

Appendix A

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: Notebook computer

Trade Mark: THOMSON

Test Model: WWNEO10A-2BK32

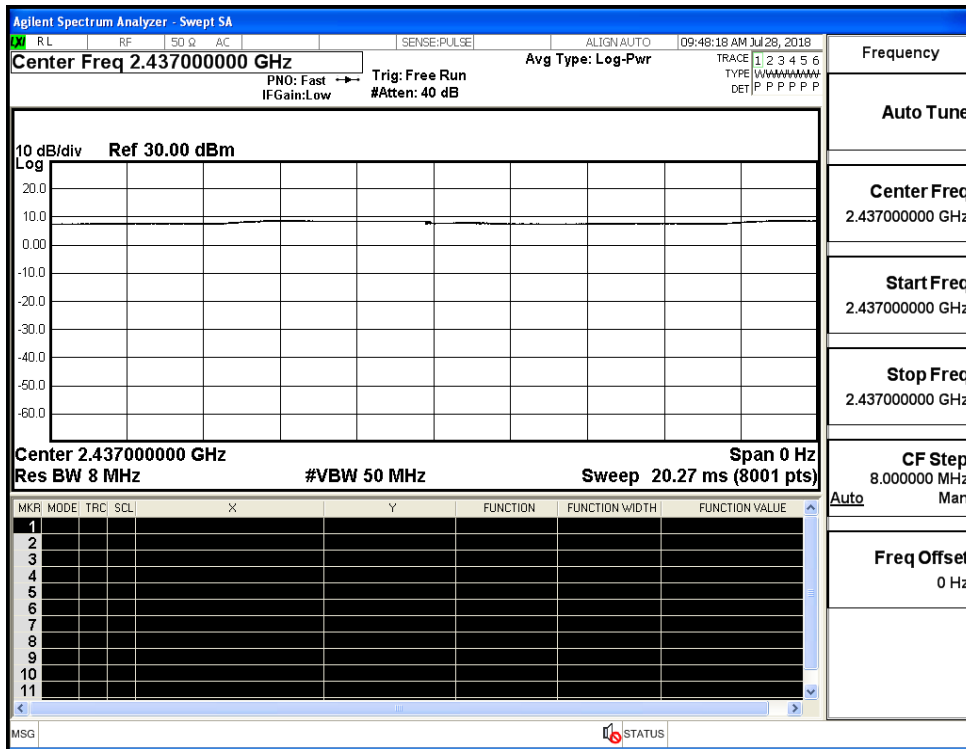
Environmental Conditions

Temperature:	22.7° C
Relative Humidity:	53.5%
ATM Pressure:	100.0 kPa
Test Engineer:	WangChuang
Supervised by:	Jayden.Zhuo

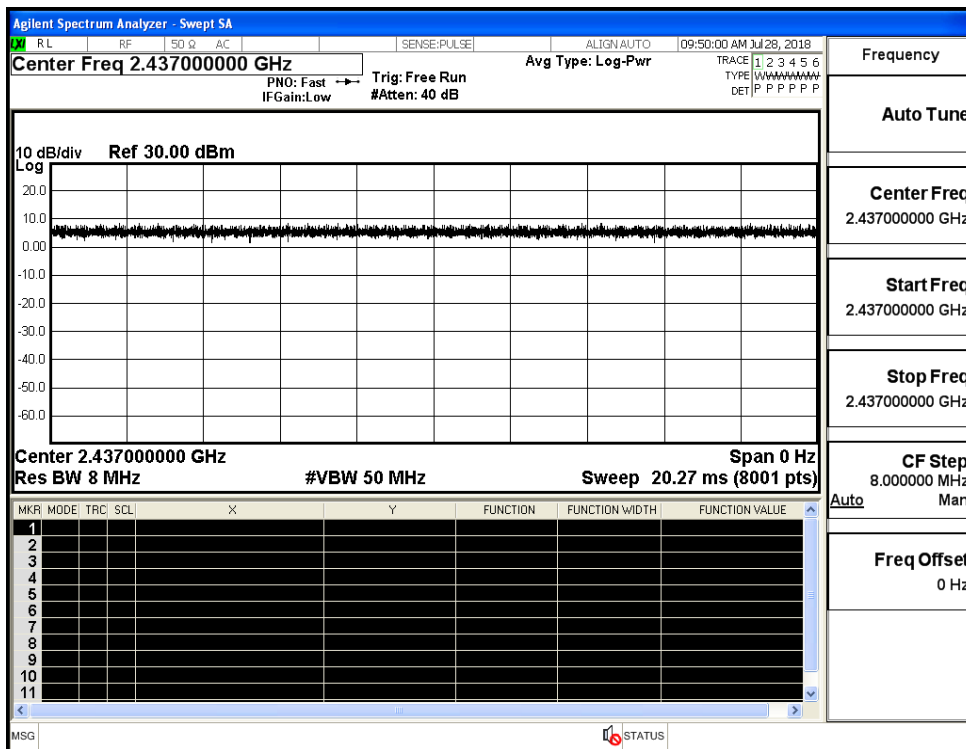
A.1 Duty Cycle

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

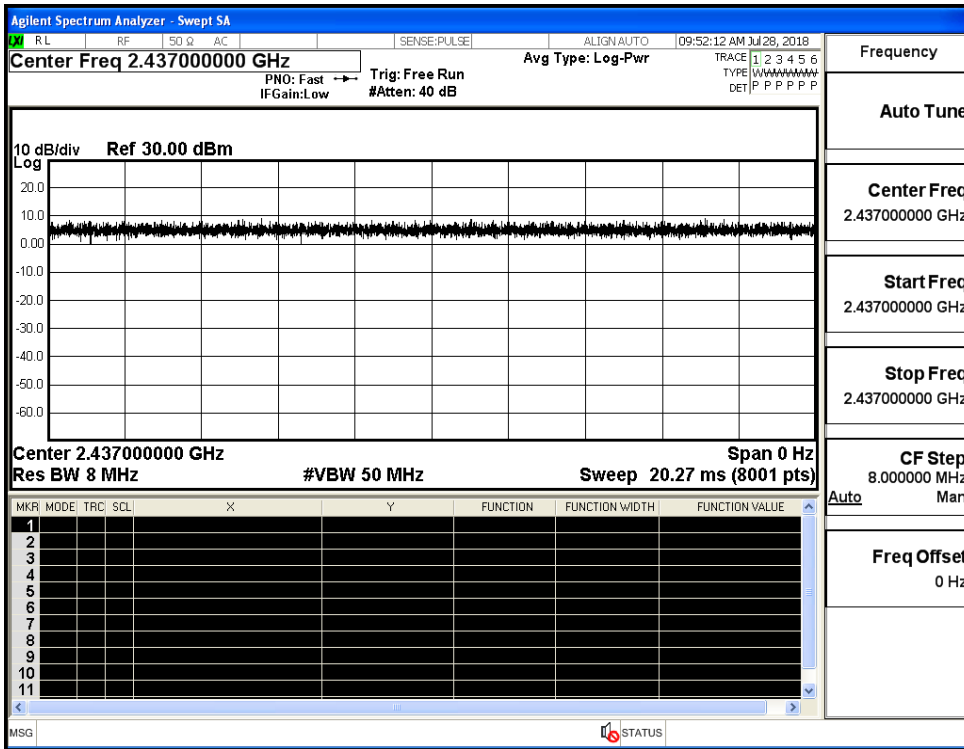
Duty Cycle_11B_2437_Ant1



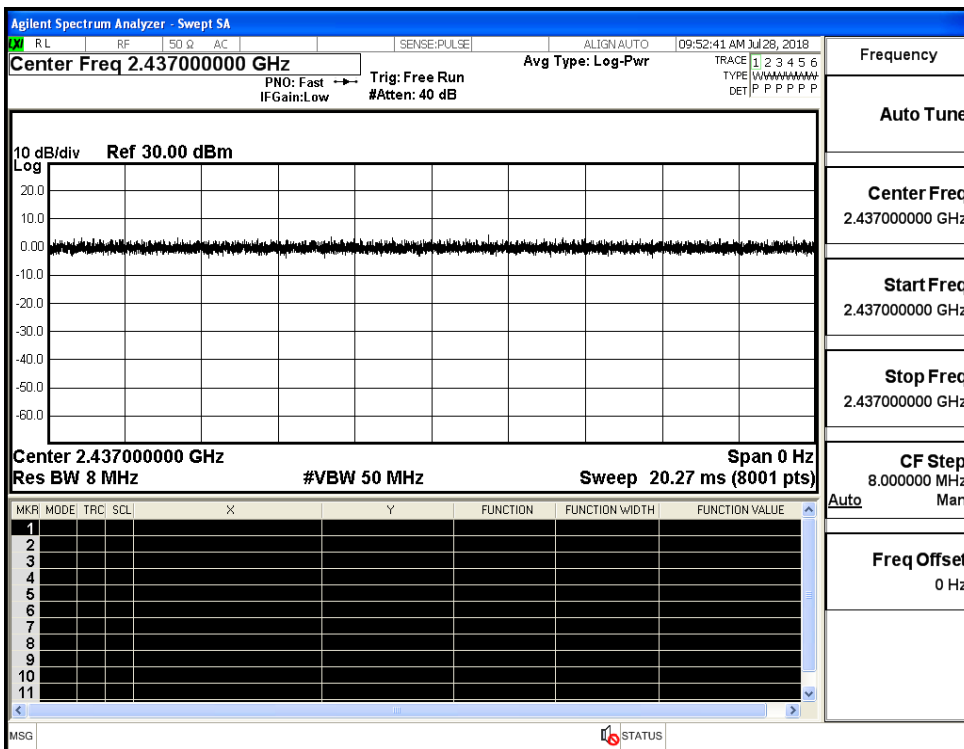
Duty Cycle_11G_2437_Ant1



Duty Cycle_11N20SISO_2437_Ant1



Duty Cycle_11N40SISO_2437_Ant1



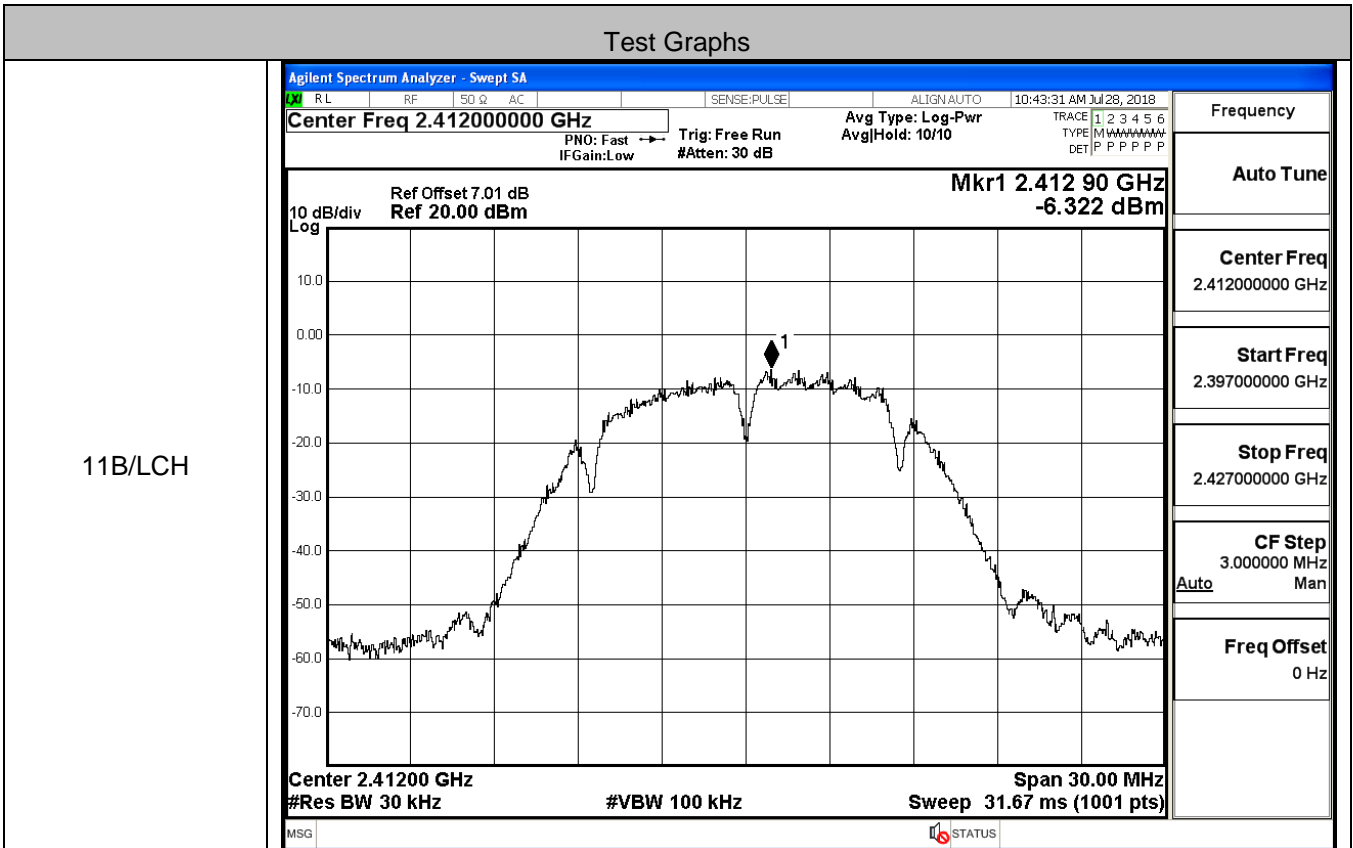
A.2 Maximum Conducted Output Power

Mode	Channel	Meas.Level [dBm]	Limit [dBm]	Verdict
11B	LCH	10.74	30	PASS
	MCH	10.88	30	PASS
	HCH	10.78	30	PASS
11G	LCH	12.69	30	PASS
	MCH	12.48	30	PASS
	HCH	12.59	30	PASS
11N20SISO	LCH	13.26	30	PASS
	MCH	12.68	30	PASS
	HCH	12.81	30	PASS
11N40SISO	LCH	14.19	30	PASS
	MCH	13.93	30	PASS
	HCH	13.76	30	PASS

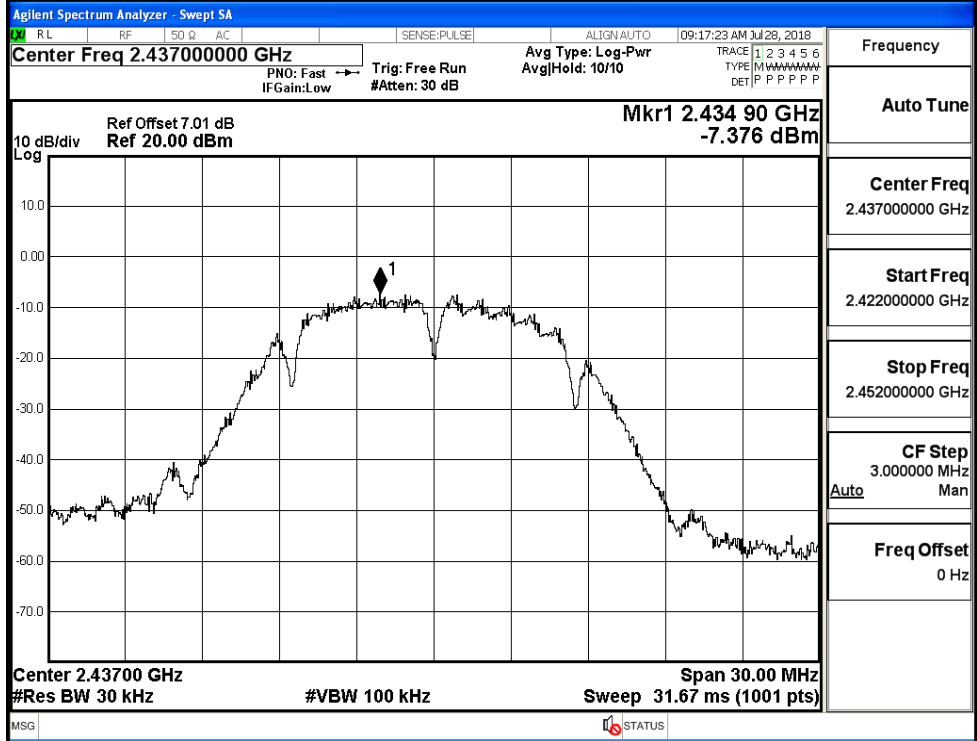
A.3 Maximum Power Spectral Density

Mode	Channel	Meas.Level [dBm/30KHz]	Limit [dBm/3KHz]	Verdict
11B	LCH	-6.322	8	PASS
	MCH	-7.376	8	PASS
	HCH	-6.804	8	PASS
11G	LCH	-10.799	8	PASS
	MCH	-11.681	8	PASS
	HCH	-11.887	8	PASS
11N20SISO	LCH	-11.292	8	PASS
	MCH	-11.396	8	PASS
	HCH	-12.194	8	PASS
11N40SISO	LCH	-14.028	8	PASS
	MCH	-14.259	8	PASS
	HCH	-15.733	8	PASS

Test Graphs

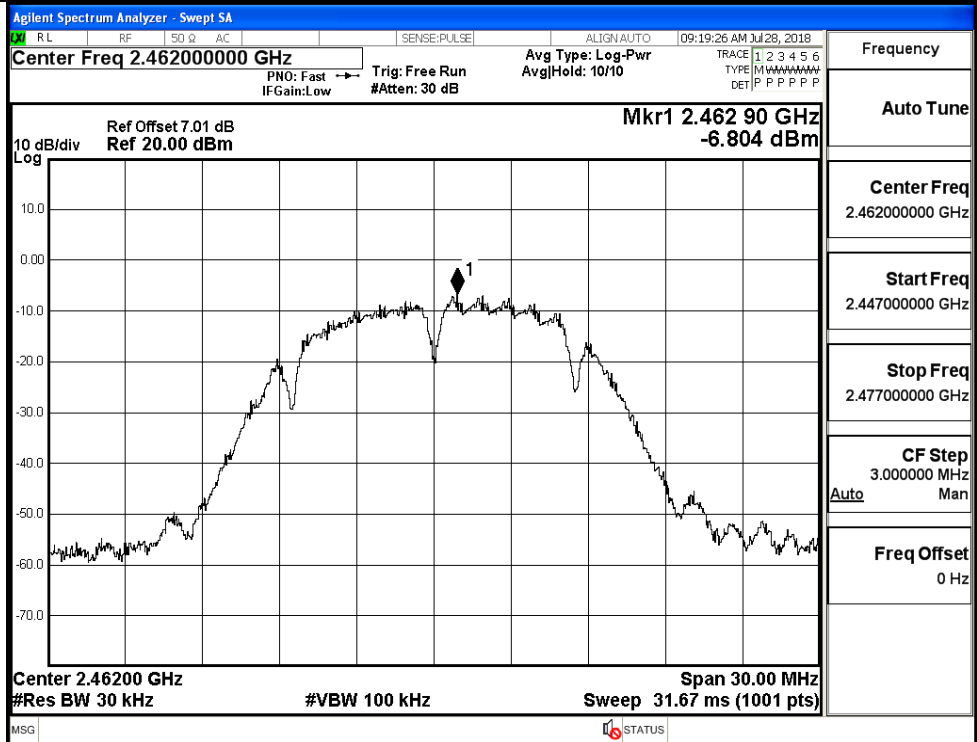


11B/MCH



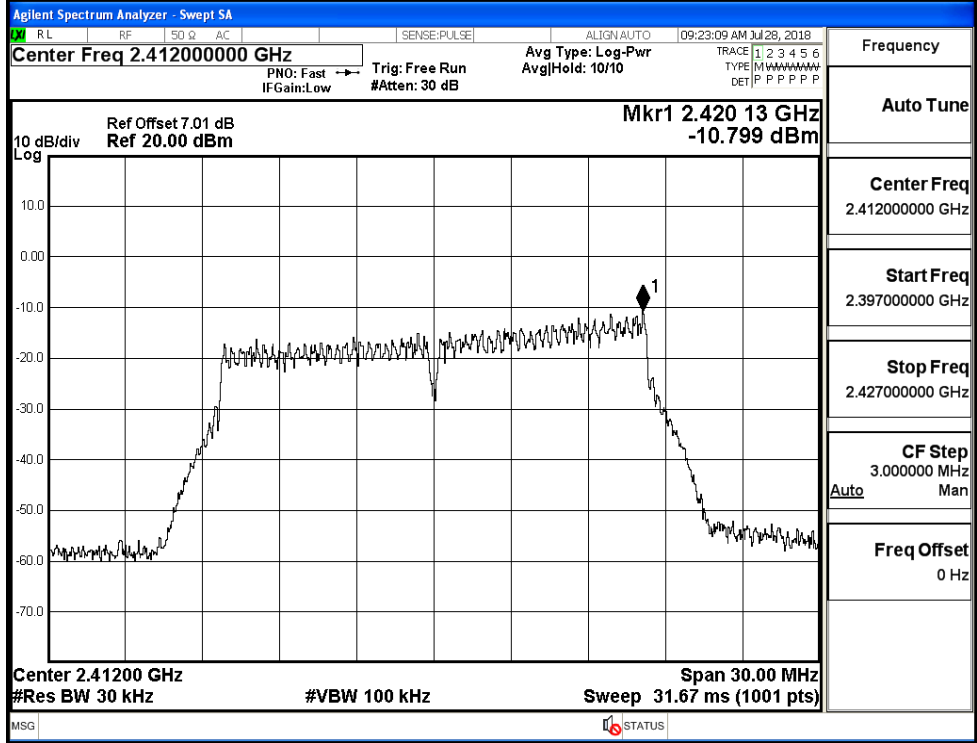
Frequency
Auto Tune
Center Freq 2.437000000 GHz
Start Freq 2.422000000 GHz
Stop Freq 2.452000000 GHz
CF Step 3.000000 MHz Auto Man
Freq Offset 0 Hz

11B/HCH

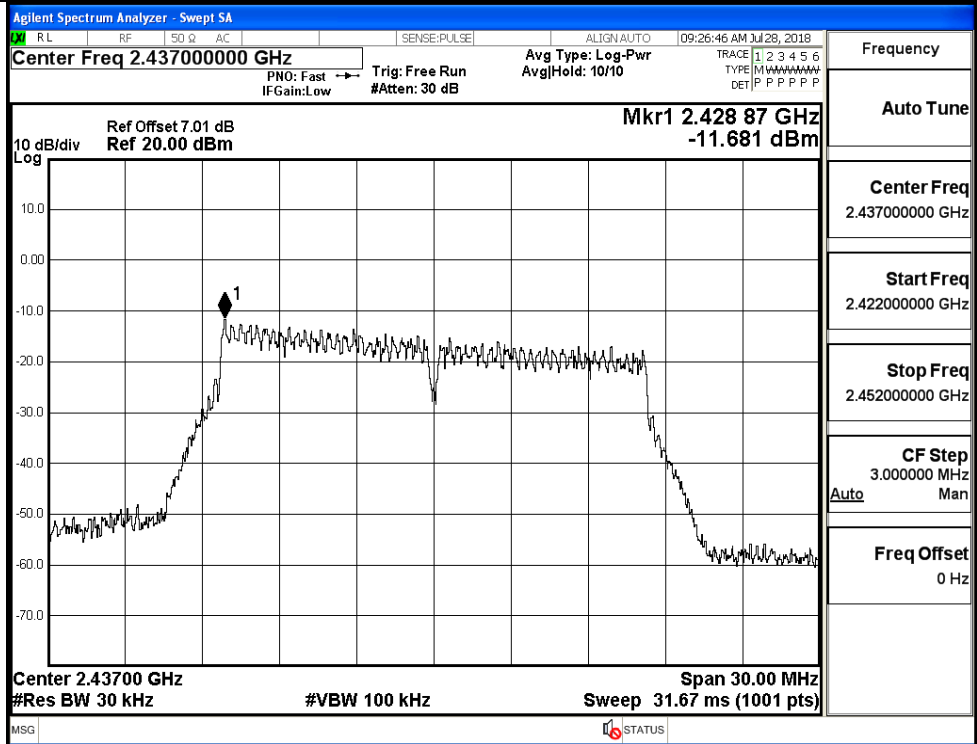


Frequency
Auto Tune
Center Freq 2.462000000 GHz
Start Freq 2.447000000 GHz
Stop Freq 2.477000000 GHz
CF Step 3.000000 MHz Auto Man
Freq Offset 0 Hz

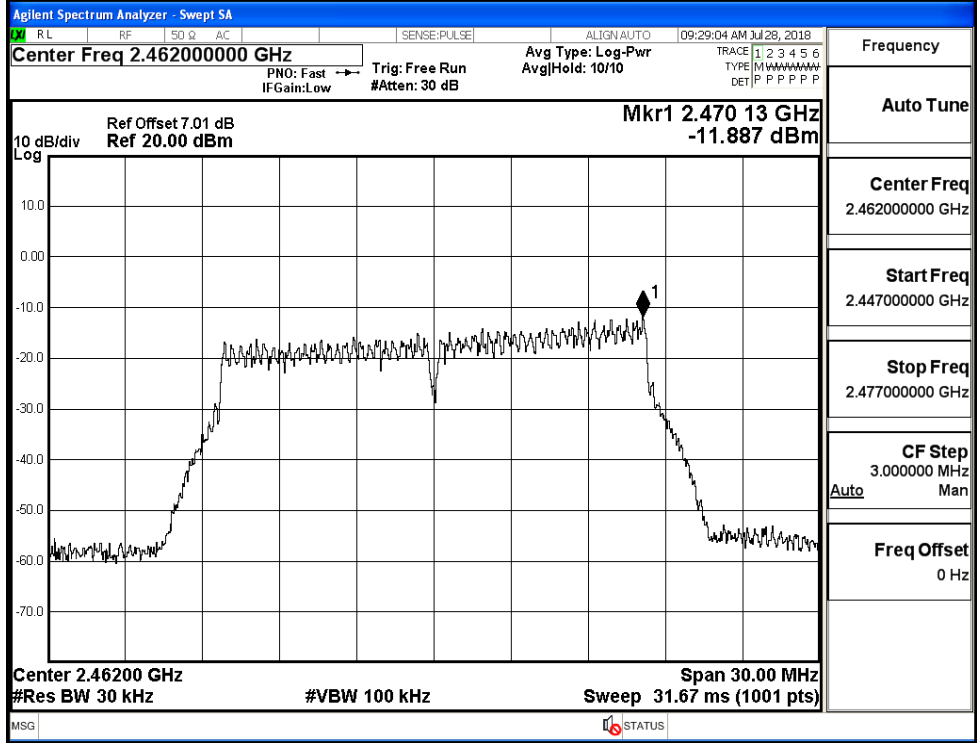
11G/LCH



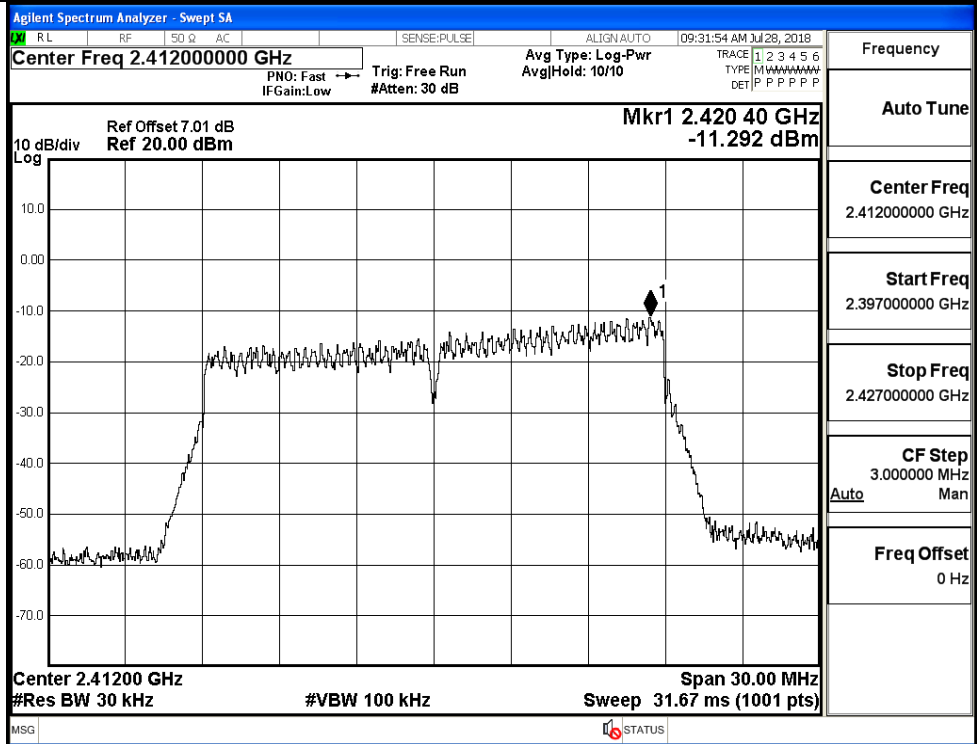
11G/MCH



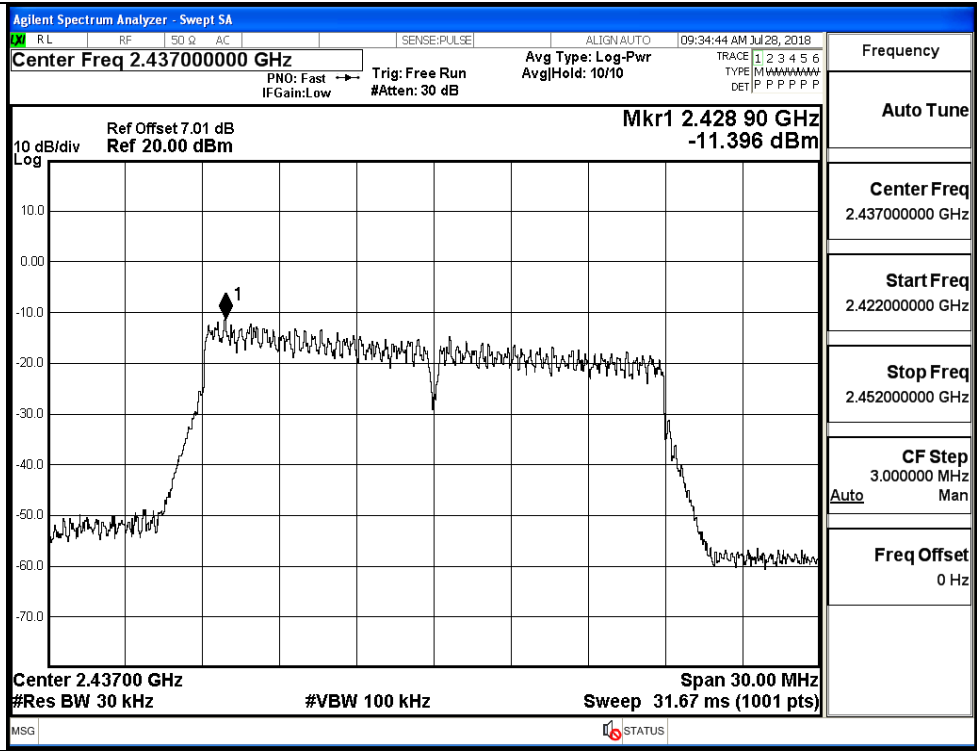
11G/HCH



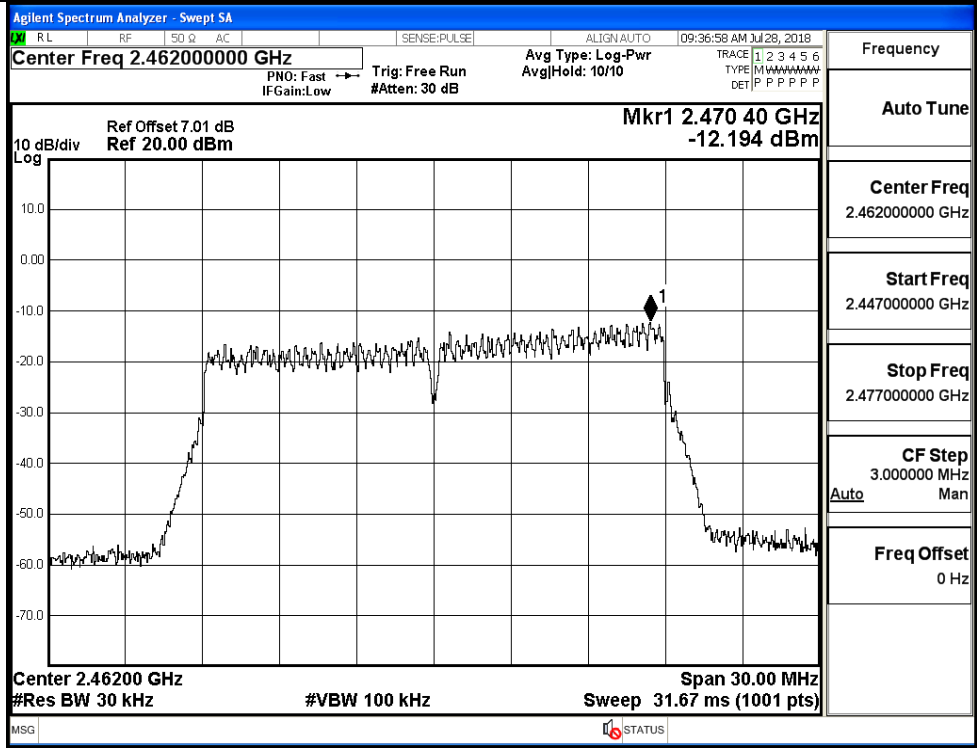
11N20SISO/LCH



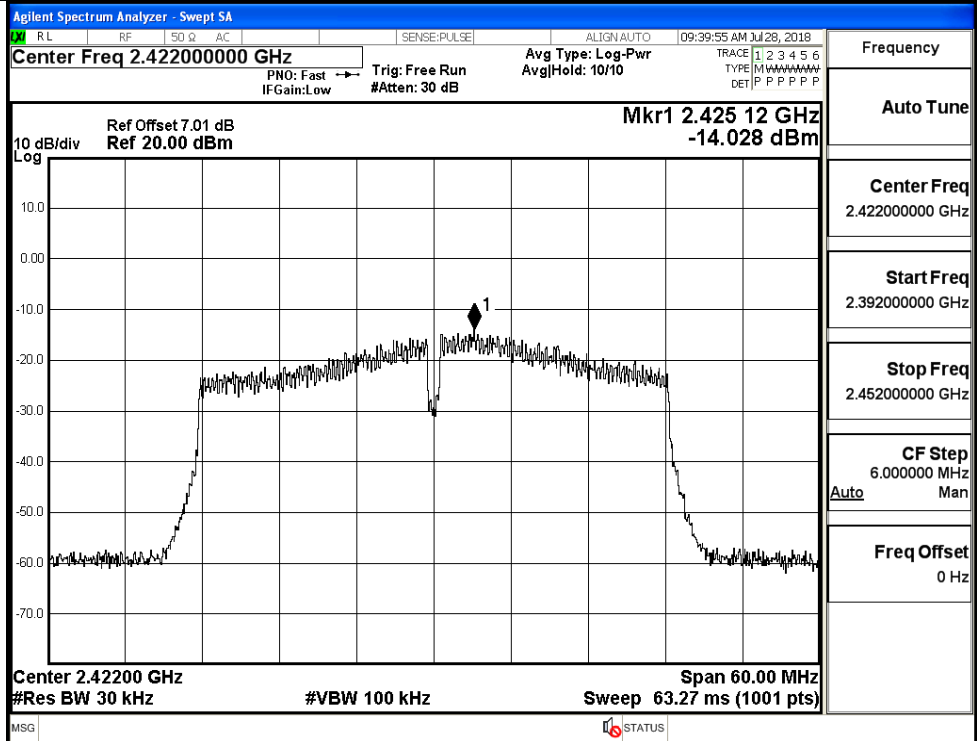
11N20SISO/MCH



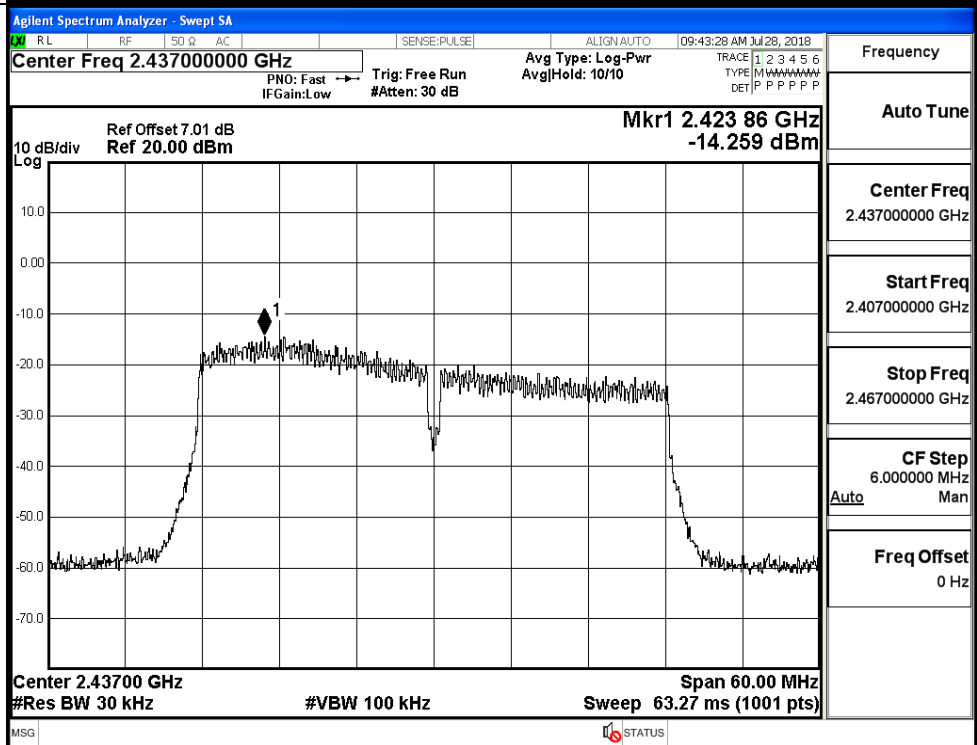
11N20SISO/HCH



11N40SISO/LCH

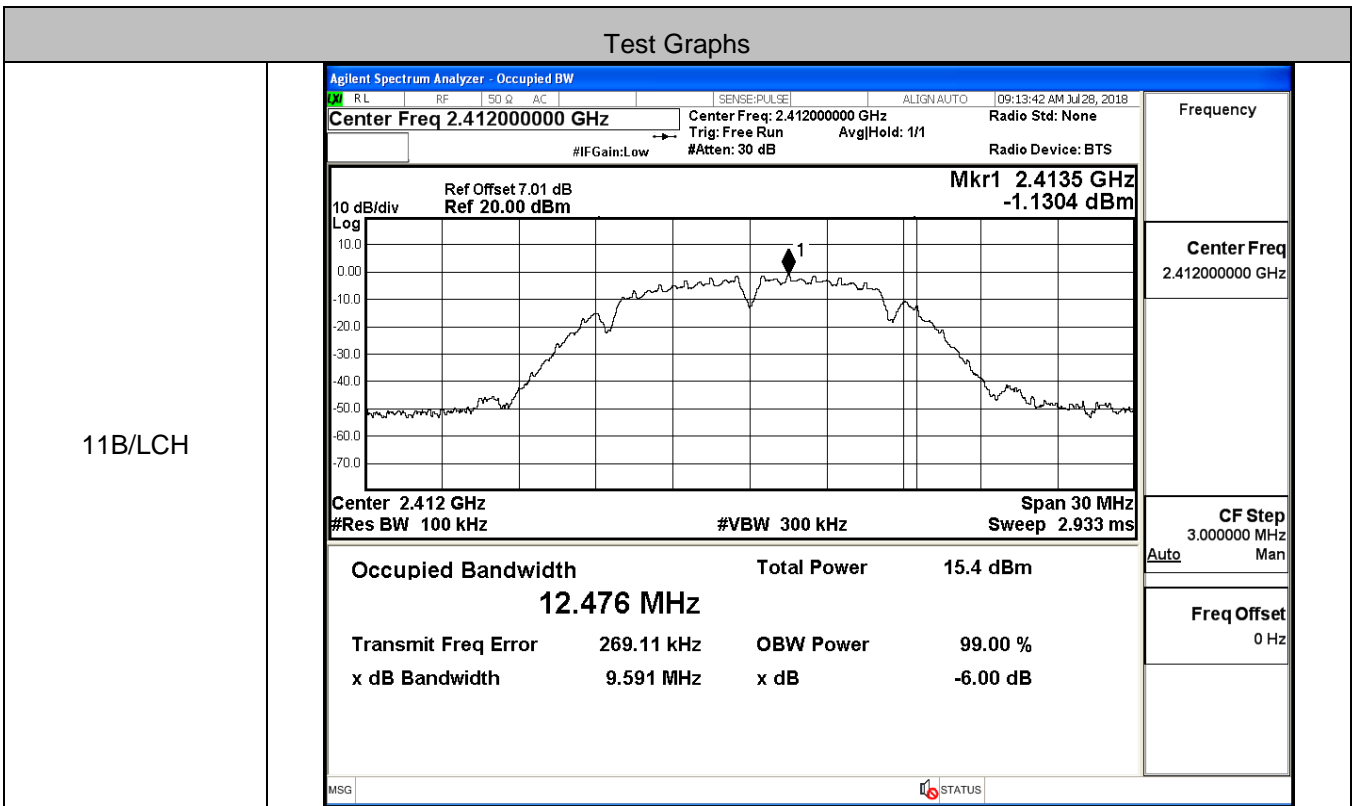


11N40SISO/MCH

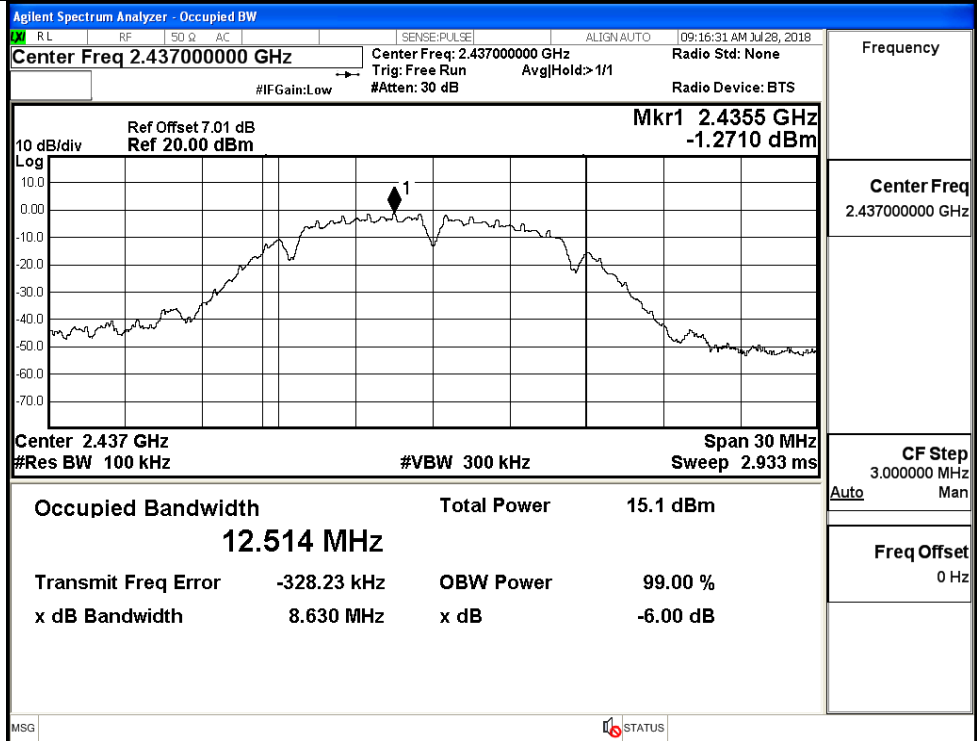


A.4 6dB Bandwidth

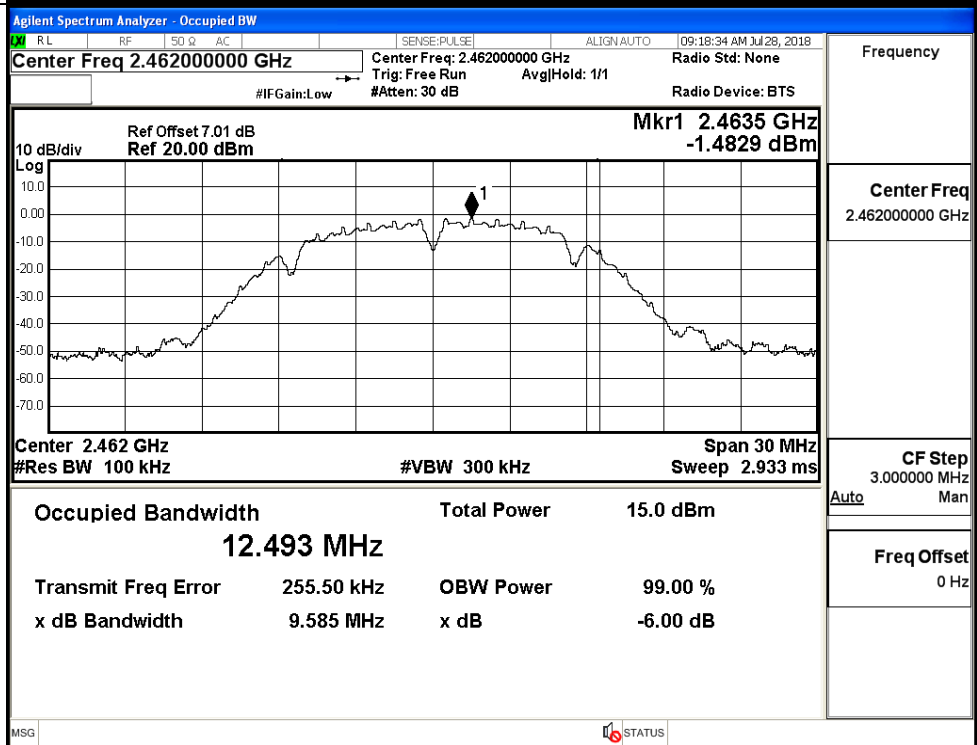
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
11B	LCH	9.591	≥0.5	PASS
	MCH	8.630	≥0.5	PASS
	HCH	9.585	≥0.5	PASS
11G	LCH	15.21	≥0.5	PASS
	MCH	16.13	≥0.5	PASS
	HCH	16.48	≥0.5	PASS
11N20SISO	LCH	14.36	≥0.5	PASS
	MCH	17.34	≥0.5	PASS
	HCH	17.32	≥0.5	PASS
11N40SISO	LCH	35.49	≥0.5	PASS
	MCH	35.79	≥0.5	PASS
	HCH	36.57	≥0.5	PASS



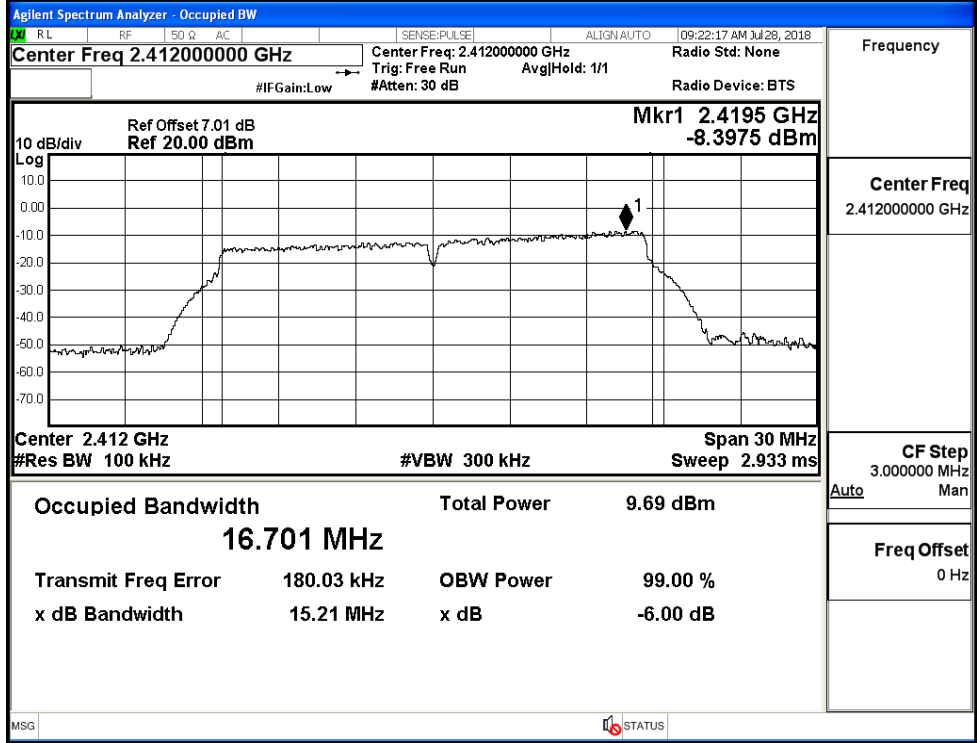
11B/MCH



11B/HCH

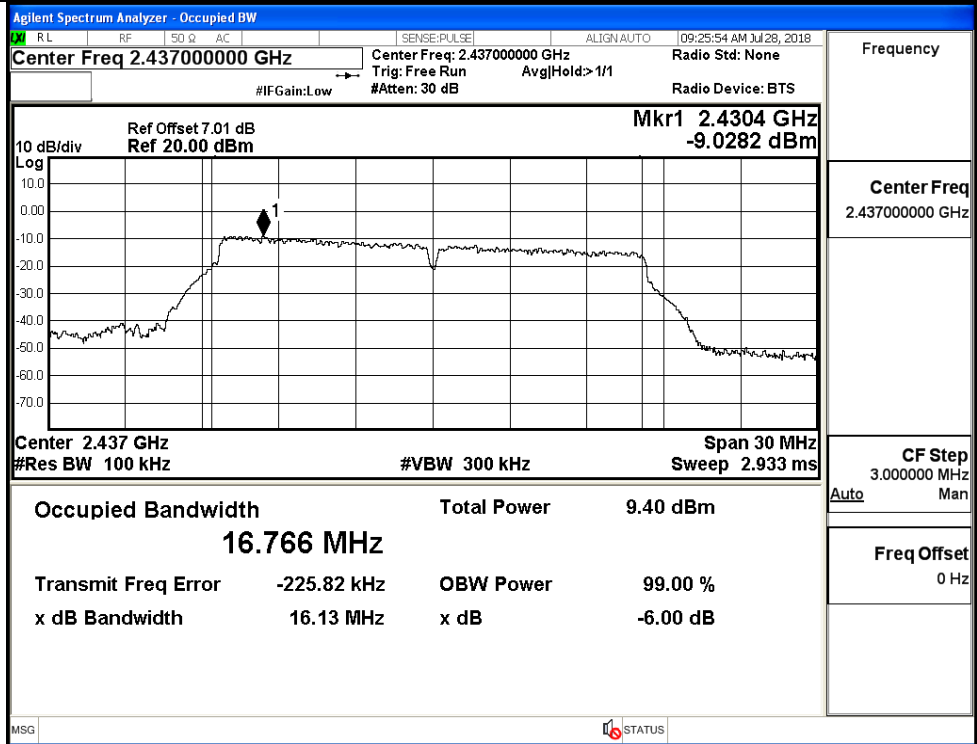


11G/LCH



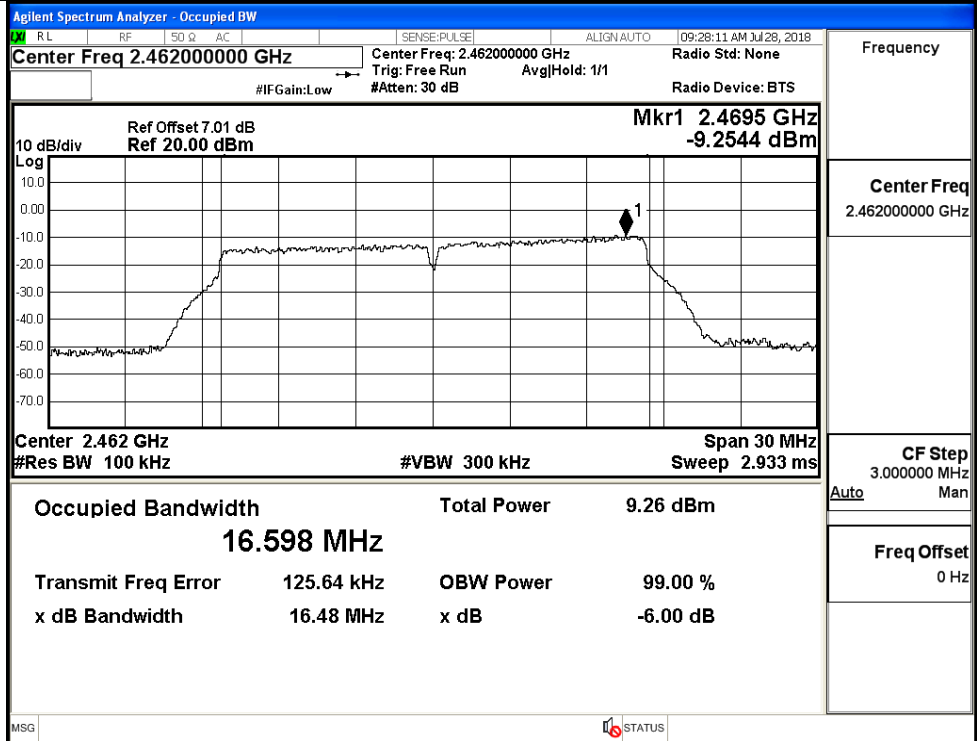
Frequency	2.41200000 GHz
Center Freq	2.41200000 GHz
CF Step	3.000000 MHz
Auto	Man
Freq Offset	0 Hz

11G/MCH



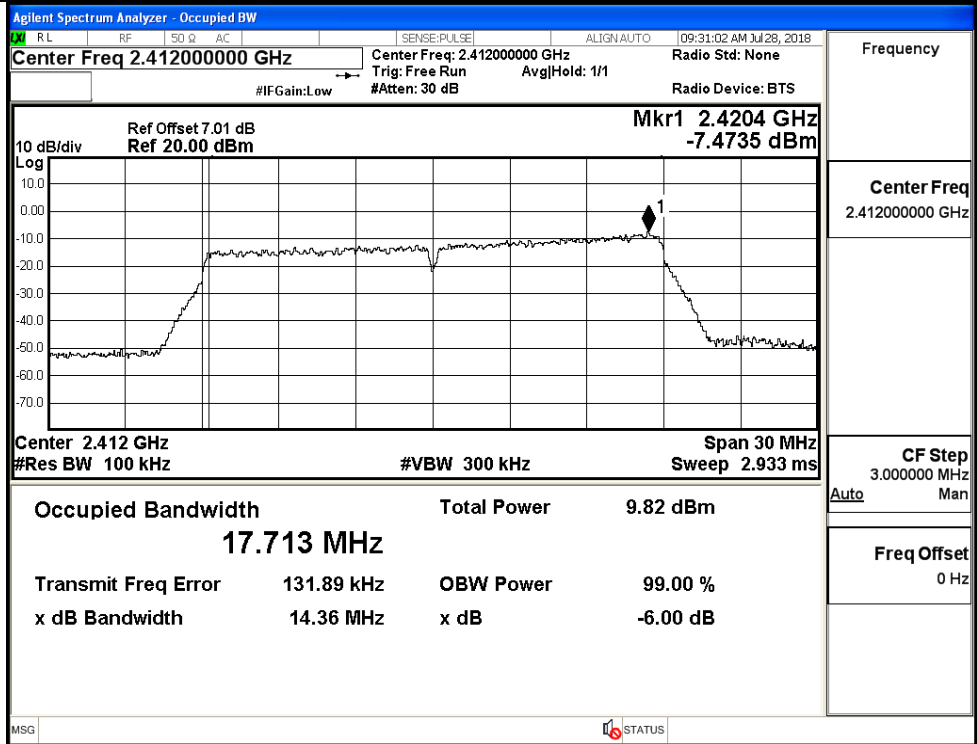
Frequency	2.43700000 GHz
Center Freq	2.43700000 GHz
CF Step	3.000000 MHz
Auto	Man
Freq Offset	0 Hz

11G/HCH



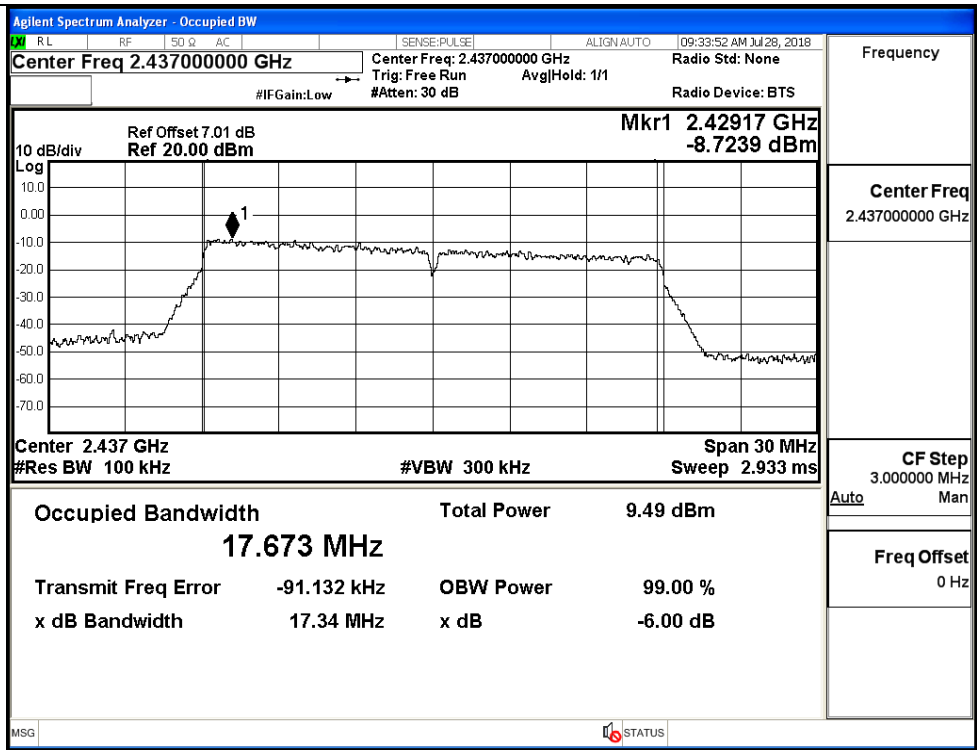
Frequency	2.46200000 GHz
Center Freq	2.46200000 GHz
CF Step	3.000000 MHz
Auto	Man
Freq Offset	0 Hz

11N20SISO/LCH

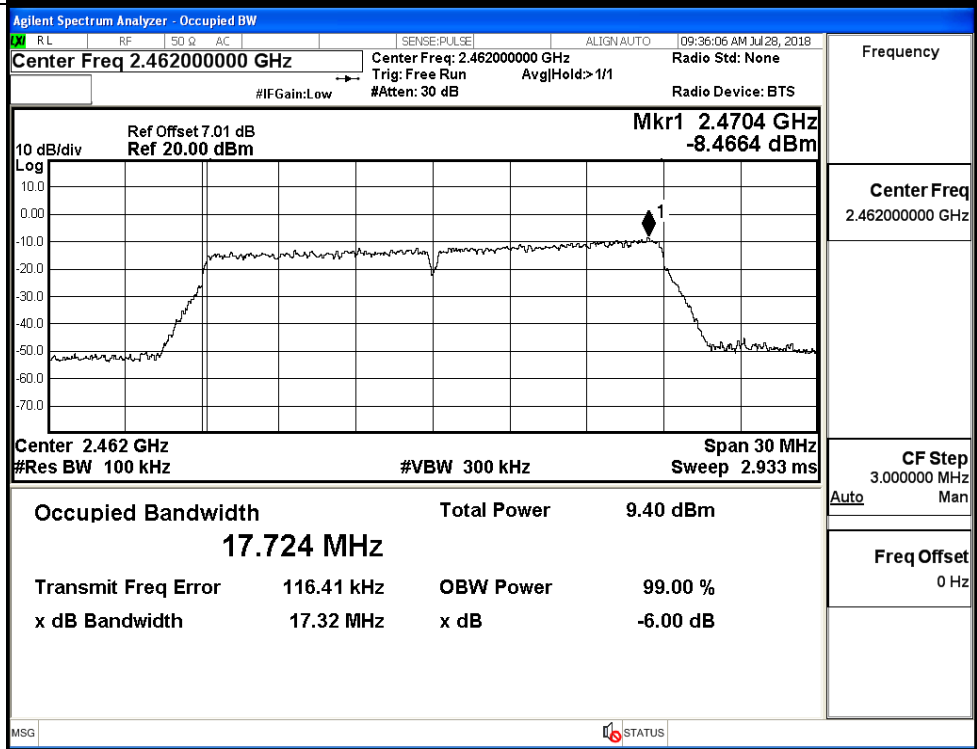


Frequency	2.41200000 GHz
Center Freq	2.41200000 GHz
CF Step	3.000000 MHz
Auto	Man
Freq Offset	0 Hz

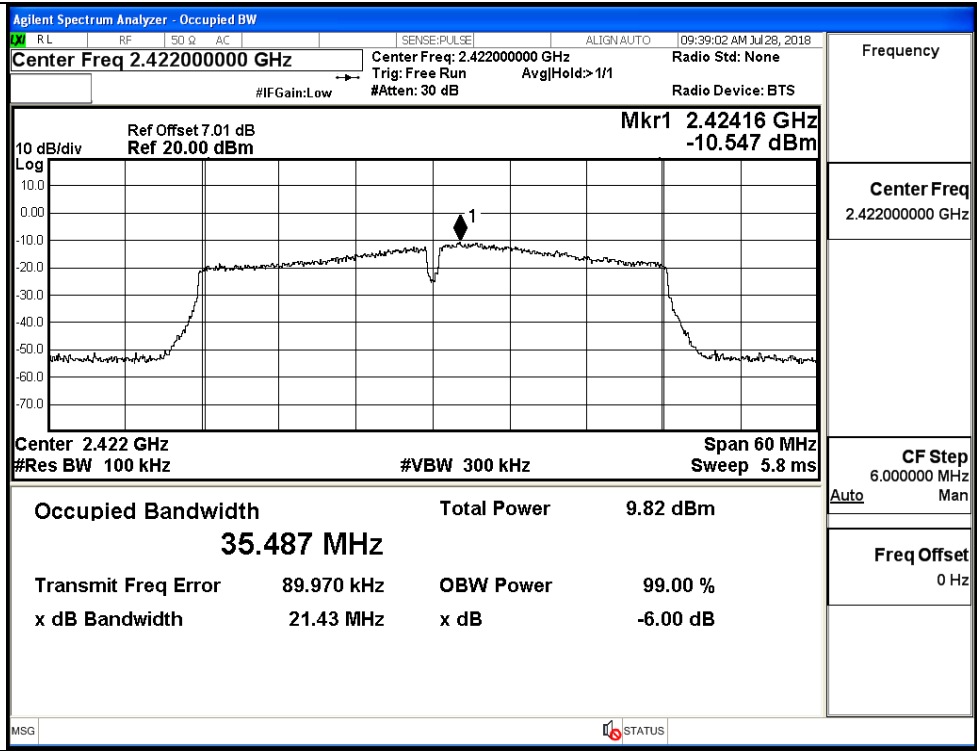
11N20SISO/MCH



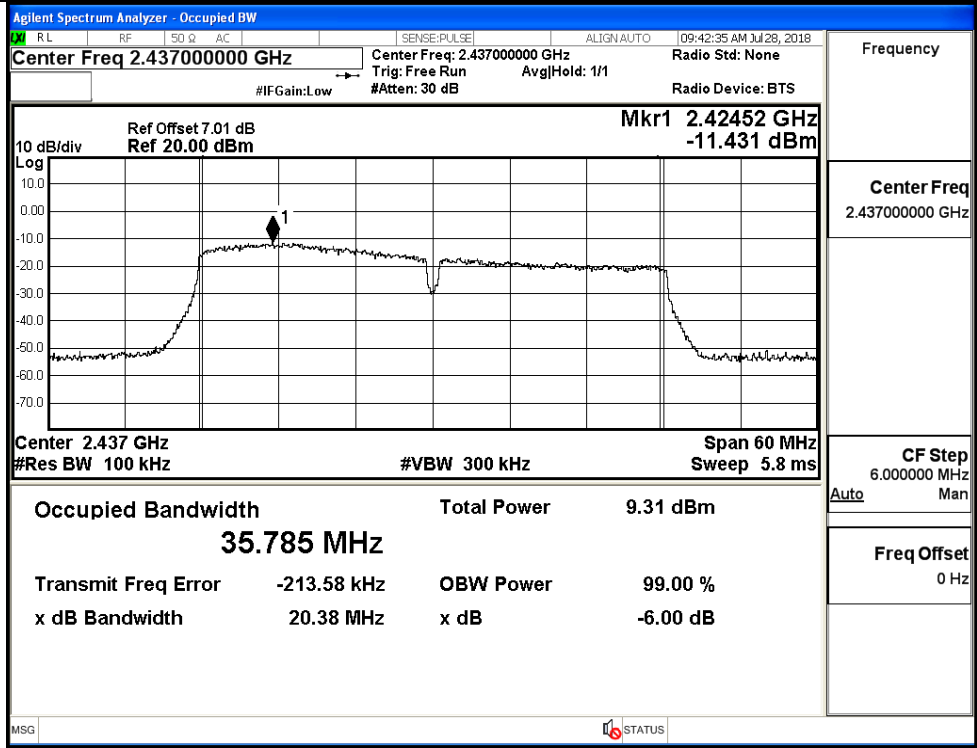
11N20SISO/HCH



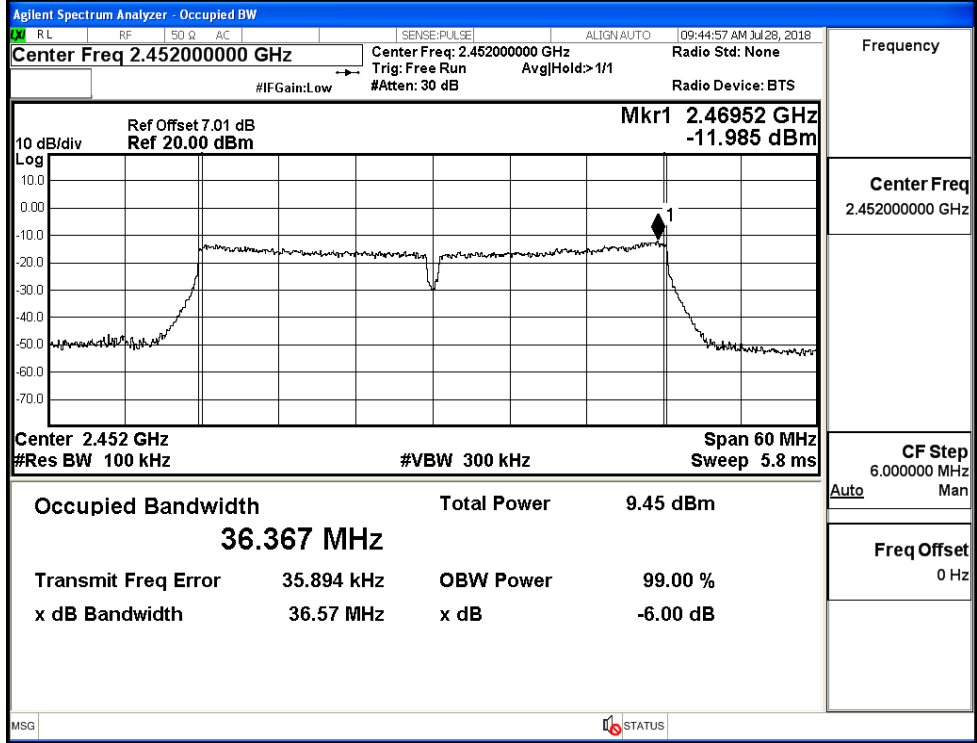
11N40SISO/LCH



11N40SISO/MCH



11N40SISO/HCH



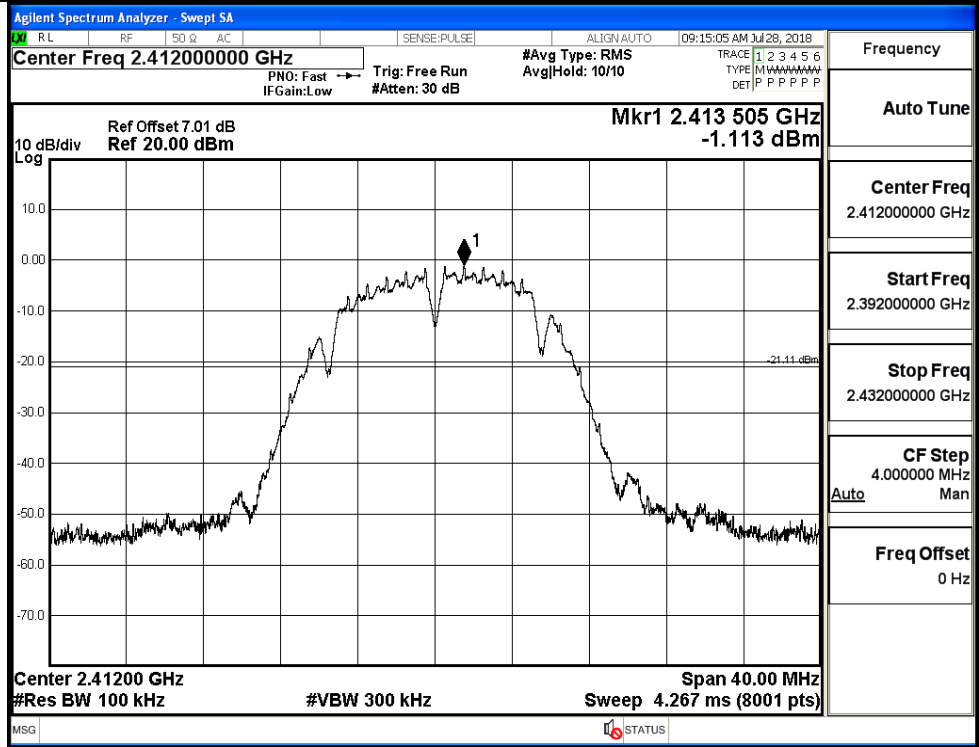
Frequency	Center Freq 2.45200000 GHz
CF Step	6.000000 MHz Auto Man
Freq Offset	0 Hz

A.5 RF Conducted Spurious Emissions

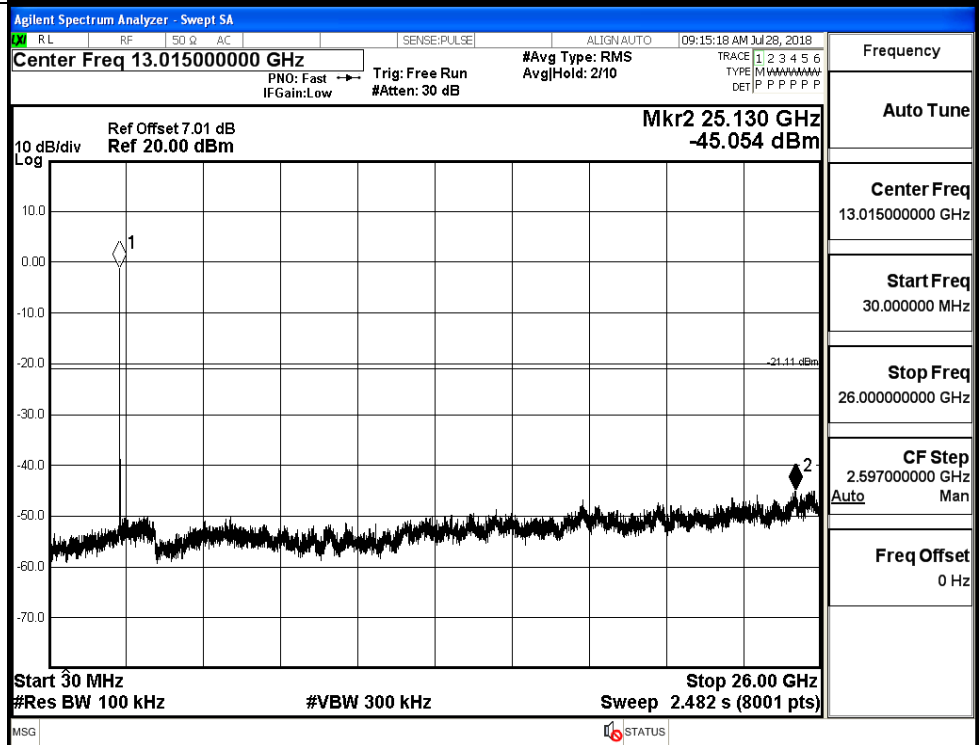
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
11B	LCH	-1.113	-45.054	-21.113	PASS
	MCH	-1.51	-44.208	-21.510	PASS
	HCH	-1.591	-44.897	-21.591	PASS
11G	LCH	-8.451	-43.889	-28.451	PASS
	MCH	-9.222	-43.785	-29.222	PASS
	HCH	-9.329	-44.678	-29.329	PASS
11N20 SISO	LCH	-7.589	-43.638	-27.589	PASS
	MCH	-8.85	-44.748	-28.850	PASS
	HCH	-8.845	-44.154	-28.845	PASS
11N40 SISO	LCH	-10.599	-44.286	-30.599	PASS
	MCH	-11.821	-43.524	-31.821	PASS
	HCH	-12.269	-44.481	-32.269	PASS

11B_LCH_Graphs

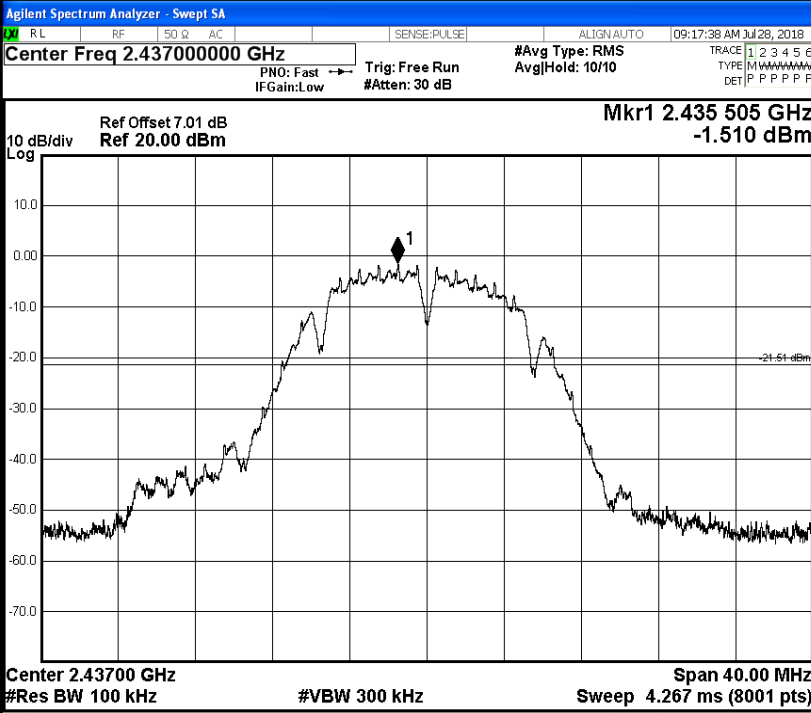
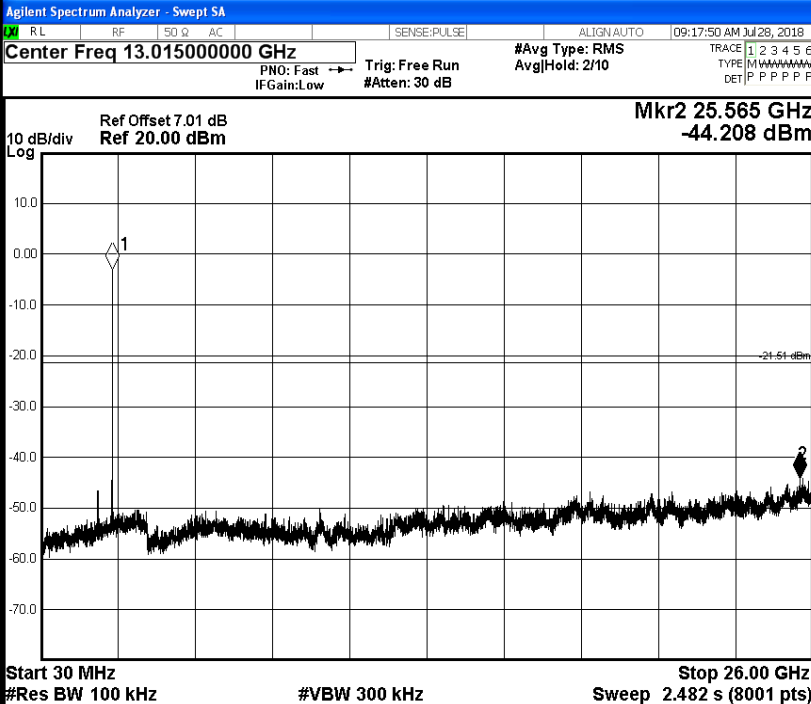
Pref/11B/LCH



Puw/11B/LCH

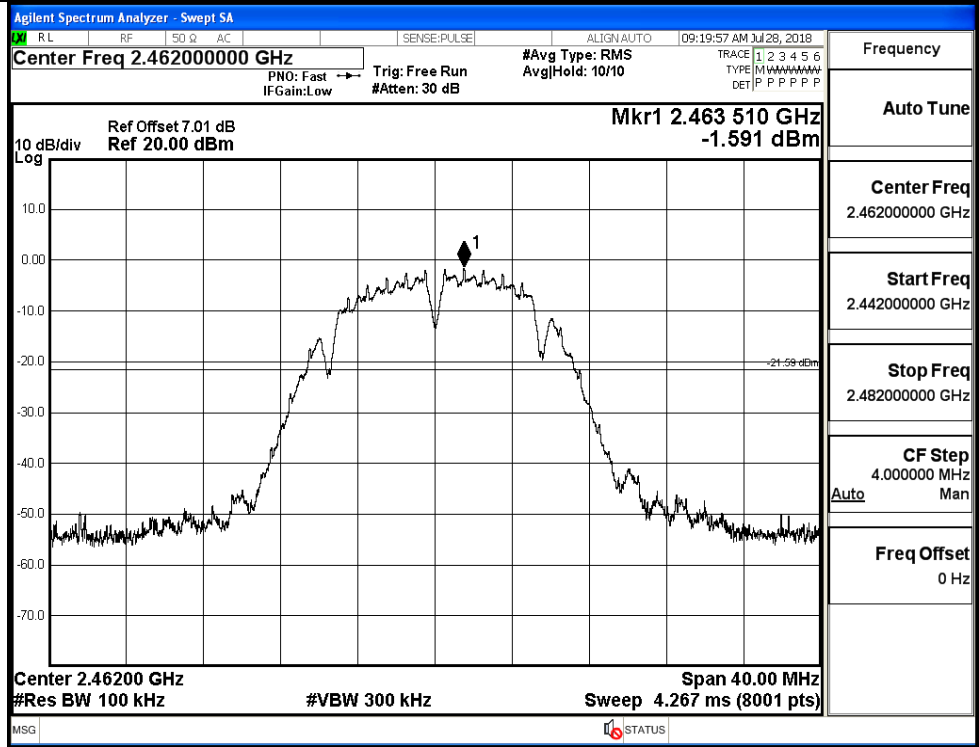


11B_MCH_Graphs

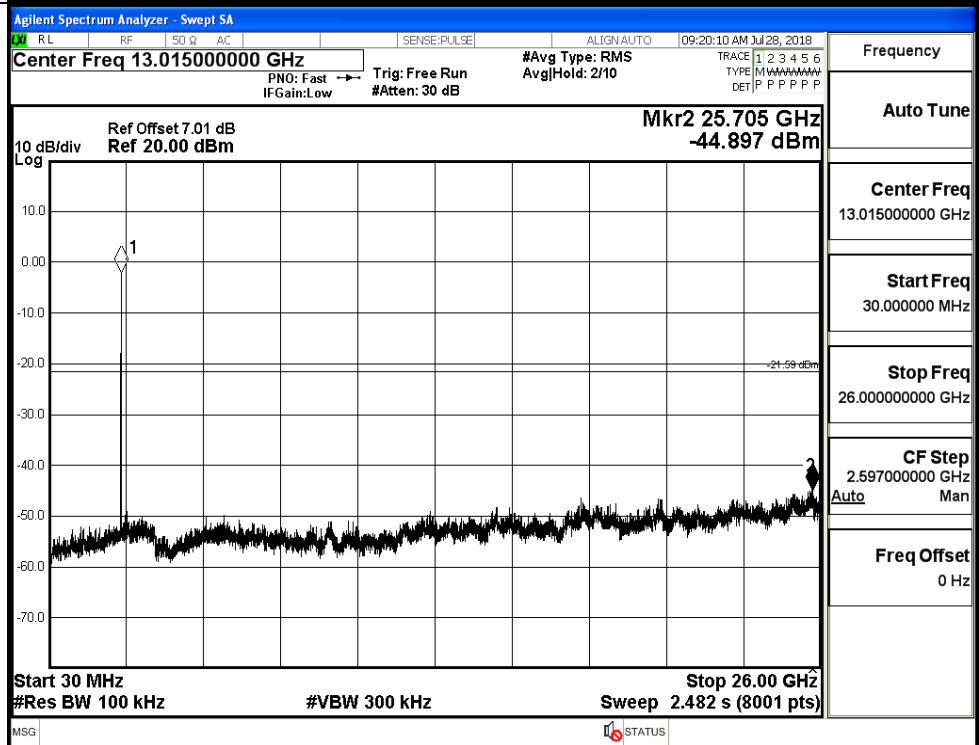
<p>Pref/11B/MCH</p>		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.437000000 GHz</p> <p>Start Freq 2.417000000 GHz</p> <p>Stop Freq 2.457000000 GHz</p> <p>CF Step 4.000000 MHz Auto Man</p> <p>Freq Offset 0 Hz</p>
	<p>Puw/11B/MCH</p>	

11B_HCH_Graphs

Pref/11B/HCH

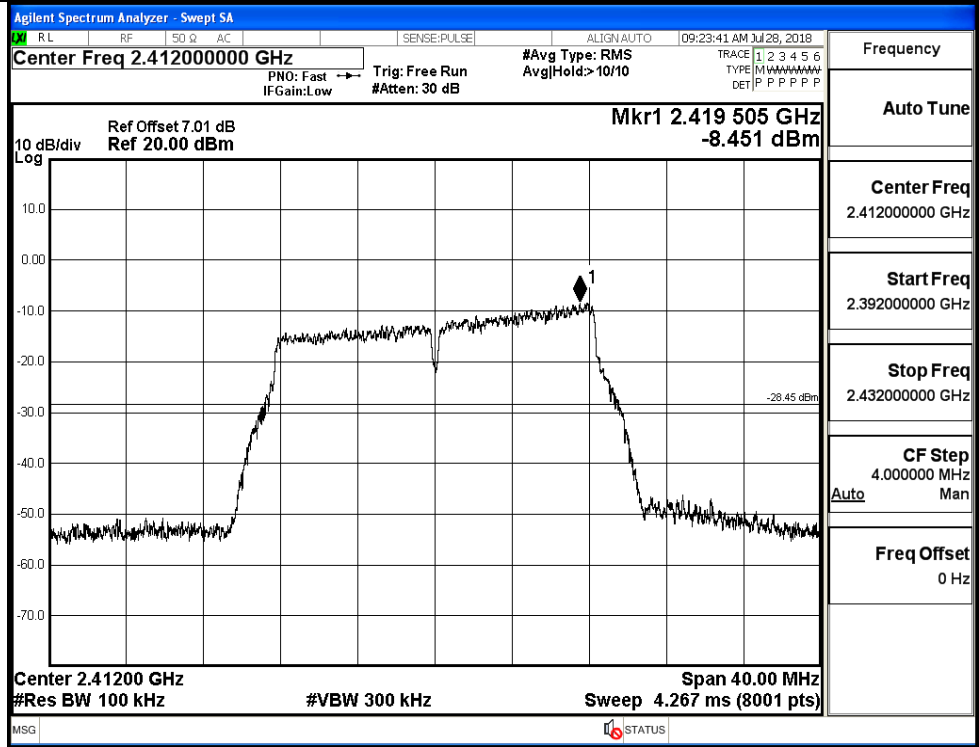


Puw/11B/HCH

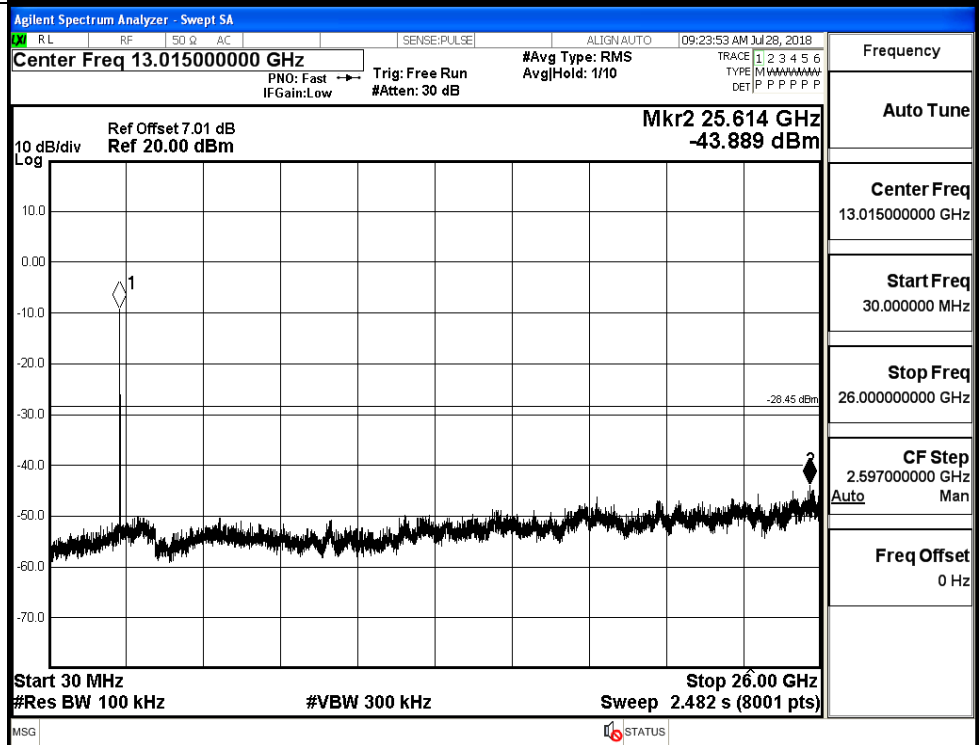


11G_LCH_Graphs

Pref/11G/LCH

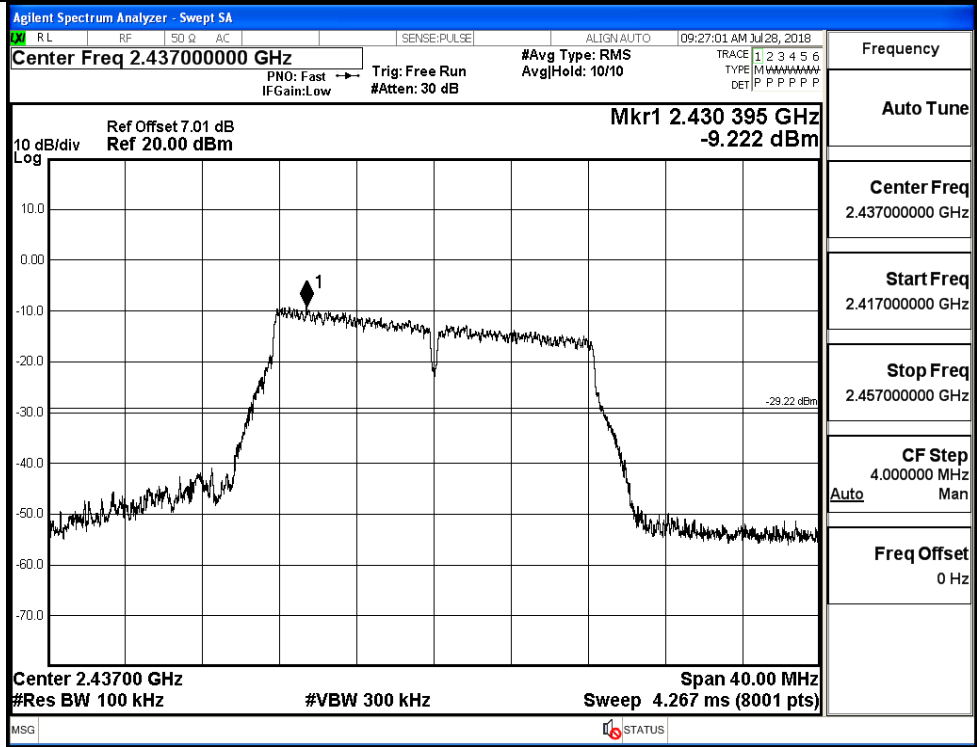


Puw/11G/LCH

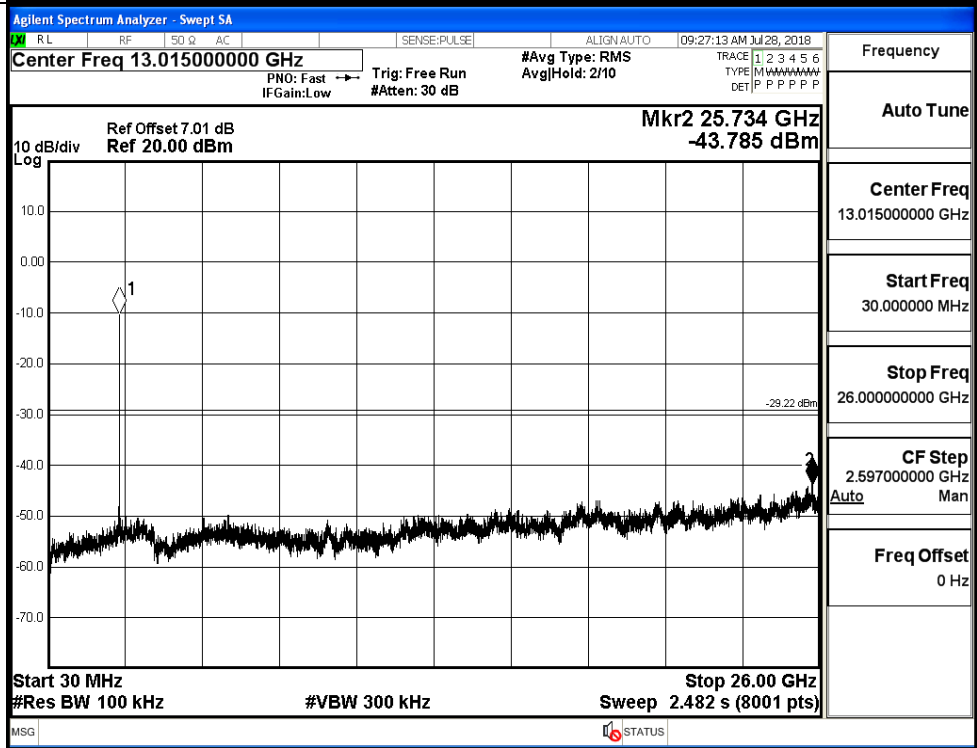


11G_MCH_Graphs

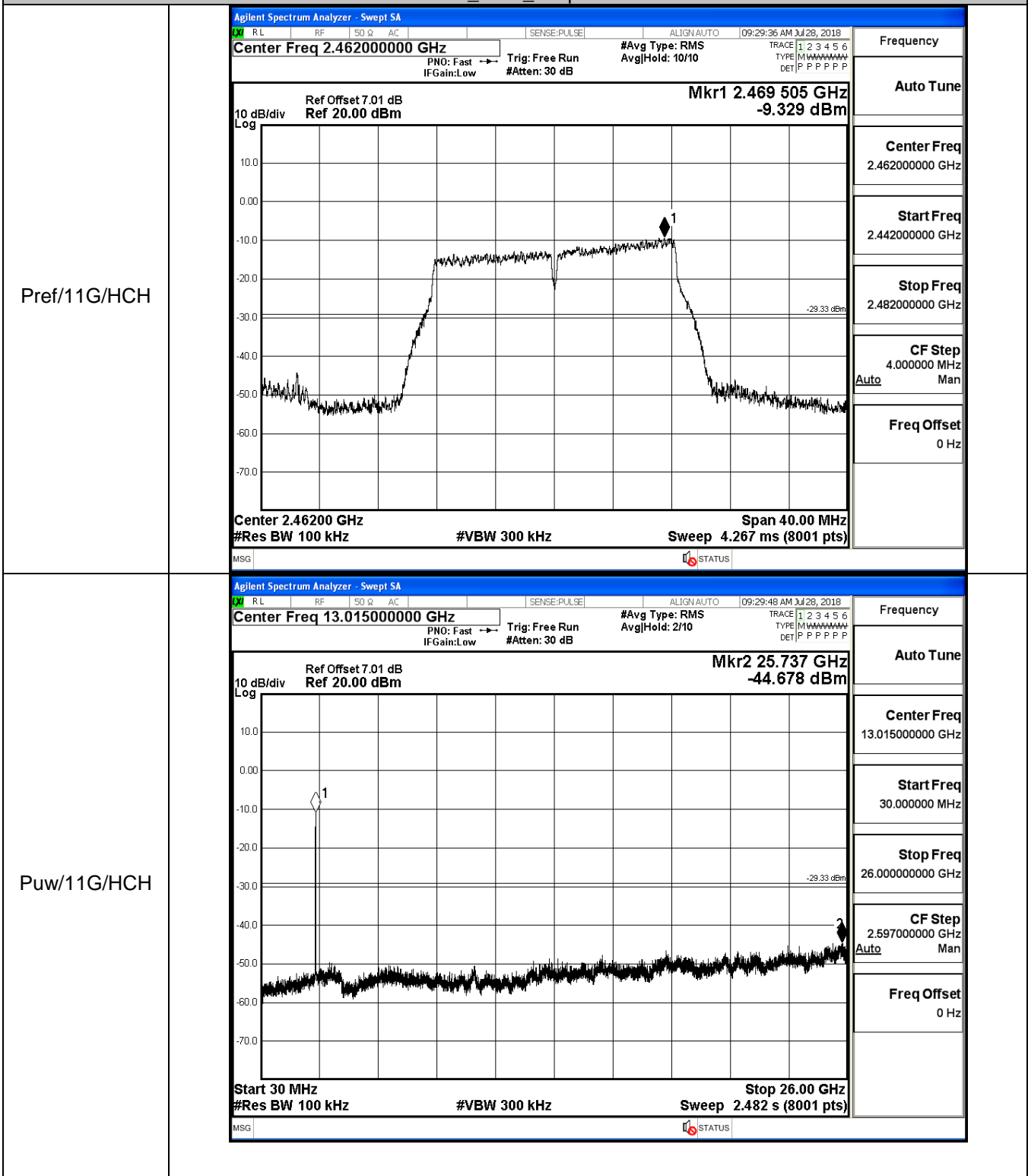
Pref/11G/MCH



Puw/11G/MCH

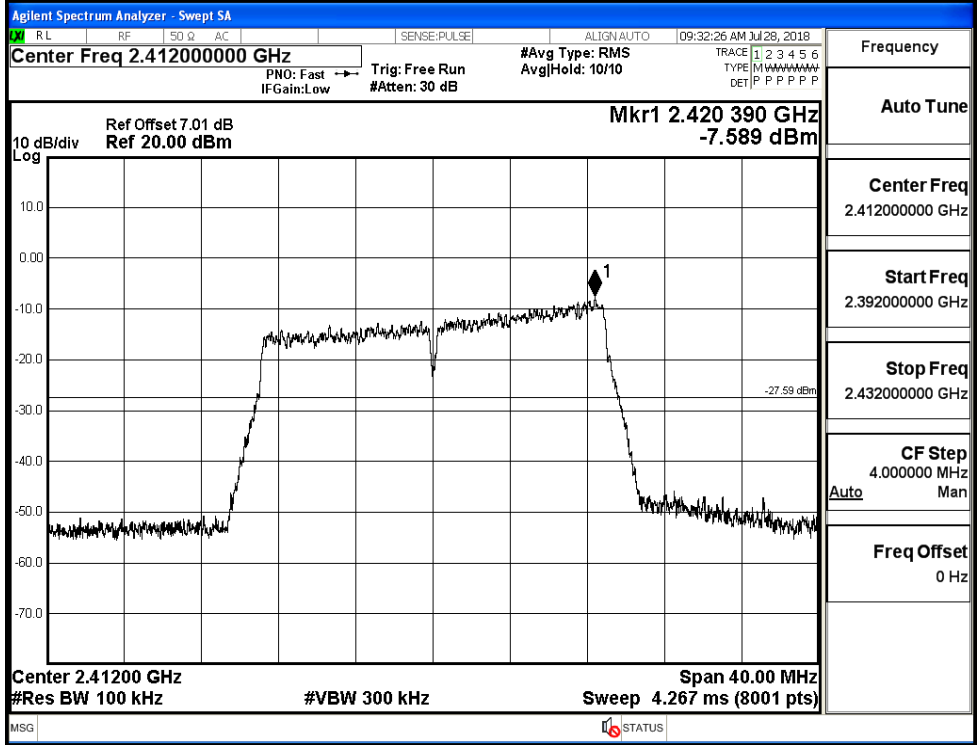


11G_HCH_Graphs

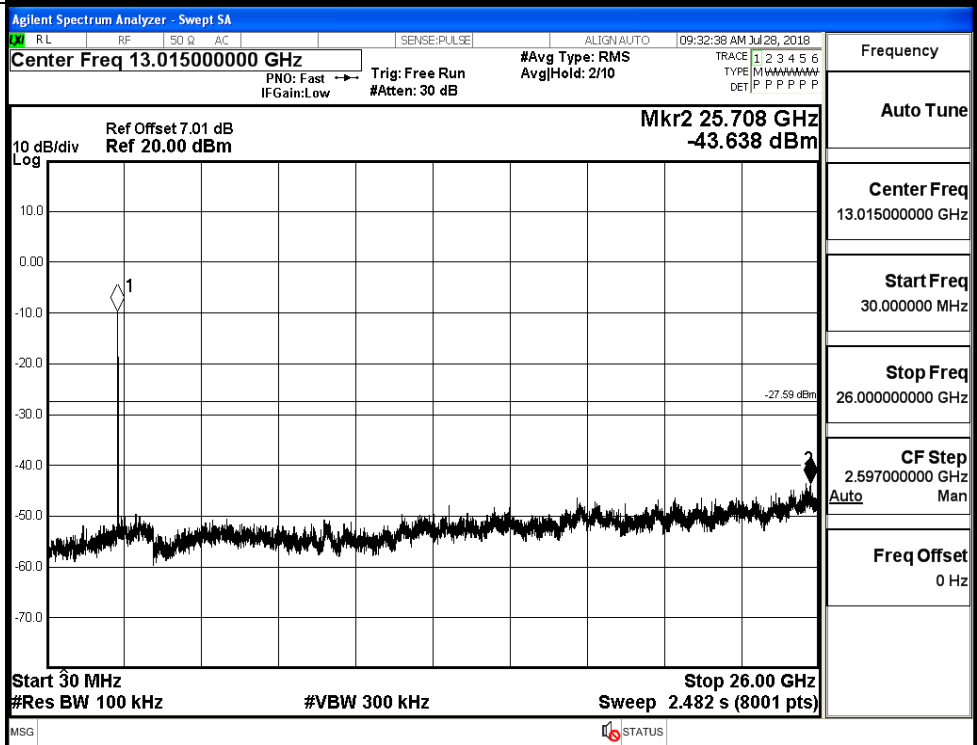


11N20SISO_LCH_Graphs

Pref/11N20SIS
O/LCH



Puw/11N20
SISO/LCH

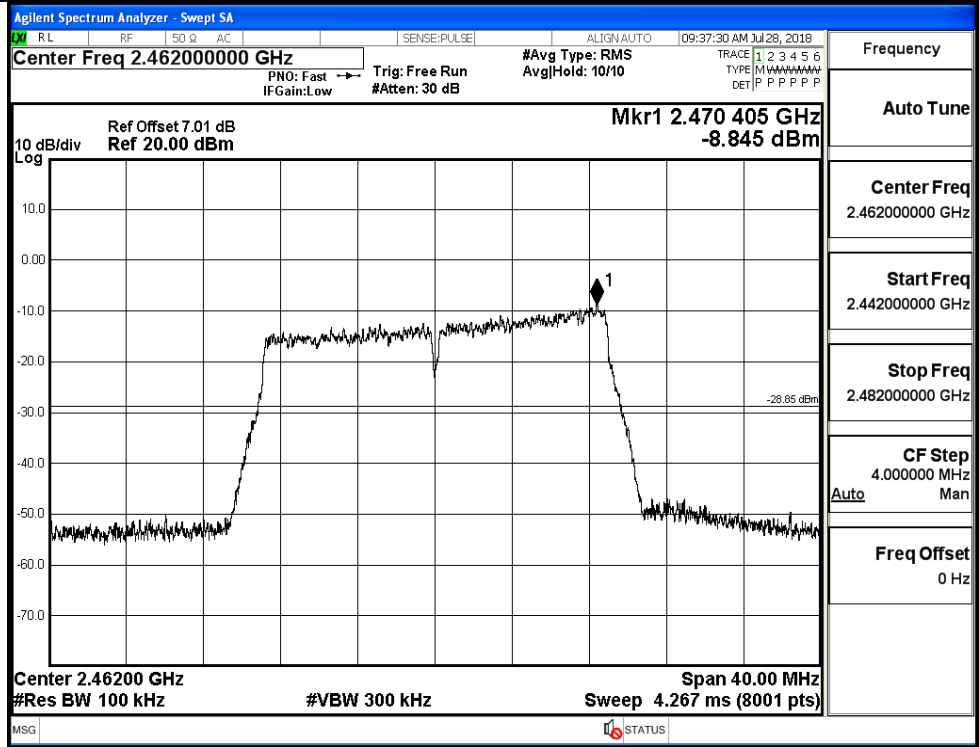


11N20SISO_MCH_Graphs

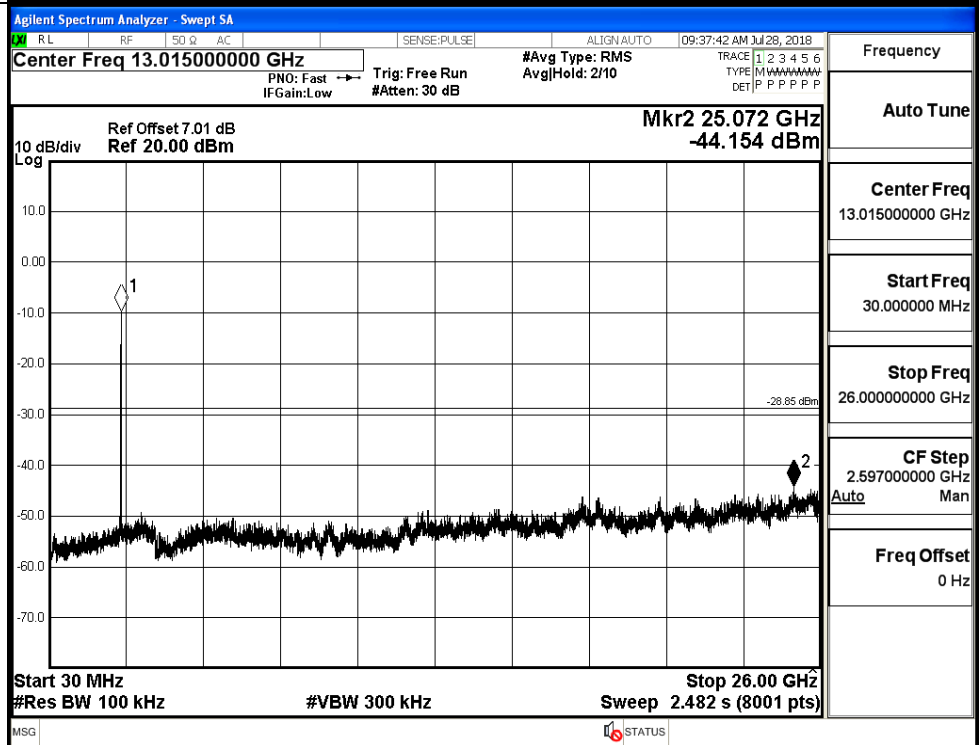
<p>Pref/11N20 SISO/MCH</p>	<p>Agilent Spectrum Analyzer - Swept SA</p> <p>Center Freq 2.43700000 GHz</p> <p>Mkr1 2.429 145 GHz -8.850 dBm</p> <p>10 dB/div Log</p> <p>Ref Offset 7.01 dB Ref 20.00 dBm</p> <p>Center 2.43700 GHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 4.267 ms (8001 pts)</p>	<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.437000000 GHz</p> <p>Start Freq 2.417000000 GHz</p> <p>Stop Freq 2.457000000 GHz</p> <p>CF Step 4.000000 MHz Auto Man</p> <p>Freq Offset 0 Hz</p>
	<p>Puw/11N20 SISO/MCH</p>	<p>Agilent Spectrum Analyzer - Swept SA</p> <p>Center Freq 13.01500000 GHz</p> <p>Mkr2 25.438 GHz -44.748 dBm</p> <p>10 dB/div Log</p> <p>Ref Offset 7.01 dB Ref 20.00 dBm</p> <p>Start 30 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 2.482 s (8001 pts)</p>

11N20SISO_HCH_Graphs

Pref/11N20
SISO/HCH

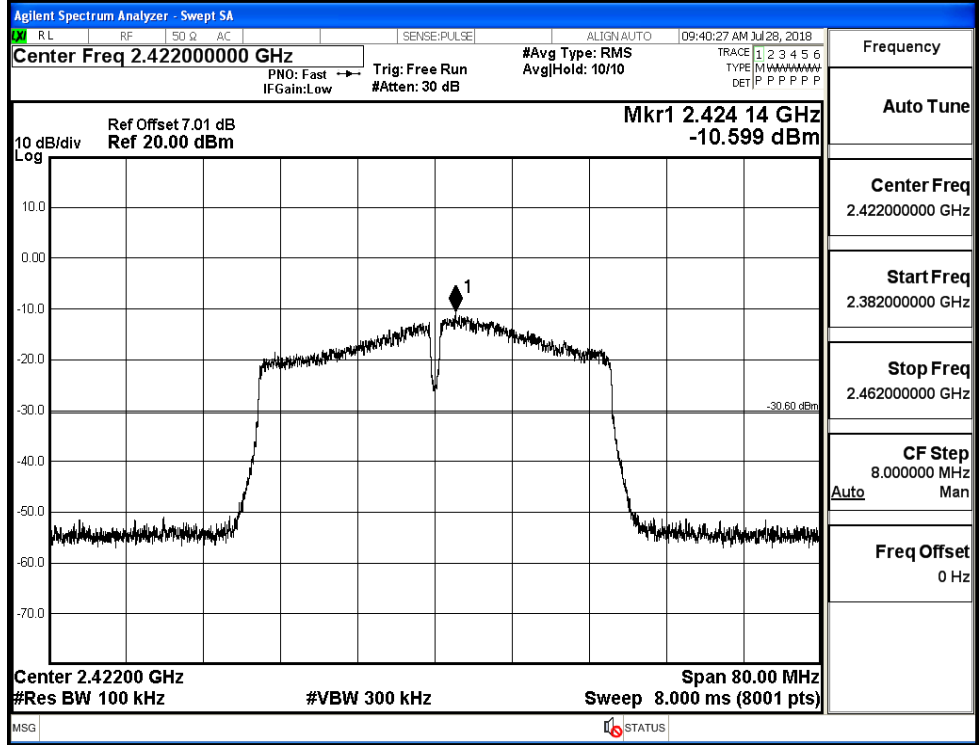


Puw/11N20
SISO/HCH

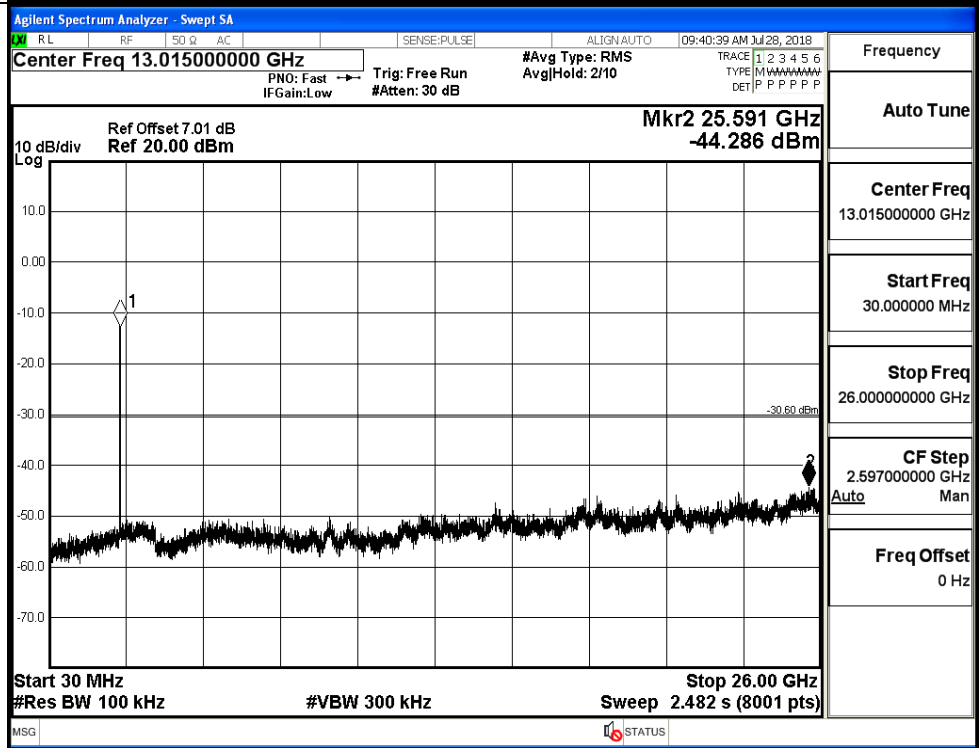


11N40SISO_LCH_Graphs

Pref/11N40
SISO/LCH

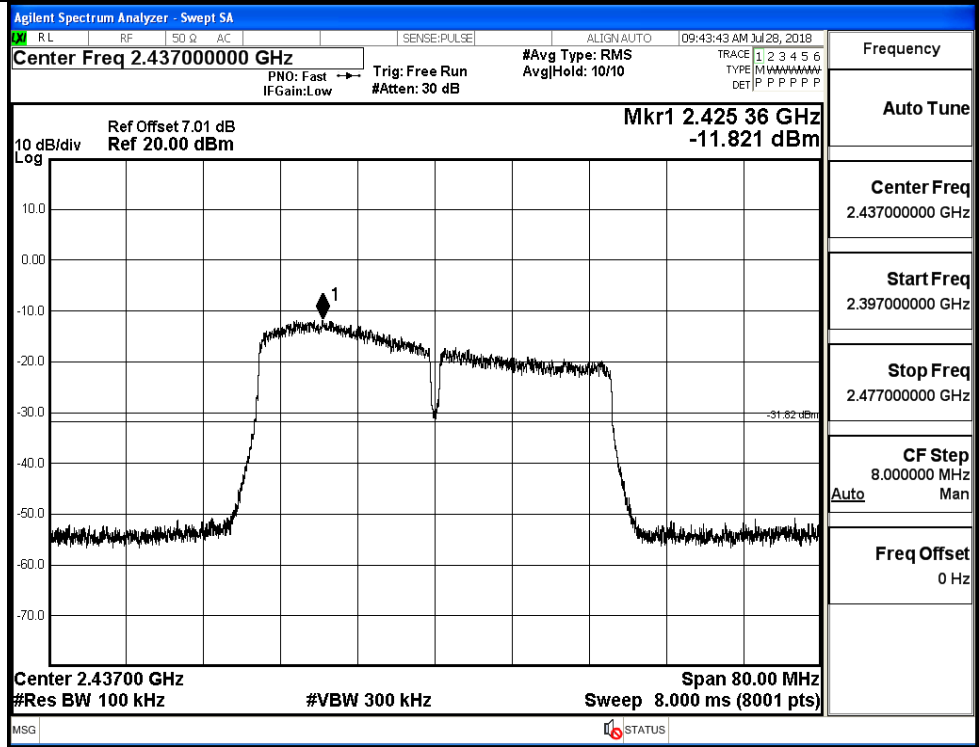


Puw/11N40
SISO/LCH

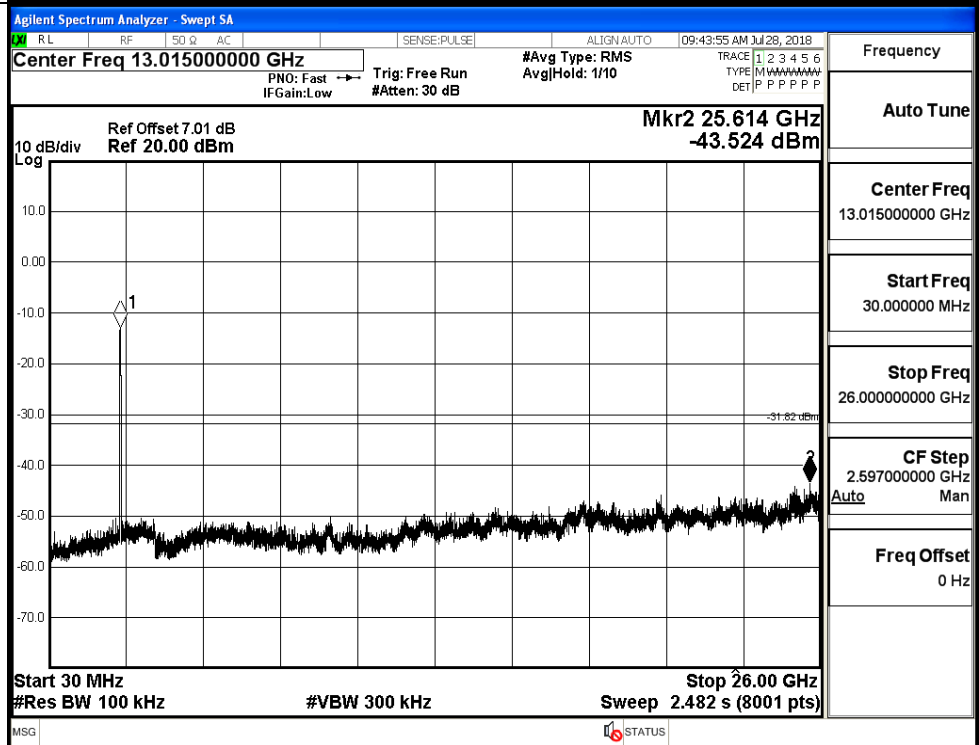


11N40SISO_MCH_Graphs

Pref/11N40
SISO/MCH

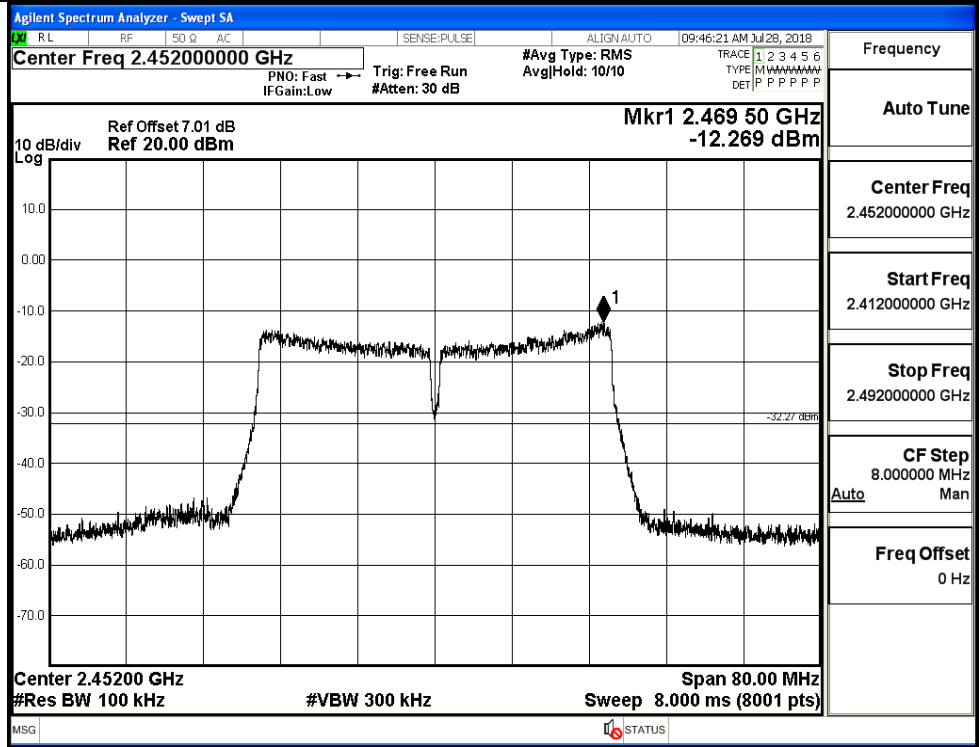


Puw/11N40
SISO/MCH

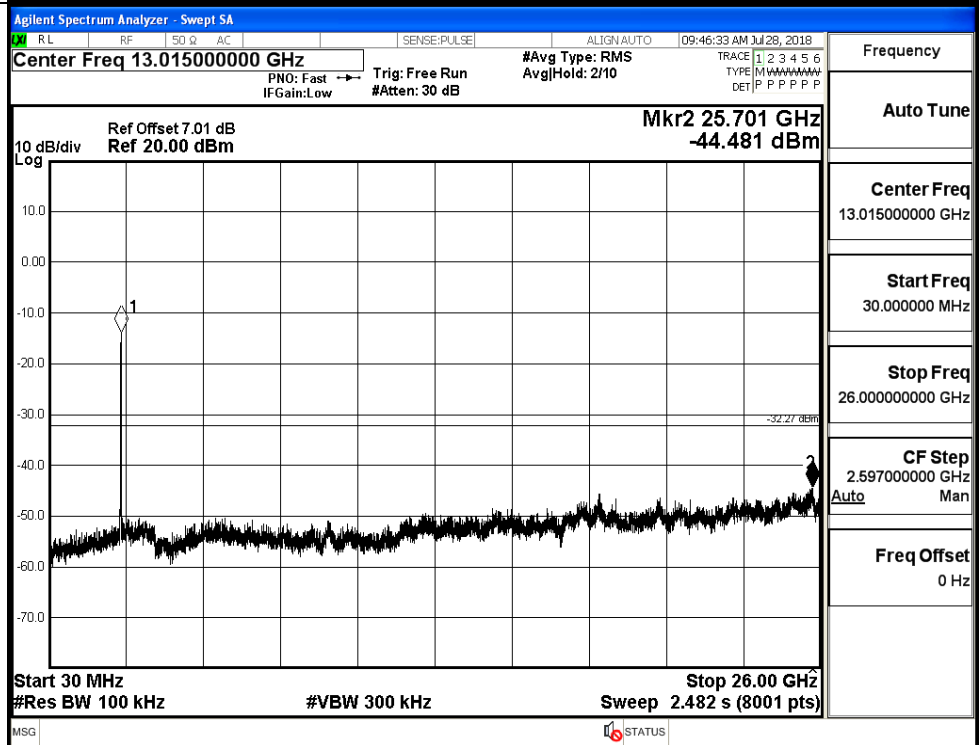


11N40SISO_HCH_Graphs

Pref/11N40
SISO/HCH



Puw/11N40
SISO/HCH

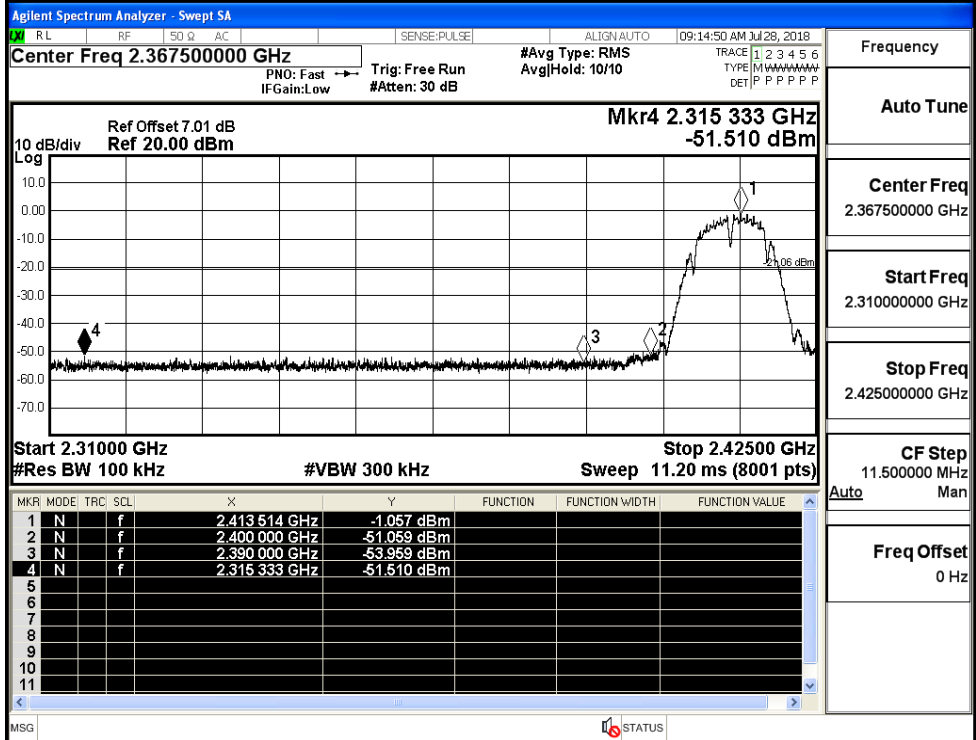


A.6 Band-edge for RF Conducted Emissions

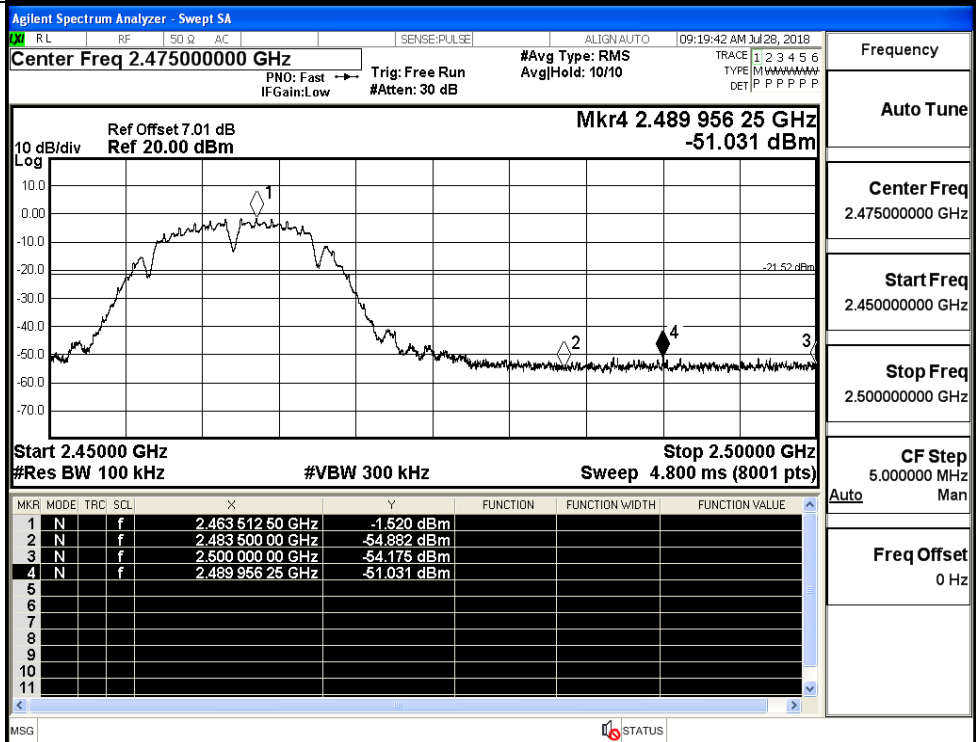
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
11B	LCH	-1.057	-51.510	-21.06	PASS
	HCH	-1.520	-51.031	-21.52	PASS
11G	LCH	-8.426	-51.364	-28.43	PASS
	HCH	-9.293	-50.998	-29.29	PASS
11N20SISO	LCH	-7.558	-51.367	-27.56	PASS
	HCH	-8.407	-50.709	-28.41	PASS
11N40SISO	LCH	-10.838	-51.065	-30.84	PASS
	HCH	-12.223	-50.786	-32.22	PASS

Test Graphs

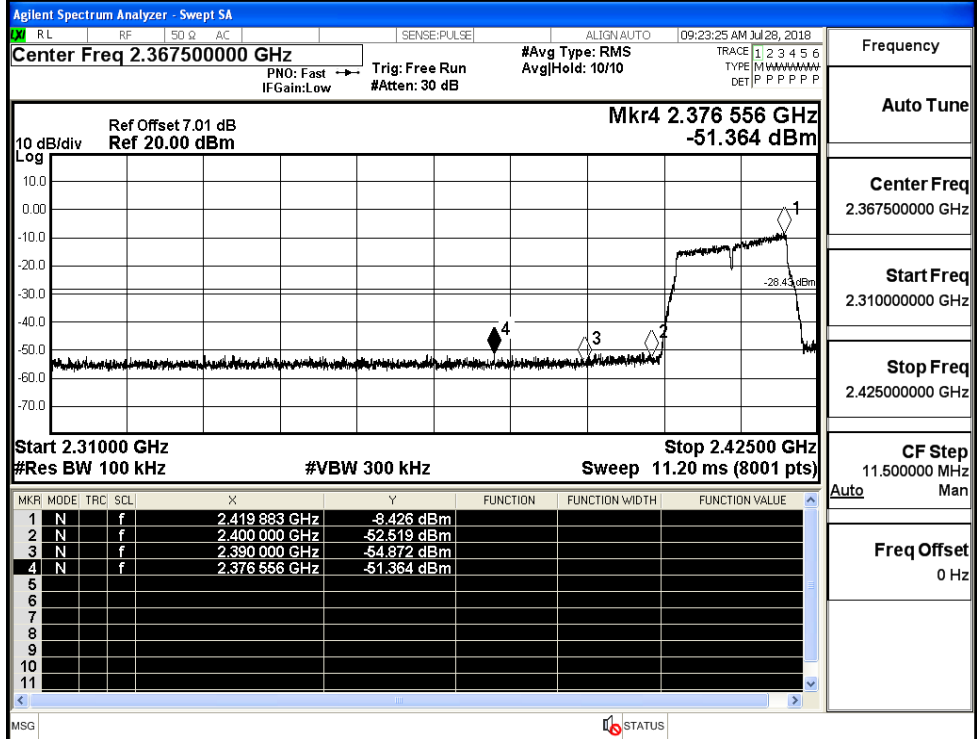
11B/LCH



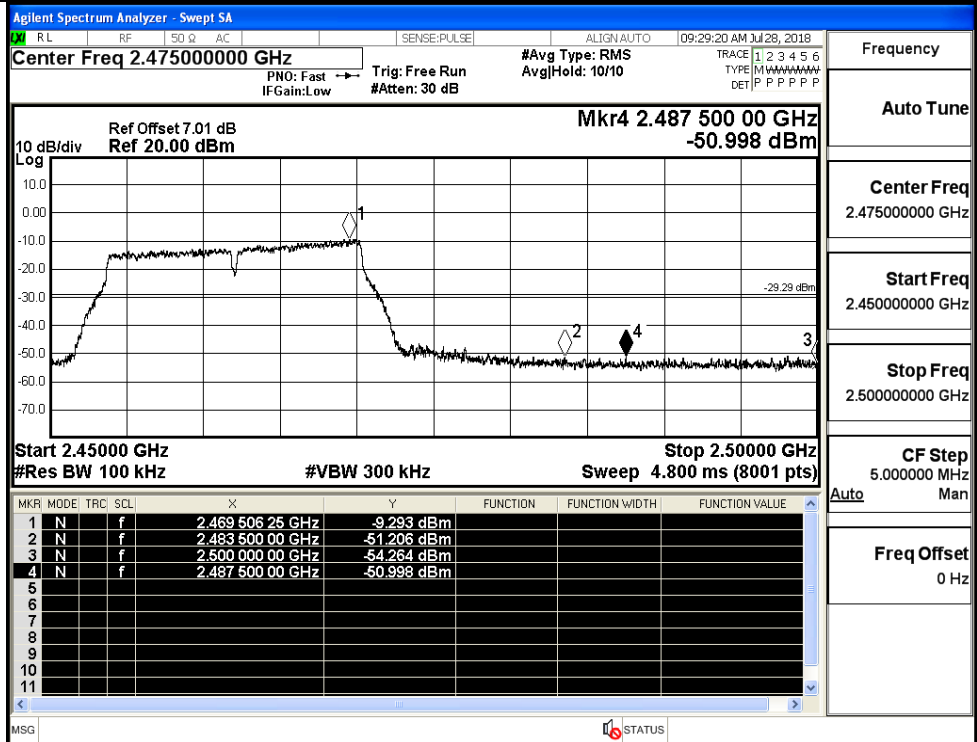
11B/HCH



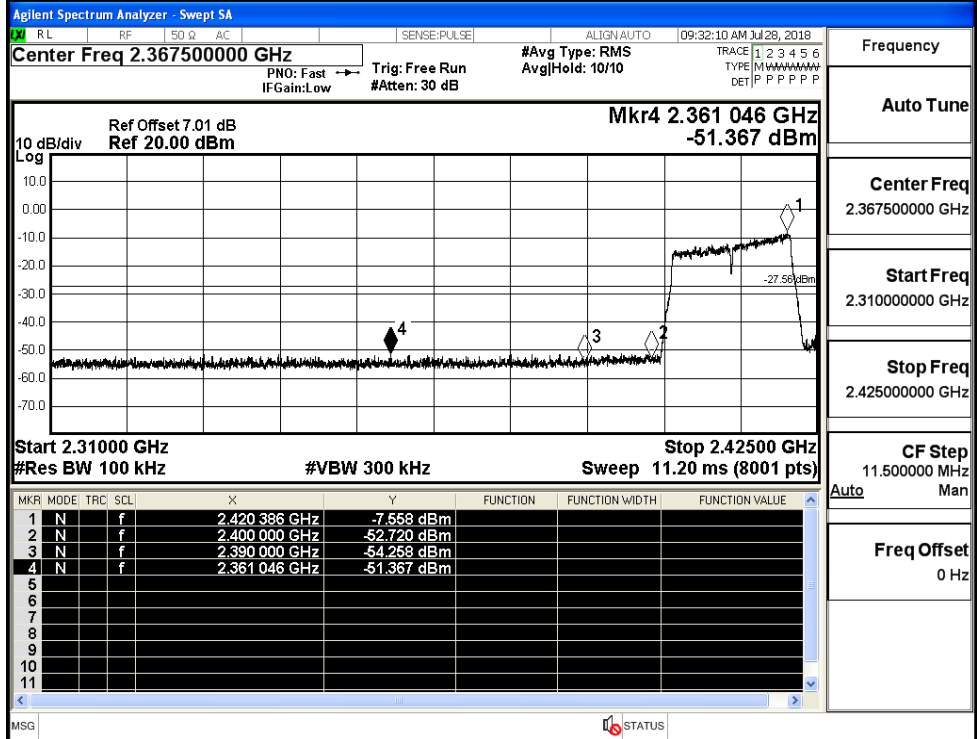
11G/LCH



11G/HCH

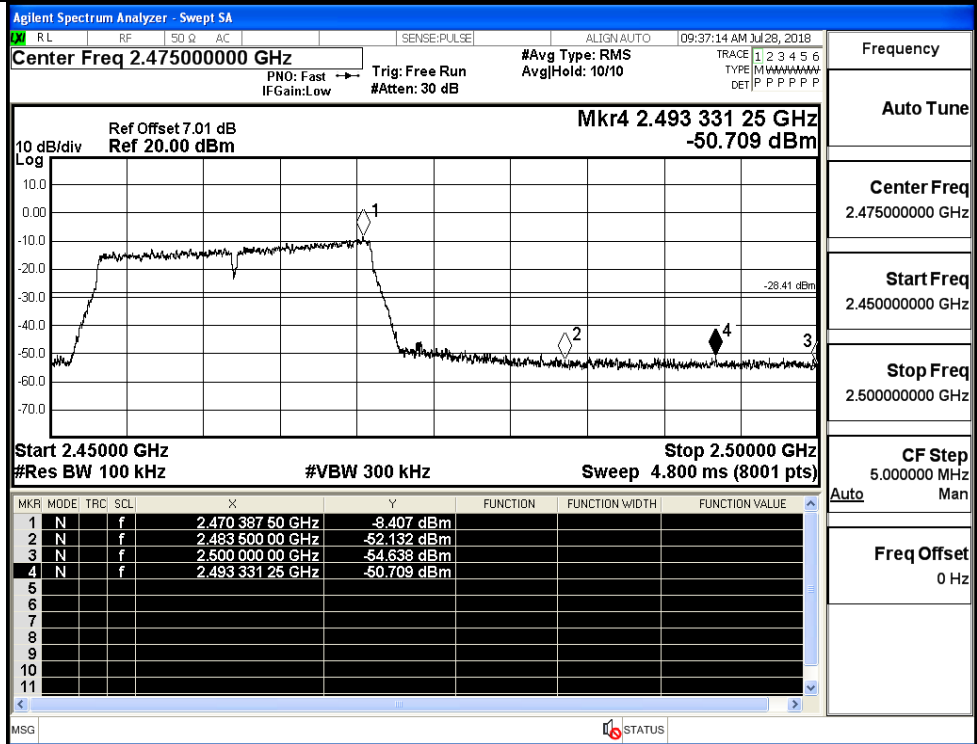


11N20SISO/LCH



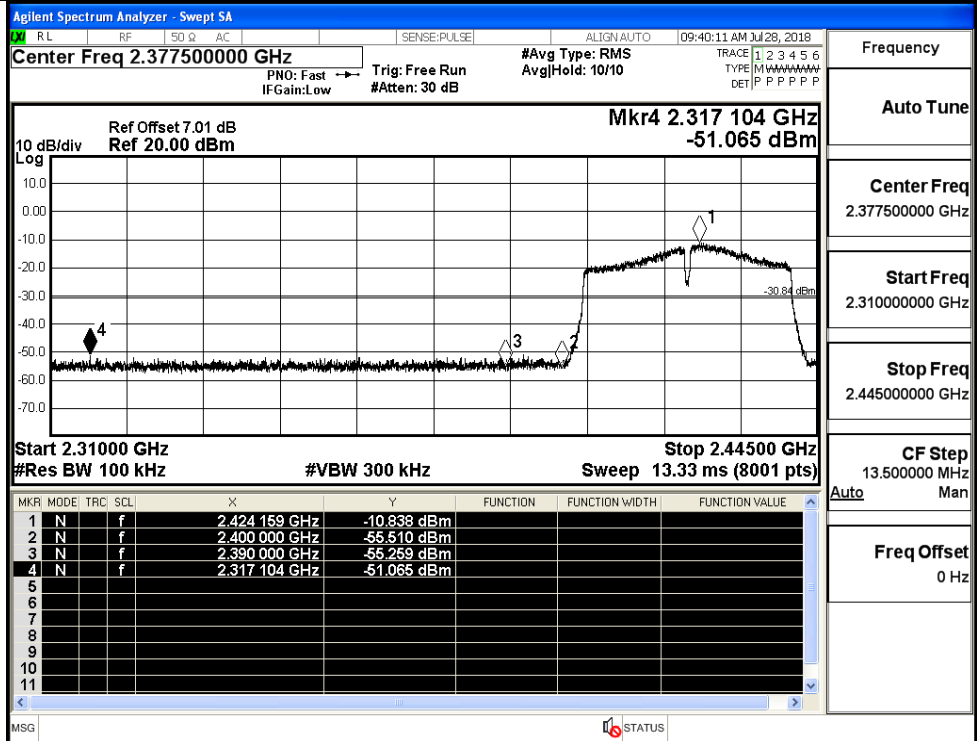
Frequency	
Auto Tune	
Center Freq	2.367500000 GHz
Start Freq	2.310000000 GHz
Stop Freq	2.425000000 GHz
CF Step	11.500000 MHz
Auto	Man
Freq Offset	0 Hz

11N20SISO/HCH



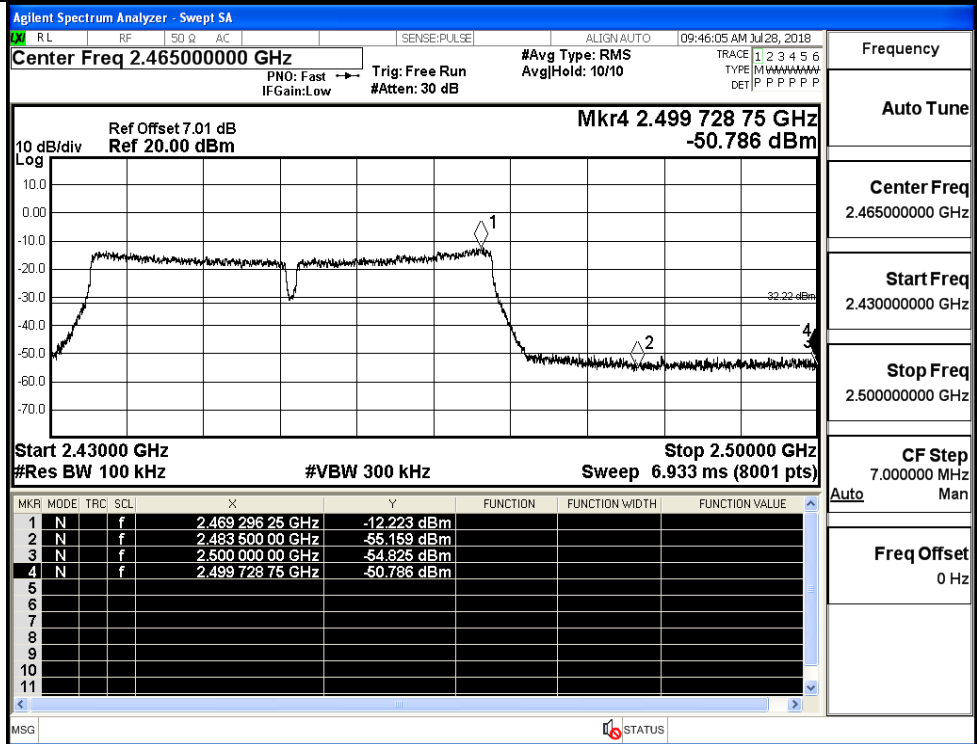
Frequency	
Auto Tune	
Center Freq	2.475000000 GHz
Start Freq	2.450000000 GHz
Stop Freq	2.500000000 GHz
CF Step	5.000000 MHz
Auto	Man
Freq Offset	0 Hz

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
Auto
Freq Offset 0 Hz

11N40SISO/HCH



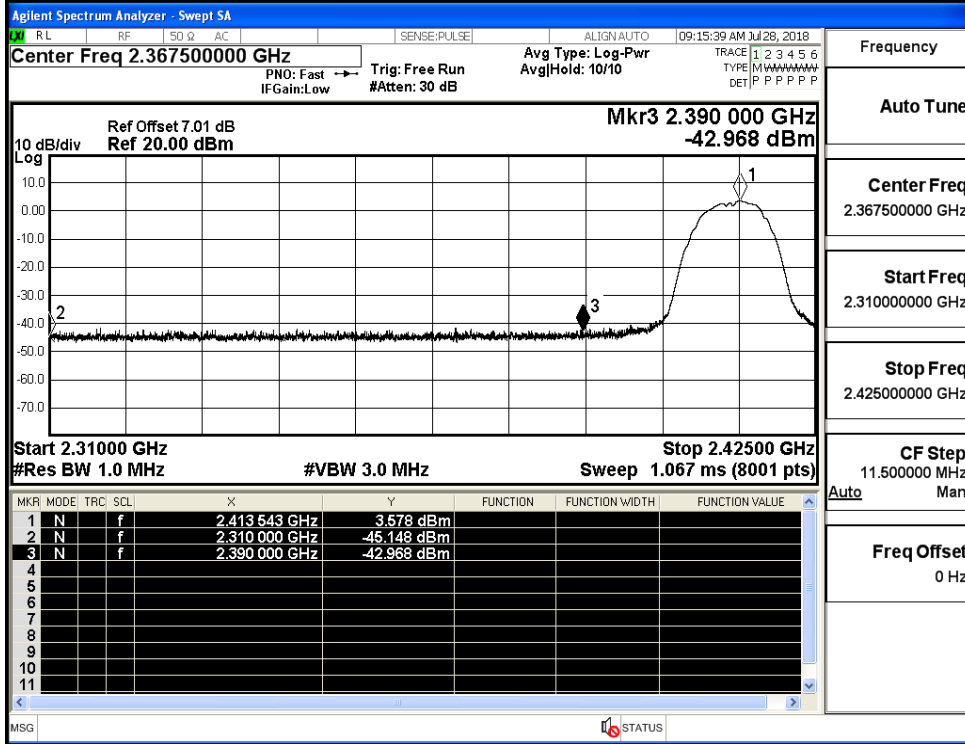
Frequency
Auto Tune
Center Freq 2.465000000 GHz
Start Freq 2.430000000 GHz
Stop Freq 2.500000000 GHz
CF Step 7.000000 MHz
Auto
Freq Offset 0 Hz

A.7 Restrict-band band-edge measurements

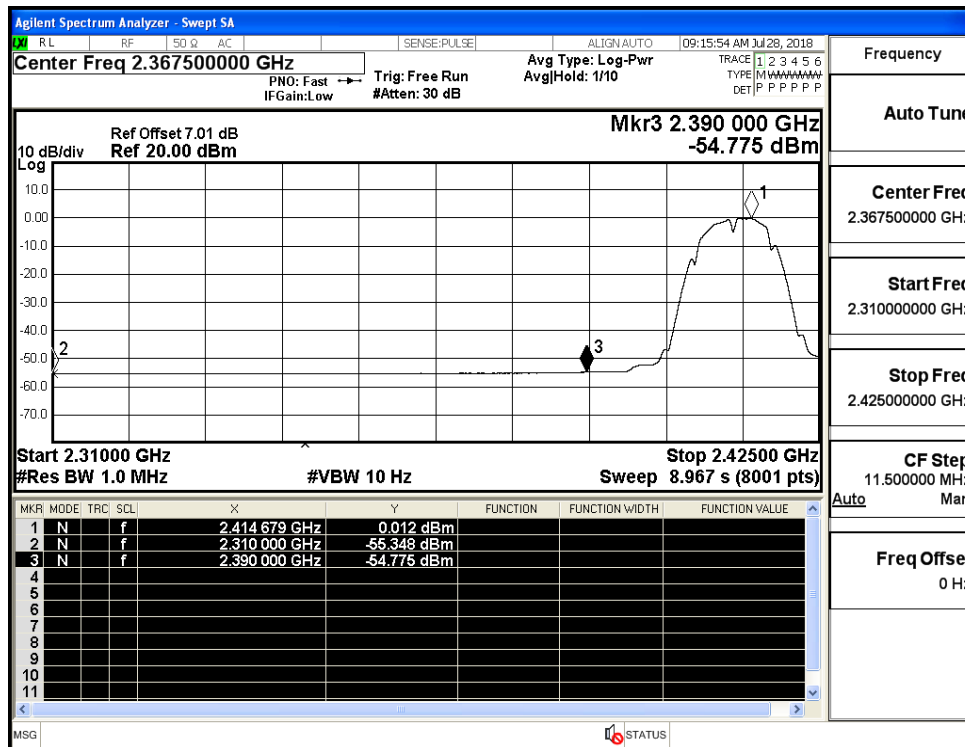
Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBu V/m]	Verdict
11B	2412	Ant1	2310.0	-45.15	2.0	0	52.11	PEAK	74	PASS
	2412	Ant1	2310.0	-55.35	2.0	0	41.91	AV	54	PASS
	2412	Ant1	2390.0	-42.97	2.0	0	54.29	PEAK	74	PASS
	2412	Ant1	2390.0	-54.78	2.0	0	42.48	AV	54	PASS
	2462	Ant1	2483.5	-43.35	2.0	0	53.90	PEAK	74	PASS
	2462	Ant1	2483.5	-54.52	2.0	0	42.74	AV	54	PASS
	2462	Ant1	2500.0	-44.47	2.0	0	52.79	PEAK	74	PASS
	2462	Ant1	2500.0	-54.59	2.0	0	42.67	AV	54	PASS
11G	2412	Ant1	2310.0	-44.27	2.0	0	52.98	PEAK	74	PASS
	2412	Ant1	2310.0	-55.31	2.0	0	41.94	AV	54	PASS
	2412	Ant1	2390.0	-45.23	2.0	0	52.03	PEAK	74	PASS
	2412	Ant1	2390.0	-54.66	2.0	0	42.60	AV	54	PASS
	2462	Ant1	2483.5	-43.40	2.0	0	53.86	PEAK	74	PASS
	2462	Ant1	2483.5	-54.02	2.0	0	43.24	AV	54	PASS
	2462	Ant1	2500.0	-44.22	2.0	0	53.04	PEAK	74	PASS
	2462	Ant1	2500.0	-54.31	2.0	0	42.94	AV	54	PASS
11N20 SISO	2412	Ant1	2310.0	-44.83	2.0	0	52.43	PEAK	74	PASS
	2412	Ant1	2310.0	-55.05	2.0	0	42.21	AV	54	PASS
	2412	Ant1	2390.0	-43.24	2.0	0	54.02	PEAK	74	PASS
	2412	Ant1	2390.0	-54.38	2.0	0	42.88	AV	54	PASS
	2462	Ant1	2483.5	-43.77	2.0	0	53.49	PEAK	74	PASS
	2462	Ant1	2483.5	-53.97	2.0	0	43.29	AV	54	PASS
	2462	Ant1	2500.0	-43.59	2.0	0	53.67	PEAK	74	PASS
	2462	Ant1	2500.0	-54.29	2.0	0	42.96	AV	54	PASS
11N40 SISO	2422	Ant1	2310.0	-45.33	2.0	0	51.93	PEAK	74	PASS
	2422	Ant1	2310.0	-55.05	2.0	0	42.21	AV	54	PASS

	2422	Ant1	2390.0	-43.46	2.0	0	53.80	PEAK	74	PASS
	2422	Ant1	2390.0	-54.54	2.0	0	42.72	AV	54	PASS
	2452	Ant1	2483.5	-42.62	2.0	0	54.64	PEAK	74	PASS
	2452	Ant1	2483.5	-54.02	2.0	0	43.24	AV	54	PASS
	2452	Ant1	2500.0	-43.41	2.0	0	53.85	PEAK	74	PASS
	2452	Ant1	2500.0	-54.14	2.0	0	43.12	AV	54	PASS

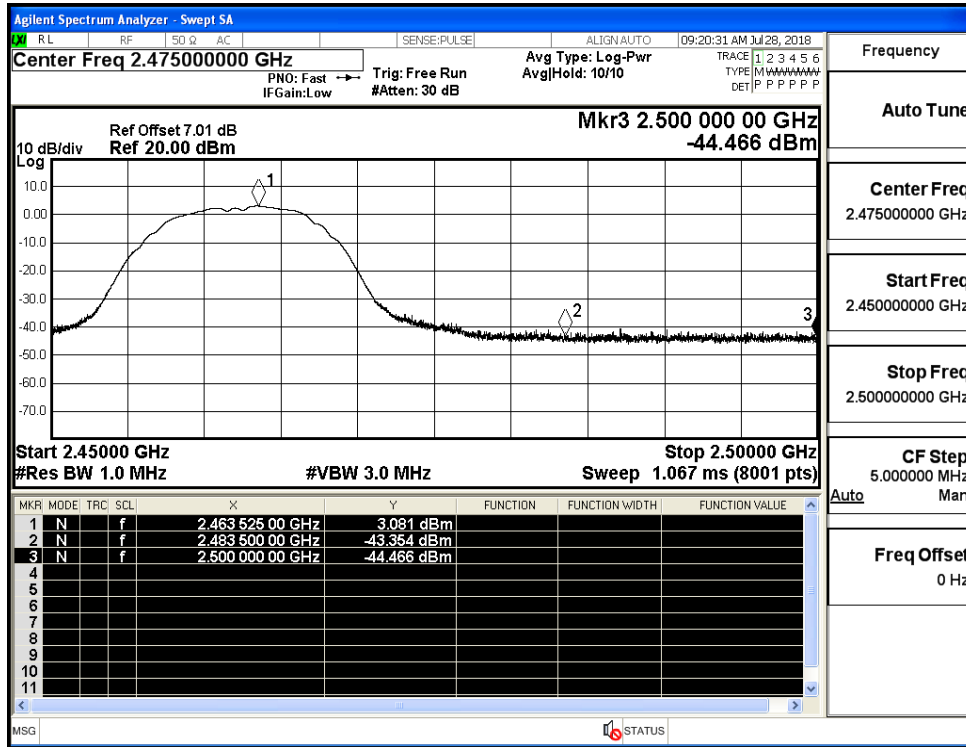
Restrict-band band-edge measurements_11B_2412_Ant1_PEAK



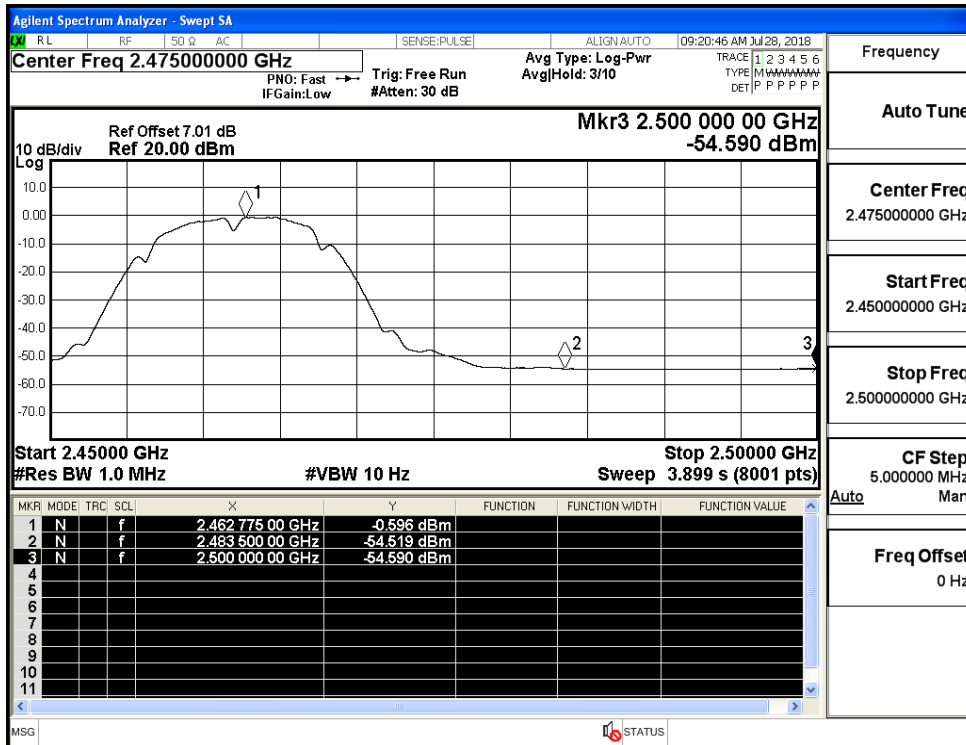
Restrict-band band-edge measurements_11B_2412_Ant1_AV



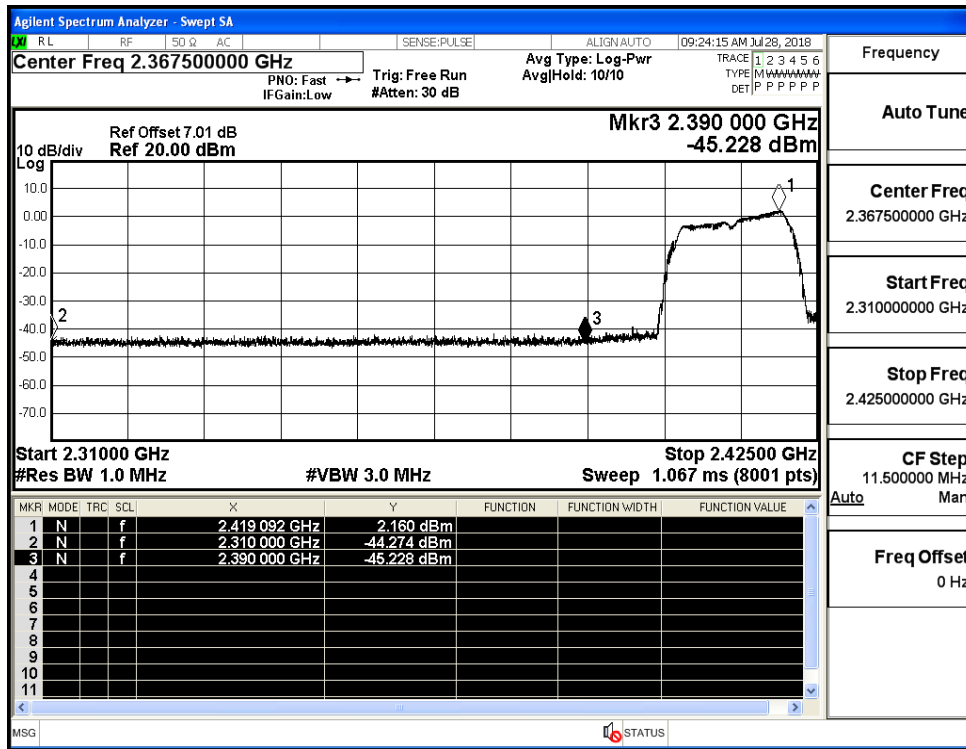
Restrict-band band-edge measurements_11B_2462_Ant1_PEAK



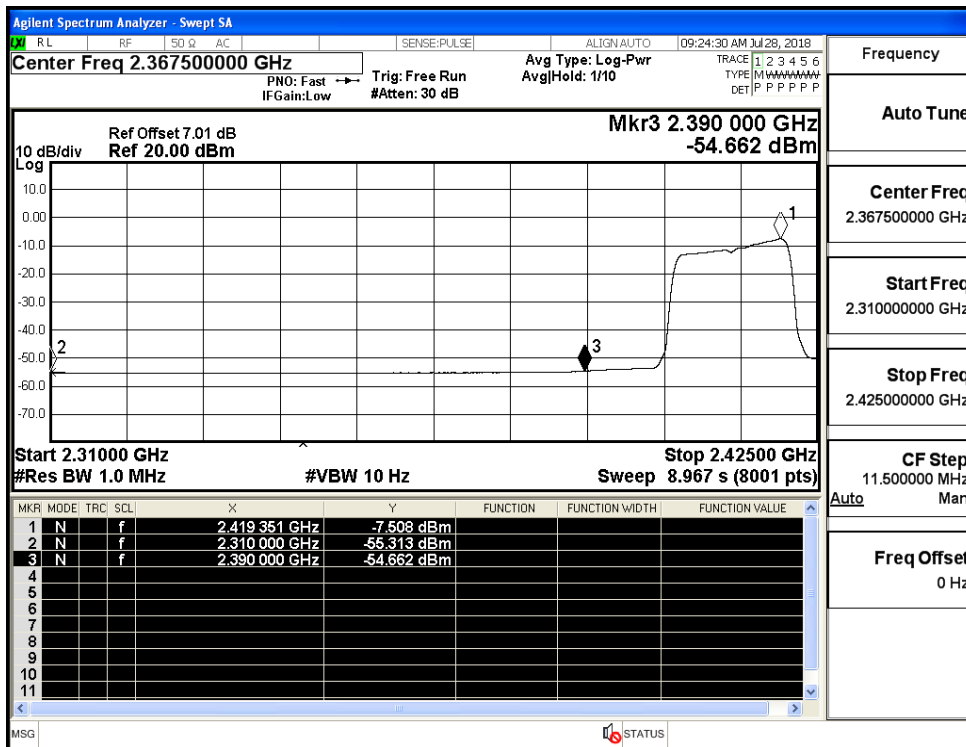
Restrict-band band-edge measurements_11B_2462_Ant1_AV



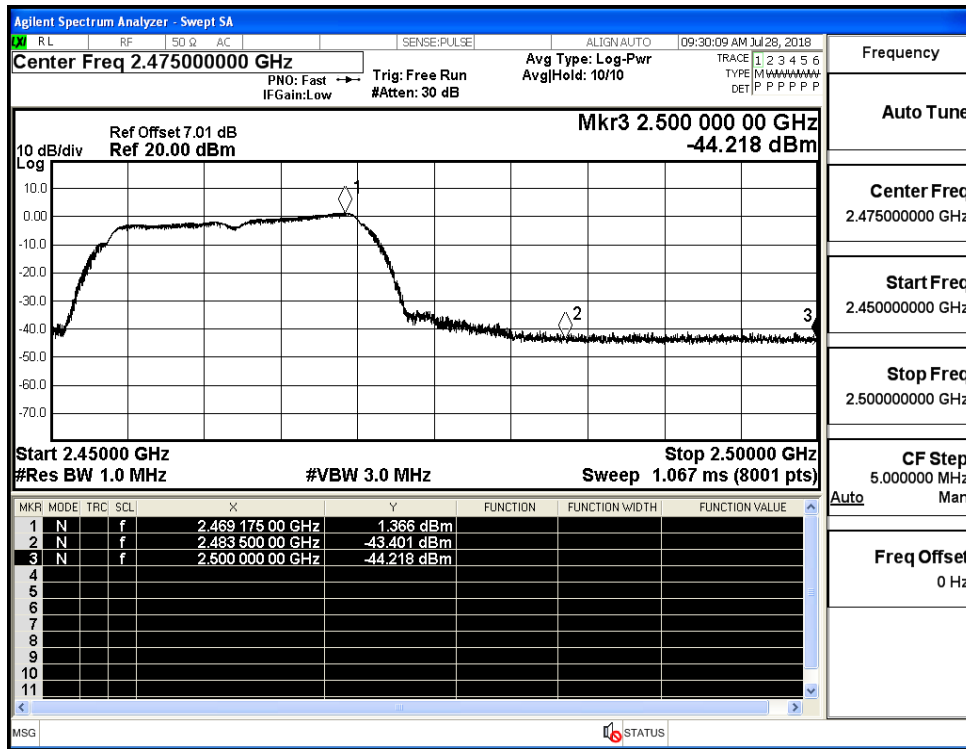
Restrict-band band-edge measurements_11G_2412_Ant1_PEAK



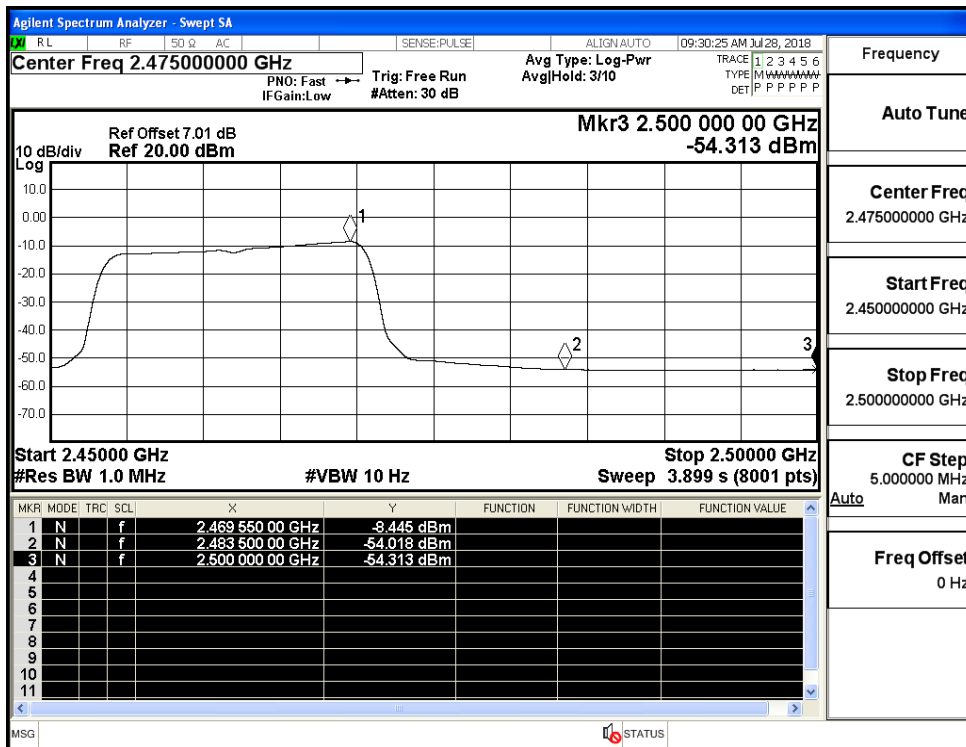
Restrict-band band-edge measurements_11G_2412_Ant1_AV



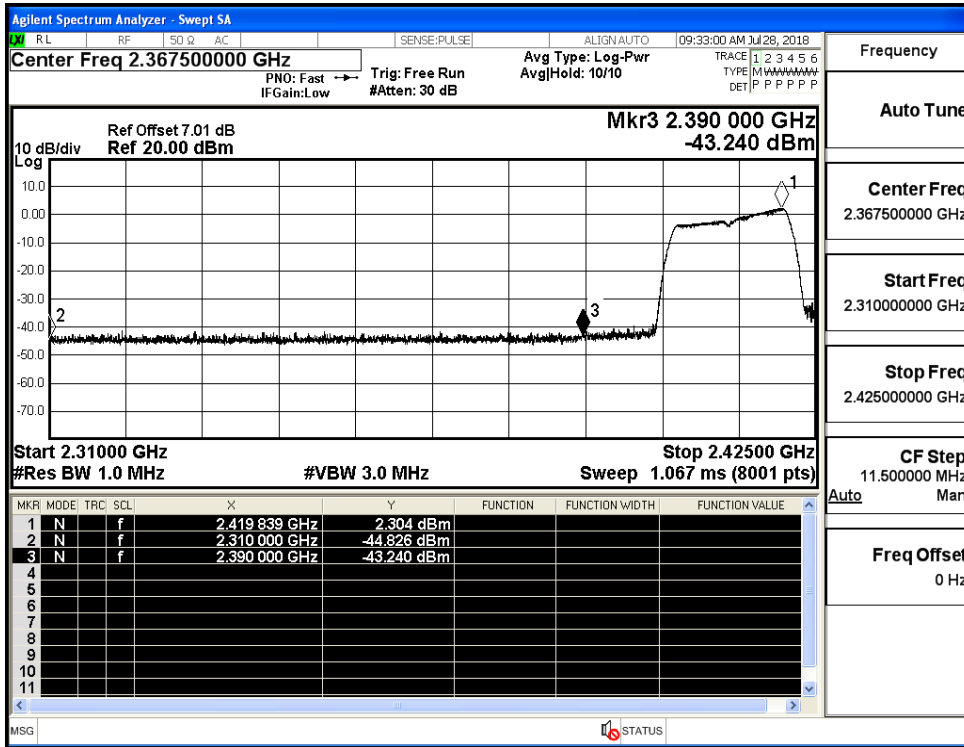
Restrict-band band-edge measurements_11G_2462_Ant1_PEAK



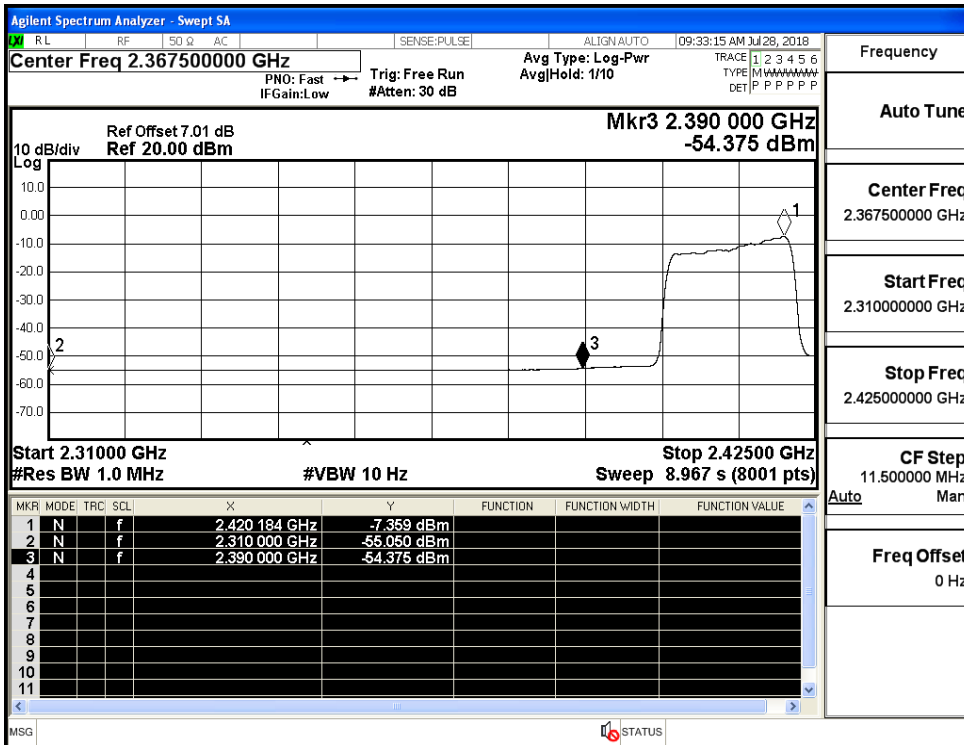
Restrict-band band-edge measurements_11G_2462_Ant1_AV



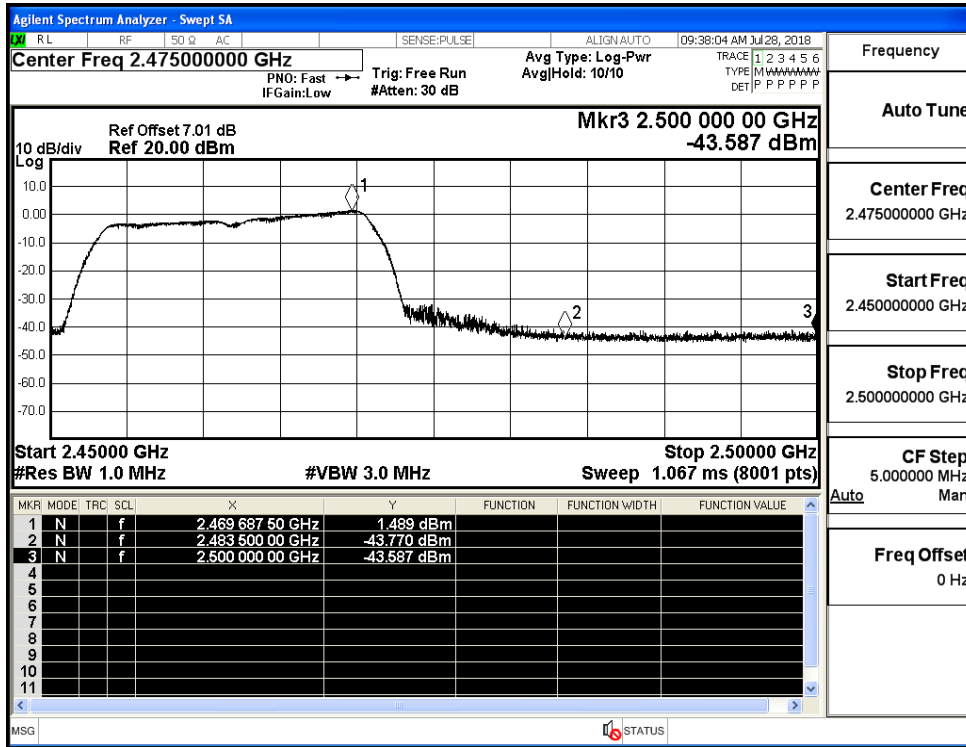
Restrict-band band-edge measurements_11N20SISO_2412_Ant1_PEAK



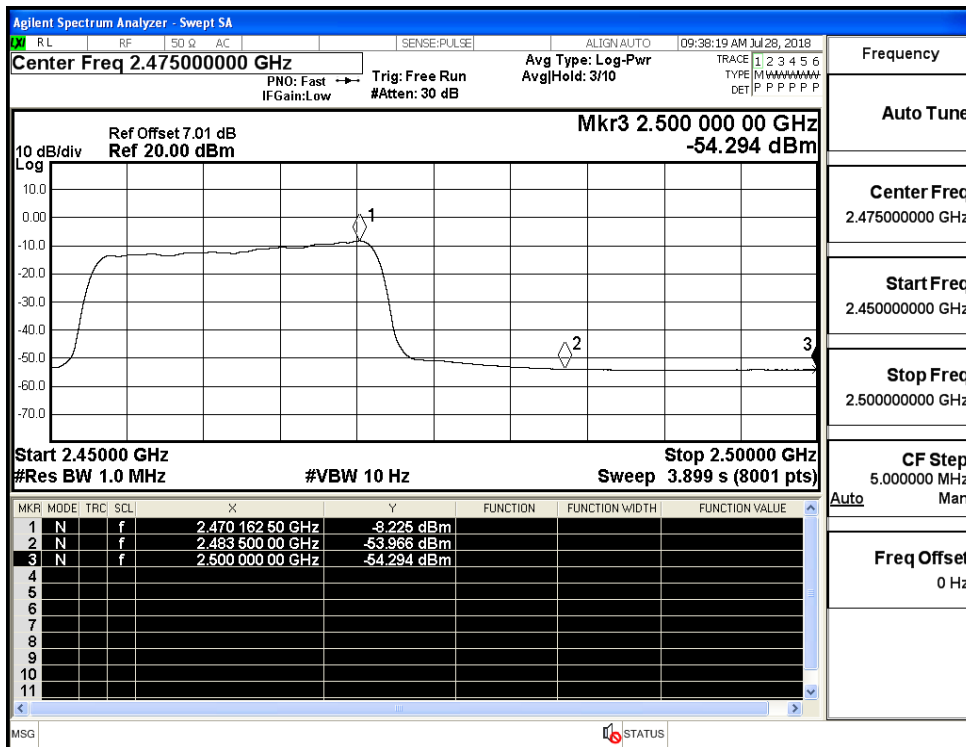
Restrict-band band-edge measurements_11N20SISO_2412_Ant1_AV



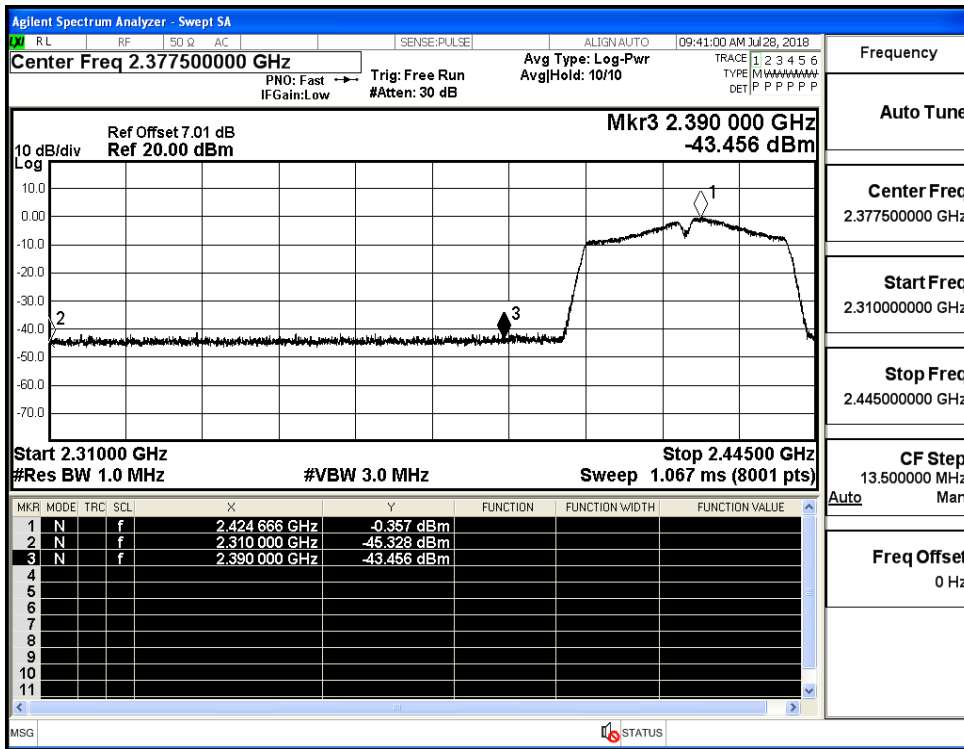
Restrict-band band-edge measurements_11N20SISO_2462_Ant1_PEAK



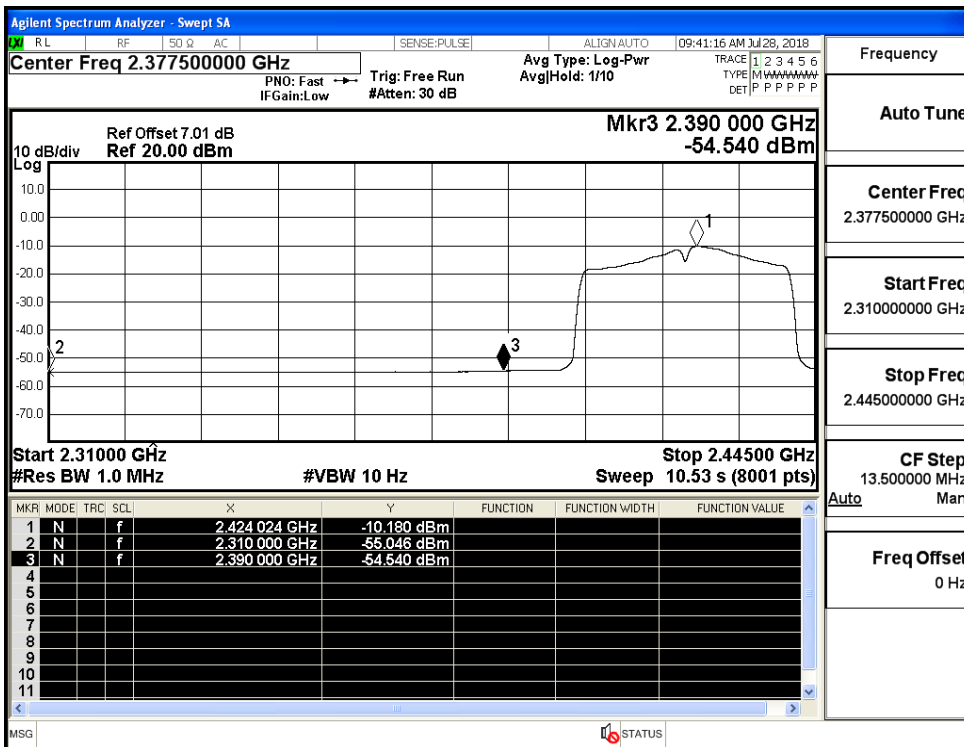
Restrict-band band-edge measurements_11N20SISO_2462_Ant1_AV



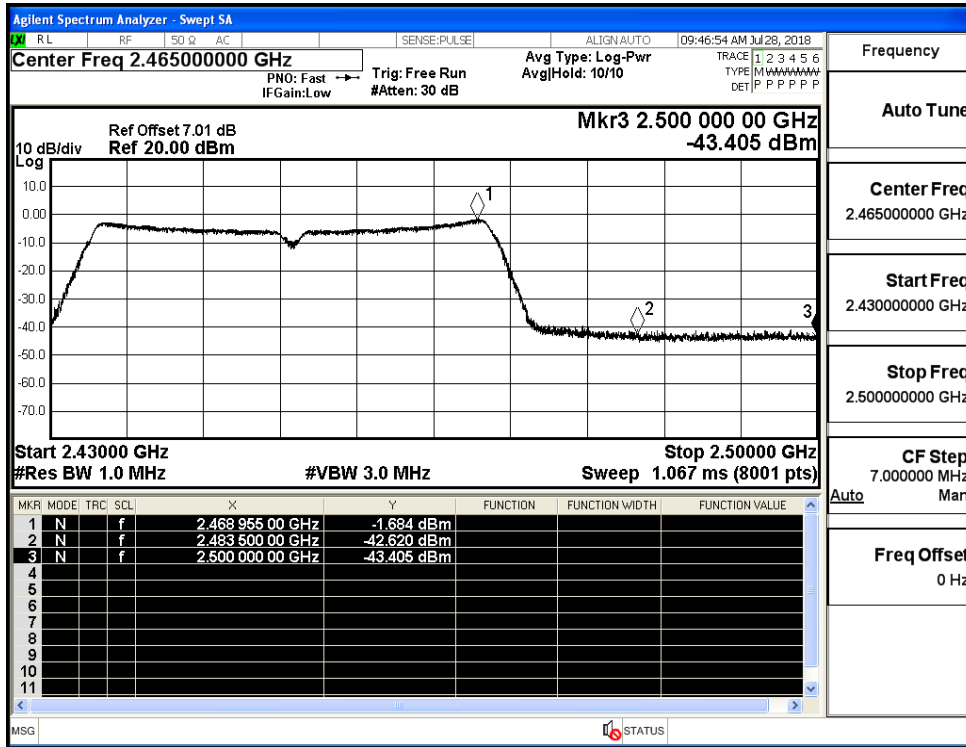
Restrict-band band-edge measurements_11N40SISO_2422_Ant1_PEAK



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

