Appendix A

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: Intelligent sleep monitor

Trade Mark: IK'SONYA

Test Model: SY58001

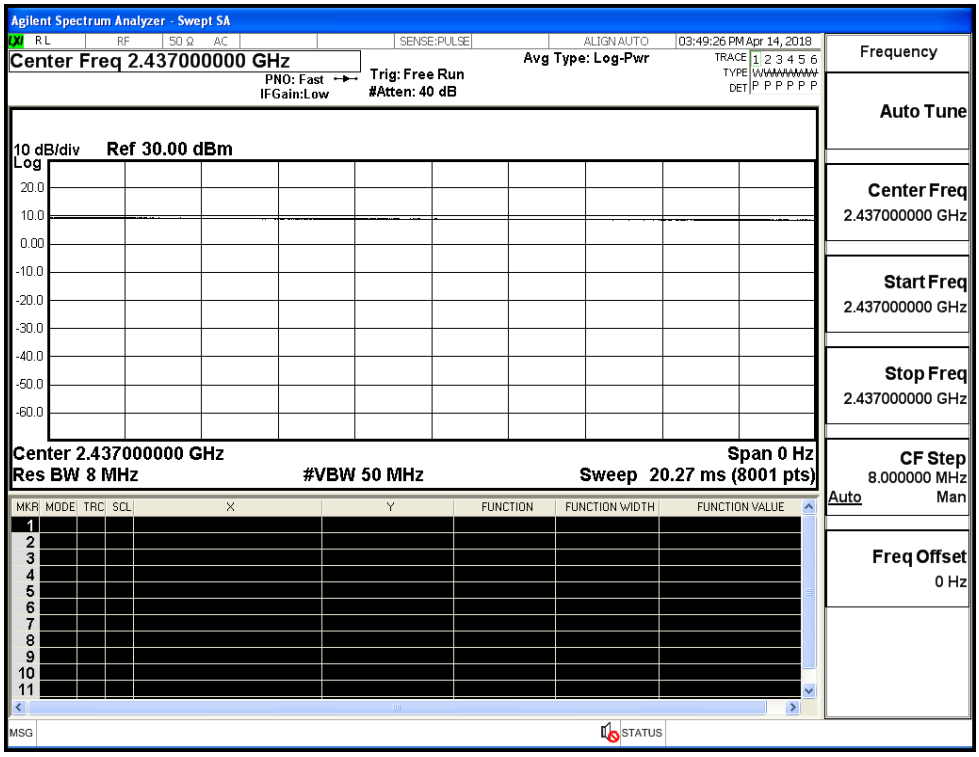
Environmental Conditions

Temperature:	22.5 ° C
Relative Humidity:	51.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Ryan.Hu
Supervised by:	Jayden Zhuo

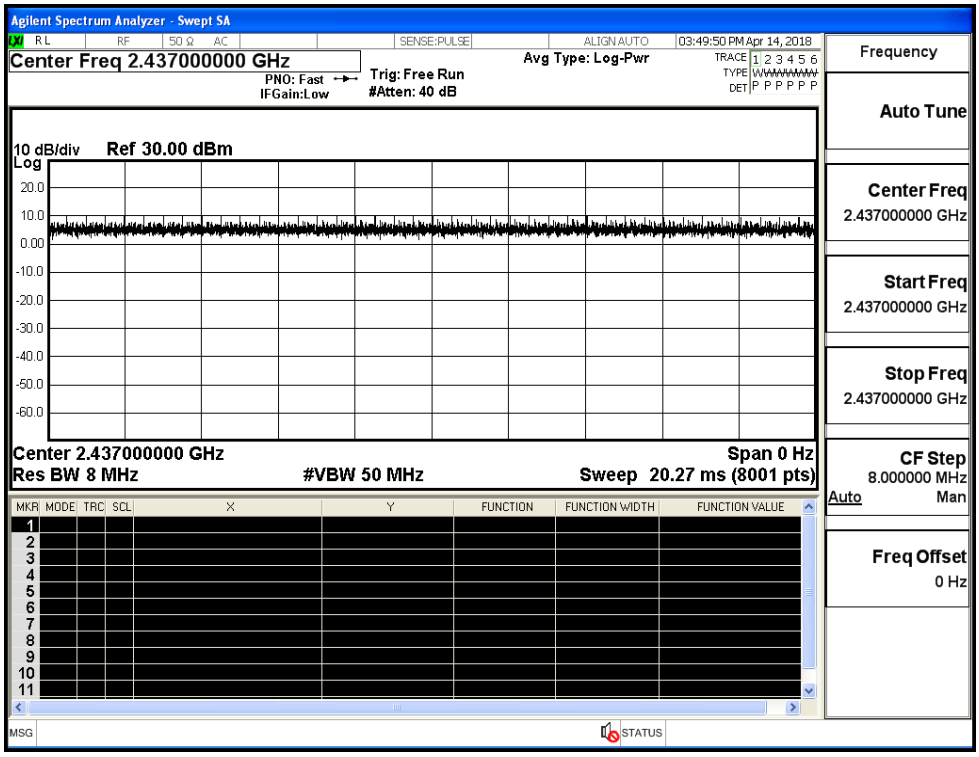
A.1 Duty Cycle

Test Mode	Test Channel	Ant	Duty Cycle[%]	Verdict
11B	2437	Ant1	100	PASS
11G	2437	Ant1	100	PASS
11N20SISO	2437	Ant1	100	PASS

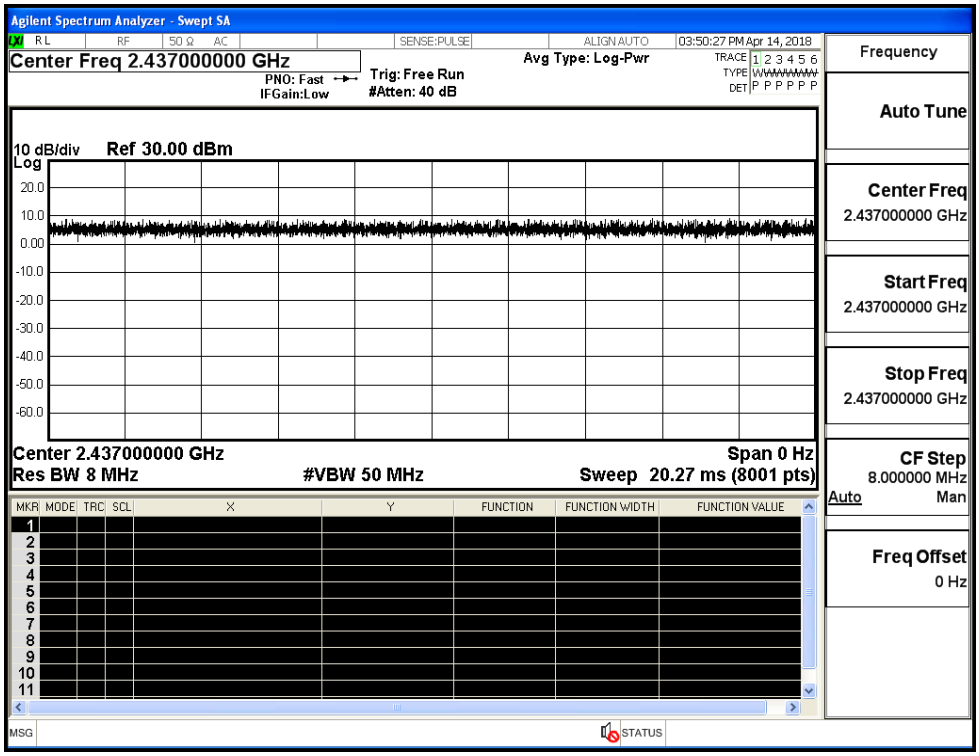
Duty Cycle_11B_2437_Ant1



Duty Cycle_11G_2437_Ant1

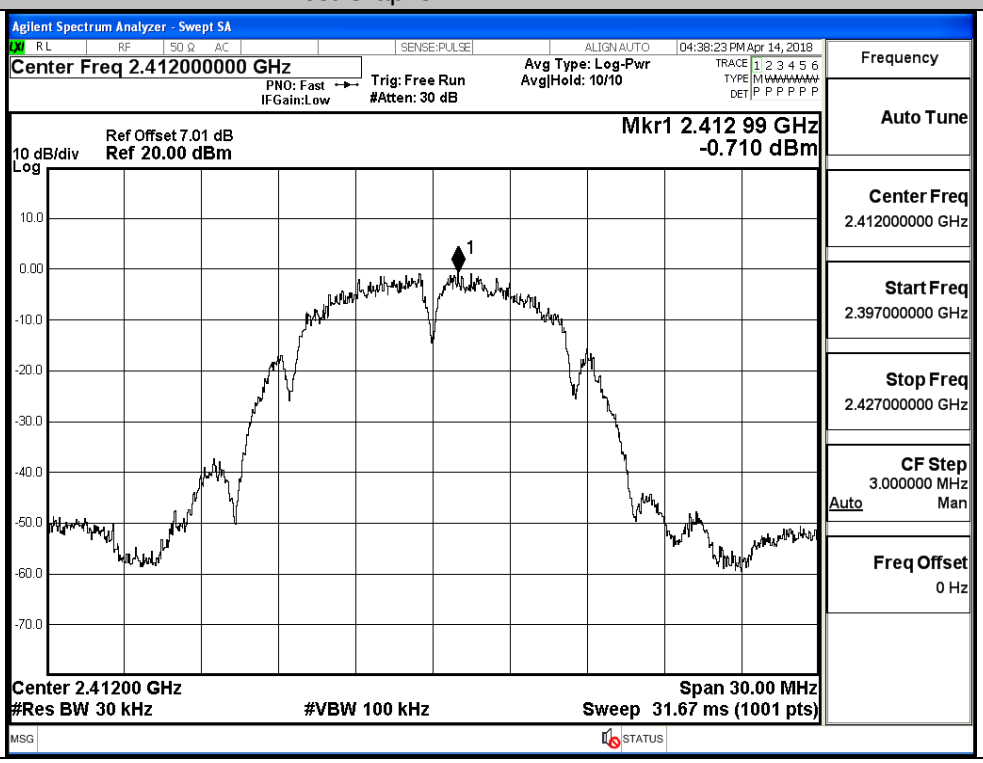


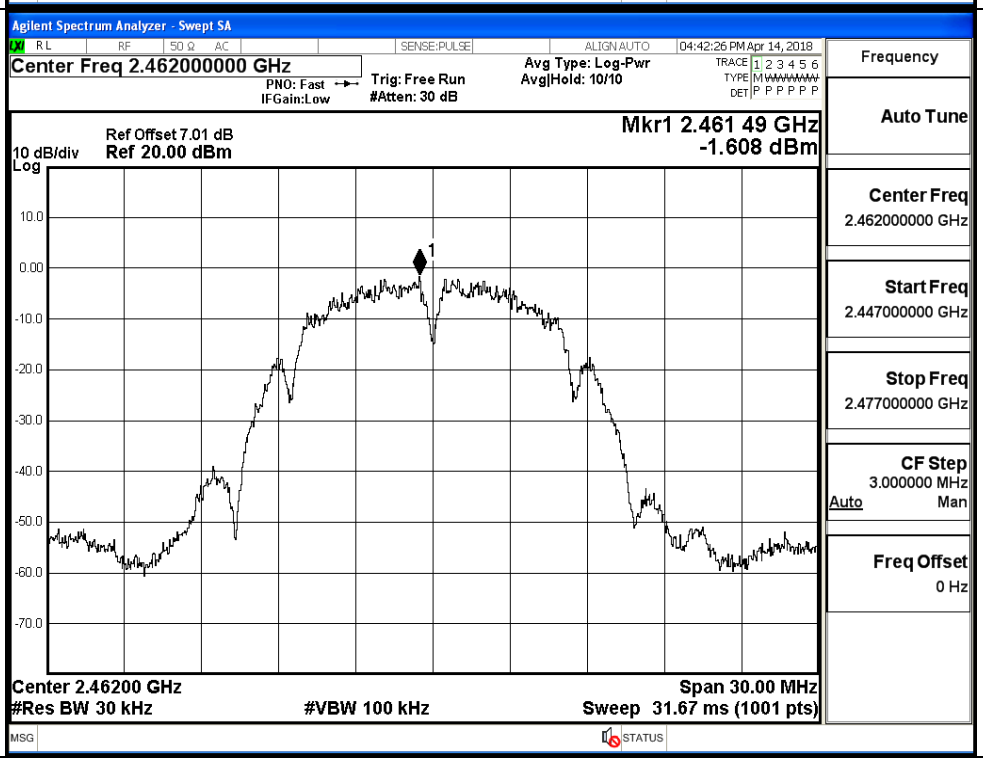
Duty Cycle_11N20SISO_2437_Ant1

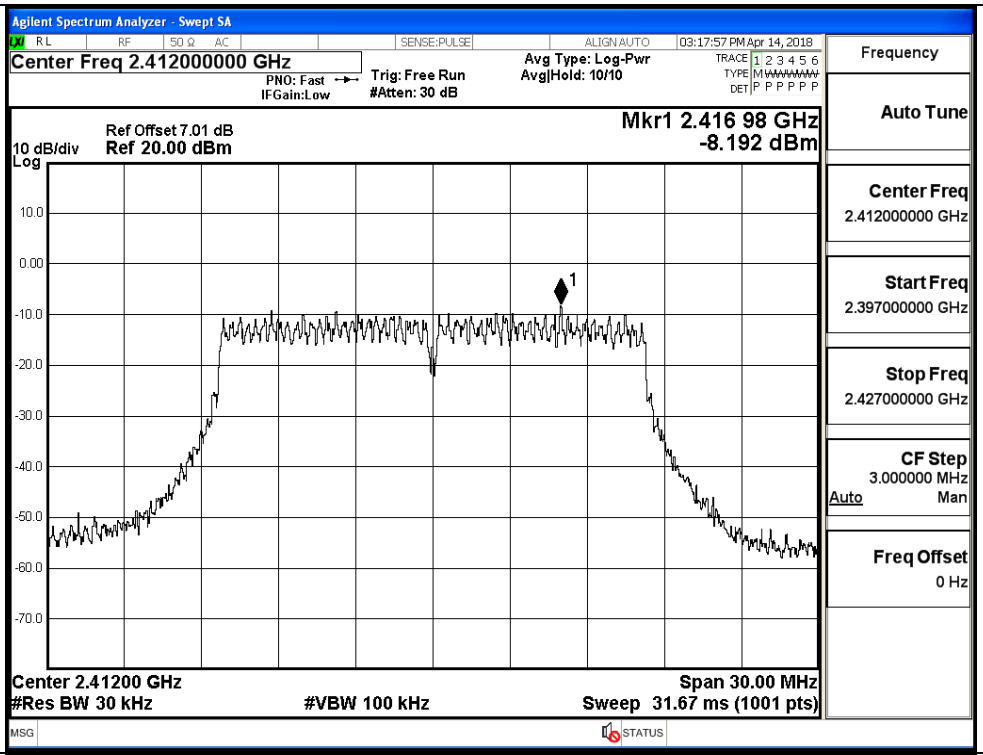
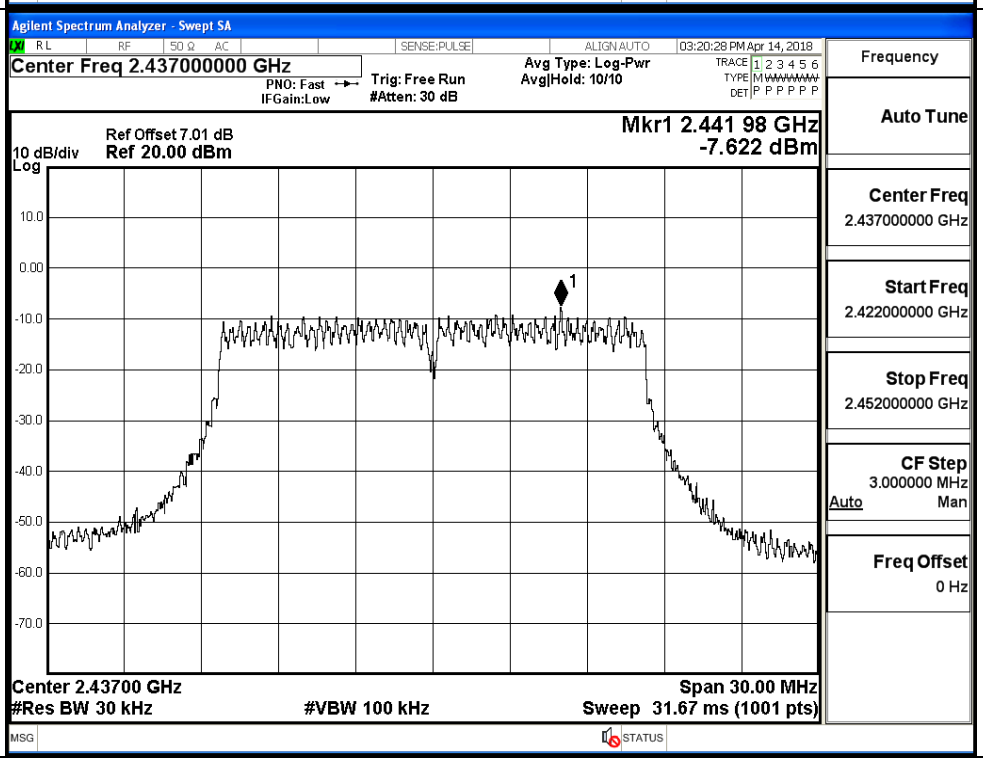


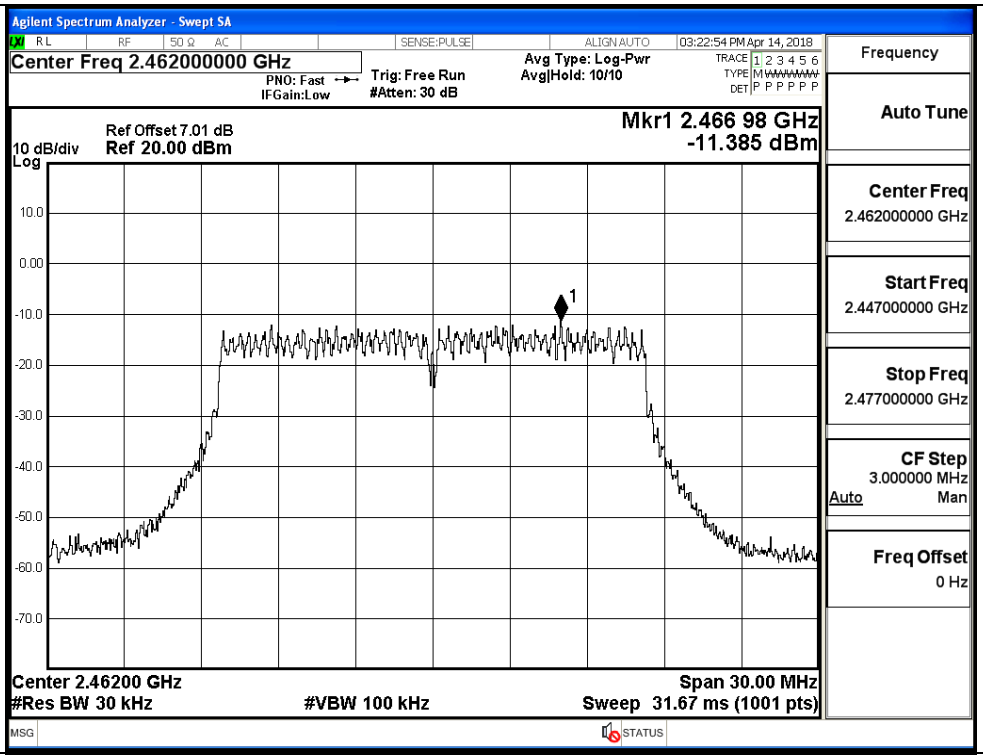
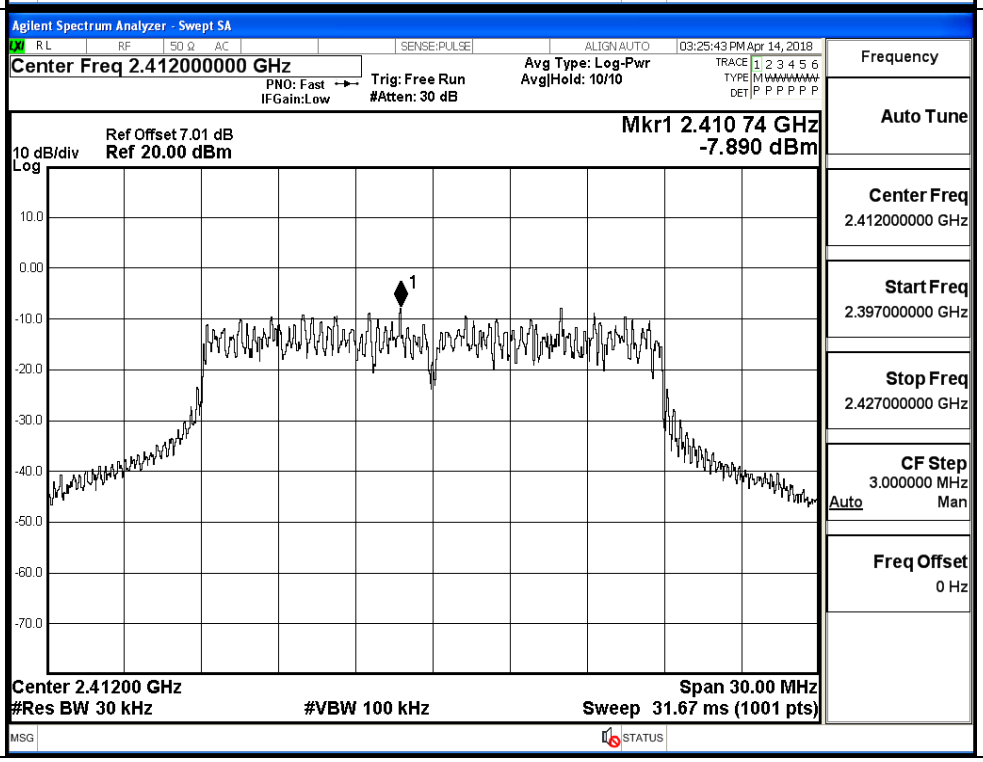
A.2 Maximum Power Spectral Density

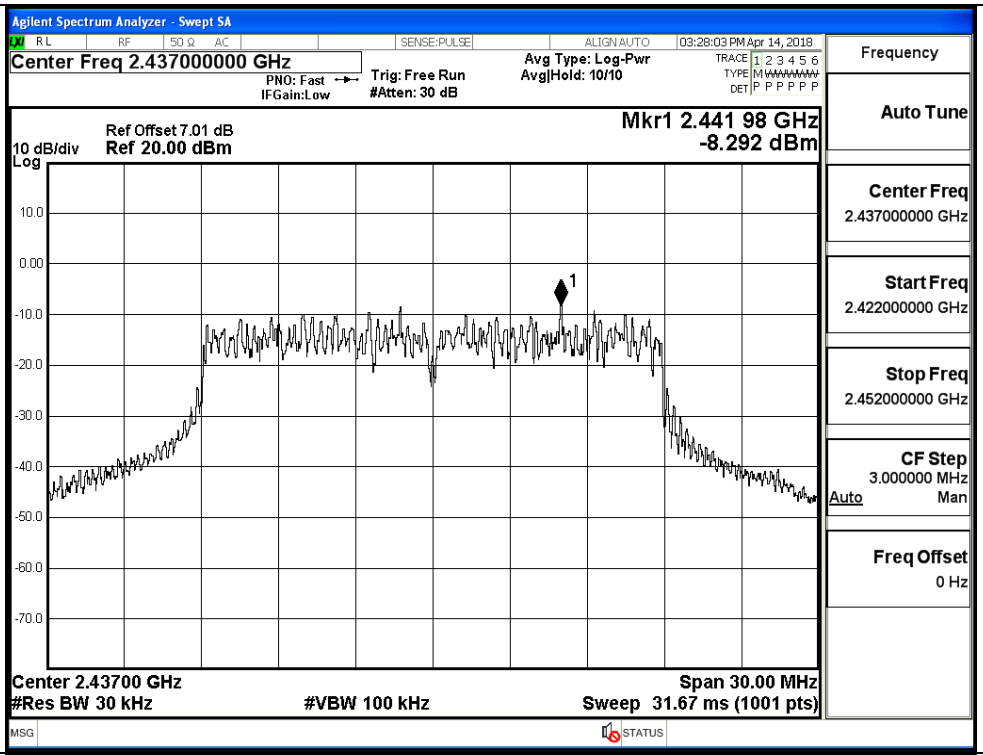
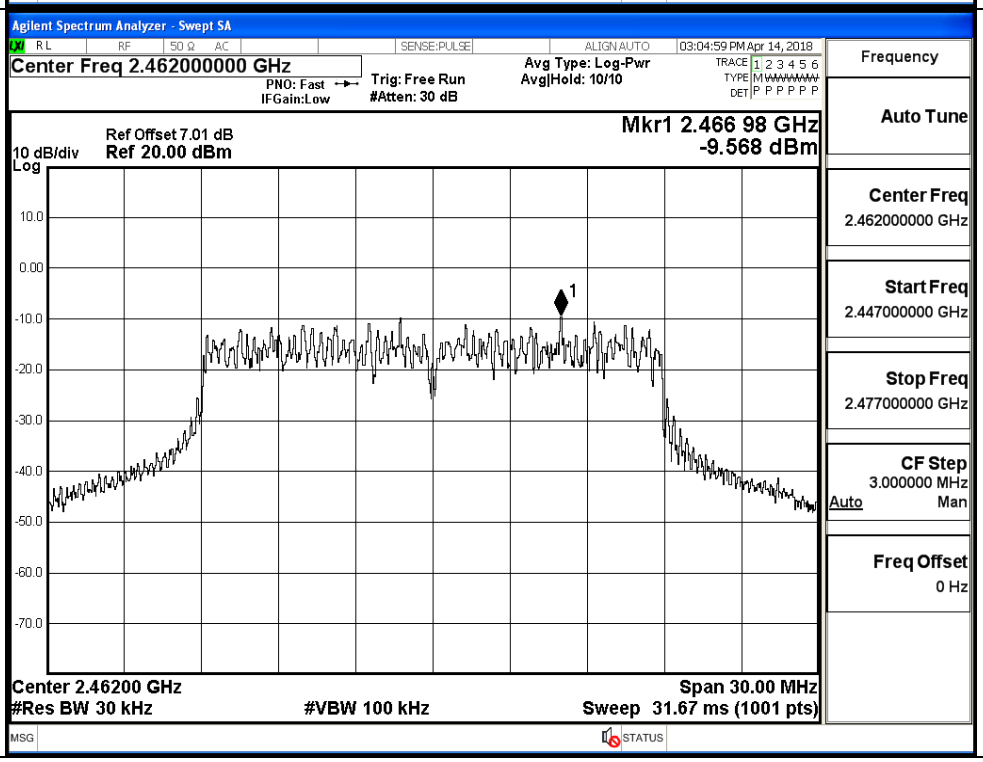
Mode	Channel	Meas.Level [dBm/30KHz]	Limit [dBm/3KHz]	Verdict
11B	LCH	-0.710	8	PASS
	MCH	-0.798	8	PASS
	HCH	-1.608	8	PASS
11G	LCH	-8.192	8	PASS
	MCH	-7.622	8	PASS
	HCH	-11.385	8	PASS
11N20SISO	LCH	-7.890	8	PASS
	MCH	-8.292	8	PASS
	HCH	-9.568	8	PASS

Test Graphs	
11B/LCH	

11B/MCH		
11B/HCH		

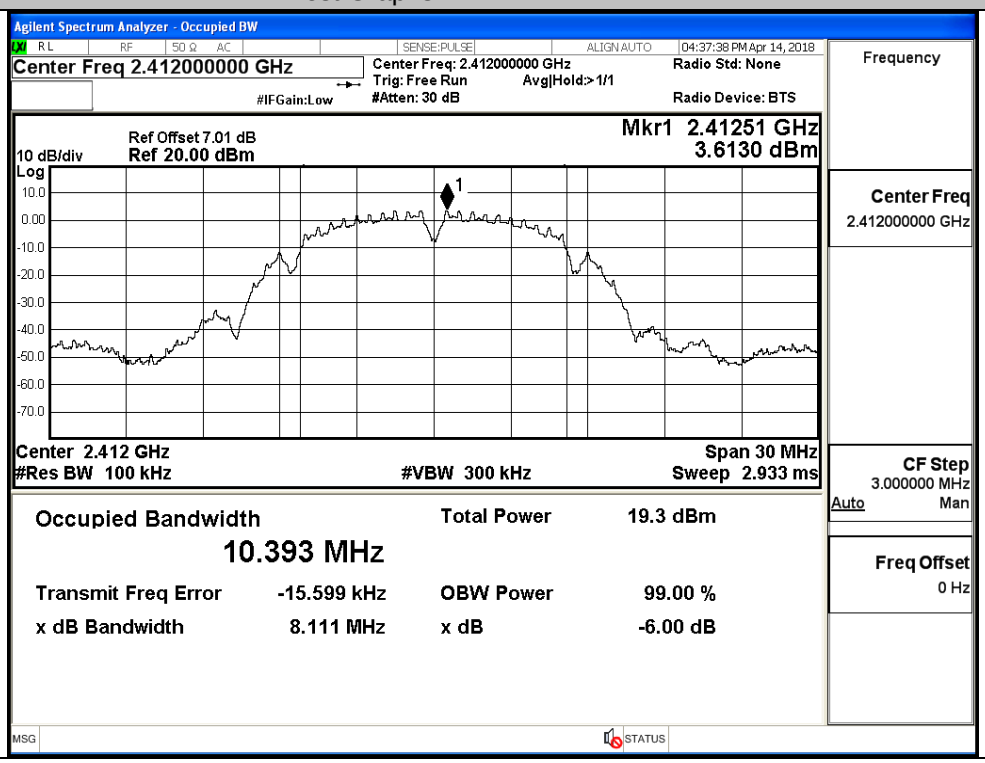
11G/LCH		
11G/MCH		

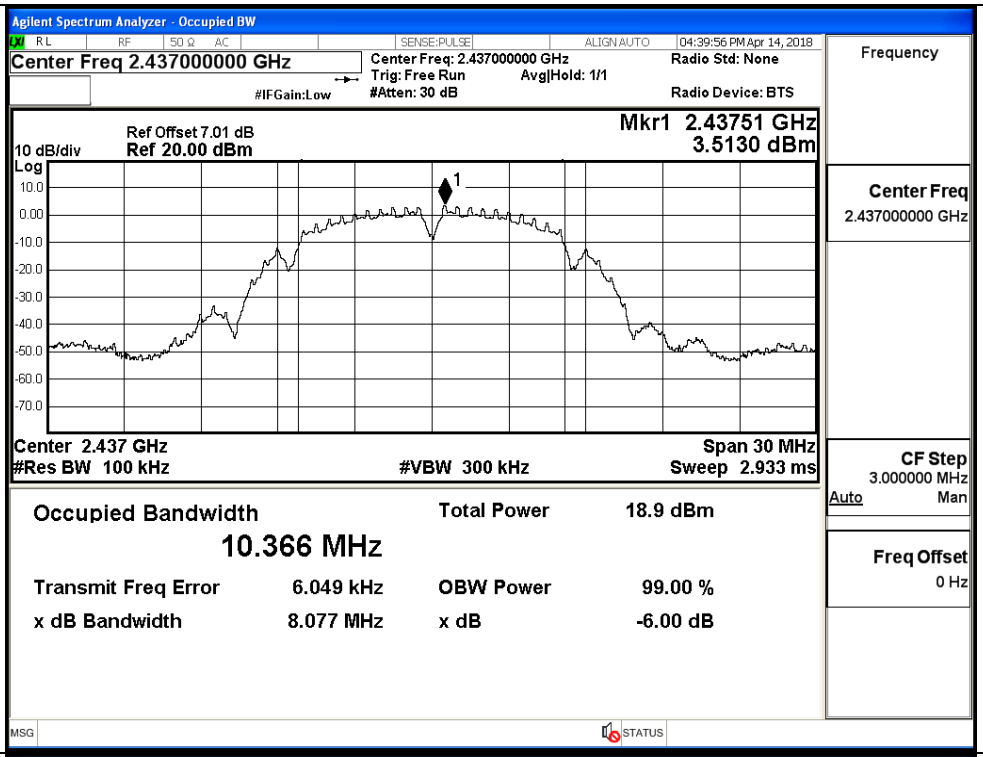
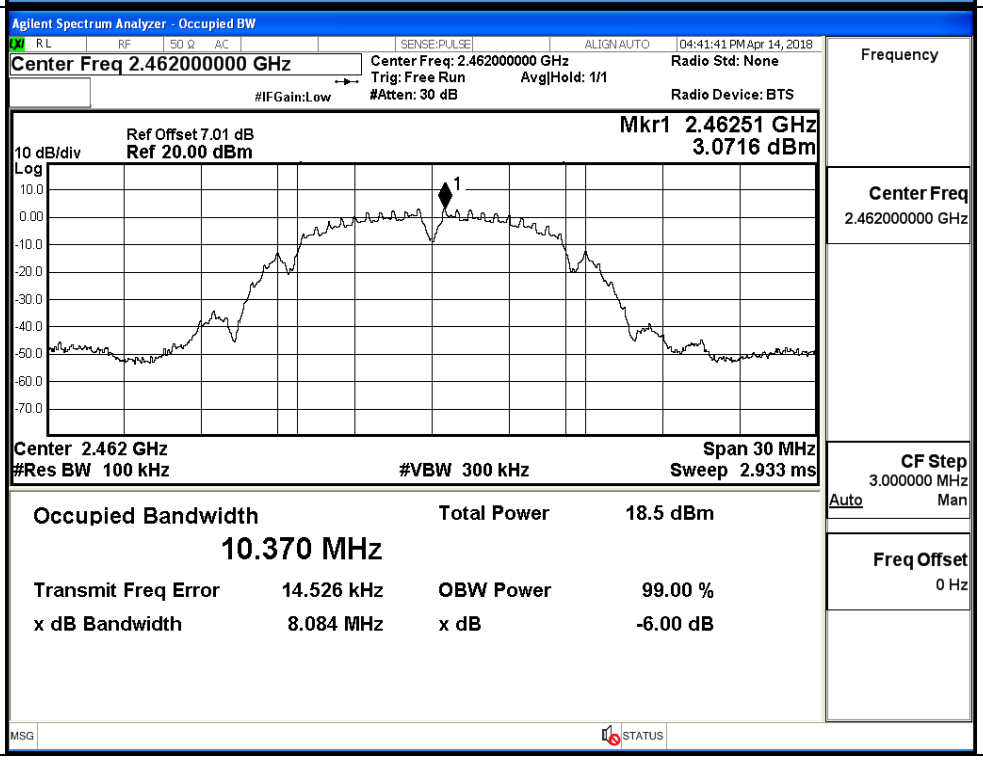
11G/HCH		
11N20SISO/LCH		

11N20SISO/MCH		
11N20SISO/HCH		

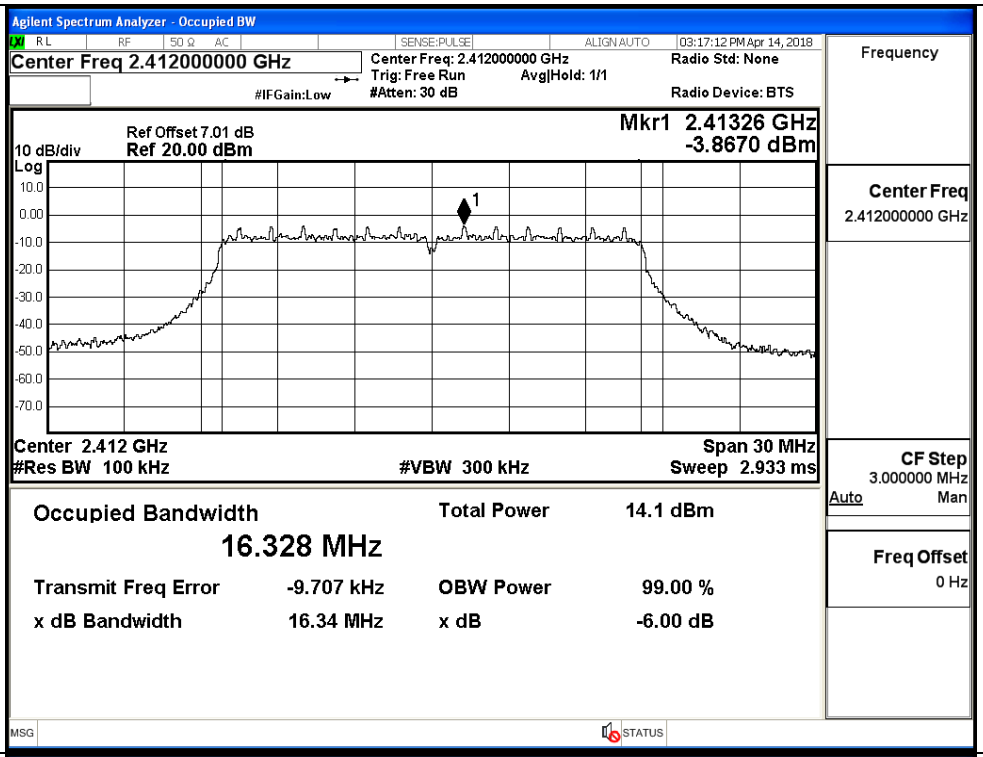
A.3 6dB Bandwidth

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
11B	LCH	8.111	≥0.5	PASS
	MCH	8.077	≥0.5	PASS
	HCH	8.084	≥0.5	PASS
11G	LCH	16.34	≥0.5	PASS
	MCH	16.33	≥0.5	PASS
	HCH	16.34	≥0.5	PASS
11N20SISO	LCH	17.33	≥0.5	PASS
	MCH	17.32	≥0.5	PASS
	HCH	17.49	≥0.5	PASS

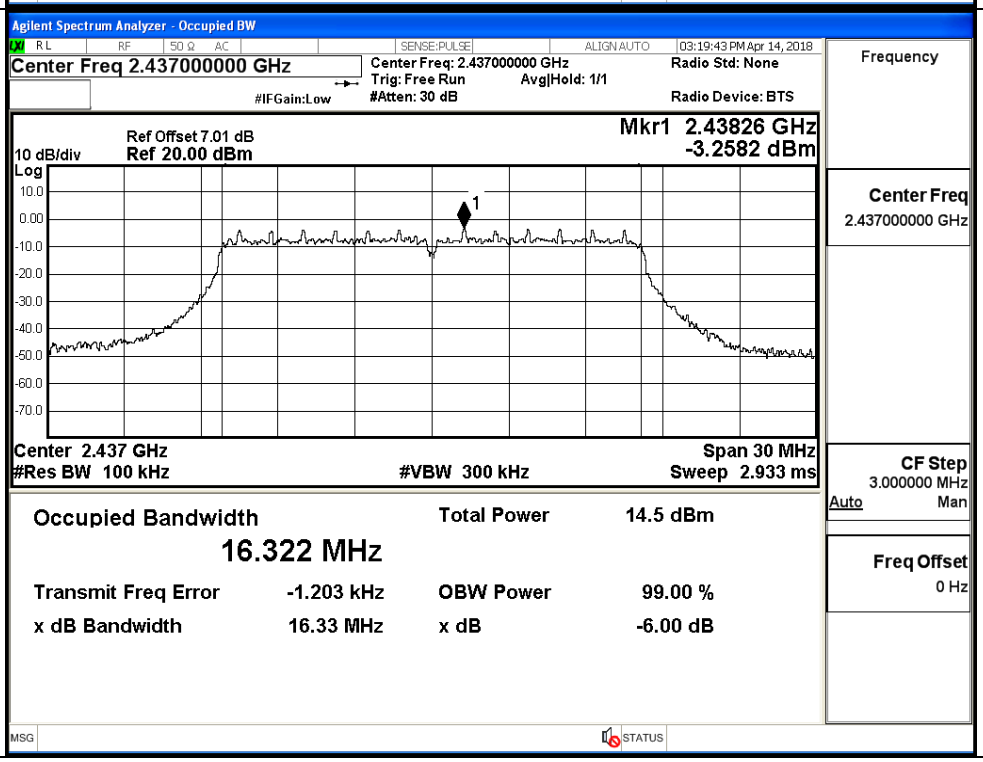
Test Graphs	
11B/LCH	

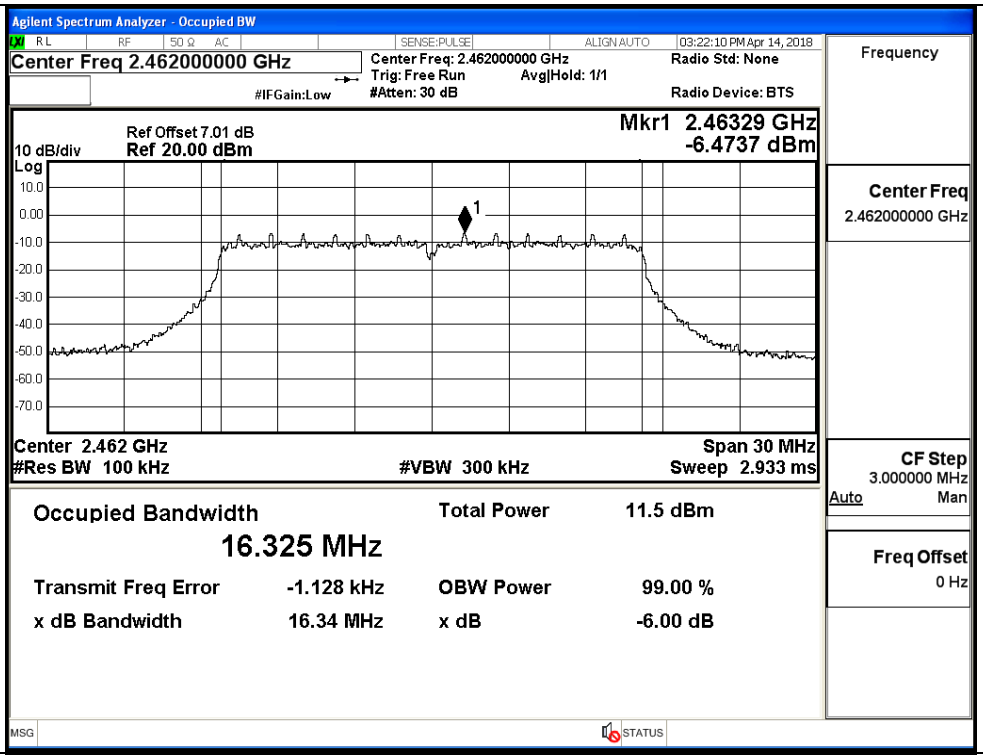
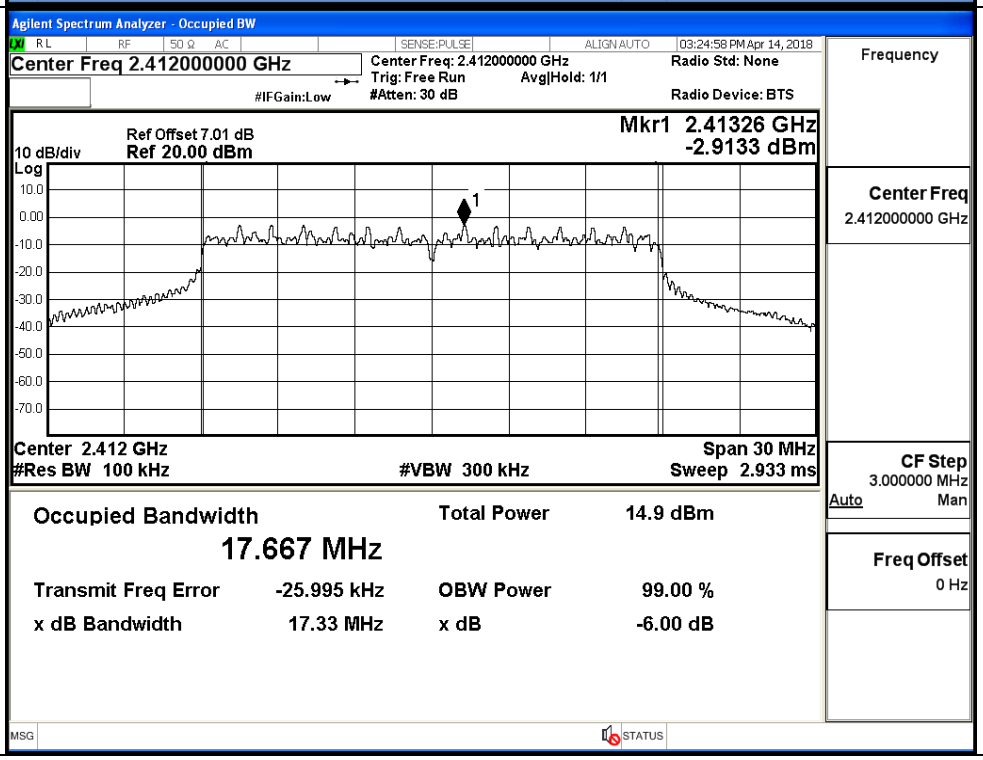
11B/MCH		
11B/HCH		

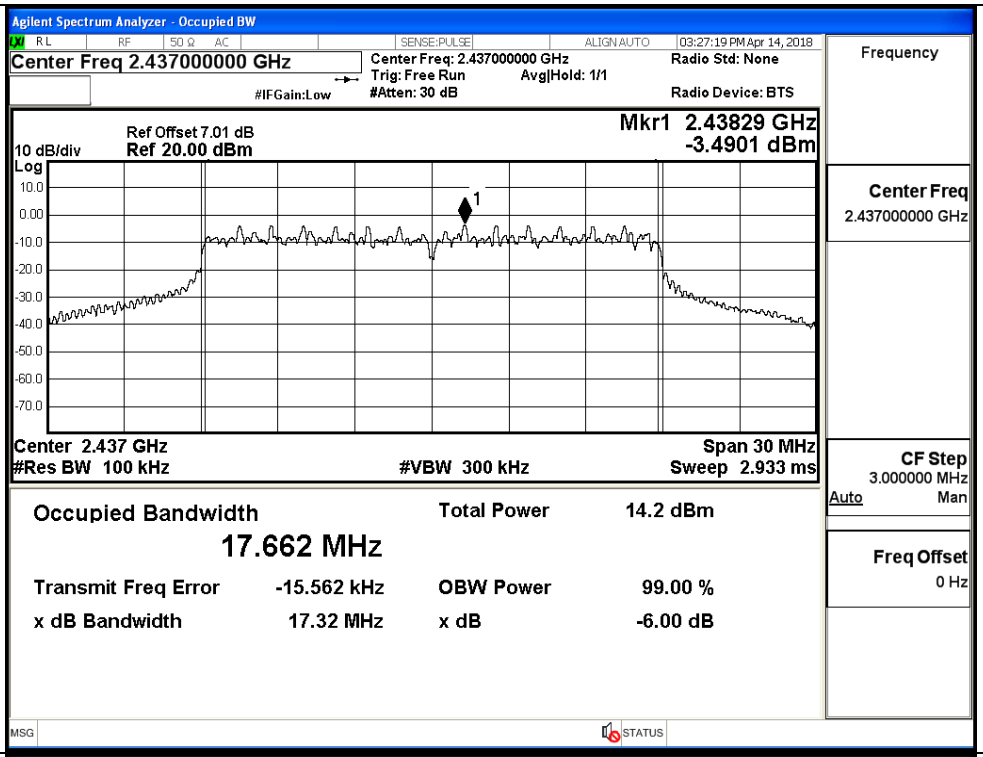
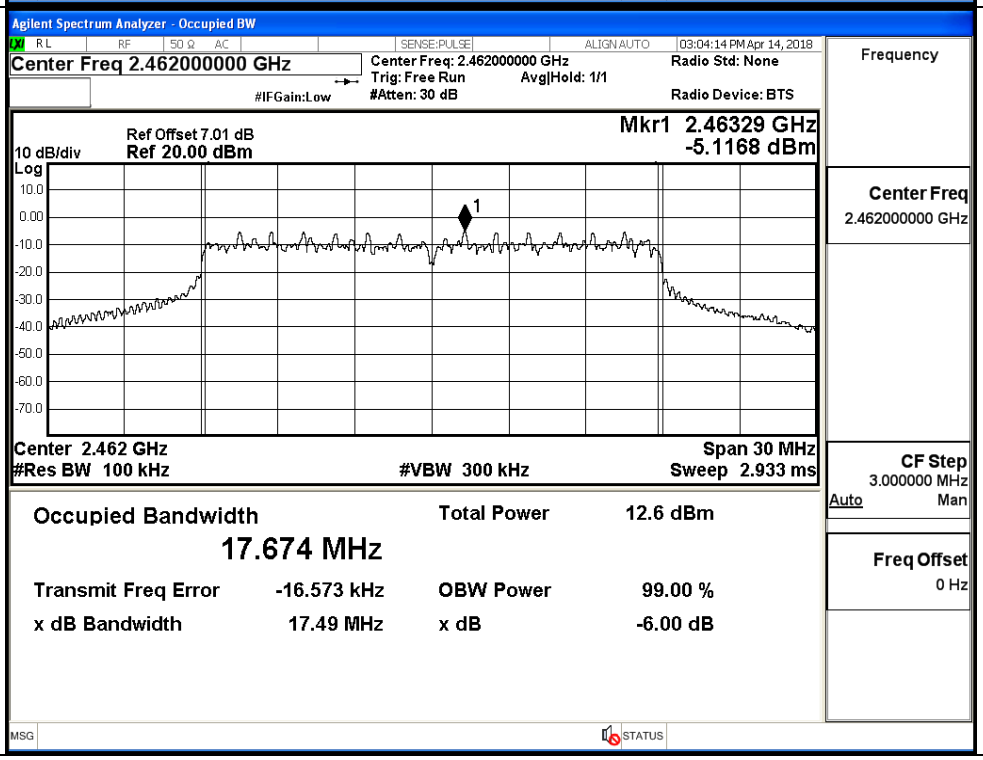
11G/LCH



11G/MCH

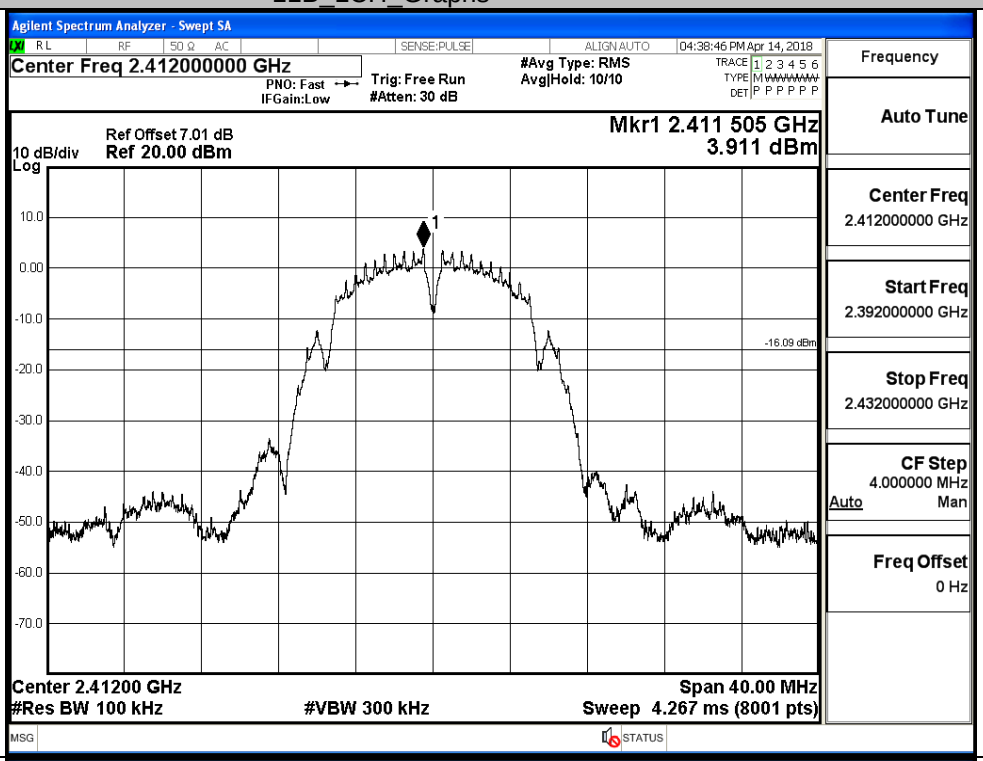
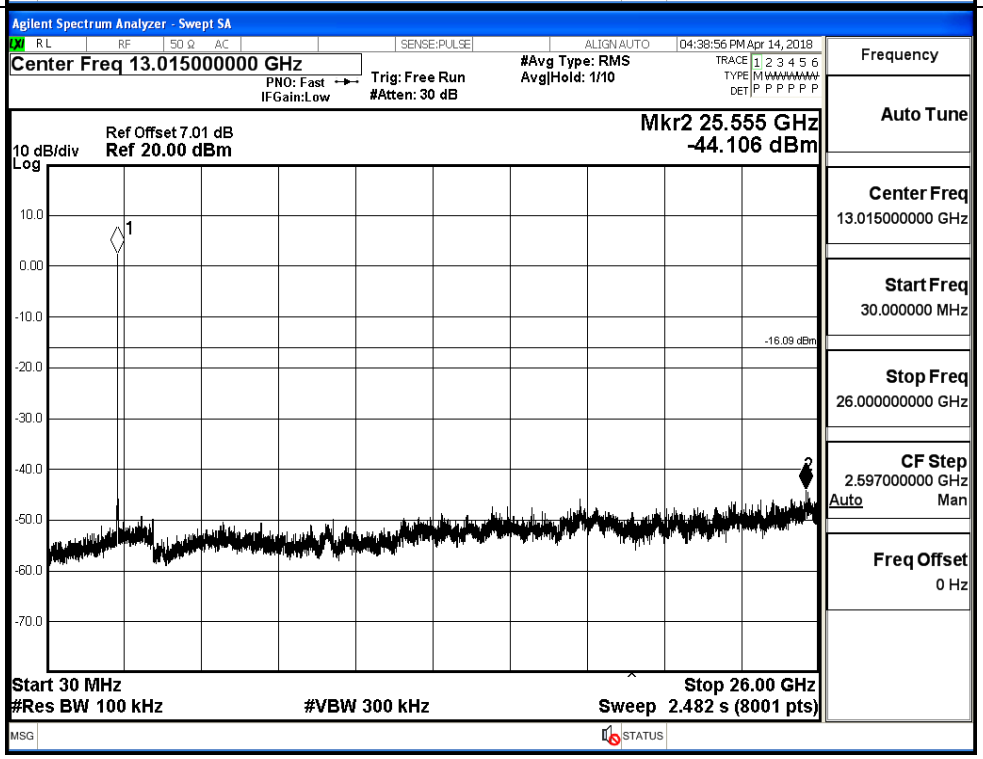


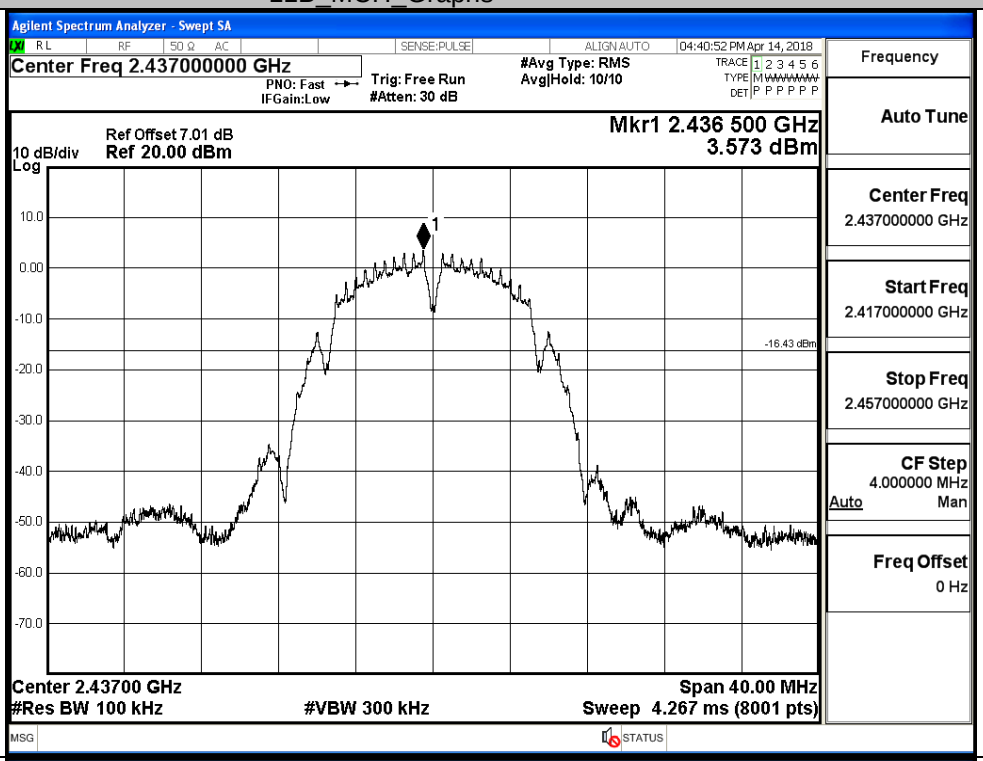
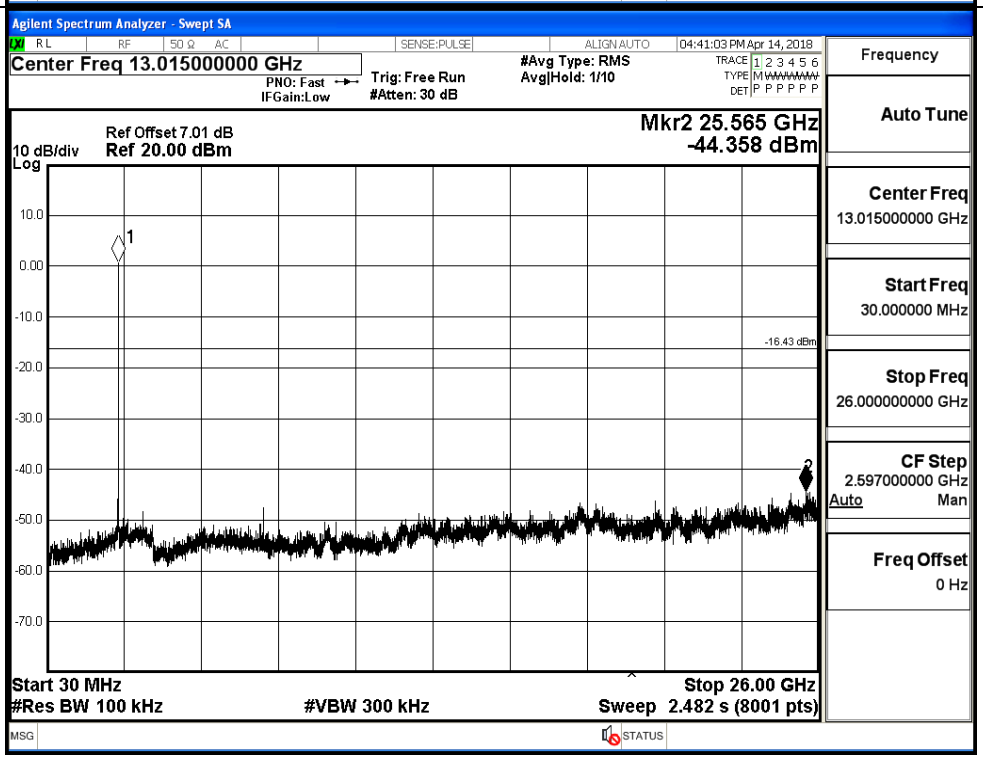
11G/HCH		
11N20SISO/LCH		

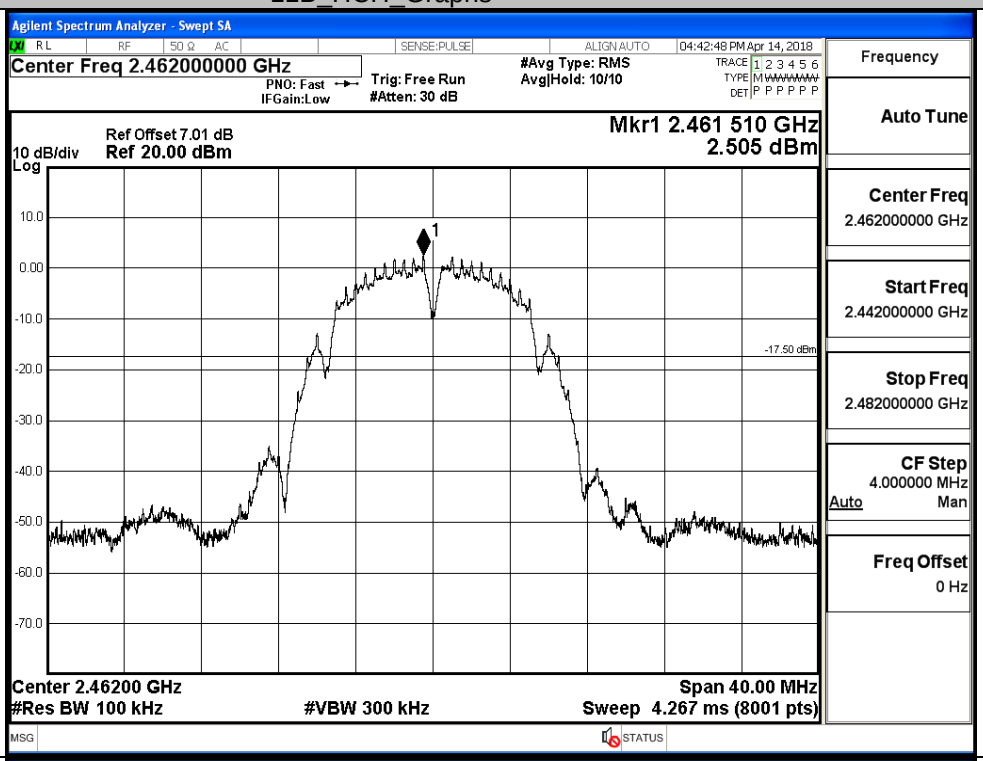
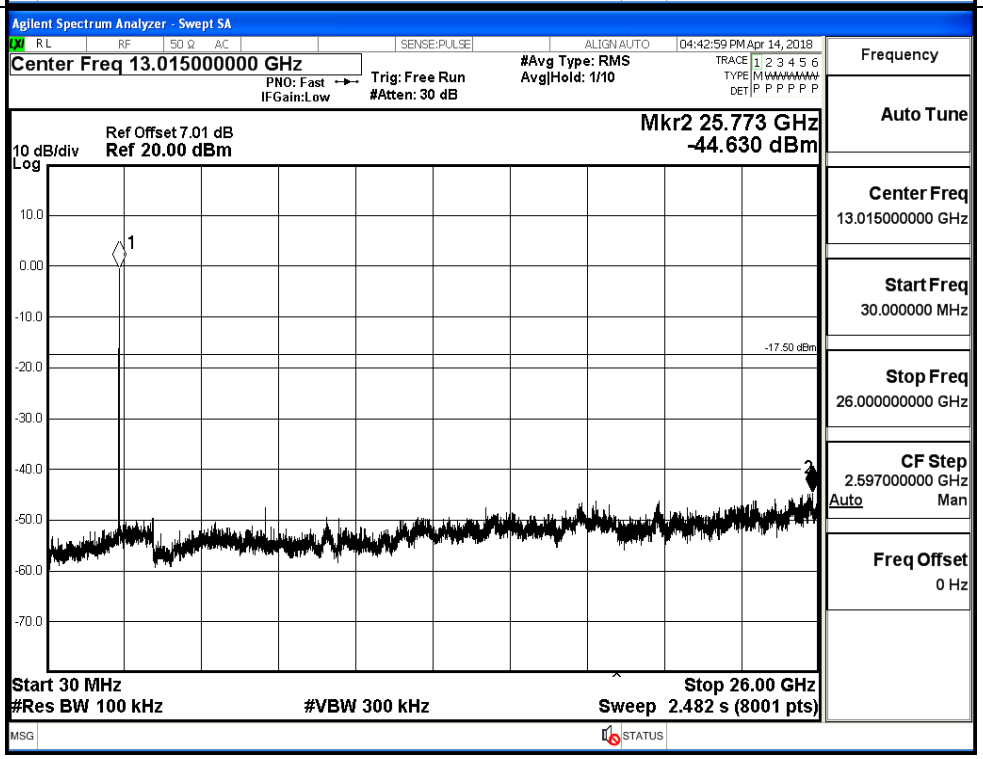
11N20SISO/MCH	
11N20SISO/HCH	

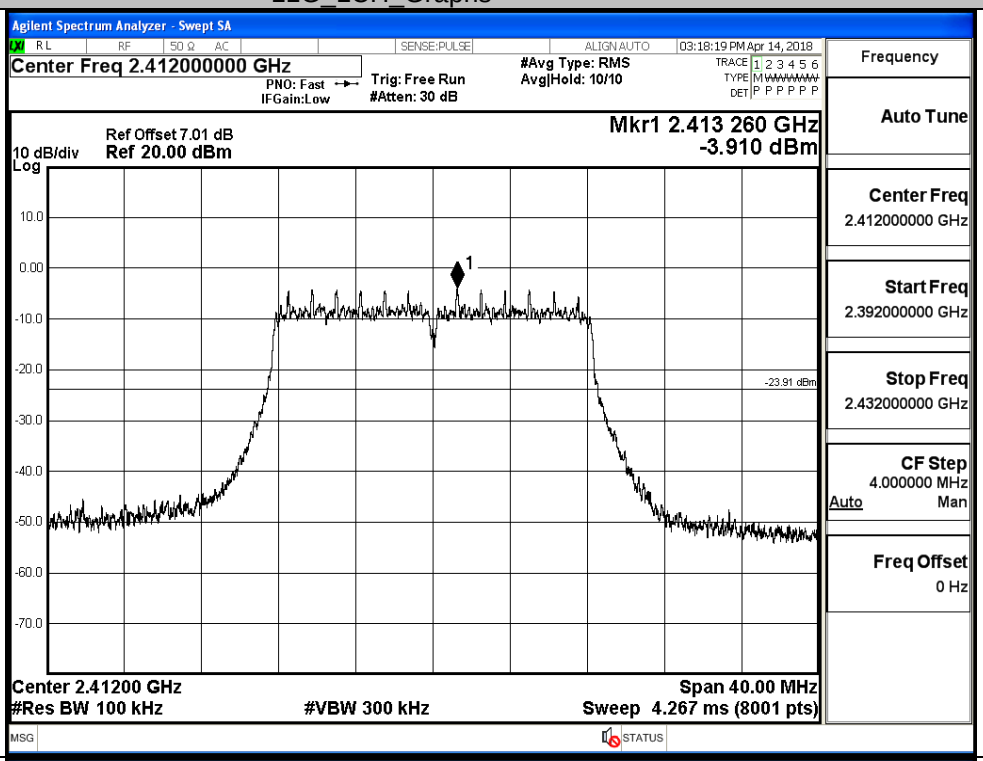
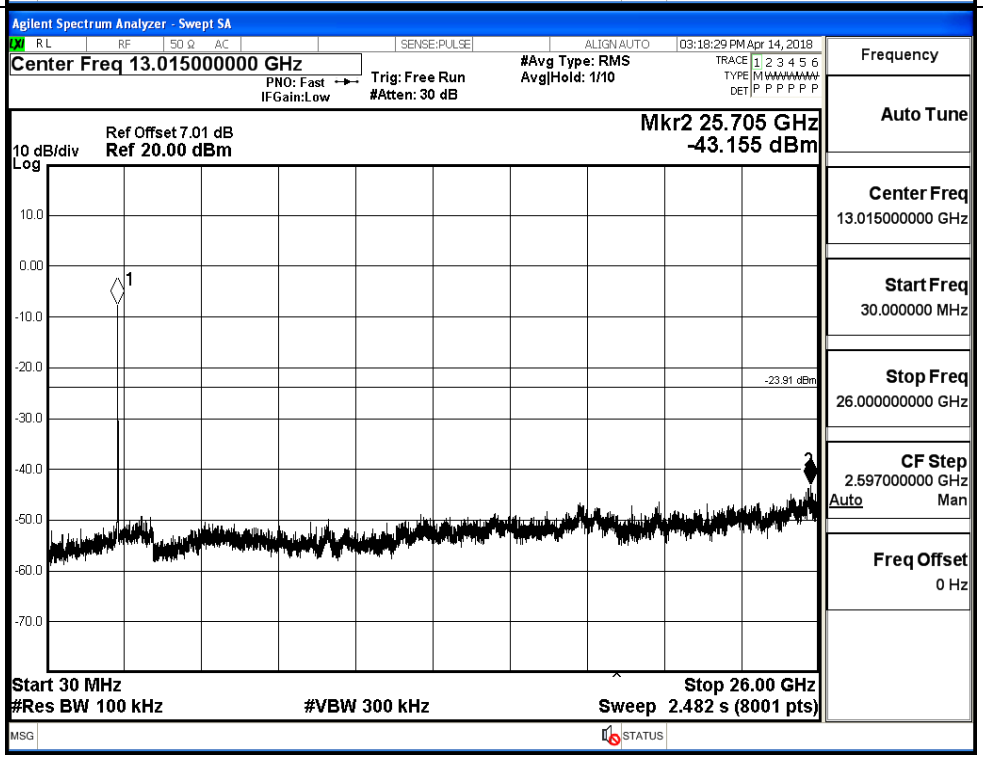
A.4 RF Conducted Spurious Emissions

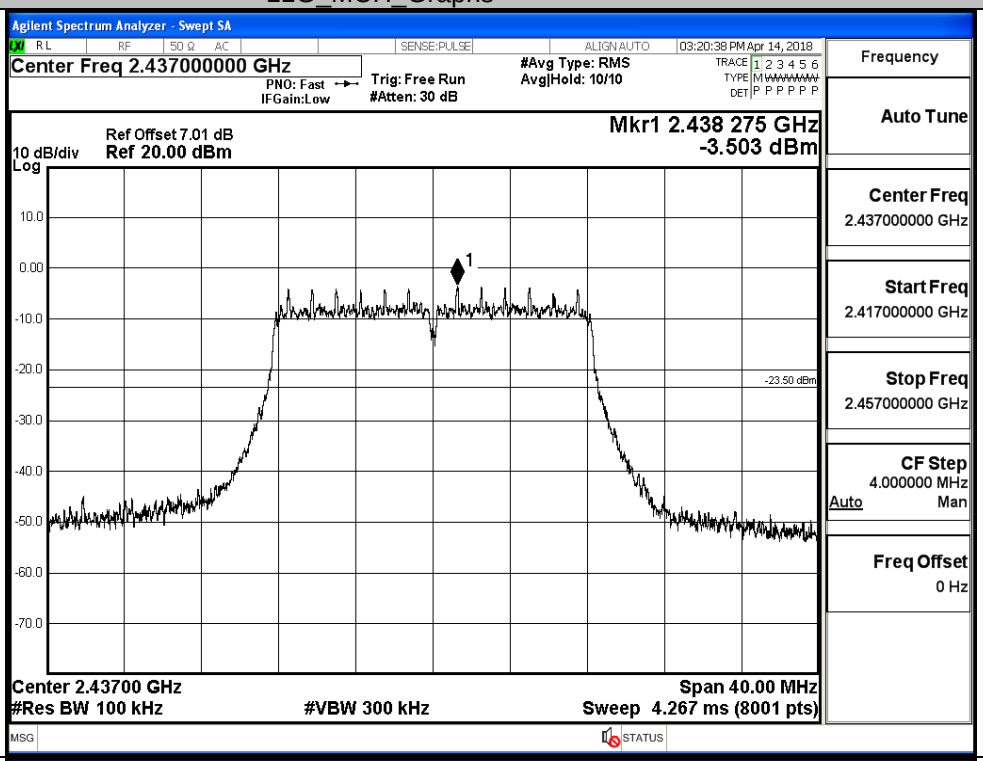
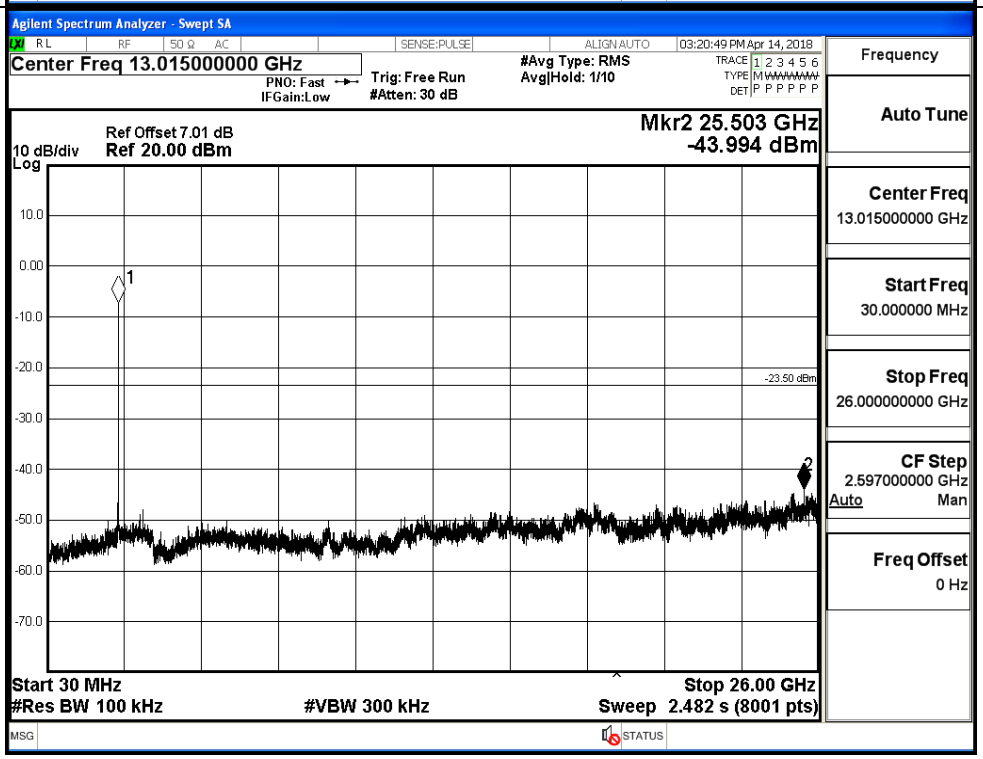
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
11B	LCH	3.911	-44.106	-16.089	PASS
	MCH	3.573	-44.358	-16.427	PASS
	HCH	2.505	-44.630	-17.495	PASS
11G	LCH	-3.91	-43.155	-23.910	PASS
	MCH	-3.503	-43.994	-23.503	PASS
	HCH	-6.878	-44.326	-26.878	PASS
11N20 SISO	LCH	-3.137	-44.821	-23.137	PASS
	MCH	-3.604	-42.548	-23.604	PASS
	HCH	-4.941	-44.992	-24.941	PASS

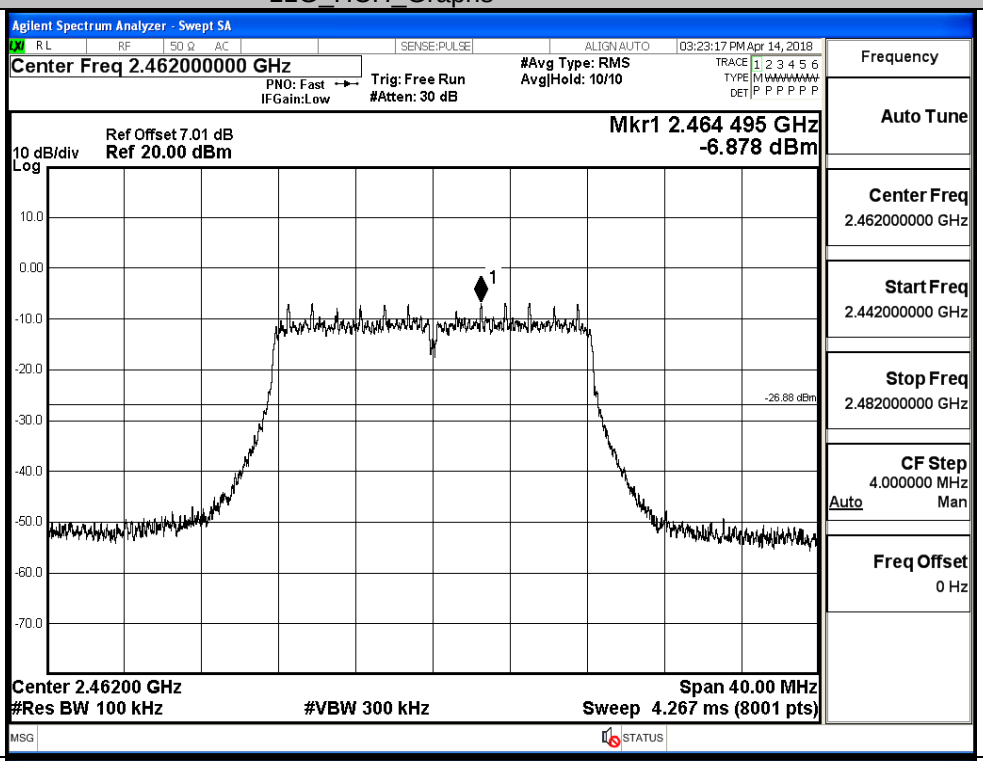
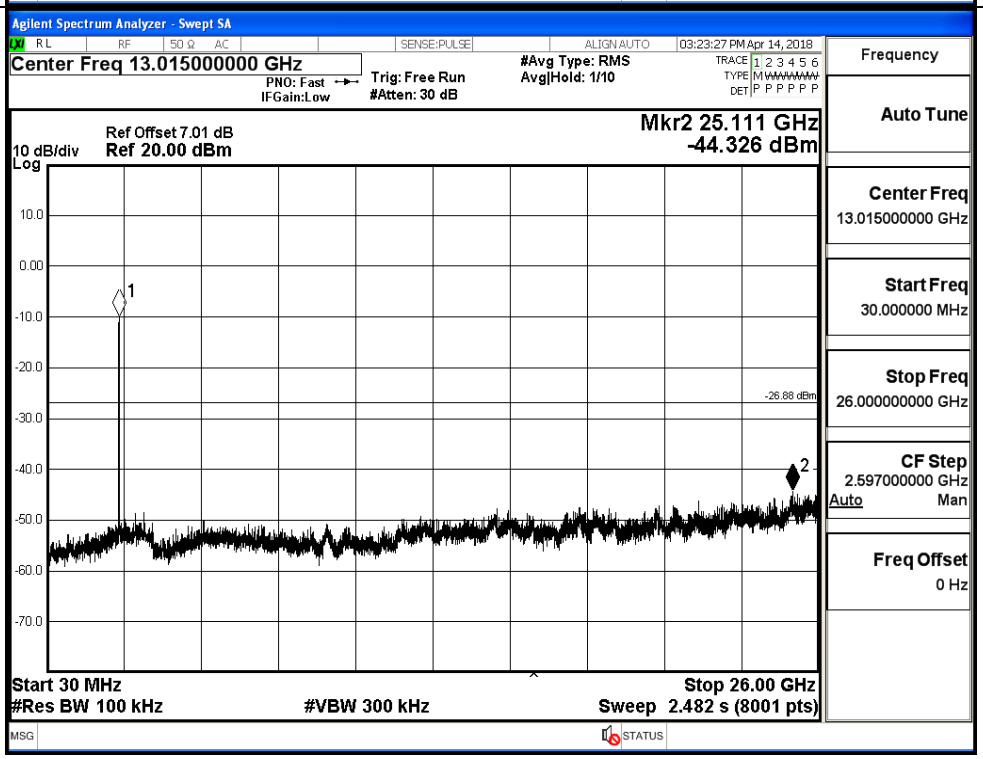
11B_LCH_Graphs		
Pref/11B/LCH		
Puw/11B/LCH		

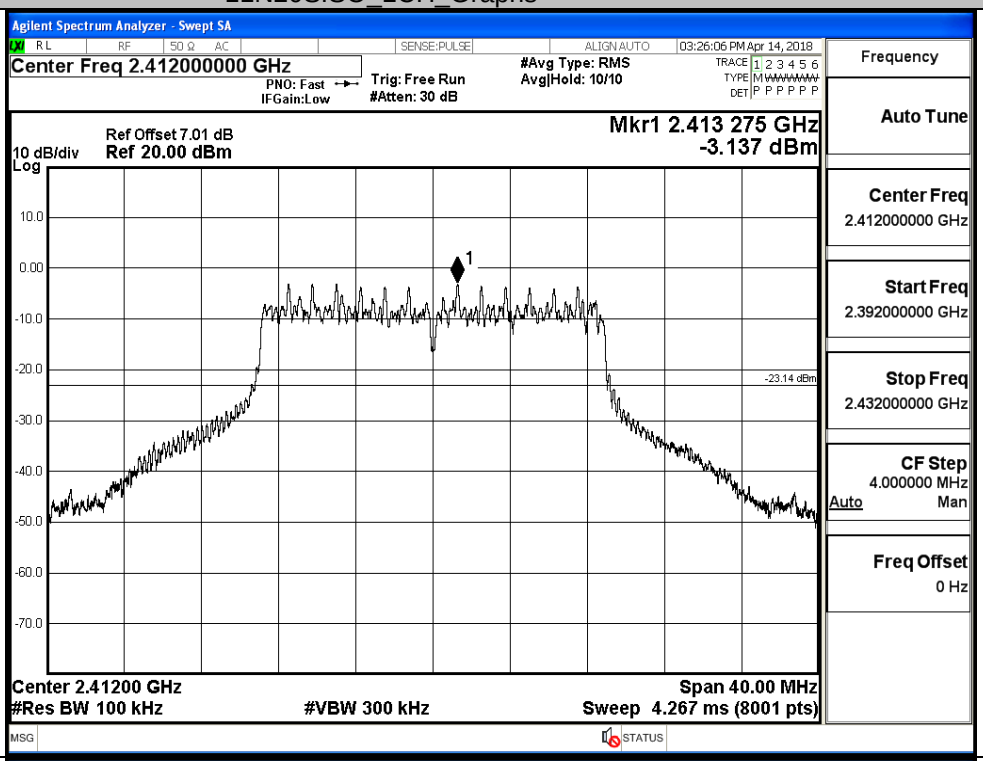
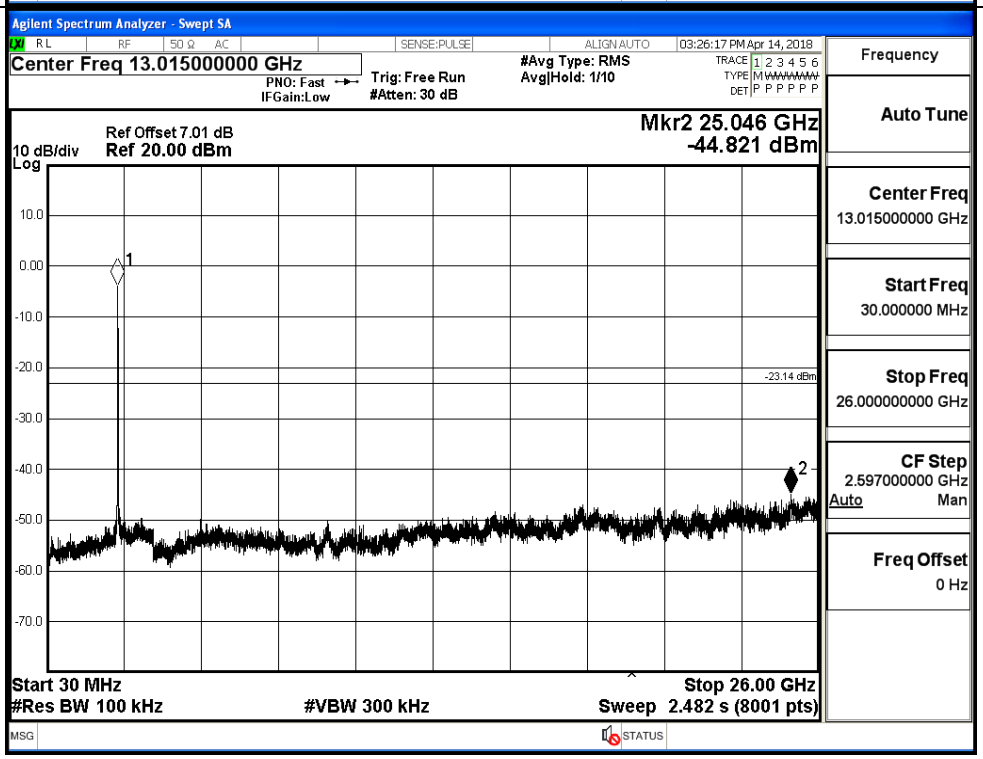
11B_MCH_Graphs		
Pref/11B/MCH		
Puw/11B/MCH		

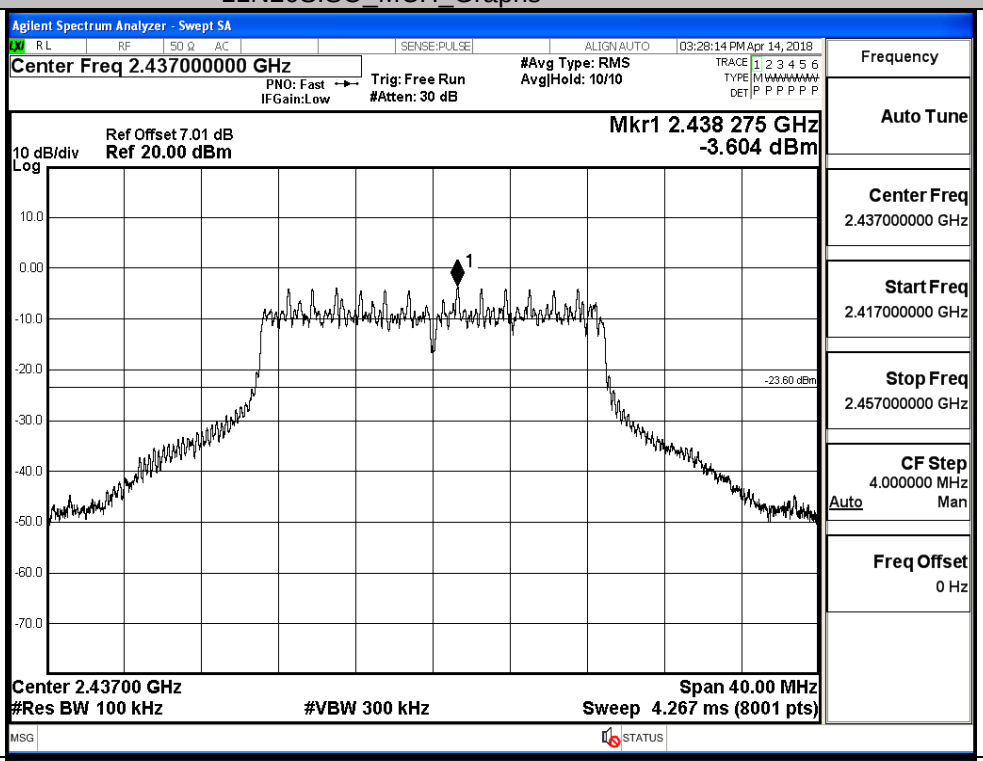
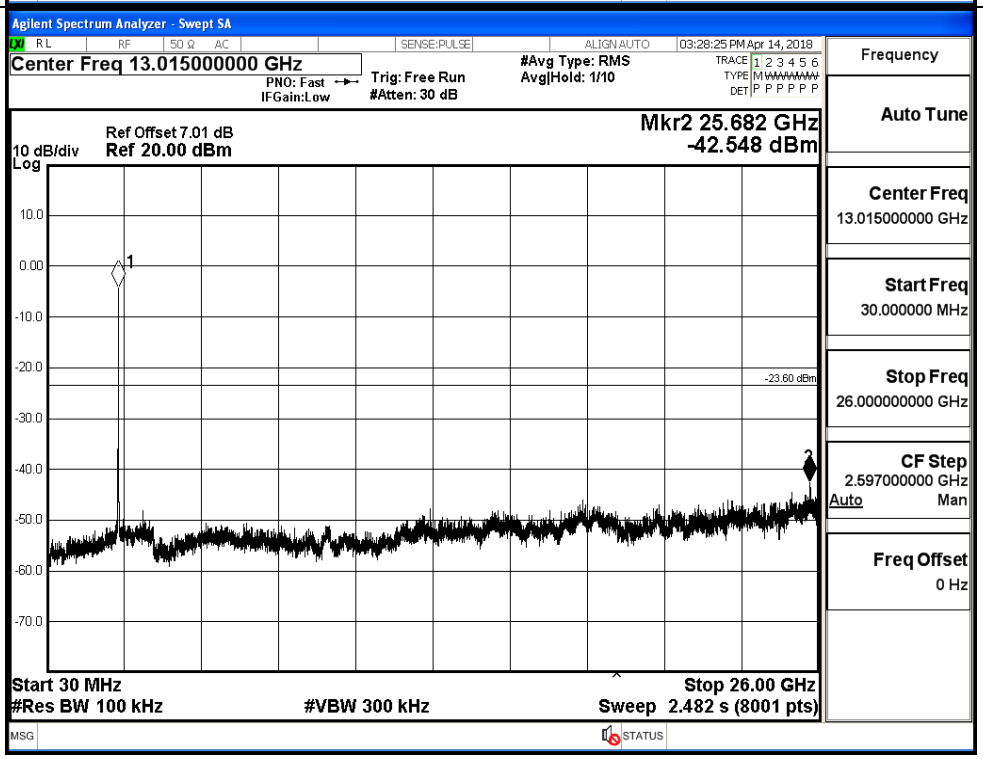
11B_HCH_Graphs		
Pref/11B/HCH		
Puw/11B/HCH		

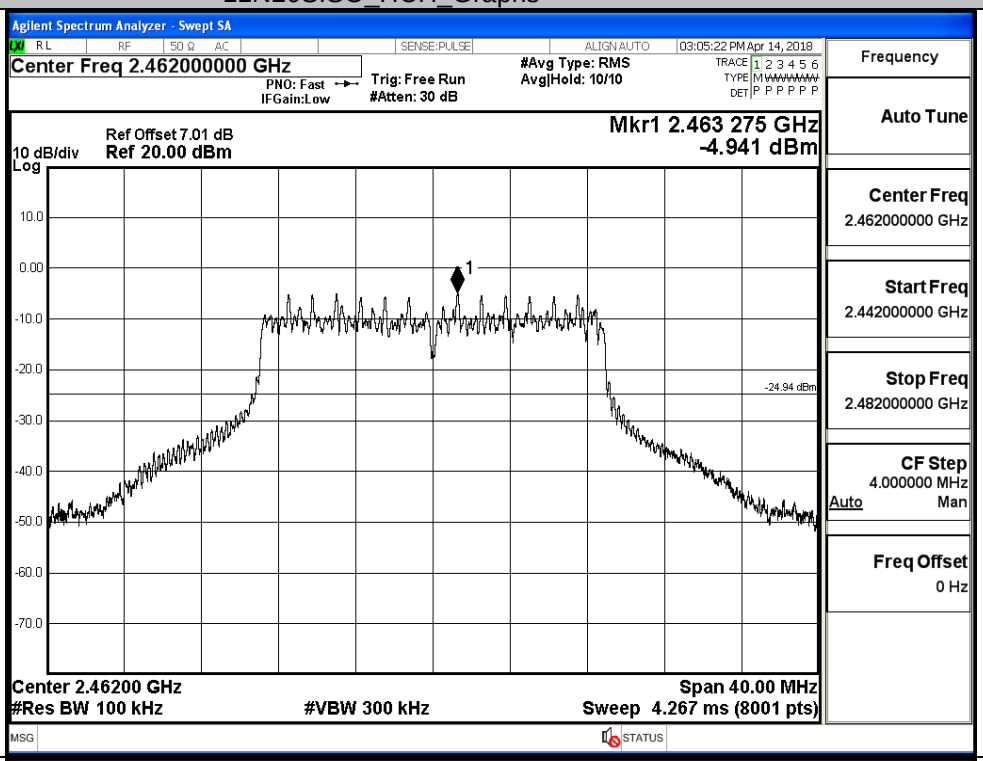
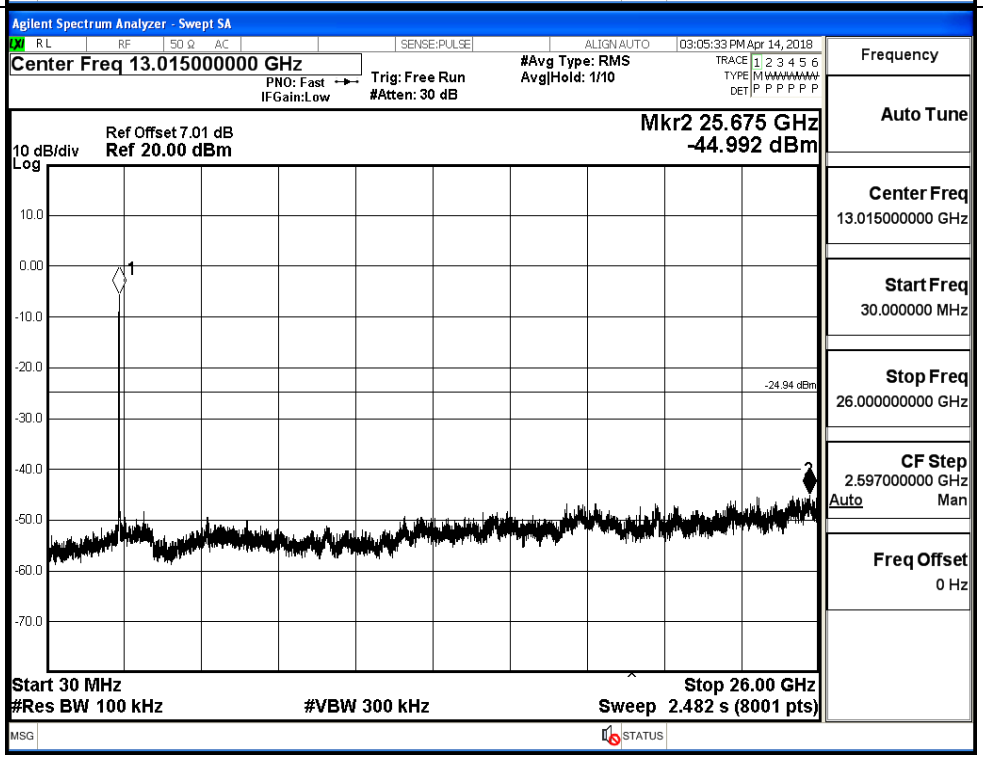
11G_LCH_Graphs		
Pref/11G/LCH		
Puw/11G/LCH		

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

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

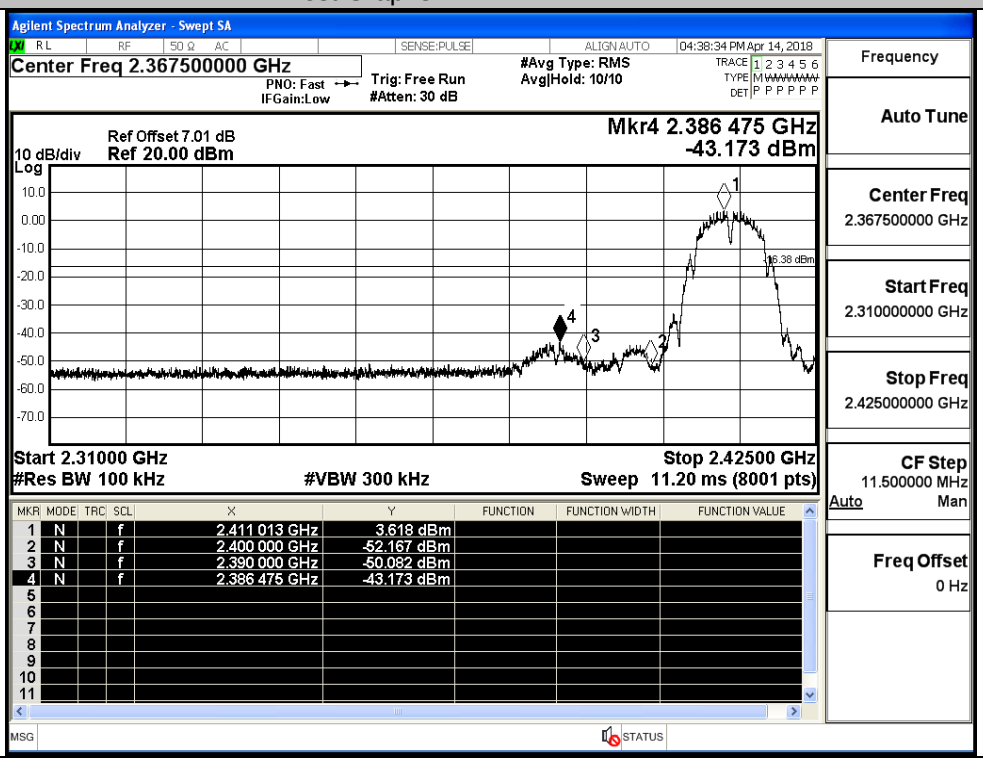
11N20SISO_LCH_Graphs		
Pref/11N20SISO/LCH		
Puw/11N20SISO/LCH		

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

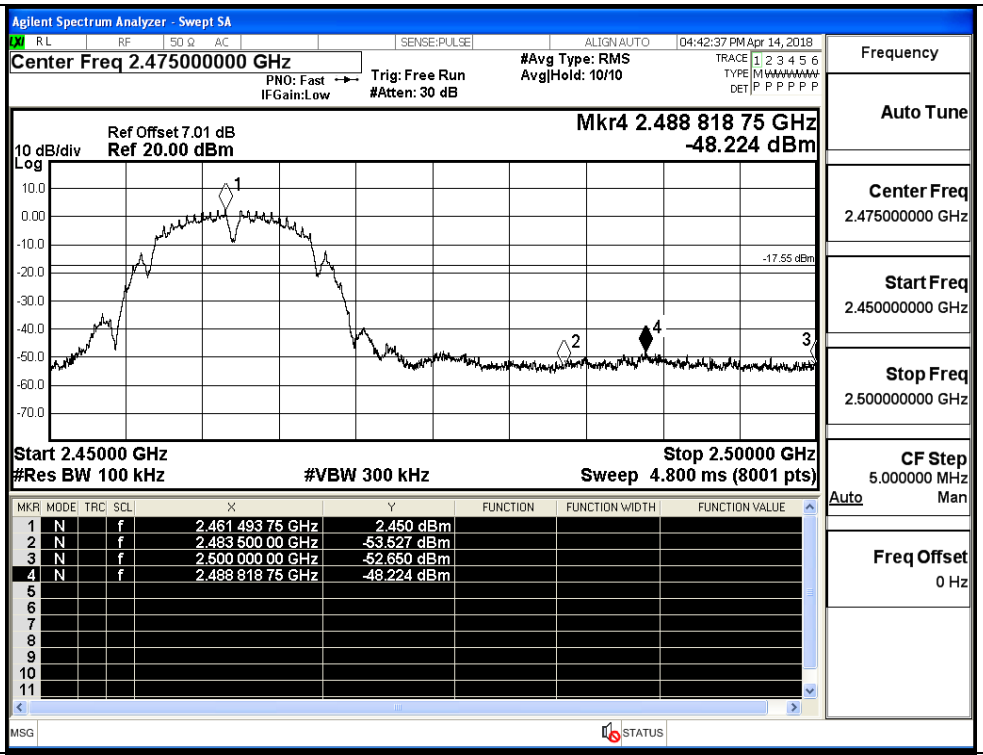
11N20SISO_HCH_Graphs	
Pref/11N20 SISO/HCH	
Puw/11N20 SISO/HCH	

A.5 Band-edge for RF Conducted Emissions

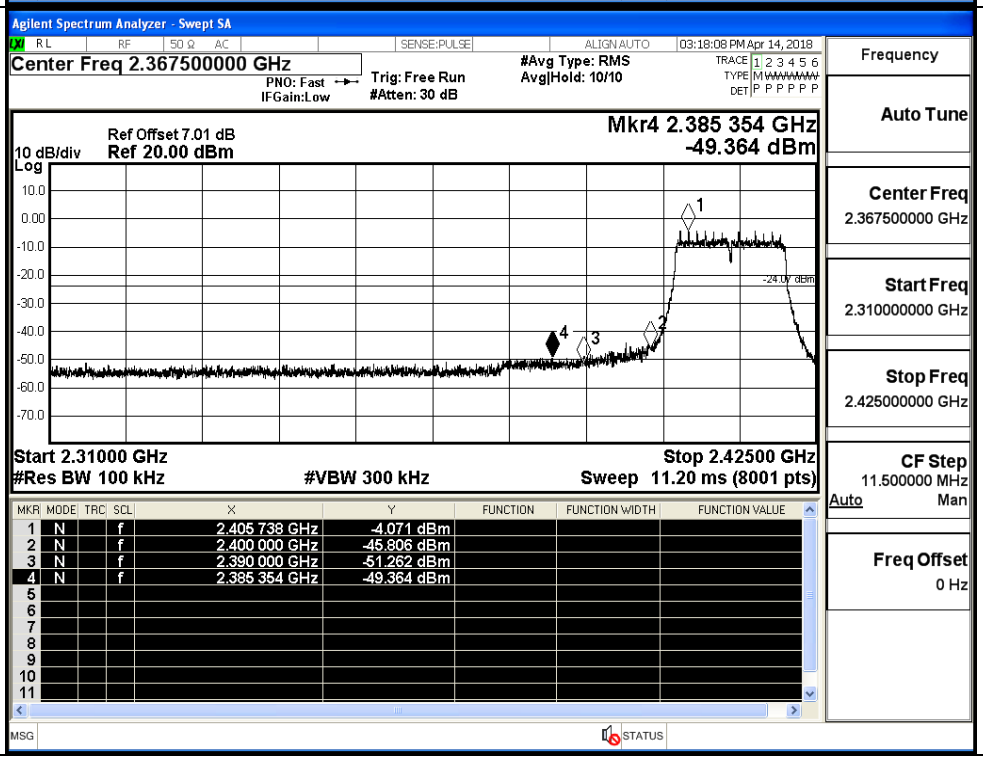
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
11B	LCH	3.618	-43.173	-16.38	PASS
	HCH	2.450	-48.224	-17.55	PASS
11G	LCH	-4.071	-49.364	-24.07	PASS
	HCH	-6.385	-50.124	-26.39	PASS
11N20SISO	LCH	-3.059	-45.827	-23.06	PASS
	HCH	-4.844	-46.681	-24.84	PASS

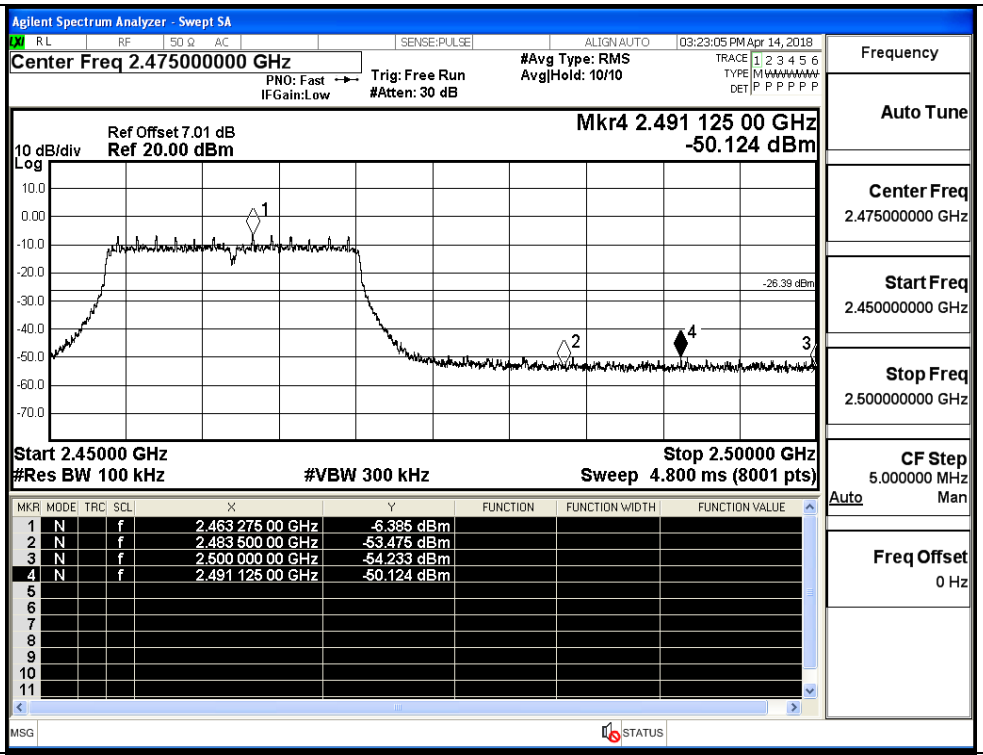
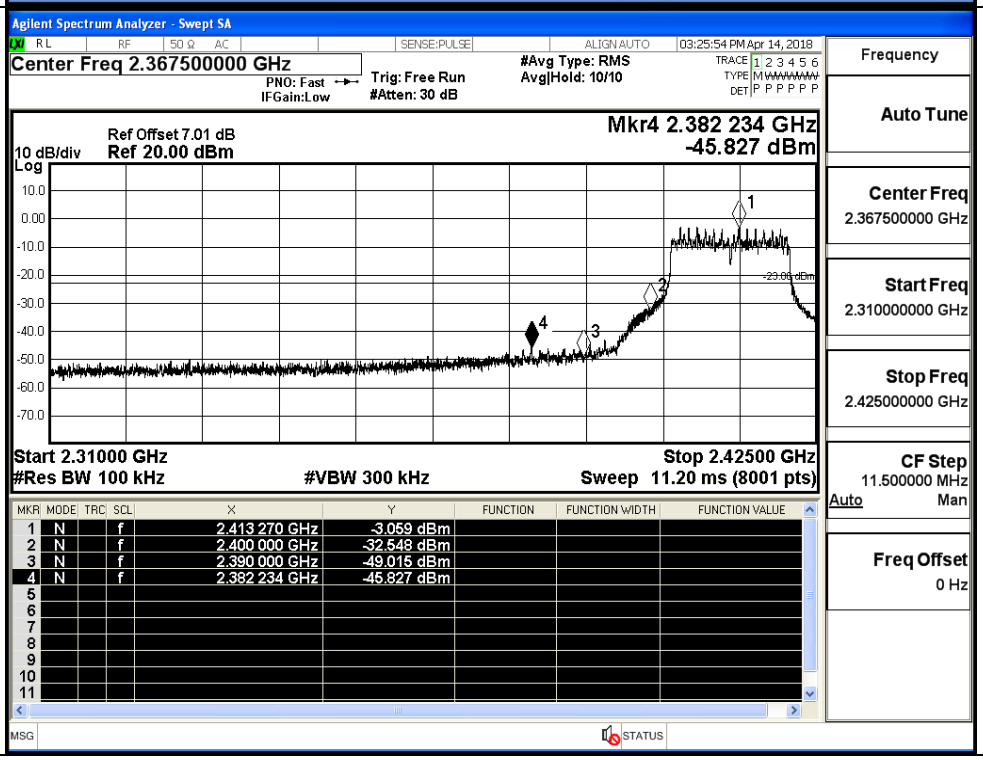
Test Graphs	
11B/LCH	

11B/HCH

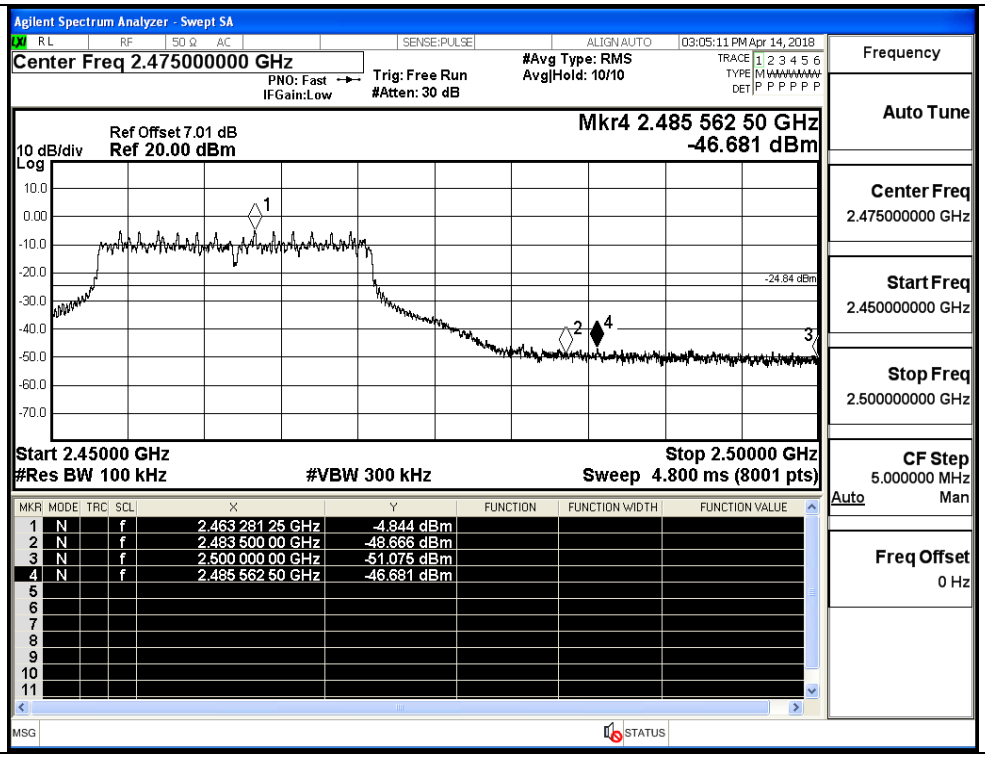


11G/LCH



11G/HCH		
11N20SISO/LCH		

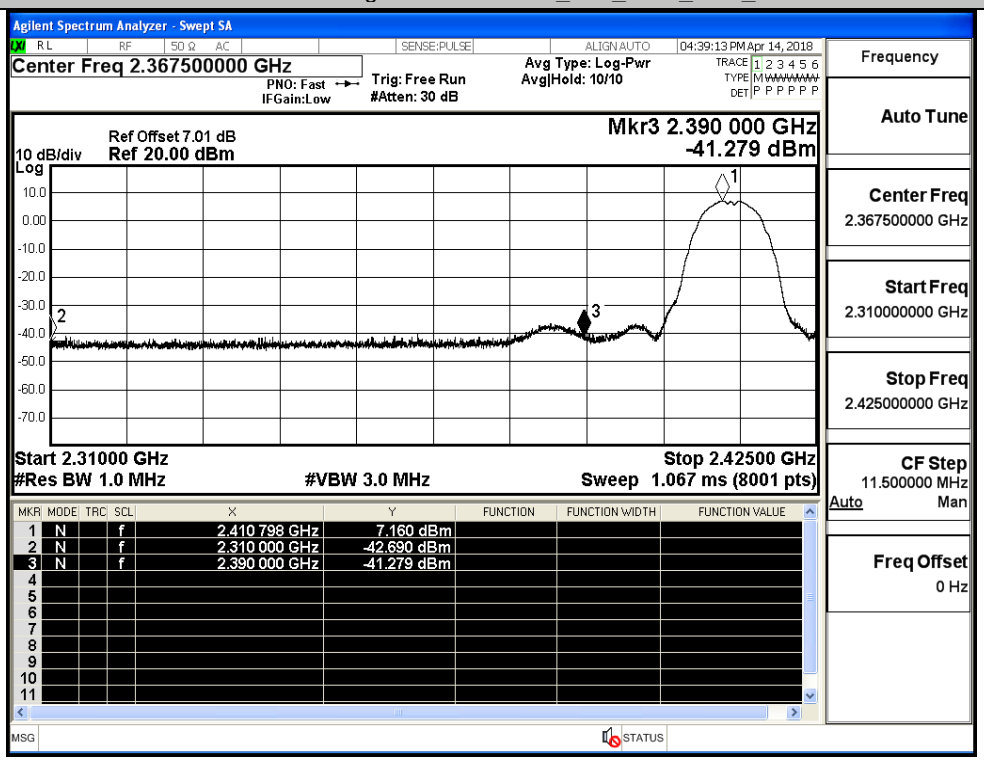
11N20SISO/HCH



A.6 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	-42.69	2.0	0	54.57	PEAK	74	PASS
	2412	Ant1	2310.0	-54.67	2.0	0	42.59	AV	54	PASS
	2412	Ant1	2390.0	-41.28	2.0	0	55.98	PEAK	74	PASS
	2412	Ant1	2390.0	-50.84	2.0	0	46.42	AV	54	PASS
	2462	Ant1	2483.5	-43.56	2.0	0	53.70	PEAK	74	PASS
	2462	Ant1	2483.5	-53.43	2.0	0	43.83	AV	54	PASS
	2462	Ant1	2500.0	-44.13	2.0	0	53.13	PEAK	74	PASS
	2462	Ant1	2500.0	-53.93	2.0	0	43.33	AV	54	PASS
11G	2412	Ant1	2310.0	-44.47	2.0	0	52.79	PEAK	74	PASS
	2412	Ant1	2310.0	-54.84	2.0	0	42.42	AV	54	PASS
	2412	Ant1	2390.0	-40.66	2.0	0	56.60	PEAK	74	PASS
	2412	Ant1	2390.0	-51.33	2.0	0	45.93	AV	54	PASS
	2462	Ant1	2483.5	-41.88	2.0	0	55.38	PEAK	74	PASS
	2462	Ant1	2483.5	-53.60	2.0	0	43.66	AV	54	PASS
	2462	Ant1	2500.0	-45.29	2.0	0	51.97	PEAK	74	PASS
	2462	Ant1	2500.0	-54.05	2.0	0	43.21	AV	54	PASS
11N20 SISO	2412	Ant1	2310.0	-40.31	2.0	0	56.95	PEAK	74	PASS
	2412	Ant1	2310.0	-54.75	2.0	0	42.51	AV	54	PASS
	2412	Ant1	2390.0	-31.33	2.0	0	65.93	PEAK	74	PASS
	2412	Ant1	2390.0	-50.22	2.0	0	47.04	AV	54	PASS
	2462	Ant1	2483.5	-32.72	2.0	0	64.54	PEAK	74	PASS
	2462	Ant1	2483.5	-52.64	2.0	0	44.62	AV	54	PASS
	2462	Ant1	2500.0	-34.74	2.0	0	62.52	PEAK	74	PASS
	2462	Ant1	2500.0	-53.89	2.0	0	43.37	AV	54	PASS

Restrict-band band-edge measurements_11B_2412_Ant1_PEAK



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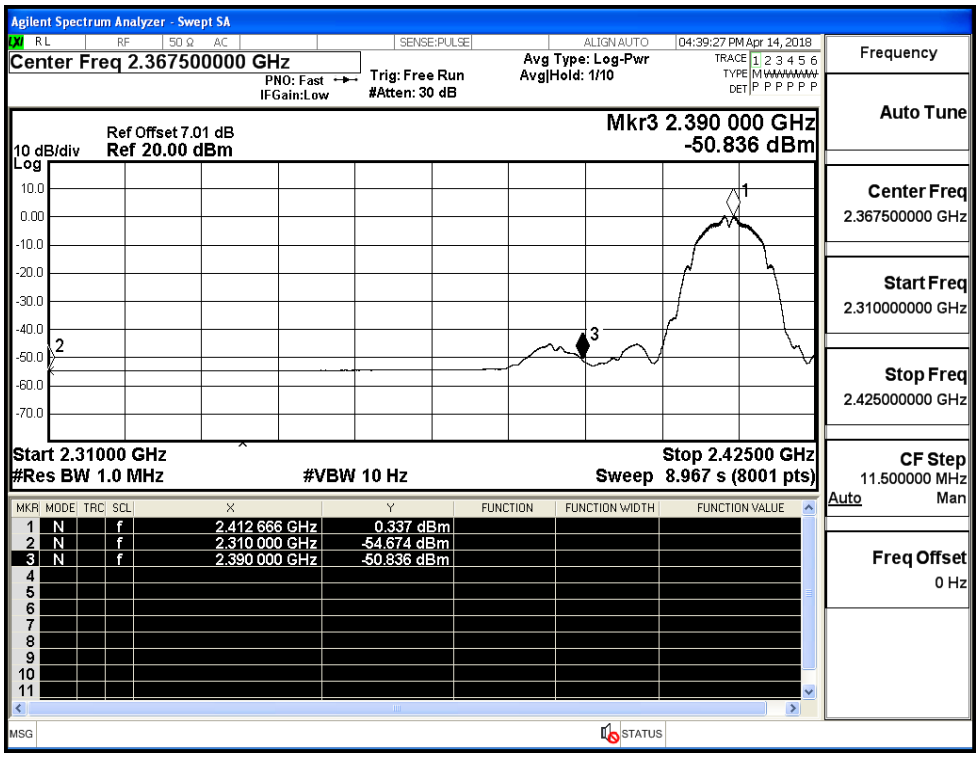

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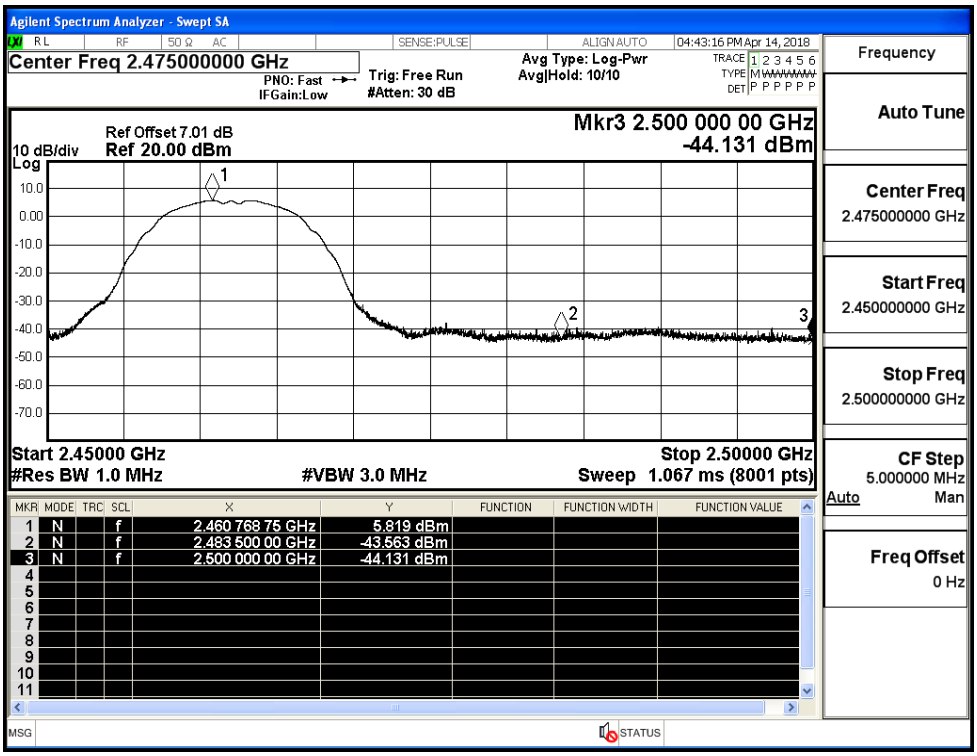

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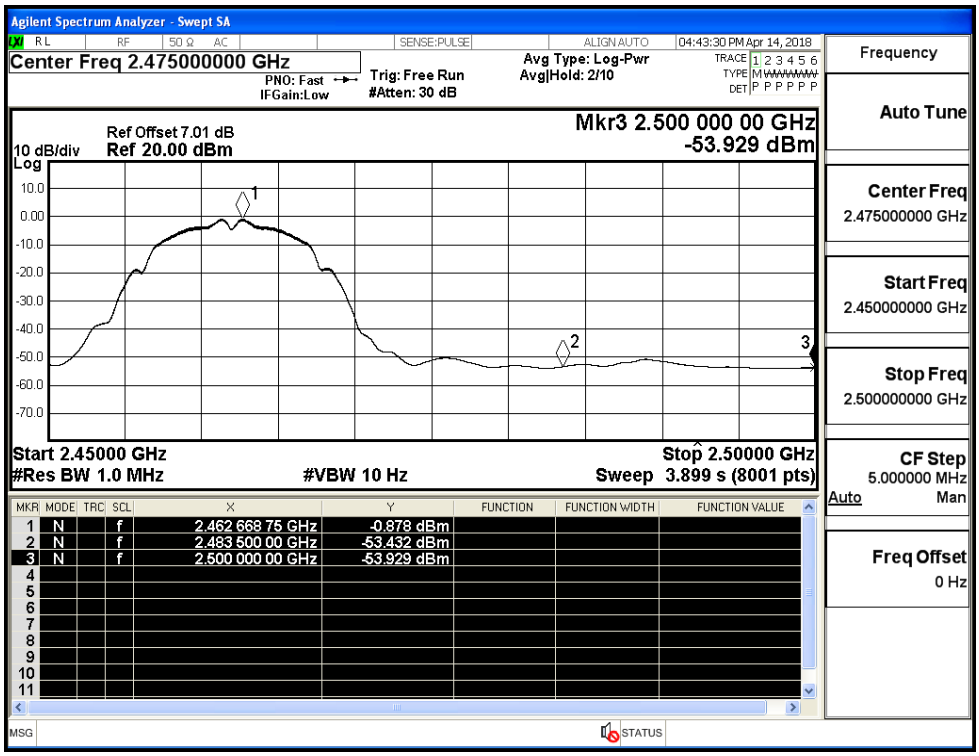

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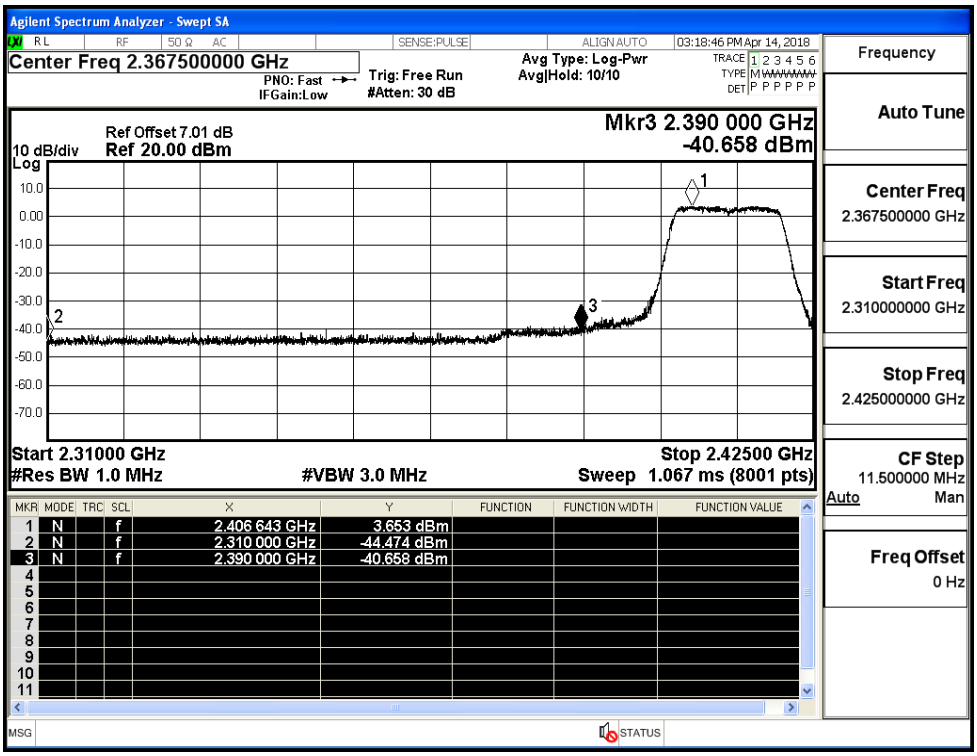

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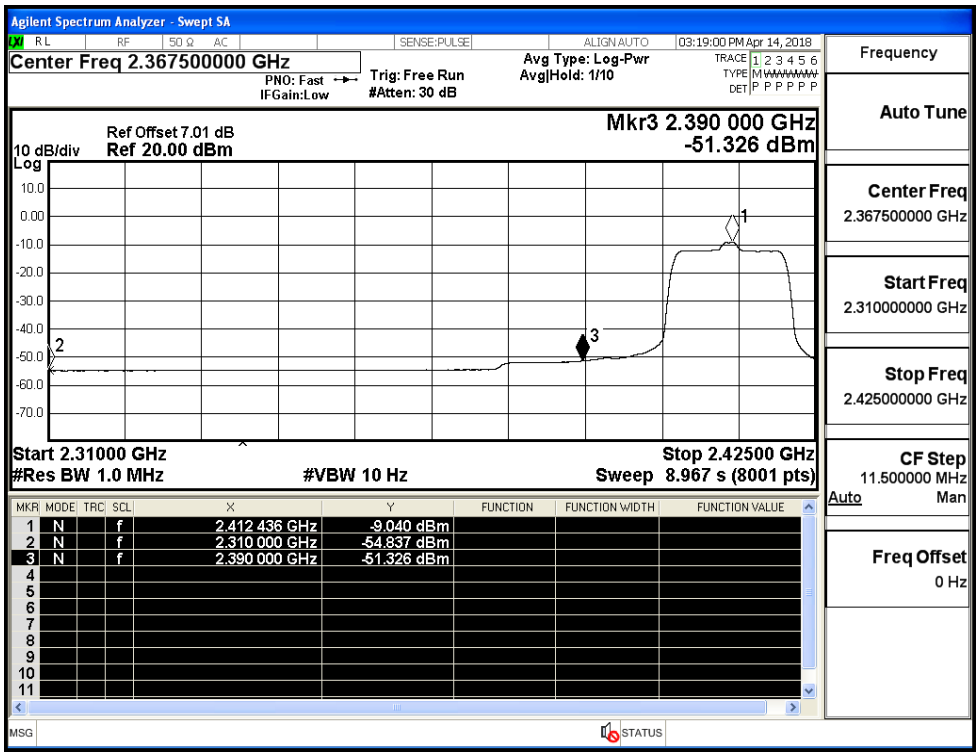

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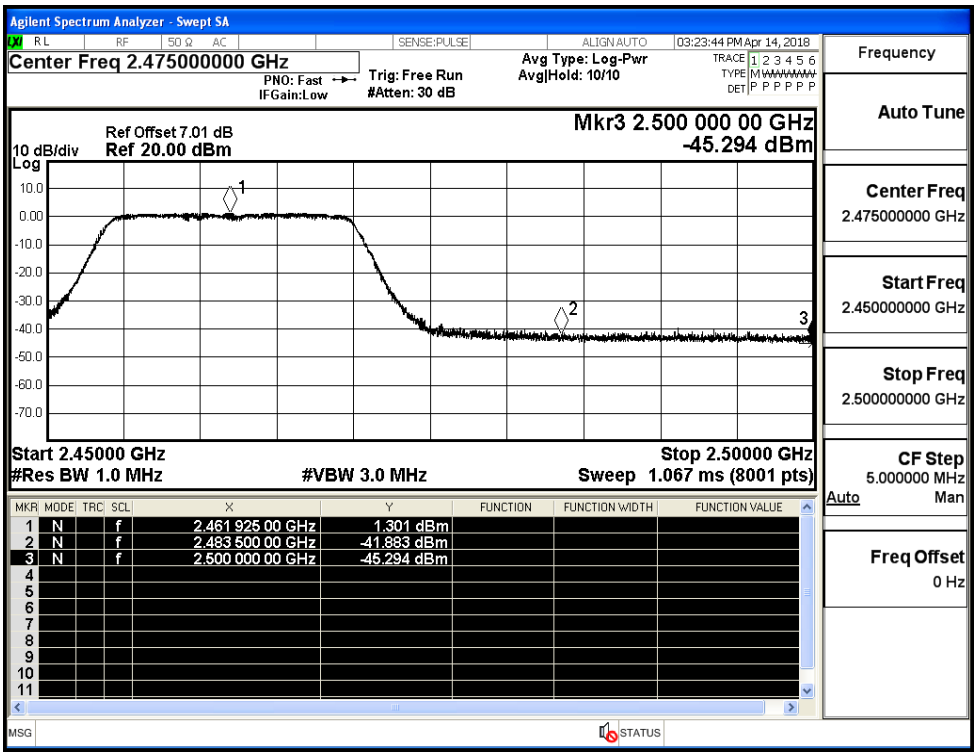

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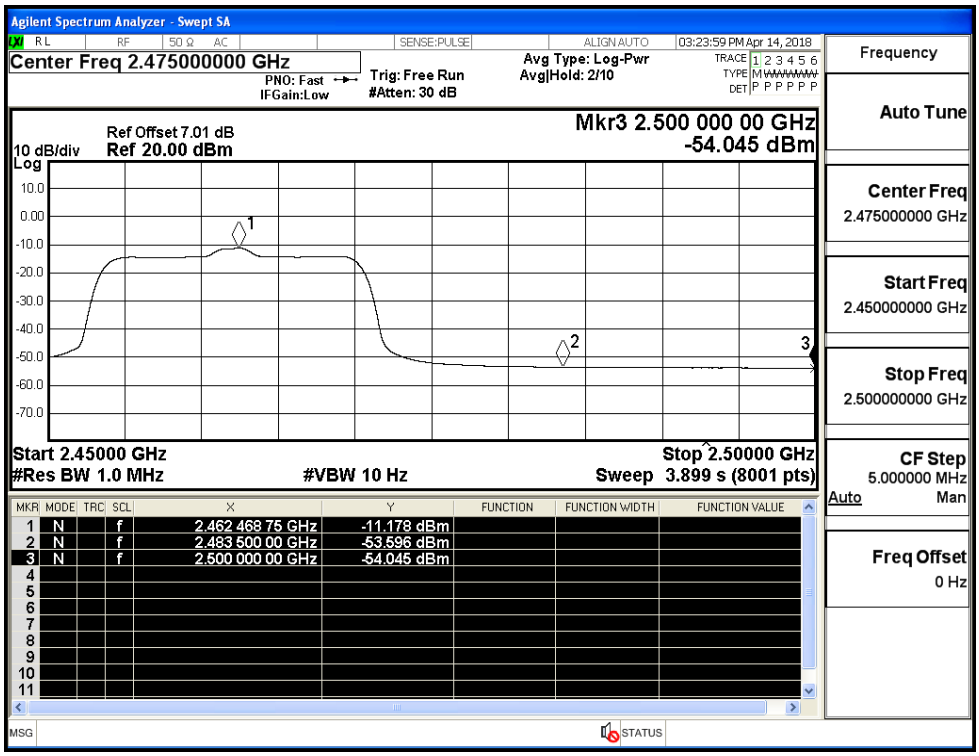

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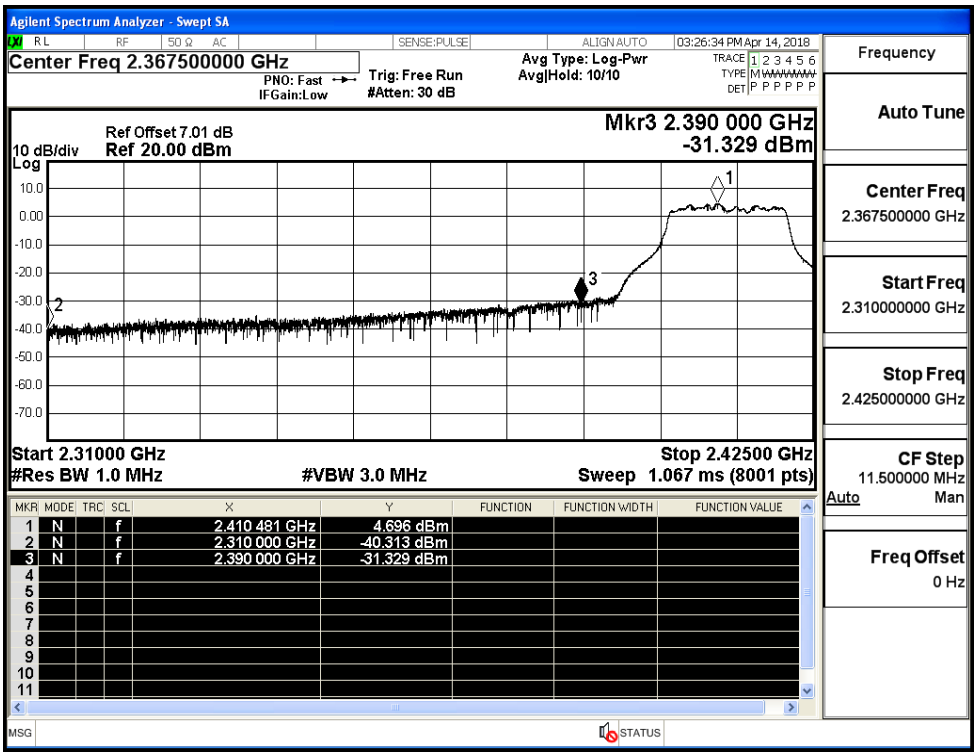

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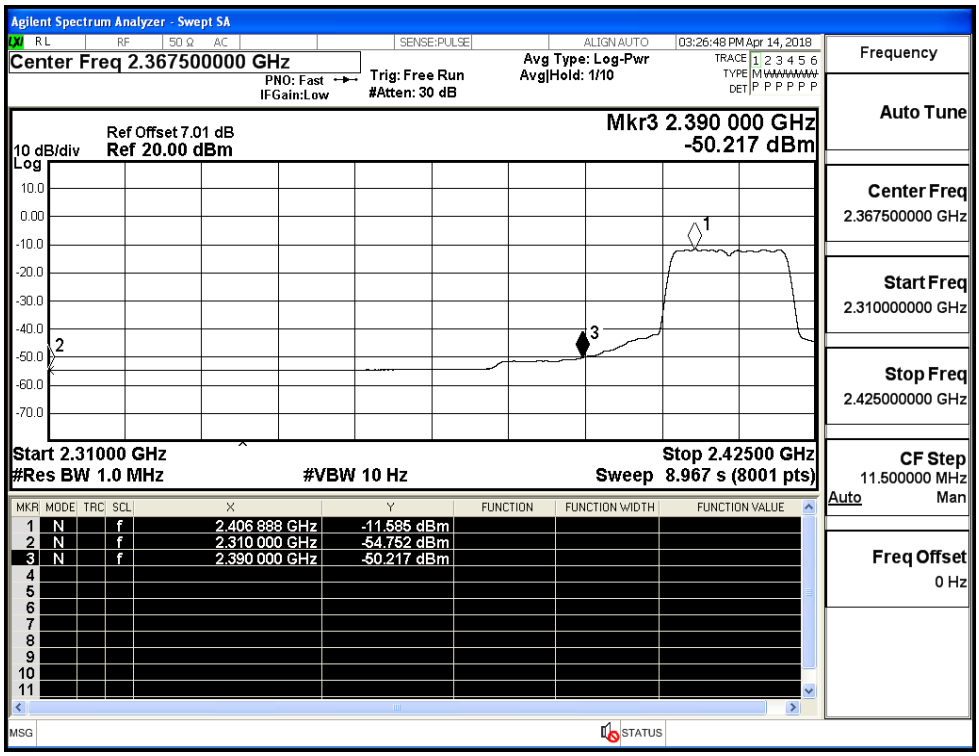

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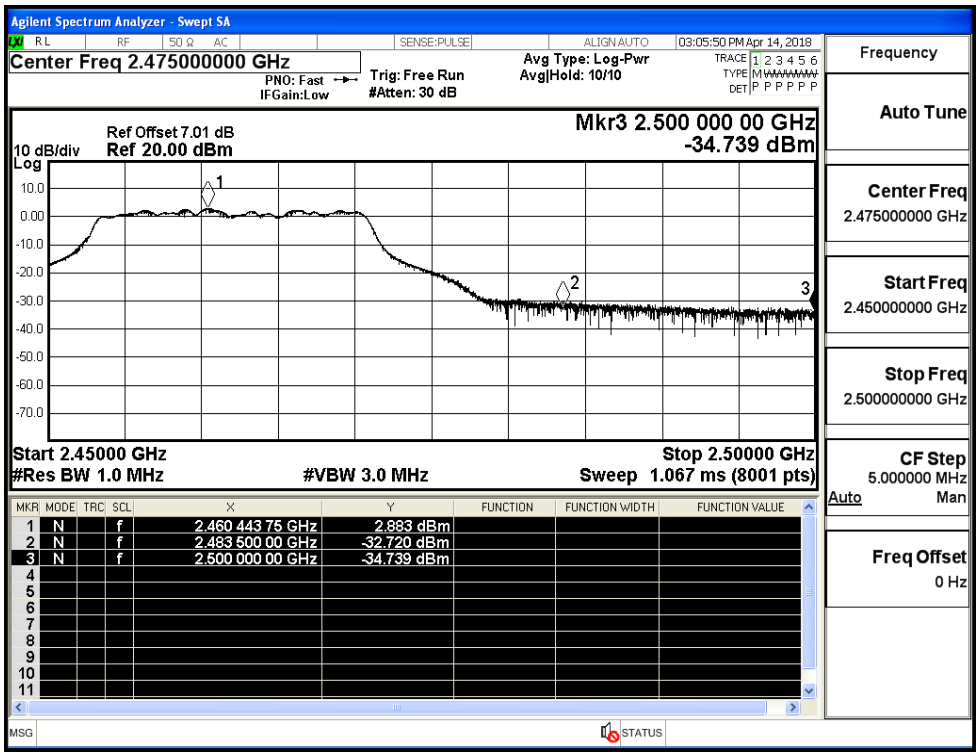
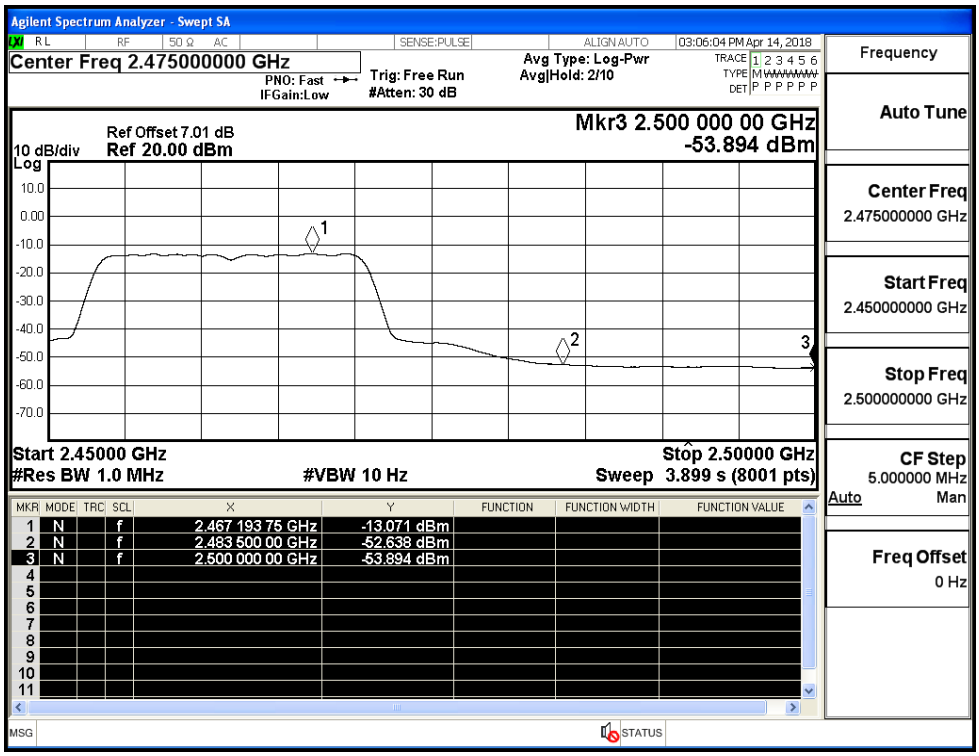
Restrict-band band-edge measurements_11N20SISO_2462_Ant1_AV