

Appendix C

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: Formuler Z8 pro
Trade Mark: FORMULER
Test Model: Z8 pro

Environmental Conditions

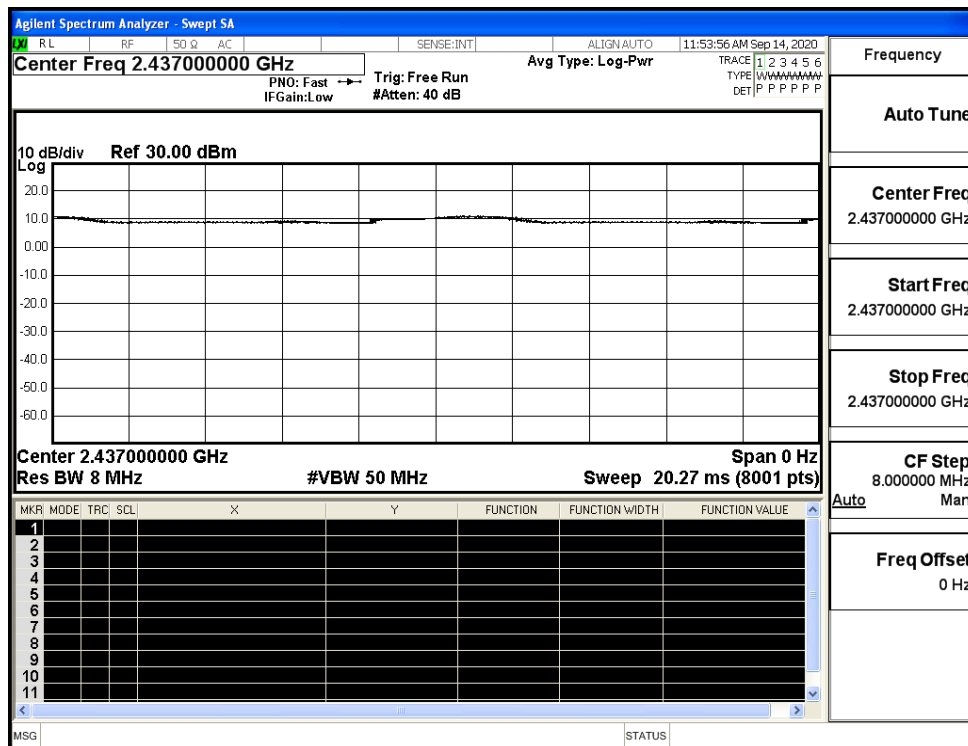
Temperature:	24.6° C
Relative Humidity:	54.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Jay Li
Supervised by:	Li Huan

C.1 Duty Cycle

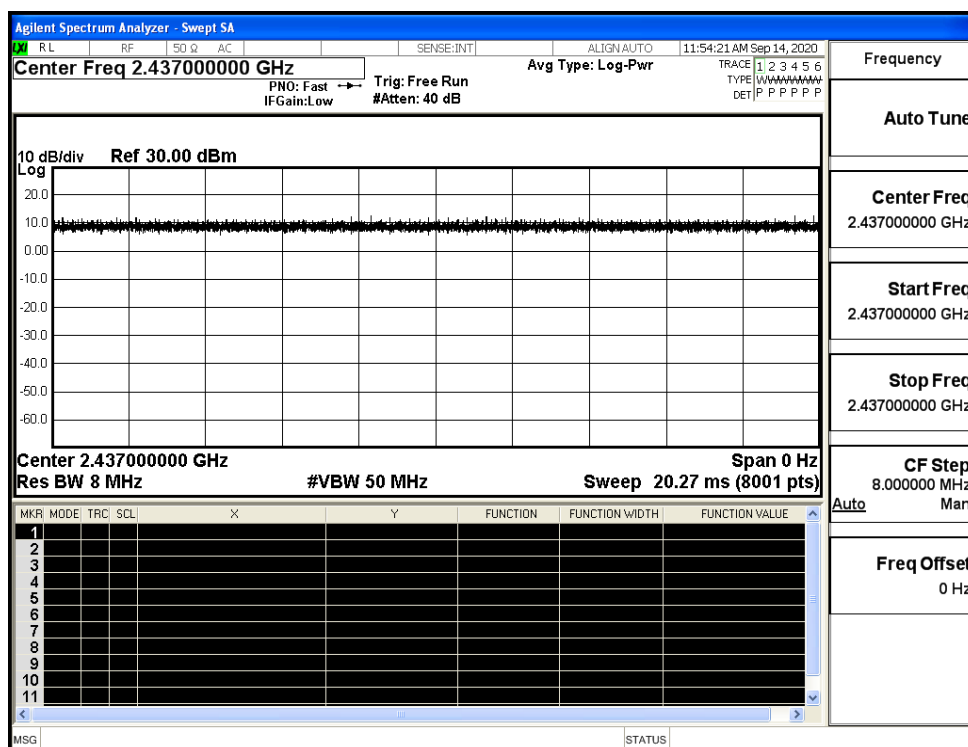
ANT 0

Test Mode	Test Channel	Ant	Duty Cycle[%]	Verdict
11B	2437	Ant1	100	PASS
11G	2437	Ant1	100	PASS
11N20	2437	Ant1	100	PASS
11N40	2437	Ant1	100	PASS

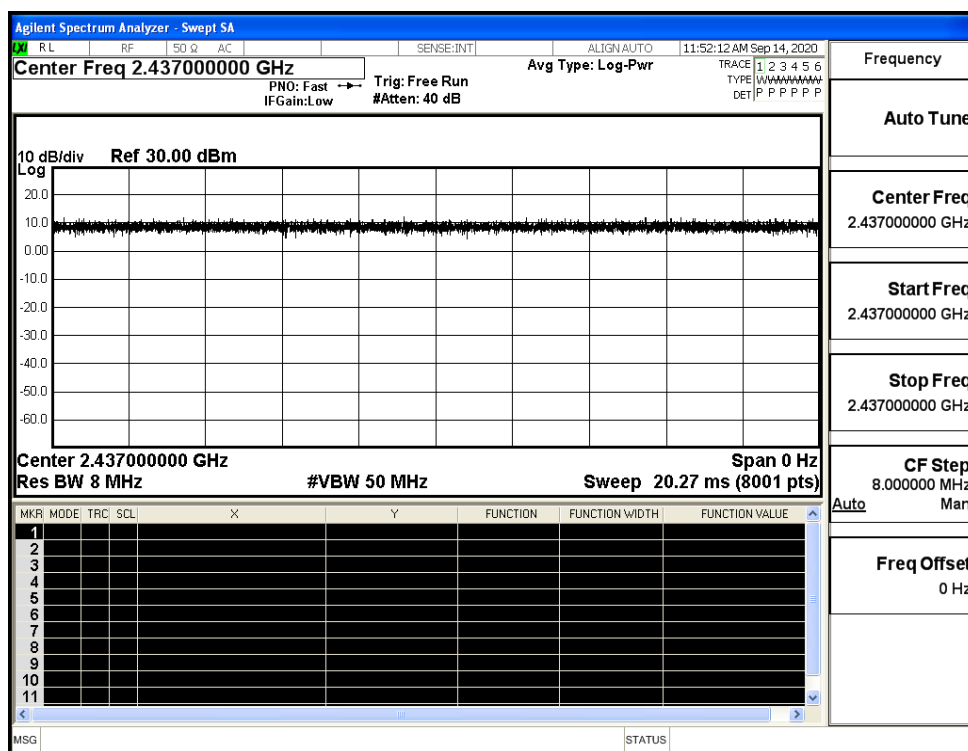
Duty Cycle_11B_2437_Ant1



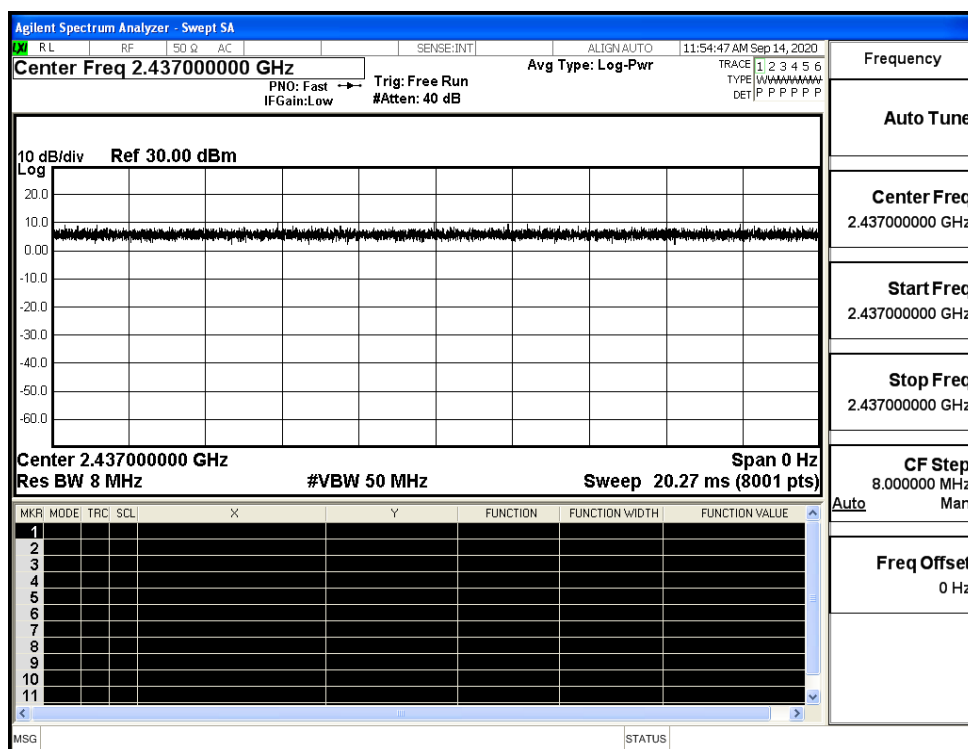
Duty Cycle_11G_2437_Ant1



Duty Cycle_11N20_2437_Ant1



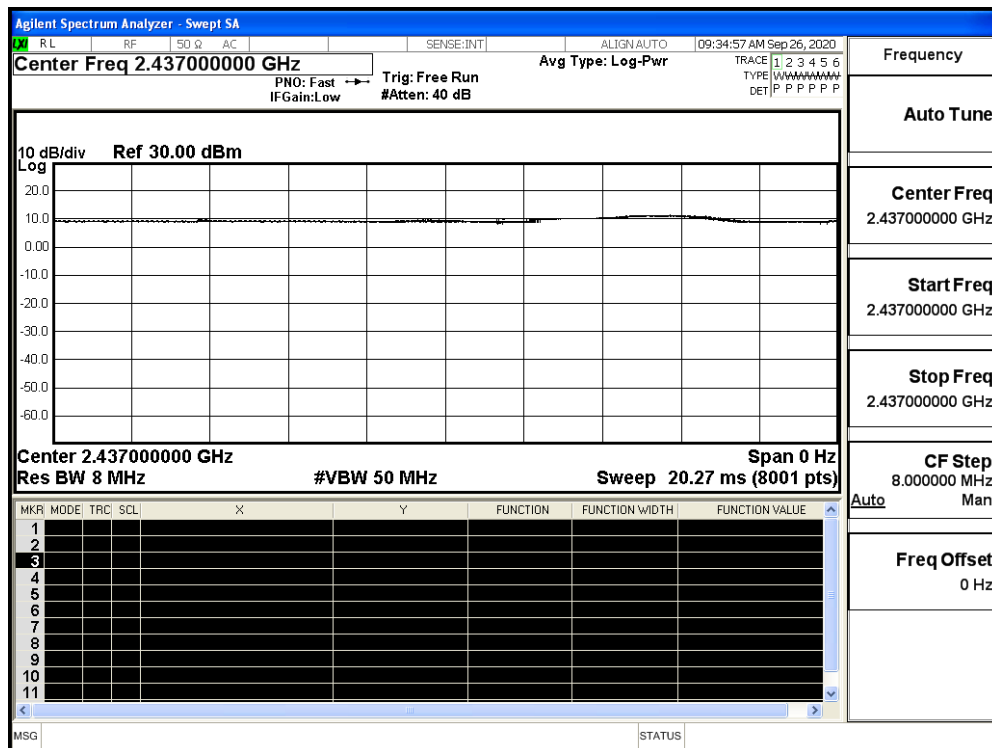
Duty Cycle_11N40_2437_Ant1



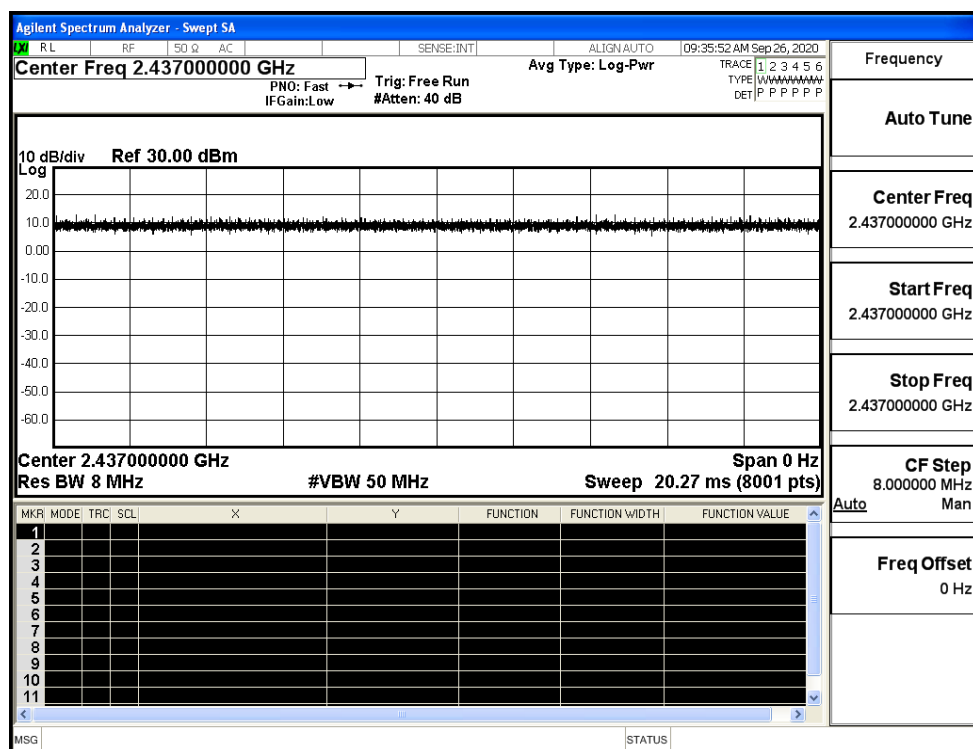
ANT 1

Test Mode	Test Channel	Ant	Duty Cycle[%]	Verdict
11B	2437	Ant1	100	PASS
11G	2437	Ant1	100	PASS
11N20	2437	Ant1	100	PASS
11N40	2437	Ant1	100	PASS

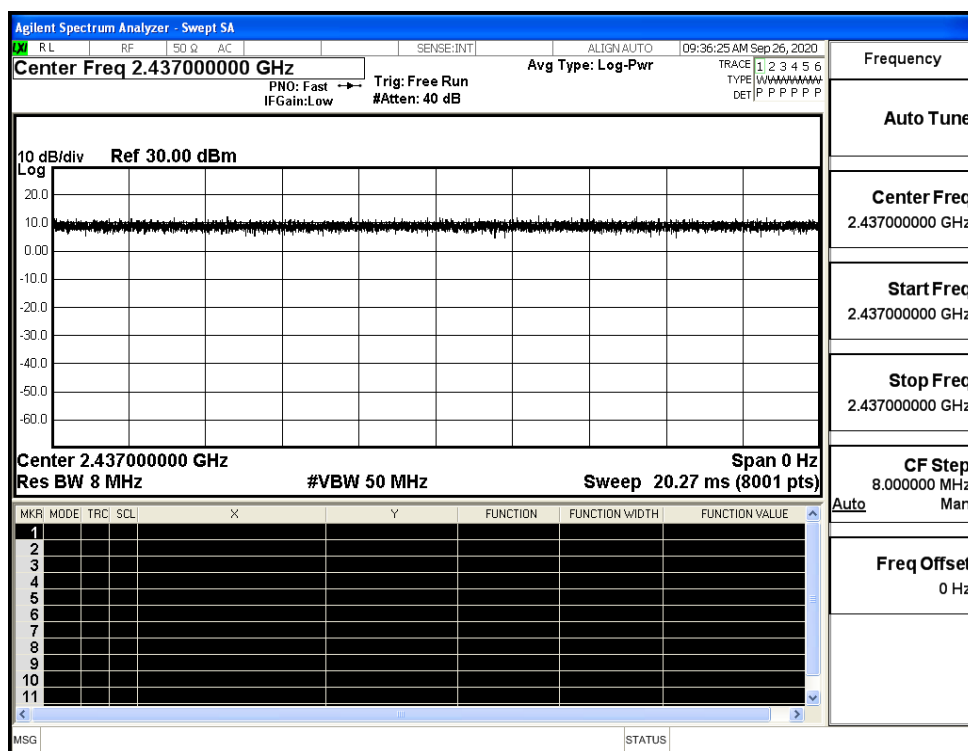
Duty Cycle_11B_2437_Ant1



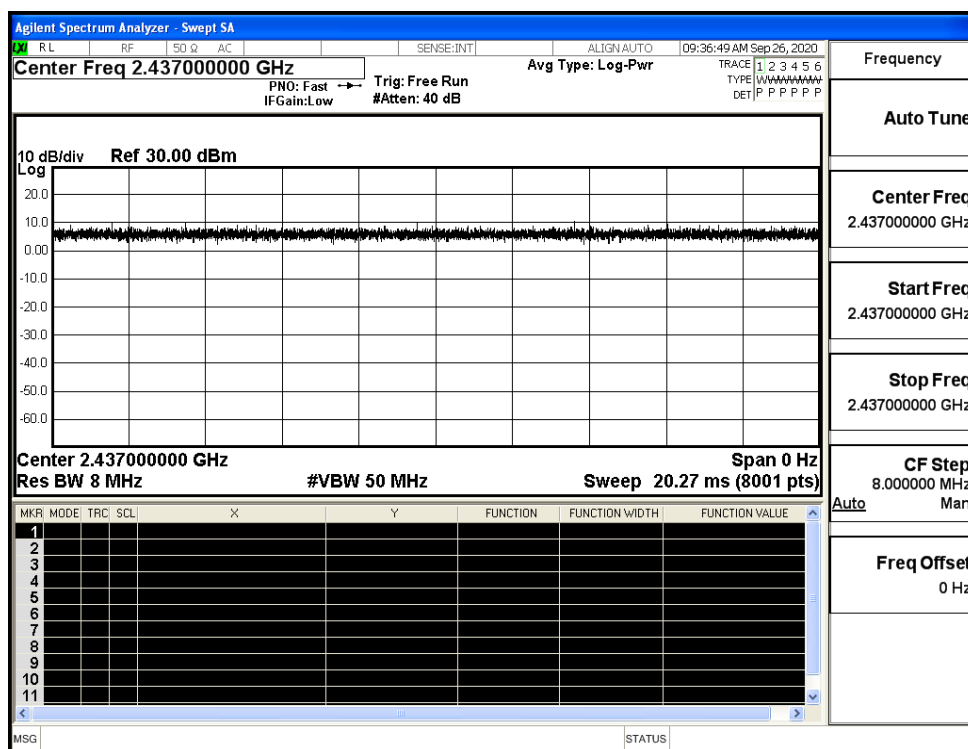
Duty Cycle_11G_2437_Ant1



Duty Cycle_11N20_2437_Ant1



Duty Cycle_11N40_2437_Ant1



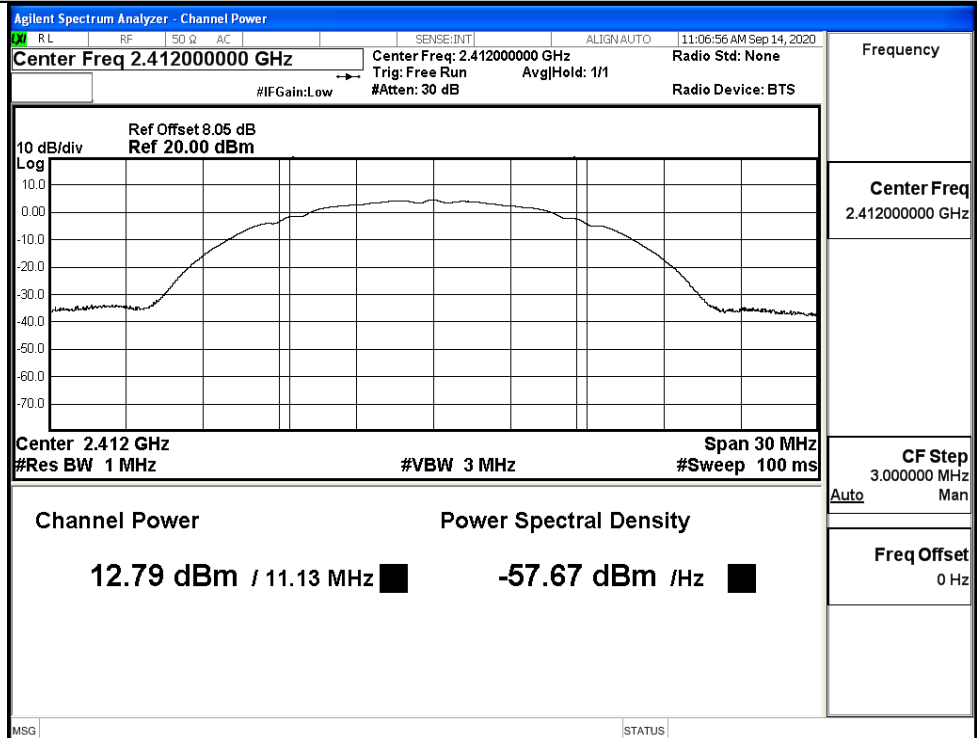
C.2 Maximum Conducted Output Power

ANT 0

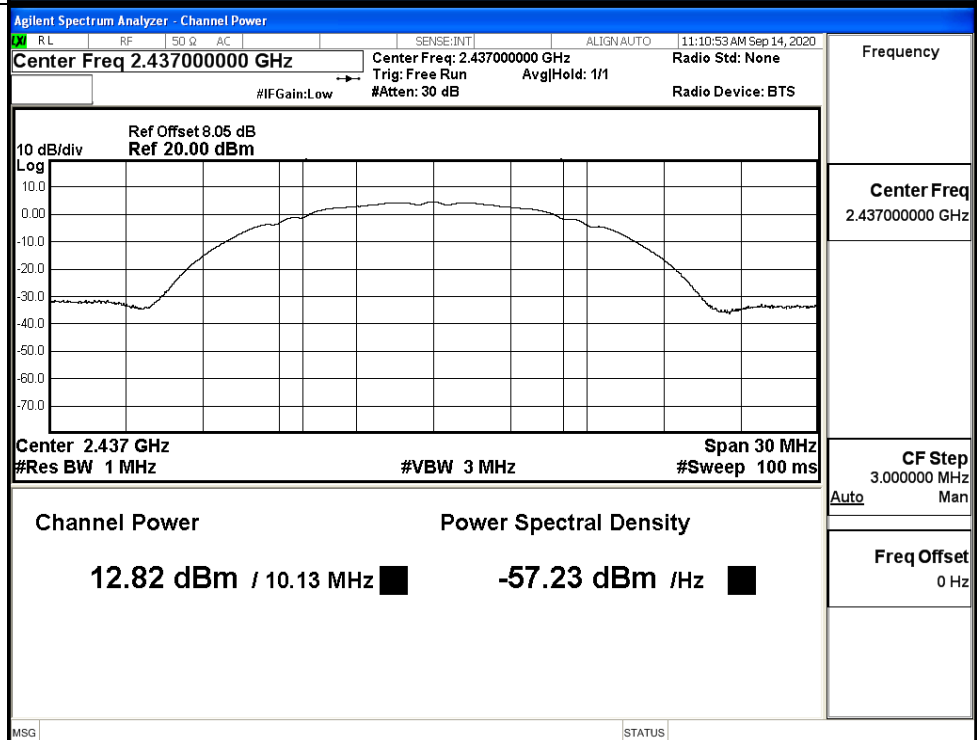
Mode	Channel	Meas.Level [dBm]	Limit [dBm]	Verdict
11B	LCH	12.79	30	PASS
	MCH	12.82	30	PASS
	HCH	12.72	30	PASS
11G	LCH	12.12	30	PASS
	MCH	12.12	30	PASS
	HCH	12.38	30	PASS
11N20	LCH	12.71	30	PASS
	MCH	12.26	30	PASS
	HCH	12.52	30	PASS
11N40	LCH	12.41	30	PASS
	MCH	12.57	30	PASS
	HCH	12.35	30	PASS

Test Graphs

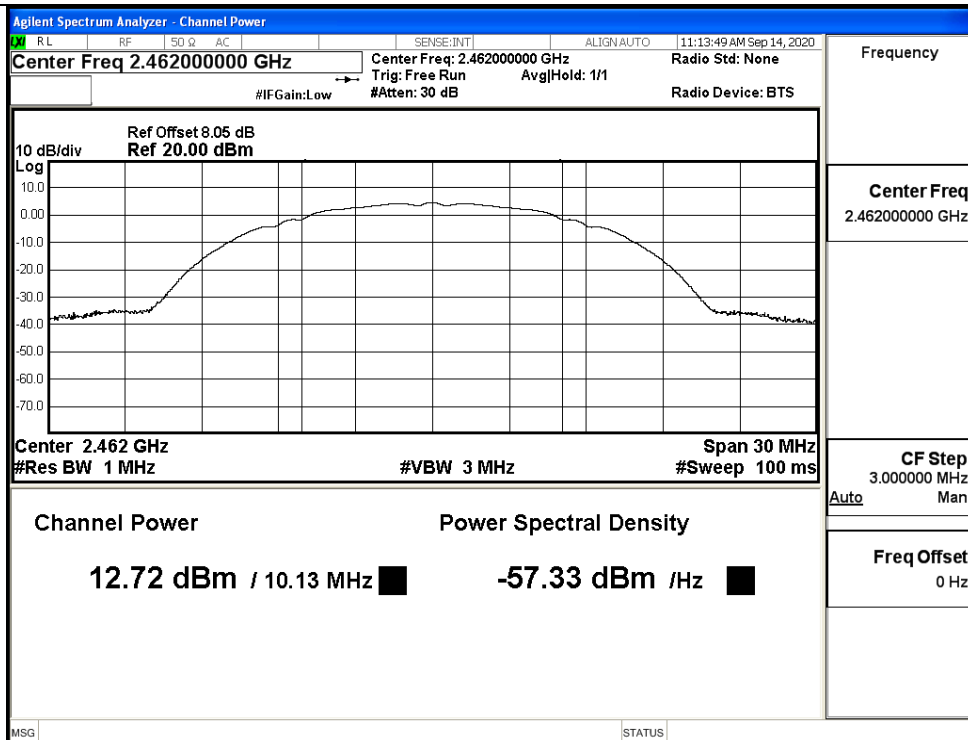
11B/LCH



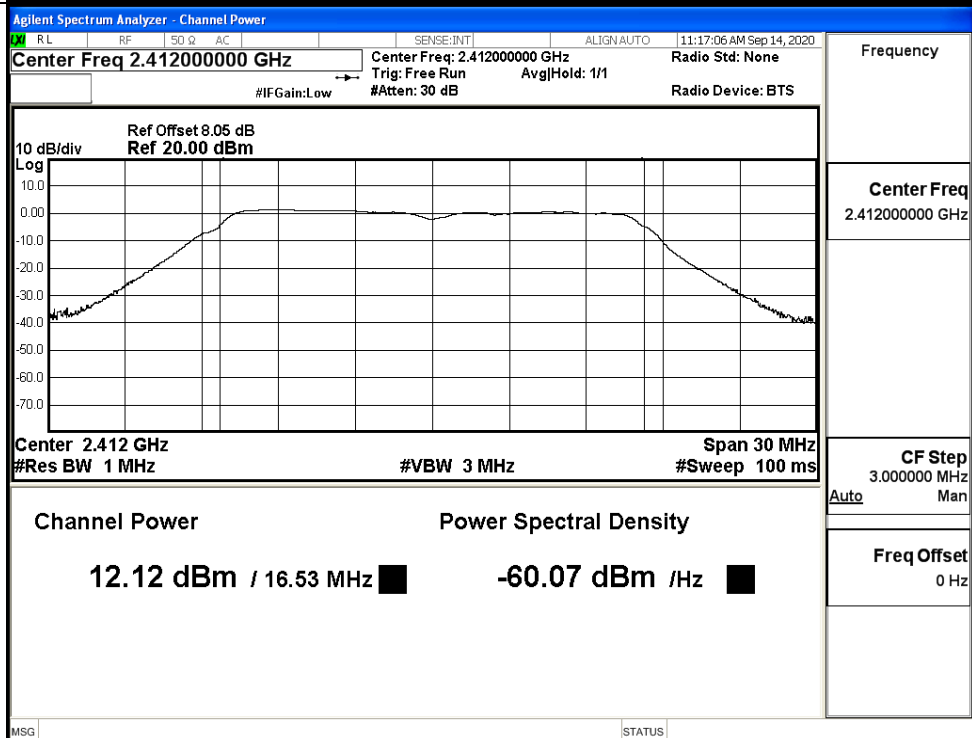
11B/MCH



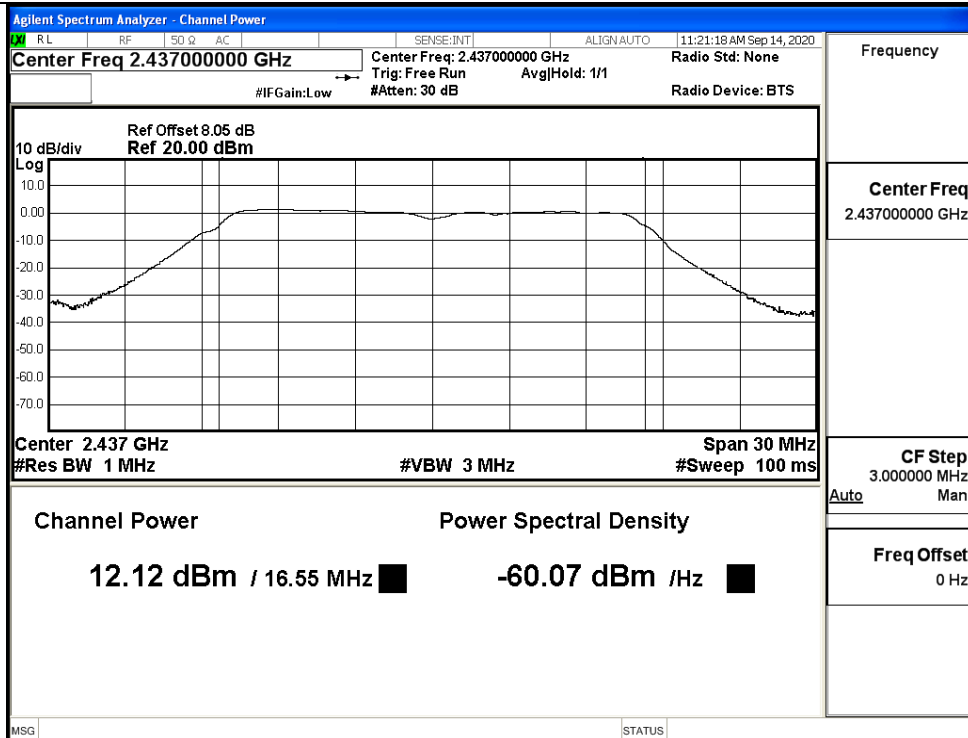
11B/HCH



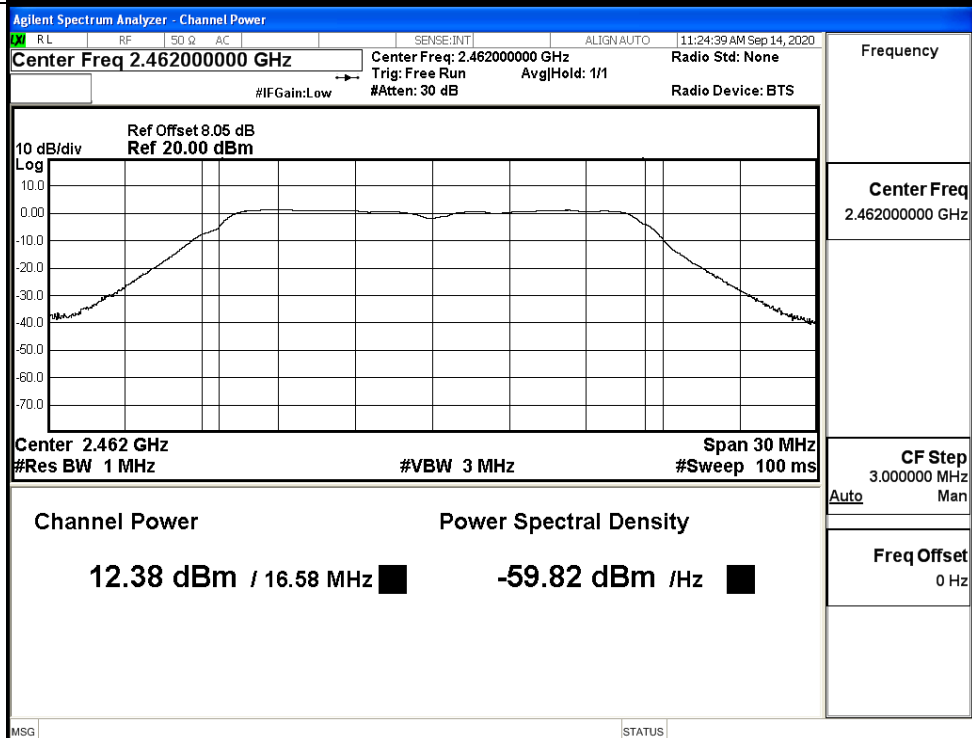
11G/LCH



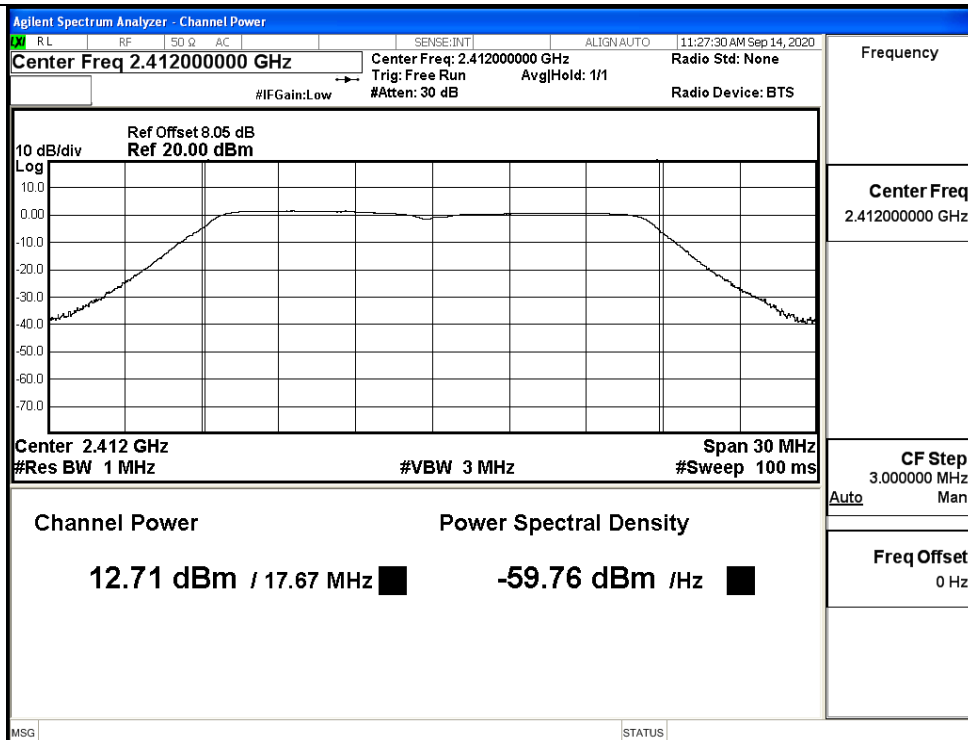
11G/MCH



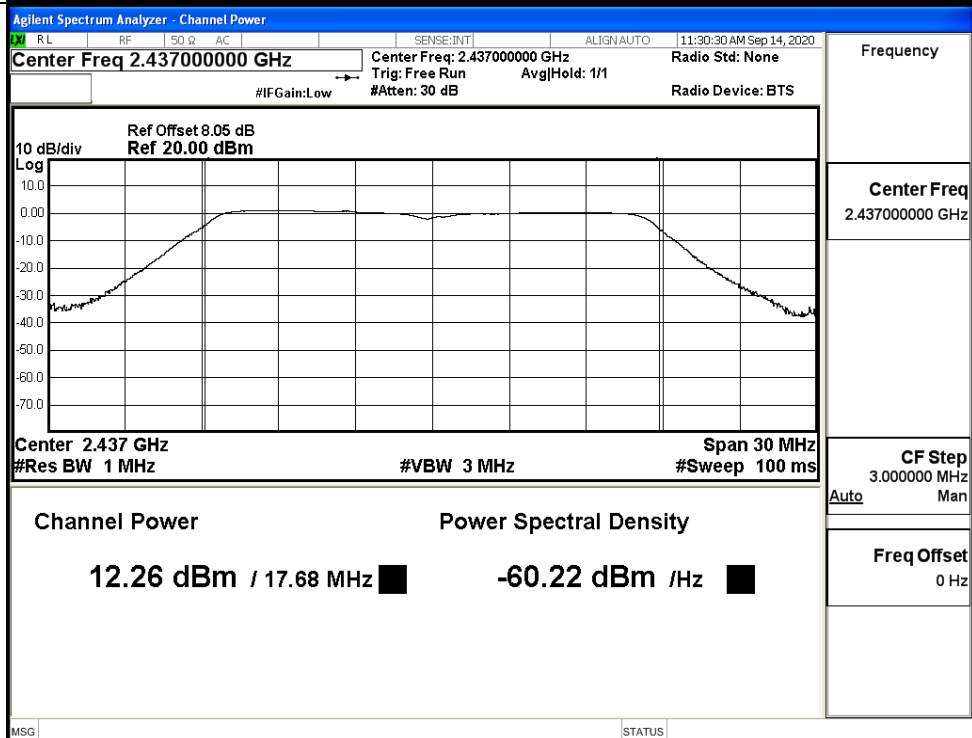
11G/HCH



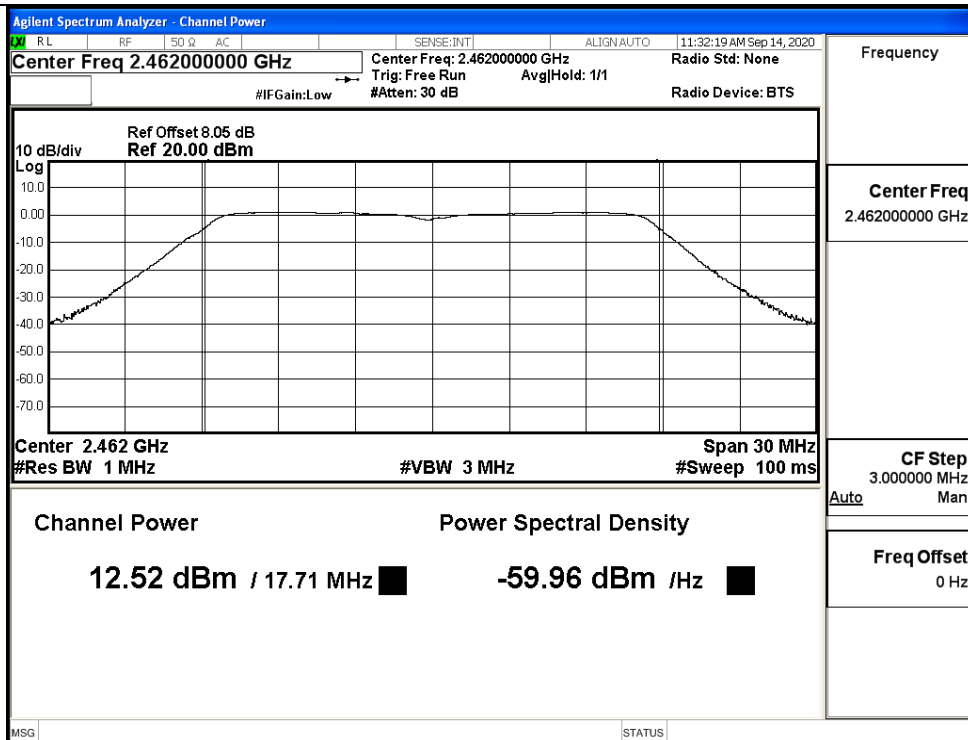
11N20/LCH



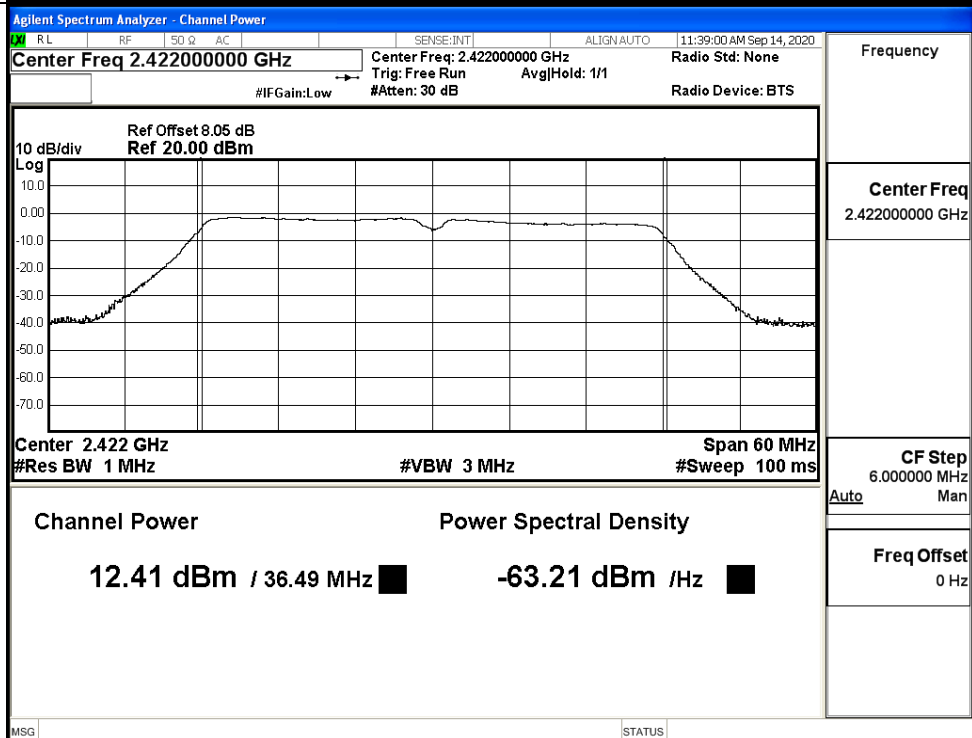
11N20/MCH



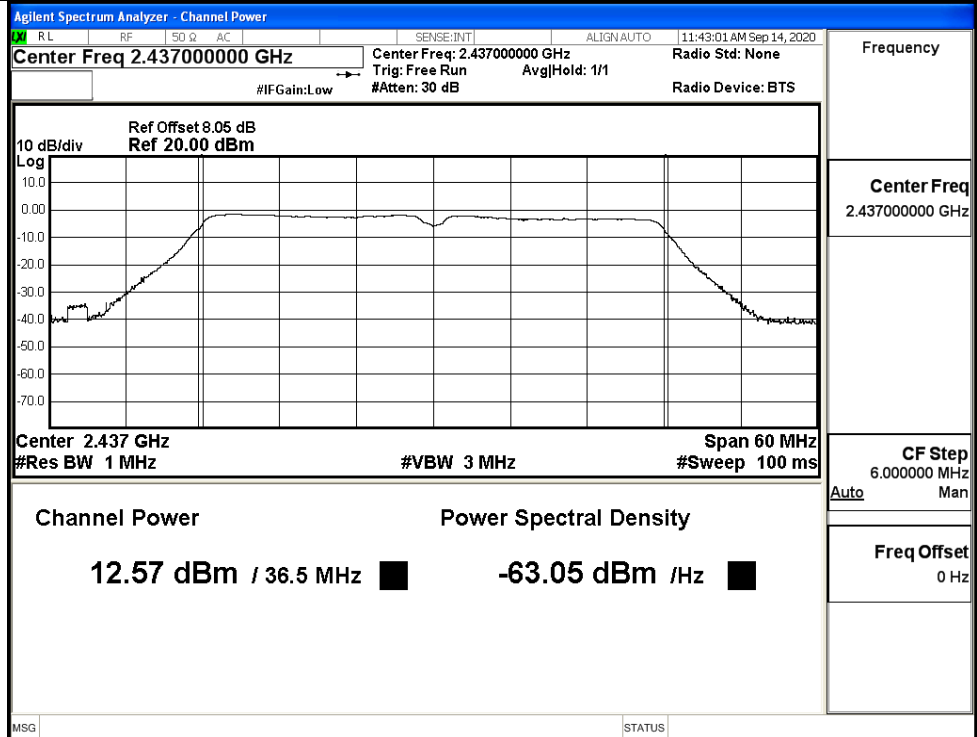
11N20/HCH



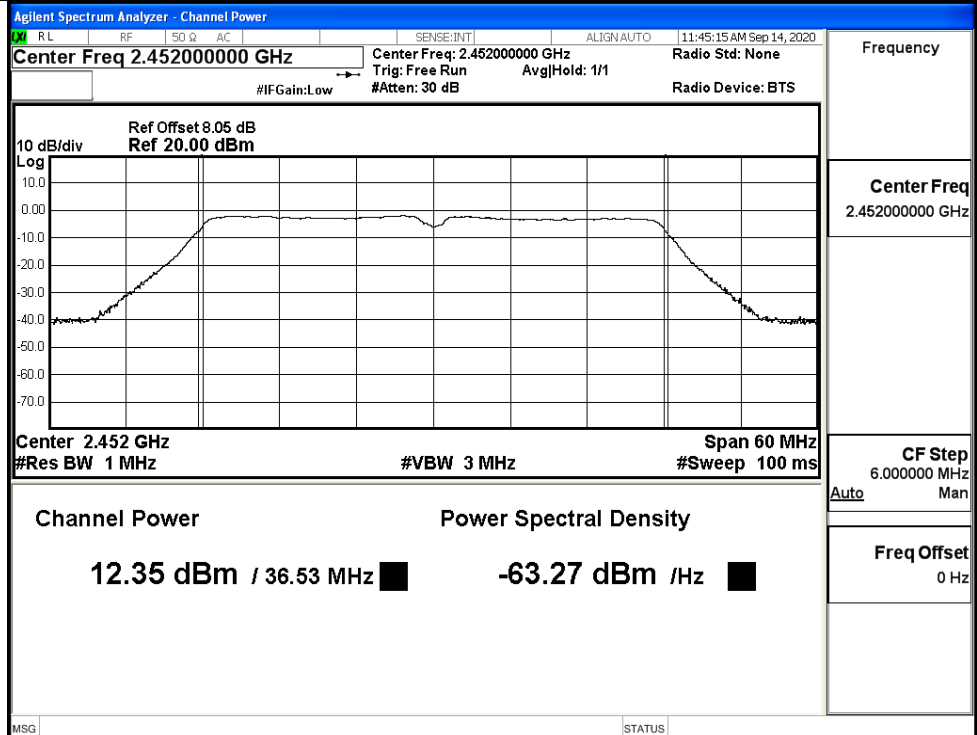
11N40/LCH



11N40/MCH



11N40/HCH

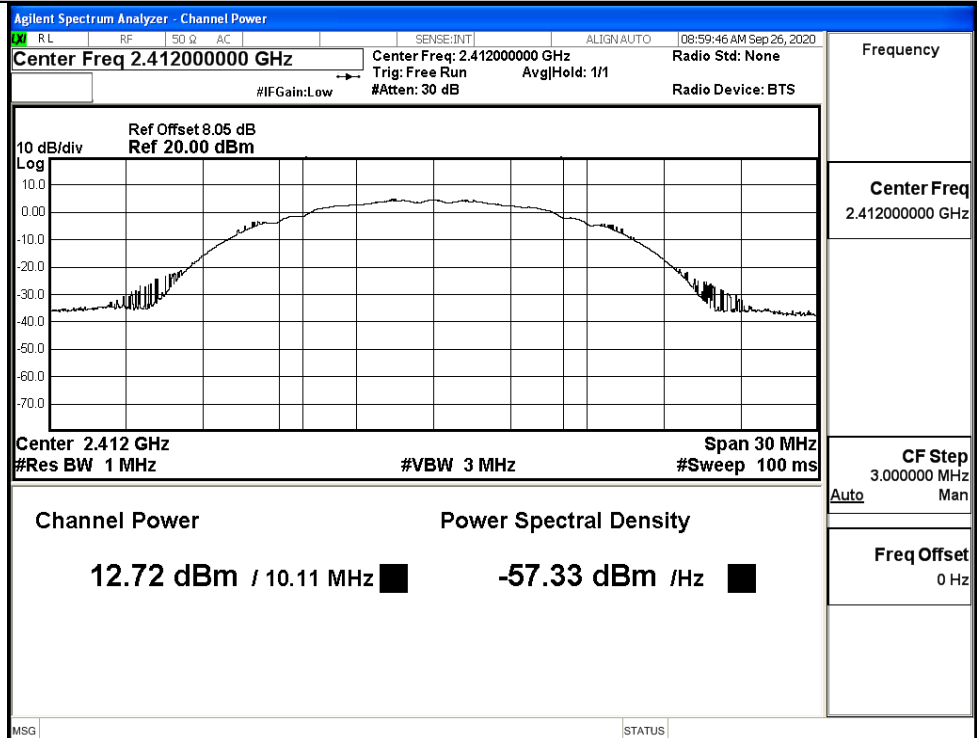


ANT 1

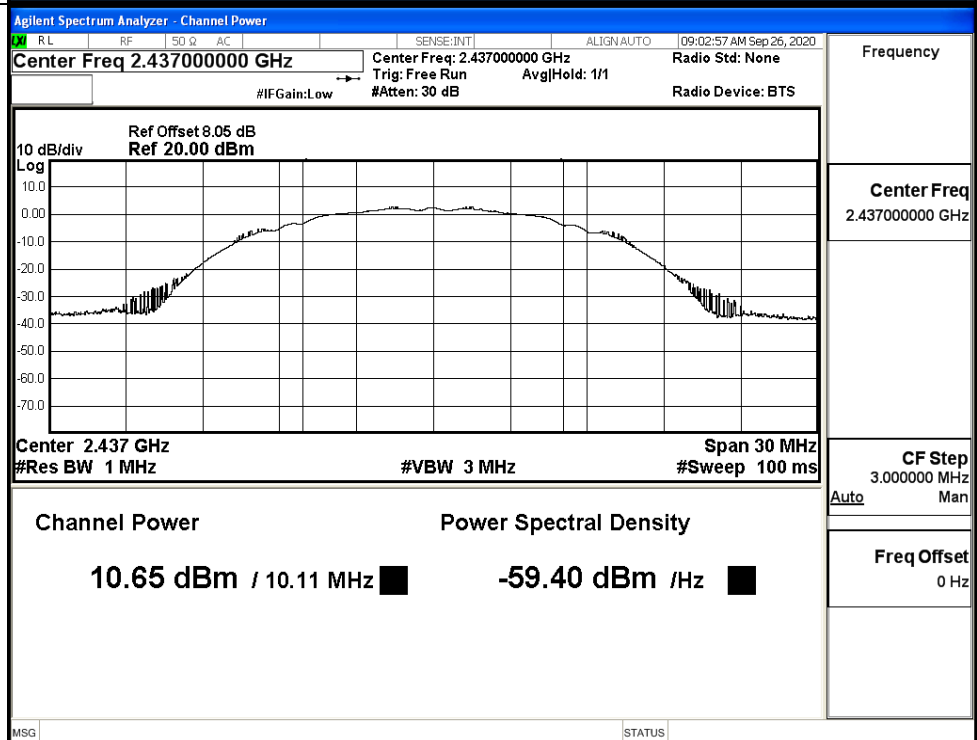
Mode	Channel	Meas.Level [dBm]	Limit [dBm]	Verdict
11B	LCH	12.72	30	PASS
	MCH	10.65	30	PASS
	HCH	10.16	30	PASS
11G	LCH	13.15	30	PASS
	MCH	11.21	30	PASS
	HCH	9.51	30	PASS
11N20	LCH	11.34	30	PASS
	MCH	10.9	30	PASS
	HCH	10.07	30	PASS
11N40	LCH	10.99	30	PASS
	MCH	9.87	30	PASS
	HCH	10.9	30	PASS

Test Graphs

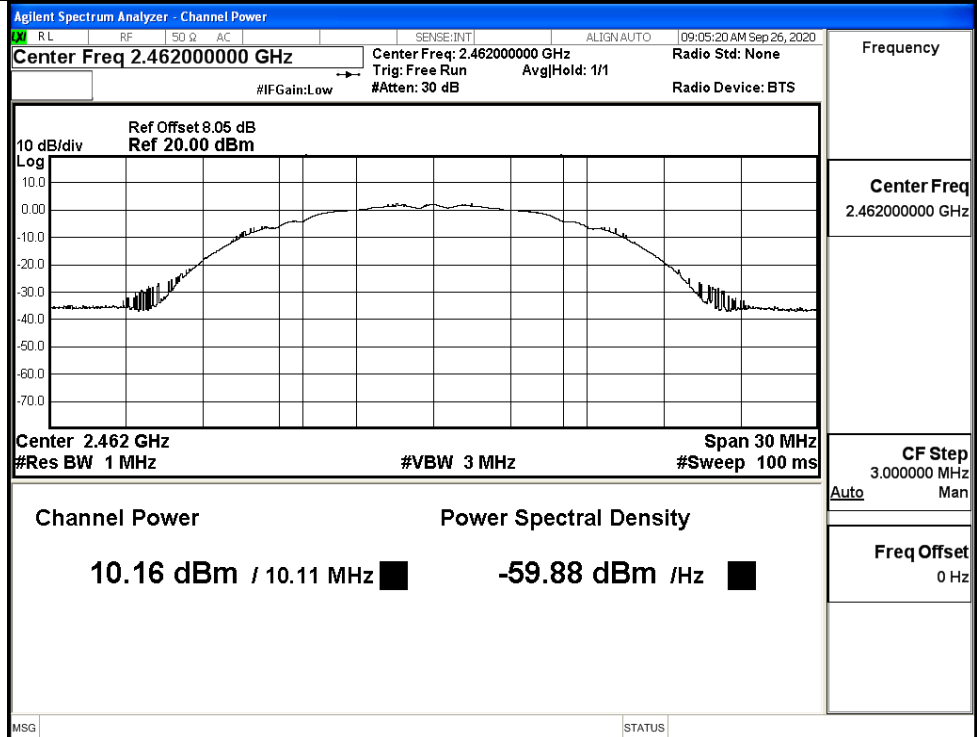
11B/LCH



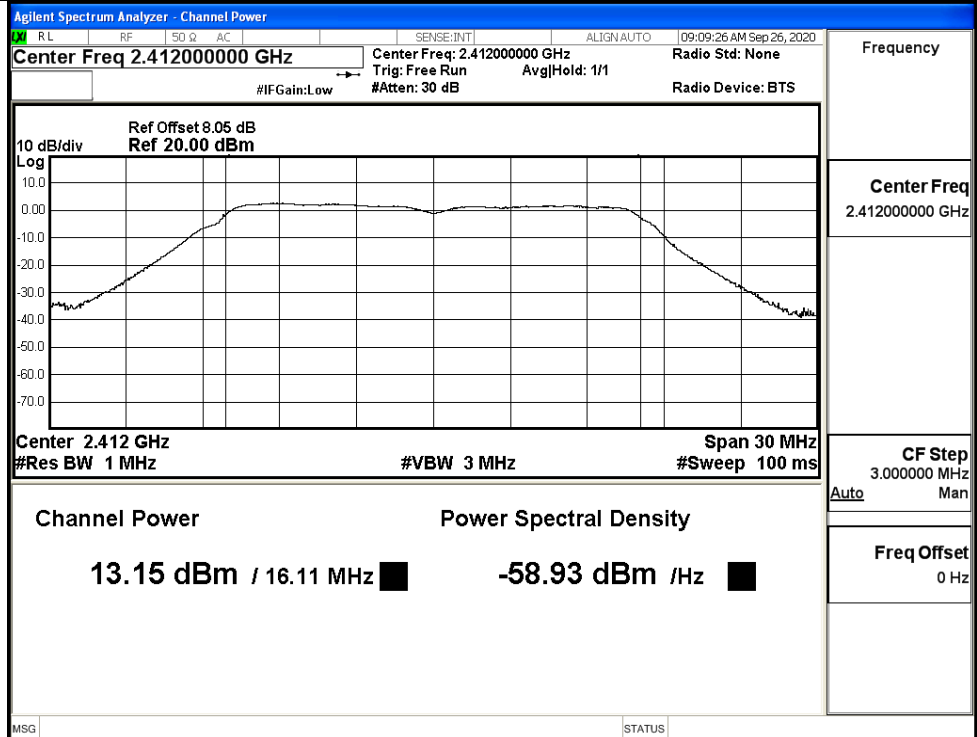
11B/MCH



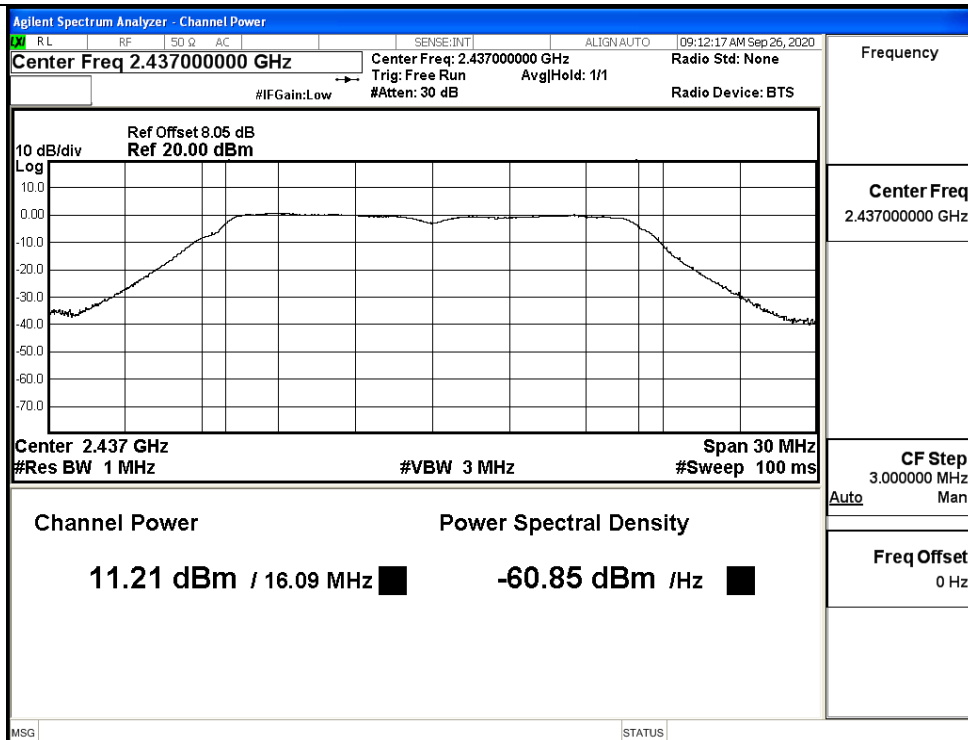
11B/HCH



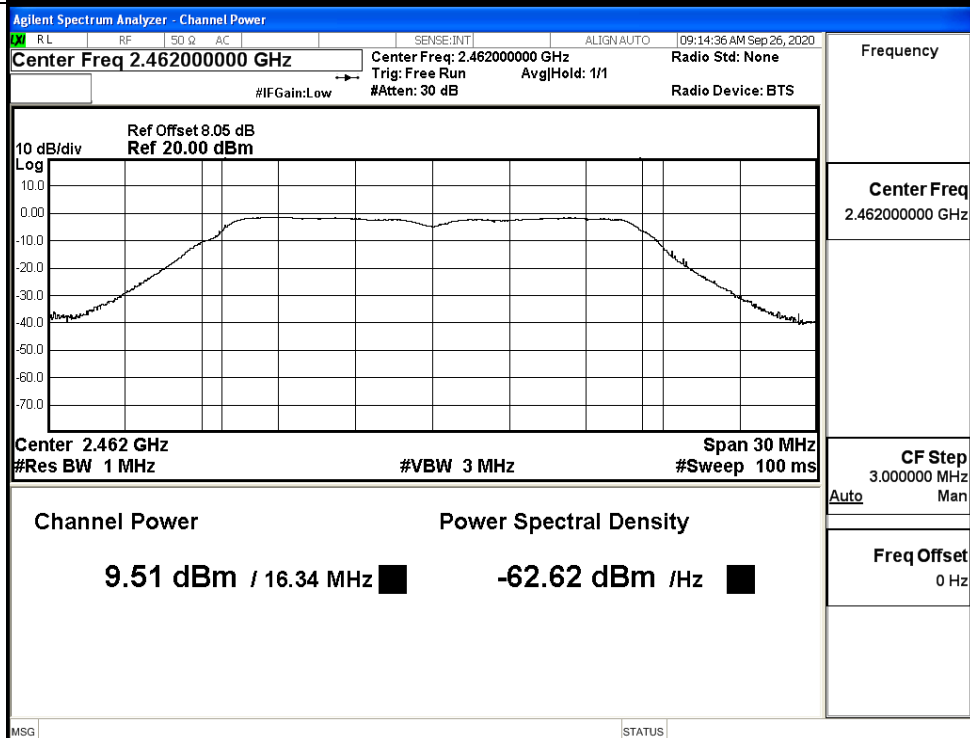
11G/LCH



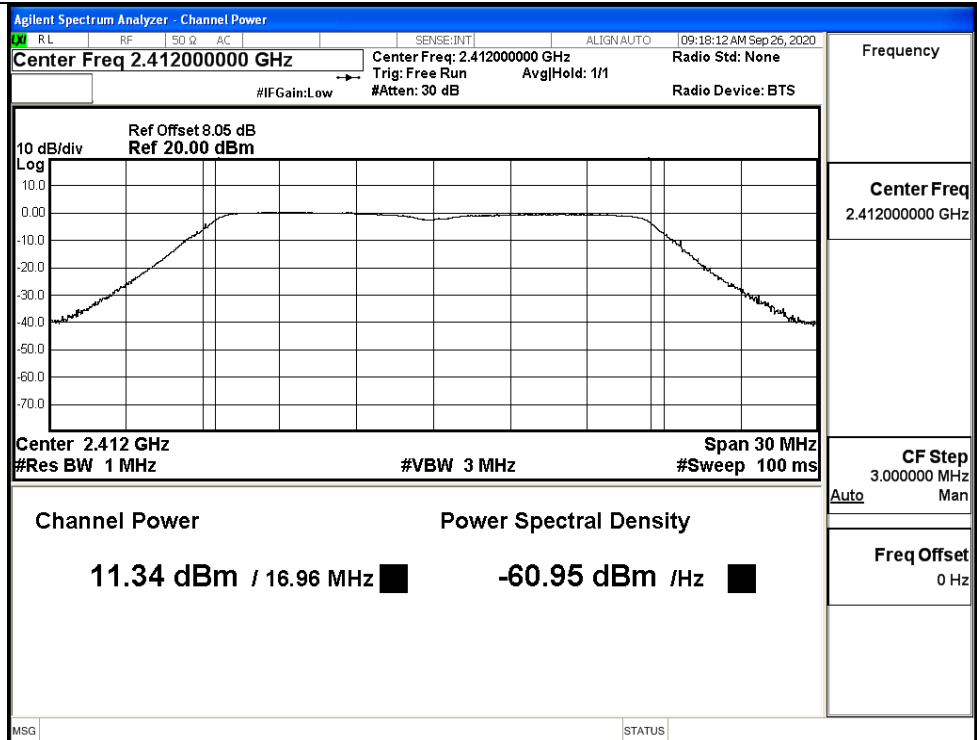
11G/MCH



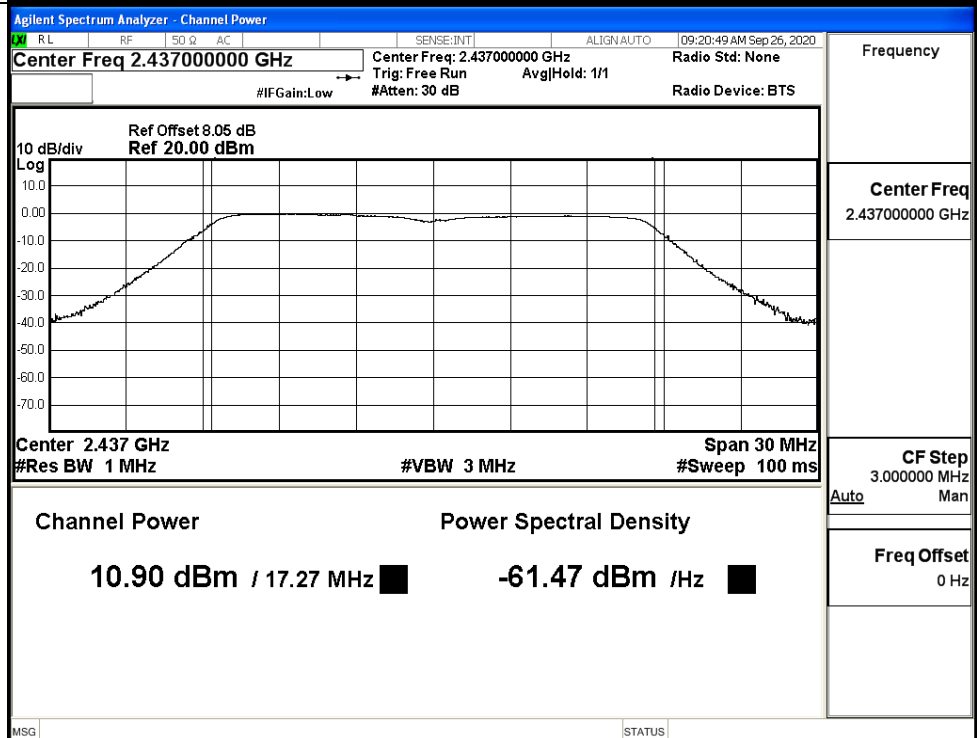
11G/HCH



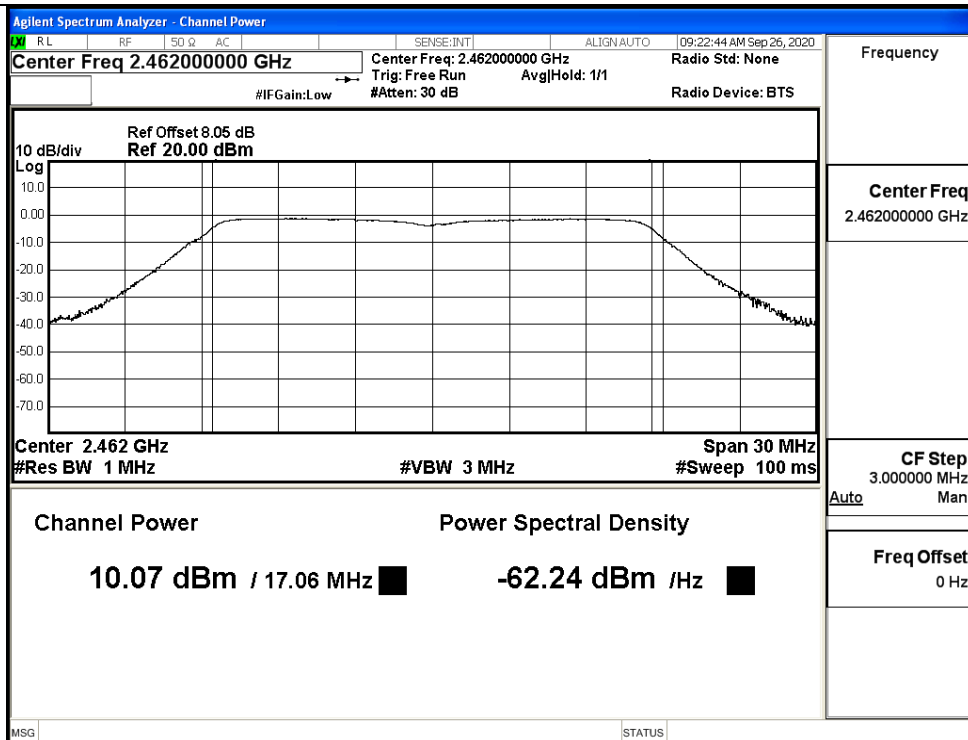
11N20/LCH



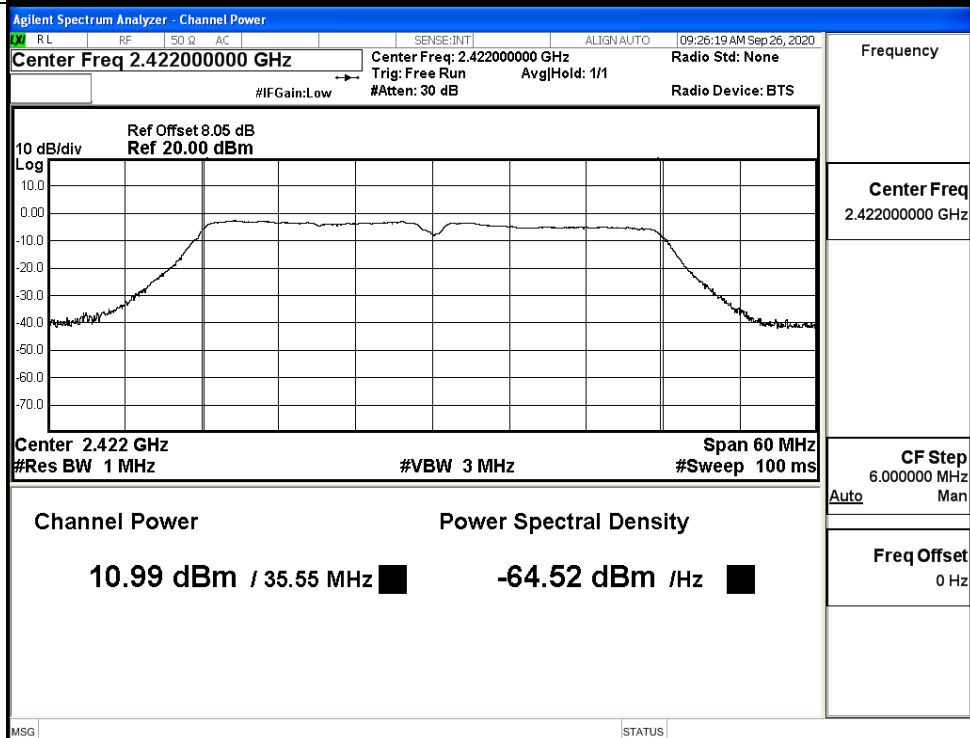
11N20/MCH



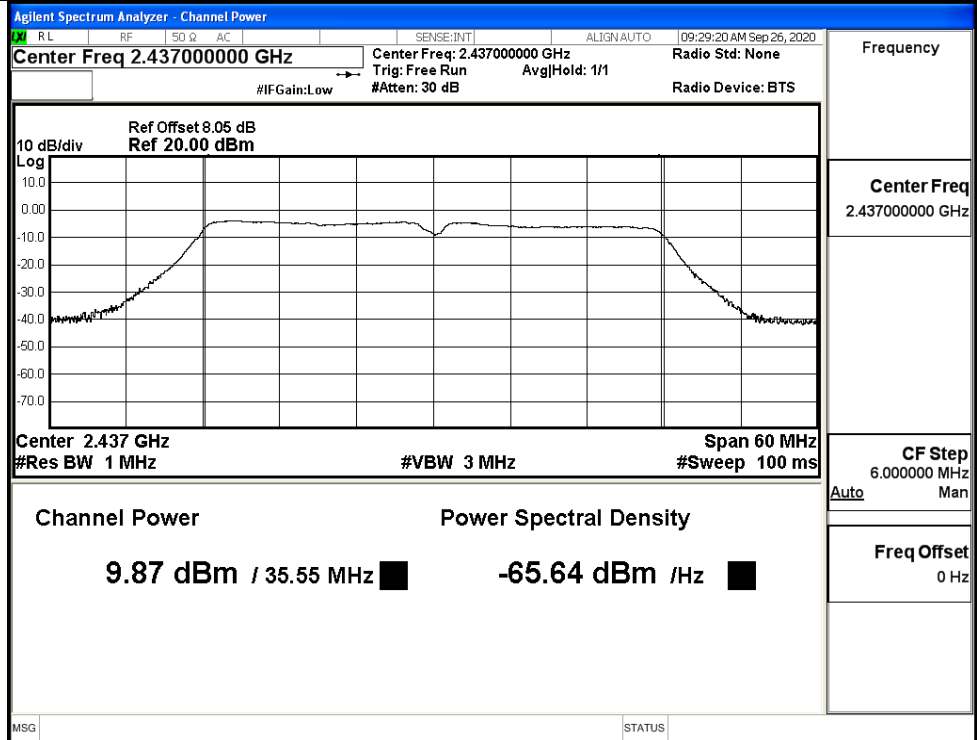
11N20/HCH



11N40/LCH



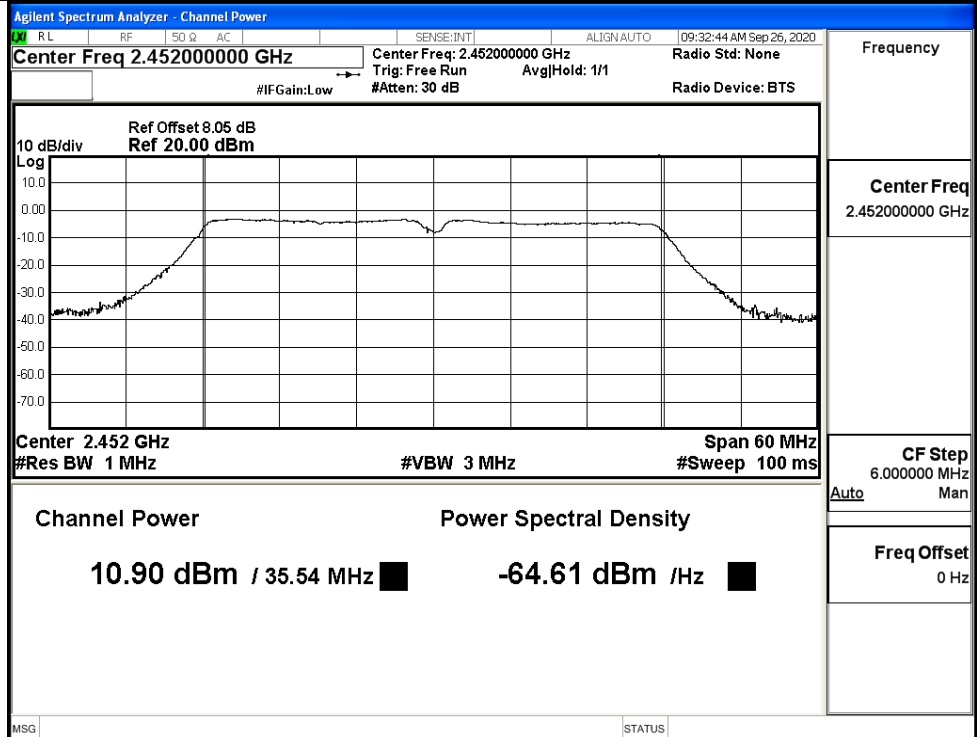
11N40/MCH



Frequency

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

11N40/HCH



Frequency

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

MIMO

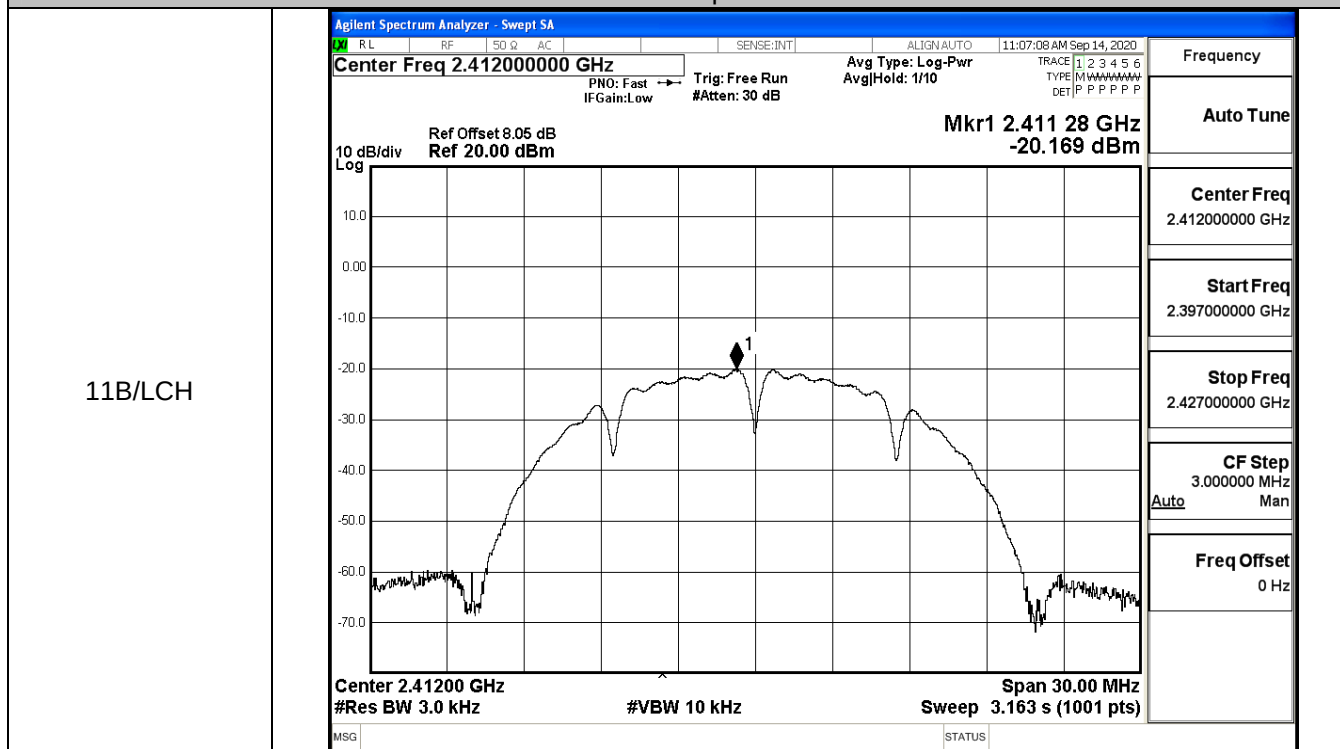
Mode	Channel	ANT 0 [dBm]	ANT 1 [dBm]	MIMO [dBm]	Limit [dBm]	Verdict
11N20	LCH	12.71	11.34	15.09	30	PASS
	MCH	12.26	10.90	14.64	30	PASS
	HCH	12.52	10.07	14.48	30	PASS
11N40	LCH	12.41	10.99	14.77	30	PASS
	MCH	12.57	9.87	14.44	30	PASS
	HCH	12.35	10.90	14.70	30	PASS

C.3 Maximum Power Spectral Density

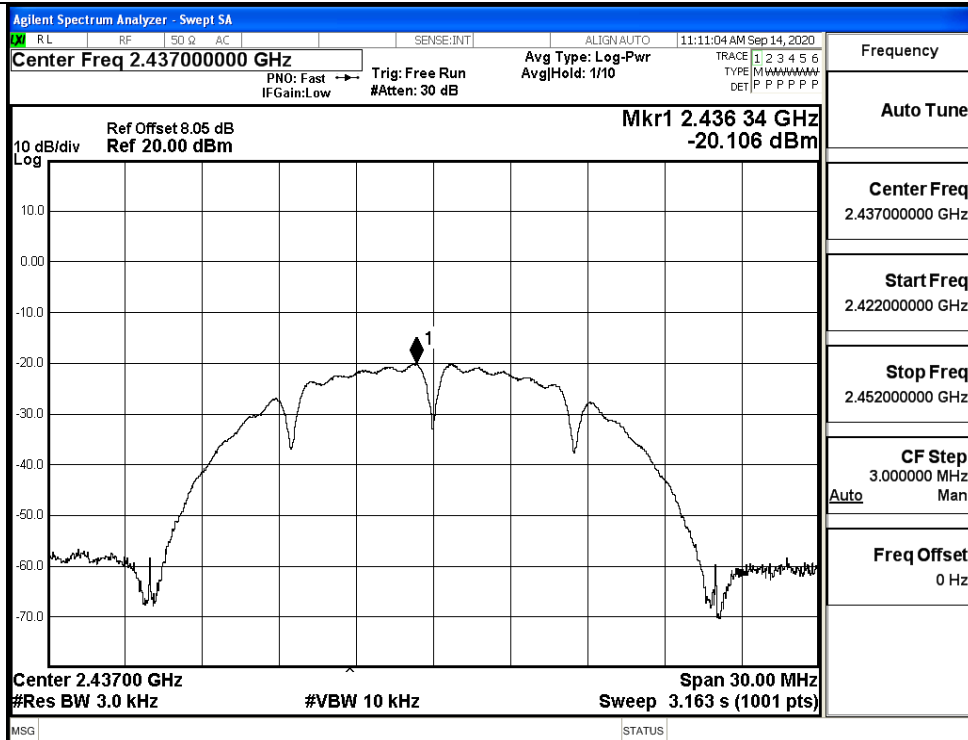
ANT 0

Mode	Channel	Meas.Level [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
11B	LCH	-20.169	8	PASS
	MCH	-20.106	8	PASS
	HCH	-20.211	8	PASS
11G	LCH	-24.087	8	PASS
	MCH	-23.809	8	PASS
	HCH	-23.578	8	PASS
11N20	LCH	-23.405	8	PASS
	MCH	-22.572	8	PASS
	HCH	-23.071	8	PASS
11N40	LCH	-25.870	8	PASS
	MCH	-25.287	8	PASS
	HCH	-26.104	8	PASS

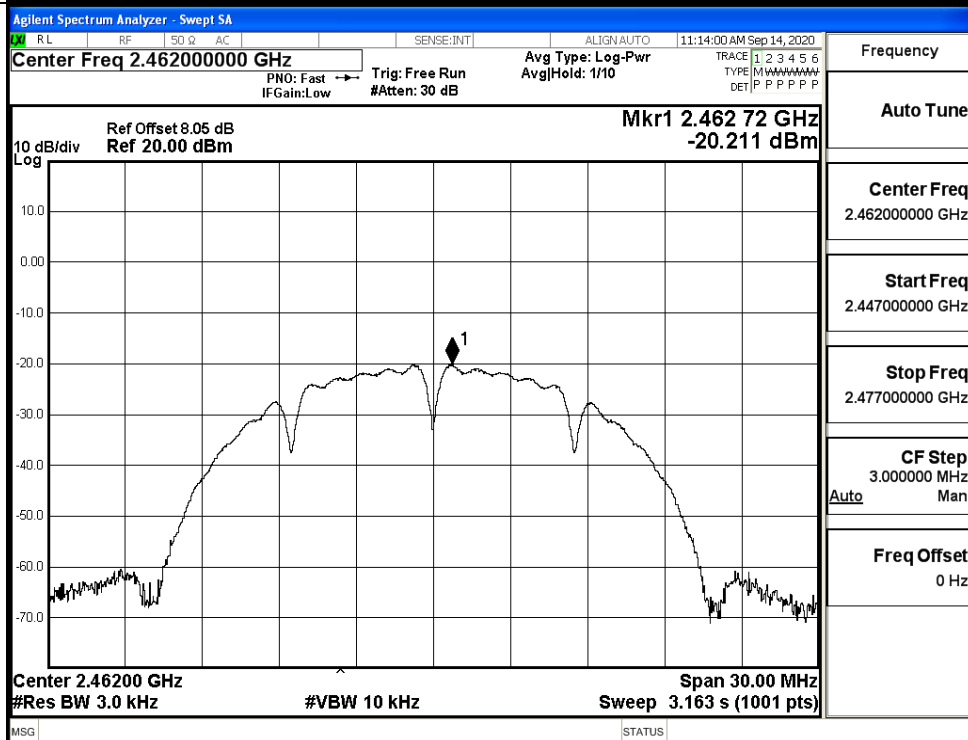
Test Graphs



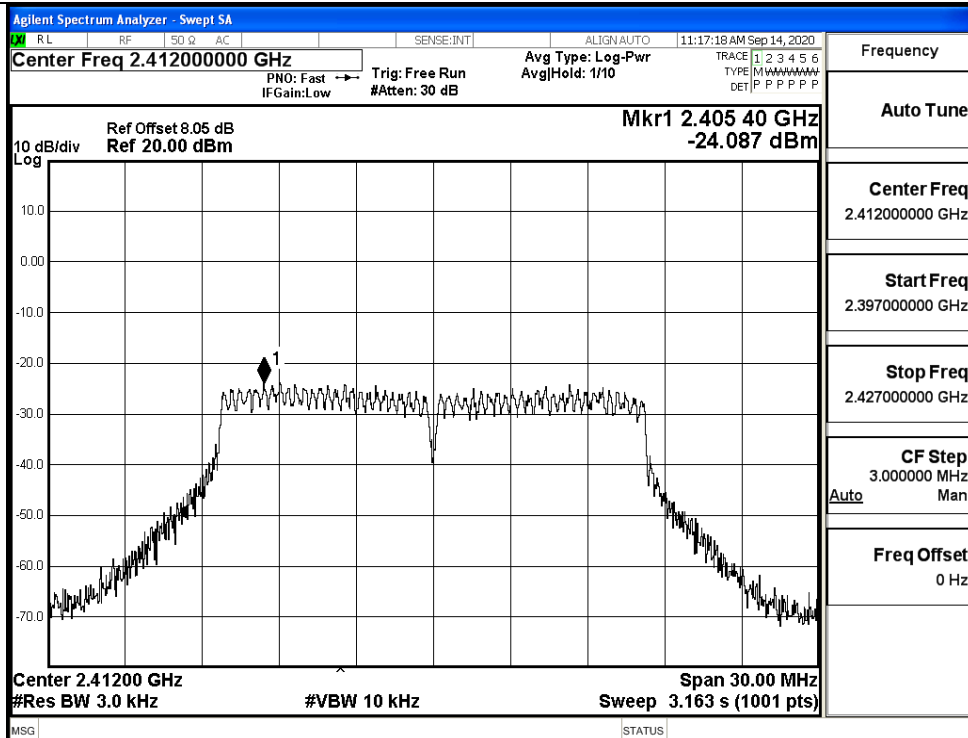
11B/MCH



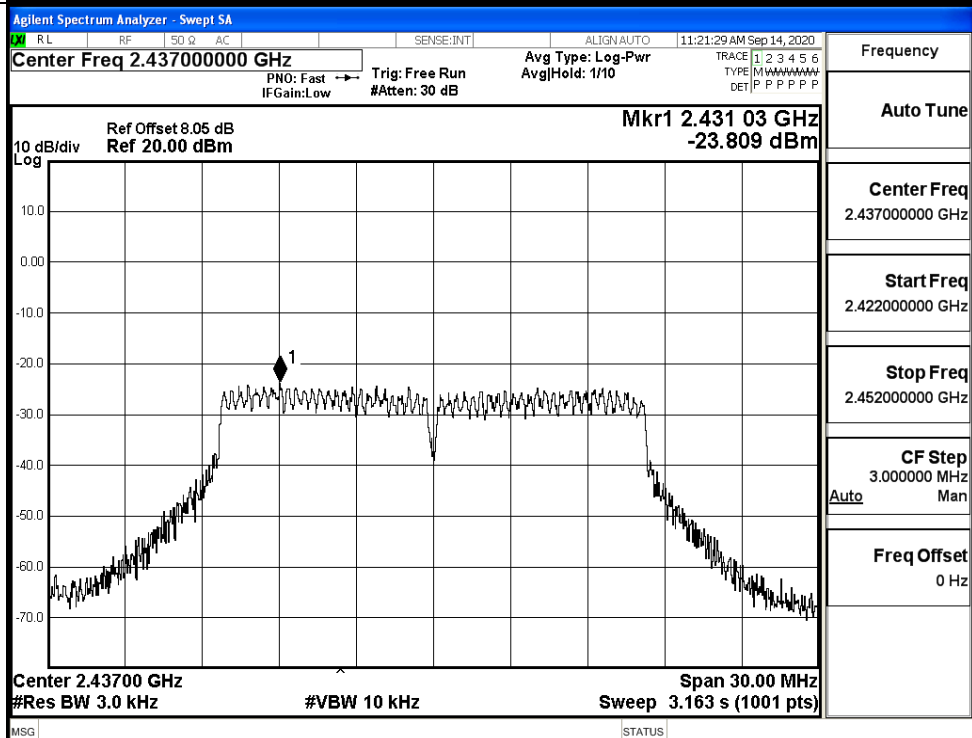
11B/HCH



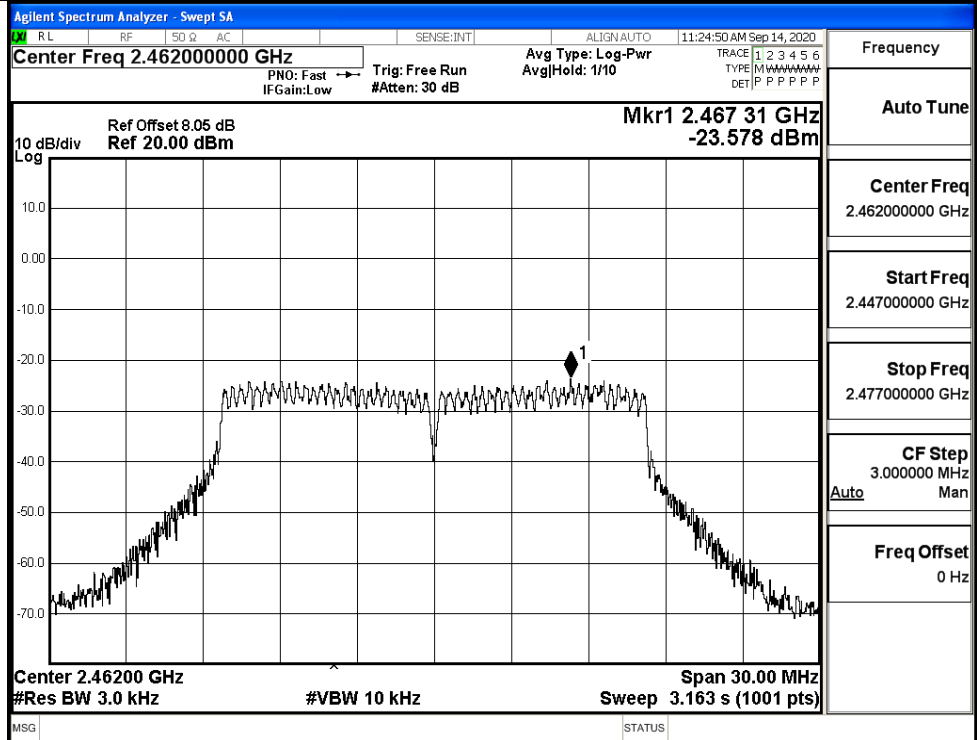
11G/LCH



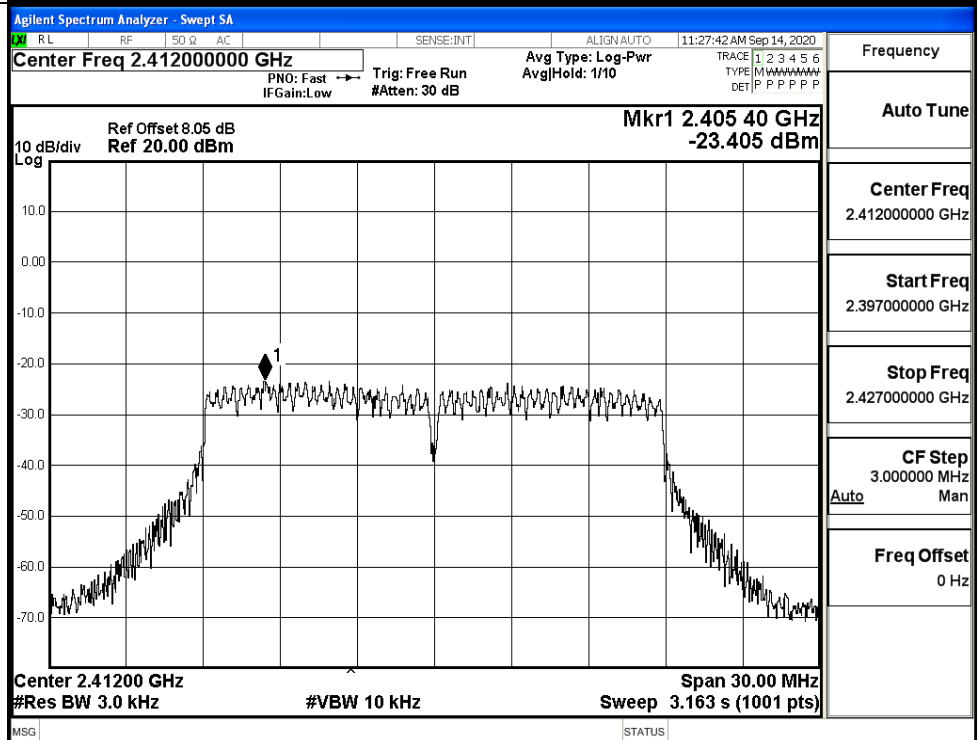
11G/MCH



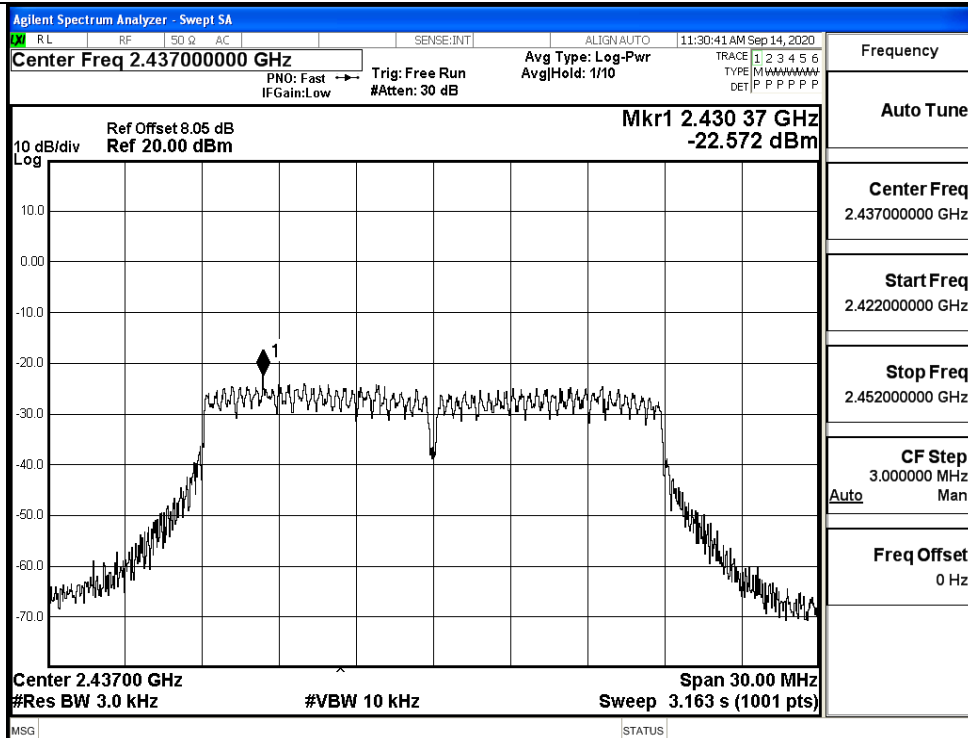
11G/HCH



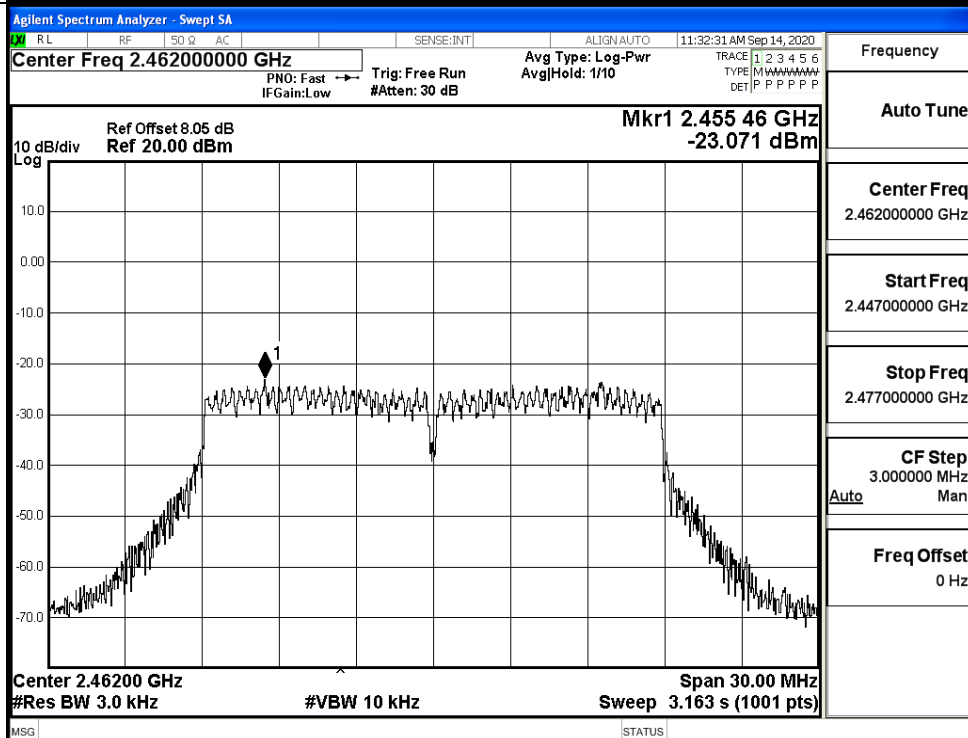
11N20/LCH



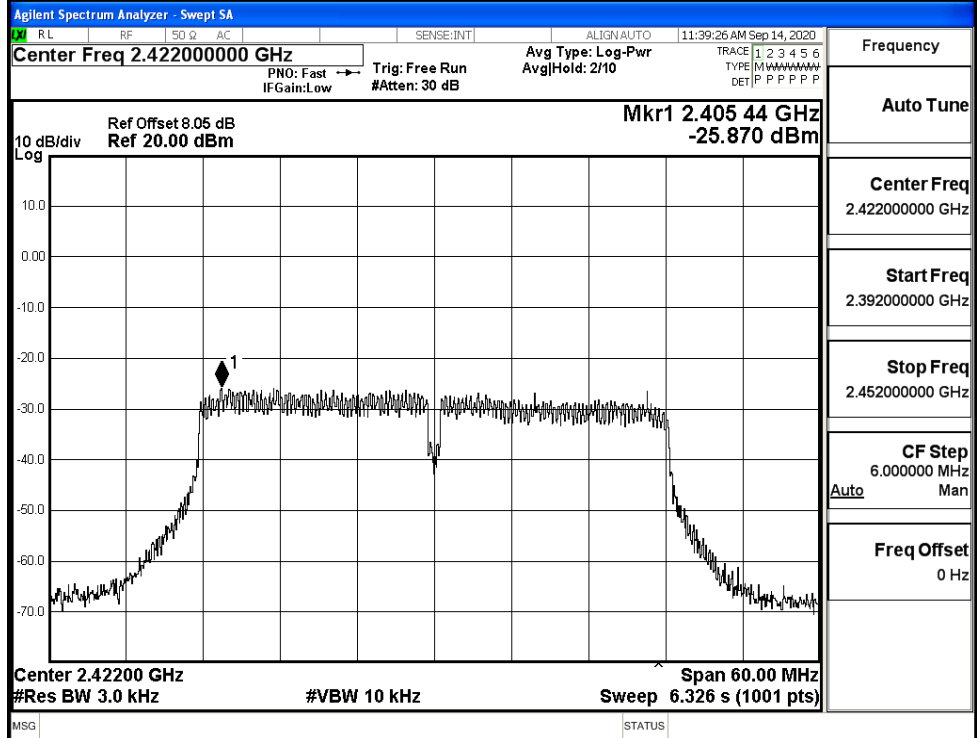
11N20/MCH



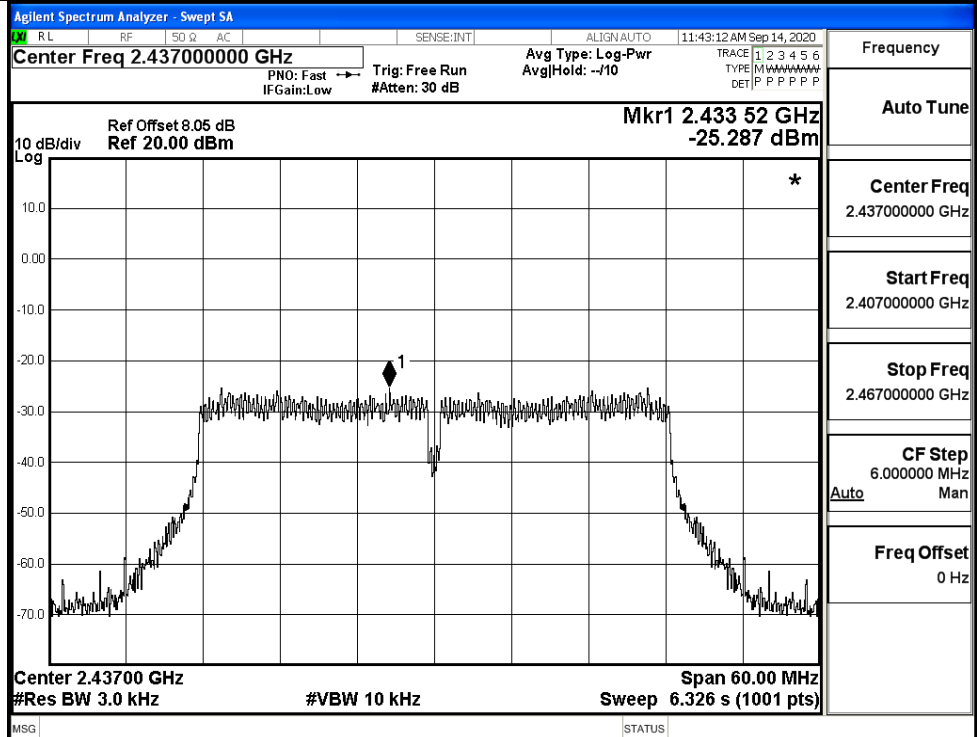
11N20/HCH



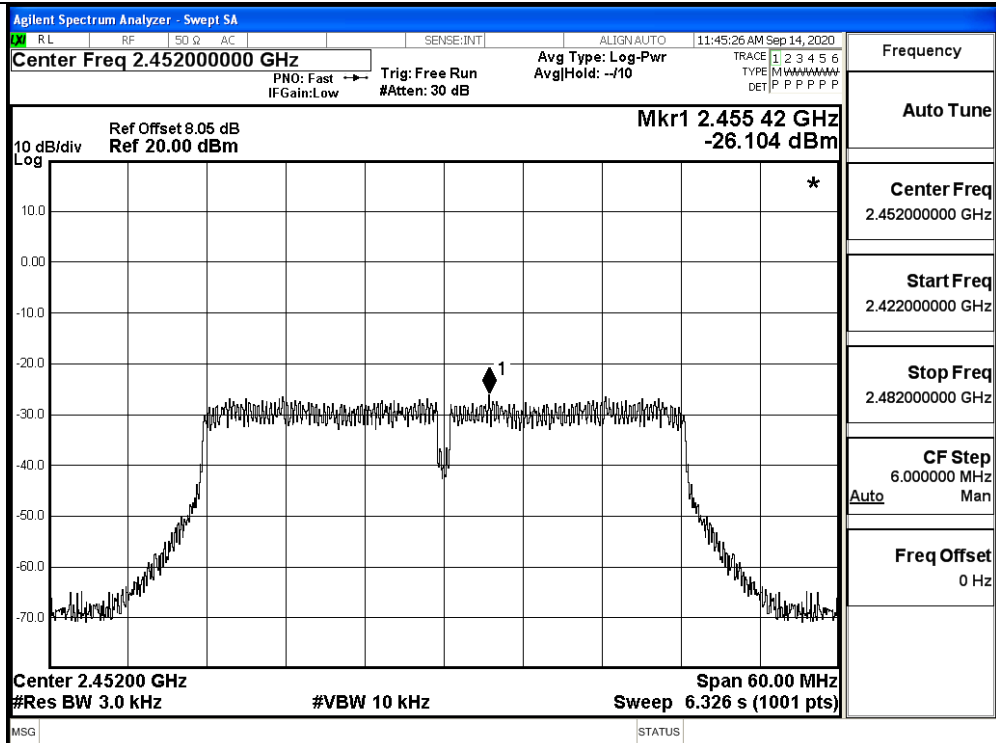
11N40/LCH



11N40/MCH



11N40/HCH

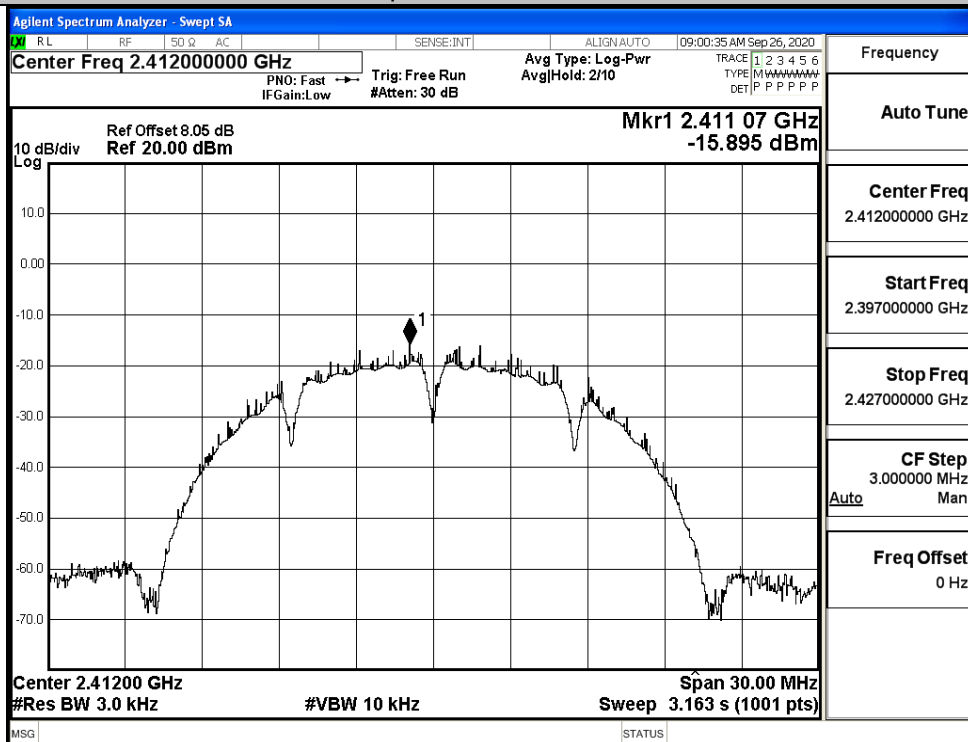


ANT 1

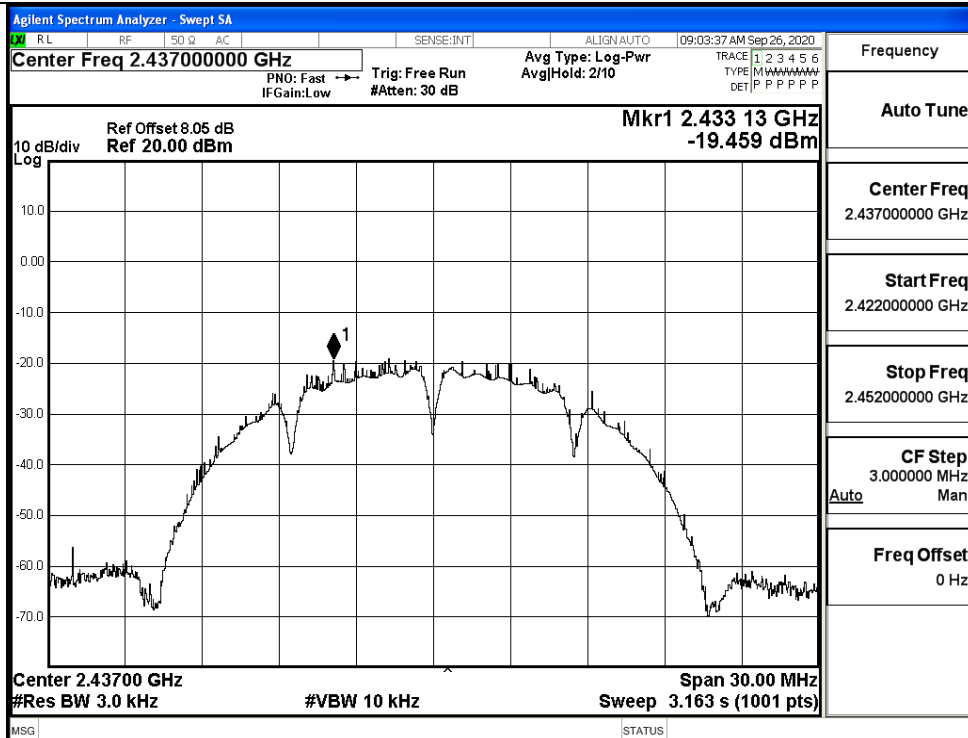
Mode	Channel	Meas.Level [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
11B	LCH	-15.895	8	PASS
	MCH	-19.459	8	PASS
	HCH	-19.010	8	PASS
11G	LCH	-22.793	8	PASS
	MCH	-24.412	8	PASS
	HCH	-26.646	8	PASS
11N20	LCH	-22.739	8	PASS
	MCH	-23.985	8	PASS
	HCH	-24.285	8	PASS
11N40	LCH	-26.036	8	PASS
	MCH	-27.541	8	PASS
	HCH	-27.116	8	PASS

Test Graphs

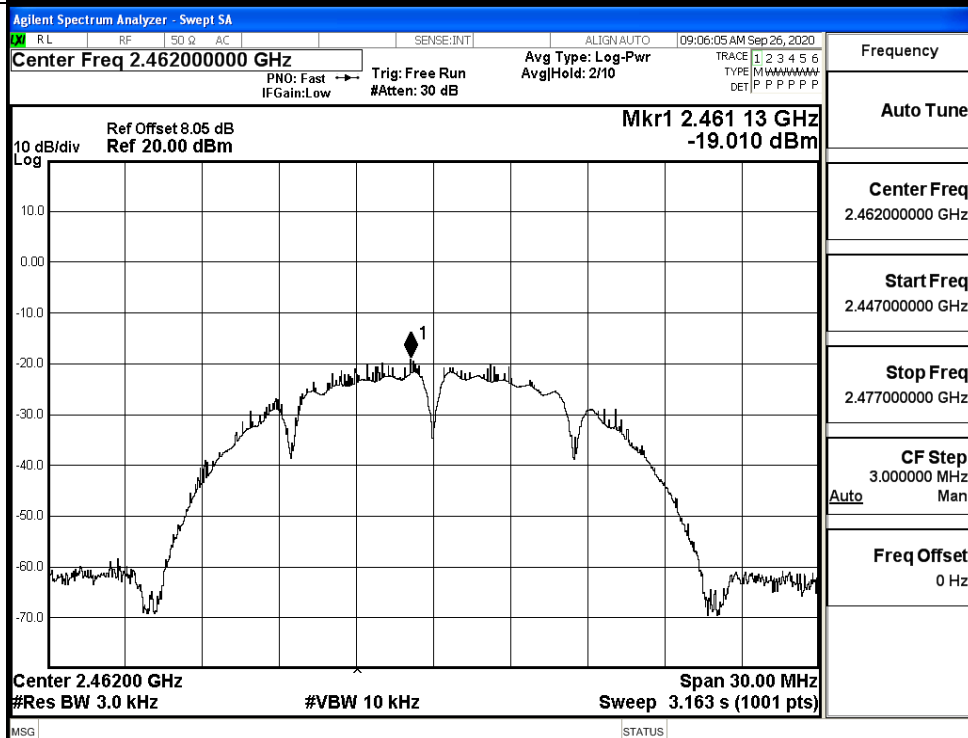
11B/LCH



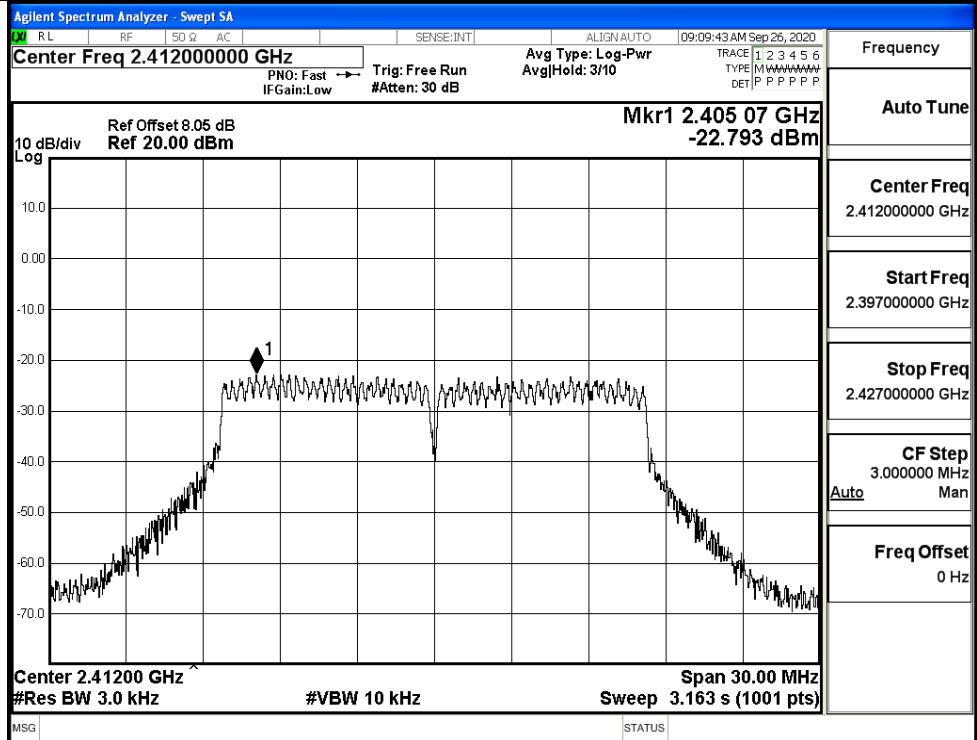
11B/MCH



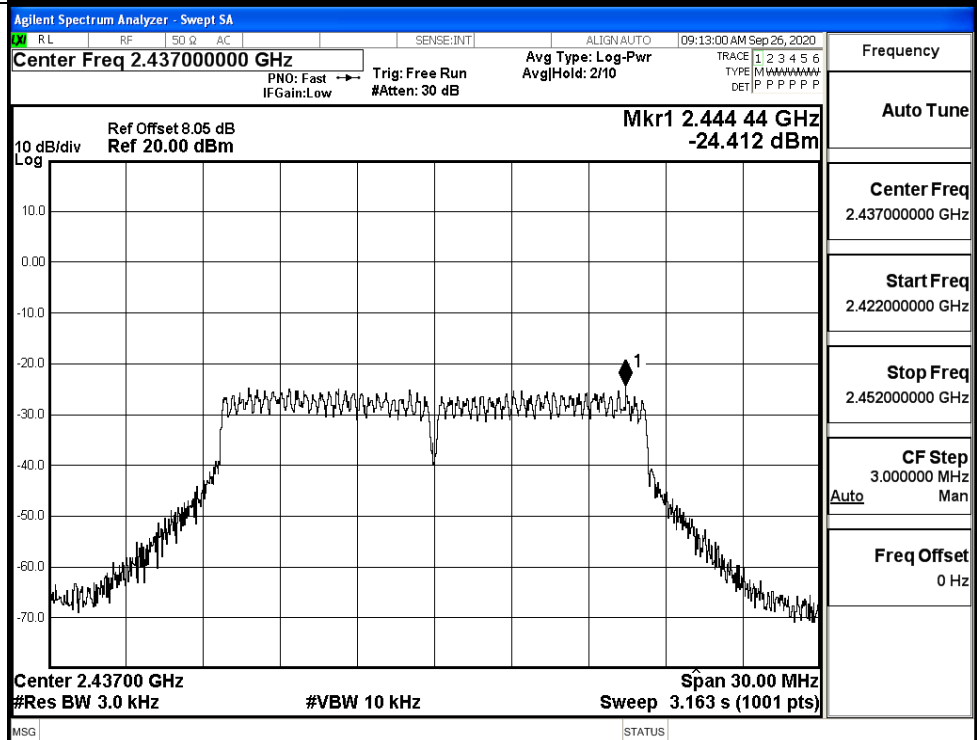
11B/HCH



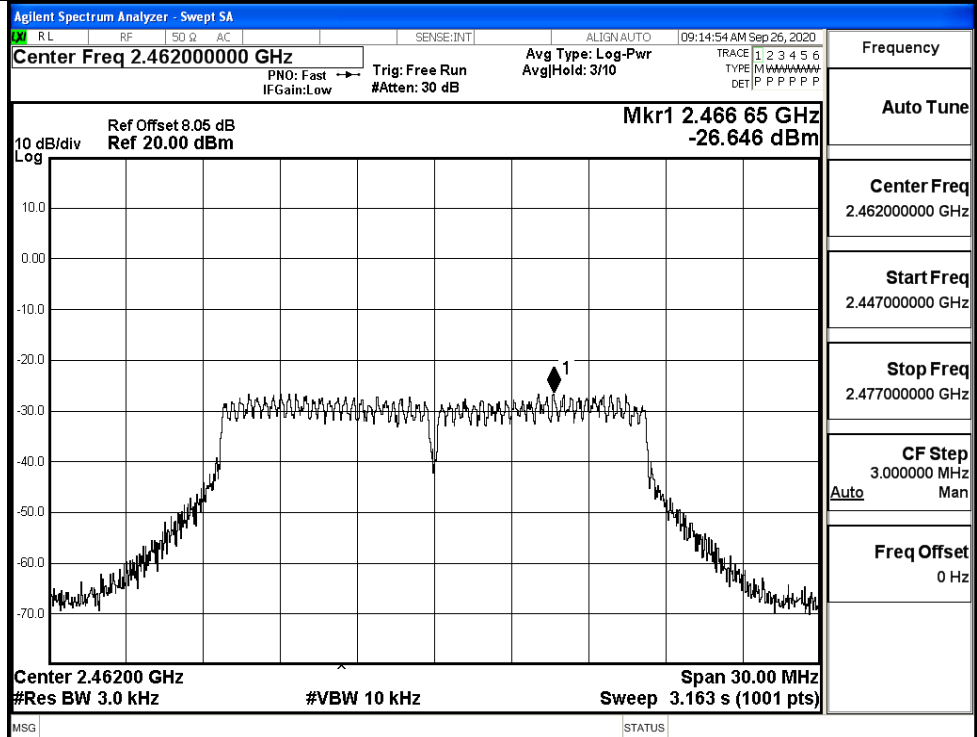
11G/LCH



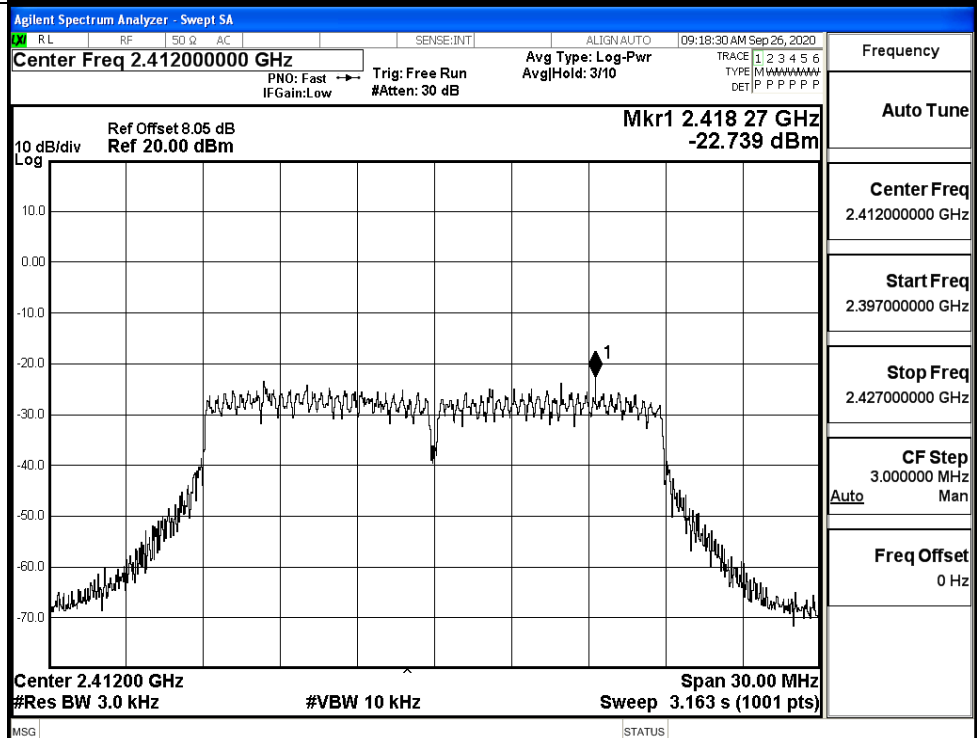
11G/MCH



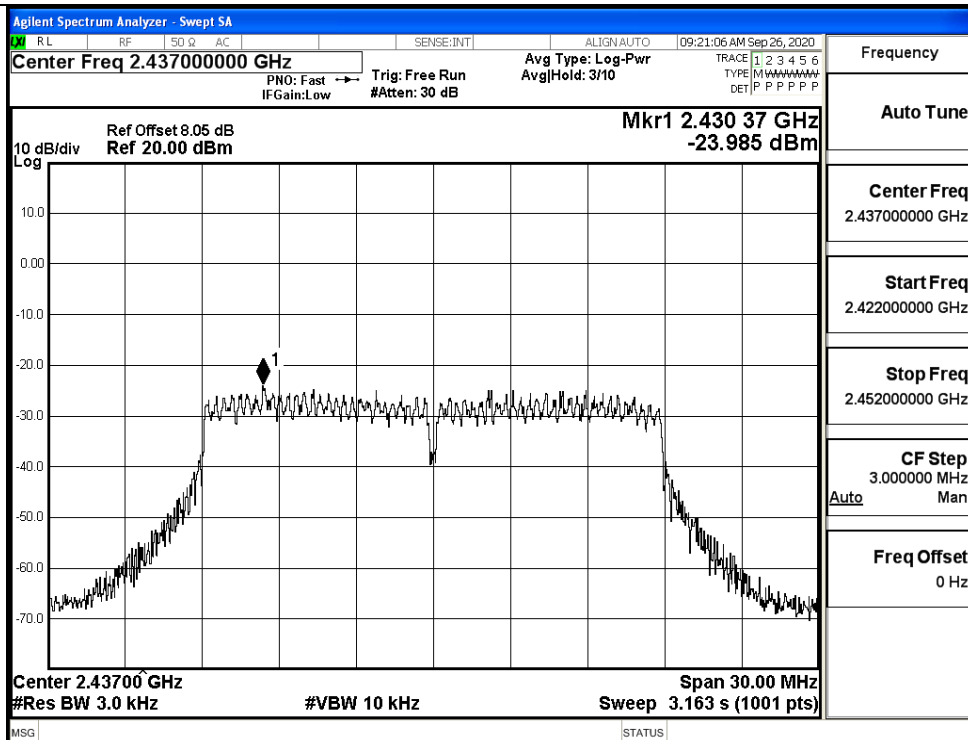
11G/HCH



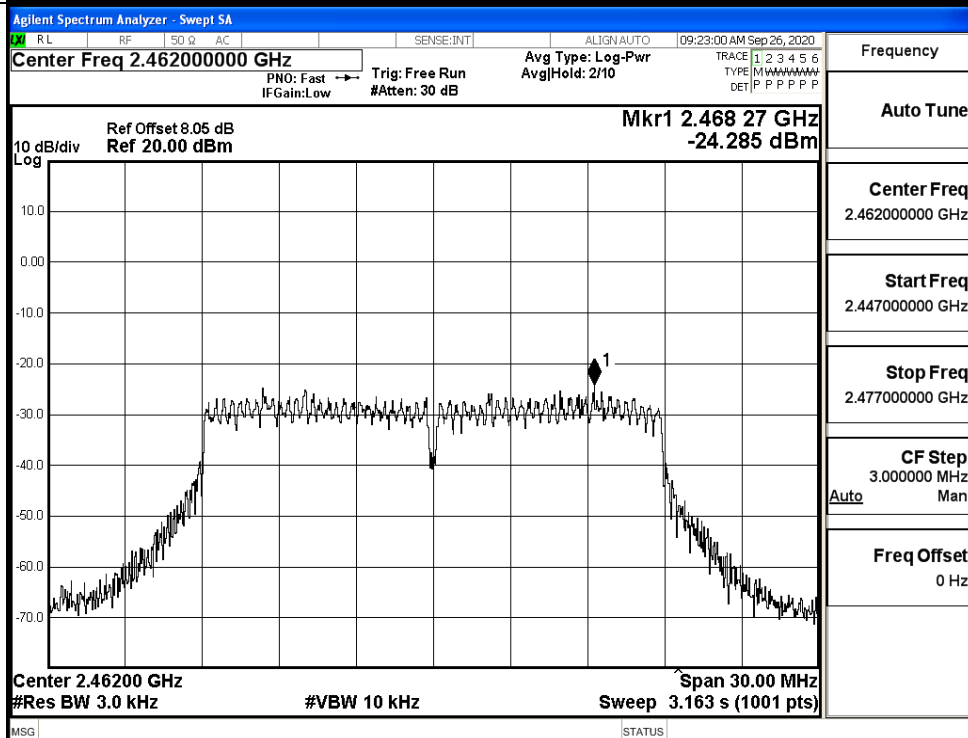
11N20/LCH



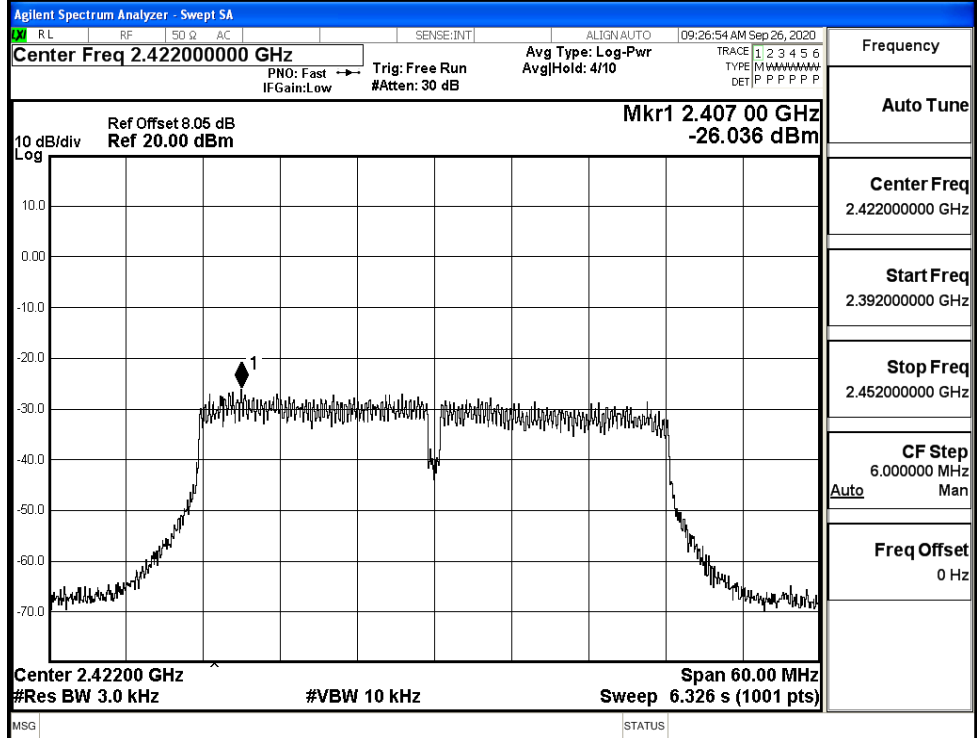
11N20/MCH



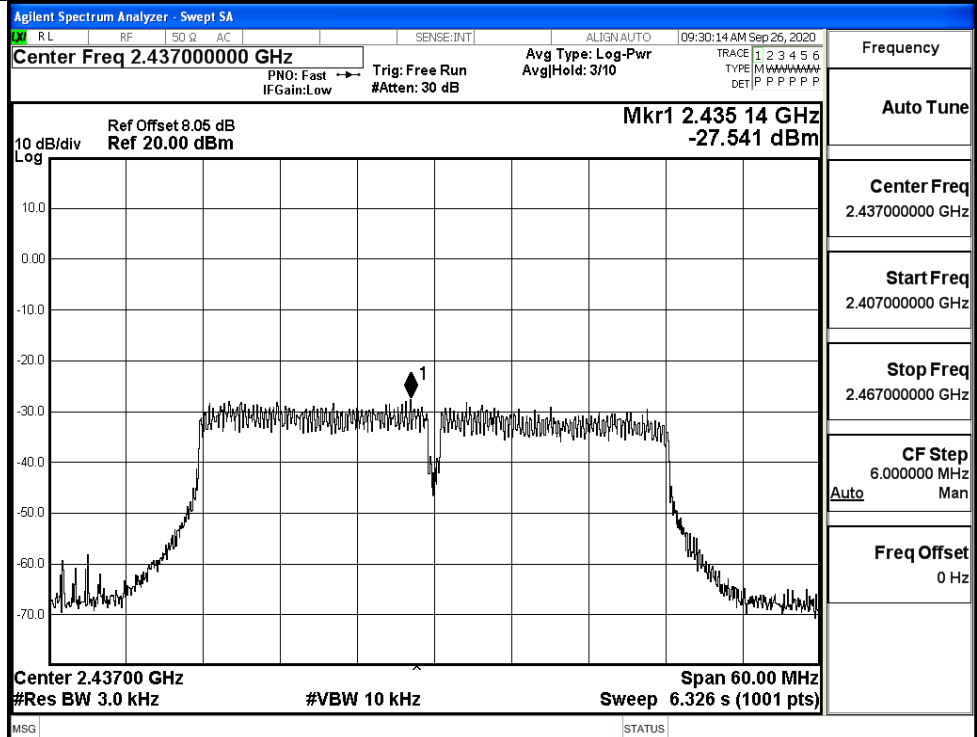
11N20/HCH



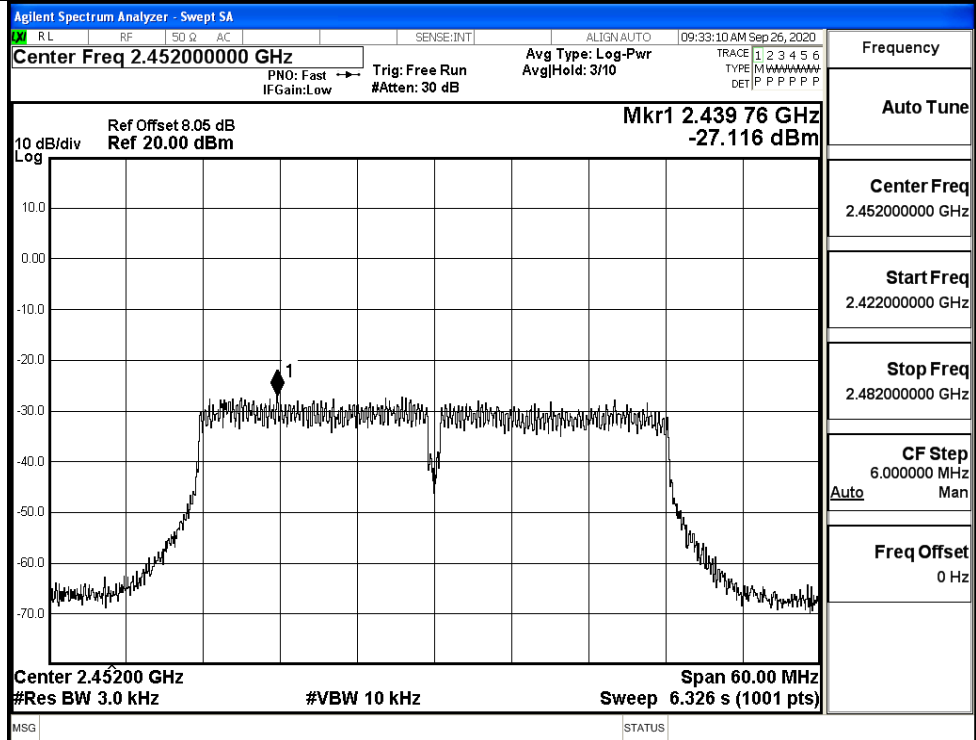
11N40/LCH



11N40/MCH



11N40/HCH



MIMO

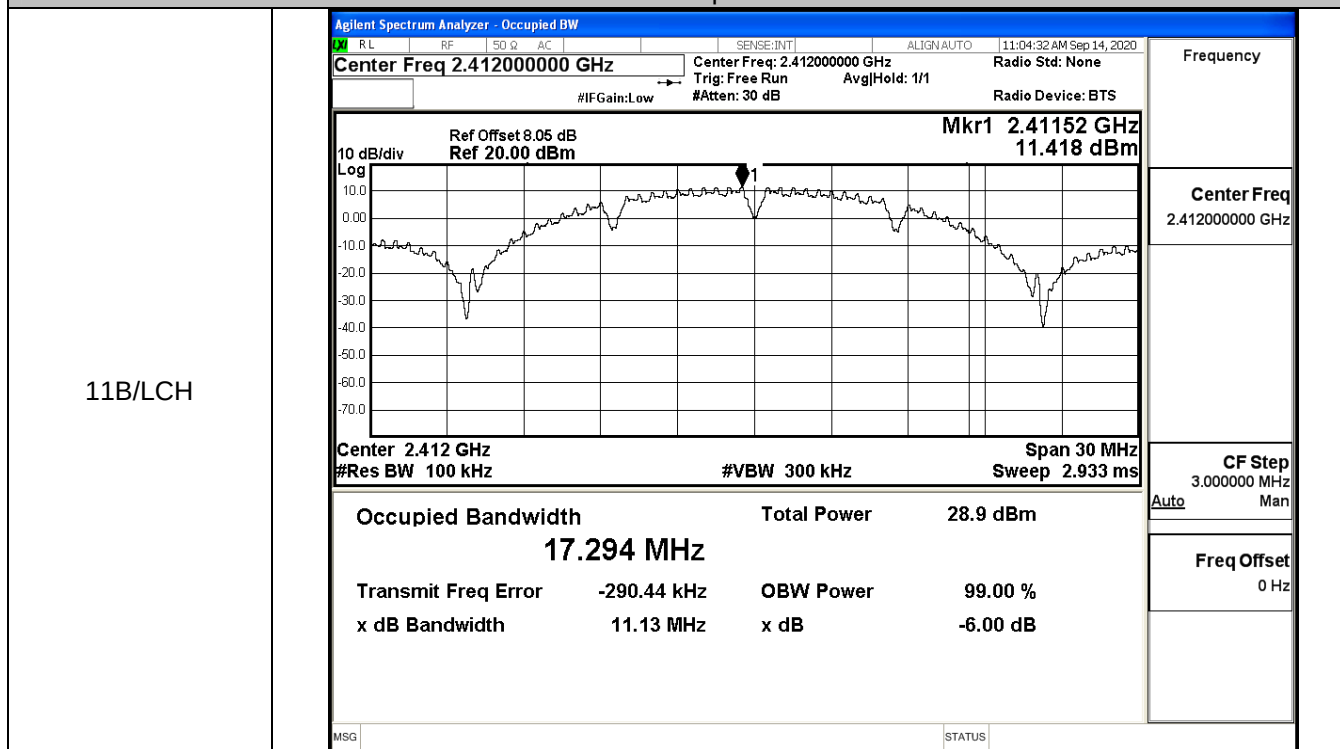
Mode	Channel	ANT 0 [dBm/3KHz]	ANT 1 [dBm/3KHz]	MIMO [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
11N20	LCH	-23.405	-22.739	-20.05	8	PASS
	MCH	-22.572	-23.985	-20.21	8	PASS
	HCH	-23.071	-24.285	-20.63	8	PASS
11N40	LCH	-25.87	-26.036	-22.94	8	PASS
	MCH	-25.287	-27.541	-23.26	8	PASS
	HCH	-26.104	-27.116	-23.57	8	PASS

C.4 6dB Bandwidth

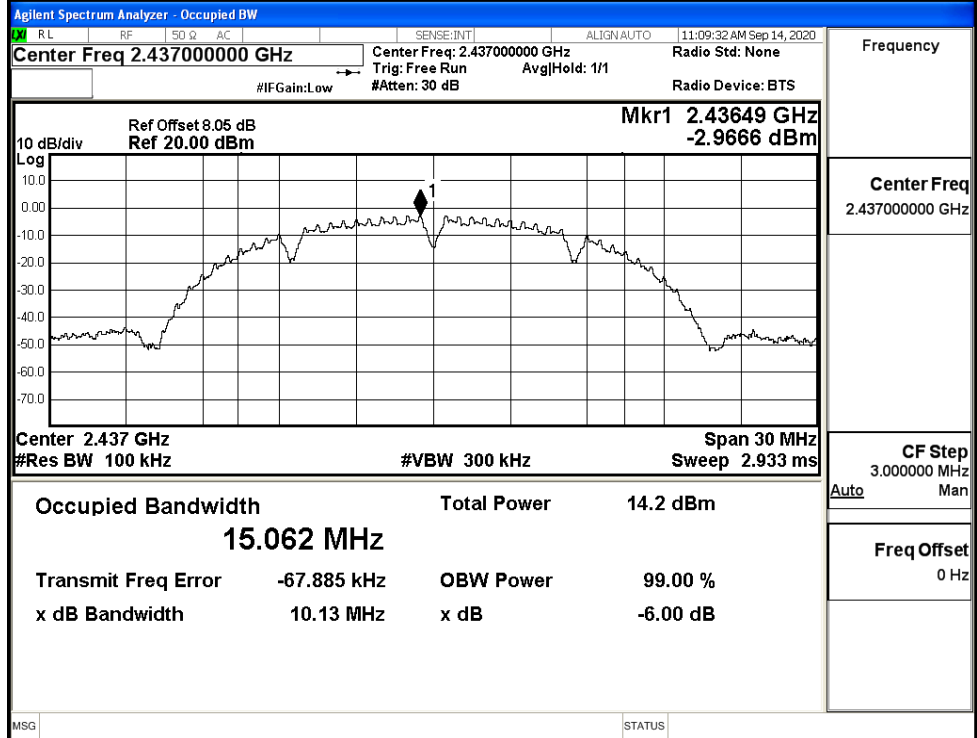
ANT 0

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
11B	LCH	11.13	≥ 0.5	PASS
	MCH	10.13	≥ 0.5	PASS
	HCH	10.13	≥ 0.5	PASS
11G	LCH	16.53	≥ 0.5	PASS
	MCH	16.55	≥ 0.5	PASS
	HCH	16.58	≥ 0.5	PASS
11N20	LCH	17.67	≥ 0.5	PASS
	MCH	17.68	≥ 0.5	PASS
	HCH	17.72	≥ 0.5	PASS
11N40	LCH	36.49	≥ 0.5	PASS
	MCH	36.50	≥ 0.5	PASS
	HCH	36.53	≥ 0.5	PASS

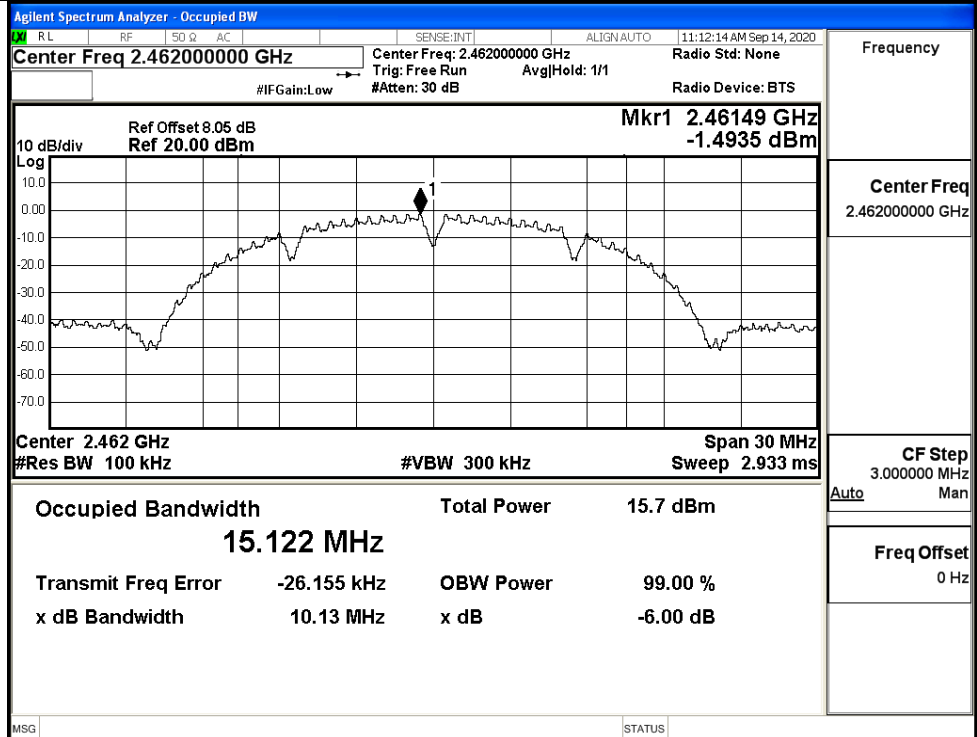
Test Graphs



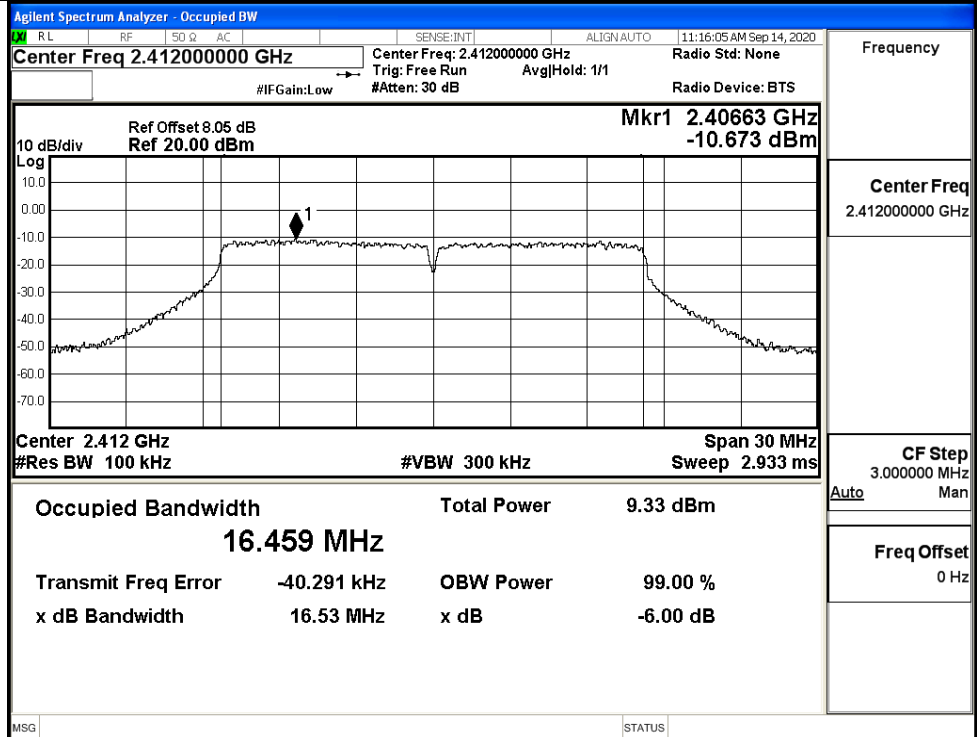
11B/MCH



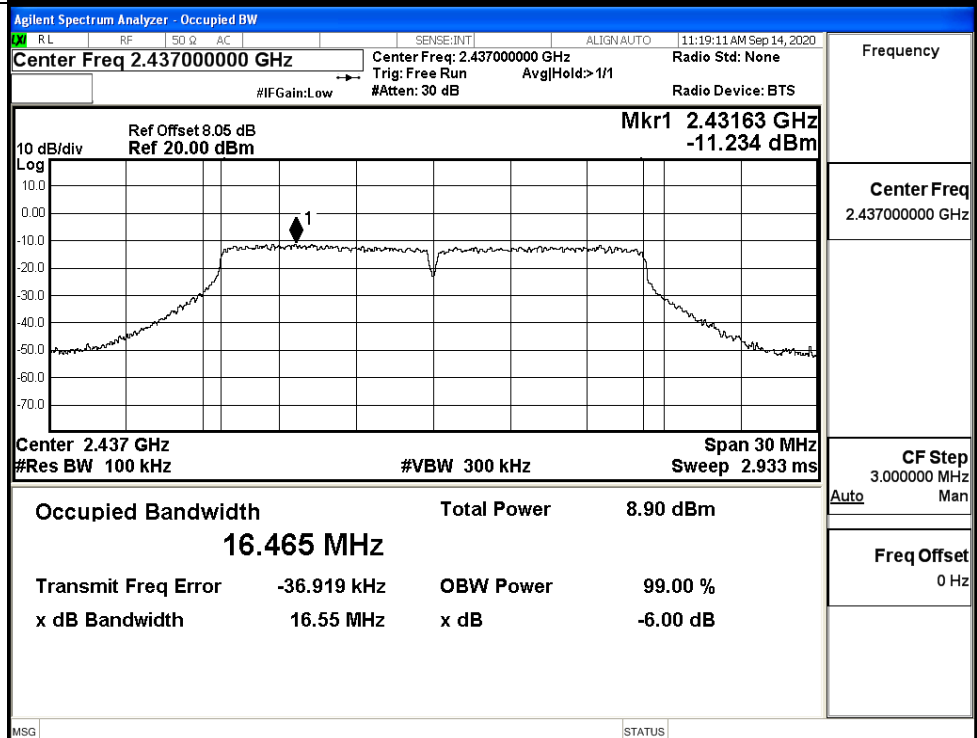
11B/HCH



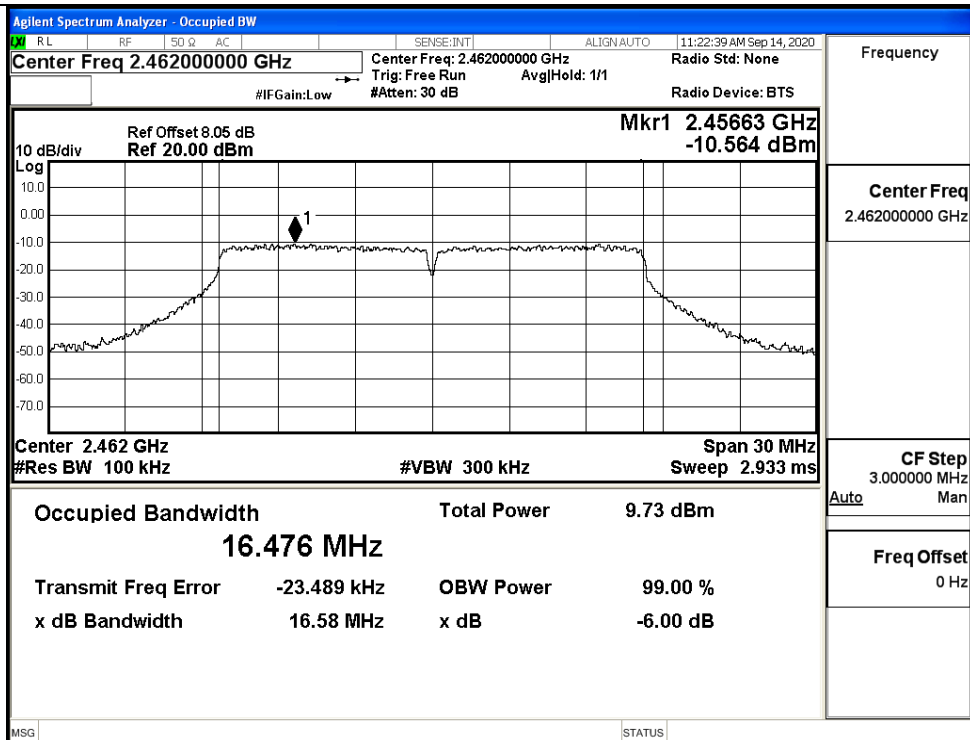
11G/LCH



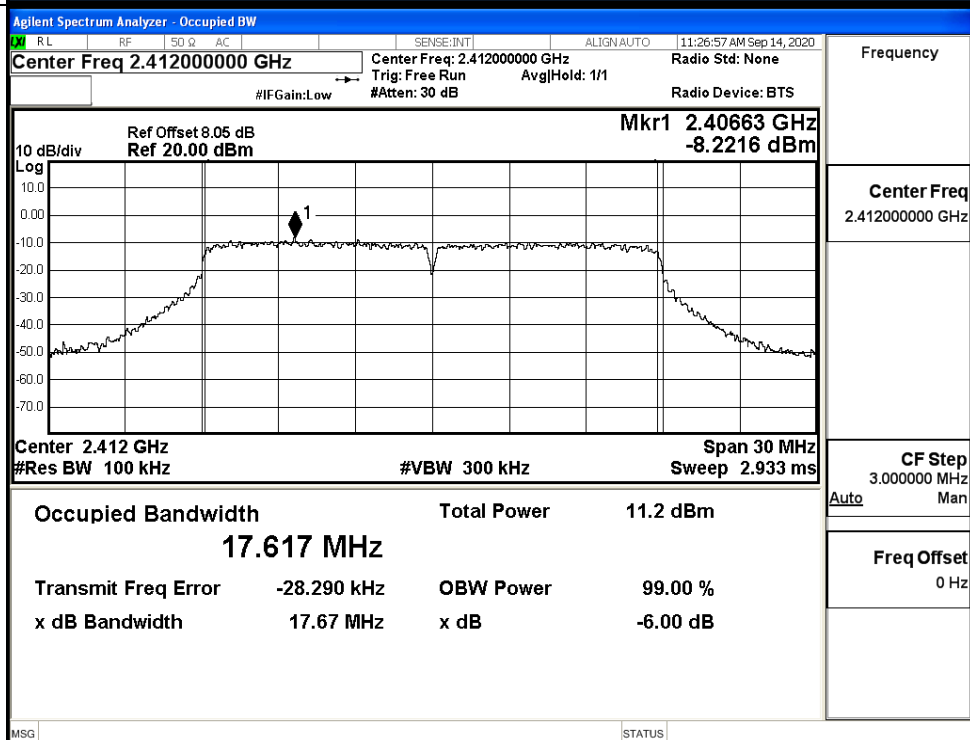
11G/MCH



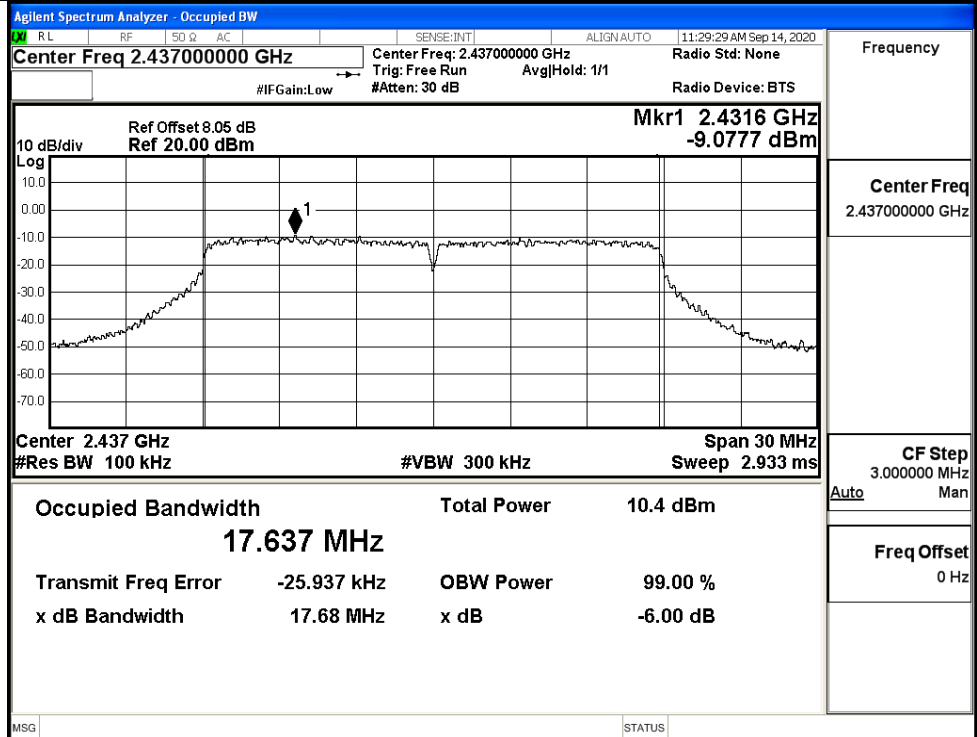
11G/HCH



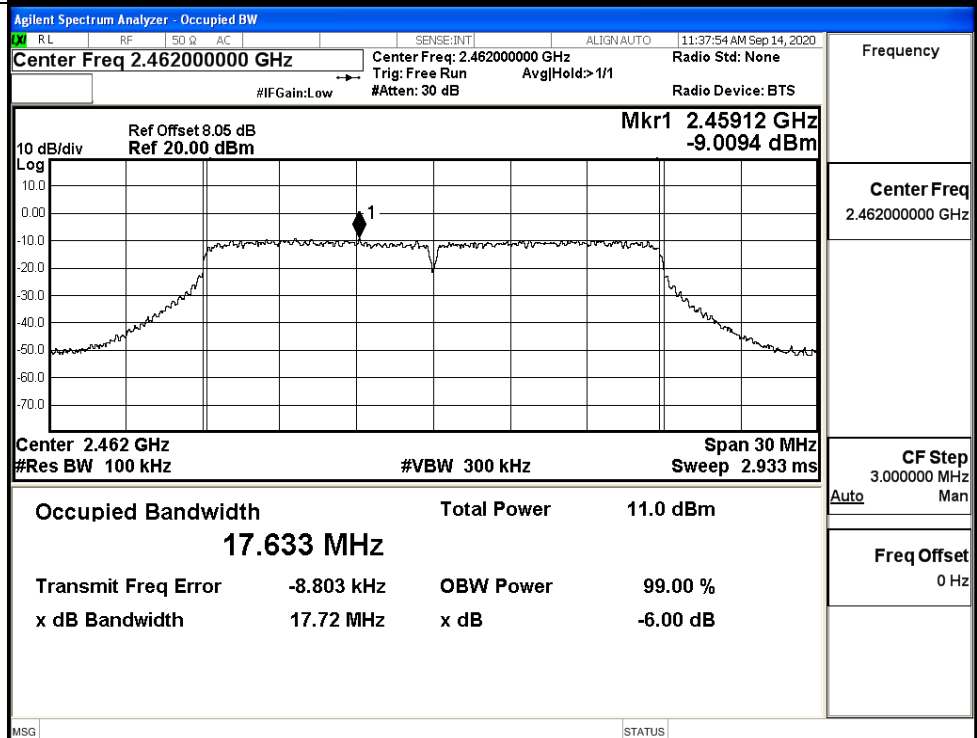
11N20/LCH



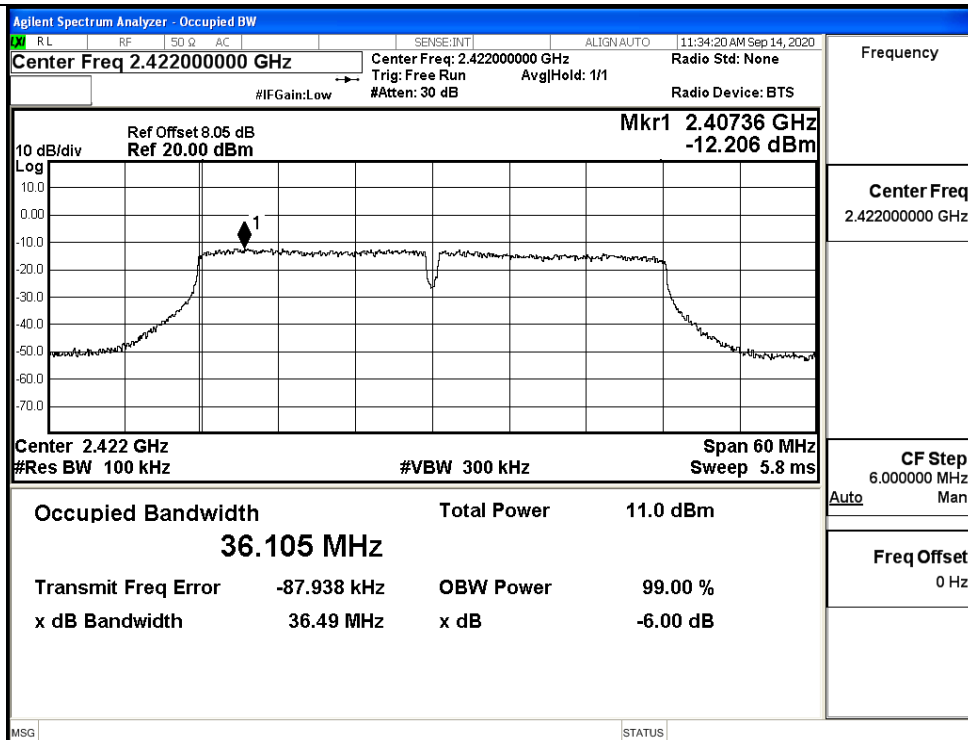
11N20/MCH



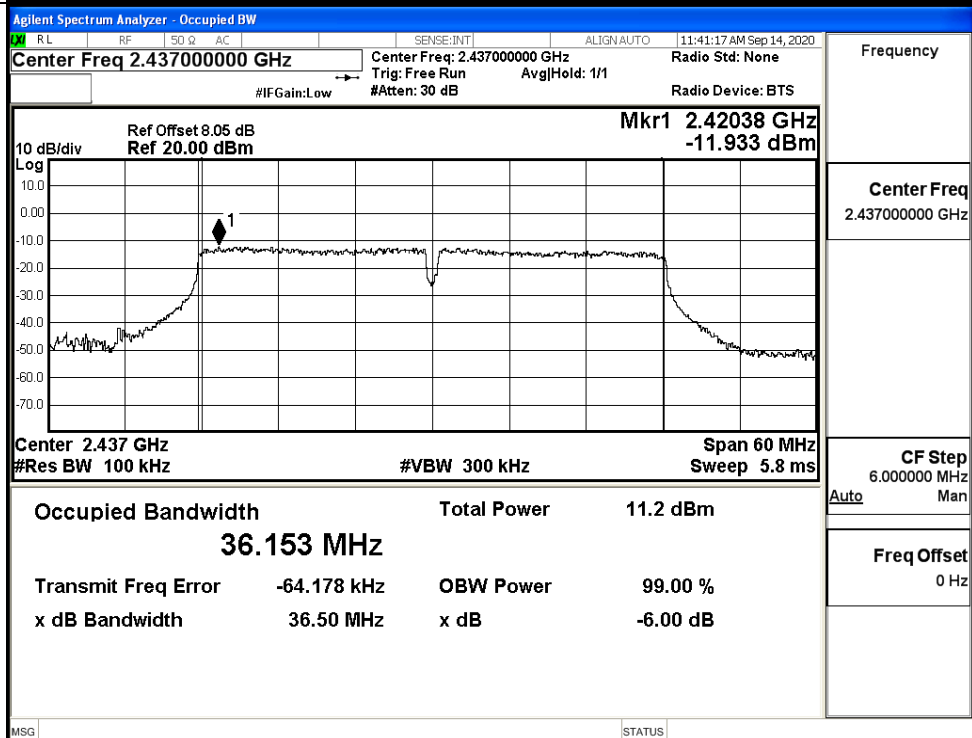
11N20/HCH



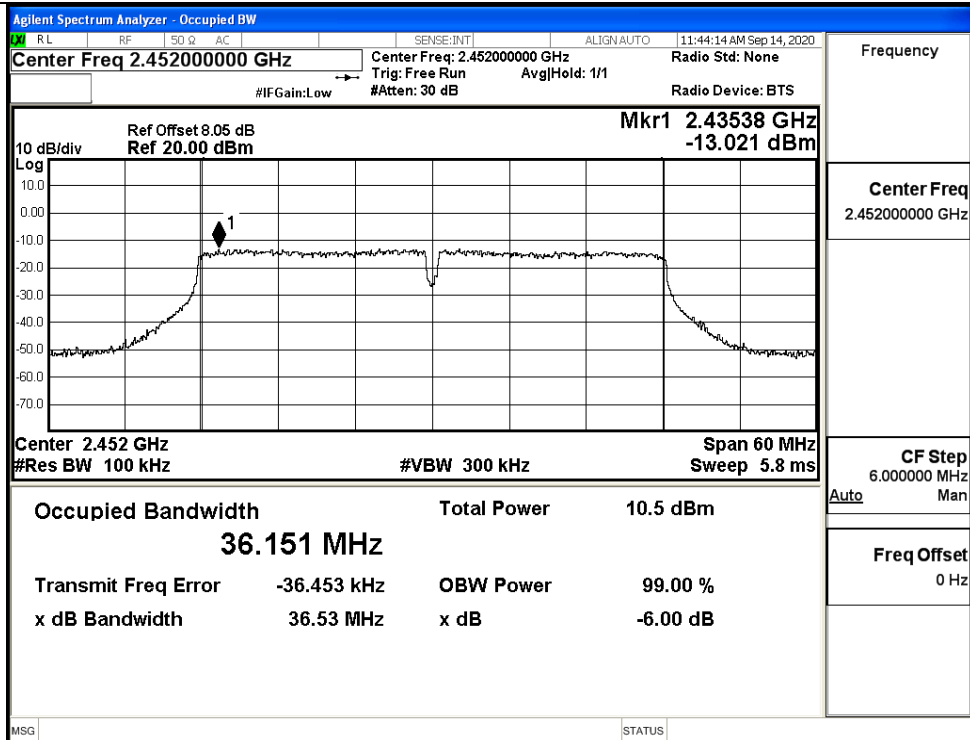
11N40/LCH



11N40/MCH



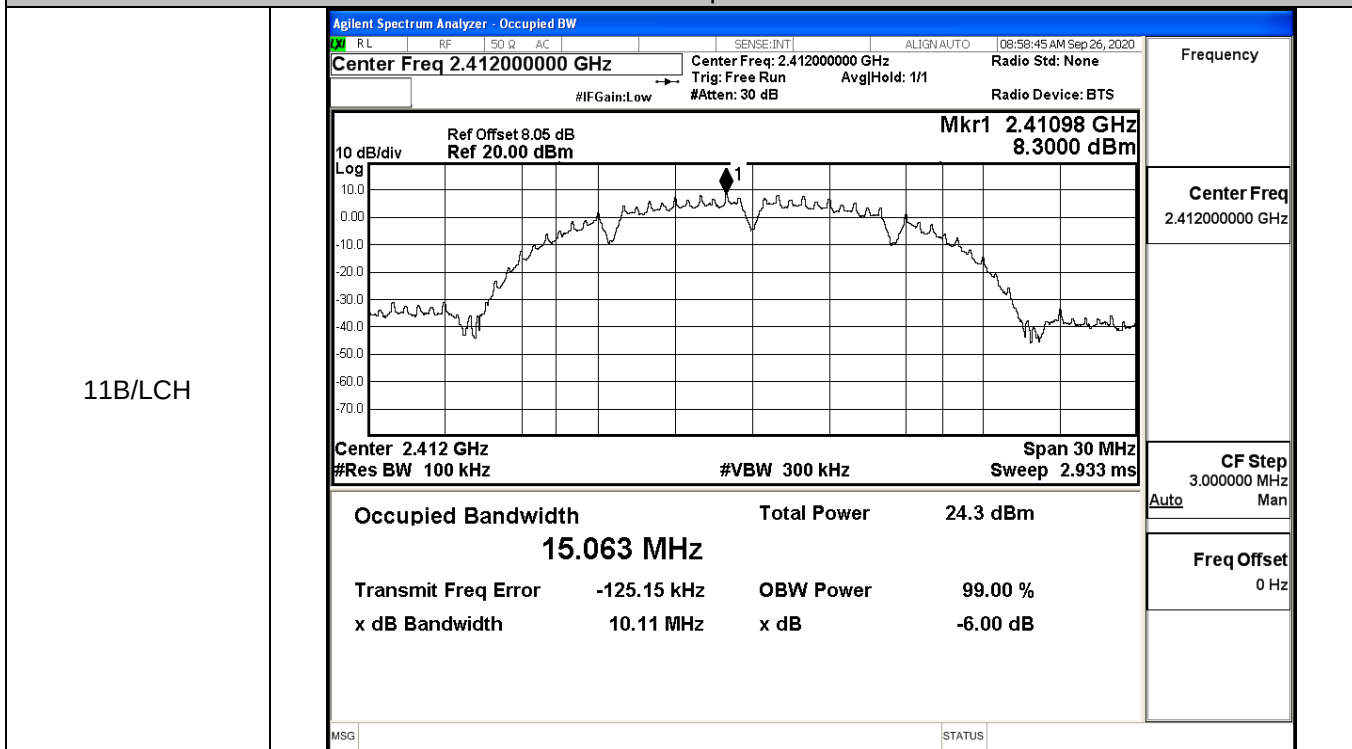
11N40/HCH



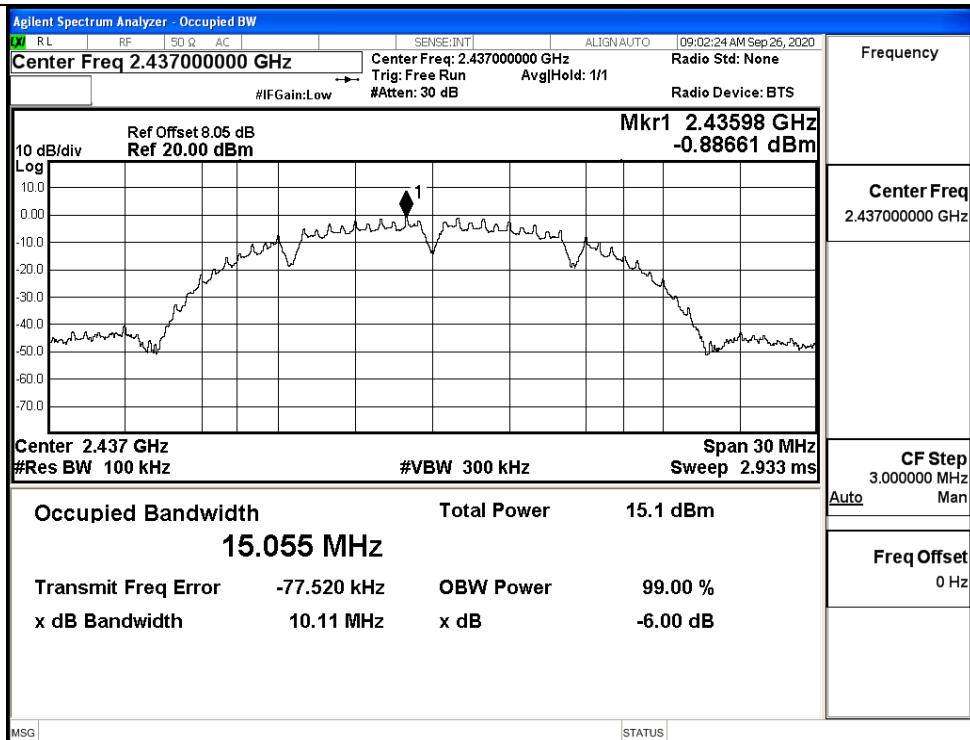
ANT 1

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
11B	LCH	10.11	≥ 0.5	PASS
	MCH	10.11	≥ 0.5	PASS
	HCH	10.11	≥ 0.5	PASS
11G	LCH	16.11	≥ 0.5	PASS
	MCH	16.09	≥ 0.5	PASS
	HCH	16.34	≥ 0.5	PASS
11N20	LCH	16.96	≥ 0.5	PASS
	MCH	17.27	≥ 0.5	PASS
	HCH	17.06	≥ 0.5	PASS
11N40	LCH	35.55	≥ 0.5	PASS
	MCH	35.55	≥ 0.5	PASS
	HCH	35.54	≥ 0.5	PASS

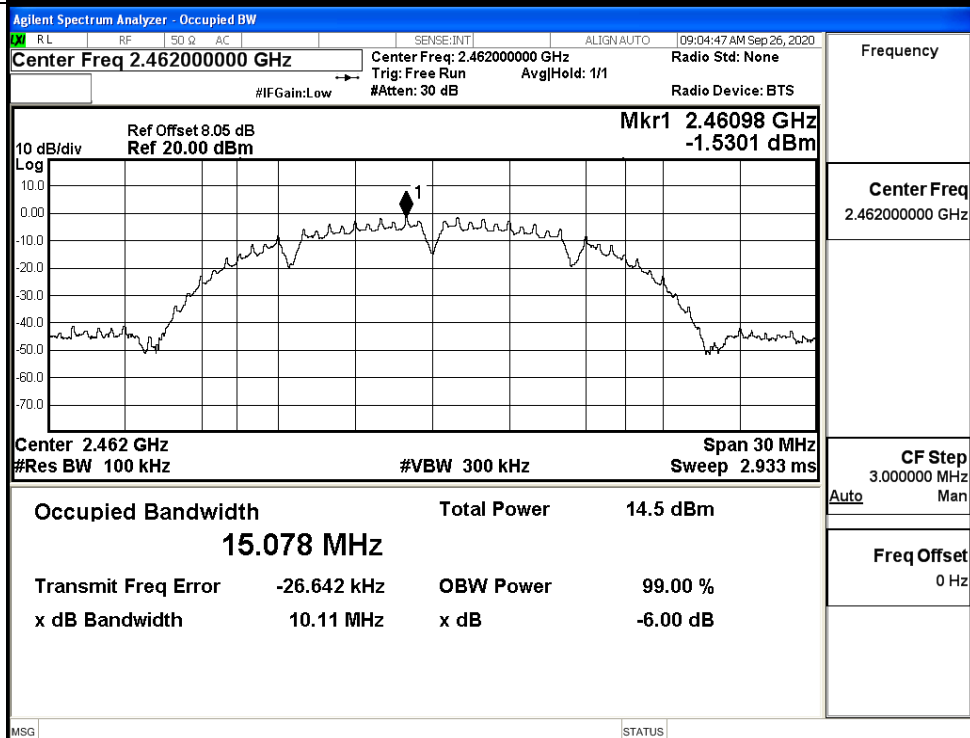
Test Graphs



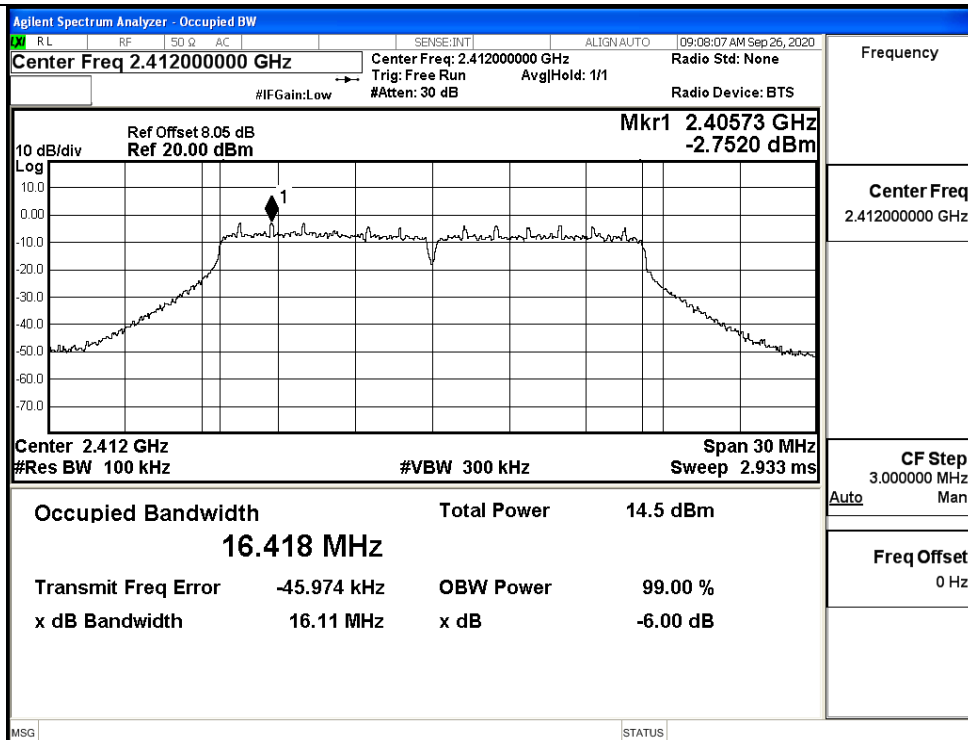
11B/MCH



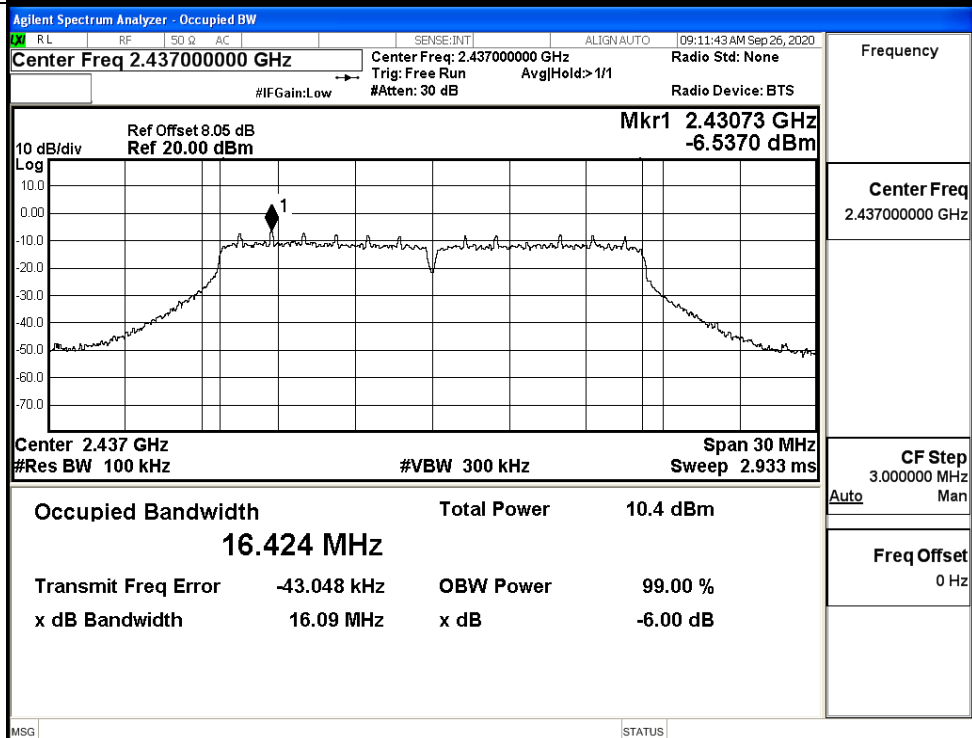
11B/HCH



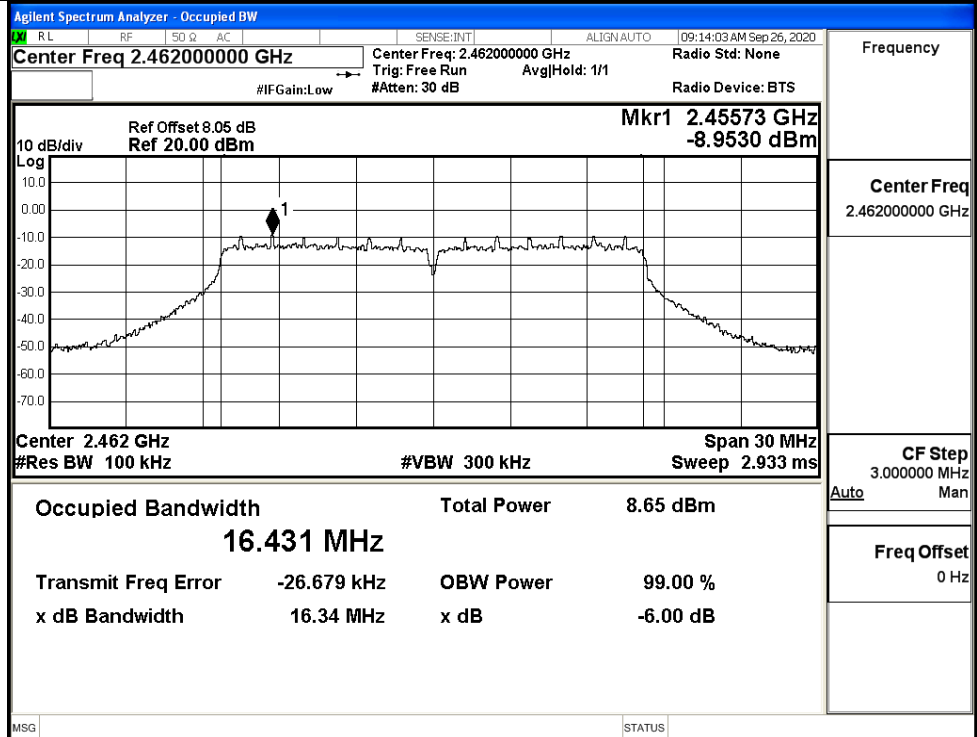
11G/LCH



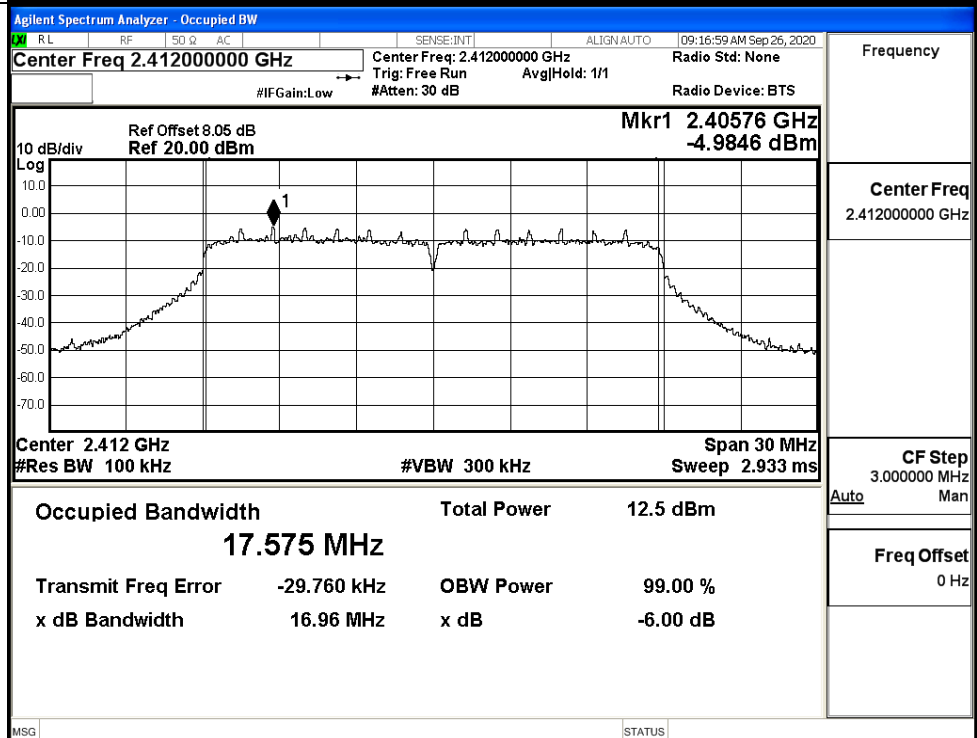
11G/MCH



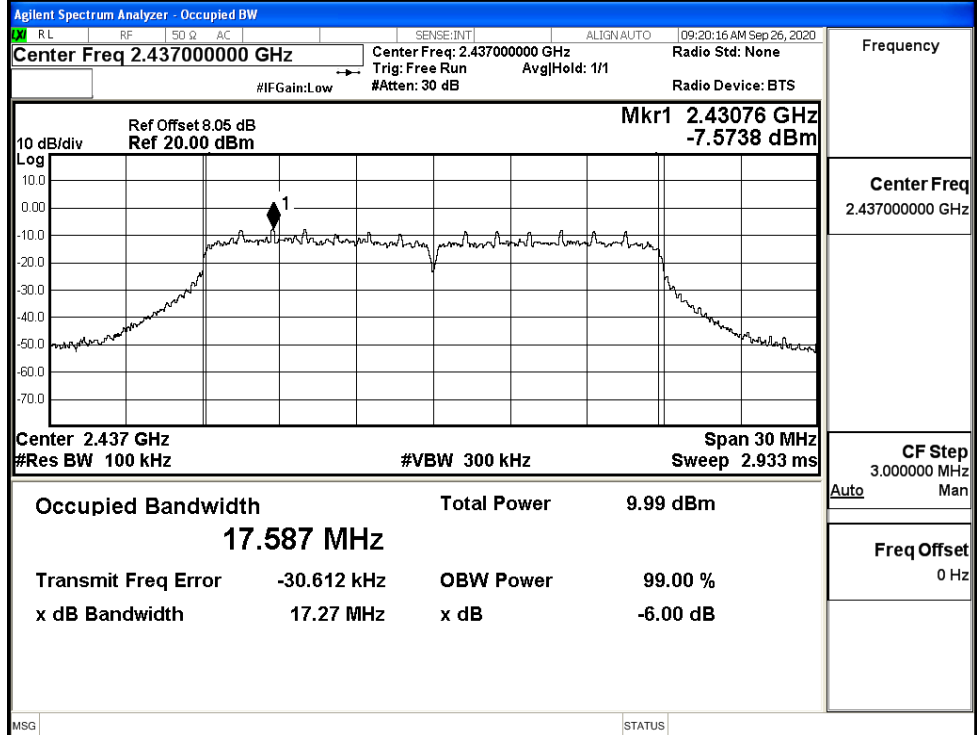
11G/HCH



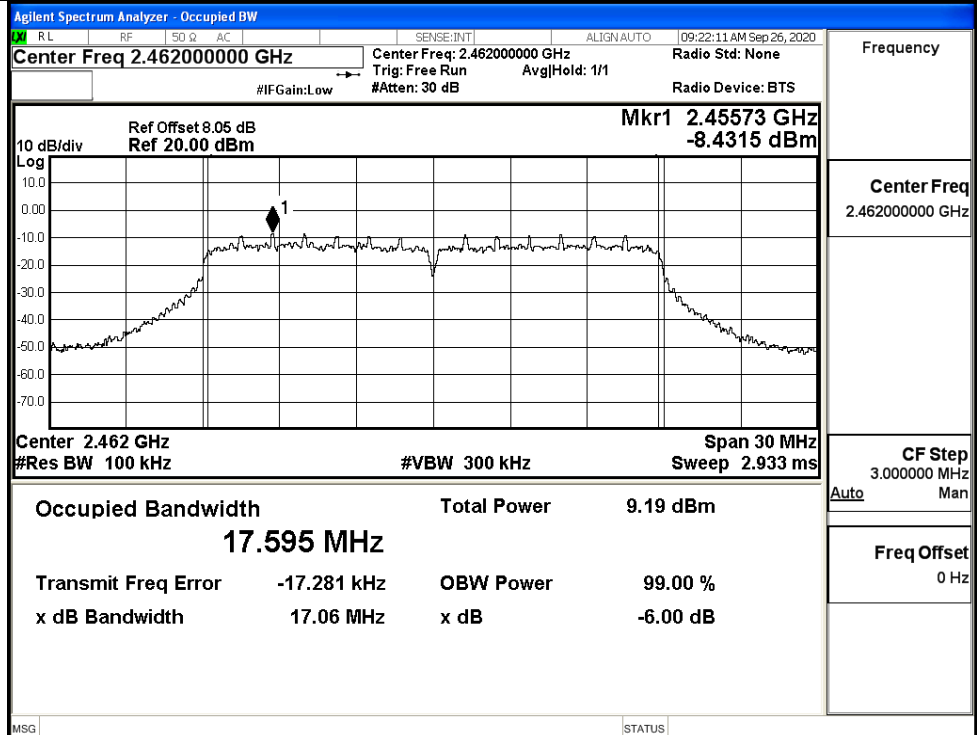
11N20/LCH



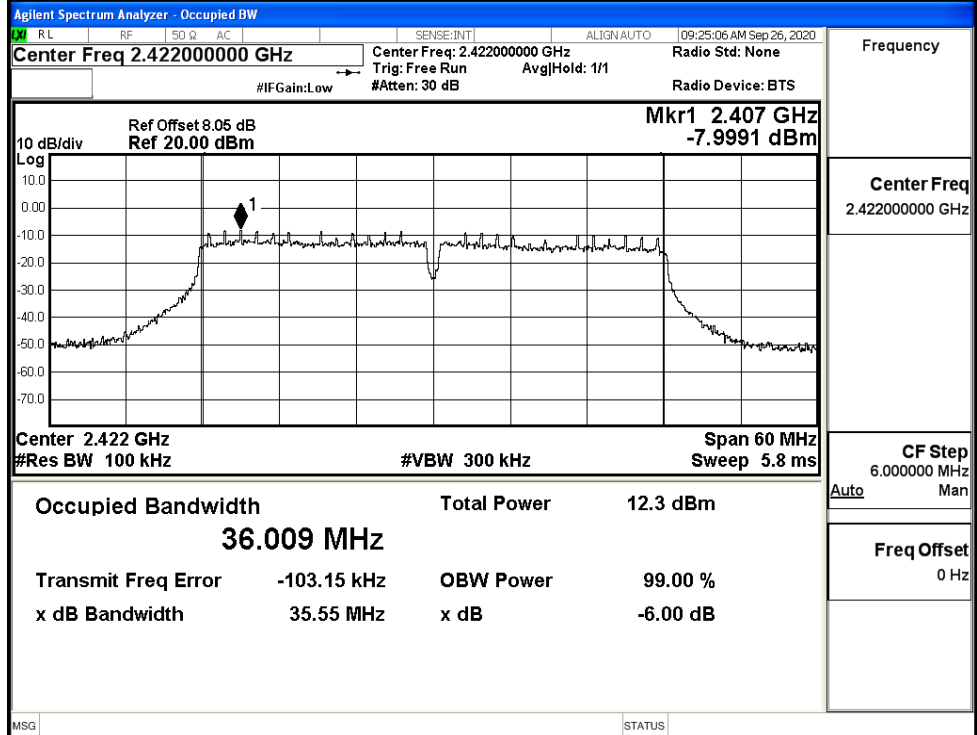
11N20/MCH



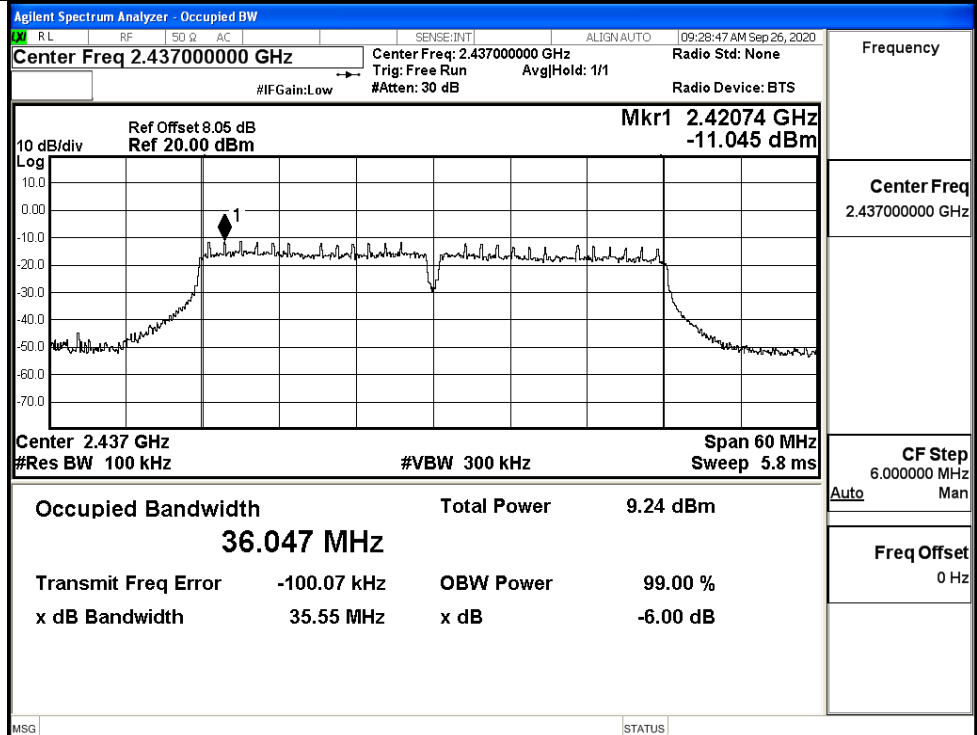
11N20/HCH



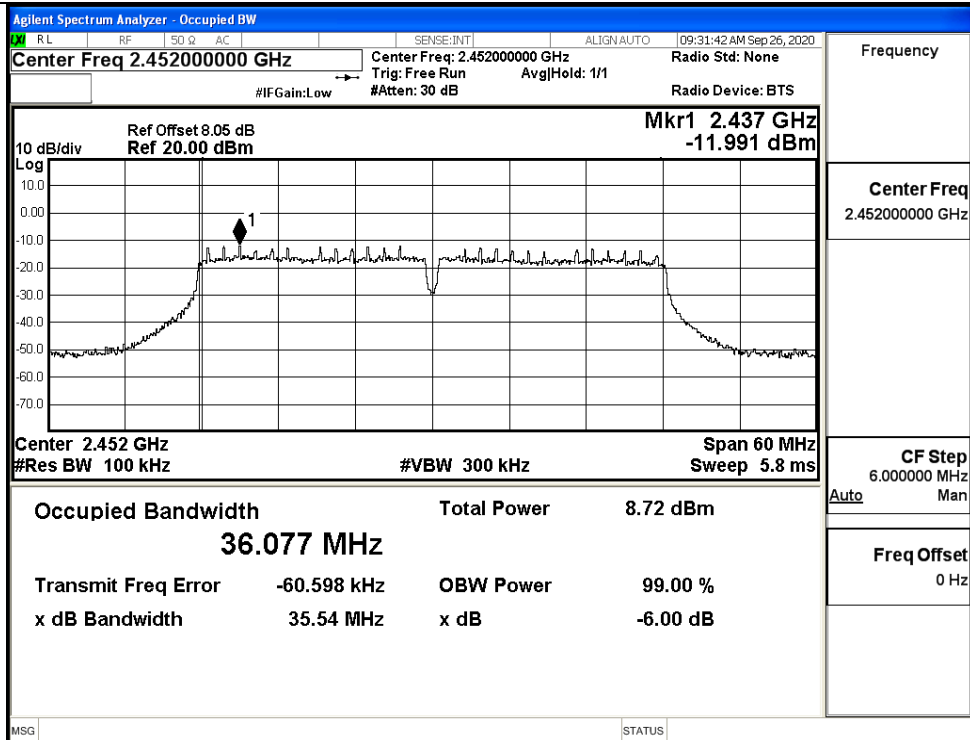
11N40/LCH



11N40/MCH



11N40/HCH

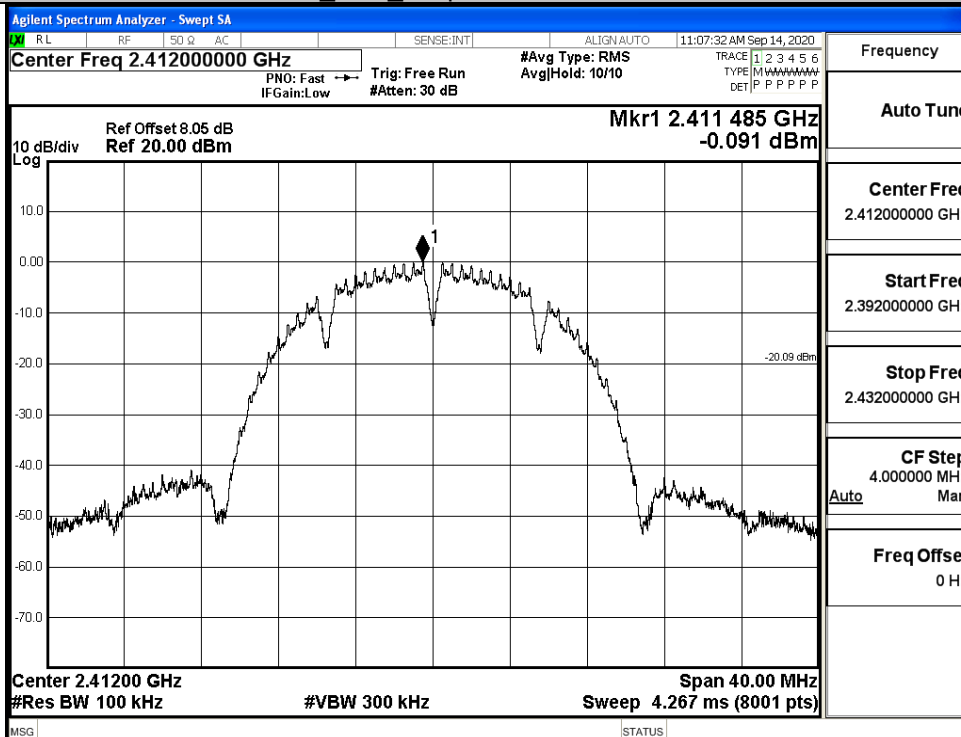


C.5 RF Conducted Spurious Emissions**ANT 0**

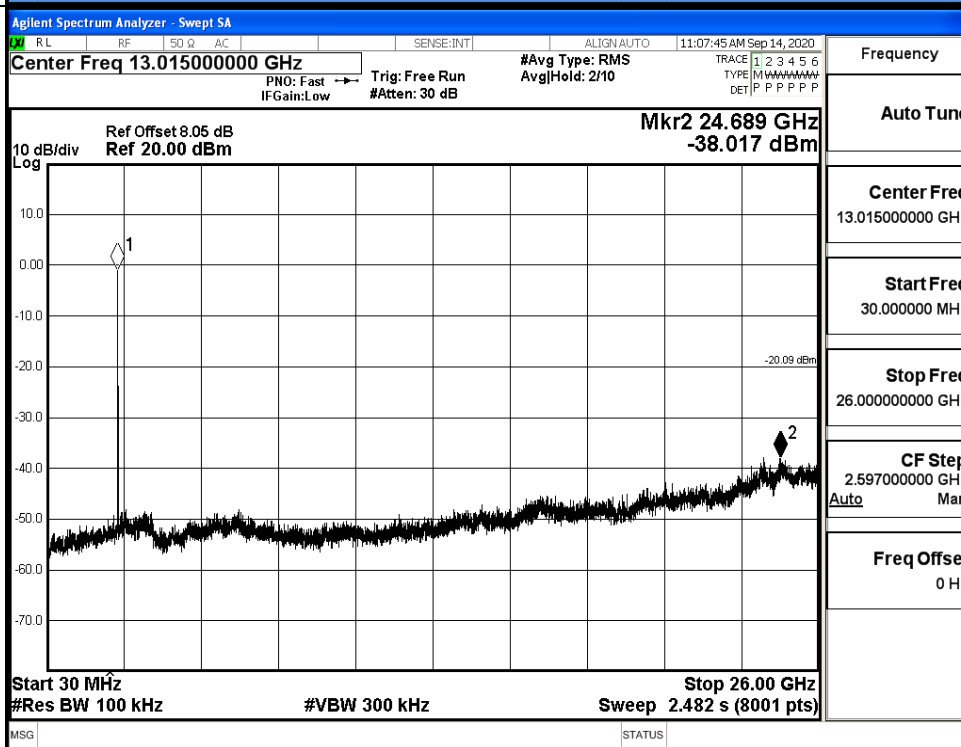
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
11B	LCH	-0.091	-38.017	-20.091	PASS
	MCH	0.019	-37.740	-19.981	PASS
	HCH	-0.186	-37.787	-20.186	PASS
11G	LCH	-9.529	-37.510	-29.529	PASS
	MCH	-9.508	-37.788	-29.508	PASS
	HCH	-9.347	-37.412	-29.347	PASS
11N20	LCH	-8.619	-38.134	-28.619	PASS
	MCH	-9.124	-38.170	-29.124	PASS
	HCH	-9.244	-38.510	-29.244	PASS
11N40	LCH	-12.046	-38.470	-32.046	PASS
	MCH	-12.233	-37.990	-32.233	PASS
	HCH	-12.628	-37.889	-32.628	PASS

11B LCH Graphs

Pref/11B/LCH

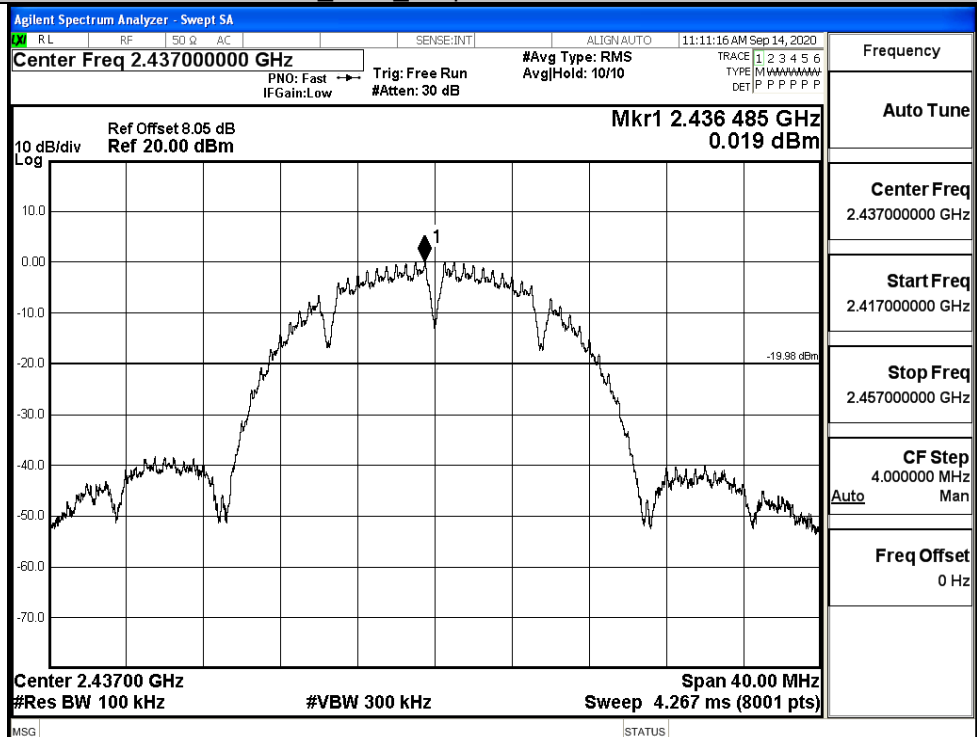


Puw/11B/LCH

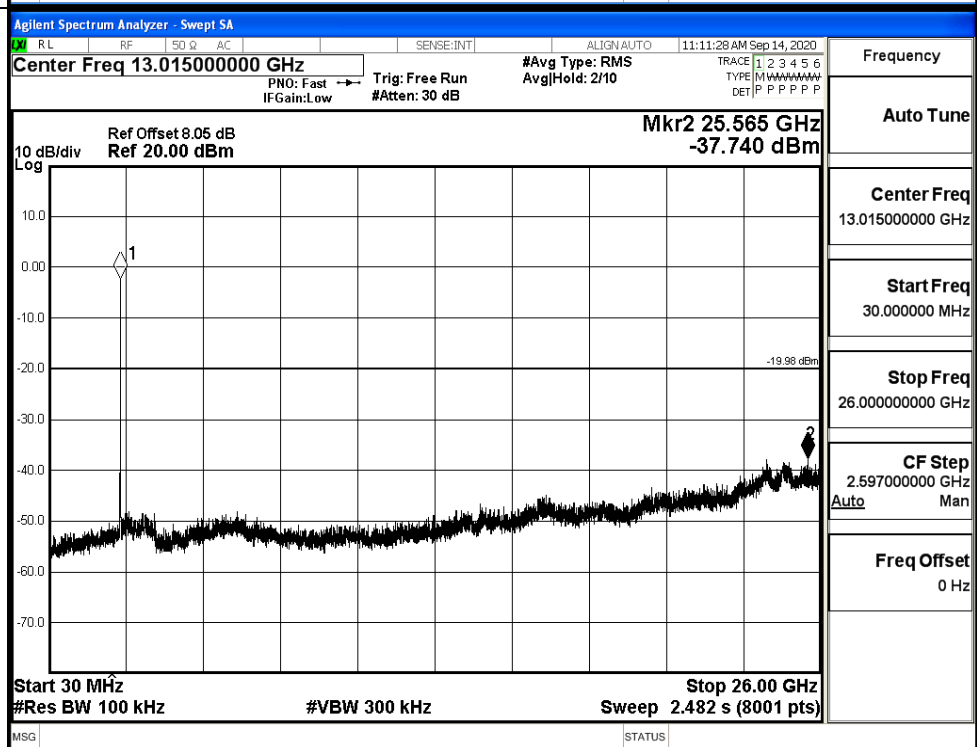


11B MCH Graphs

Pref/11B/MCH

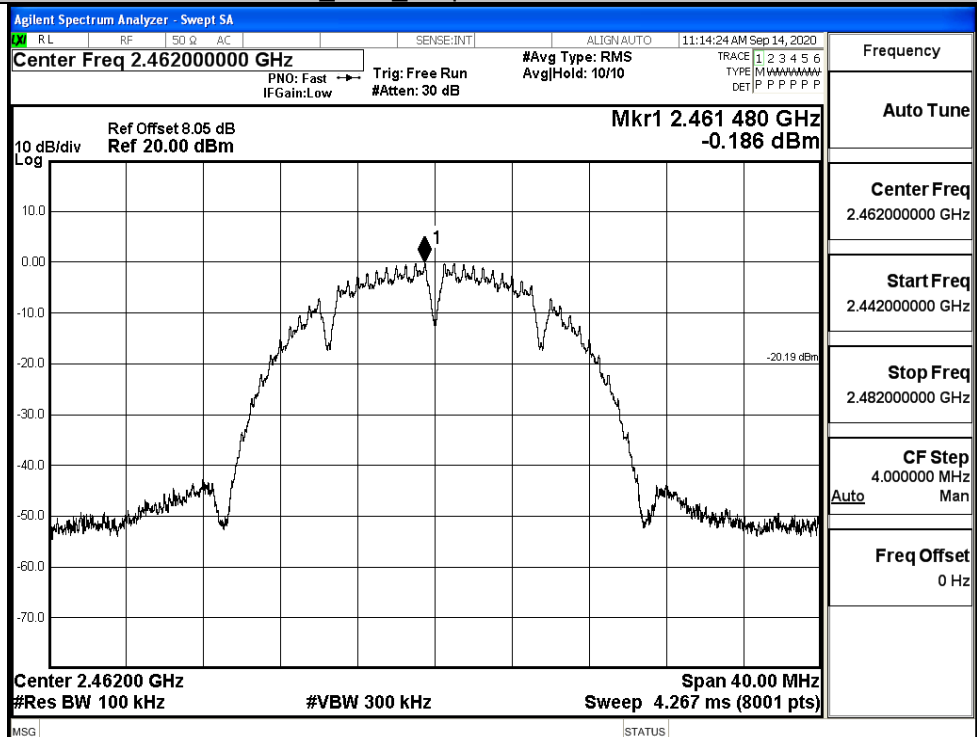


Puw/11B/MCH

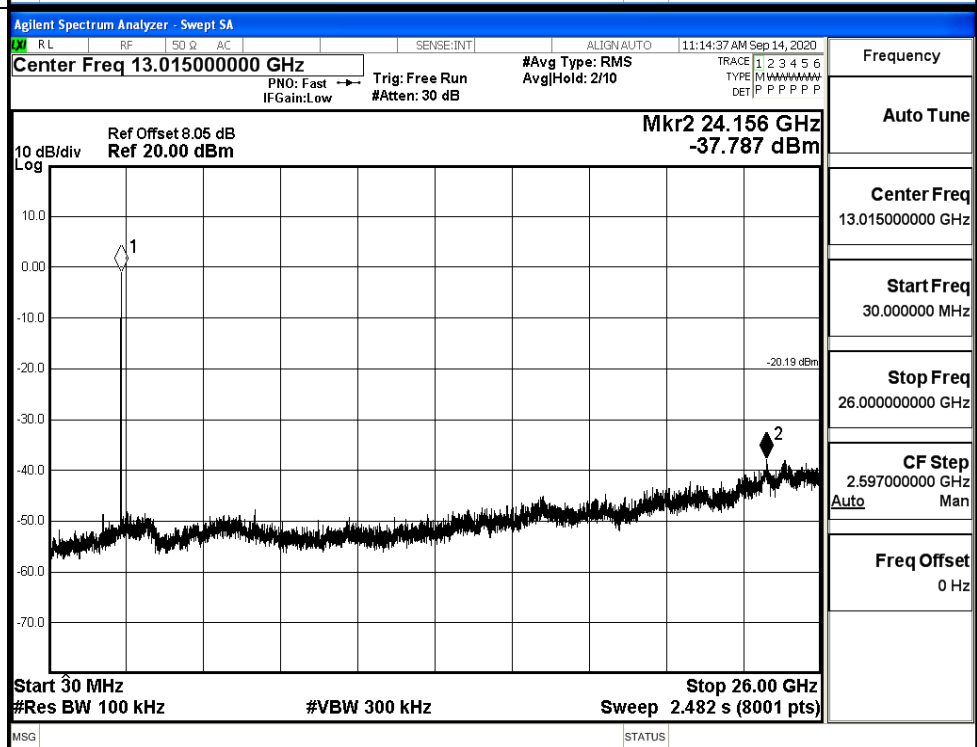


11B HCH Graphs

Pref/11B/HCH

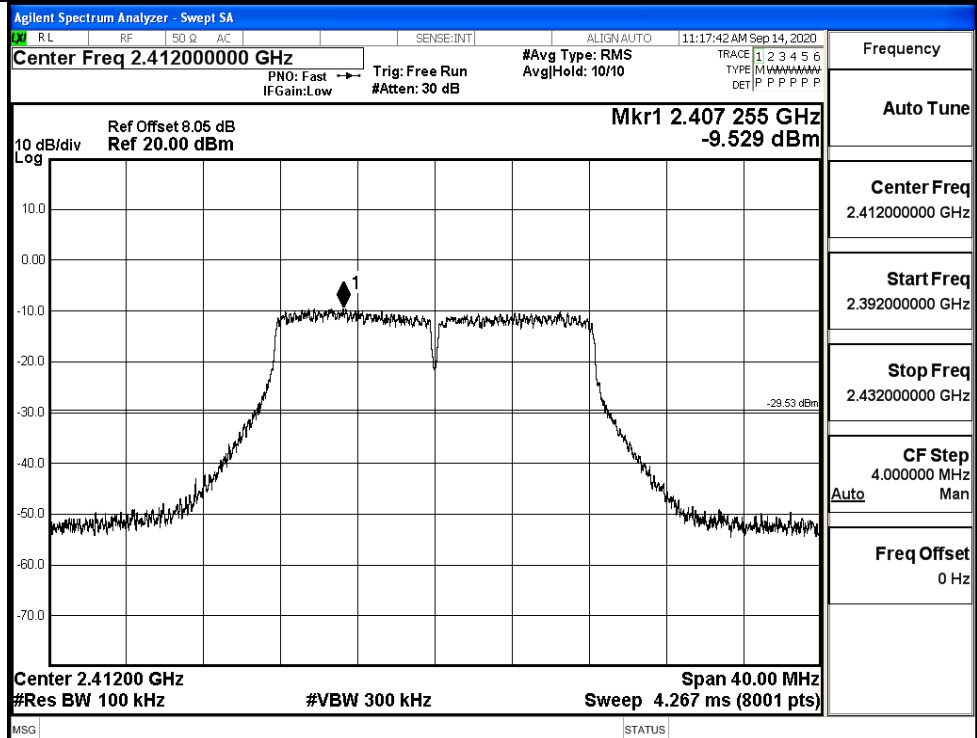


Puw/11B/HCH

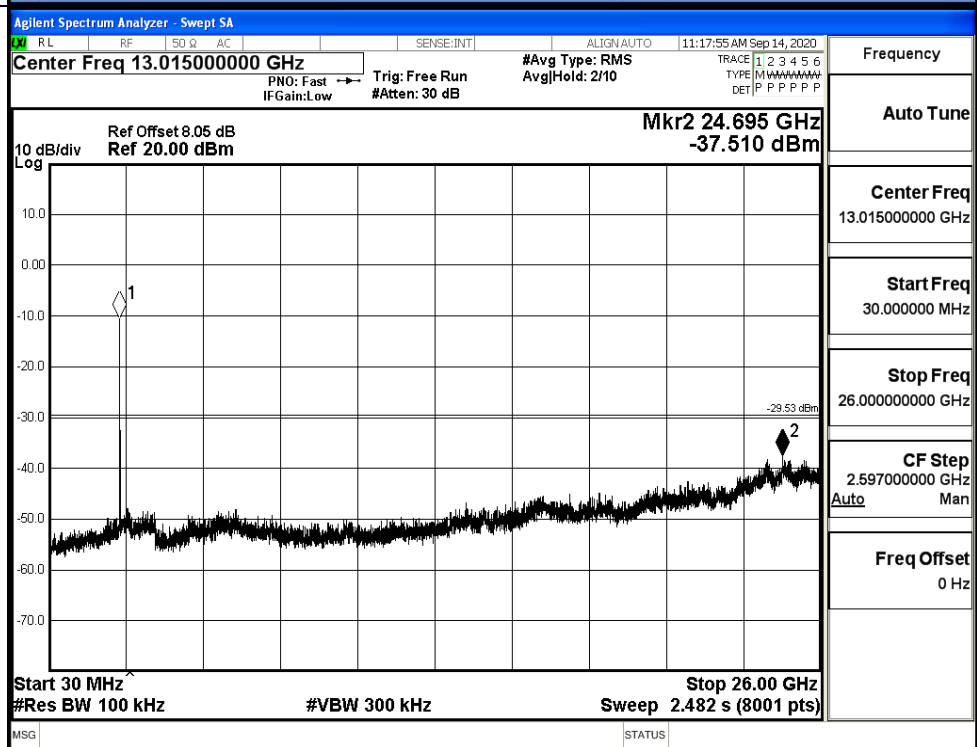


11G LCH Graphs

Pref/11G/LCH

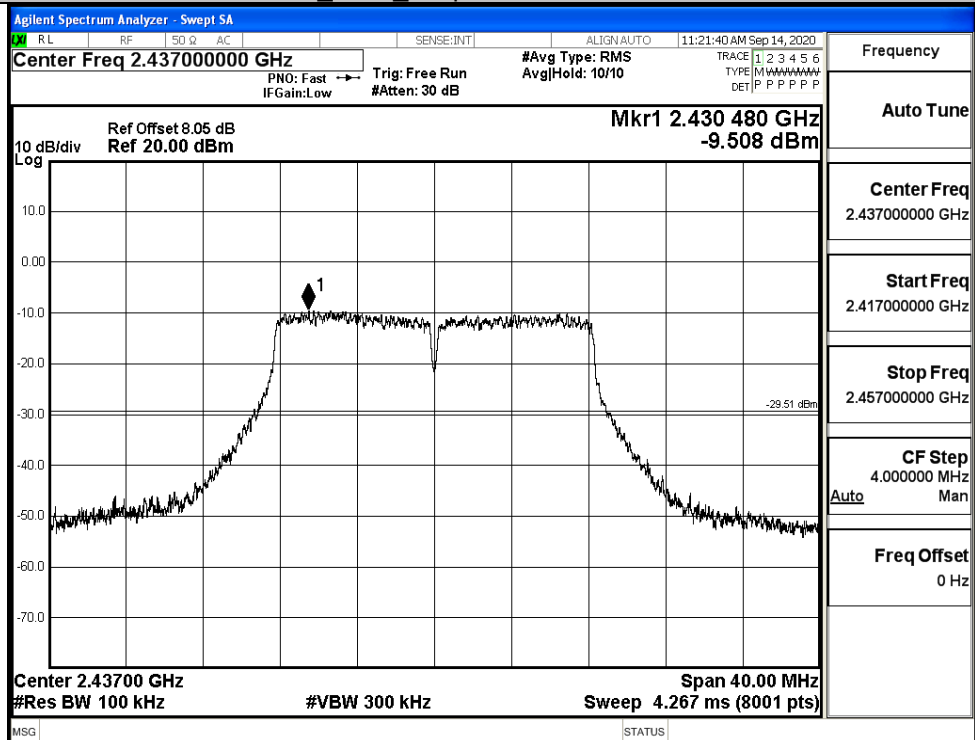


Puw/11G/LCH

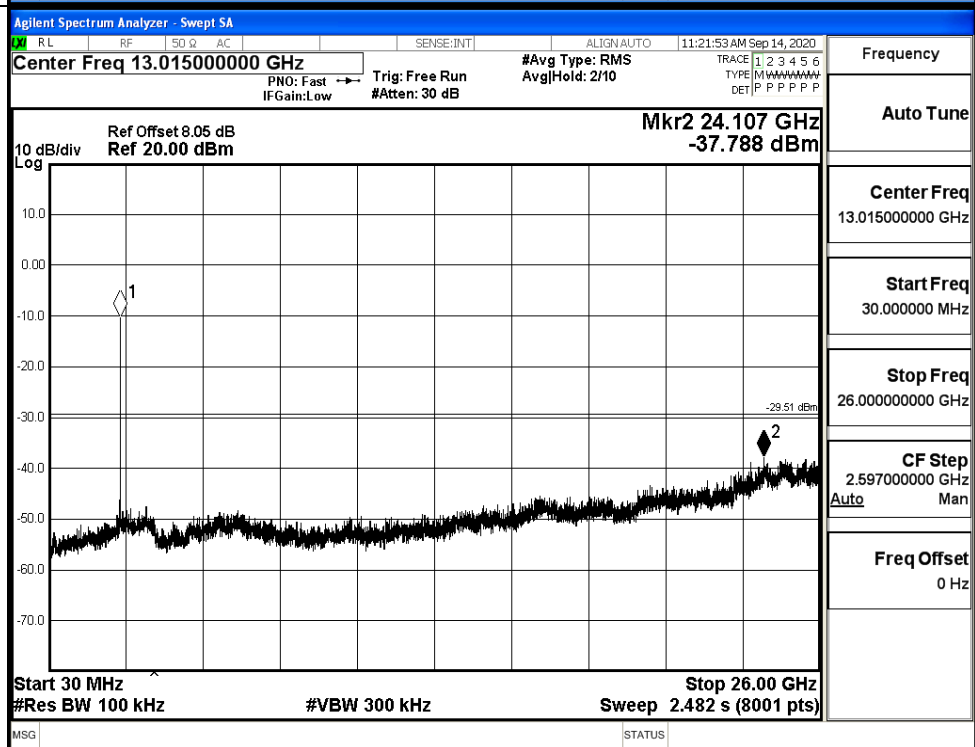


11G MCH Graphs

Pref/11G/MCH

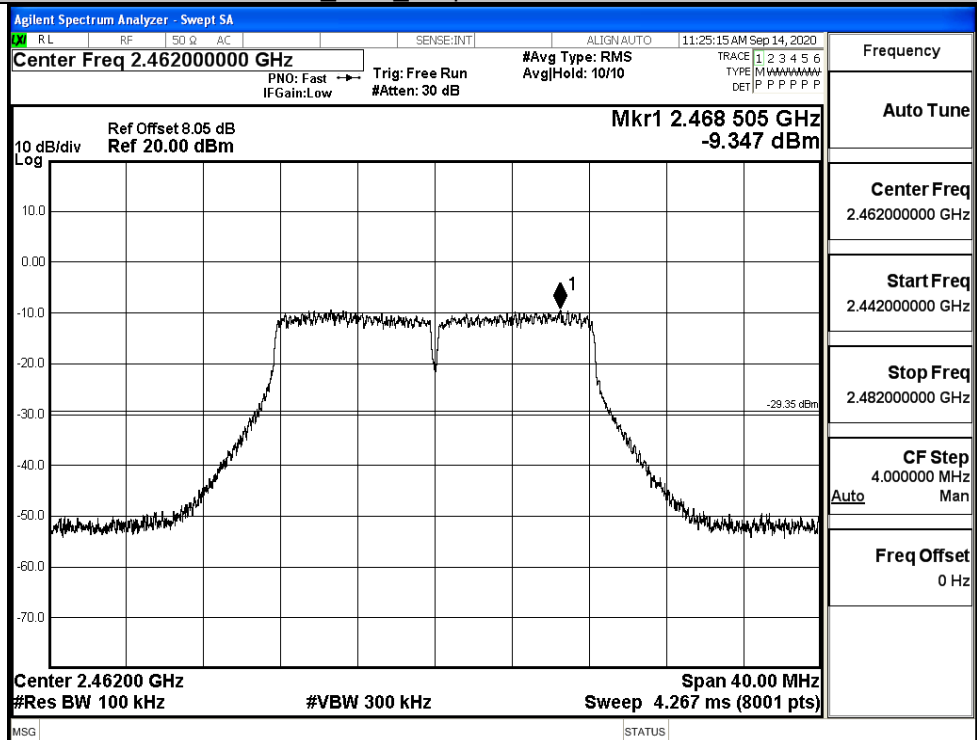


Puw/11G/MCH

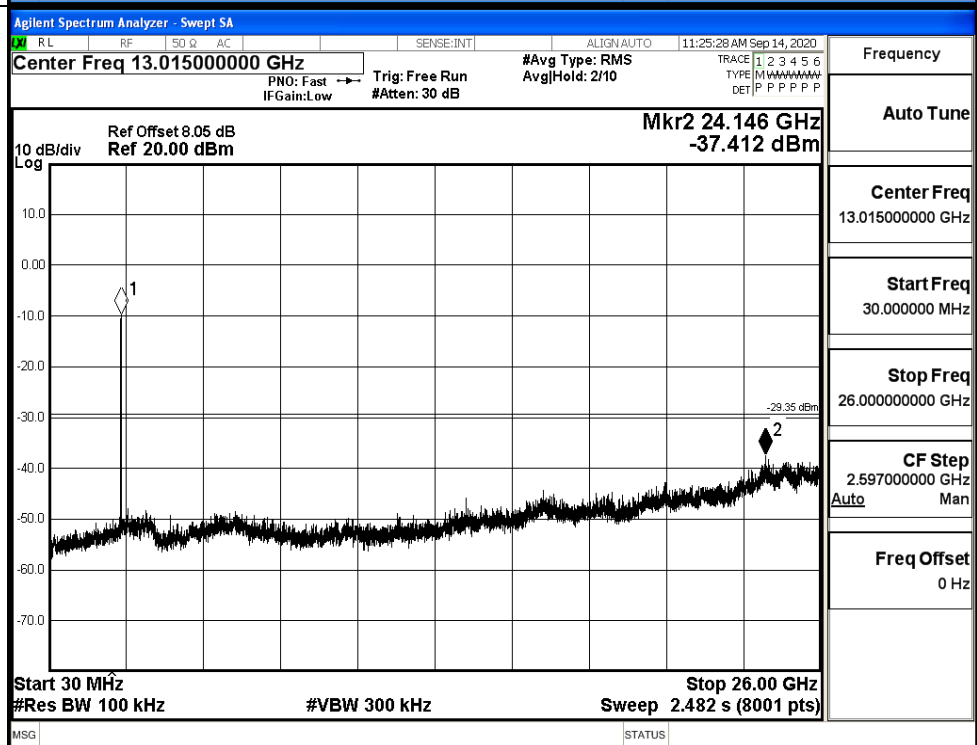


11G HCH Graphs

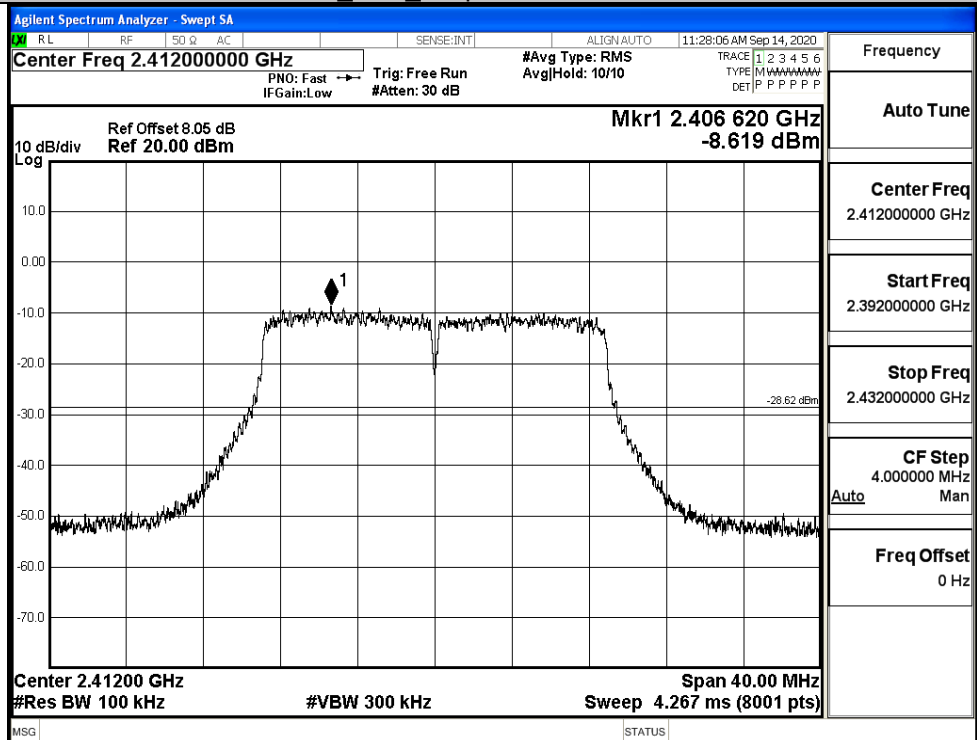
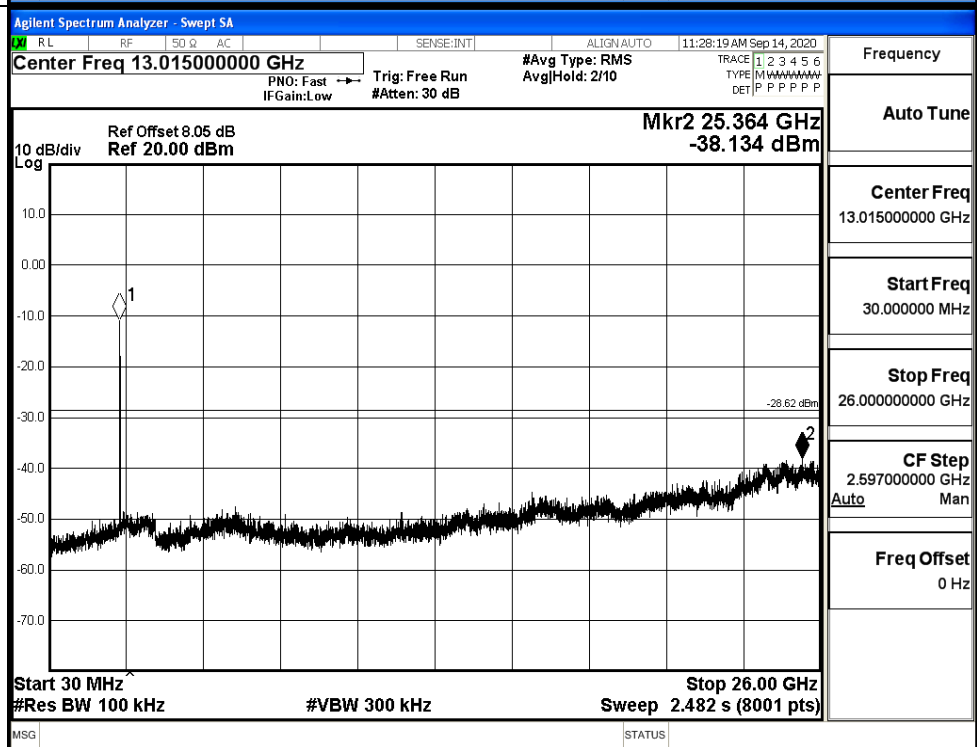
Pref/11G/HCH



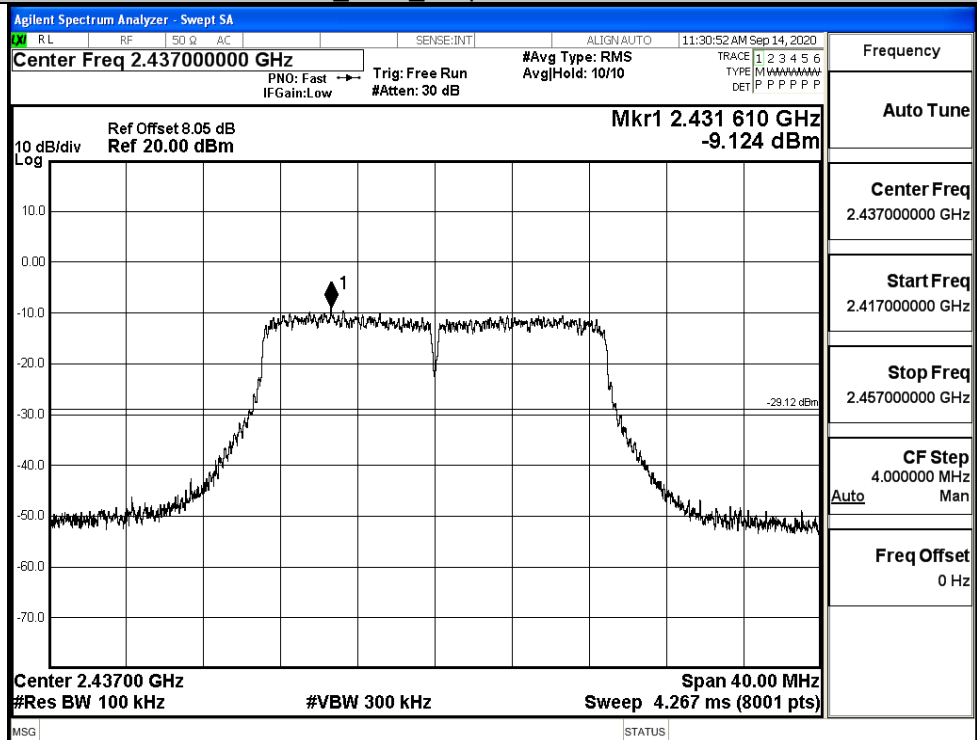
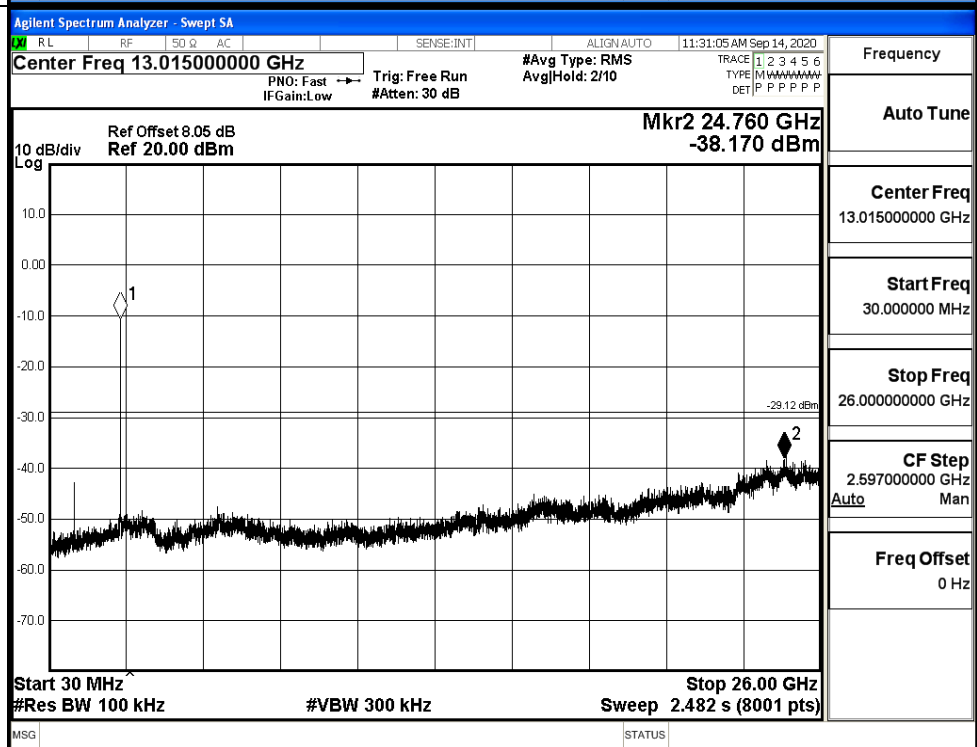
Puw/11G/HCH



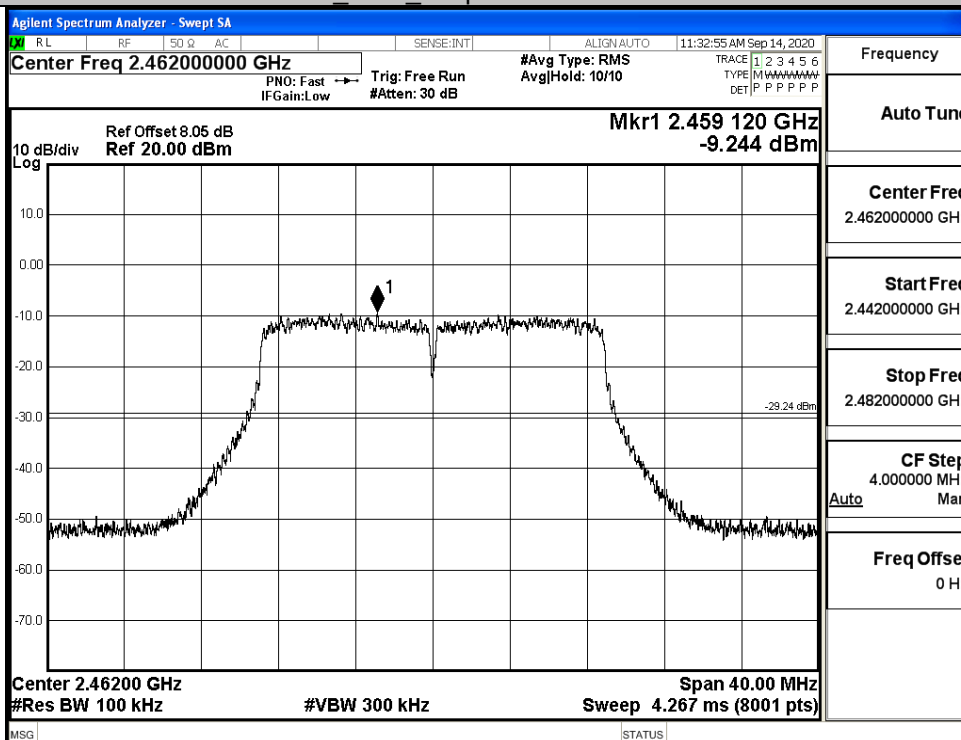
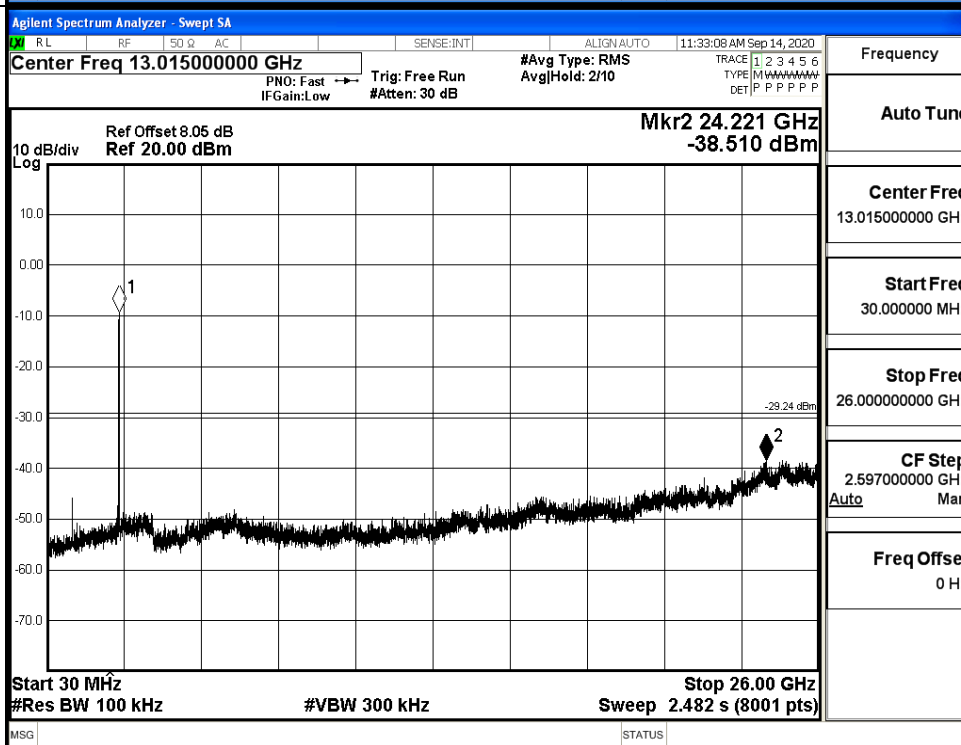
11N20 LCH Graphs

Pref/11N20/LC
HPuw/11N20
/LCH

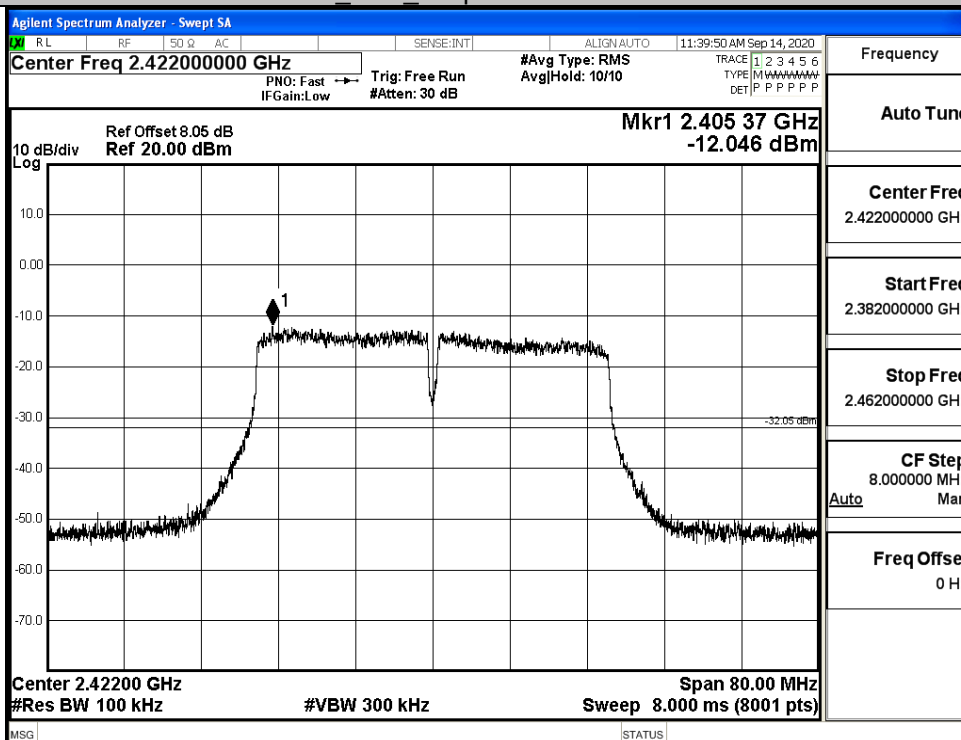
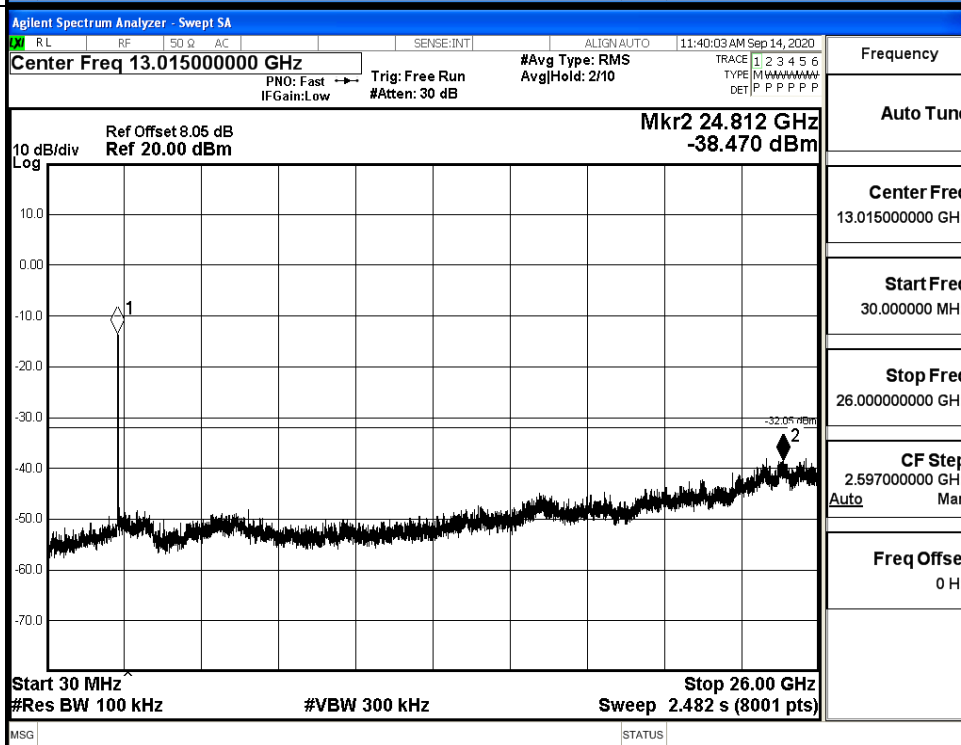
11N20 MCH Graphs

Pref/11N20
/MCHPuw/11N20
/MCH

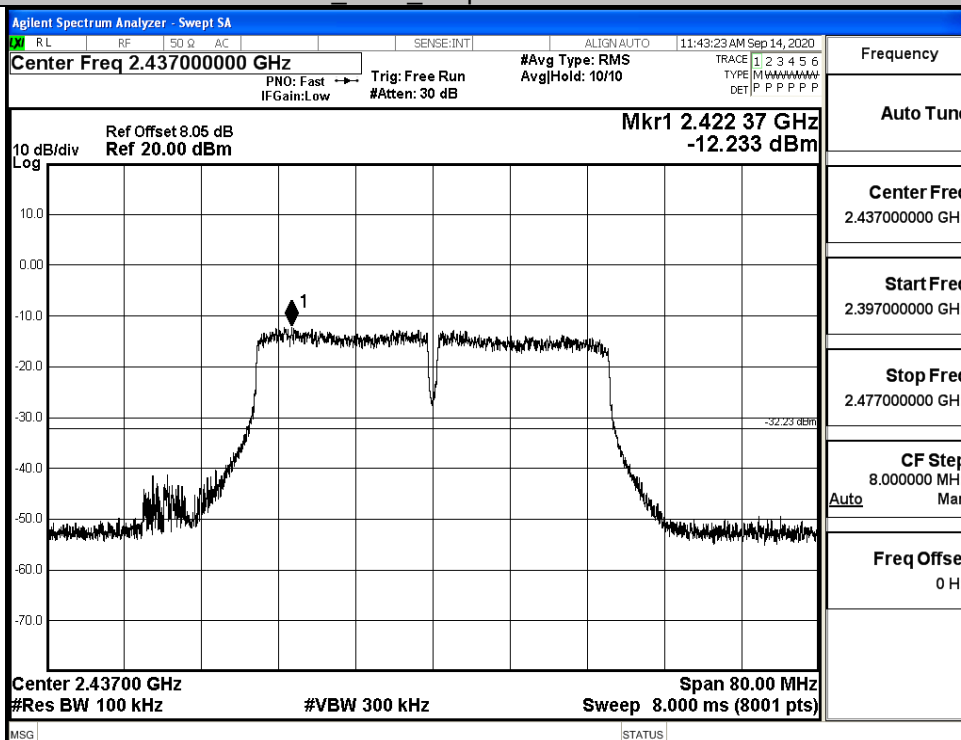
11N20 HCH Graphs

Pref/11N20
/HCHPuw/11N20
/HCH

11N40 LCH Graphs

Pref/11N40
/LCHPuW/11N40
/LCH

11N40 MCH Graphs

Pref/11N40
/MCHPuw/11N40
/MCH