

**Appendix A**  
**RF Test Data for 2.4G WIFI (Conducted Measurement)**  
**Product Name: Smart Power Strip**  
**Trade Mark: Nexxt Solutions**  
**Test Model: NHP-E610**

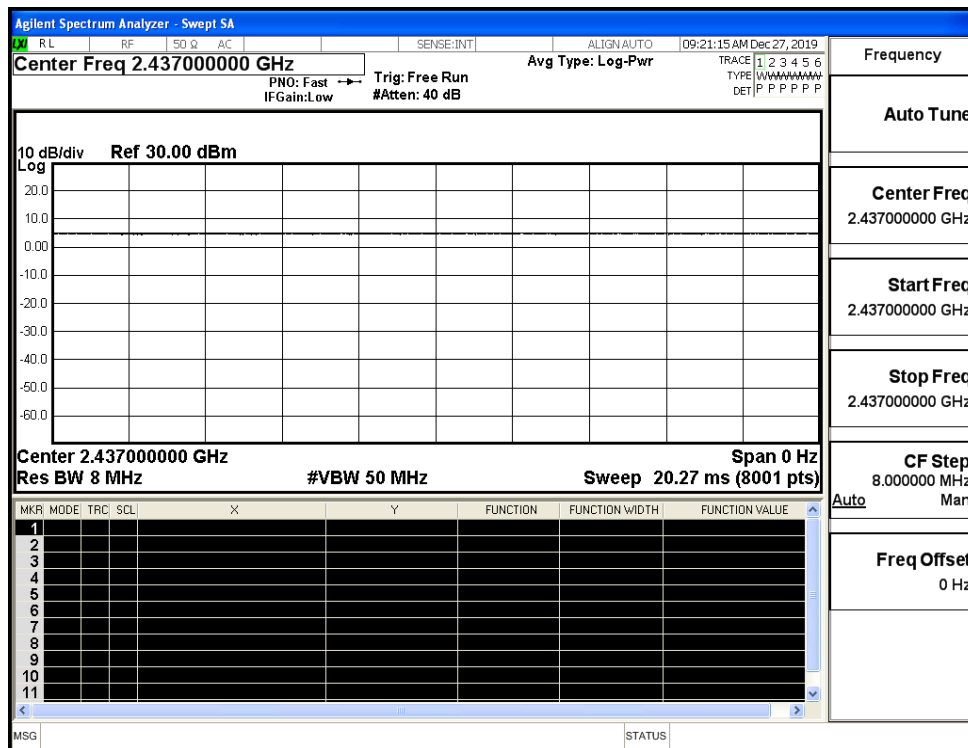
**Environmental Conditions**

Temperature:	24.3 ° C
Relative Humidity:	53.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Alisa Huang
Supervised by:	Wang Chuang

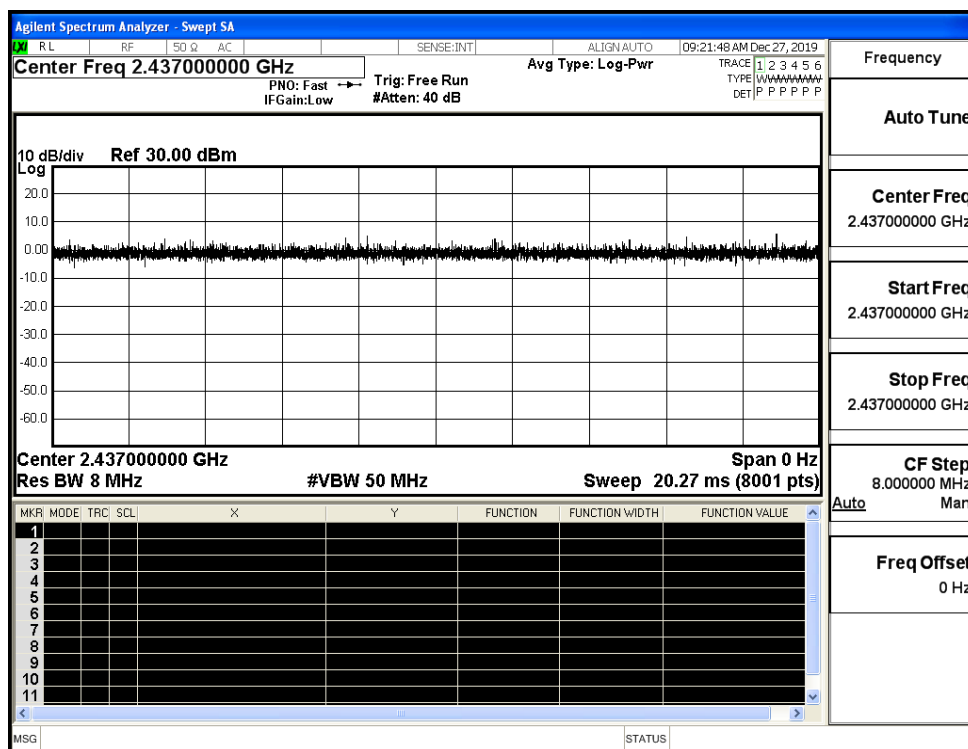
**A.1 Duty Cycle**

Test Mode	Test Channel	Ant	Duty Cycle[%]	Verdict
11B	2437	Ant1	100	PASS
11G	2437	Ant1	100	PASS
11N20SISO	2437	Ant1	100	PASS
11N40SISO	2437	Ant1	100	PASS

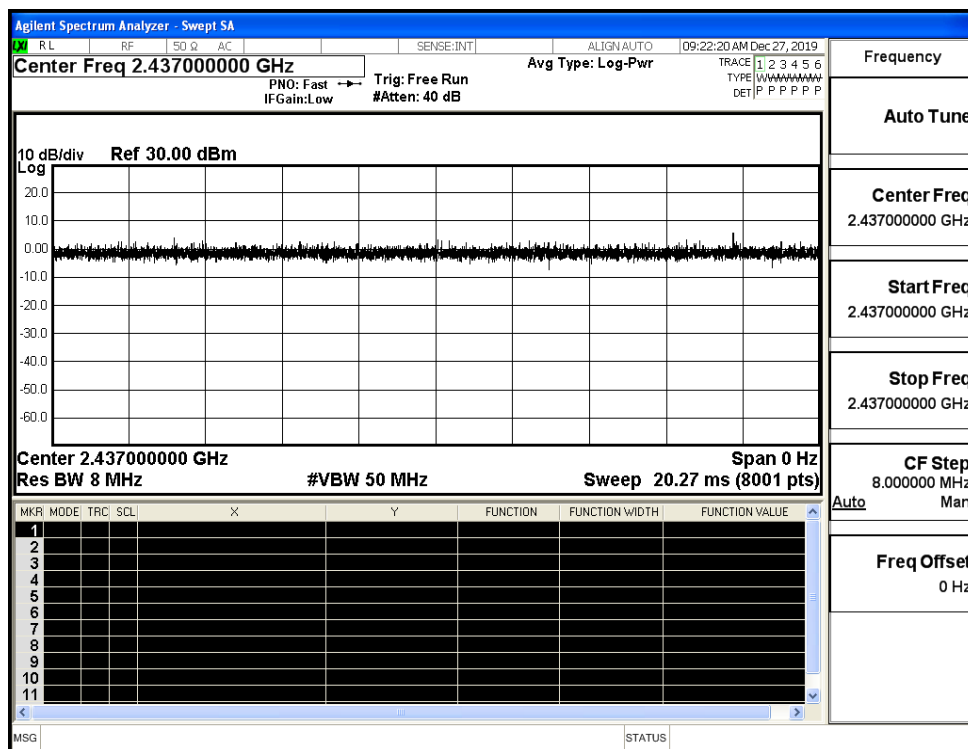
## Duty Cycle\_11B\_2437\_Ant1



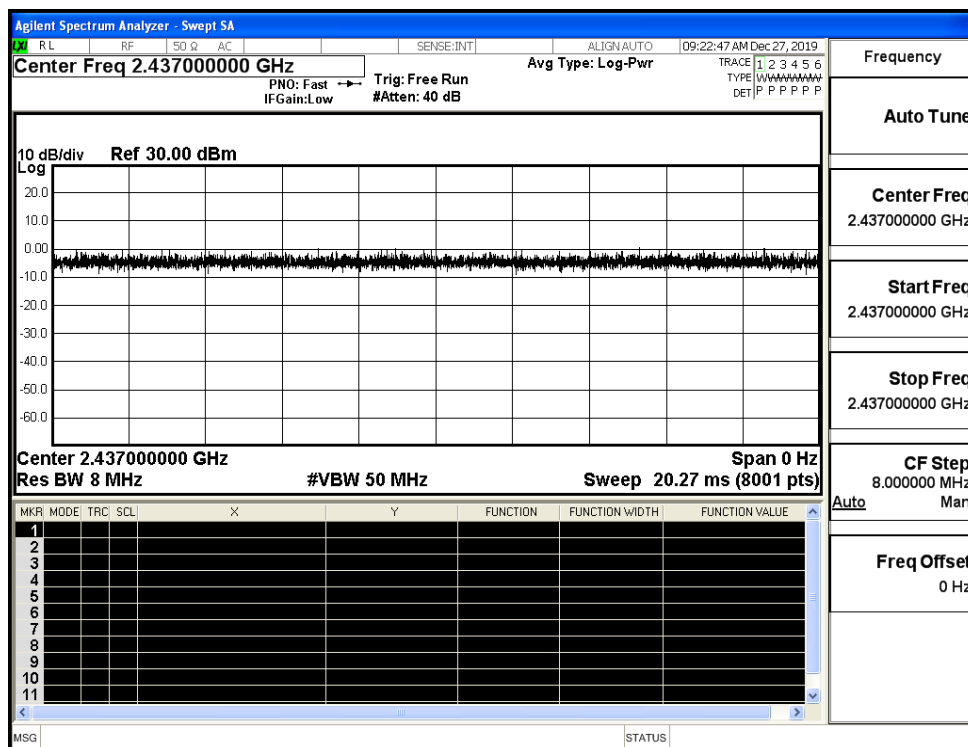
## Duty Cycle\_11G\_2437\_Ant1



## Duty Cycle\_11N20SISO\_2437\_Ant1



## Duty Cycle\_11N40SISO\_2437\_Ant1



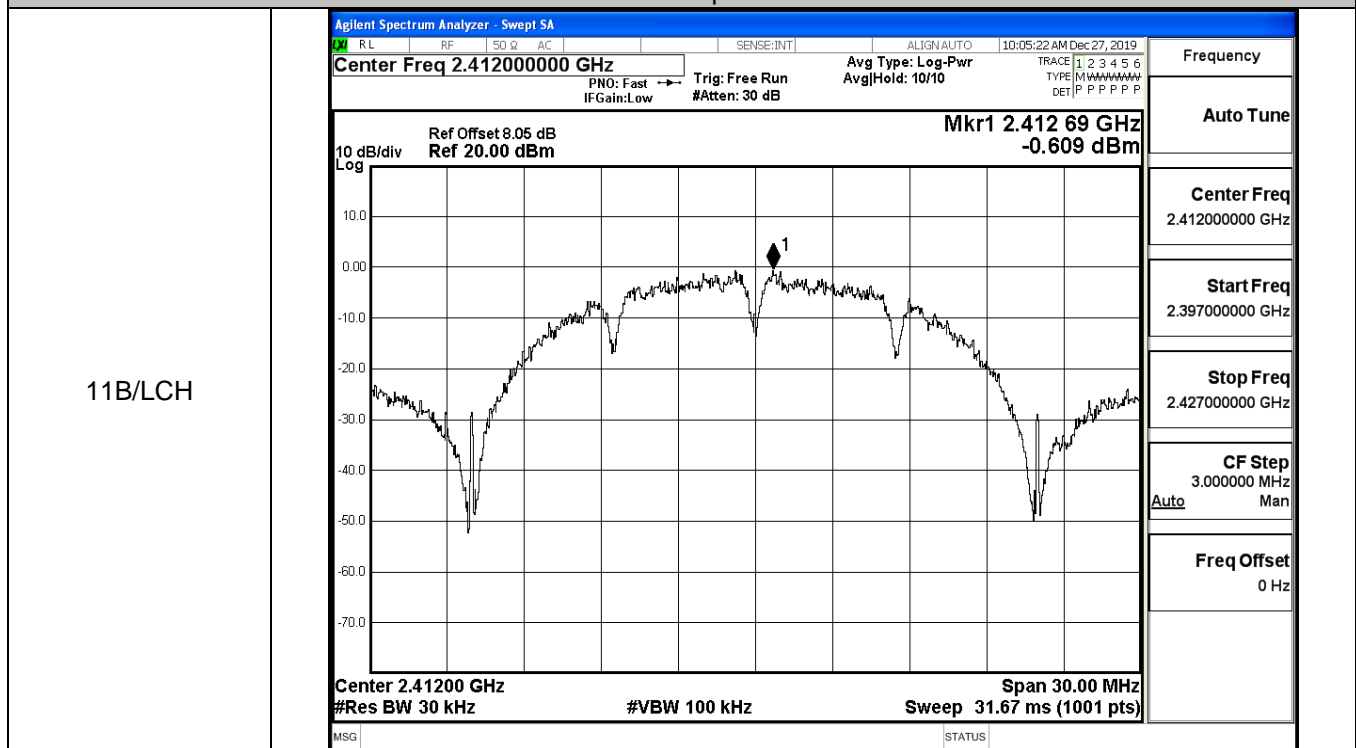
**A.2 Maximum Conducted Output Power**

Mode	Channel	Meas.Level [dBm]	Limit [dBm]	Verdict
11B	LCH	16.63	30	PASS
	MCH	16.61	30	PASS
	HCH	16.00	30	PASS
11G	LCH	14.85	30	PASS
	MCH	14.36	30	PASS
	HCH	15.05	30	PASS
11N20SISO	LCH	16.13	30	PASS
	MCH	15.56	30	PASS
	HCH	15.00	30	PASS
11N40SISO	LCH	16.25	30	PASS
	MCH	15.88	30	PASS
	HCH	15.30	30	PASS

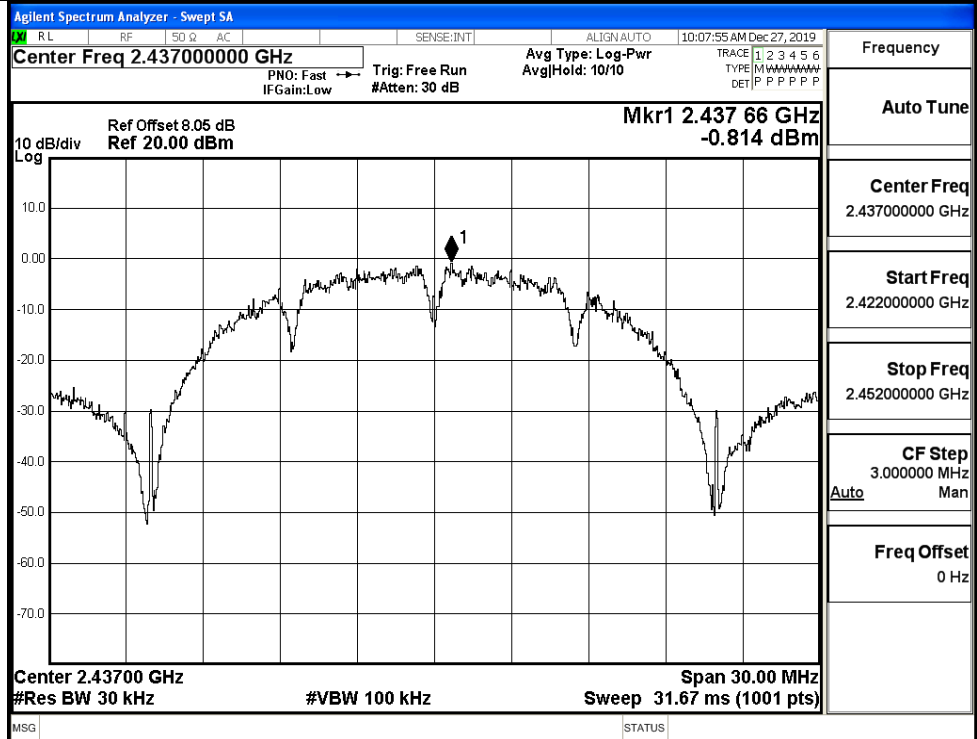
### A.3 Maximum Power Spectral Density

Mode	Channel	Meas.Level [dBm/30KHz]	Limit [dBm/3KHz]	Verdict
11B	LCH	-0.609	8	PASS
	MCH	-0.814	8	PASS
	HCH	-1.500	8	PASS
11G	LCH	-9.189	8	PASS
	MCH	-9.902	8	PASS
	HCH	-8.985	8	PASS
11N20SISO	LCH	-7.796	8	PASS
	MCH	-8.271	8	PASS
	HCH	-9.194	8	PASS
11N40SISO	LCH	-11.148	8	PASS
	MCH	-11.466	8	PASS
	HCH	-11.729	8	PASS

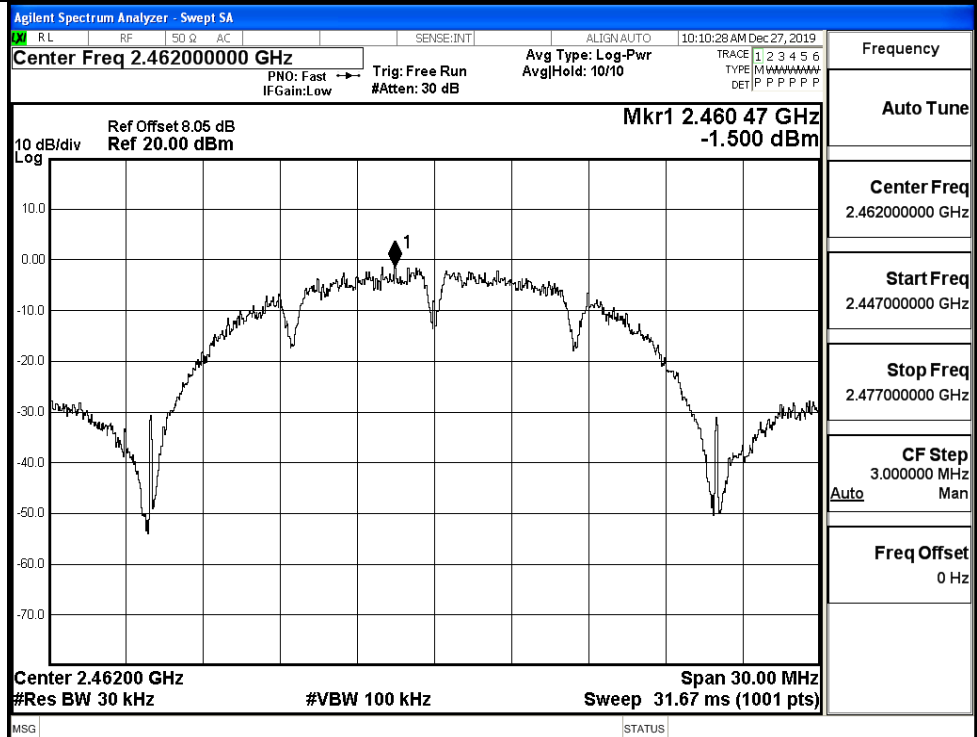
#### Test Graphs



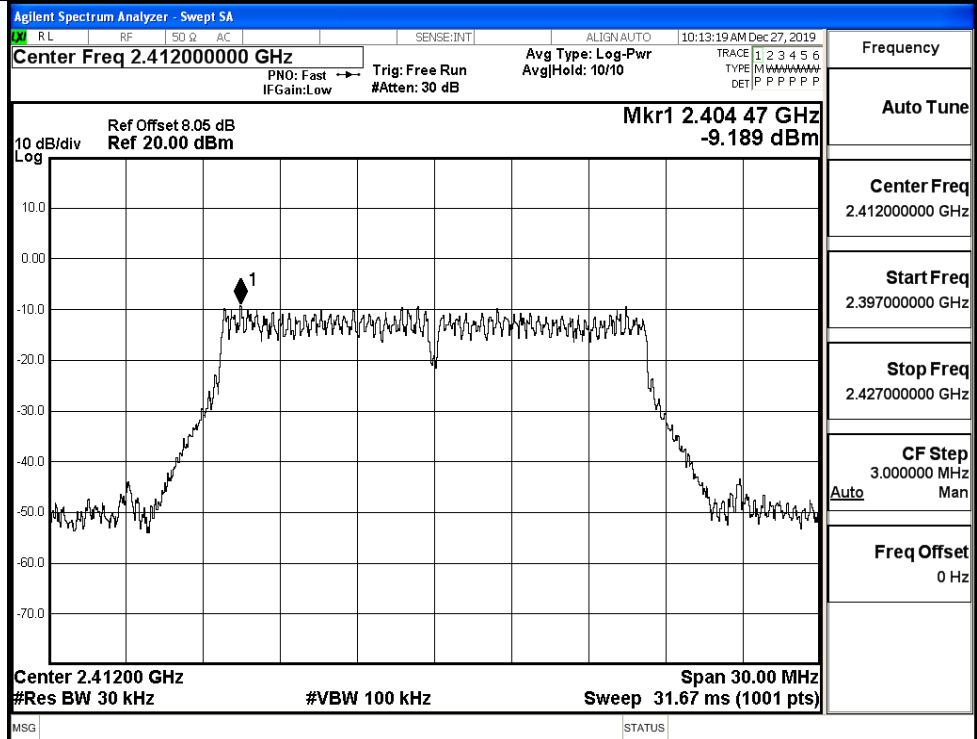
11B/MCH



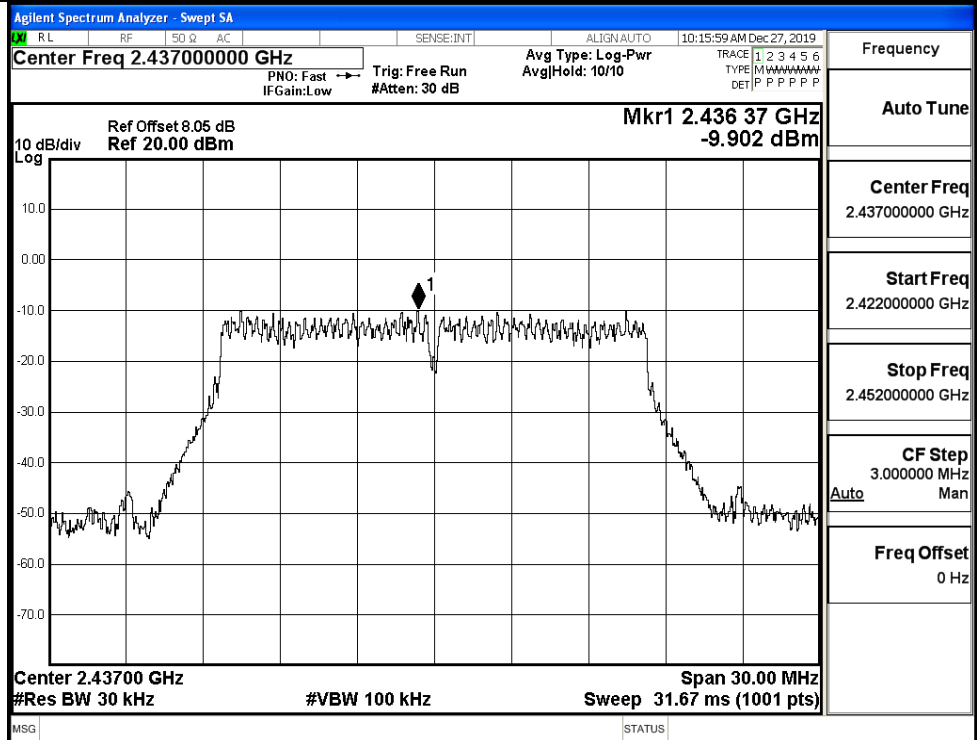
11B/HCH



11G/LCH



11G/MCH

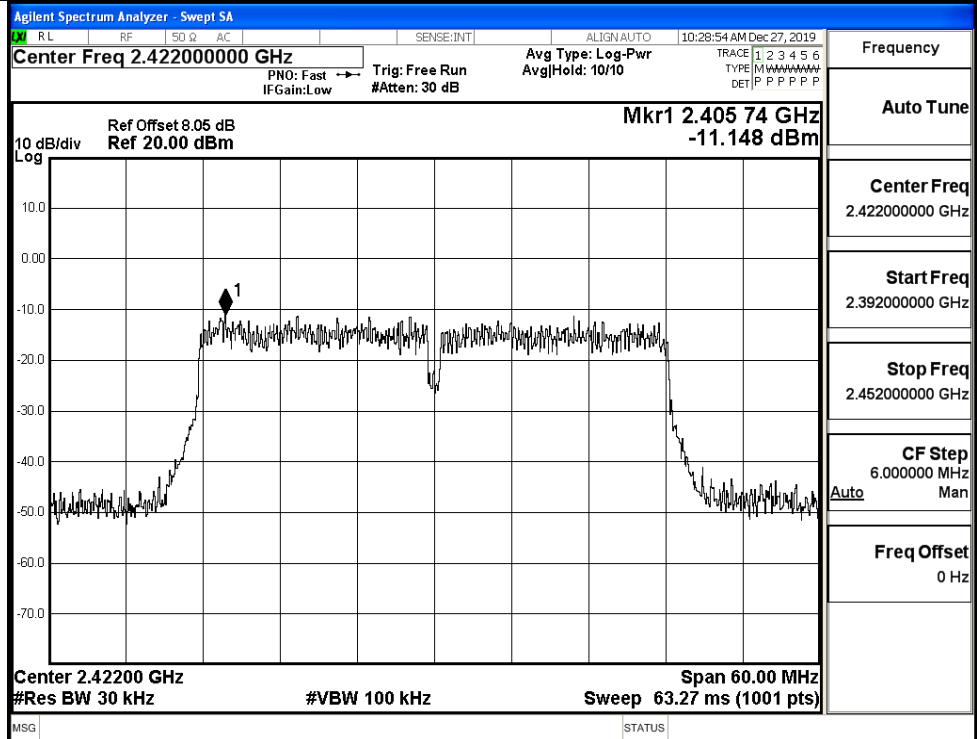


Page 8 of 46

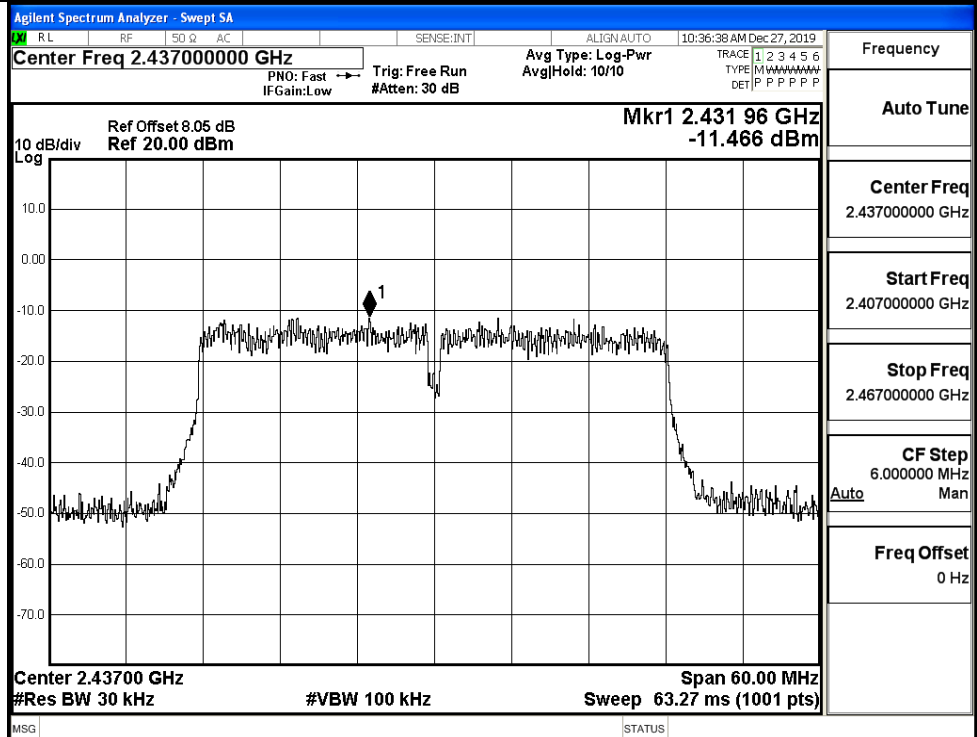


Page 9 of 46

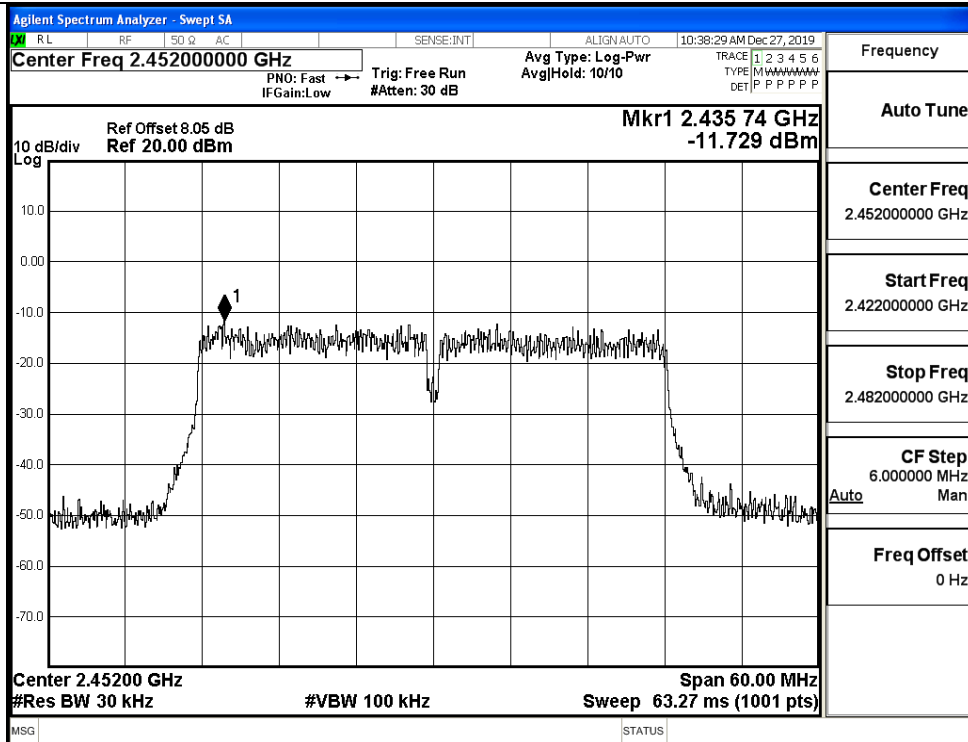
11N40SISO/LCH



11N40SISO/MCH



11N40SISO/HCH

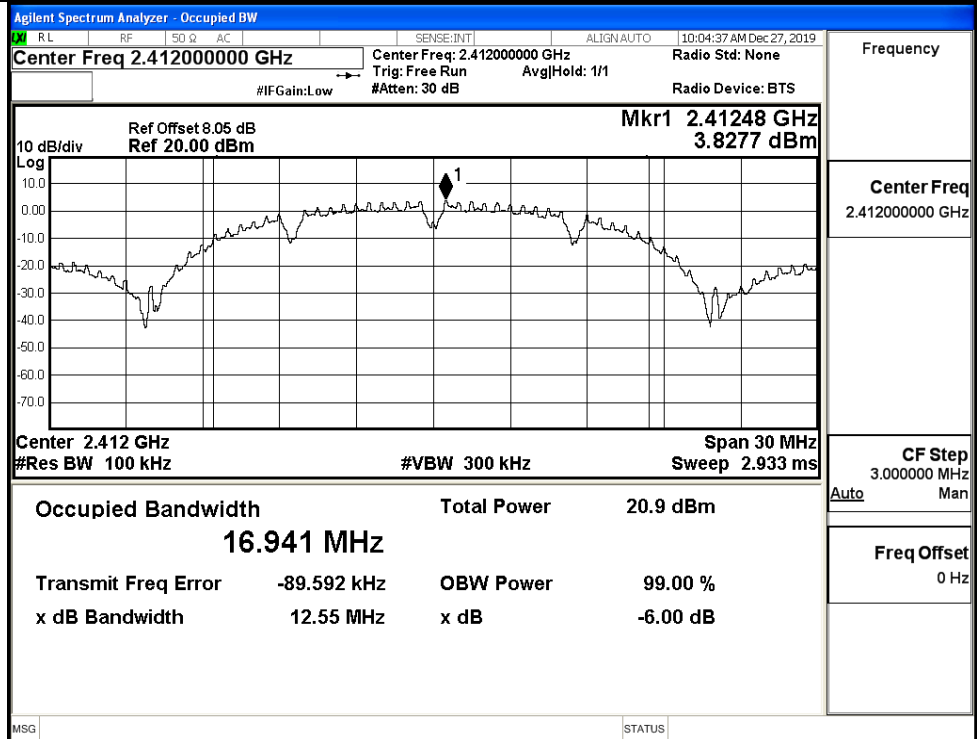


## A.4 6dB Bandwidth

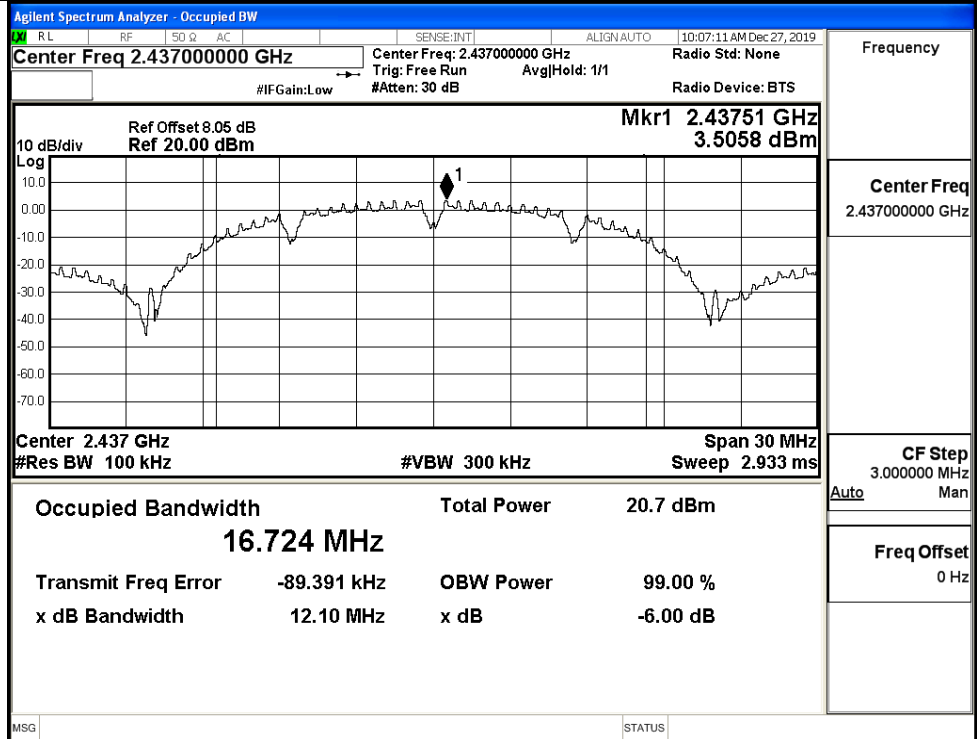
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
11B	LCH	12.55	$\geq 0.5$	PASS
	MCH	12.10	$\geq 0.5$	PASS
	HCH	11.60	$\geq 0.5$	PASS
11G	LCH	16.37	$\geq 0.5$	PASS
	MCH	16.38	$\geq 0.5$	PASS
	HCH	16.38	$\geq 0.5$	PASS
11N20SISO	LCH	17.07	$\geq 0.5$	PASS
	MCH	17.14	$\geq 0.5$	PASS
	HCH	17.02	$\geq 0.5$	PASS
11N40SISO	LCH	35.58	$\geq 0.5$	PASS
	MCH	35.74	$\geq 0.5$	PASS
	HCH	35.60	$\geq 0.5$	PASS

## Test Graphs

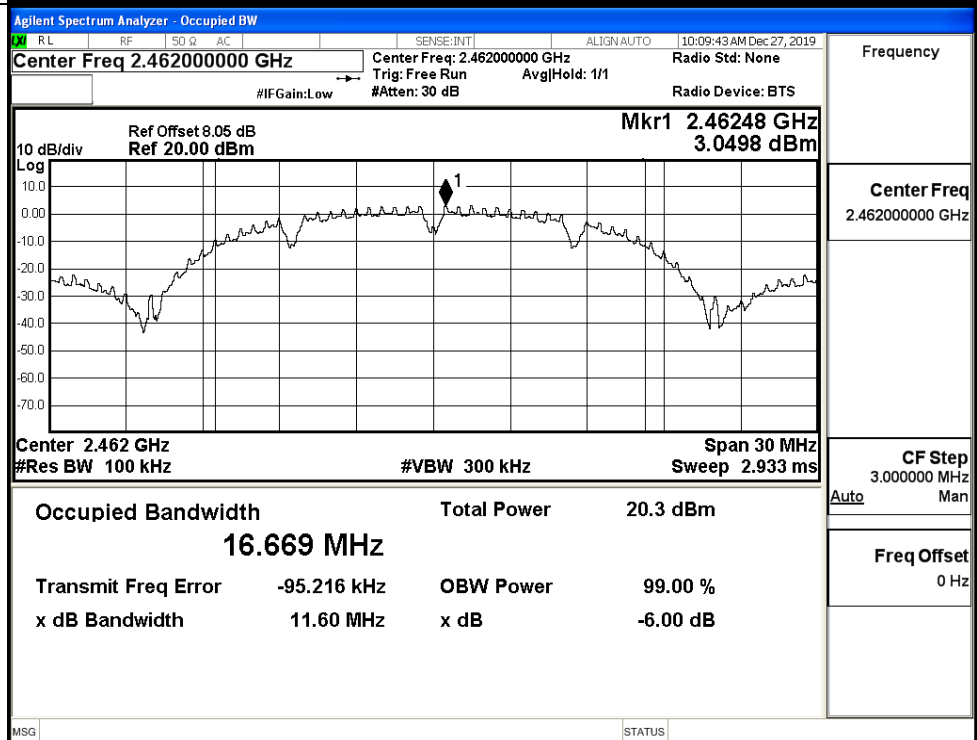
11B/LCH



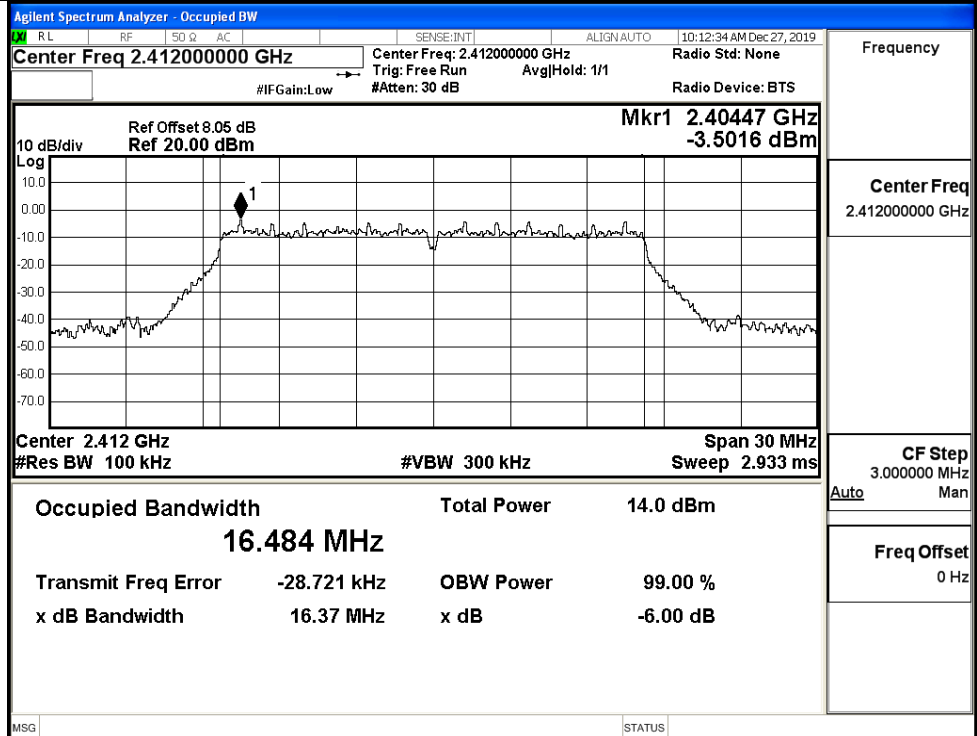
11B/MCH



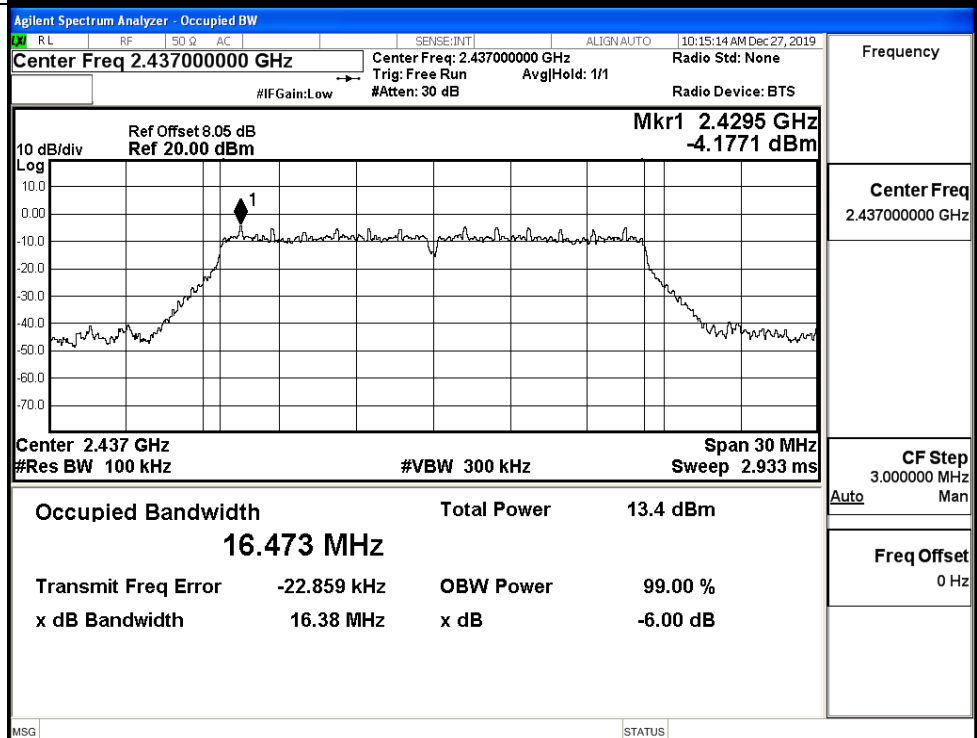
11B/HCH



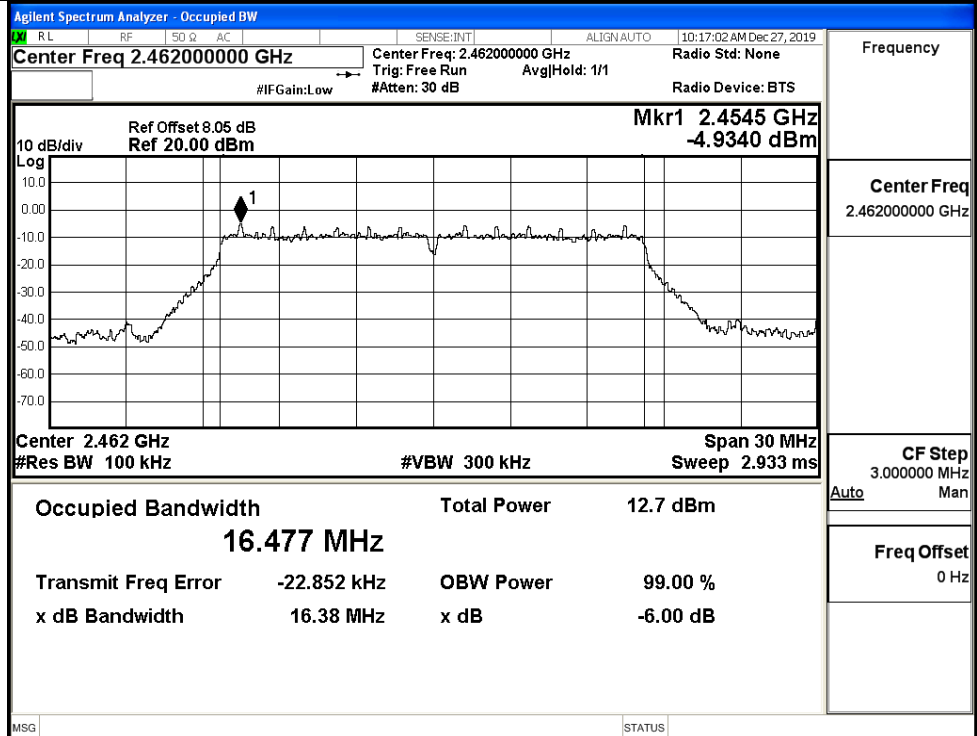
11G/LCH



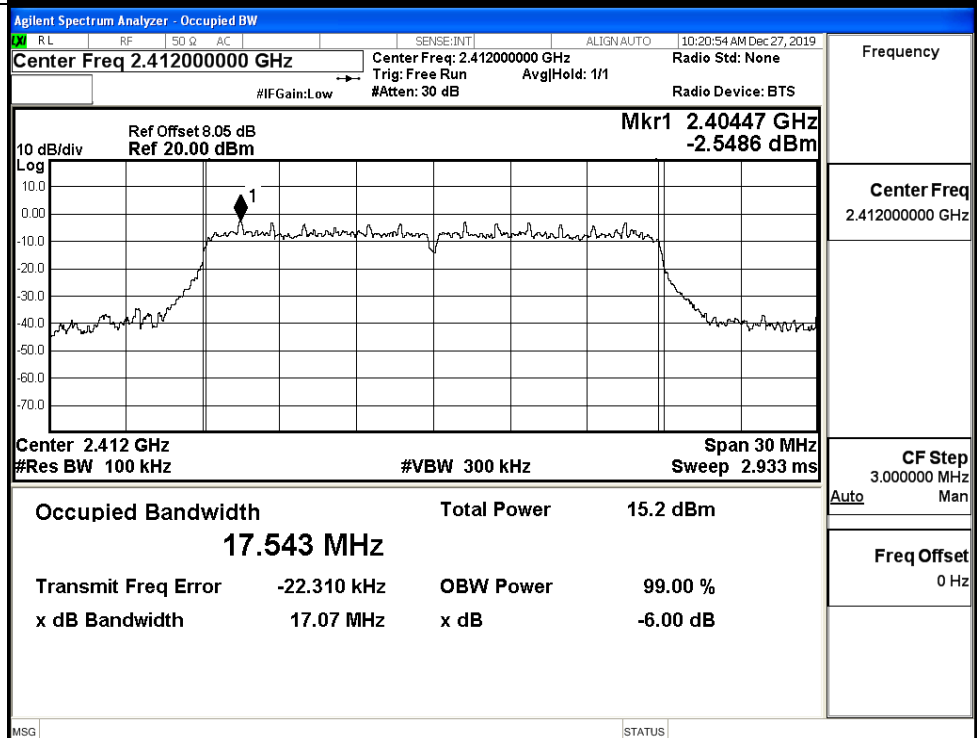
11G/MCH



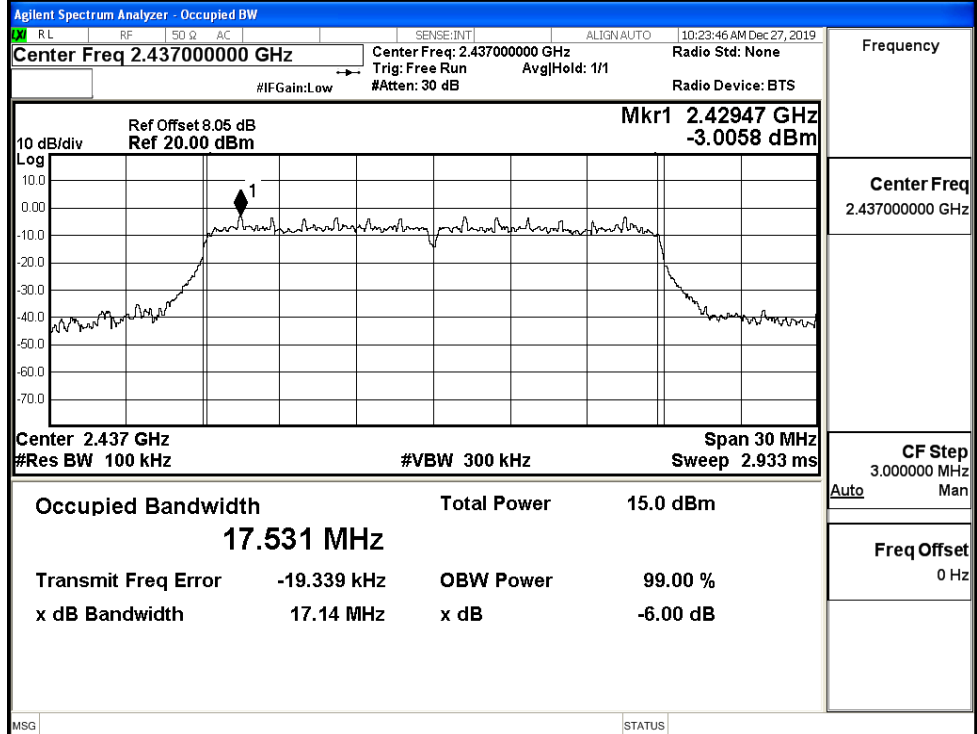
11G/HCH



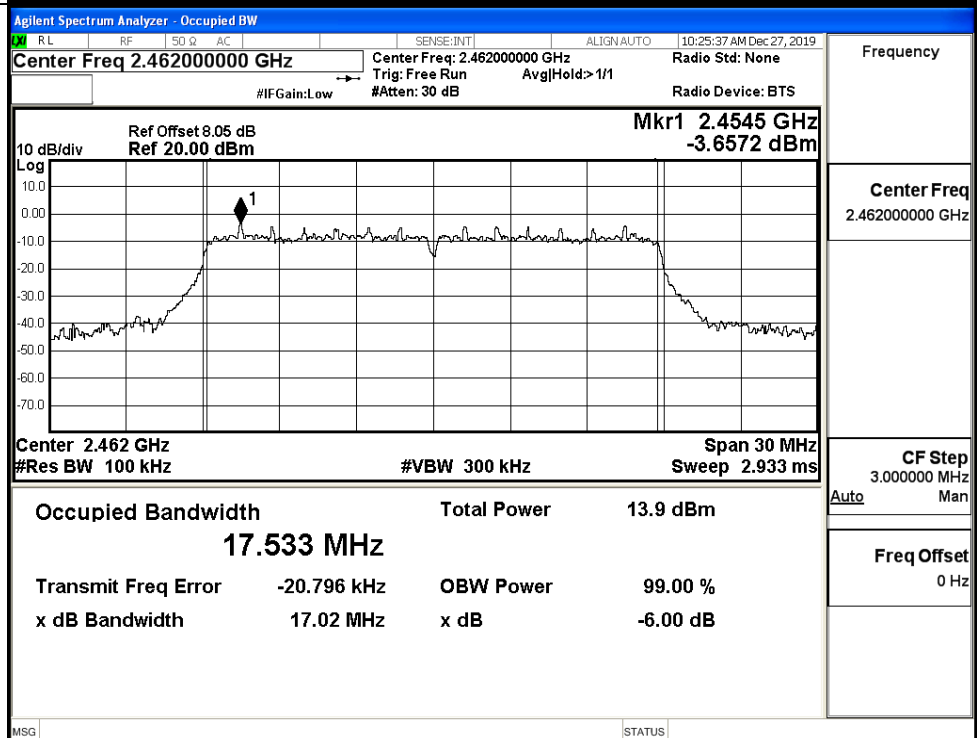
11N20SISO/LCH



11N20SISO/MCH

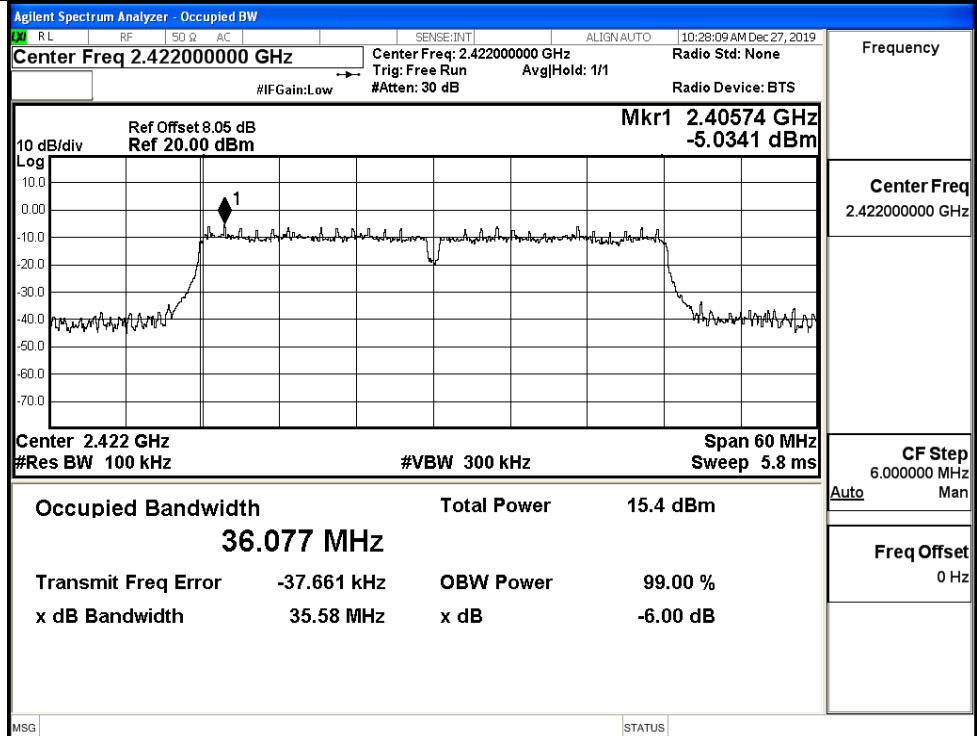


11N20SISO/HCH

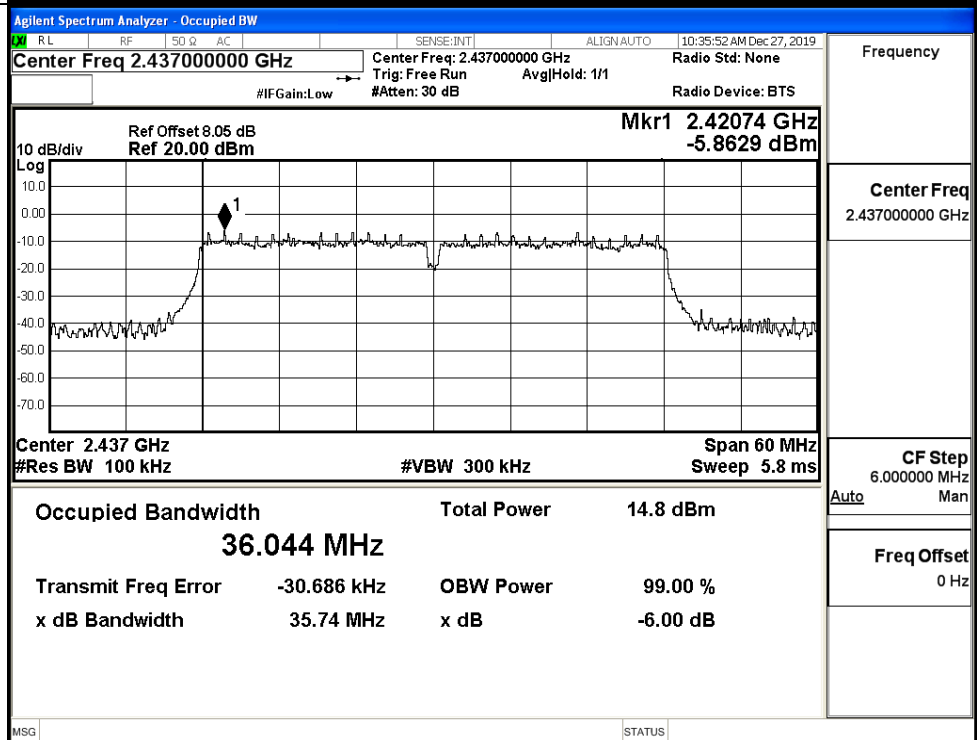




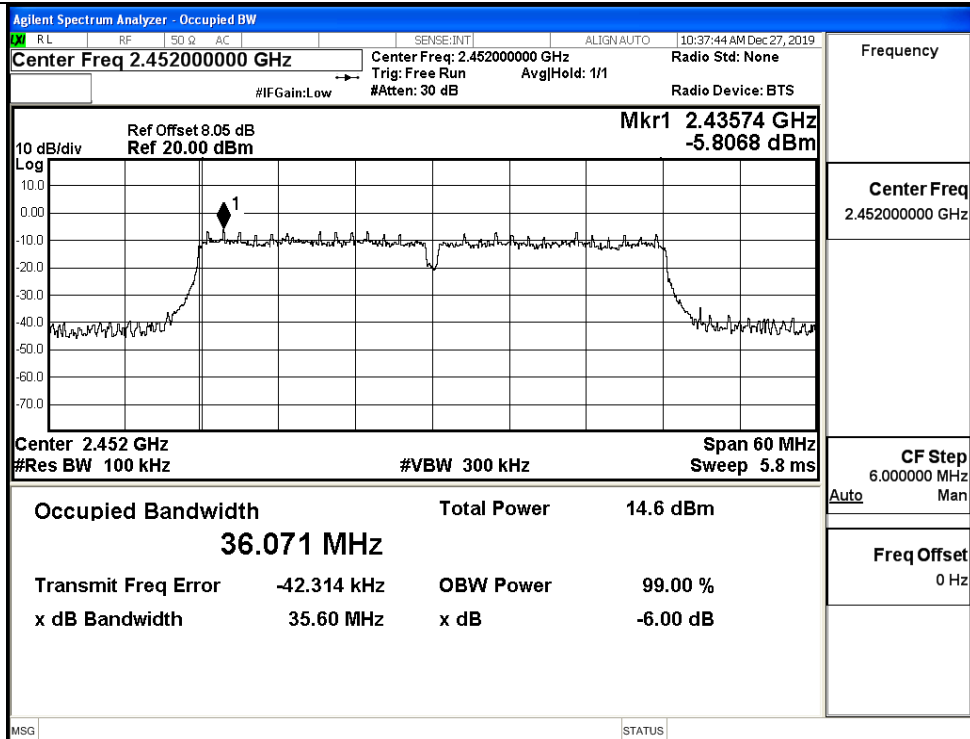
11N40SISO/LCH



11N40SISO/MCH



11N40SISO/HCH

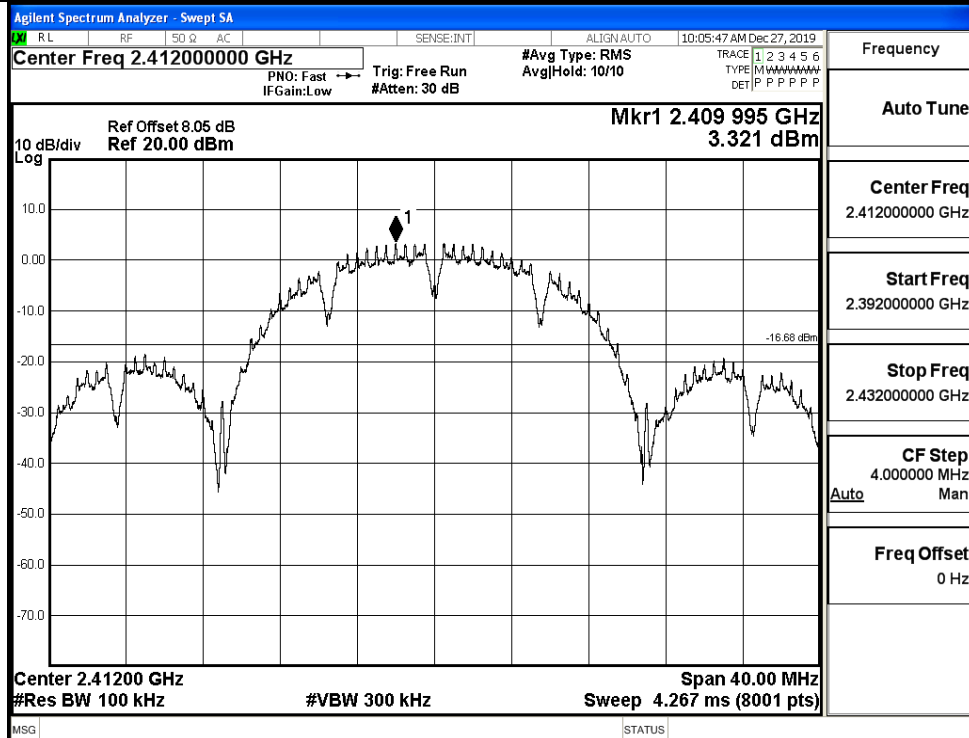


## A.5 RF Conducted Spurious Emissions

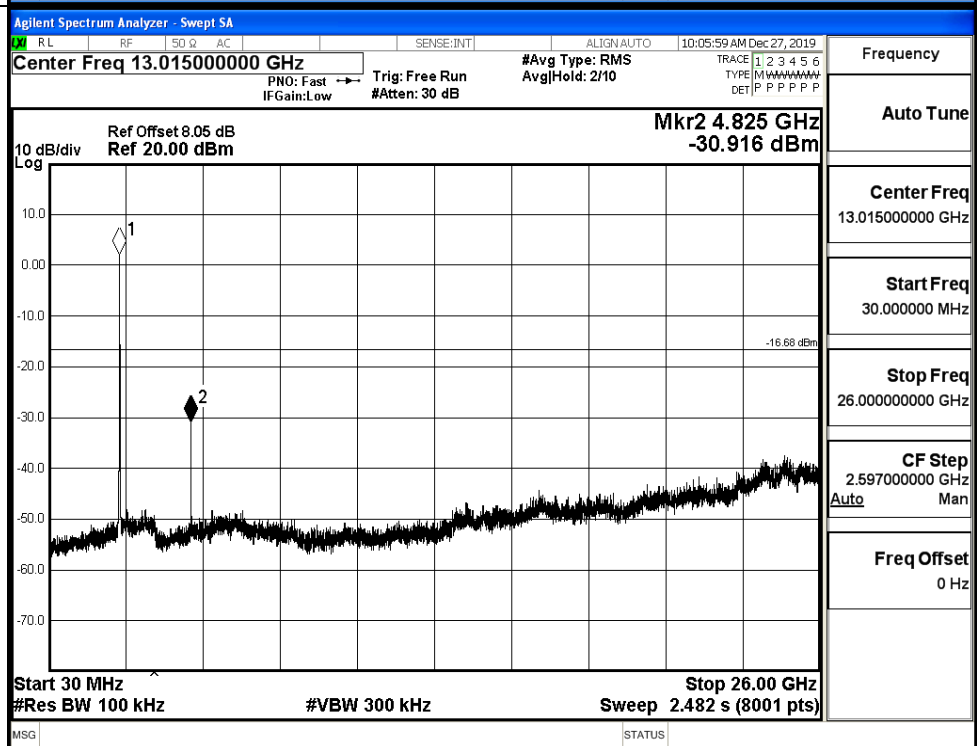
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
11B	LCH	3.321	-30.916	-16.679	PASS
	MCH	3.56	-31.296	-16.440	PASS
	HCH	2.979	-31.488	-17.021	PASS
11G	LCH	-4.097	-37.984	-24.097	PASS
	MCH	-4.429	-38.120	-24.429	PASS
	HCH	-3.912	-37.303	-23.912	PASS
11N20 SISO	LCH	-2.25	-38.551	-22.250	PASS
	MCH	-2.896	-38.429	-22.896	PASS
	HCH	-4.262	-37.734	-24.262	PASS
11N40 SISO	LCH	-5.318	-37.838	-25.318	PASS
	MCH	-5.745	-37.471	-25.745	PASS
	HCH	-6.068	-38.050	-26.068	PASS

## 11B\_LCH\_Graphs

Pref/11B/LCH

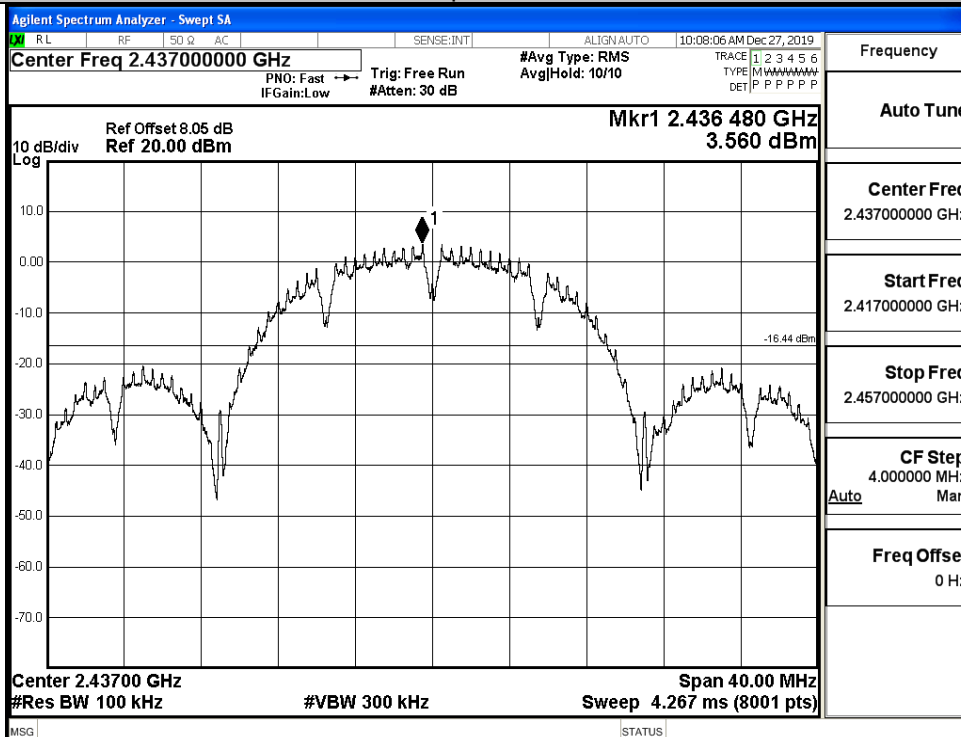


Puw/11B/LCH

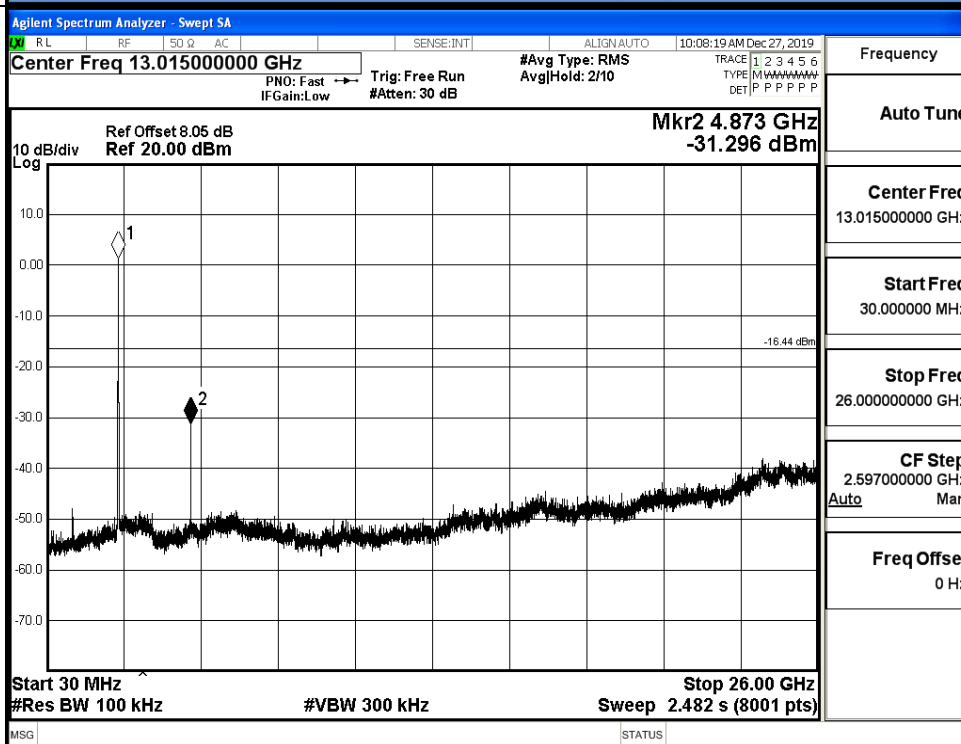


## 11B\_MCH\_Graphs

Pref/11B/MCH

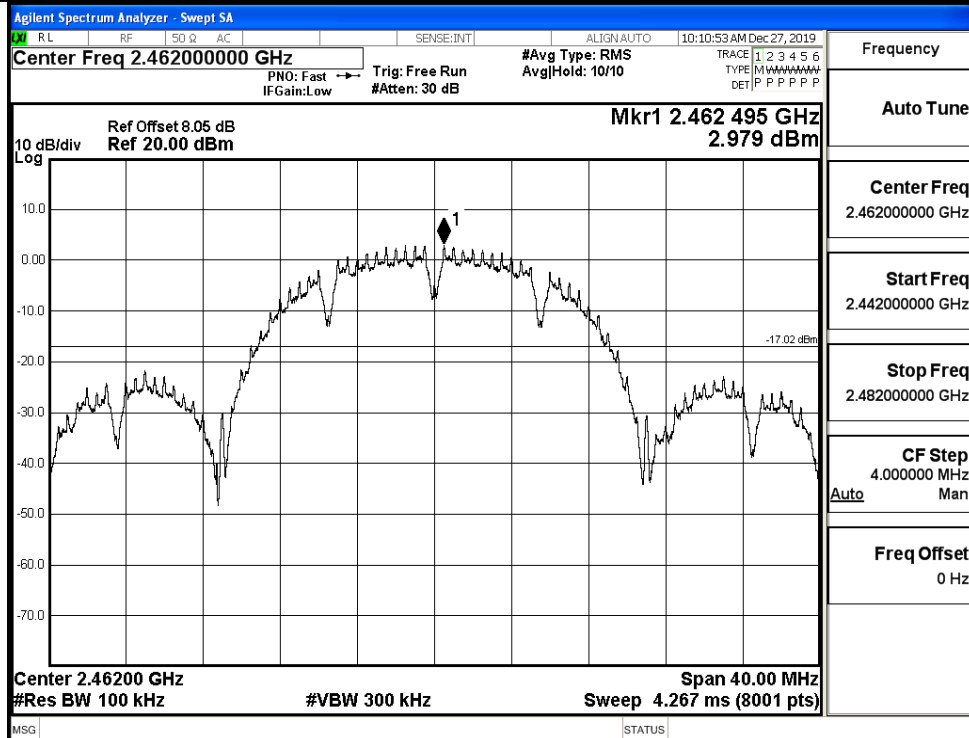


Puw/11B/MCH

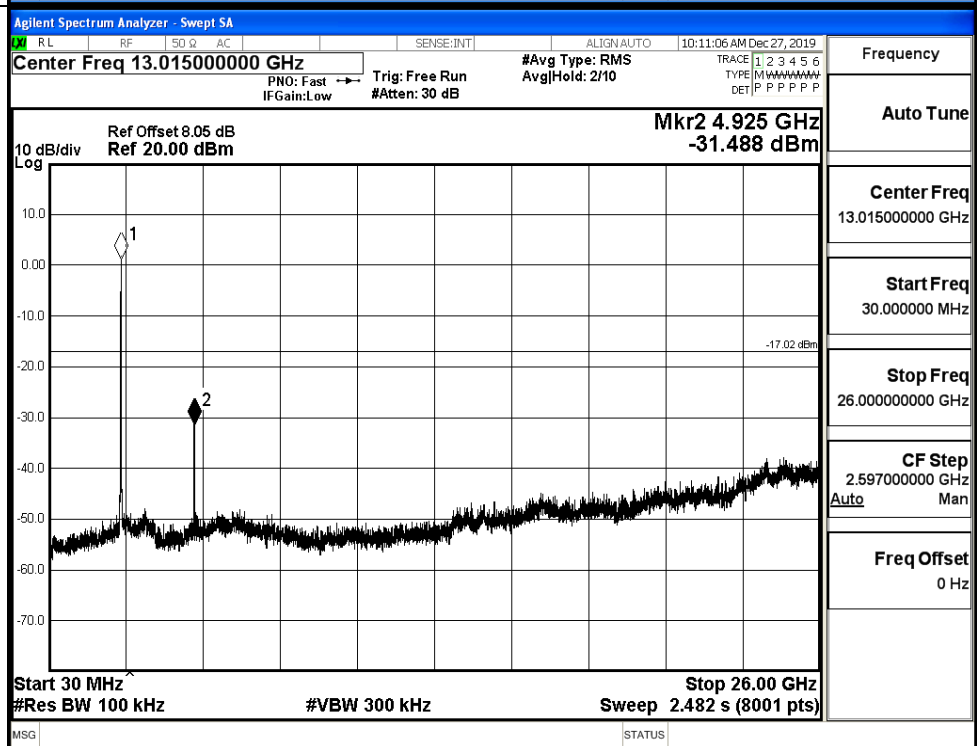


## 11B\_HCH\_Graphs

Pref/11B/HCH

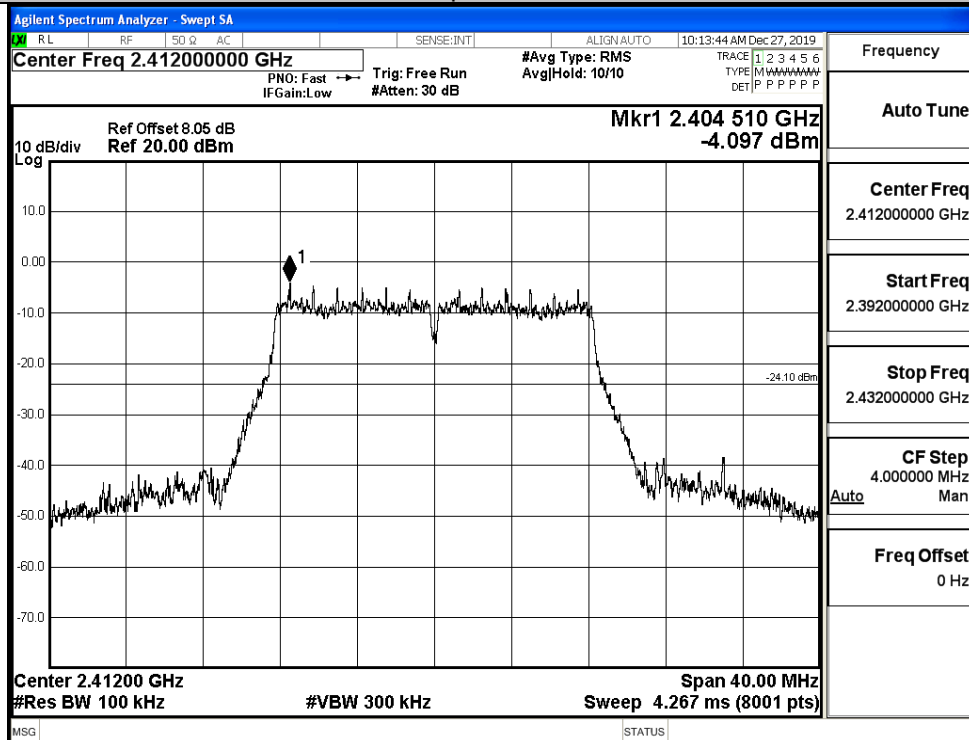


Puw/11B/HCH

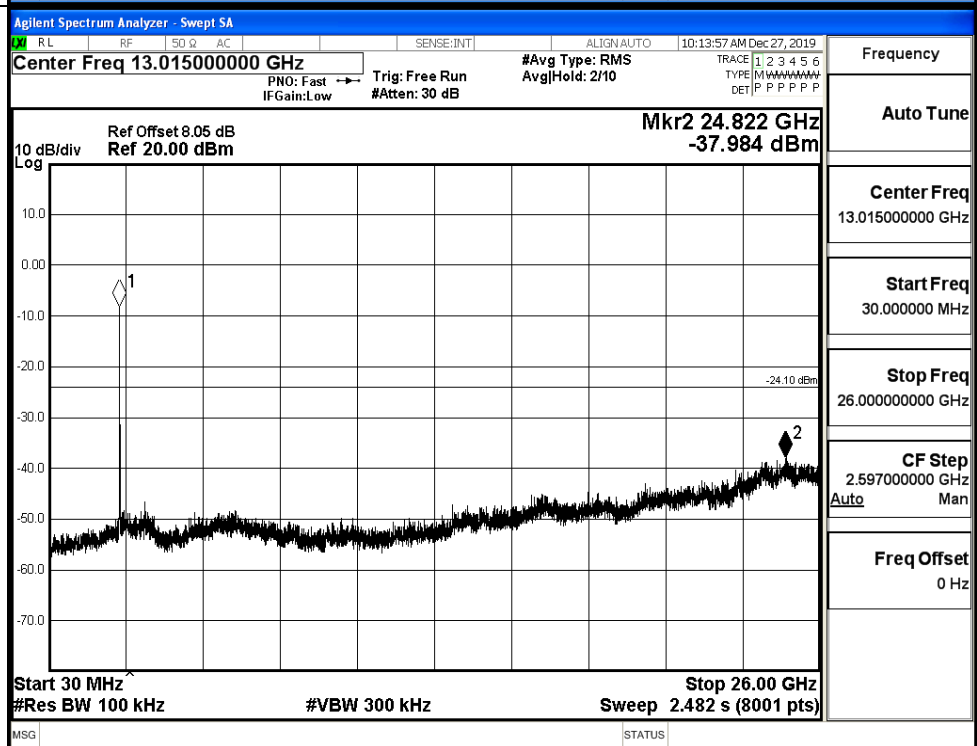


## 11G\_LCH\_Graphs

Pref/11G/LCH

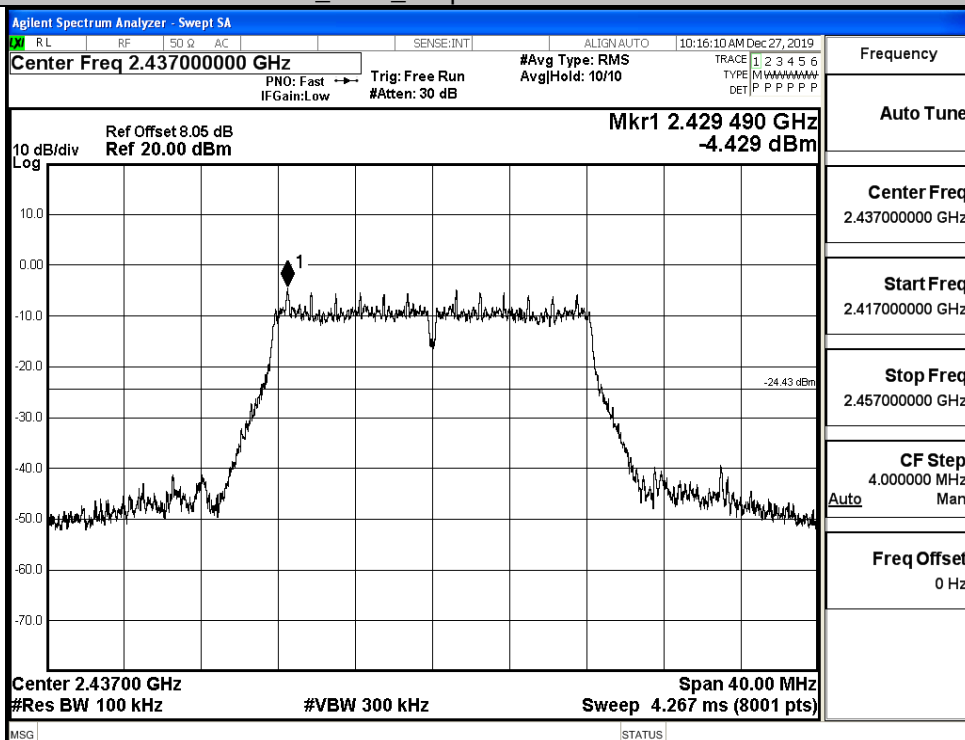


Puw/11G/LCH

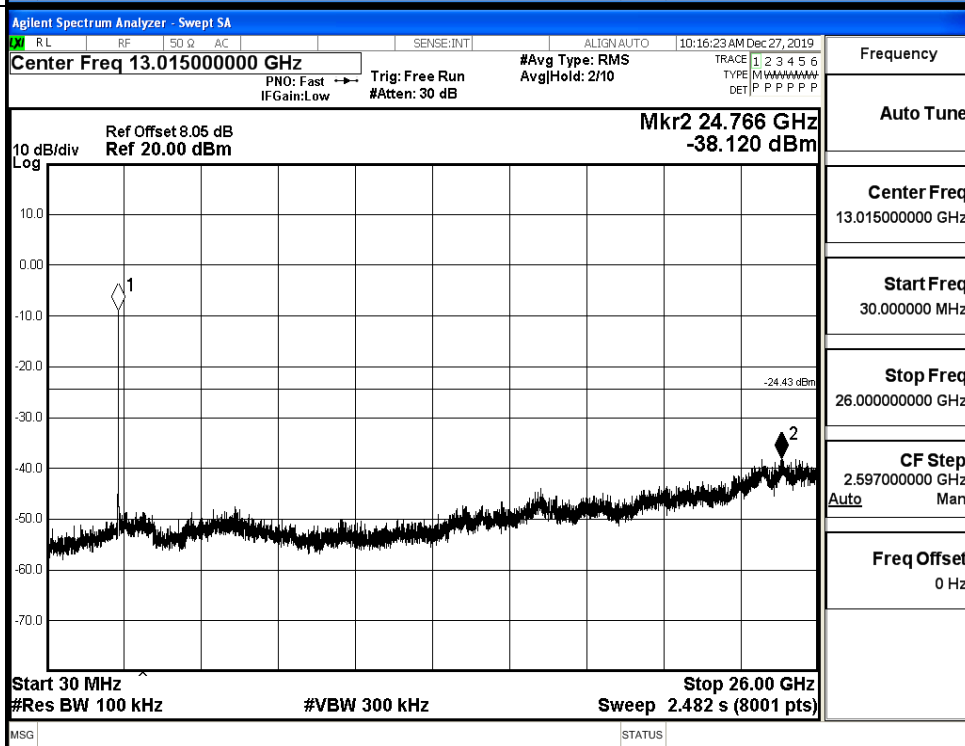


## 11G\_MCH\_Graphs

Pref/11G/MCH



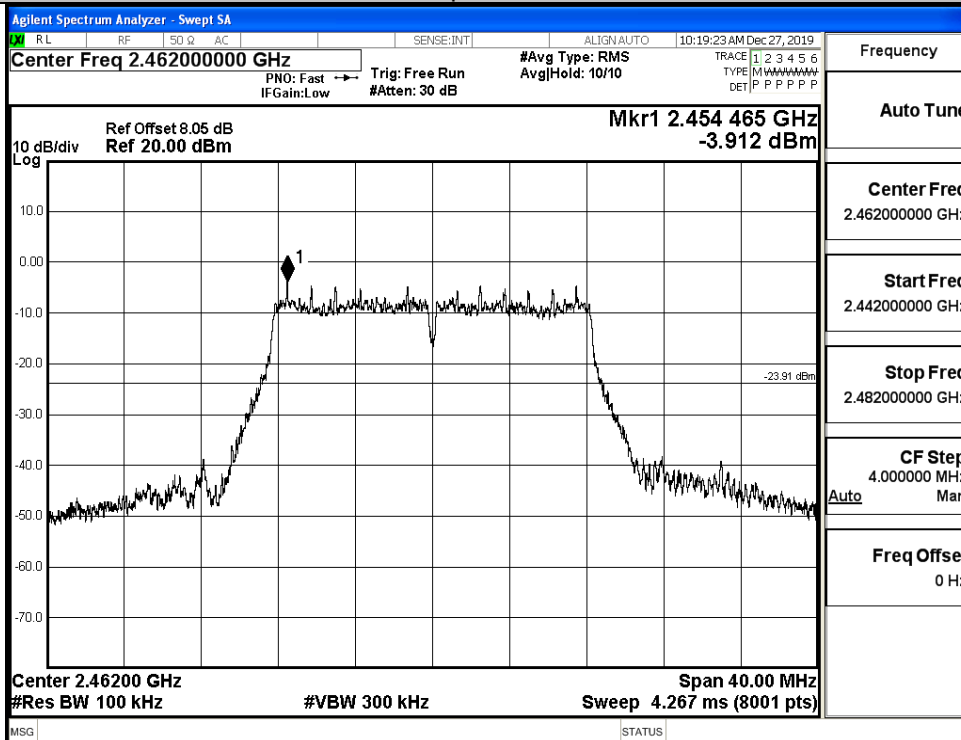
Puw/11G/MCH



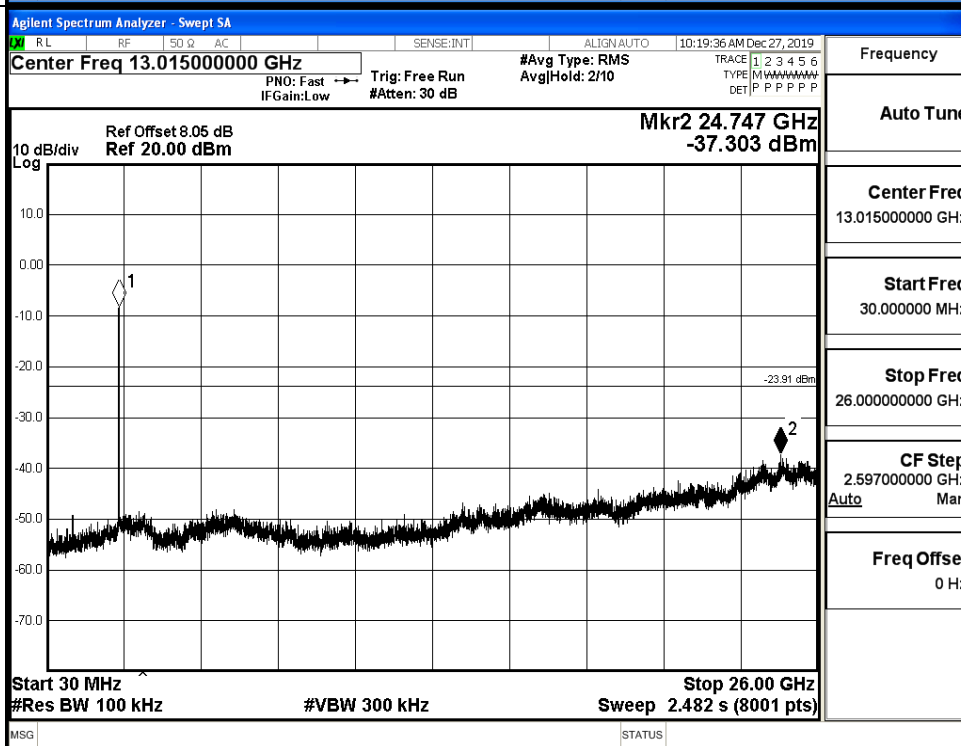


## 11G\_HCH\_Graphs

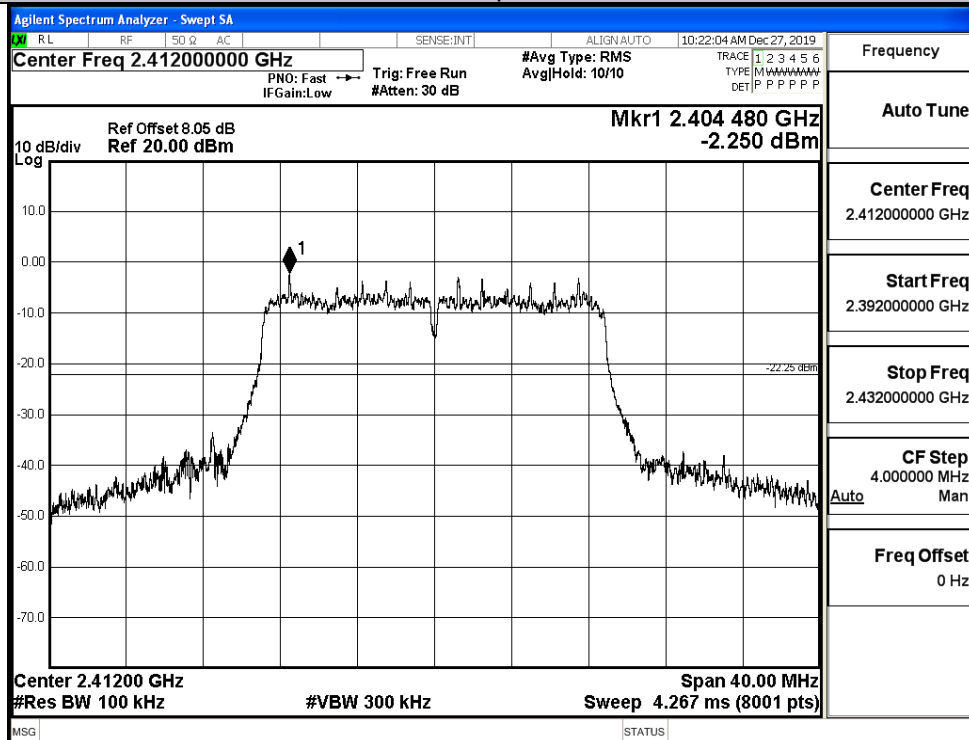
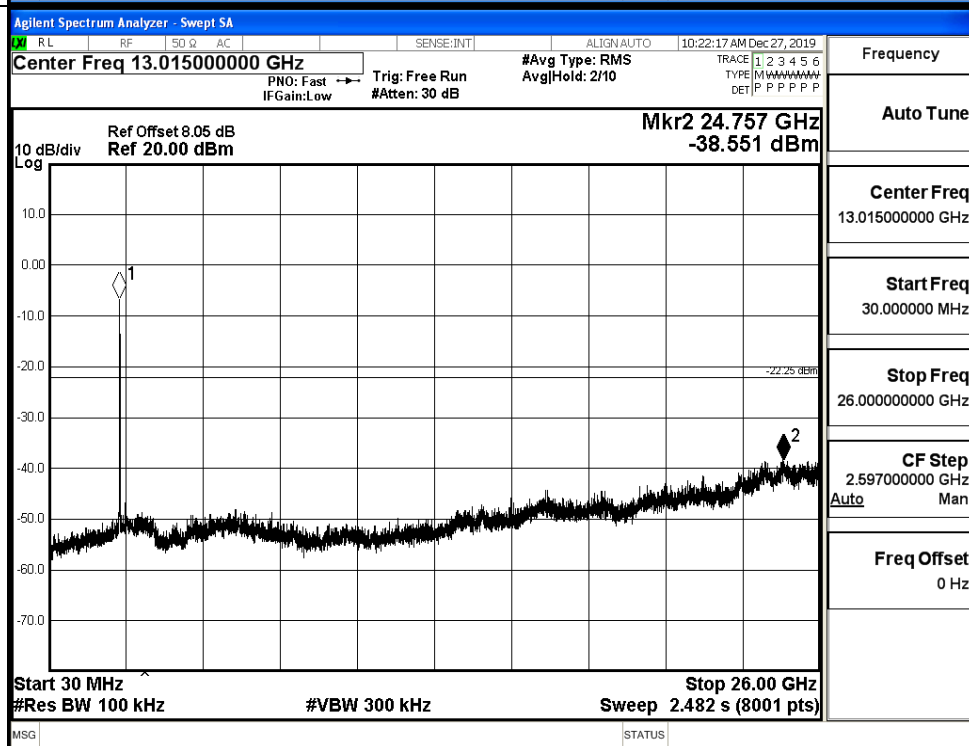
Pref/11G/HCH



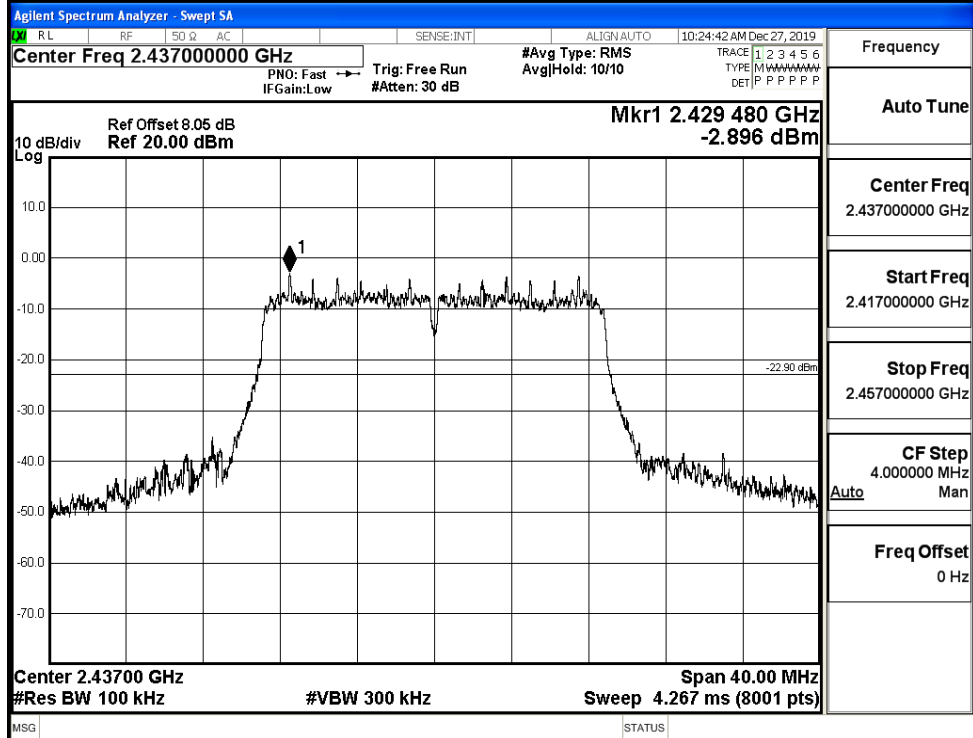
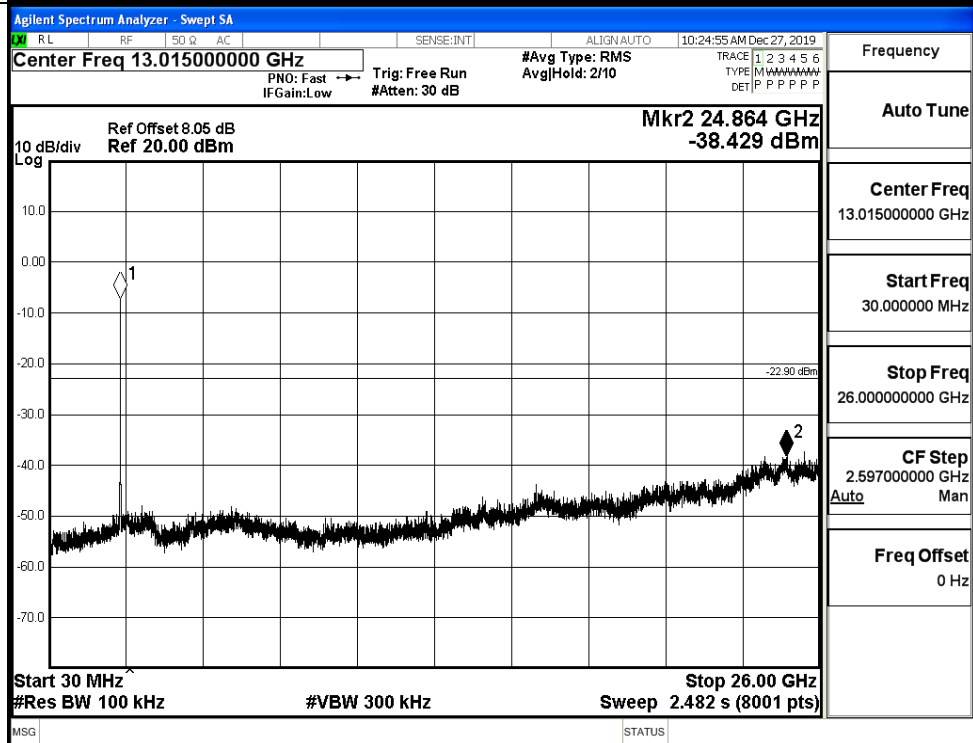
Puw/11G/HCH



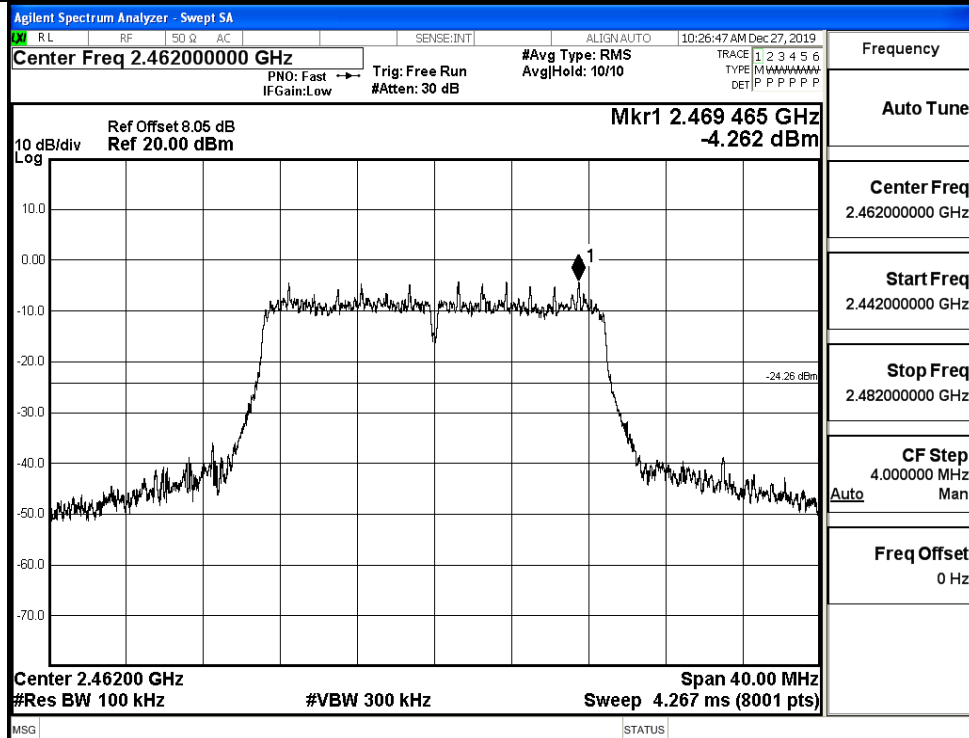
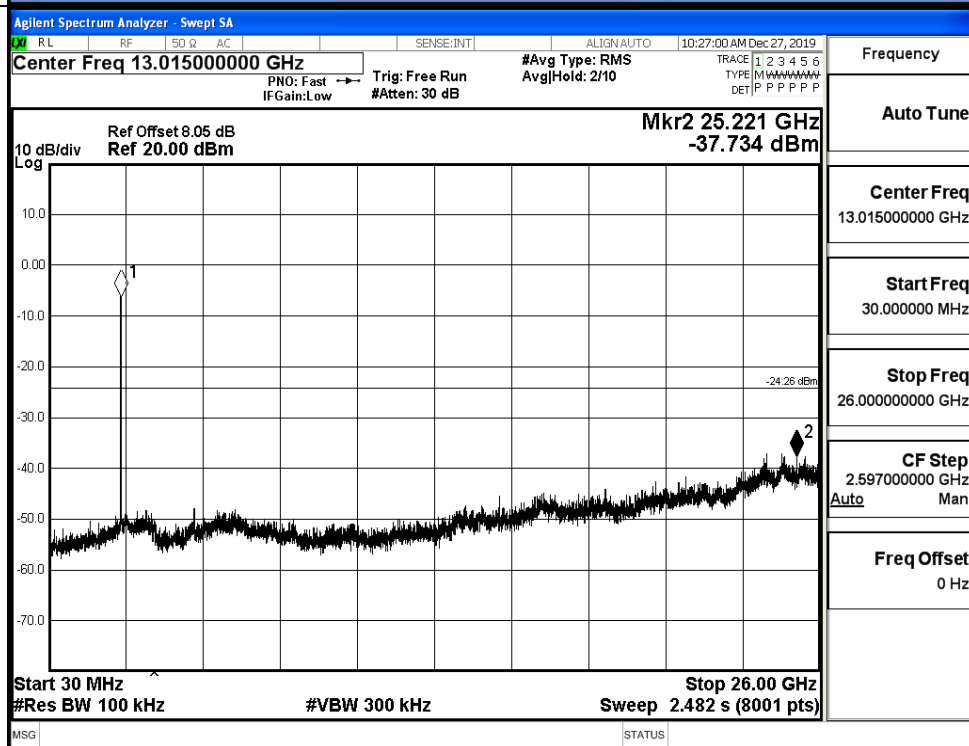
## 11N20ISO\_LCH\_Graphs

Pref/11N20SIS  
O/LCHPuw/11N20  
SISO/LCH

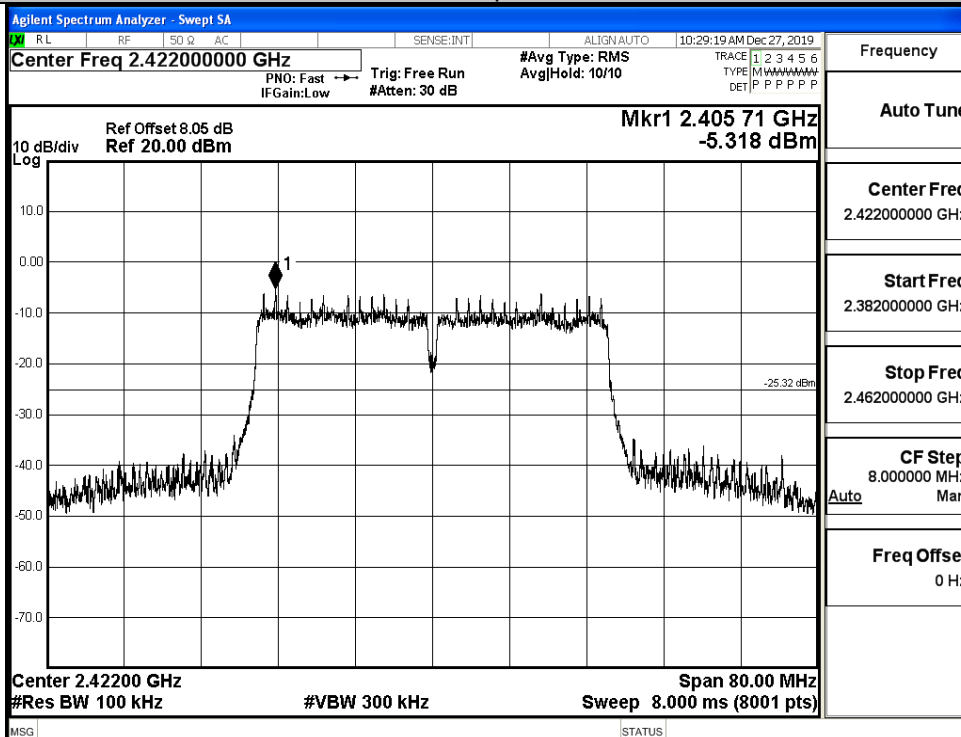
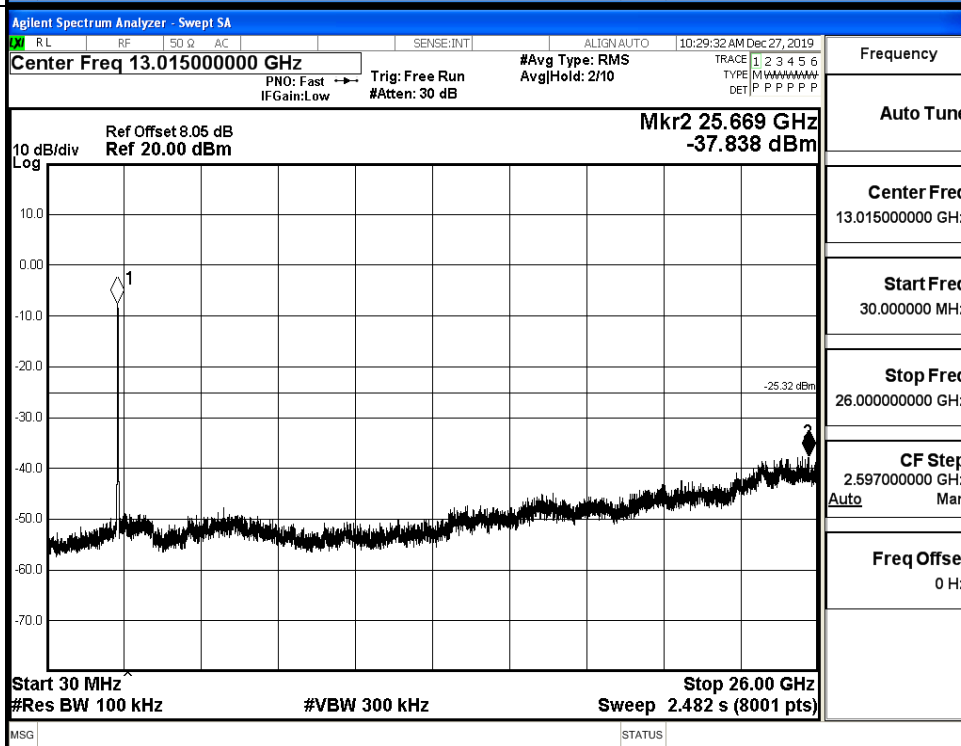
## 11N20SISO\_MCH\_Graphs

Pref/11N20  
SISO/MCHPuw/11N20  
SISO/MCH

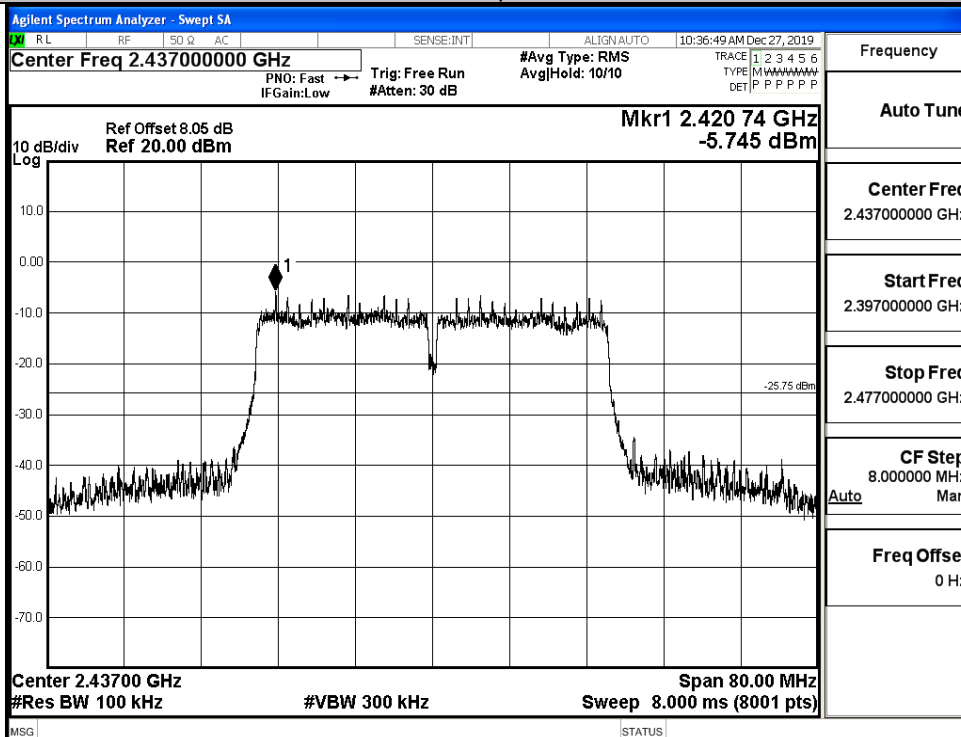
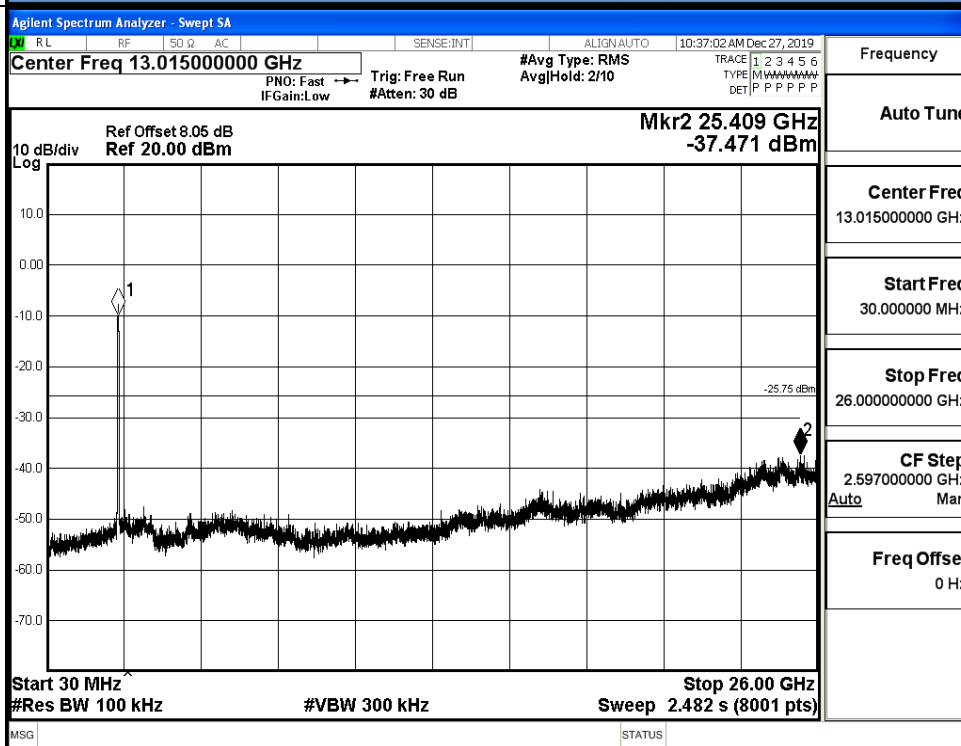
## 11N20ISO\_HCH\_Graphs

Pref/11N20  
SISO/HCHPuw/11N20  
SISO/HCH

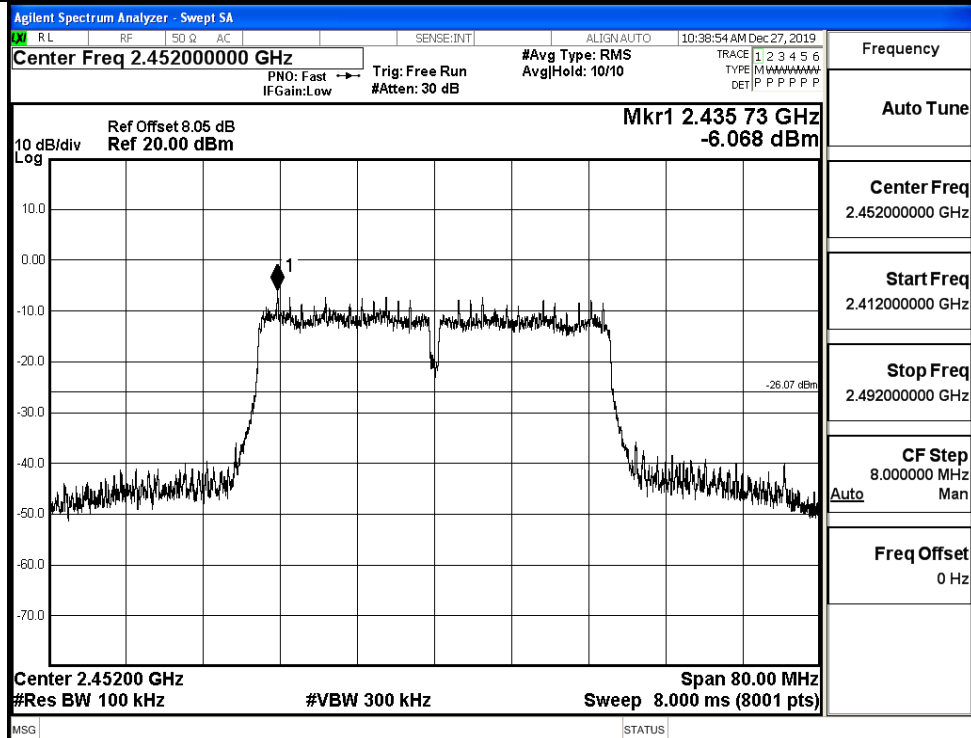
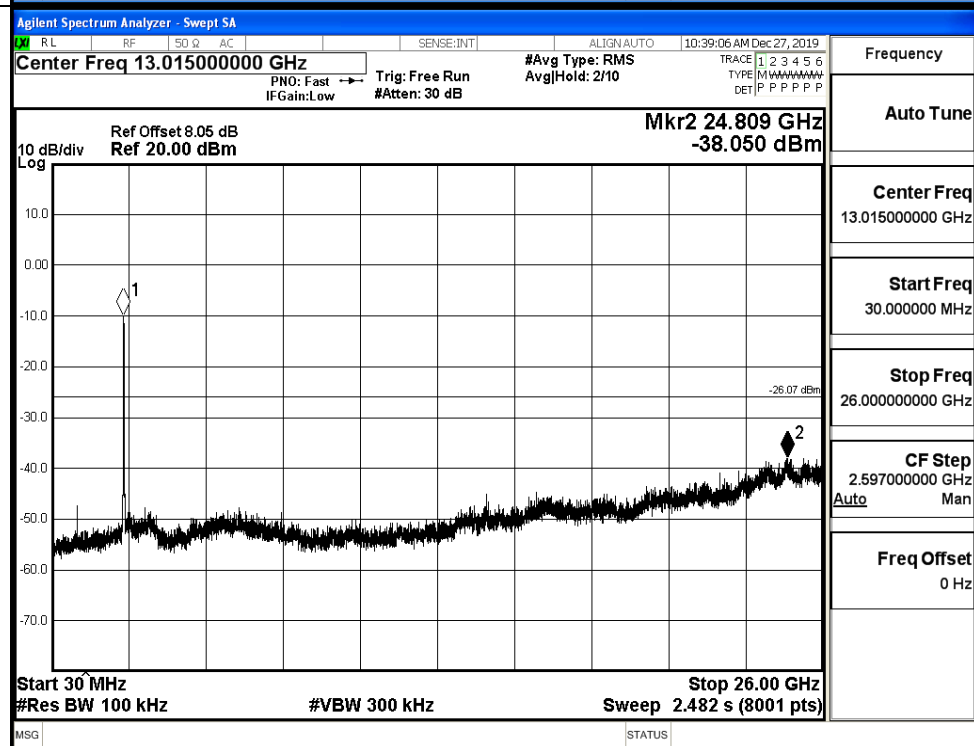
## 11N40SISO\_LCH\_Graphs

Pref/11N40  
SISO/LCHPuw/11N40  
SISO/LCH

## 11N40SISO\_MCH\_Graphs

Pref/11N40  
SISO/MCHPuw/11N40  
SISO/MCH

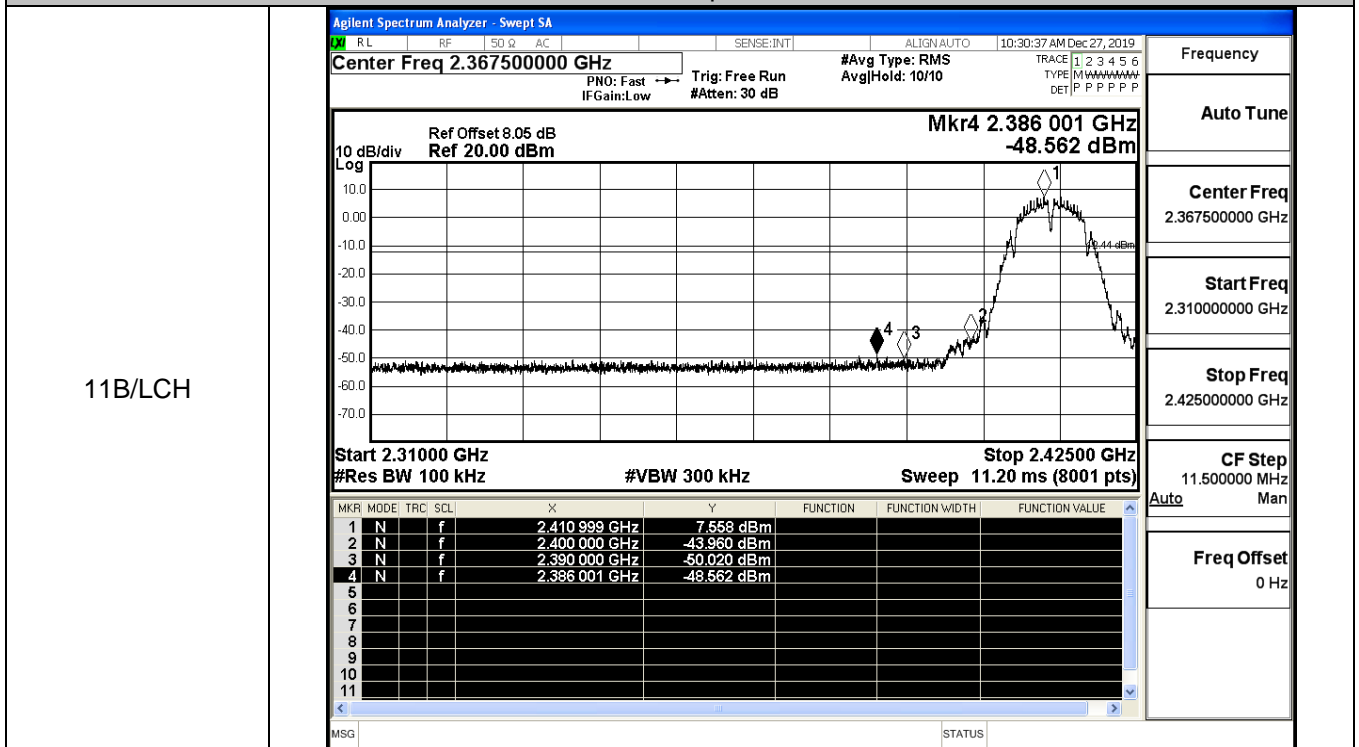
## 11N40SISO\_HCH\_Graphs

Pref/11N40  
SISO/HCHPuw/11N40  
SISO/HCH

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

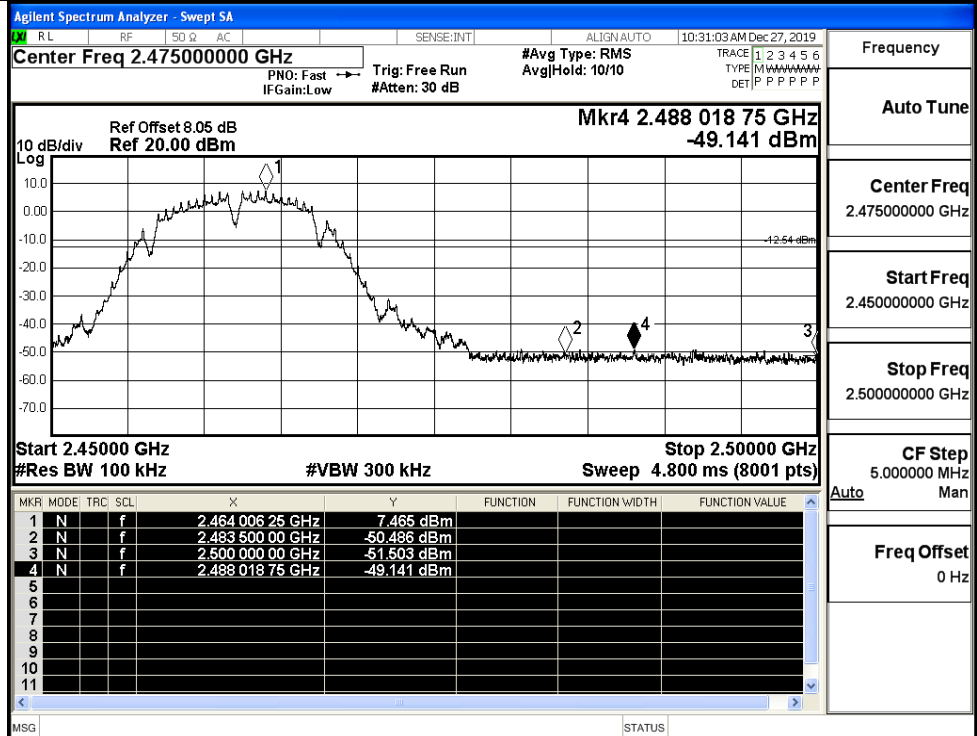
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
11B	LCH	7.558	-48.562	-12.44	PASS
	HCH	7.465	-49.141	-12.54	PASS
11G	LCH	-4.510	-48.565	-24.51	PASS
	HCH	-3.712	-47.896	-23.71	PASS
11N20SISO	LCH	-3.212	-48.080	-23.21	PASS
	HCH	-3.510	-46.582	-23.51	PASS
11N40SISO	LCH	-5.226	-39.174	-25.23	PASS
	HCH	-6.032	-41.043	-26.03	PASS

Test Graphs

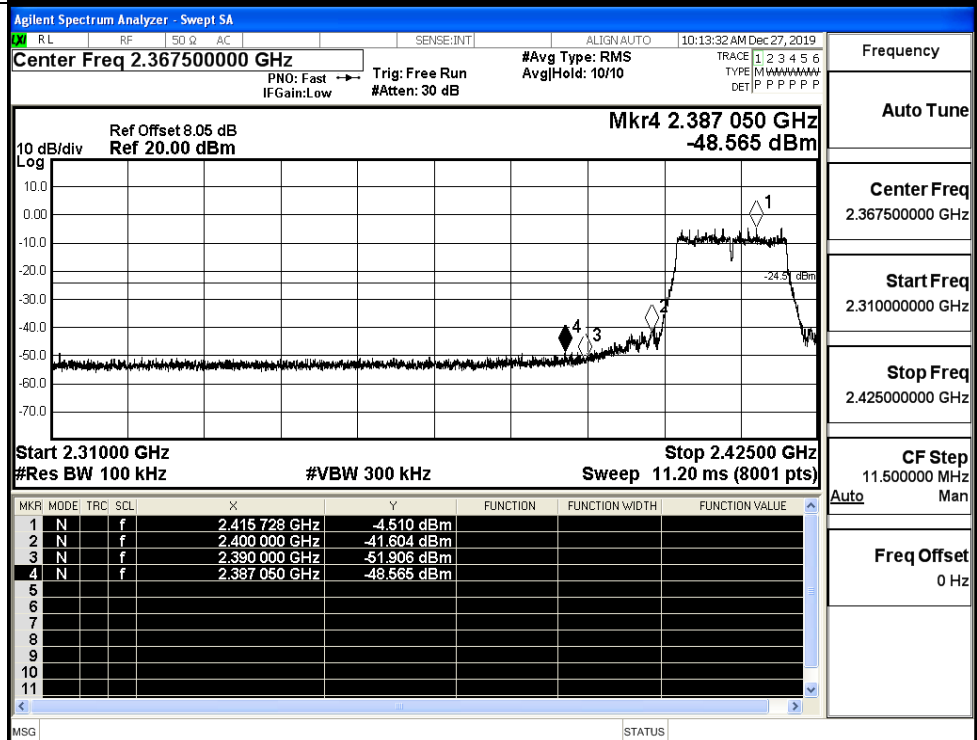




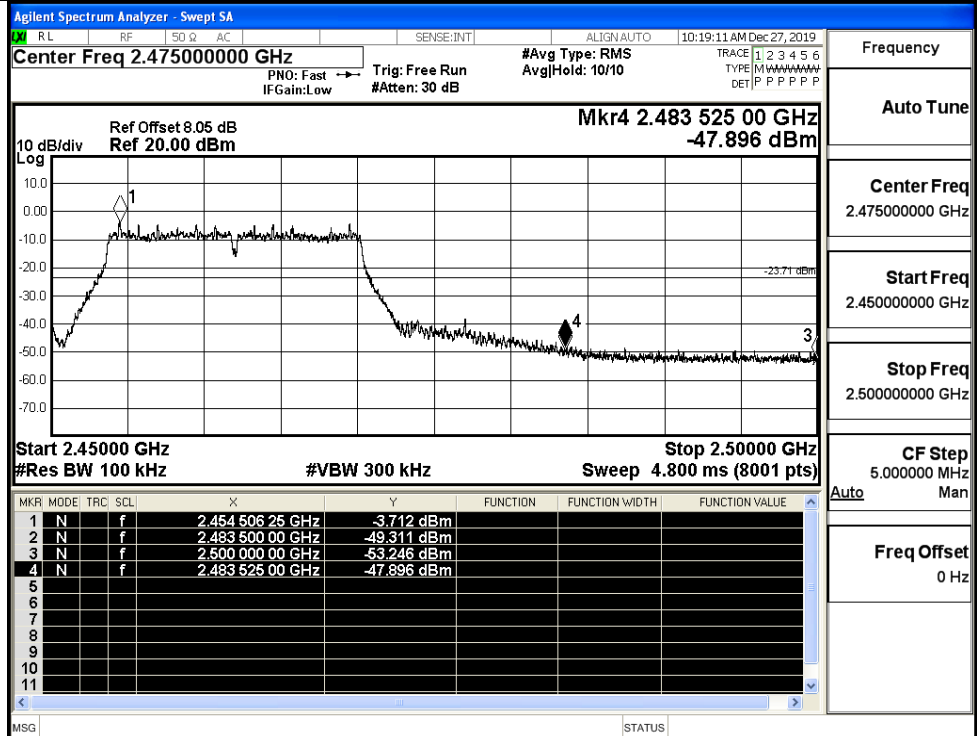
11B/HCH



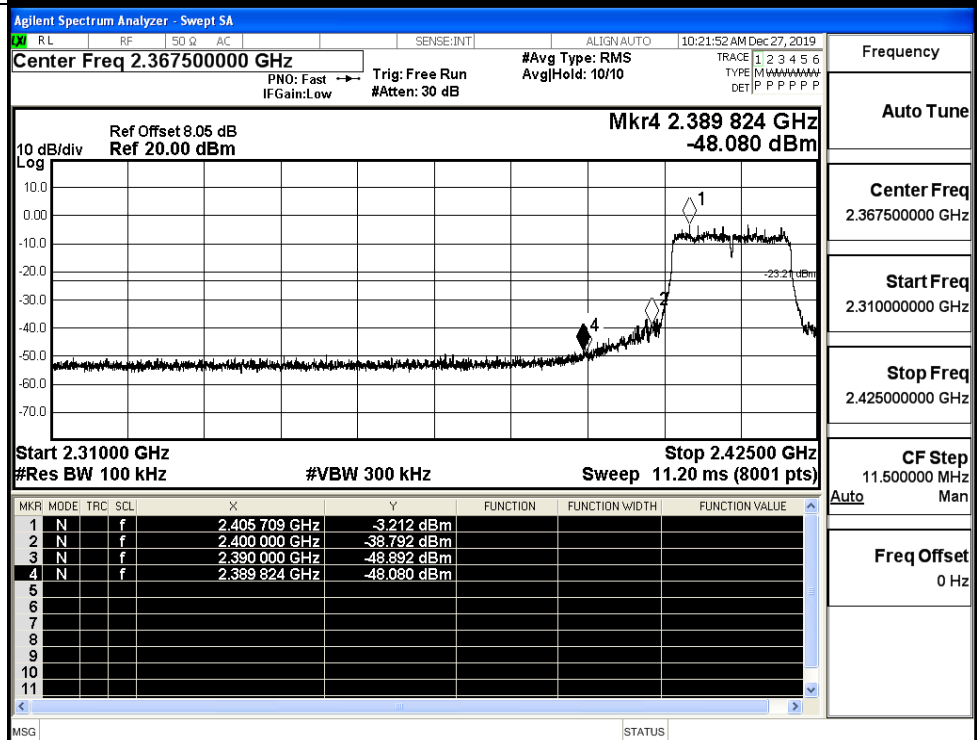
11G/LCH



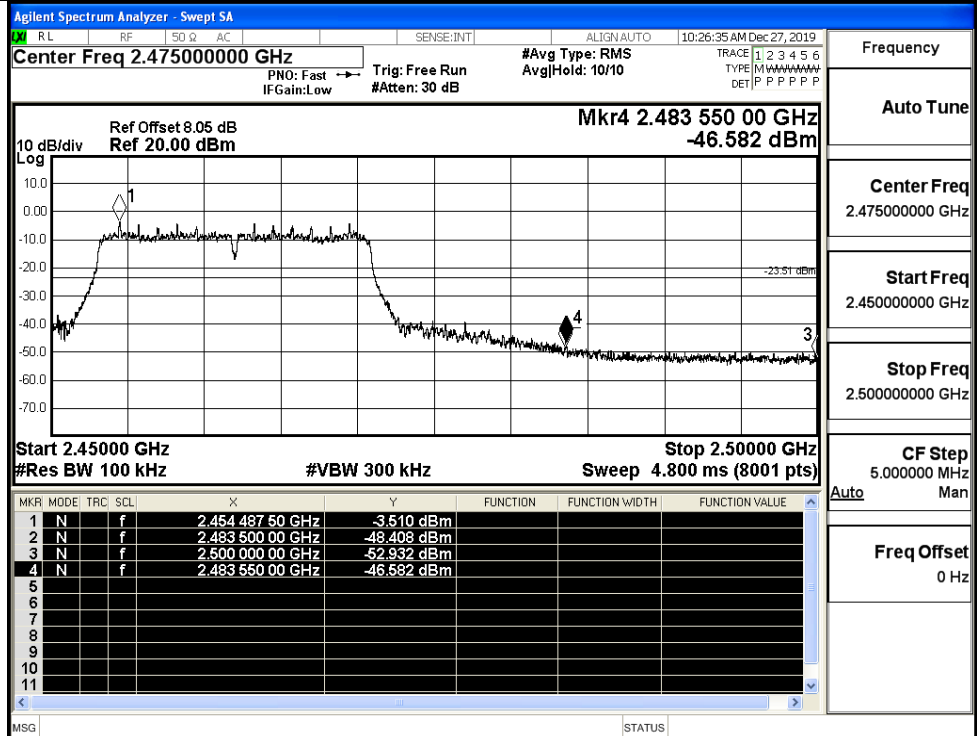
11G/HCH



11N20SISO/LCH



11N20SISO/HCH



Frequency

Auto Tune

Center Freq

2.475000000 GHz

Start Freq

2.450000000 GHz

Stop Freq

2.500000000 GHz

CF Step

5.000000 MHz

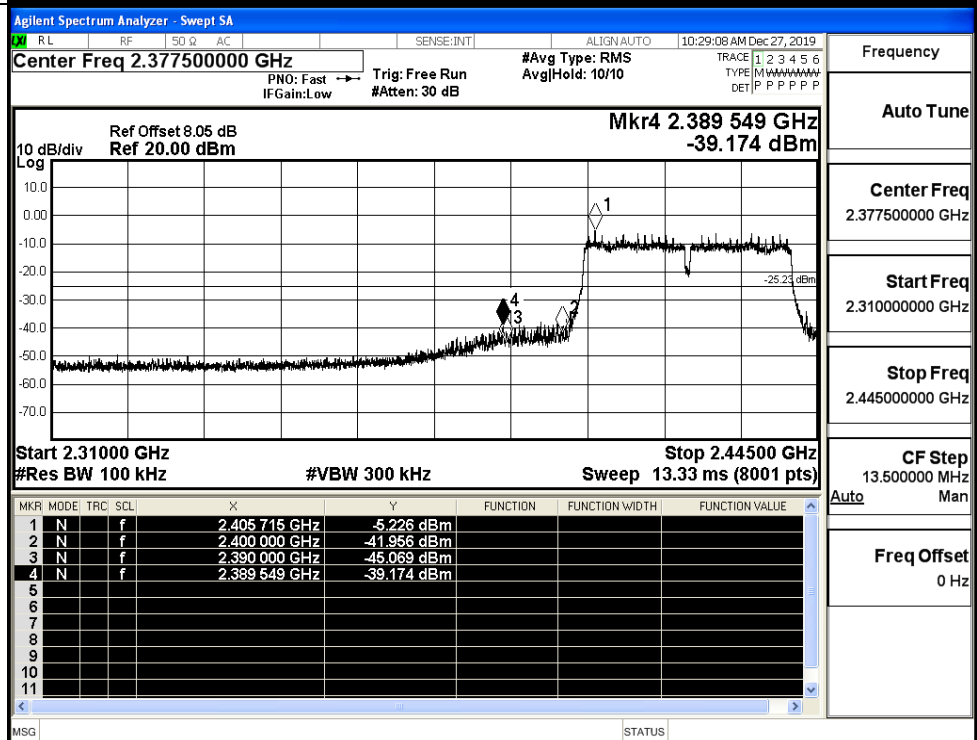
Auto

Man

Freq Offset

0 Hz

11N40SISO/LCH



Frequency

Auto Tune

Center Freq

2.377500000 GHz

Start Freq

2.310000000 GHz

Stop Freq

2.445000000 GHz

CF Step

13.500000 MHz

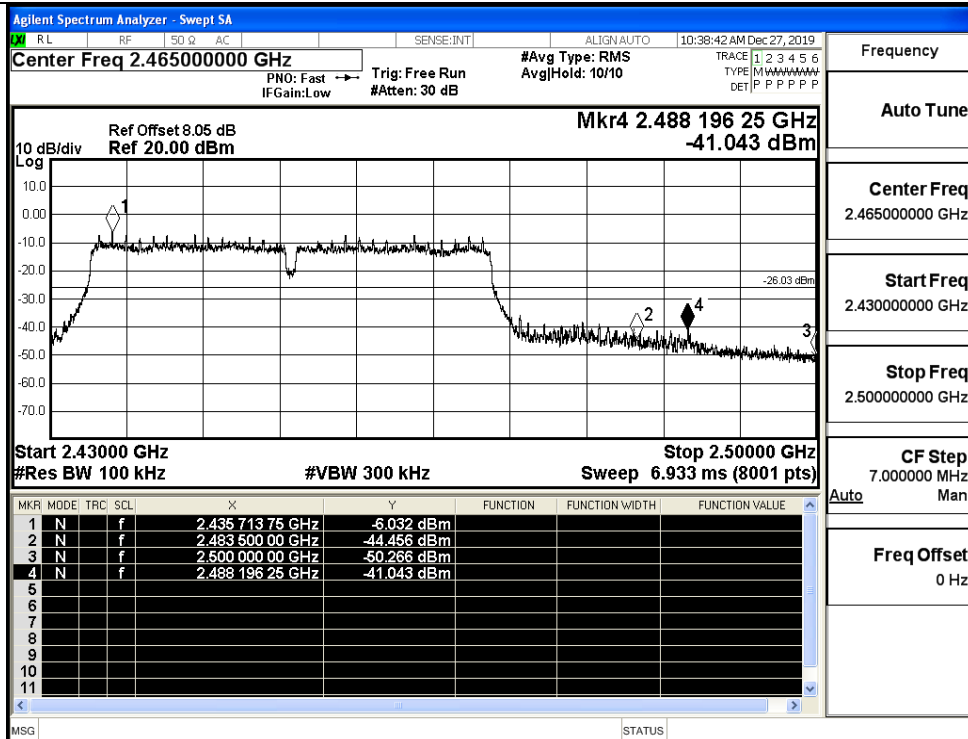
Auto

Man

Freq Offset

0 Hz

11N40SISO/HCH

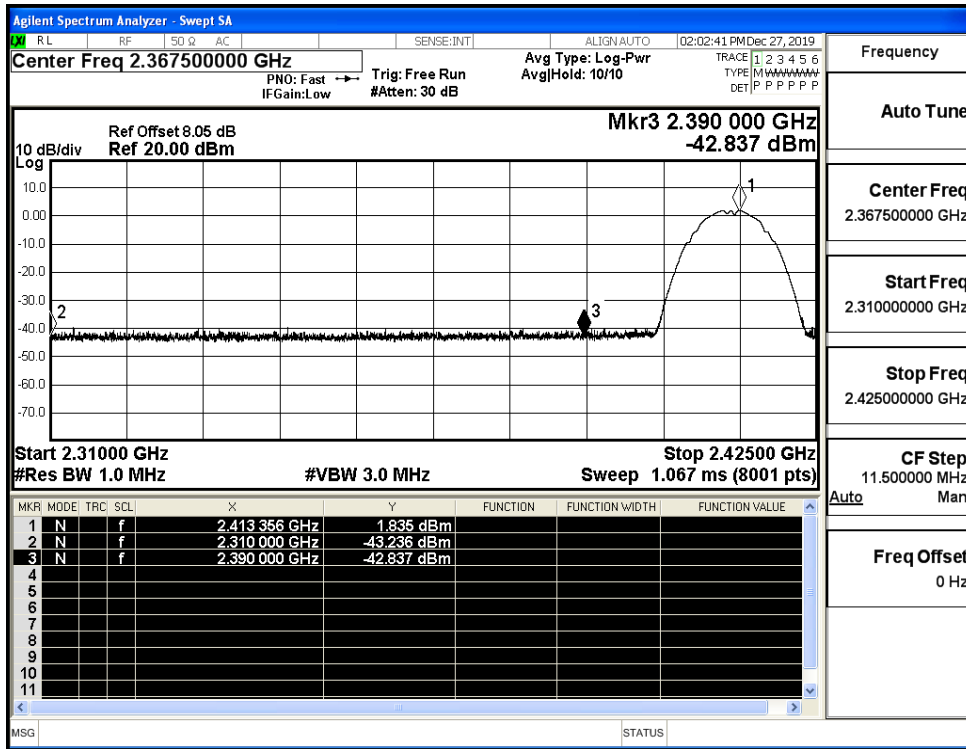


## A.7 Restrict-band band-edge measurements

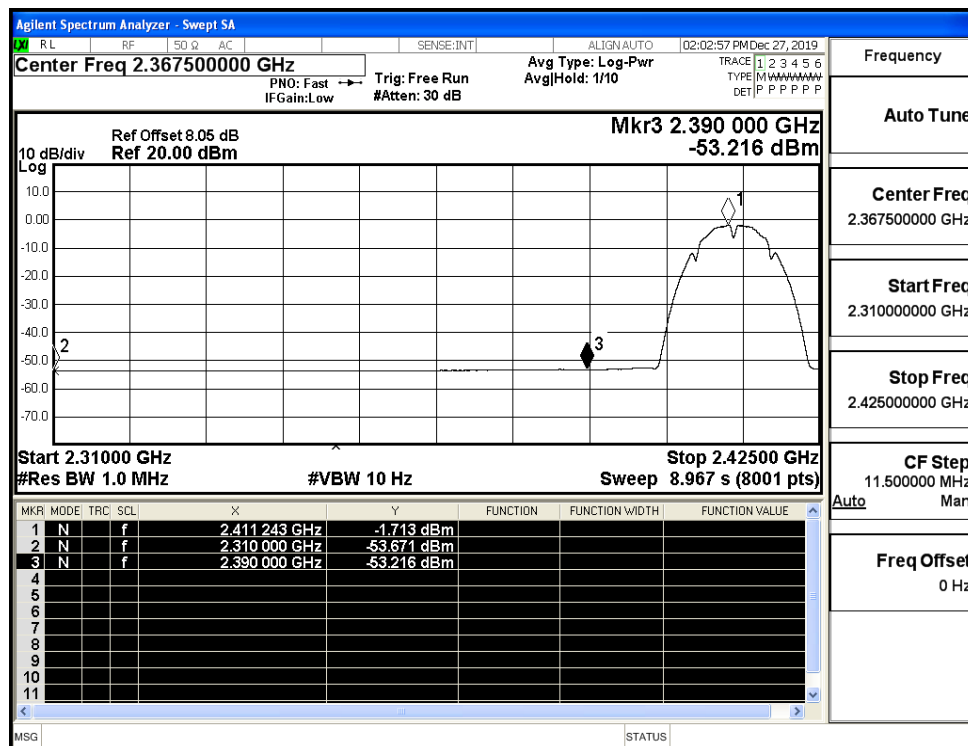
Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
11B	2412	Ant1	2310.0	-43.24	2.0	0	53.99	PEAK	74	PASS
	2412	Ant1	2310.0	-53.67	2.0	0	43.56	AV	54	PASS
	2412	Ant1	2390.0	-42.84	2.0	0	54.39	PEAK	74	PASS
	2412	Ant1	2390.0	-53.22	2.0	0	44.01	AV	54	PASS
	2462	Ant1	2483.5	-41.80	2.0	0	55.43	PEAK	74	PASS
	2462	Ant1	2483.5	-52.79	2.0	0	44.44	AV	54	PASS
	2462	Ant1	2500.0	-41.36	2.0	0	55.87	PEAK	74	PASS
	2462	Ant1	2500.0	-52.70	2.0	0	44.53	AV	54	PASS
11G	2412	Ant1	2310.0	-43.24	2.0	0	54.02	PEAK	74	PASS
	2412	Ant1	2310.0	-53.67	2.0	0	43.59	AV	54	PASS
	2412	Ant1	2390.0	-42.08	2.0	0	55.17	PEAK	74	PASS
	2412	Ant1	2390.0	-51.47	2.0	0	45.79	AV	54	PASS
	2462	Ant1	2483.5	-39.66	2.0	0	57.59	PEAK	74	PASS
	2462	Ant1	2483.5	-50.49	2.0	0	46.77	AV	54	PASS
	2462	Ant1	2500.0	-41.26	2.0	0	55.99	PEAK	74	PASS
	2462	Ant1	2500.0	-52.70	2.0	0	44.56	AV	54	PASS
11N20 SISO	2412	Ant1	2310.0	-42.59	2.0	0	54.67	PEAK	74	PASS
	2412	Ant1	2310.0	-53.60	2.0	0	43.66	AV	54	PASS
	2412	Ant1	2390.0	-39.07	2.0	0	58.19	PEAK	74	PASS
	2412	Ant1	2390.0	-50.34	2.0	0	46.92	AV	54	PASS
	2462	Ant1	2483.5	-38.96	2.0	0	58.30	PEAK	74	PASS
	2462	Ant1	2483.5	-50.11	2.0	0	47.15	AV	54	PASS
	2462	Ant1	2500.0	-42.07	2.0	0	55.19	PEAK	74	PASS
	2462	Ant1	2500.0	-52.71	2.0	0	44.55	AV	54	PASS
11N40 SISO	2422	Ant1	2310.0	-44.11	2.0	0	53.15	PEAK	74	PASS
	2422	Ant1	2310.0	-53.64	2.0	0	43.62	AV	54	PASS

	2422	Ant1	2390.0	-32.47	2.0	0	64.79	PEAK	74	PASS
	2422	Ant1	2390.0	-45.37	2.0	0	51.88	AV	54	PASS
	2452	Ant1	2483.5	-29.36	2.0	0	67.90	PEAK	74	PASS
	2452	Ant1	2483.5	-45.86	2.0	0	51.40	AV	54	PASS
	2452	Ant1	2500.0	-38.56	2.0	0	58.70	PEAK	74	PASS
	2452	Ant1	2500.0	-51.36	2.0	0	45.90	AV	54	PASS

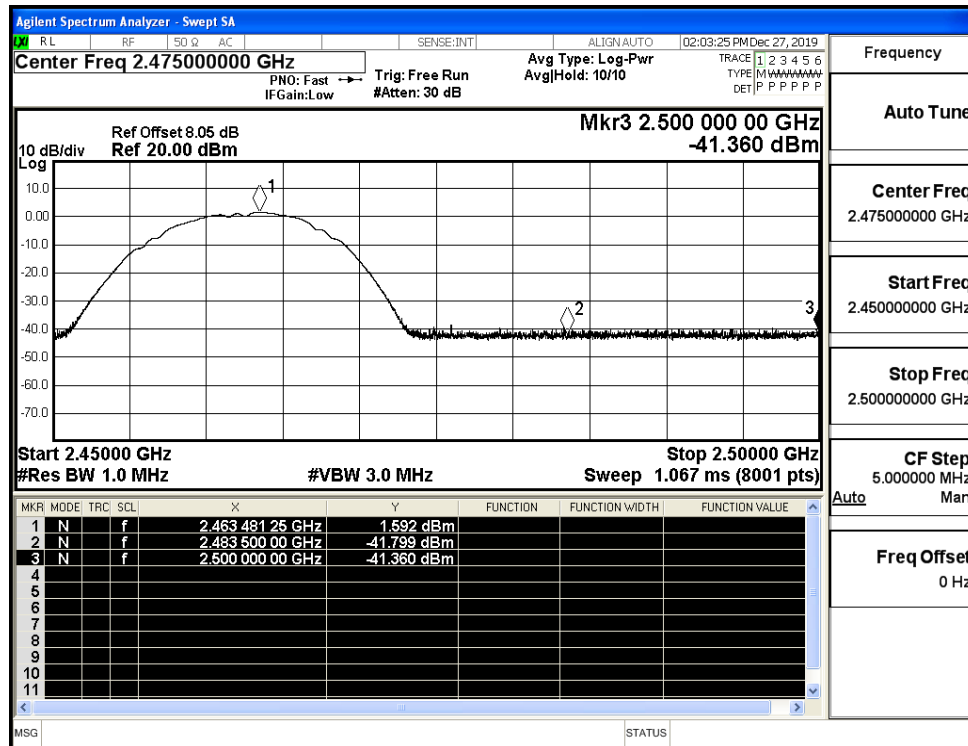
## Restrict-band band-edge measurements\_11B\_2412\_Ant1\_PEAK



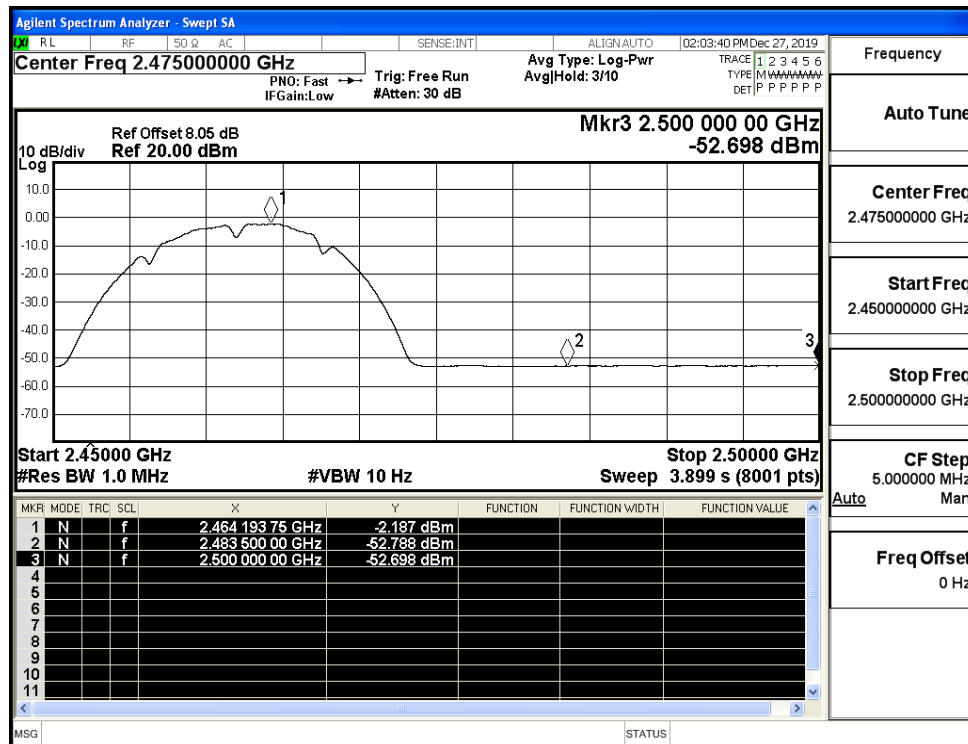
## Restrict-band band-edge measurements\_11B\_2412\_Ant1\_AV



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

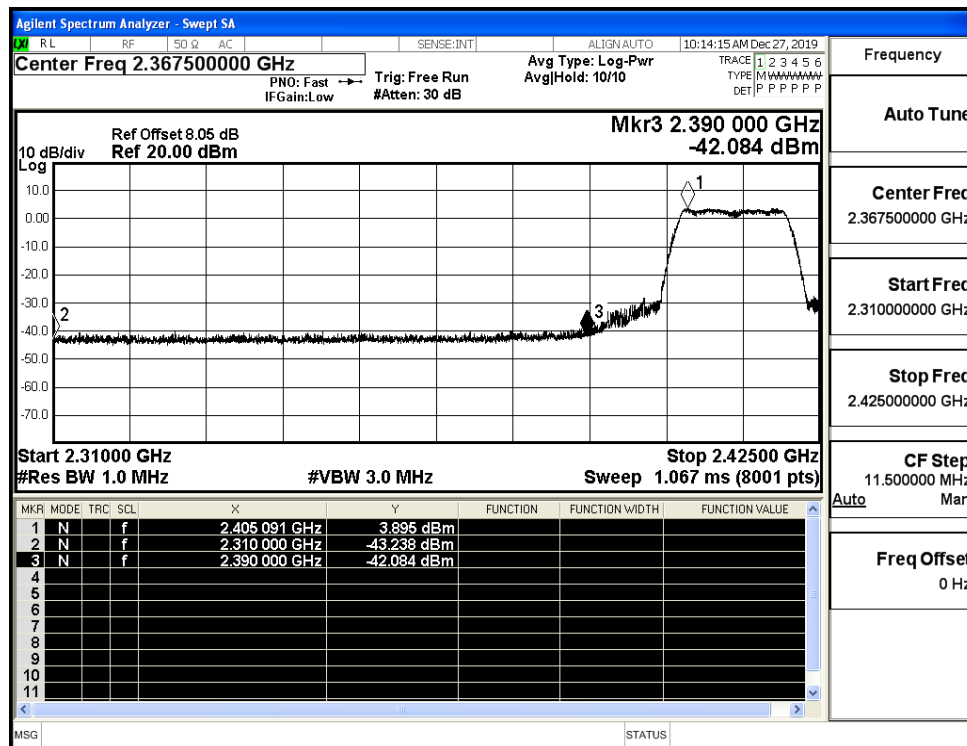


## Restrict-band band-edge measurements\_11B\_2462\_Ant1\_AV

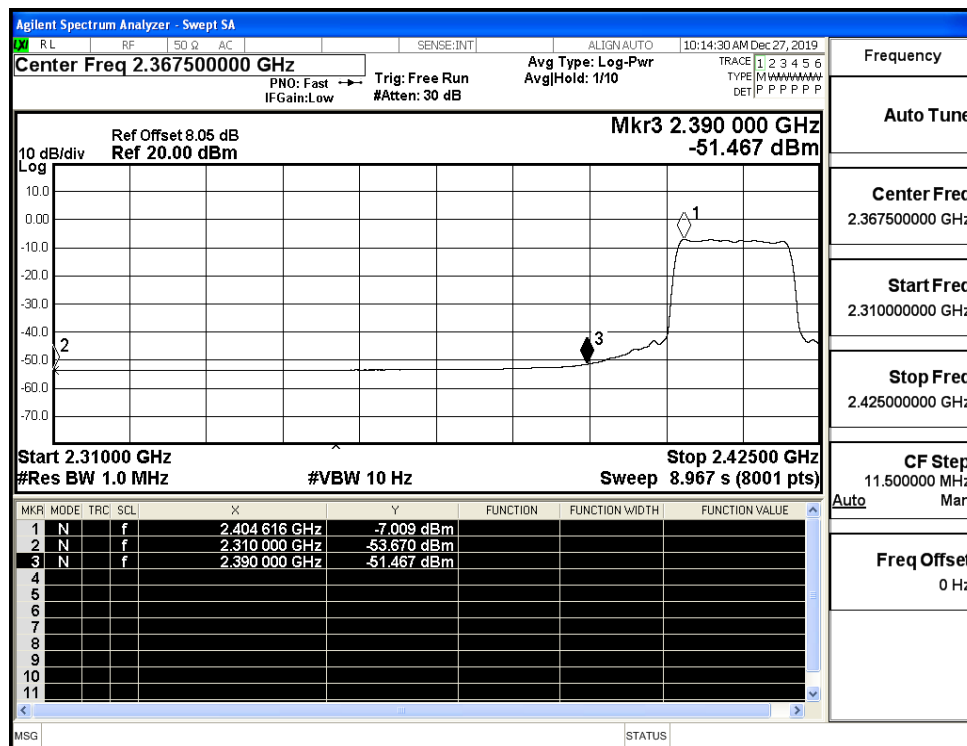




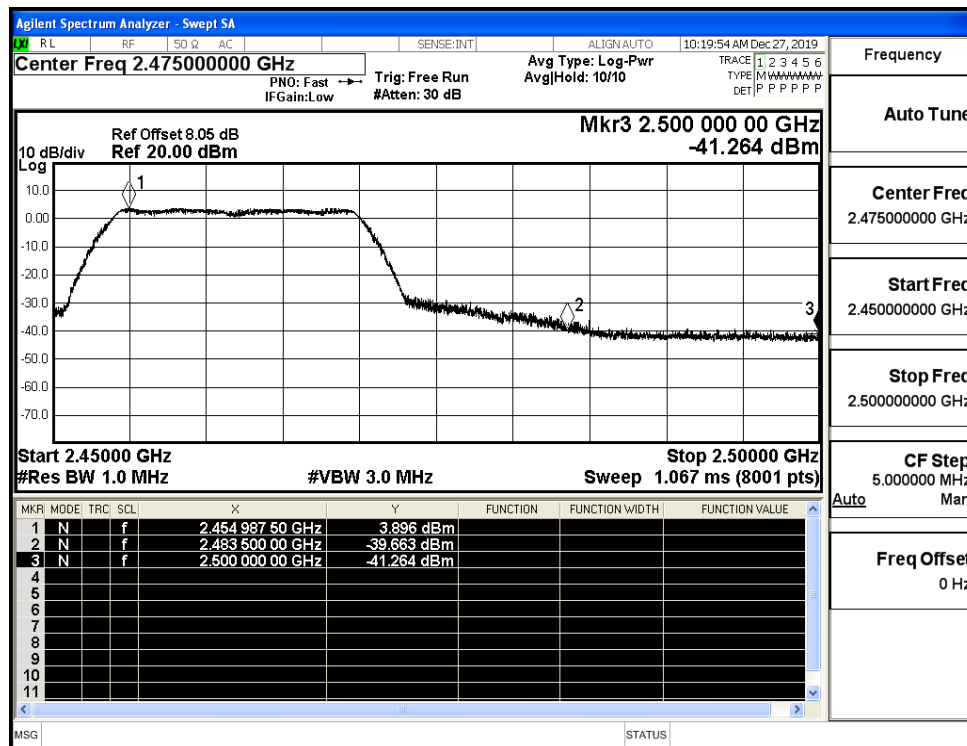
## Restrict-band band-edge measurements\_11G\_2412\_Ant1\_PEAK



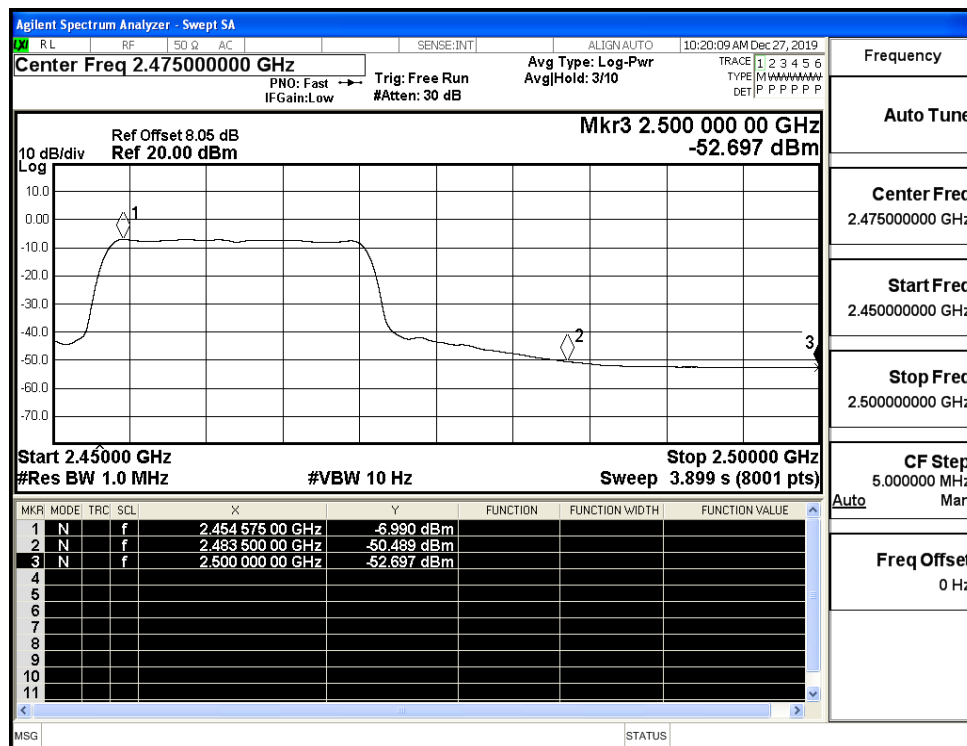
## Restrict-band band-edge measurements\_11G\_2412\_Ant1\_AV



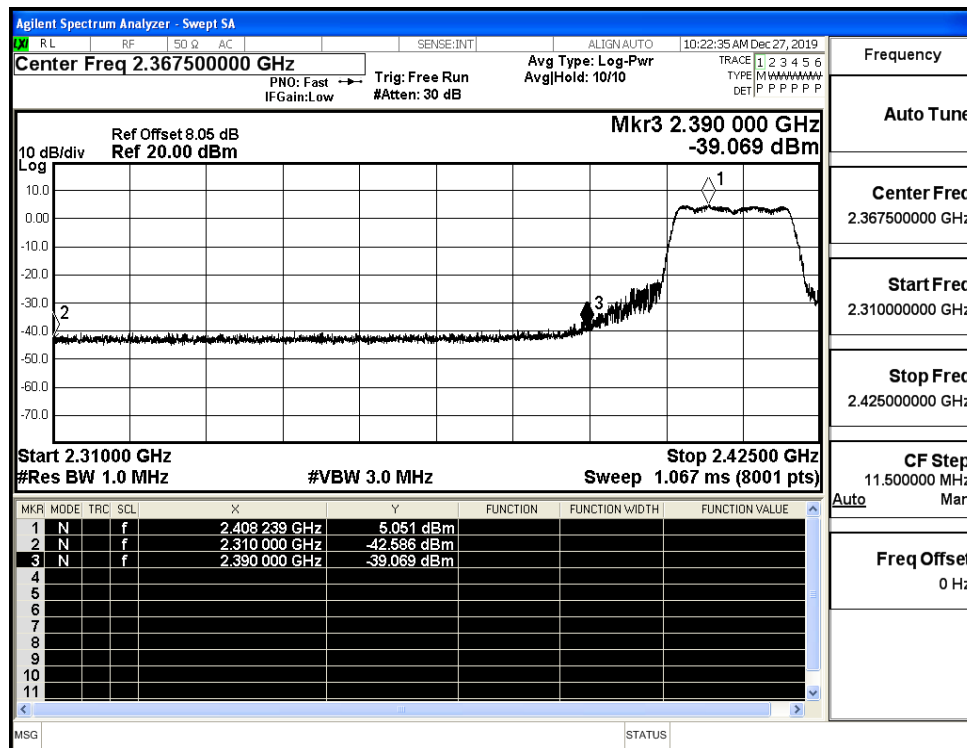
## Restrict-band band-edge measurements\_11G\_2462\_Ant1\_PEAK



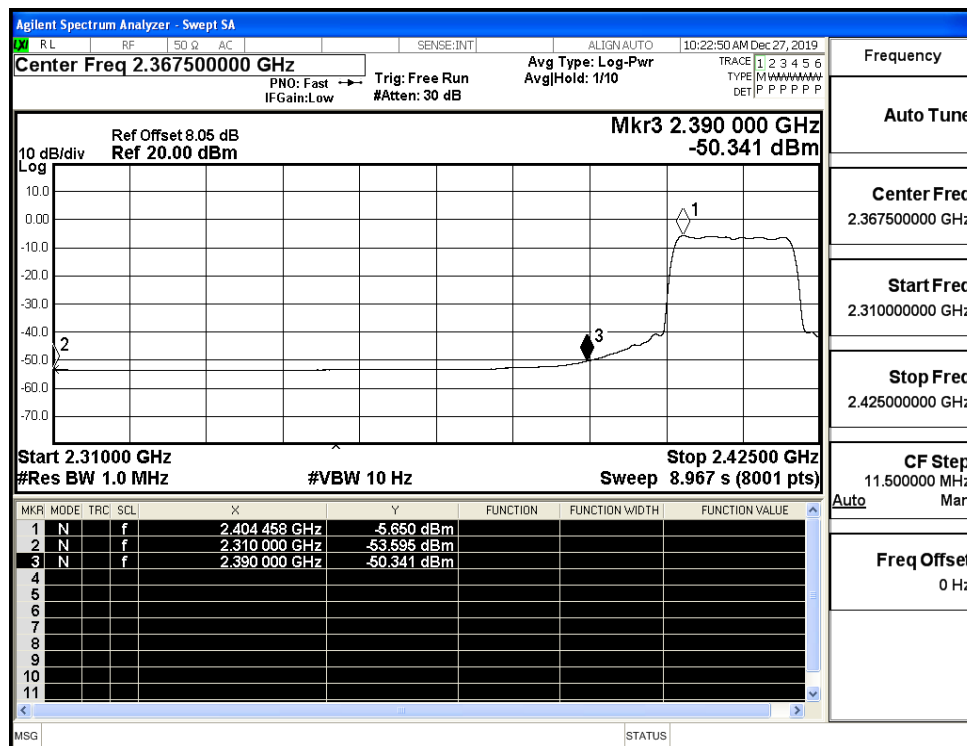
## Restrict-band band-edge measurements\_11G\_2462\_Ant1\_AV



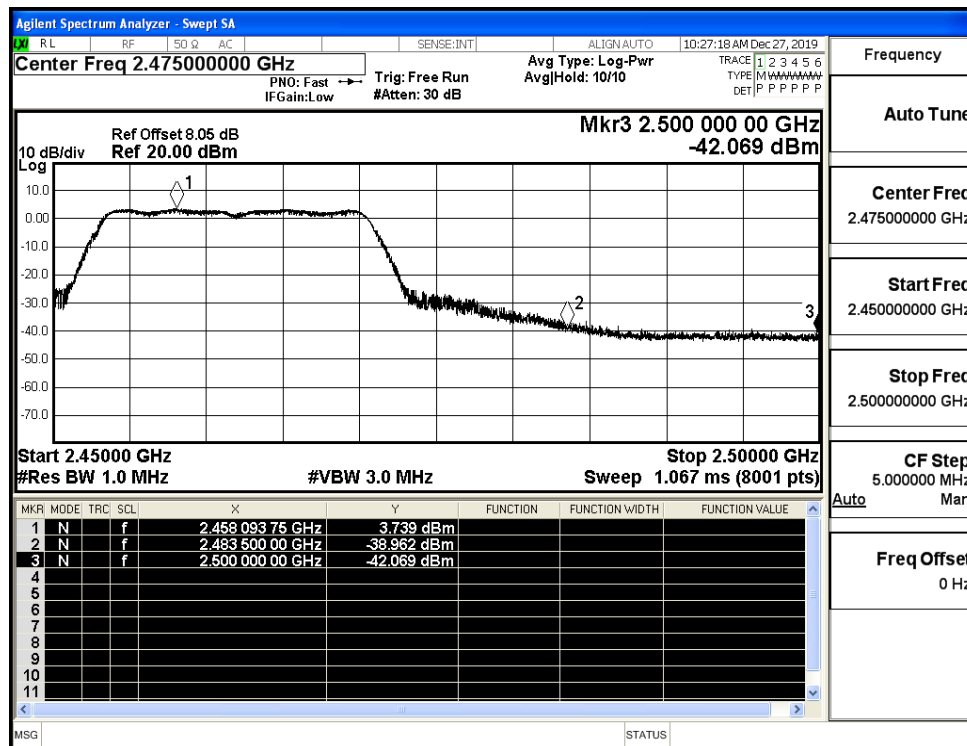
## Restrict-band band-edge measurements\_11N20SISO\_2412\_Ant1\_PEAK



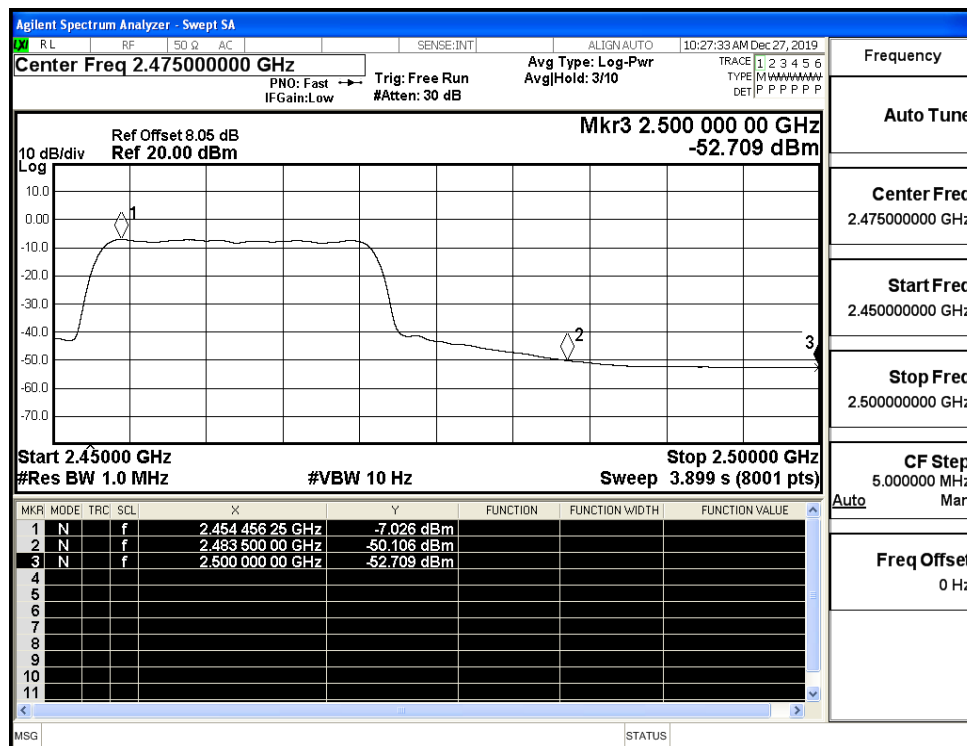
## Restrict-band band-edge measurements\_11N20SISO\_2412\_Ant1\_AV



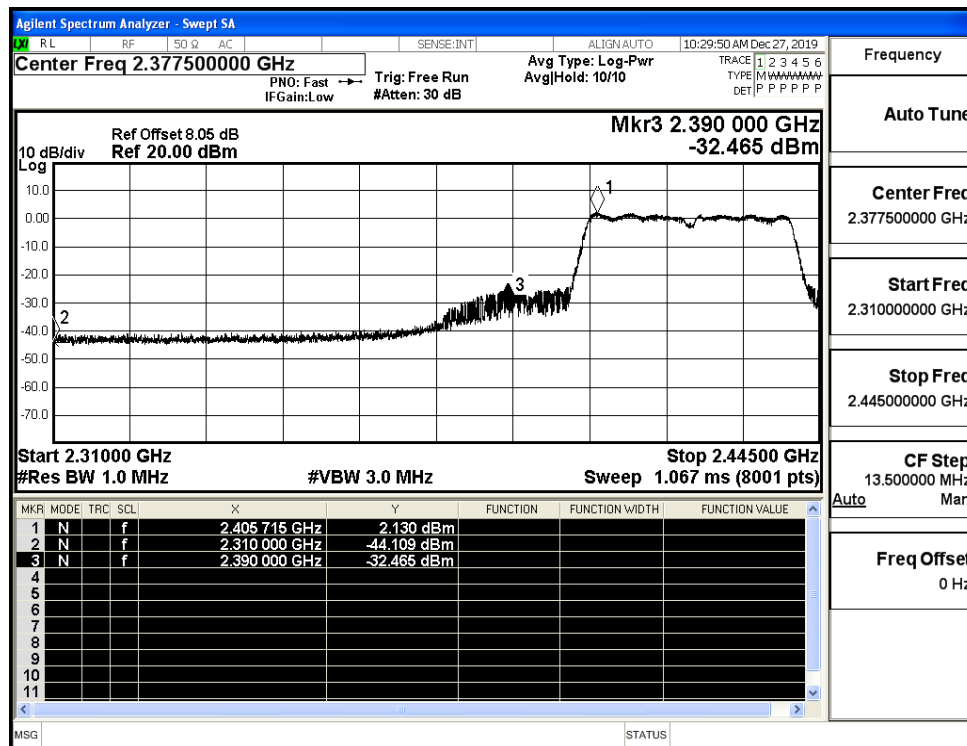
## Restrict-band band-edge measurements\_11N20SISO\_2462\_Ant1\_PEAK



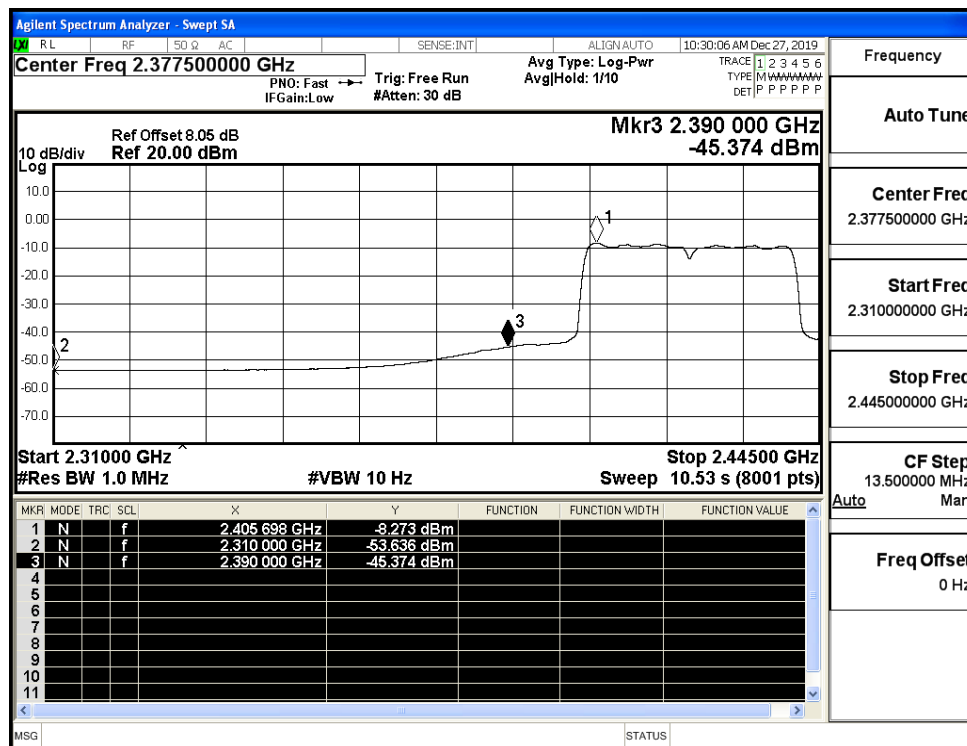
## Restrict-band band-edge measurements\_11N20SISO\_2462\_Ant1\_AV



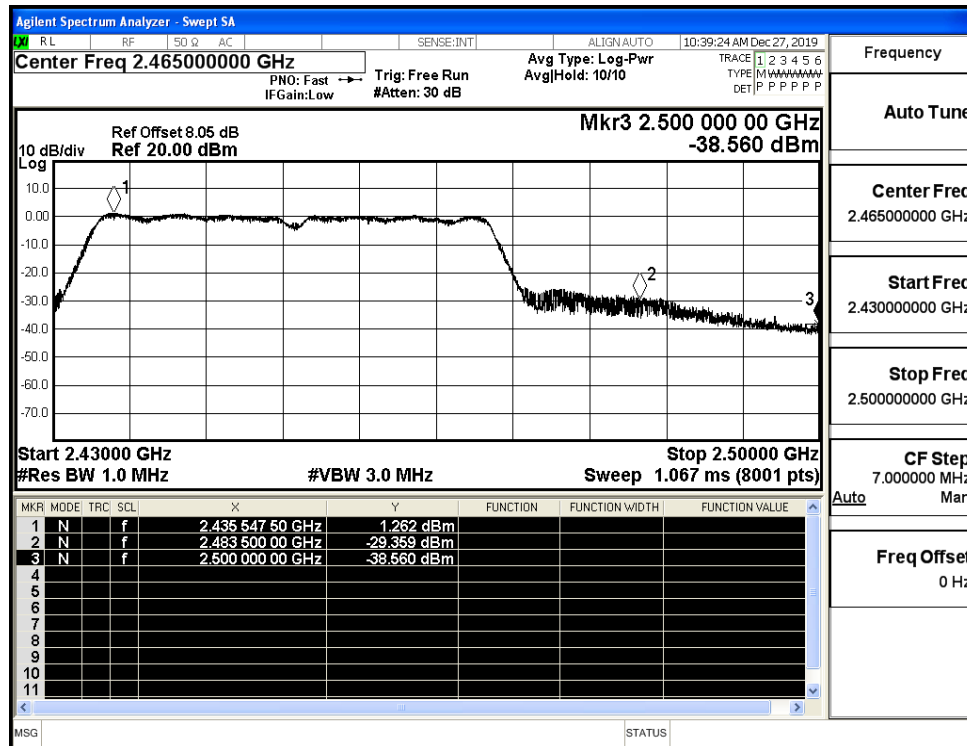
## Restrict-band band-edge measurements\_11N40SISO\_2422\_Ant1\_PEAK



## Restrict-band band-edge measurements\_11N40SISO\_2422\_Ant1\_AV



## Restrict-band band-edge measurements\_11N40SISO\_2452\_Ant1\_PEAK



## Restrict-band band-edge measurements\_11N40SISO\_2452\_Ant1\_AV

