

Appendix A

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: WIFI Camera

Trade Mark: N/A

Test Model: JV-NW2M10

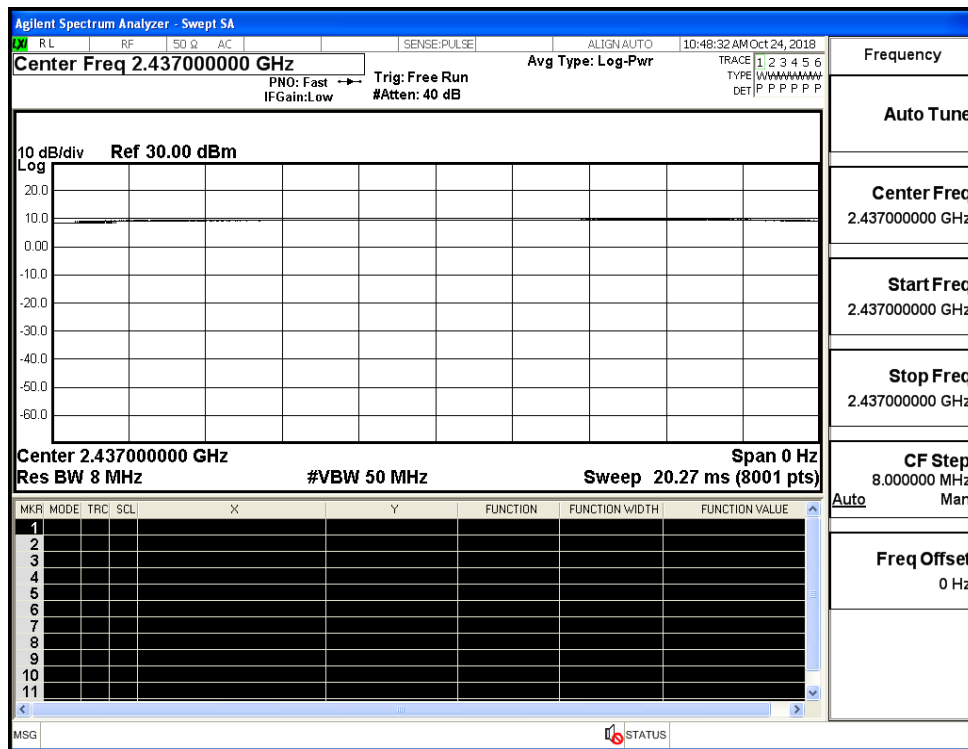
Environmental Conditions

Temperature:	24.3 ° C
Relative Humidity:	52.7%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond.Lu
Supervised by:	Jayden.Zhuo

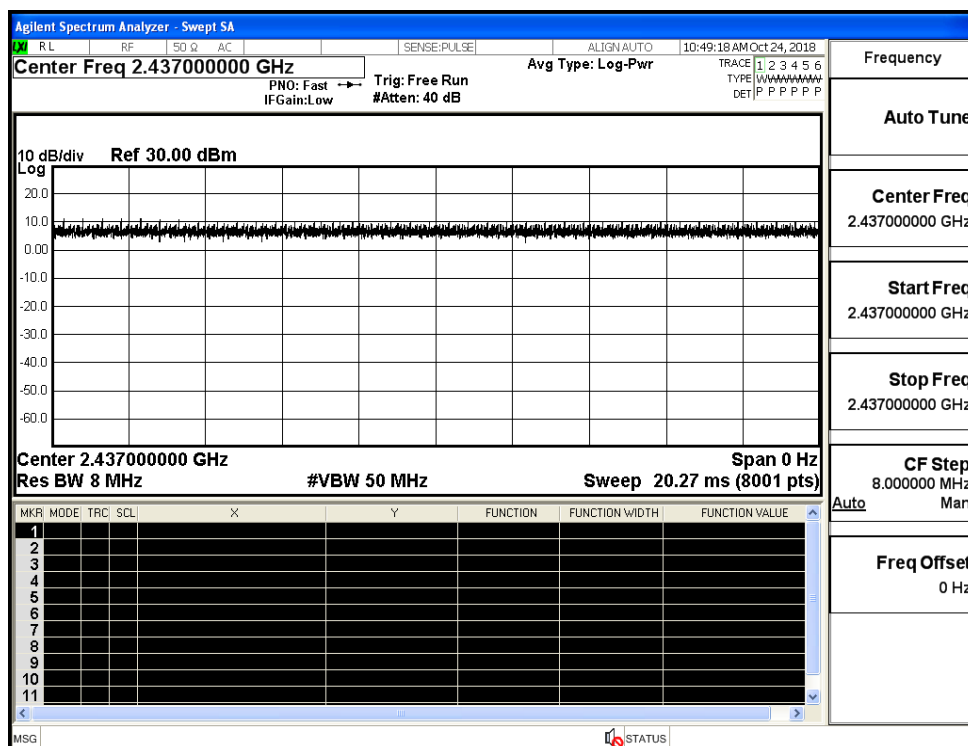
A.1 Duty Cycle

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

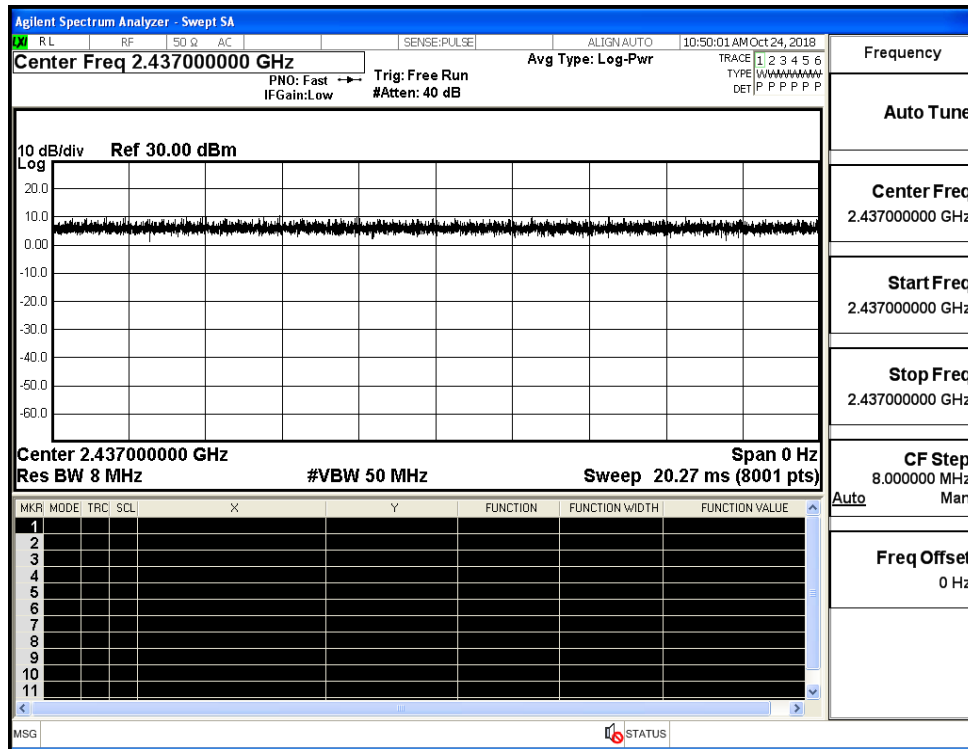
Duty Cycle_11B_2437_Ant1



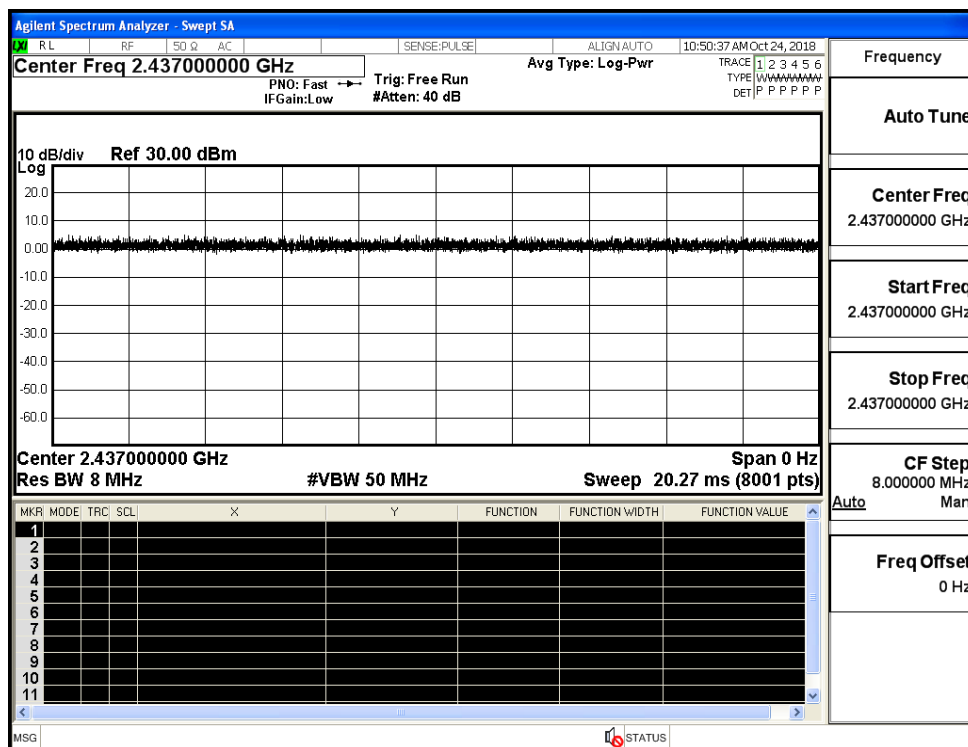
Duty Cycle_11G_2437_Ant1



Duty Cycle_11N20SISO_2437_Ant1



Duty Cycle_11N40SISO_2437_Ant1



A.2 Maximum Conducted Output Power

Mode	Channel	Meas.Level [dBm]	Limit [dBm]	Verdict
11B	LCH	13.74	30	PASS
	MCH	14.57	30	PASS
	HCH	14.07	30	PASS
11G	LCH	14.29	30	PASS
	MCH	15.17	30	PASS
	HCH	13.79	30	PASS
11N20SISO	LCH	14.40	30	PASS
	MCH	15.07	30	PASS
	HCH	13.54	30	PASS
11N40SISO	LCH	14.29	30	PASS
	MCH	14.32	30	PASS
	HCH	14.00	30	PASS

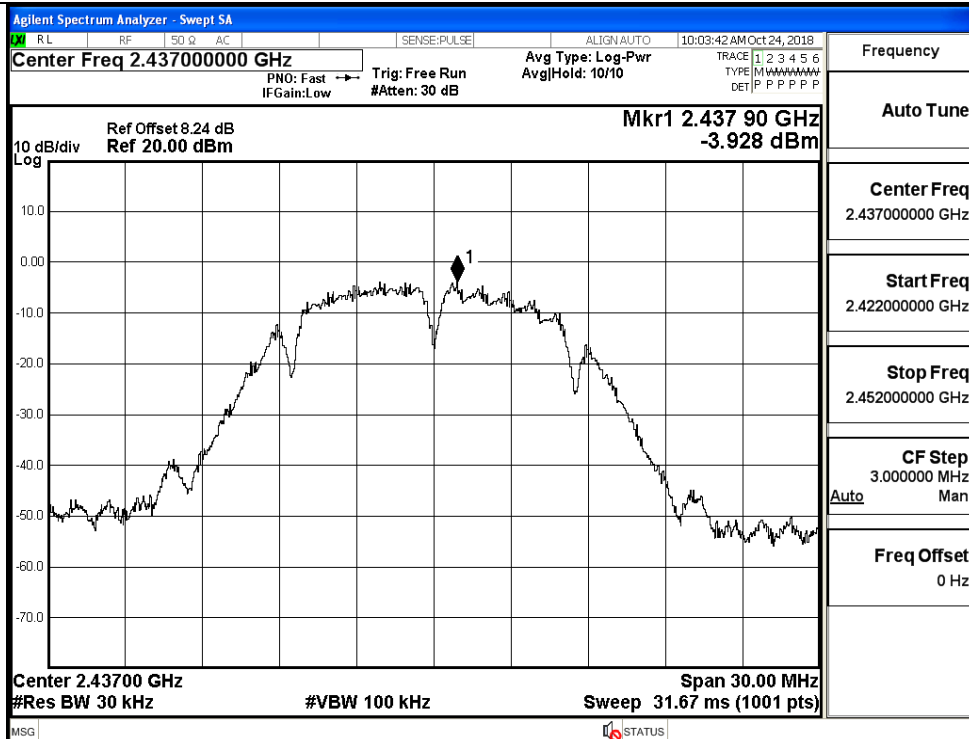
A.3 Maximum Power Spectral Density

Mode	Channel	Meas.Level [dBm/30KHz]	Limit [dBm/3KHz]	Verdict
11B	LCH	-4.541	8	PASS
	MCH	-3.928	8	PASS
	HCH	-3.558	8	PASS
11G	LCH	-9.397	8	PASS
	MCH	-7.012	8	PASS
	HCH	-7.986	8	PASS
11N20SISO	LCH	-9.331	8	PASS
	MCH	-7.713	8	PASS
	HCH	-7.399	8	PASS
11N40SISO	LCH	-12.338	8	PASS
	MCH	-11.893	8	PASS
	HCH	-10.812	8	PASS

Test Graphs



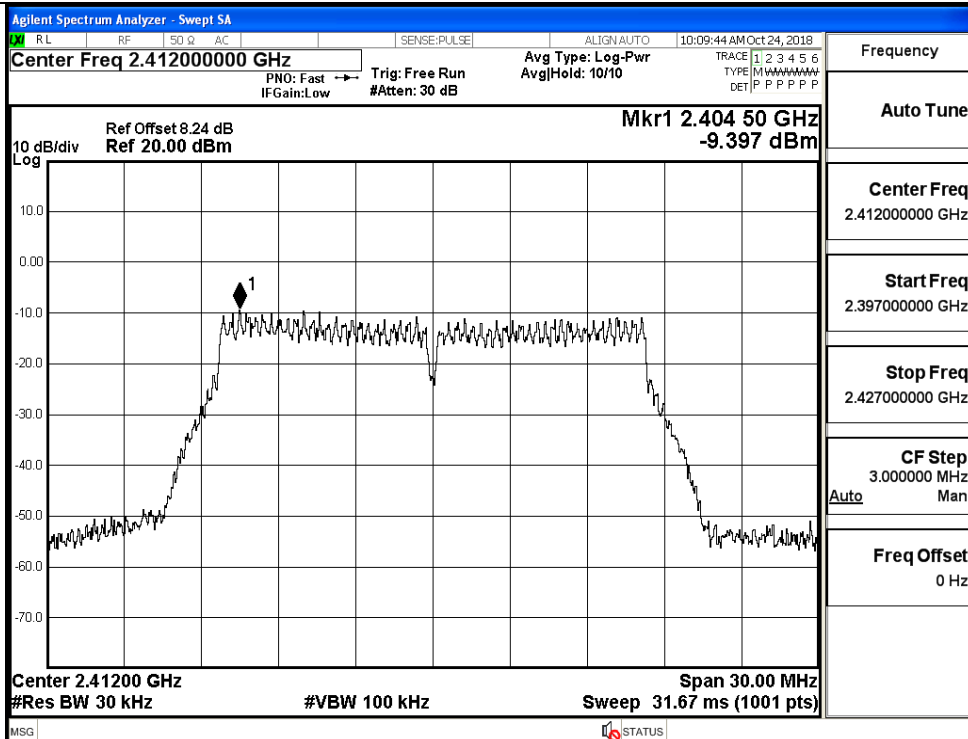
11B/MCH



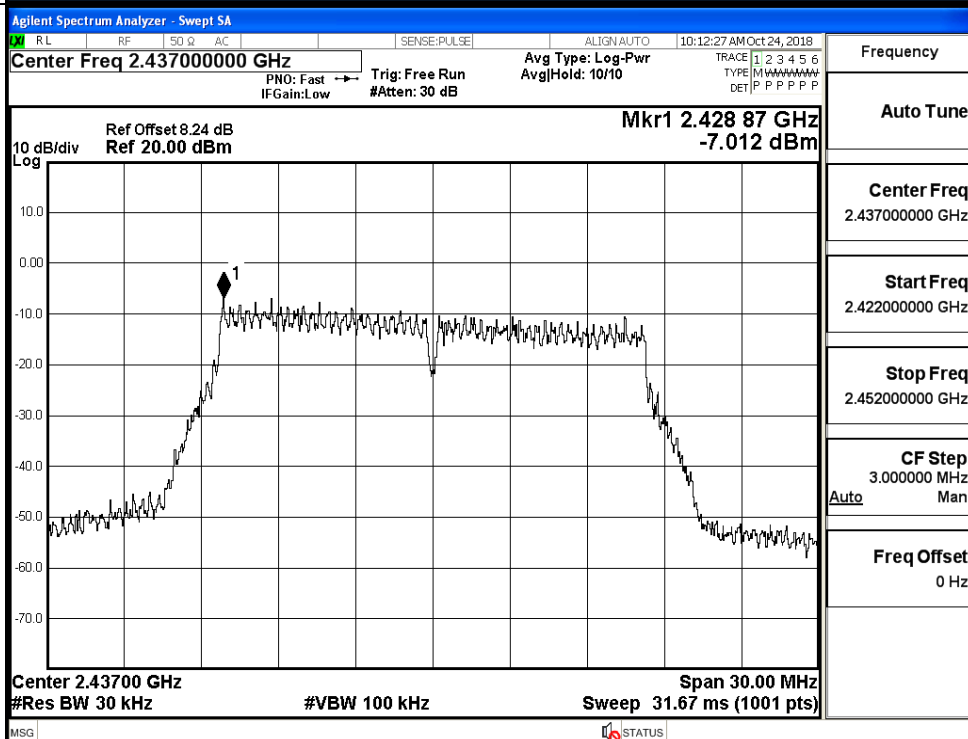
11B/HCH



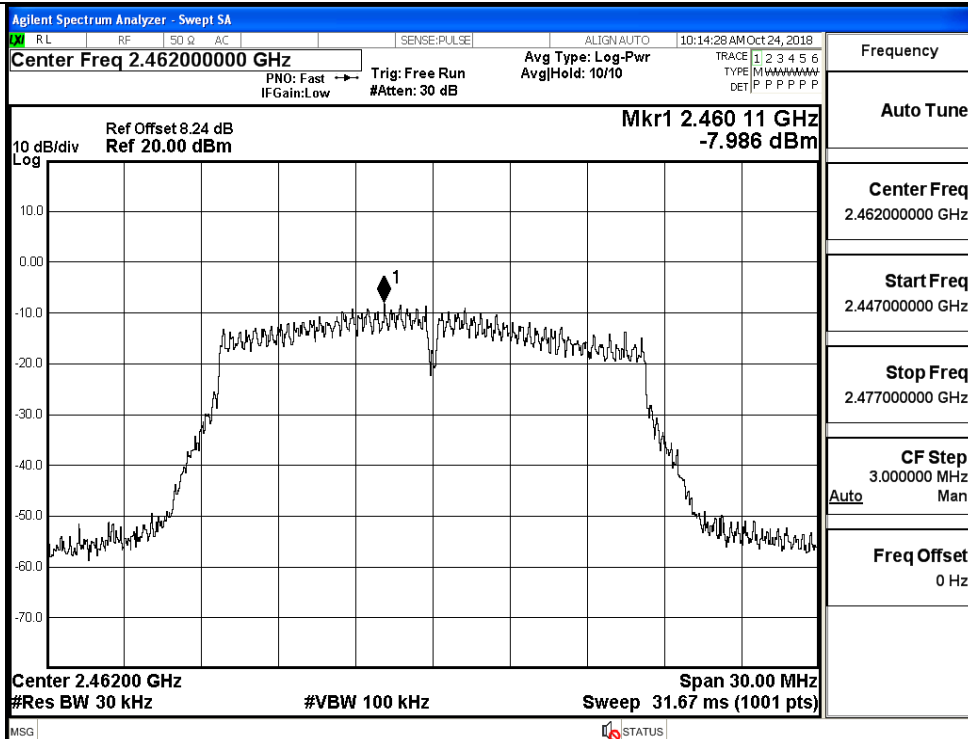
11G/LCH



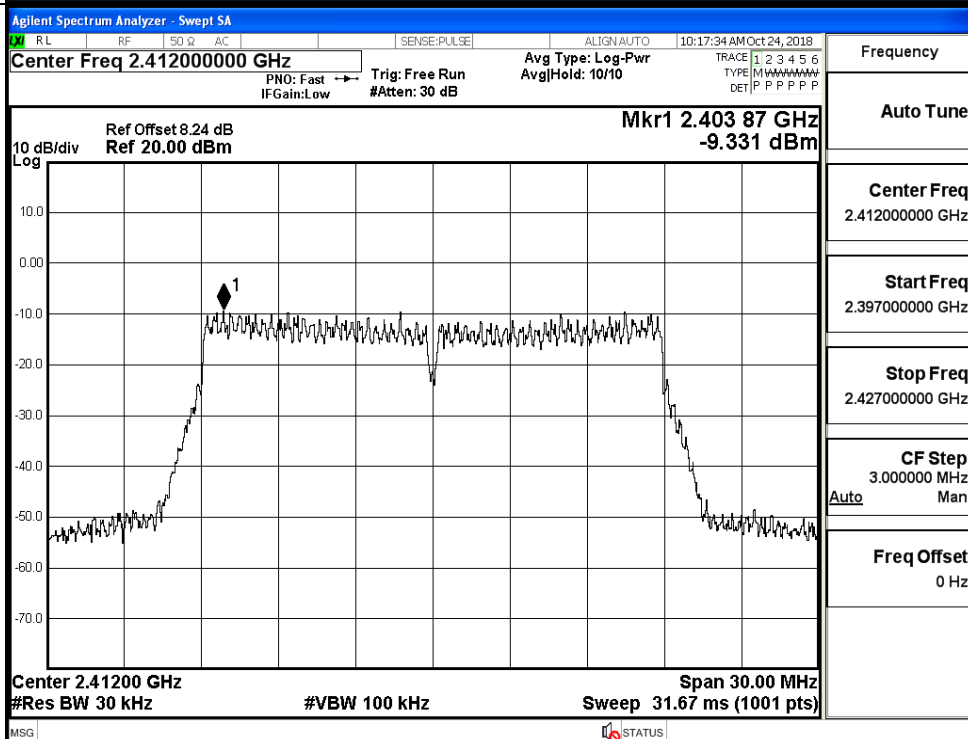
11G/MCH



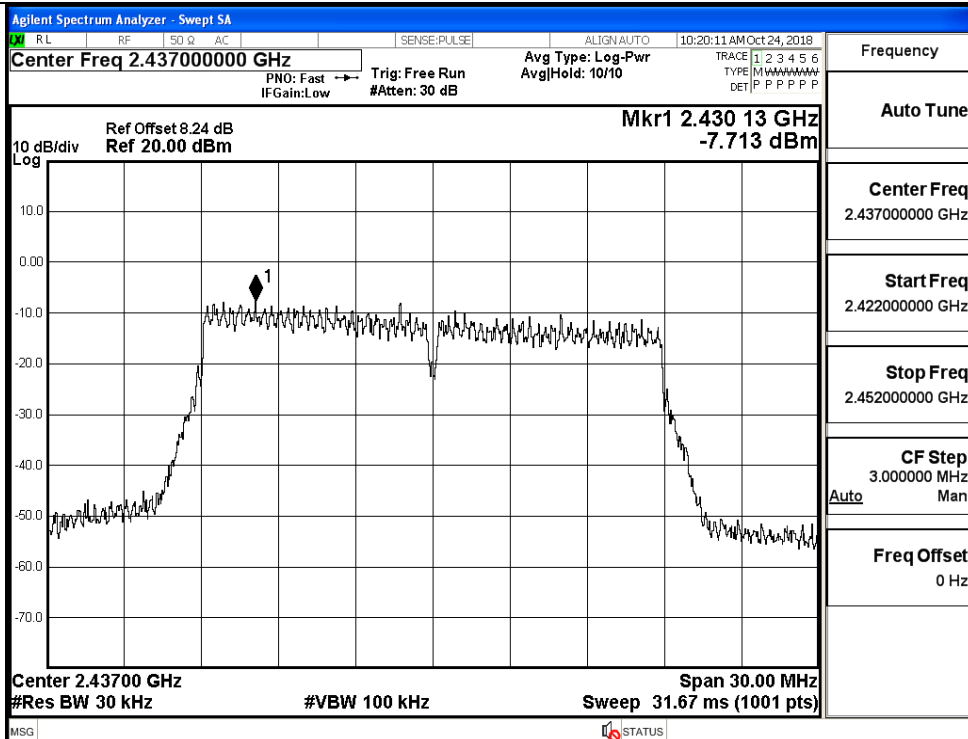
11G/HCH



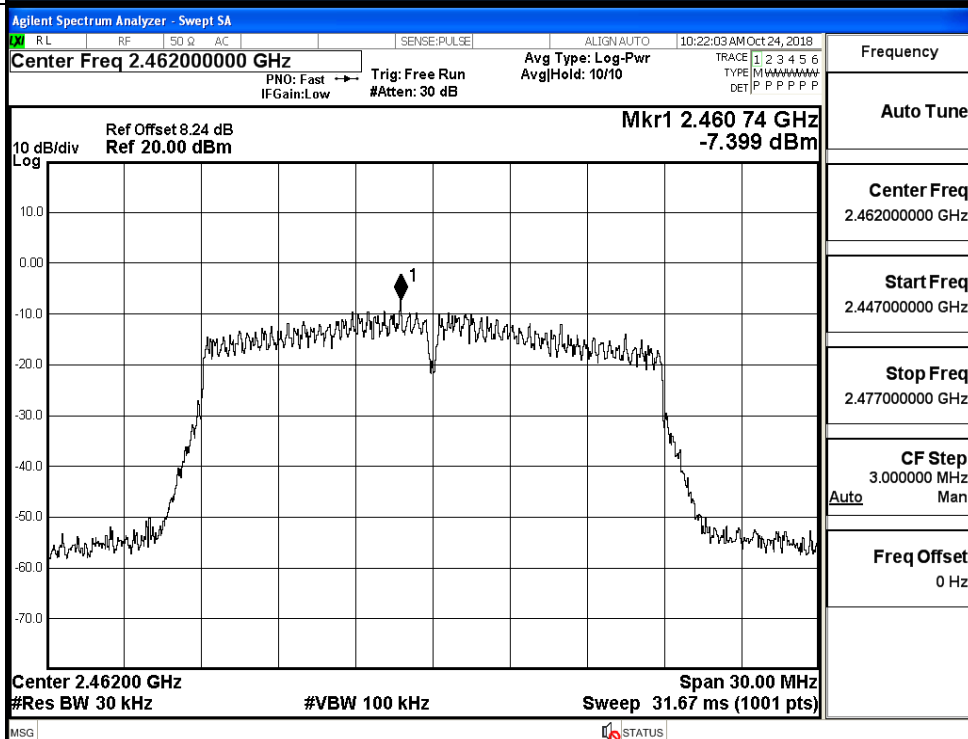
11N20SISO/LCH



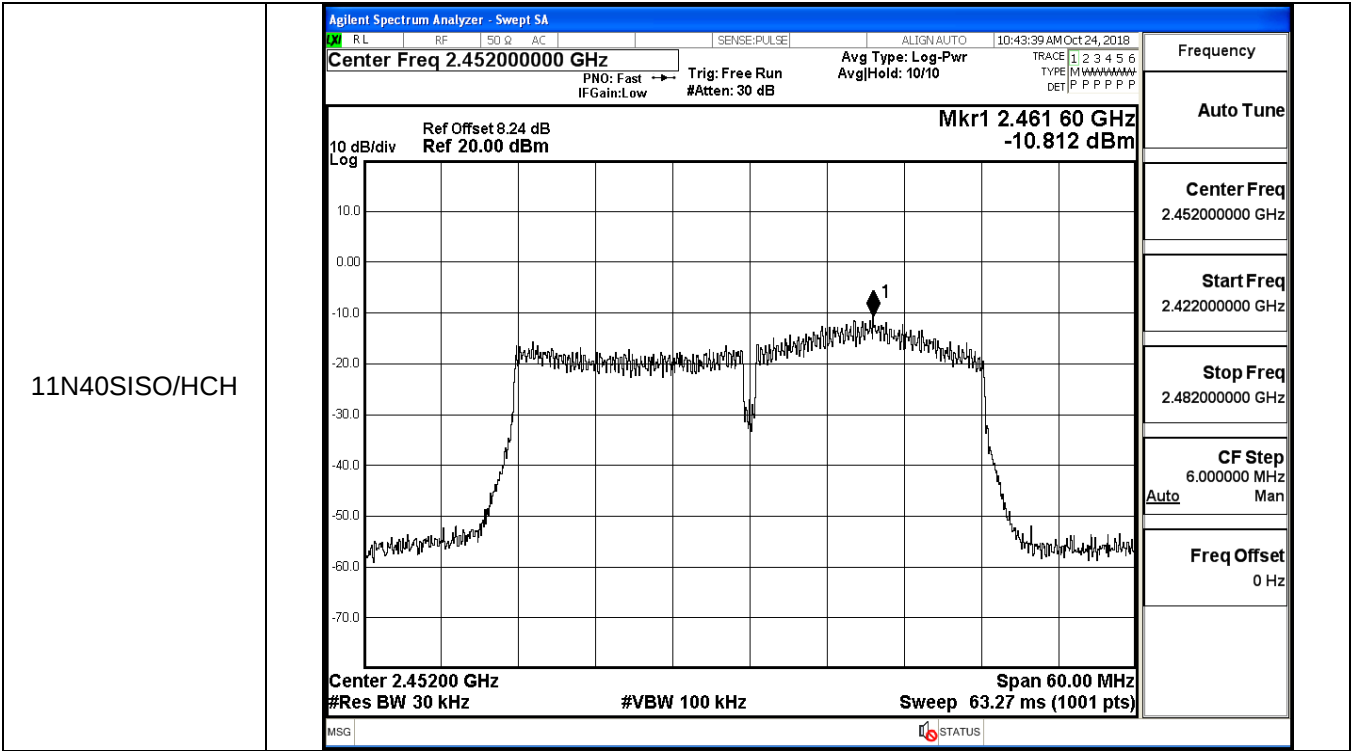
11N20SISO/MCH



11N20SISO/HCH



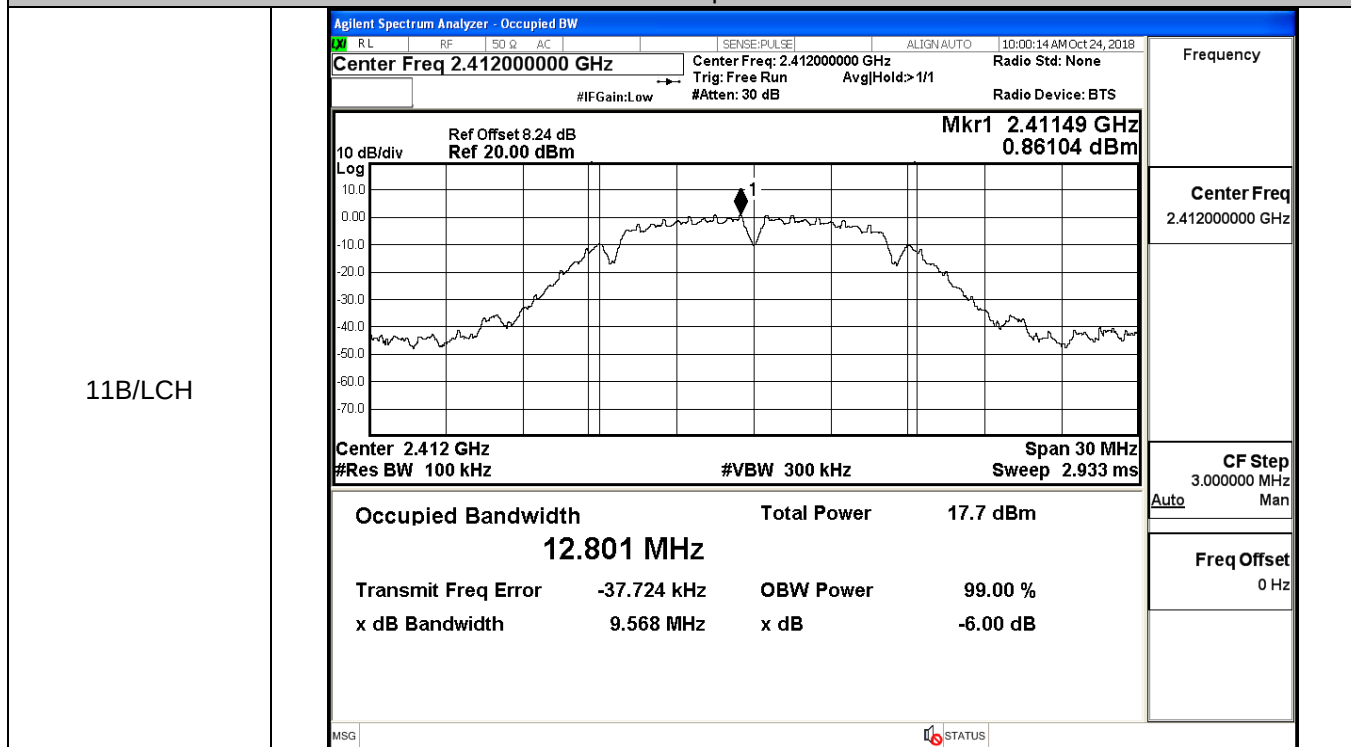
11N40SISO/LCH	Agilent Spectrum Analyzer - Swept SA RL RF SO Q AC SENSE: PULSE ALIGN: AUTO 10:24:52 AM Oct 24, 2018 Center Freq 2.422000000 GHz PNO: Fast IF Gain: Low Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr Avg/Hold: 10/10 TRACE 1 2 3 4 5 6 TYPE: M W W W W W W W DET: P P P P P P Ref Offset 8.24 dB Ref 20.00 dBm Mkr1 2.425 12 GHz -12.338 dBm Center 2.42200 GHz #Res BW 30 kHz #VBW 100 kHz Span 60.00 MHz Sweep 63.27 ms (1001 pts) MSG STATUS Frequency Auto Tune Center Freq 2.422000000 GHz Start Freq 2.392000000 GHz Stop Freq 2.452000000 GHz CF Step 6.000000 MHz Auto Man Freq Offset 0 Hz
11N40SISO/MCH	Agilent Spectrum Analyzer - Swept SA RL RF SO Q AC SENSE: PULSE ALIGN: AUTO 10:34:05 AM Oct 24, 2018 Center Freq 2.437000000 GHz PNO: Fast IF Gain: Low Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr Avg/Hold: 10/10 TRACE 1 2 3 4 5 6 TYPE: M W W W W W W W DET: P P P P P P Ref Offset 8.24 dB Ref 20.00 dBm Mkr1 2.427 64 GHz -11.893 dBm Center 2.43700 GHz #Res BW 30 kHz #VBW 100 kHz Span 60.00 MHz Sweep 63.27 ms (1001 pts) MSG STATUS Frequency Auto Tune Center Freq 2.437000000 GHz Start Freq 2.407000000 GHz Stop Freq 2.467000000 GHz CF Step 6.000000 MHz Auto Man Freq Offset 0 Hz



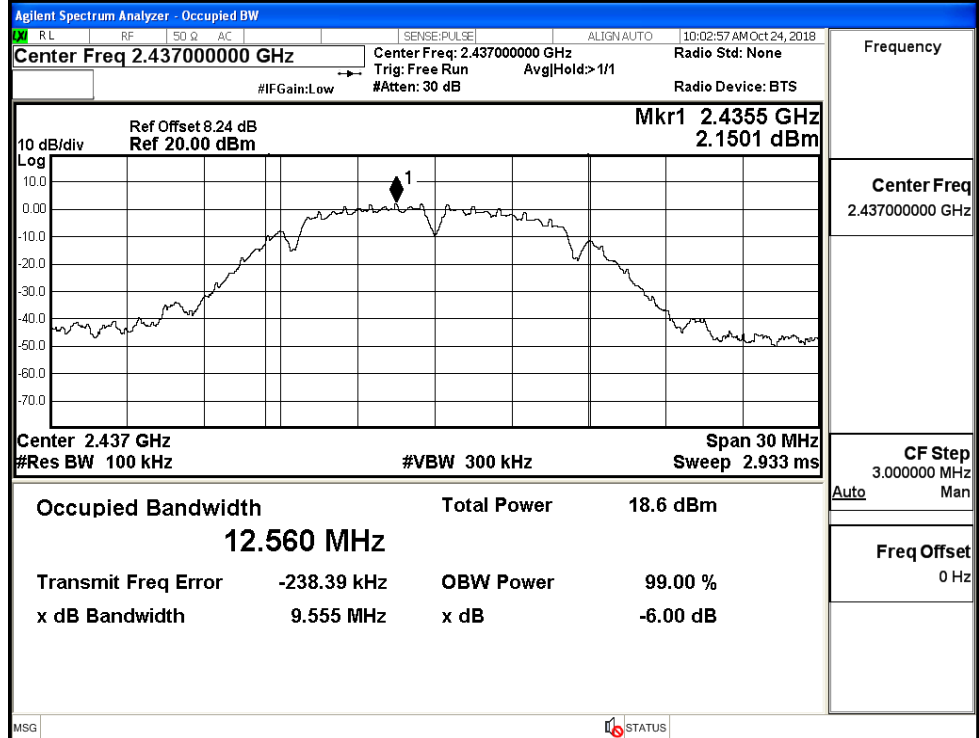
A.4 6dB Bandwidth

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
11B	LCH	9.568	≥ 0.5	PASS
	MCH	9.555	≥ 0.5	PASS
	HCH	8.114	≥ 0.5	PASS
11G	LCH	16.39	≥ 0.5	PASS
	MCH	15.83	≥ 0.5	PASS
	HCH	15.09	≥ 0.5	PASS
11N20SISO	LCH	17.64	≥ 0.5	PASS
	MCH	16.38	≥ 0.5	PASS
	HCH	15.06	≥ 0.5	PASS
11N40SISO	LCH	36.39	≥ 0.5	PASS
	MCH	36.41	≥ 0.5	PASS
	HCH	35.10	≥ 0.5	PASS

Test Graphs



11B/MCH



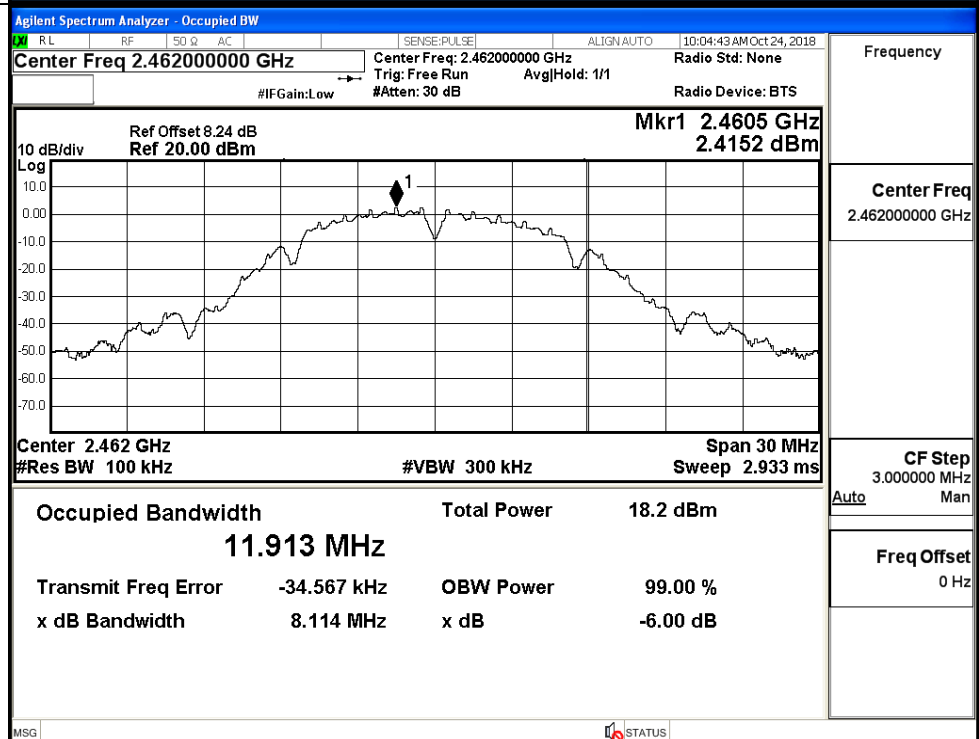
Frequency

Center Freq
2.437000000 GHz

CF Step
3.000000 MHz
Auto Man

Freq Offset
0 Hz

11B/HCH



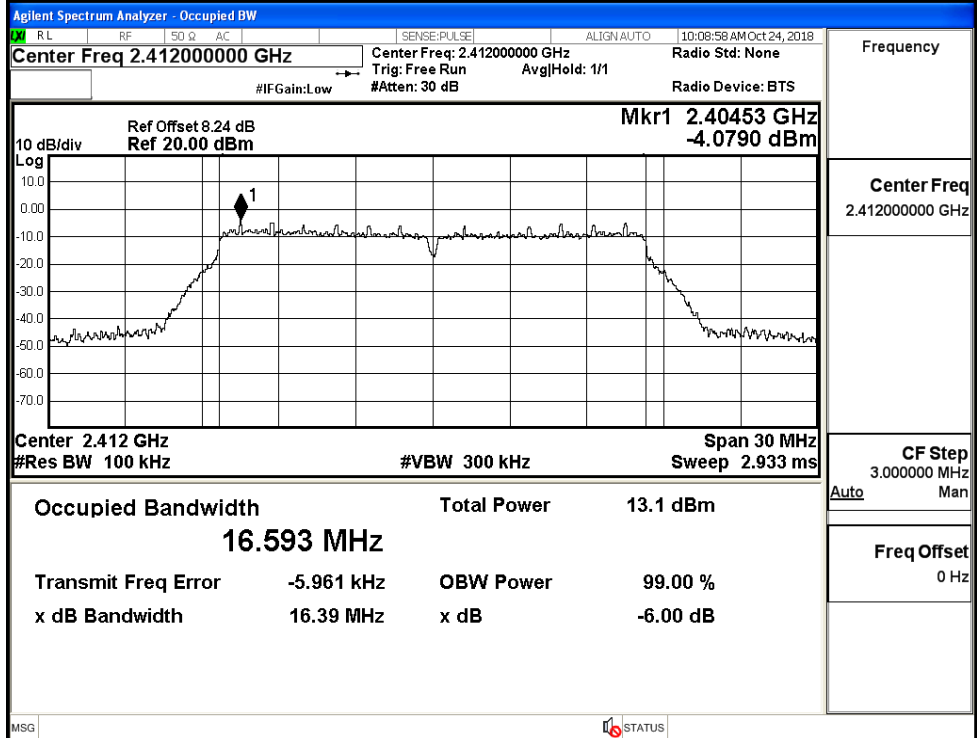
Frequency

Center Freq
2.462000000 GHz

CF Step
3.000000 MHz
Auto Man

Freq Offset
0 Hz

11G/LCH



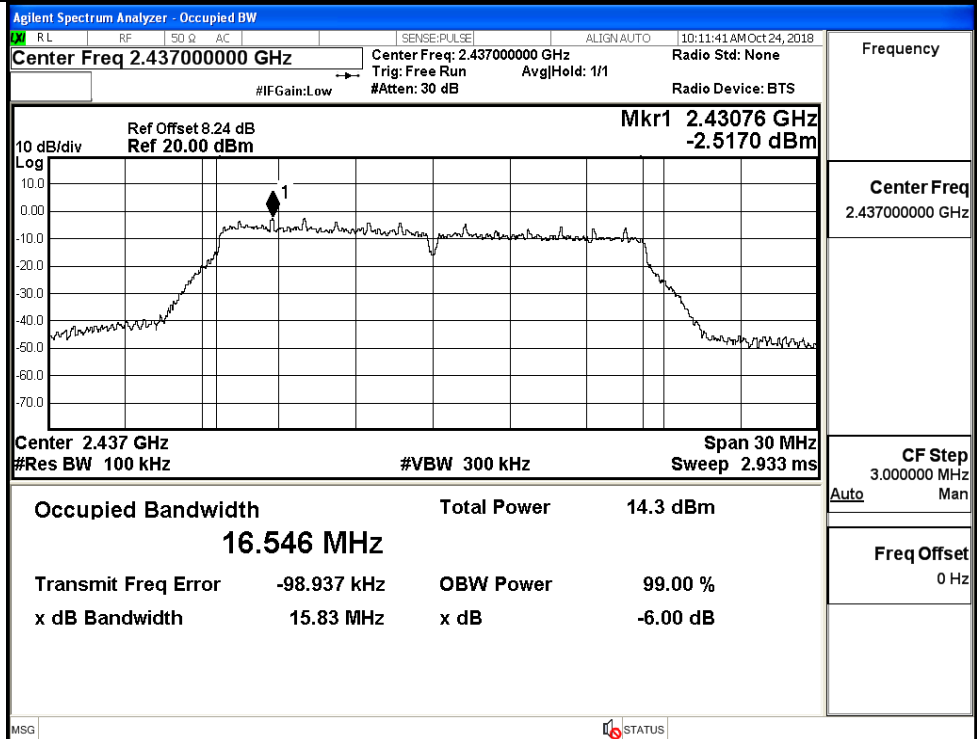
Frequency

Center Freq
2.41200000 GHz

CF Step
3.000000 MHz
Auto Man

Freq Offset
0 Hz

11G/MCH



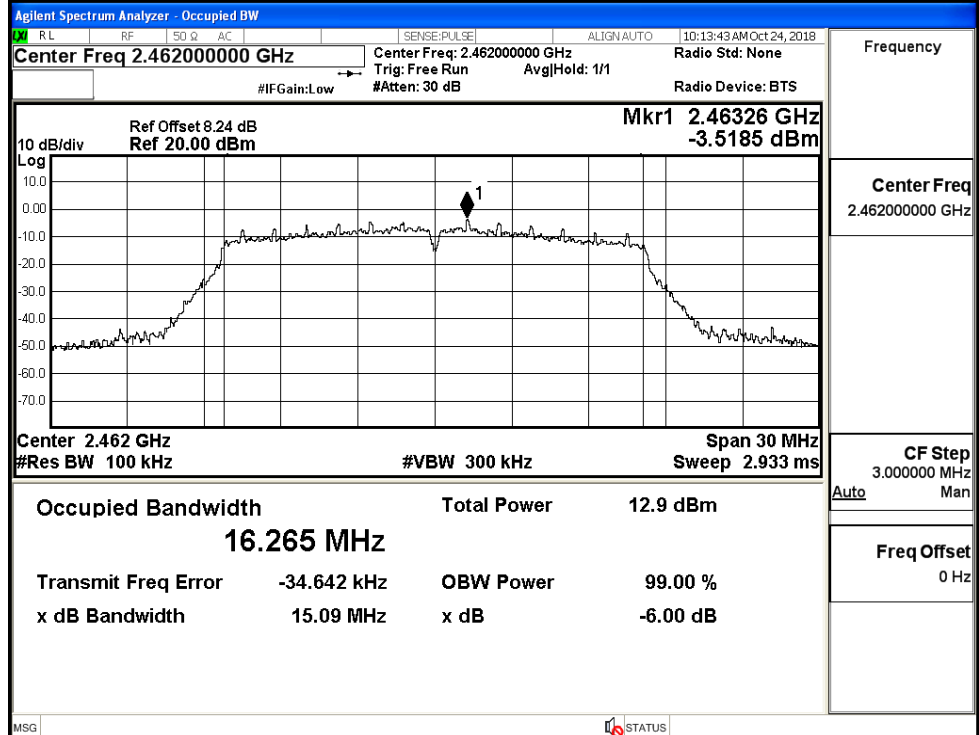
Frequency

Center Freq
2.43700000 GHz

CF Step
3.000000 MHz
Auto Man

Freq Offset
0 Hz

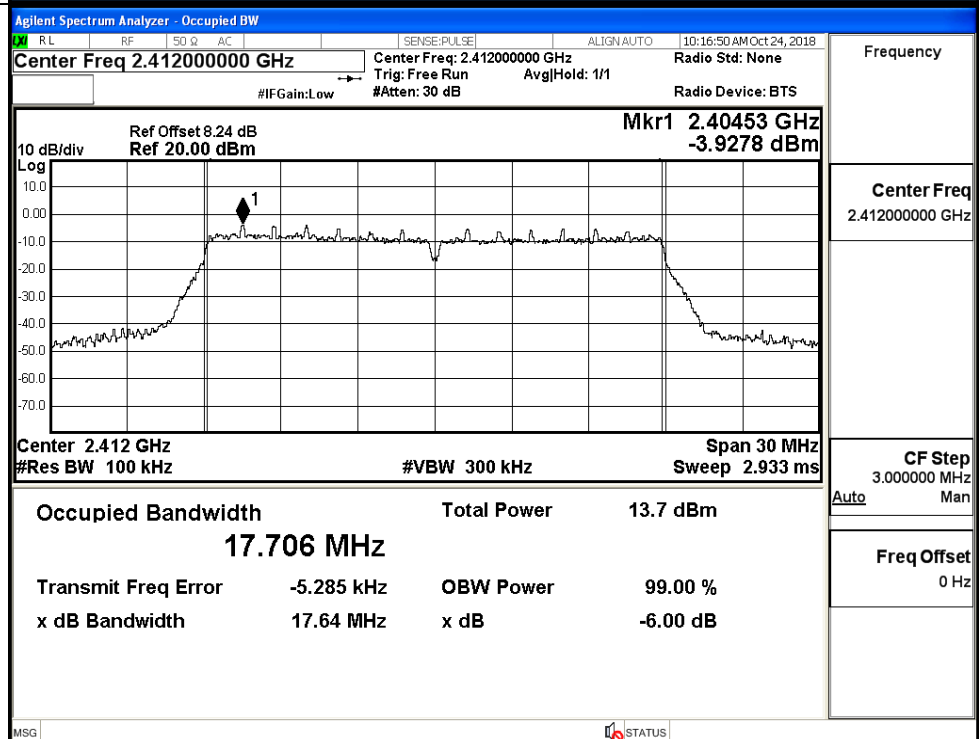
11G/HCH



Frequency

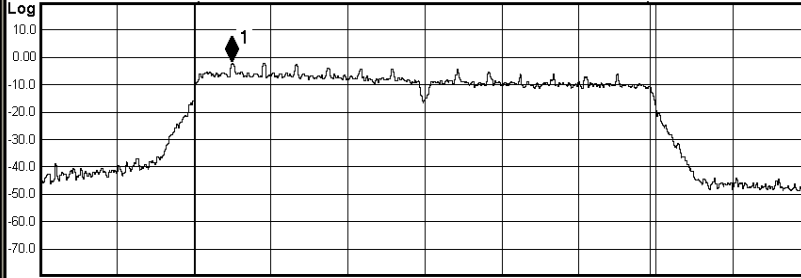
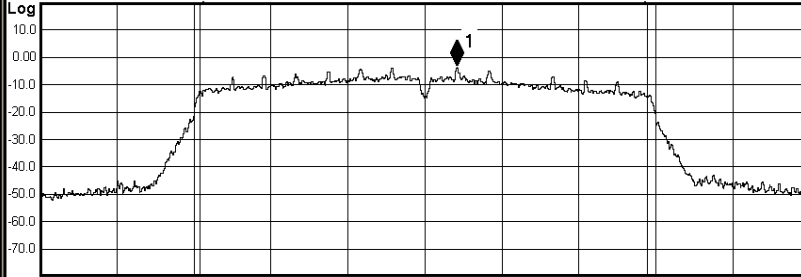
Center Freq
2.462000000 GHzCF Step
3.000000 MHz
Auto ManFreq Offset
0 Hz

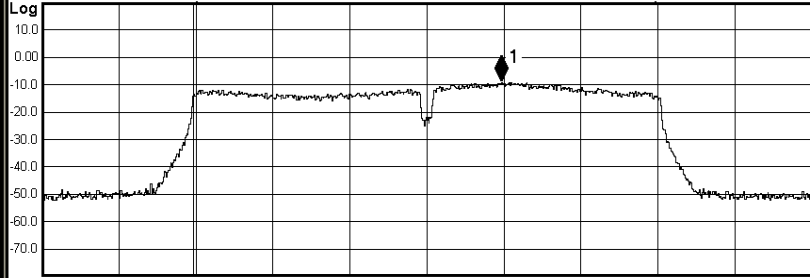
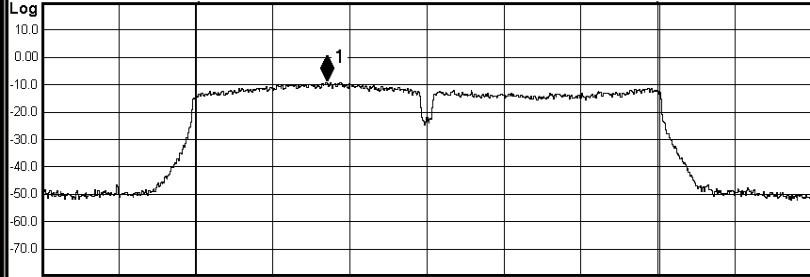
11N20SISO/LCH



Frequency

Center Freq
2.412000000 GHzCF Step
3.000000 MHz
Auto ManFreq Offset
0 Hz

11N20SISO/MCH	Agilent Spectrum Analyzer - Occupied BW RL RF 50 Q AC SENSE:PULSE ALIGN AUTO 10:19:26 AM Oct 24, 2018 Center Freq 2.437000000 GHz Center Freq: 2.437000000 GHz Radio Std: None #IFGain:Low Trig: Free Run Avg/Hold:> 1/1 Radio Device: BTS #Atten: 30 dB 10 dB/div Ref Offset 8.24 dB Ref 20.00 dBm Mkr1 2.4295 GHz -2.1157 dBm  Center 2.437 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth 17.652 MHz Total Power 14.5 dBm Transmit Freq Error -68.341 kHz OBW Power 99.00 % x dB Bandwidth 16.38 MHz x dB -6.00 dB MSG STATUS	Frequency Center Freq 2.437000000 GHz CF Step 3.000000 MHz Auto Man Freq Offset 0 Hz
	11N20SISO/HCH	Agilent Spectrum Analyzer - Occupied BW RL RF 50 Q AC SENSE:PULSE ALIGN AUTO 10:21:18 AM Oct 24, 2018 Center Freq 2.462000000 GHz Center Freq: 2.462000000 GHz Radio Std: None #IFGain:Low Trig: Free Run Avg/Hold: 1/1 Radio Device: BTS #Atten: 30 dB 10 dB/div Ref Offset 8.24 dB Ref 20.00 dBm Mkr1 2.46326 GHz -3.5169 dBm  Center 2.462 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth 17.399 MHz Total Power 12.9 dBm Transmit Freq Error -41.517 kHz OBW Power 99.00 % x dB Bandwidth 15.06 MHz x dB -6.00 dB MSG STATUS

11N40SISO/LCH	Agilent Spectrum Analyzer - Occupied BW RL RF 50 Q AC SENSE:PULSE ALIGN AUTO 10:24:07 AM Oct 24, 2018 Center Freq 2.42200000 GHz Center Freq: 2.422000000 GHz Radio Std: None #IFGain:Low Trig: Free Run Avg Hold: 1/1 Radio Device: BTS Ref Offset 8.24 dB Ref 20.00 dBm Mkr1 2.42782 GHz -9.1272 dBm  Center 2.422 GHz #Res BW 100 kHz #VBW 300 kHz Span 60 MHz Sweep 5.8 ms Occupied Bandwidth 36.018 MHz Total Power 12.9 dBm Transmit Freq Error -44.959 kHz OBW Power 99.00 % x dB Bandwidth 36.39 MHz x dB -6.00 dB MSG STATUS	Frequency Center Freq 2.422000000 GHz CF Step 6.000000 MHz Auto Man Freq Offset 0 Hz	
	11N40SISO/MCH	Agilent Spectrum Analyzer - Occupied BW RL RF 50 Q AC SENSE:PULSE ALIGN AUTO 10:33:19 AM Oct 24, 2018 Center Freq 2.437000000 GHz Center Freq: 2.437000000 GHz Radio Std: None #IFGain:Low Trig: Free Run Avg Hold: 1/1 Radio Device: BTS Ref Offset 8.24 dB Ref 20.00 dBm Mkr1 2.4292 GHz -9.1223 dBm  Center 2.437 GHz #Res BW 100 kHz #VBW 300 kHz Span 60 MHz Sweep 5.8 ms Occupied Bandwidth 36.102 MHz Total Power 13.0 dBm Transmit Freq Error 71.348 kHz OBW Power 99.00 % x dB Bandwidth 36.41 MHz x dB -6.00 dB MSG STATUS	Frequency Center Freq 2.437000000 GHz CF Step 6.000000 MHz Auto Man Freq Offset 0 Hz

Center Freq 2.437000000 GHz

Center Freq: 2.437000000 GHz

Radio Std: None

#IF Gain: Low

Trig: Free Run

Avg/Hold: 1/1

Radio Device: BTS

Ref Offset 8.24 dB

Ref 20.00 dBm

Mkr1 2.4292 GHz

-9.1223 dBm

Center 2.437 GHz

#Res BW 100 kHz

#VBW 300 kHz

Span 60 MHz

Sweep 5.8 ms

Occupied Bandwidth

36.102 MHz

Total Power

13.0 dBm

Transmit Freq Error

71.348 kHz

OBW Power

99.00 %

x dB Bandwidth

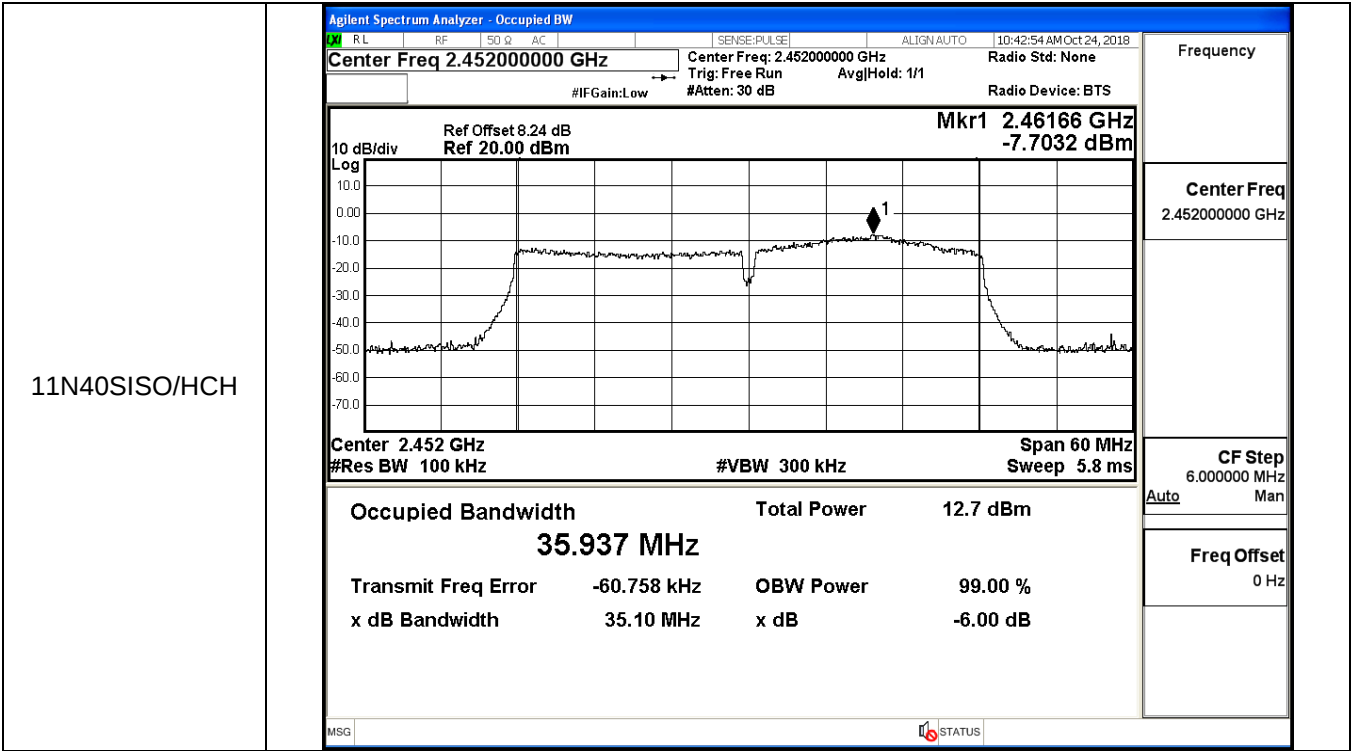
36.41 MHz

x dB

-6.00 dB

MSG

STATUS

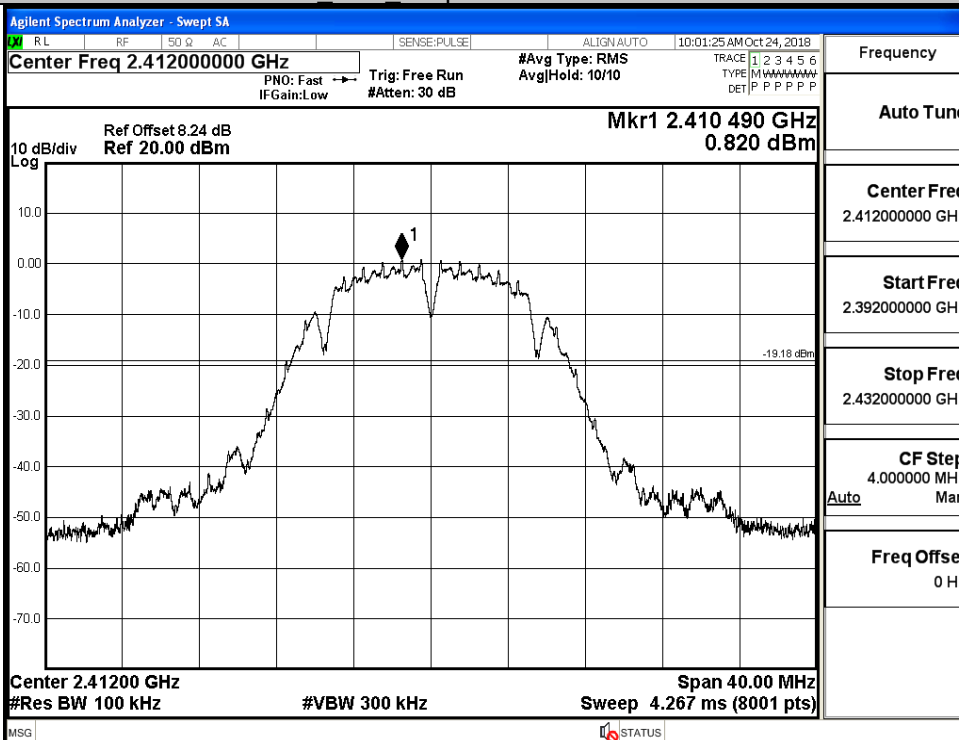


A.5 RF Conducted Spurious Emissions

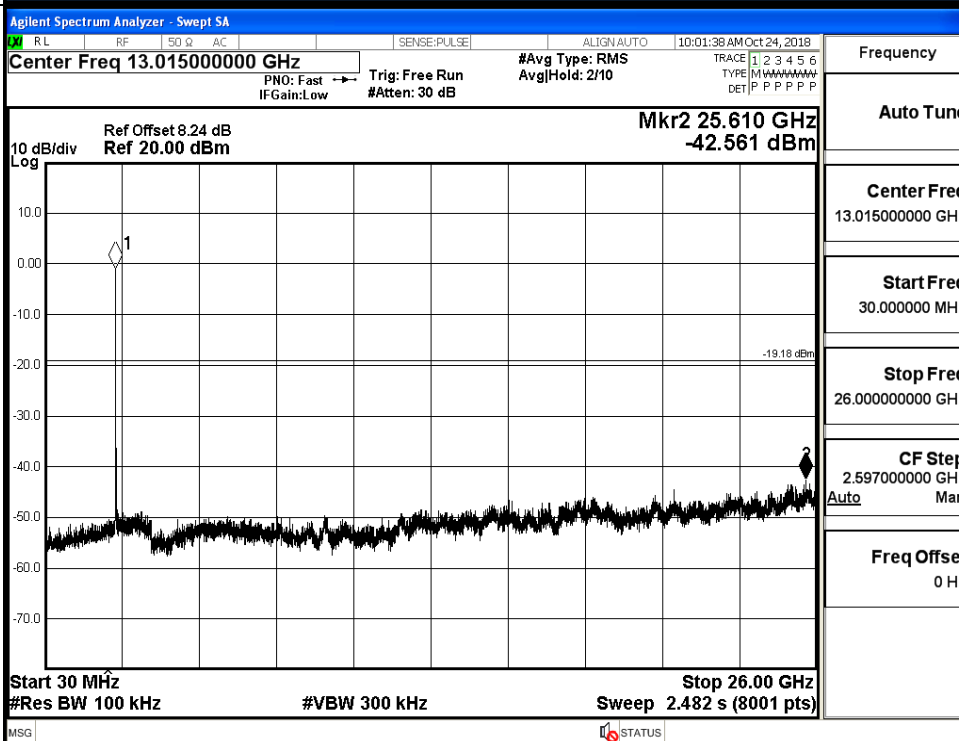
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
11B	LCH	0.82	-42.561	-19.180	PASS
	MCH	1.939	-42.929	-18.061	PASS
	HCH	2.361	-43.287	-17.639	PASS
11G	LCH	-4.417	-42.902	-24.417	PASS
	MCH	-3.454	-43.367	-23.454	PASS
	HCH	-2.93	-44.850	-22.930	PASS
11N20SISO	LCH	-4.002	-44.136	-24.002	PASS
	MCH	-1.995	-43.628	-21.995	PASS
	HCH	-3.556	-42.874	-23.556	PASS
11N40SISO	LCH	-9.466	-43.463	-29.466	PASS
	MCH	-9.245	-40.677	-29.245	PASS
	HCH	-7.864	-43.573	-27.864	PASS

11B LCH Graphs

Pref/11B/LCH

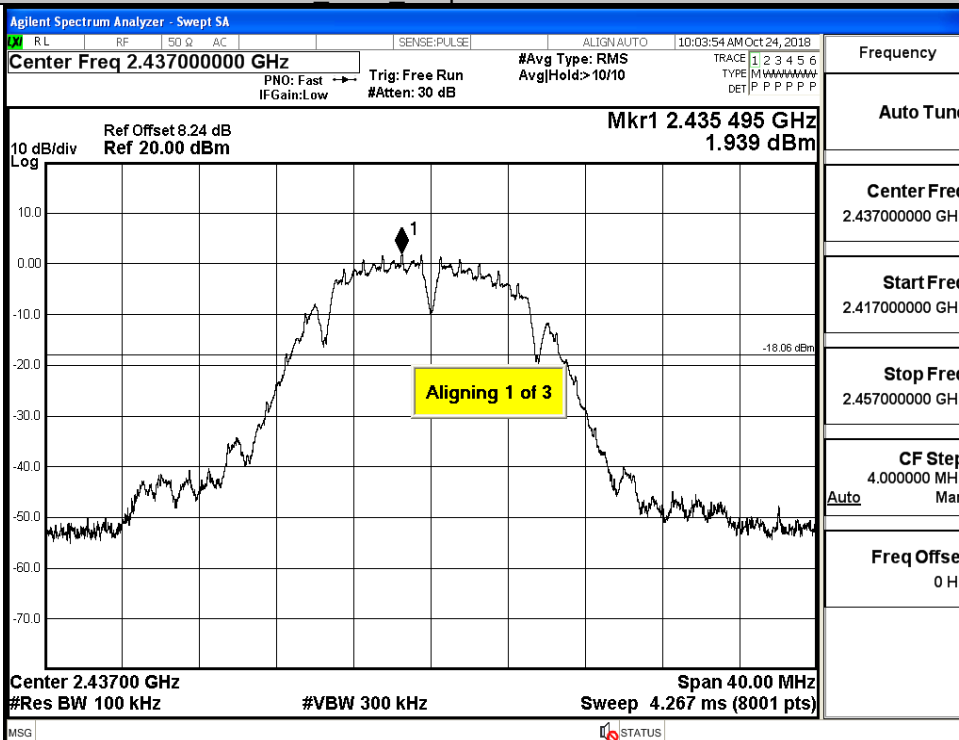


Puw/11B/LCH

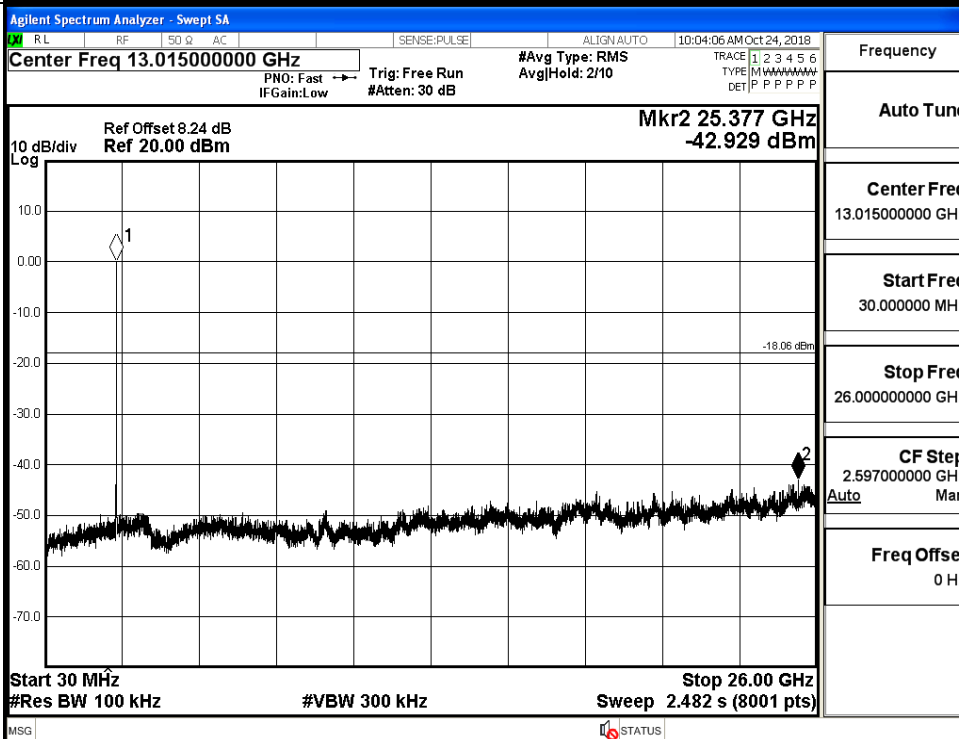


11B MCH Graphs

Pref/11B/MCH

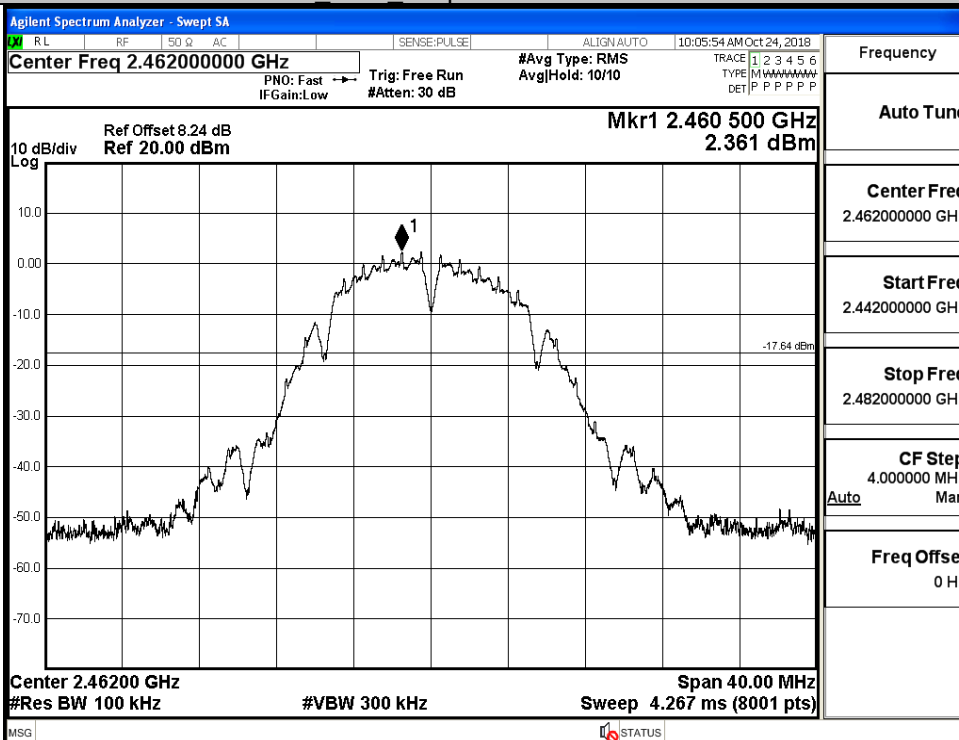


Puw/11B/MCH

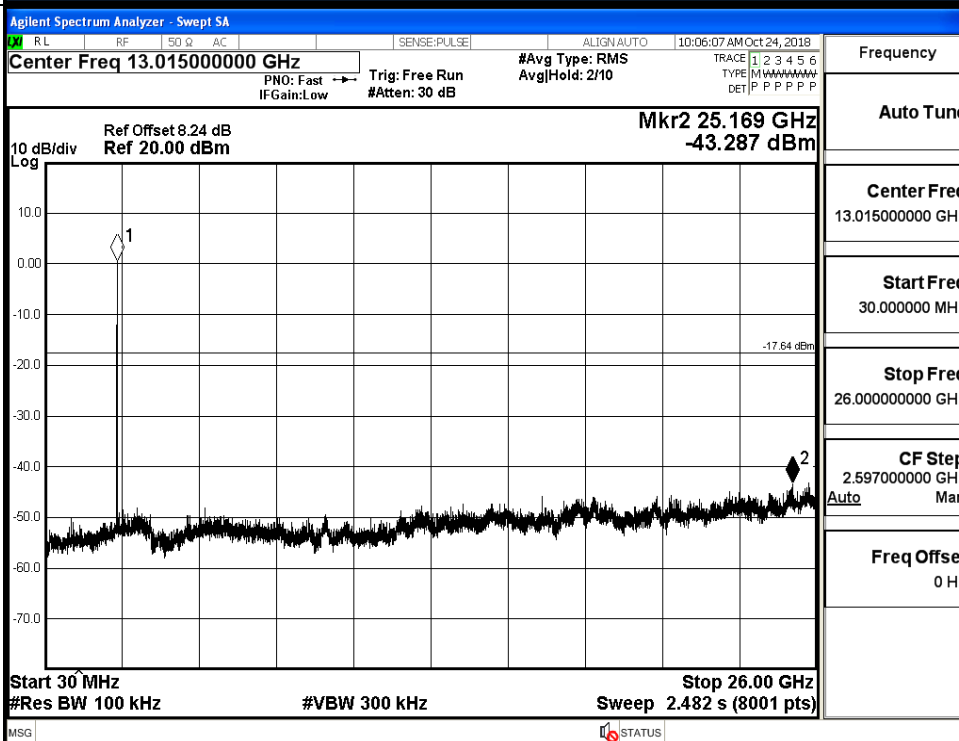


11B HCH Graphs

Pref/11B/HCH

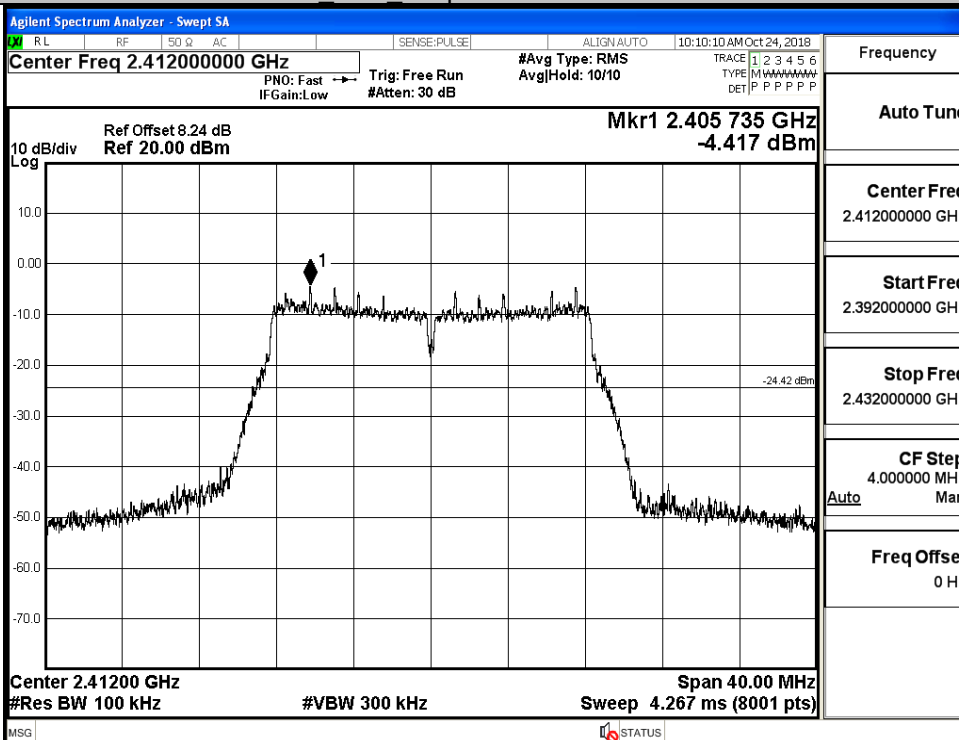


Puw/11B/HCH

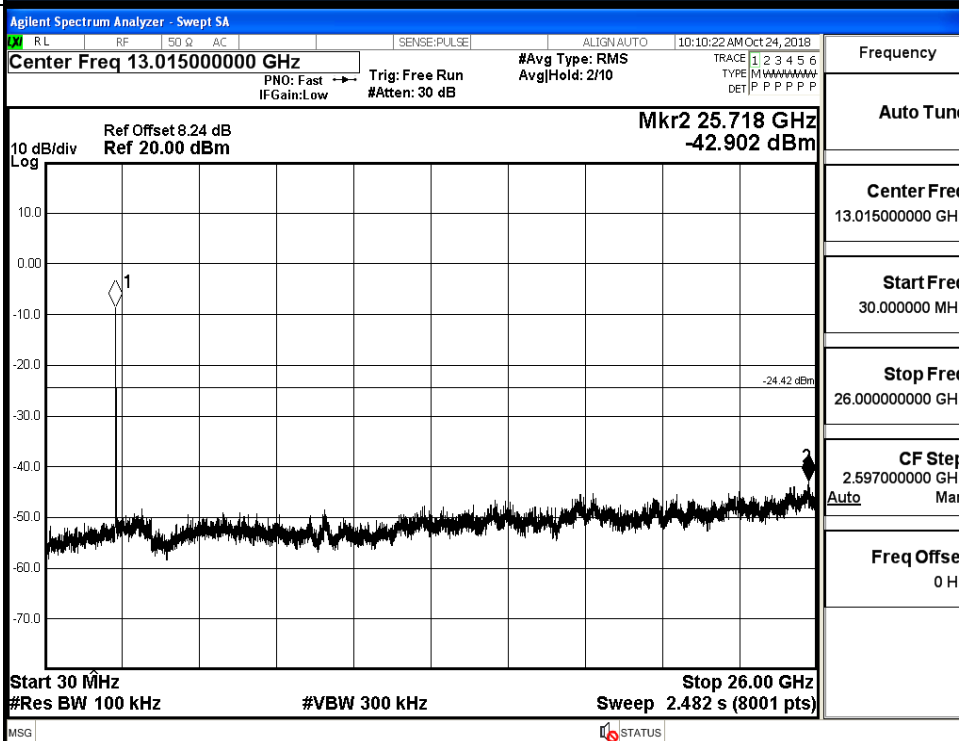


11G LCH Graphs

Pref/11G/LCH

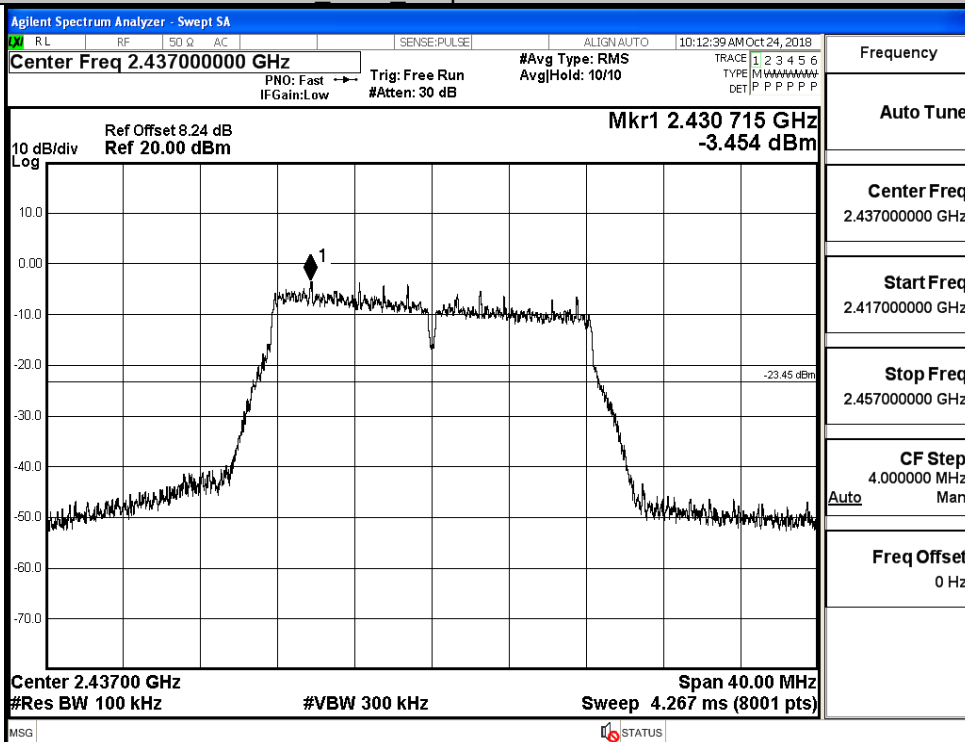


Puw/11G/LCH

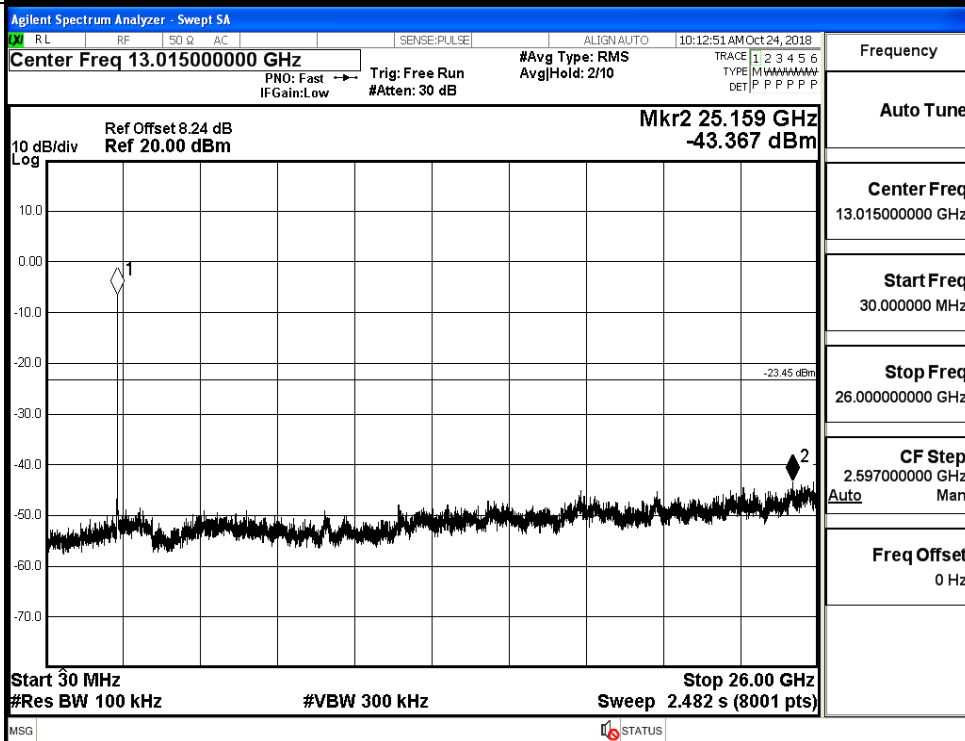


11G MCH Graphs

Pref/11G/MCH

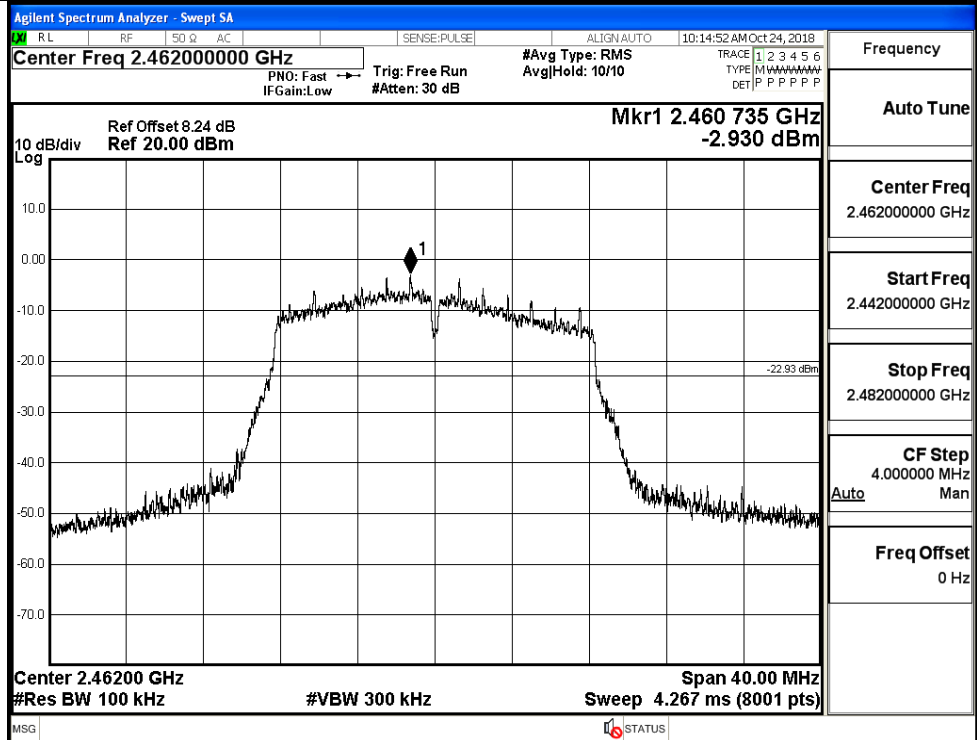


Puw/11G/MCH

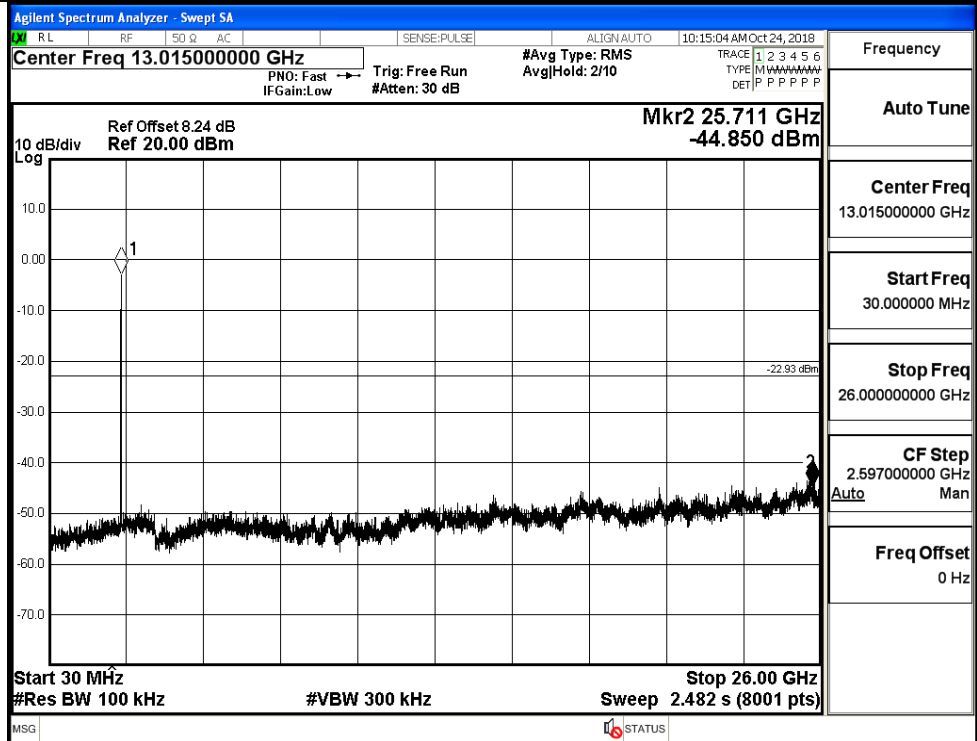


11G HCH Graphs

Pref/11G/HCH

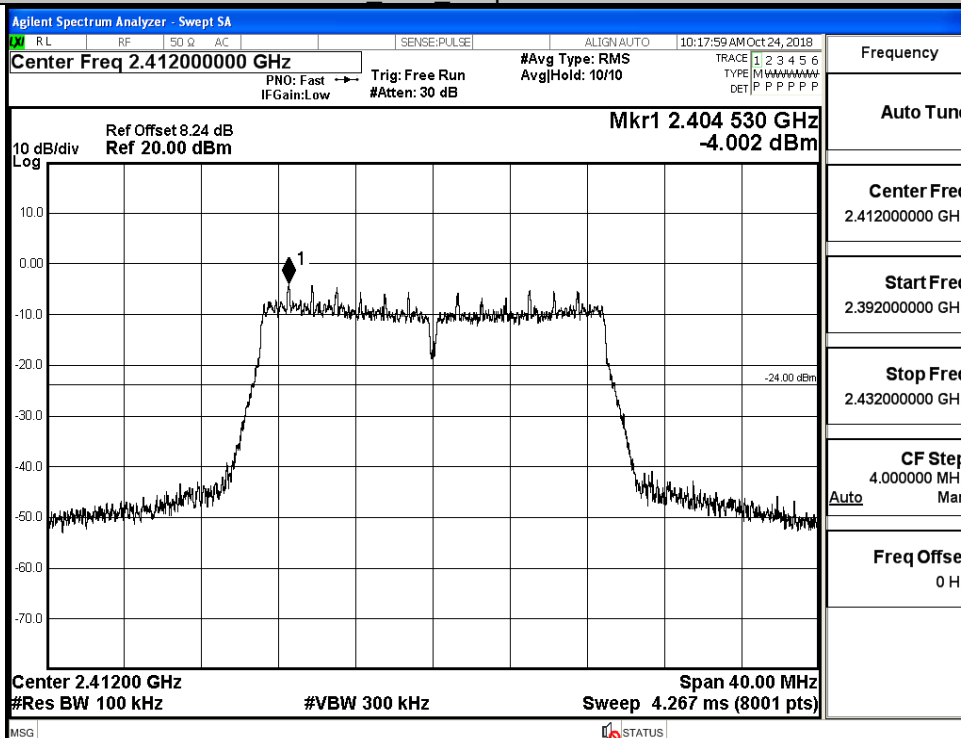


Puw/11G/HCH

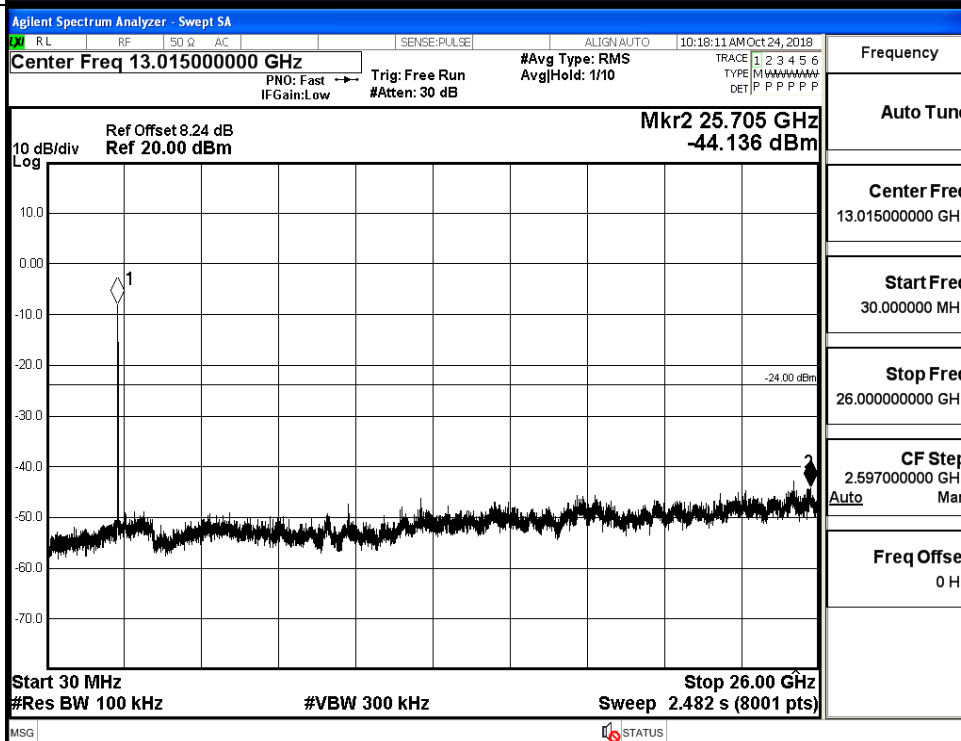


11N20SISO LCH Graphs

Pref/11N20SIS
O/LCH

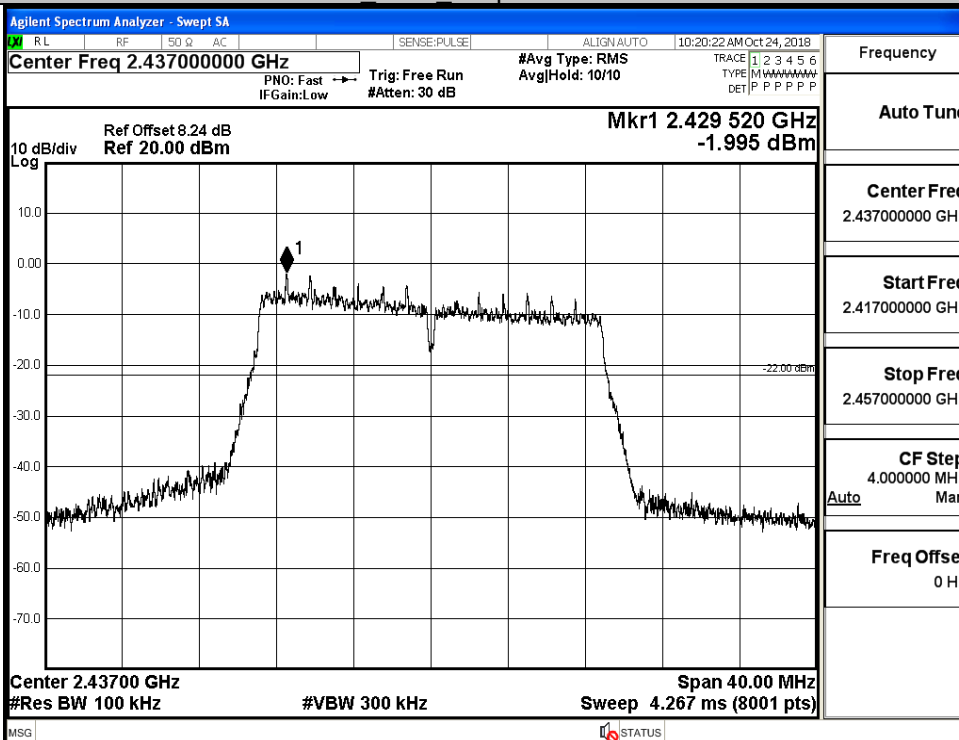


Puw/11N20
SISO/LCH

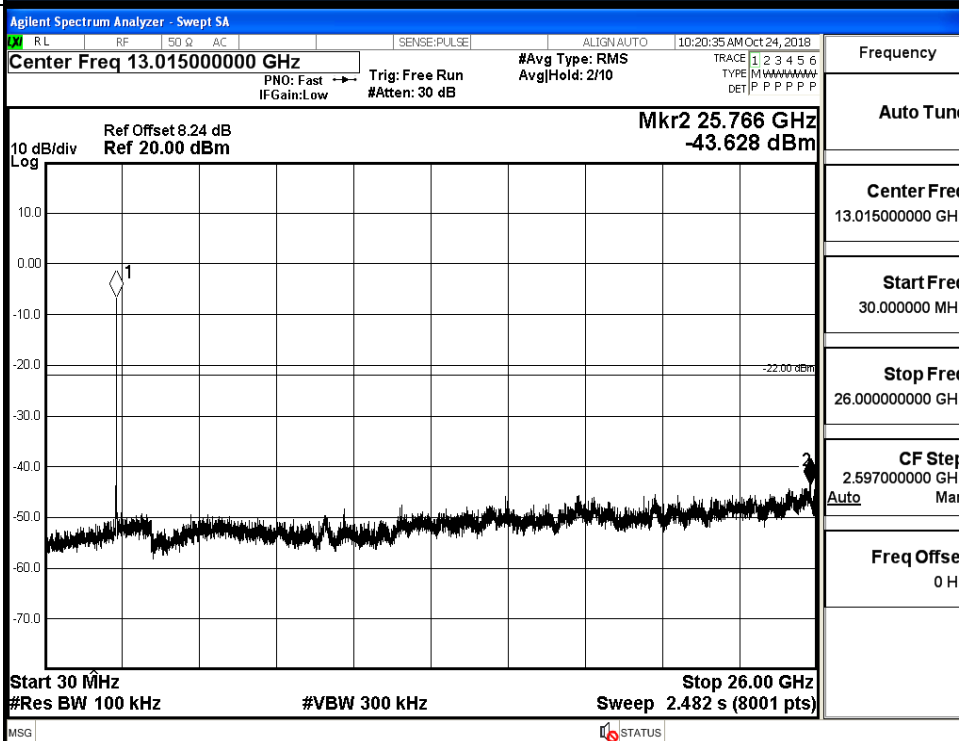


11N20SISO MCH Graphs

Pref/11N20
SISO/MCH

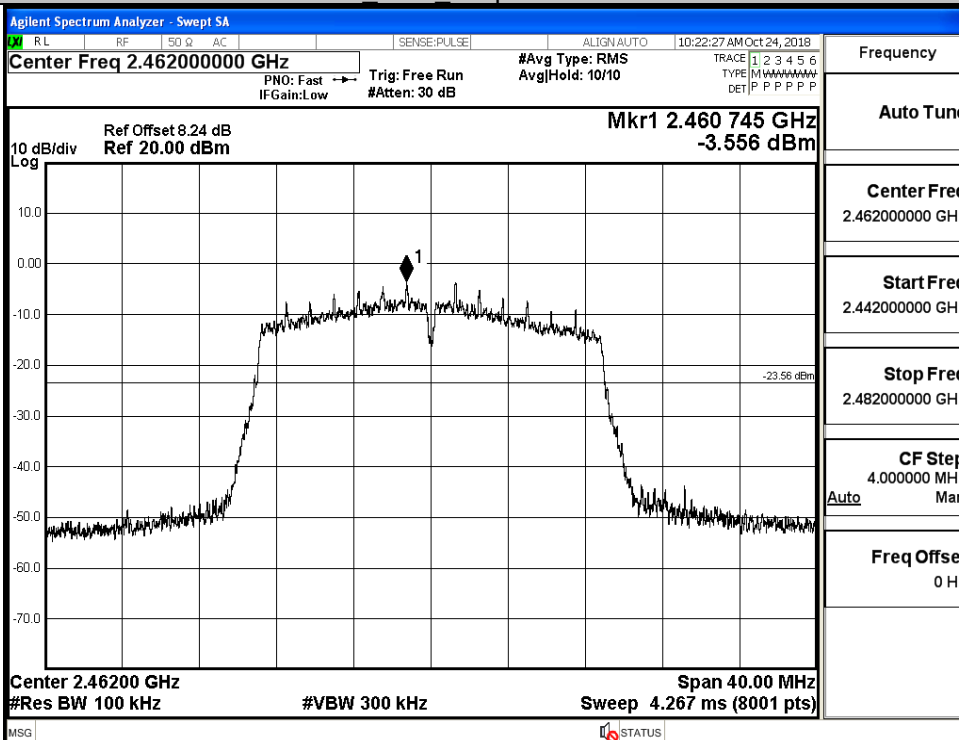


Puw/11N20
SISO/MCH

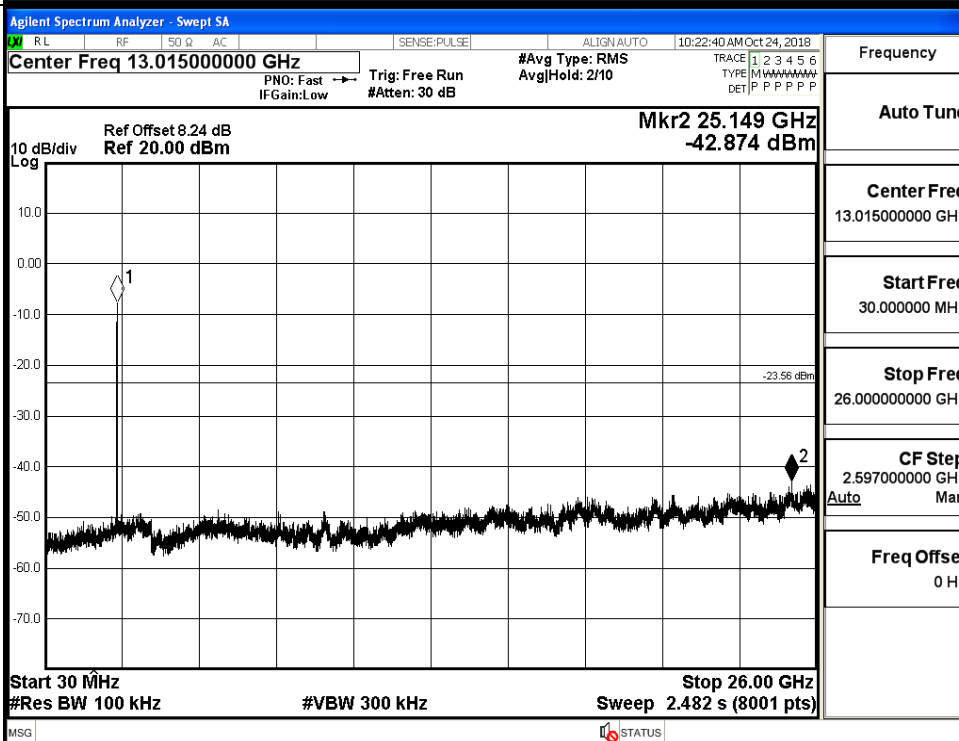


11N20SISO HCH Graphs

Pref/11N20
SISO/HCH

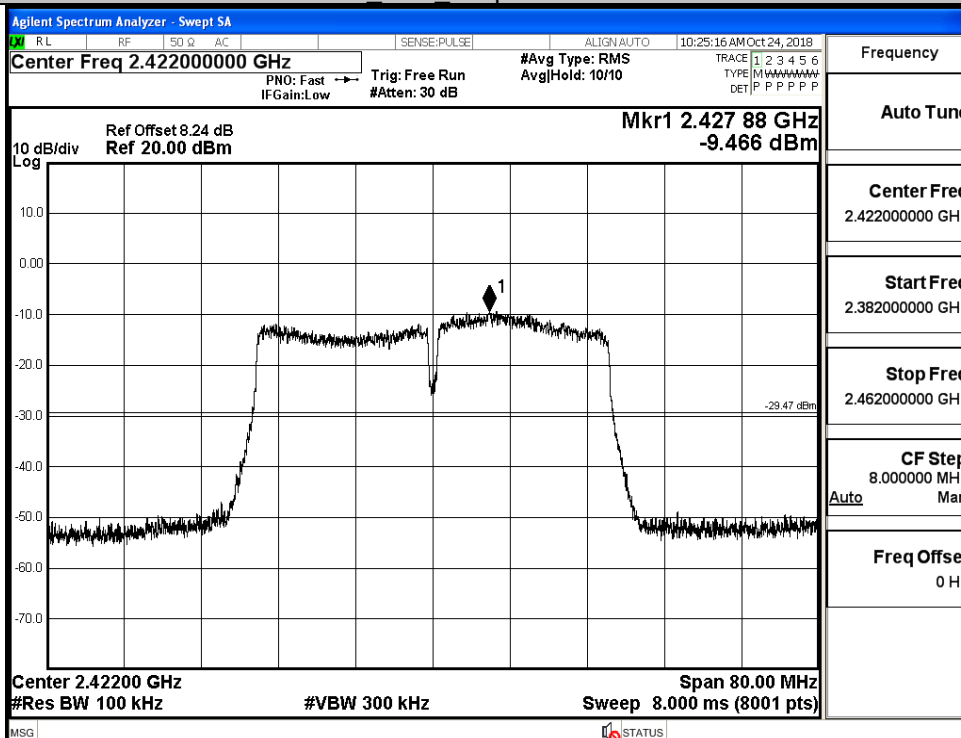


Puw/11N20
SISO/HCH

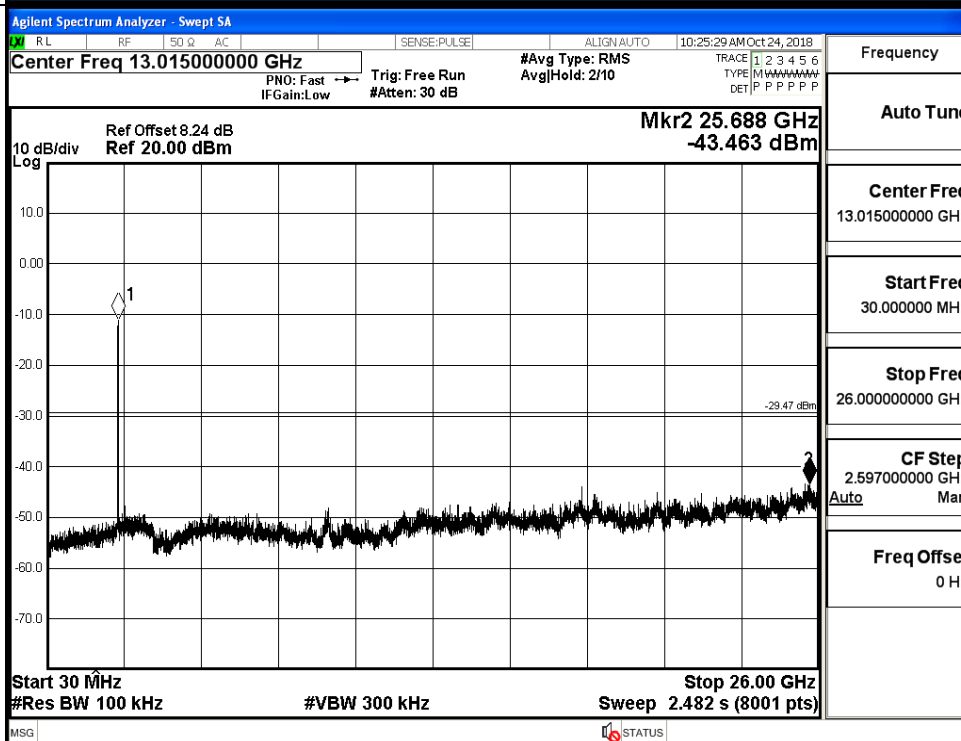


11N40SISO LCH Graphs

Pref/11N40
SISO/LCH

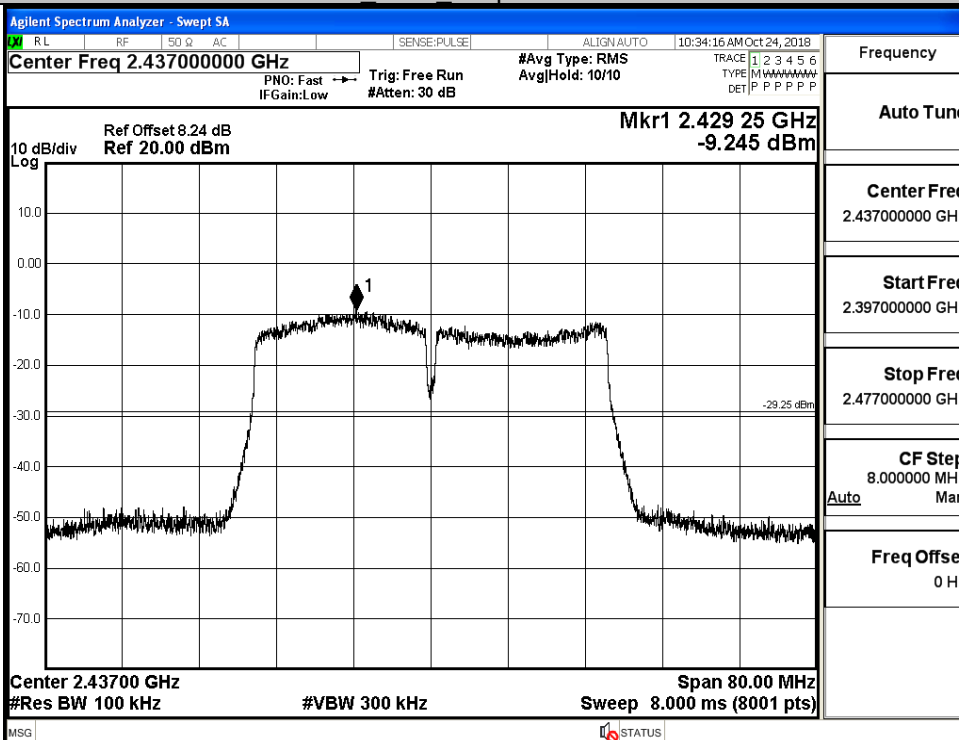


Puw/11N40
SISO/LCH

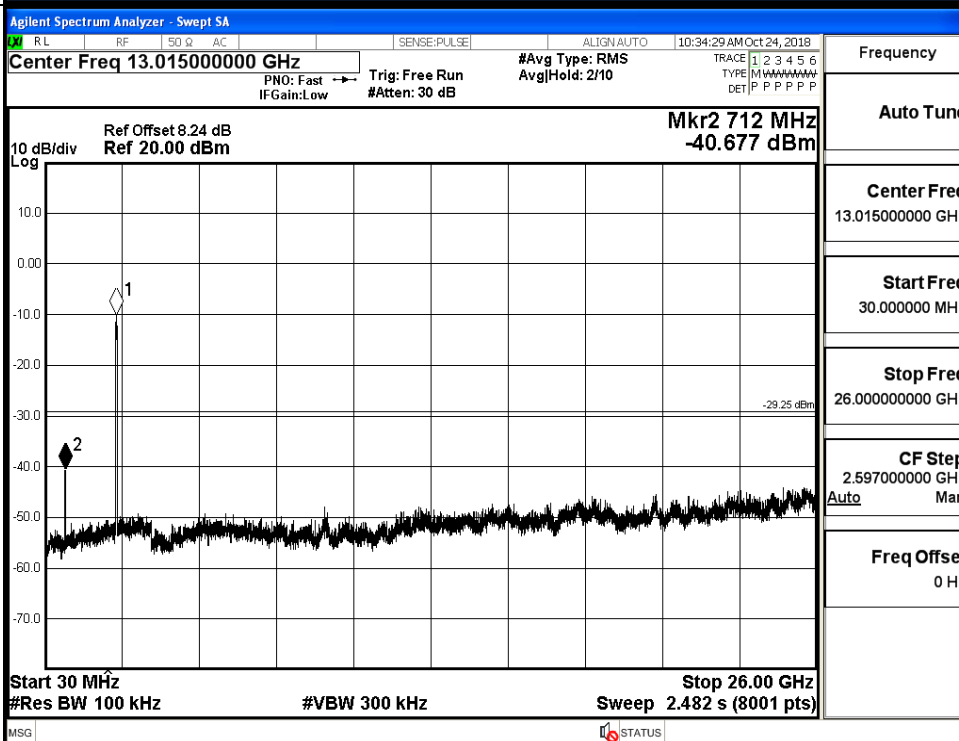


11N40SISO MCH Graphs

Pref/11N40
SISO/MCH

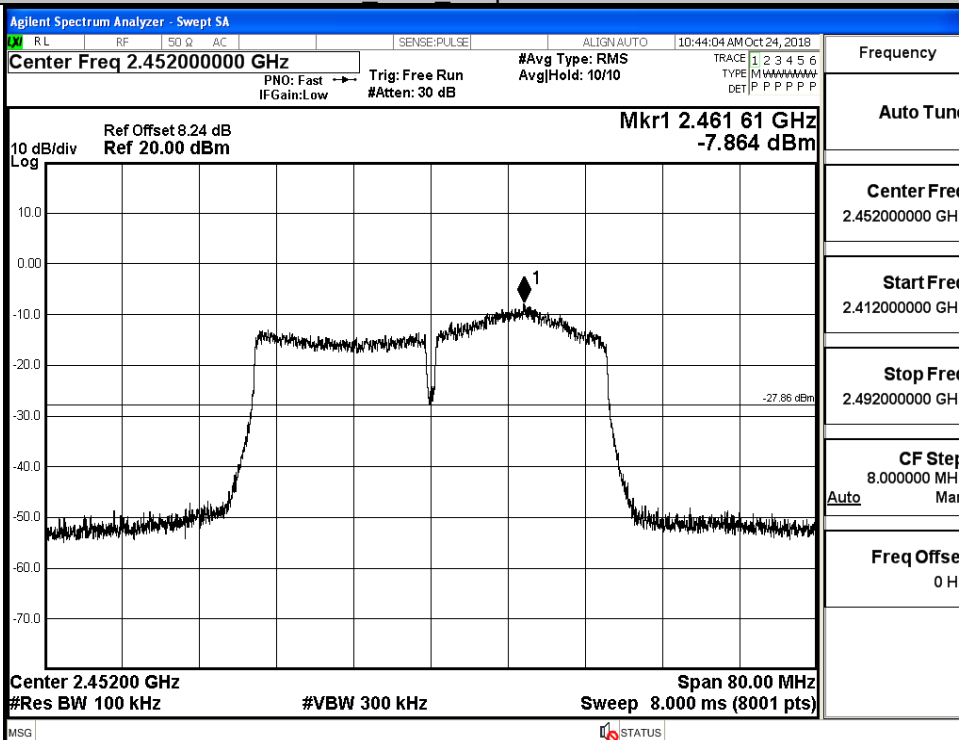


Puw/11N40
SISO/MCH

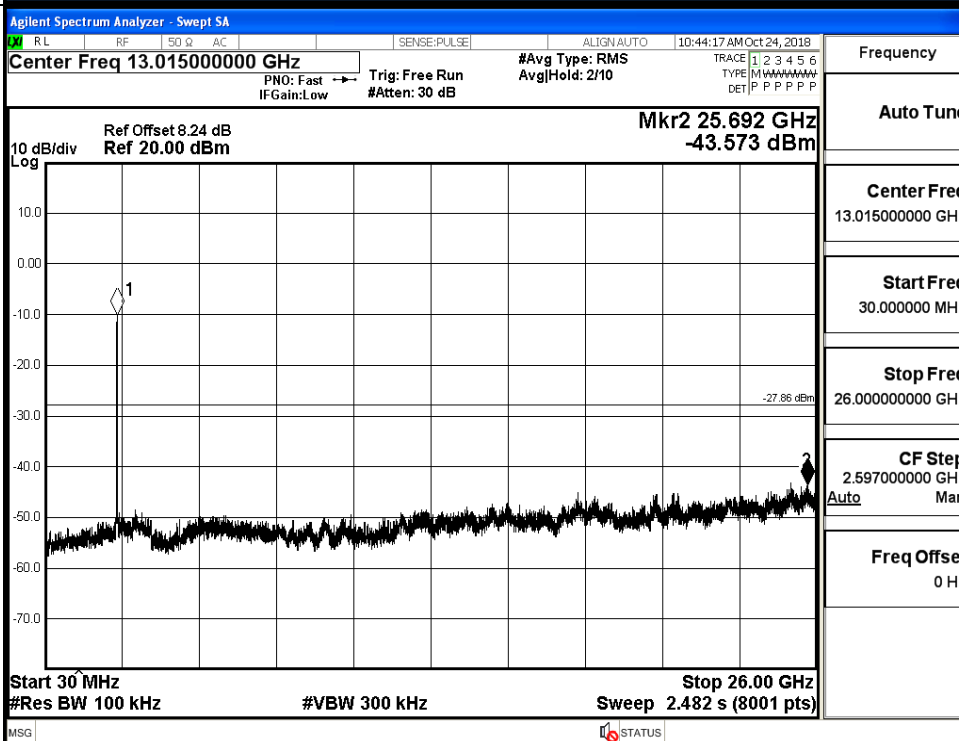


11N40SISO HCH Graphs

Pref/11N40
SISO/HCH

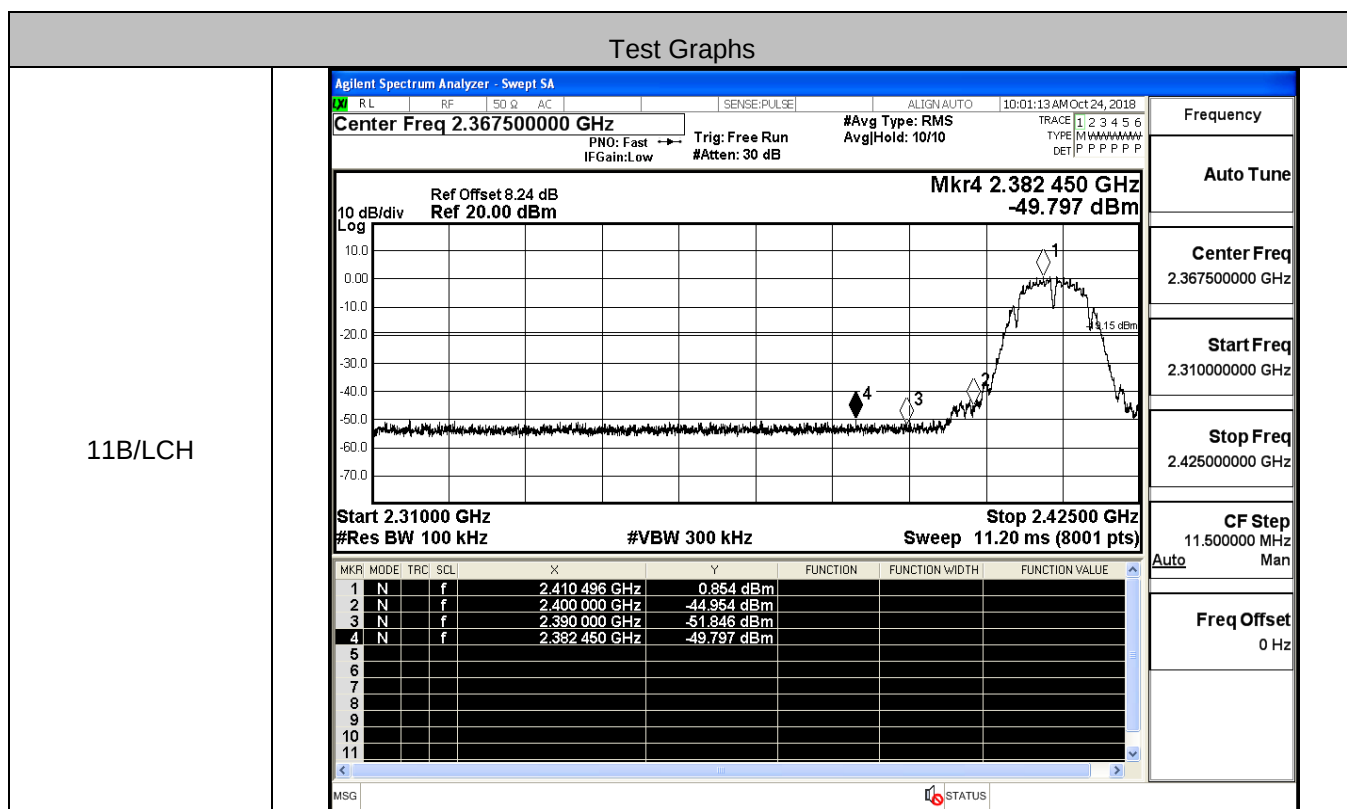


Puw/11N40
SISO/HCH

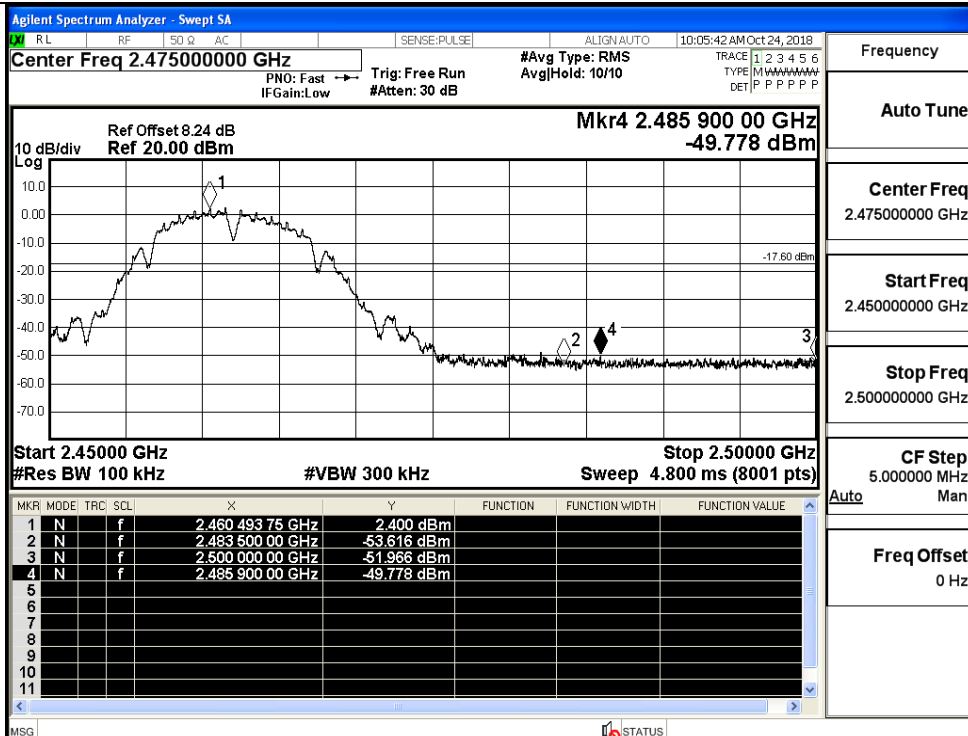


A.6 Band-edge for RF Conducted Emissions

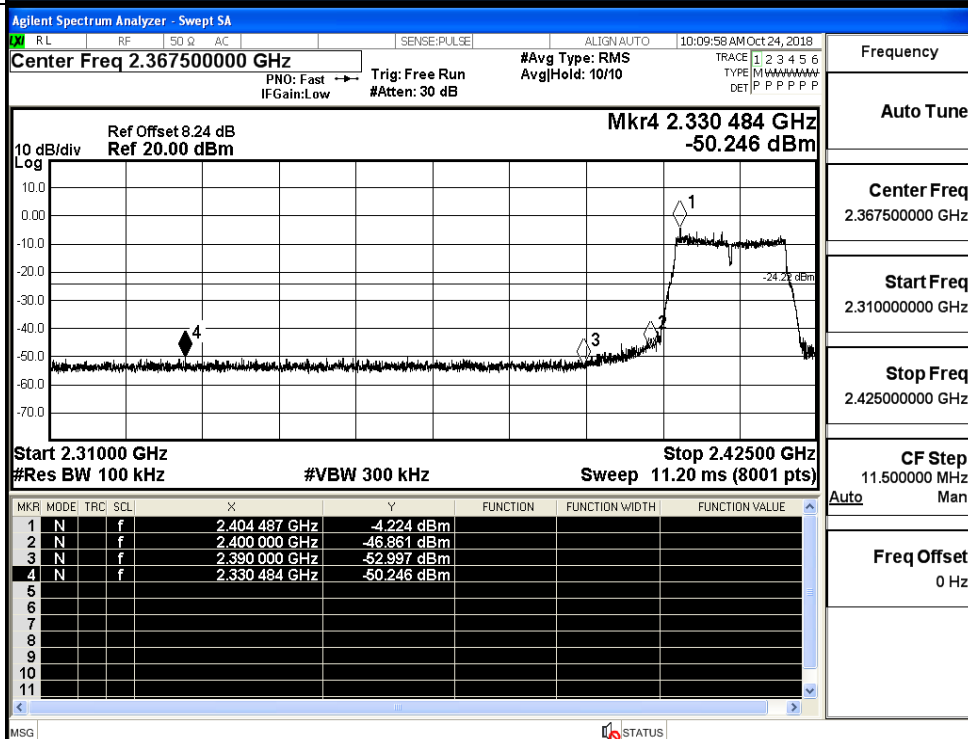
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
11B	LCH	0.854	-49.797	-19.15	PASS
	HCH	2.400	-49.778	-17.6	PASS
11G	LCH	-4.224	-50.246	-24.22	PASS
	HCH	-3.065	-49.955	-23.07	PASS
11N20SISO	LCH	-4.032	-49.367	-24.03	PASS
	HCH	-3.526	-50.293	-23.53	PASS
11N40SISO	LCH	-9.362	-50.483	-29.36	PASS
	HCH	-8.178	-47.705	-28.18	PASS



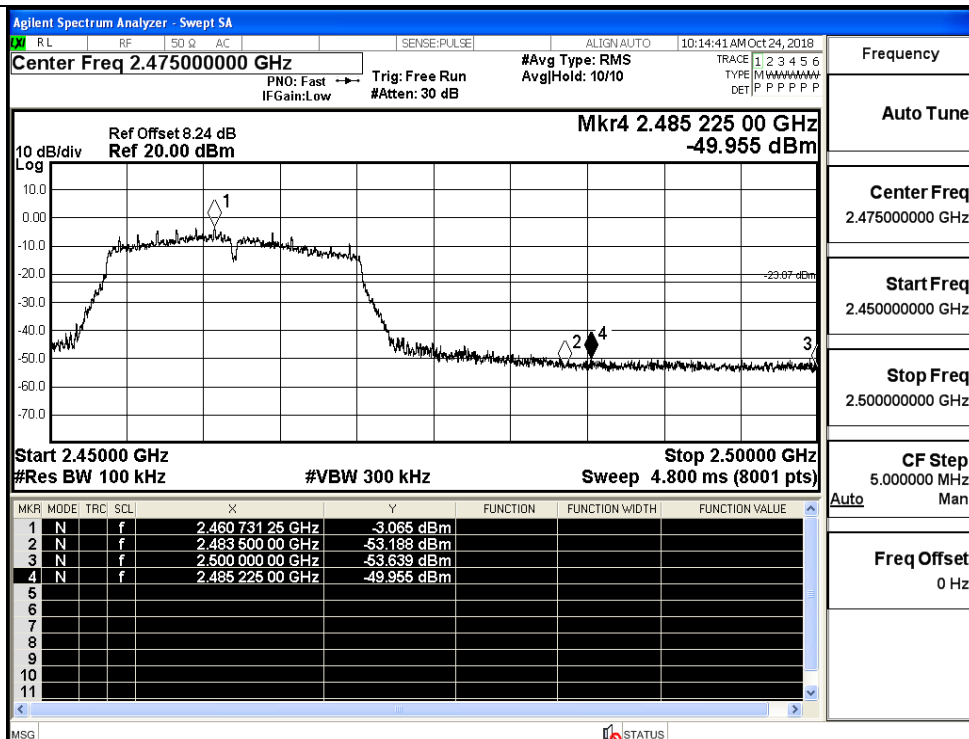
11B/HCH



11G/LCH



11G/HCH



Frequency

Auto Tune

Center Freq
2.475000000 GHz

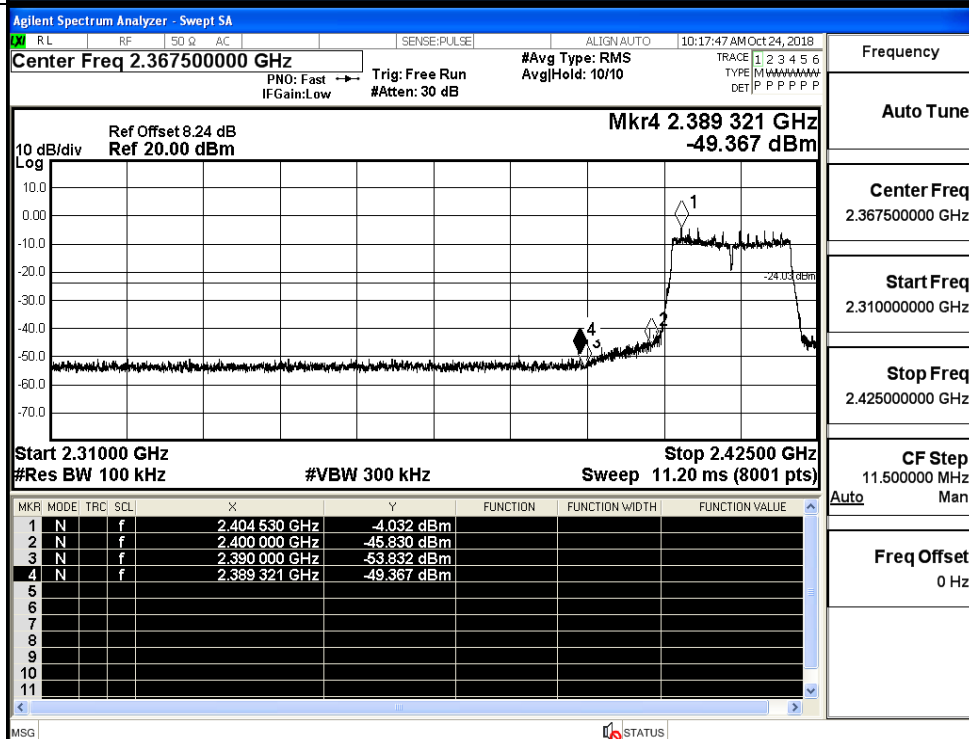
Start Freq
2.450000000 GHz

Stop Freq
2.500000000 GHz

CF Step
5.000000 MHz
Man

Freq Offset
0 Hz

11N20SISO/LCH



Frequency

Auto Tune

Center Freq
2.367500000 GHz

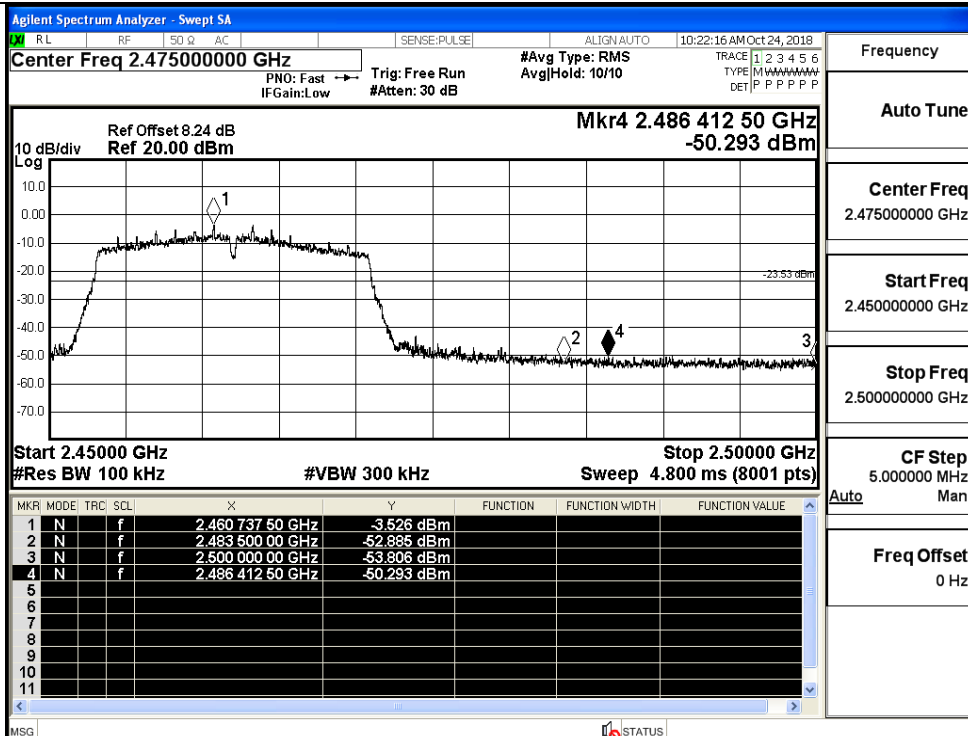
Start Freq
2.310000000 GHz

Stop Freq
2.425000000 GHz

CF Step
11.500000 MHz
Man

Freq Offset
0 Hz

11N20SISO/HCH



Frequency

Auto Tune

Center Freq
2.475000000 GHz

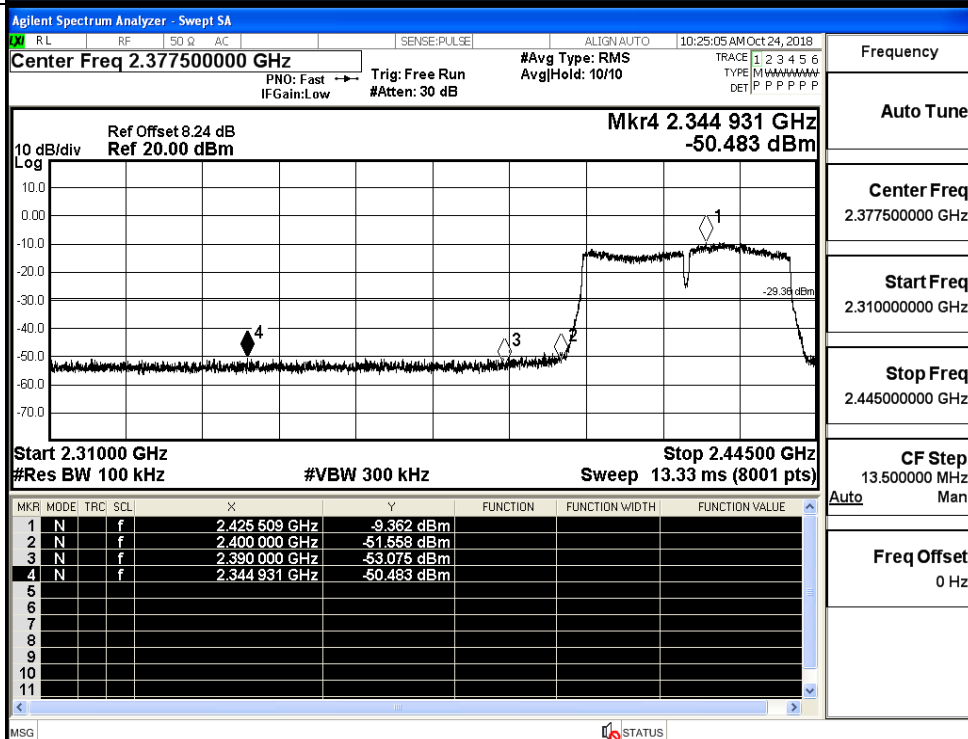
Start Freq
2.450000000 GHz

Stop Freq
2.500000000 GHz

CF Step
5.000000 MHz
Man

Freq Offset
0 Hz

11N40SISO/LCH



Frequency

Auto Tune

Center Freq
2.377500000 GHz

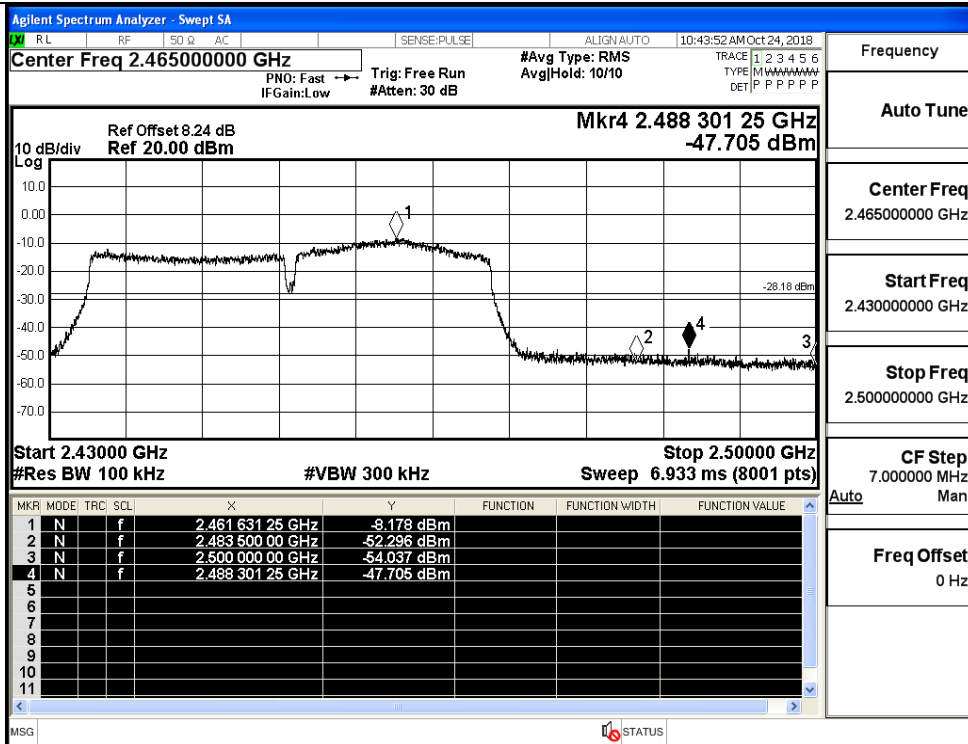
Start Freq
2.310000000 GHz

Stop Freq
2.445000000 GHz

CF Step
13.500000 MHz
Man

Freq Offset
0 Hz

11N40SISO/HCH

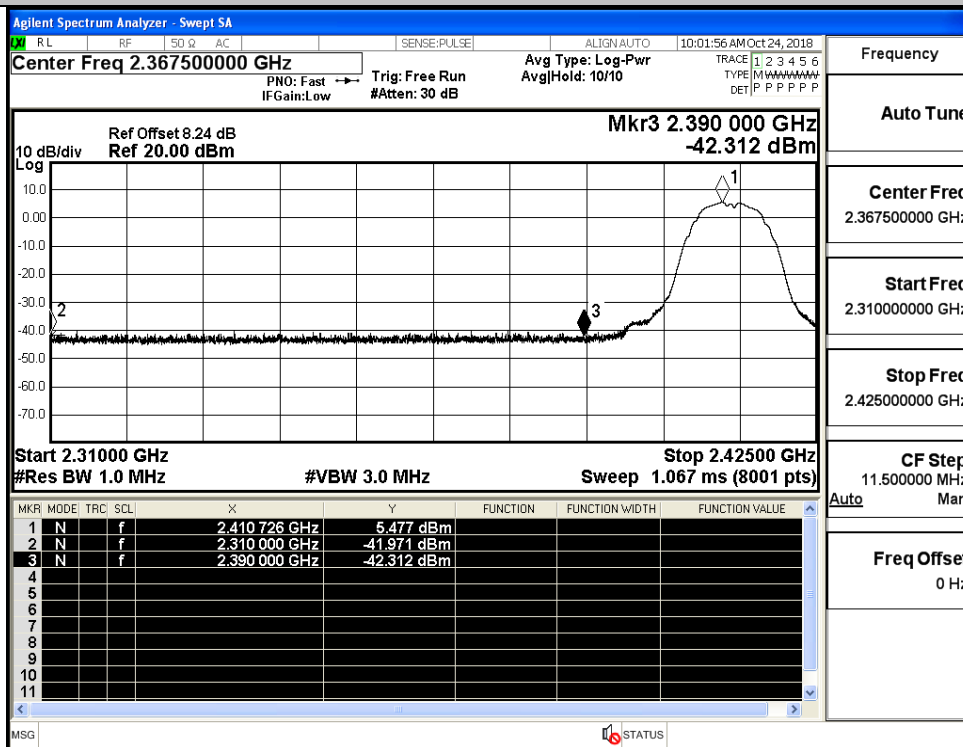


A.7 Restrict-band band-edge measurements

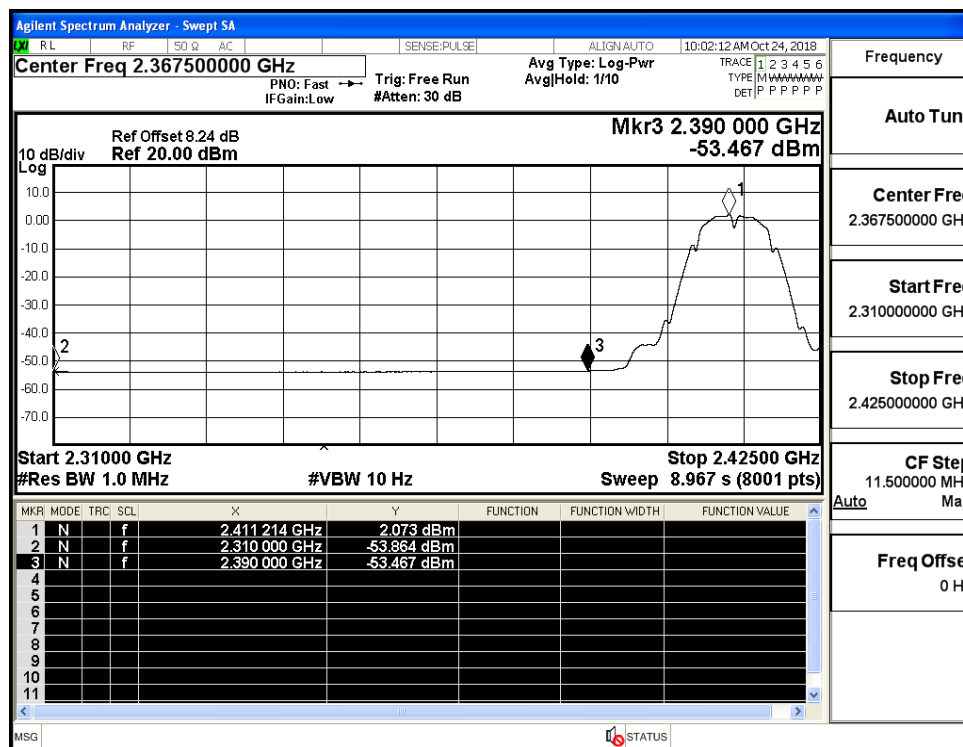
Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
11B	2412	Ant1	2310.0	-41.971	3.00	0	56.257	PEAK	74	PASS
	2412	Ant1	2310.0	-53.864	3.00	0	44.364	AV	54	PASS
	2412	Ant1	2390.0	-42.312	3.00	0	55.916	PEAK	74	PASS
	2412	Ant1	2390.0	-53.467	3.00	0	44.761	AV	54	PASS
	2462	Ant1	2483.5	-42.901	3.00	0	55.327	PEAK	74	PASS
	2462	Ant1	2483.5	-52.975	3.00	0	45.253	AV	54	PASS
	2462	Ant1	2500.0	-42.930	3.00	0	55.298	PEAK	74	PASS
	2462	Ant1	2500.0	-53.205	3.00	0	45.023	AV	54	PASS
11G	2412	Ant1	2310.0	-42.336	3.00	0	55.892	PEAK	74	PASS
	2412	Ant1	2310.0	-53.803	3.00	0	44.425	AV	54	PASS
	2412	Ant1	2390.0	-42.736	3.00	0	55.492	PEAK	74	PASS
	2412	Ant1	2390.0	-53.241	3.00	0	44.987	AV	54	PASS
	2462	Ant1	2483.5	-42.250	3.00	0	55.978	PEAK	74	PASS
	2462	Ant1	2483.5	-52.395	3.00	0	45.833	AV	54	PASS
	2462	Ant1	2500.0	-42.986	3.00	0	55.242	PEAK	74	PASS
	2462	Ant1	2500.0	-53.230	3.00	0	44.998	AV	54	PASS
11N20 SISO	2412	Ant1	2310.0	-43.472	3.00	0	54.756	PEAK	74	PASS
	2412	Ant1	2310.0	-53.817	3.00	0	44.411	AV	54	PASS
	2412	Ant1	2390.0	-43.066	3.00	0	55.162	PEAK	74	PASS
	2412	Ant1	2390.0	-53.325	3.00	0	44.903	AV	54	PASS
	2462	Ant1	2483.5	-41.713	3.00	0	56.515	PEAK	74	PASS
	2462	Ant1	2483.5	-52.380	3.00	0	45.848	AV	54	PASS
	2462	Ant1	2500.0	-42.877	3.00	0	55.351	PEAK	74	PASS
	2462	Ant1	2500.0	-53.166	3.00	0	45.062	AV	54	PASS
11N40 SISO	2422	Ant1	2310.0	-43.350	3.00	0	54.878	PEAK	74	PASS
	2422	Ant1	2310.0	-53.784	3.00	0	44.444	AV	54	PASS

	2422	Ant1	2390.0	-43.182	3.00	0	55.046	PEAK	74	PASS
	2422	Ant1	2390.0	-53.243	3.00	0	44.985	AV	54	PASS
	2452	Ant1	2483.5	-40.759	3.00	0	57.469	PEAK	74	PASS
	2452	Ant1	2483.5	-51.498	3.00	0	46.730	AV	54	PASS
	2452	Ant1	2500.0	-42.953	3.00	0	55.275	PEAK	74	PASS
	2452	Ant1	2500.0	-53.161	3.00	0	45.067	AV	54	PASS

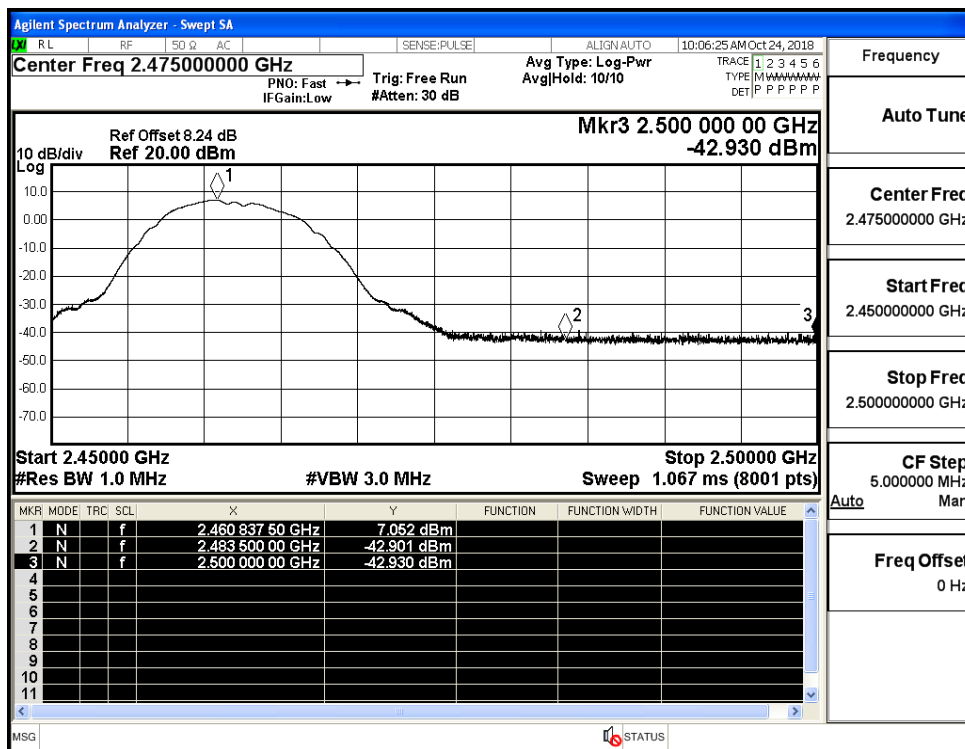
Restrict-band band-edge measurements_11B_2412_Ant1_PEAK



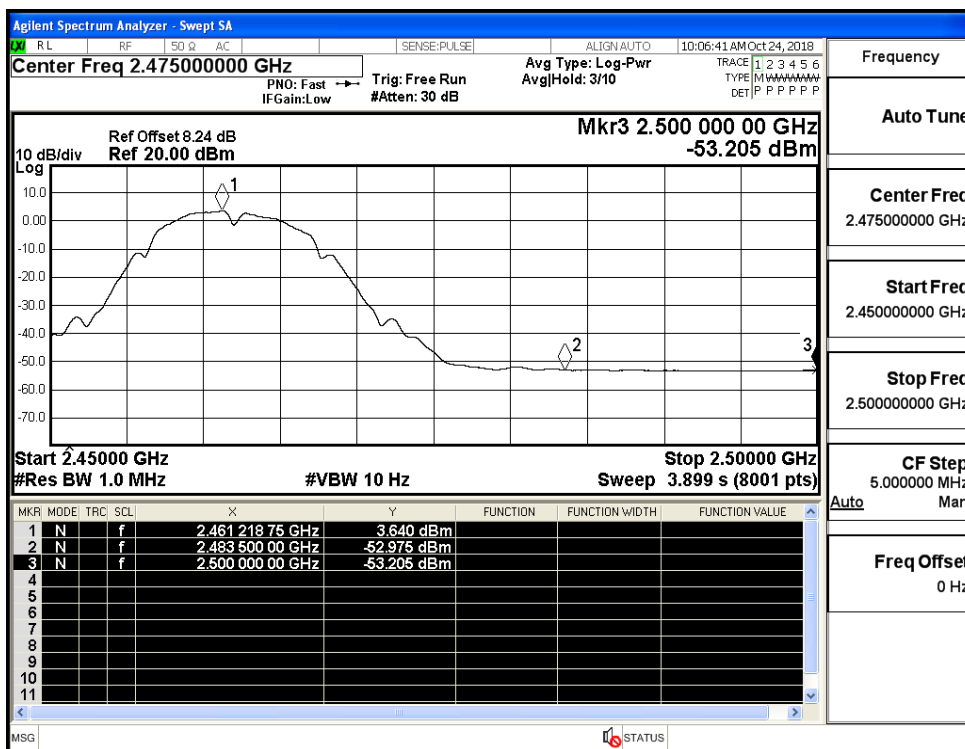
Restrict-band band-edge measurements_11B_2412_Ant1_AV



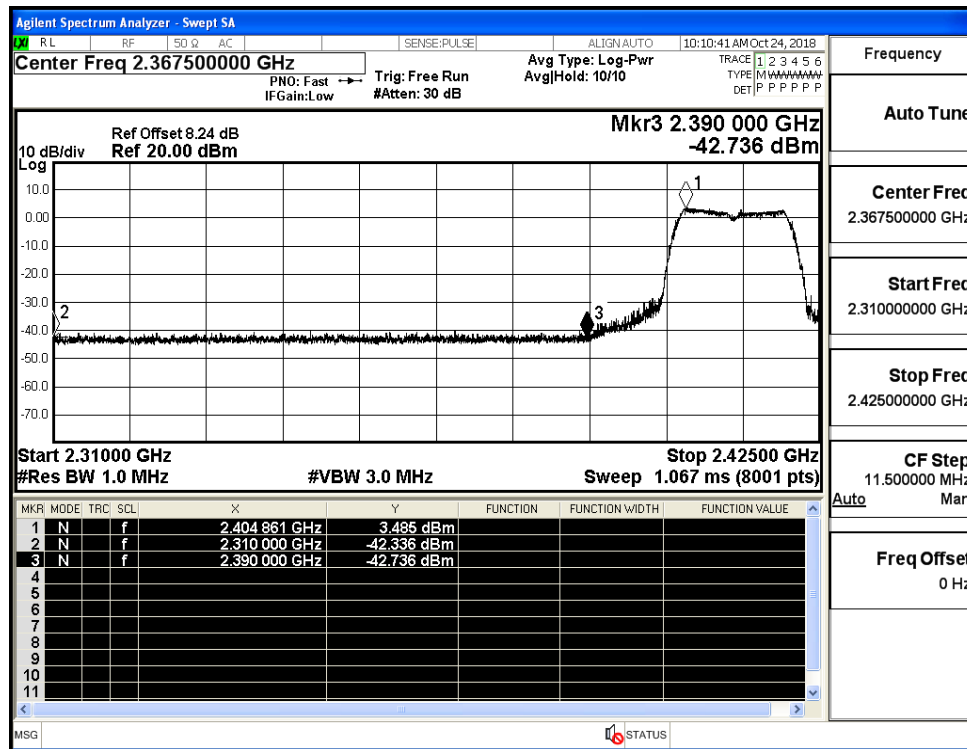
Restrict-band band-edge measurements_11B_2462_Ant1_PEAK



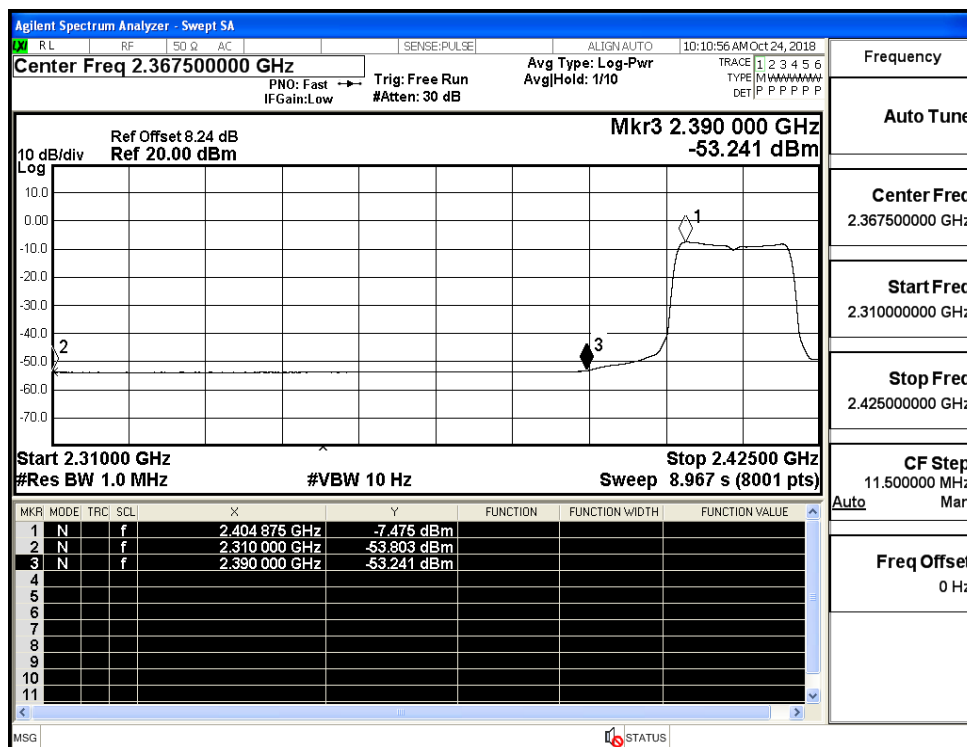
Restrict-band band-edge measurements_11B_2462_Ant1_AV



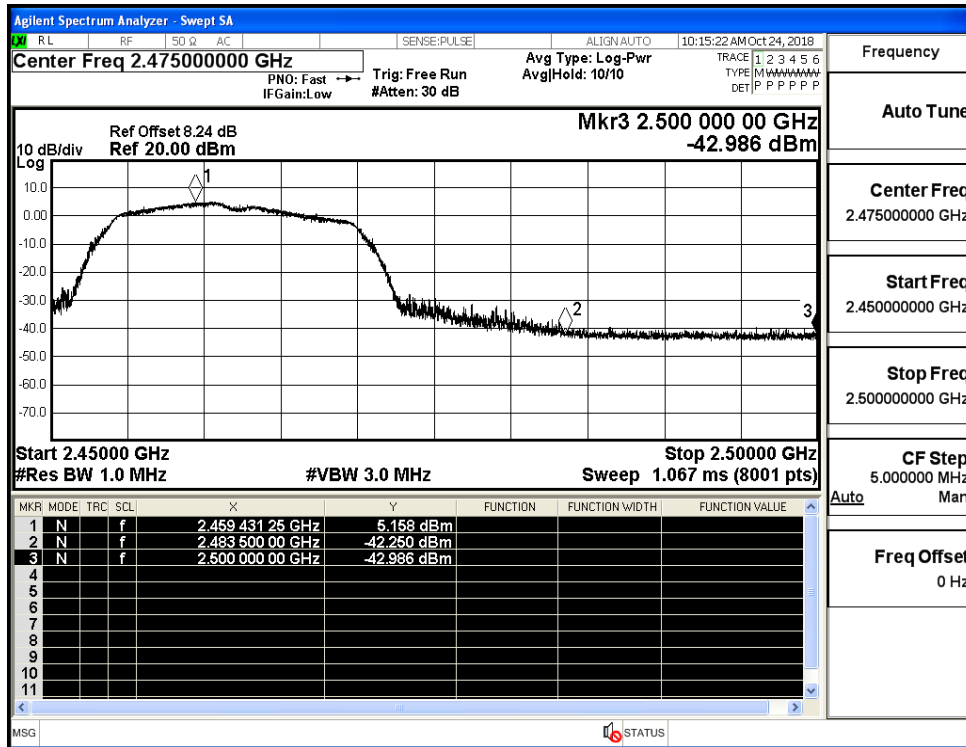
Restrict-band band-edge measurements_11G_2412_Ant1_PEAK



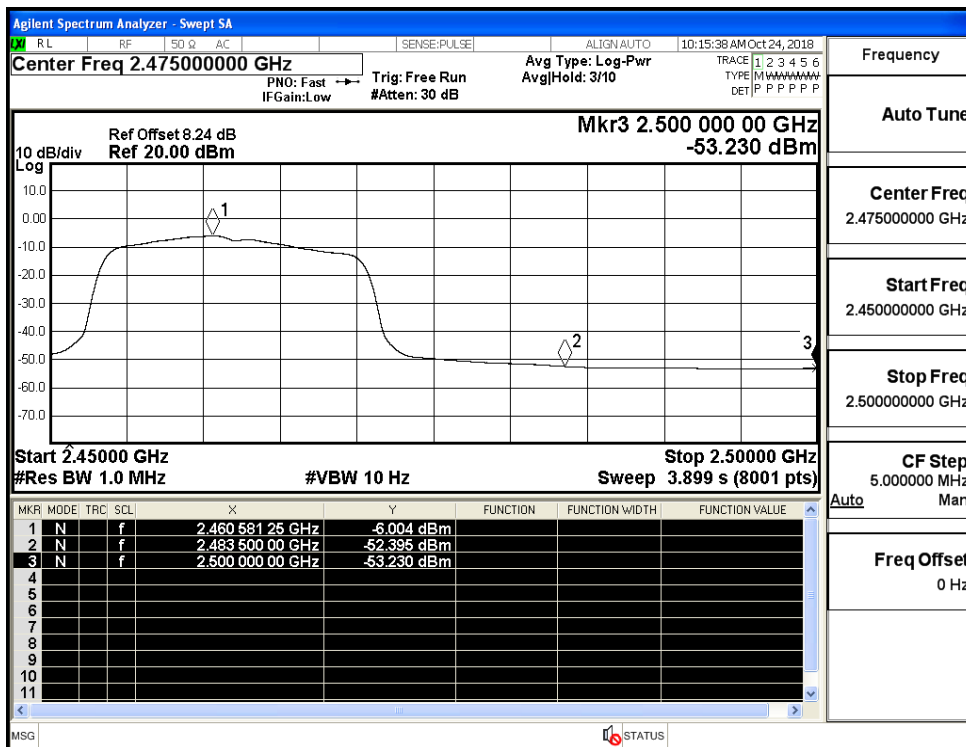
Restrict-band band-edge measurements_11G_2412_Ant1_AV



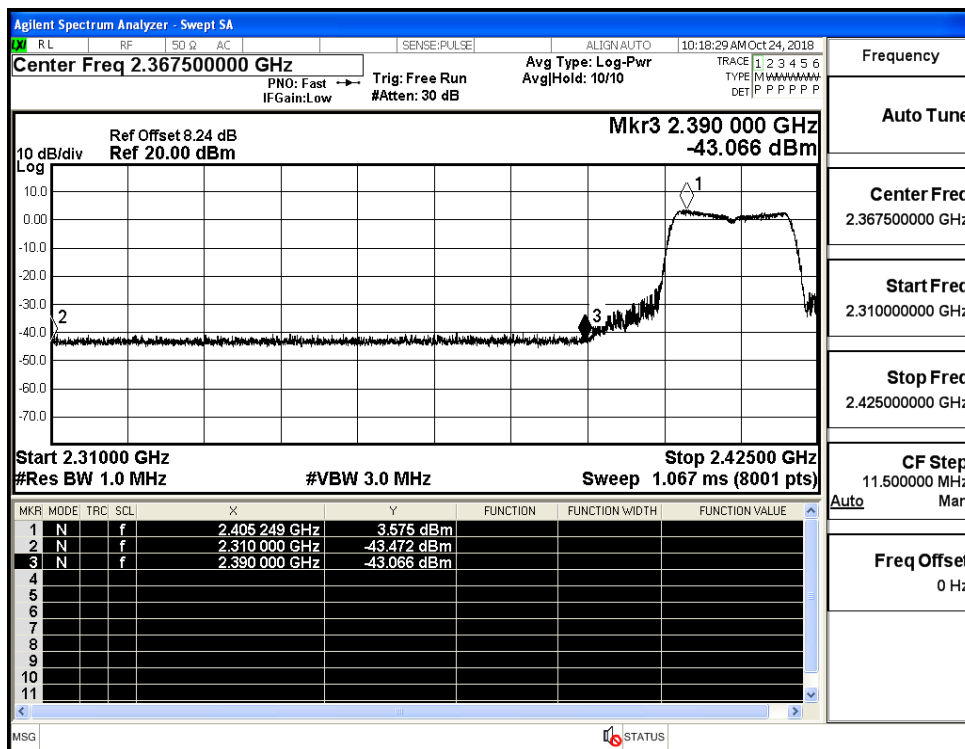
Restrict-band band-edge measurements_11G_2462_Ant1_PEAK



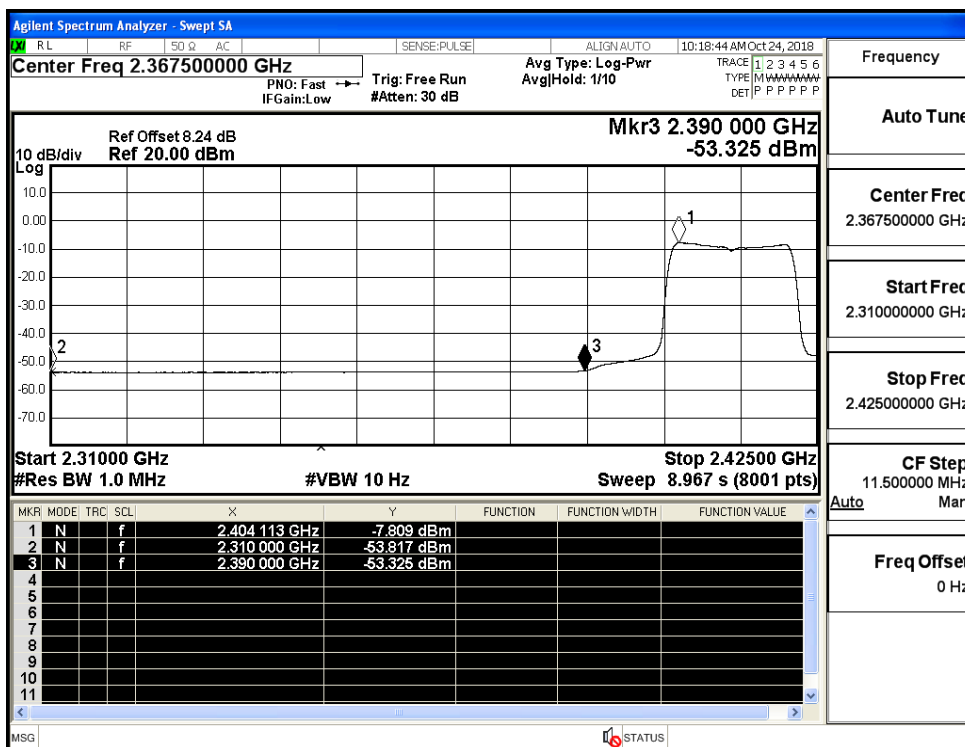
Restrict-band band-edge measurements_11G_2462_Ant1_AV



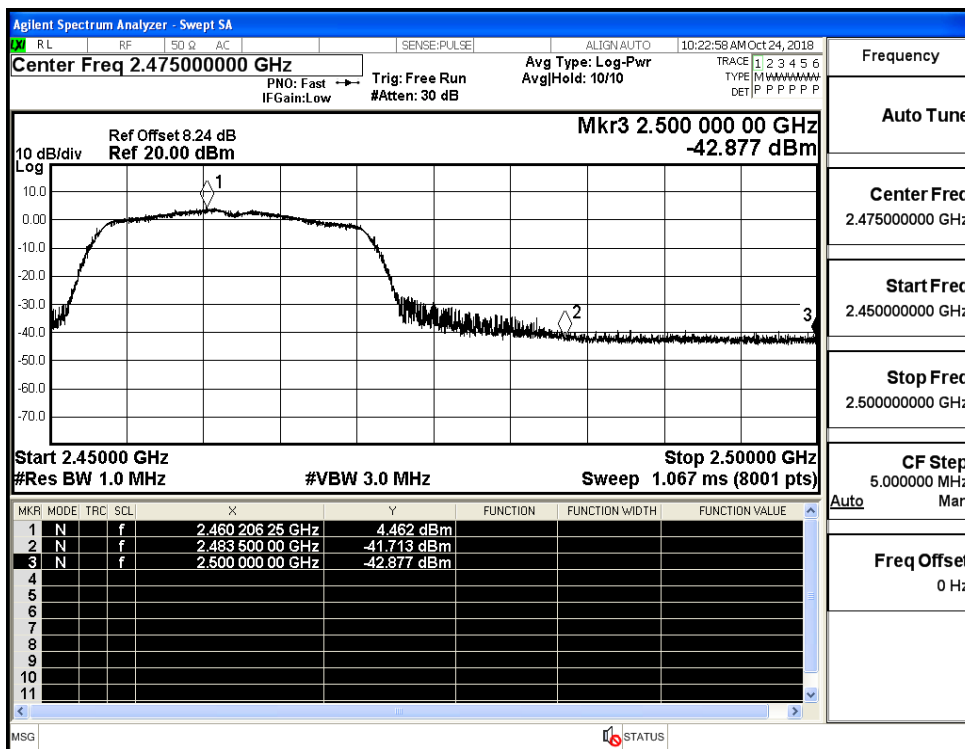
Restrict-band band-edge measurements_11N20SISO_2412_Ant1_PEAK



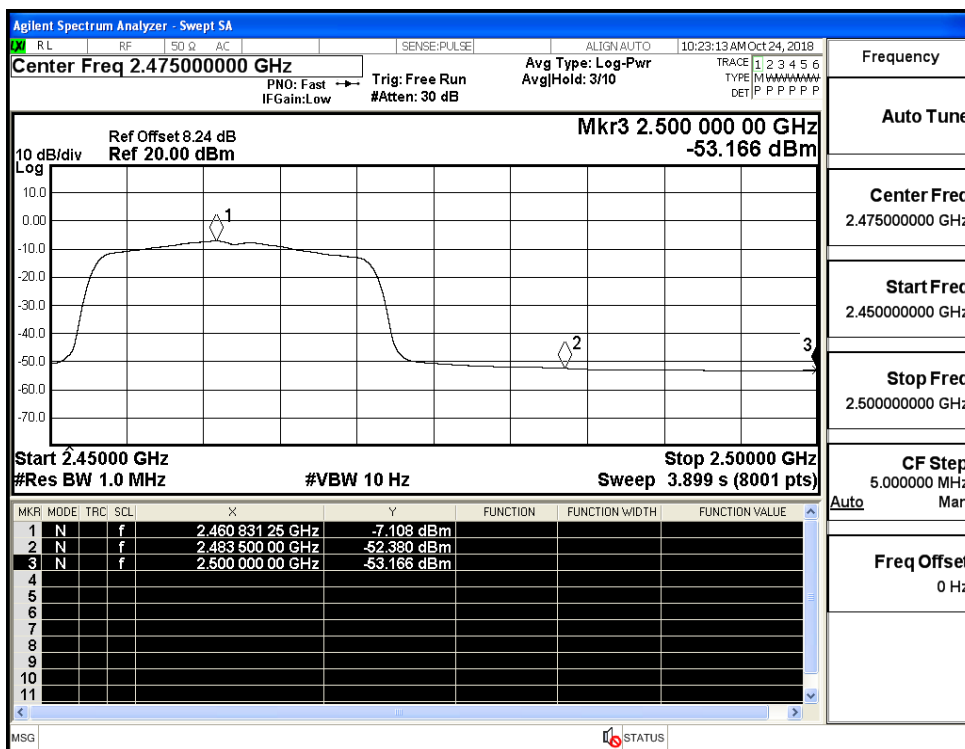
Restrict-band band-edge measurements_11N20SISO_2412_Ant1_AV



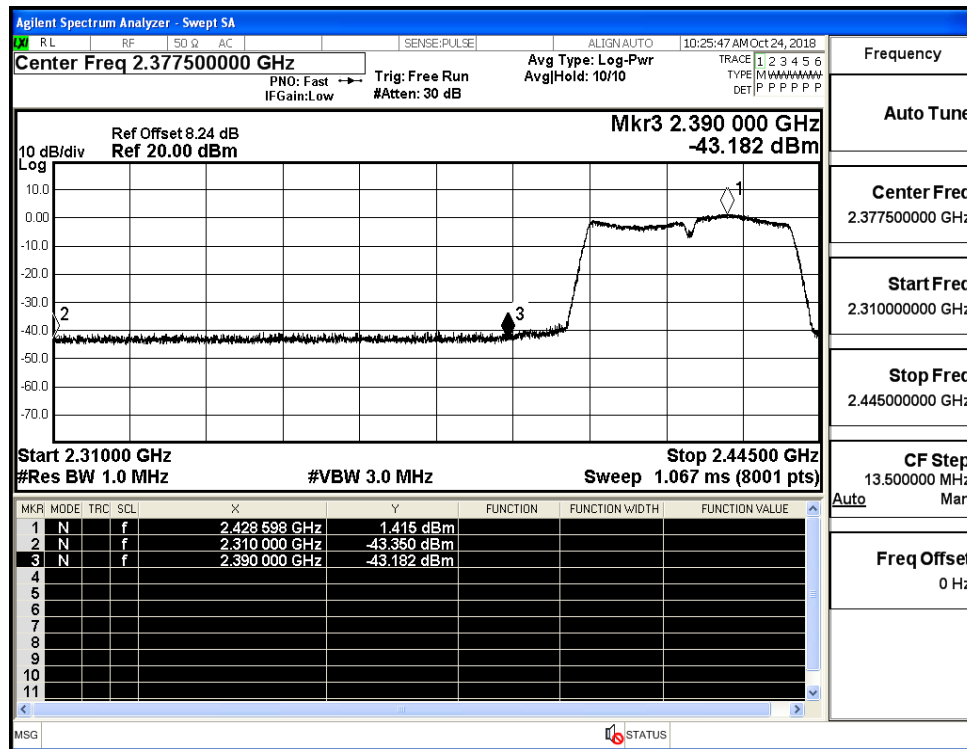
Restrict-band band-edge measurements_11N20SISO_2462_Ant1_PEAK



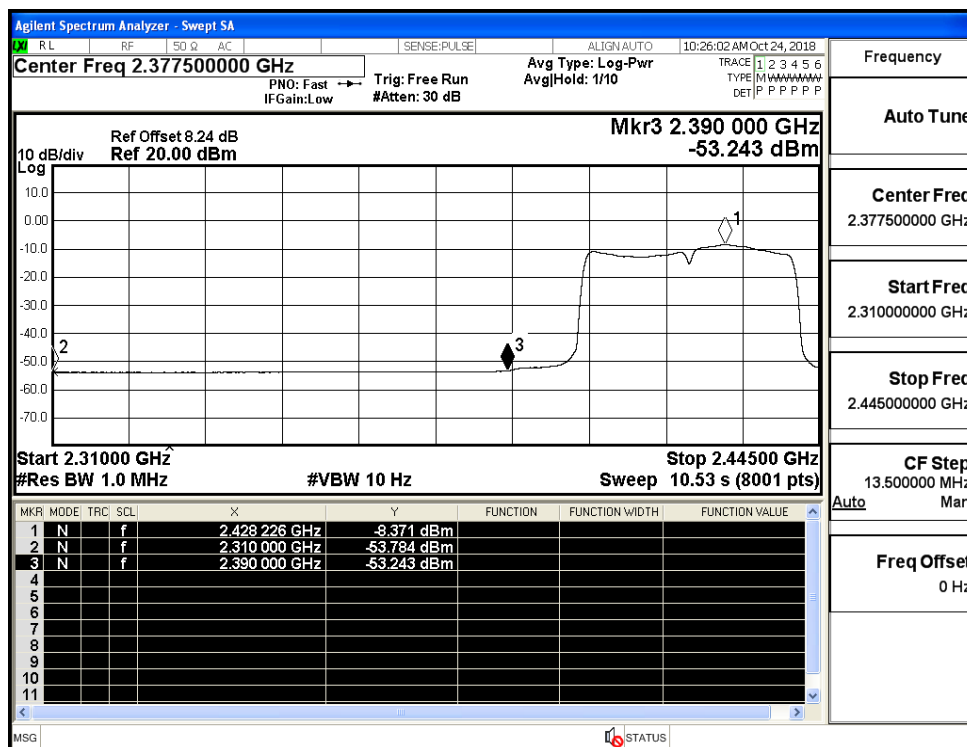
Restrict-band band-edge measurements_11N20SISO_2462_Ant1_AV



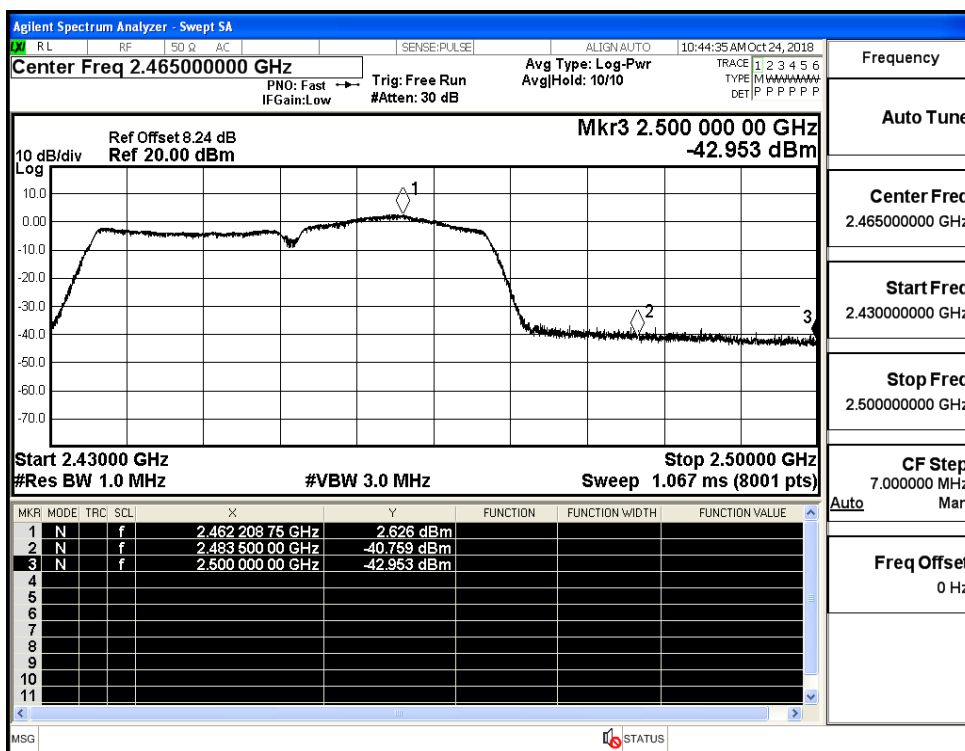
Restrict-band band-edge measurements_11N40SISO_2422_Ant1_PEAK



Restrict-band band-edge measurements_11N40SISO_2422_Ant1_AV



Restrict-band band-edge measurements_11N40SISO_2452_Ant1_PEAK



Restrict-band band-edge measurements_11N40SISO_2452_Ant1_AV

