

**1.6dB Bandwidth**

Test Mode	Test Channel	Ant	EBW[MHz]	Limit	Verdict
11B	2412	Ant1	9.152	0.5	PASS
11B	2437	Ant1	9.155	0.5	PASS
11B	2462	Ant1	9.150	0.5	PASS
11G	2412	Ant1	16.62	0.5	PASS
11G	2437	Ant1	16.61	0.5	PASS
11G	2462	Ant1	16.61	0.5	PASS
11N20SISO	2412	Ant1	17.83	0.5	PASS
11N20SISO	2437	Ant1	17.83	0.5	PASS
11N20SISO	2462	Ant1	17.82	0.5	PASS
11N40SISO	2422	Ant1	36.51	0.5	PASS
11N40SISO	2437	Ant1	36.53	0.5	PASS
11N40SISO	2452	Ant1	36.50	0.5	PASS

## 6dB Bandwidth\_11B\_2412\_Ant1

Agilent Spectrum Analyzer - Occupied BW

Center Freq 2.41200000 GHz    Center Freq: 2.41200000 GHz    Radio Std: None  
 Trig: Free Run    Avg/Hold: 1/1  
 #IFGain: Low    #Atten: 30 dB    Radio Device: BTS

Ref Offset 7.07 dB    Mkr1 2.41149 GHz  
 Ref 20.00 dB    1.8351 dBm

Center 2.412 GHz    Span 30 MHz  
 #Res BW 100 kHz    #VBW 300 kHz    Sweep 2.933 ms

Occupied Bandwidth	Total Power	18.3 dBm
<b>12.296 MHz</b>		
Transmit Freq Error	-2.980 kHz	OBW Power
		99.00 %
x dB Bandwidth	9.152 MHz	x dB
		-6.00 dB

Frequency: 2.41200000 GHz  
 CF Step: 3.000000 MHz (Auto)  
 Freq Offset: 0 Hz

## 6dB Bandwidth\_11B\_2437\_Ant1

Agilent Spectrum Analyzer - Occupied BW

Center Freq 2.43700000 GHz    Center Freq: 2.437000000 GHz    Radio Std: None  
 Trig: Free Run    Avg/Hold: 1/1  
 #IFGain: Low    #Atten: 30 dB    Radio Device: BTS

Ref Offset 8.07 dB    Mkr1 2.43649 GHz  
 Ref 20.00 dB    3.1186 dBm

Center 2.437 GHz    Span 30 MHz  
 #Res BW 100 kHz    #VBW 300 kHz    Sweep 2.933 ms

Occupied Bandwidth	Total Power	19.7 dBm
<b>12.324 MHz</b>		
Transmit Freq Error	620 Hz	OBW Power
		99.00 %
x dB Bandwidth	9.155 MHz	x dB
		-6.00 dB

Frequency: 2.43700000 GHz  
 CF Step: 3.000000 MHz (Auto)  
 Freq Offset: 0 Hz

## 6dB Bandwidth\_11B\_2462\_Ant1

Agilent Spectrum Analyzer - Occupied BW

RL RF 50 Ω AC SENSE:PULSE ALIGN:AUTO 01:46:36 PM Dec 05, 2017

Center Freq 2.46200000 GHz Center Freq: 2.46200000 GHz Radio Std: None  
 Trig: Free Run Avg|Hold: 1/1  
 #IFGain:Low #Atten: 30 dB Radio Device: BTS

Ref Offset 8.07 dB Mkr1 2.46149 GHz  
 Ref 20.00 dBm 3.5270 dBm

Center 2.462 GHz Span 30 MHz  
 #Res BW 100 kHz #VBW 300 kHz Sweep 2.933 ms

Occupied Bandwidth	Total Power	20.0 dBm
<b>12.342 MHz</b>		
Transmit Freq Error	-19.528 kHz	OBW Power 99.00 %
x dB Bandwidth	9.150 MHz	x dB -6.00 dB

MSG STATUS

Frequency	
Center Freq	2.46200000 GHz
CF Step	3.000000 MHz
Auto Man	
Freq Offset	0 Hz

## 6dB Bandwidth\_11G\_2412\_Ant1

Agilent Spectrum Analyzer - Occupied BW

RL RF 50 Ω AC SENSE:PULSE ALIGN:AUTO 01:52:15 PM Dec 05, 2017

Center Freq 2.41200000 GHz Center Freq: 2.41200000 GHz Radio Std: None  
 Trig: Free Run Avg|Hold: 1/1  
 #IFGain:Low #Atten: 30 dB Radio Device: BTS

Ref Offset 7.07 dB Mkr1 2.40741 GHz  
 Ref 20.00 dBm -7.5330 dBm

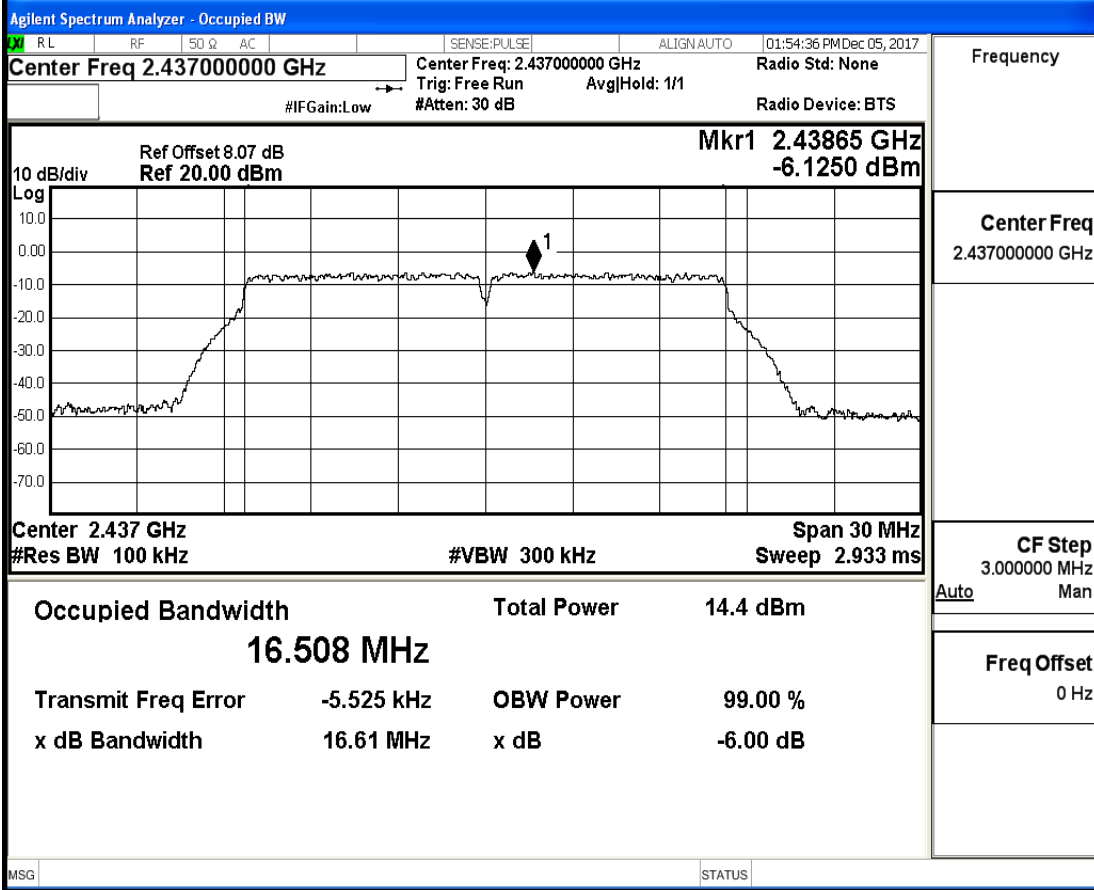
Center 2.412 GHz Span 30 MHz  
 #Res BW 100 kHz #VBW 300 kHz Sweep 2.933 ms

Occupied Bandwidth	Total Power	13.1 dBm
<b>16.508 MHz</b>		
Transmit Freq Error	-13.800 kHz	OBW Power 99.00 %
x dB Bandwidth	16.62 MHz	x dB -6.00 dB

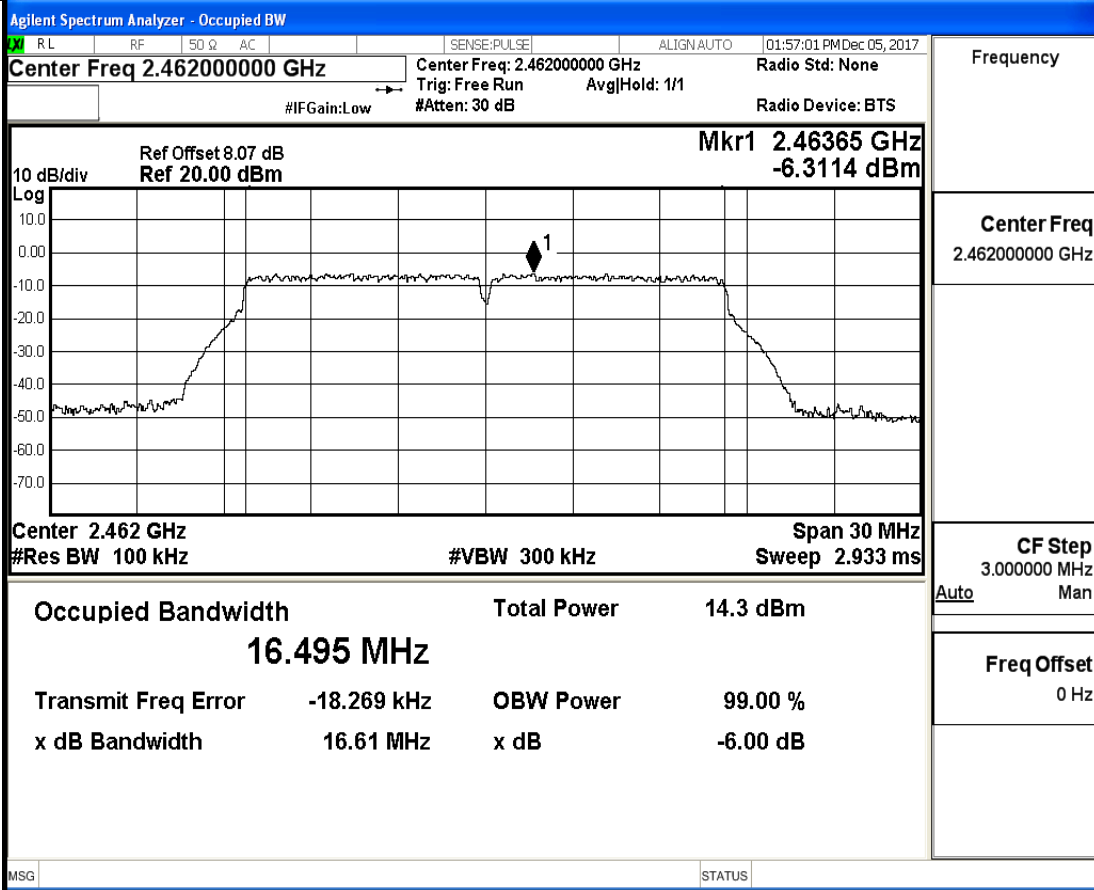
MSG STATUS

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

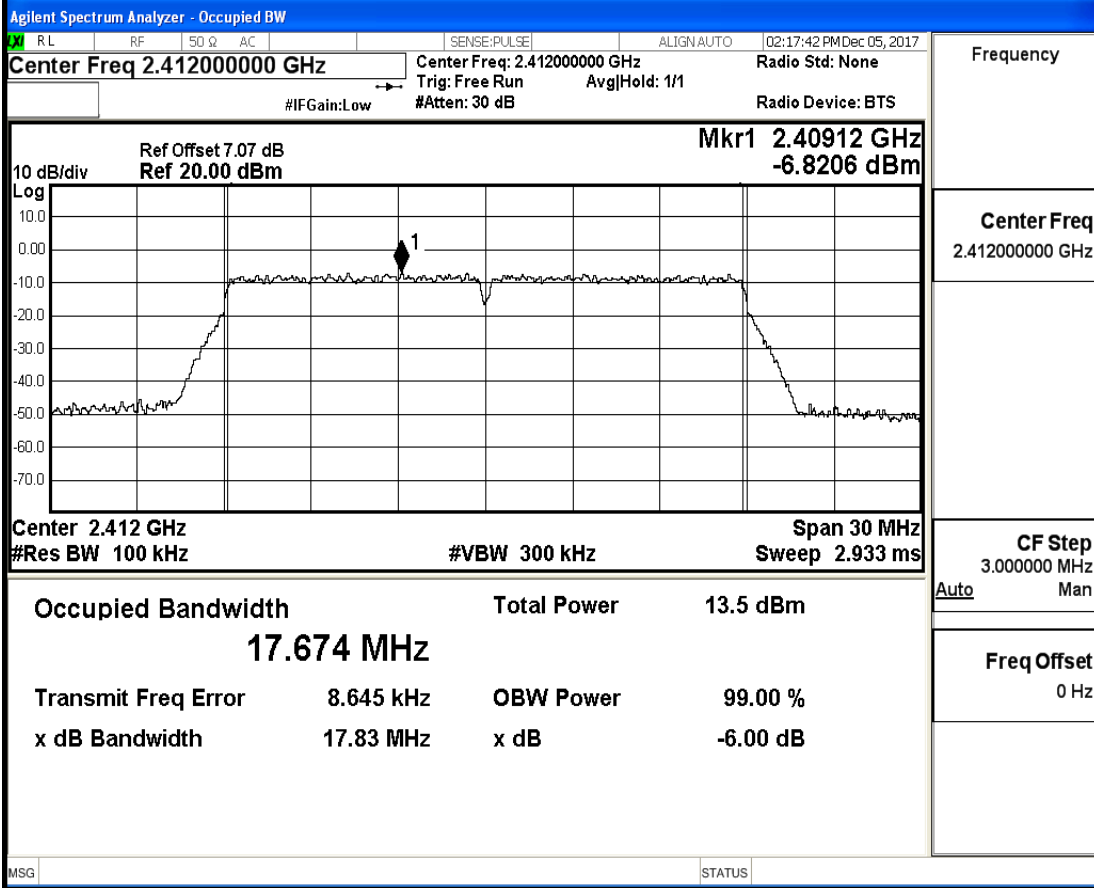
## 6dB Bandwidth\_11G\_2437\_Ant1



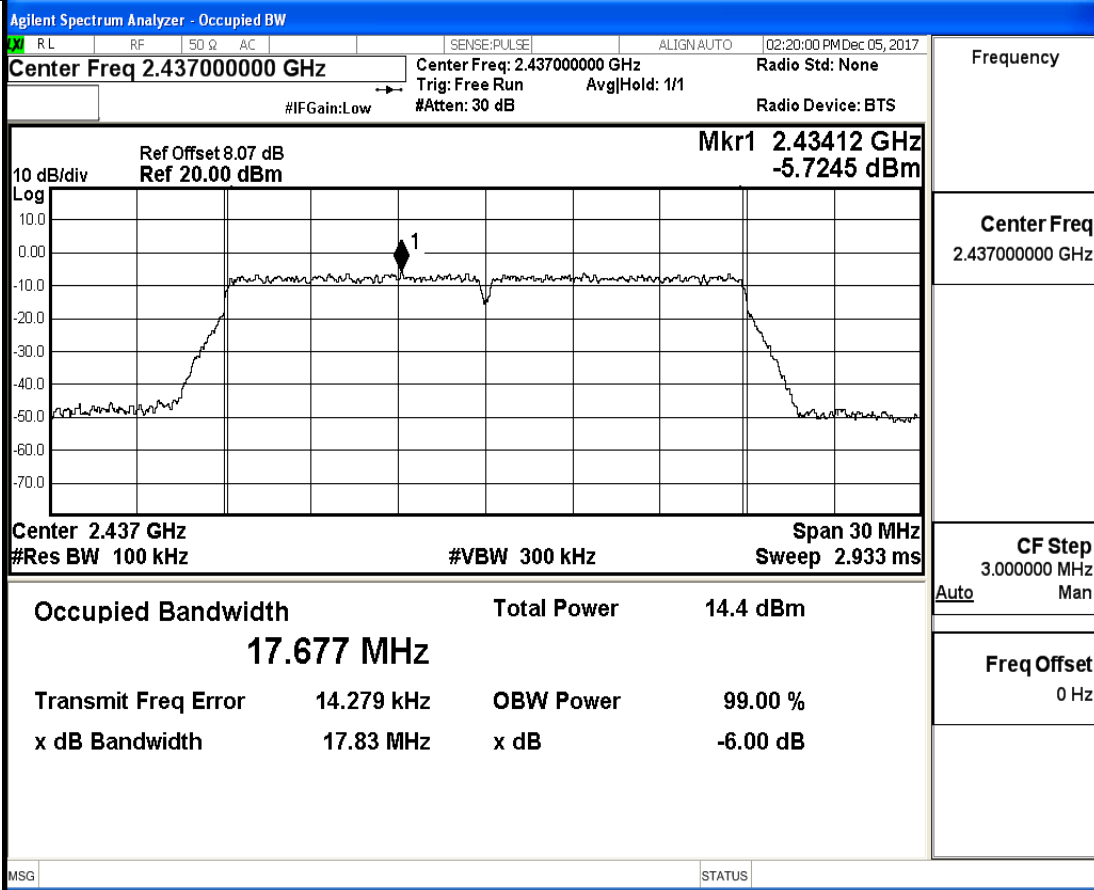
## 6dB Bandwidth\_11G\_2462\_Ant1



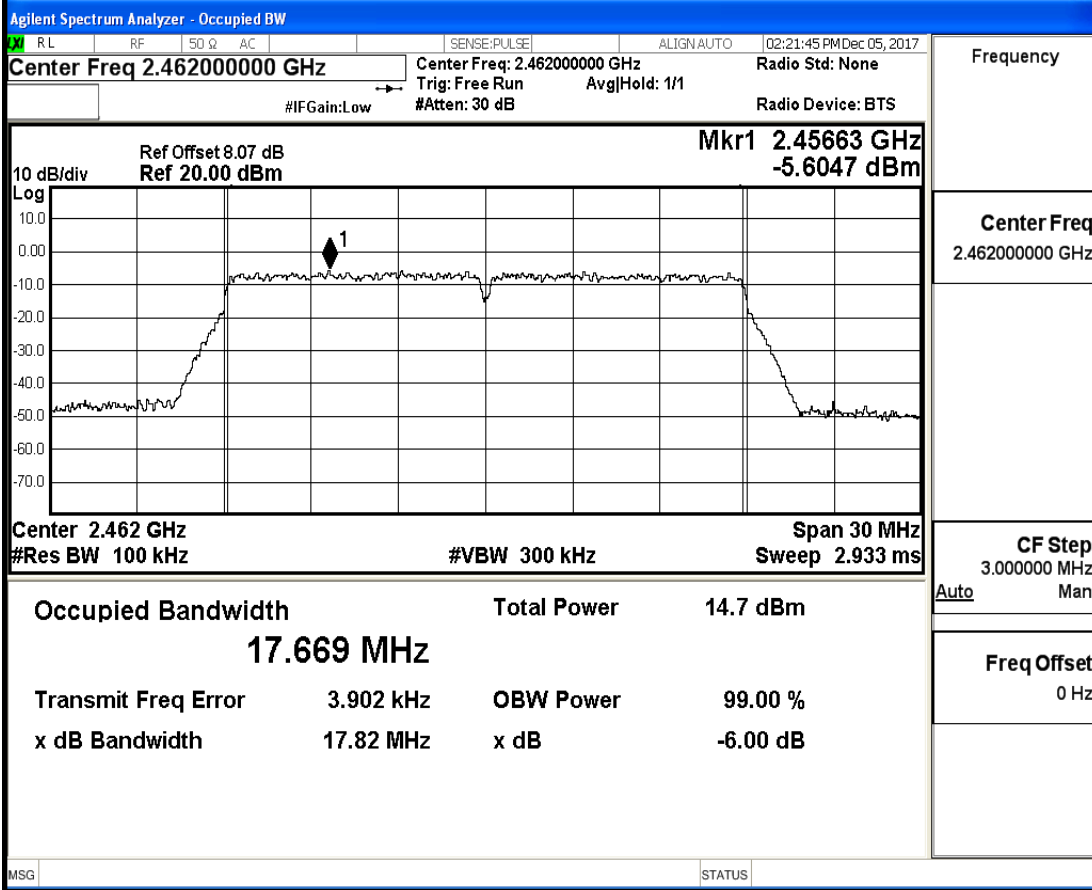
## 6dB Bandwidth\_11N20SISO\_2412\_Ant1



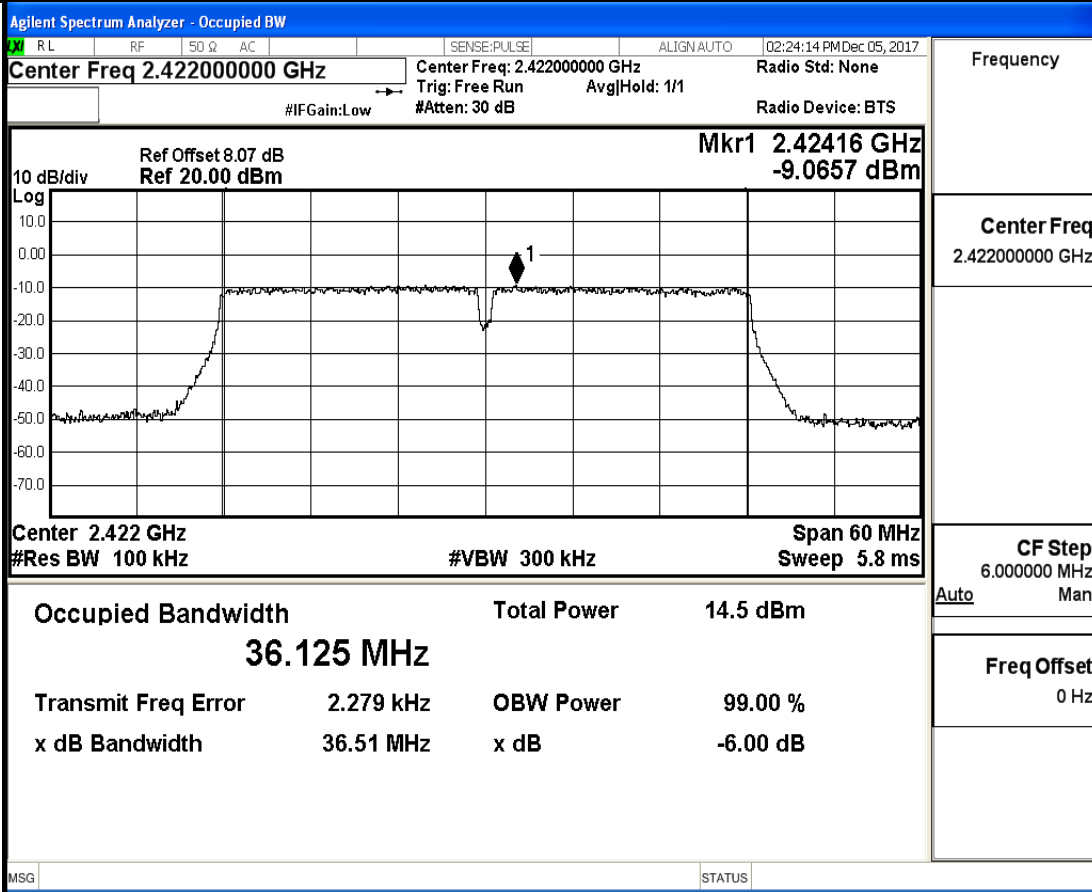
## 6dB Bandwidth\_11N20SISO\_2437\_Ant1



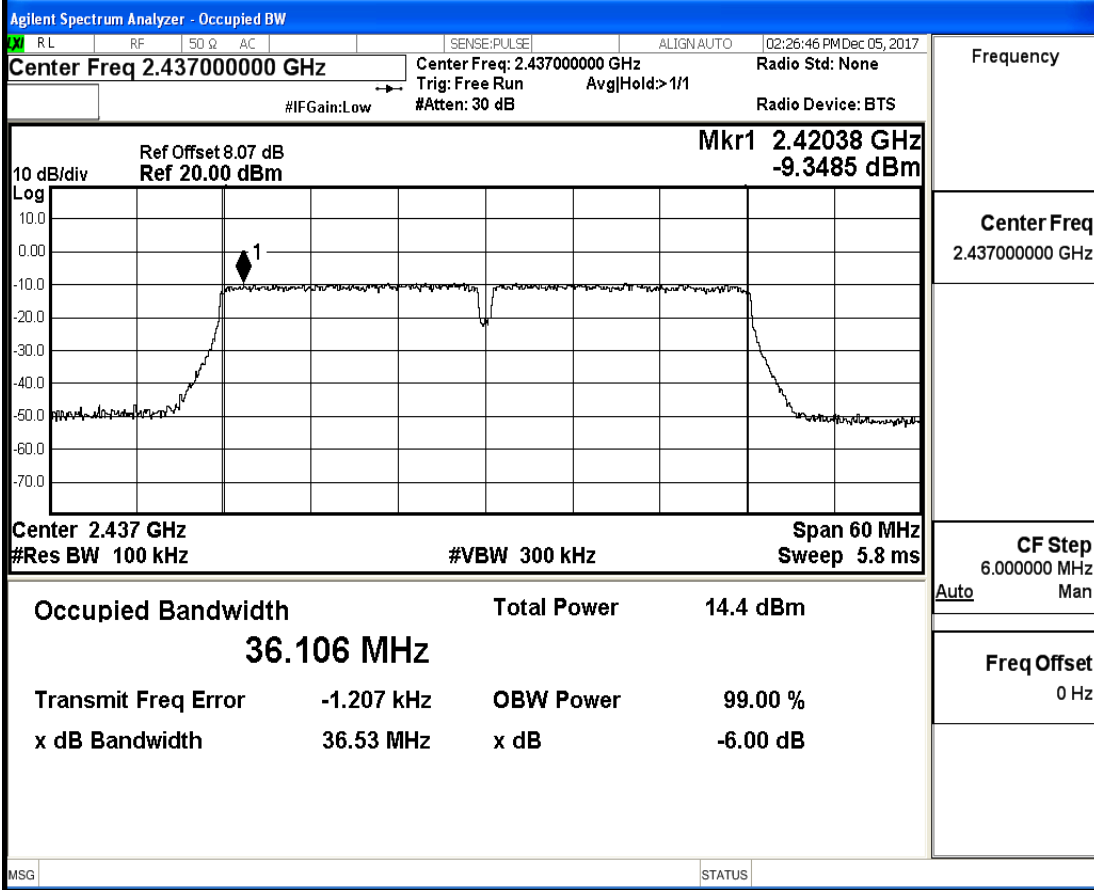
## 6dB Bandwidth\_11N20SISO\_2462\_Ant1



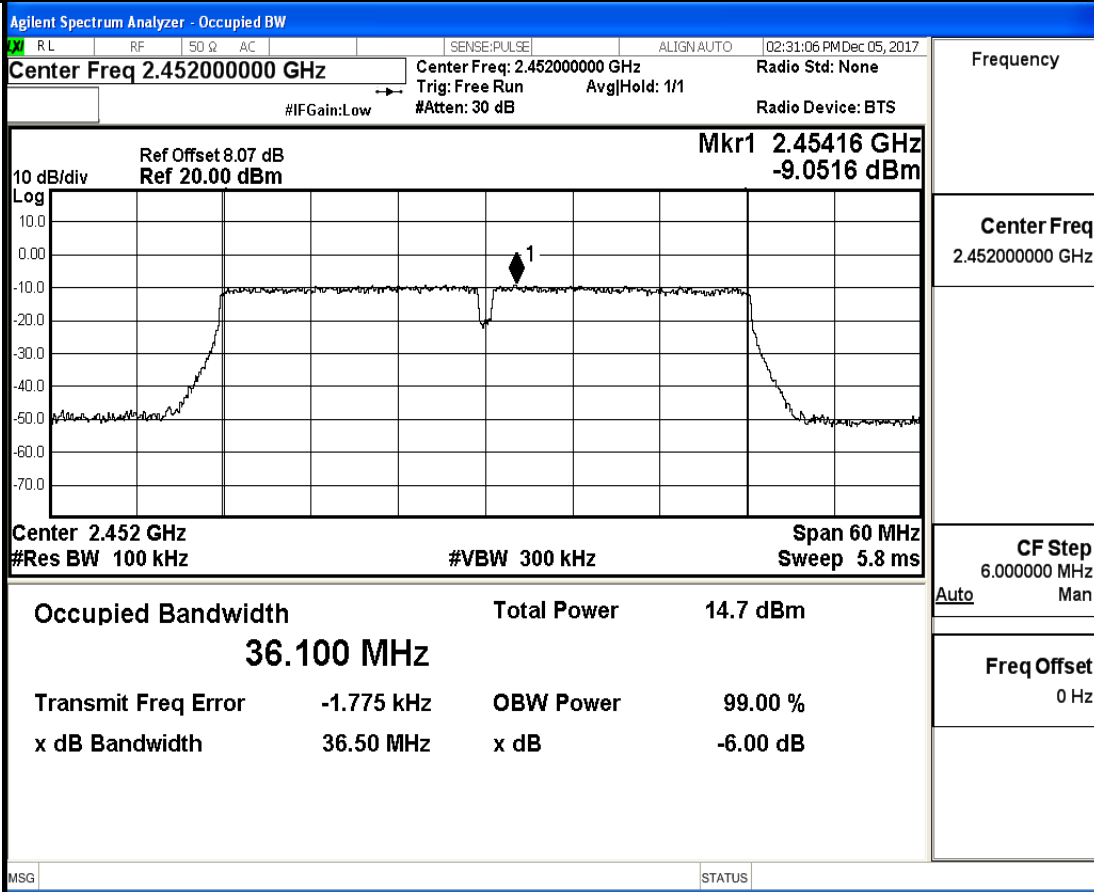
## 6dB Bandwidth\_11N40SISO\_2422\_Ant1



## 6dB Bandwidth\_11N40SISO\_2437\_Ant1



## 6dB Bandwidth\_11N40SISO\_2452\_Ant1



**2.Maximum peak conducted output power**

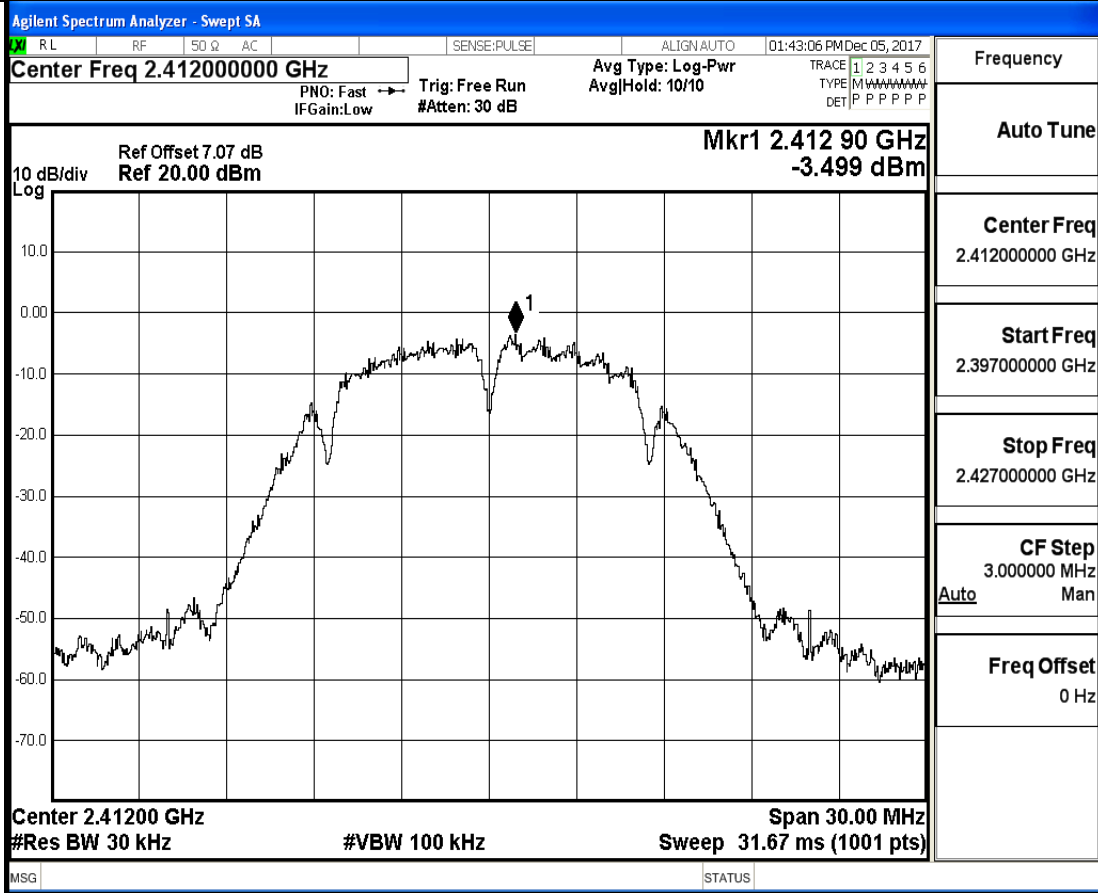
Test Mode	Test Channel	Ant	Power[dBm]	Limit[dBm]	Verdict
11B	2412	Ant1	14.36	30	PASS
11B	2437	Ant1	15.68	30	PASS
11B	2462	Ant1	16.03	30	PASS
11G	2412	Ant1	14.43	30	PASS
11G	2437	Ant1	15.68	30	PASS
11G	2462	Ant1	15.66	30	PASS
11N20SISO	2412	Ant1	14.38	30	PASS
11N20SISO	2437	Ant1	14.67	30	PASS
11N20SISO	2462	Ant1	14.86	30	PASS
11N40SISO	2422	Ant1	14.67	30	PASS
11N40SISO	2437	Ant1	14.55	30	PASS
11N40SISO	2452	Ant1	14.83	30	PASS



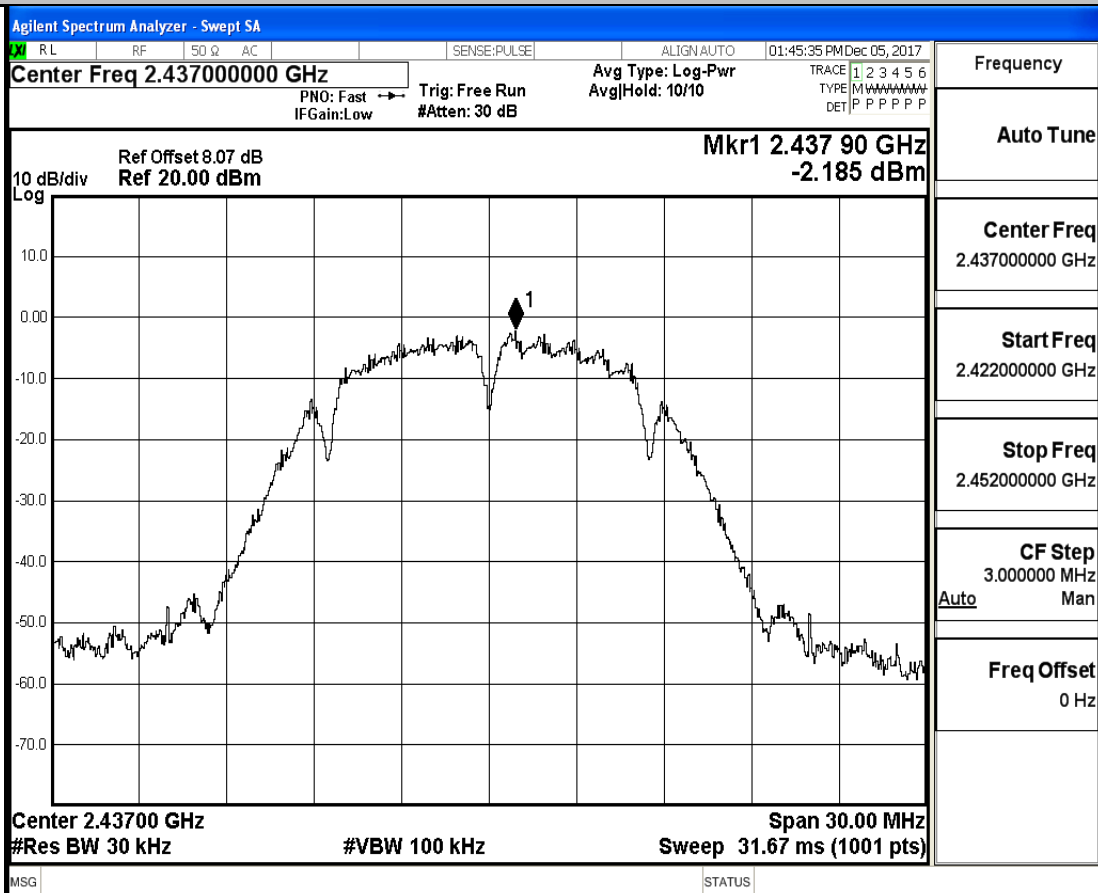
**3.Maximum Peak power spectral density**

Test Mode	Test Channel	Ant	PSD[dBm/MHz]	Limit[dBm/MHz]	Verdict
11B	2412	Ant1	-3.499	8.00	PASS
11B	2437	Ant1	-2.185	8.00	PASS
11B	2462	Ant1	-1.791	8.00	PASS
11G	2412	Ant1	-10.331	8.00	PASS
11G	2437	Ant1	-9.251	8.00	PASS
11G	2462	Ant1	-9.04	8.00	PASS
11N20SISO	2412	Ant1	-9.525	8.00	PASS
11N20SISO	2437	Ant1	-8.546	8.00	PASS
11N20SISO	2462	Ant1	-8.319	8.00	PASS
11N40SISO	2422	Ant1	-12.300	8.00	PASS
11N40SISO	2437	Ant1	-12.313	8.00	PASS
11N40SISO	2452	Ant1	-12.222	8.00	PASS

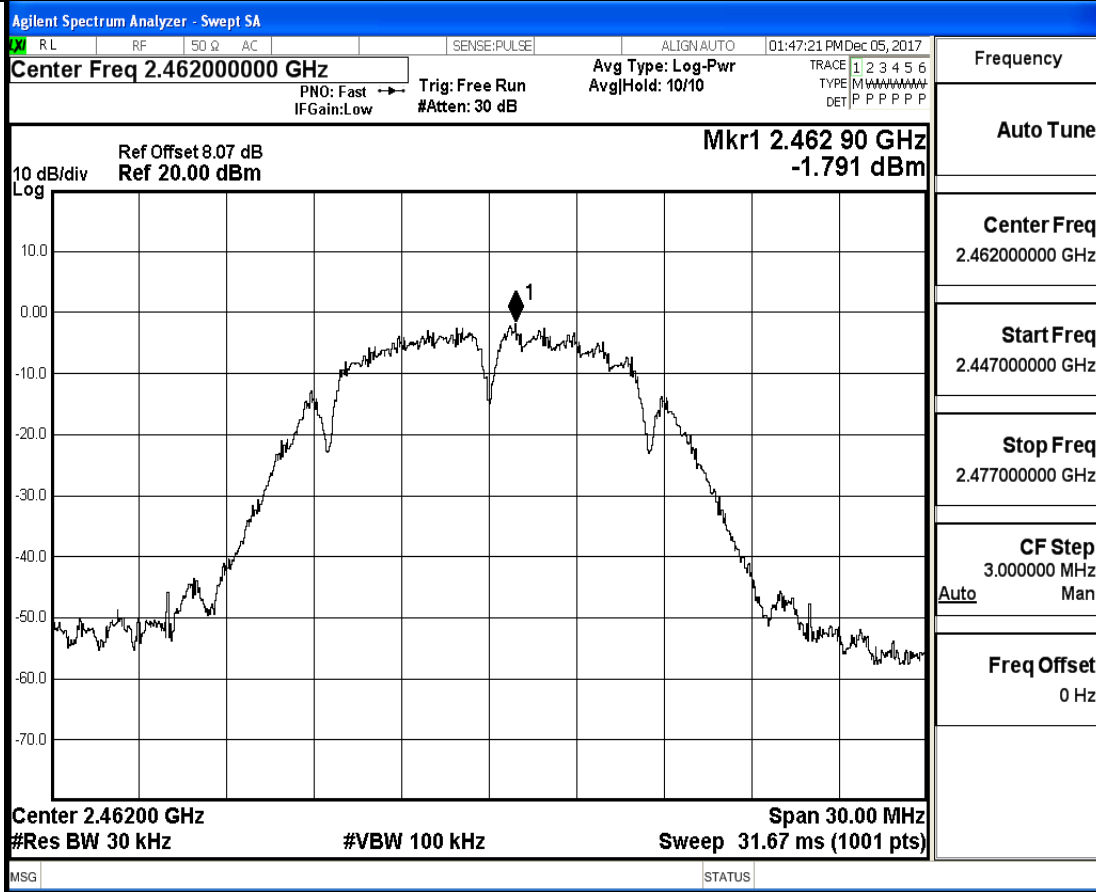
## Maximum Peak power spectral density\_11B\_2412\_Ant1



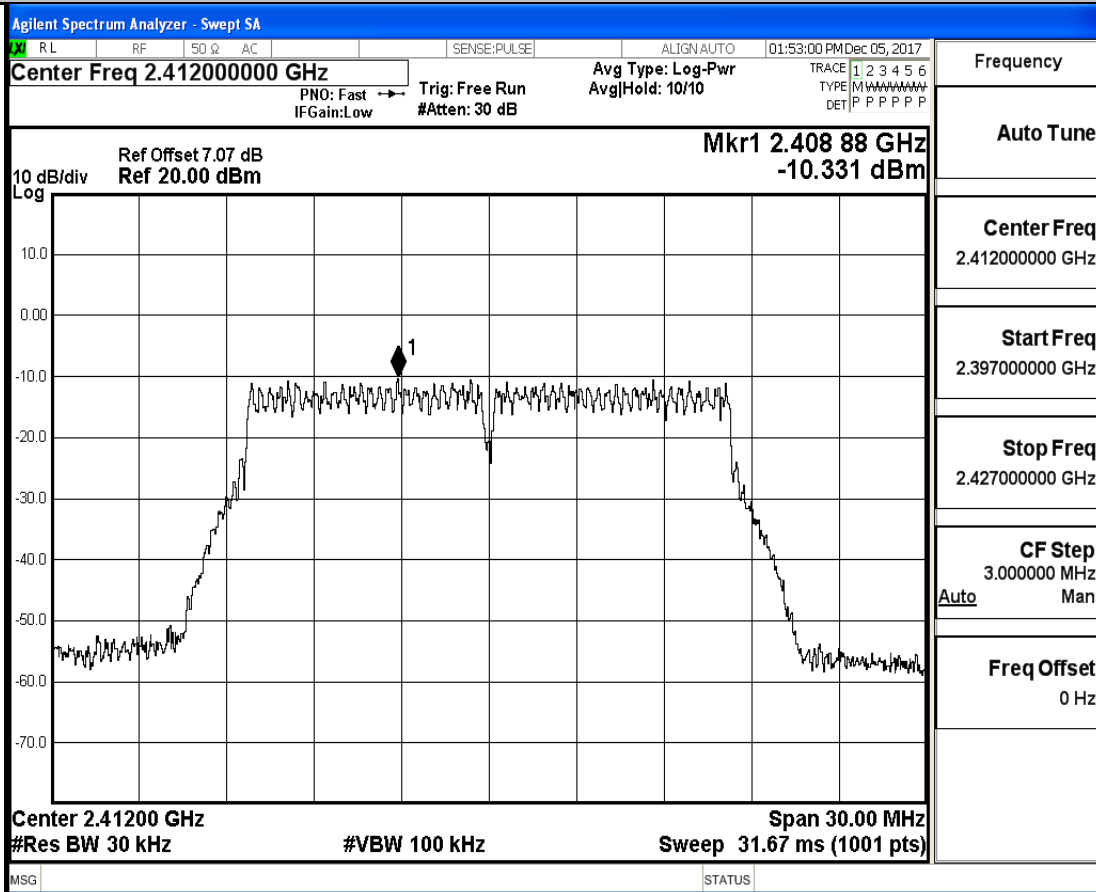
## Maximum Peak power spectral density\_11B\_2437\_Ant1



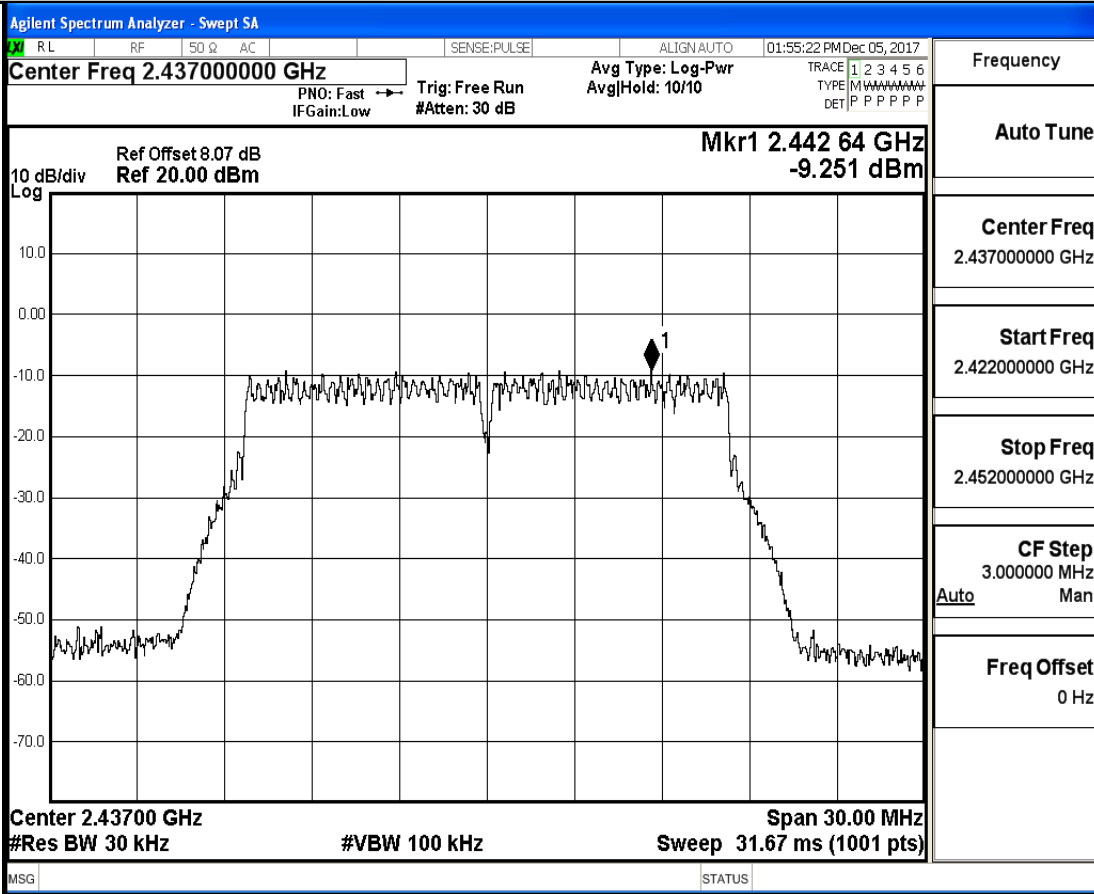
## Maximum Peak power spectral density\_11B\_2462\_Ant1



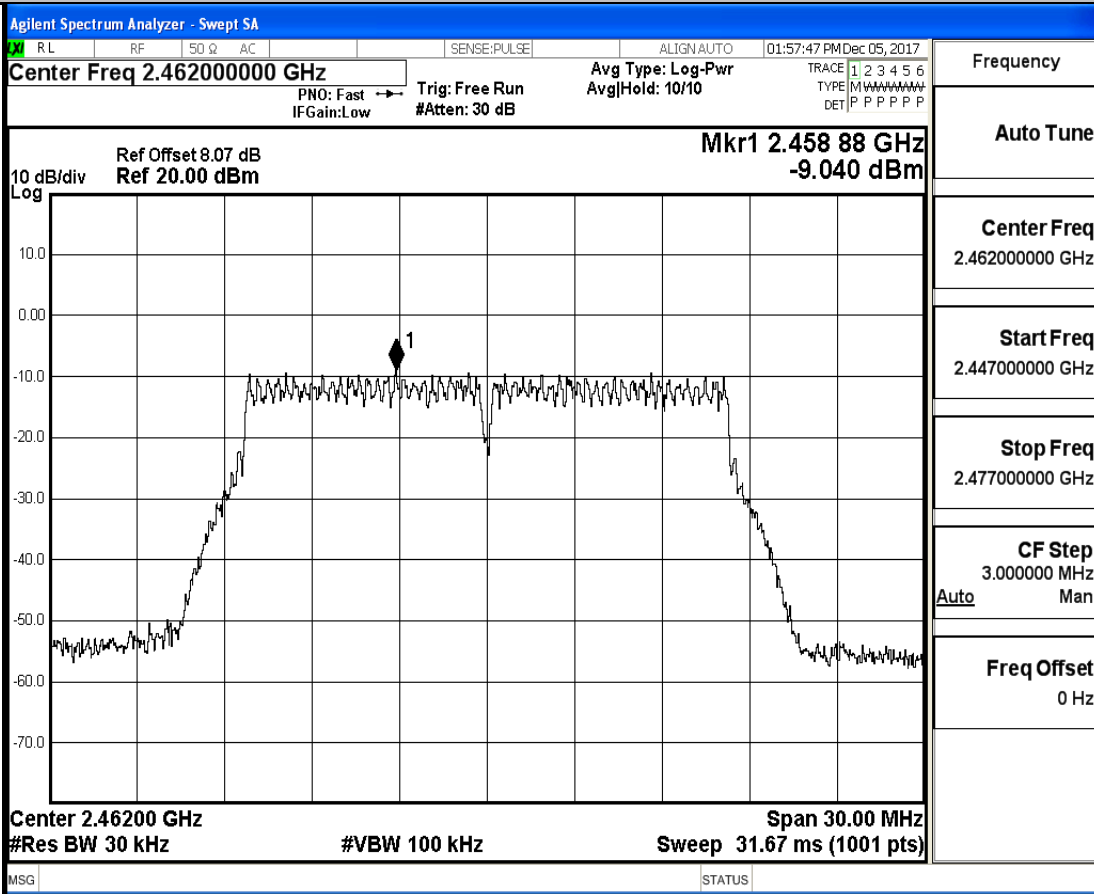
## Maximum Peak power spectral density\_11G\_2412\_Ant1



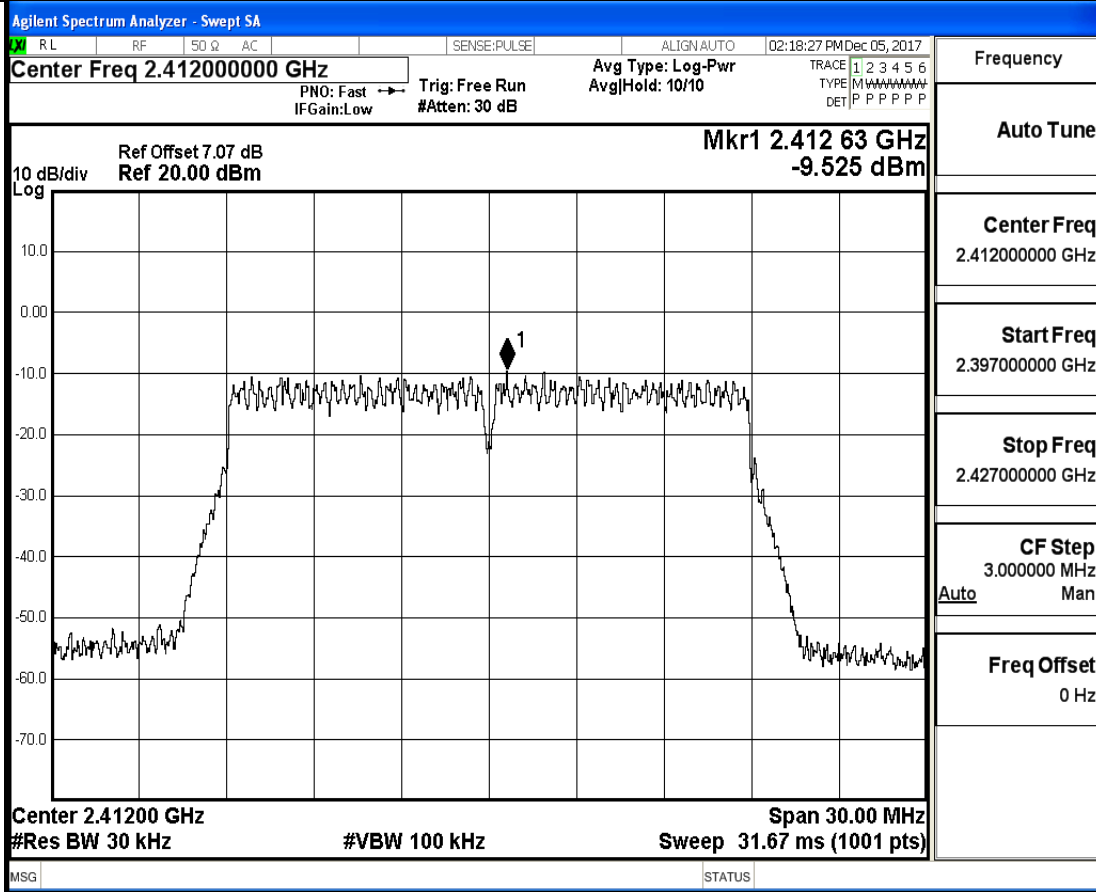
## Maximum Peak power spectral density\_11G\_2437\_Ant1



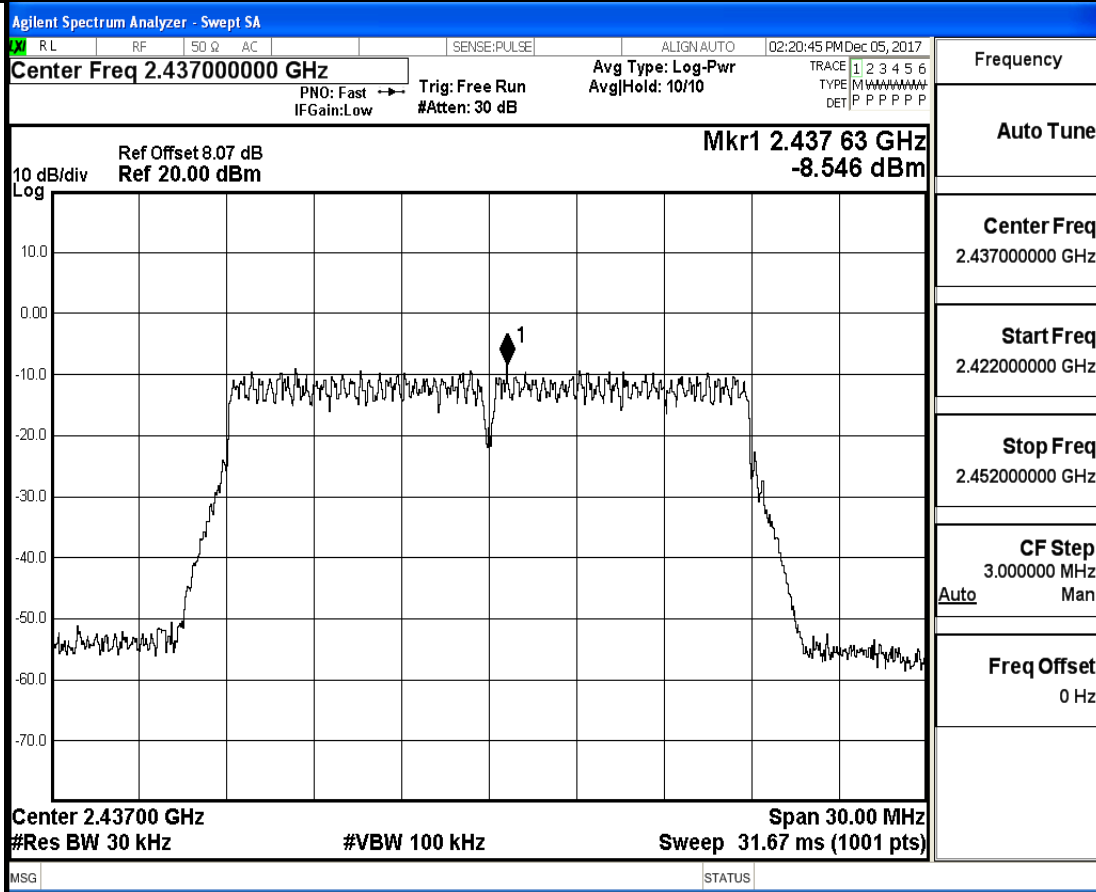
## Maximum Peak power spectral density\_11G\_2462\_Ant1



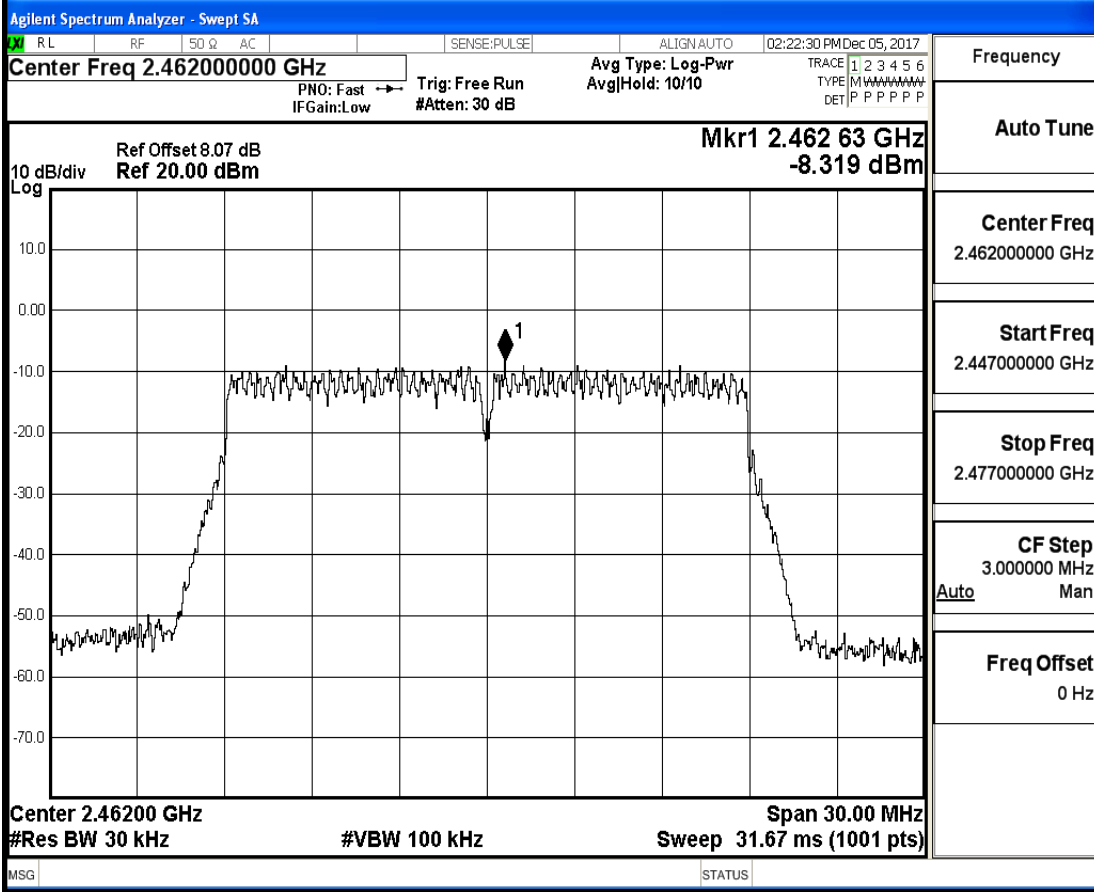
## Maximum Peak power spectral density\_11N20SISO\_2412\_Ant1



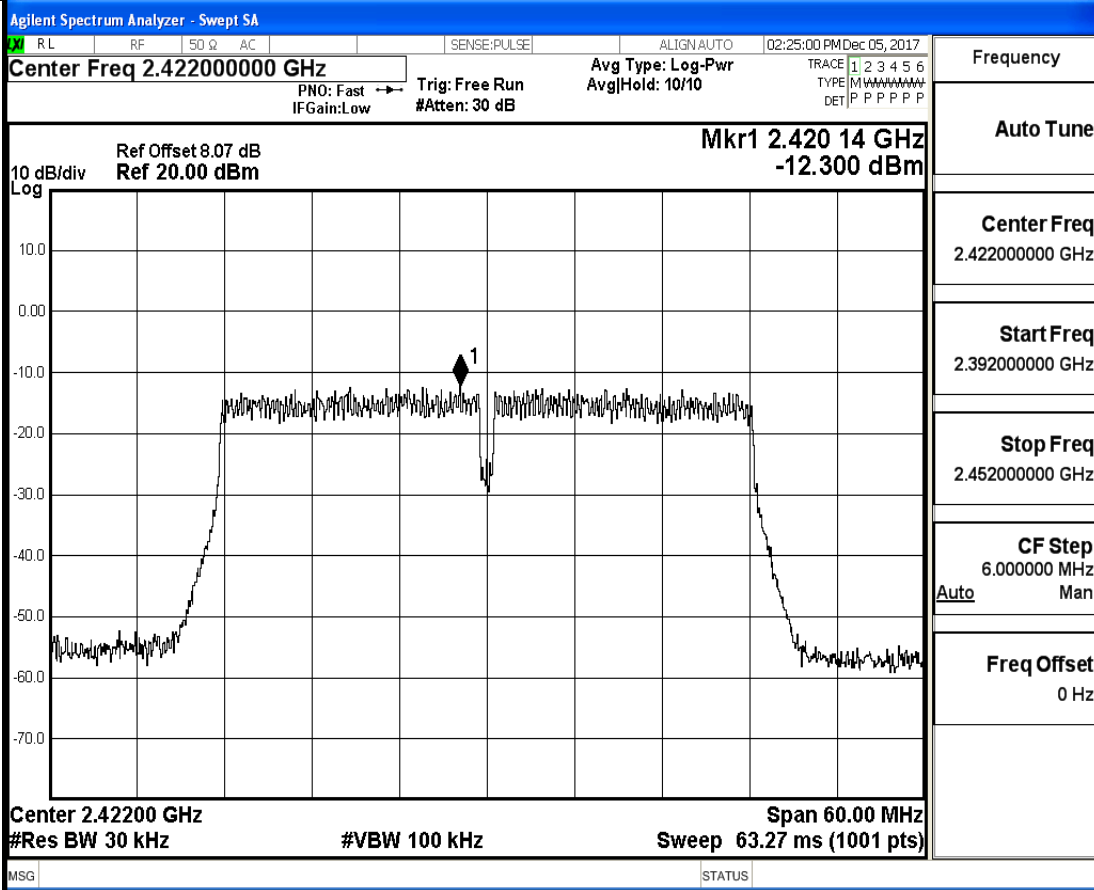
## Maximum Peak power spectral density\_11N20SISO\_2437\_Ant1



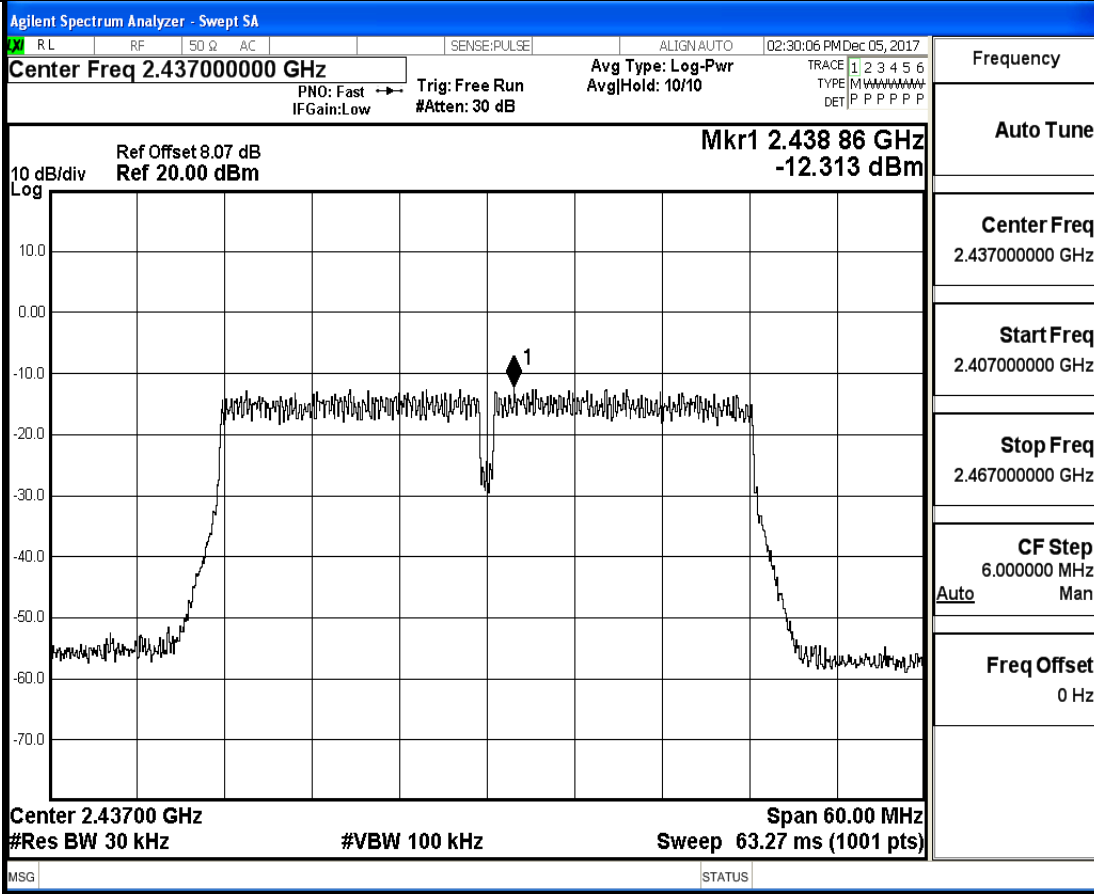
## Maximum Peak power spectral density\_11N20SISO\_2462\_Ant1



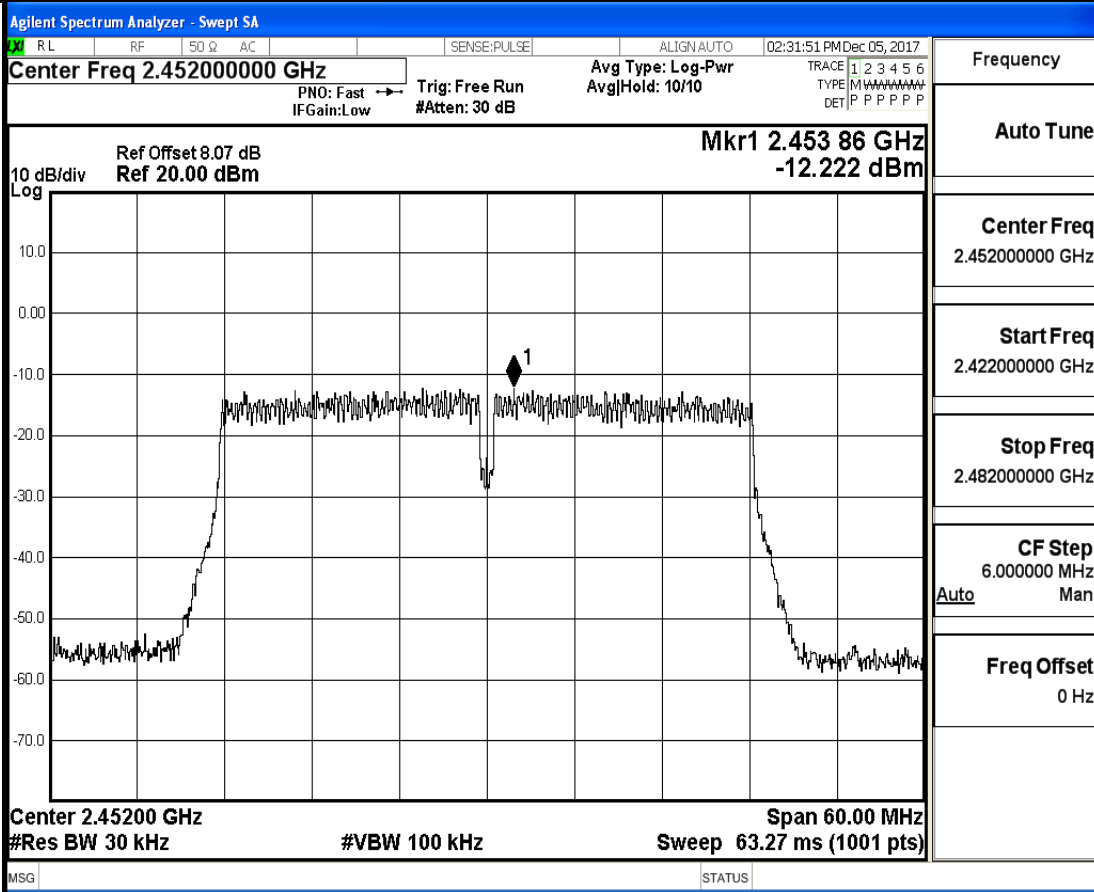
## Maximum Peak power spectral density\_11N40SISO\_2422\_Ant1



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



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

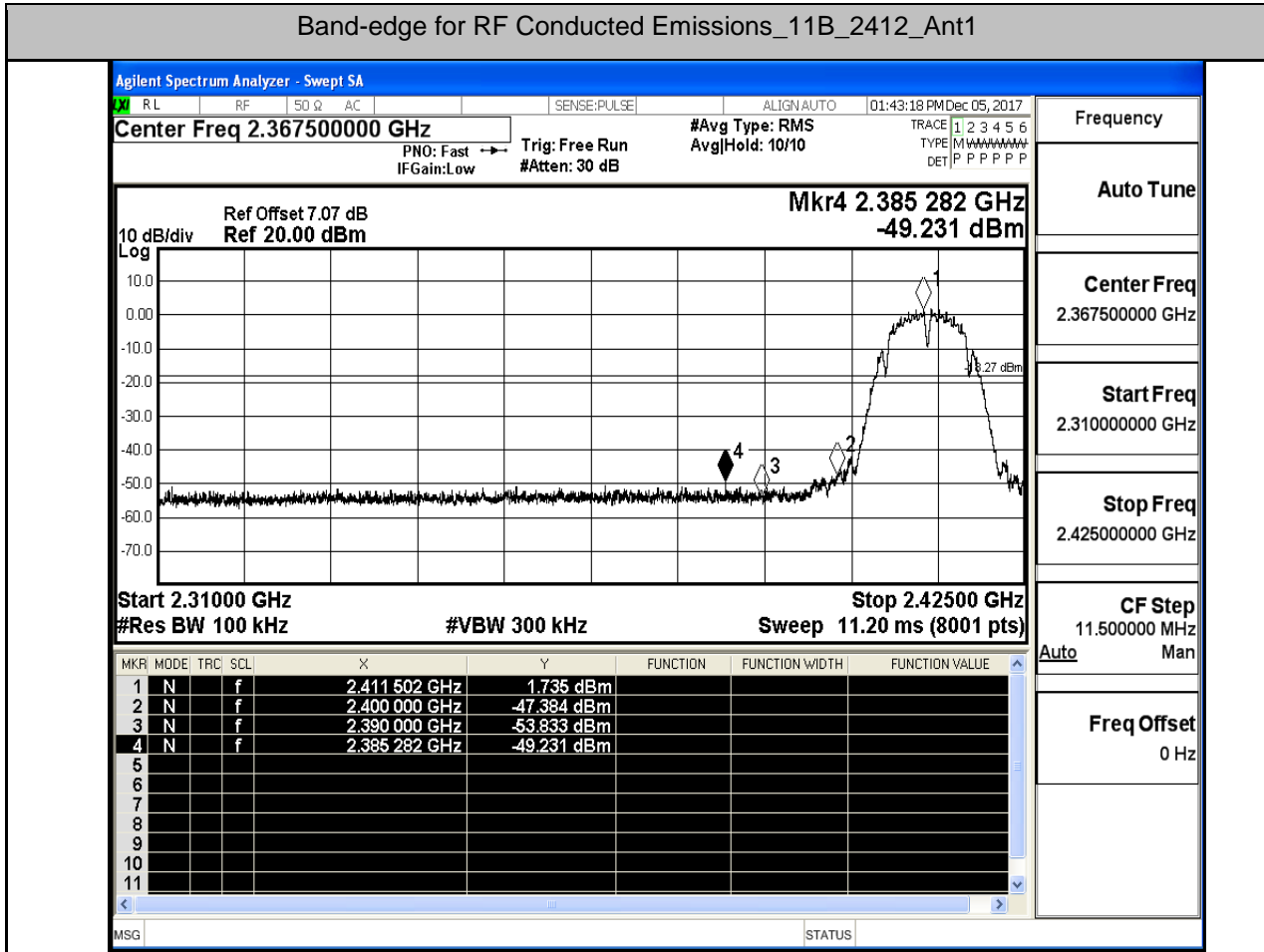


**4.Band-edge for RF Conducted Emissions**

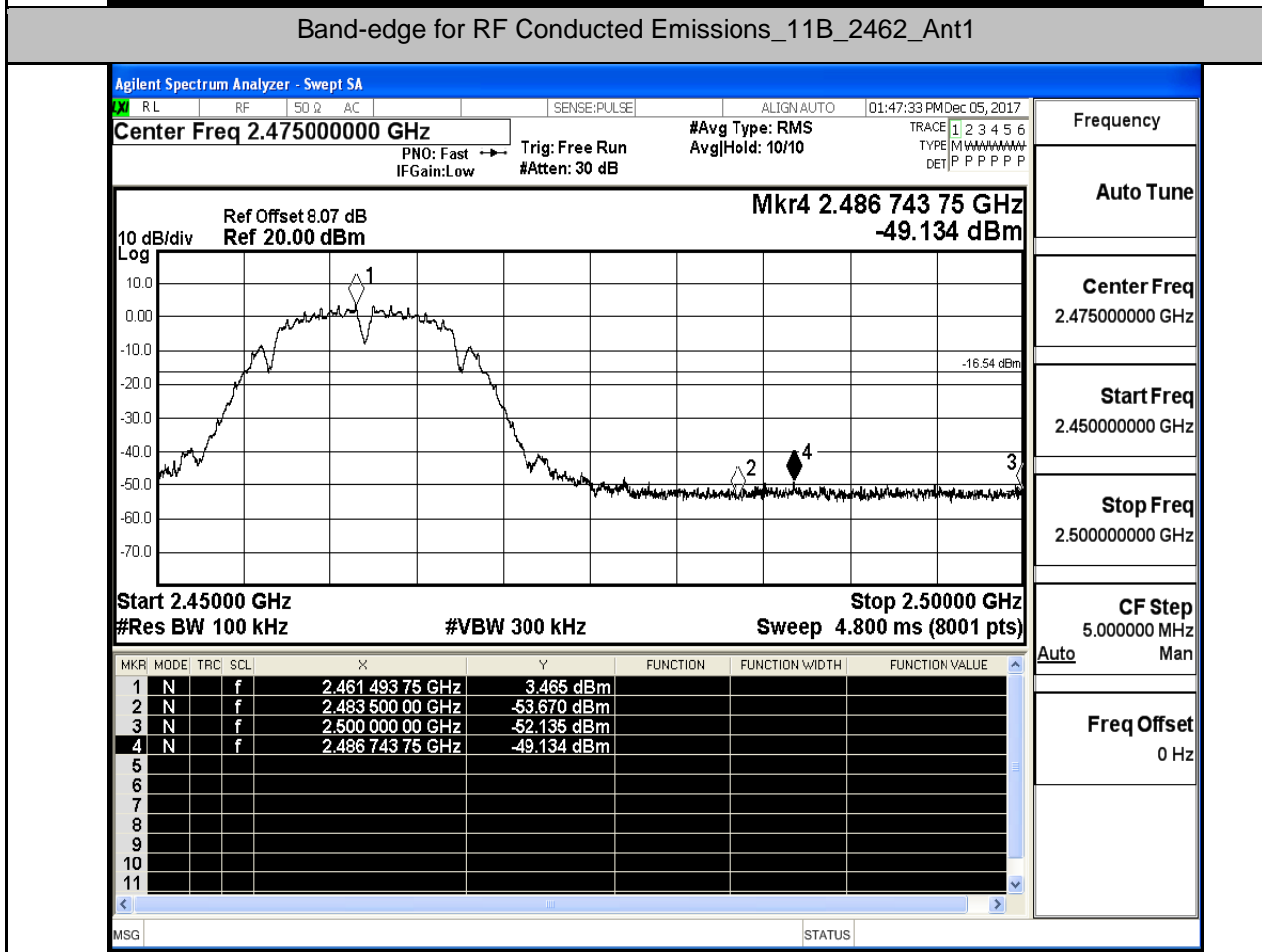
Test Mode	Test Channel	Ant	Carrier Power[dBm]	Max. Spurious Level [dBm]	Limit [dBm]	Verdict
11B	2412	Ant1	1.735	-49.231	-18.27	PASS
11B	2462	Ant1	3.465	-49.134	-16.54	PASS
11G	2412	Ant1	-7.579	-49.251	-27.58	PASS
11G	2462	Ant1	-6.356	-48.917	-26.36	PASS
11N20SISO	2412	Ant1	-6.633	-49.393	-26.63	PASS
11N20SISO	2462	Ant1	-5.822	-48.990	-25.82	PASS
11N40SISO	2422	Ant1	-9.257	-47.471	-29.26	PASS
11N40SISO	2452	Ant1	-9.387	-48.543	-29.39	PASS



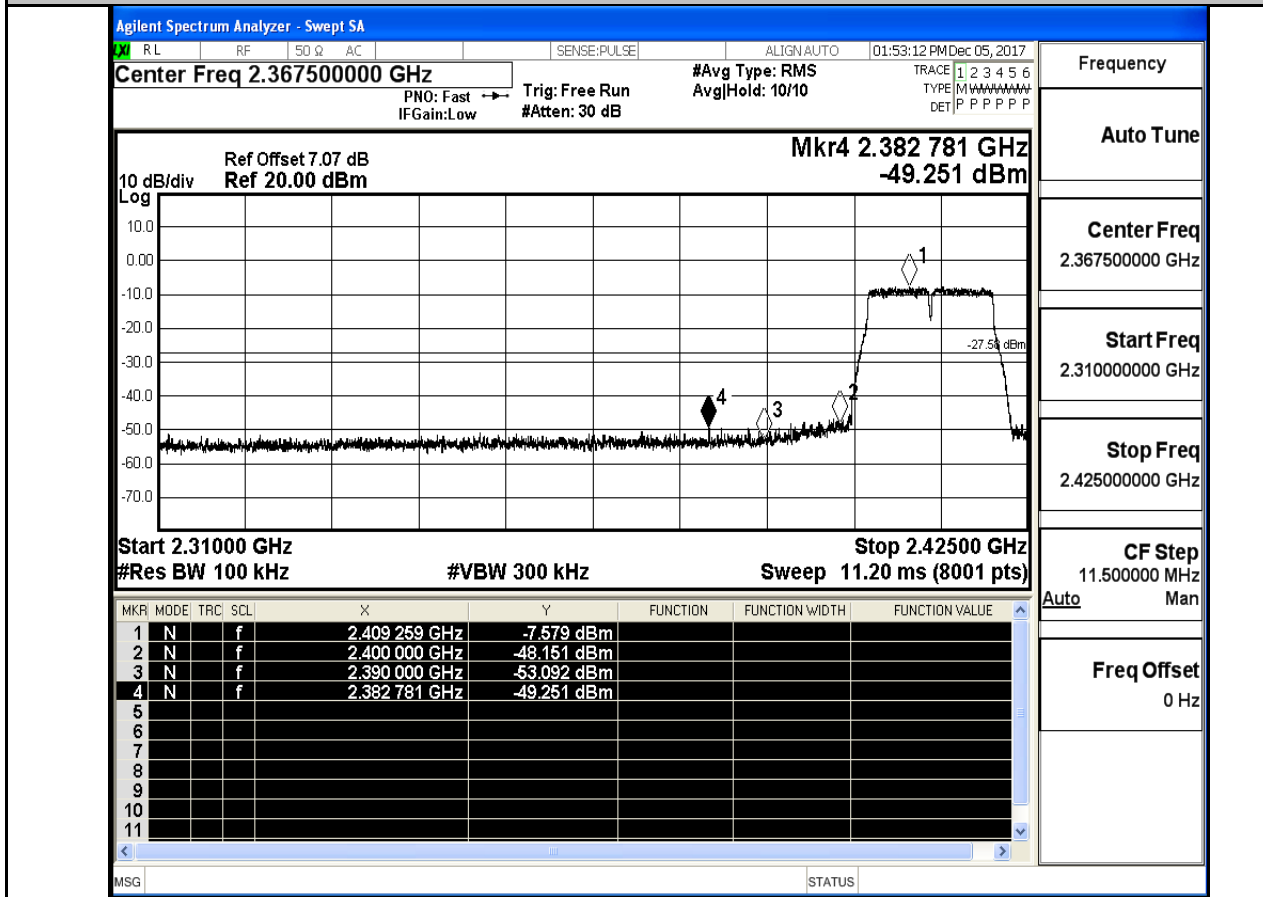
## Band-edge for RF Conducted Emissions\_11B\_2412\_Ant1



## Band-edge for RF Conducted Emissions\_11B\_2462\_Ant1

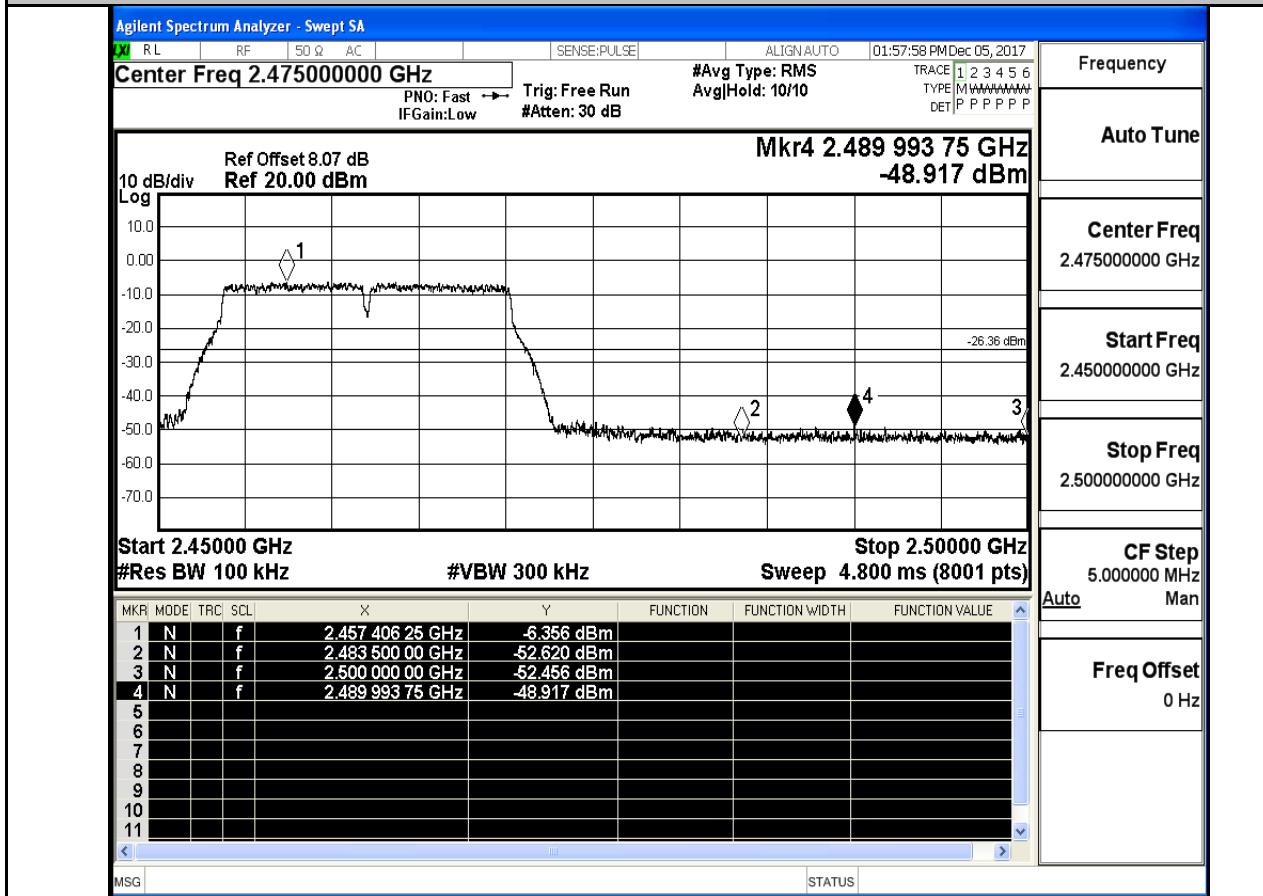


## Band-edge for RF Conducted Emissions\_11G\_2412\_Ant1



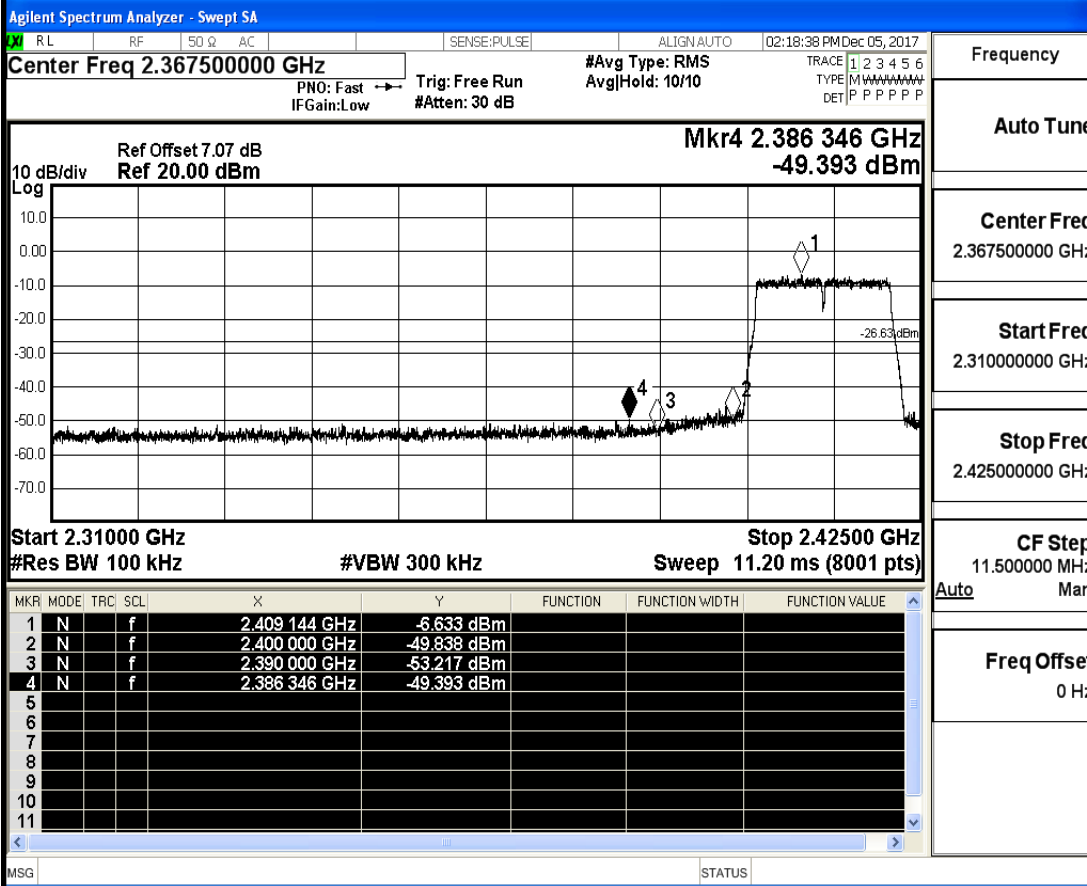
Frequency	
Auto Tune	
Center Freq	2.367500000 GHz
Start Freq	2.310000000 GHz
Stop Freq	2.425000000 GHz
CF Step	11.500000 MHz
Freq Offset	0 Hz

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

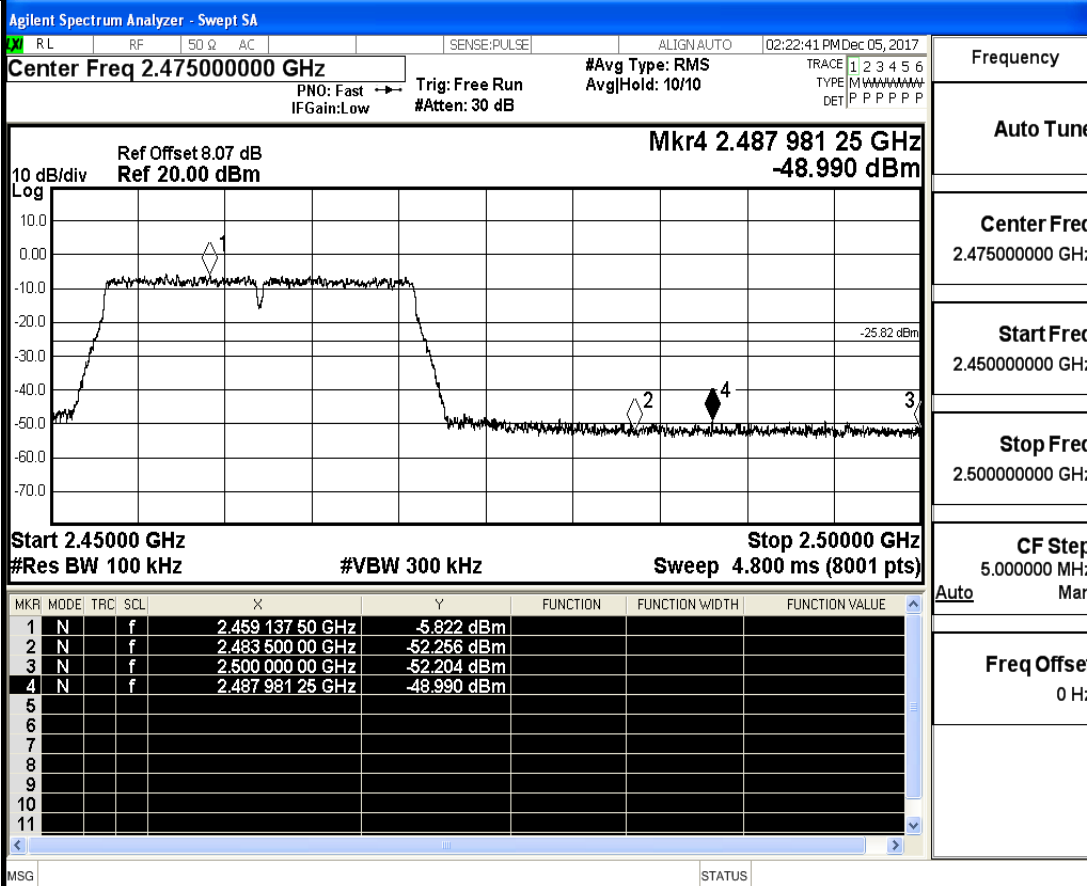


Frequency	
Auto Tune	
Center Freq	2.475000000 GHz
Start Freq	2.450000000 GHz
Stop Freq	2.500000000 GHz
CF Step	5.000000 MHz
Freq Offset	0 Hz

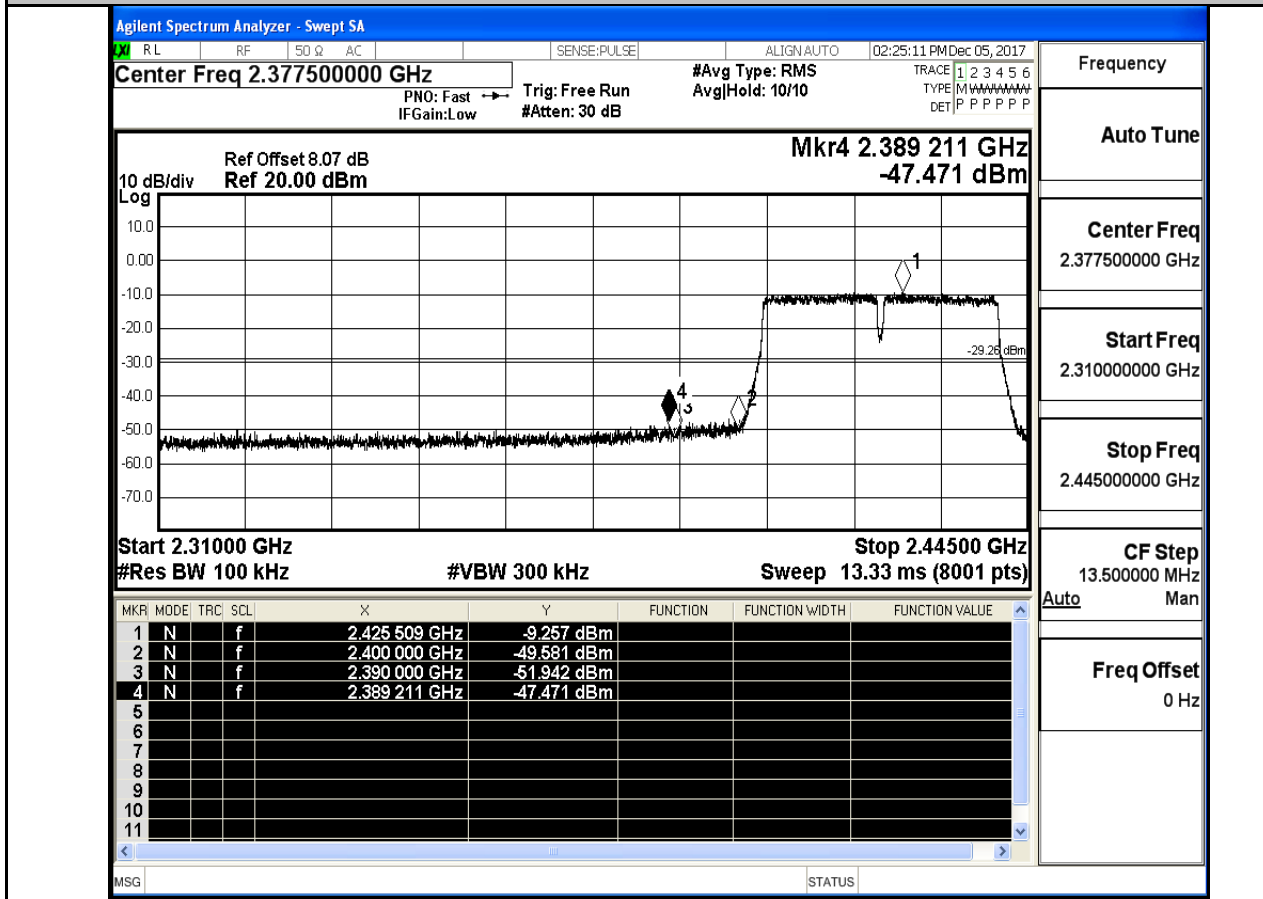
## Band-edge for RF Conducted Emissions\_11N20SISO\_2412\_Ant1



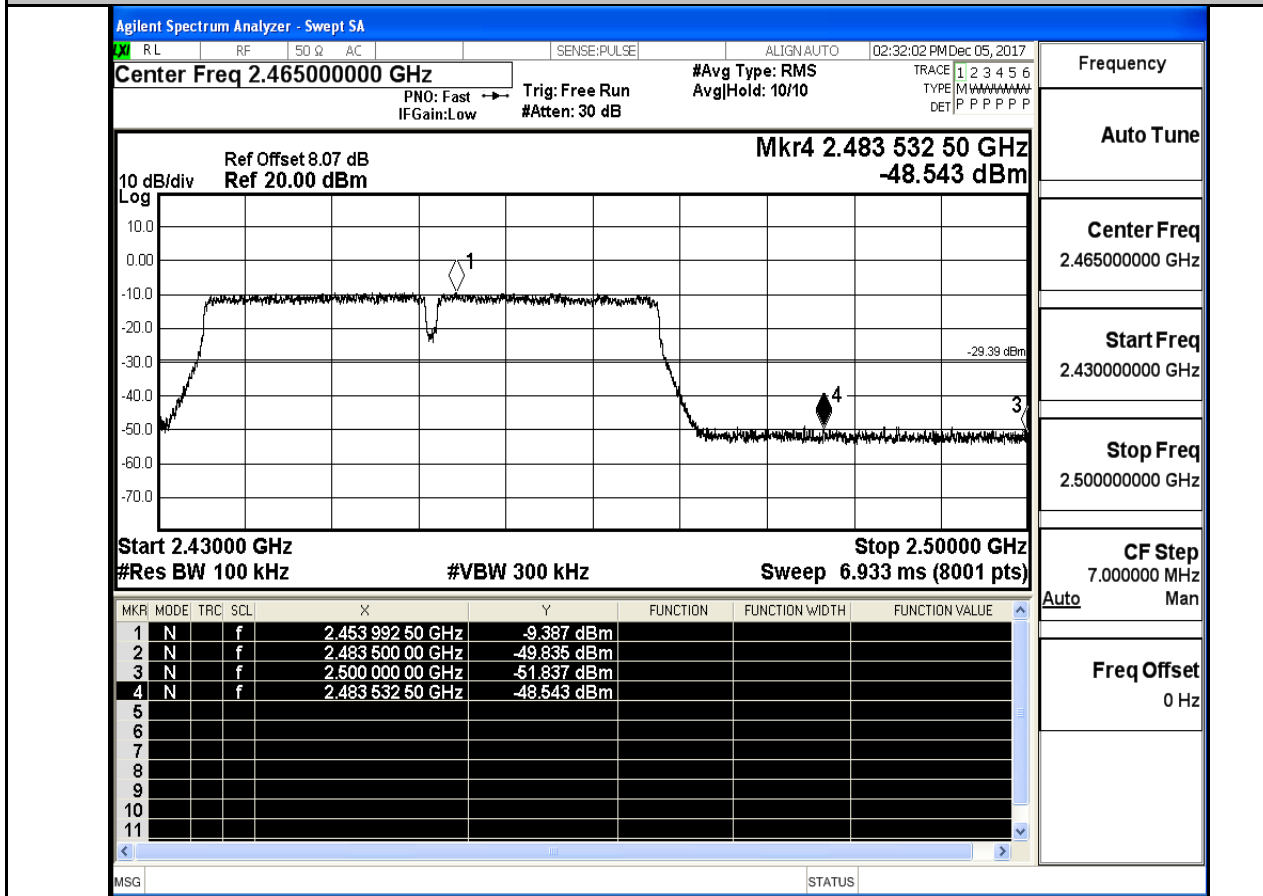
## Band-edge for RF Conducted Emissions\_11N20SISO\_2462\_Ant1



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



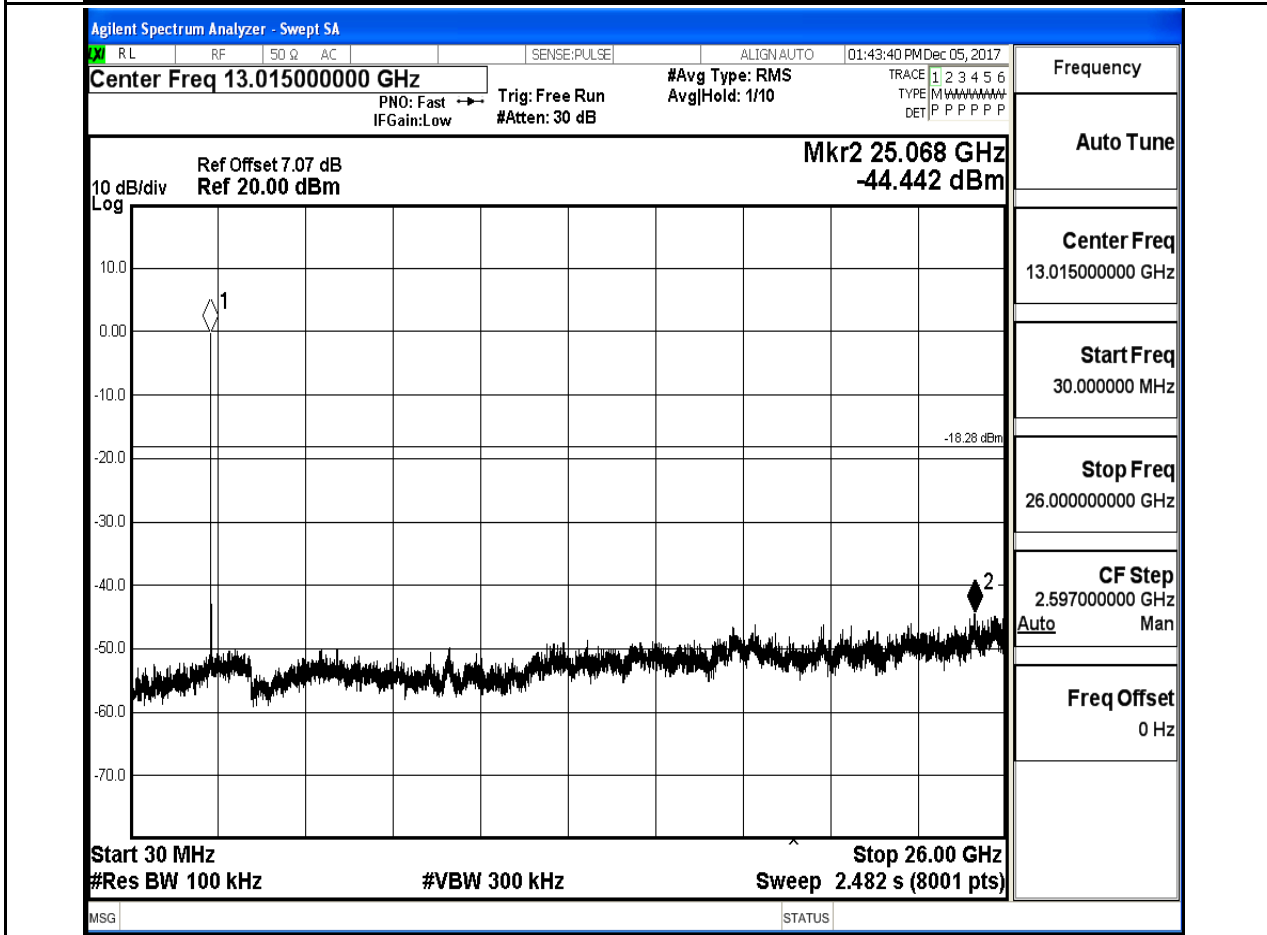
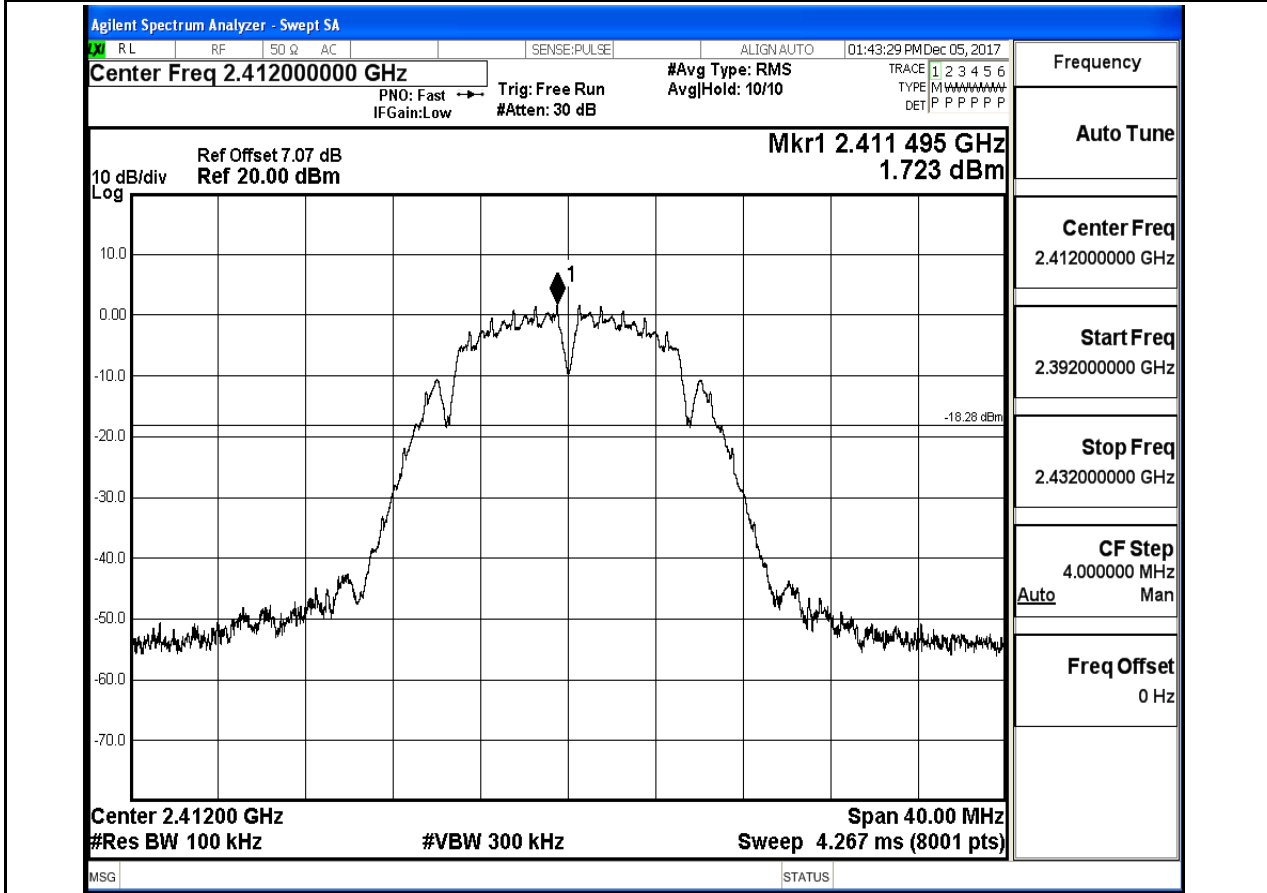
## Band-edge for RF Conducted Emissions\_11N40SISO\_2452\_Ant1



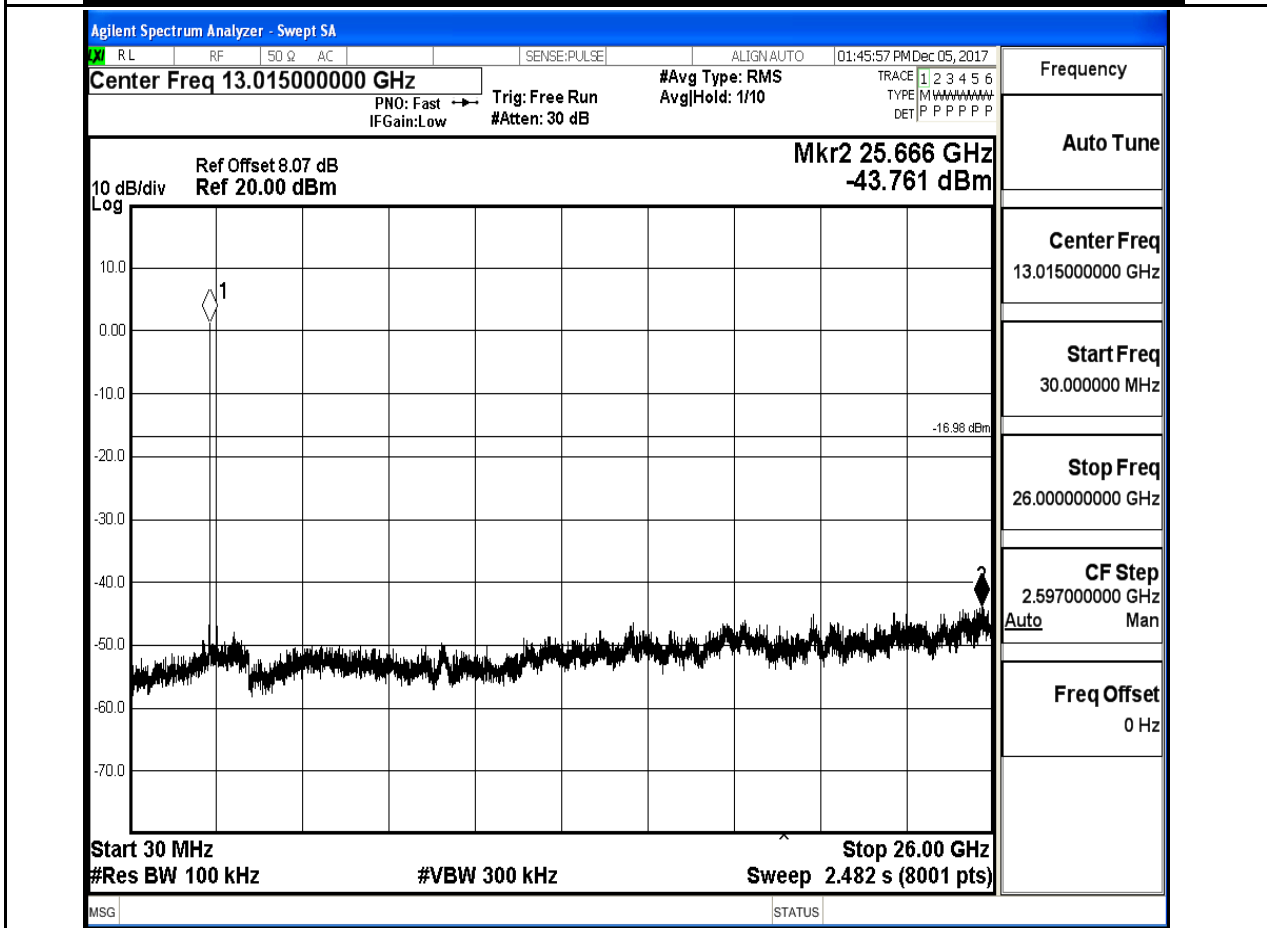
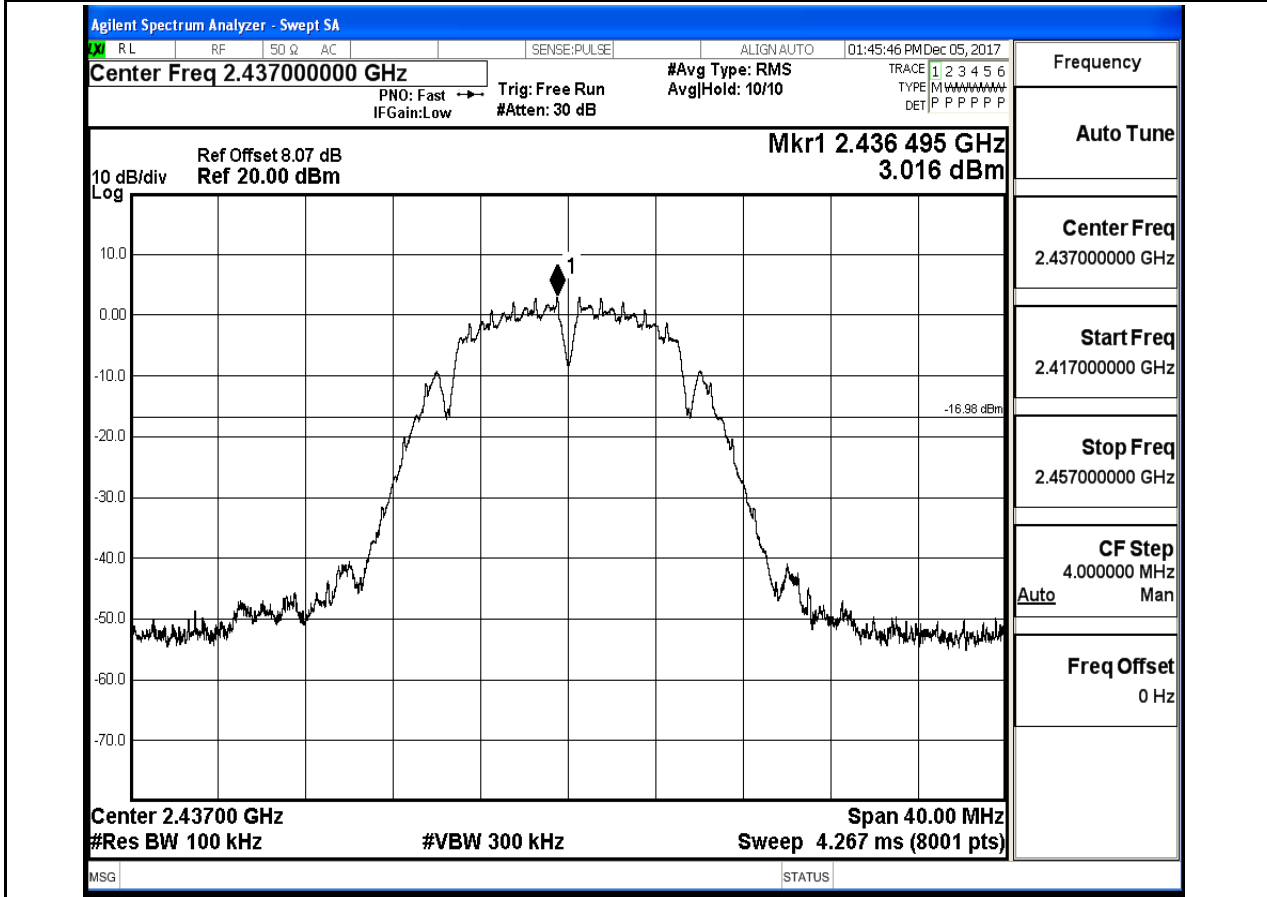
5.RF Conducted Spurious Emissions

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	-44.442	<-18.277	PASS
11B	2437	Ant1	30	26000	100	300	3.016	-43.761	<-16.984	PASS
11B	2462	Ant1	30	26000	100	300	3.393	-42.511	<-16.607	PASS
11G	2412	Ant1	30	26000	100	300	-7.627	-44.728	<-27.627	PASS
11G	2437	Ant1	30	26000	100	300	-6.332	-44.658	<-26.332	PASS
11G	2462	Ant1	30	26000	100	300	-6.5	-43.763	<-26.5	PASS
11N20SISO	2412	Ant1	30	26000	100	300	-6.643	-43.818	<-26.643	PASS
11N20SISO	2437	Ant1	30	26000	100	300	-6.021	-42.650	<-26.021	PASS
11N20SISO	2462	Ant1	30	26000	100	300	-5.742	-43.278	<-25.742	PASS
11N40SISO	2422	Ant1	30	26000	100	300	-9.478	-43.597	<-29.478	PASS
11N40SISO	2437	Ant1	30	26000	100	300	-9.342	-43.110	<-29.342	PASS
11N40SISO	2452	Ant1	30	26000	100	300	-9.322	-43.576	<-29.322	PASS

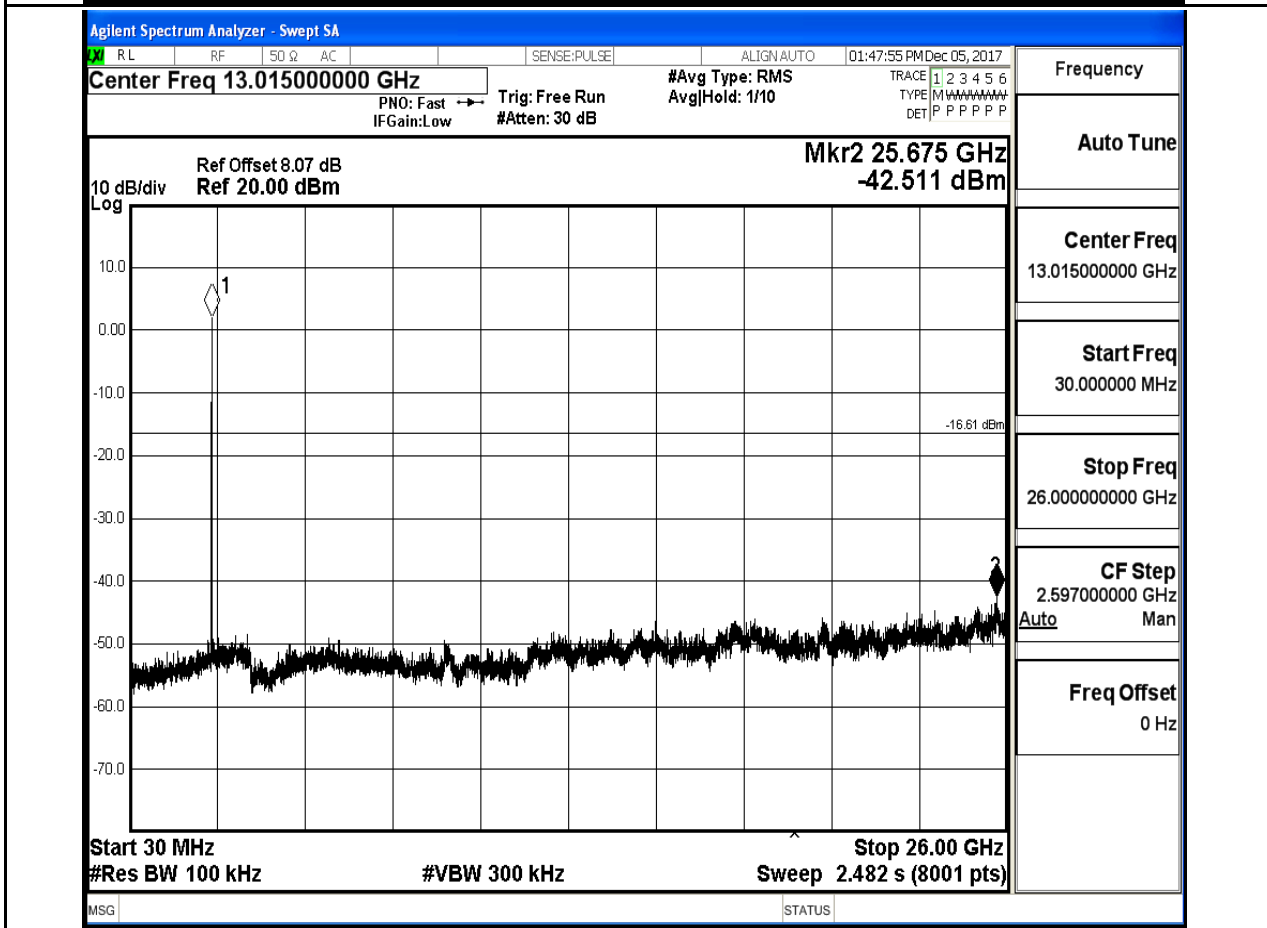
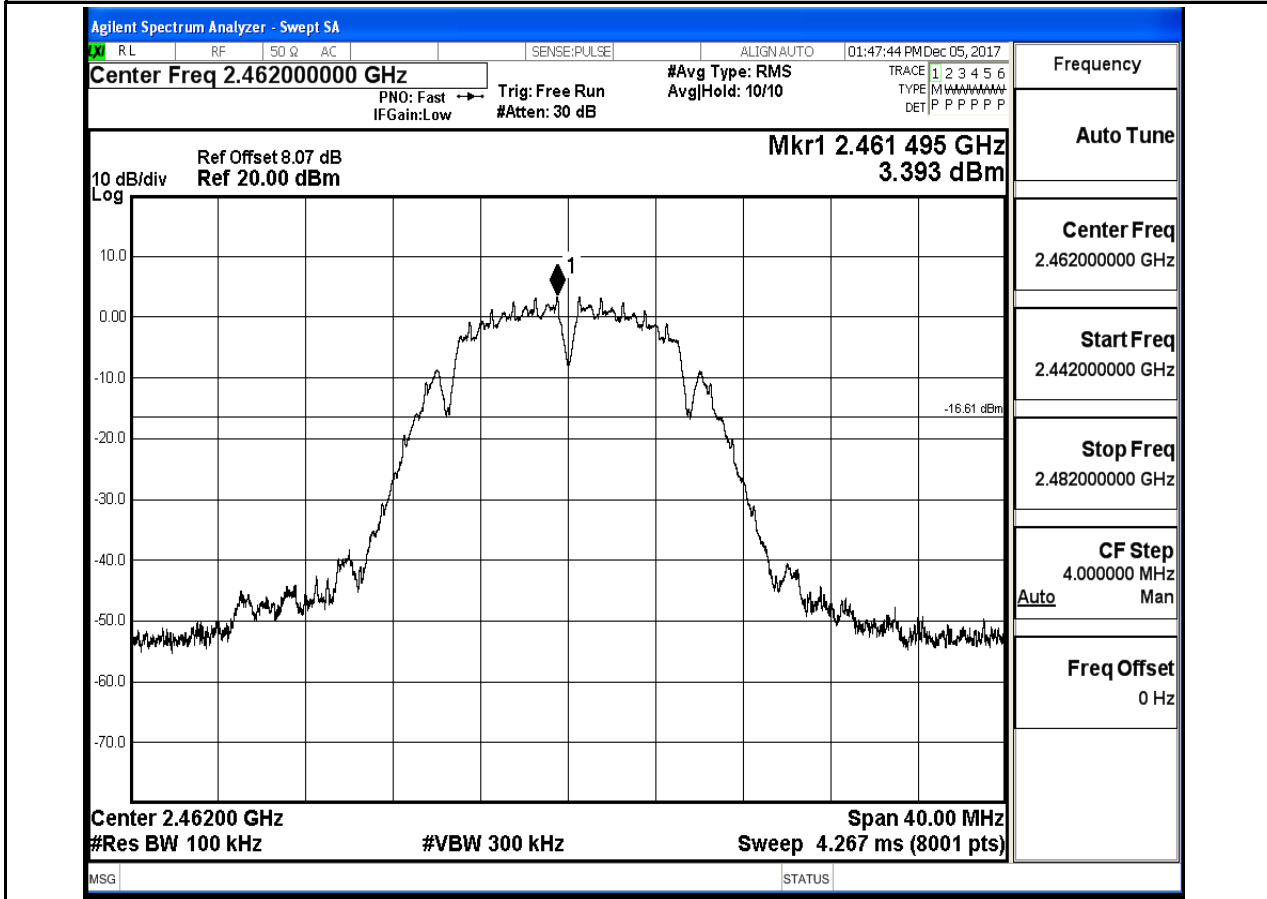
## RF Conducted Spurious Emissions\_11B\_2412\_Ant1



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

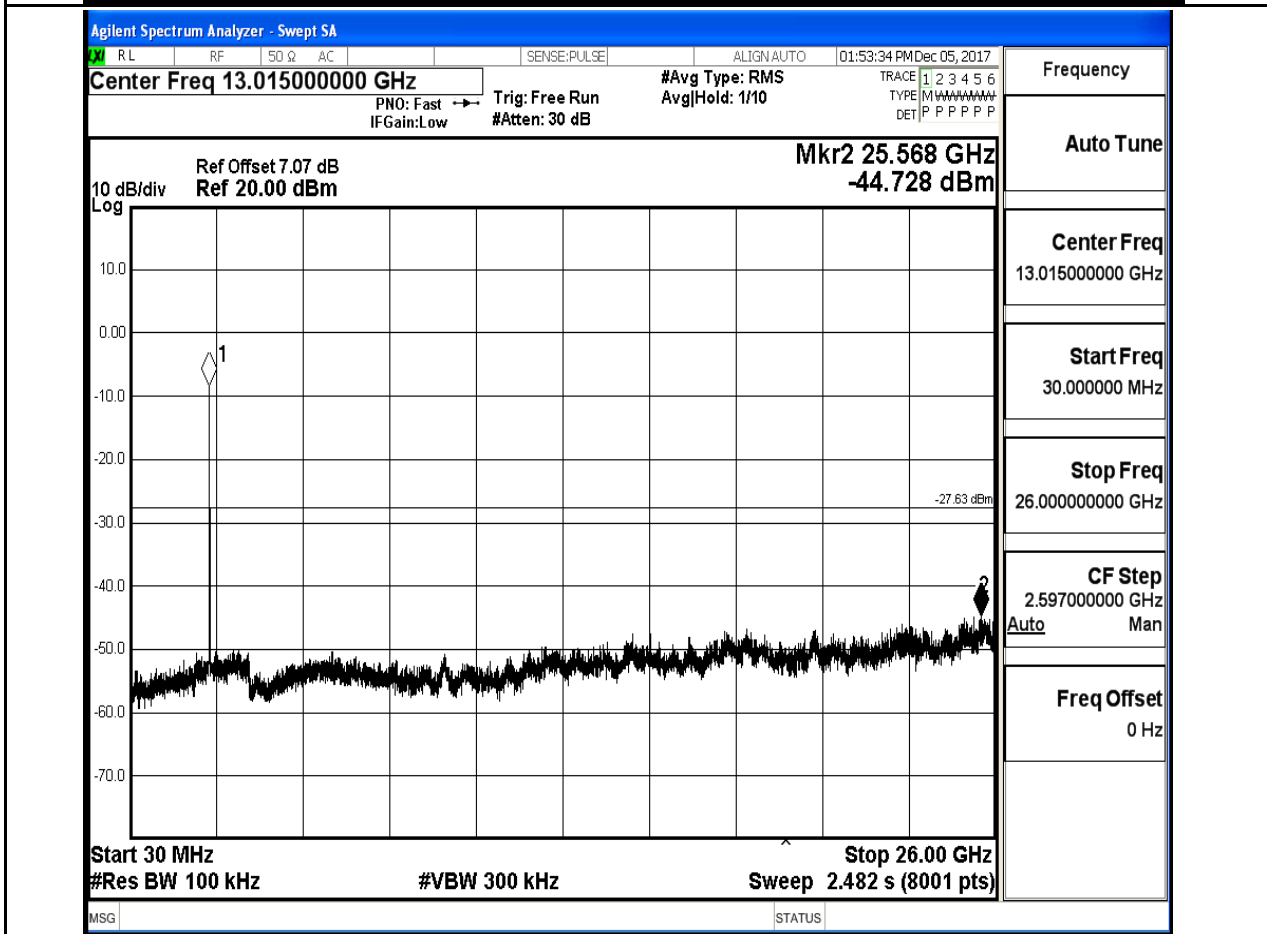
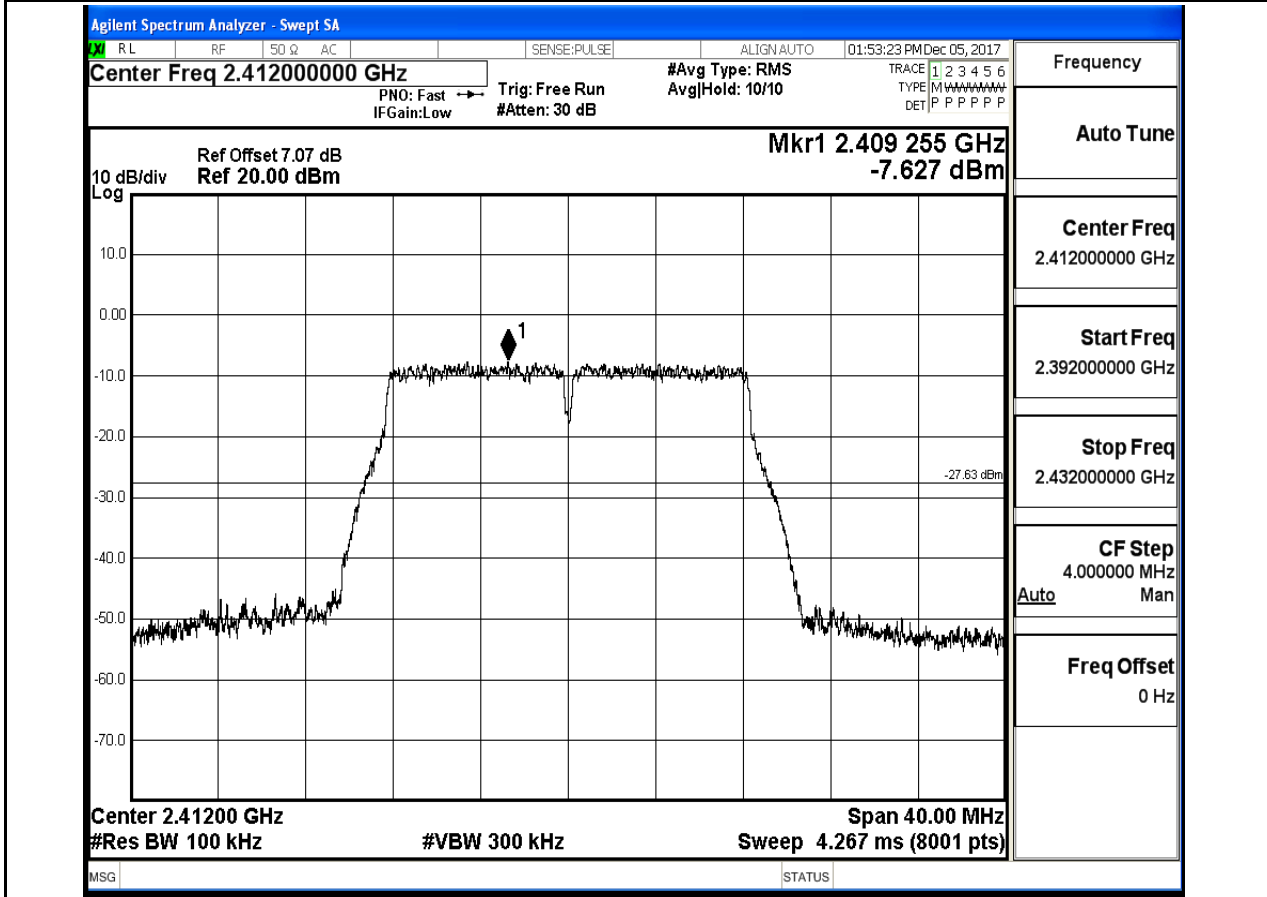


## RF Conducted Spurious Emissions\_11B\_2462\_Ant1

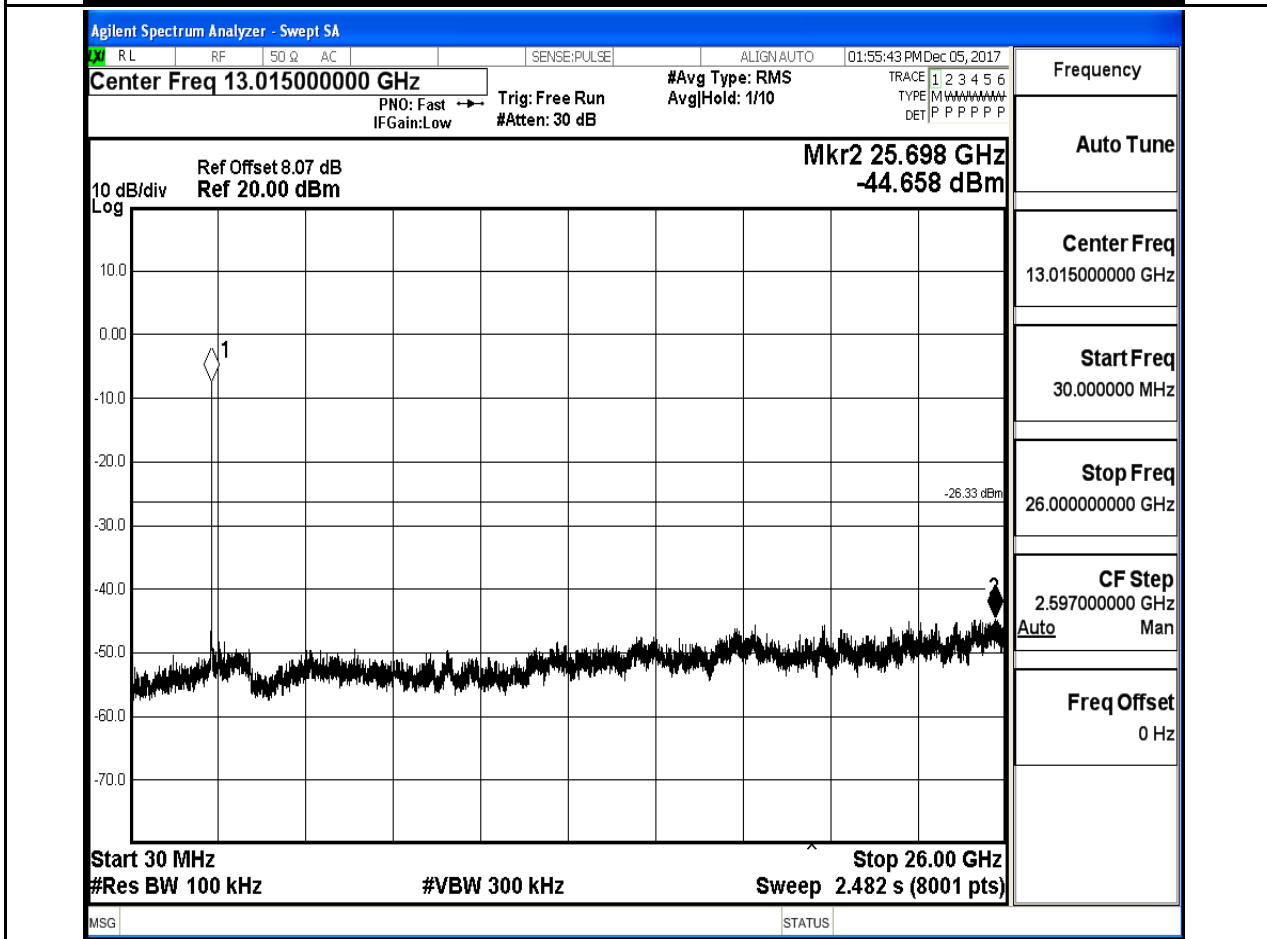
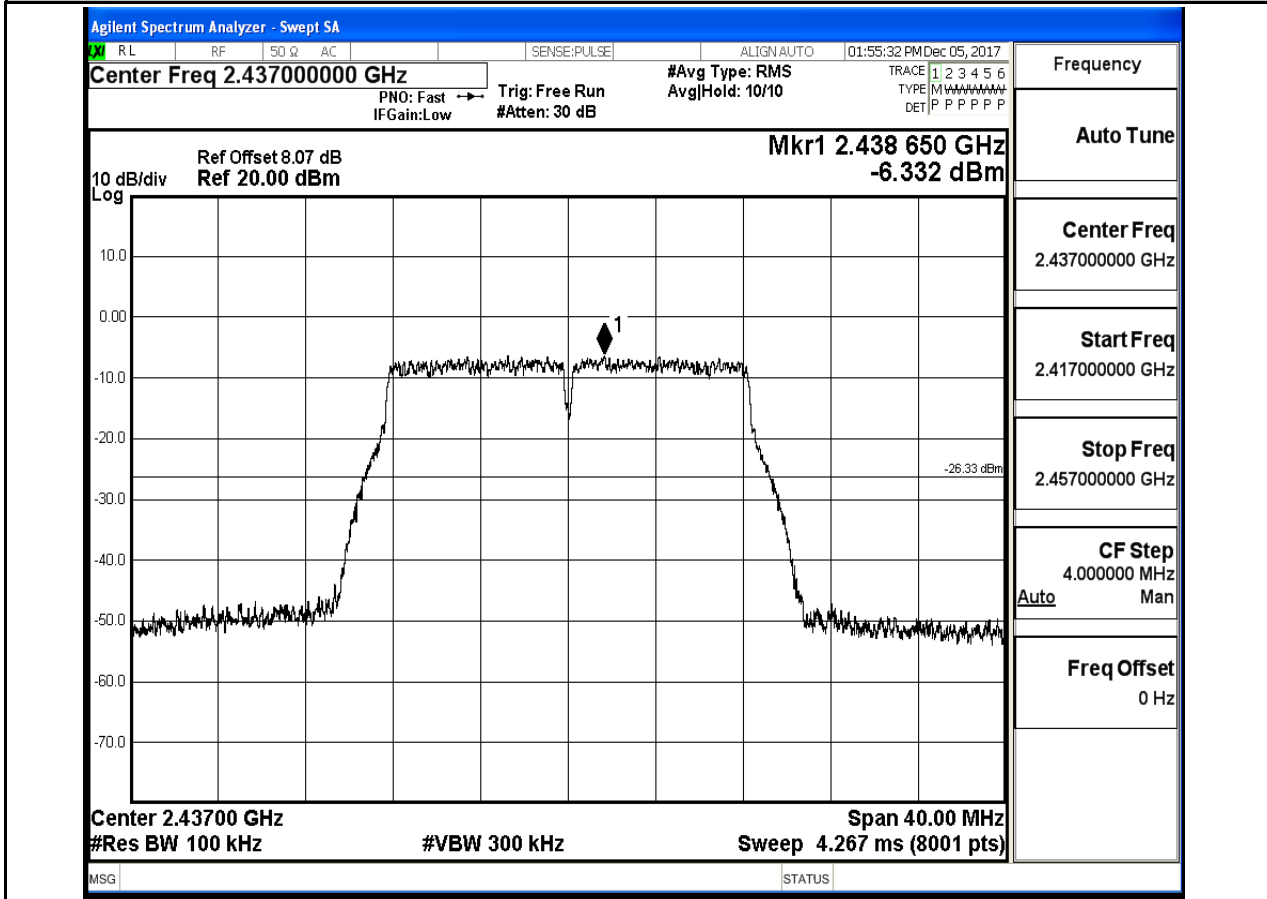




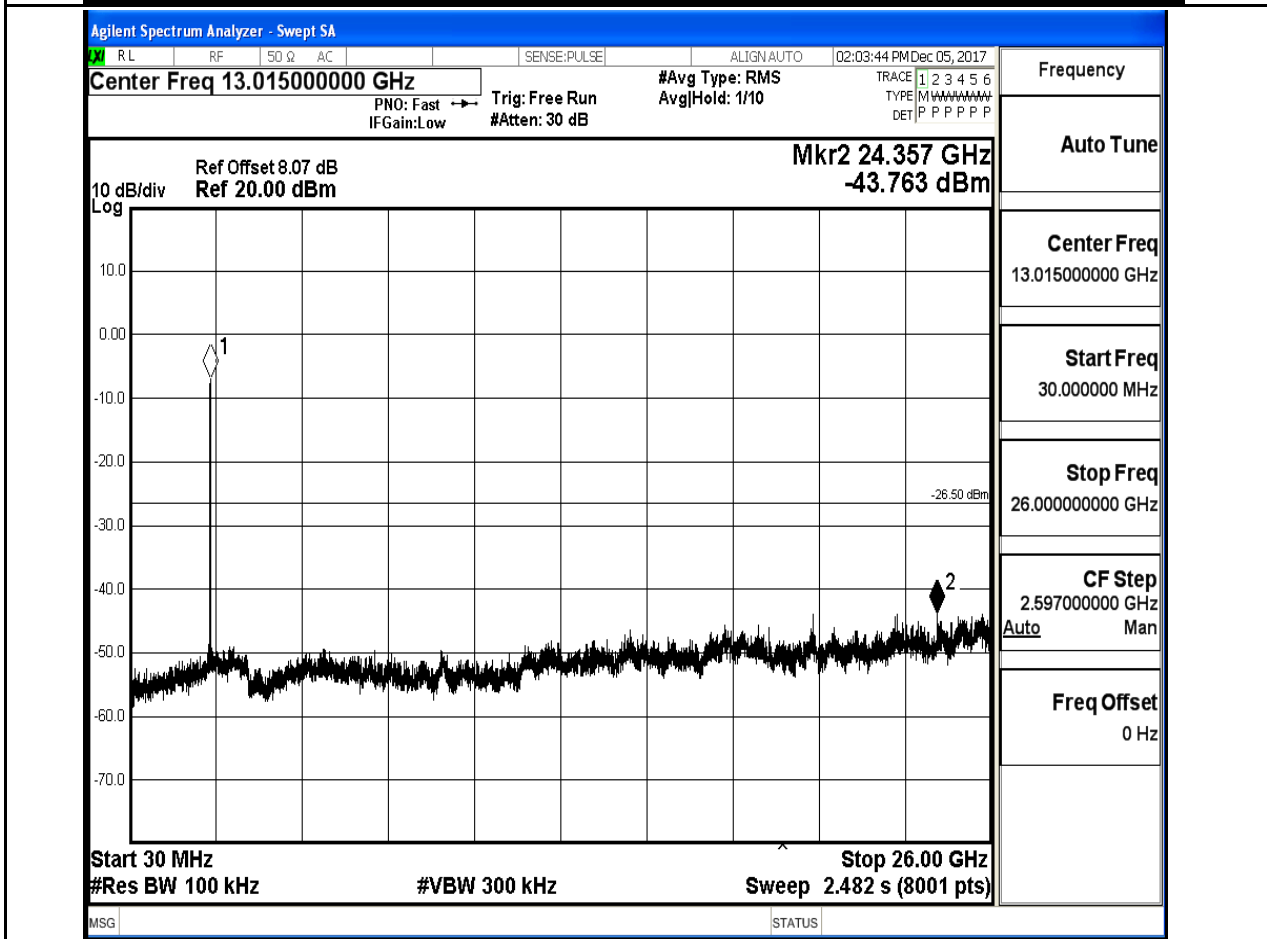
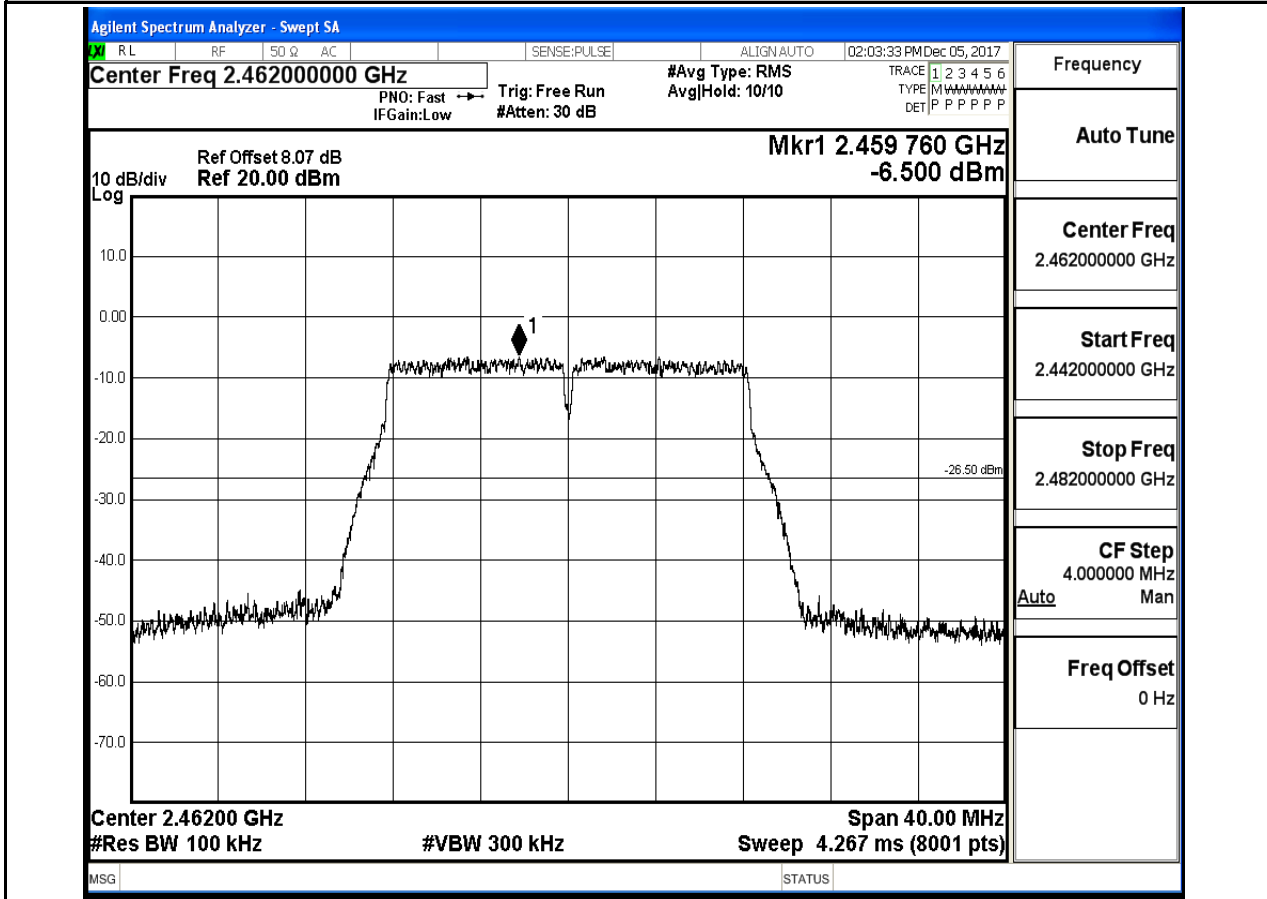
## RF Conducted Spurious Emissions\_11G\_2412\_Ant1



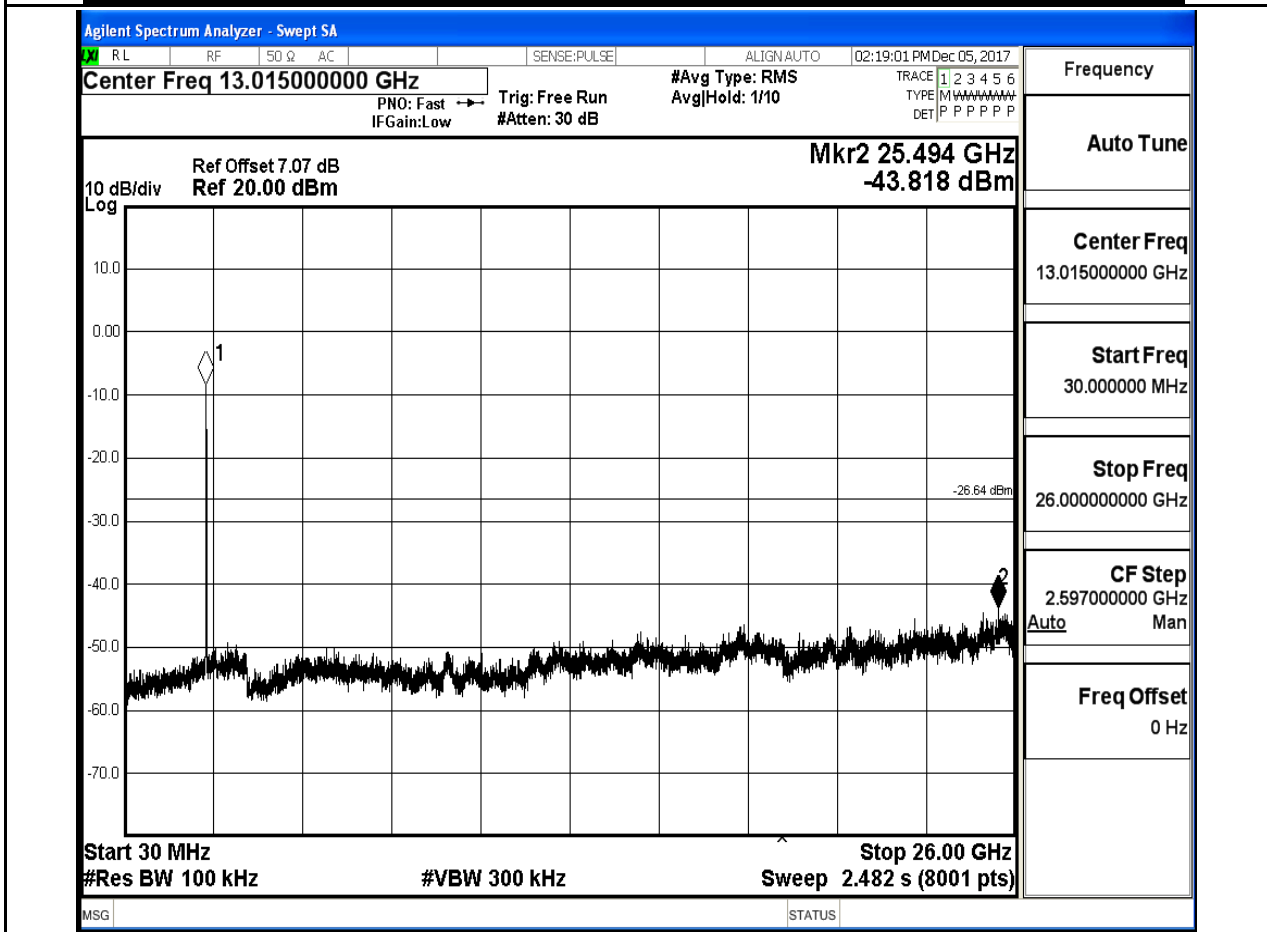
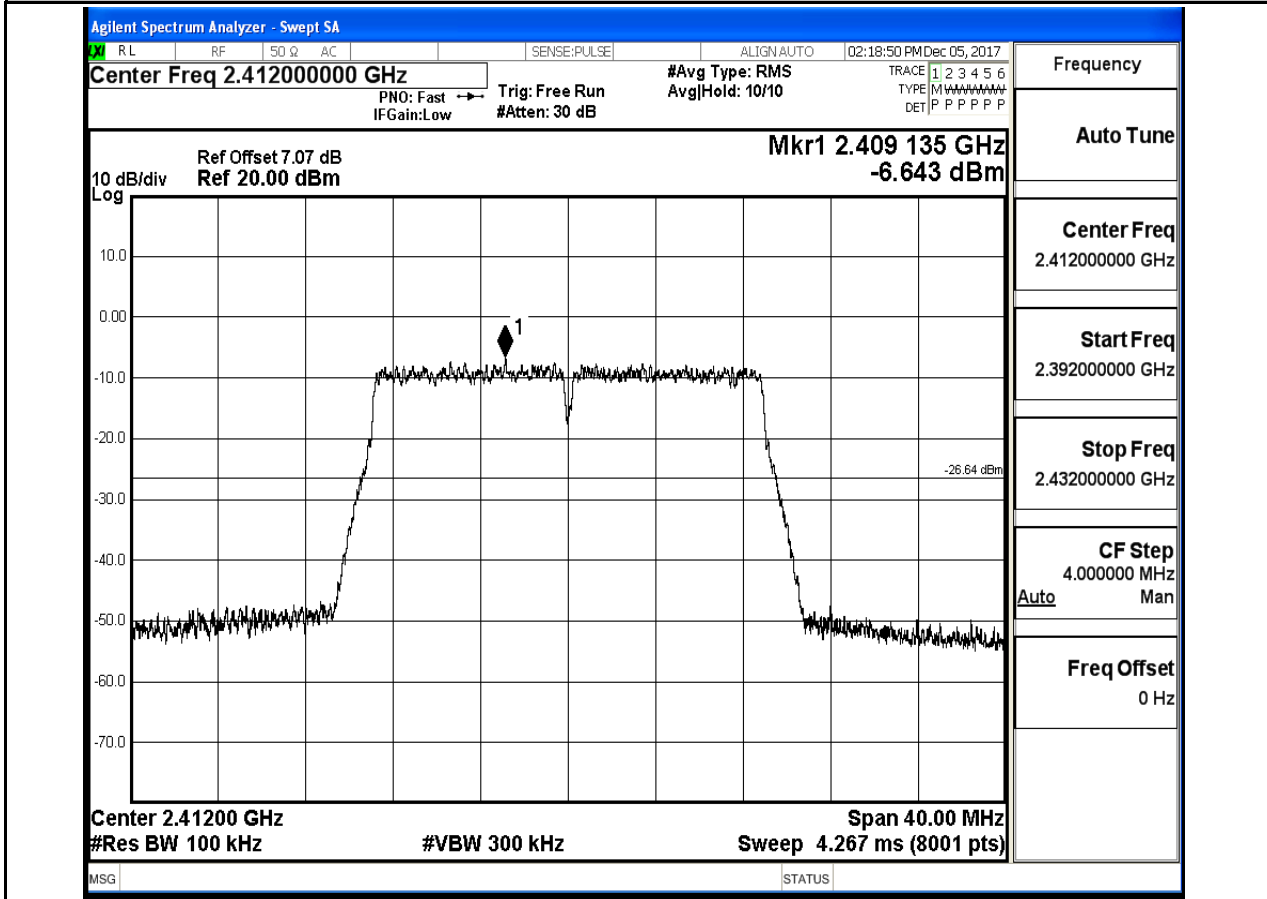
## RF Conducted Spurious Emissions\_11G\_2437\_Ant1



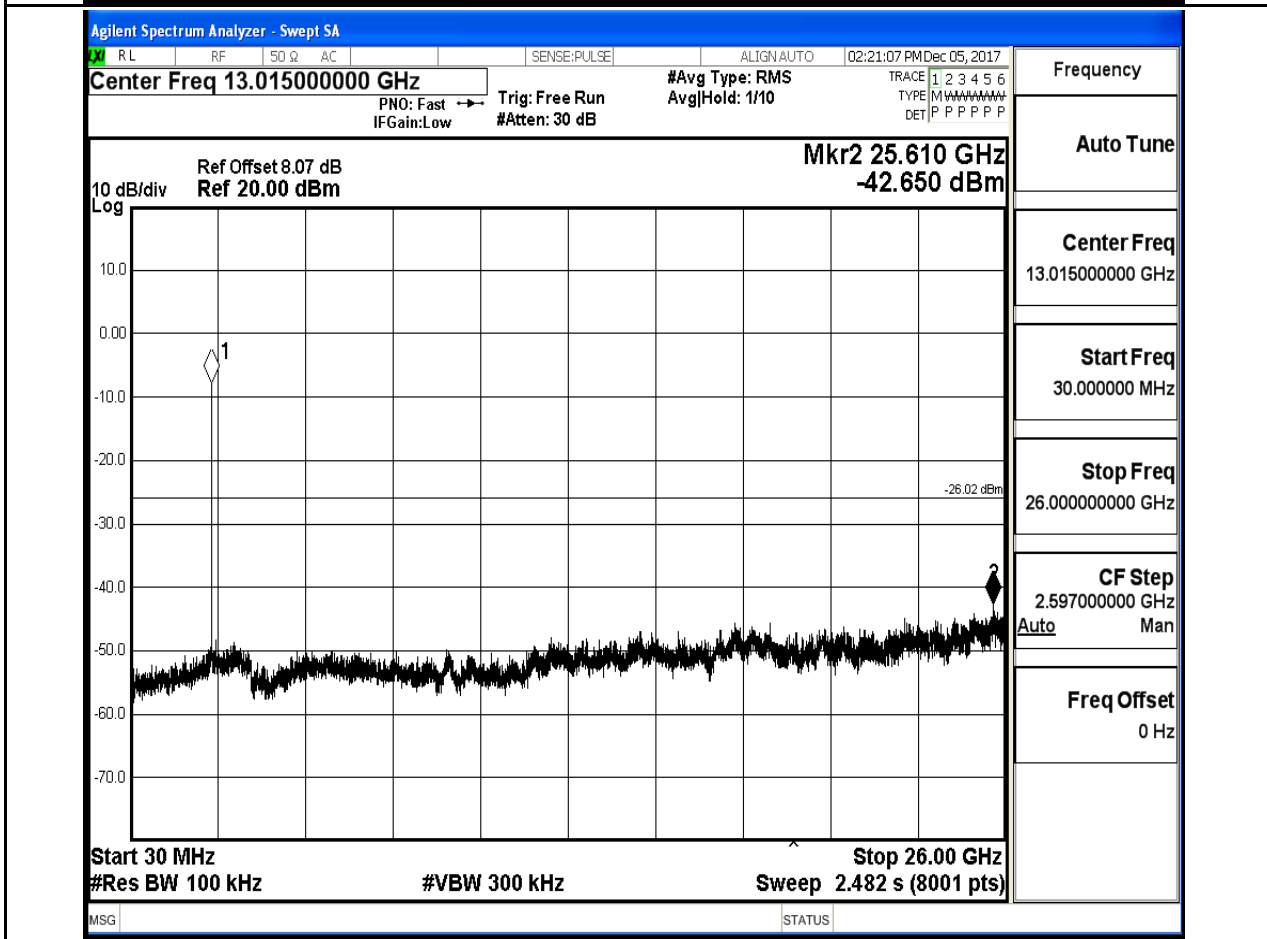
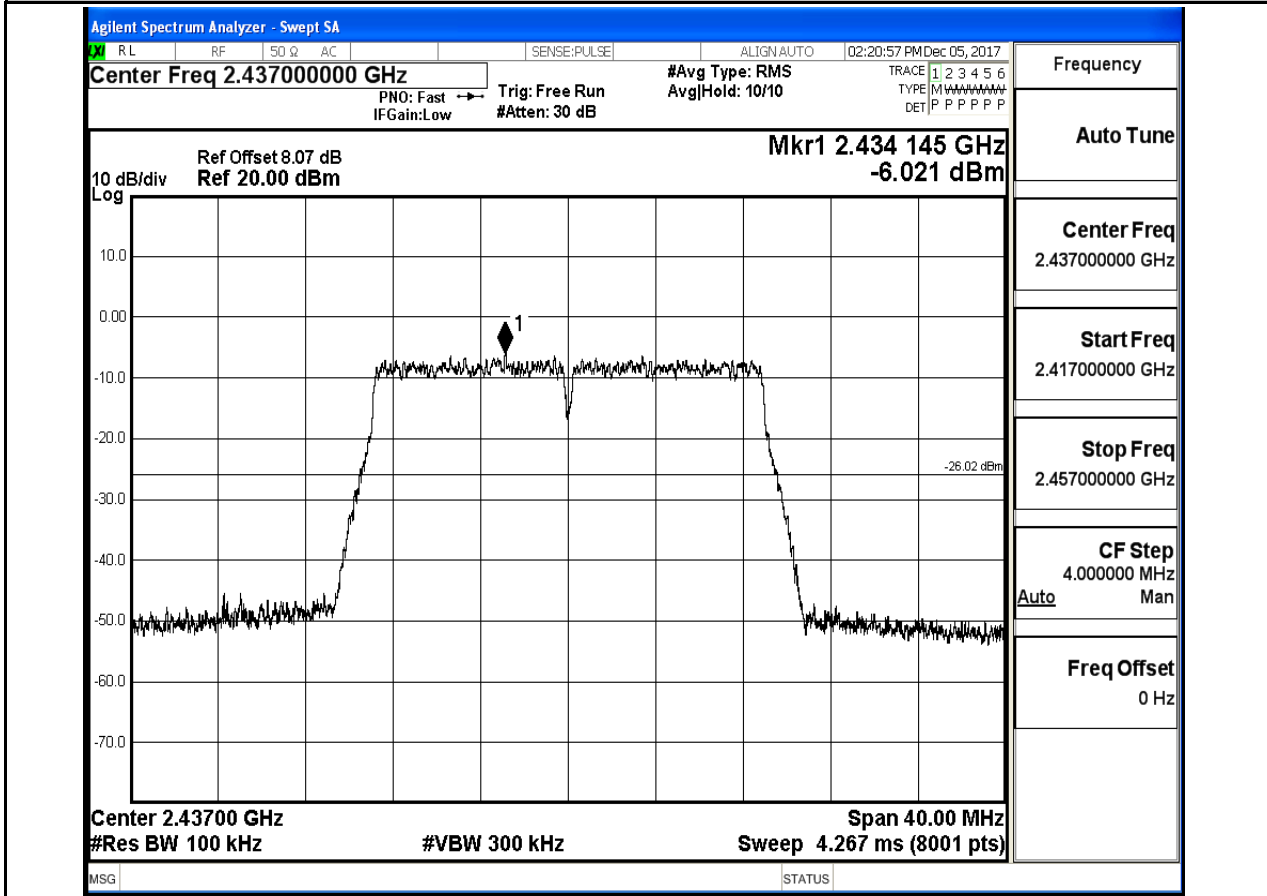
## RF Conducted Spurious Emissions\_11G\_2462\_Ant1



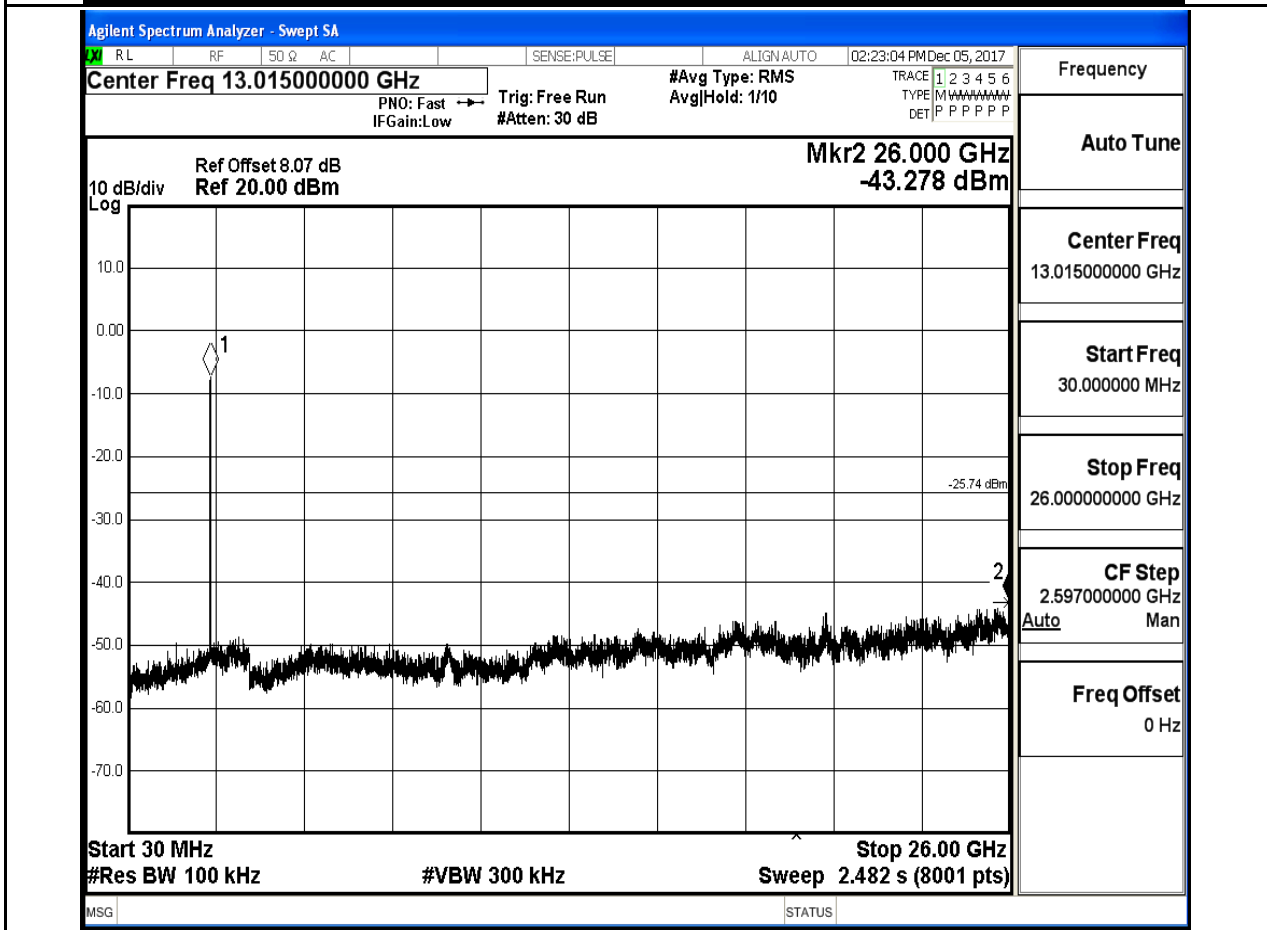
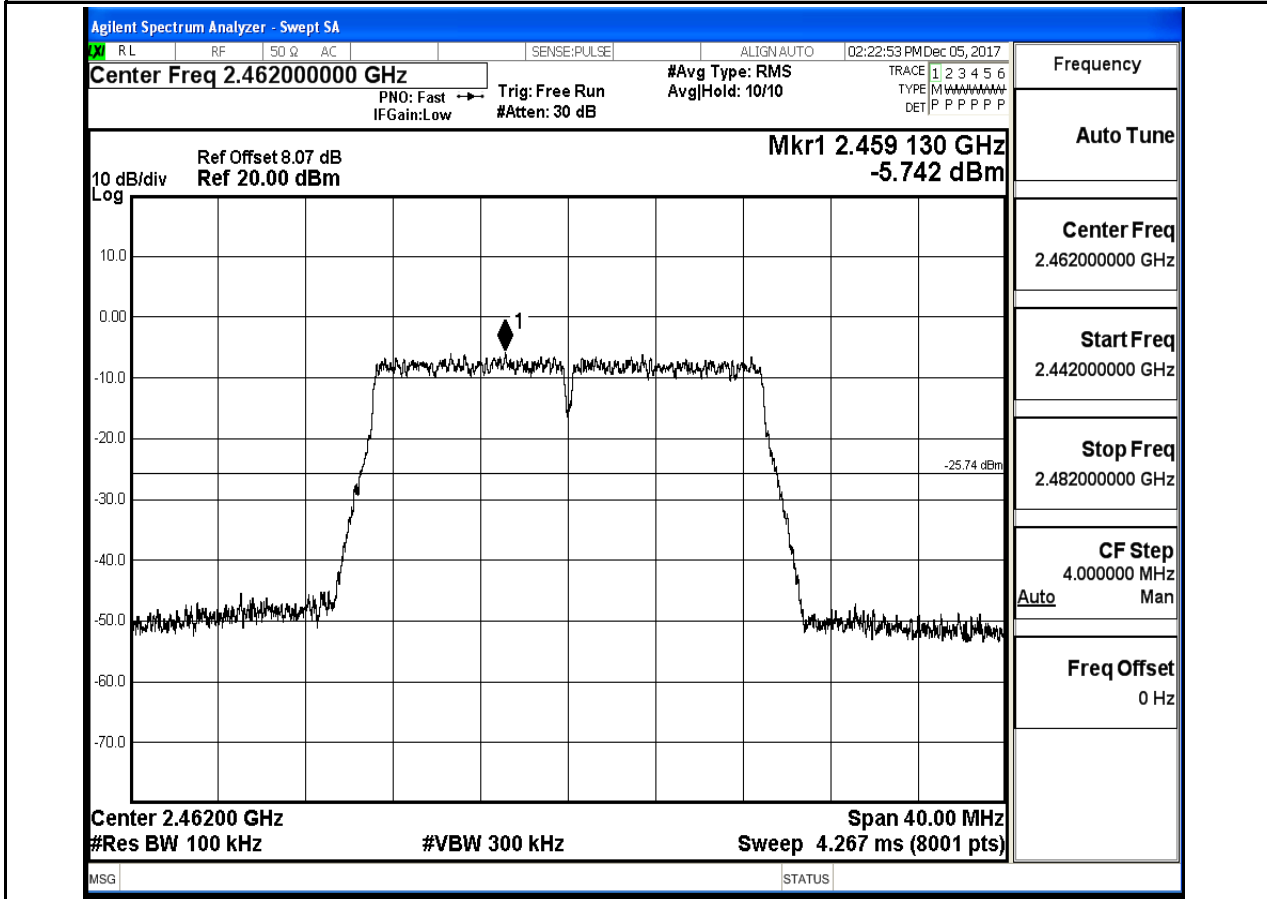
## RF Conducted Spurious Emissions\_11N20SISO\_2412\_Ant1



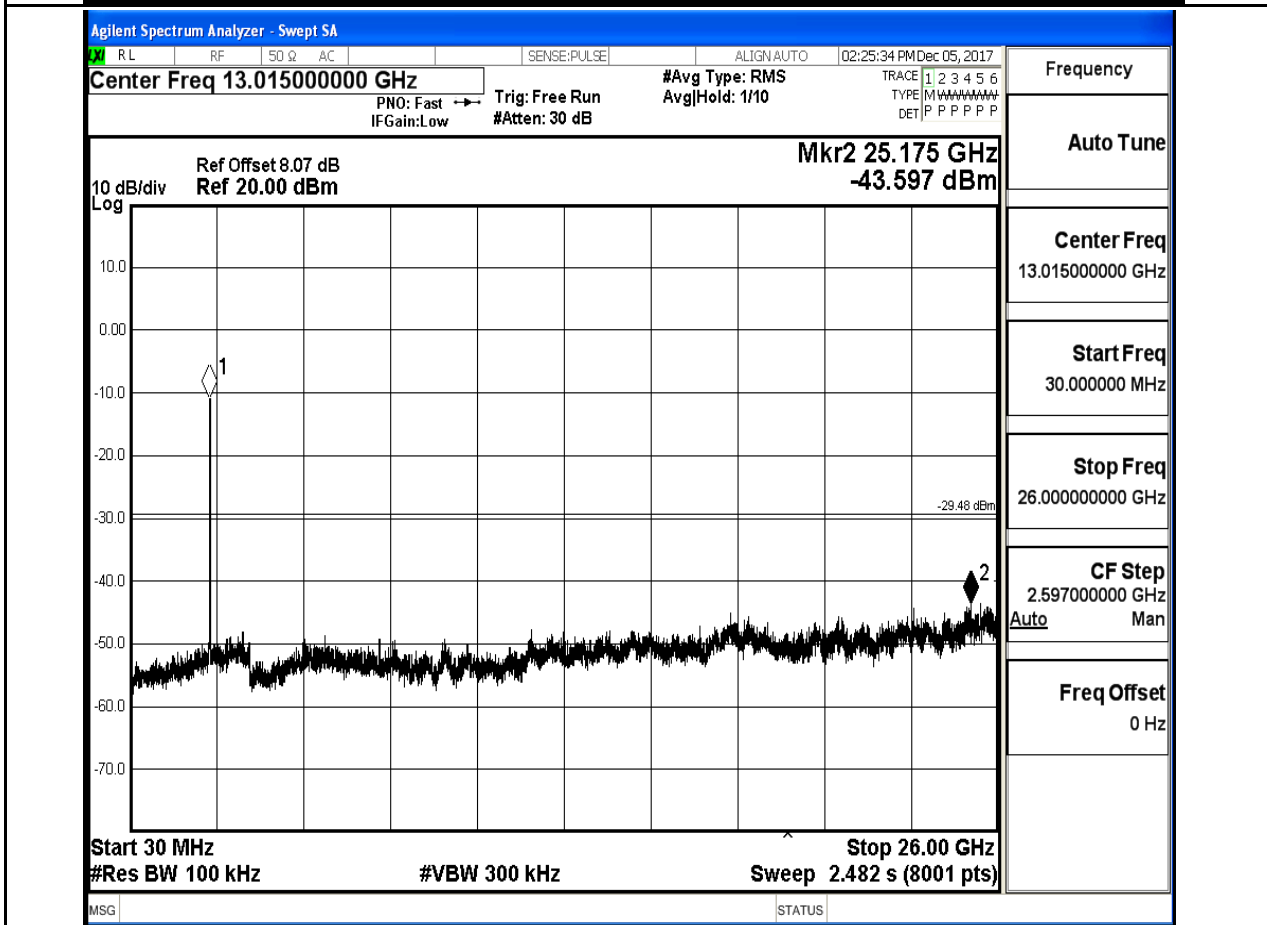
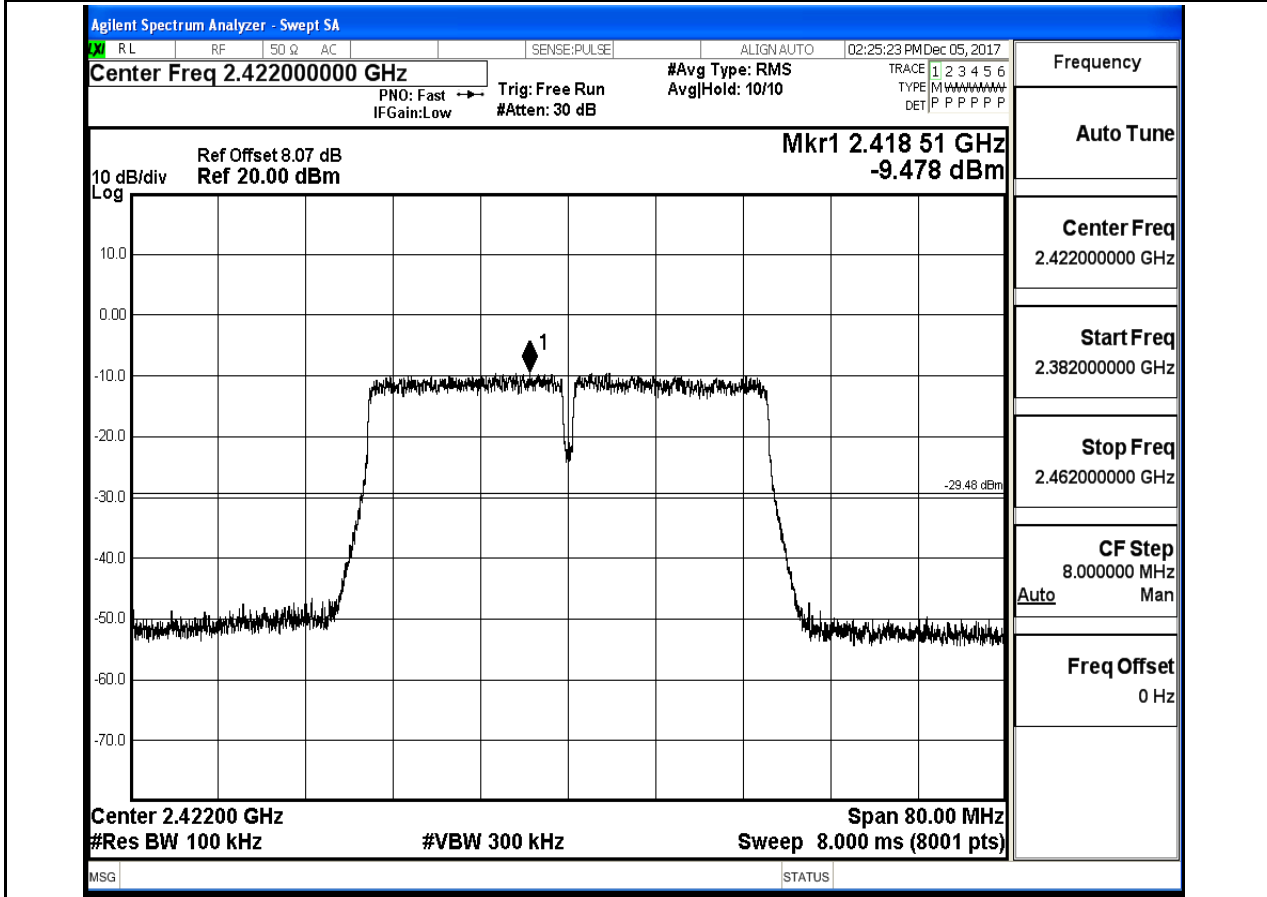
## RF Conducted Spurious Emissions\_11N20SISO\_2437\_Ant1



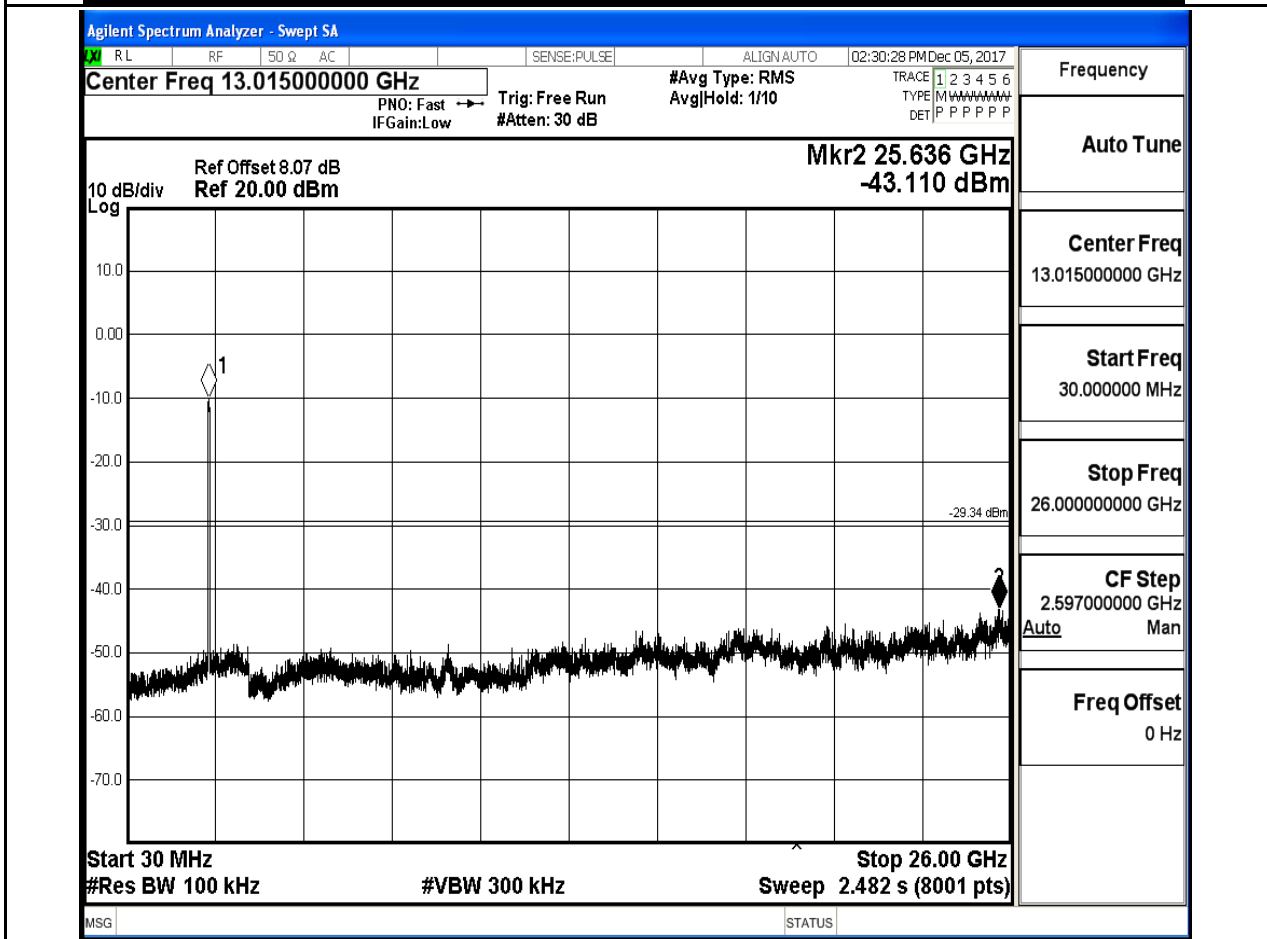
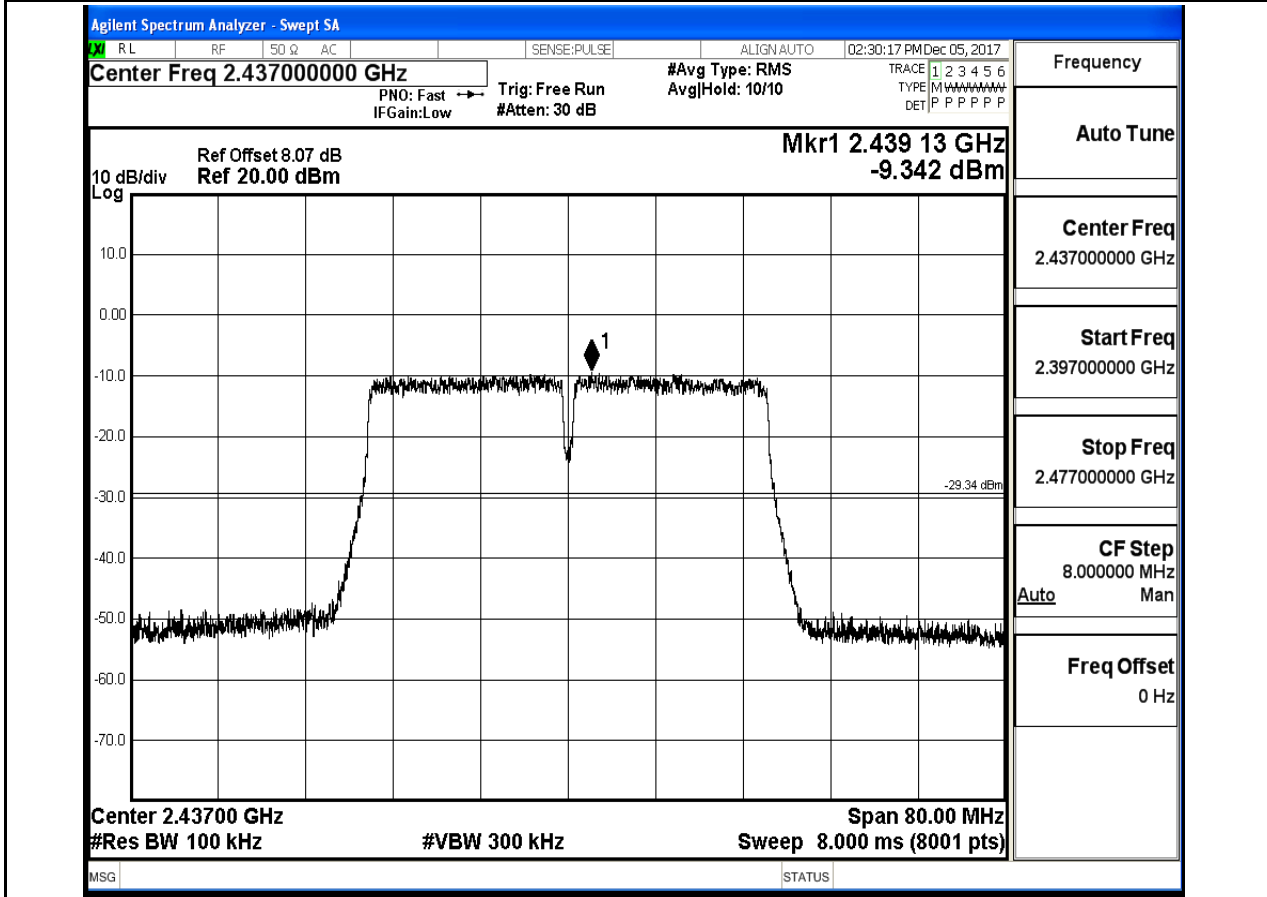
## RF Conducted Spurious Emissions\_11N20SISO\_2462\_Ant1



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

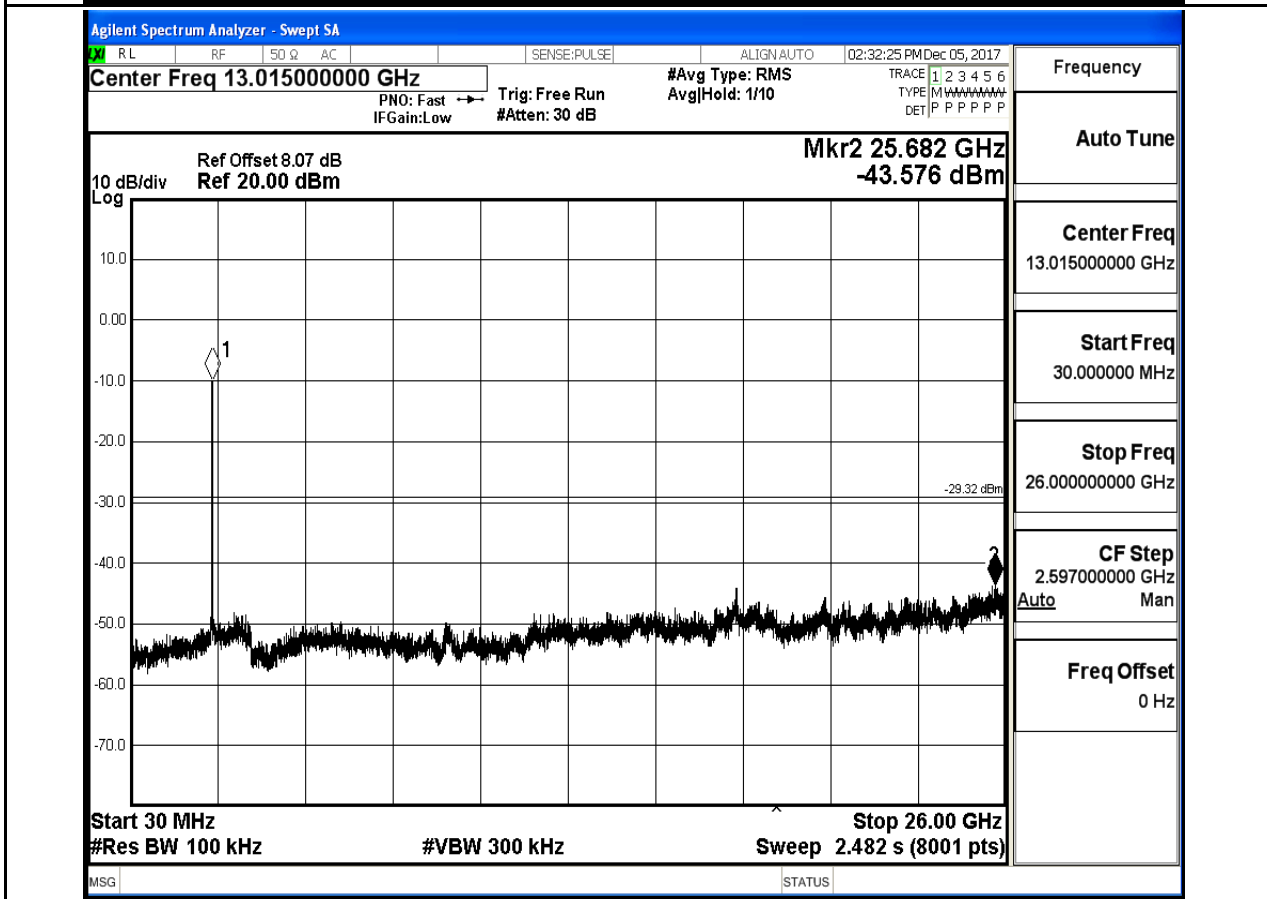
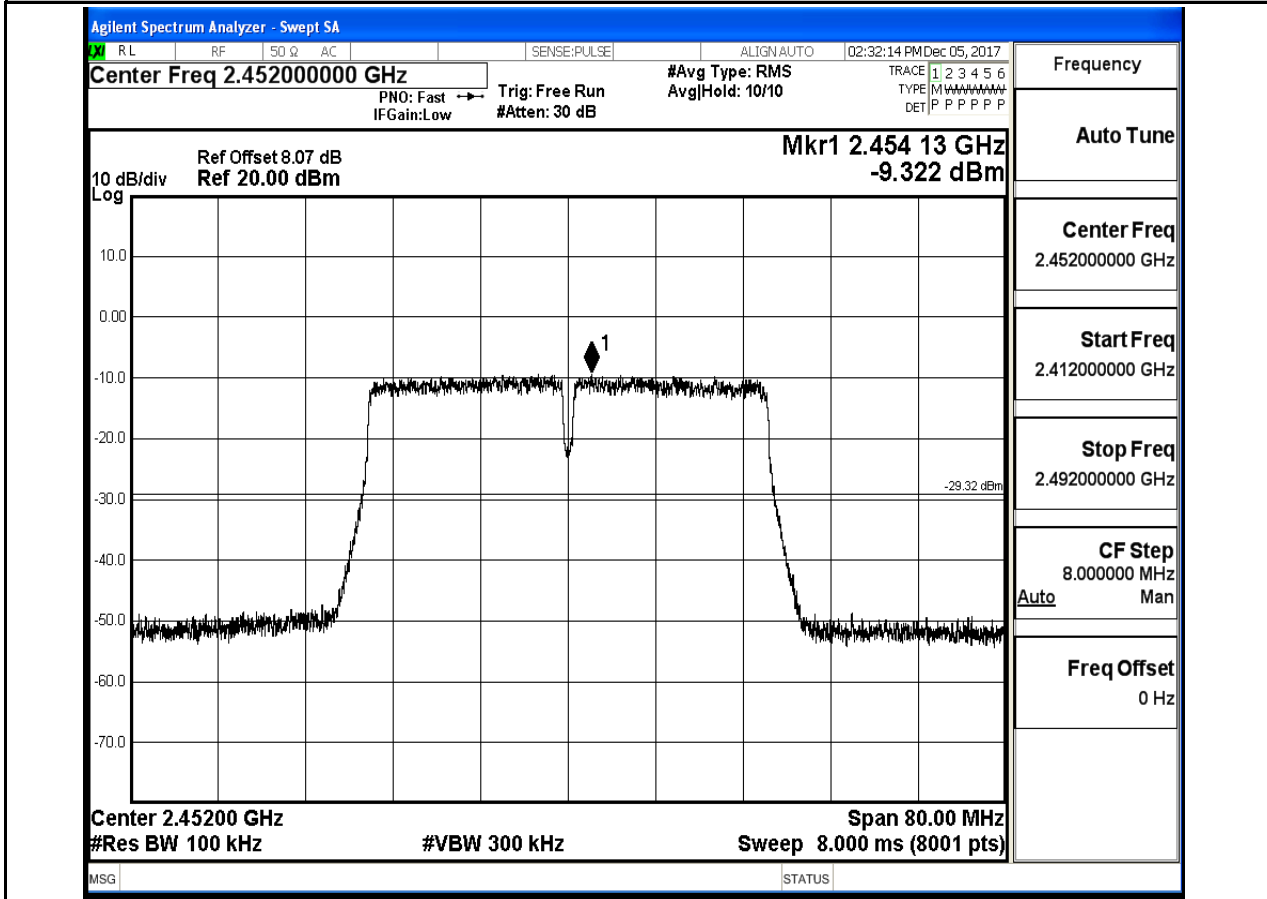


## RF Conducted Spurious Emissions\_11N40SISO\_2437\_Ant1





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

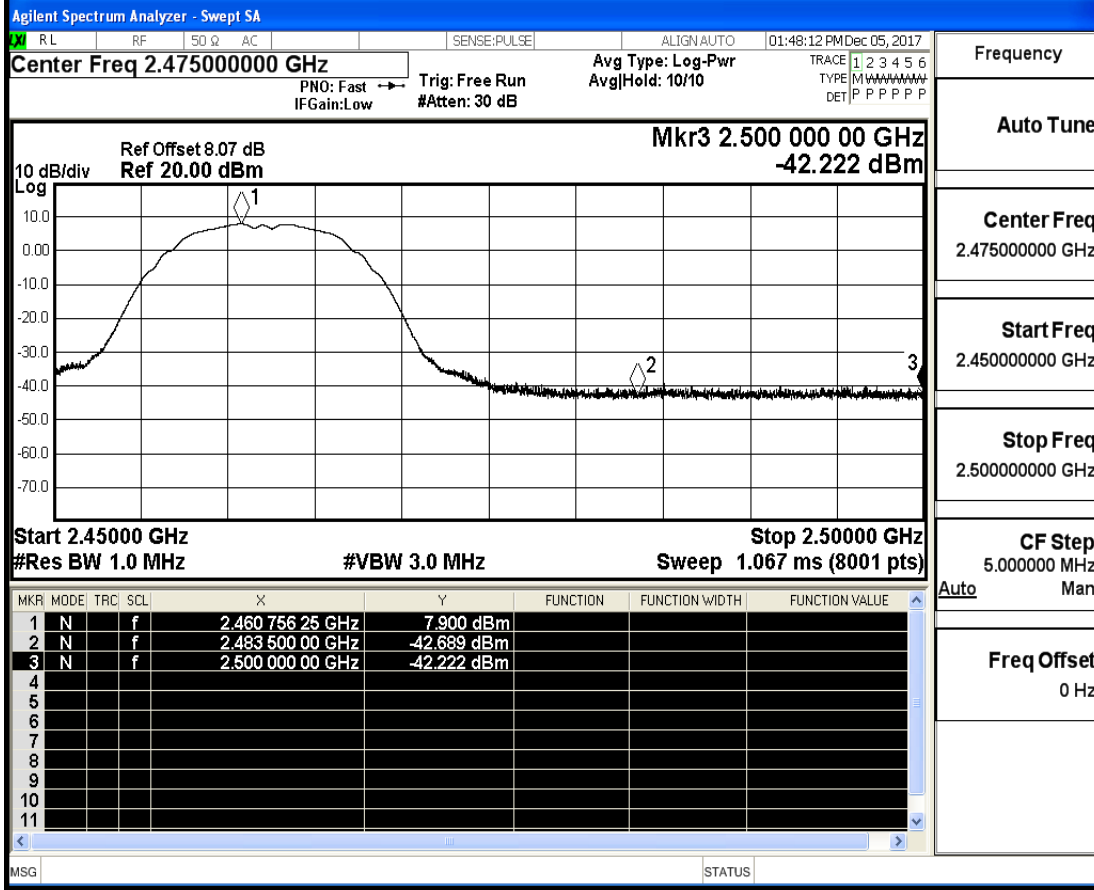


**6.Restrict-band band-edge measurements**

Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
11B	2412	Ant1	2310.0	-45.03	3	0	53.17	PEAK	74	PASS
11B	2412	Ant1	2310.0	-54.92	3	0	43.28	AV	54	PASS
11B	2412	Ant1	2390.0	-43.17	3	0	55.03	PEAK	74	PASS
11B	2412	Ant1	2390.0	-53.82	3	0	44.38	AV	54	PASS
11B	2462	Ant1	2483.5	-42.69	3	0	55.51	PEAK	74	PASS
11B	2462	Ant1	2483.5	-52.95	3	0	45.25	AV	54	PASS
11B	2462	Ant1	2500.0	-42.22	3	0	55.98	PEAK	74	PASS
11B	2462	Ant1	2500.0	-52.95	3	0	45.25	AV	54	PASS
11G	2412	Ant1	2310.0	-45.20	3	0	53.00	PEAK	74	PASS
11G	2412	Ant1	2310.0	-54.93	3	0	43.27	AV	54	PASS
11G	2412	Ant1	2390.0	-43.01	3	0	55.19	PEAK	74	PASS
11G	2412	Ant1	2390.0	-53.29	3	0	44.91	AV	54	PASS
11G	2462	Ant1	2483.5	-42.01	3	0	56.19	PEAK	74	PASS
11G	2462	Ant1	2483.5	-52.30	3	0	45.9	AV	54	PASS
11G	2462	Ant1	2500.0	-40.43	3	0	57.77	PEAK	74	PASS
11G	2462	Ant1	2500.0	-52.55	3	0	45.65	AV	54	PASS
11N20SISO	2412	Ant1	2310.0	-44.53	3	0	53.67	PEAK	74	PASS
11N20SISO	2412	Ant1	2310.0	-54.92	3	0	43.28	AV	54	PASS
11N20SISO	2412	Ant1	2390.0	-41.72	3	0	56.48	PEAK	74	PASS
11N20SISO	2412	Ant1	2390.0	-52.96	3	0	45.24	AV	54	PASS
11N20SISO	2462	Ant1	2483.5	-42.08	3	0	56.12	PEAK	74	PASS
11N20SISO	2462	Ant1	2483.5	-52.17	3	0	46.03	AV	54	PASS
11N20SISO	2462	Ant1	2500.0	-41.21	3	0	56.99	PEAK	74	PASS
11N20SISO	2462	Ant1	2500.0	-52.50	3	0	45.70	AV	54	PASS
11N40SISO	2422	Ant1	2310.0	-42.24	3	0	55.96	PEAK	74	PASS
11N40SISO	2422	Ant1	2310.0	-53.98	3	0	44.22	AV	54	PASS
11N40SISO	2422	Ant1	2390.0	-40.30	3	0	57.90	PEAK	74	PASS
11N40SISO	2422	Ant1	2390.0	-51.23	3	0	46.97	AV	54	PASS
11N40SISO	2452	Ant1	2483.5	-41.67	3	0	56.53	PEAK	74	PASS
11N40SISO	2452	Ant1	2483.5	-52.05	3	0	46.15	AV	54	PASS
11N40SISO	2452	Ant1	2500.0	-41.41	3	0	56.79	PEAK	74	PASS
11N40SISO	2452	Ant1	2500.0	-52.51	3	0	45.69	AV	54	PASS

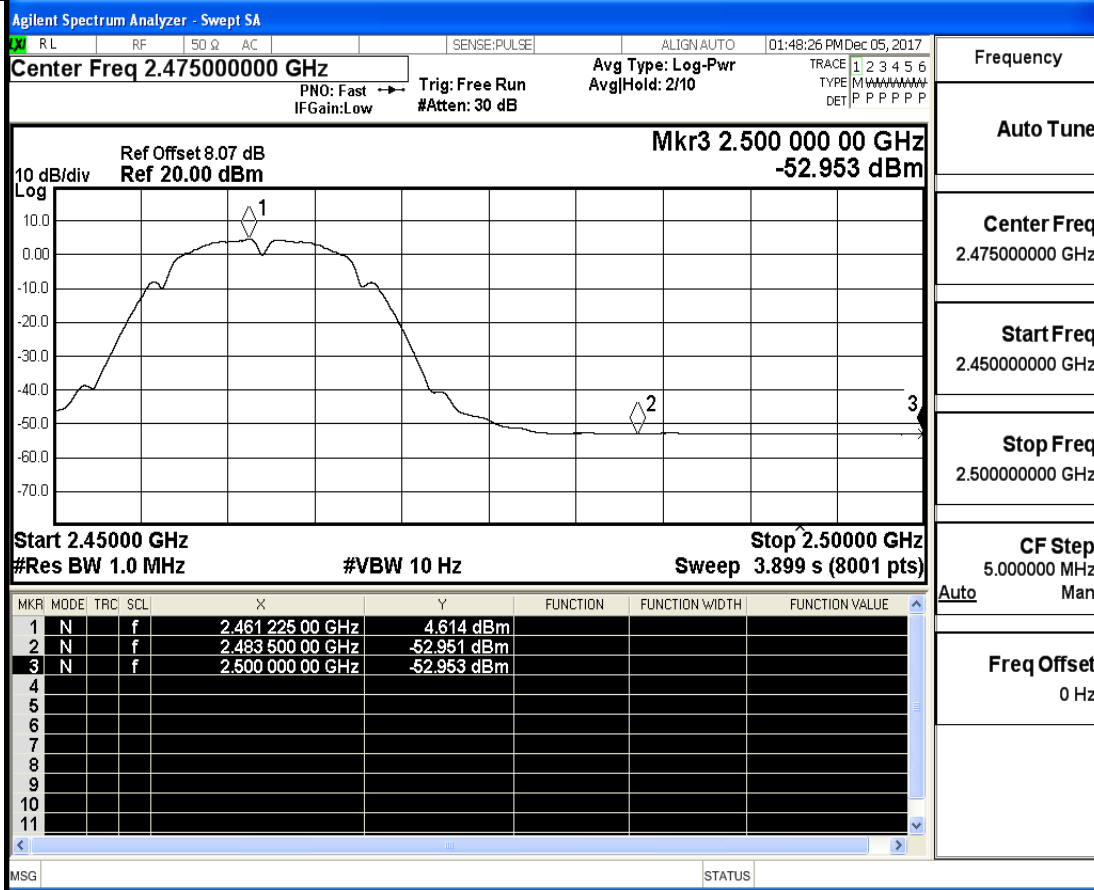


## Restrict-band band-edge measurements\_11B\_2462\_Ant1\_PEAK



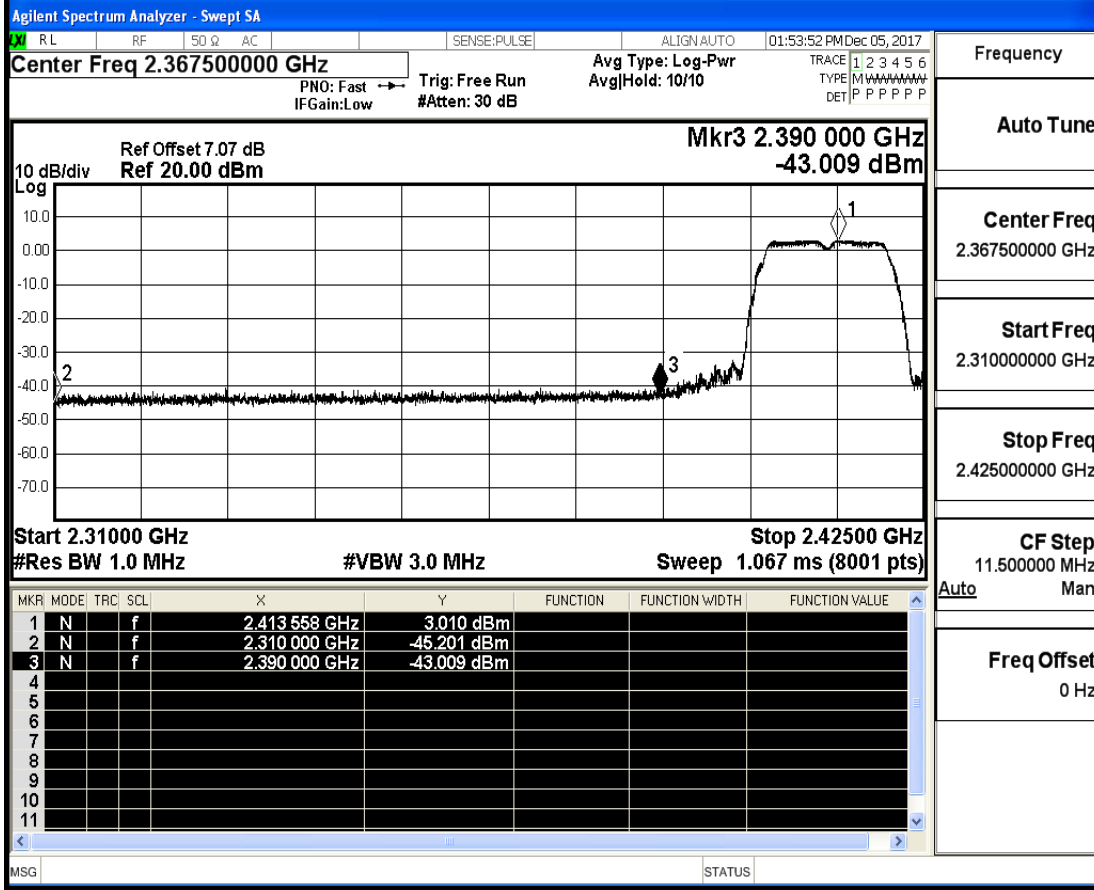
Frequency	
Auto Tune	
Center Freq	2.475000000 GHz
Start Freq	2.450000000 GHz
Stop Freq	2.500000000 GHz
CF Step	5.000000 MHz
Freq Offset	0 Hz

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

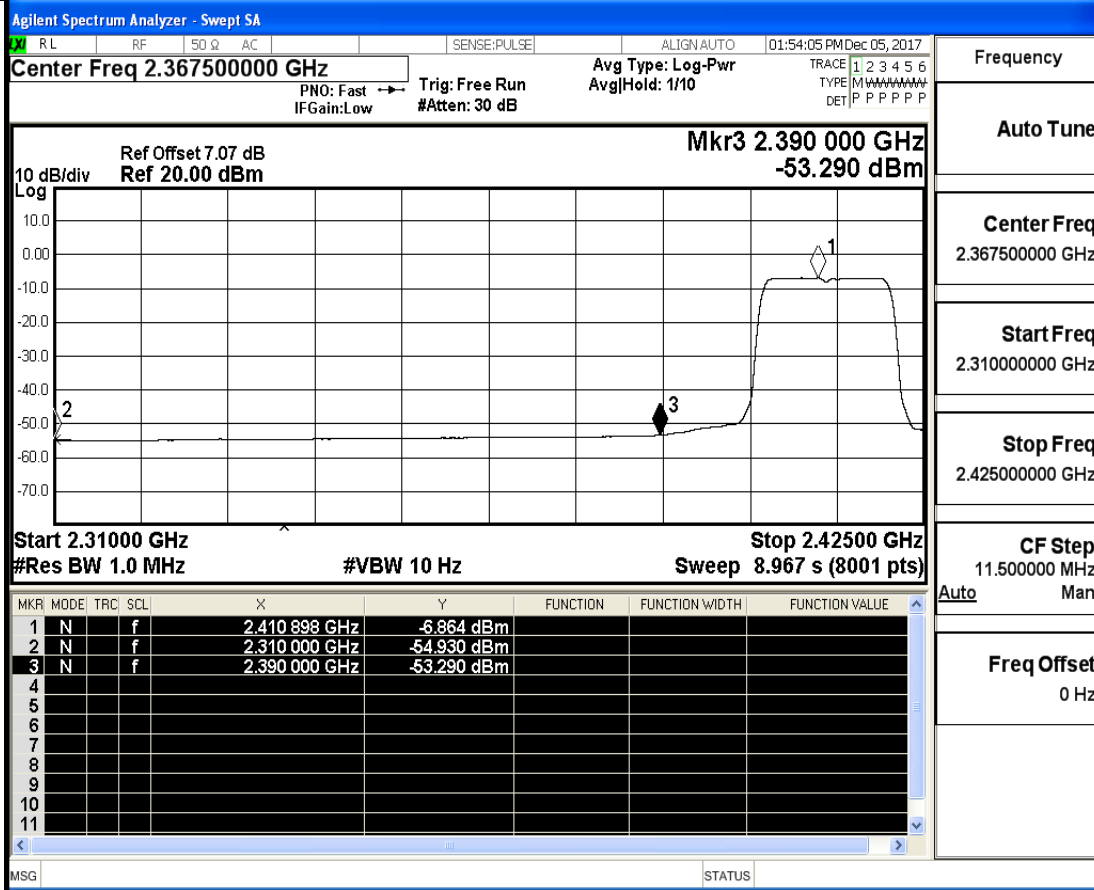


Frequency	
Auto Tune	
Center Freq	2.475000000 GHz
Start Freq	2.450000000 GHz
Stop Freq	2.500000000 GHz
CF Step	5.000000 MHz
Freq Offset	0 Hz

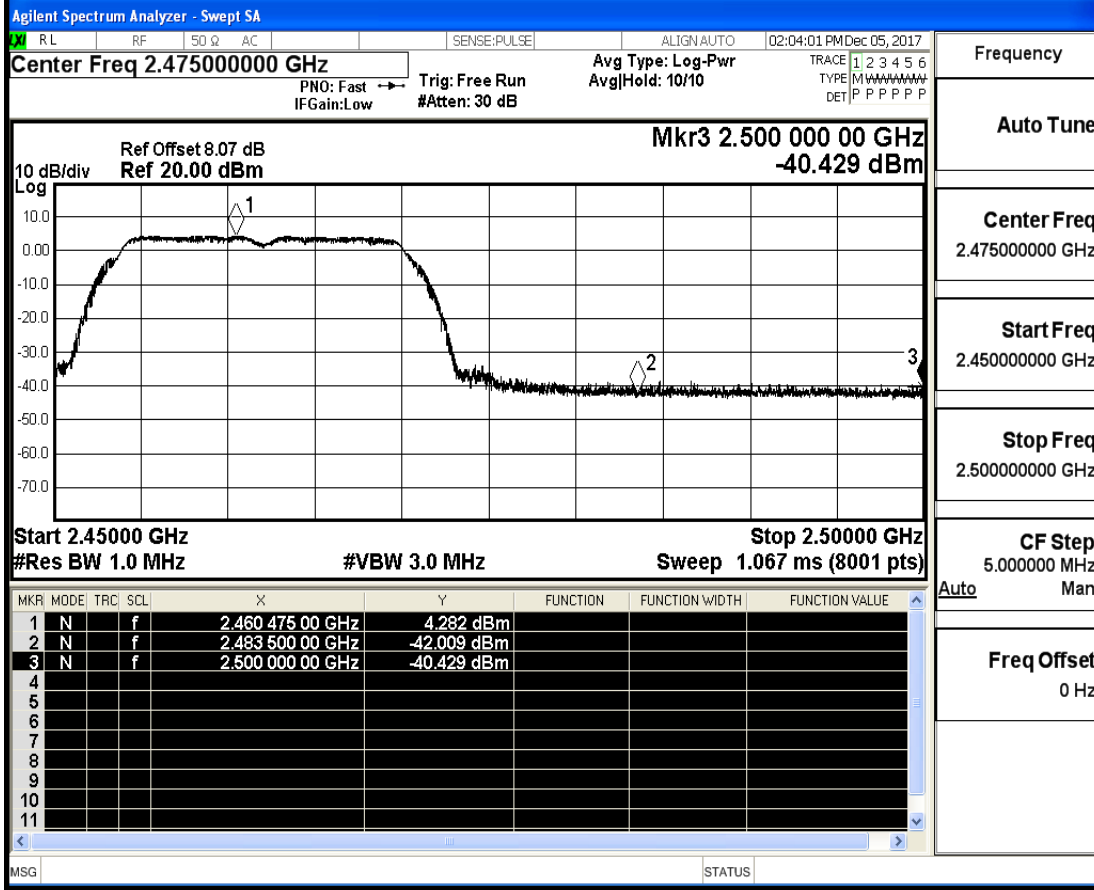
## Restrict-band band-edge measurements\_11G\_2412\_Ant1\_PEAK



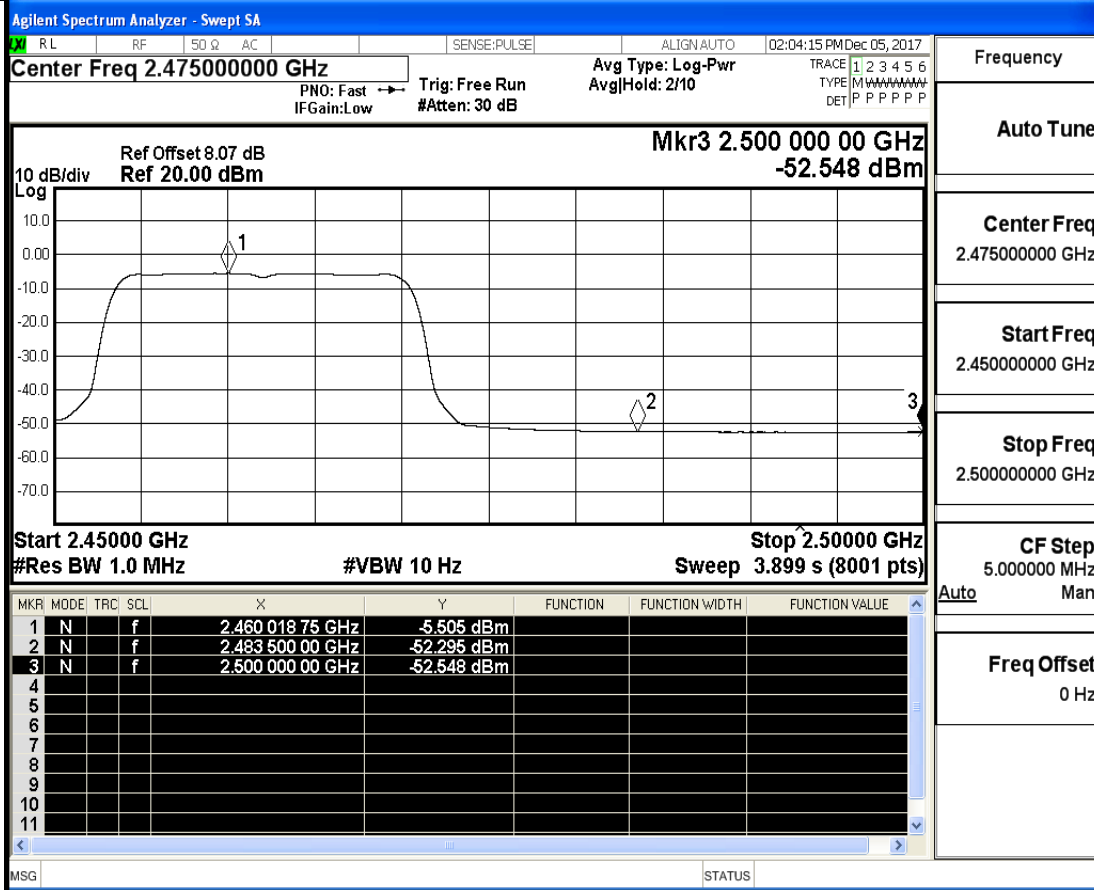
## Restrict-band band-edge measurements\_11G\_2412\_Ant1\_AV



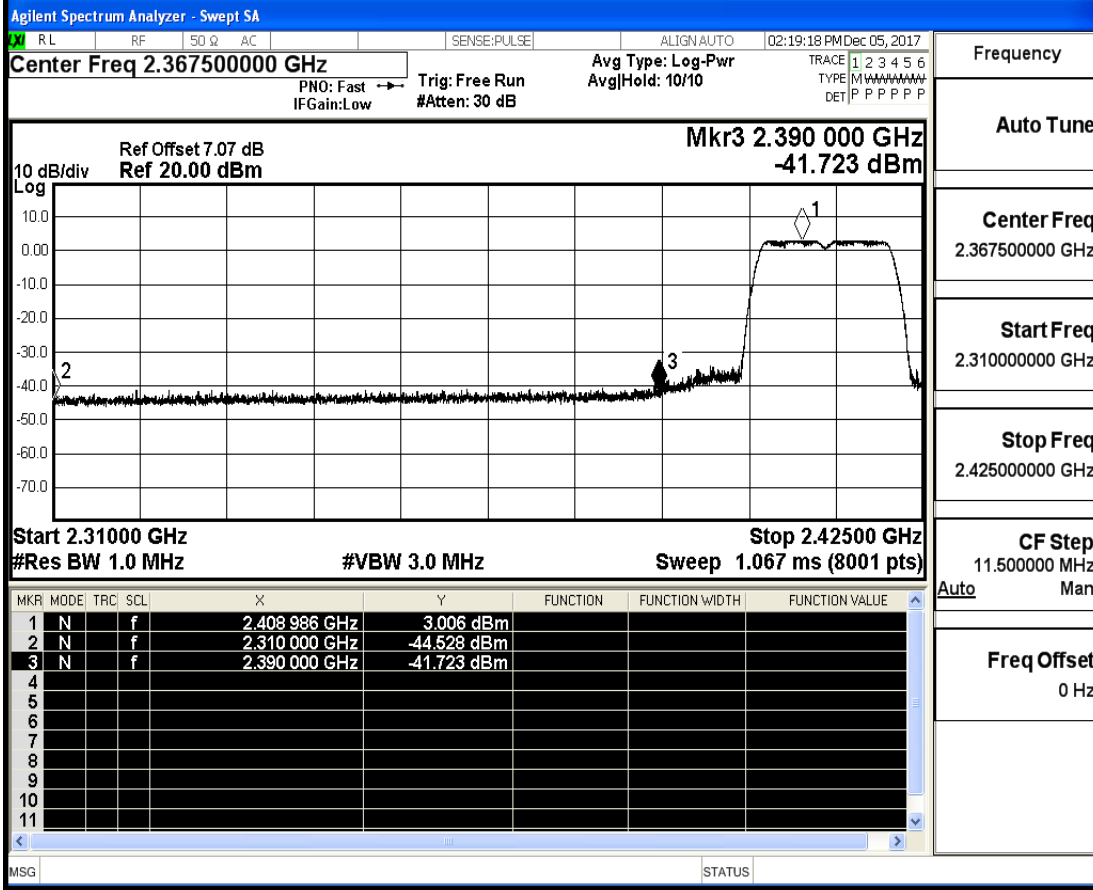
## Restrict-band band-edge measurements\_11G\_2462\_Ant1\_PEAK



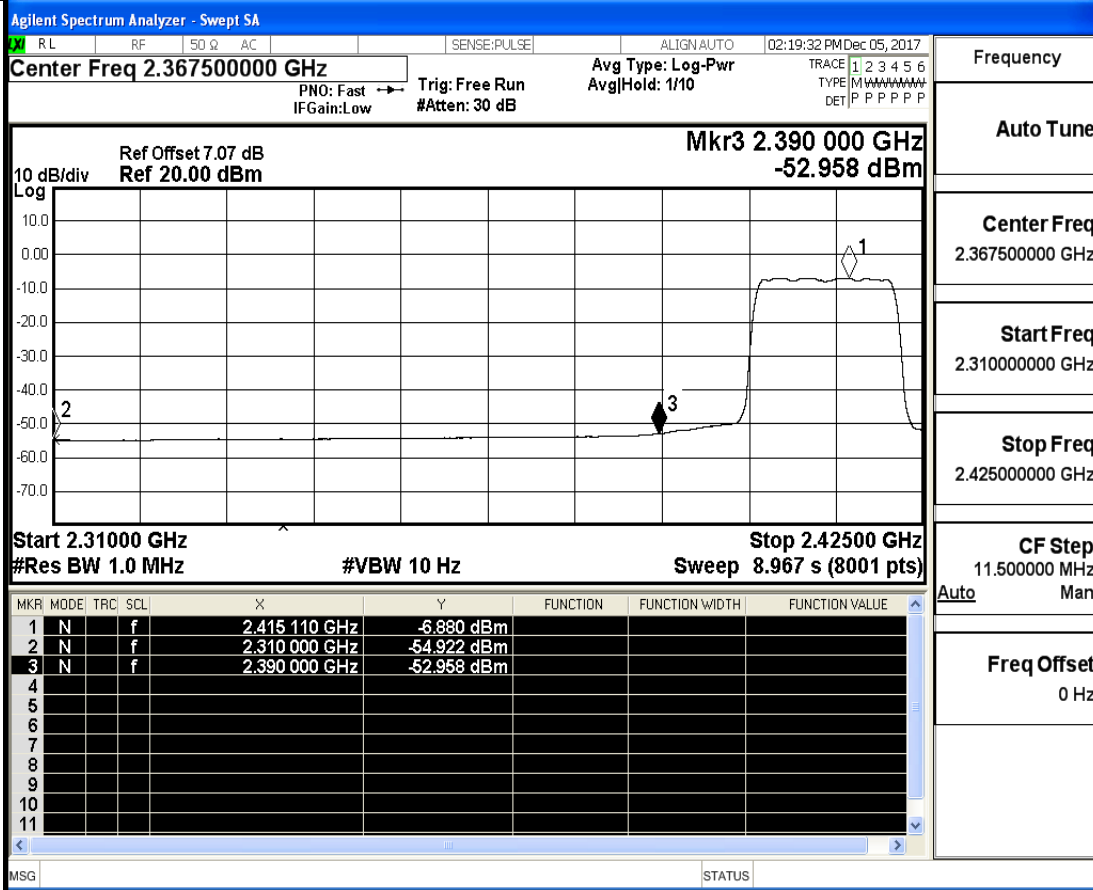
## Restrict-band band-edge measurements\_11G\_2462\_Ant1\_AV



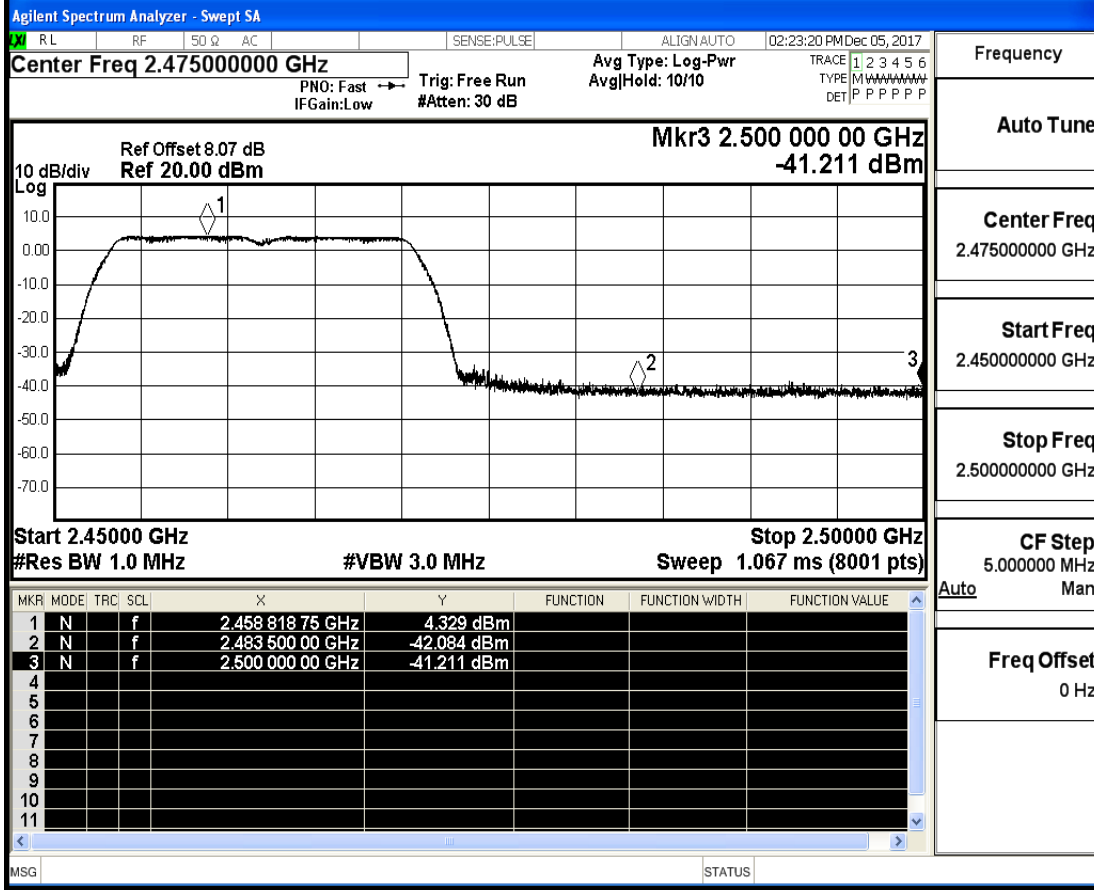
## Restrict-band band-edge measurements\_11N20SISO\_2412\_Ant1\_PEAK



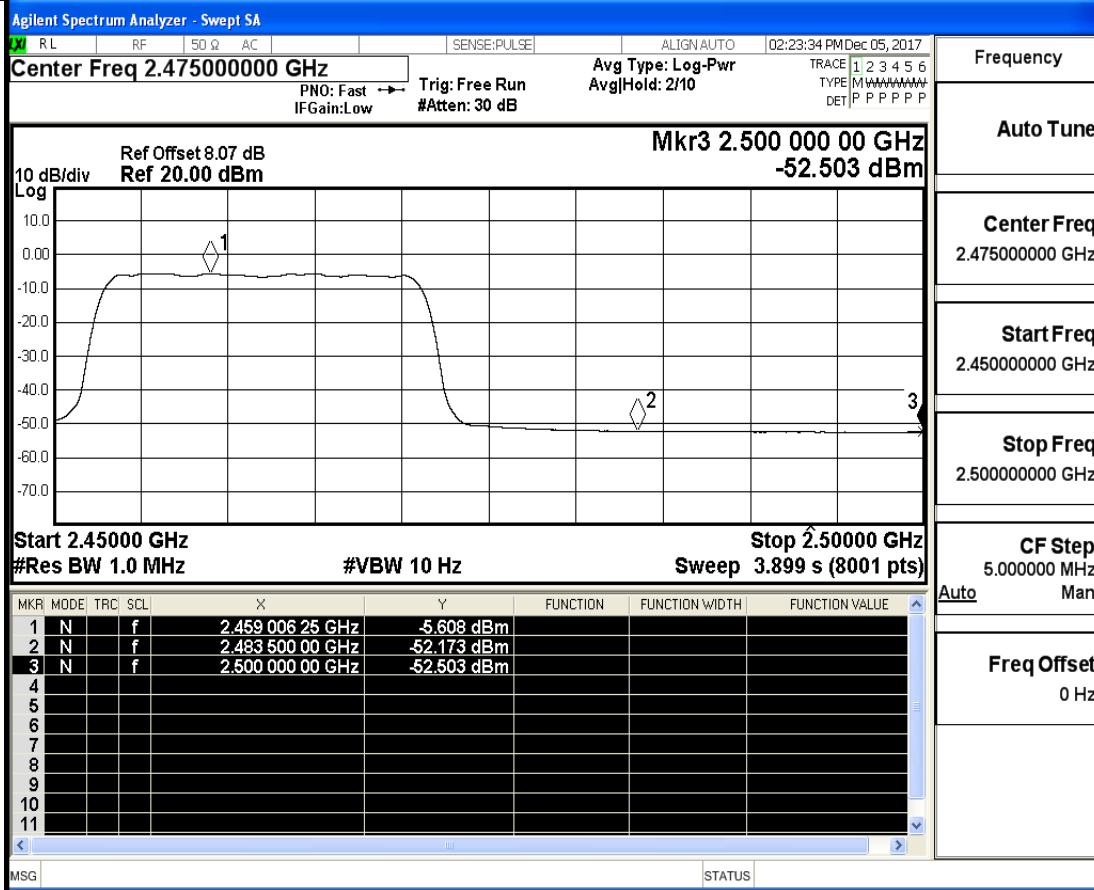
## Restrict-band band-edge measurements\_11N20SISO\_2412\_Ant1\_AV



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

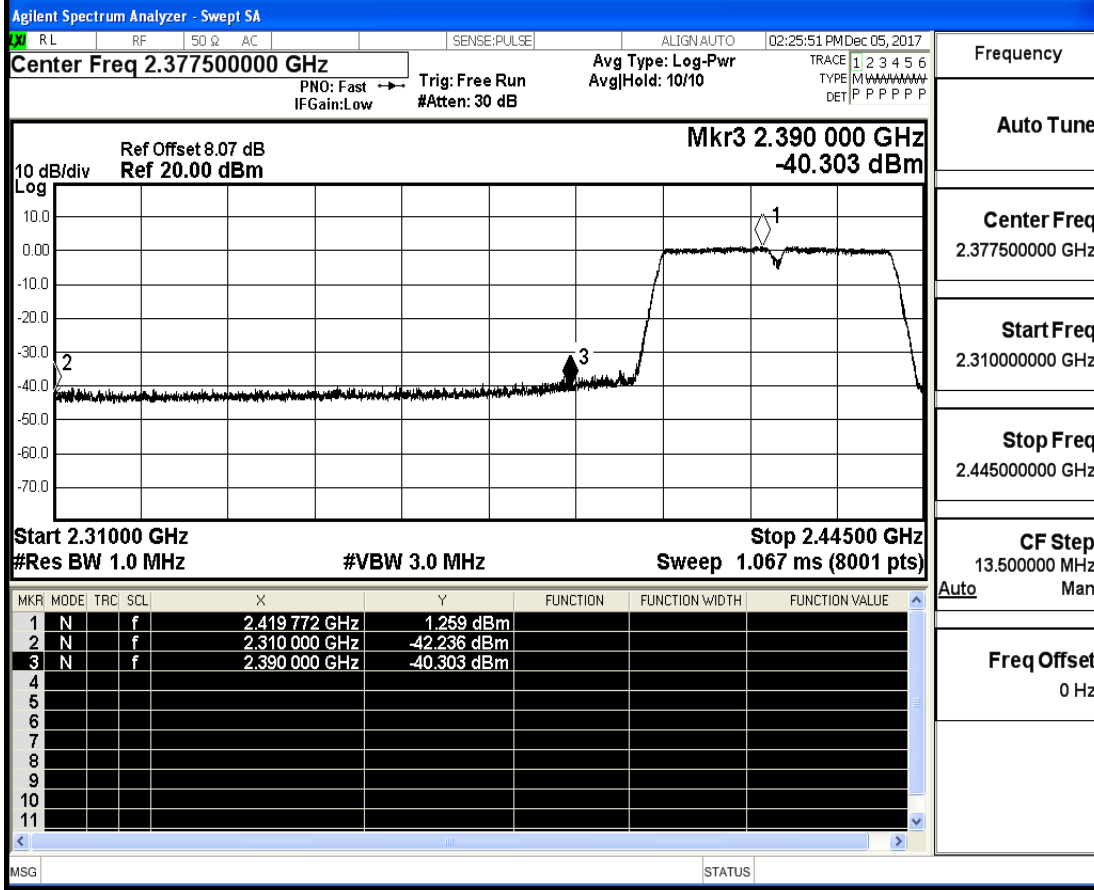


## Restrict-band band-edge measurements\_11N20SISO\_2462\_Ant1\_AV



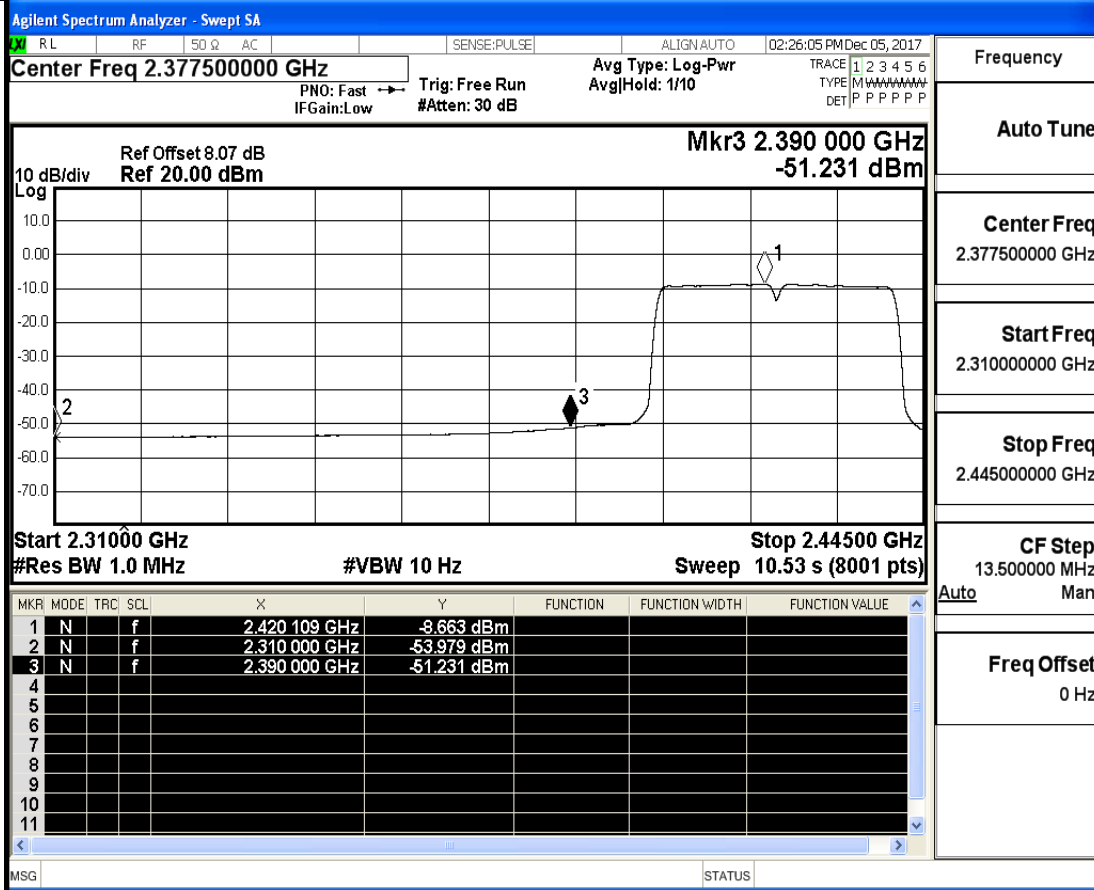


## Restrict-band band-edge measurements\_11N40SISO\_2422\_Ant1\_PEAK



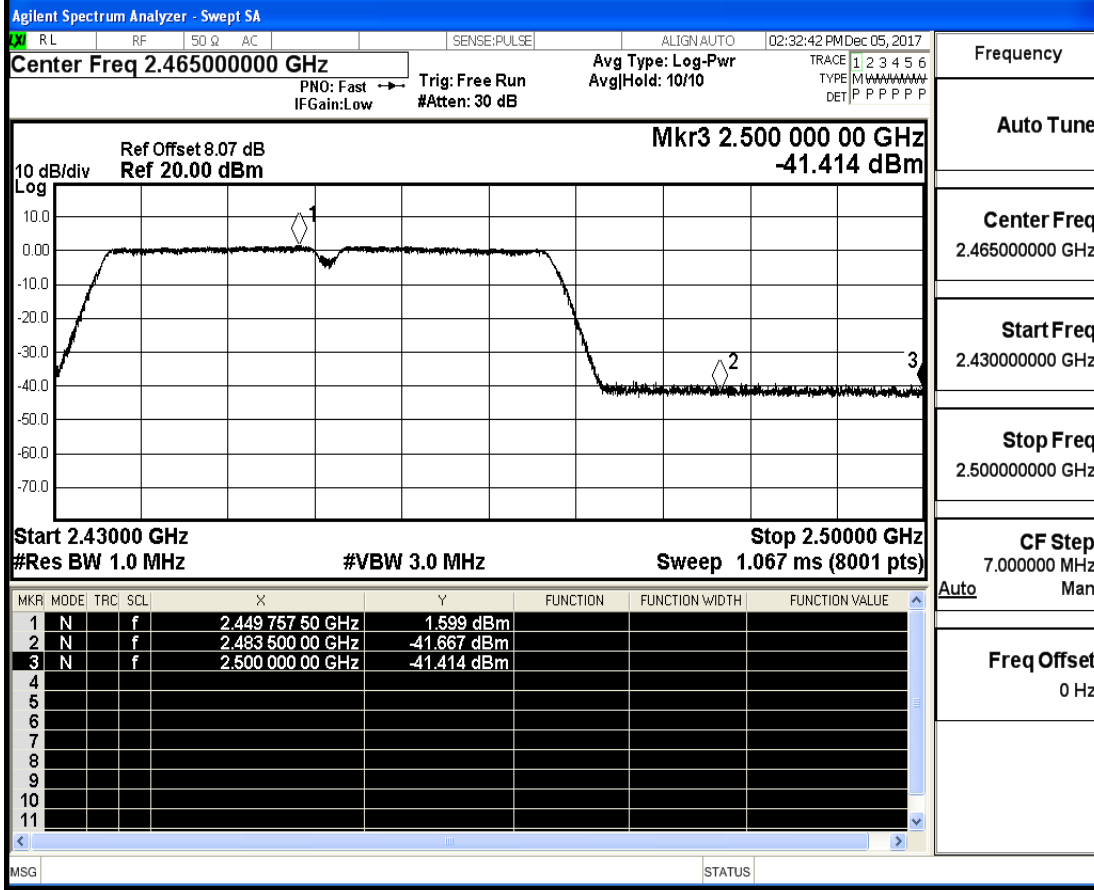
Frequency	
Auto Tune	
Center Freq	2.377500000 GHz
Start Freq	2.310000000 GHz
Stop Freq	2.445000000 GHz
CF Step	13.500000 MHz
Auto	Man
Freq Offset	0 Hz

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

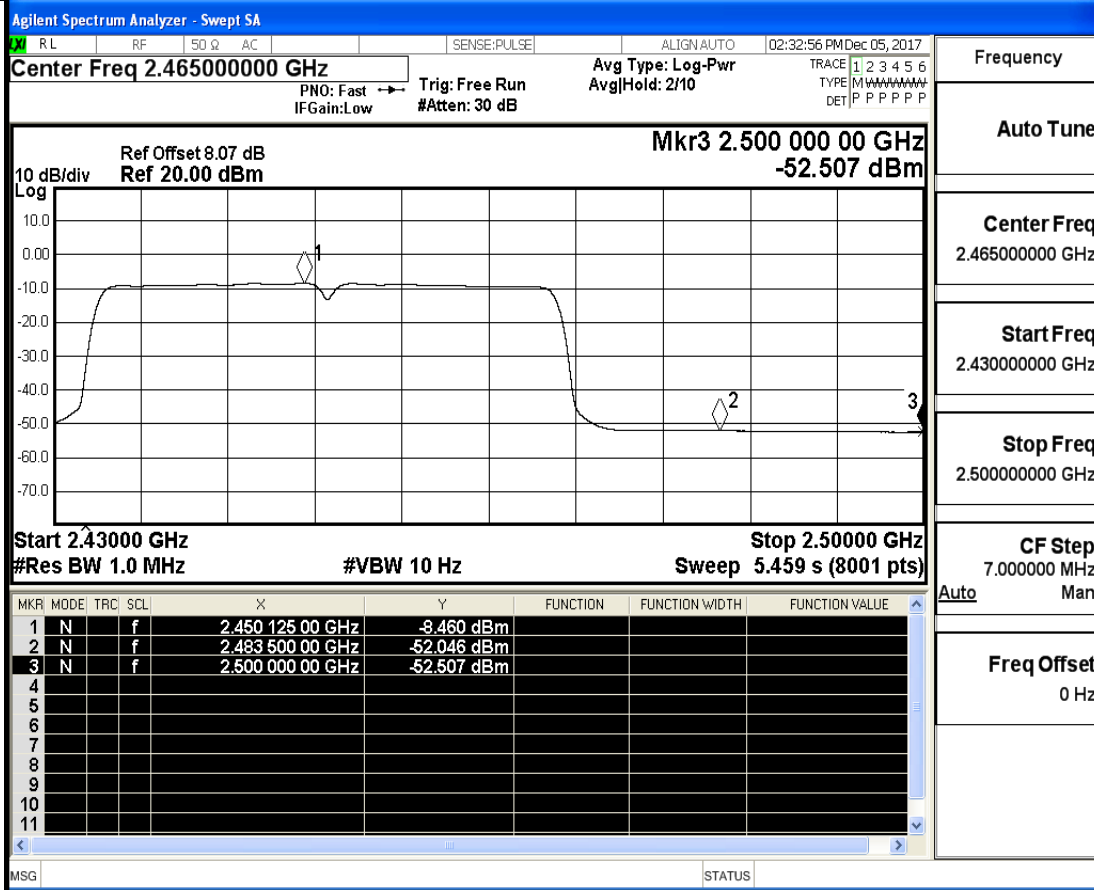


Frequency	
Auto Tune	
Center Freq	2.377500000 GHz
Start Freq	2.310000000 GHz
Stop Freq	2.445000000 GHz
CF Step	13.500000 MHz
Auto	Man
Freq Offset	0 Hz

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



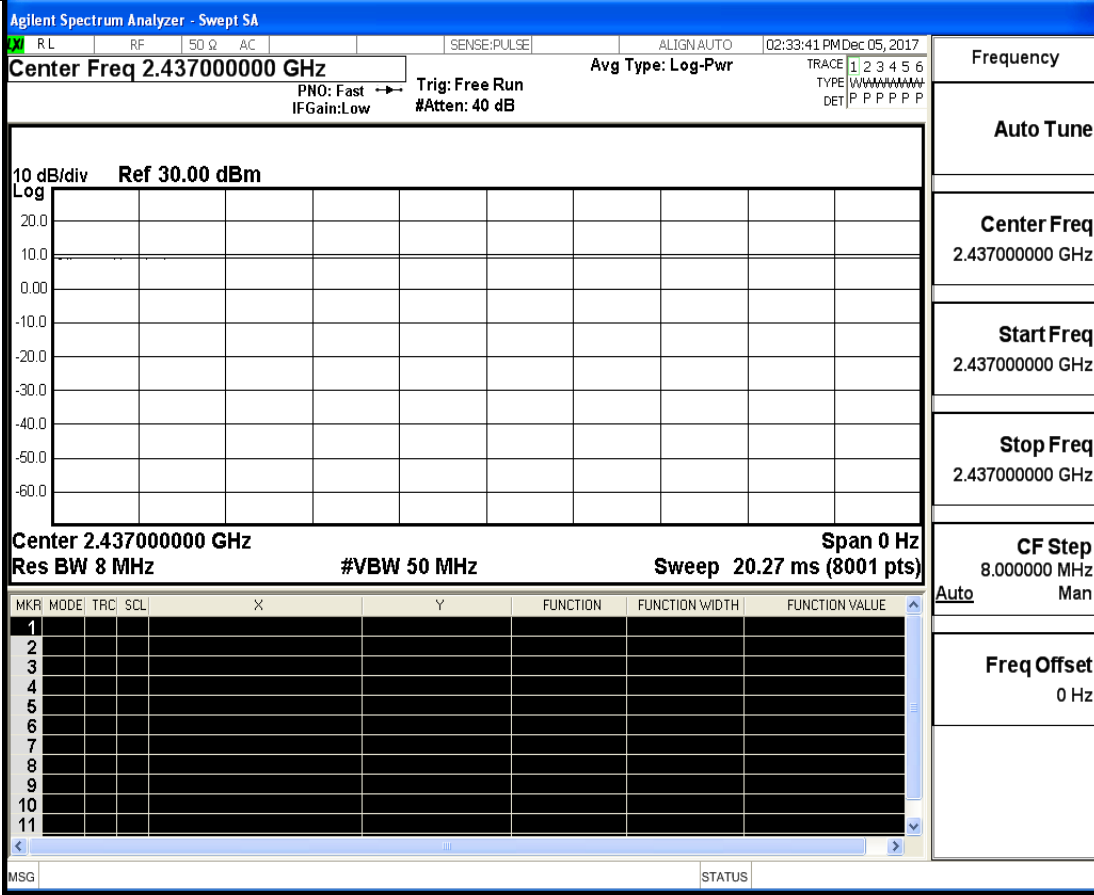
## Restrict-band band-edge measurements\_11N40SISO\_2452\_Ant1\_AV



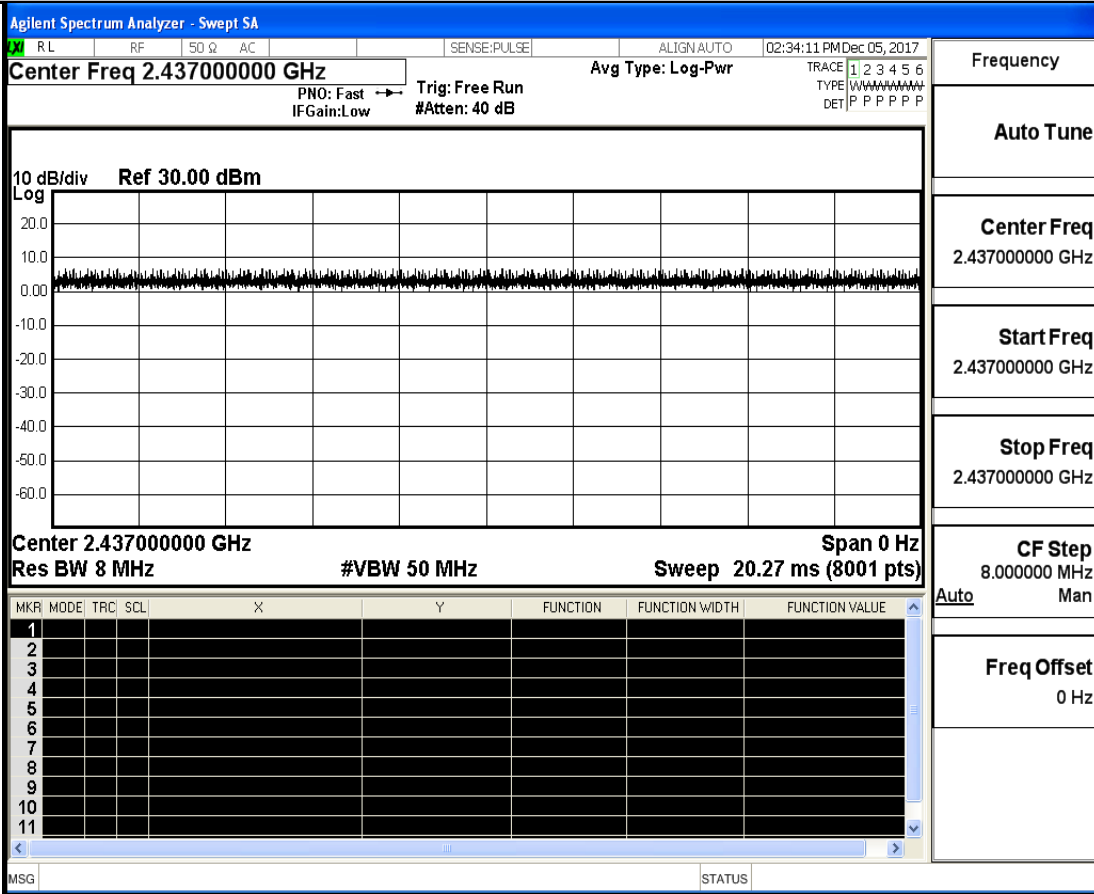
**7.Duty Cycle**

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

Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:PULSE ALIGN:AUTO 02:34:41 PM Dec 05, 2017

Center Freq **2.437000000 GHz** Avg Type: Log-Pwr

PNO: Fast → Trig: Free Run  
IFGain:Low #Atten: 40 dB

TRACE 1 2 3 4 5 6  
TYPE WWWWWWWW  
DET P P P P P P

10 dB/div Ref 30.00 dBm

Center **2.437000000 GHz** Span **0 Hz**  
Res BW **8 MHz** #VBW **50 MHz** Sweep **20.27 ms (8001 pts)**

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								

MSG STATUS

Frequency

Auto Tune

Center Freq  
2.437000000 GHz

Start Freq  
2.437000000 GHz

Stop Freq  
2.437000000 GHz

CF Step  
8.000000 MHz  
Auto Man

Freq Offset  
0 Hz

## Duty Cycle\_11N40SISO\_2437\_Ant1

Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:PULSE ALIGN:AUTO 02:35:12 PM Dec 05, 2017

Center Freq **2.437000000 GHz** Avg Type: Log-Pwr

PNO: Fast → Trig: Free Run  
IFGain:Low #Atten: 40 dB

TRACE 1 2 3 4 5 6  
TYPE WWWWWWWW  
DET P P P P P P

10 dB/div Ref 30.00 dBm

Center **2.437000000 GHz** Span **0 Hz**  
Res BW **8 MHz** #VBW **50 MHz** Sweep **20.27 ms (8001 pts)**

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								

MSG STATUS

Frequency

Auto Tune

Center Freq  
2.437000000 GHz

Start Freq  
2.437000000 GHz

Stop Freq  
2.437000000 GHz

CF Step  
8.000000 MHz  
Auto Man

Freq Offset  
0 Hz