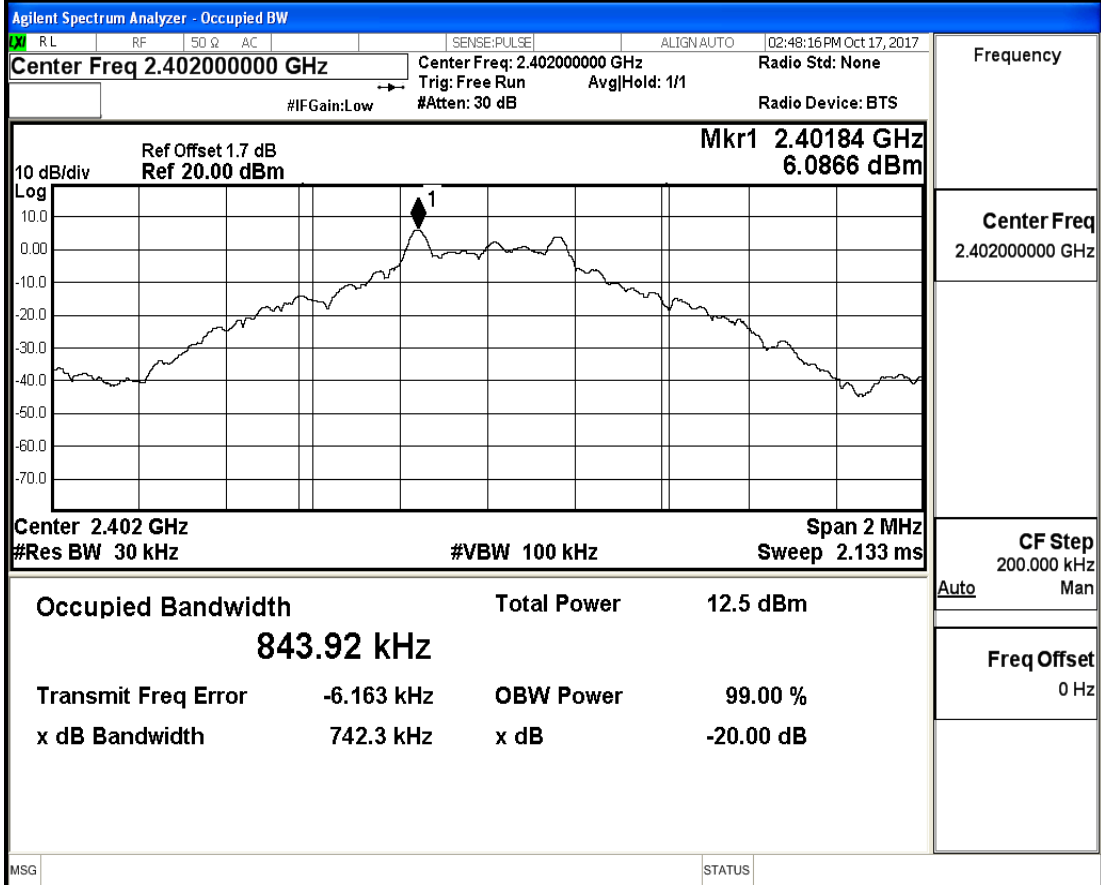


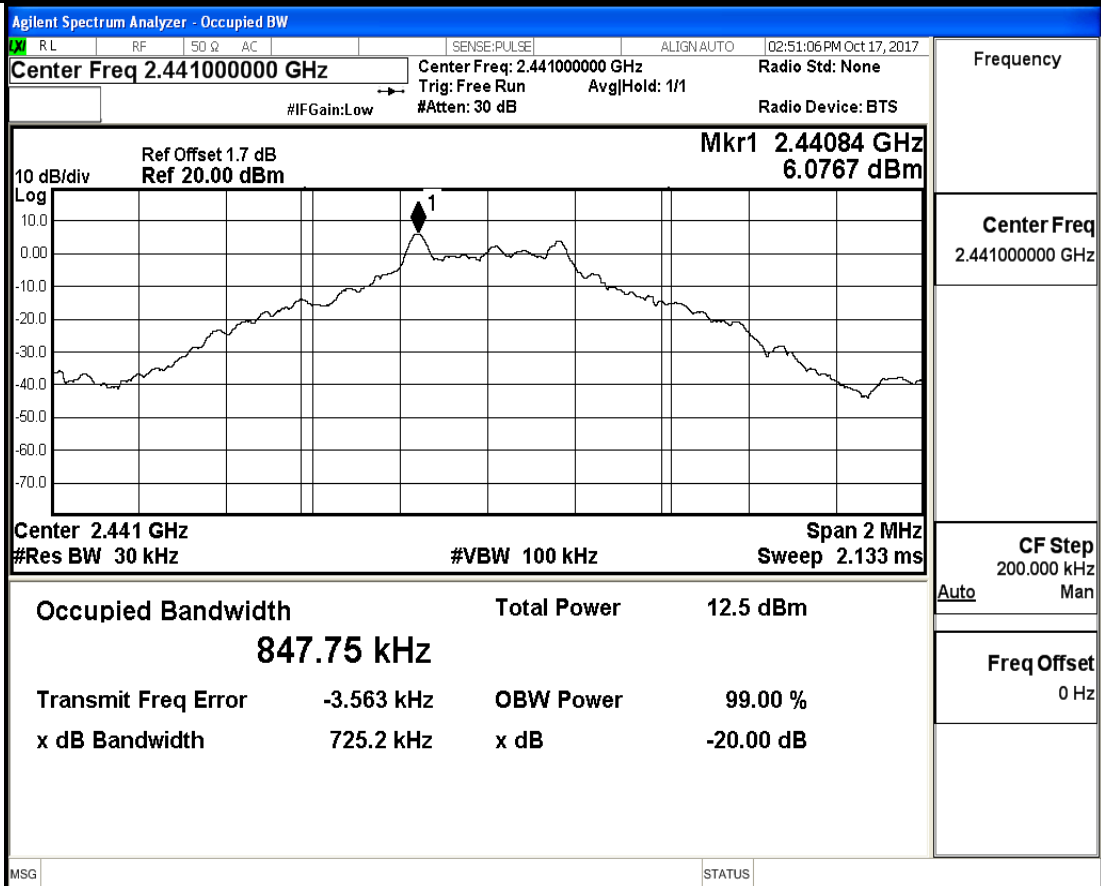
## 1.20 dB Bandwidth

Test Mode	Test Channel	EBW[MHz]	Limit[MHz]	Verdict
GFSK	2402	0.7423	---	PASS
	2441	0.7252	---	PASS
	2480	0.8295	---	PASS
$\pi/4$ DQPSK	2402	1.131	---	PASS
	2441	1.120	---	PASS
	2480	1.122	---	PASS
8DPSK	2402	1.135	---	PASS
	2441	1.118	---	PASS
	2480	1.119	---	PASS

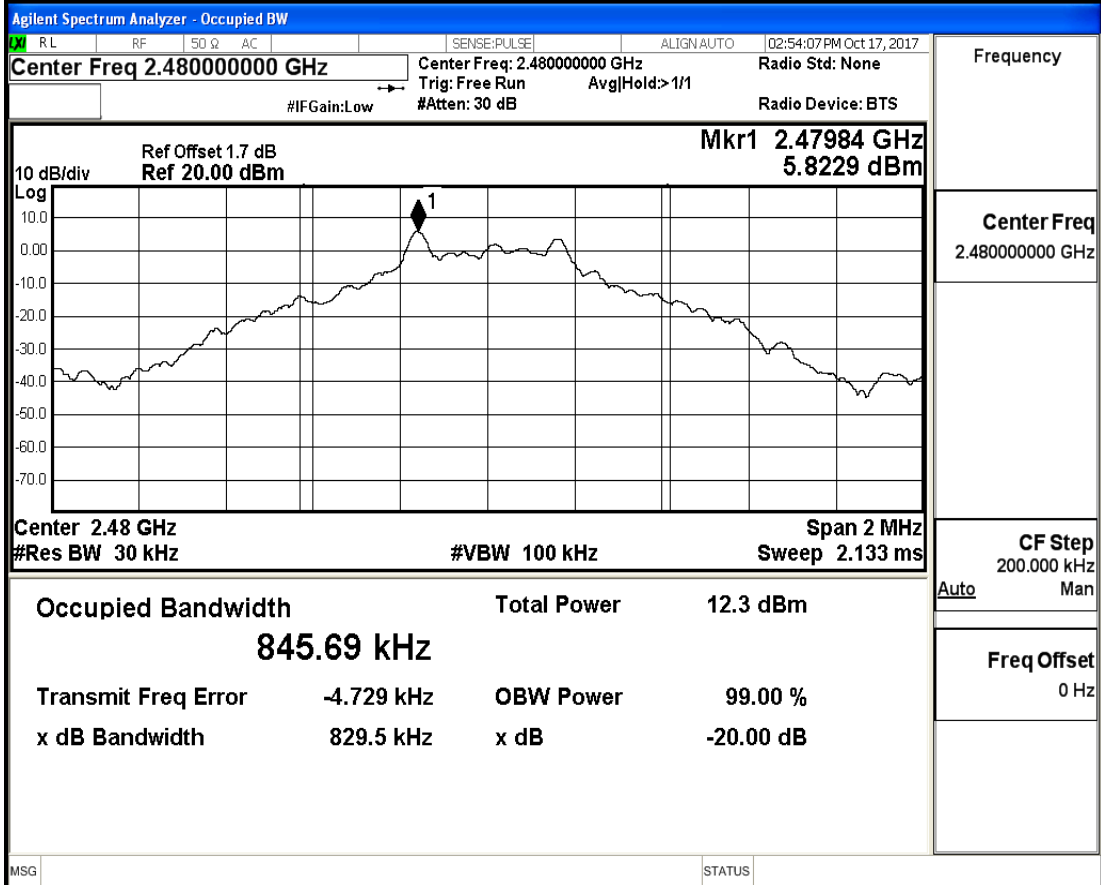
## 20 dB Bandwidth\_DH1\_2402



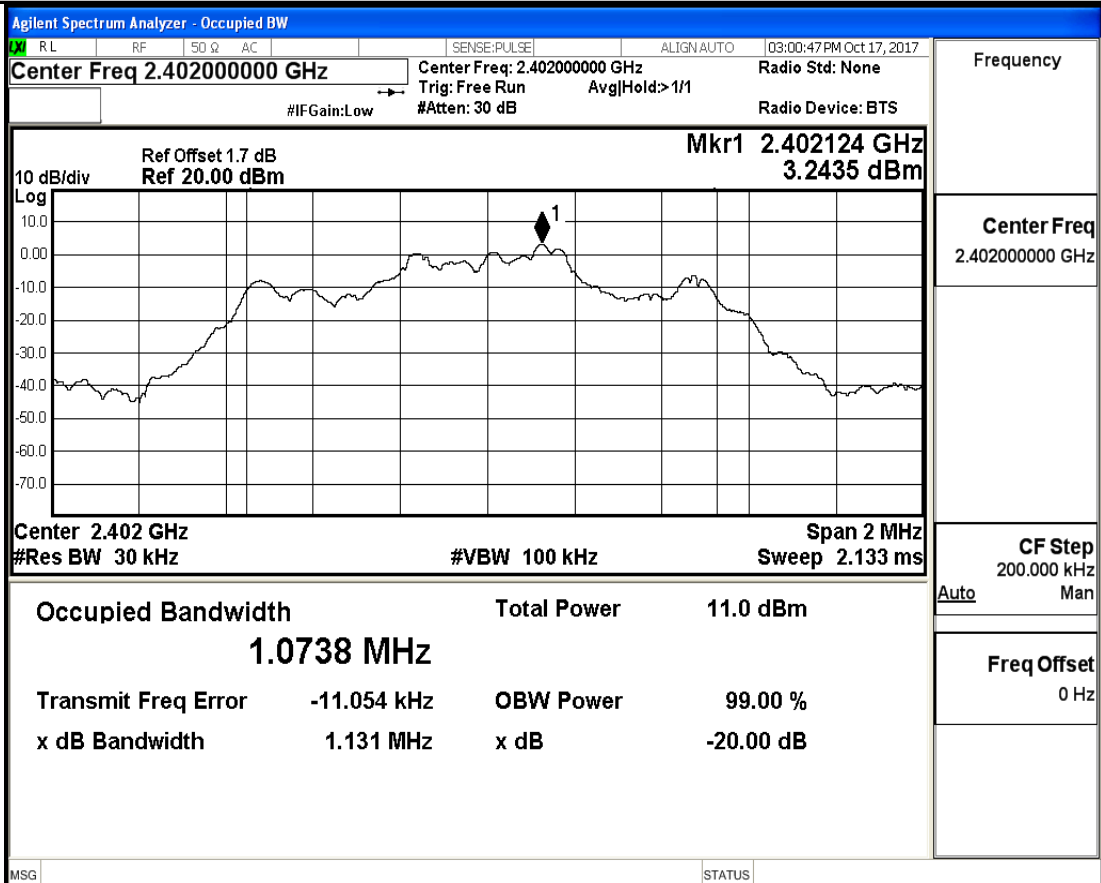
## 20 dB Bandwidth\_DH1\_2441



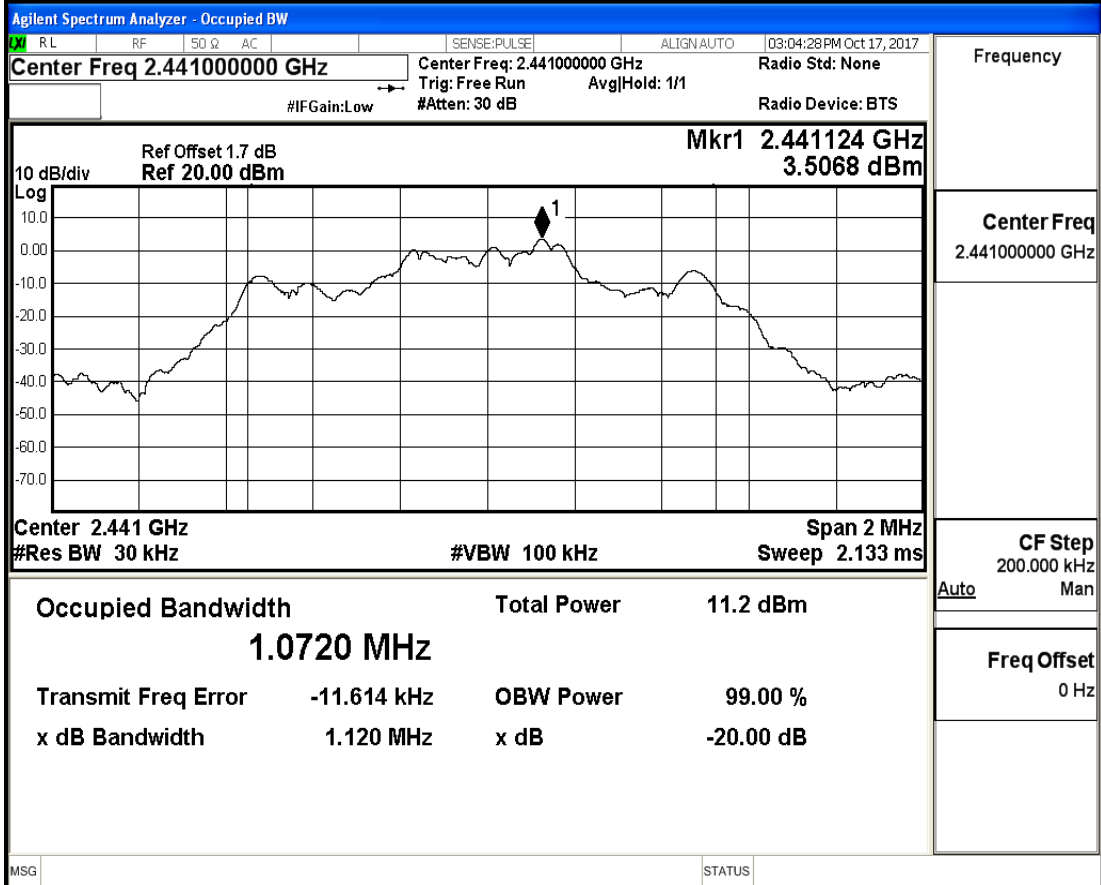
## 20 dB Bandwidth\_DH1\_2480



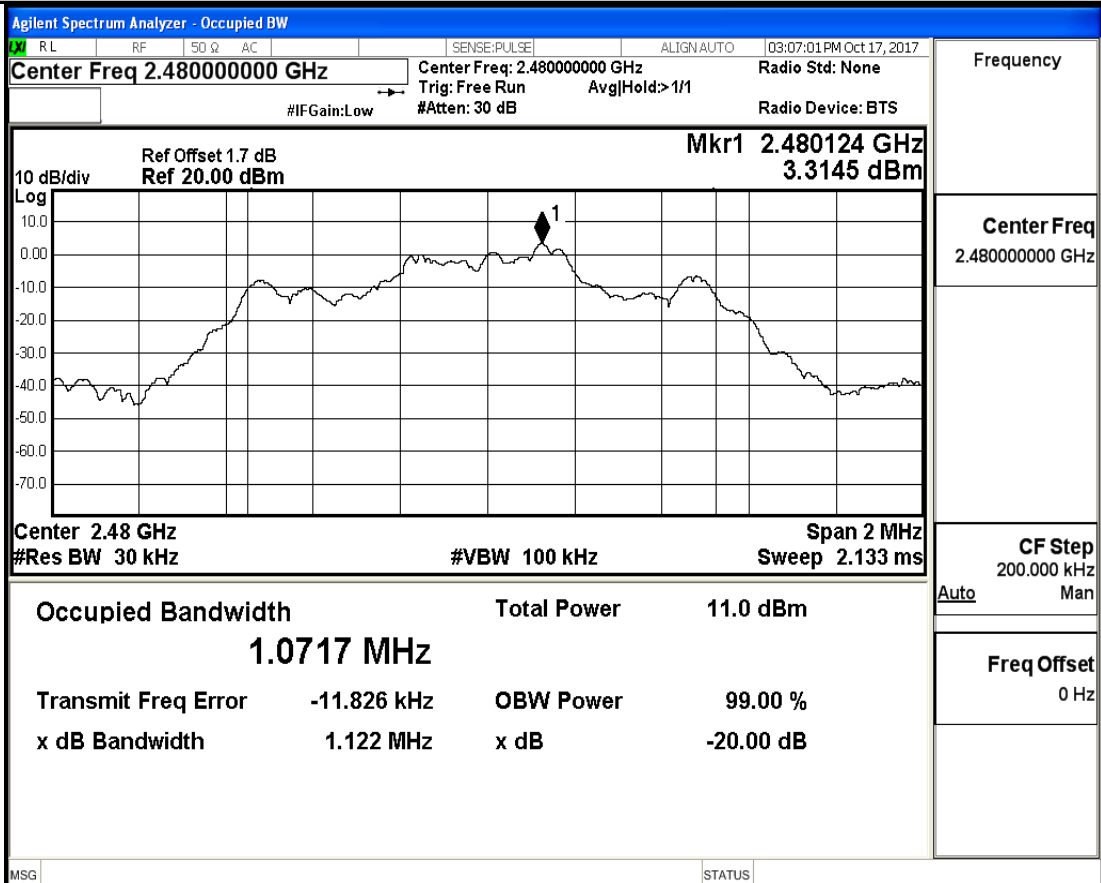
## 20 dB Bandwidth\_2DH1\_2402



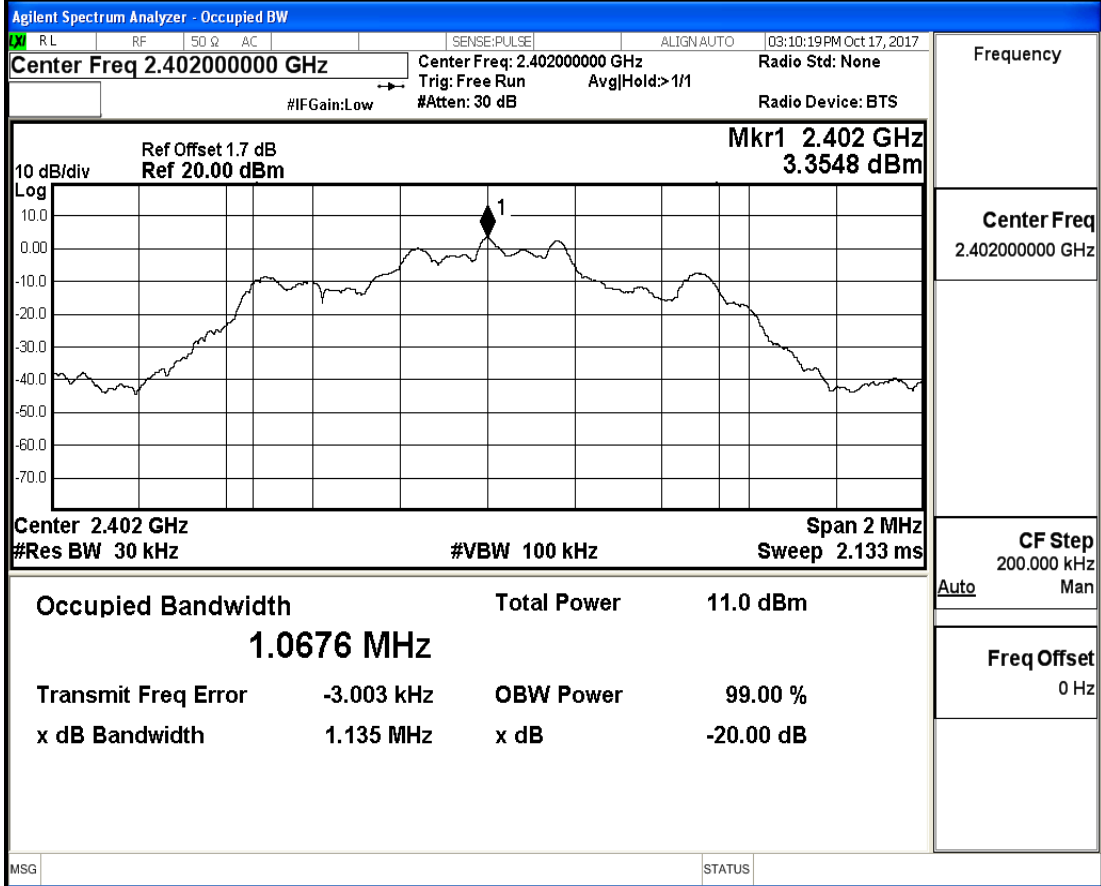
## 20 dB Bandwidth\_2DH1\_2441



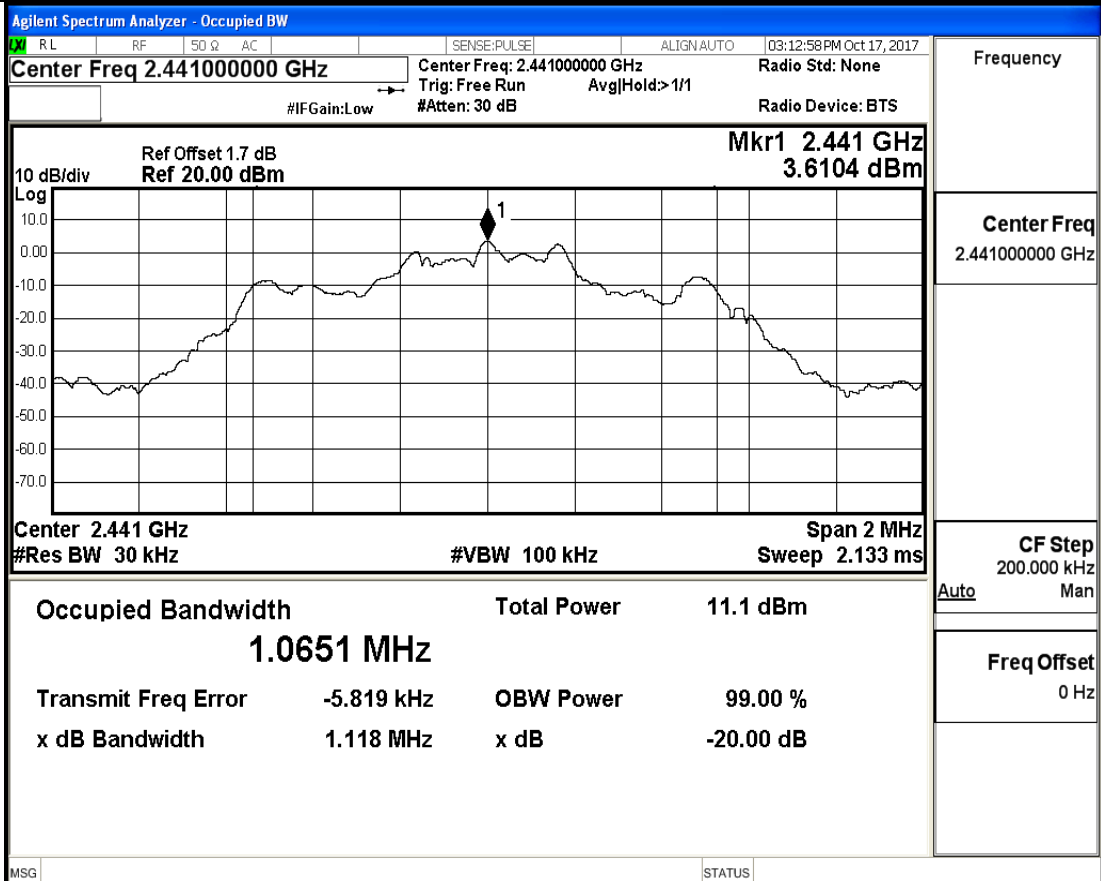
## 20 dB Bandwidth\_2DH1\_2480



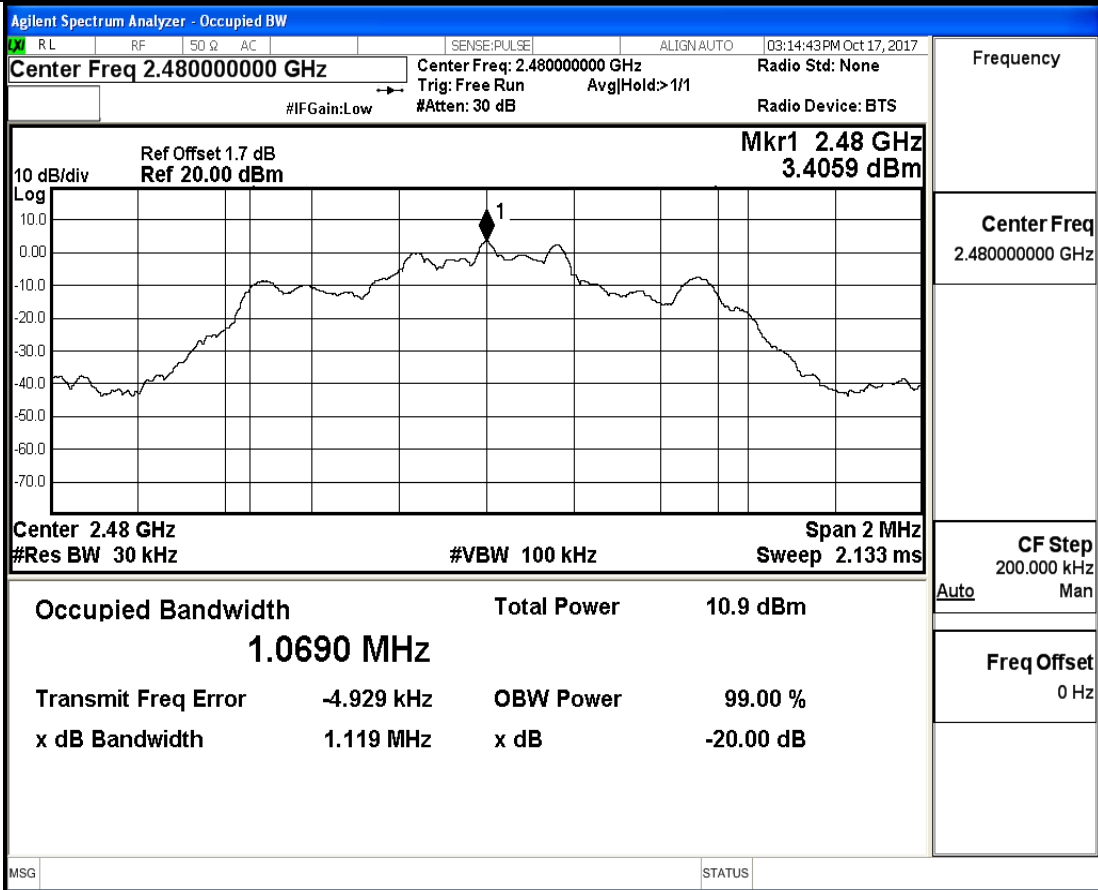
## 20 dB Bandwidth\_3DH1\_2402



## 20 dB Bandwidth\_3DH1\_2441



20 dB Bandwidth\_3DH1\_2480



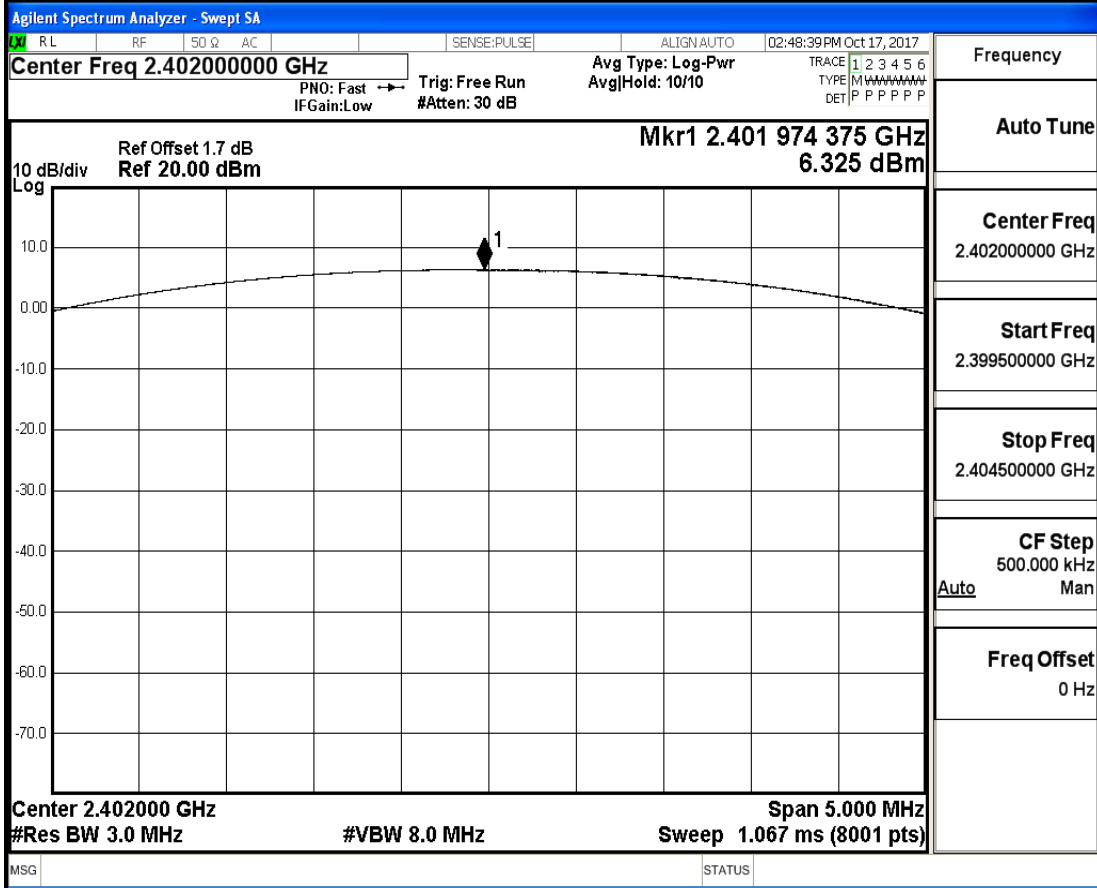
**2.Occupied Bandwidth**

Test Mode	Test Channel	OBW[MHz]	Limit[MHz]	Verdict
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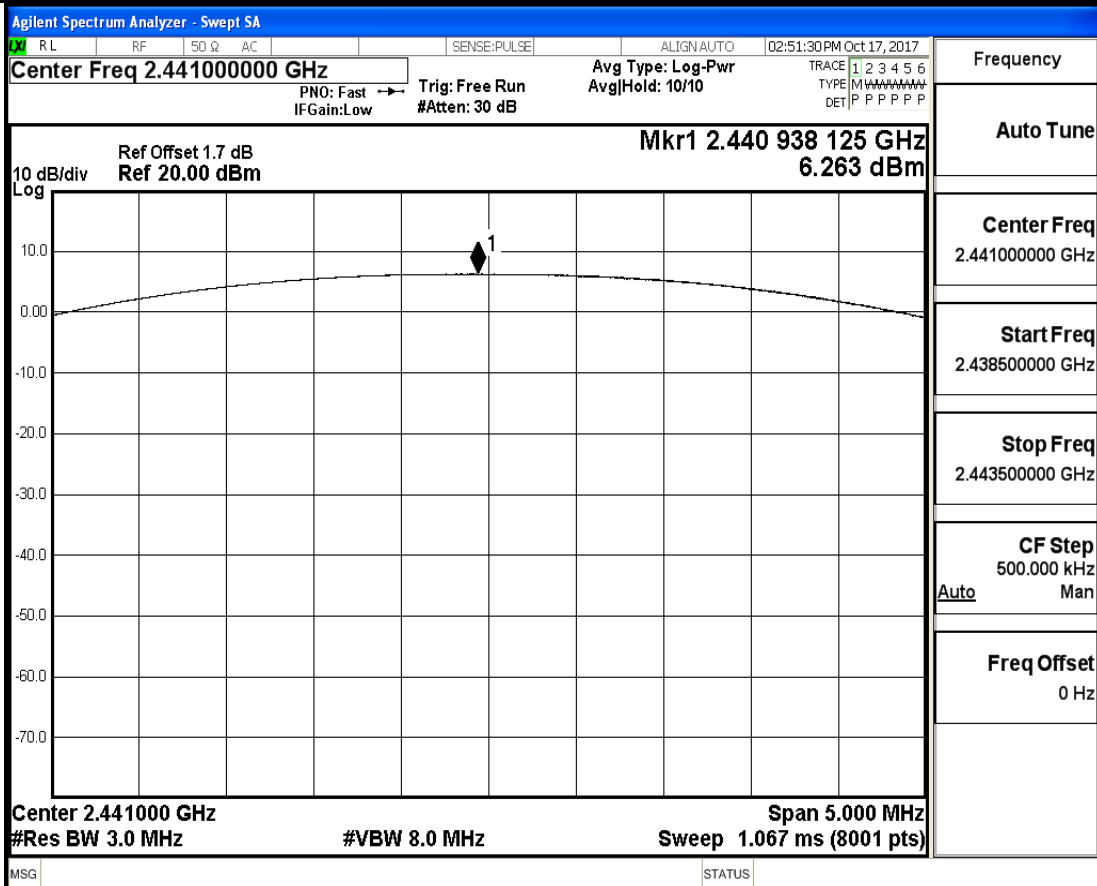
**3.Conducted Peak Output Power**

Test Mode	Test Channel	Power[dBm]	Limit[dBm]	Verdict
GFSK	2402	6.325	30	PASS
	2441	6.263	30	PASS
	2480	5.985	30	PASS
$\pi/4$ DQPSK	2402	5.146	21	PASS
	2441	5.247	21	PASS
	2480	4.987	21	PASS
8DPSK	2402	5.173	21	PASS
	2441	5.289	21	PASS
	2480	5.036	21	PASS

## Conducted Peak Output Power\_DH1\_2402

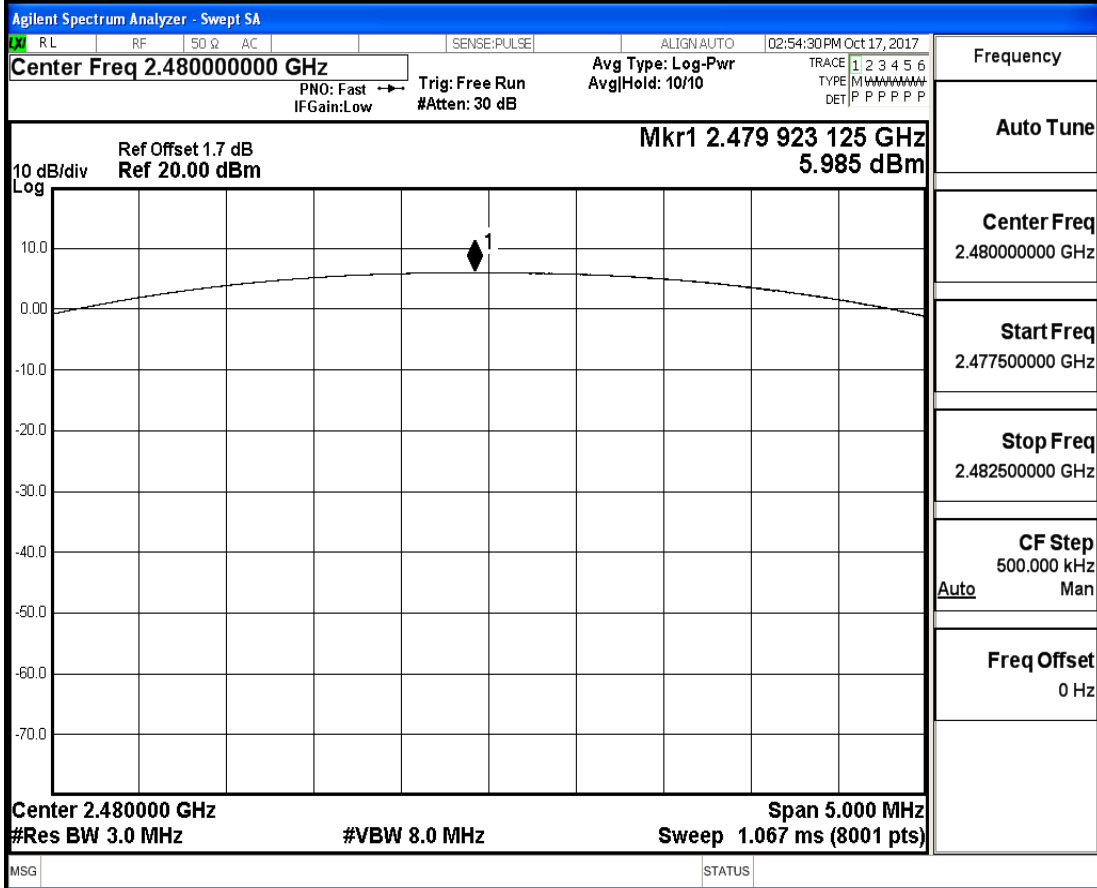


## Conducted Peak Output Power\_DH1\_2441

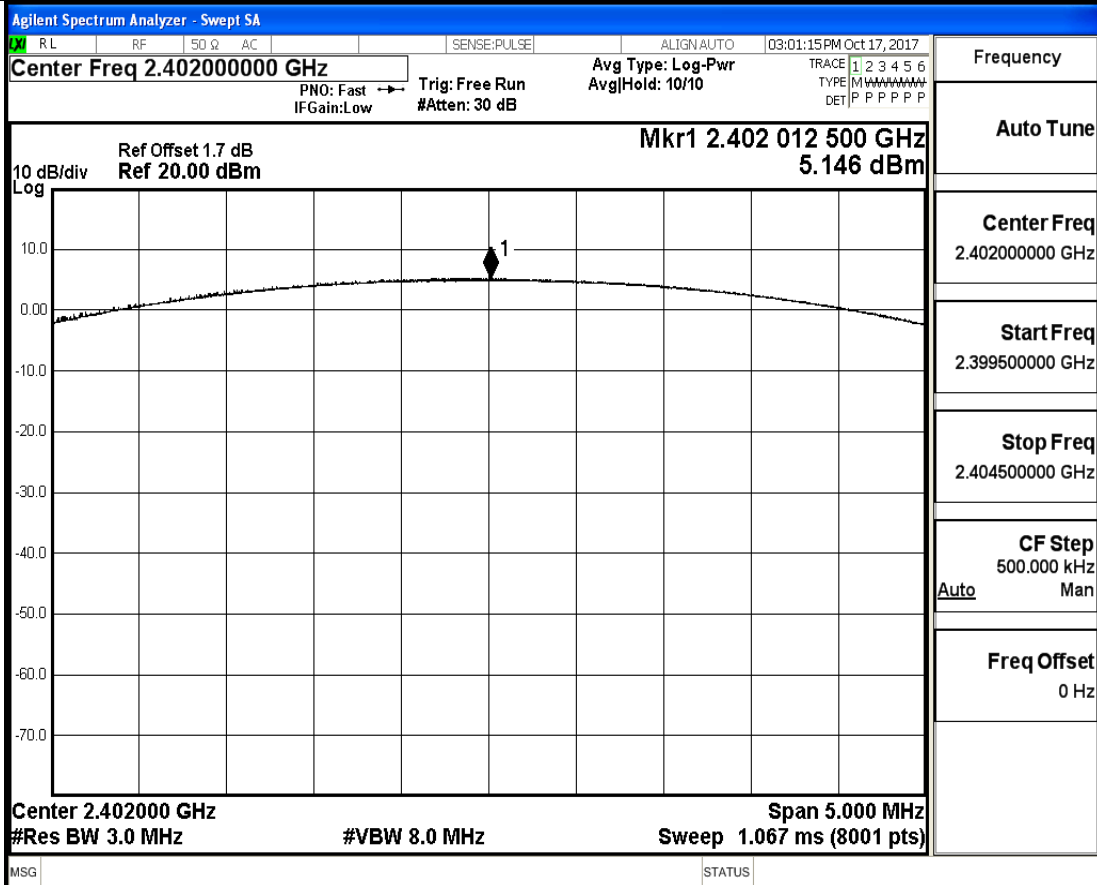




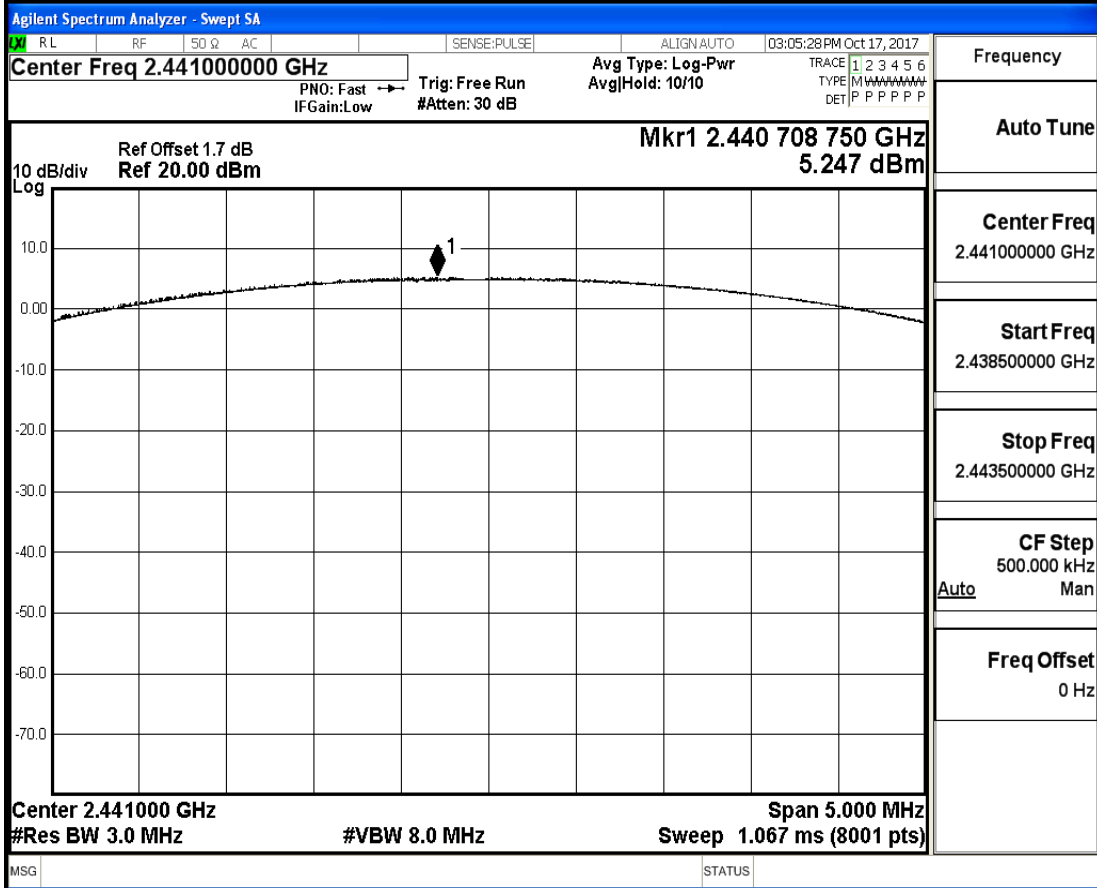
Conducted Peak Output Power\_DH1\_2480



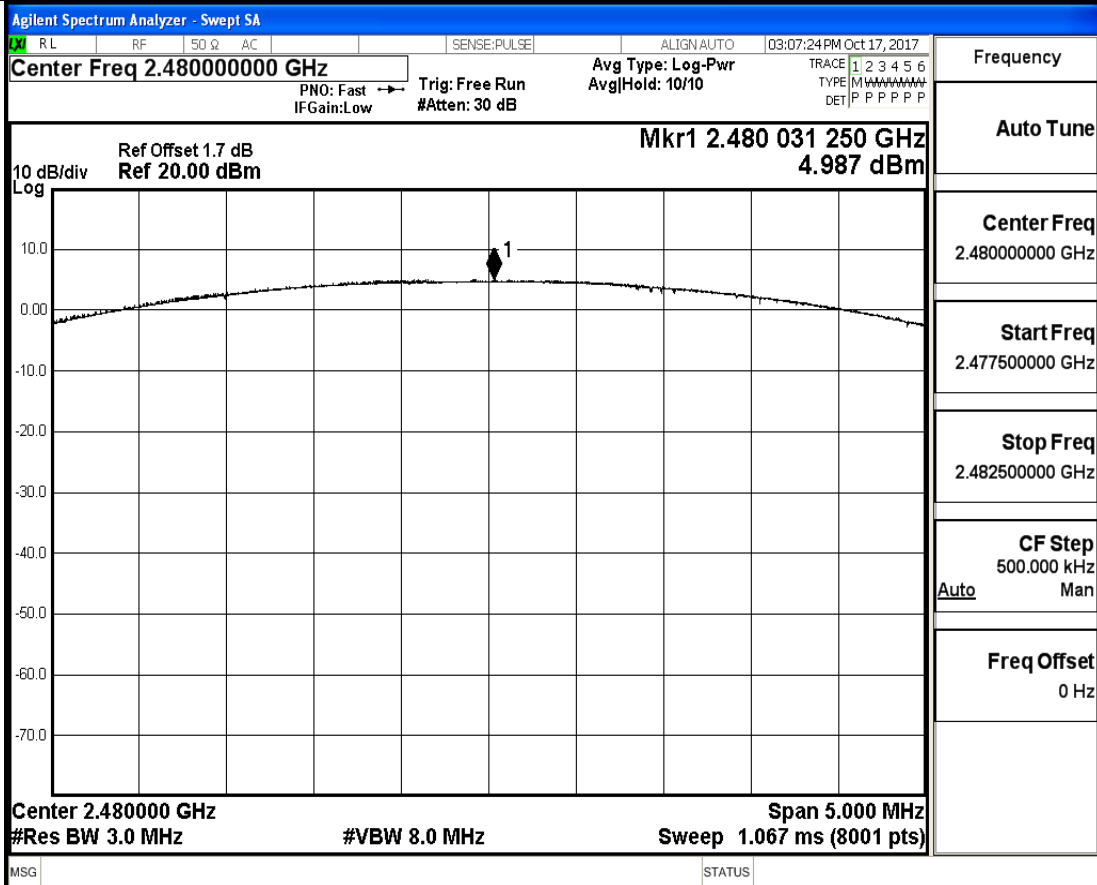
Conducted Peak Output Power\_2DH1\_2402



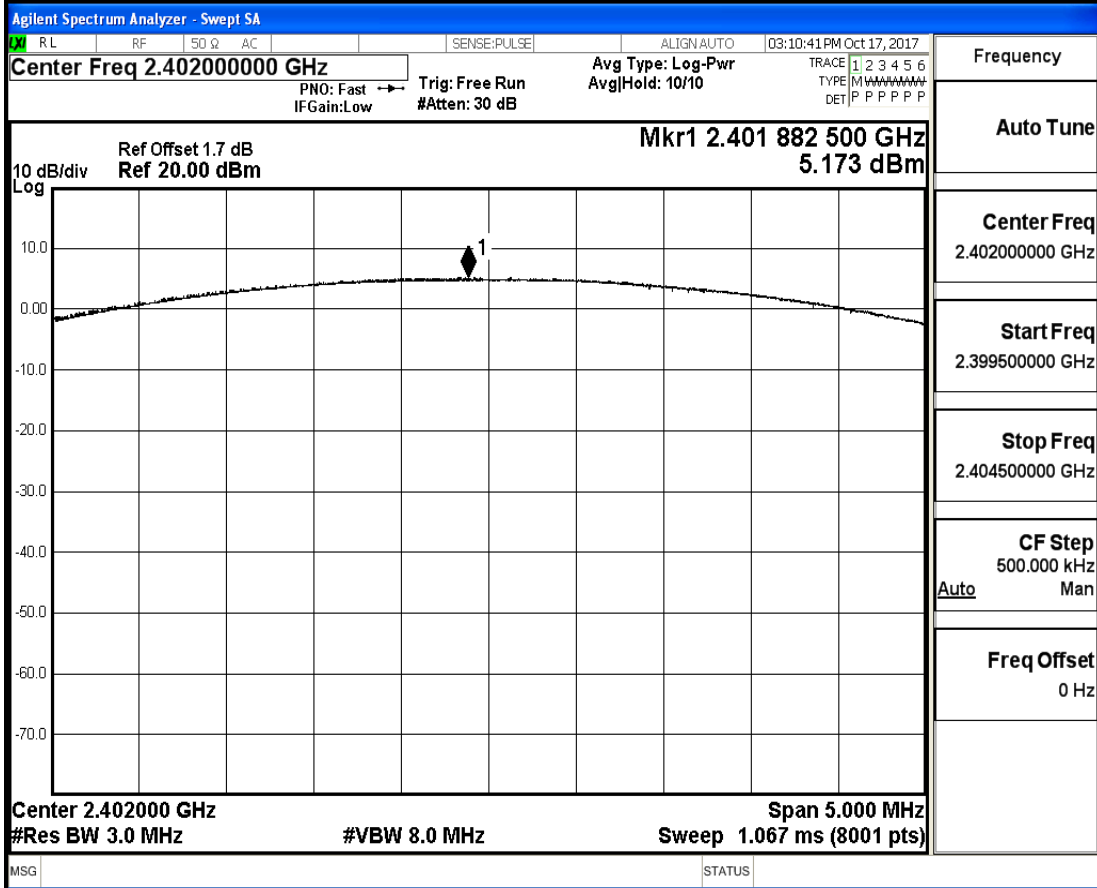
Conducted Peak Output Power\_2DH1\_2441



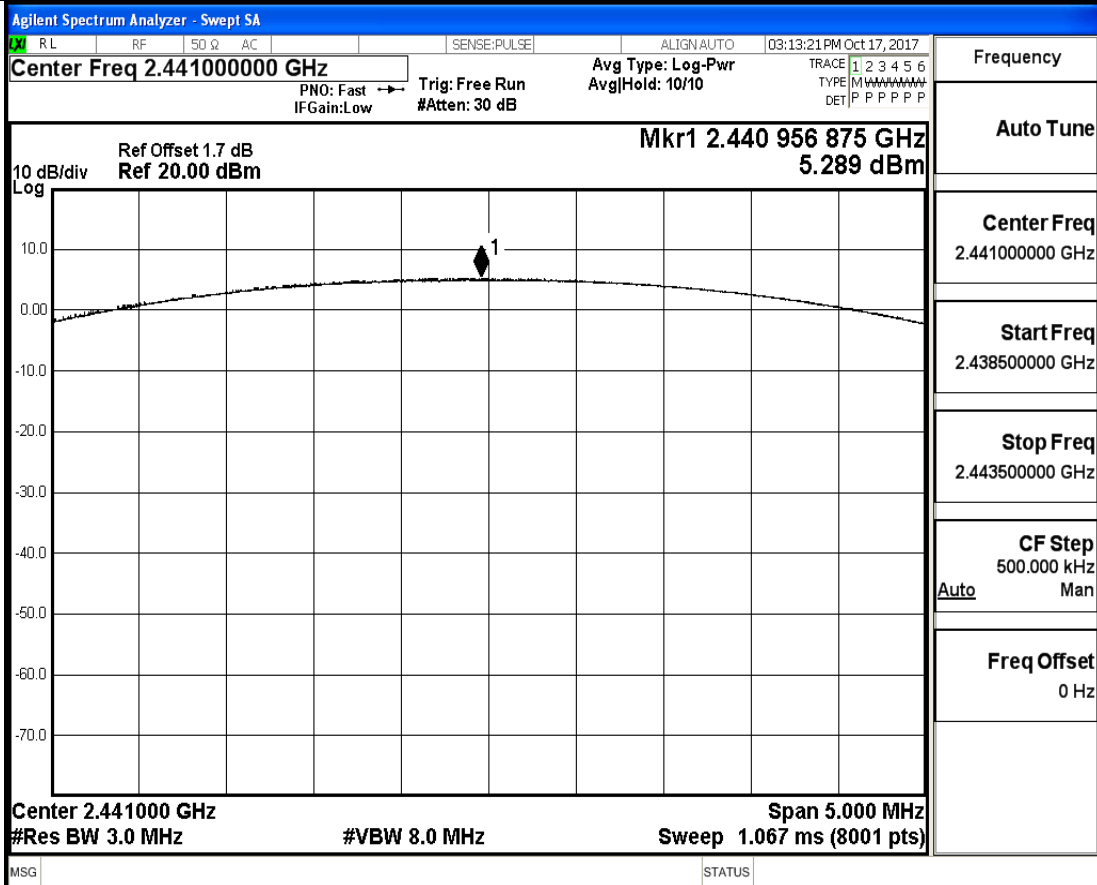
Conducted Peak Output Power\_2DH1\_2480



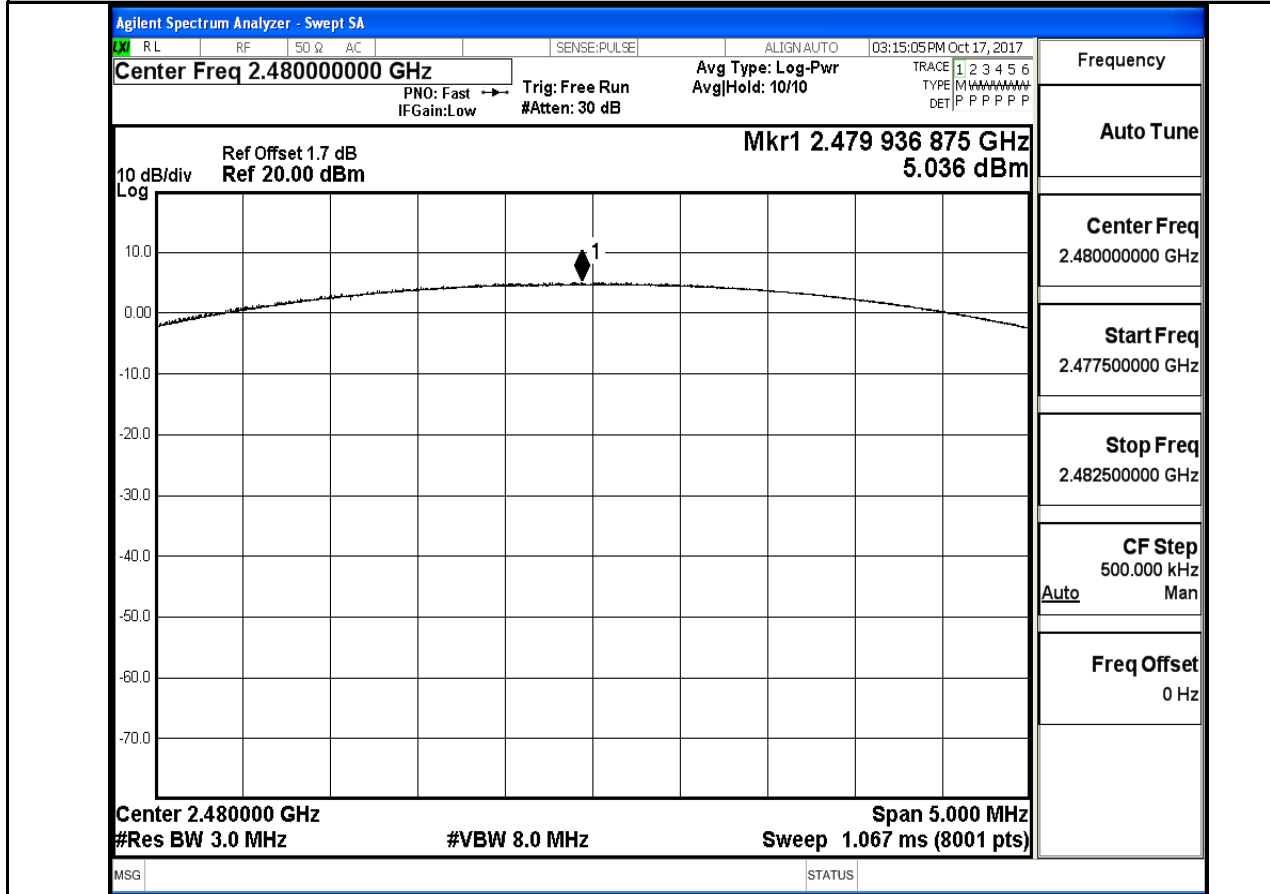
Conducted Peak Output Power\_3DH1\_2402



Conducted Peak Output Power\_3DH1\_2441



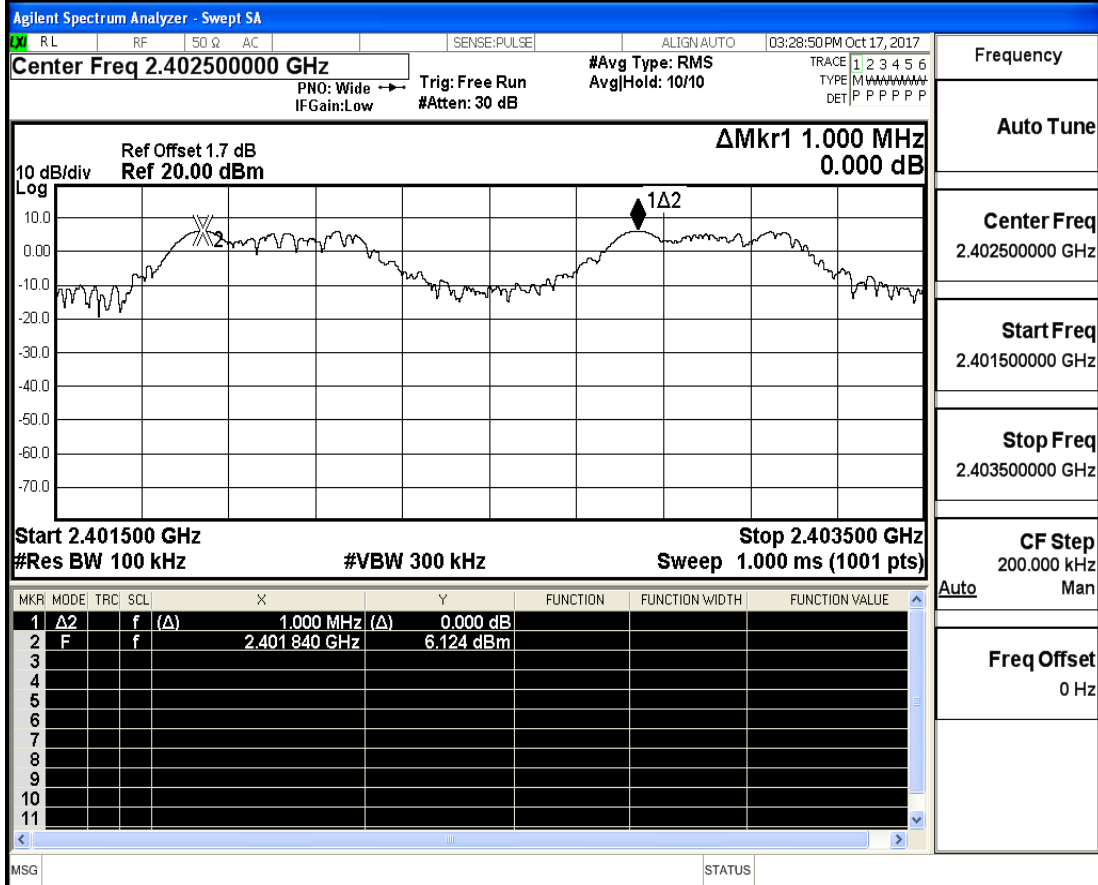
## Conducted Peak Output Power\_3DH1\_2480



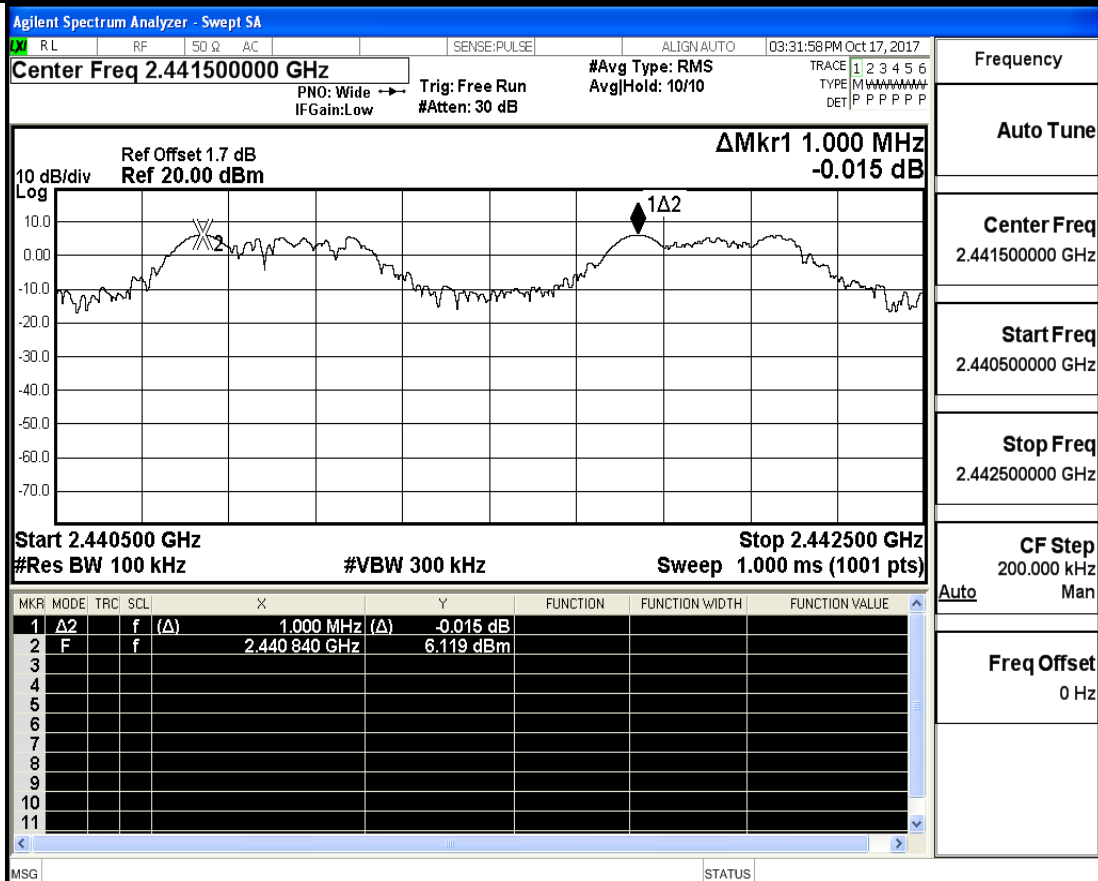
**4.Carrier Frequency Separation**

Test Mode	Test Channel	Result[MHz]	Limit[MHz]	Verdict
GFSK	2402	1	0.7423	PASS
	2441	1	0.7252	PASS
	2480	1	0.8295	PASS
$\pi/4$ DQPSK	2402	0.982	0.754	PASS
	2441	0.798	0.7467	PASS
	2480	1.008	0.748	PASS
8DPSK	2402	1.014	0.7567	PASS
	2441	0.998	0.7453	PASS
	2480	0.984	0.7460	PASS

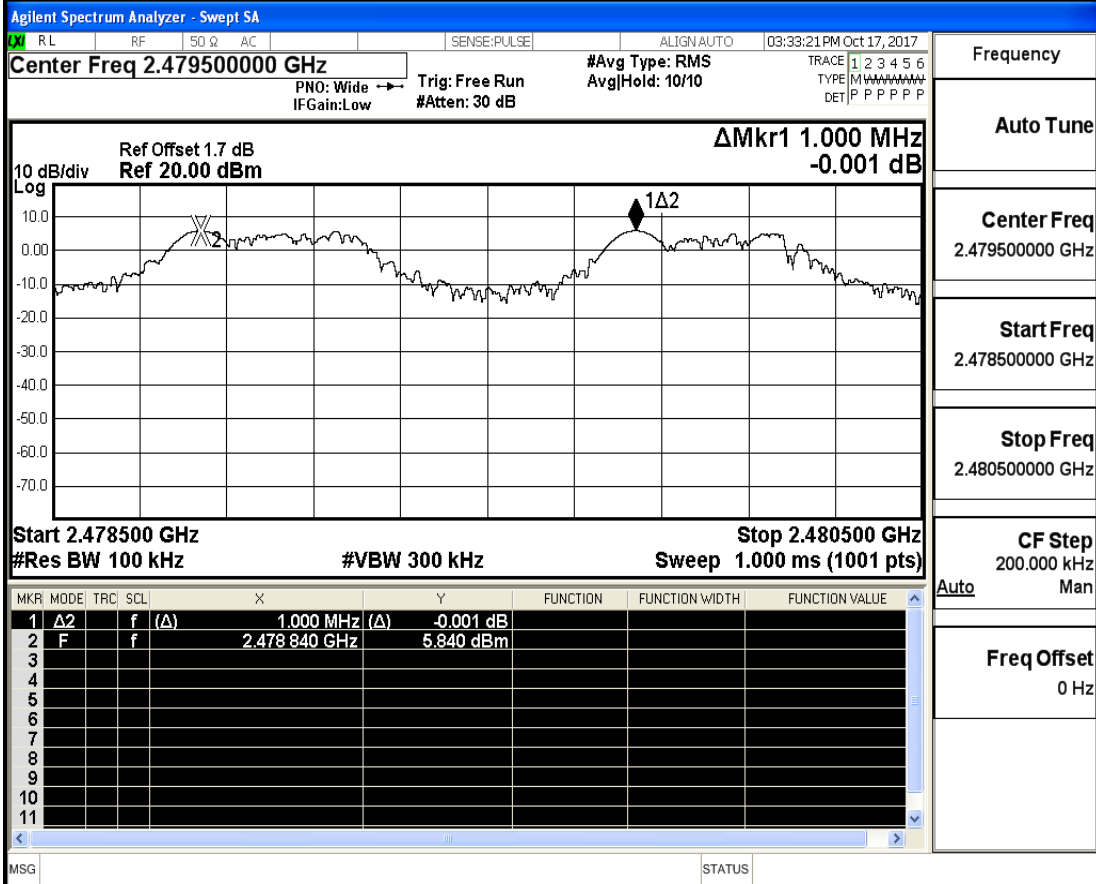
## Carrier Frequency Separation\_DH1\_2402



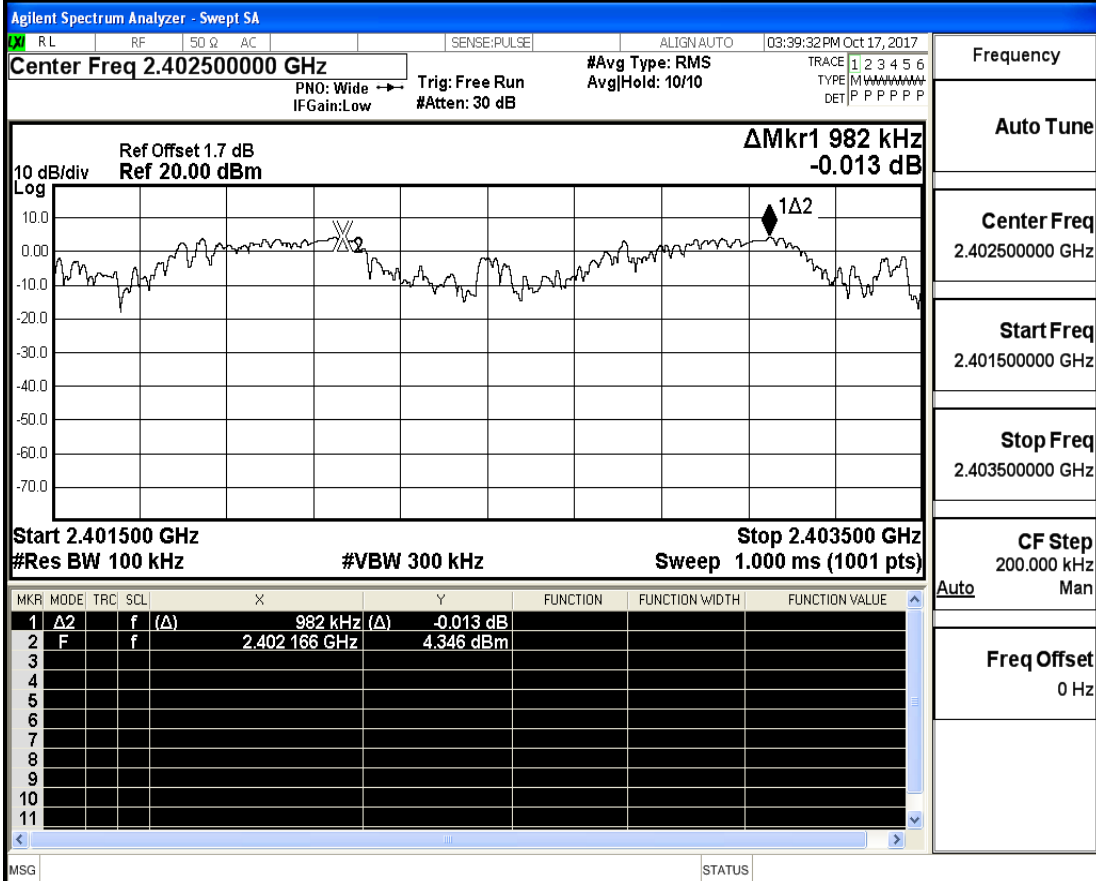
## Carrier Frequency Separation\_DH1\_2441



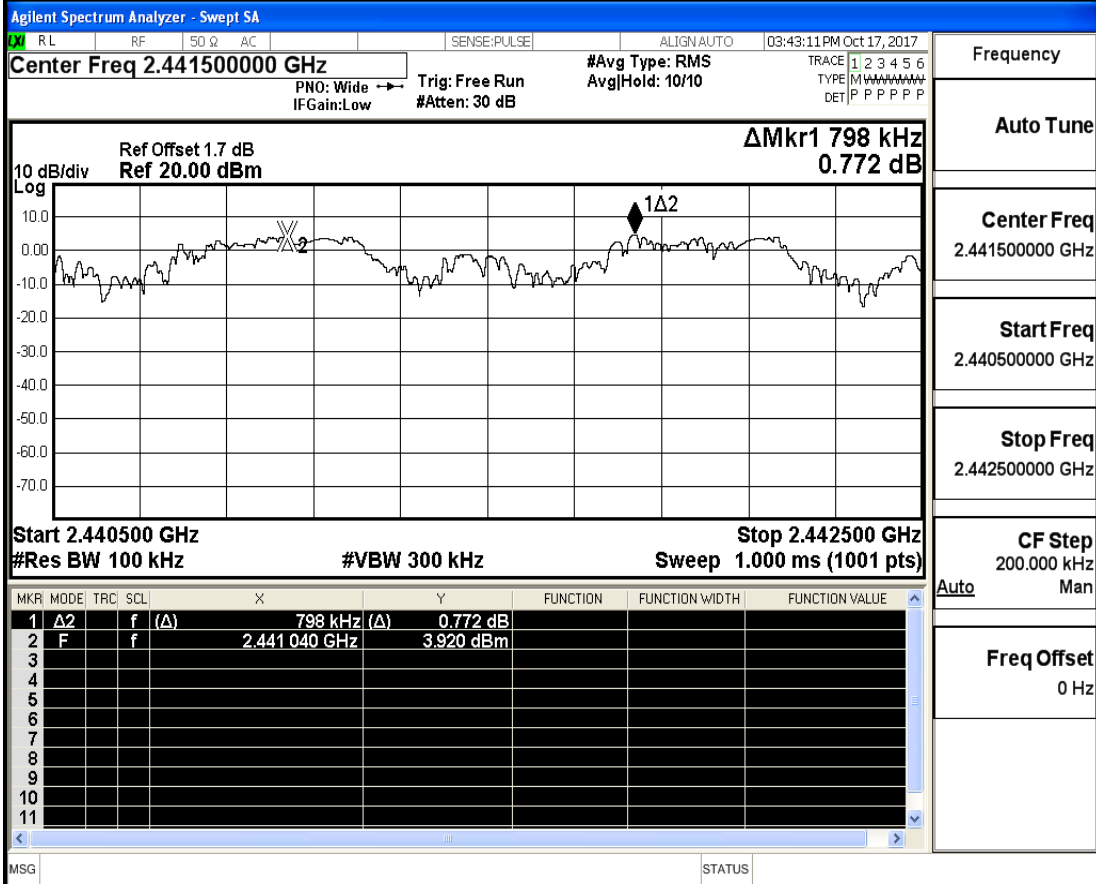
## Carrier Frequency Separation\_DH1\_2480



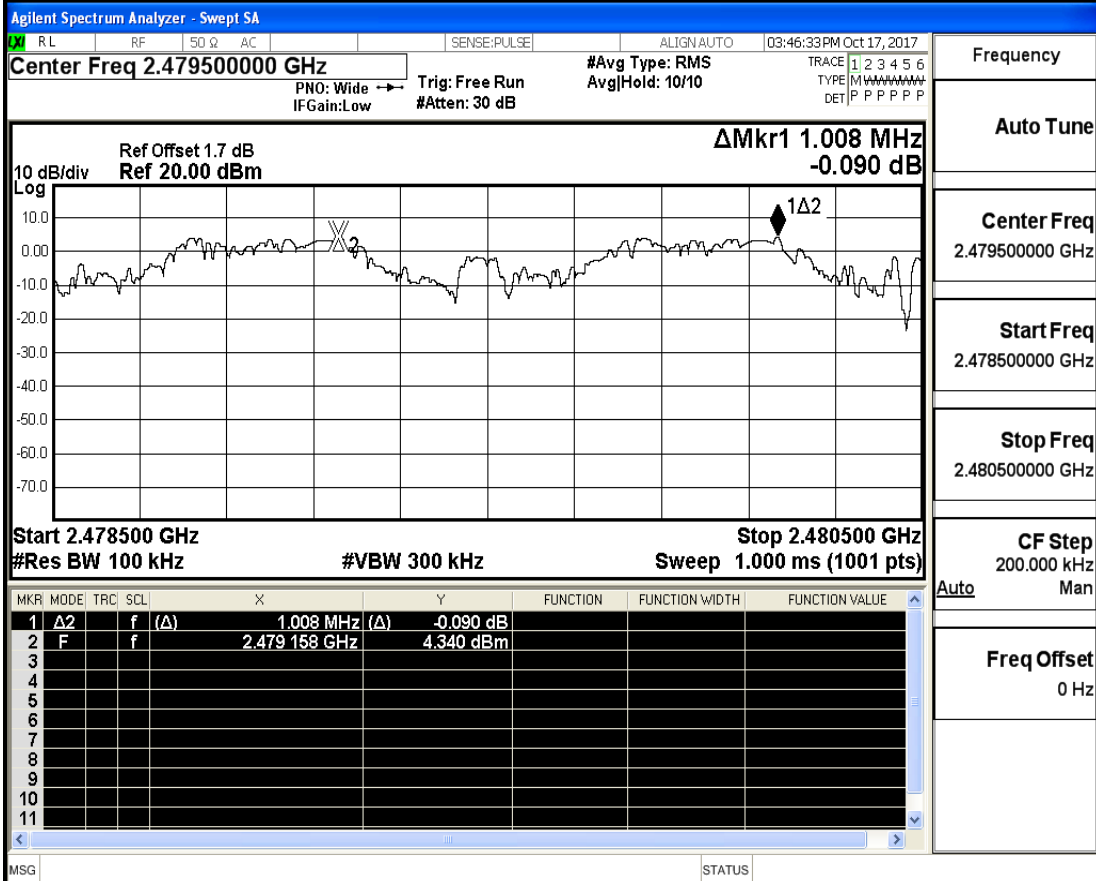
## Carrier Frequency Separation\_2DH1\_2402



## Carrier Frequency Separation\_2DH1\_2441

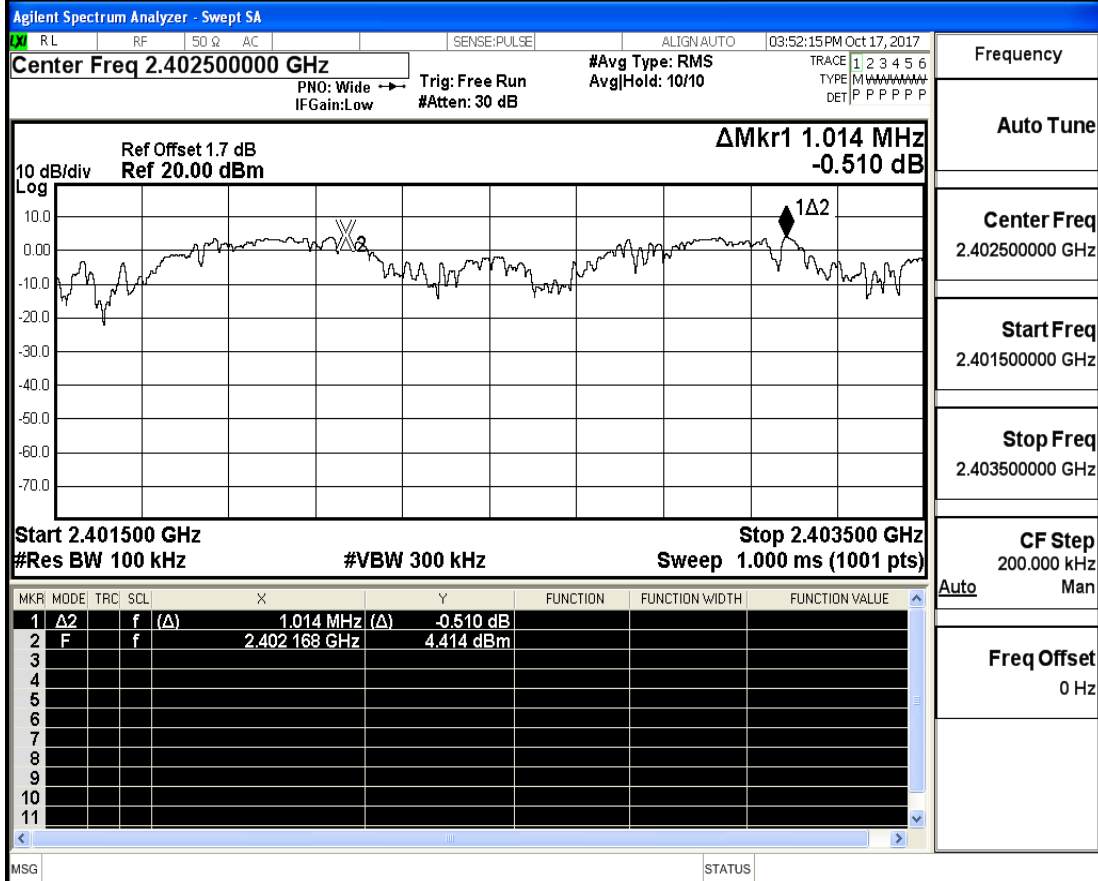


## Carrier Frequency Separation\_2DH1\_2480

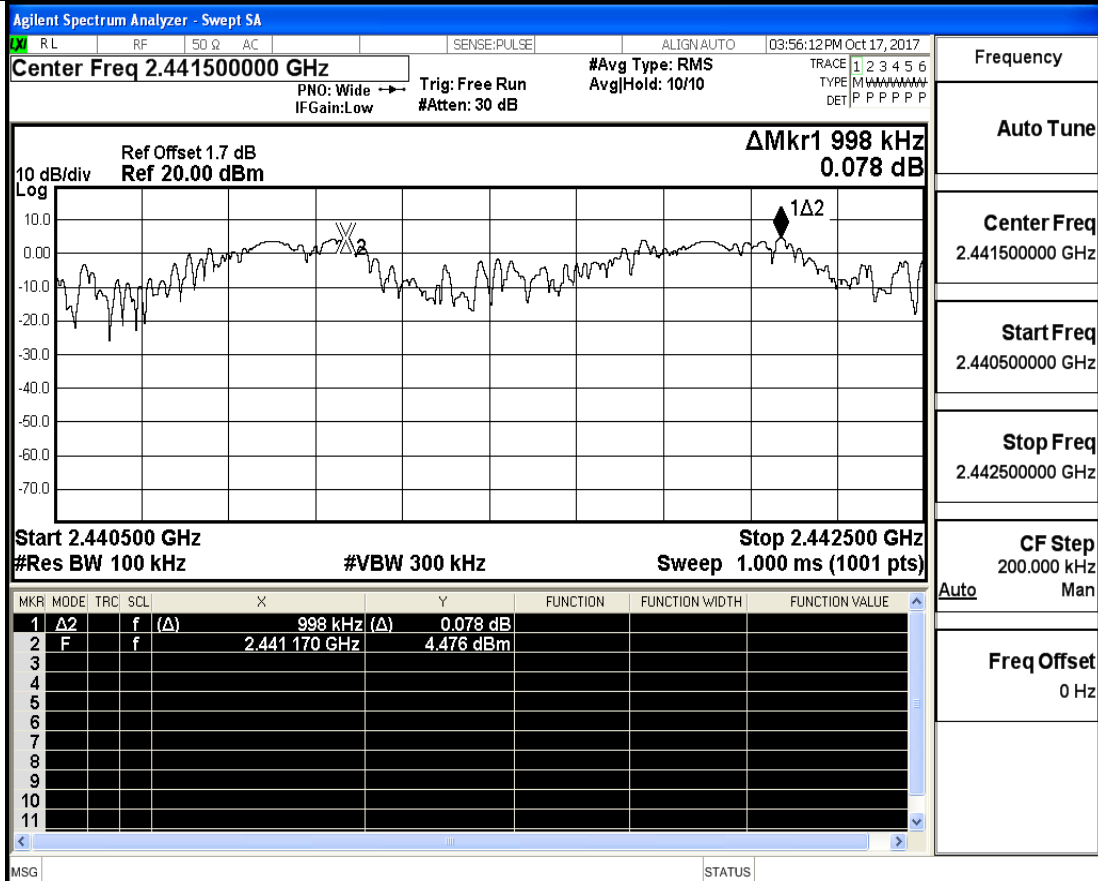




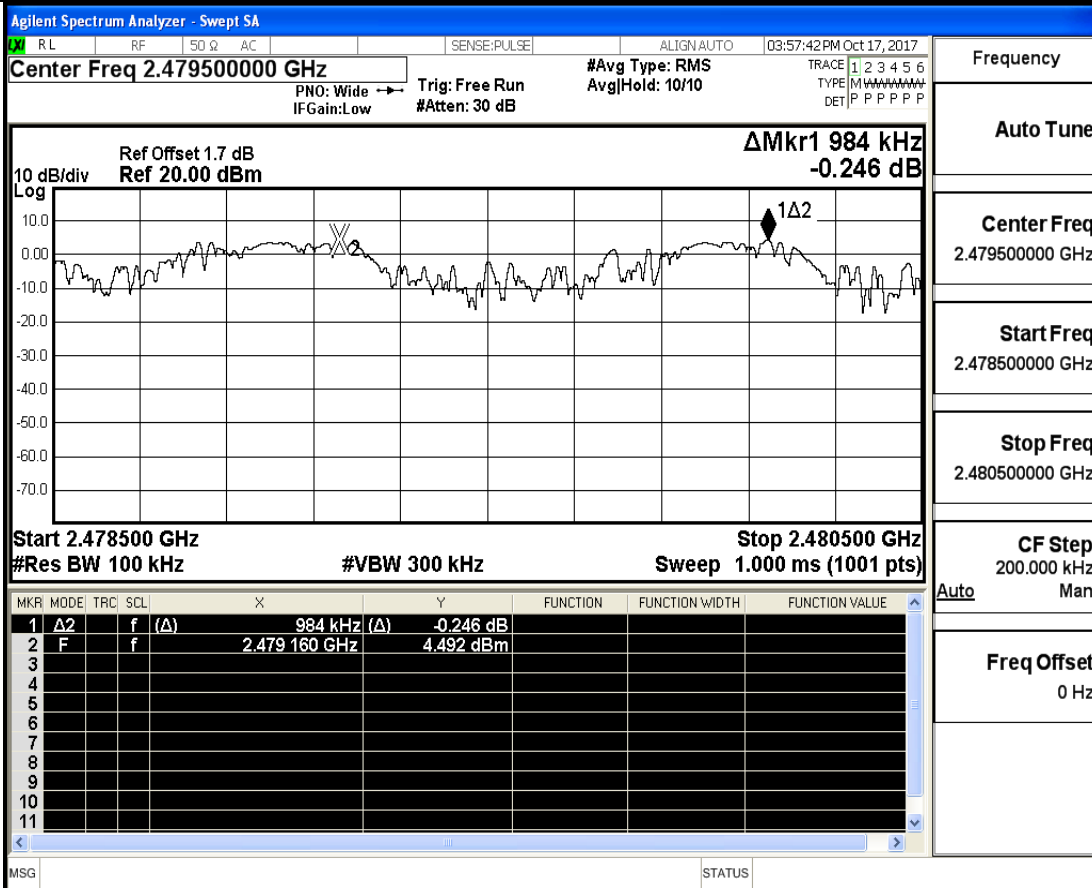
## Carrier Frequency Separation\_3DH1\_2402



## Carrier Frequency Separation\_3DH1\_2441



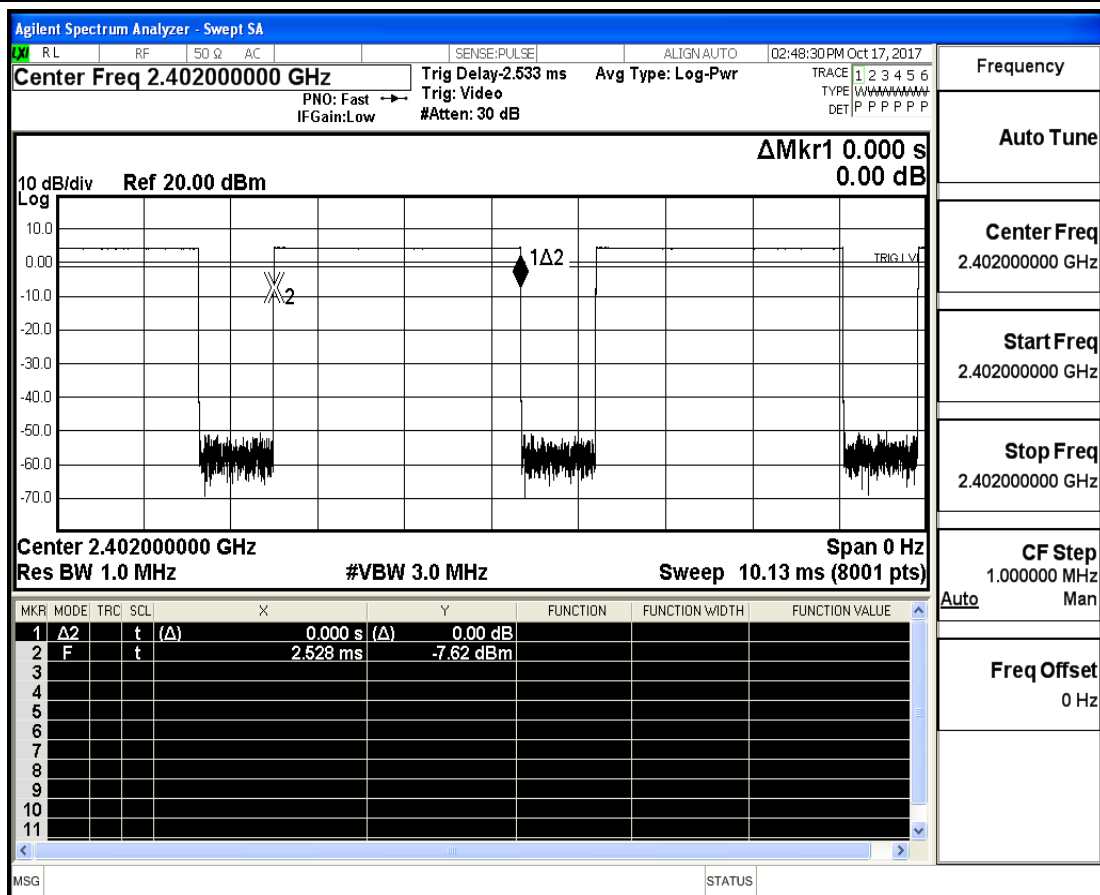
Carrier Frequency Separation\_3DH1\_2480



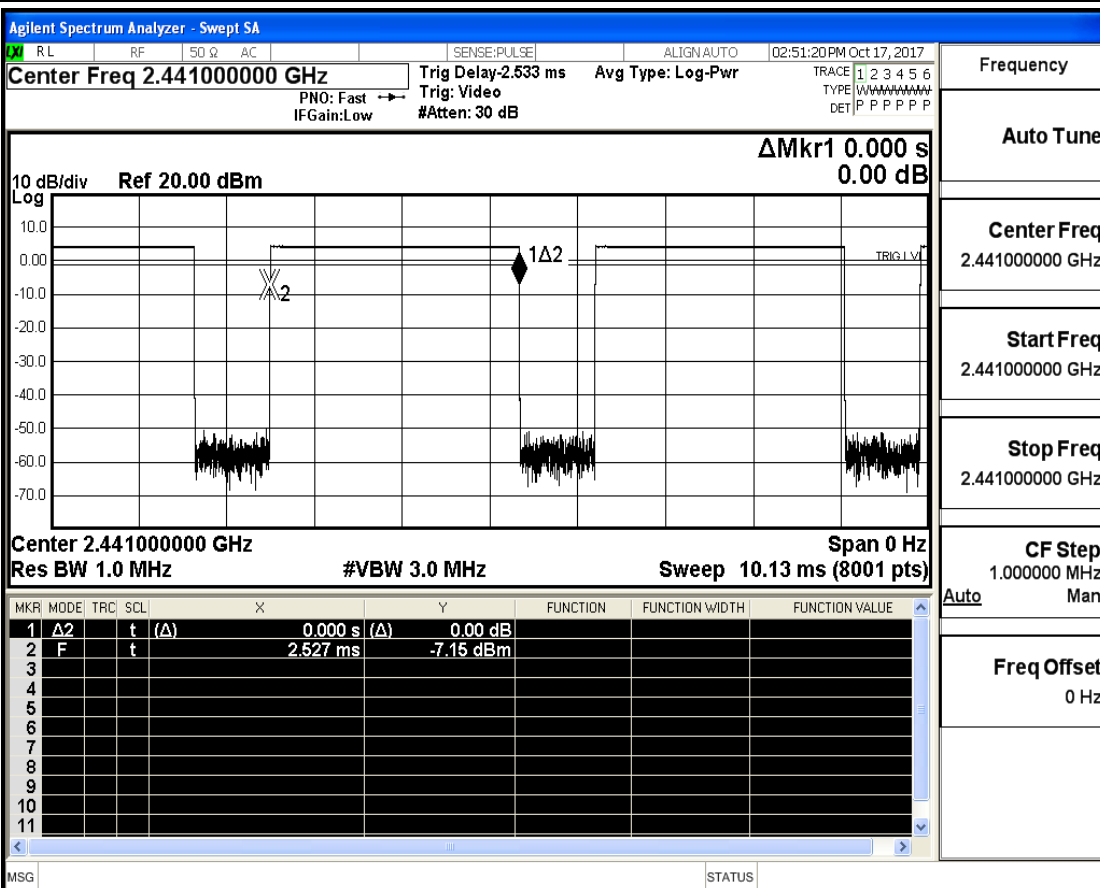
**5.Dwell Time**

Test Mode	Test Channel	Burst Width[ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit[s]	Verdict
DH5	2402	2.88	106.7	0.307	0.4	PASS
DH5	2441	2.88	106.7	0.307	0.4	PASS
DH5	2480	2.88	106.7	0.307	0.4	PASS
2DH5	2402	2.88	106.7	0.307	0.4	PASS
2DH5	2441	2.88	106.7	0.307	0.4	PASS
2DH5	2480	2.88	106.7	0.307	0.4	PASS
3DH5	2402	2.88	106.7	0.307	0.4	PASS
3DH5	2441	2.88	106.7	0.307	0.4	PASS
3DH5	2480	2.88	106.7	0.307	0.4	PASS

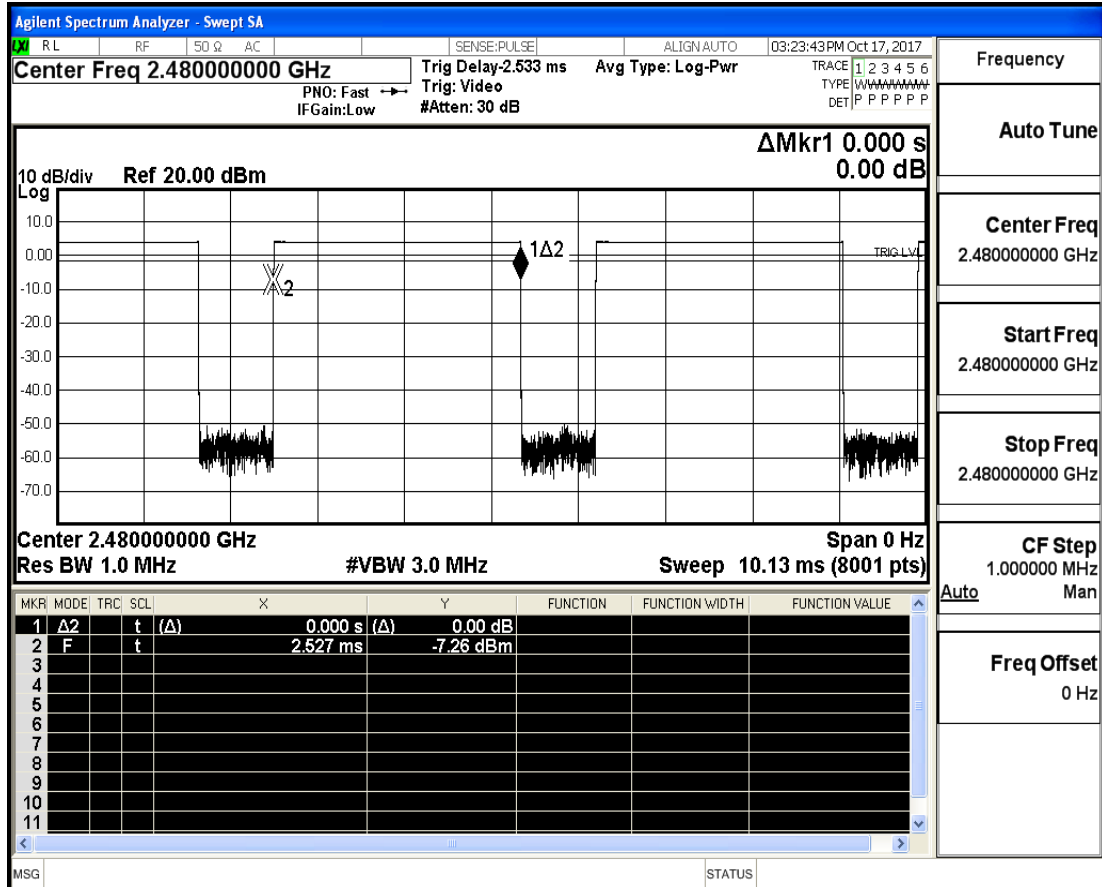
## Dwell Time DH5 2402



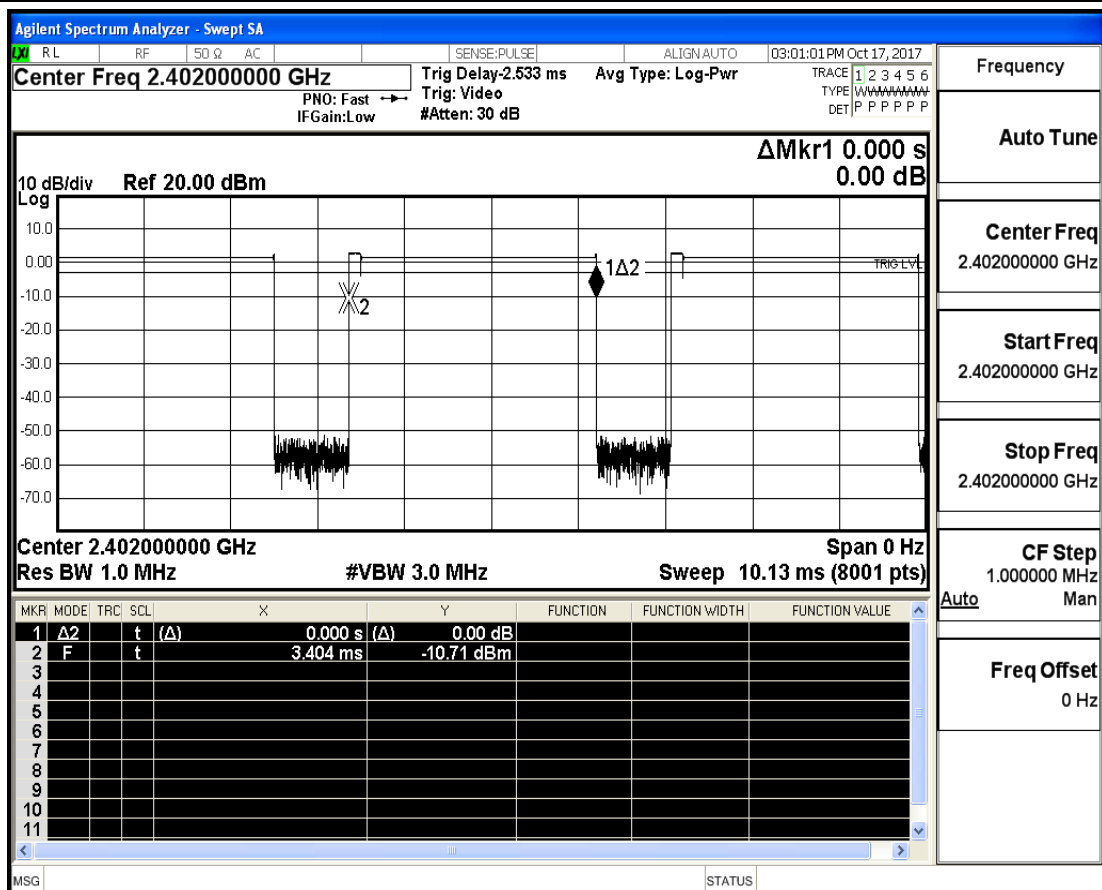
## Dwell Time\_DH5\_2441



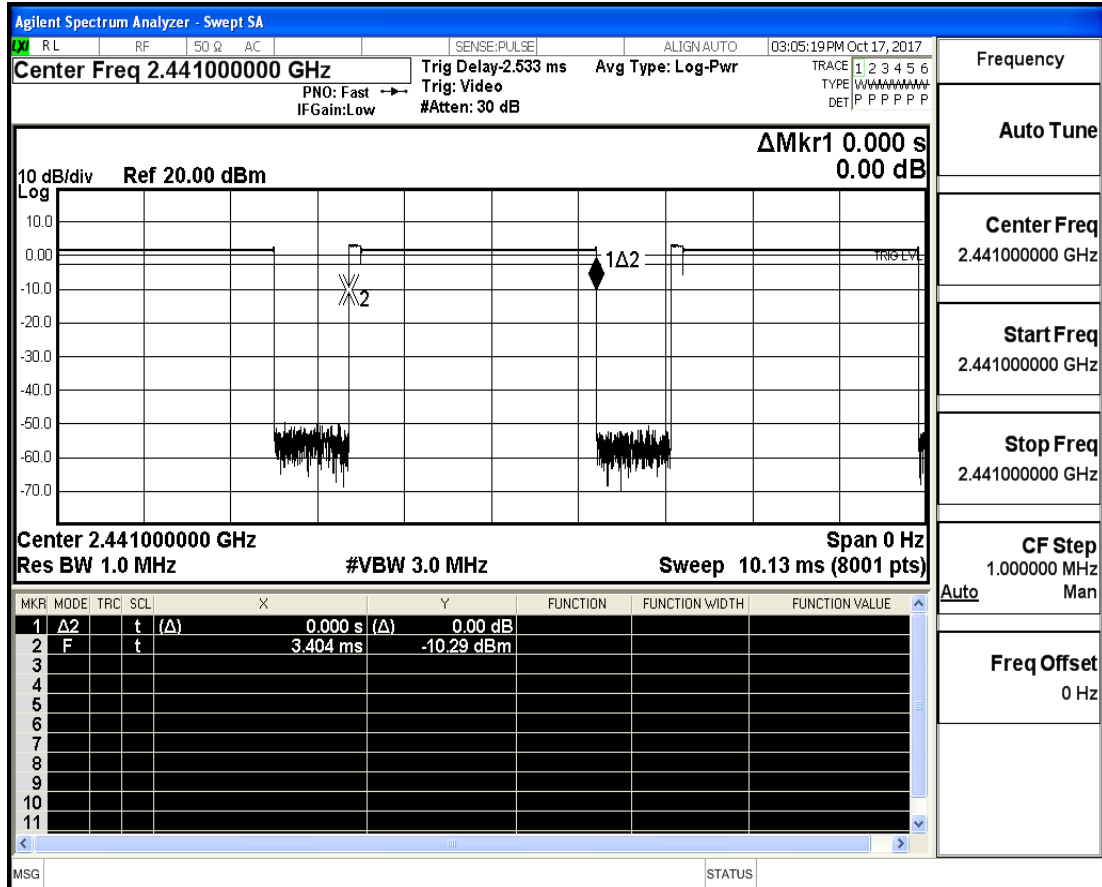
## Dwell Time\_DH5\_2480



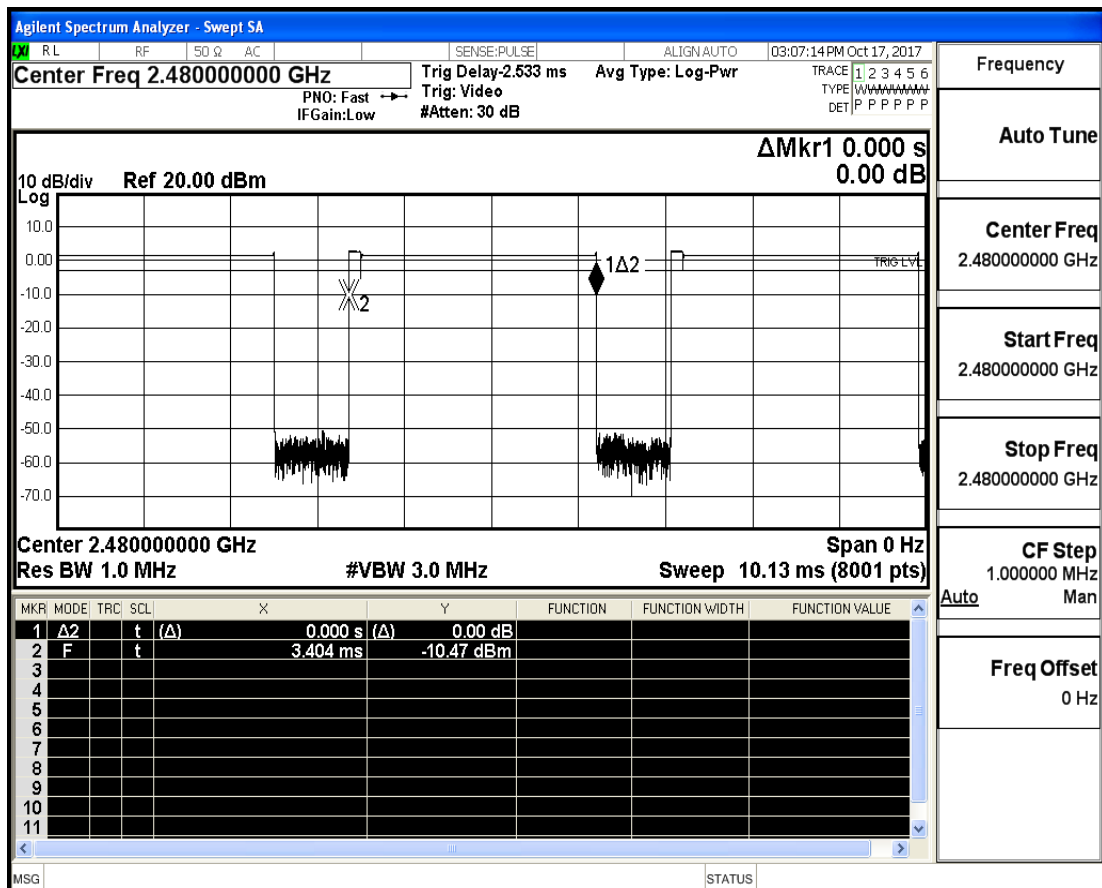
## Dwell Time\_2DH5\_2402



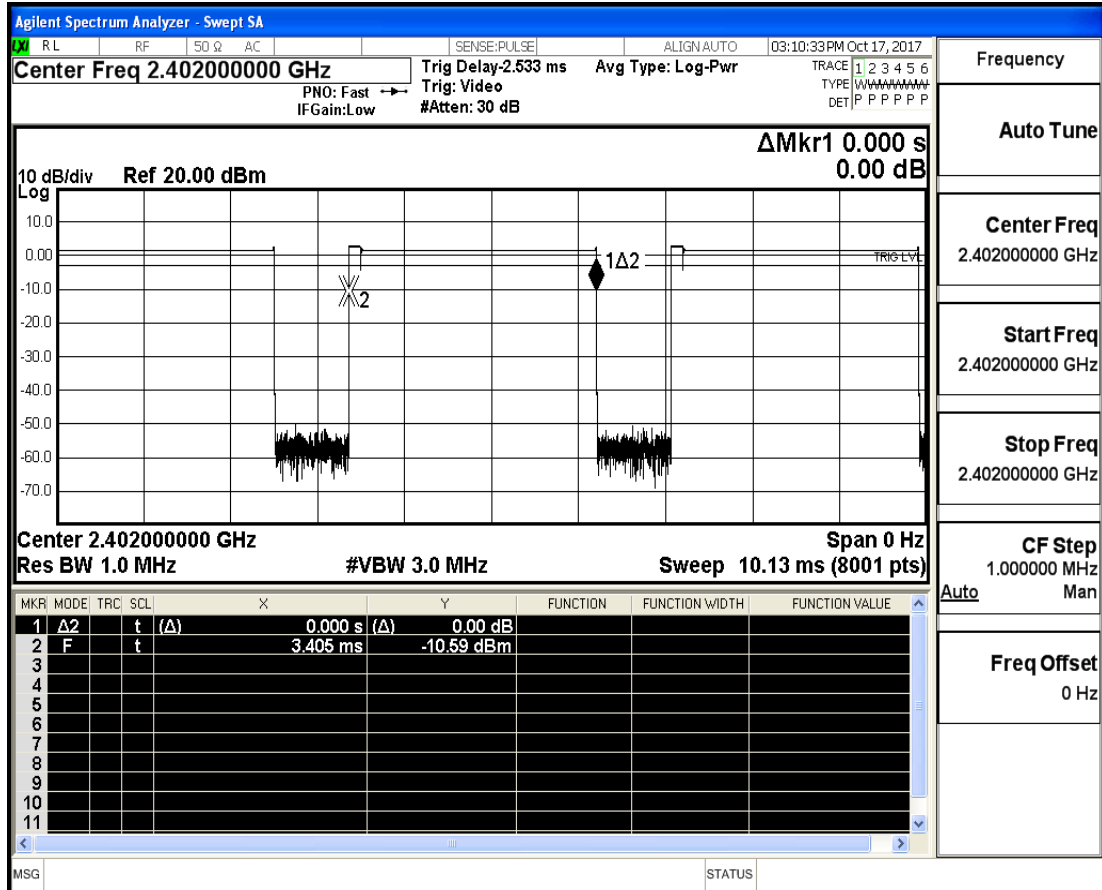
## Dwell Time\_2DH5\_2441



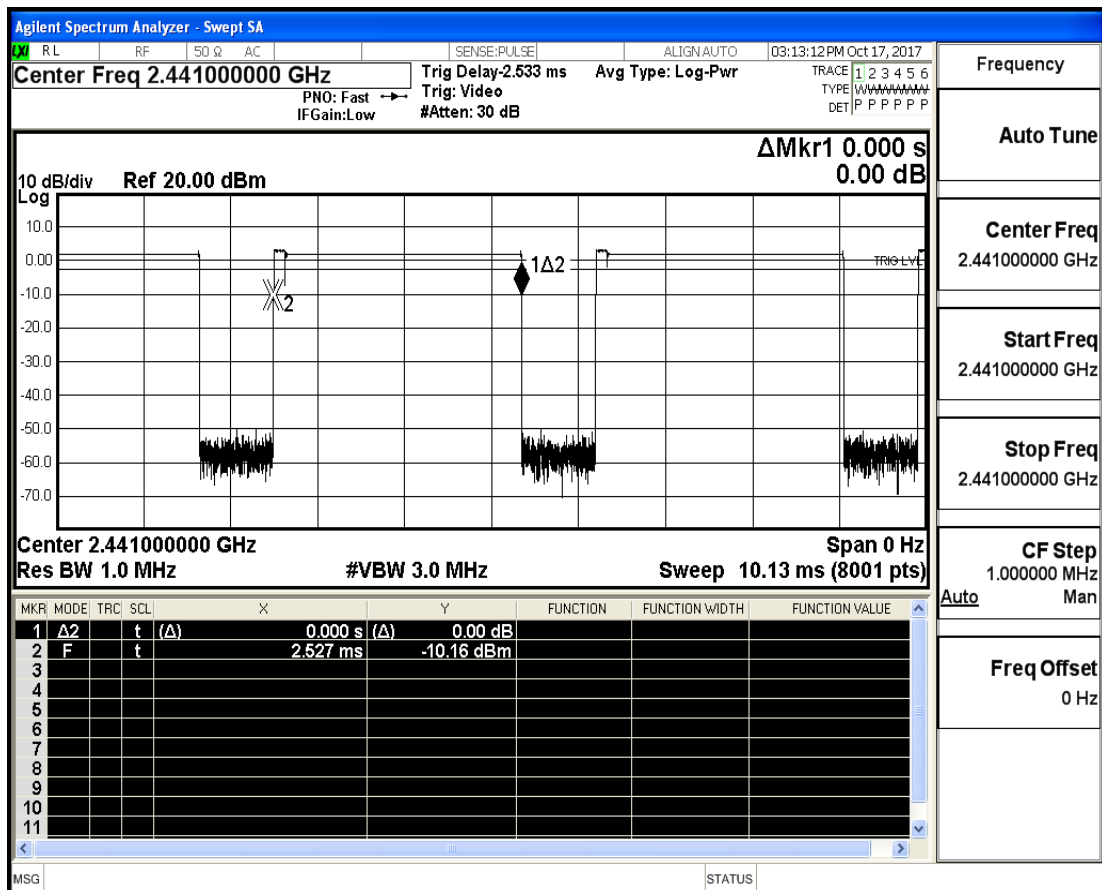
## Dwell Time\_2DH5\_2480



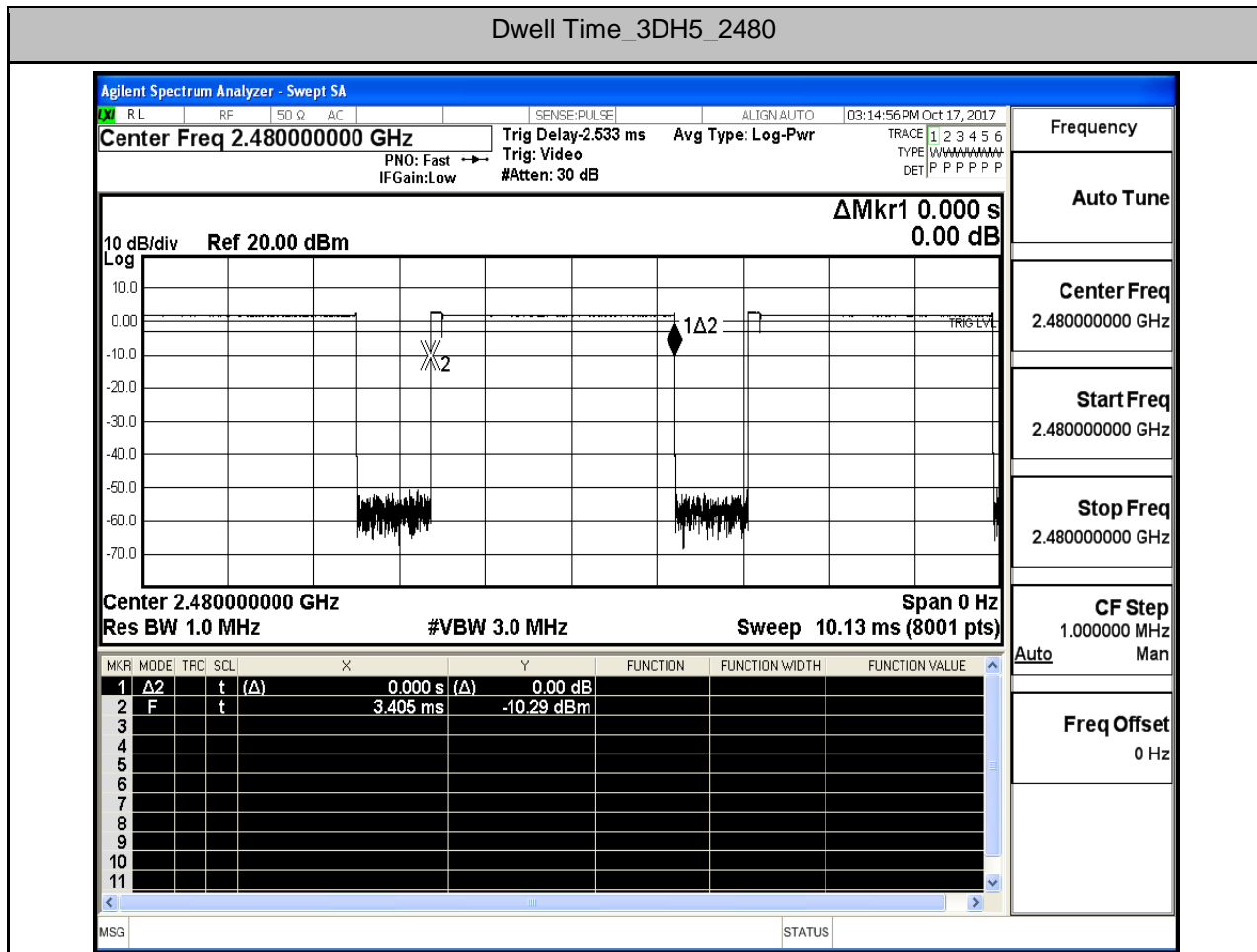
## Dwell Time\_3DH5\_2402



## Dwell Time\_3DH5\_2441



Dwell Time\_3DH5\_2480

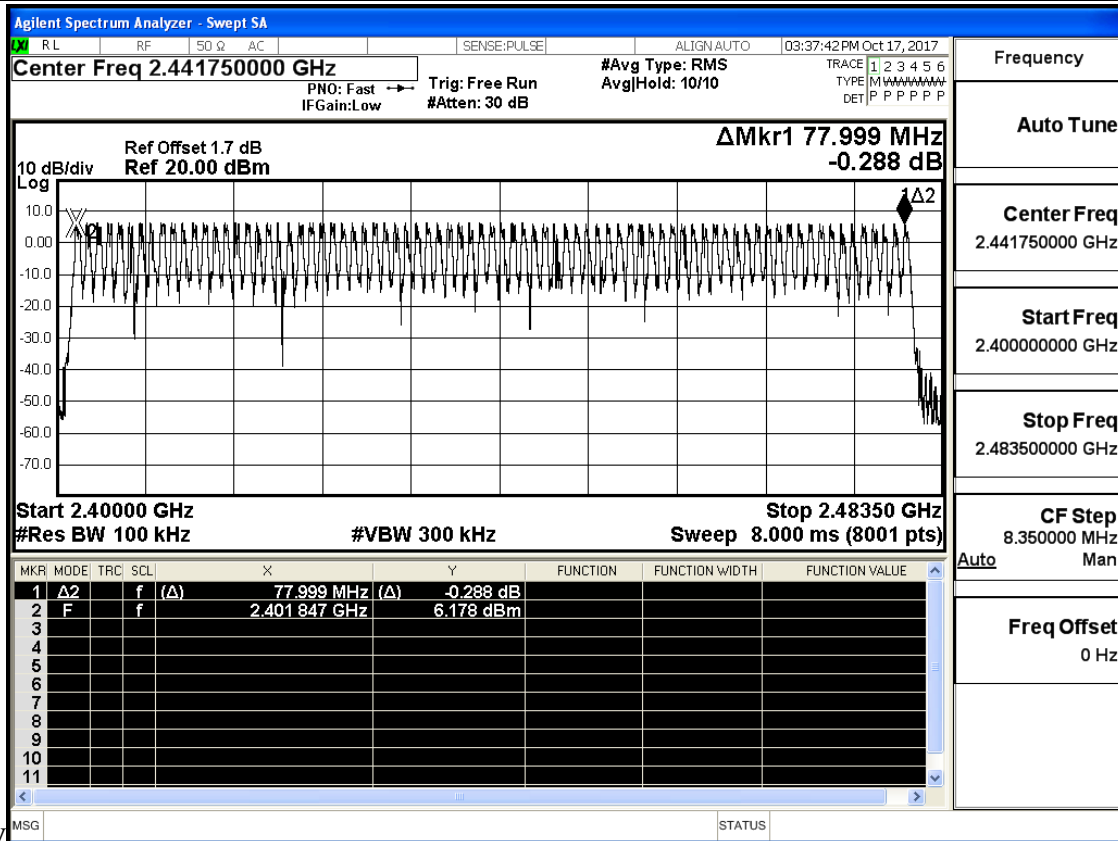




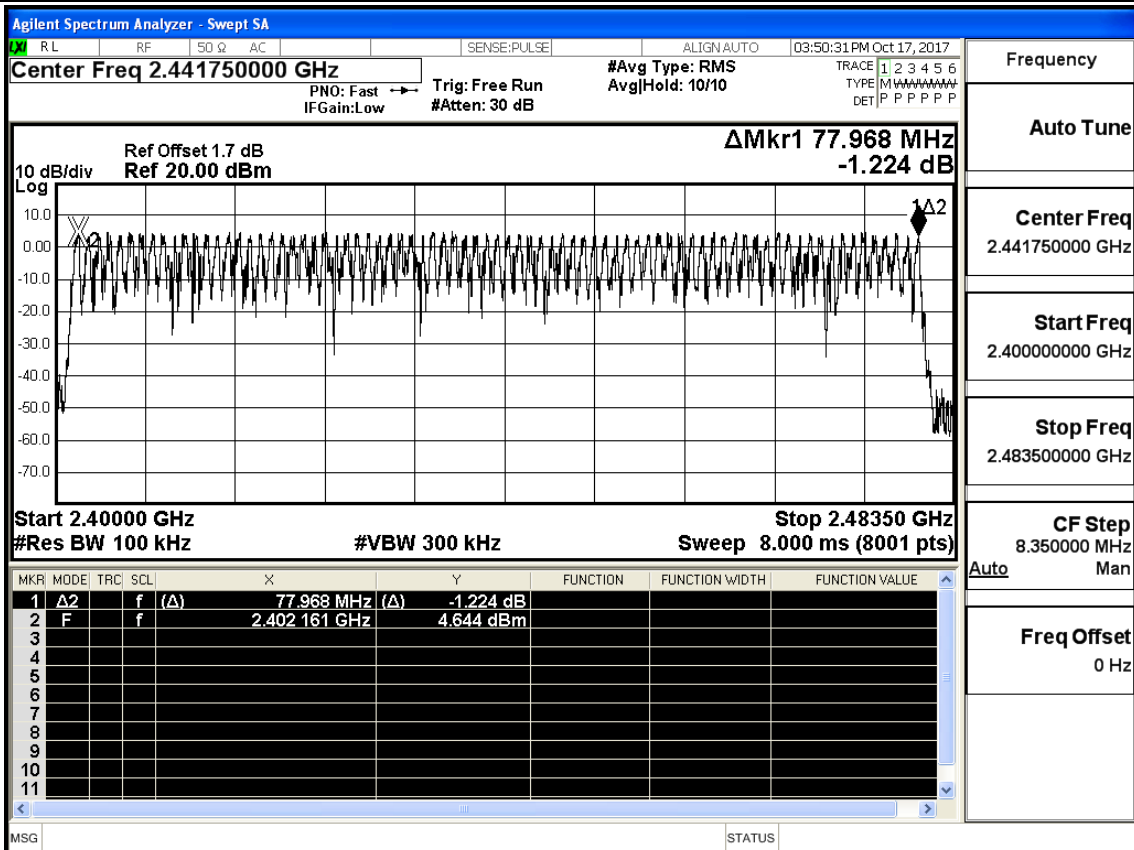
**6.Hopping Channel Number**

Test Mode	Test Channel	Number of Hopping Channel[N]	Limit[N]	Verdict
DH1	2402	79	$\geq 15$	PASS
2DH1	2402	79	$\geq 15$	PASS
3DH1	2402	79	$\geq 15$	PASS

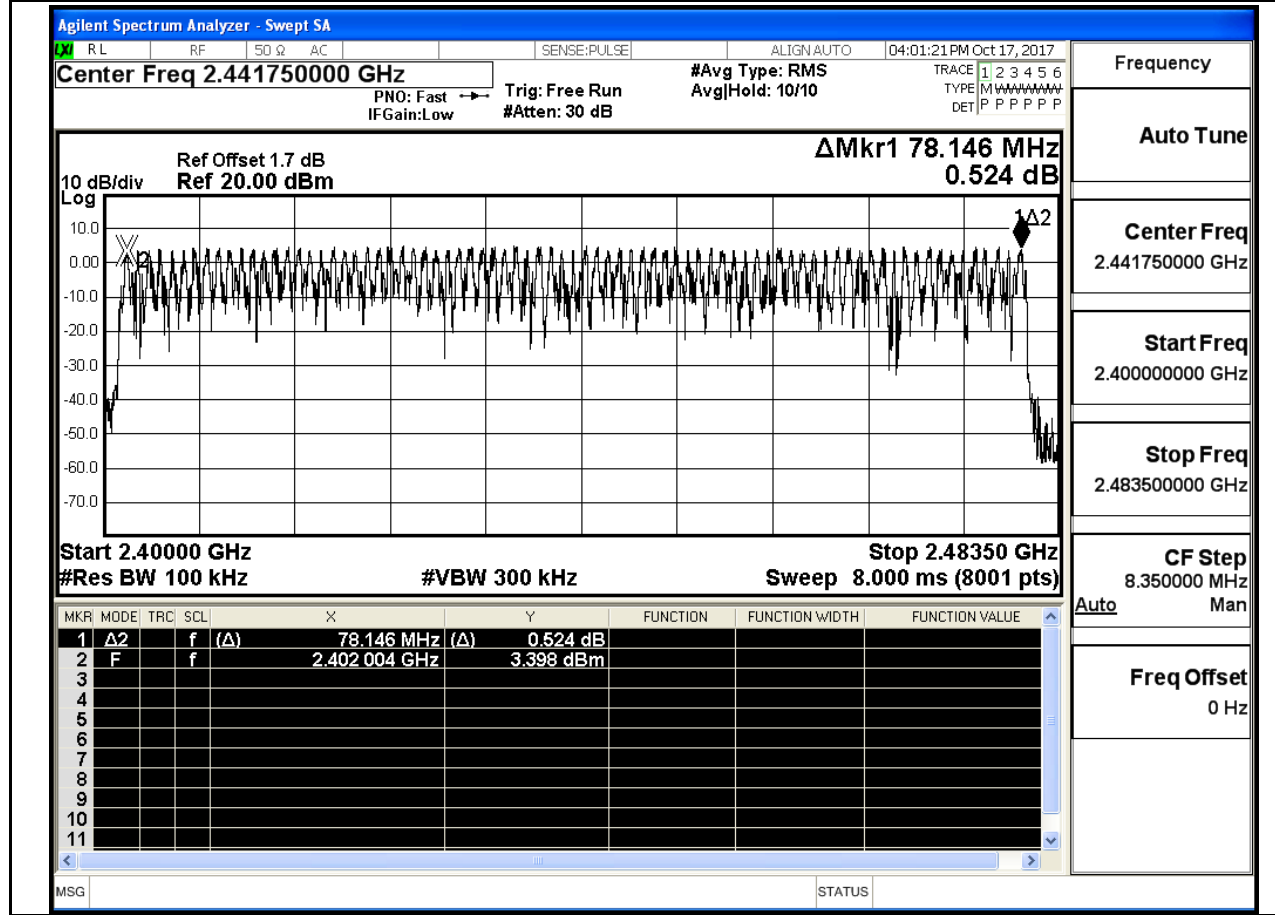
Hopping Channel Number\_DH1\_2402



Hopping Channel Number\_2DH1\_2402



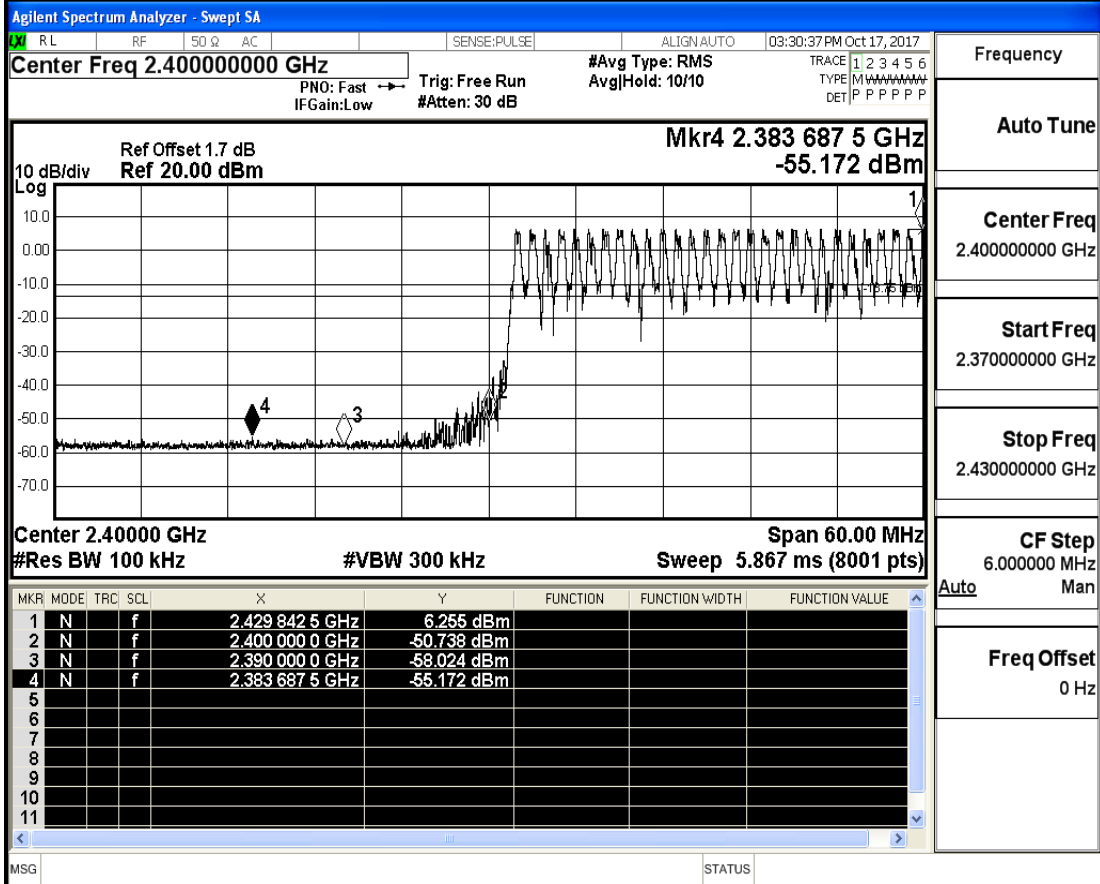
Hopping Channel Number\_3DH1\_2402



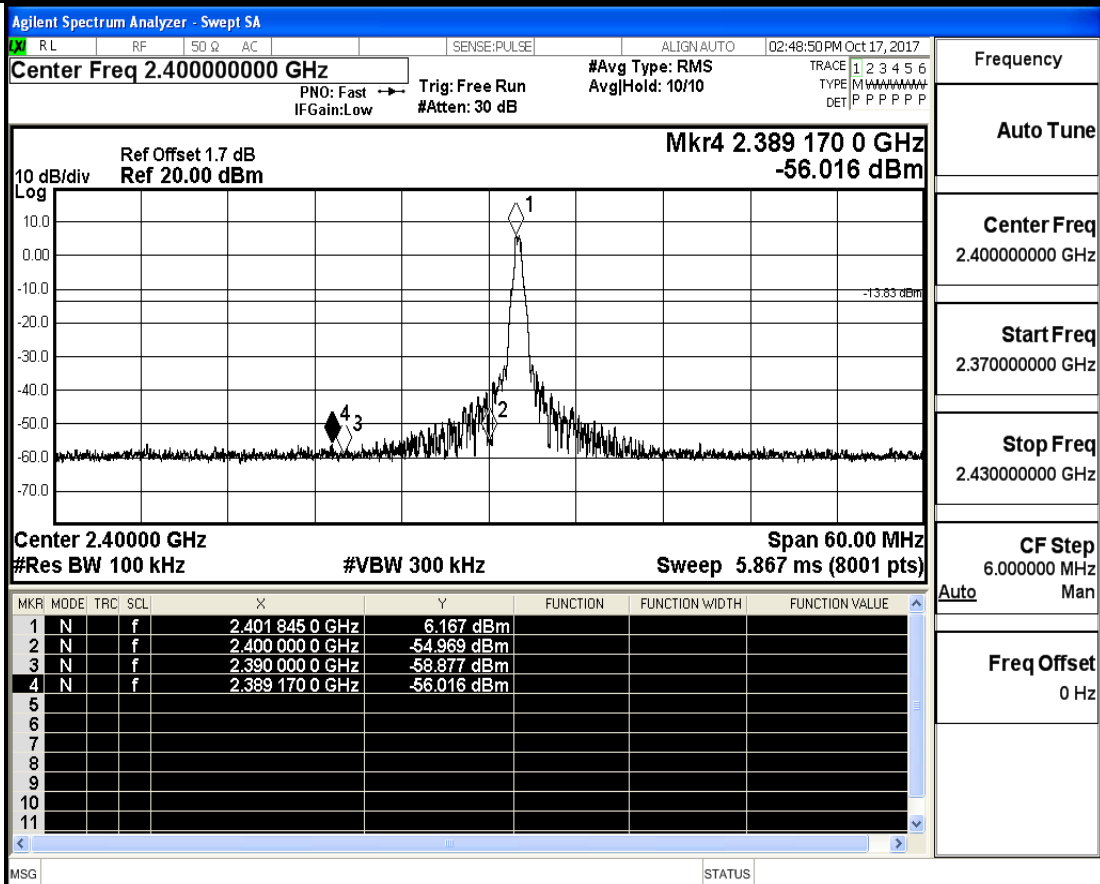
## 7.Band-edge for RF Conducted Emissions

Test Mode	Test Channel	Hopping	Carrier Power[dBm]	Max. Spurious Level [dBm]	Limit[dBm]	Verdict
DH1	2402	On	6.255	-55.172	-13.75	PASS
DH1	2402	Off	6.167	-56.016	-13.83	PASS
DH1	2480	On	5.972	-46.239	-14.03	PASS
DH1	2480	Off	5.877	-44.281	-14.12	PASS
2DH1	2402	On	4.867	-54.433	-15.13	PASS
2DH1	2402	Off	4.657	-56.413	-15.34	PASS
2DH1	2480	On	4.616	-47.910	-15.38	PASS
2DH1	2480	Off	4.542	-46.998	-15.46	PASS
3DH1	2402	On	4.670	-55.836	-15.33	PASS
3DH1	2402	Off	4.329	-56.769	-15.67	PASS
3DH1	2480	On	4.588	-49.811	-15.41	PASS
3DH1	2480	Off	4.440	-47.713	-15.56	PASS

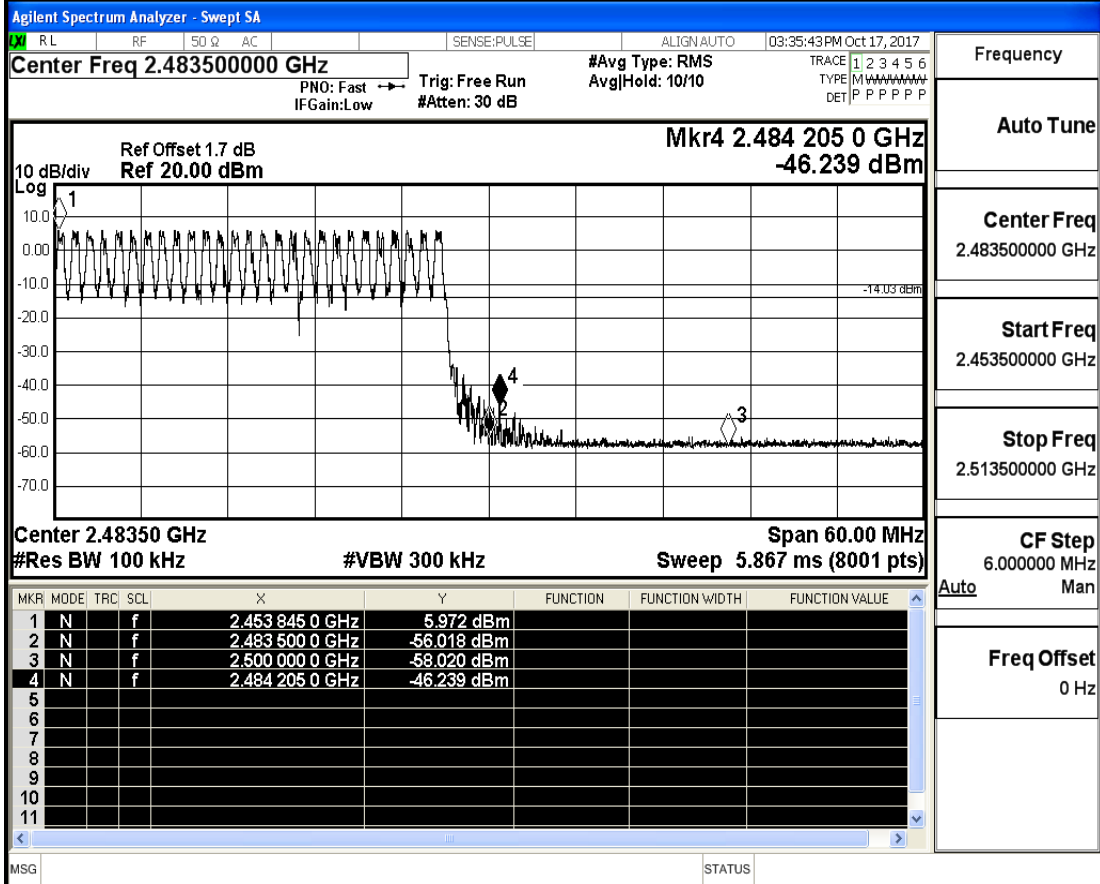
## Band-edge for RF Conducted Emissions\_DH1\_2402\_Hopping On



## Band-edge for RF Conducted Emissions\_DH1\_2402\_Hopping Off



Band-edge for RF Conducted Emissions\_DH1\_2480\_Hopping On



Frequency

Auto Tune

Center Freq  
2.483500000 GHz

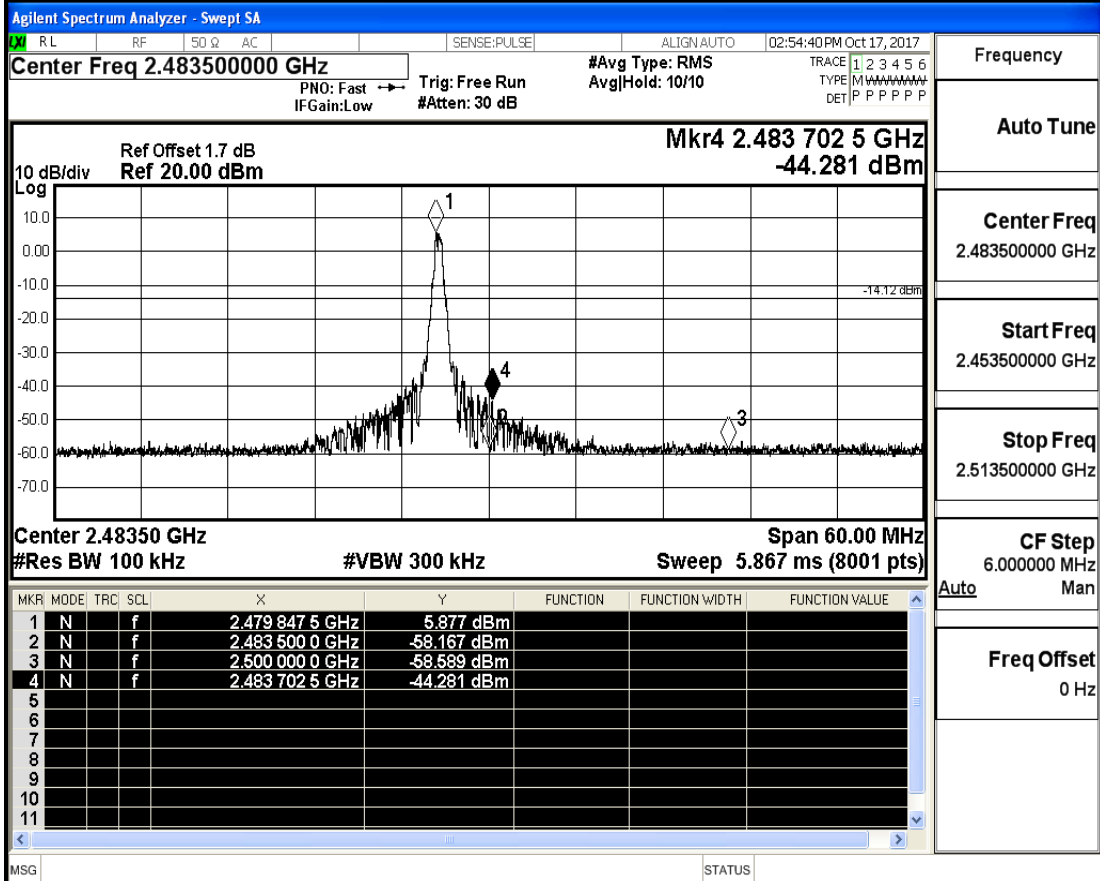
Start Freq  
2.453500000 GHz

Stop Freq  
2.513500000 GHz

CF Step  
6.000000 MHz  
Auto Man

Freq Offset  
0 Hz

Band-edge for RF Conducted Emissions\_DH1\_2480\_Hopping Off



Frequency

Auto Tune

Center Freq  
2.483500000 GHz

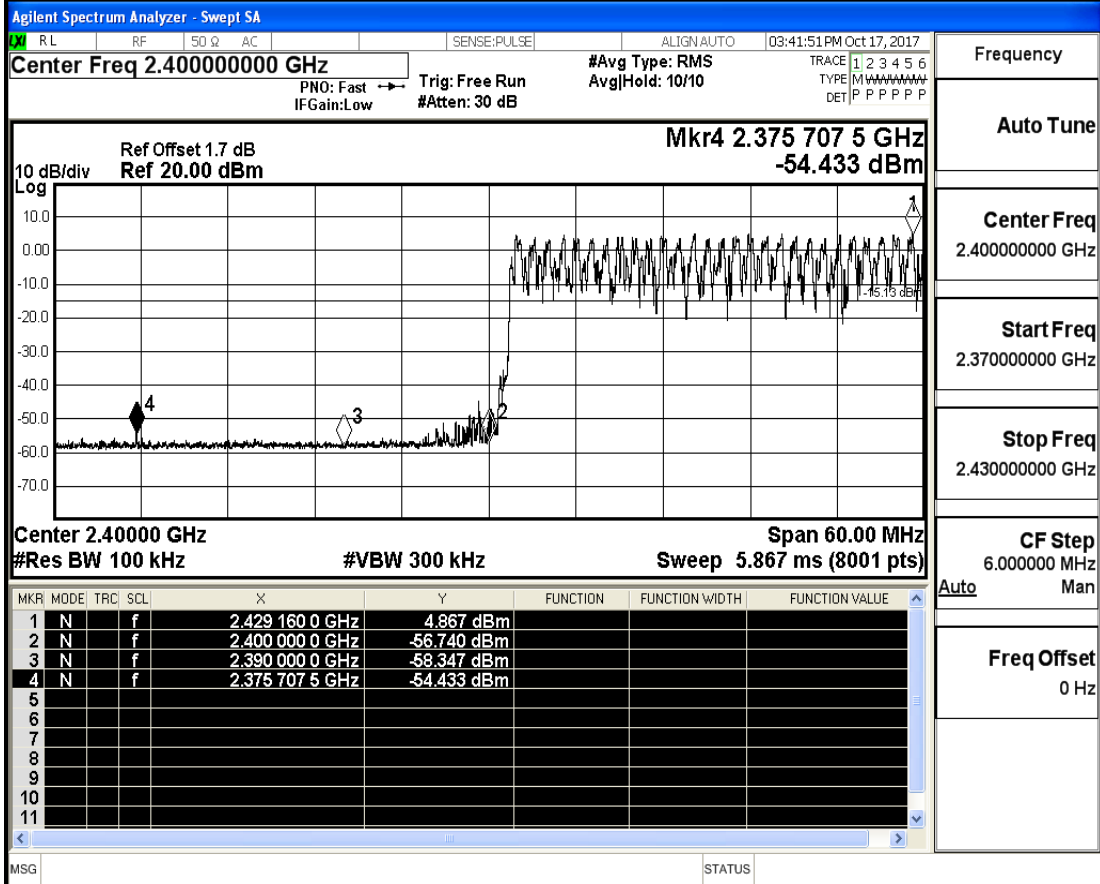
Start Freq  
2.453500000 GHz

Stop Freq  
2.513500000 GHz

CF Step  
6.000000 MHz  
Auto Man

Freq Offset  
0 Hz

## Band-edge for RF Conducted Emissions\_2DH1\_2402\_Hopping On



Frequency

Auto Tune

Center Freq  
2.400000000 GHz

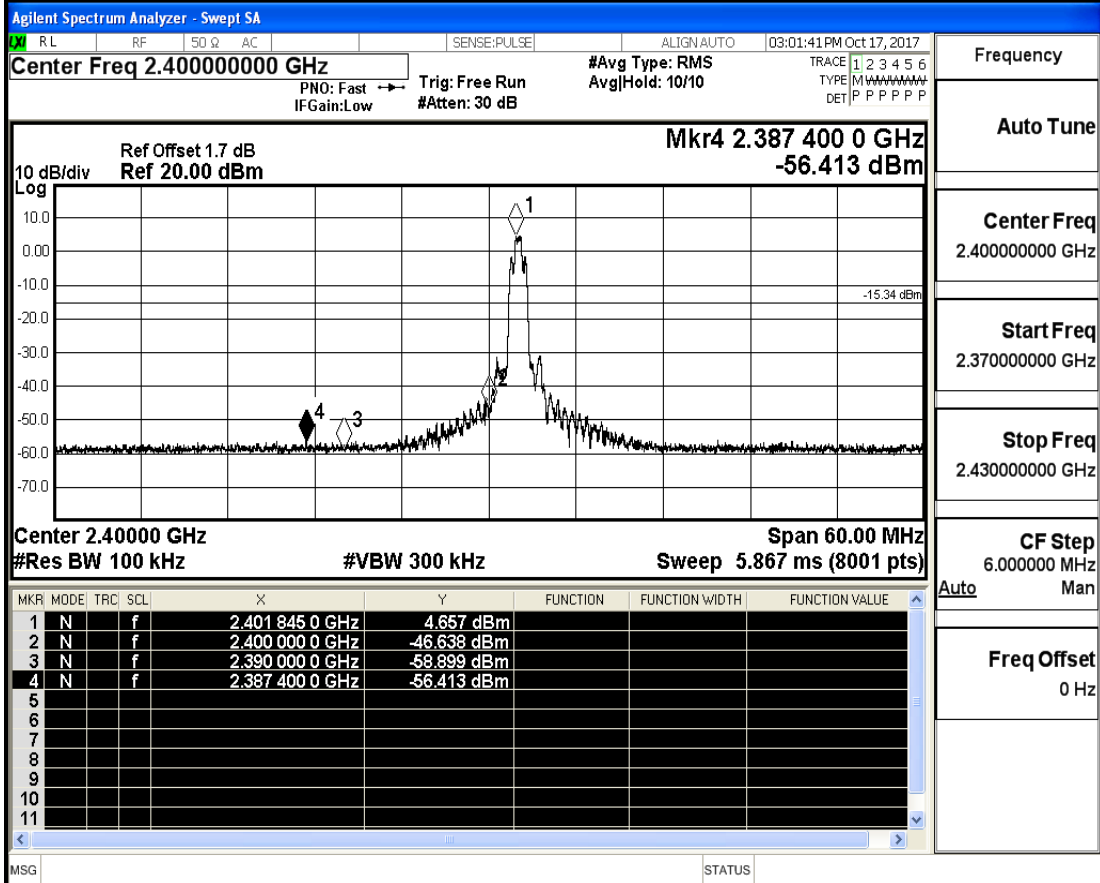
Start Freq  
2.370000000 GHz

Stop Freq  
2.430000000 GHz

CF Step  
6.000000 MHz  
Auto Man

Freq Offset  
0 Hz

## Band-edge for RF Conducted Emissions\_2DH1\_2402\_Hopping Off



Frequency

Auto Tune

Center Freq  
2.400000000 GHz

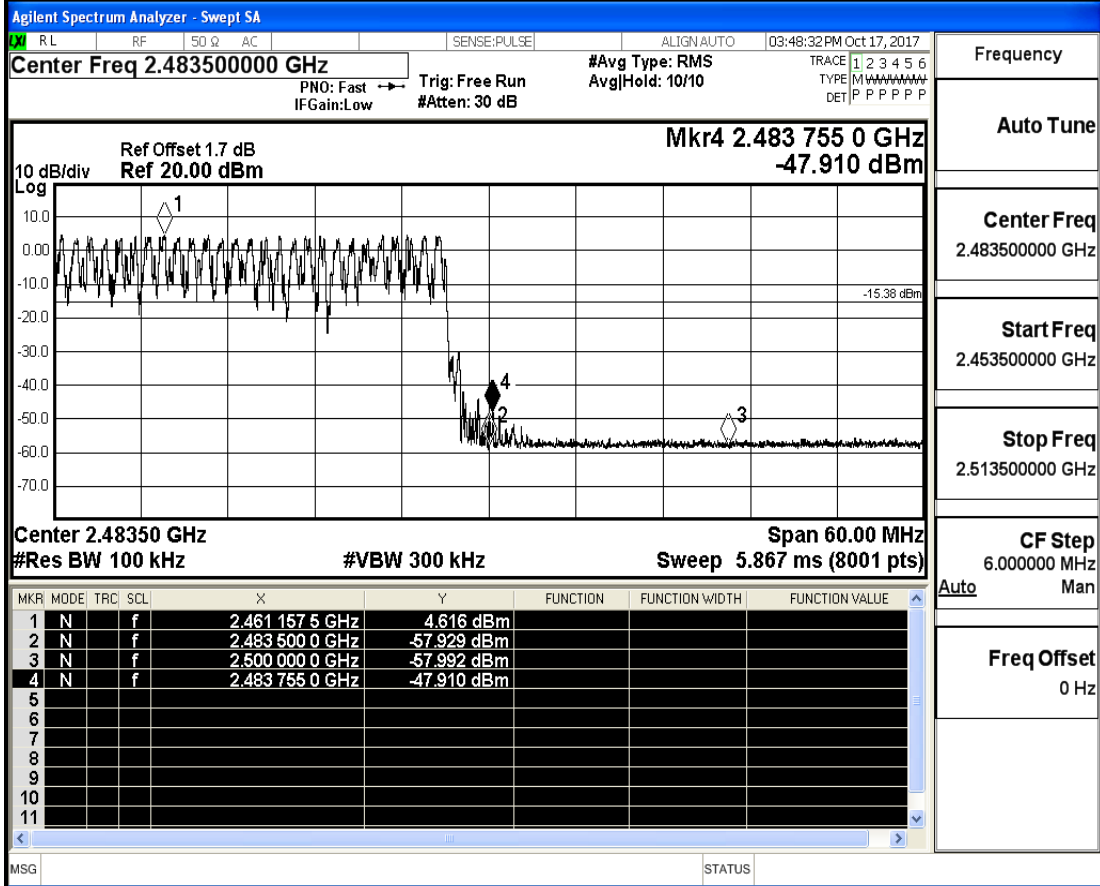
Start Freq  
2.370000000 GHz

Stop Freq  
2.430000000 GHz

CF Step  
6.000000 MHz  
Auto Man

Freq Offset  
0 Hz

**Band-edge for RF Conducted Emissions\_2DH1\_2480\_Hopping On**



Frequency

Auto Tune

Center Freq  
2.483500000 GHz

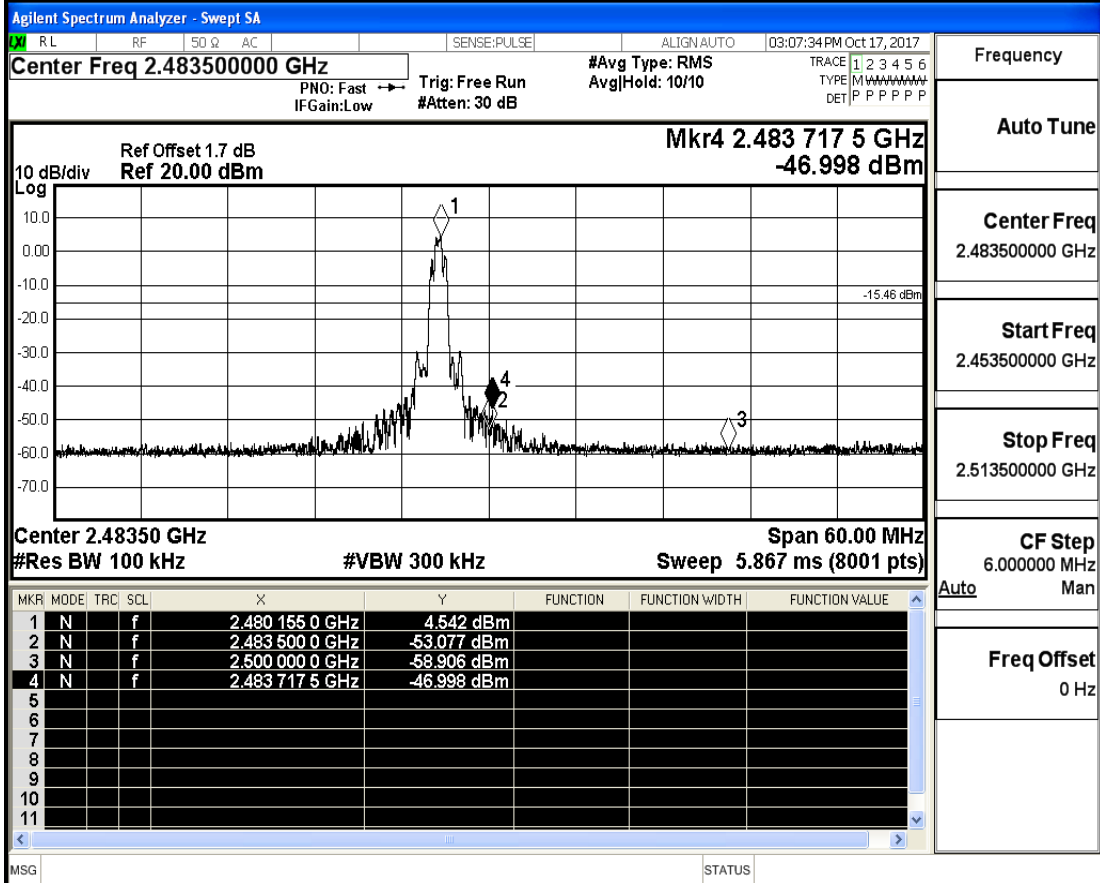
Start Freq  
2.453500000 GHz

Stop Freq  
2.513500000 GHz

CF Step  
6.000000 MHz  
Auto Man

Freq Offset  
0 Hz

**Band-edge for RF Conducted Emissions\_2DH1\_2480\_Hopping Off**



Frequency

Auto Tune

Center Freq  
2.483500000 GHz

Start Freq  
2.453500000 GHz

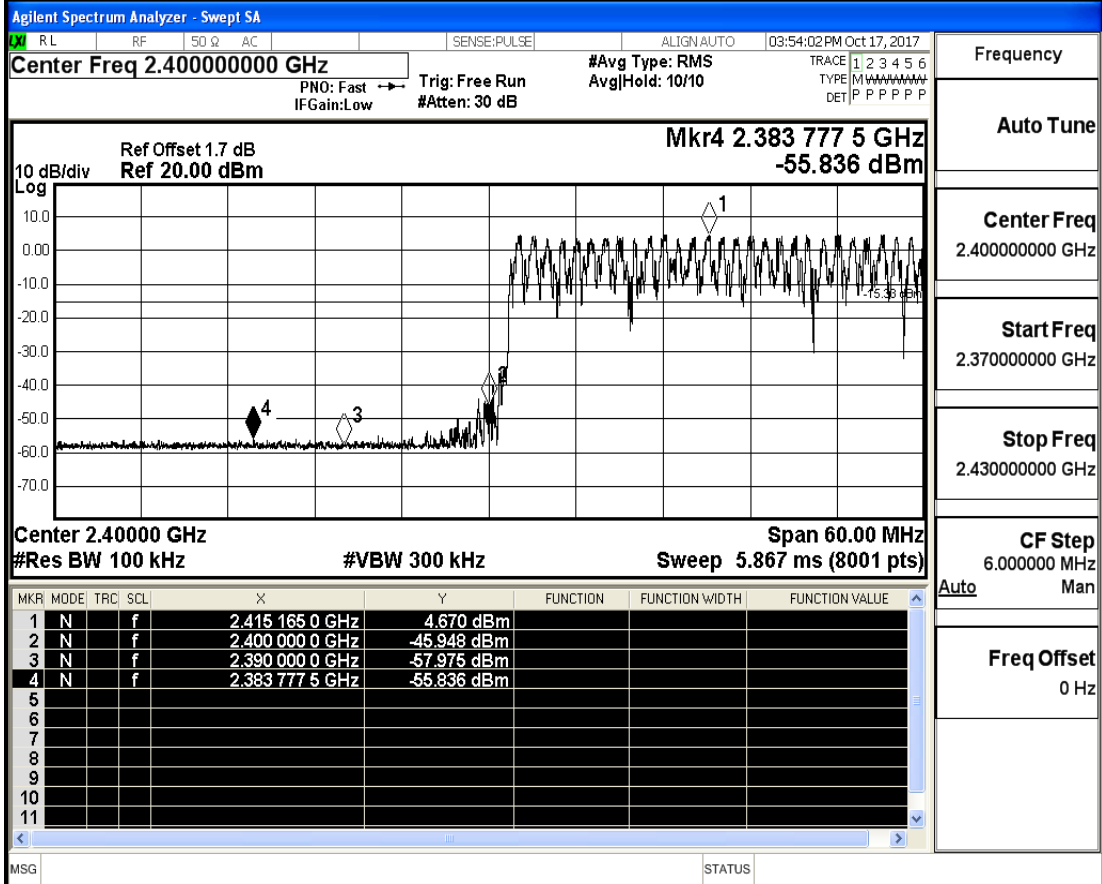
Stop Freq  
2.513500000 GHz

CF Step  
6.000000 MHz  
Auto Man

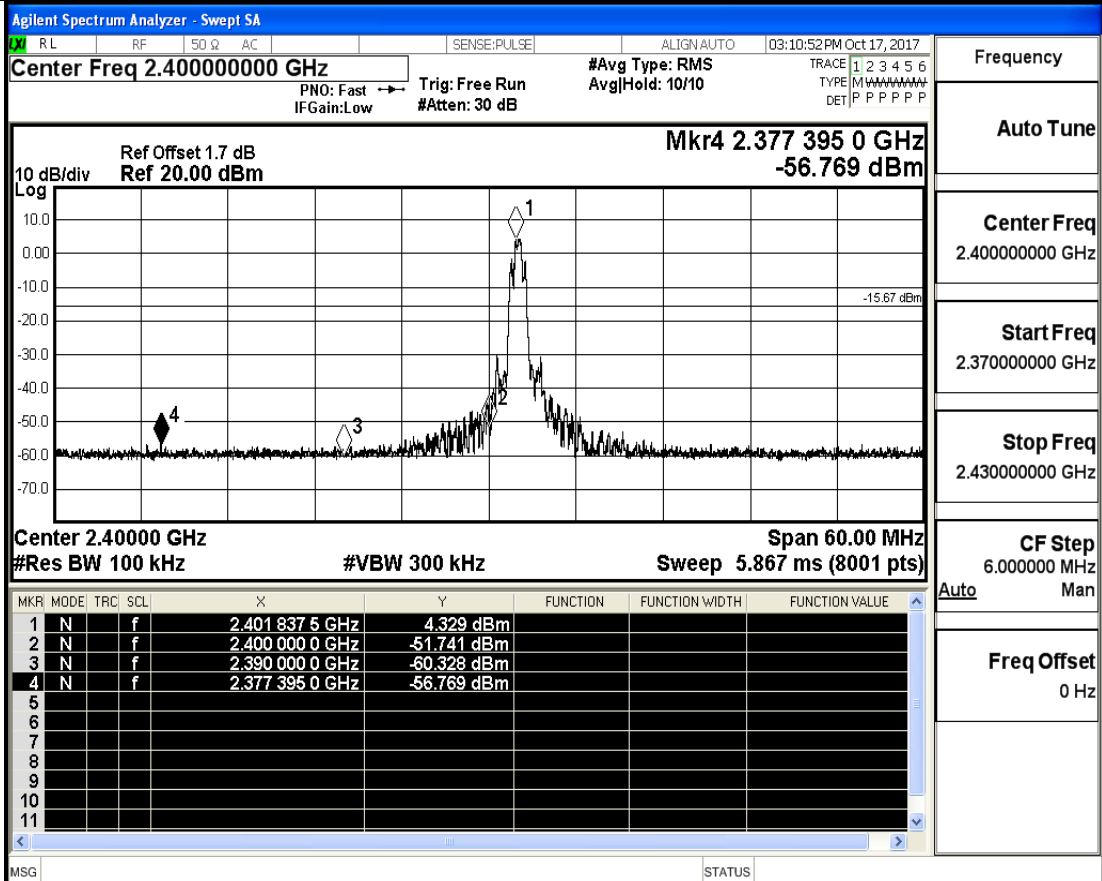
Freq Offset  
0 Hz



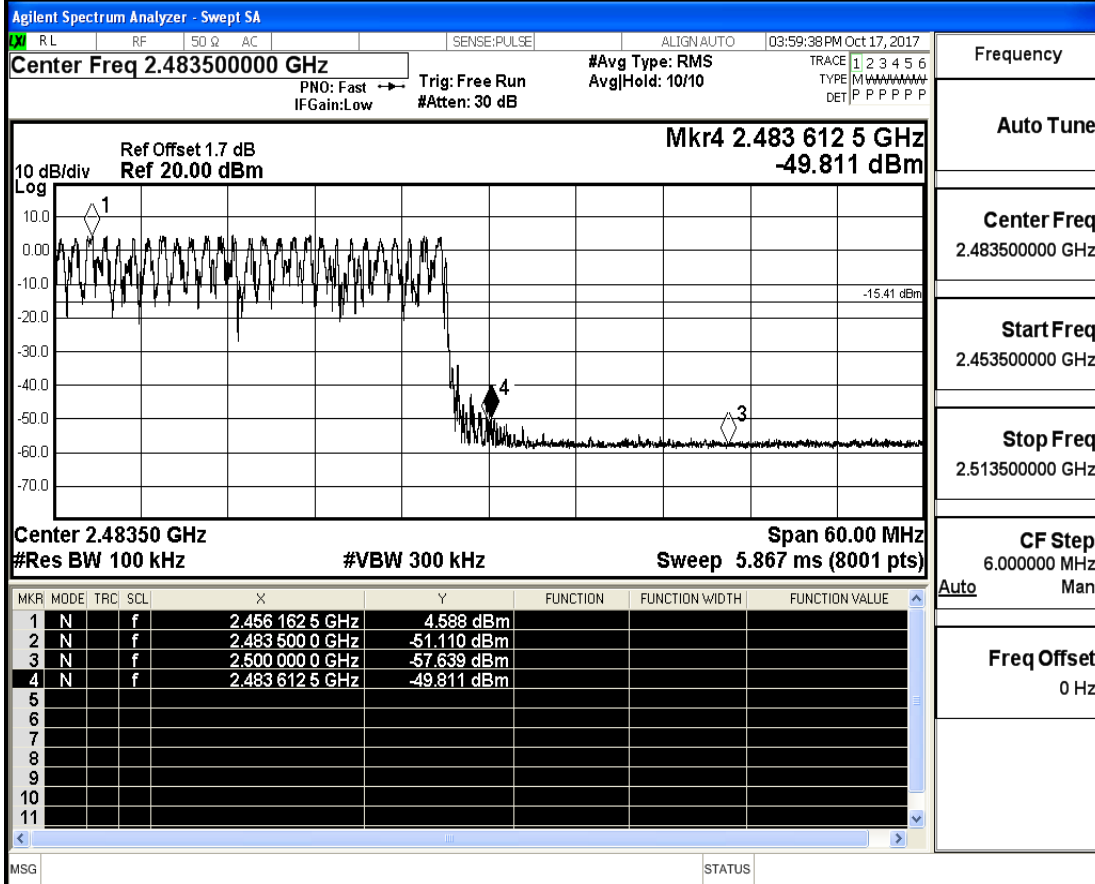
## Band-edge for RF Conducted Emissions\_3DH1\_2402\_Hopping On



## Band-edge for RF Conducted Emissions\_3DH1\_2402\_Hopping Off



Band-edge for RF Conducted Emissions\_3DH1\_2480\_Hopping On



Frequency

Auto Tune

Center Freq  
2.483500000 GHz

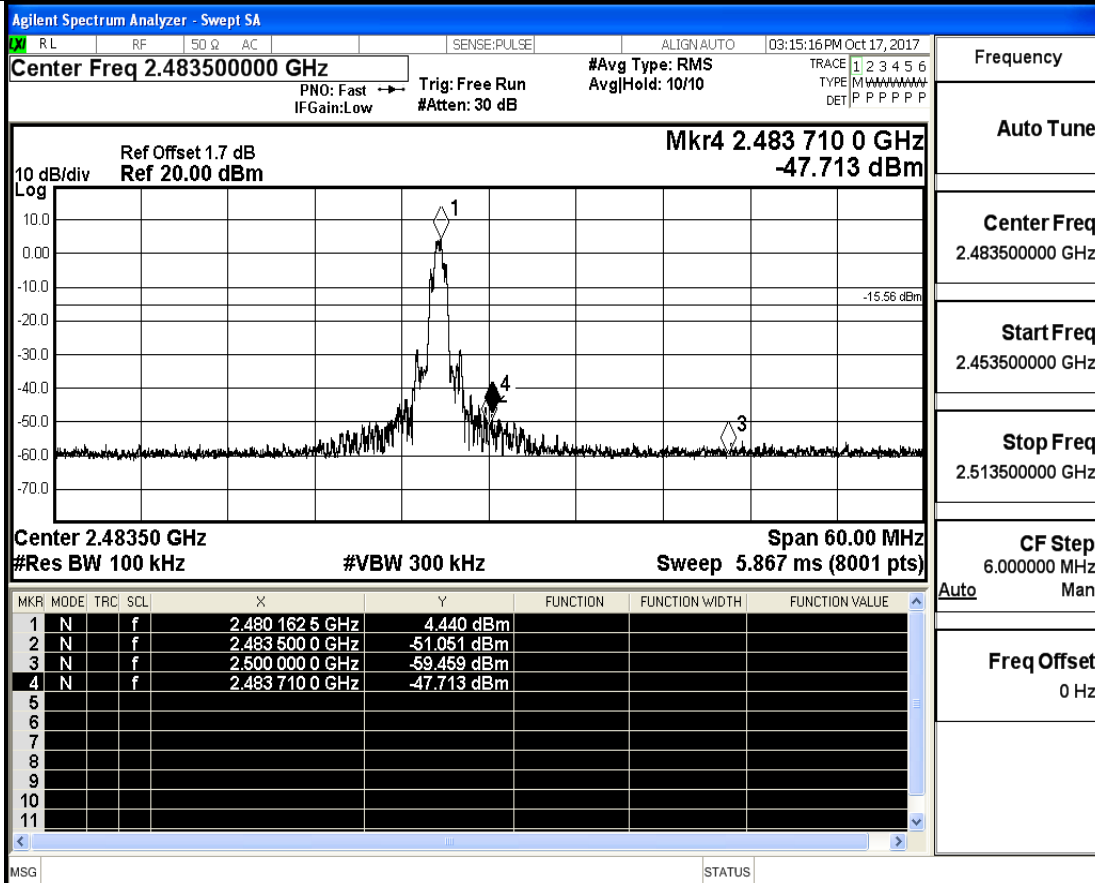
Start Freq  
2.453500000 GHz

Stop Freq  
2.513500000 GHz

CF Step  
6.000000 MHz  
Auto Man

Freq Offset  
0 Hz

Band-edge for RF Conducted Emissions\_3DH1\_2480\_Hopping Off



Frequency

Auto Tune

Center Freq  
2.483500000 GHz

Start Freq  
2.453500000 GHz

Stop Freq  
2.513500000 GHz

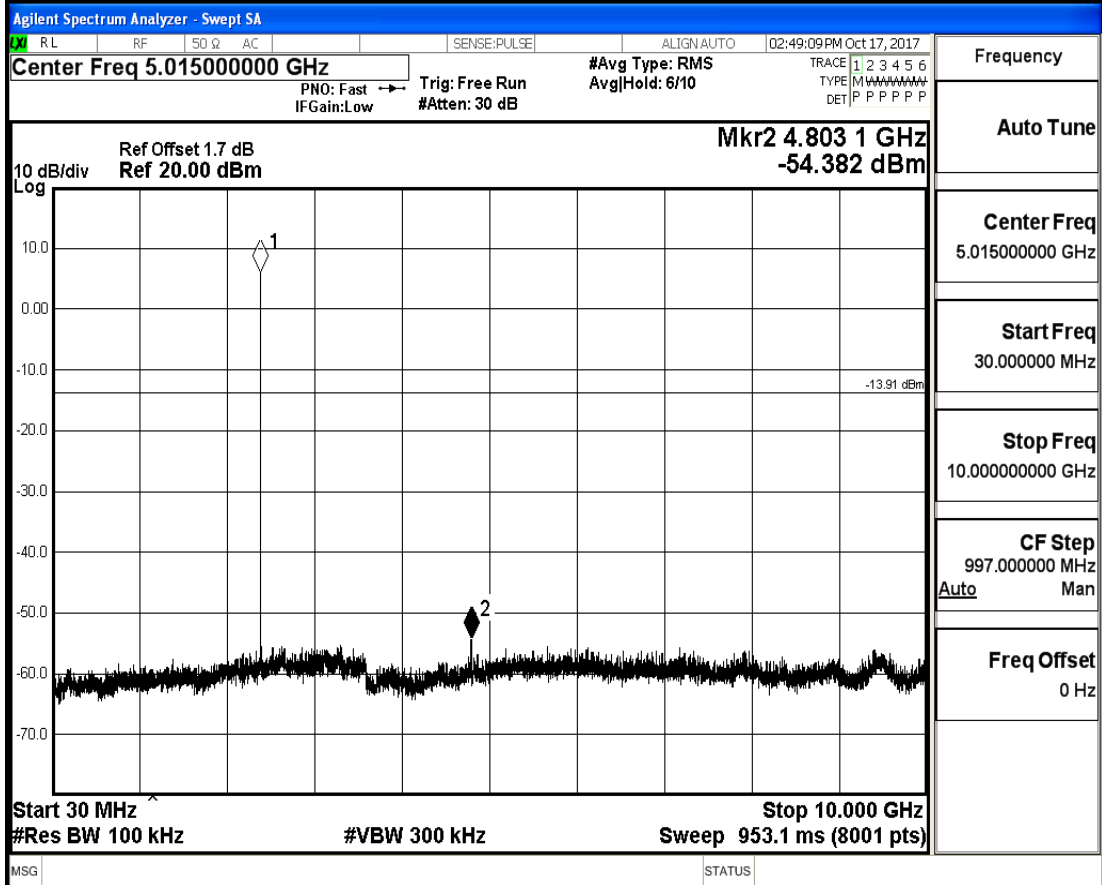
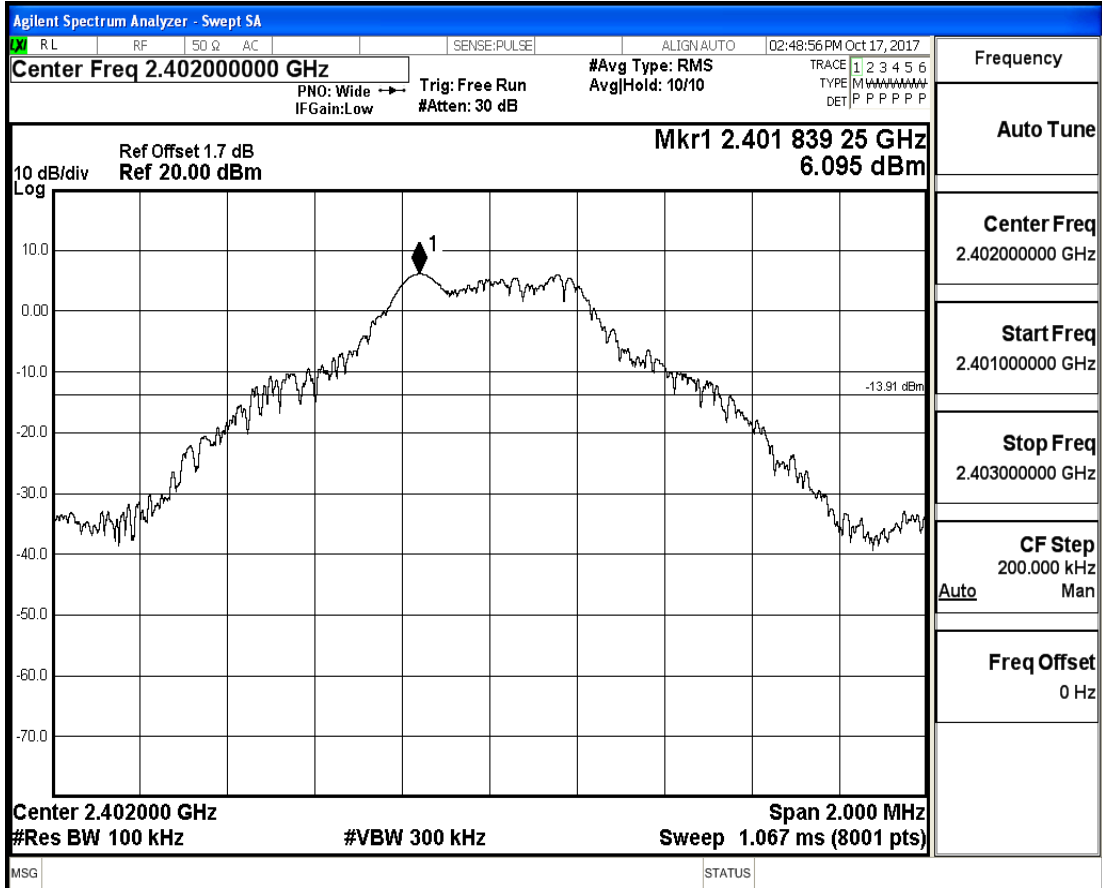
CF Step  
6.000000 MHz  
Auto Man

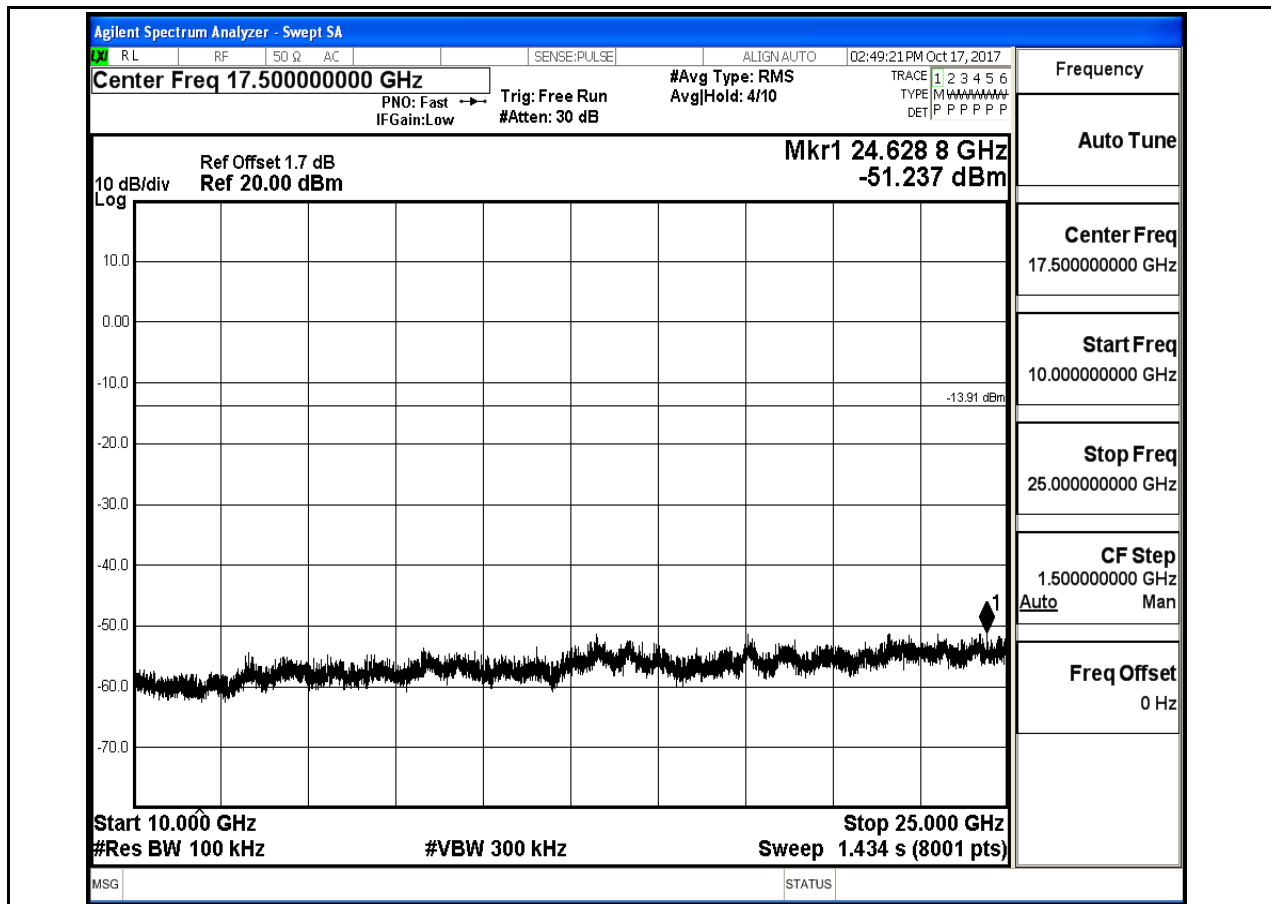
Freq Offset  
0 Hz

## 8.RF Conducted Spurious Emissions

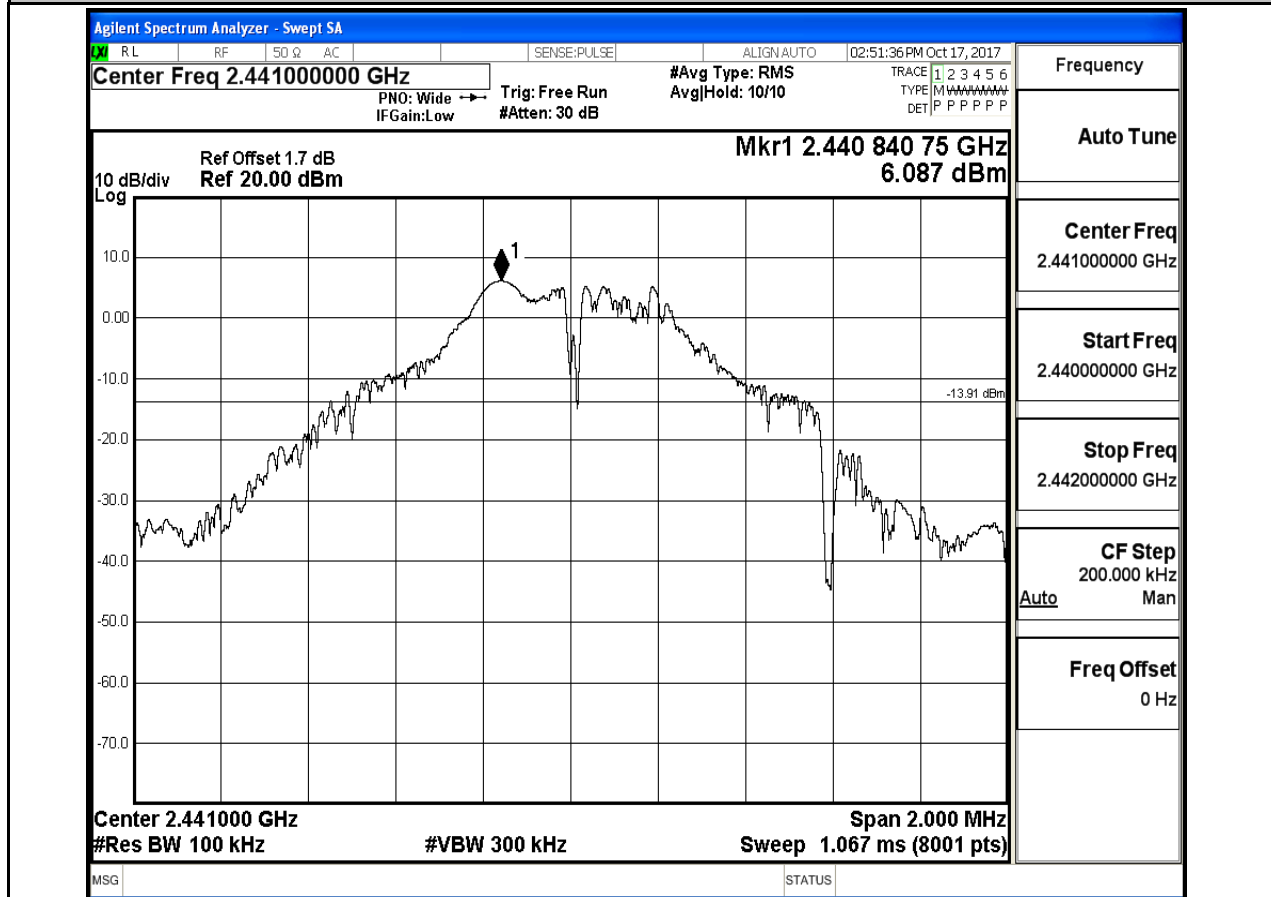
Test Mode	Test Channel	StartFre [MHz]	StopFre [MHz]	RBW [kHz]	VBW [kHz]	Pref[dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
DH1	2402	30	10000	100	300	6.095	-54.382	<- 13.905	PASS
DH1	2402	10000	25000	100	300	6.095	-51.237	<- 13.905	PASS
DH1	2441	30	10000	100	300	6.087	-52.886	<- 13.913	PASS
DH1	2441	10000	25000	100	300	6.087	-50.511	<- 13.913	PASS
DH1	2480	30	10000	100	300	5.827	-54.168	<- 14.173	PASS
DH1	2480	10000	25000	100	300	5.827	-51.177	<- 14.173	PASS
2DH1	2402	30	10000	100	300	4.545	-54.918	<- 15.455	PASS
2DH1	2402	10000	25000	100	300	4.545	-51.091	<- 15.455	PASS
2DH1	2441	30	10000	100	300	4.701	-54.423	<- 15.299	PASS
2DH1	2441	10000	25000	100	300	4.701	-50.808	<- 15.299	PASS
2DH1	2480	30	10000	100	300	4.474	-55.103	<- 15.526	PASS
2DH1	2480	10000	25000	100	300	4.474	-50.369	<- 15.526	PASS
3DH1	2402	30	10000	100	300	4.562	-54.658	<- 15.438	PASS
3DH1	2402	10000	25000	100	300	4.562	-49.975	<- 15.438	PASS
3DH1	2441	30	10000	100	300	4.609	-55.325	<- 15.391	PASS
3DH1	2441	10000	25000	100	300	4.609	-50.330	<- 15.391	PASS
3DH1	2480	30	10000	100	300	4.436	-54.643	<- 15.564	PASS
3DH1	2480	10000	25000	100	300	4.436	-50.625	<- 15.564	PASS

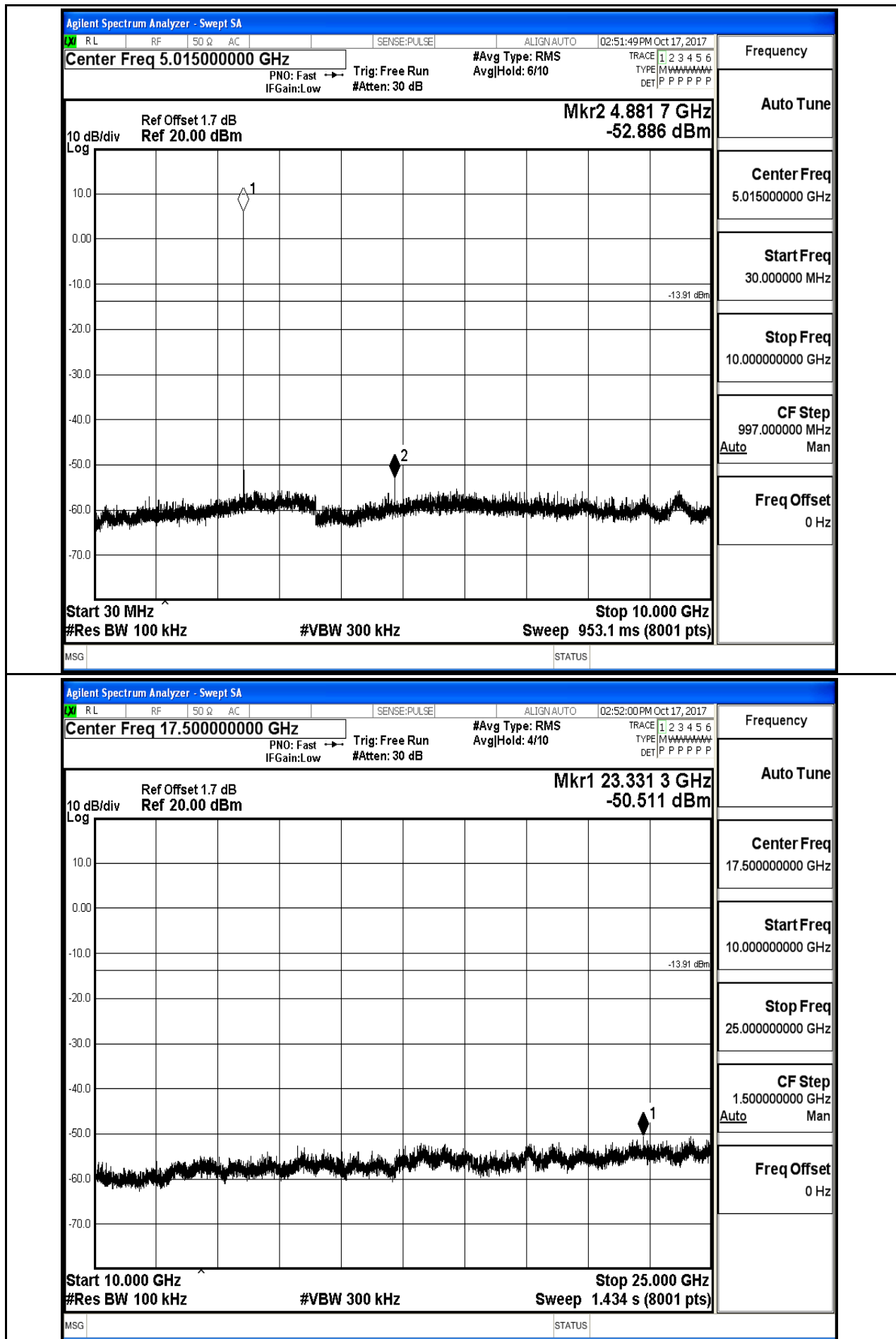
## RF Conducted Spurious Emissions\_DH1\_2402



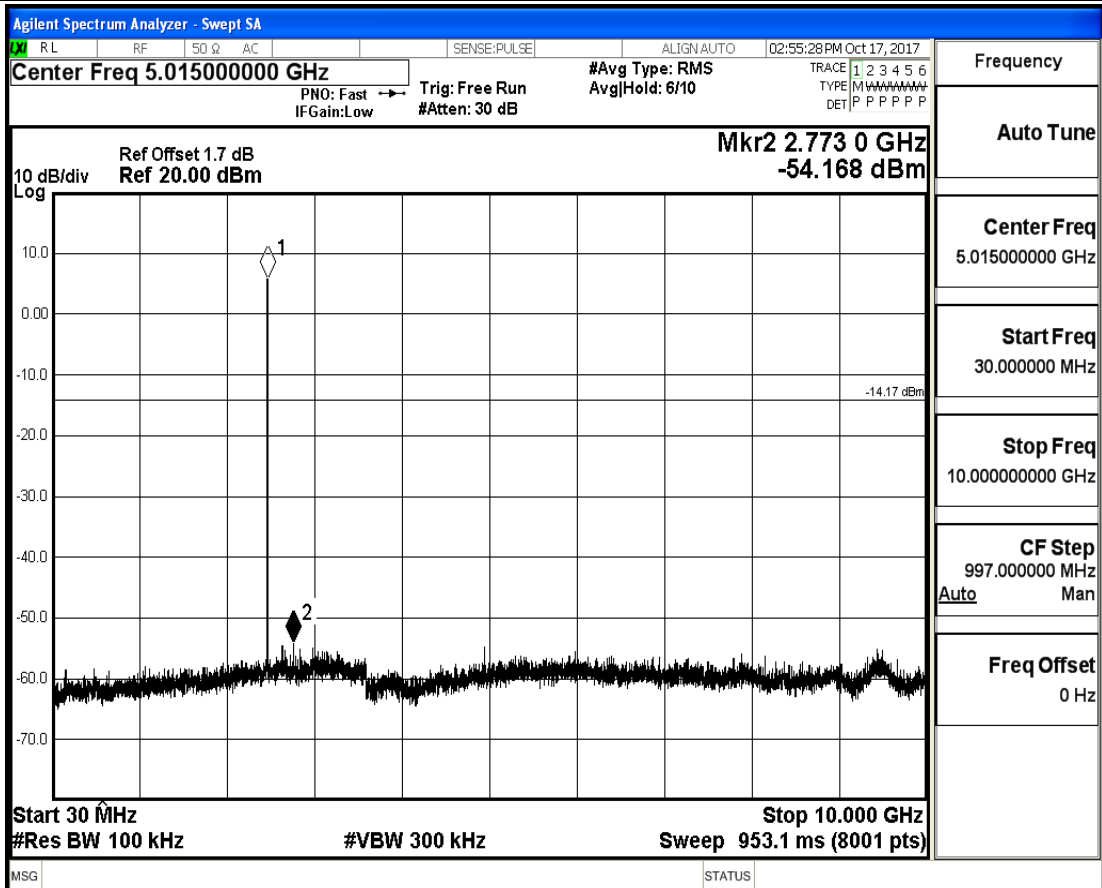
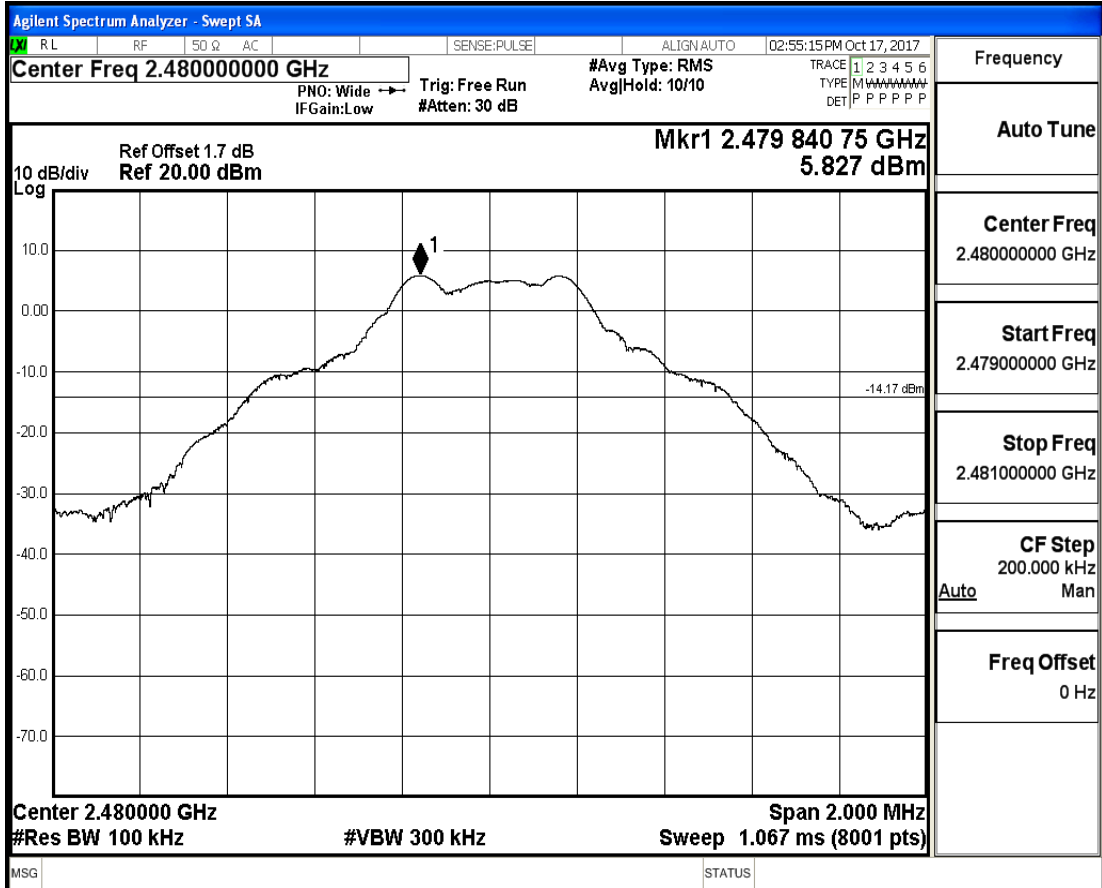


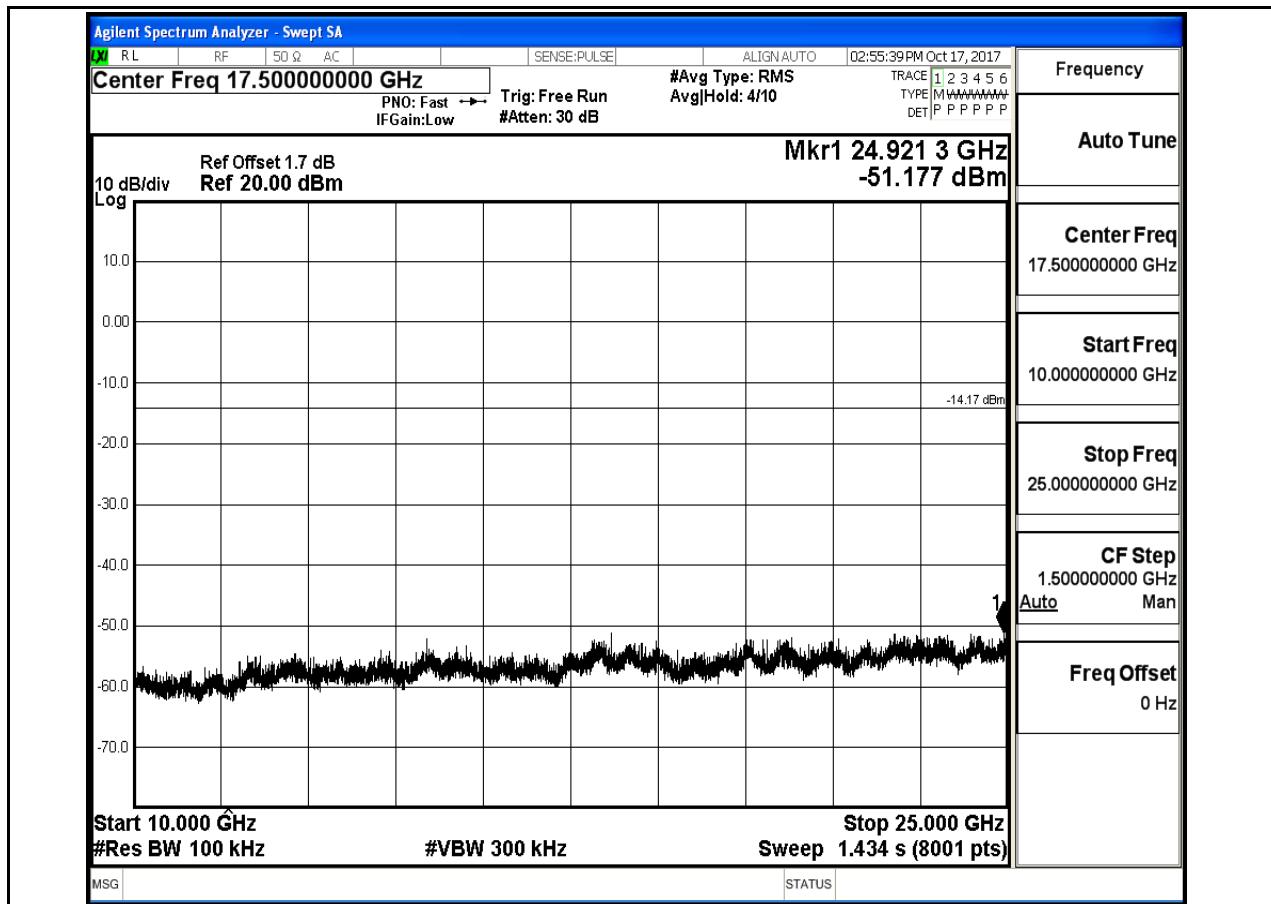
RF Conducted Spurious Emissions\_DH1\_2441



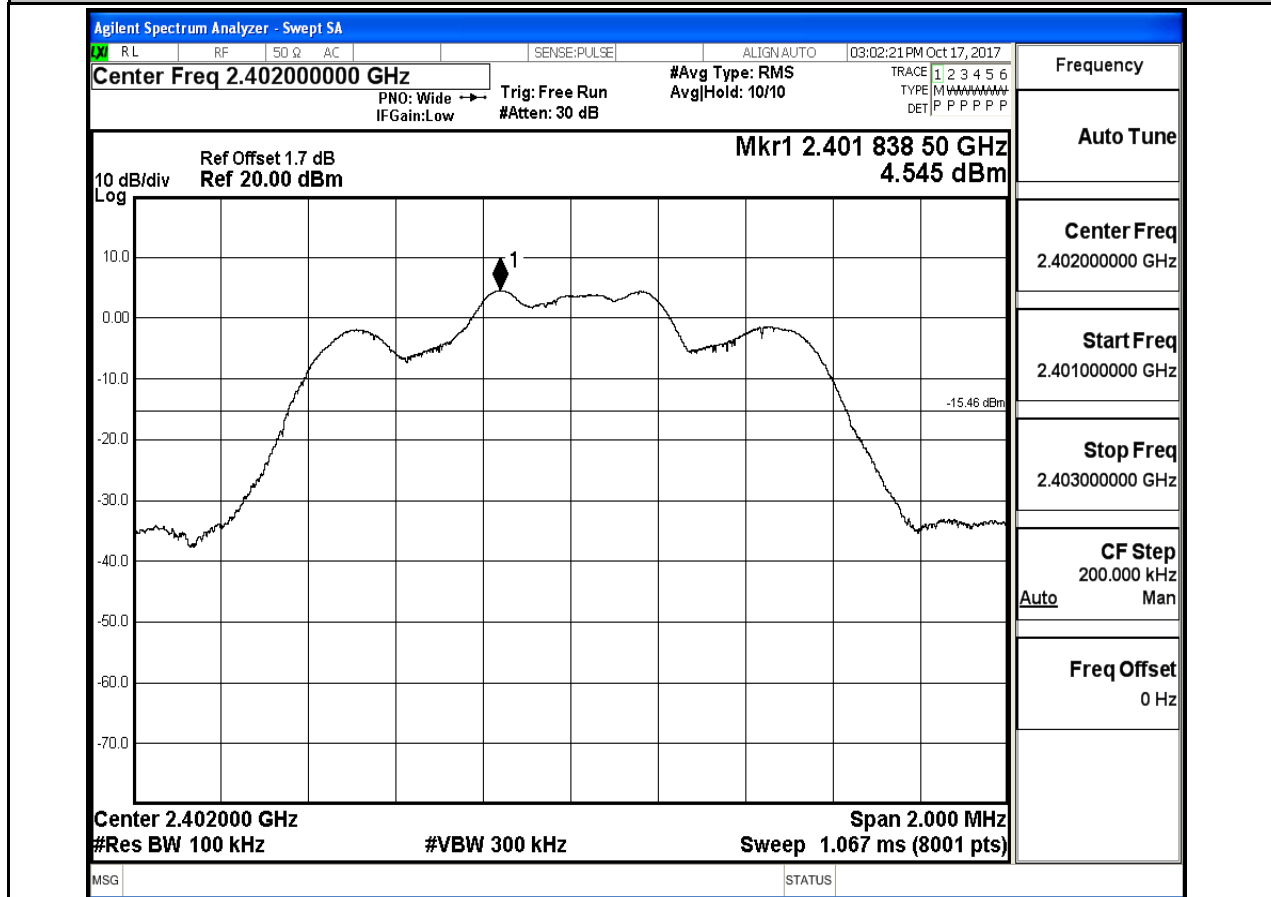


RF Conducted Spurious Emissions\_DH1\_2480

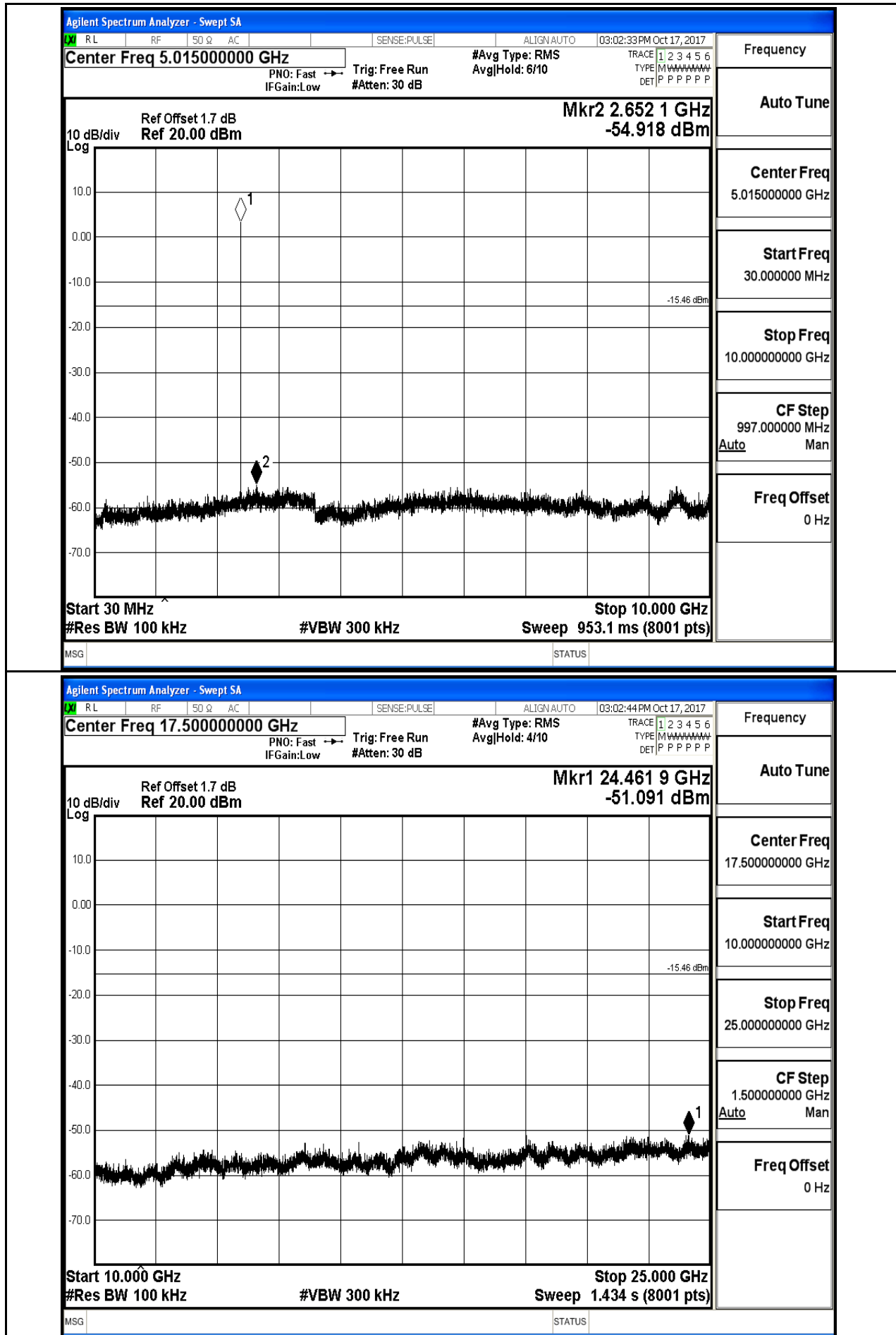




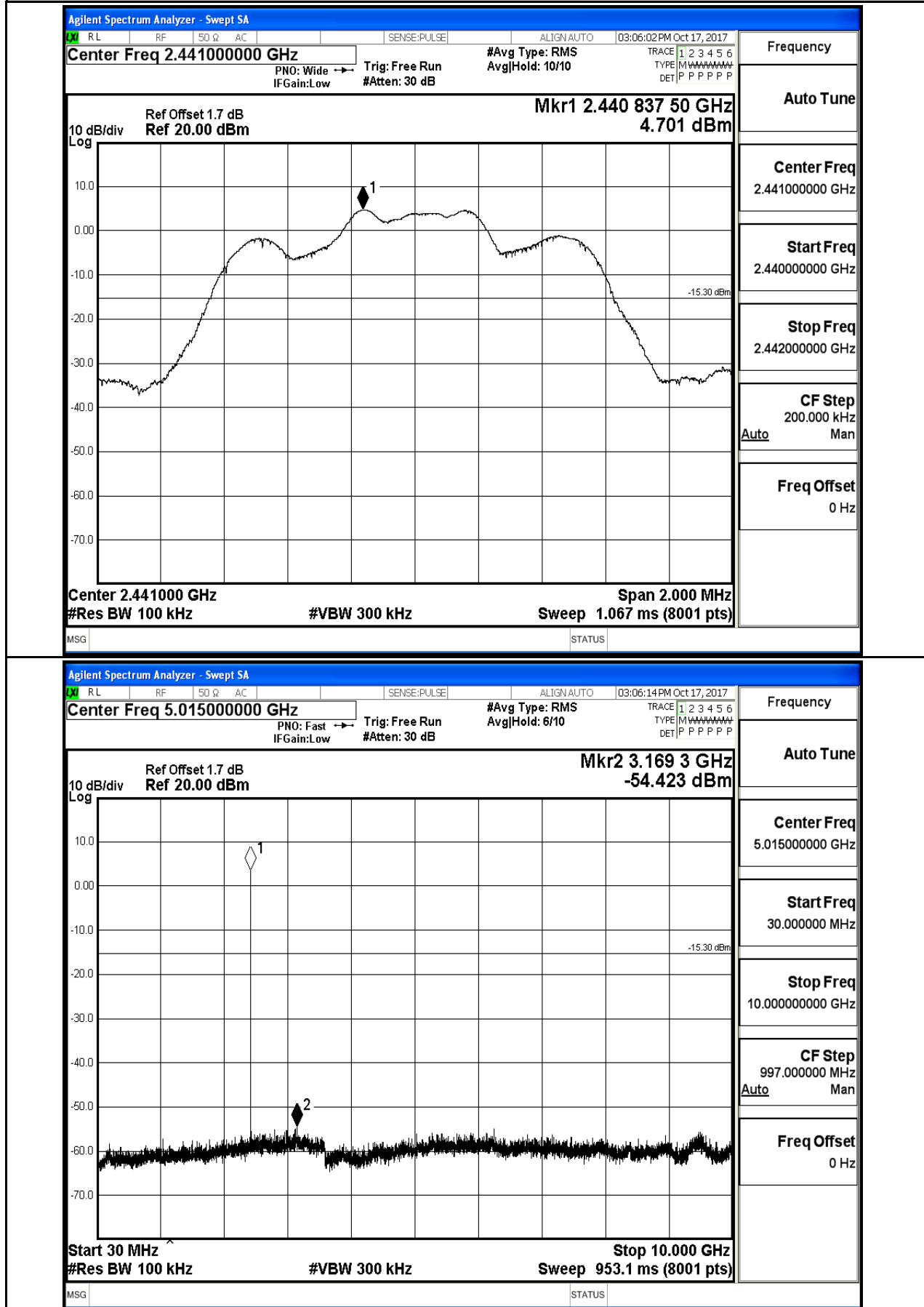
RF Conducted Spurious Emissions\_2DH1\_2402

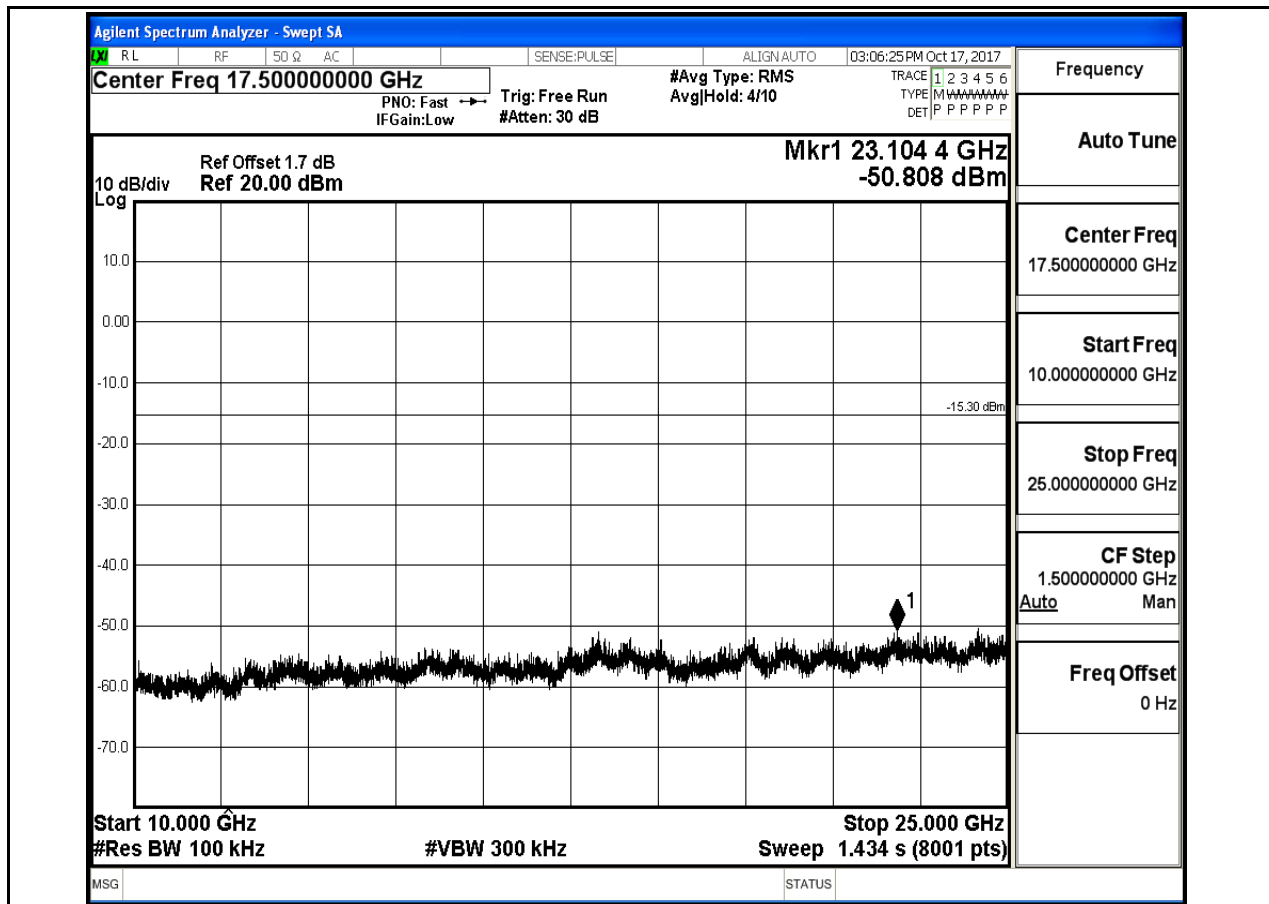




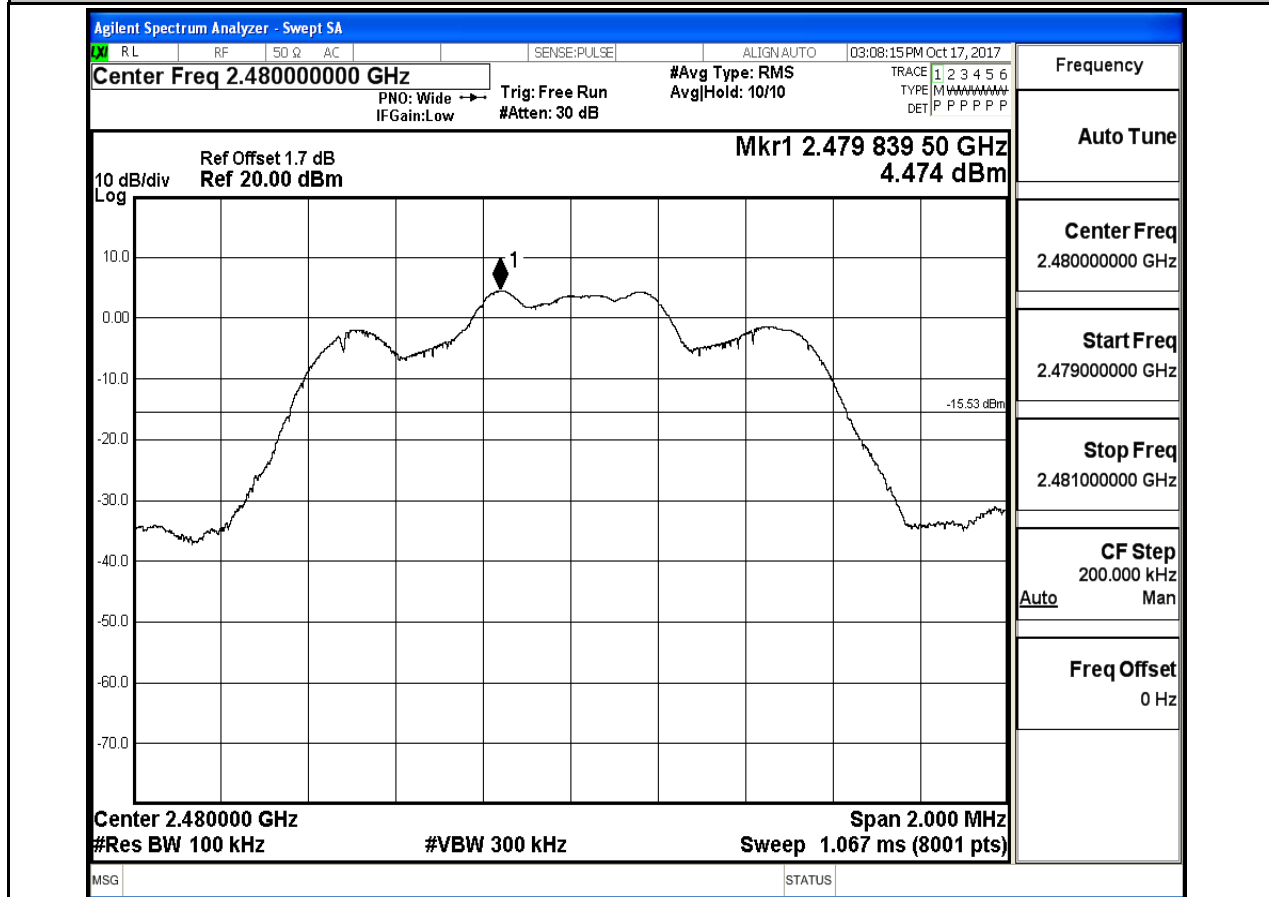


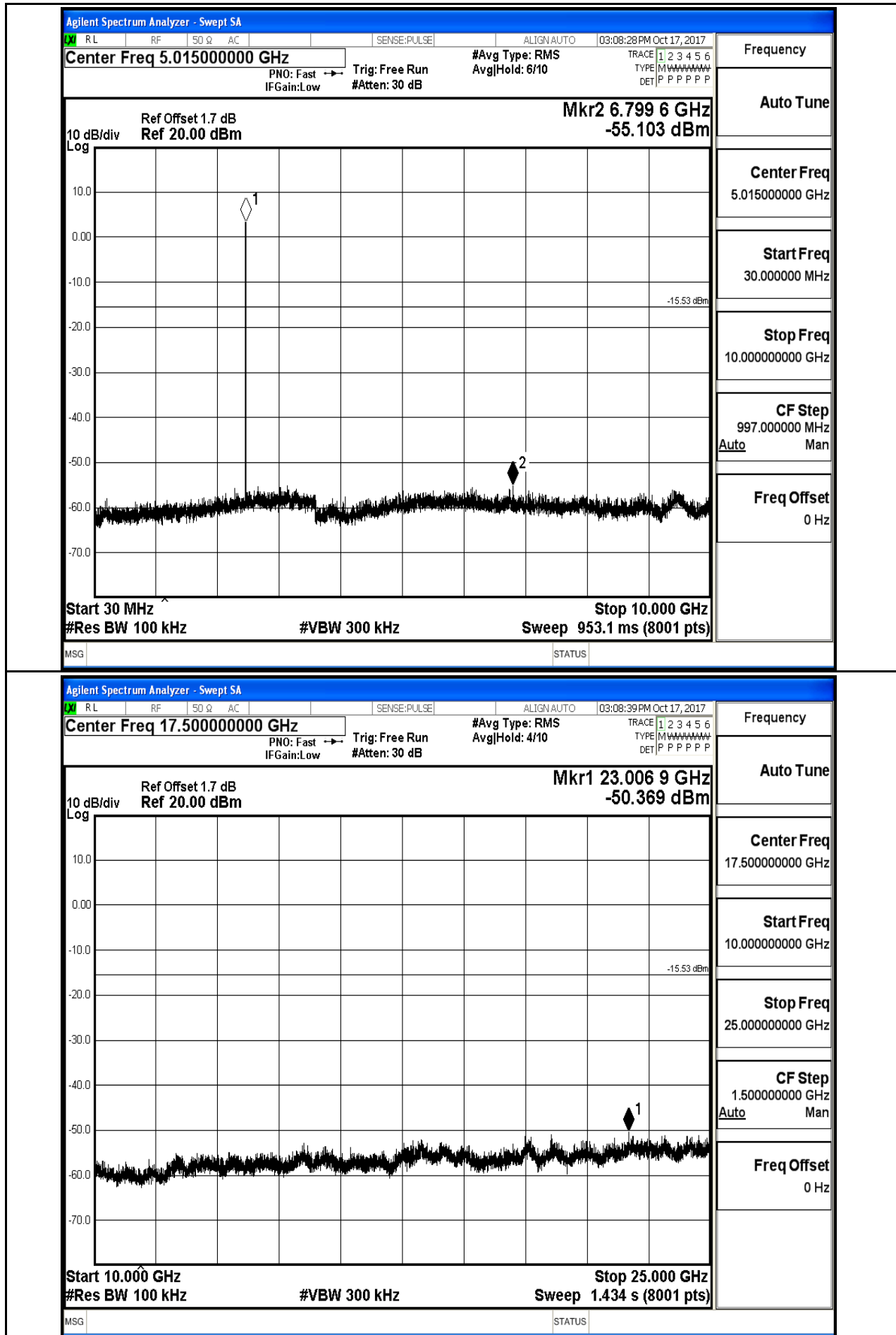
RF Conducted Spurious Emissions\_2DH1\_2441





RF Conducted Spurious Emissions\_2DH1\_2480





Agilent Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:PULSE ALIGN:AUTO 03:08:39 PM Oct 17, 2017

Center Freq 17.500000000 GHz

PN0: Fast Trig: Free Run #Avg Type: RMS  
IFGain:Low #Atten: 30 dB AvgHold: 4/10

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

Frequency

Auto Tune

Center Freq  
17.500000000 GHz

Start Freq  
10.000000000 GHz

Stop Freq  
25.000000000 GHz

CF Step  
1.500000000 GHz  
Auto Man

Freq Offset  
0 Hz

10 dB/div Log

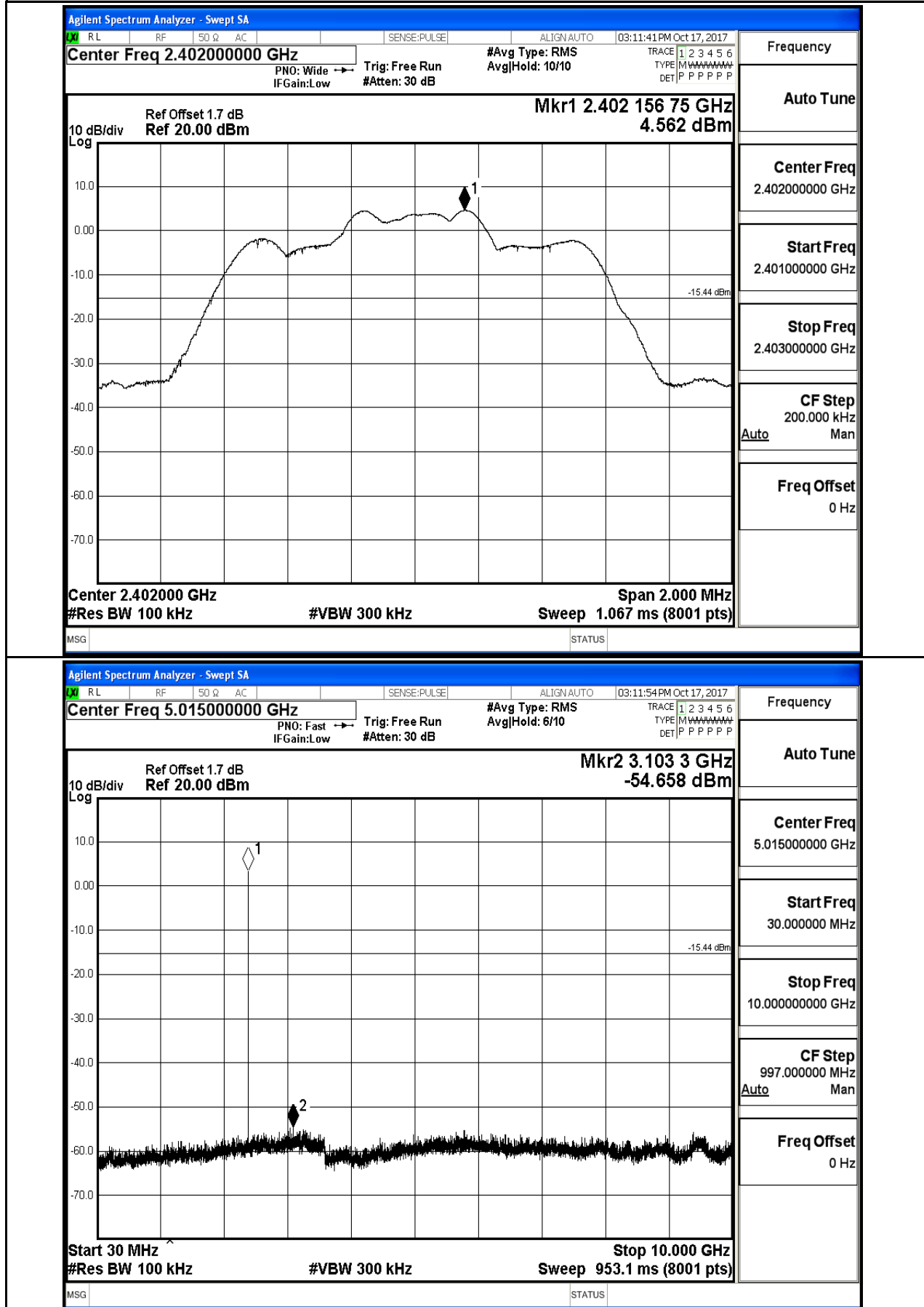
Ref Offset 1.7 dB  
Ref 20.00 dBm

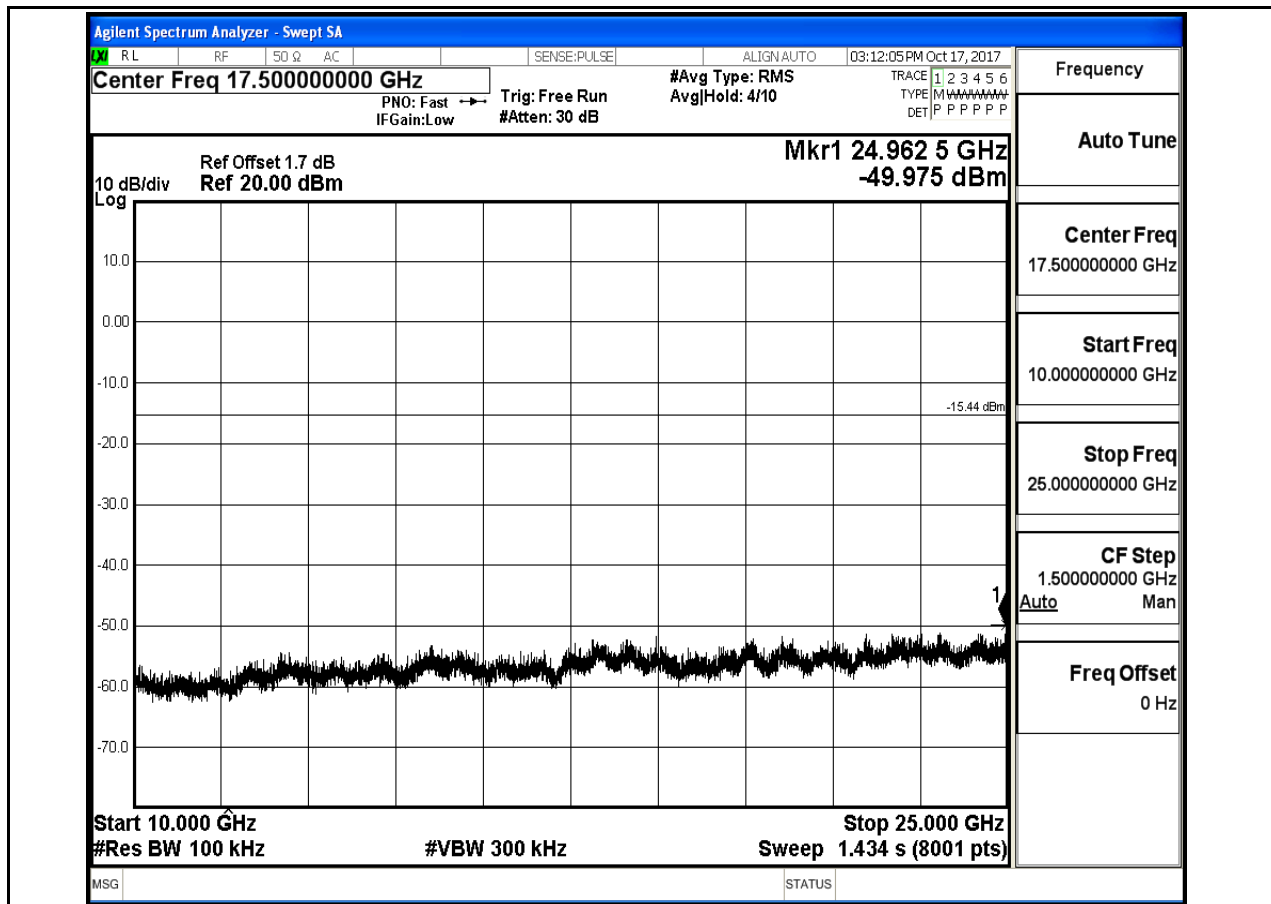
Mkr1 23.006 9 GHz  
-50.369 dBm

Start 10.000 GHz Stop 25.000 GHz  
#Res BW 100 kHz #VBW 300 kHz Sweep 1.434 s (8001 pts)

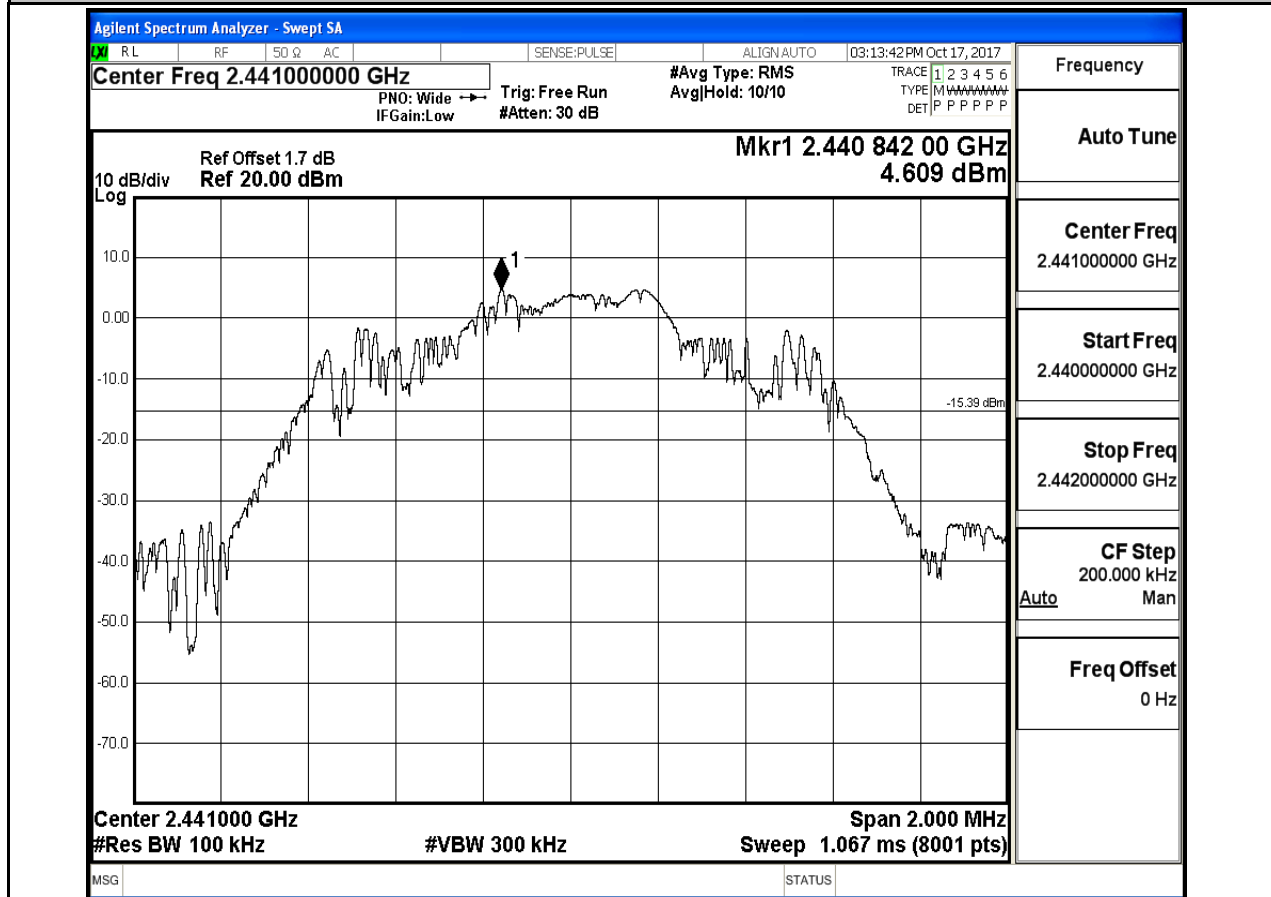
MSG STATUS

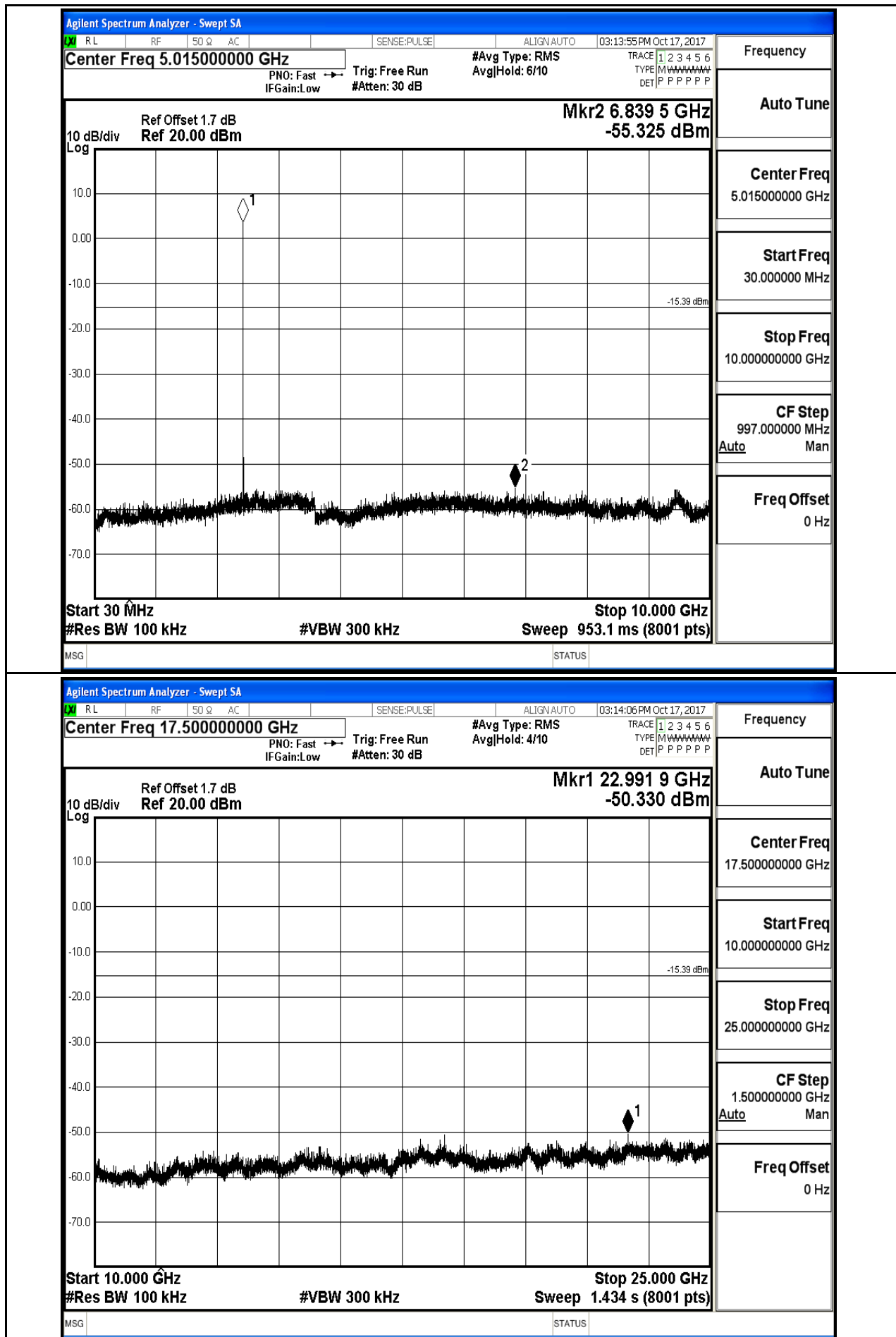
RF Conducted Spurious Emissions\_3DH1\_2402





RF Conducted Spurious Emissions\_3DH1\_2441





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:PULSE ALIGN:AUTO 03:14:06 PM Oct 17, 2017

Center Freq 17.50000000 GHz

PN0: Fast Trig: Free Run #Avg Type: RMS  
IFGain:Low #Atten: 30 dB AvgHold: 4/10

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

Frequency

Auto Tune

Center Freq  
17.50000000 GHz

Start Freq  
10.00000000 GHz

Stop Freq  
25.00000000 GHz

CF Step  
1.50000000 GHz  
Auto Man

Freq Offset  
0 Hz

10 dB/div  
Log

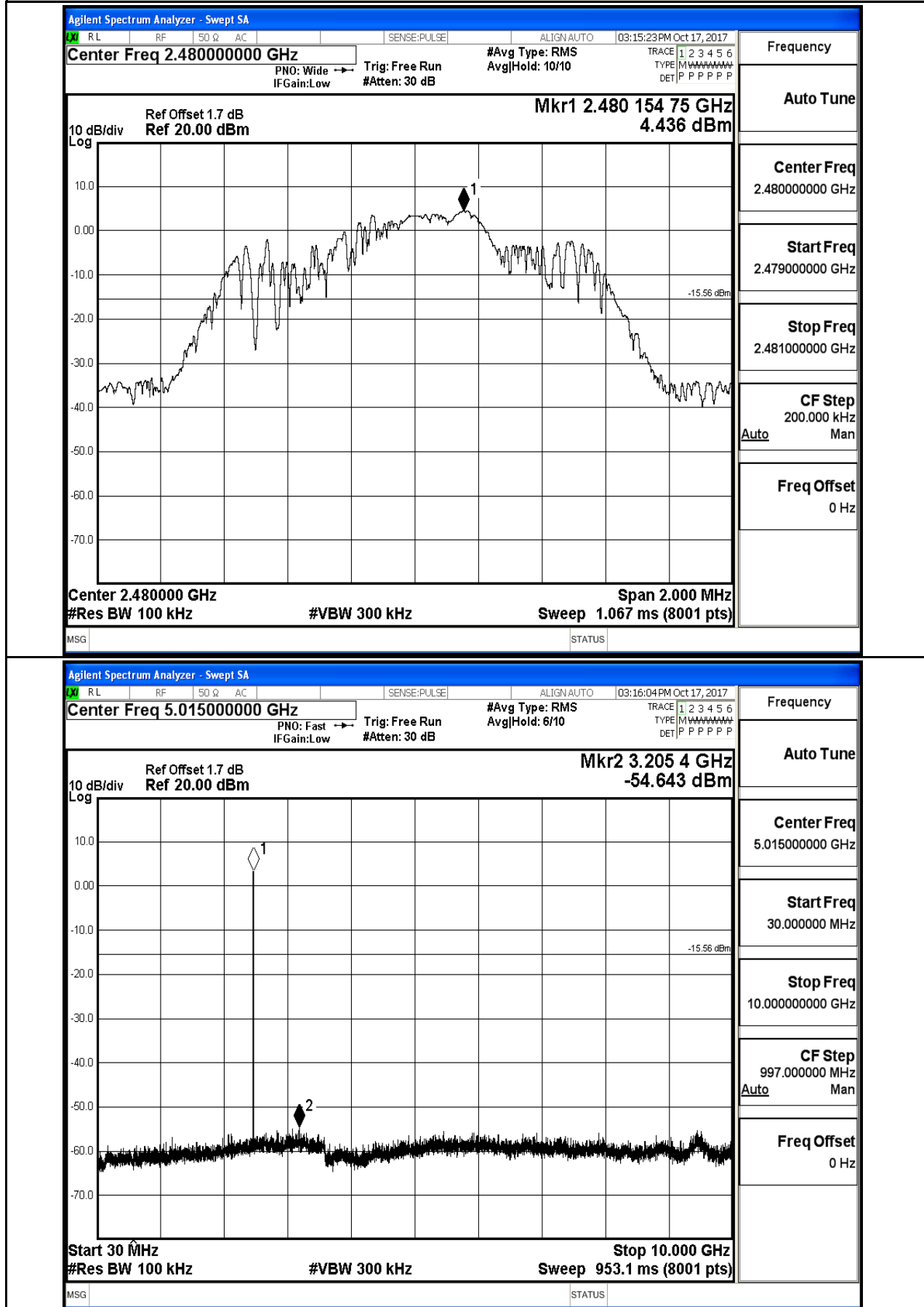
Ref Offset 1.7 dB  
Ref 20.00 dBm

Mkr1 22.991 9 GHz  
-50.330 dBm

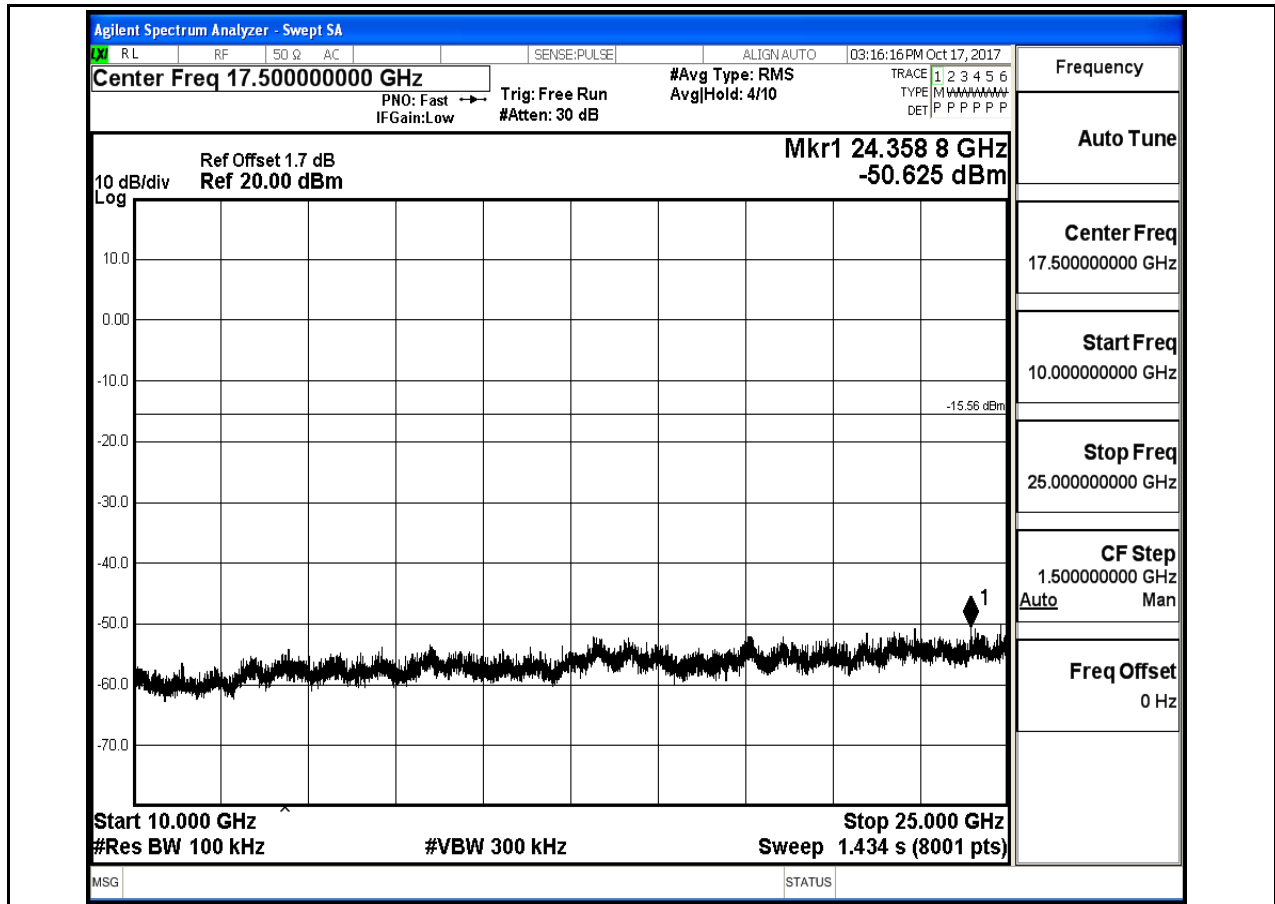
Start 10.000 GHz  
#Res BW 100 kHz #VBW 300 kHz Sweep 1.434 s (8001 pts)

MSG STATUS

## RF Conducted Spurious Emissions\_3DH1\_2480



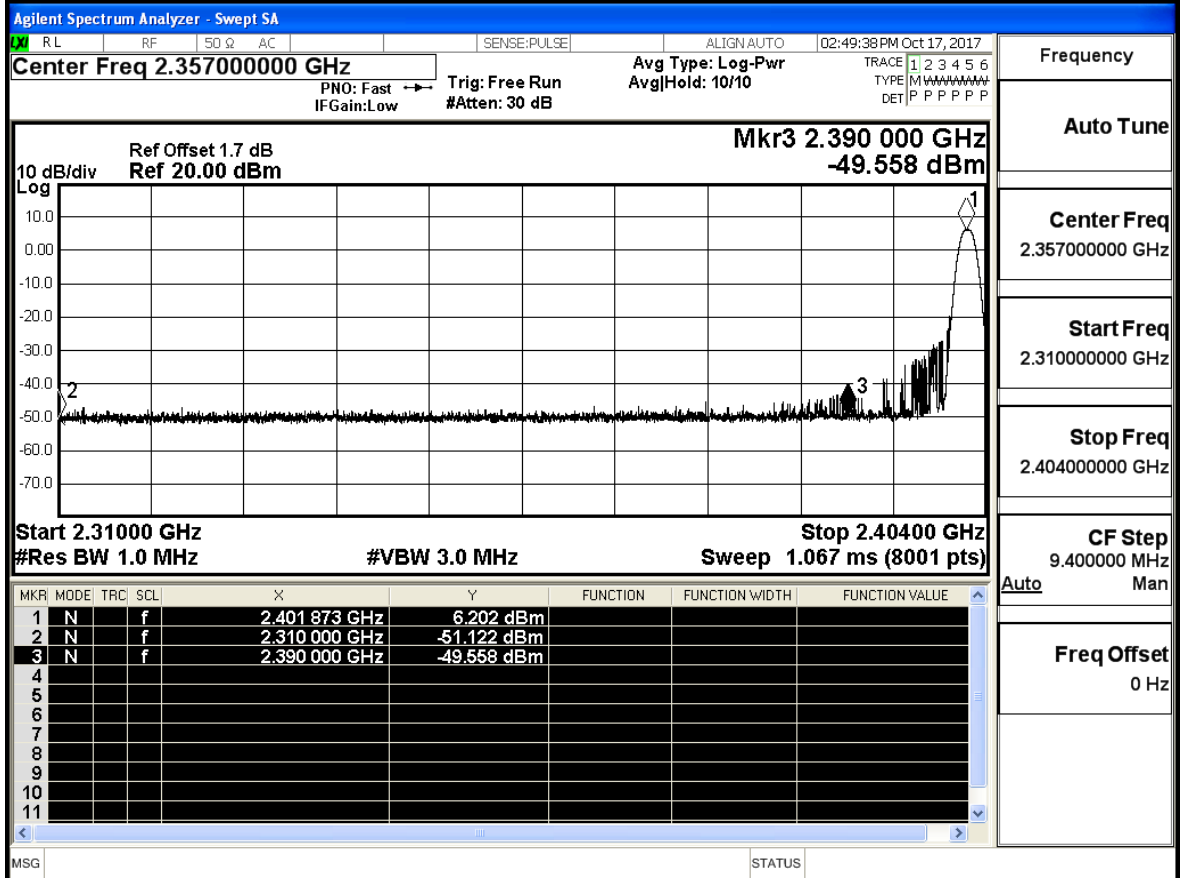




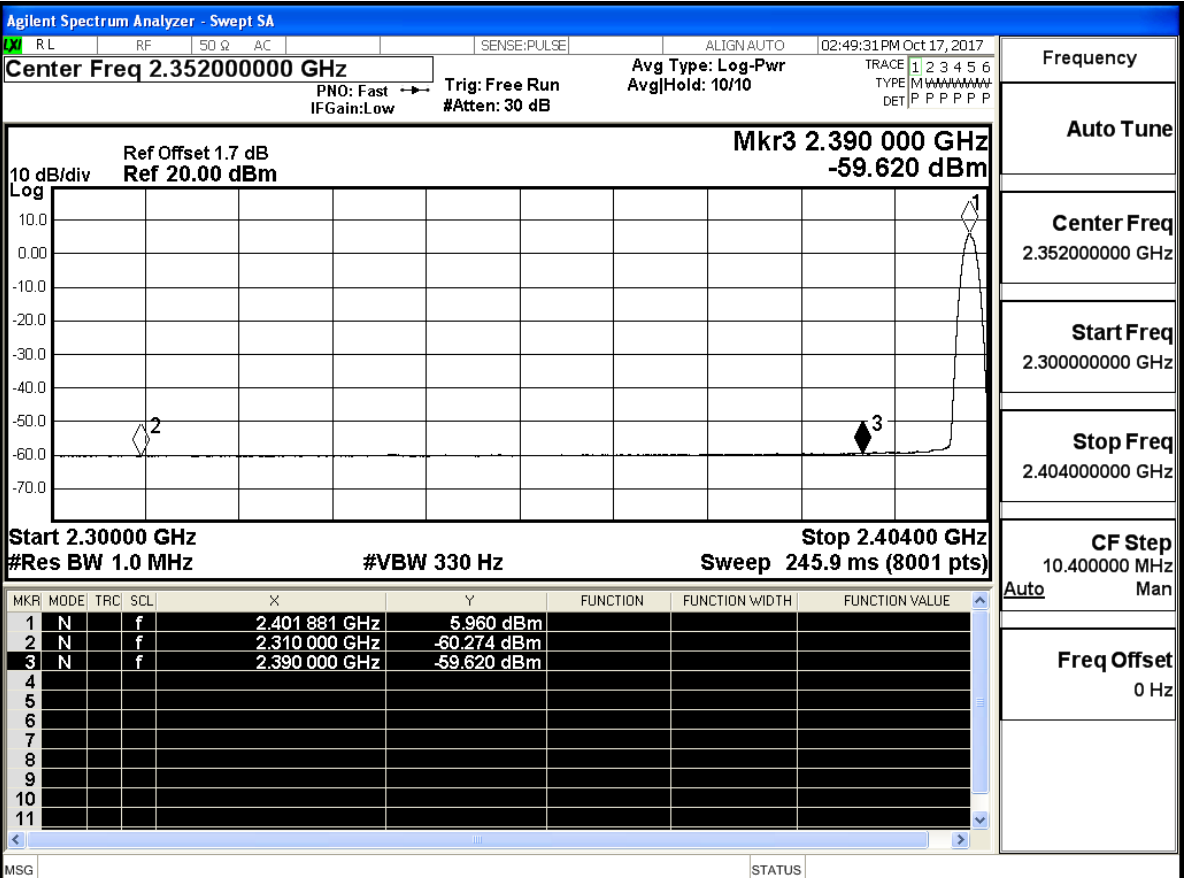
## 9.Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
DH1	On	2310.0	-51.12	2	0	46.14	PEAK	74	PASS
DH1	On	2390.0	-49.56	2	0	47.70	PEAK	74	PASS
DH1	On	2483.5	-32.14	2	0	65.12	PEAK	74	PASS
DH1	On	2500.0	-50.35	2	0	46.91	PEAK	74	PASS
2DH1	On	2310.0	-51.00	2	0	46.26	PEAK	74	PASS
2DH1	On	2390.0	-48.33	2	0	48.93	PEAK	74	PASS
2DH1	On	2483.5	-31.41	2	0	65.85	PEAK	74	PASS
2DH1	On	2500.0	-47.05	2	0	50.21	PEAK	74	PASS
3DH1	On	2310.0	-51.76	2	0	45.50	PEAK	74	PASS
3DH1	On	2390.0	-49.79	2	0	47.47	PEAK	74	PASS
3DH1	On	2483.5	-47.18	2	0	50.08	PEAK	74	PASS
3DH1	On	2500.0	-48.30	2	0	48.96	PEAK	74	PASS

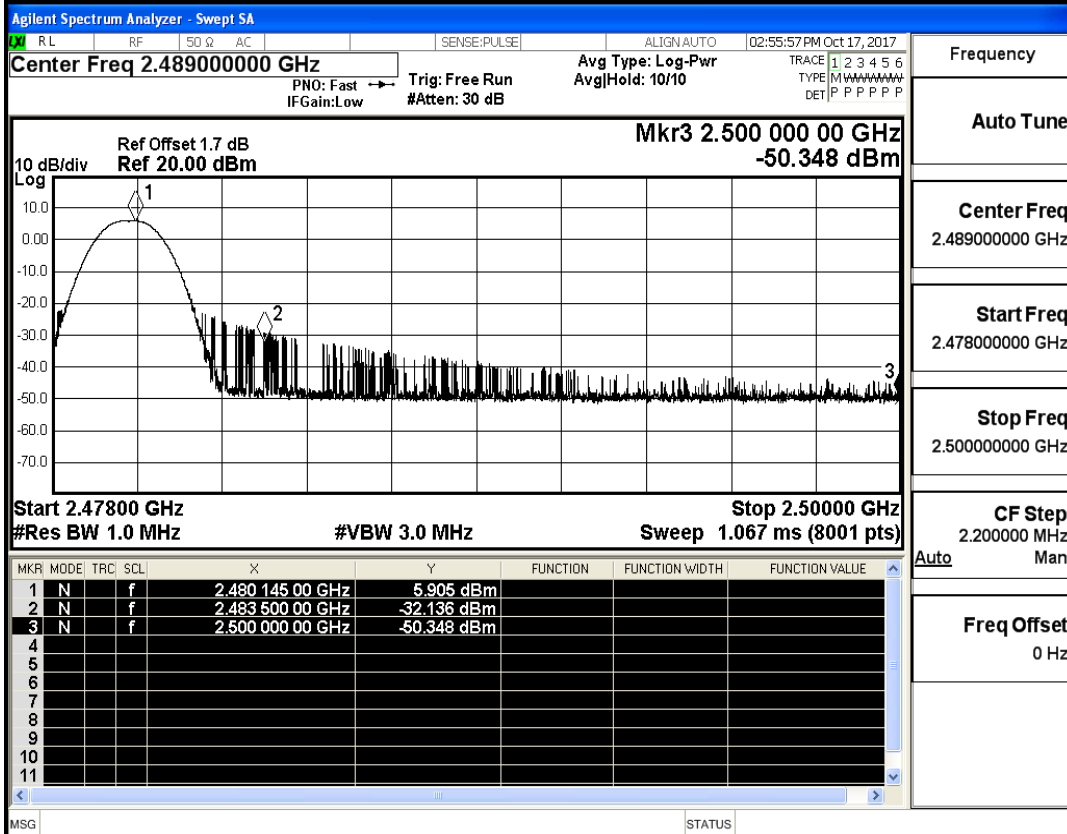
## Restrict-band band-edge measurements\_Hopping On\_PEAK



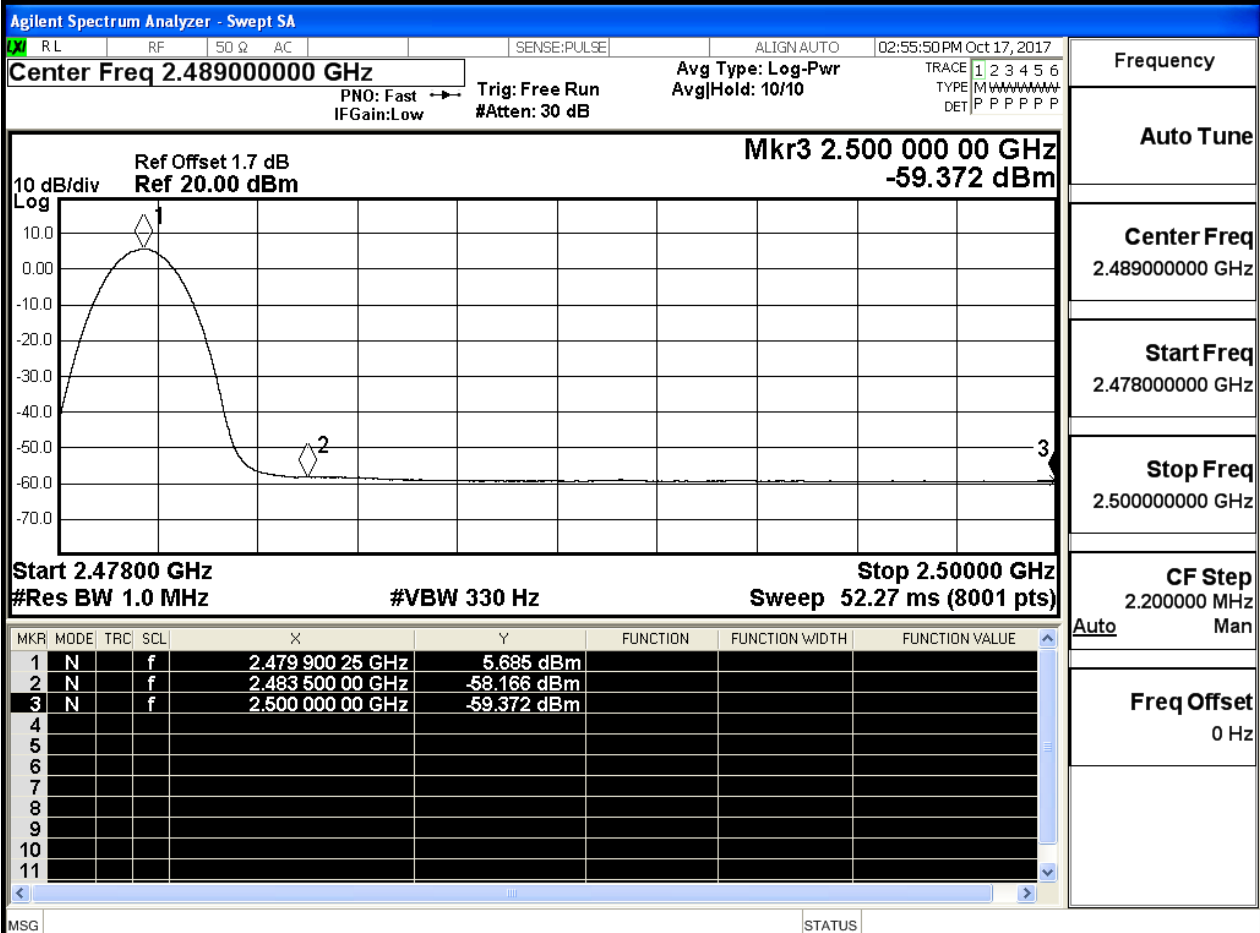
## Restrict-band band-edge measurements\_Hopping On\_PEAK



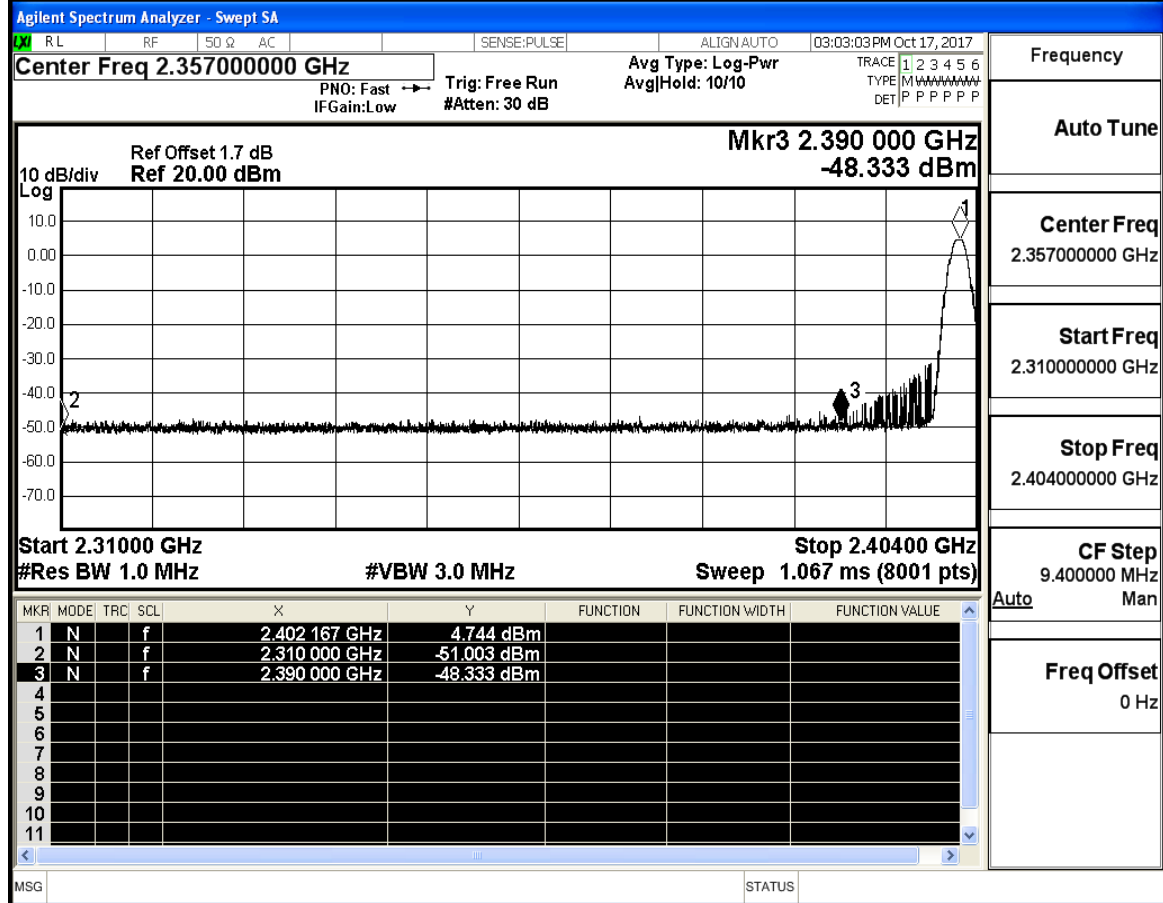
## Restrict-band band-edge measurements\_Hopping On\_PEAK



## Restrict-band band-edge measurements\_Hopping On\_PEAK



Restrict-band band-edge measurements\_Hopping On\_PEAK



Frequency

Auto Tune

Center Freq  
2.357000000 GHz

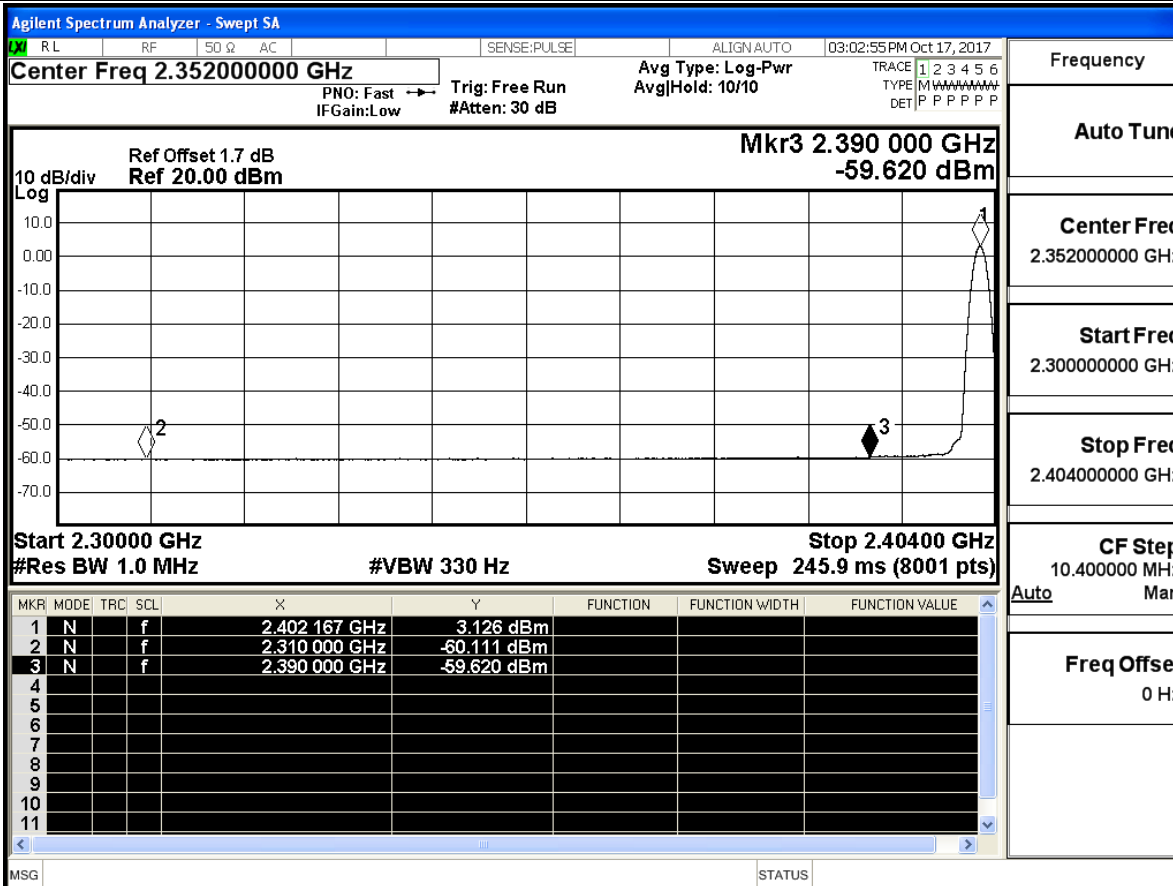
Start Freq  
2.310000000 GHz

Stop Freq  
2.404000000 GHz

CF Step  
9.400000 MHz  
Auto Man

Freq Offset  
0 Hz

Restrict-band band-edge measurements\_Hopping On\_PEAK



Frequency

Auto Tune

Center Freq  
2.352000000 GHz

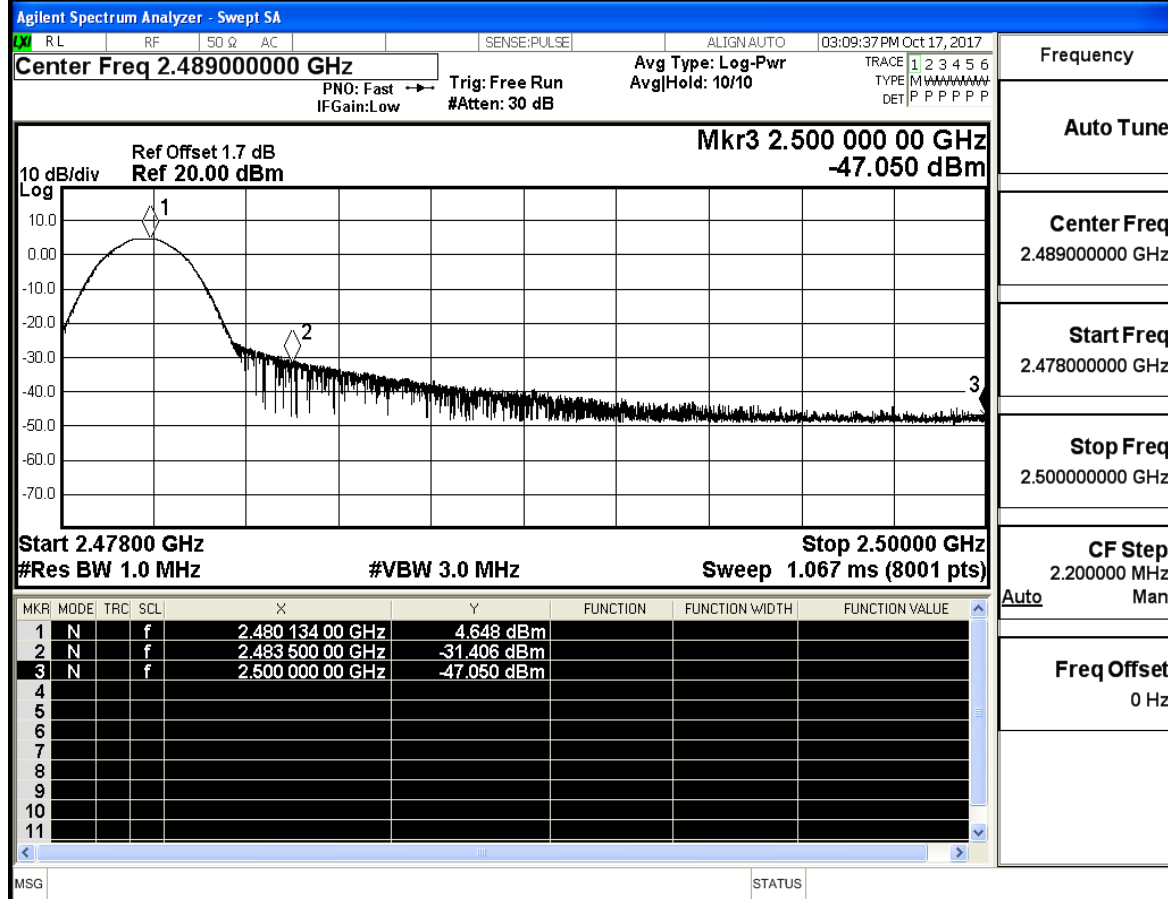
Start Freq  
2.300000000 GHz

Stop Freq  
2.404000000 GHz

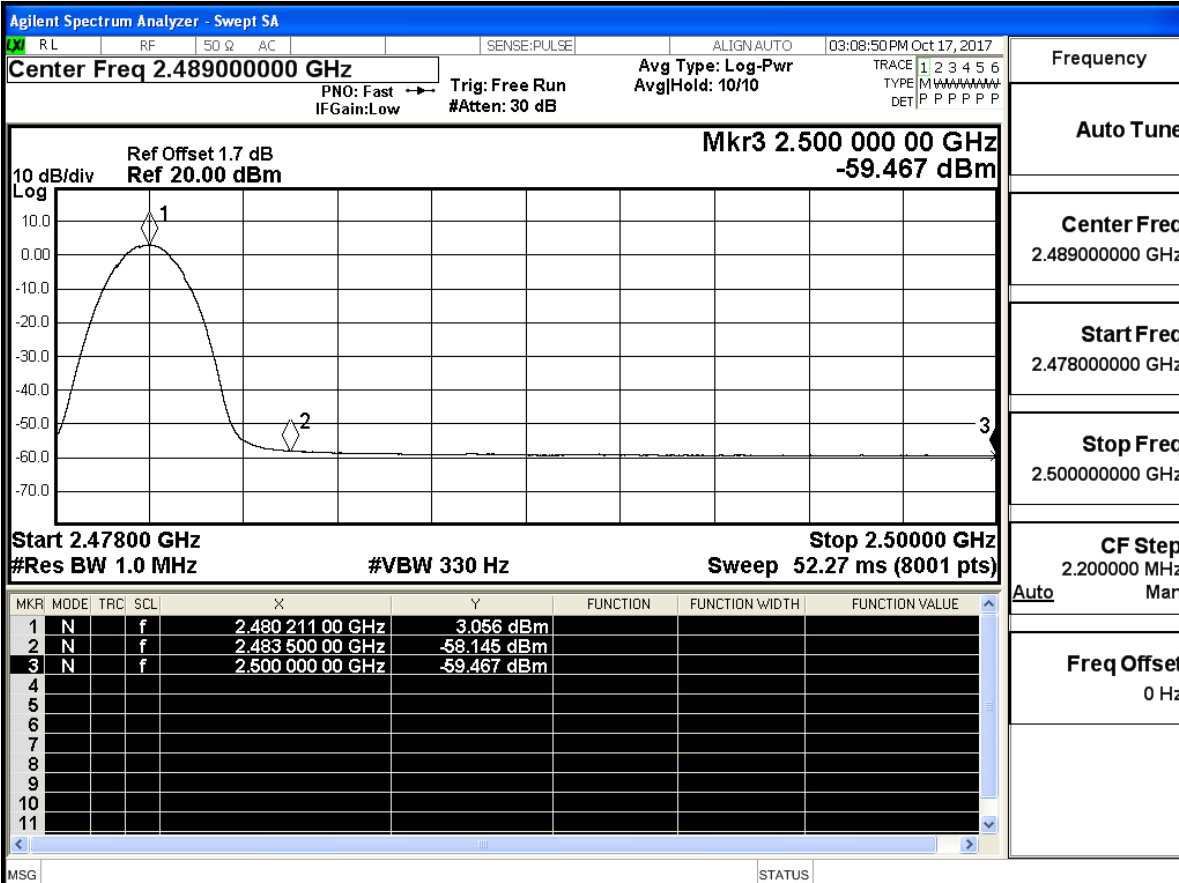
CF Step  
10.400000 MHz  
Auto Man

Freq Offset  
0 Hz

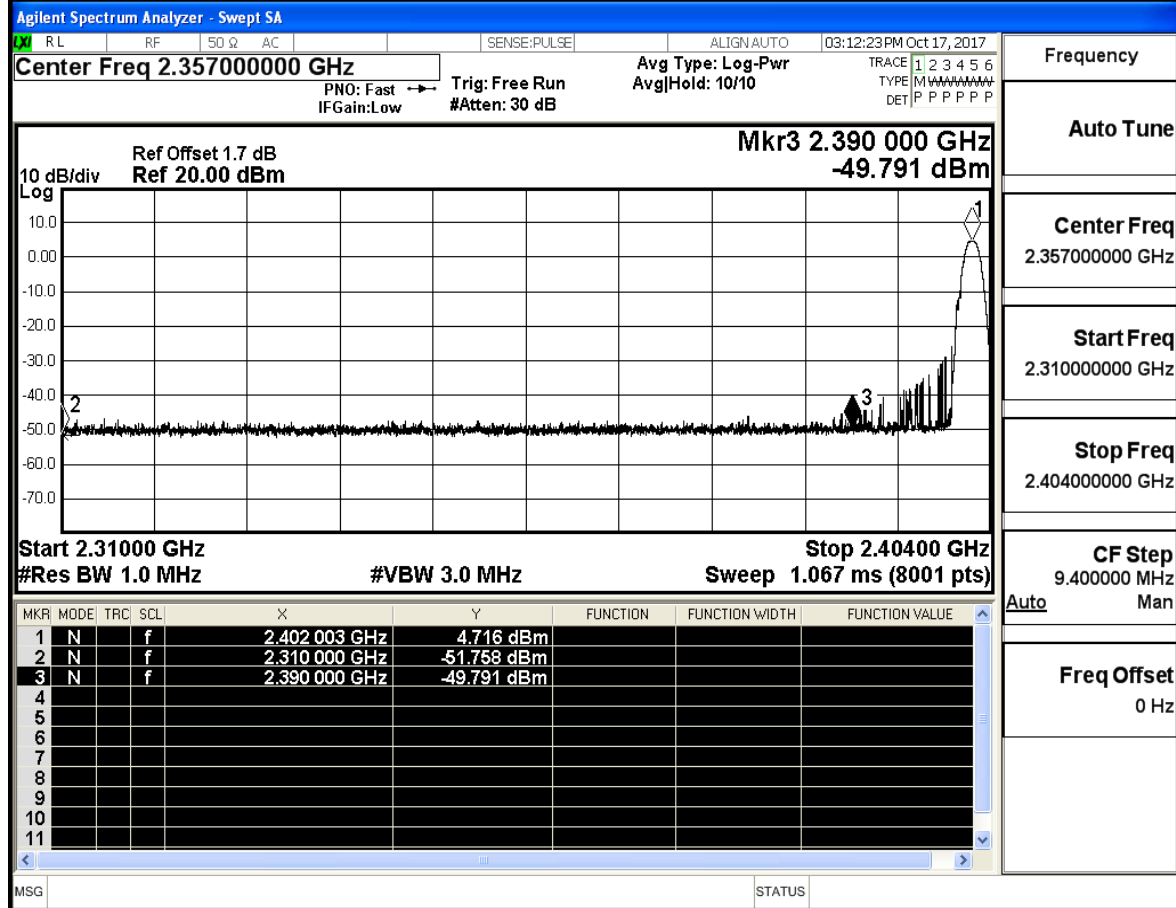
## Restrict-band band-edge measurements\_Hopping On\_PEAK



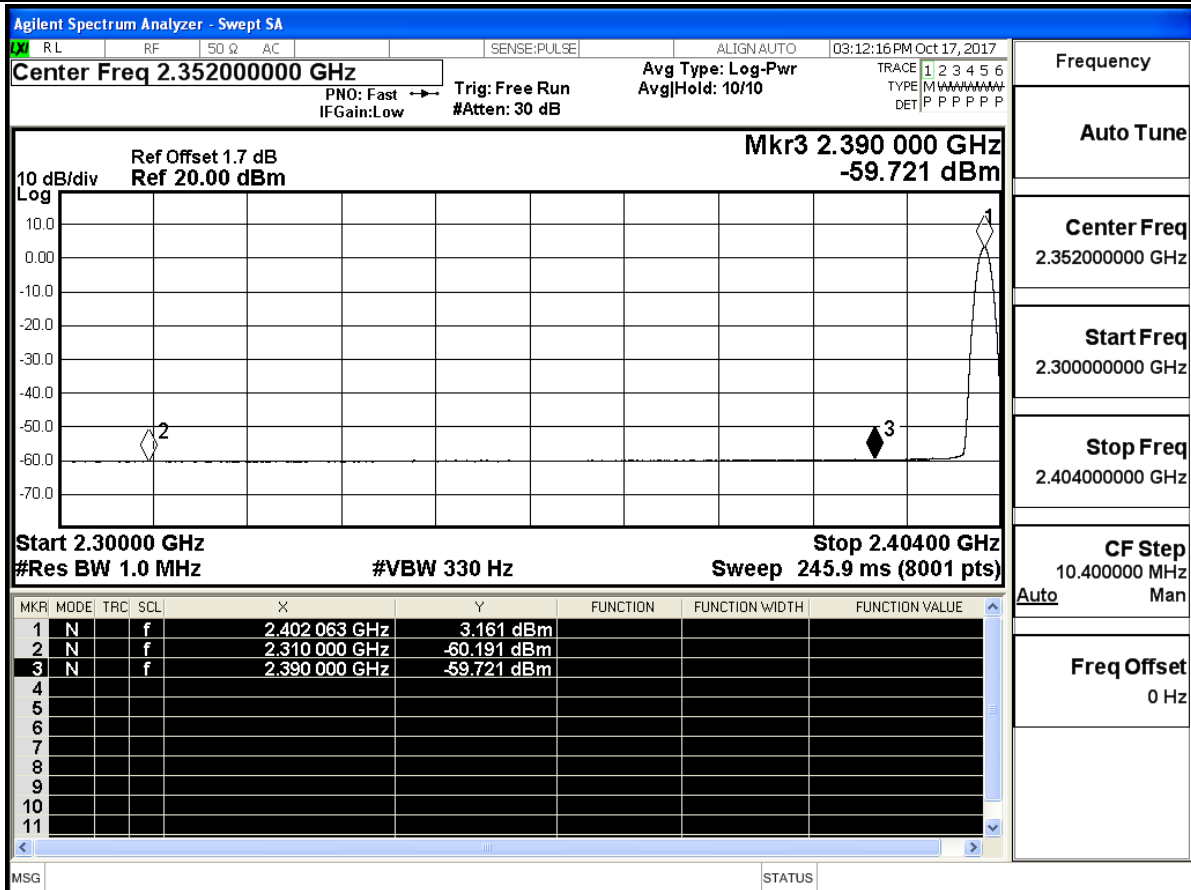
## Restrict-band band-edge measurements\_Hopping On\_PEAK



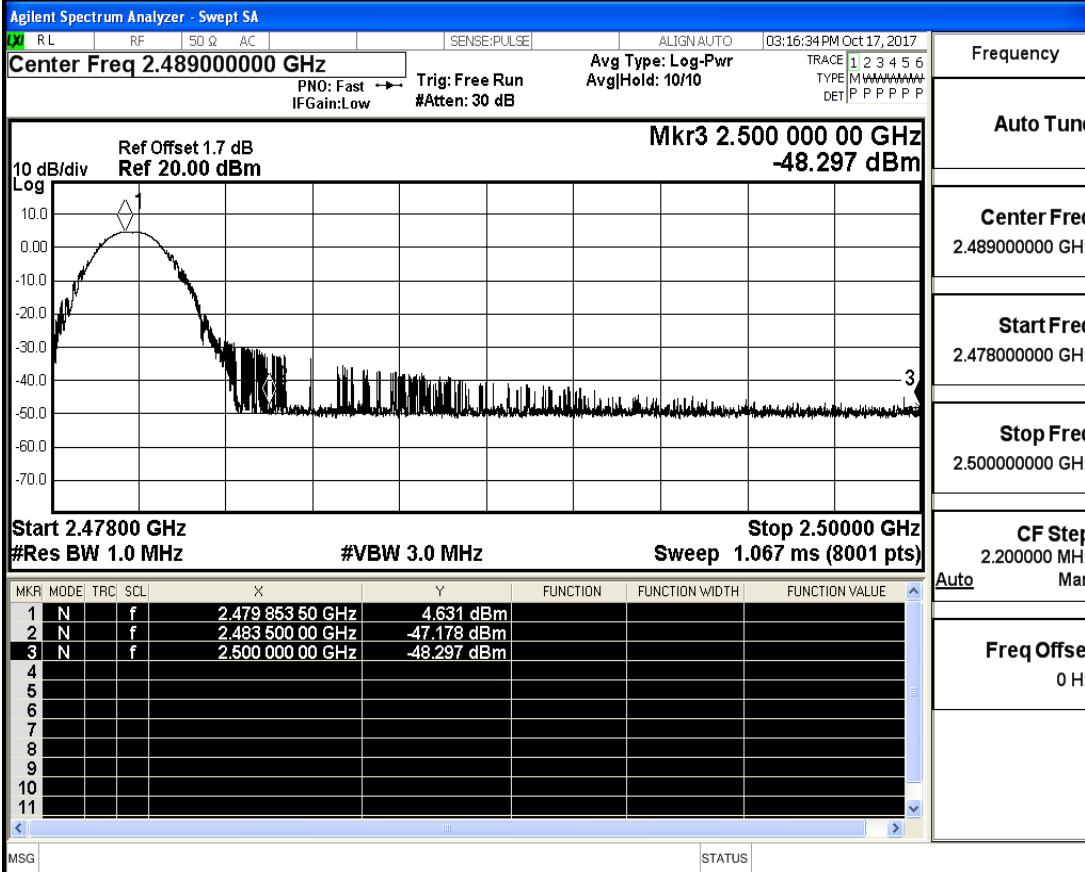
Restrict-band band-edge measurements\_Hopping On\_PEAK



Restrict-band band-edge measurements\_Hopping On\_PEAK



Restrict-band band-edge measurements\_Hopping On\_PEAK



Restrict-band band-edge measurements\_Hopping On\_PEAK

