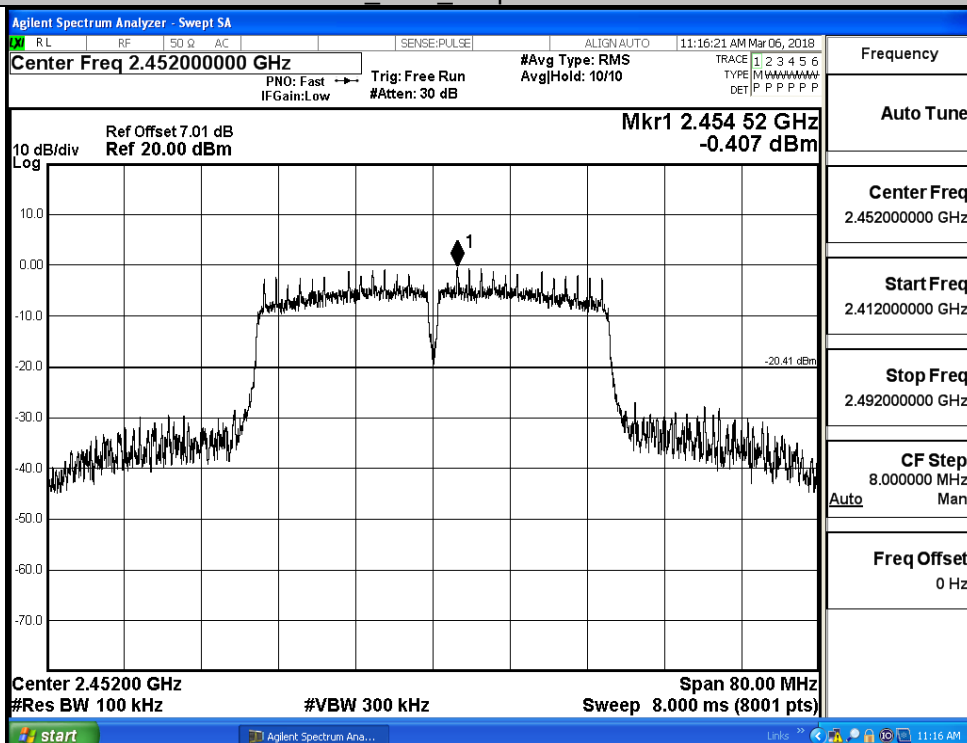
Stop Freq
26.000000000 GHz

CF Step
2.597000000 GHz
Auto

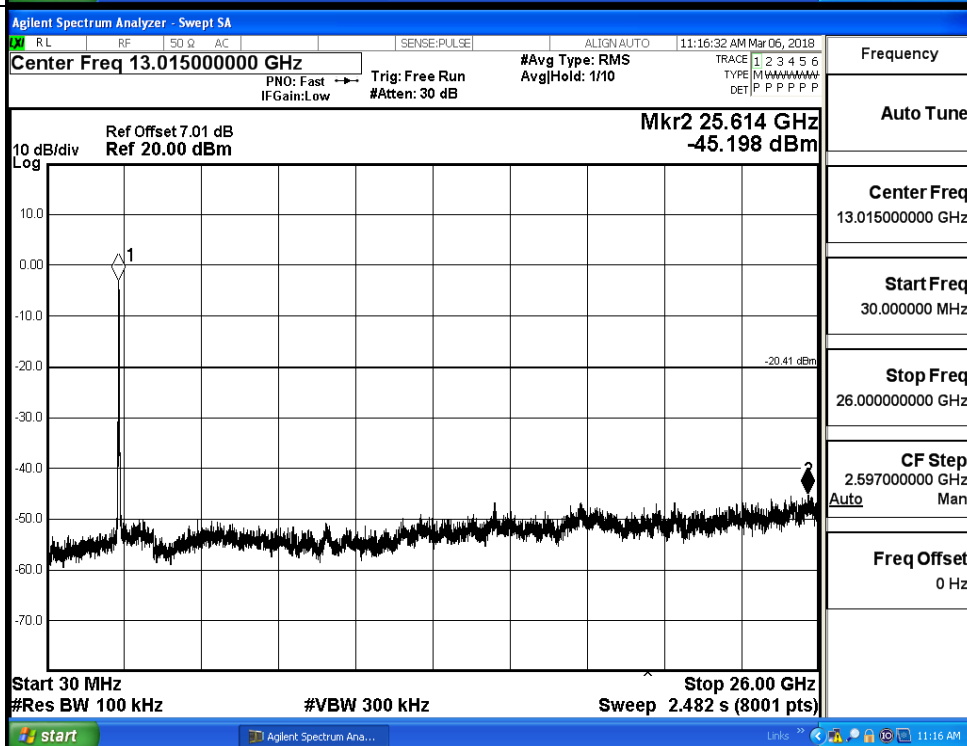
Freq Offset
0 Hz

11N40SISO HCH Graphs

Pref/11N40
SISO/HCH



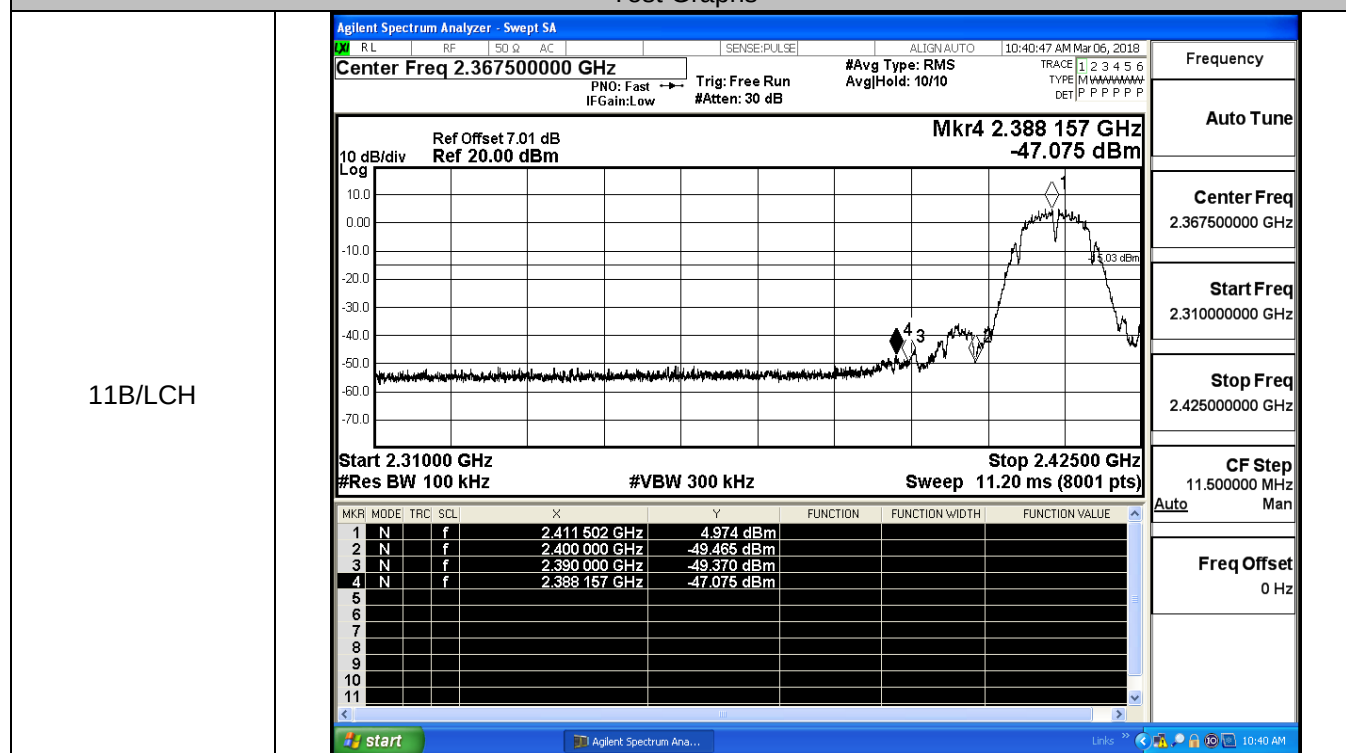
Puw/11N40
SISO/HCH



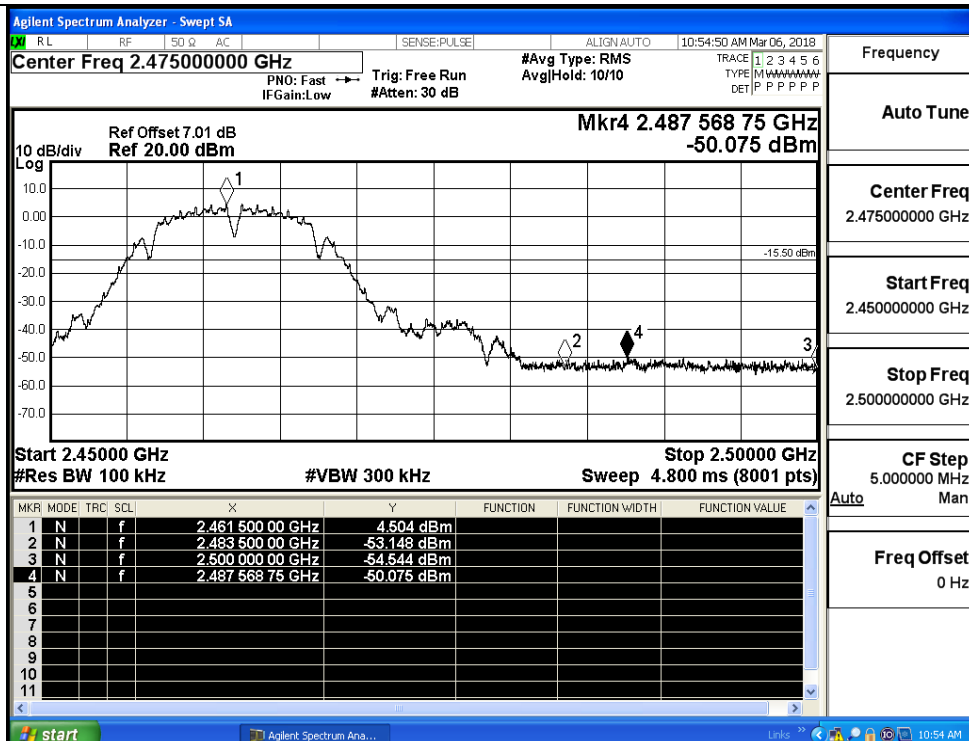
A.4 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
11B	LCH	4.974	-47.075	-15.03	PASS
	HCH	4.504	-50.075	-15.5	PASS
11G	LCH	1.308	-47.424	-18.69	PASS
	HCH	3.205	-41.052	-16.8	PASS
11N20SISO	LCH	0.510	-44.938	-19.49	PASS
	HCH	2.318	-40.925	-17.68	PASS
11N40SISO	LCH	-0.185	-31.201	-20.19	PASS
	HCH	-0.427	-30.693	-20.43	PASS

Test Graphs



11B/HCH



Frequency

Auto Tune

Center Freq

2.475000000 GHz

Start Freq

2.450000000 GHz

Stop Freq

2.500000000 GHz

CF Step

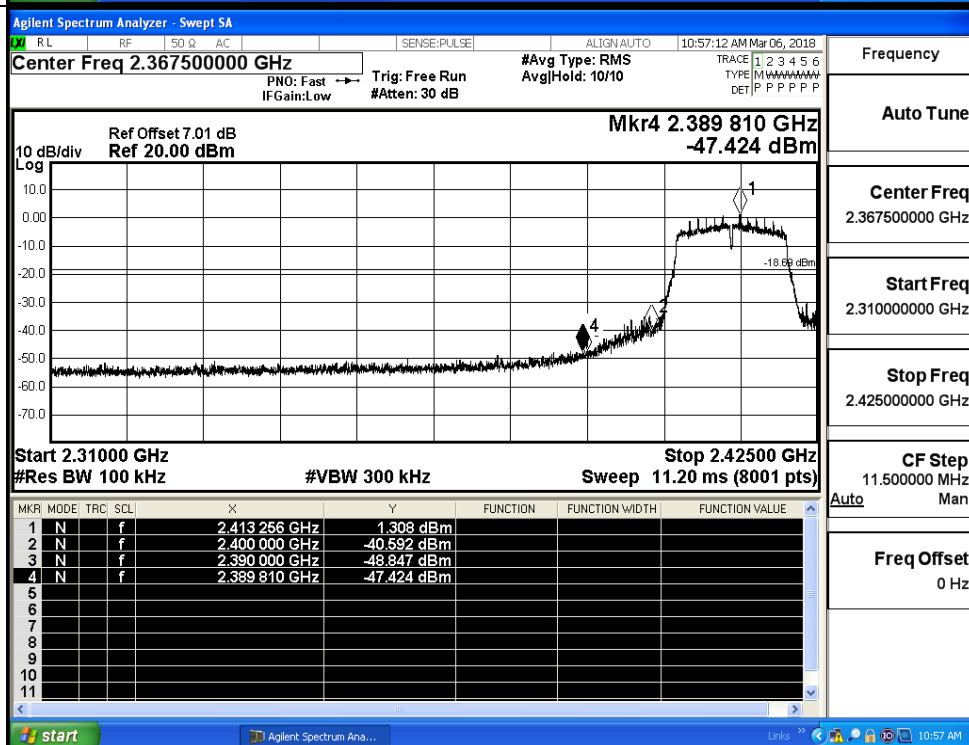
5.000000 MHz

Auto

Freq Offset

0 Hz

11G/LCH



Frequency

Auto Tune

Center Freq

2.367500000 GHz

Start Freq

2.310000000 GHz

Stop Freq

2.425000000 GHz

CF Step

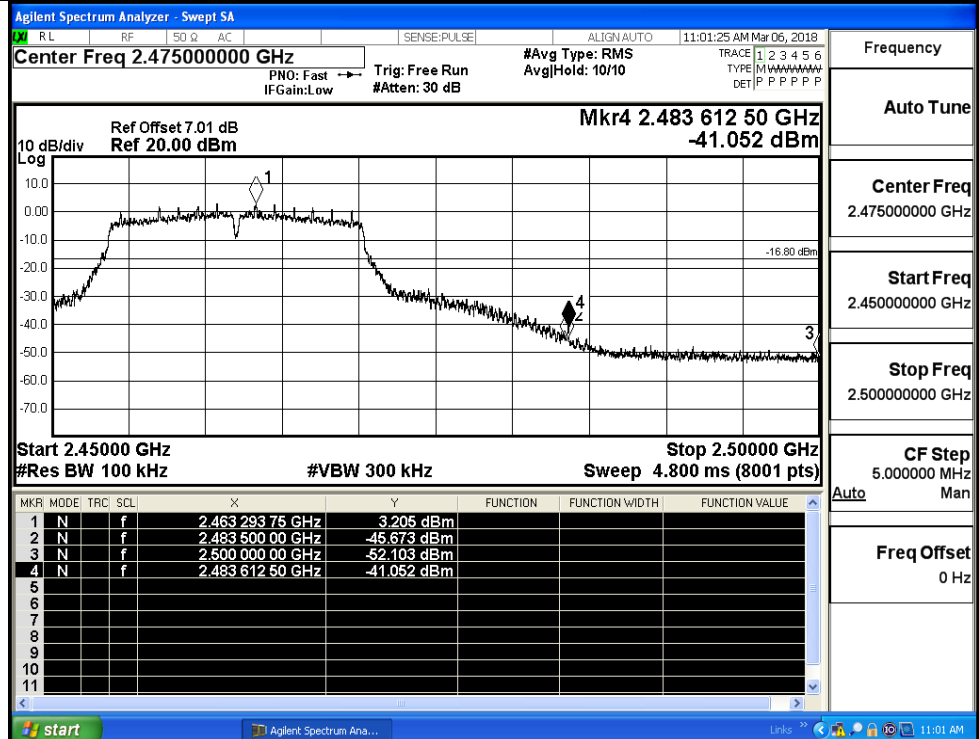
11.500000 MHz

Auto

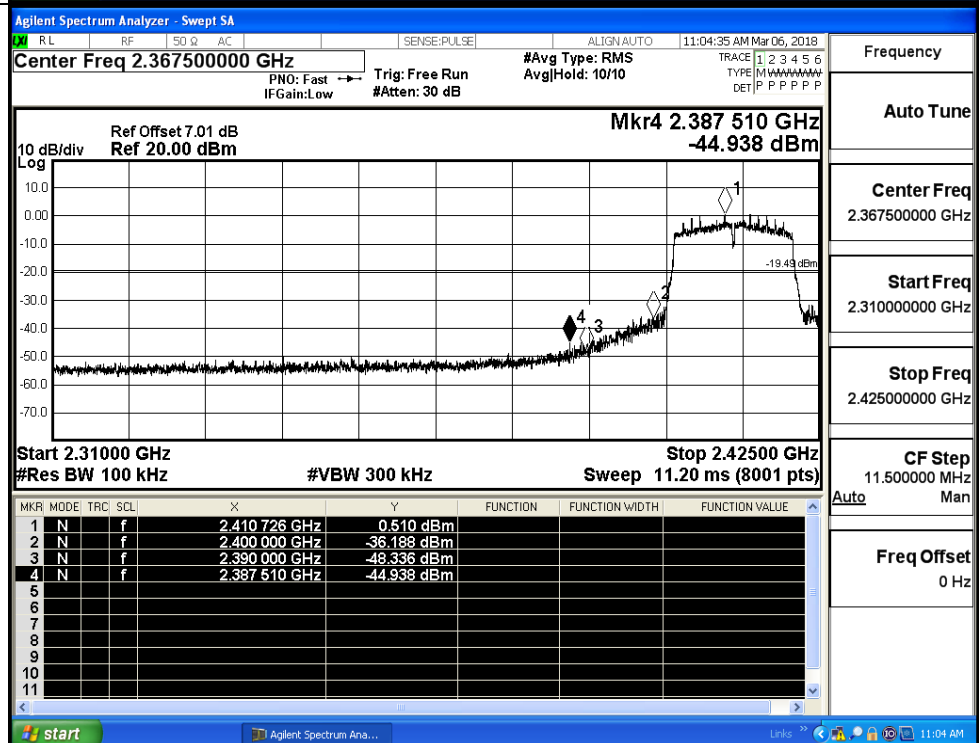
Freq Offset

0 Hz

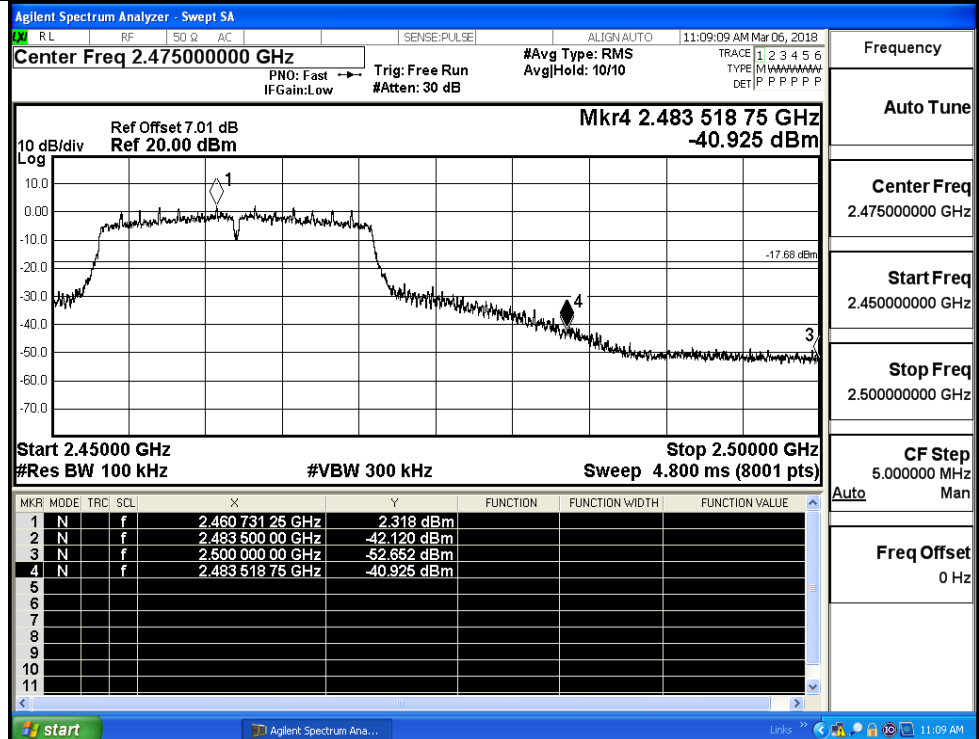
11G/HCH



11N20SISO/LCH



11N20SISO/HCH



Frequency

Auto Tune

Center Freq

2.475000000 GHz

Start Freq

2.450000000 GHz

Stop Freq

2.500000000 GHz

CF Step

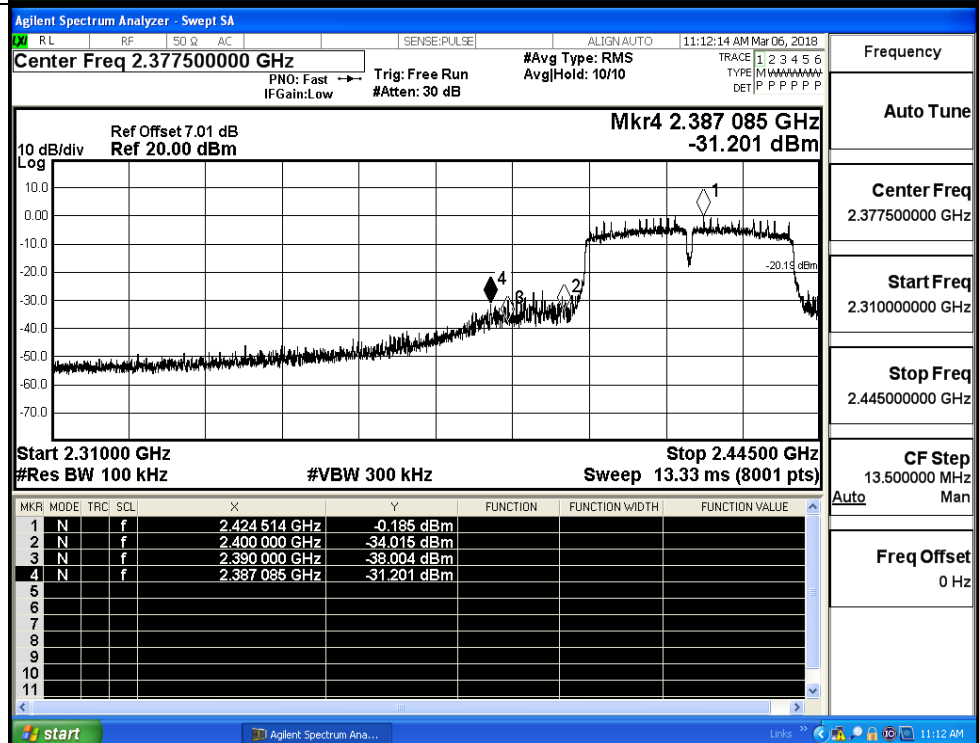
5.000000 MHz

Auto Man

Freq Offset

0 Hz

11N40SISO/LCH



Frequency

Auto Tune

Center Freq

2.377500000 GHz

Start Freq

2.310000000 GHz

Stop Freq

2.445000000 GHz

CF Step

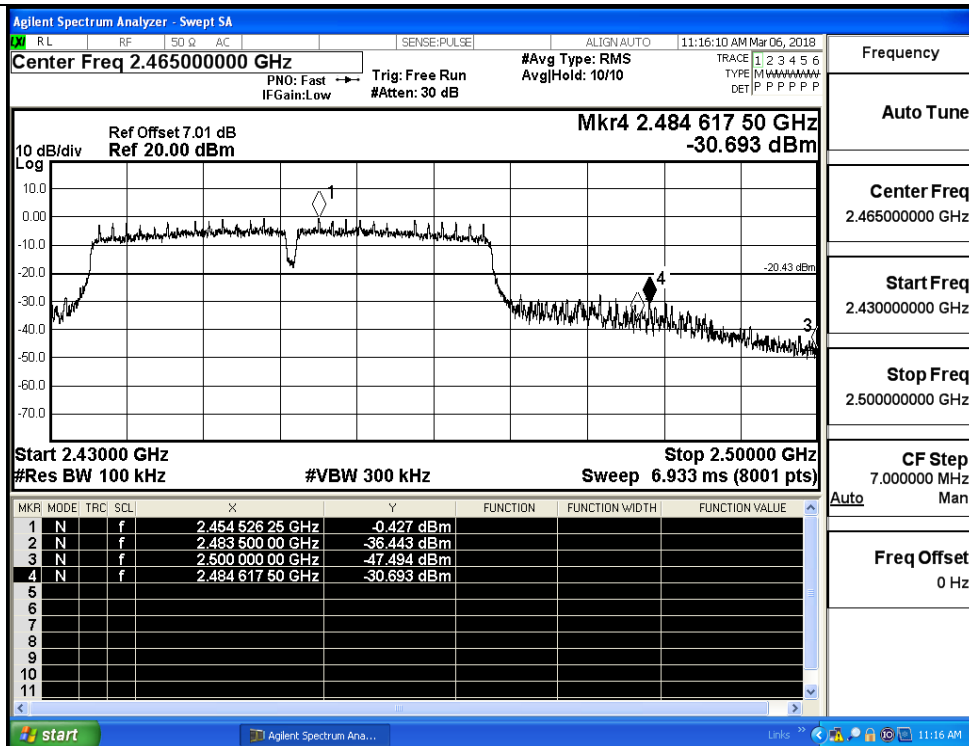
13.500000 MHz

Auto Man

Freq Offset

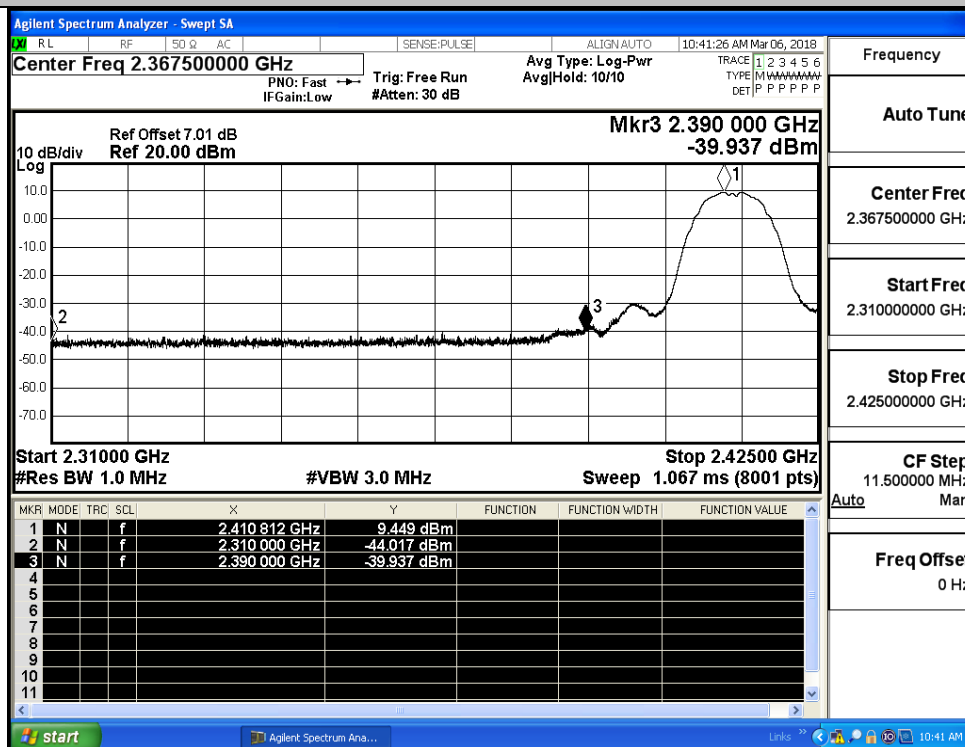
0 Hz

11N40SISO/HCH

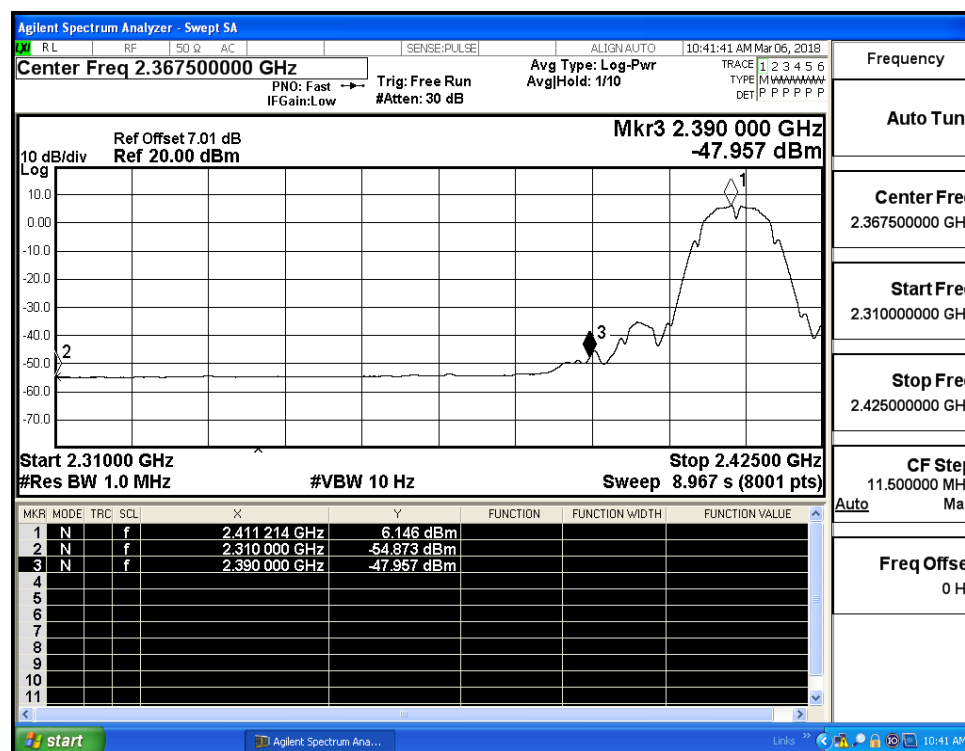


A.5 Restrict-band band-edge measurements

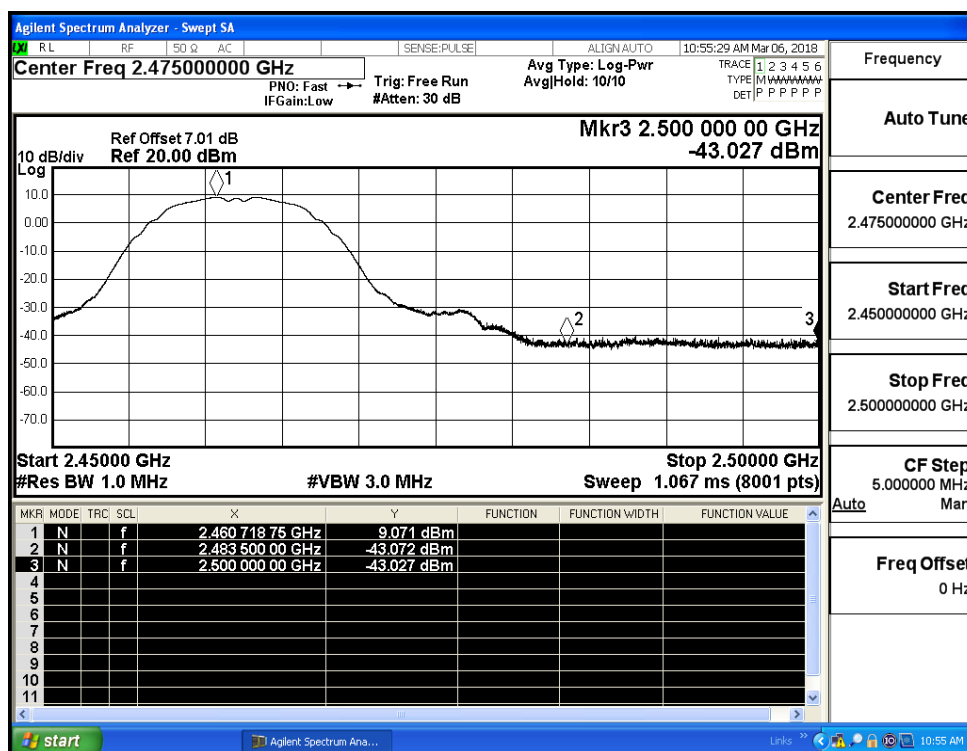
Restrict-band band-edge measurements_11B_2412_Ant1_PEAK



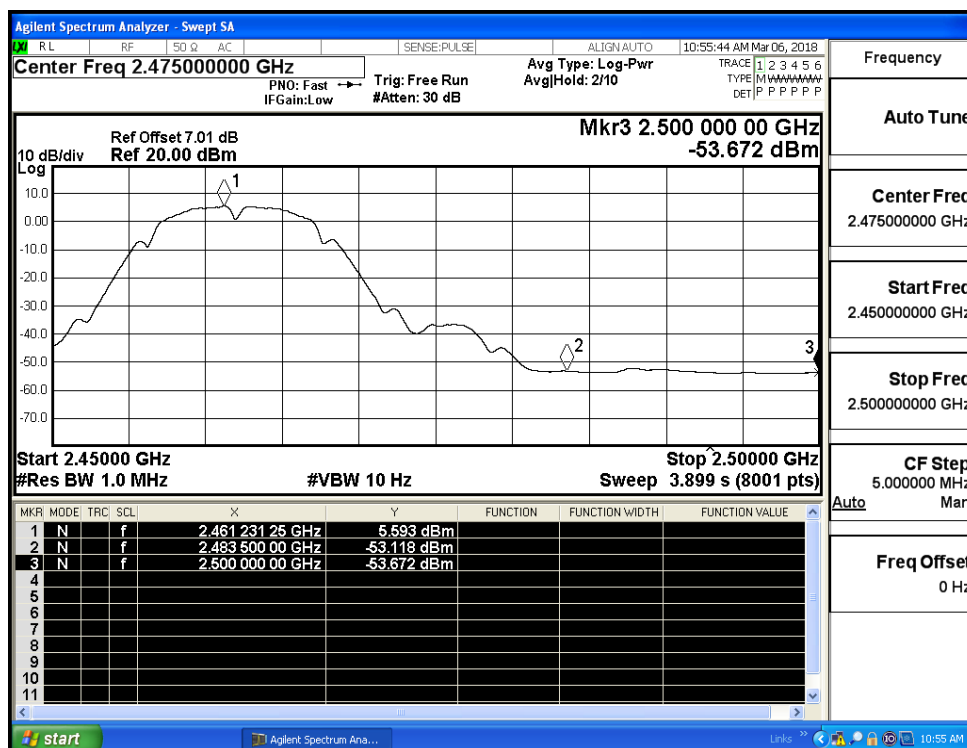
Restrict-band band-edge measurements_11B_2412_Ant1_AV



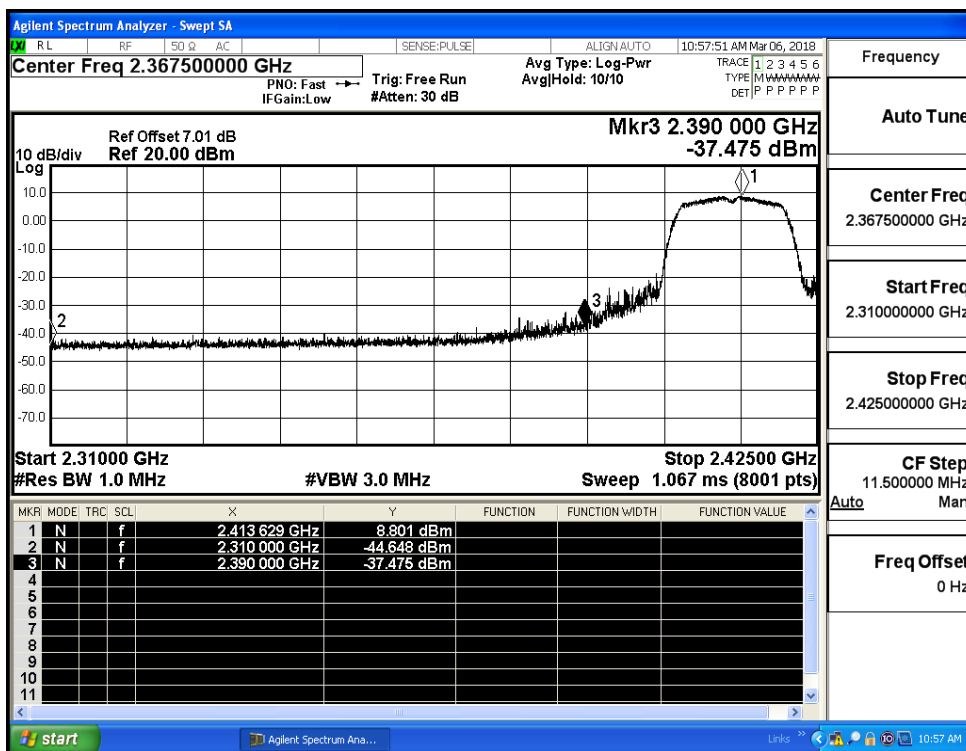
Restrict-band band-edge measurements_11B_2462_Ant1_PEAK



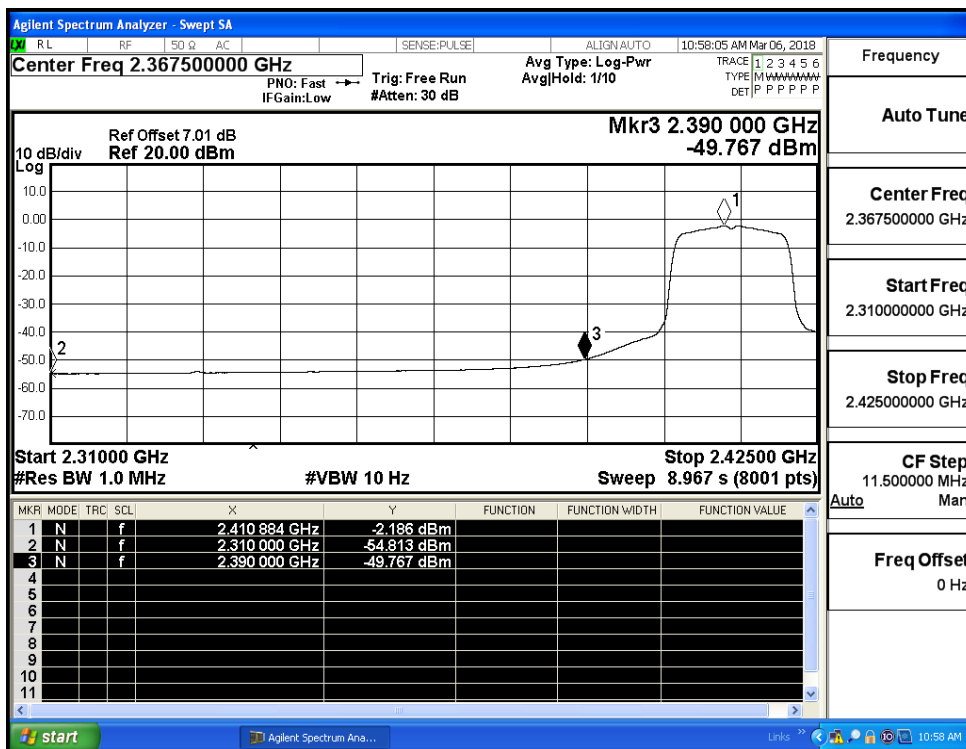
Restrict-band band-edge measurements_11B_2462_Ant1_AV



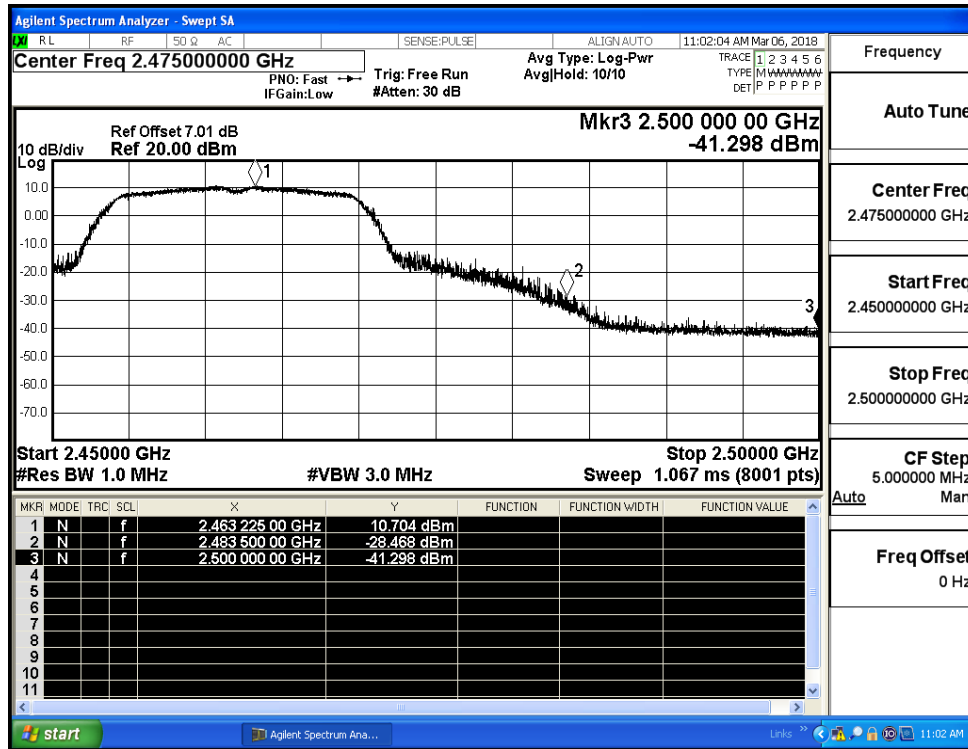
Restrict-band band-edge measurements_11G_2412_Ant1_PEAK



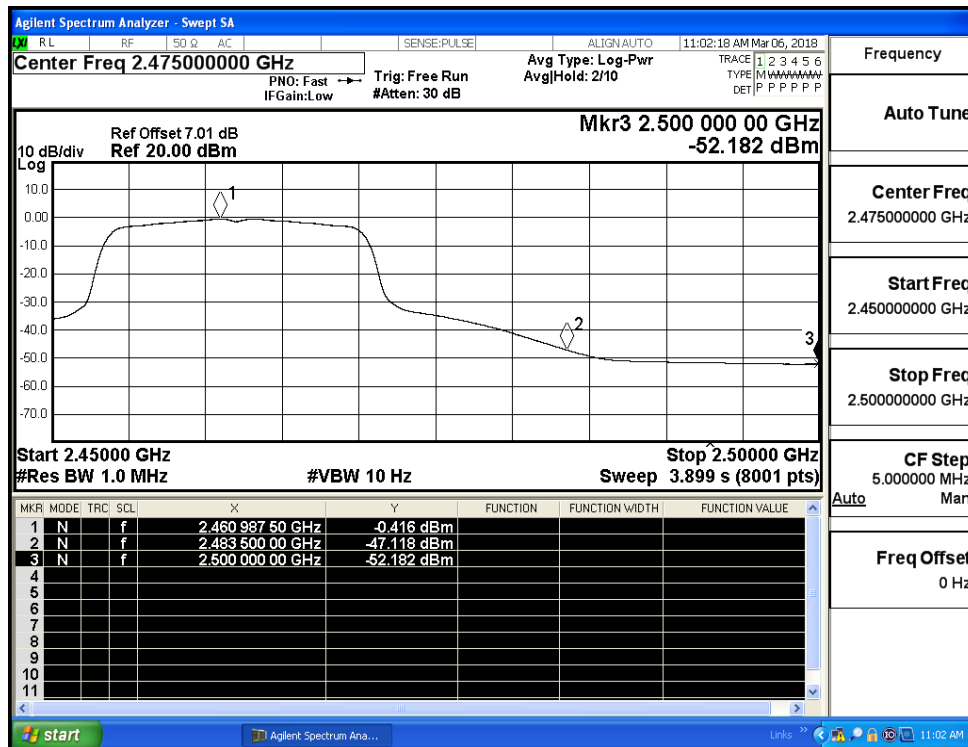
Restrict-band band-edge measurements_11G_2412_Ant1_AV



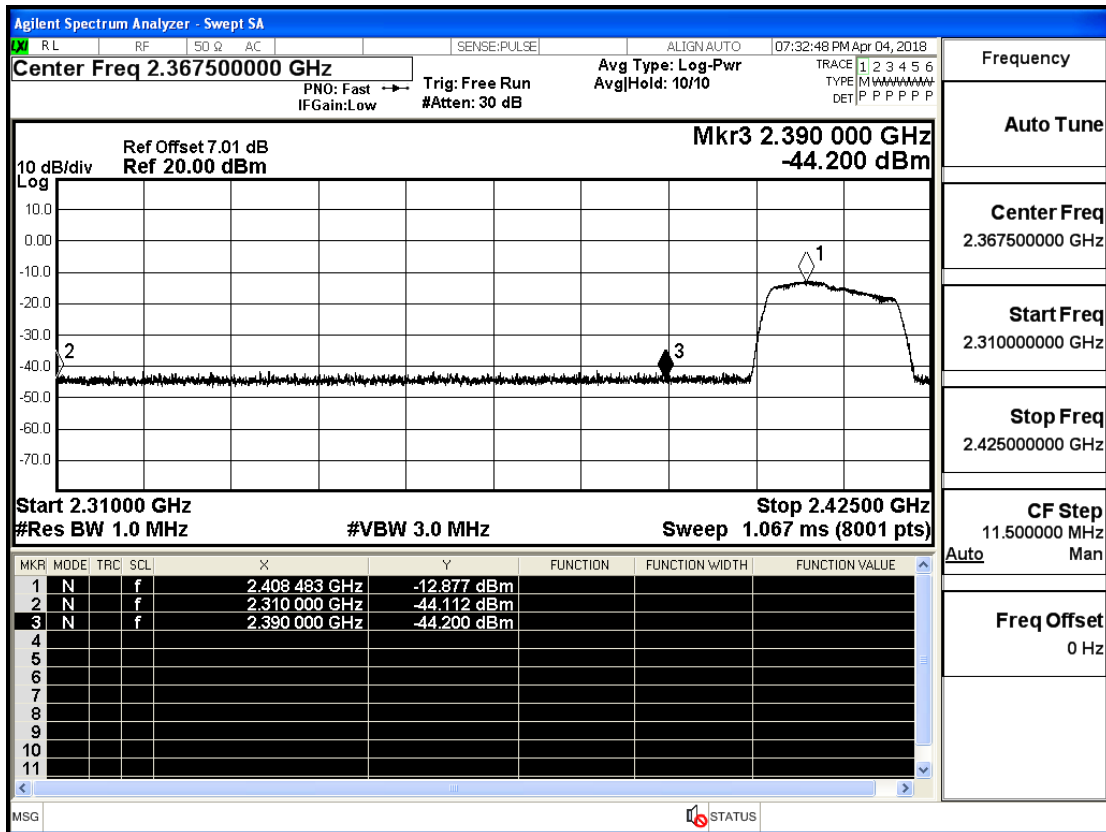
Restrict-band band-edge measurements_11G_2462_Ant1_PEAK



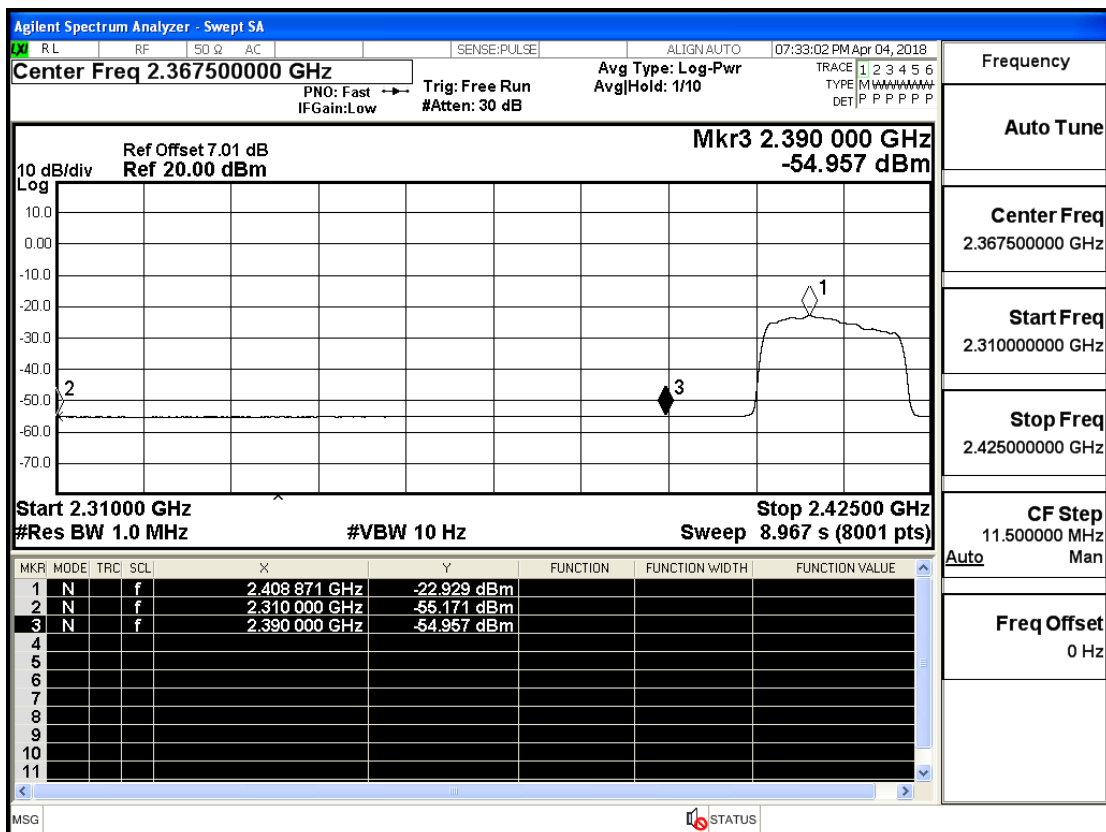
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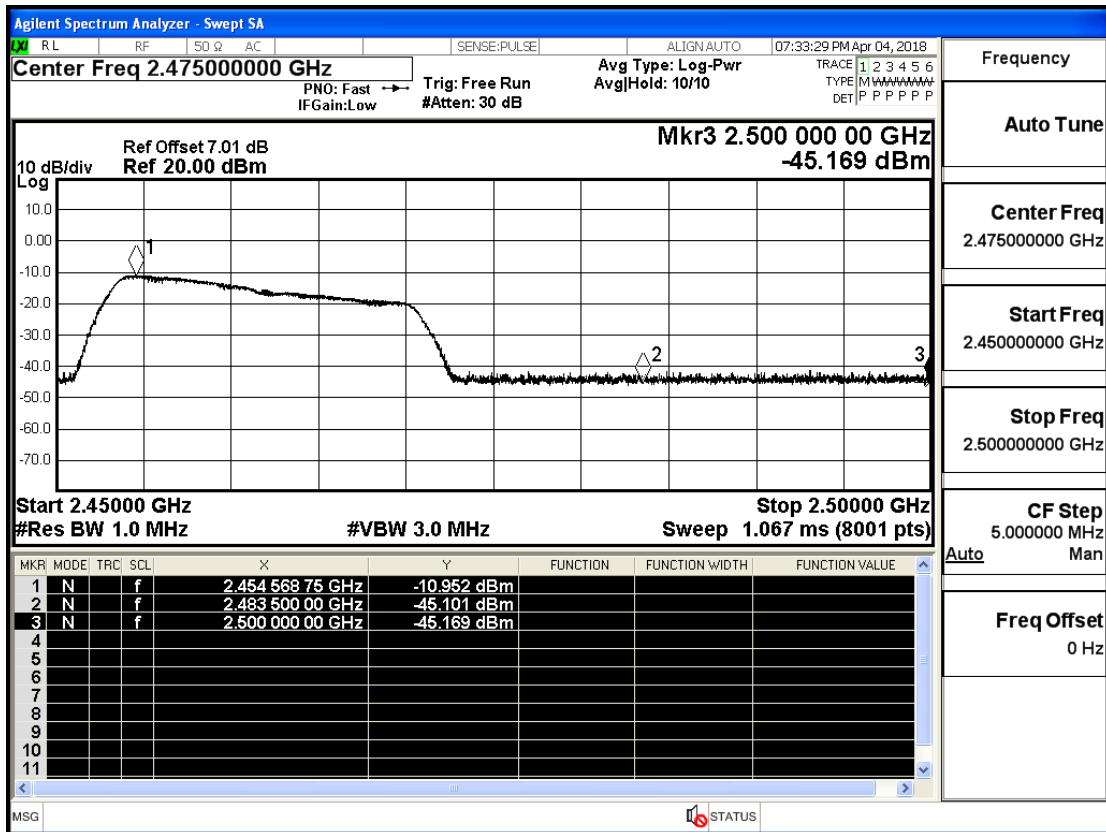
Restrict-band band-edge measurements_11N20SISO_2412_Ant1_PEAK



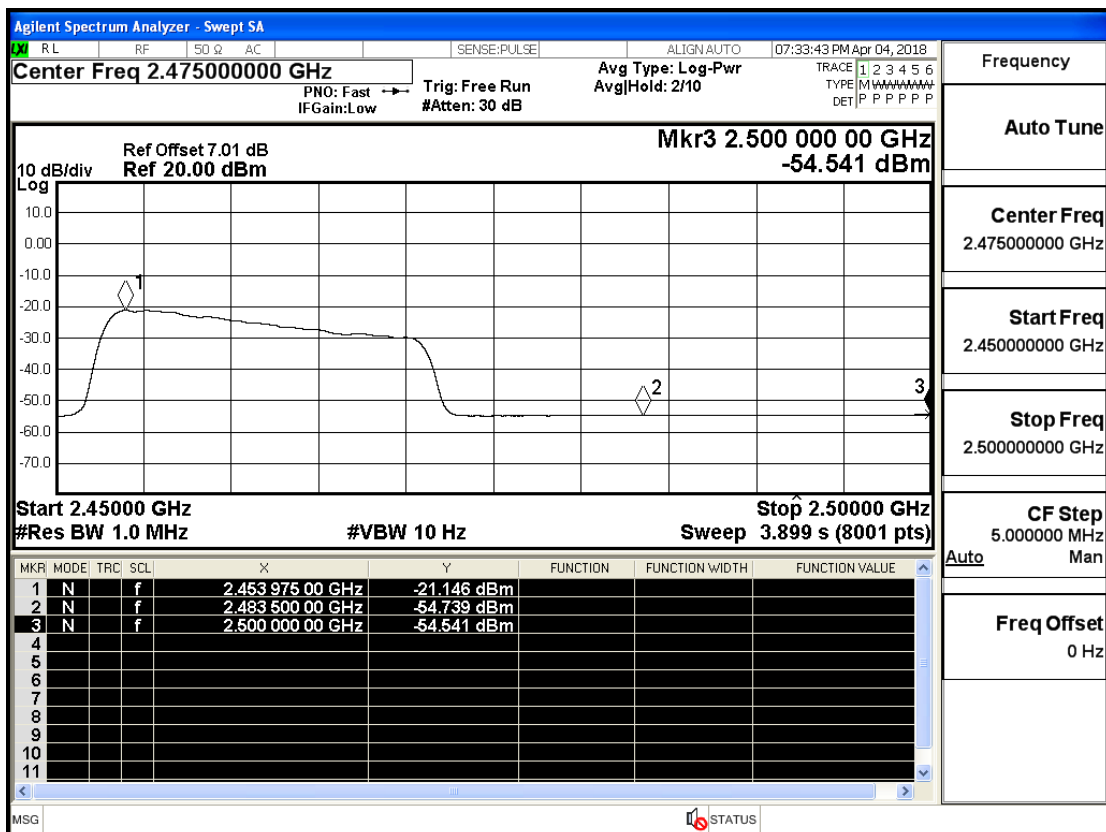
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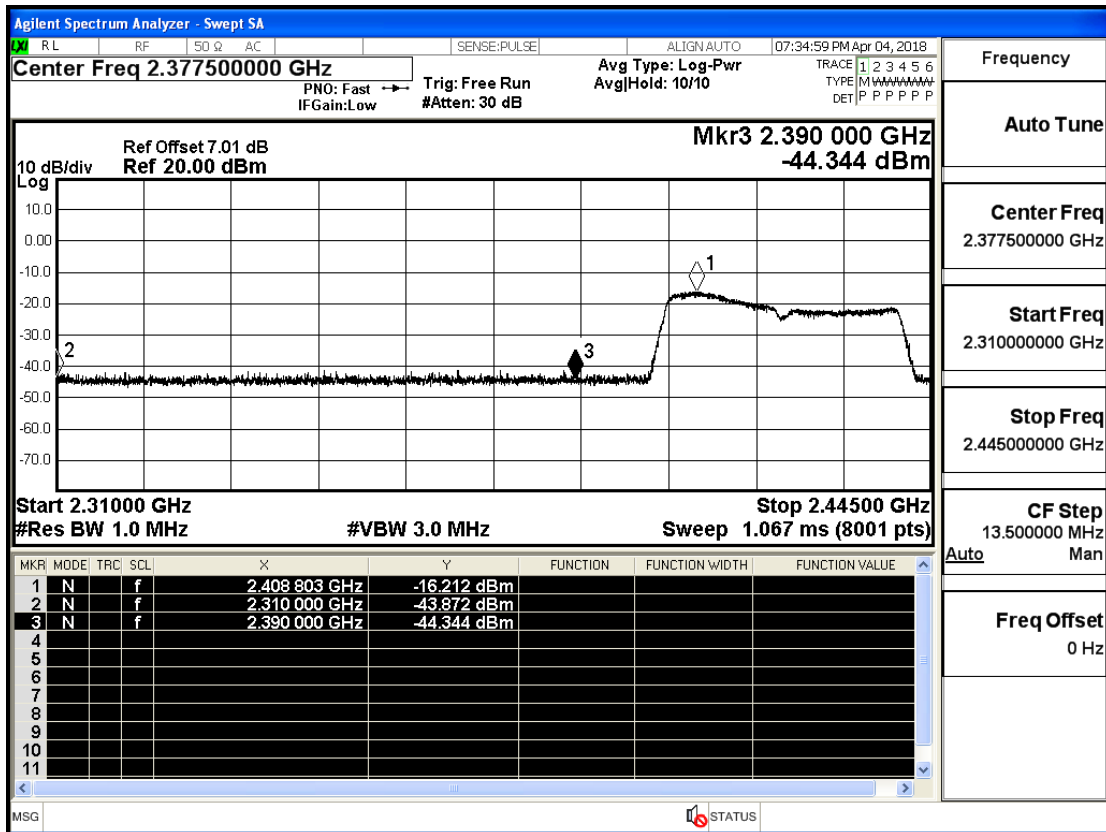
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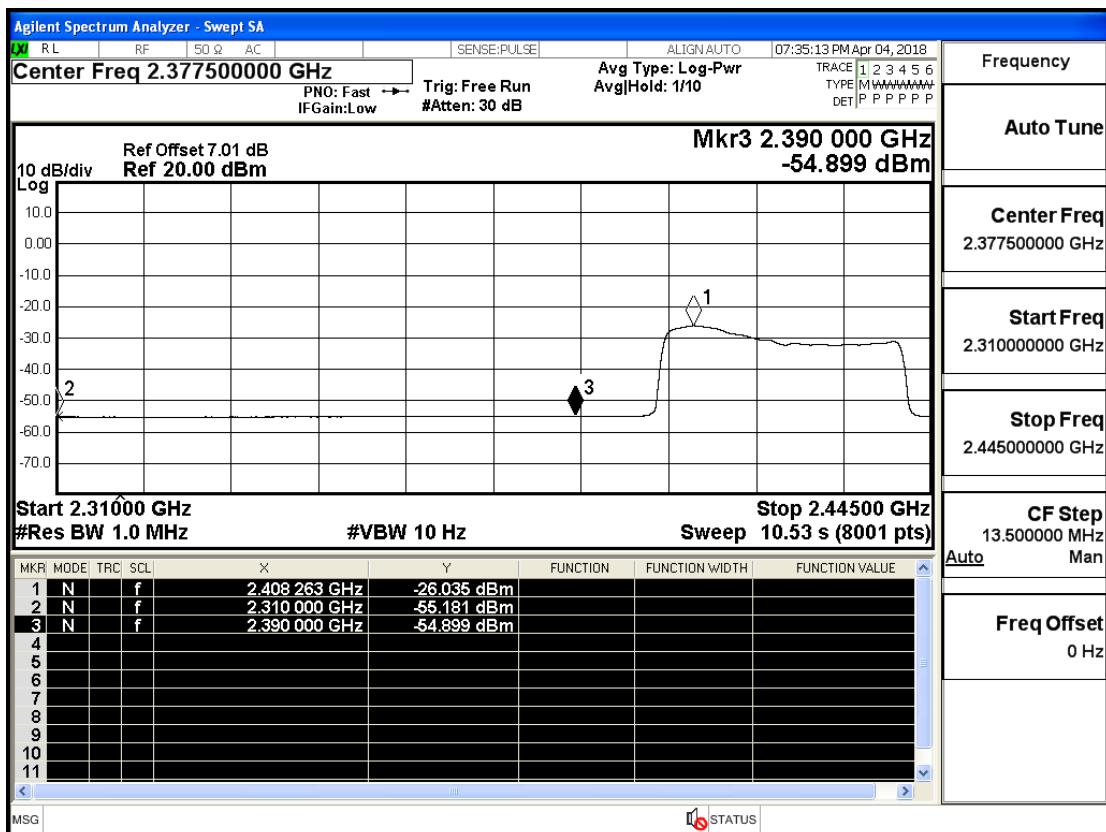
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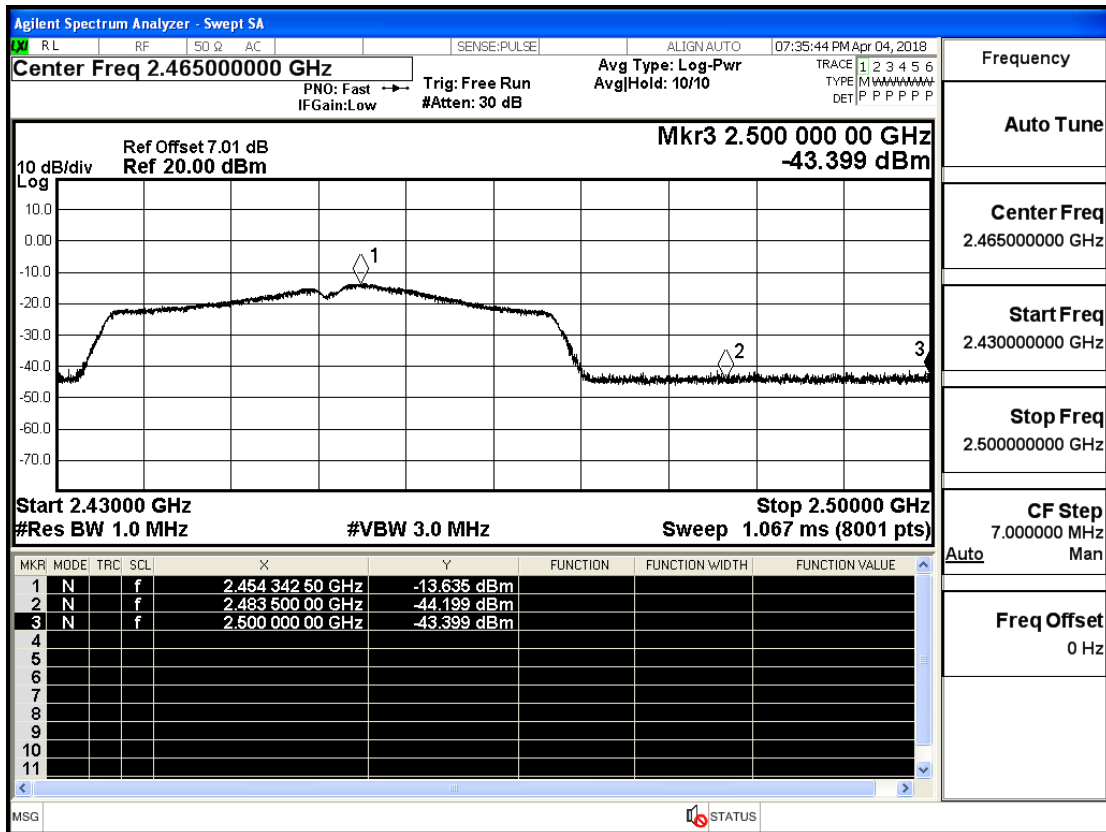
Restrict-band band-edge measurements_11N40SISO_2422_Ant1_PEAK



Restrict-band band-edge measurements_11N40SISO_2422_Ant1_AV



Restrict-band band-edge measurements_11N40SISO_2452_Ant1_PEAK



Restrict-band band-edge measurements_11N40SISO_2452_Ant1_AV

