

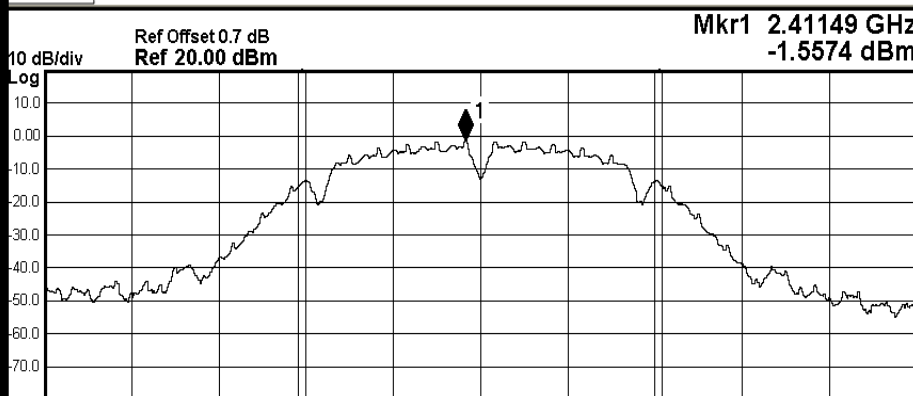
**1.6dB Bandwidth**

Test Mode	Test Channel	Ant	EBW[MHz]	Limit	Verdict
11B	2412	Ant1	9.157	0.5	PASS
11B	2437	Ant1	9.159	0.5	PASS
11B	2462	Ant1	9.161	0.5	PASS
11G	2412	Ant1	16.43	0.5	PASS
11G	2437	Ant1	16.42	0.5	PASS
11G	2462	Ant1	16.42	0.5	PASS
11N20SISO	2412	Ant1	17.62	0.5	PASS
11N20SISO	2437	Ant1	17.62	0.5	PASS
11N20SISO	2462	Ant1	17.63	0.5	PASS
11N40SISO	2422	Ant1	36.38	0.5	PASS
11N40SISO	2437	Ant1	36.37	0.5	PASS
11N40SISO	2452	Ant1	36.32	0.5	PASS

## 6dB Bandwidth\_11B\_2412\_Ant1

Agilent Spectrum Analyzer - Occupied BW

☒ R L ☐ RF ☐ 50  $\Omega$  ☐ AC ☐ SENSE:PULSE ☐ ALIGN:AUTO 03:45:11 PM Nov 29, 2017  
**Center Freq 2.412000000 GHz** Center Freq: 2.412000000 GHz Radio Std: None  
Trig: Free Run Avg/Hold: 1/1  
#IFGain: Low #Atten: 30 dB Radio Device: BTS



**Occupied Bandwidth** **Total Power** **15.0 dBm**  
**12.496 MHz**  
Transmit Freq Error -2.319 kHz **OBW Power** **99.00 %**  
x dB Bandwidth 9.157 MHz x dB **-6.00 dB**

Frequency

Center Freq  
2.412000000 GHz

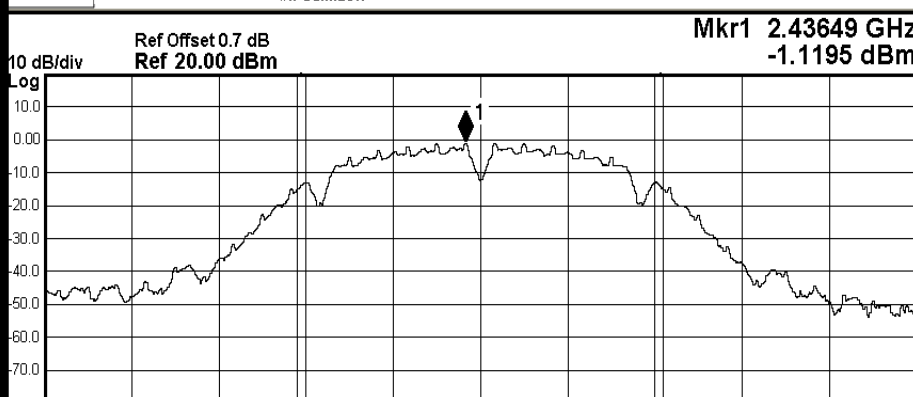
CF Step  
3.000000 MHz  
Auto Man

Freq Offset  
0 Hz

## 6dB Bandwidth\_11B\_2437\_Ant1

Agilent Spectrum Analyzer - Occupied BW

☒ R L ☐ RF ☐ 50  $\Omega$  ☐ AC ☐ SENSE:PULSE ☐ ALIGN:AUTO 03:47:33 PM Nov 29, 2017  
**Center Freq 2.437000000 GHz** Center Freq: 2.437000000 GHz Radio Std: None  
Trig: Free Run Avg/Hold: 1/1  
#IFGain: Low #Atten: 30 dB Radio Device: BTS



**Occupied Bandwidth** **Total Power** **15.5 dBm**  
**12.531 MHz**  
Transmit Freq Error 3.320 kHz **OBW Power** **99.00 %**  
x dB Bandwidth 9.159 MHz x dB **-6.00 dB**

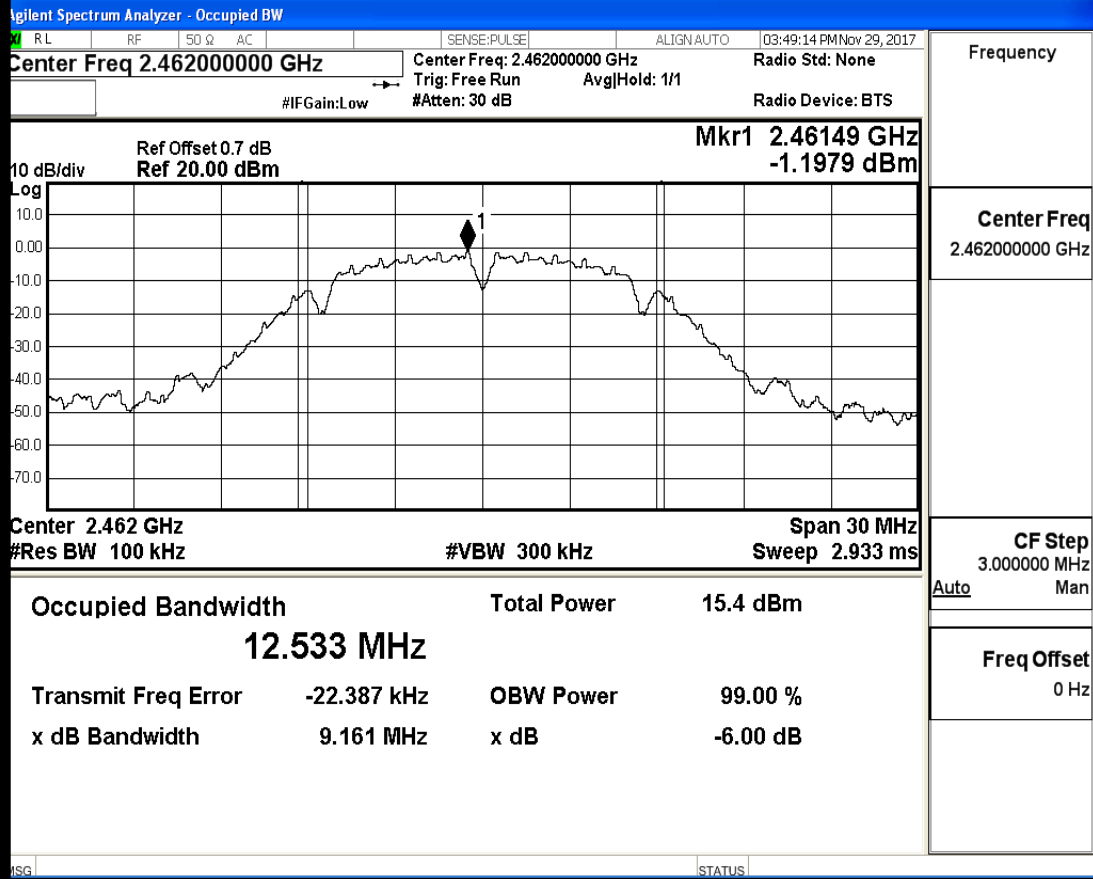
Frequency

Center Freq  
2.437000000 GHz

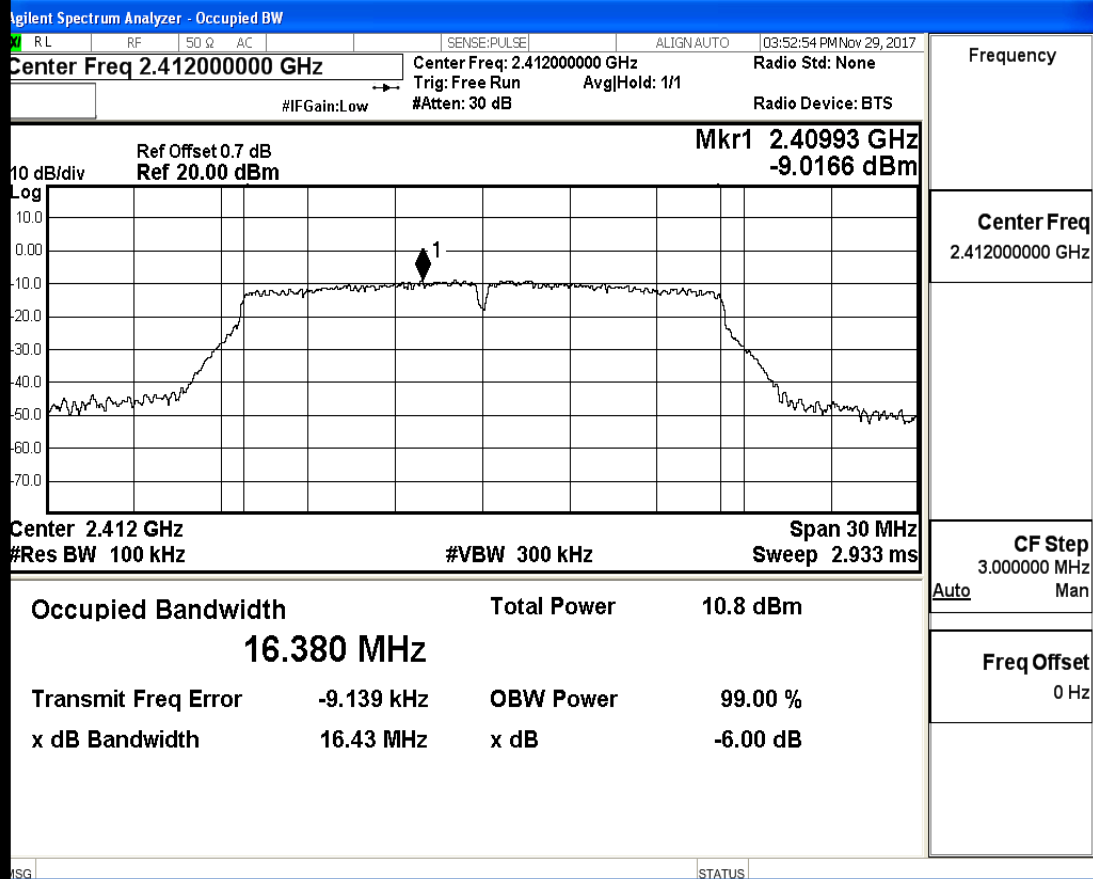
CF Step  
3.000000 MHz  
Auto Man

Freq Offset  
0 Hz

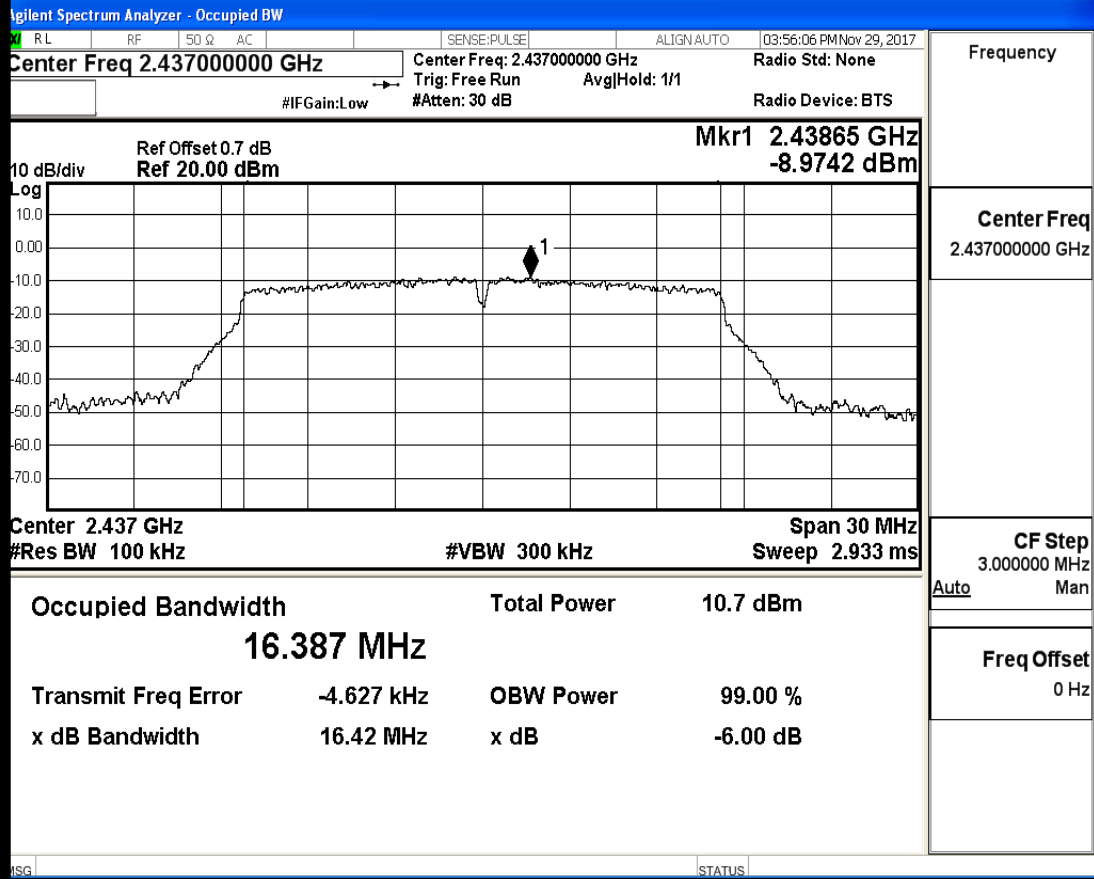
## 6dB Bandwidth\_11B\_2462\_Ant1



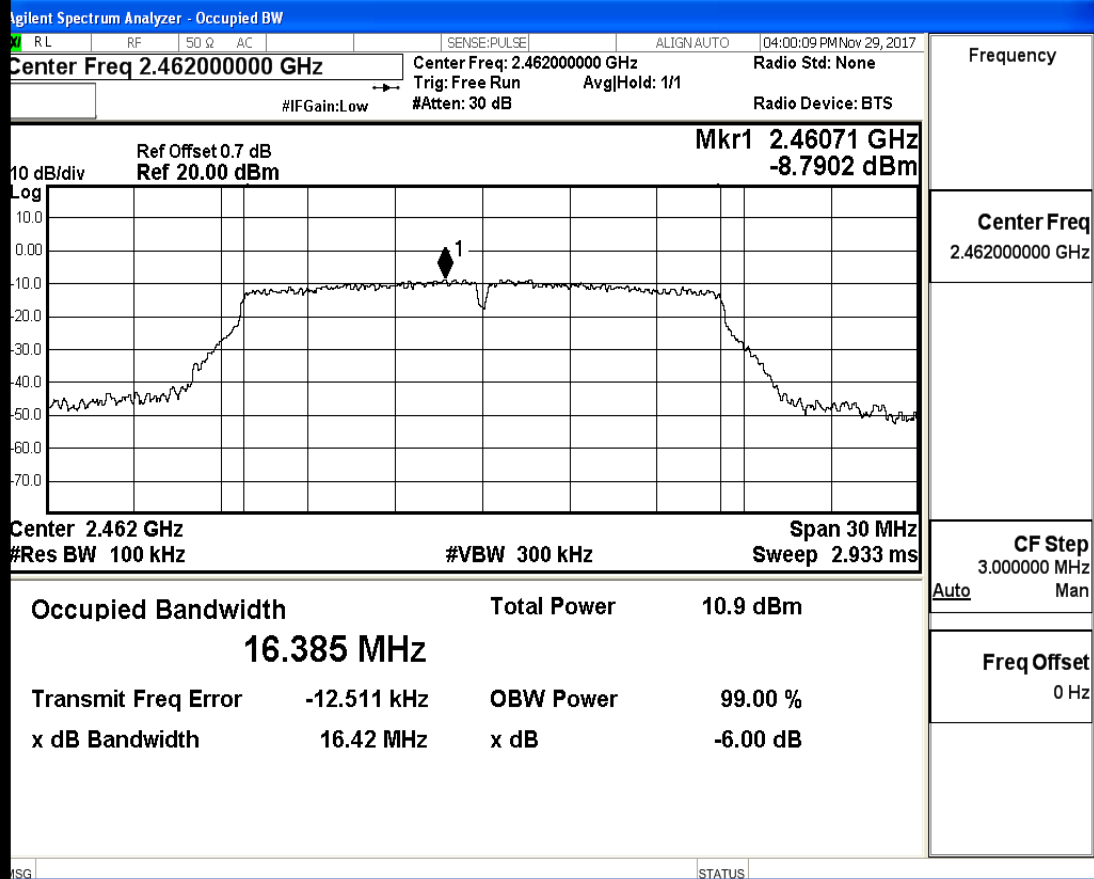
## 6dB Bandwidth\_11G\_2412\_Ant1



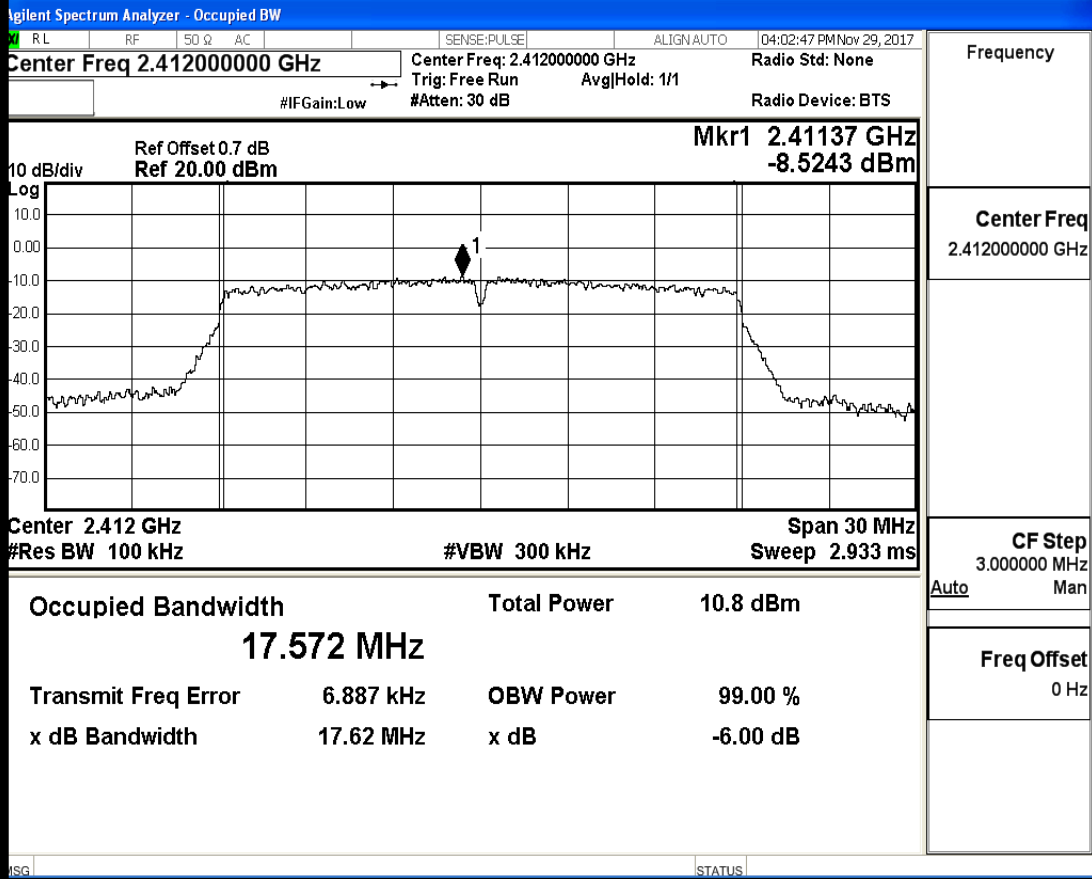
## 6dB Bandwidth\_11G\_2437\_Ant1



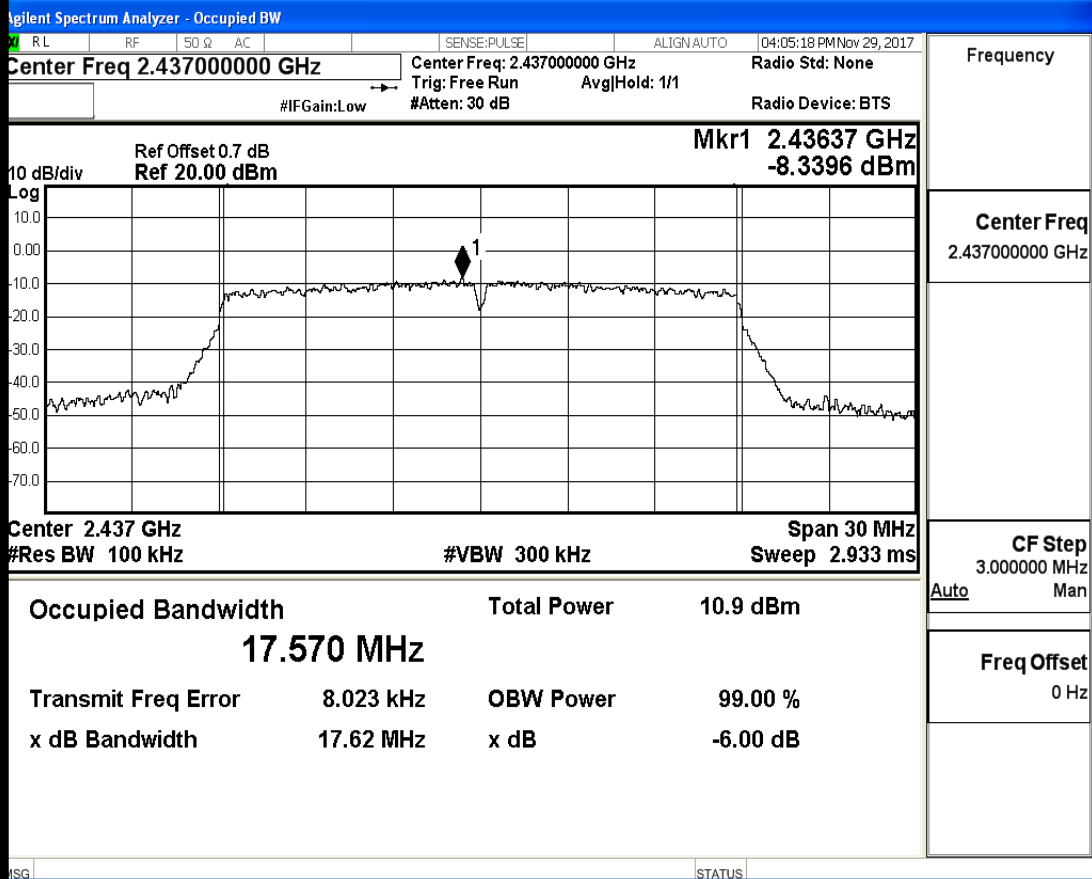
## 6dB Bandwidth\_11G\_2462\_Ant1



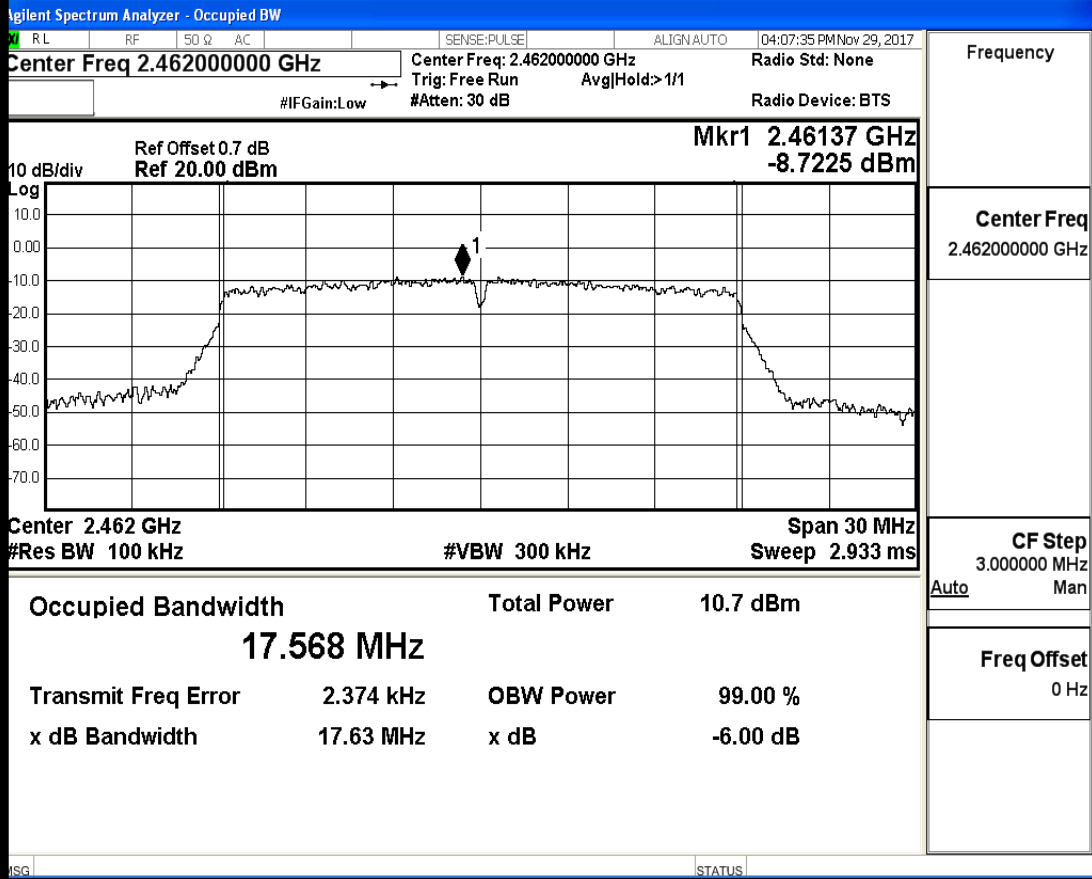
## 6dB Bandwidth\_11N20SISO\_2412\_Ant1



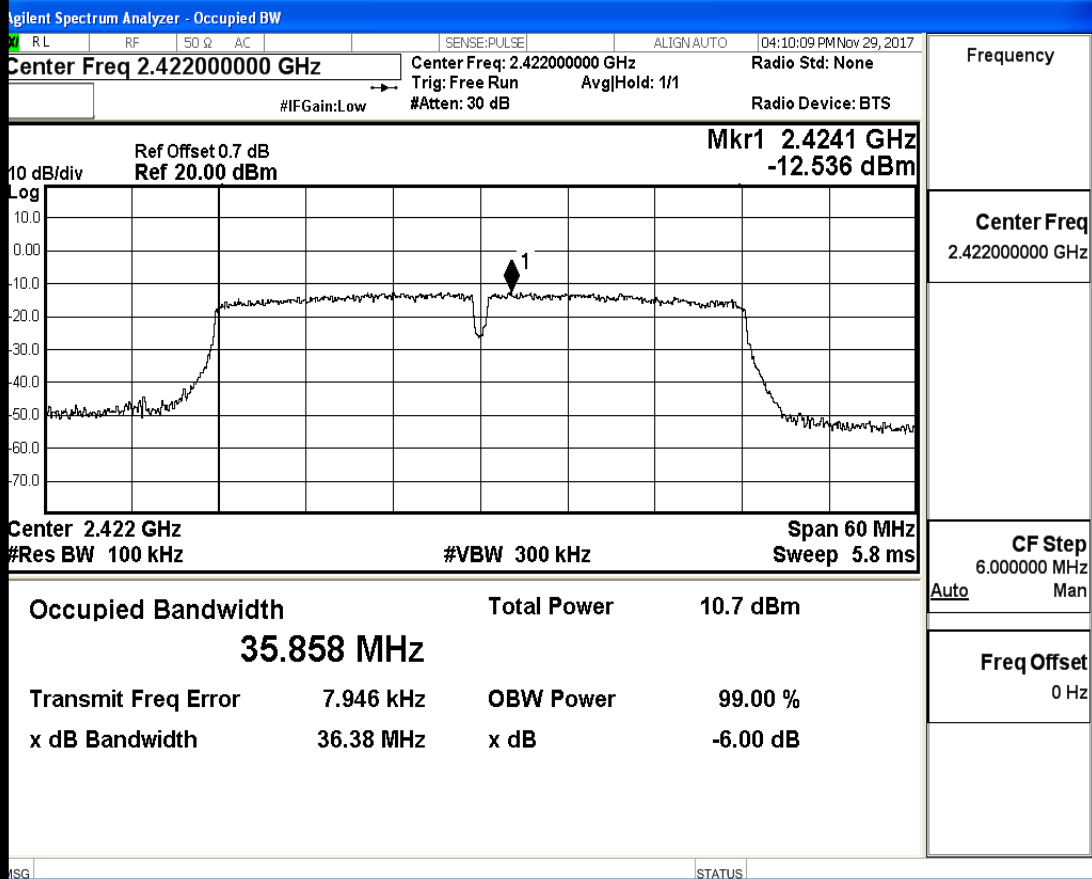
## 6dB Bandwidth\_11N20SISO\_2437\_Ant1



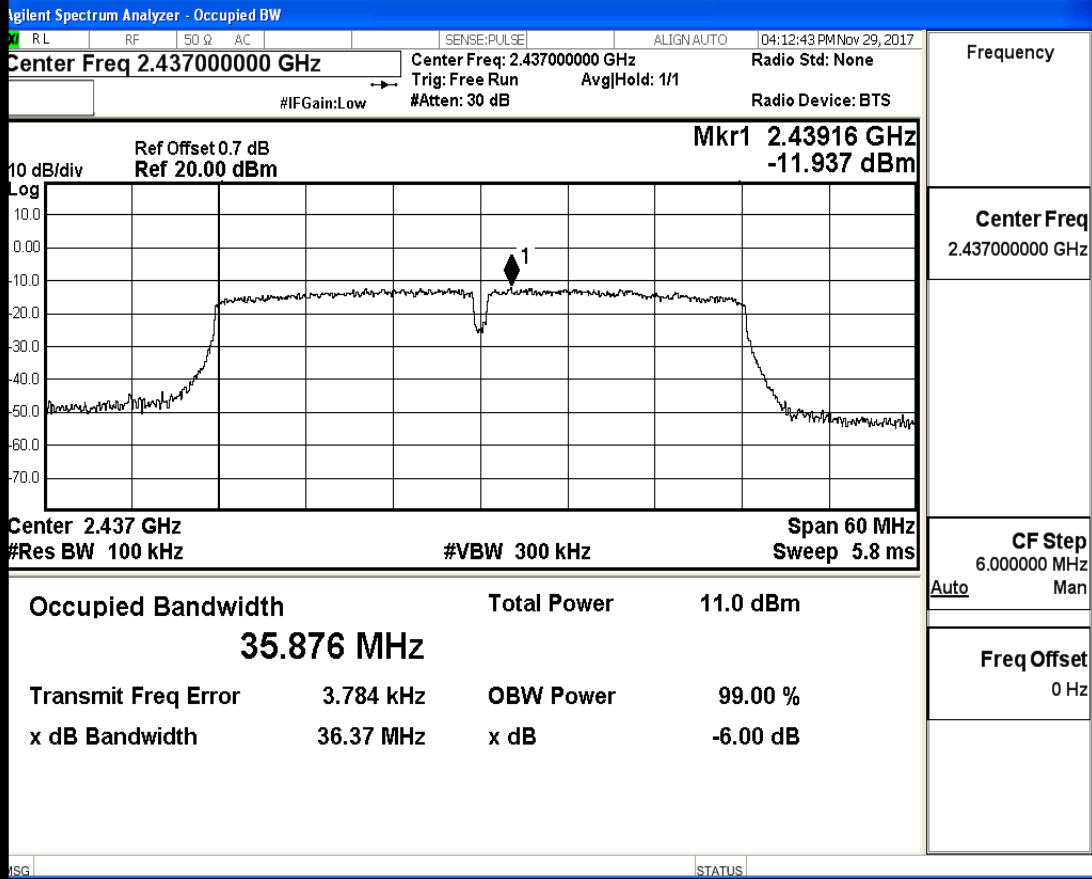
## 6dB Bandwidth\_11N20SISO\_2462\_Ant1



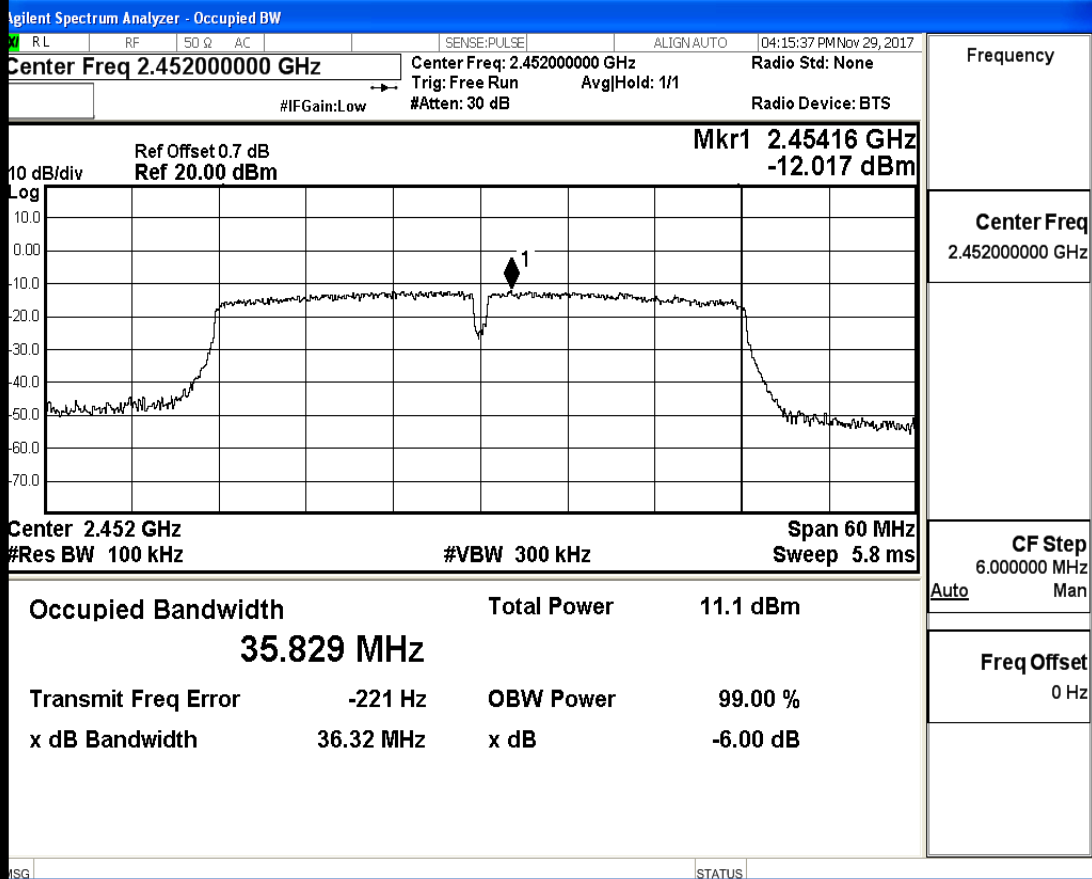
## 6dB Bandwidth\_11N40SISO\_2422\_Ant1



## 6dB Bandwidth\_11N40SISO\_2437\_Ant1



## 6dB Bandwidth\_11N40SISO\_2452\_Ant1

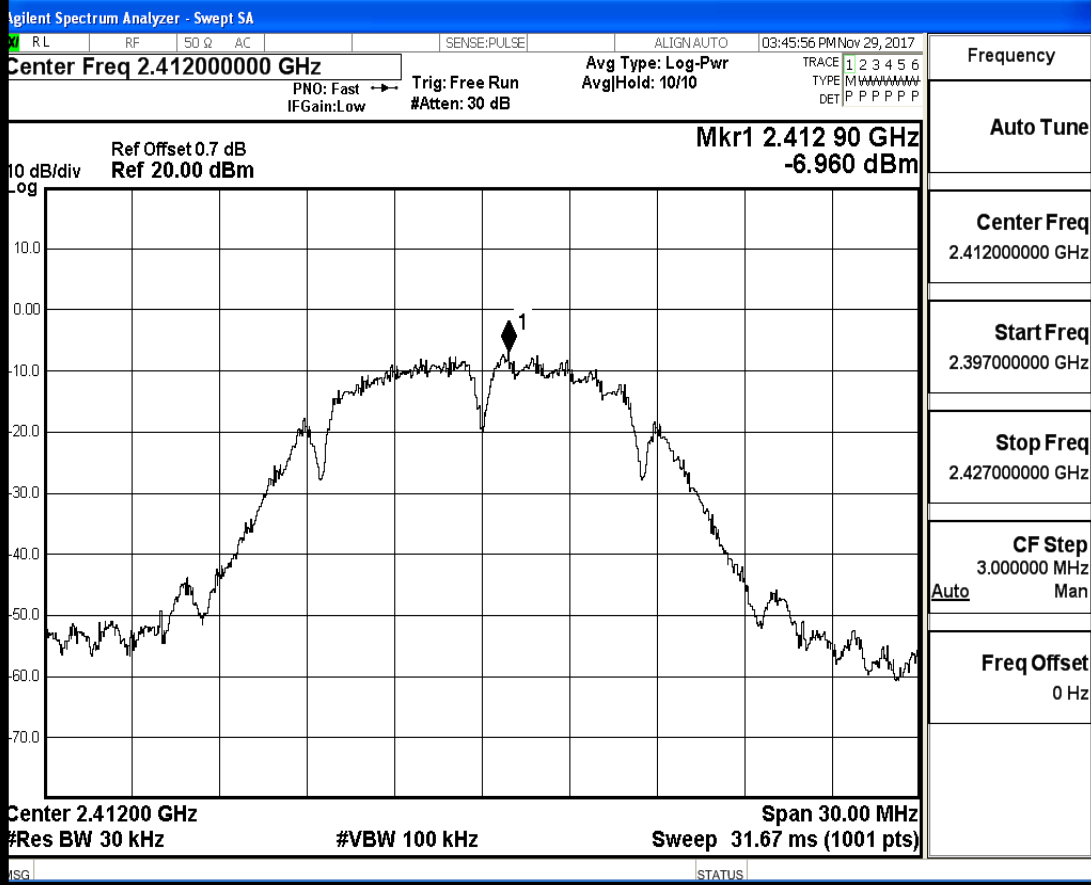


**2.Maximum Peak power spectral density**

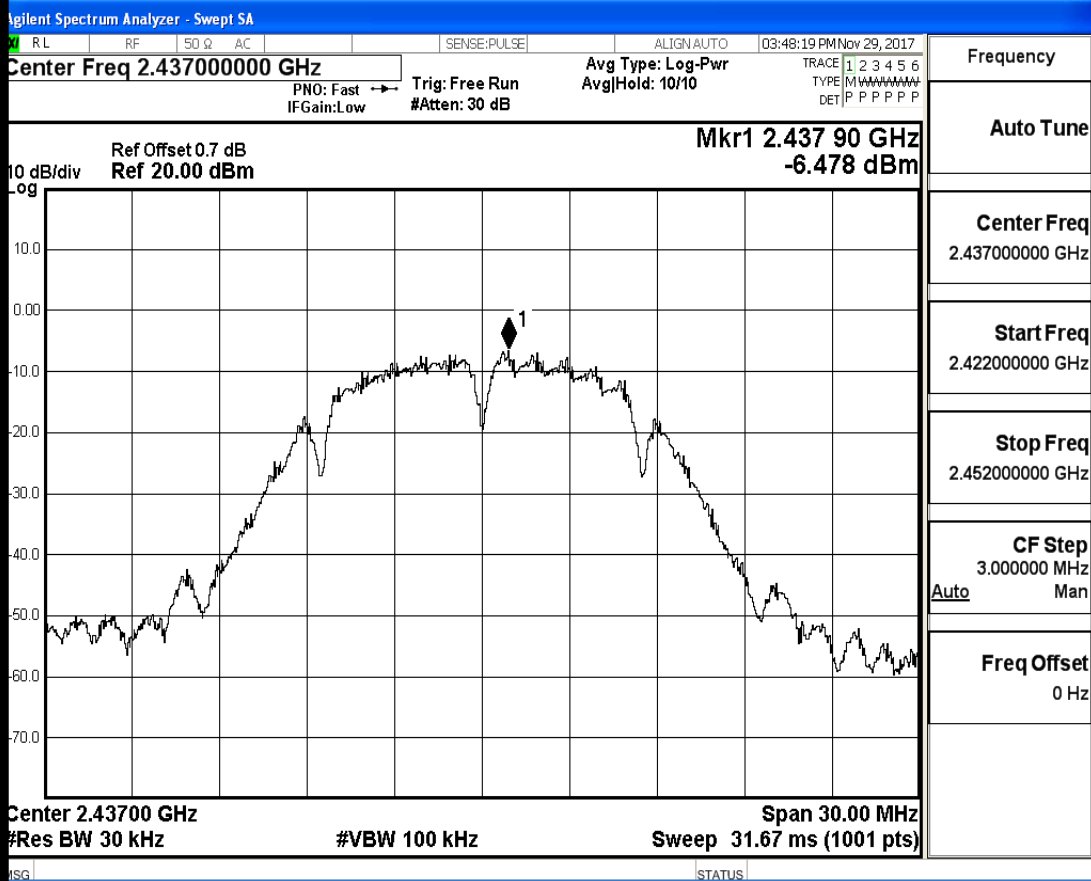
Test Mode	Test Channel	Ant	PSD[dBm/30kHz]	Limit[dBm/3kHz]	Verdict
11B	2412	Ant1	-6.960	8.00	PASS
11B	2437	Ant1	-6.478	8.00	PASS
11B	2462	Ant1	-6.597	8.00	PASS
11G	2412	Ant1	-11.711	8.00	PASS
11G	2437	Ant1	-11.539	8.00	PASS
11G	2462	Ant1	-11.559	8.00	PASS
11N20SISO	2412	Ant1	-11.163	8.00	PASS
11N20SISO	2437	Ant1	-10.670	8.00	PASS
11N20SISO	2462	Ant1	-11.043	8.00	PASS
11N40SISO	2422	Ant1	-15.336	8.00	PASS
11N40SISO	2437	Ant1	-15.466	8.00	PASS
11N40SISO	2452	Ant1	-15.229	8.00	PASS



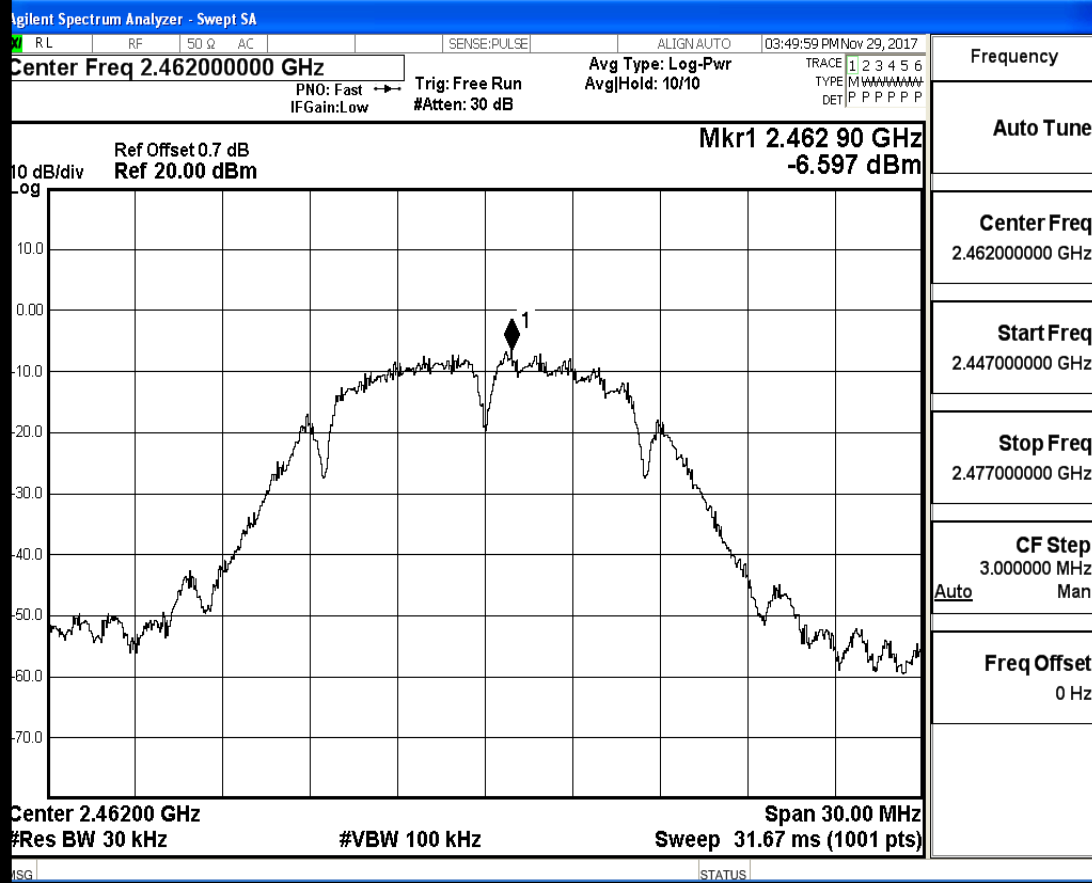
## Maximum Peak power spectral density\_11B\_2412\_Ant1



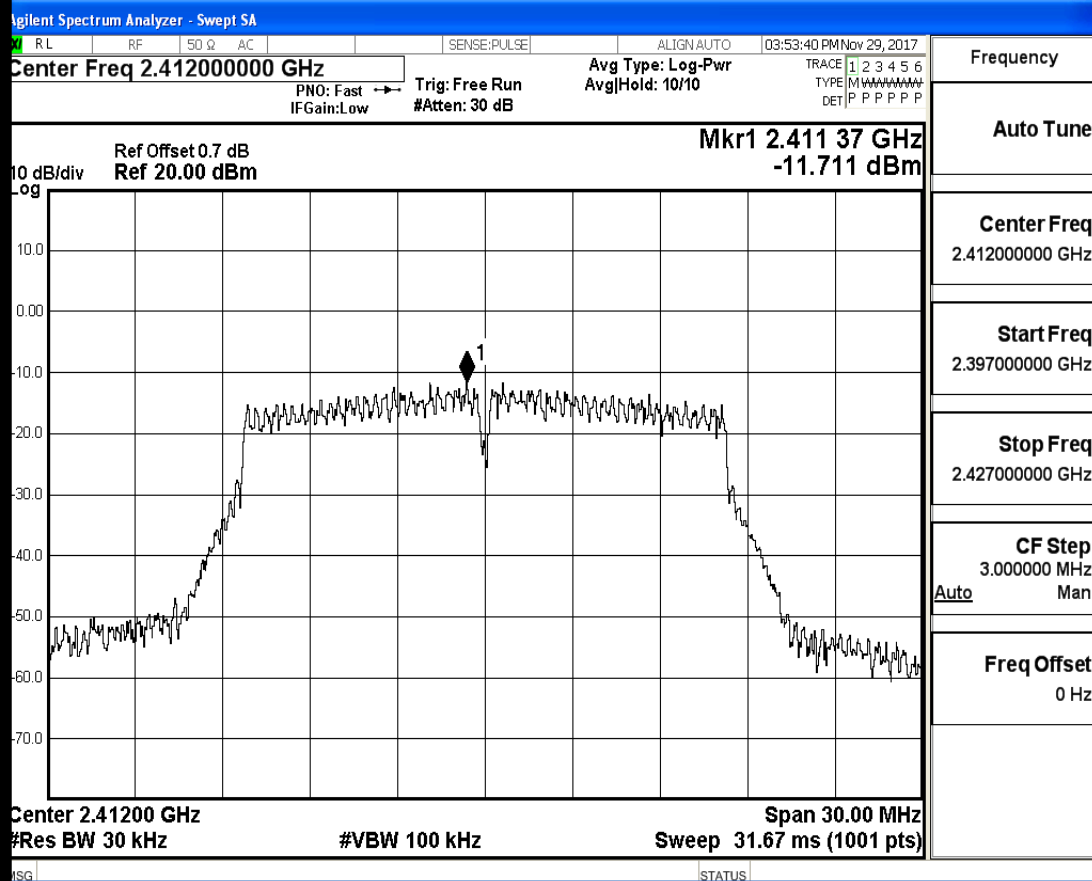
## Maximum Peak power spectral density\_11B\_2437\_Ant1



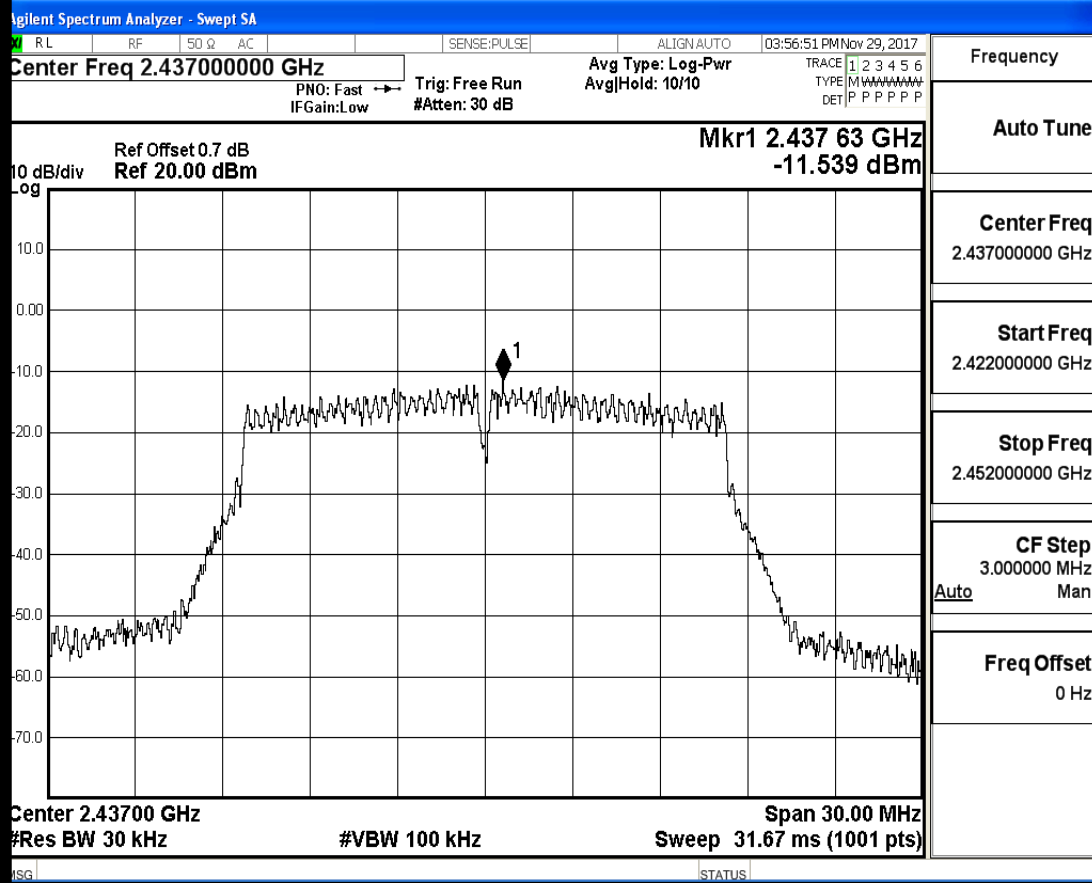
## Maximum Peak power spectral density\_11B\_2462\_Ant1



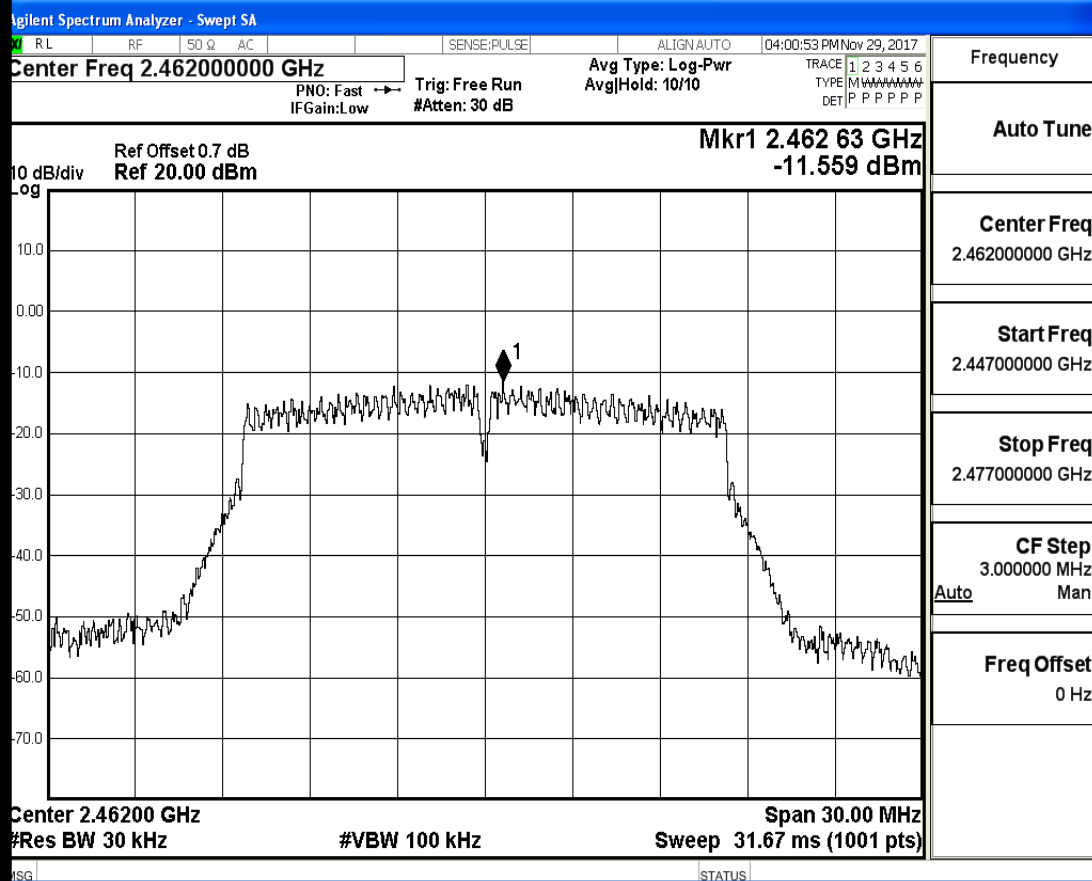
## Maximum Peak power spectral density\_11G\_2412\_Ant1



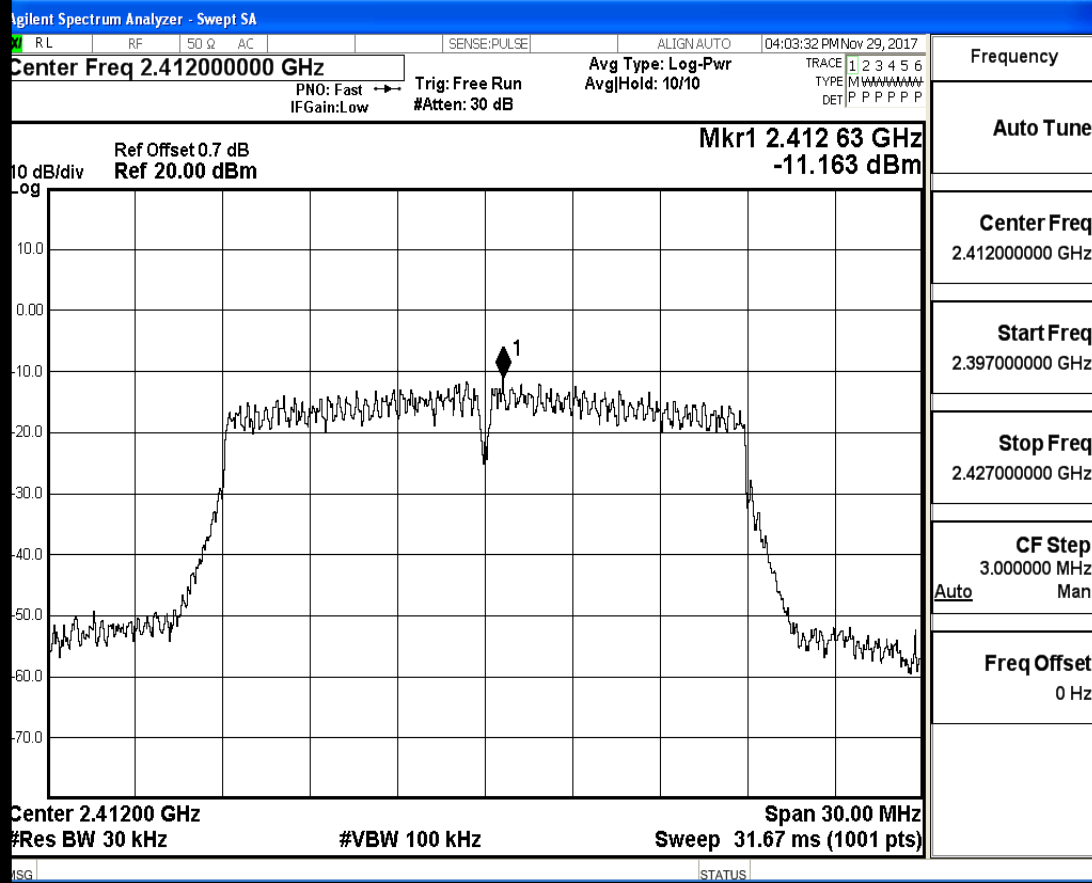
## Maximum Peak power spectral density\_11G\_2437\_Ant1



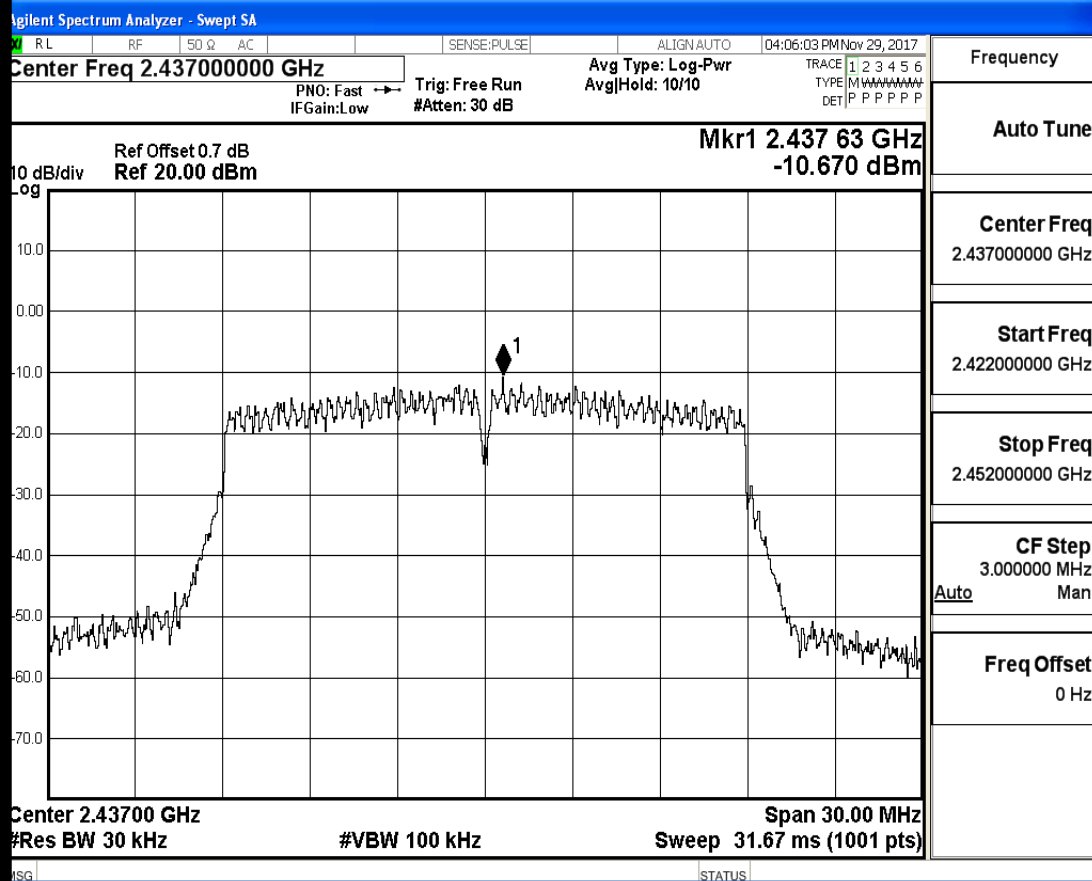
## Maximum Peak power spectral density\_11G\_2462\_Ant1



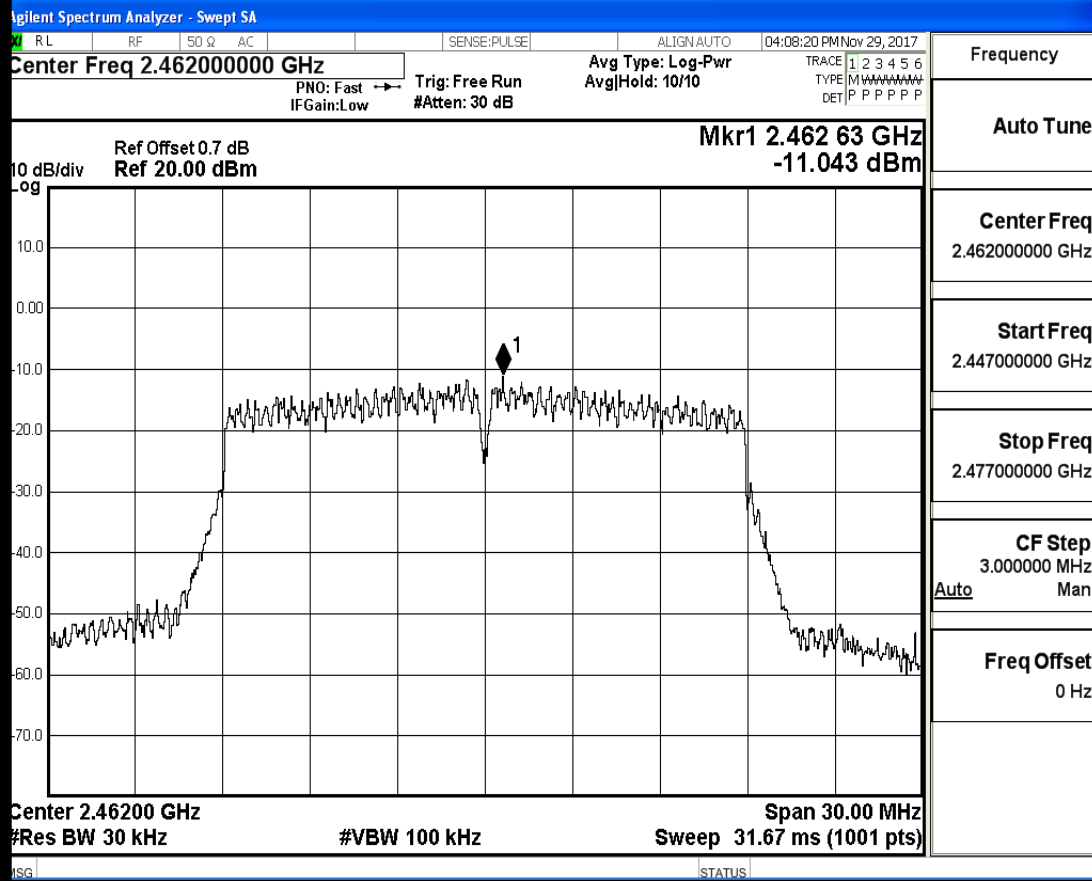
## Maximum Peak power spectral density\_11N20SISO\_2412\_Ant1



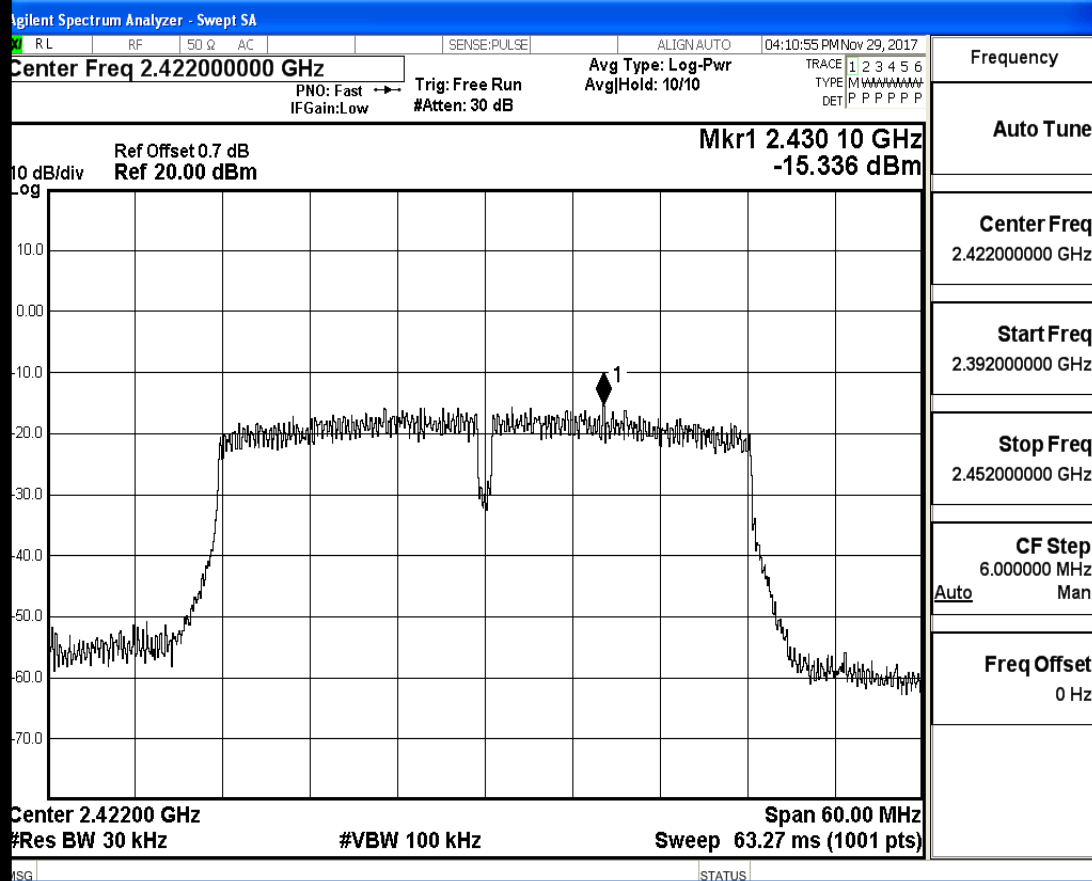
## Maximum Peak power spectral density\_11N20SISO\_2437\_Ant1



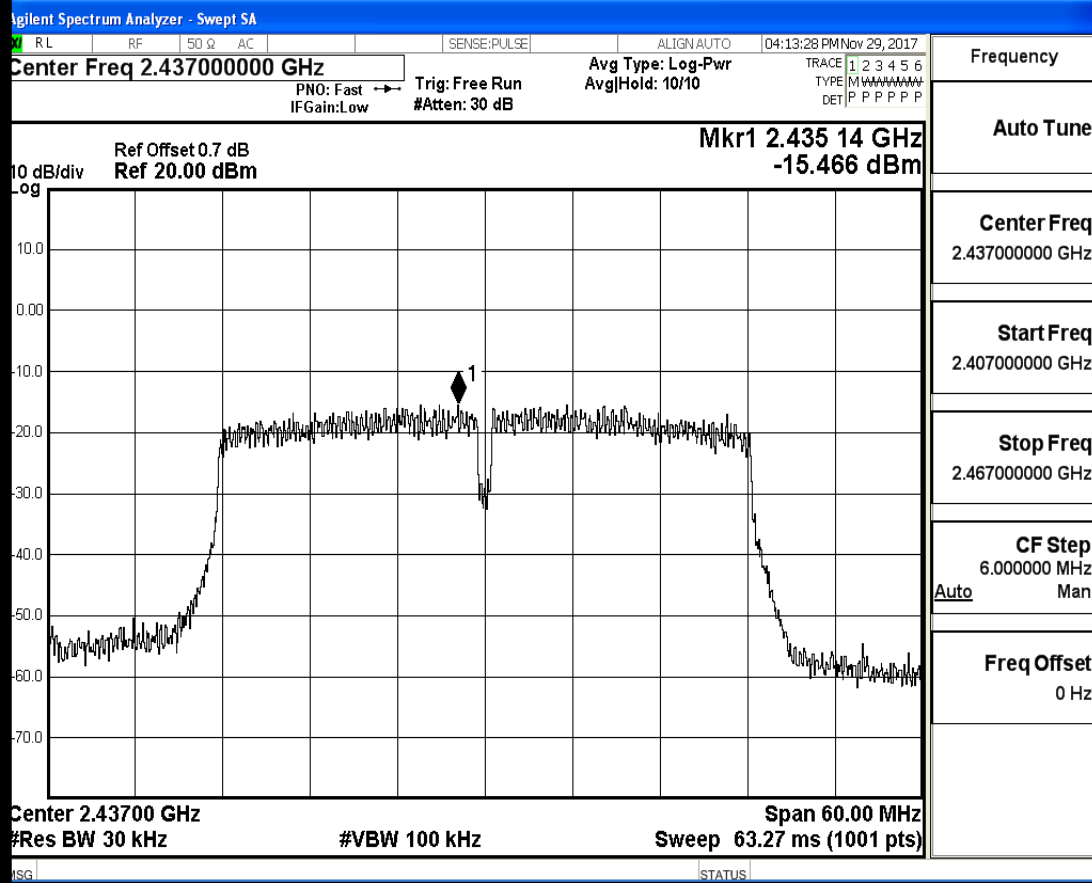
## Maximum Peak power spectral density\_11N20SISO\_2462\_Ant1



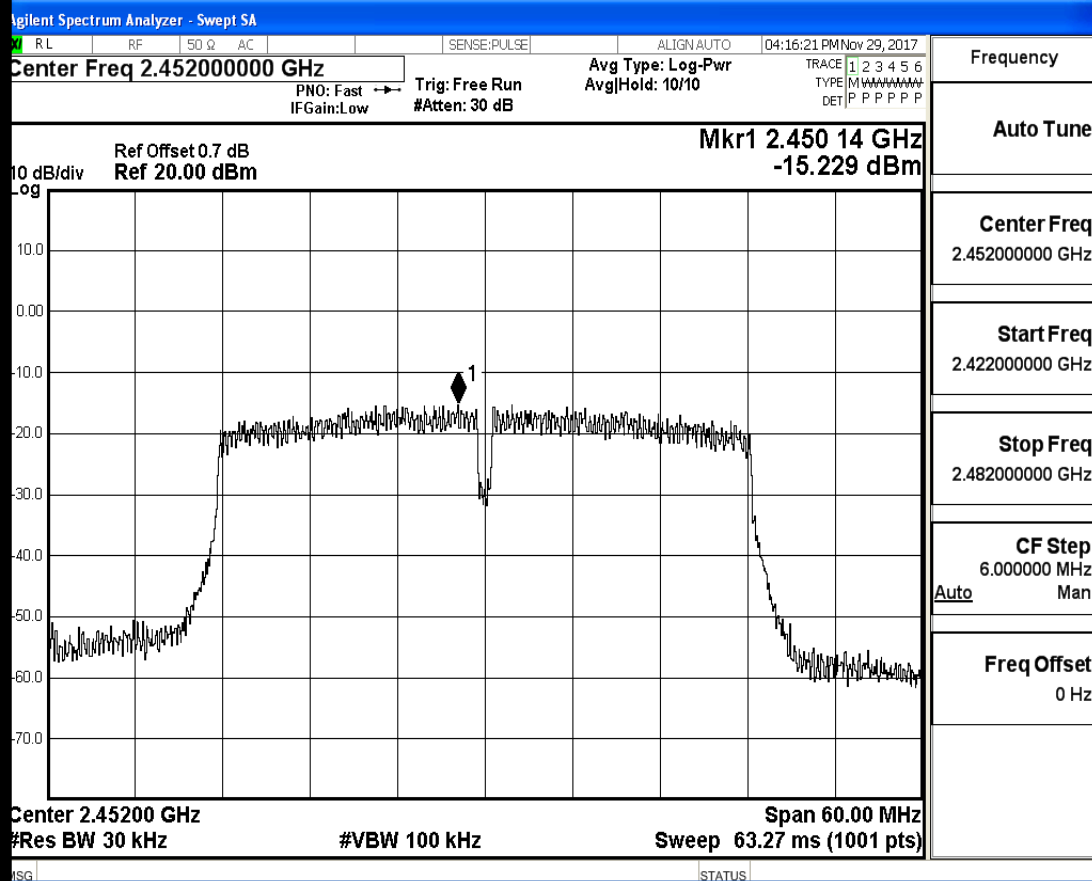
## Maximum Peak power spectral density\_11N40SISO\_2422\_Ant1



## Maximum Peak power spectral density\_11N40SISO\_2437\_Ant1

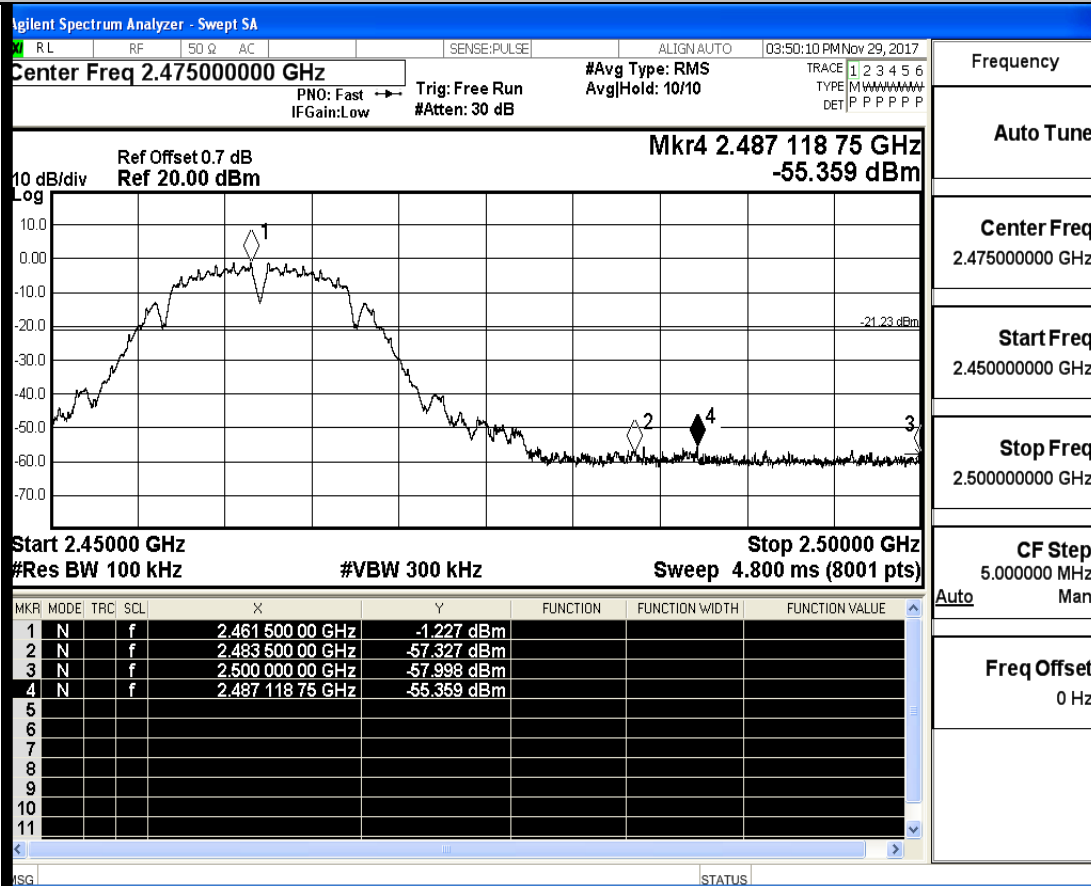
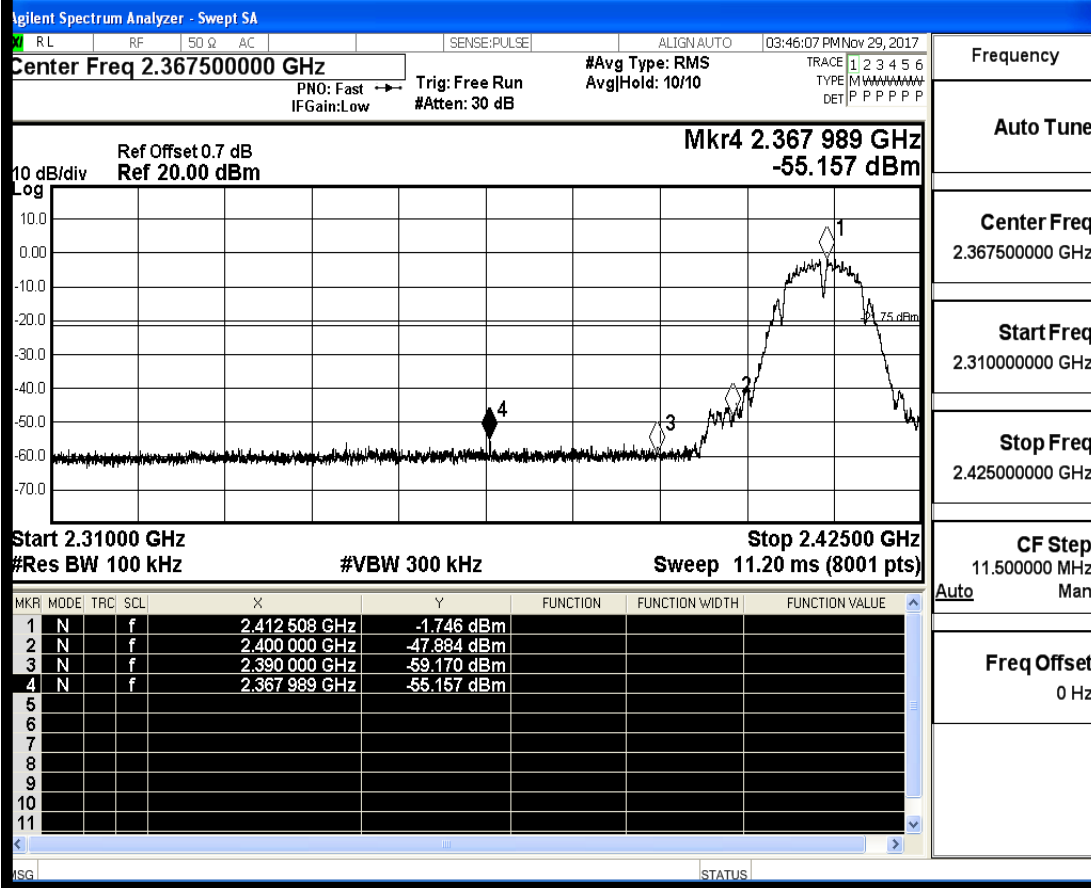


## Maximum Peak power spectral density\_11N40SISO\_2452\_Ant1



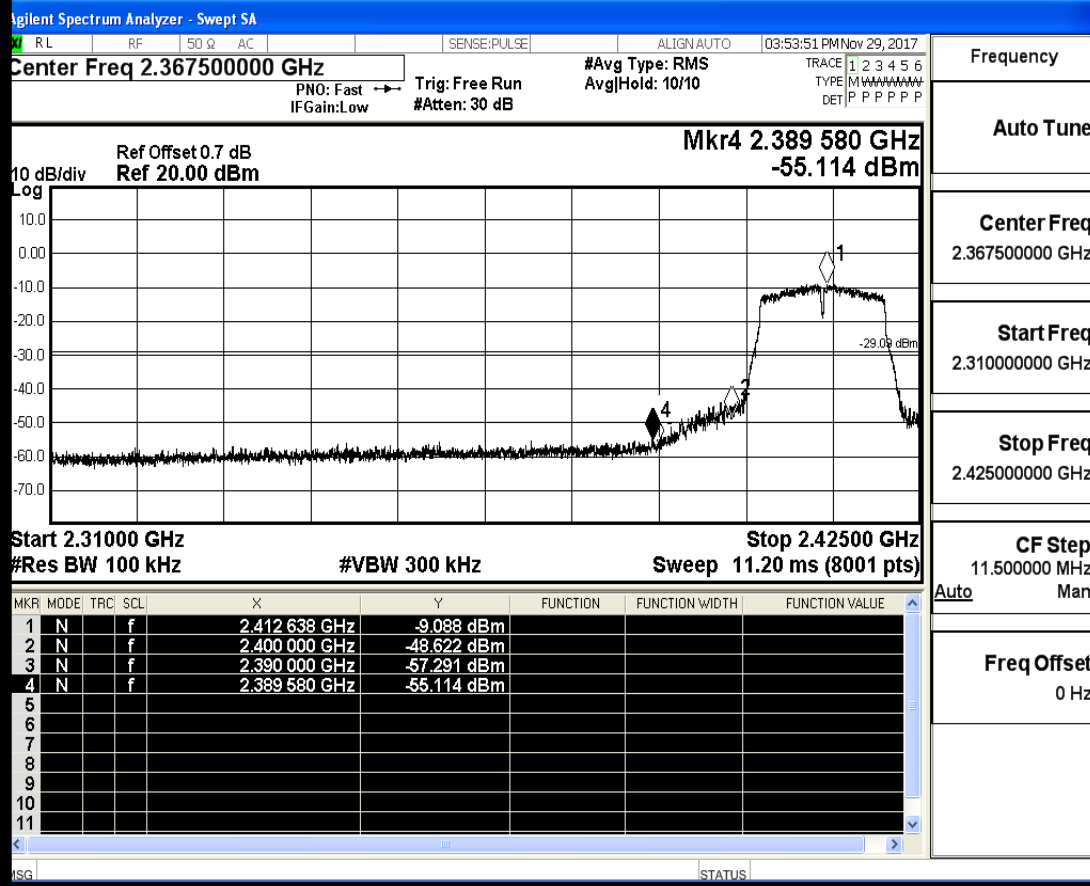
**3.Band-edge for RF Conducted Emissions**

Test Mode	Test Channel	Ant	Carrier Power[dBm]	Max. Spurious Level [dBm]	Limit [dBm]	Verdict
11B	2412	Ant1	-1.746	-55.157	-21.75	PASS
11B	2462	Ant1	-1.227	-55.359	-21.23	PASS
11G	2412	Ant1	-9.088	-55.114	-29.09	PASS
11G	2462	Ant1	-8.906	-54.799	-28.91	PASS
11N20SISO	2412	Ant1	-8.680	-54.317	-28.68	PASS
11N20SISO	2462	Ant1	-8.885	-54.753	-28.89	PASS
11N40SISO	2422	Ant1	-12.829	-48.975	-32.83	PASS
11N40SISO	2452	Ant1	-12.219	-51.207	-32.22	PASS

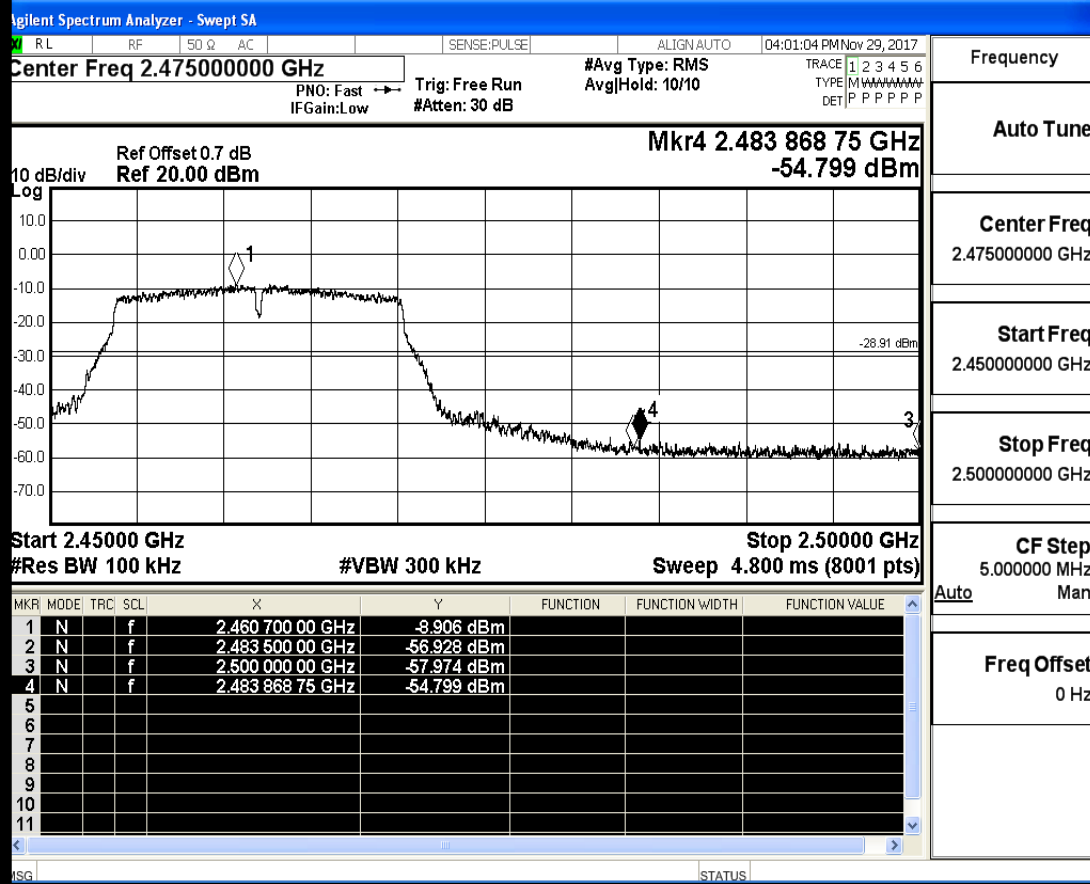




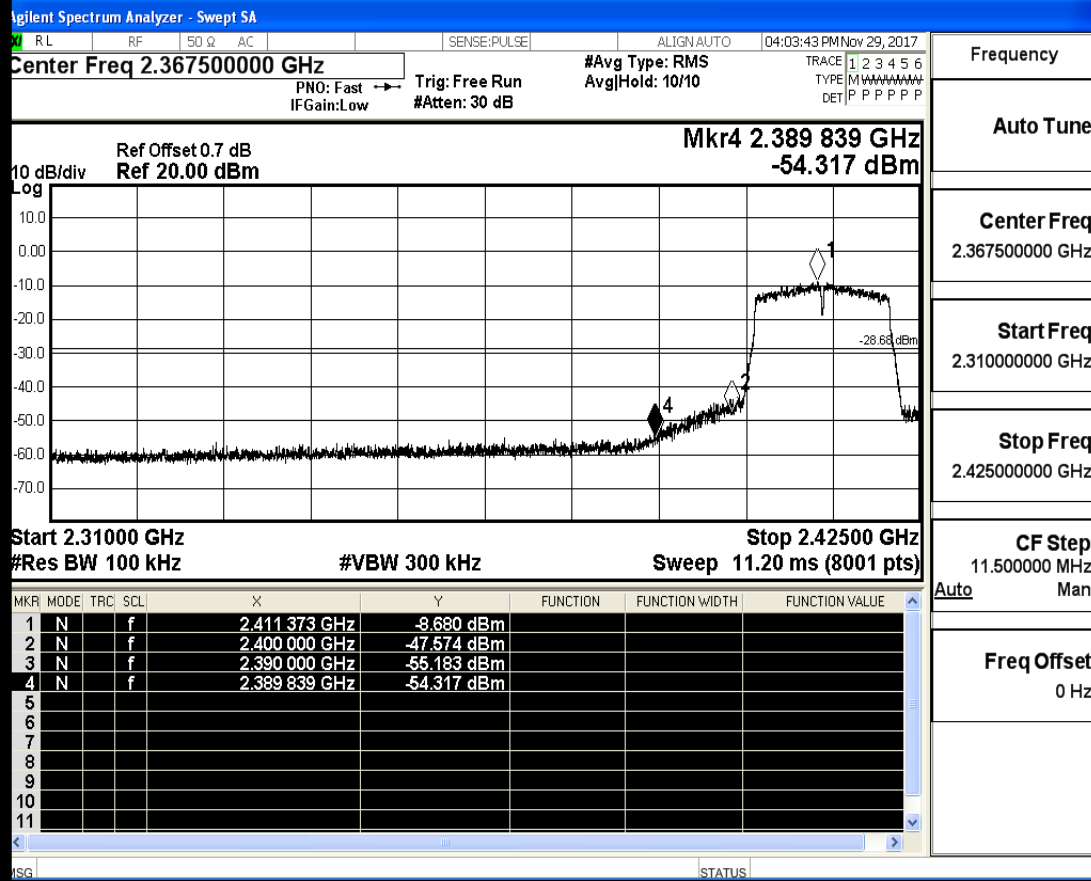
## Band-edge for RF Conducted Emissions\_11G\_2412\_Ant1



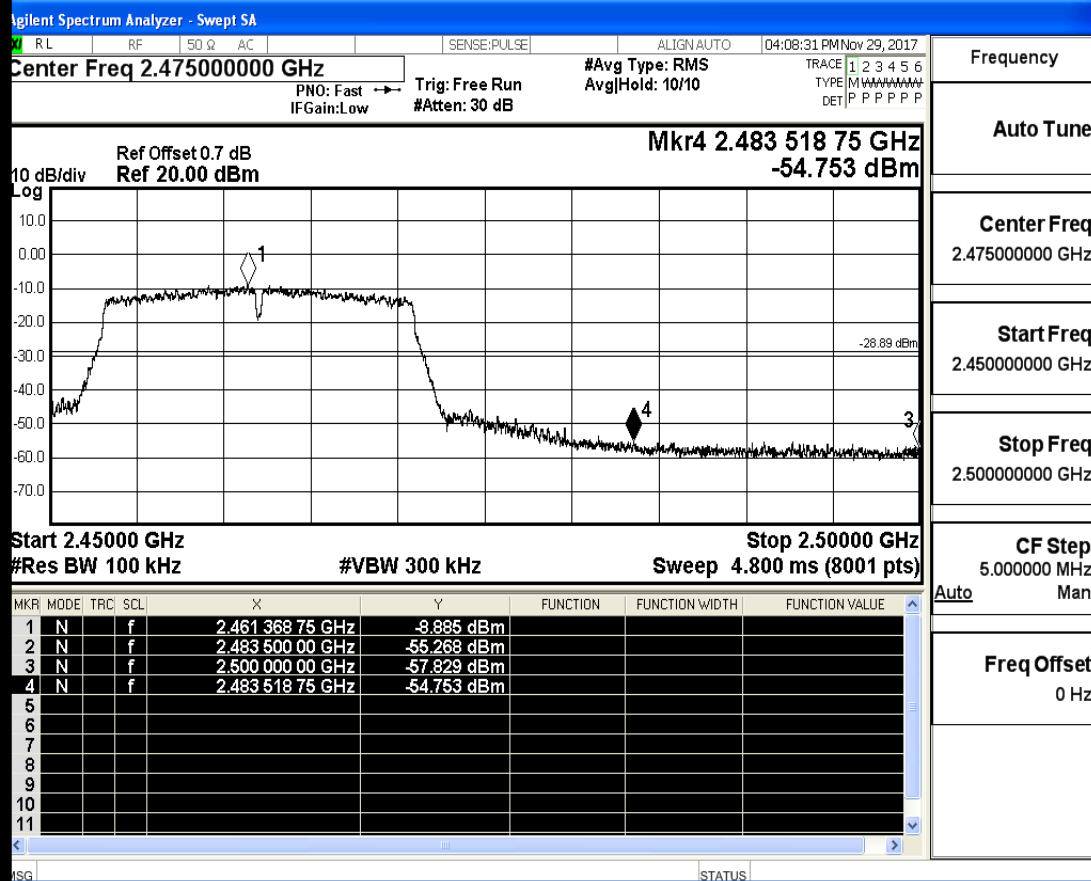
## Band-edge for RF Conducted Emissions\_11G\_2462\_Ant1



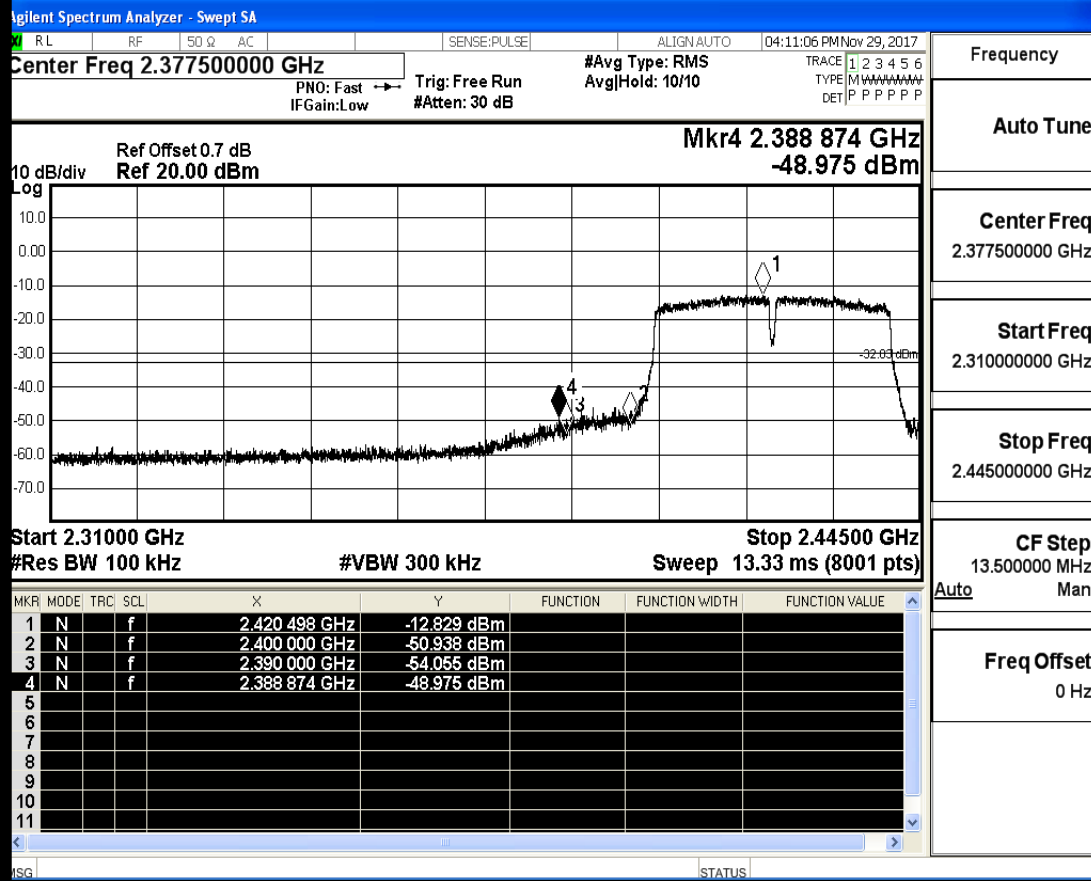
## Band-edge for RF Conducted Emissions\_11N20SISO\_2412\_Ant1



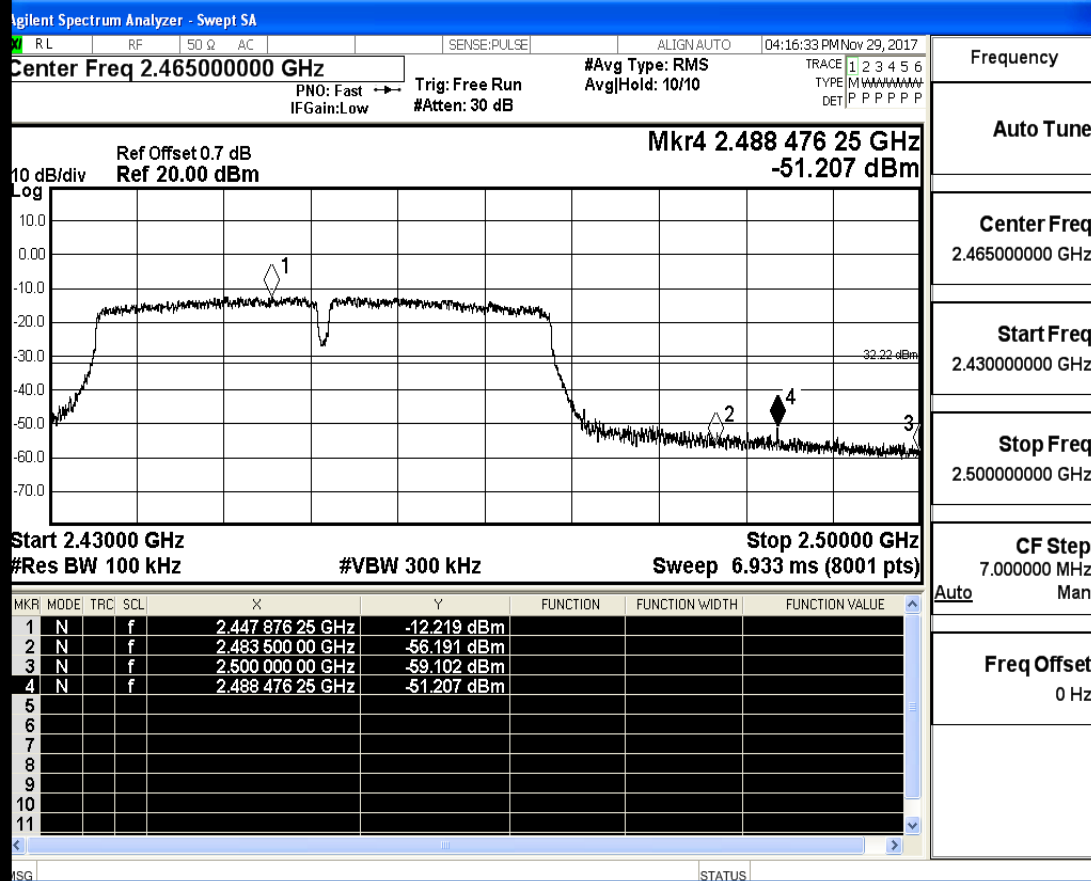
## Band-edge for RF Conducted Emissions\_11N20SISO\_2462\_Ant1



## Band-edge for RF Conducted Emissions\_11N40SISO\_2422\_Ant1



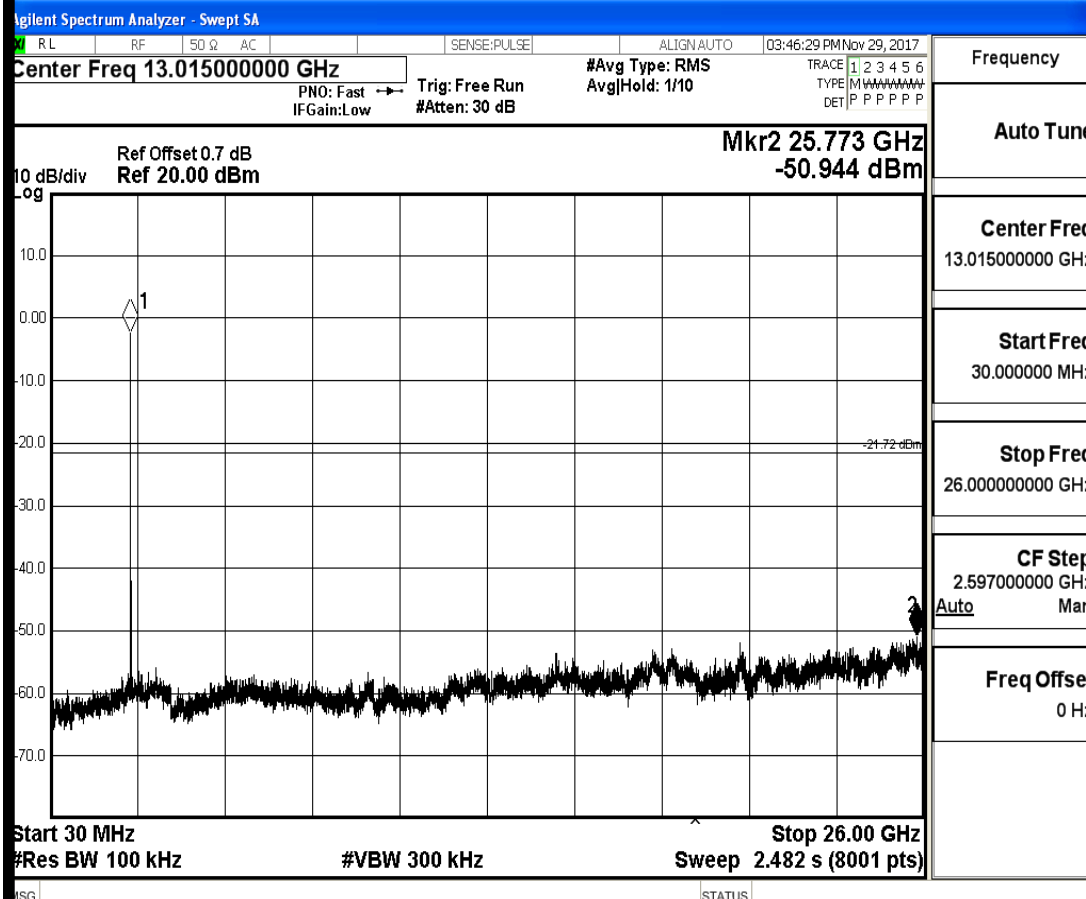
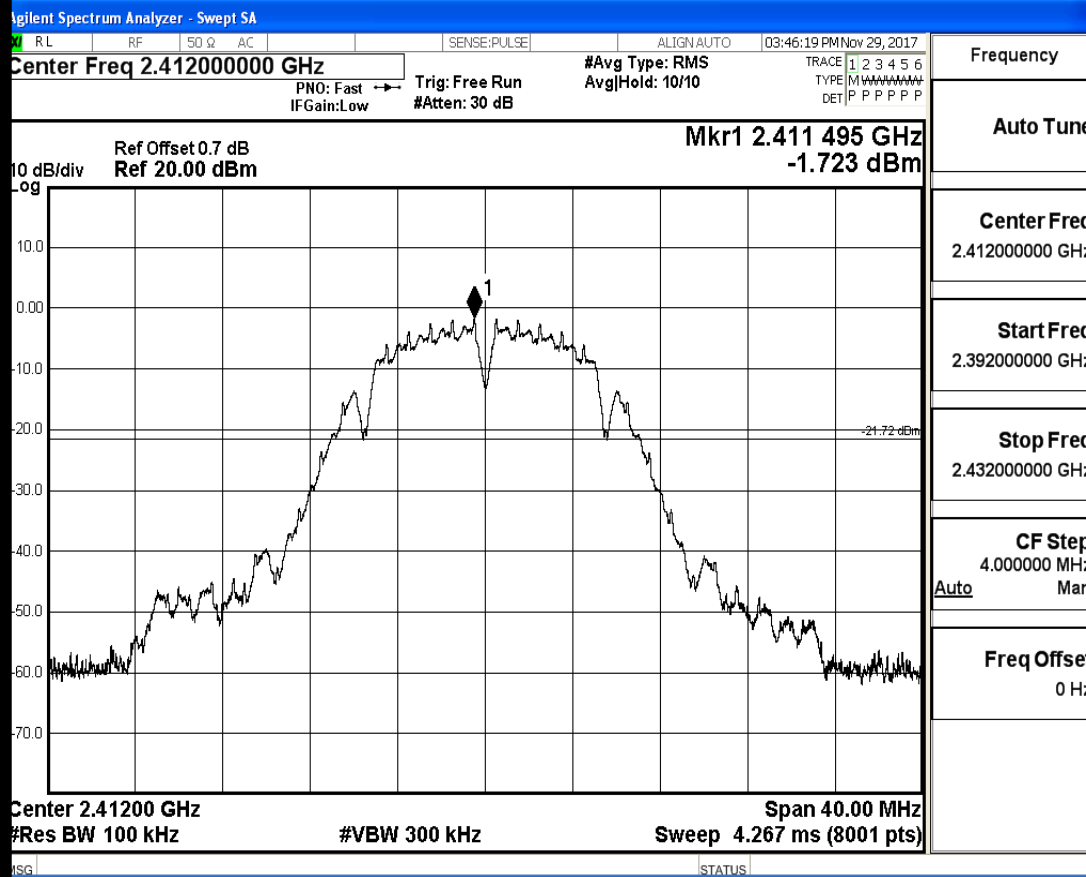
## Band-edge for RF Conducted Emissions\_11N40SISO\_2452\_Ant1



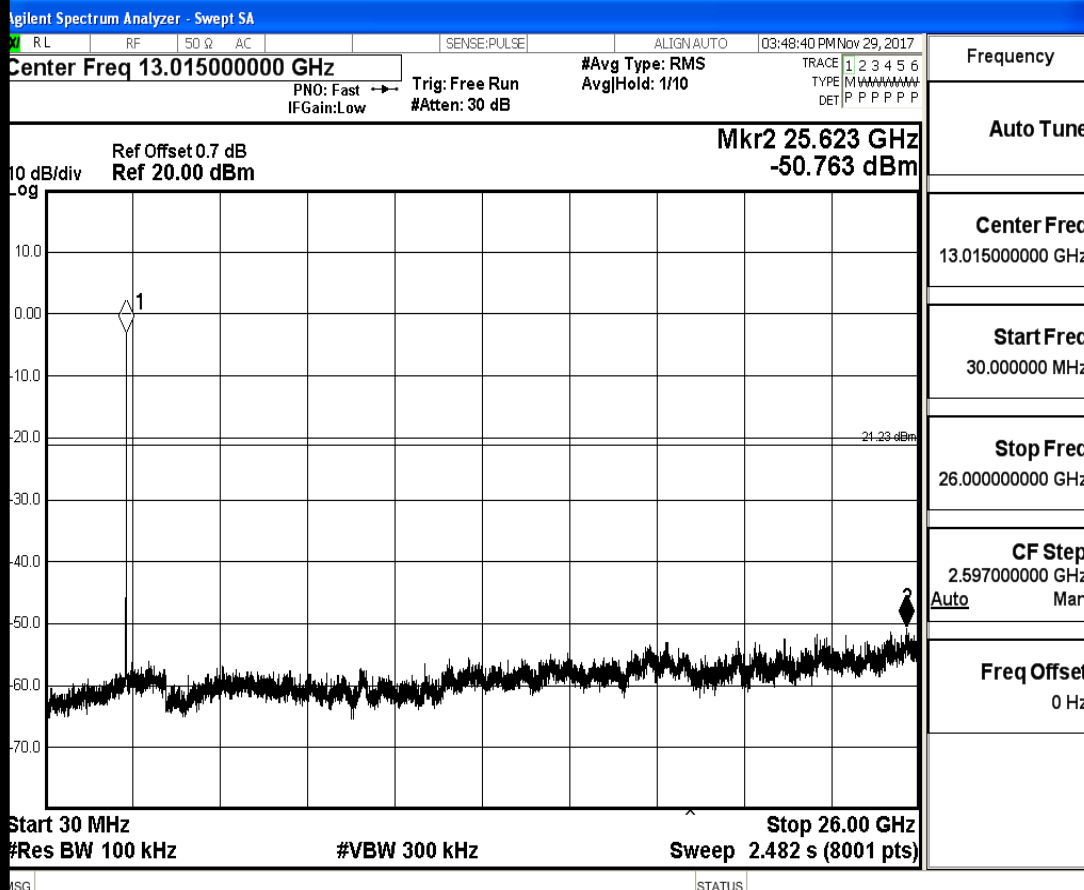
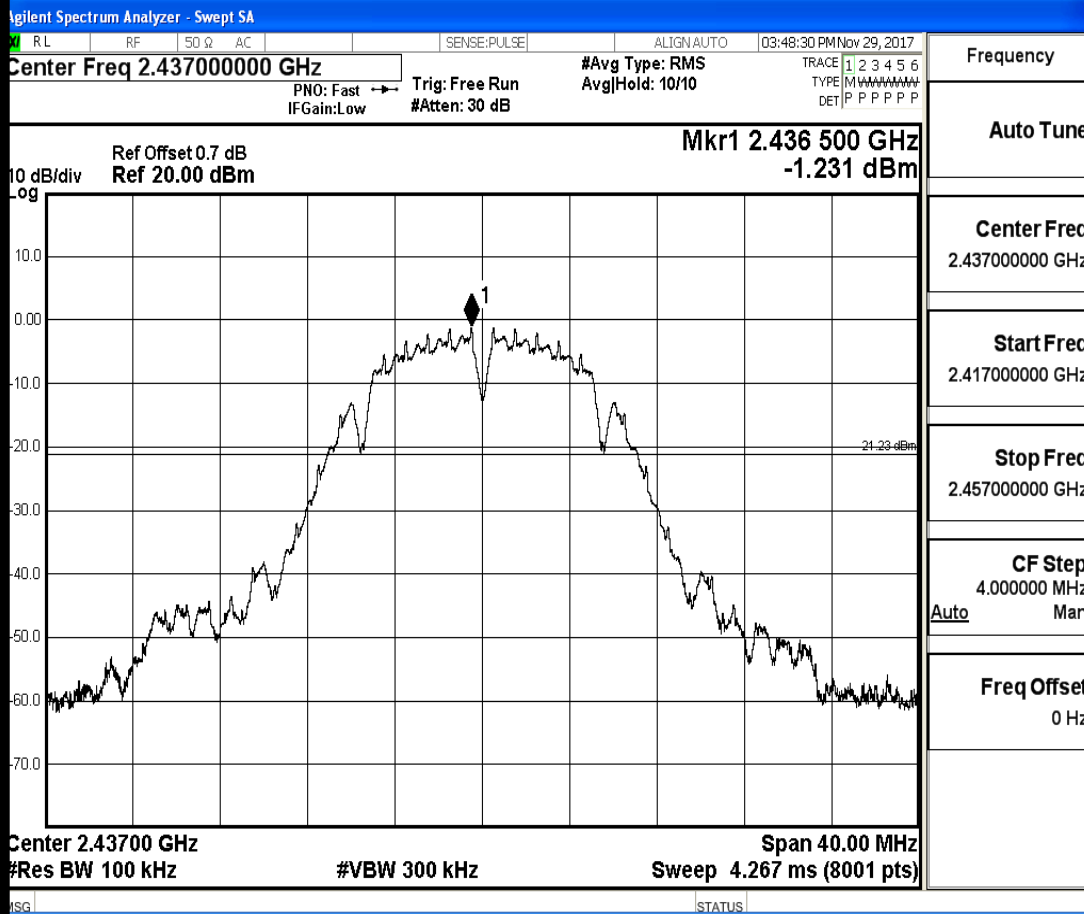
#### 4.RF Conducted Spurious Emissions

Test Mode	Test Channel	Ant	StartFre [MHz]	StopFre [MHz]	RBW [kHz]	VBW [kHz]	Pref[dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
11B	2412	Ant1	30	26000	100	300	-1.723	-50.944	<-21.723	PASS
11B	2437	Ant1	30	26000	100	300	-1.231	-50.763	<-21.231	PASS
11B	2462	Ant1	30	26000	100	300	-1.293	-51.129	<-21.293	PASS
11G	2412	Ant1	30	26000	100	300	-9.109	-50.074	<-29.109	PASS
11G	2437	Ant1	30	26000	100	300	-9.053	-50.946	<-29.053	PASS
11G	2462	Ant1	30	26000	100	300	-8.989	-50.062	<-28.989	PASS
11N20SISO	2412	Ant1	30	26000	100	300	-8.682	-50.919	<-28.682	PASS
11N20SISO	2437	Ant1	30	26000	100	300	-8.474	-51.077	<-28.474	PASS
11N20SISO	2462	Ant1	30	26000	100	300	-8.761	-50.847	<-28.761	PASS
11N40SISO	2422	Ant1	30	26000	100	300	-12.687	-51.349	<-32.687	PASS
11N40SISO	2437	Ant1	30	26000	100	300	-11.971	-49.921	<-31.971	PASS
11N40SISO	2452	Ant1	30	26000	100	300	-12.344	-50.460	<-32.344	PASS

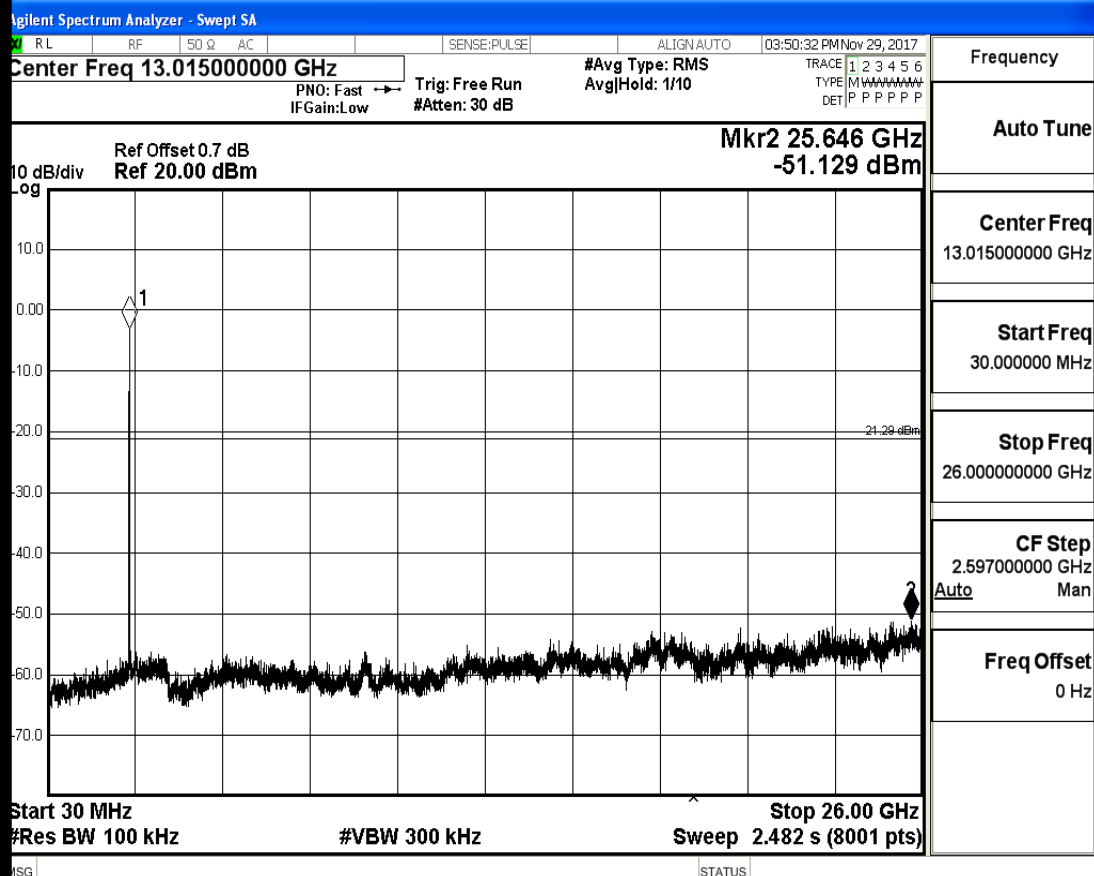
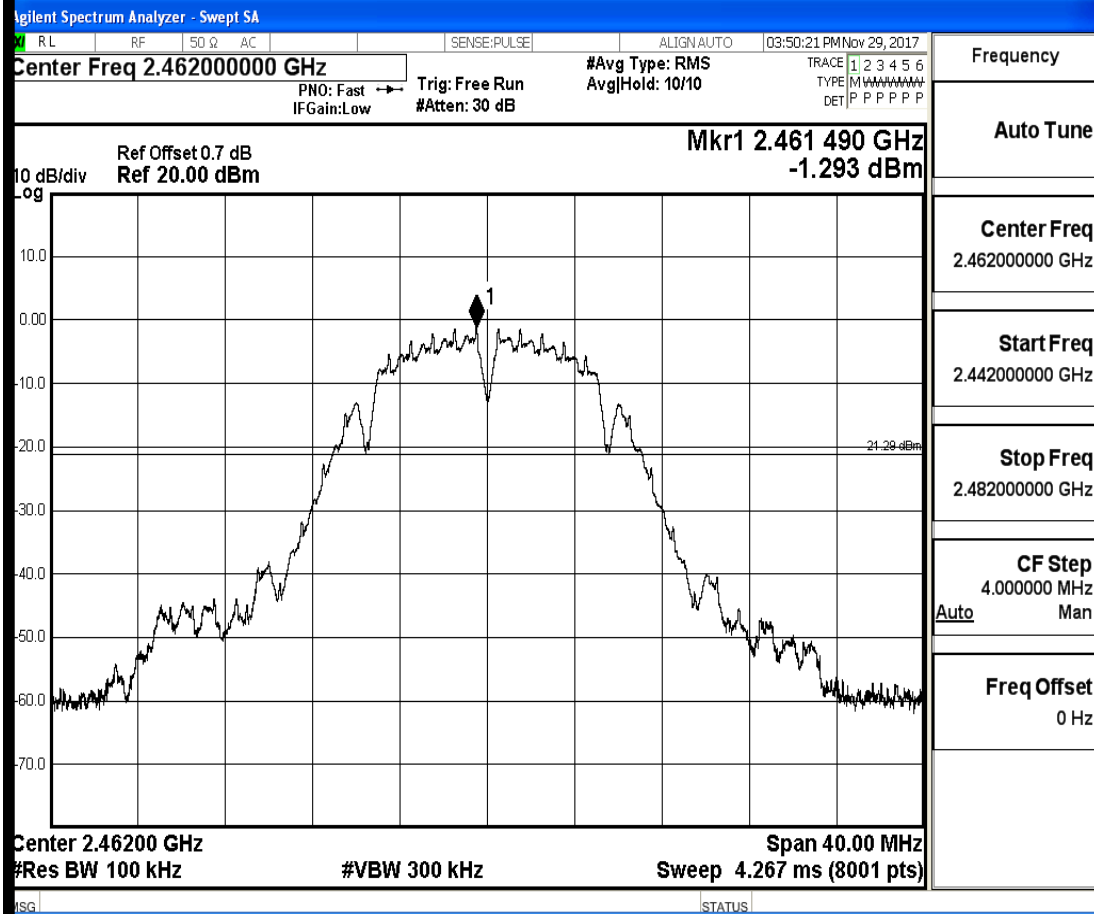
## RF Conducted Spurious Emissions\_11B\_2412\_Ant1



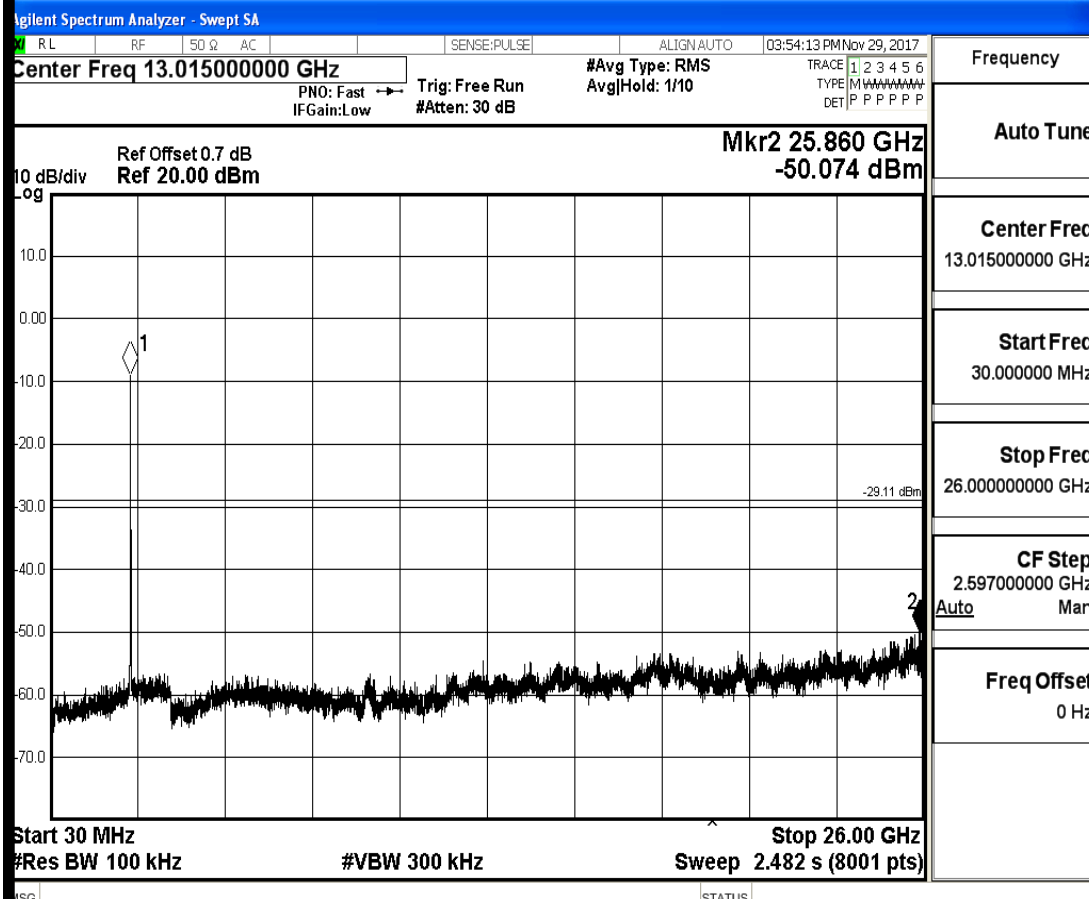
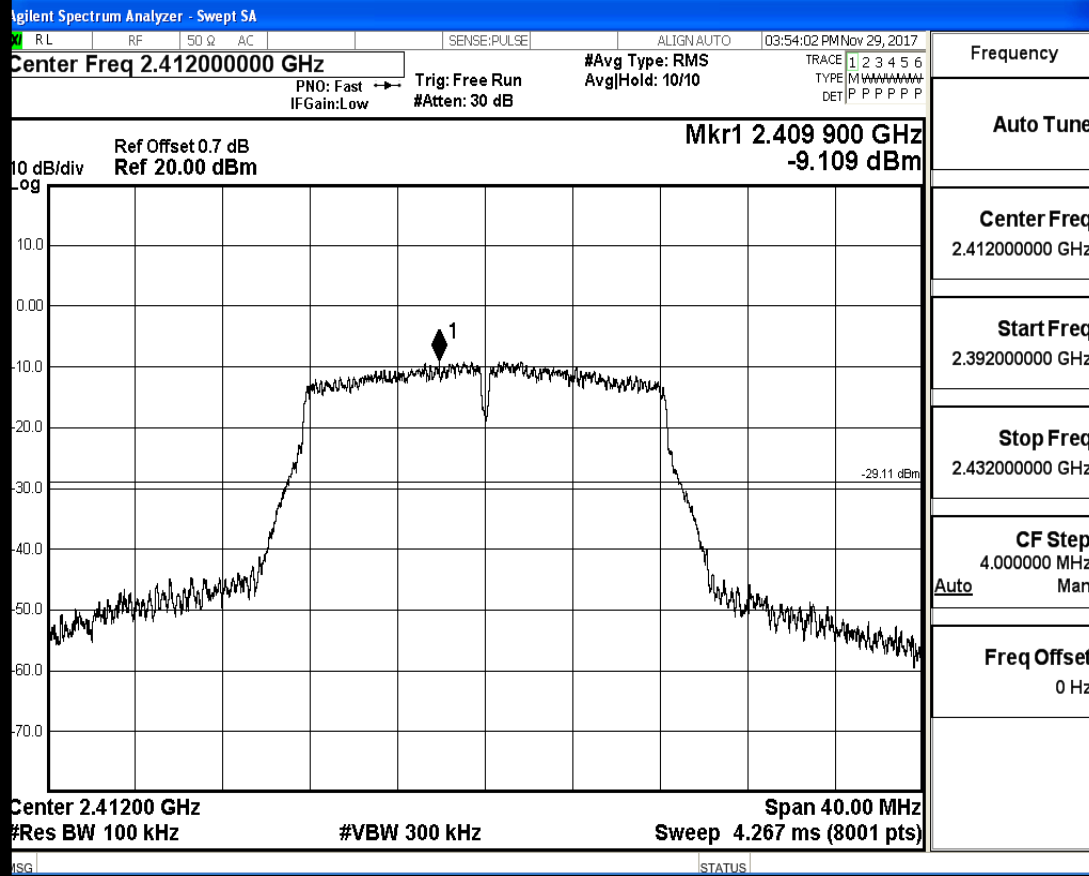
## RF Conducted Spurious Emissions\_11B\_2437\_Ant1



## RF Conducted Spurious Emissions\_11B\_2462\_Ant1

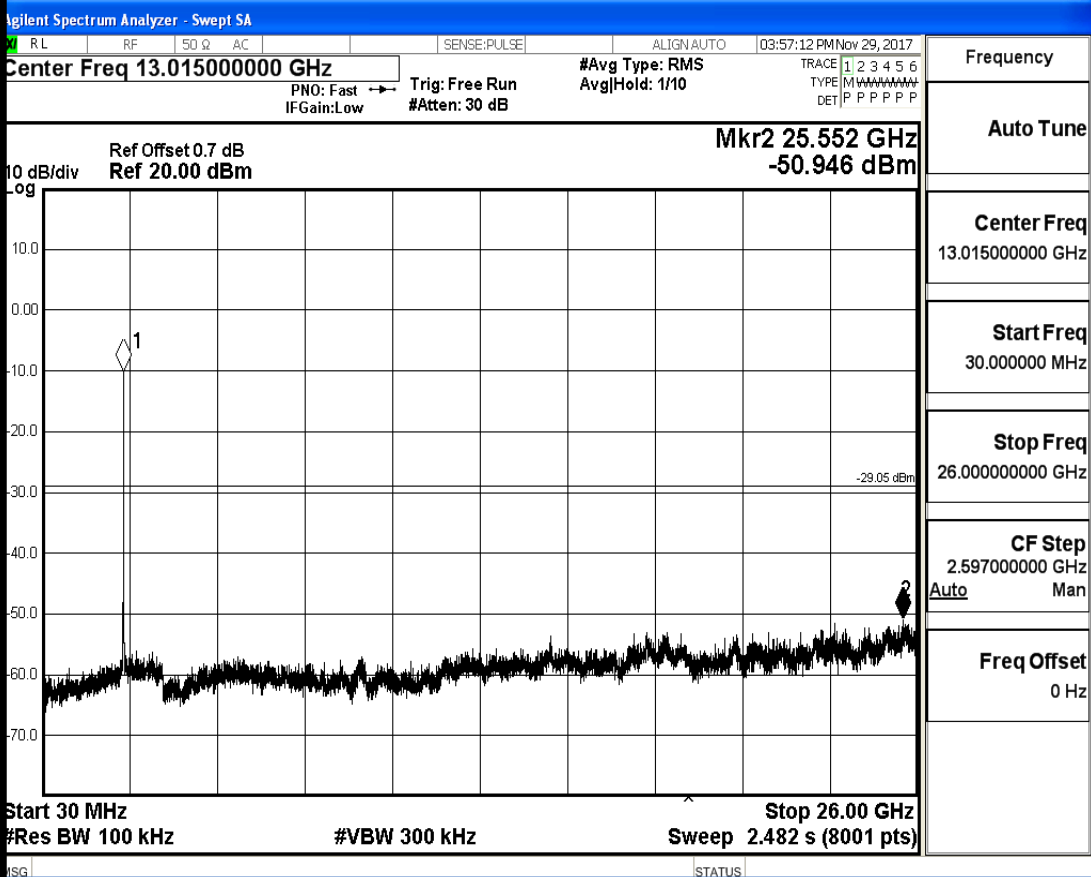
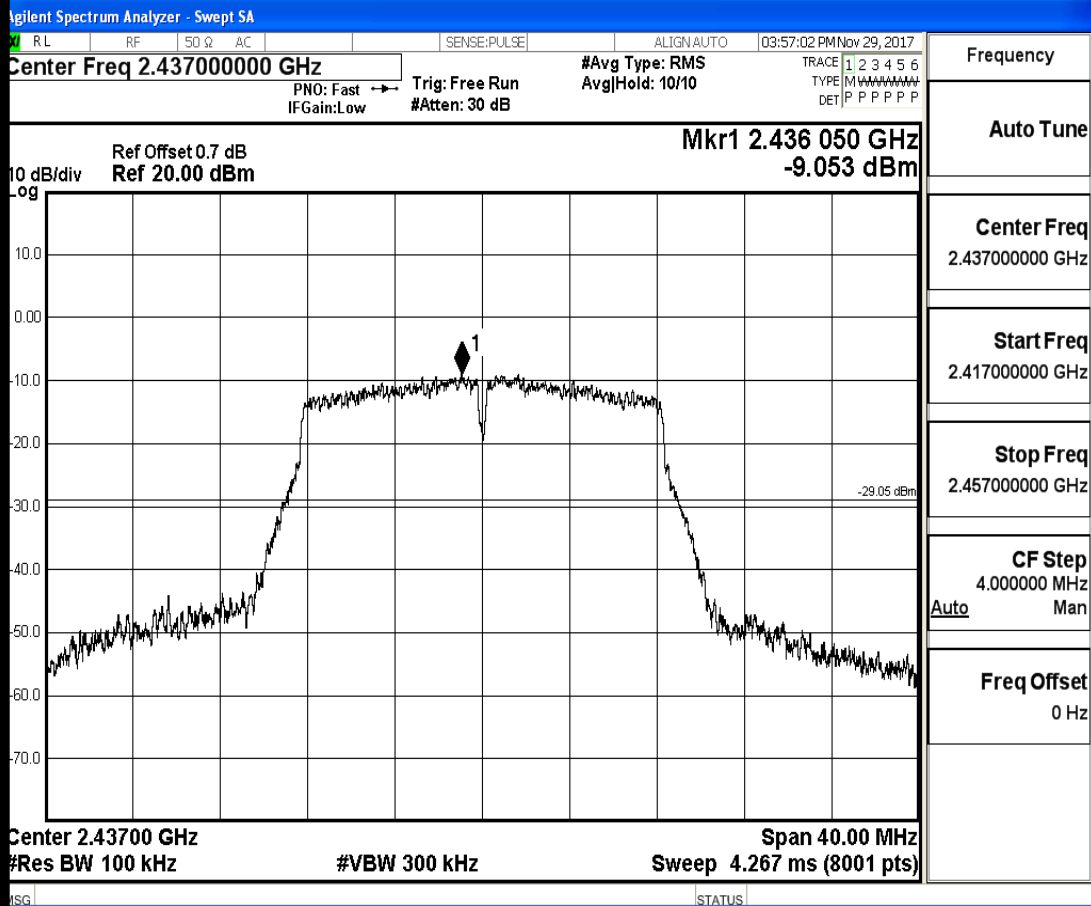


## RF Conducted Spurious Emissions\_11G\_2412\_Ant1

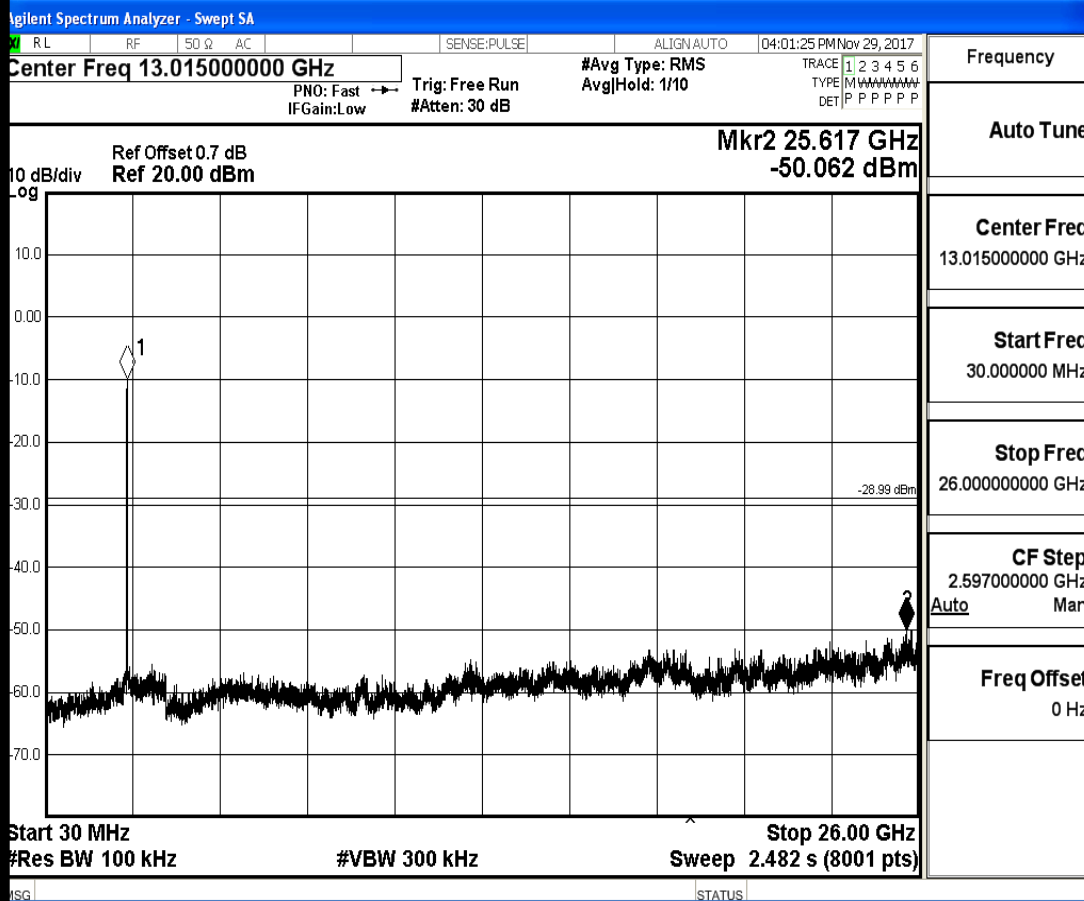
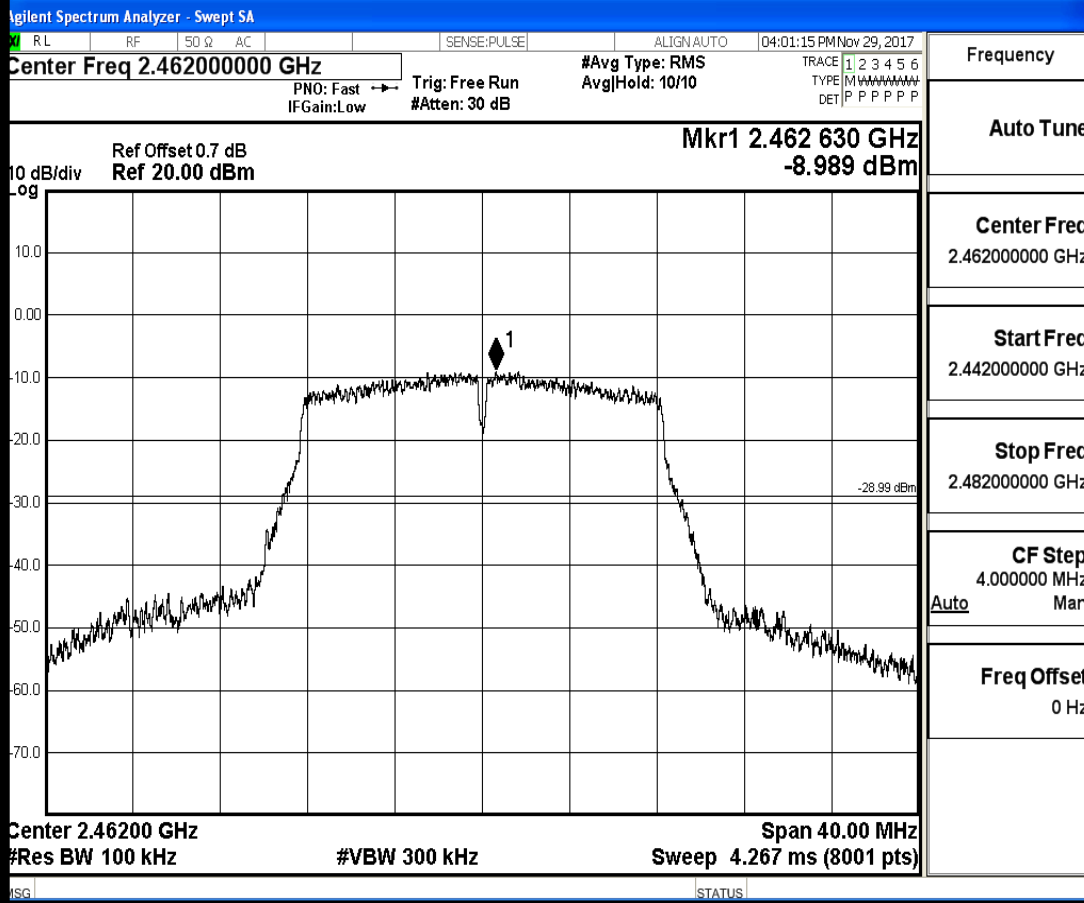




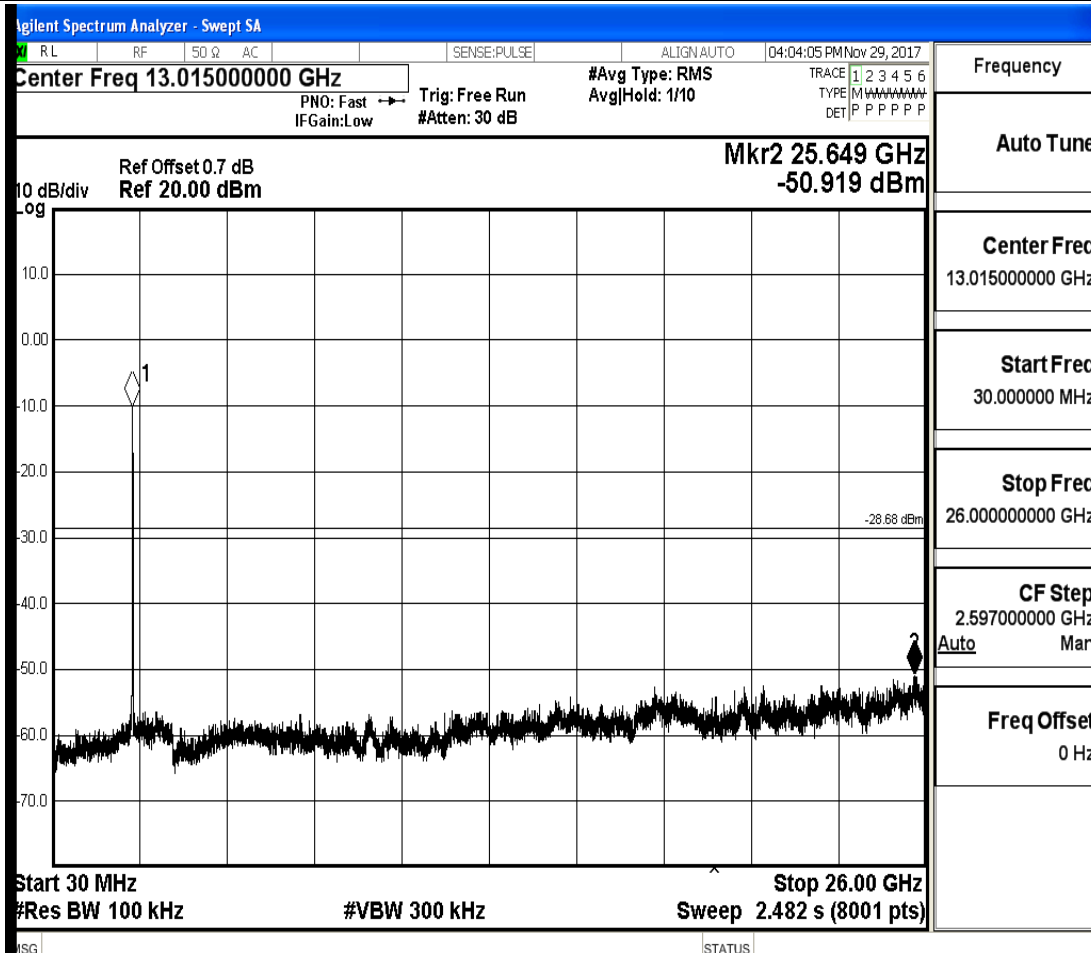
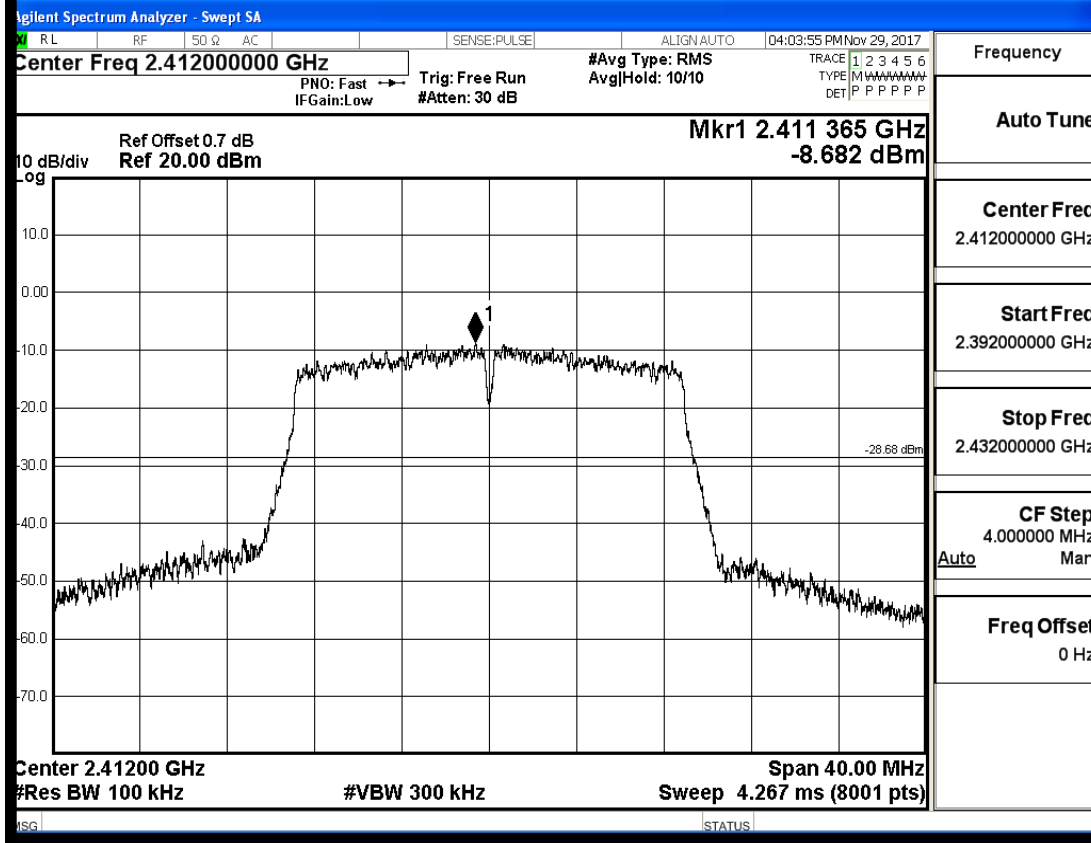
## RF Conducted Spurious Emissions\_11G\_2437\_Ant1



## RF Conducted Spurious Emissions\_11G\_2462\_Ant1



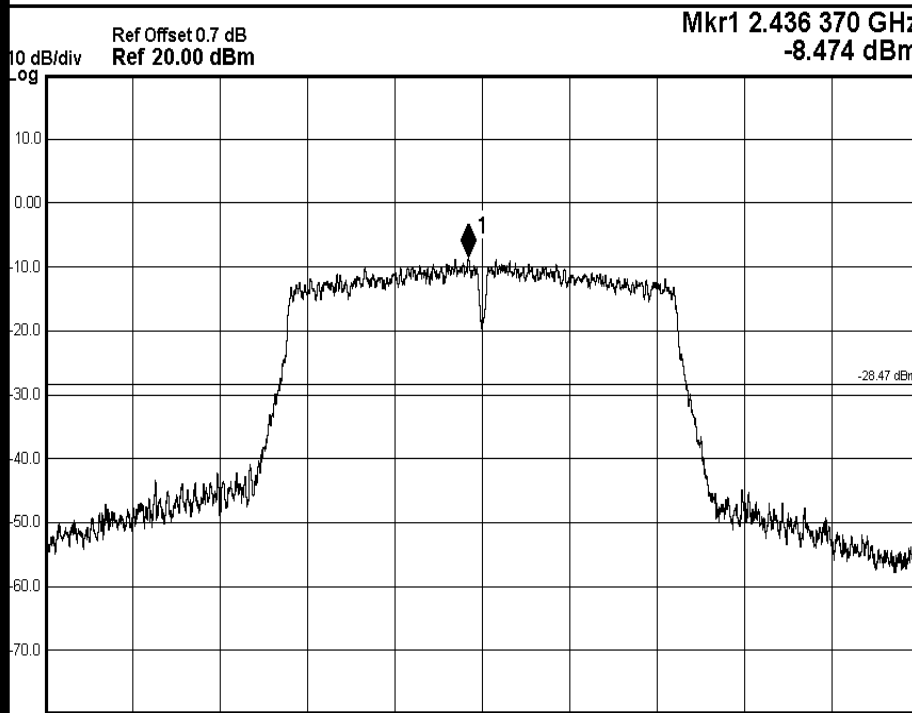
## RF Conducted Spurious Emissions\_11N20SISO\_2412\_Ant1



## RF Conducted Spurious Emissions\_11N20SISO\_2437\_Ant1

Agilent Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:PULSE ALIGN AUTO 04:06:15 PM Nov 29, 2017  
Center Freq 2.437000000 GHz #Avg Type: RMS TRACE 1 2 3 4 5 6  
PNO: Fast Trig: Free Run AvgHold: 10/10 TYPE M W W W W W W W  
IFGain: Low #Atten: 30 dB DET P P P P P P P



Frequency

Auto Tune

Center Freq

2.437000000 GHz

Start Freq

2.417000000 GHz

Stop Freq

2.457000000 GHz

CF Step

4.000000 MHz

Auto

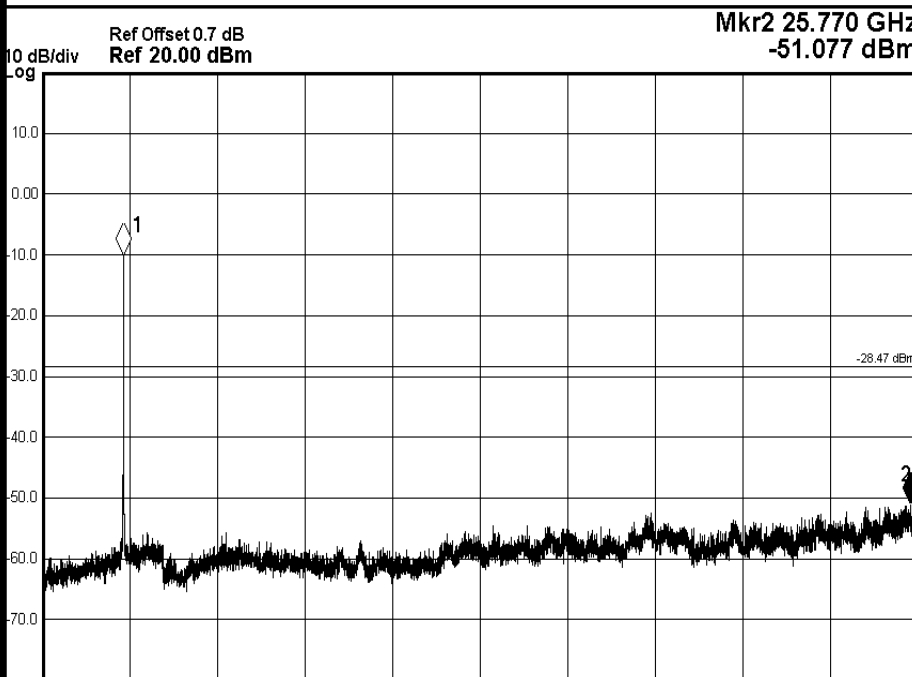
Man

Freq Offset

0 Hz

Agilent Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:PULSE ALIGN AUTO 04:06:25 PM Nov 29, 2017  
Center Freq 13.015000000 GHz #Avg Type: RMS TRACE 1 2 3 4 5 6  
PNO: Fast Trig: Free Run AvgHold: 1/10 TYPE M W W W W W W W  
IFGain: Low #Atten: 30 dB DET P P P P P P P



Frequency

Auto Tune

Center Freq

13.015000000 GHz

Start Freq

30.000000 MHz

Stop Freq

26.000000000 GHz

CF Step

2.597000000 GHz

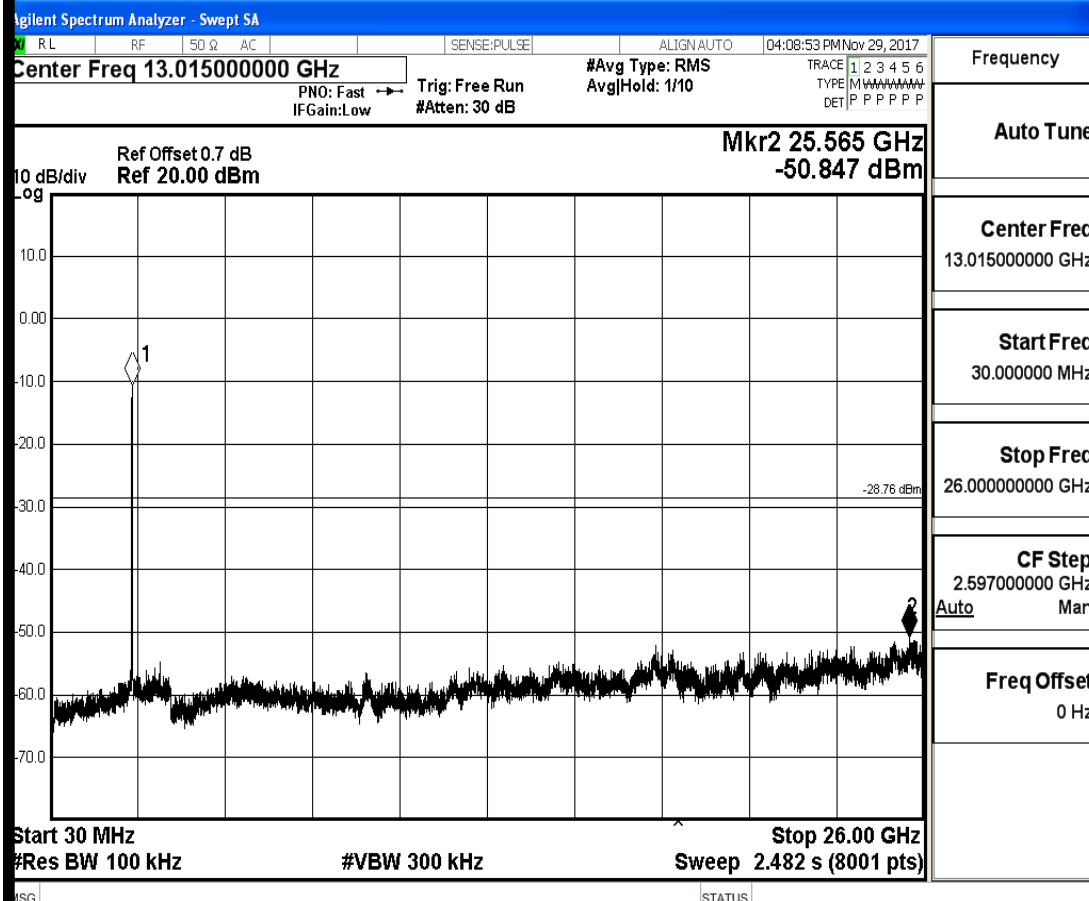
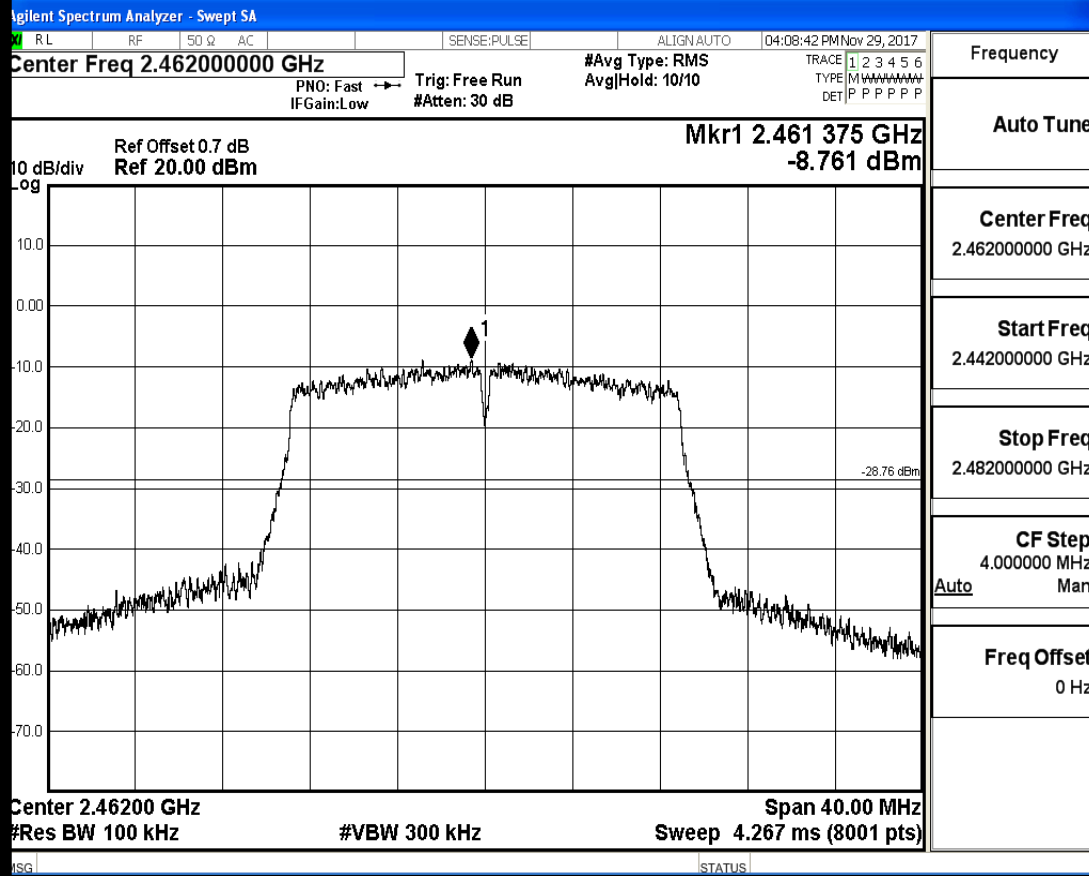
Auto

Man

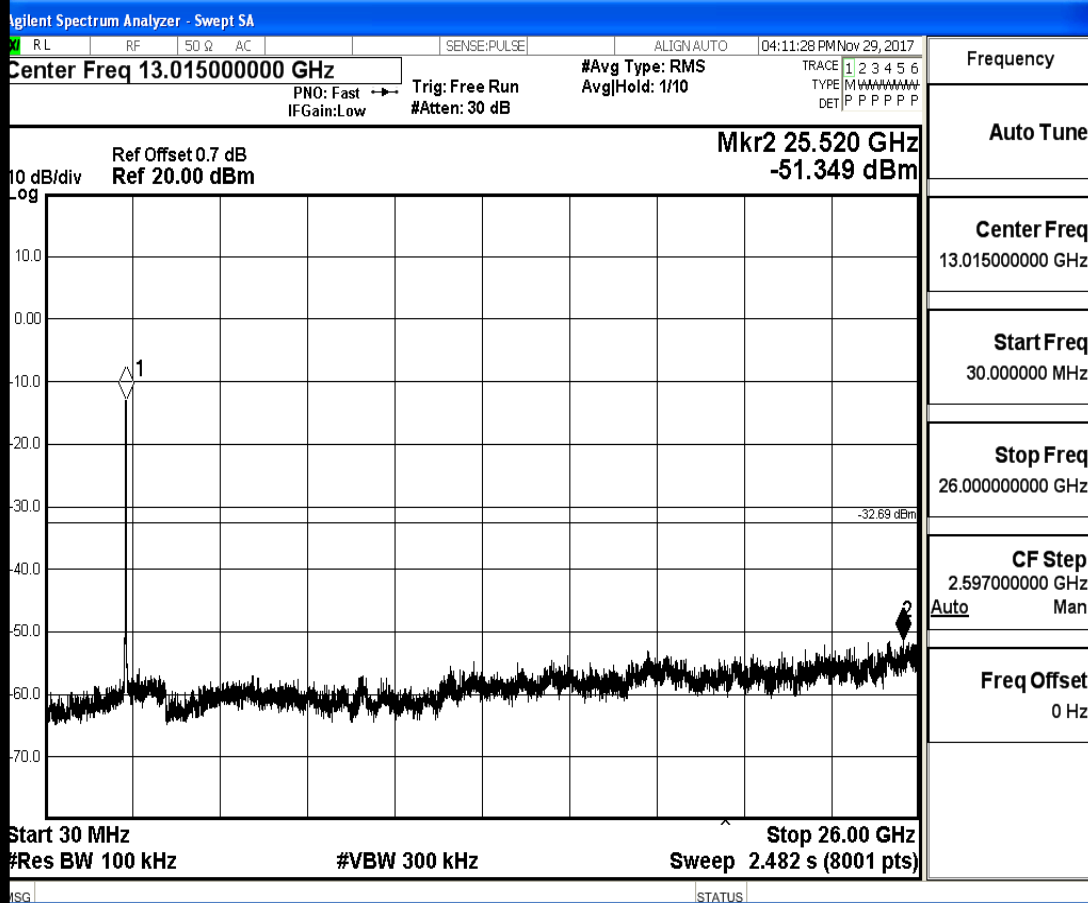
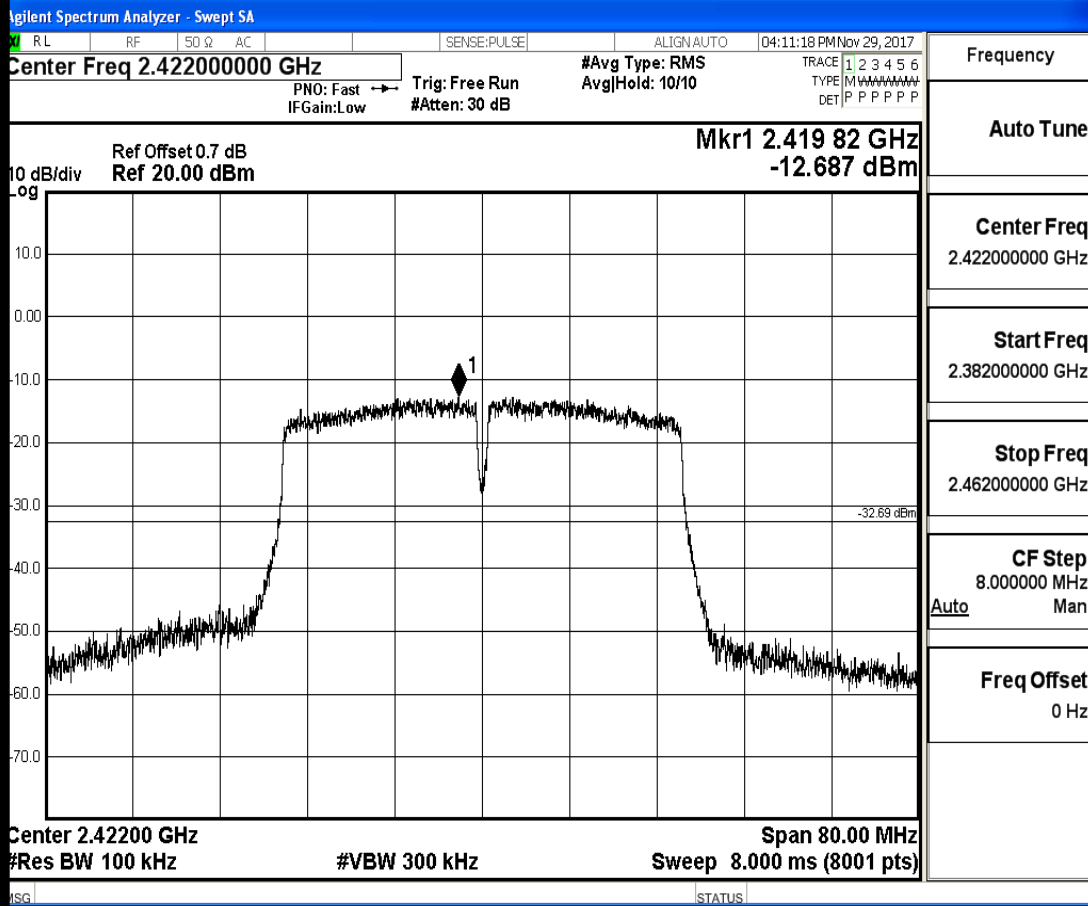
Freq Offset

0 Hz

## RF Conducted Spurious Emissions\_11N20SISO\_2462\_Ant1



## RF Conducted Spurious Emissions\_11N40SISO\_2422\_Ant1



## RF Conducted Spurious Emissions\_11N40SISO\_2437\_Ant1

Agilent Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:PULSE ALIGN AUTO 04:13:39 PM Nov 29, 2017

Center Freq 2.43700000 GHz

PNO: Fast IF Gain: Low

Trig: Free Run #Atten: 30 dB

#Avg Type: RMS Avg/Hold: 10/10

TRACE 1 2 3 4 5 6 TYPE: M W W W W W W W DET: P P P P P P P

Frequency

Auto Tune

Center Freq 2.437000000 GHz

Start Freq 2.397000000 GHz

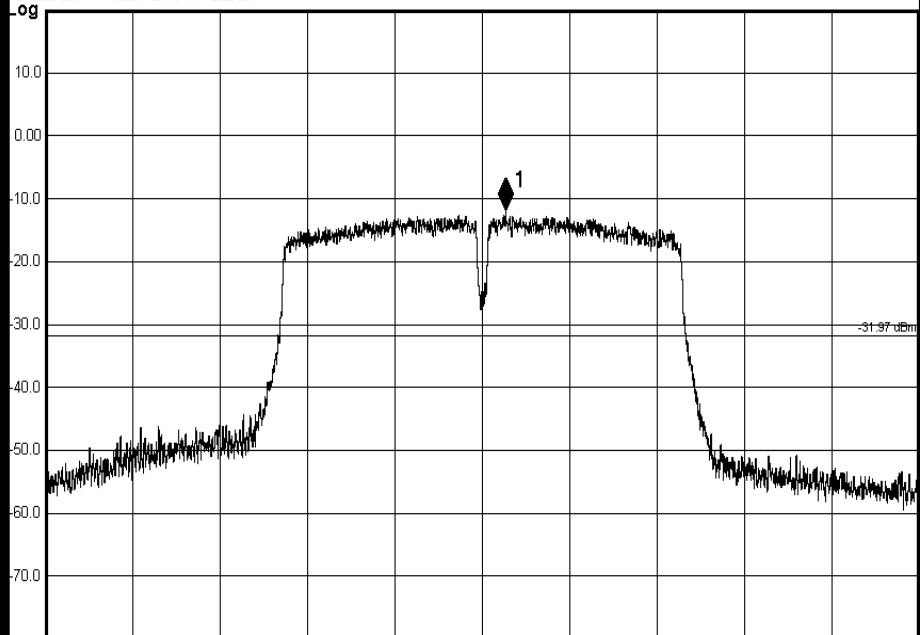
Stop Freq 2.477000000 GHz

CF Step 8.000000 MHz Auto Man

Freq Offset 0 Hz

Ref Offset 0.7 dB Ref 20.00 dBm

Mkr1 2.439 13 GHz -11.971 dBm



Center 2.43700 GHz

#Res BW 100 kHz

#VBW 300 kHz

Span 80.00 MHz Sweep 8.000 ms (8001 pts)

MSG

STATUS

Agilent Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:PULSE ALIGN AUTO 04:13:49 PM Nov 29, 2017

Center Freq 13.01500000 GHz

PNO: Fast IF Gain: Low

Trig: Free Run #Atten: 30 dB

#Avg Type: RMS Avg/Hold: 1/10

TRACE 1 2 3 4 5 6 TYPE: M W W W W W W W DET: P P P P P P P

Frequency

Auto Tune

Center Freq 13.015000000 GHz

Start Freq 30.000000 MHz

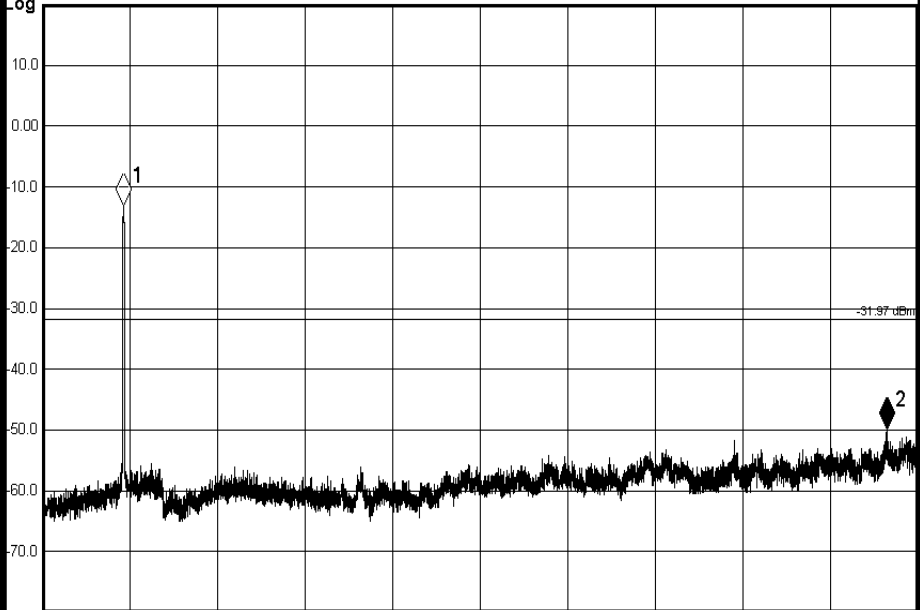
Stop Freq 26.000000000 GHz

CF Step 2.597000000 GHz Auto Man

Freq Offset 0 Hz

Ref Offset 0.7 dB Ref 20.00 dBm

Mkr2 25.094 GHz -49.921 dBm



Start 30 MHz

#Res BW 100 kHz

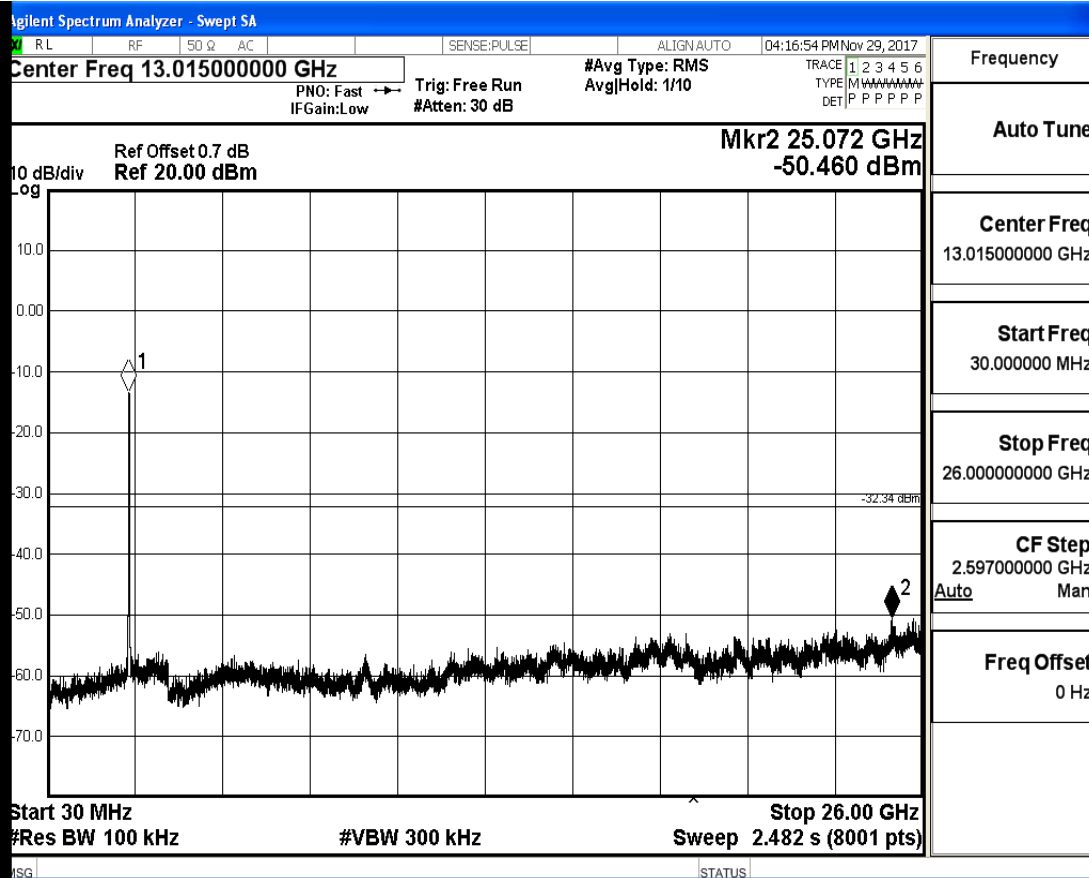
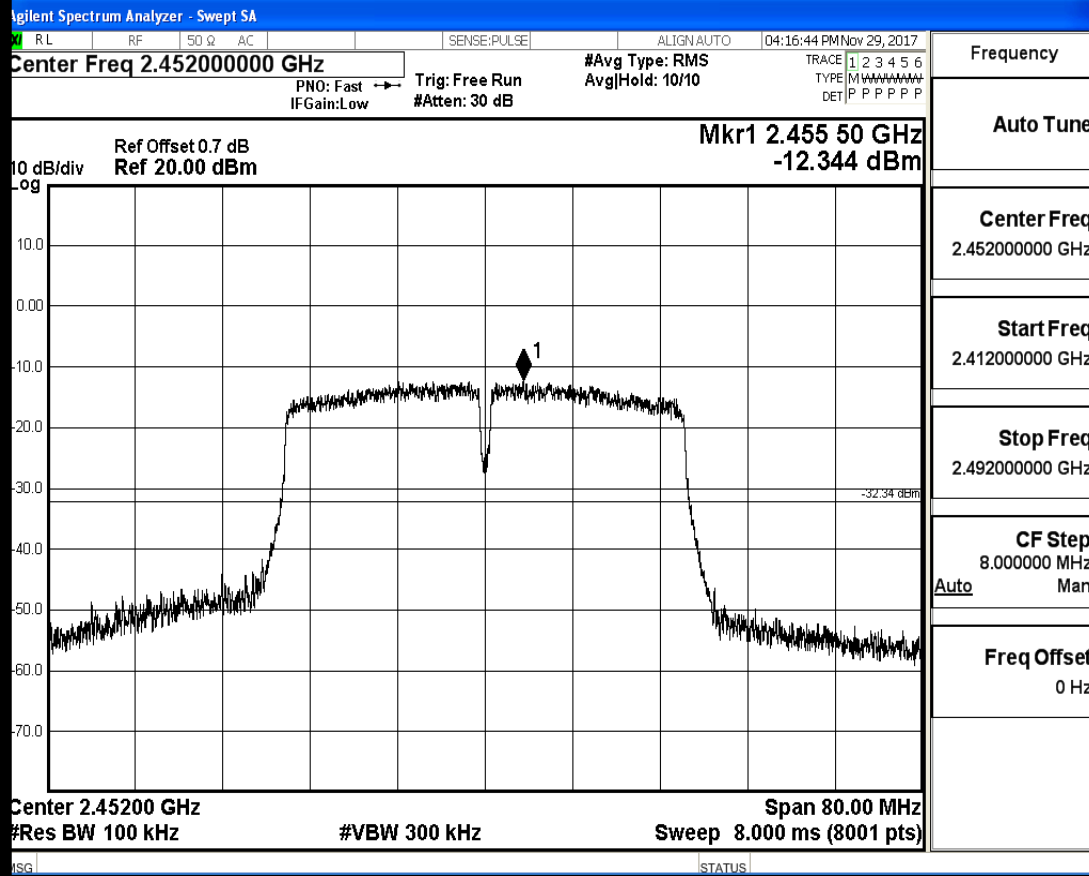
#VBW 300 kHz

Stop 26.00 GHz Sweep 2.482 s (8001 pts)

MSG

STATUS

## RF Conducted Spurious Emissions\_11N40SISO\_2452\_Ant1

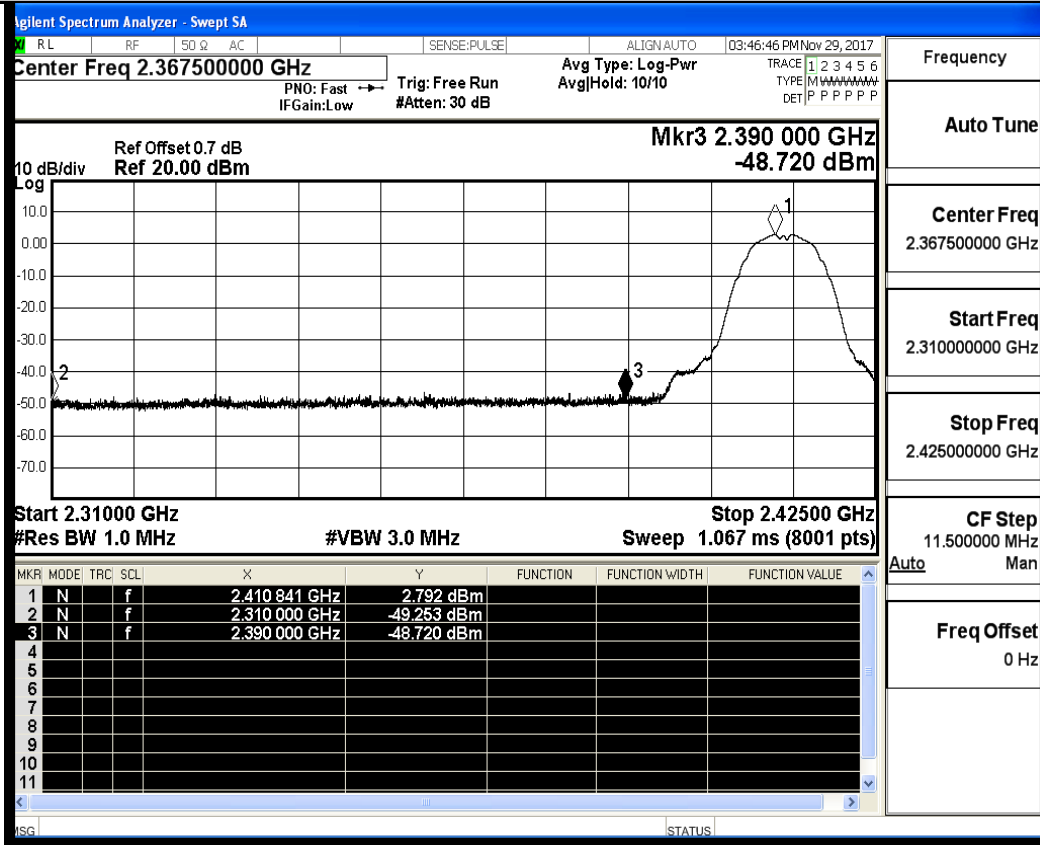




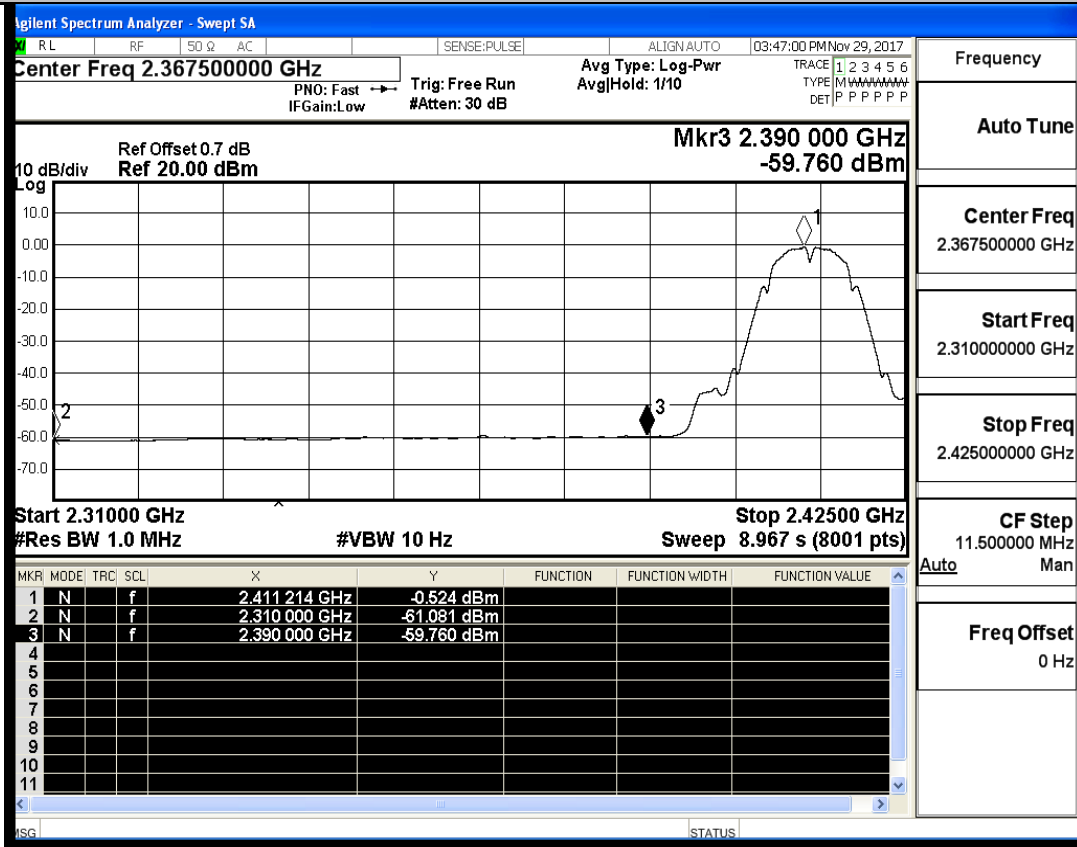
### 5.Restrict-band band-edge measurements

Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
11B	2412	Ant1	2310.0	-49.25	2.00	0	48.00	PEAK	74	PASS
11B	2412	Ant1	2310.0	-61.08	2.00	0	36.18	AV	54	PASS
11B	2412	Ant1	2390.0	-48.72	2.00	0	48.54	PEAK	74	PASS
11B	2412	Ant1	2390.0	-59.76	2.00	0	37.50	AV	54	PASS
11B	2462	Ant1	2483.5	-48.63	2.00	0	48.63	PEAK	74	PASS
11B	2462	Ant1	2483.5	-58.88	2.00	0	38.37	AV	54	PASS
11B	2462	Ant1	2500.0	-49.68	2.00	0	47.58	PEAK	74	PASS
11B	2462	Ant1	2500.0	-59.75	2.00	0	37.51	AV	54	PASS
11G	2412	Ant1	2310.0	-49.96	2.00	0	47.30	PEAK	74	PASS
11G	2412	Ant1	2310.0	-61.05	2.00	0	36.20	AV	54	PASS
11G	2412	Ant1	2390.0	-46.68	2.00	0	50.58	PEAK	74	PASS
11G	2412	Ant1	2390.0	-57.18	2.00	0	40.08	AV	54	PASS
11G	2462	Ant1	2483.5	-47.43	2.00	0	49.82	PEAK	74	PASS
11G	2462	Ant1	2483.5	-57.74	2.00	0	39.51	AV	54	PASS
11G	2462	Ant1	2500.0	-49.29	2.00	0	47.97	PEAK	74	PASS
11G	2462	Ant1	2500.0	-59.04	2.00	0	38.22	AV	54	PASS
11N20SISO	2412	Ant1	2310.0	-50.18	2.00	0	47.07	PEAK	74	PASS
11N20SISO	2412	Ant1	2310.0	-61.07	2.00	0	36.19	AV	54	PASS
11N20SISO	2412	Ant1	2390.0	-37.24	2.00	0	60.02	PEAK	74	PASS
11N20SISO	2412	Ant1	2390.0	-56.02	2.00	0	41.24	AV	54	PASS
11N20SISO	2462	Ant1	2483.5	-46.37	2.00	0	50.88	PEAK	74	PASS
11N20SISO	2462	Ant1	2483.5	-57.52	2.00	0	39.74	AV	54	PASS
11N20SISO	2462	Ant1	2500.0	-47.05	2.00	0	50.20	PEAK	74	PASS
11N20SISO	2462	Ant1	2500.0	-59.00	2.00	0	38.26	AV	54	PASS
11N40SISO	2422	Ant1	2310.0	-50.45	2.00	0	46.81	PEAK	74	PASS
11N40SISO	2422	Ant1	2310.0	-61.21	2.00	0	36.05	AV	54	PASS
11N40SISO	2422	Ant1	2390.0	-40.83	2.00	0	56.43	PEAK	74	PASS
11N40SISO	2422	Ant1	2390.0	-52.84	2.00	0	44.41	AV	54	PASS
11N40SISO	2452	Ant1	2483.5	-43.81	2.00	0	53.45	PEAK	74	PASS
11N40SISO	2452	Ant1	2483.5	-55.28	2.00	0	41.98	AV	54	PASS
11N40SISO	2452	Ant1	2500.0	-47.18	2.00	0	50.08	PEAK	74	PASS
11N40SISO	2452	Ant1	2500.0	-58.59	2.00	0	38.67	AV	54	PASS

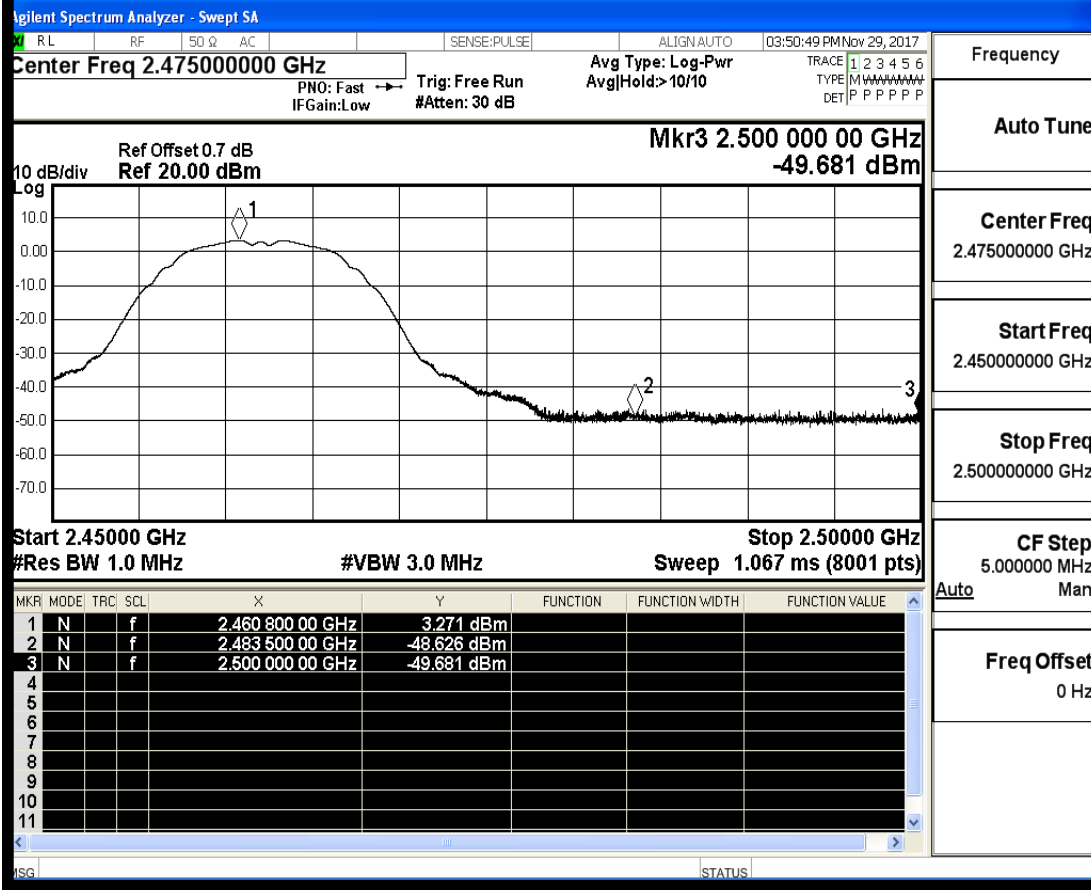
## Restrict-band band-edge measurements\_11B\_2412\_Ant1\_PEAK



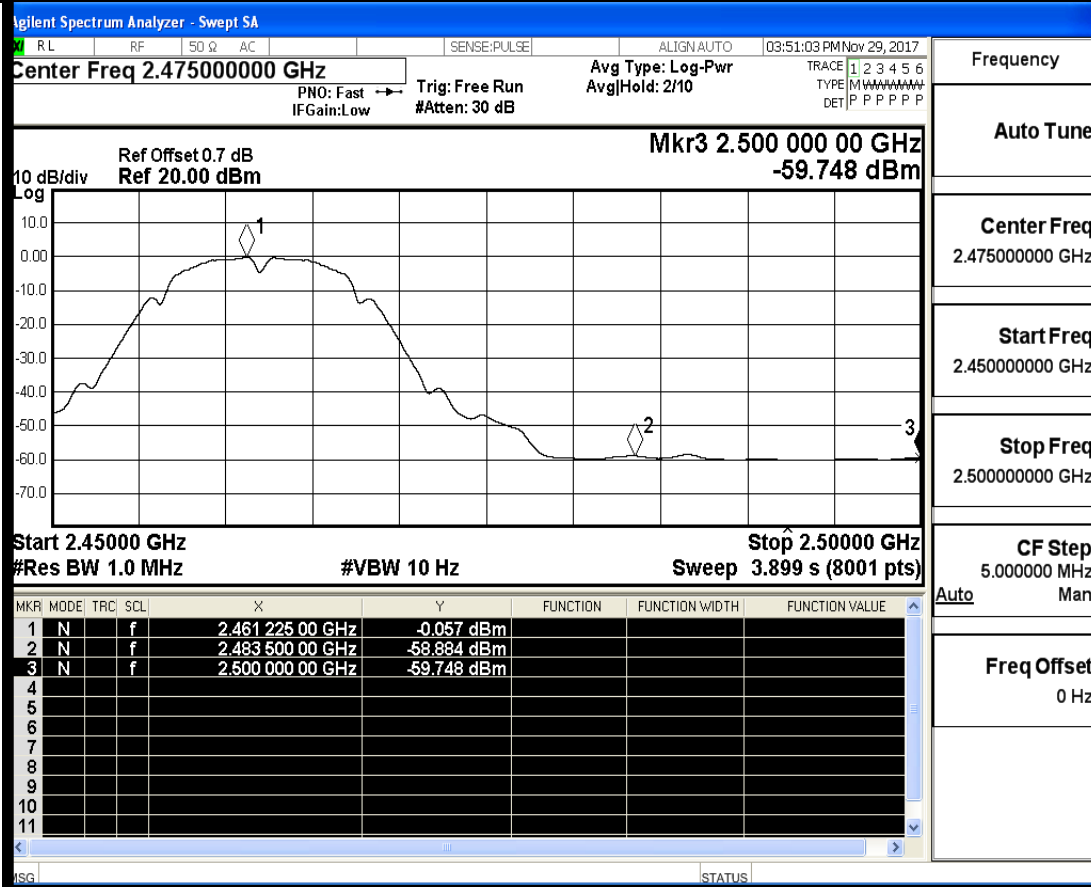
## Restrict-band band-edge measurements\_11B\_2412\_Ant1\_AV



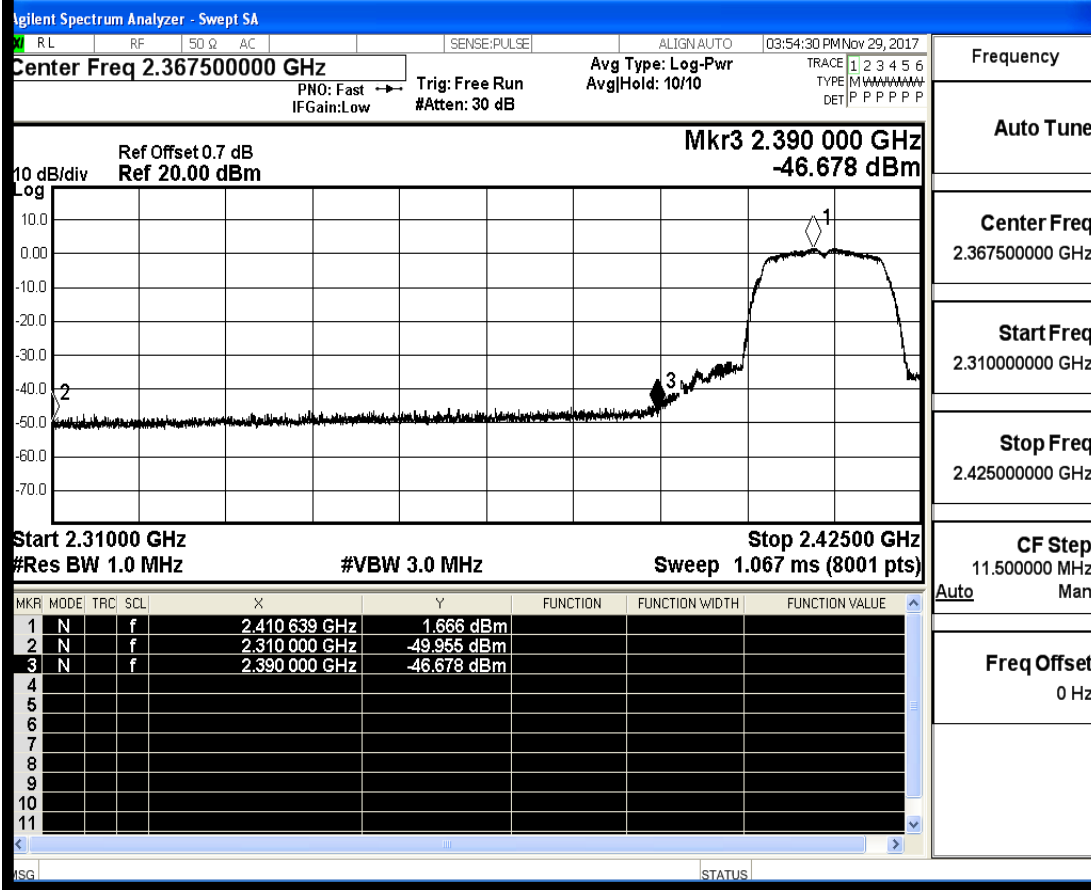
## Restrict-band band-edge measurements\_11B\_2462\_Ant1\_PEAK



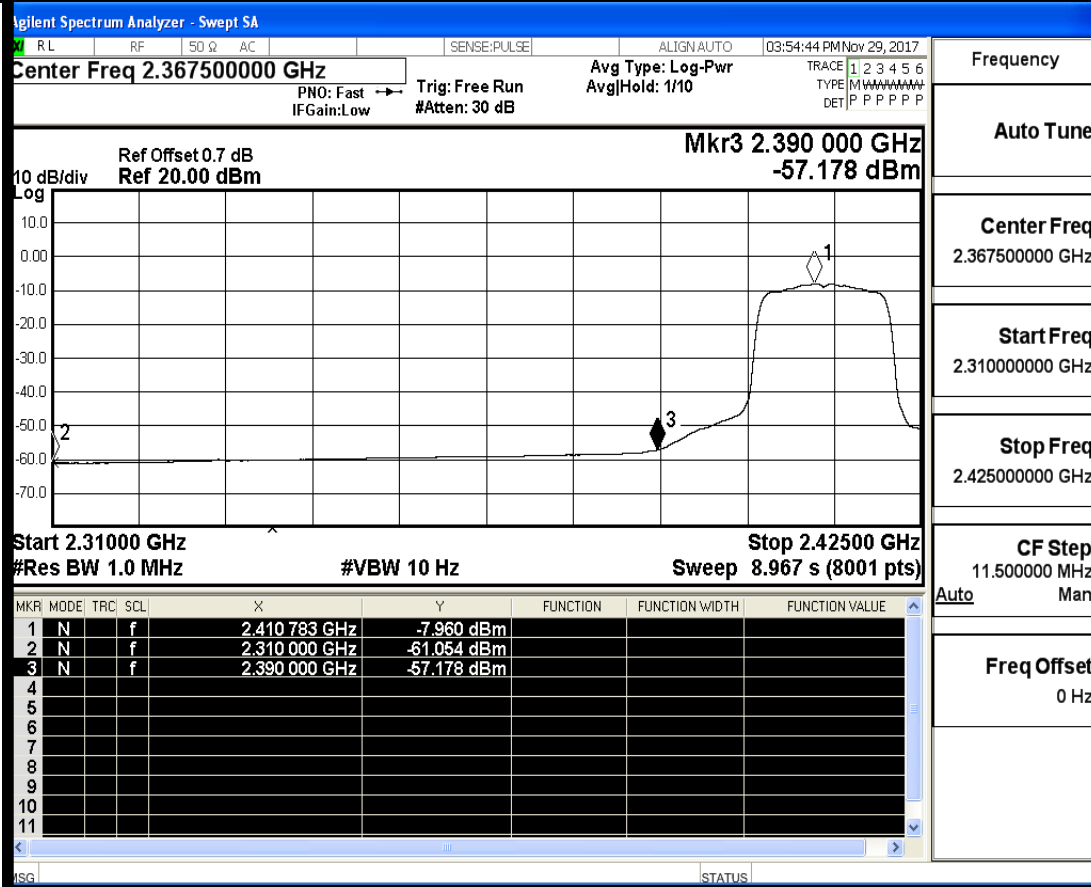
## Restrict-band band-edge measurements\_11B\_2462\_Ant1\_AV



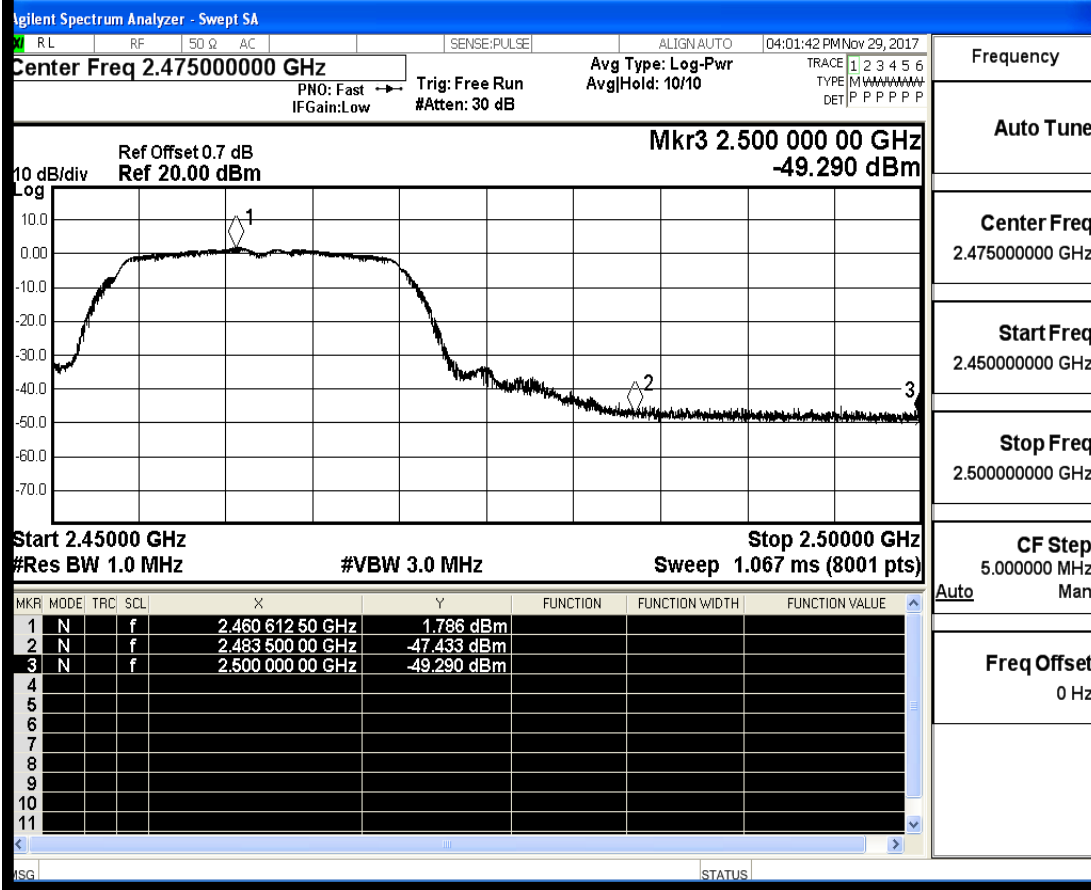
## Restrict-band band-edge measurements\_11G\_2412\_Ant1\_PEAK



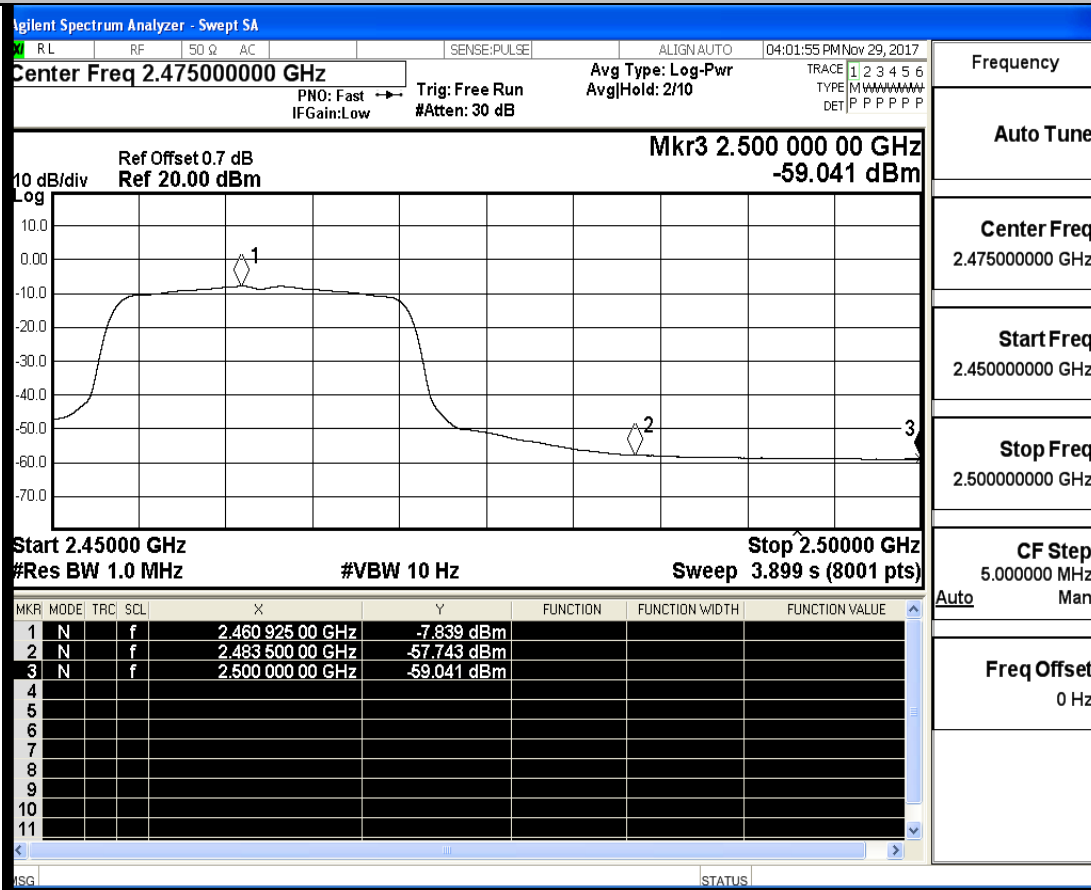
## Restrict-band band-edge measurements\_11G\_2412\_Ant1\_AV



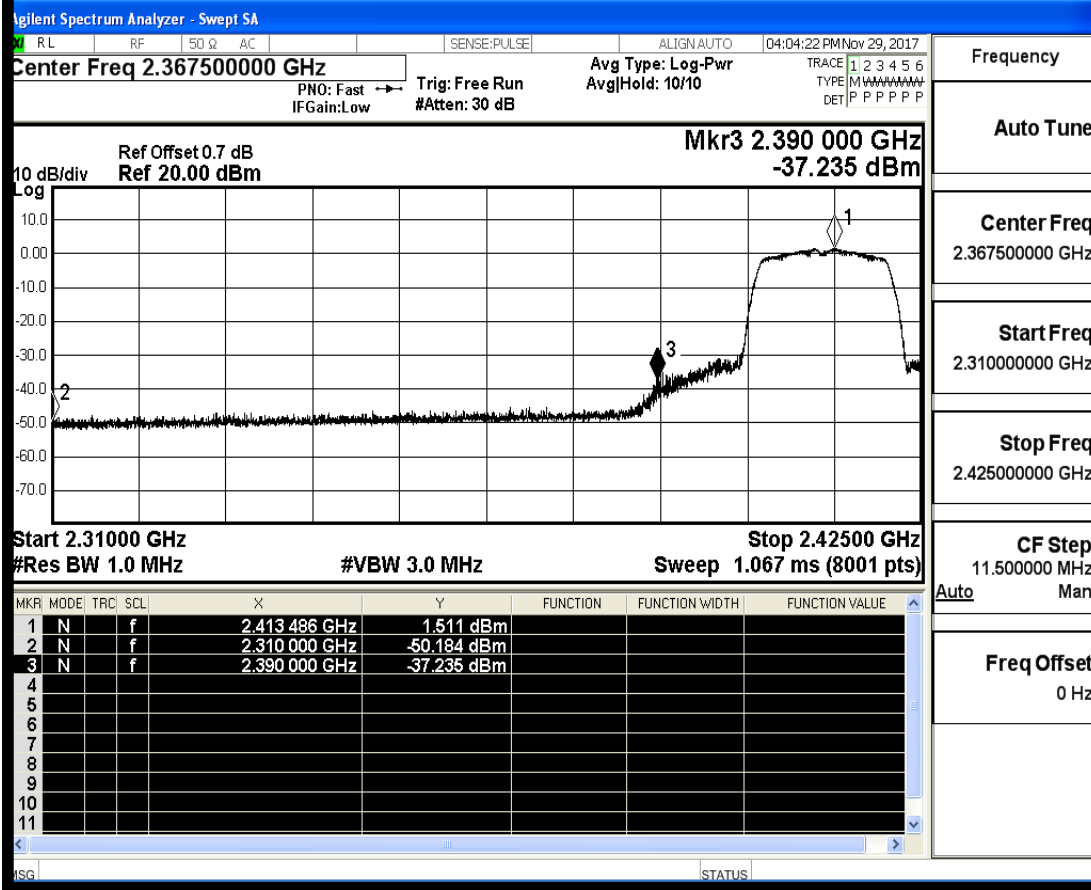
## Restrict-band band-edge measurements\_11G\_2462\_Ant1\_PEAK



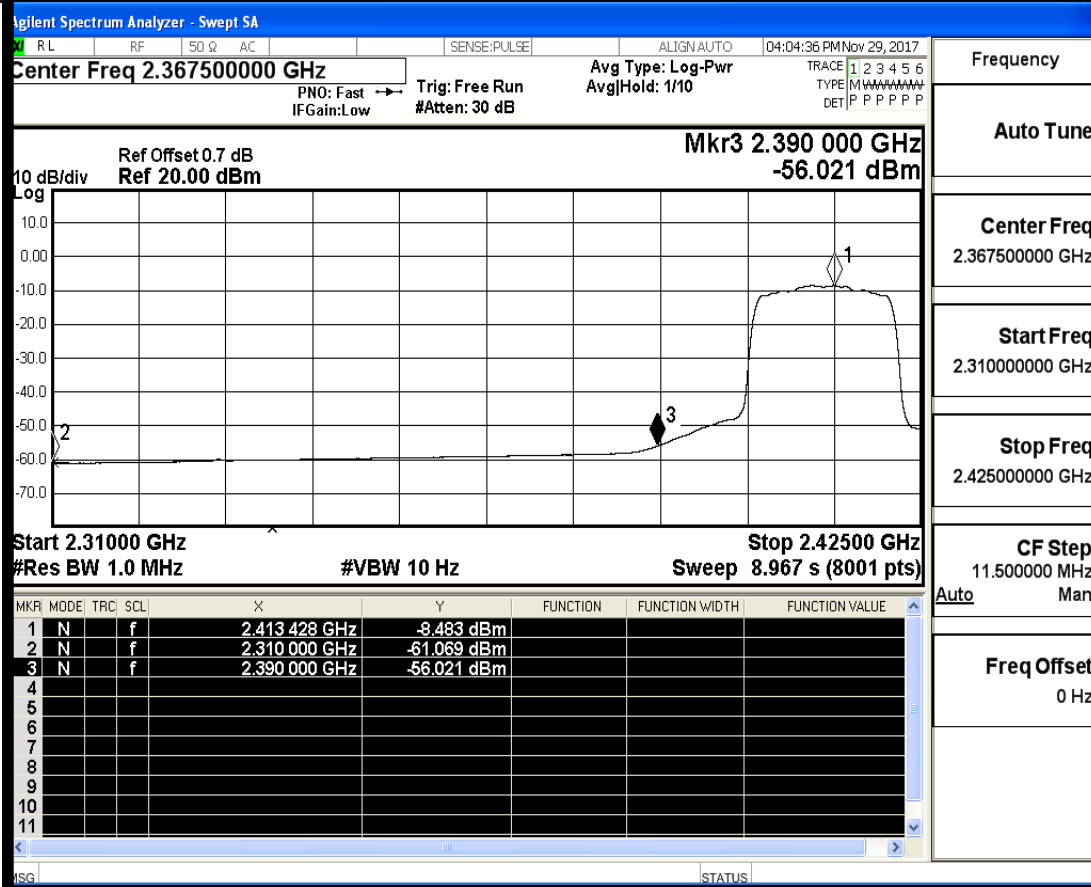
## Restrict-band band-edge measurements\_11G\_2462\_Ant1\_AV



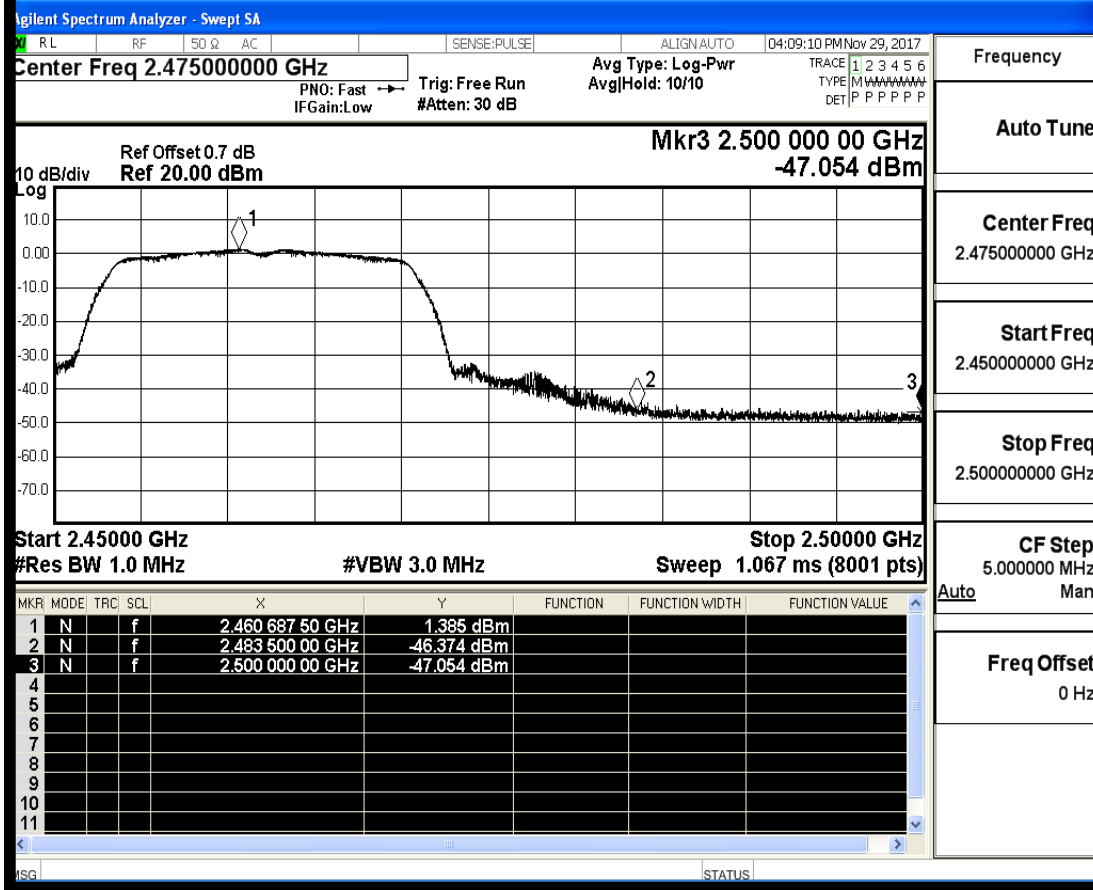
## Restrict-band band-edge measurements\_11N20SISO\_2412\_Ant1\_PEAK



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



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



Frequency

Auto Tune

Center Freq  
2.475000000 GHz

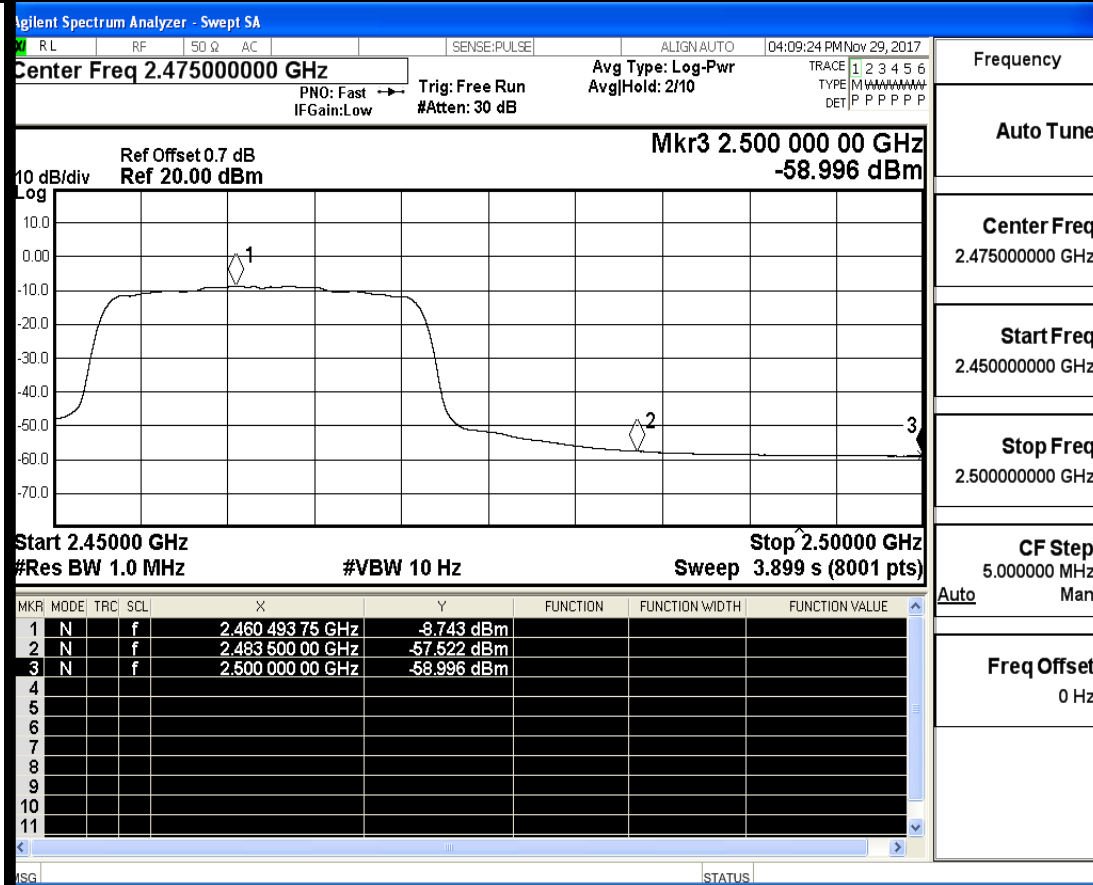
Start Freq  
2.450000000 GHz

Stop Freq  
2.500000000 GHz

CF Step  
5.000000 MHz  
Auto Man

Freq Offset  
0 Hz

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



Frequency

Auto Tune

Center Freq  
2.475000000 GHz

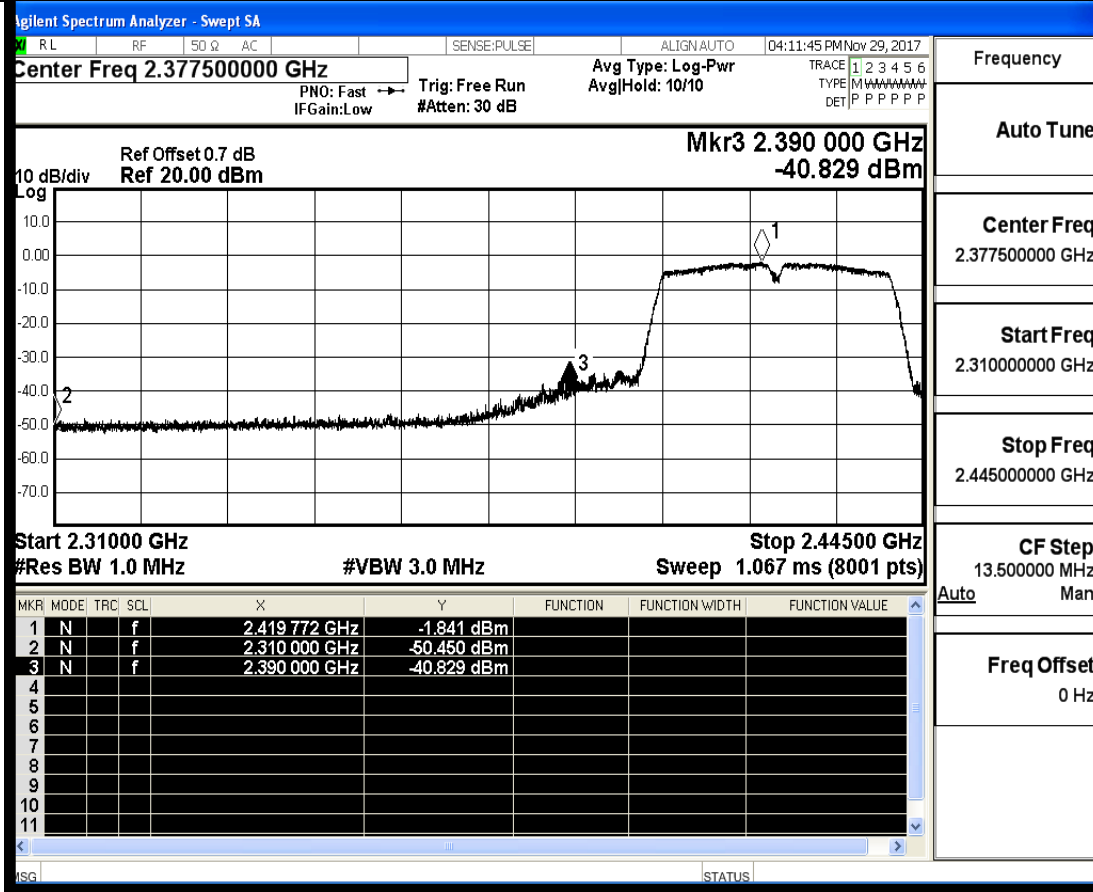
Start Freq  
2.450000000 GHz

Stop Freq  
2.500000000 GHz

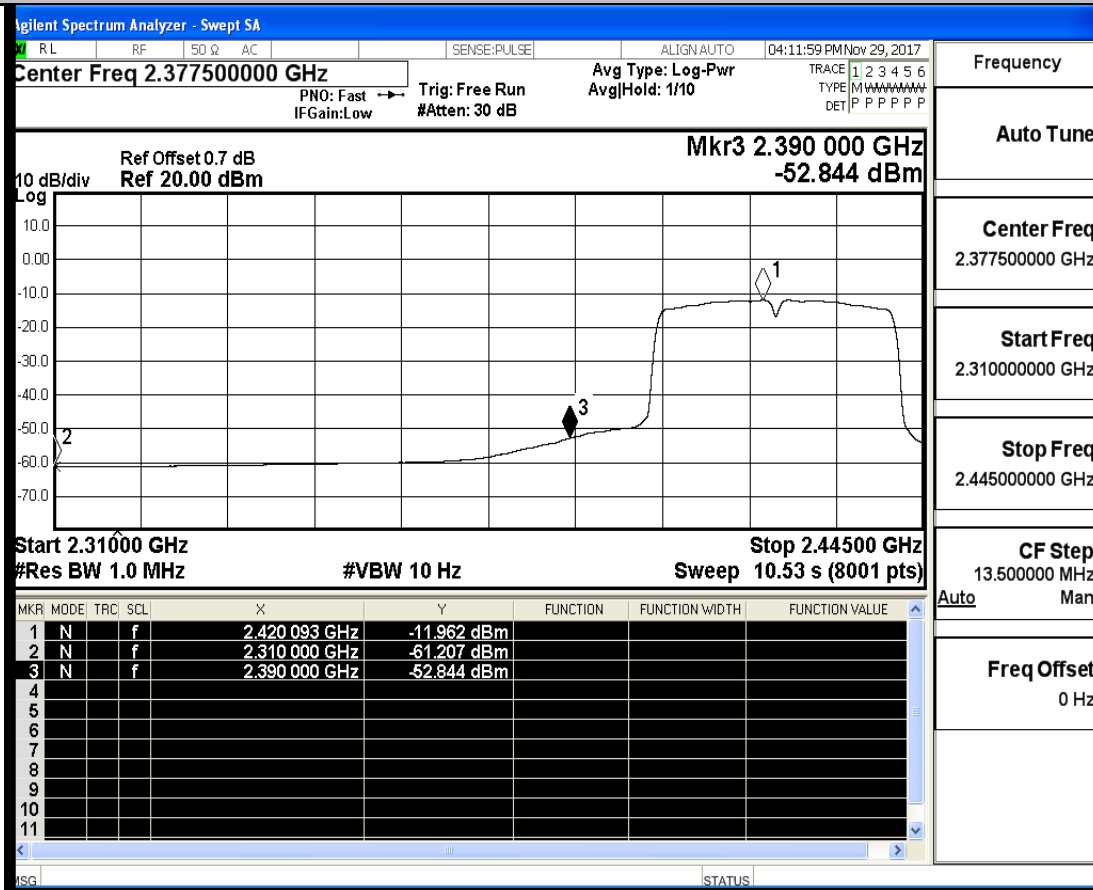
CF Step  
5.000000 MHz  
Auto Man

Freq Offset  
0 Hz

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

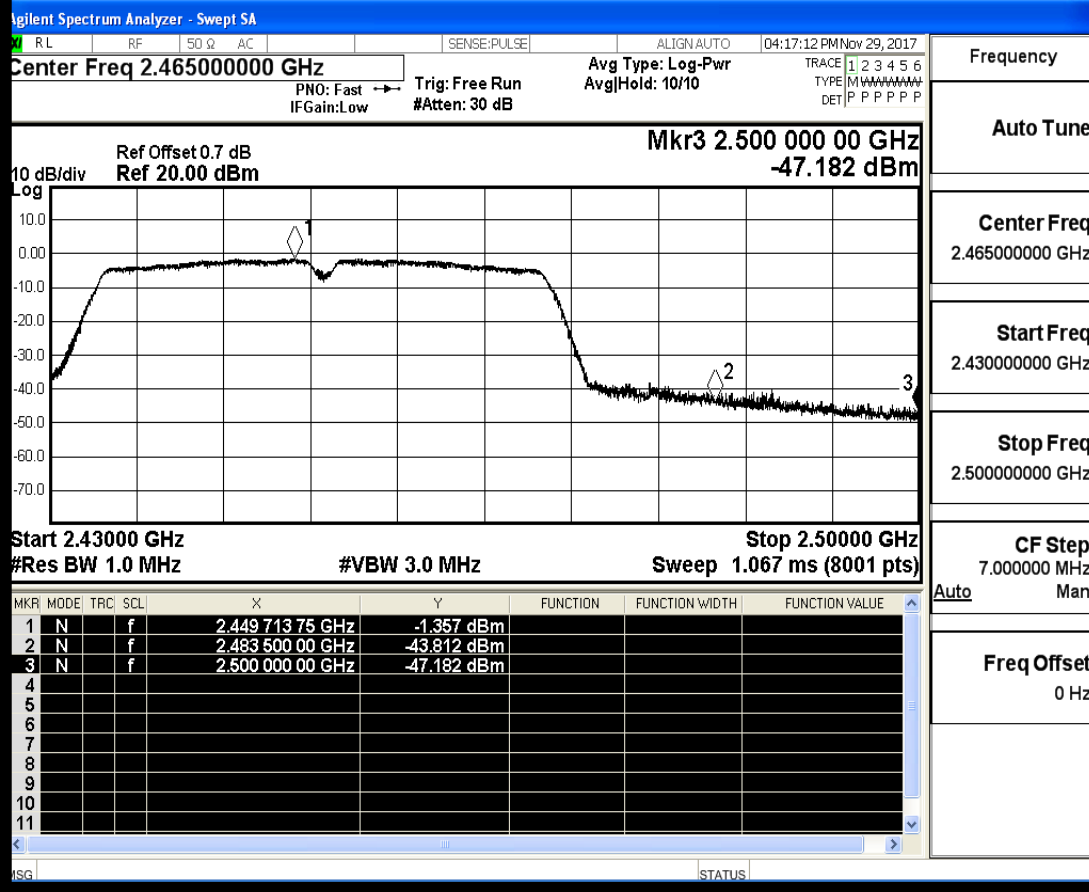


## Restrict-band band-edge measurements\_11N40SISO\_2422\_Ant1\_AV

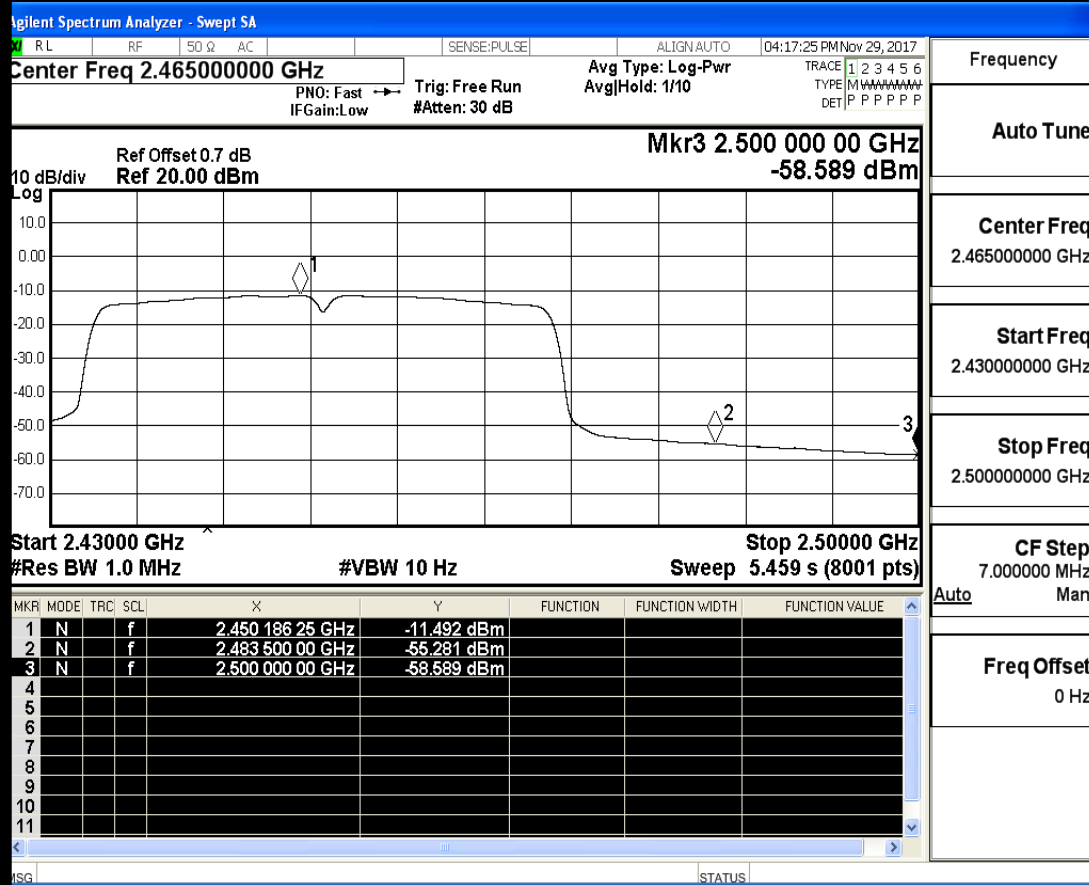




## Restrict-band band-edge measurements\_11N40SISO\_2452\_Ant1\_PEAK

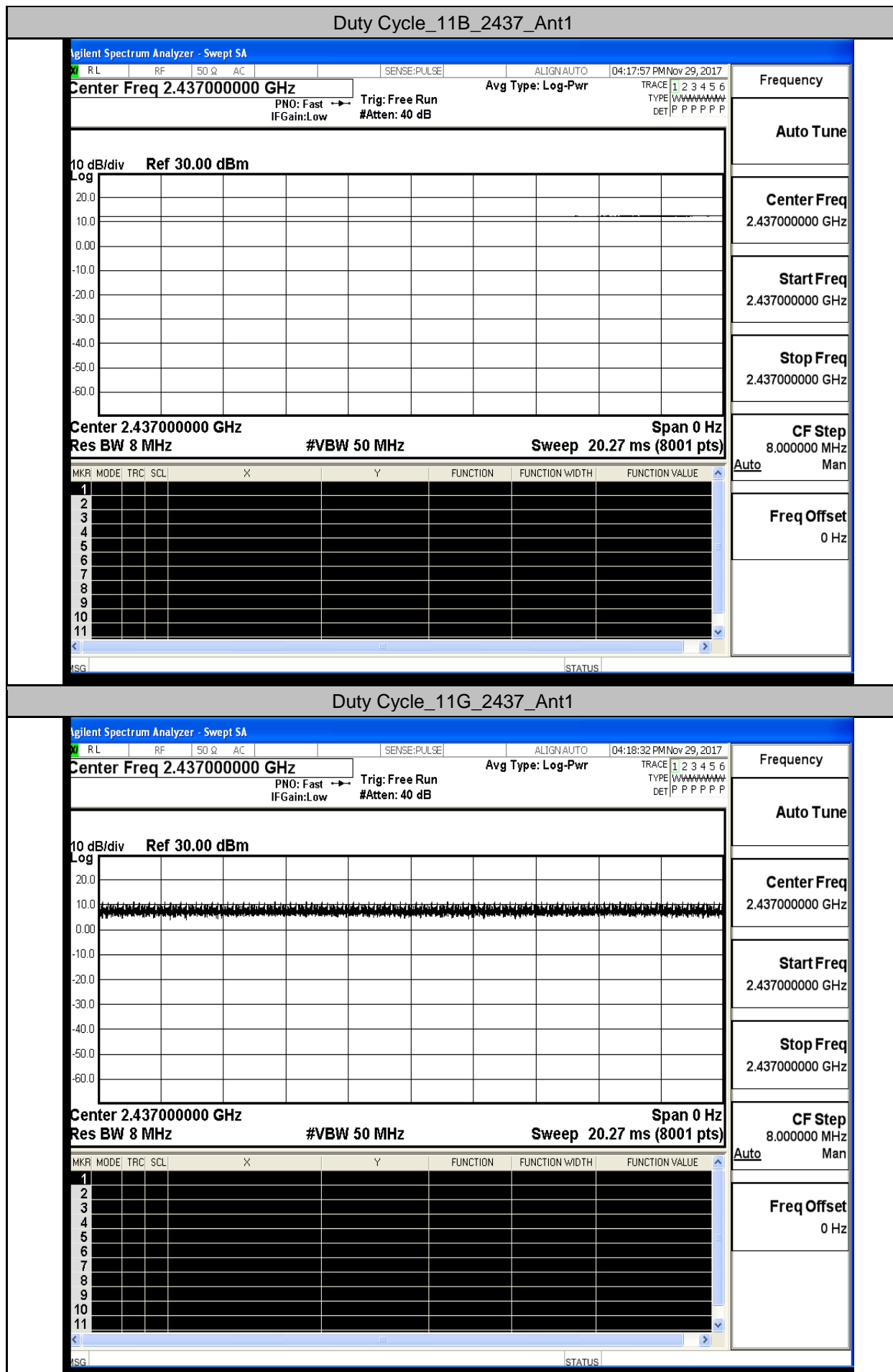


## Restrict-band band-edge measurements\_11N40SISO\_2452\_Ant1\_AV

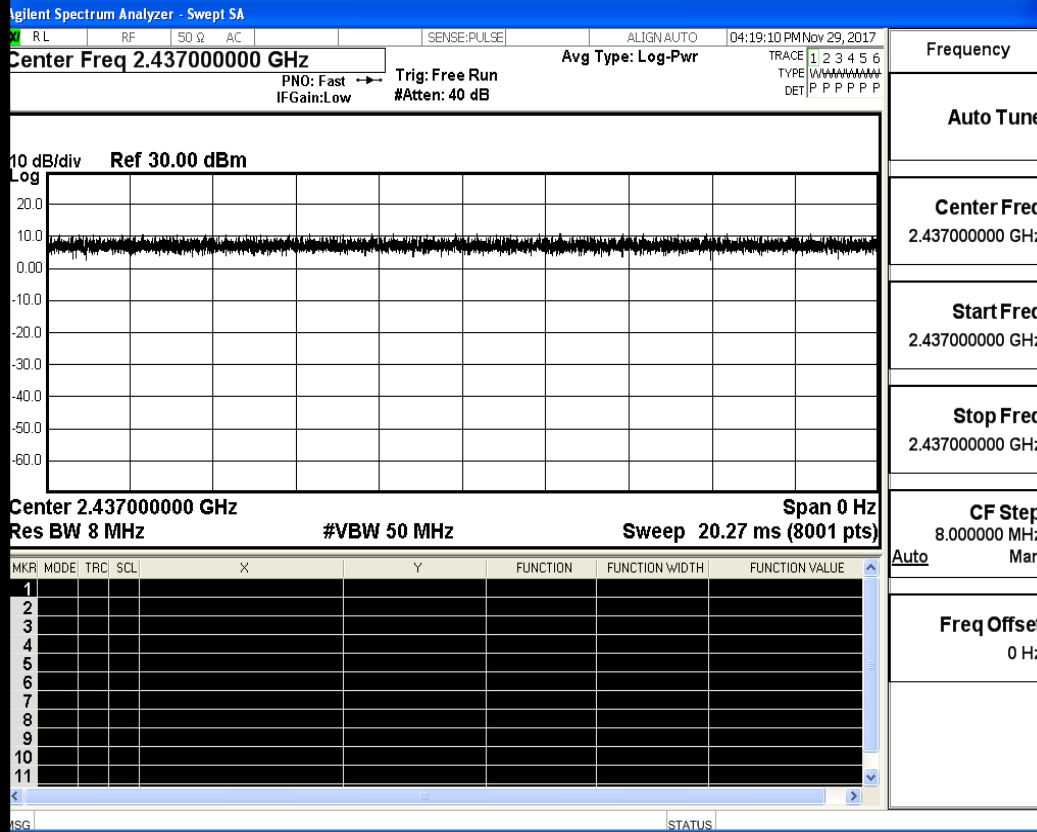


**6.Duty Cycle**

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\_11N20SISO\_2437\_Ant1



## Duty Cycle\_11N40SISO\_2437\_Ant1

