

Appendix A

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: Wifi Camera

Trade Mark: SecuEasy

Test Model: SE-ND201PT

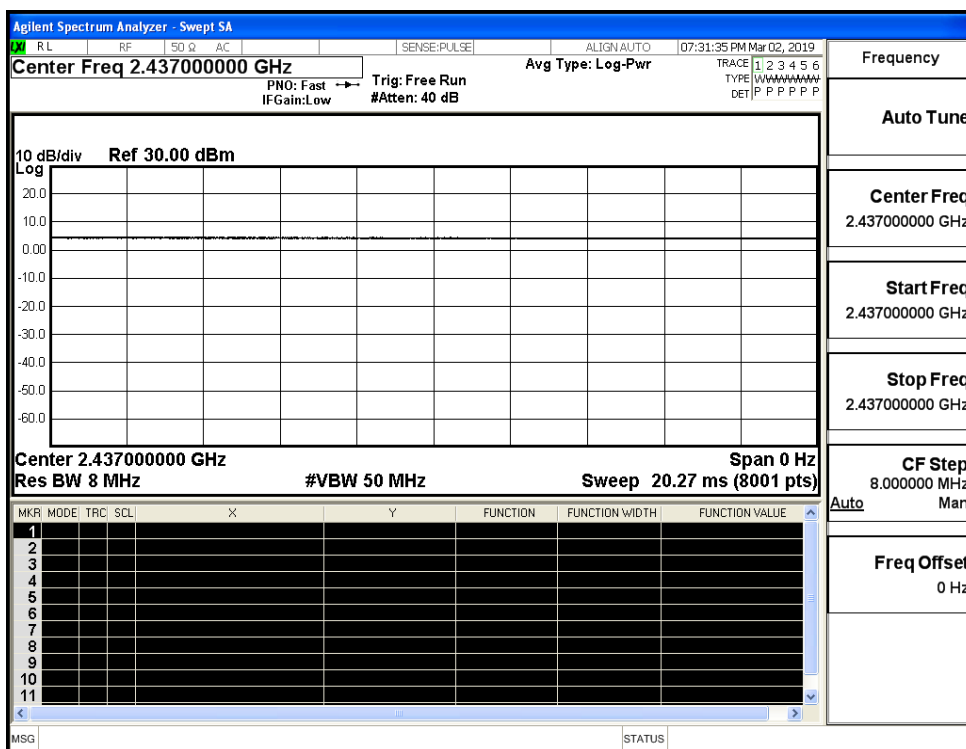
Environmental Conditions

Temperature:	23.5 ° C
Relative Humidity:	54.1%
ATM Pressure:	100.0 kPa
Test Engineer:	DiamondLu
Supervised by:	Jayden.Zhuo

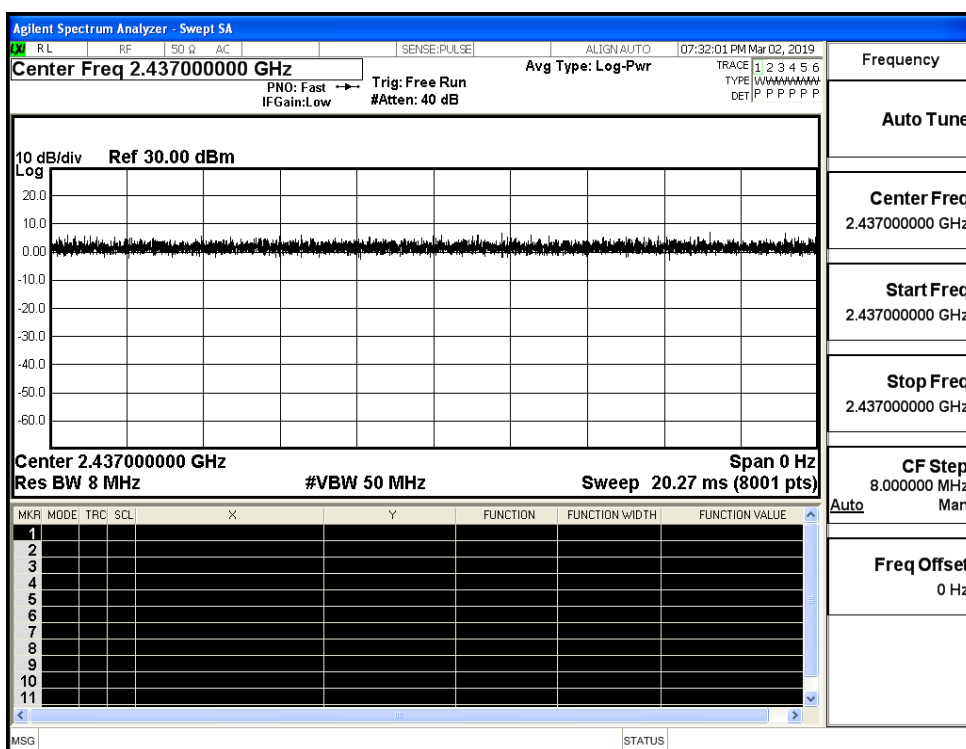
A.1 Duty Cycle

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

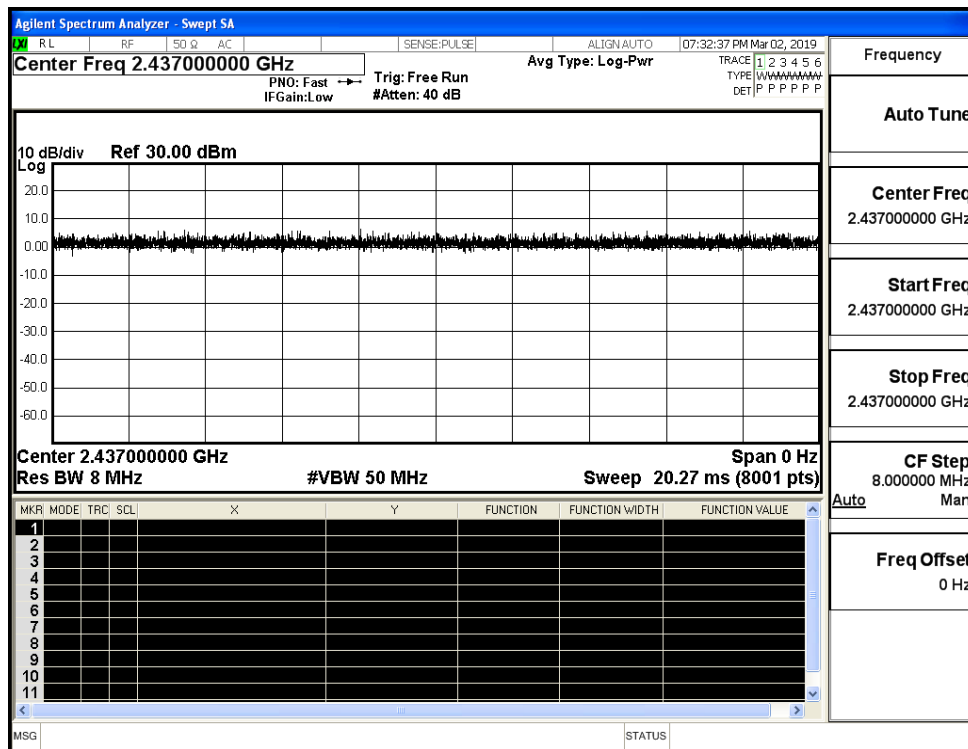
Duty Cycle_11B_2437_Ant1



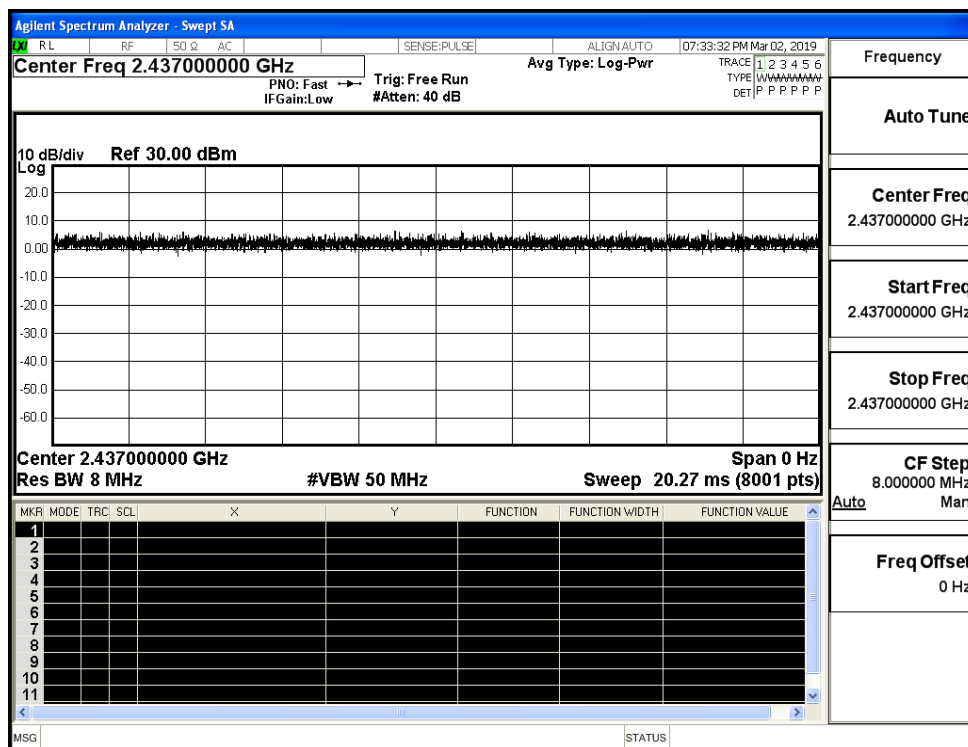
Duty Cycle_11G_2437_Ant1



Duty Cycle_11N20SISO_2437_Ant1



Duty Cycle_11N40SISO_2437_Ant1



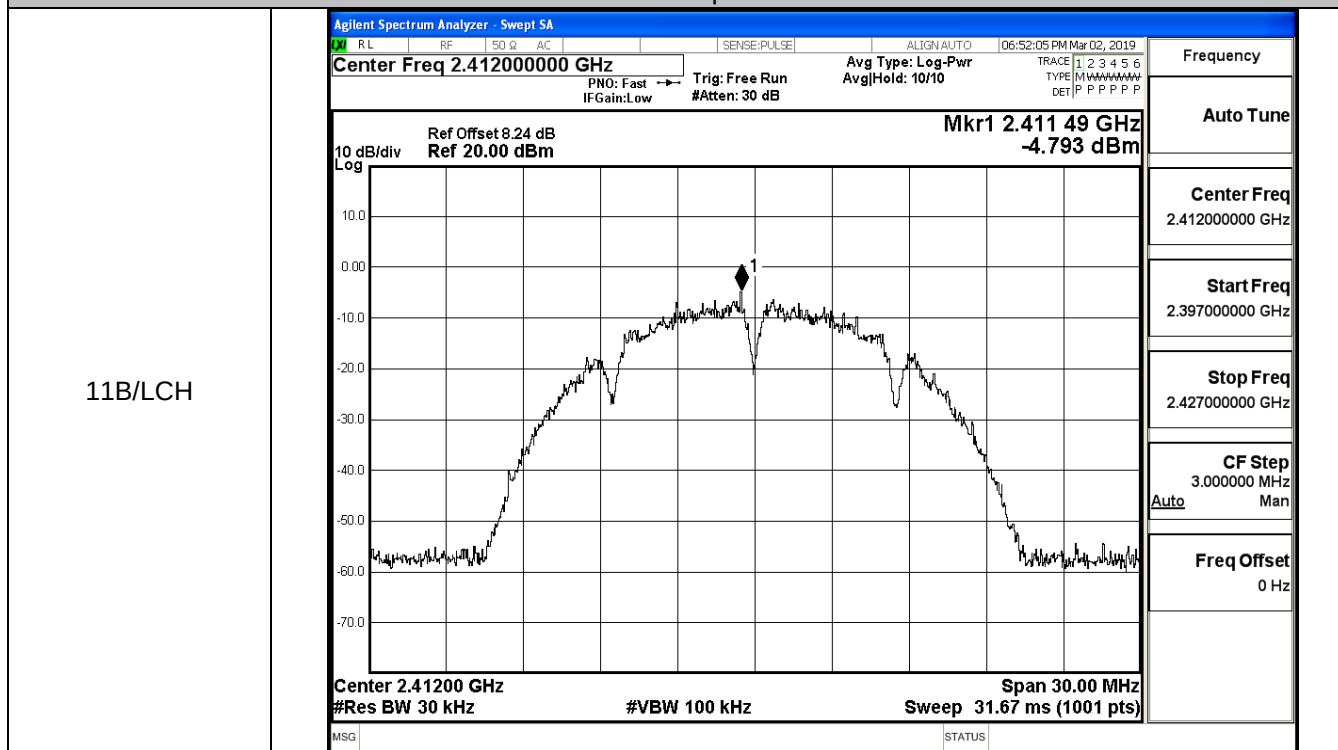
A.2 Maximum Conducted Output Power

Mode	Channel	Meas.Level [dBm]	Limit [dBm]	Verdict
11B	LCH	10.32	30	PASS
	MCH	9.98	30	PASS
	HCH	8.57	30	PASS
11G	LCH	8.59	30	PASS
	MCH	8.67	30	PASS
	HCH	8.86	30	PASS
11N20SISO	LCH	8.58	30	PASS
	MCH	8.55	30	PASS
	HCH	8.09	30	PASS
11N40SISO	LCH	10.39	30	PASS
	MCH	9.45	30	PASS
	HCH	8.69	30	PASS

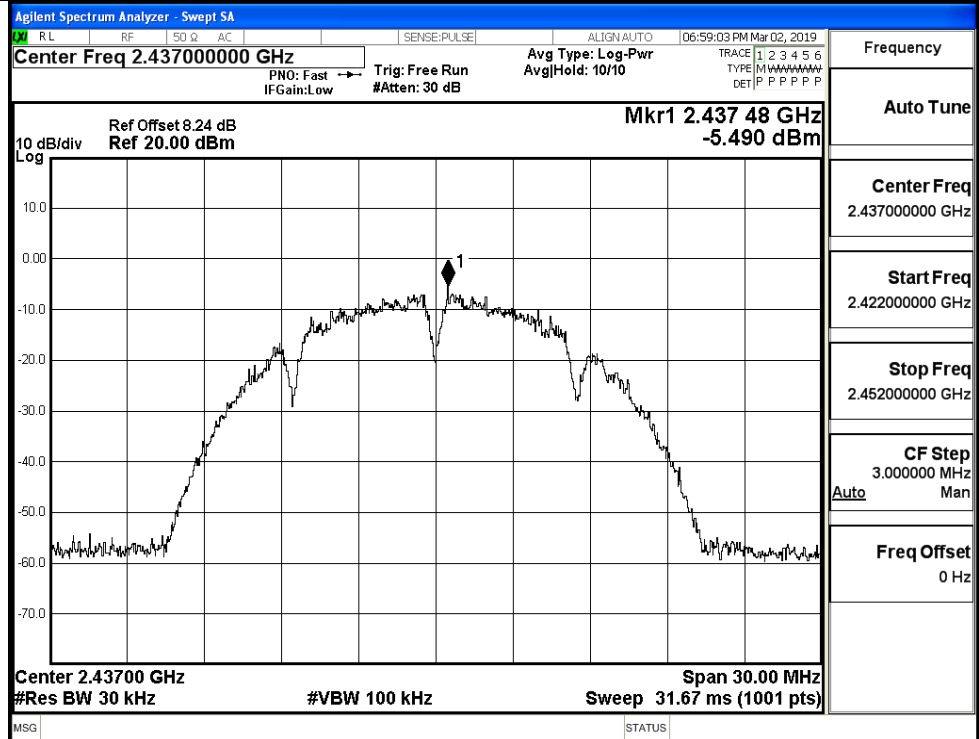
A.3 Maximum Power Spectral Density

Mode	Channel	Meas.Level [dBm/30KHz]	Limit [dBm/3KHz]	Verdict
11B	LCH	-4.793	8	PASS
	MCH	-5.490	8	PASS
	HCH	-7.094	8	PASS
11G	LCH	-13.810	8	PASS
	MCH	-13.919	8	PASS
	HCH	-14.868	8	PASS
11N20SISO	LCH	-14.415	8	PASS
	MCH	-14.221	8	PASS
	HCH	-14.711	8	PASS
11N40SISO	LCH	-14.703	8	PASS
	MCH	-15.933	8	PASS
	HCH	-17.213	8	PASS

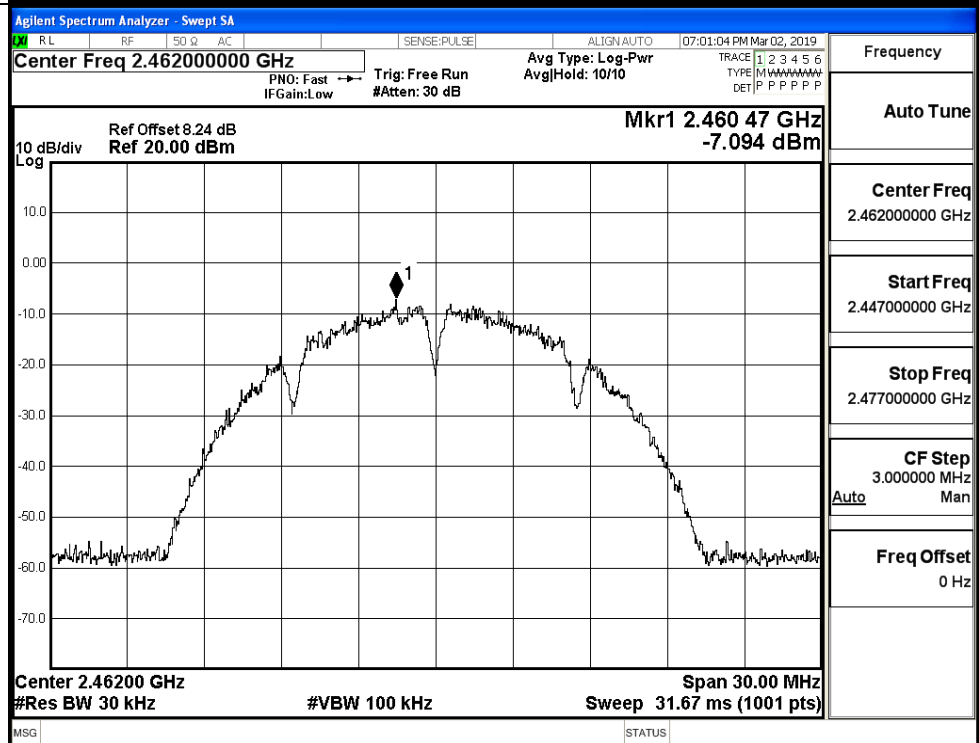
Test Graphs



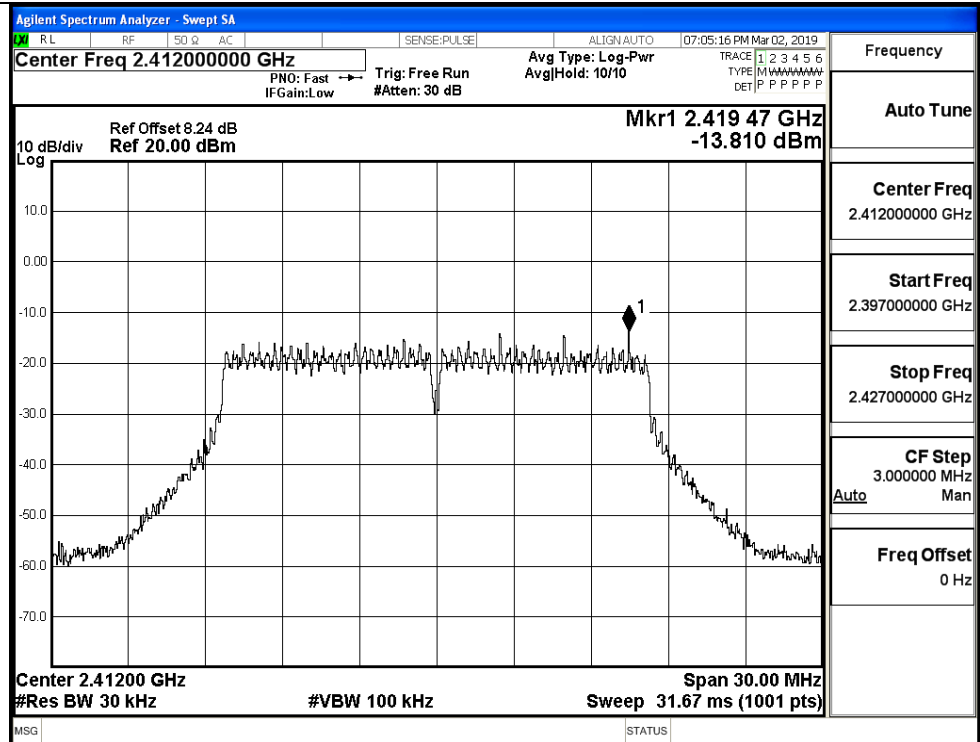
11B/MCH



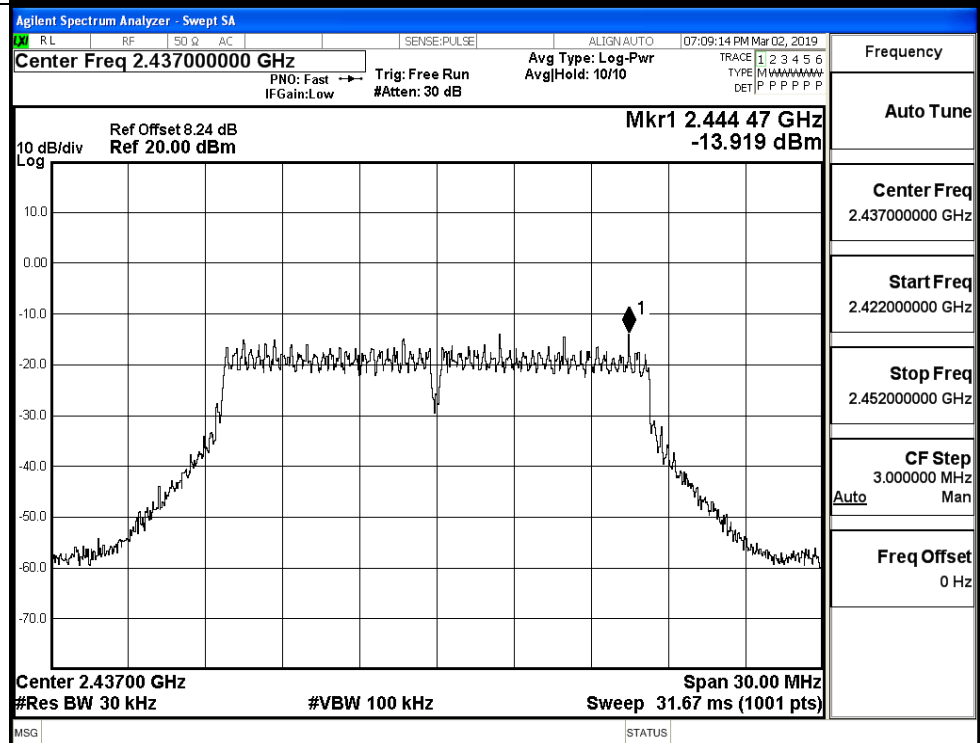
11B/HCH



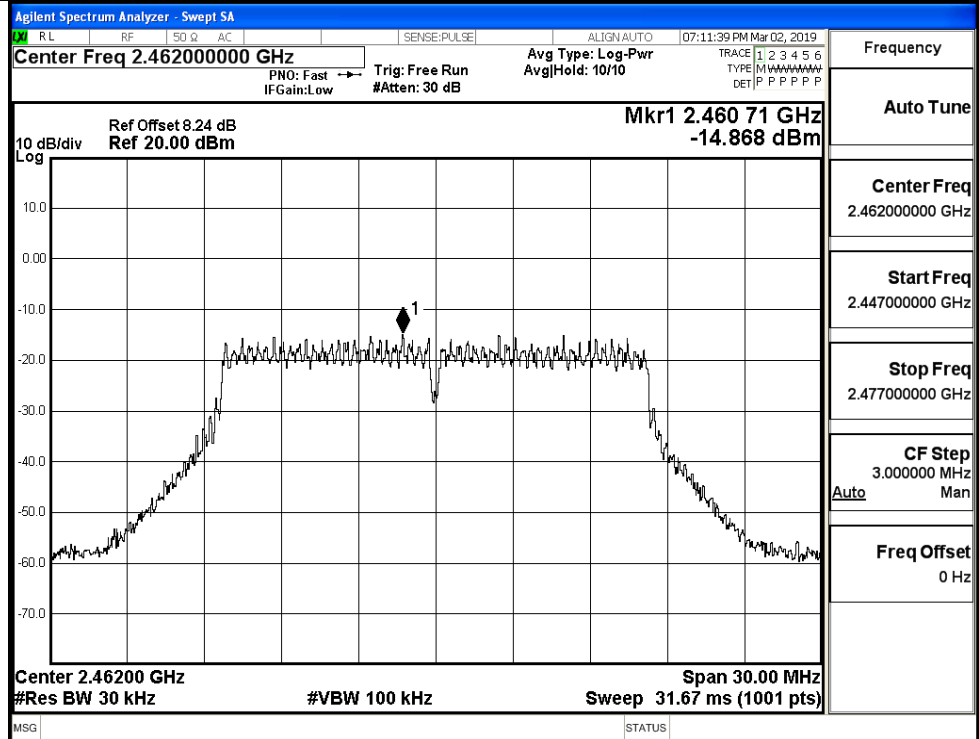
11G/LCH



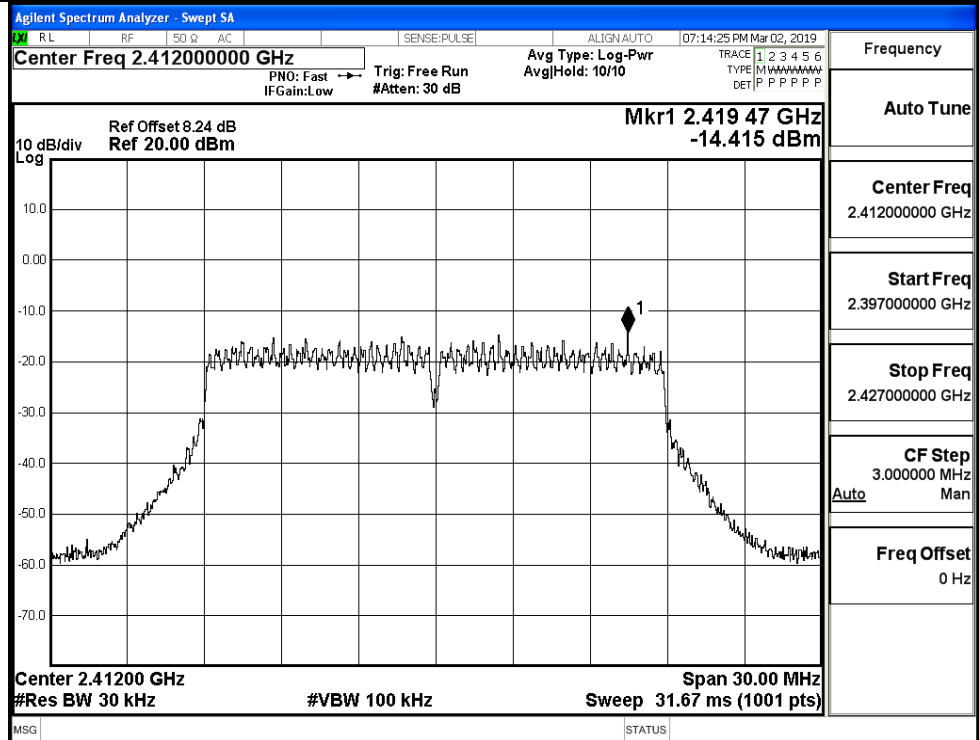
11G/MCH

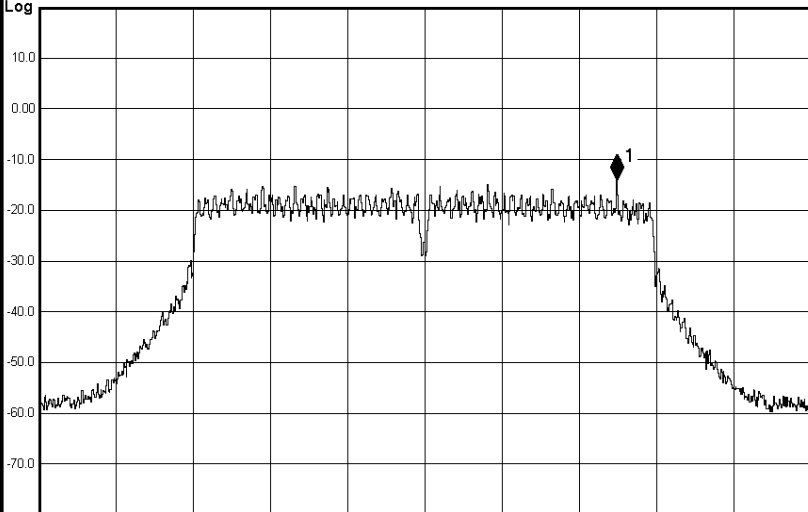
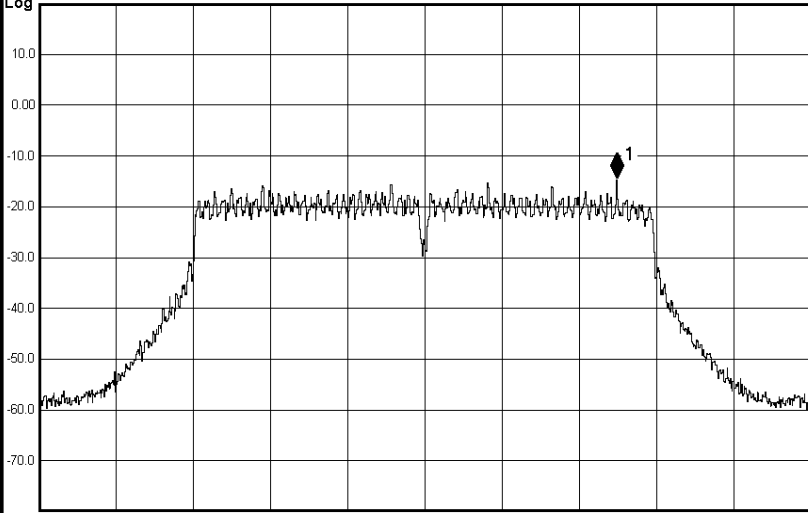


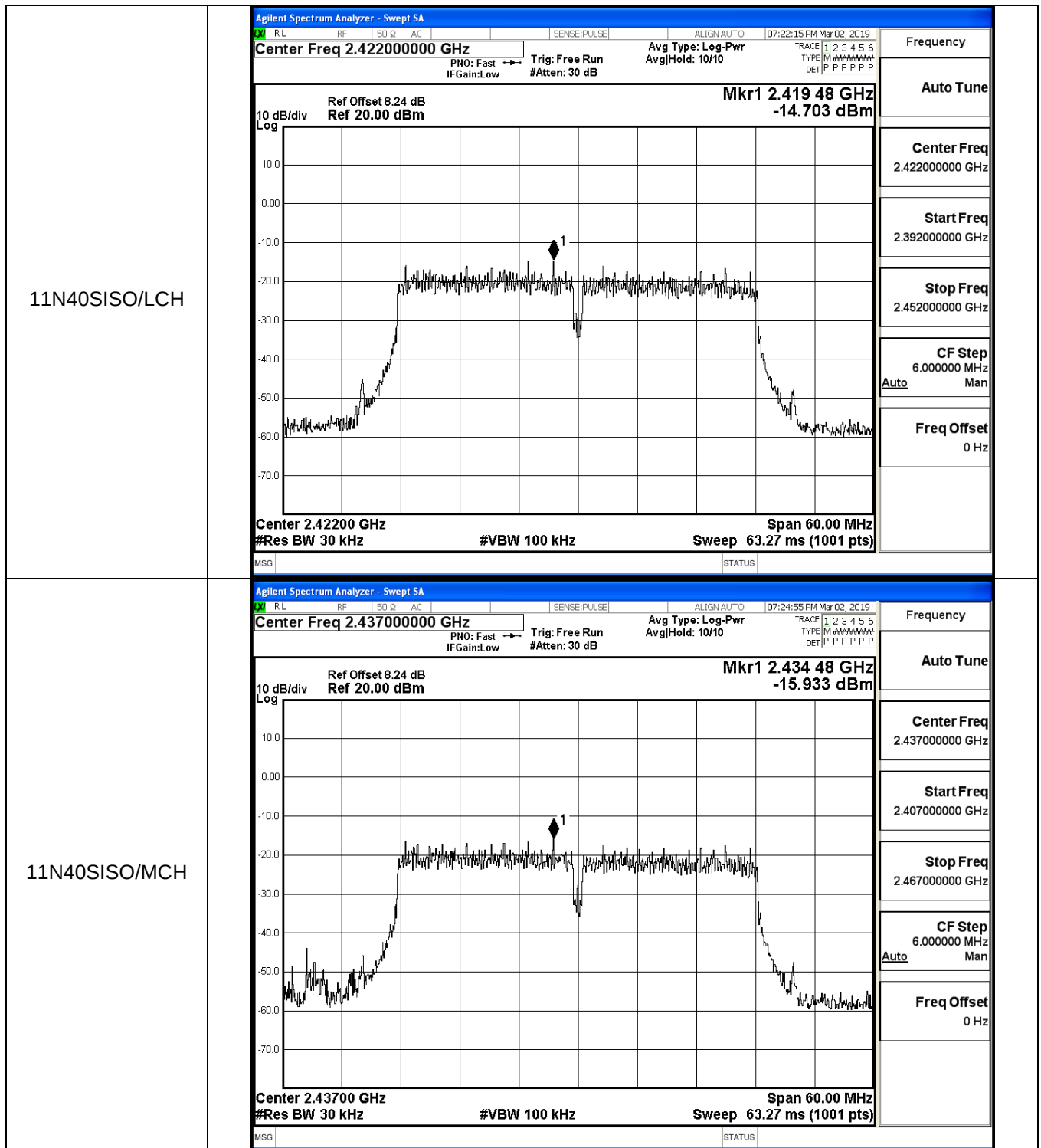
11G/HCH



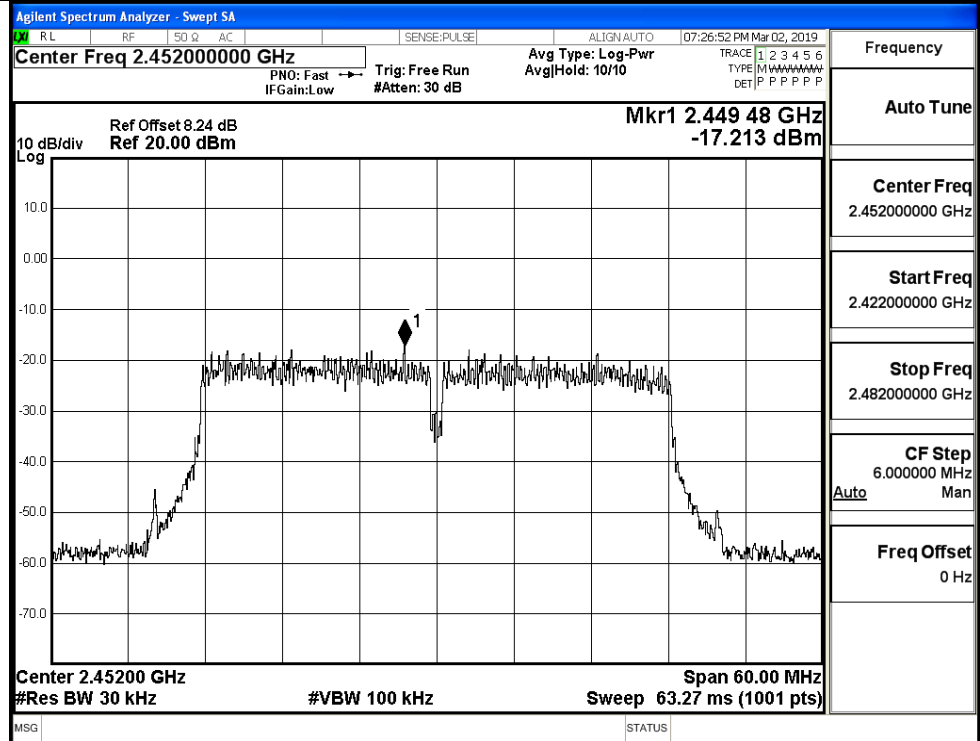
11N20SISO/LCH



11N20SISO/MCH	Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC SENSE:PULSE ALIGN:AUTO 07:17:03 PM Mar 02, 2019 Center Freq 2.437000000 GHz PN0: Fast IFGain:Low Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr AvgHold: 10/10 TRACE 1 2 3 4 5 6 TYPE [M W A W A W A W A W] DET [P P P P P P P P] Ref Offset 8.24 dB Ref 20.00 dBm Mkr1 2.444 47 GHz -14.221 dBm 10 dB/div Log  Center 2.43700 GHz #Res BW 30 kHz #VBW 100 kHz Span 30.00 MHz Sweep 31.67 ms (1001 pts) MSG STATUS	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
11N20SISO/HCH	Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC SENSE:PULSE ALIGN:AUTO 07:19:10 PM Mar 02, 2019 Center Freq 2.462000000 GHz PN0: Fast IFGain:Low Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr AvgHold: 10/10 TRACE 1 2 3 4 5 6 TYPE [M W A W A W A W A W] DET [P P P P P P P P] Ref Offset 8.24 dB Ref 20.00 dBm Mkr1 2.469 47 GHz -14.711 dBm 10 dB/div Log  Center 2.46200 GHz #Res BW 30 kHz #VBW 100 kHz Span 30.00 MHz Sweep 31.67 ms (1001 pts) MSG STATUS	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



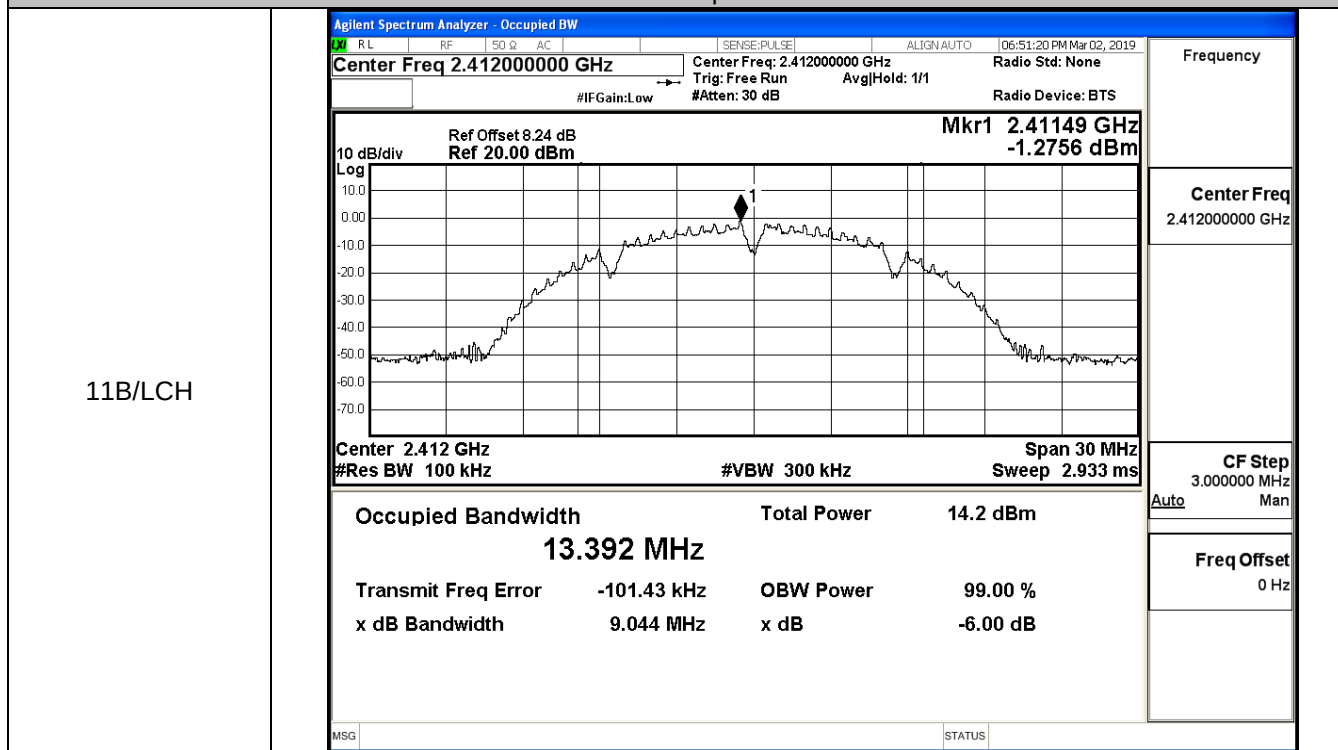
11N40SISO/HCH



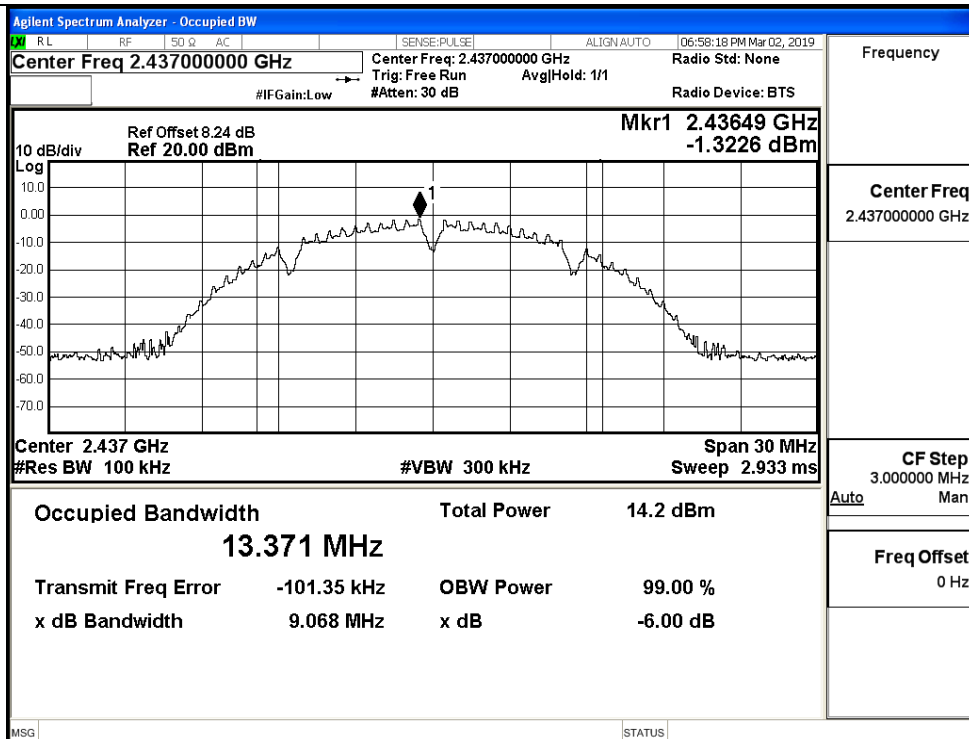
A.4 6dB Bandwidth

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
11B	LCH	9.044	≥ 0.5	PASS
	MCH	9.068	≥ 0.5	PASS
	HCH	8.581	≥ 0.5	PASS
11G	LCH	16.07	≥ 0.5	PASS
	MCH	15.70	≥ 0.5	PASS
	HCH	15.74	≥ 0.5	PASS
11N20SISO	LCH	15.76	≥ 0.5	PASS
	MCH	15.74	≥ 0.5	PASS
	HCH	16.76	≥ 0.5	PASS
11N40SISO	LCH	35.32	≥ 0.5	PASS
	MCH	35.24	≥ 0.5	PASS
	HCH	35.37	≥ 0.5	PASS

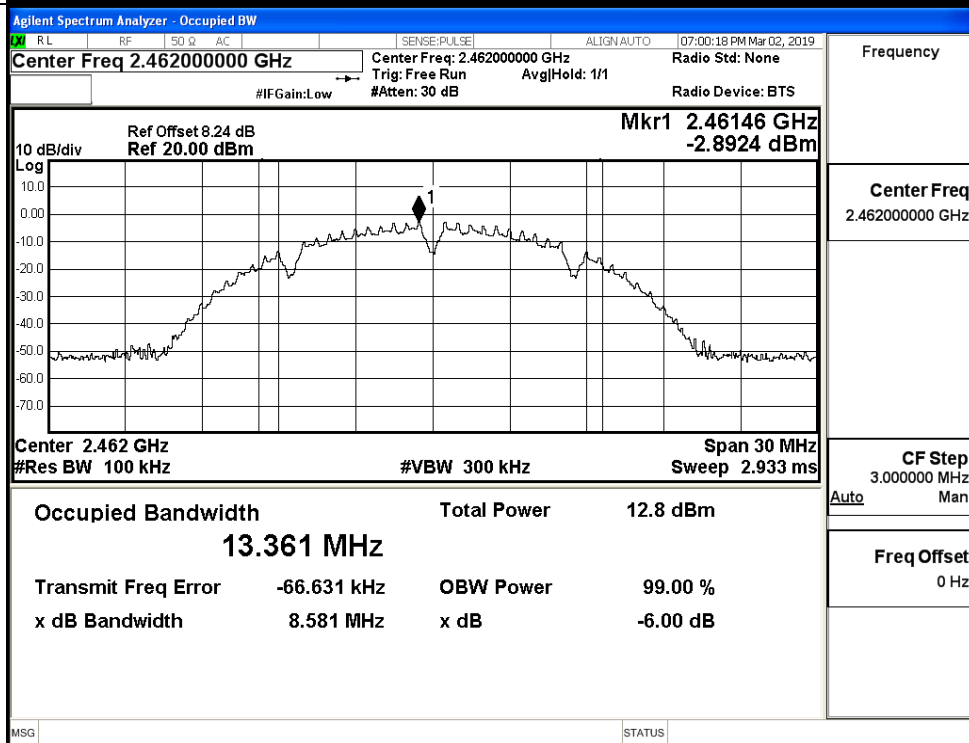
Test Graphs



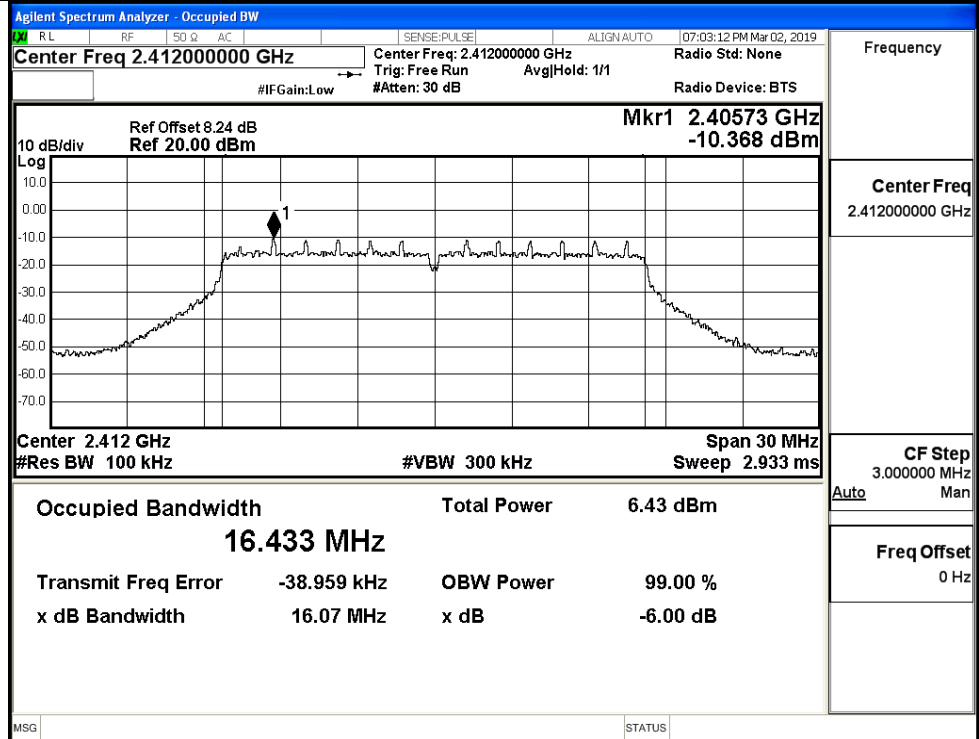
11B/MCH



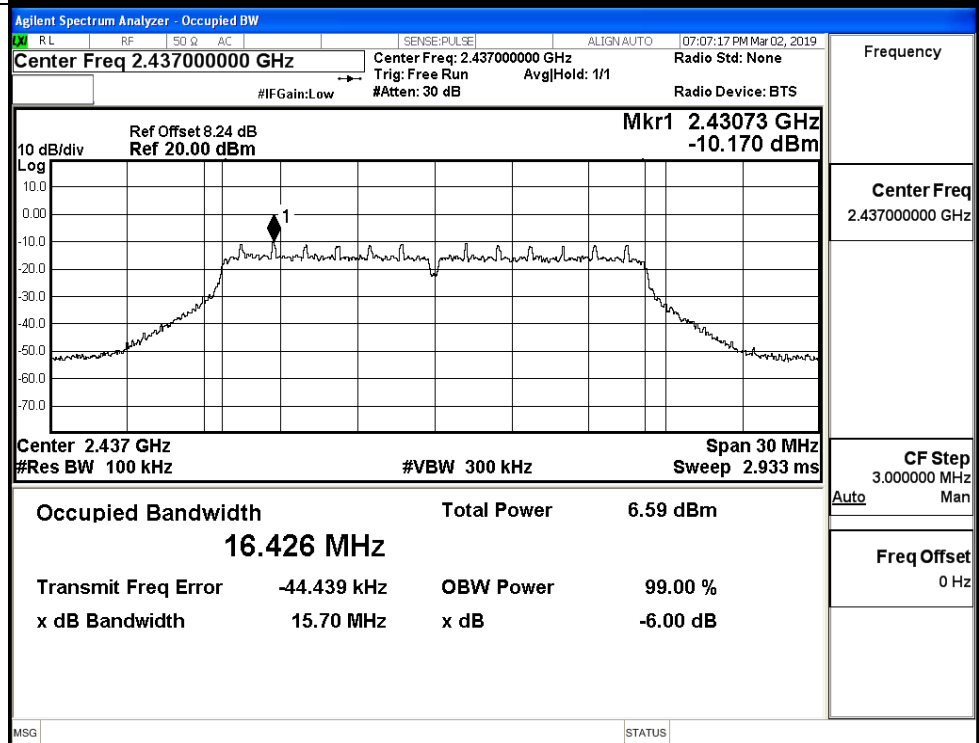
11B/HCH



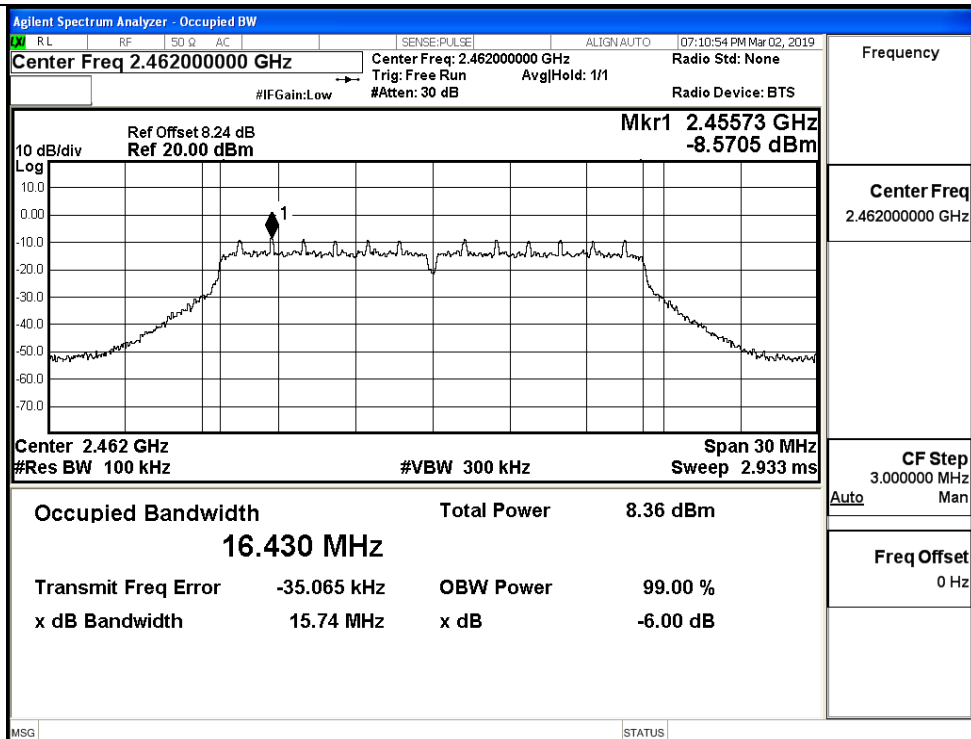
11G/LCH



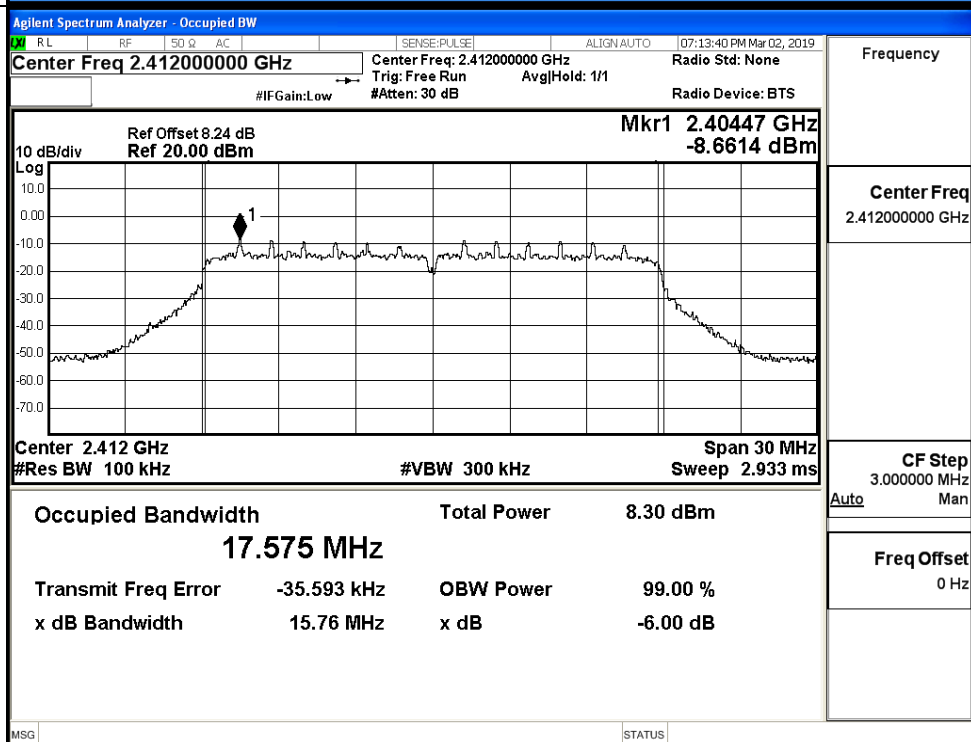
11G/MCH

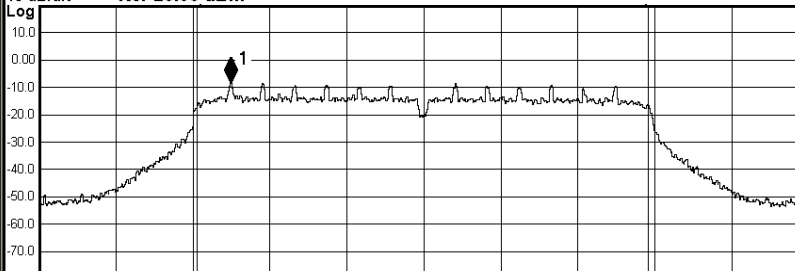
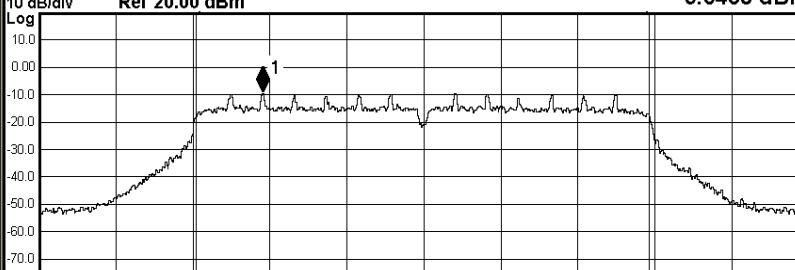


11G/HCH



11N20SISO/LCH



11N20SISO/MCH	Agilent Spectrum Analyzer - Occupied BW RL RF 50 Ω AC SENSE:PULSE ALIGN: AUTO 07:16:18 PM Mar 02, 2019 Center Freq 2.437000000 GHz Center Freq: 2.437000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None #IFGain: Low #Atten: 30 dB Radio Device: BTS 10 dB/div Ref Offset 8.24 dB Ref 20.00 dBm Mkr1 2.4295 GHz -8.5732 dBm  Center 2.437 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth 17.574 MHz Total Power 8.42 dBm Transmit Freq Error -42.126 kHz OBW Power 99.00 % x dB Bandwidth 15.74 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 Ω AC SENSE:PULSE ALIGN: AUTO 07:18:25 PM Mar 02, 2019 Center Freq 2.462000000 GHz Center Freq: 2.462000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None #IFGain: Low #Atten: 30 dB Radio Device: BTS 10 dB/div Ref Offset 8.24 dB Ref 20.00 dBm Mkr1 2.45573 GHz -9.5438 dBm  Center 2.462 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth 17.590 MHz Total Power 7.67 dBm Transmit Freq Error -37.614 kHz OBW Power 99.00 % x dB Bandwidth 16.76 MHz x dB -6.00 dB MSG STATUS

Frequency

Center Freq

2.462000000 GHz

CF Step

3.000000 MHz

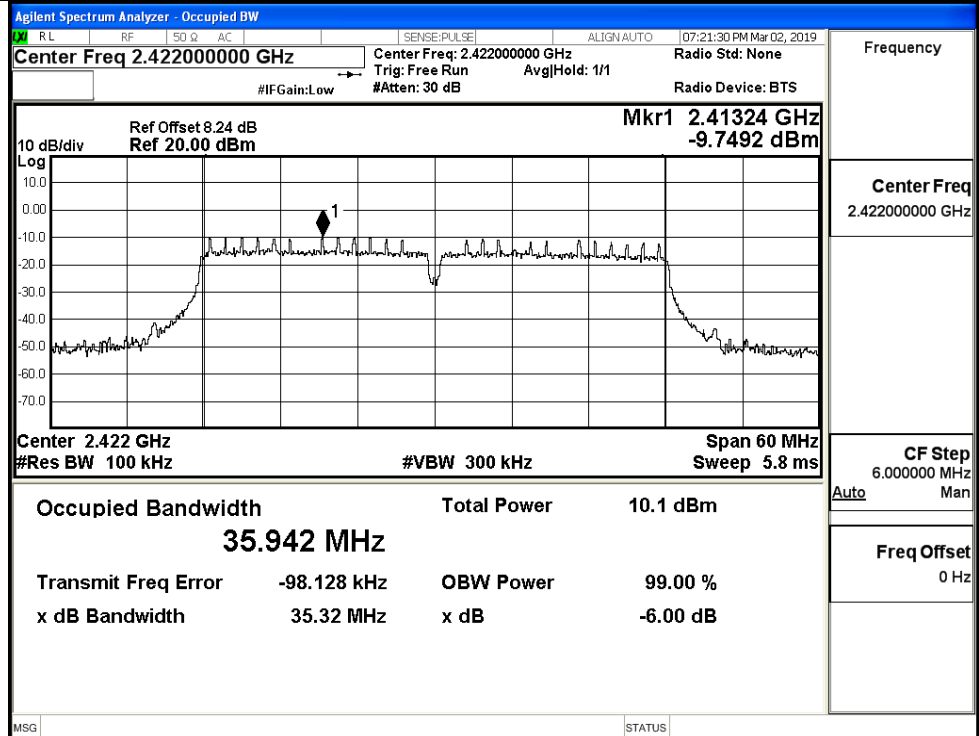
Auto

Man

Freq Offset

0 Hz

11N40SISO/LCH



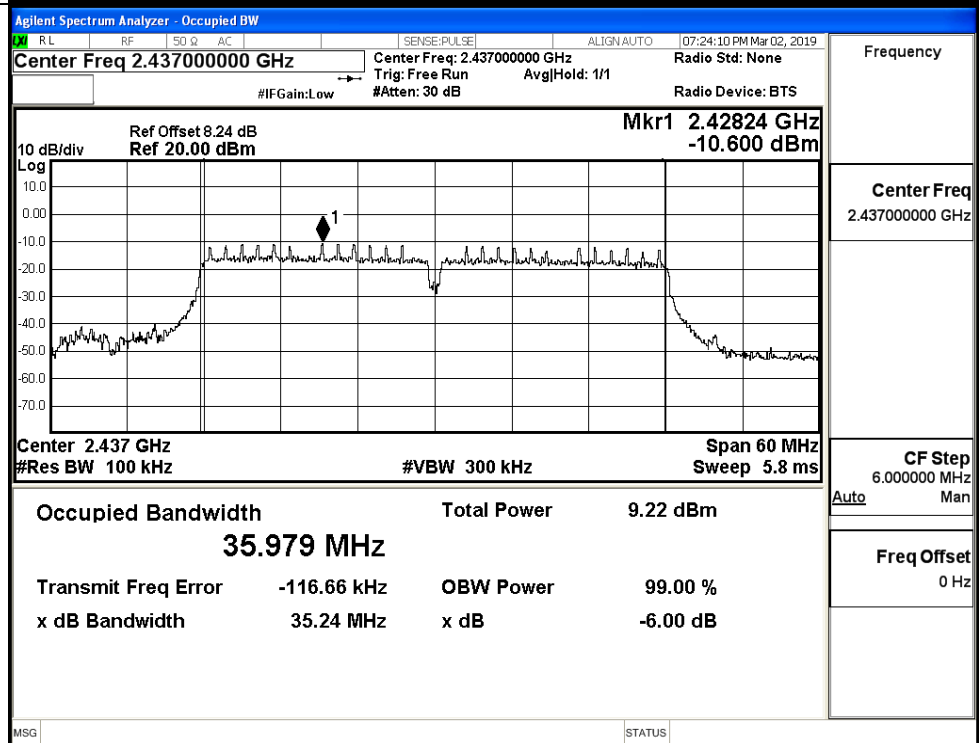
Frequency

Center Freq
2.422000000 GHz

CF Step
6.000000 MHz
Auto Man

Freq Offset
0 Hz

11N40SISO/MCH

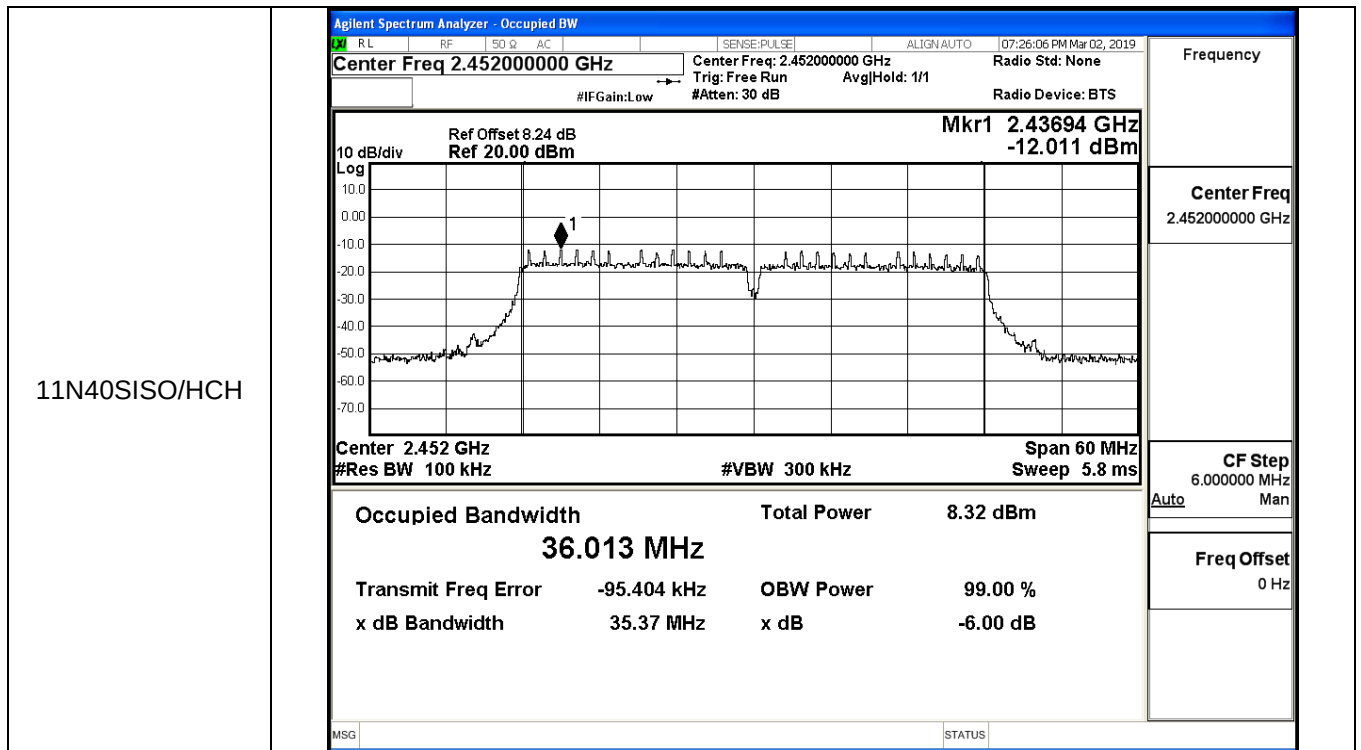


Frequency

Center Freq
2.437000000 GHz

CF Step
6.000000 MHz
Auto Man

Freq Offset
0 Hz

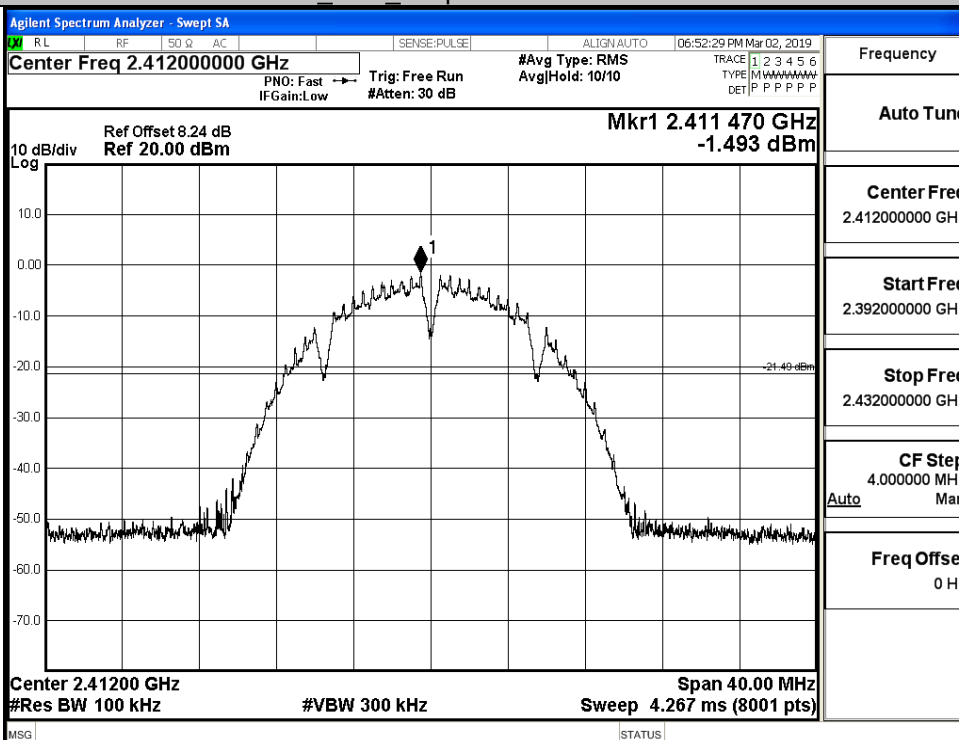


A.5 RF Conducted Spurious Emissions

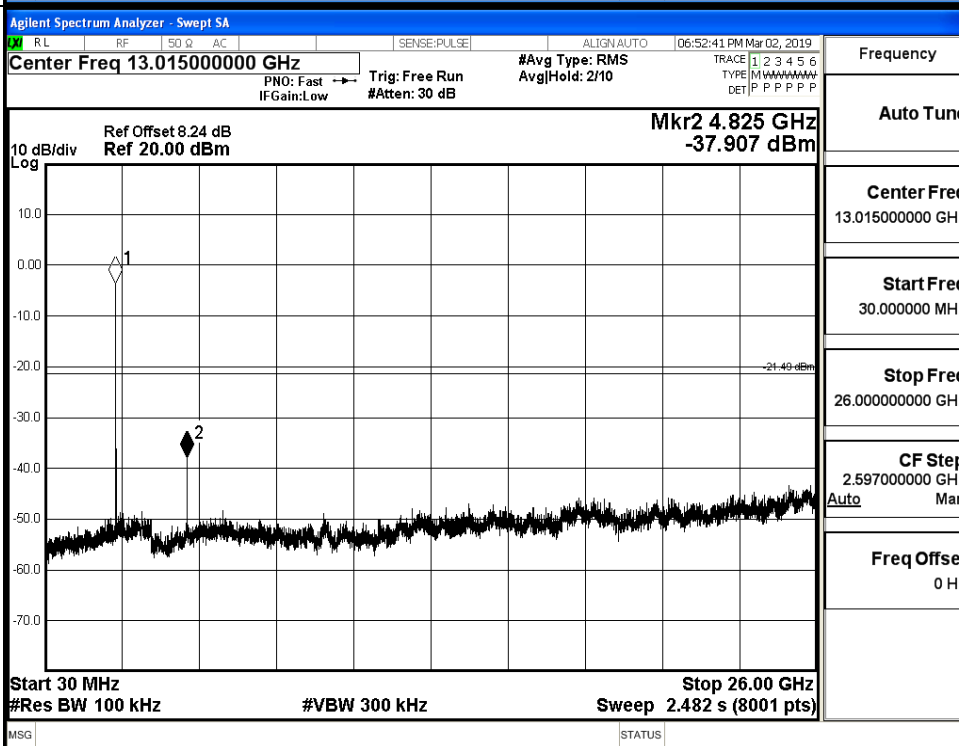
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
11B	LCH	-1.493	-37.907	-21.493	PASS
	MCH	-1.977	-39.515	-21.977	PASS
	HCH	-3.443	-42.273	-23.443	PASS
11G	LCH	-8.845	-44.152	-28.845	PASS
	MCH	-8.863	-44.028	-28.863	PASS
	HCH	-8.918	-43.502	-28.918	PASS
11N20SISO	LCH	-8.873	-42.454	-28.873	PASS
	MCH	-8.493	-44.015	-28.493	PASS
	HCH	-9.74	-41.979	-29.740	PASS
11N40SISO	LCH	-10.225	-43.071	-30.225	PASS
	MCH	-10.913	-42.071	-30.913	PASS
	HCH	-11.663	-44.284	-31.663	PASS

11B LCH Graphs

Pref/11B/LCH

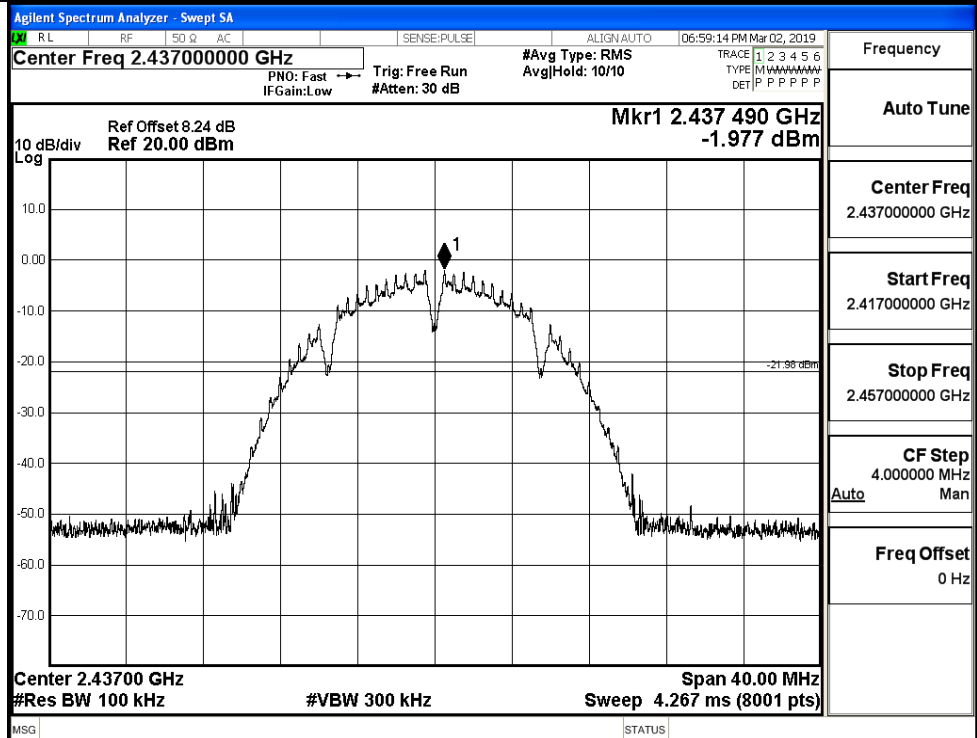


Puw/11B/LCH

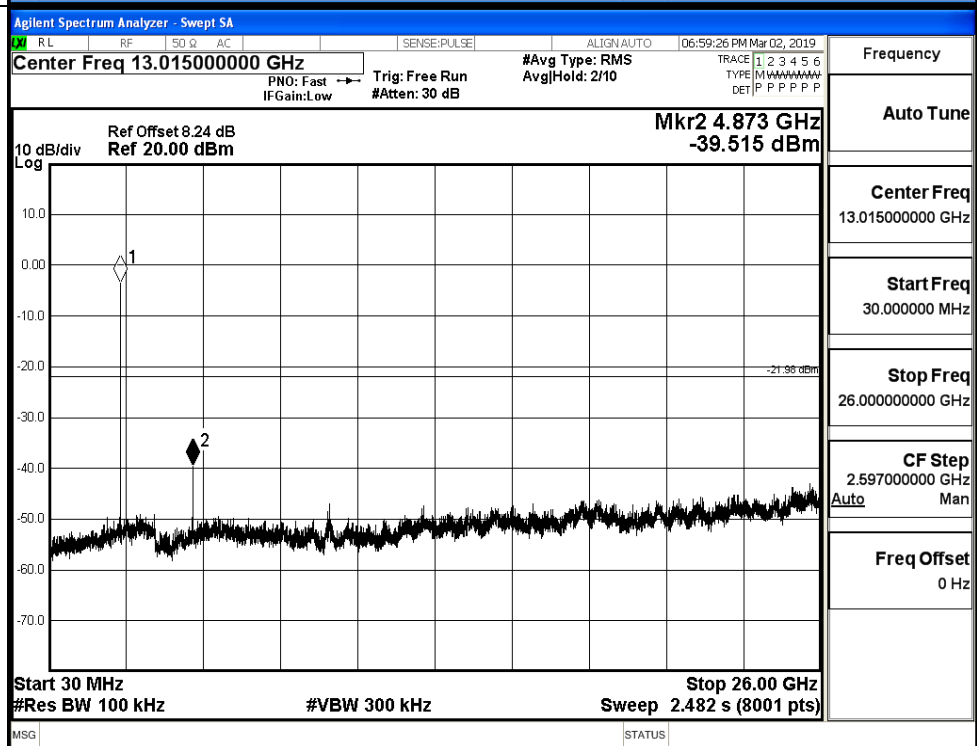


11B MCH Graphs

Pref/11B/MCH

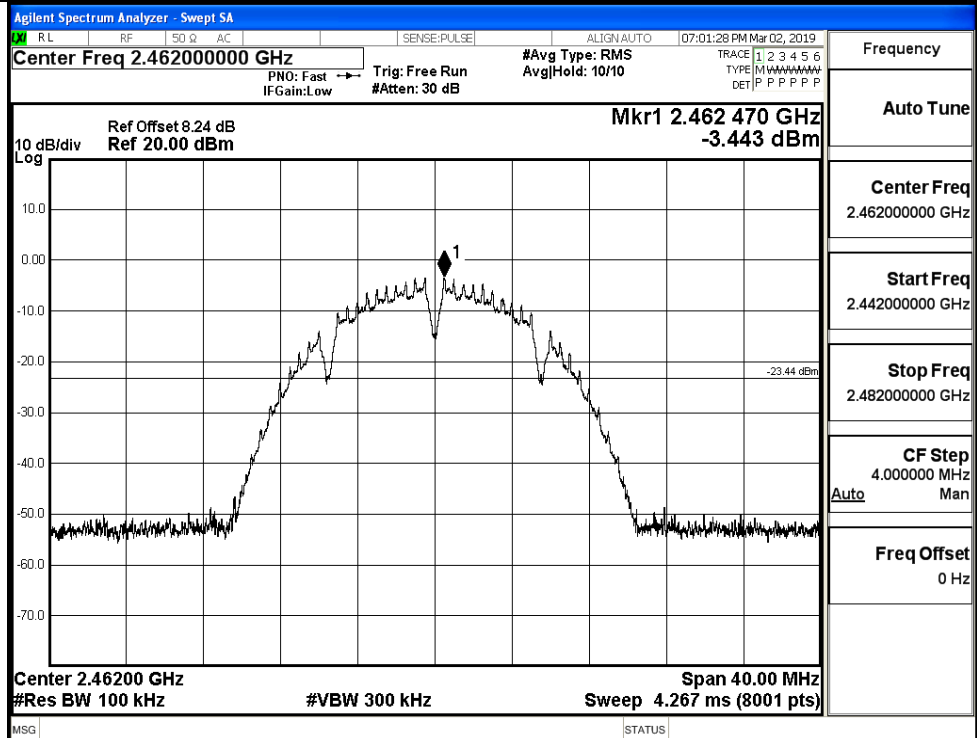


Puw/11B/MCH

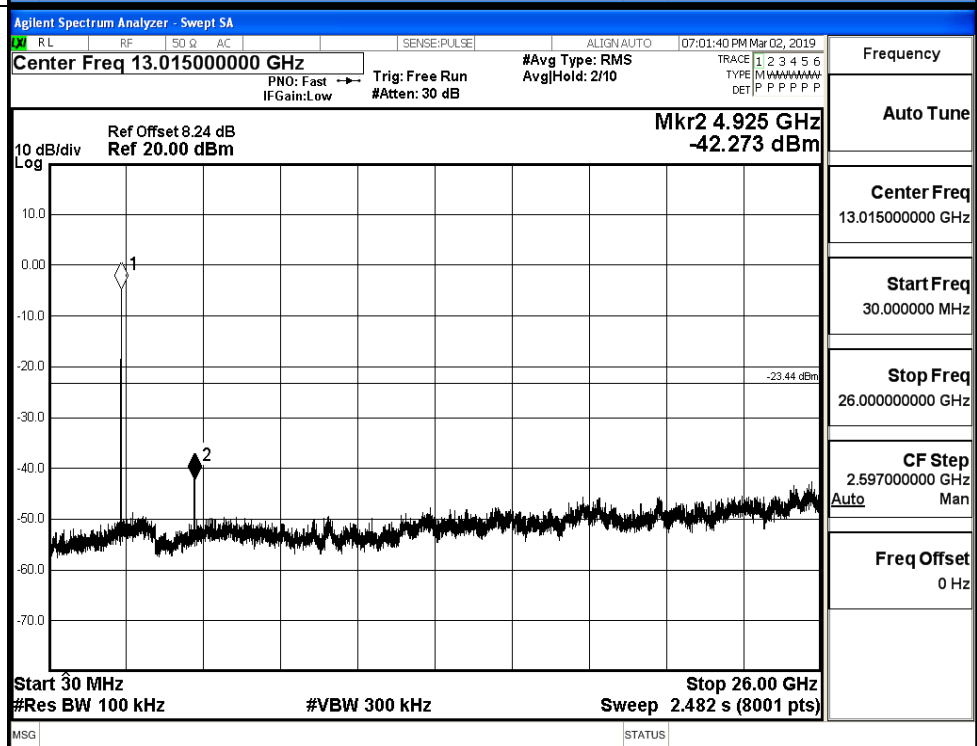


11B HCH Graphs

Pref/11B/HCH

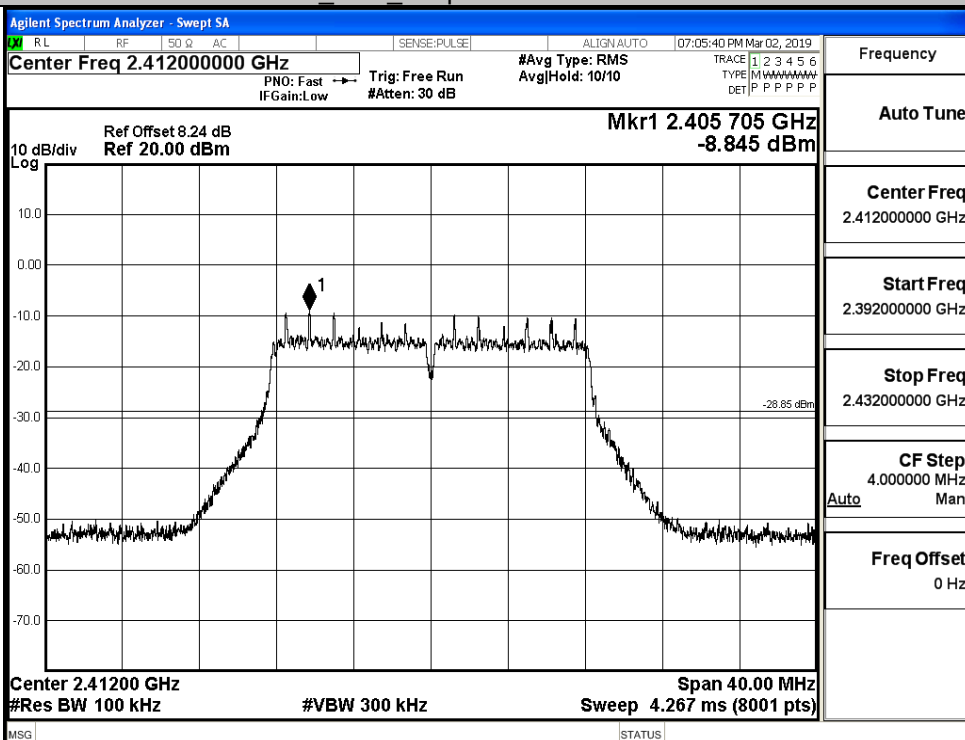


Puw/11B/HCH

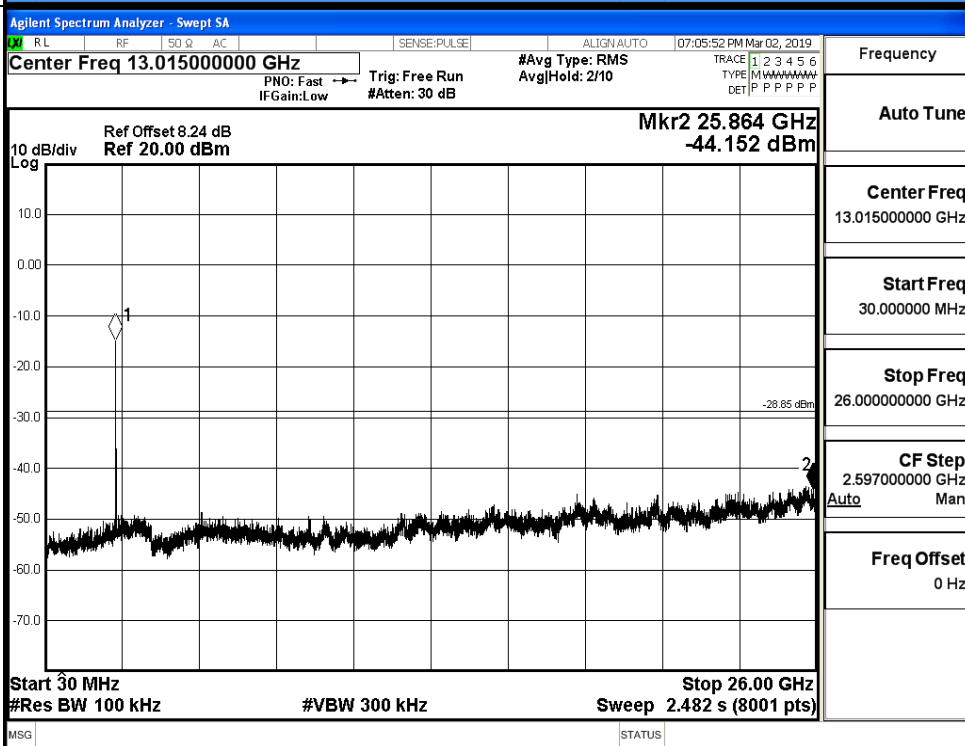


11G LCH Graphs

Pref/11G/LCH

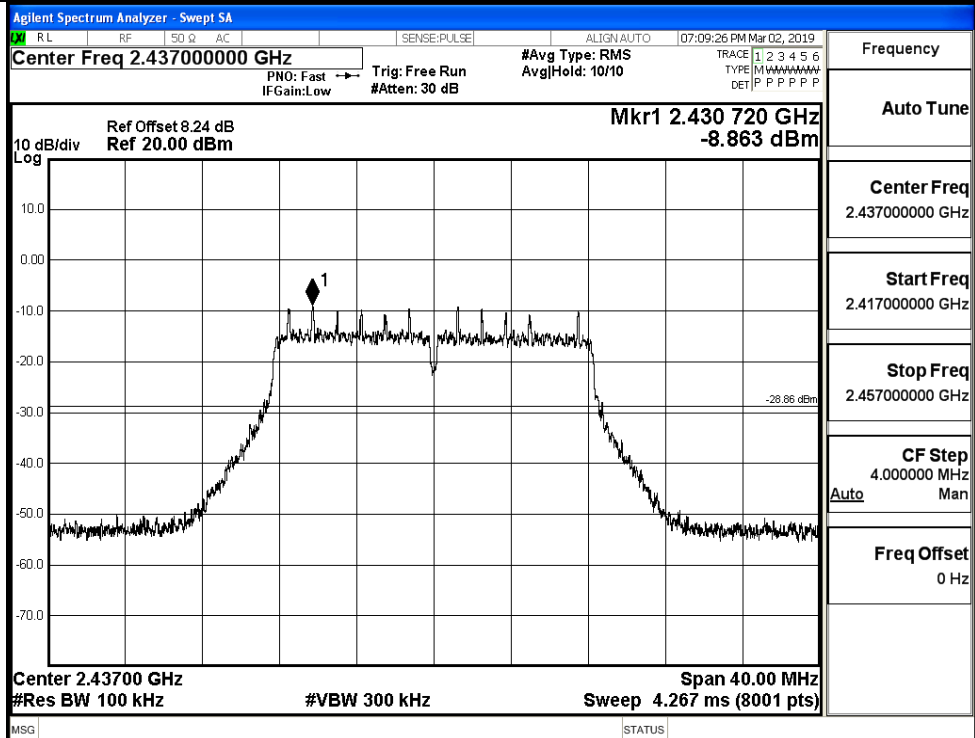


Puw/11G/LCH

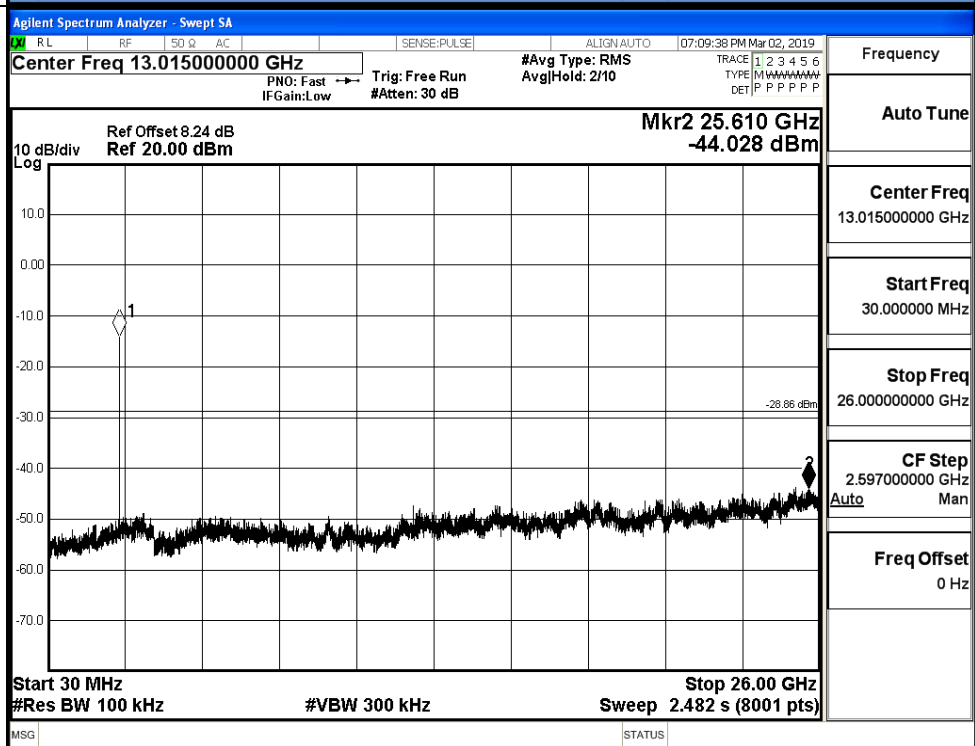


11G MCH Graphs

Pref/11G/MCH

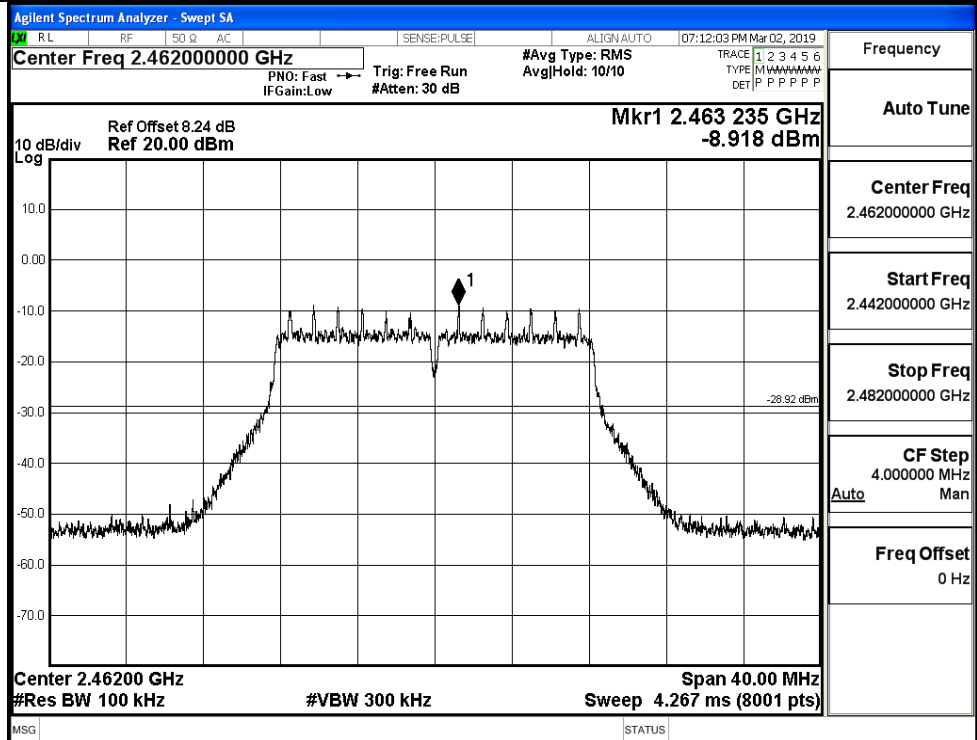


Puw/11G/MCH

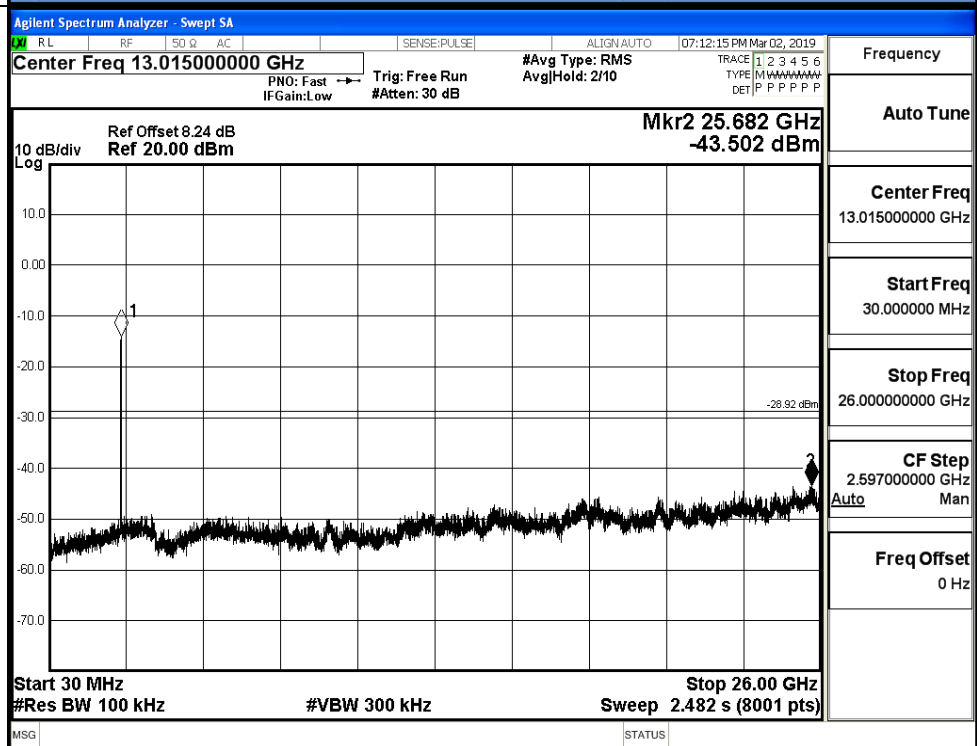


11G HCH Graphs

Pref/11G/HCH

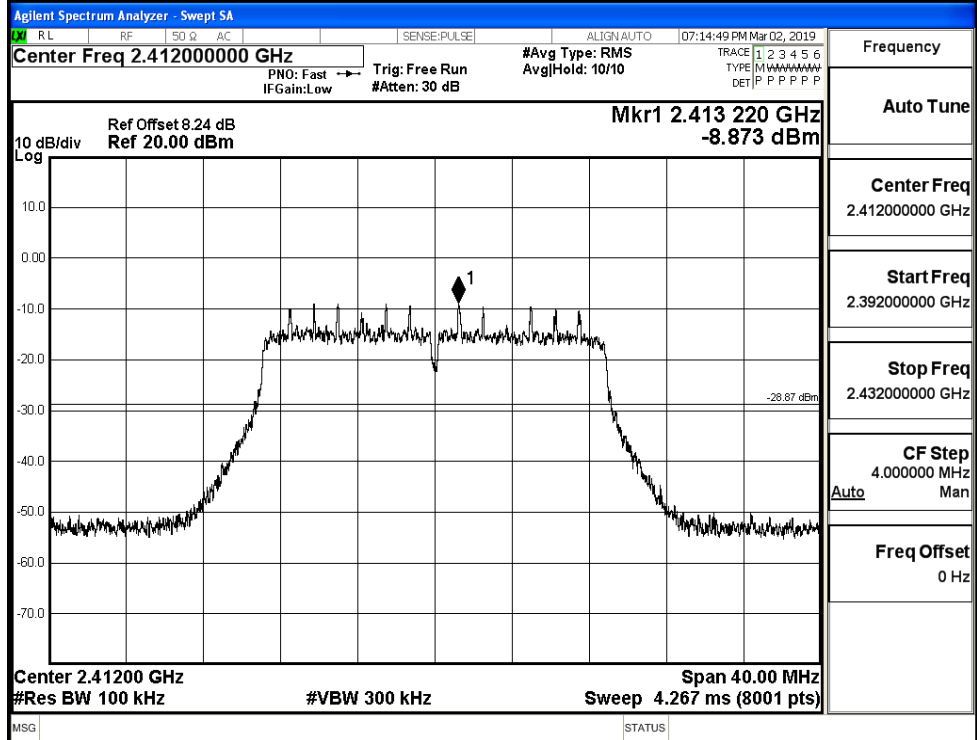


Puw/11G/HCH

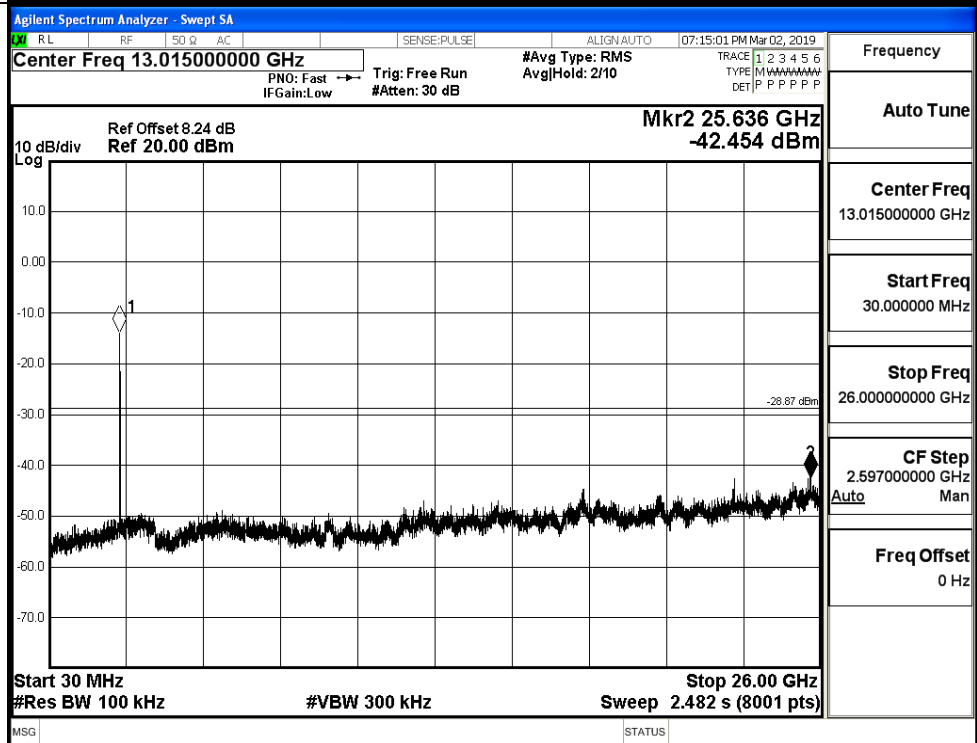


11N20SISO LCH Graphs

Pref/11N20SIS
O/LCH

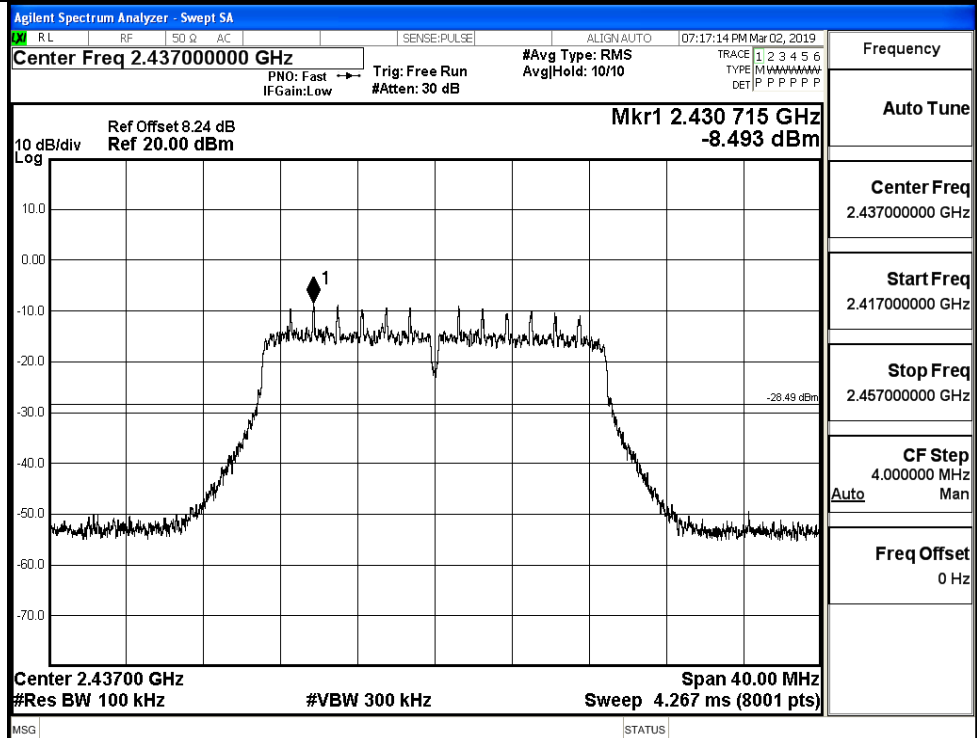


Puw/11N20
SISO/LCH

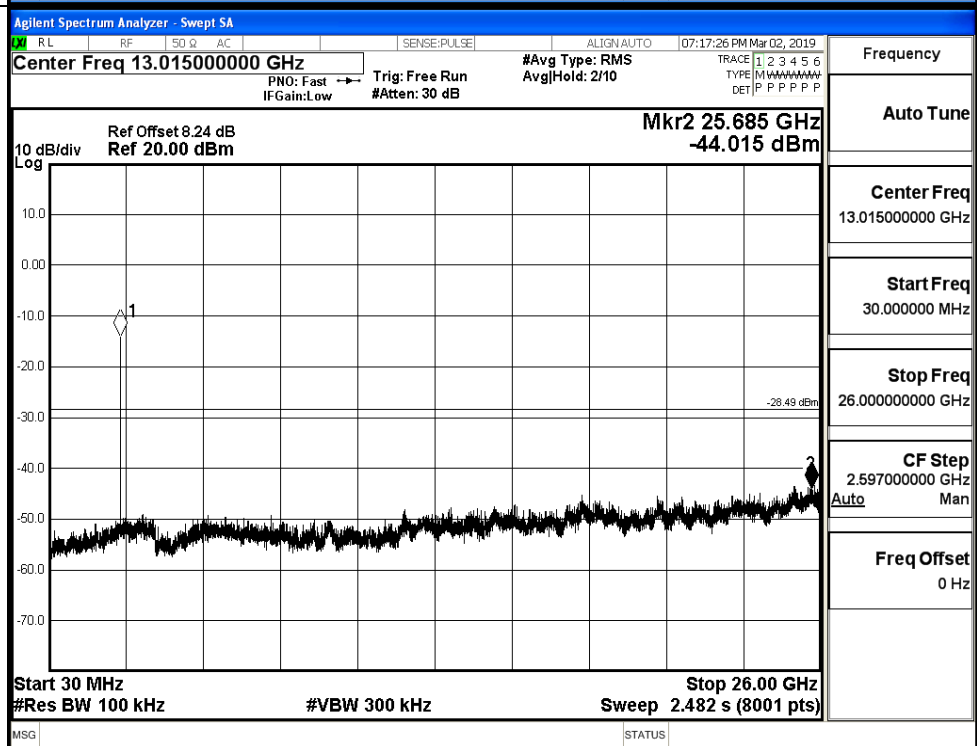


11N20SISO_MCH_Graphs

Pref/11N20
SISO/MCH

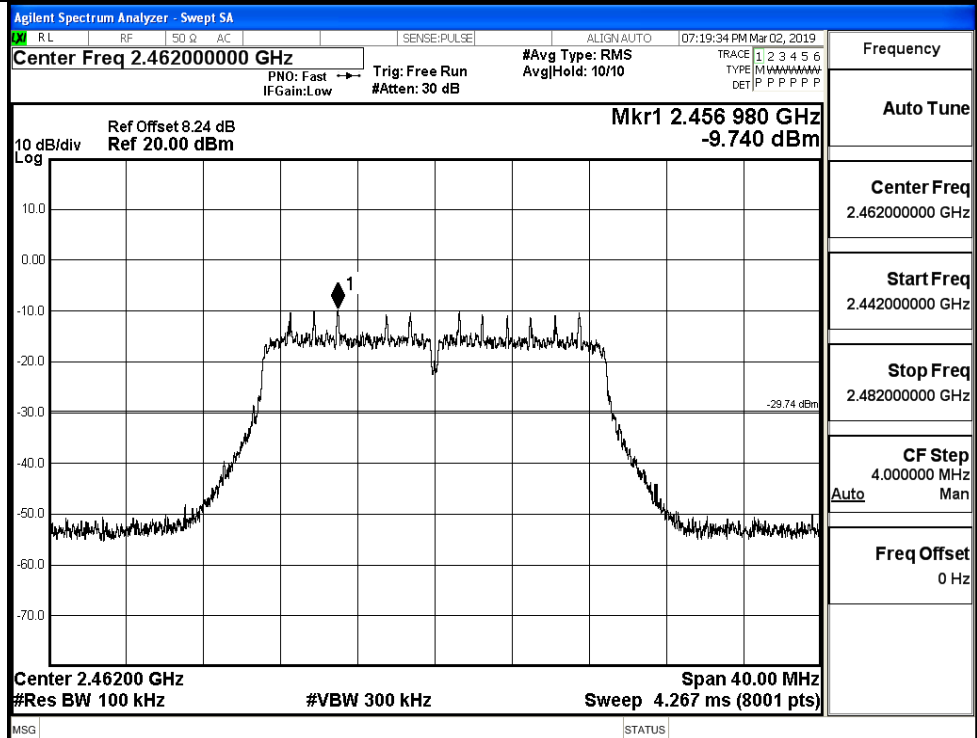


Puw/11N20
SISO/MCH

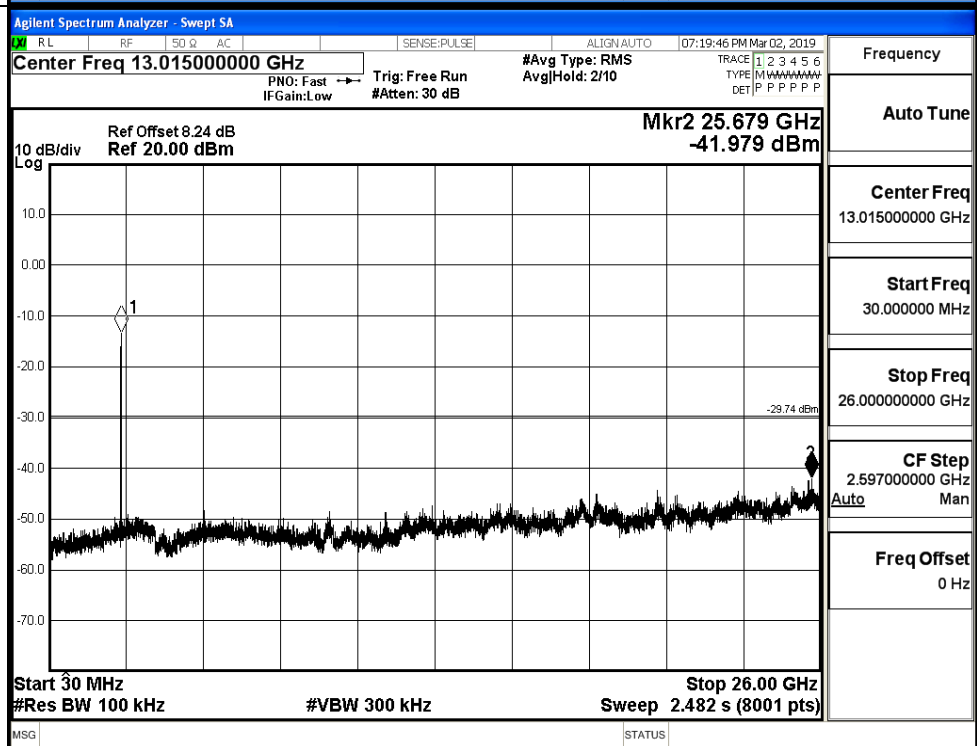


11N20SISO HCH Graphs

Pref/11N20
SISO/HCH

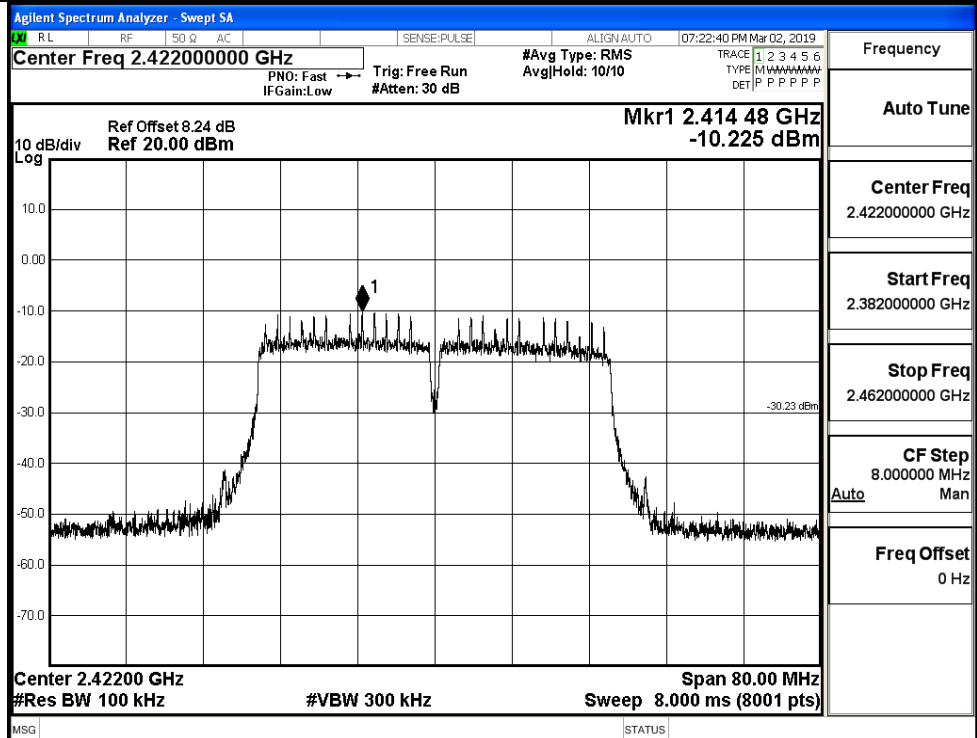


Puw/11N20
SISO/HCH

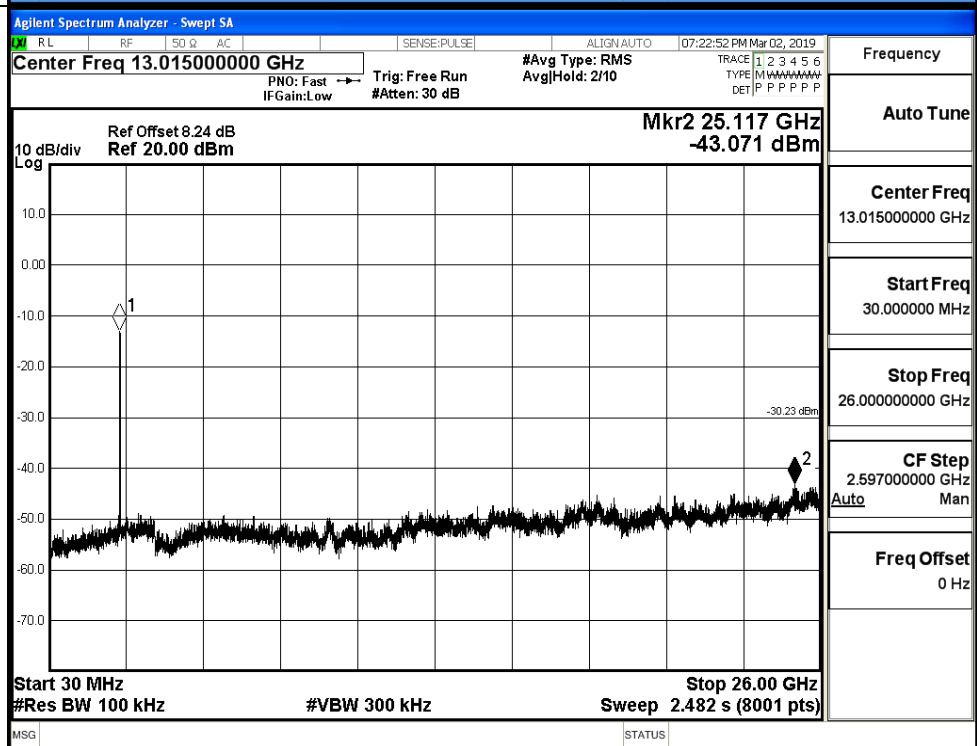


11N40SISO LCH Graphs

Pref/11N40
SISO/LCH

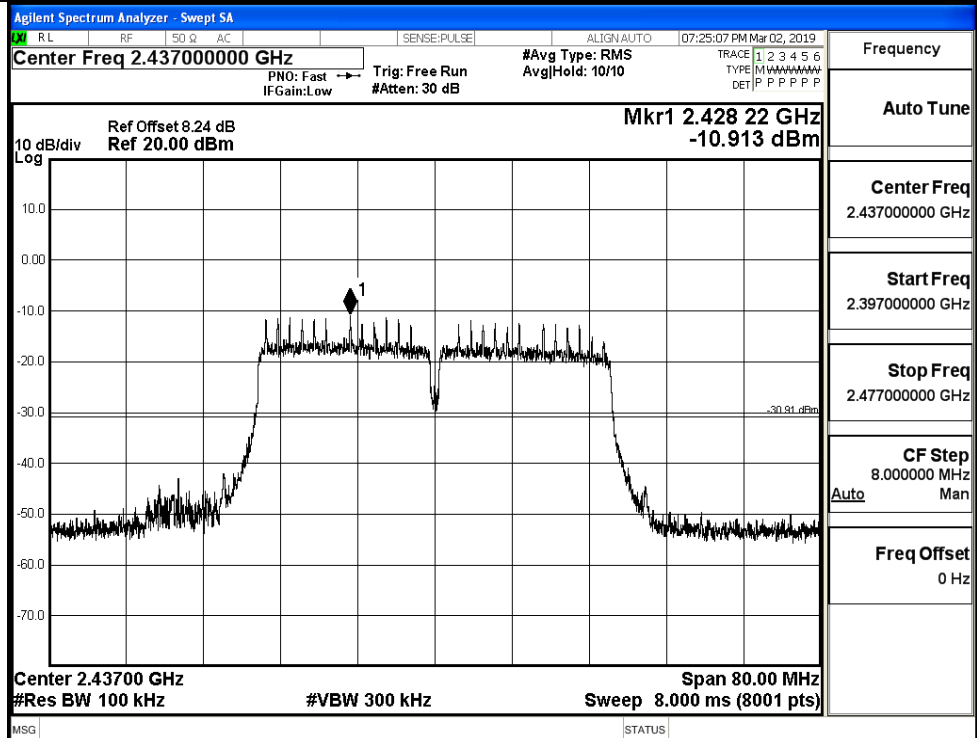


Puw/11N40
SISO/LCH

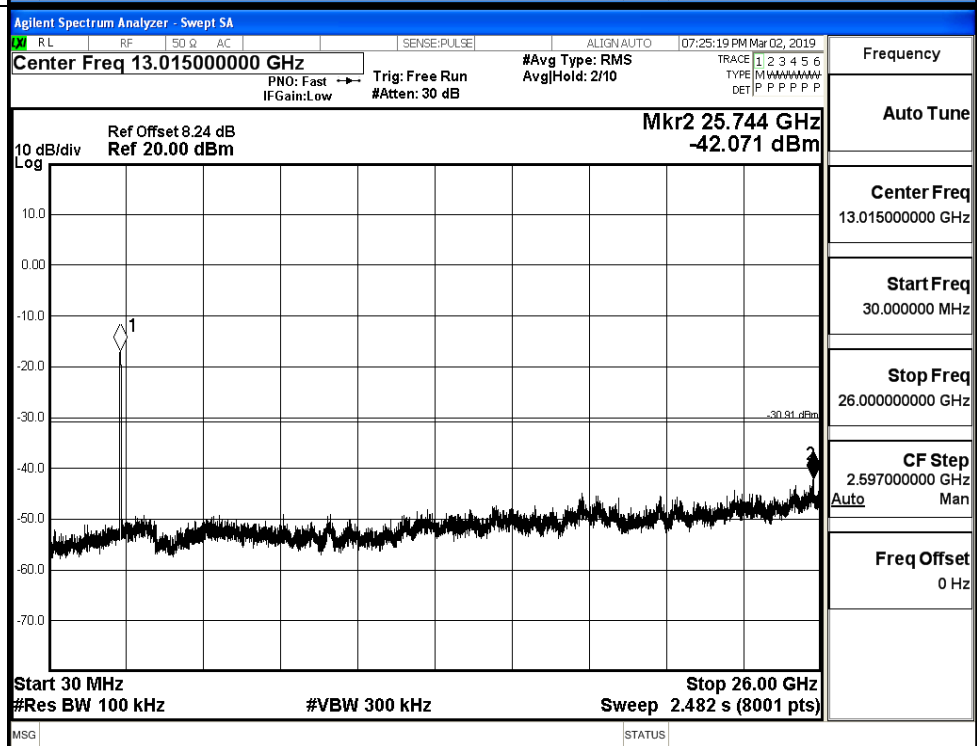


11N40SISO_MCH_Graphs

Pref/11N40
SISO/MCH

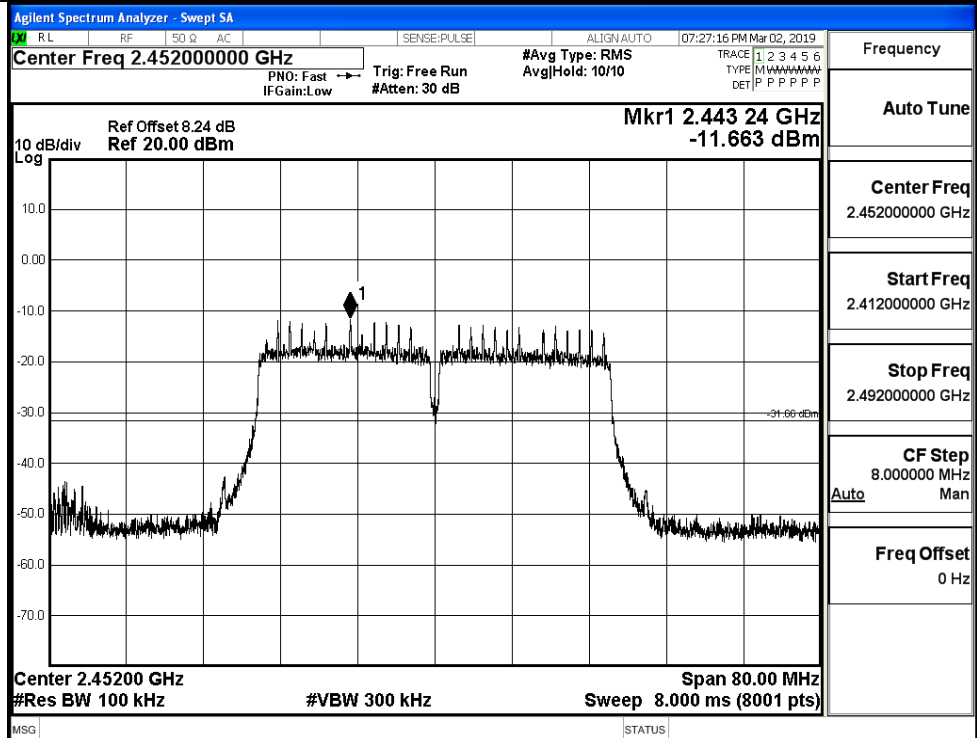


Puw/11N40
SISO/MCH

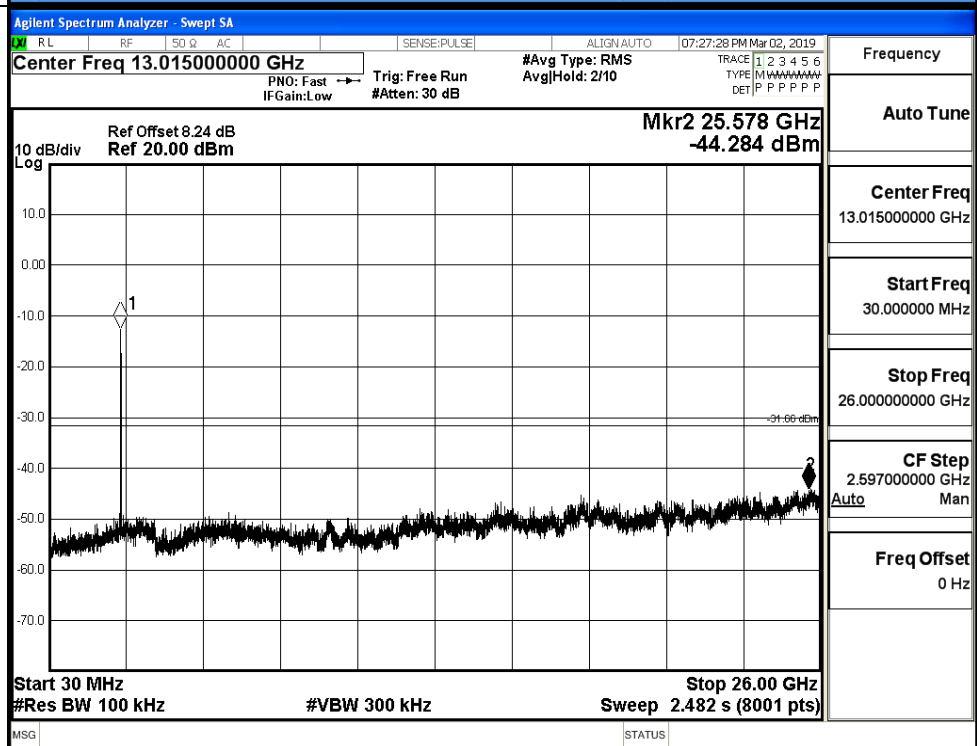


11N40SISO HCH Graphs

Pref/11N40
SISO/HCH

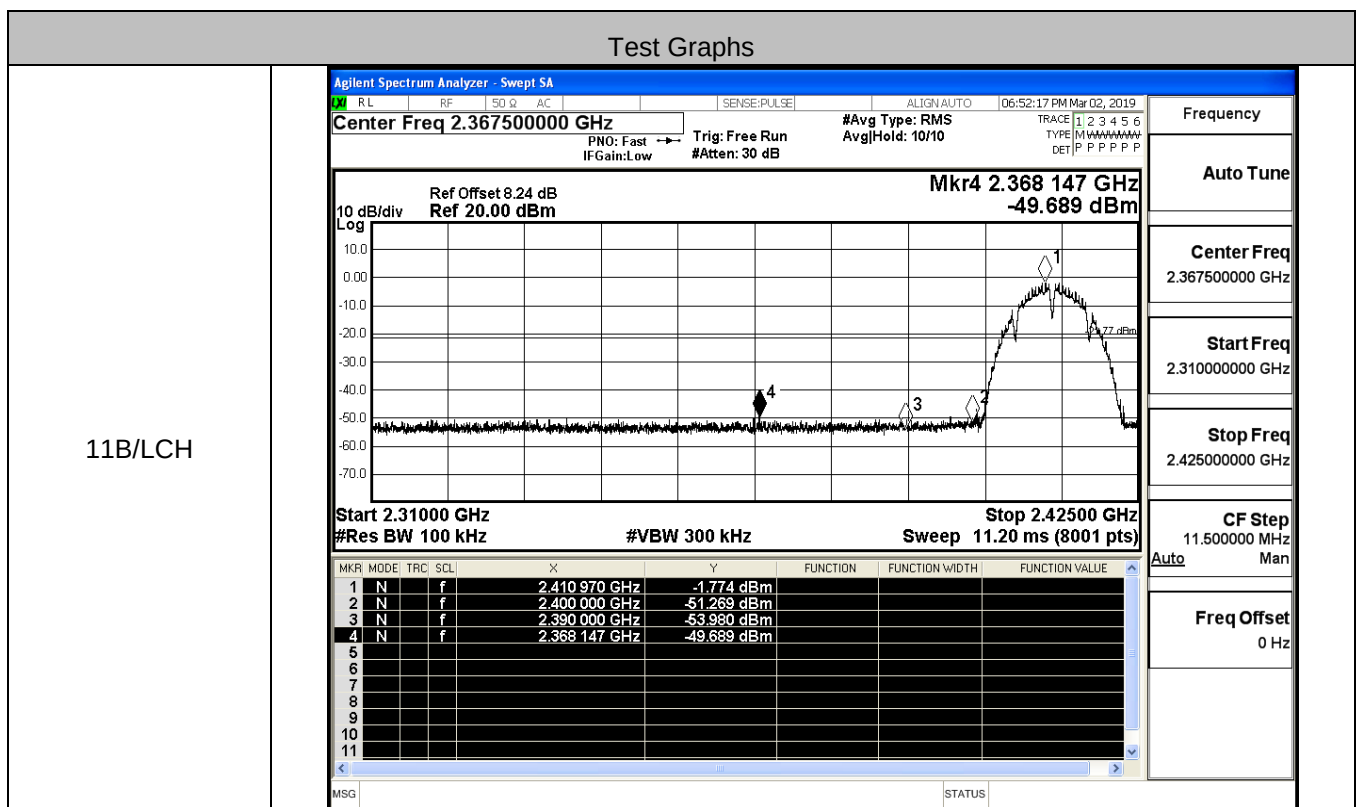


Puw/11N40
SISO/HCH

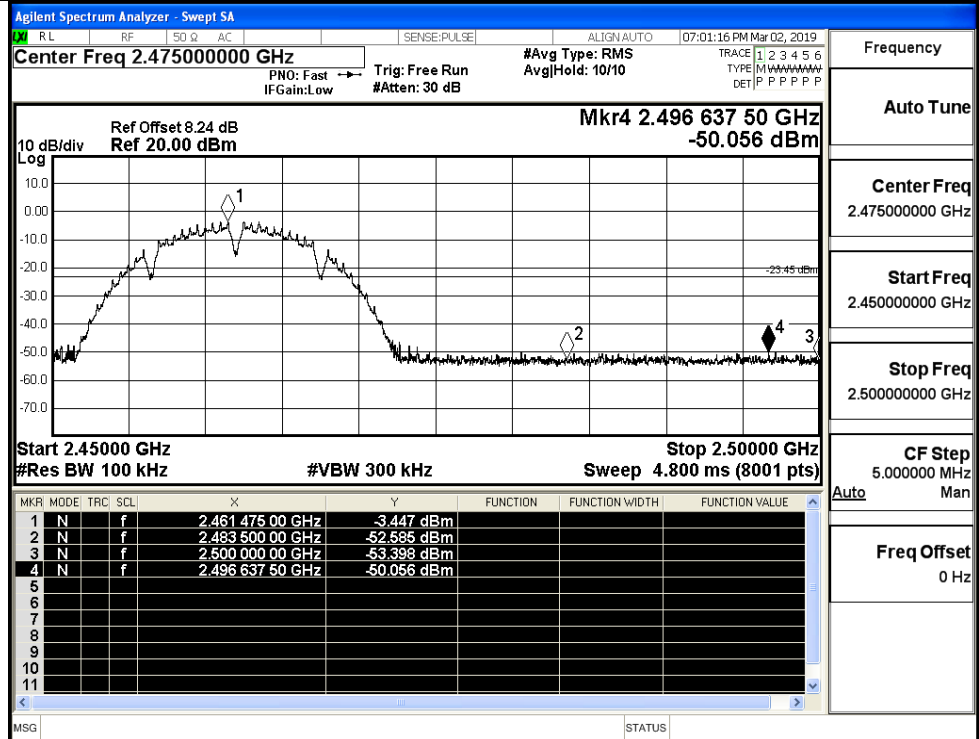


A.6 Band-edge for RF Conducted Emissions

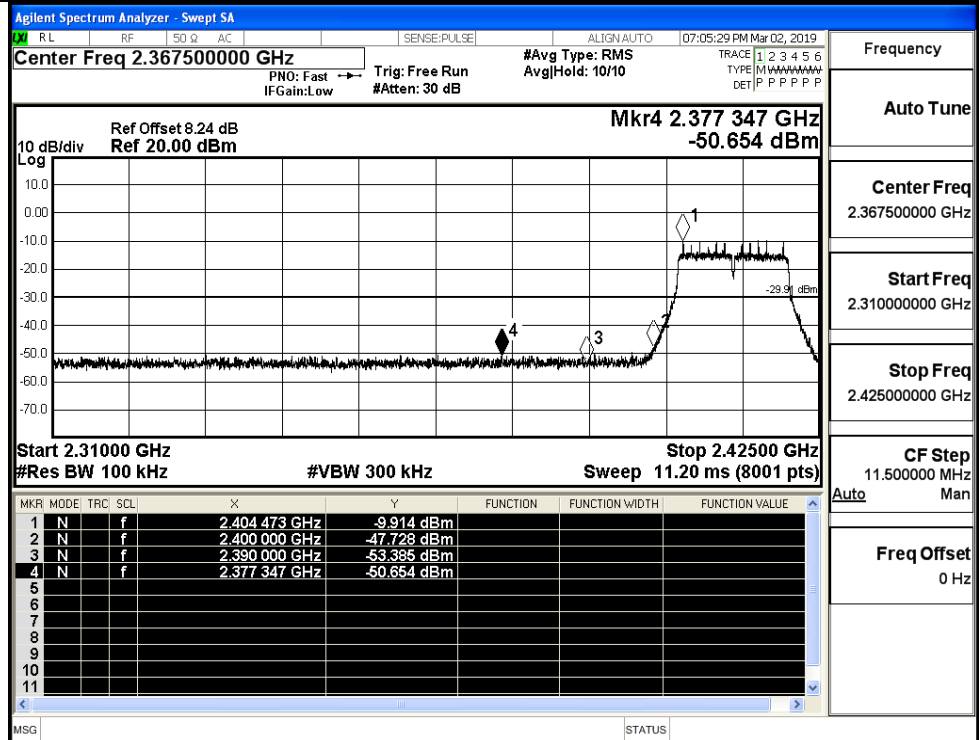
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
11B	LCH	-1.774	-49.689	-21.77	PASS
	HCH	-3.447	-50.056	-23.45	PASS
11G	LCH	-9.914	-50.654	-29.91	PASS
	HCH	-8.892	-49.045	-28.89	PASS
11N20SISO	LCH	-8.893	-49.802	-28.89	PASS
	HCH	-9.431	-50.481	-29.43	PASS
11N40SISO	LCH	-10.028	-48.745	-30.03	PASS
	HCH	-12.374	-49.957	-32.37	PASS



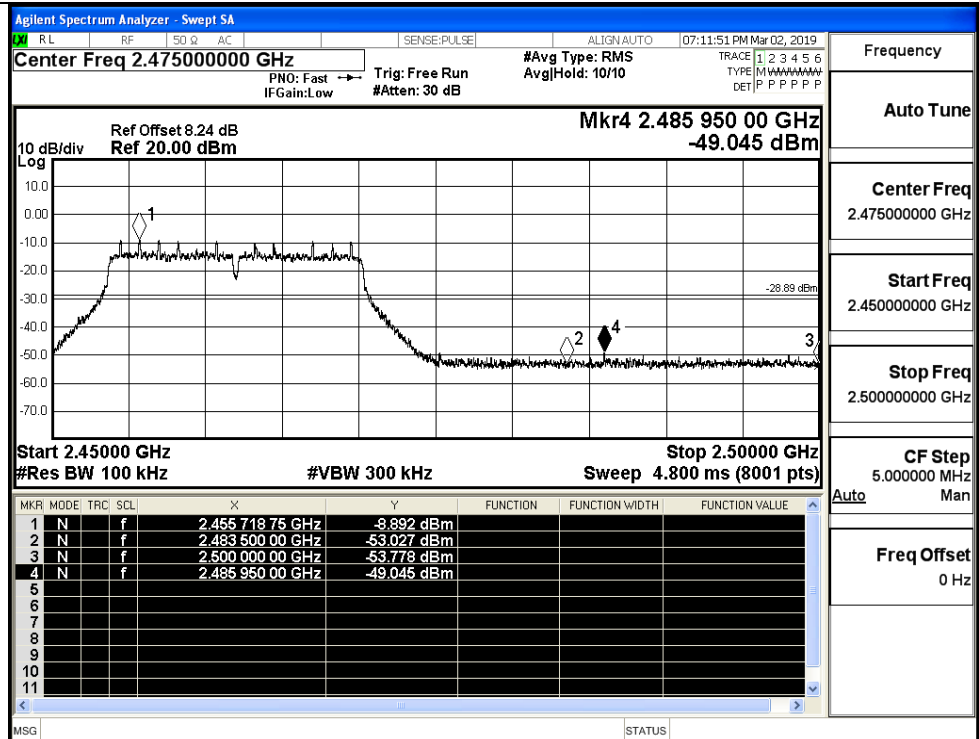
11B/HCH



11G/LCH



11G/HCH



Frequency

Auto Tune

Center Freq
2.475000000 GHz

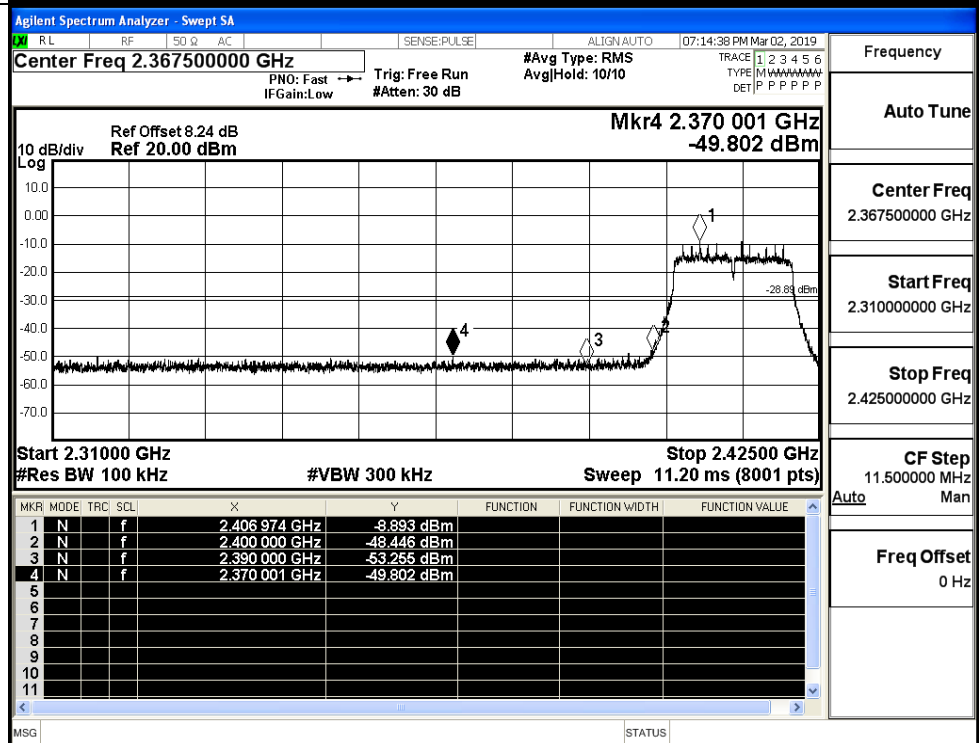
Start Freq
2.450000000 GHz

Stop Freq
2.500000000 GHz

CF Step
5.000000 MHz
Auto Man

Freq Offset
0 Hz

11N20SISO/LCH



Frequency

Auto Tune

Center Freq
2.367500000 GHz

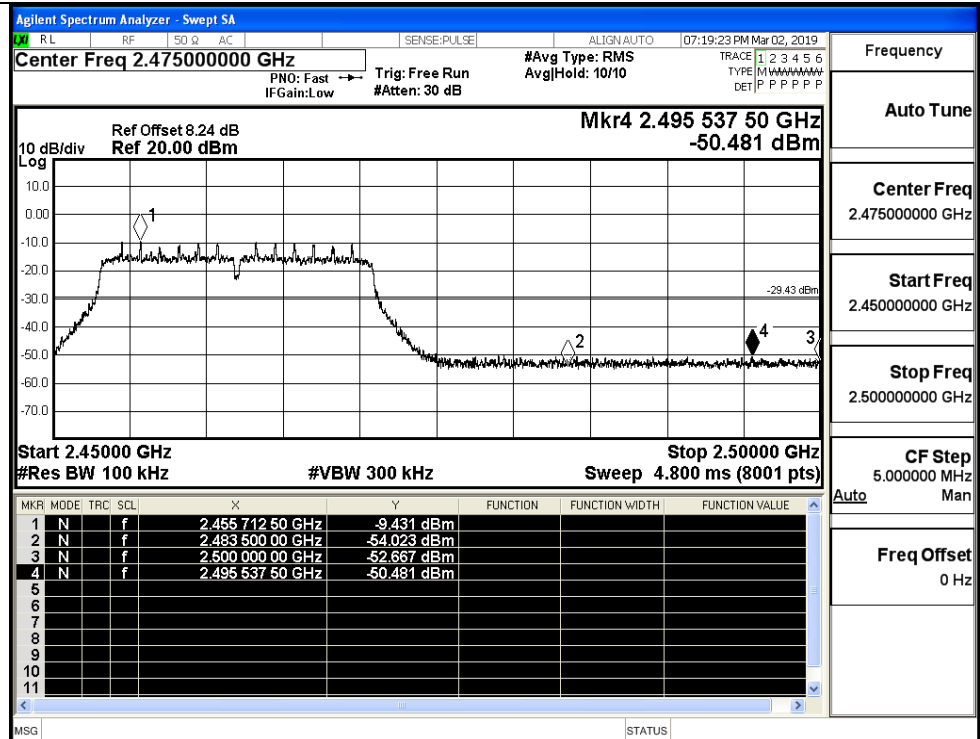
Start Freq
2.310000000 GHz

Stop Freq
2.425000000 GHz

CF Step
11.500000 MHz
Auto Man

Freq Offset
0 Hz

11N20SISO/HCH



Frequency

Auto Tune

Center Freq
2.475000000 GHz

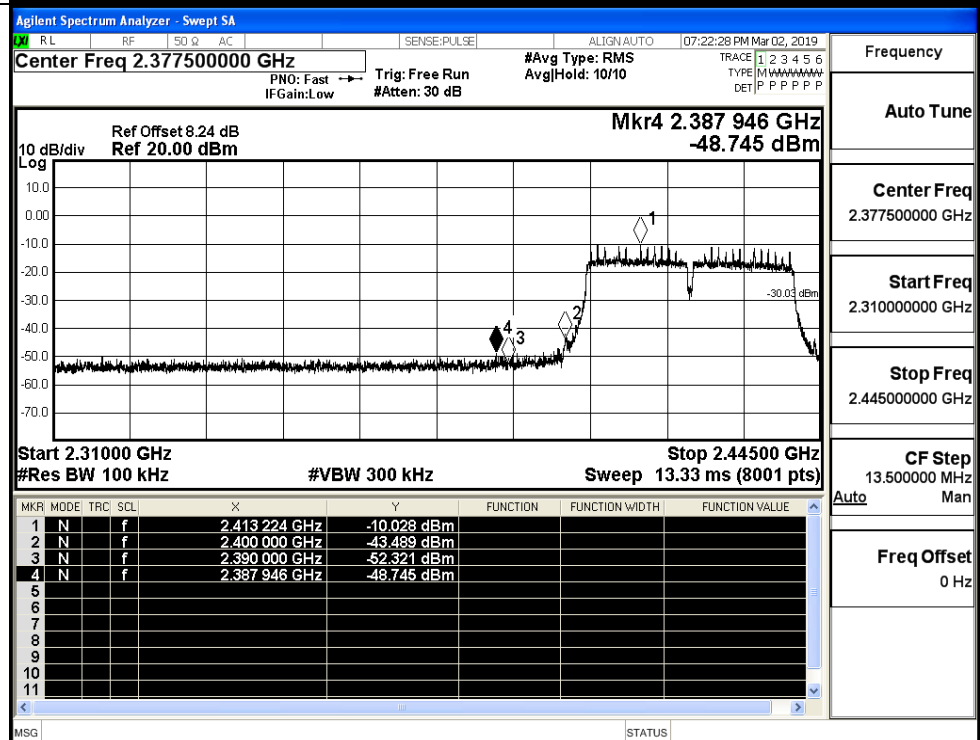
Start Freq
2.450000000 GHz

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

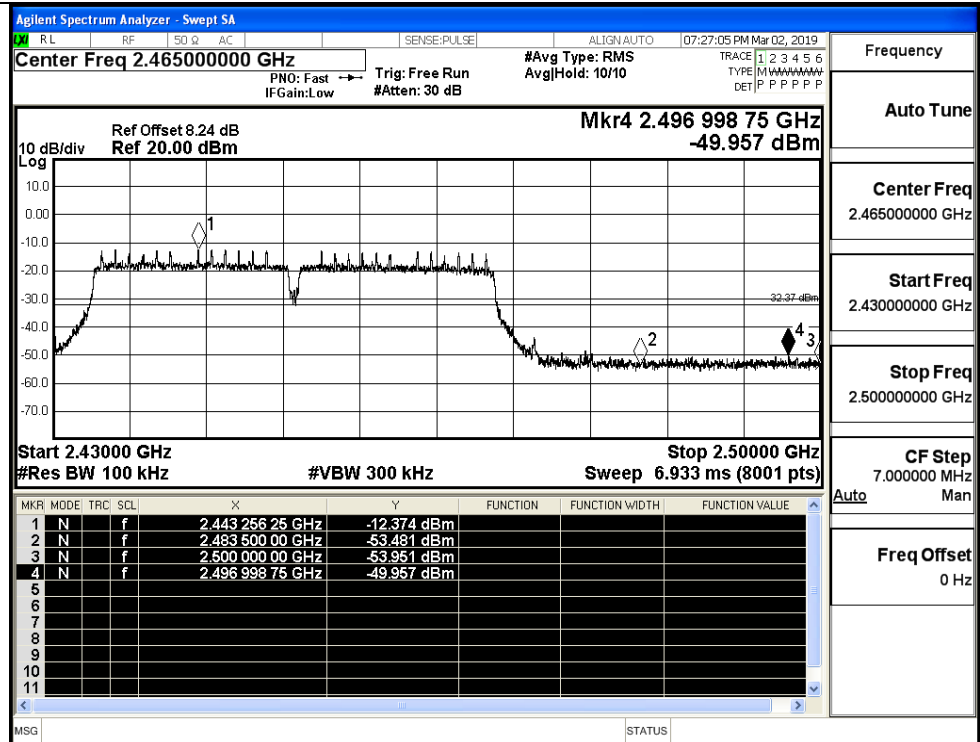
Start Freq
2.310000000 GHz

Stop Freq
2.445000000 GHz

CF Step
13.500000 MHz
Auto Man

Freq Offset
0 Hz

11N40SISO/HCH



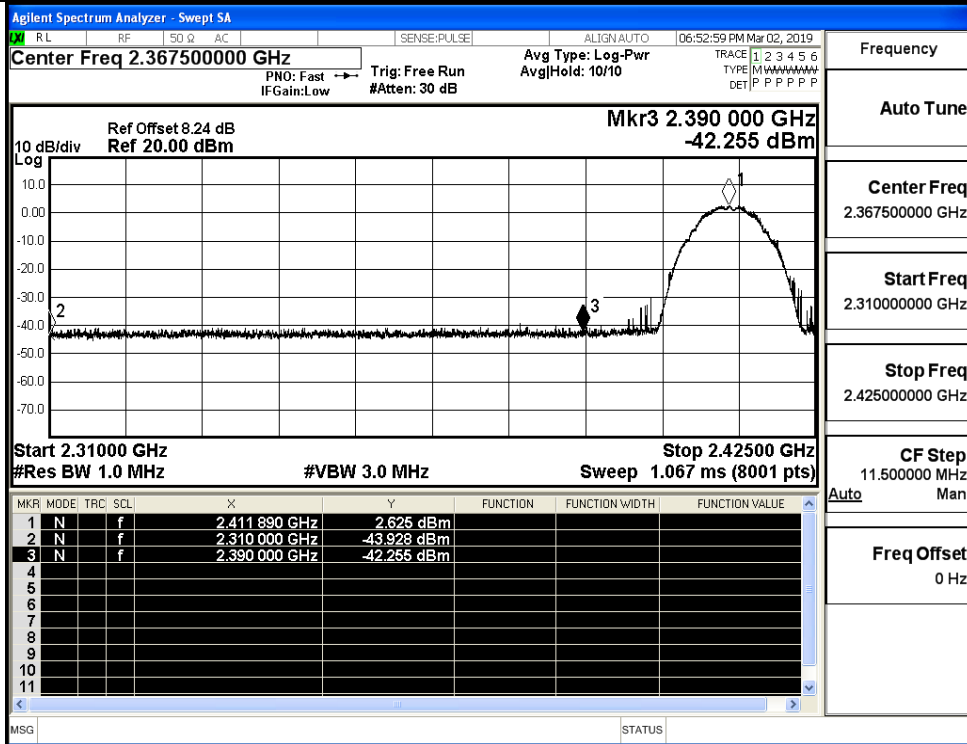
Frequency
Auto Tune
Center Freq 2.465000000 GHz
Start Freq 2.430000000 GHz
Stop Freq 2.500000000 GHz
CF Step 7.000000 MHz
Auto Man
Freq Offset 0 Hz

A.7 Restrict-band band-edge measurements

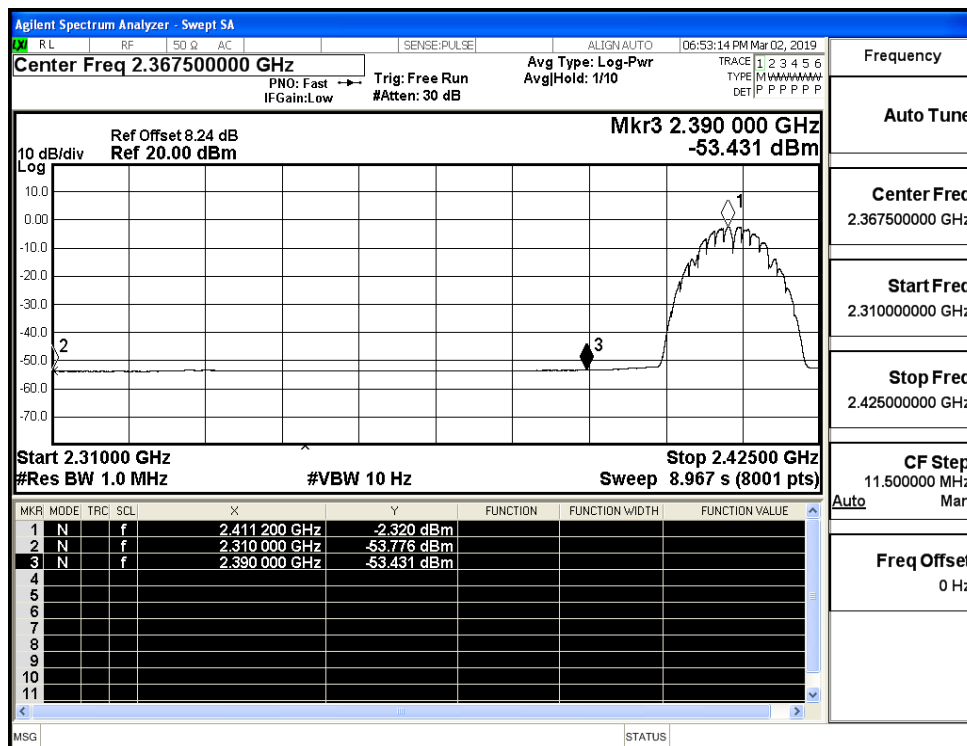
Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
11B	2412	Ant1	2310.0	-43.928	3.00	0	54.300	PEAK	74	PASS
	2412	Ant1	2310.0	-53.776	3.00	0	44.452	AV	54	PASS
	2412	Ant1	2390.0	-42.255	3.00	0	55.973	PEAK	74	PASS
	2412	Ant1	2390.0	-53.431	3.00	0	44.797	AV	54	PASS
	2462	Ant1	2483.5	-43.303	3.00	0	54.925	PEAK	74	PASS
	2462	Ant1	2483.5	-53.345	3.00	0	44.883	AV	54	PASS
	2462	Ant1	2500.0	-43.478	3.00	0	54.750	PEAK	74	PASS
	2462	Ant1	2500.0	-53.156	3.00	0	45.072	AV	54	PASS
11G	2412	Ant1	2310.0	-43.512	3.00	0	54.716	PEAK	74	PASS
	2412	Ant1	2310.0	-53.825	3.00	0	44.403	AV	54	PASS
	2412	Ant1	2390.0	-43.193	3.00	0	55.035	PEAK	74	PASS
	2412	Ant1	2390.0	-53.420	3.00	0	44.808	AV	54	PASS
	2462	Ant1	2483.5	-43.522	3.00	0	54.706	PEAK	74	PASS
	2462	Ant1	2483.5	-53.384	3.00	0	44.844	AV	54	PASS
	2462	Ant1	2500.0	-44.140	3.00	0	54.088	PEAK	74	PASS
	2462	Ant1	2500.0	-53.172	3.00	0	45.056	AV	54	PASS
11N20 SISO	2412	Ant1	2310.0	-42.342	3.00	0	55.886	PEAK	74	PASS
	2412	Ant1	2310.0	-53.792	3.00	0	44.436	AV	54	PASS
	2412	Ant1	2390.0	-41.848	3.00	0	56.380	PEAK	74	PASS
	2412	Ant1	2390.0	-53.400	3.00	0	44.828	AV	54	PASS
	2462	Ant1	2483.5	-42.460	3.00	0	55.768	PEAK	74	PASS
	2462	Ant1	2483.5	-53.368	3.00	0	44.860	AV	54	PASS
	2462	Ant1	2500.0	-43.042	3.00	0	55.186	PEAK	74	PASS
	2462	Ant1	2500.0	-53.222	3.00	0	45.006	AV	54	PASS
11N40 SISO	2422	Ant1	2310.0	-43.778	3.00	0	54.450	PEAK	74	PASS
	2422	Ant1	2310.0	-53.762	3.00	0	44.466	AV	54	PASS

	2422	Ant1	2390.0	-35.670	3.00	0	62.558	PEAK	74	PASS
	2422	Ant1	2390.0	-52.860	3.00	0	45.368	AV	54	PASS
	2452	Ant1	2483.5	-42.062	3.00	0	56.166	PEAK	74	PASS
	2452	Ant1	2483.5	-53.226	3.00	0	45.002	AV	54	PASS
	2452	Ant1	2500.0	-43.239	3.00	0	54.989	PEAK	74	PASS
	2452	Ant1	2500.0	-53.199	3.00	0	45.029	AV	54	PASS

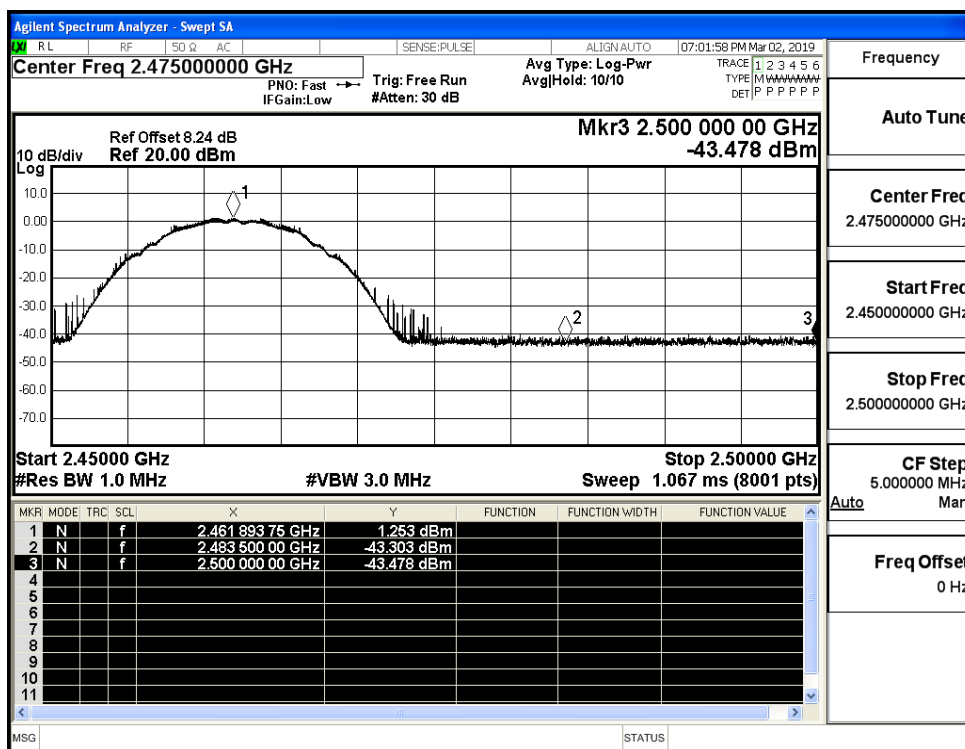
Restrict-band band-edge measurements_11B_2412_Ant1_PEAK



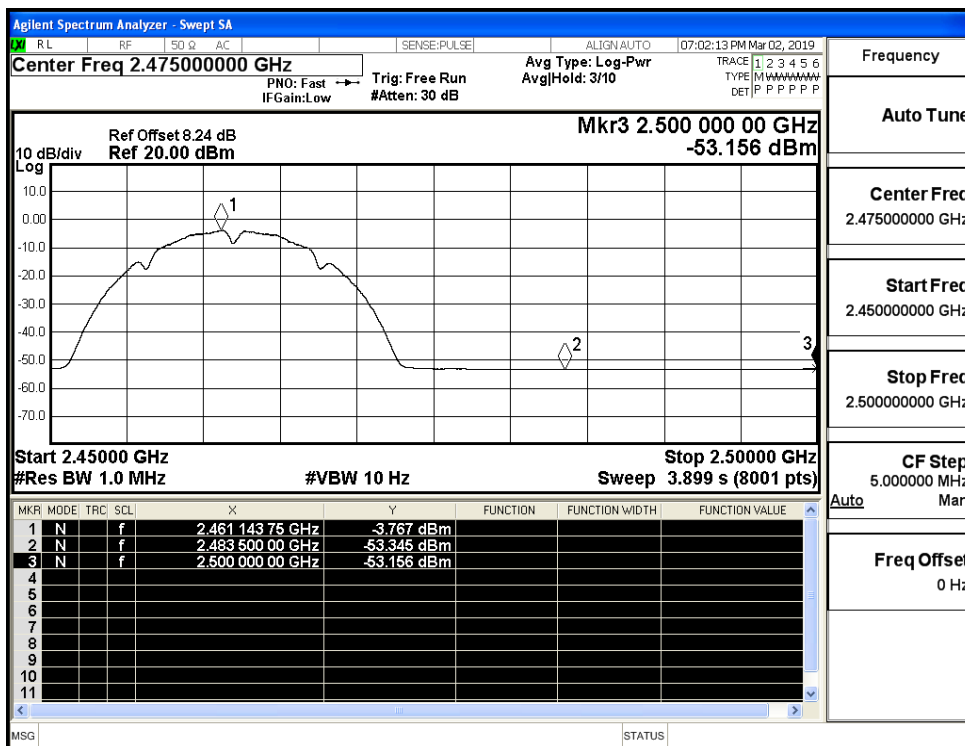
Restrict-band band-edge measurements_11B_2412_Ant1_AV



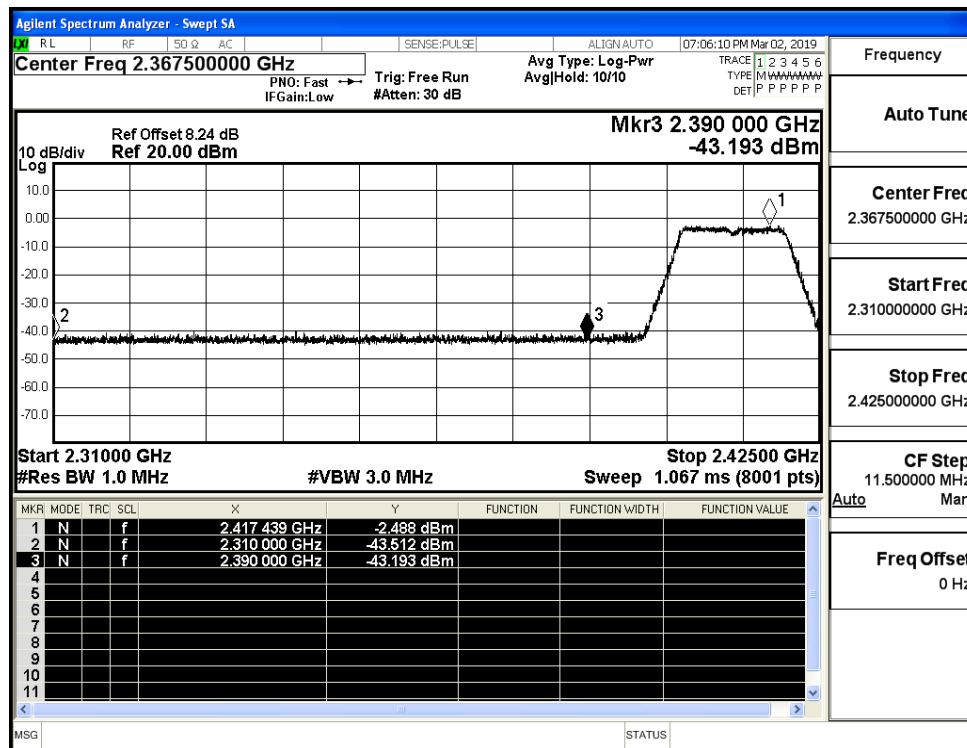
Restrict-band band-edge measurements_11B_2462_Ant1_PEAK



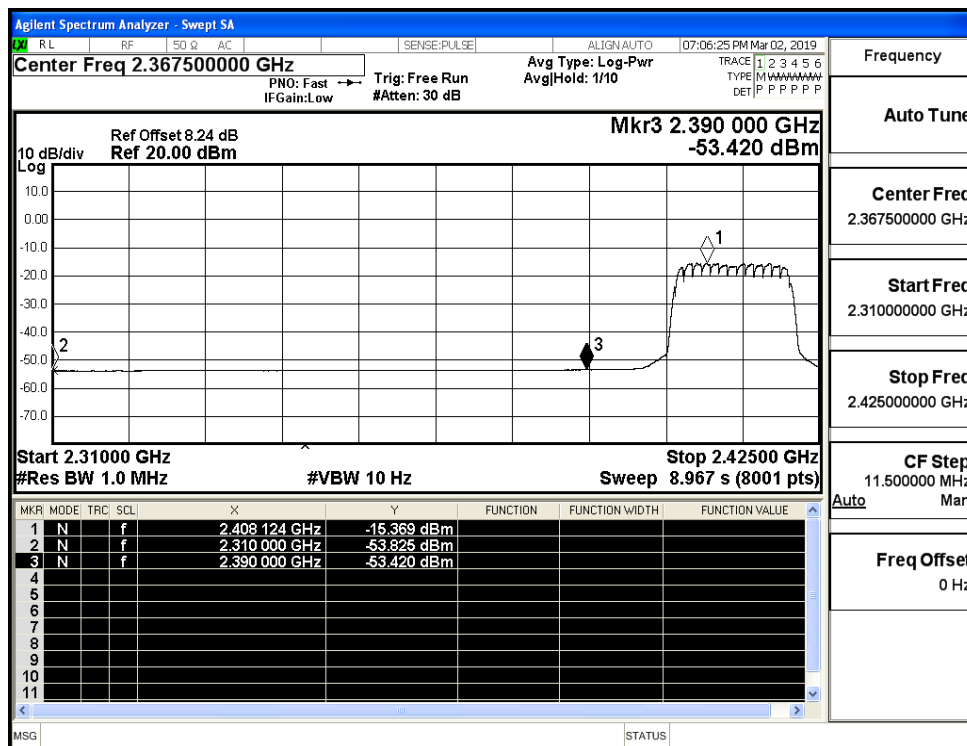
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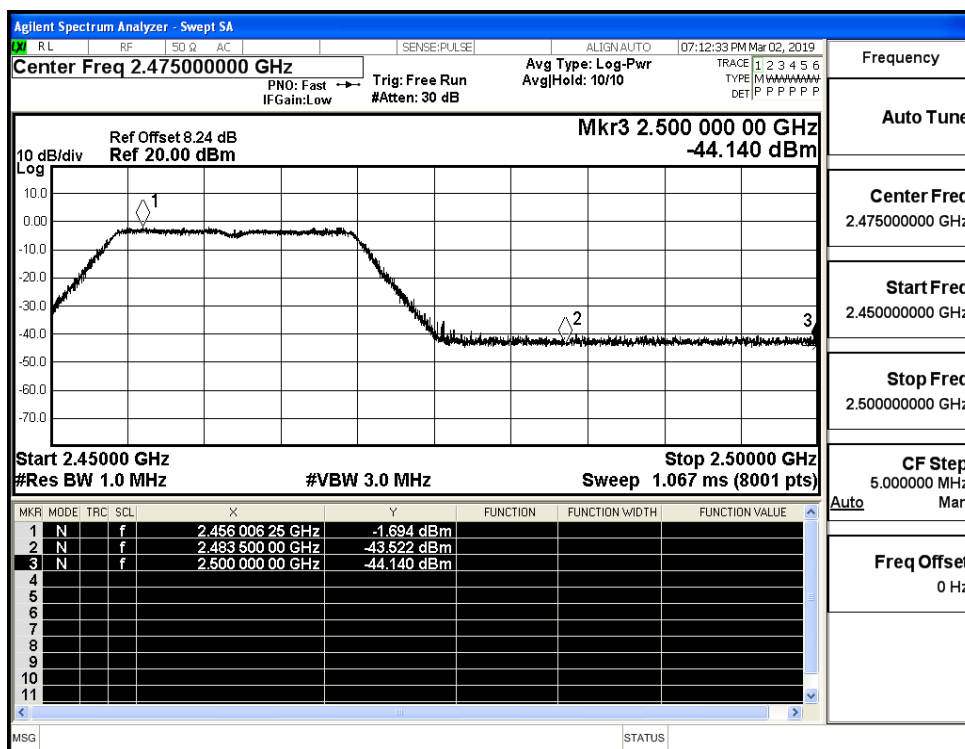
Restrict-band band-edge measurements_11G_2412_Ant1_PEAK



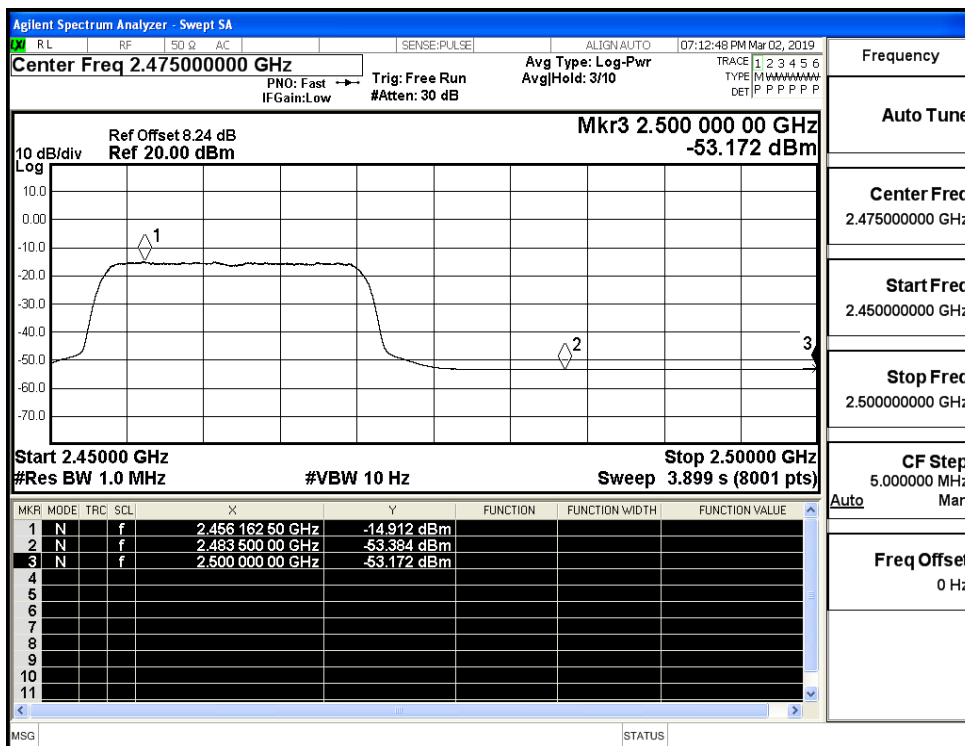
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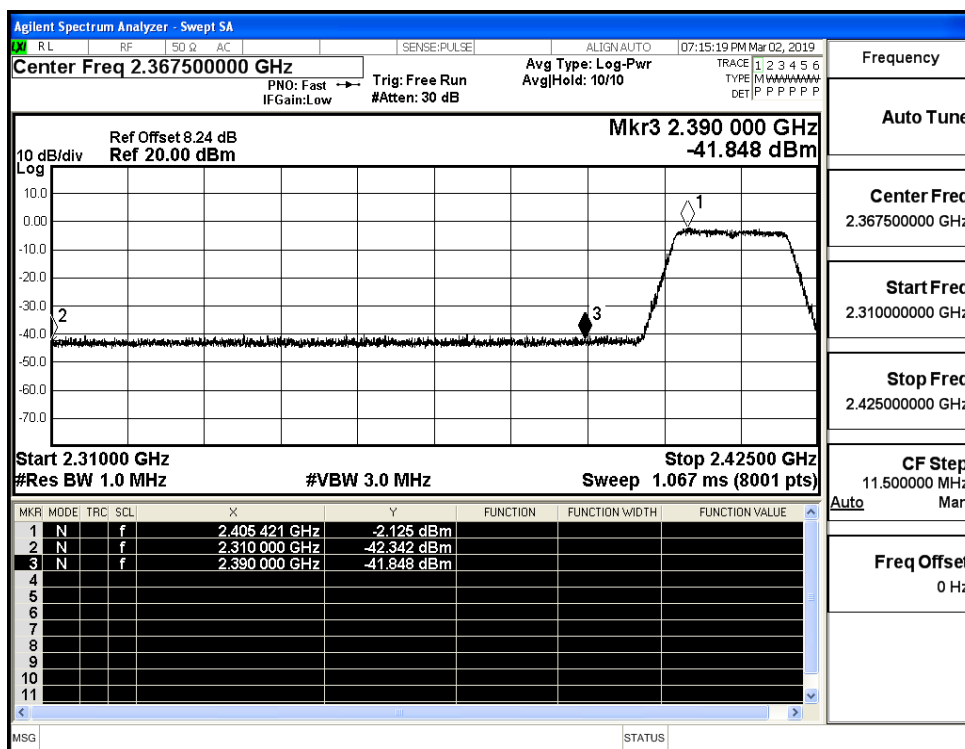
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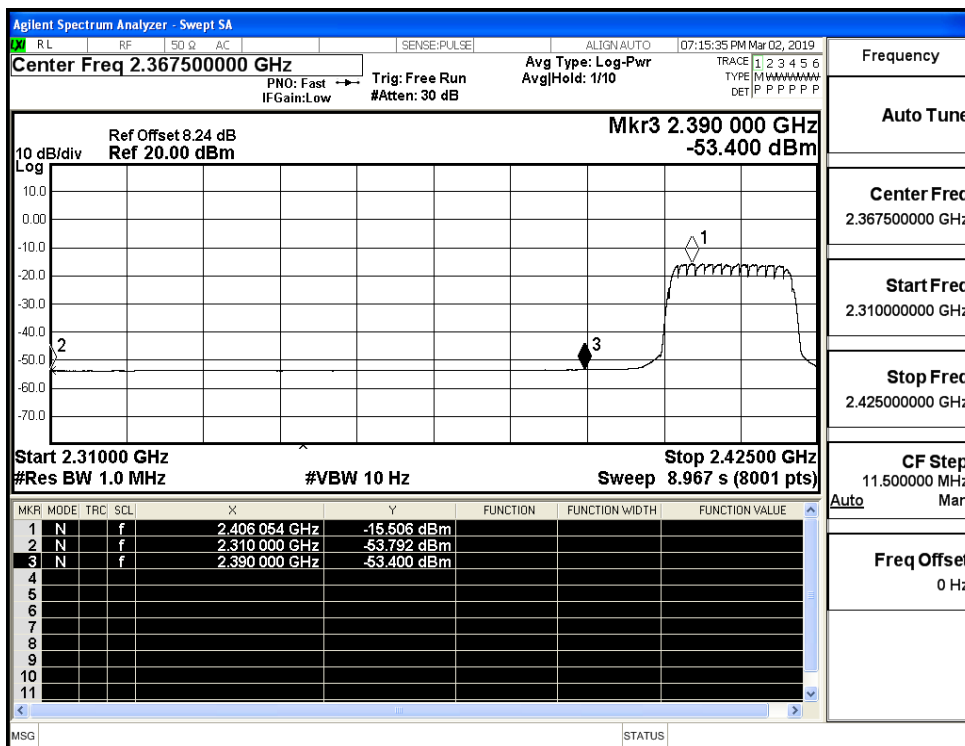
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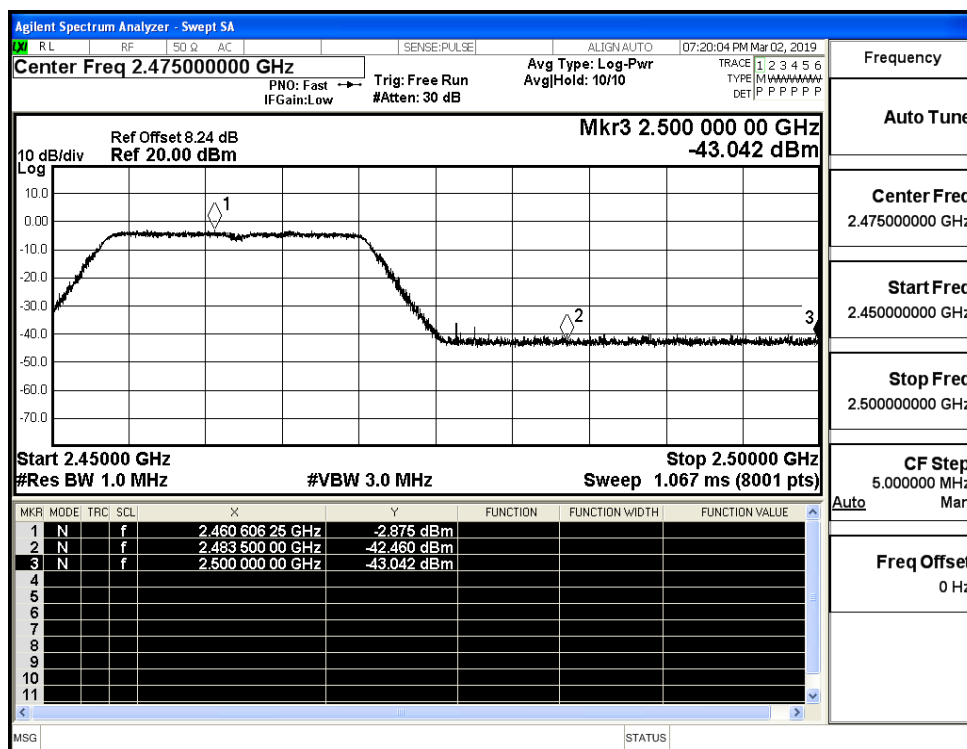
Restrict-band band-edge measurements_11N20SISO_2412_Ant1_PEAK



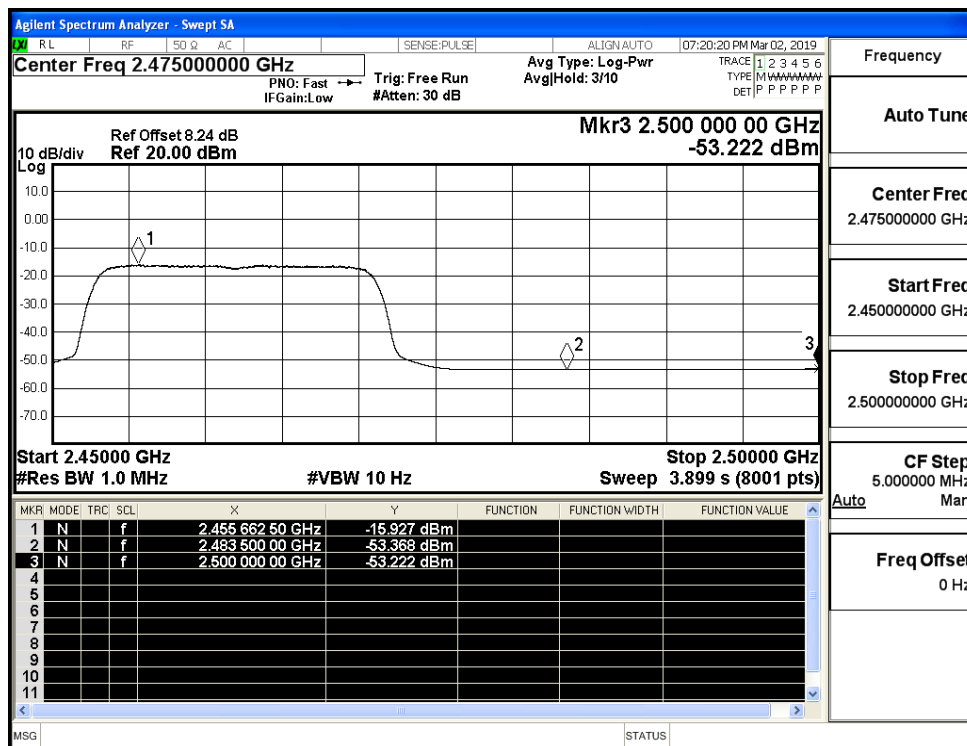
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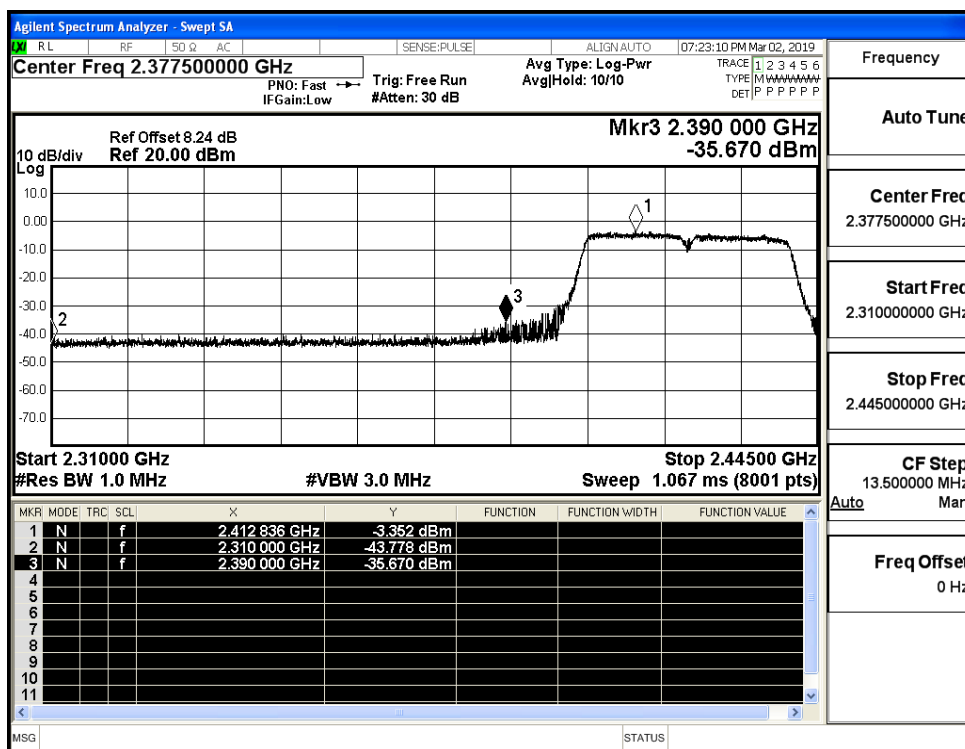
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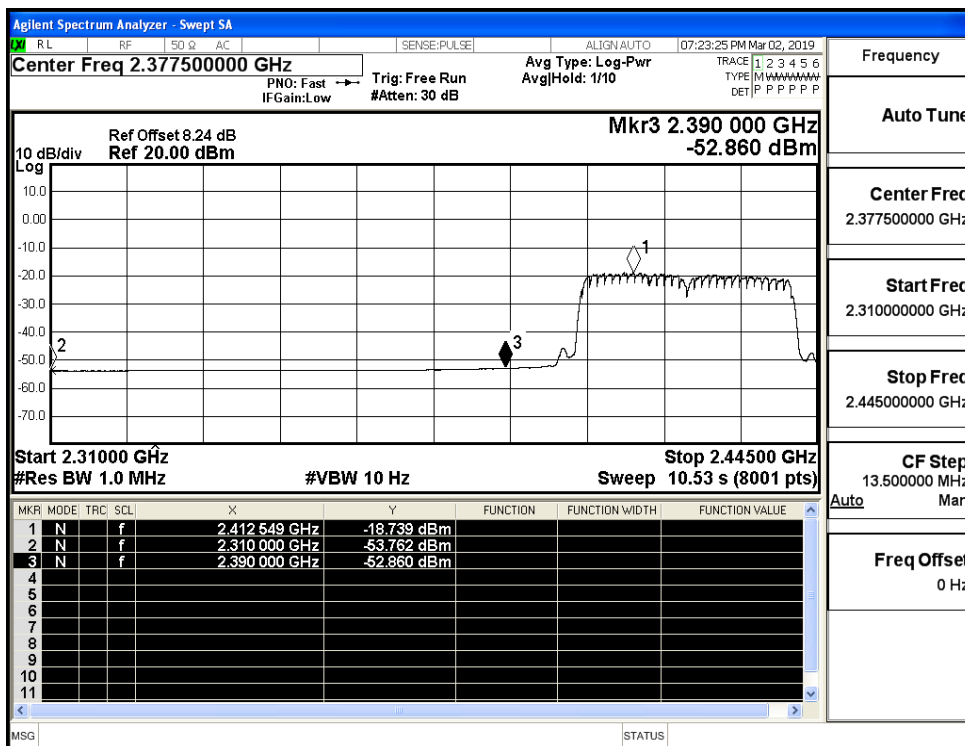
Restrict-band band-edge measurements_11N20SISO_2462_Ant1_AV



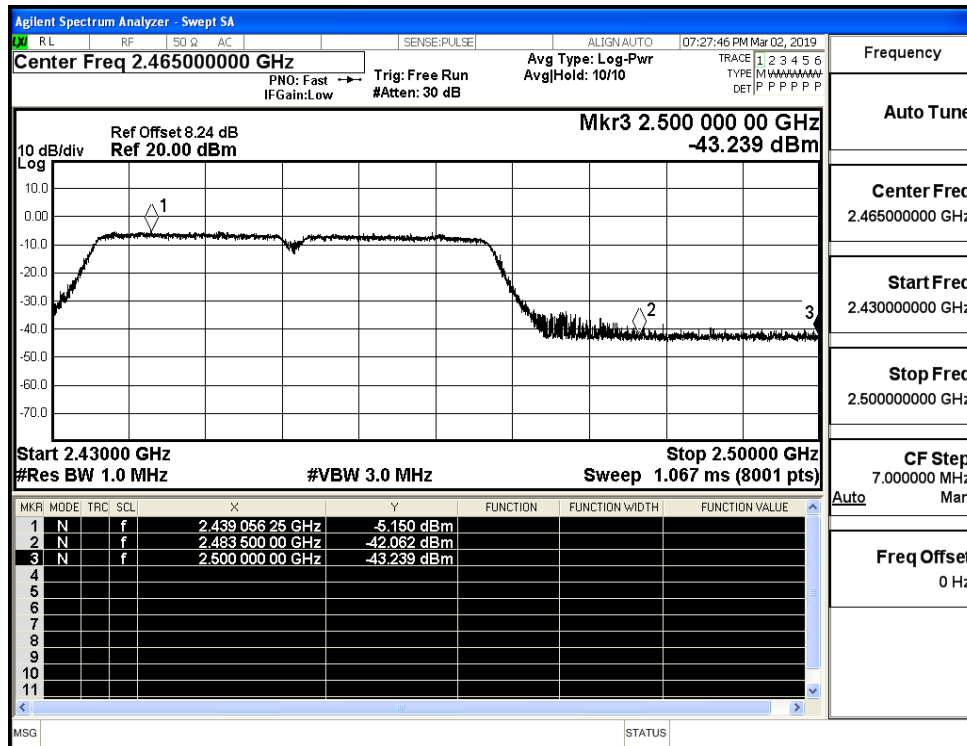
Restrict-band band-edge measurements_11N40SISO_2422_Ant1_PEAK



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

