Appendix A

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: CD player converter

Trade Mark: Tonivent

Test Model: TON301

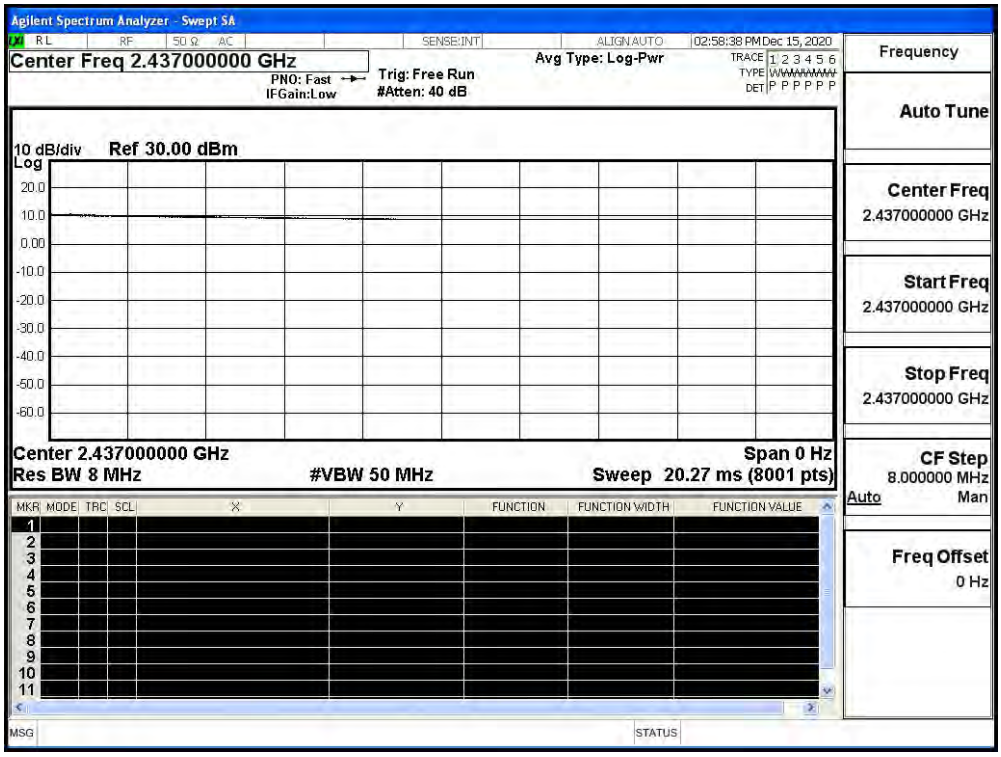
Environmental Conditions

Temperature:	23.2 ° C
Relative Humidity:	54.5%
ATM Pressure:	100.0 kPa
Test Engineer:	Kay Hu
Supervised by:	Li Huan

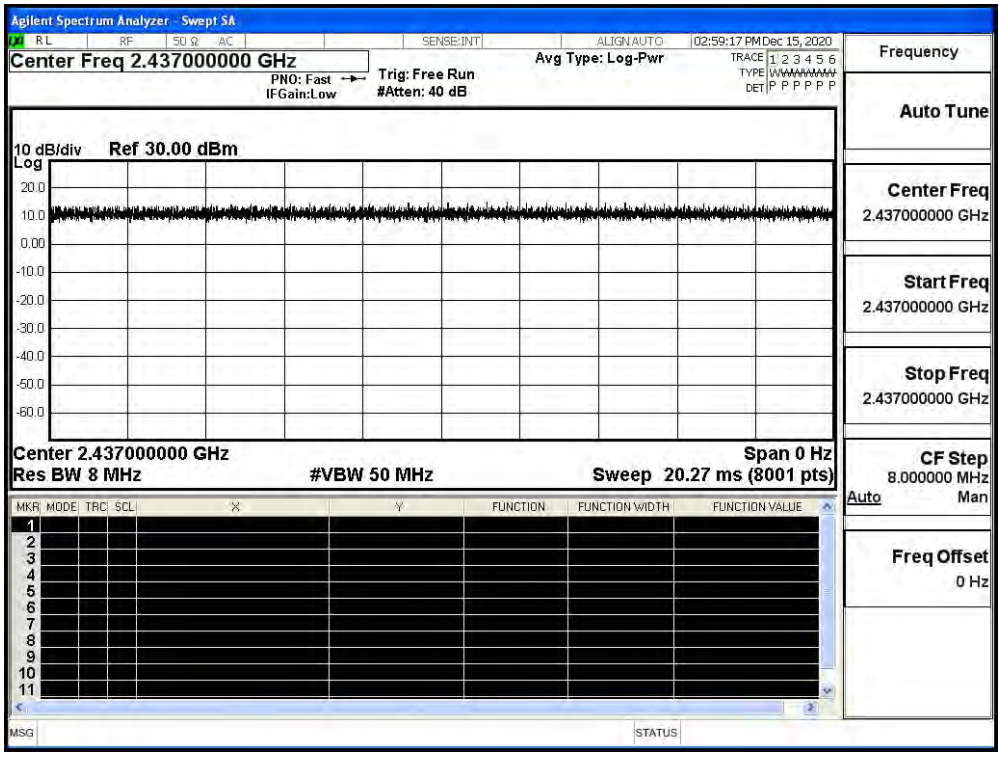
A.1 Duty Cycle

Test Mode	Test Channel	Ant	Duty Cycle[%]	Verdict
11B	2437	Ant1	100.00	PASS
11G	2437	Ant1	100.00	PASS
11N20SISO	2437	Ant1	100.00	PASS

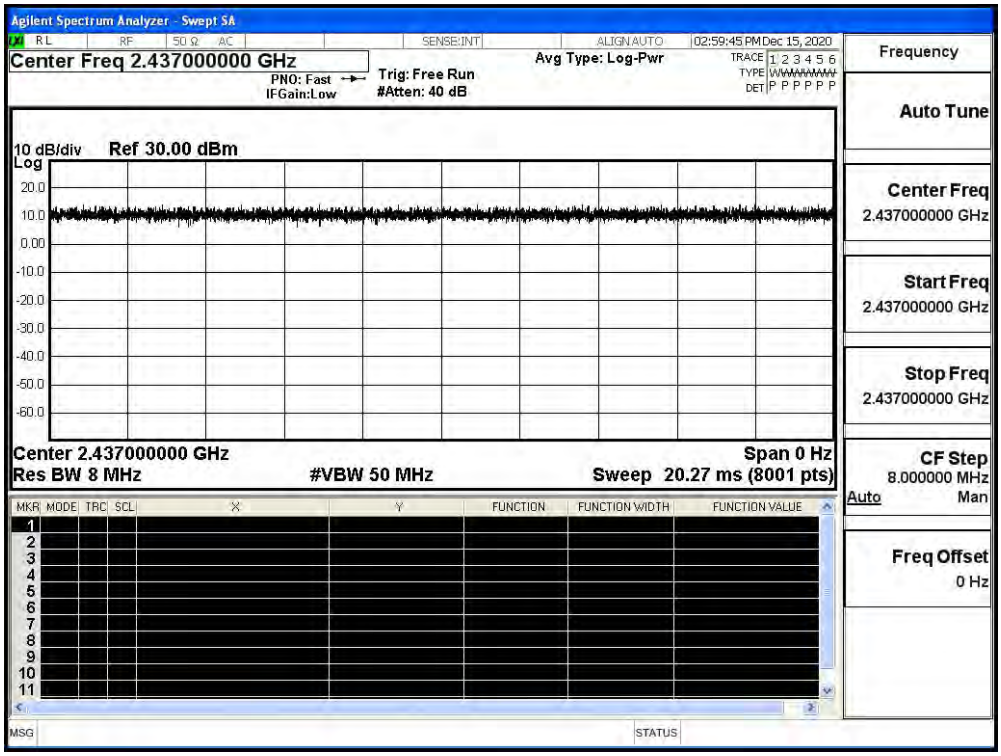
Duty Cycle_11B_2437_Ant1



Duty Cycle_11G_2437_Ant1



Duty Cycle_11N20SISO_2437_Ant1

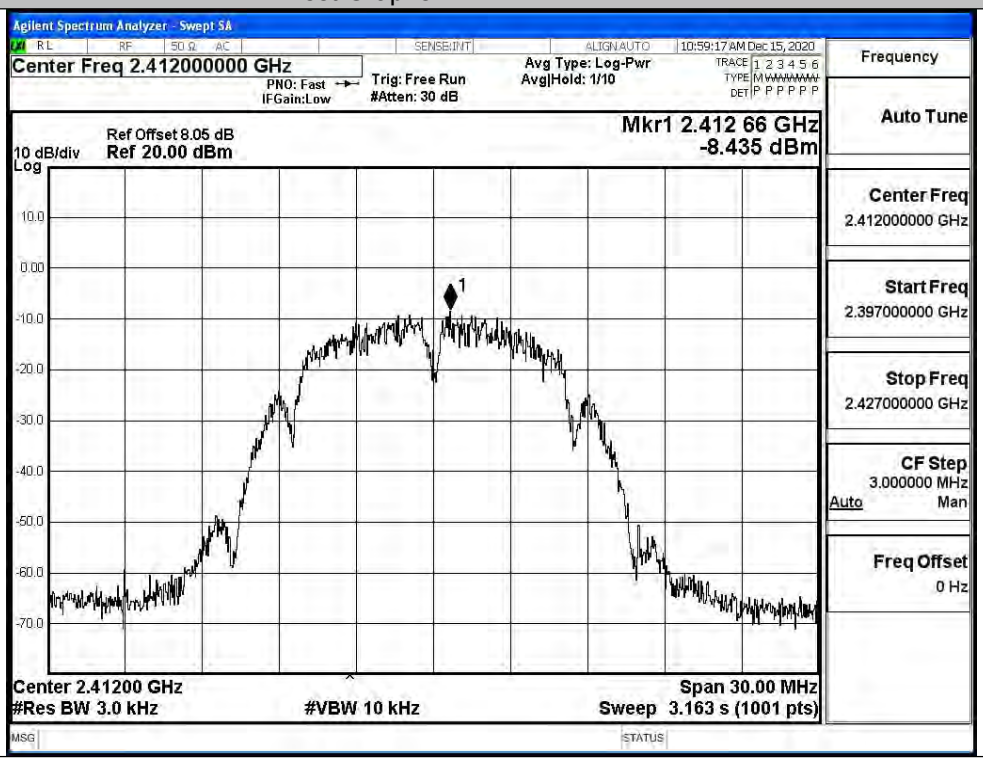


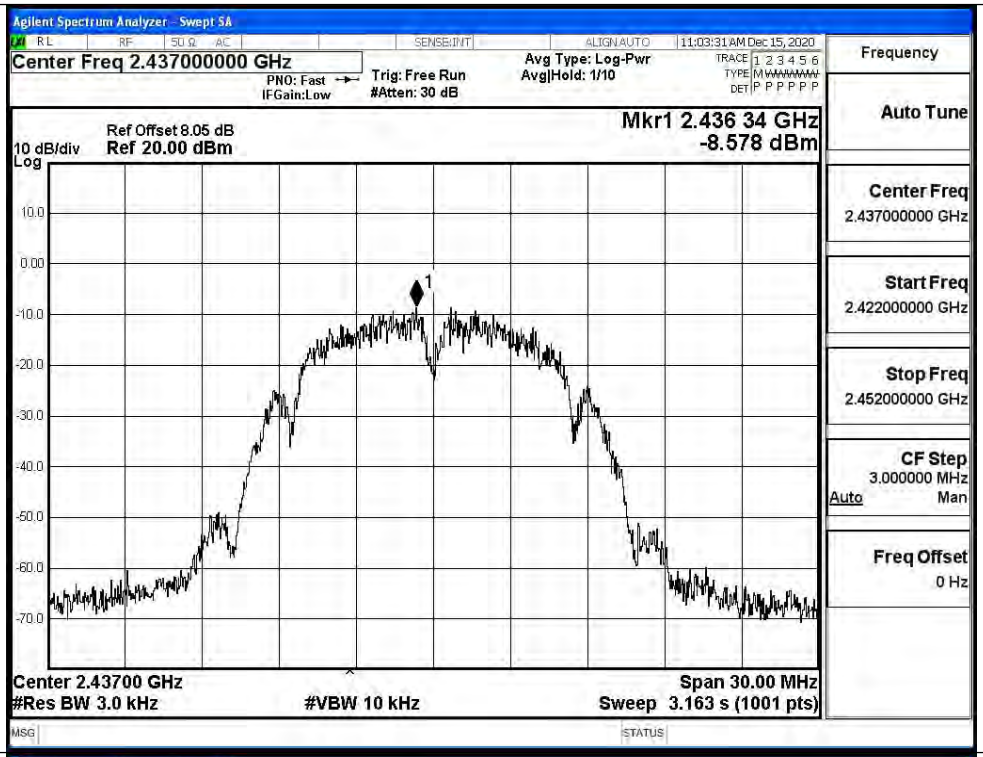
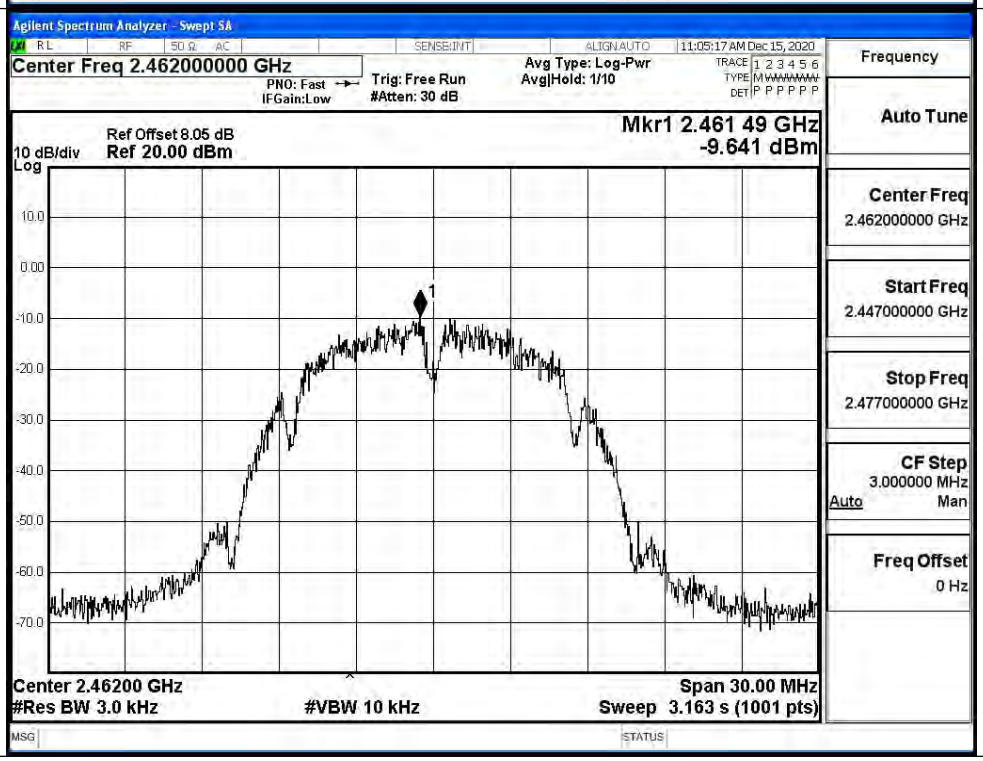
A.2 Maximum Conducted Output Power

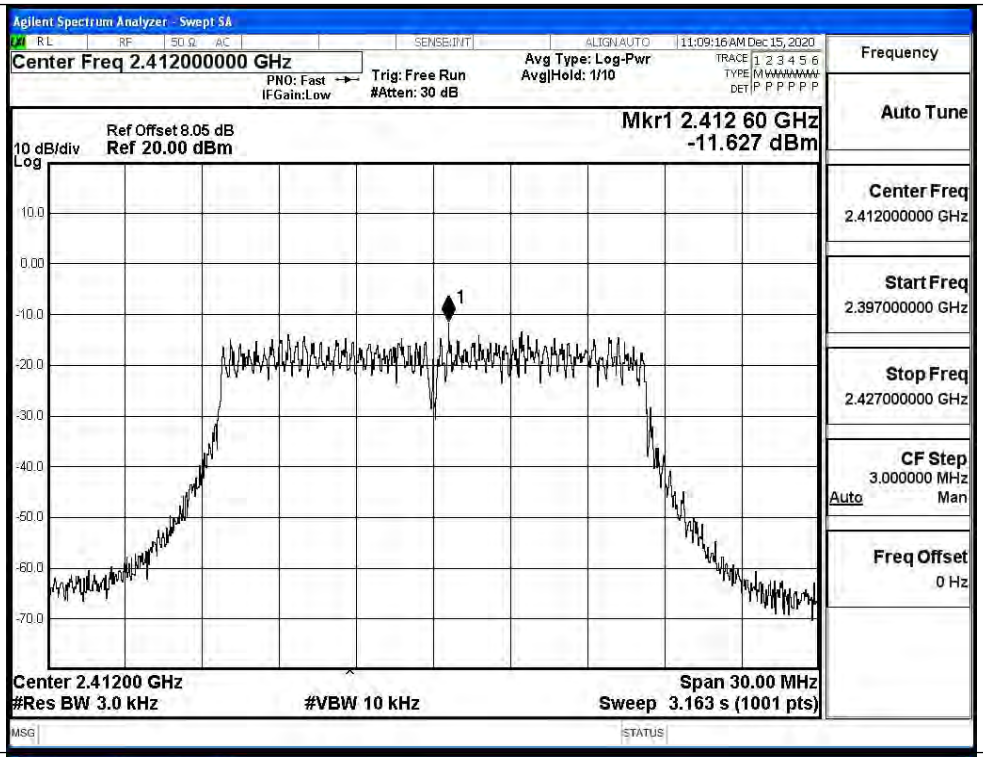
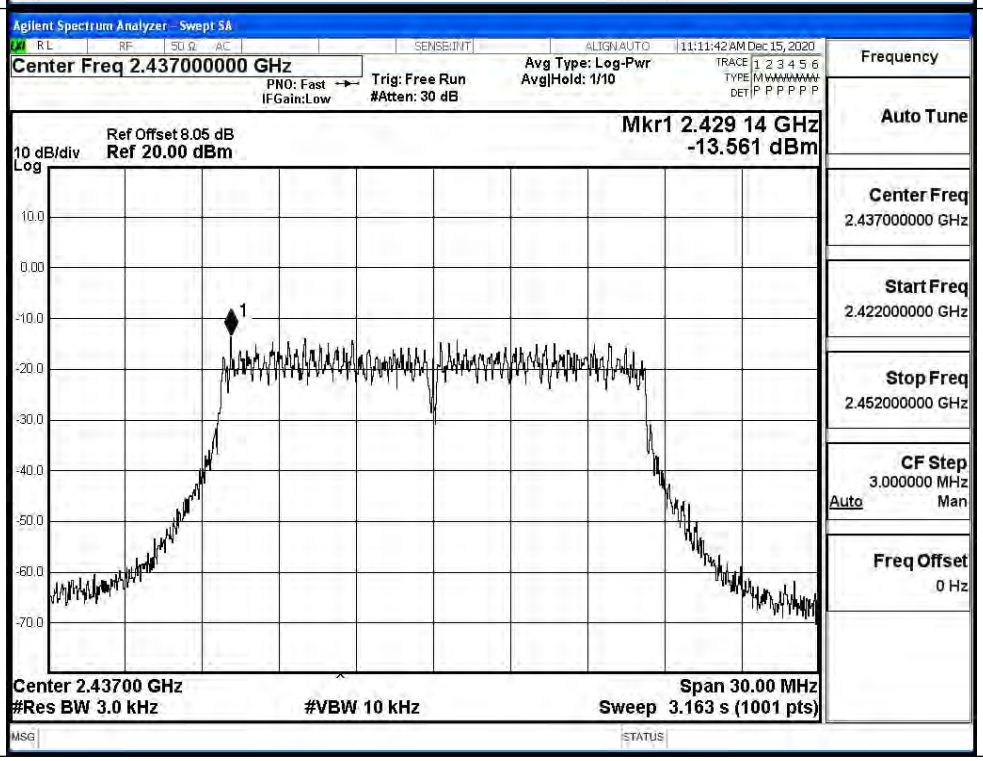
Mode	Channel	Meas.Level [dBm]	Limit [dBm]	Verdict
11B	LCH	17.72	30	PASS
	MCH	17.52	30	PASS
	HCH	16.30	30	PASS
11G	LCH	**20.71**	30	PASS
	MCH	20.30	30	PASS
	HCH	18.80	30	PASS
11N20SISO	LCH	20.43	30	PASS
	MCH	19.96	30	PASS
	HCH	18.52	30	PASS

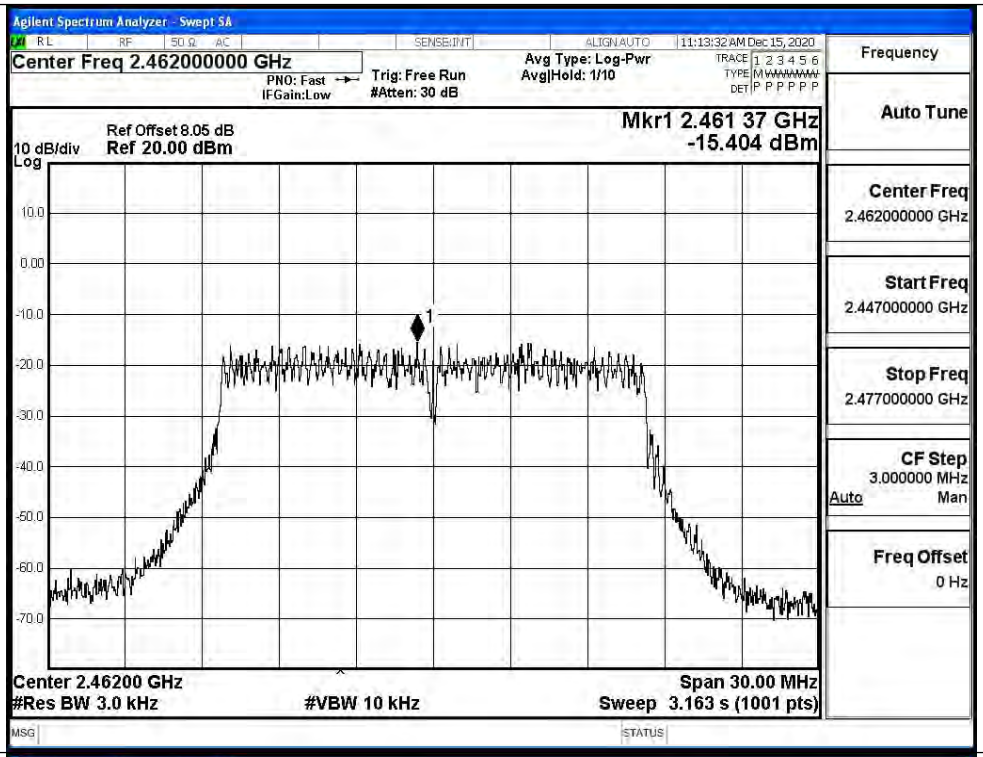
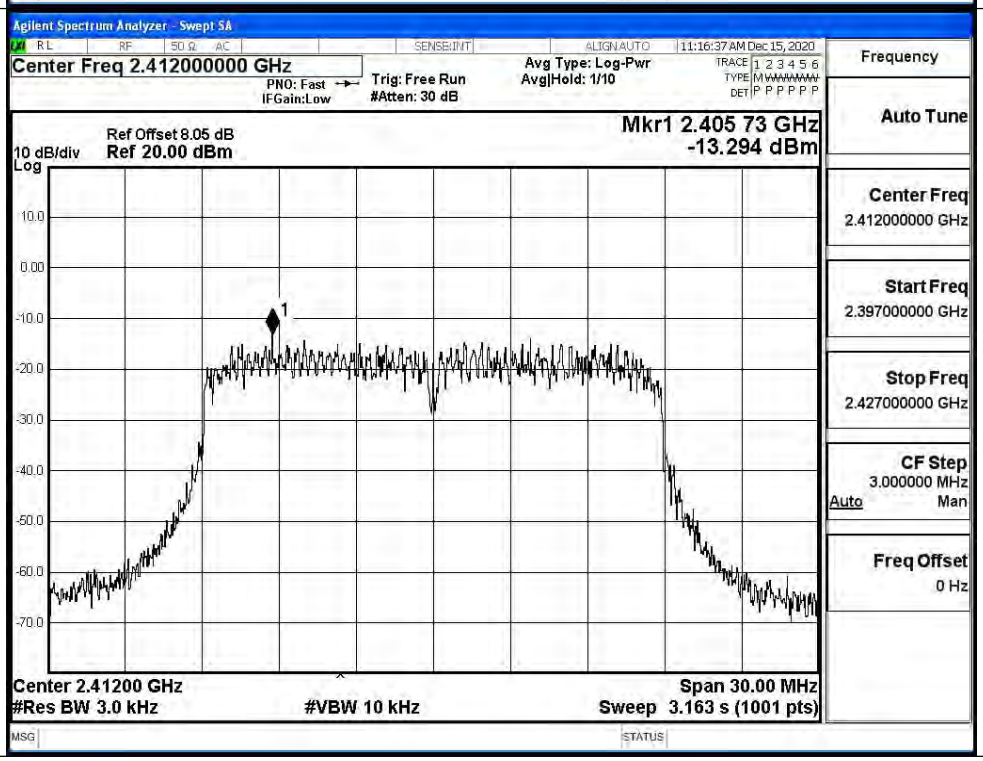
A.3 Maximum Power Spectral Density

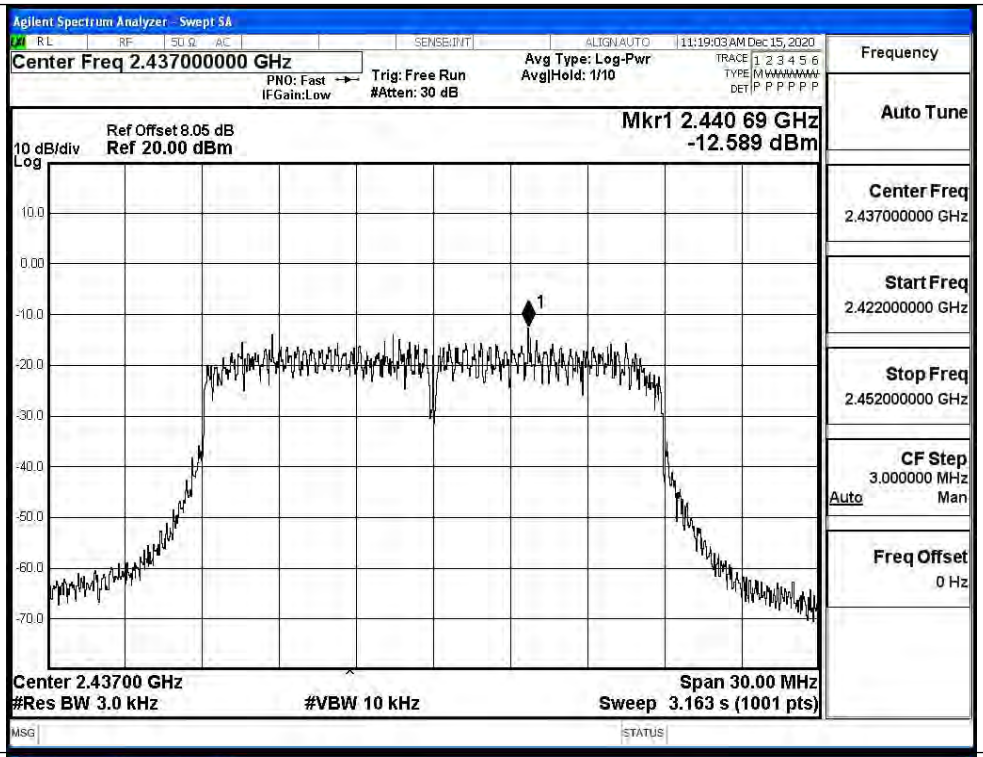
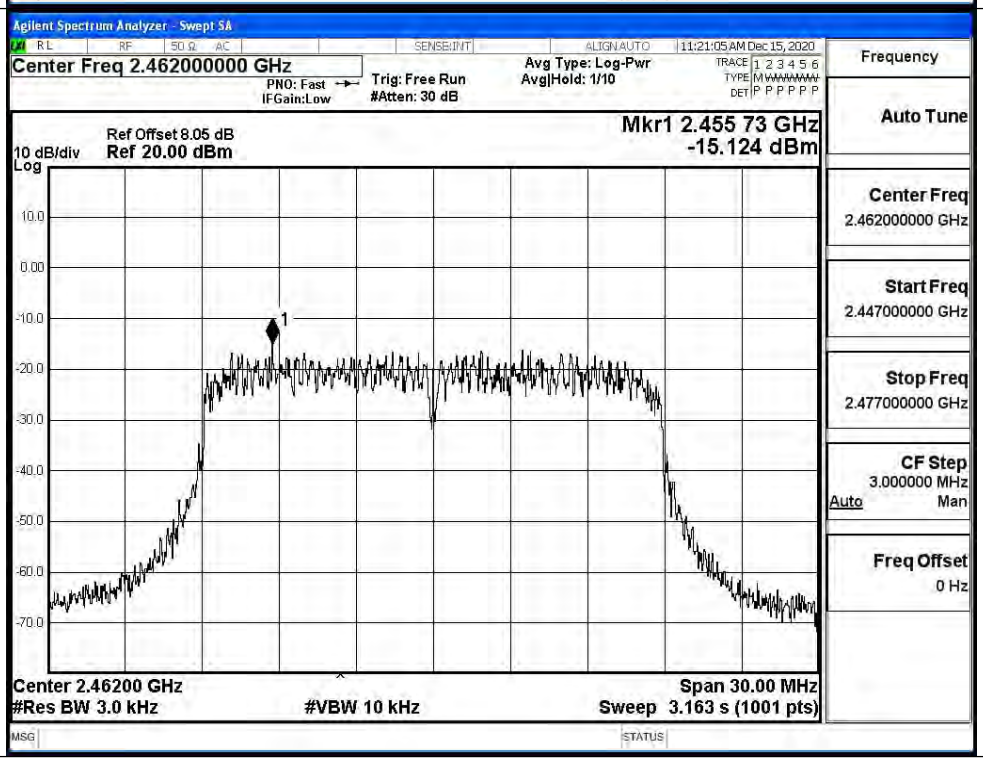
Mode	Channel	Meas.Level [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
11B	LCH	-8.435	8	PASS
	MCH	-8.578	8	PASS
	HCH	-9.641	8	PASS
11G	LCH	-11.627	8	PASS
	MCH	-13.561	8	PASS
	HCH	-15.404	8	PASS
11N20SISO	LCH	-13.294	8	PASS
	MCH	-12.589	8	PASS
	HCH	-15.124	8	PASS

Test Graphs		
11B/LCH		

11B/MCH		
11B/HCH		

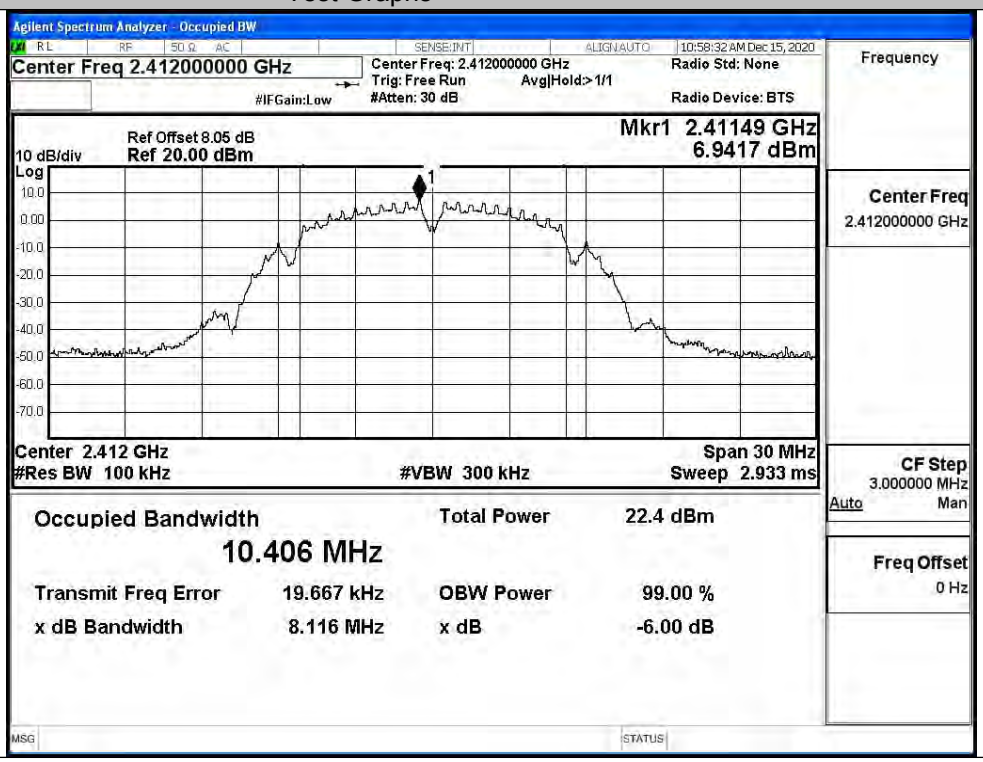
11G/LCH		
11G/MCH		

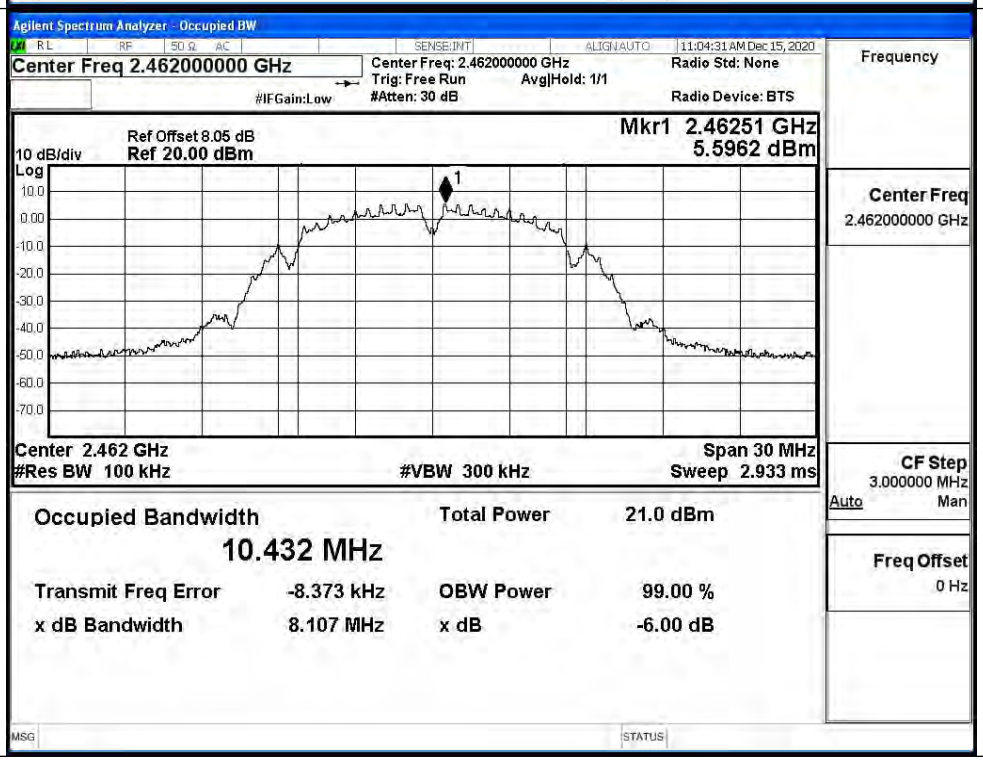
11G/HCH		
11N20SISO/LCH		

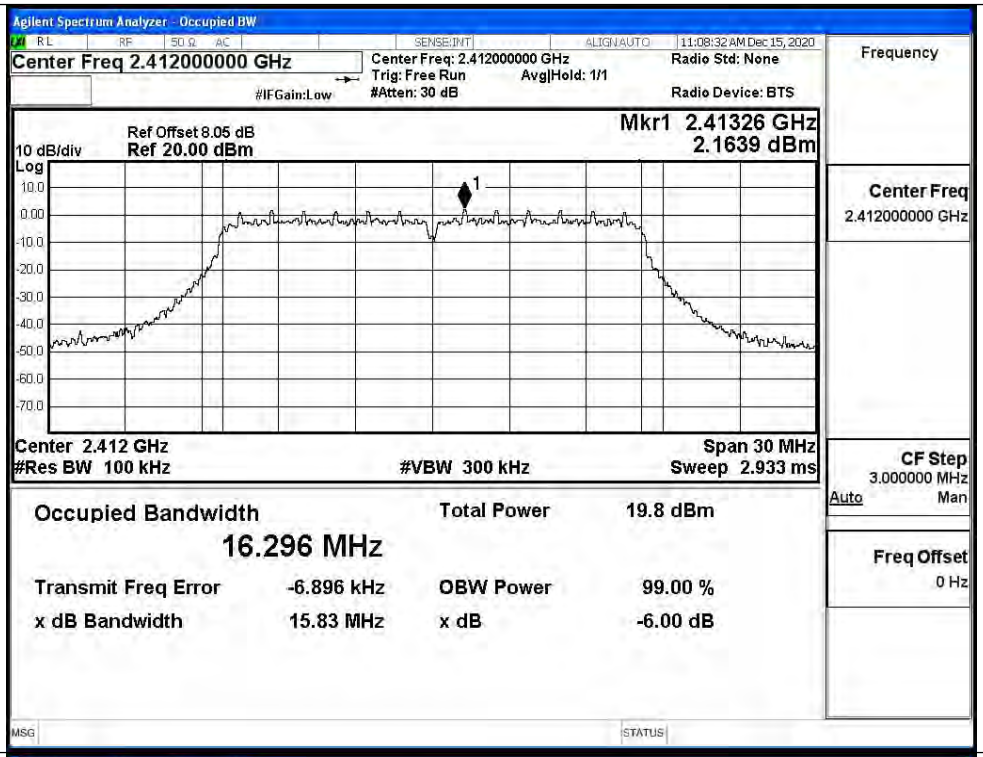
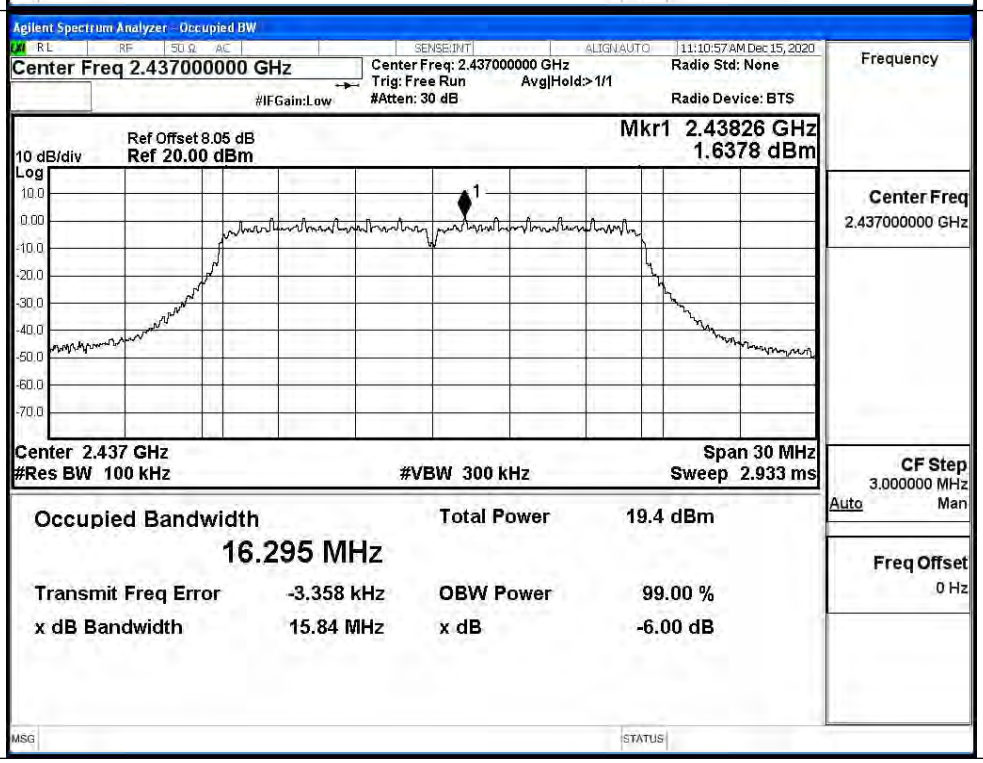
11N20SISO/MCH		
11N20SISO/HCH		

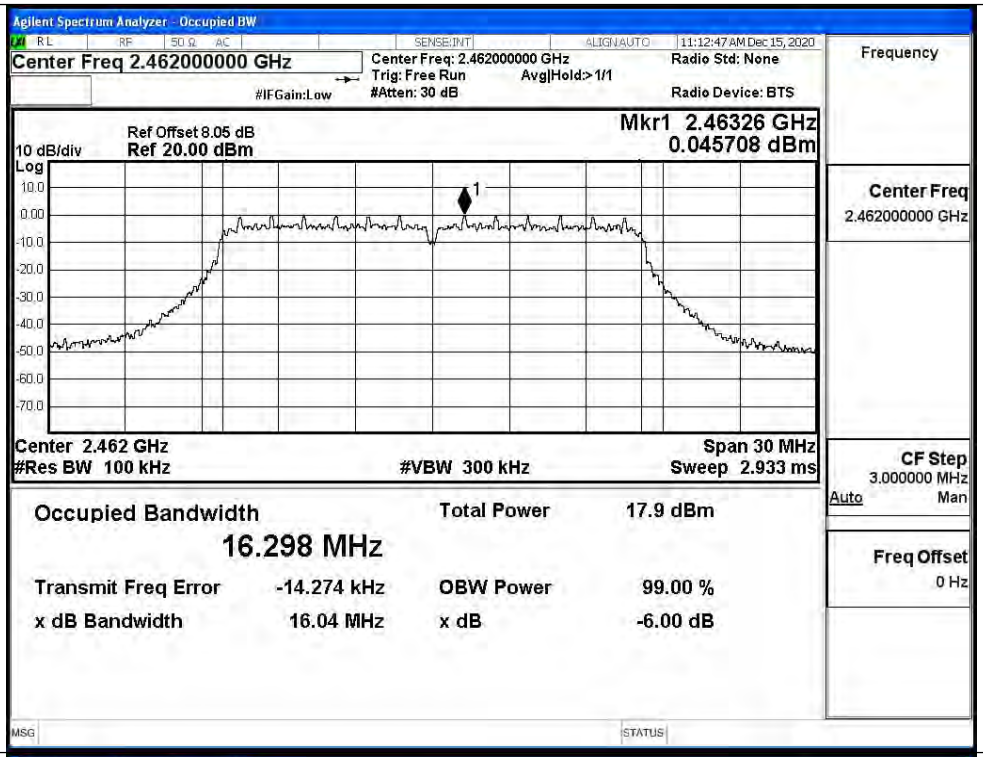
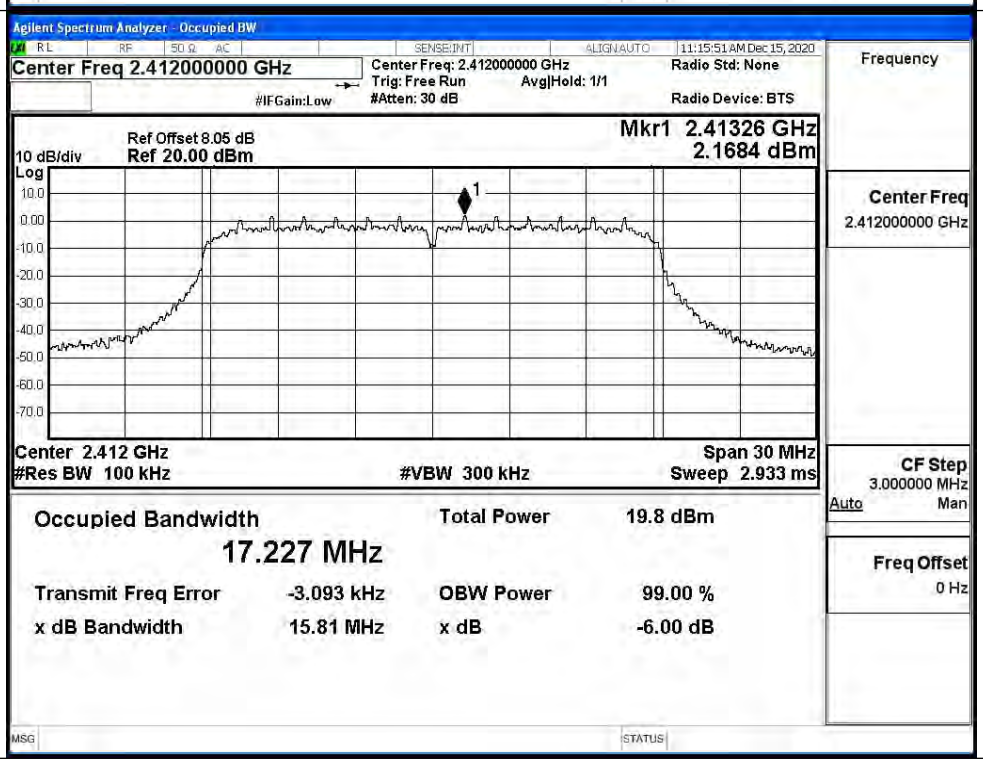
A.4 6dB Bandwidth

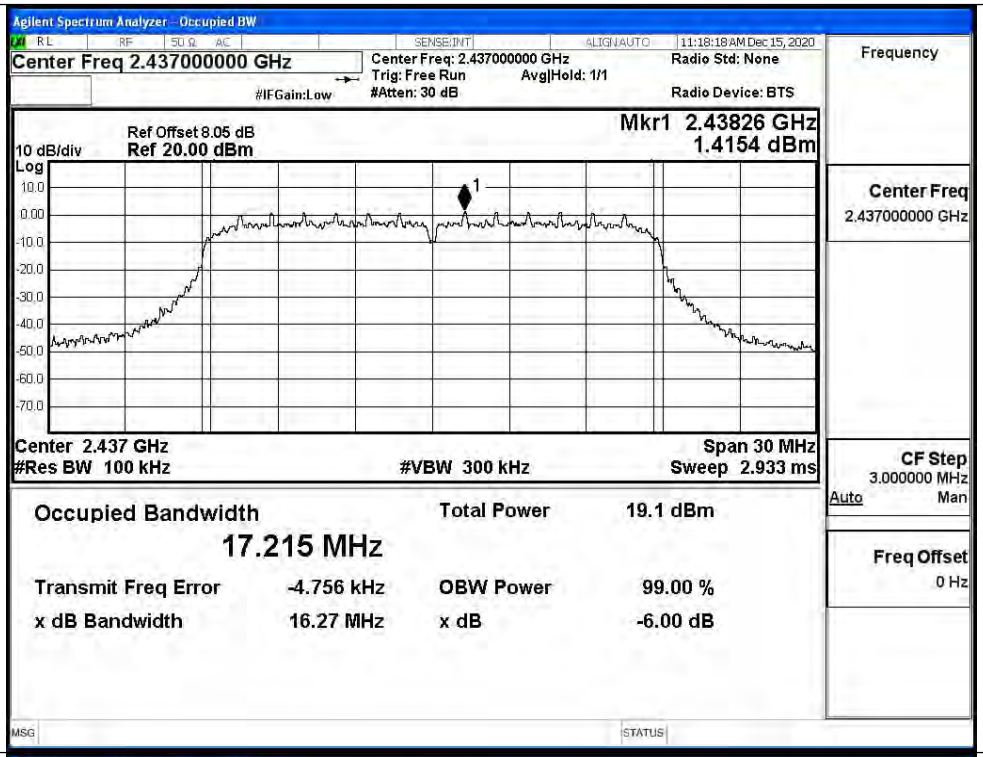
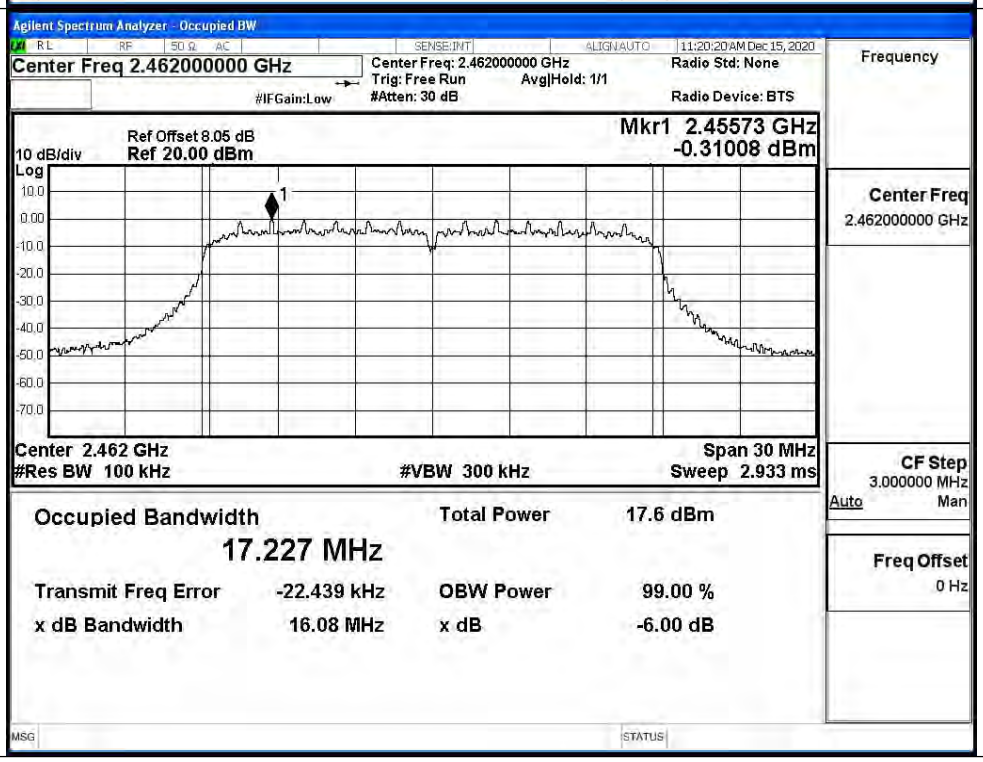
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
11B	LCH	8.116	⩾0.5	PASS
	MCH	8.095	⩾0.5	PASS
	HCH	8.107	⩾0.5	PASS
11G	LCH	15.83	⩾0.5	PASS
	MCH	15.84	⩾0.5	PASS
	HCH	16.04	⩾0.5	PASS
11N20SISO	LCH	15.81	⩾0.5	PASS
	MCH	16.27	⩾0.5	PASS
	HCH	16.08	⩾0.5	PASS

Test Graphs	
11B/LCH	

11B/MCH	
11B/HCH	

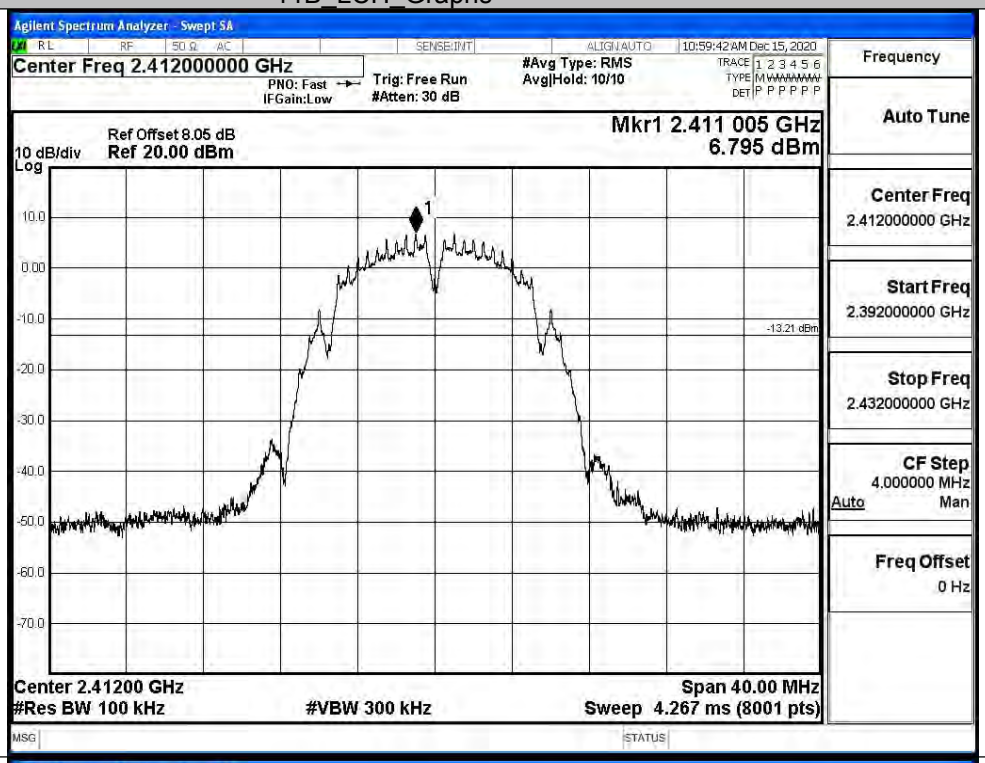
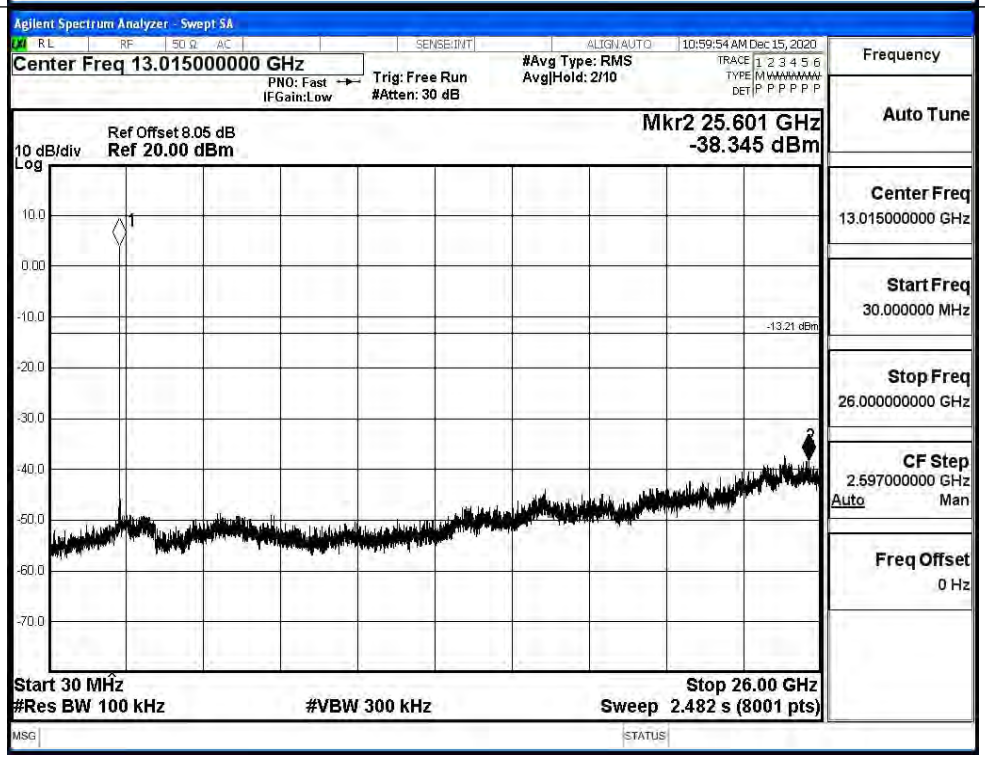
11G/LCH		
11G/MCH		

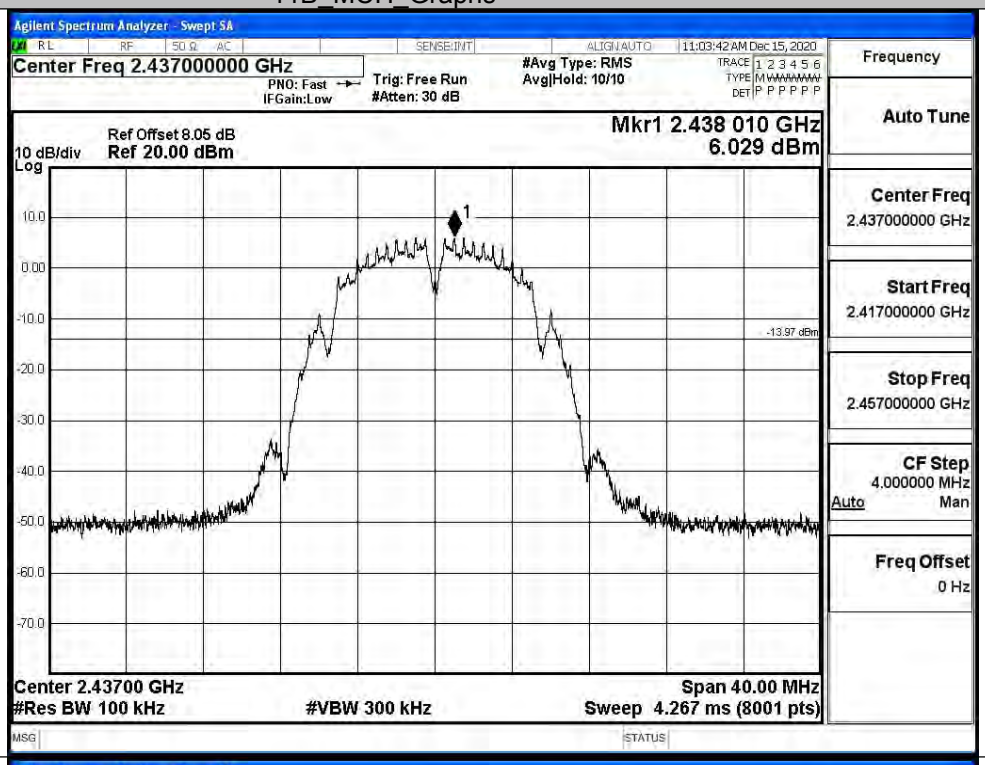
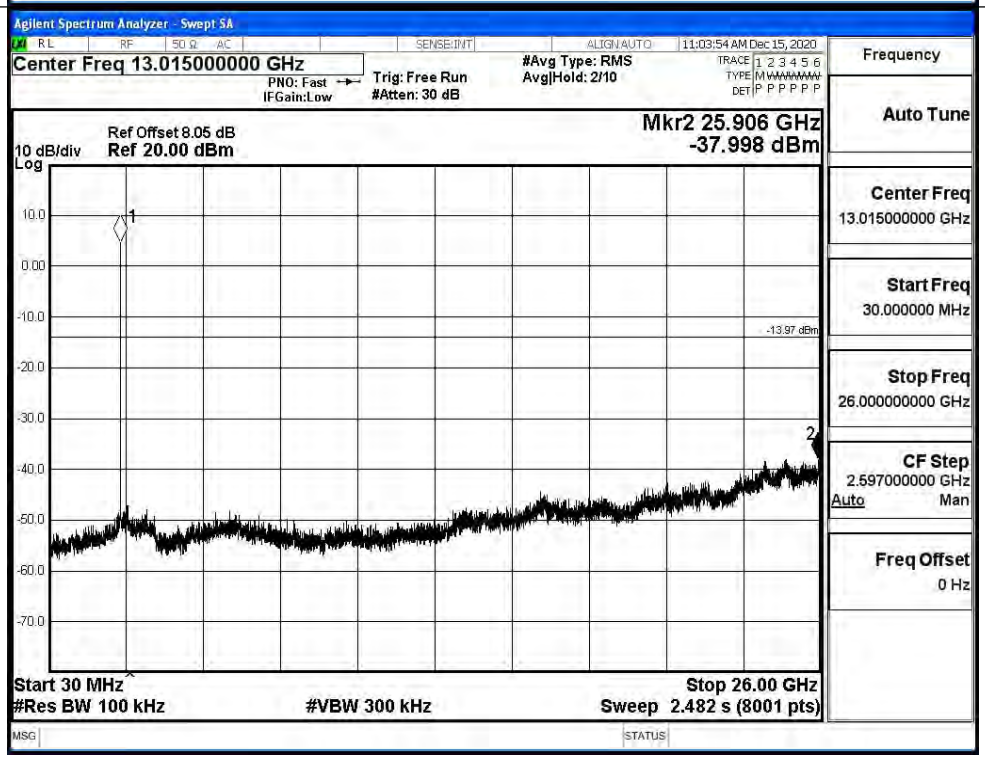
11G/HCH		
11N20SISO/LCH		

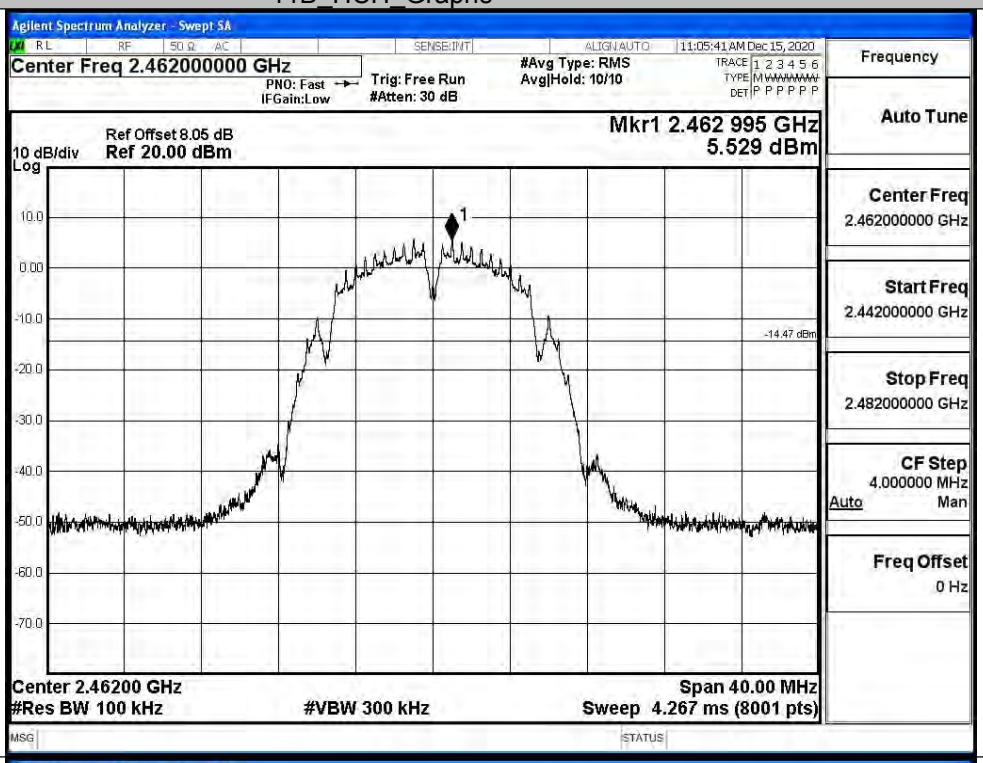
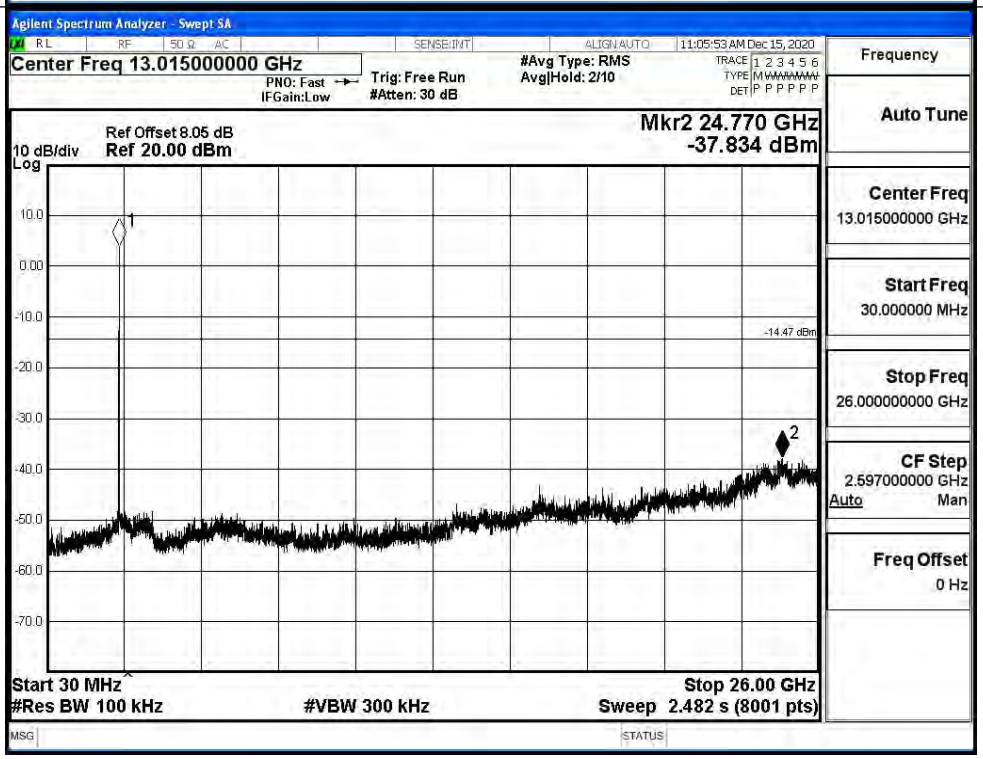
11N20SISO/MCH		
11N20SISO/HCH		

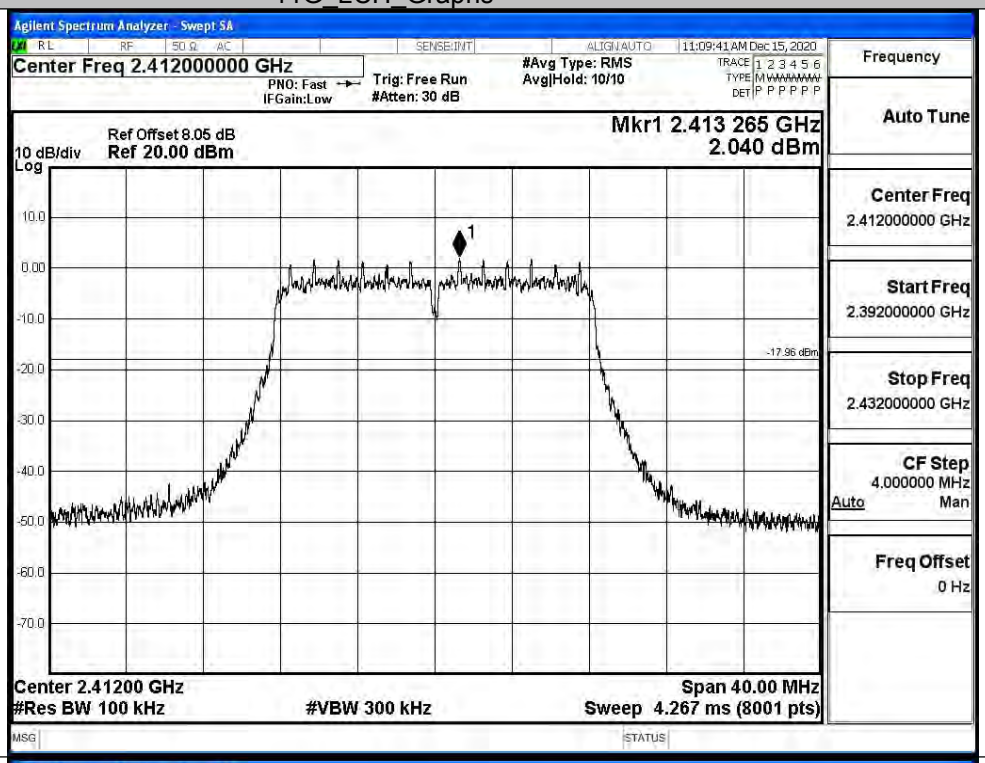
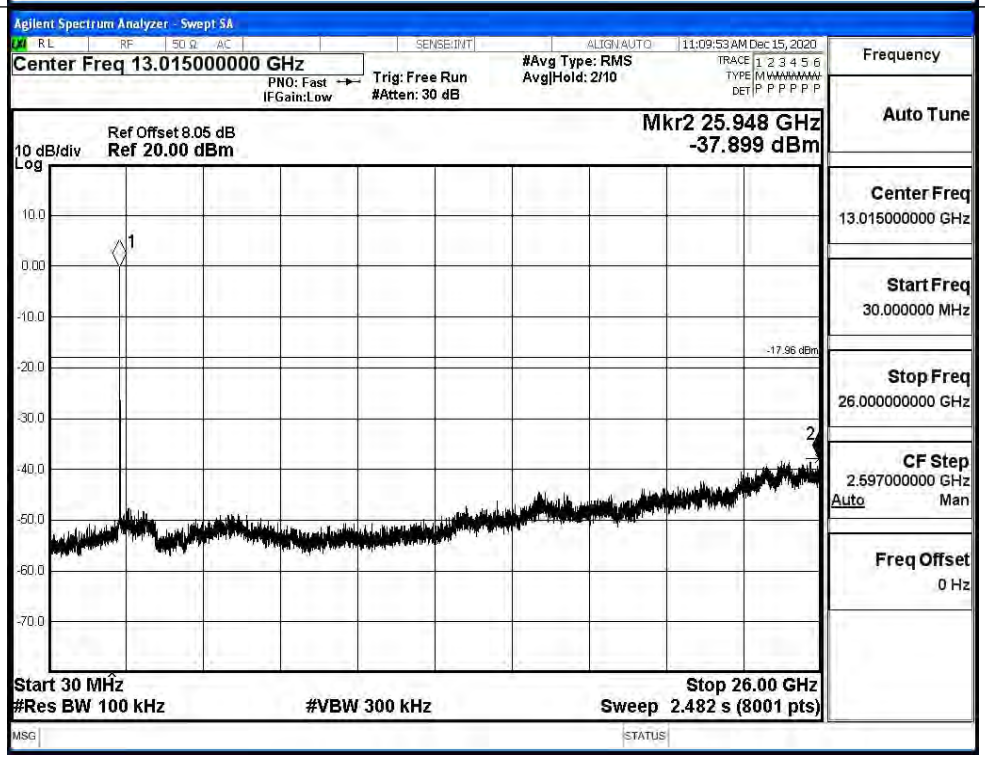
A.5 RF Conducted Spurious Emissions

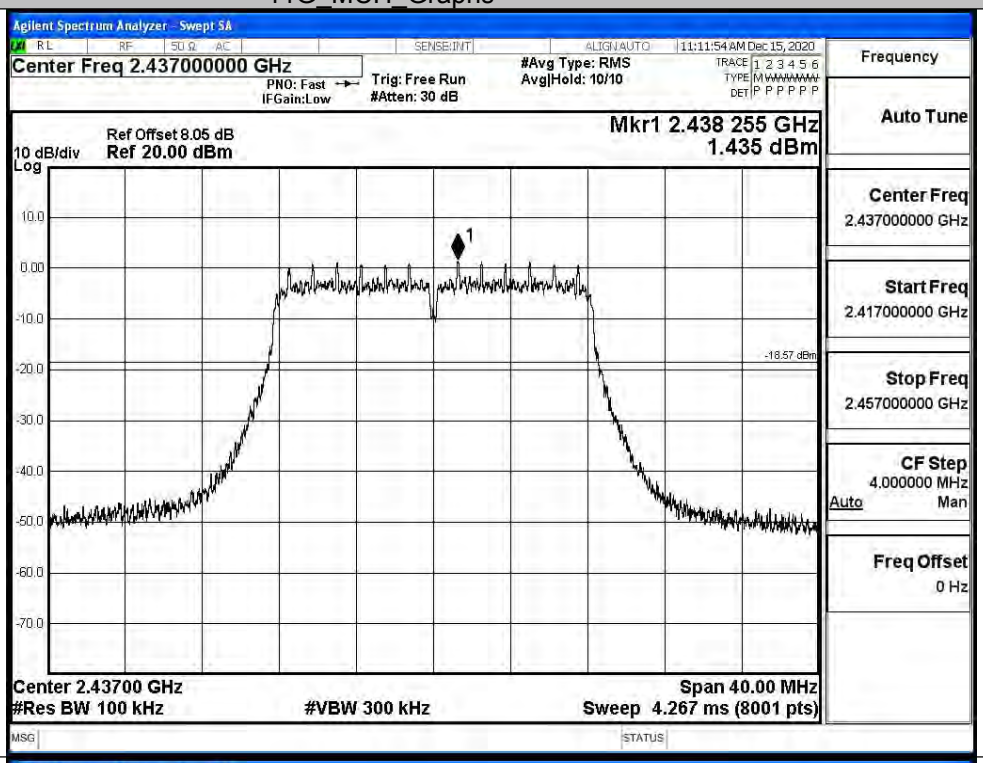
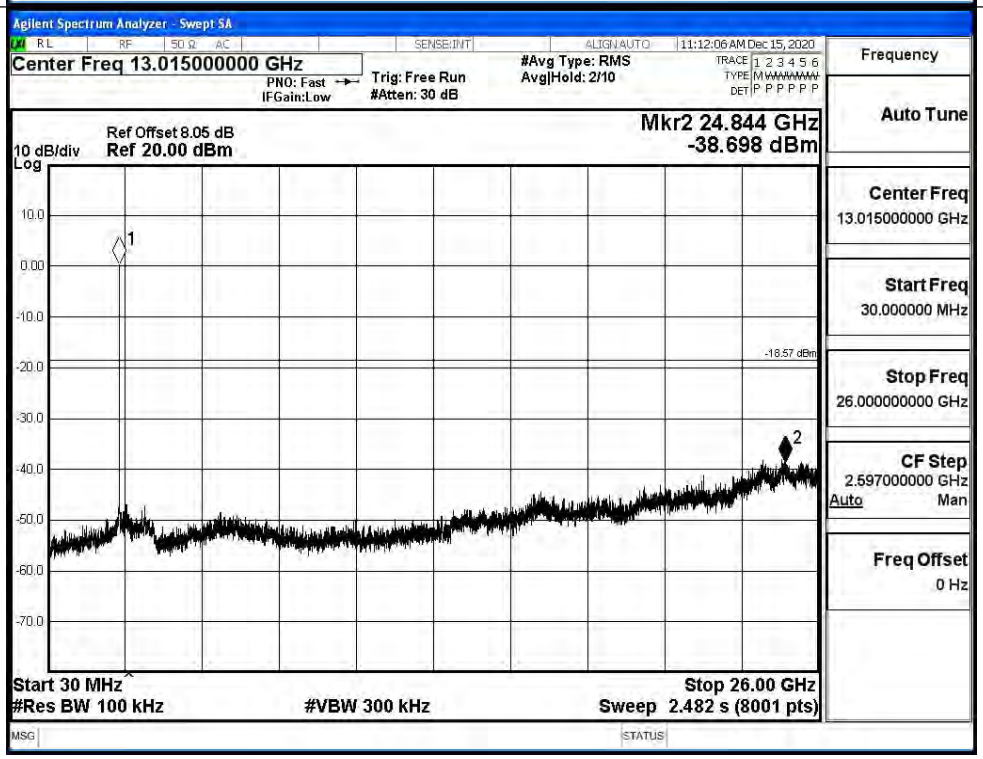
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
11B	LCH	6.795	-38.345	-13.205	PASS
	MCH	6.029	-37.998	-13.971	PASS
	HCH	5.529	-37.834	-14.471	PASS
11G	LCH	2.04	-37.899	-17.960	PASS
	MCH	1.435	-38.698	-18.565	PASS
	HCH	-0.391	-37.032	-20.391	PASS
11N20 SISO	LCH	1.607	-38.001	-18.393	PASS
	MCH	0.811	-36.899	-19.189	PASS
	HCH	-0.35	-37.662	-20.350	PASS

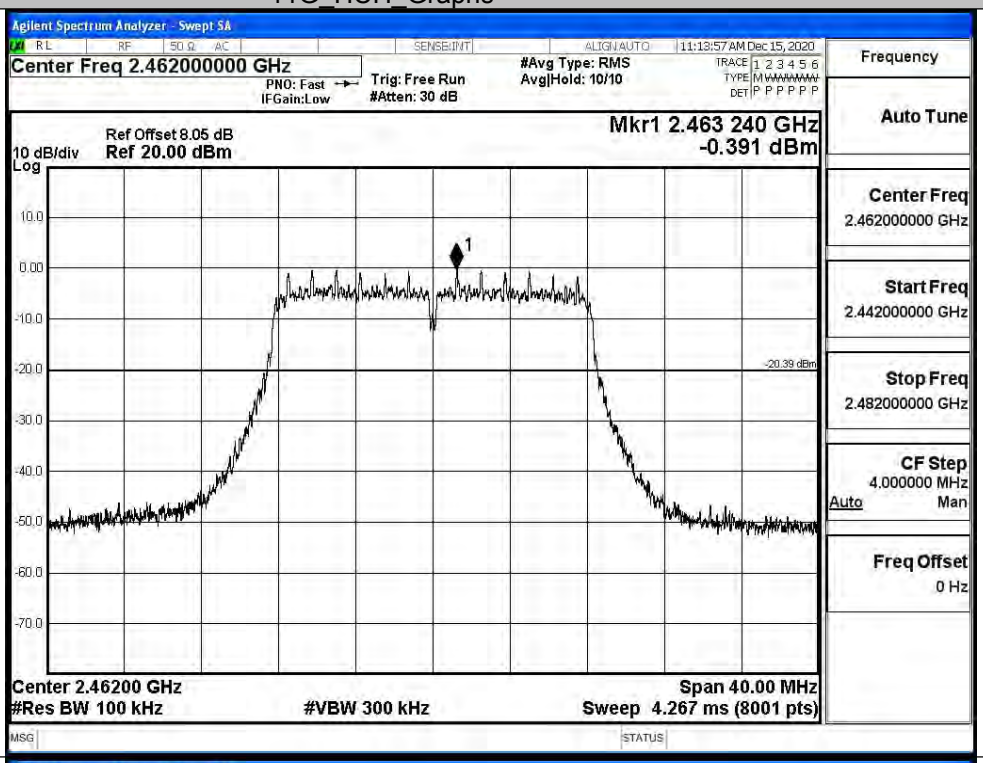
11B_LCH_Graphs		
Pref/11B/LCH		
Puw/11B/LCH		

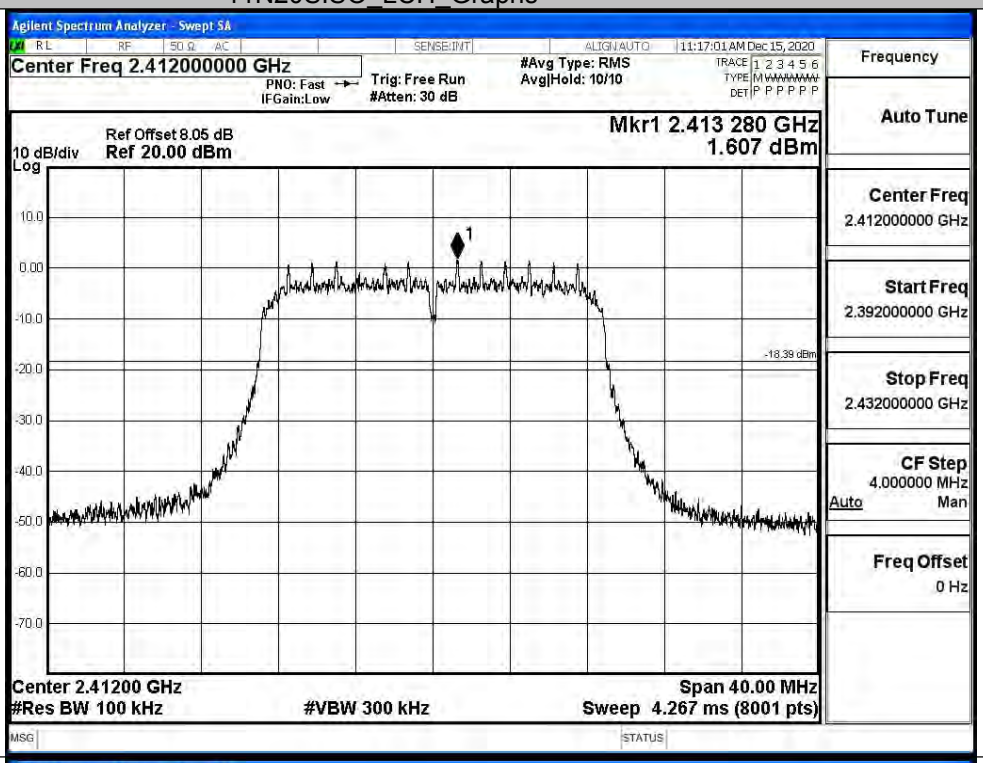
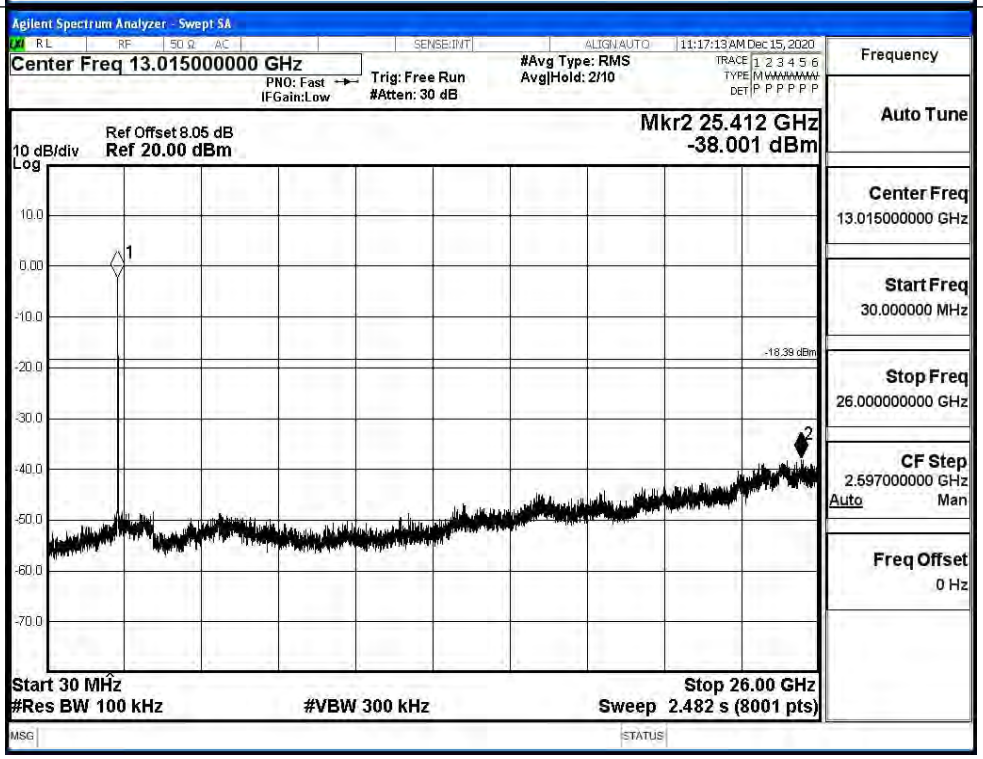
11B_MCH_Graphs		
Pref/11B/MCH		
Puw/11B/MCH		

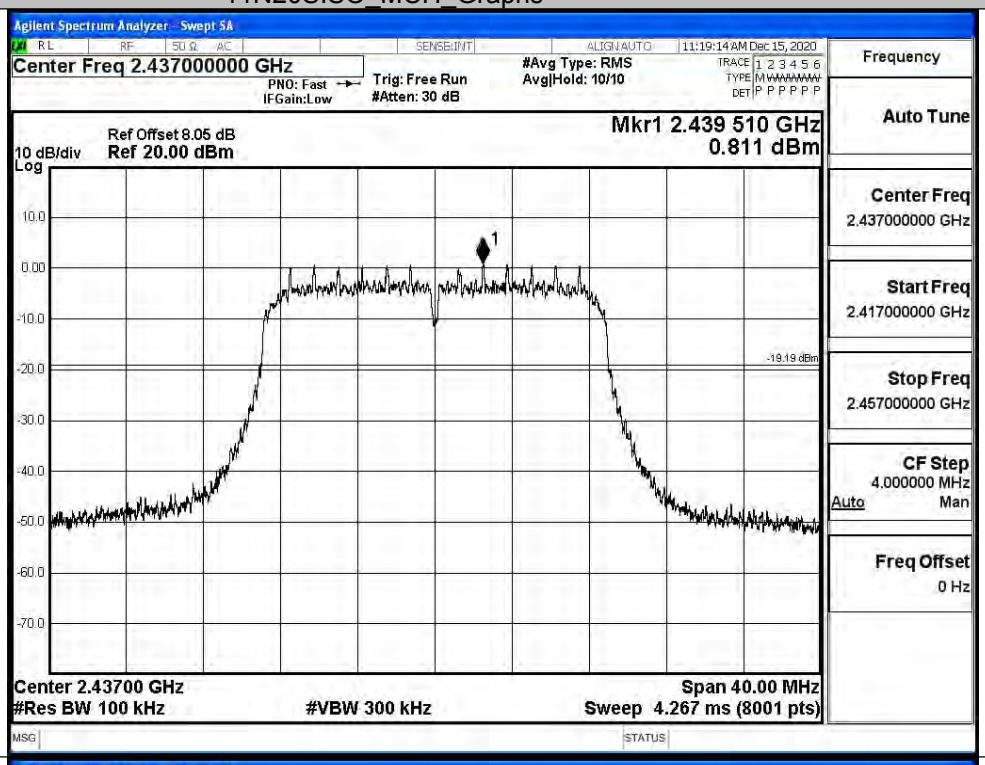
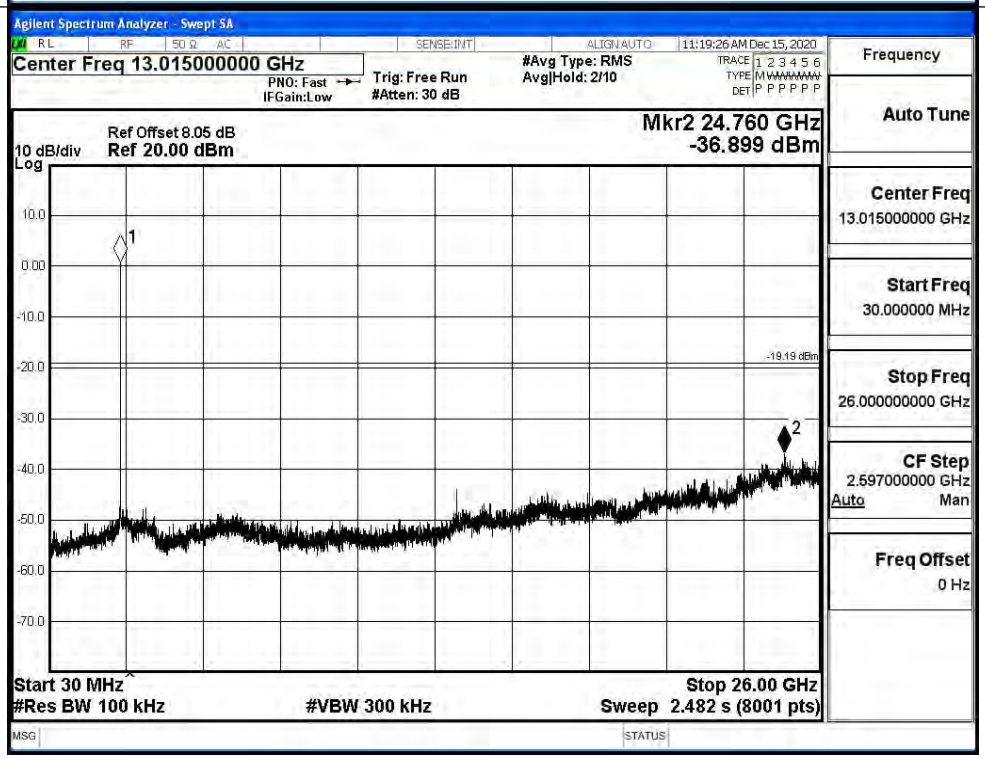
11B_HCH_Graphs		
Pref/11B/HCH		
Puw/11B/HCH		

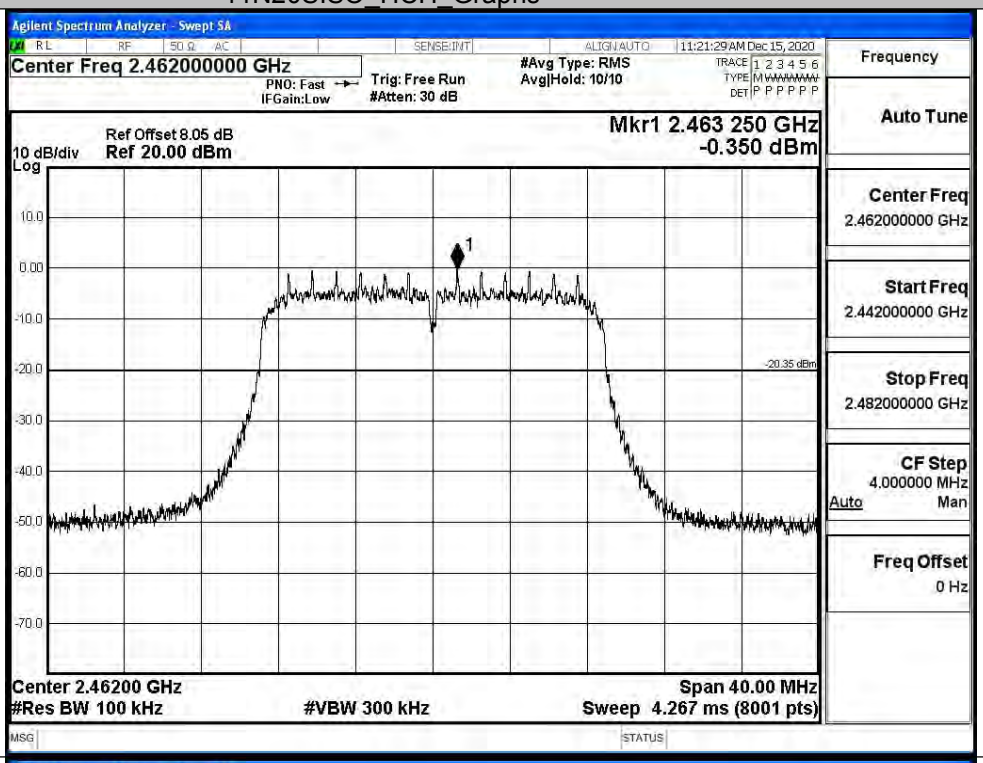
11G_LCH_Graphs		
Pref/11G/LCH		
Puw/11G/LCH		

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

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

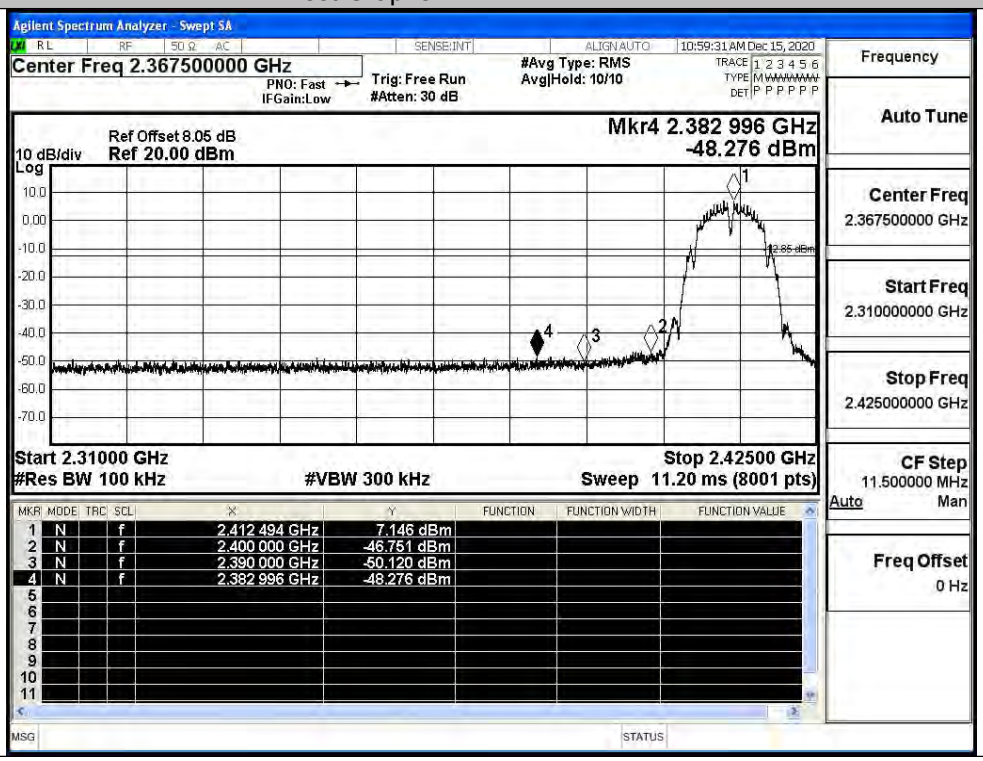
11N20SISO_LCH_Graphs		
Pref/11N20SISO/LCH		
Puw/11N20SISO/LCH		

11N20SISO_MCH_Graphs	
Pref/11N20 SISO/MCH	
Puw/11N20 SISO/MCH	

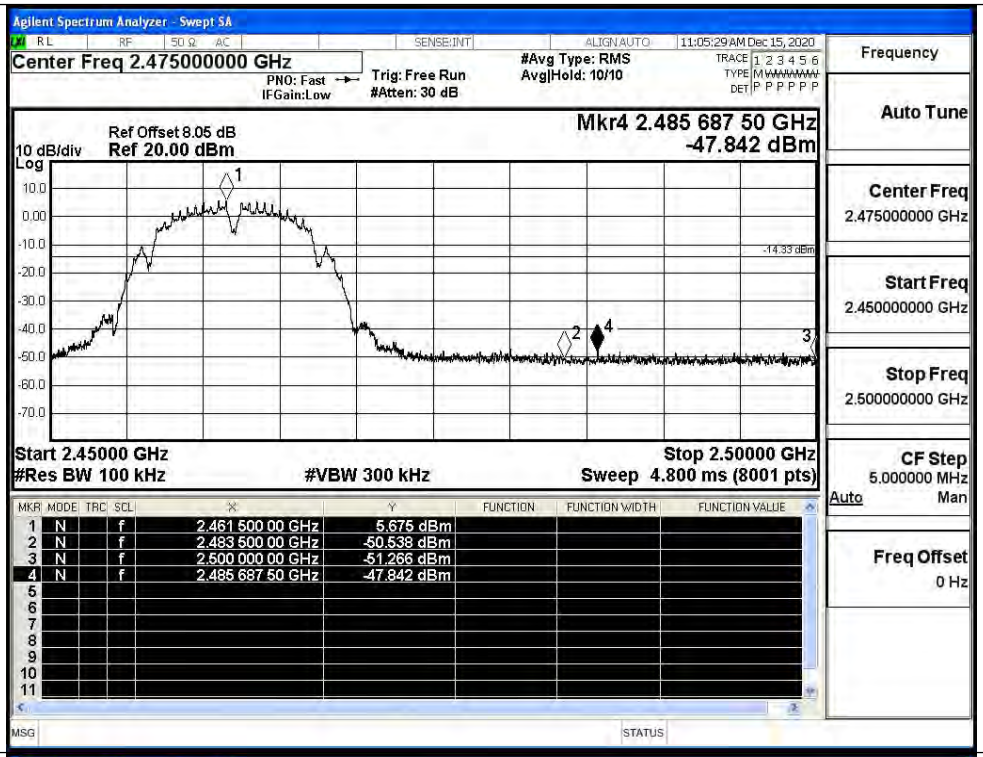
11N20SISO_HCH_Graphs		
Pref/11N20 SISO/HCH		
Puw/11N20 SISO/HCH		

A.6 Band-edge for RF Conducted Emissions

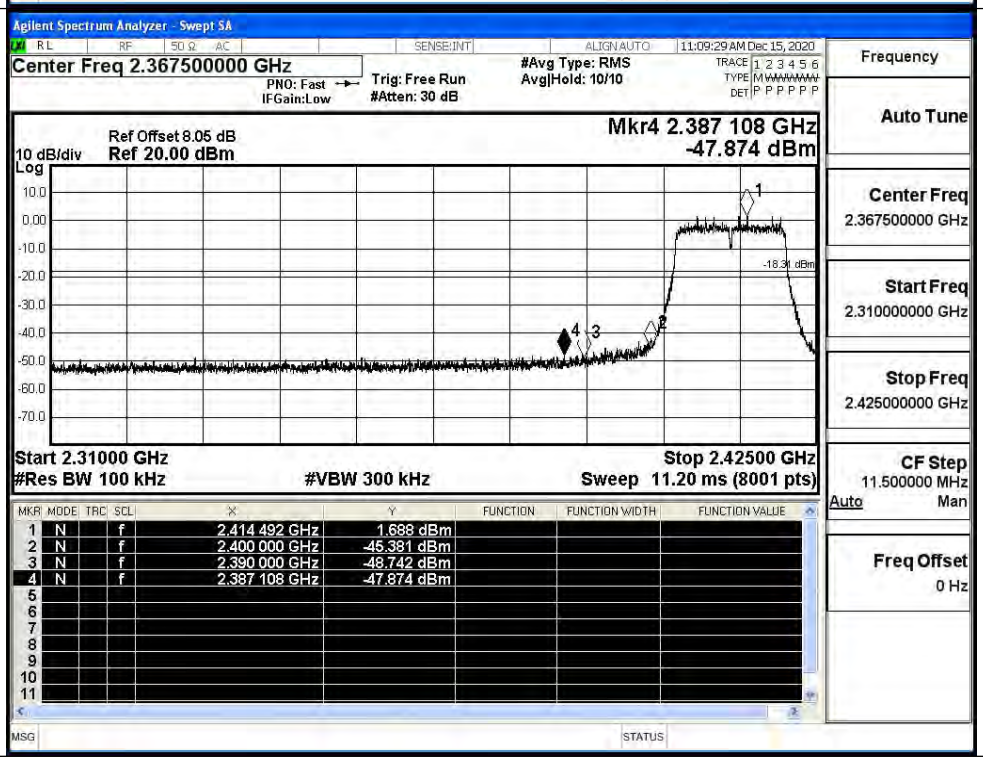
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
11B	LCH	7.146	-48.276	-12.85	PASS
	HCH	5.675	-47.842	-14.33	PASS
11G	LCH	1.688	-47.874	-18.31	PASS
	HCH	-0.141	-48.215	-20.14	PASS
11N20SISO	LCH	1.790	-46.833	-18.21	PASS
	HCH	-0.145	-48.024	-20.15	PASS

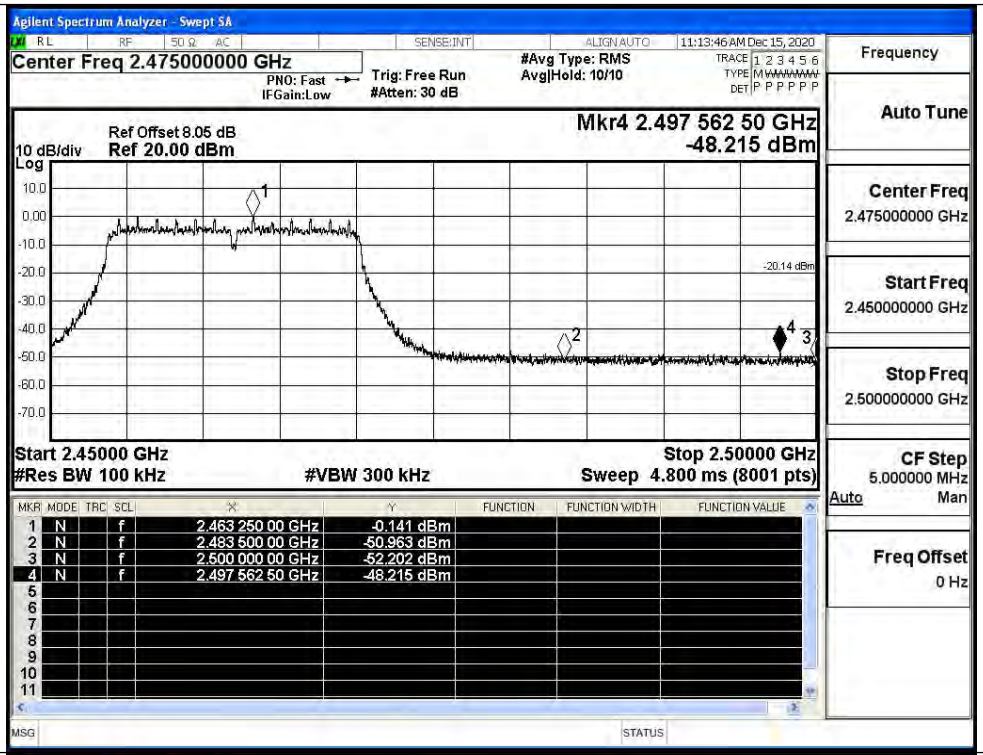
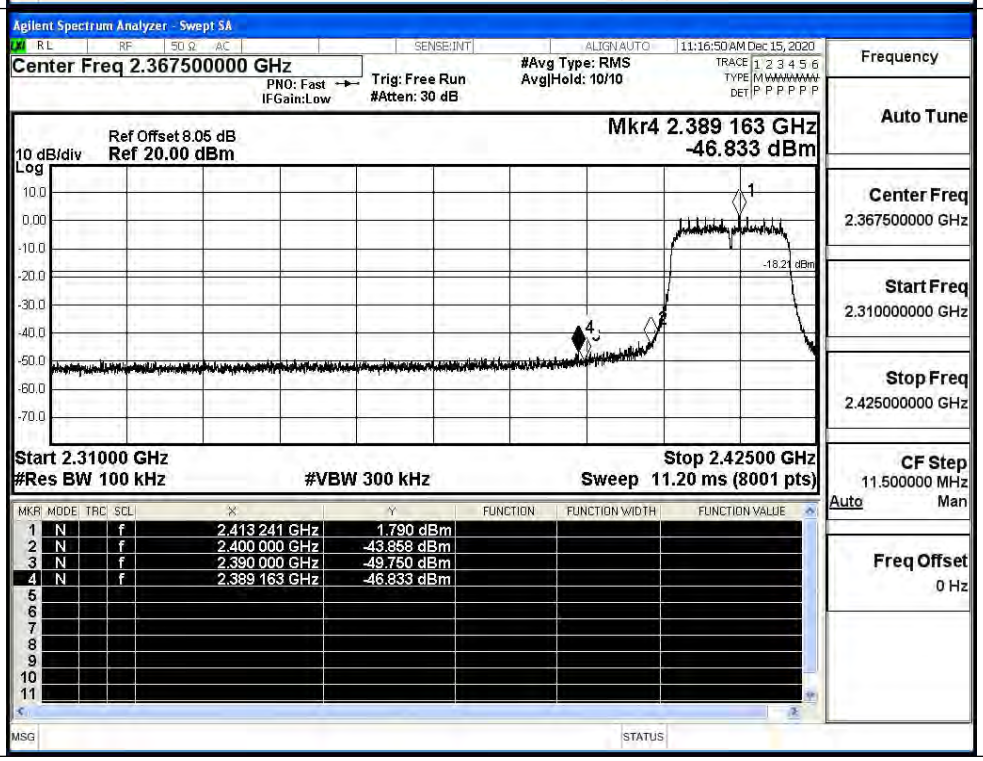
Test Graphs	
11B/LCH	

11B/HCH

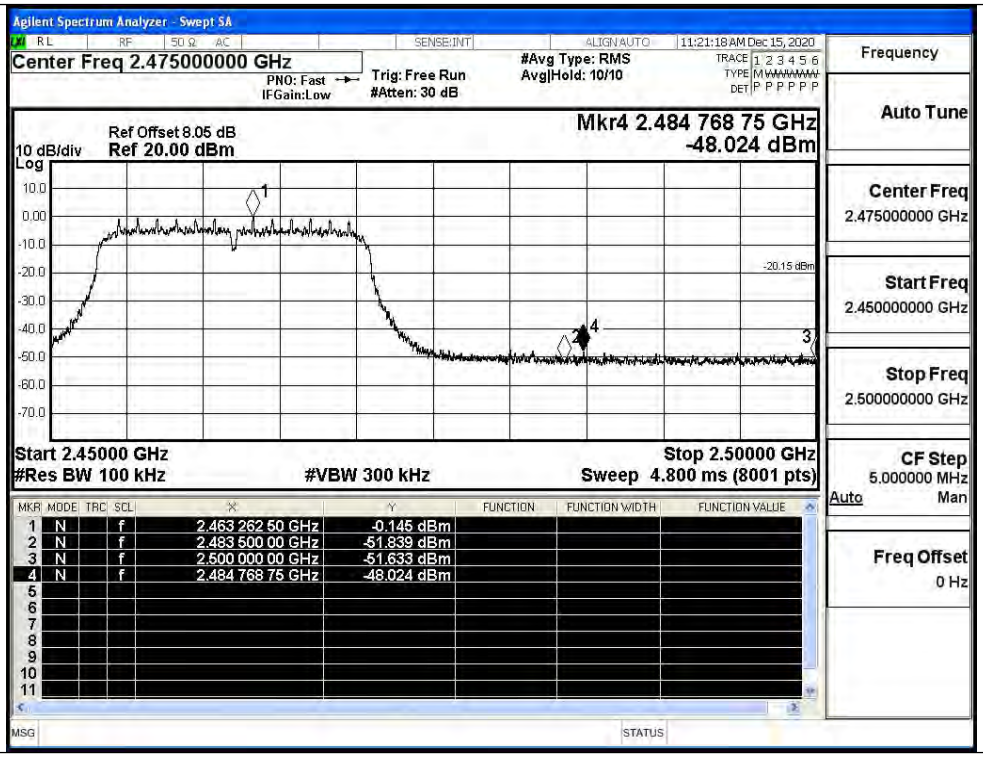


11G/LCH



11G/HCH		
11N20SISO/LCH		

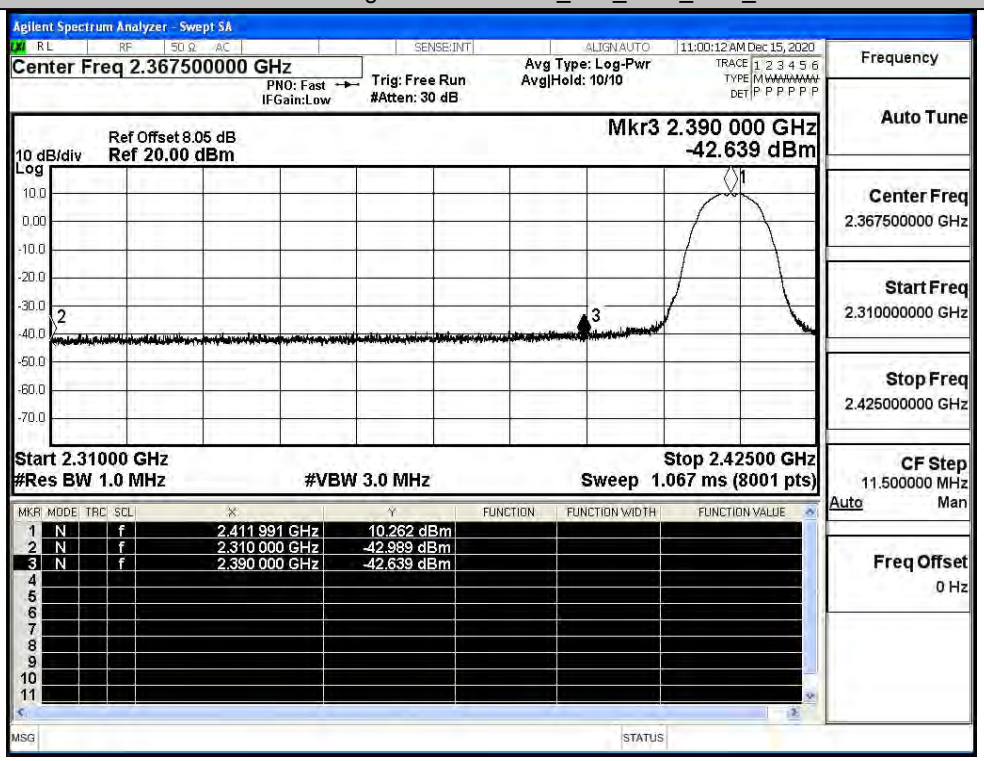
11N20SISO/HCH



A.7 Restrict-band band-edge measurements

Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
11B	2412	Ant1	2310.0	-42.99	3.0	0	55.24	PEAK	74	PASS
	2412	Ant1	2310.0	-52.93	3.0	0	45.30	AV	54	PASS
	2412	Ant1	2390.0	-42.64	3.0	0	55.59	PEAK	74	PASS
	2412	Ant1	2390.0	-51.39	3.0	0	46.84	AV	54	PASS
	2462	Ant1	2483.5	-40.45	3.0	0	57.78	PEAK	74	PASS
	2462	Ant1	2483.5	-51.14	3.0	0	47.09	AV	54	PASS
	2462	Ant1	2500.0	-41.57	3.0	0	56.66	PEAK	74	PASS
	2462	Ant1	2500.0	-51.54	3.0	0	46.69	AV	54	PASS
11G	2412	Ant1	2310.0	-42.60	3.0	0	55.63	PEAK	74	PASS
	2412	Ant1	2310.0	-52.85	3.0	0	45.38	AV	54	PASS
	2412	Ant1	2390.0	-40.26	3.0	0	57.97	PEAK	74	PASS
	2412	Ant1	2390.0	-50.46	3.0	0	47.77	AV	54	PASS
	2462	Ant1	2483.5	-40.51	3.0	0	57.72	PEAK	74	PASS
	2462	Ant1	2483.5	-51.31	3.0	0	46.92	AV	54	PASS
	2462	Ant1	2500.0	-41.57	3.0	0	56.66	PEAK	74	PASS
	2462	Ant1	2500.0	-51.55	3.0	0	46.68	AV	54	PASS
11N20 SISO	2412	Ant1	2310.0	-42.68	3.0	0	55.55	PEAK	74	PASS
	2412	Ant1	2310.0	-52.90	3.0	0	45.33	AV	54	PASS
	2412	Ant1	2390.0	-39.10	3.0	0	59.13	PEAK	74	PASS
	2412	Ant1	2390.0	-50.57	3.0	0	47.66	AV	54	PASS
	2462	Ant1	2483.5	-40.61	3.0	0	57.62	PEAK	74	PASS
	2462	Ant1	2483.5	-51.31	3.0	0	46.92	AV	54	PASS
	2462	Ant1	2500.0	-41.55	3.0	0	56.68	PEAK	74	PASS
	2462	Ant1	2500.0	-51.56	3.0	0	46.67	AV	54	PASS

Restrict-band band-edge measurements_11B_2412_Ant1_PEAK



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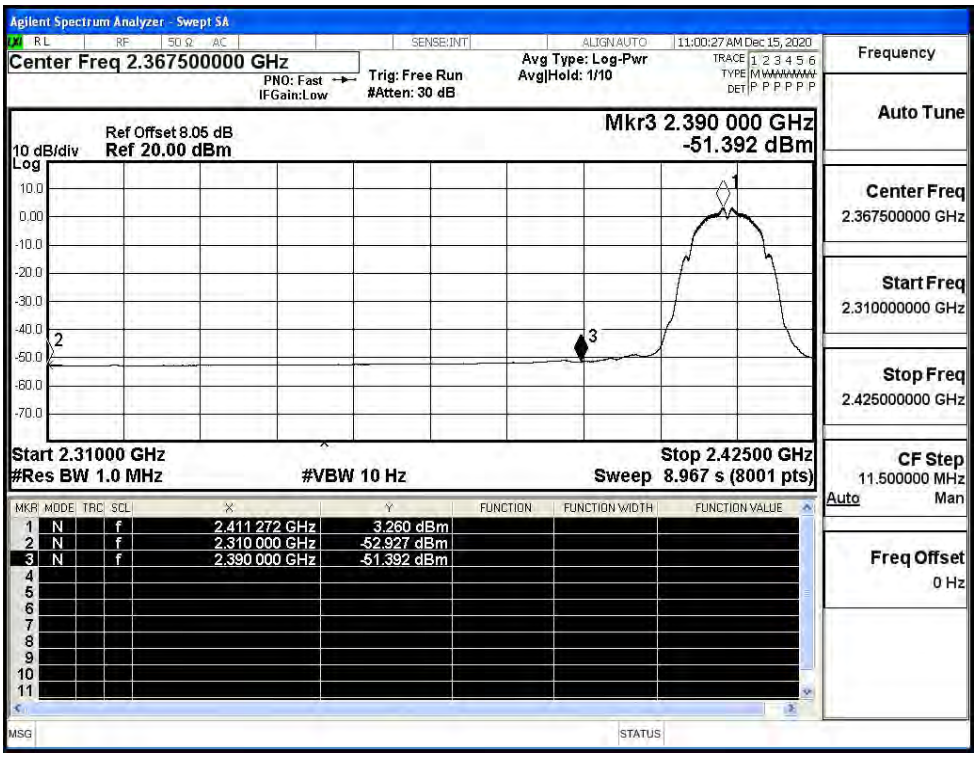

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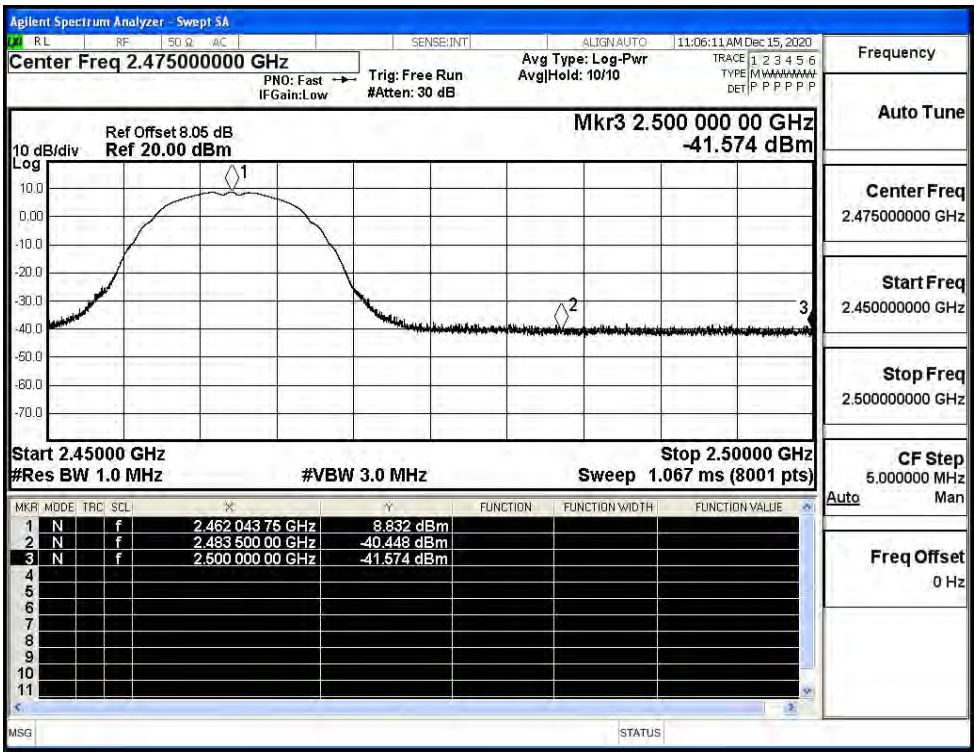

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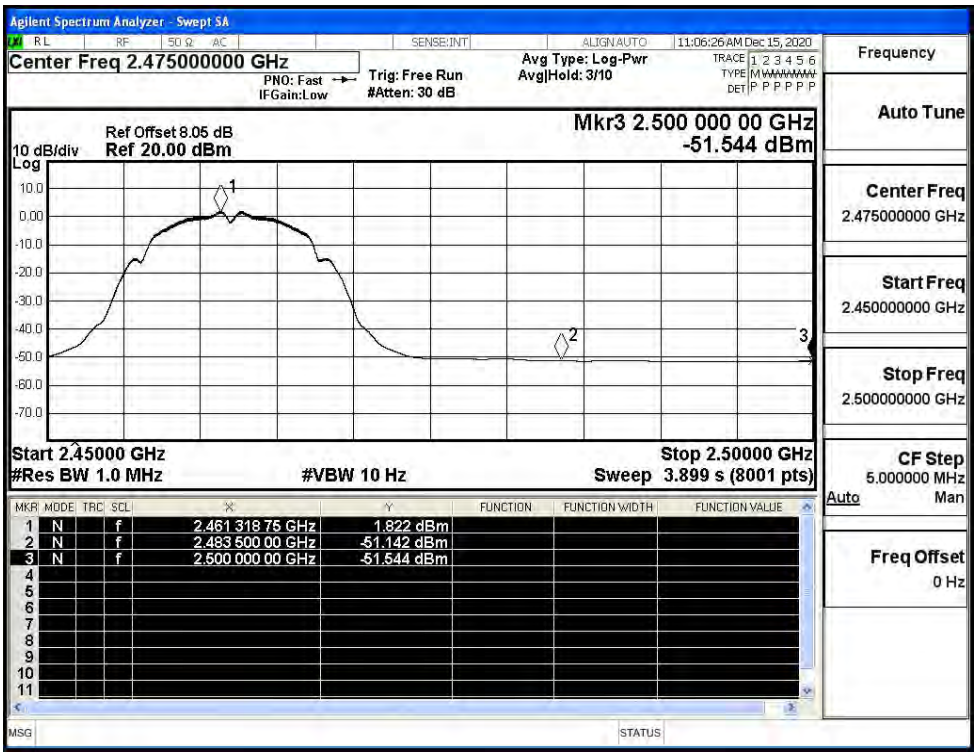

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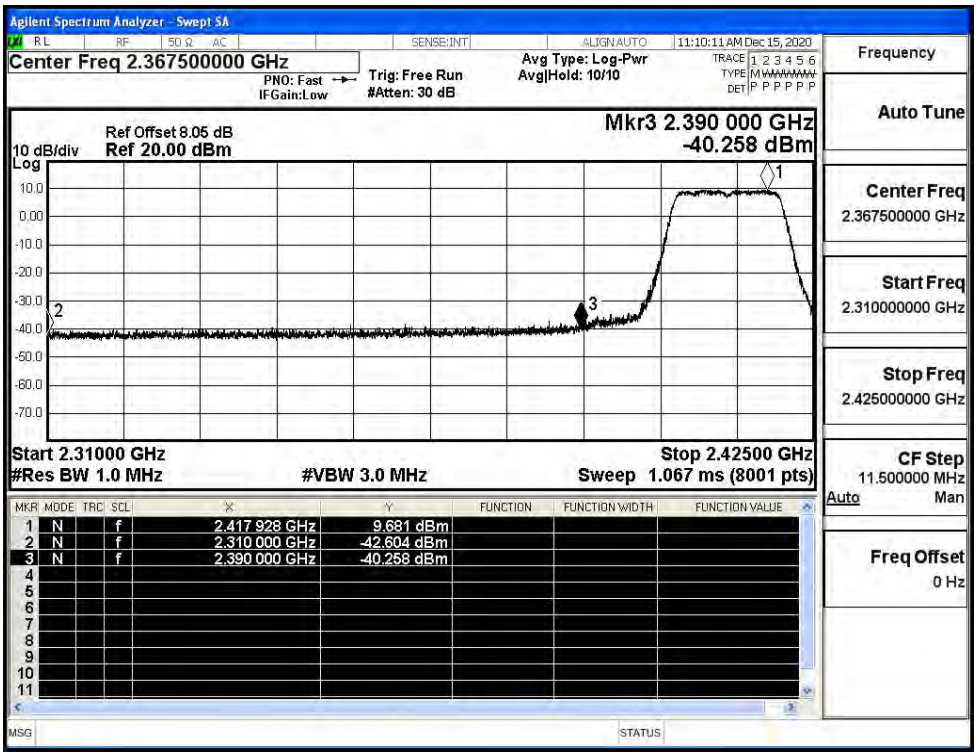

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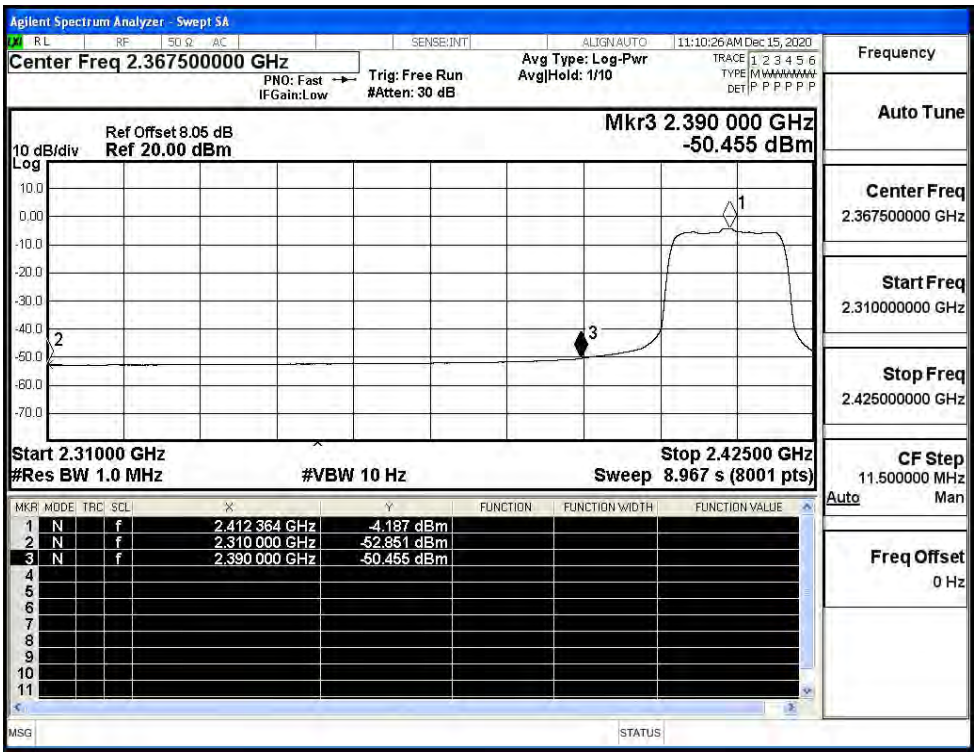

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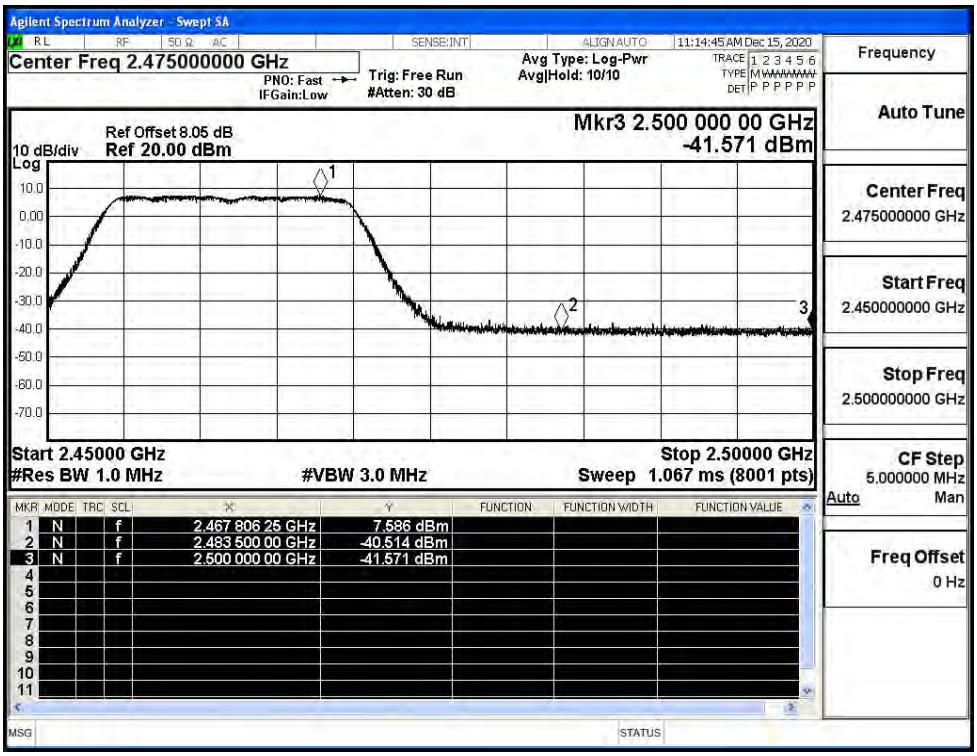

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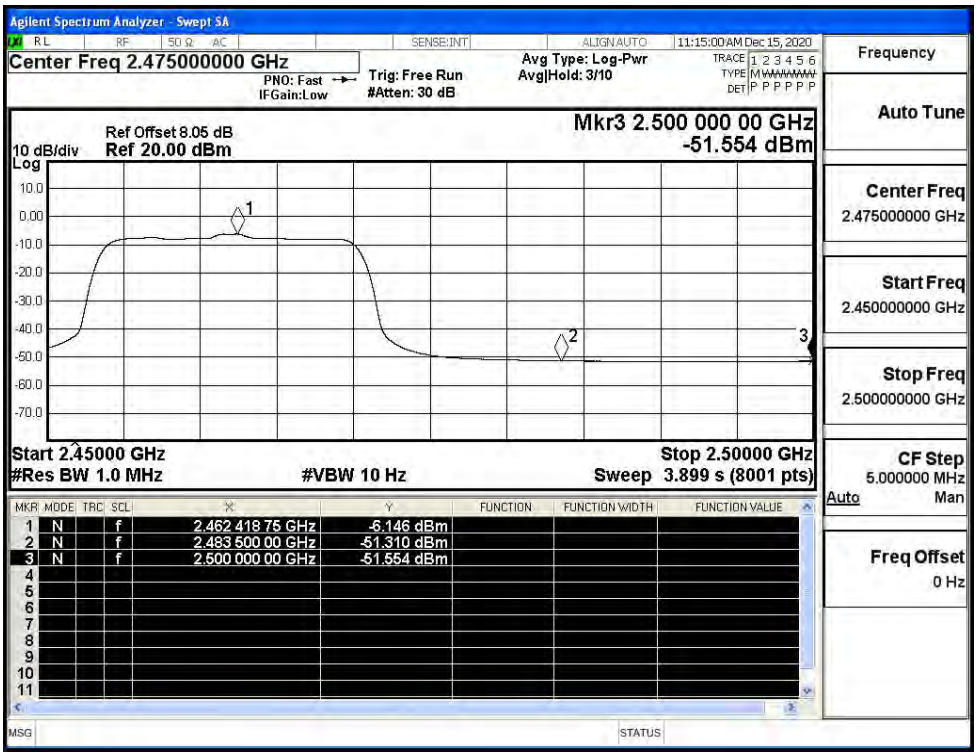

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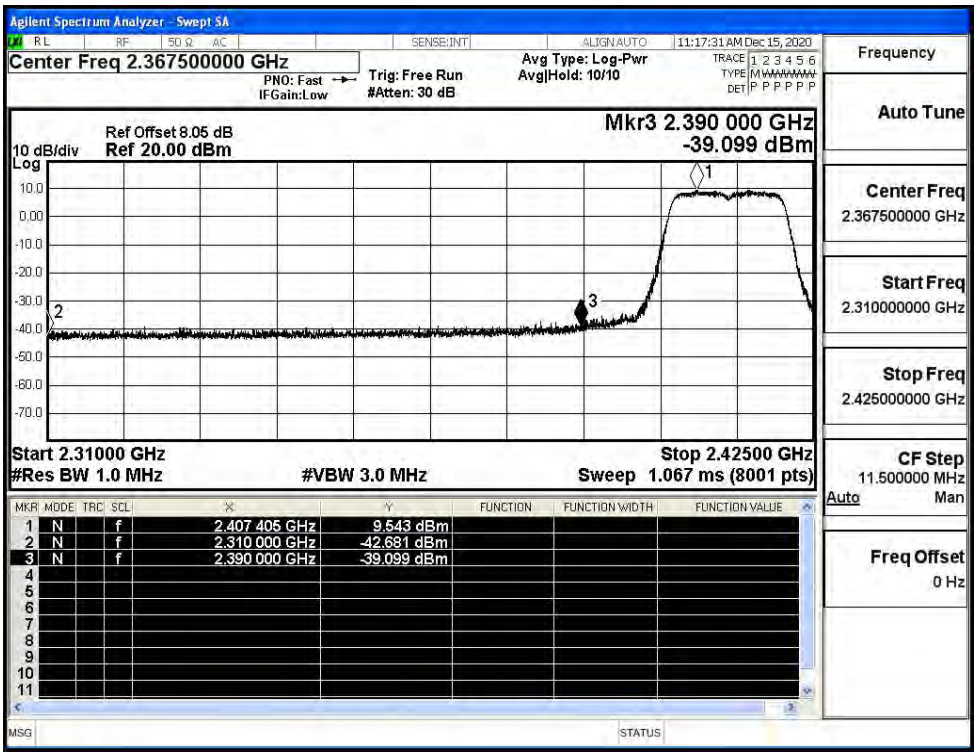

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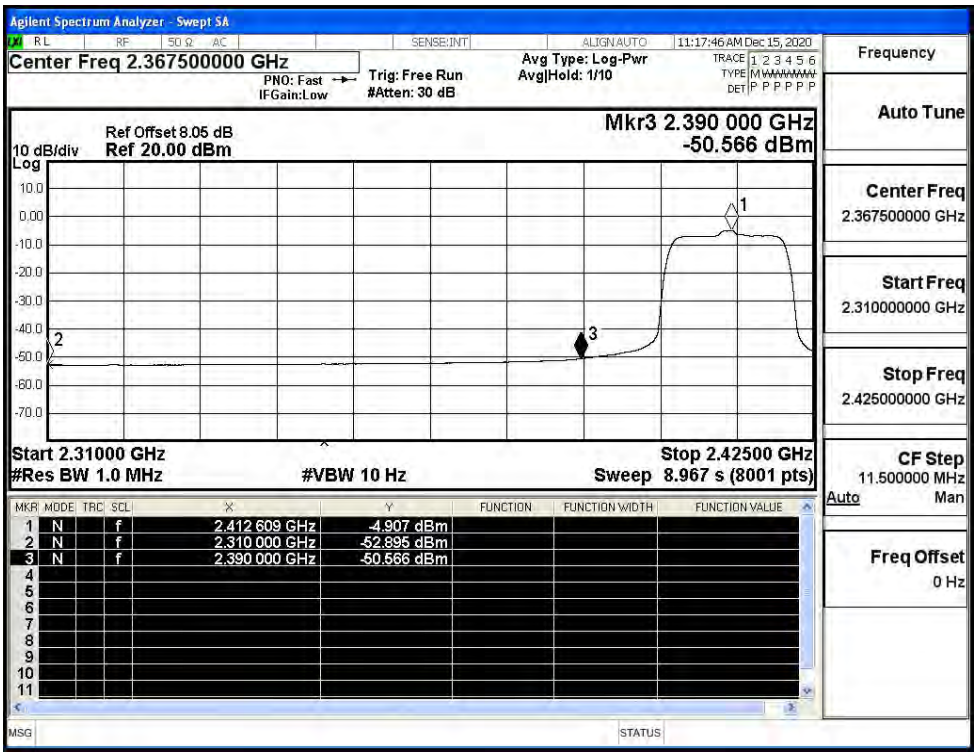

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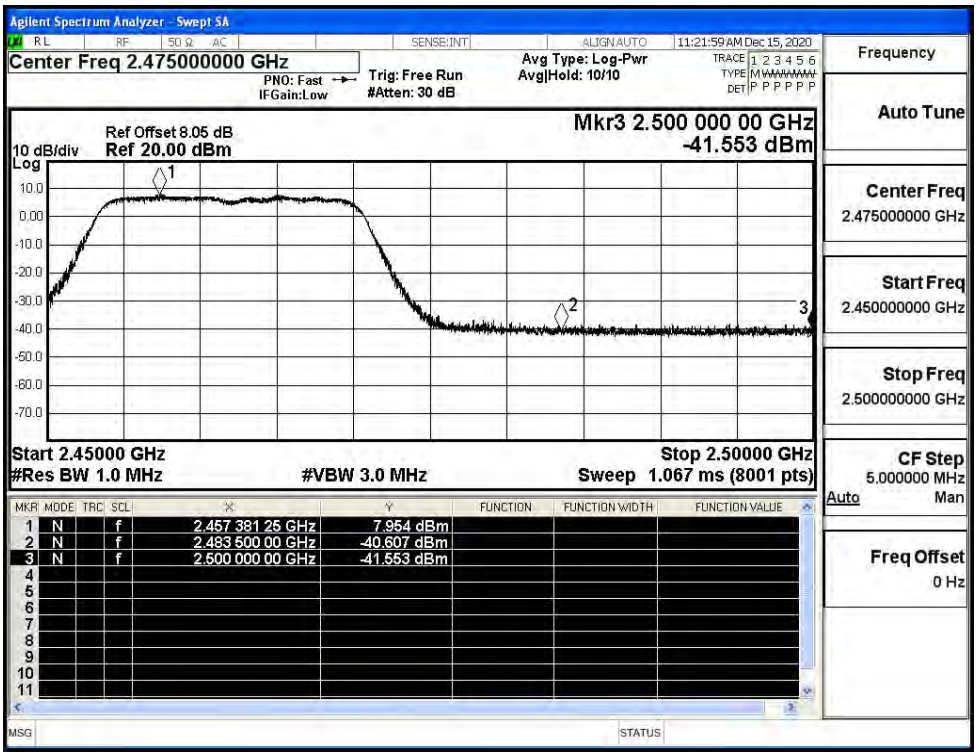
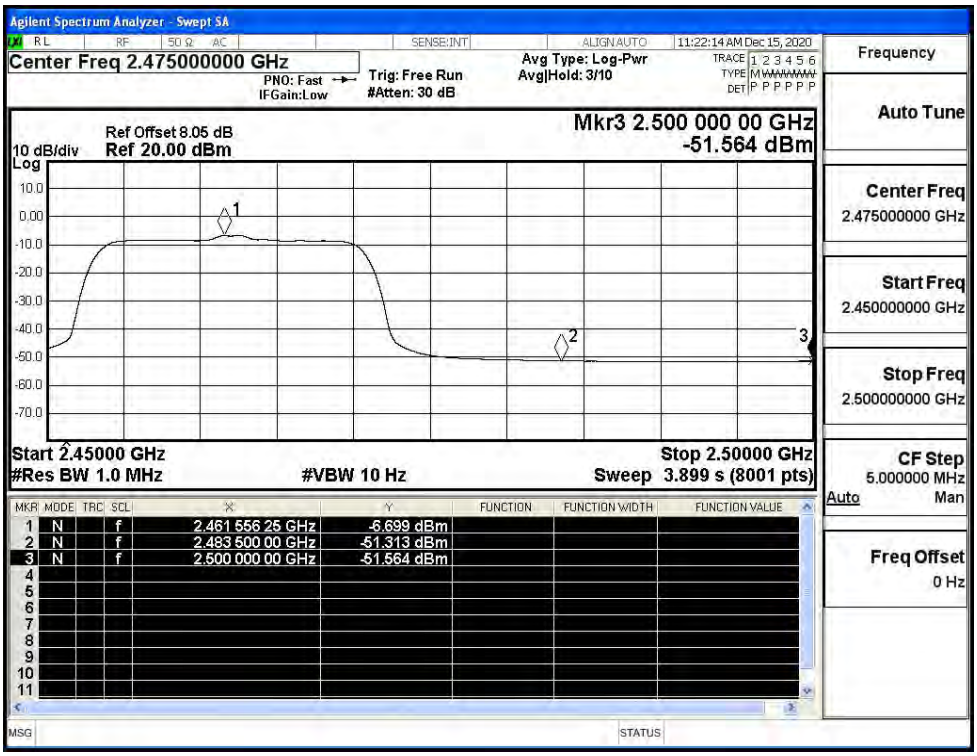
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