Appendix A

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: Smart Flood light

Trade Mark: N/A

Test Model: FTC-100-WN-C28-K1-EU-IGN

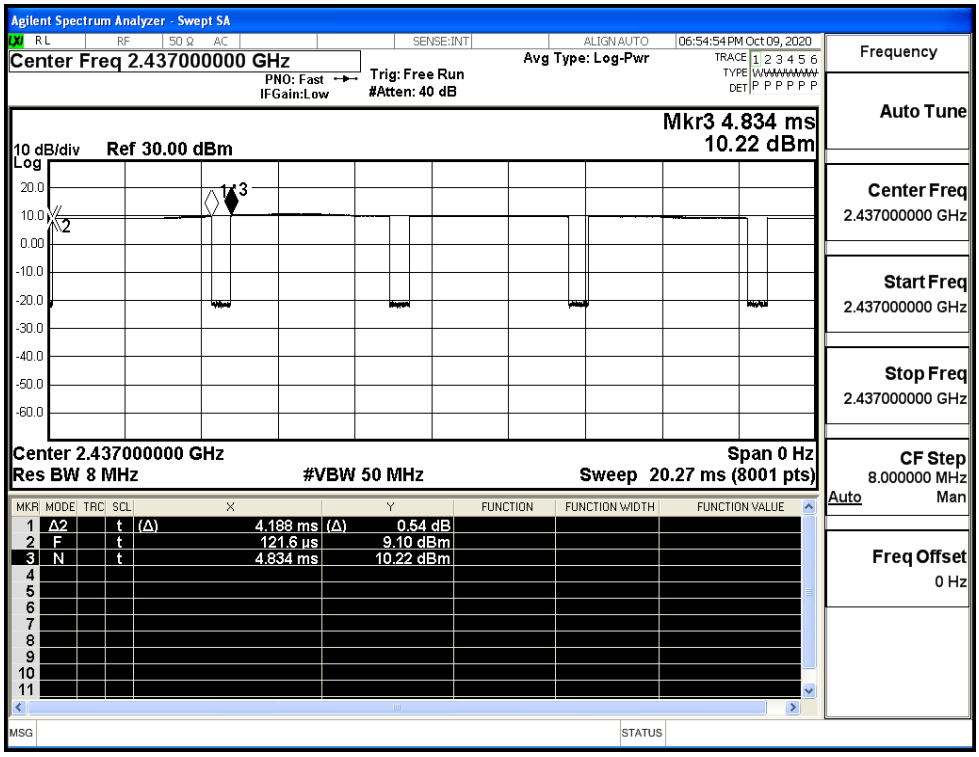
Environmental Conditions

Temperature:	25 ° C
Relative Humidity:	50%
ATM Pressure:	100.0 kPa
Test Engineer:	Kay Hu
Supervised by:	Li Huan

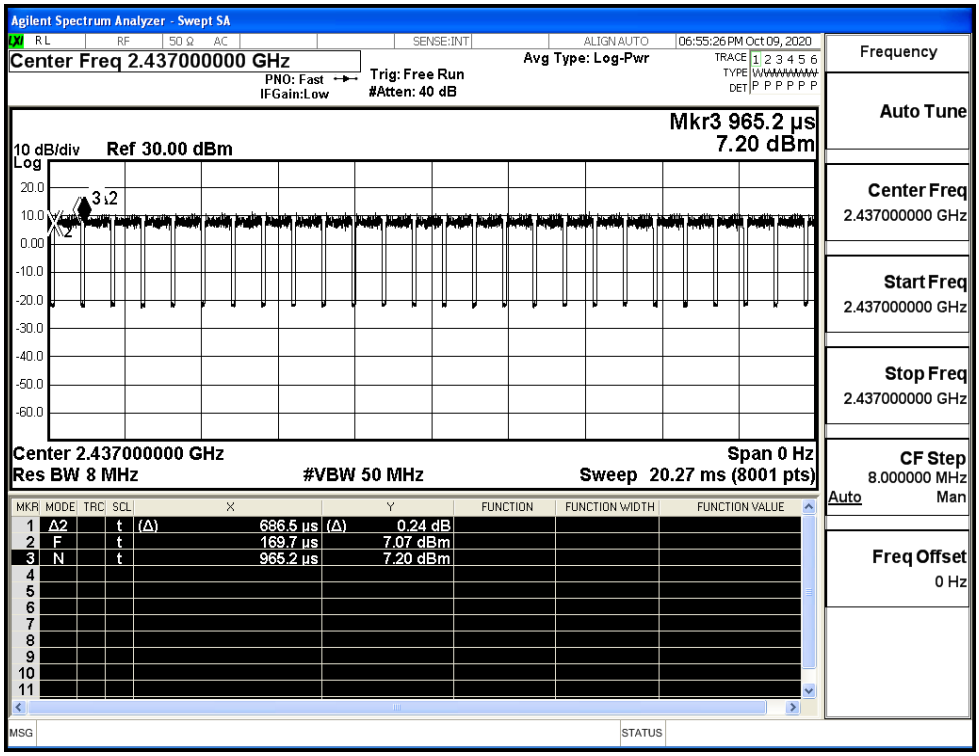
A.1 Duty Cycle

Test Mode	Test Channel	Ant	Duty Cycle[%]	Verdict
11B	2437	Ant1	88.87	PASS
11G	2437	Ant1	86.31	PASS
11N20SISO	2437	Ant1	85.67	PASS

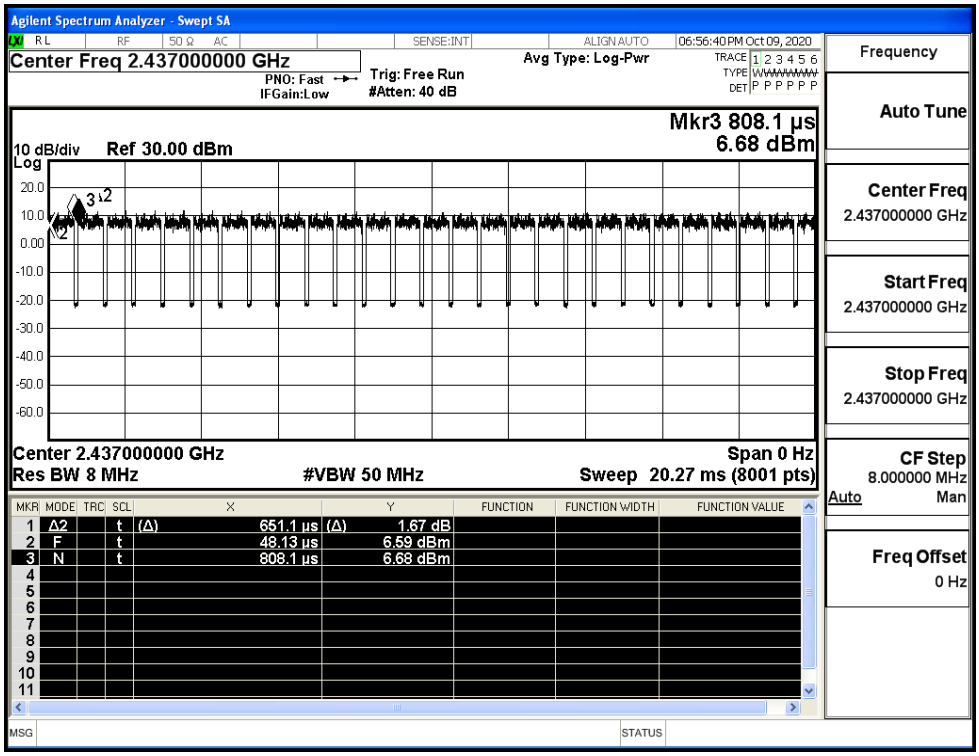
Duty Cycle_11B_2437_Ant1



Duty Cycle_11G_2437_Ant1

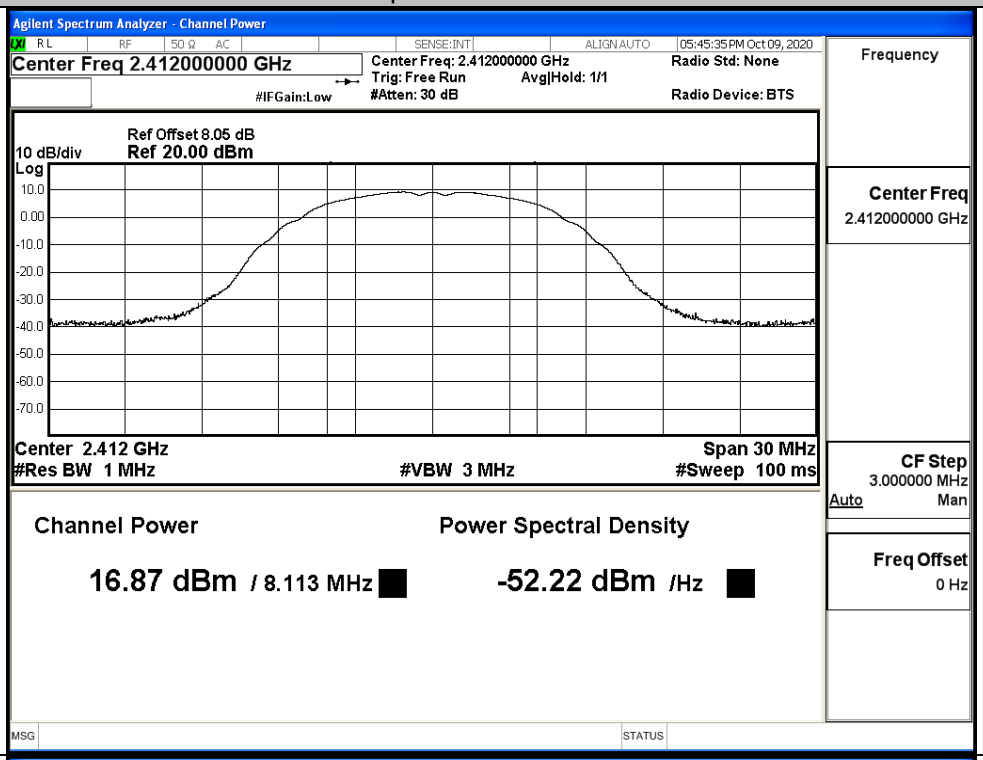
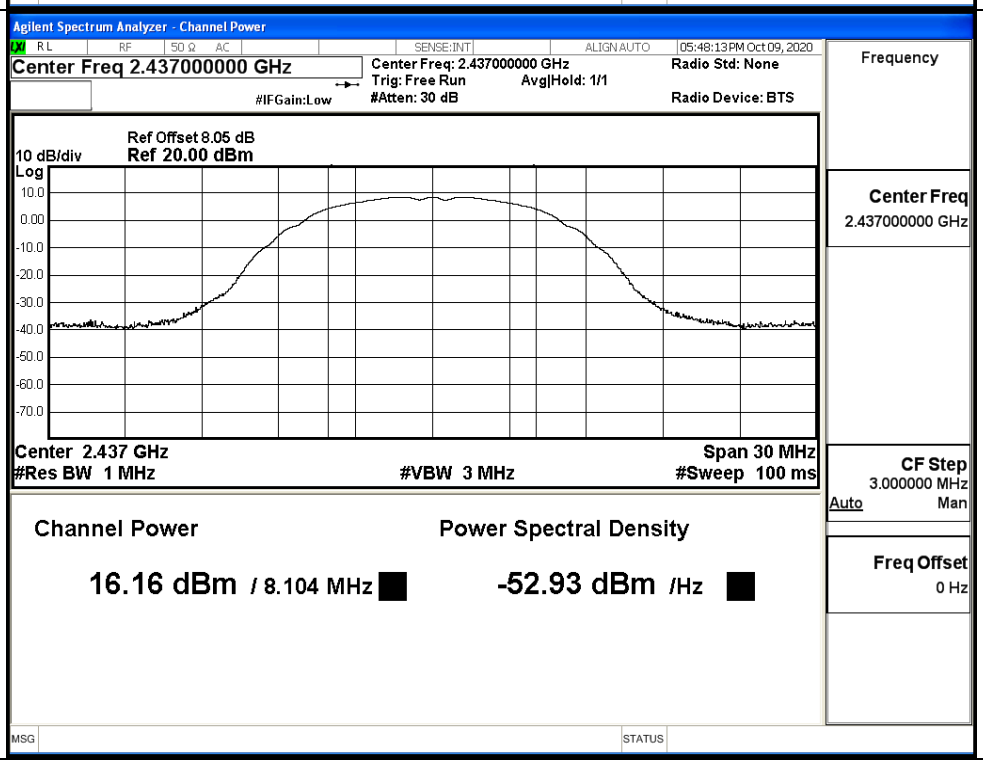


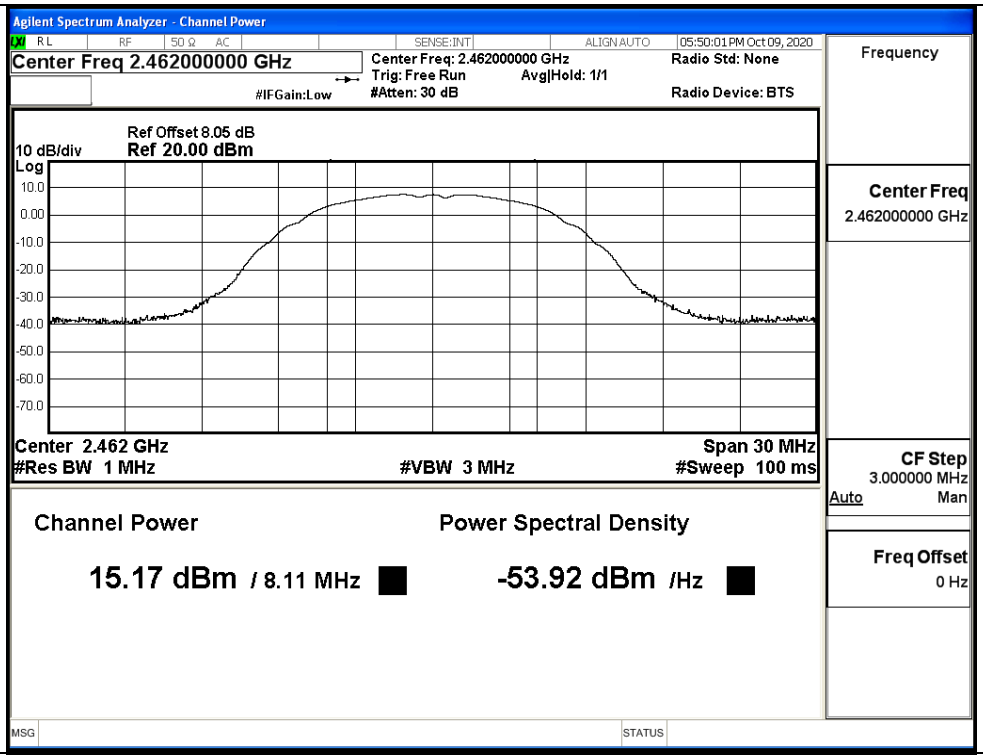
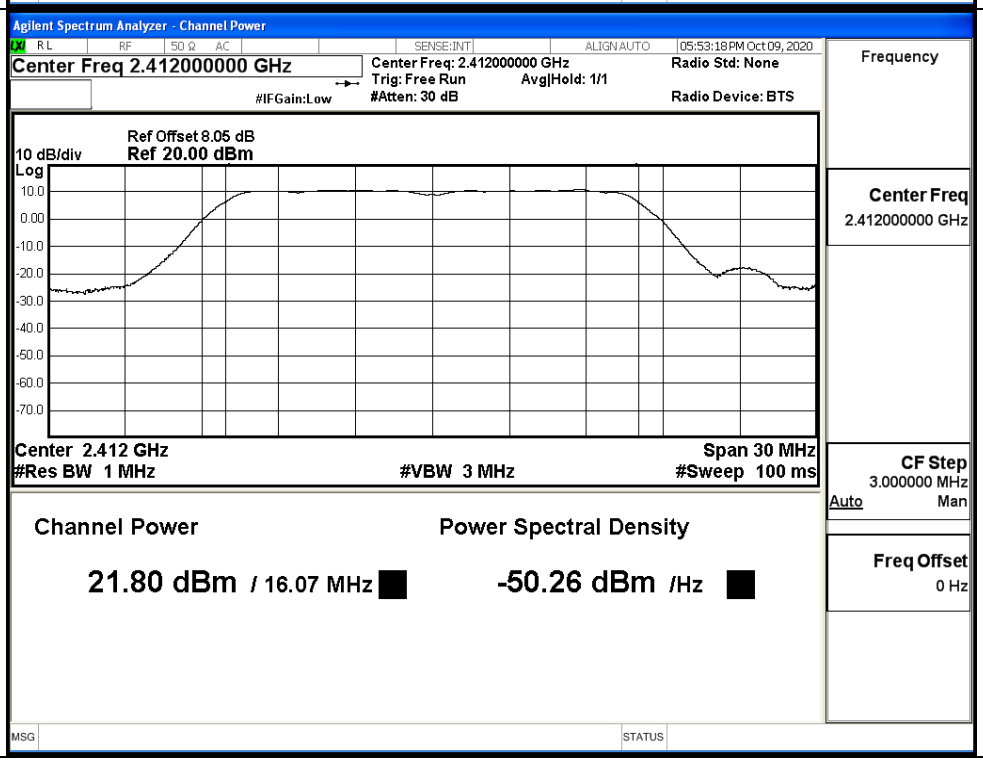
Duty Cycle_11N20SISO_2437_Ant1

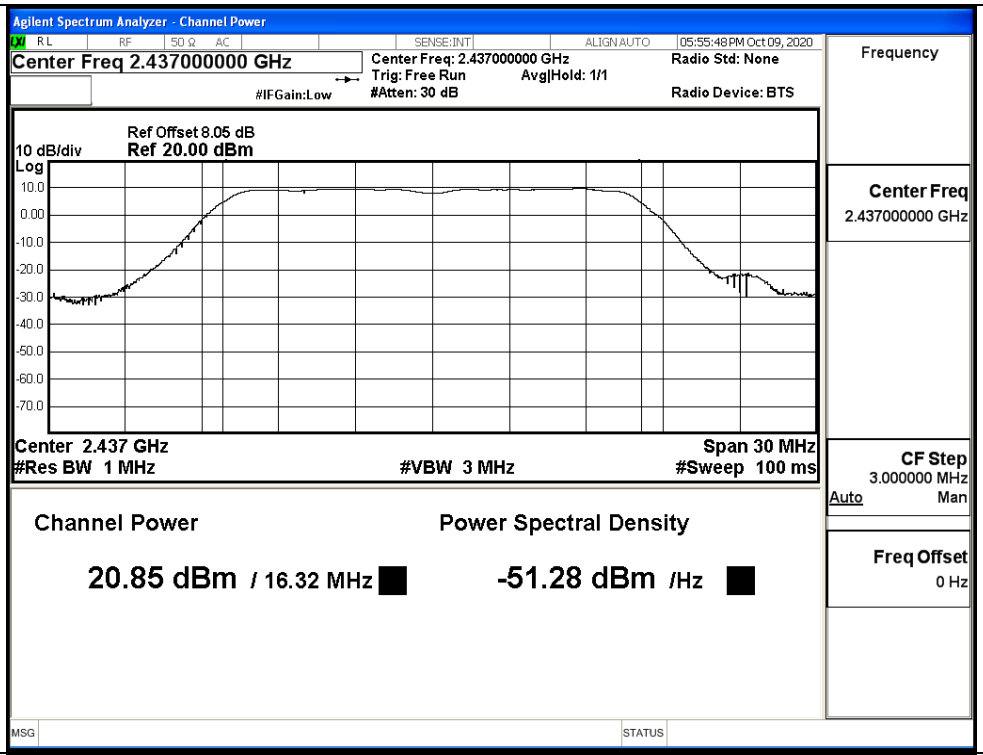
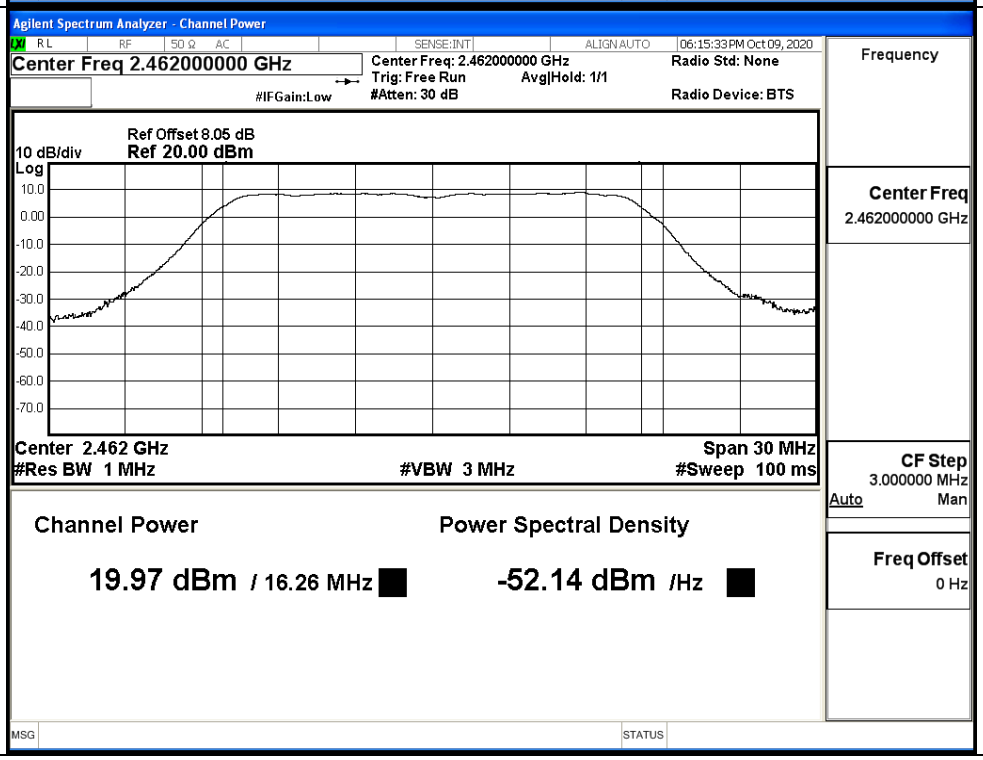


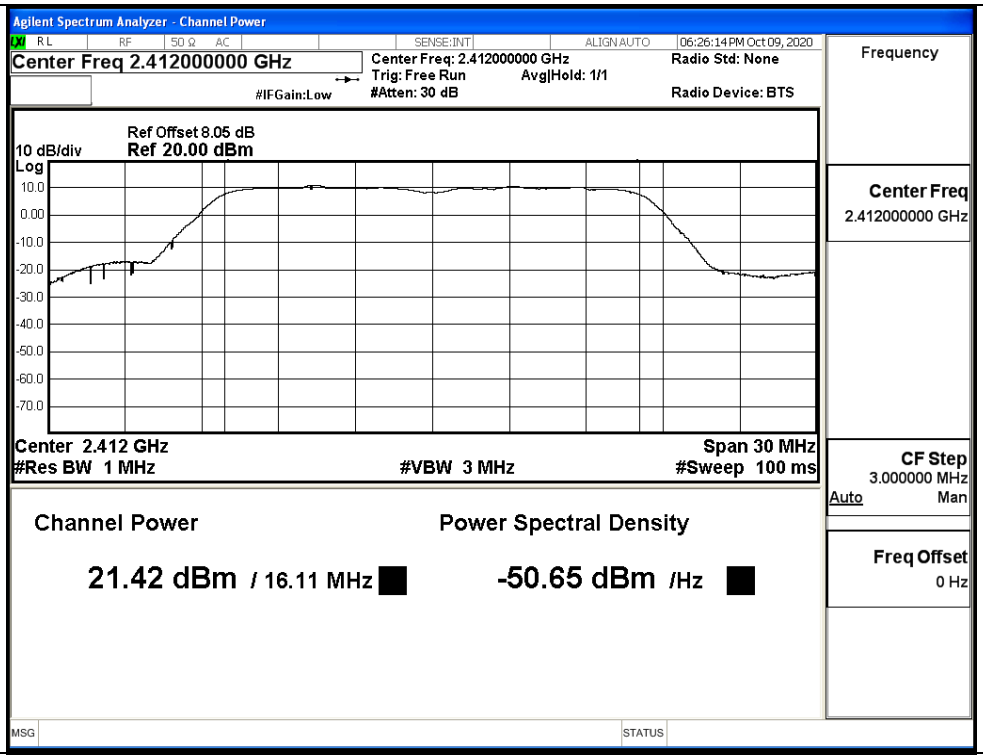
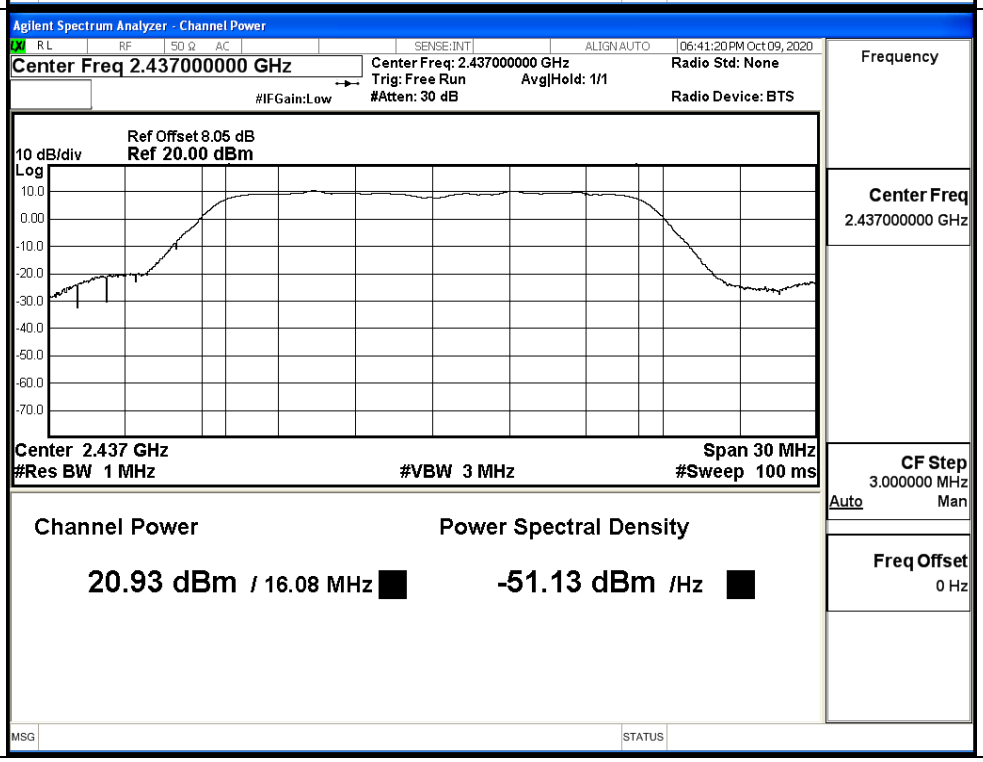
A.2 Maximum Conducted Output Power

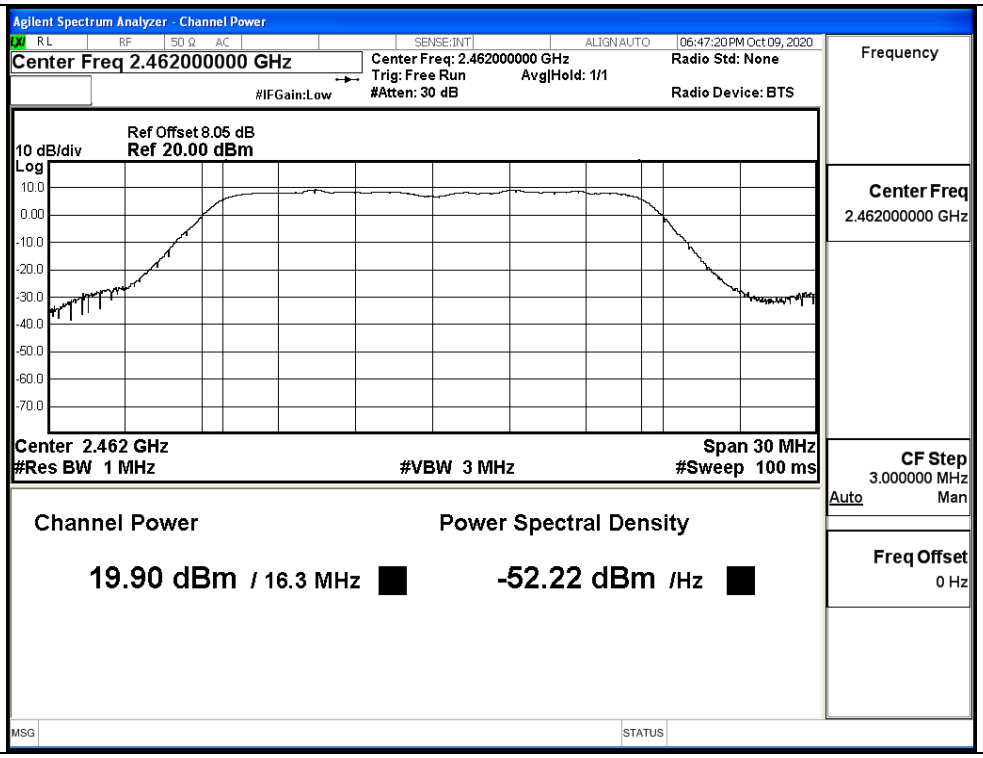
Mode	Channel	Meas.Level [dBm]	Correction Factor [dB]	Level [dBm]	Limit [dBm]	Verdict
11B	LCH	16.87	-0.51	16.36	30	PASS
	MCH	16.16	-0.51	15.65	30	PASS
	HCH	15.17	-0.51	14.66	30	PASS
11G	LCH	21.80	-0.64	21.16	30	PASS
	MCH	20.85	-0.64	20.21	30	PASS
	HCH	19.97	-0.64	19.33	30	PASS
11N20SISO	LCH	21.42	-0.67	20.75	30	PASS
	MCH	20.93	-0.67	20.26	30	PASS
	HCH	19.90	-0.67	19.23	30	PASS

Test Graphs		
11B/LCH		
11B/MCH		

11B/HCH		
11G/LCH		

11G/MCH	
11G/HCH	

11N20SISO/LCH	
11N20SISO/MCH	

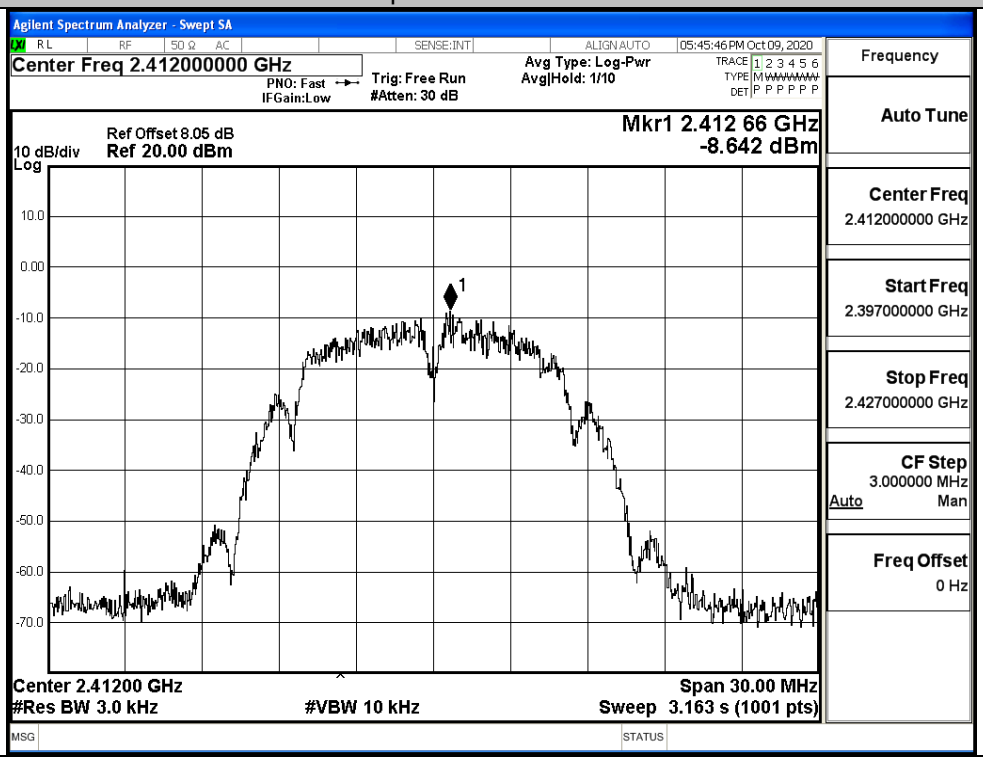
11N20SISO/HCH	

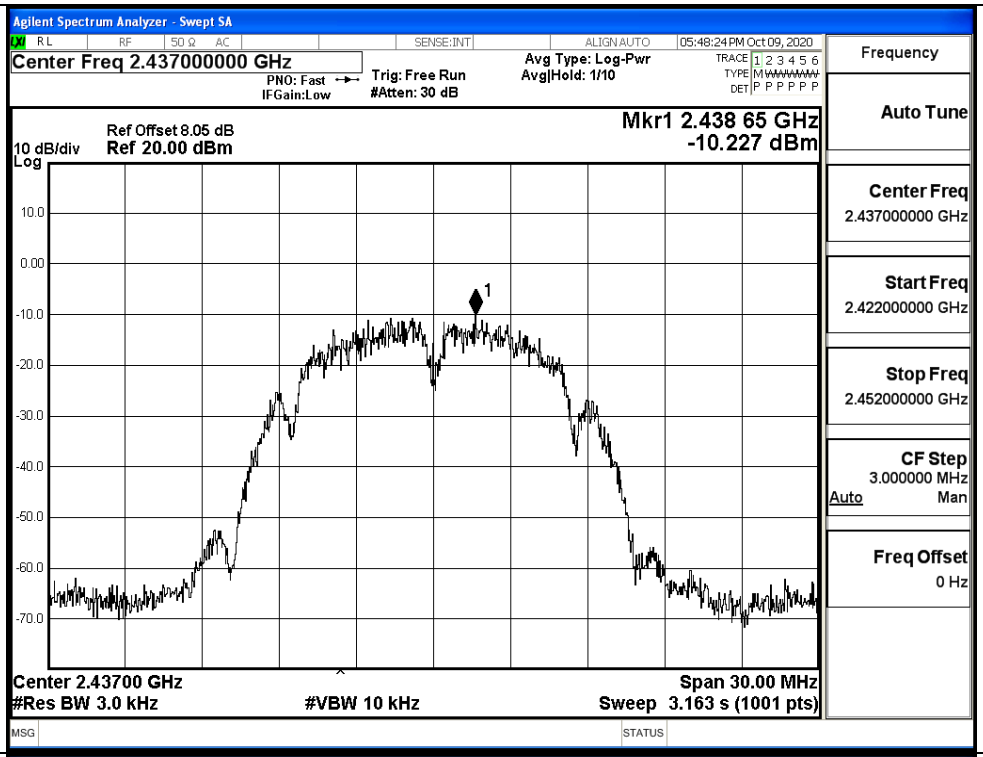
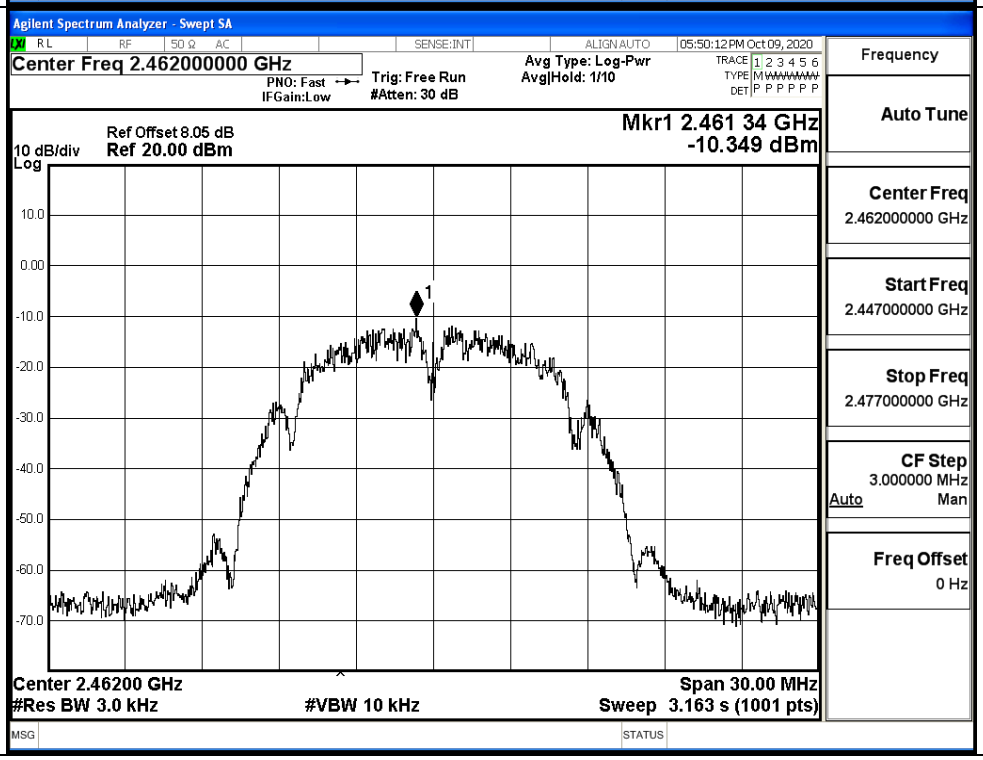
A.3 Maximum Power Spectral Density

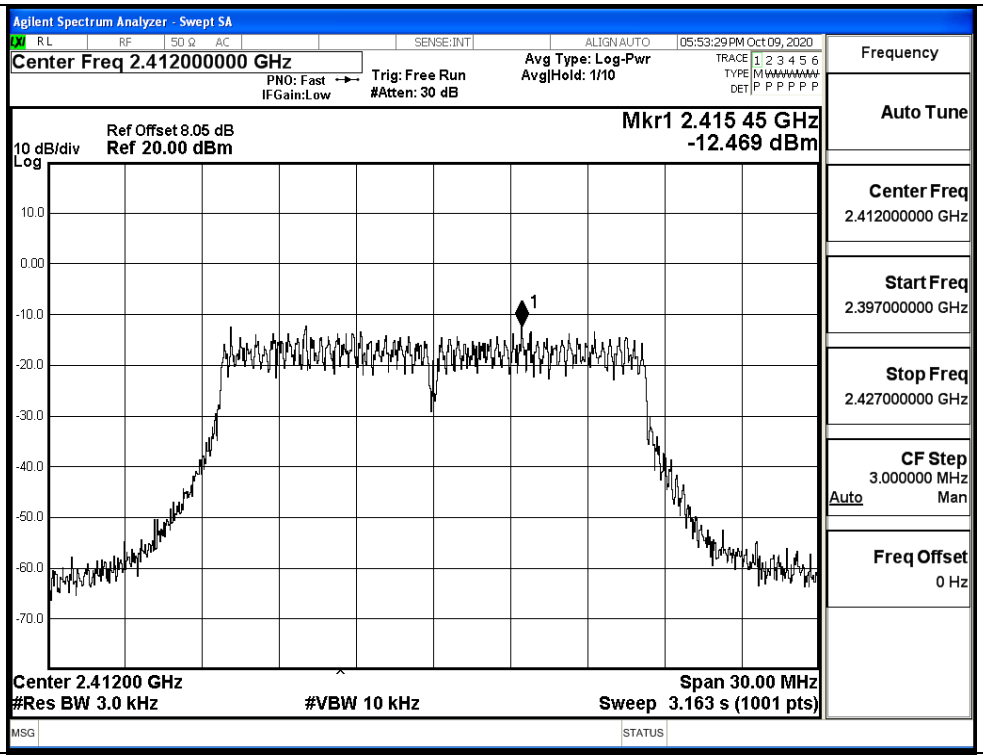
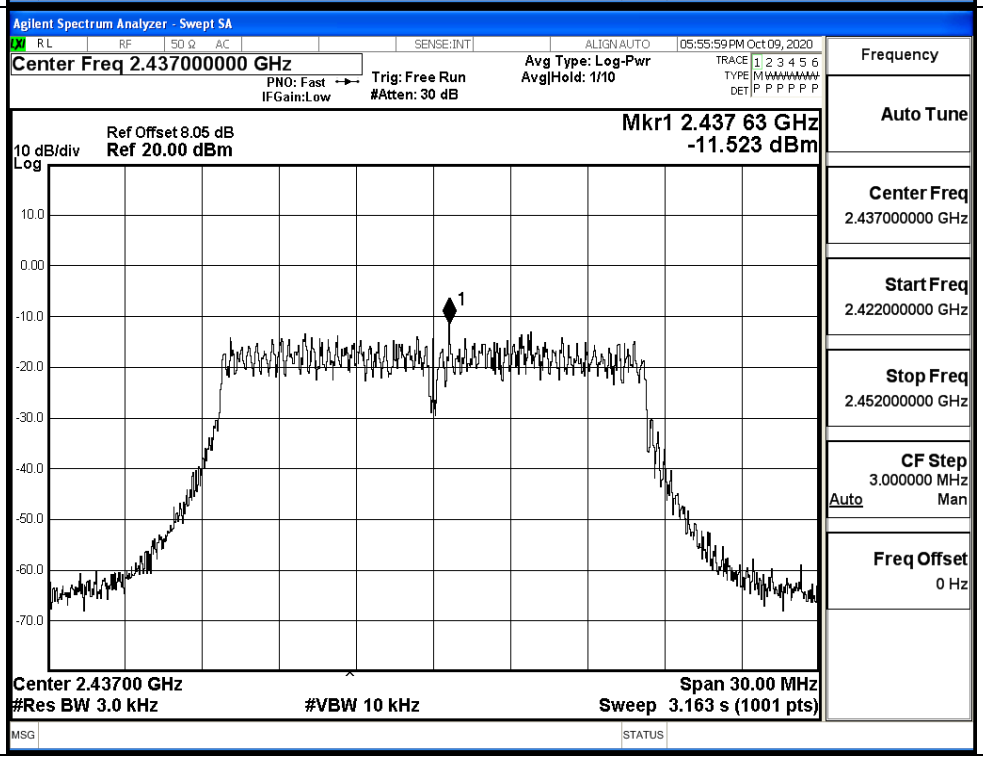
Mode	Channel	Meas.Level [dBm/3KHz]	Correction Factor [dB]	Level [dBm]	Limit [dBm/3KHz]	Verdict
11B	LCH	-8.642	-0.51	-9.152	8	PASS
	MCH	-10.227	-0.51	-10.737	8	PASS
	HCH	-10.349	-0.51	-10.859	8	PASS
11G	LCH	-12.469	-0.64	-13.109	8	PASS
	MCH	-11.523	-0.64	-12.163	8	PASS
	HCH	-13.641	-0.64	-14.281	8	PASS
11N20SISO	LCH	-12.556	-0.67	-13.226	8	PASS
	MCH	-13.124	-0.67	-13.794	8	PASS
	HCH	-14.625	-0.67	-15.295	8	PASS

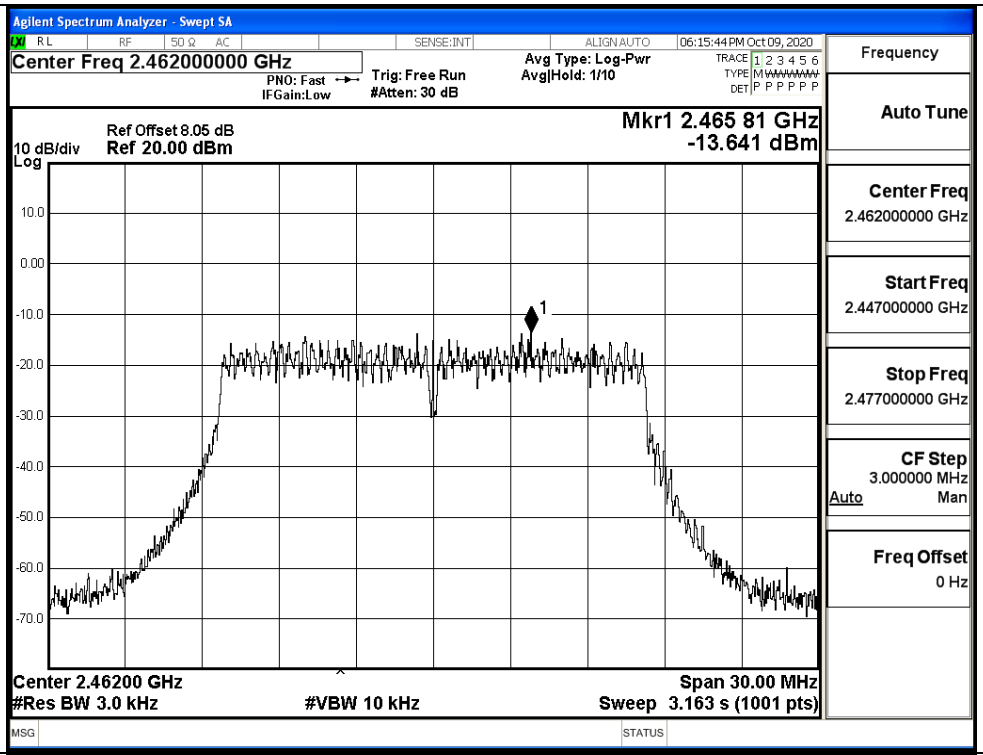
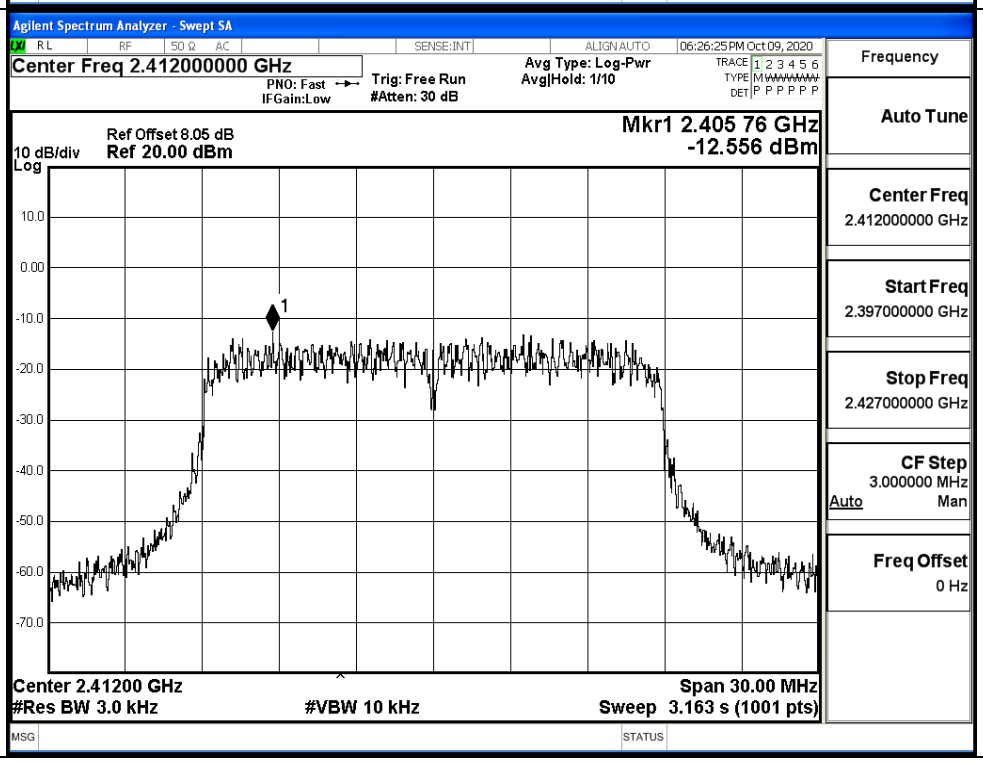
Test Graphs

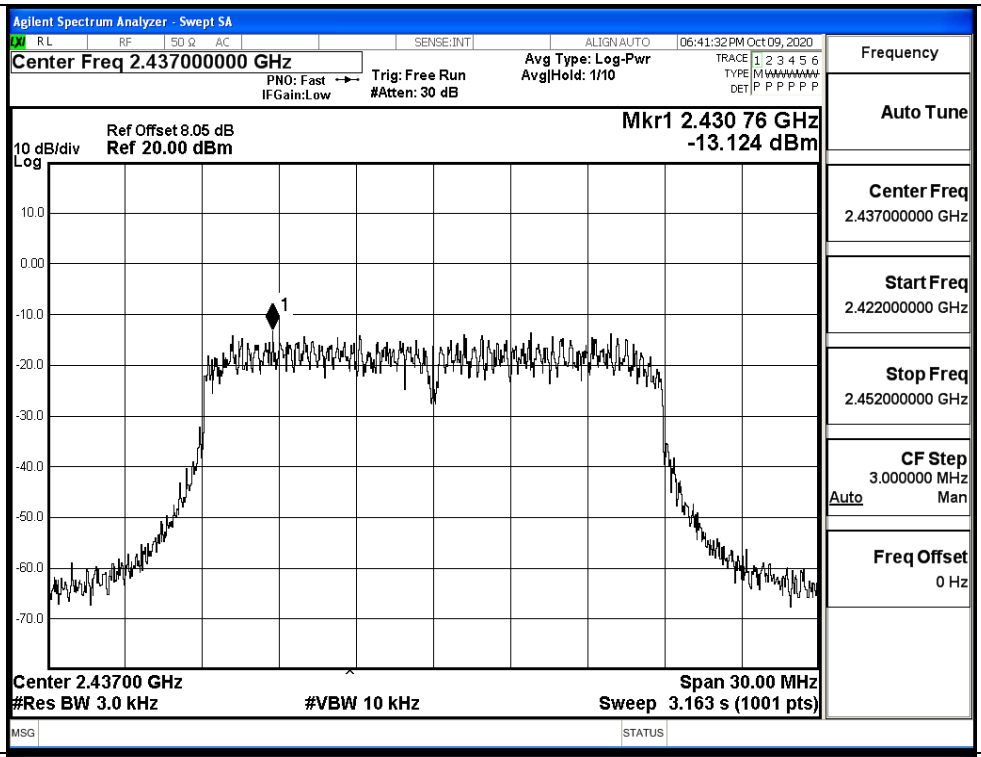
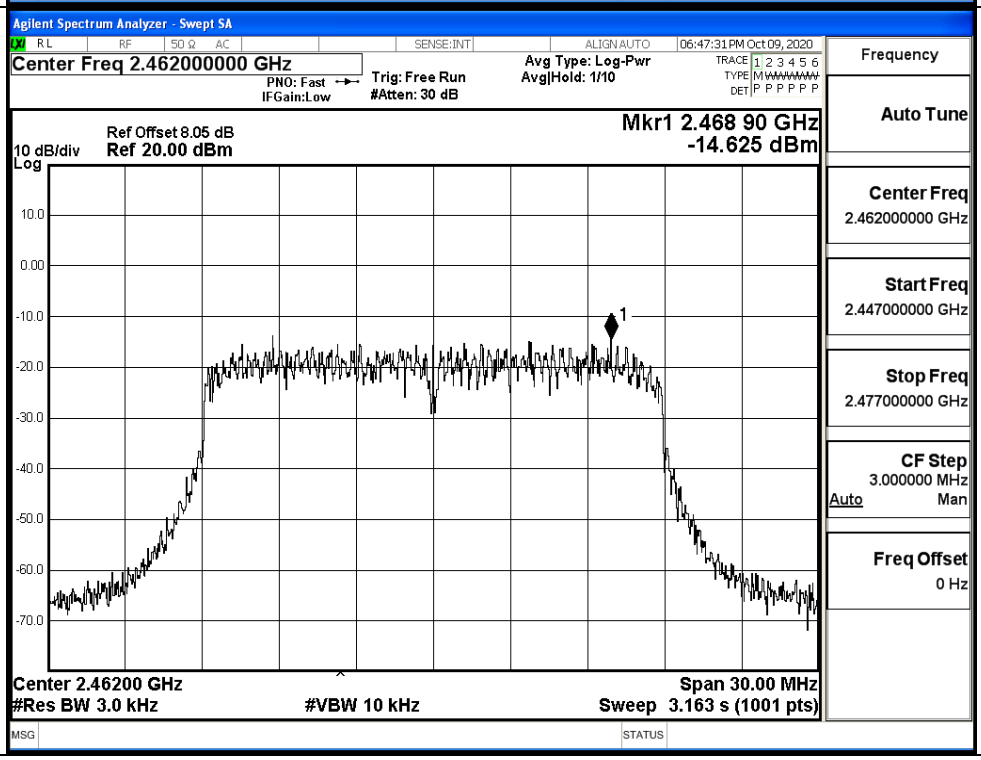
11B/LCH



11B/MCH	
11B/HCH	

11G/LCH	
11G/MCH	

11G/HCH	
11N20SISO/LCH	

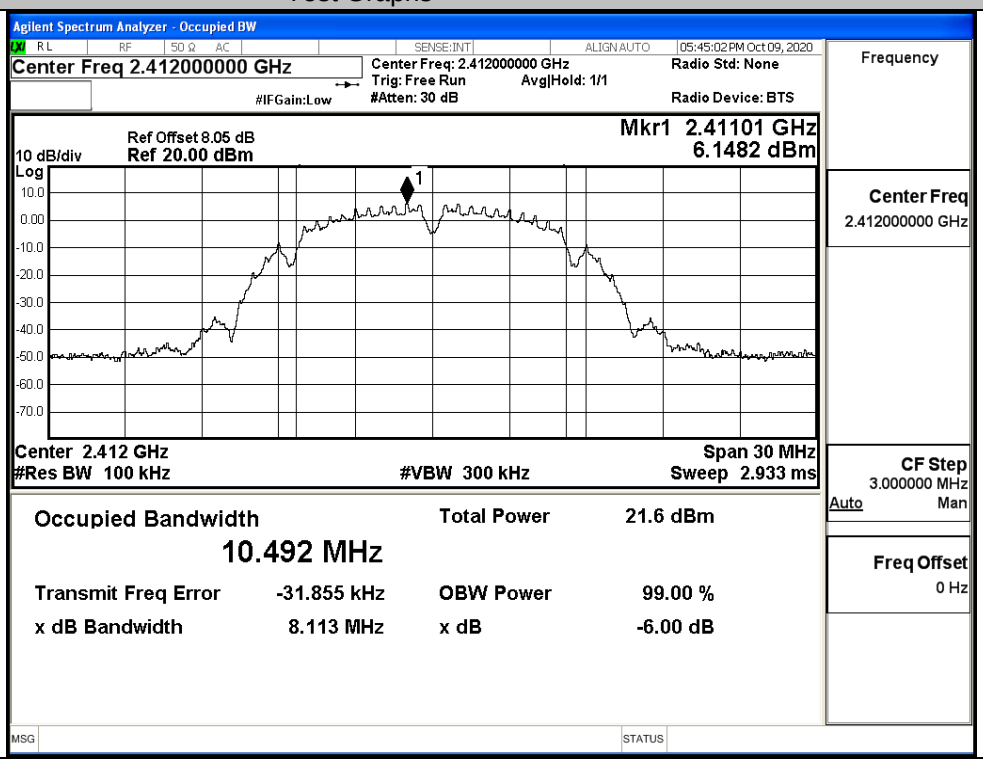
11N20SISO/MCH		
11N20SISO/HCH		

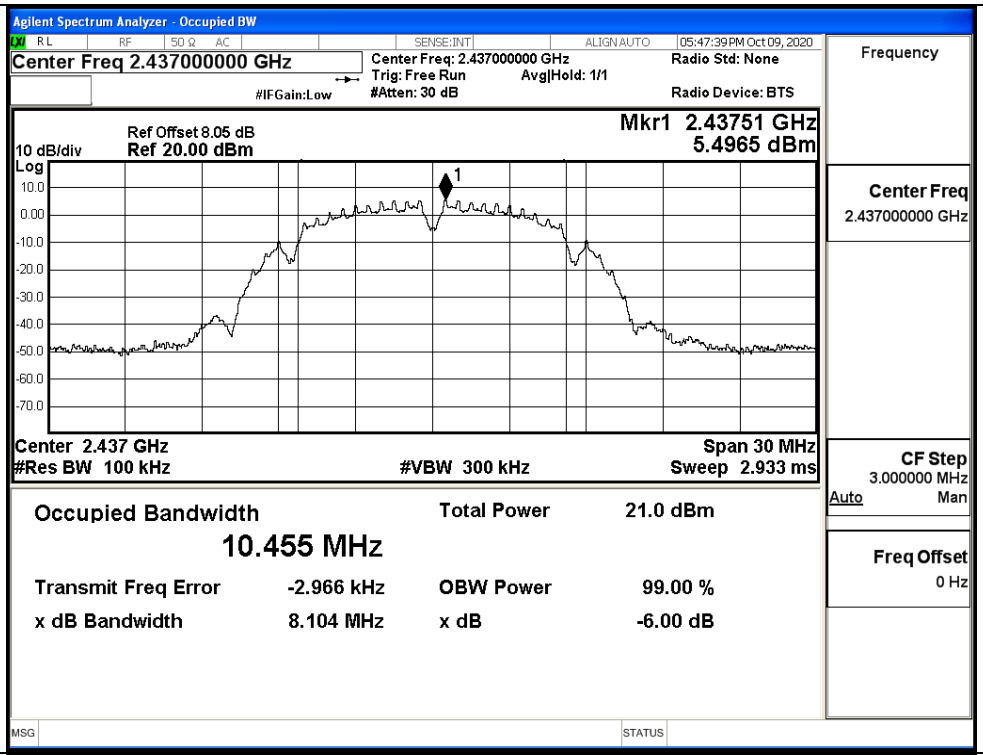
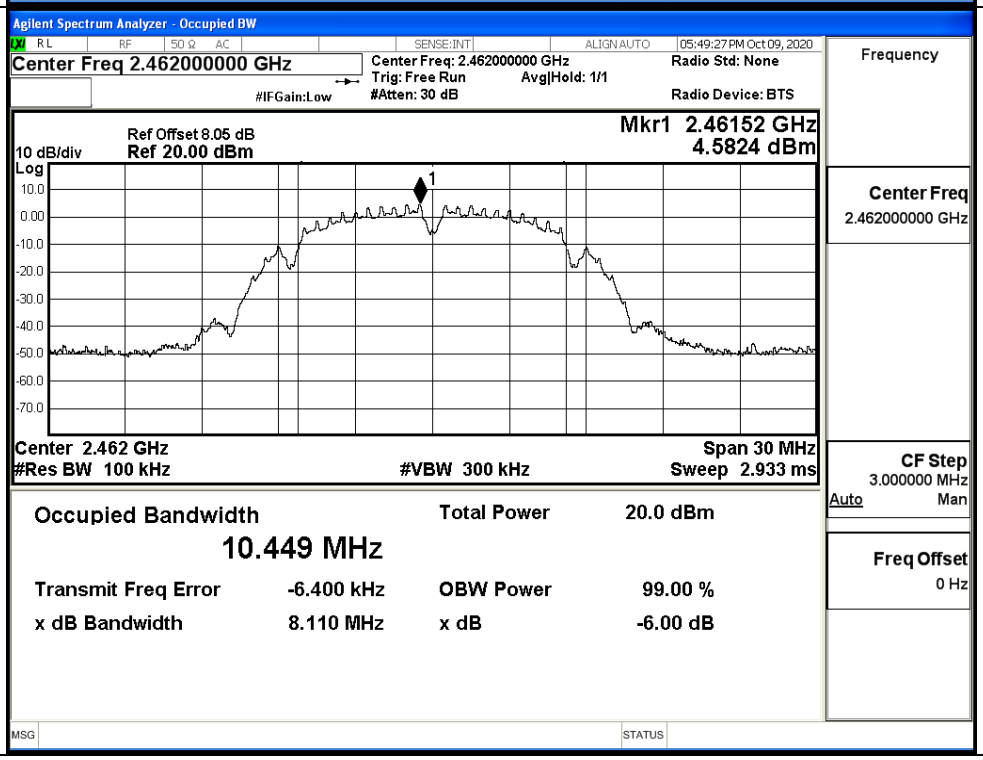
A.4 6dB Bandwidth

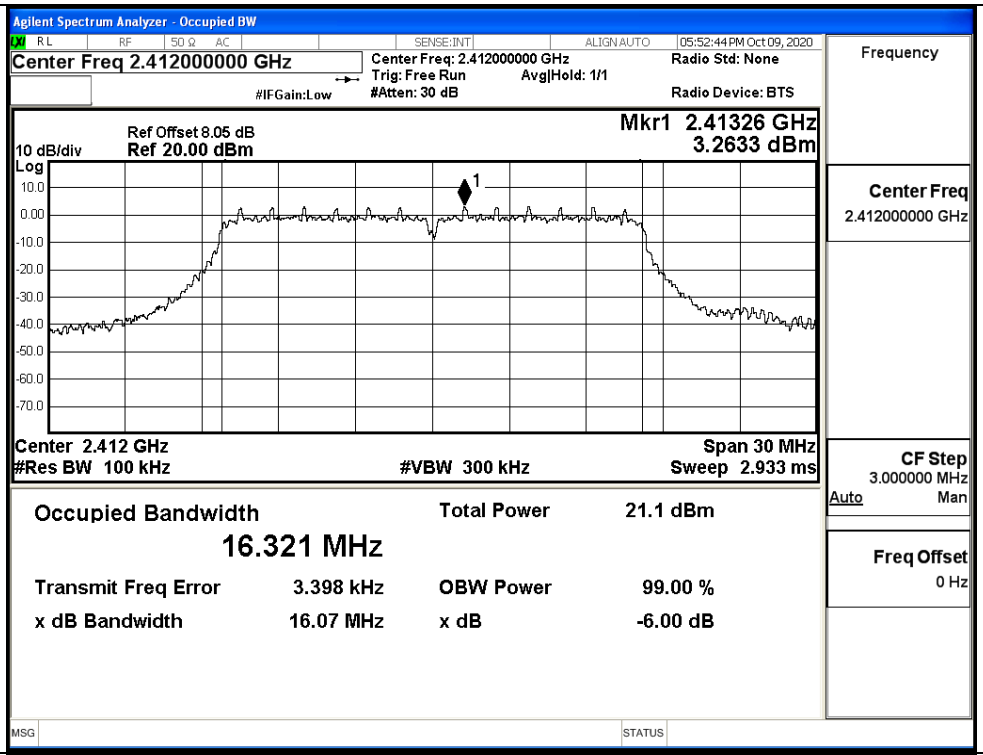
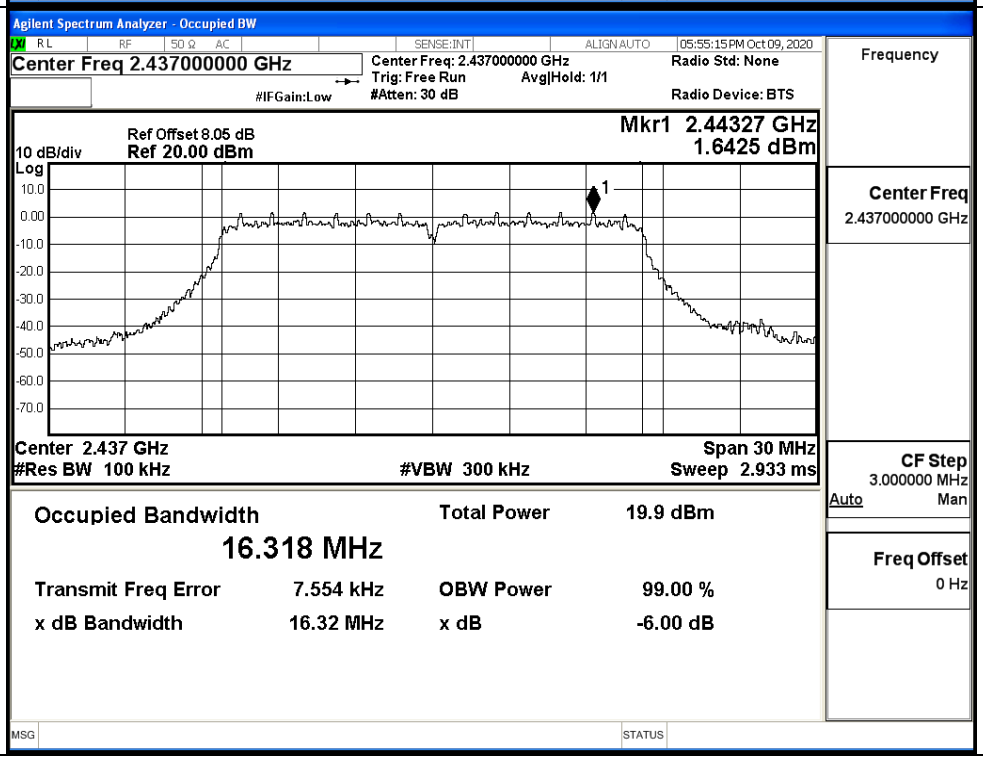
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
11B	LCH	8.113	≥0.5	PASS
	MCH	8.104	≥0.5	PASS
	HCH	8.110	≥0.5	PASS
11G	LCH	16.07	≥0.5	PASS
	MCH	16.32	≥0.5	PASS
	HCH	16.26	≥0.5	PASS
11N20SISO	LCH	16.11	≥0.5	PASS
	MCH	16.08	≥0.5	PASS
	HCH	16.30	≥0.5	PASS

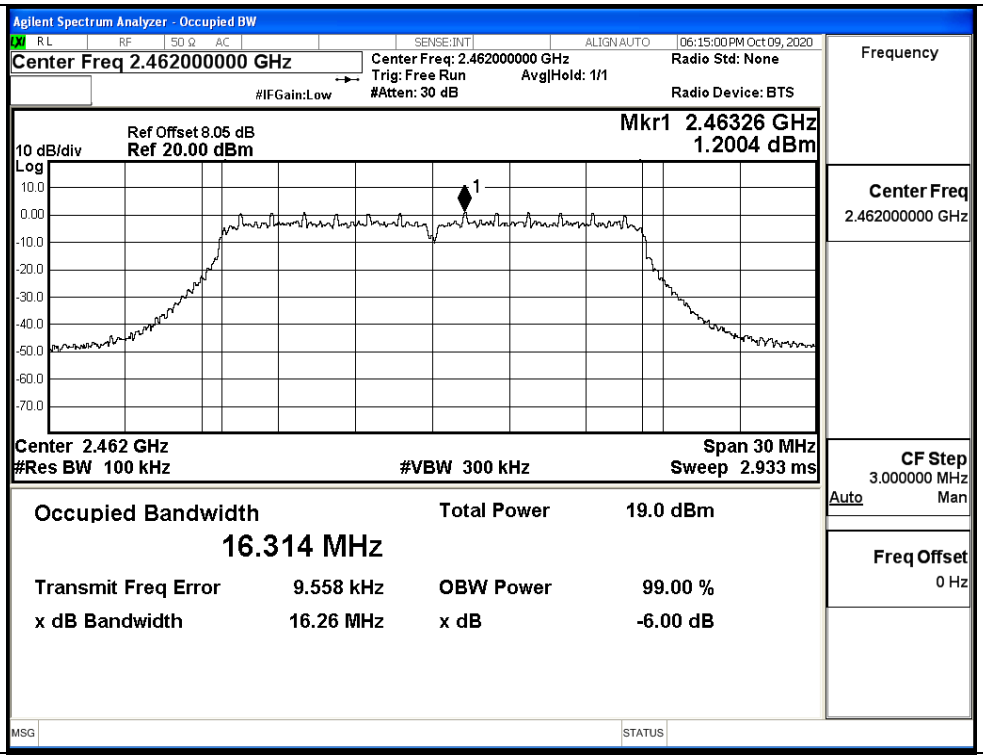
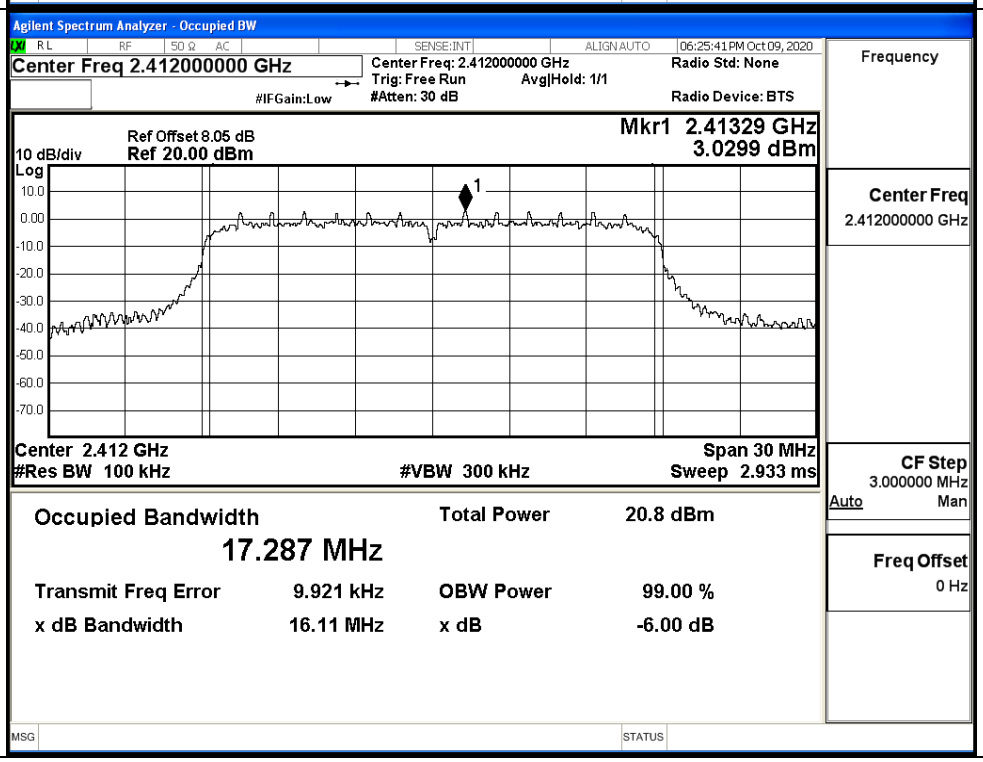
Test Graphs

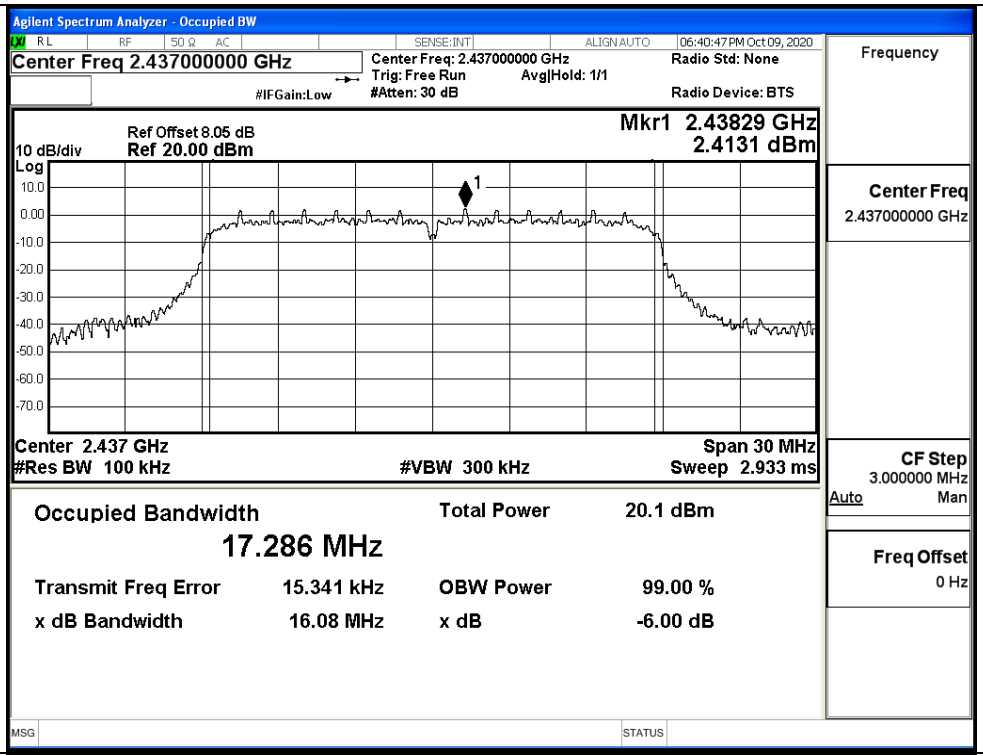
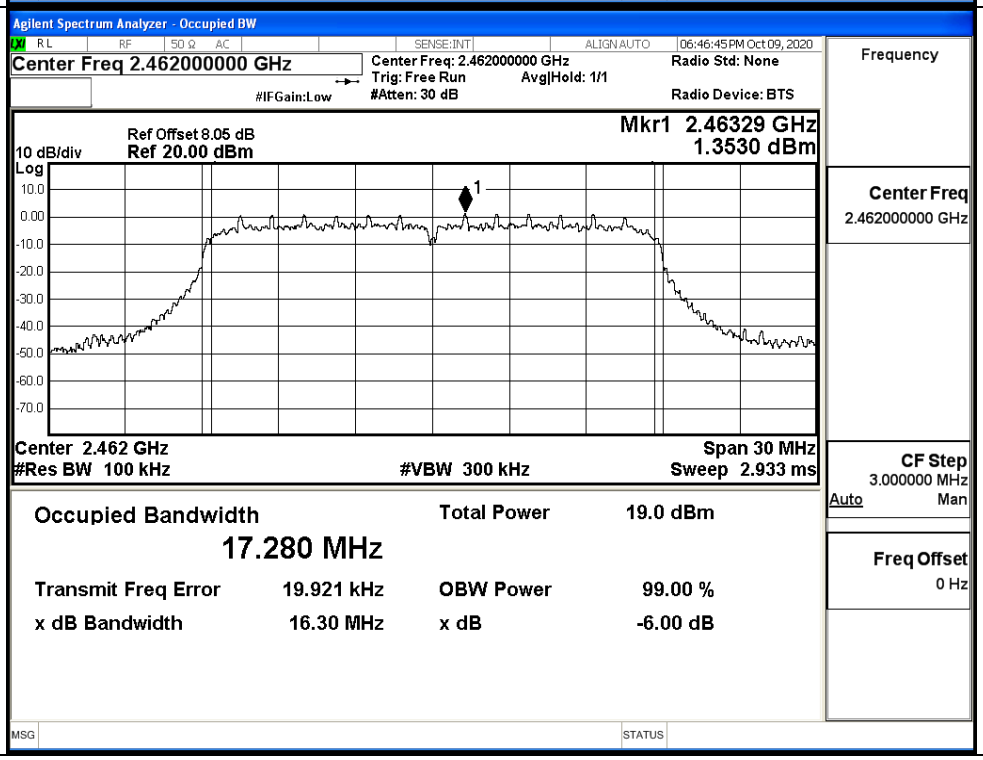
11B/LCH



11B/MCH	
11B/HCH	

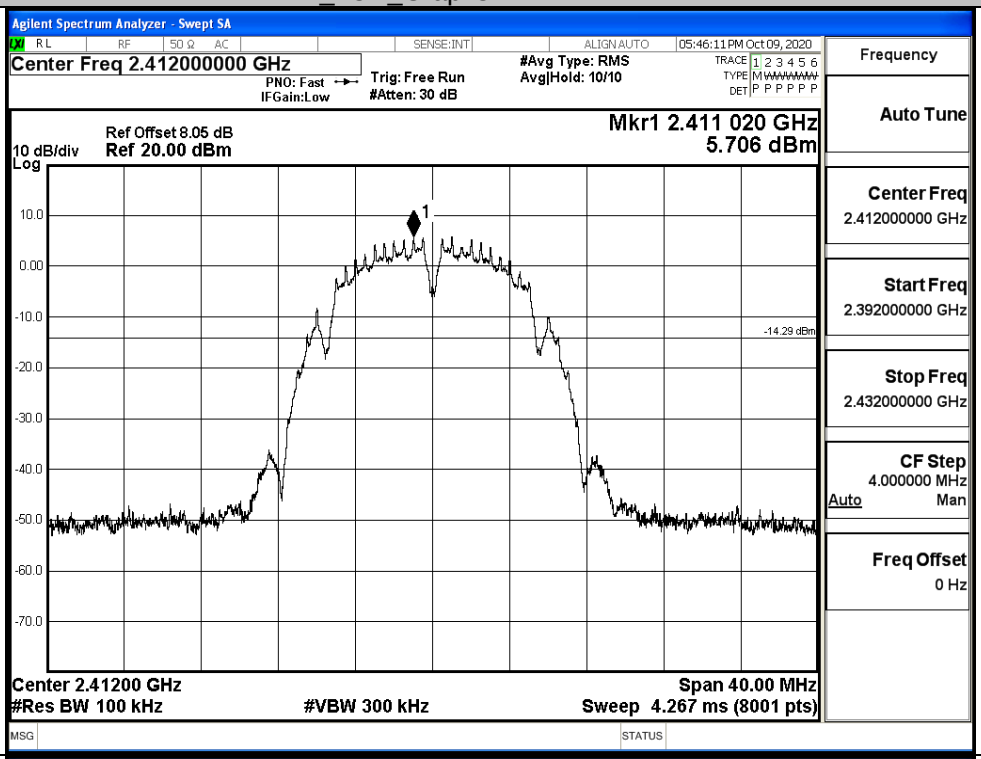
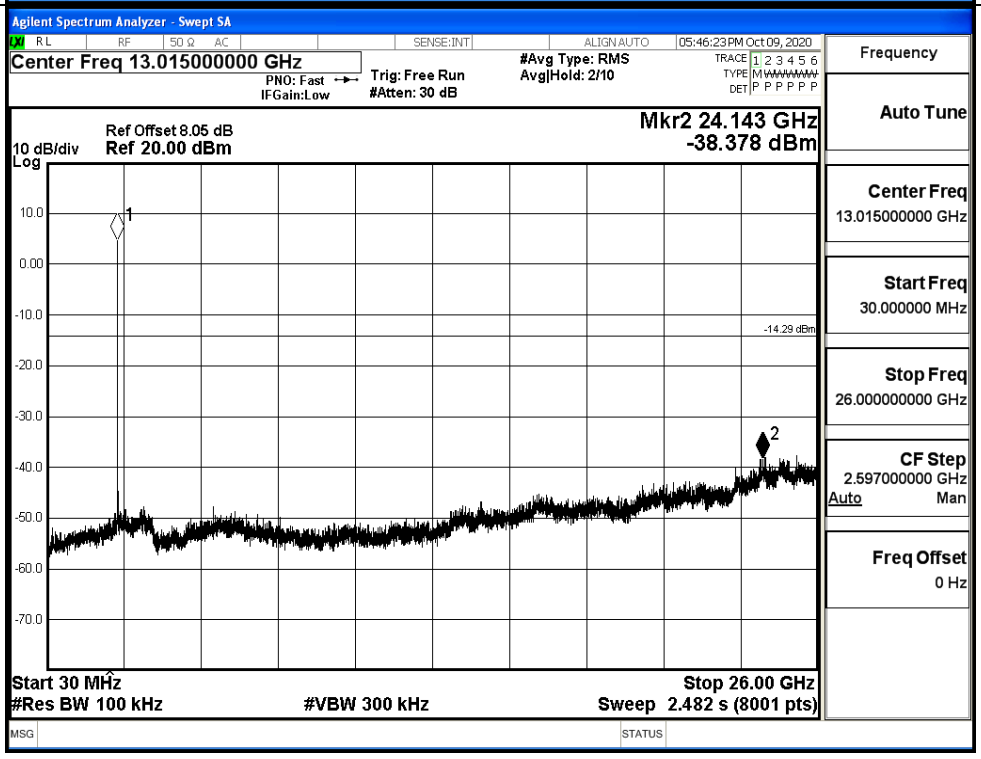
11G/LCH	
11G/MCH	

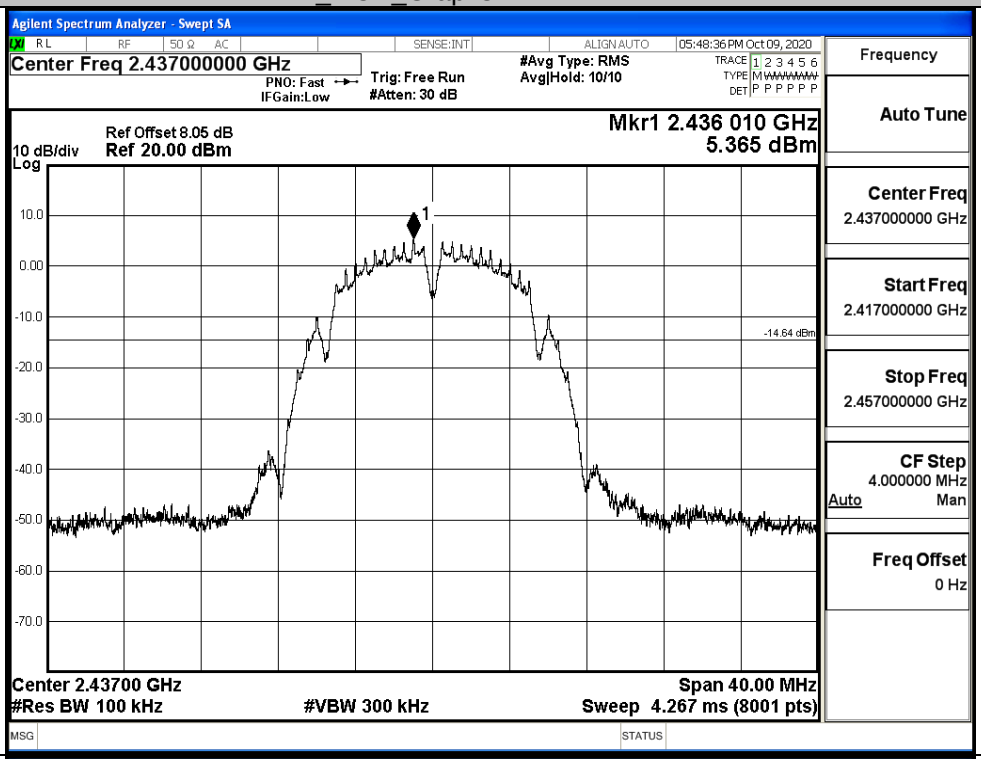
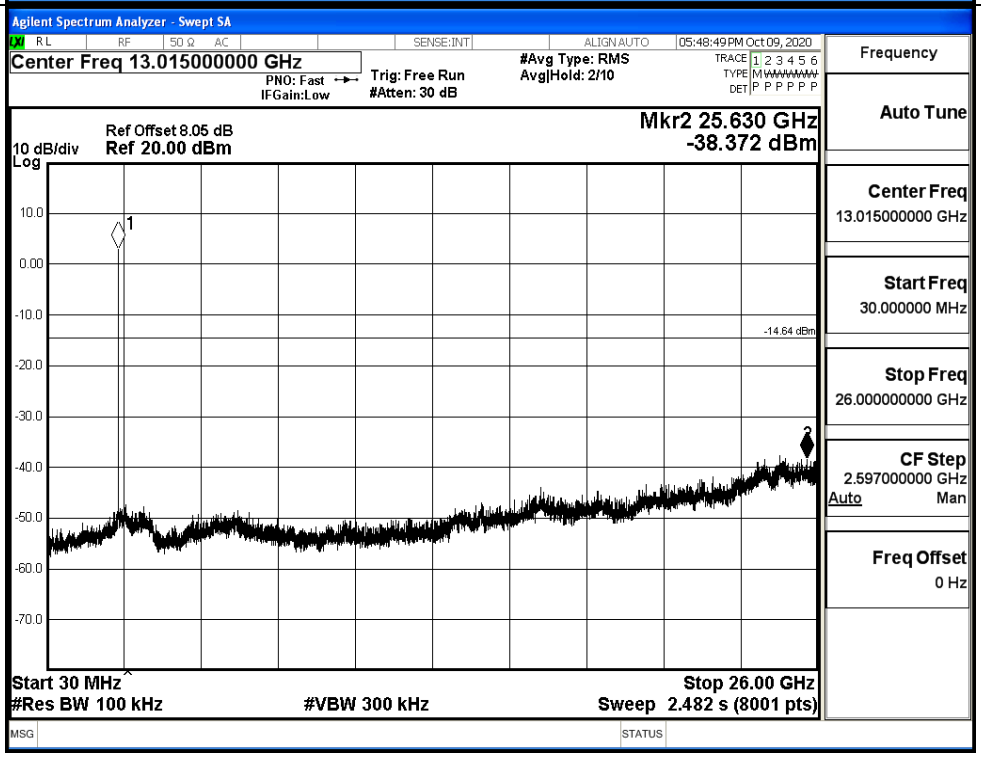
11G/HCH	
11N20SISO/LCH	

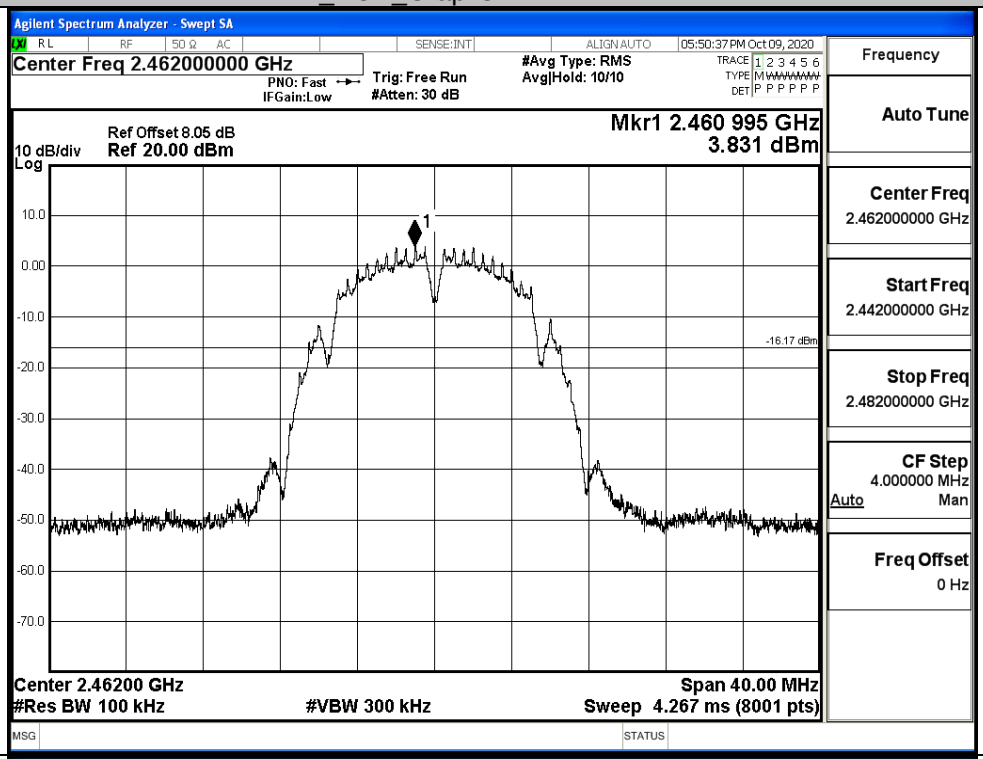
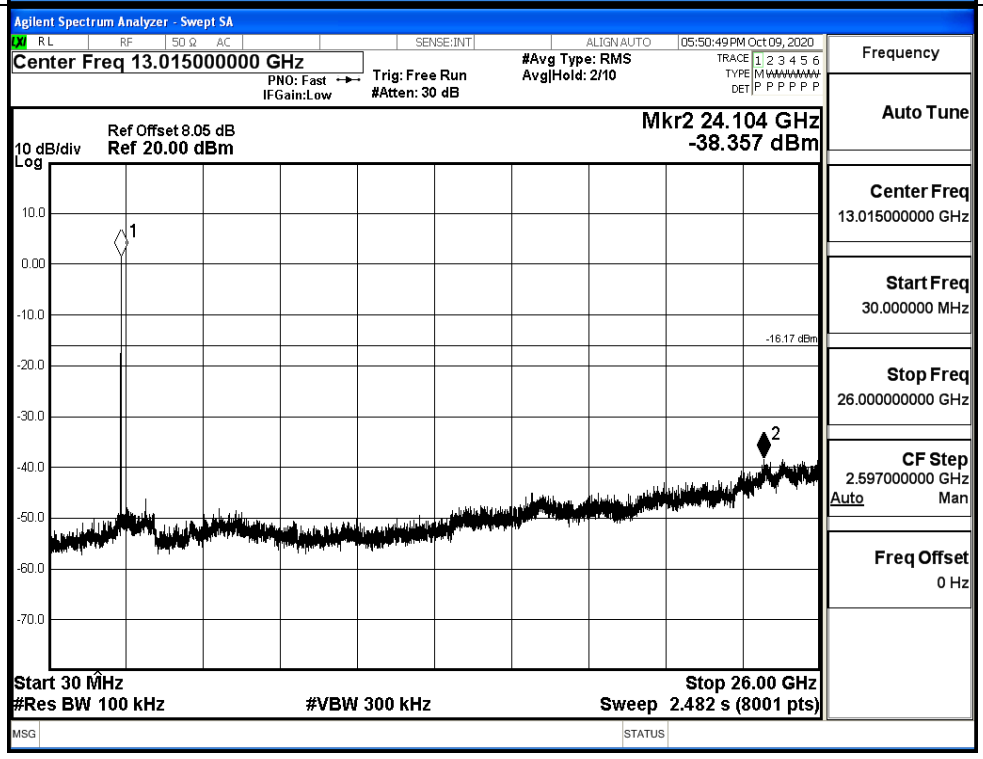
11N20SISO/MCH	
11N20SISO/HCH	

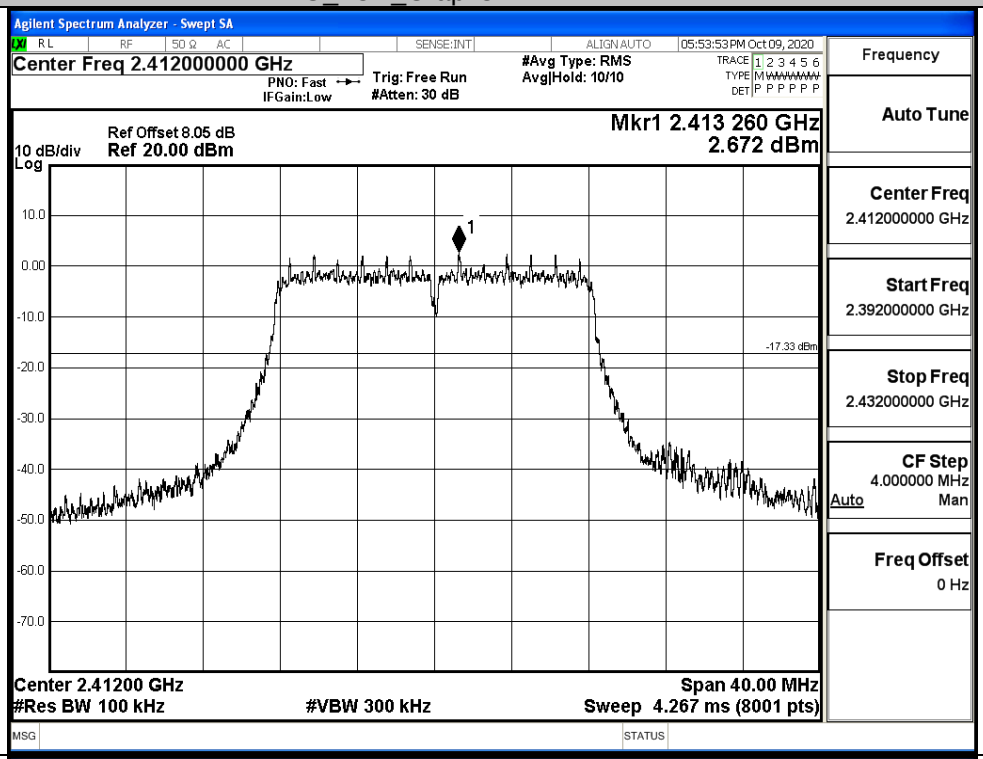
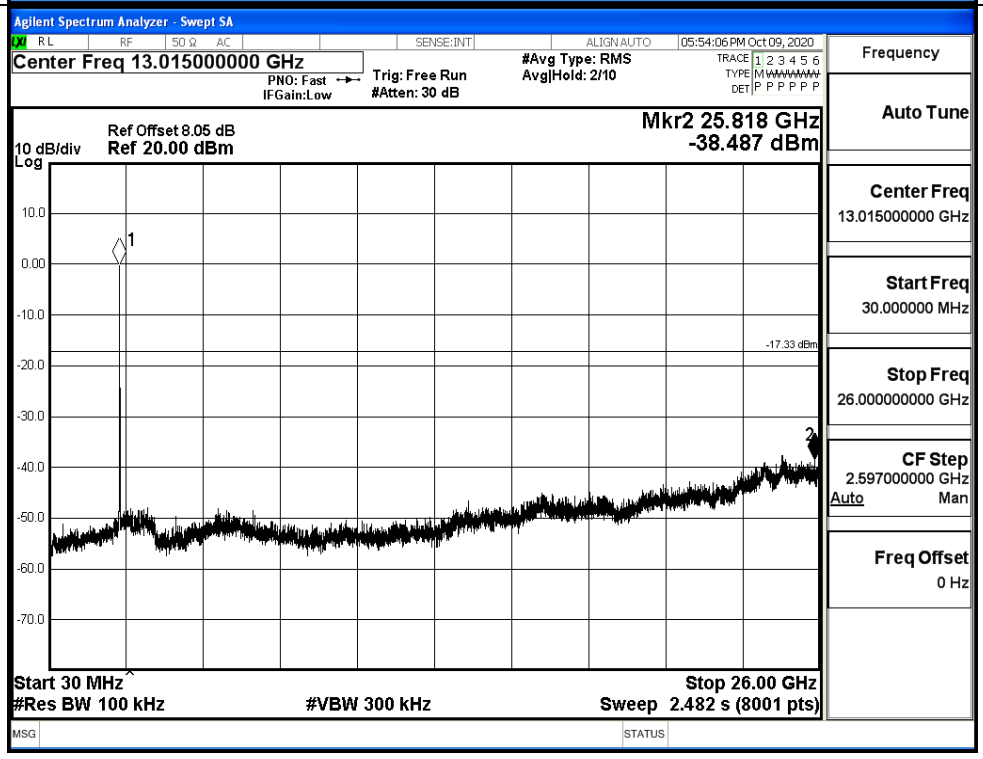
A.5 RF Conducted Spurious Emissions

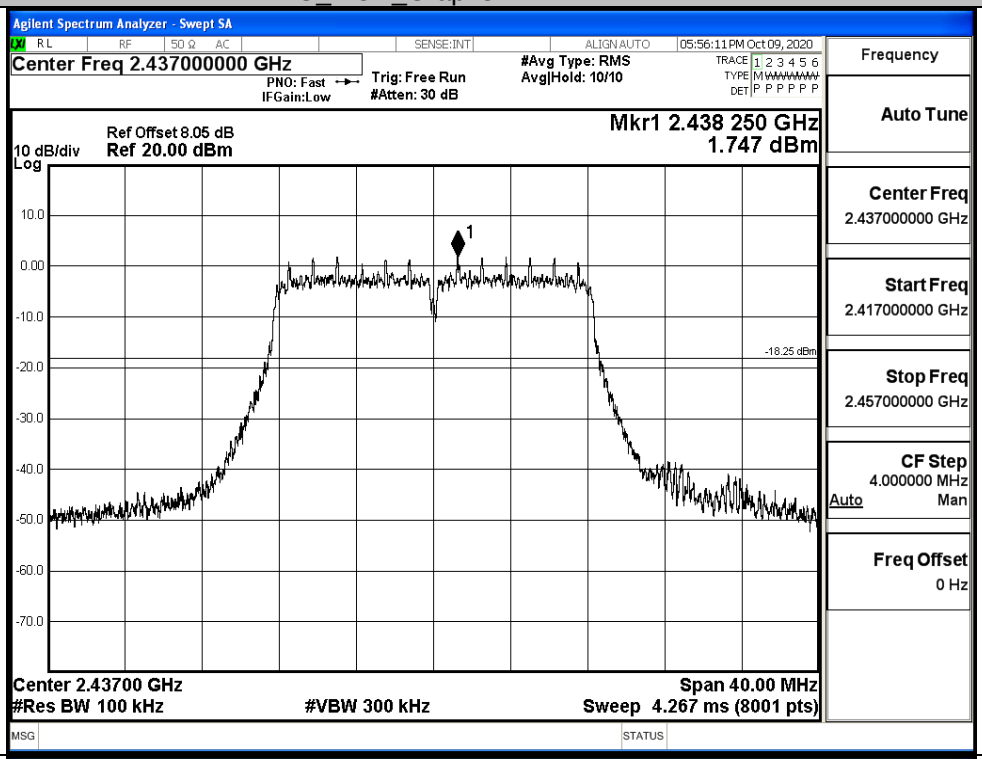
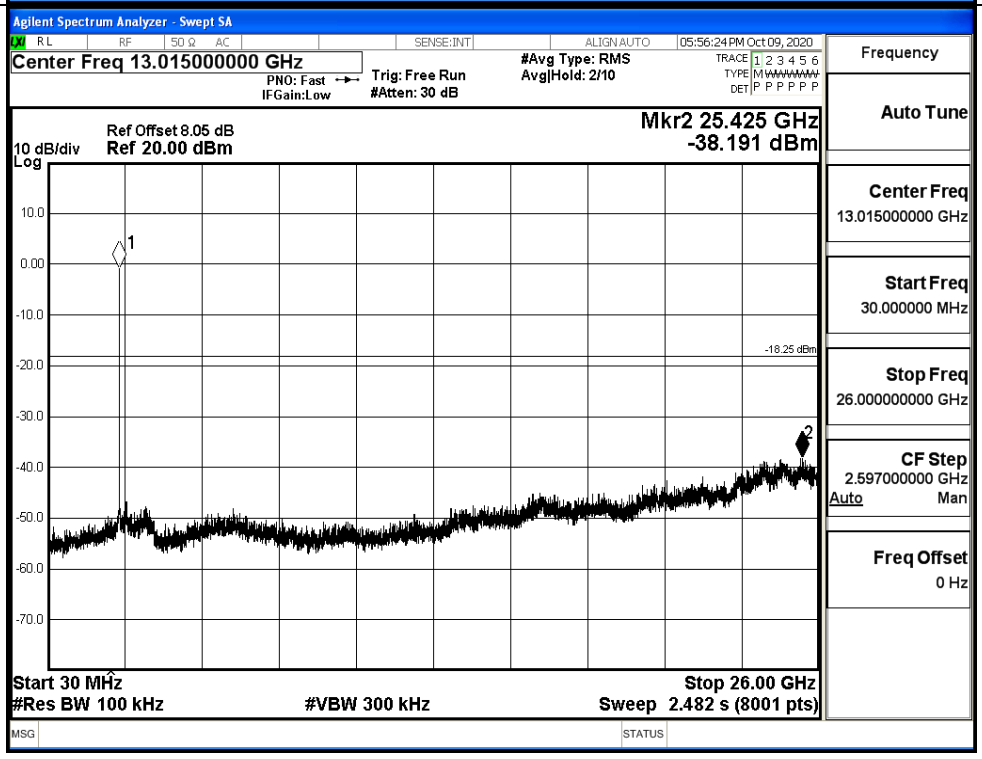
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
11B	LCH	5.706	-38.378	-14.294	PASS
	MCH	5.365	-38.372	-14.635	PASS
	HCH	3.831	-38.357	-16.169	PASS
11G	LCH	2.672	-38.487	-17.328	PASS
	MCH	1.747	-38.191	-18.253	PASS
	HCH	1.089	-36.981	-18.911	PASS
11N20 SISO	LCH	2.458	-37.730	-17.542	PASS
	MCH	2.326	-38.159	-17.674	PASS
	HCH	0.906	-37.759	-19.094	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	

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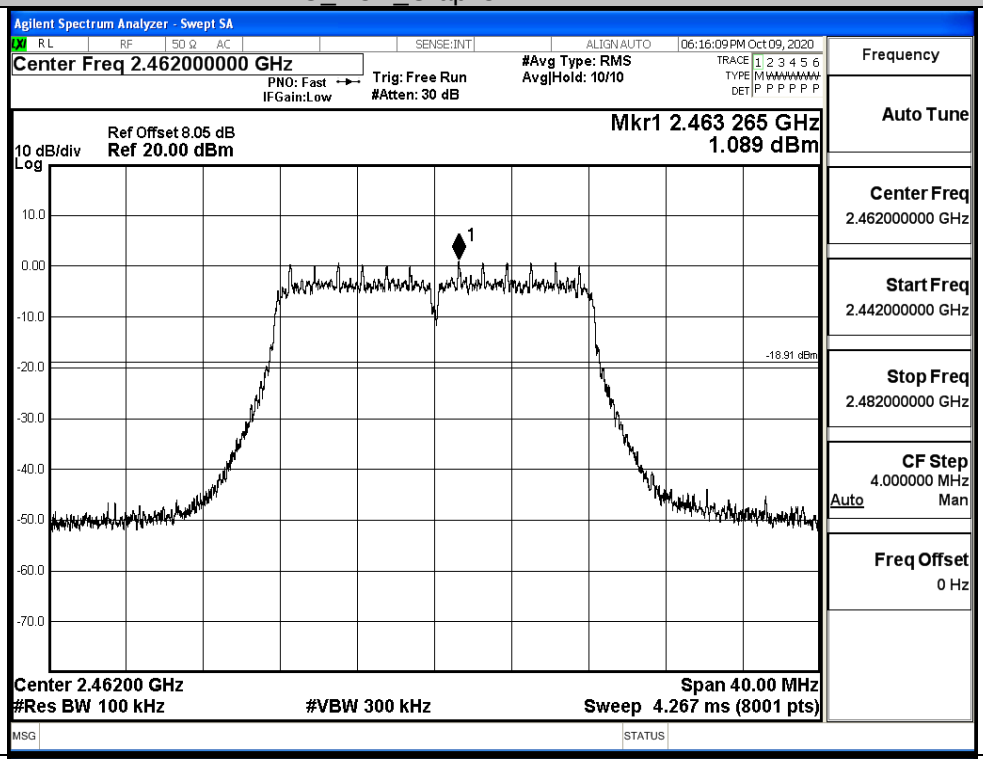
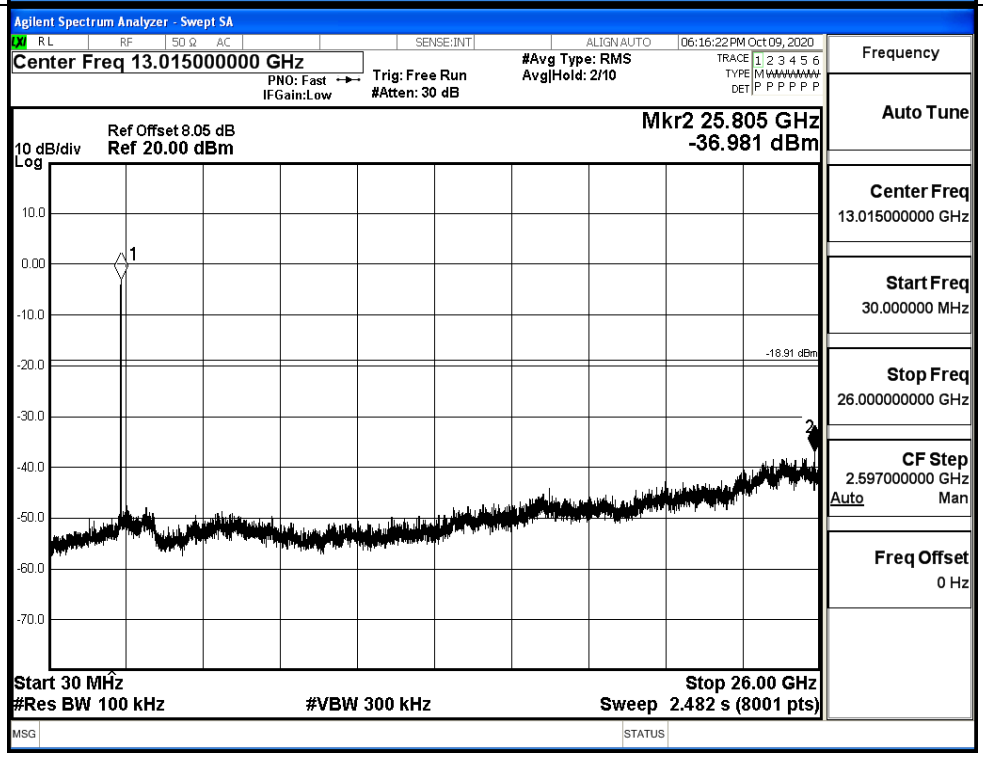
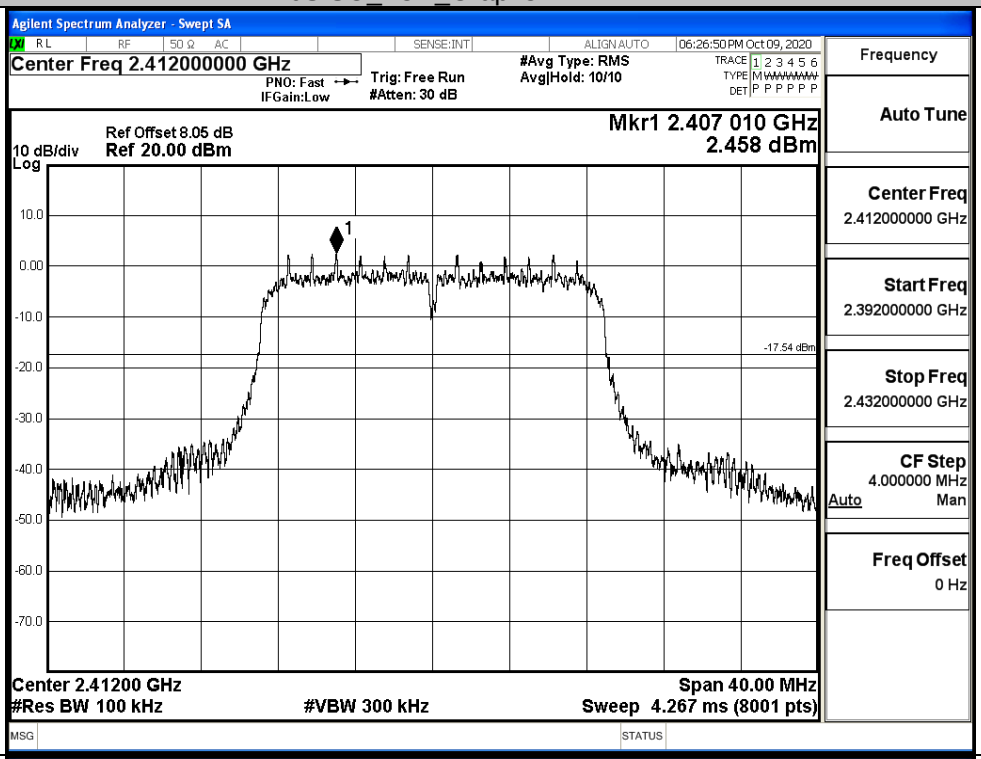
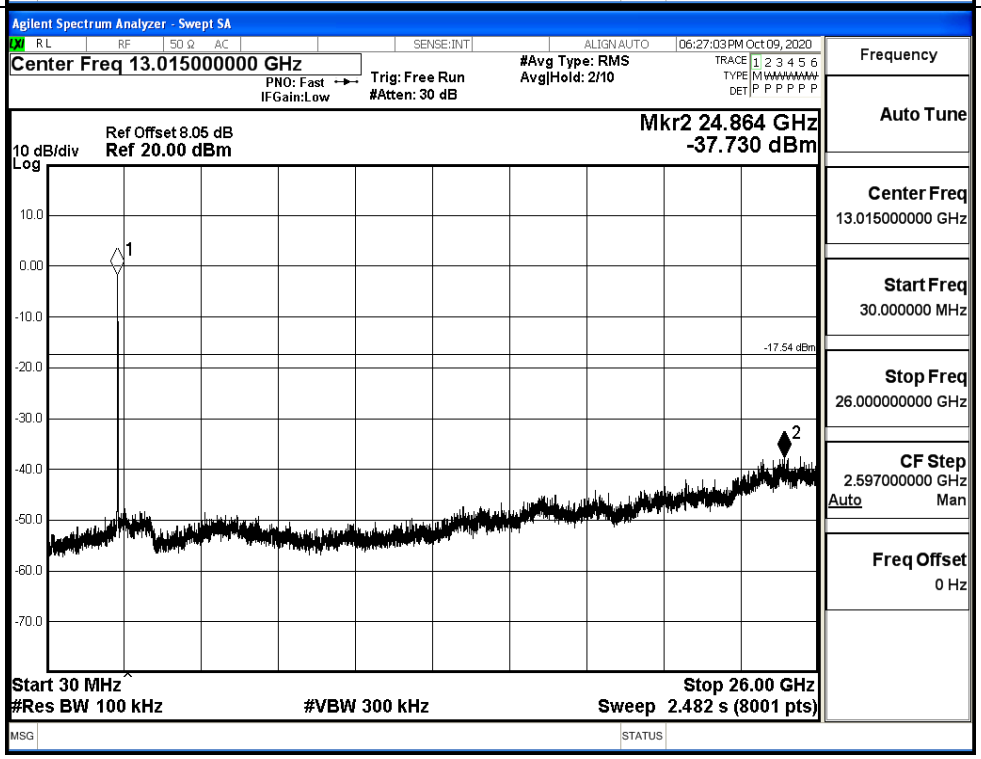
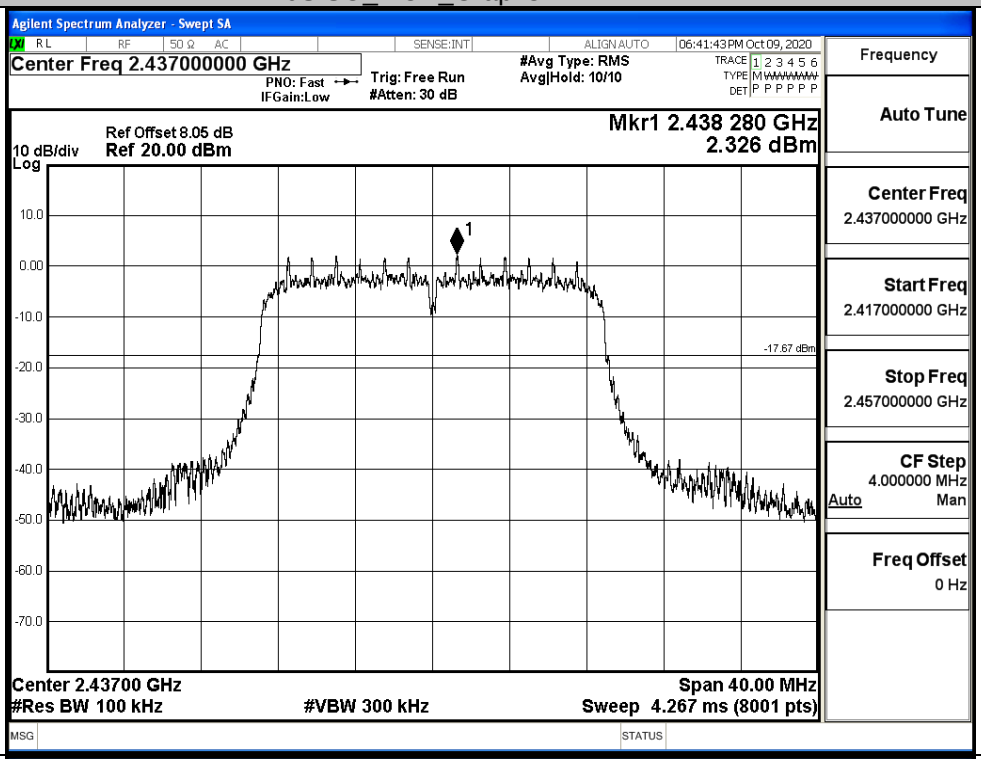
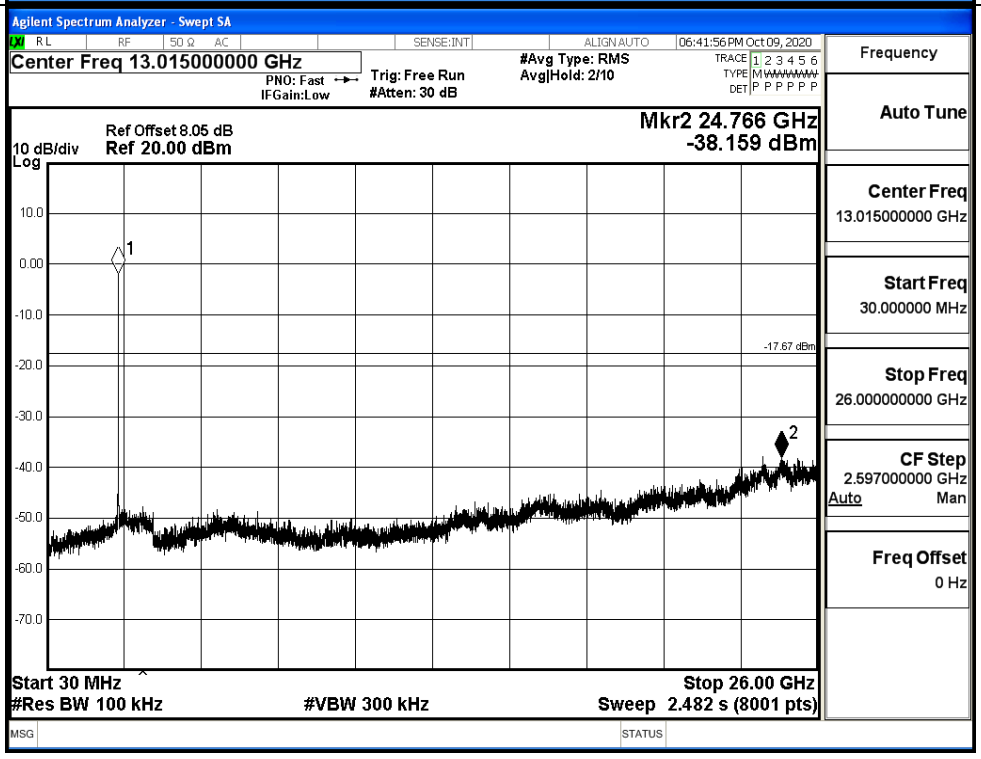
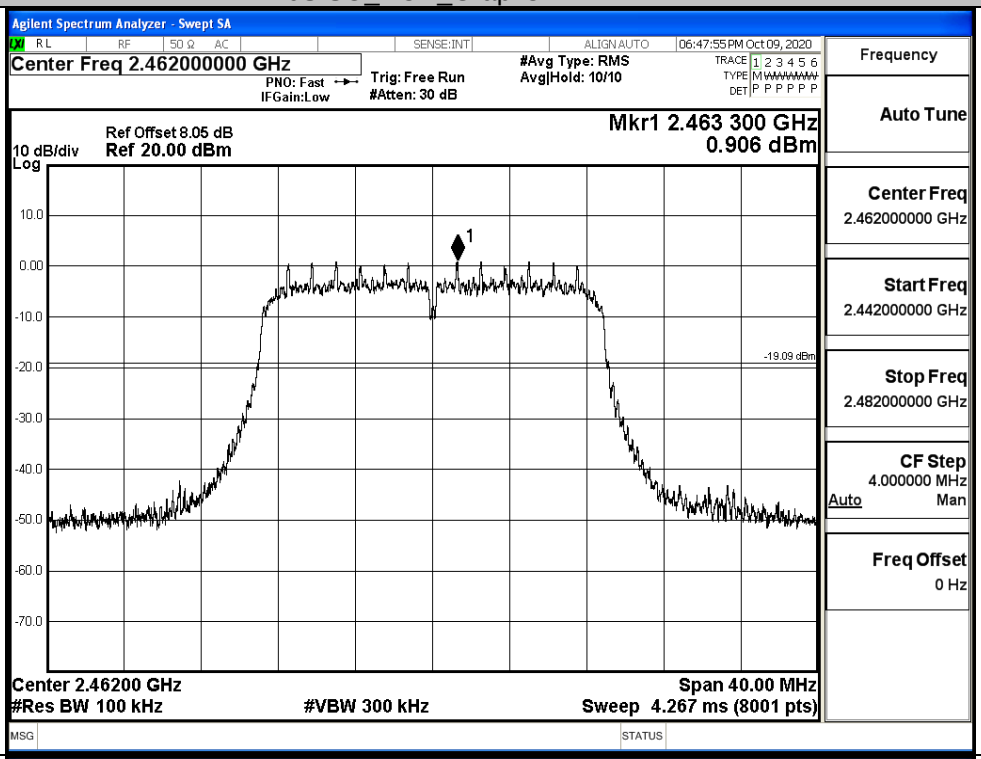
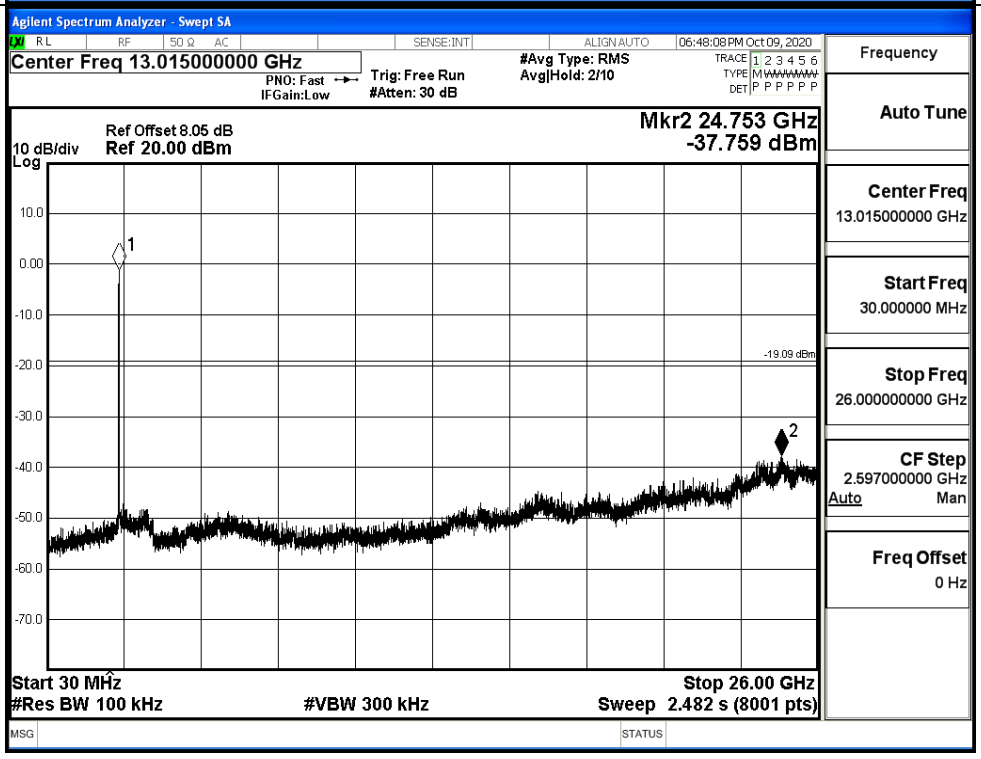
Pref/11G/HCH	
Puw/11G/HCH	

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

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

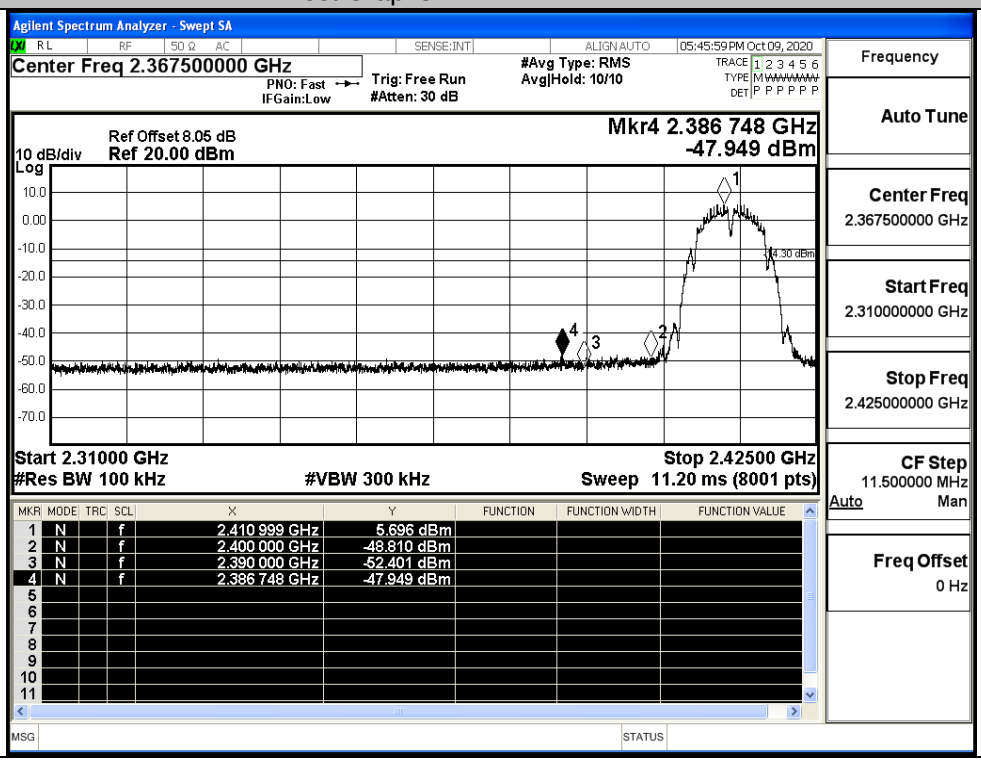
11N20SISO_HCH_Graphs	
Pref/11N20 SISO/HCH	
Puw/11N20 SISO/HCH	

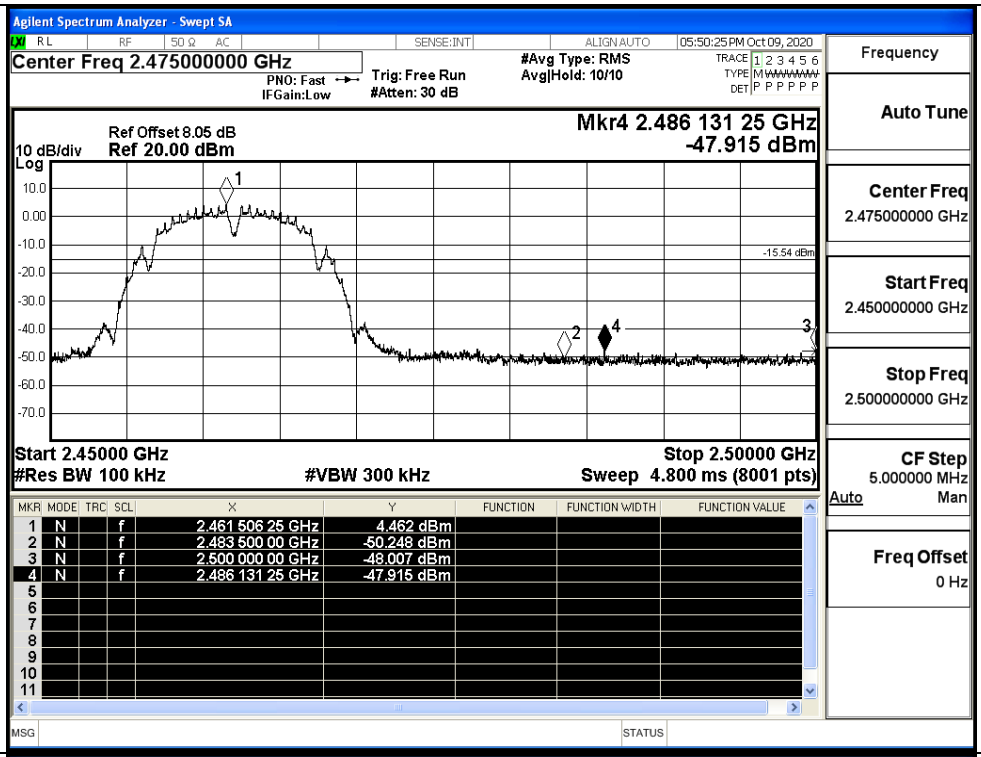
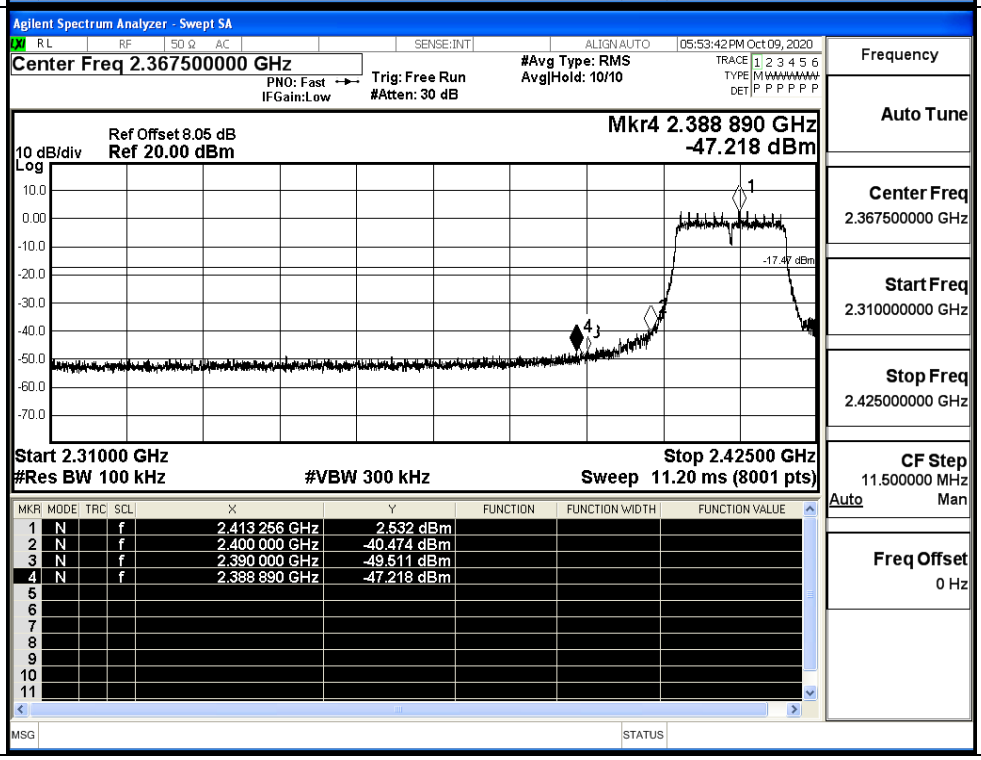
A.6 Band-edge for RF Conducted Emissions

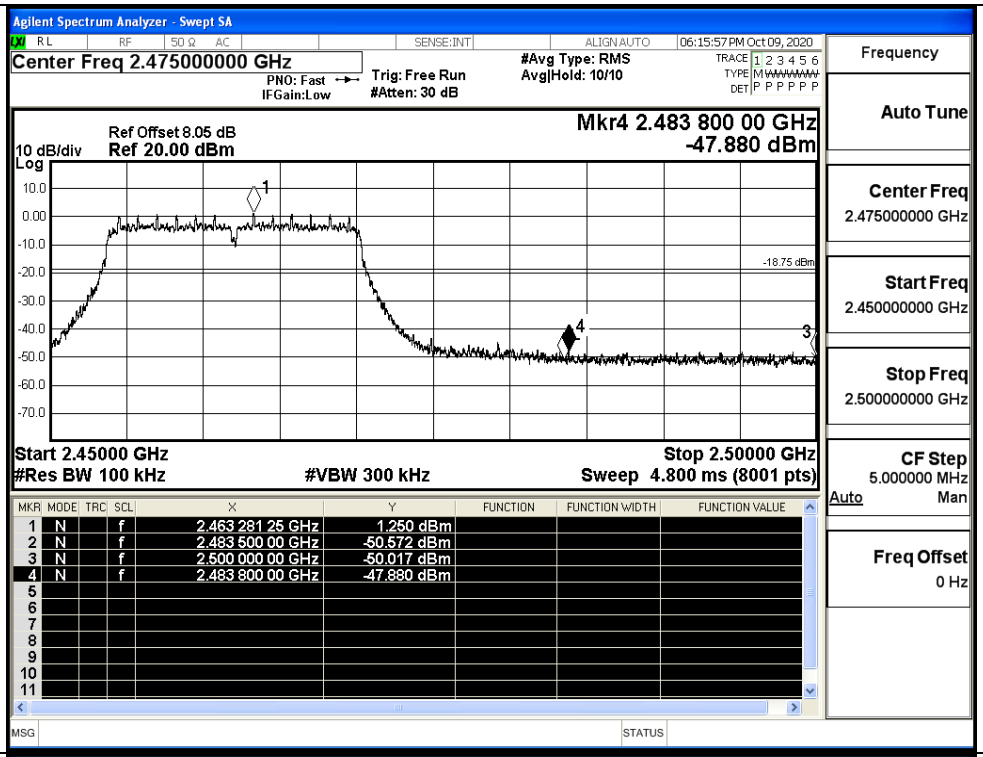
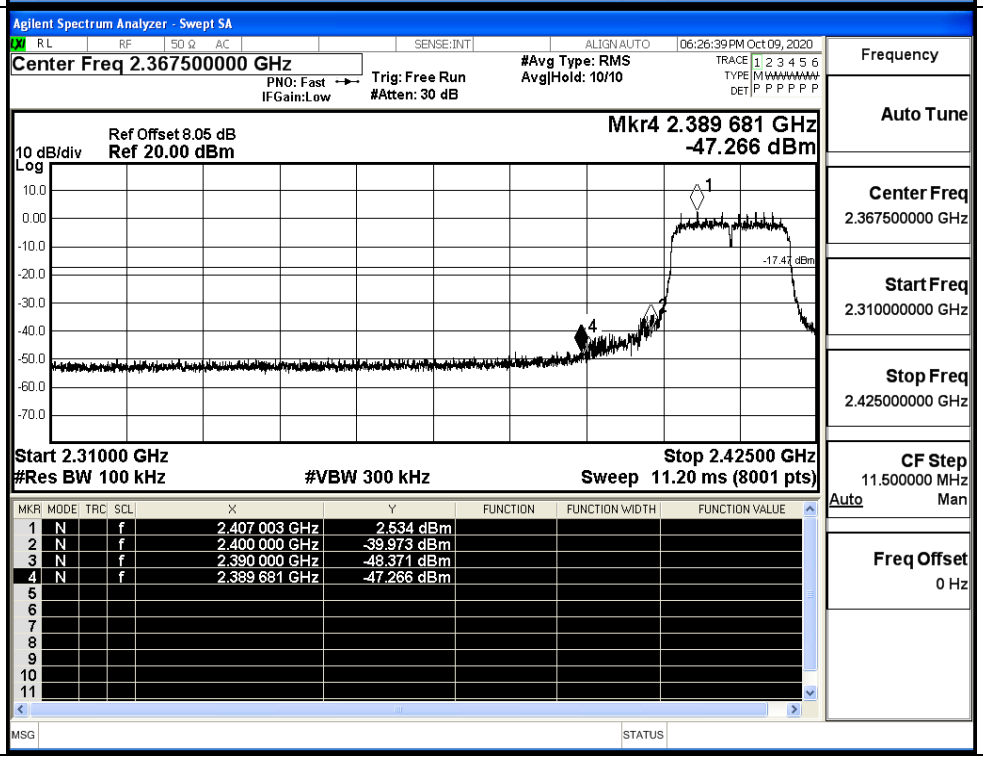
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
11B	LCH	5.696	-47.949	-14.3	PASS
	HCH	4.462	-47.915	-15.54	PASS
11G	LCH	2.532	-47.218	-17.47	PASS
	HCH	1.250	-47.880	-18.75	PASS
11N20SISO	LCH	2.534	-47.266	-17.47	PASS
	HCH	1.367	-47.263	-18.63	PASS

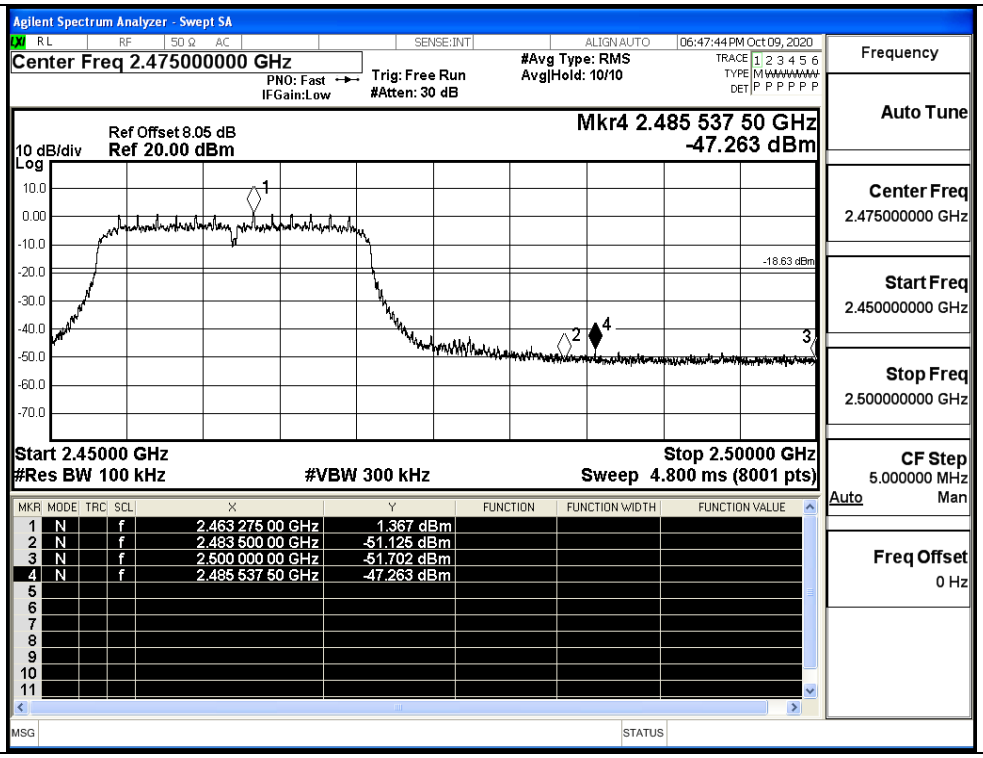
Test Graphs

11B/LCH



11B/HCH	
11G/LCH	

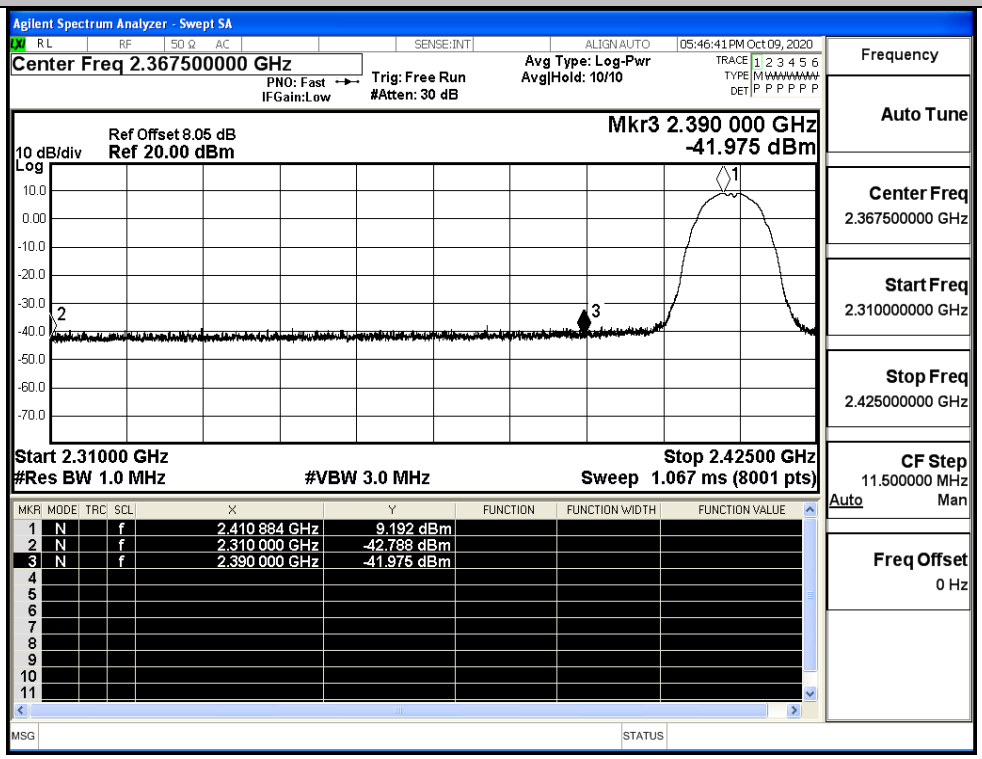
11G/HCH	
11N20SISO/LCH	

11N20SISO/HCH	

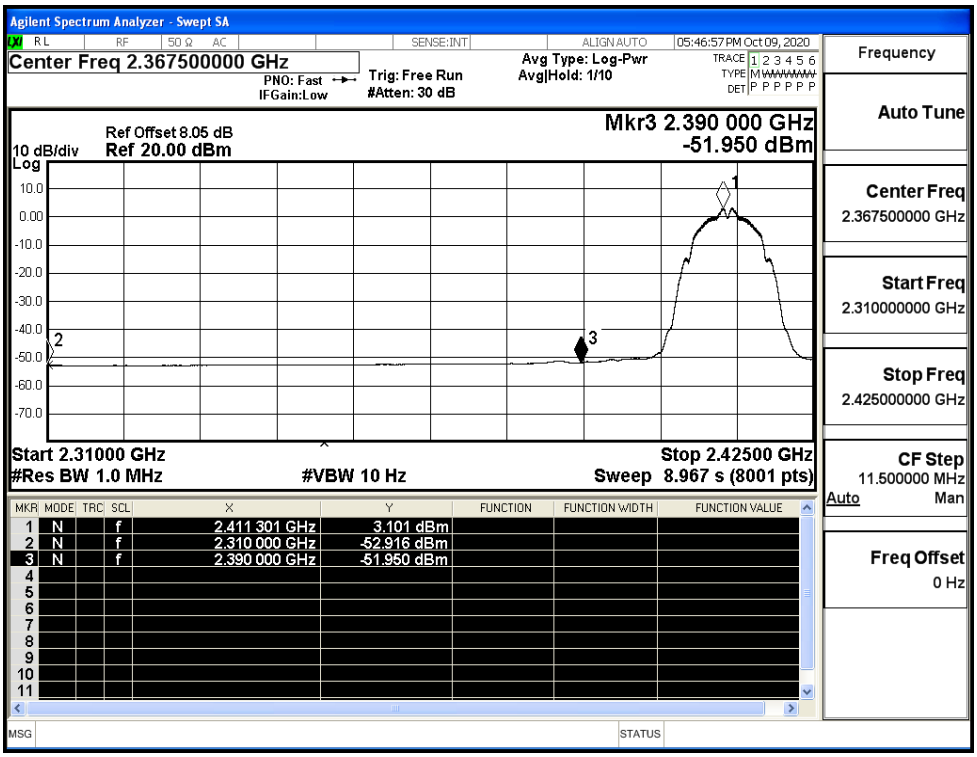
A.7 Restrict-band band-edge measurements

Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
11B	2412	Ant1	2310.0	-42.79	2.0	0	52.47	PEAK	74	PASS
	2412	Ant1	2310.0	-52.92	2.0	0	42.34	AV	54	PASS
	2412	Ant1	2390.0	-41.98	2.0	0	53.28	PEAK	74	PASS
	2412	Ant1	2390.0	-51.95	2.0	0	43.31	AV	54	PASS
	2462	Ant1	2483.5	-41.24	2.0	0	54.02	PEAK	74	PASS
	2462	Ant1	2483.5	-51.33	2.0	0	43.92	AV	54	PASS
	2462	Ant1	2500.0	-41.39	2.0	0	53.87	PEAK	74	PASS
	2462	Ant1	2500.0	-51.48	2.0	0	43.78	AV	54	PASS
11G	2412	Ant1	2310.0	-42.17	2.0	0	53.09	PEAK	74	PASS
	2412	Ant1	2310.0	-52.91	2.0	0	42.35	AV	54	PASS
	2412	Ant1	2390.0	-39.04	2.0	0	56.22	PEAK	74	PASS
	2412	Ant1	2390.0	-50.20	2.0	0	45.06	AV	54	PASS
	2462	Ant1	2483.5	-41.10	2.0	0	54.16	PEAK	74	PASS
	2462	Ant1	2483.5	-50.93	2.0	0	44.33	AV	54	PASS
	2462	Ant1	2500.0	-39.65	2.0	0	55.61	PEAK	74	PASS
	2462	Ant1	2500.0	-51.44	2.0	0	43.81	AV	54	PASS
11N20 SISO	2412	Ant1	2310.0	-42.32	2.0	0	52.94	PEAK	74	PASS
	2412	Ant1	2310.0	-52.90	2.0	0	42.36	AV	54	PASS
	2412	Ant1	2390.0	-32.74	2.0	0	62.52	PEAK	74	PASS
	2412	Ant1	2390.0	-50.12	2.0	0	45.14	AV	54	PASS
	2462	Ant1	2483.5	-40.54	2.0	0	54.72	PEAK	74	PASS
	2462	Ant1	2483.5	-50.79	2.0	0	44.47	AV	54	PASS
	2462	Ant1	2500.0	-41.92	2.0	0	53.34	PEAK	74	PASS
	2462	Ant1	2500.0	-51.42	2.0	0	43.83	AV	54	PASS

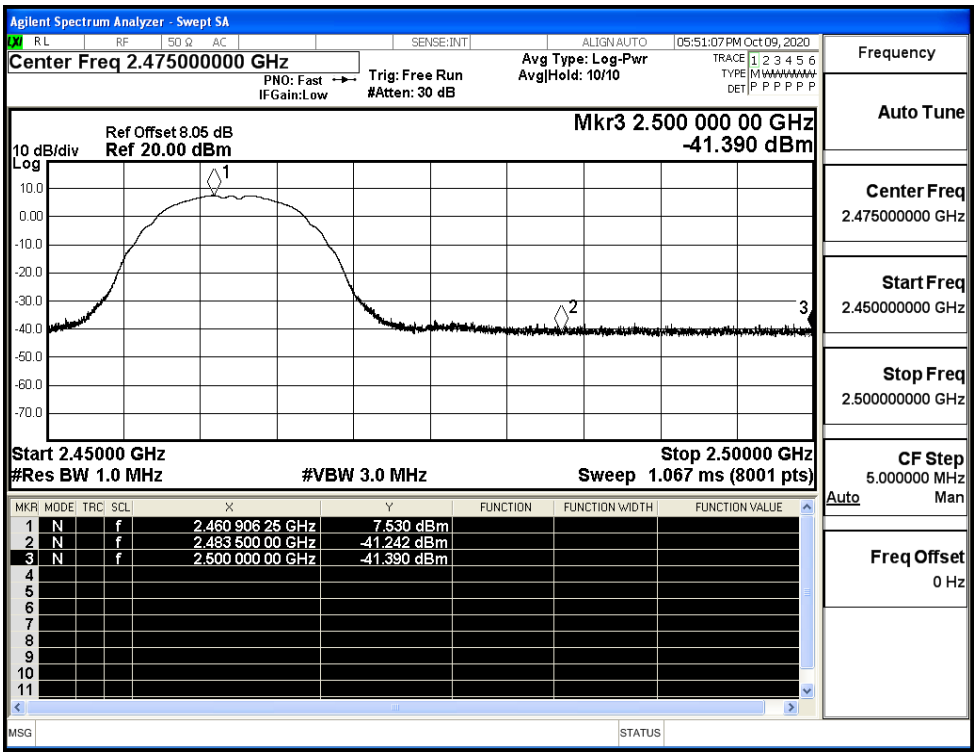
Restrict-band band-edge measurements_11B_2412_Ant1_PEAK



Restrict-band band-edge measurements_11B_2412_Ant1_AV



Restrict-band band-edge measurements_11B_2462_Ant1_PEAK



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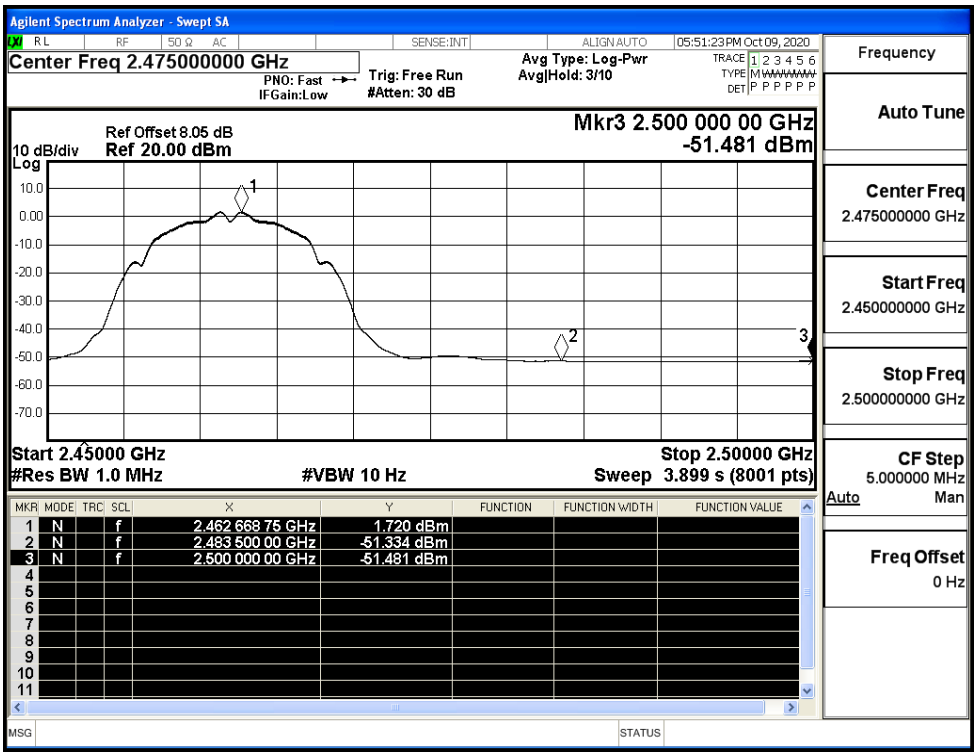
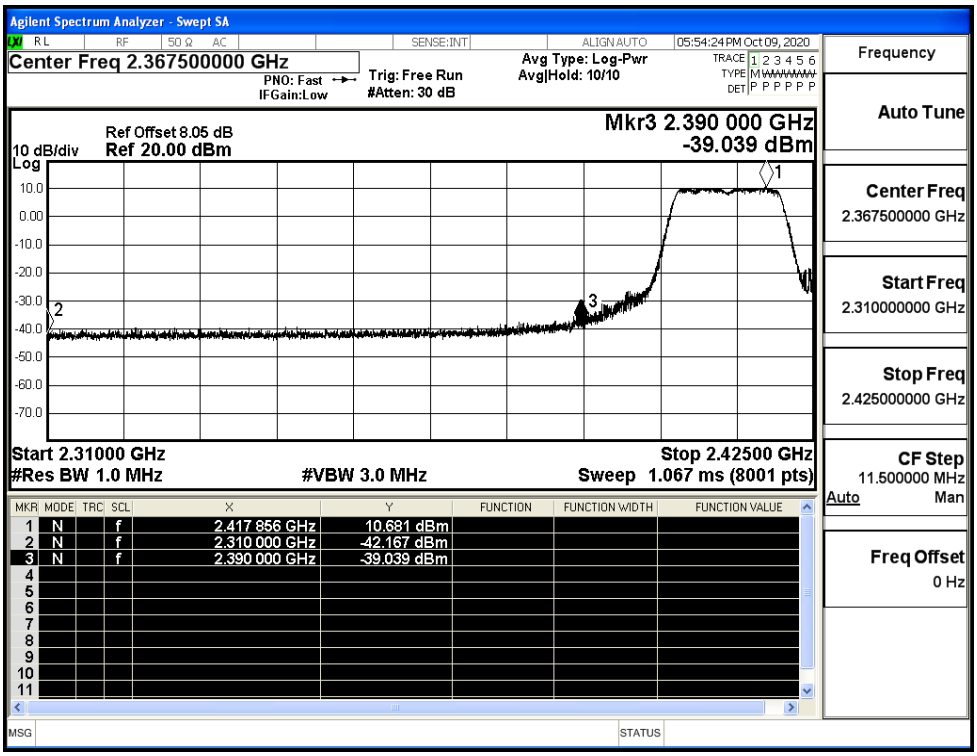


Restrict-band band-edge measurements_11G_2412_Ant1_PEAK



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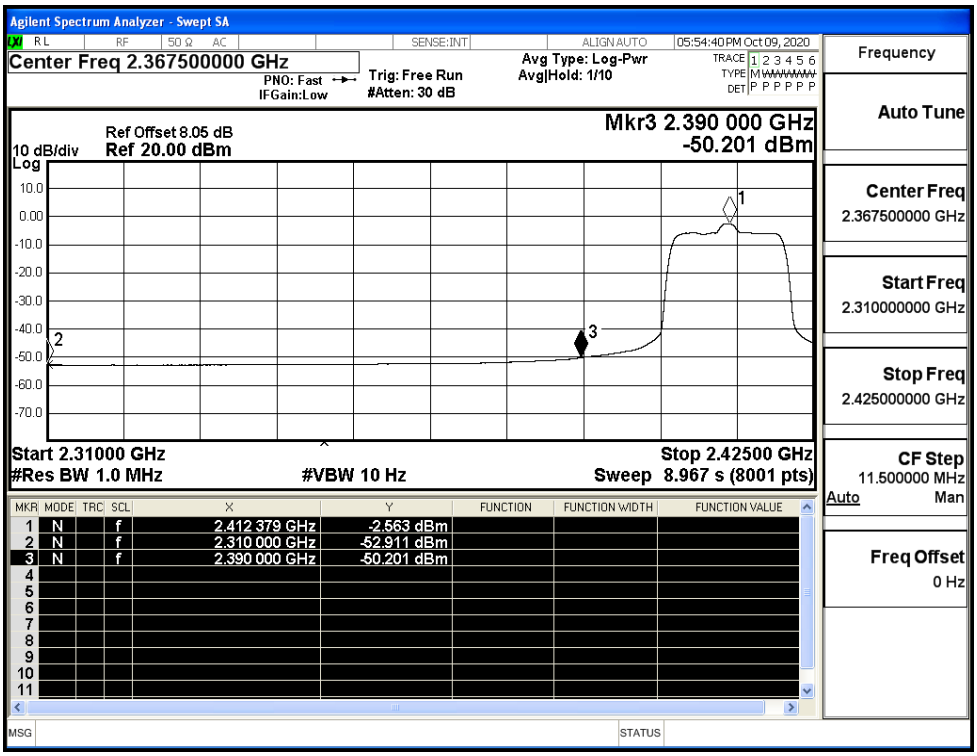

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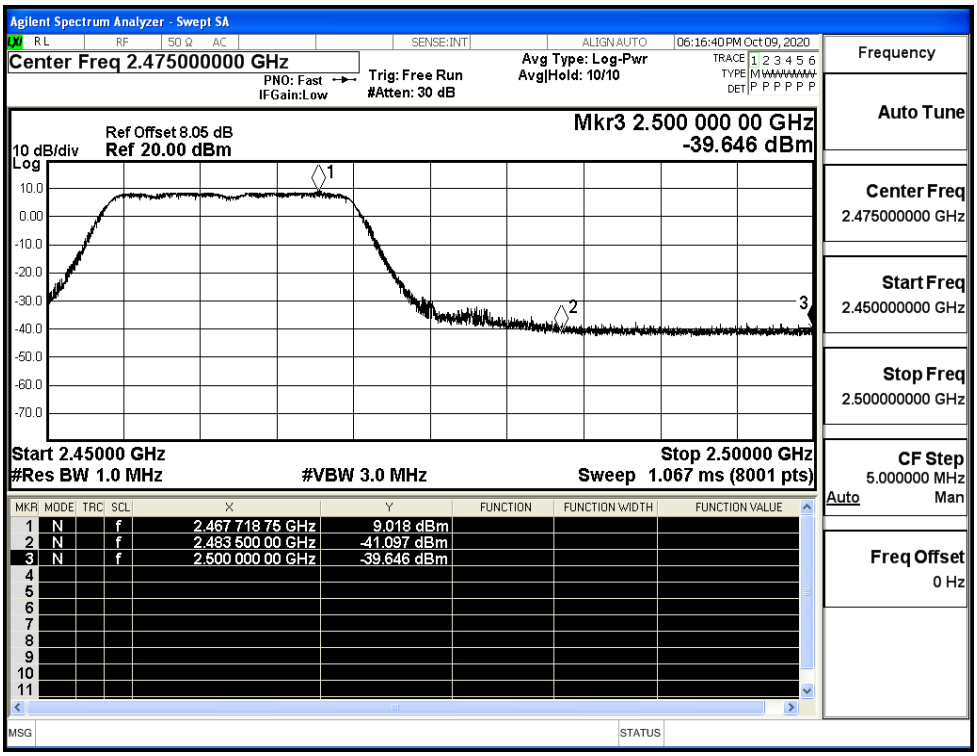

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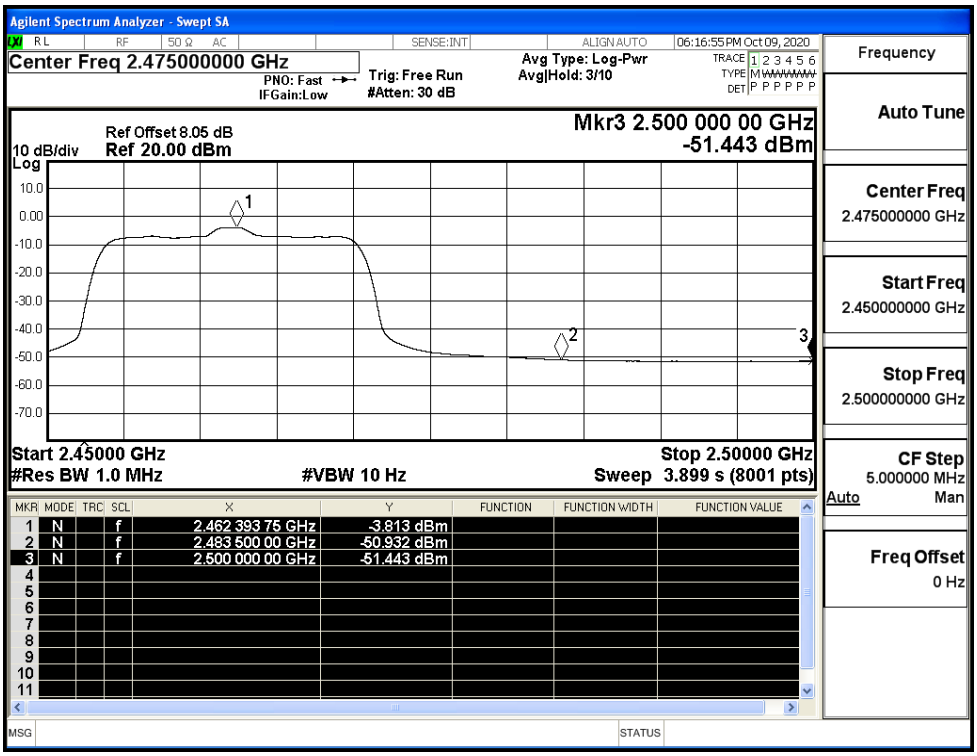
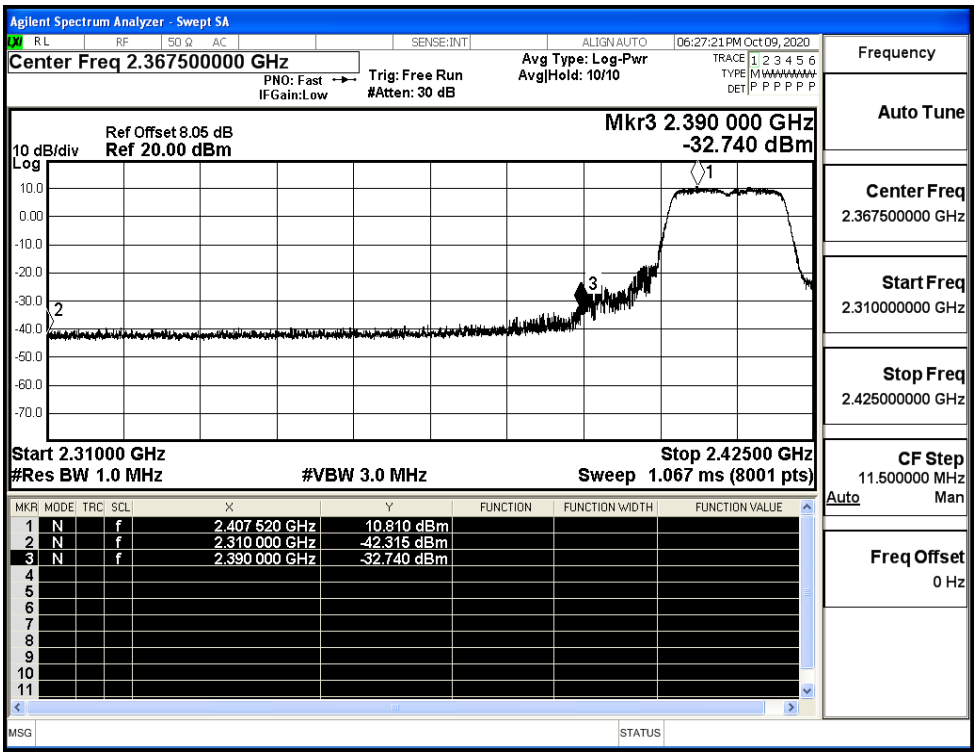


Restrict-band band-edge measurements_11N20SISO_2412_Ant1_PEAK



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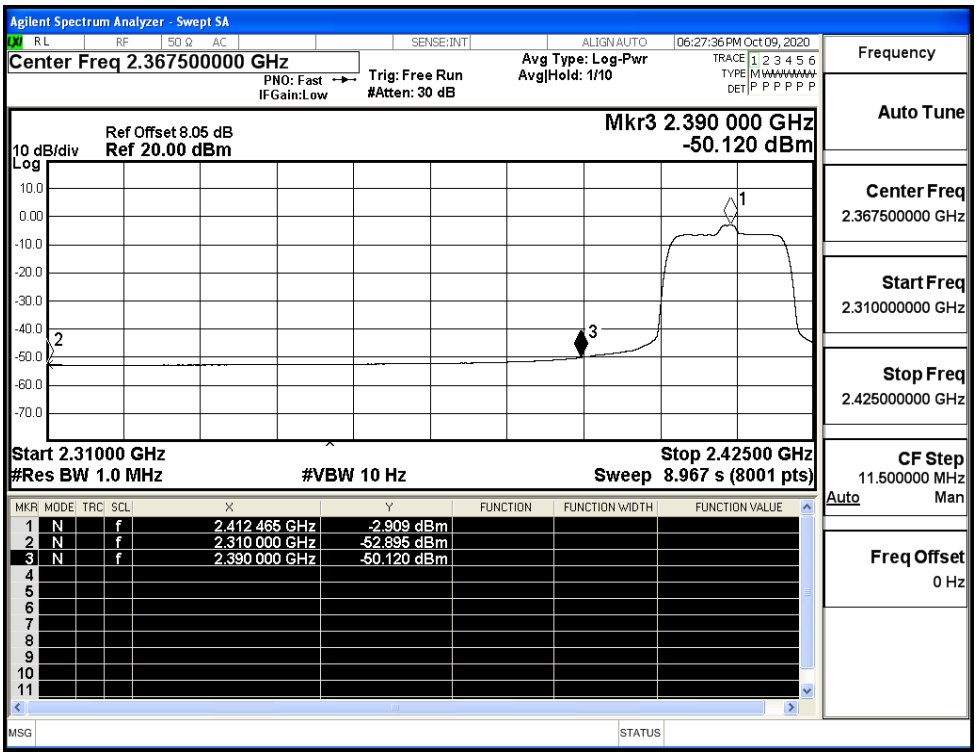

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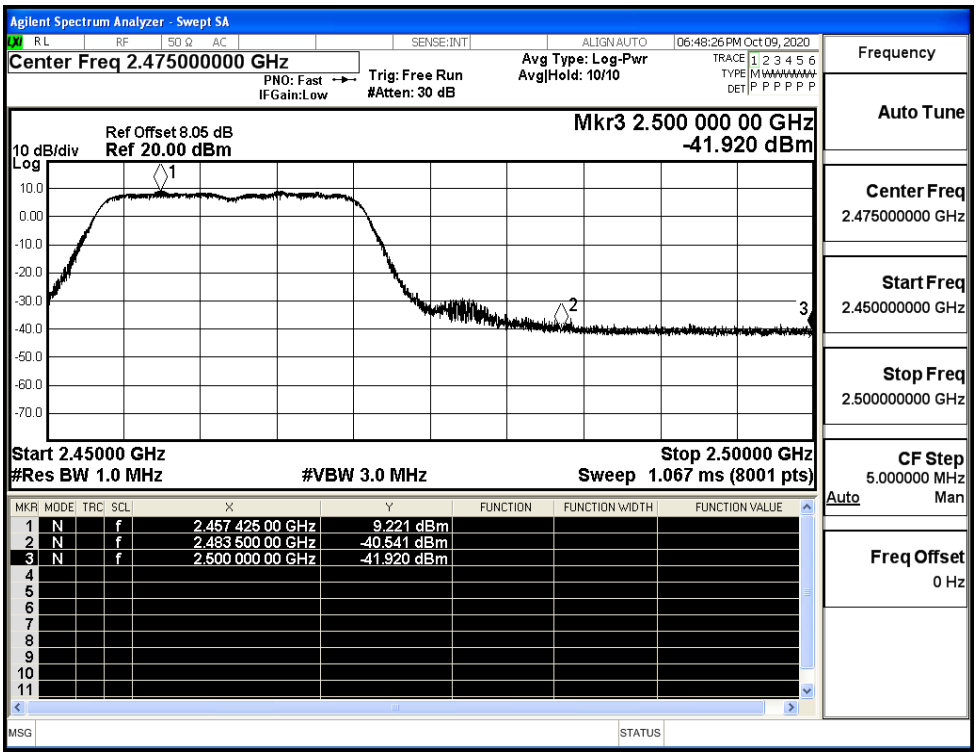
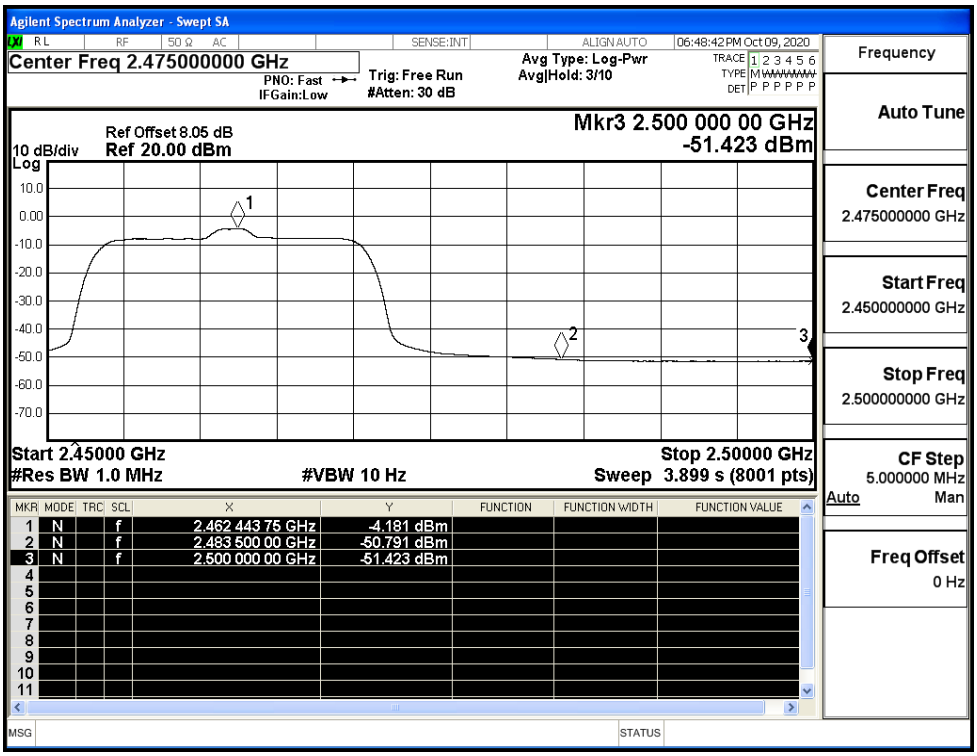
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