

## Appendix A

### RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: **WiFi Socket**

Trade Mark: **N/A**

Test Model: **M3 Outlet**

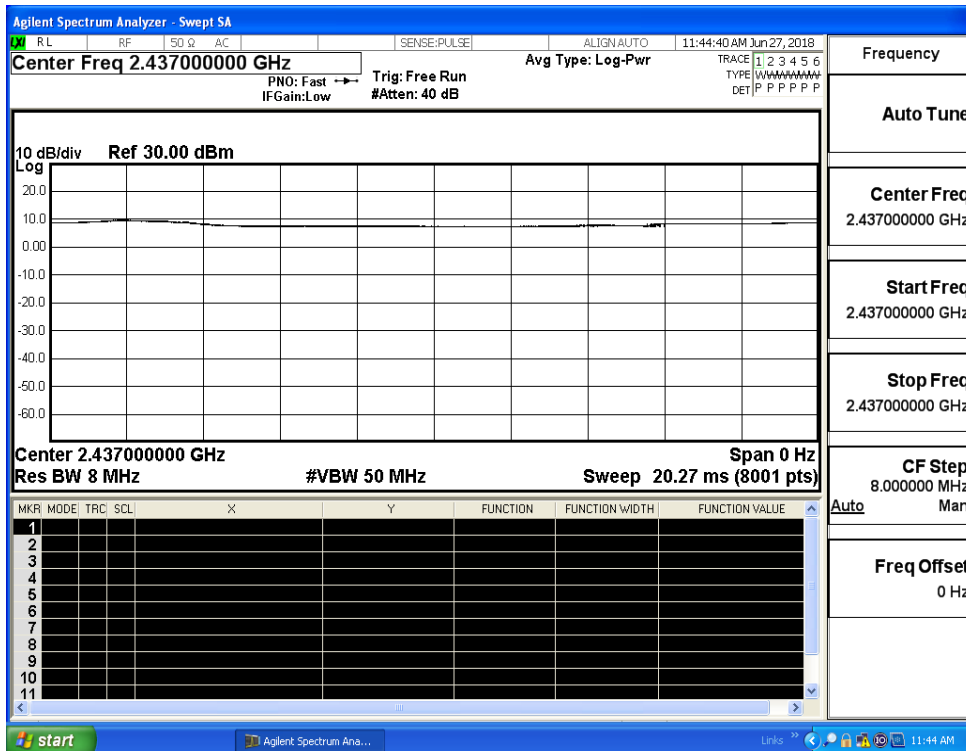
#### Environmental Conditions

Temperature:	23.5 ° C
Relative Humidity:	53.4%
ATM Pressure:	100.0 kPa
Test Engineer:	WangChang
Supervised by:	Jayden.Zhuo

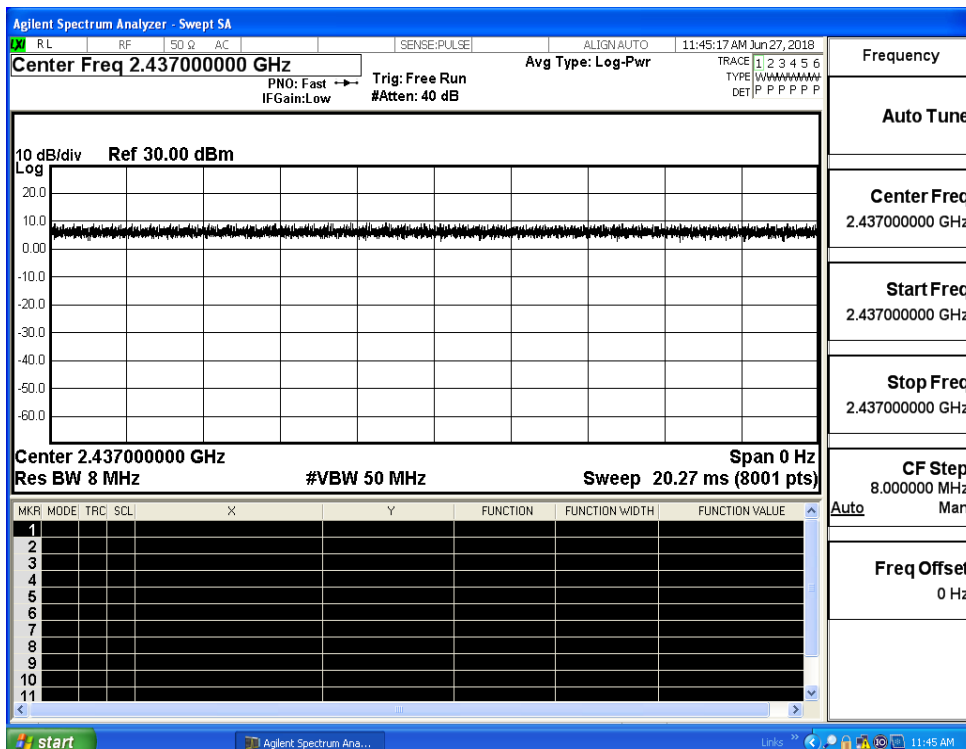
#### A.1 Duty Cycle

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

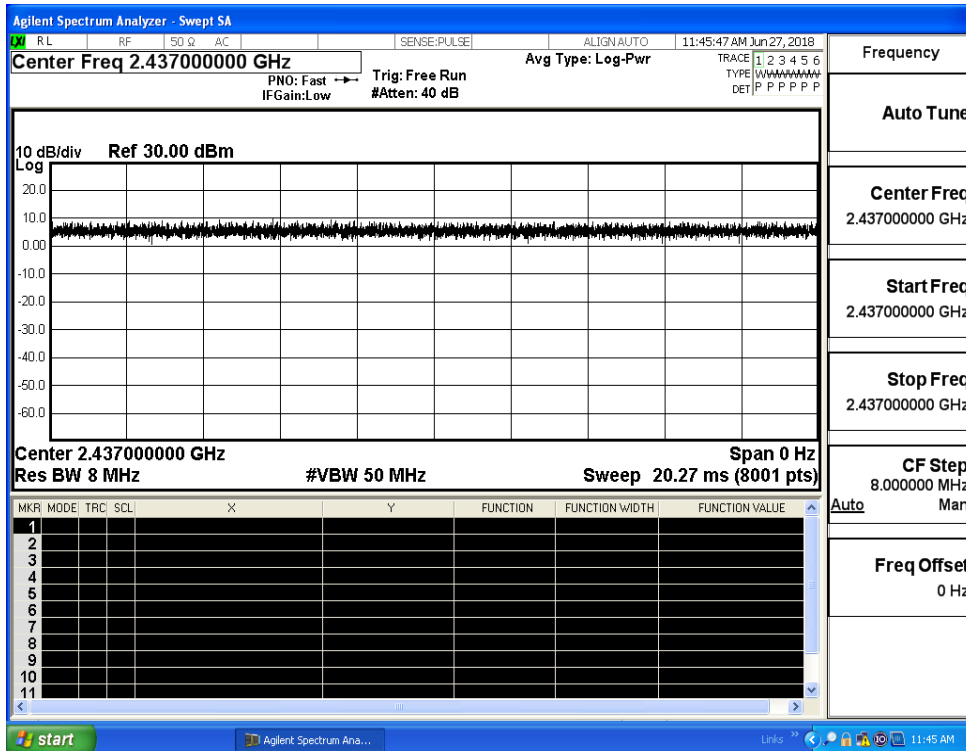
Duty Cycle\_11B\_2437\_Ant1



Duty Cycle\_11G\_2437\_Ant1



Duty Cycle\_11N20SISO\_2437\_Ant1

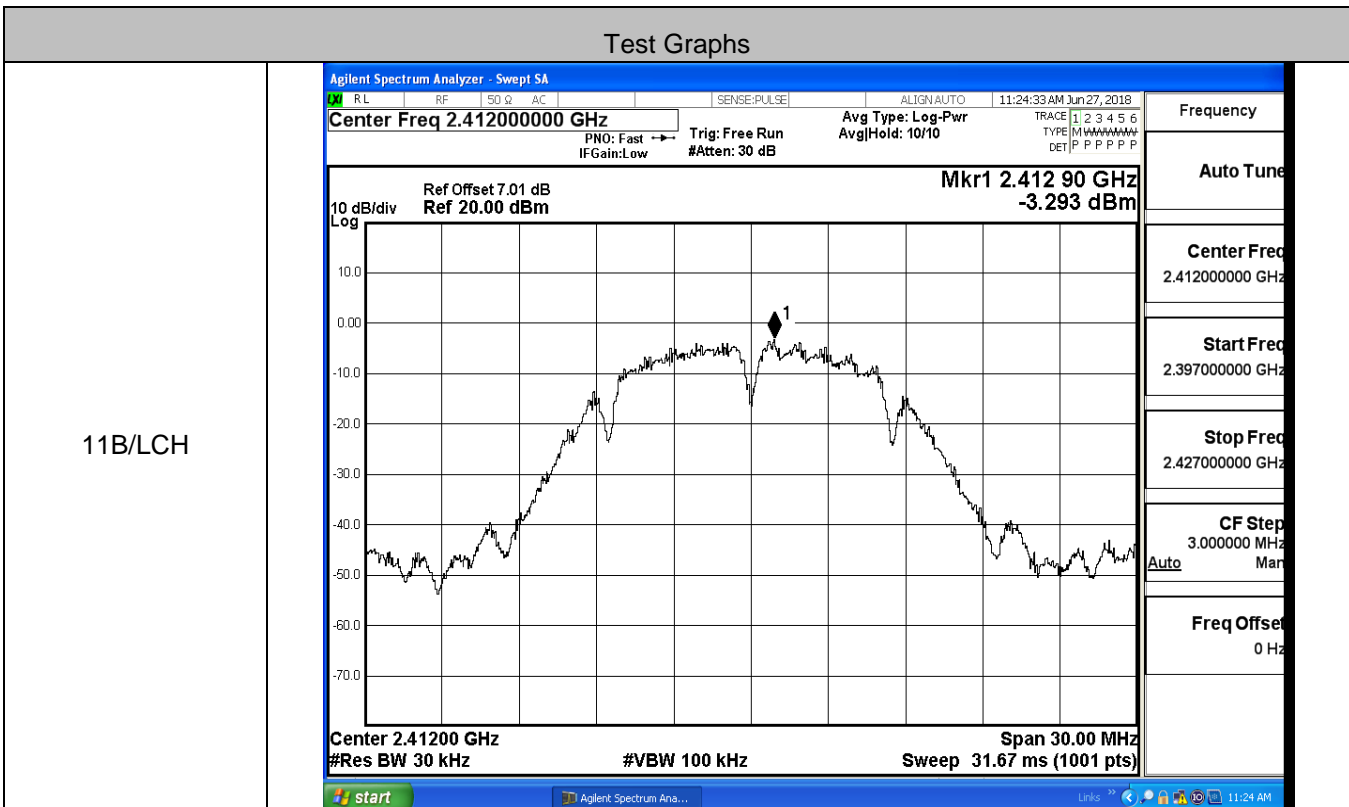


**A.2 Maximum Conducted Output Power**

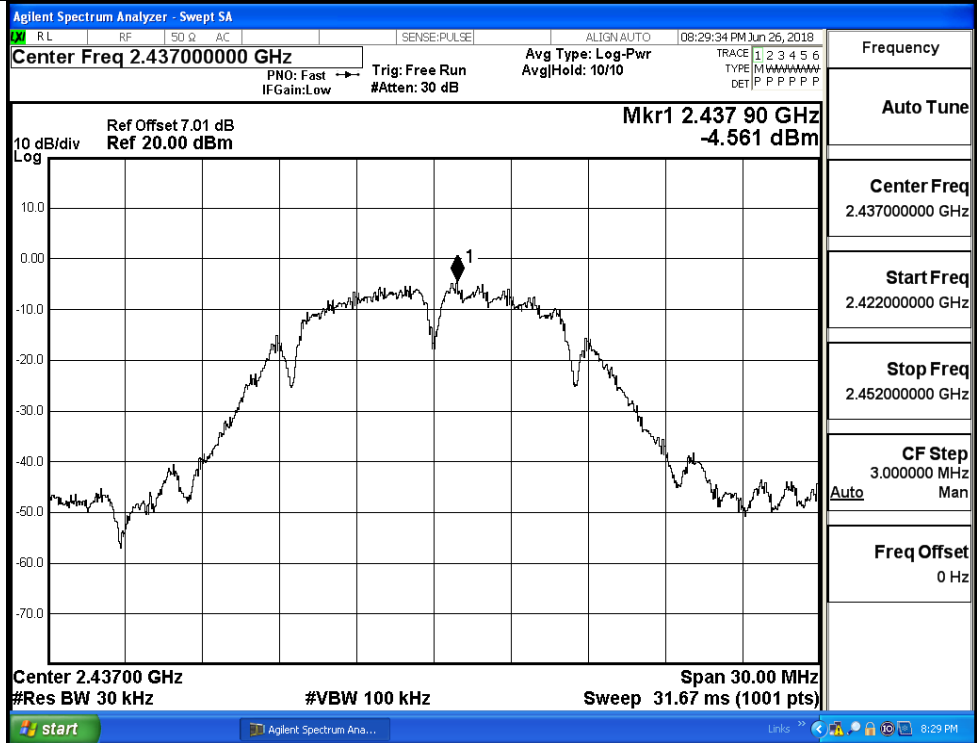
Mode	Channel	Meas.Level [dBm]	Limit [dBm]	Verdict
11B	LCH	14.81	30	PASS
	MCH	13.43	30	PASS
	HCH	13.07	30	PASS
11G	LCH	14.95	30	PASS
	MCH	13.76	30	PASS
	HCH	13.94	30	PASS
11N20SISO	LCH	14.60	30	PASS
	MCH	14.54	30	PASS
	HCH	13.57	30	PASS

### A.3 Maximum Power Spectral Density

Mode	Channel	Meas.Level [dBm/30KHz]	Limit [dBm/3KHz]	Verdict
11B	LCH	-3.293	8	PASS
	MCH	-4.561	8	PASS
	HCH	-4.989	8	PASS
11G	LCH	-8.662	8	PASS
	MCH	-9.845	8	PASS
	HCH	-9.715	8	PASS
11N20SISO	LCH	-8.405	8	PASS
	MCH	-8.491	8	PASS
	HCH	-9.583	8	PASS



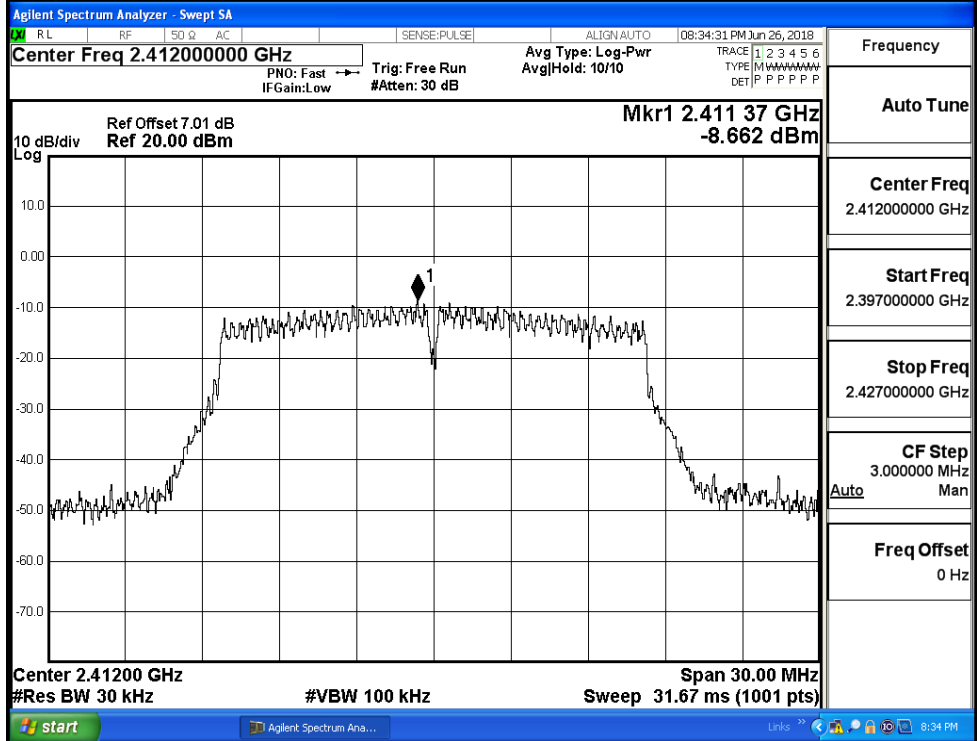
11B/MCH



11B/HCH

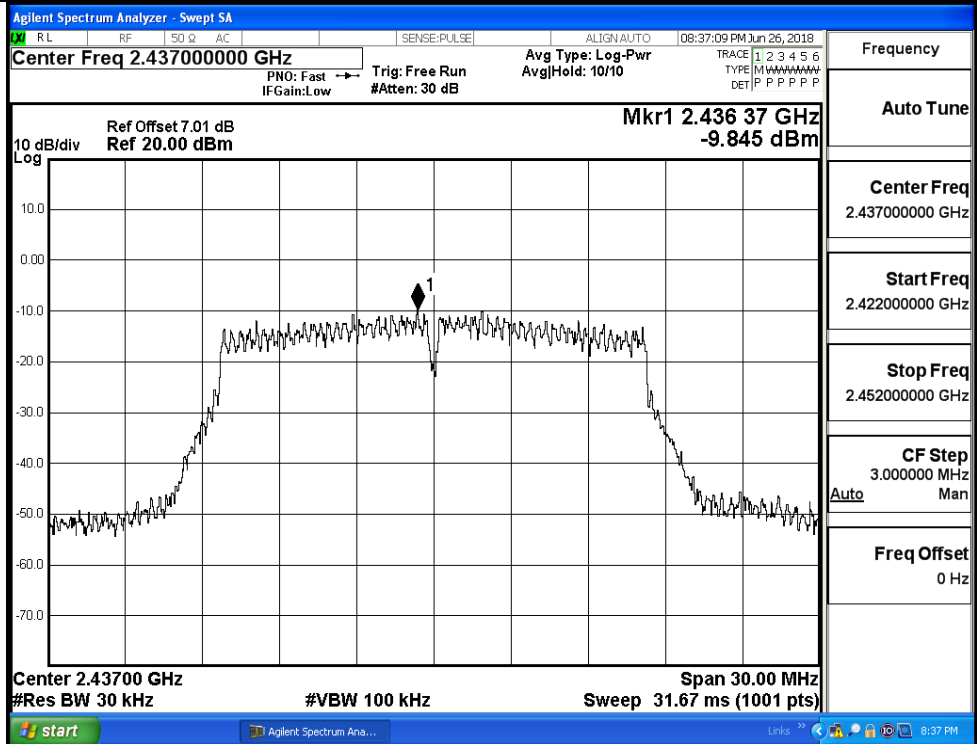


11G/LCH



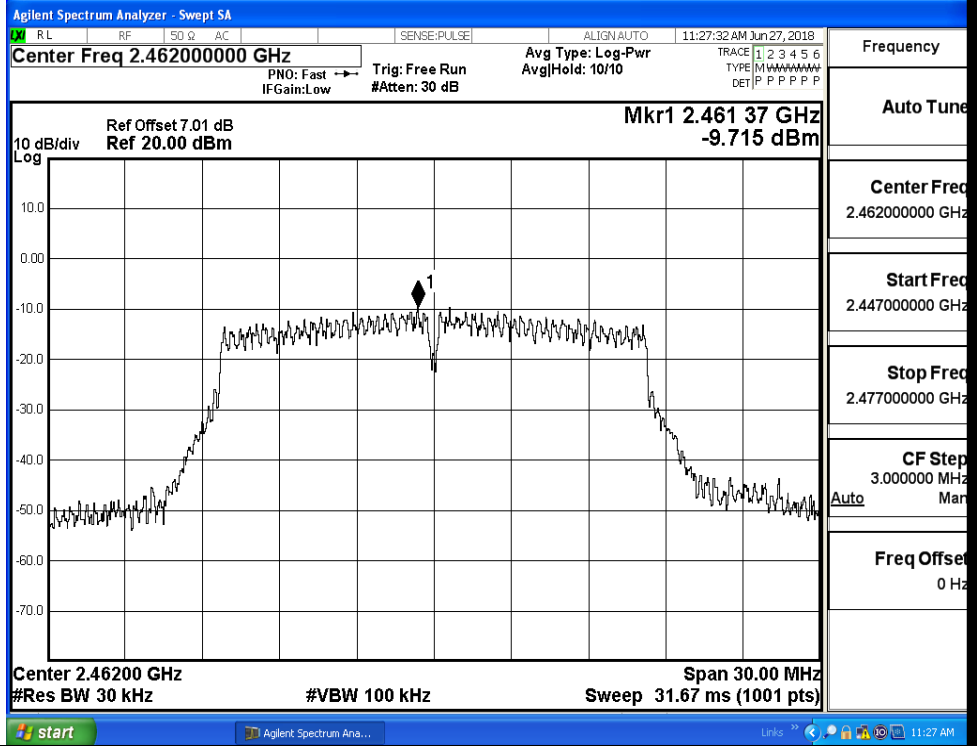
Frequency
Auto Tune
Center Freq 2.41200000 GHz
Start Freq 2.397000000 GHz
Stop Freq 2.427000000 GHz
CF Step 3.000000 MHz Auto Man
Freq Offset 0 Hz

11G/MCH



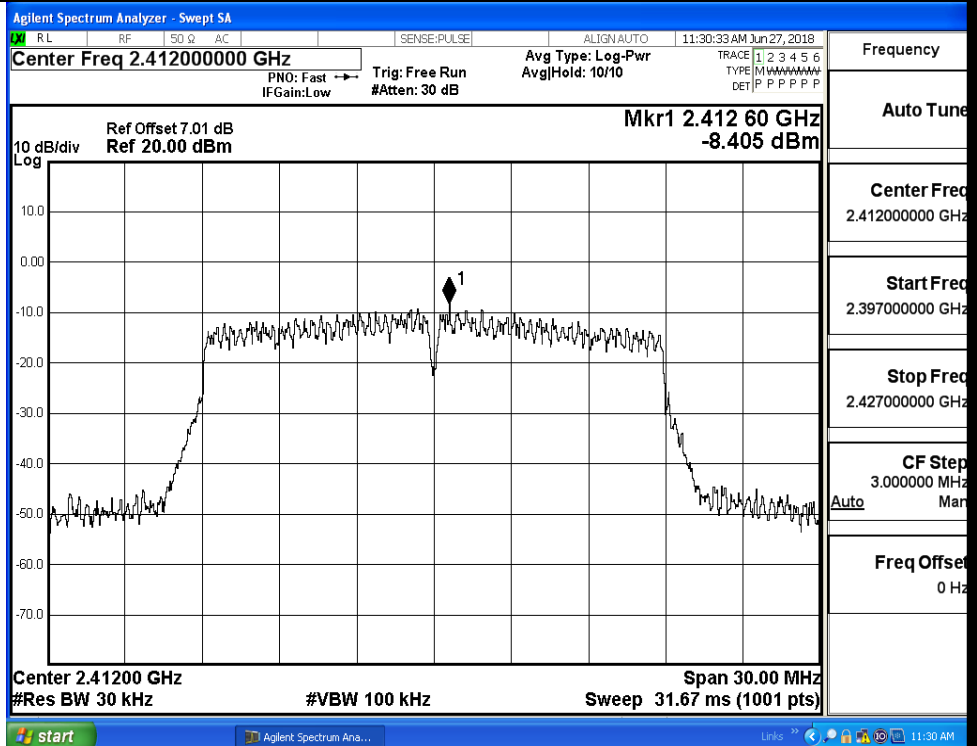
Frequency
Auto Tune
Center Freq 2.437000000 GHz
Start Freq 2.422000000 GHz
Stop Freq 2.452000000 GHz
CF Step 3.000000 MHz Auto Man
Freq Offset 0 Hz

11G/HCH



Frequency
Auto Tune
Center Freq 2.46200000 GHz
Start Freq 2.447000000 GHz
Stop Freq 2.477000000 GHz
CF Step 3.000000 MHz Auto Man
Freq Offset 0 Hz

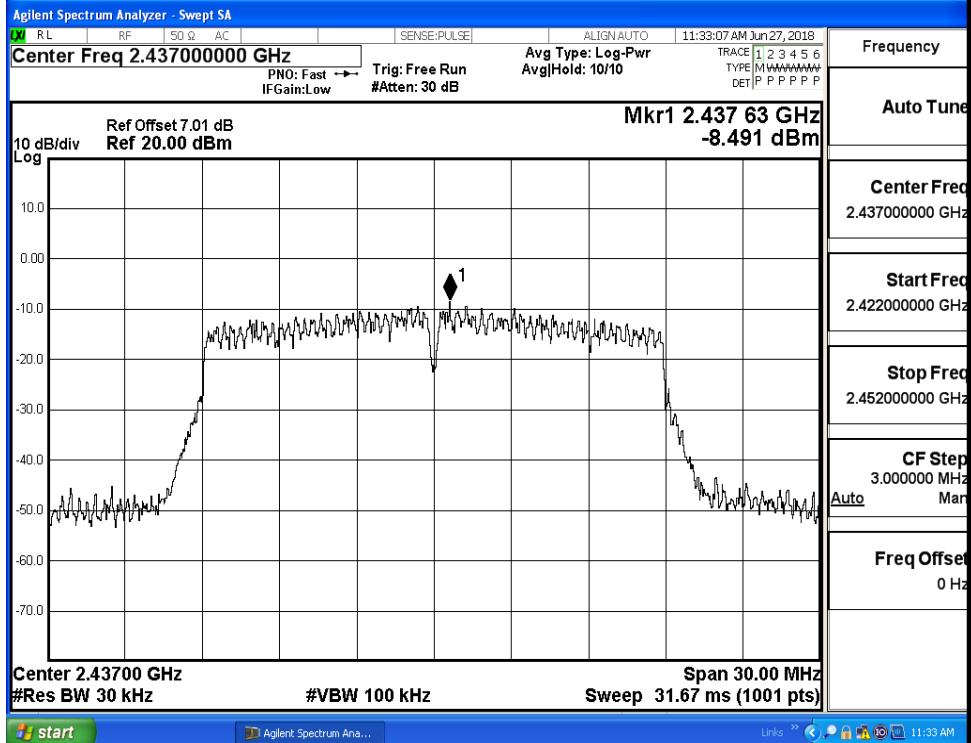
11N20SISO/LCH



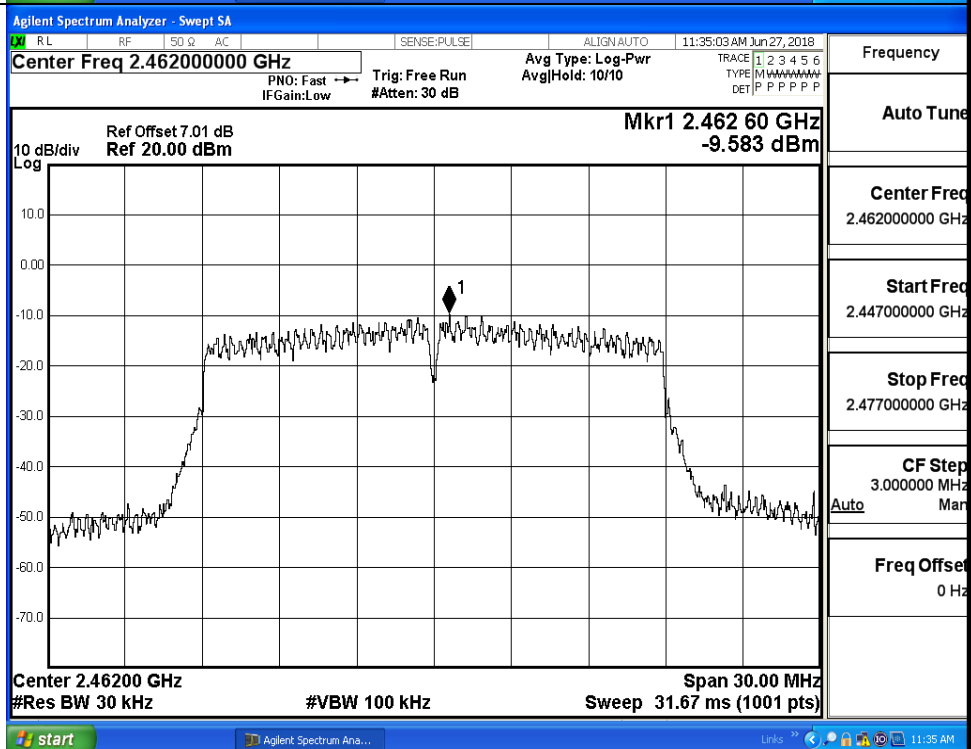
Frequency
Auto Tune
Center Freq 2.41200000 GHz
Start Freq 2.397000000 GHz
Stop Freq 2.427000000 GHz
CF Step 3.000000 MHz Auto Man
Freq Offset 0 Hz



11N20SISO/MCH

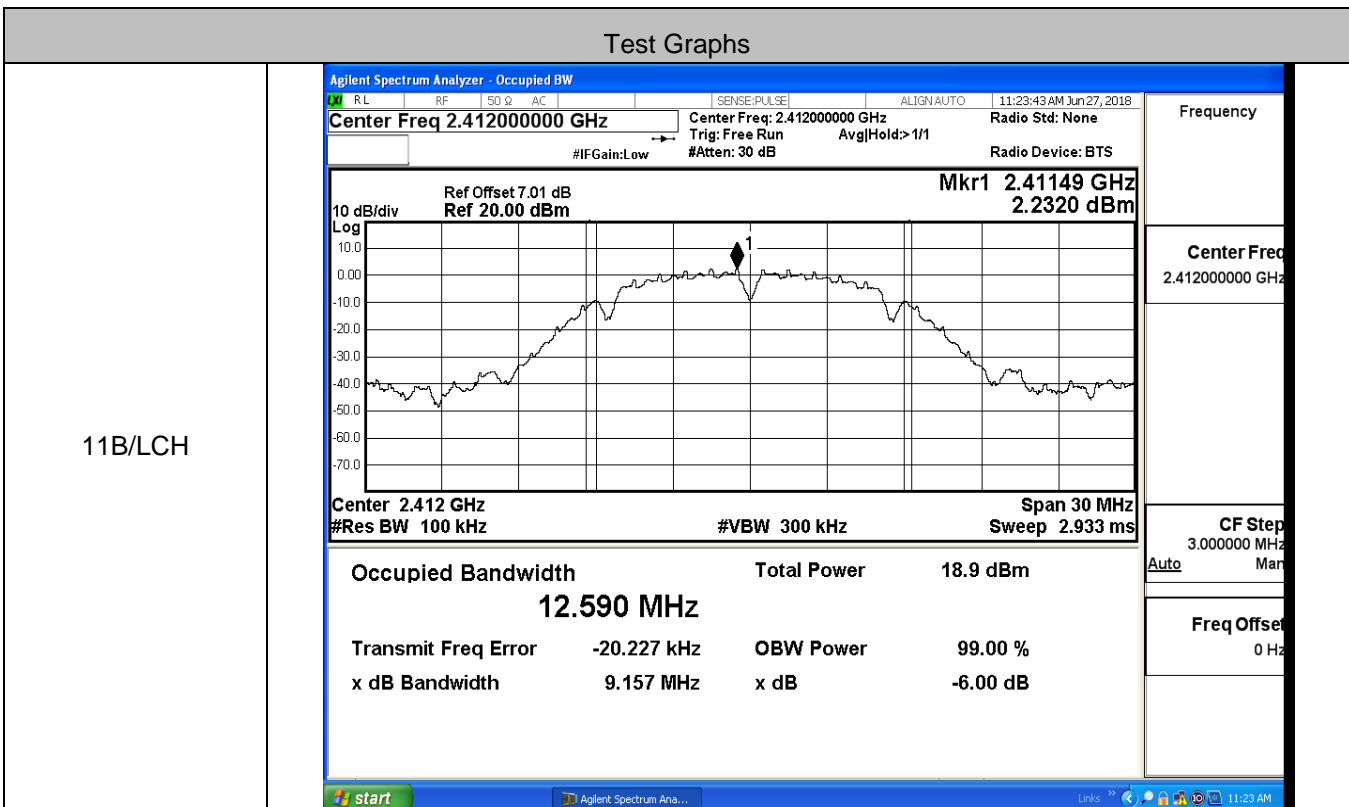


11N20SISO/HCH

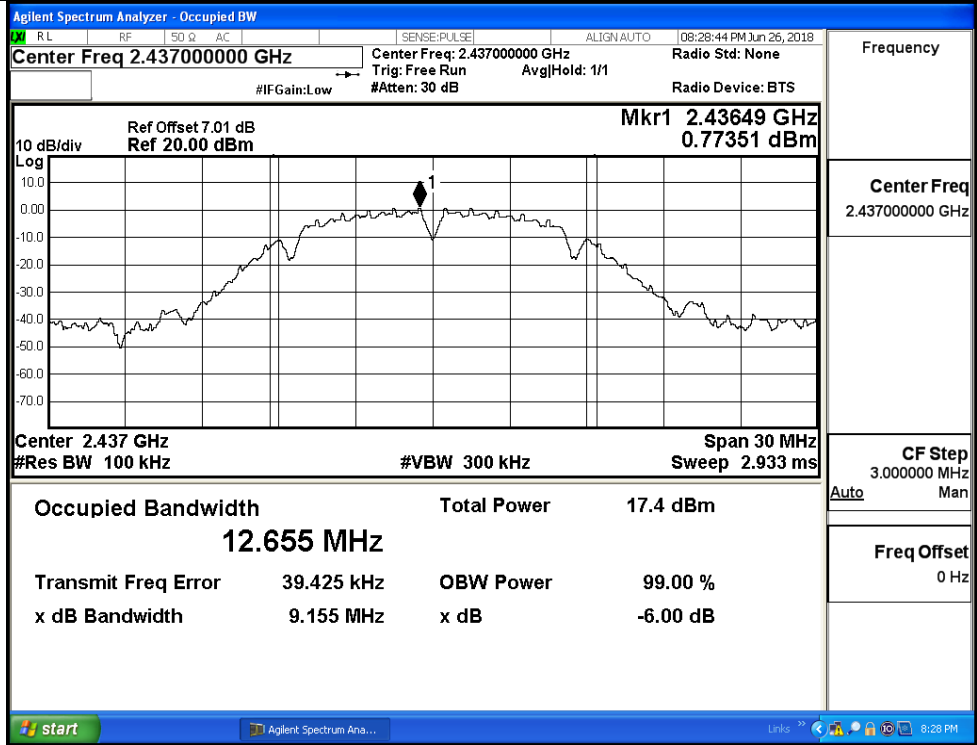


**A.4 6dB Bandwidth**

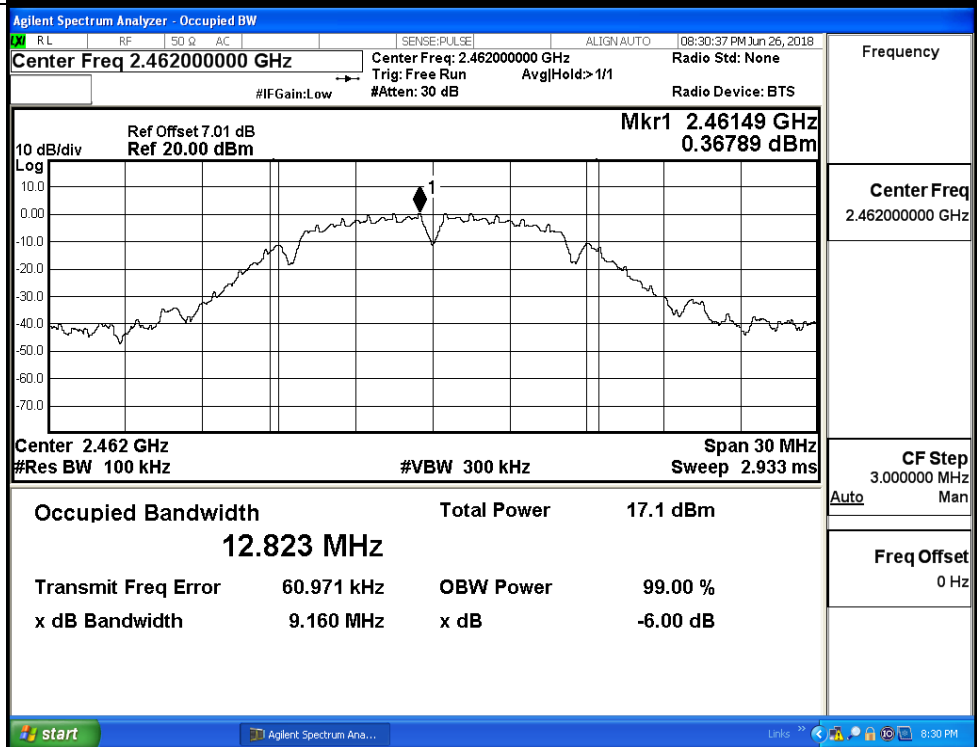
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
11B	LCH	9.157	≥0.5	PASS
	MCH	9.155	≥0.5	PASS
	HCH	9.160	≥0.5	PASS
11G	LCH	16.40	≥0.5	PASS
	MCH	16.39	≥0.5	PASS
	HCH	16.41	≥0.5	PASS
11N20SISO	LCH	17.64	≥0.5	PASS
	MCH	17.60	≥0.5	PASS
	HCH	17.63	≥0.5	PASS



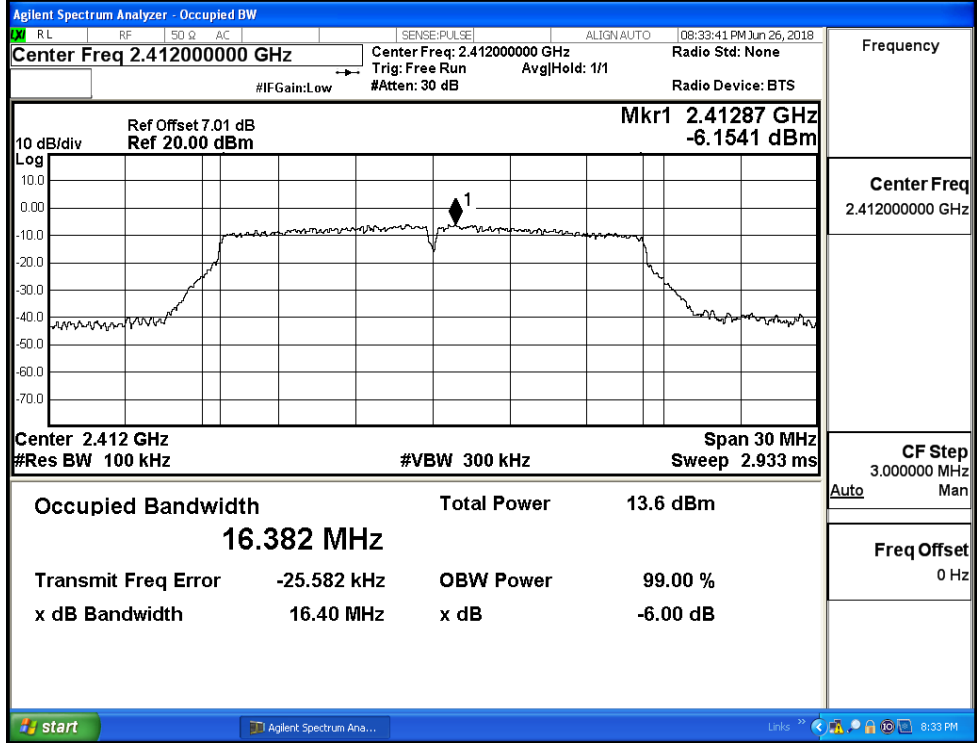
11B/MCH



11B/HCH

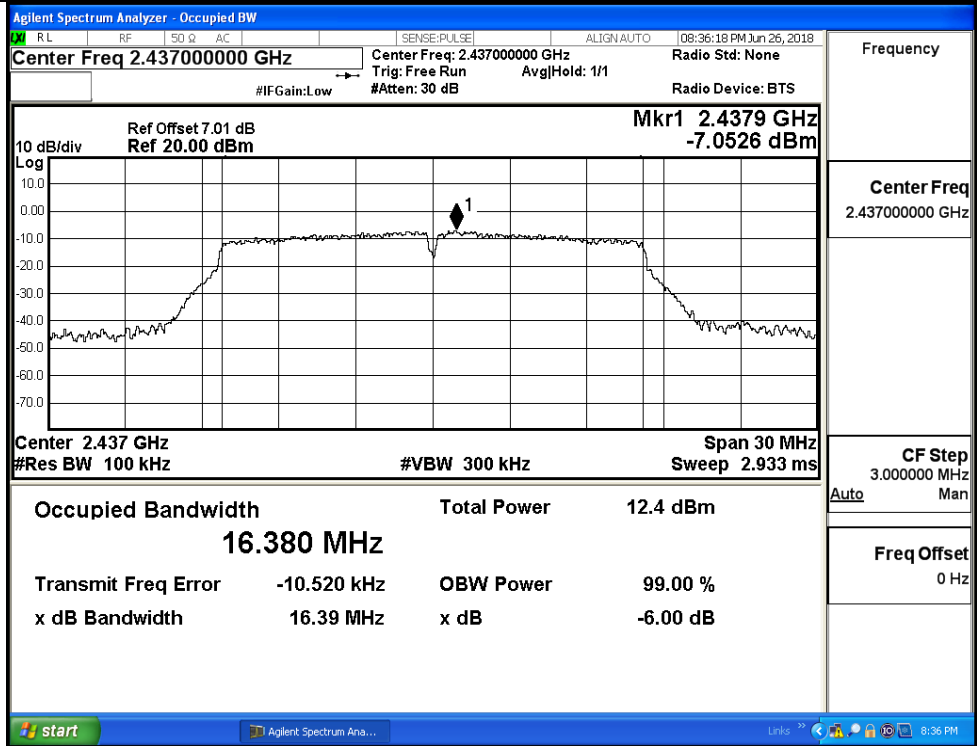


11G/LCH



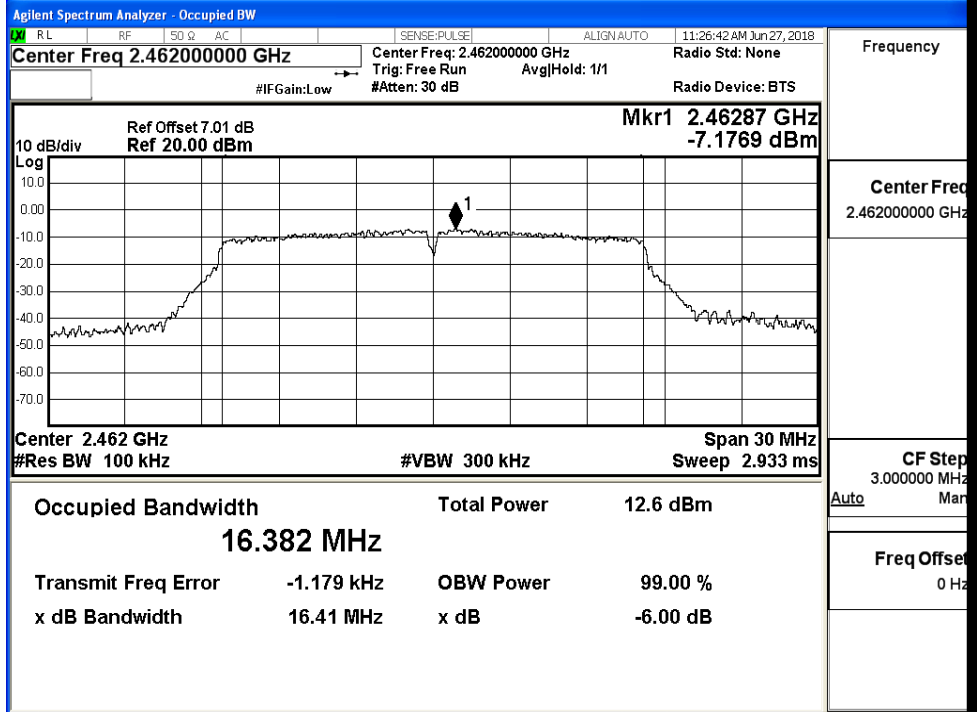
Frequency  
Center Freq  
2.41200000 GHz  
CF Step  
3.000000 MHz  
Auto  
Man  
Freq Offset  
0 Hz

11G/MCH

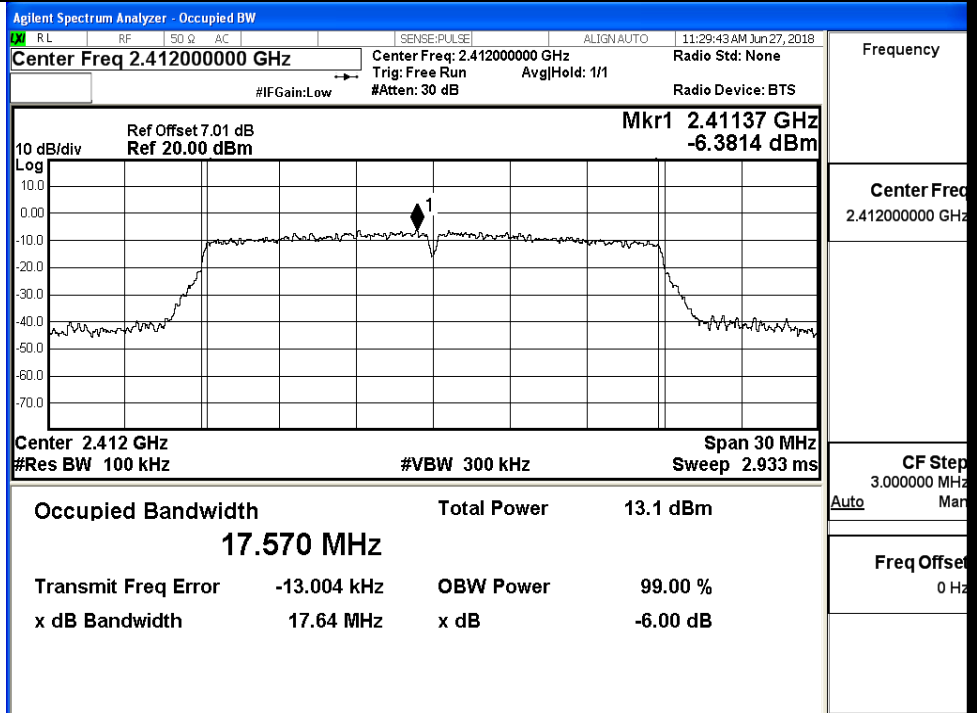


Frequency  
Center Freq  
2.43700000 GHz  
CF Step  
3.000000 MHz  
Auto  
Man  
Freq Offset  
0 Hz

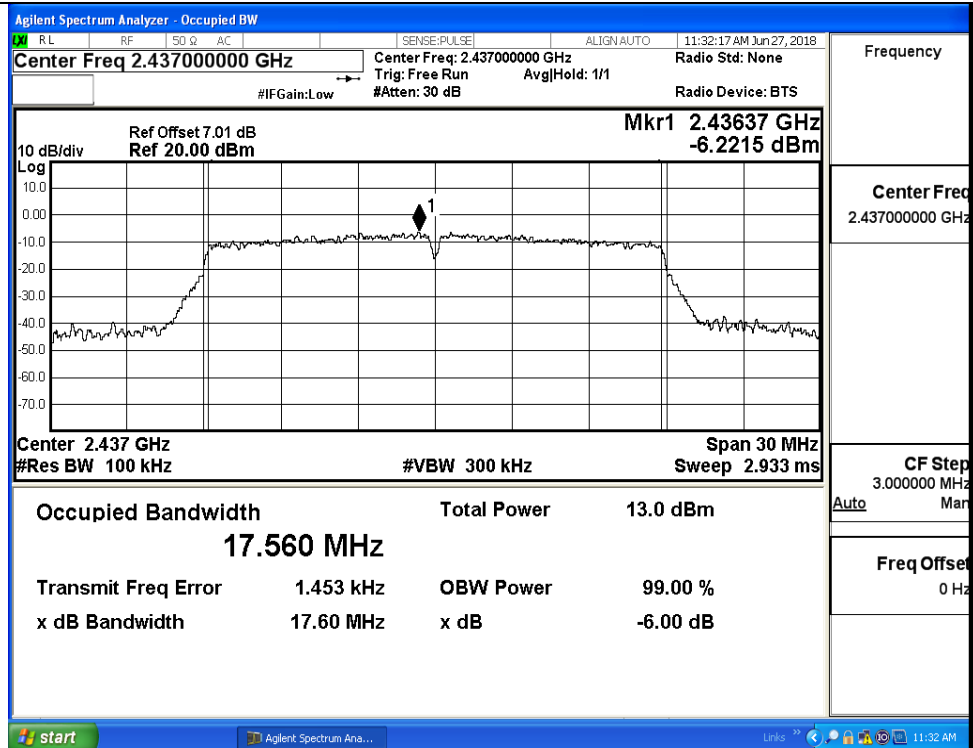
11G/HCH



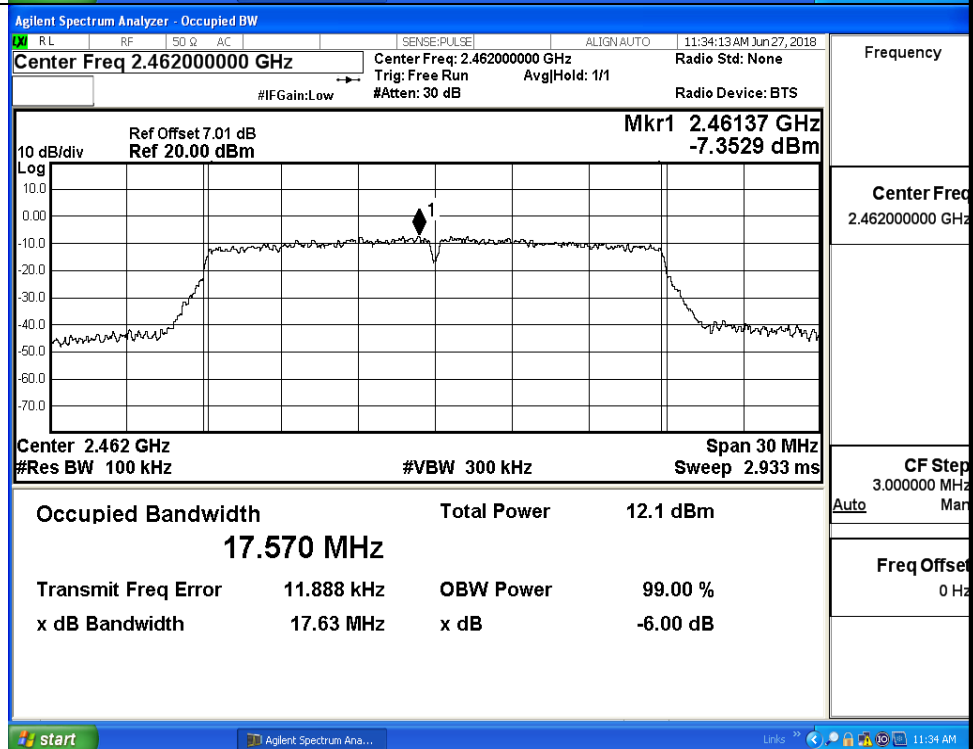
11N20SISO/LCH



11N20SISO/MCH



11N20SISO/HCH

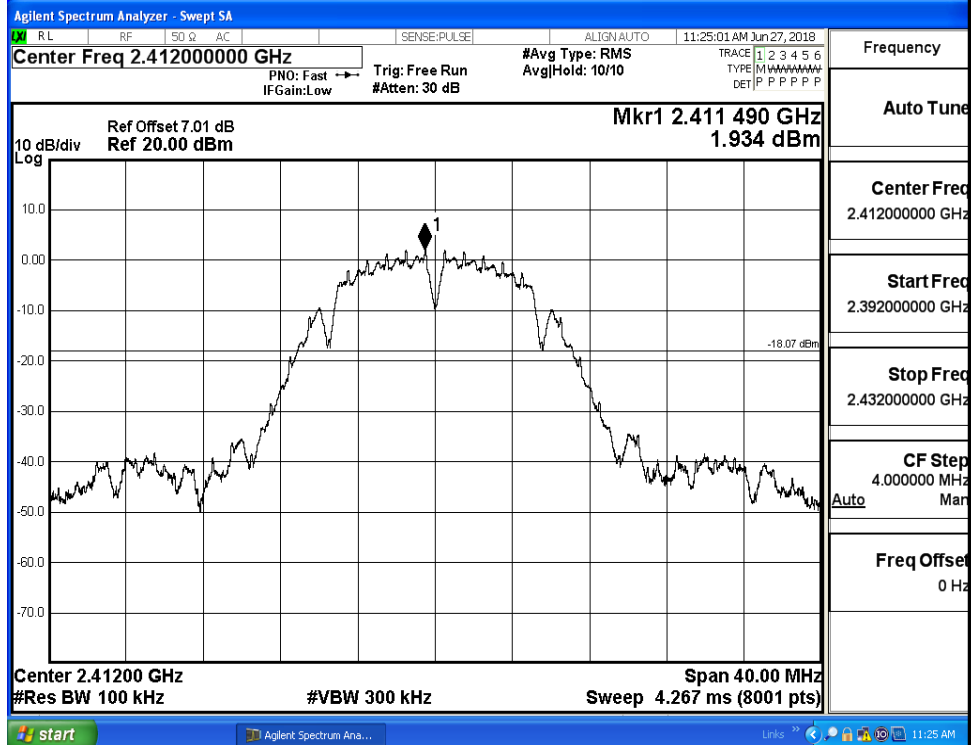


**A.5 RF Conducted Spurious Emissions**

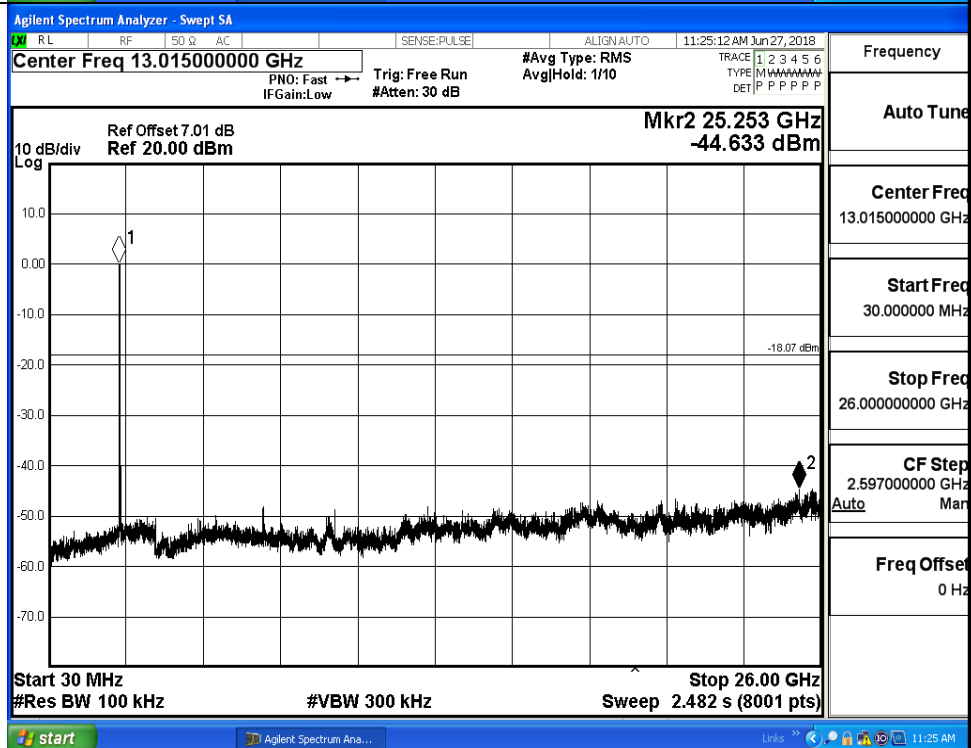
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
11B	LCH	1.934	-44.633	-18.066	PASS
	MCH	0.733	-44.917	-19.267	PASS
	HCH	0.294	-44.856	-19.706	PASS
11G	LCH	-6.019	-43.973	-26.019	PASS
	MCH	-7.117	-45.289	-27.117	PASS
	HCH	-7.143	-44.528	-27.143	PASS
11N20 SISO	LCH	-6.488	-44.649	-26.488	PASS
	MCH	-6.445	-44.032	-26.445	PASS
	HCH	-7.553	-45.542	-27.553	PASS

11B\_LCH\_Graphs

Pref/11B/LCH



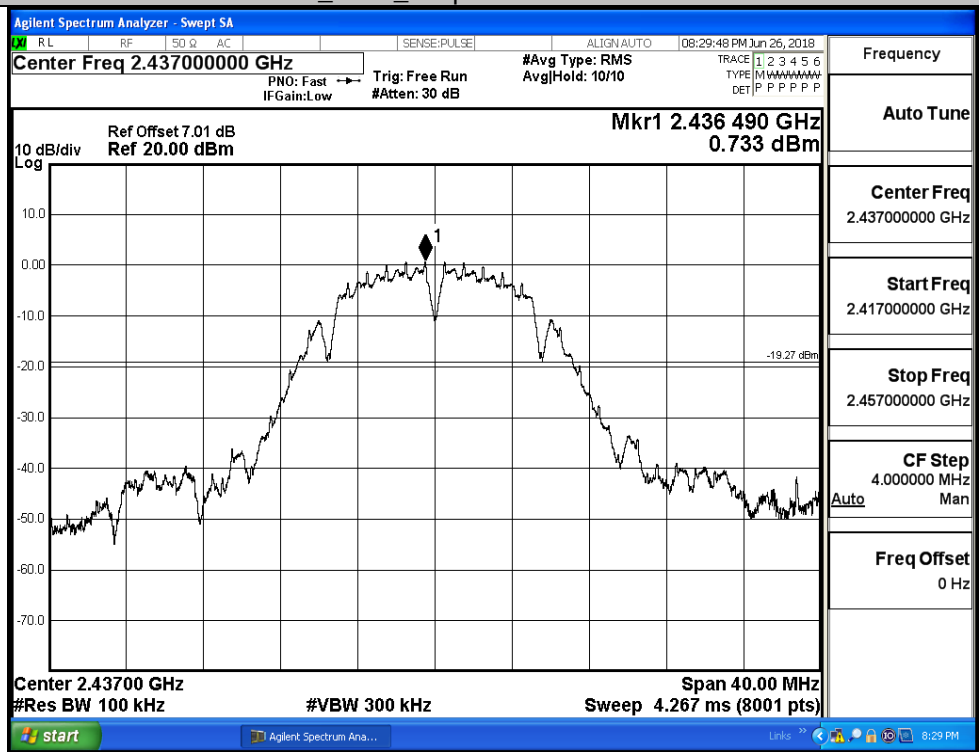
Puw/11B/LCH



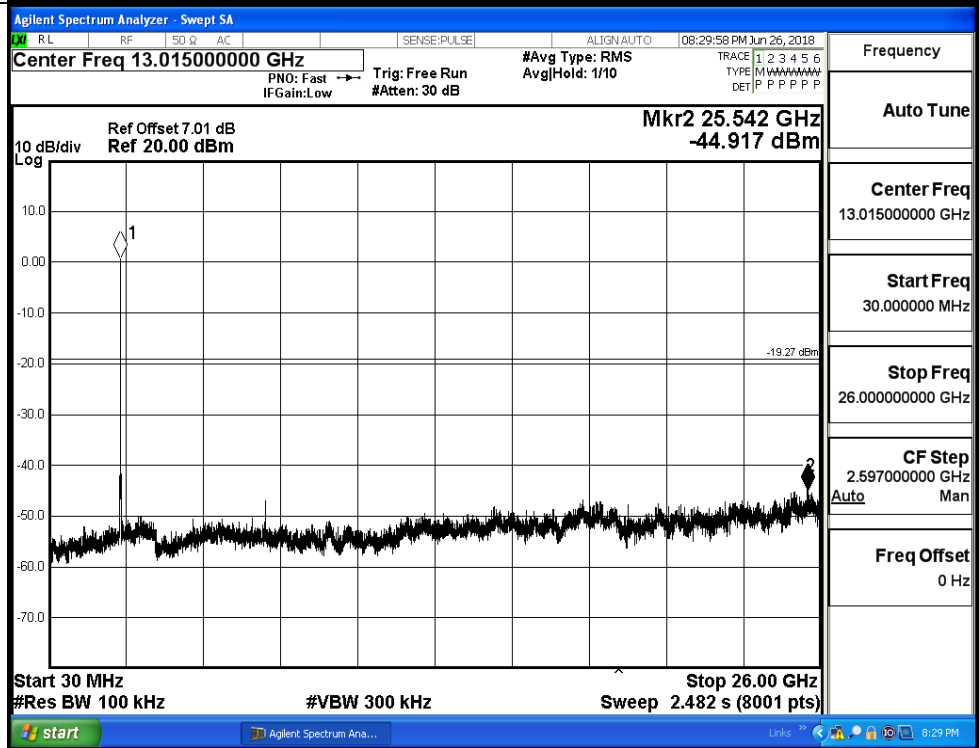


11B\_MCH\_Graphs

Pref/11B/MCH

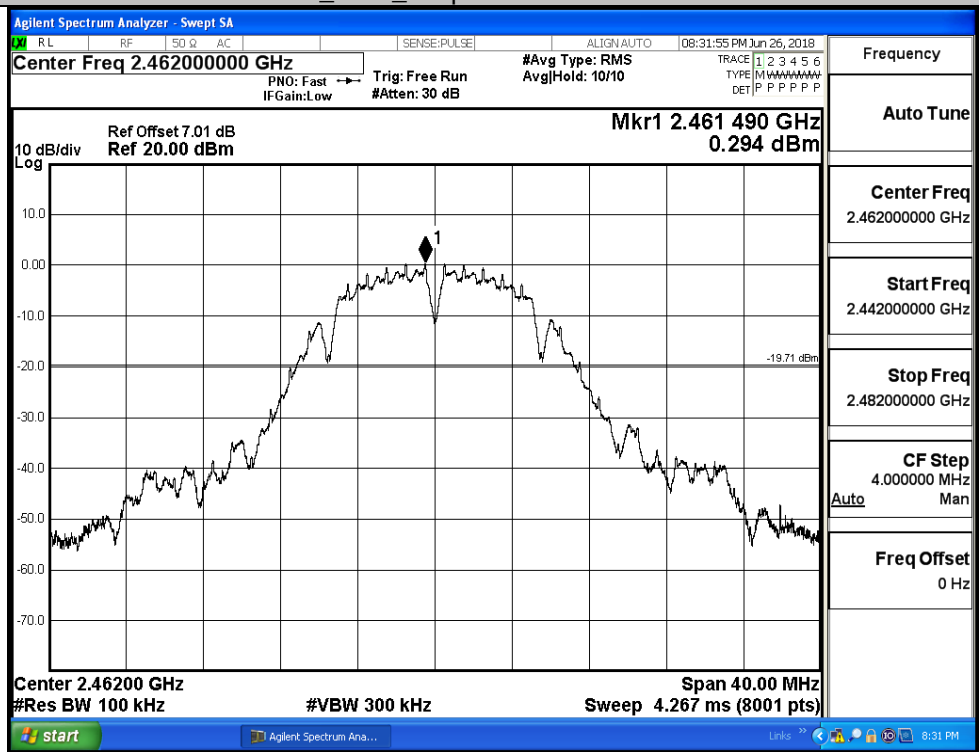


Puw/11B/MCH

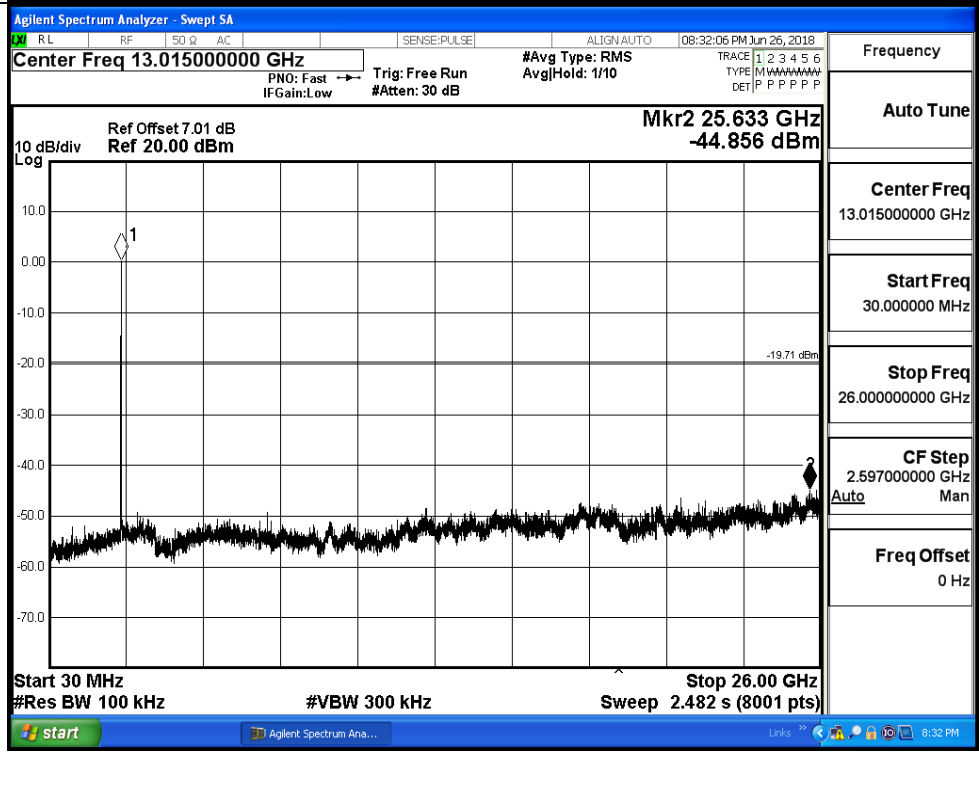


11B\_HCH\_Graphs

Pref/11B/HCH

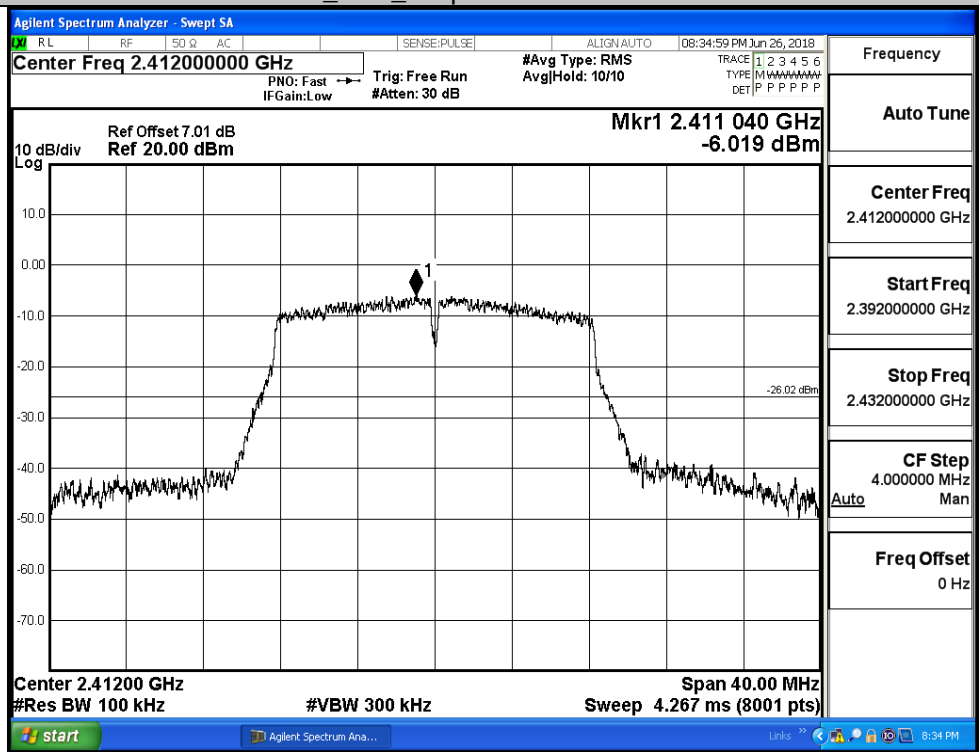


Puw/11B/HCH

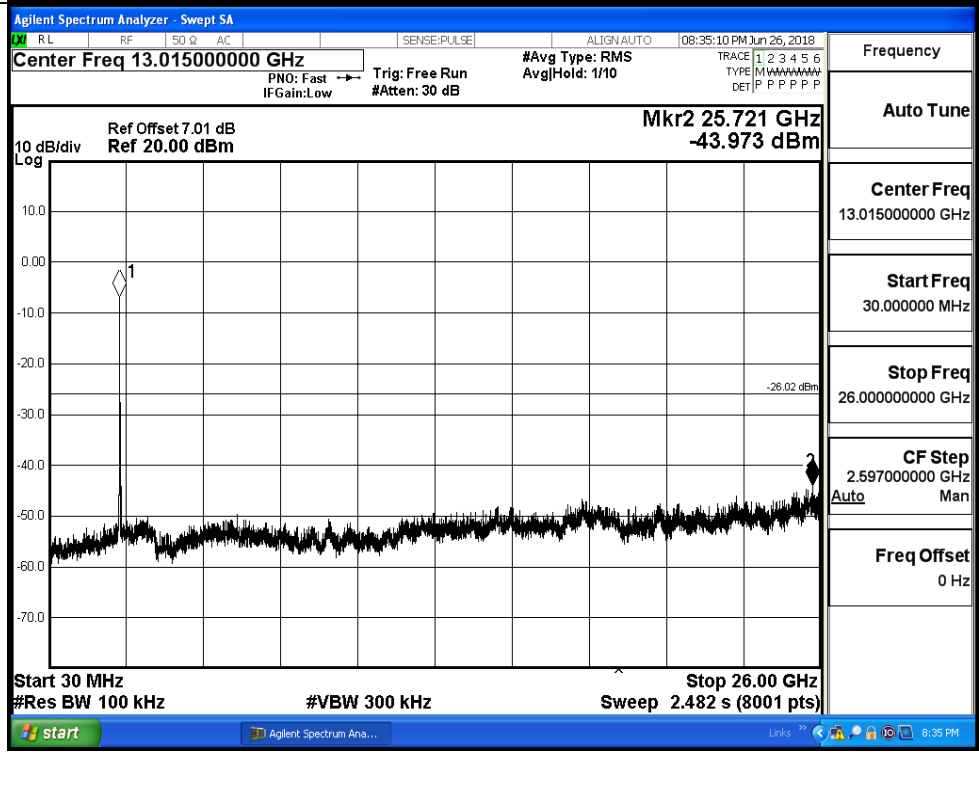


11G\_LCH\_Graphs

Pref/11G/LCH

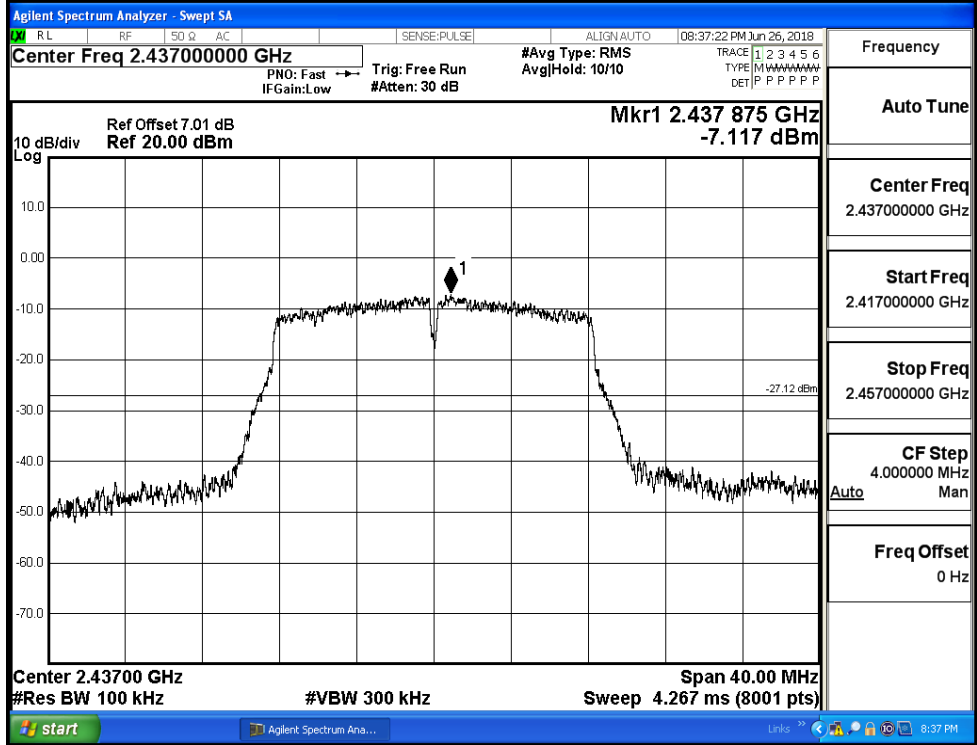


Puw/11G/LCH

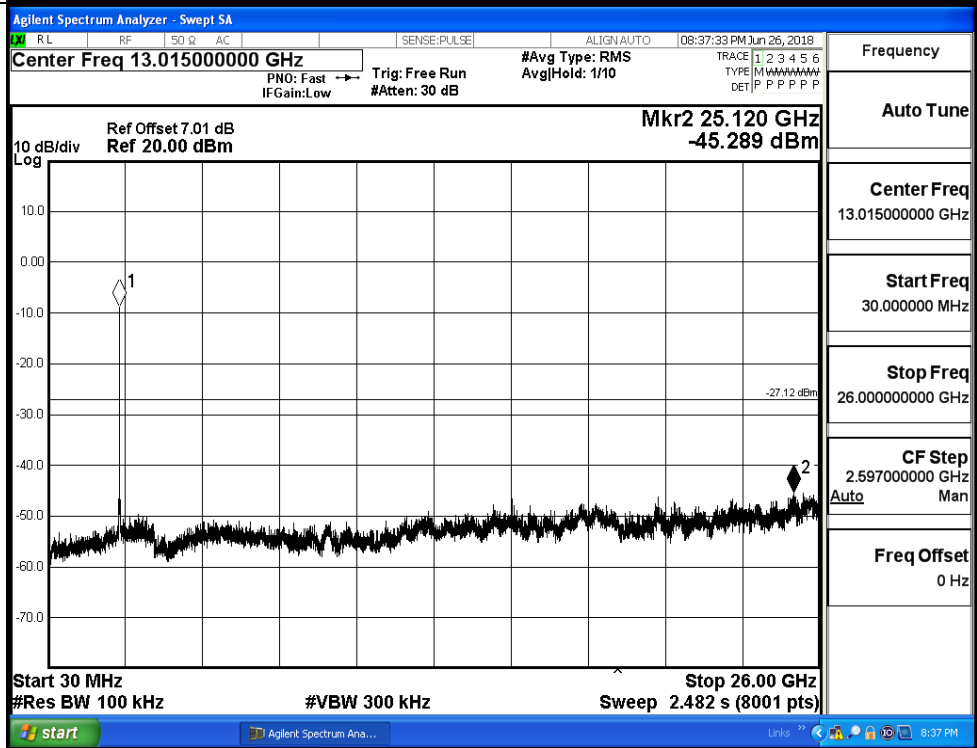


11G\_MCH\_Graphs

Pref/11G/MCH

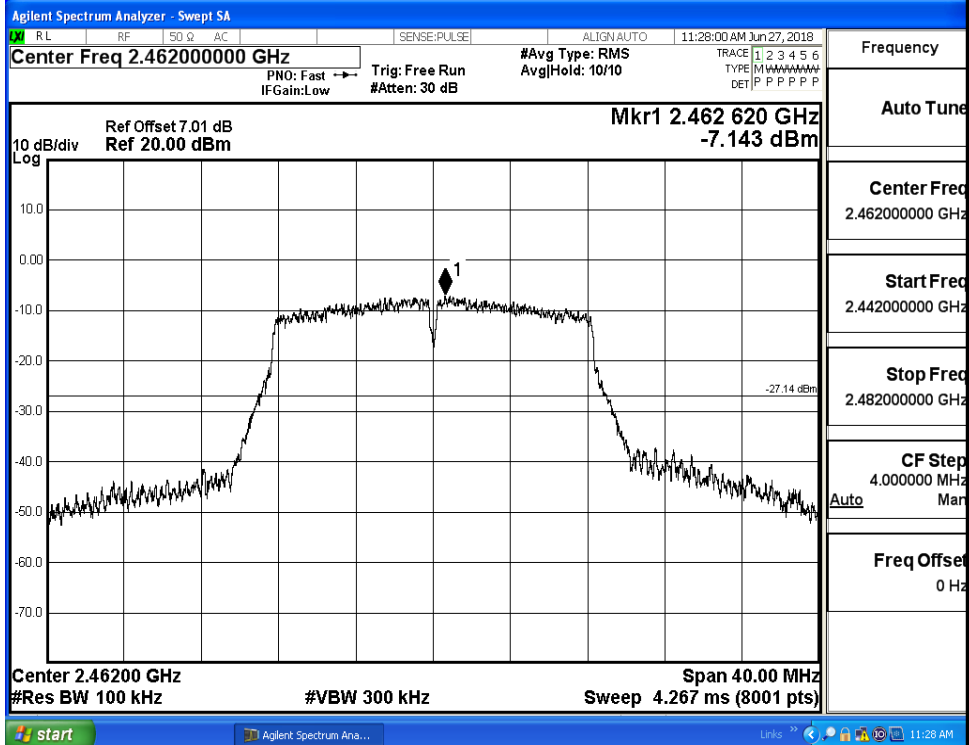


Puw/11G/MCH

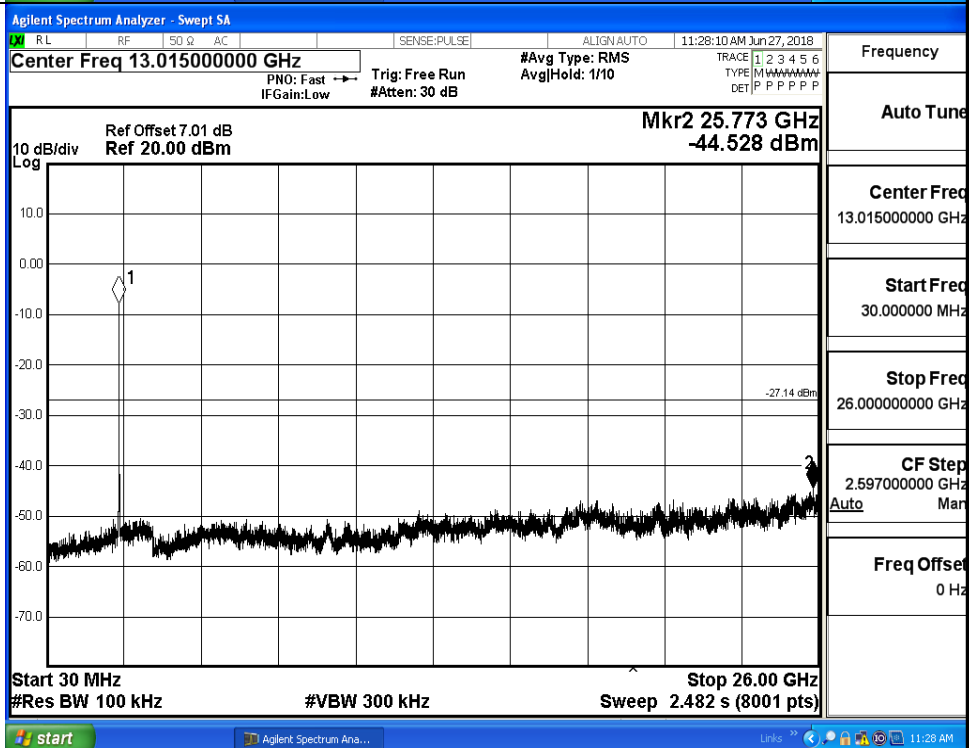


11G\_HCH\_Graphs

Pref/11G/HCH

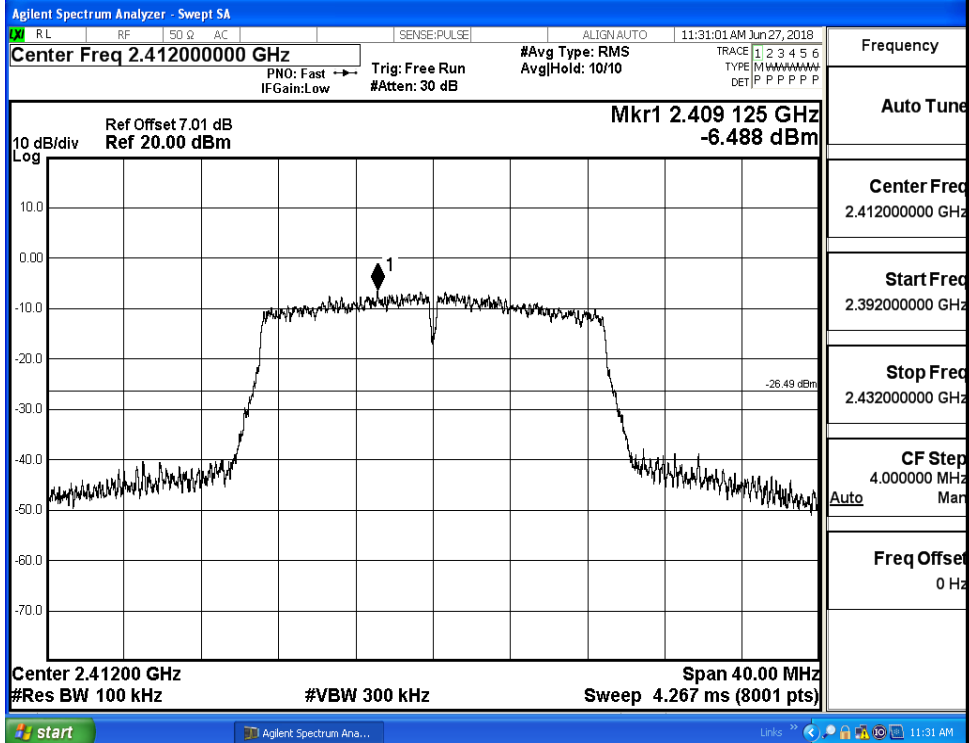


Puw/11G/HCH



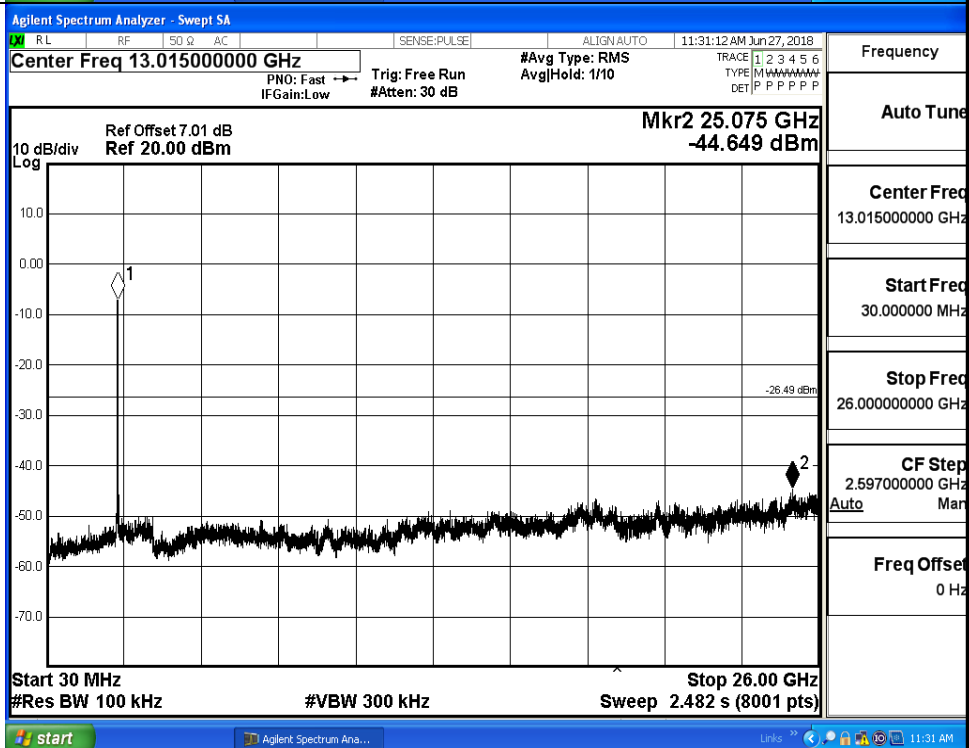
11N20SISO\_LCH\_Graphs

Pref/11N20SIS  
O/LCH



Frequency
Auto Tune
Center Freq 2.41200000 GHz
Start Freq 2.392000000 GHz
Stop Freq 2.432000000 GHz
CF Step 4.000000 MHz Auto
Freq Offset 0 Hz

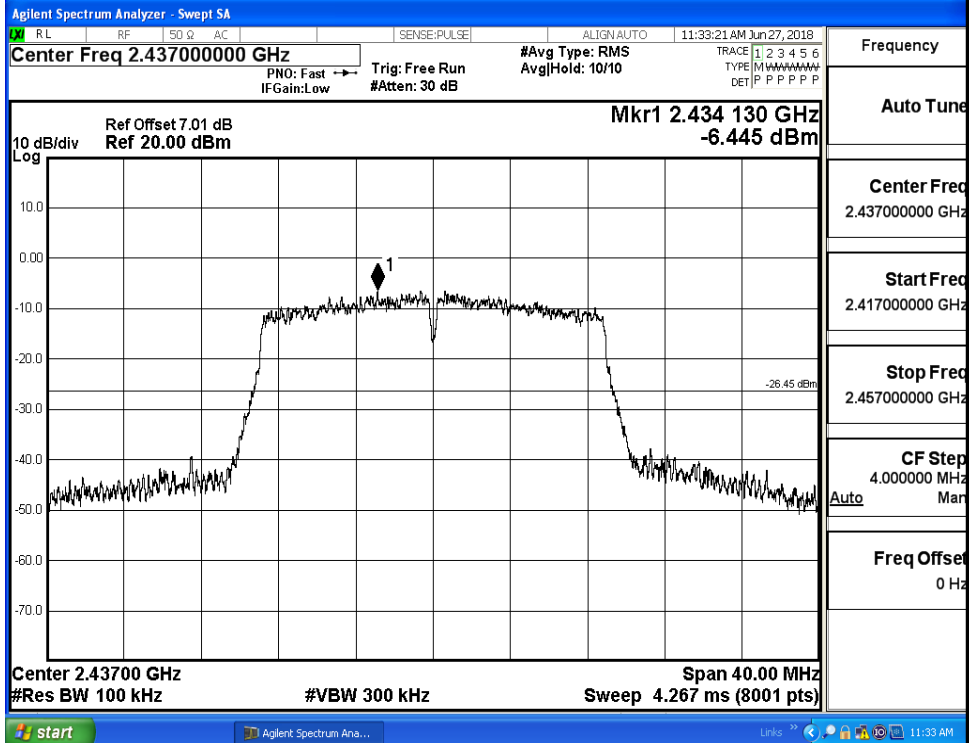
Puw/11N20  
SISO/LCH



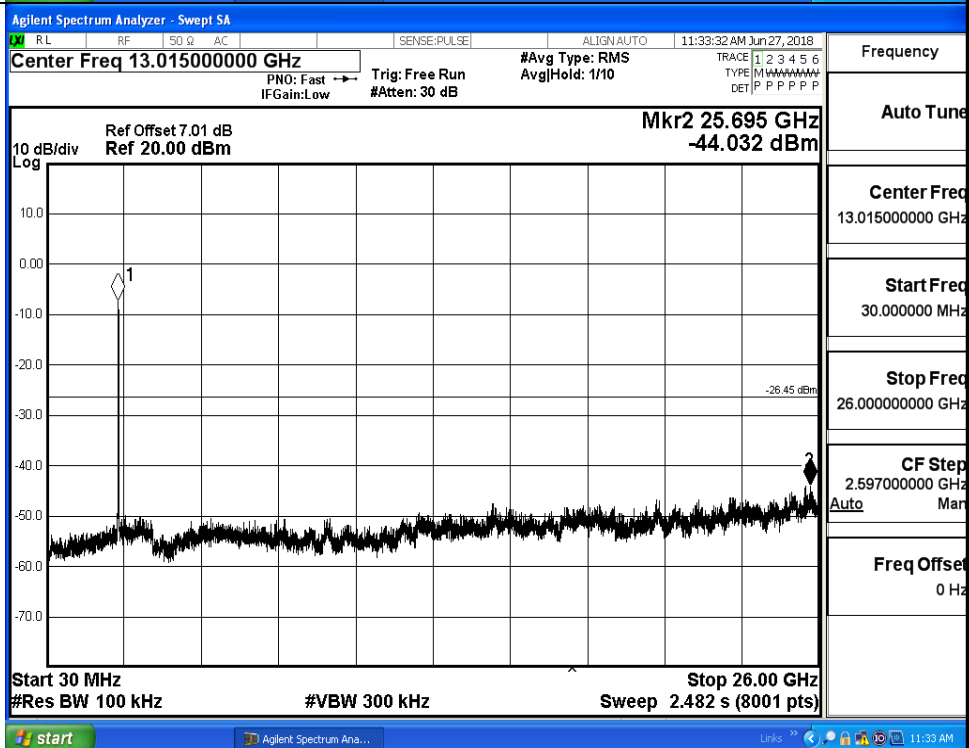
Frequency
Auto Tune
Center Freq 13.01500000 GHz
Start Freq 30.000000 MHz
Stop Freq 26.000000000 GHz
CF Step 2.597000000 GHz Auto
Freq Offset 0 Hz

11N20SISO\_MCH\_Graphs

Pref/11N20  
SISO/MCH

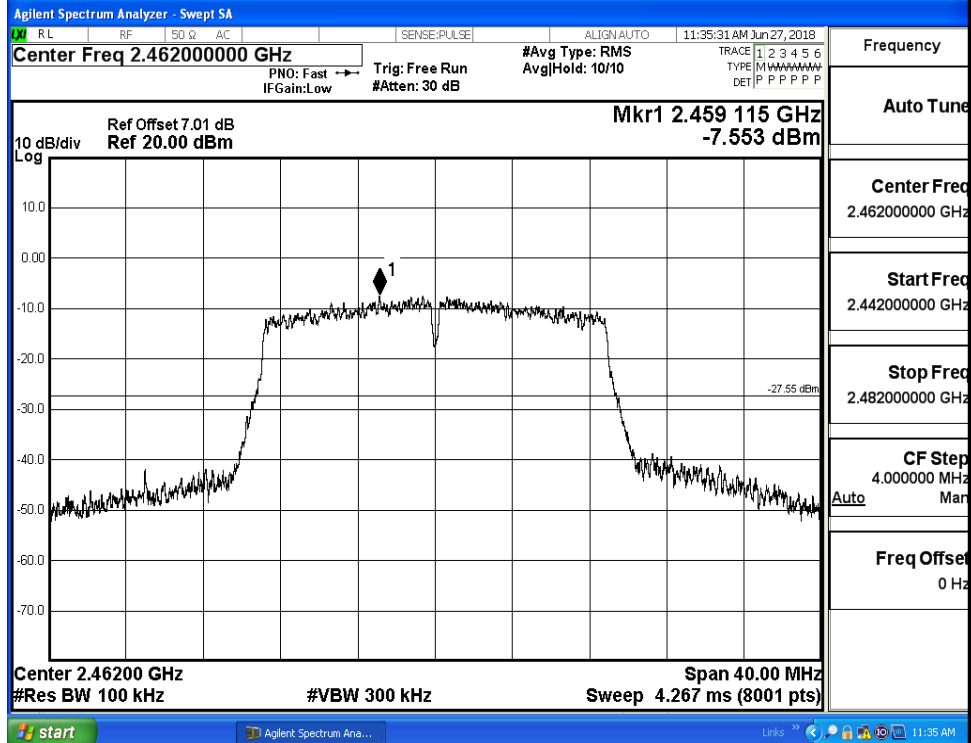


Puw/11N20  
SISO/MCH

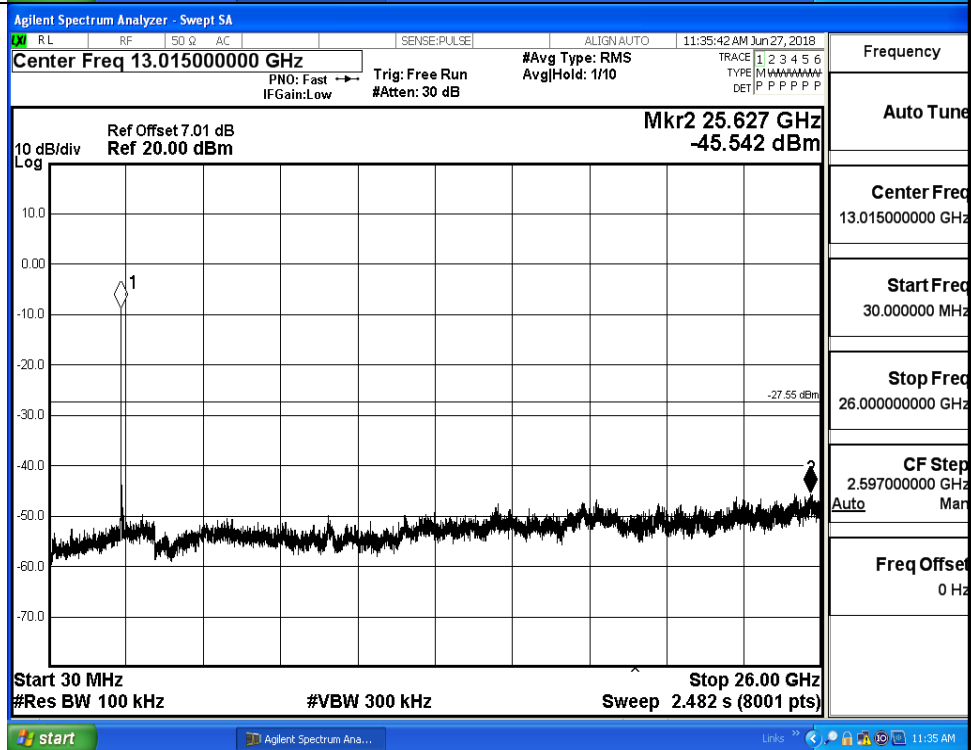


11N20SISO\_HCH\_Graphs

Pref/11N20  
SISO/HCH



Puw/11N20  
SISO/HCH

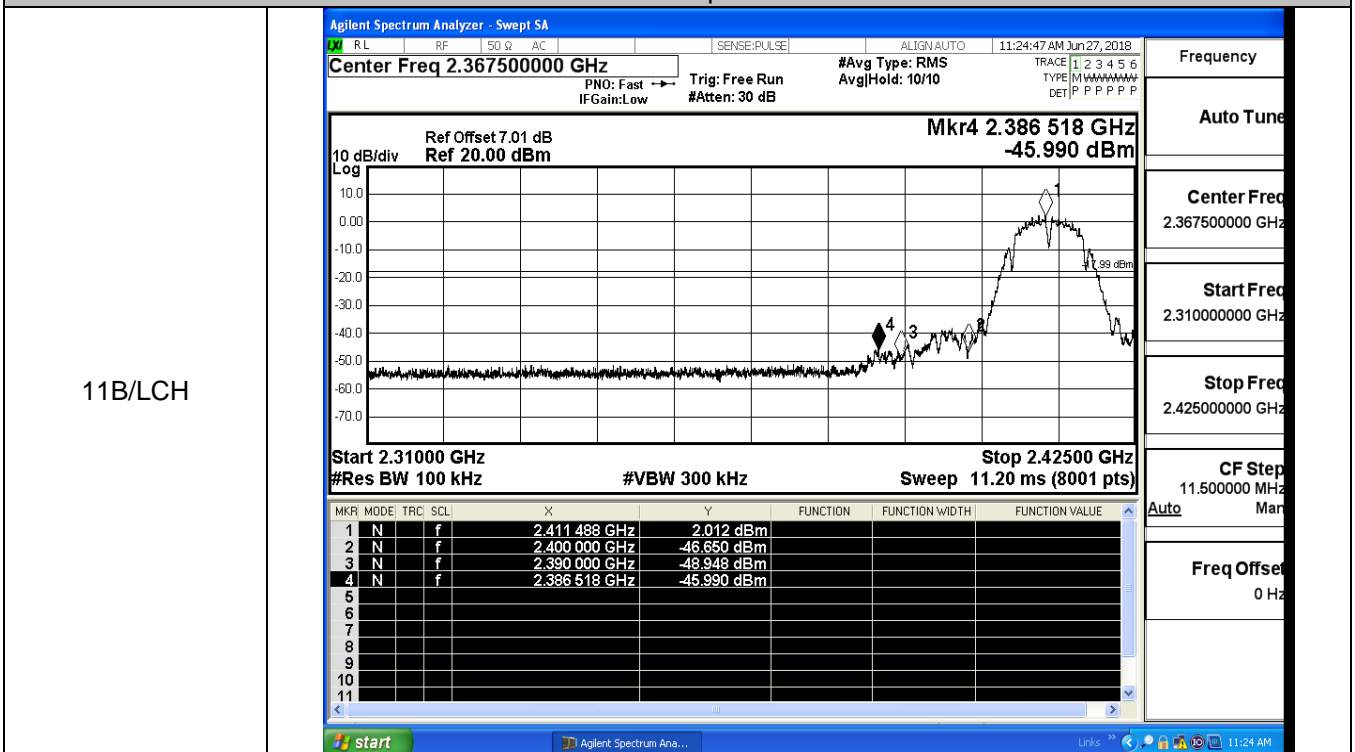




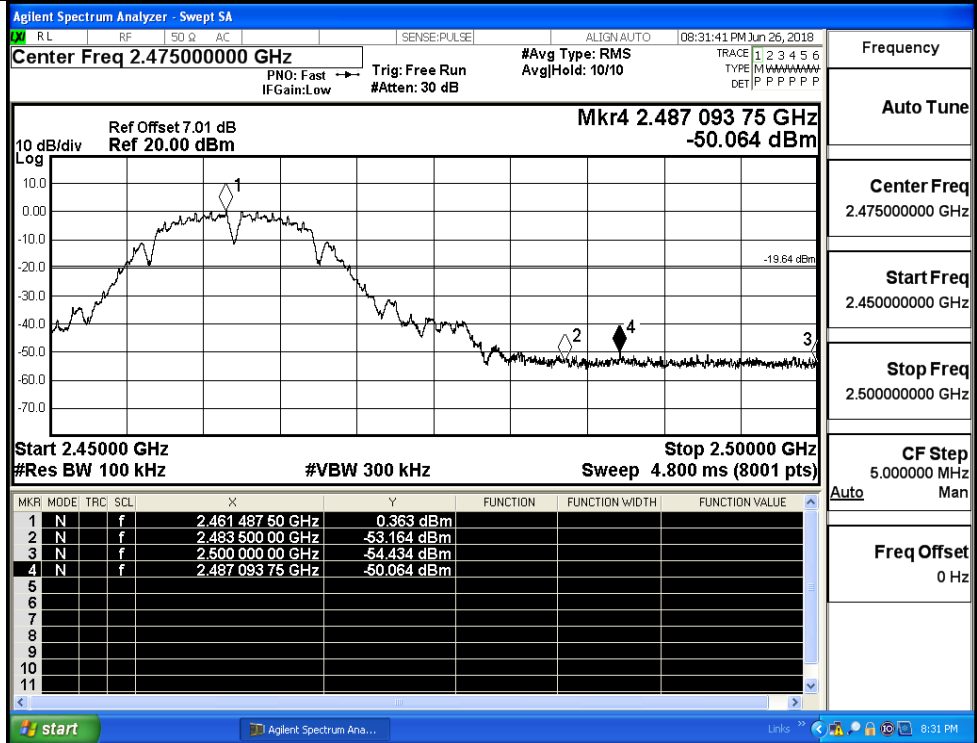
### A.6 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
11B	LCH	2.012	-45.990	-17.99	PASS
	HCH	0.363	-50.064	-19.64	PASS
11G	LCH	-5.951	-42.991	-25.95	PASS
	HCH	-7.120	-48.623	-27.12	PASS
11N20SISO	LCH	-6.466	-46.858	-26.47	PASS
	HCH	-7.403	-49.936	-27.4	PASS

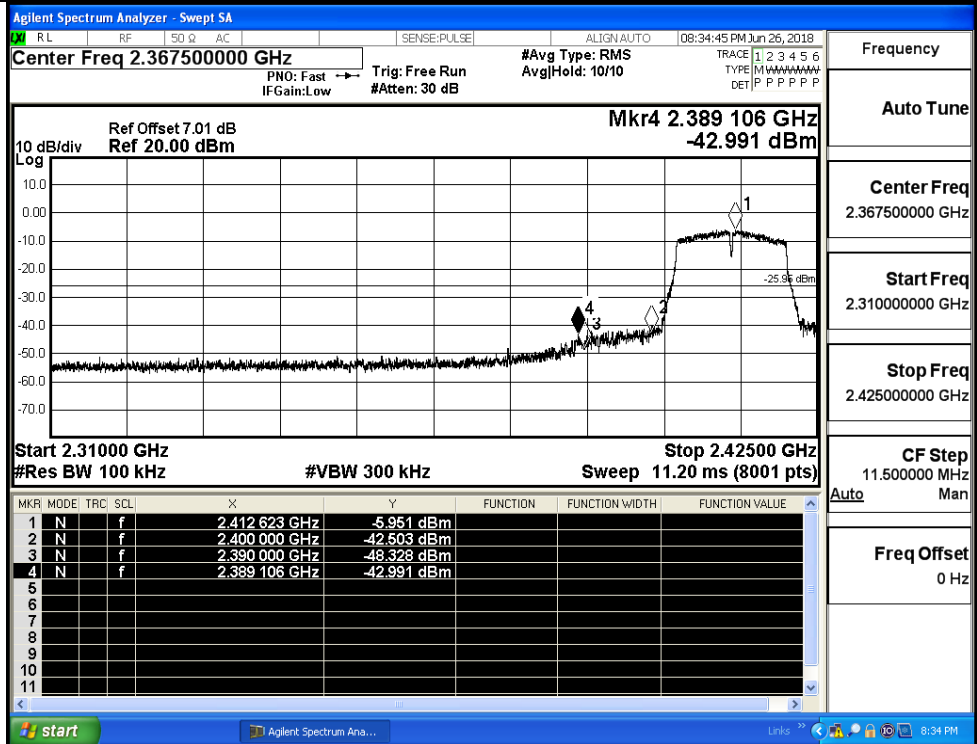
#### Test Graphs



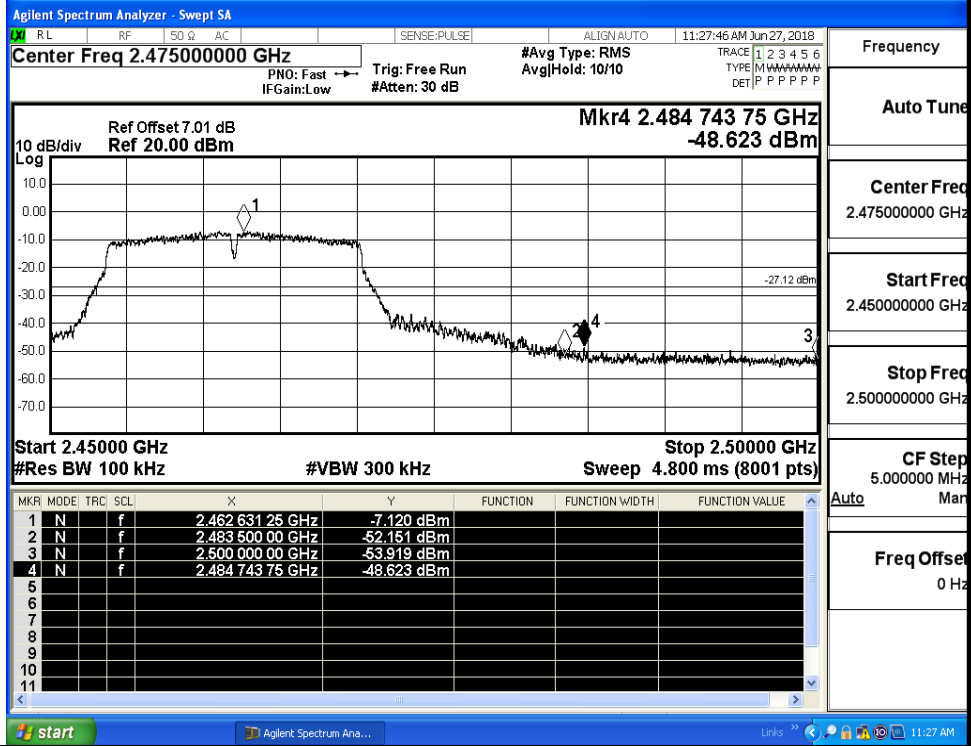
11B/HCH



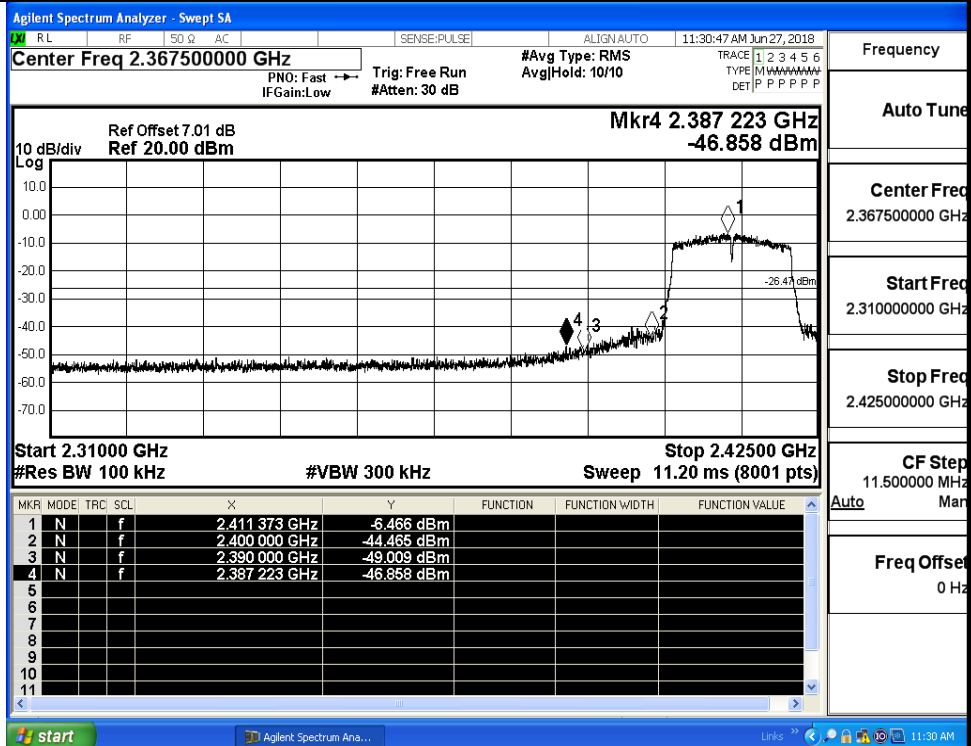
11G/LCH



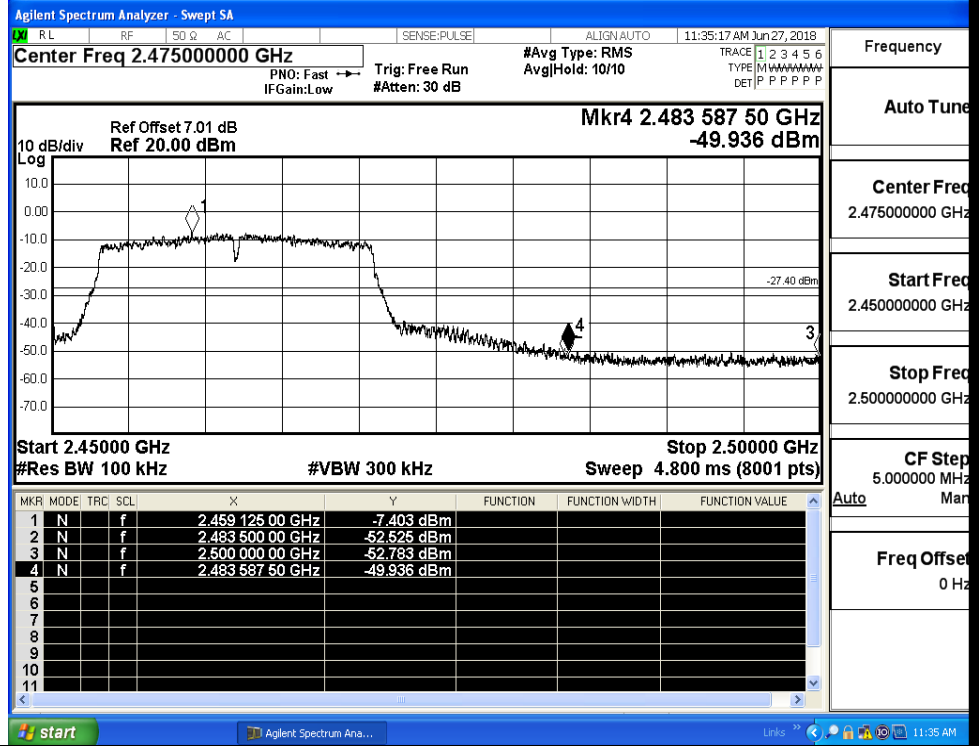
11G/HCH



11N20SISO/LCH



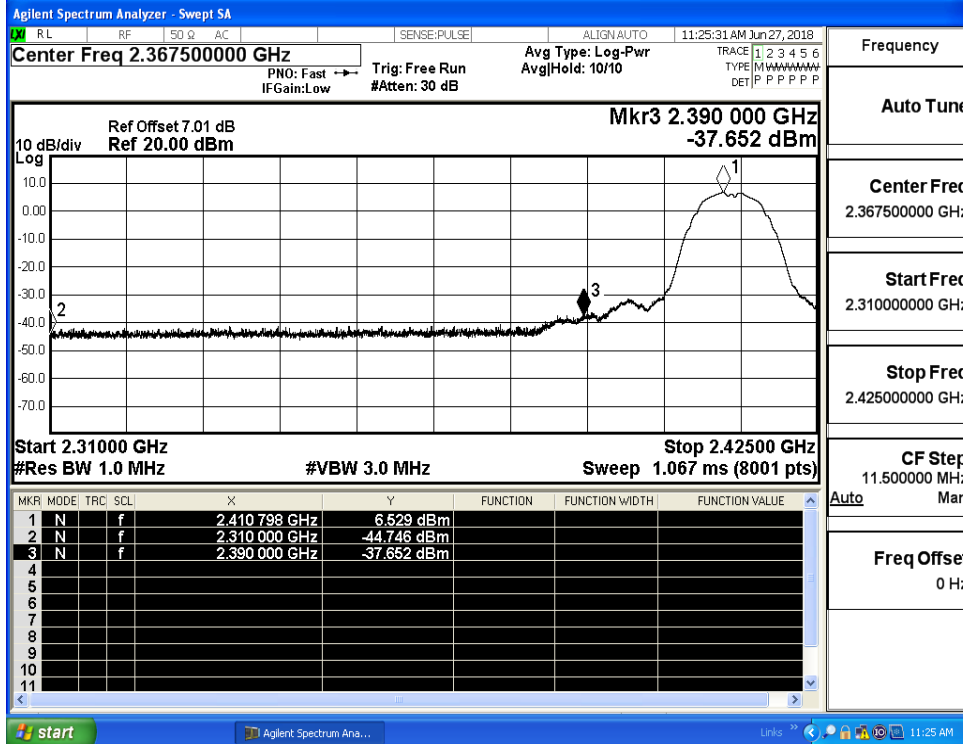
11N20SISO/HCH



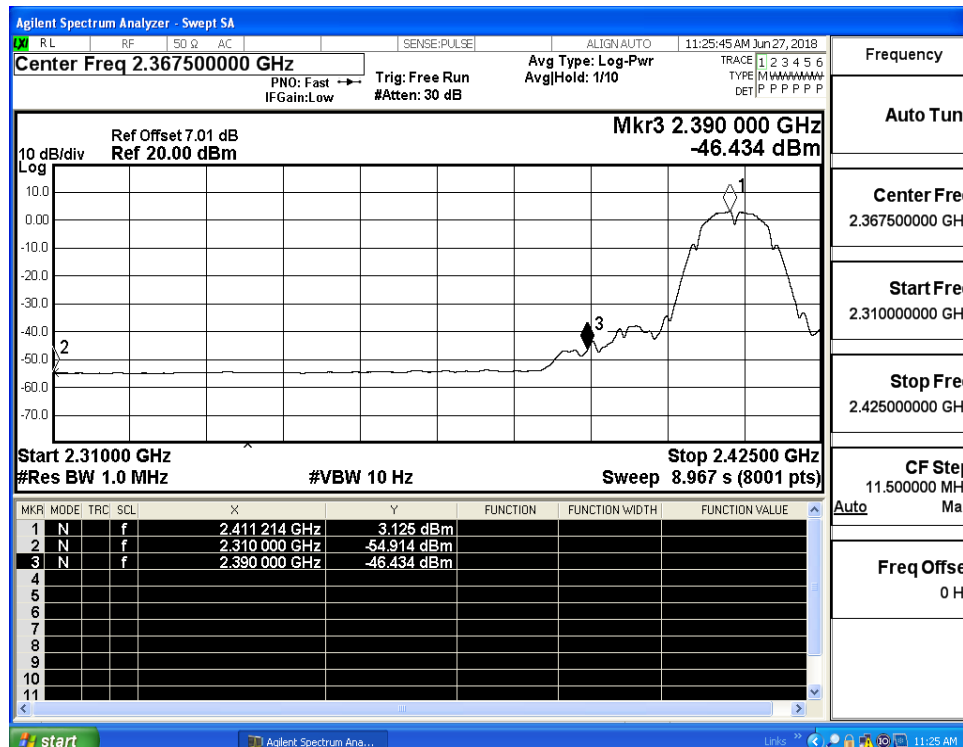
## A.7 Restrict-band band-edge measurements

Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBu V/m]	Verdict
11B	2412	Ant1	2310.0	-44.75	2.0	0	52.51	PEAK	74	PASS
	2412	Ant1	2310.0	-54.91	2.0	0	42.34	AV	54	PASS
	2412	Ant1	2390.0	-37.65	2.0	0	59.61	PEAK	74	PASS
	2412	Ant1	2390.0	-46.43	2.0	0	50.82	AV	54	PASS
	2462	Ant1	2483.5	-42.99	2.0	0	54.26	PEAK	74	PASS
	2462	Ant1	2483.5	-53.37	2.0	0	43.89	AV	54	PASS
	2462	Ant1	2500.0	-42.37	2.0	0	54.89	PEAK	74	PASS
	2462	Ant1	2500.0	-54.04	2.0	0	43.22	AV	54	PASS
11G	2412	Ant1	2310.0	-44.33	2.0	0	52.93	PEAK	74	PASS
	2412	Ant1	2310.0	-54.85	2.0	0	42.41	AV	54	PASS
	2412	Ant1	2390.0	-32.95	2.0	0	64.31	PEAK	74	PASS
	2412	Ant1	2390.0	-49.19	2.0	0	48.06	AV	54	PASS
	2462	Ant1	2483.5	-38.39	2.0	0	58.87	PEAK	74	PASS
	2462	Ant1	2483.5	-52.24	2.0	0	45.02	AV	54	PASS
	2462	Ant1	2500.0	-43.32	2.0	0	53.94	PEAK	74	PASS
	2462	Ant1	2500.0	-53.70	2.0	0	43.55	AV	54	PASS
11N20 SISO	2412	Ant1	2310.0	-45.06	2.0	0	52.20	PEAK	74	PASS
	2412	Ant1	2310.0	-54.87	2.0	0	42.39	AV	54	PASS
	2412	Ant1	2390.0	-37.67	2.0	0	59.59	PEAK	74	PASS
	2412	Ant1	2390.0	-49.80	2.0	0	47.46	AV	54	PASS
	2462	Ant1	2483.5	-39.86	2.0	0	57.40	PEAK	74	PASS
	2462	Ant1	2483.5	-51.95	2.0	0	45.31	AV	54	PASS
	2462	Ant1	2500.0	-43.35	2.0	0	53.91	PEAK	74	PASS
	2462	Ant1	2500.0	-53.76	2.0	0	43.50	AV	54	PASS

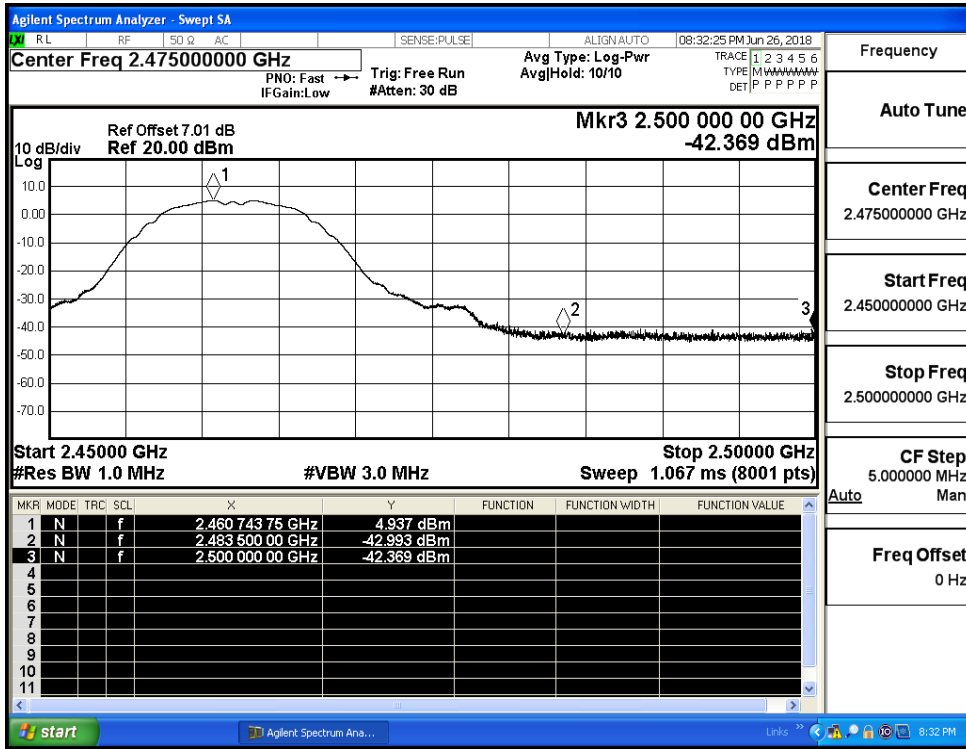
Restrict-band band-edge measurements\_11B\_2412\_Ant1\_PEAK



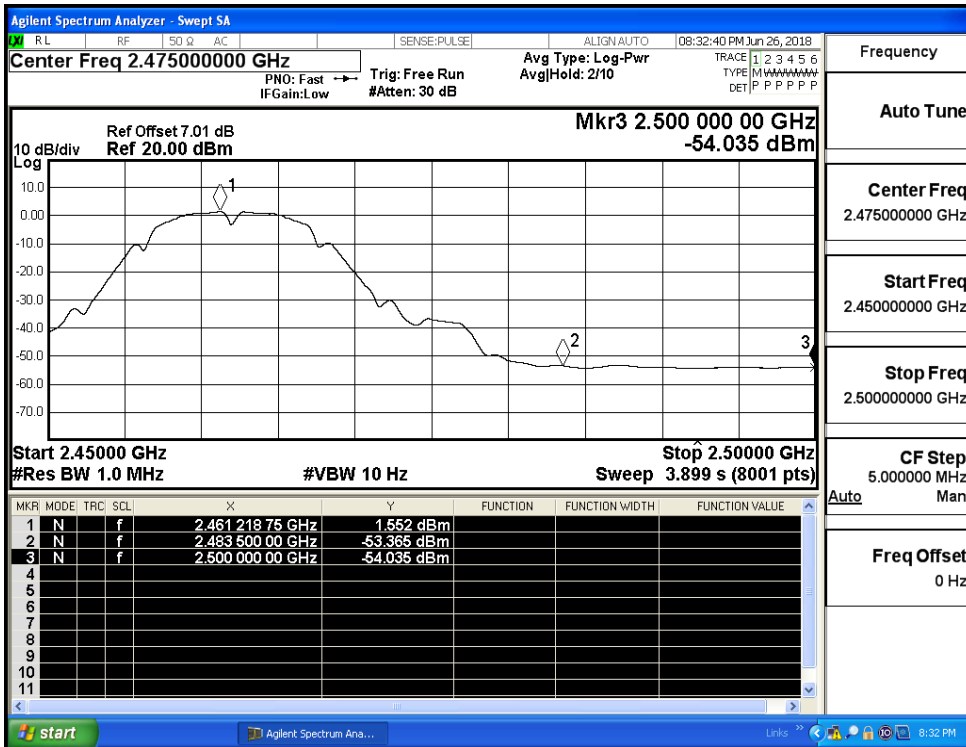
Restrict-band band-edge measurements\_11B\_2412\_Ant1\_AV



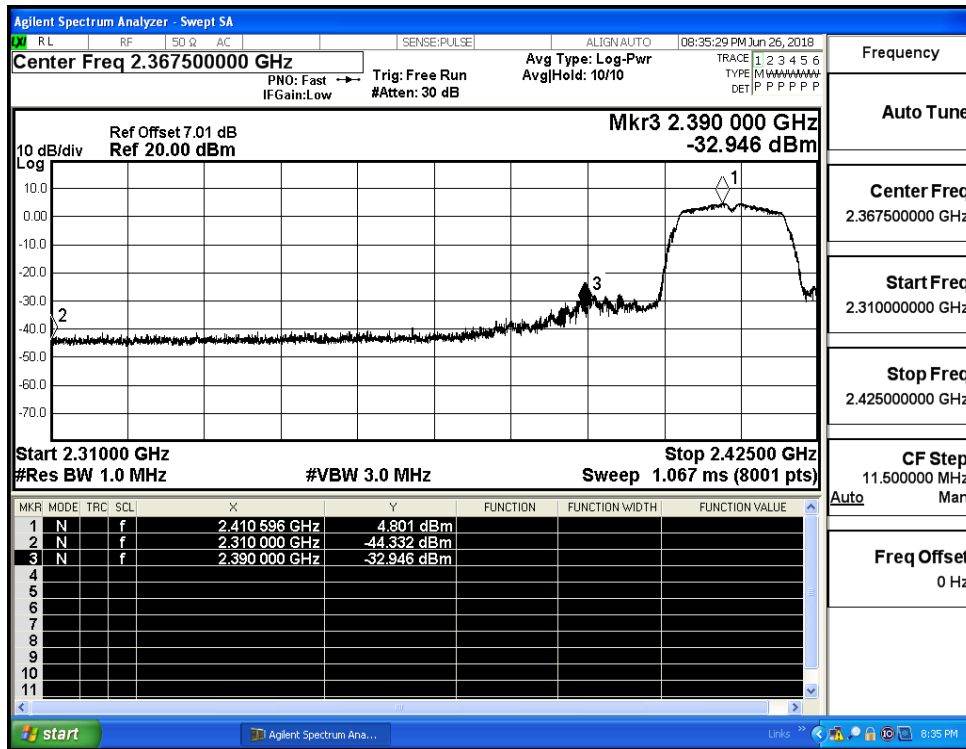
Restrict-band band-edge measurements\_11B\_2462\_Ant1\_PEAK



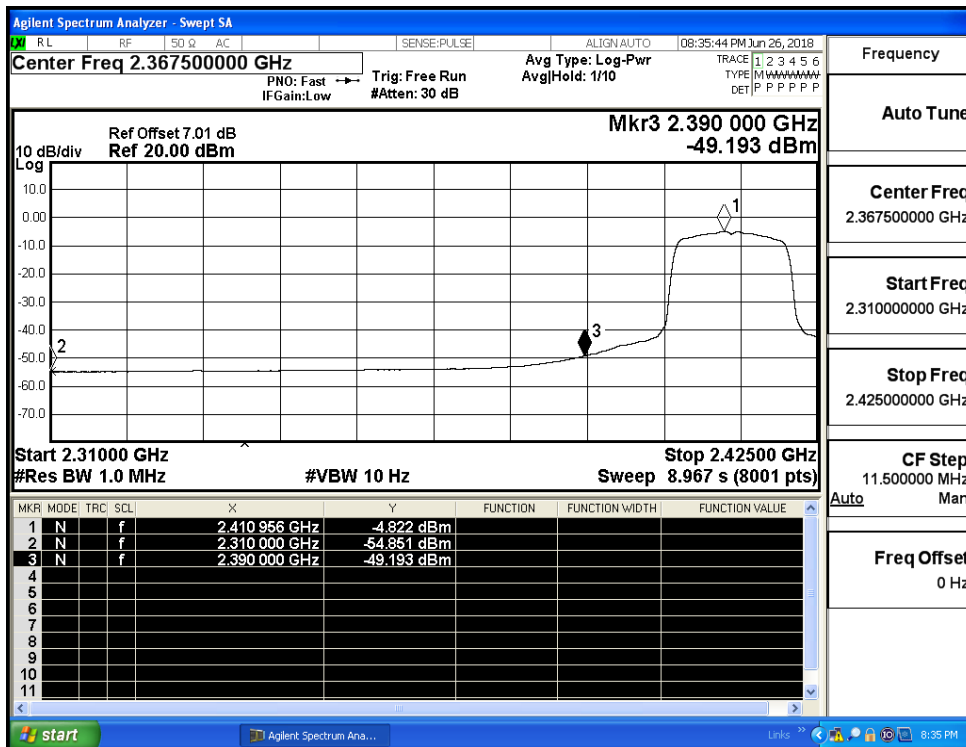
Restrict-band band-edge measurements\_11B\_2462\_Ant1\_AV



Restrict-band band-edge measurements\_11G\_2412\_Ant1\_PEAK

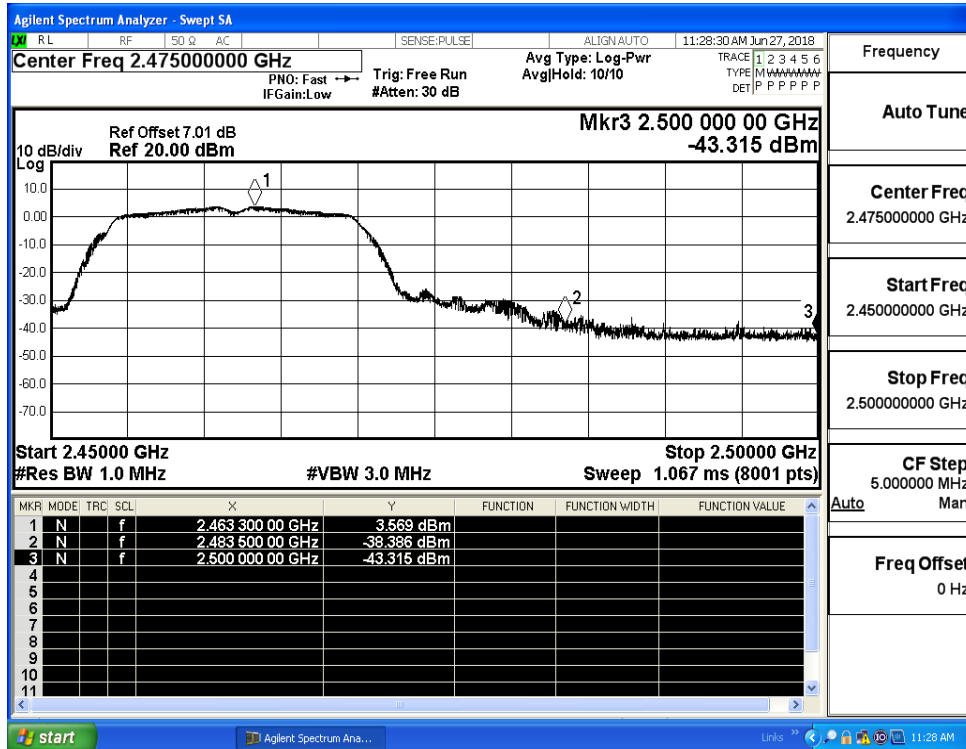


Restrict-band band-edge measurements\_11G\_2412\_Ant1\_AV

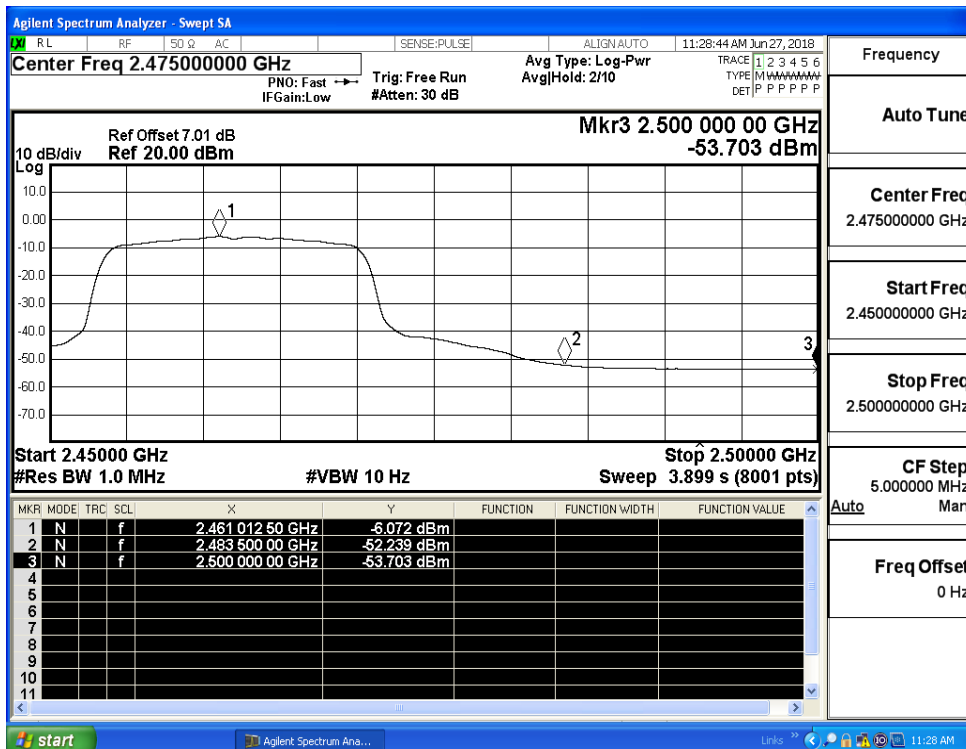




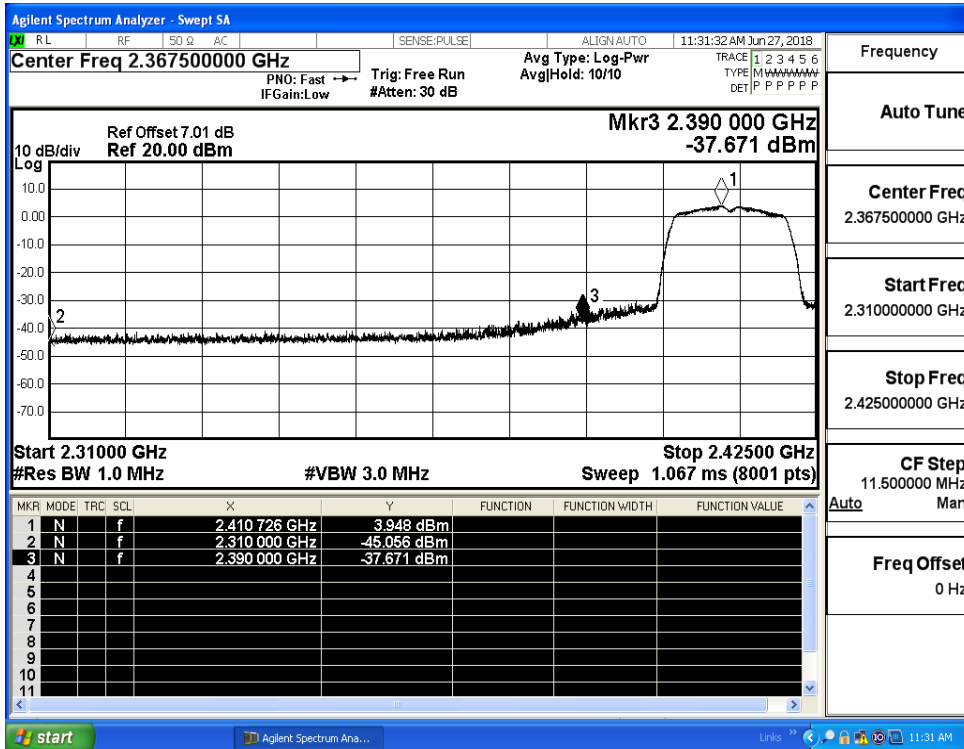
Restrict-band band-edge measurements\_11G\_2462\_Ant1\_PEAK



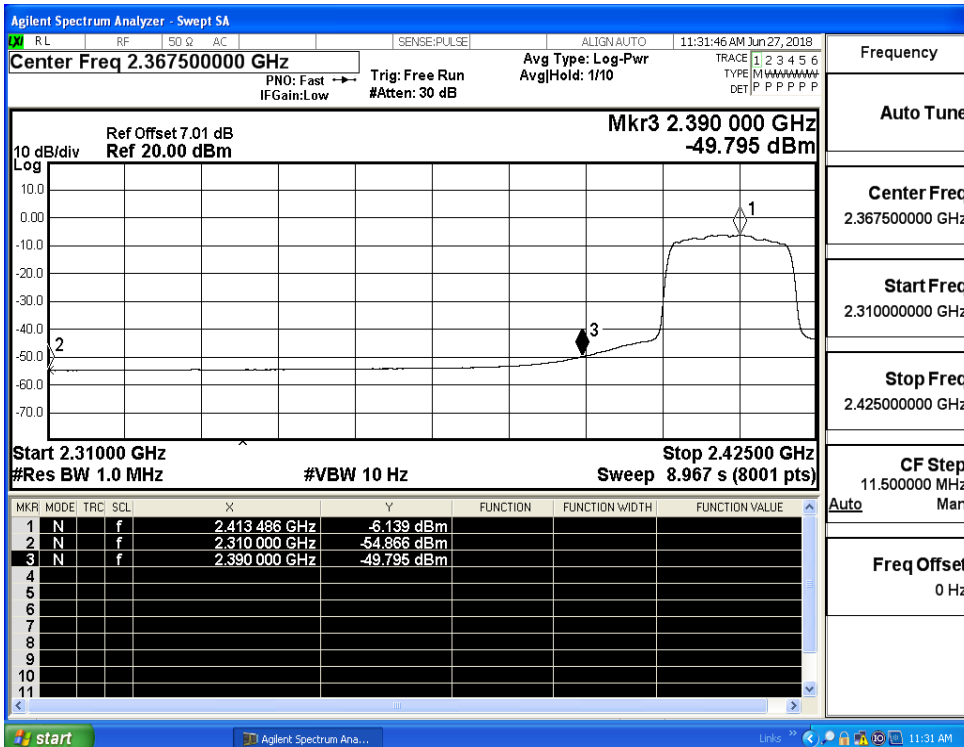
Restrict-band band-edge measurements\_11G\_2462\_Ant1\_AV



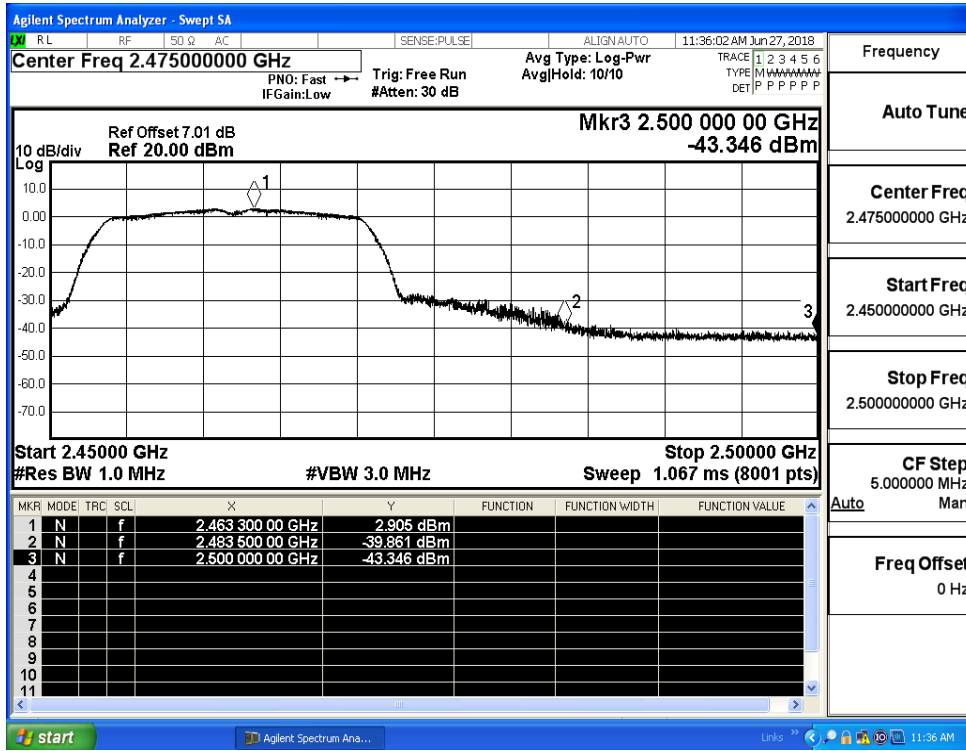
Restrict-band band-edge measurements\_11N20SISO\_2412\_Ant1\_PEAK



Restrict-band band-edge measurements\_11N20SISO\_2412\_Ant1\_AV



Restrict-band band-edge measurements\_11N20SISO\_2462\_Ant1\_PEAK



Restrict-band band-edge measurements\_11N20SISO\_2462\_Ant1\_AV

