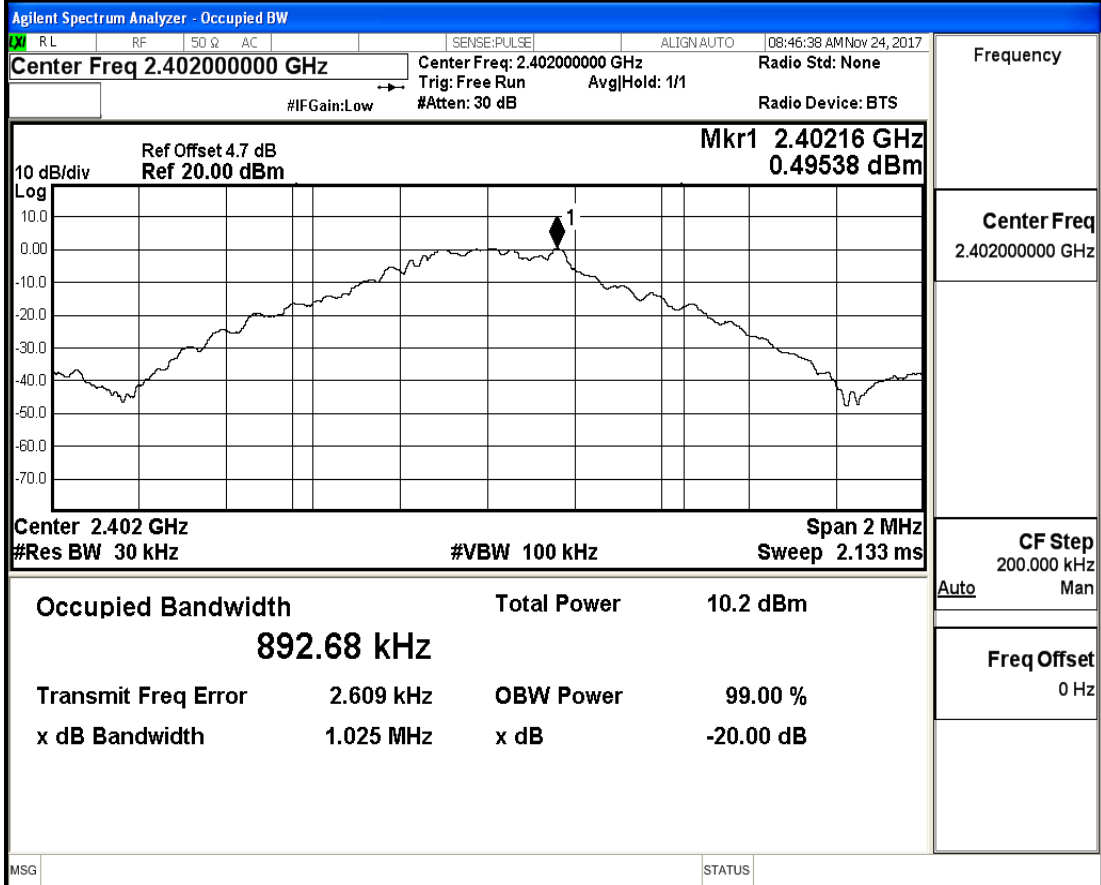


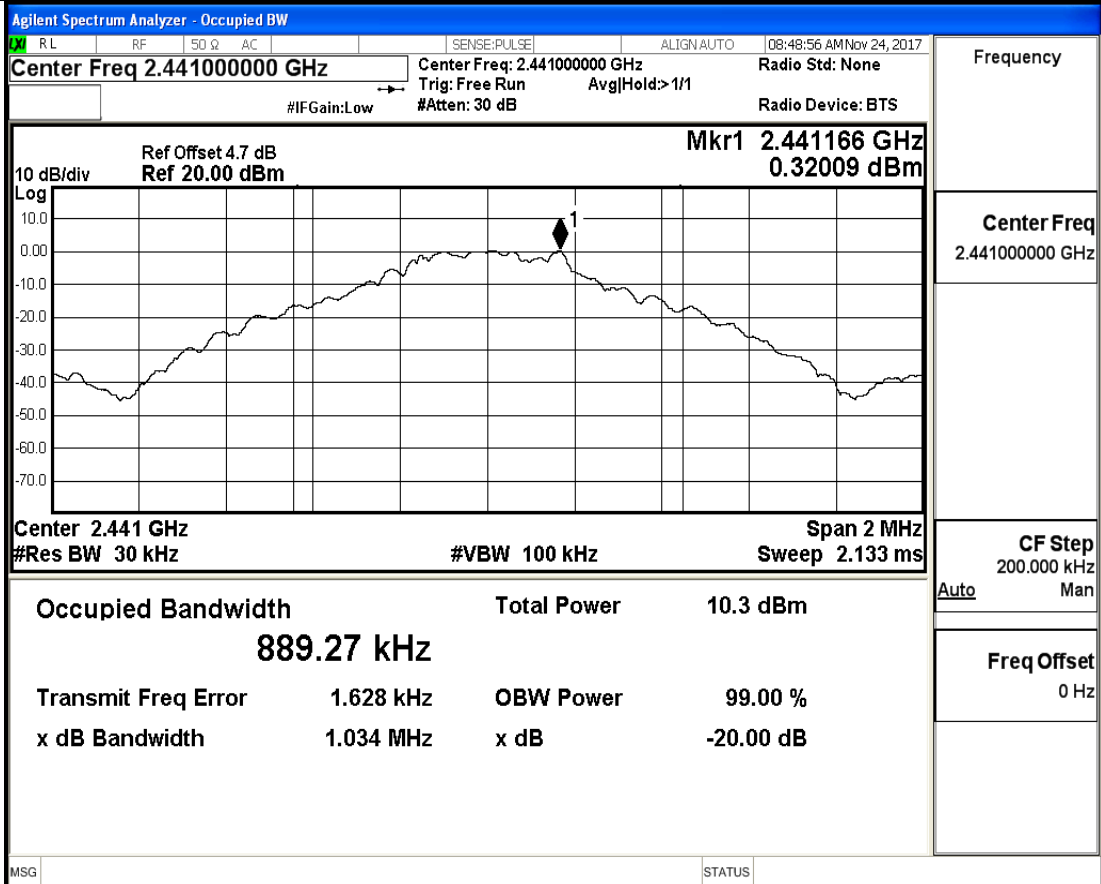
1.20 dB Bandwidth and 99% Bandwidth

Test Mode	Test Channel	20db[MHz]	99%[MHz]	Limit[MHz]	Verdict
DH5	2402	1.025	0.89268	---	PASS
DH5	2441	1.034	0.88927	---	PASS
DH5	2480	0.9736	0.89042	---	PASS
2DH5	2402	1.292	1.1741	---	PASS
2DH5	2441	1.292	1.1731	---	PASS
2DH5	2480	1.291	1.1738	---	PASS
3DH5	2402	1.295	1.1800	---	PASS
3DH5	2441	1.298	1.1841	---	PASS
3DH5	2480	1.298	1.1846	---	PASS

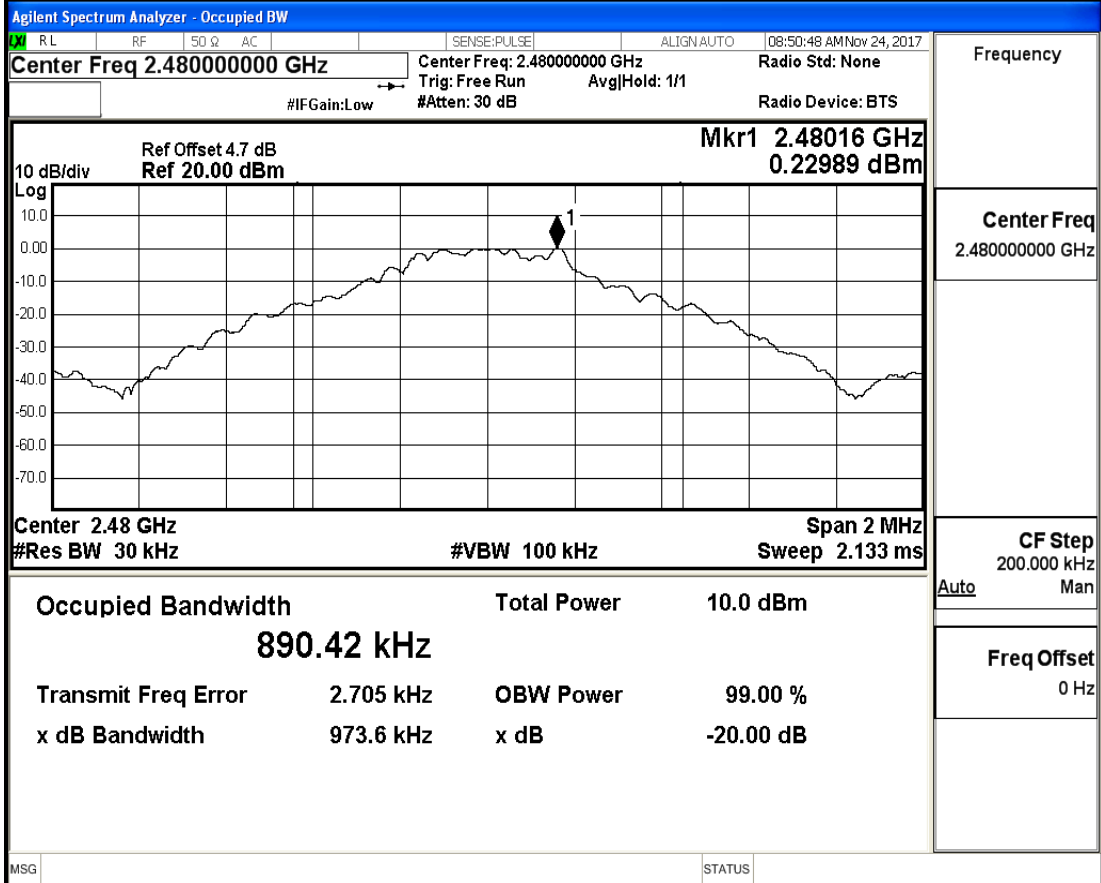
20 dB Bandwidth_DH5_2402



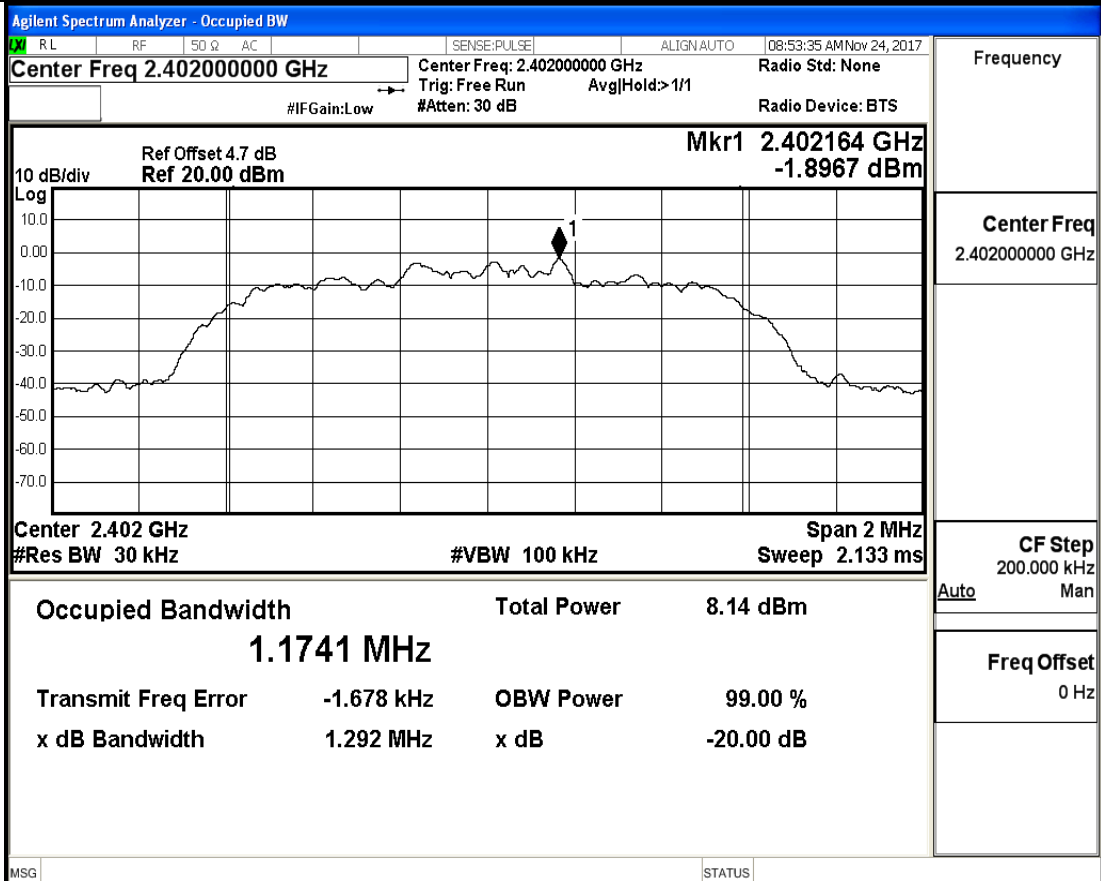
20 dB Bandwidth_DH5_2441



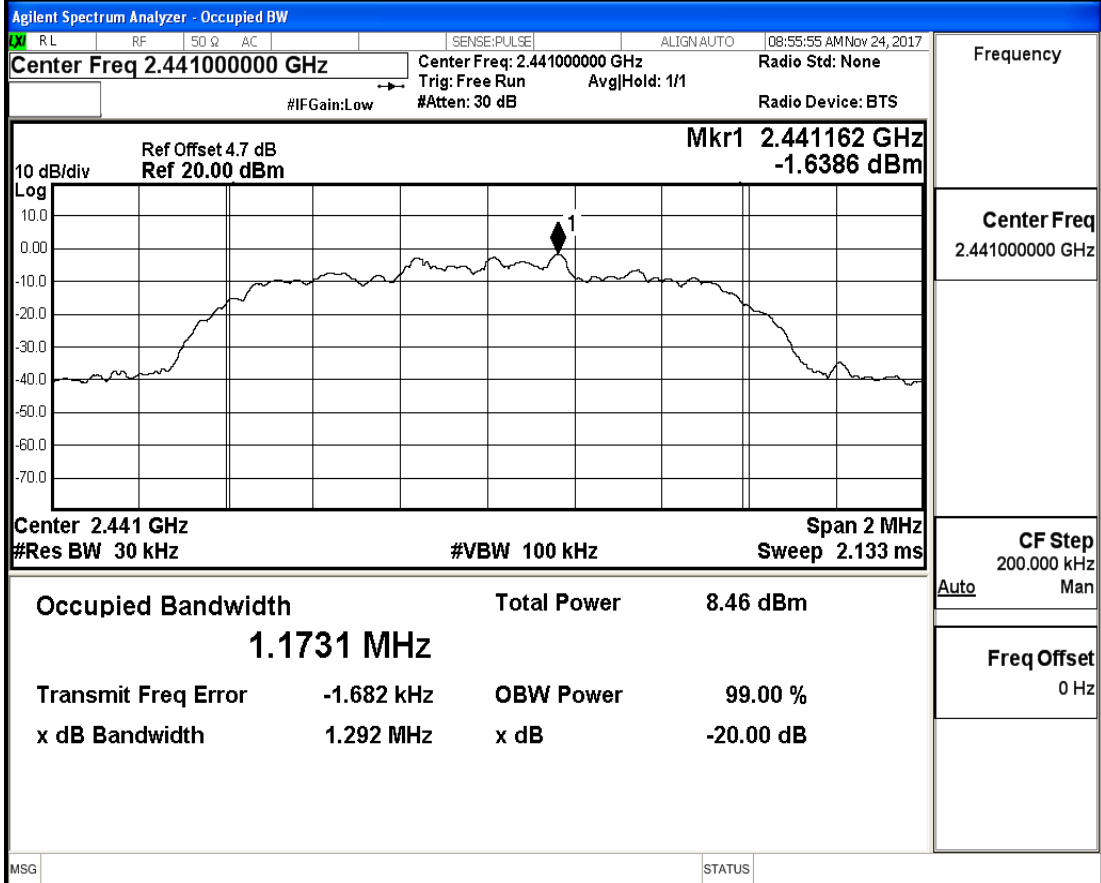
20 dB Bandwidth_DH5_2480



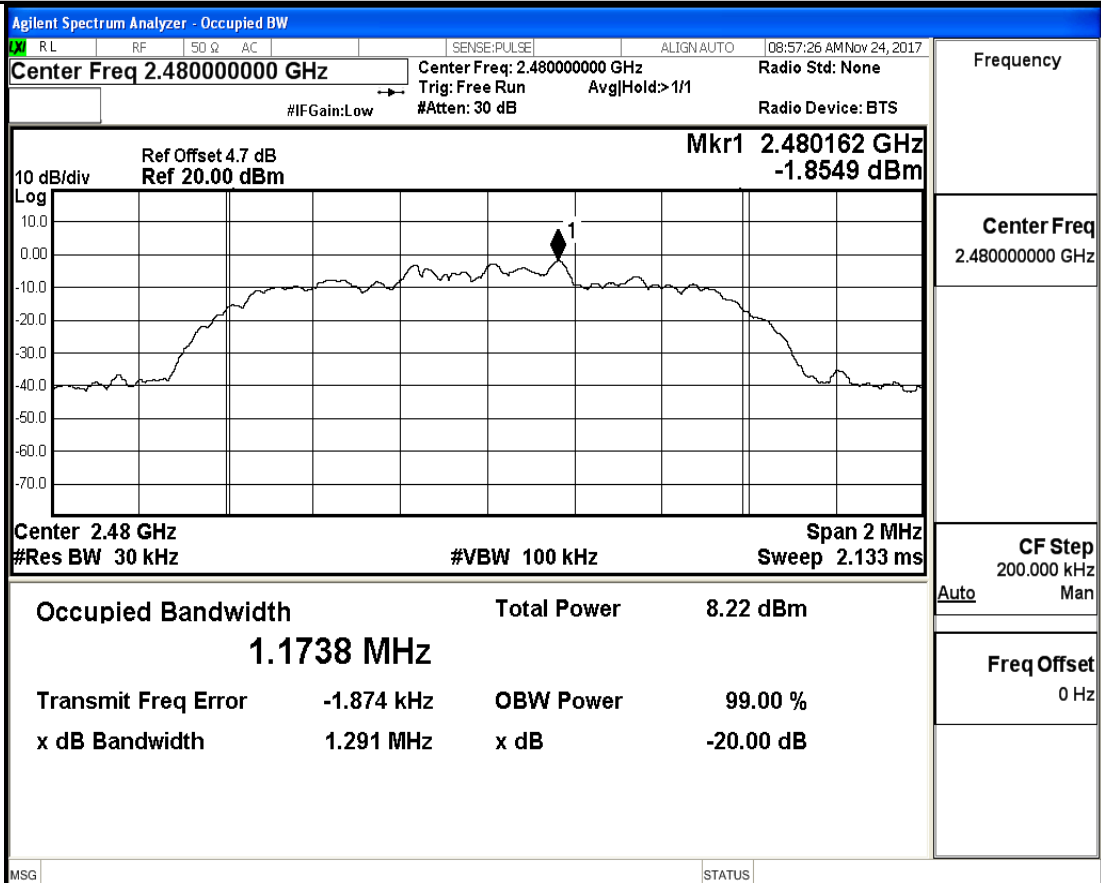
20 dB Bandwidth_2DH5_2402



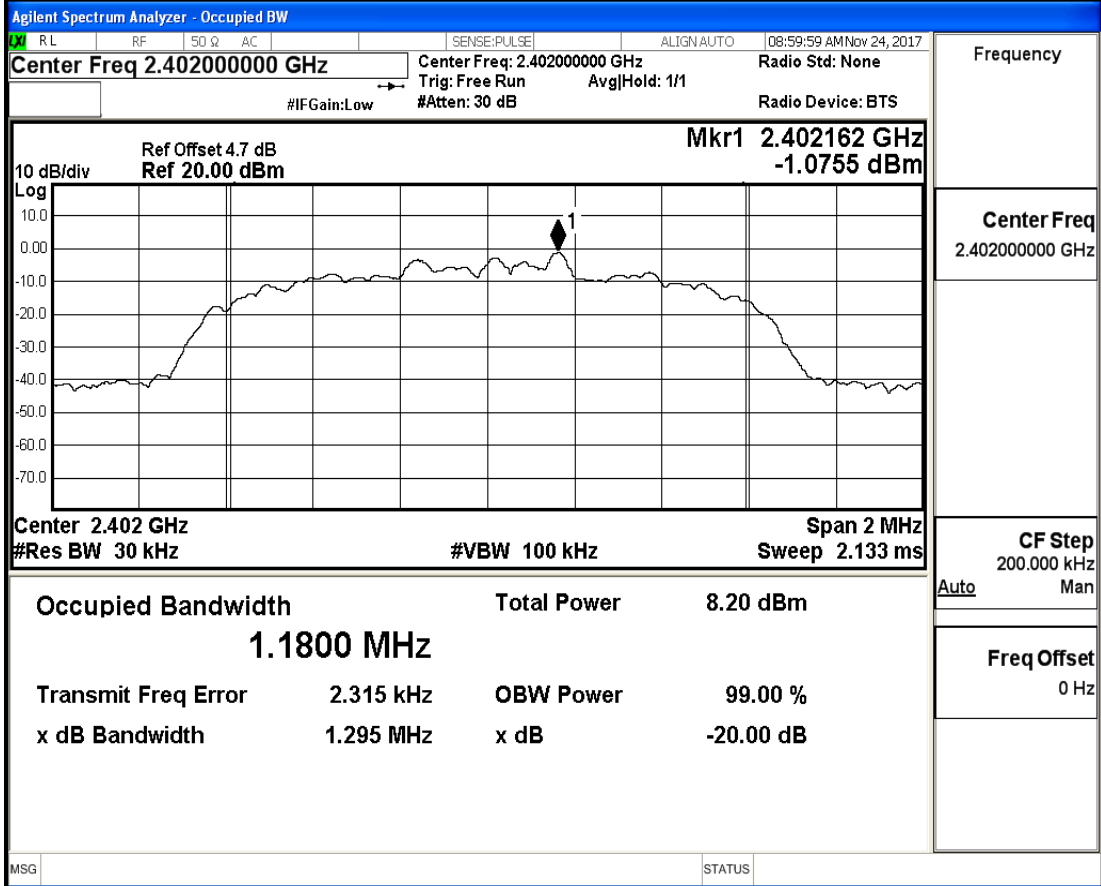
20 dB Bandwidth_2DH5_2441



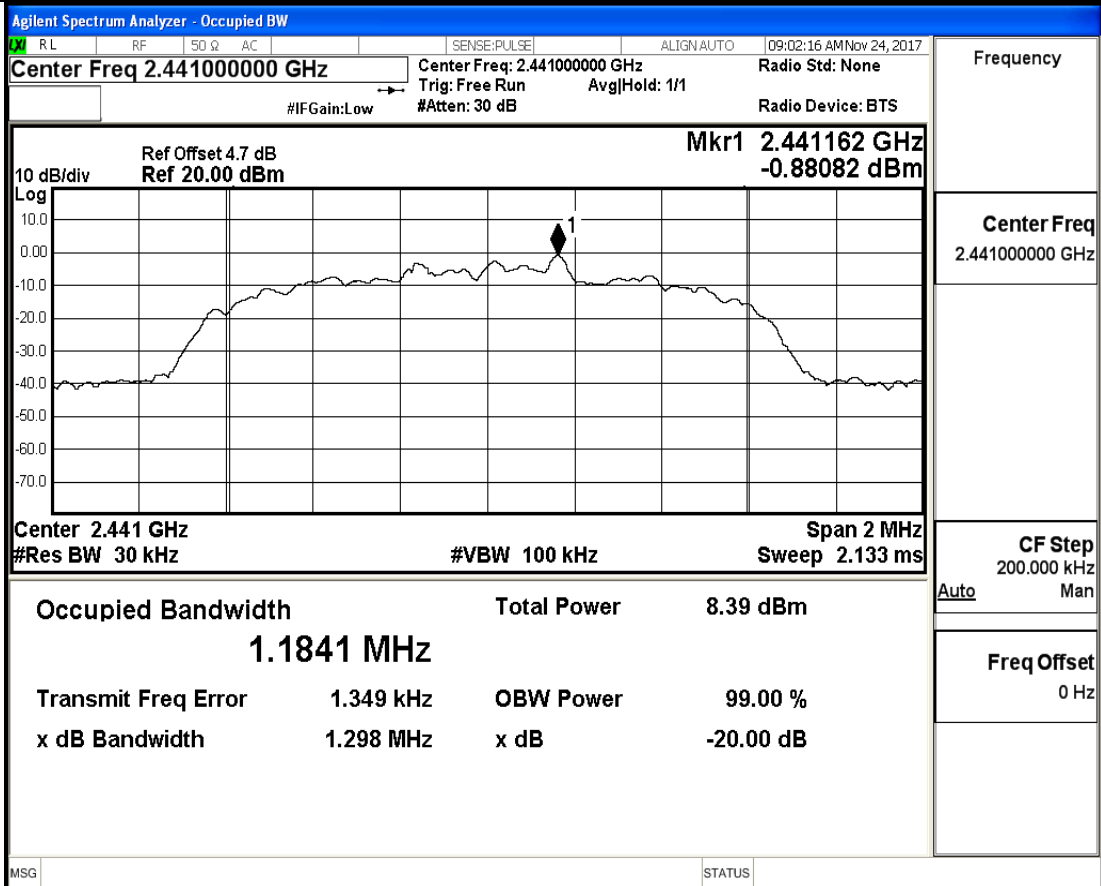
20 dB Bandwidth_2DH5_2480

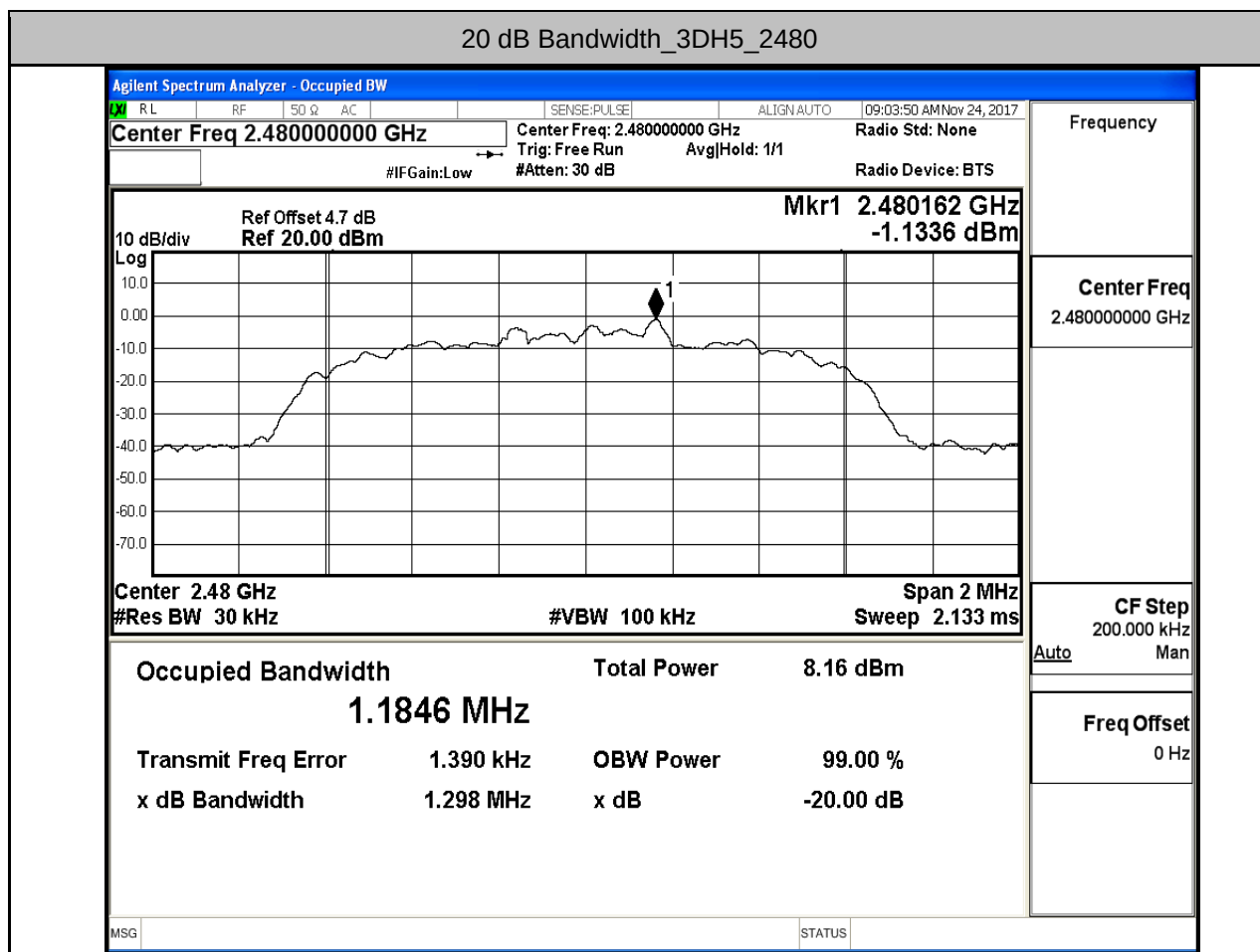


20 dB Bandwidth_3DH5_2402



20 dB Bandwidth_3DH5_2441

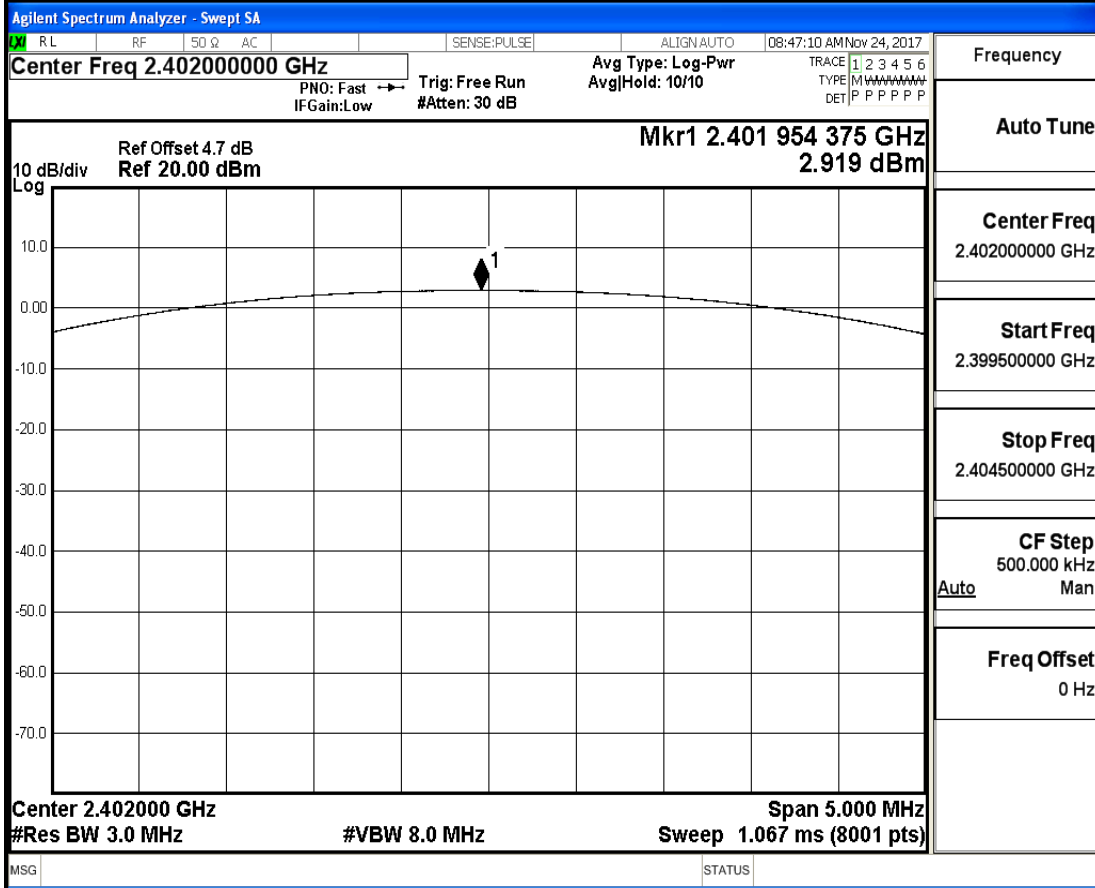




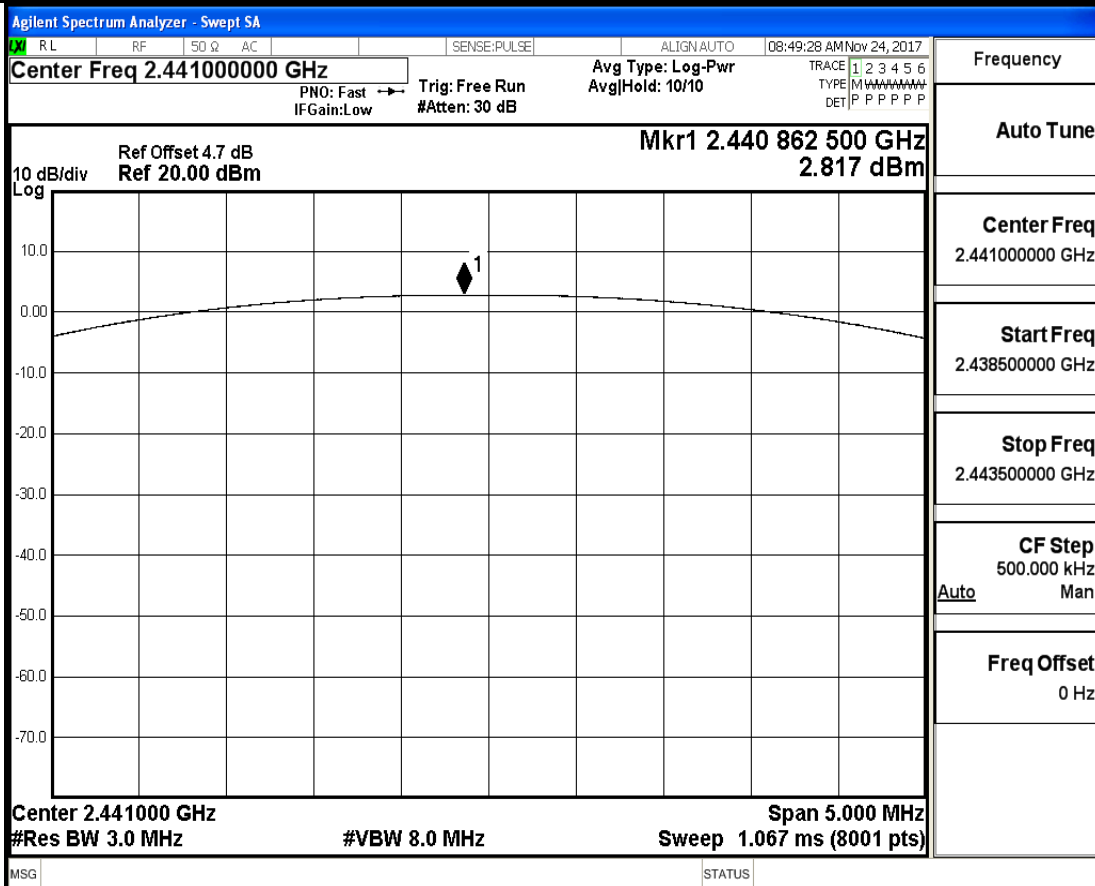
2. Conducted Peak Output Power

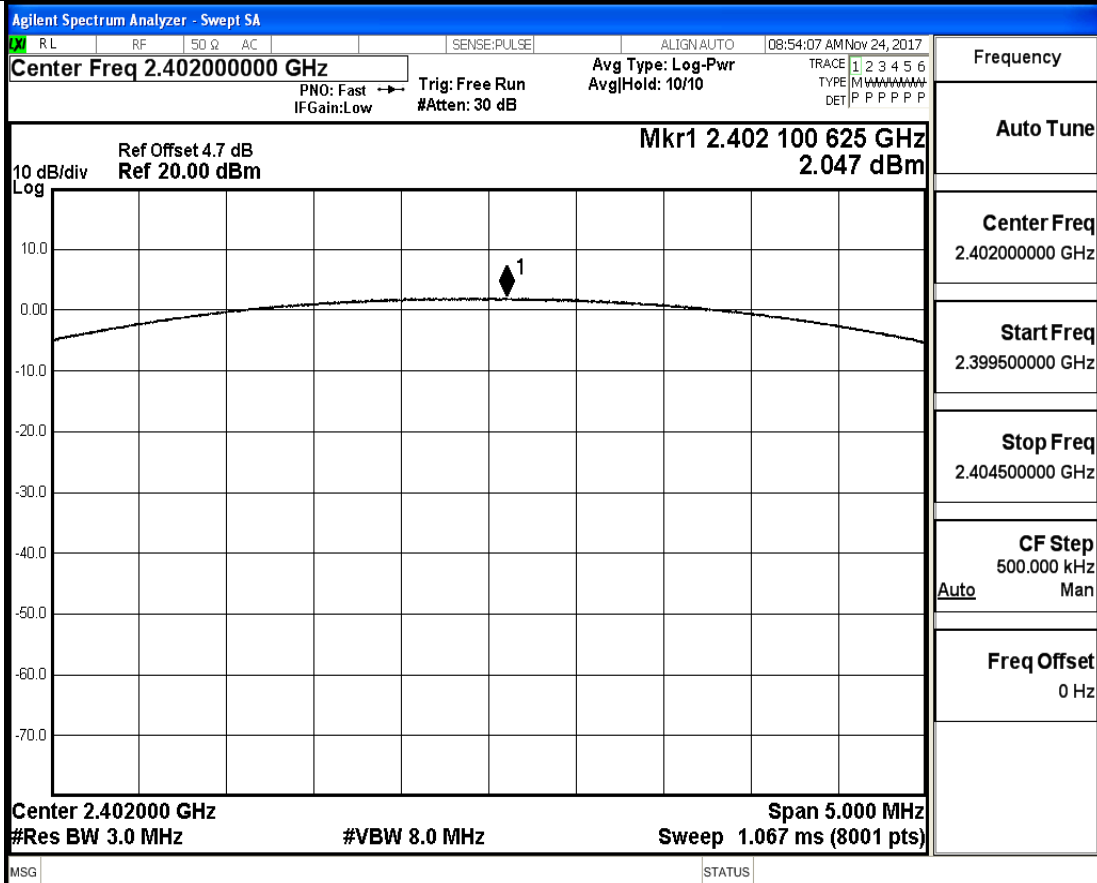
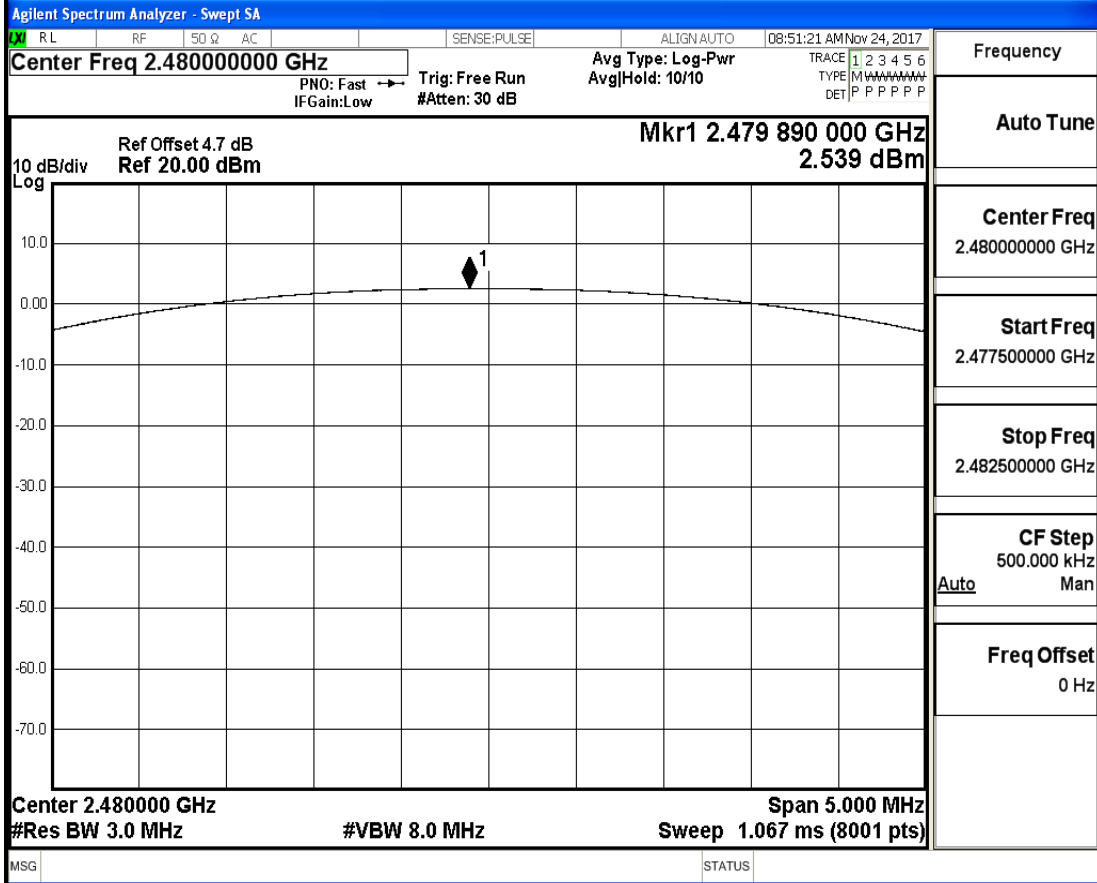
Test Mode	Test Channel	Power[dBm]	Limit[dBm]	Verdict
DH5	2402	2.919	21	PASS
DH5	2441	2.817	21	PASS
DH5	2480	2.539	21	PASS
2DH5	2402	2.047	21	PASS
2DH5	2441	2.065	21	PASS
2DH5	2480	1.807	21	PASS
3DH5	2402	2.177	21	PASS
3DH5	2441	2.214	21	PASS
3DH5	2480	1.936	21	PASS

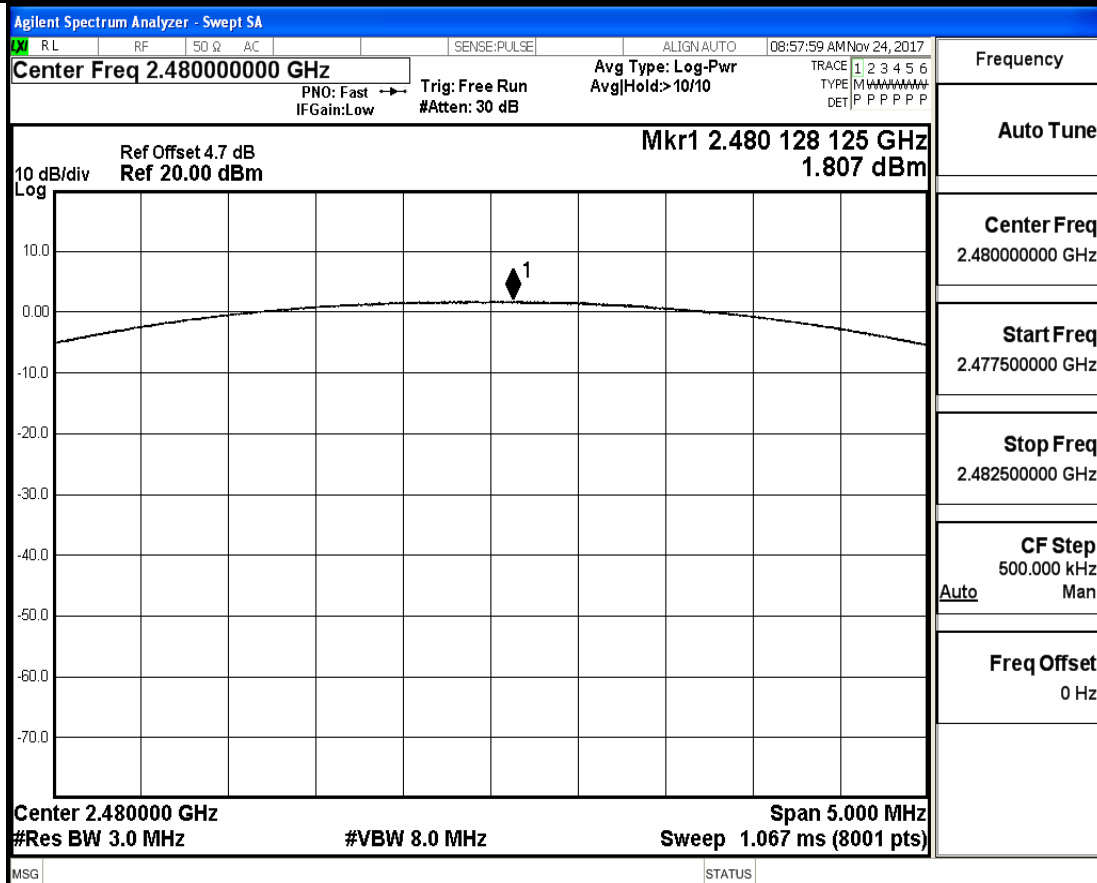
Conducted Peak Output Power_DH5_2402



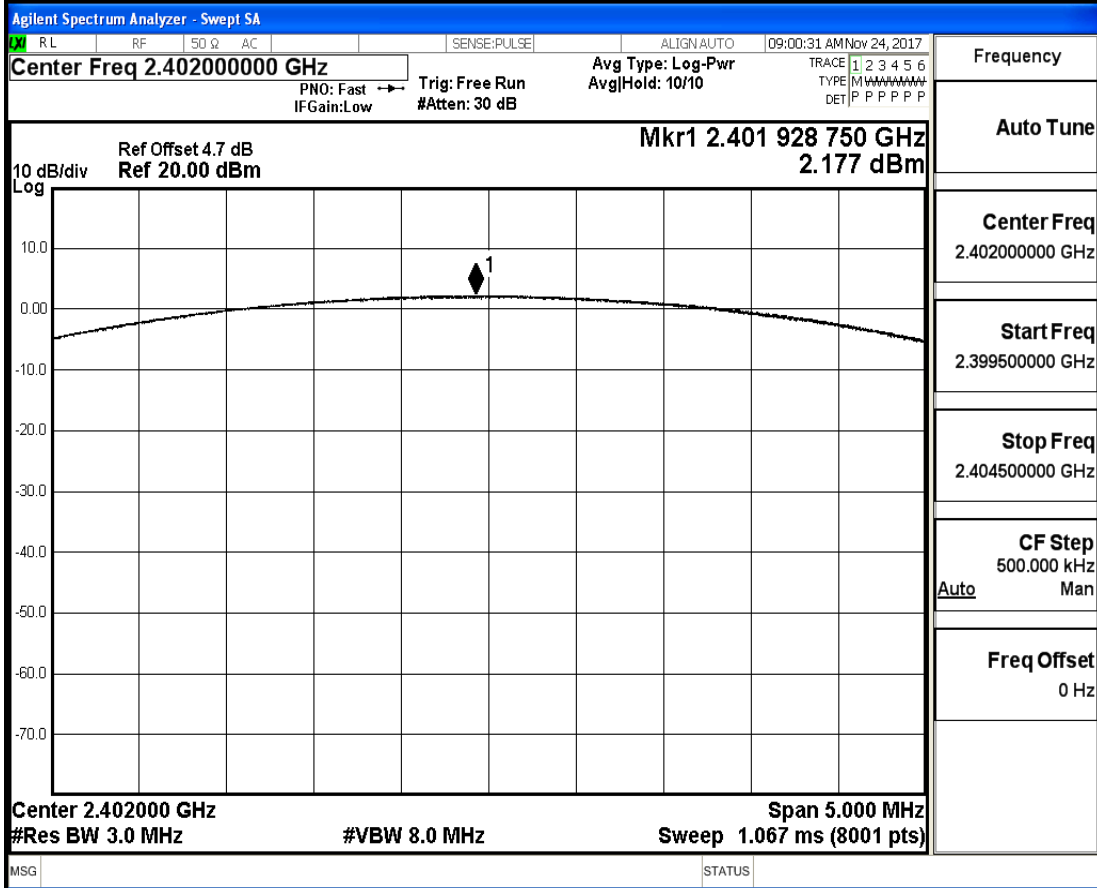
Conducted Peak Output Power_DH5_2441



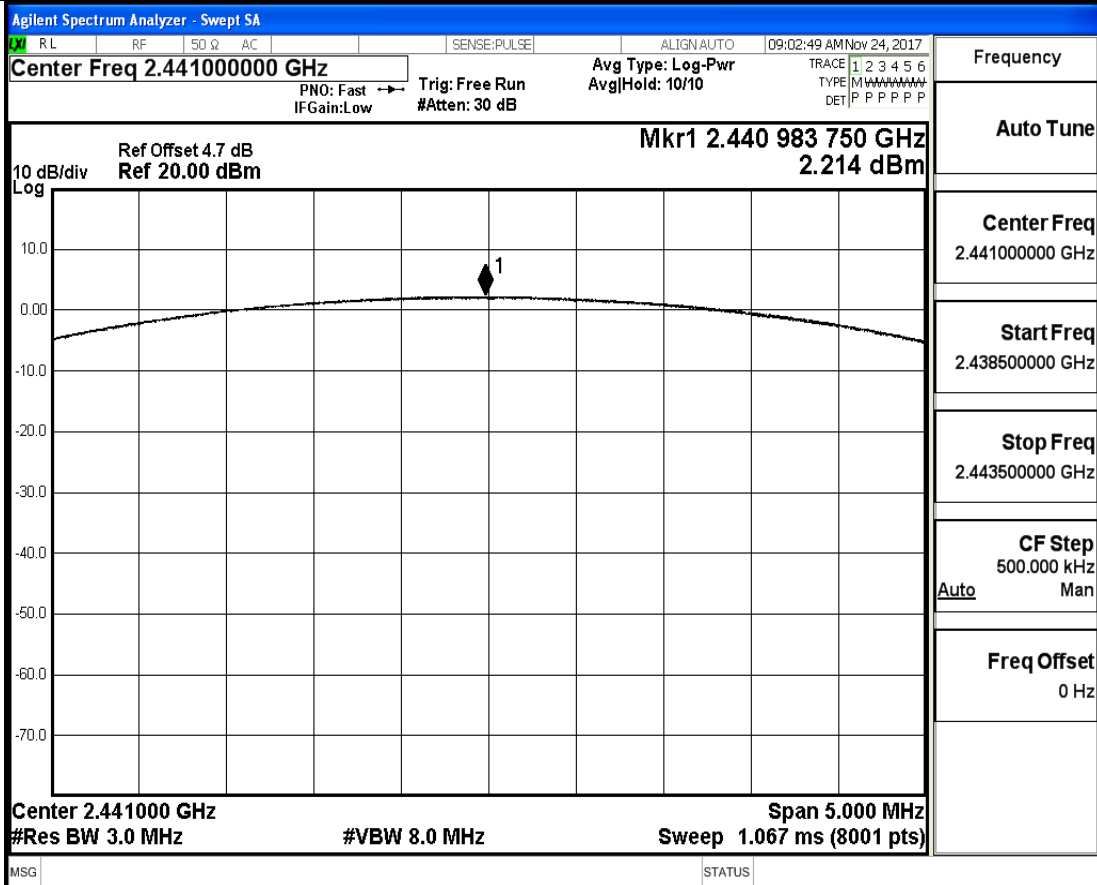




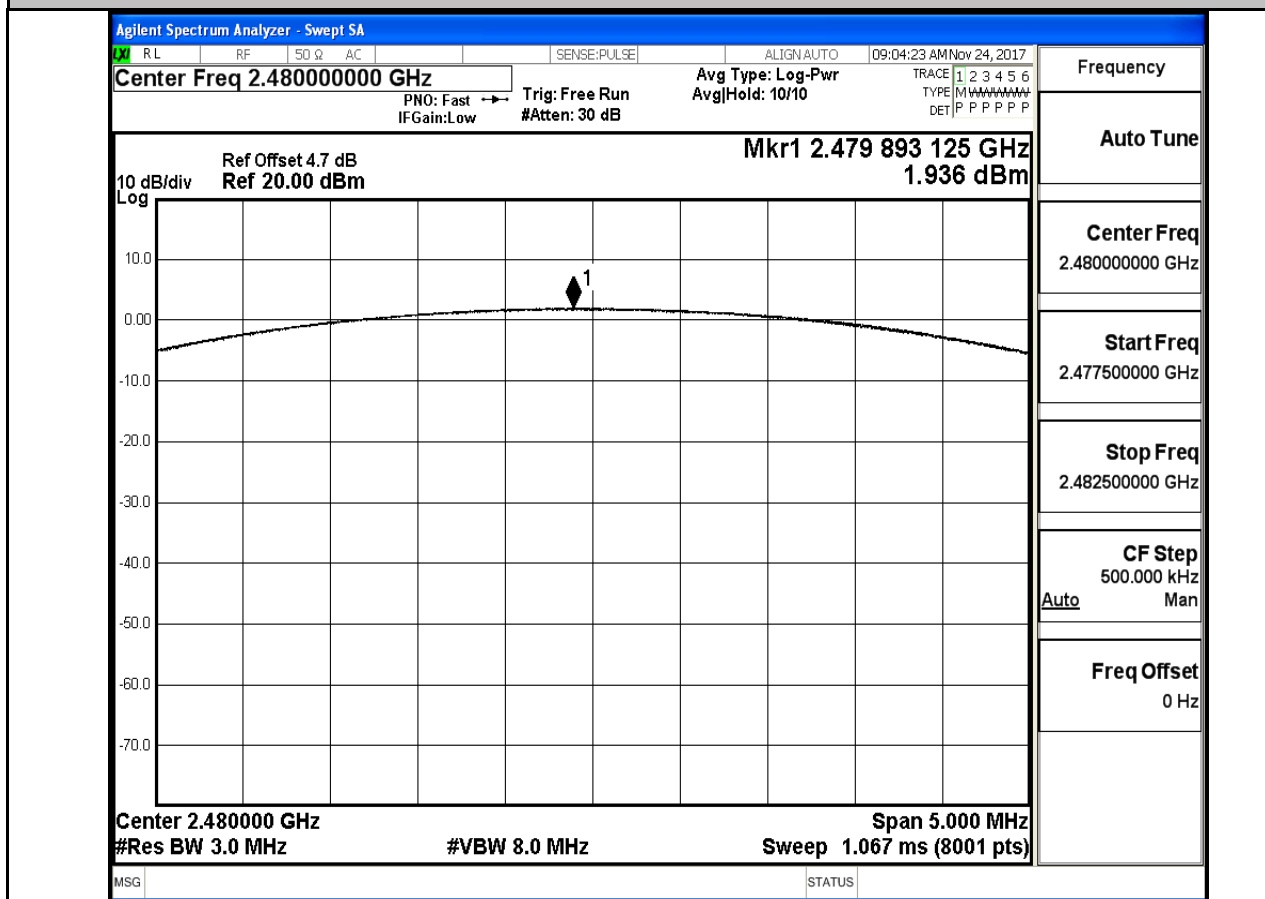
Conducted Peak Output Power_3DH5_2402



Conducted Peak Output Power_3DH5_2441



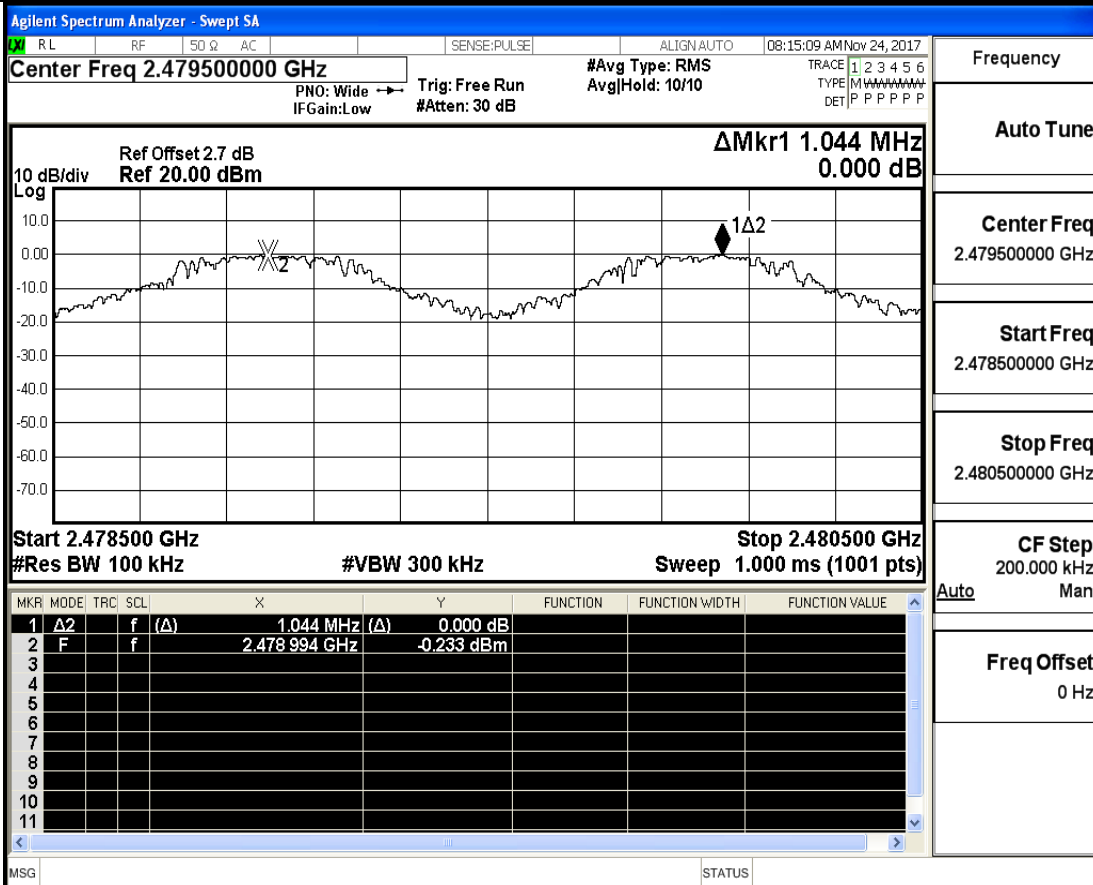
Conducted Peak Output Power_3DH5_2480



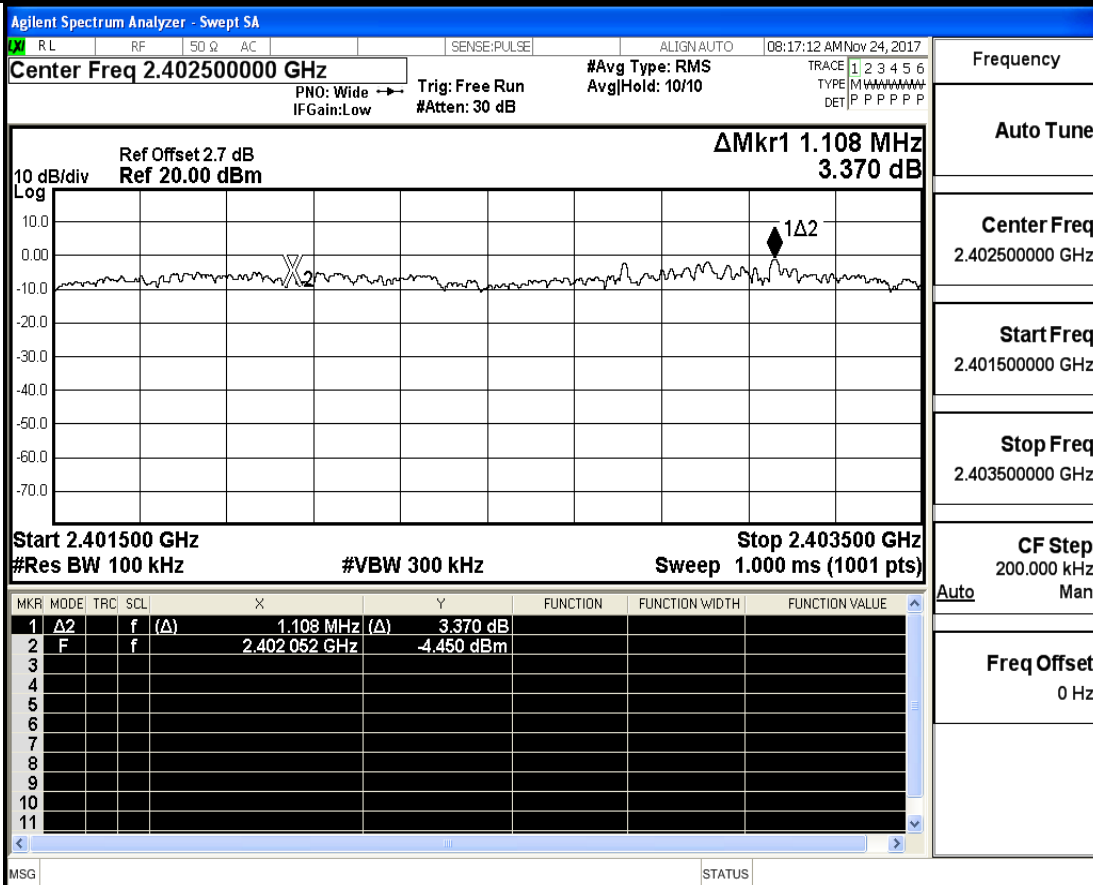
3.Carrier Frequency Separation

Test Mode	Test Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	2402	1.122	0.69	PASS
DH5	2441	0.848	0.69	PASS
DH5	2480	1.044	0.68	PASS
2DH5	2402	1.108	0.86	PASS
2DH5	2441	0.97	0.86	PASS
2DH5	2480	1.008	0.86	PASS
3DH5	2402	1.008	0.86	PASS
3DH5	2441	1.01	0.87	PASS
3DH5	2480	1.012	0.87	PASS

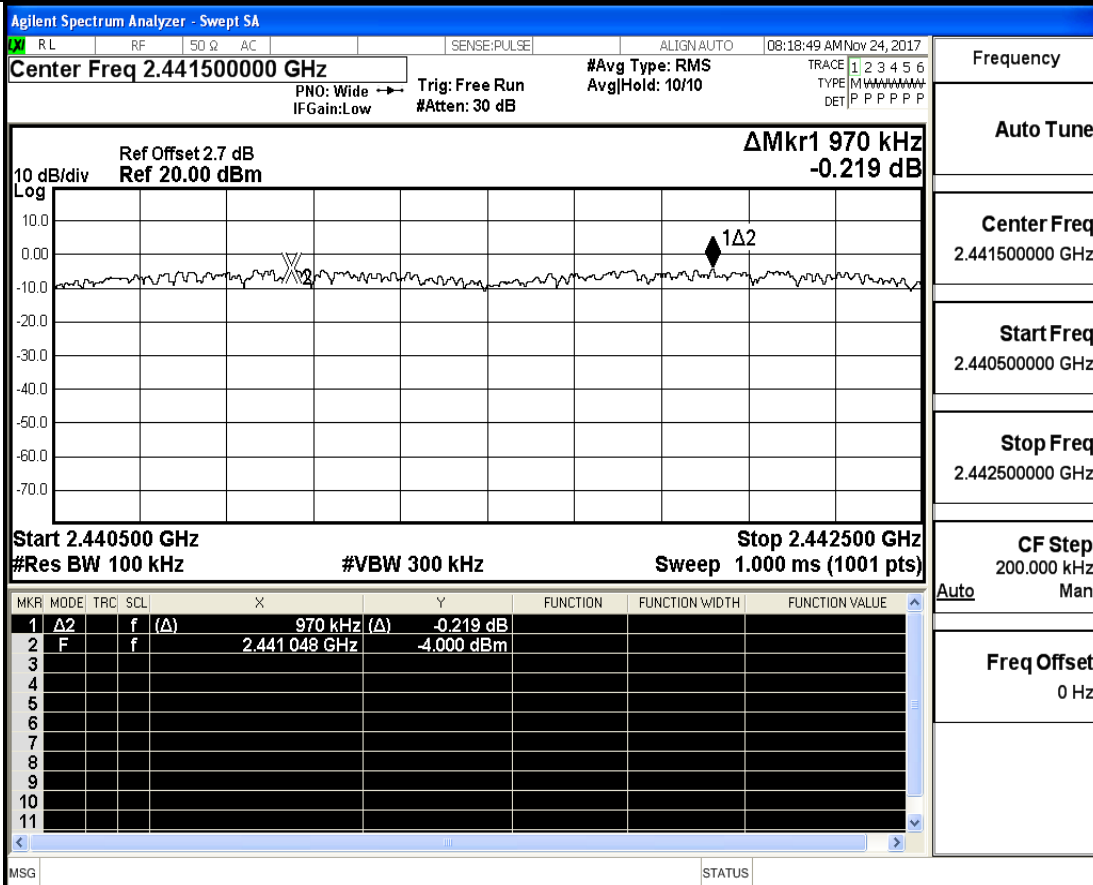
Carrier Frequency Separation_DH5_2480



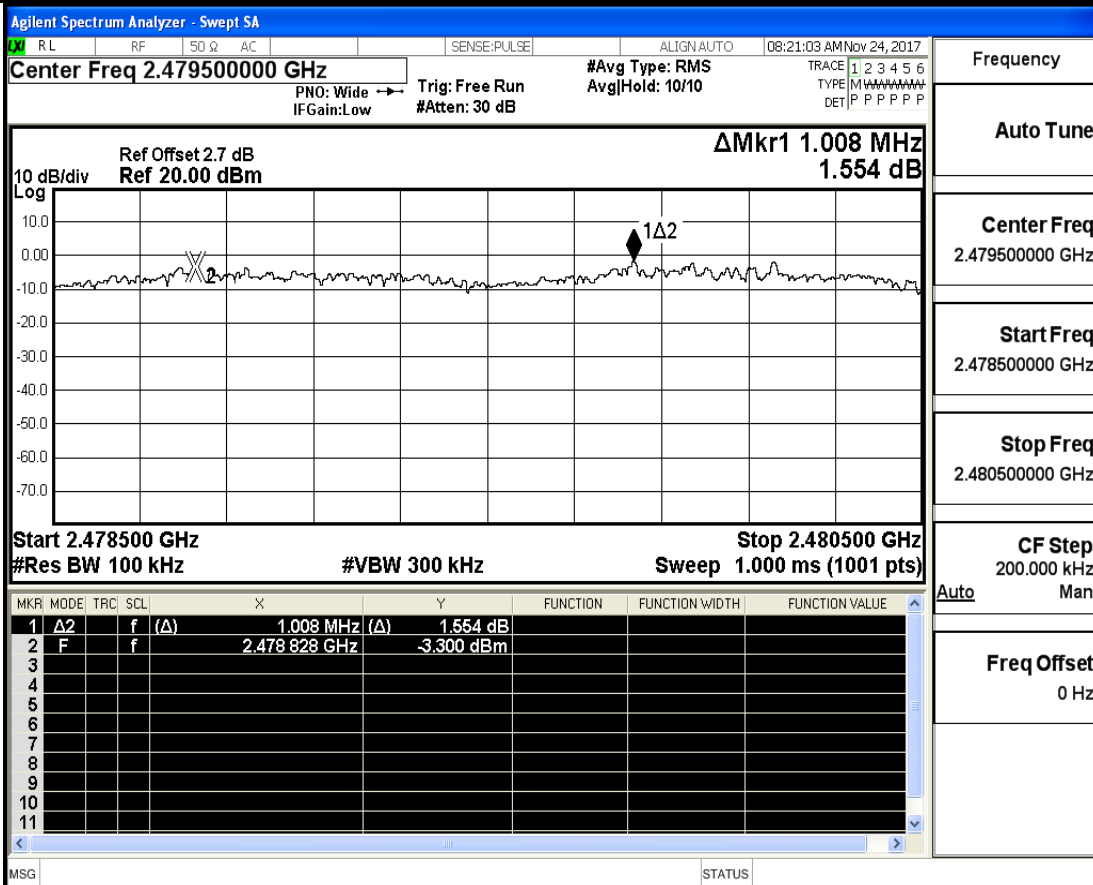
Carrier Frequency Separation_2DH5_2402



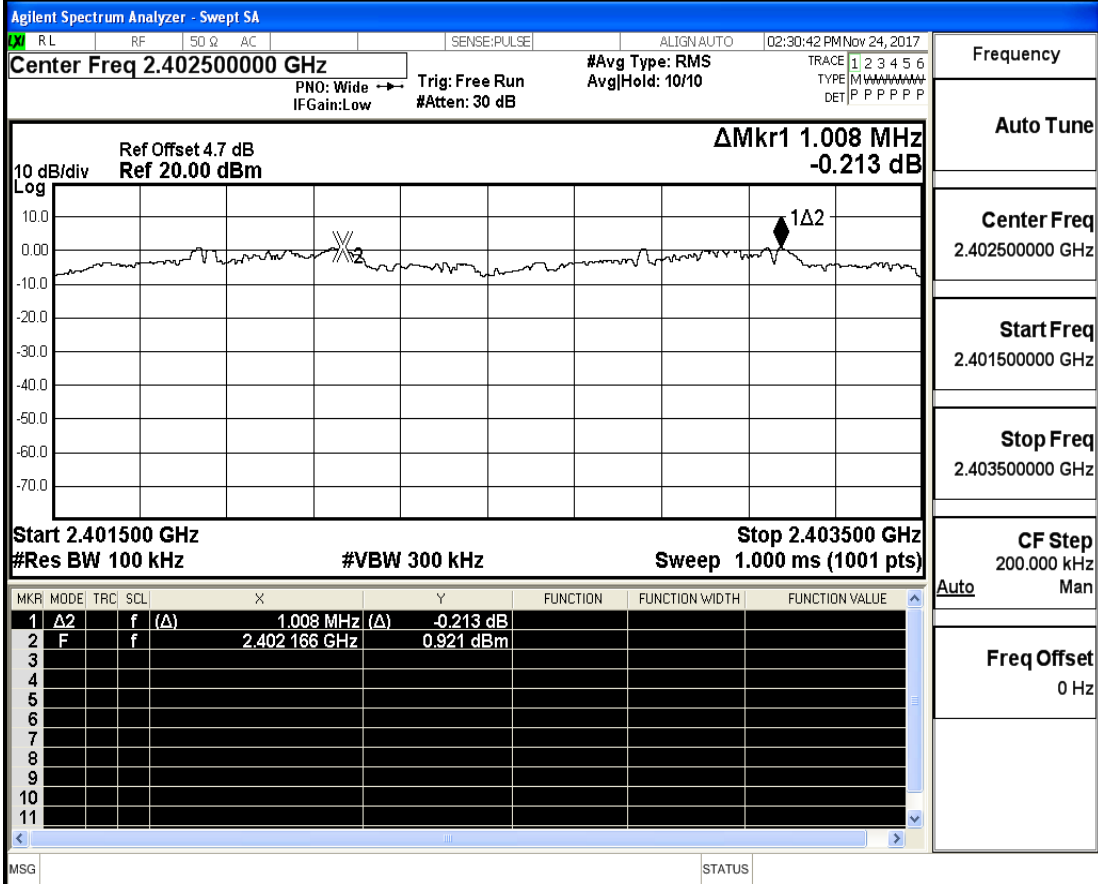
Carrier Frequency Separation_2DH5_2441



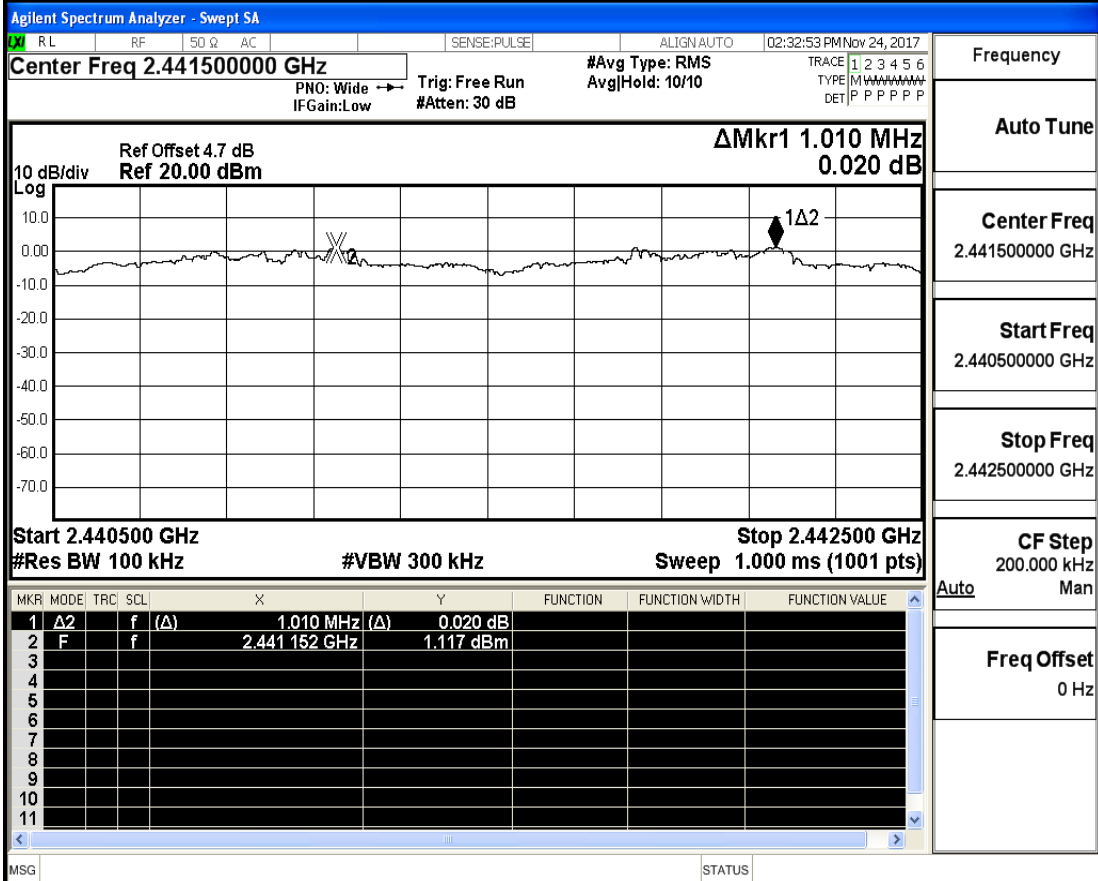
Carrier Frequency Separation_2DH5_2480



Carrier Frequency Separation_3DH5_2402



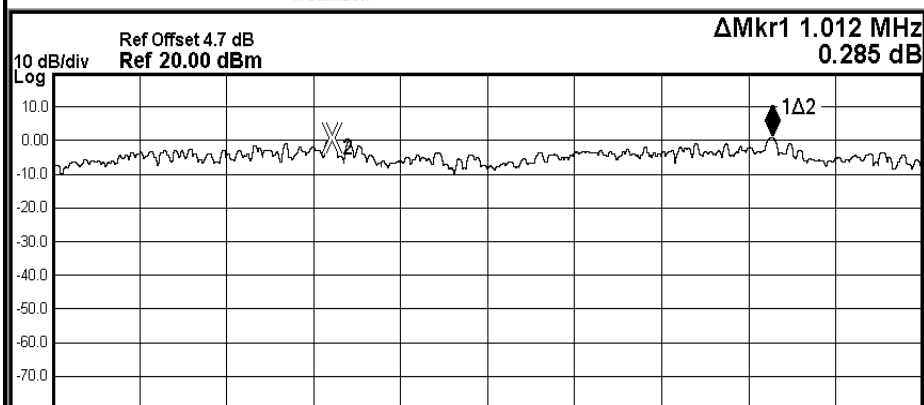
Carrier Frequency Separation_3DH5_2441



Carrier Frequency Separation_3DH5_2480

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.479500000 GHz
 PNO: Wide → Trig: Free Run
 IFGain:Low #Atten: 30 dB
 #Avg Type: RMS
 AvgHold: 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



MRK	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	Δ2	f	(Δ)	1.012 MHz (Δ)	0.285 dB			
2	F	f		2.479 142 GHz	0.654 dBm			
3								
4								
5								
6								
7								
8								
9								
10								
11								

Frequency

Auto Tune

Center Freq
2.479500000 GHz

Start Freq
2.478500000 GHz

Stop Freq
2.480500000 GHz

CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz

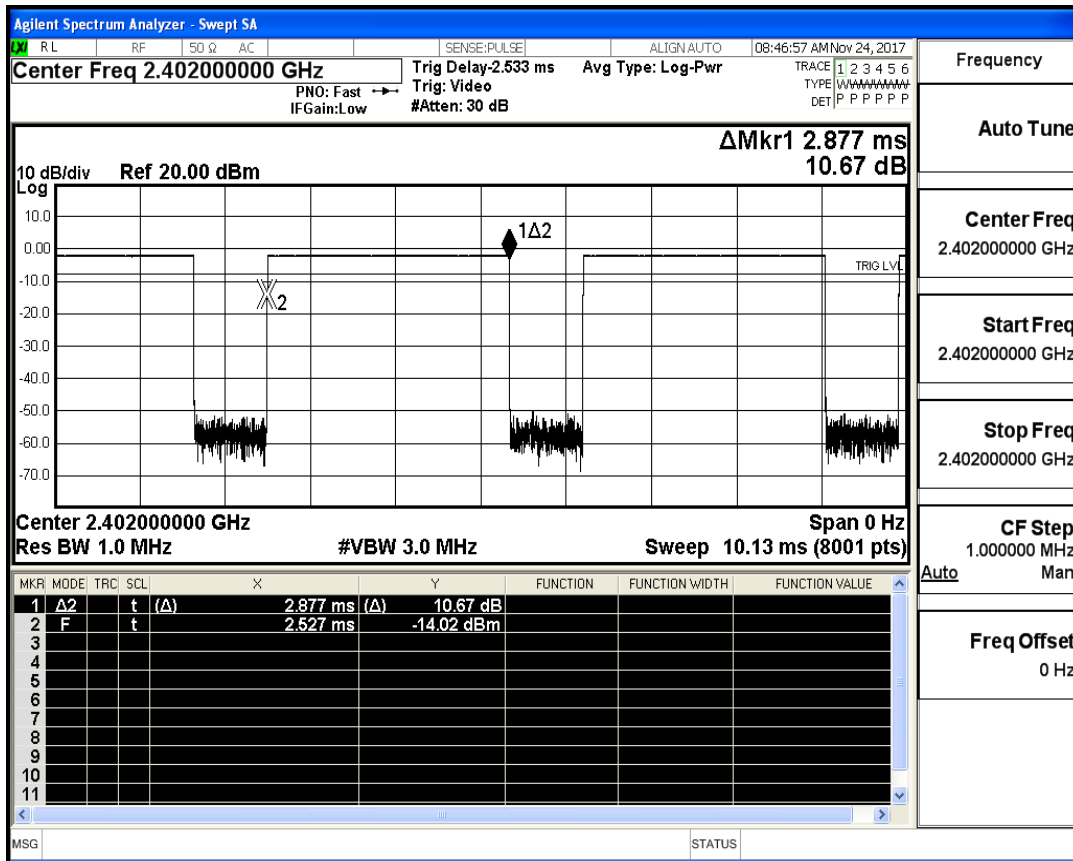
MSG

STATUS

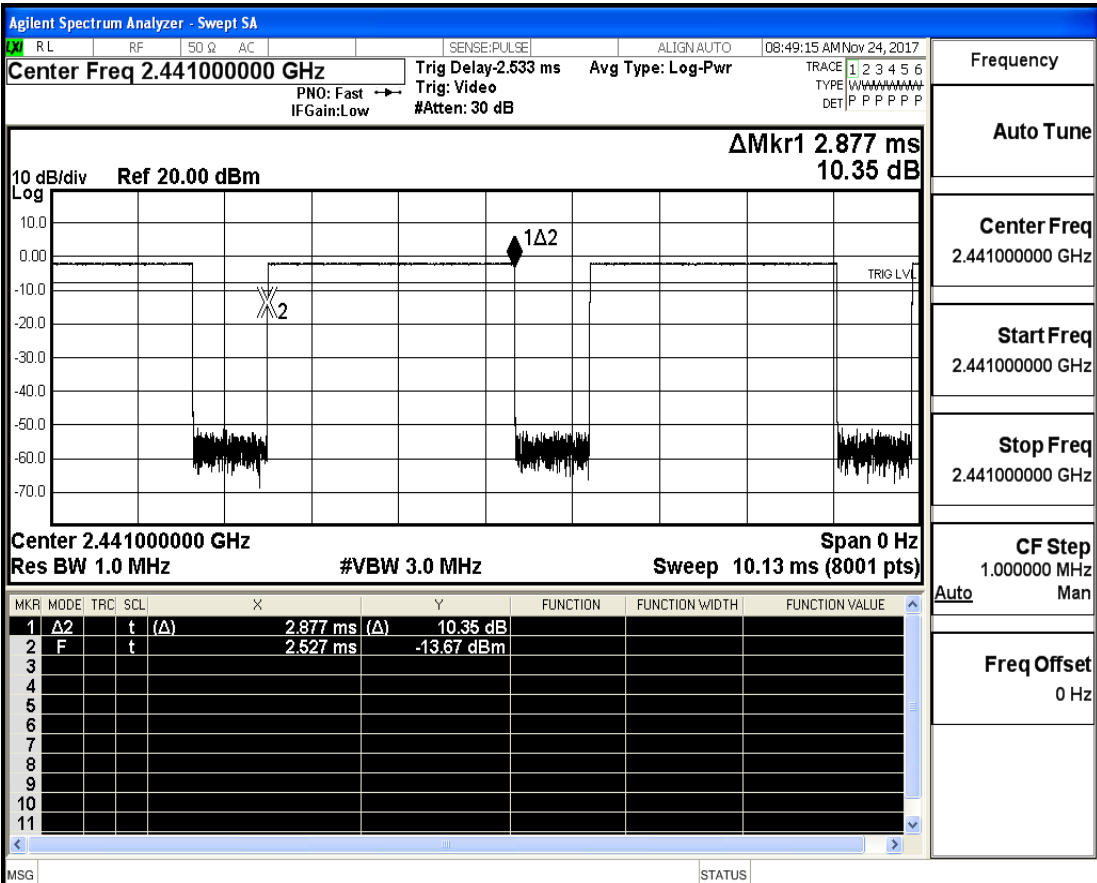
4.Dwell Time

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

Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:PULSE ALIGN:AUTO 08:51:08 AM Nov 24, 2017

Center Freq 2.48000000 GHz Trig Delay-2.533 ms Avg Type: Log-Pwr TRACE 1 2 3 4 5 6
PNO: Fast → Trig: Video TYPE W W W W W W W
IF Gain: Low #Atten: 30 dB DET P P P P P P

ΔMkr1 2.875 ms 11.18 dB

10 dB/div Ref 20.00 dBm

Log

Center 2.48000000 GHz Res BW 1.0 MHz #VBW 3.0 MHz Span 0 Hz Sweep 10.13 ms (8001 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	Δ2	t	(Δ)	2.875 ms	(Δ) 11.18 dB			
2	F	t		2.527 ms	-13.81 dBm			
3								
4								
5								
6								
7								
8								
9								
10								
11								

MSG STATUS

Frequency

Auto Tune

Center Freq 2.48000000 GHz

Start Freq 2.48000000 GHz

Stop Freq 2.48000000 GHz

CF Step 1.000000 MHz Man

Freq Offset 0 Hz

Dwell Time_2DH5_2402

Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:PULSE ALIGN:AUTO 08:53:54 AM Nov 24, 2017

Center Freq 2.40200000 GHz Trig Delay-2.533 ms Avg Type: Log-Pwr TRACE 1 2 3 4 5 6
PNO: Fast → Trig: Video TYPE W W W W W W W
IF Gain: Low #Atten: 30 dB DET P P P P P P

ΔMkr1 2.879 ms 13.86 dB

10 dB/div Ref 20.00 dBm

Log

Center 2.40200000 GHz Res BW 1.0 MHz #VBW 3.0 MHz Span 0 Hz Sweep 10.13 ms (8001 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	Δ2	t	(Δ)	2.879 ms	(Δ) 13.86 dB			
2	F	t		2.527 ms	-18.02 dBm			
3								
4								
5								
6								
7								
8								
9								
10								
11								

MSG STATUS

Frequency

Auto Tune

Center Freq 2.40200000 GHz

Start Freq 2.40200000 GHz

Stop Freq 2.40200000 GHz

CF Step 1.000000 MHz Man

Freq Offset 0 Hz

Dwell Time_2DH5_2441

Agilent Spectrum Analyzer - Swept SA

R L RF 50 Ω AC SENSE:PULSE ALIGN AUTO 08:56:14 AM Nov 24, 2017

Center Freq 2.441000000 GHz Trig Delay-2.533 ms Avg Type: Log-Pwr TRACE 1 2 3 4 5 6
PNO: Fast → IF Gain: Low Trig: Video #Atten: 30 dB TYPE WWWWWWWW DET P P P P P P

ΔMkr1 2.879 ms 13.53 dB

10 dB/div Ref 20.00 dBm

Log

Center 2.441000000 GHz Span 0 Hz
Res BW 1.0 MHz #VBW 3.0 MHz Sweep 10.13 ms (8001 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	Δ2	t	(Δ)	2.879 ms	(Δ) 13.53 dB			
2	F	t		3.692 ms	-17.65 dBm			
3								
4								
5								
6								
7								
8								
9								
10								
11								

MSG STATUS

Frequency

Auto Tune

Center Freq 2.441000000 GHz

Start Freq 2.441000000 GHz

Stop Freq 2.441000000 GHz

CF Step 1.000000 MHz
Auto Man

Freq Offset 0 Hz

Dwell Time_2DH5_2480

Agilent Spectrum Analyzer - Swept SA

R L RF 50 Ω AC SENSE:PULSE ALIGN AUTO 08:57:46 AM Nov 24, 2017

Center Freq 2.480000000 GHz Trig Delay-2.533 ms Avg Type: Log-Pwr TRACE 1 2 3 4 5 6
PNO: Fast → IF Gain: Low Trig: Video #Atten: 30 dB TYPE WWWWWWWW DET P P P P P P

ΔMkr1 2.879 ms 13.78 dB

10 dB/div Ref 20.00 dBm

Log

Center 2.480000000 GHz Span 0 Hz
Res BW 1.0 MHz #VBW 3.0 MHz Sweep 10.13 ms (8001 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	Δ2	t	(Δ)	2.879 ms	(Δ) 13.78 dB			
2	F	t		2.527 ms	-17.85 dBm			
3								
4								
5								
6								
7								
8								
9								
10								
11								

MSG STATUS

Frequency

Auto Tune

Center Freq 2.480000000 GHz

Start Freq 2.480000000 GHz

Stop Freq 2.480000000 GHz

CF Step 1.000000 MHz
Auto Man

Freq Offset 0 Hz

Dwell Time_3DH5_2402

Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:PULSE ALIGN:AUTO 09:00:18 AM Nov 24, 2017

Center Freq 2.40200000 GHz Trig Delay-2.533 ms Avg Type: Log-Pwr TRACE 1 2 3 4 5 6
PNO: Fast → Trig: Video TYPE WWWWWWWW
IF Gain: Low #Atten: 30 dB DET P P P P P

ΔMkr1 2.880 ms
12.28 dB

10 dB/div Ref 20.00 dBm

Log

Center 2.40200000 GHz Span 0 Hz
Res BW 1.0 MHz #VBW 3.0 MHz Sweep 10.13 ms (8001 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	Δ2	t	(Δ)	2.880 ms	(Δ) 12.28 dB			
2	F	t		806.9 μs	-17.10 dBm			
3								
4								
5								
6								
7								
8								
9								
10								
11								

MSG STATUS

Frequency

Auto Tune

Center Freq
2.40200000 GHz

Start Freq
2.40200000 GHz

Stop Freq
2.40200000 GHz

CF Step
1.000000 MHz
Auto Man

Freq Offset
0 Hz

Dwell Time_3DH5_2441

Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:PULSE ALIGN:AUTO 09:02:35 AM Nov 24, 2017

Center Freq 2.44100000 GHz Trig Delay-2.533 ms Avg Type: Log-Pwr TRACE 1 2 3 4 5 6
PNO: Fast → Trig: Video TYPE WWWWWWWW
IF Gain: Low #Atten: 30 dB DET P P P P P

ΔMkr1 2.882 ms
10.70 dB

10 dB/div Ref 20.00 dBm

Log

Center 2.44100000 GHz Span 0 Hz
Res BW 1.0 MHz #VBW 3.0 MHz Sweep 10.13 ms (8001 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	Δ2	t	(Δ)	2.882 ms	(Δ) 10.70 dB			
2	F	t		2.527 ms	-16.62 dBm			
3								
4								
5								
6								
7								
8								
9								
10								
11								

MSG STATUS

Frequency

Auto Tune

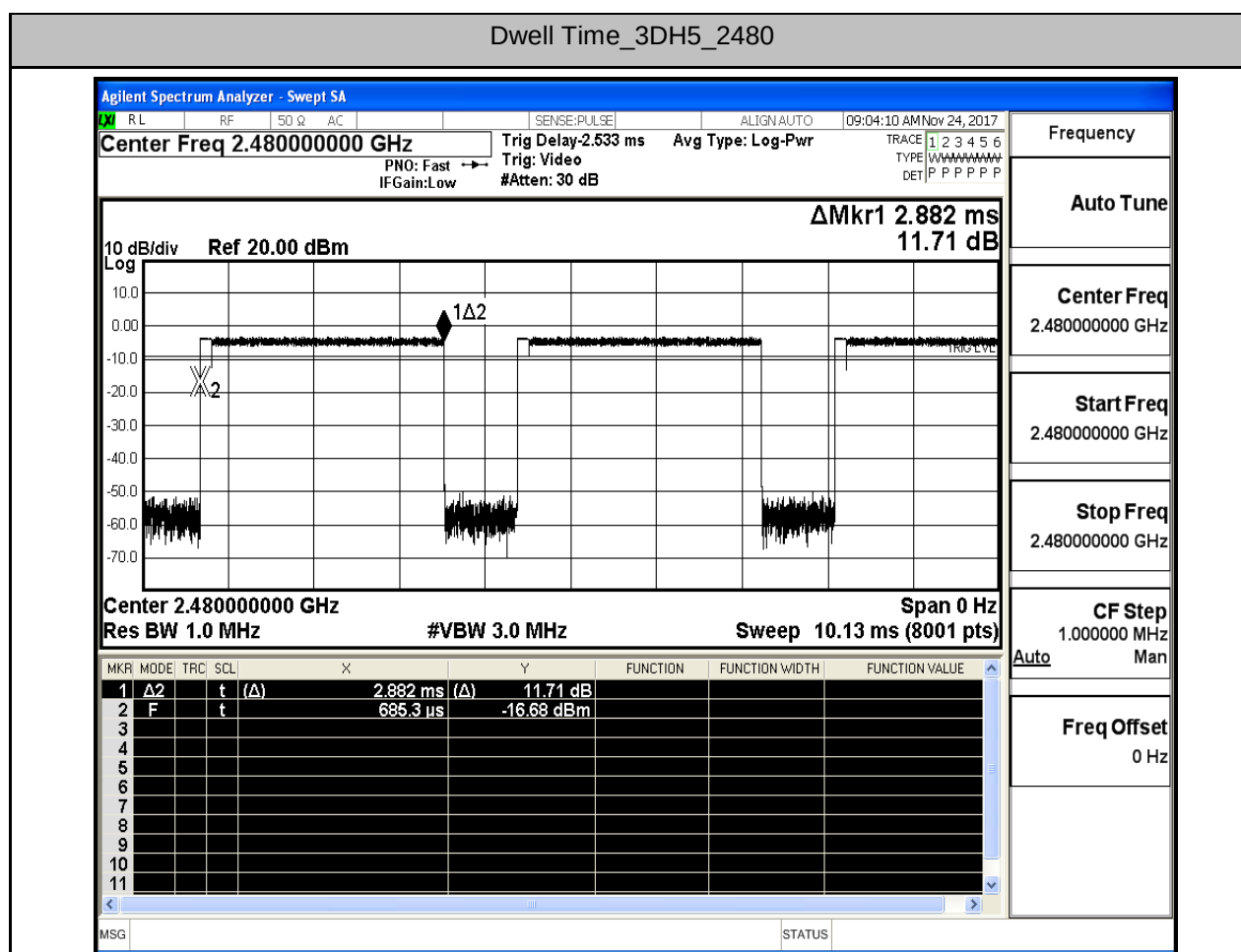
Center Freq
2.44100000 GHz

Start Freq
2.44100000 GHz

Stop Freq
2.44100000 GHz

CF Step
1.000000 MHz
Auto Man

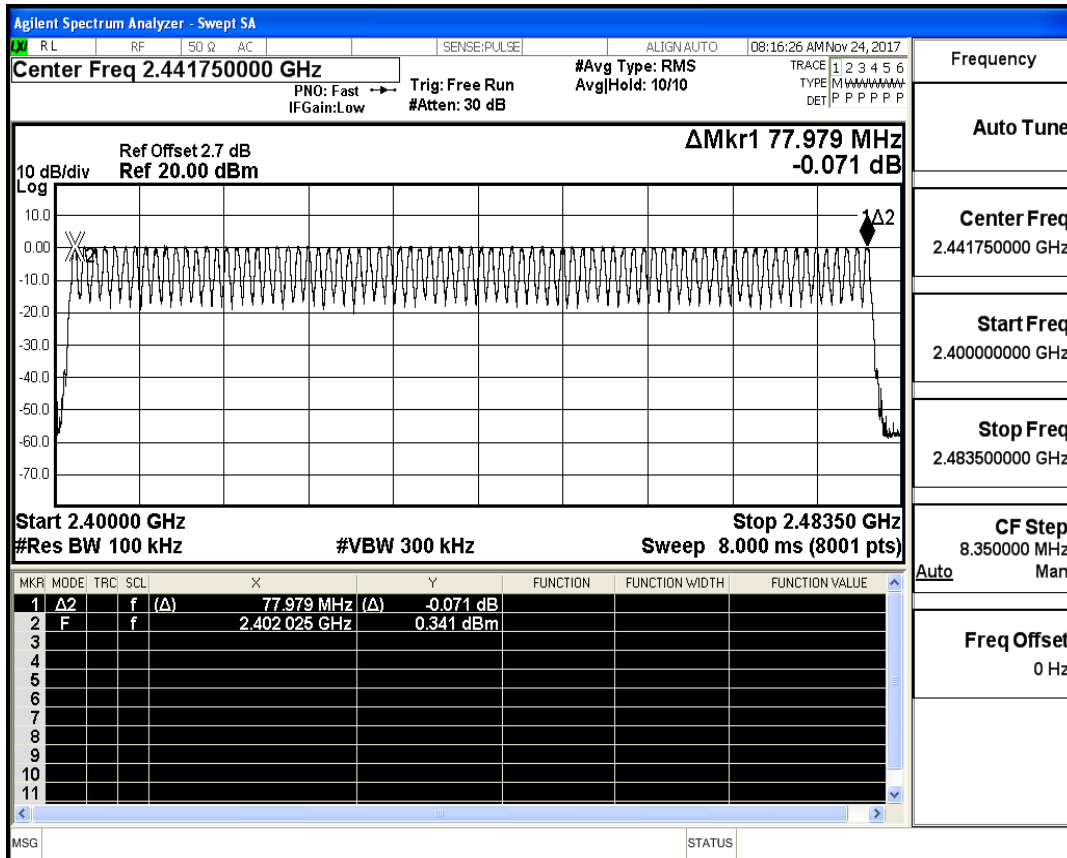
Freq Offset
0 Hz



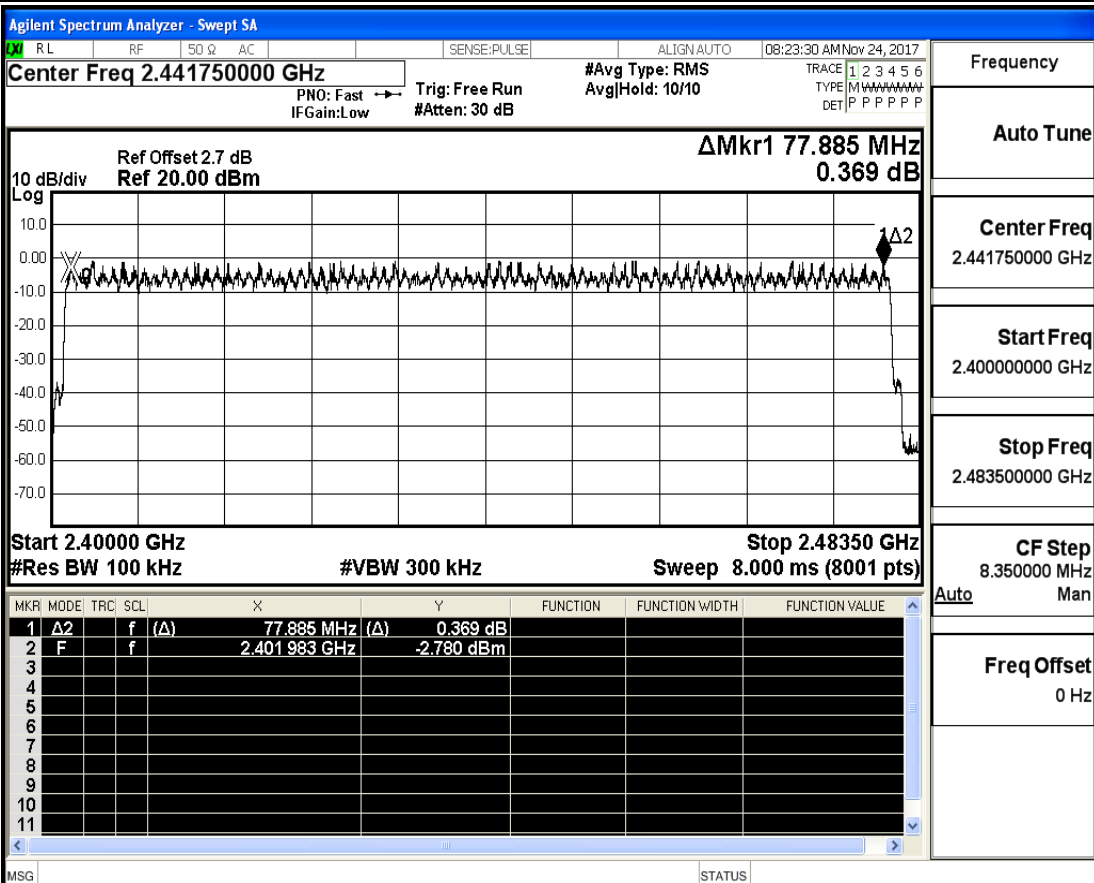
5.Hopping Channel Number

Test Mode	Test Channel	Number of Hopping Channel[N]	Limit[N]	Verdict
DH5	2402	79	>=15	PASS
2DH5	2402	79	>=15	PASS
3DH5	2402	79	>=15	PASS

Hopping Channel Number_DH5_2402



Hopping Channel Number_2DH5_2402



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:PULSE ALIGN AUTO 02:11:26 PM Nov 24, 2017

Center Freq 2.441750000 GHz PNO: Fast Trig: Free Run #Avg Type: RMS Avg/Hold: 10/10
IF Gain: Low #Atten: 30 dB

Ref Offset 4.7 dB Δ Mkr1 77.864 MHz
Ref 20.00 dBm -1.564 dB

10 dB/div Log

Start 2.40000 GHz Stop 2.48350 GHz
#Res BW 100 kHz #VBW 300 kHz Sweep 8.000 ms (8001 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	Δ 2	f	(Δ)	77.864 MHz	-1.564 dB			
2	F	f		2.402161 GHz	0.956 dBm			
3								
4								
5								
6								
7								
8								
9								
10								
11								

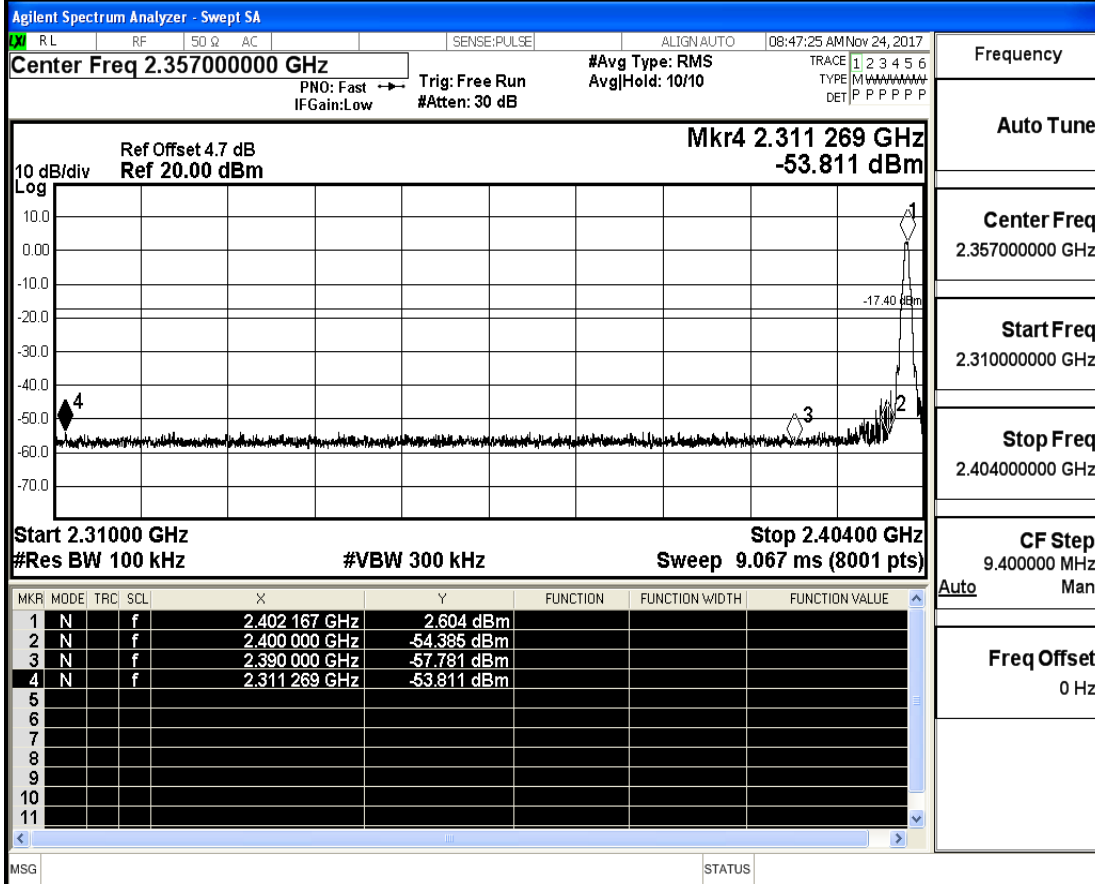
MSG STATUS

Frequency
Auto Tune
Center Freq
2.441750000 GHz
Start Freq
2.400000000 GHz
Stop Freq
2.483500000 GHz
CF Step
8.350000 MHz
Auto Man
Freq Offset
0 Hz

6.Band-edge for RF Conducted Emissions

Test Mode	Test Channel	Hopping	Carrier Power[dBm]	Max. Spurious Level [dBm]	Limit[dBm]	Verdict
DH5	2402	Off	2.604	-53.811	-17.4	PASS
DH5	2402	On	0.475	-55.215	-19.53	PASS
DH5	2480	Off	2.304	-47.590	-17.7	PASS
DH5	2480	On	0.354	-52.812	-19.65	PASS
2DH5	2402	Off	1.017	-53.205	-18.98	PASS
2DH5	2402	On	-0.921	-54.971	-20.92	PASS
2DH5	2480	Off	1.008	-50.716	-18.99	PASS
2DH5	2480	On	-0.873	-54.547	-20.87	PASS
3DH5	2402	On	1.119	-52.301	-18.88	PASS
3DH5	2402	Off	-1.471	-53.007	-21.47	PASS
3DH5	2480	On	1.152	-52.897	-18.85	PASS
3DH5	2480	Off	0.645	-49.621	-19.36	PASS

Band-edge for RF Conducted Emissions_DH5_2402_Hopping Off



Frequency

Auto Tune

Center Freq
2.357000000 GHz

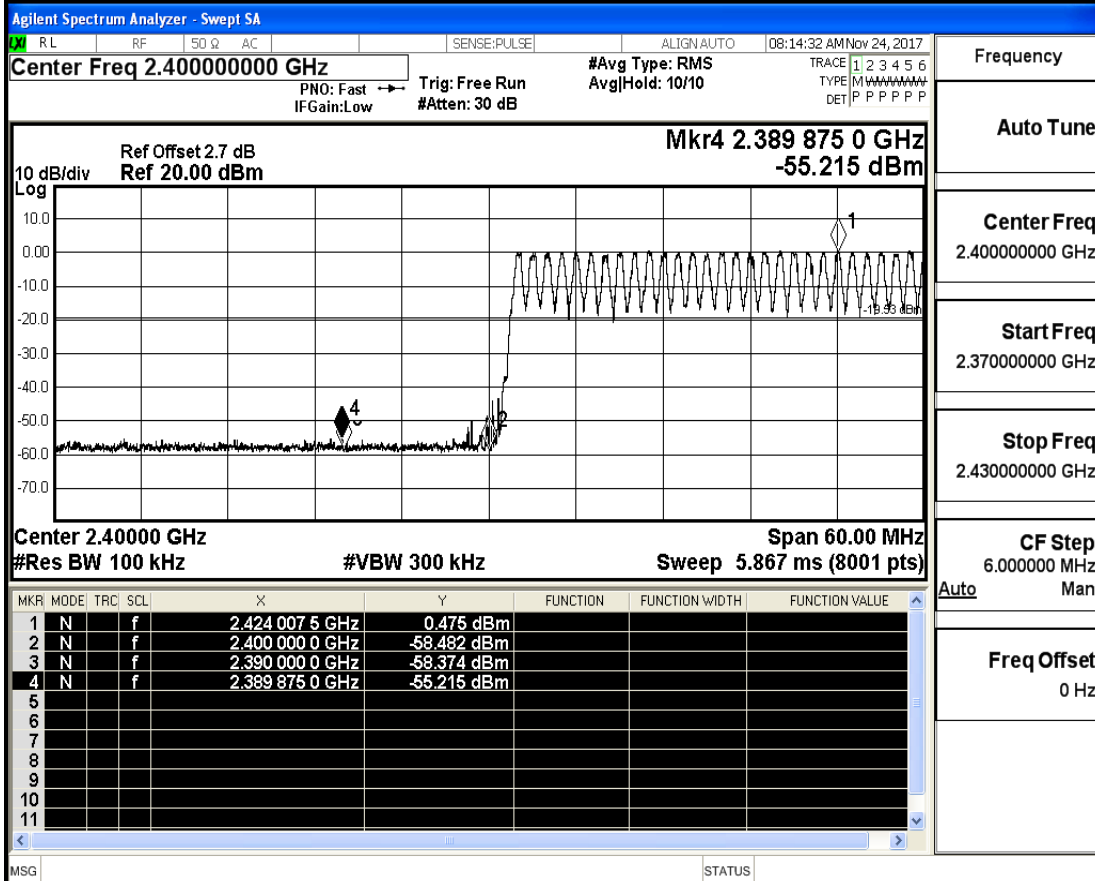
Start Freq
2.310000000 GHz

Stop Freq
2.404000000 GHz

CF Step
9.400000 MHz
Auto Man

Freq Offset
0 Hz

Band-edge for RF Conducted Emissions_DH5_2402_Hopping On



Frequency

Auto Tune

Center Freq
2.400000000 GHz

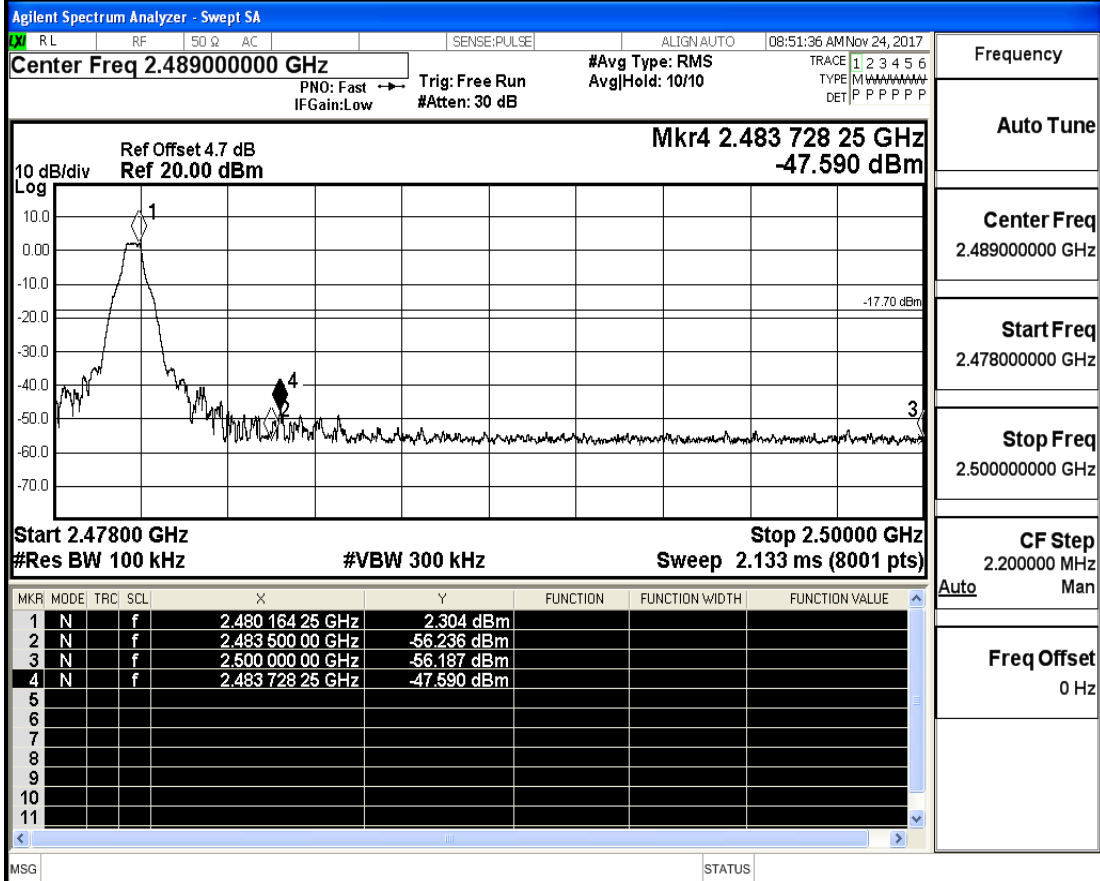
Start Freq
2.370000000 GHz

Stop Freq
2.430000000 GHz

CF Step
6.000000 MHz
Auto Man

Freq Offset
0 Hz

Band-edge for RF Conducted Emissions_DH5_2480_Hopping Off



Frequency

Auto Tune

Center Freq
2.489000000 GHz

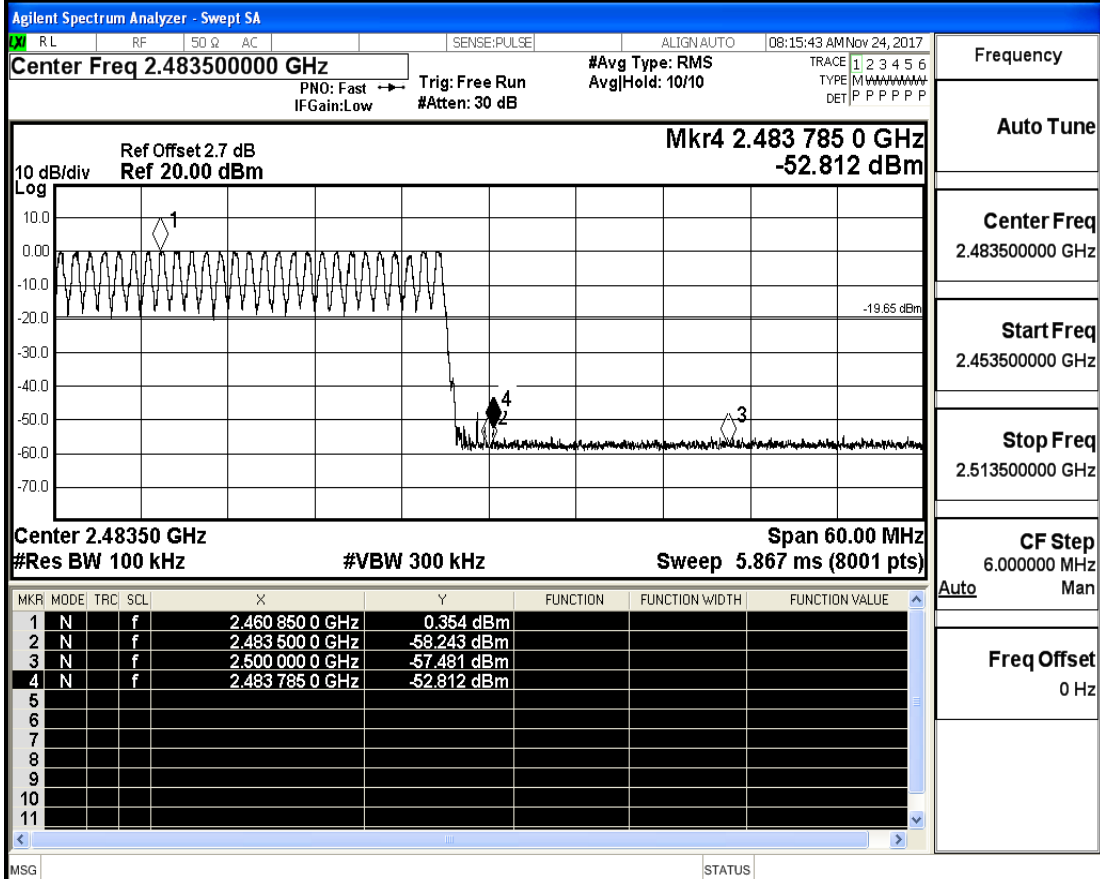
Start Freq
2.478000000 GHz

Stop Freq
2.500000000 GHz

CF Step
2.200000 MHz
Auto Man

Freq Offset
0 Hz

Band-edge for RF Conducted Emissions_DH5_2480_Hopping On



Frequency

Auto Tune

Center Freq
2.483500000 GHz

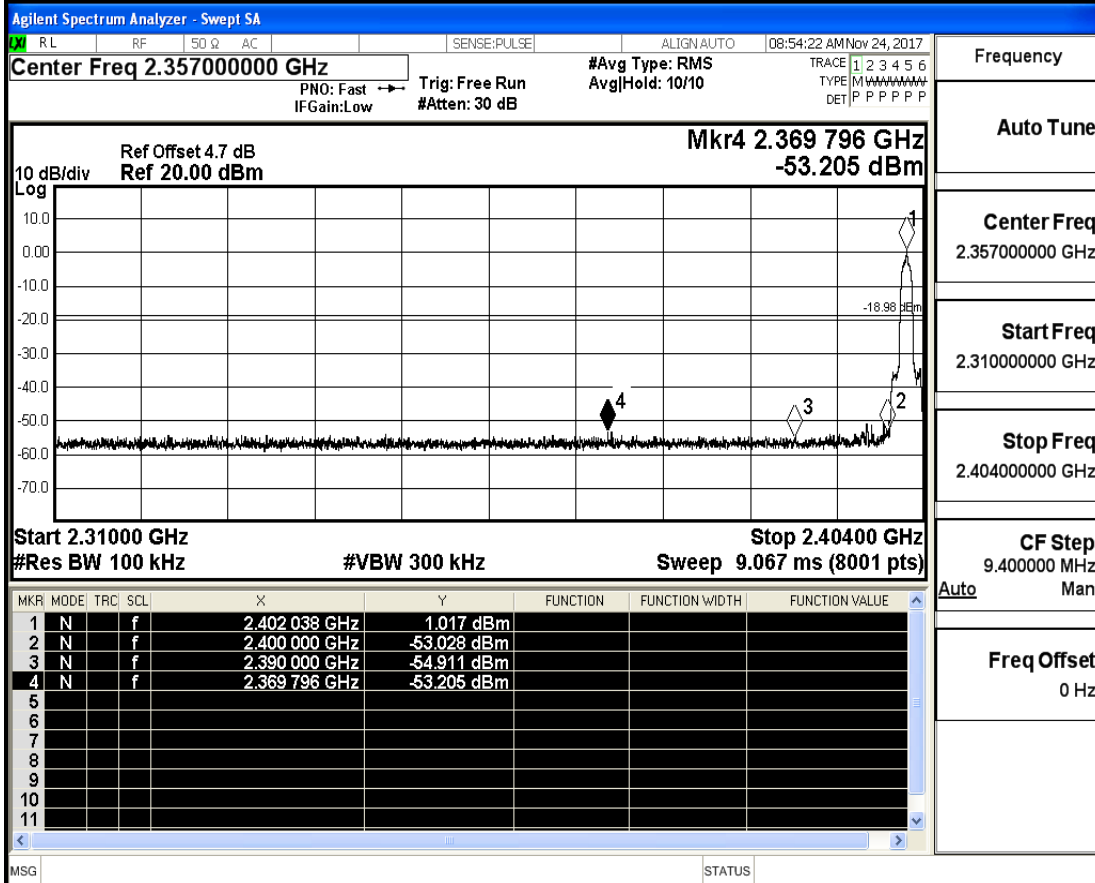
Start Freq
2.453500000 GHz

Stop Freq
2.513500000 GHz

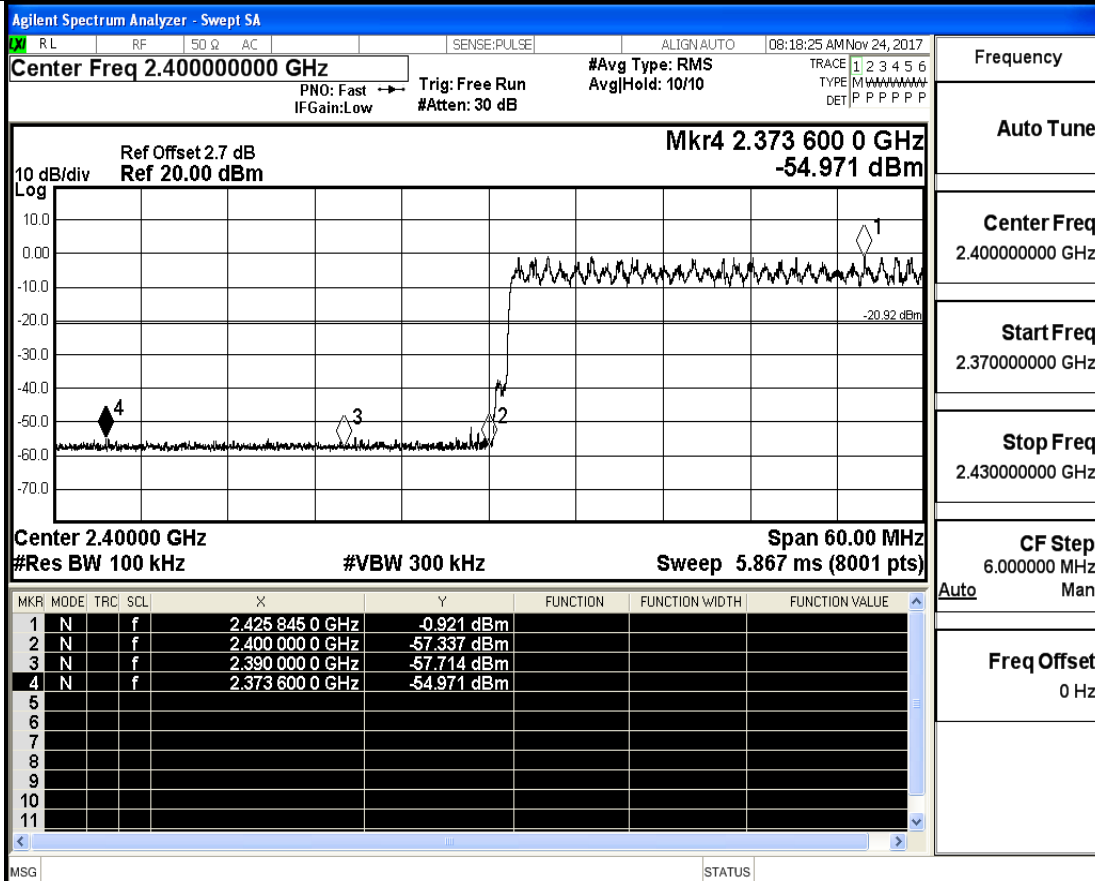
CF Step
6.000000 MHz
Auto Man

Freq Offset
0 Hz

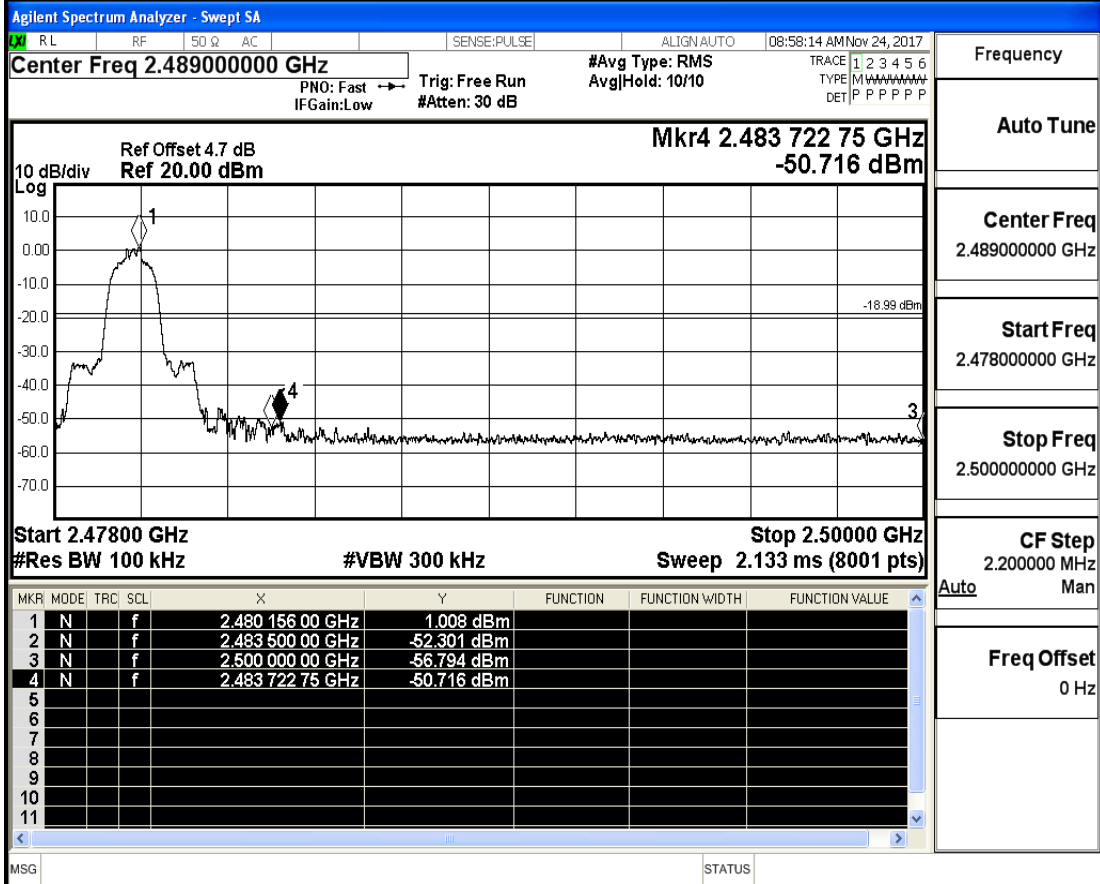
Band-edge for RF Conducted Emissions_2DH5_2402_Hopping Off



Band-edge for RF Conducted Emissions_2DH5_2402_Hopping On



Band-edge for RF Conducted Emissions_2DH5_2480_Hopping Off



Frequency

Auto Tune

Center Freq
2.489000000 GHz

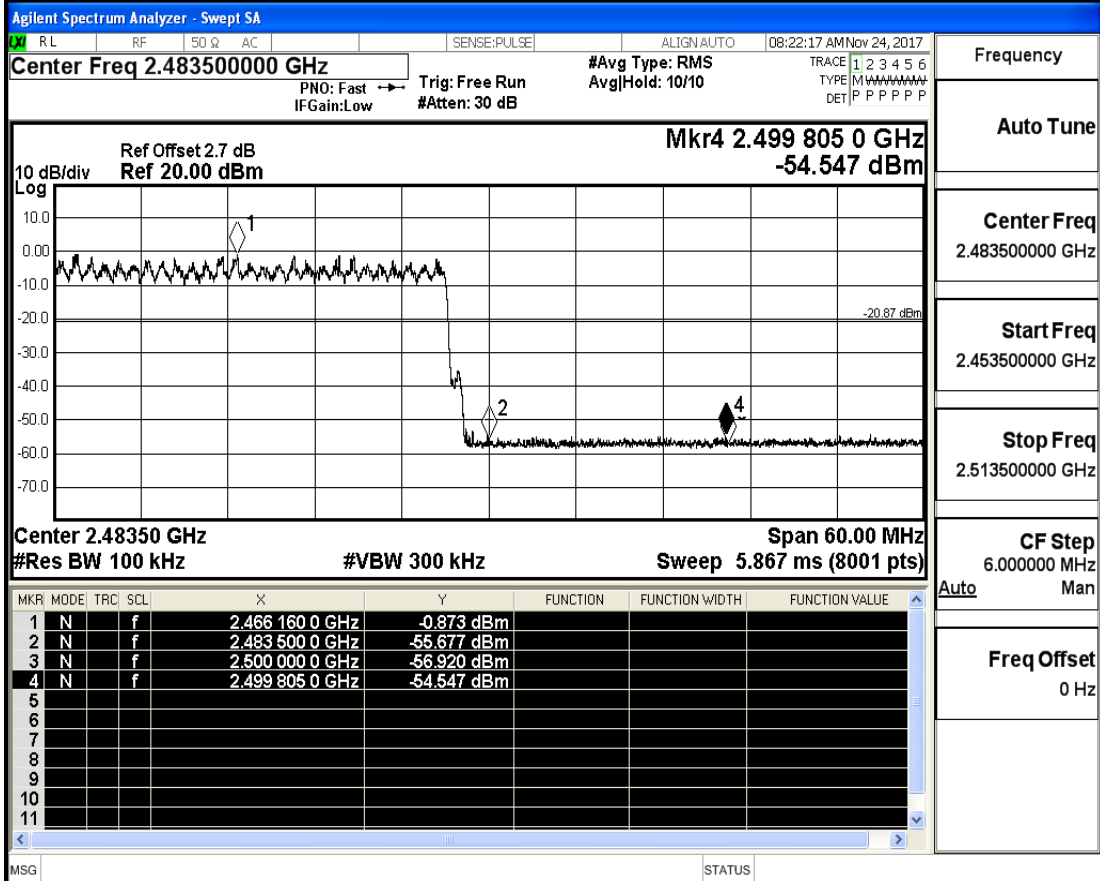
Start Freq
2.478000000 GHz

Stop Freq
2.500000000 GHz

CF Step
2.200000 MHz
Auto Man

Freq Offset
0 Hz

Band-edge for RF Conducted Emissions_2DH5_2480_Hopping On



Frequency

Auto Tune

Center Freq
2.483500000 GHz

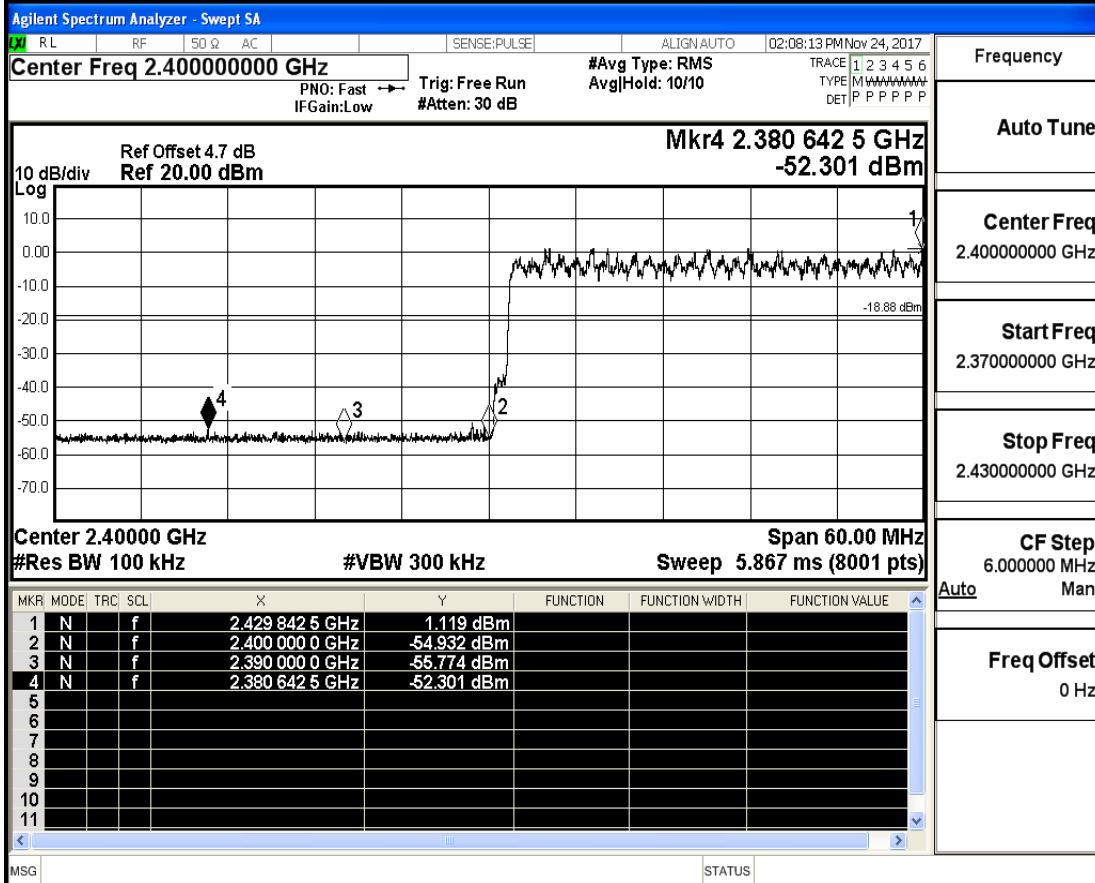
Start Freq
2.453500000 GHz

Stop Freq
2.513500000 GHz

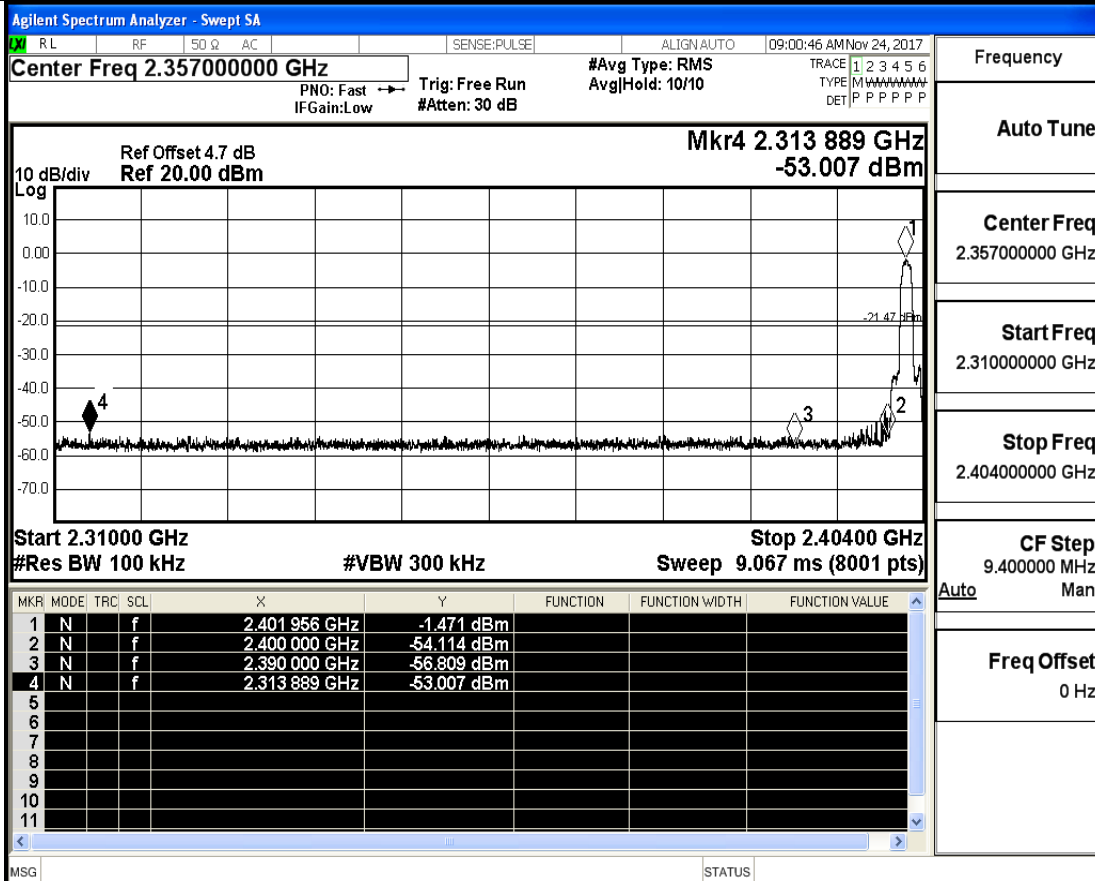
CF Step
6.000000 MHz
Auto Man

Freq Offset
0 Hz

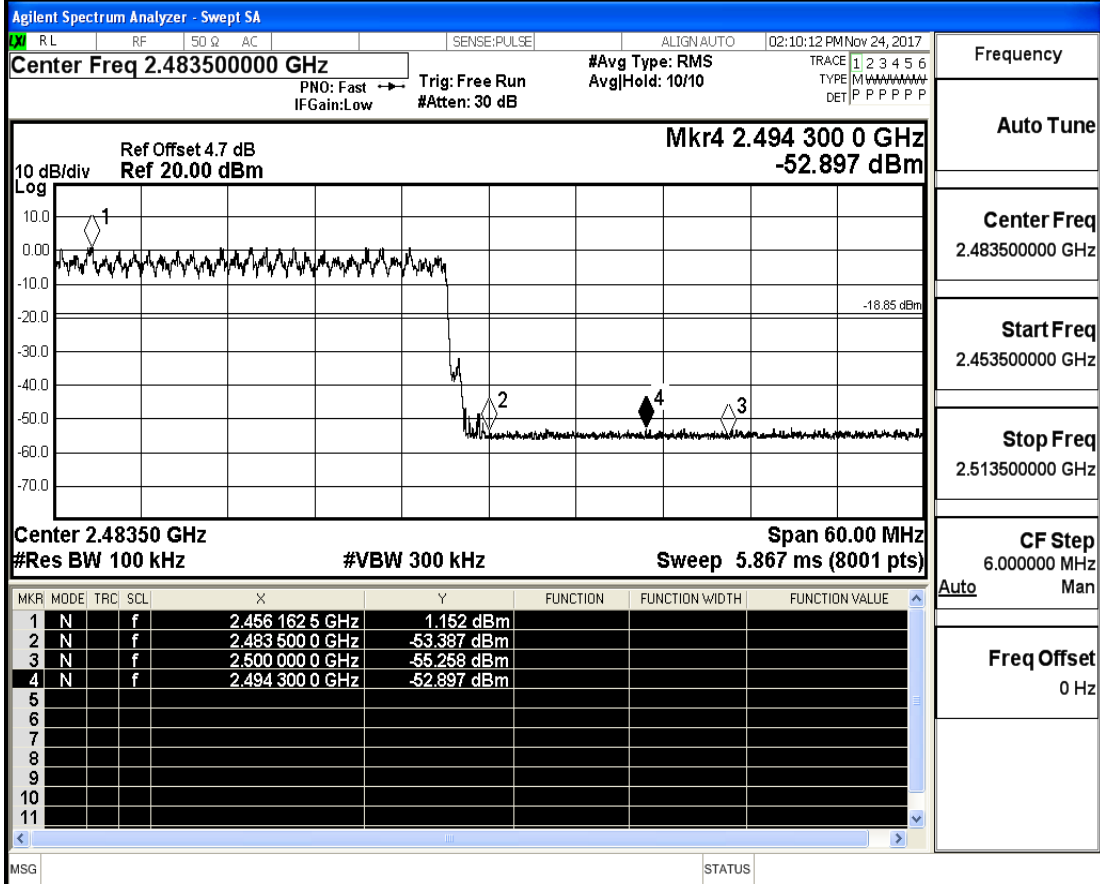
Band-edge for RF Conducted Emissions_3DH5_2402_Hopping On



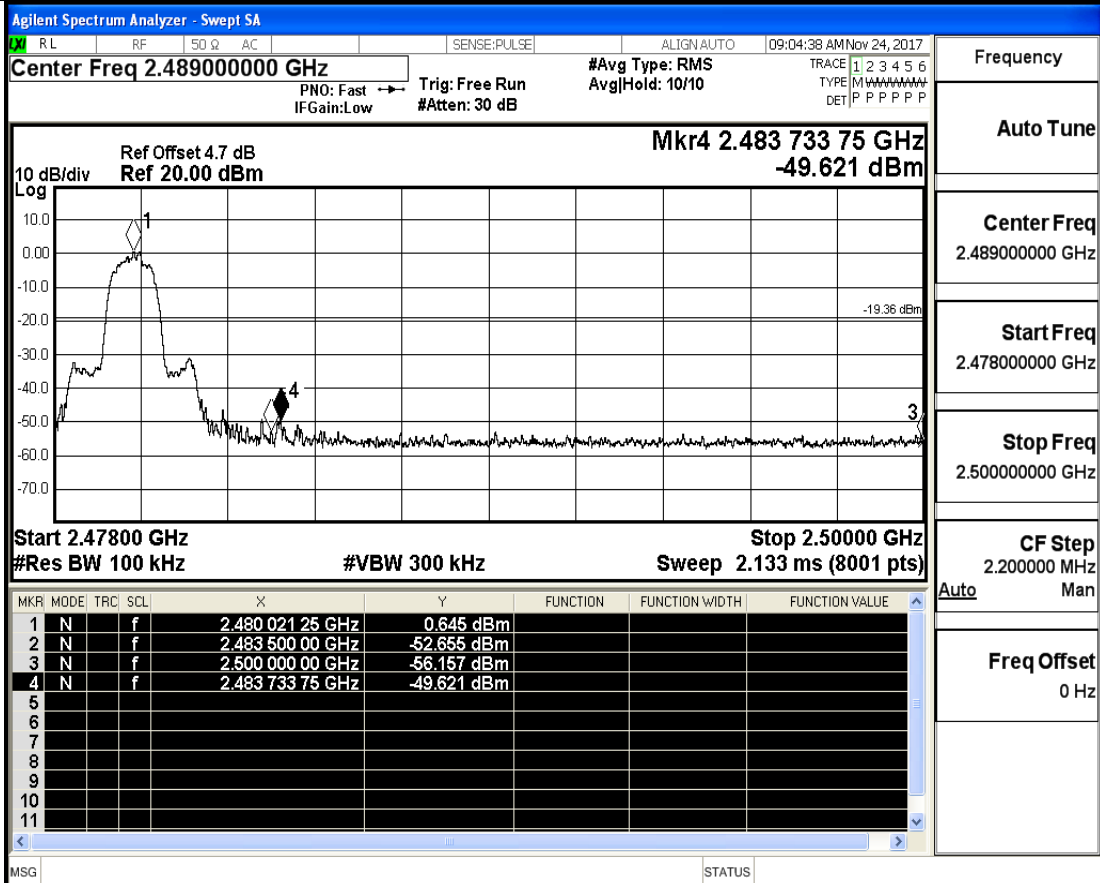
Band-edge for RF Conducted Emissions_3DH5_2402_Hopping Off



Band-edge for RF Conducted Emissions_3DH5_2480_Hopping On



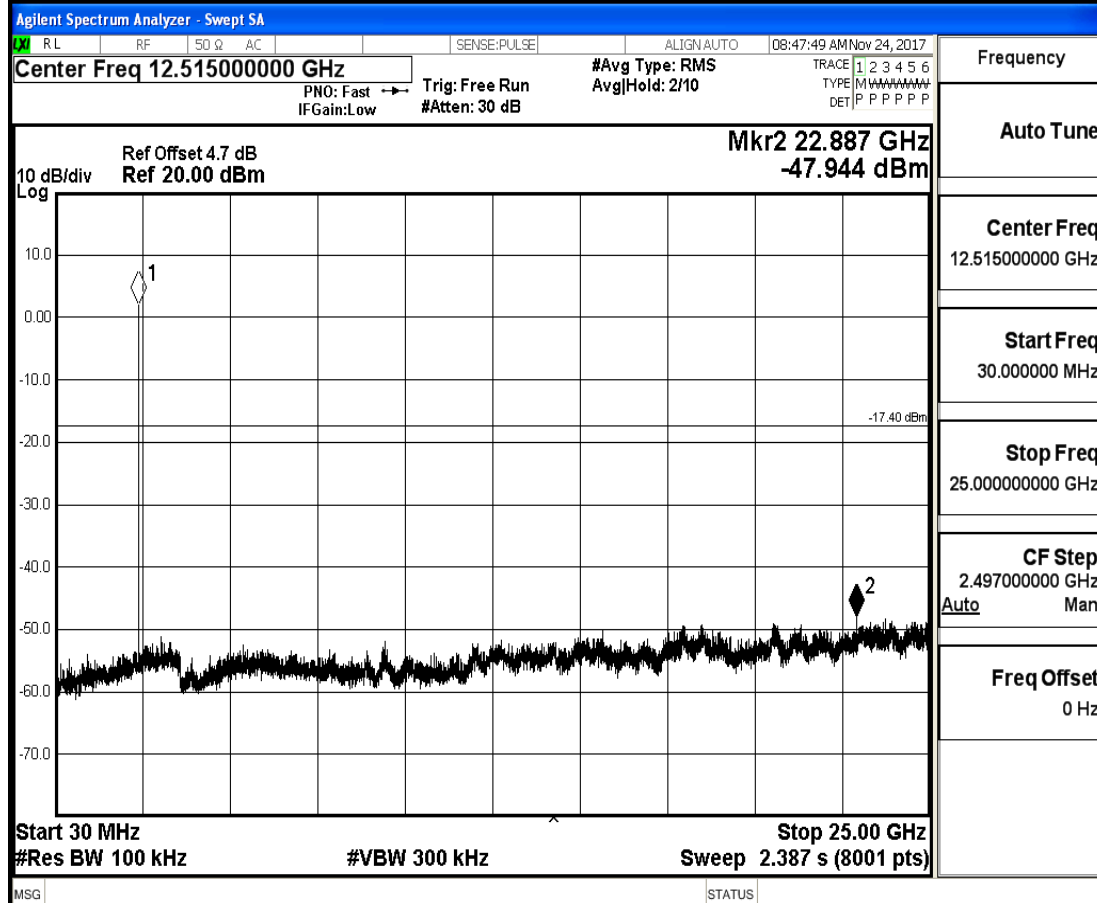
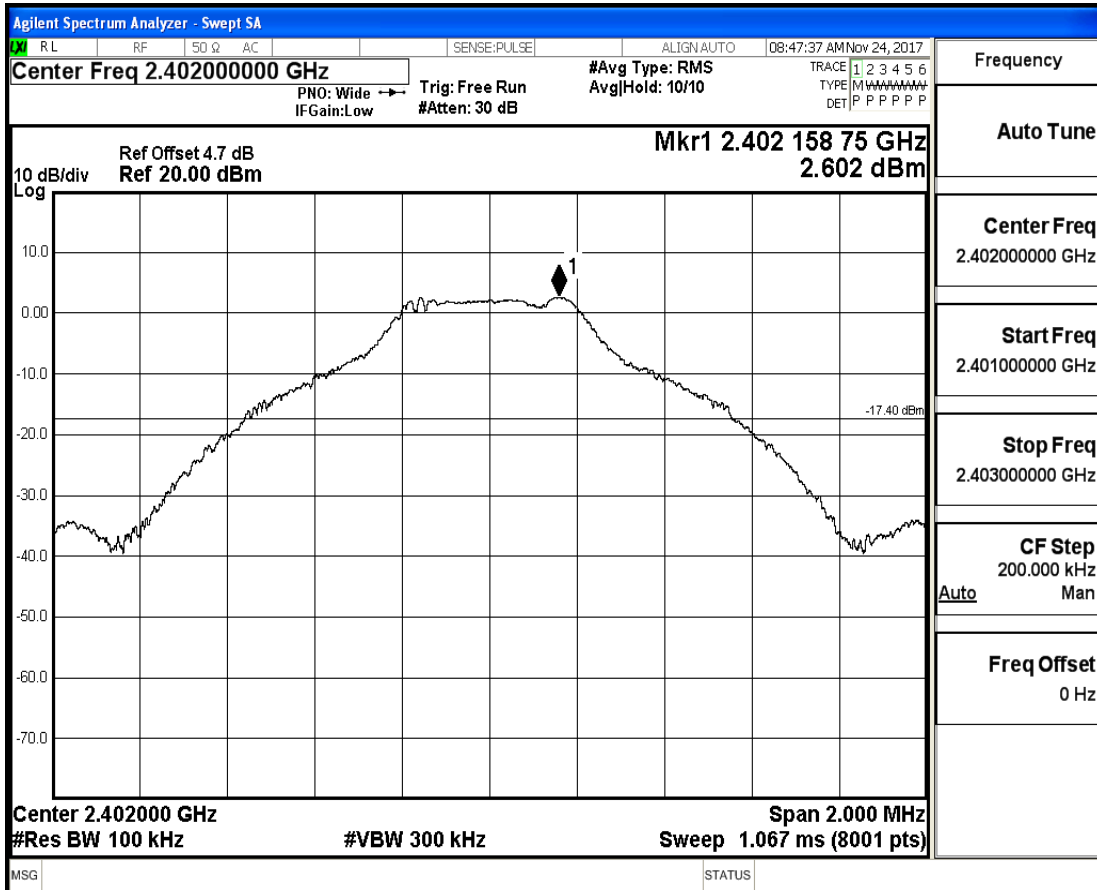
Band-edge for RF Conducted Emissions_3DH5_2480_Hopping Off



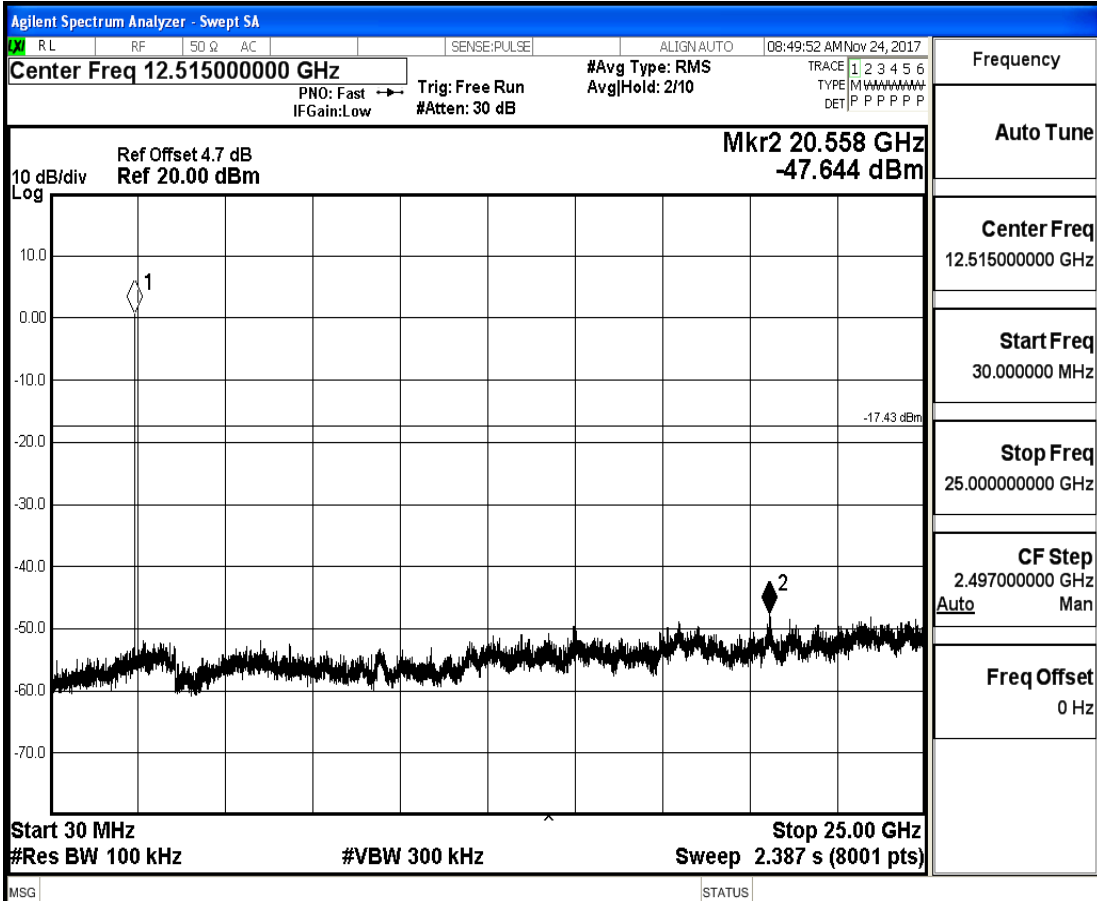
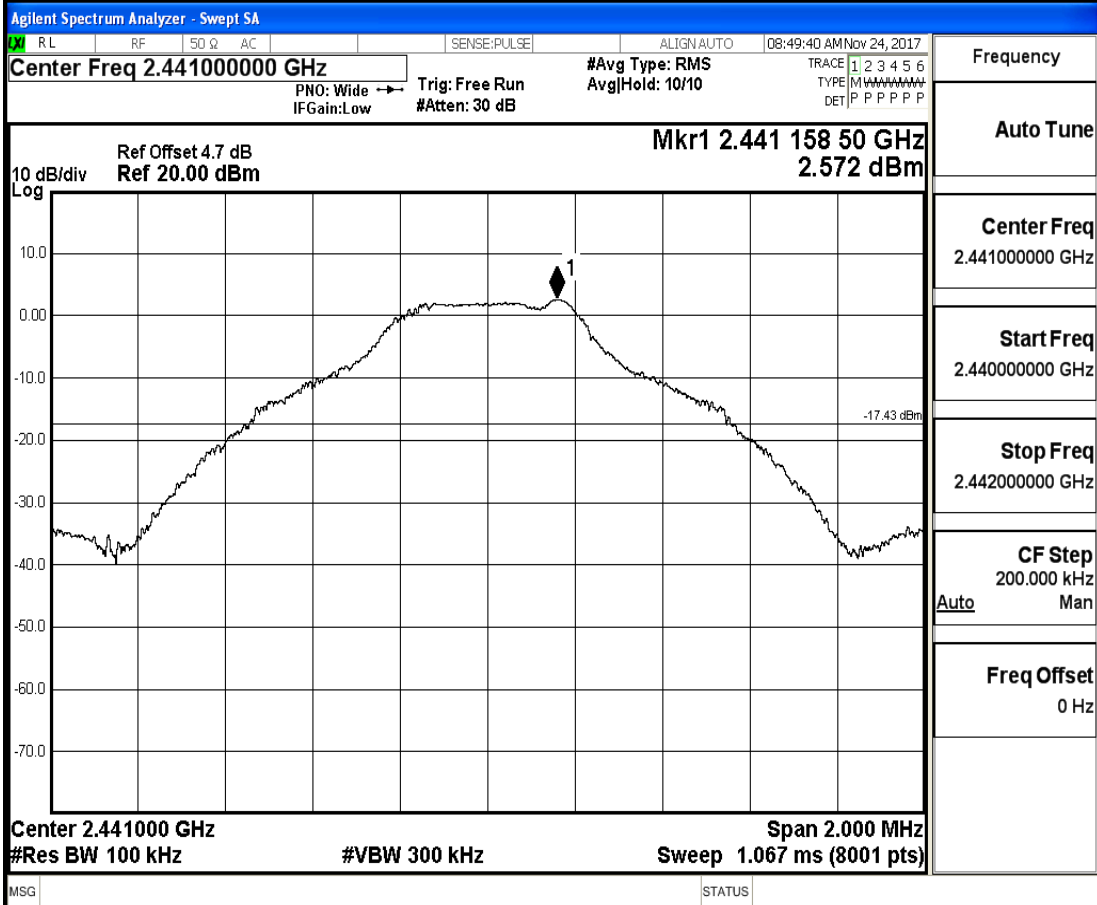
7.RF Conducted Spurious Emissions

Test Mode	Test Channel	StartFre [MHz]	StopFre [MHz]	RBW [kHz]	VBW [kHz]	Pref[dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
DH5	2402	30	25000	100	300	2.602	-47.944	<- 17.398	PASS
DH5	2441	30	25000	100	300	2.572	-47.644	<- 17.428	PASS
DH5	2480	30	25000	100	300	2.232	-47.625	<- 17.768	PASS
2DH5	2402	30	25000	100	300	0.778	-47.077	<- 19.222	PASS
2DH5	2441	30	25000	100	300	0.919	-47.077	<- 19.081	PASS
2DH5	2480	30	25000	100	300	0.222	-47.573	<- 19.778	PASS
3DH5	2402	30	25000	100	300	0.832	-47.473	<- 19.168	PASS
3DH5	2441	30	25000	100	300	1.15	-48.333	<-18.85	PASS
3DH5	2480	30	25000	100	300	0.738	-48.281	<- 19.262	PASS

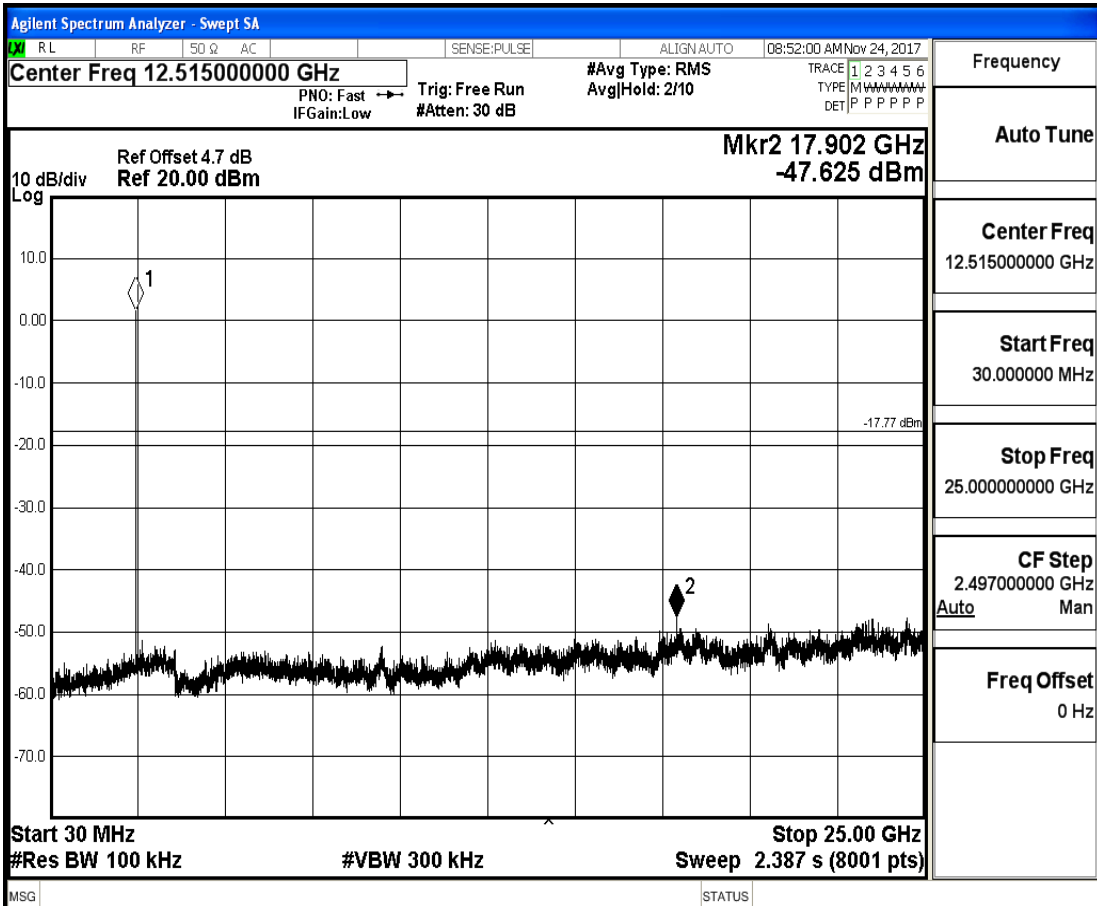
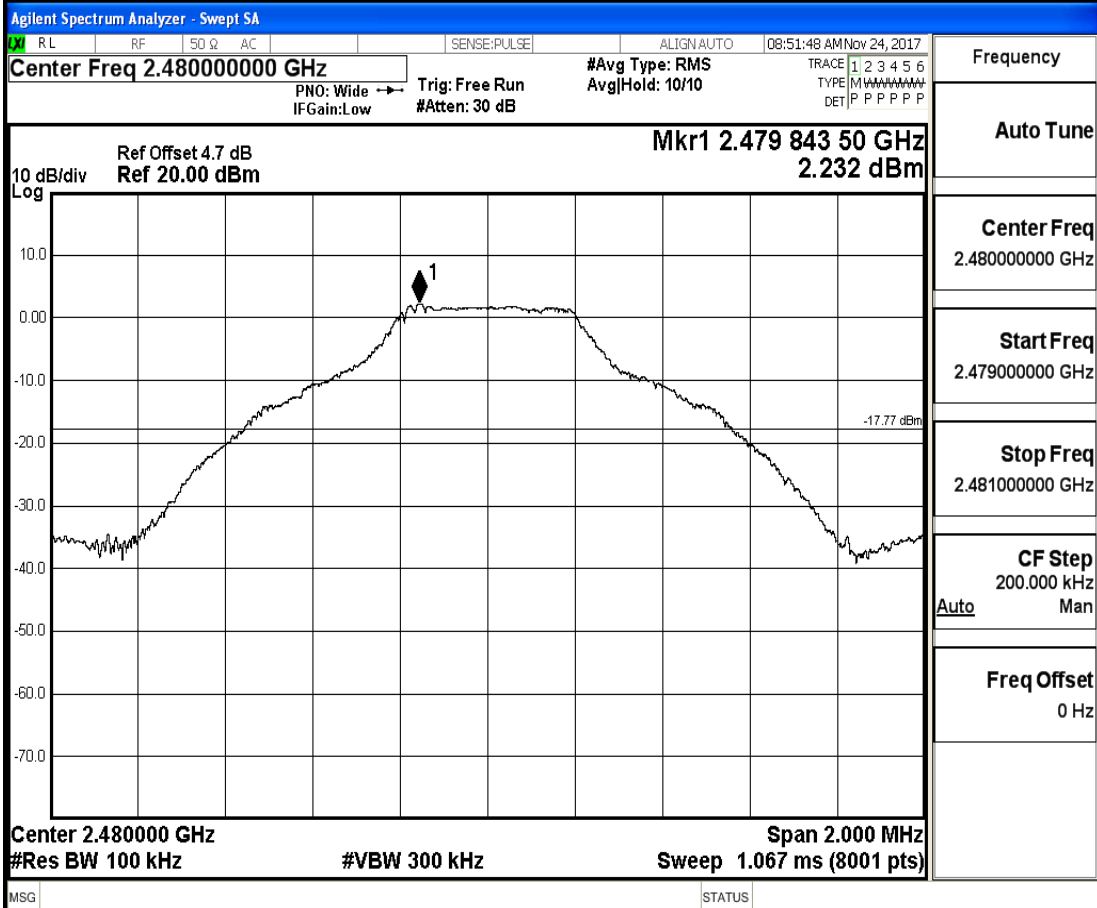
RF Conducted Spurious Emissions_DH5_2402



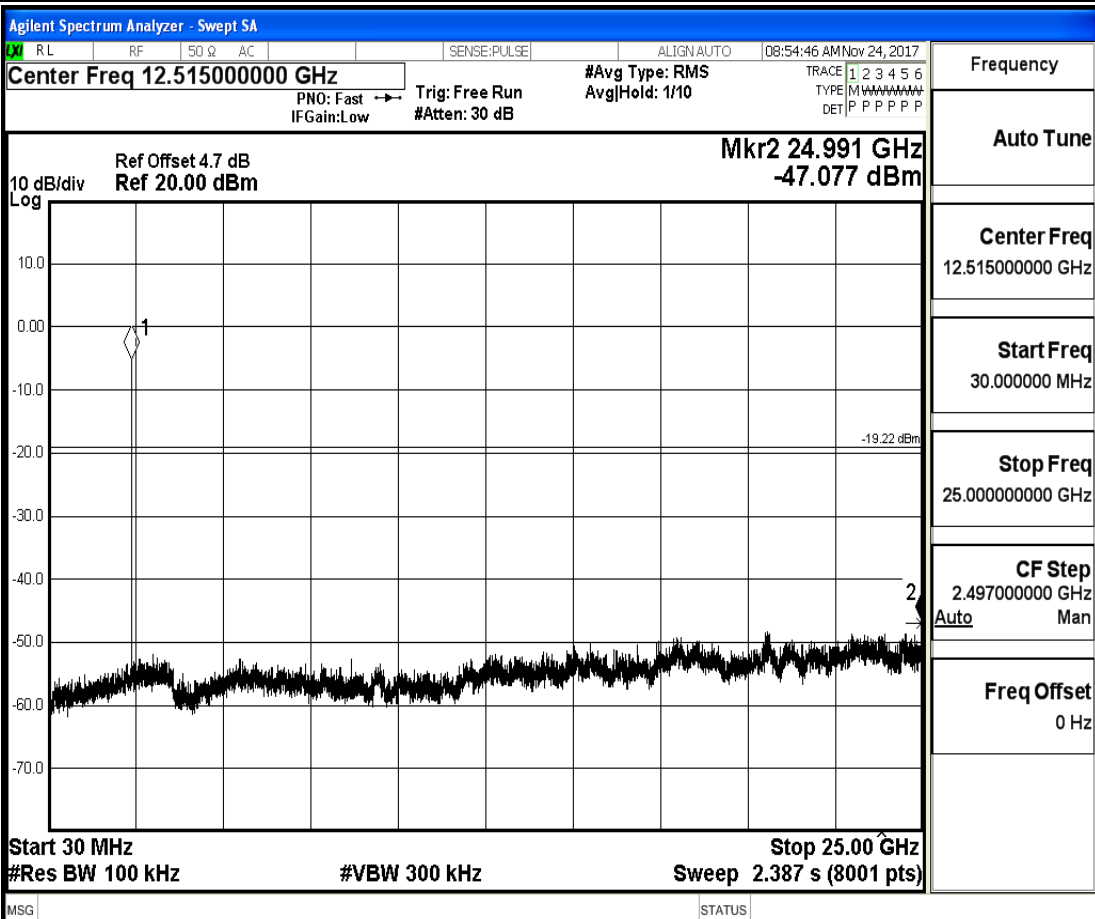
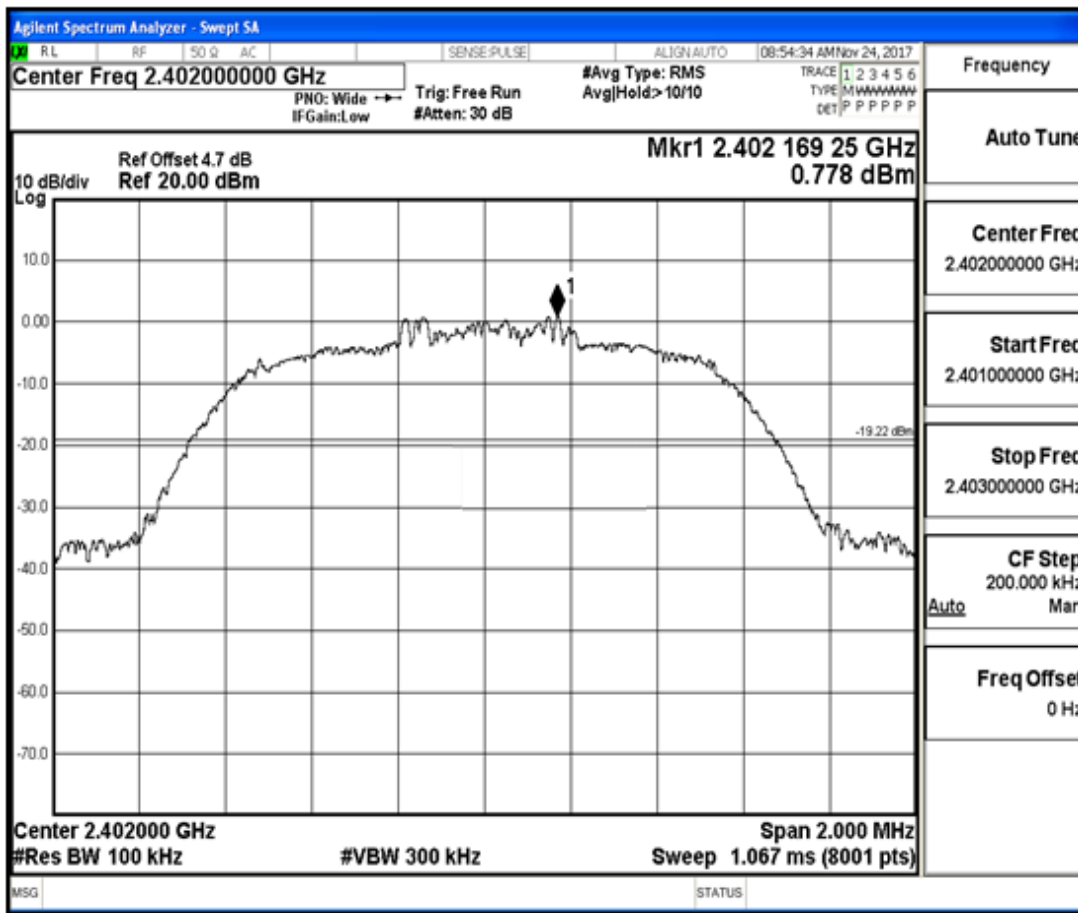
RF Conducted Spurious Emissions_DH5_2441



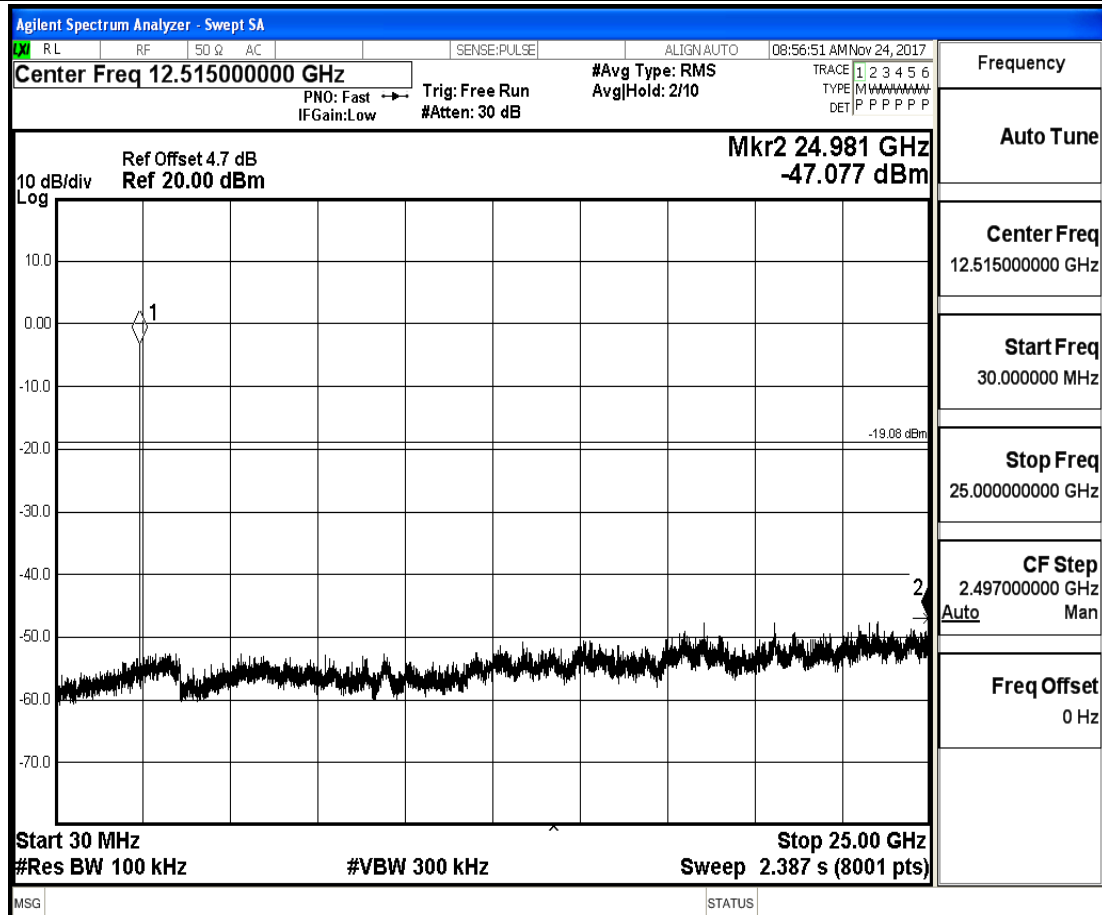
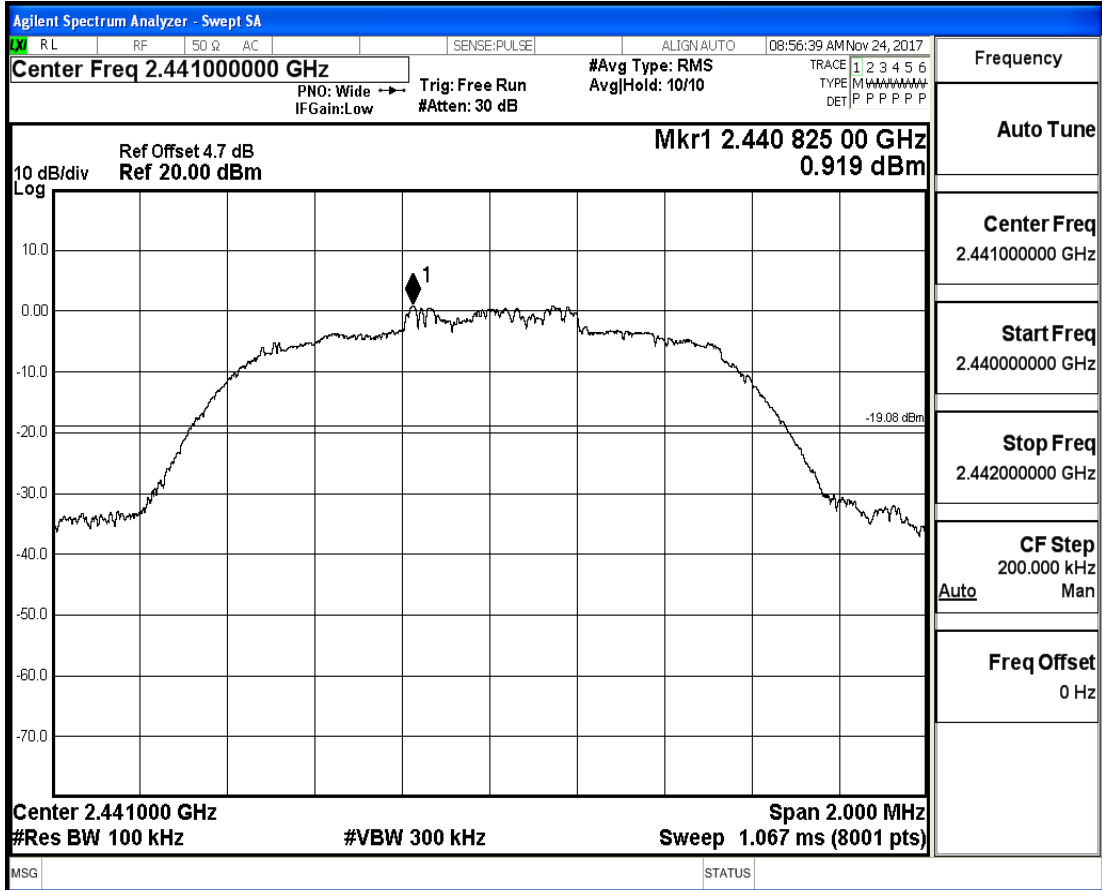
RF Conducted Spurious Emissions_DH5_2480



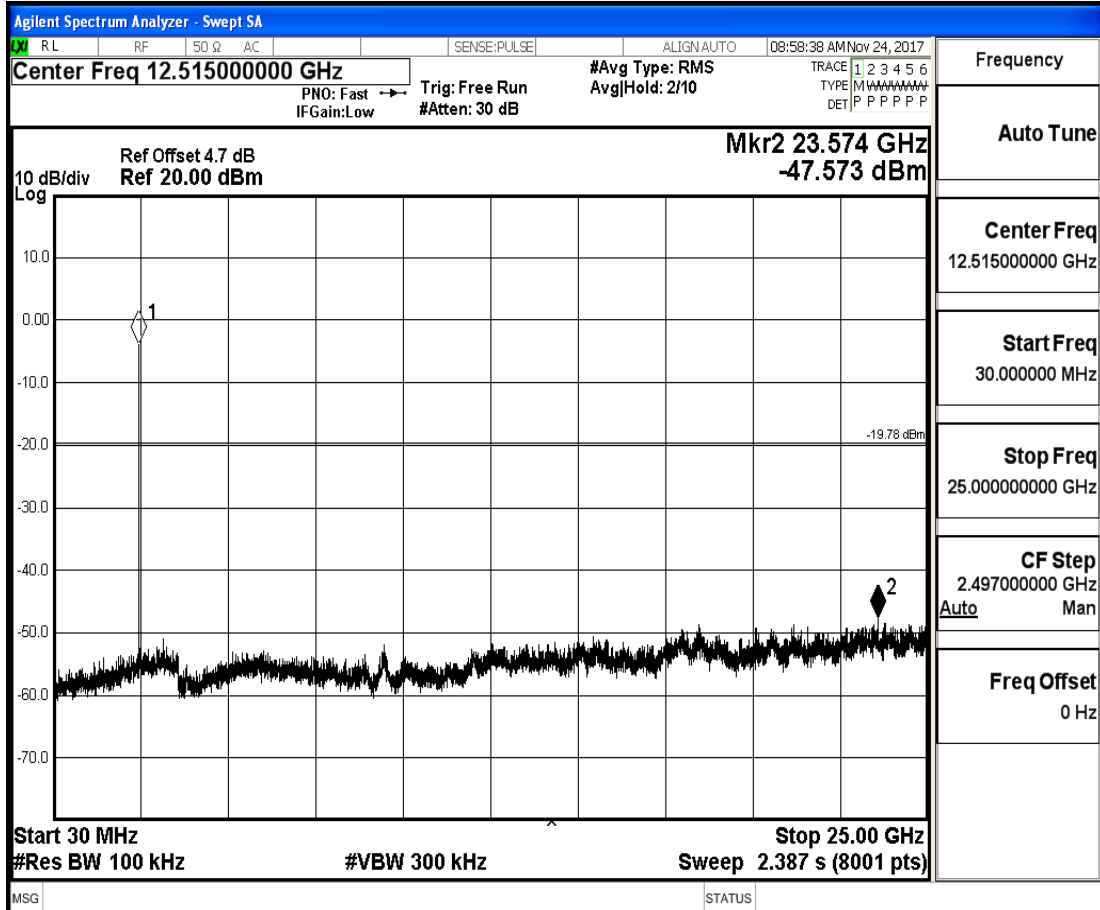
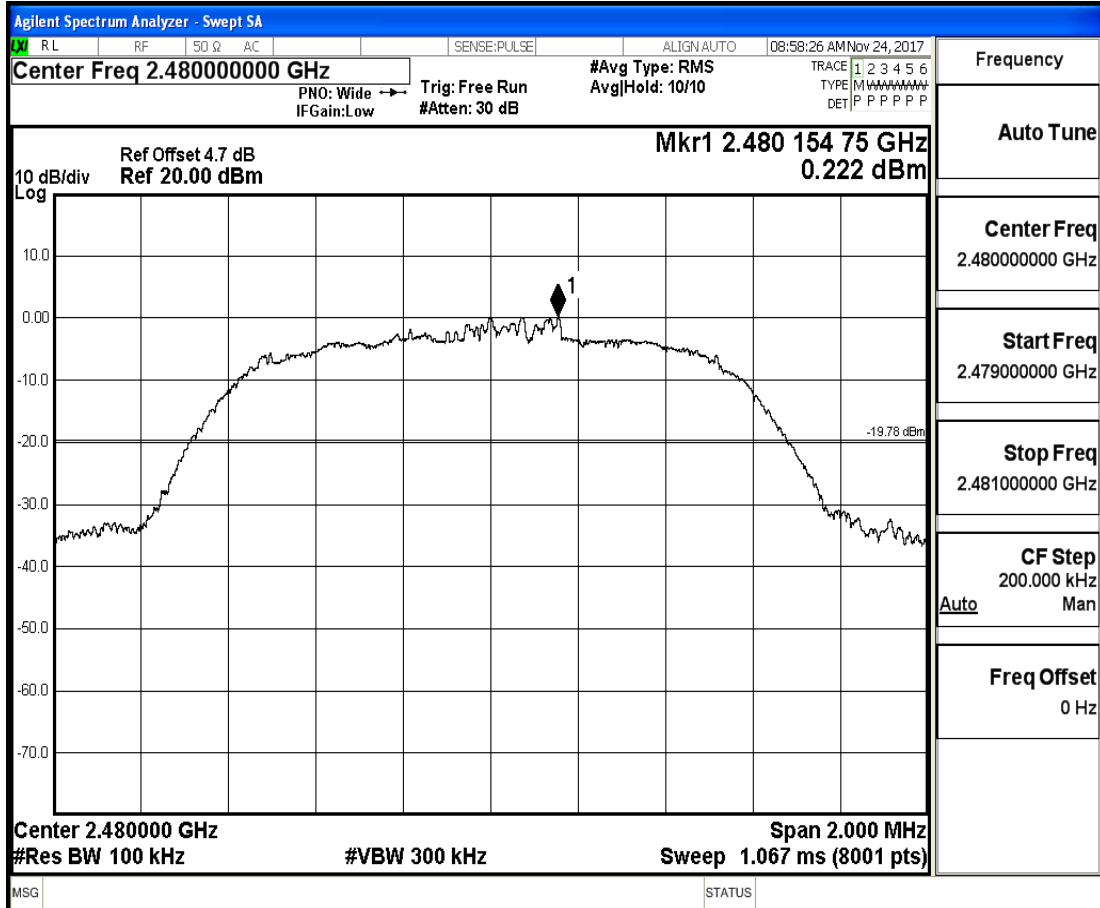
RF Conducted Spurious Emissions_2DH5_2402



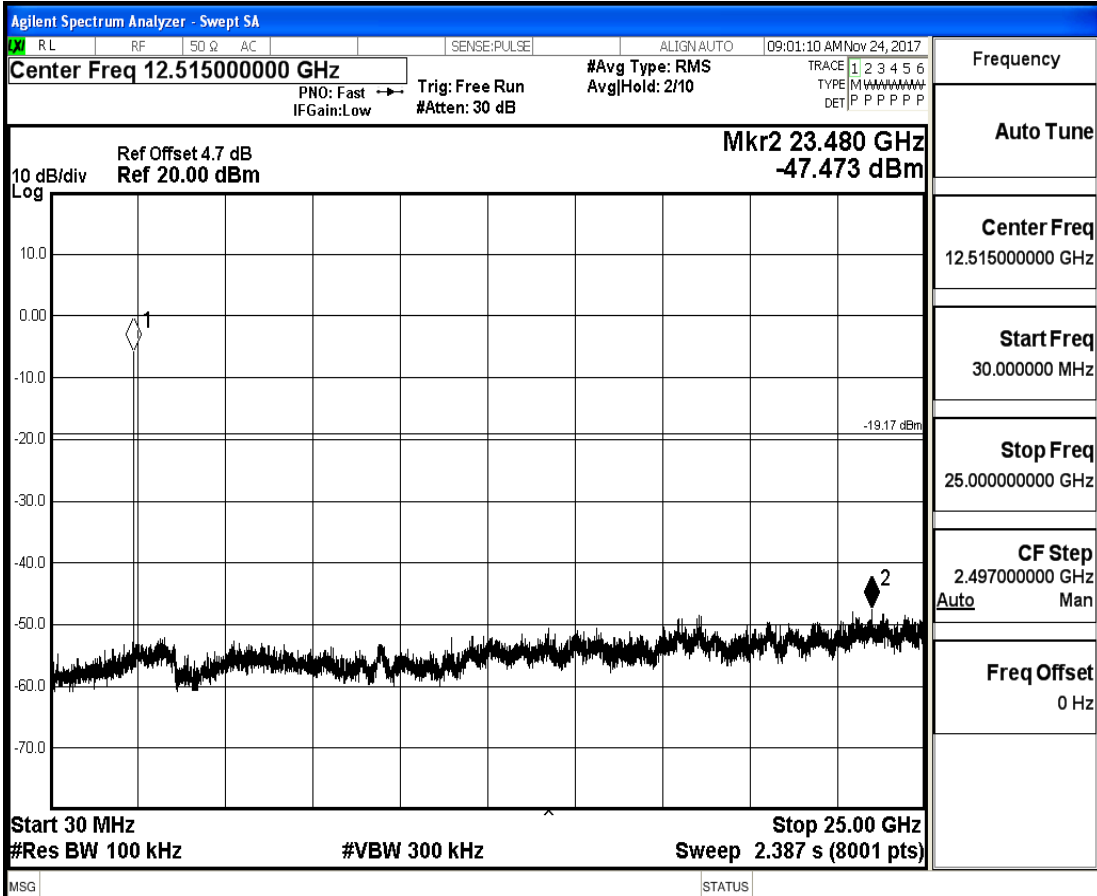
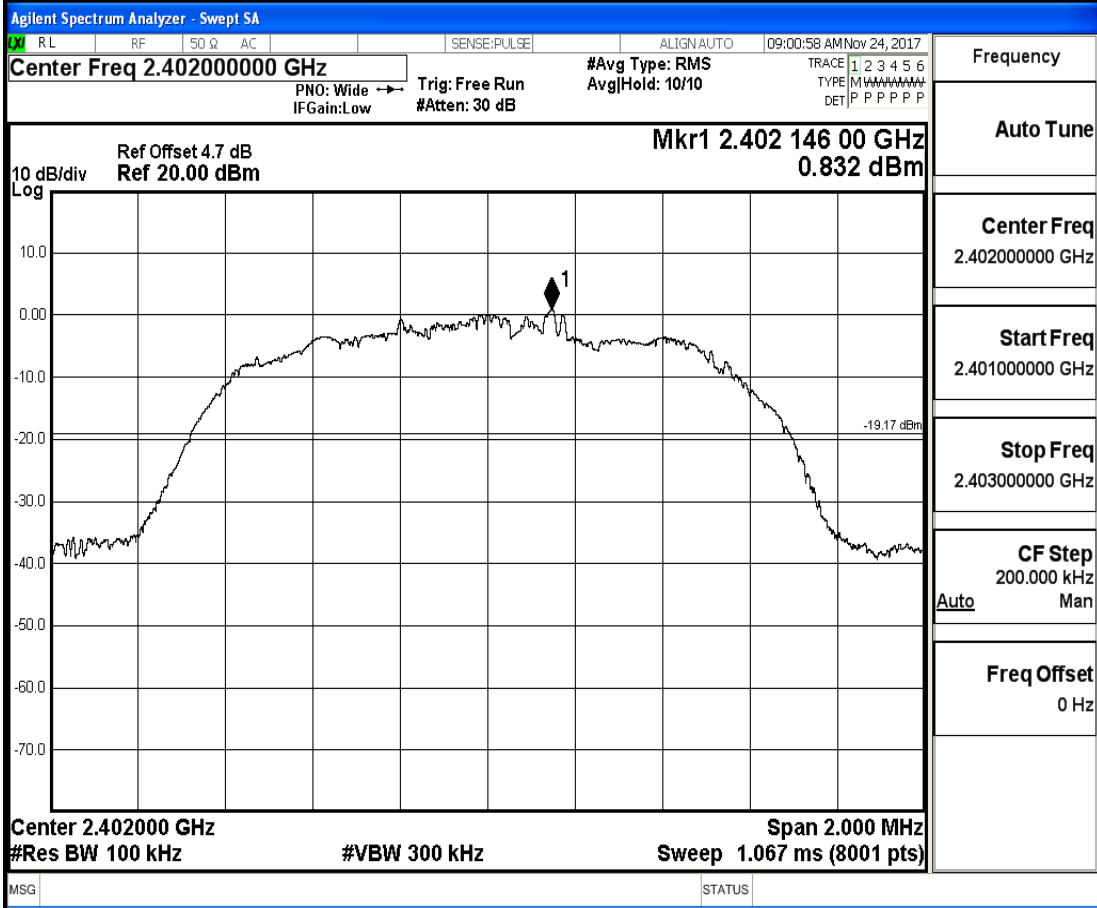
RF Conducted Spurious Emissions_2DH5_2441



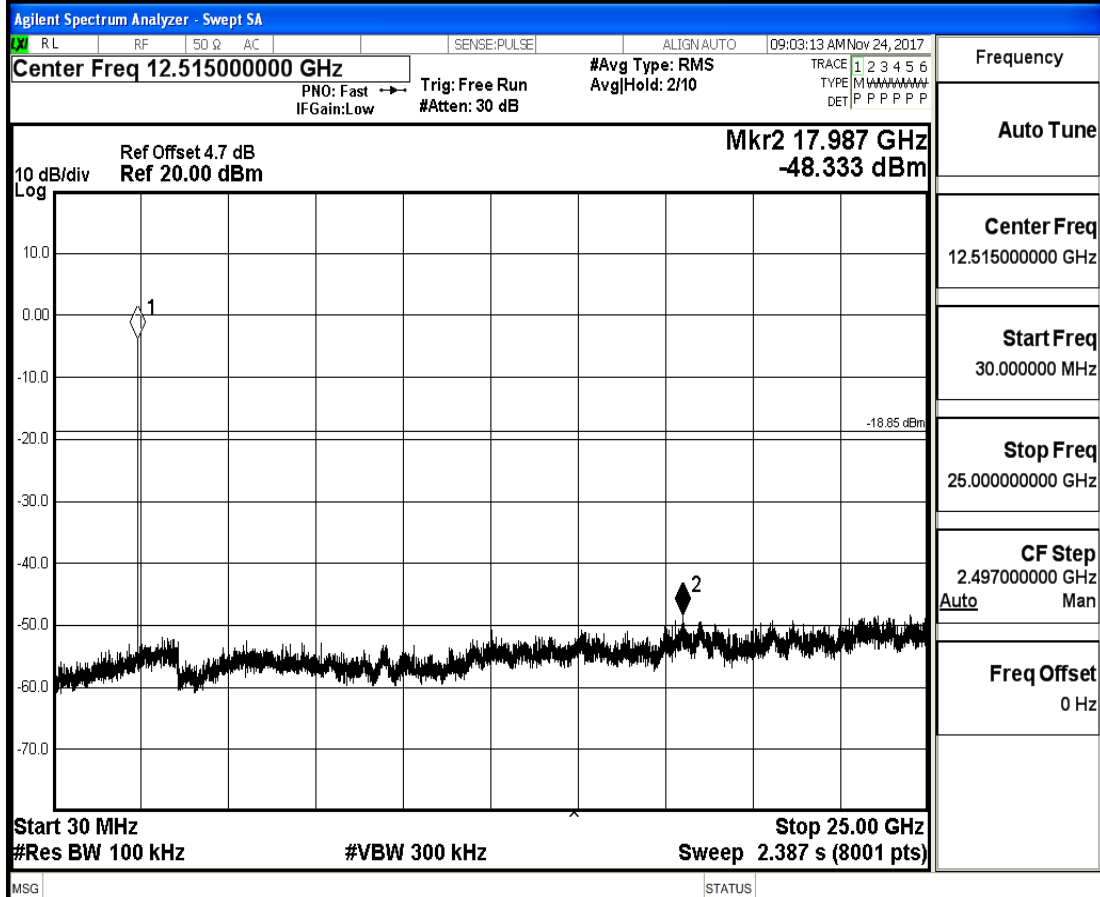
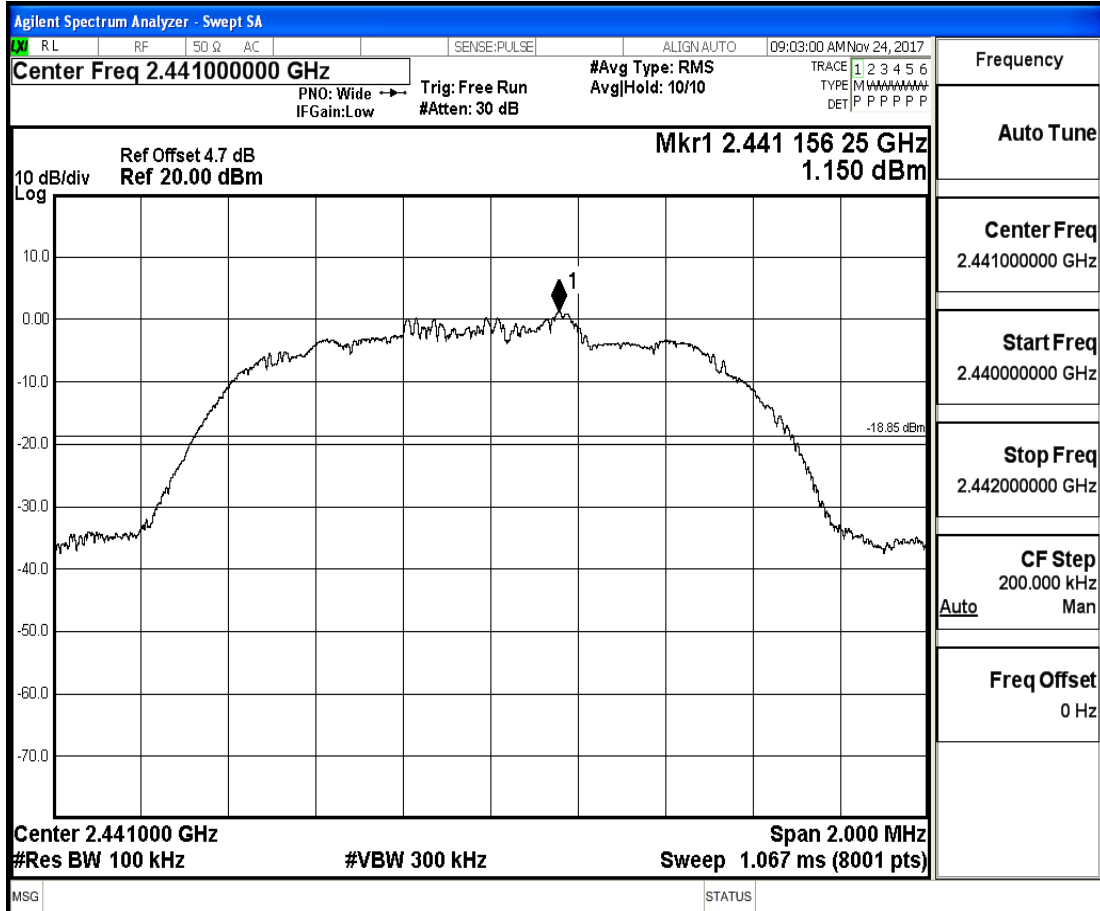
RF Conducted Spurious Emissions_2DH5_2480



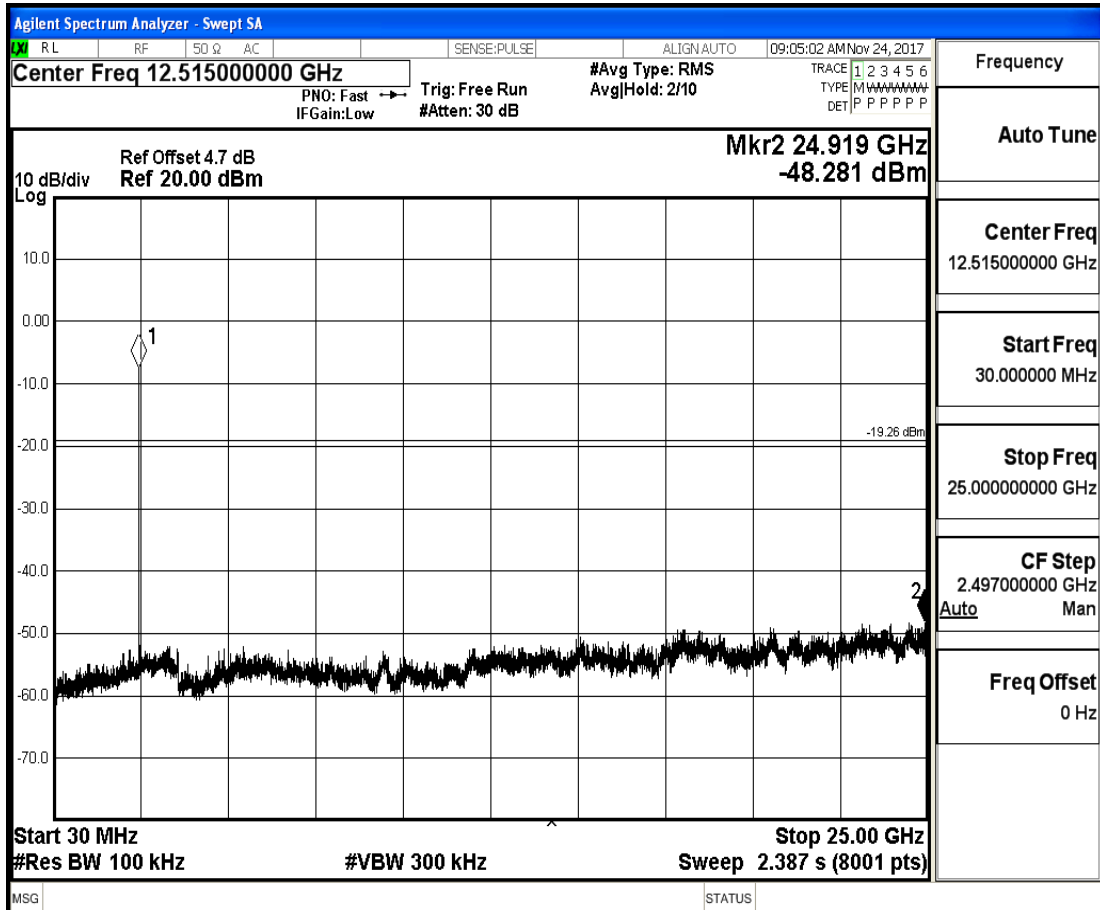
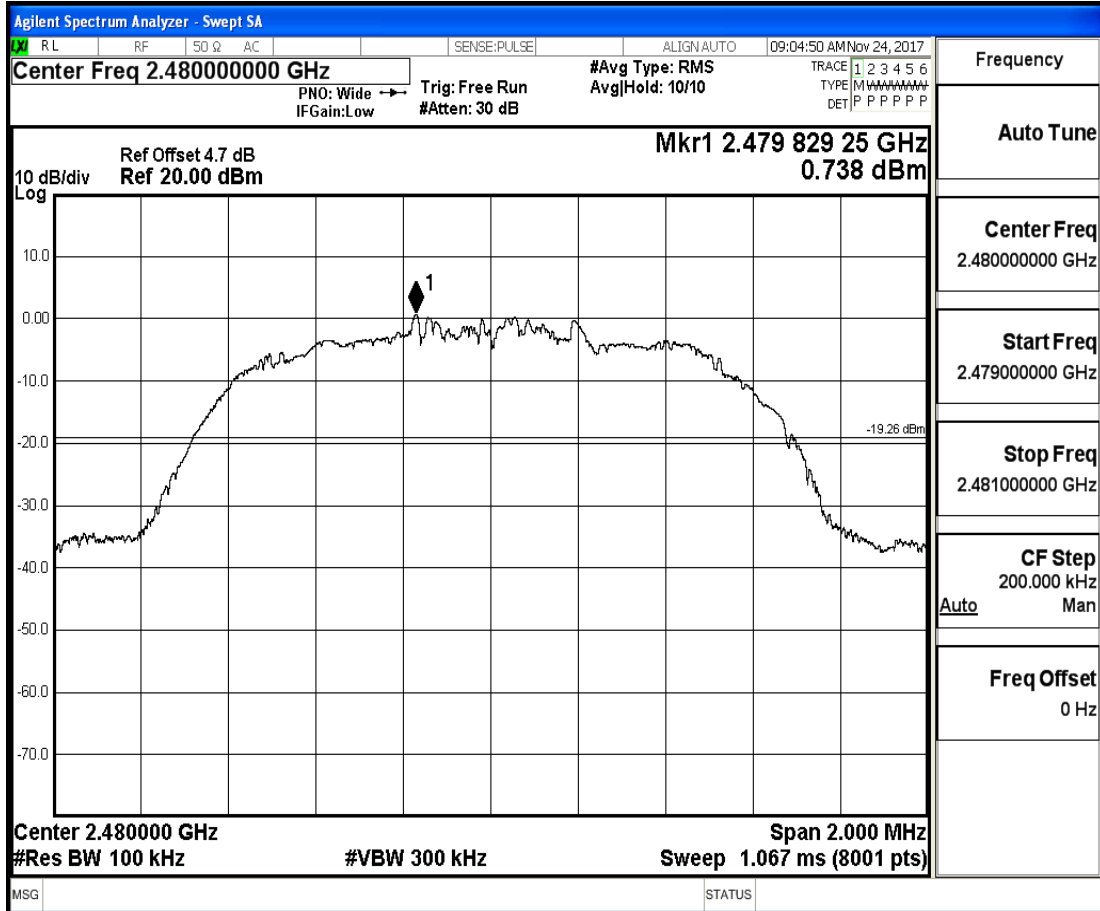
RF Conducted Spurious Emissions_3DH5_2402



RF Conducted Spurious Emissions_3DH5_2441



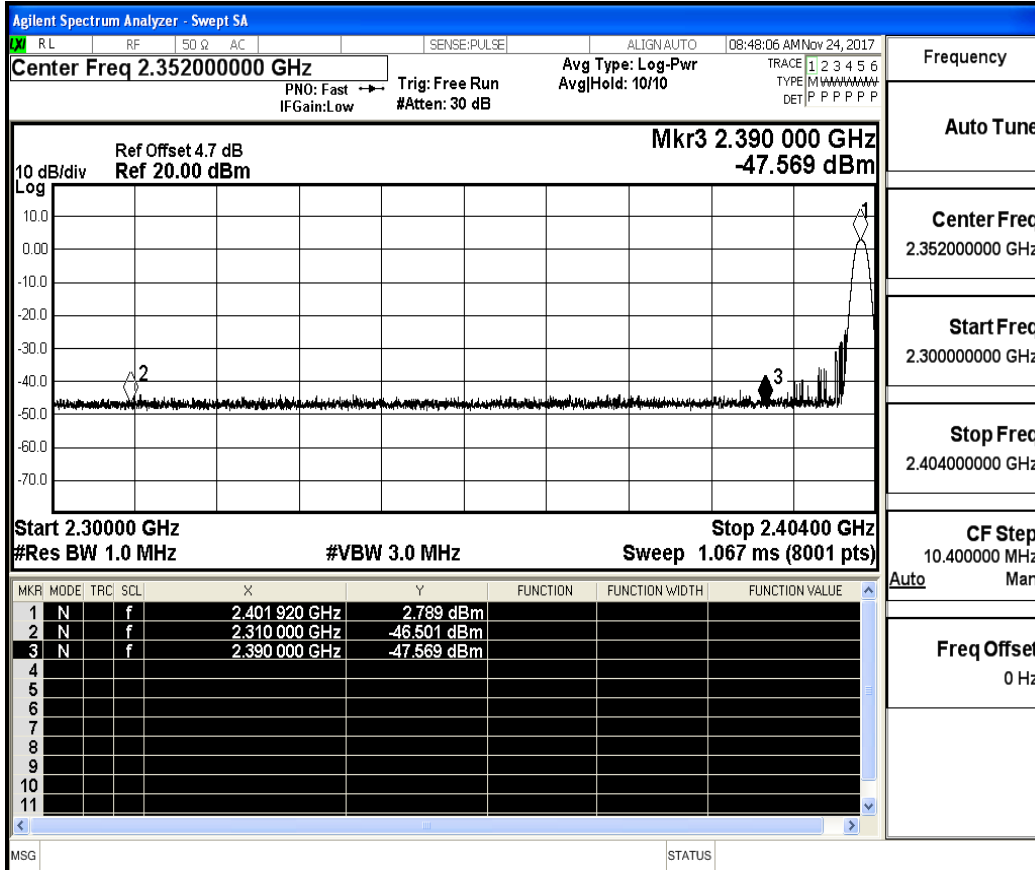
RF Conducted Spurious Emissions_3DH5_2480



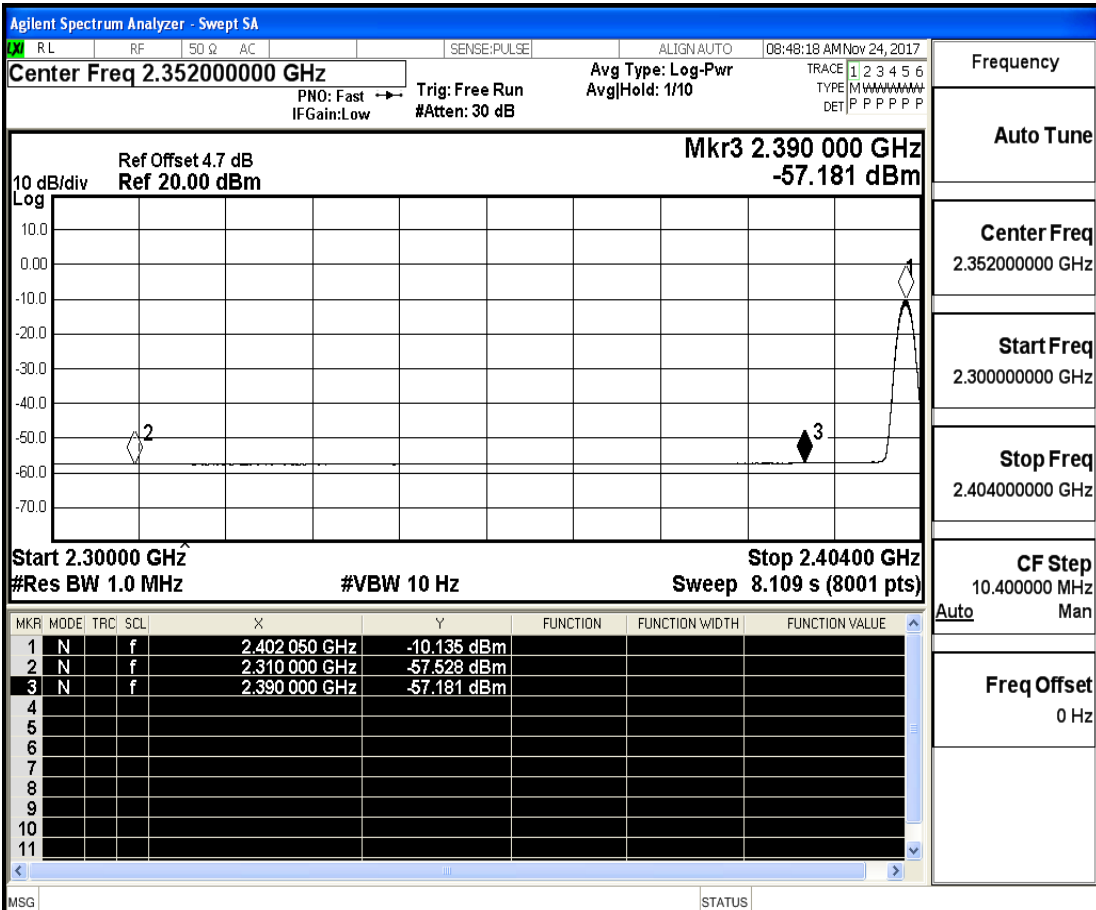
8.Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
DH5	OFF	2310.0	-46.50	2.00	0	50.76	PEAK	74	PASS
DH5	OFF	2310.0	-57.53	2.00	0	39.73	AV	54	PASS
DH5	OFF	2390.0	-47.57	2.00	0	49.69	PEAK	74	PASS
DH5	OFF	2390.0	-57.18	2.00	0	40.08	AV	54	PASS
DH5	OFF	2483.5	-46.91	2.00	0	50.35	PEAK	74	PASS
DH5	OFF	2483.5	-56.75	2.00	0	40.51	AV	54	PASS
DH5	OFF	2500.0	-47.10	2.00	0	50.16	PEAK	74	PASS
DH5	OFF	2500.0	-56.87	2.00	0	40.39	AV	54	PASS
2DH5	OFF	2310.0	-44.79	2.00	0	52.47	PEAK	74	PASS
2DH5	OFF	2310.0	-57.52	2.00	0	39.74	AV	54	PASS
2DH5	OFF	2390.0	-47.16	2.00	0	50.10	PEAK	74	PASS
2DH5	OFF	2390.0	-57.16	2.00	0	40.10	AV	54	PASS
2DH5	OFF	2483.5	-46.26	2.00	0	51.00	PEAK	74	PASS
2DH5	OFF	2483.5	-56.60	2.00	0	40.66	AV	54	PASS
2DH5	OFF	2500.0	-47.63	2.00	0	49.63	PEAK	74	PASS
2DH5	OFF	2500.0	-56.89	2.00	0	40.37	AV	54	PASS
3DH5	OFF	2310.0	-46.51	2.00	0	50.74	PEAK	74	PASS
3DH5	OFF	2310.0	-57.51	2.00	0	39.75	AV	54	PASS
3DH5	OFF	2390.0	-45.33	2.00	0	51.92	PEAK	74	PASS
3DH5	OFF	2390.0	-57.18	2.00	0	40.08	AV	54	PASS
3DH5	OFF	2483.5	-49.83	2.00	0	47.43	PEAK	74	PASS
3DH5	OFF	2483.5	-58.65	2.00	0	38.61	AV	54	PASS
3DH5	OFF	2500.0	-47.65	2.00	0	49.61	PEAK	74	PASS
3DH5	OFF	2500.0	-58.99	2.00	0	38.26	AV	54	PASS

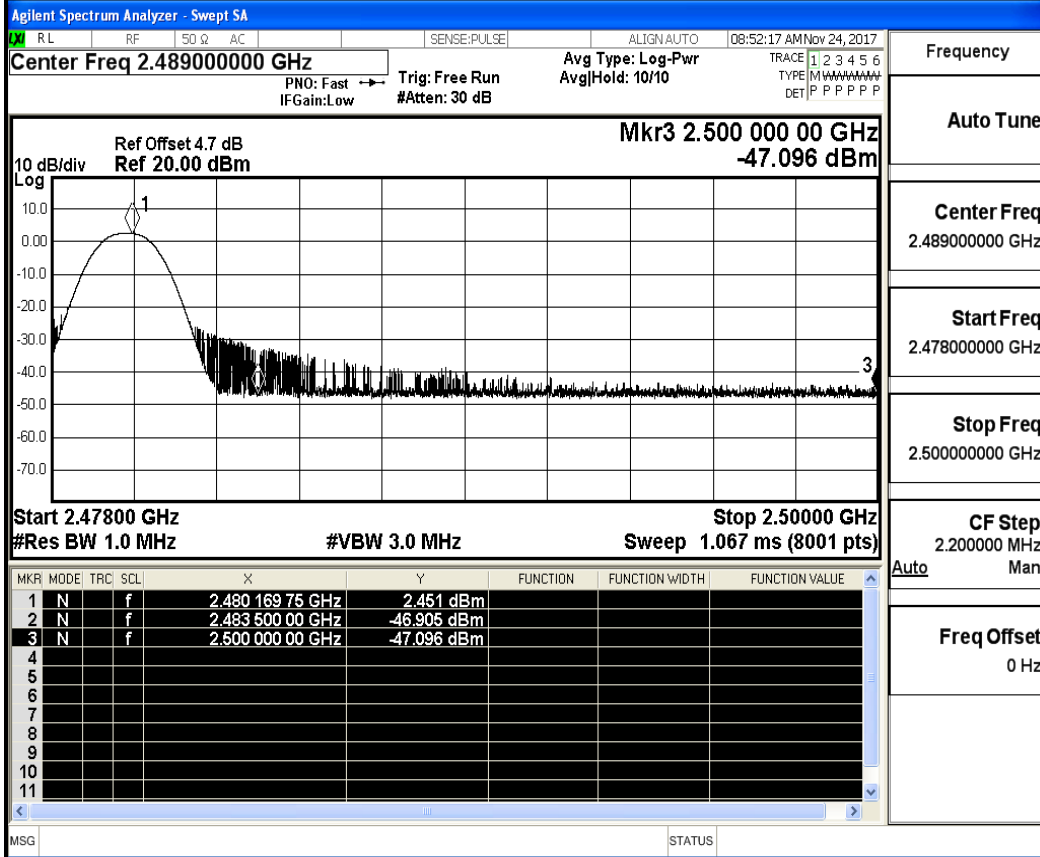
Restrict-band band-edge measurements_2402_PEAK



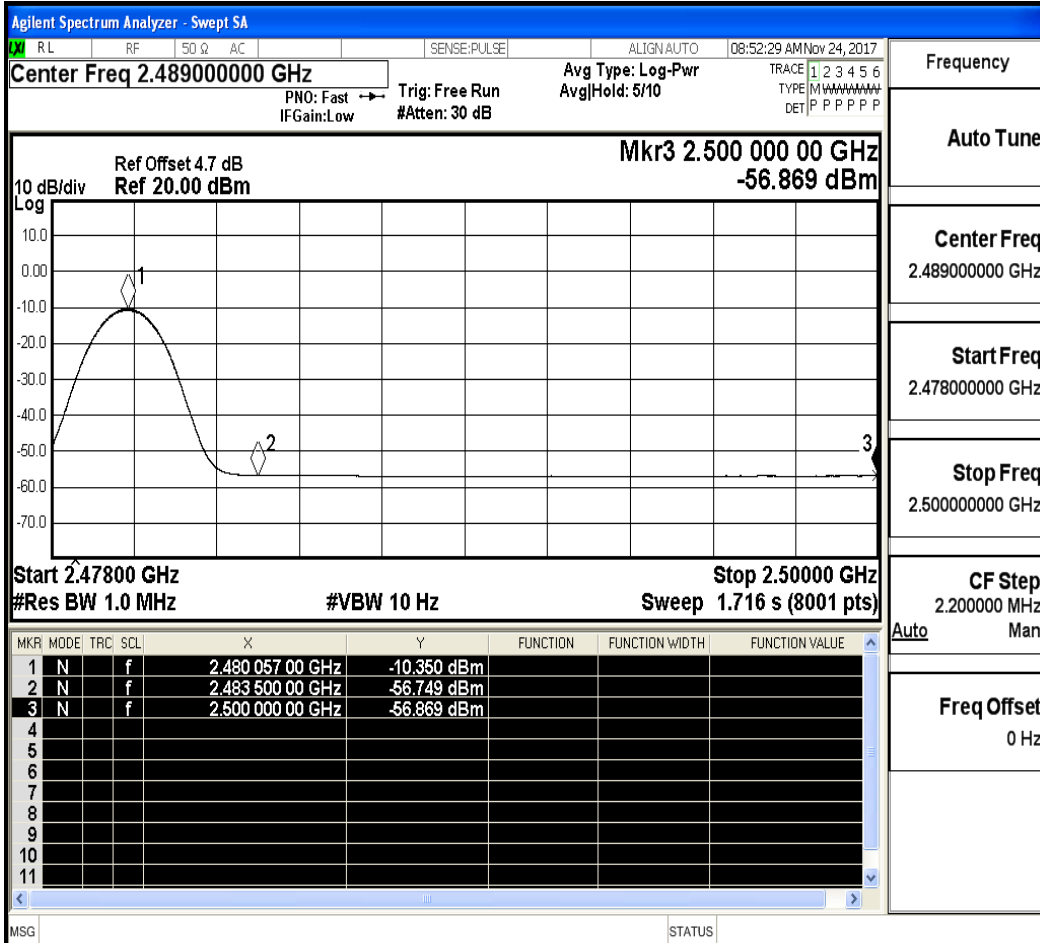
Restrict-band band-edge measurements_2402_AV



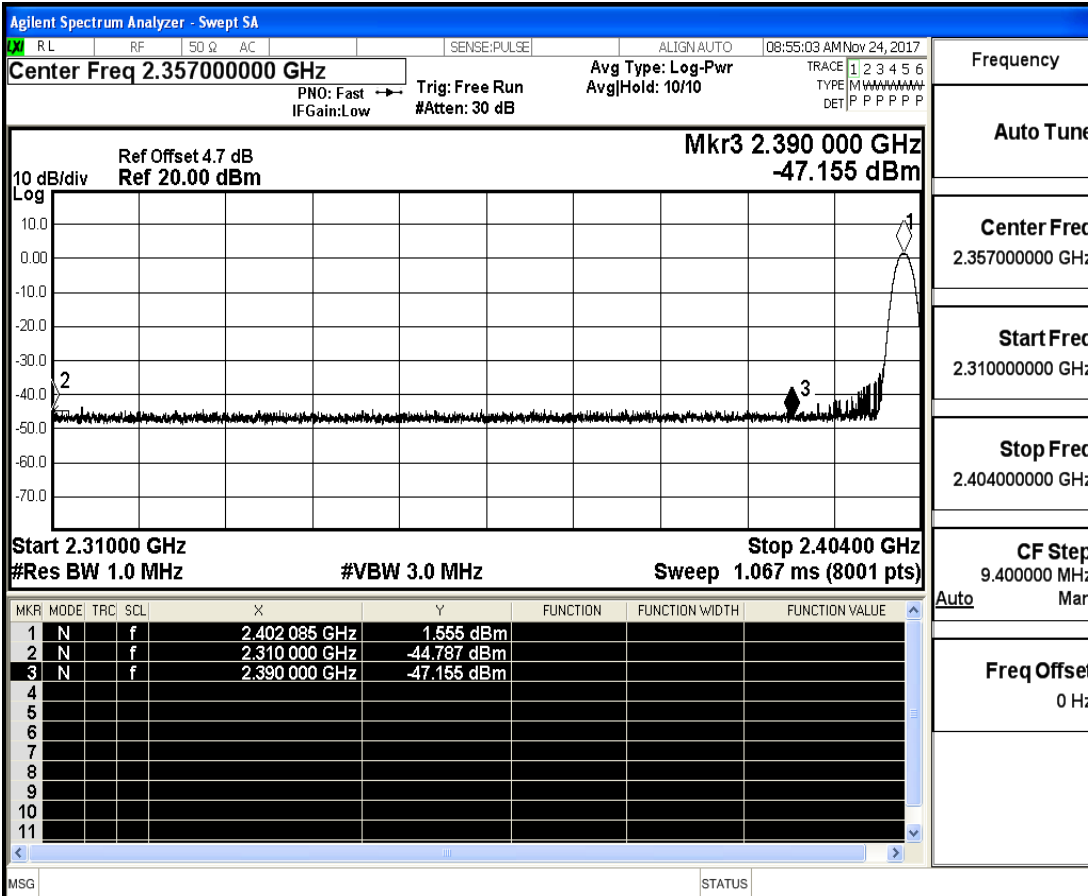
Restrict-band band-edge measurements_2480_PEAK



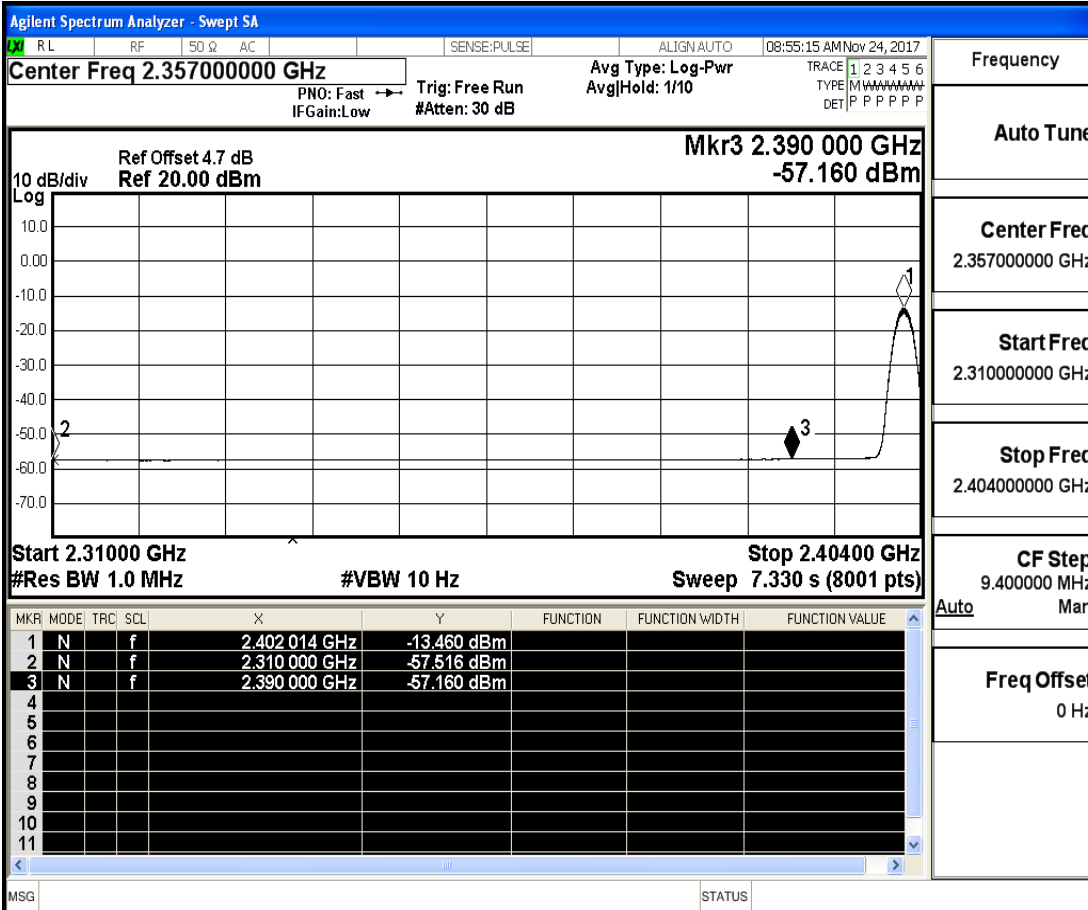
Restrict-band band-edge measurements_2480_AV



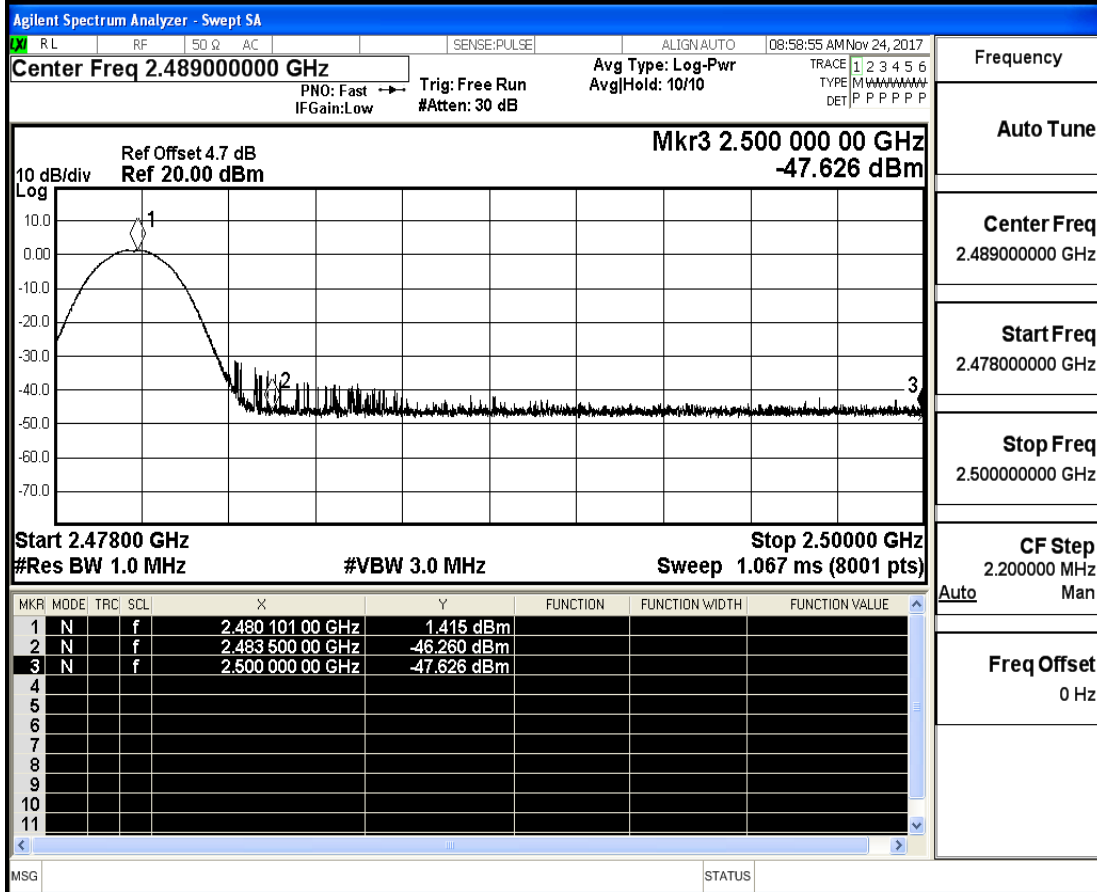
Restrict-band band-edge measurements_2402_PEAK



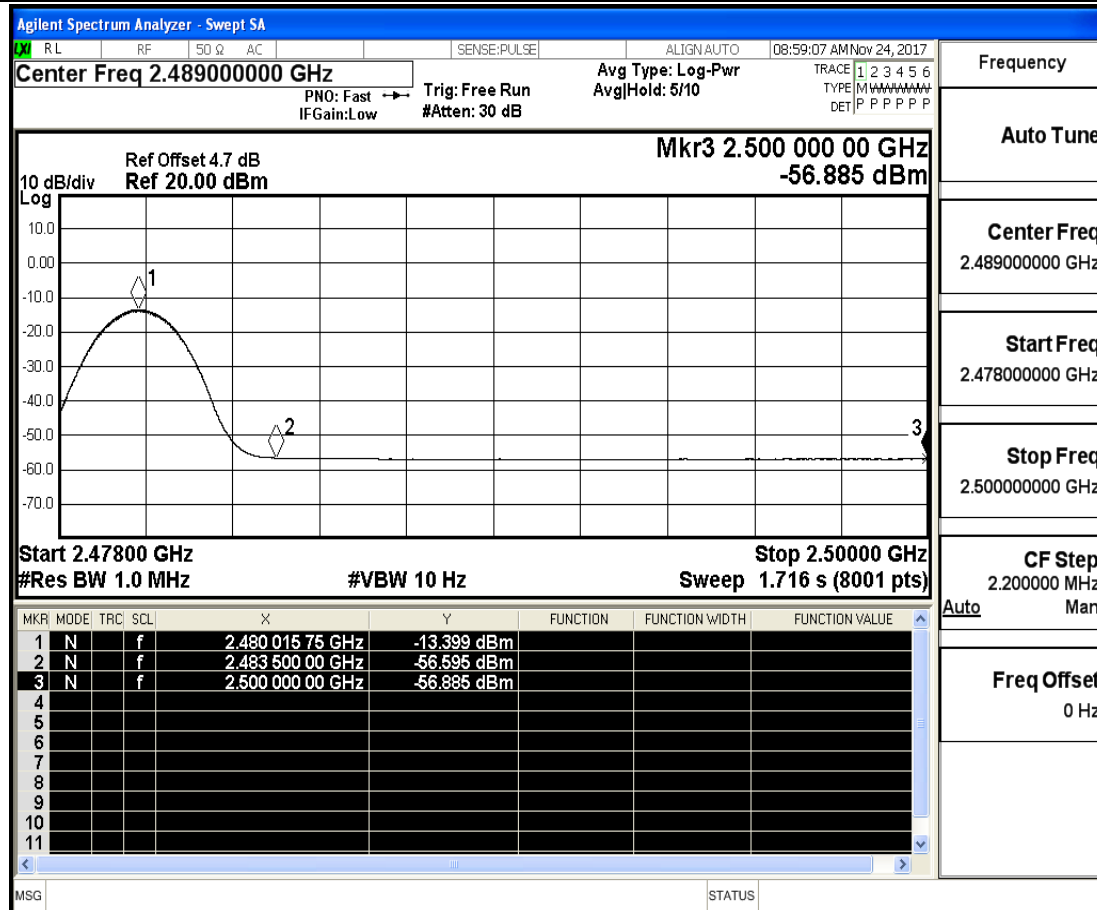
Restrict-band band-edge measurements_2402_AV



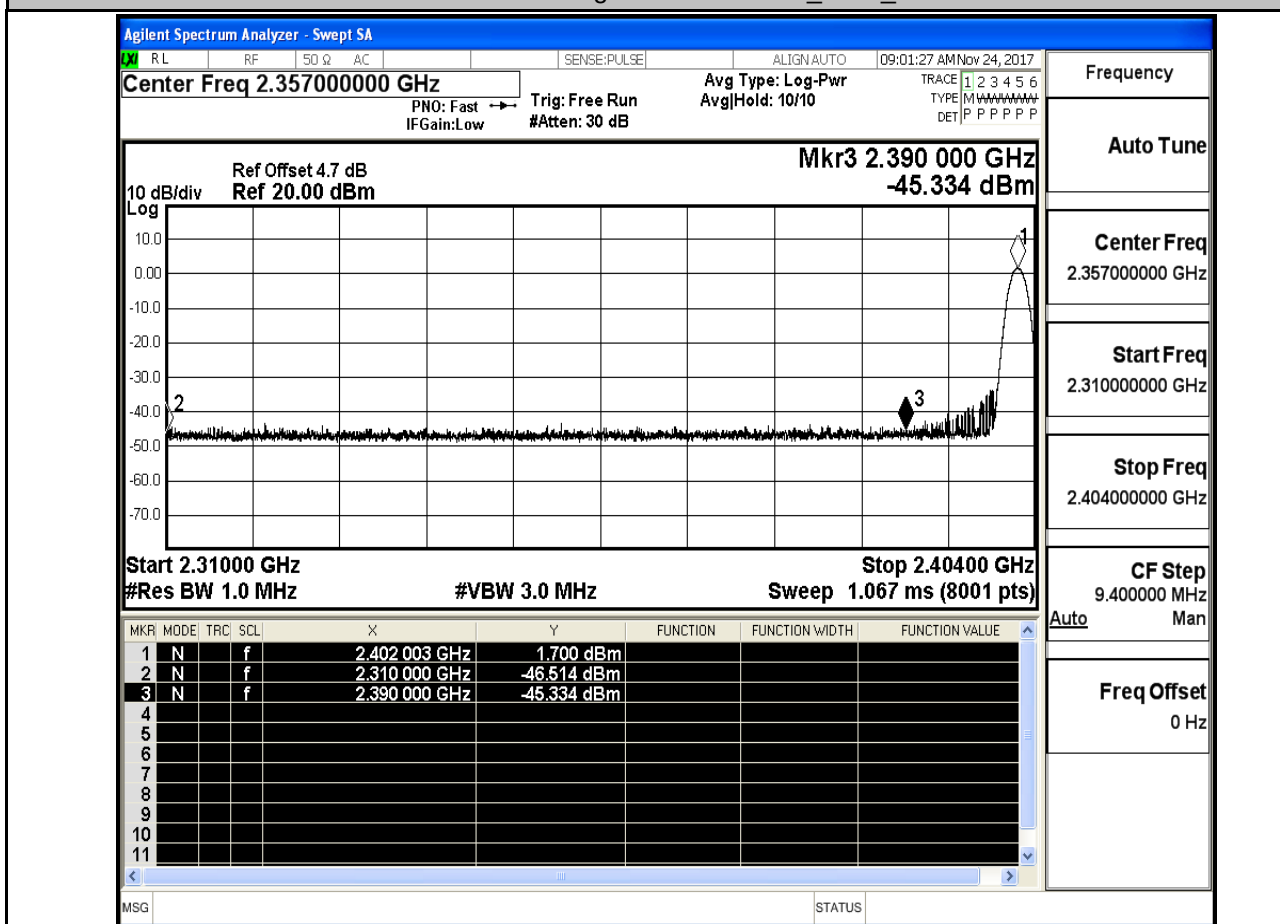
Restrict-band band-edge measurements_2480_PEAK



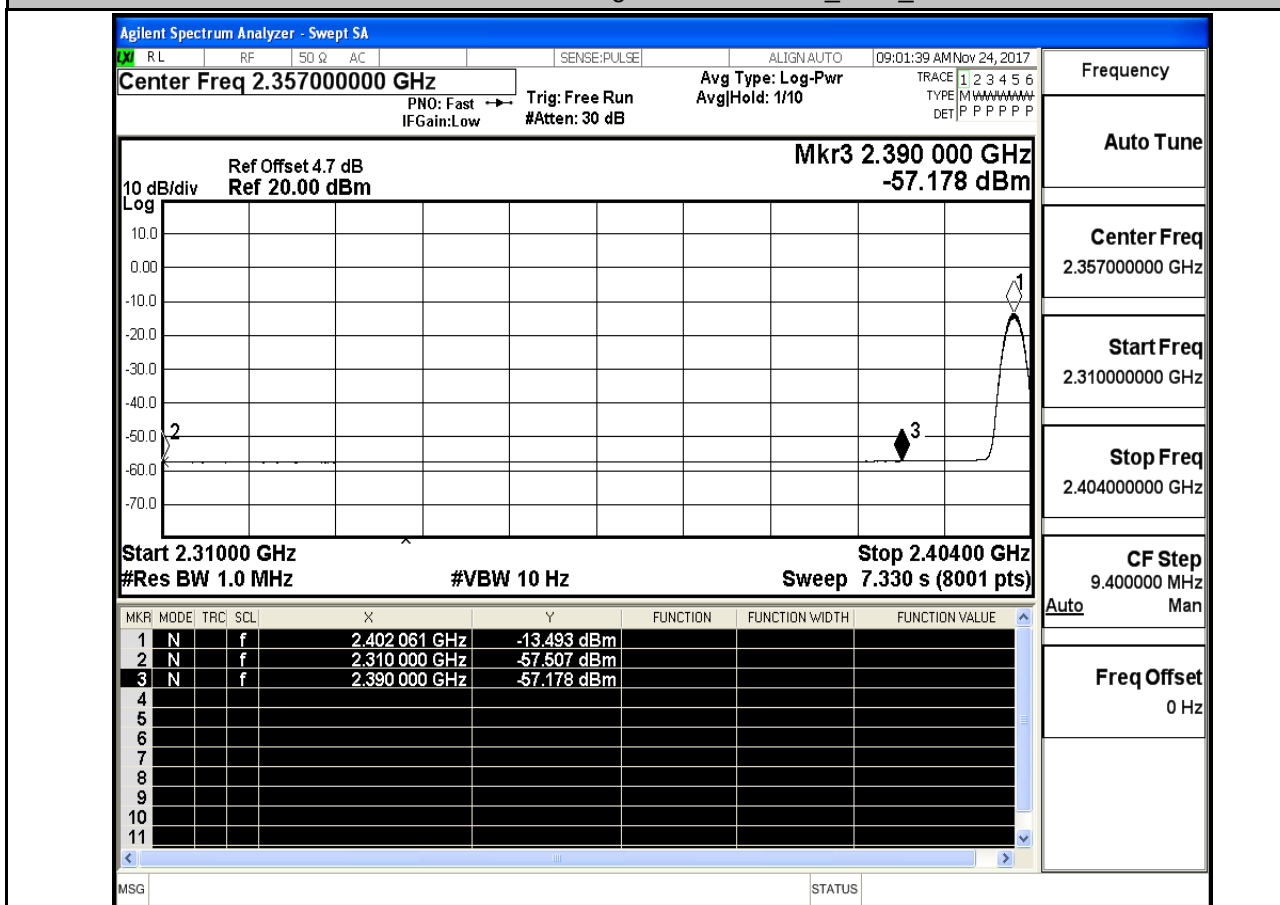
Restrict-band band-edge measurements_2480_AV



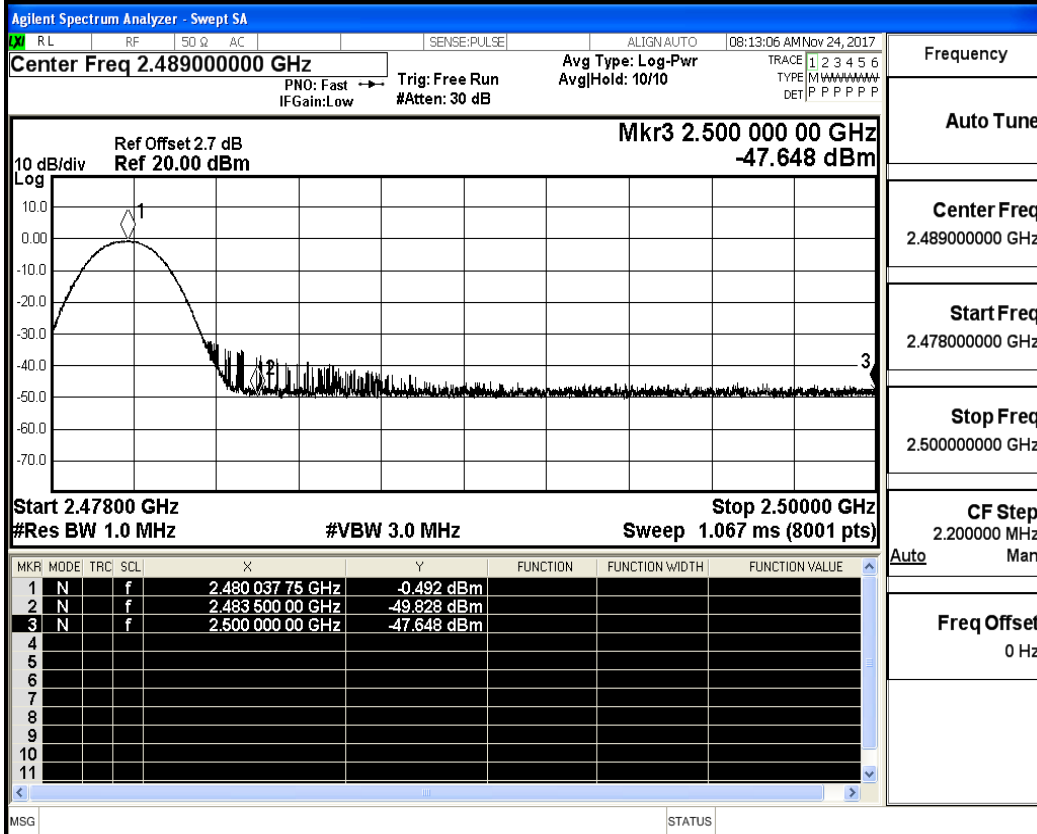
Restrict-band band-edge measurements_2402_PEAK



Restrict-band band-edge measurements_2402_AV



Restrict-band band-edge measurements_2480_PEAK



Restrict-band band-edge measurements_2480_AV

