

Appendix A

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: 4G Router

Trade Mark: TODAAIR

Test Model: TD954G2

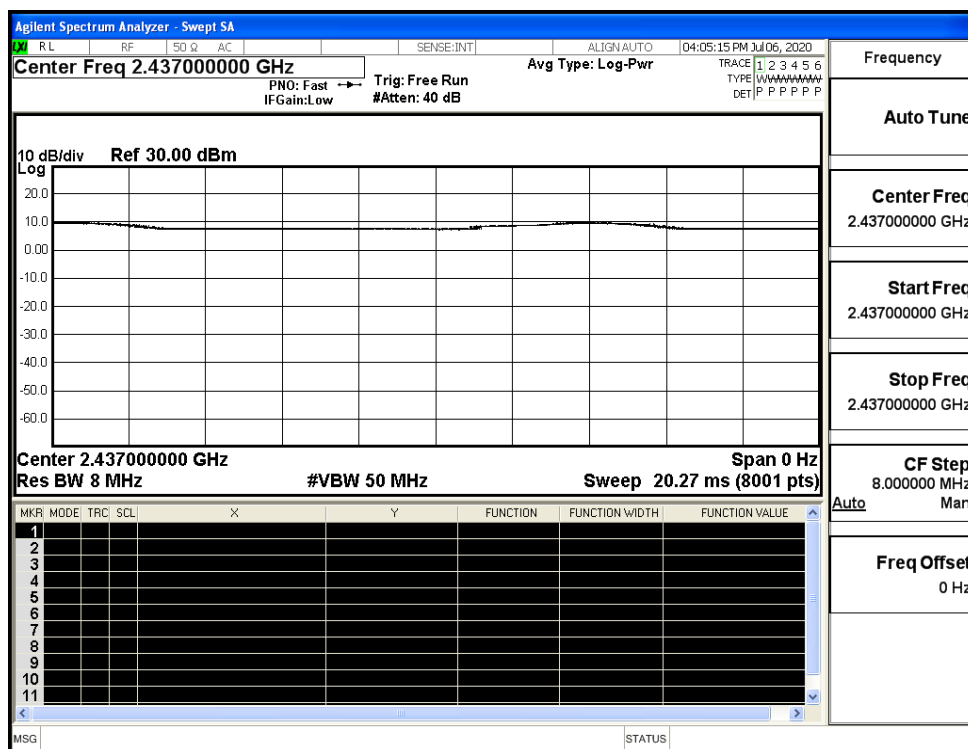
Environmental Conditions

Temperature:	23.4 ° C
Relative Humidity:	54.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond Lu
Supervised by:	Li Huan

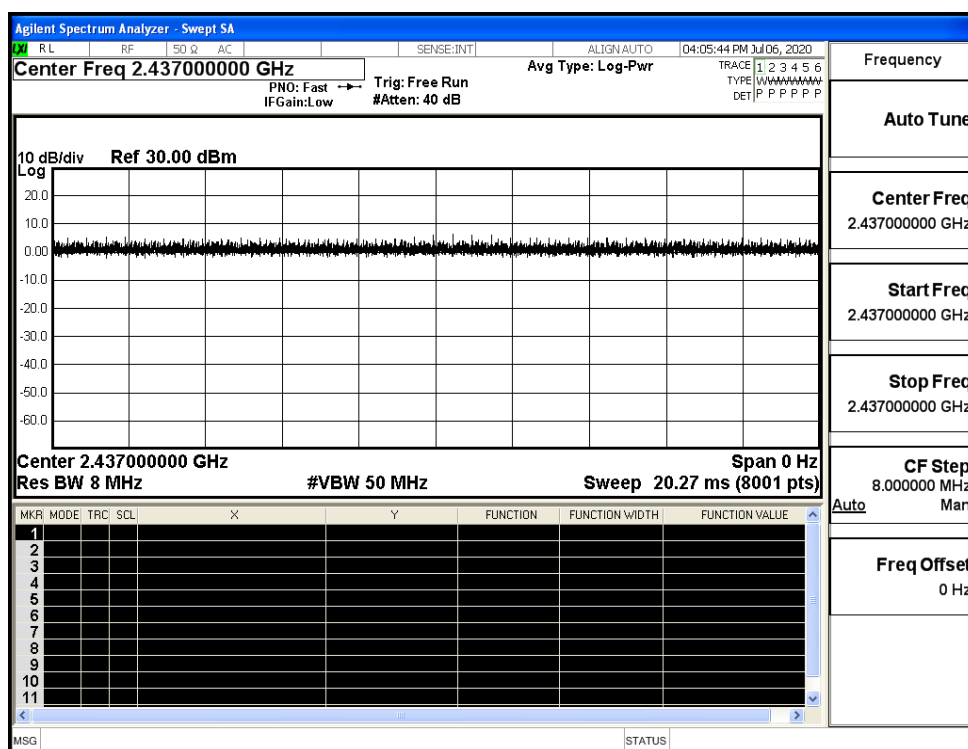
A.1 Duty Cycle

Test Mode	Test Channel	Ant	Duty Cycle[%]	Verdict
11B	2437	Ant0	100	PASS
11G	2437	Ant0	100	PASS
11N20SISO	2437	Ant0	100	PASS
11N40SISO	2437	Ant0	100	PASS
11B	2437	Ant1	100	PASS
11G	2437	Ant1	100	PASS
11N20SISO	2437	Ant1	100	PASS
11N40SISO	2437	Ant1	100	PASS

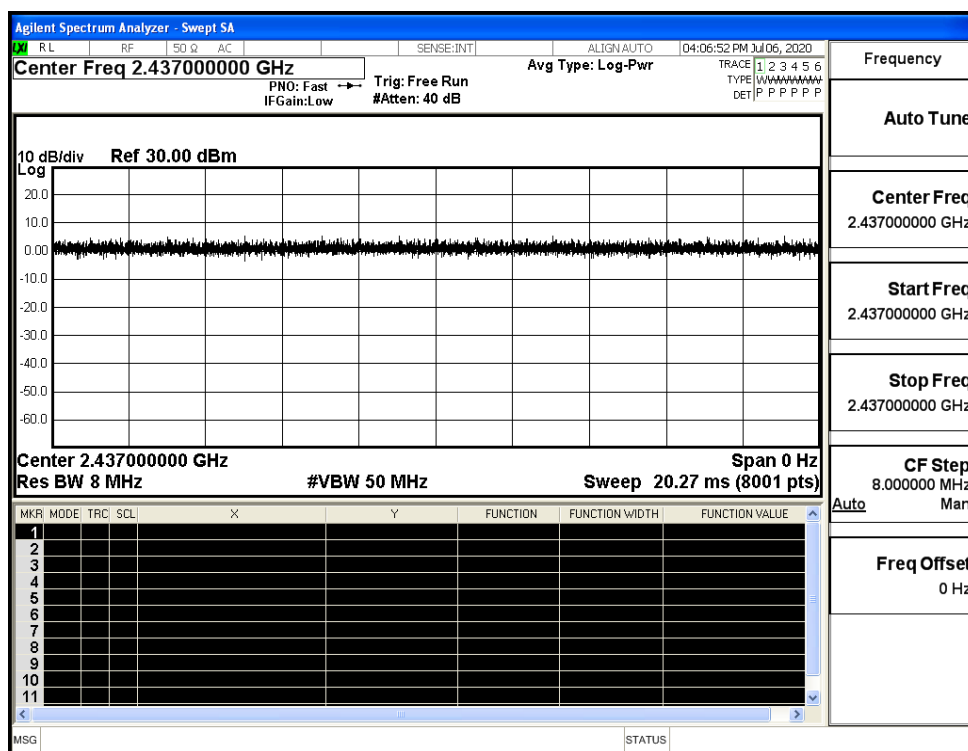
Duty Cycle_11B_2437_Ant0



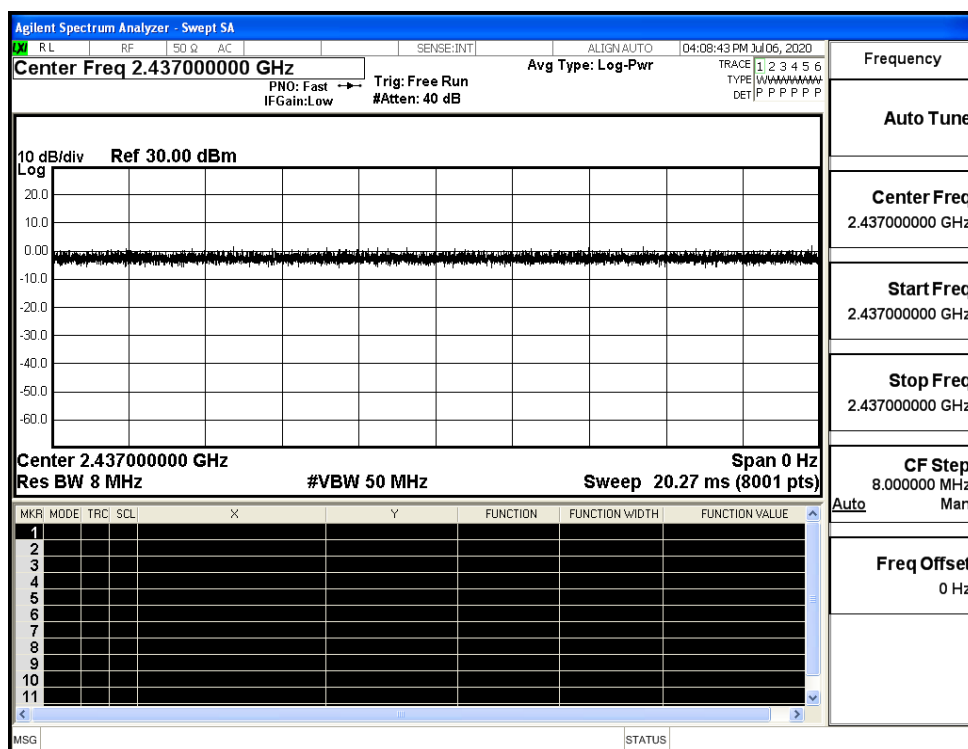
Duty Cycle_11G_2437_Ant0



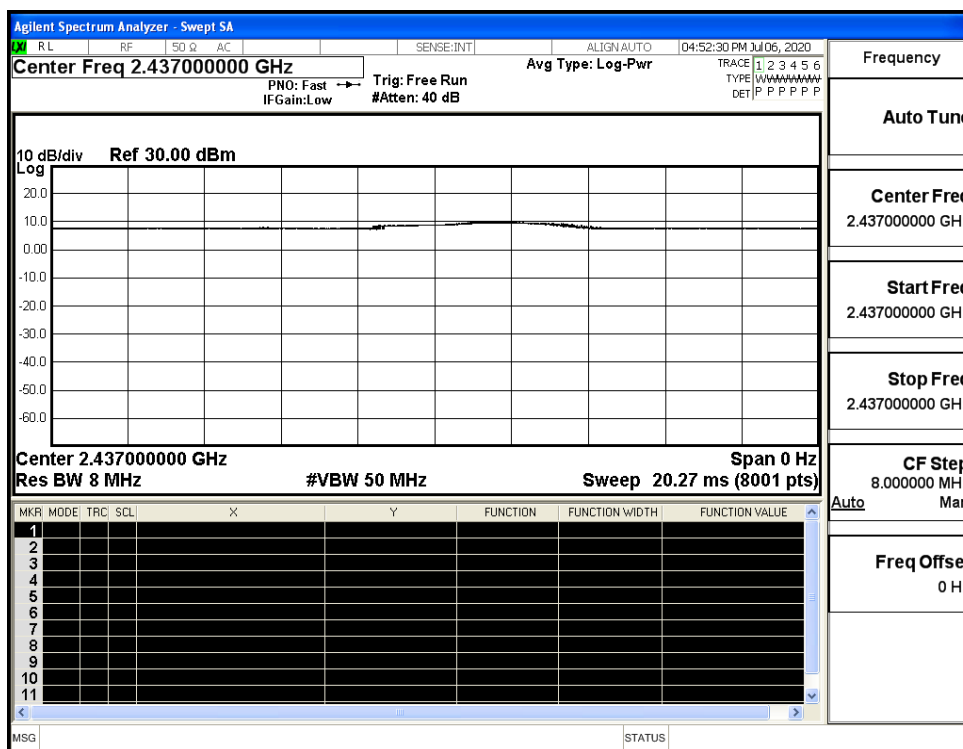
Duty Cycle_11N20SISO_2437_Ant0



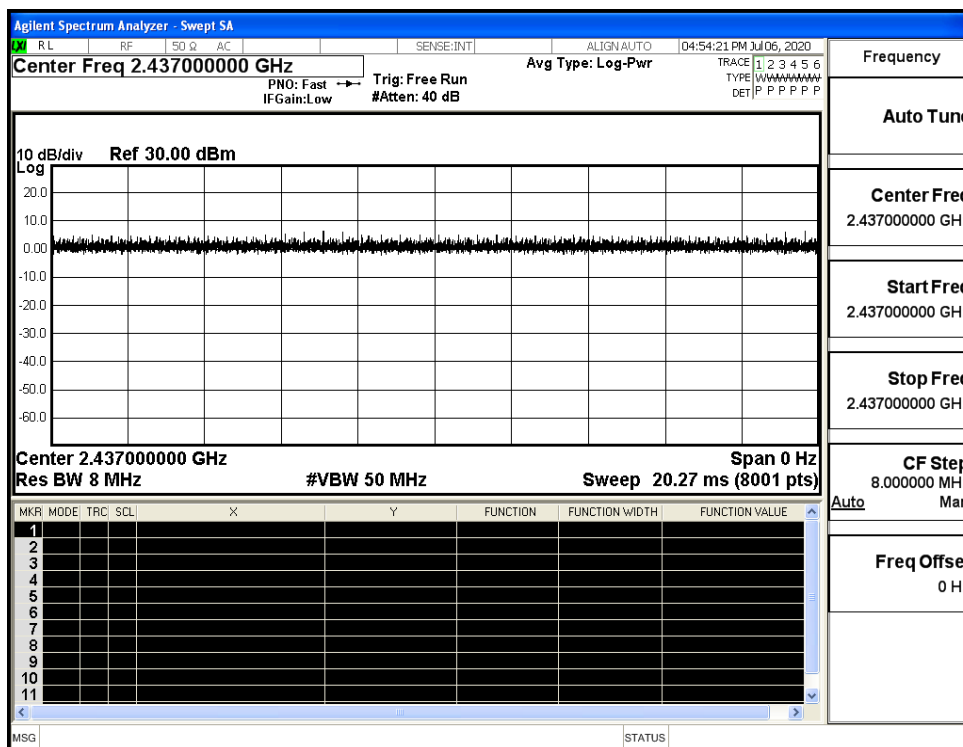
Duty Cycle_11N40SISO_2437_Ant0



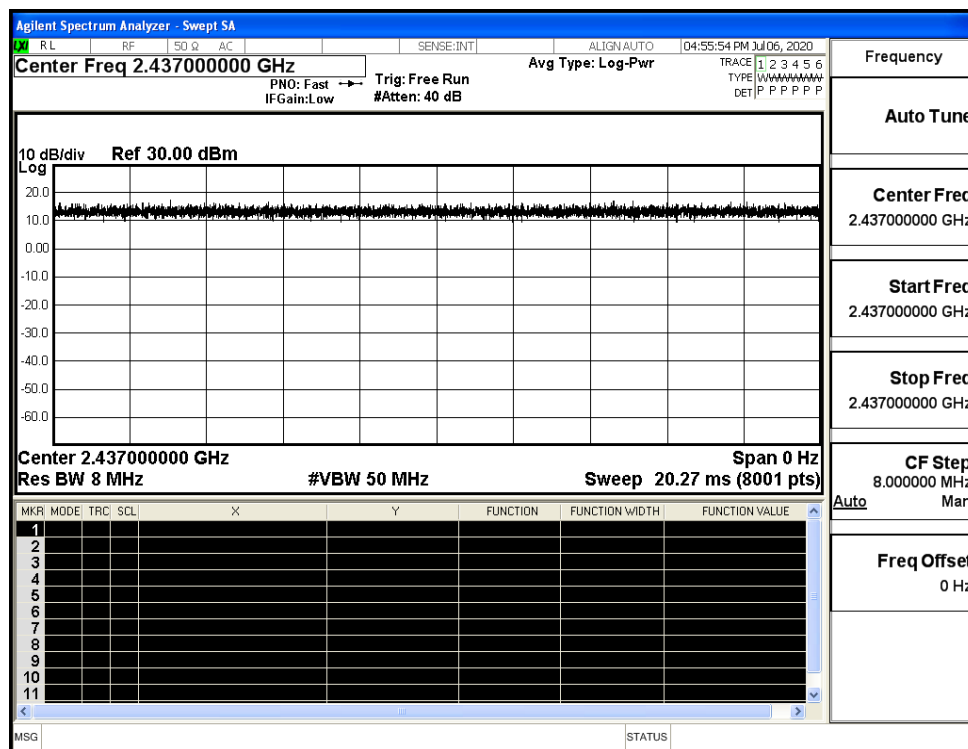
Duty Cycle_11B_2437_Ant1



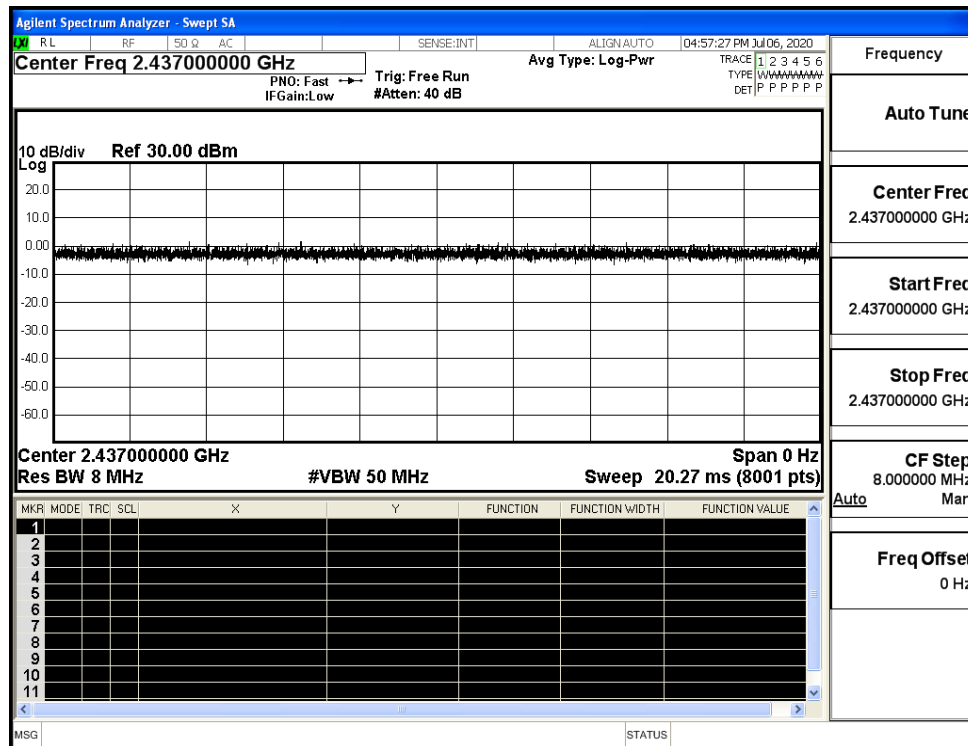
Duty Cycle_11G_2437_Ant1



Duty Cycle_11N20SISO_2437_Ant1



Duty Cycle_11N40SISO_2437_Ant1

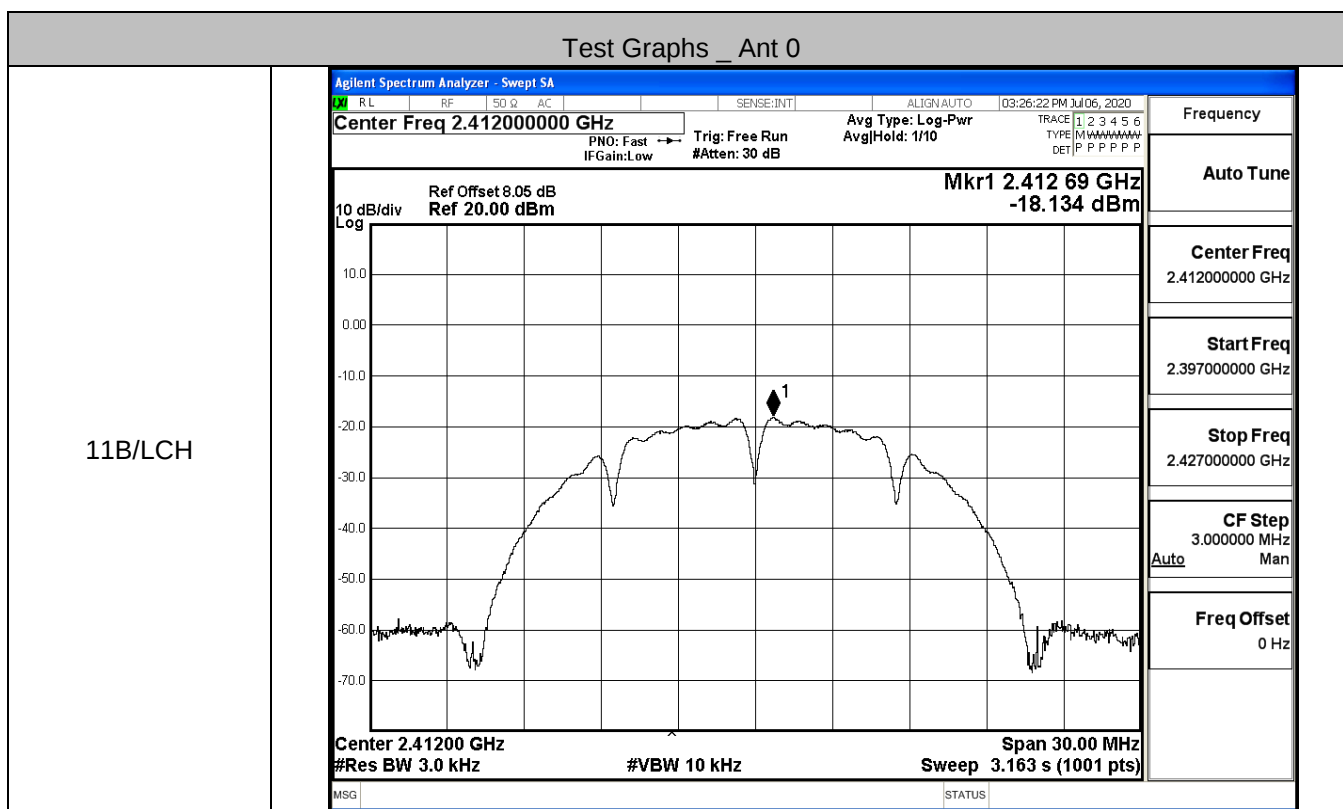


A.2 Maximum Conducted Output Power

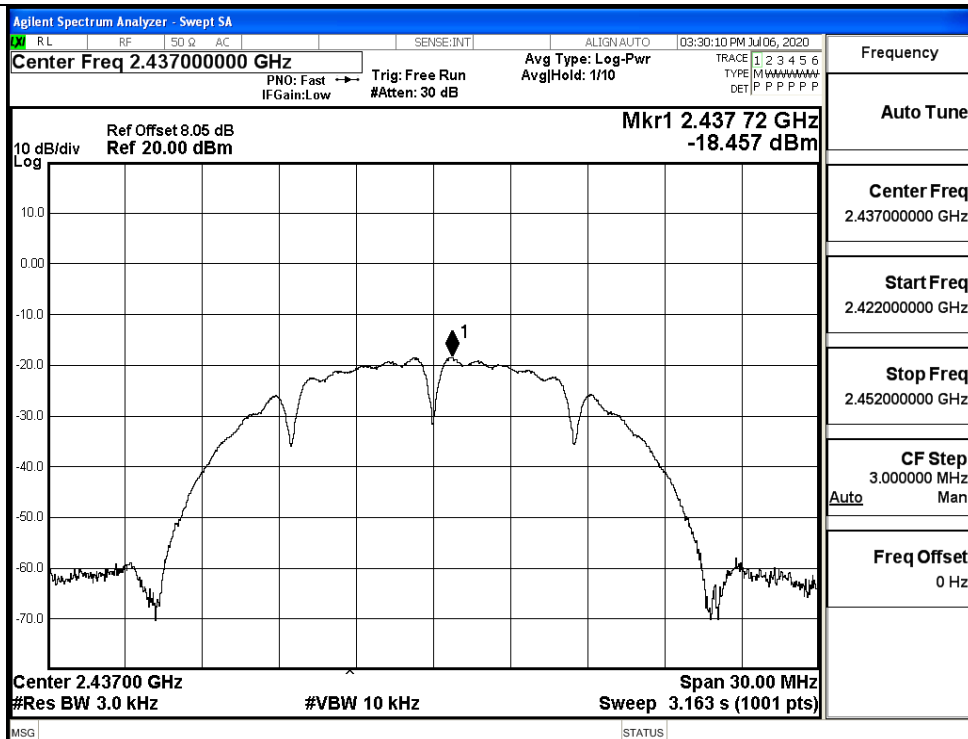
Mode	Channel	Peak Power [dBm]			Limit [dBm]	Verdict
		Ant 0	Ant 1	Sum		
11B	LCH	14.63	14.27	/	30	PASS
	MCH	14.39	14.89	/	30	PASS
	HCH	13.69	14.76	/	30	PASS
11G	LCH	13.70	13.71	/	30	PASS
	MCH	14.91	14.36	/	30	PASS
	HCH	14.39	14.25	/	30	PASS
11N20	LCH	13.96	13.87	16.93	27.99	PASS
	MCH	14.58	14.58	17.59	27.99	PASS
	HCH	14.03	14.52	17.29	27.99	PASS
11N40	LCH	12.54	13.55	16.08	27.99	PASS
	MCH	13.74	13.81	16.79	27.99	PASS
	HCH	13.79	13.75	16.78	27.99	PASS

A.3 Maximum Power Spectral Density

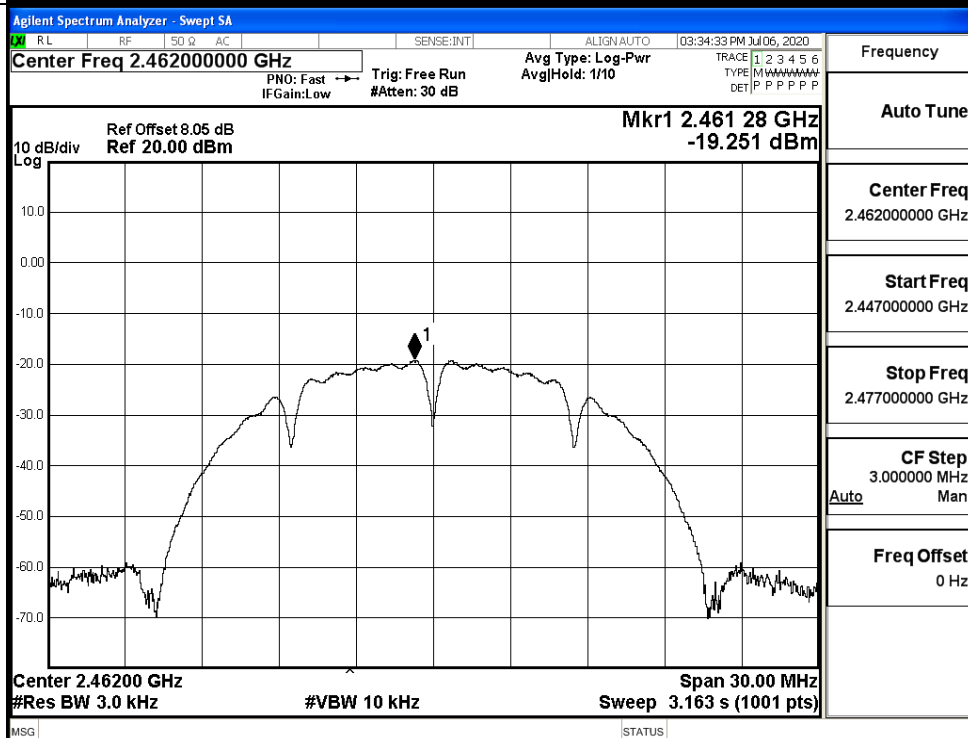
Mode	Channel	Meas.Level [dBm/3KHz]			Limit [dBm/3KHz]	Verdict
		Ant 0	Ant 1	Sum		
11B	LCH	-18.134	-18.558	/	8	PASS
	MCH	-18.457	-17.934	/	8	PASS
	HCH	-19.251	-18.100	/	8	PASS
11G	LCH	-22.329	-22.861	/	8	PASS
	MCH	-21.560	-22.186	/	8	PASS
	HCH	-21.502	-22.051	/	8	PASS
11N20	LCH	-21.321	-20.992	-18.14	5.99	PASS
	MCH	-21.984	-21.271	-18.60	5.99	PASS
	HCH	-22.301	-21.969	-19.12	5.99	PASS
11N40	LCH	-24.870	-23.408	-21.07	5.99	PASS
	MCH	-24.125	-23.429	-20.75	5.99	PASS
	HCH	-23.191	-23.507	-20.34	5.99	PASS



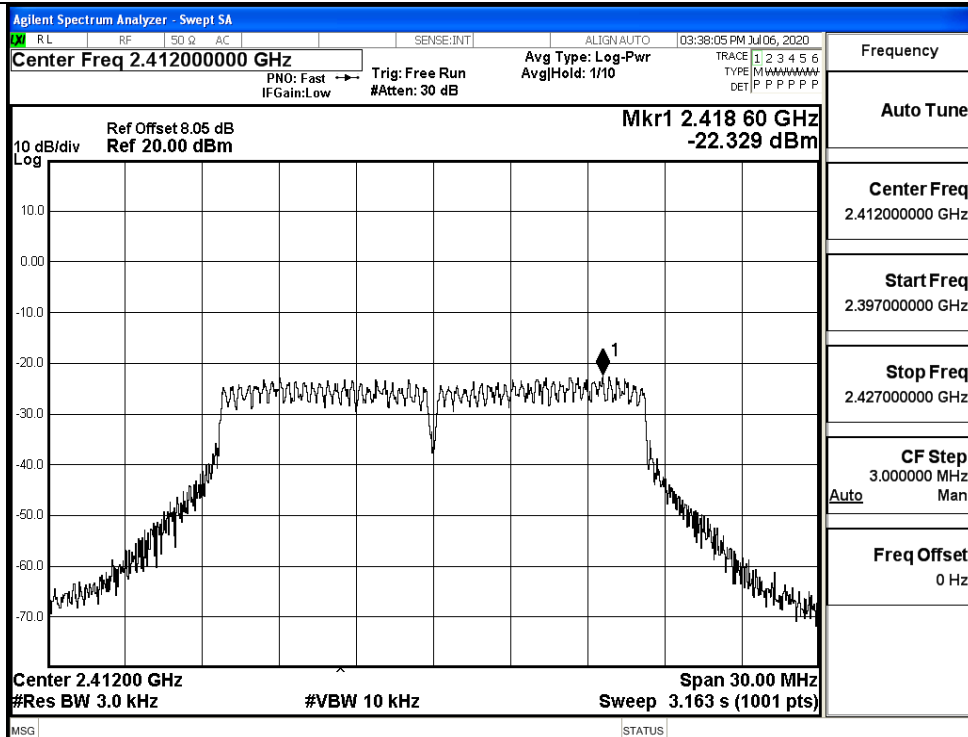
11B/MCH



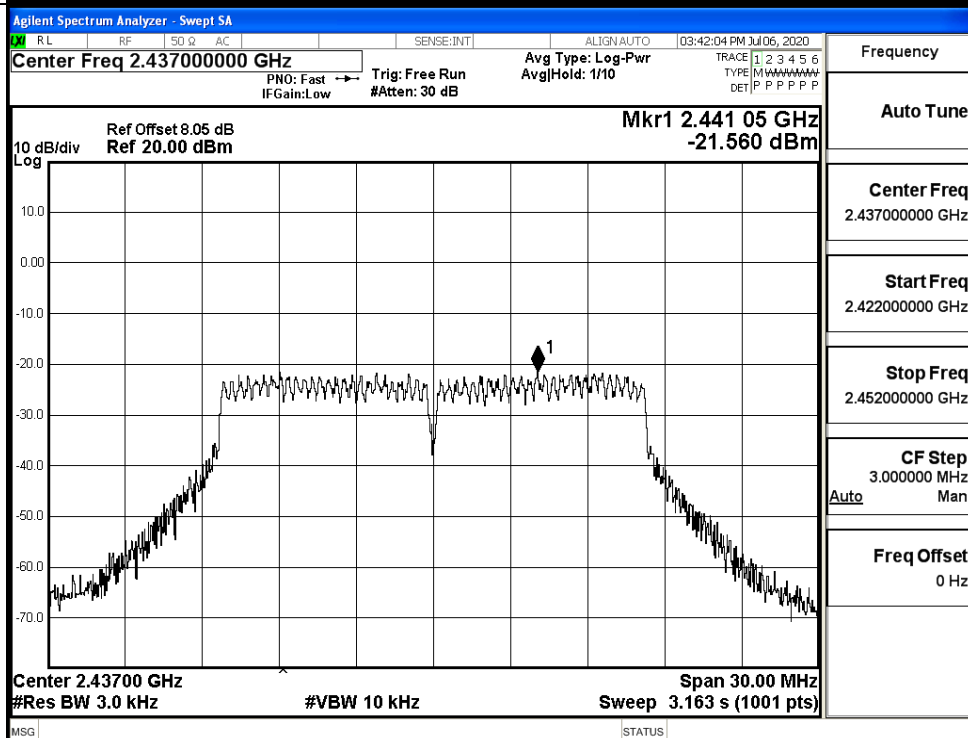
11B/HCH



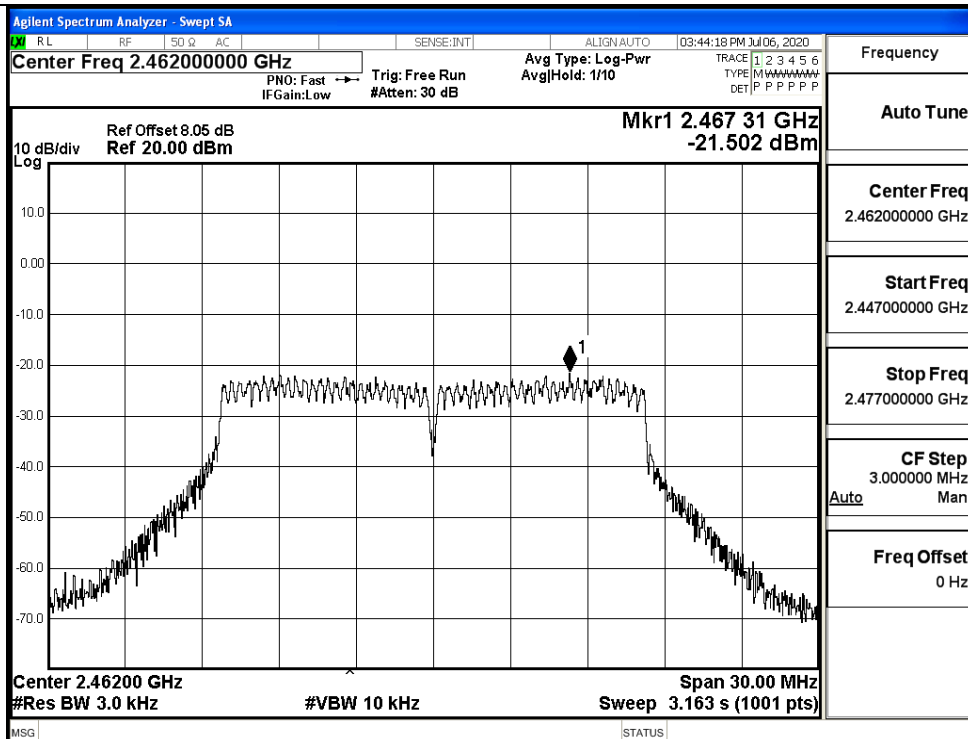
11G/LCH



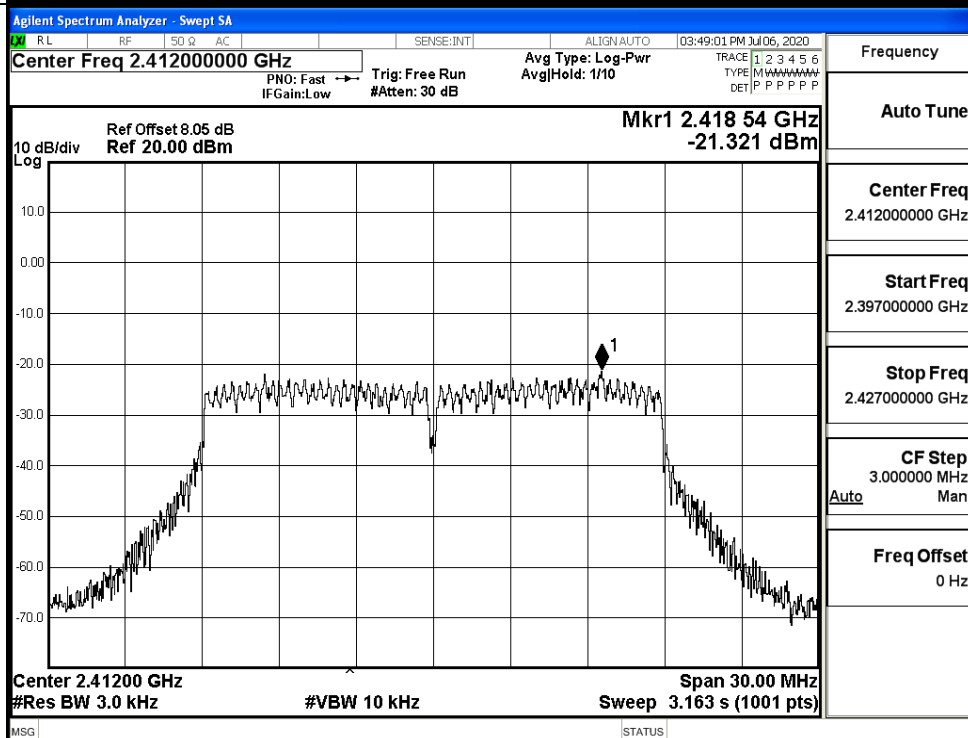
11G/MCH



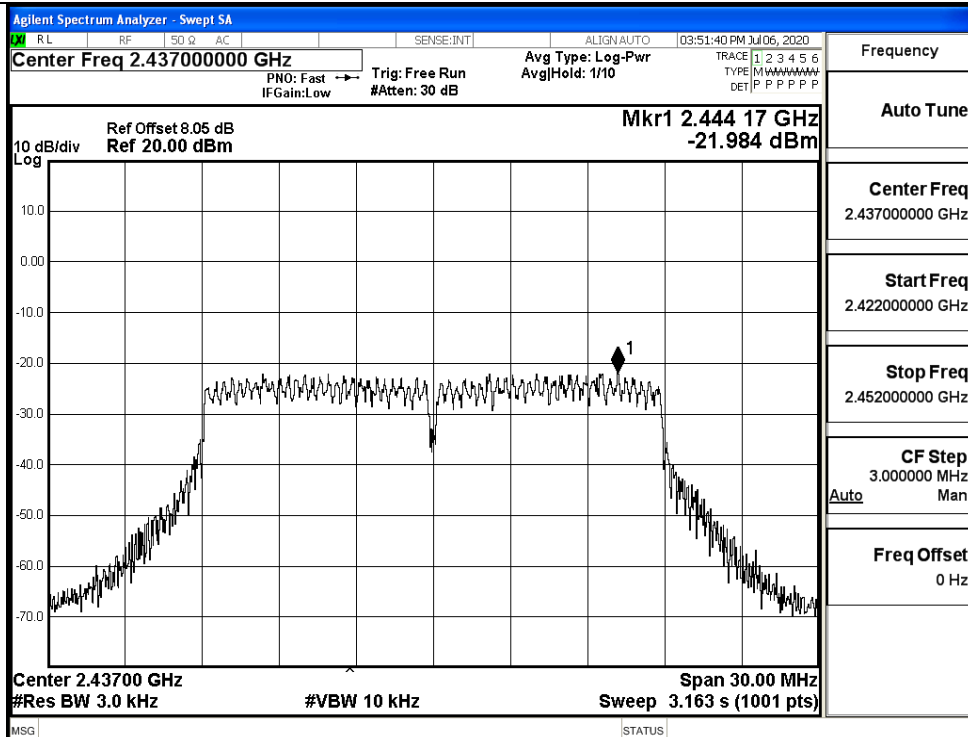
11G/HCH



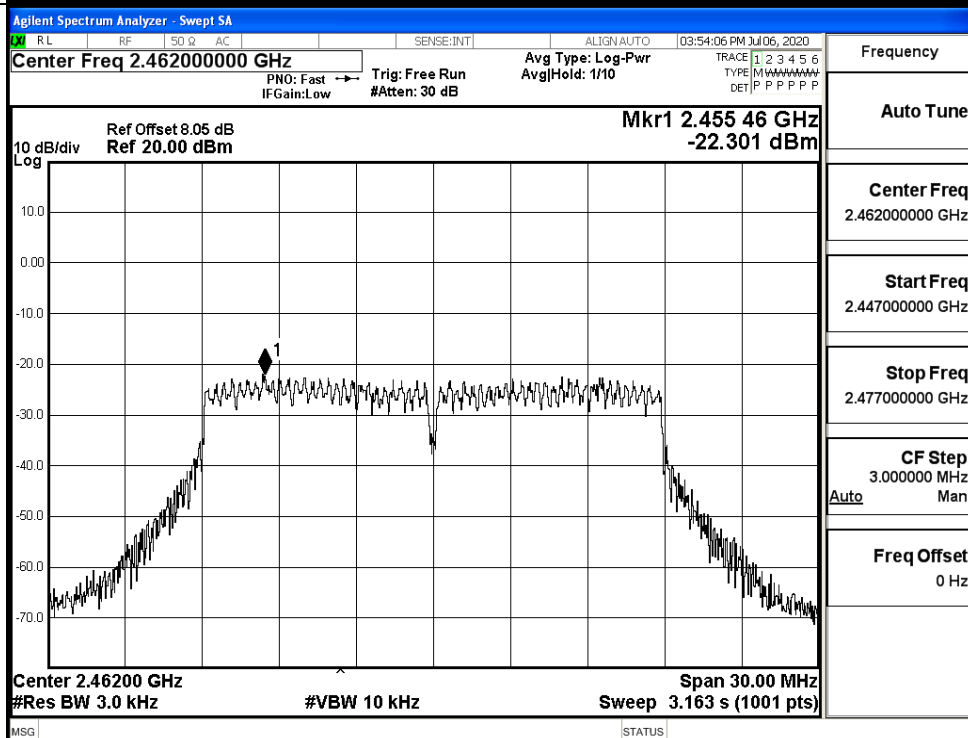
11N20SISO/LCH



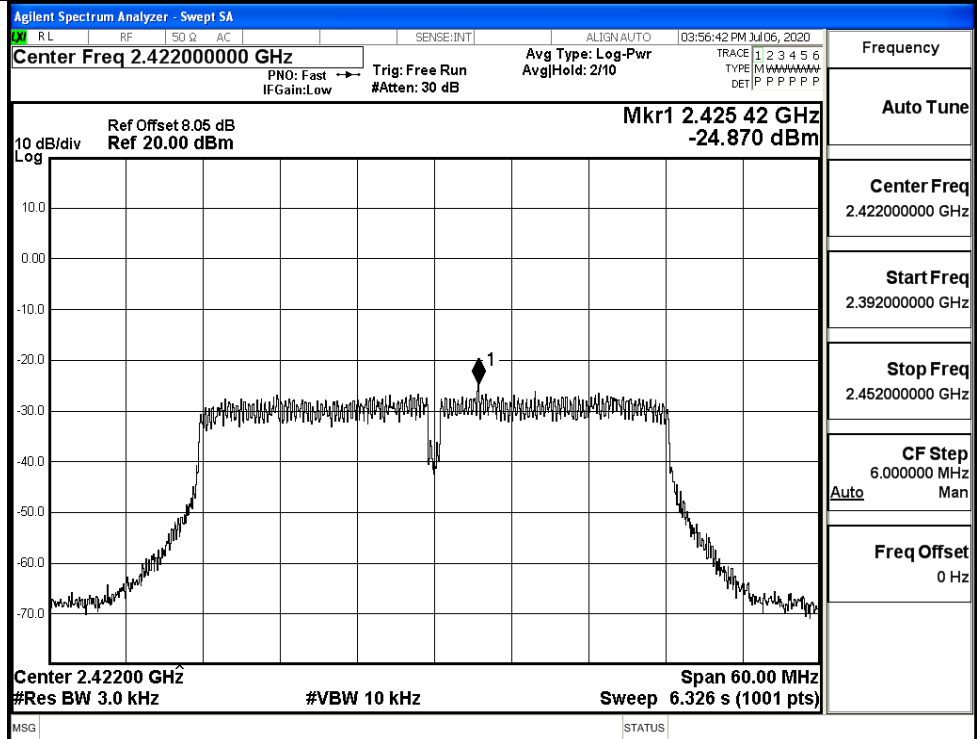
11N20SISO/MCH



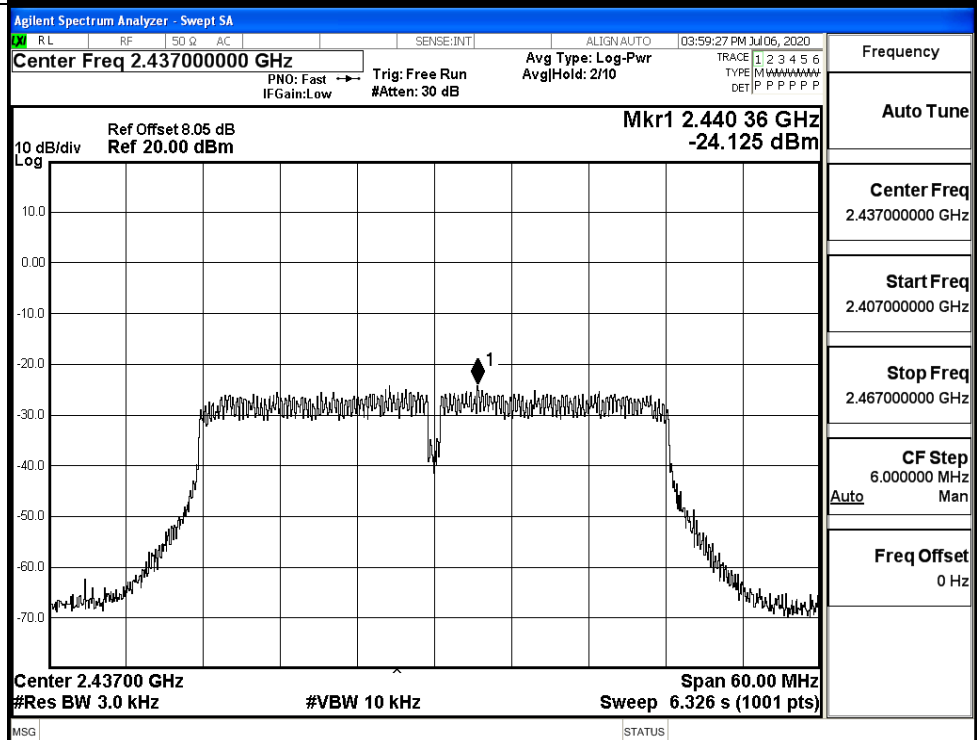
11N20SISO/HCH

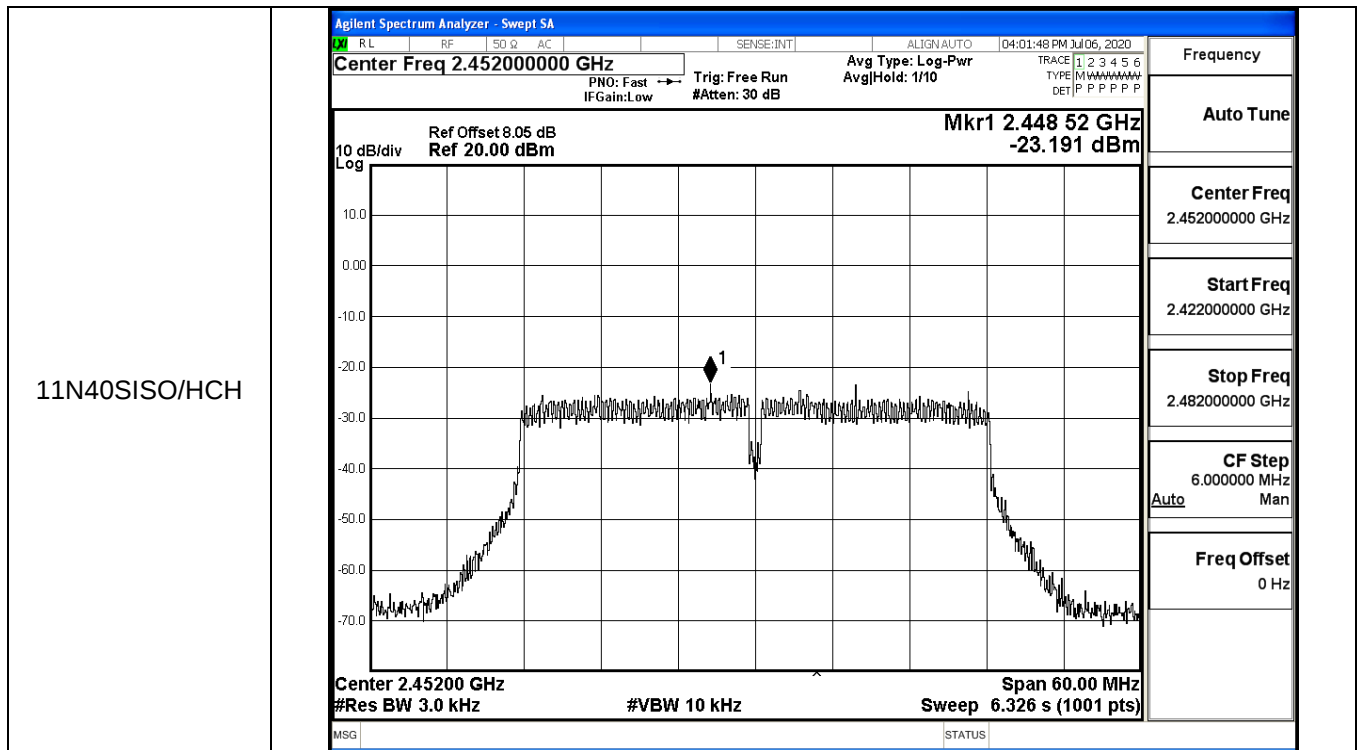


11N40SISO/LCH



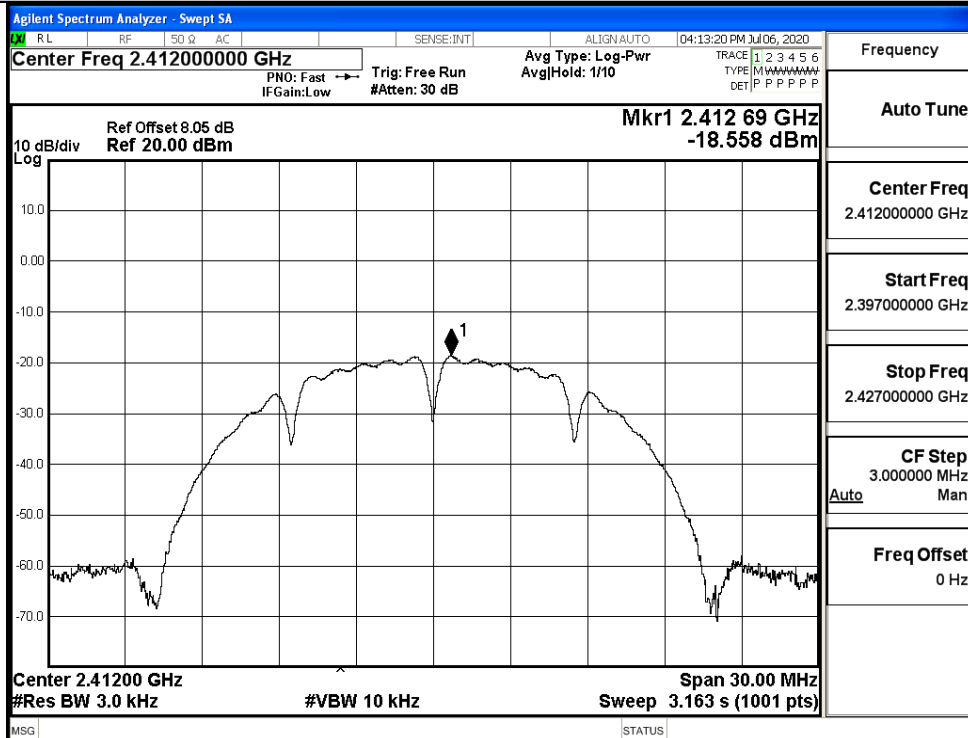
11N40SISO/MCH



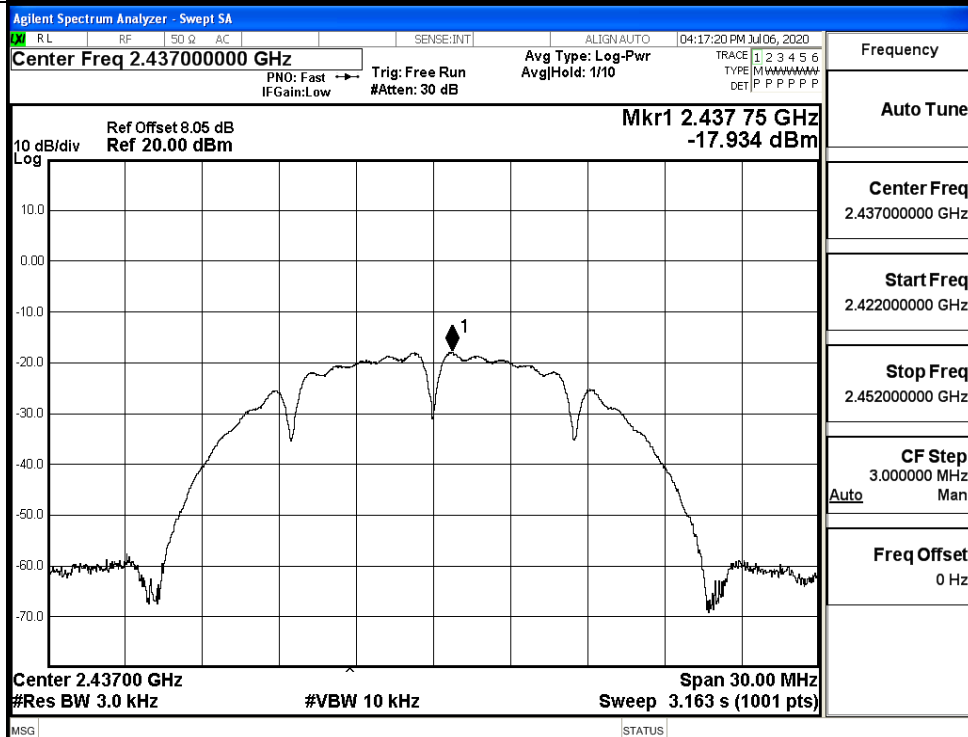


Test Graphs _ Ant 1

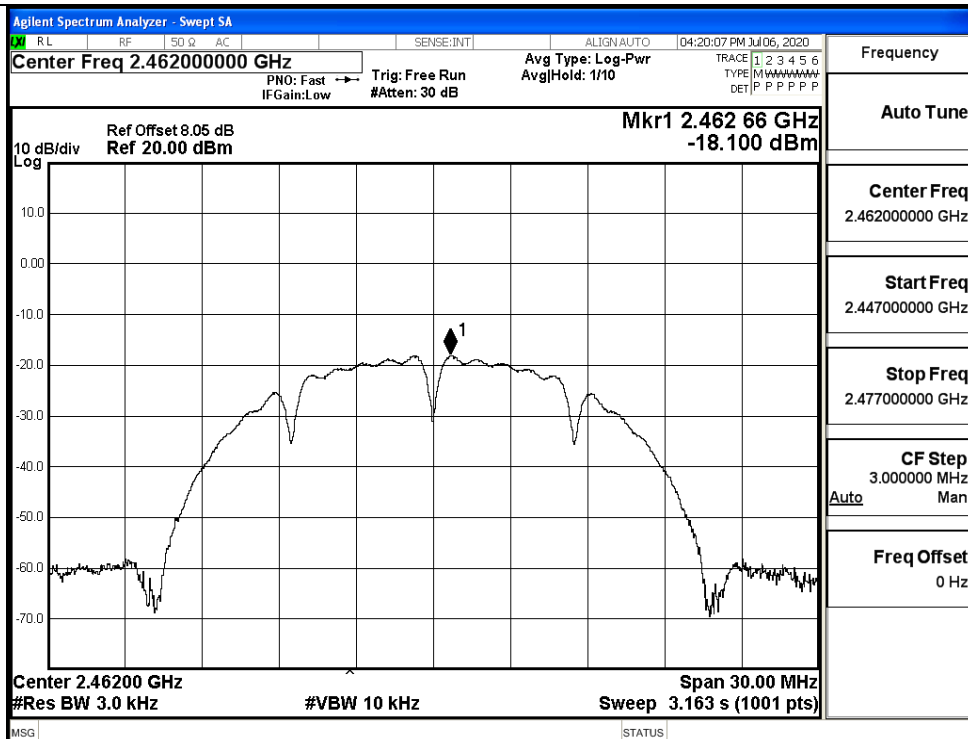
11B/LCH



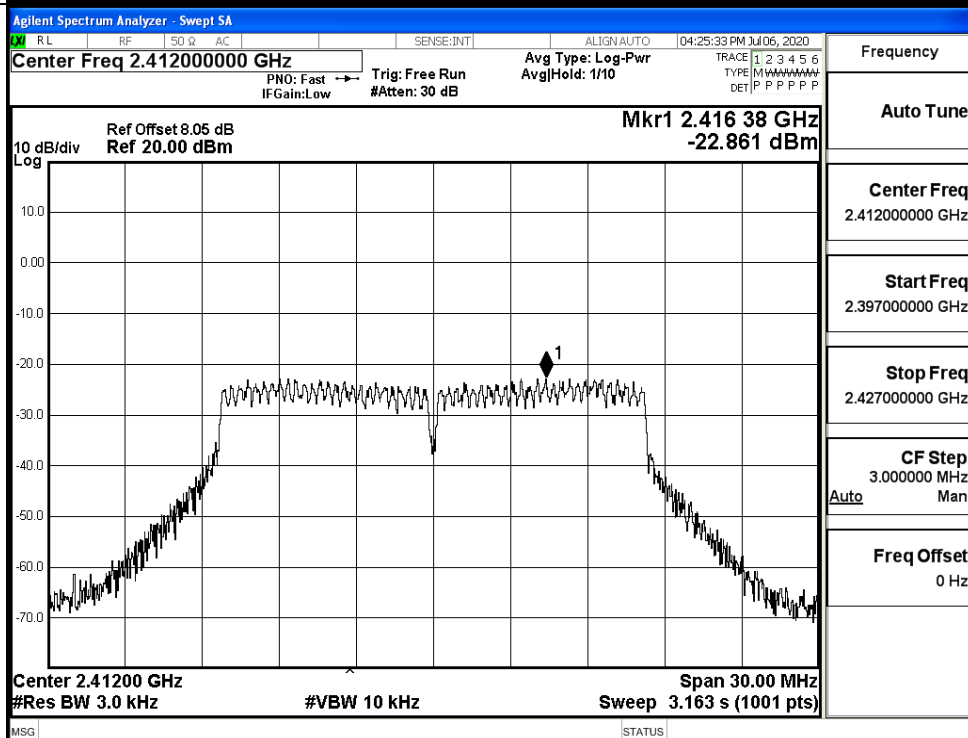
11B/MCH



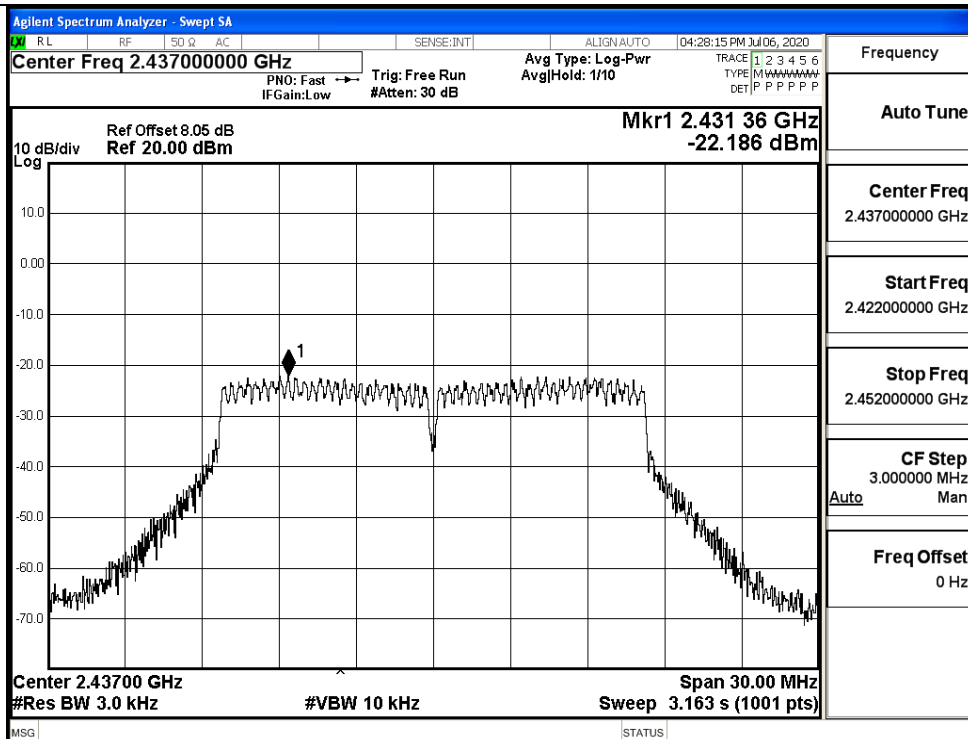
11B/HCH



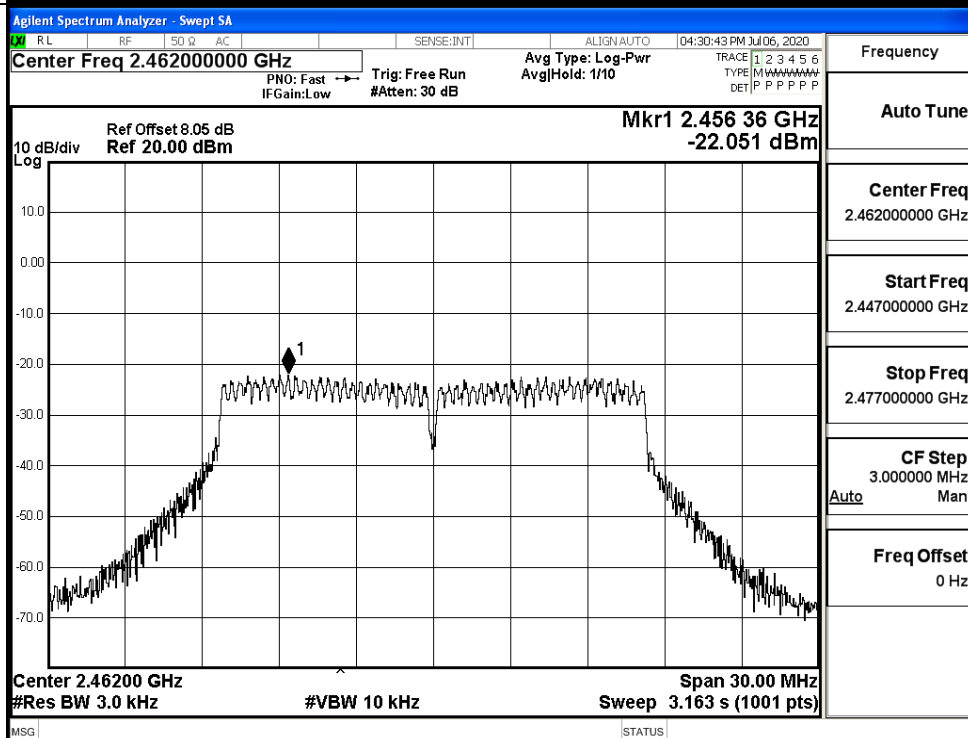
11G/LCH



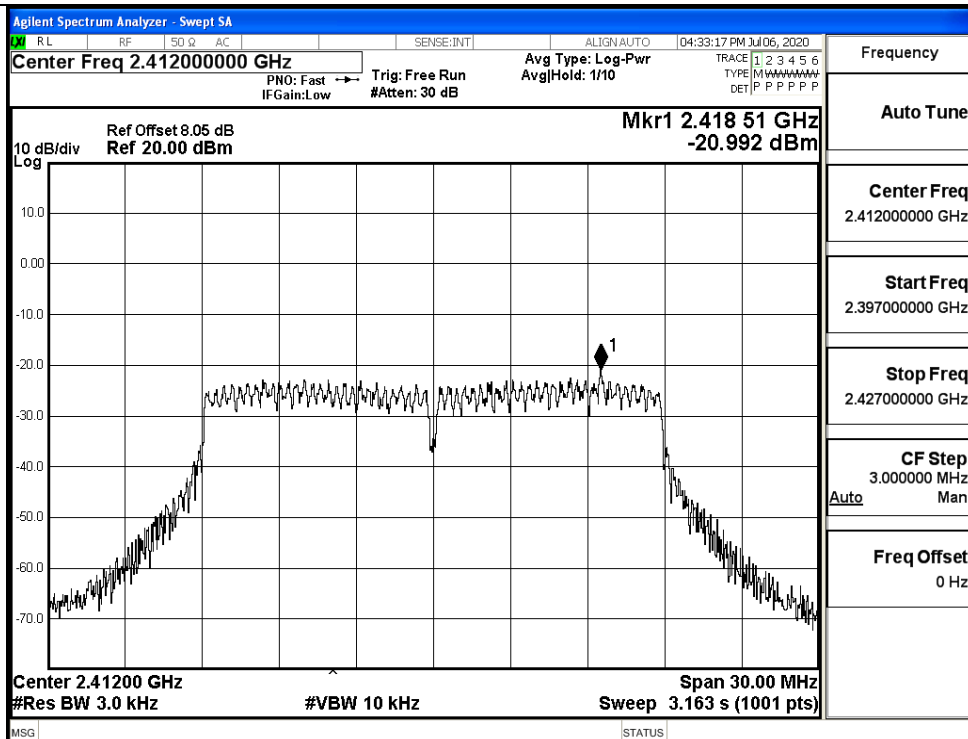
11G/MCH



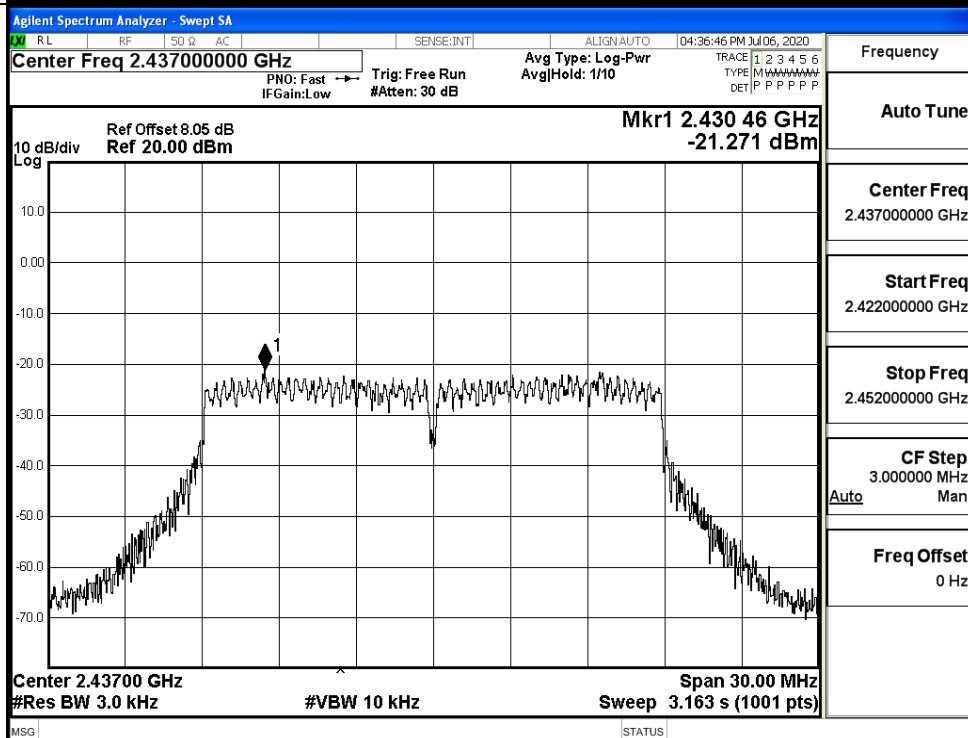
11G/HCH



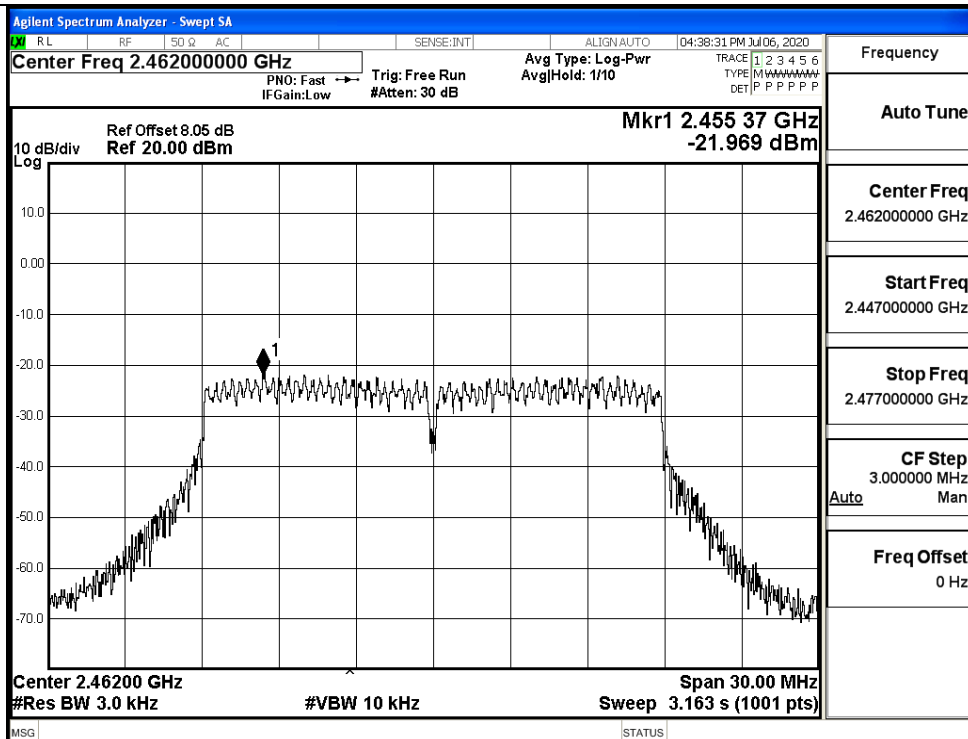
11N20SISO/LCH



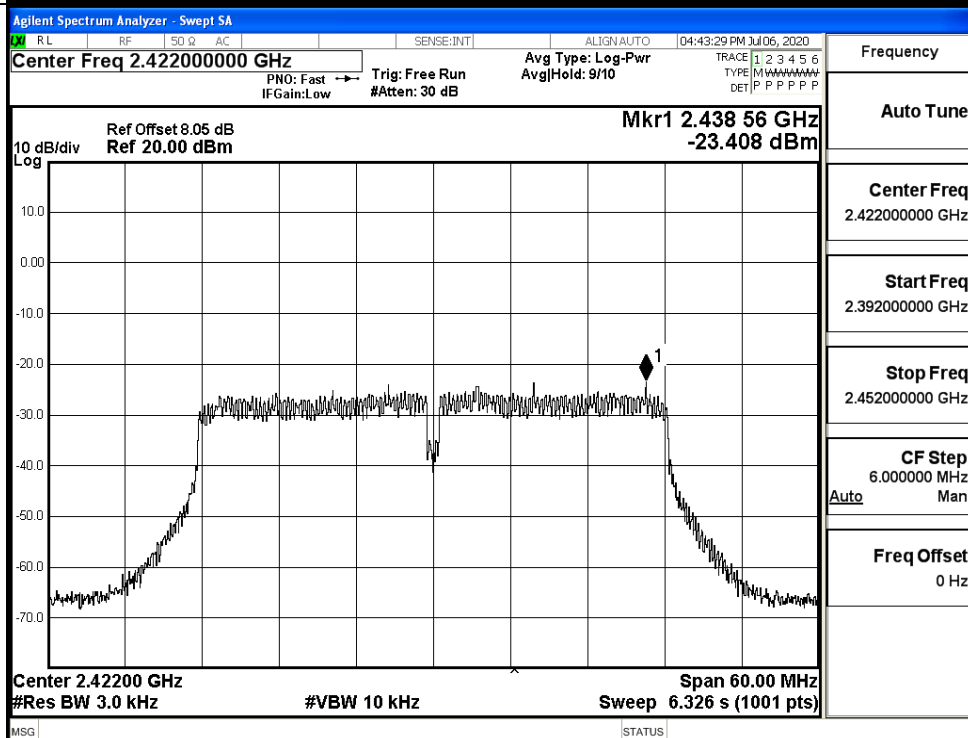
11N20SISO/MCH



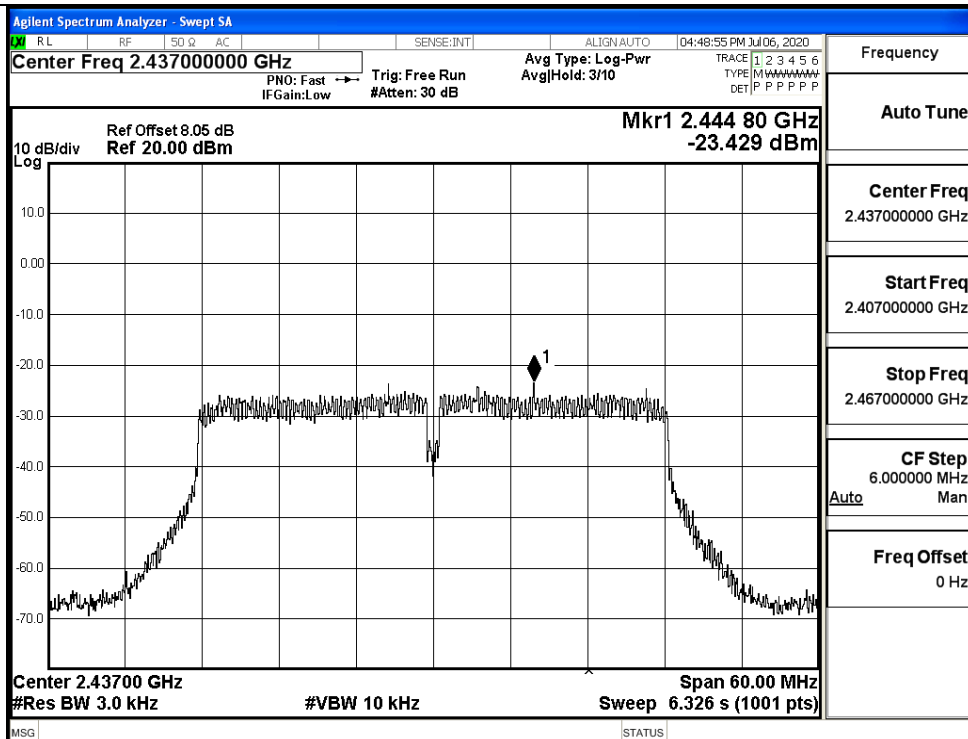
11N20SISO/HCH



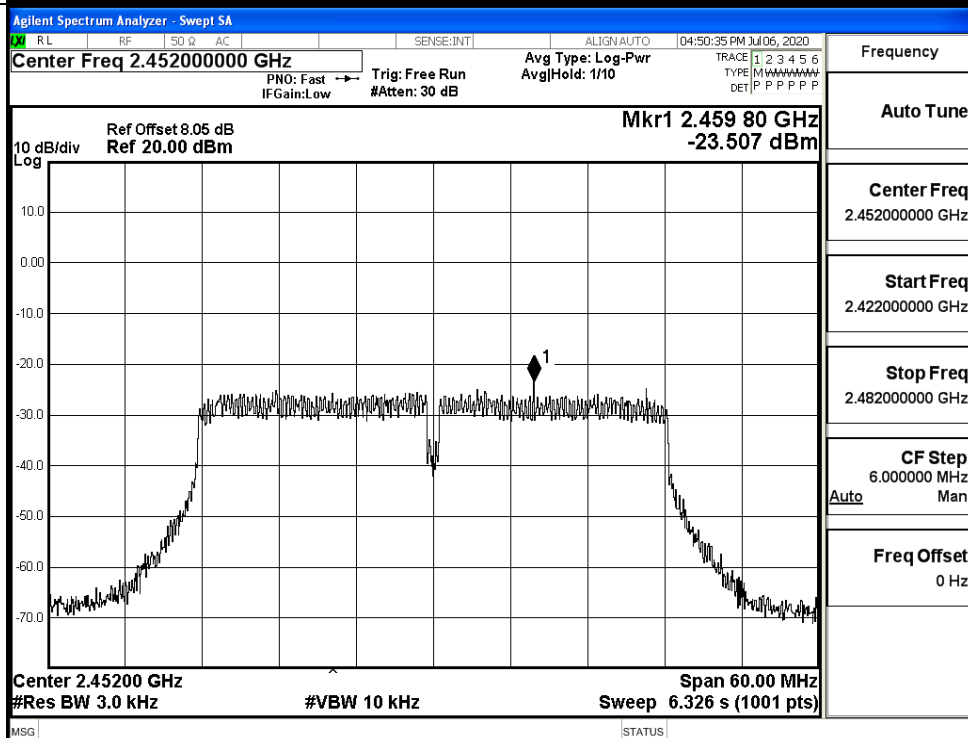
11N40SISO/LCH



11N40SISO/MCH



11N40SISO/HCH

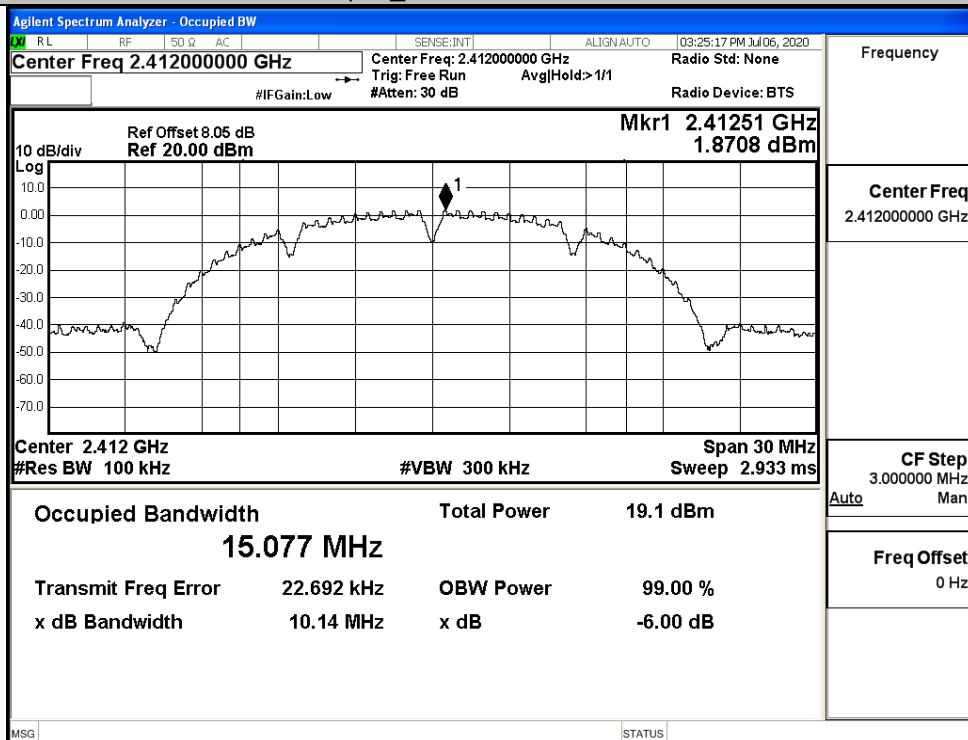


A.4 6dB Bandwidth

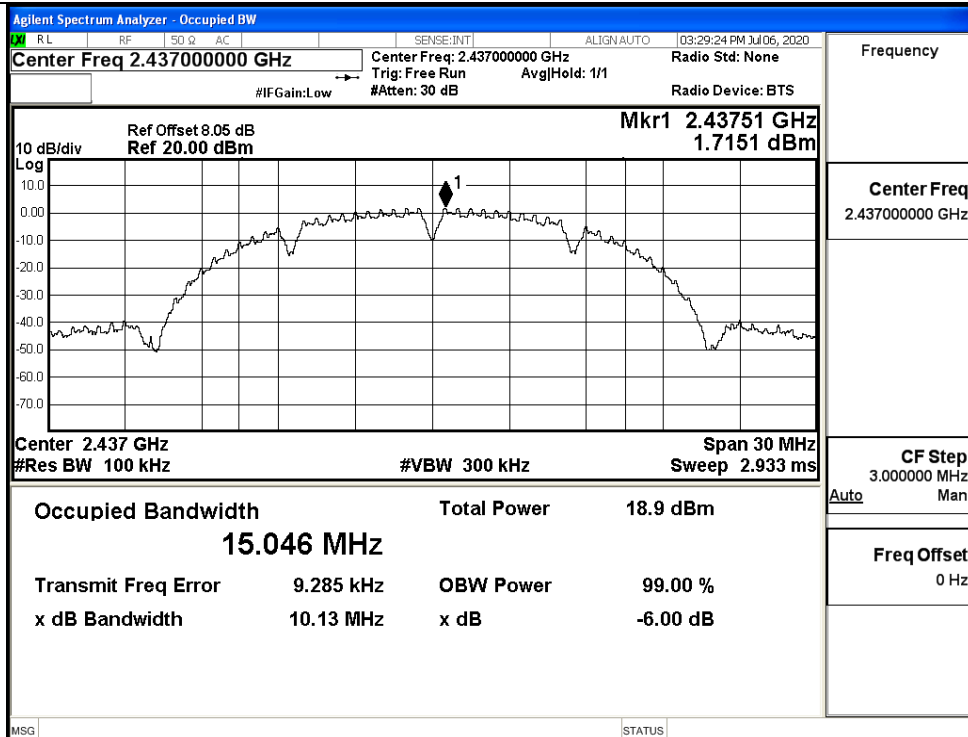
Mode	Channel	6dB Bandwidth [MHz]		Limit [MHz]	Verdict
		Ant 0	Ant 1		
11B	LCH	10.14	10.14	≥ 0.5	PASS
	MCH	10.13	10.13	≥ 0.5	PASS
	HCH	10.14	10.13	≥ 0.5	PASS
11G	LCH	16.54	16.56	≥ 0.5	PASS
	MCH	16.55	16.56	≥ 0.5	PASS
	HCH	16.56	16.57	≥ 0.5	PASS
11N20SISO	LCH	17.76	17.75	≥ 0.5	PASS
	MCH	17.71	17.71	≥ 0.5	PASS
	HCH	17.71	17.69	≥ 0.5	PASS
11N40SISO	LCH	36.50	36.48	≥ 0.5	PASS
	MCH	36.50	36.46	≥ 0.5	PASS
	HCH	36.47	36.50	≥ 0.5	PASS

Test Graphs_ Ant 0

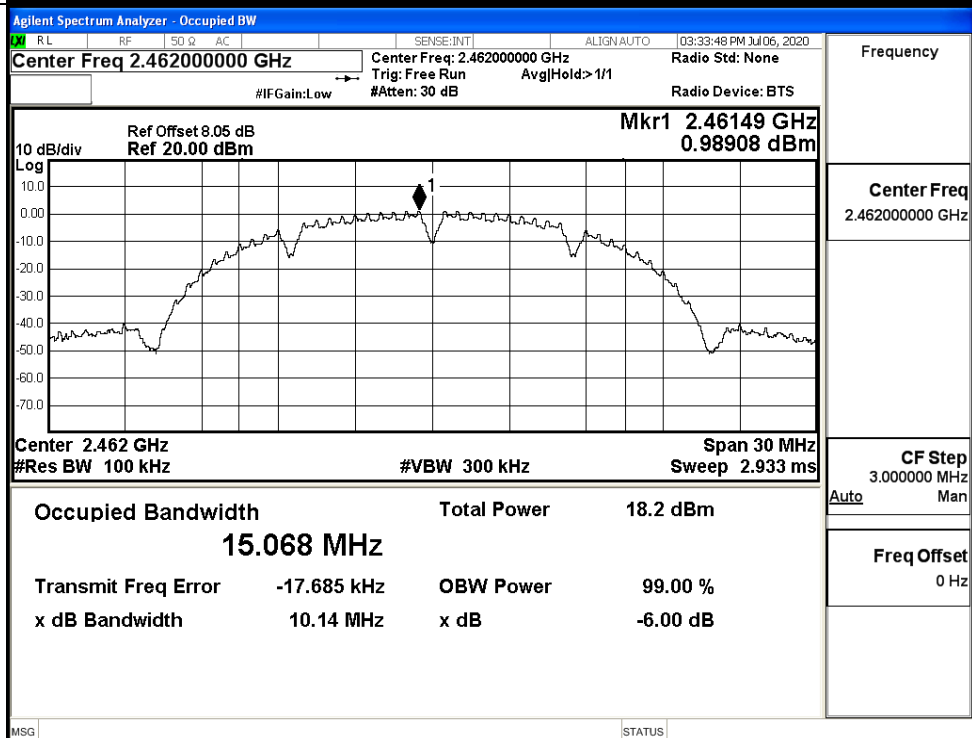
11B/LCH



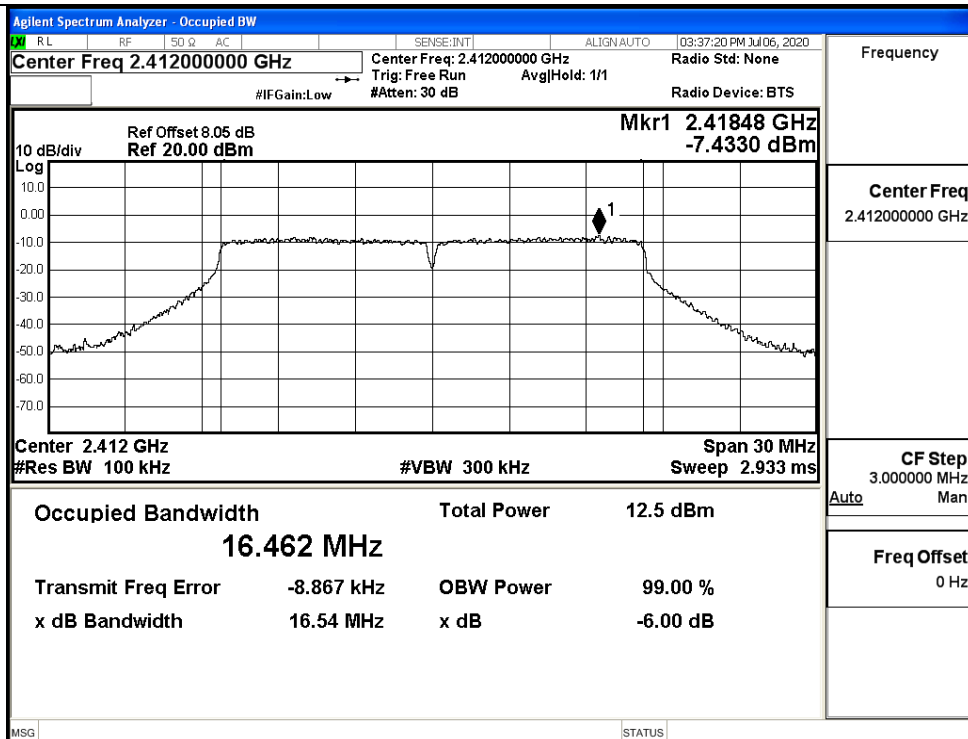
11B/MCH



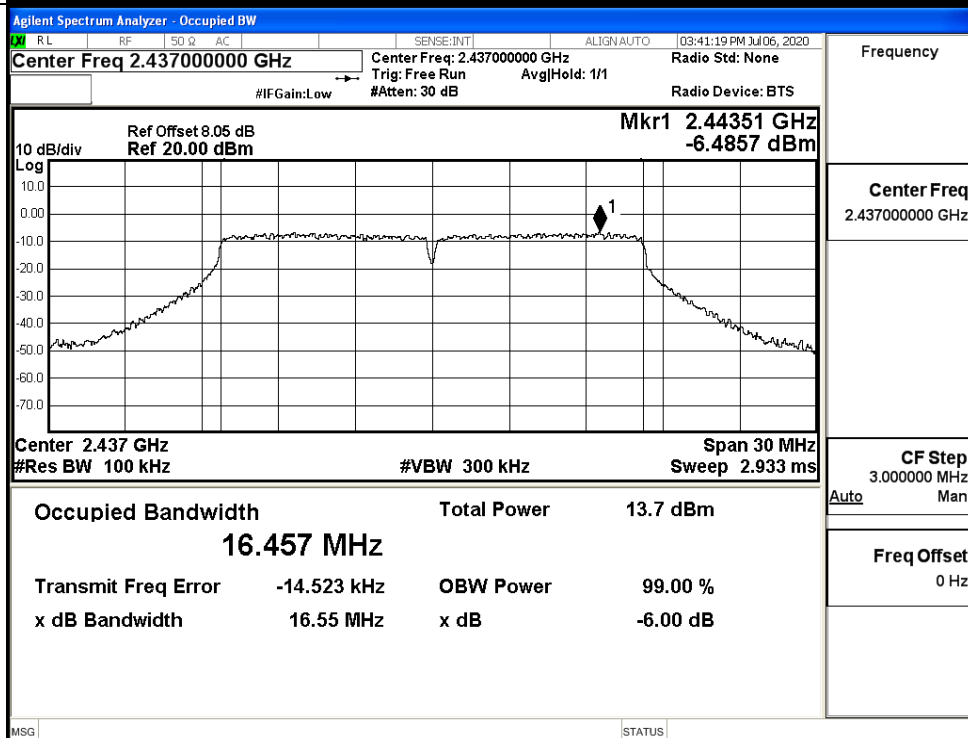
11B/HCH



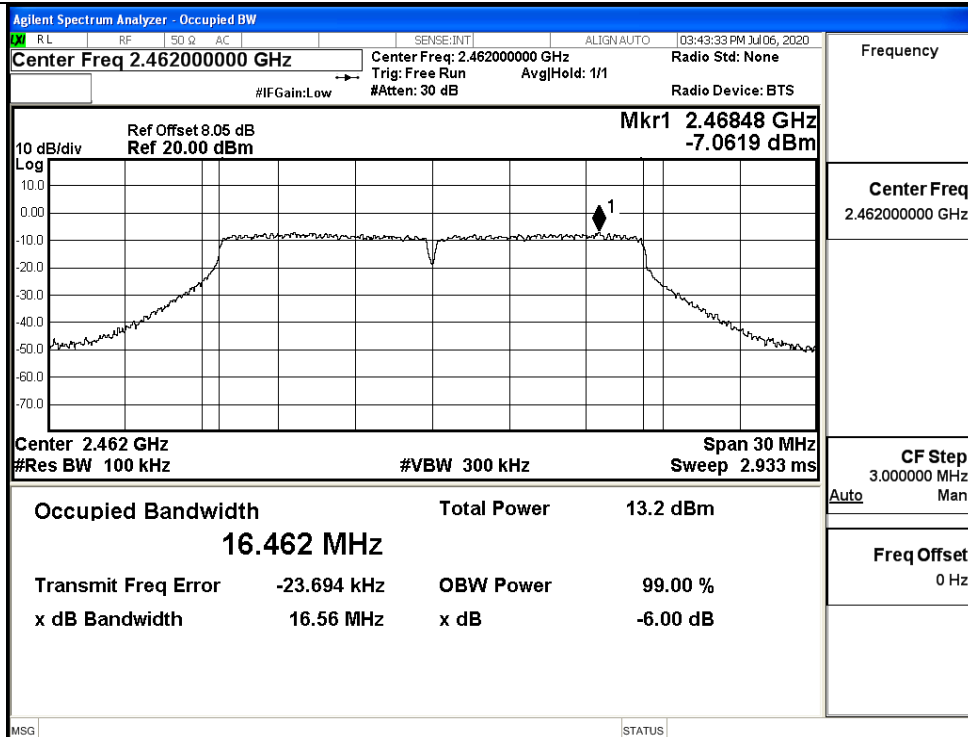
11G/LCH



11G/MCH



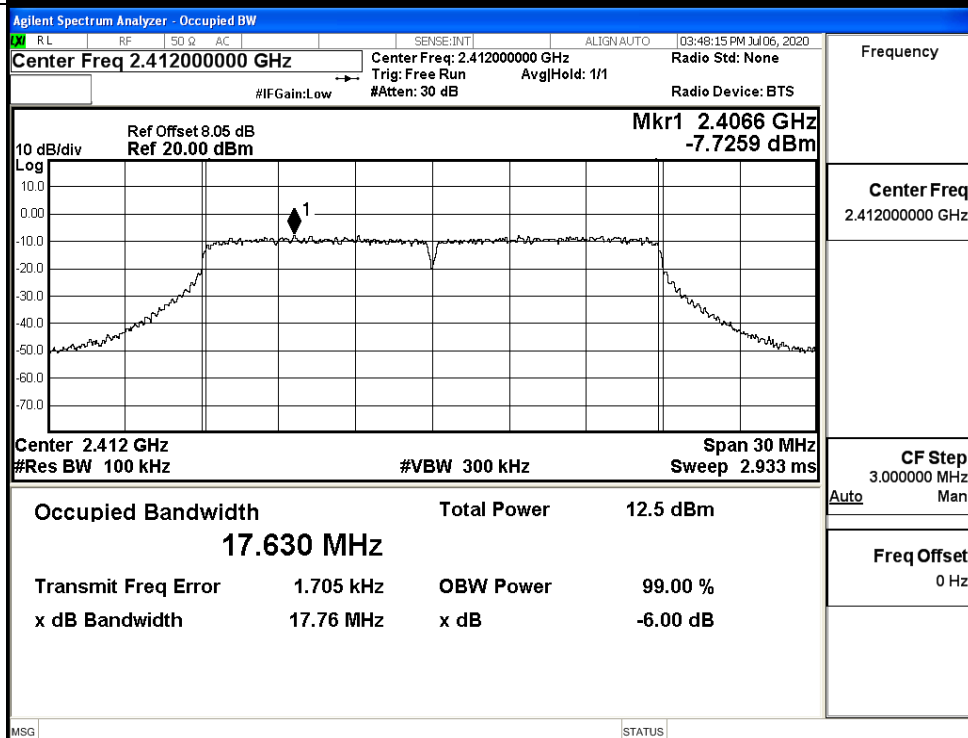
11G/HCH



Frequency

Center Freq
2.462000000 GHzCF Step
3.000000 MHz
Auto ManFreq Offset
0 Hz

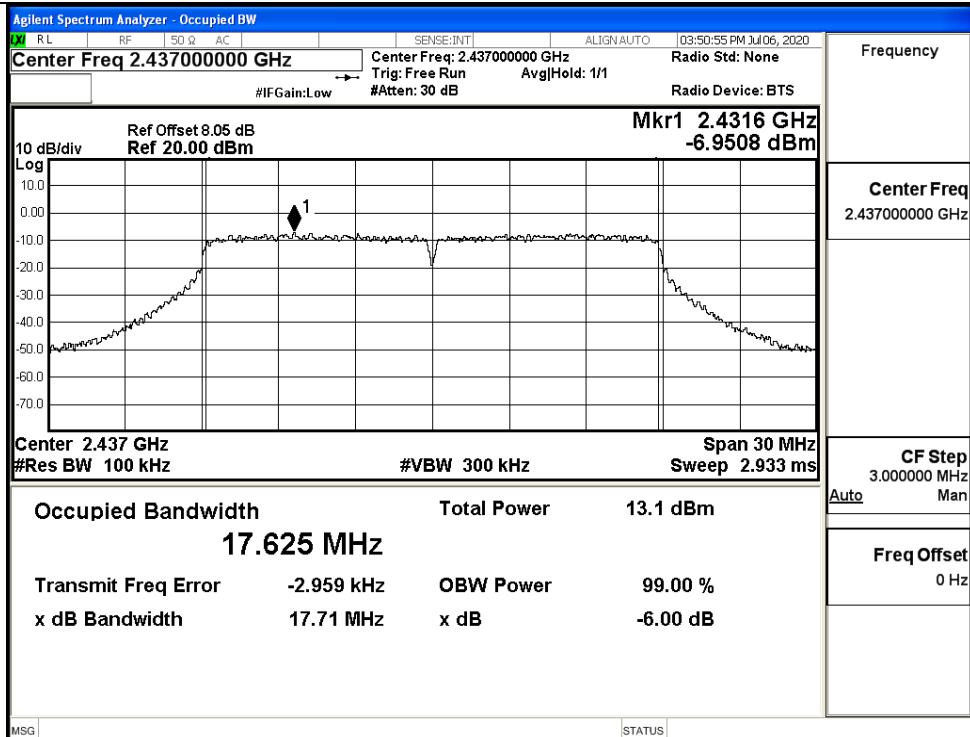
11N20SISO/LCH



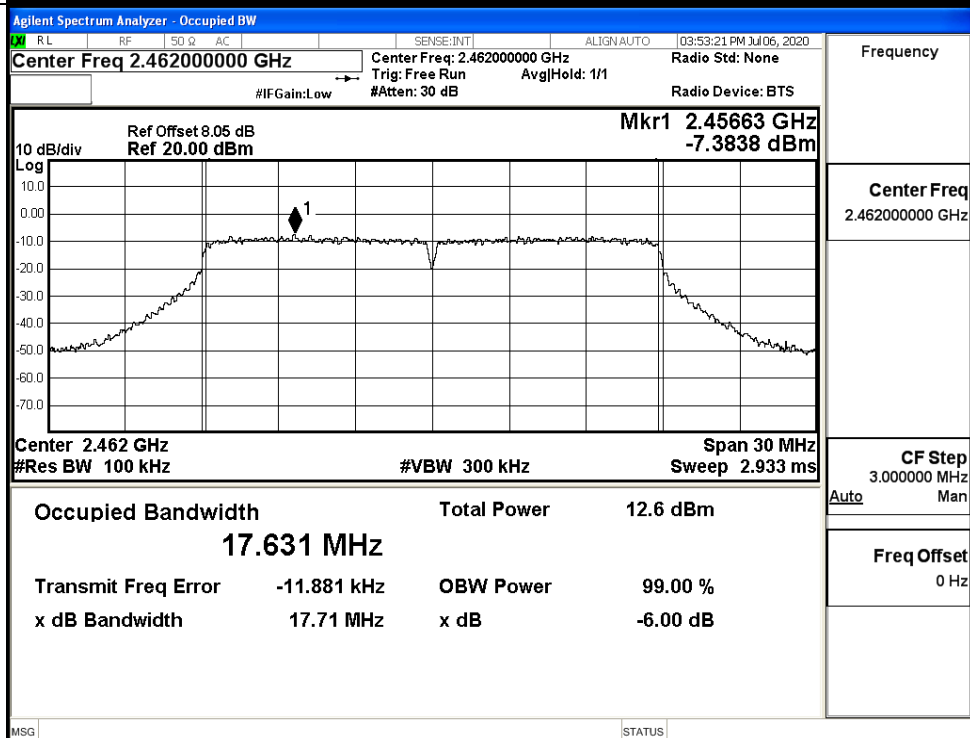
Frequency

Center Freq
2.412000000 GHzCF Step
3.000000 MHz
Auto ManFreq Offset
0 Hz

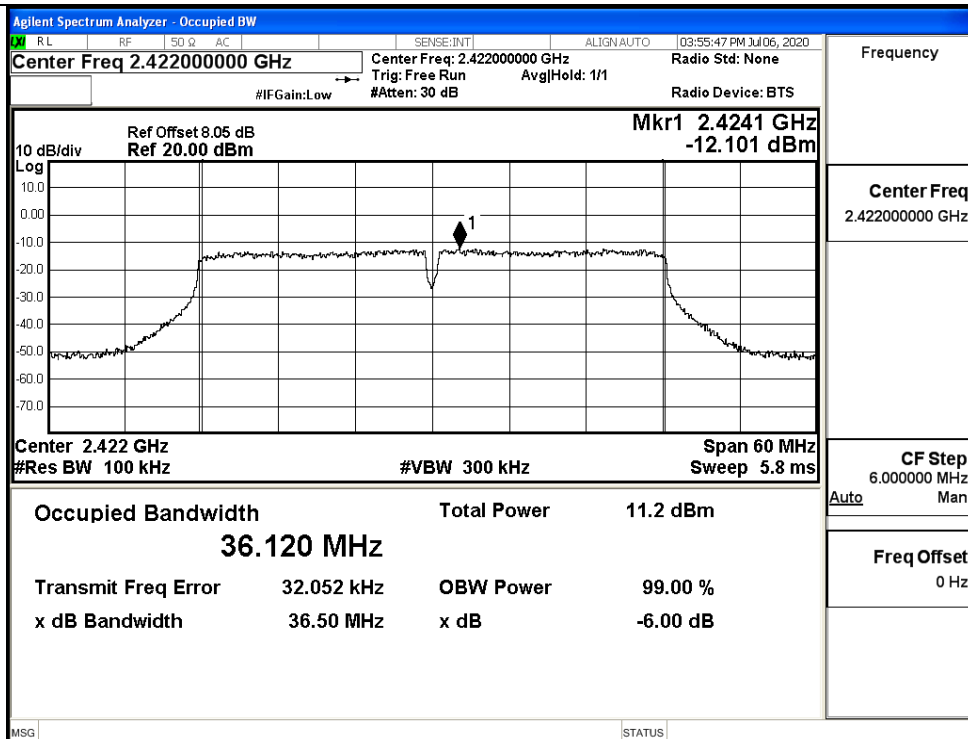
11N20SISO/MCH



11N20SISO/HCH



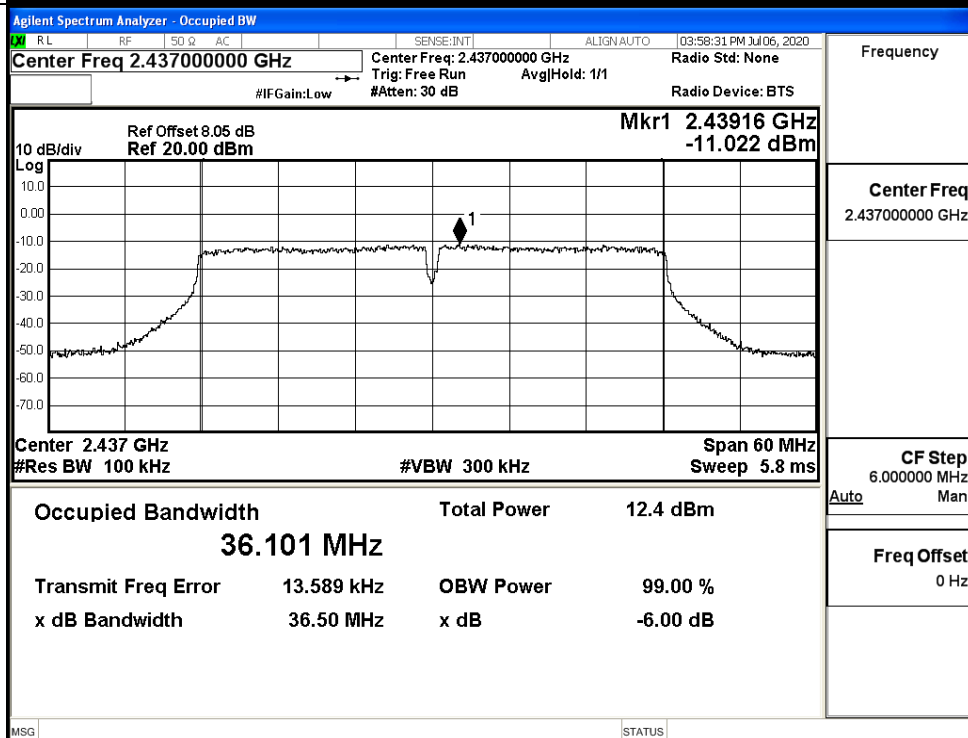
11N40SISO/LCH



Frequency

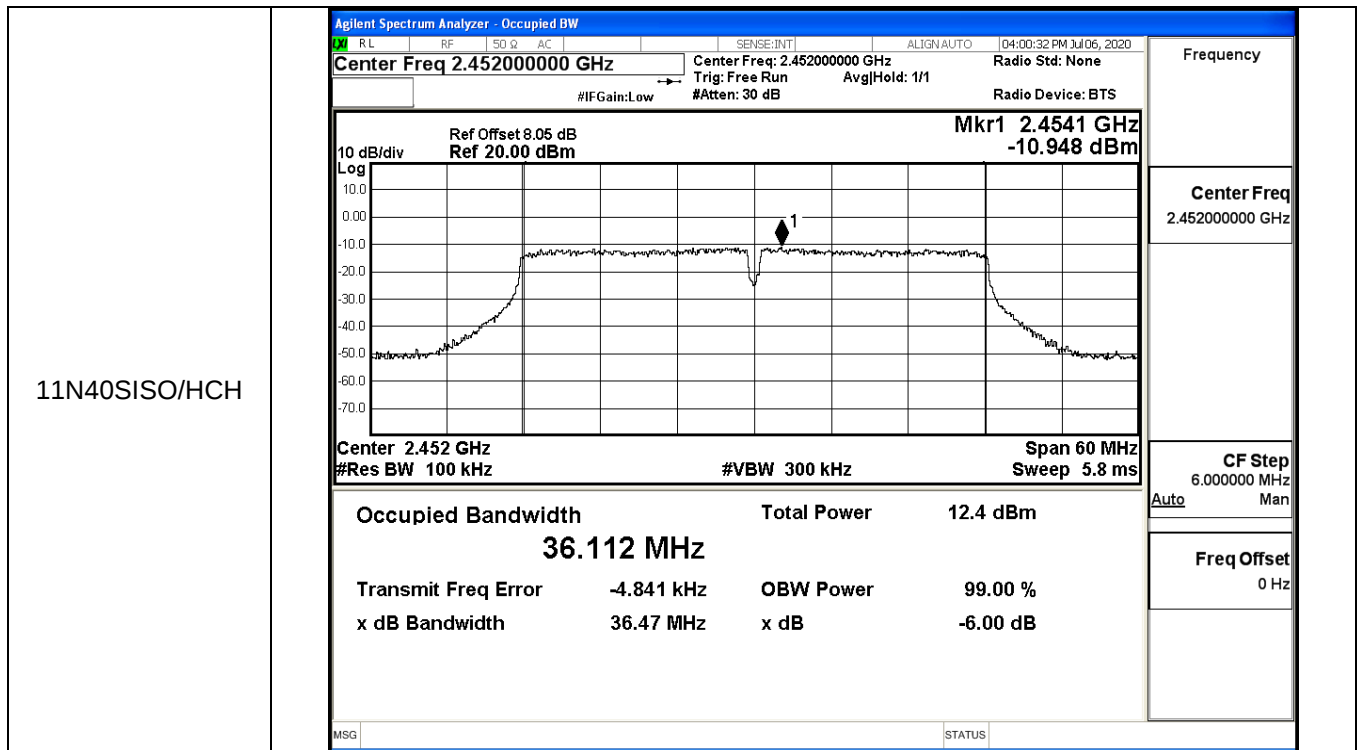
Center Freq
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6.000000 MHz
Auto ManFreq Offset
0 Hz

11N40SISO/MCH



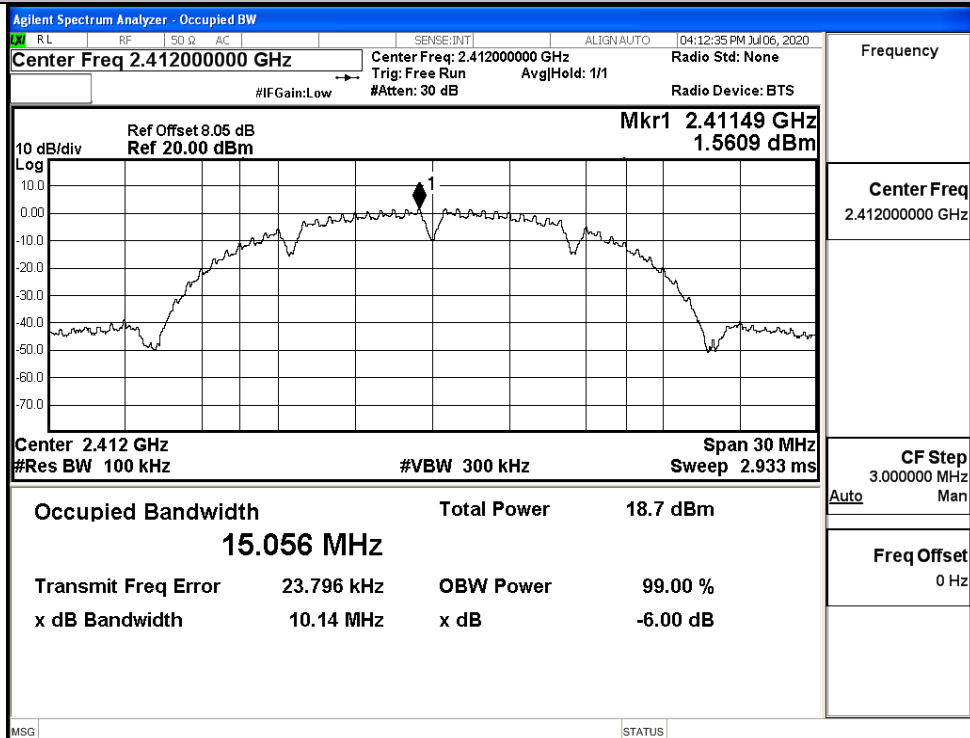
Frequency

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



Test Graphs_ Ant 1

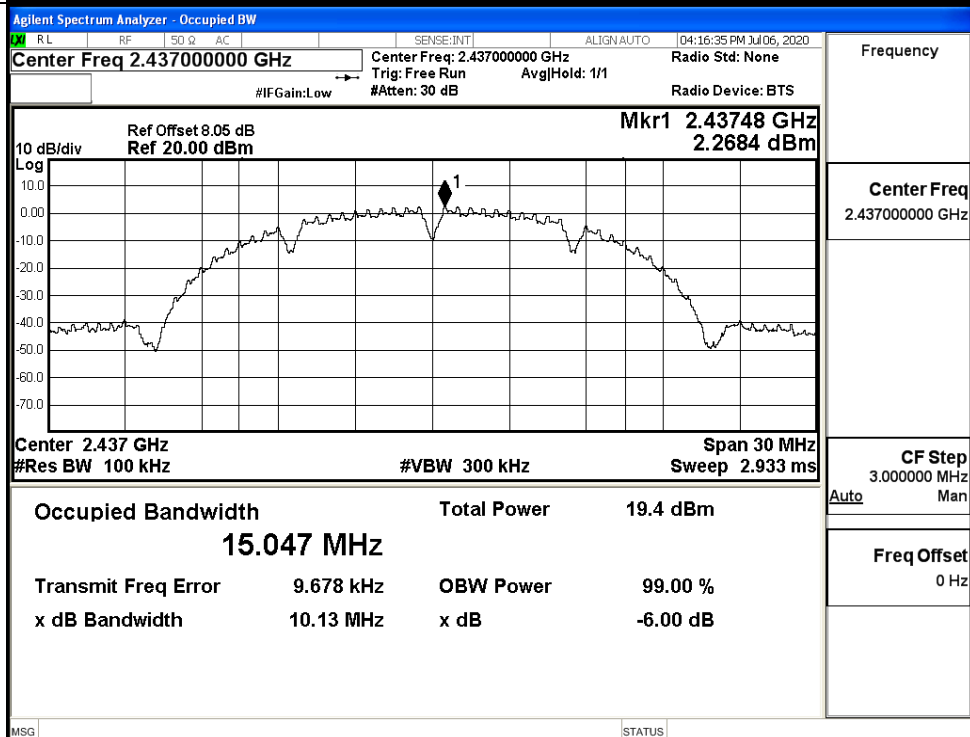
11B/LCH



Frequency

Center Freq
2.412000000 GHzCF Step
3.000000 MHz
Auto ManFreq Offset
0 Hz

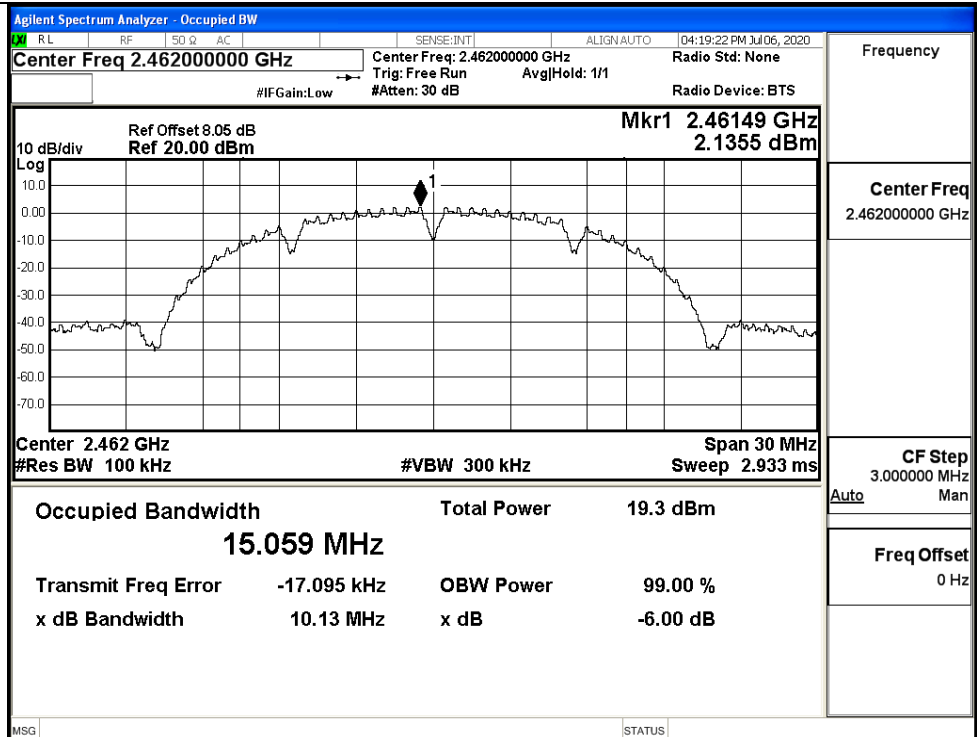
11B/MCH



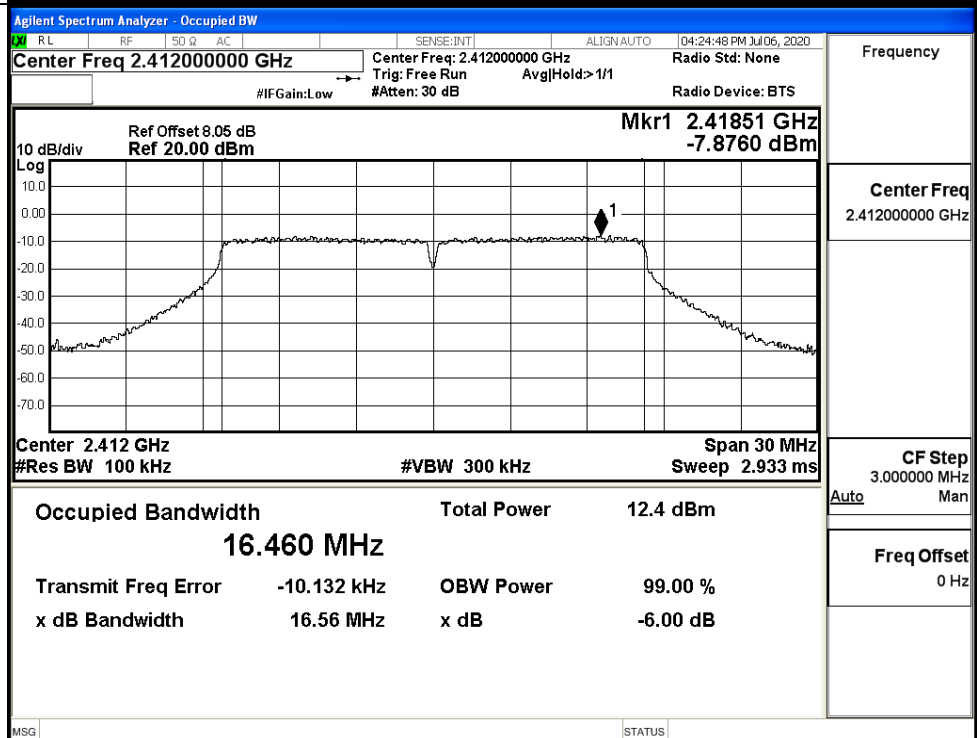
Frequency

Center Freq
2.437000000 GHzCF Step
3.000000 MHz
Auto ManFreq Offset
0 Hz

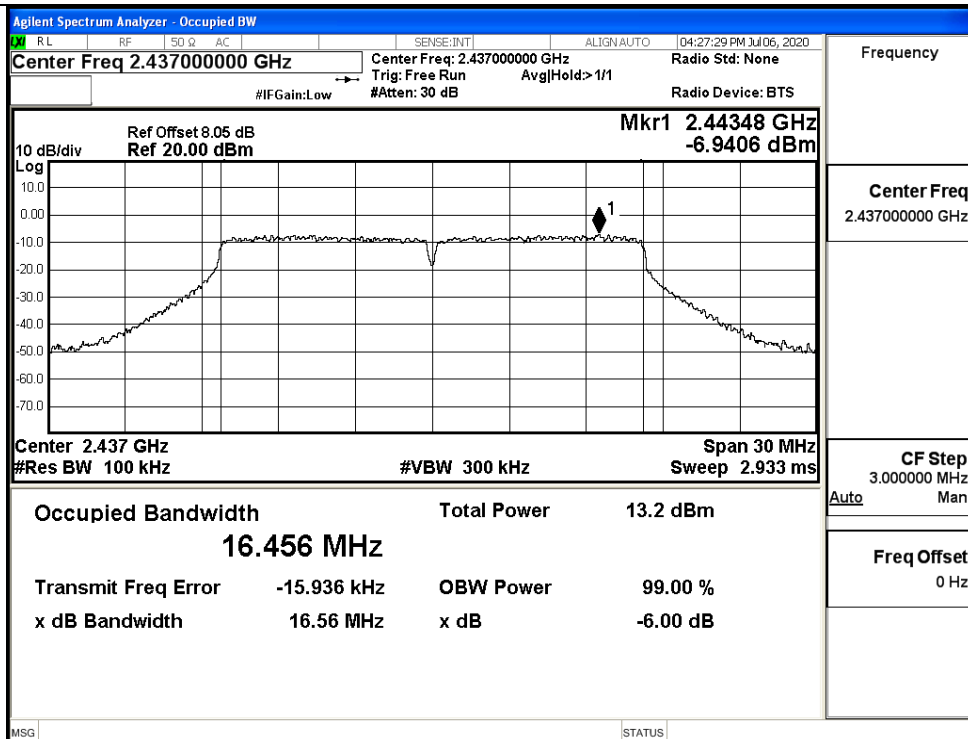
11B/HCH



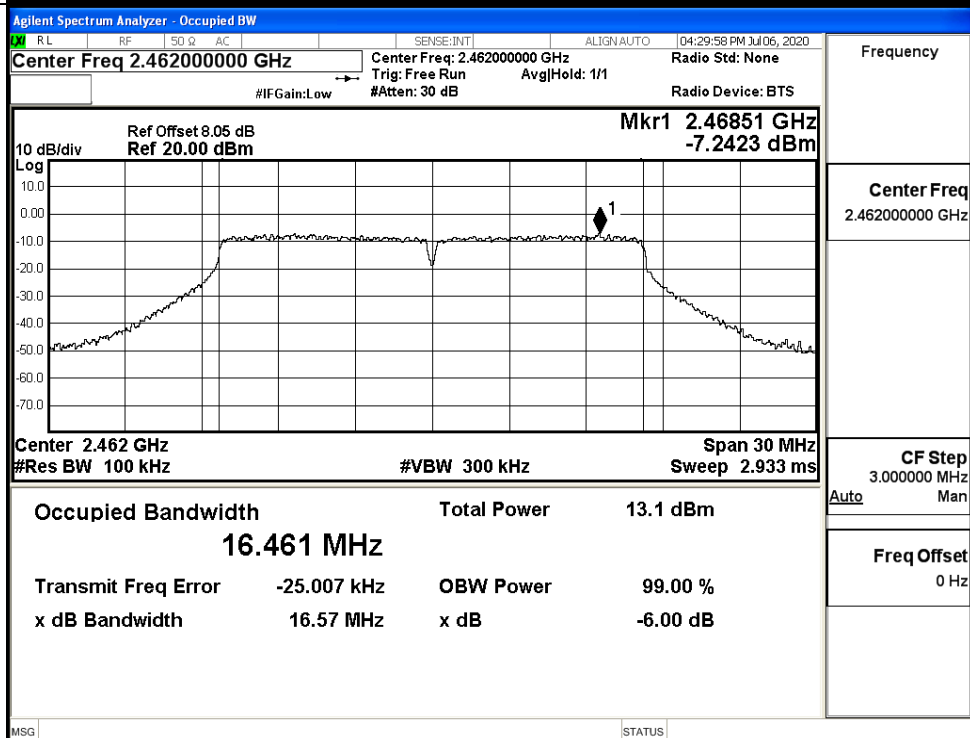
11G/LCH



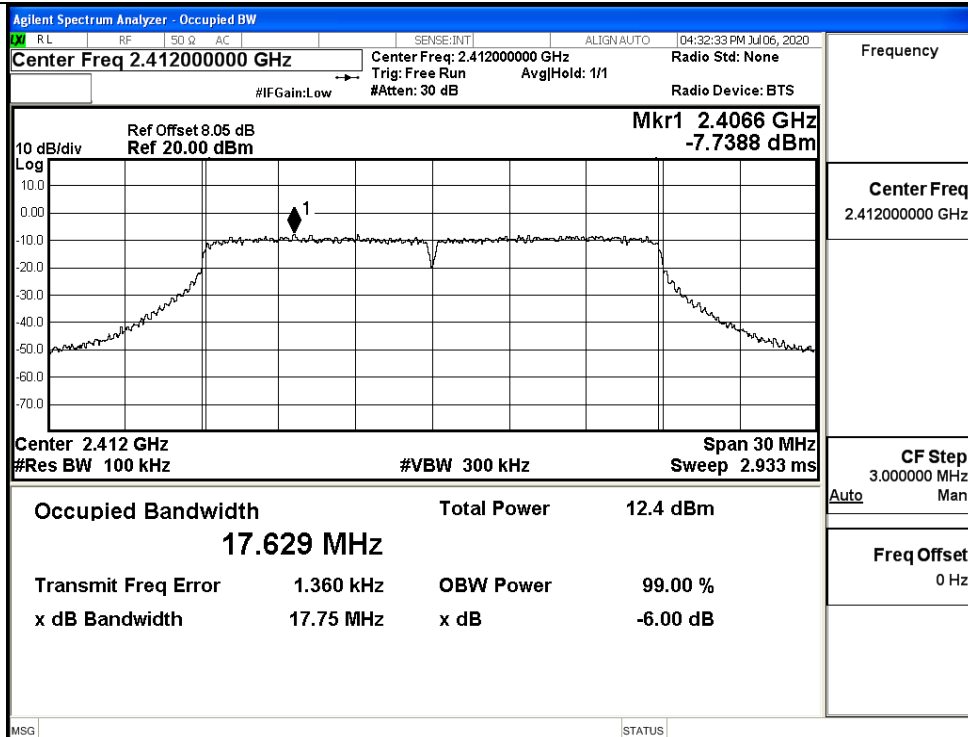
11G/MCH



11G/HCH



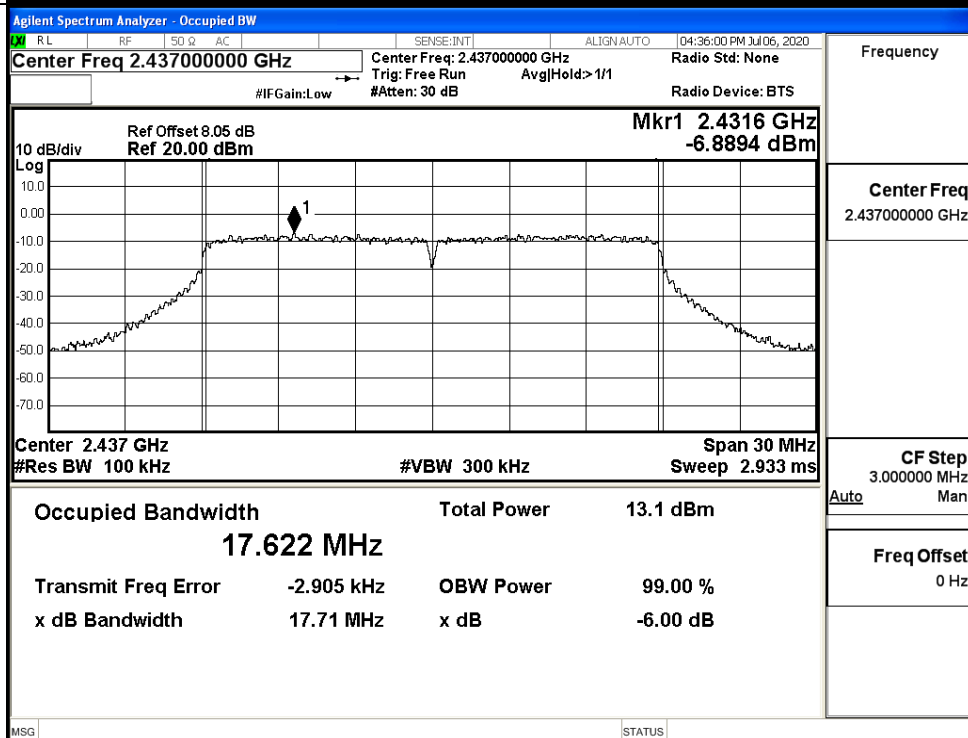
11N20SISO/LCH



Frequency

Center Freq
2.412000000 GHzCF Step
3.000000 MHz
Auto ManFreq Offset
0 Hz

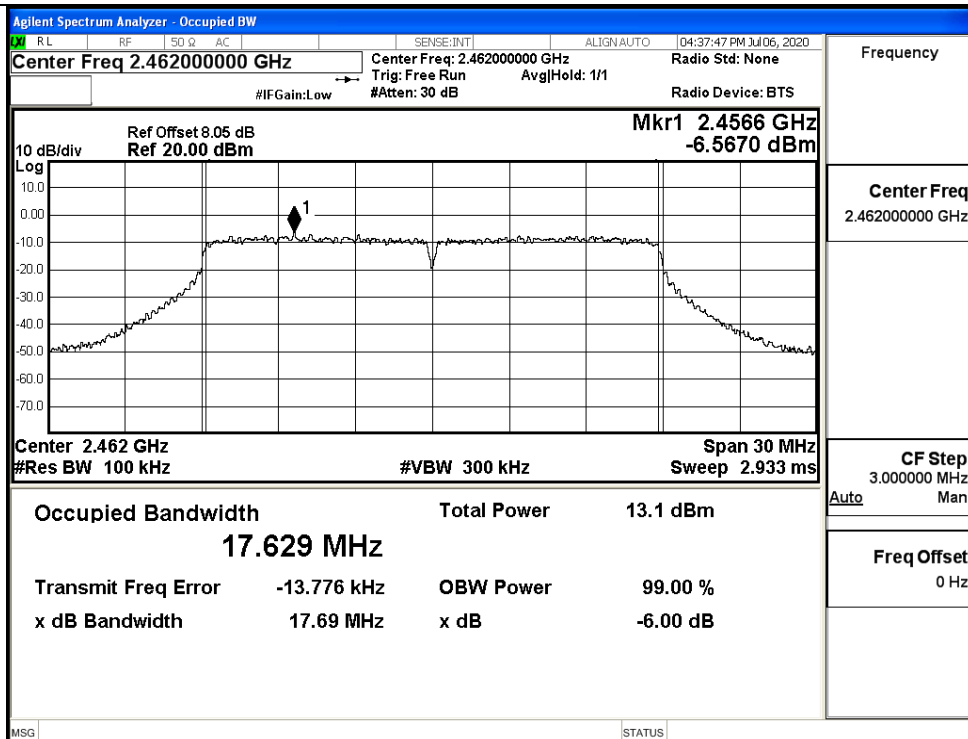
11N20SISO/MCH



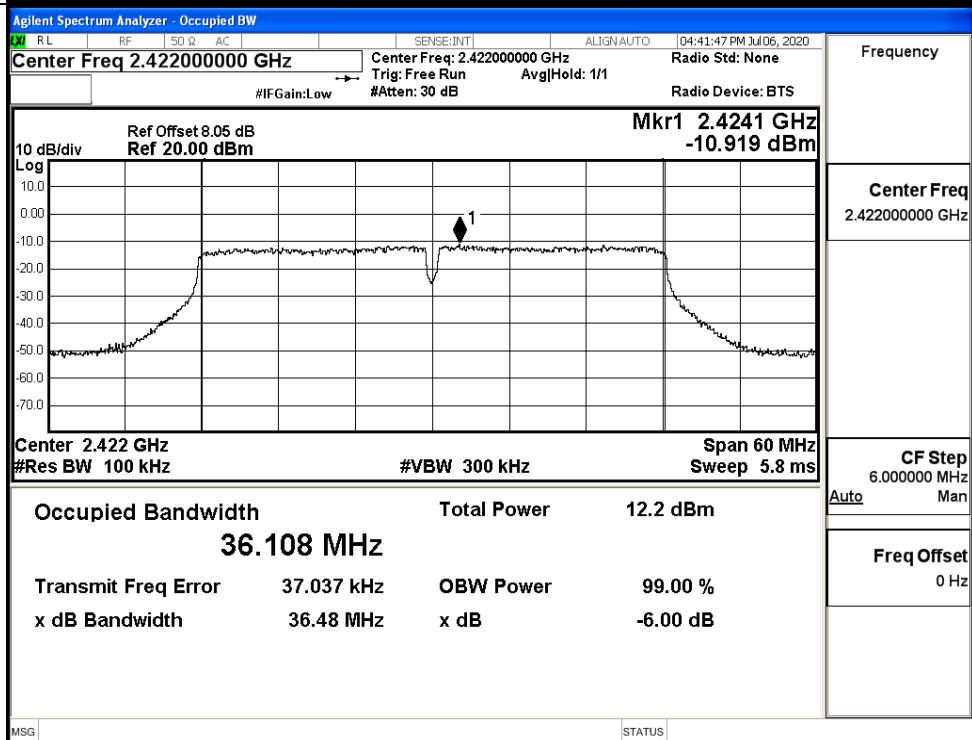
Frequency

Center Freq
2.437000000 GHzCF Step
3.000000 MHz
Auto ManFreq Offset
0 Hz

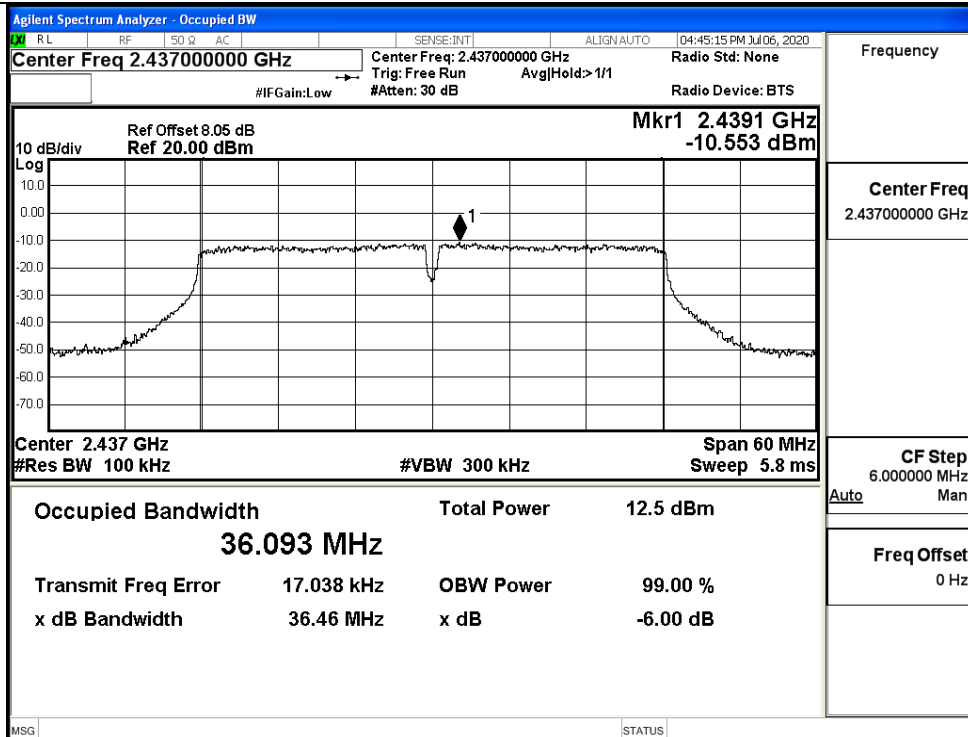
11N20SISO/HCH



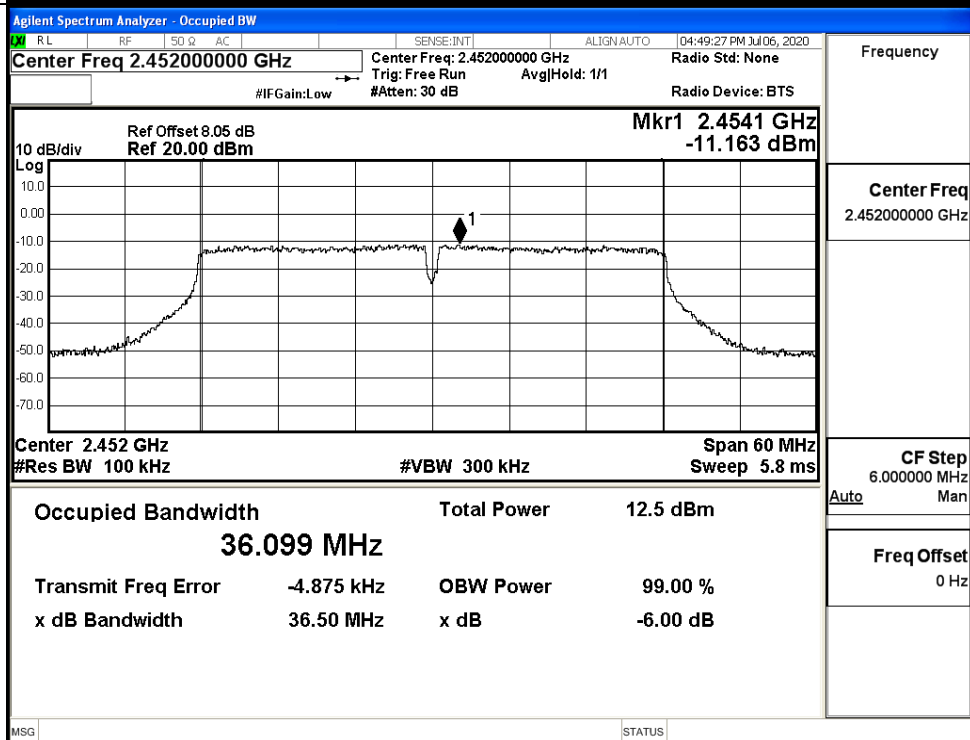
11N40SISO/LCH



11N40SISO/MCH



11N40SISO/HCH



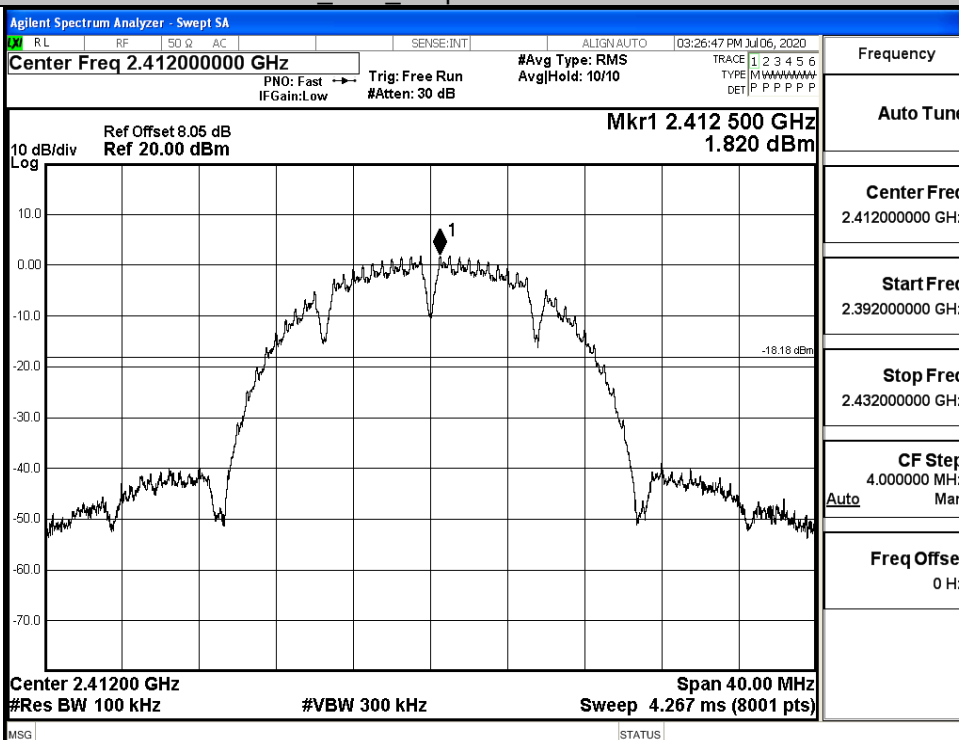
A.5 RF Conducted Spurious Emissions

Ant 0

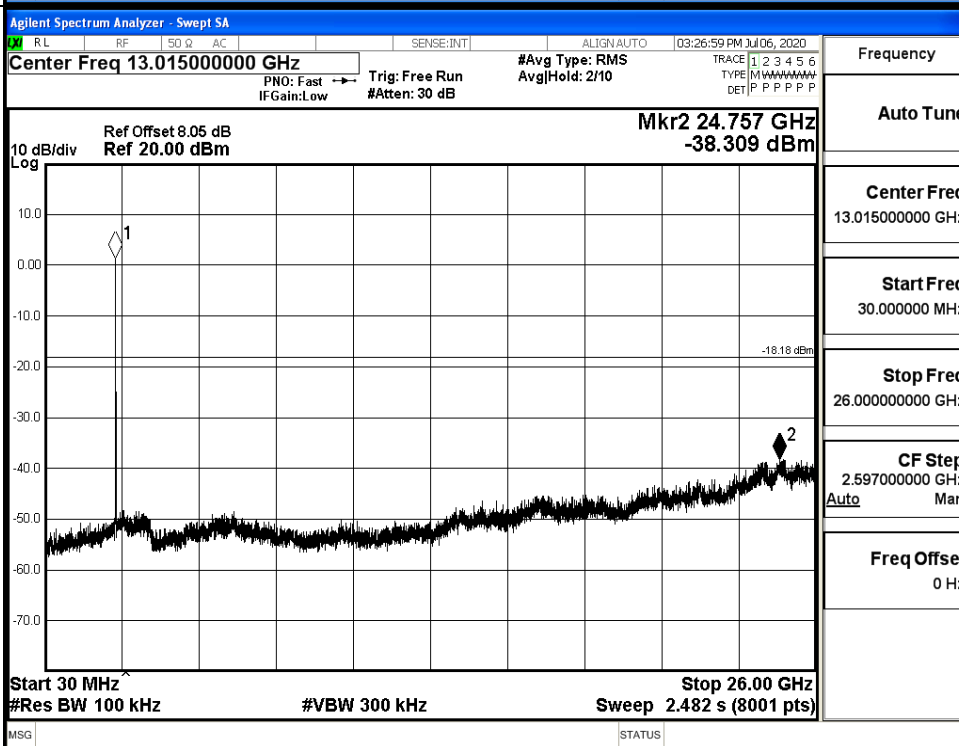
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
11B	LCH	1.82	-38.309	-18.180	PASS
	MCH	1.536	-38.110	-18.464	PASS
	HCH	0.806	-38.475	-19.194	PASS
11G	LCH	-7.631	-37.610	-27.631	PASS
	MCH	-6.576	-38.032	-26.576	PASS
	HCH	-7.243	-37.751	-27.243	PASS
11N20 SISO	LCH	-7.6	-37.737	-27.600	PASS
	MCH	-7.129	-38.675	-27.129	PASS
	HCH	-7.711	-36.876	-27.711	PASS
11N40 SISO	LCH	-12.407	-37.400	-32.407	PASS
	MCH	-11.37	-38.059	-31.370	PASS
	HCH	-10.964	-37.270	-30.964	PASS

11B LCH Graphs

Pref/11B/LCH

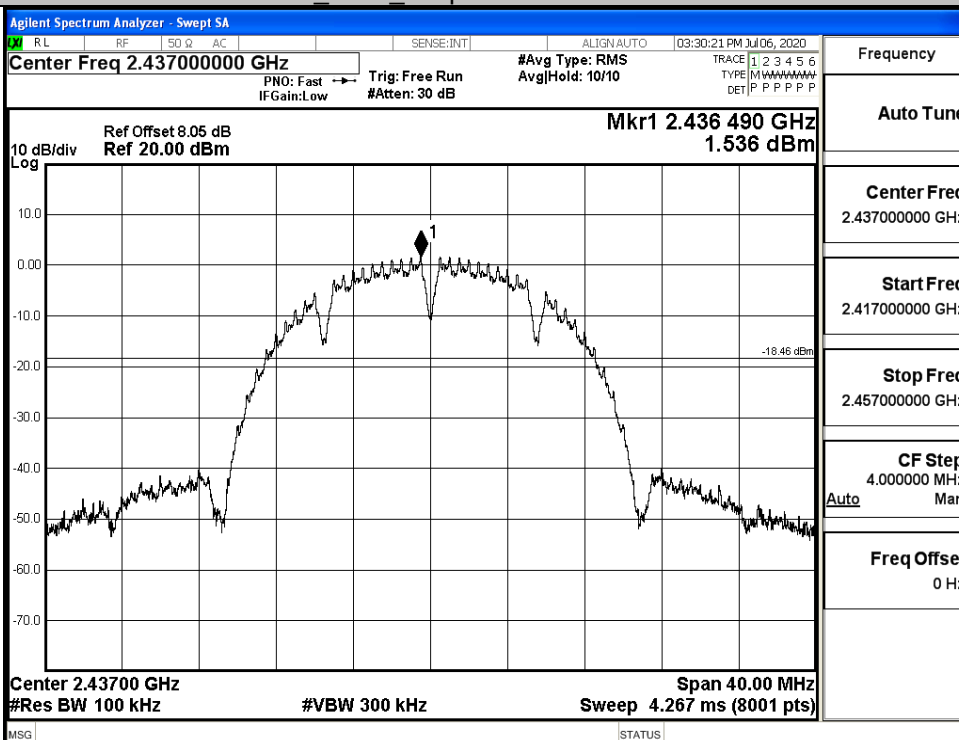


Puw/11B/LCH

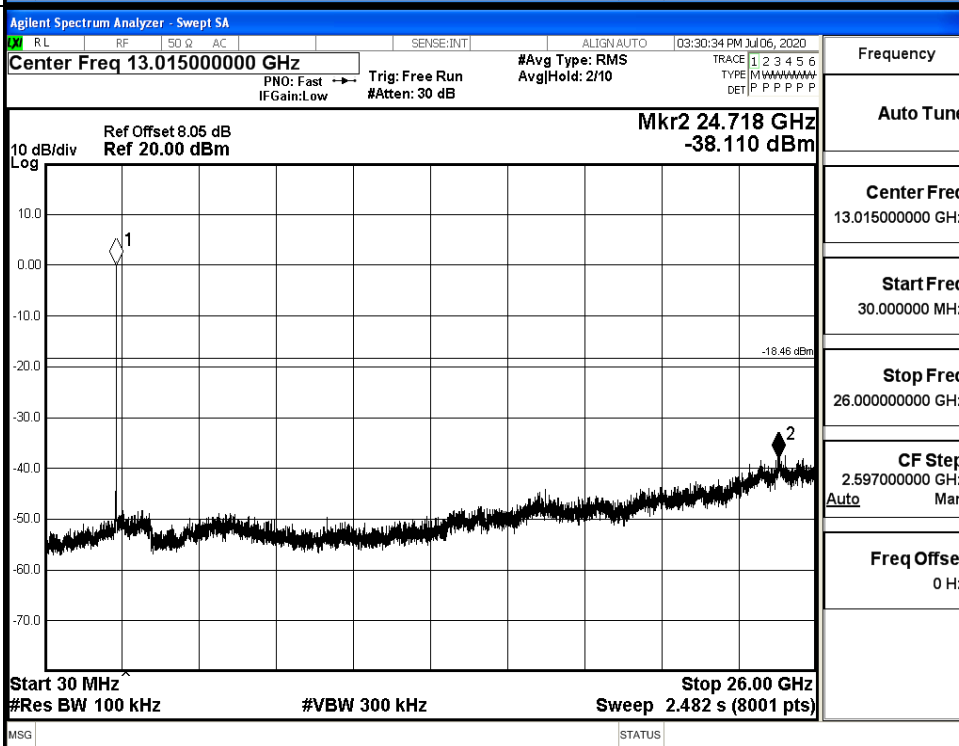


11B MCH Graphs

Pref/11B/MCH

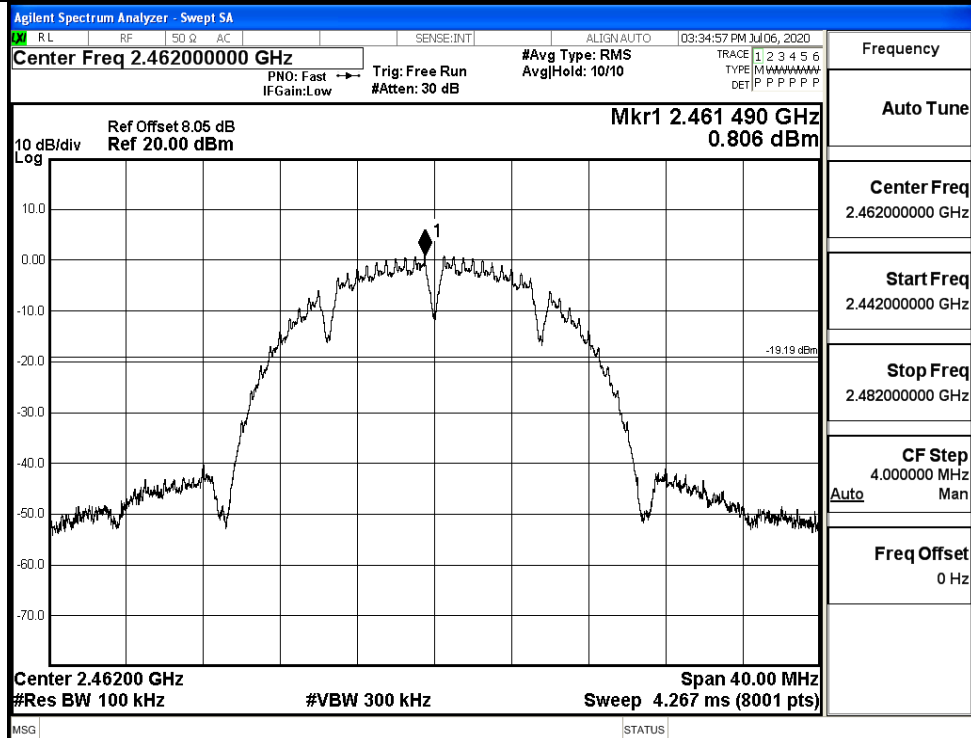


Puw/11B/MCH

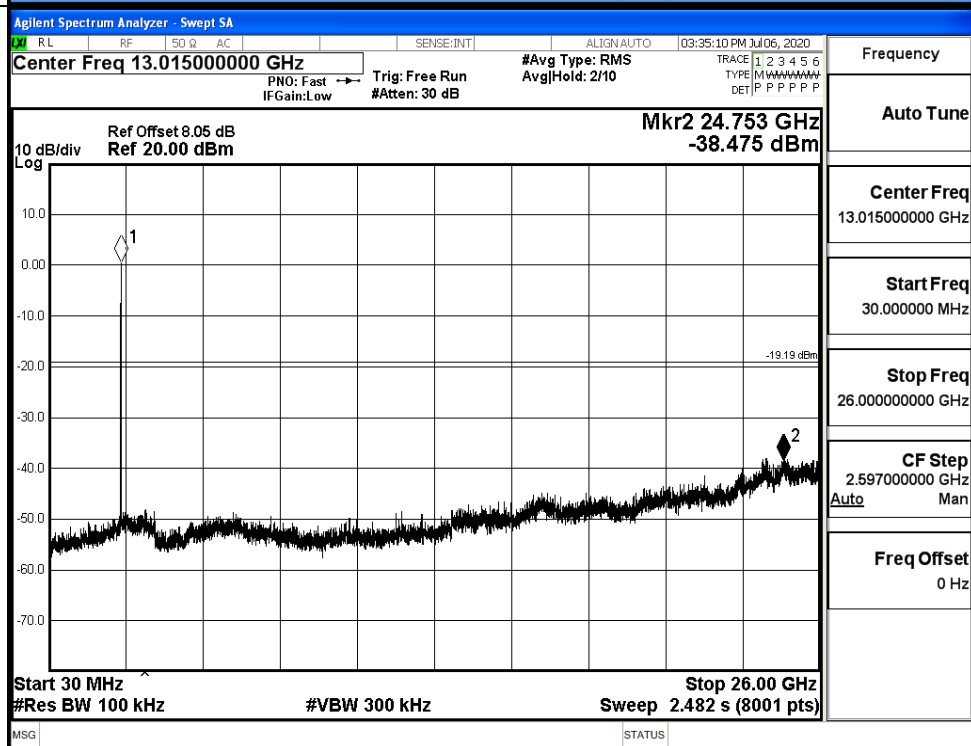


11B HCH Graphs

Pref/11B/HCH

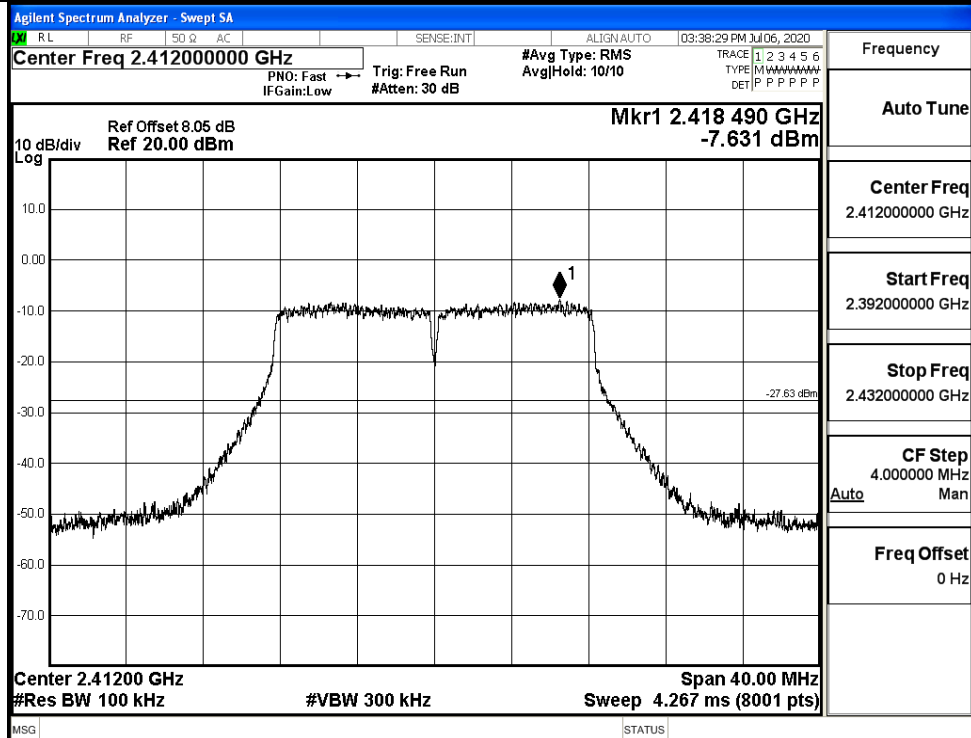


Puw/11B/HCH

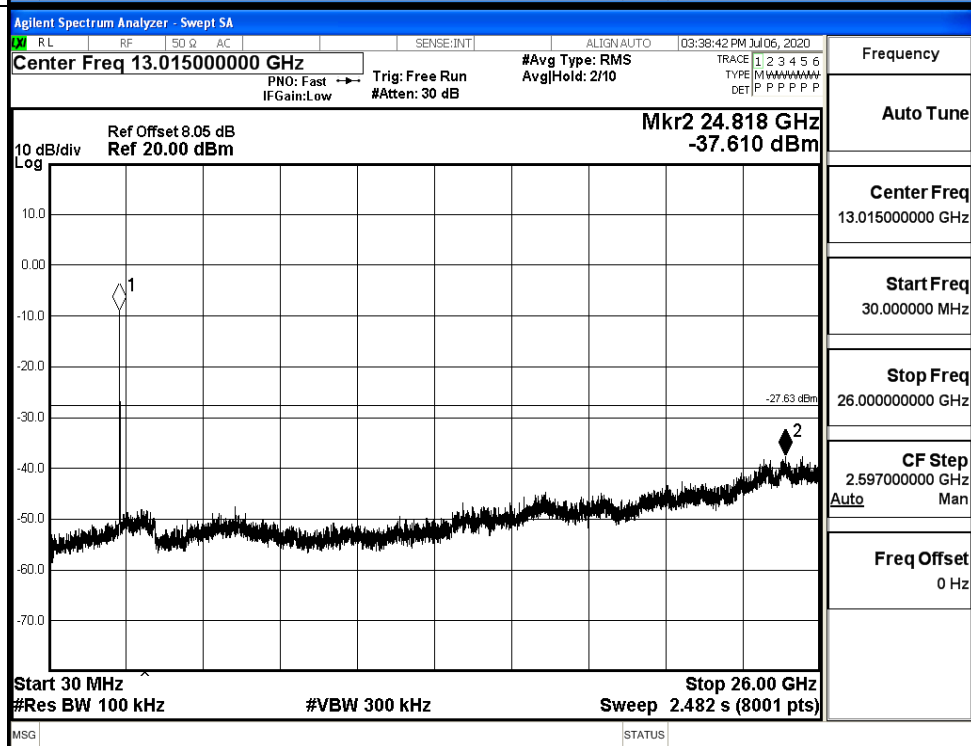


11G LCH Graphs

Pref/11G/LCH

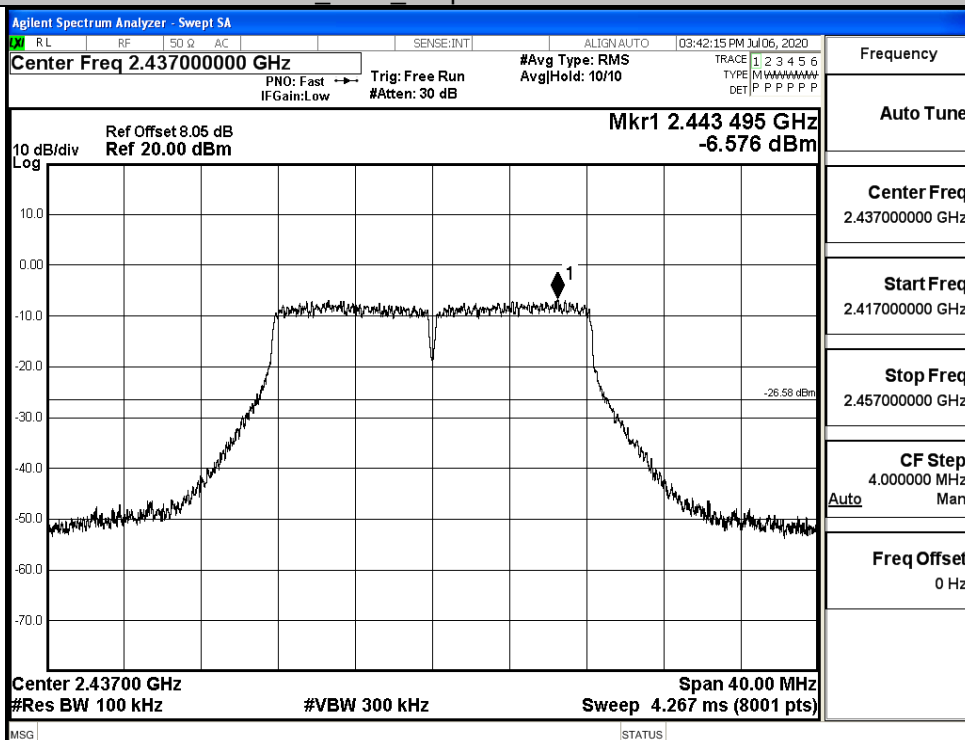


Puw/11G/LCH

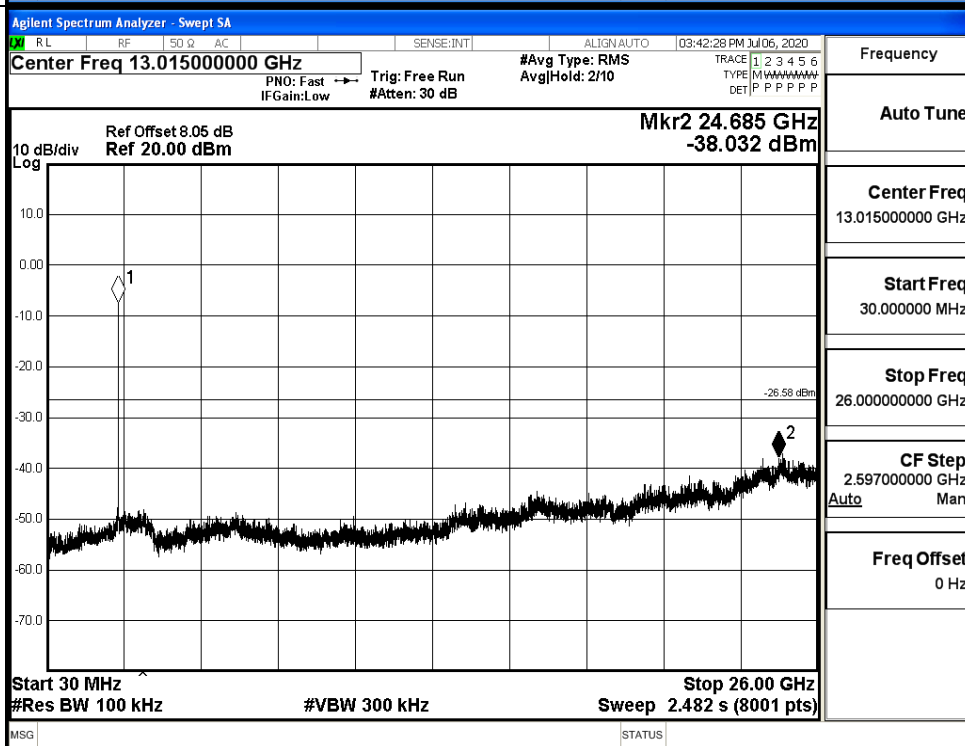


11G MCH Graphs

Pref/11G/MCH

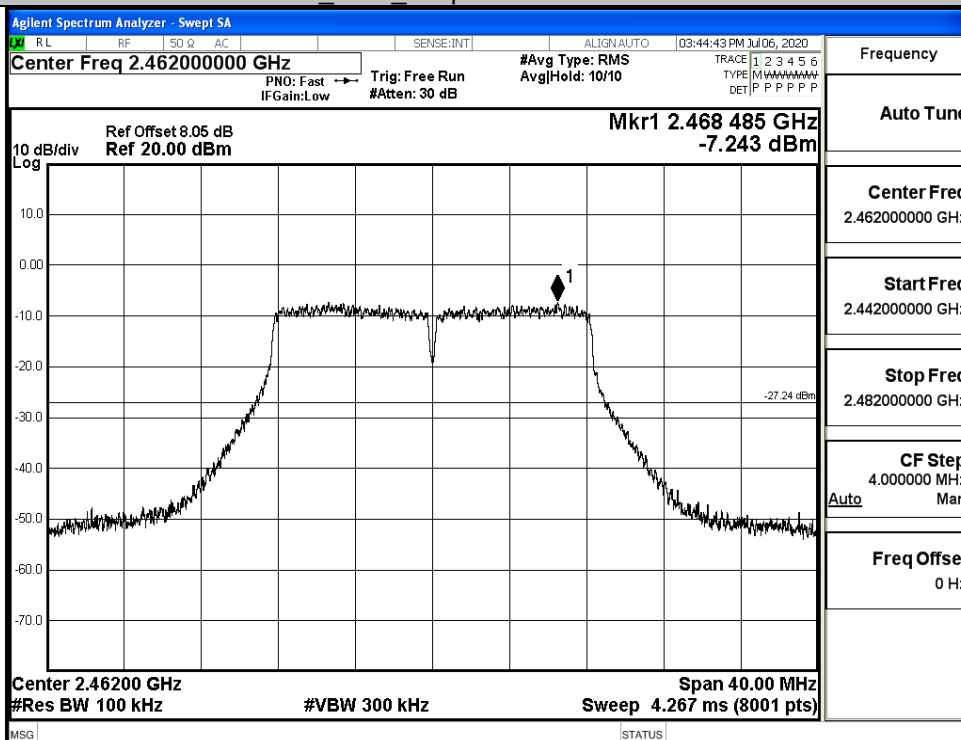


Puw/11G/MCH

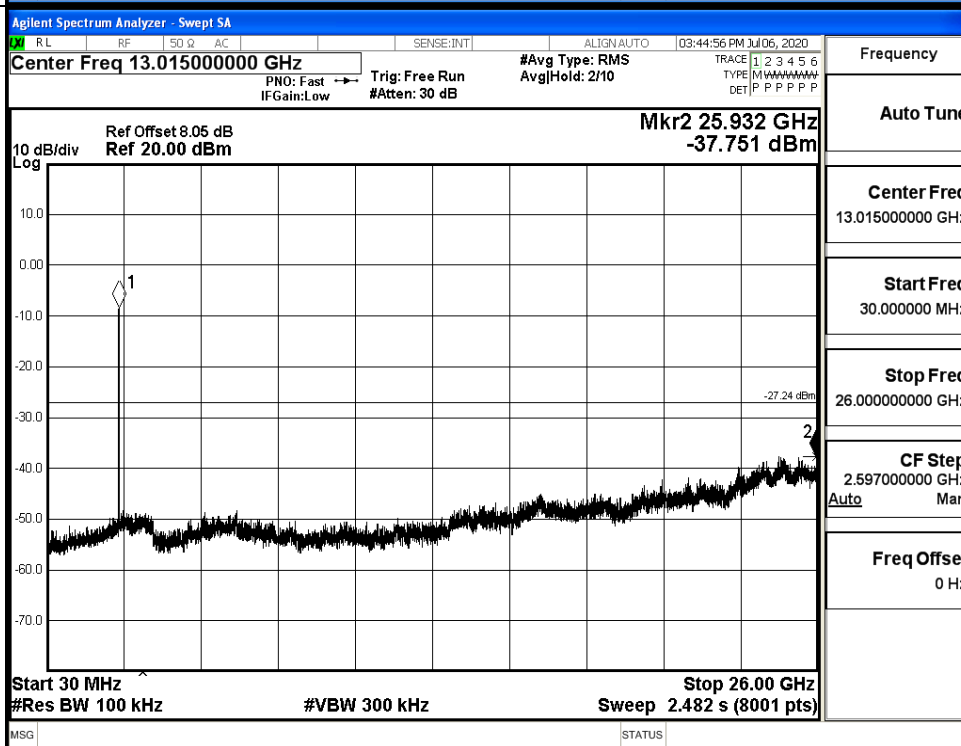


11G HCH Graphs

Pref/11G/HCH

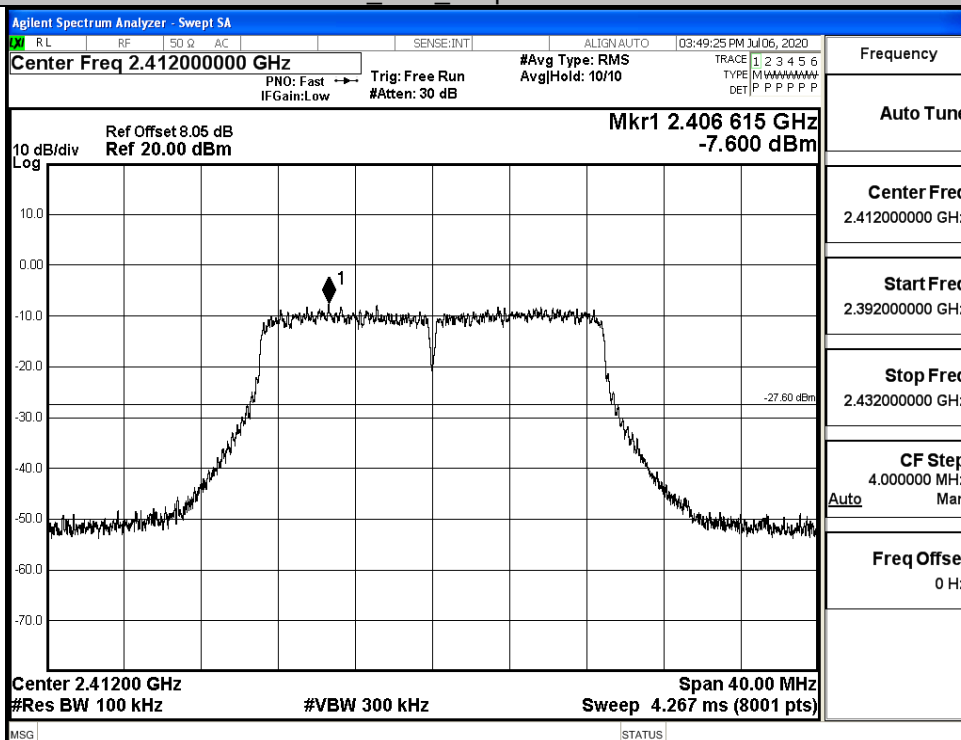


Puw/11G/HCH

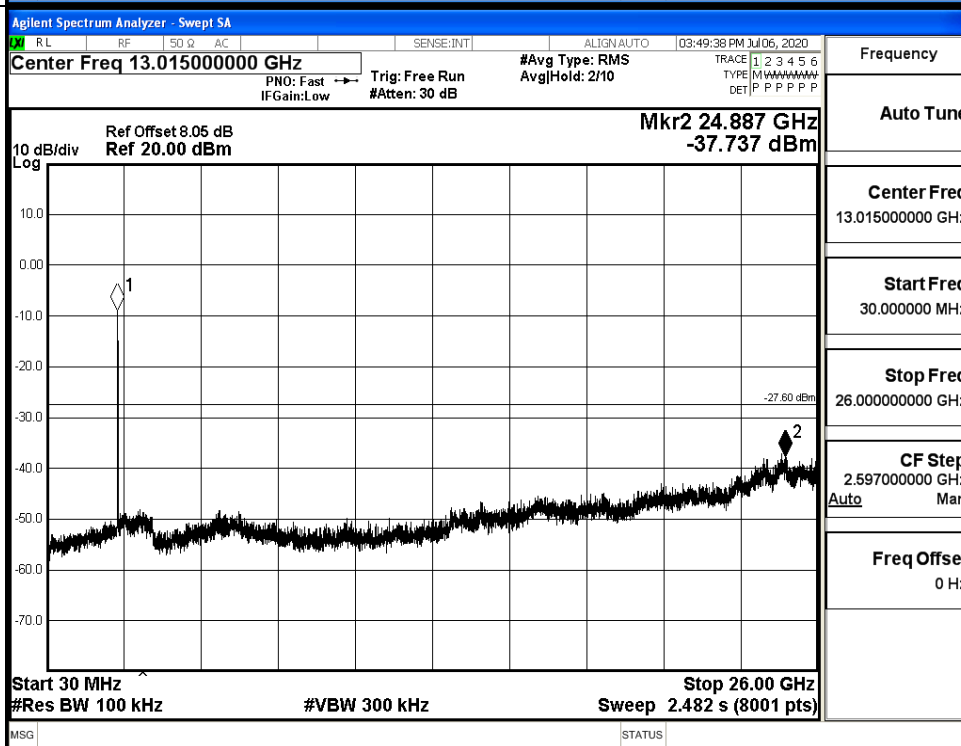


11N20SISO LCH Graphs

Pref/11N20SIS
O/LCH

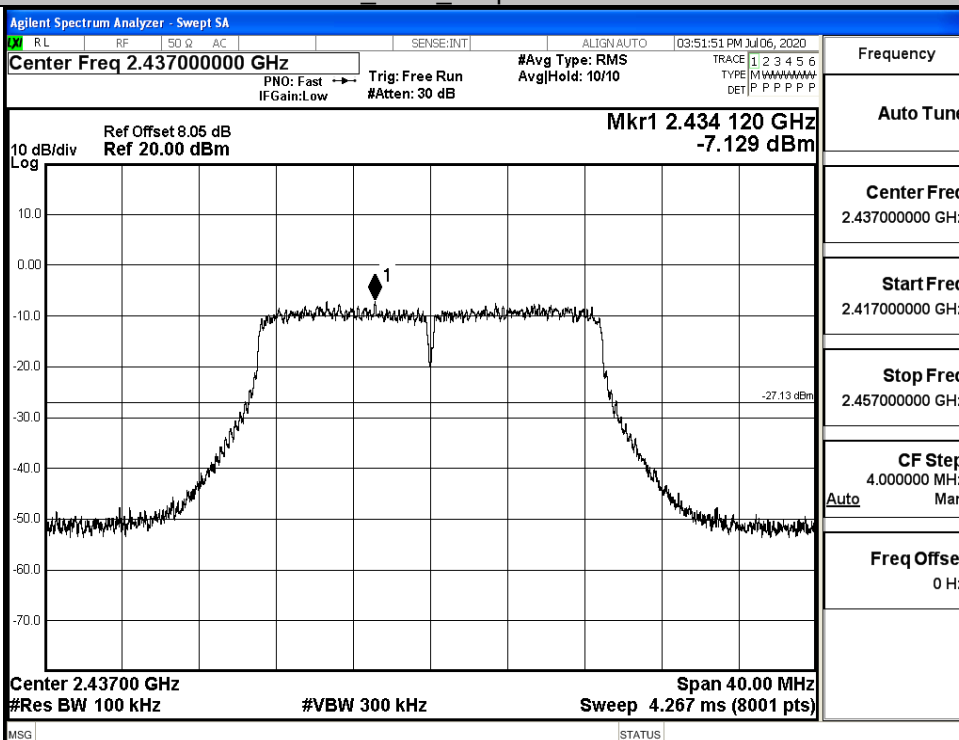


Puw/11N20
SISO/LCH

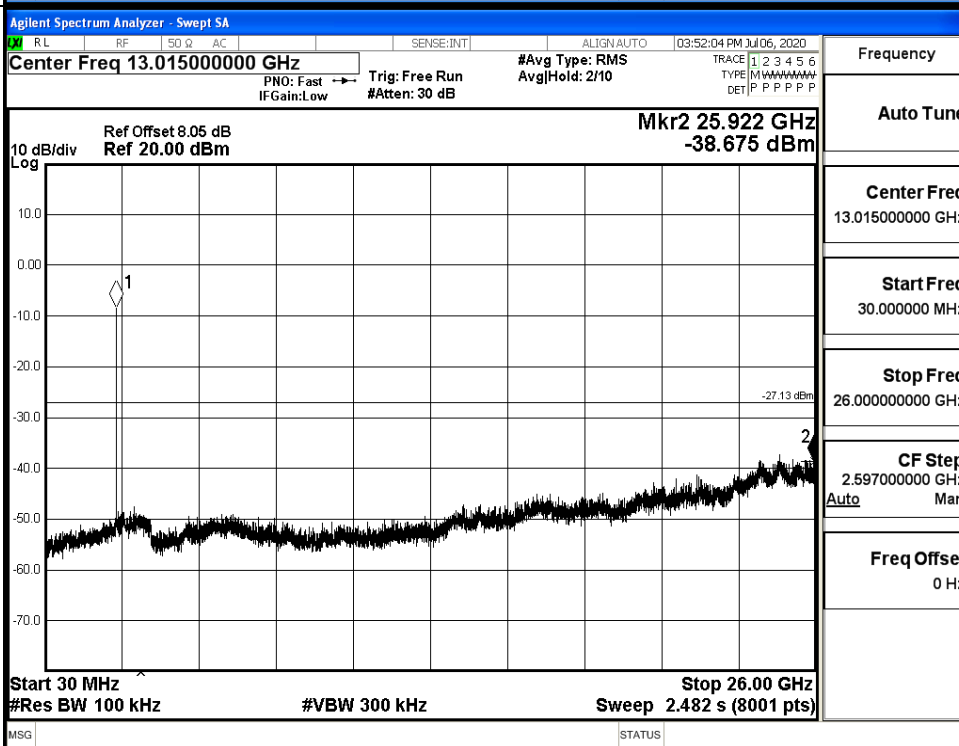


11N20SISO_MCH_Graphs

Pref/11N20
SISO/MCH

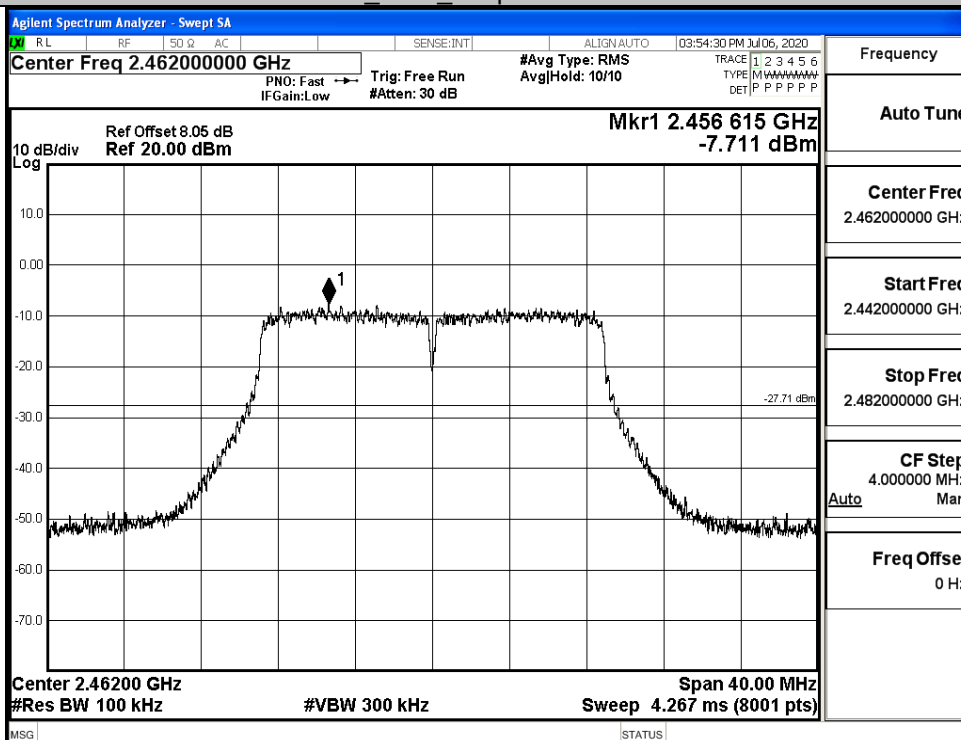


Puw/11N20
SISO/MCH

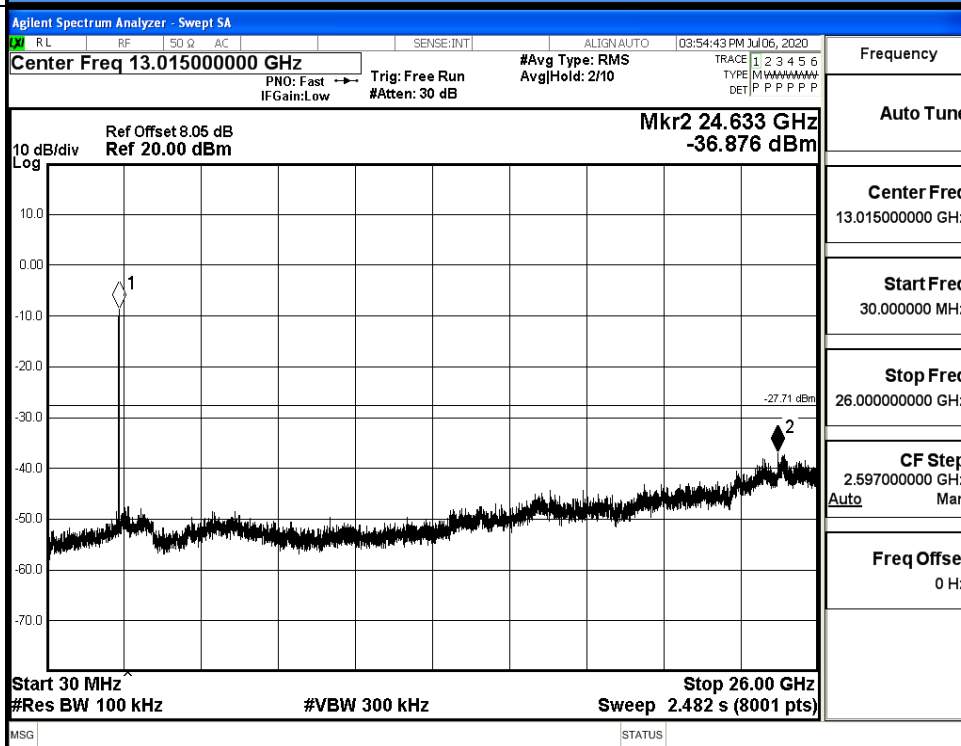


11N20SISO HCH Graphs

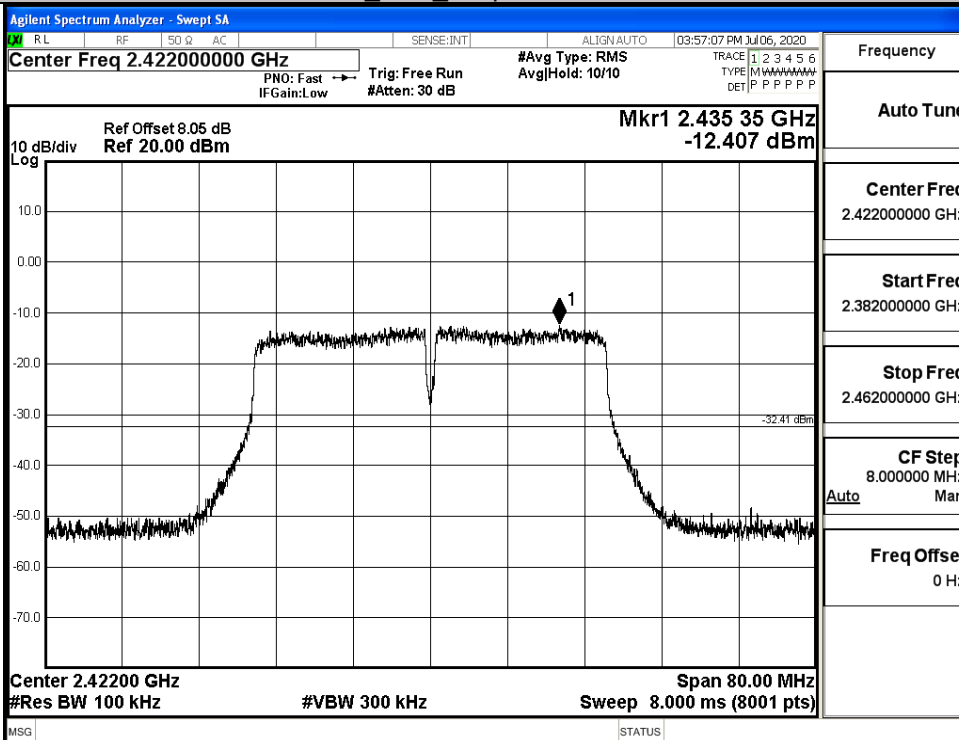
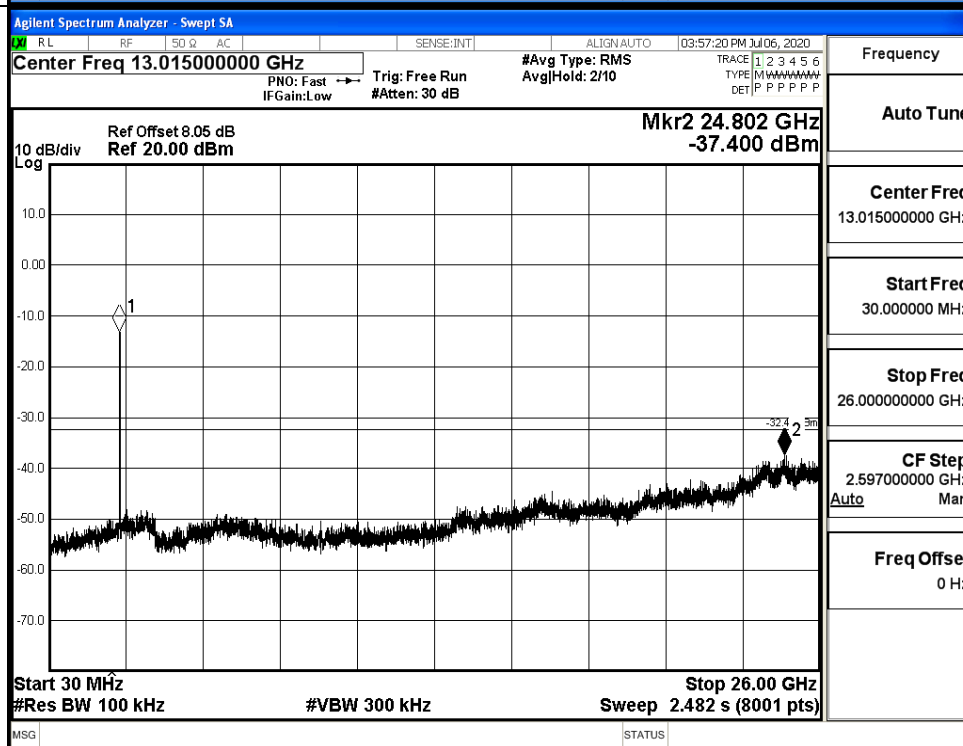
Pref/11N20
SISO/HCH



Puw/11N20
SISO/HCH

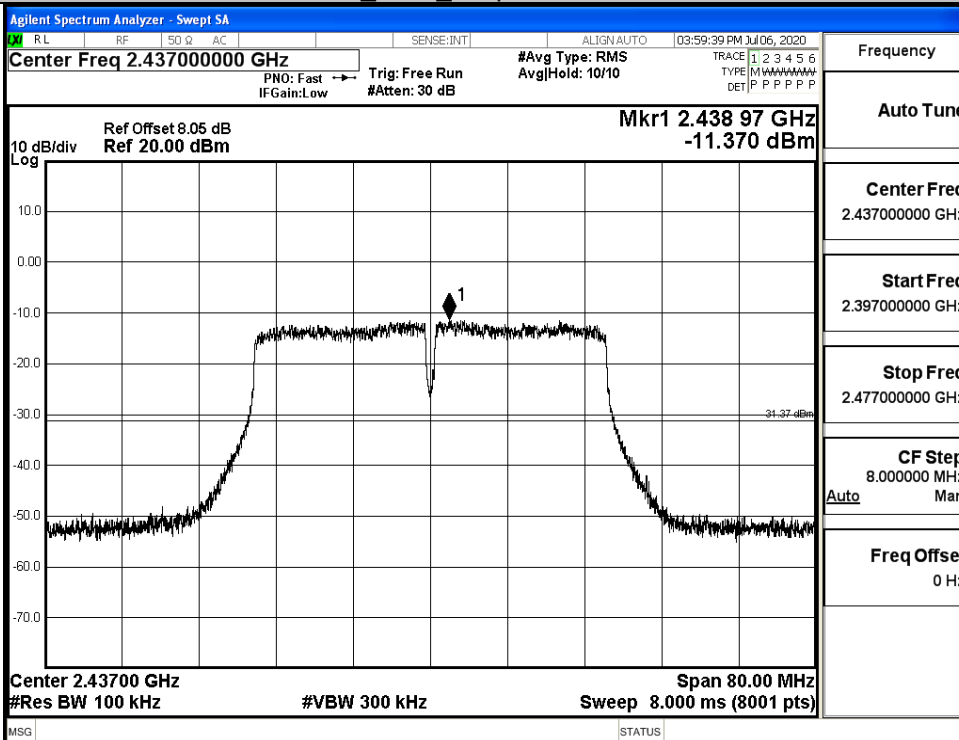


11N40SISO LCH Graphs

Pref/11N40
SISO/LCHPuw/11N40
SISO/LCH

11N40SISO_MCH_Graphs

Pref/11N40
SISO/MCH



Puw/11N40
SISO/MCH

