

Appendix A

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: 4G LTE Wireless Router

Trade Mark: GL.iNET

Test Model: GL-XE300C4

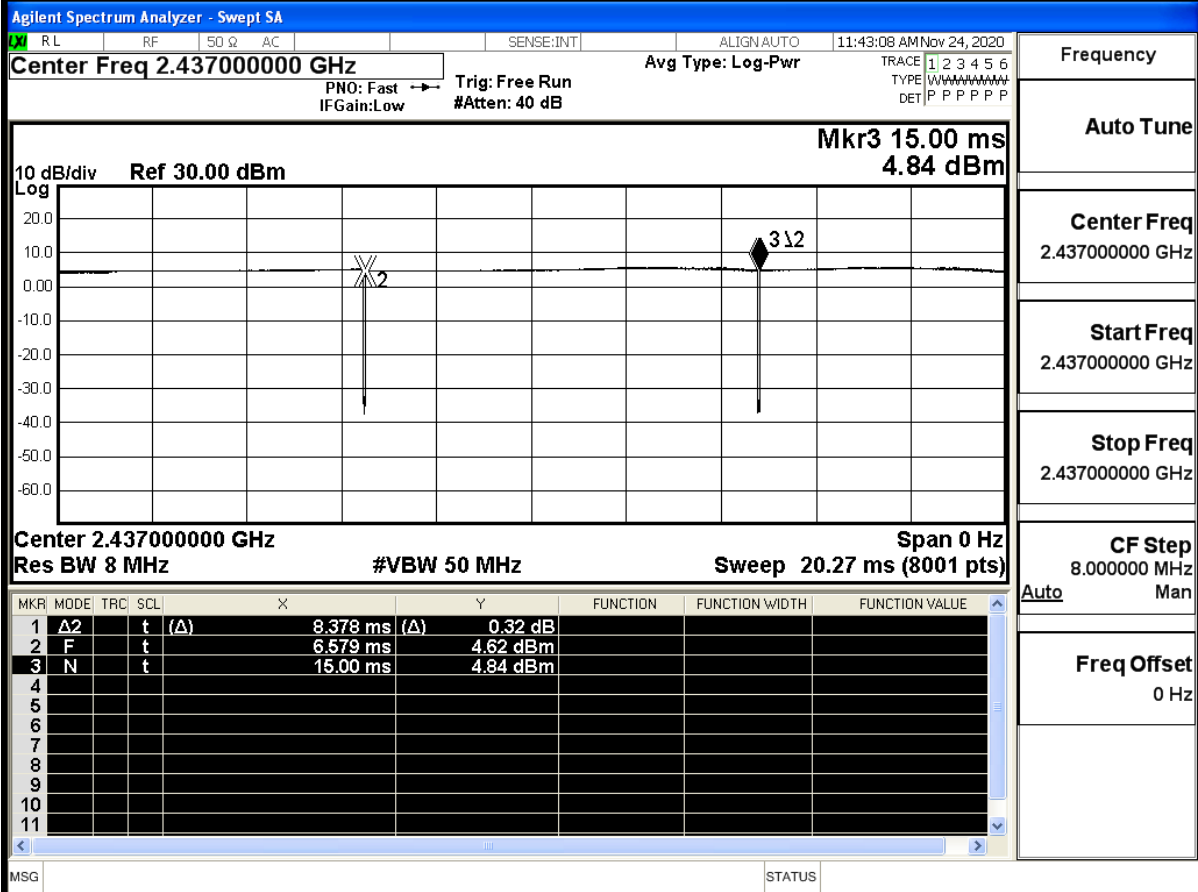
Environmental Conditions

Temperature:	22.3° C
Relative Humidity:	53.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond Lu
Supervised by:	Li Huan

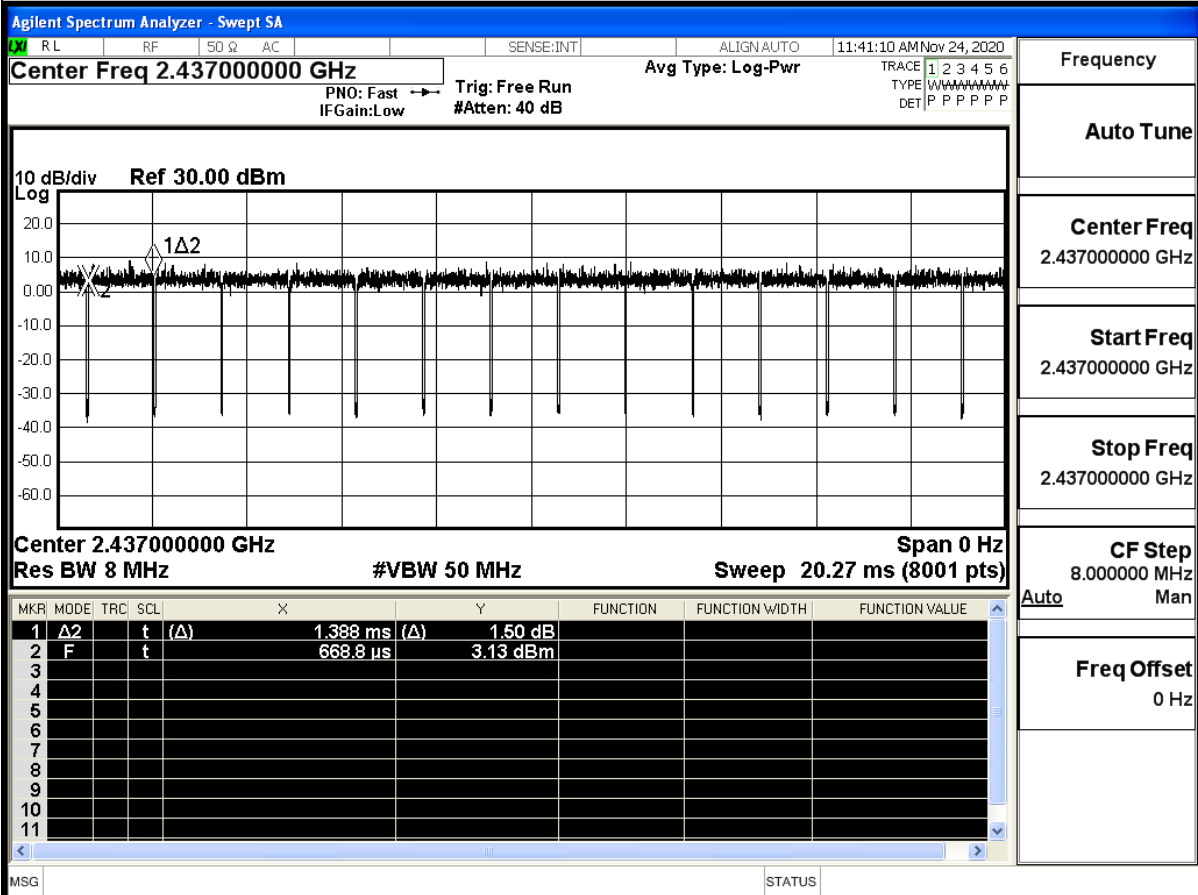
A.1 Duty Cycle

Test Mode	Test Channel	Duty Cycle[%]	10log(1/x) Factor (dB)	1/T Minimum VBW(KHz)
11B	2437	99.49	0.02	/
11G	2437	96.65	0.15	0.720
11N20SISO	2437	96.42	0.16	0.771
11N40SISO	2437	93.04	0.31	1.554

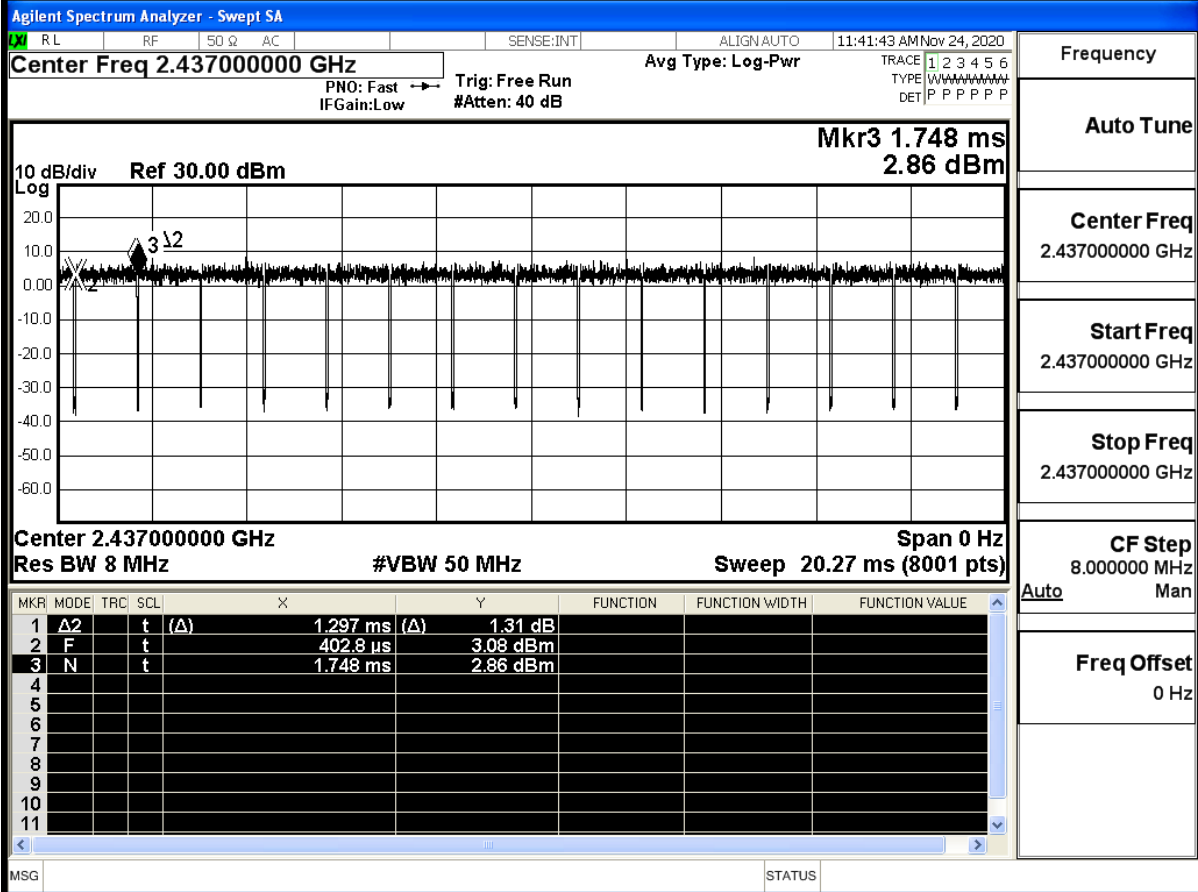
Duty Cycle_11B_2437



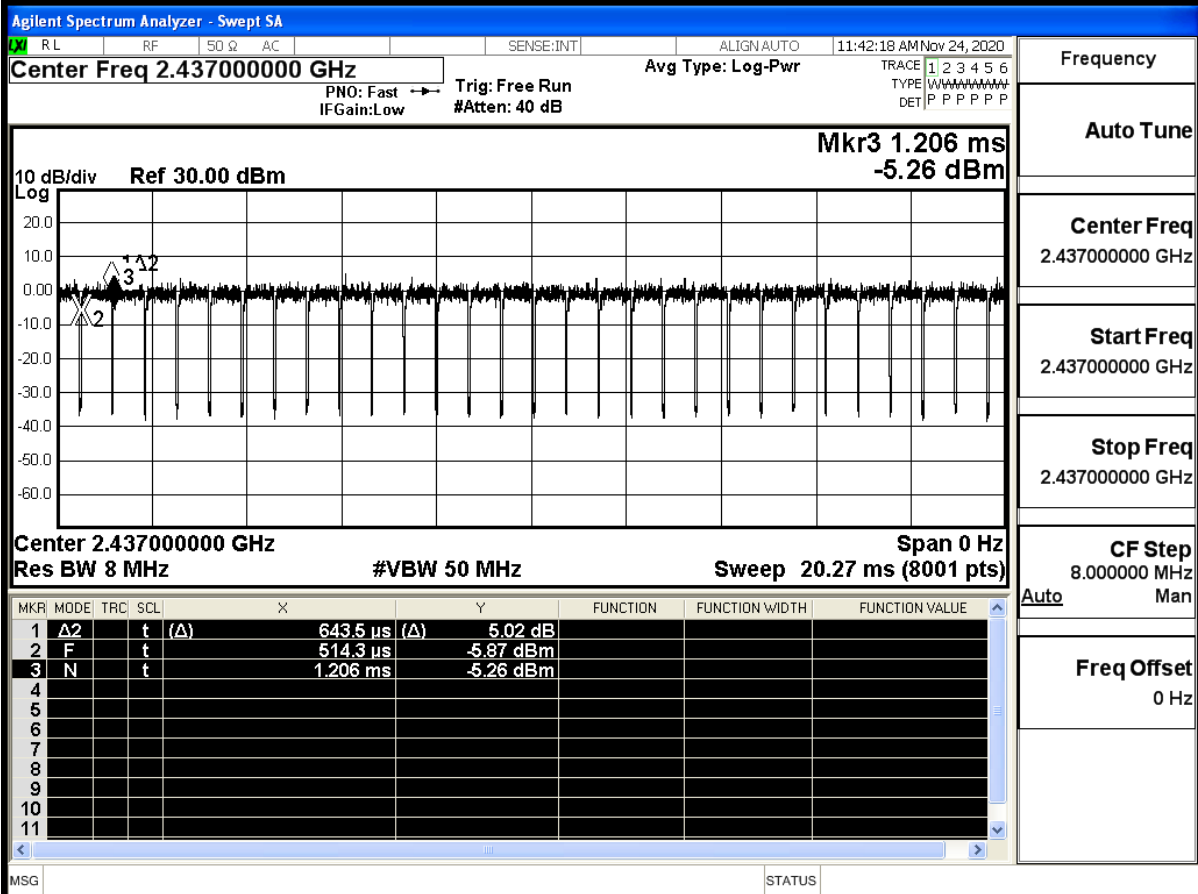
Duty Cycle_11G_2437



Duty Cycle_11N20SISO_2437



Duty Cycle_11N40SISO_2437



A.2 Maximum Conducted Output Power

Mode	Channel	Peak Power [dBm]			Limit [dBm]	Verdict
		Ant 0	Ant 1	Sum		
11B	LCH	17.43	17.24	/	30	PASS
	MCH	21.07	21.48	/	30	PASS
	HCH	16.24	17.55	/	30	PASS
11G	LCH	17.00	16.56	/	30	PASS
	MCH	22.01	21.81	/	30	PASS
	HCH	16.93	17.40	/	30	PASS
11N20	LCH	17.73	16.45	20.15	30	PASS
	MCH	21.46	21.36	24.42	30	PASS
	HCH	16.37	17.45	19.95	30	PASS
11N40	LCH	16.20	17.49	19.90	30	PASS
	MCH	21.27	21.24	24.27	30	PASS
	HCH	16.72	18.18	20.52	30	PASS

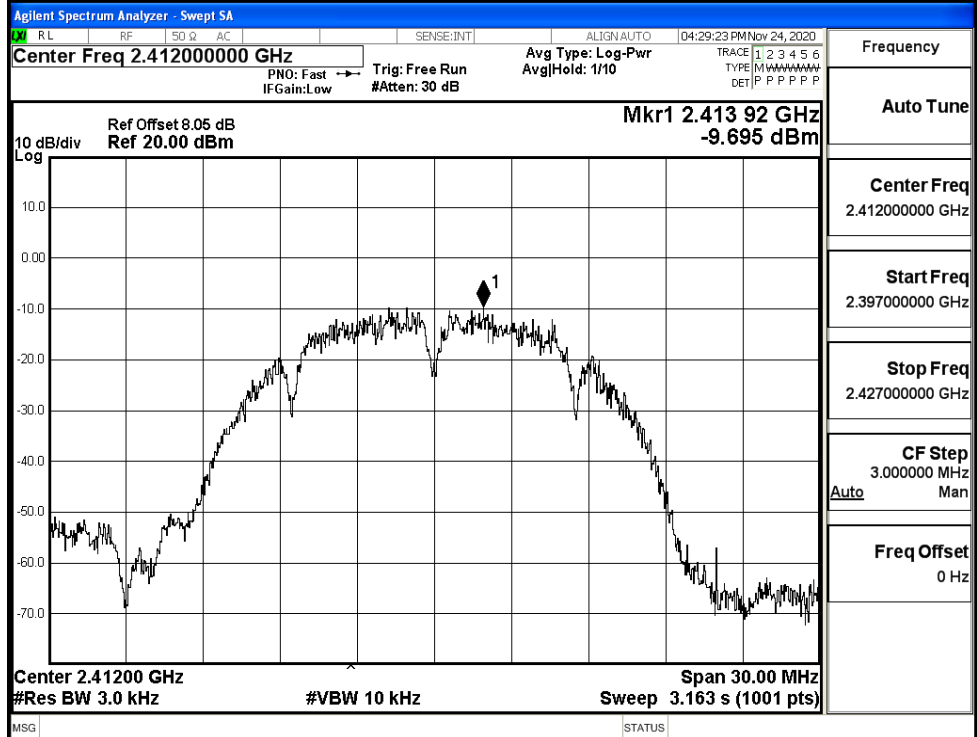
A.3 Maximum Power Spectral Density

Mode	Channel	PSD Level [dBm/3KHz]		Limit [dBm/3KHz]	Verdict
		Ant 0	Ant 1		
11B	LCH	-9.695	-9.198	8	PASS
	MCH	-7.211	-4.527	8	PASS
	HCH	-10.853	-8.513	8	PASS
11G	LCH	-16.165	-15.265	8	PASS
	MCH	-11.544	-12.661	8	PASS
	HCH	-16.997	-15.959	8	PASS
11N20	LCH	-18.002	-17.149	8	PASS
	MCH	-12.493	-12.600	8	PASS
	HCH	-16.552	-17.018	8	PASS
11N40	LCH	-19.804	-17.877	8	PASS
	MCH	-15.552	-13.042	8	PASS
	HCH	-18.938	-18.392	8	PASS

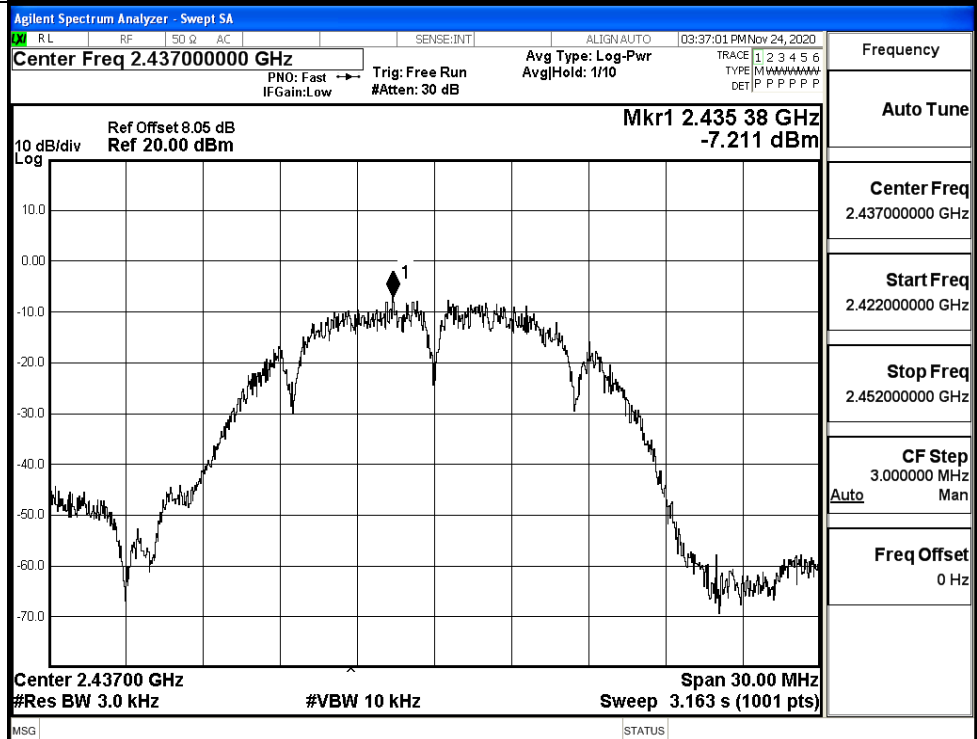
Mode	Channel	MIMO PSD [dBm/3KHz]			Limit [dBm/3KHz]	Verdict
		Ant 0	Ant 1	Sum		
11N20	LCH	-18.002	-17.149	-14.54	8	PASS
	MCH	-12.493	-12.600	-9.54	8	PASS
	HCH	-16.552	-17.018	-13.77	8	PASS
11N40	LCH	-19.804	-17.877	-15.72	8	PASS
	MCH	-15.552	-13.042	-11.11	8	PASS
	HCH	-18.938	-18.392	-15.65	8	PASS

Test Graphs_ Ant 0

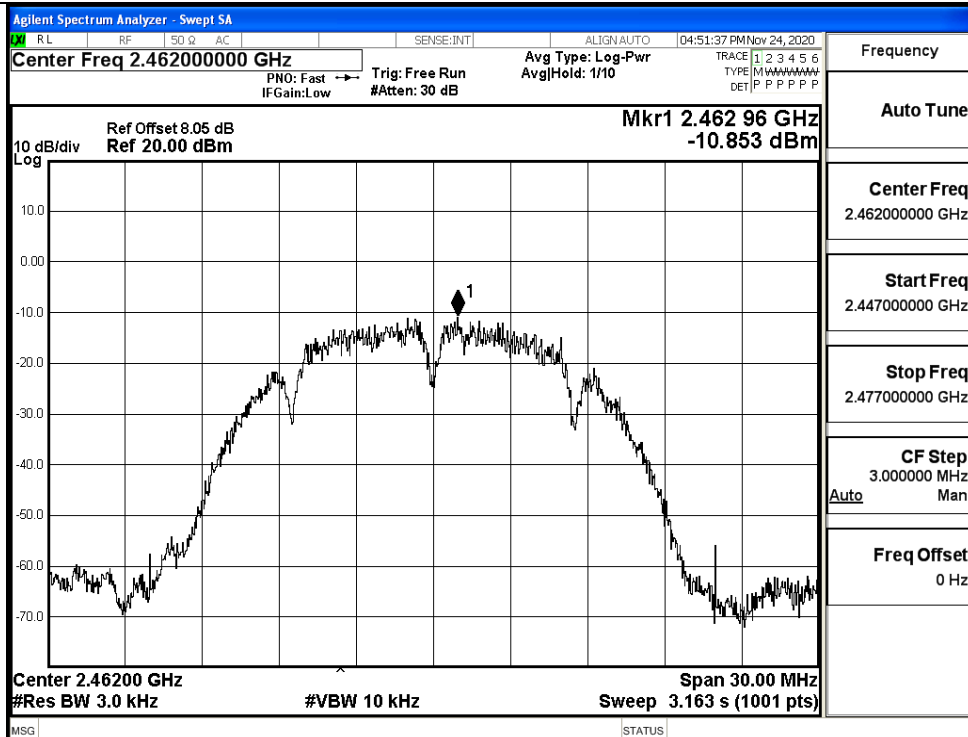
11B/LCH



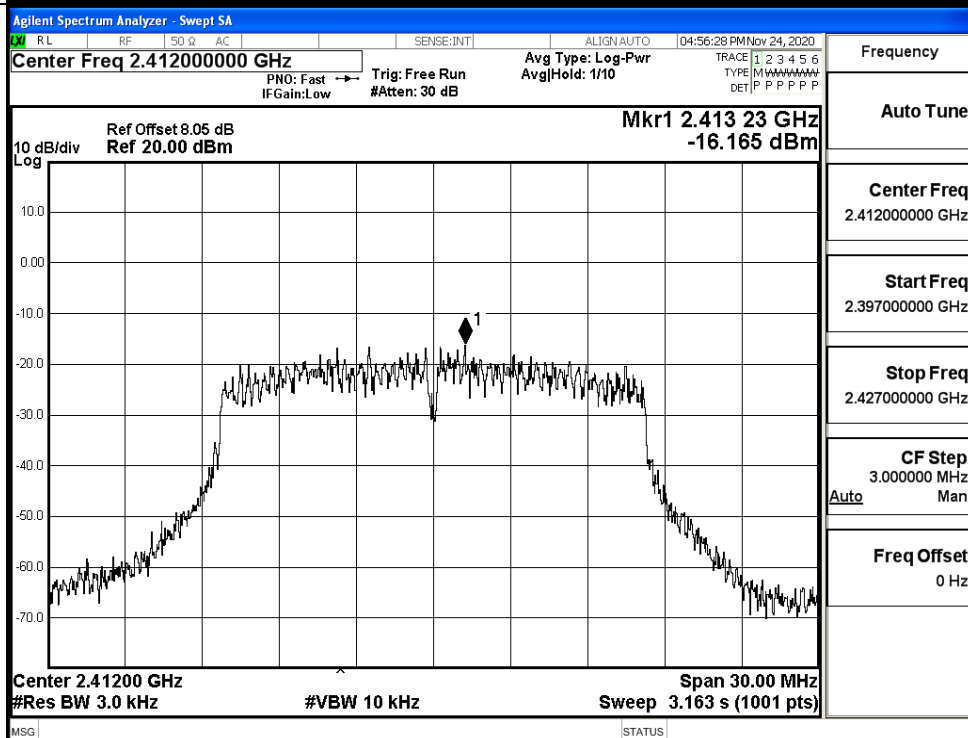
11B/MCH



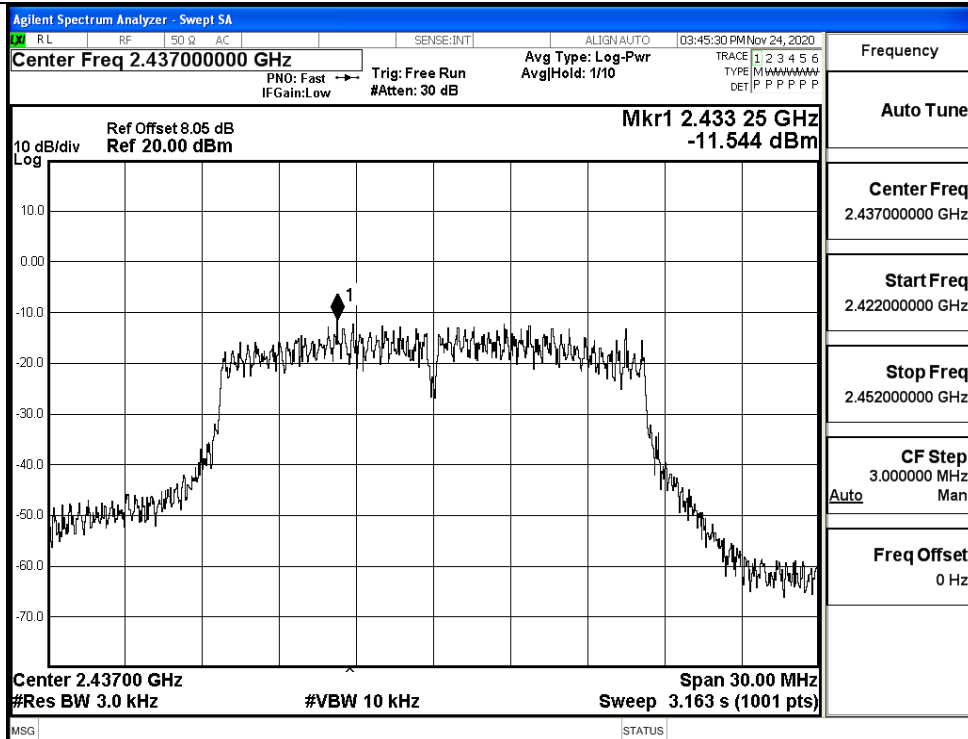
11B/HCH



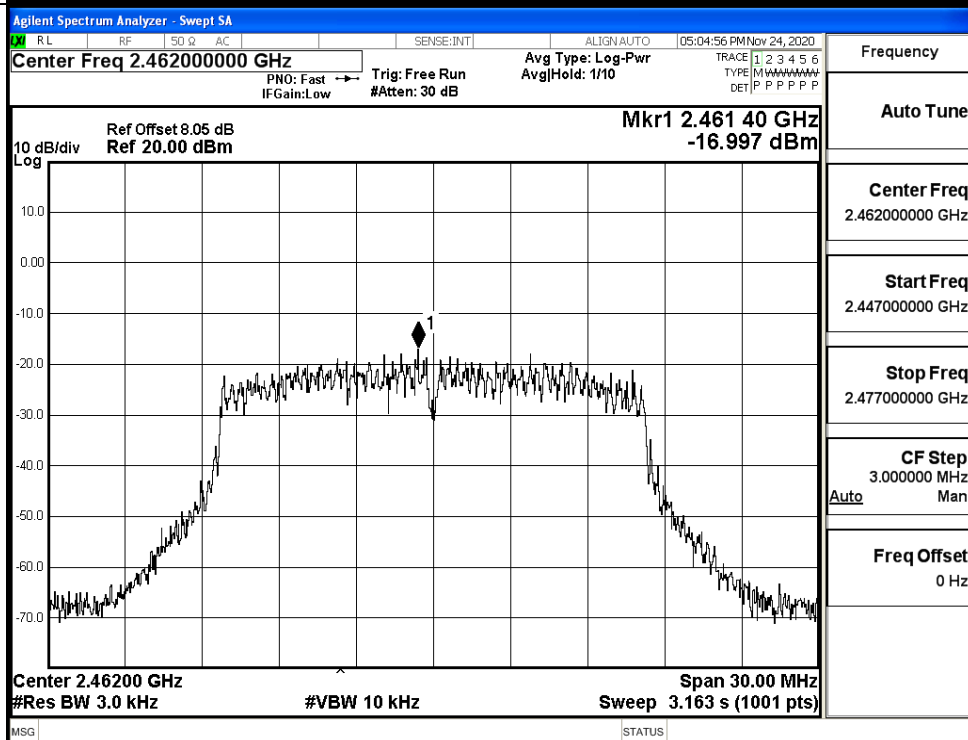
11G/LCH



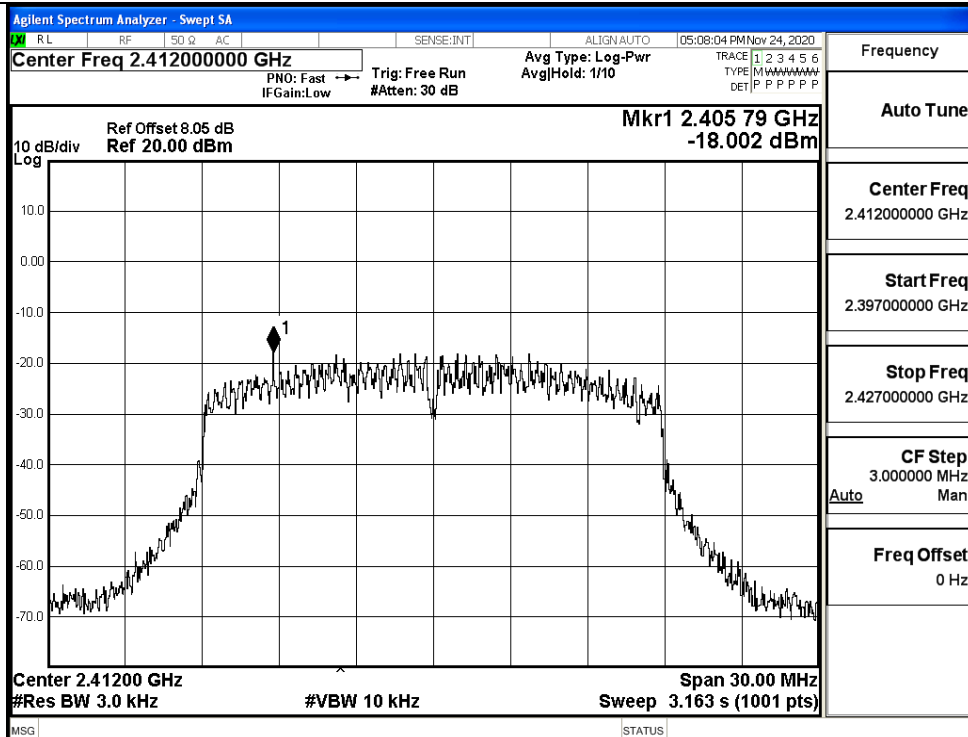
11G/MCH



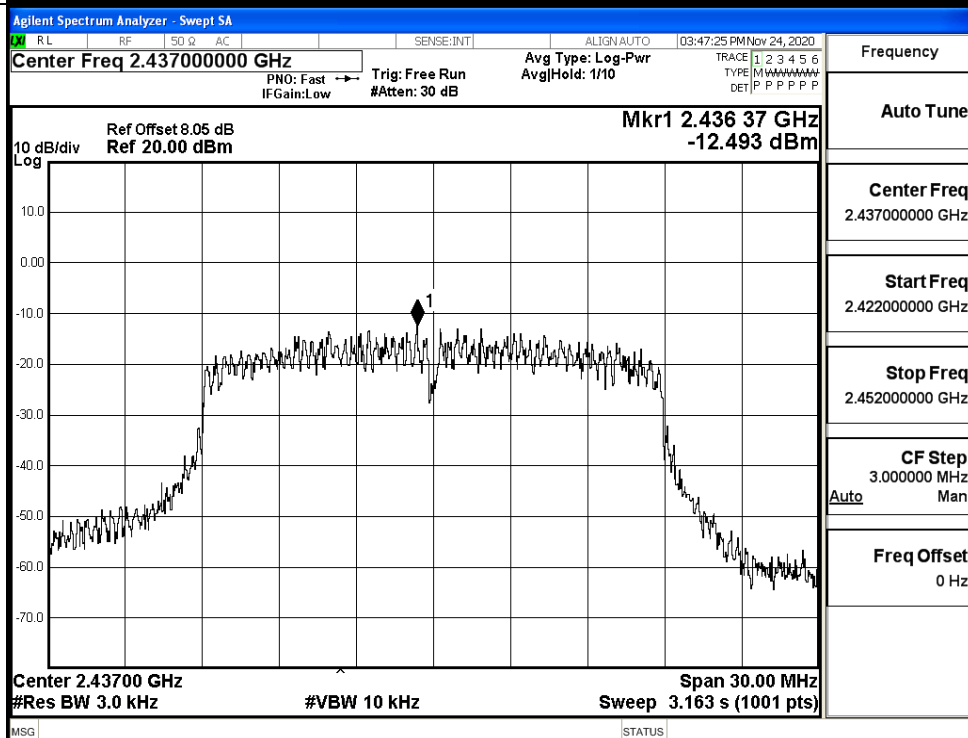
11G/HCH



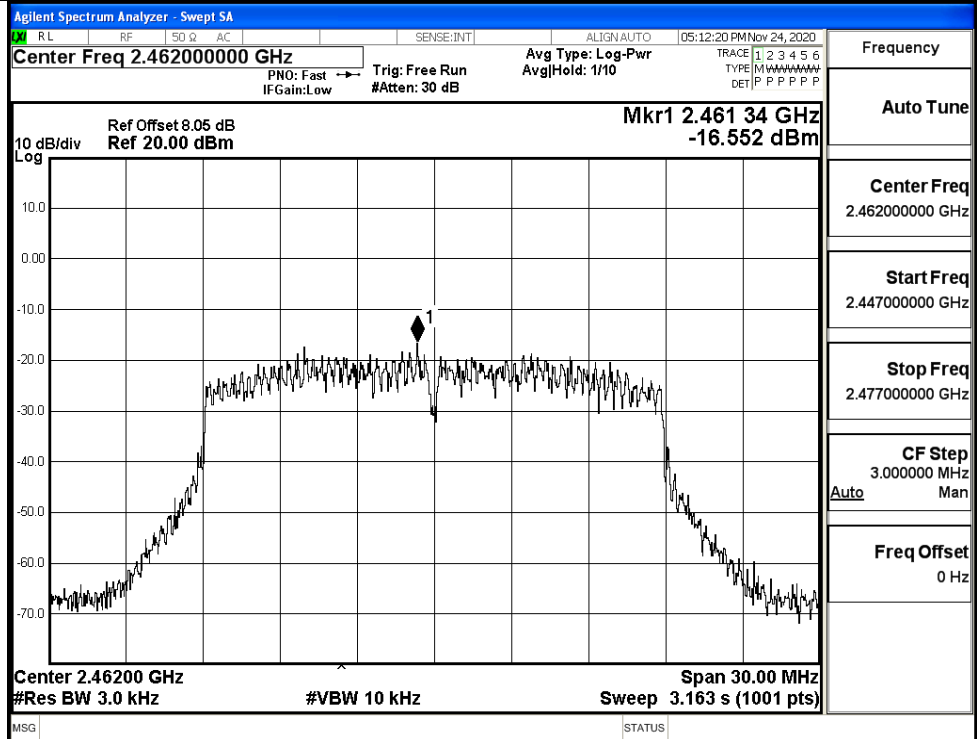
11N20SISO/LCH



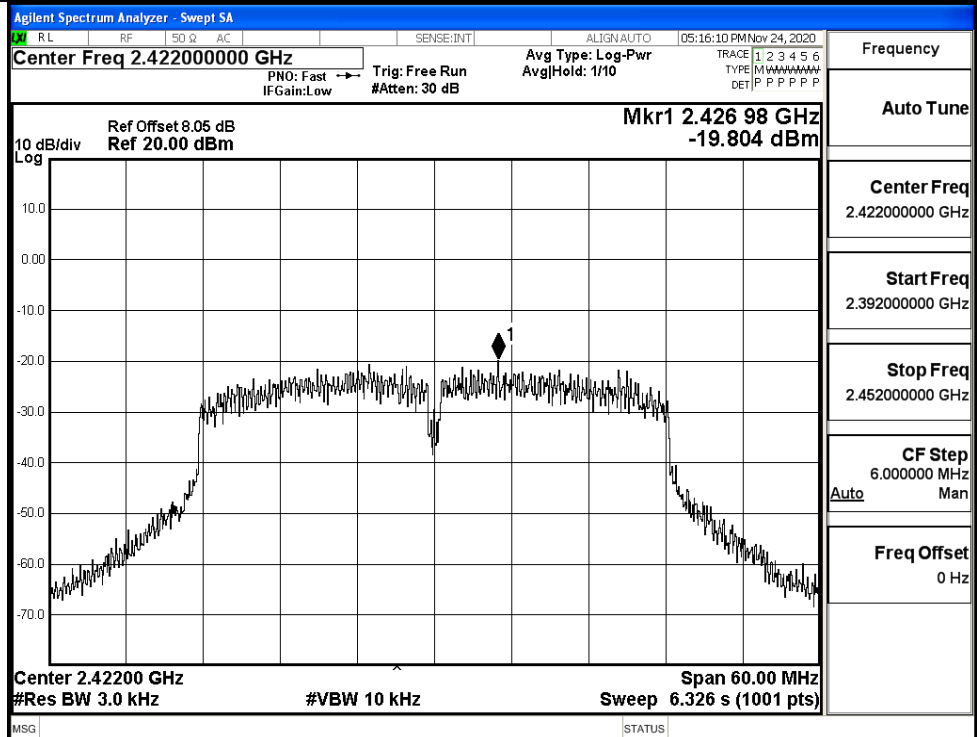
11N20SISO/MCH



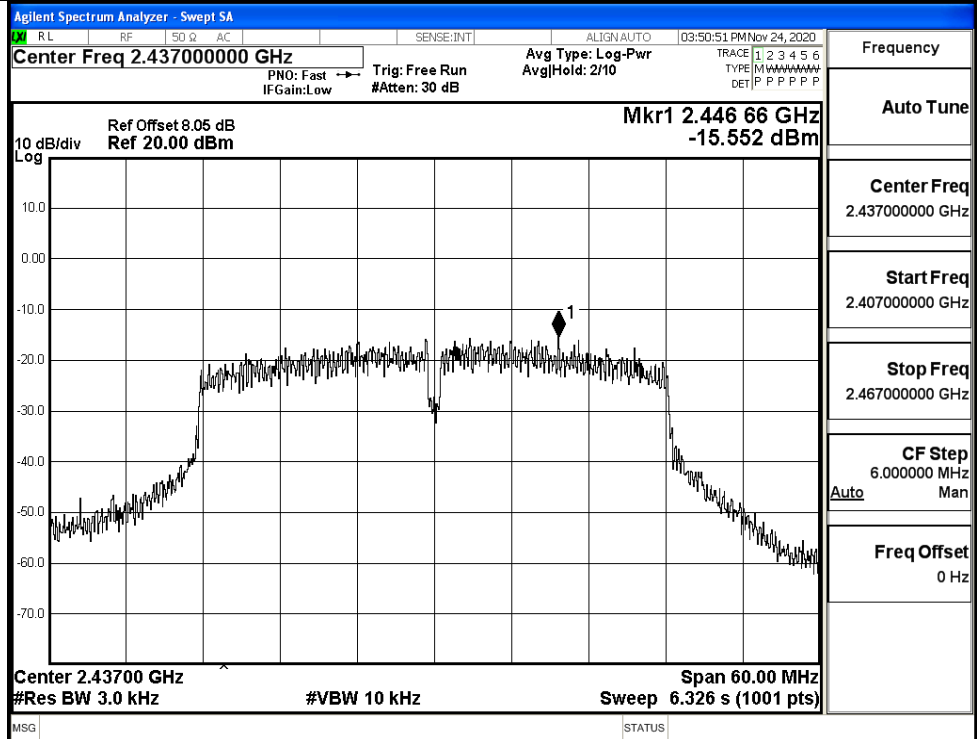
11N20SISO/HCH



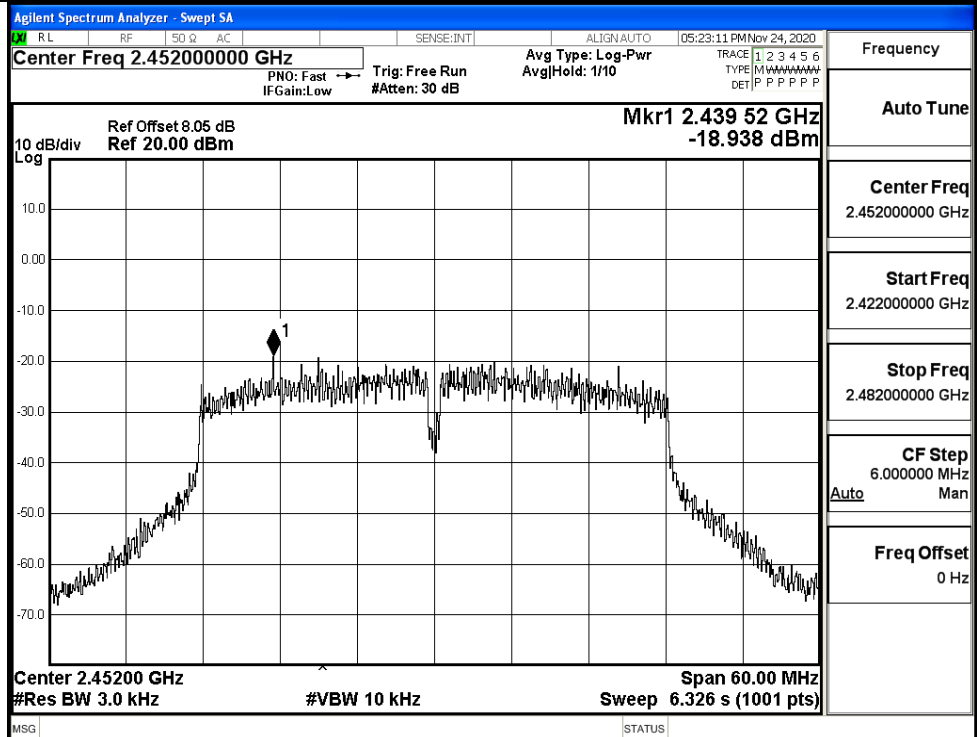
11N40SISO/LCH



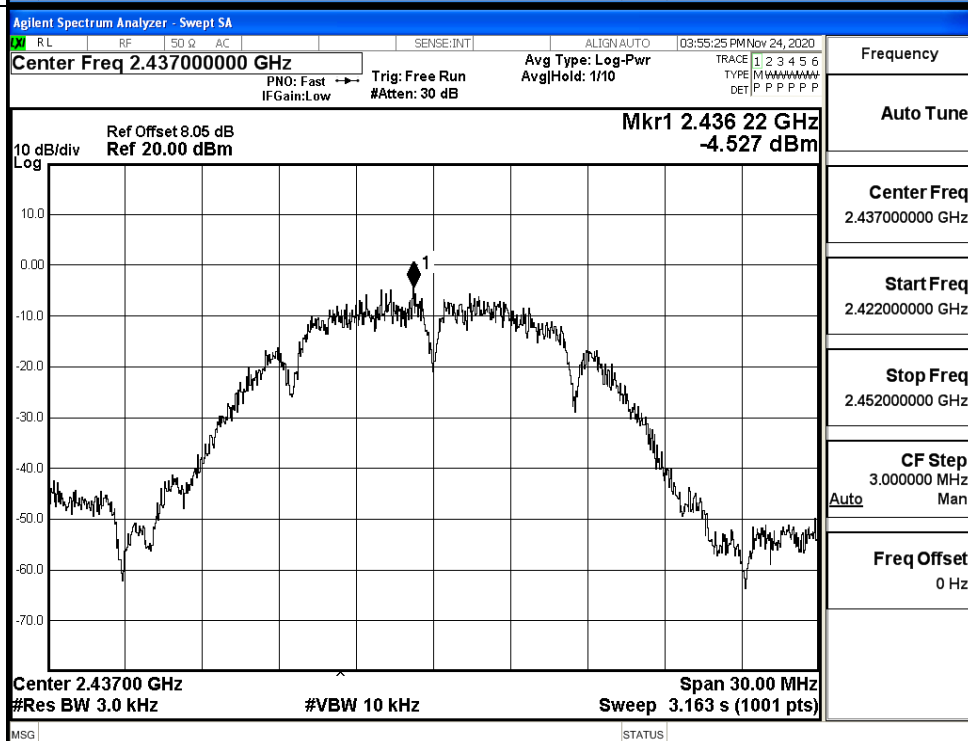
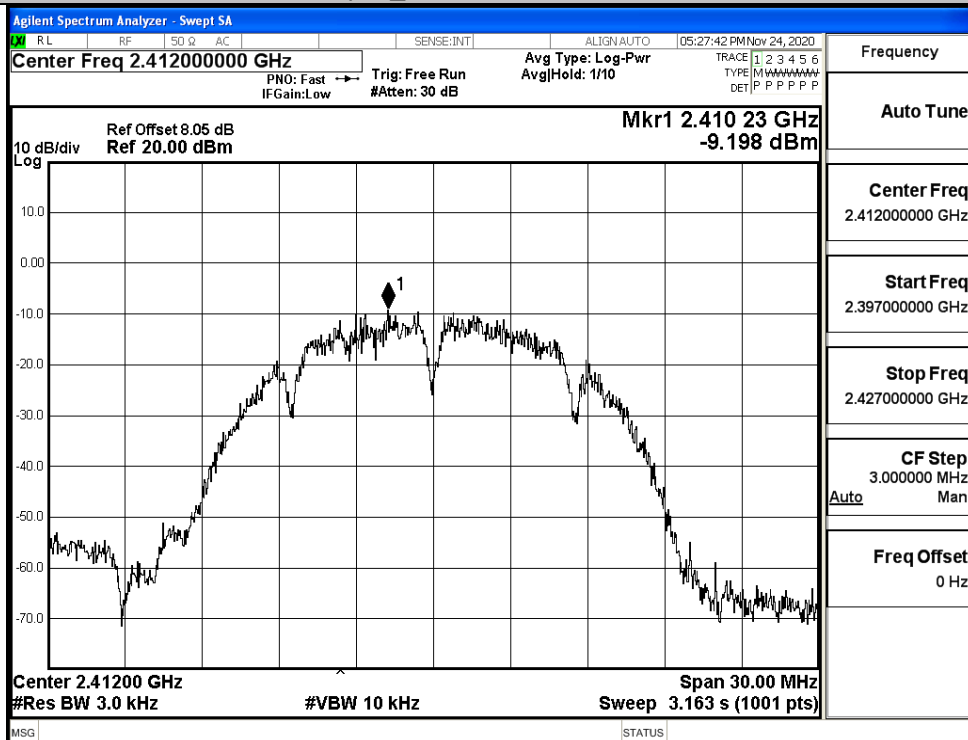
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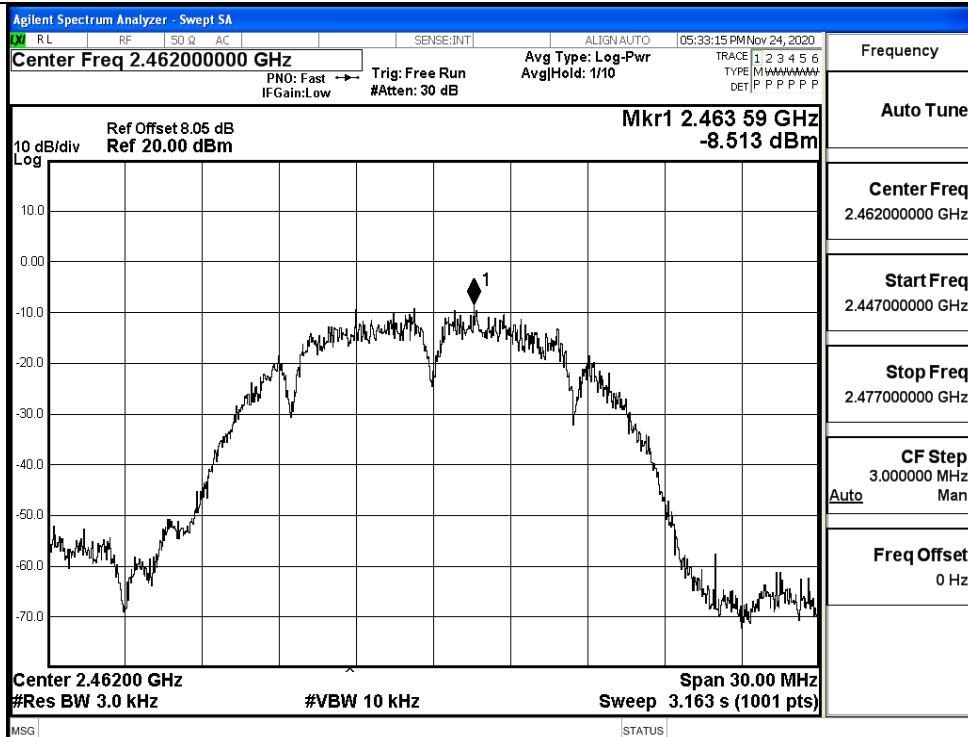
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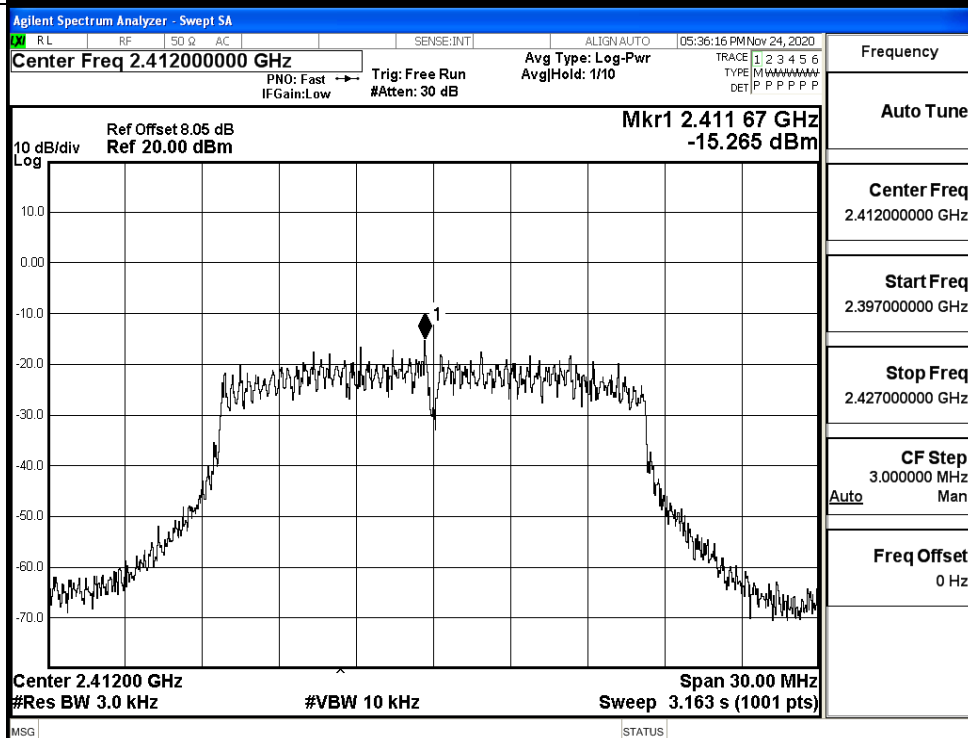
Test Graphs_ Ant 1



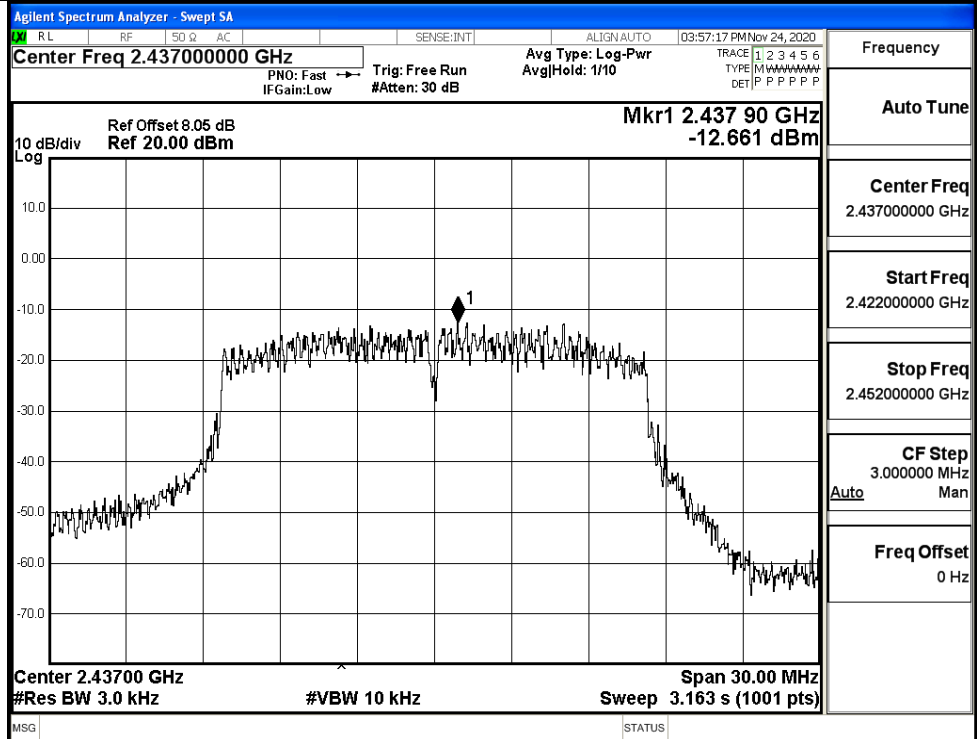
11B/HCH



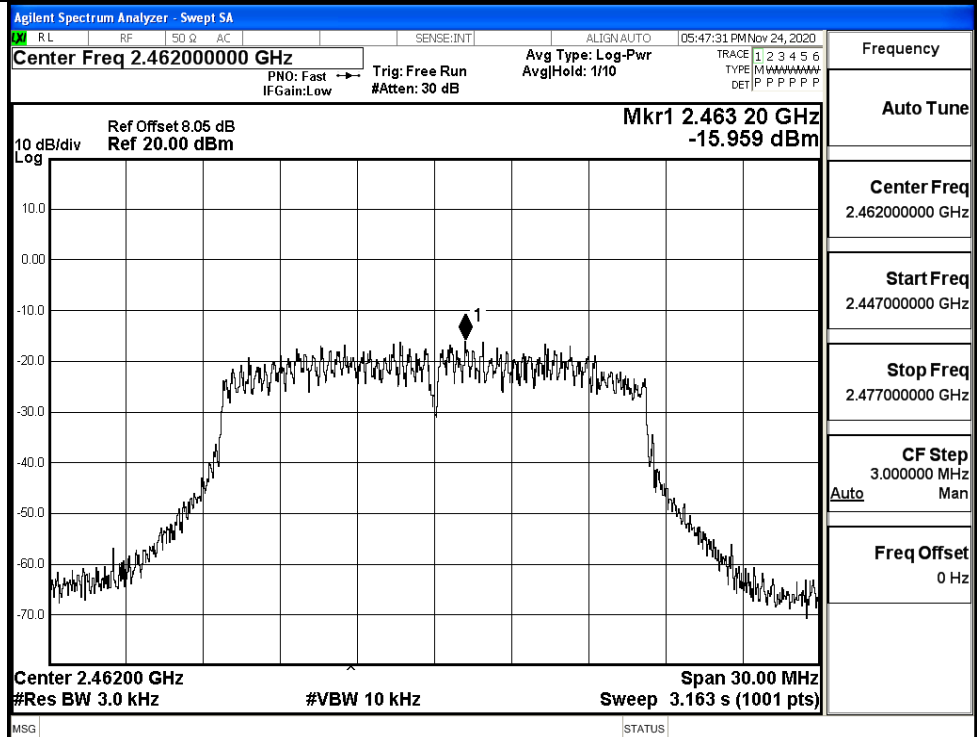
11G/LCH



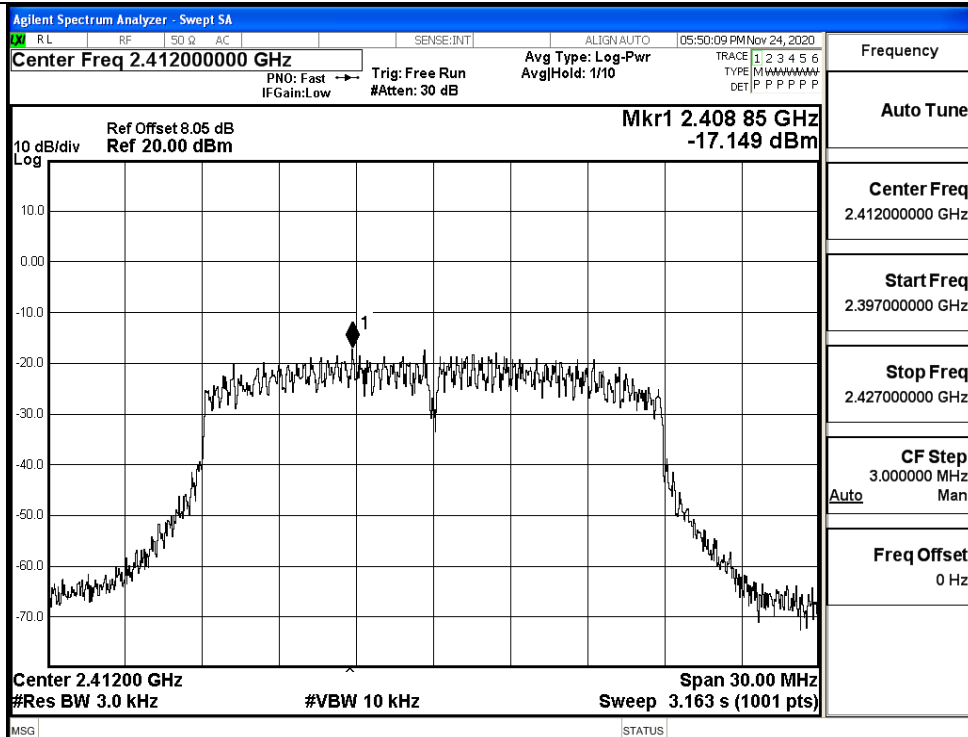
11G/MCH



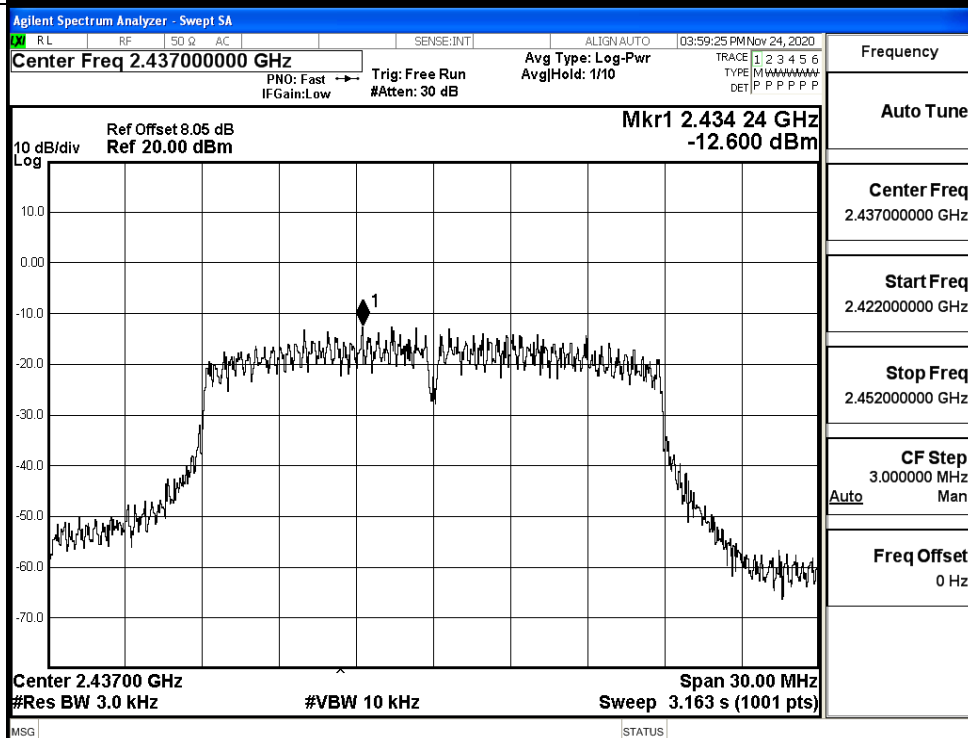
11G/HCH



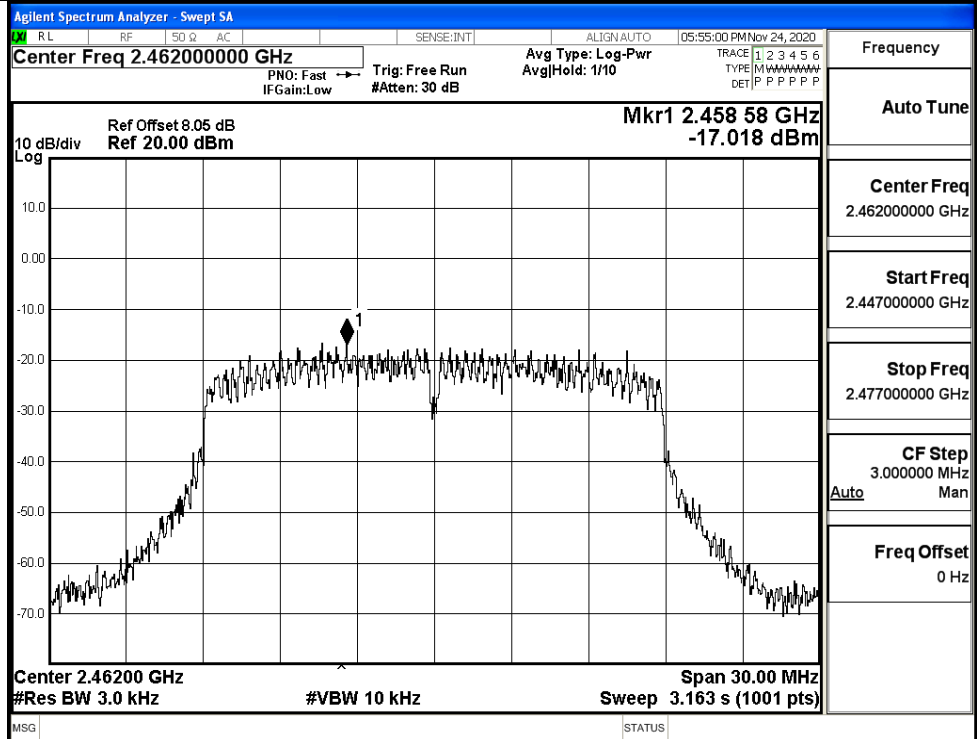
11N20SISO/LCH



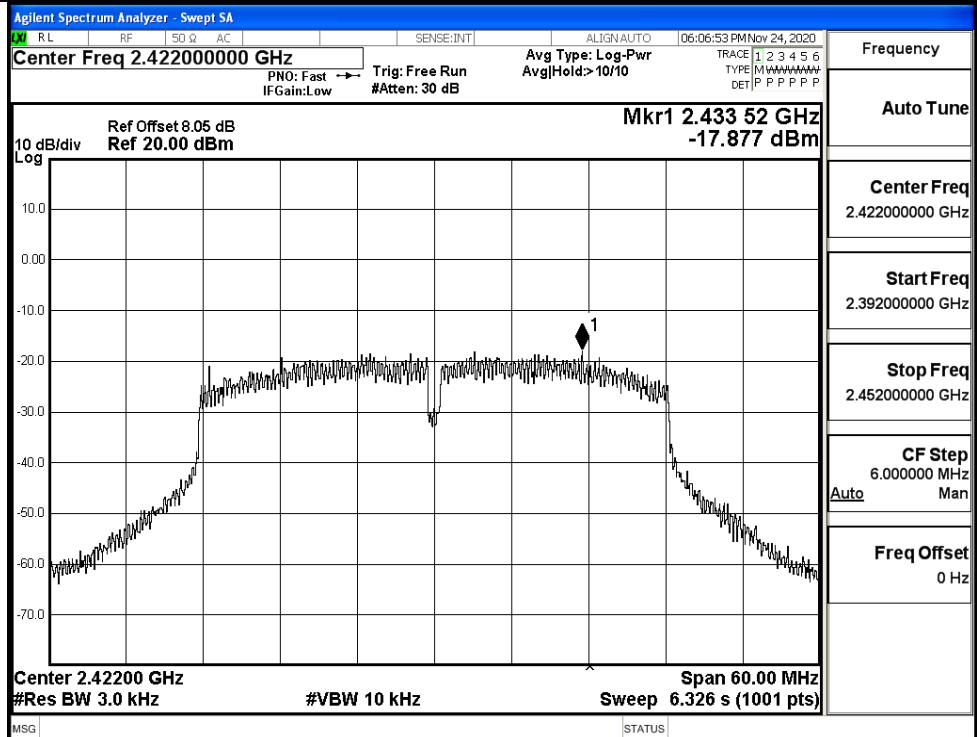
11N20SISO/MCH



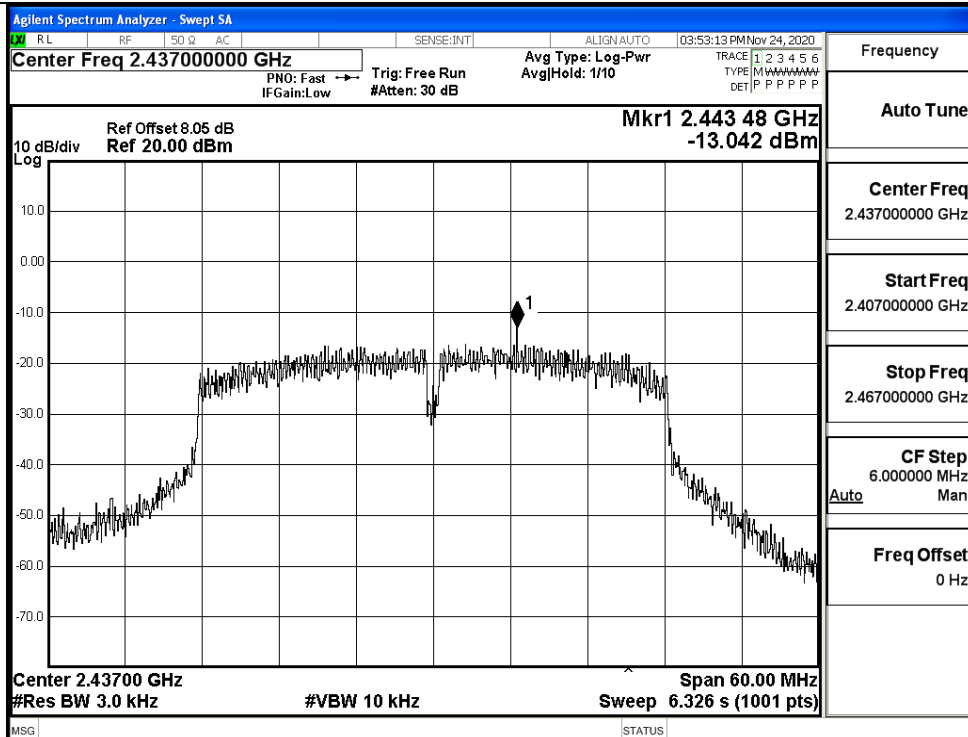
11N20SISO/HCH



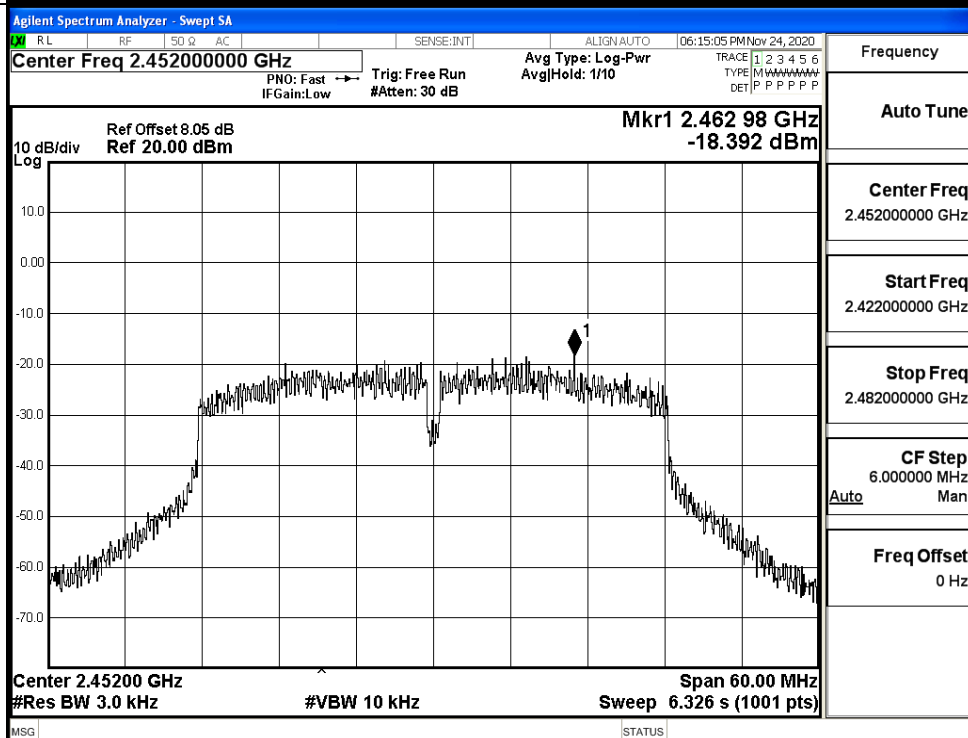
11N40SISO/LCH



11N40SISO/MCH



11N40SISO/HCH



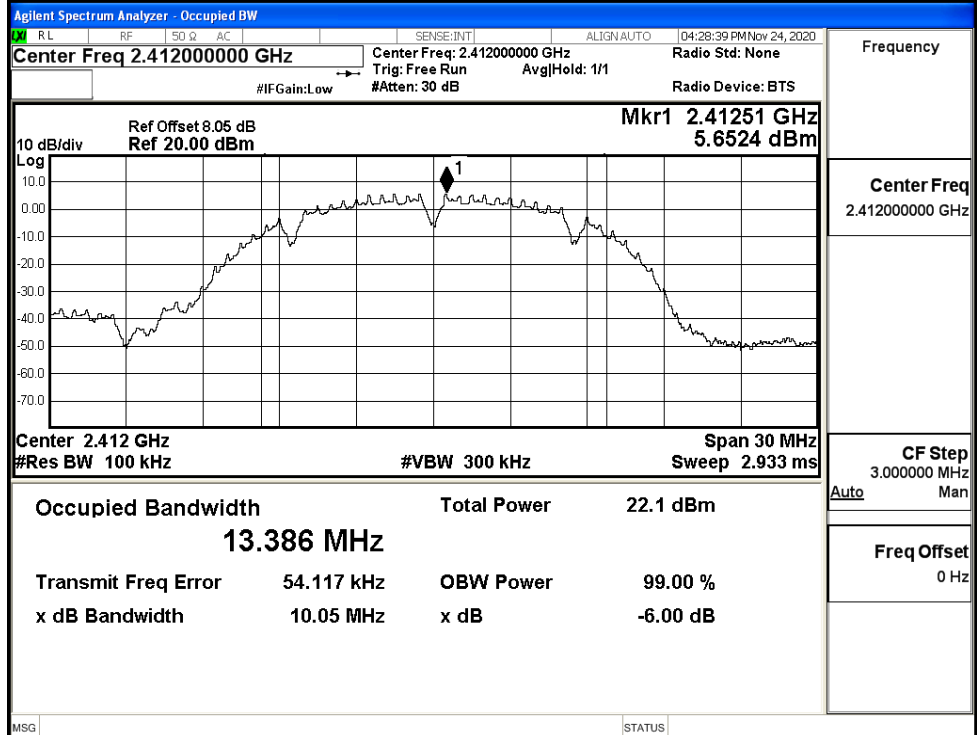
A.4 6dB Bandwidth

ANT 0

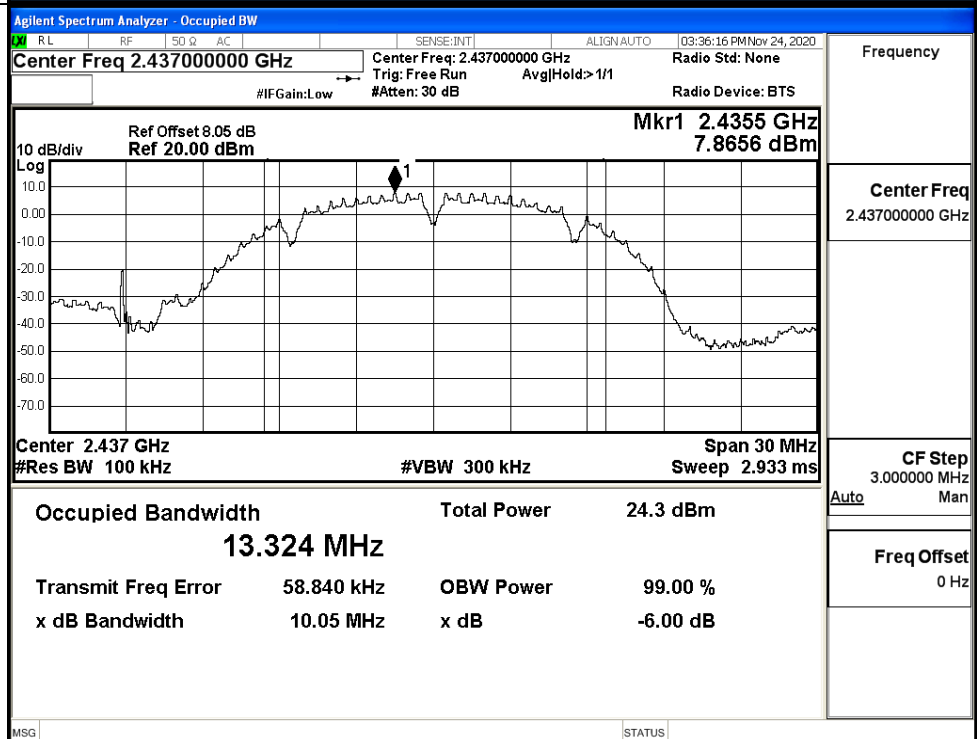
Mode	Channel	6dB Bandwidth [MHz]		Limit [MHz]	Verdict
		Ant 0	Ant 1		
11B	LCH	10.05	9.111	≥ 0.5	PASS
	MCH	10.05	9.566	≥ 0.5	PASS
	HCH	10.04	10.06	≥ 0.5	PASS
11G	LCH	15.15	15.11	≥ 0.5	PASS
	MCH	15.14	15.07	≥ 0.5	PASS
	HCH	15.02	13.90	≥ 0.5	PASS
11N20SISO	LCH	15.11	15.12	≥ 0.5	PASS
	MCH	15.13	15.14	≥ 0.5	PASS
	HCH	15.05	15.12	≥ 0.5	PASS
11N40SISO	LCH	35.04	35.09	≥ 0.5	PASS
	MCH	33.84	33.81	≥ 0.5	PASS
	HCH	31.43	35.11	≥ 0.5	PASS

Test Graphs_ Ant 0

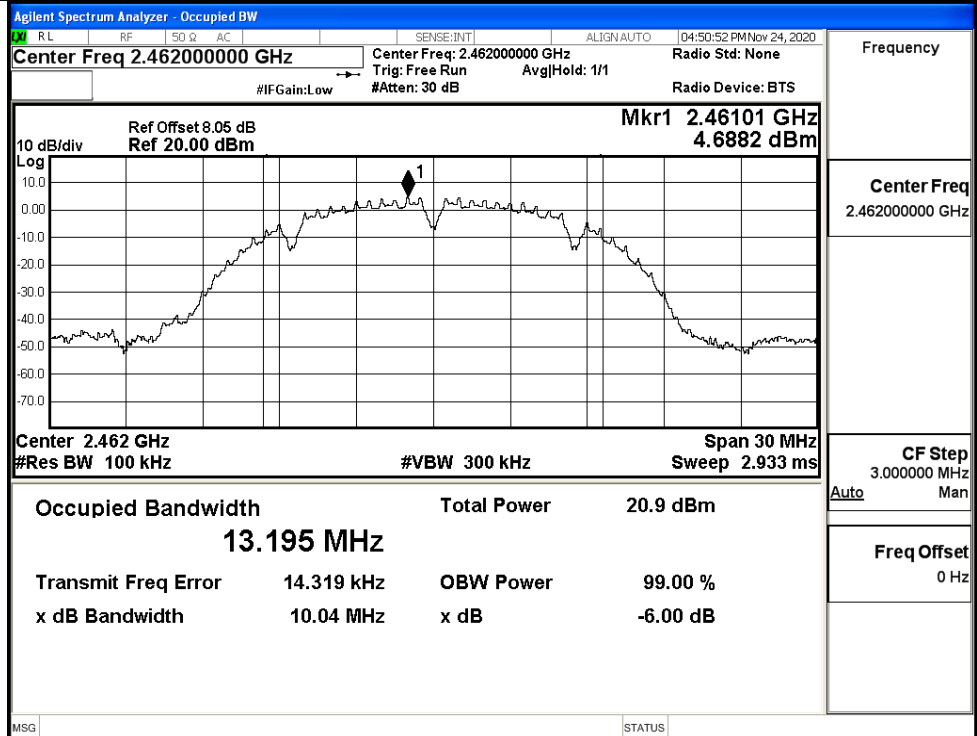
11B/LCH



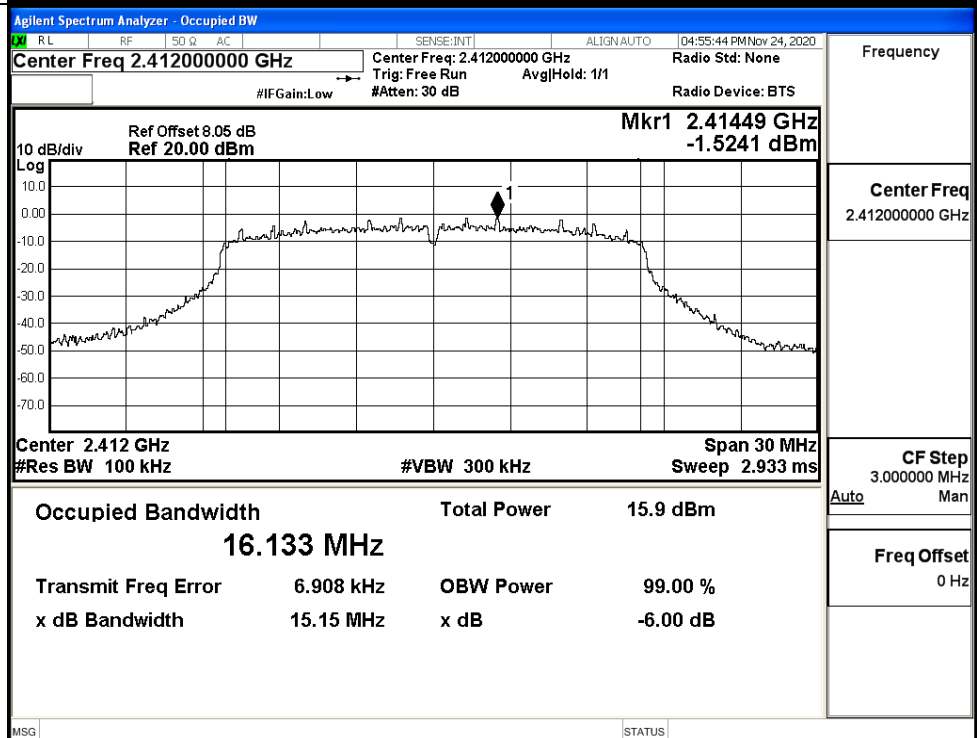
11B/MCH



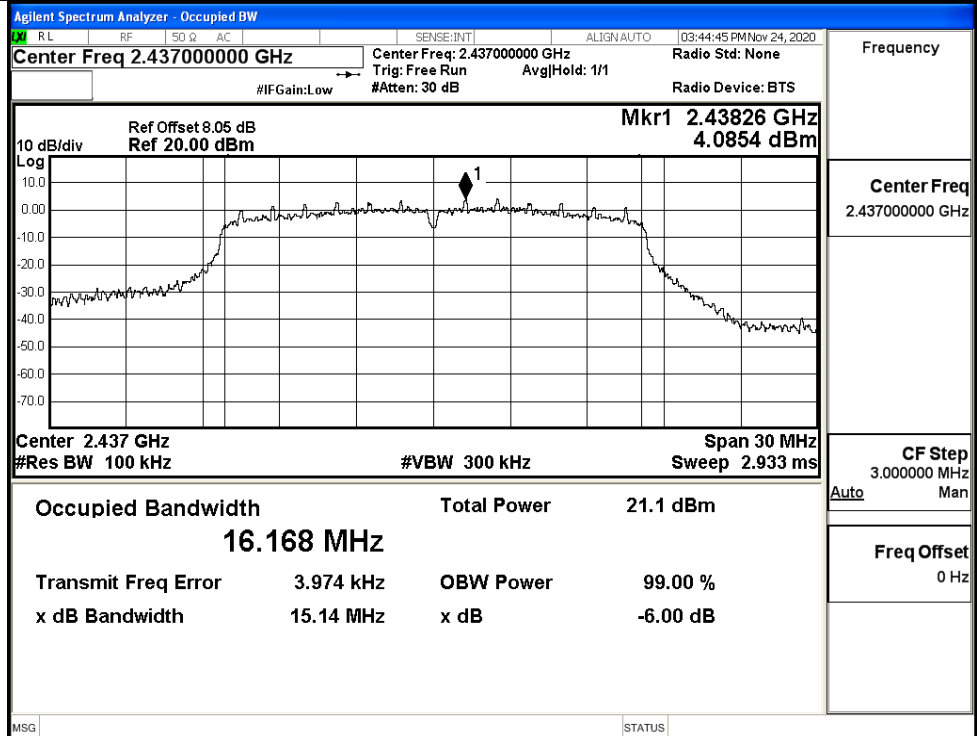
11B/HCH



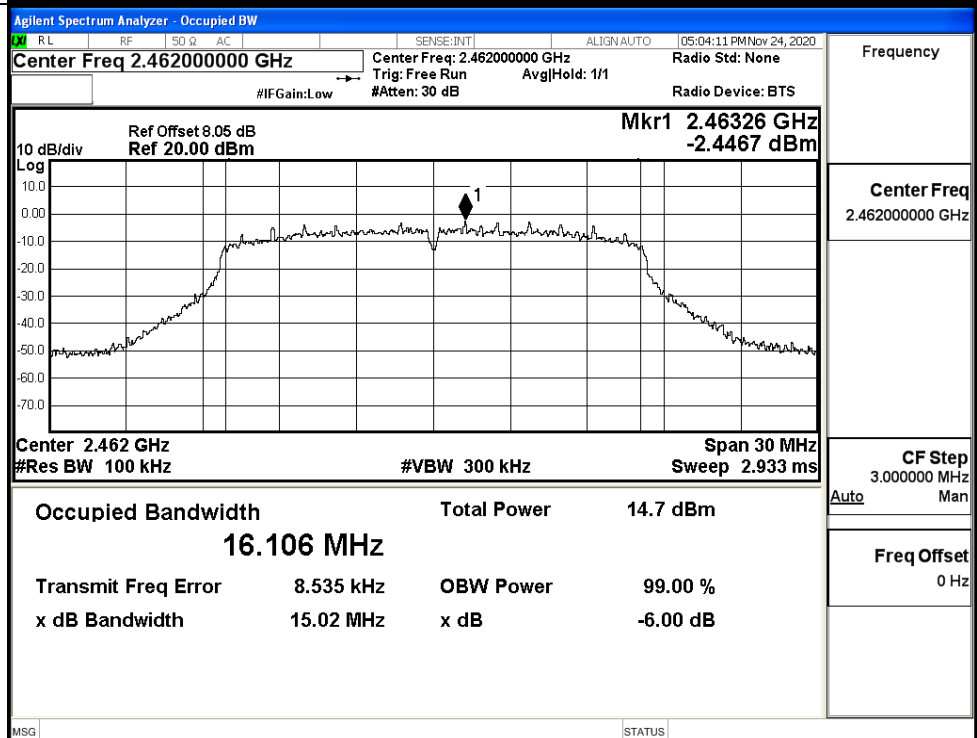
11G/LCH



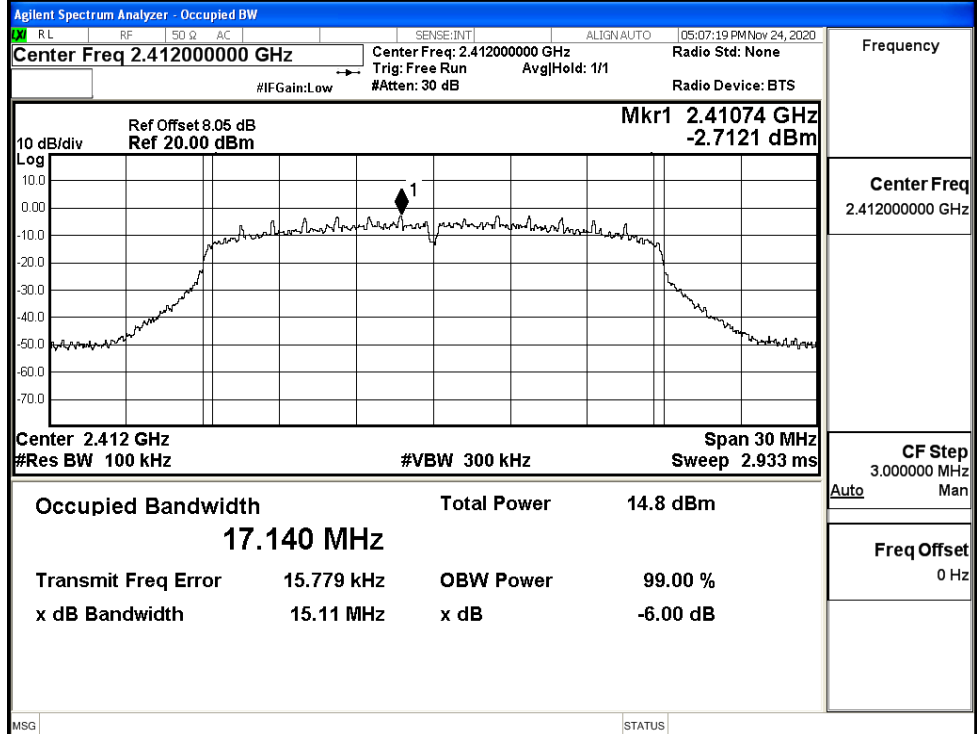
11G/MCH



11G/HCH



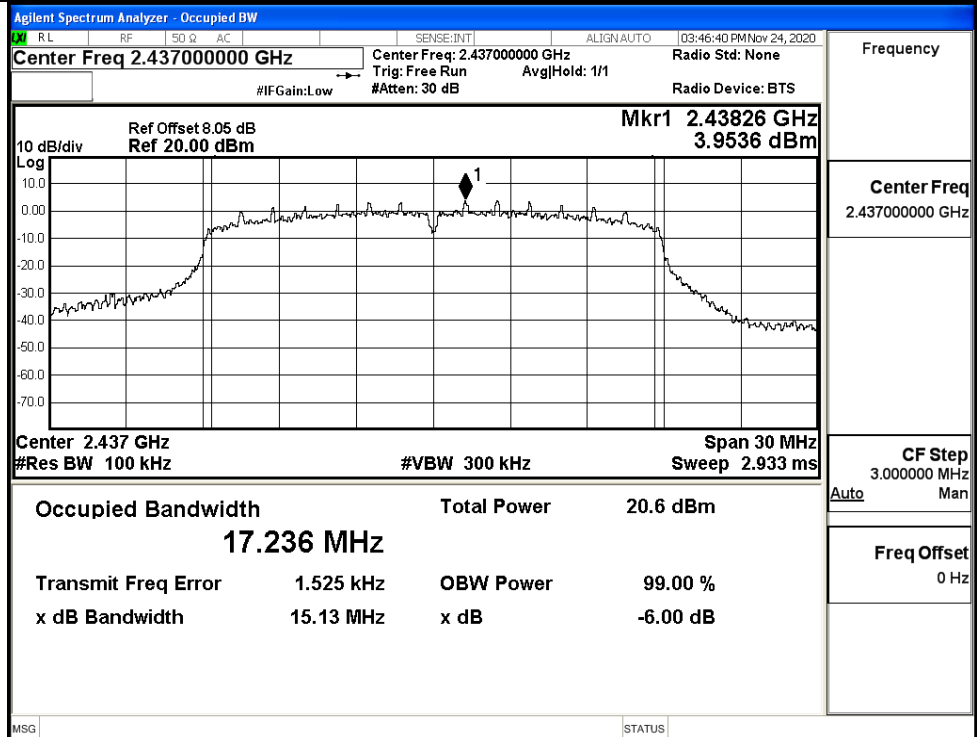
11N20SISO/LCH



Frequency

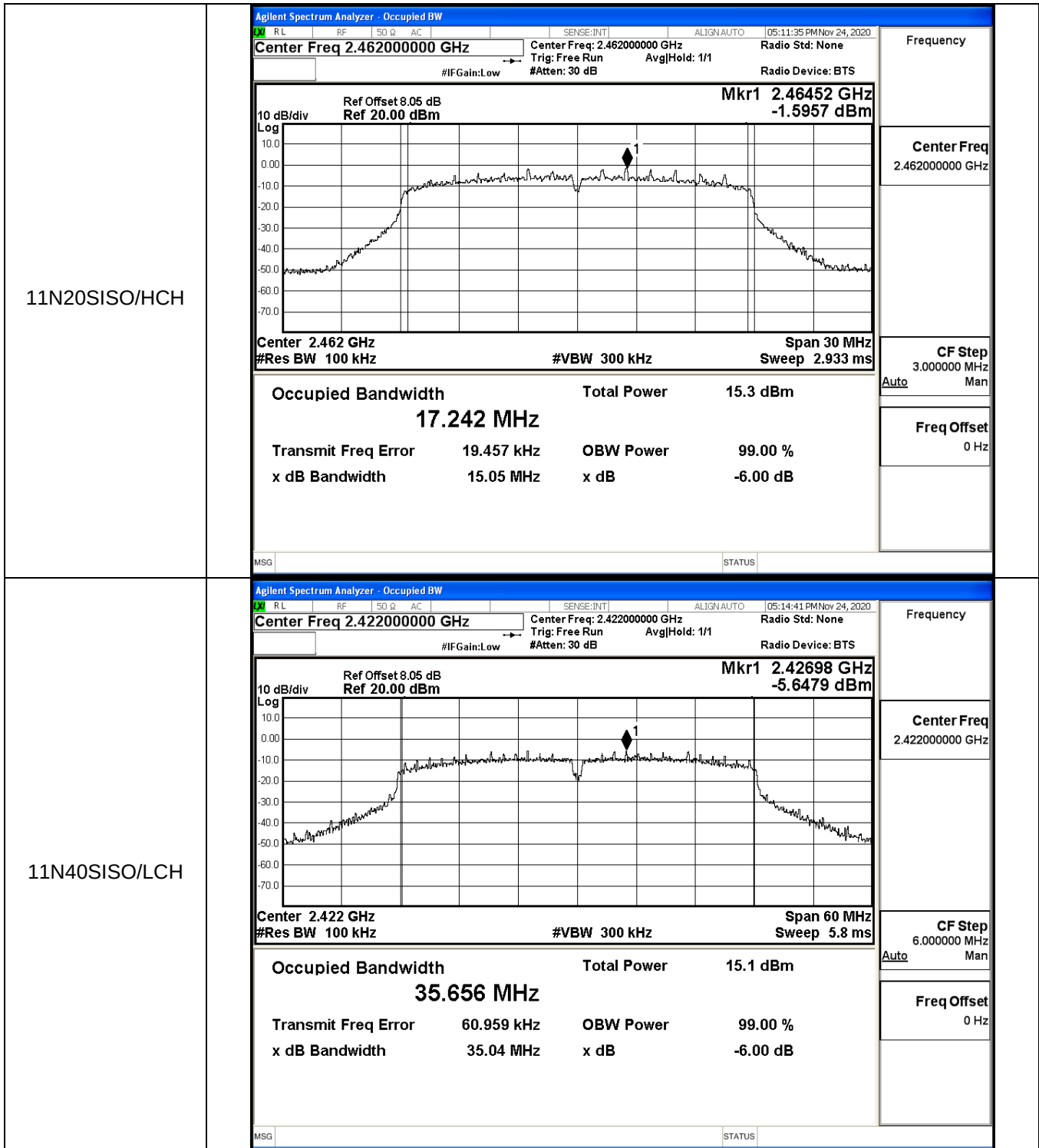
Center Freq
2.412000000 GHzCF Step
3.000000 MHz
Auto ManFreq Offset
0 Hz

11N20SISO/MCH

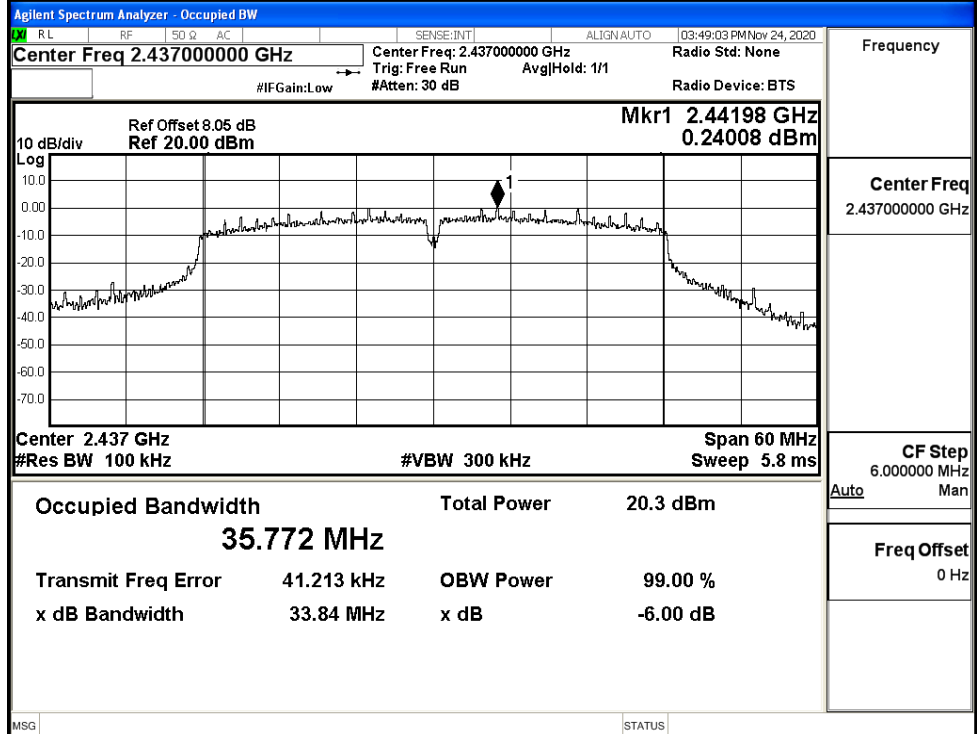


Frequency

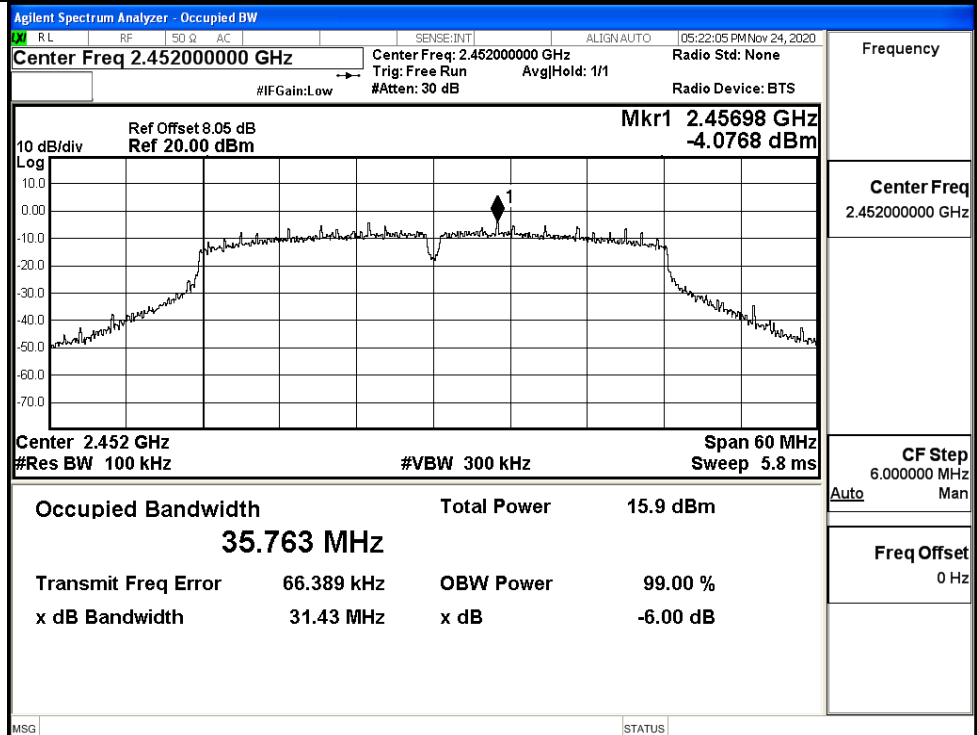
Center Freq
2.437000000 GHzCF Step
3.000000 MHz
Auto ManFreq Offset
0 Hz



11N40SISO/MCH

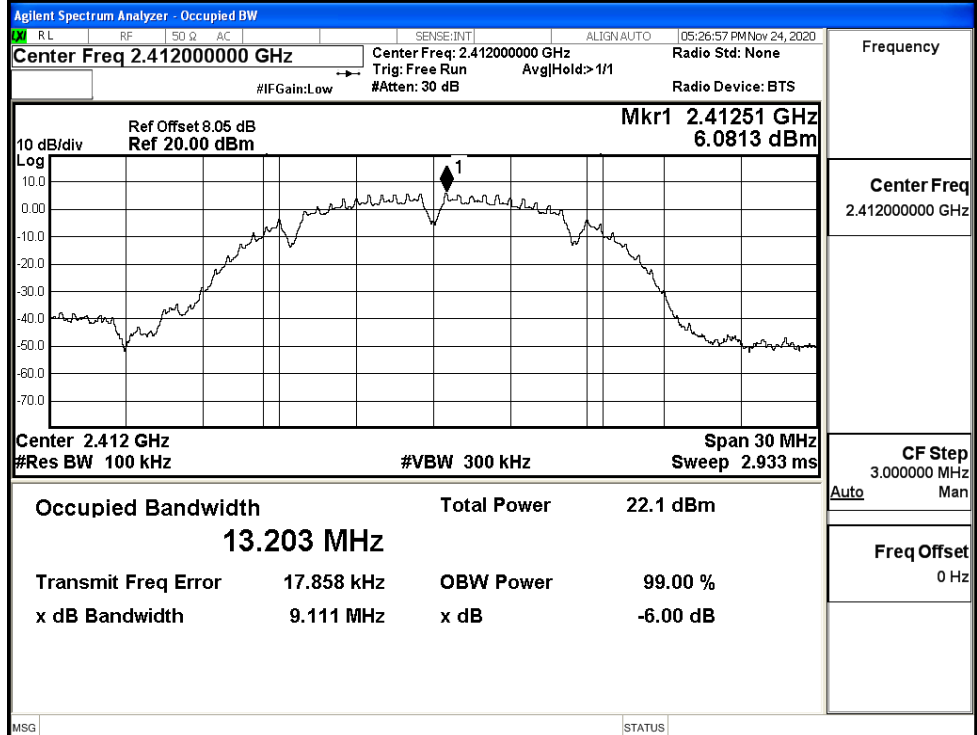


11N40SISO/HCH

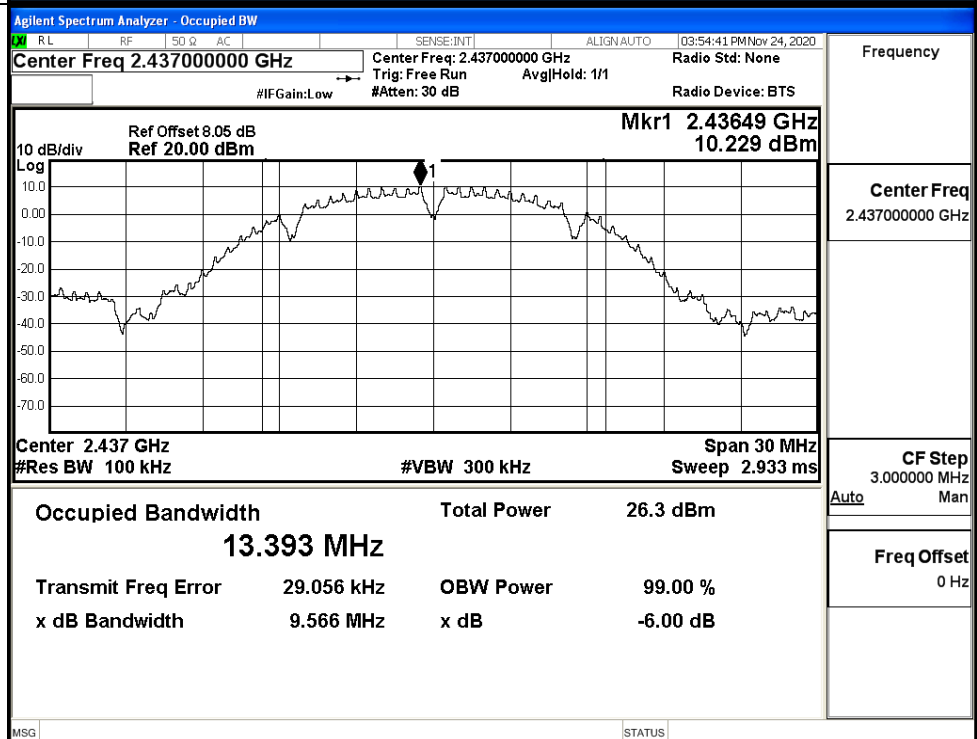


Test Graphs_ Ant 1

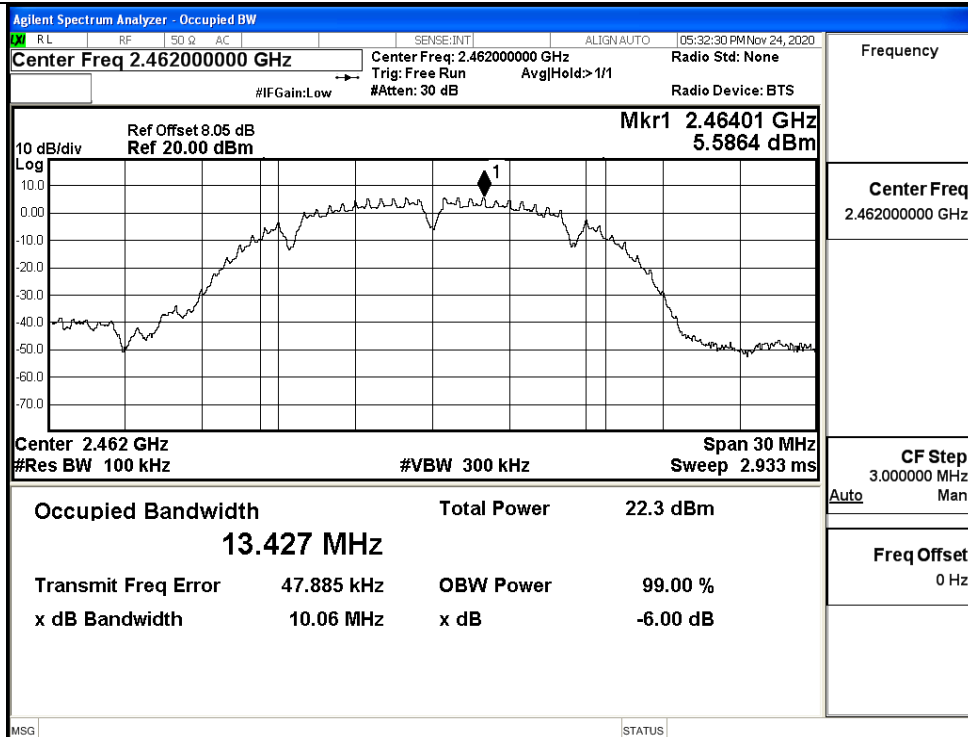
11B/LCH



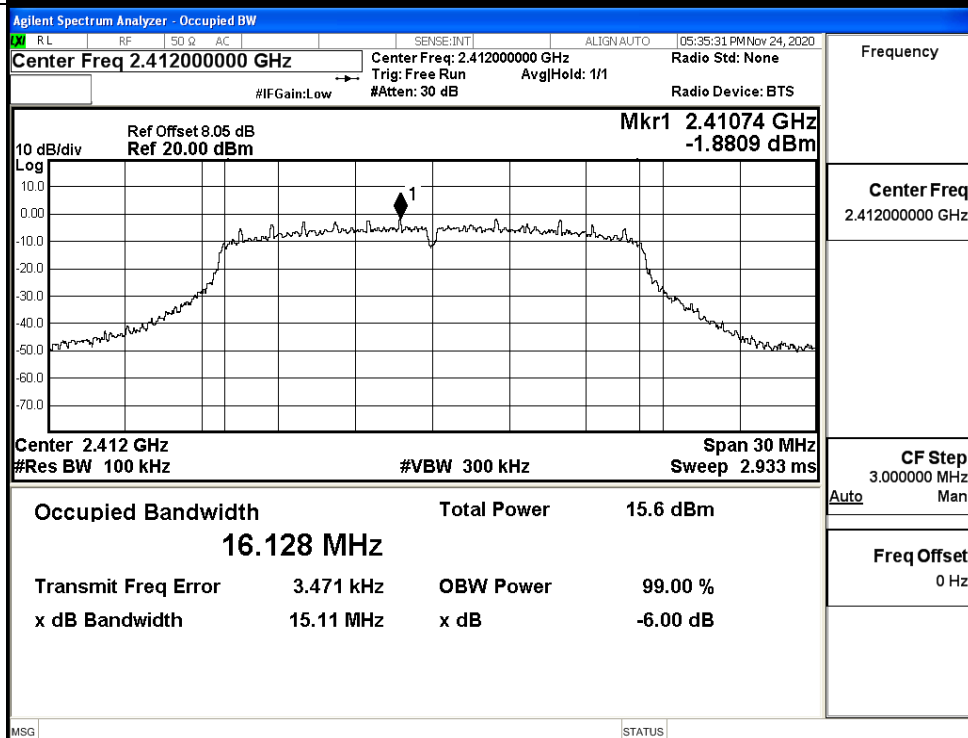
11B/MCH



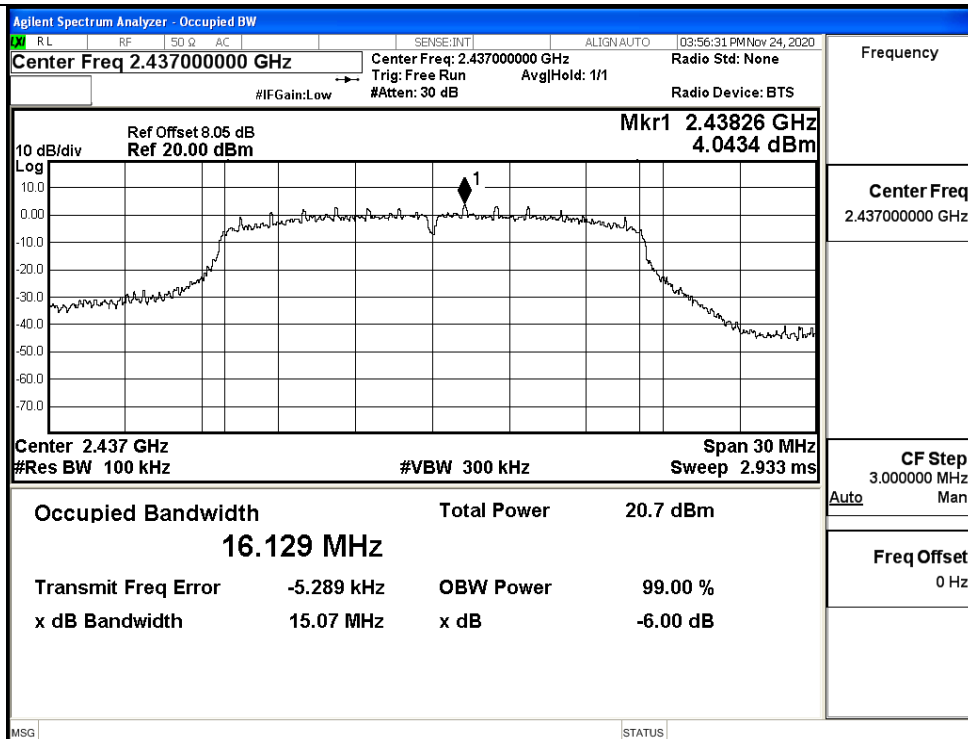
11B/HCH



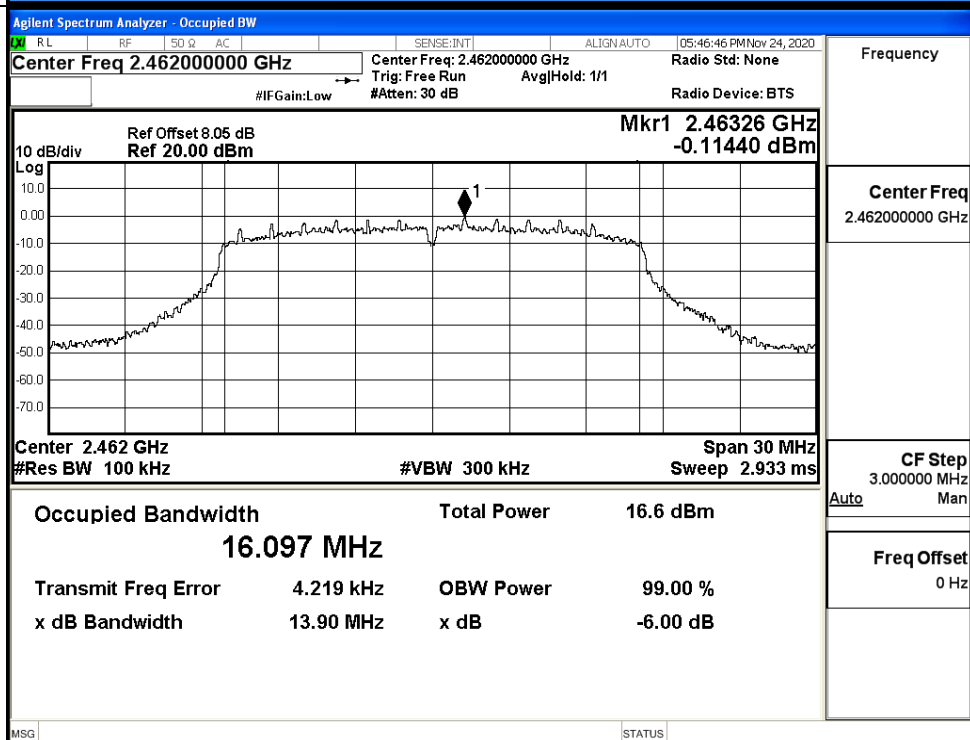
11G/LCH



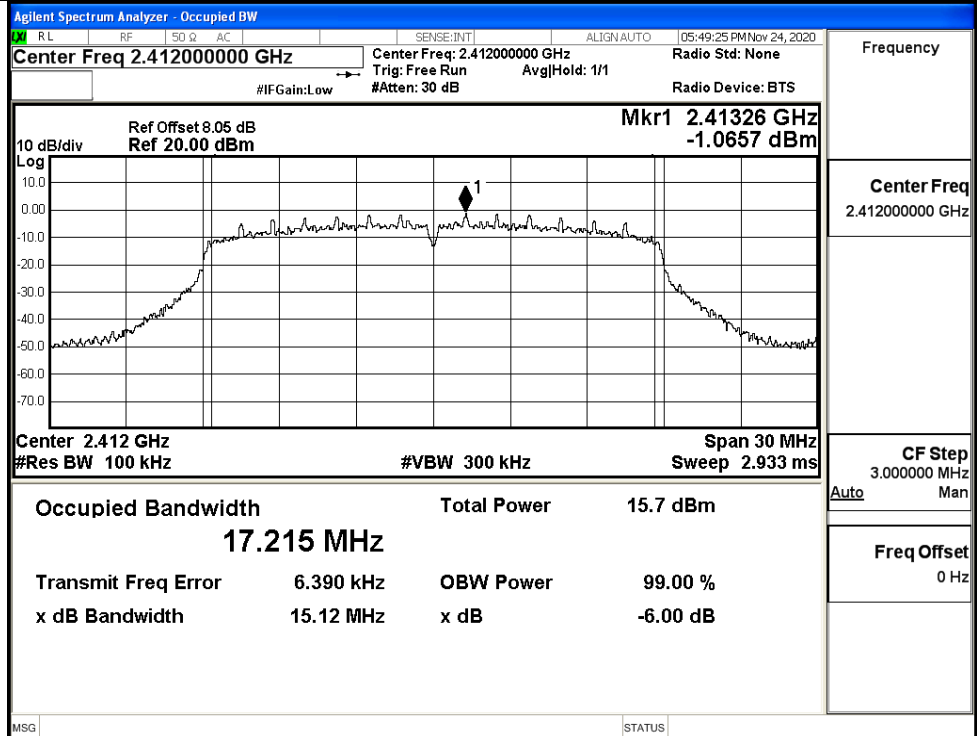
11G/MCH



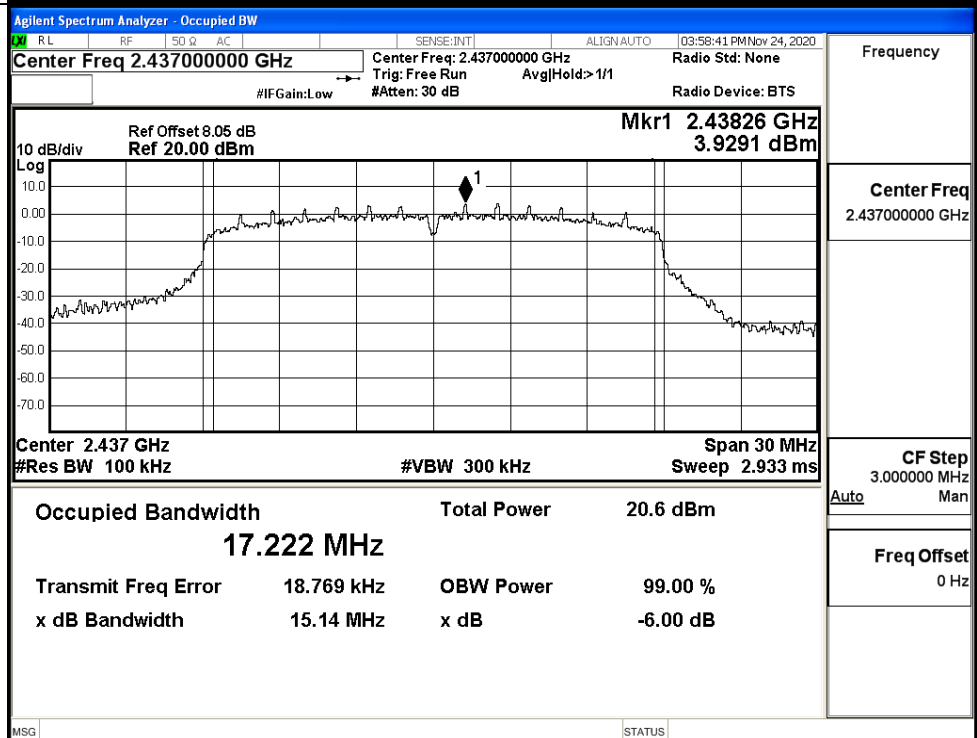
11G/HCH

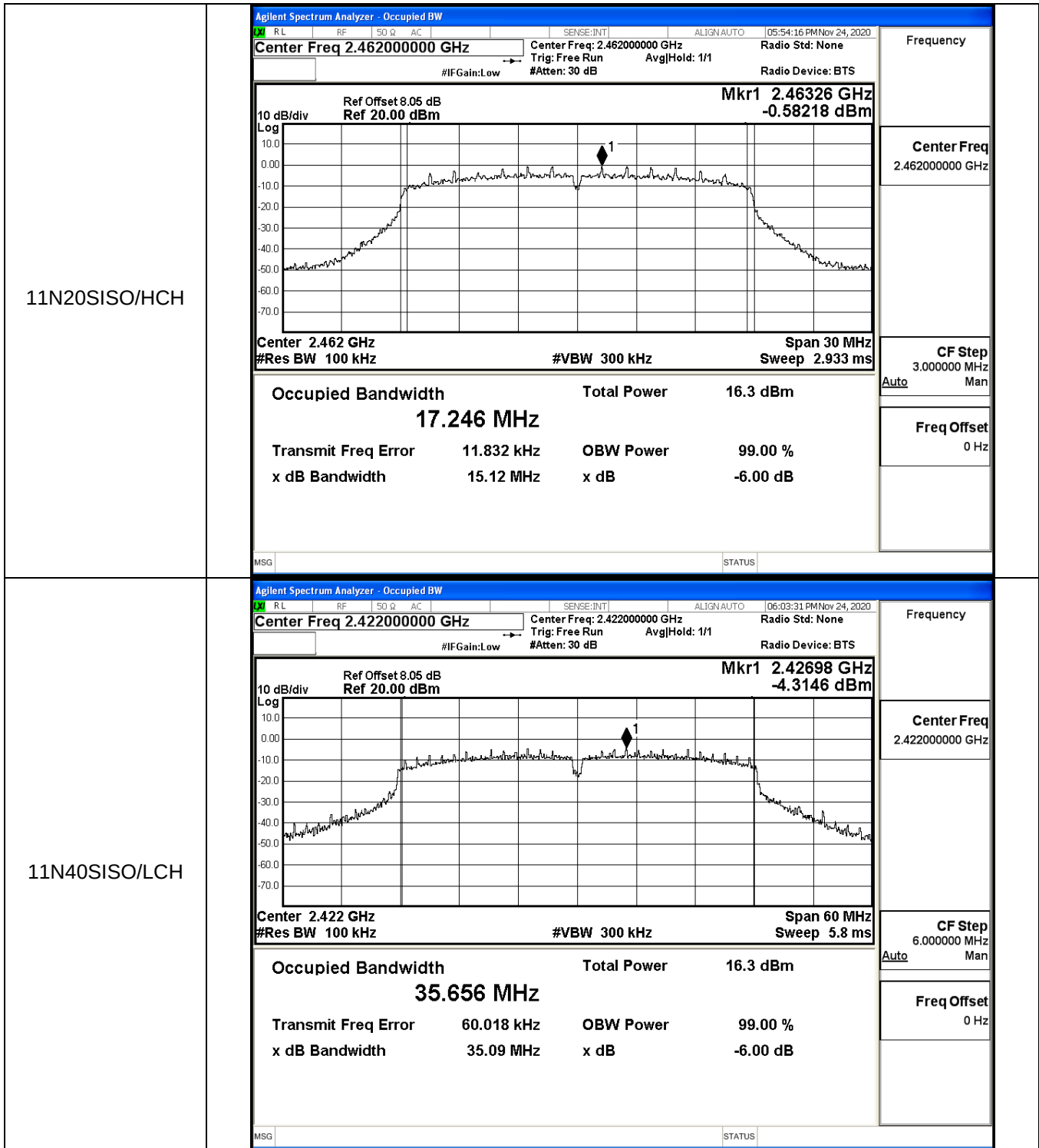


11N20SISO/LCH

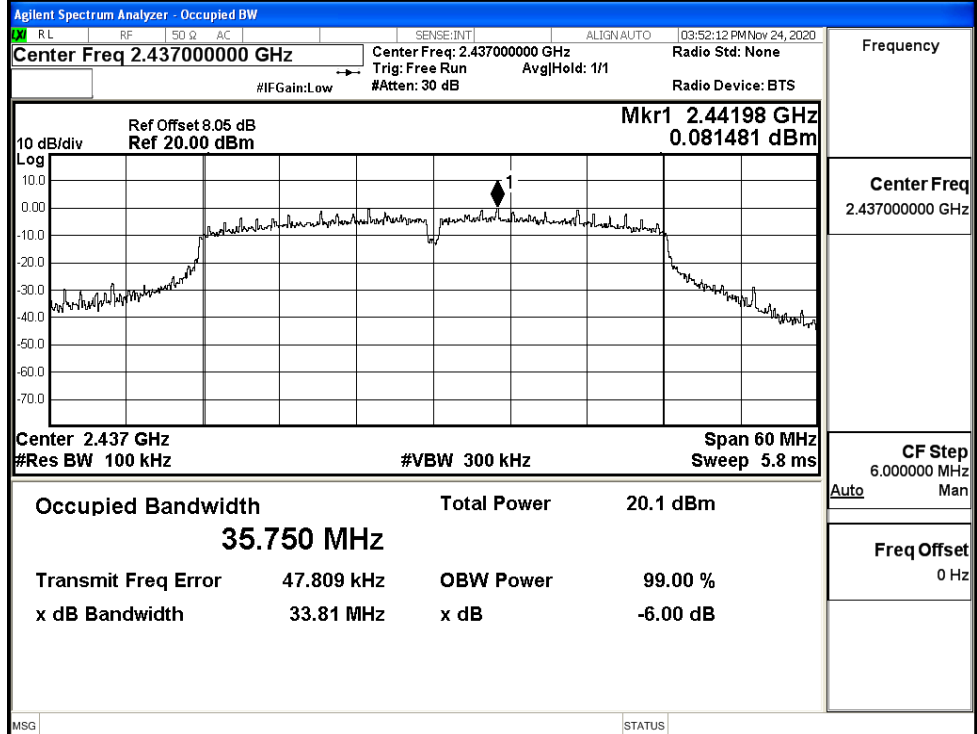


11N20SISO/MCH

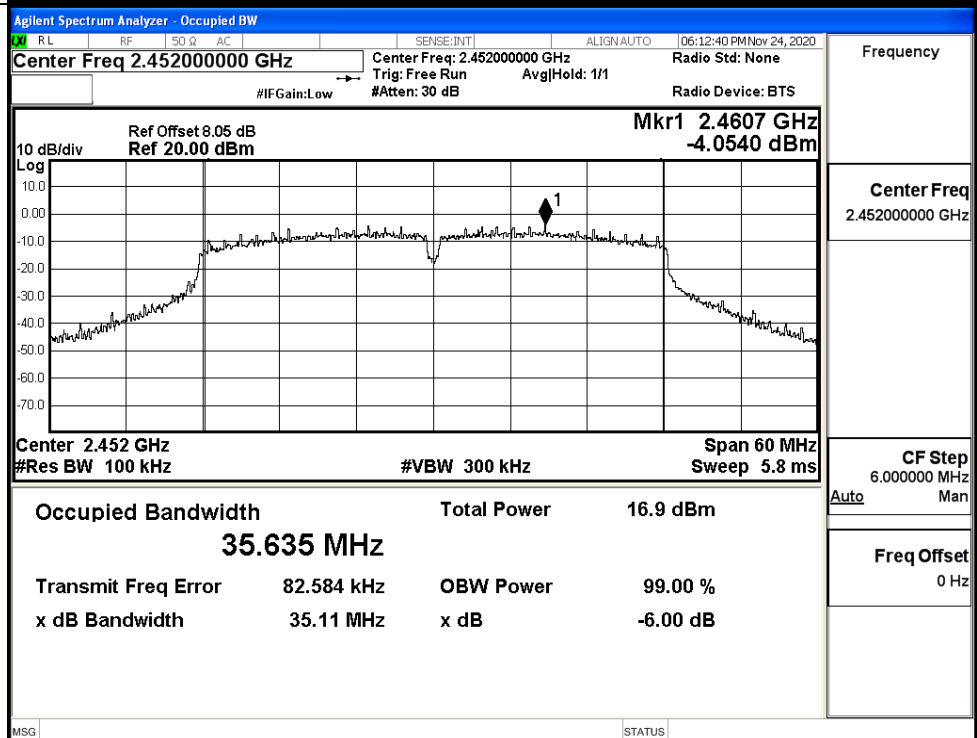




11N40SISO/MCH



11N40SISO/HCH



A.5 RF Conducted Spurious Emissions

ANT 0

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
11B	LCH	5.825	-33.482	-14.175	PASS
	MCH	7.763	-28.684	-12.237	PASS
	HCH	4.793	-36.305	-15.207	PASS
11G	LCH	-2.029	-37.978	-22.029	PASS
	MCH	3.105	-37.887	-16.895	PASS
	HCH	-2.729	-37.813	-22.729	PASS
11N20 SISO	LCH	-2.767	-37.853	-22.767	PASS
	MCH	3.587	-37.979	-16.413	PASS
	HCH	-1.104	-37.644	-21.104	PASS
11N40 SISO	LCH	-5.188	-37.850	-25.188	PASS
	MCH	-0.119	-37.823	-20.119	PASS
	HCH	-4.181	-36.425	-24.181	PASS

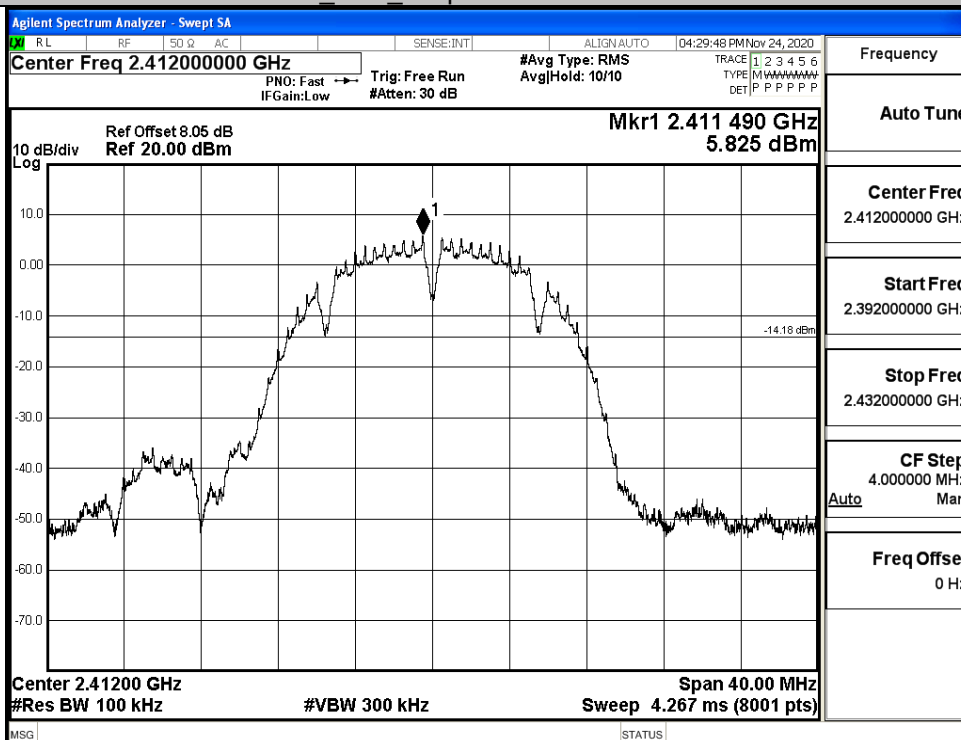
ANT 1

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
11B	LCH	5.498	-33.609	-14.502	PASS
	MCH	9.545	-27.429	-10.455	PASS
	HCH	5.5	-34.685	-14.500	PASS
11G	LCH	-1.507	-37.294	-21.507	PASS
	MCH	-1.494	-37.842	-21.494	PASS
	HCH	-0.583	-38.385	-20.583	PASS
11N20 SISO	LCH	-0.738	-37.821	-20.738	PASS
	MCH	3.678	-36.958	-16.322	PASS
	HCH	-0.08	-37.530	-20.080	PASS
11N40 SISO	LCH	-4.271	-37.849	-24.271	PASS
	MCH	0.024	-37.712	-19.976	PASS
	HCH	-3.623	-37.280	-23.623	PASS

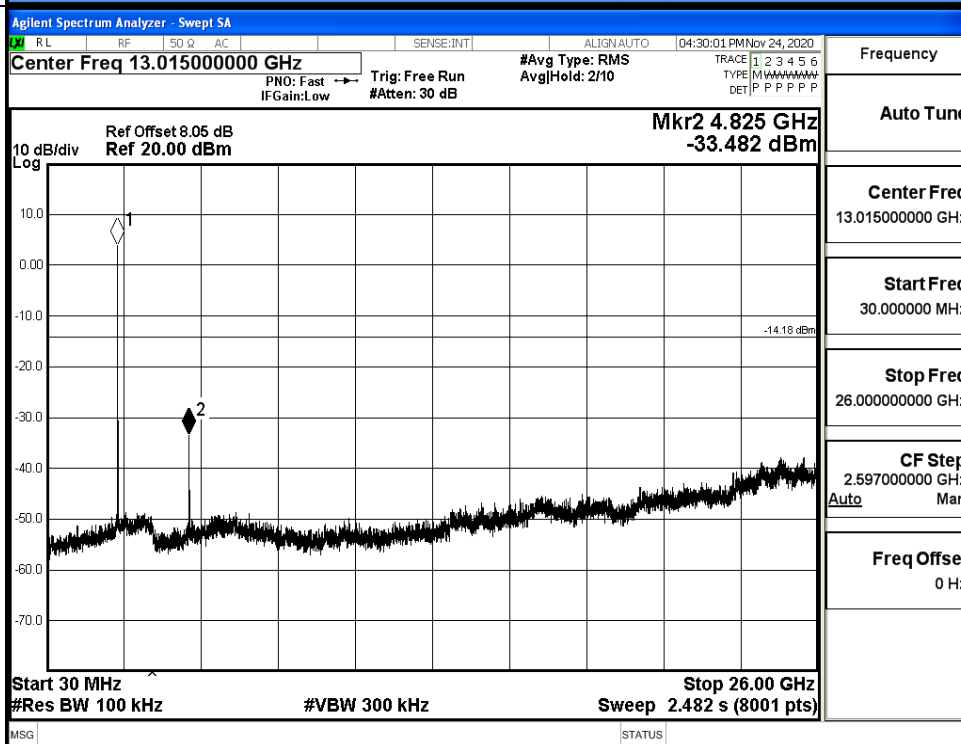
ANT 0

11B LCH Graphs

Pref/11B/LCH

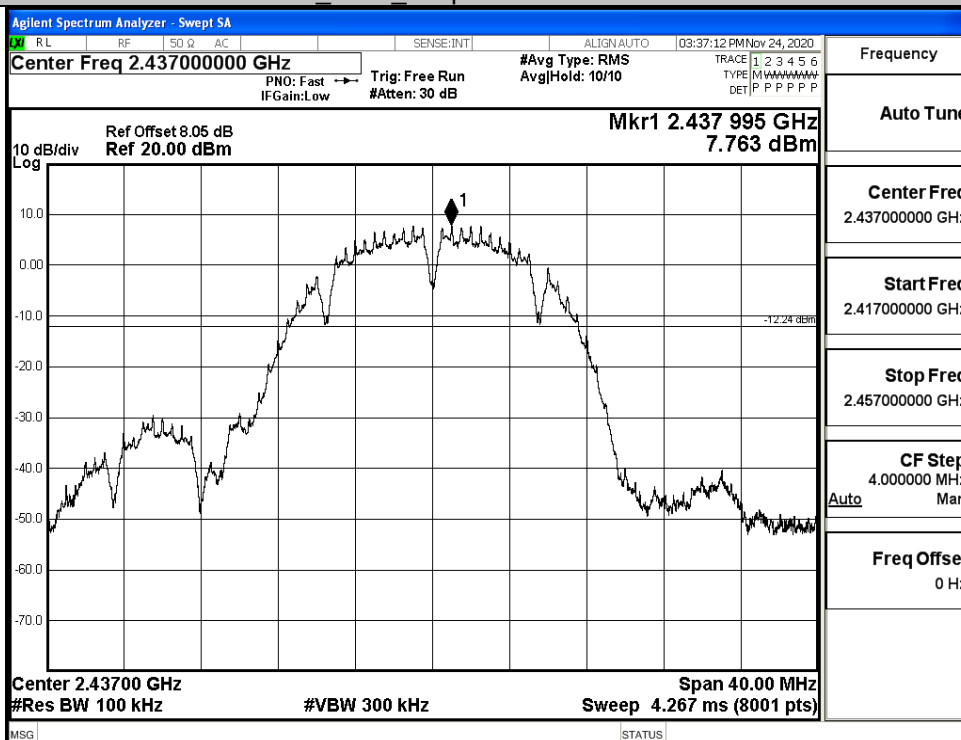


Puw/11B/LCH

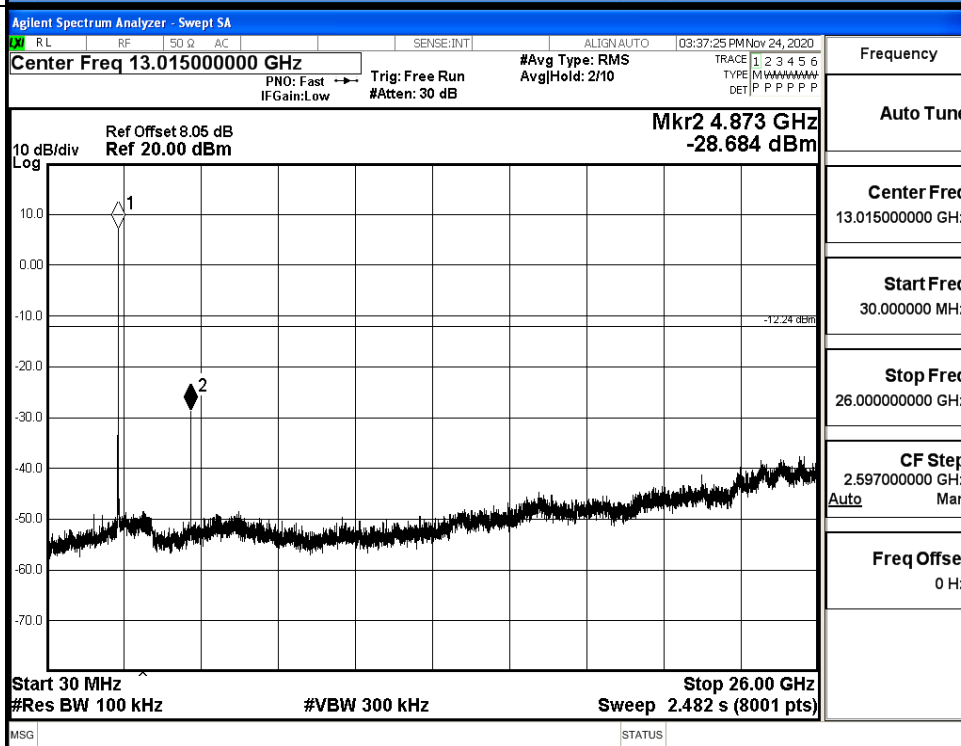


11B MCH Graphs

Pref/11B/MCH

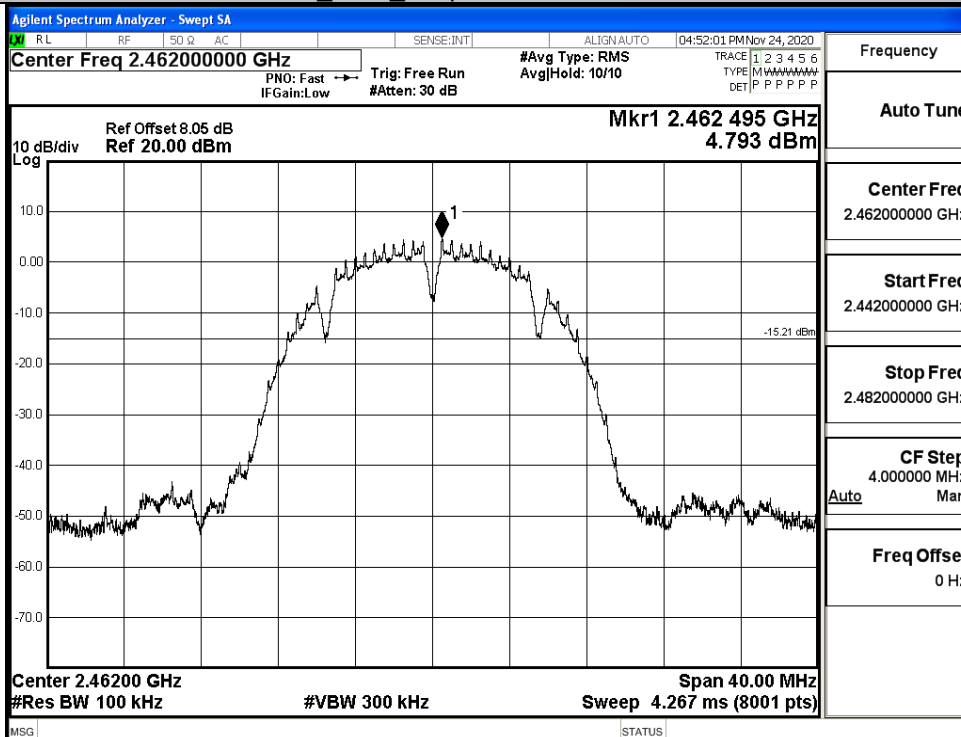


Puw/11B/MCH

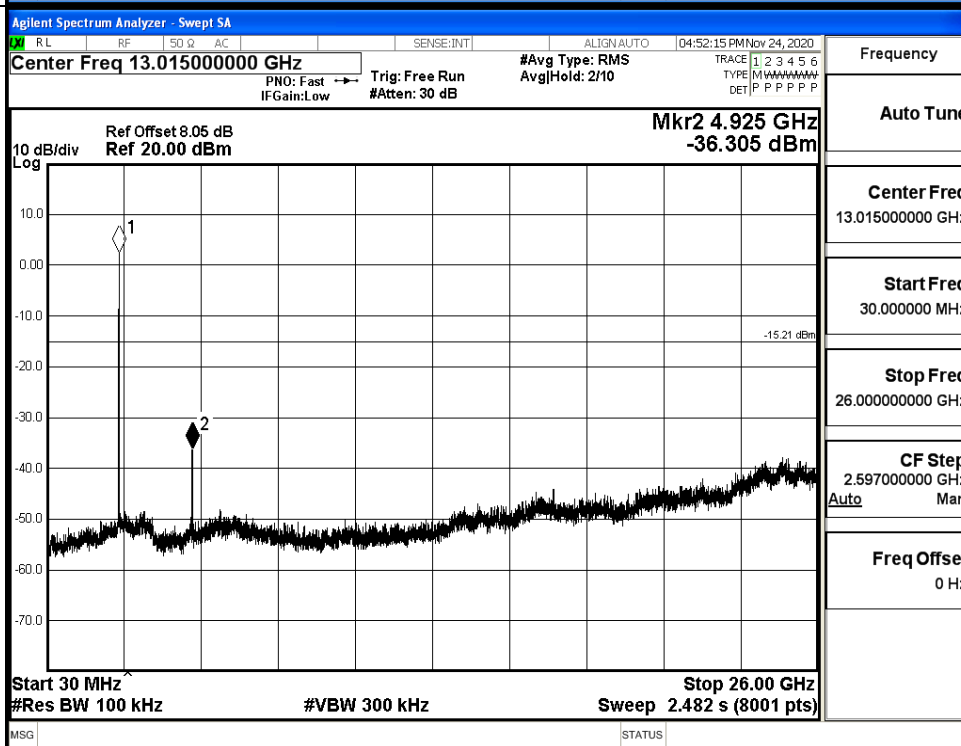


11B HCH Graphs

Pref/11B/HCH

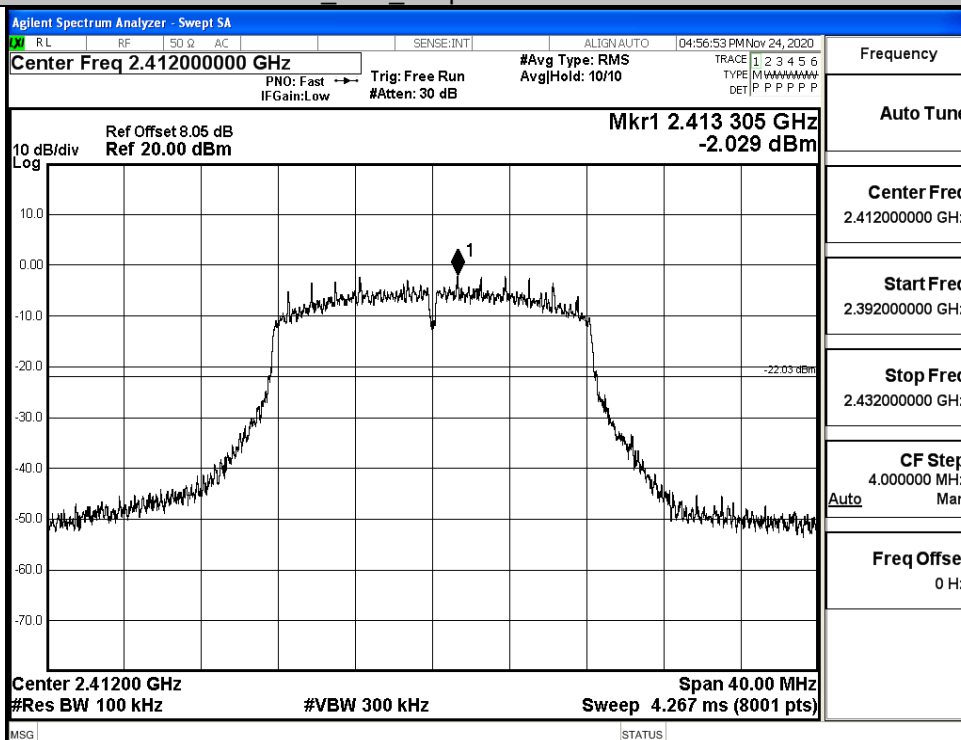


Puw/11B/HCH

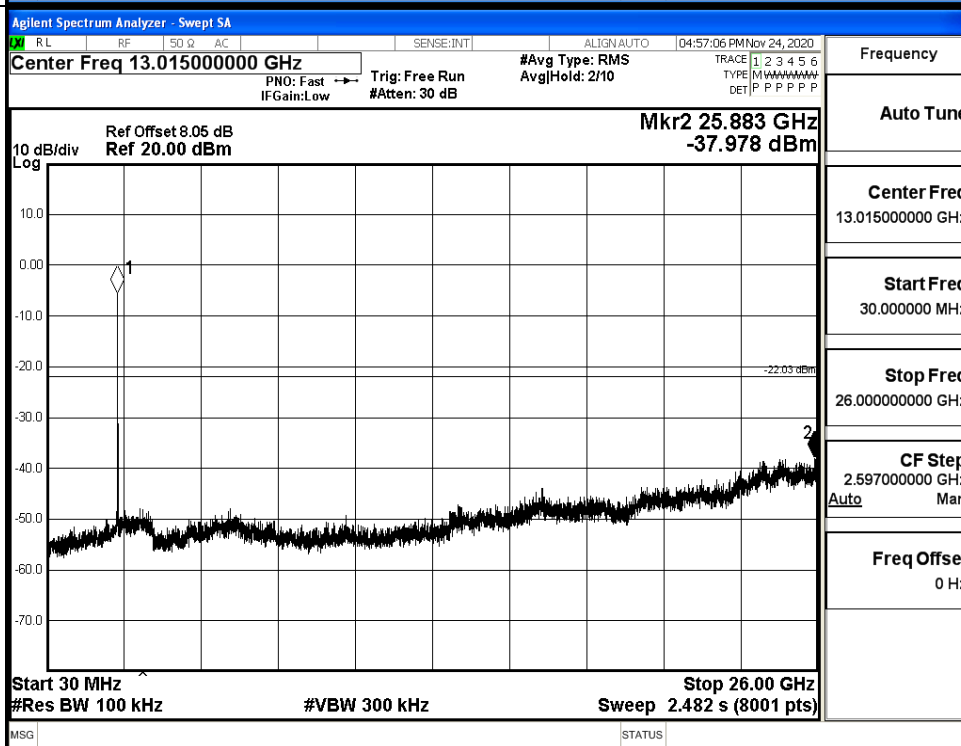


11G LCH Graphs

Pref/11G/LCH

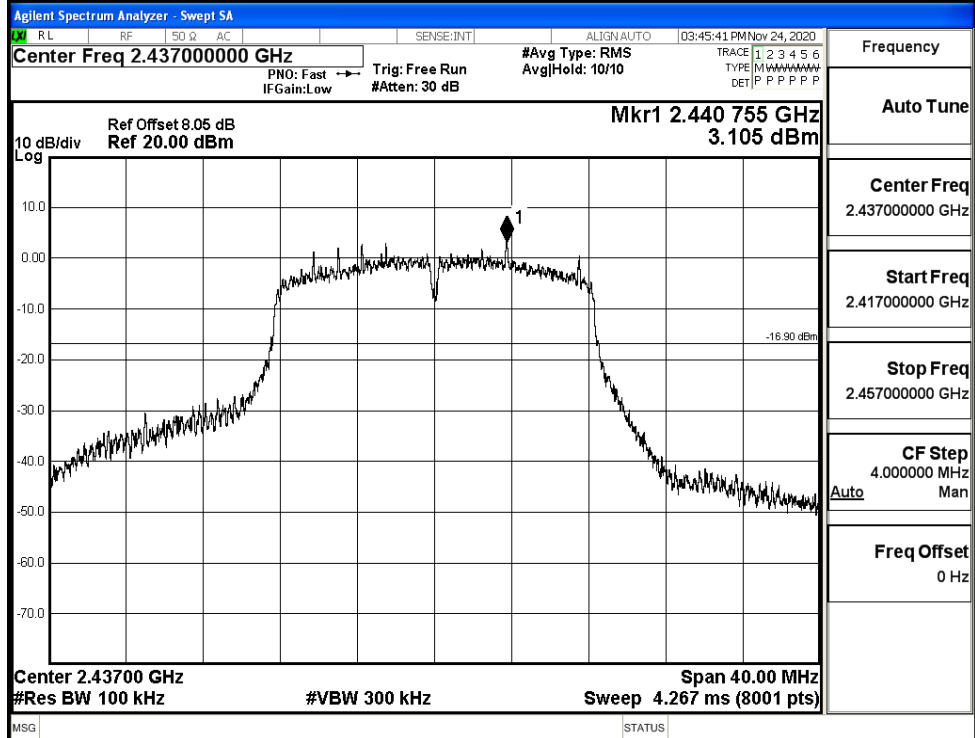


Puw/11G/LCH

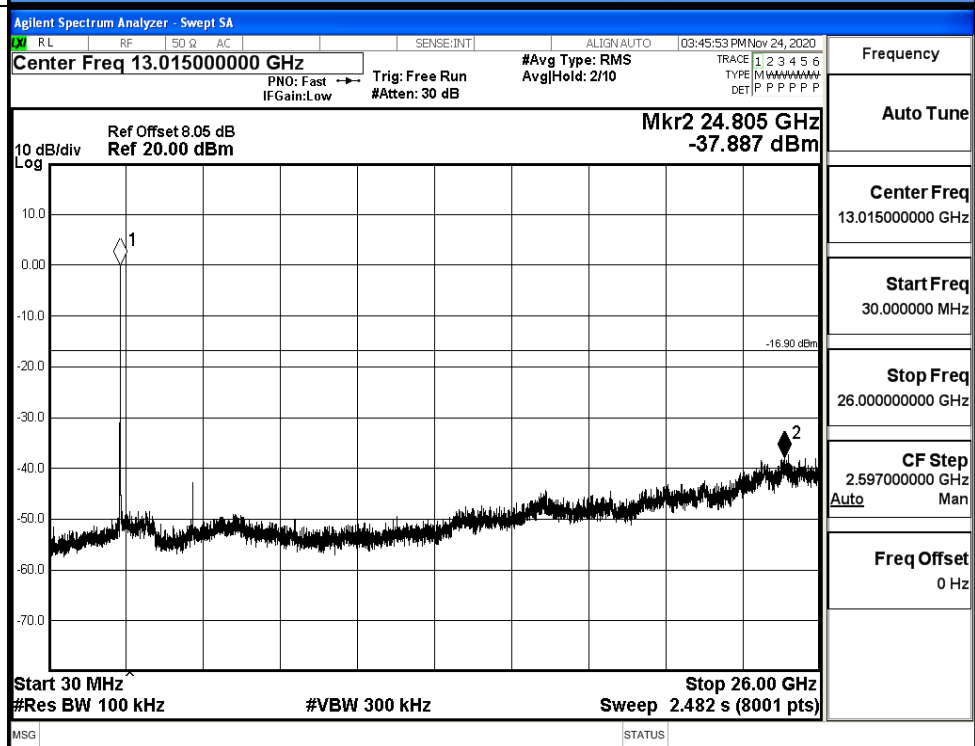


11G MCH Graphs

Pref/11G/MCH

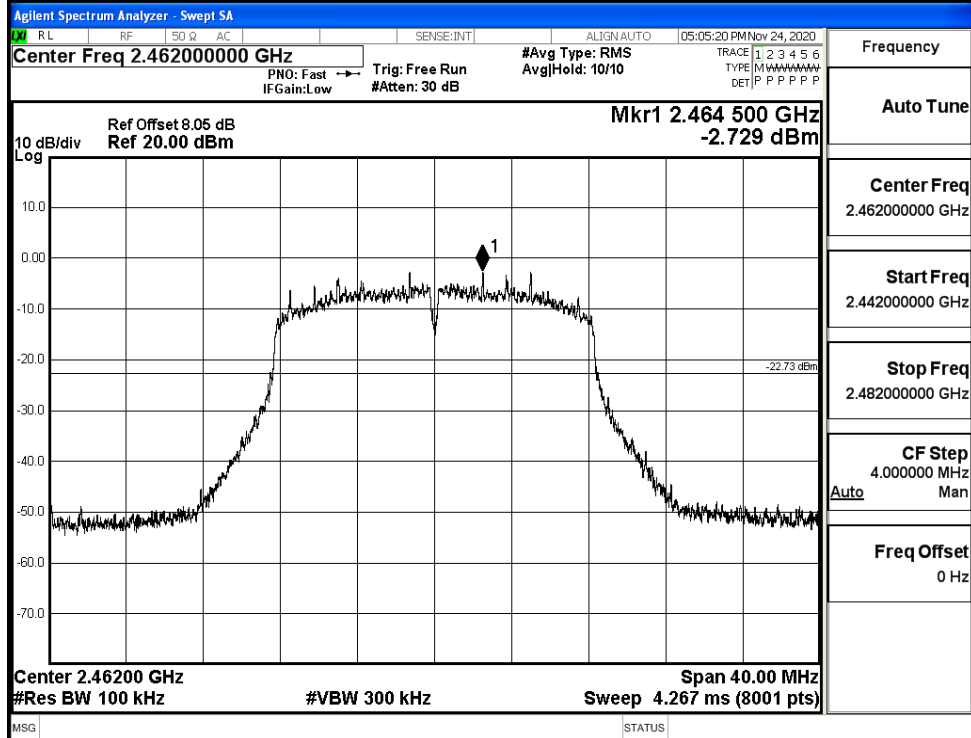


Puw/11G/MCH

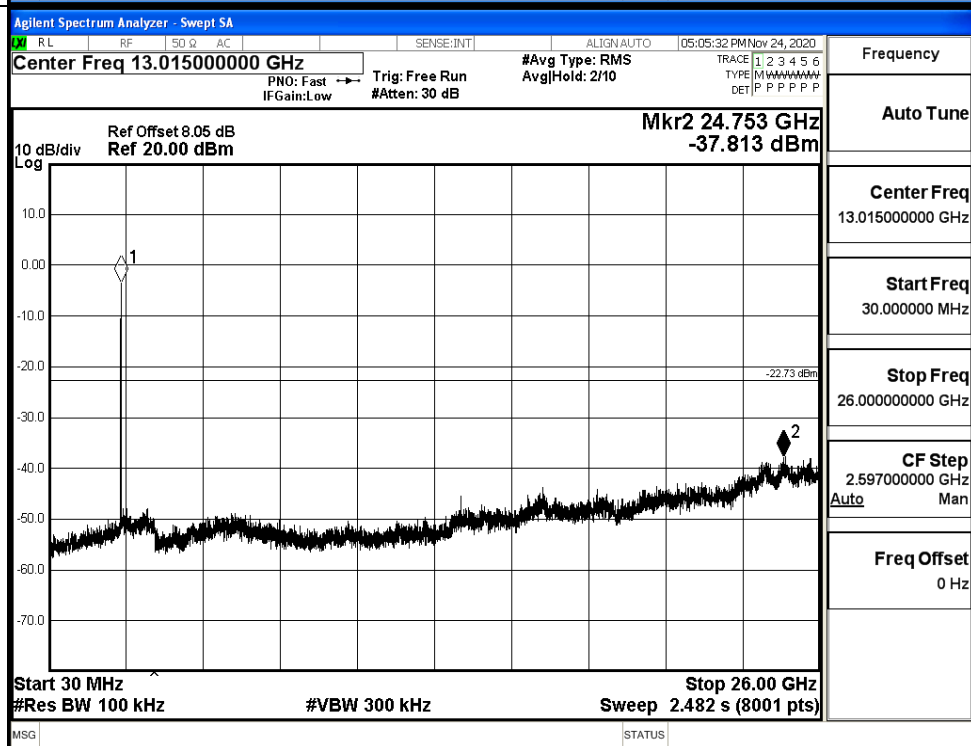


11G HCH Graphs

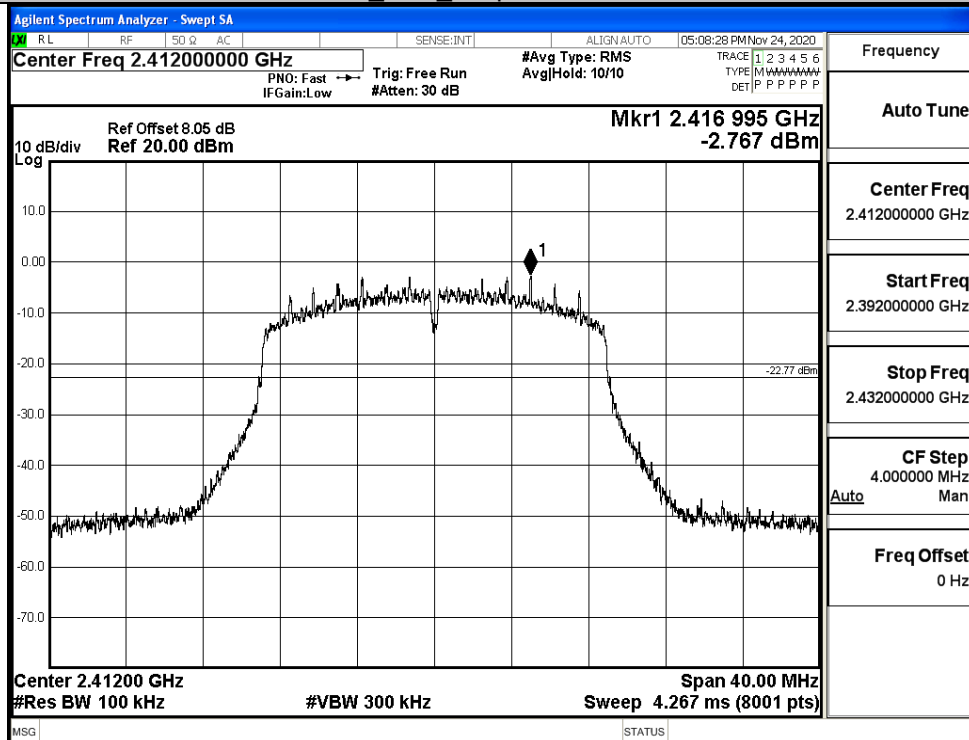
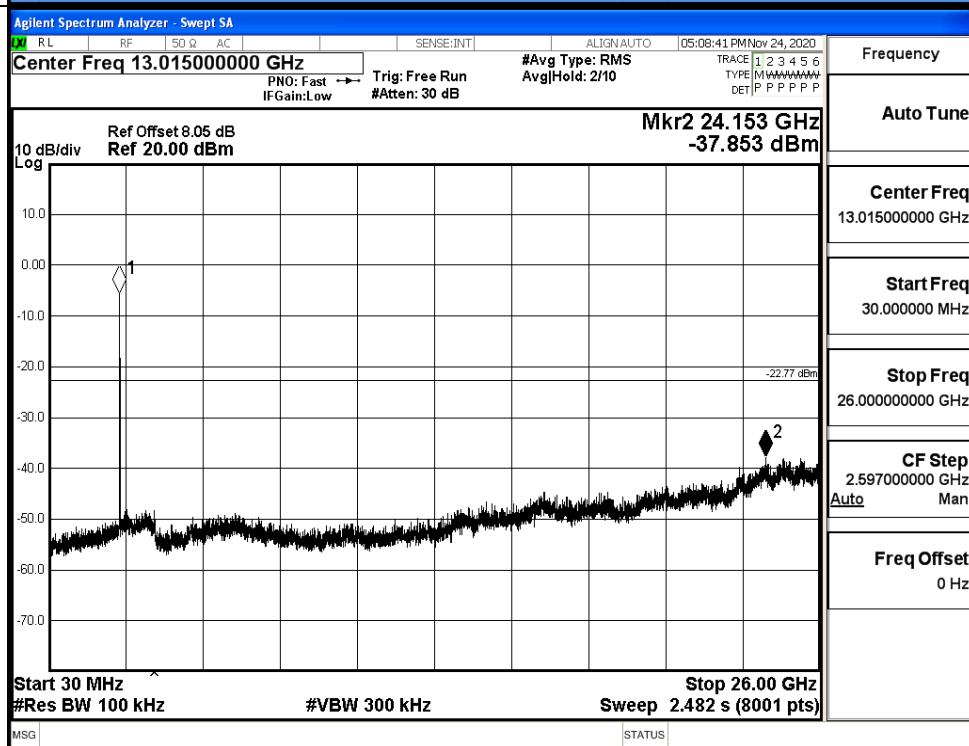
Pref/11G/HCH



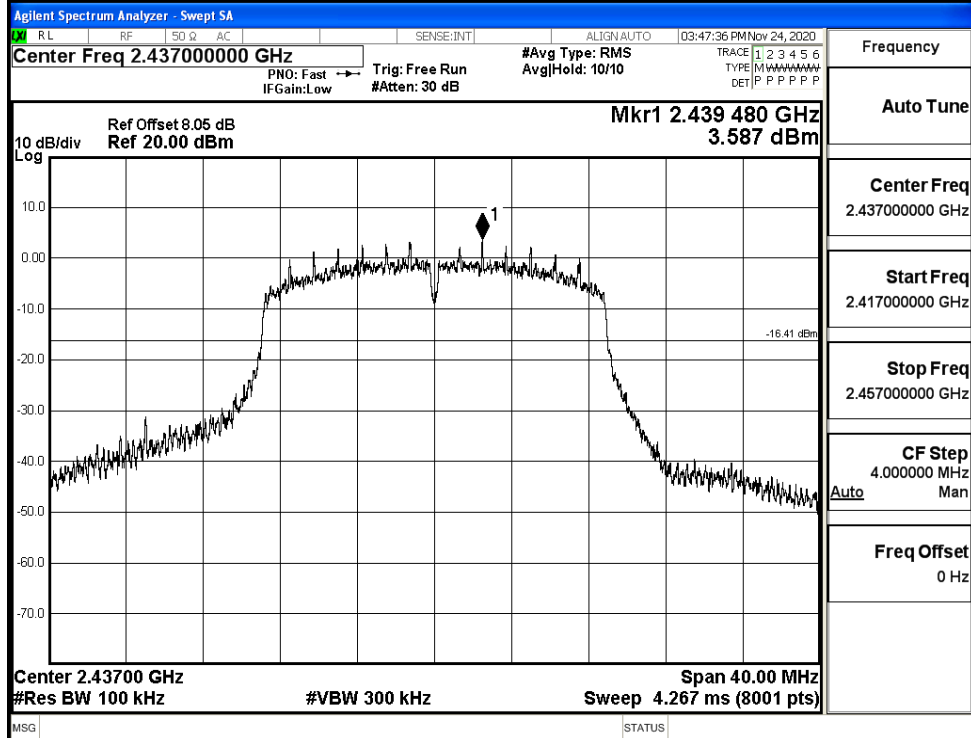
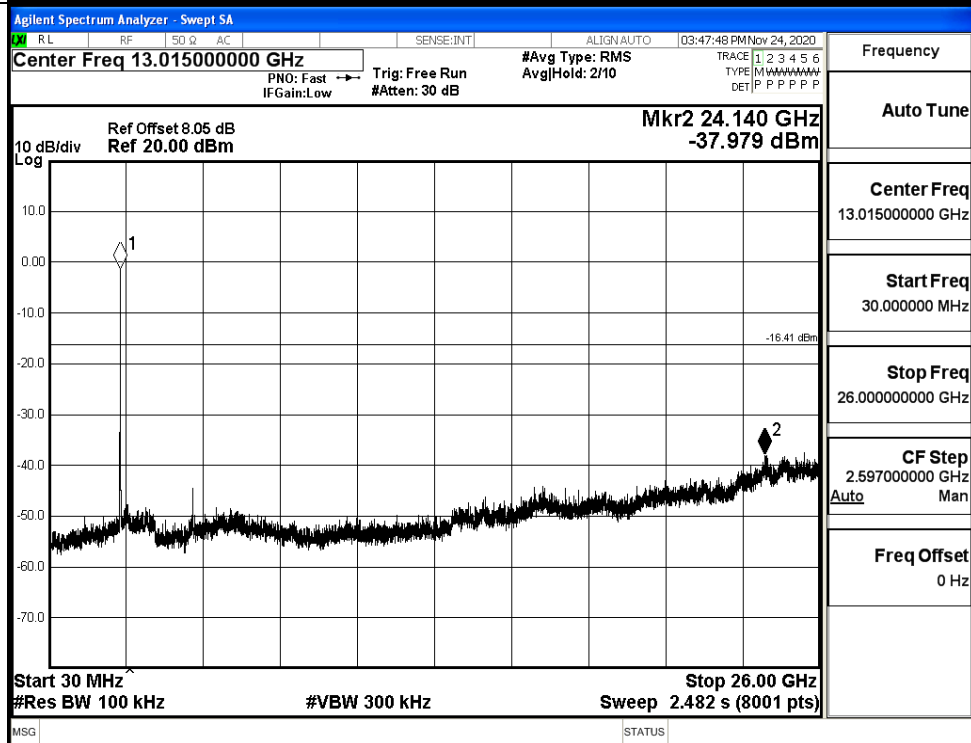
Puw/11G/HCH



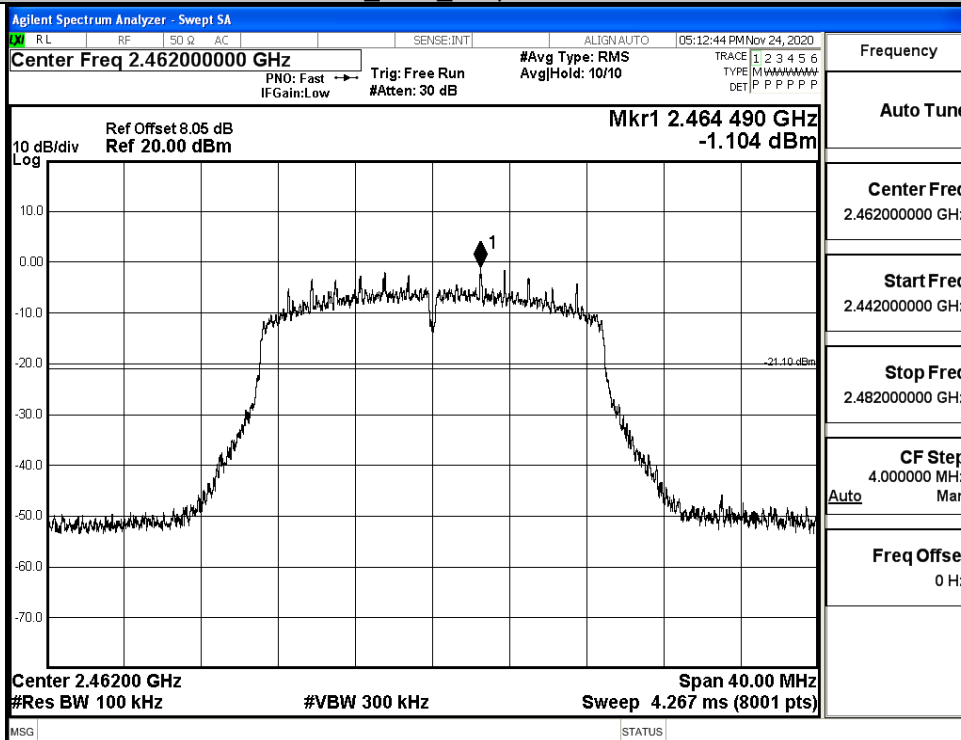
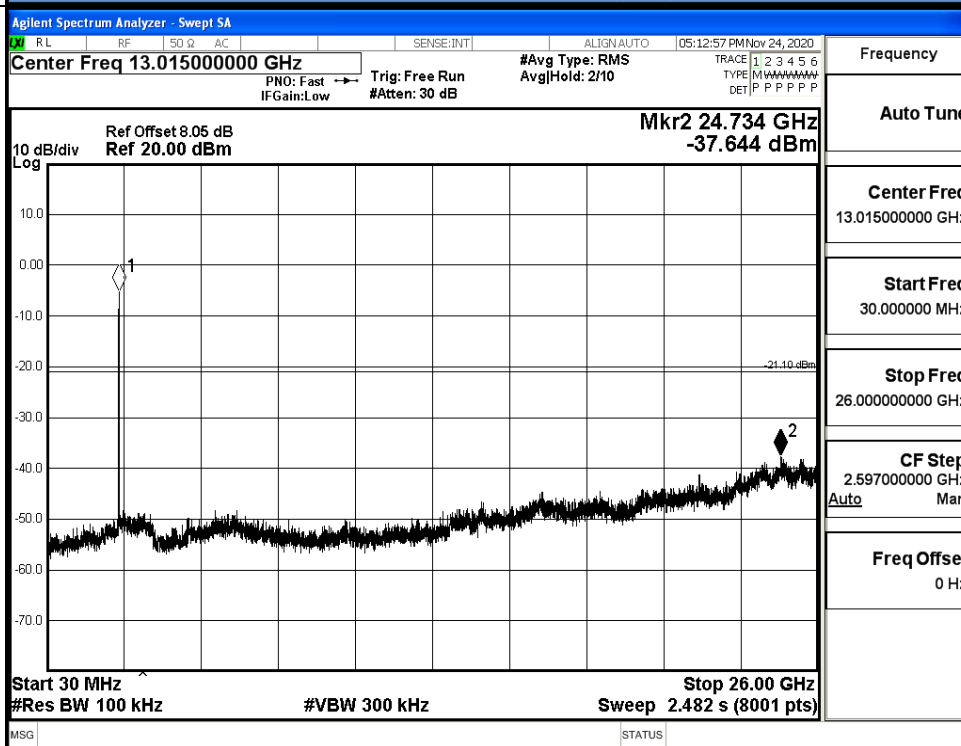
11N20SISO LCH Graphs

Pref/11N20SIS
O/LCHPuw/11N20
SISO/LCH

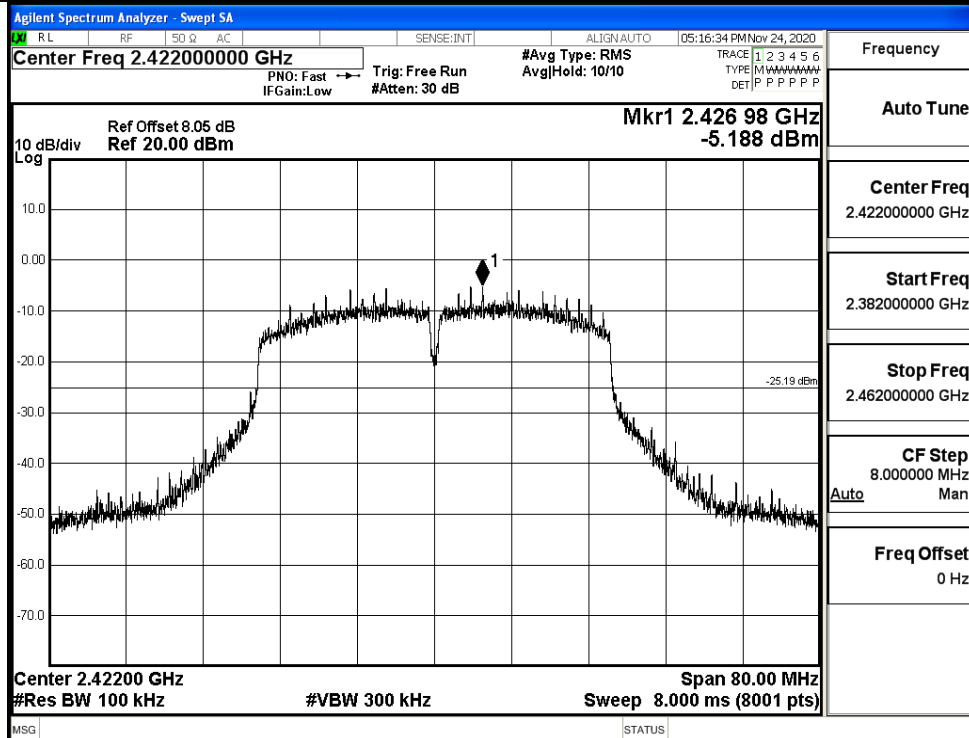
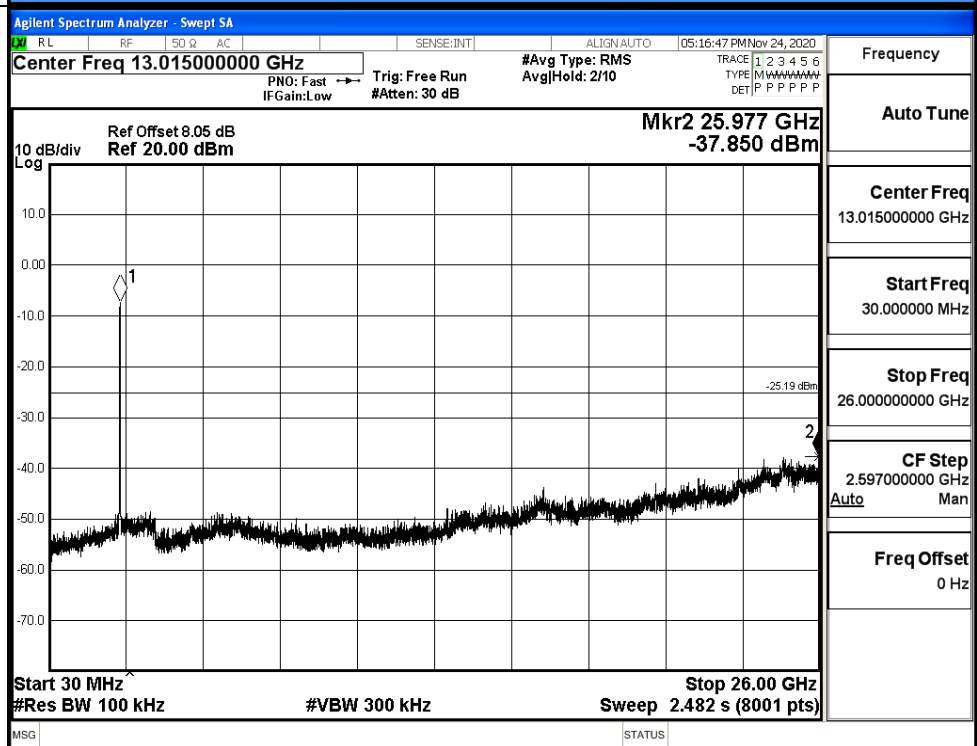
11N20SISO_MCH_Graphs

Pref/11N20
SISO/MCHPuw/11N20
SISO/MCH

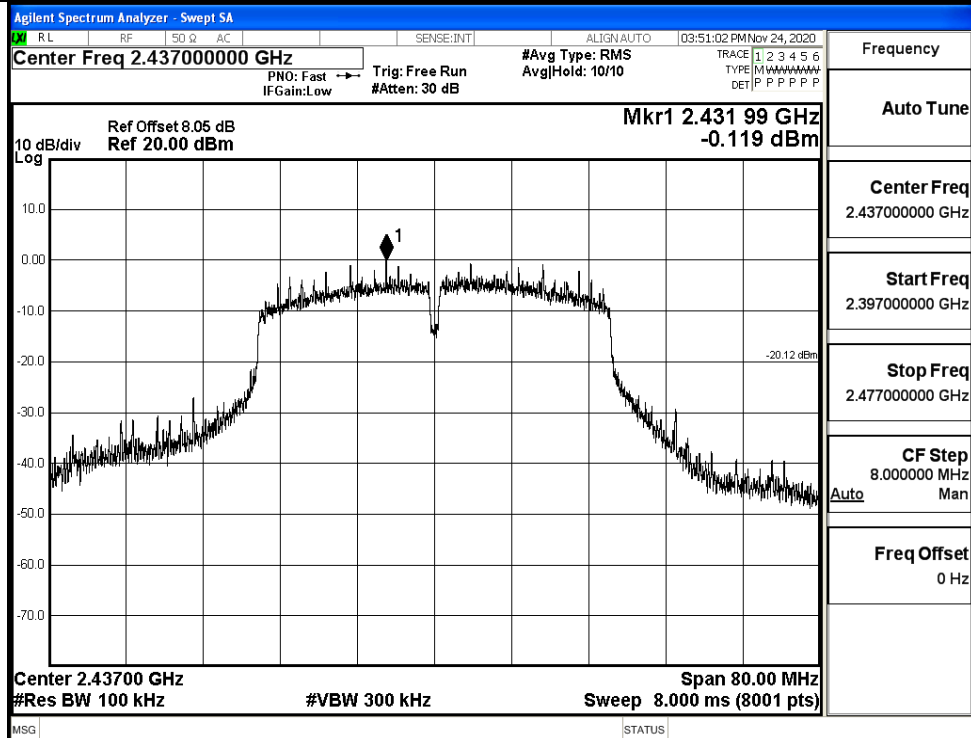
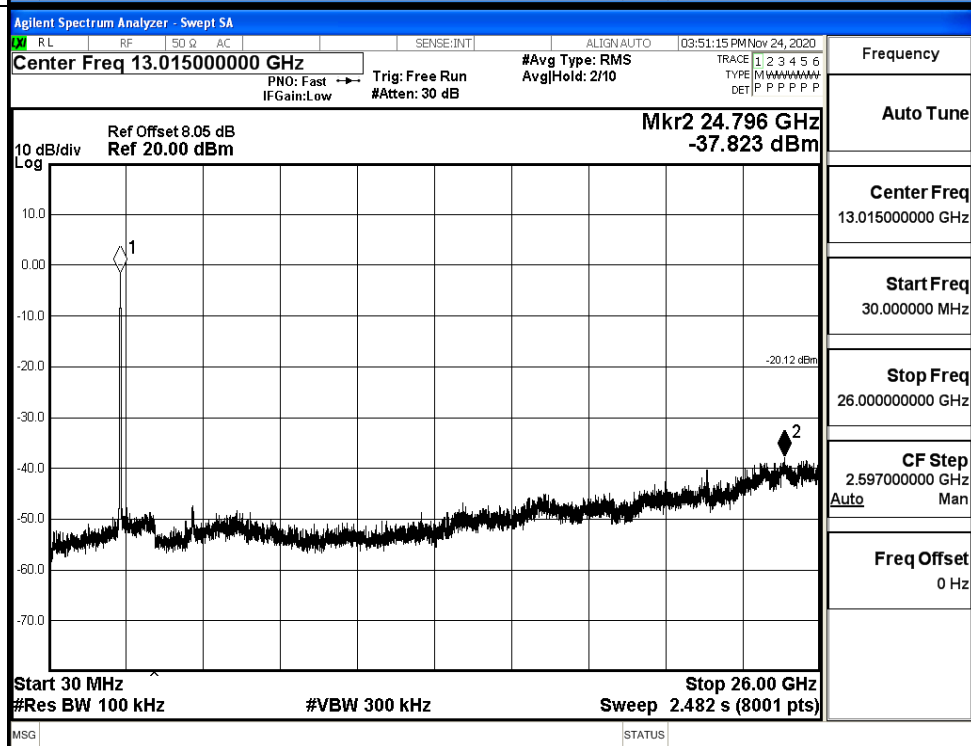
11N20SISO HCH Graphs

Pref/11N20
SISO/HCHPuw/11N20
SISO/HCH

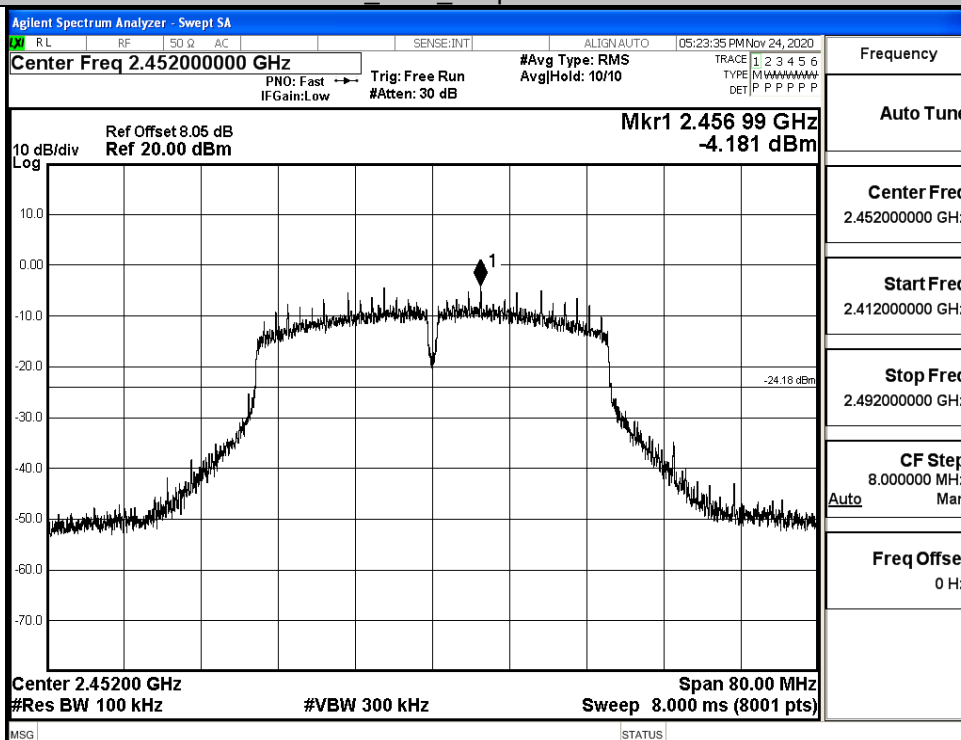
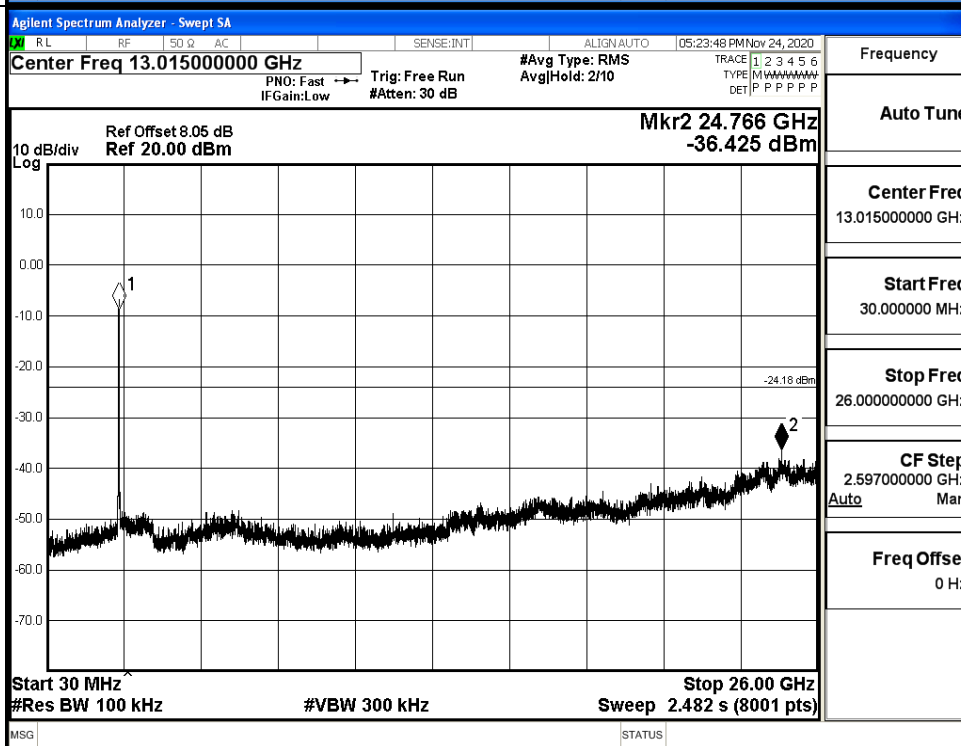
11N40SISO LCH Graphs

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

11N40SISO_MCH_Graphs

Pref/11N40
SISO/MCHPuw/11N40
SISO/MCH

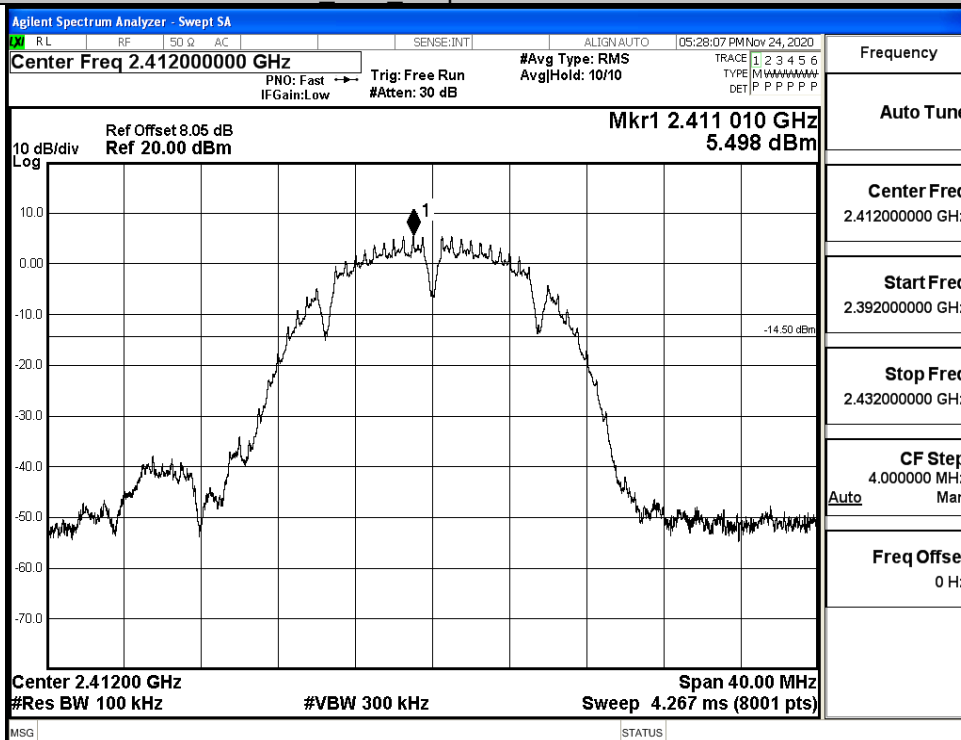
11N40SISO HCH Graphs

Pref/11N40
SISO/HCHPuw/11N40
SISO/HCH

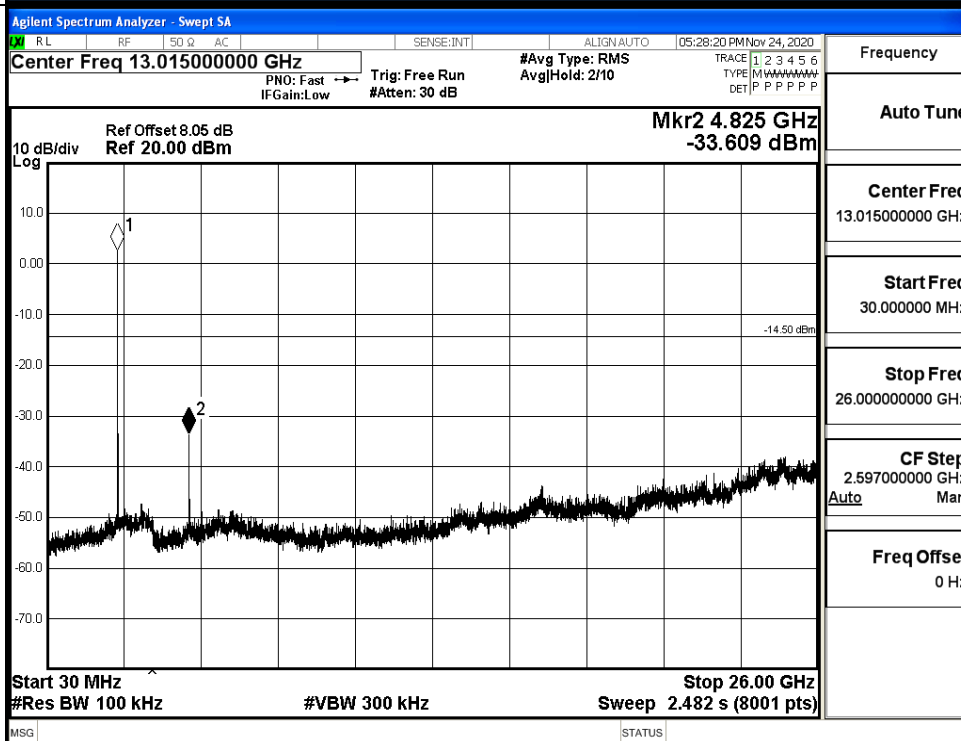
ANT 1

11B LCH Graphs

Pref/11B/LCH

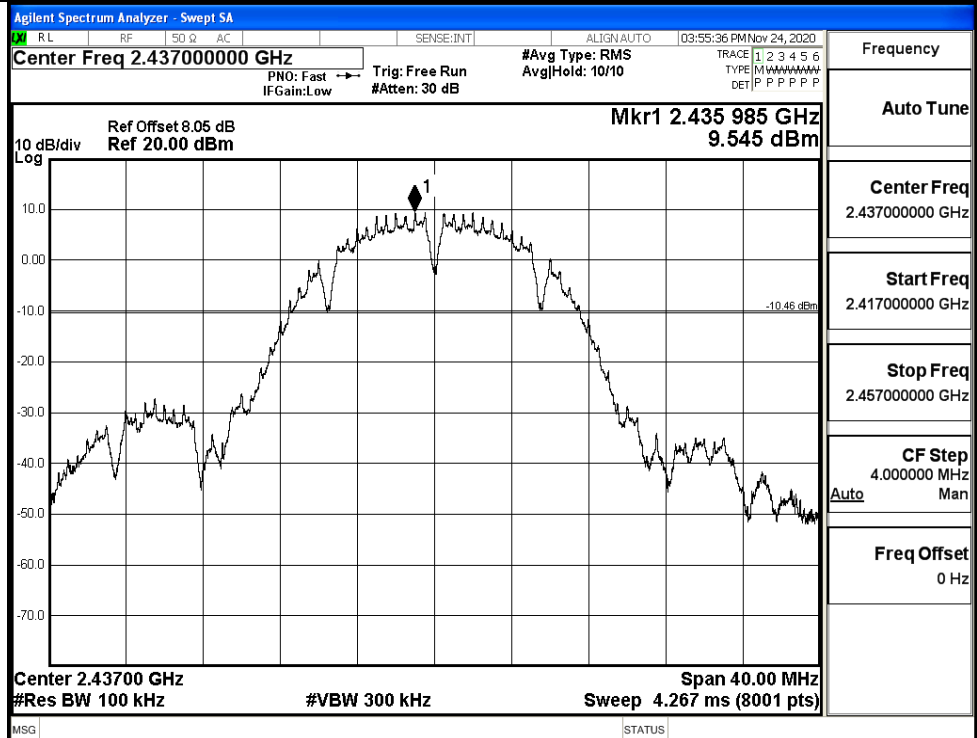


Puw/11B/LCH

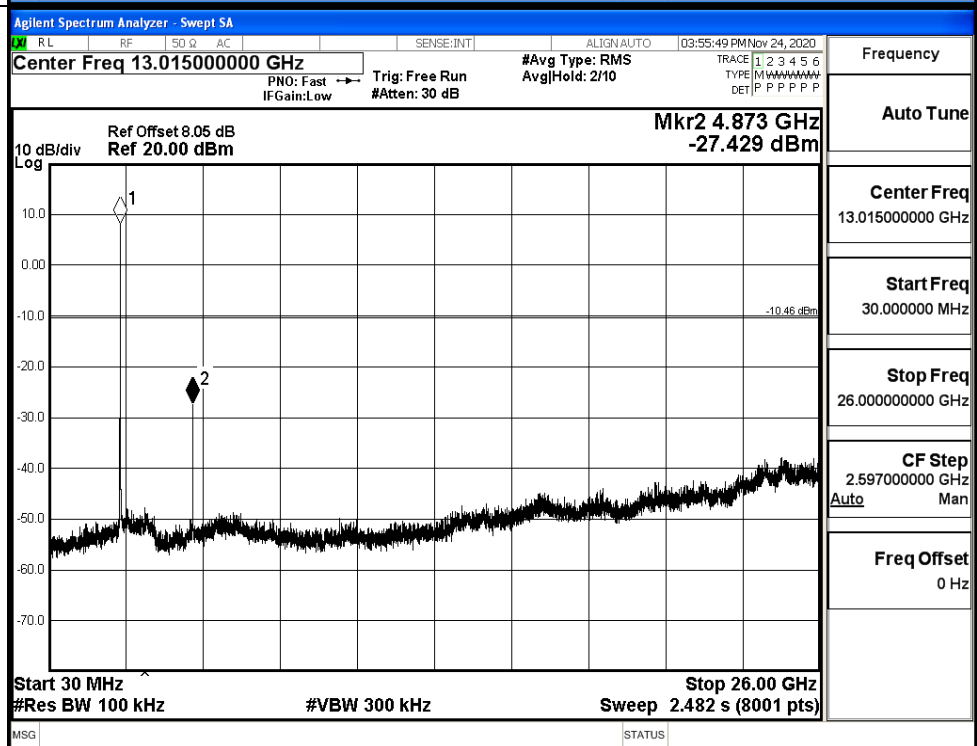


11B MCH Graphs

Pref/11B/MCH

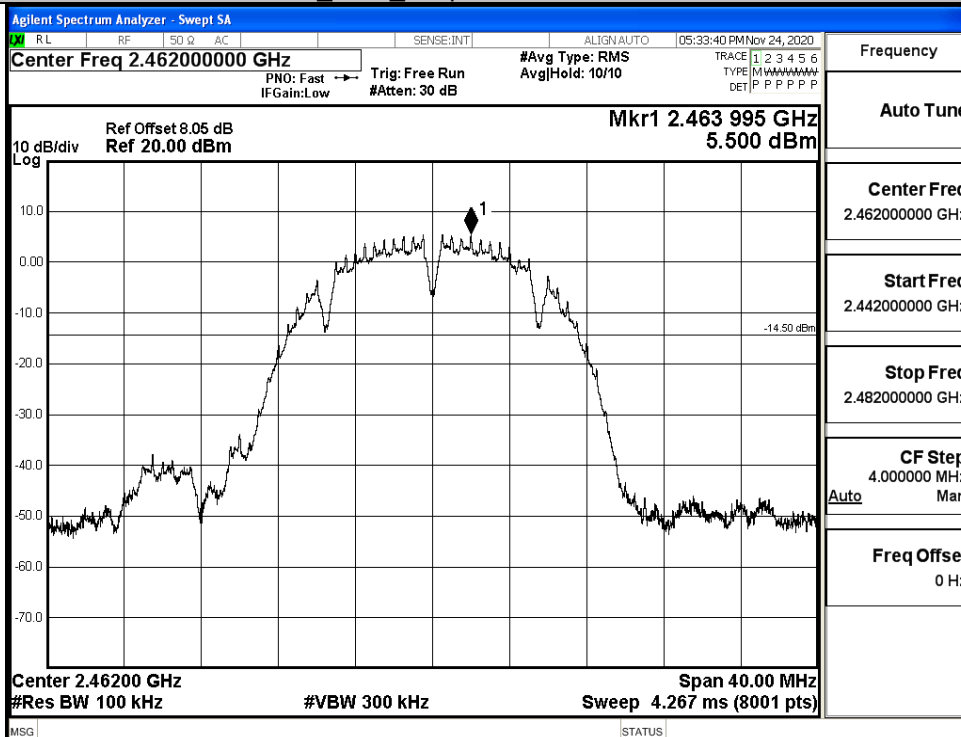


Puw/11B/MCH

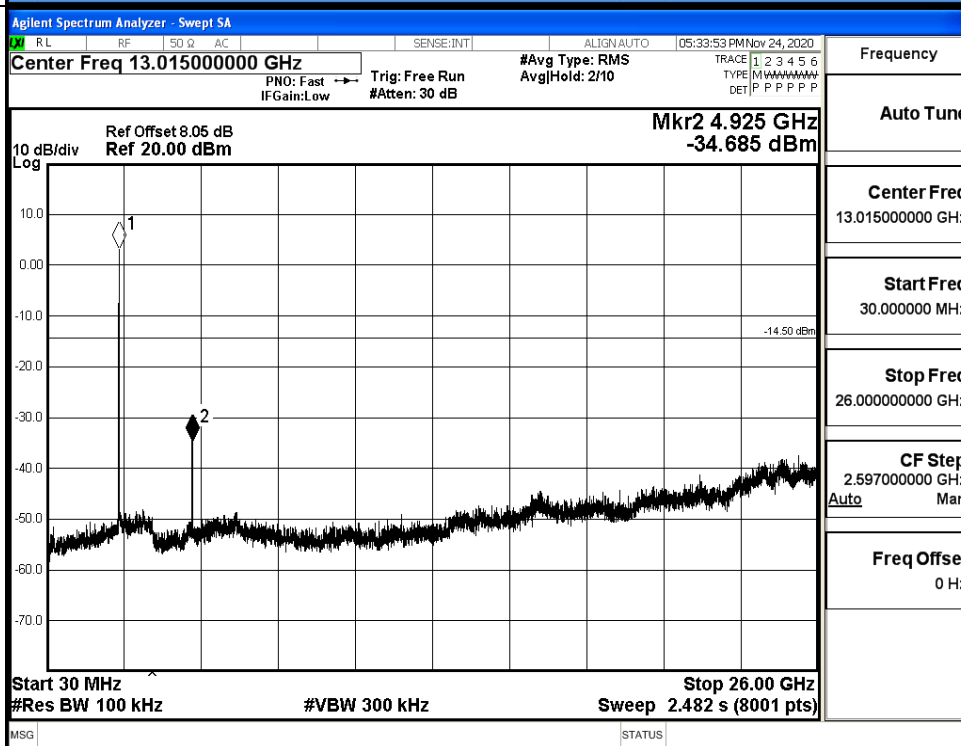


11B HCH Graphs

Pref/11B/HCH

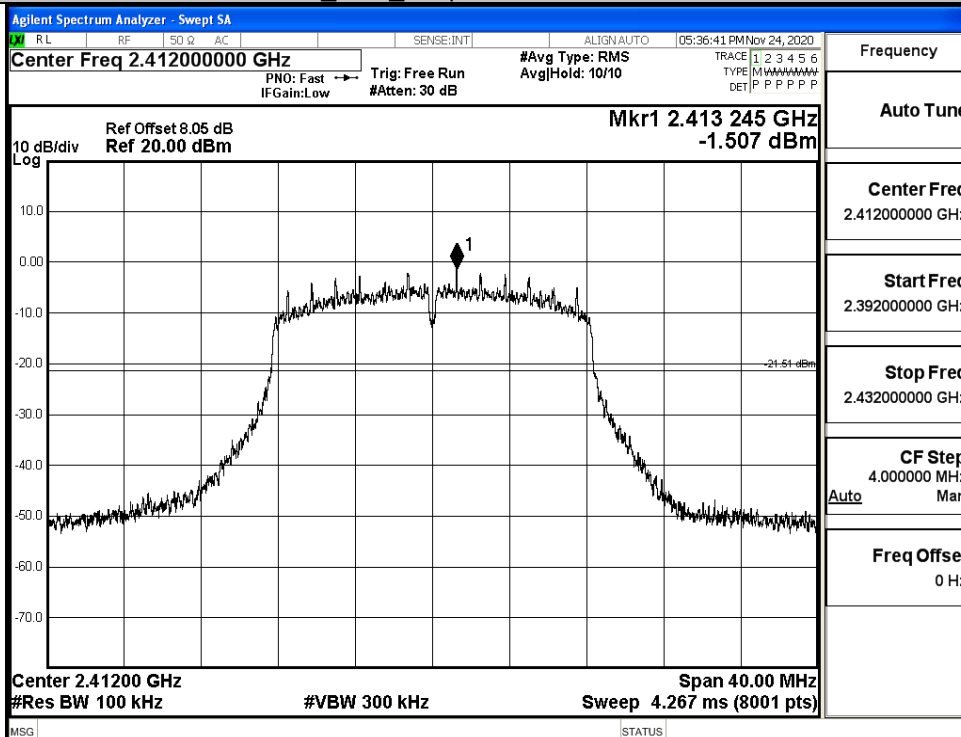


Puw/11B/HCH

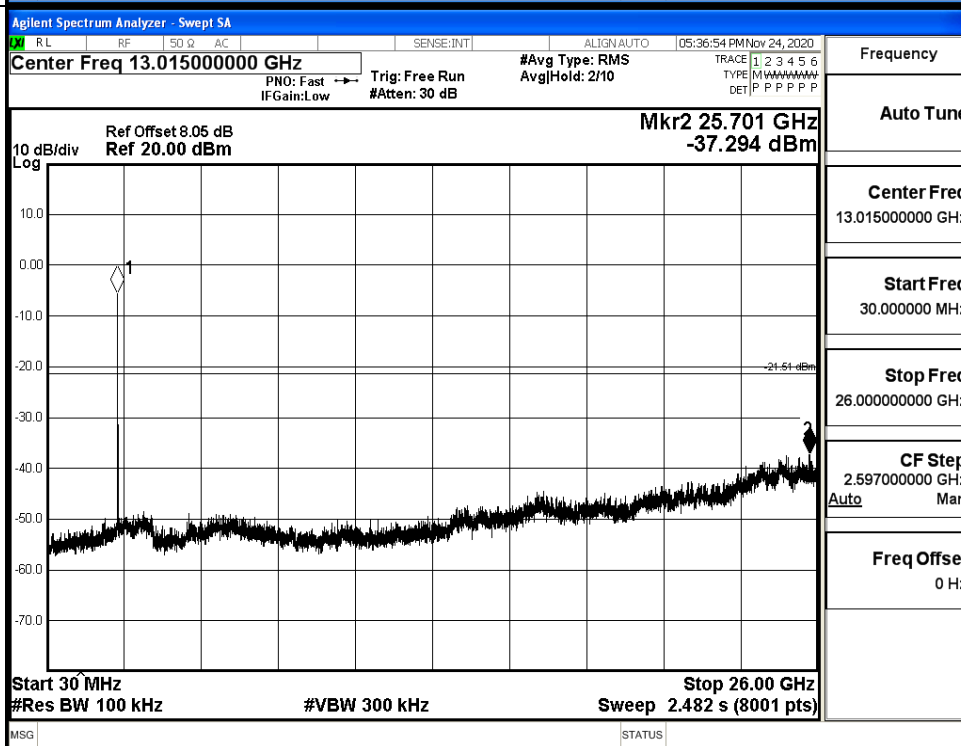


11G LCH Graphs

Pref/11G/LCH

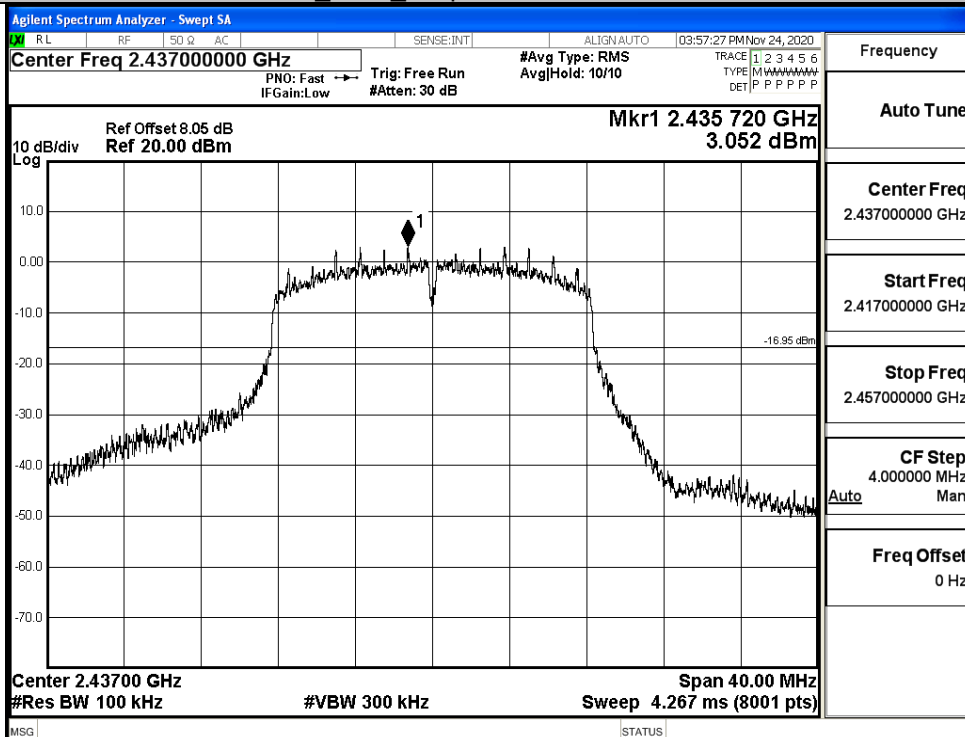


Puw/11G/LCH

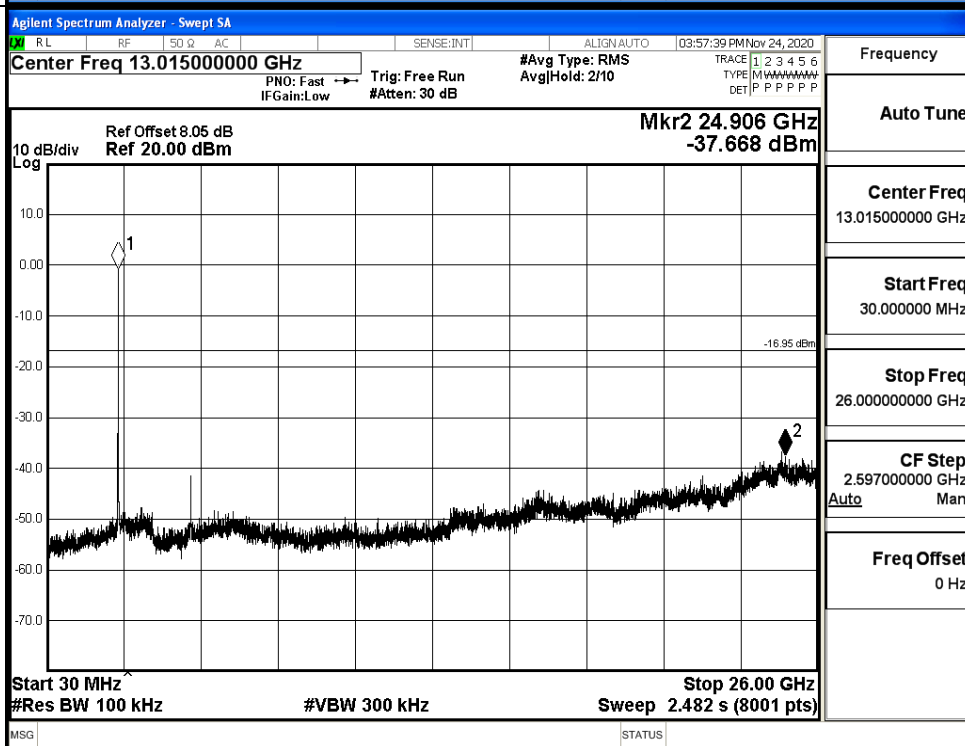


11G MCH Graphs

Pref/11G/MCH

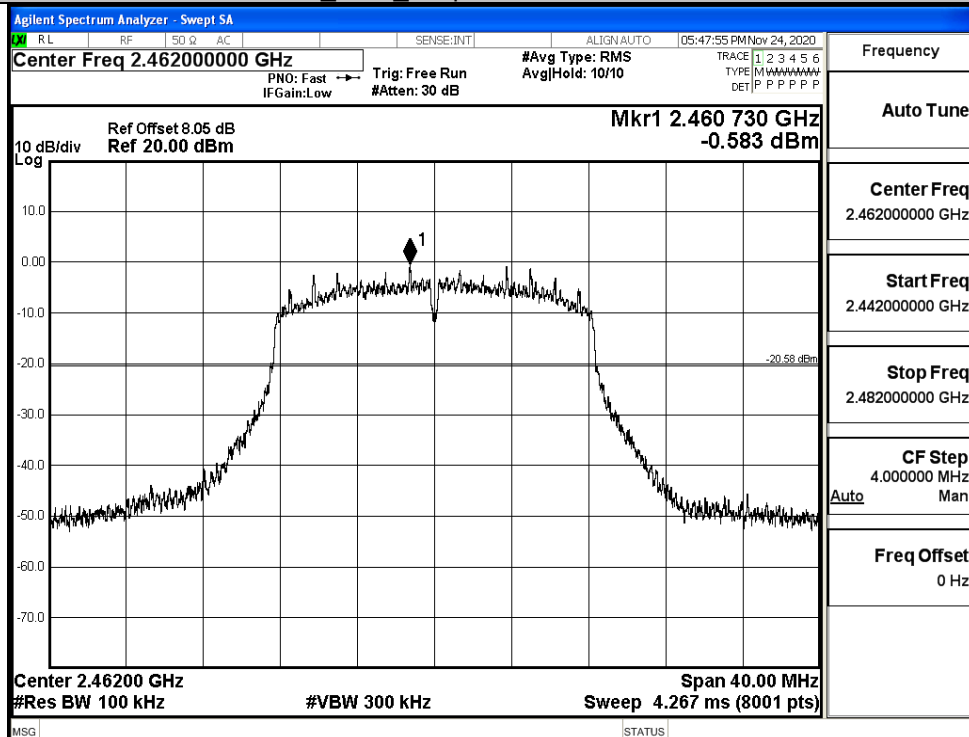


Puw/11G/MCH



11G HCH Graphs

Pref/11G/HCH



Puw/11G/HCH

