

1.6dB Bandwidth

Test Mode	Test Channel	Ant	EBW[MHz]	Limit	Verdict
11B	2412	Ant1	9.158	0.5	PASS
11B	2437	Ant1	9.157	0.5	PASS
11B	2462	Ant1	9.158	0.5	PASS
11G	2412	Ant1	15.15	0.5	PASS
11G	2437	Ant1	16.41	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	17.62	0.5	PASS
11N40SISO	2422	Ant1	36.38	0.5	PASS
11N40SISO	2437	Ant1	36.39	0.5	PASS
11N40SISO	2452	Ant1	36.38	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 0.7 dB Mkr1 2.41149 GHz
 Ref 20.00 dBm -2.6450 dBm

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

Occupied Bandwidth	Total Power	14.0 dBm
12.421 MHz		
Transmit Freq Error	-2.611 kHz	OBW Power 99.00 %
x dB Bandwidth	9.158 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: 2.43700000 GHz Radio Std: None
 Trig: Free Run Avg|Hold: 1/1
 #IFGain:Low #Atten: 30 dB Radio Device: BTS

Ref Offset 0.7 dB Mkr1 2.43649 GHz
 Ref 20.00 dBm -1.8352 dBm

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

Occupied Bandwidth	Total Power	14.8 dBm
12.461 MHz		
Transmit Freq Error	3.094 kHz	OBW Power 99.00 %
x dB Bandwidth	9.157 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 04:07:48 PM Oct 13, 2017

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

Ref Offset 0.7 dB Mkr1 2.46149 GHz
 Ref 20.00 dBm -2.0547 dBm

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

Occupied Bandwidth	Total Power	14.5 dBm
12.444 MHz		
Transmit Freq Error	OBW Power	99.00 %
-20.368 kHz		
x dB Bandwidth	x dB	-6.00 dB
9.158 MHz		

Frequency: 2.46200000 GHz

CF Step: 3.000000 MHz (Auto)

Freq Offset: 0 Hz

MSG STATUS

6dB Bandwidth_11G_2412_Ant1

Agilent Spectrum Analyzer - Occupied BW

RL RF 50 Ω AC SENSE:PULSE ALIGN:AUTO 04:10:27 PM Oct 13, 2017

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

Ref Offset 0.7 dB Mkr1 2.41326 GHz
 Ref 20.00 dBm -5.1799 dBm

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

Occupied Bandwidth	Total Power	11.7 dBm
16.387 MHz		
Transmit Freq Error	OBW Power	99.00 %
-1.101 kHz		
x dB Bandwidth	x dB	-6.00 dB
15.15 MHz		

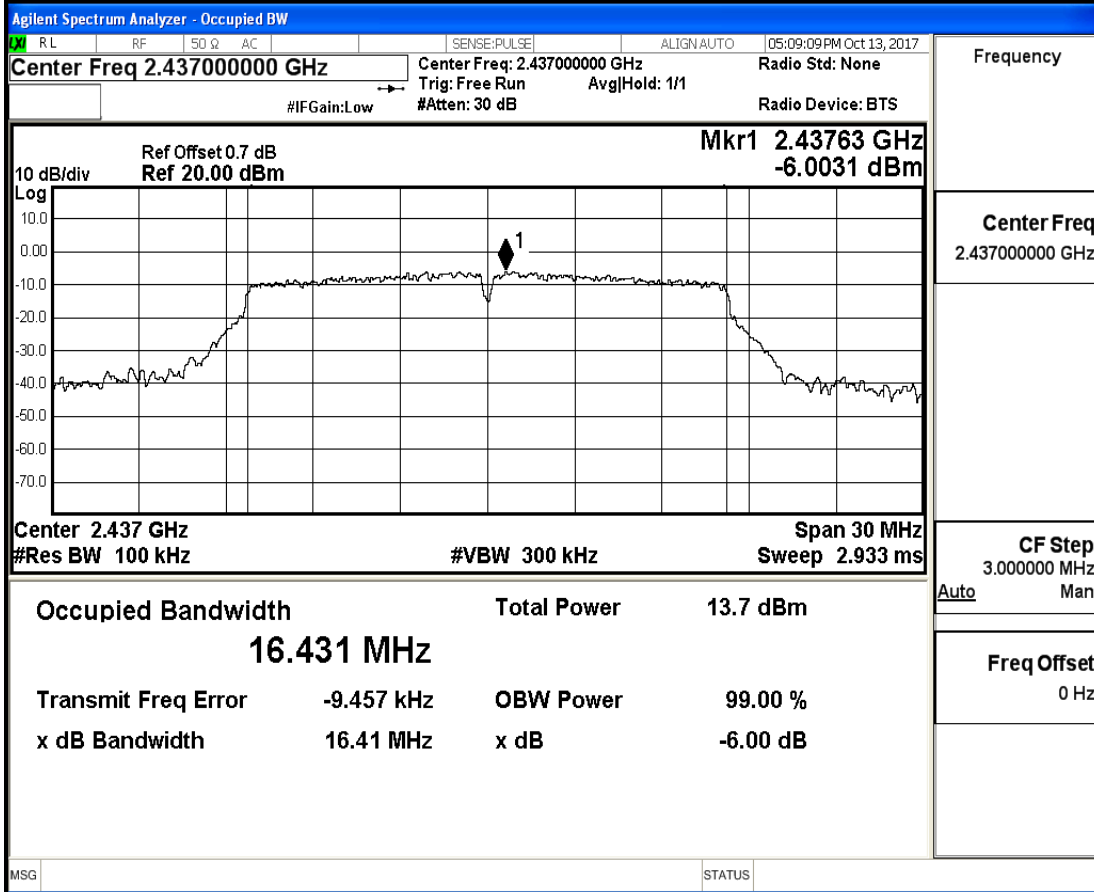
Frequency: 2.41200000 GHz

CF Step: 3.000000 MHz (Auto)

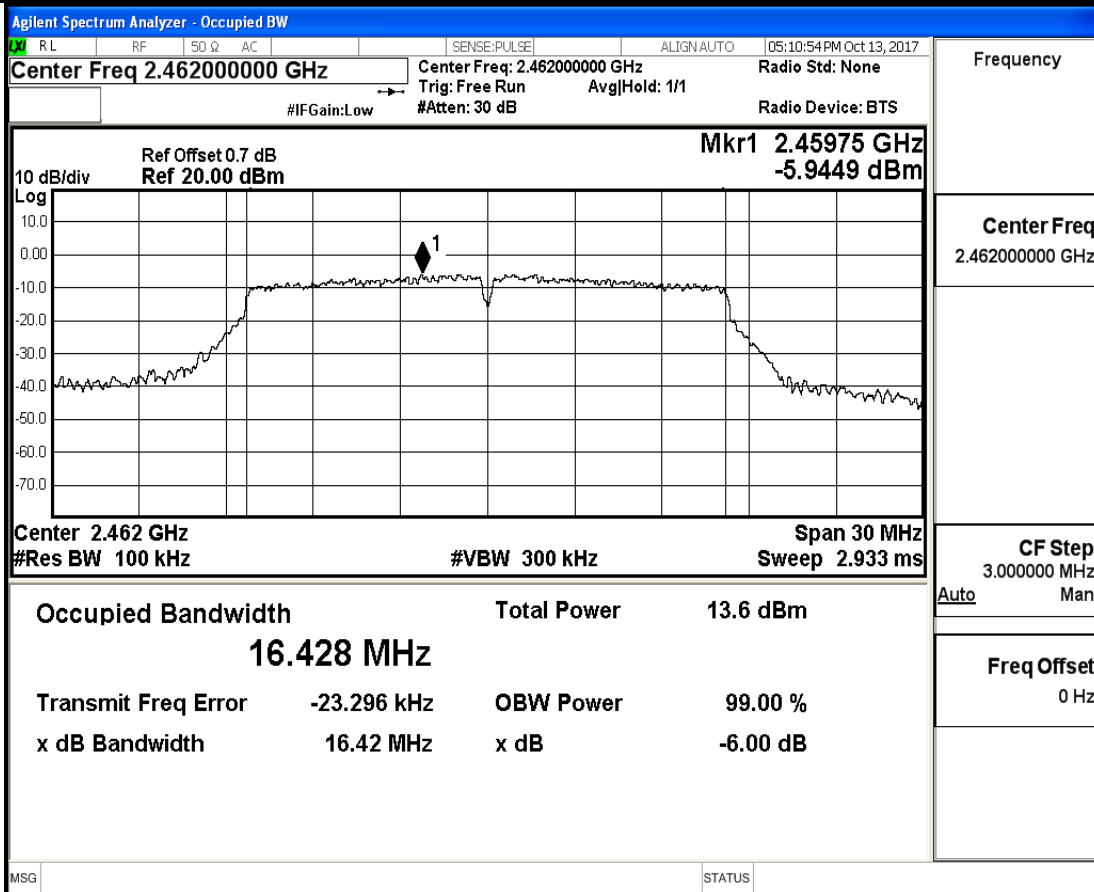
Freq Offset: 0 Hz

MSG STATUS

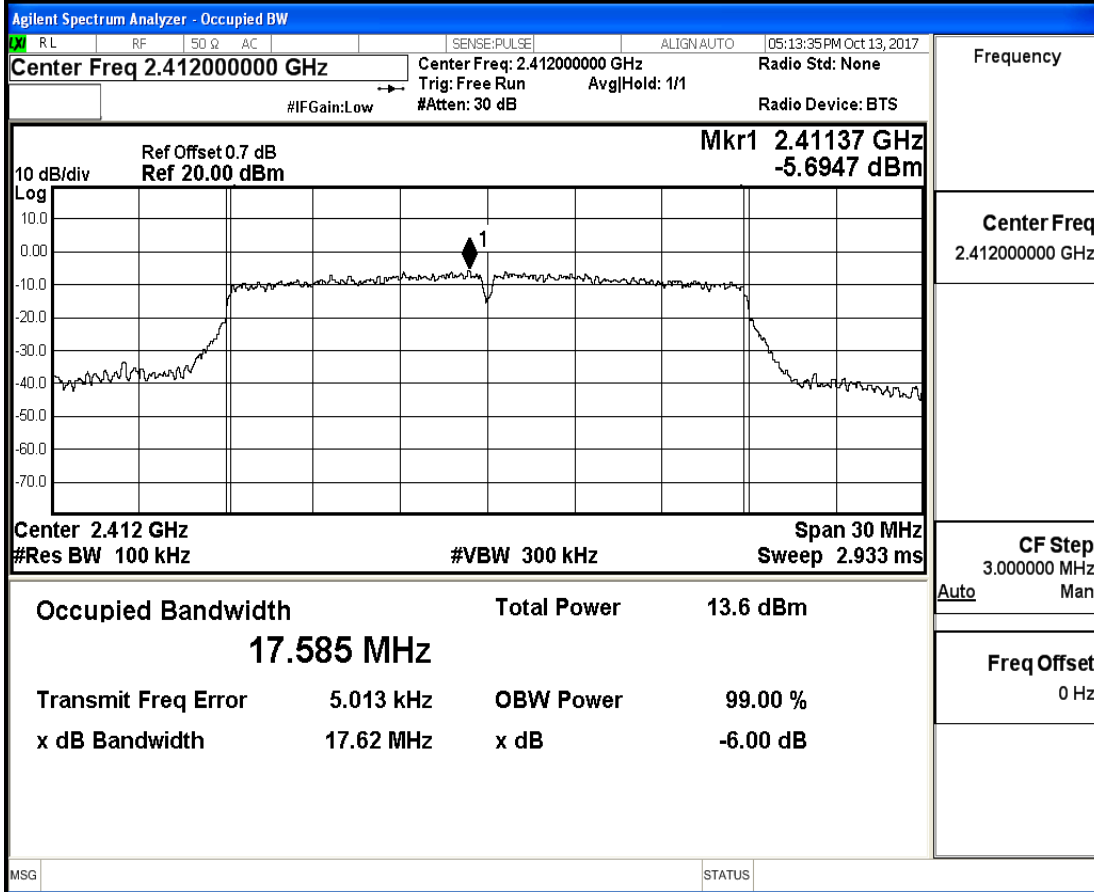
6dB Bandwidth_11G_2437_Ant1



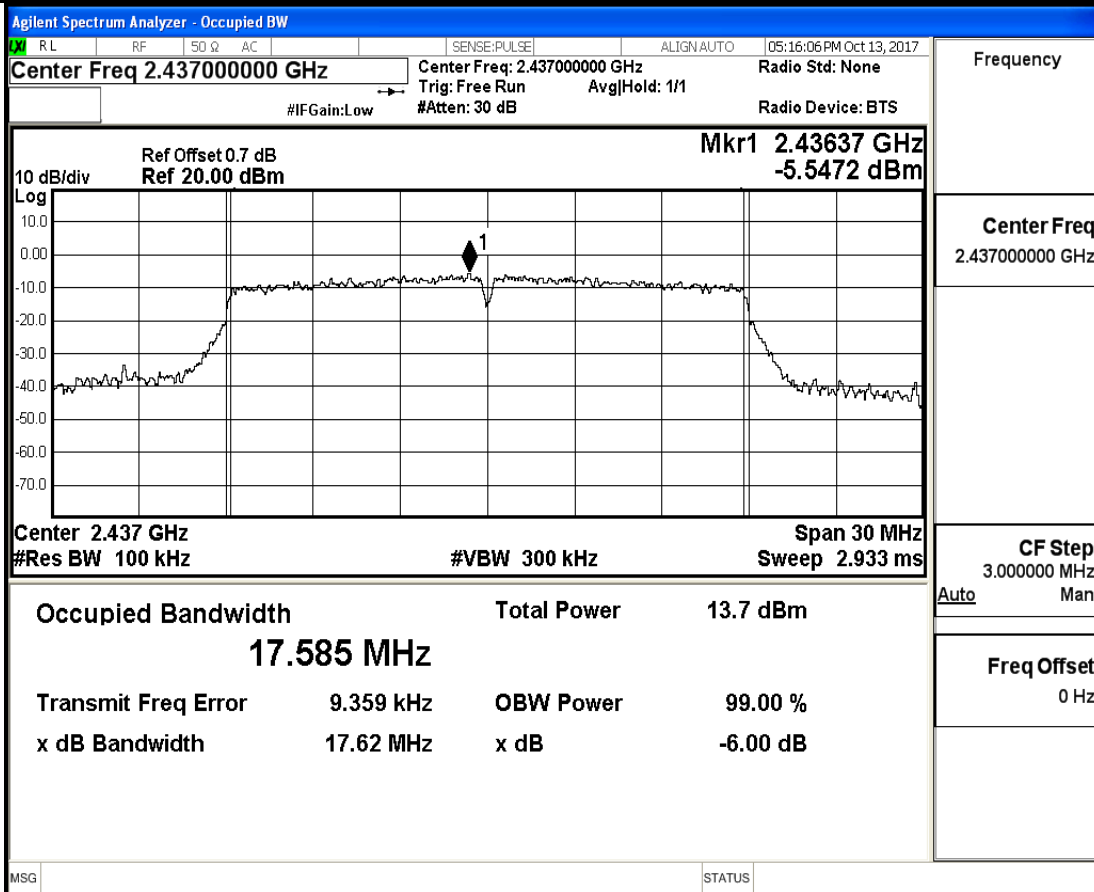
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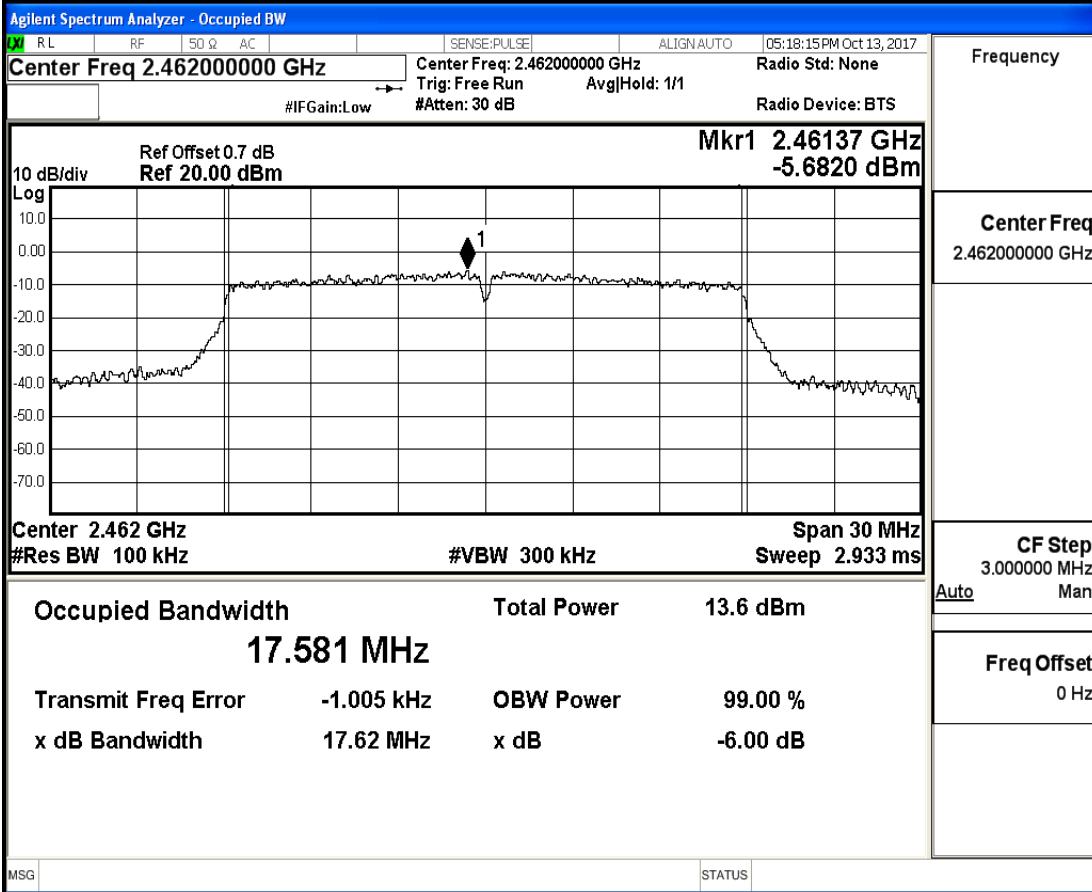
6dB Bandwidth_11N20SISO_2412_Ant1



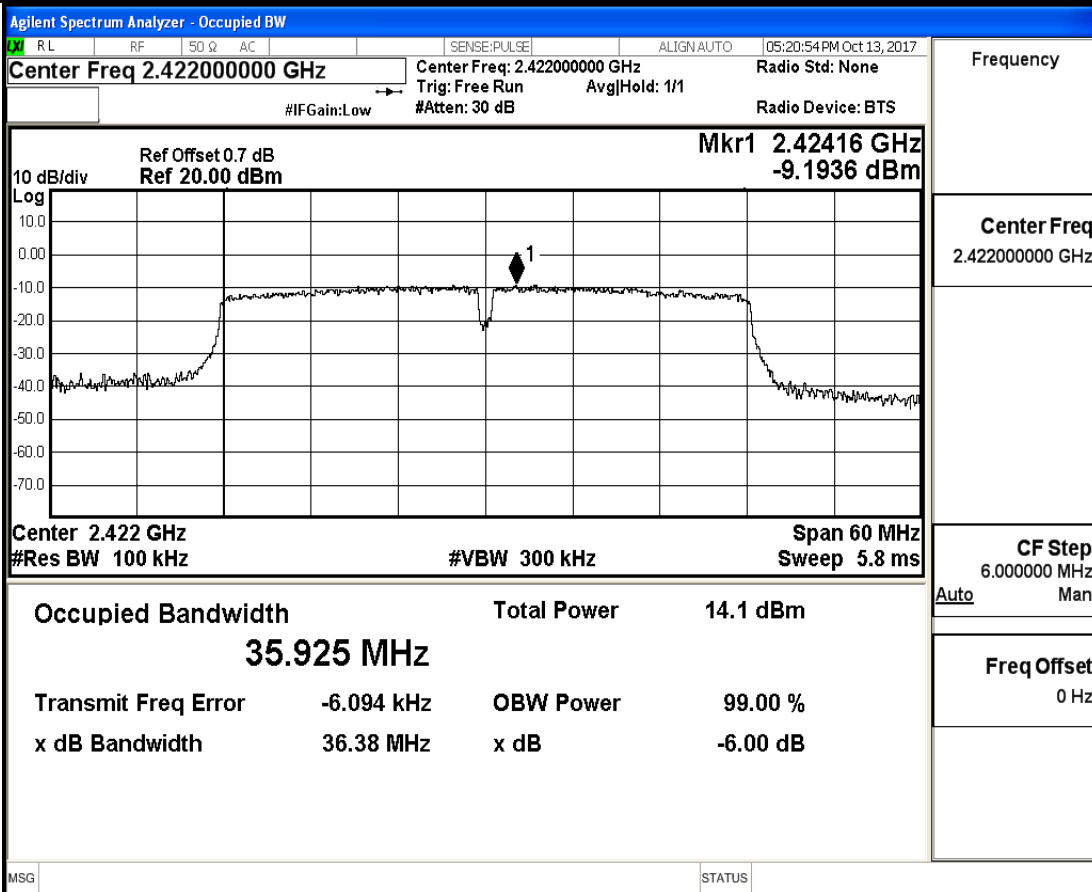
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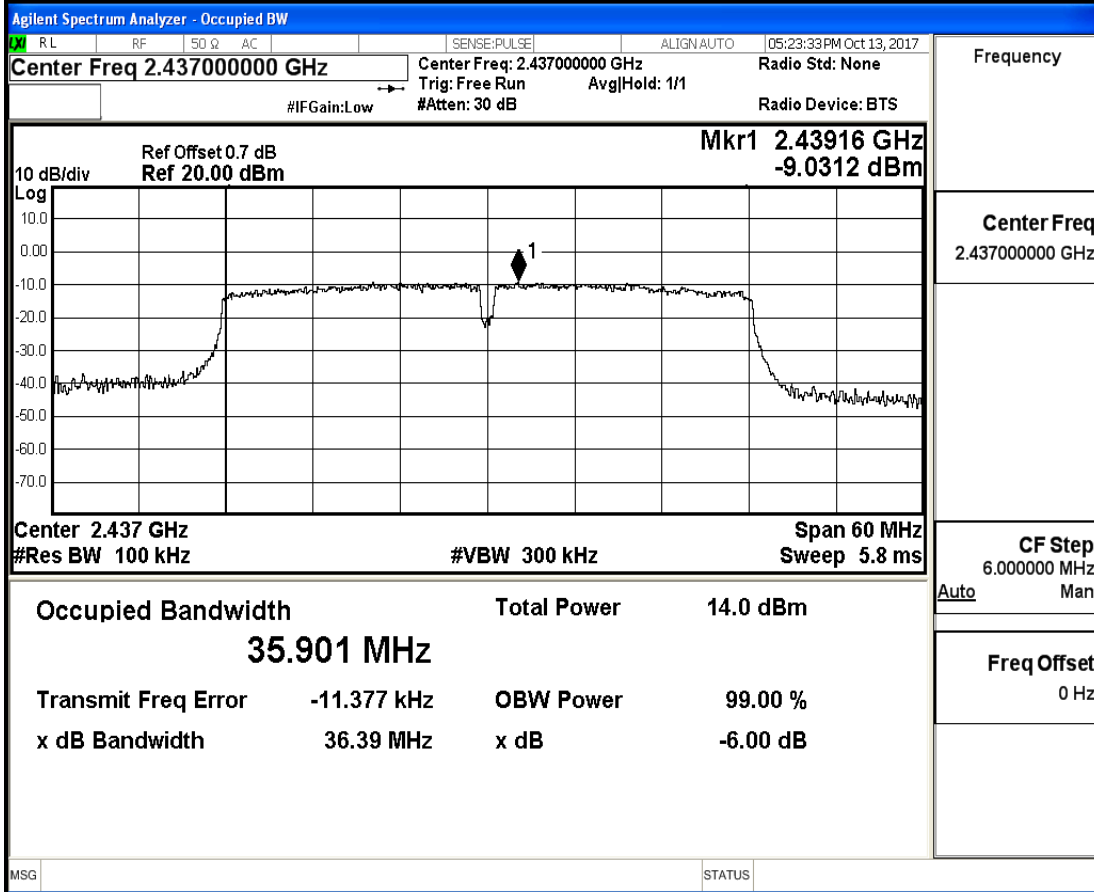
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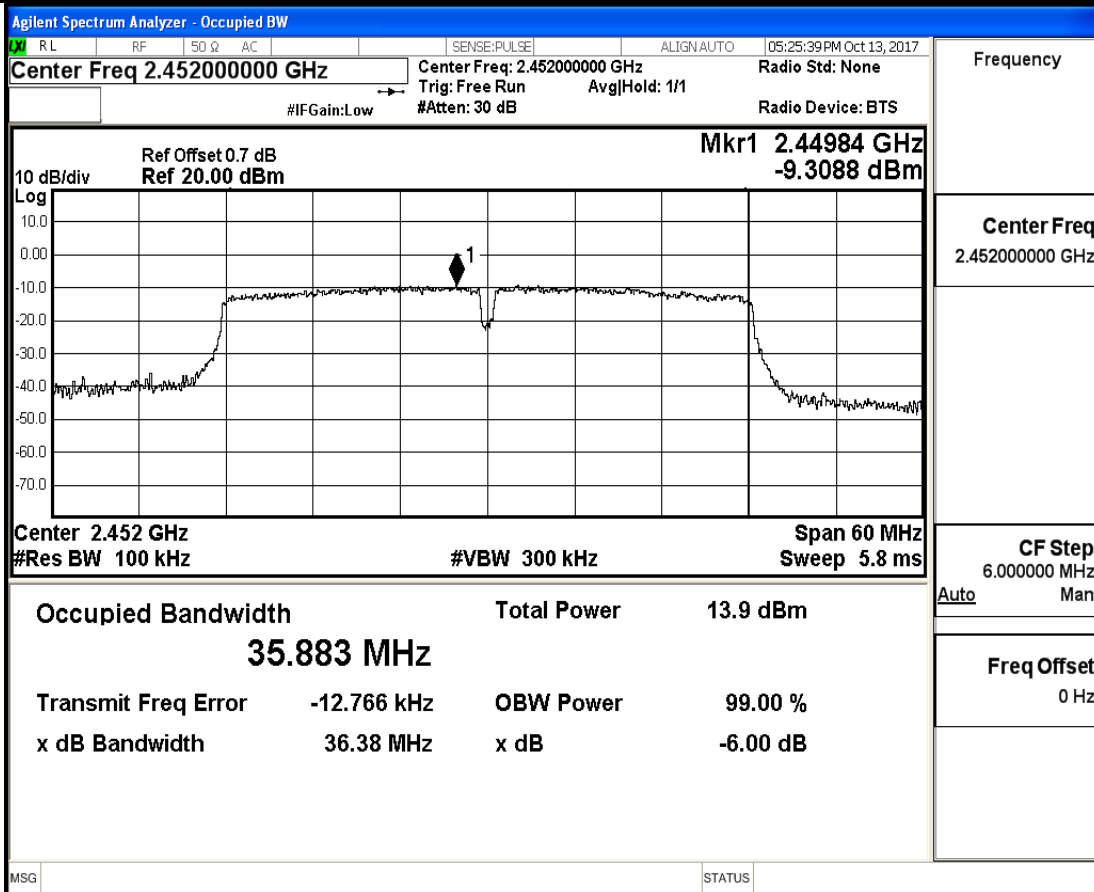
6dB Bandwidth_11N40SISO_2422_Ant1



6dB Bandwidth_11N40SISO_2437_Ant1



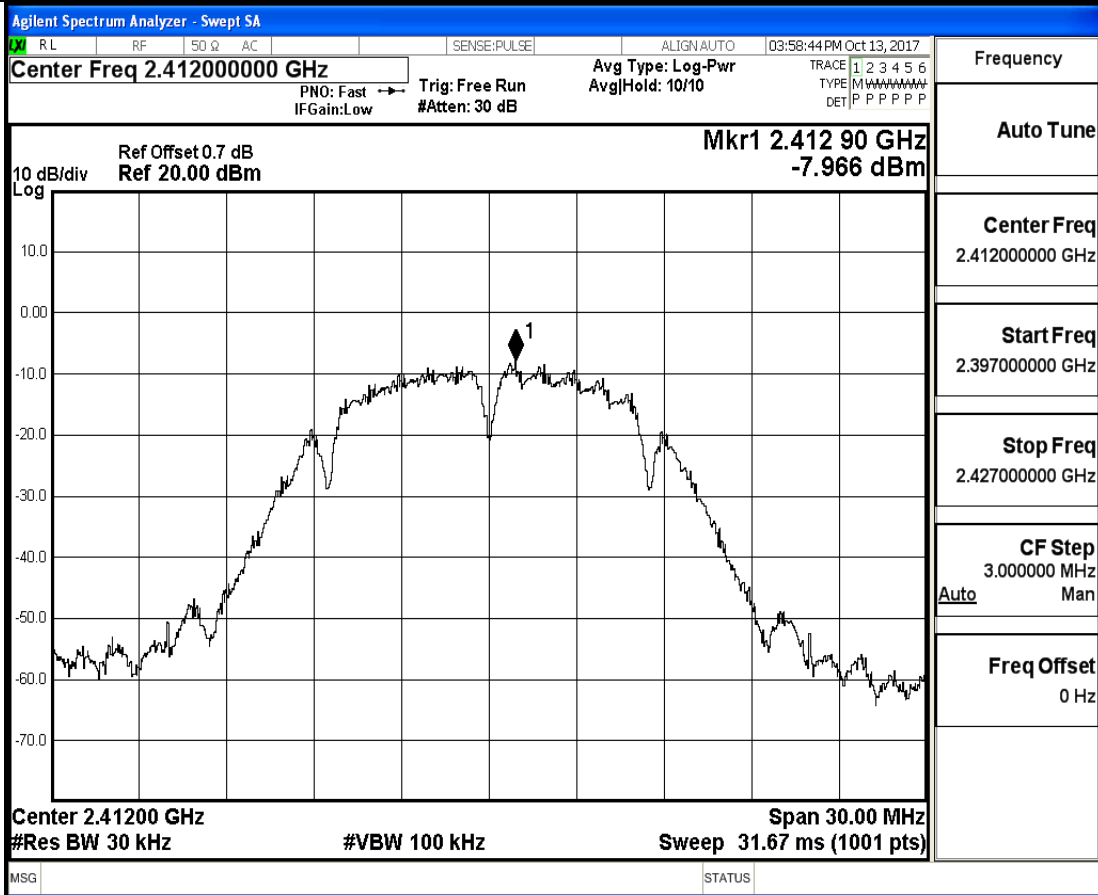
6dB Bandwidth_11N40SISO_2452_Ant1



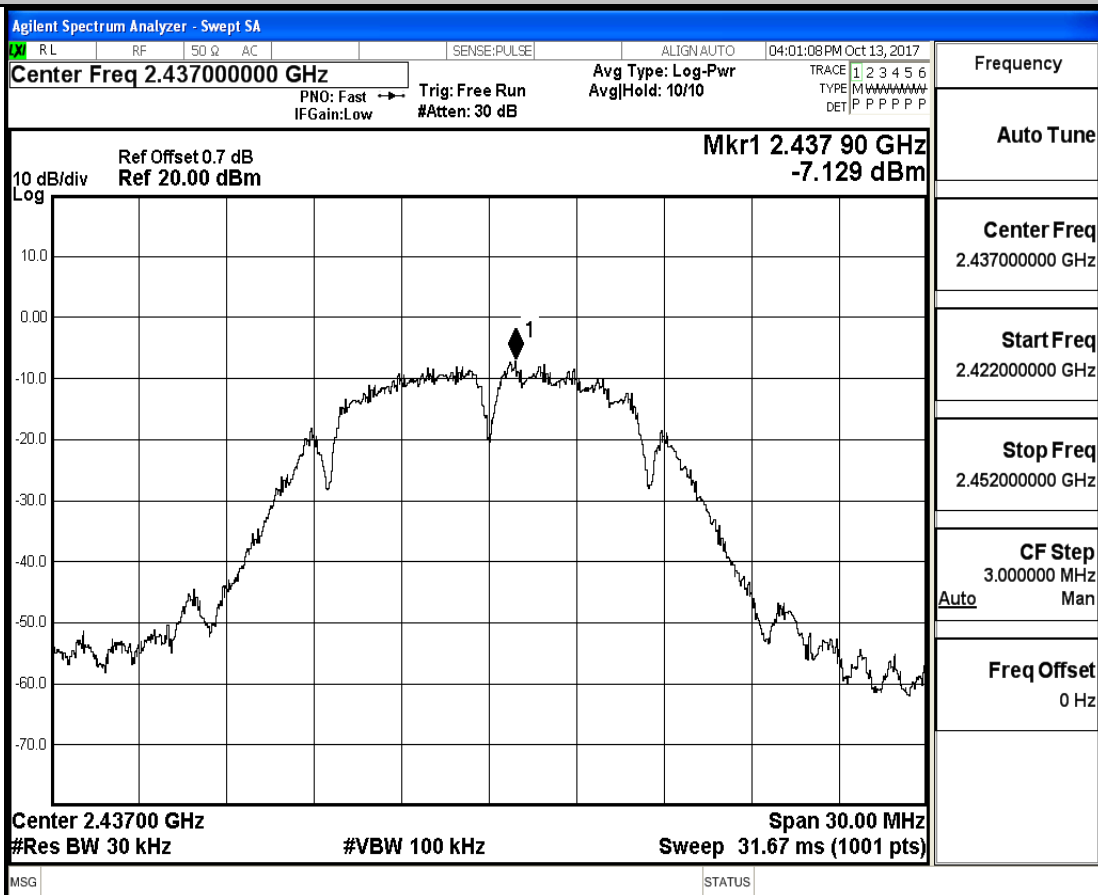
2.Maximum Peak power spectral density

Test Mode	Test Channel	Ant	PSD[dBm/30kHz]	Limit[dBm/3kHz]	Verdict
11B	2412	Ant1	-7.966	8.00	PASS
11B	2437	Ant1	-7.129	8.00	PASS
11B	2462	Ant1	-7.419	8.00	PASS
11G	2412	Ant1	-10.765	8.00	PASS
11G	2437	Ant1	-8.781	8.00	PASS
11G	2462	Ant1	-8.753	8.00	PASS
11N20SISO	2412	Ant1	-8.043	8.00	PASS
11N20SISO	2437	Ant1	-8.116	8.00	PASS
11N20SISO	2462	Ant1	-8.267	8.00	PASS
11N40SISO	2422	Ant1	-12.592	8.00	PASS
11N40SISO	2437	Ant1	-12.331	8.00	PASS
11N40SISO	2452	Ant1	-12.351	8.00	PASS

Maximum Peak power spectral density_11B_2412_Ant1



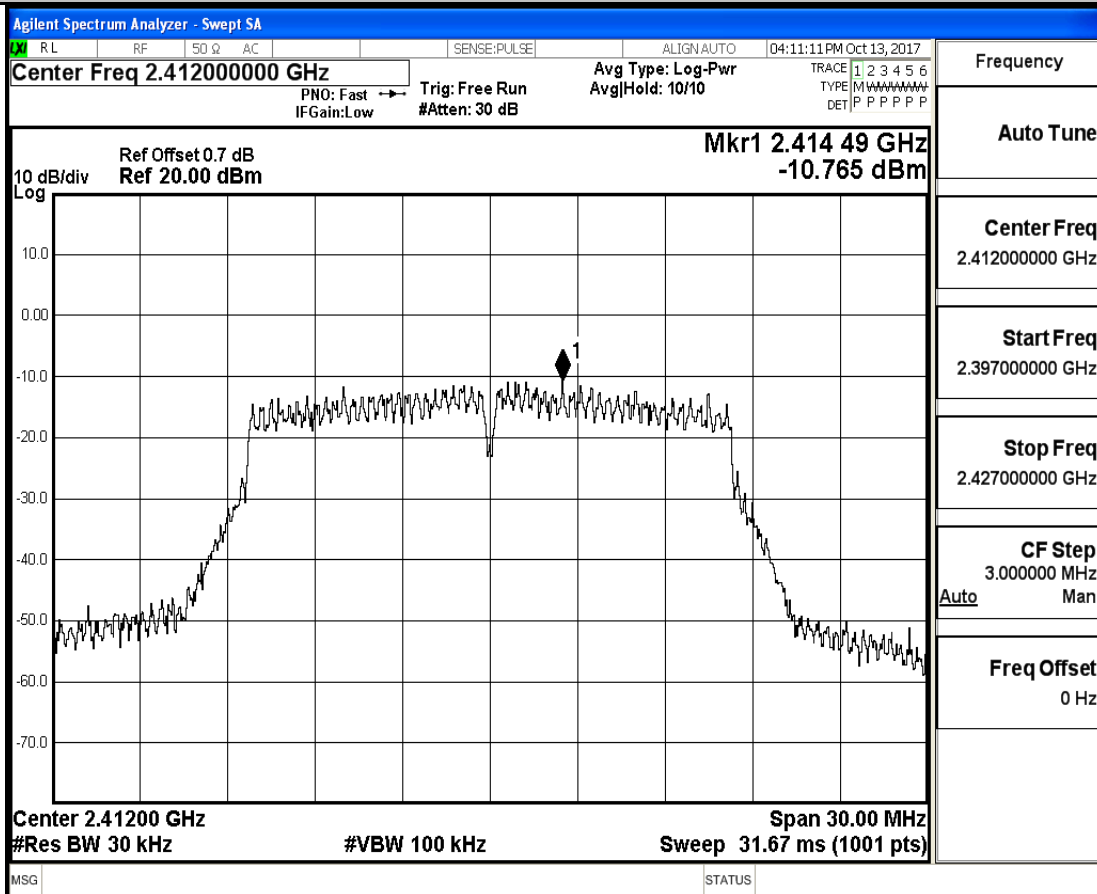
Maximum Peak power spectral density_11B_2437_Ant1



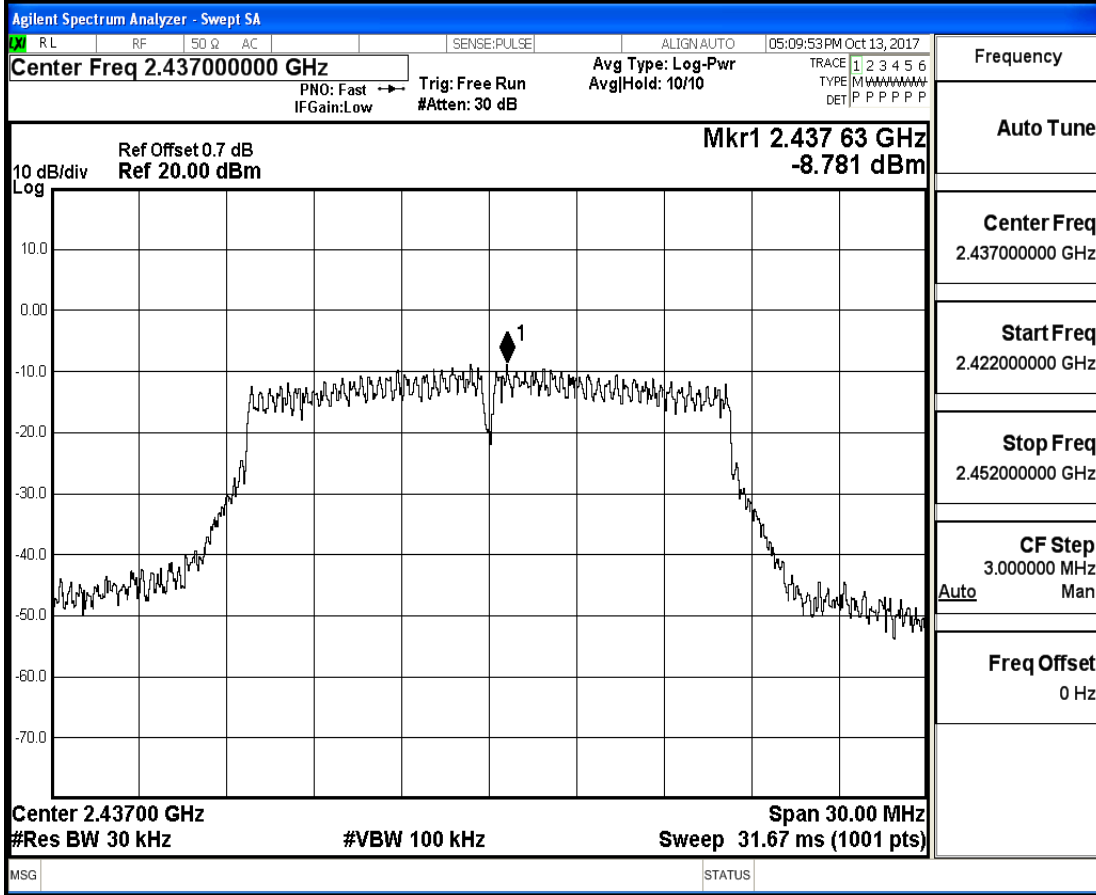
Maximum Peak power spectral density_11B_2462_Ant1



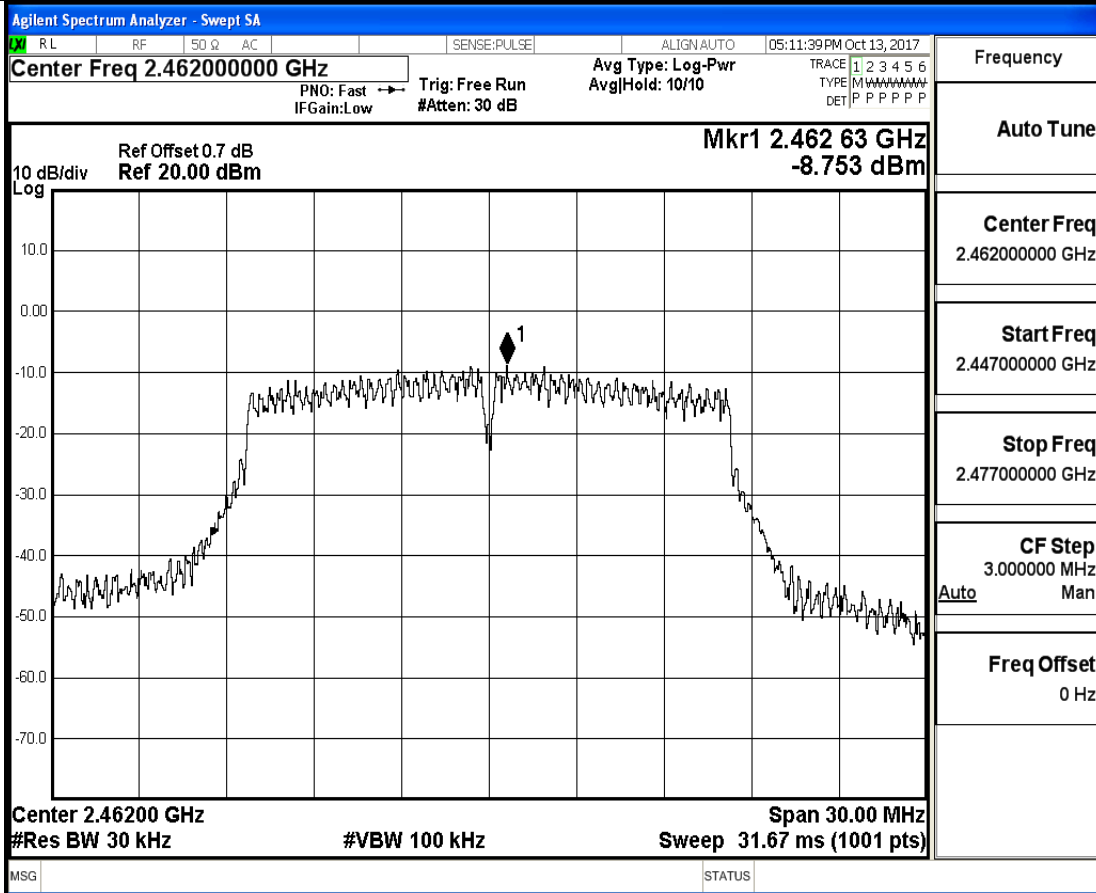
Maximum Peak power spectral density_11G_2412_Ant1



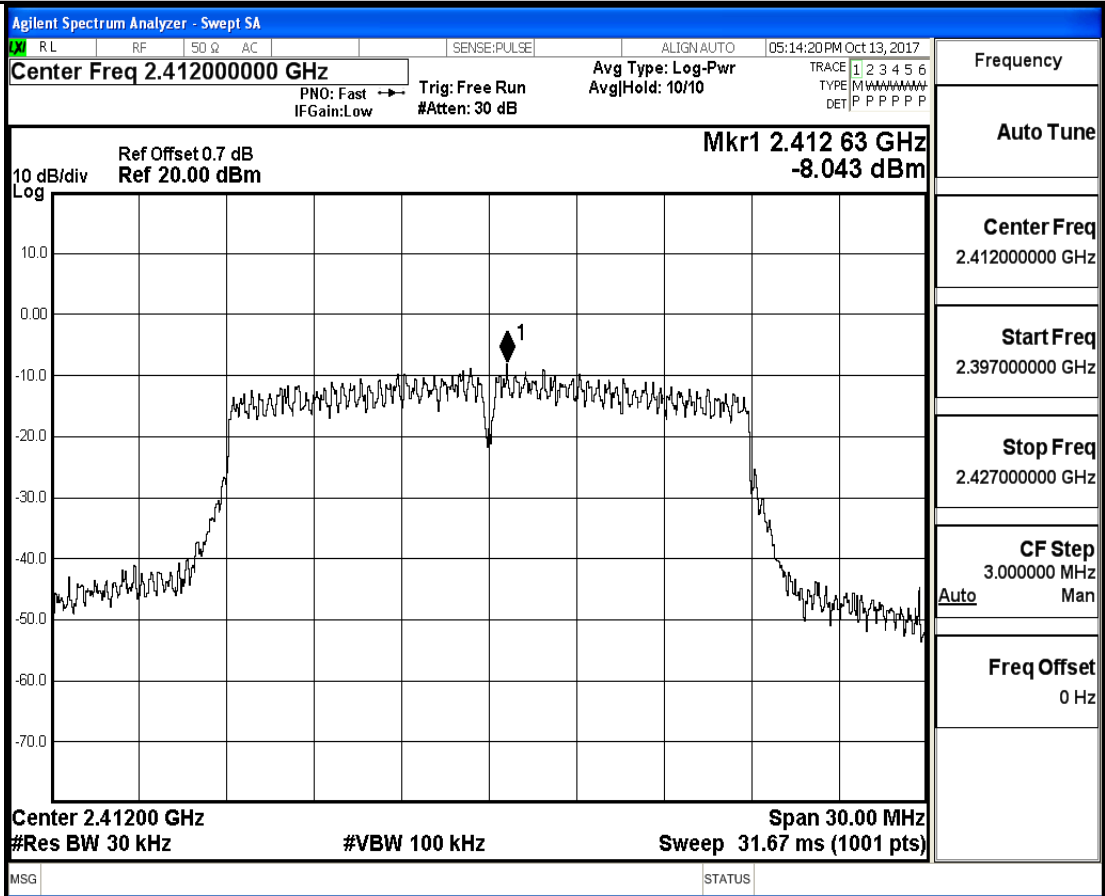
Maximum Peak power spectral density_11G_2437_Ant1



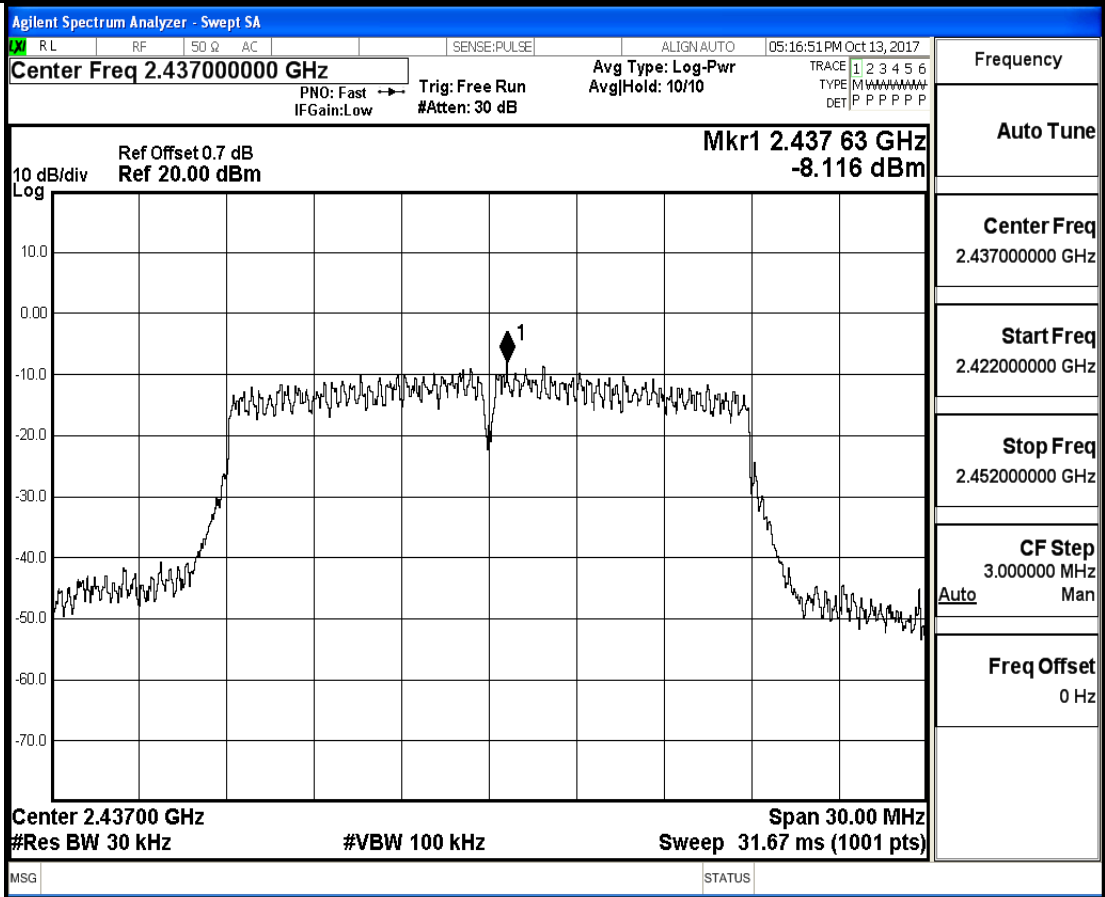
Maximum Peak power spectral density_11G_2462_Ant1



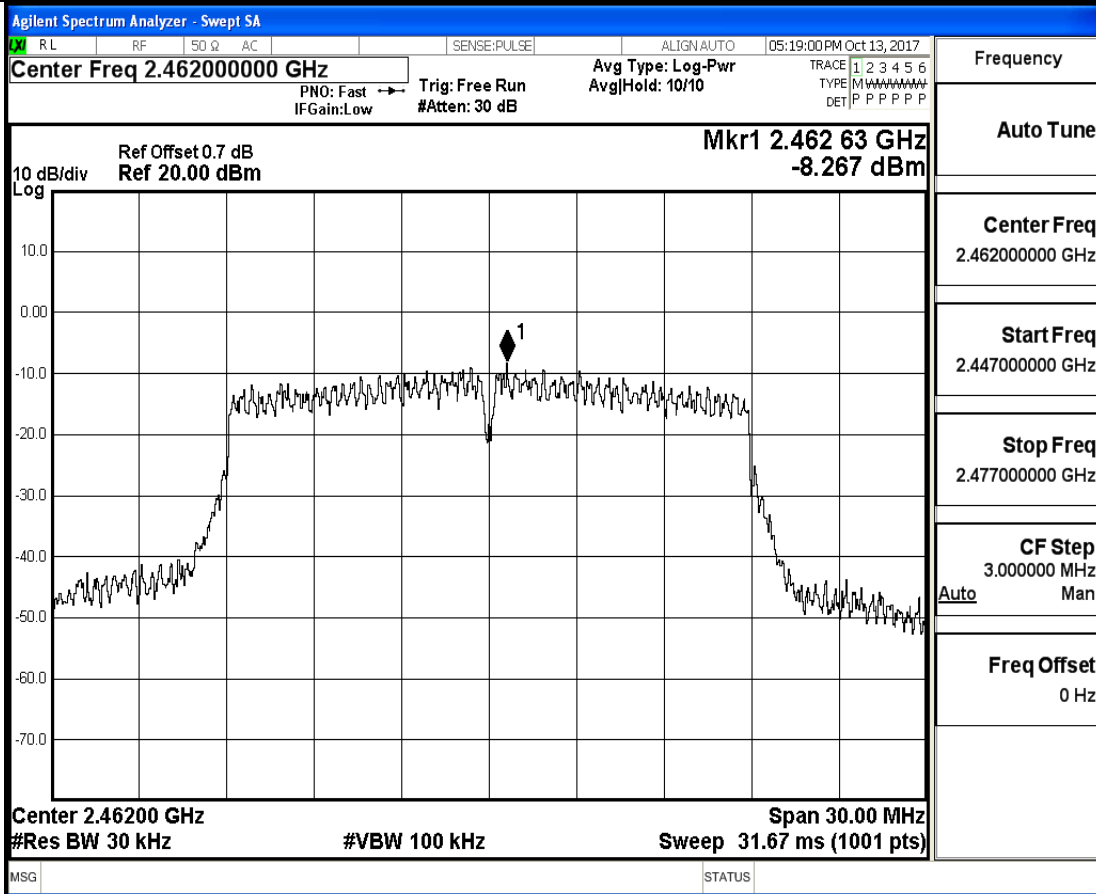
Maximum Peak power spectral density_11N20SISO_2412_Ant1



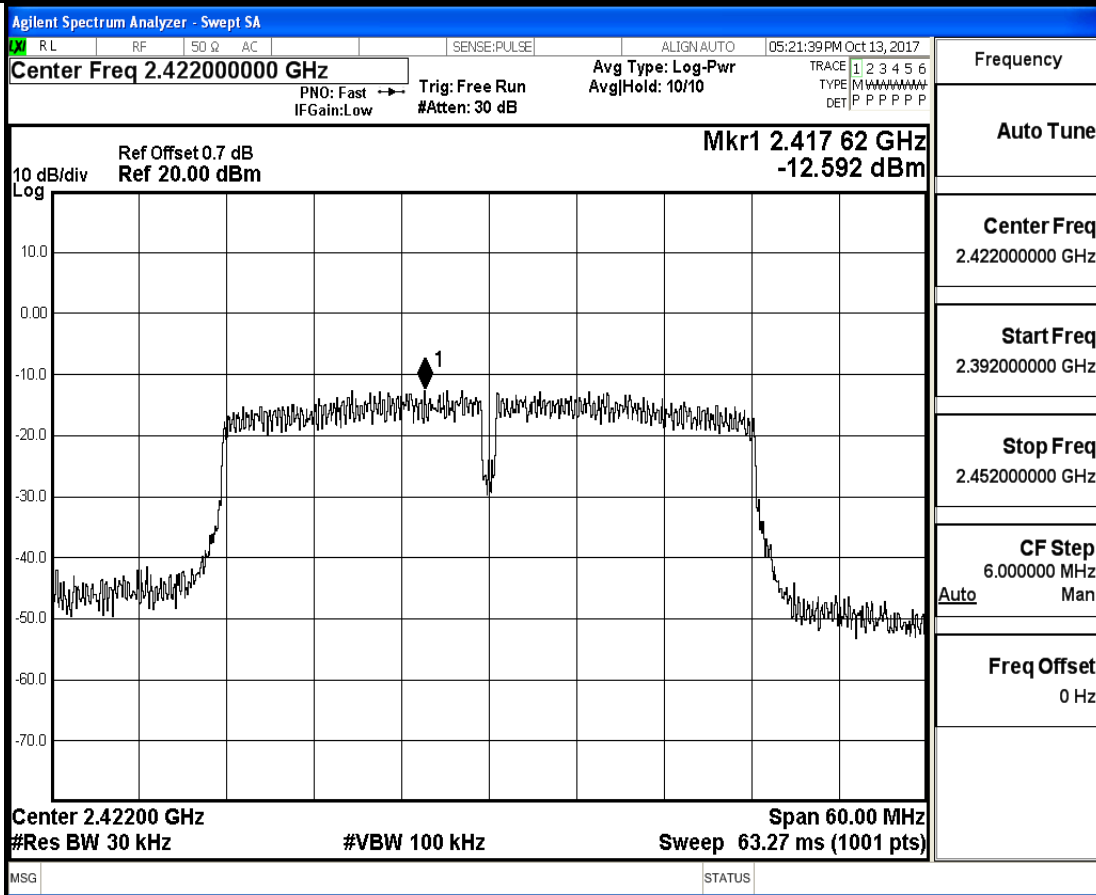
Maximum Peak power spectral density_11N20SISO_2437_Ant1



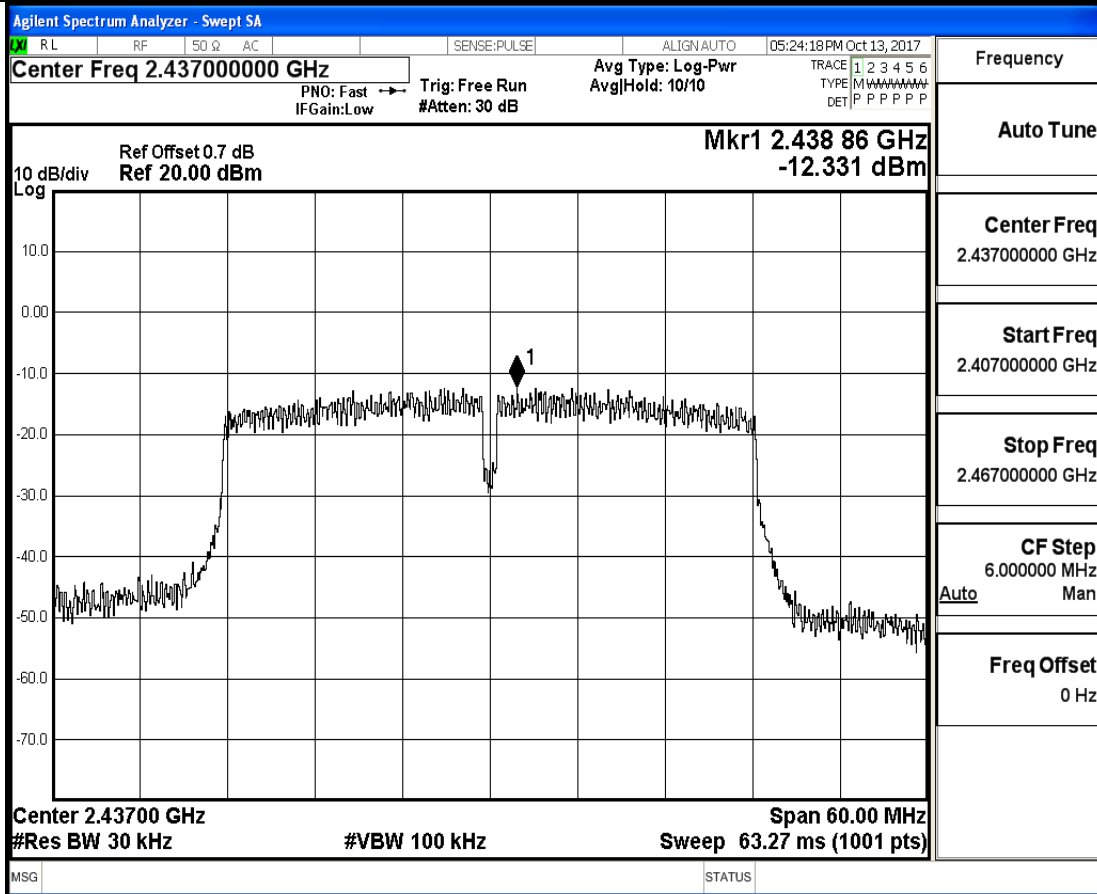
Maximum Peak power spectral density_11N20SISO_2462_Ant1



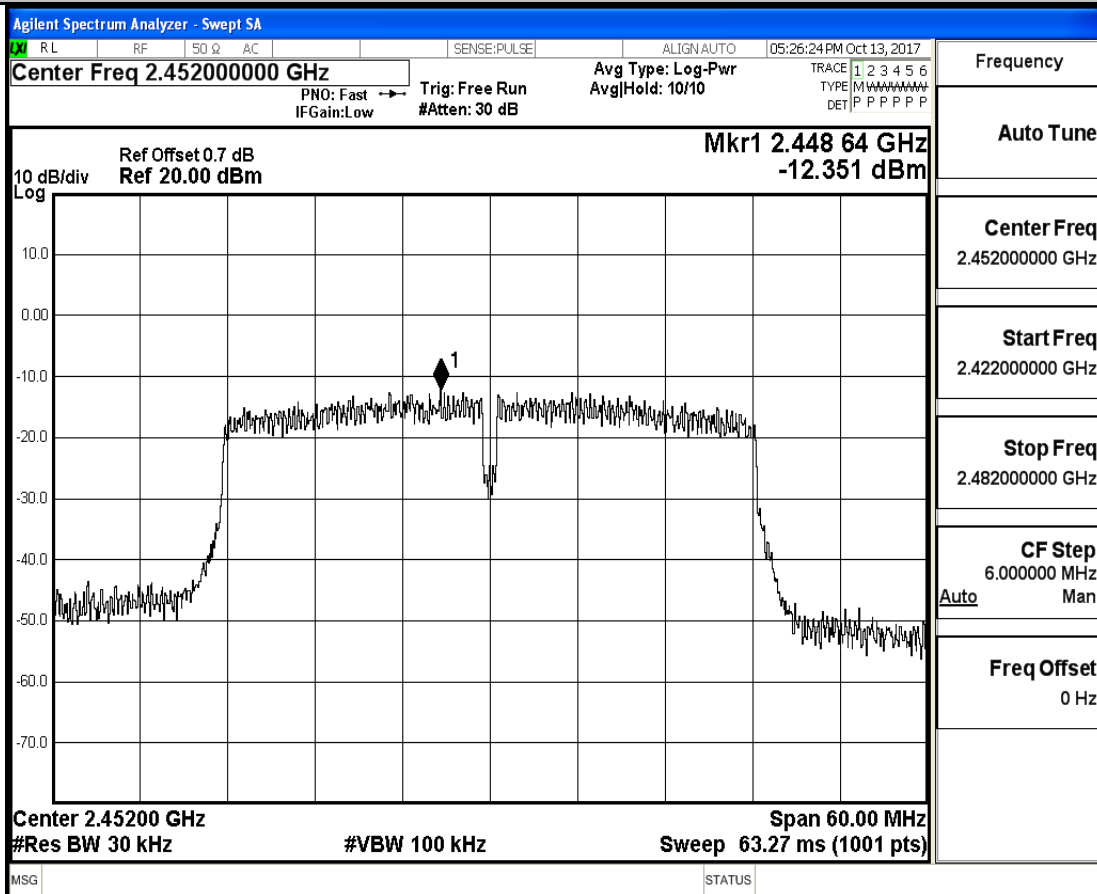
Maximum Peak power spectral density_11N40SISO_2422_Ant1



Maximum Peak power spectral density_11N40SISO_2437_Ant1



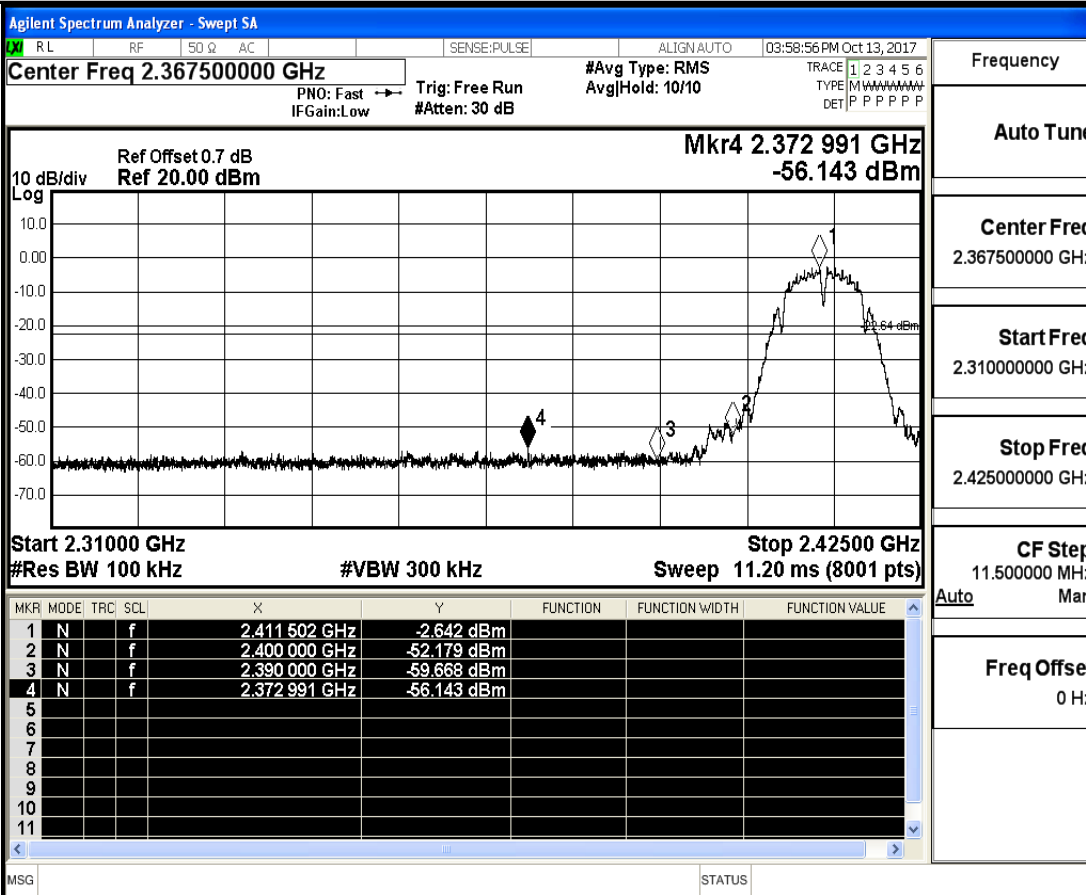
Maximum Peak power spectral density_11N40SISO_2452_Ant1



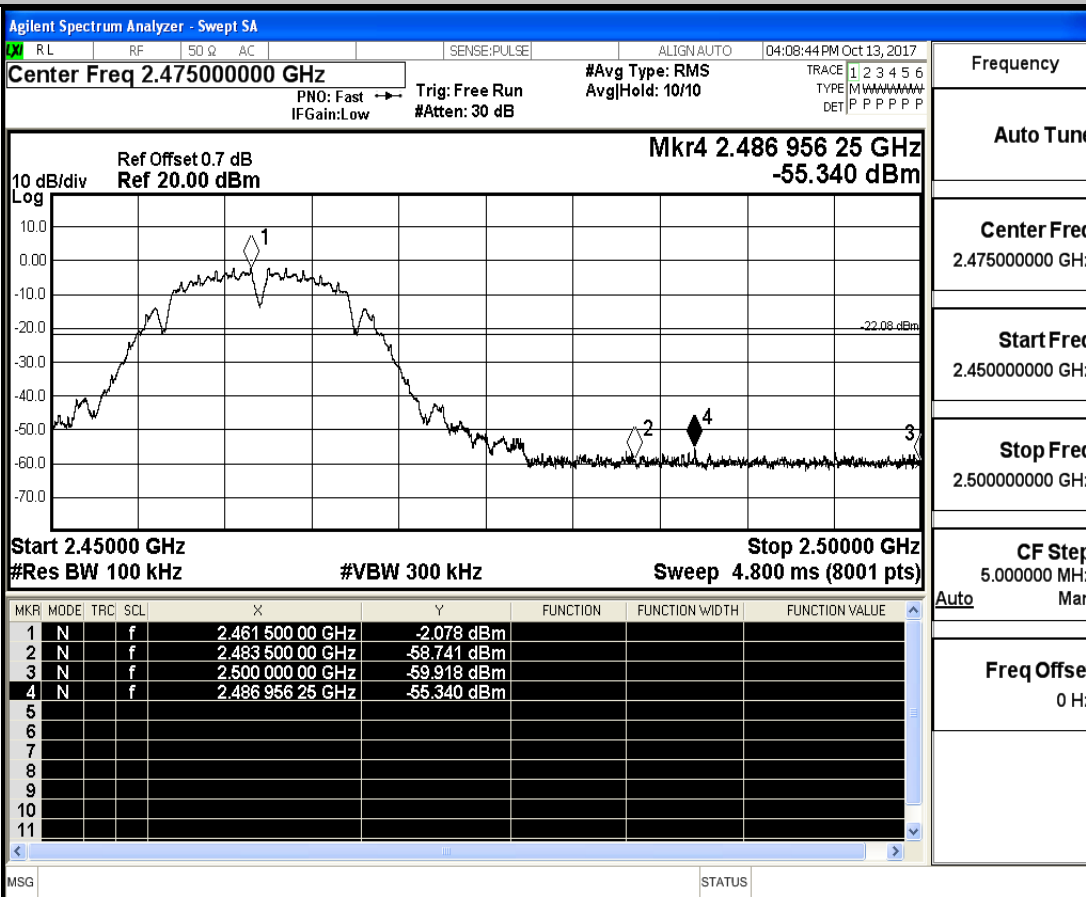
3.Band-edge for RF Conducted Emissions

Test Mode	Test Channel	Ant	Carrier Power[dBm]	Max. Spurious Level [dBm]	Limit [dBm]	Verdict
11B	2412	Ant1	-2.642	-56.143	-22.64	PASS
11B	2462	Ant1	-2.078	-55.340	-22.08	PASS
11G	2412	Ant1	-5.550	-54.267	-25.55	PASS
11G	2462	Ant1	-6.092	-51.465	-26.09	PASS
11N20SISO	2412	Ant1	-6.039	-45.481	-26.04	PASS
11N20SISO	2462	Ant1	-5.999	-51.762	-26	PASS
11N40SISO	2422	Ant1	-9.627	-39.900	-29.63	PASS
11N40SISO	2452	Ant1	-9.610	-45.482	-29.61	PASS

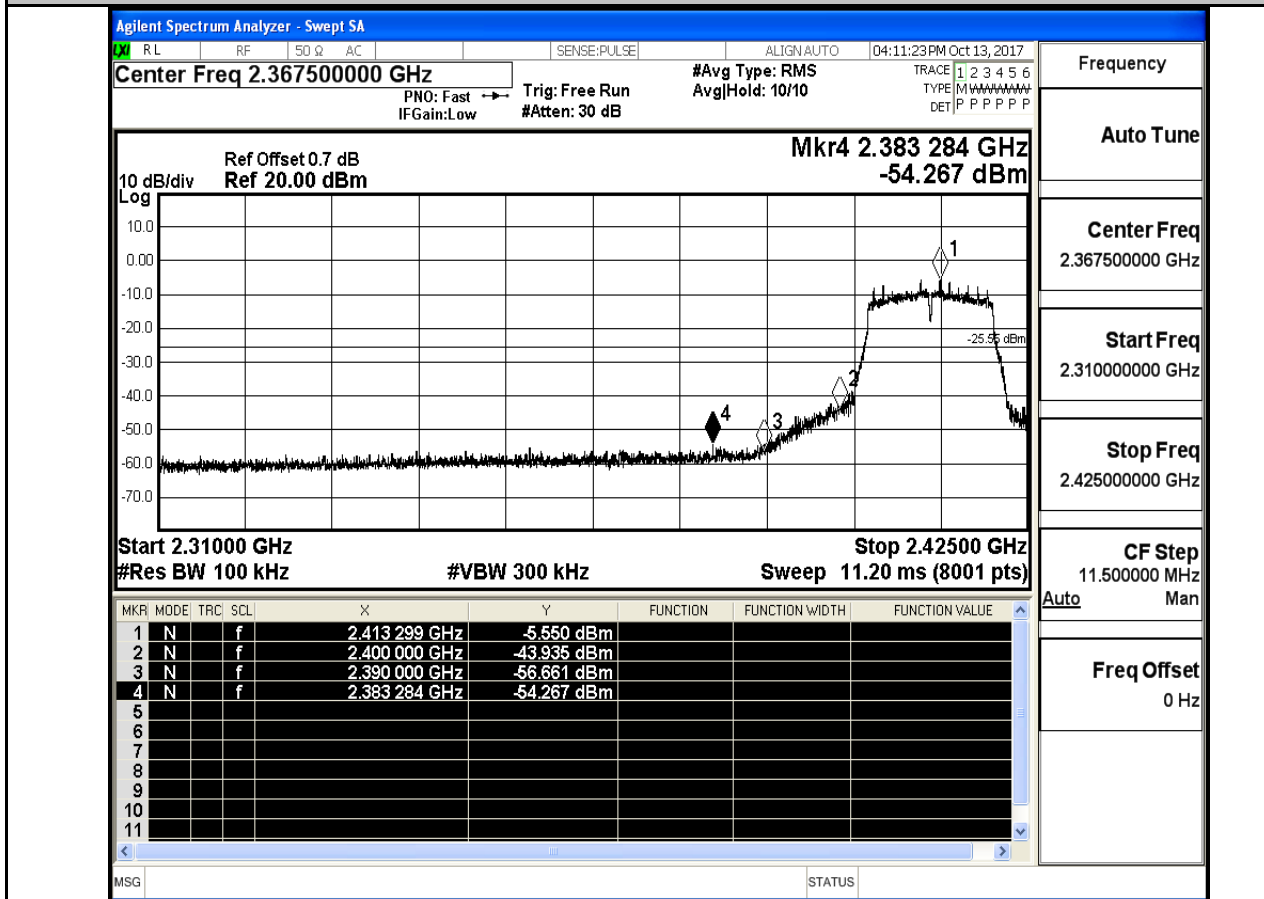
Band-edge for RF Conducted Emissions_11B_2412_Ant1



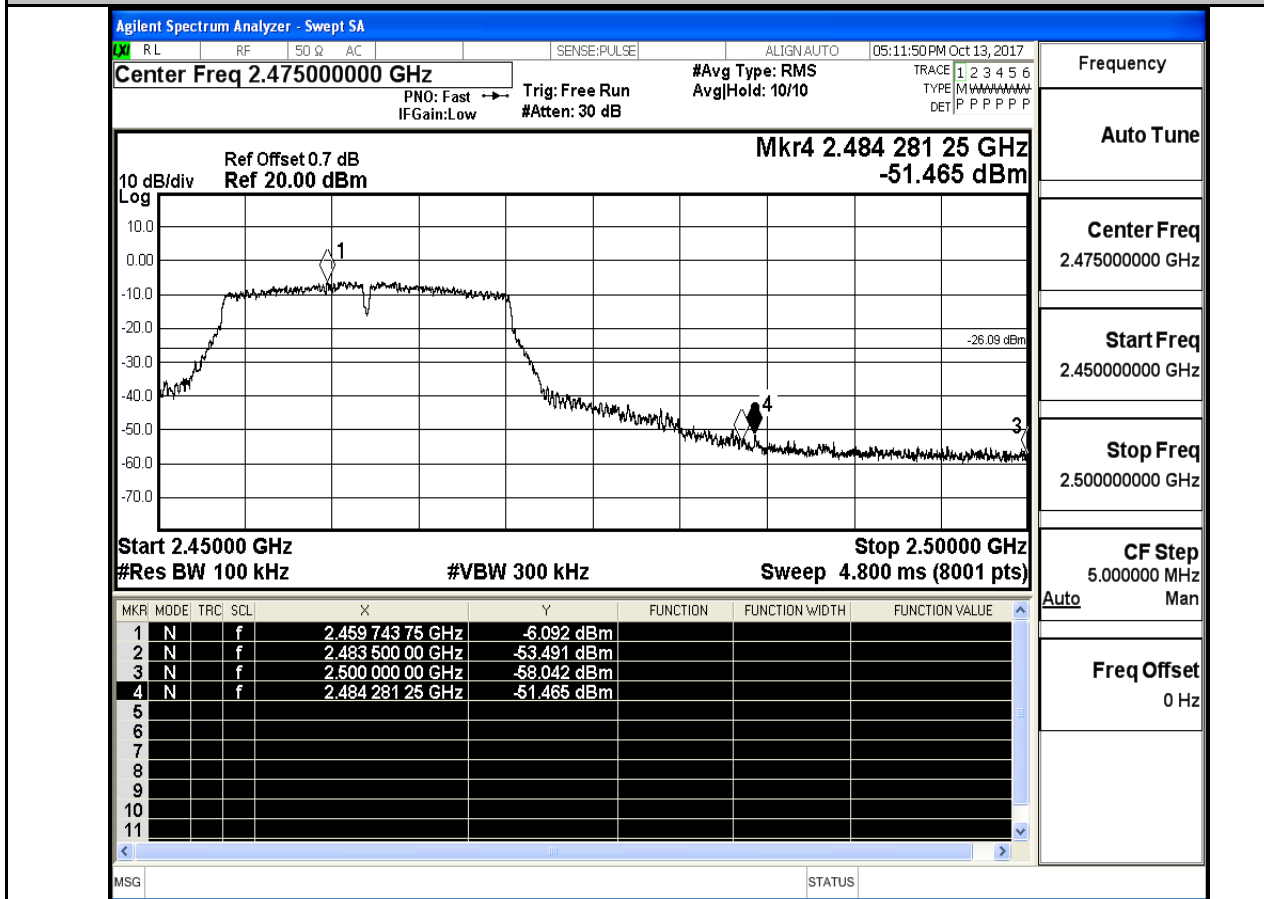
Band-edge for RF Conducted Emissions_11B_2462_Ant1



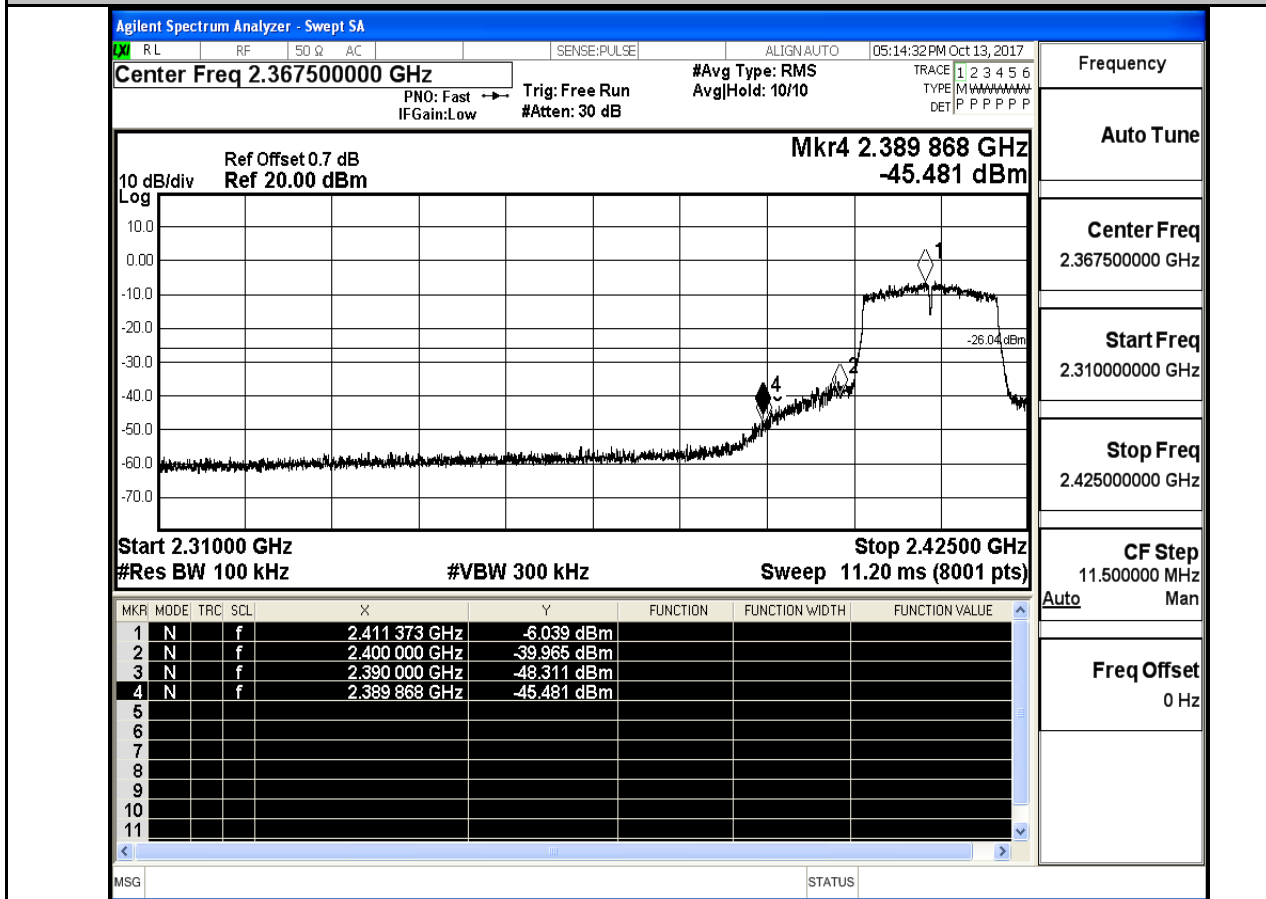
Band-edge for RF Conducted Emissions_11G_2412_Ant1



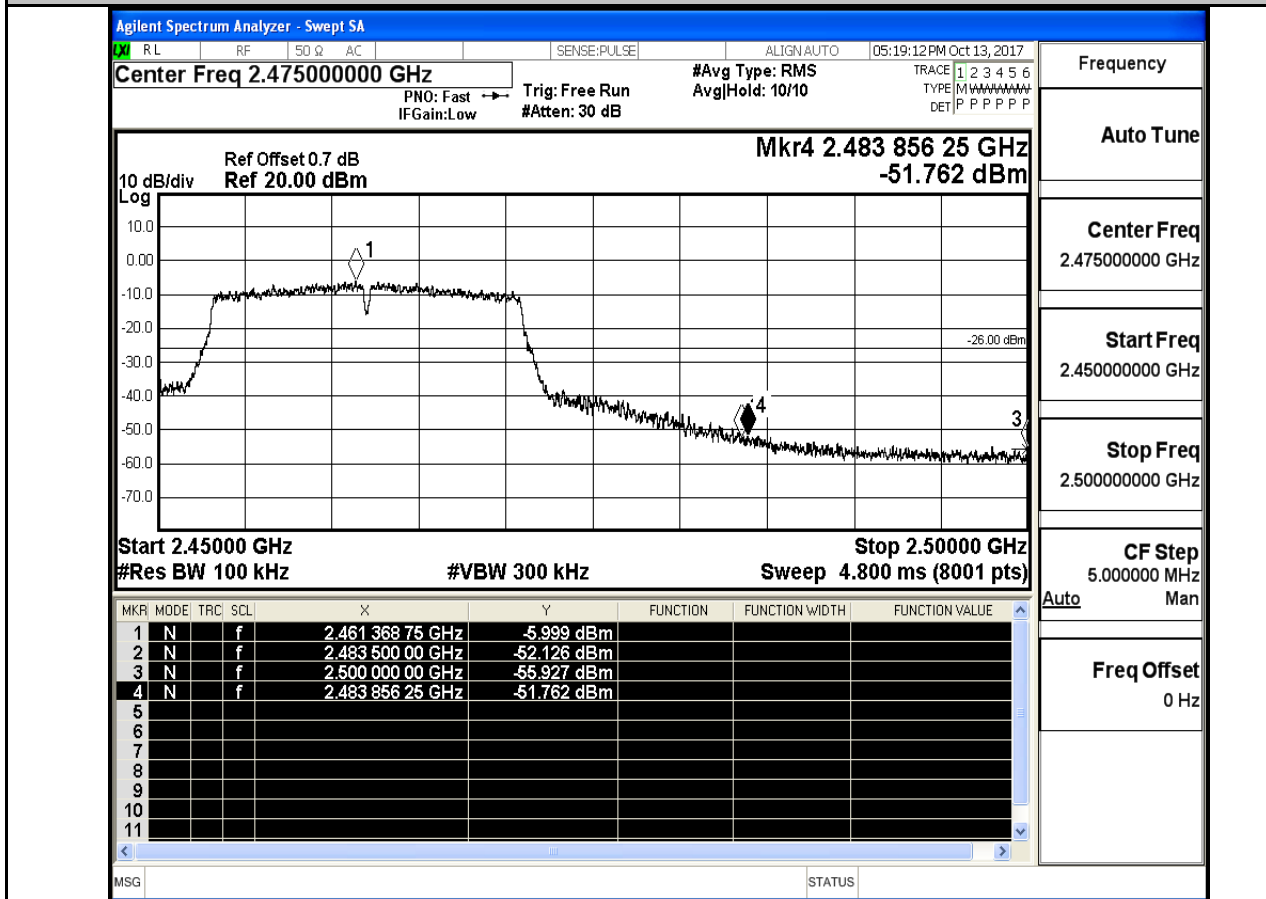
Band-edge for RF Conducted Emissions_11G_2462_Ant1



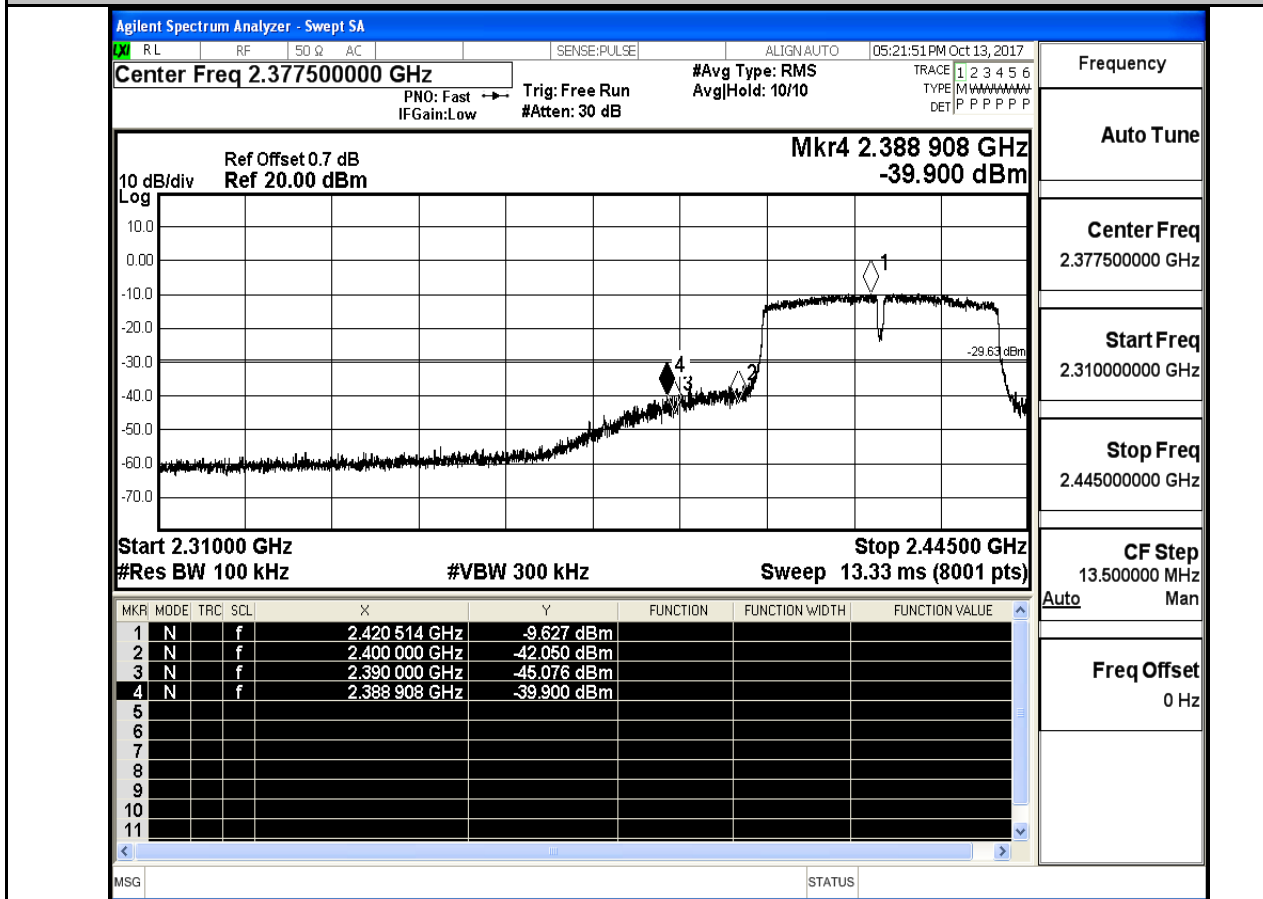
Band-edge for RF Conducted Emissions_11N20SISO_2412_Ant1



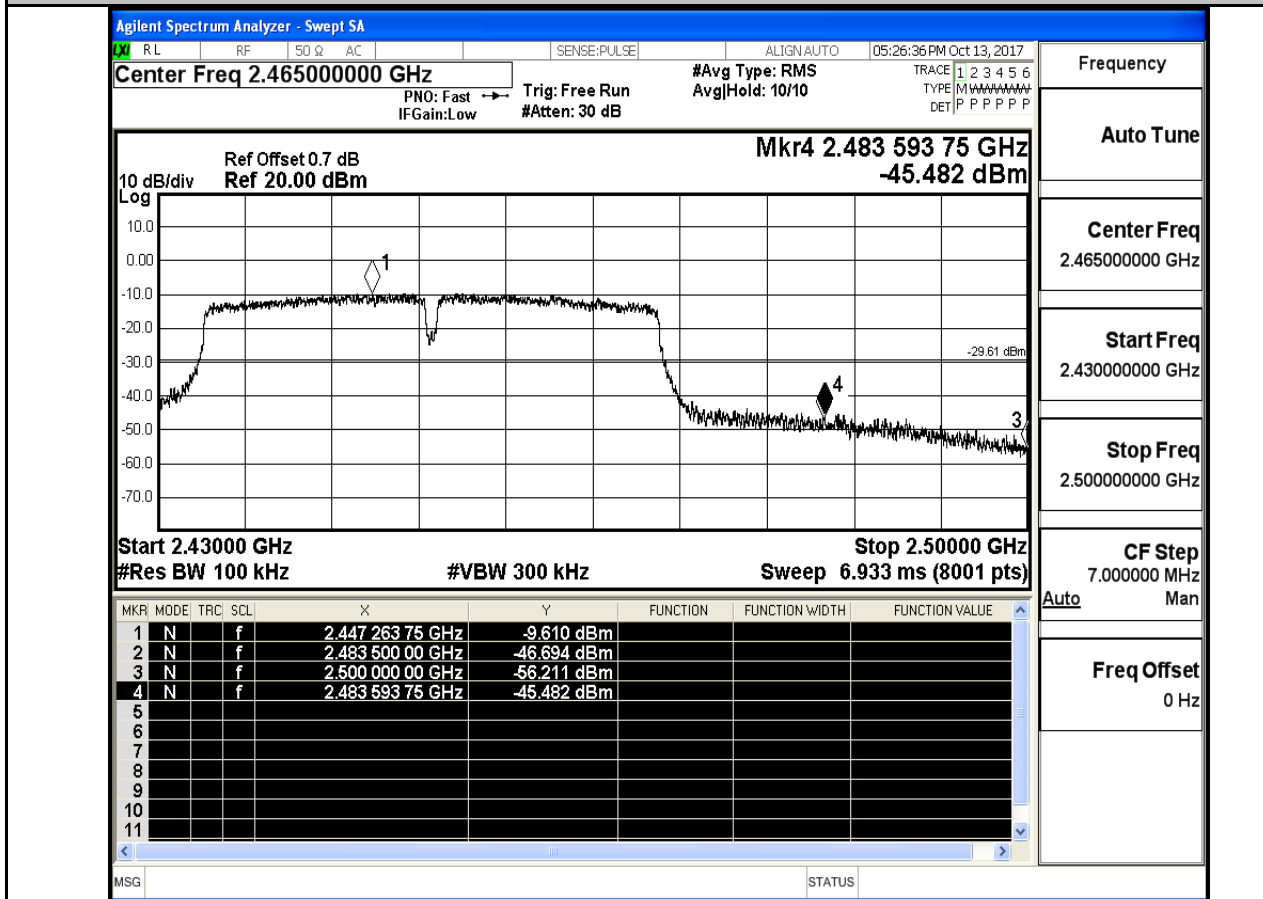
Band-edge for RF Conducted Emissions_11N20SISO_2462_Ant1



Band-edge for RF Conducted Emissions_11N40SISO_2422_Ant1



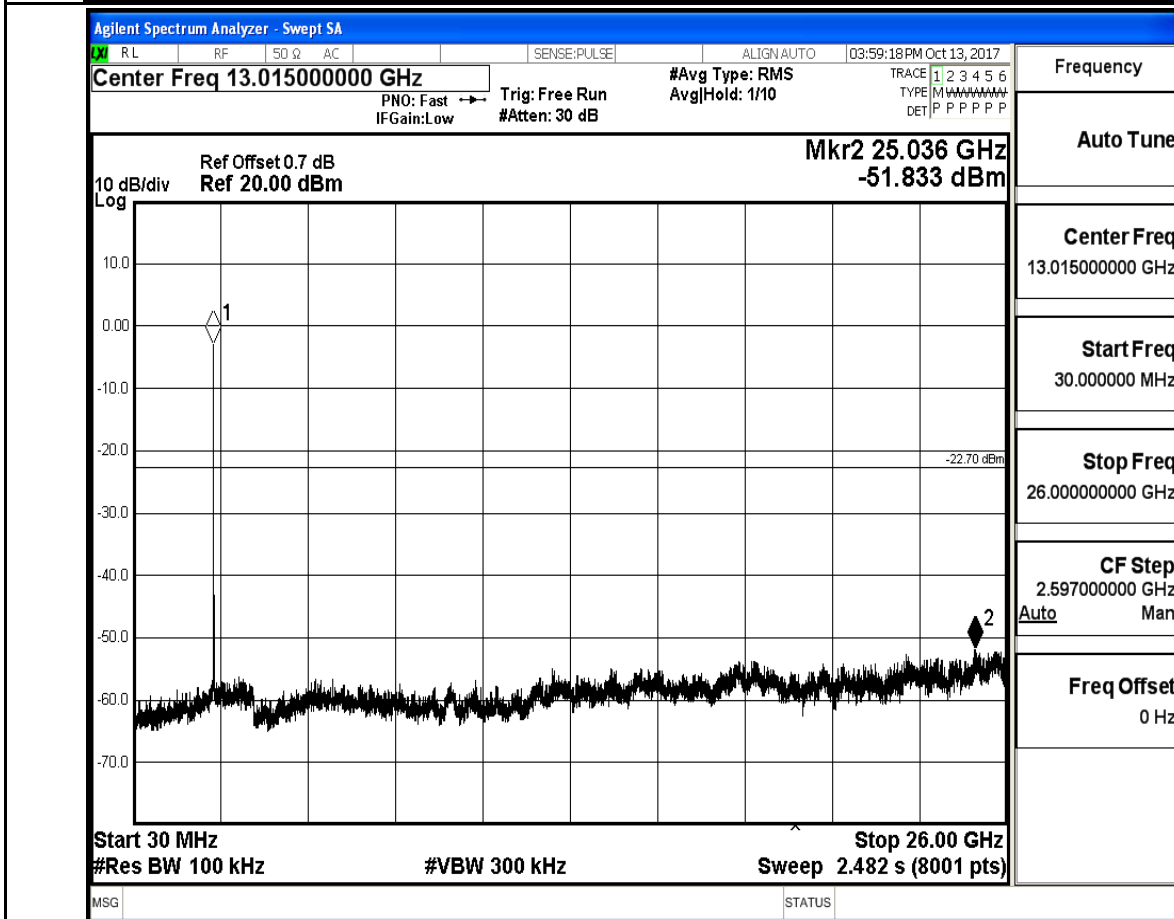
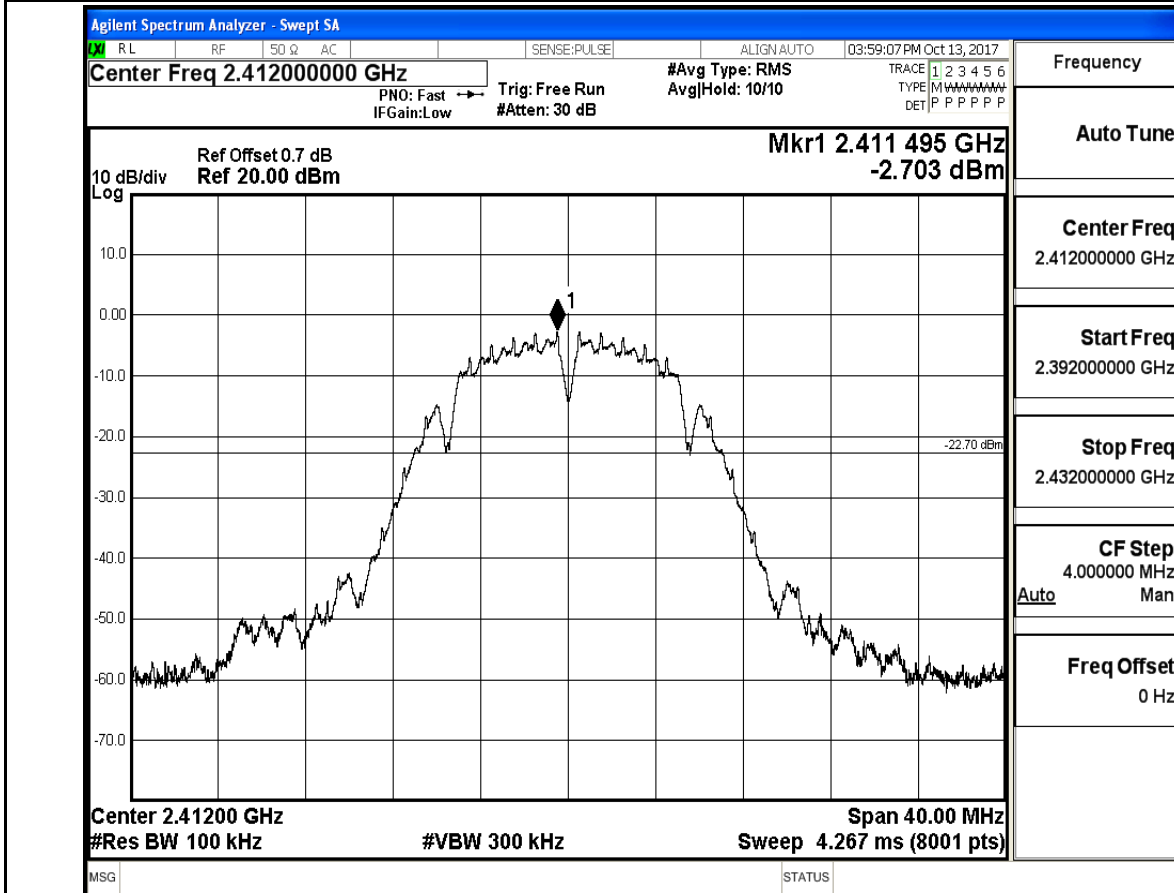
Band-edge for RF Conducted Emissions_11N40SISO_2452_Ant1



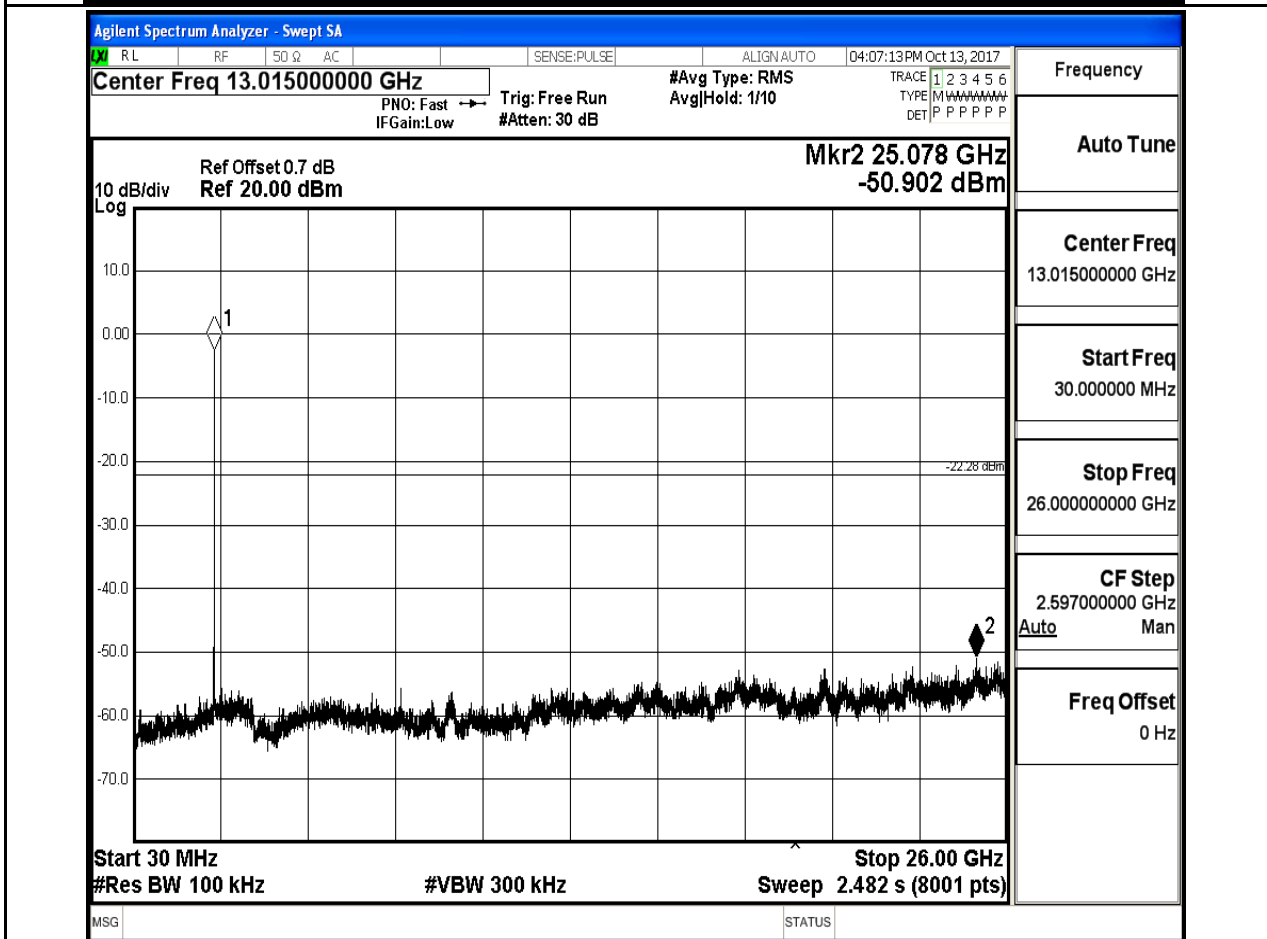
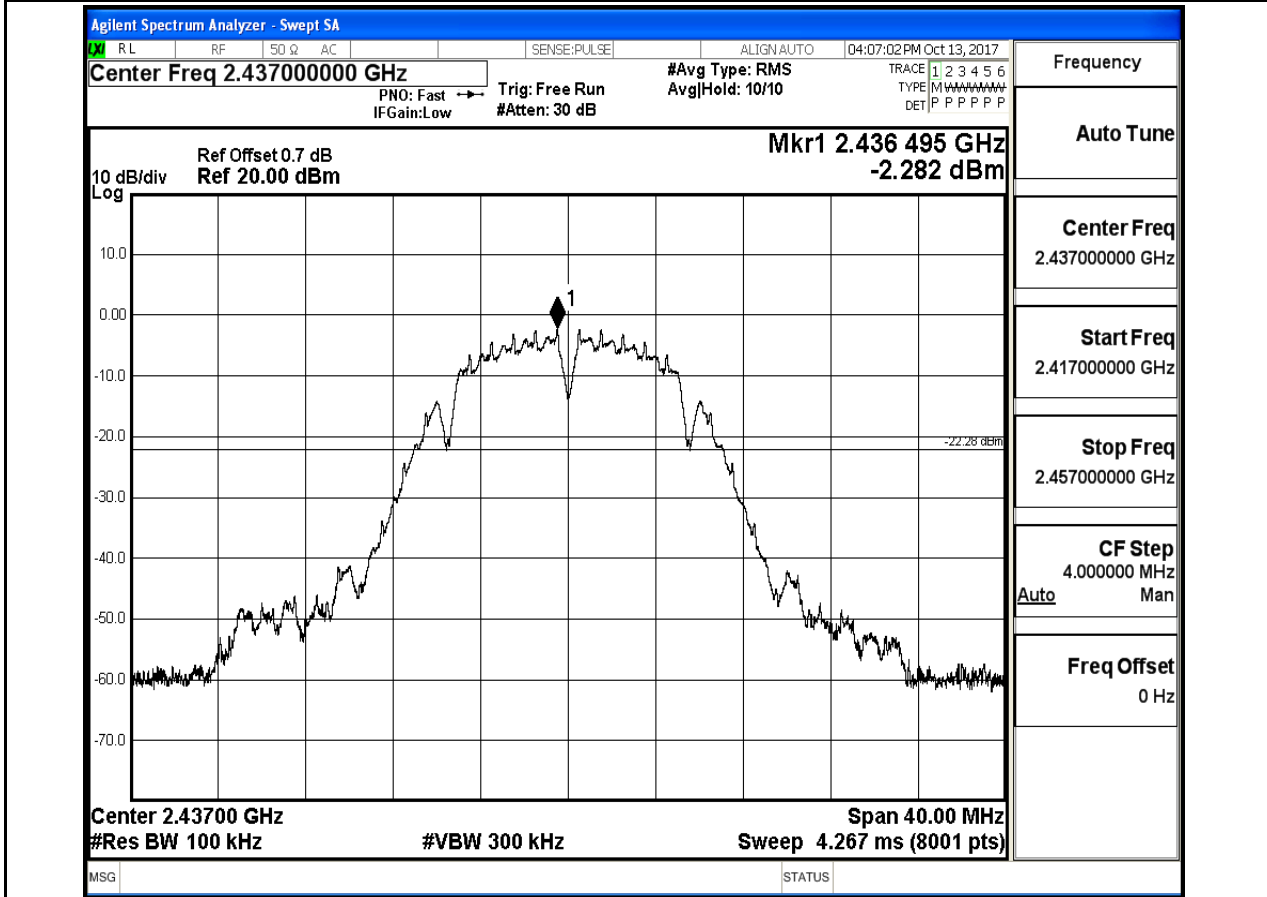
4.RF Conducted Spurious Emissions

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	-2.703	-51.833	<-22.703	PASS
11B	2437	Ant1	30	26000	100	300	-2.282	-50.902	<-22.282	PASS
11B	2462	Ant1	30	26000	100	300	-2.134	-51.099	<-22.134	PASS
11G	2412	Ant1	30	26000	100	300	-5.797	-51.230	<-25.797	PASS
11G	2437	Ant1	30	26000	100	300	-6.001	-50.533	<-26.001	PASS
11G	2462	Ant1	30	26000	100	300	-6.358	-50.954	<-26.358	PASS
11N20SISO	2412	Ant1	30	26000	100	300	-5.886	-51.266	<-25.886	PASS
11N20SISO	2437	Ant1	30	26000	100	300	-5.712	-51.093	<-25.712	PASS
11N20SISO	2462	Ant1	30	26000	100	300	-5.948	-50.848	<-25.948	PASS
11N40SISO	2422	Ant1	30	26000	100	300	-9.589	-50.824	<-29.589	PASS
11N40SISO	2437	Ant1	30	26000	100	300	-9.613	-50.954	<-29.613	PASS
11N40SISO	2452	Ant1	30	26000	100	300	-9.34	-51.492	<-29.34	PASS

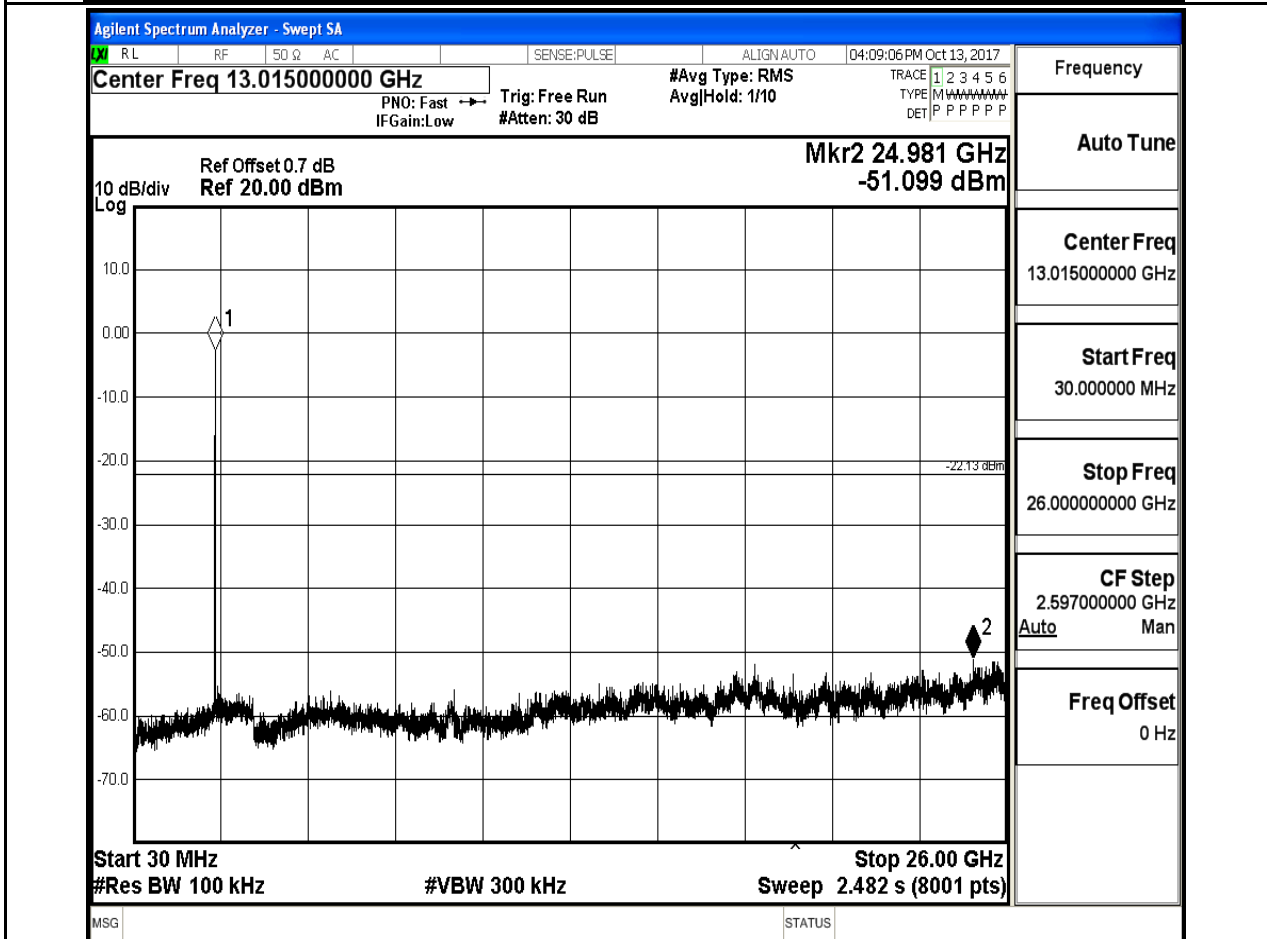
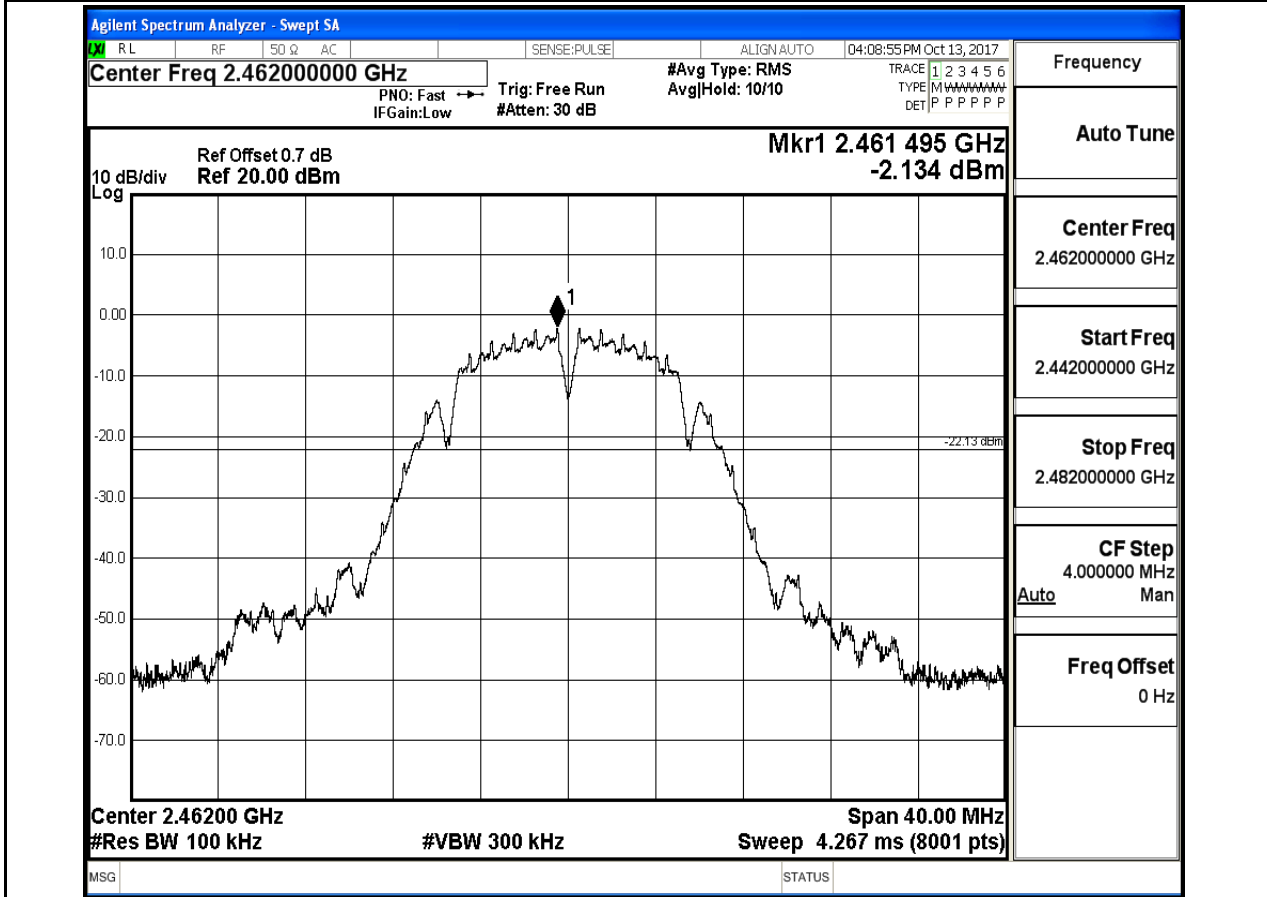
RF Conducted Spurious Emissions_11B_2412_Ant1



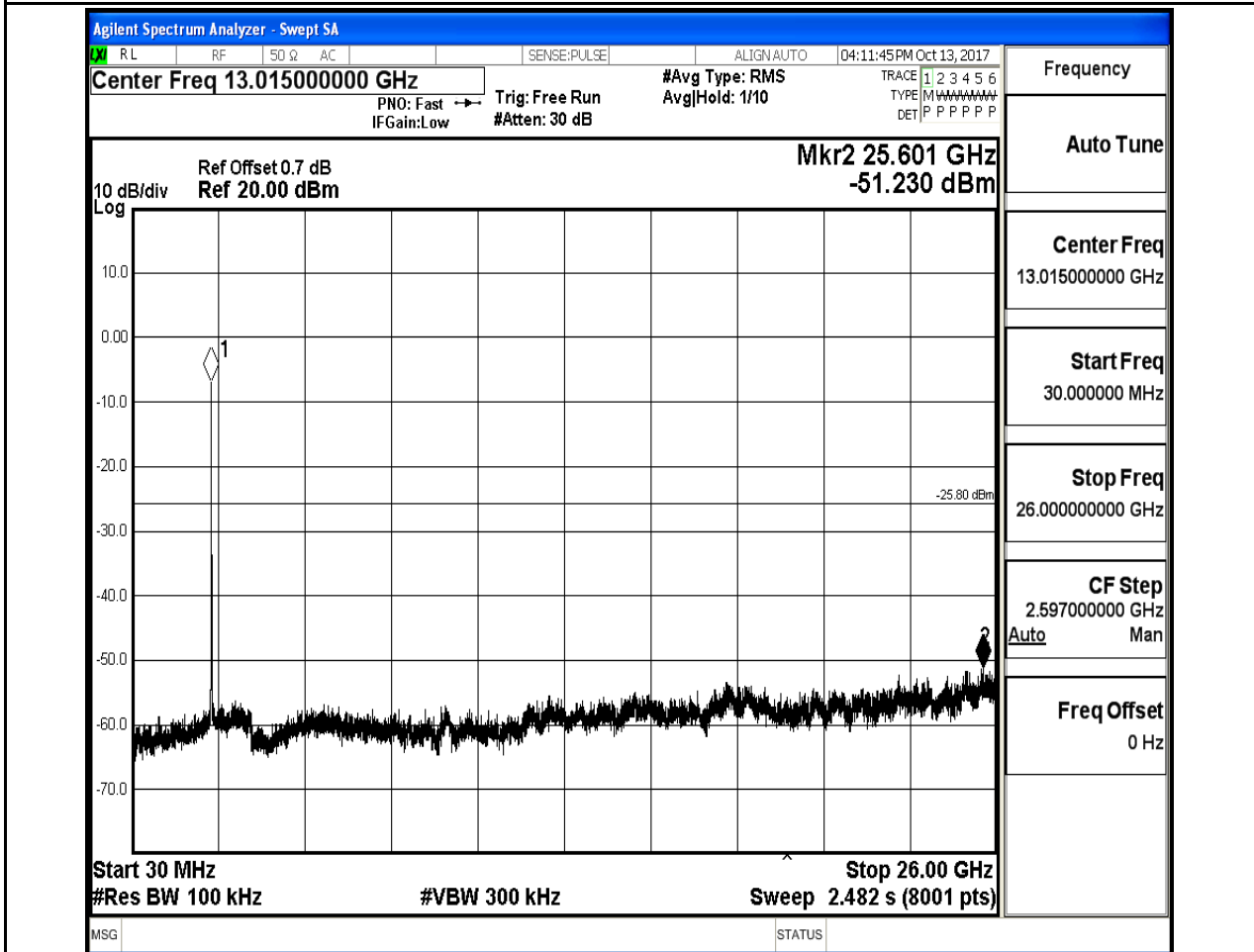
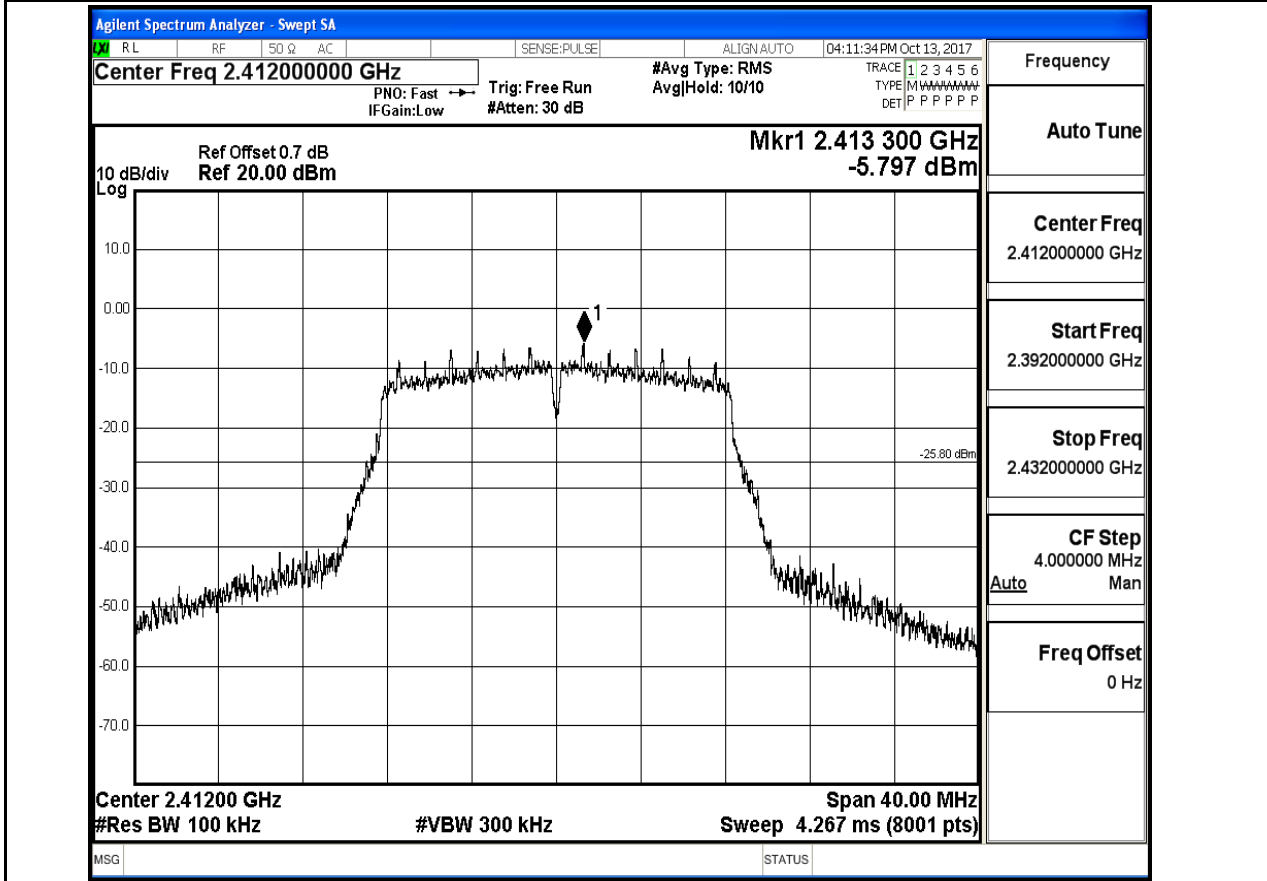
RF Conducted Spurious Emissions_11B_2437_Ant1

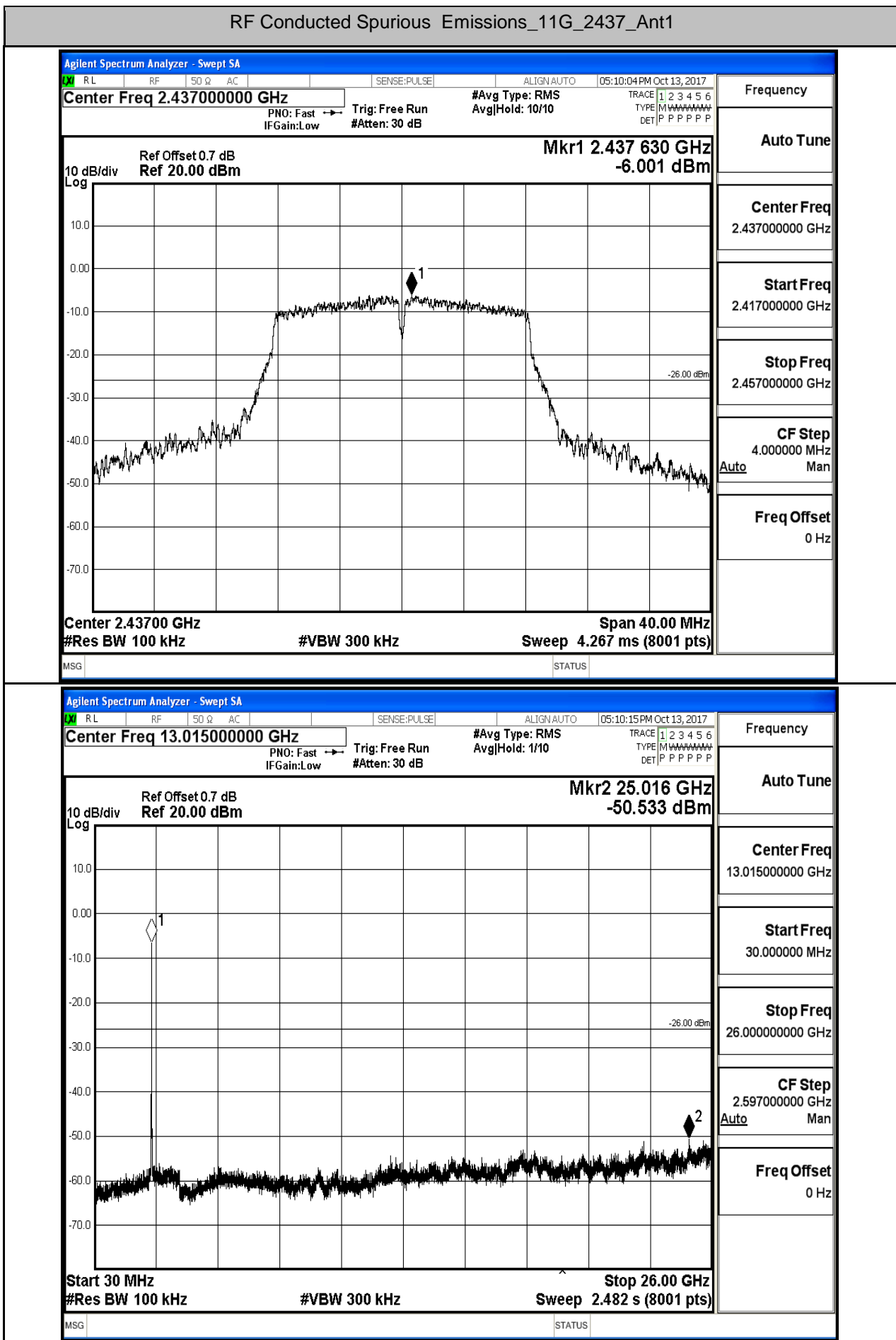


RF Conducted Spurious Emissions_11B_2462_Ant1

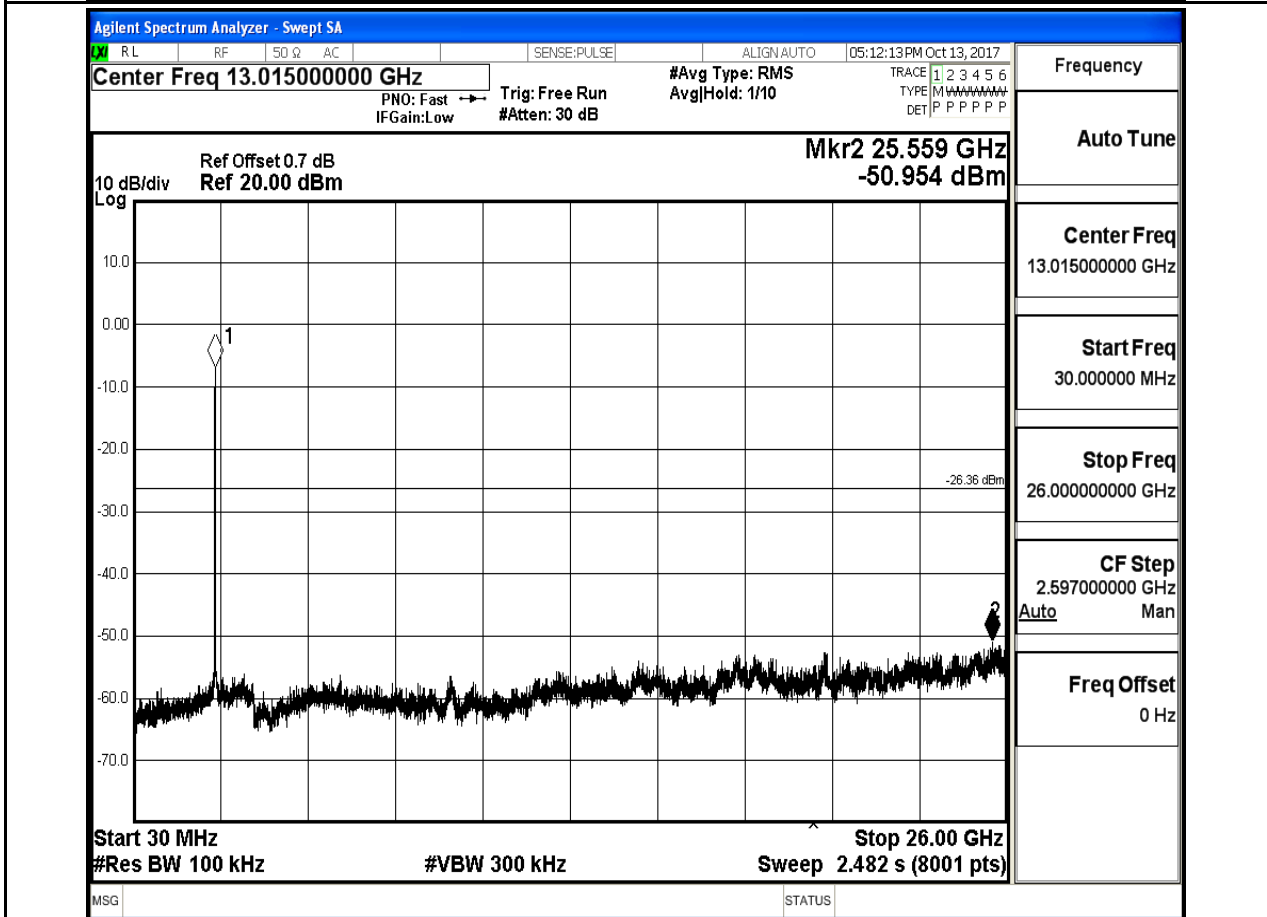
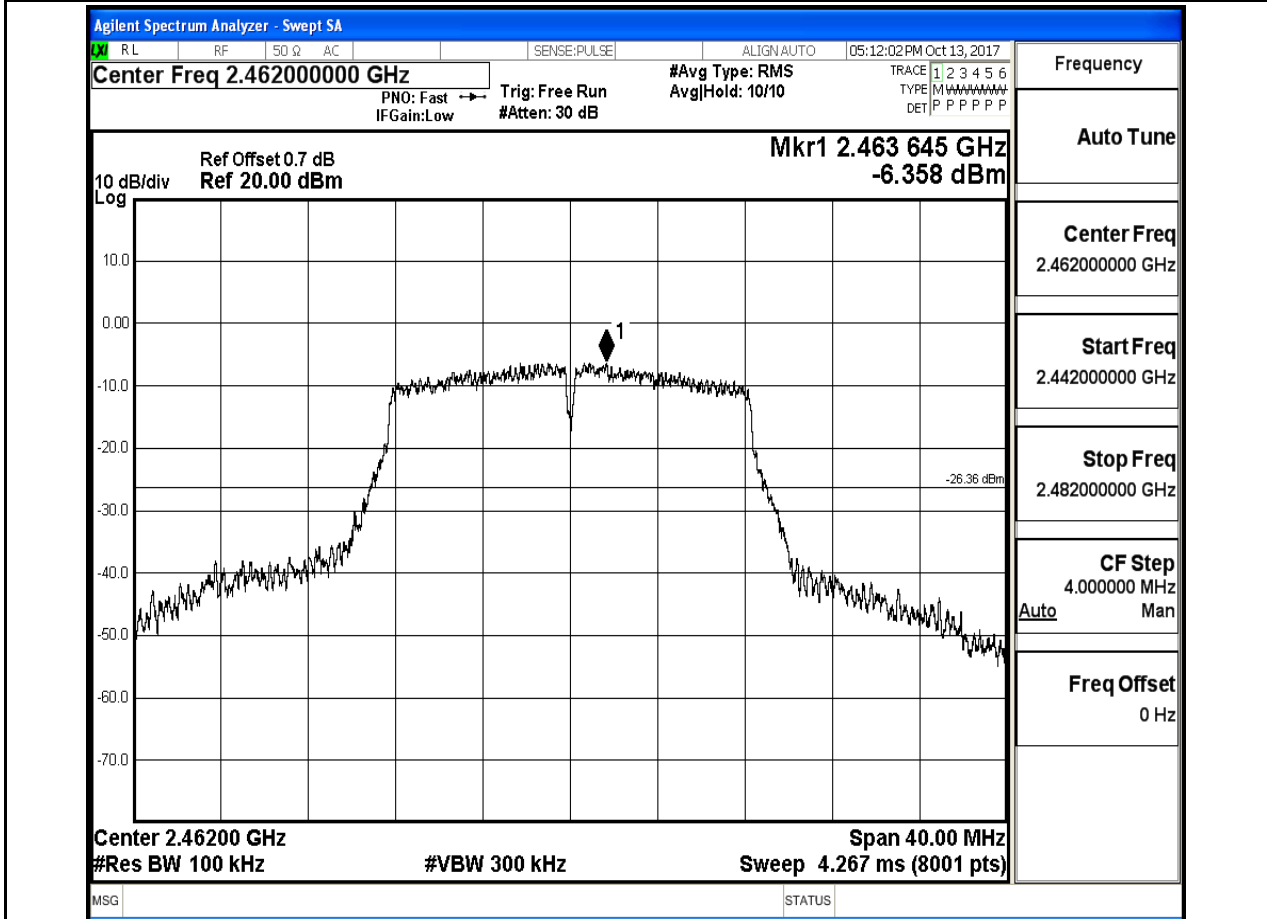


RF Conducted Spurious Emissions_11G_2412_Ant1

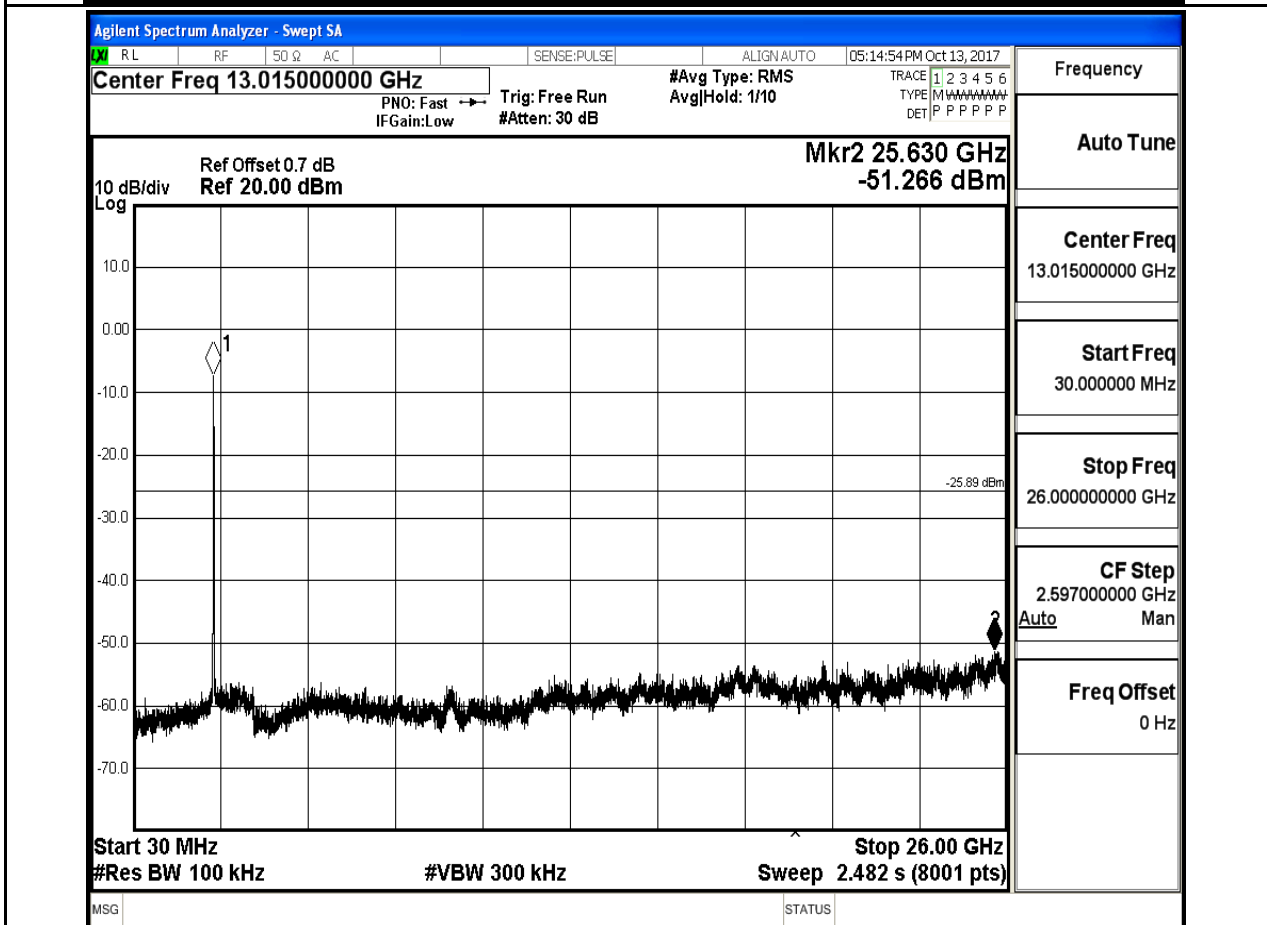
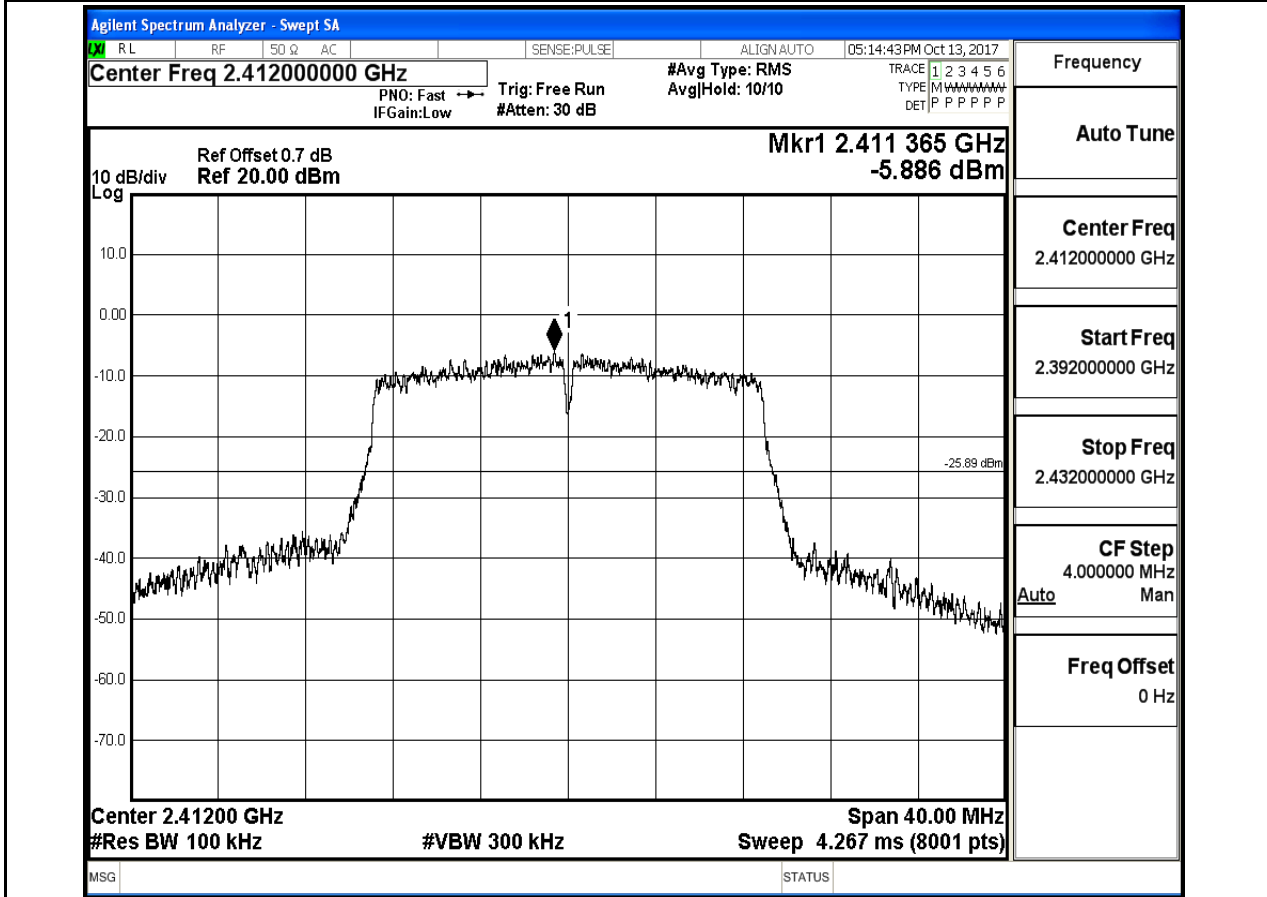




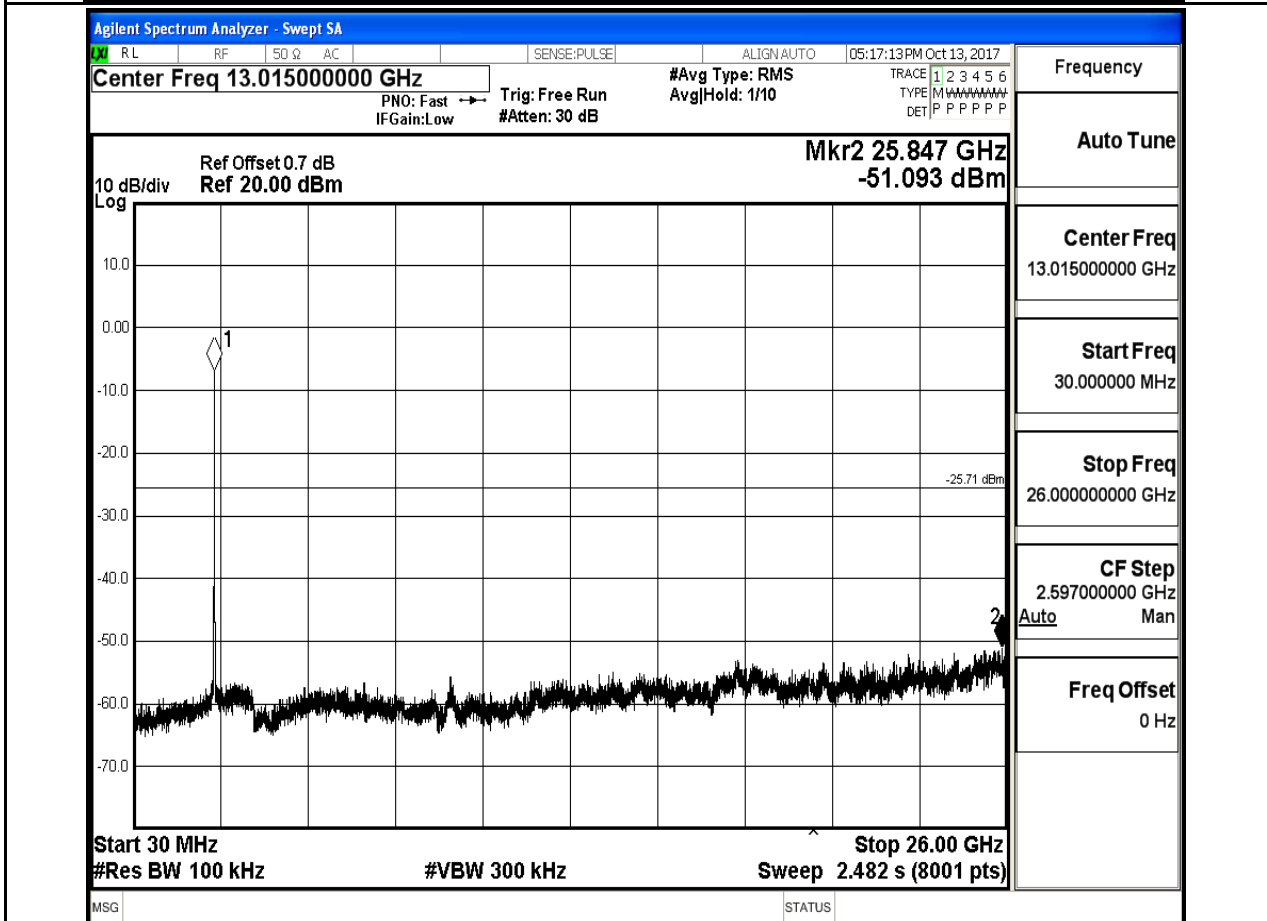
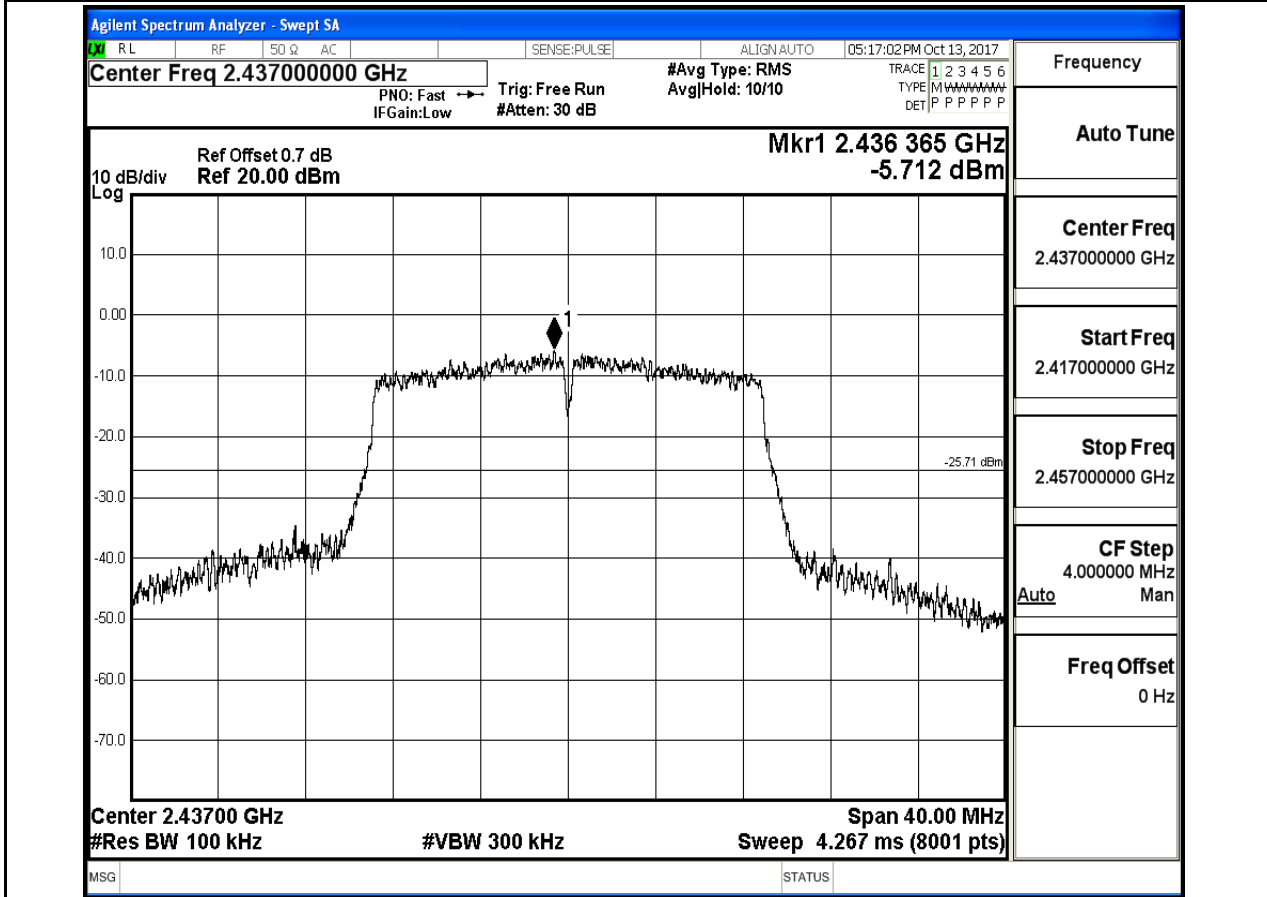
RF Conducted Spurious Emissions_11G_2462_Ant1



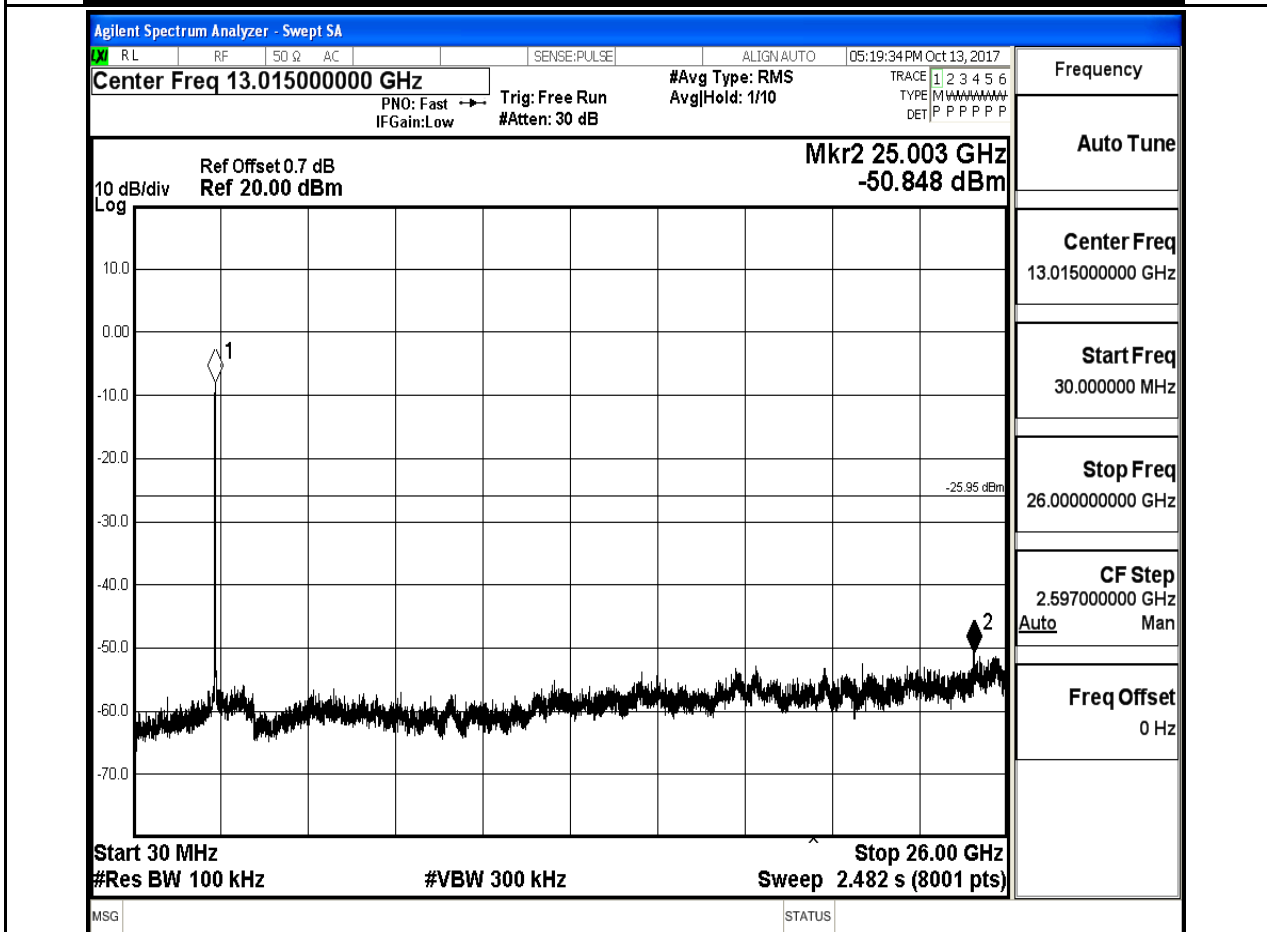
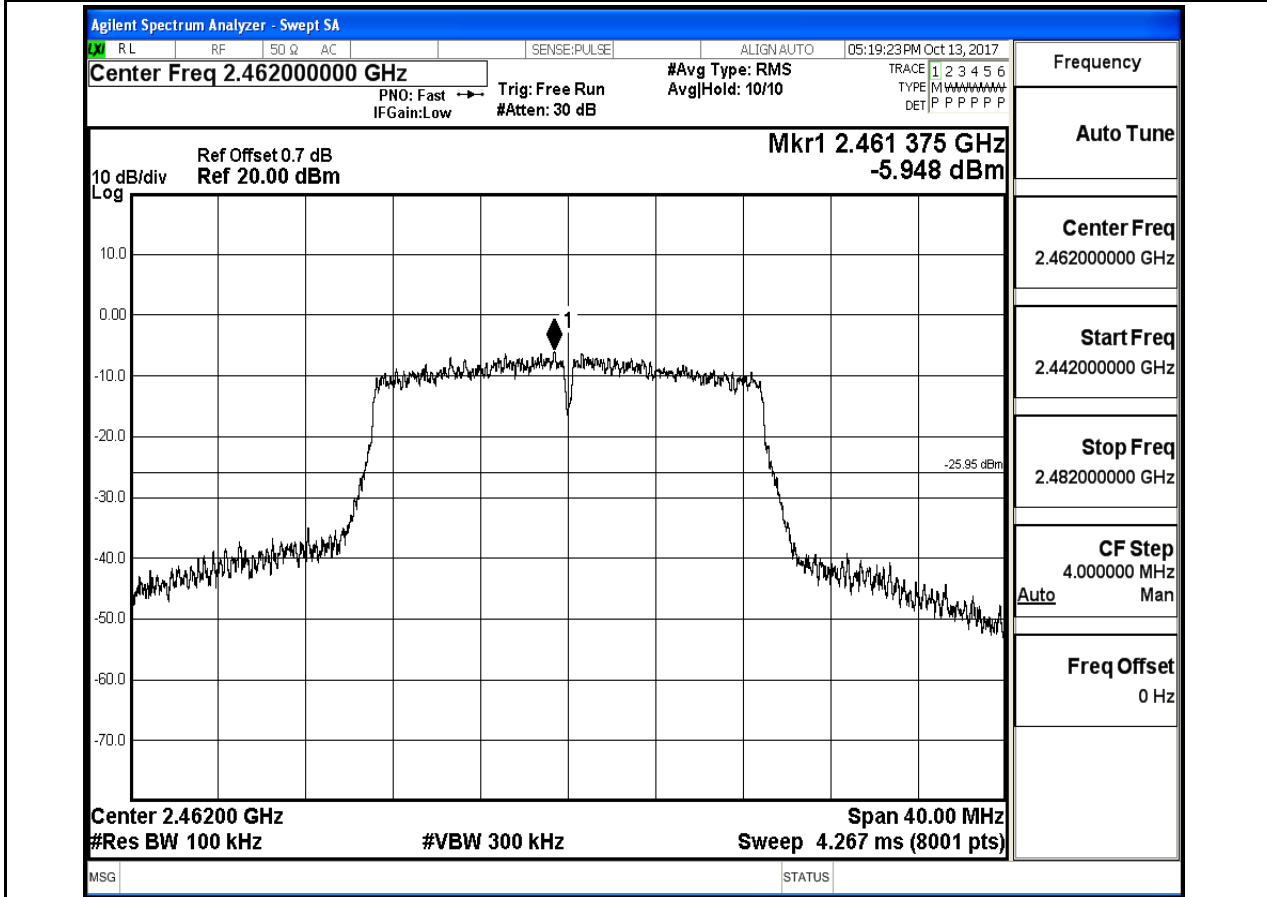
RF Conducted Spurious Emissions_11N20SISO_2412_Ant1



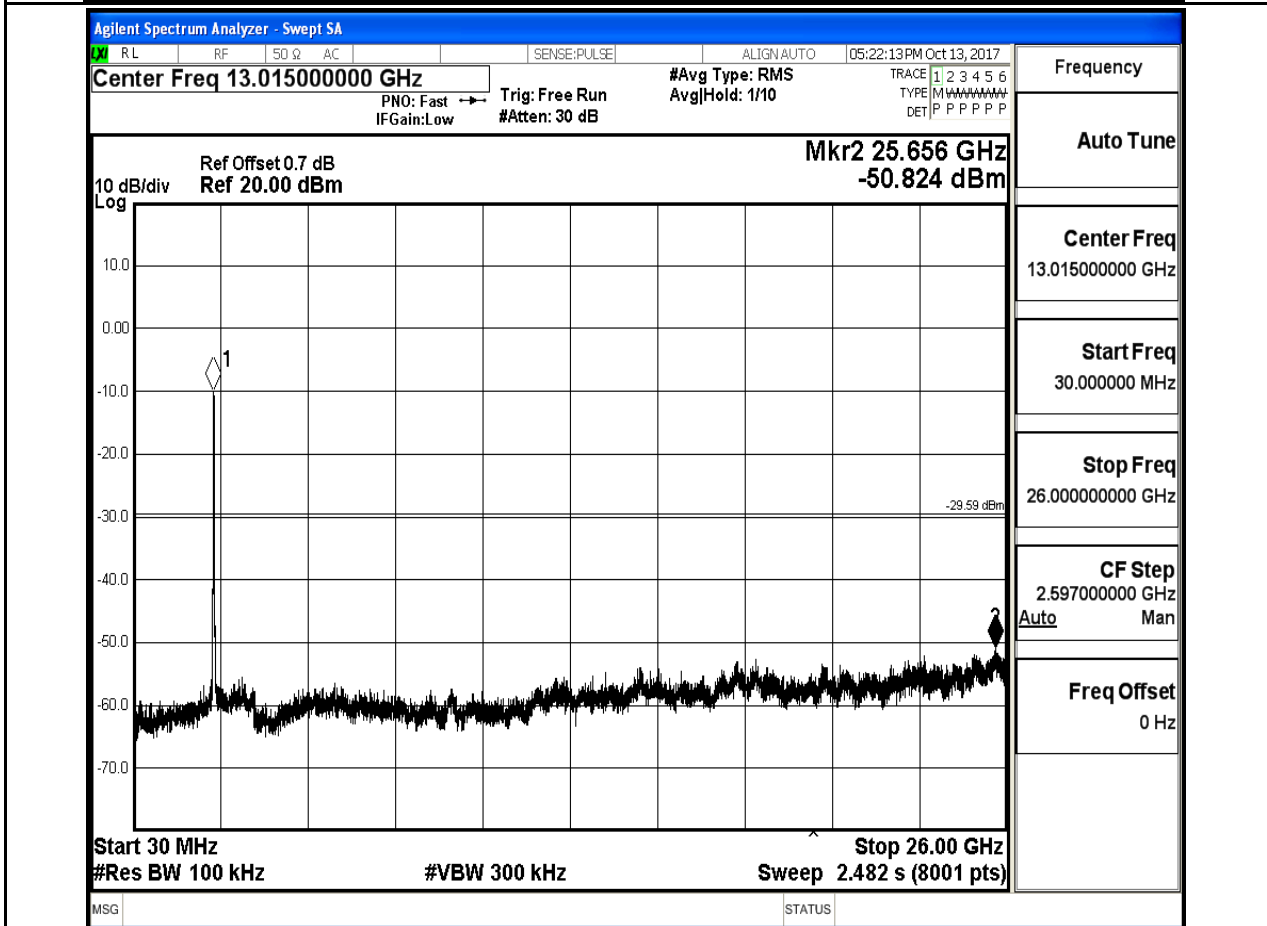
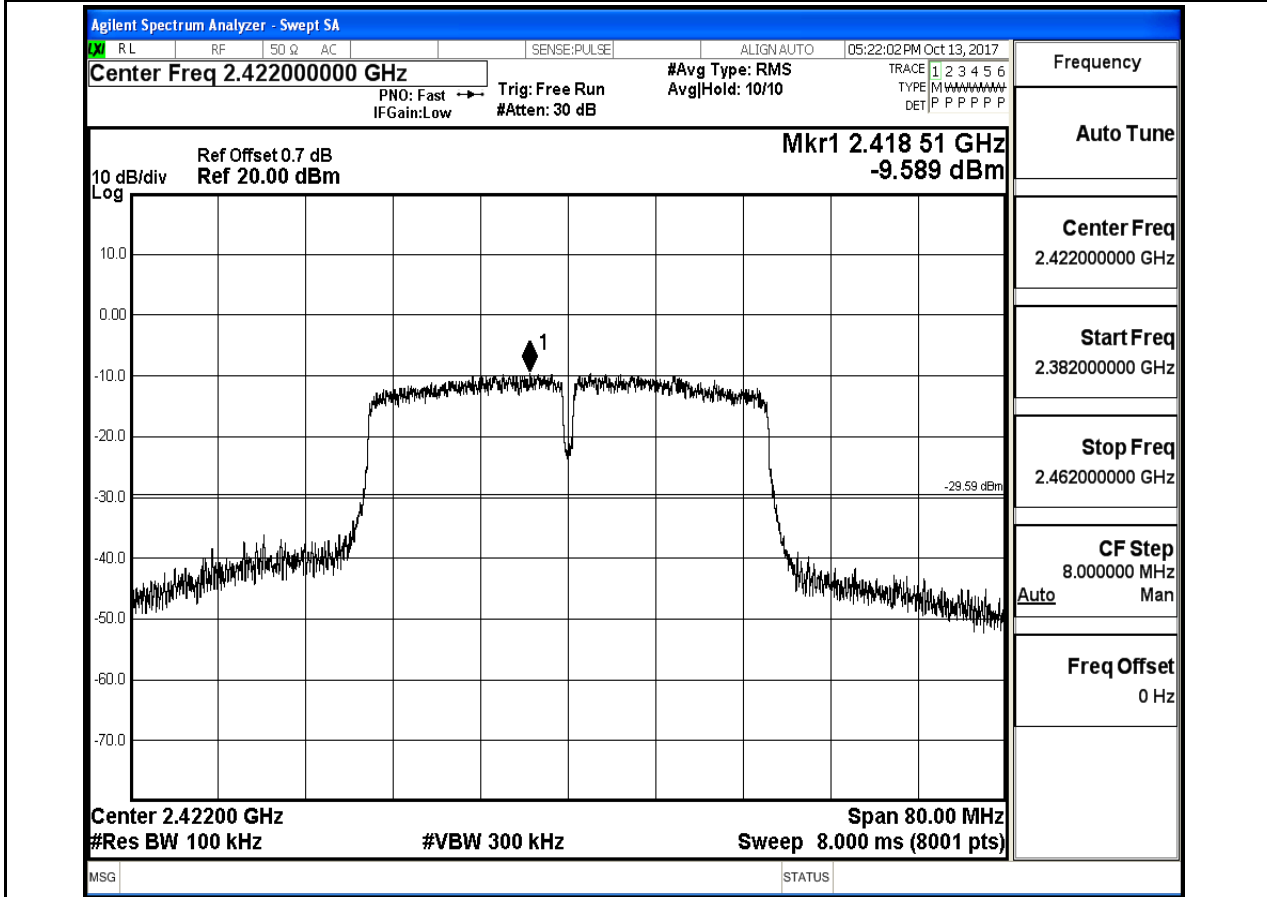
RF Conducted Spurious Emissions_11N20SISO_2437_Ant1



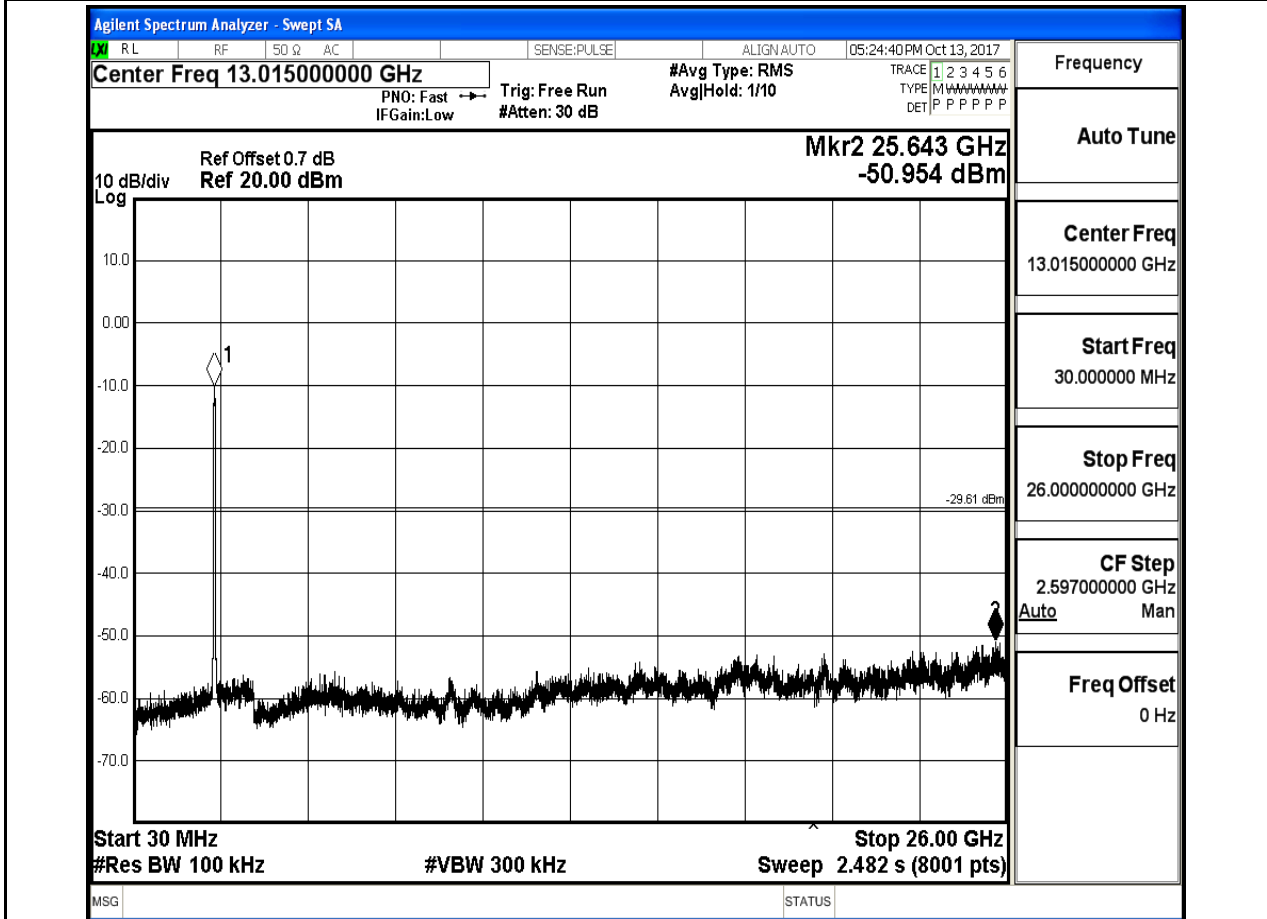
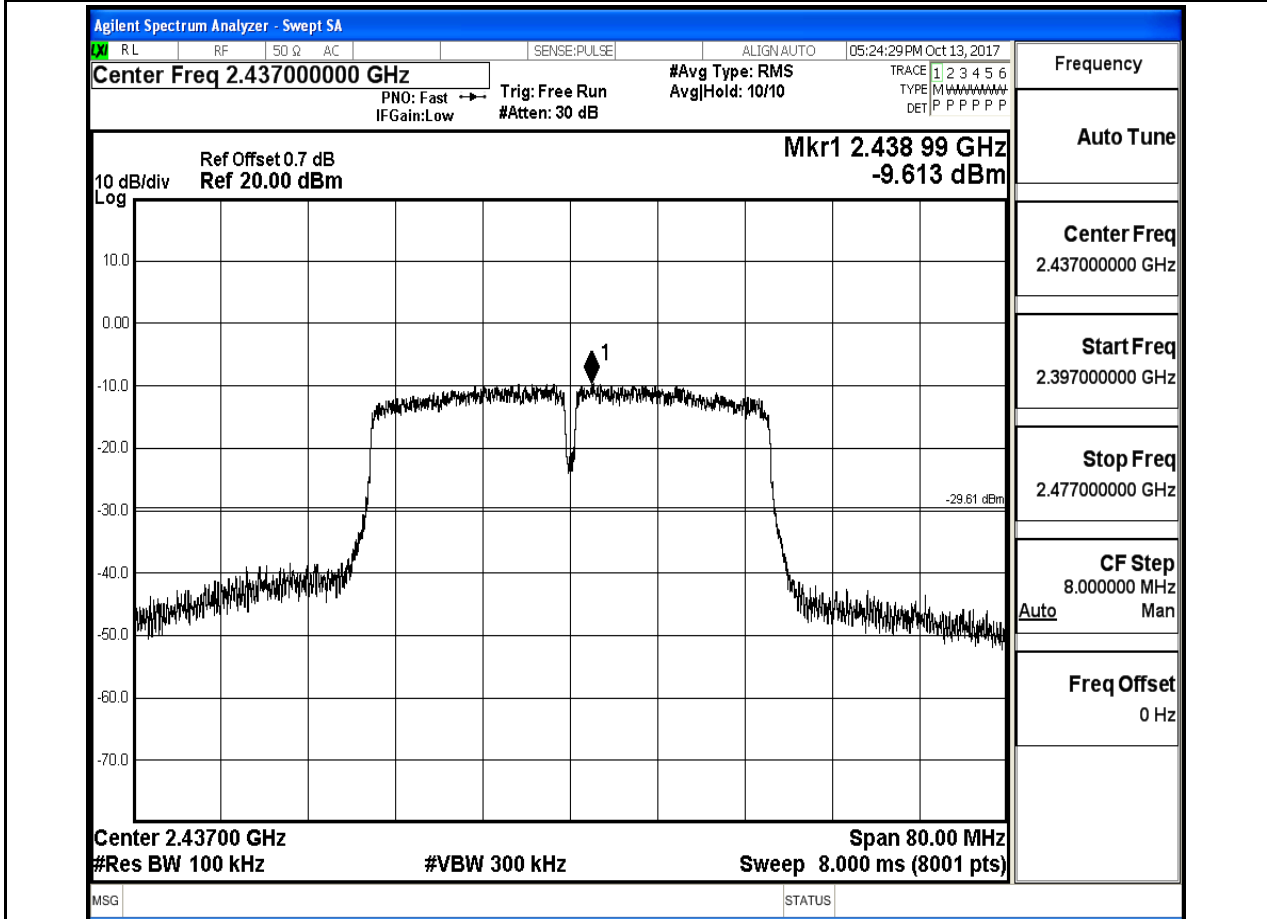
RF Conducted Spurious Emissions_11N20SISO_2462_Ant1



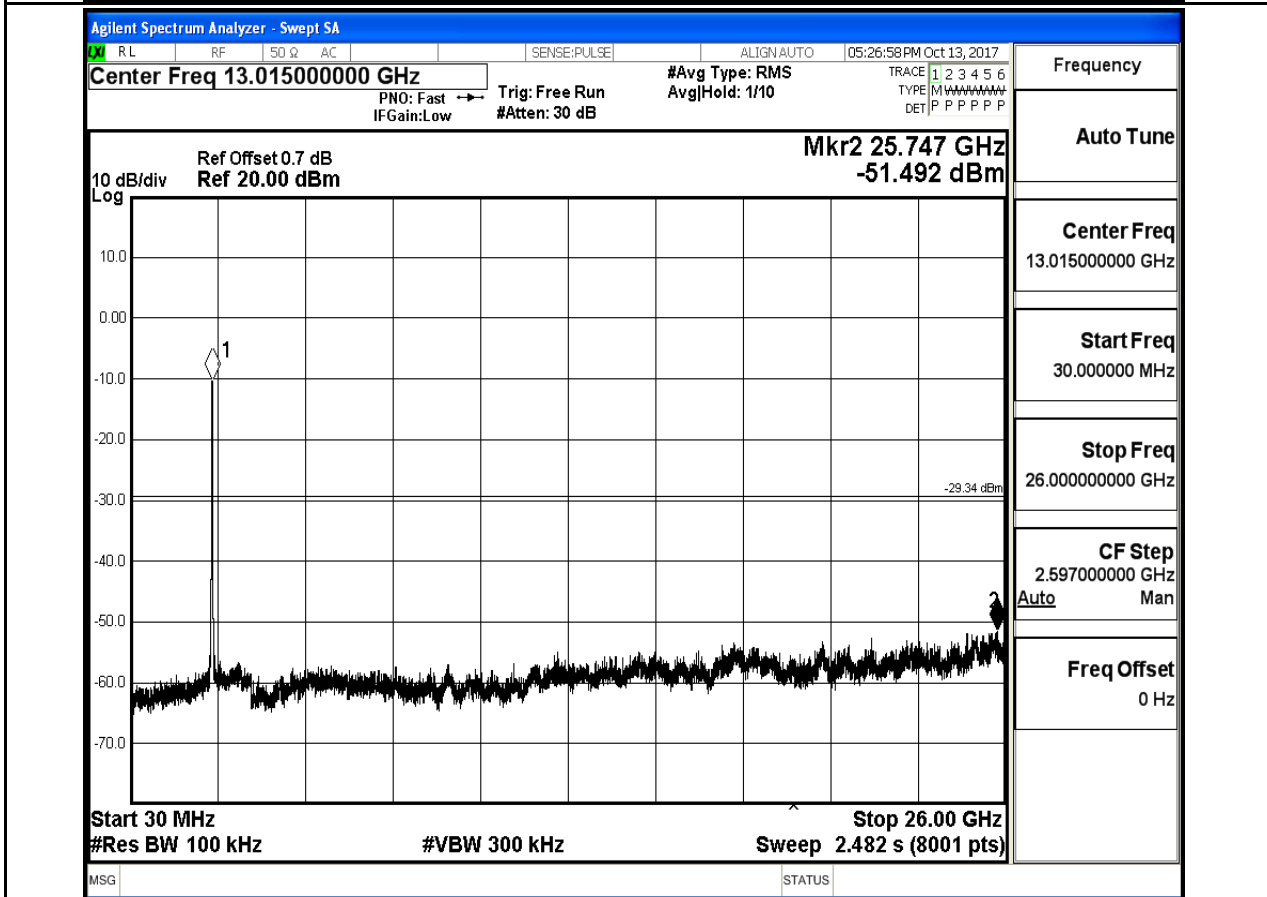
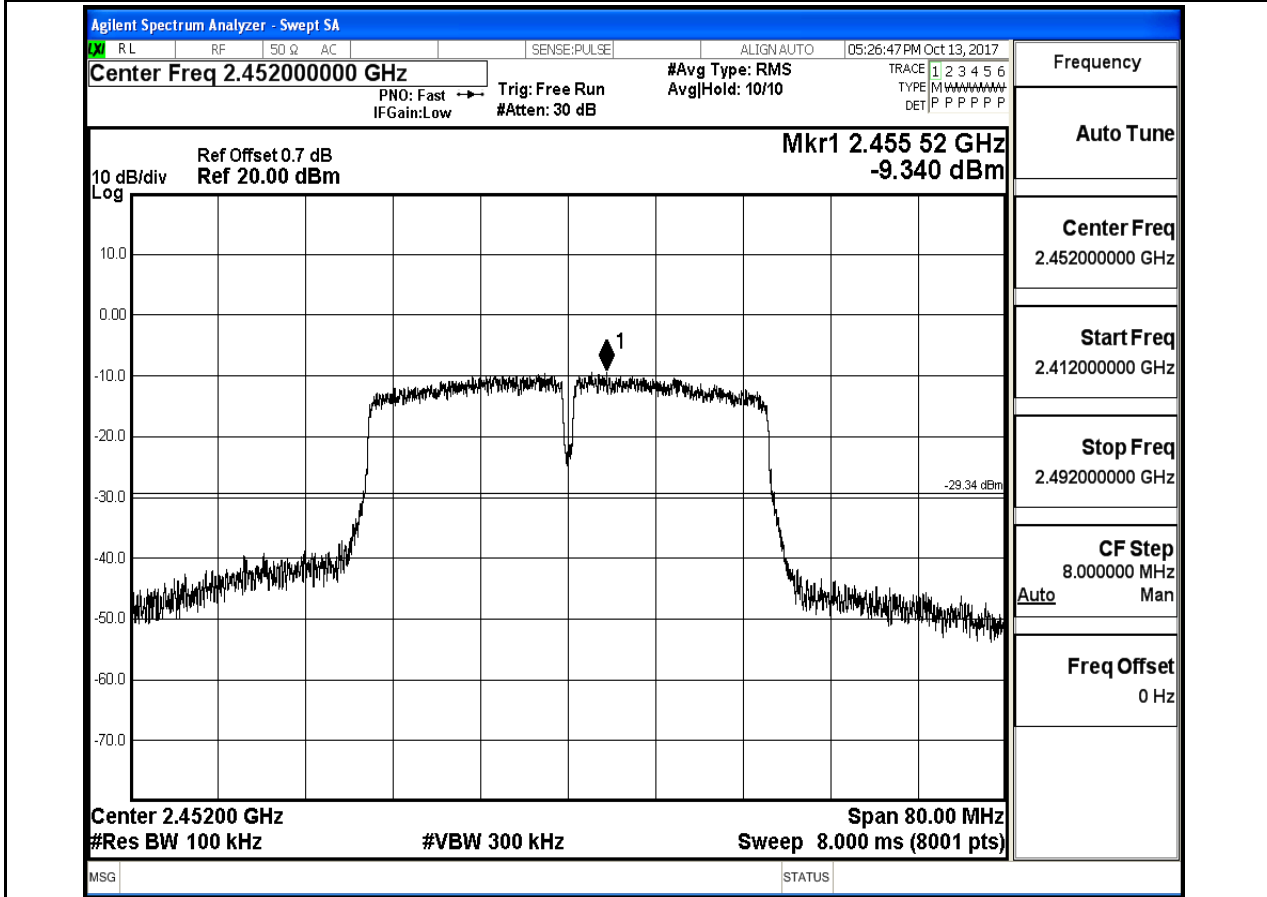
RF Conducted Spurious Emissions_11N40SISO_2422_Ant1



RF Conducted Spurious Emissions_11N40SISO_2437_Ant1



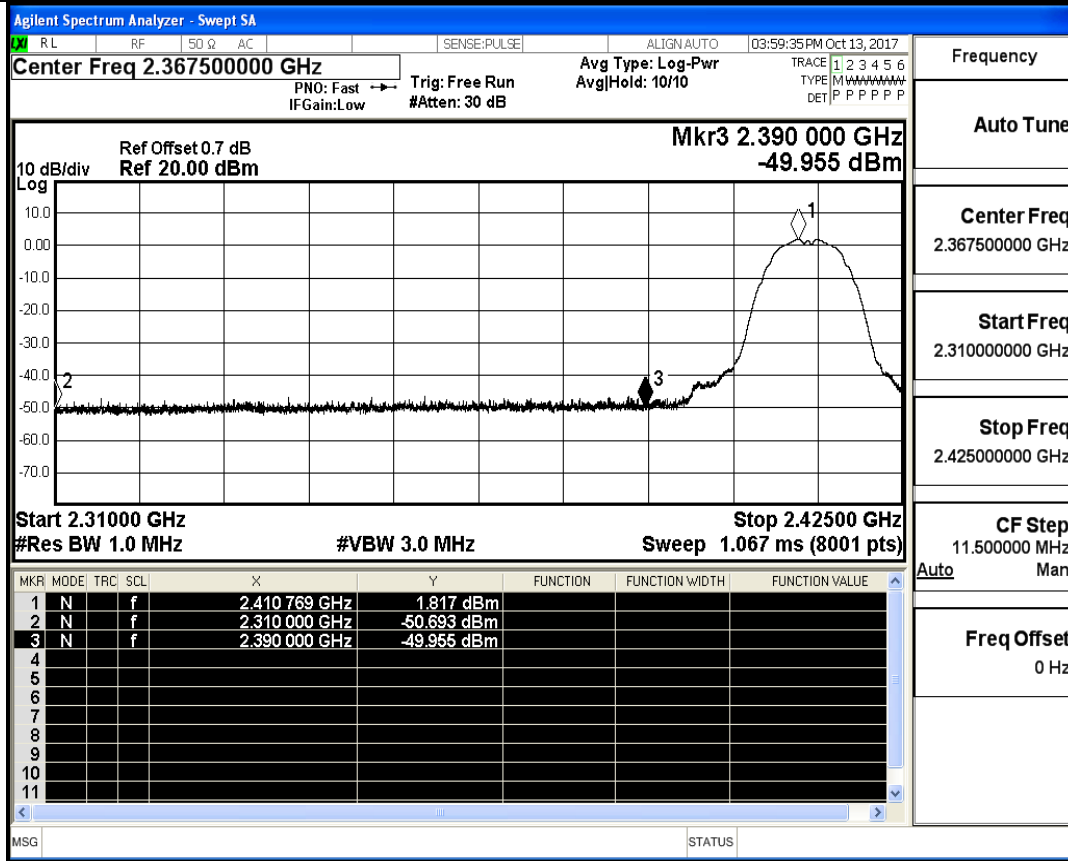
RF Conducted Spurious Emissions_11N40SISO_2452_Ant1



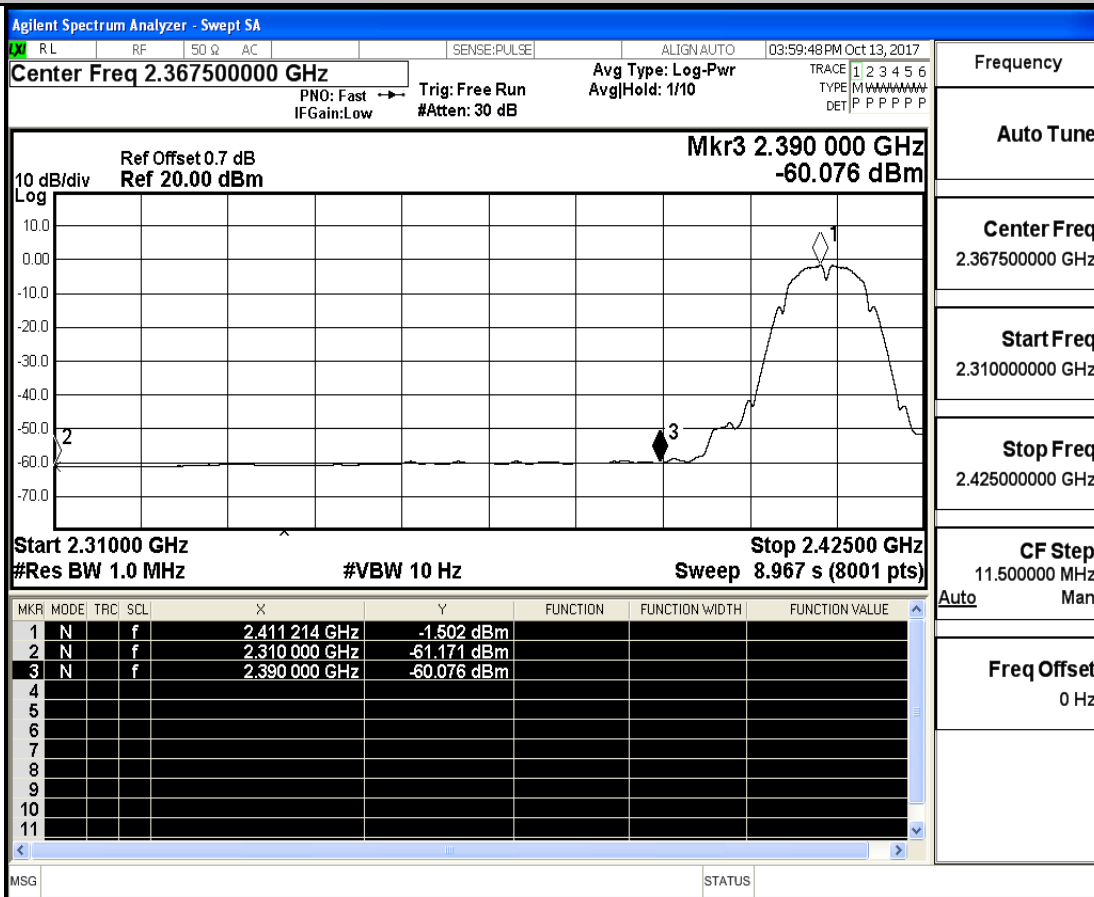
5.Restrict-band band-edge measurements

Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
11B	2412	Ant1	2310.0	-50.69	2.50	0	47.070	PEAK	74	PASS
11B	2412	Ant1	2310.0	-61.17	2.50	0	36.590	AV	54	PASS
11B	2412	Ant1	2390.0	-49.96	2.50	0	47.800	PEAK	74	PASS
11B	2412	Ant1	2390.0	-60.08	2.50	0	37.680	AV	54	PASS
11B	2462	Ant1	2483.5	-49.95	2.50	0	47.810	PEAK	74	PASS
11B	2462	Ant1	2483.5	-59.52	2.50	0	38.240	AV	54	PASS
11B	2462	Ant1	2500.0	-49.27	2.50	0	48.490	PEAK	74	PASS
11B	2462	Ant1	2500.0	-59.96	2.50	0	37.800	AV	54	PASS
11G	2412	Ant1	2310.0	-50.14	2.50	0	47.620	PEAK	74	PASS
11G	2412	Ant1	2310.0	-60.99	2.50	0	36.770	AV	54	PASS
11G	2412	Ant1	2390.0	-44.95	2.50	0	52.810	PEAK	74	PASS
11G	2412	Ant1	2390.0	-56.81	2.50	0	40.950	AV	54	PASS
11G	2462	Ant1	2483.5	-40.40	2.50	0	57.360	PEAK	74	PASS
11G	2462	Ant1	2483.5	-54.90	2.50	0	42.860	AV	54	PASS
11G	2462	Ant1	2500.0	-48.60	2.50	0	49.160	PEAK	74	PASS
11G	2462	Ant1	2500.0	-58.38	2.50	0	39.380	AV	54	PASS
11N20SISO	2412	Ant1	2310.0	-47.19	2.50	0	50.570	PEAK	74	PASS
11N20SISO	2412	Ant1	2310.0	-60.99	2.50	0	36.770	AV	54	PASS
11N20SISO	2412	Ant1	2390.0	-31.85	2.50	0	65.910	PEAK	74	PASS
11N20SISO	2412	Ant1	2390.0	-50.55	2.50	0	47.210	AV	54	PASS
11N20SISO	2462	Ant1	2483.5	-41.02	2.50	0	56.740	PEAK	74	PASS
11N20SISO	2462	Ant1	2483.5	-53.65	2.50	0	44.110	AV	54	PASS
11N20SISO	2462	Ant1	2500.0	-48.32	2.50	0	49.440	PEAK	74	PASS
11N20SISO	2462	Ant1	2500.0	-58.33	2.50	0	39.430	AV	54	PASS
11N40SISO	2422	Ant1	2310.0	-50.59	2.50	0	47.170	PEAK	74	PASS
11N40SISO	2422	Ant1	2310.0	-61.05	2.50	0	36.710	AV	54	PASS
11N40SISO	2422	Ant1	2390.0	-32.01	2.50	0	65.750	PEAK	74	PASS
11N40SISO	2422	Ant1	2390.0	-44.29	2.50	0	53.470	AV	54	PASS
11N40SISO	2452	Ant1	2483.5	-36.28	2.50	0	61.480	PEAK	74	PASS
11N40SISO	2452	Ant1	2483.5	-48.39	2.50	0	49.370	AV	54	PASS
11N40SISO	2452	Ant1	2500.0	-44.05	2.50	0	53.710	PEAK	74	PASS
11N40SISO	2452	Ant1	2500.0	-56.04	2.50	0	41.720	AV	54	PASS

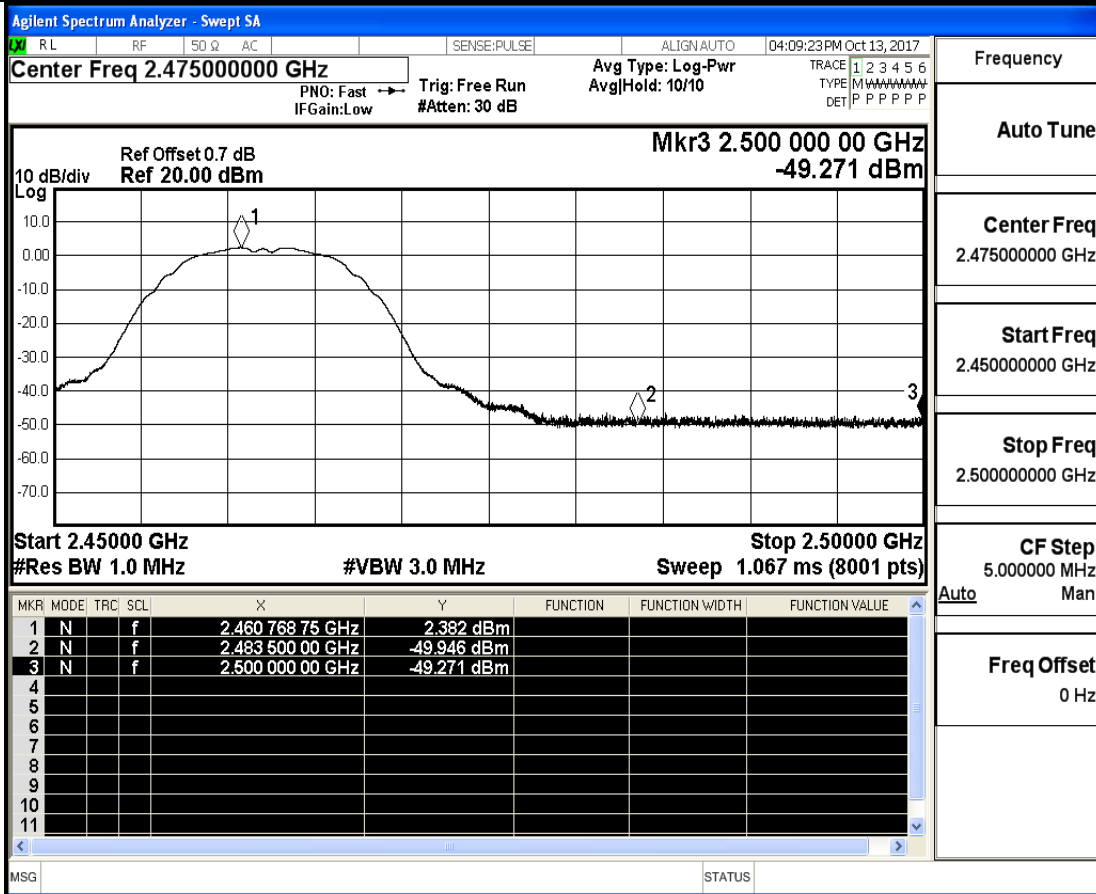
Restrict-band band-edge measurements_11B_2412_Ant1_PEAK



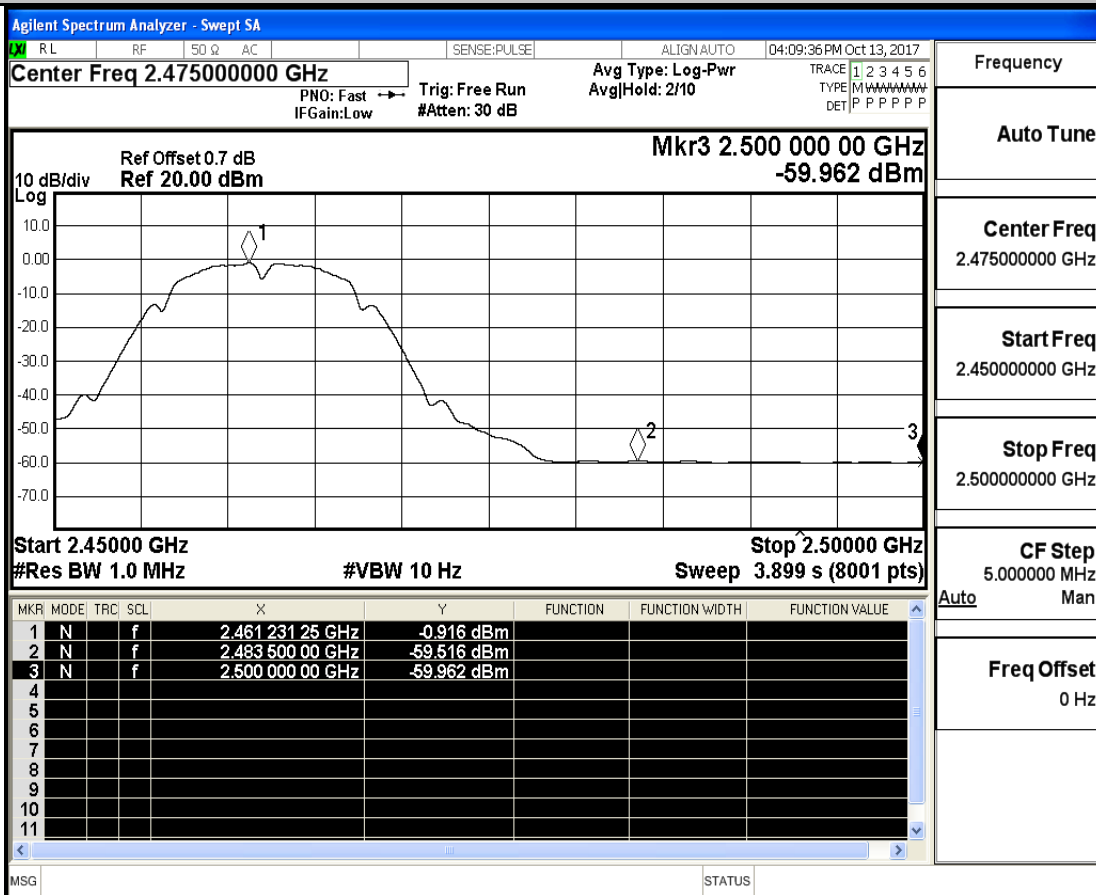
Restrict-band band-edge measurements_11B_2412_Ant1_AV



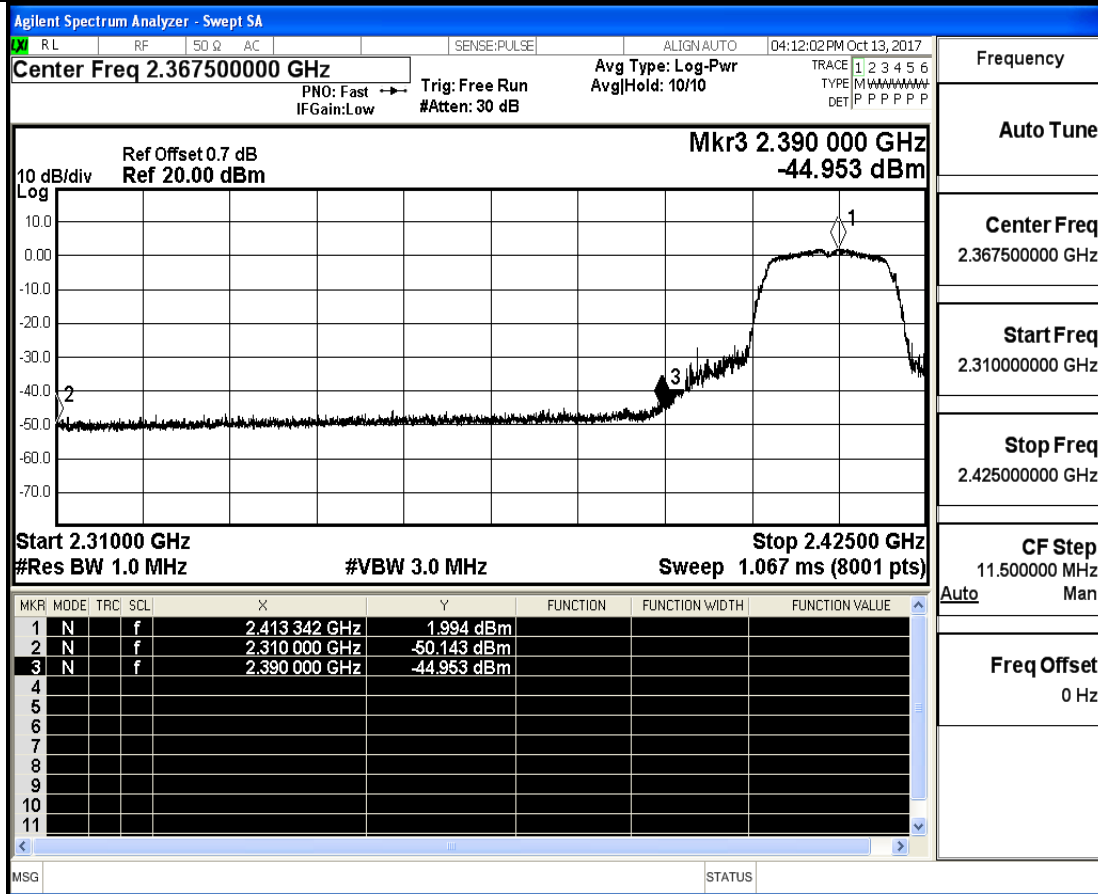
Restrict-band band-edge measurements_11B_2462_Ant1_PEAK



Restrict-band band-edge measurements_11B_2462_Ant1_AV

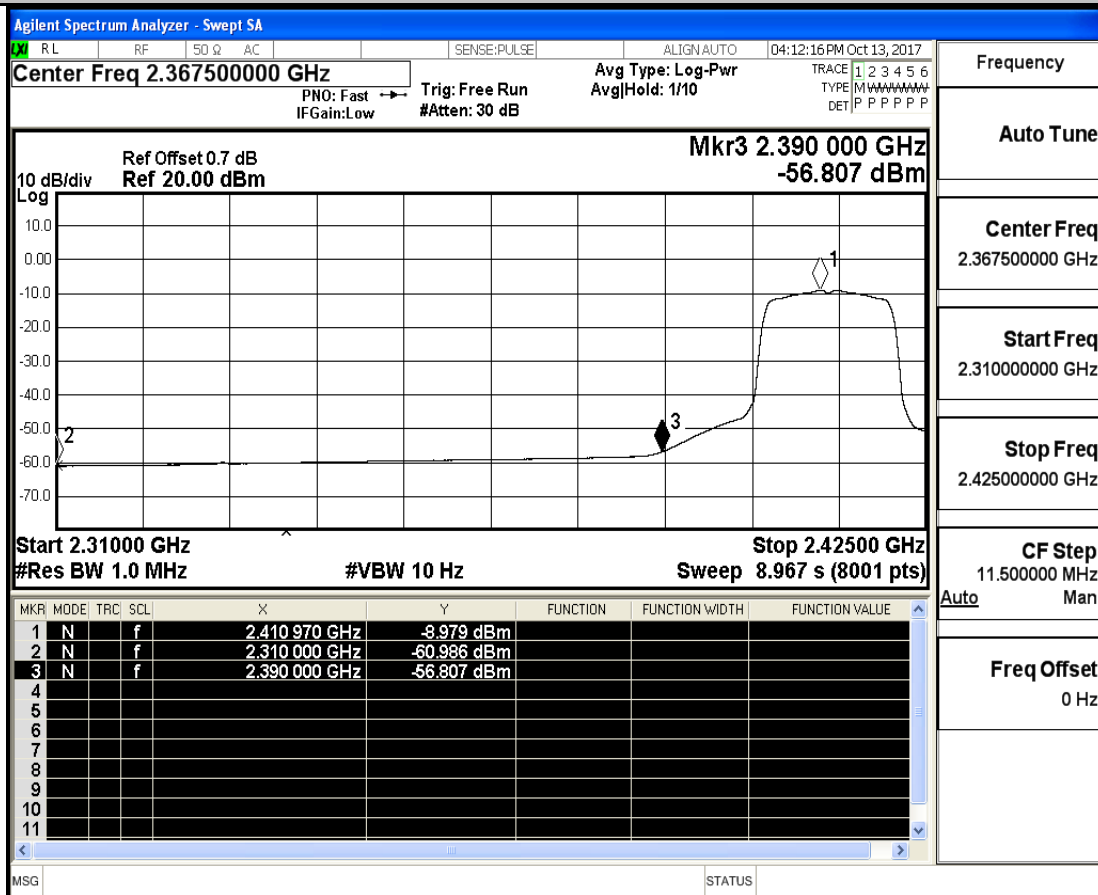


Restrict-band band-edge measurements_11G_2412_Ant1_PEAK



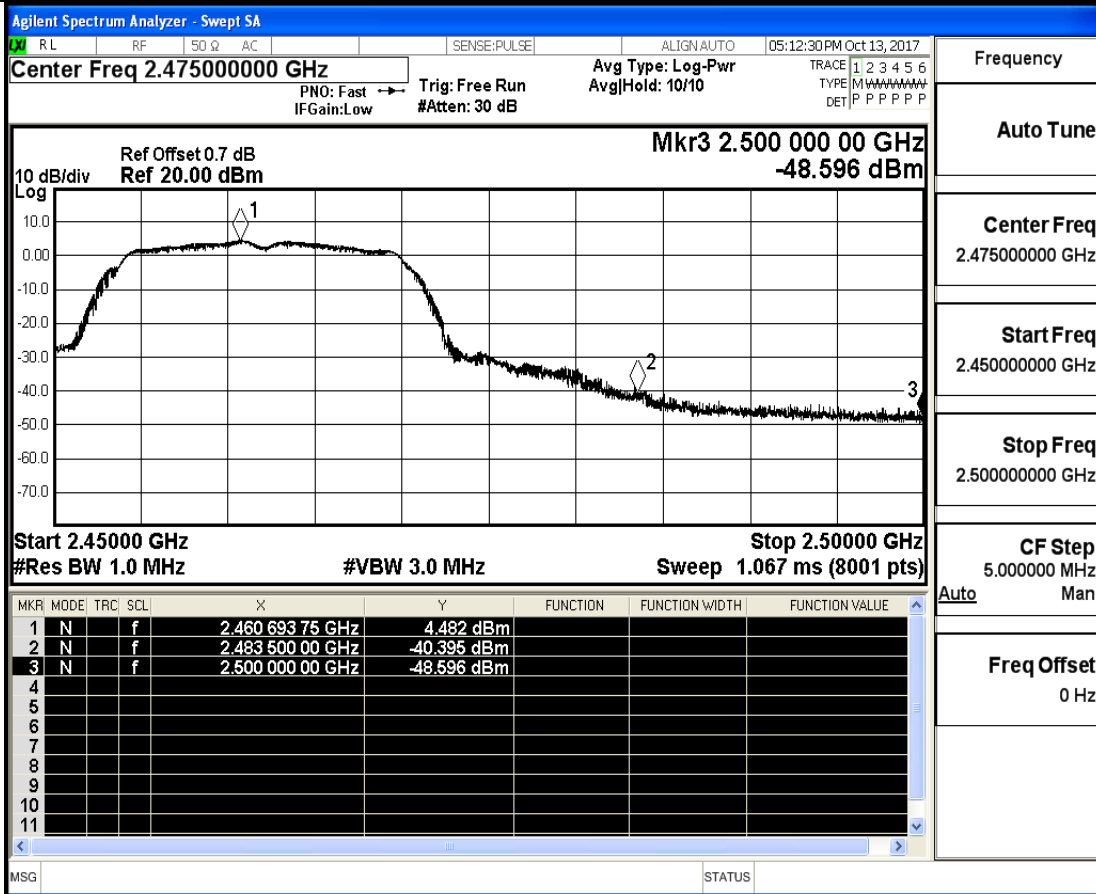
Frequency	
Auto Tune	
Center Freq	2.367500000 GHz
Start Freq	2.310000000 GHz
Stop Freq	2.425000000 GHz
CF Step	11.500000 MHz
	Auto Man
Freq Offset	0 Hz

Restrict-band band-edge measurements_11G_2412_Ant1_AV



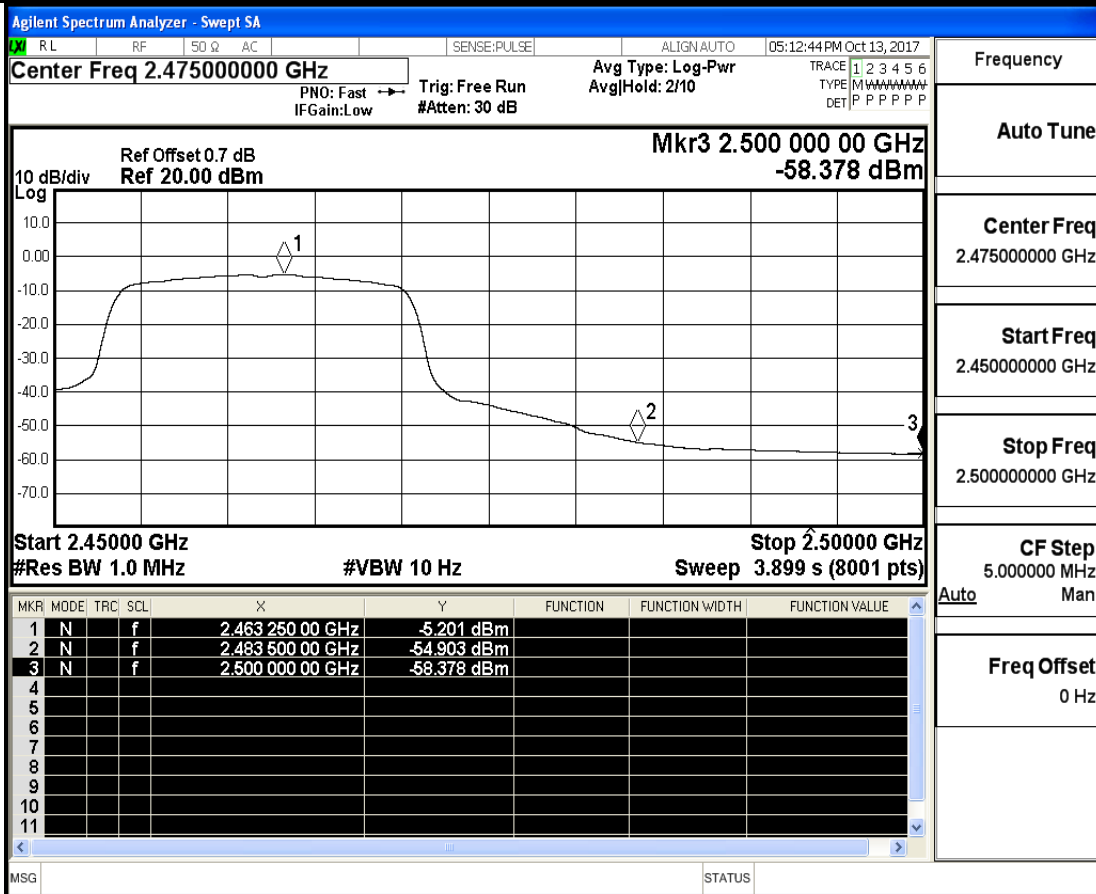
Frequency	
Auto Tune	
Center Freq	2.367500000 GHz
Start Freq	2.310000000 GHz
Stop Freq	2.425000000 GHz
CF Step	11.500000 MHz
	Auto Man
Freq Offset	0 Hz

Restrict-band band-edge measurements_11G_2462_Ant1_PEAK



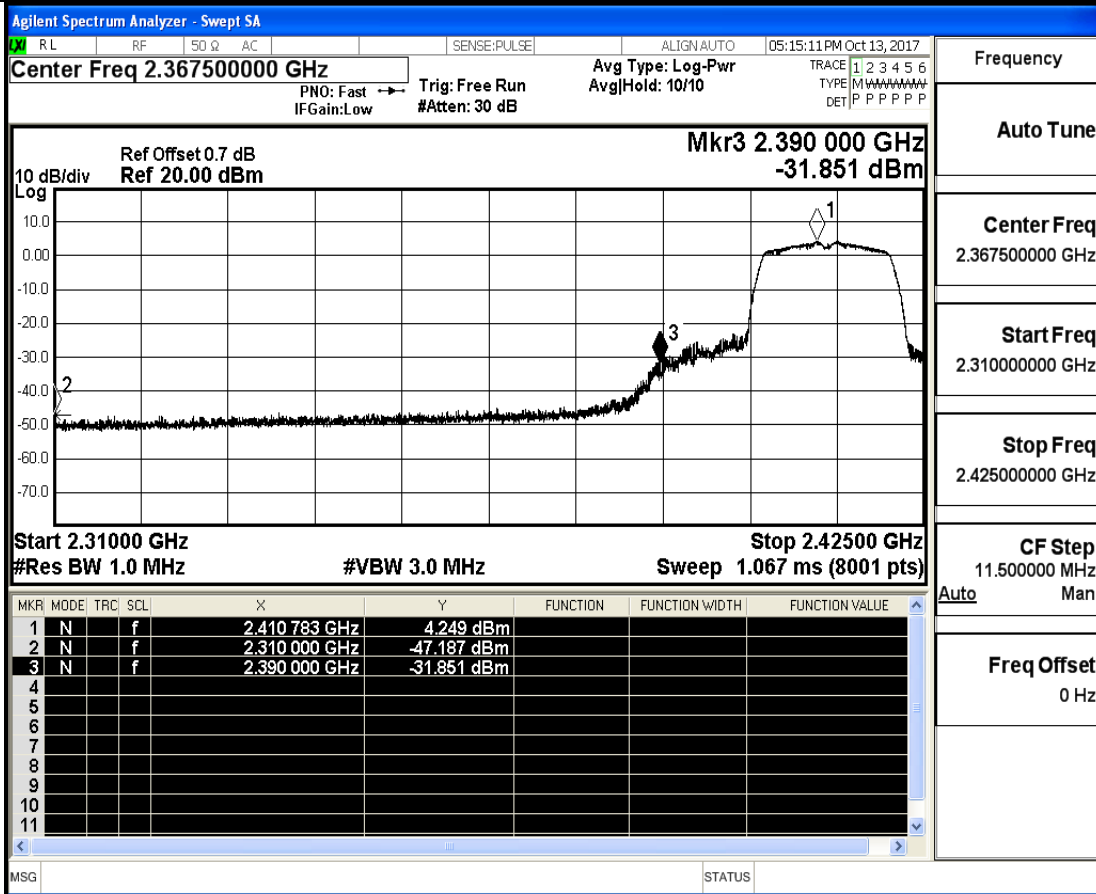
Frequency	
Auto Tune	
Center Freq	2.475000000 GHz
Start Freq	2.450000000 GHz
Stop Freq	2.500000000 GHz
CF Step	5.0000000 MHz
Auto	Man
Freq Offset	0 Hz

Restrict-band band-edge measurements_11G_2462_Ant1_AV

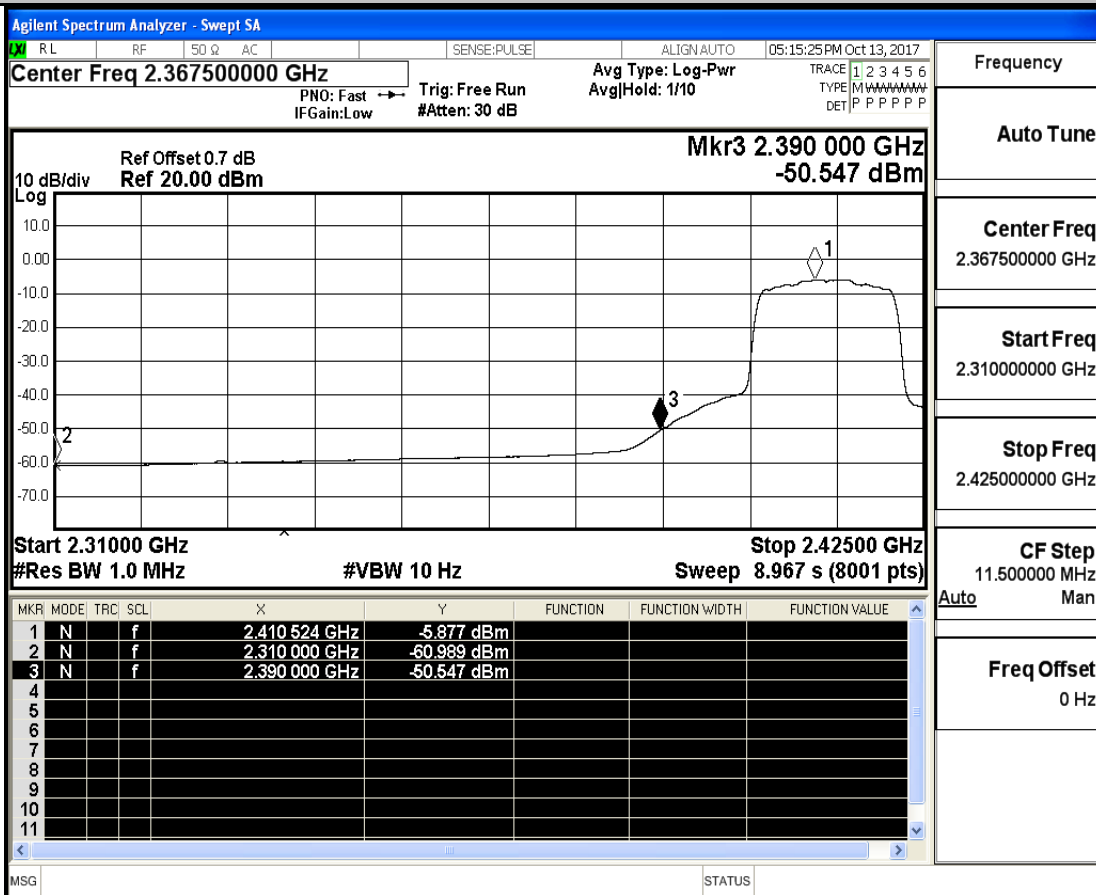


Frequency	
Auto Tune	
Center Freq	2.475000000 GHz
Start Freq	2.450000000 GHz
Stop Freq	2.500000000 GHz
CF Step	5.0000000 MHz
Auto	Man
Freq Offset	0 Hz

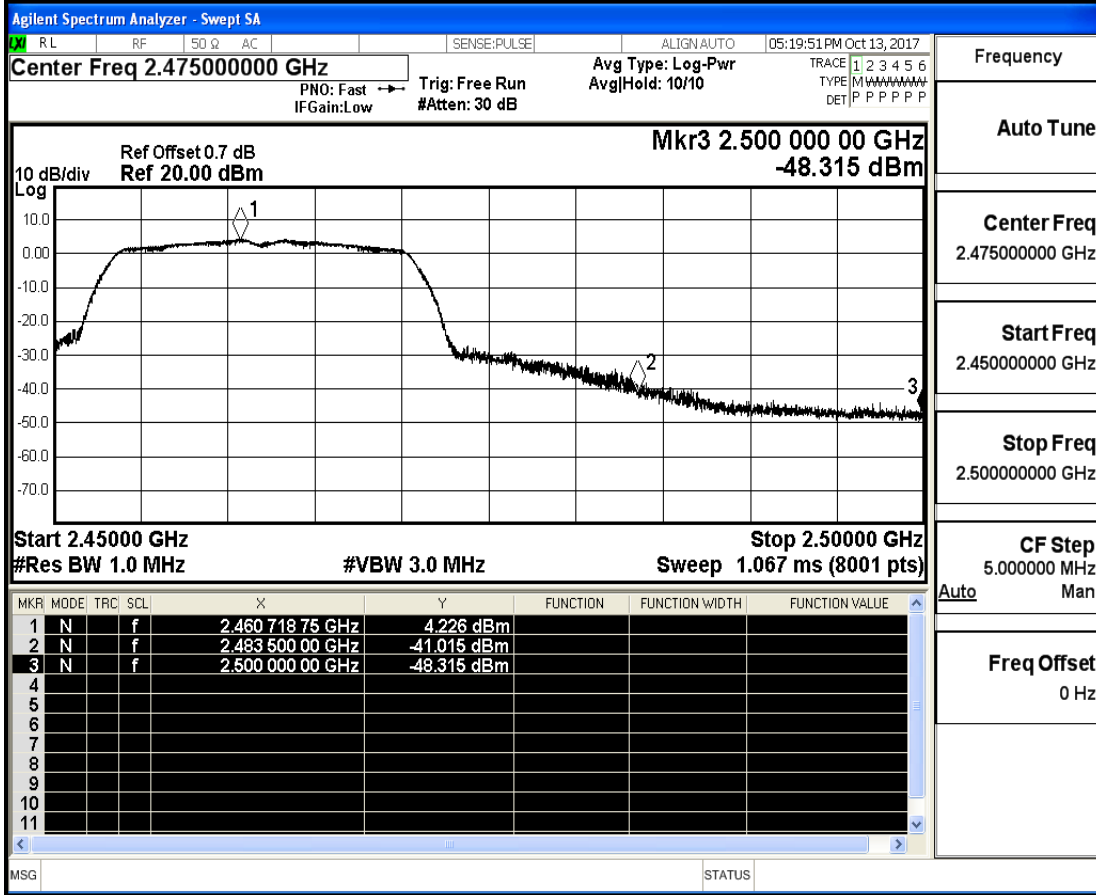
Restrict-band band-edge measurements_11N20SISO_2412_Ant1_PEAK



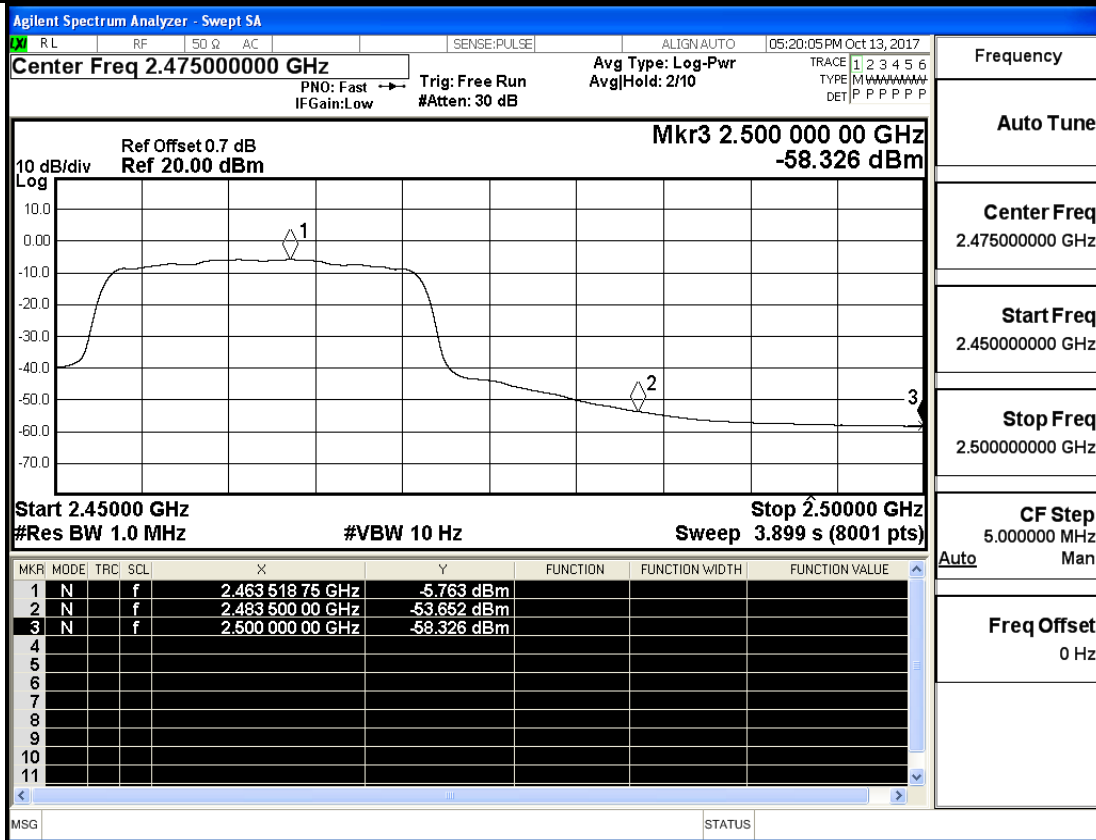
Restrict-band band-edge measurements_11N20SISO_2412_Ant1_AV



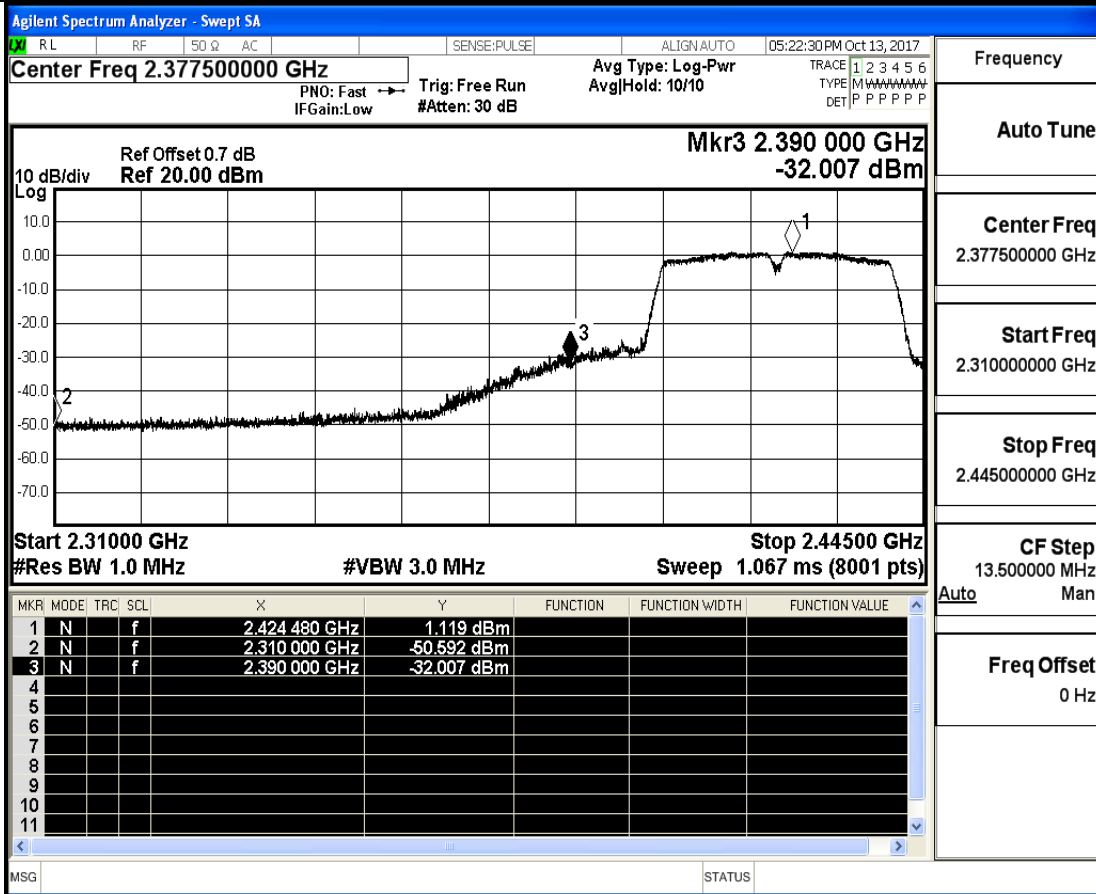
Restrict-band band-edge measurements_11N20SISO_2462_Ant1_PEAK



Restrict-band band-edge measurements_11N20SISO_2462_Ant1_AV

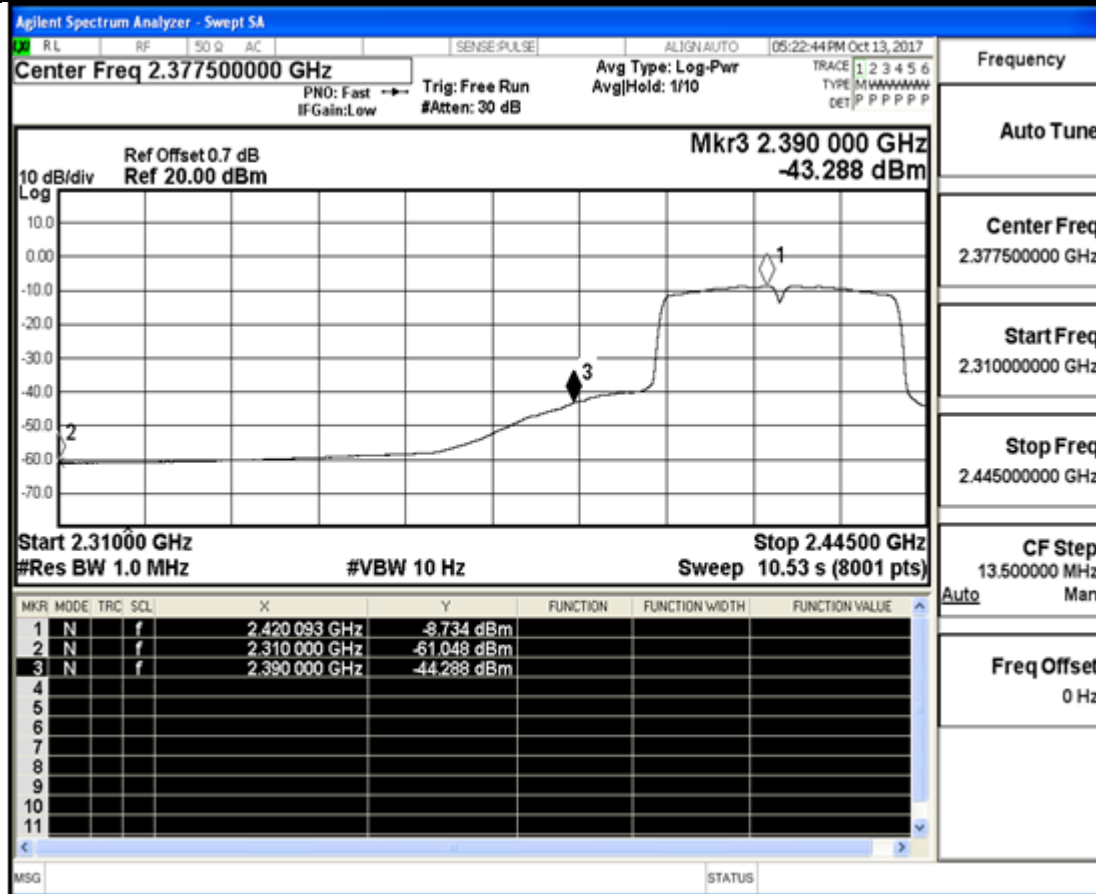


Restrict-band band-edge measurements_11N40SISO_2422_Ant1_PEAK



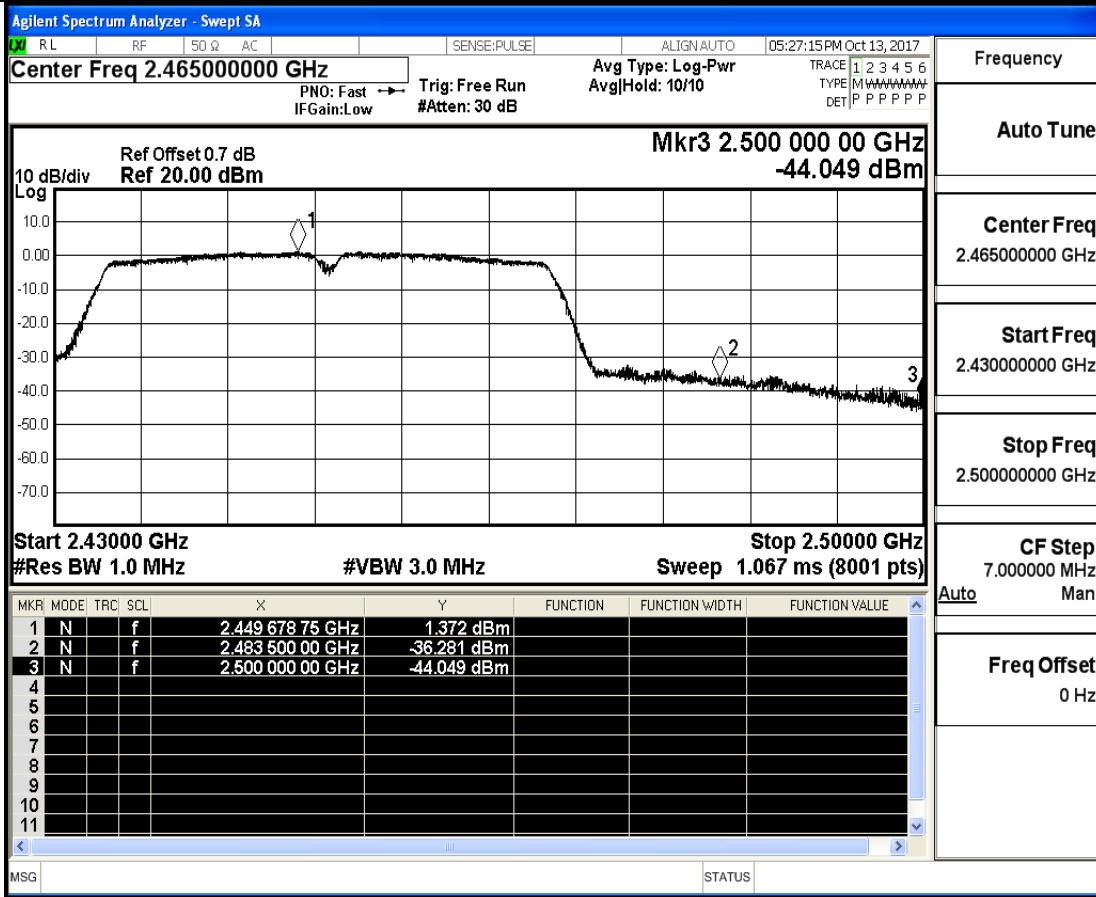
Frequency
Auto Tune
Center Freq 2.377500000 GHz
Start Freq 2.310000000 GHz
Stop Freq 2.445000000 GHz
CF Step 13.500000 MHz Auto Man
Freq Offset 0 Hz

Restrict-band band-edge measurements_11N40SISO_2422_Ant1_AV

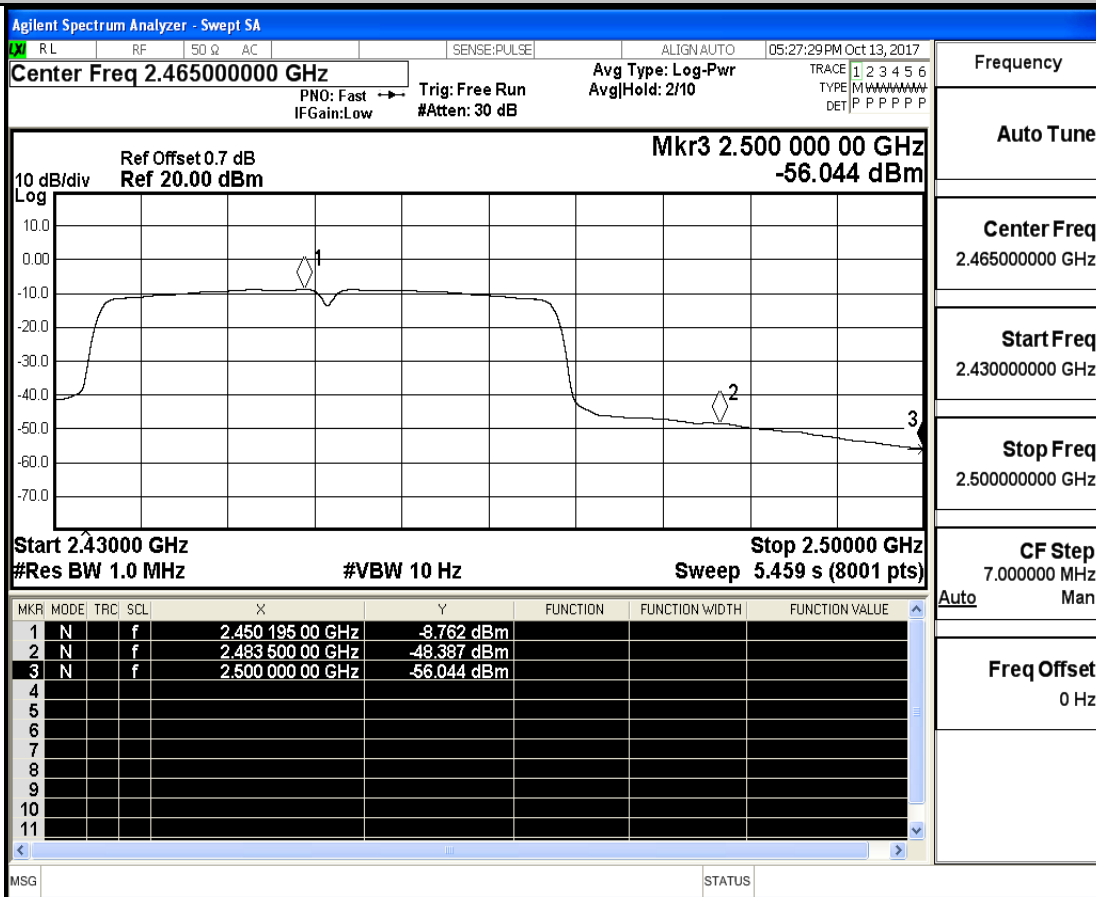


Frequency
Auto Tune
Center Freq 2.377500000 GHz
Start Freq 2.310000000 GHz
Stop Freq 2.445000000 GHz
CF Step 13.500000 MHz Auto Man
Freq Offset 0 Hz

Restrict-band band-edge measurements_11N40SISO_2452_Ant1_PEAK



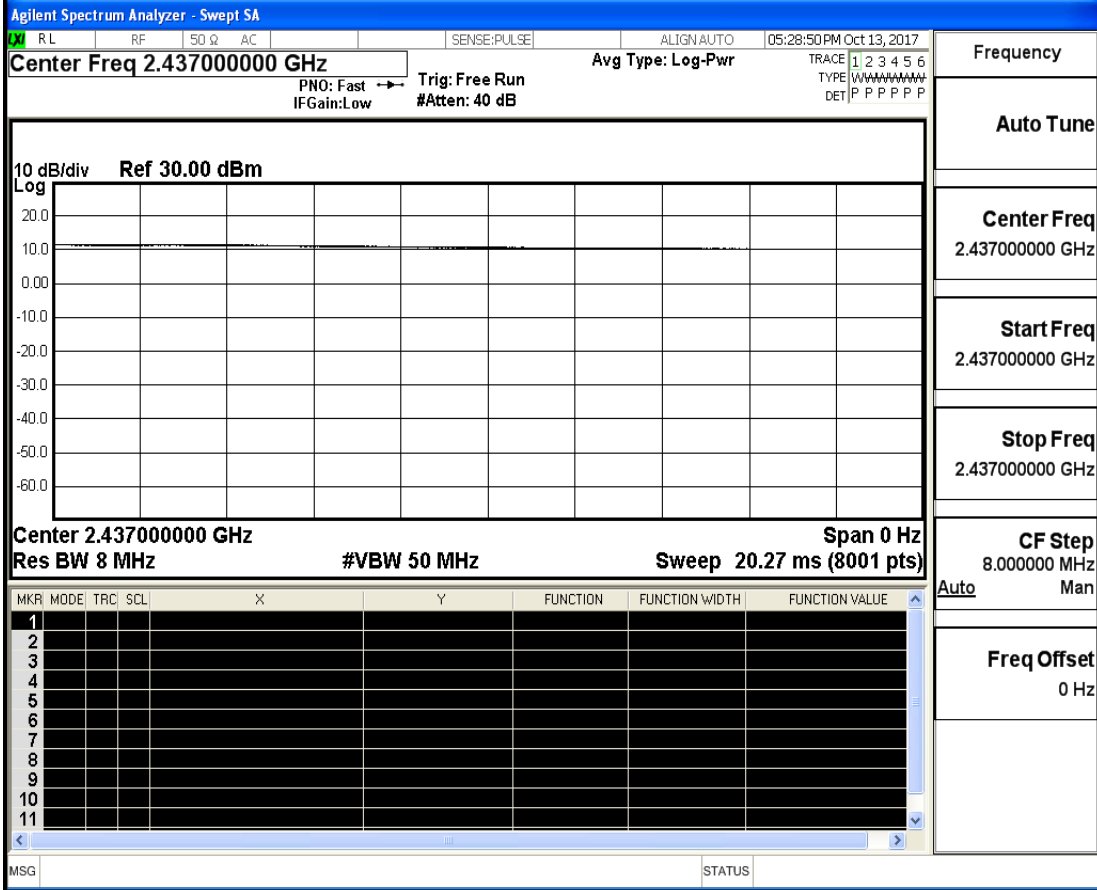
Restrict-band band-edge measurements_11N40SISO_2452_Ant1_AV



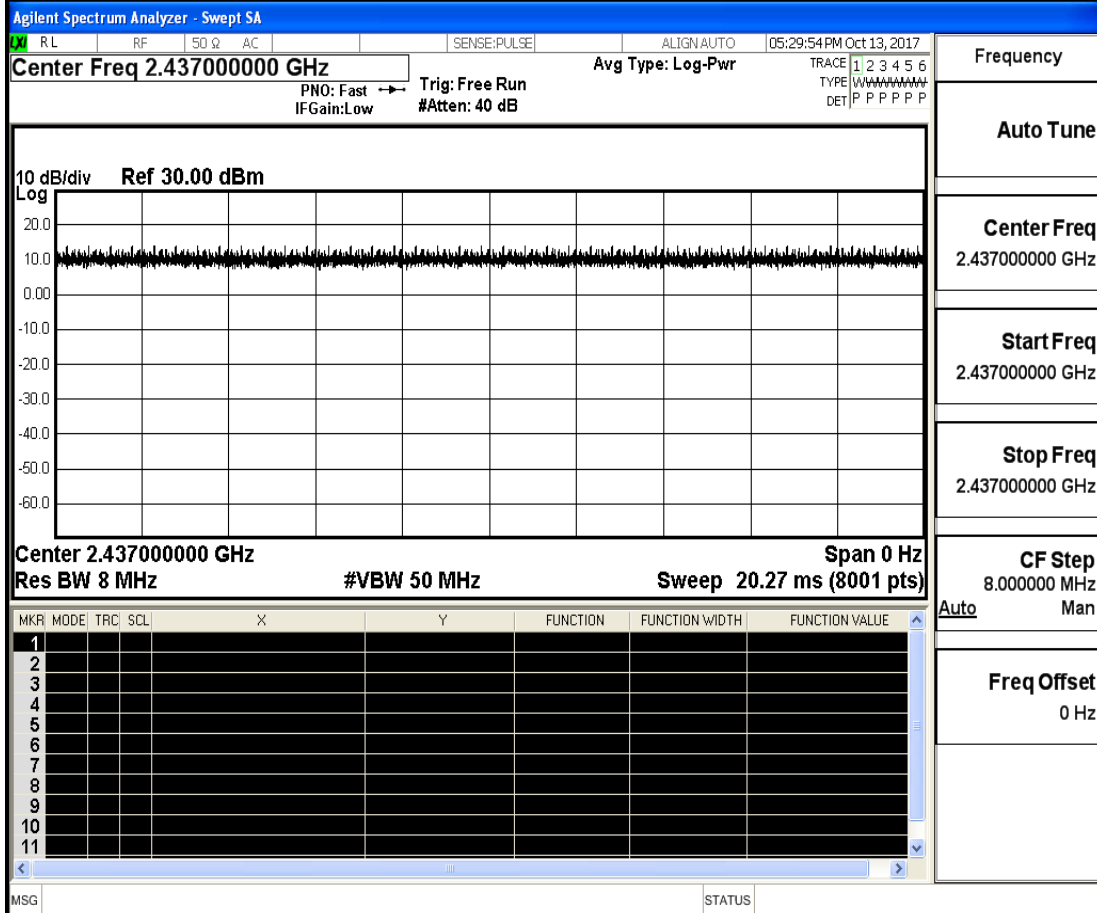
6.Duty Cycle

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_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 05:30:47 PM Oct 13, 2017

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

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

10 dB/div Ref 30.00 dBm

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

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 05:32:02 PM Oct 13, 2017

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

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

10 dB/div Ref 30.00 dBm

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

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