Appendix A

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: KE2 Edge Manager Cell
Trade Mark: KE2, KE2 Connect, KE2 Therm
Test Model: KE2EM-Cell

Environmental Conditions

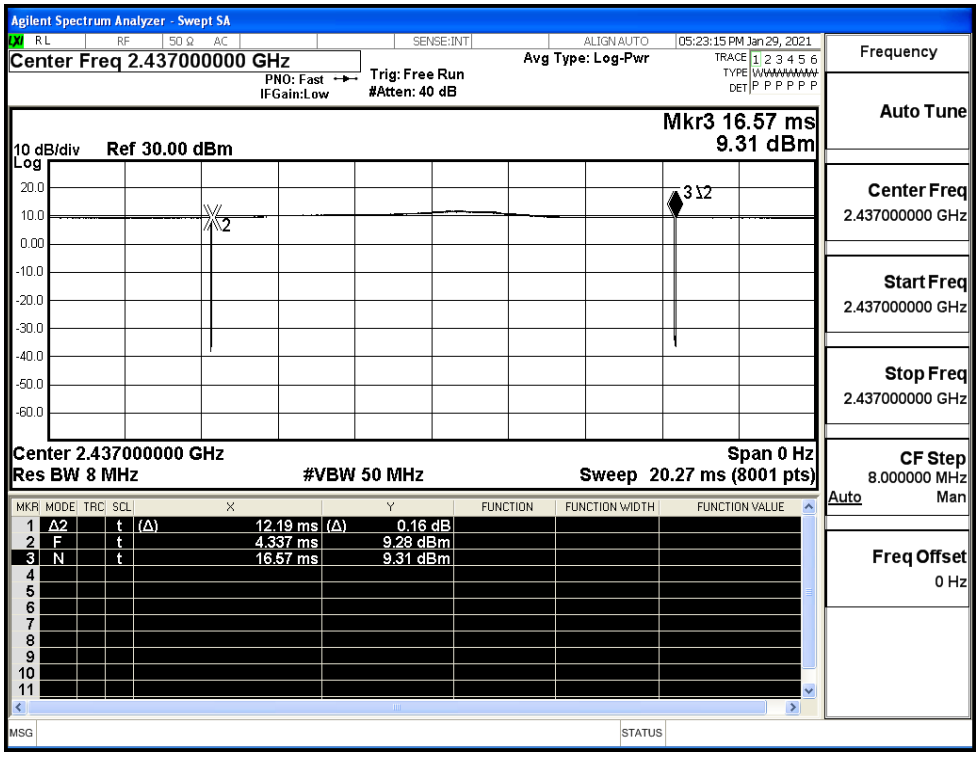
Temperature:	23.7 ° C
Relative Humidity:	52.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond Lu
Supervised by:	Li Huan

A.1 Duty Cycle

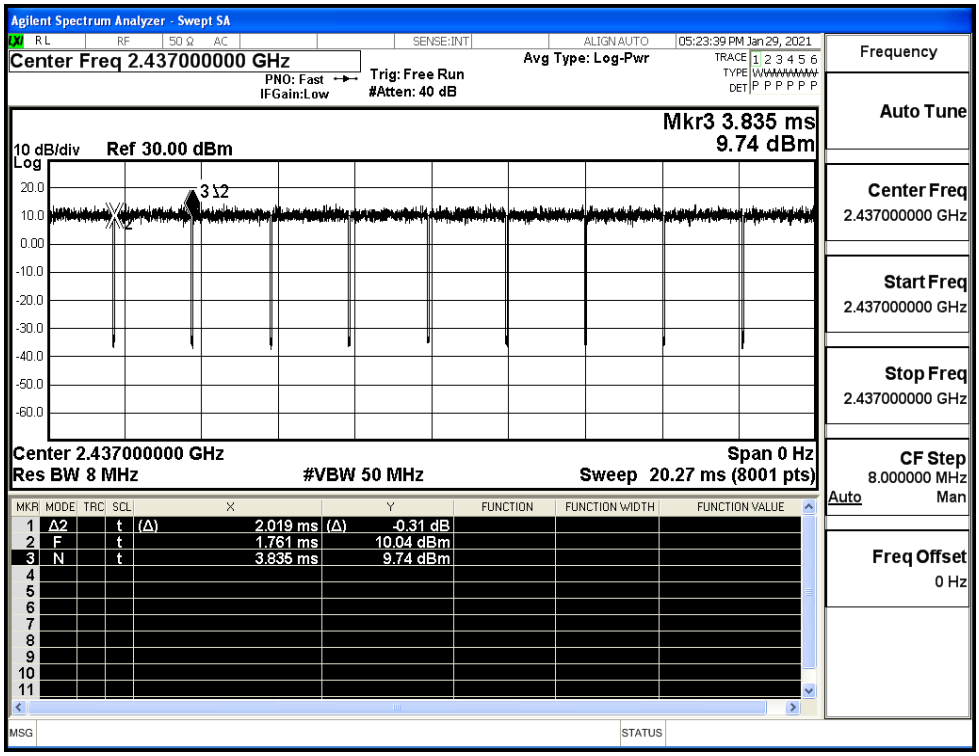
Test Mode	Test Channel	Ant	Duty Cycle[%]	1/T Minimum VBW(KHz)	Verdict
11B	2437	Ant1	99.61	0.08	PASS
11G	2437	Ant1	97.31	0.50	PASS
11N20SISO	2437	Ant1	97.25	0.53	PASS
11N40SISO	2437	Ant1	95.54	1.08	PASS

Test Mode	Test Channel	Ant	Duty Cycle[%]	1/T Minimum VBW(KHz)	Verdict
11B	2437	Ant2	100	0.01	PASS
11G	2437	Ant2	97.31	0.50	PASS
11N20SISO	2437	Ant2	97.12	0.53	PASS
11N40SISO	2437	Ant2	95.54	1.08	PASS

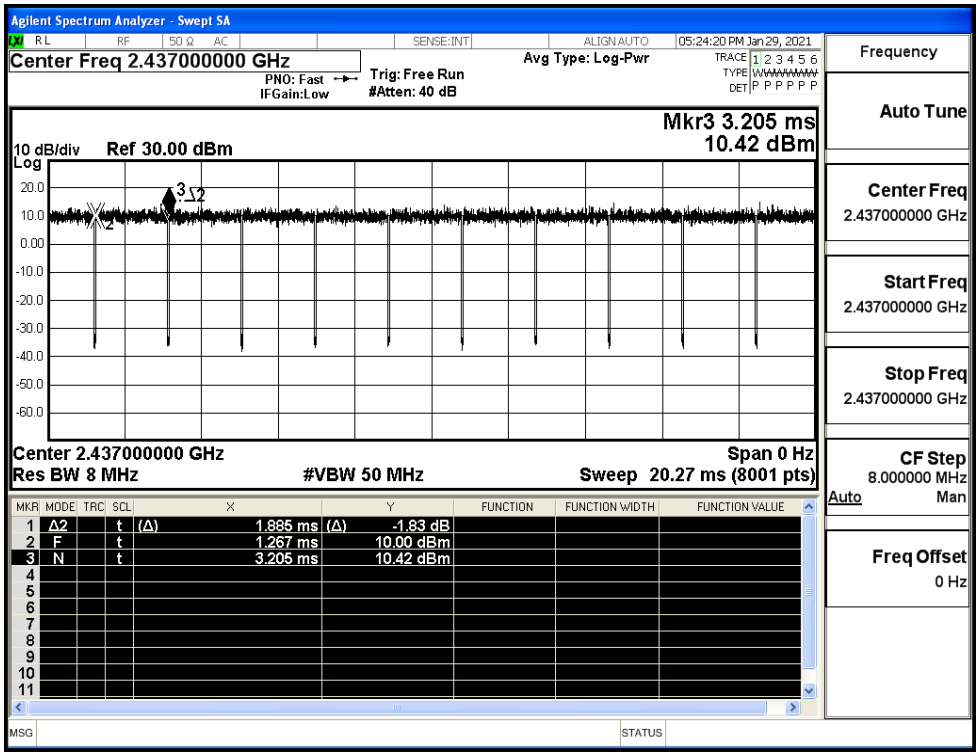
Duty Cycle_11B_2437_Ant1



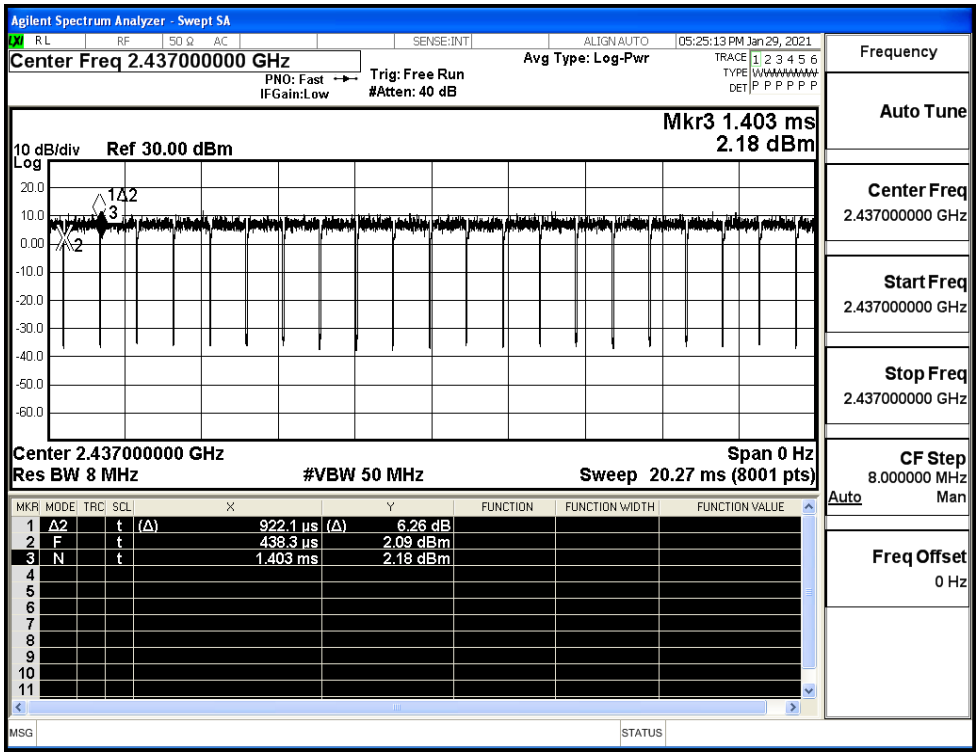
Duty Cycle_11G_2437_Ant1



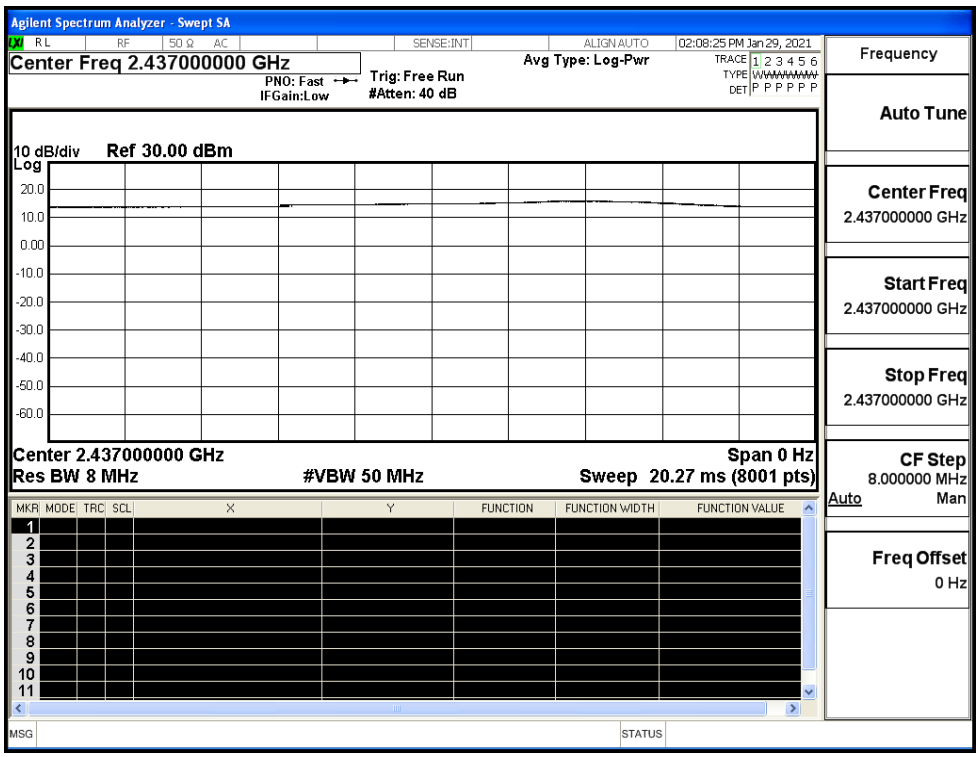
Duty Cycle_11N20SISO_2437_Ant1



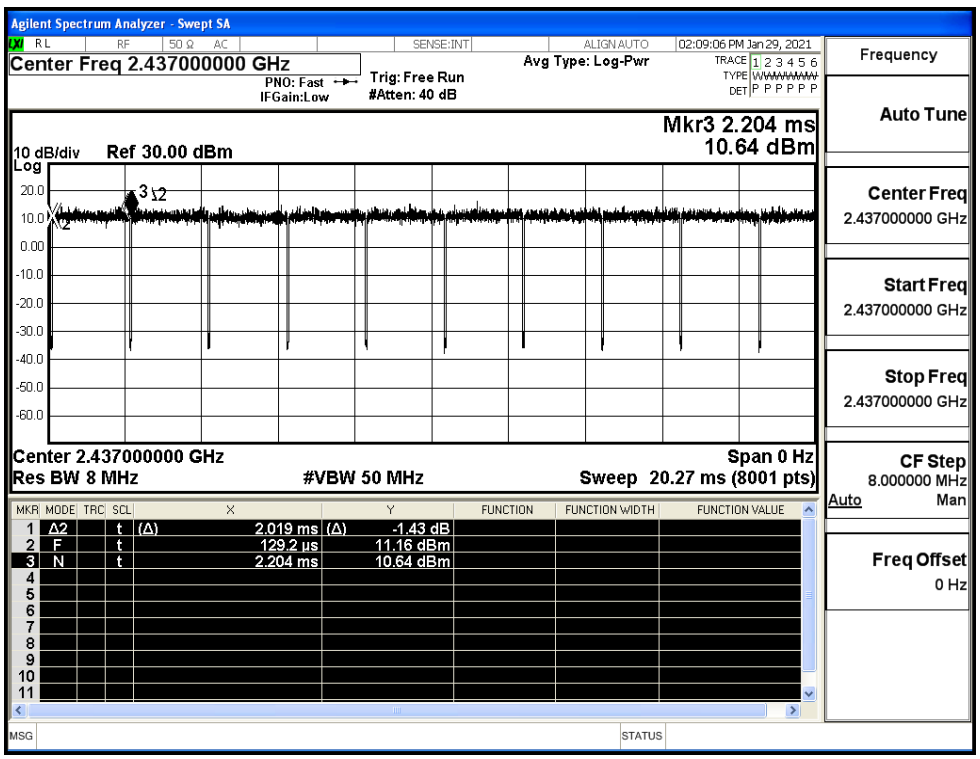
Duty Cycle_11N40SISO_2437_Ant1



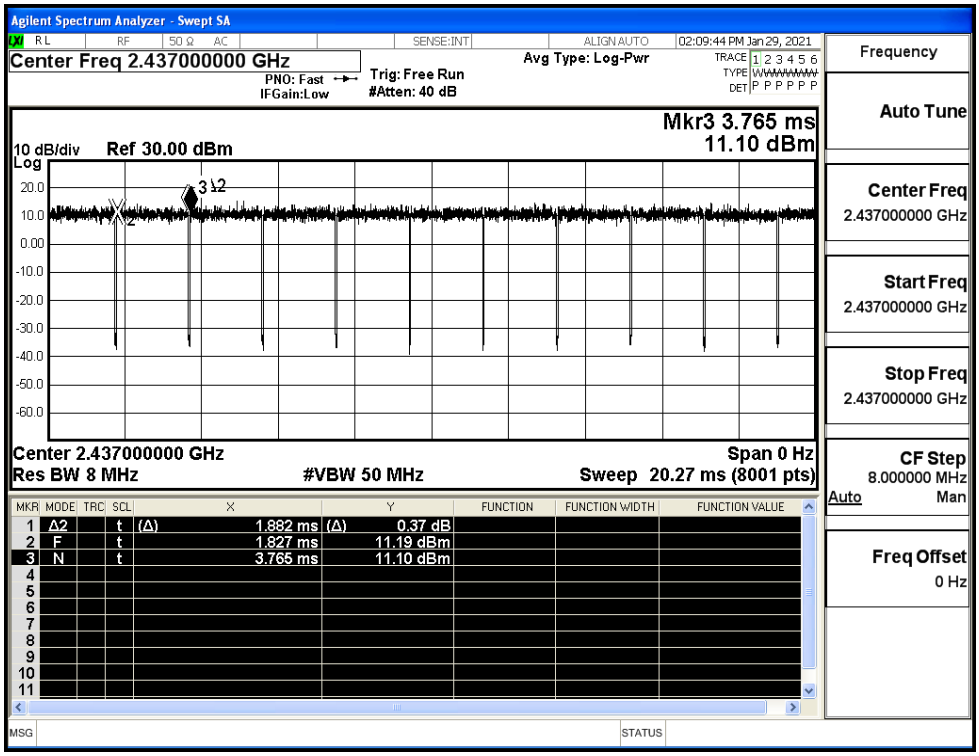
Duty Cycle_11B_2437_Ant2



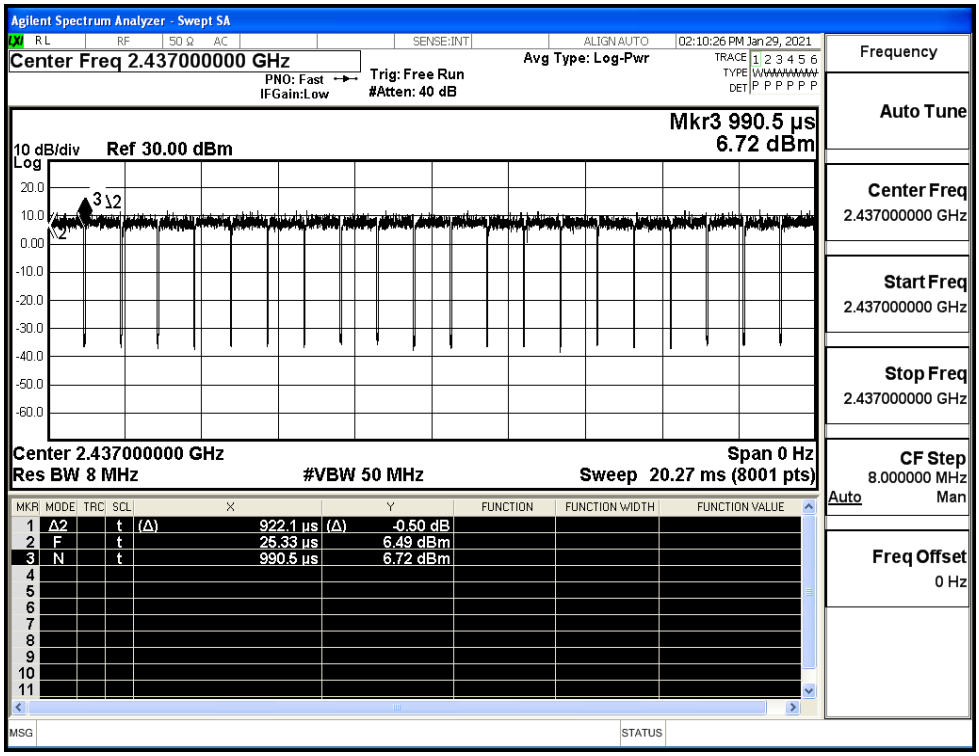
Duty Cycle_11G_2437_Ant2



Duty Cycle_11N20SISO_2437_Ant2



Duty Cycle_11N40SISO_2437_Ant2



A.2 Maximum Conducted Output Power

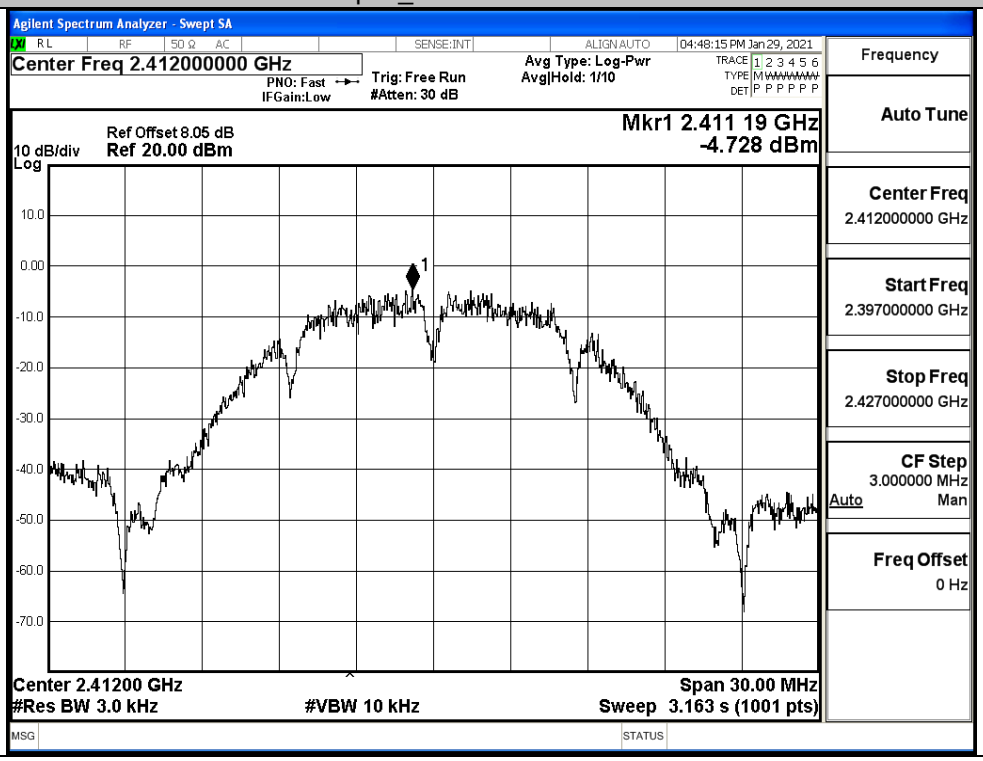
Mode	Channel	Meas.Level [dBm]			Limit [dBm]	Verdict
		Ant_1	Ant_2	Sum		
11B	LCH	17.11	16.97	/	30	PASS
	MCH	17.79	17.53	/	30	PASS
	HCH	17.94	17.52	/	30	PASS
11G	LCH	19.02	18.94	/	30	PASS
	MCH	18.86	18.68	/	30	PASS
	HCH	18.05	18.79	/	30	PASS
11N20SISO	LCH	18.62	18.64	21.64	30	PASS
	MCH	18.51	18.45	21.49	30	PASS
	HCH	18.64	18.56	21.61	30	PASS
11N40SISO	LCH	18.36	19.29	21.86	30	PASS
	MCH	18.74	18.64	21.70	30	PASS
	HCH	19.46	19.53	22.51	30	PASS

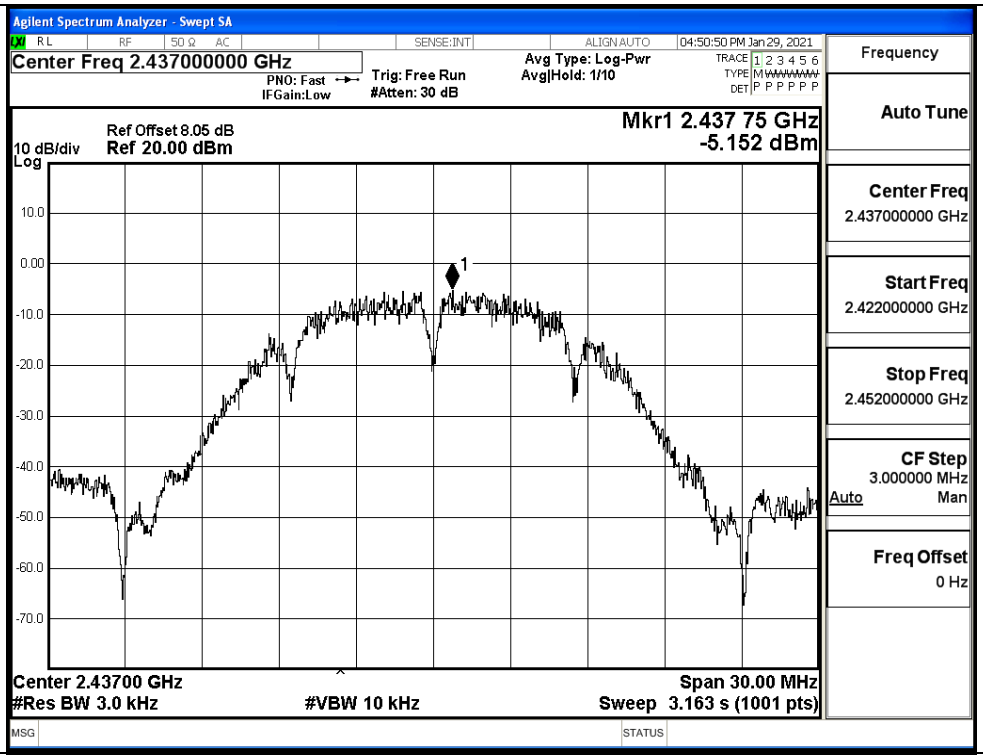
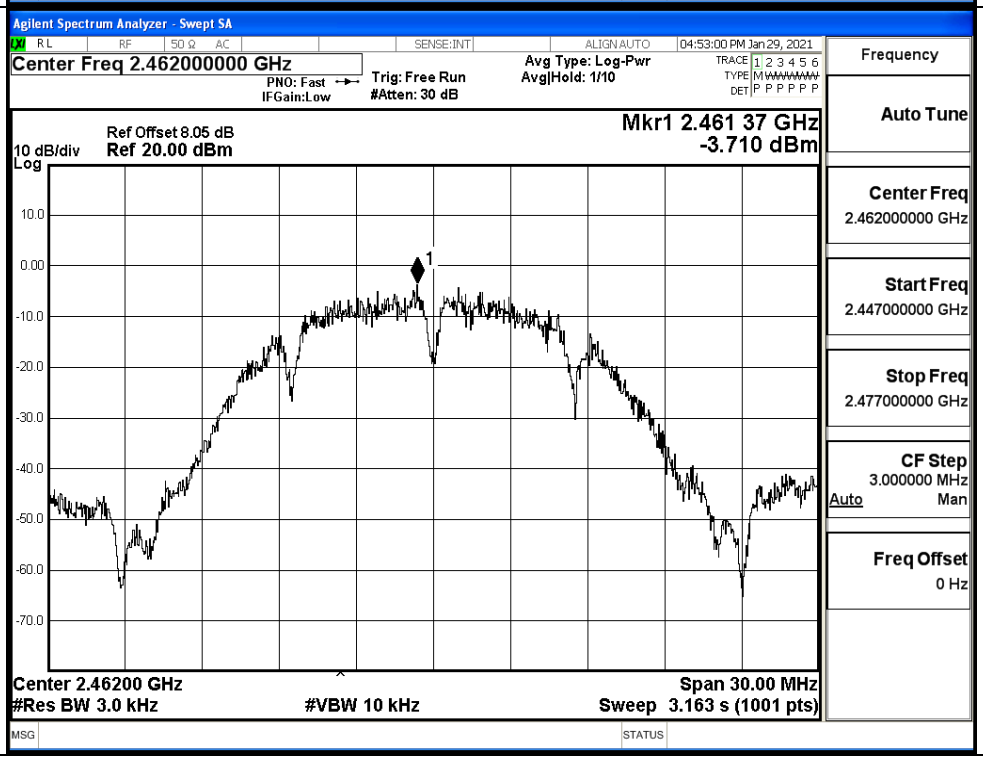
A.3 Maximum Power Spectral Density

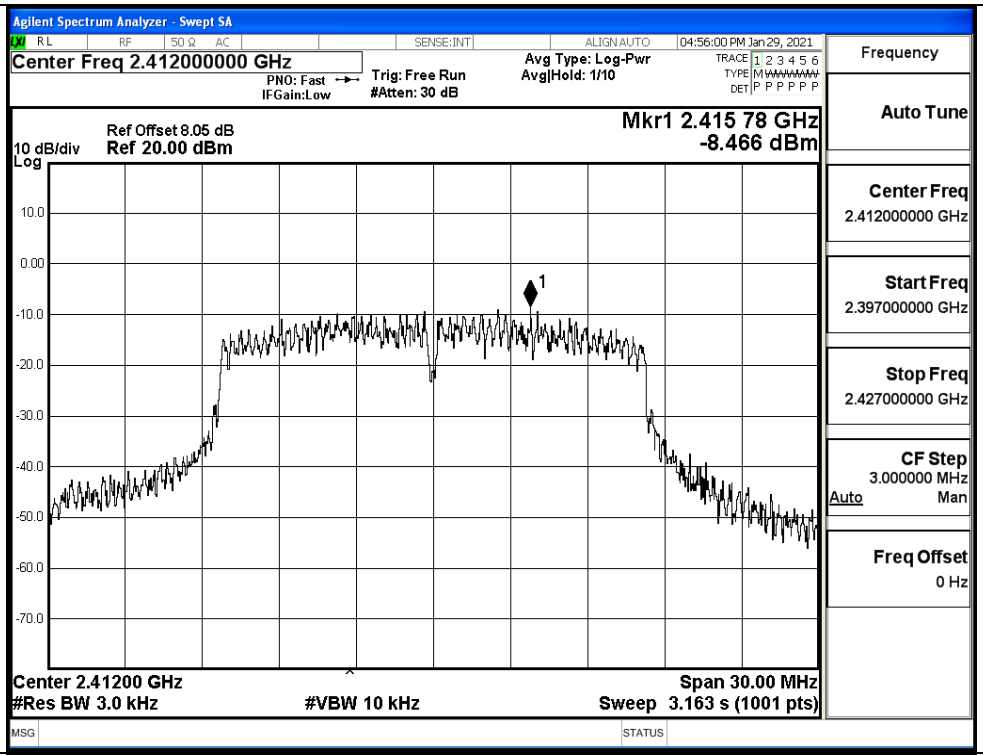
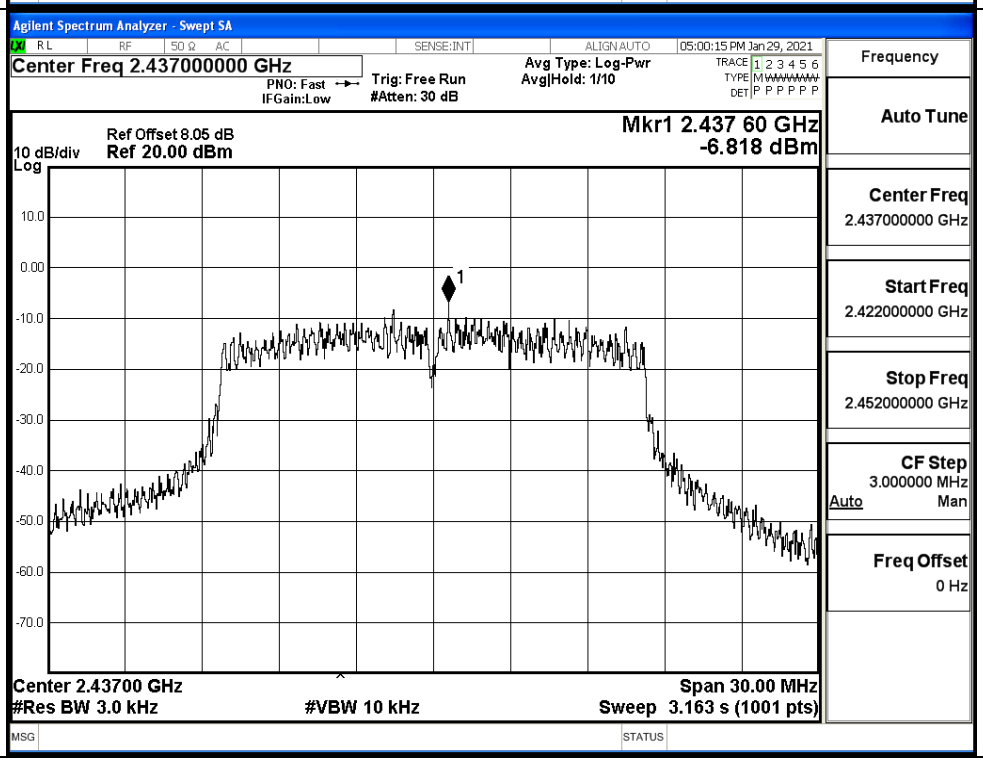
Mode	Channel	Meas.Level [dBm/3KHz]			Limit [dBm/3KHz]	Verdict
		Ant_1	Ant_2	Sum		
11B	LCH	-4.728	-4.344	/	8	PASS
	MCH	-5.152	-5.515	/	8	PASS
	HCH	-3.710	-4.430	/	8	PASS
11G	LCH	-8.466	-9.396	/	8	PASS
	MCH	-6.818	-10.080	/	8	PASS
	HCH	-10.061	-8.954	/	8	PASS
11N20SISO	LCH	-10.632	-10.683	-7.647	8	PASS
	MCH	-11.470	-9.719	-7.497	8	PASS
	HCH	-10.607	-10.087	-7.329	8	PASS
11N40SISO	LCH	-12.932	-13.886	-10.373	8	PASS
	MCH	-12.784	-13.725	-10.219	8	PASS
	HCH	-12.187	-12.248	-9.207	8	PASS

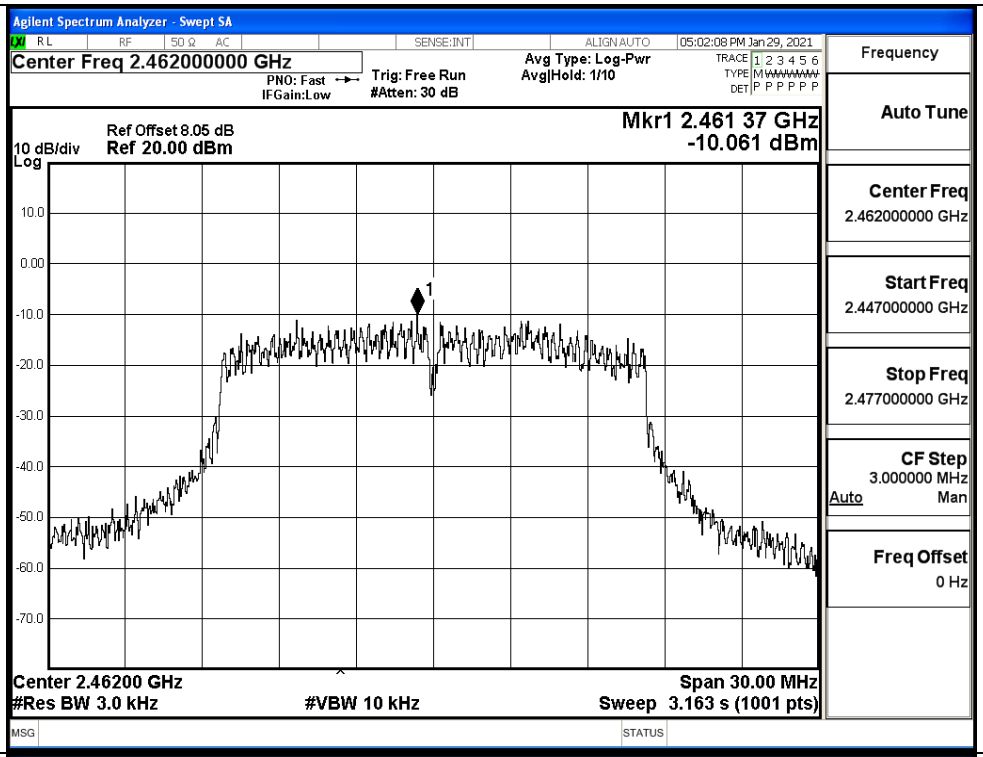
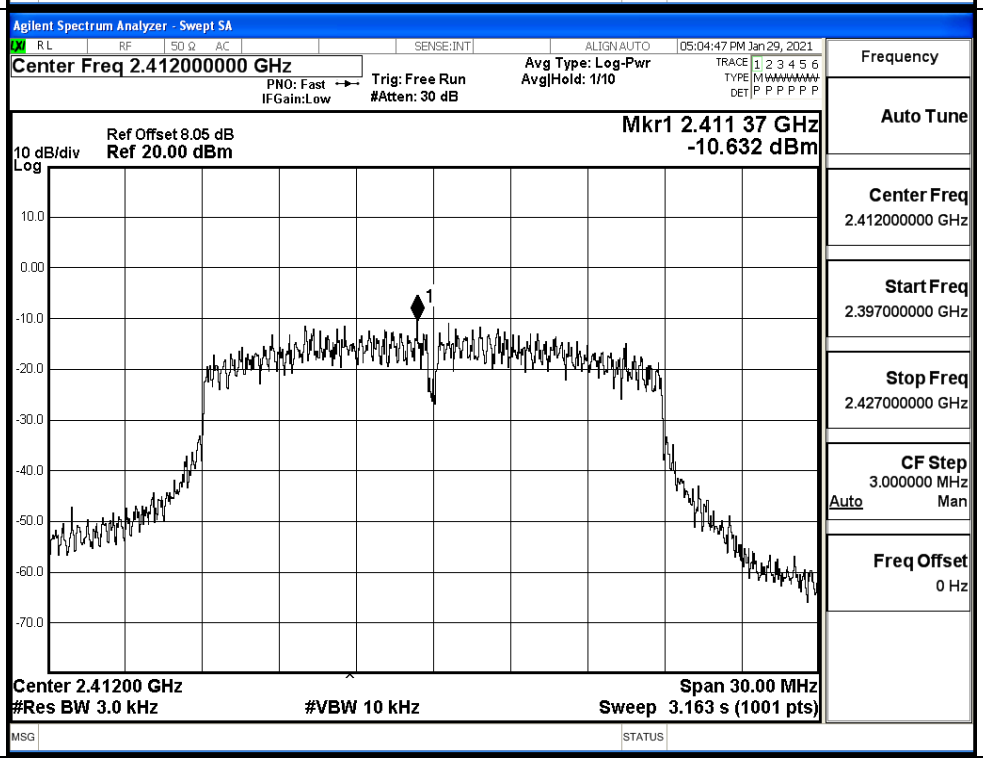
Test Graphs_Ant1

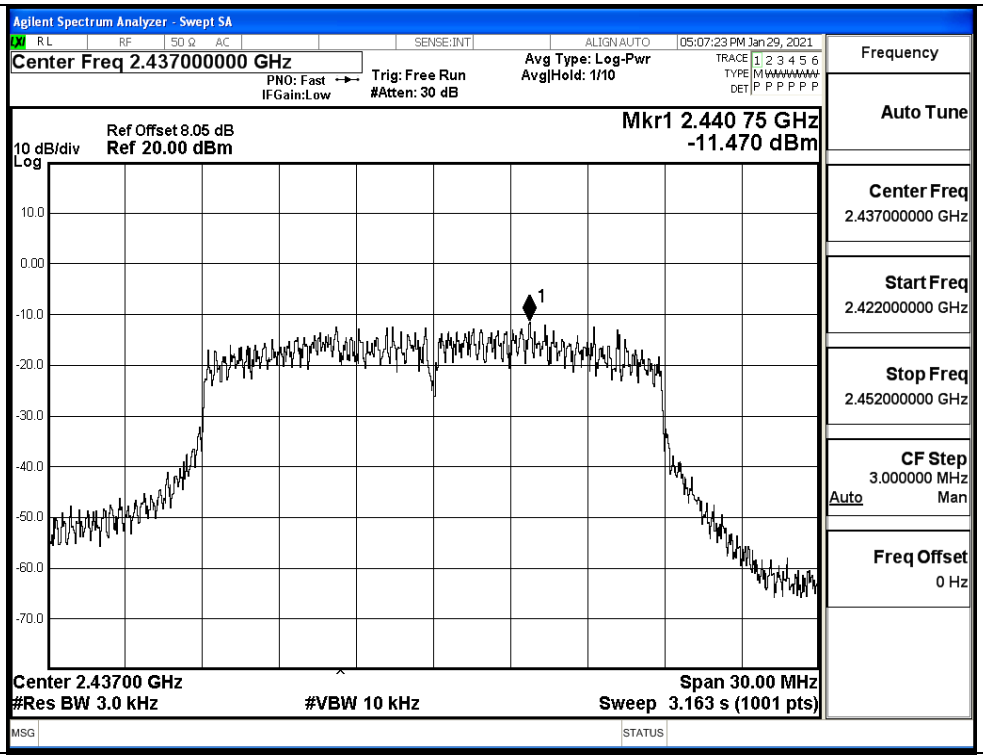
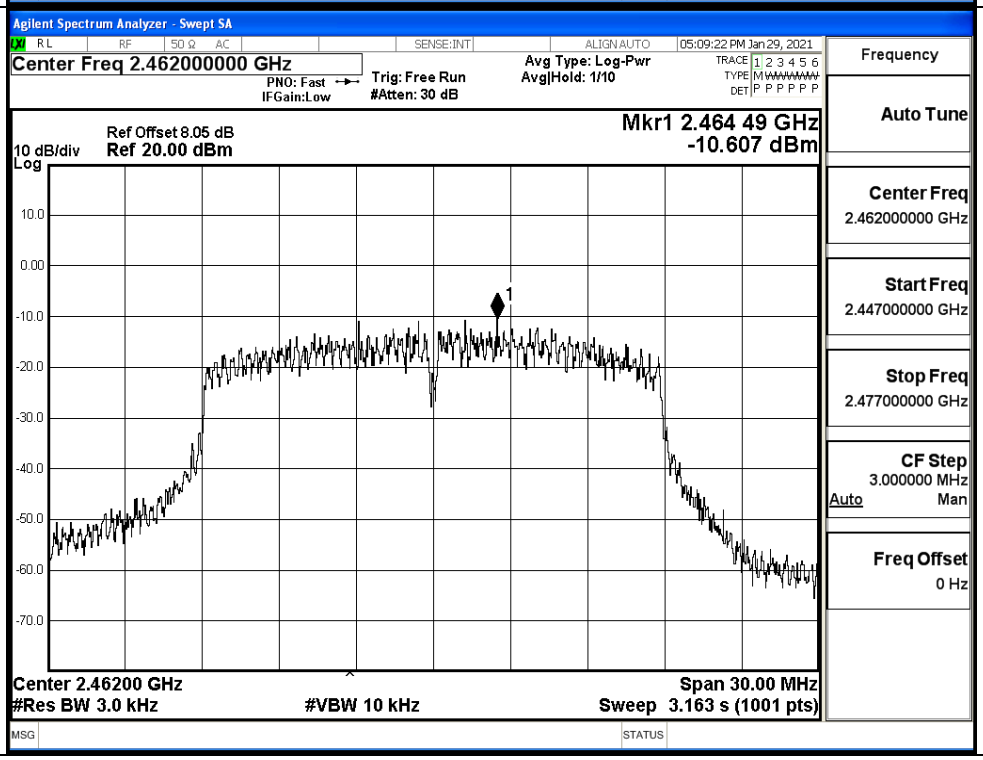
11B/LCH

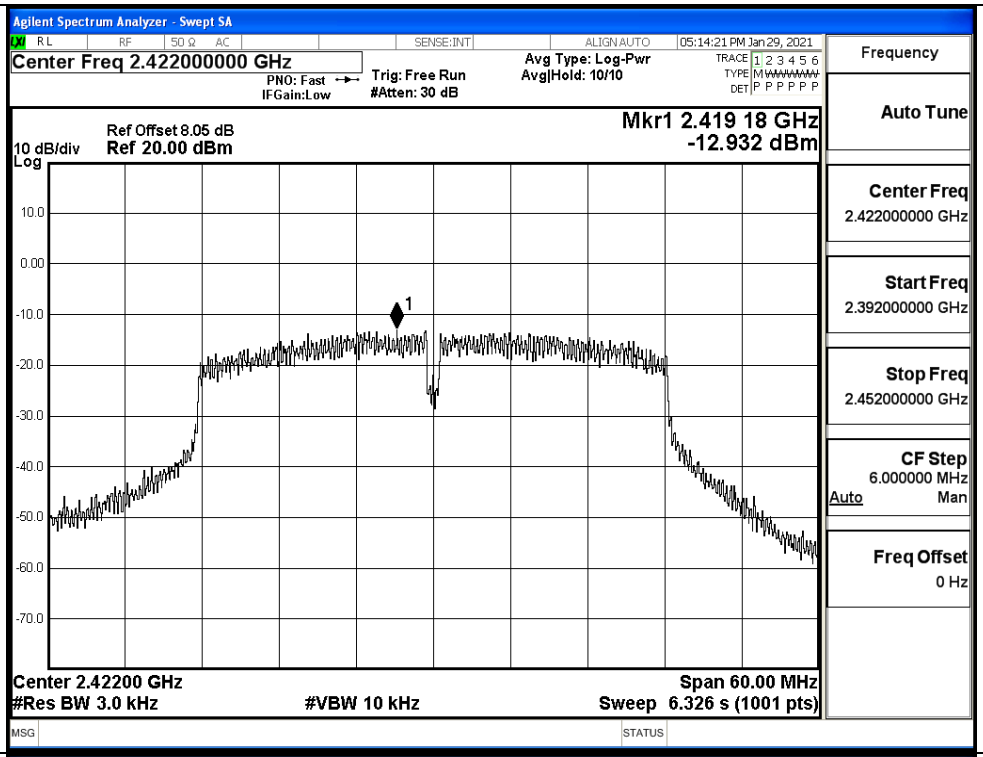
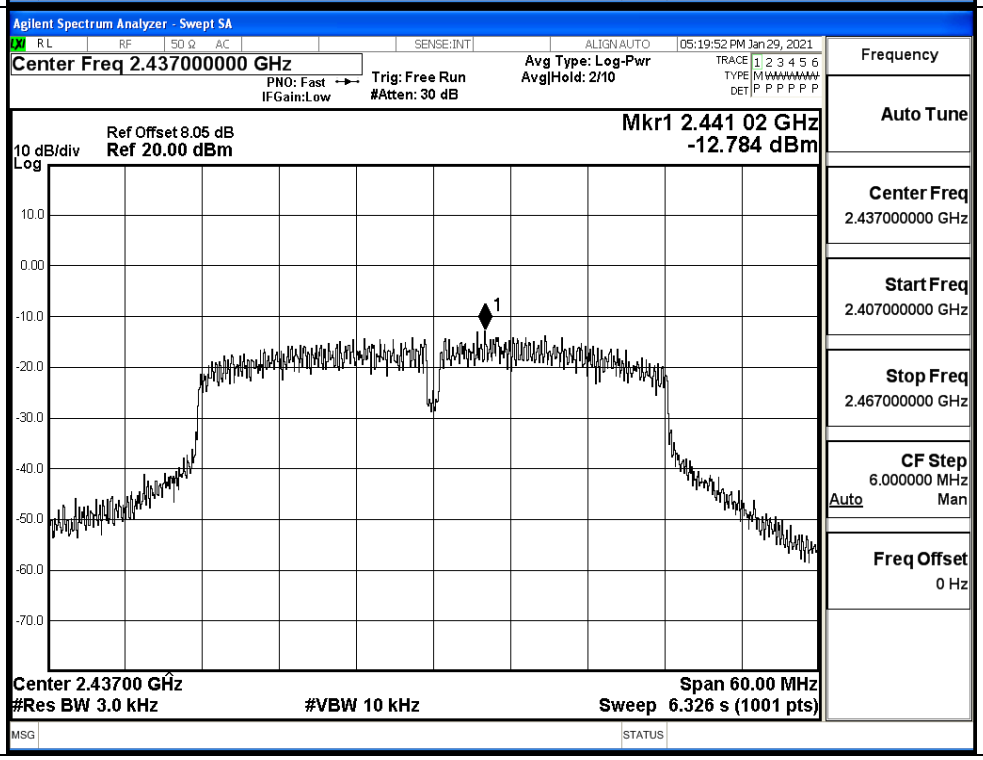


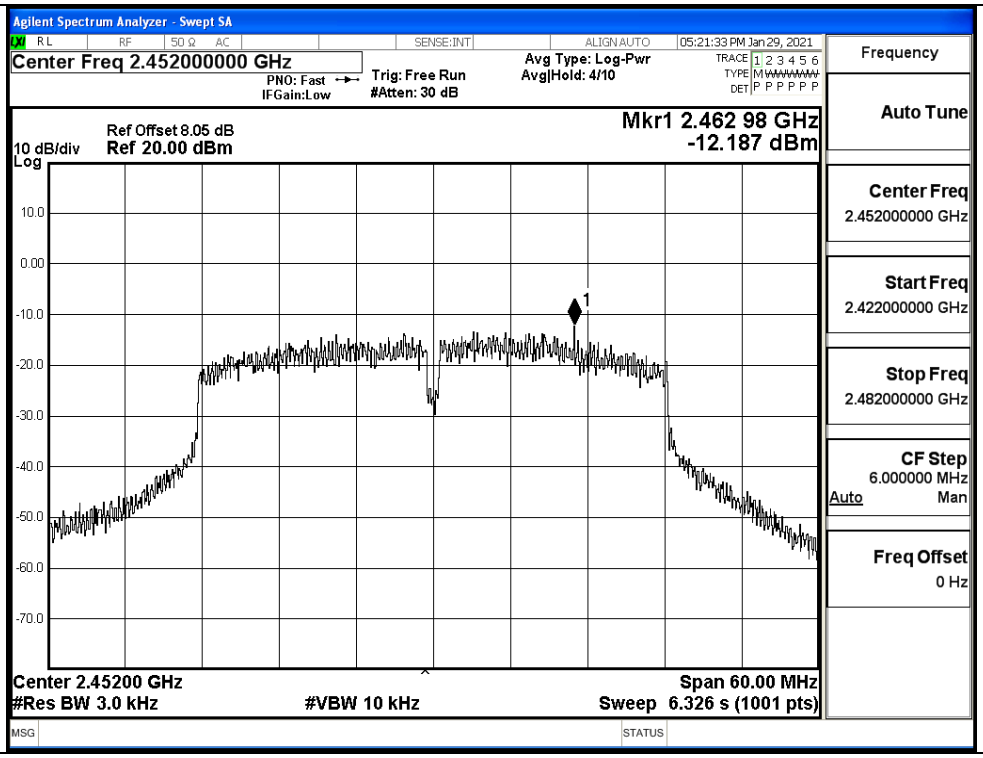
11B/MCH	
11B/HCH	

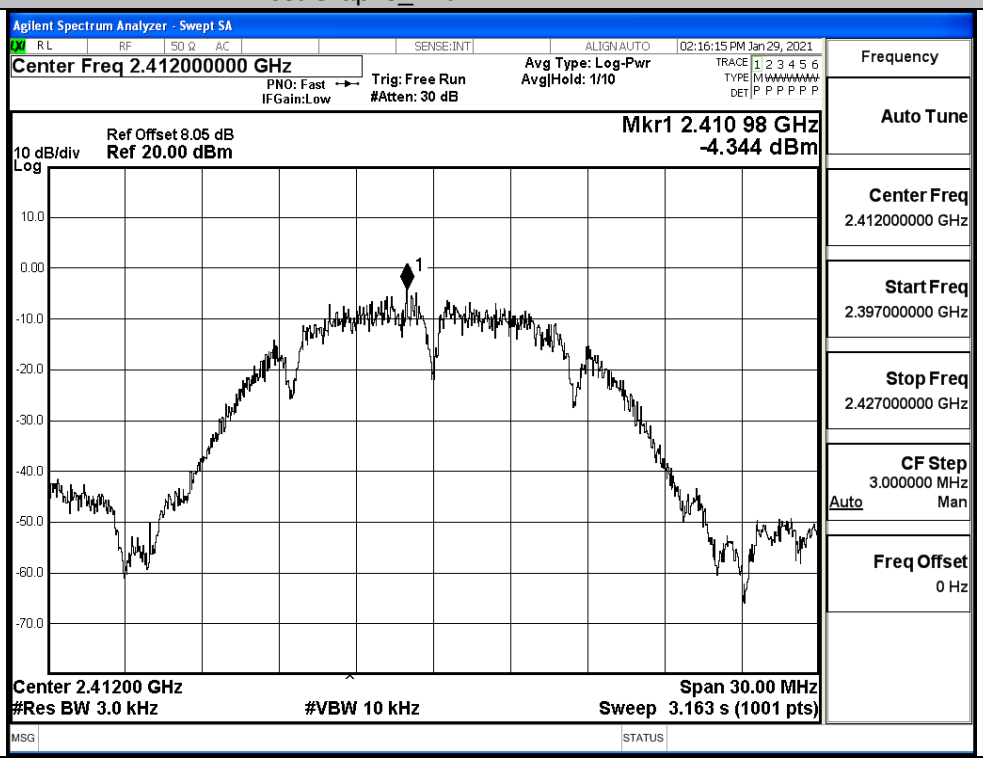
11G/LCH	
11G/MCH	

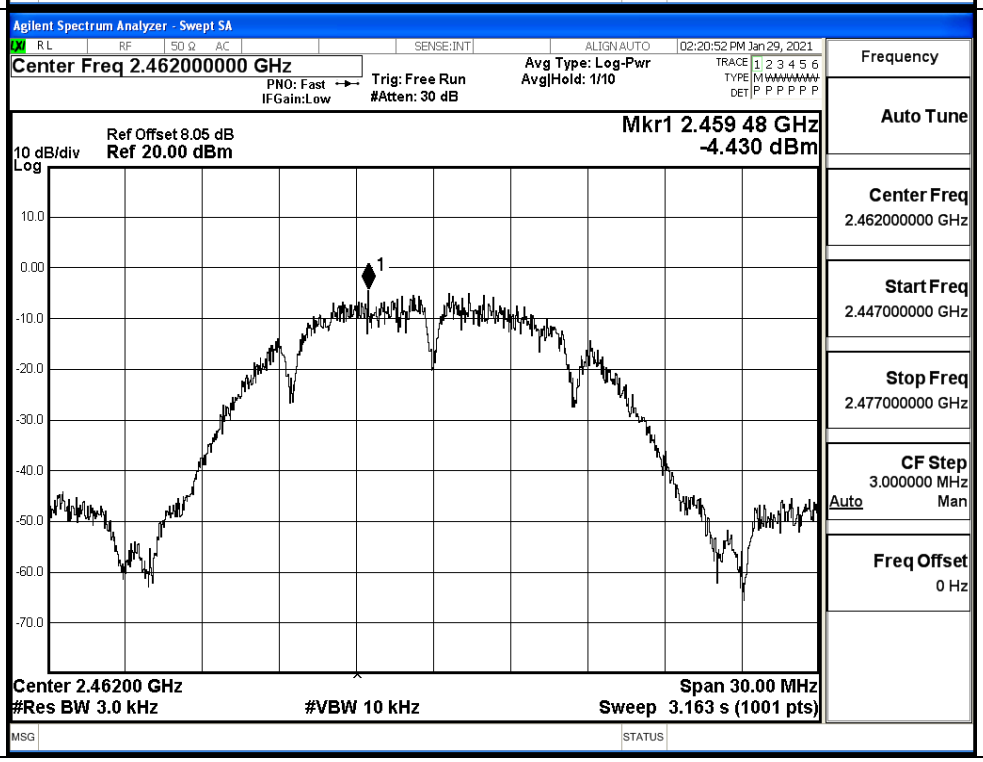
11G/HCH	
11N20SISO/LCH	

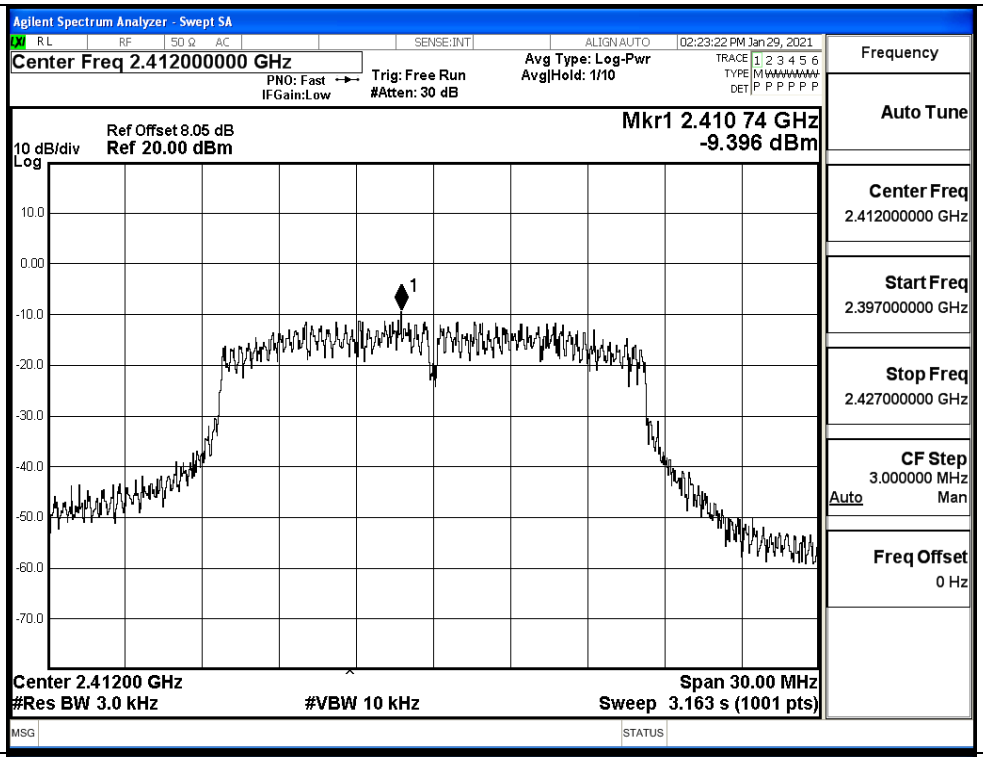
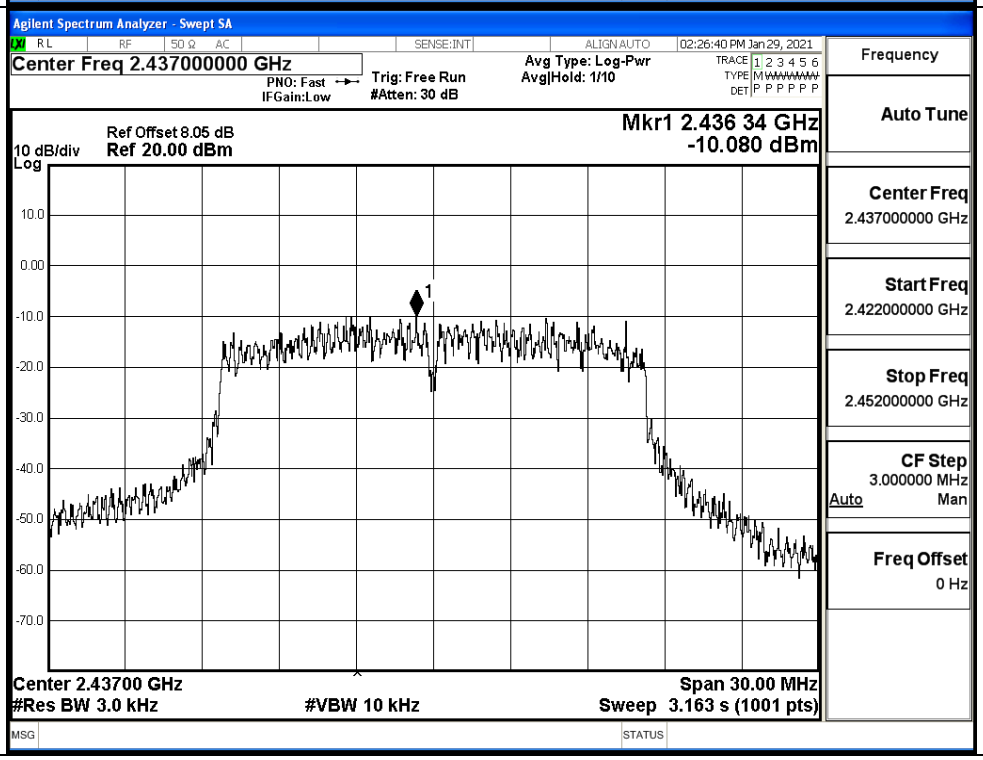
11N20SISO/MCH		
11N20SISO/HCH		

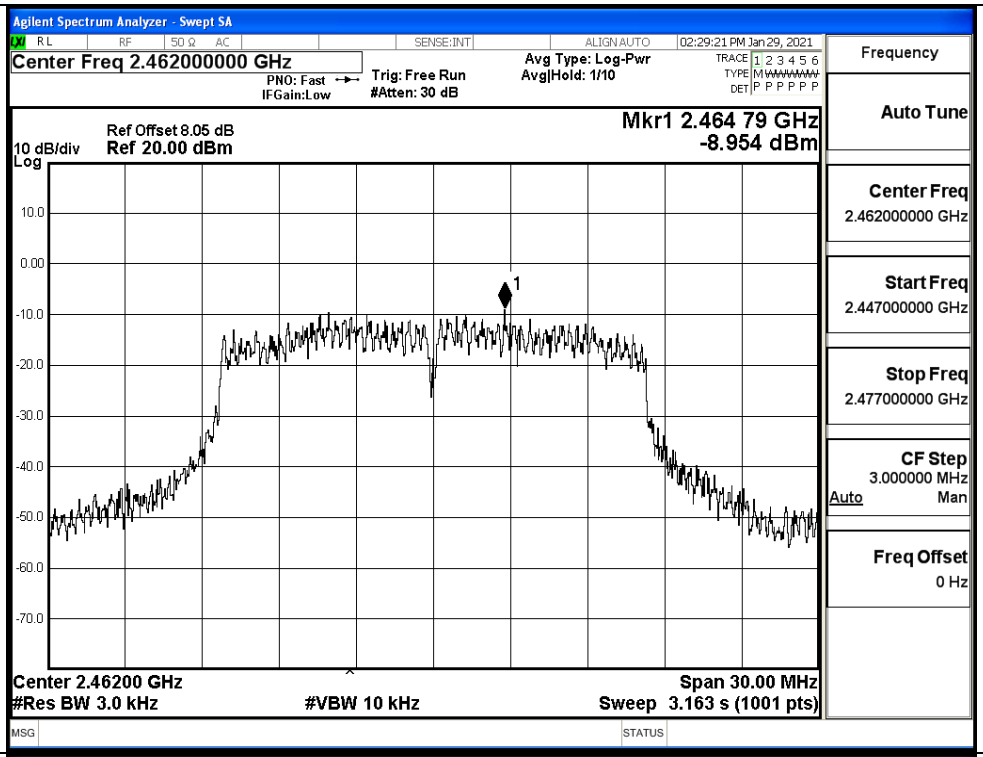
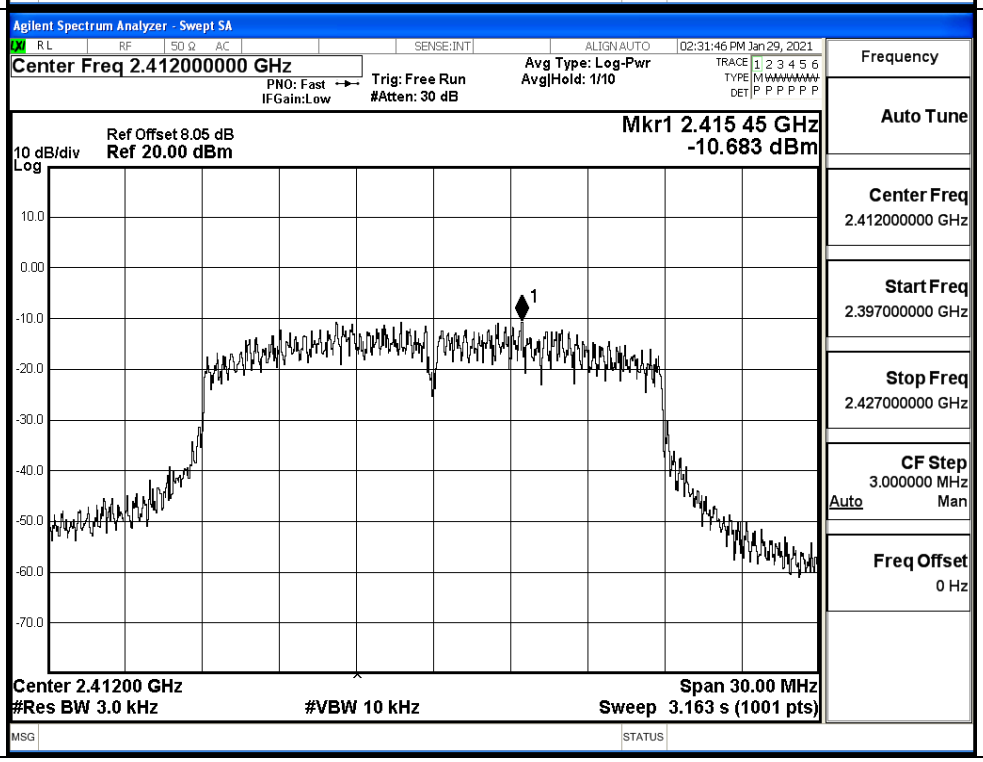
11N40SISO/LCH		
11N40SISO/MCH		

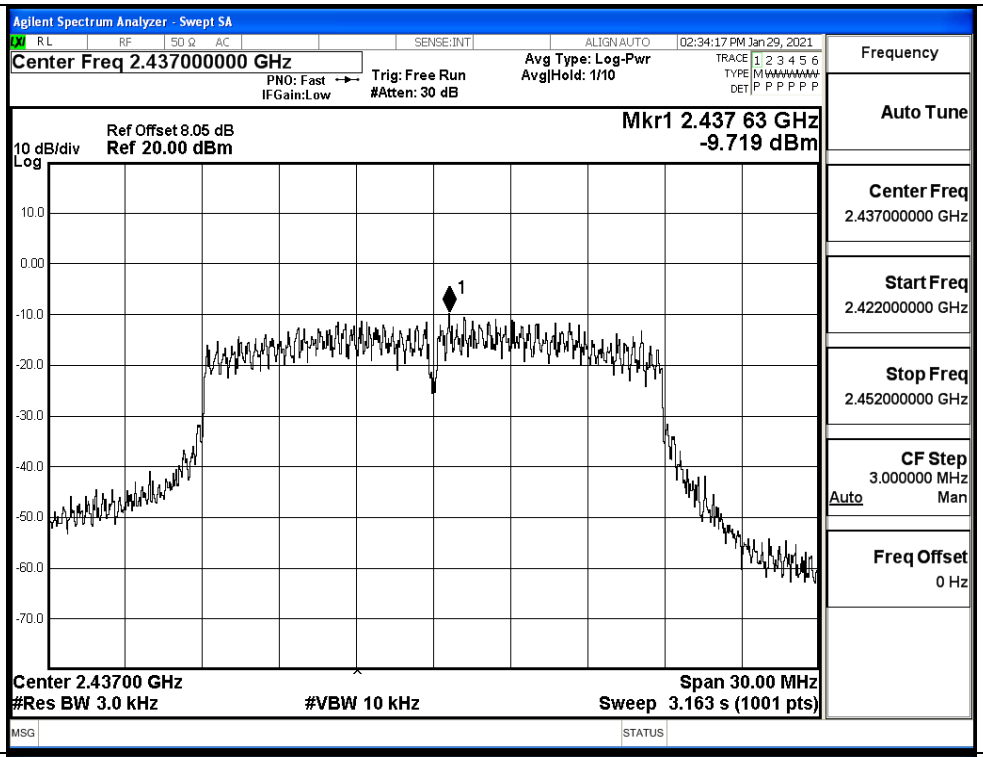
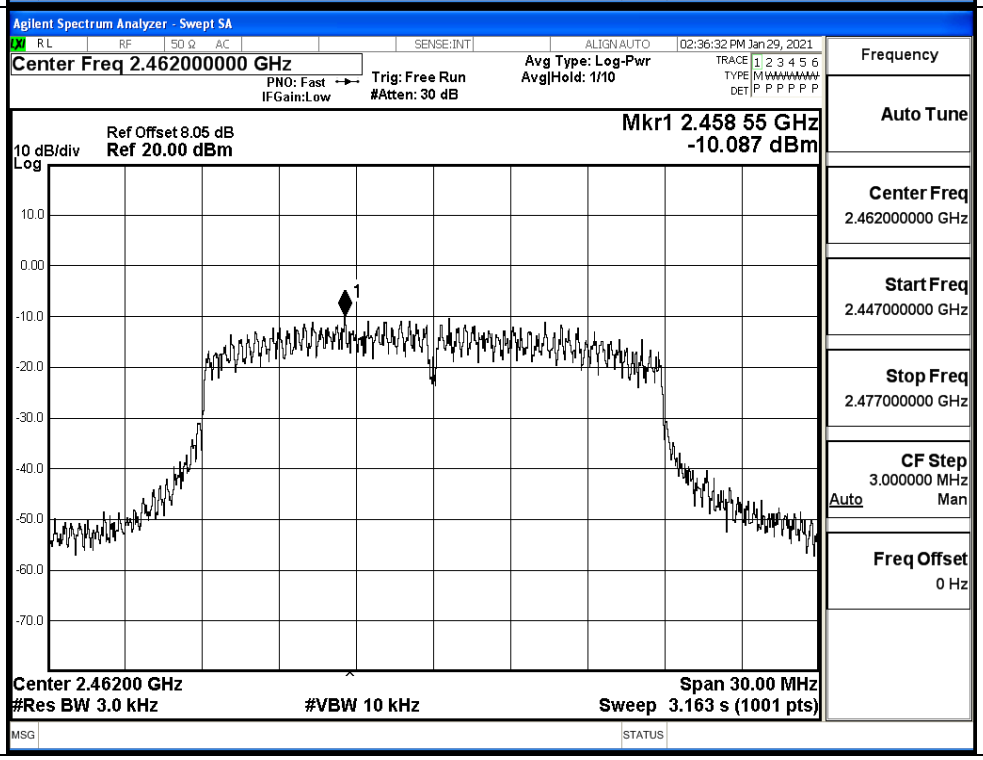
11N40SISO/HCH	

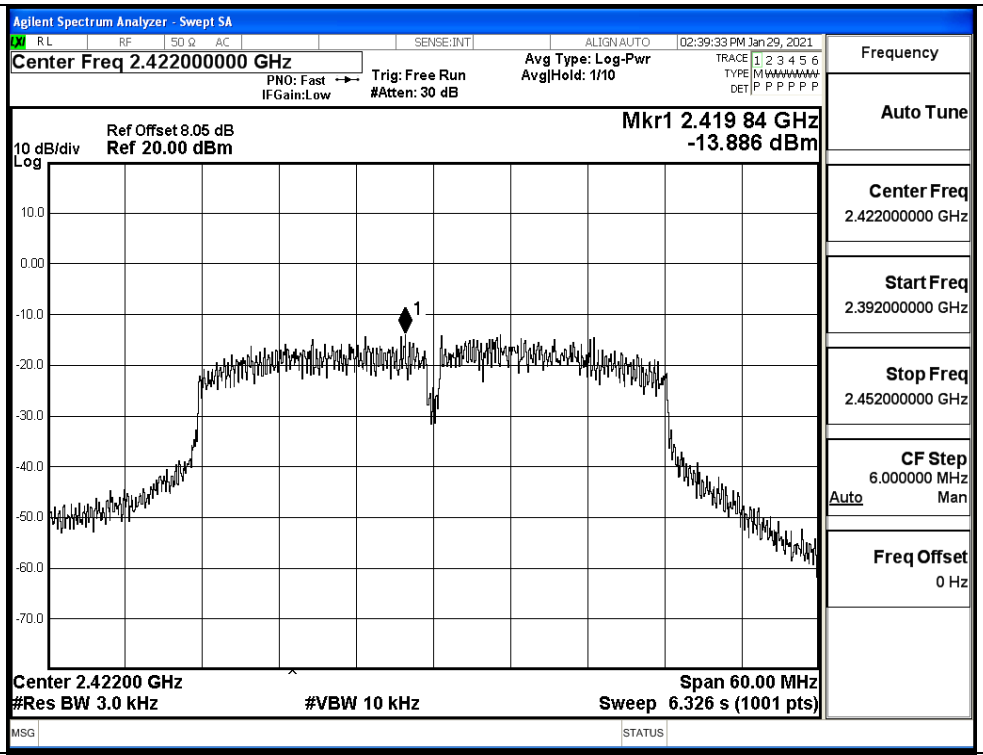
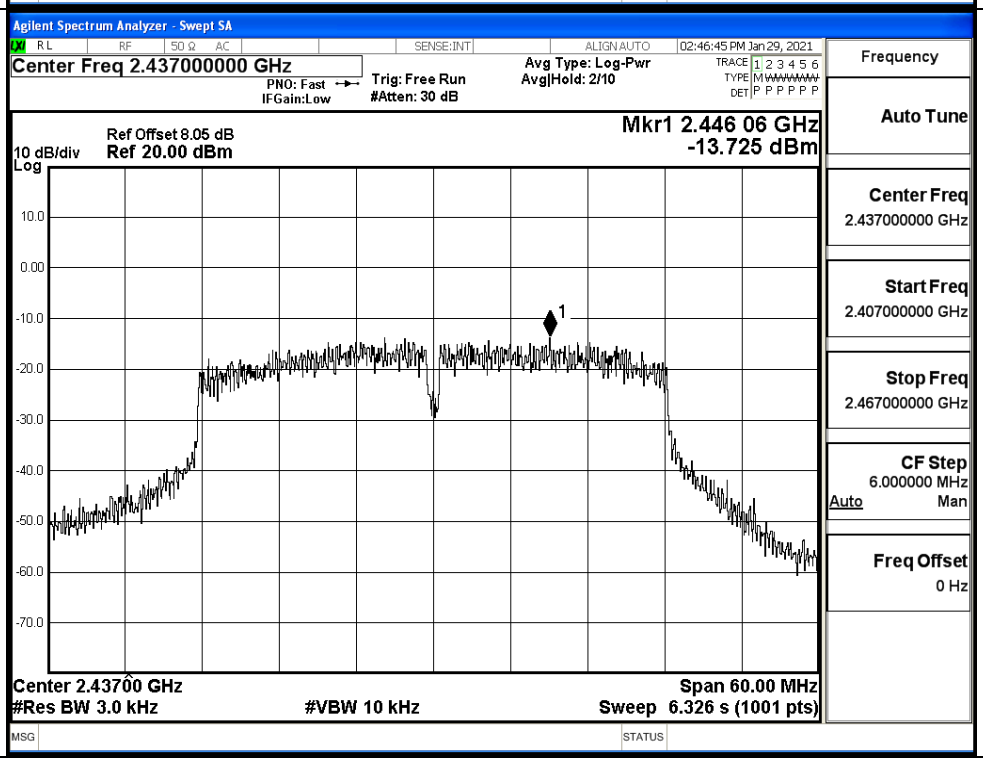
Test Graphs_Ant2	
11B/LCH	

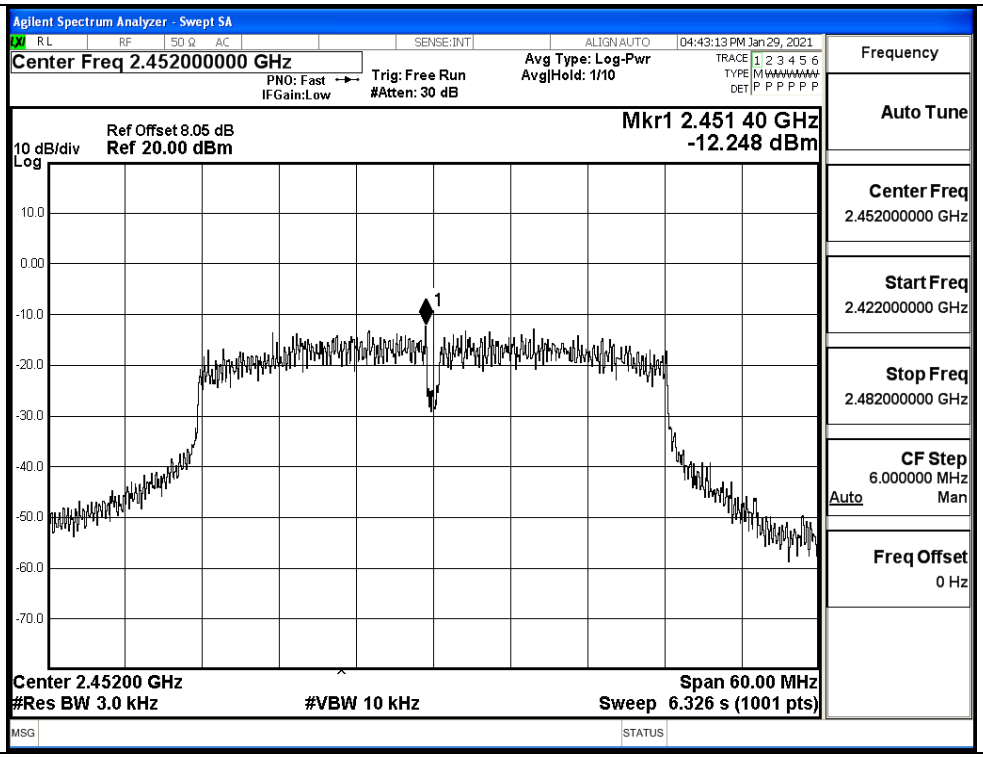
11B/MCH		
11B/HCH		

11G/LCH	
11G/MCH	

11G/HCH		
11N20SISO/LCH		

11N20SISO/MCH		
11N20SISO/HCH		

11N40SISO/LCH		
11N40SISO/MCH		

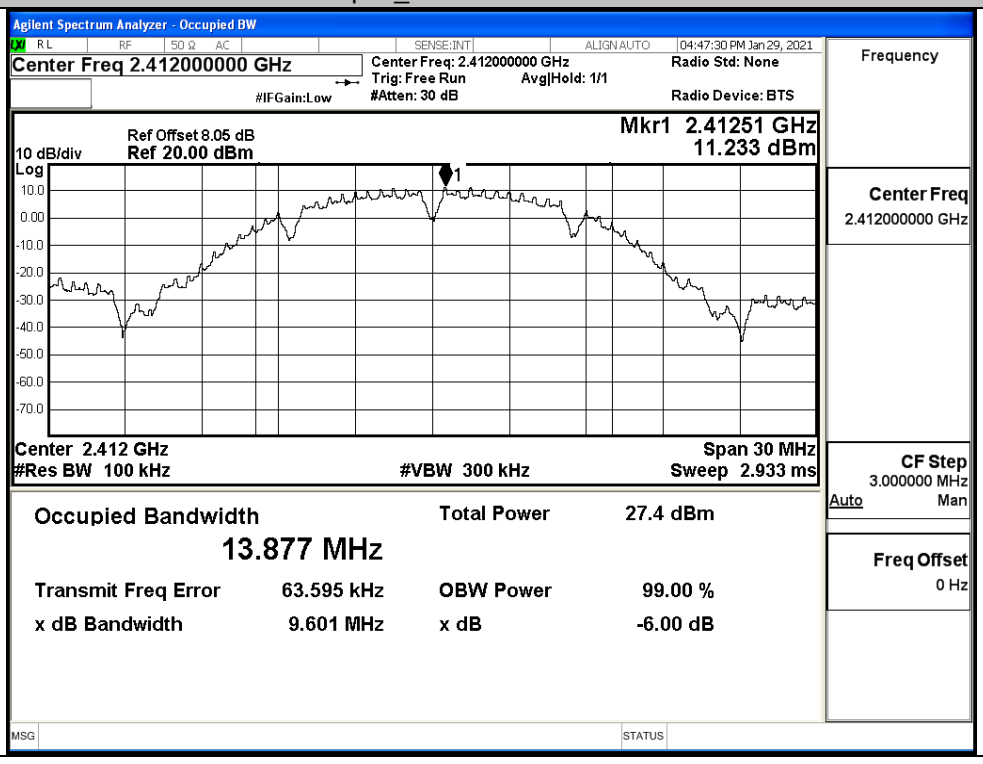
11N40SISO/HCH	

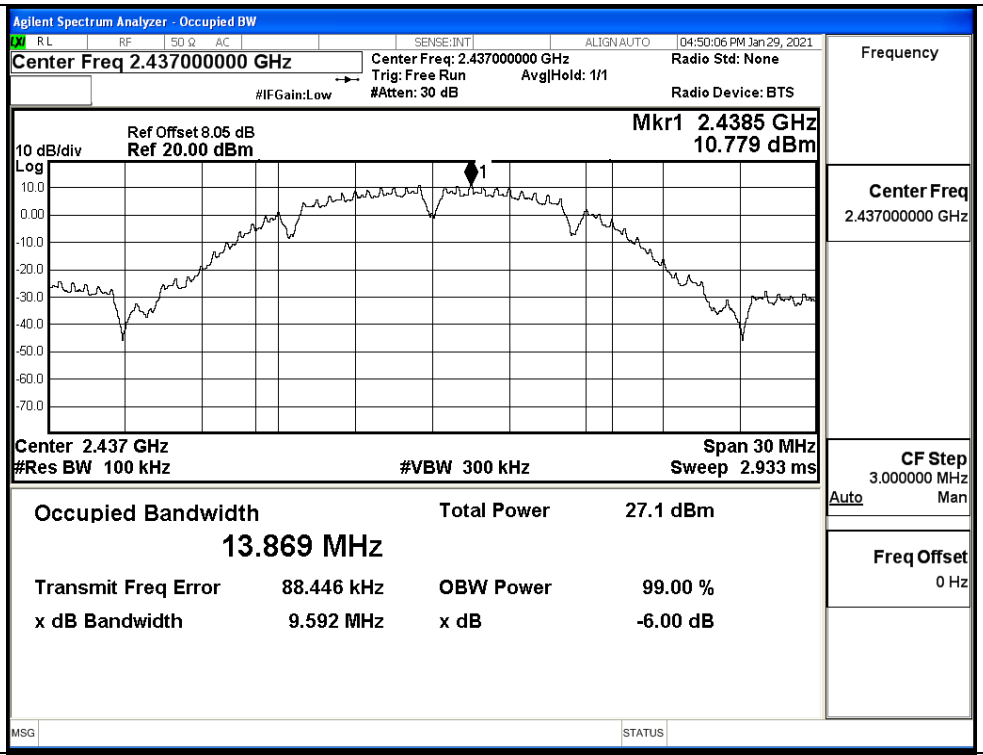
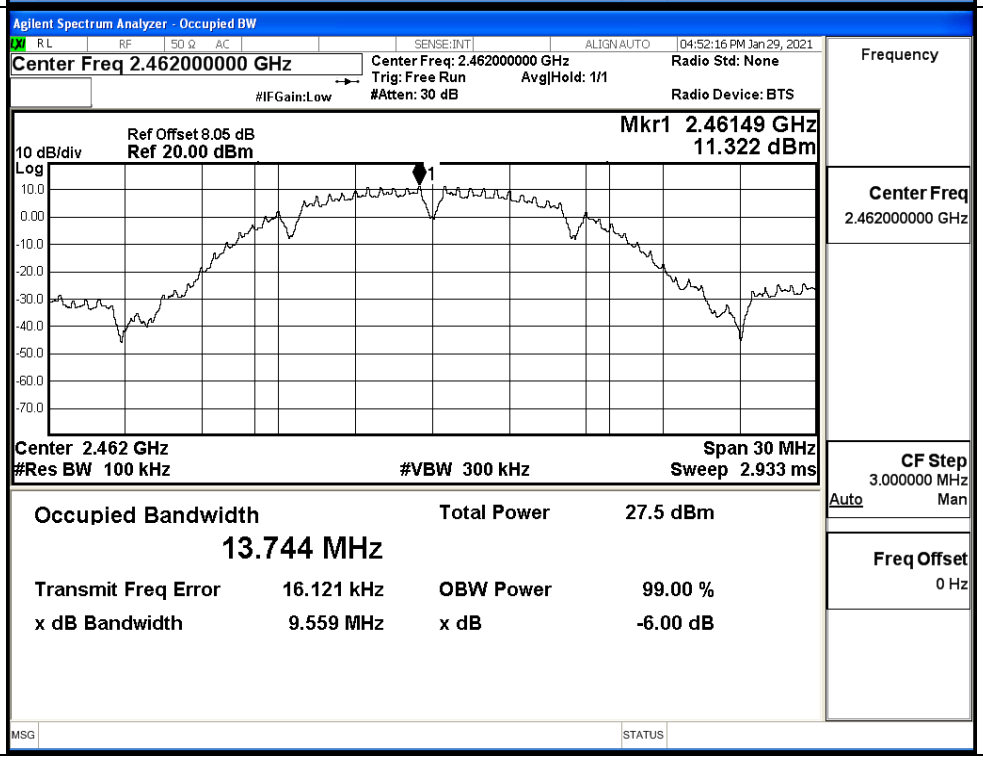
A.4 6dB Bandwidth

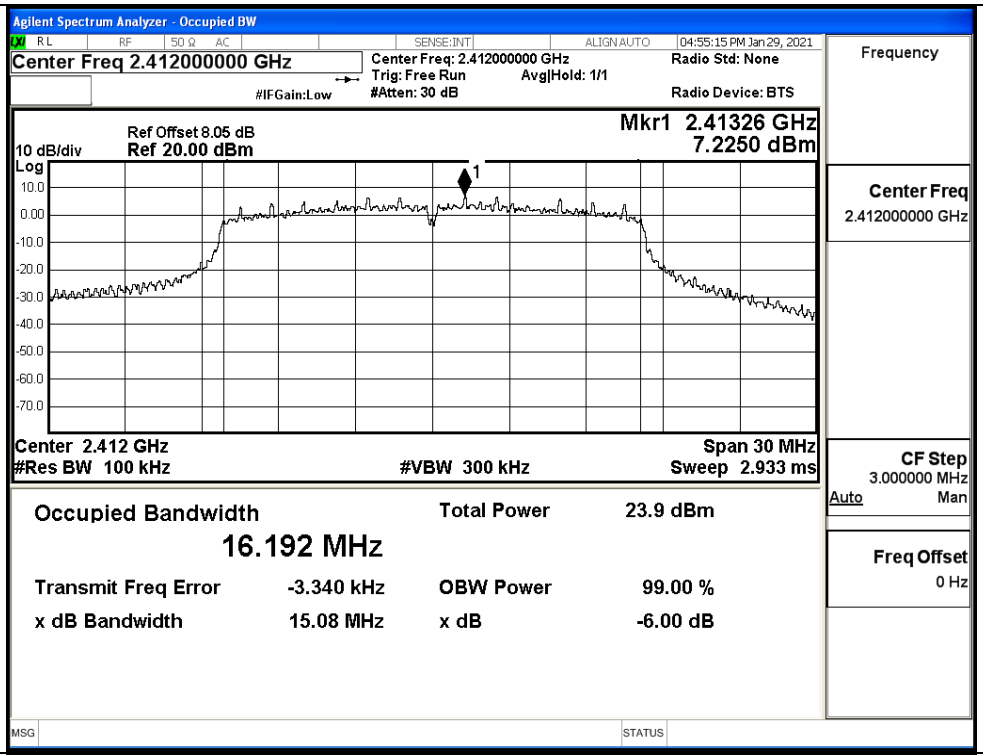
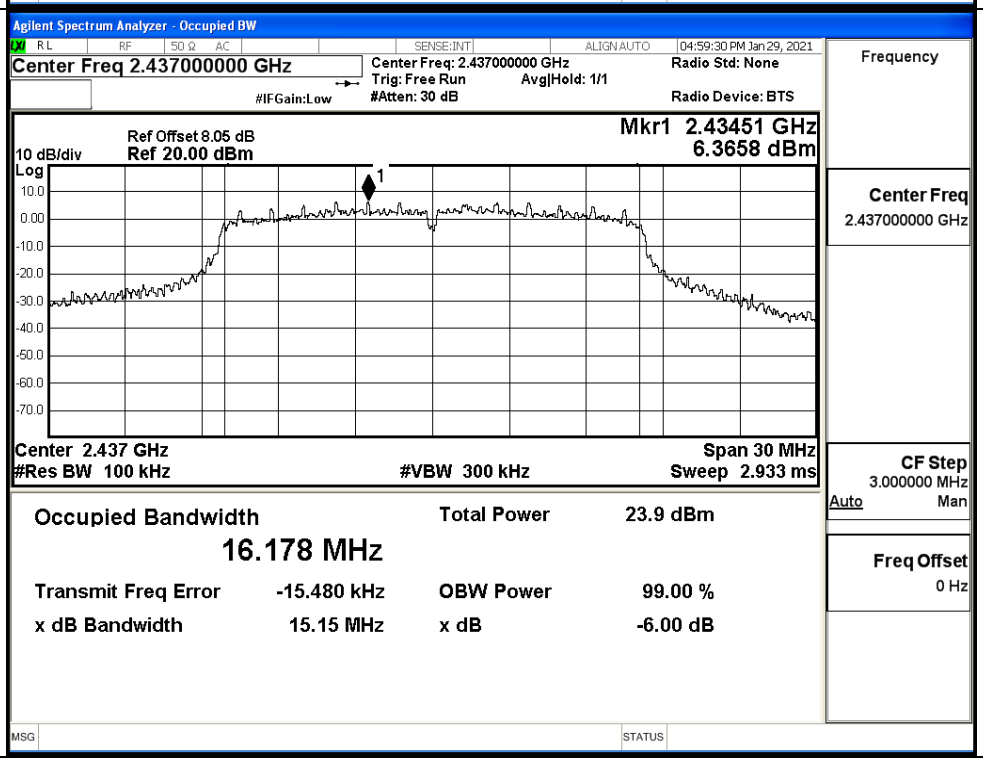
Mode	Channel	6dB Bandwidth [MHz]		Limit [MHz]	Verdict
		Ant_1	Ant_2		
11B	LCH	9.601	10.07	≥0.5	PASS
	MCH	9.592	9.605	≥0.5	PASS
	HCH	9.559	9.107	≥0.5	PASS
11G	LCH	15.08	14.07	≥0.5	PASS
	MCH	15.15	15.13	≥0.5	PASS
	HCH	15.11	15.11	≥0.5	PASS
11N20SISO	LCH	15.13	15.05	≥0.5	PASS
	MCH	15.13	15.12	≥0.5	PASS
	HCH	15.10	15.08	≥0.5	PASS
11N40SISO	LCH	33.87	35.07	≥0.5	PASS
	MCH	35.05	31.95	≥0.5	PASS
	HCH	32.66	33.88	≥0.5	PASS

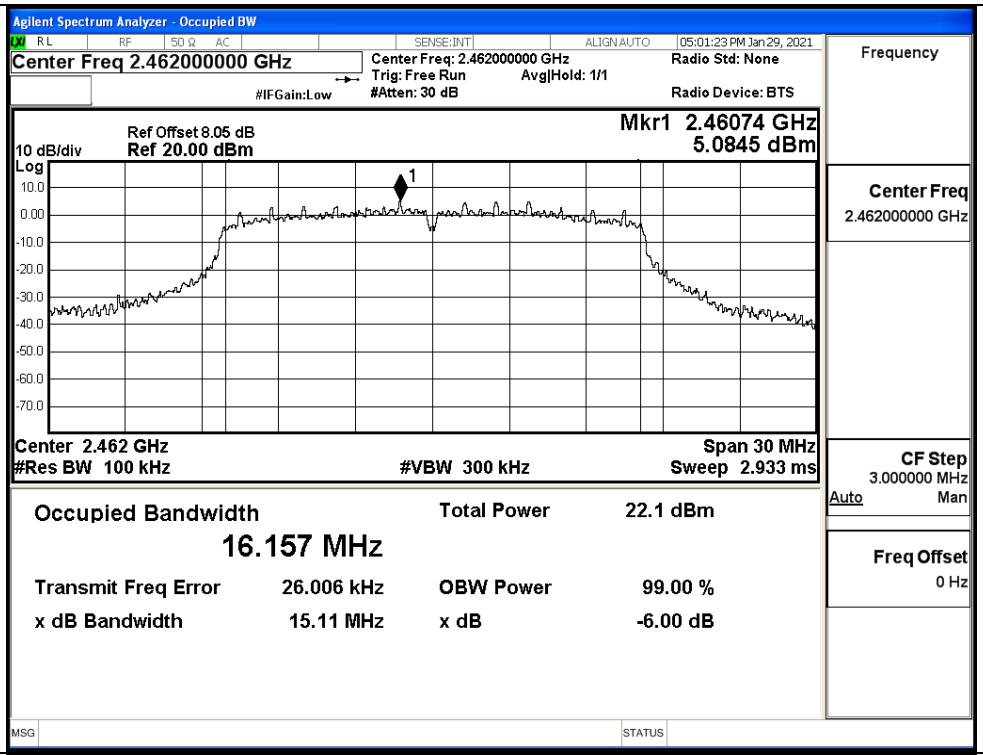
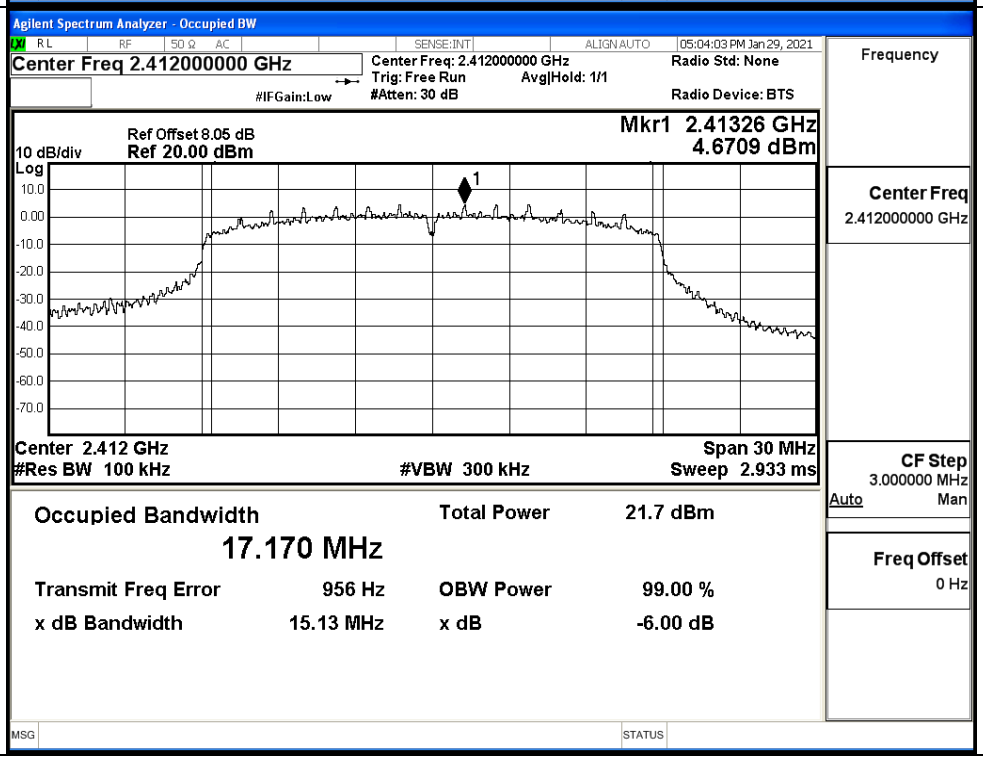
Test Graphs_ Ant1

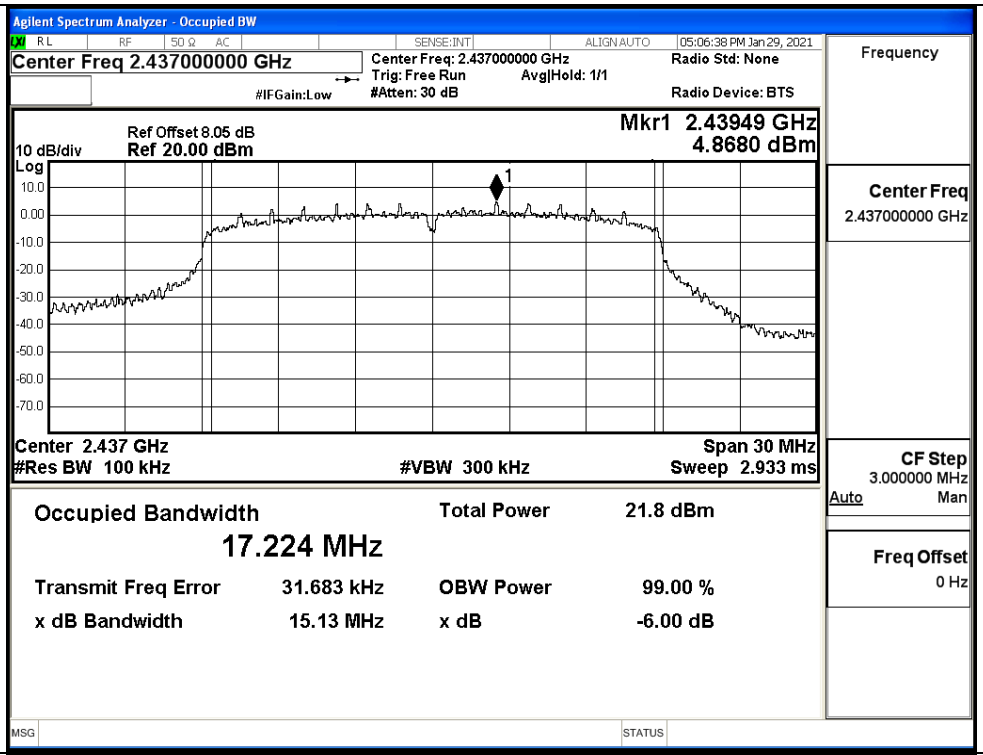
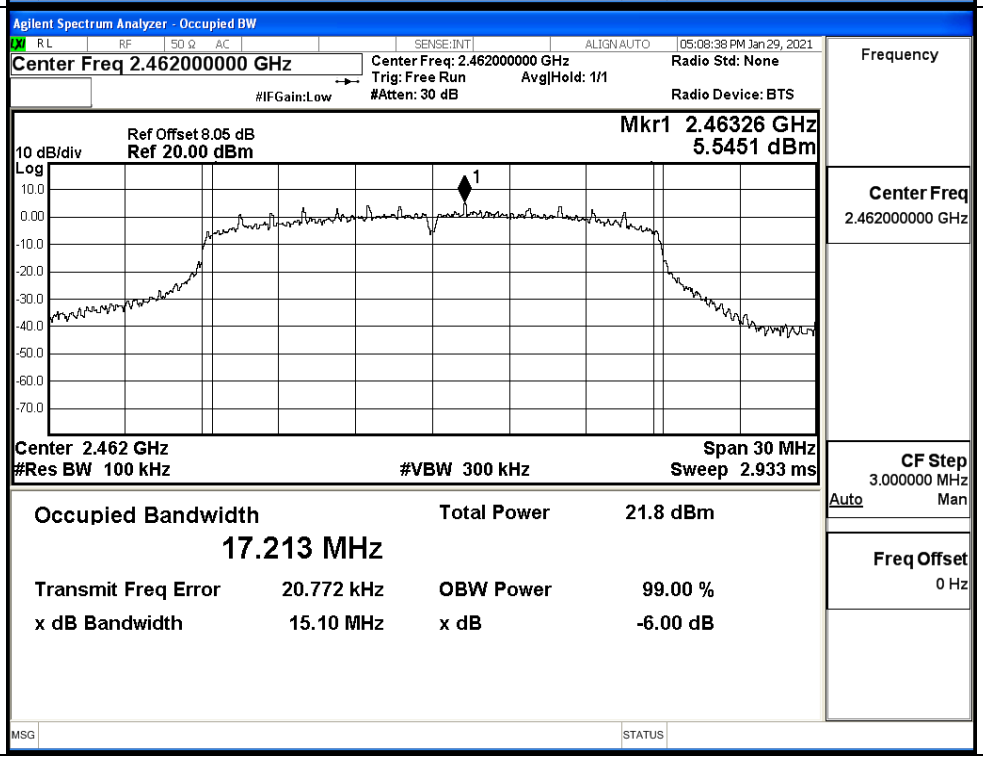
11B/LCH

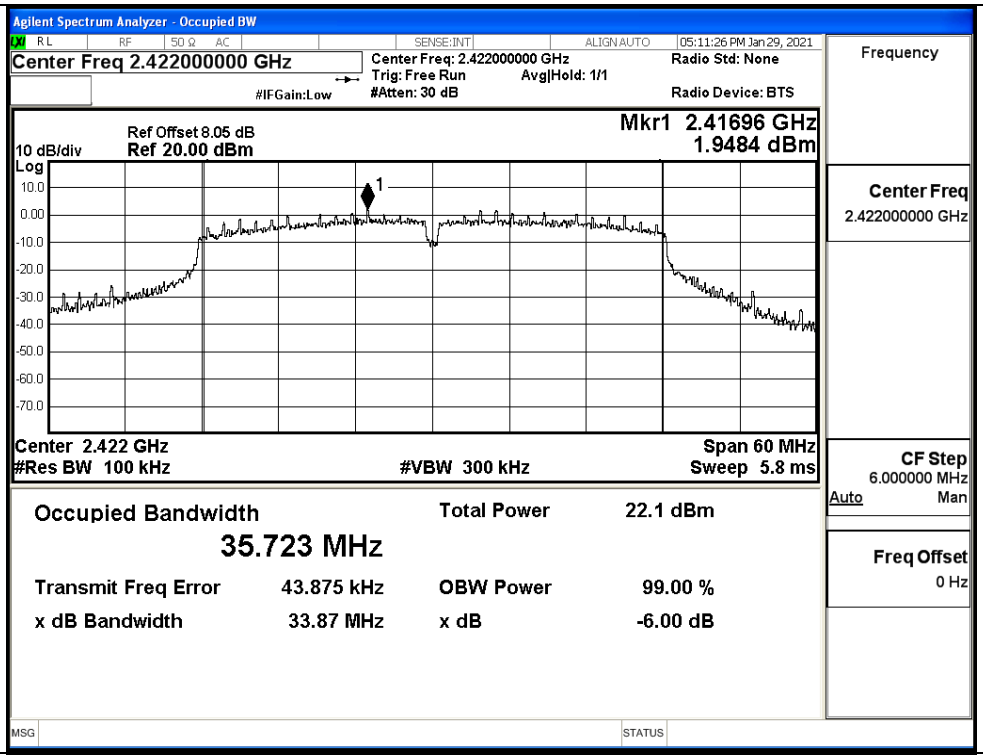
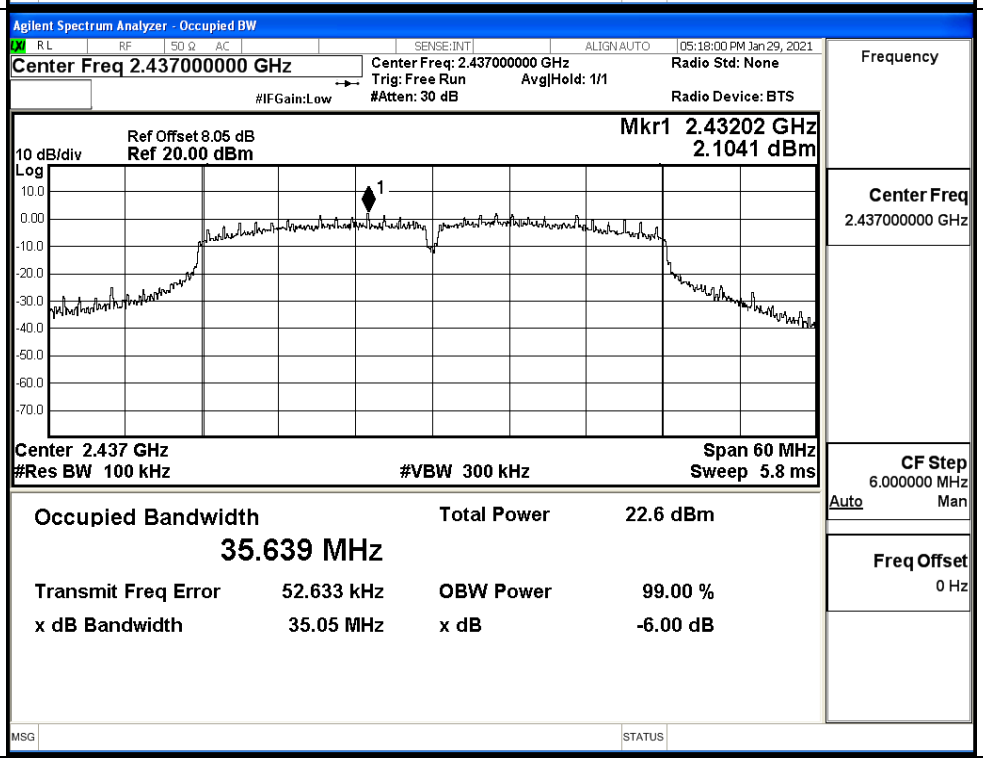


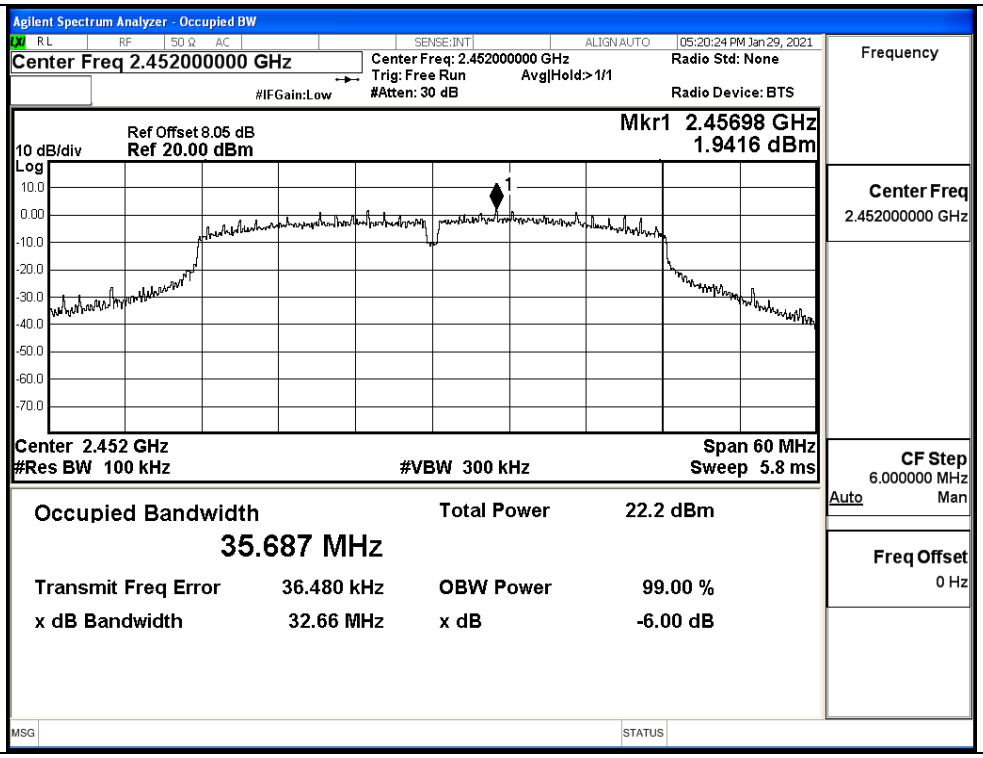
11B/MCH	
11B/HCH	

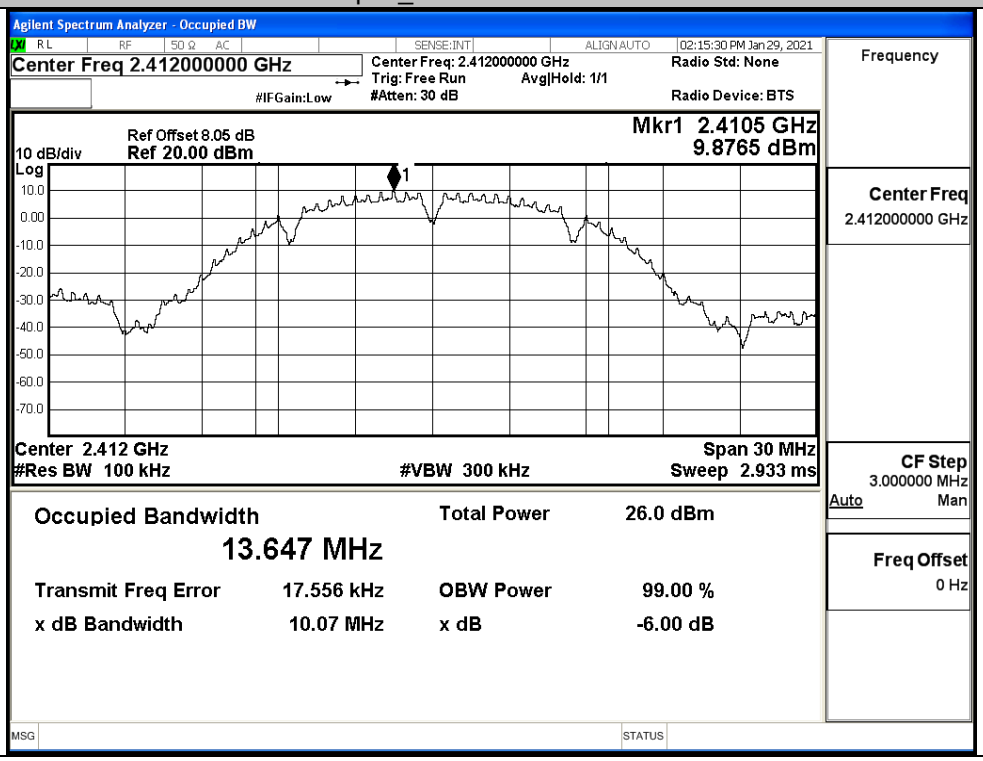
11G/LCH	
11G/MCH	

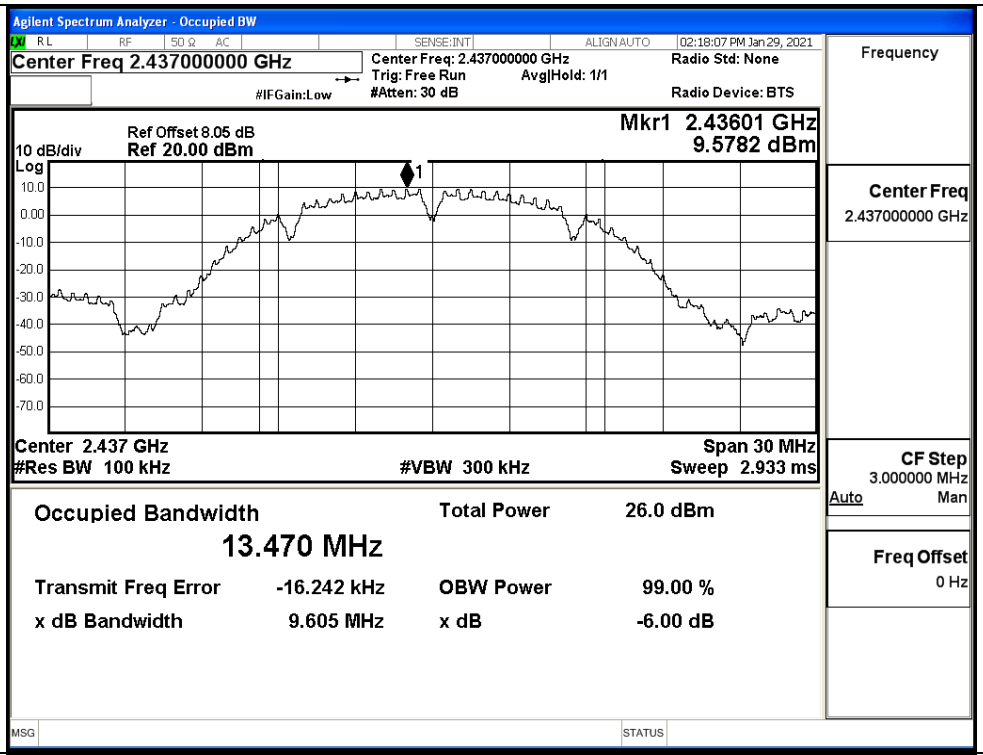
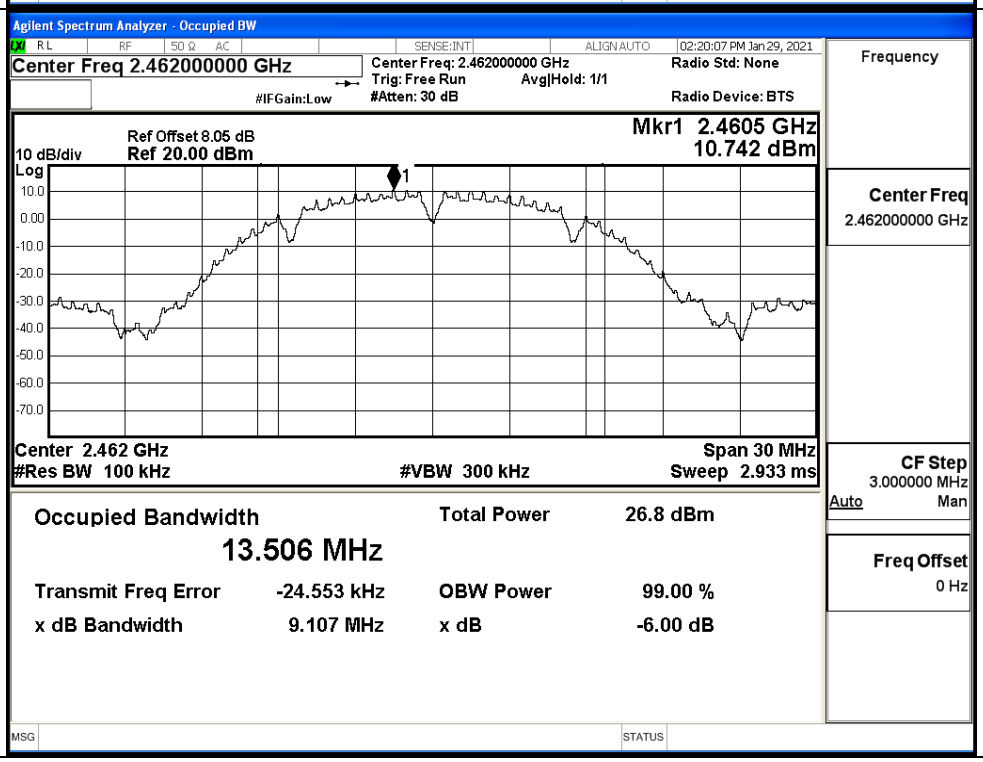
11G/HCH	
11N20SISO/LCH	

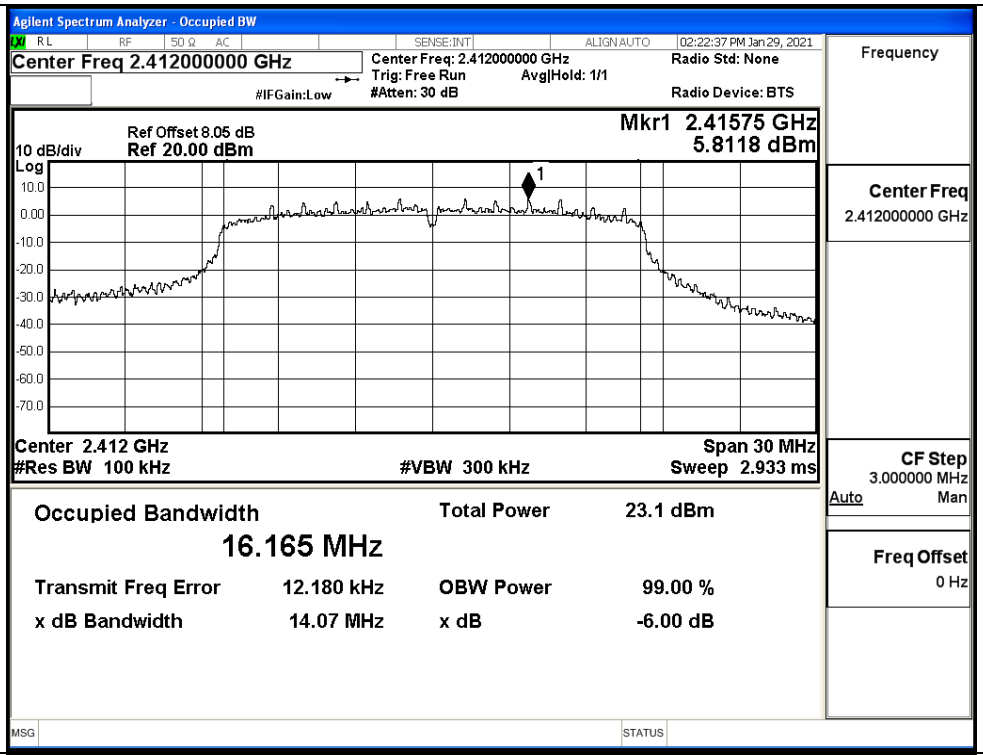
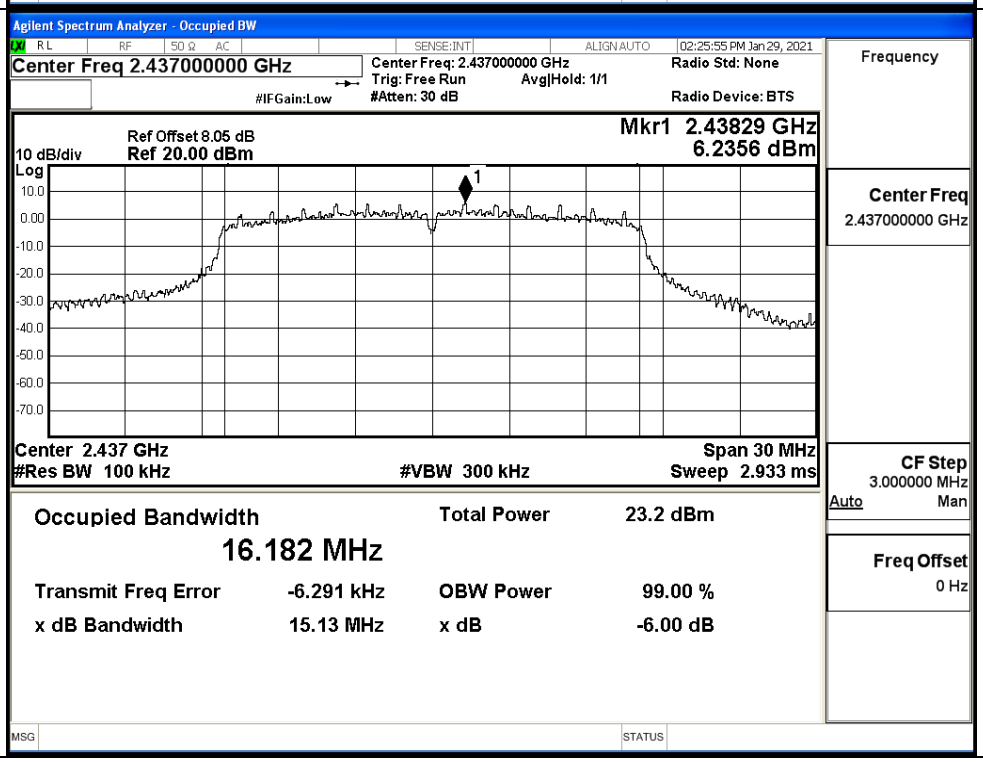
11N20SISO/MCH	
11N20SISO/HCH	

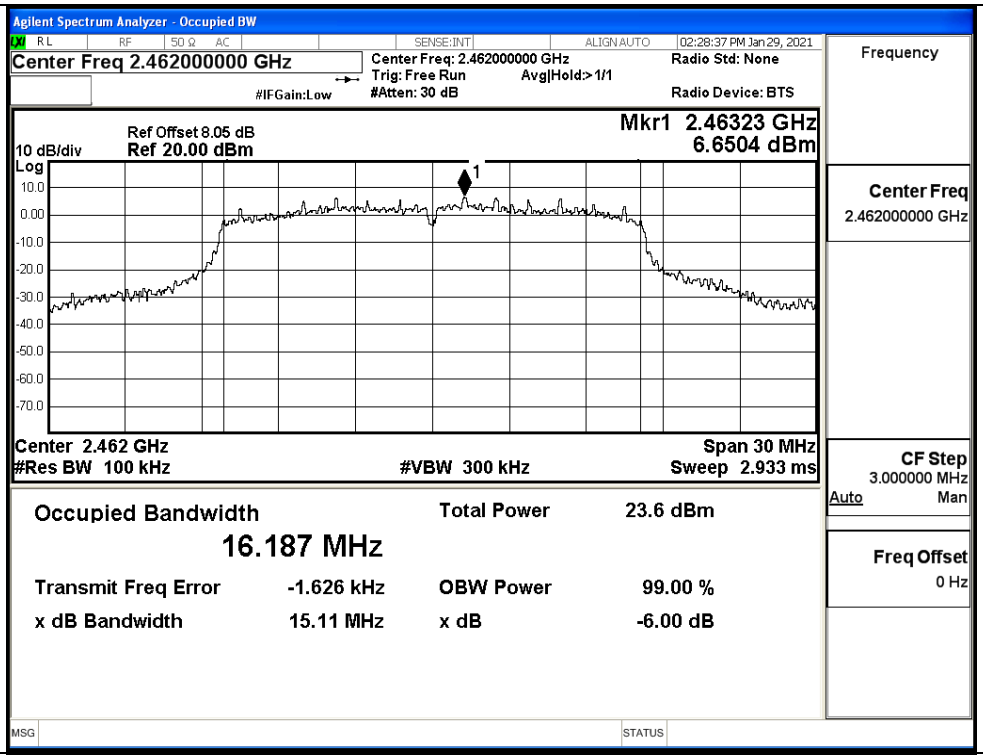
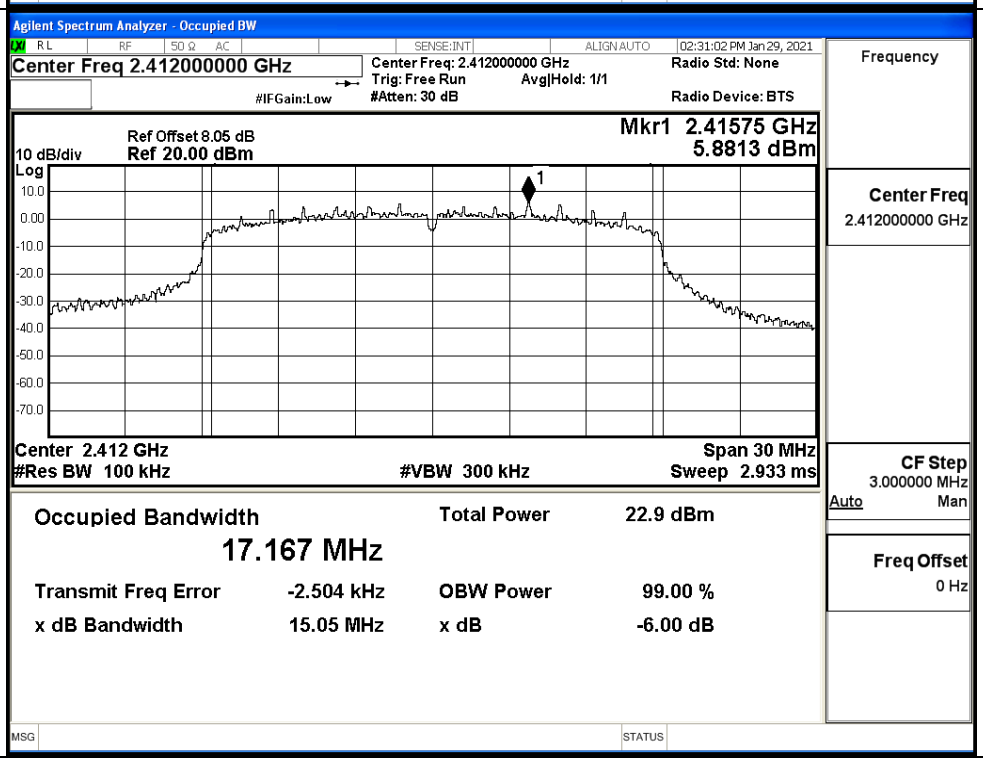
11N40SISO/LCH	
11N40SISO/MCH	

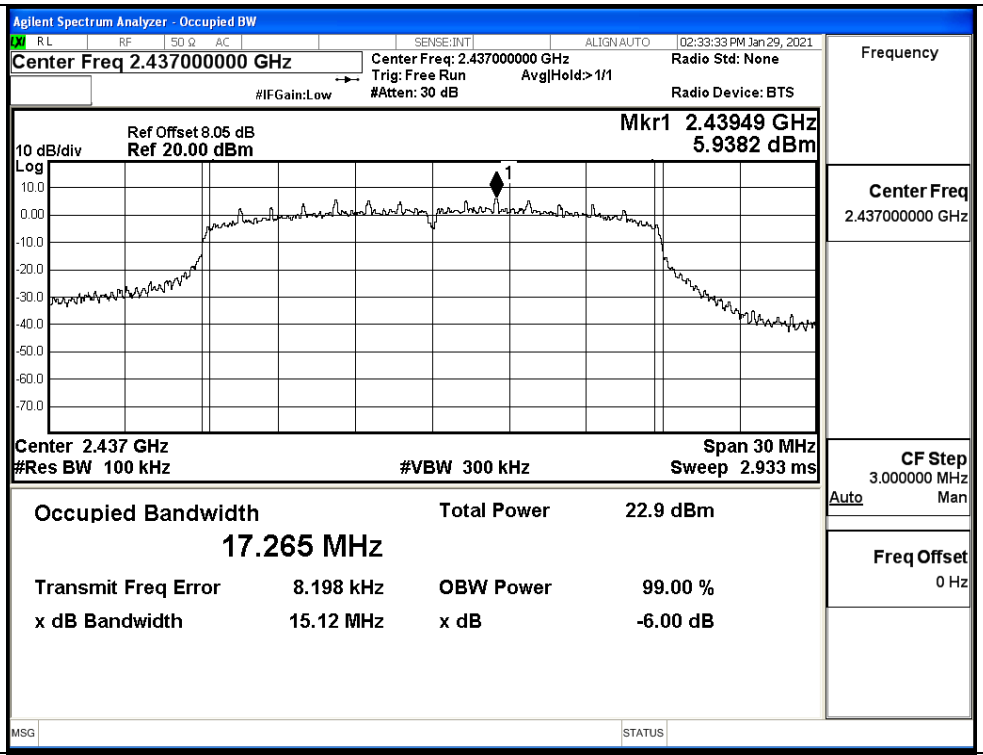
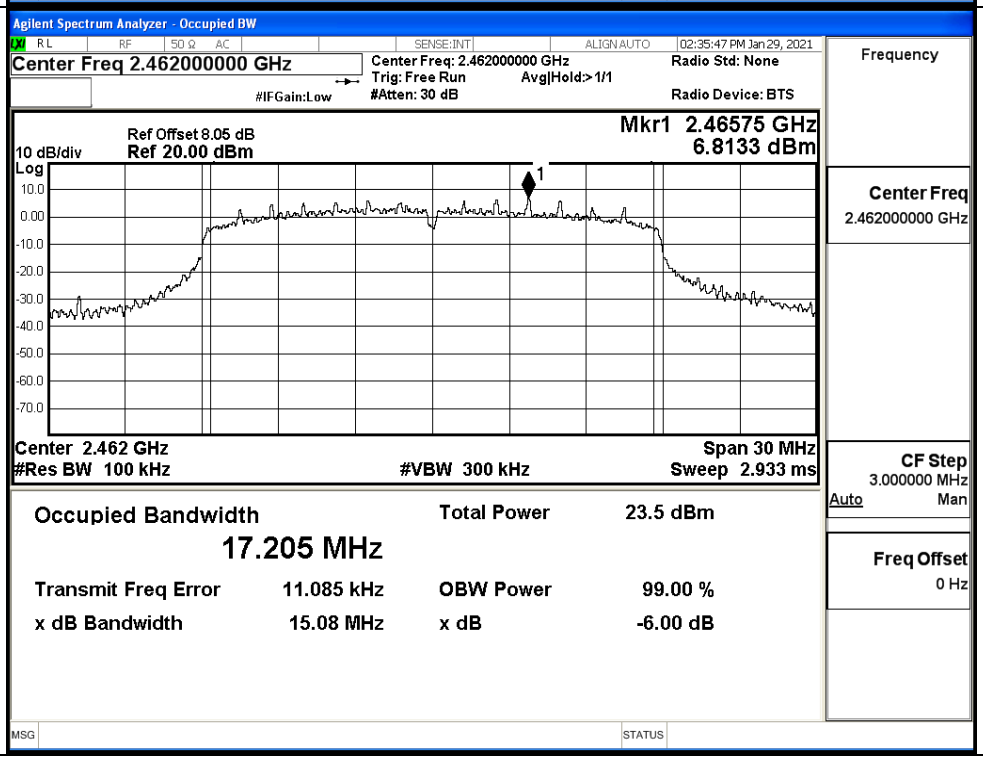
11N40SISO/HCH	

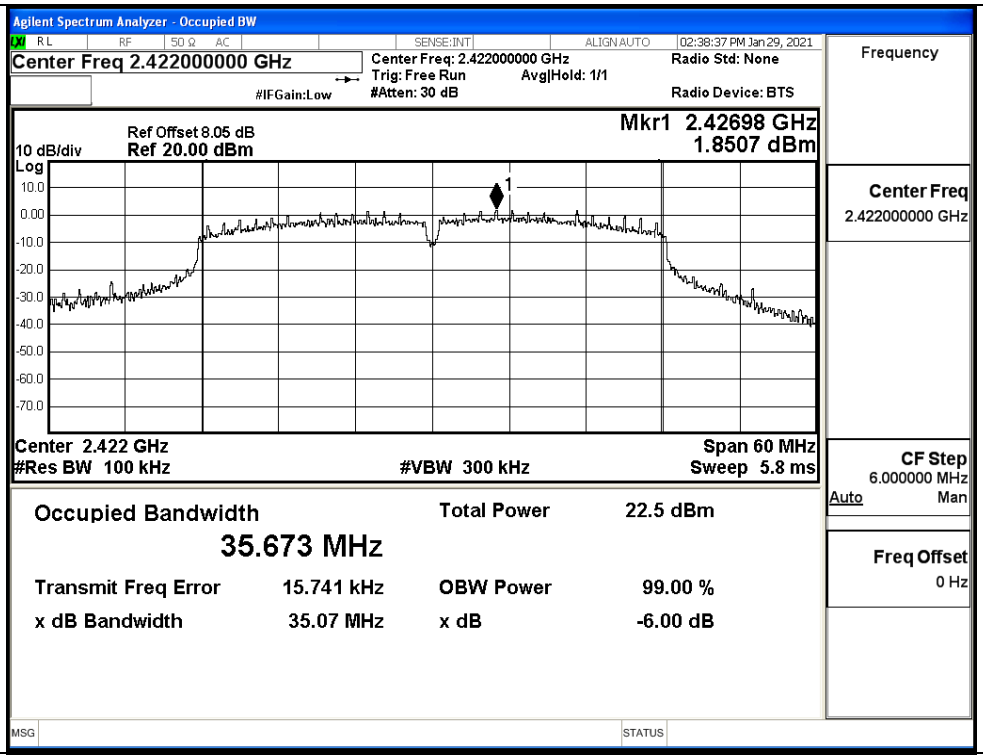
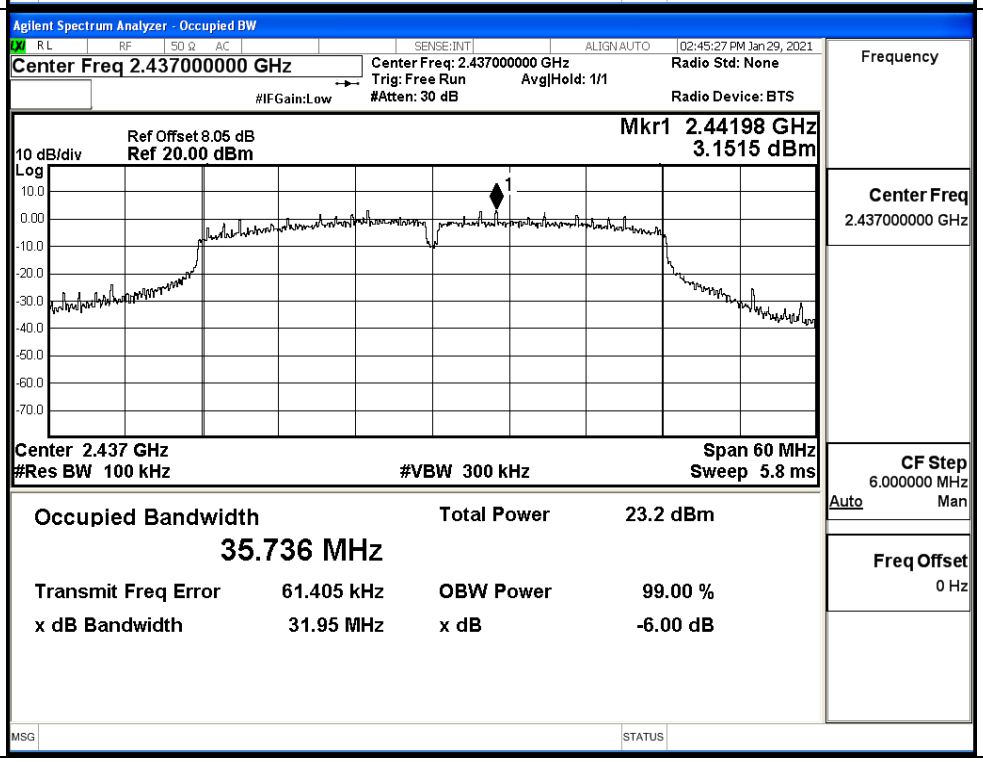
Test Graphs_Ant2	
11B/LCH	

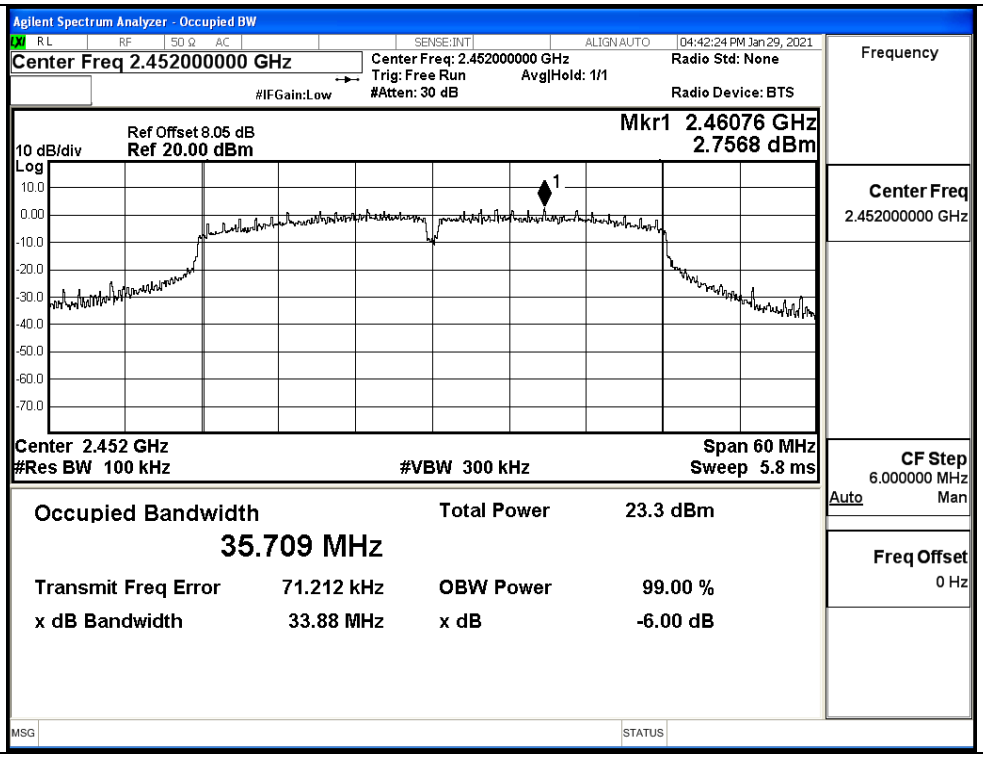
11B/MCH	
11B/HCH	

11G/LCH		
11G/MCH		

11G/HCH	
11N20SISO/LCH	

11N20SISO/MCH	
11N20SISO/HCH	

11N40SISO/LCH	
11N40SISO/MCH	

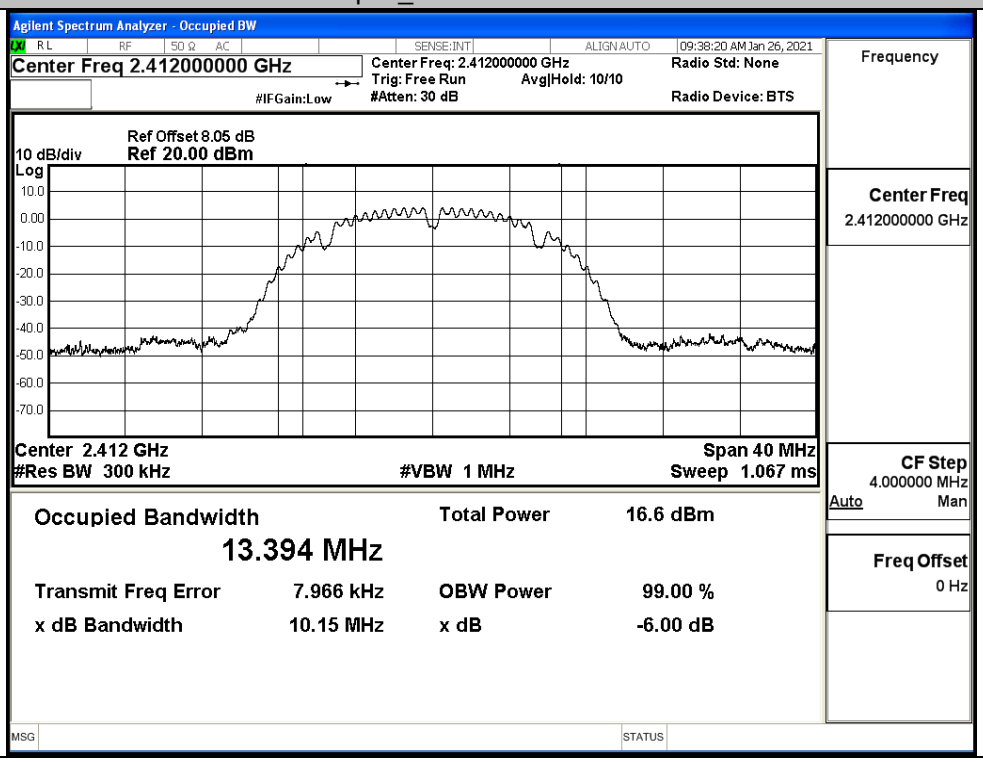
11N40SISO/HCH	

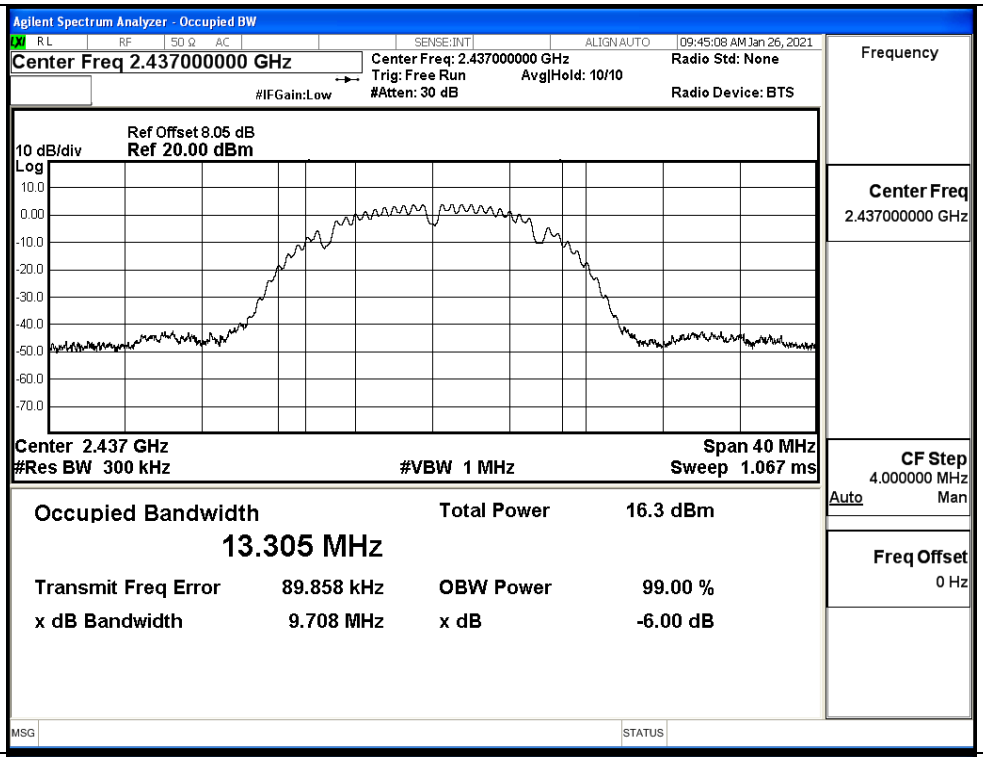
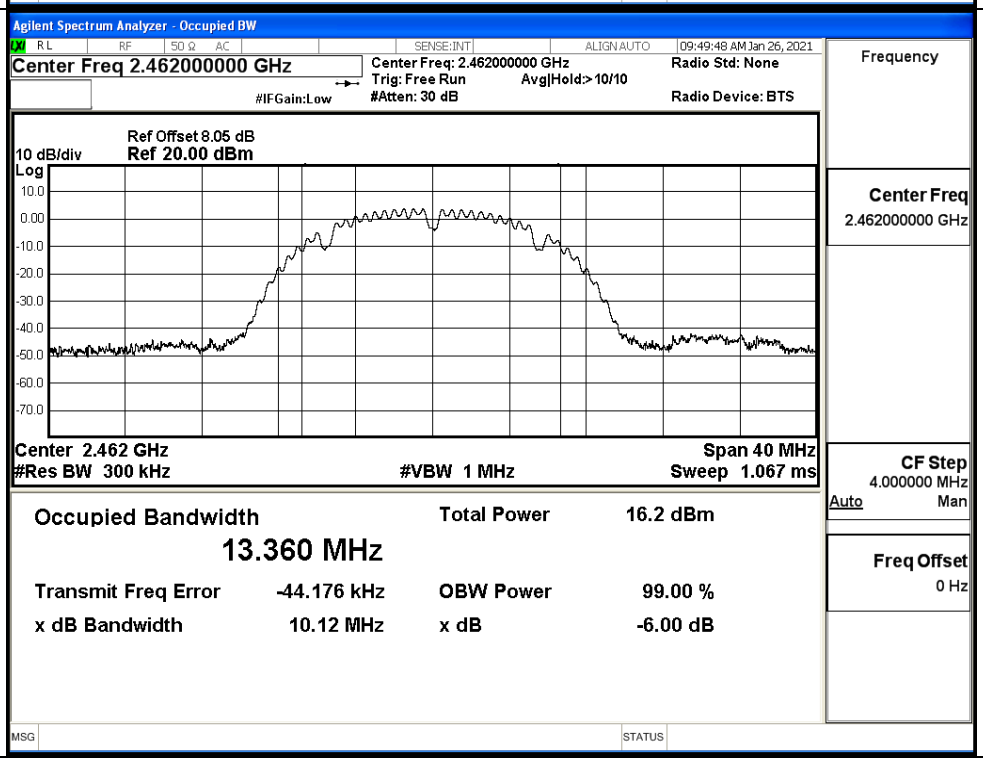
A.5 Occupied Bandwidth

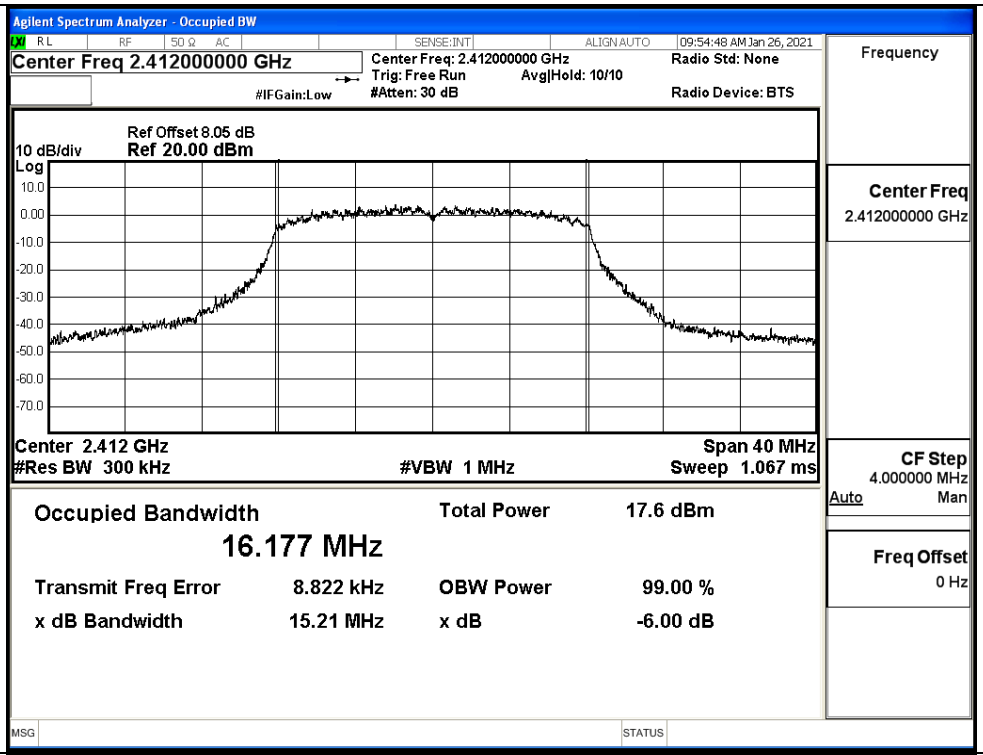
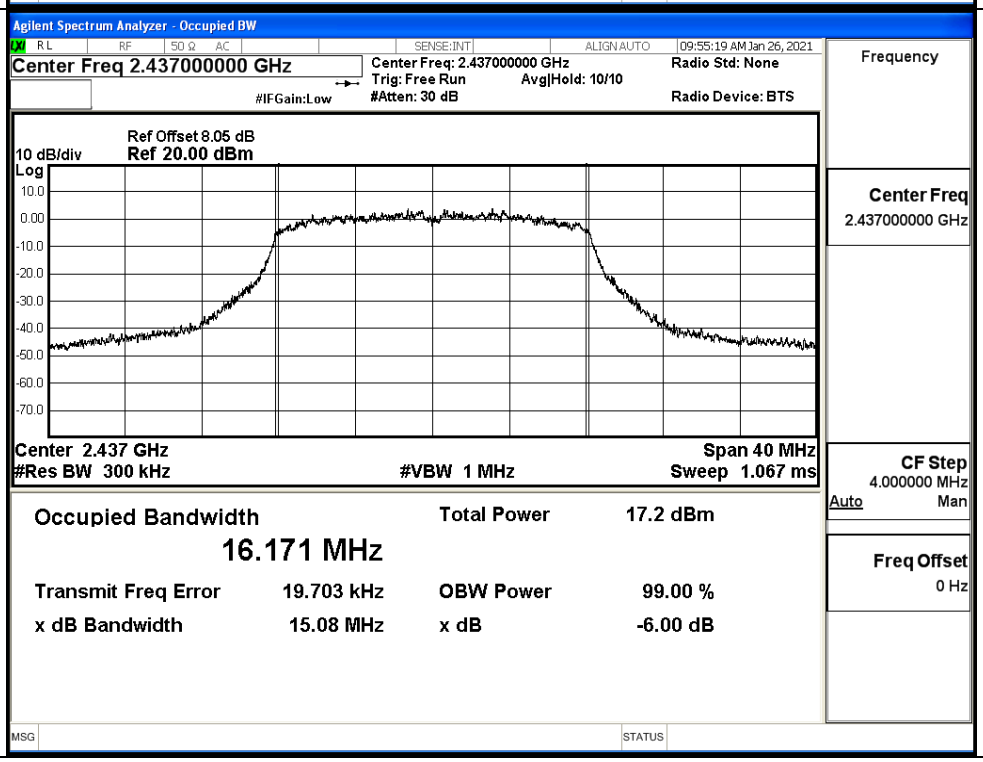
Mode	Channel	Occupied Bandwidth [MHz]		Limit [MHz]	Verdict
		Ant_1	Ant_2		
11B	LCH	13.394	13.797	≥0.5	PASS
	MCH	13.305	13.588	≥0.5	PASS
	HCH	13.360	13.600	≥0.5	PASS
11G	LCH	16.177	16.220	≥0.5	PASS
	MCH	16.171	16.208	≥0.5	PASS
	HCH	16.172	16.227	≥0.5	PASS
11N20SISO	LCH	17.211	17.296	≥0.5	PASS
	MCH	17.264	17.304	≥0.5	PASS
	HCH	17.234	17.233	≥0.5	PASS
11N40SISO	LCH	35.718	35.891	≥0.5	PASS
	MCH	35.783	35.844	≥0.5	PASS
	HCH	35.820	35.834	≥0.5	PASS

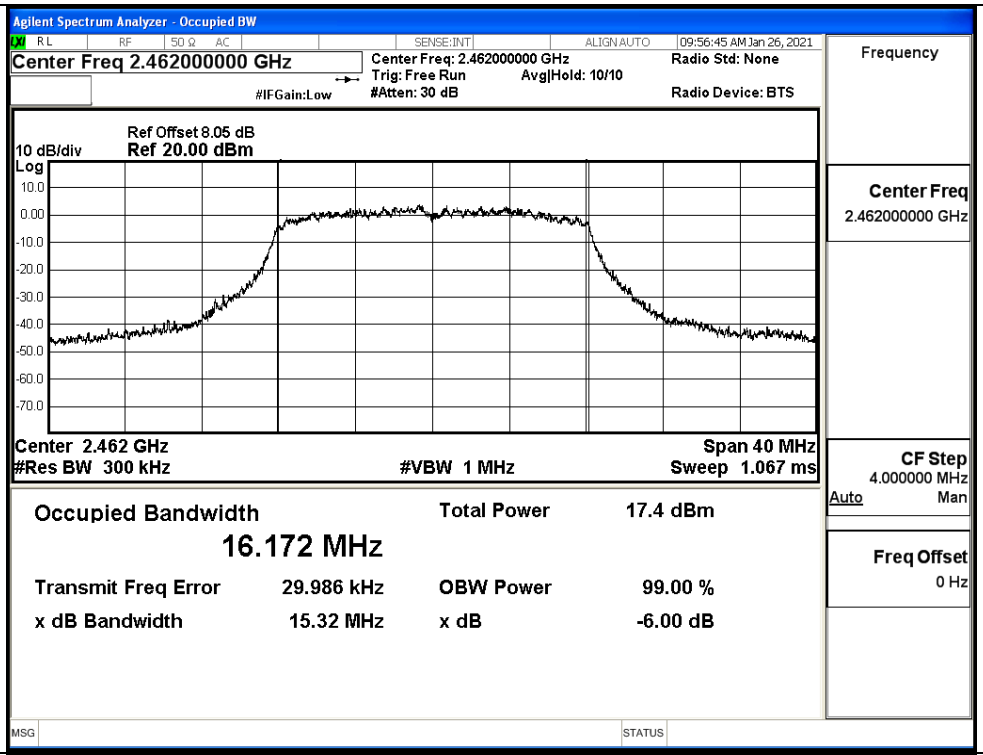
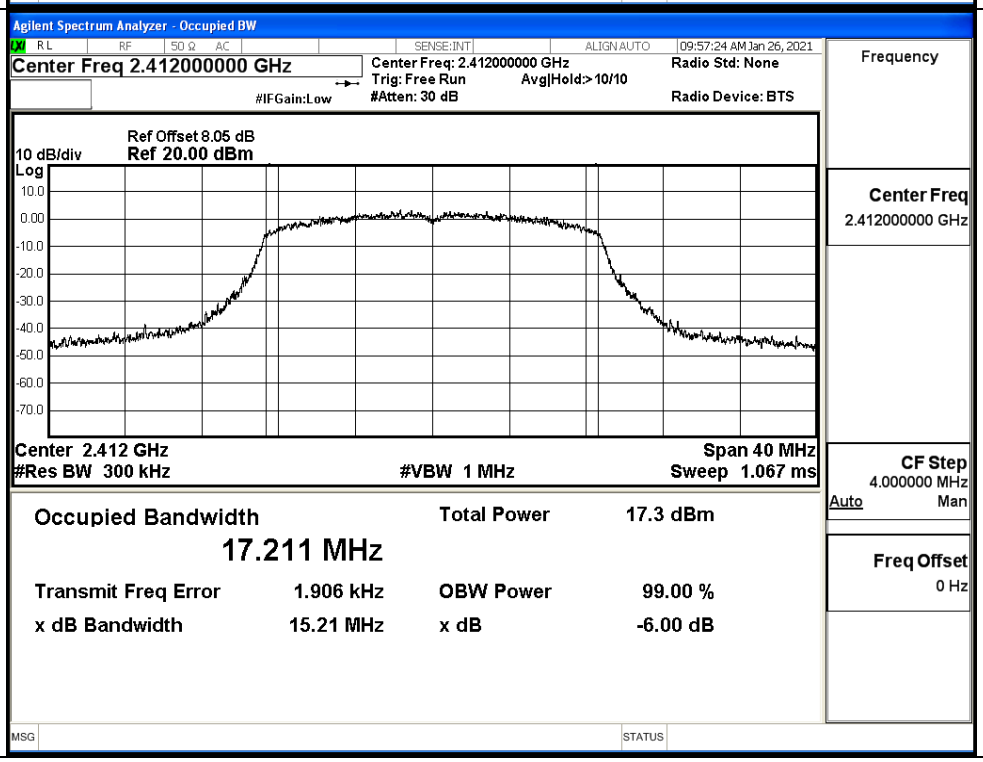
Test Graphs_Ant1

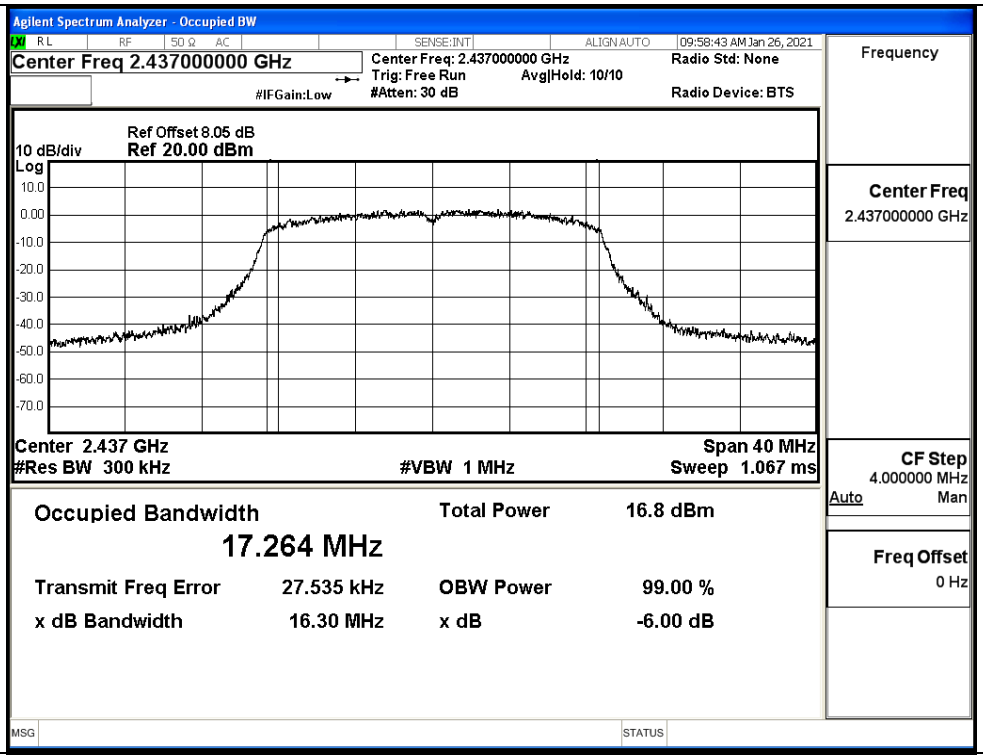
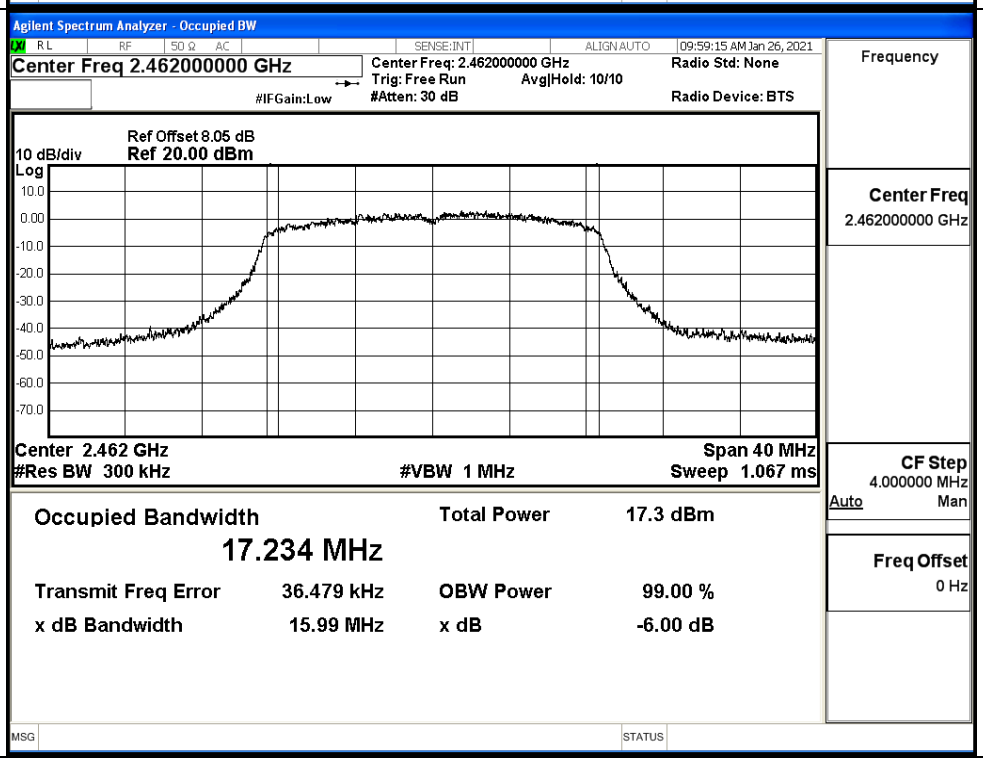
11B/LCH

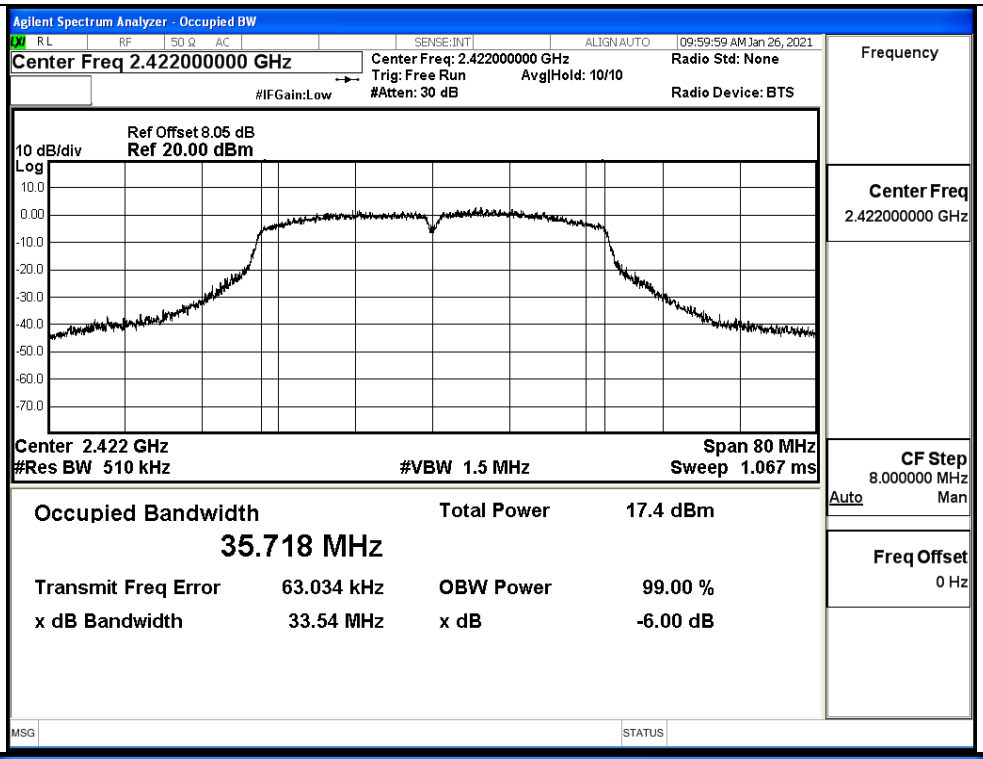
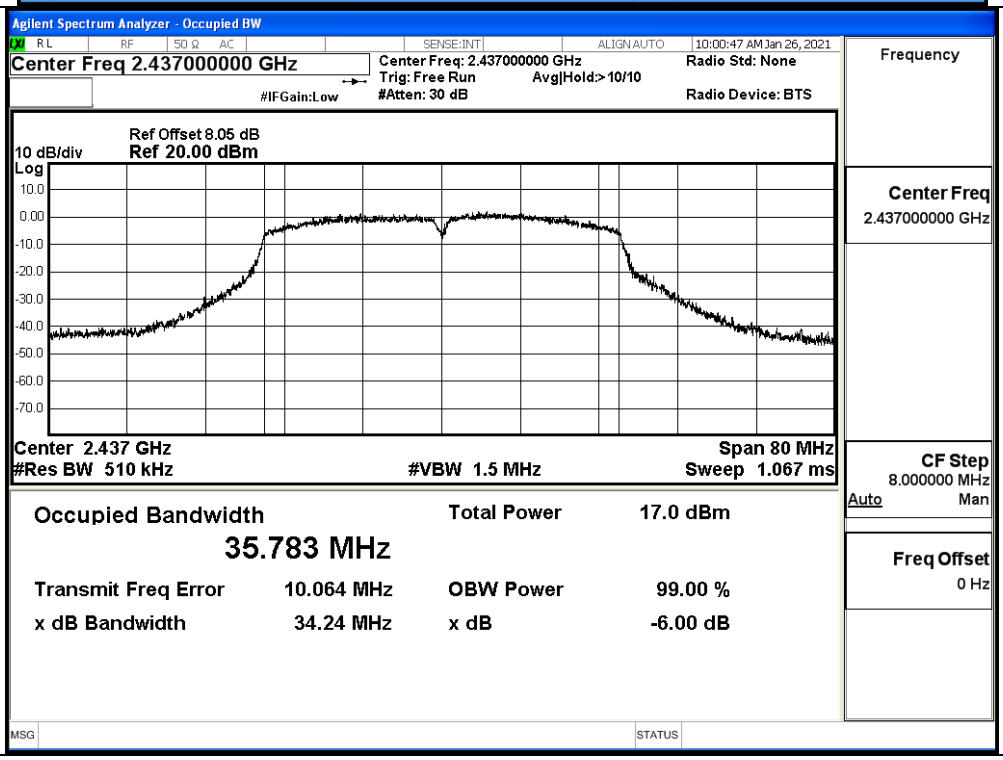


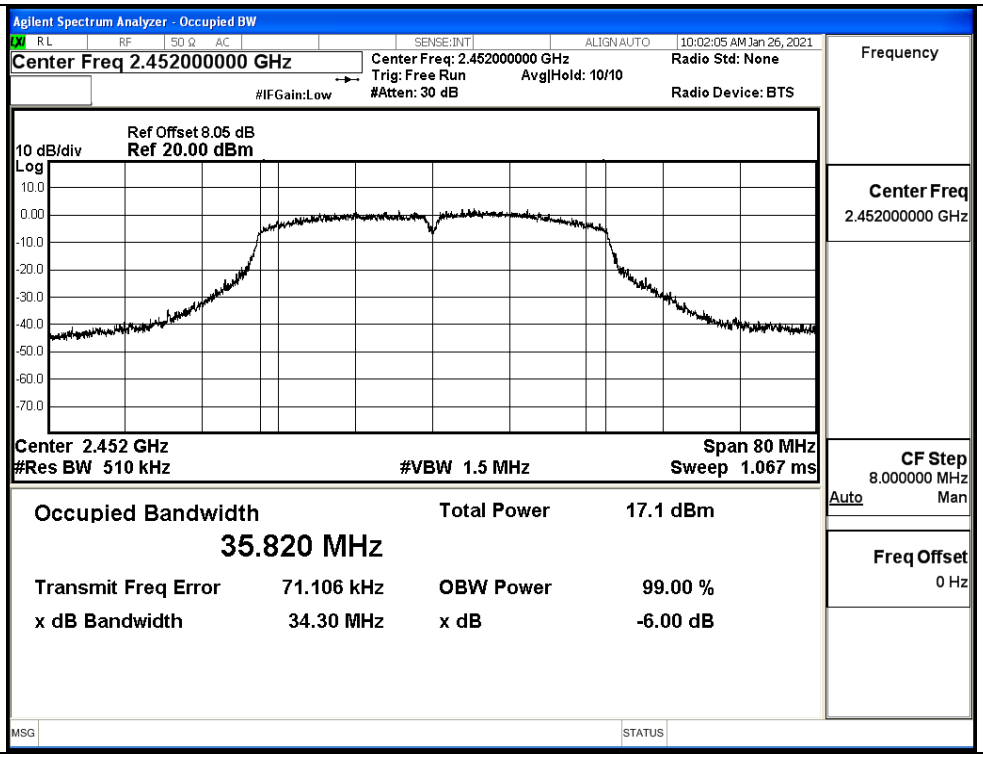
11B/MCH	
11B/HCH	

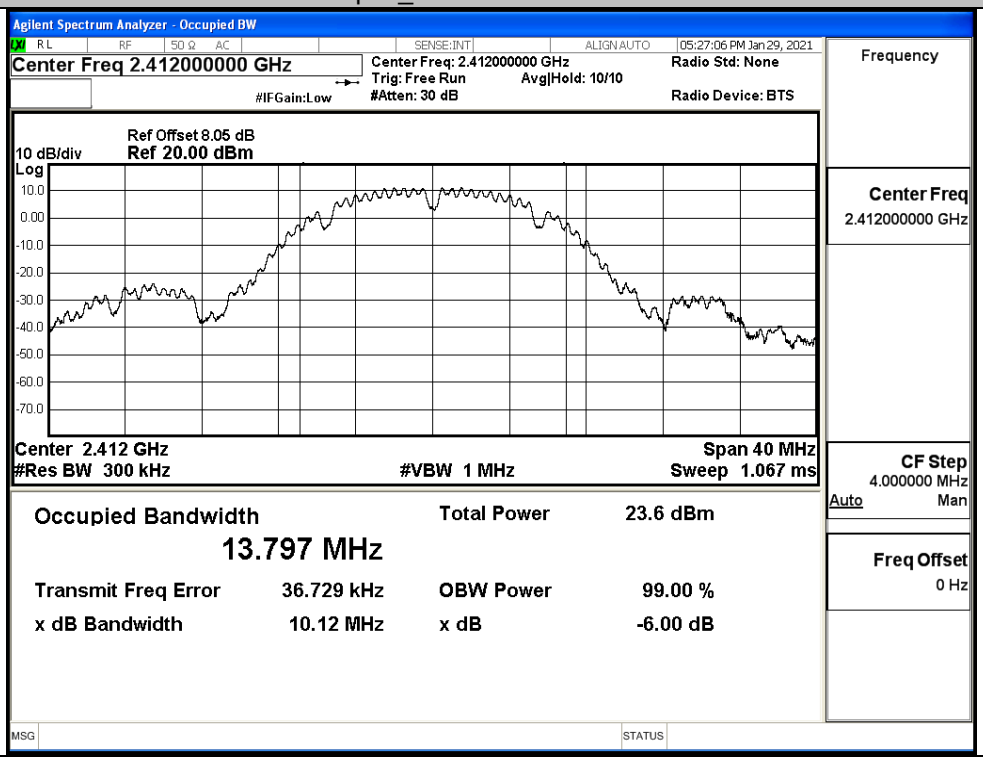
11G/LCH	
11G/MCH	

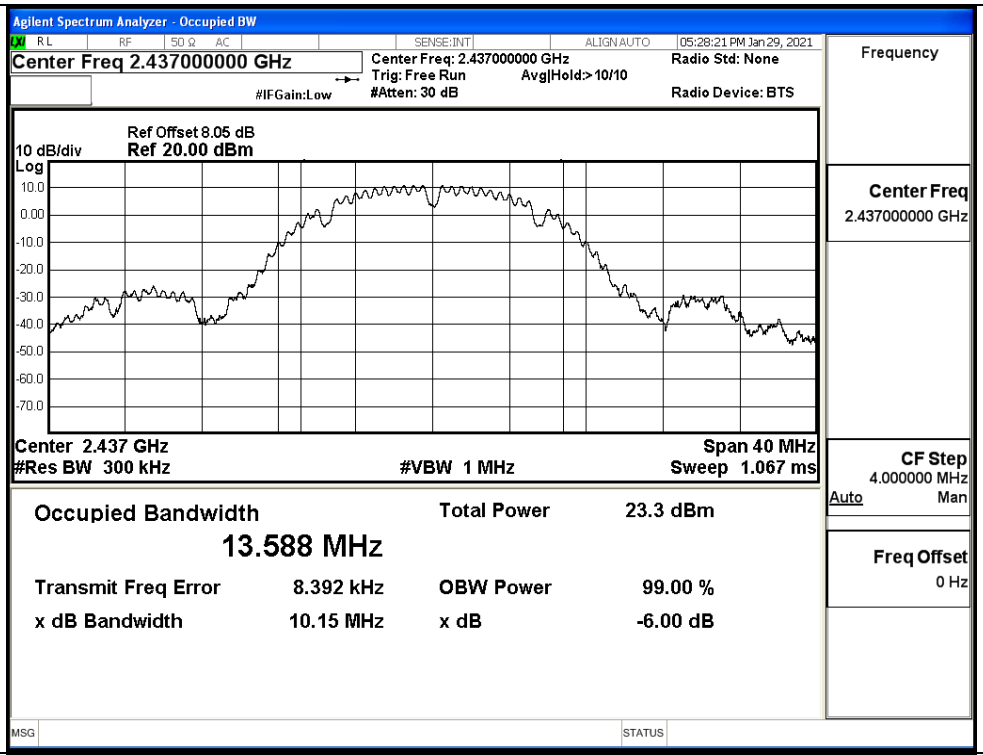
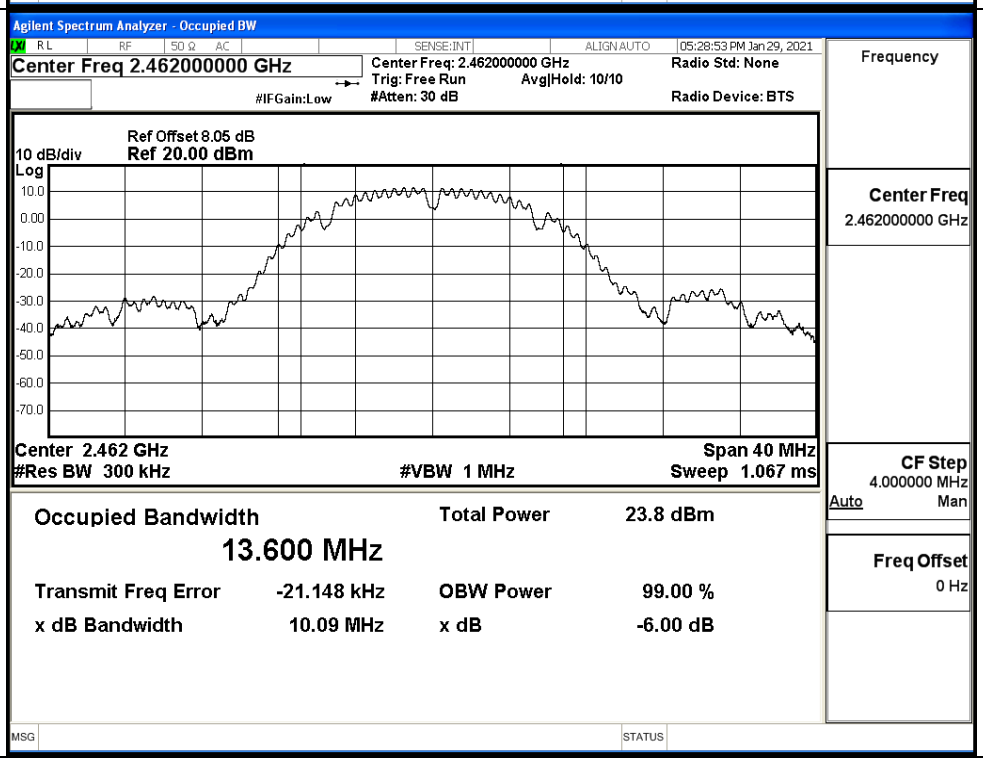
11G/HCH	
11N20SISO/LCH	

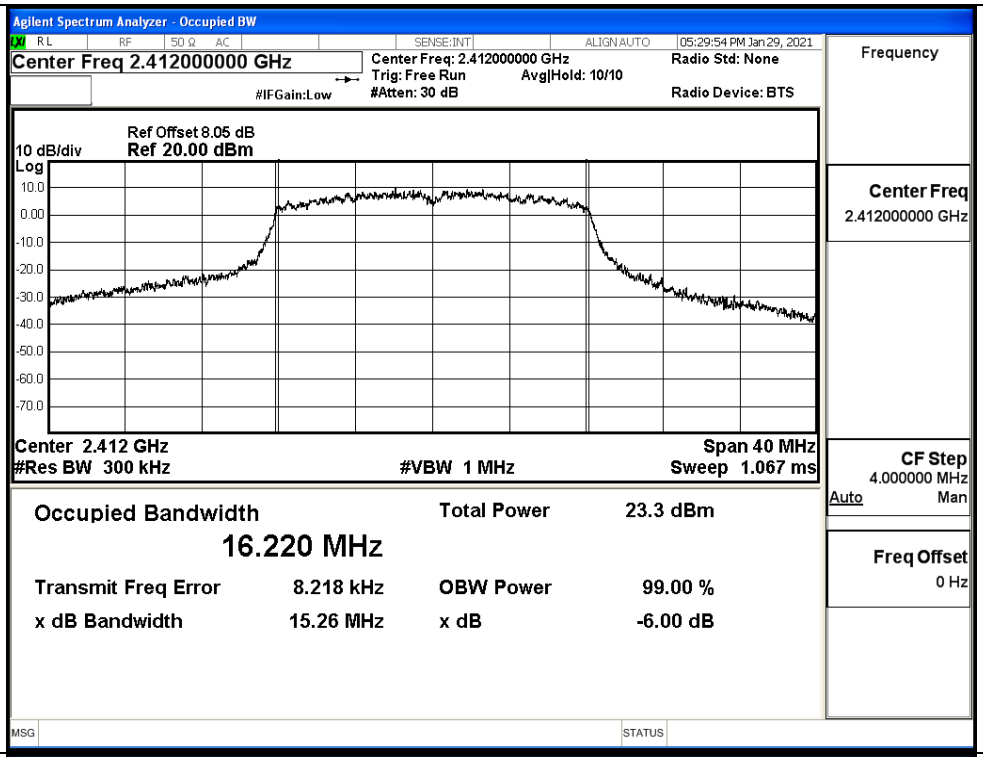
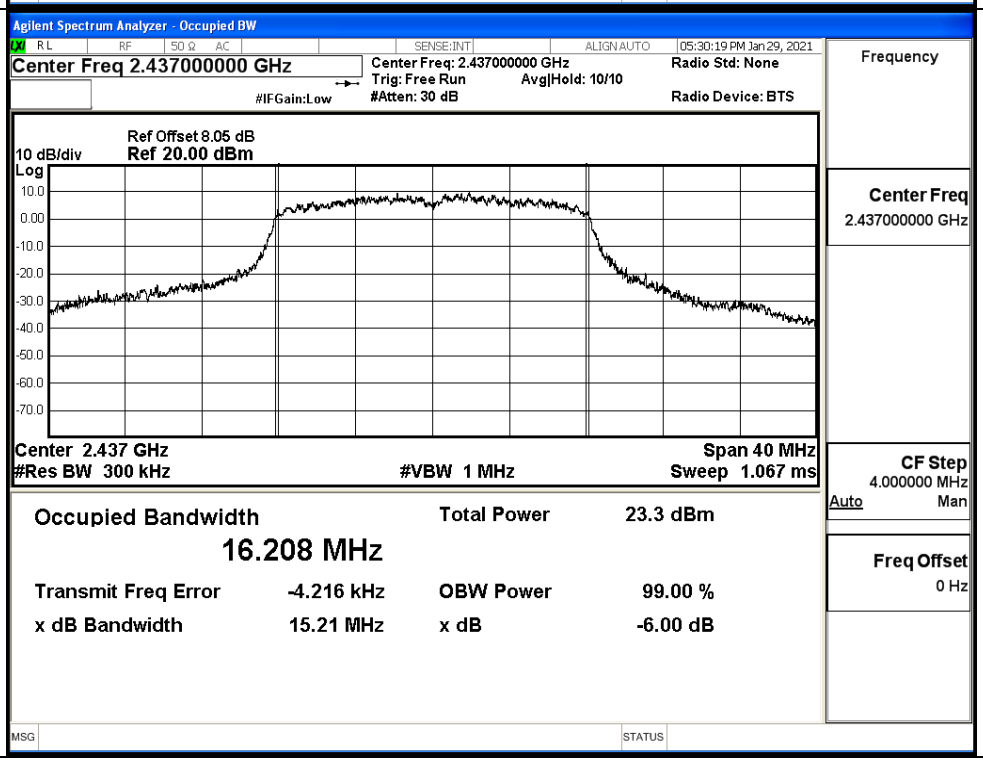
11N20SISO/MCH	
11N20SISO/HCH	

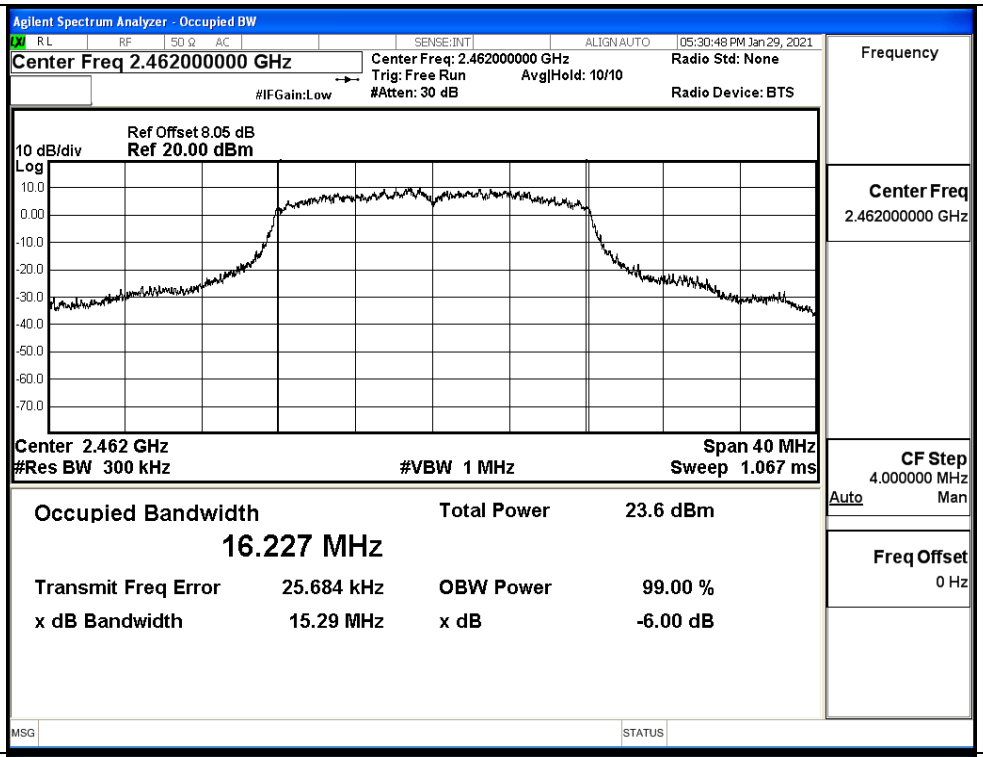
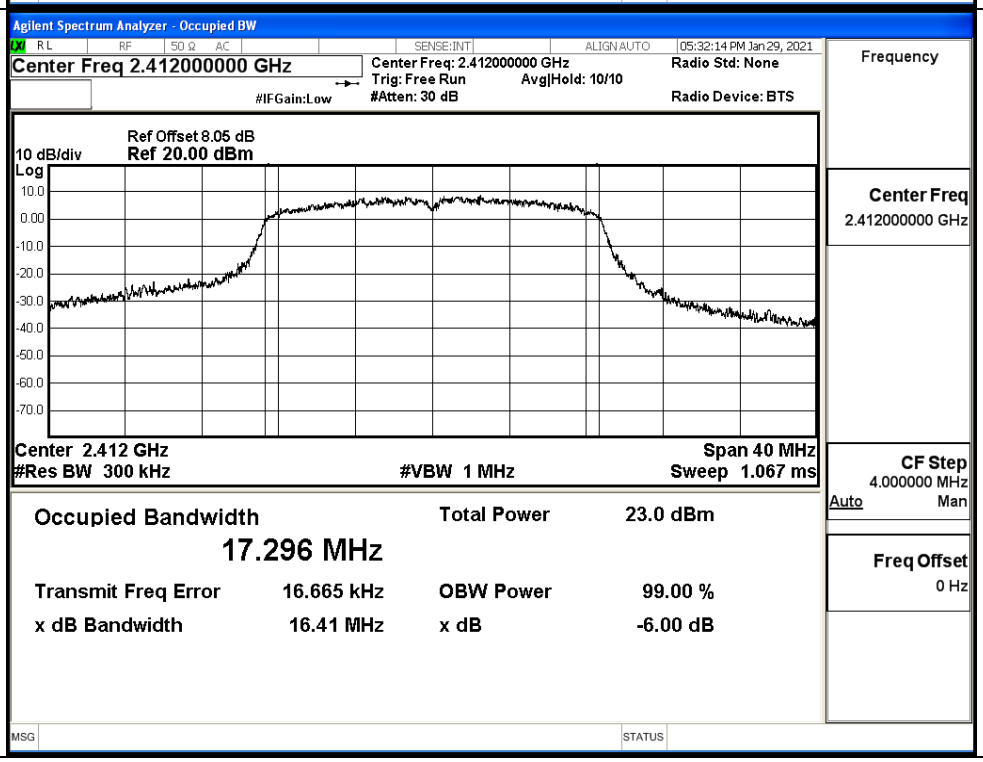
11N40SISO/LCH	
11N40SISO/MCH	

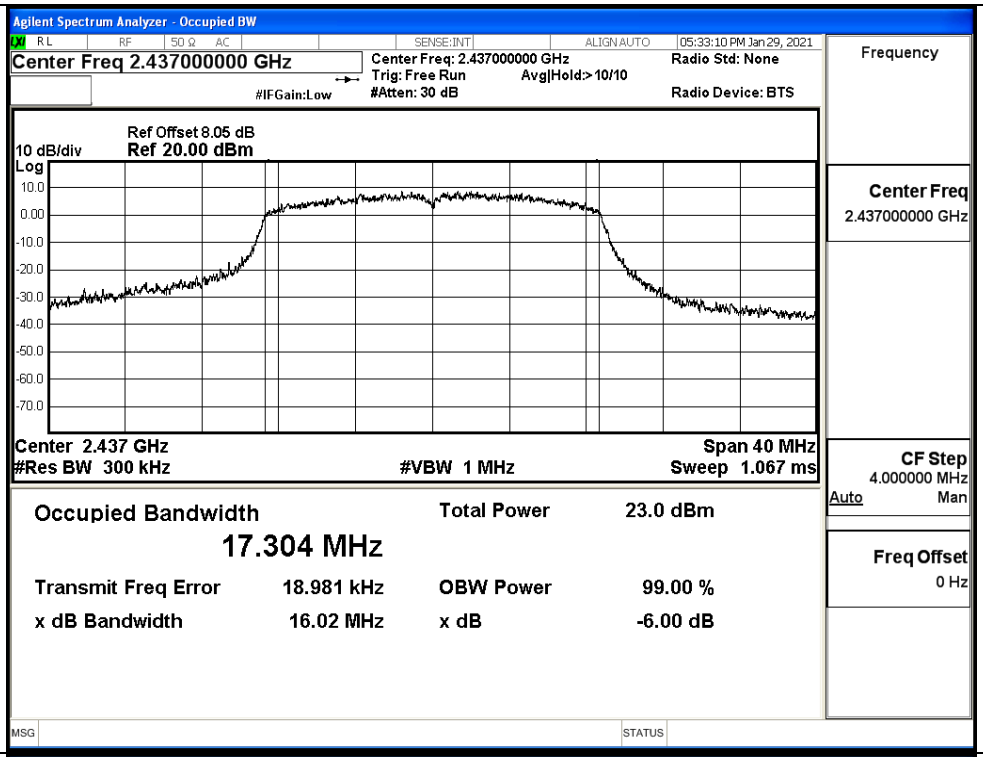
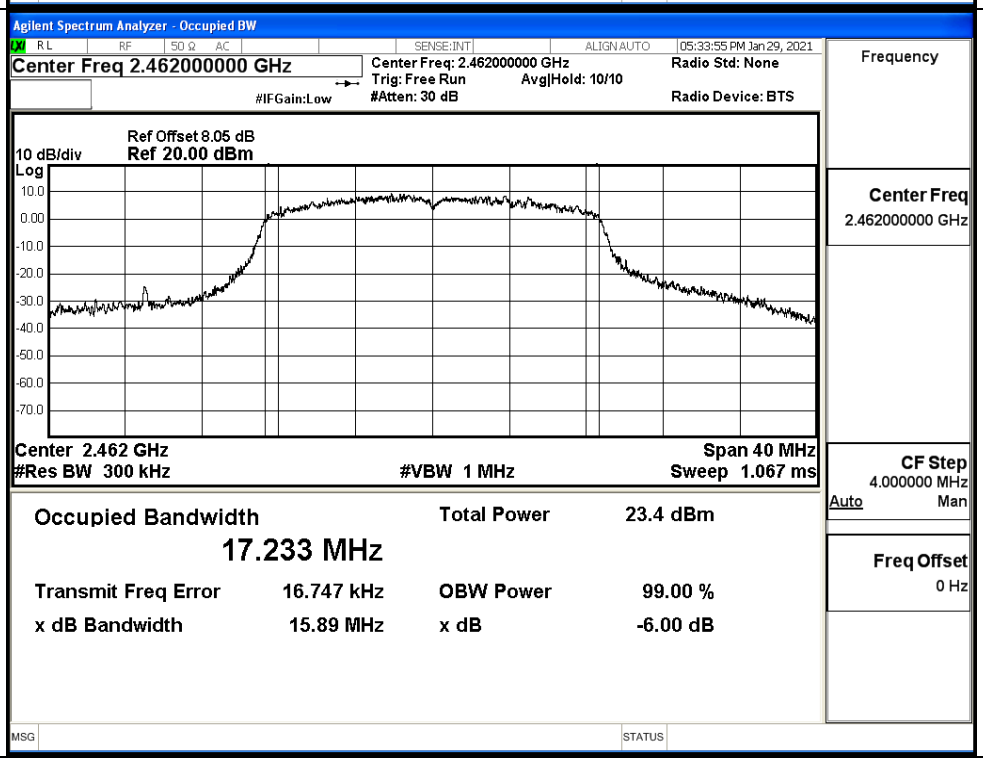
11N40SISO/HCH	

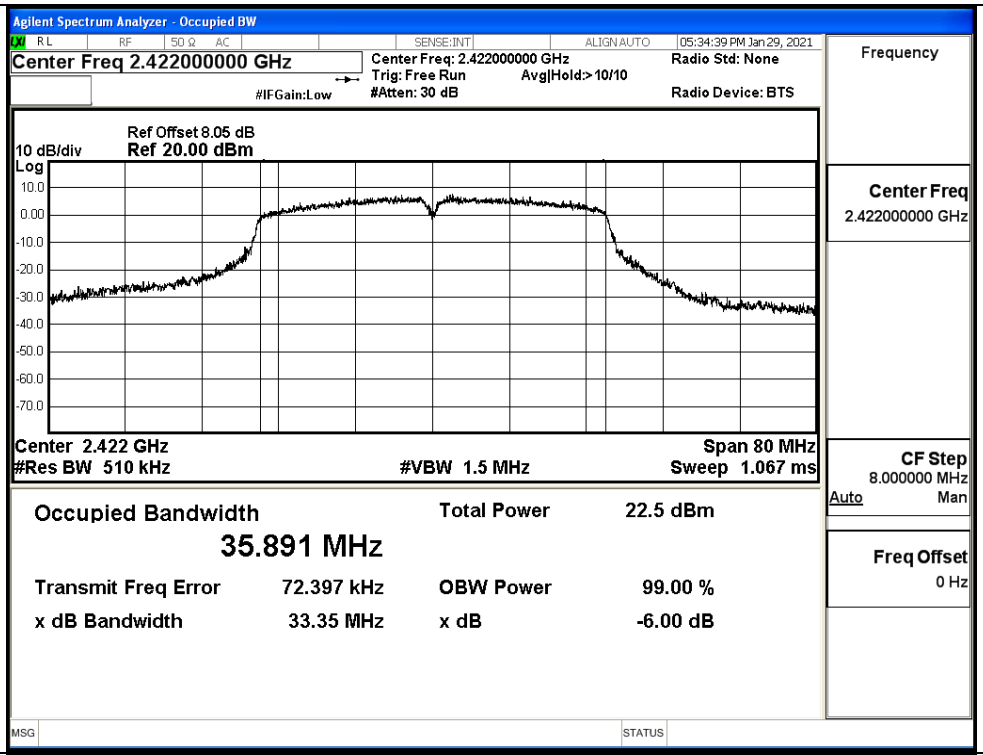
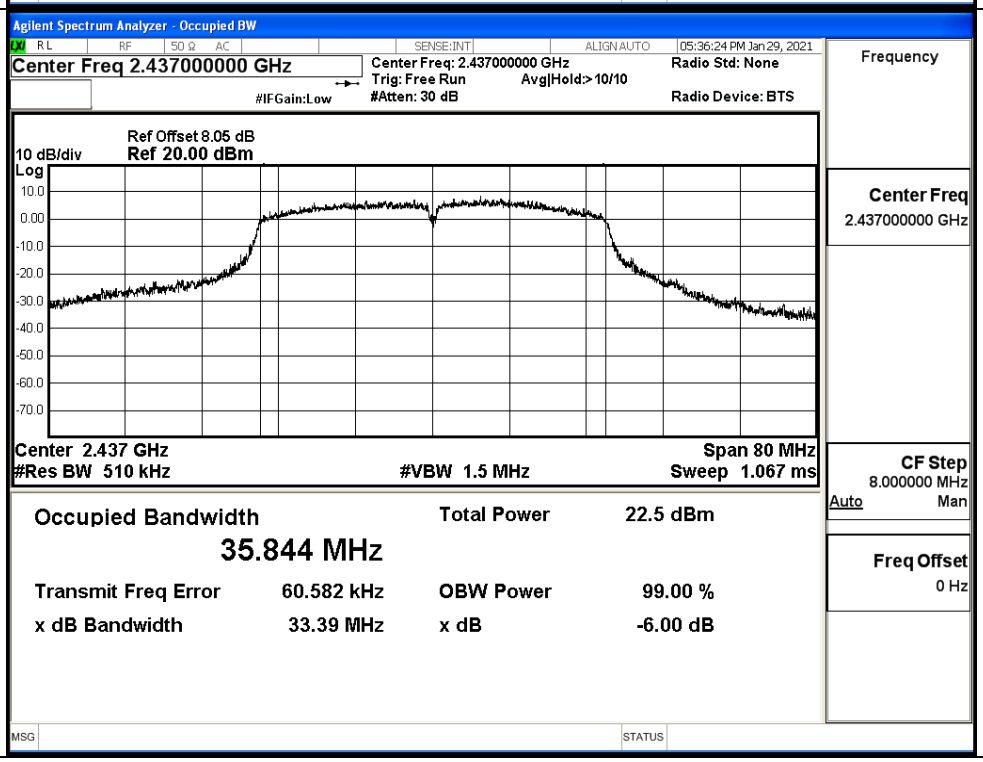
Test Graphs_Ant2	
11B/LCH	

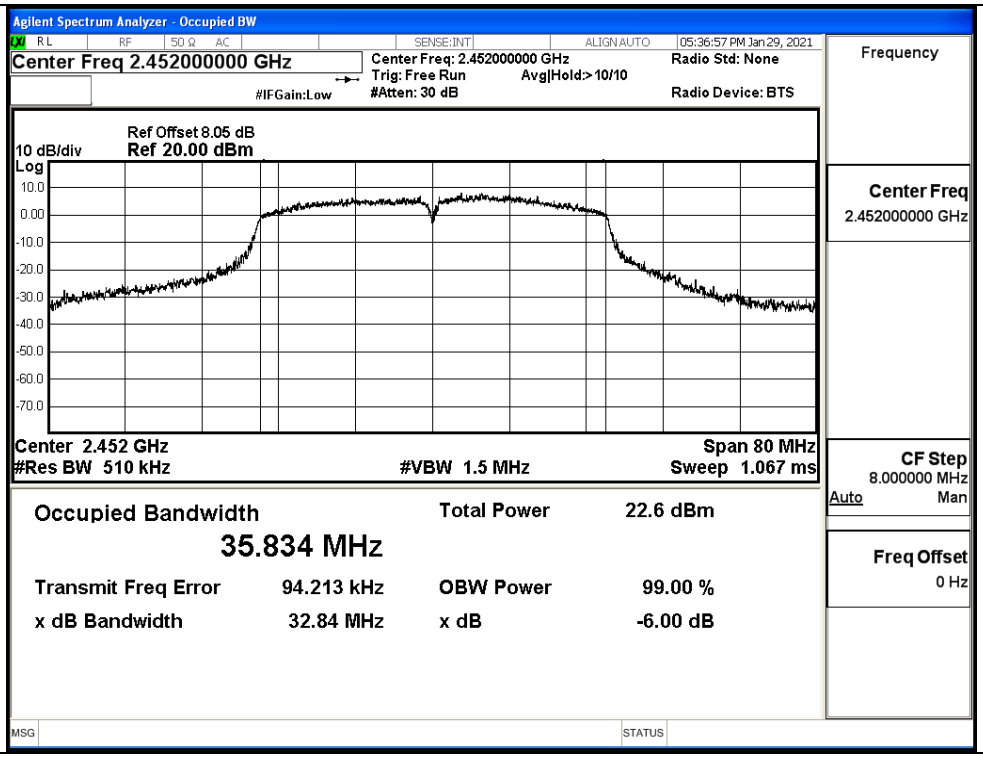
11B/MCH		
11B/HCH		

11G/LCH	
11G/MCH	

11G/HCH	
11N20SISO/LCH	

11N20SISO/MCH	
11N20SISO/HCH	

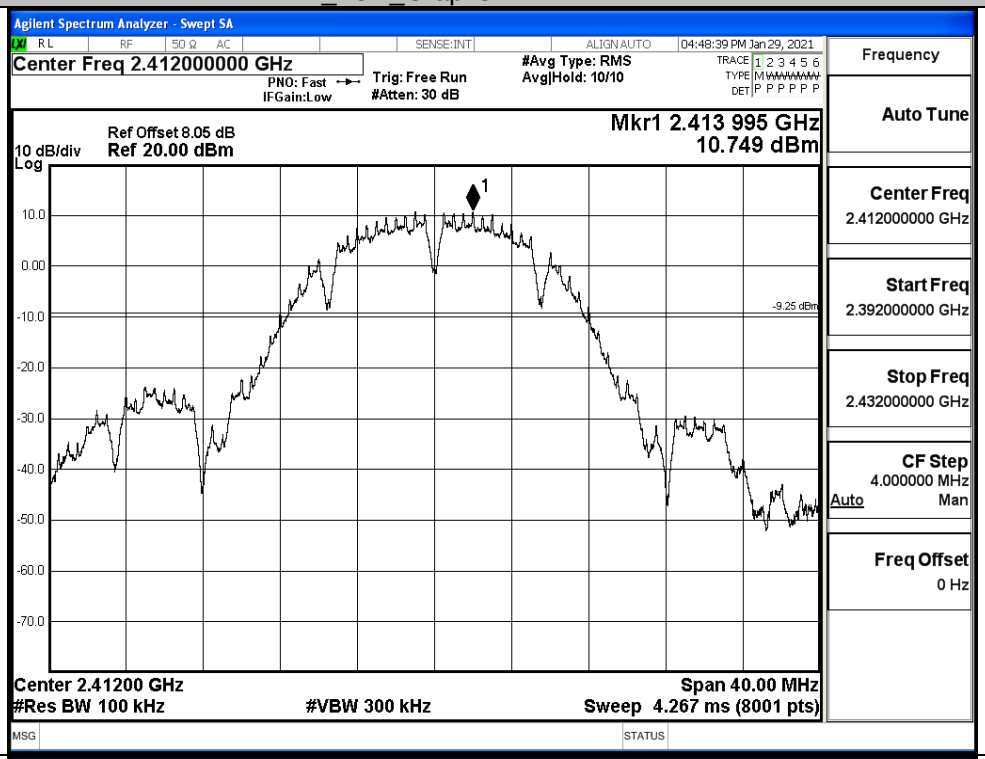
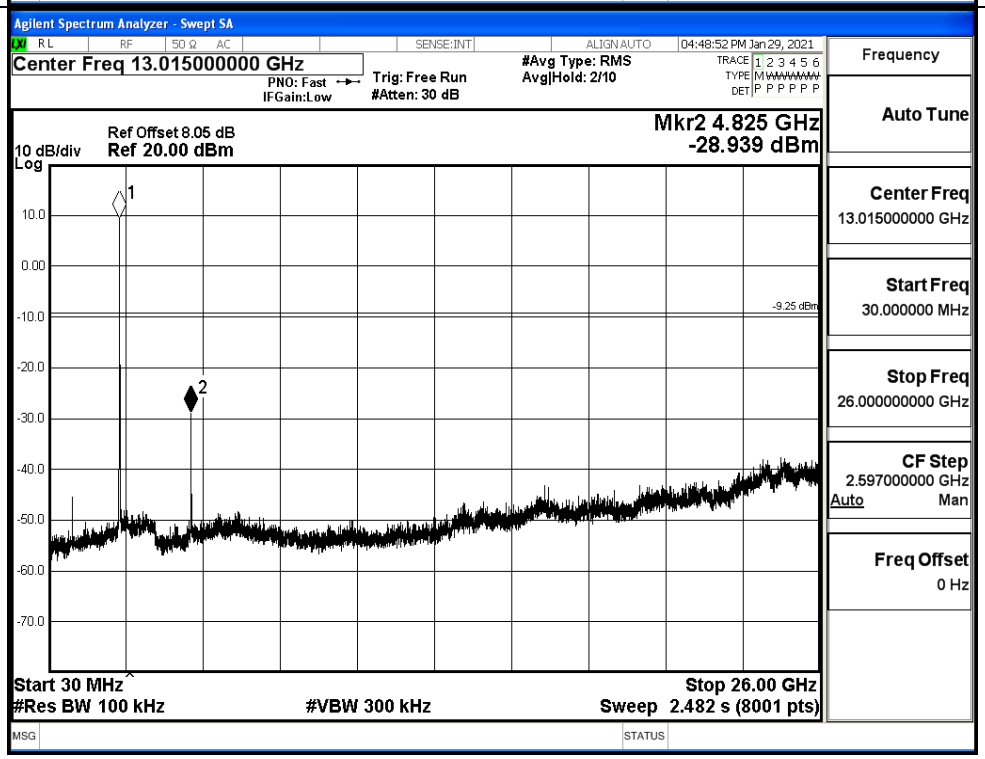
11N40SISO/LCH	
11N40SISO/MCH	

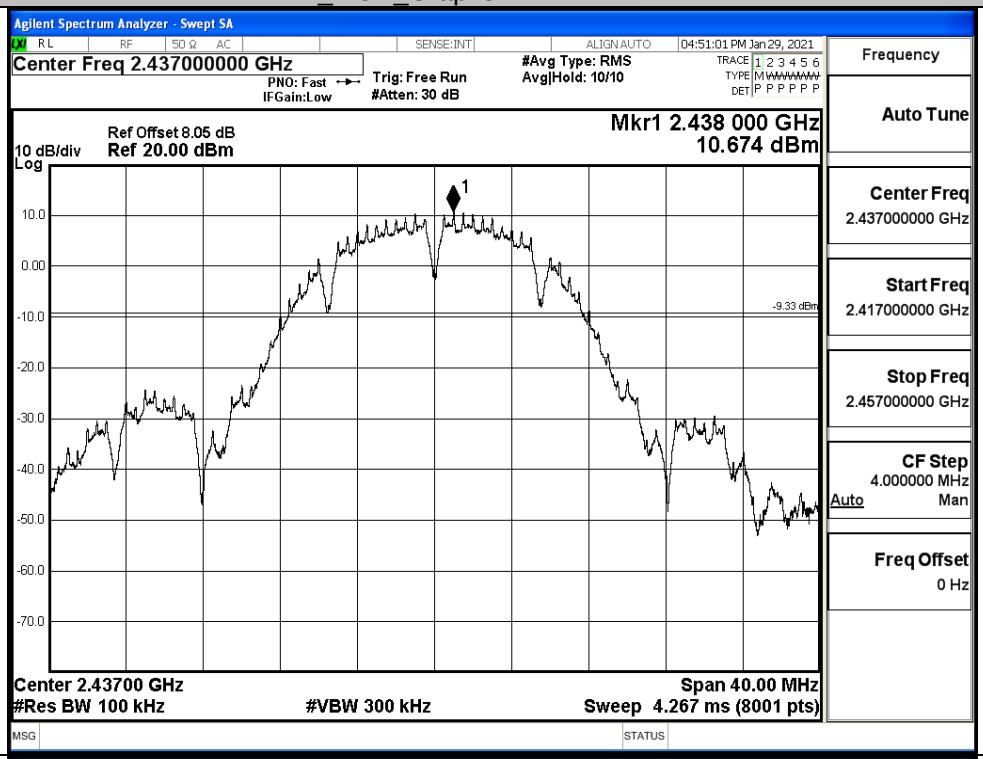
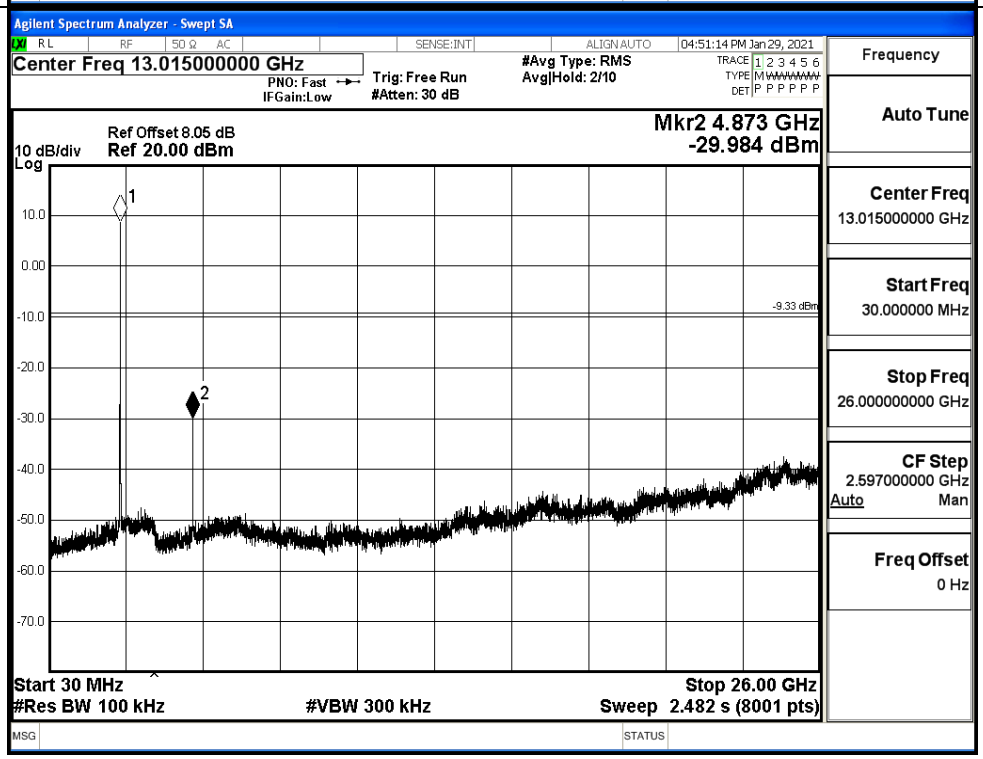
11N40SISO/HCH	

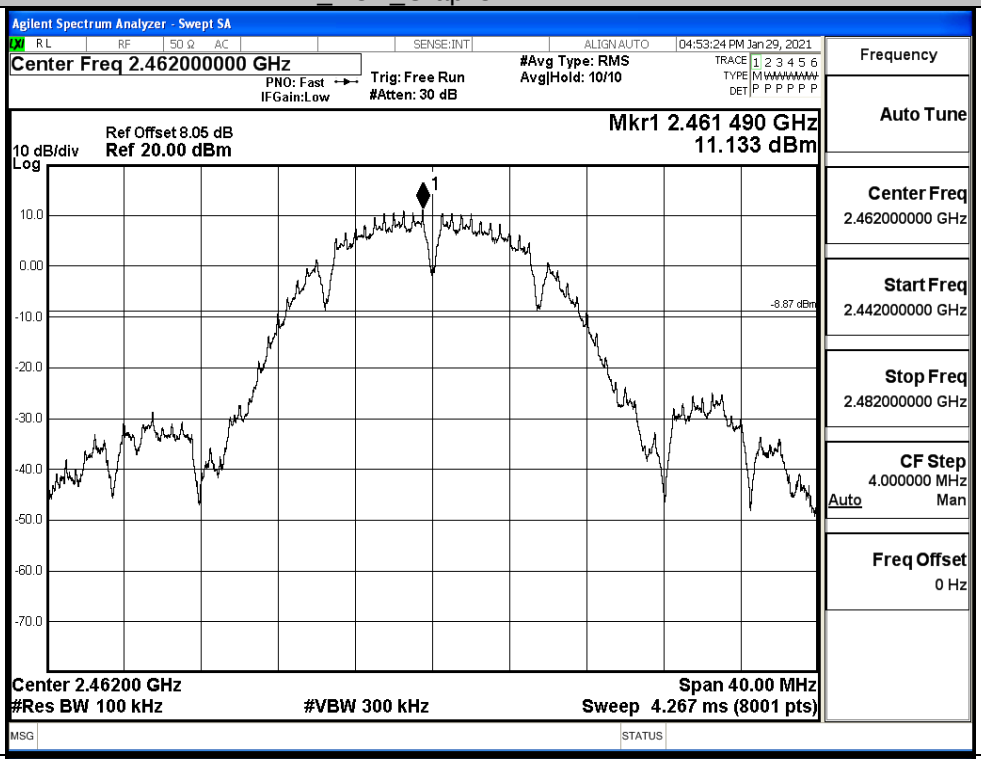
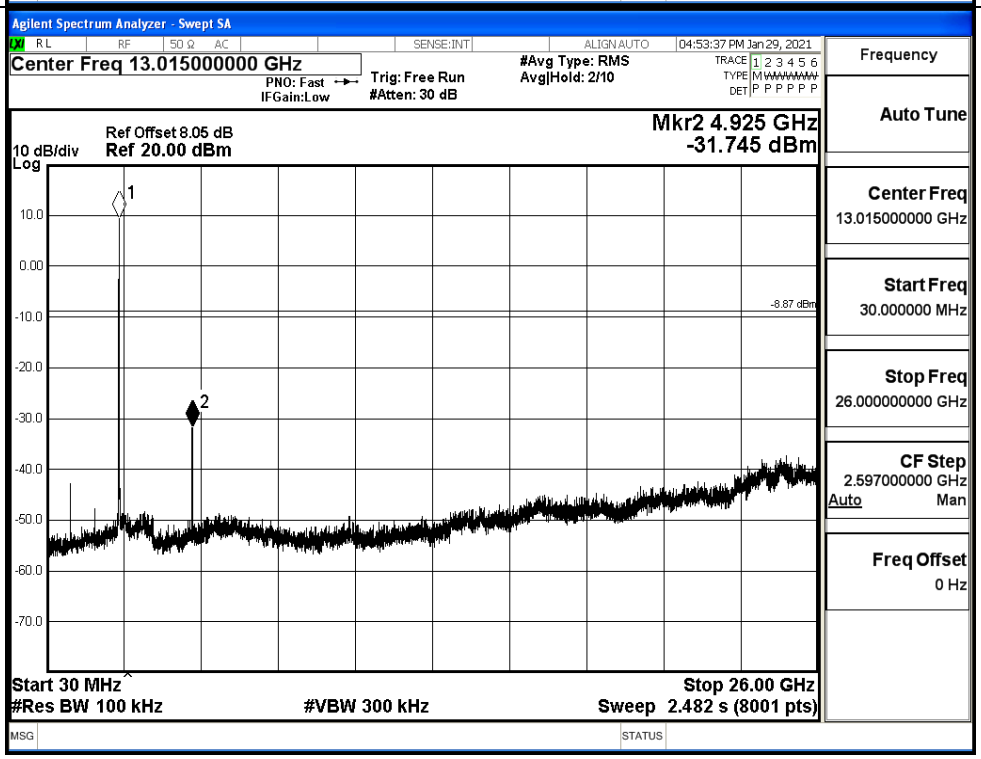
A.6 RF Conducted Spurious Emissions

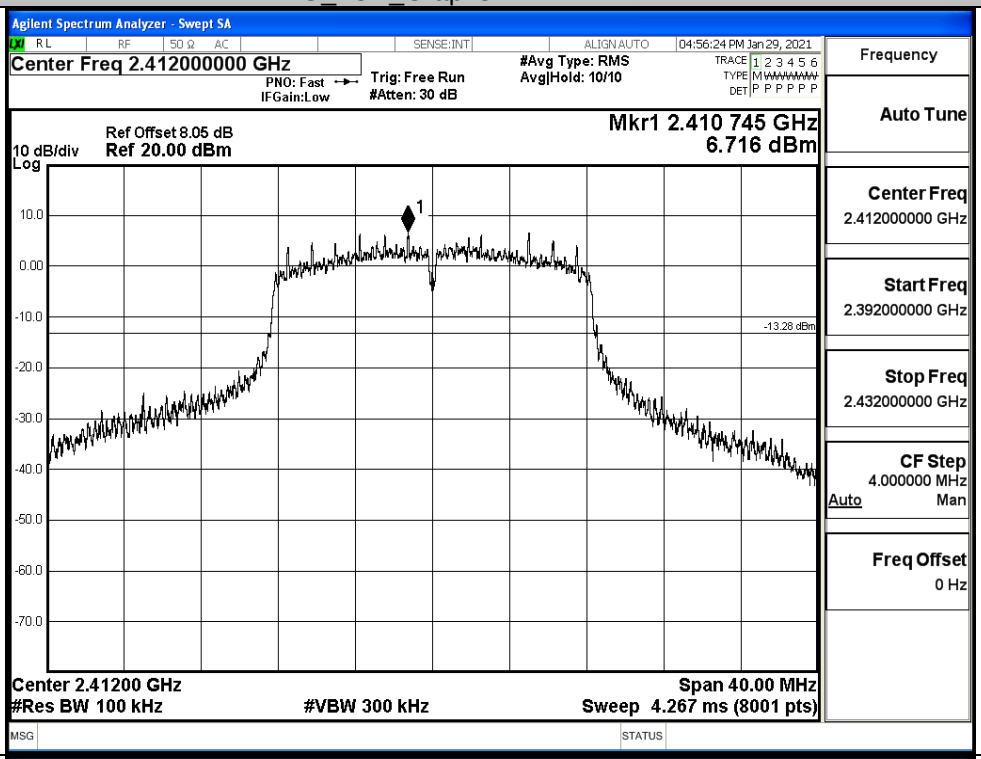
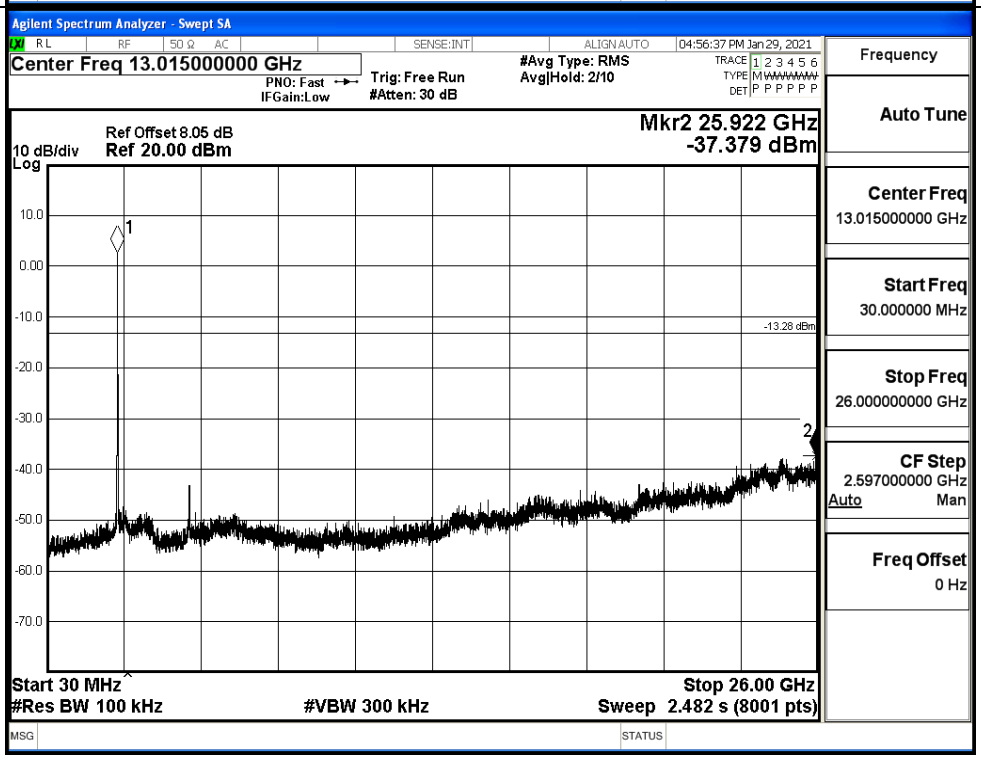
Ant1

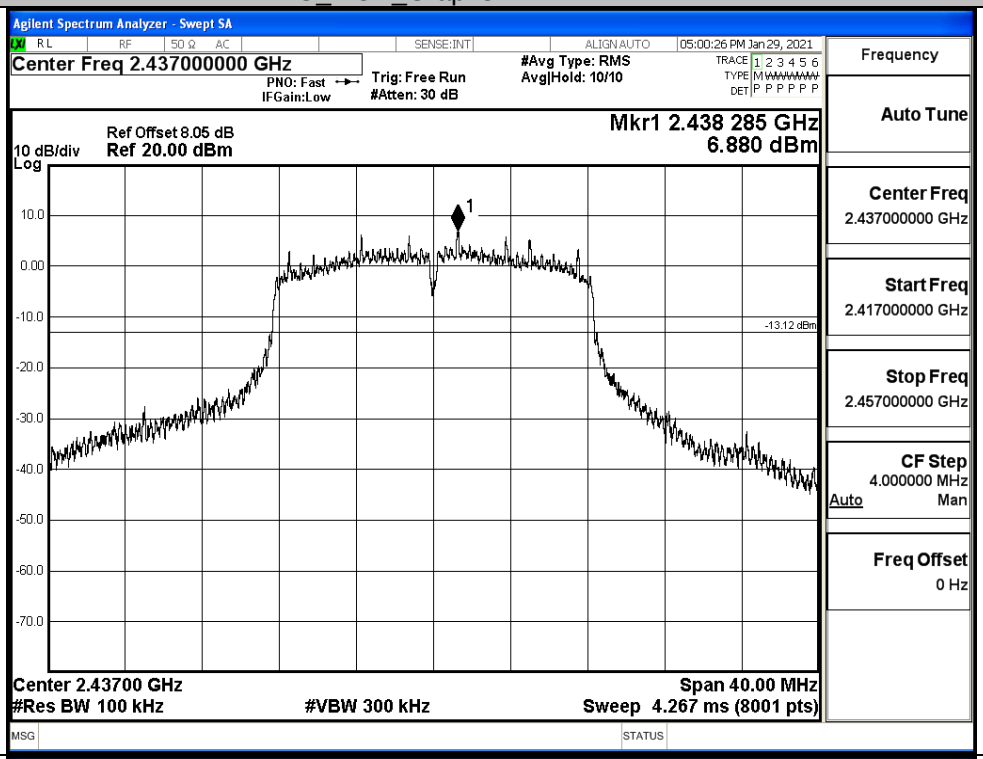
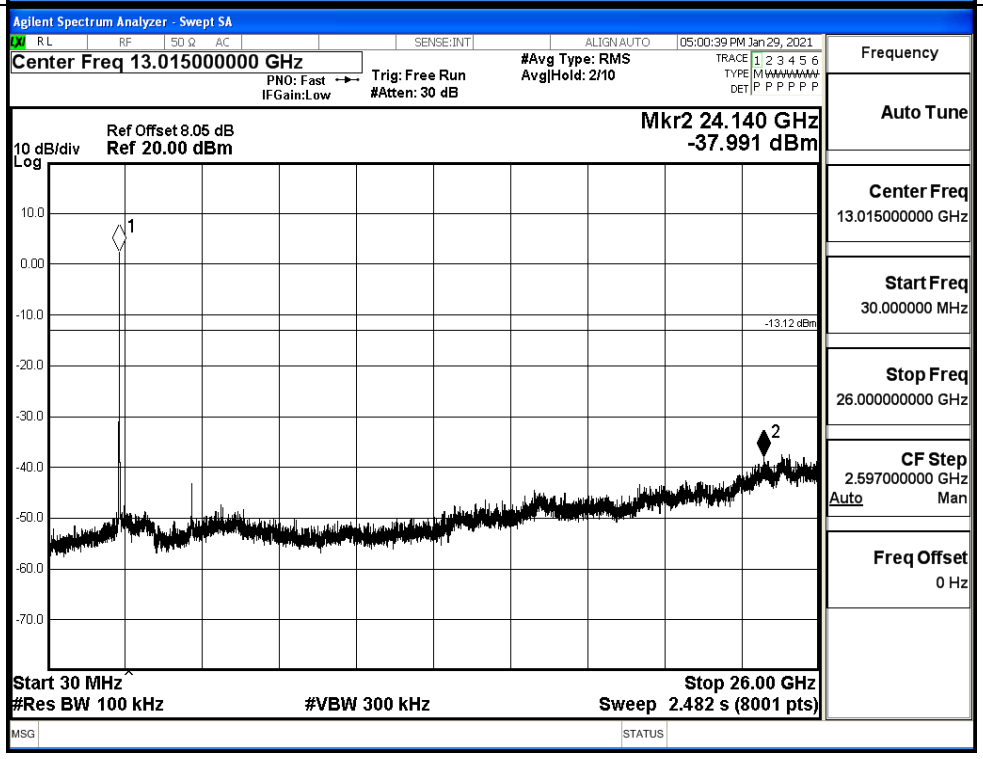
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
11B	LCH	10.749	-28.939	-9.251	PASS
	MCH	10.674	-29.984	-9.326	PASS
	HCH	11.133	-31.745	-8.867	PASS
11G	LCH	6.716	-37.379	-13.284	PASS
	MCH	6.88	-37.991	-13.120	PASS
	HCH	4.321	-37.428	-15.679	PASS
11N20 SISO	LCH	4.118	-37.769	-15.882	PASS
	MCH	5.146	-37.752	-14.854	PASS
	HCH	5.332	-38.013	-14.668	PASS
11N40 SISO	LCH	1.676	-37.972	-18.324	PASS
	MCH	2.056	-37.884	-17.944	PASS
	HCH	1.913	-37.811	-18.087	PASS

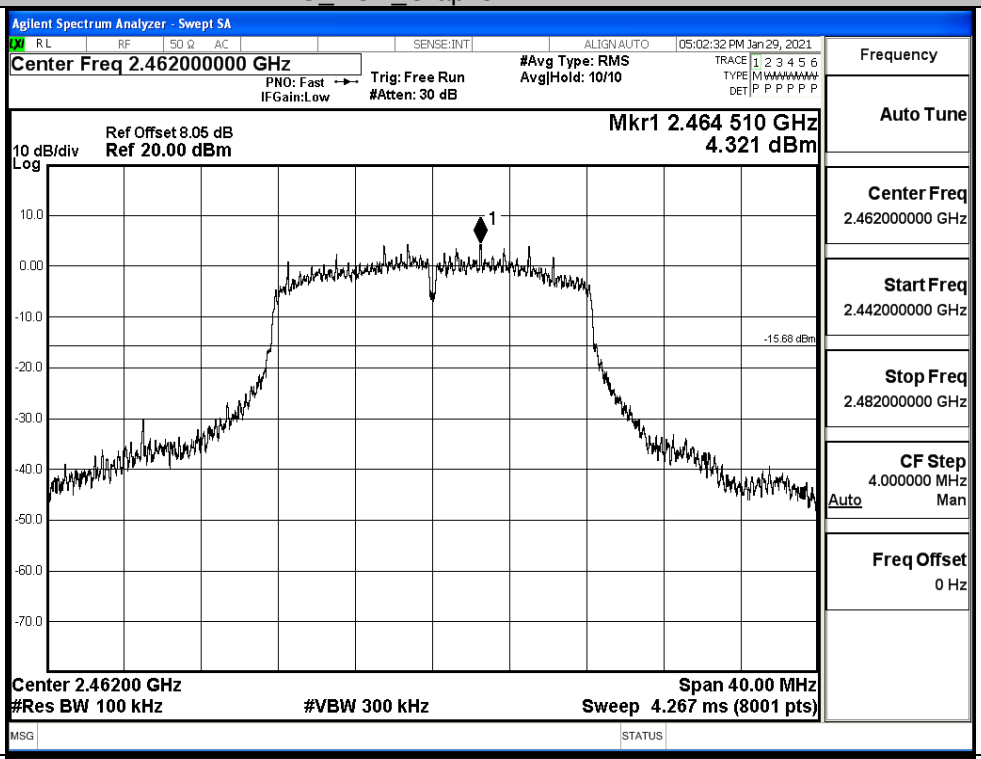
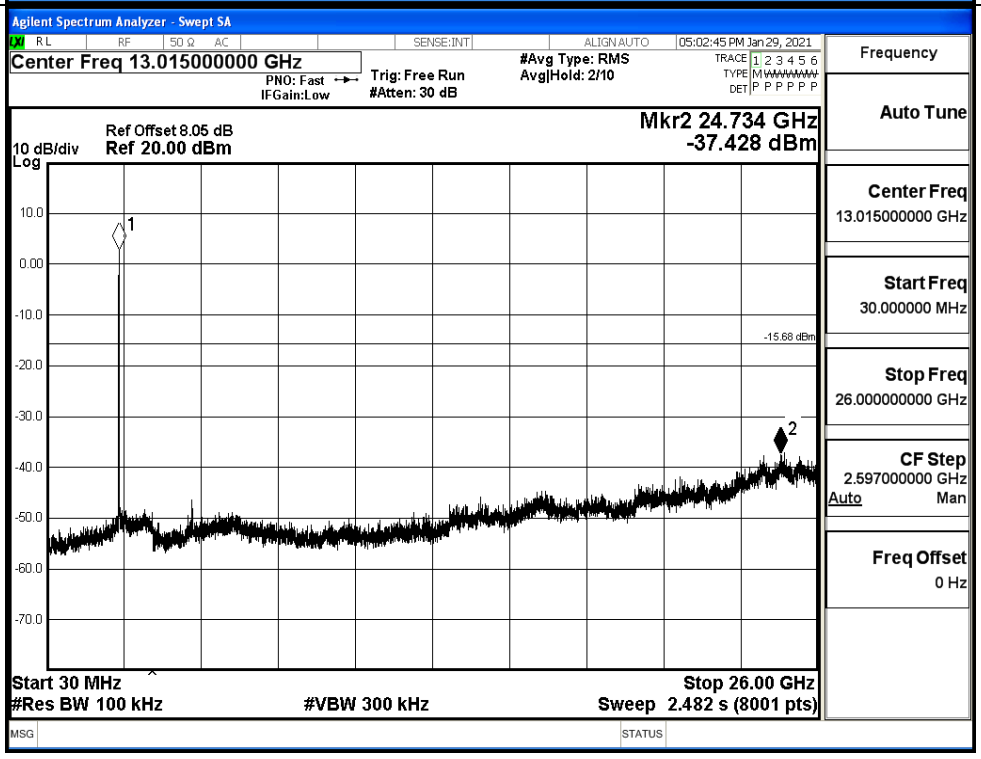
11B_LCH_Graphs	
Pref/11B/LCH	
Puw/11B/LCH	

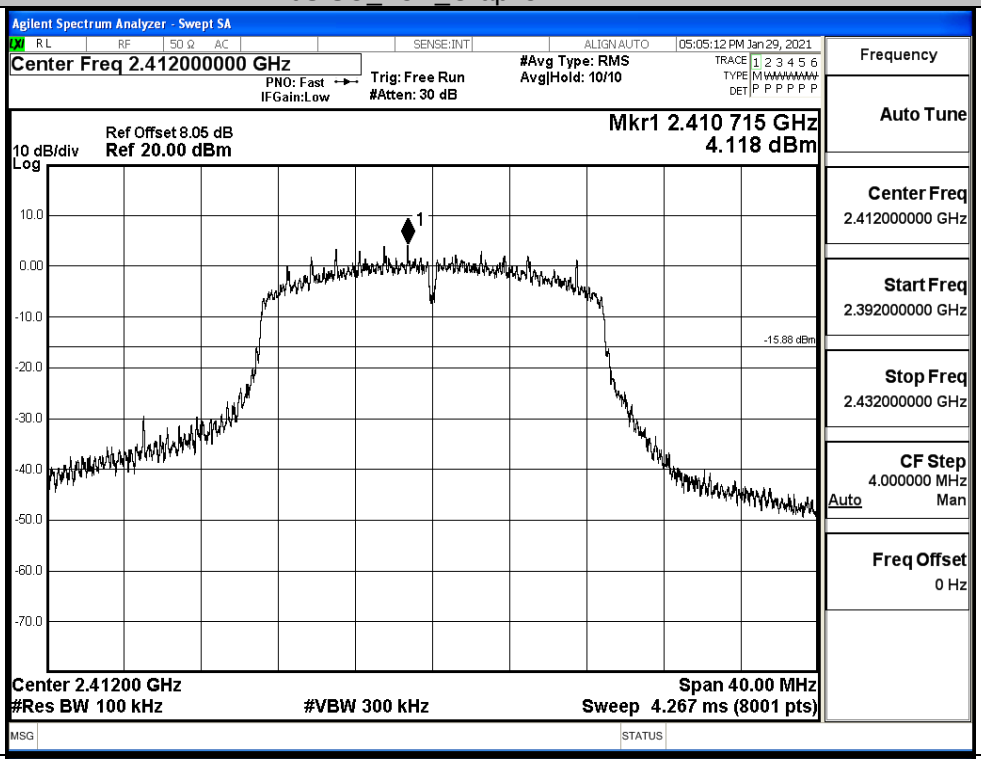
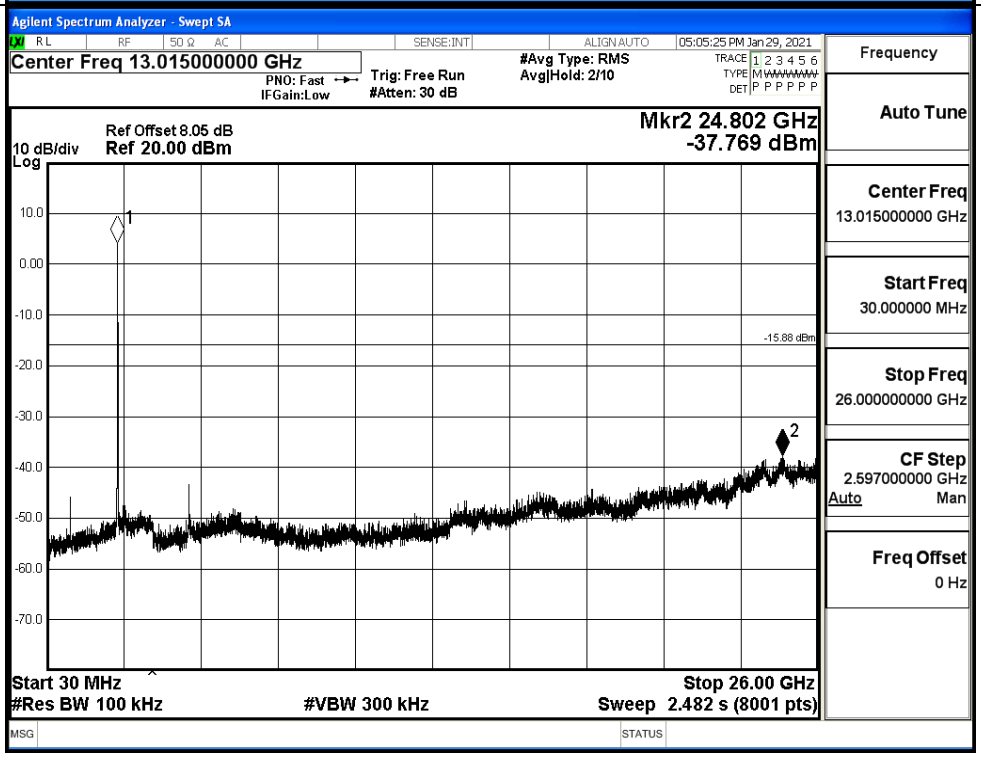
11B_MCH_Graphs	
Pref/11B/MCH	
Puw/11B/MCH	

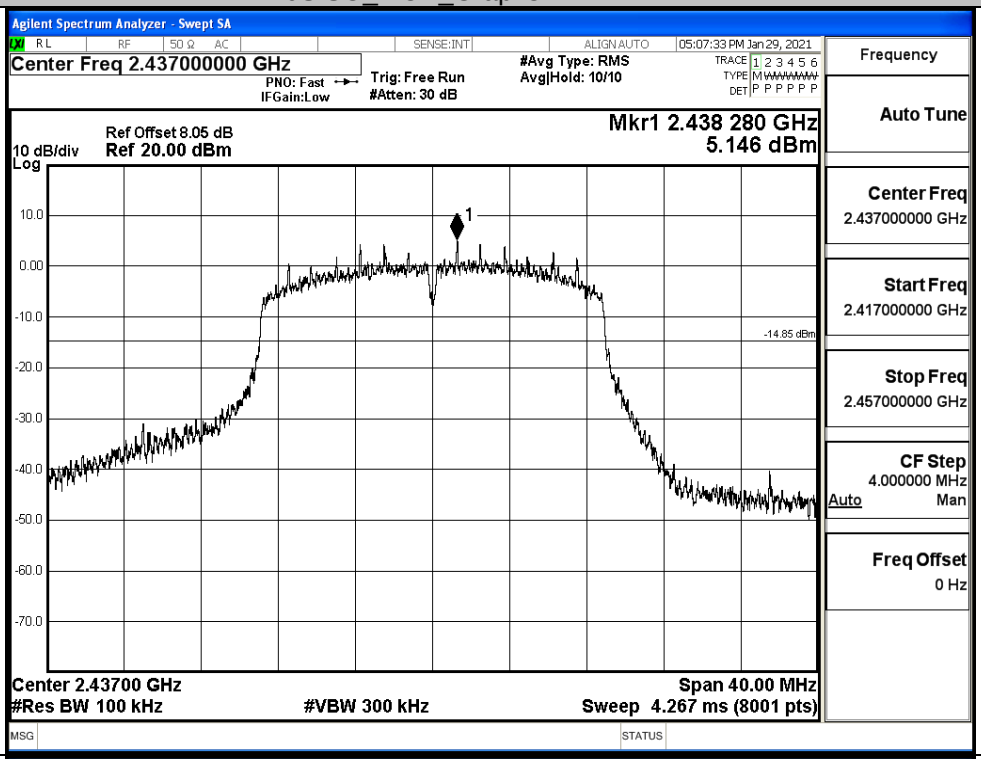
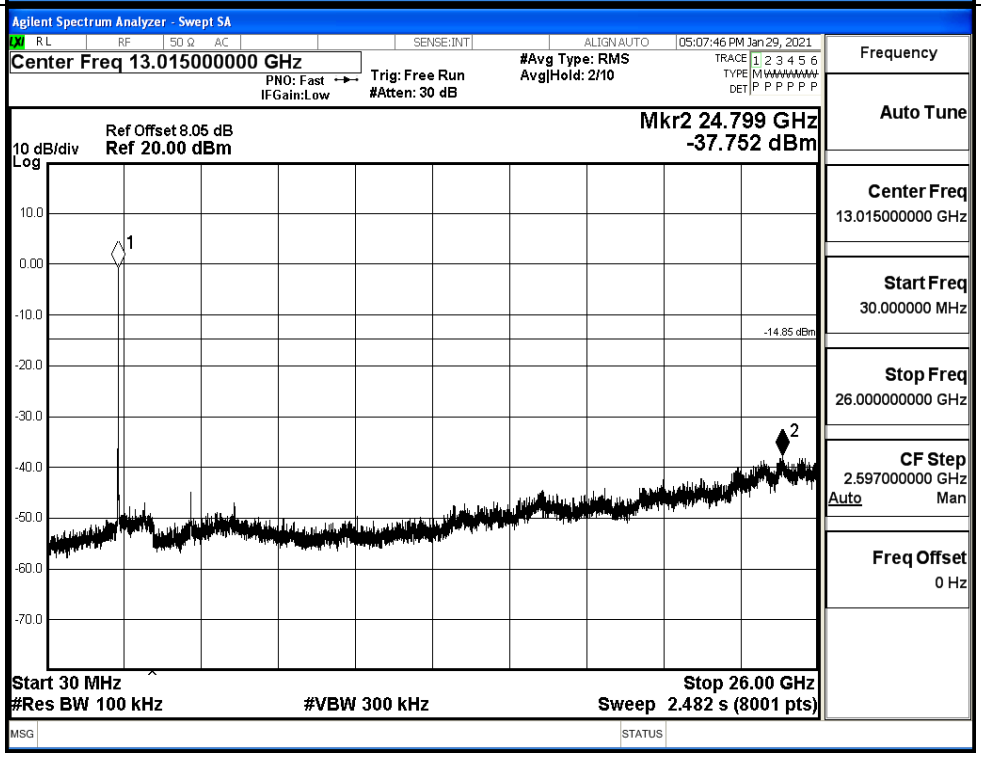
11B_HCH_Graphs	
Pref/11B/HCH	
Puw/11B/HCH	

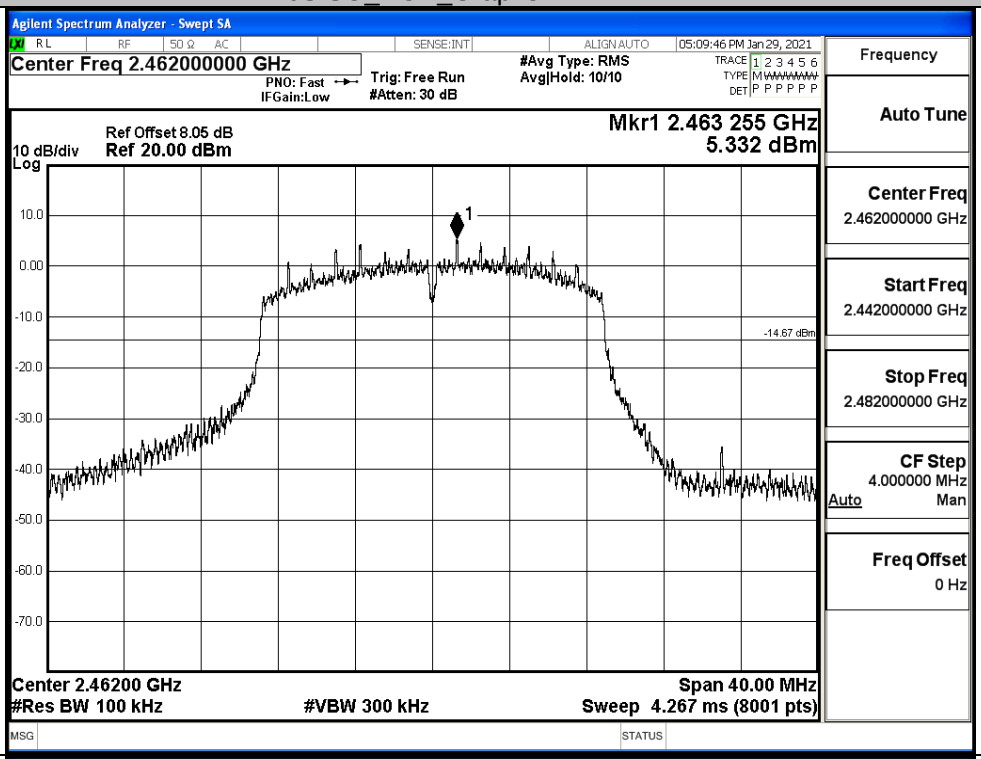
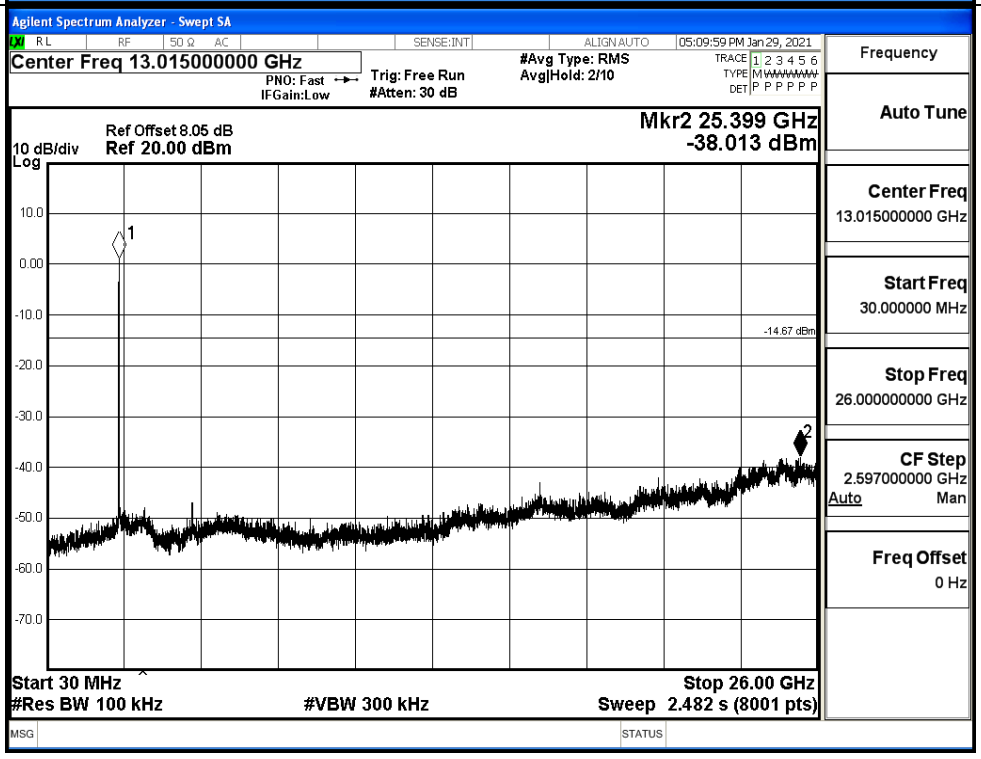
11G_LCH_Graphs	
Pref/11G/LCH	
Puw/11G/LCH	

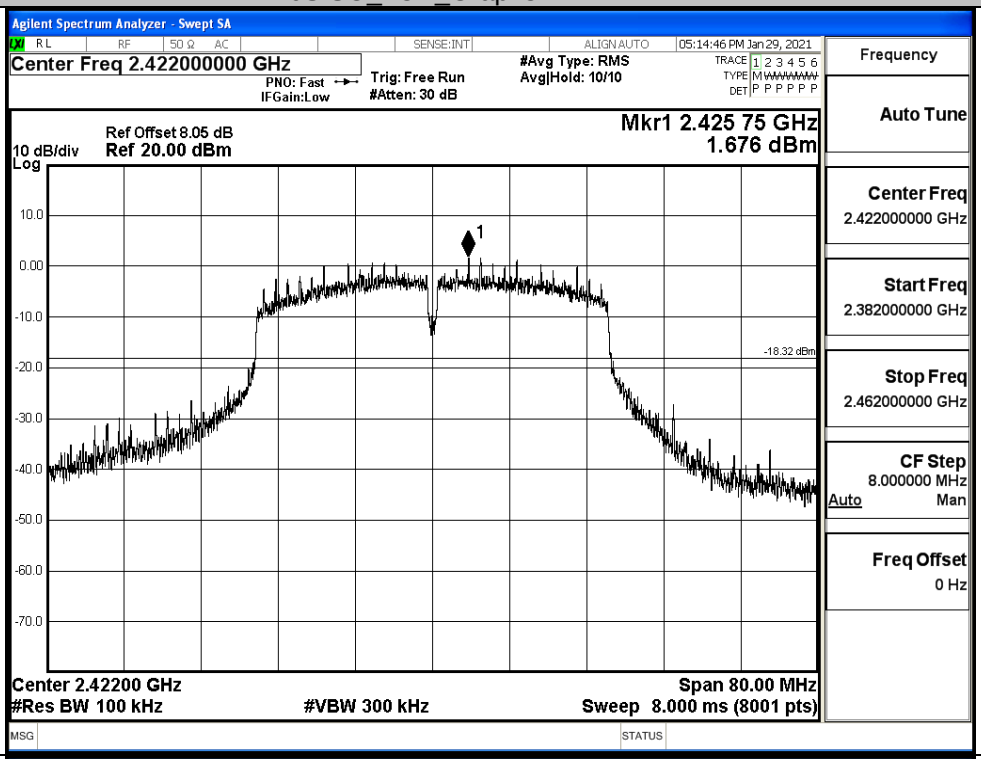
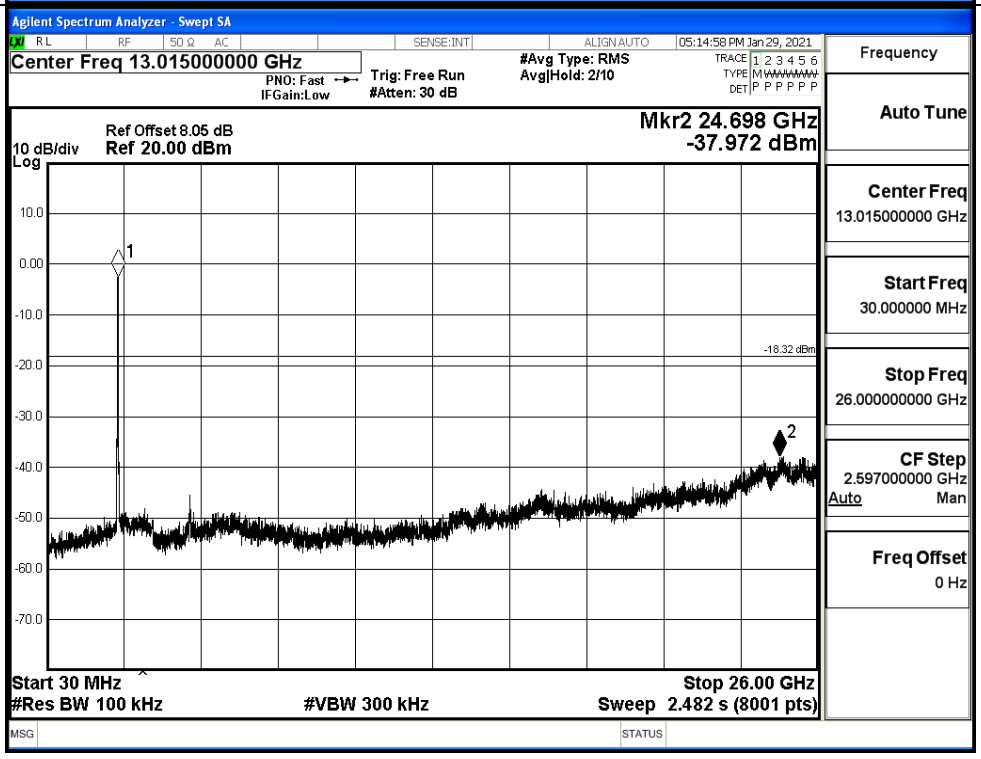
11G_MCH_Graphs	
Pref/11G/MCH	
Puw/11G/MCH	

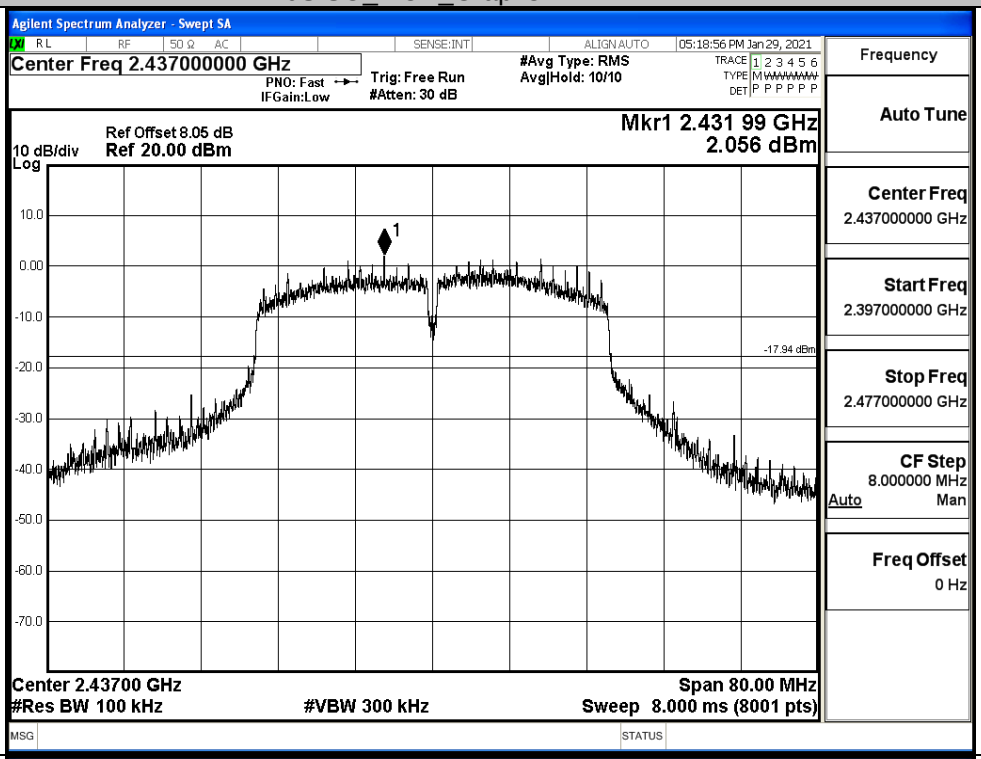
11G_HCH_Graphs	
Pref/11G/HCH	
Puw/11G/HCH	

11N20SISO_LCH_Graphs	
Pref/11N20SISO/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/LCH	
Puw/11N40 SISO/LCH	

11N40SISO_MCH_Graphs	
Pref/11N40 SISO/MCH	
Puw/11N40 SISO/MCH