

Appendix C

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: Intelligent Robot

Trade Mark: **Gomer**

Test Model: G0001A

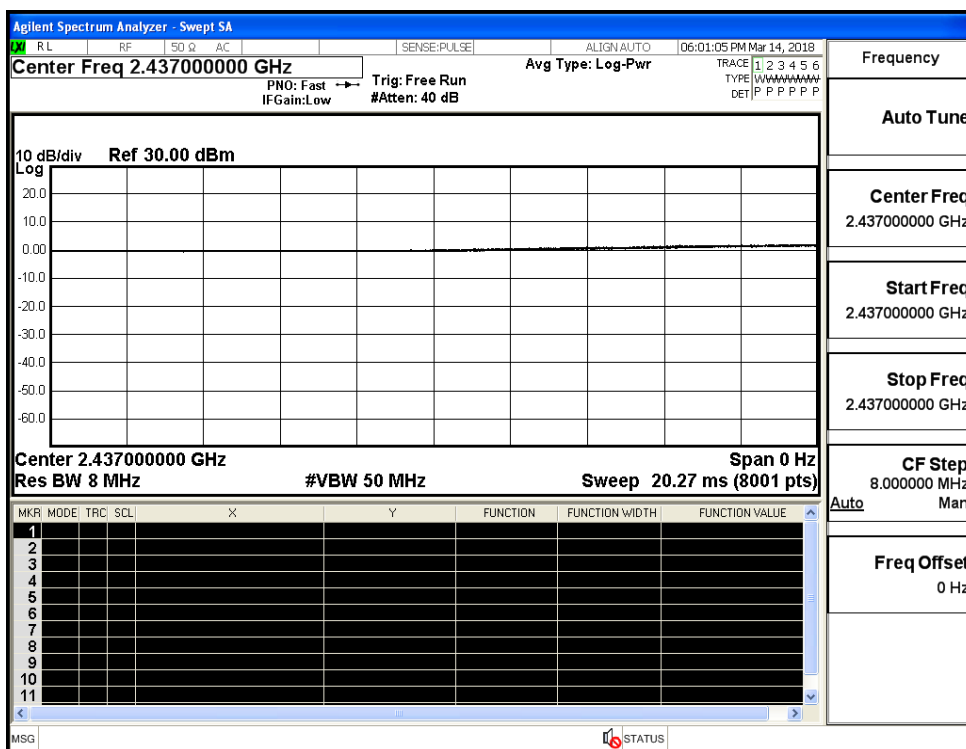
Environmental Conditions

Temperature:	24.3 ° C
Relative Humidity:	52.6%
ATM Pressure:	100.0 kPa
Test Engineer:	WC Wang
Supervised by:	Tom.Liu

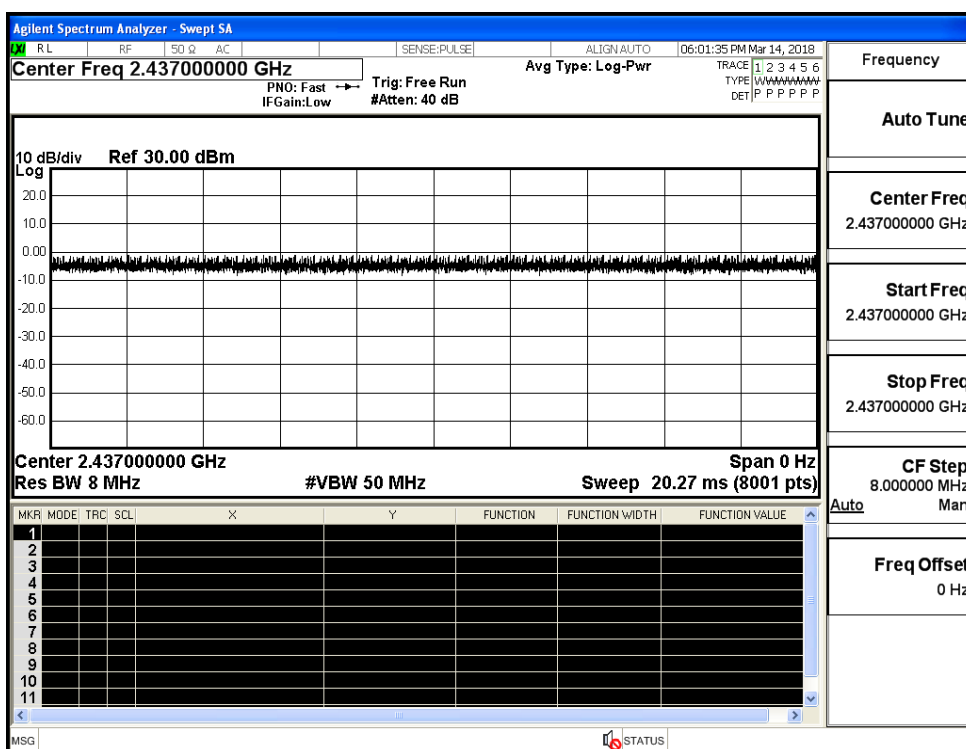
C.1 Duty Cycle

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

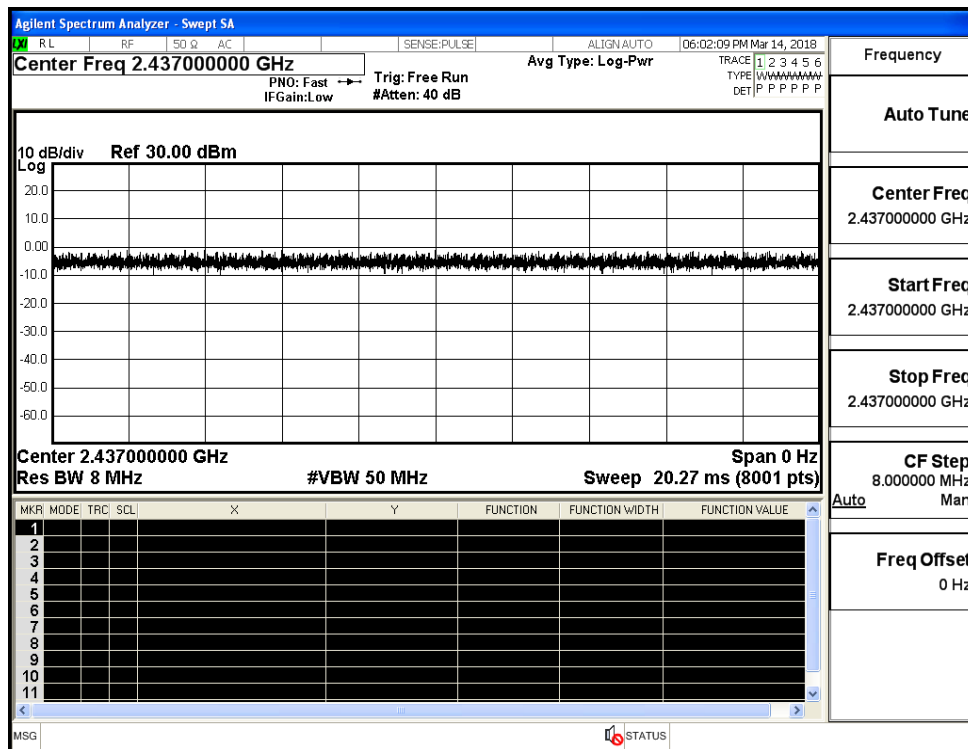
Duty Cycle_11B_2437_Ant1



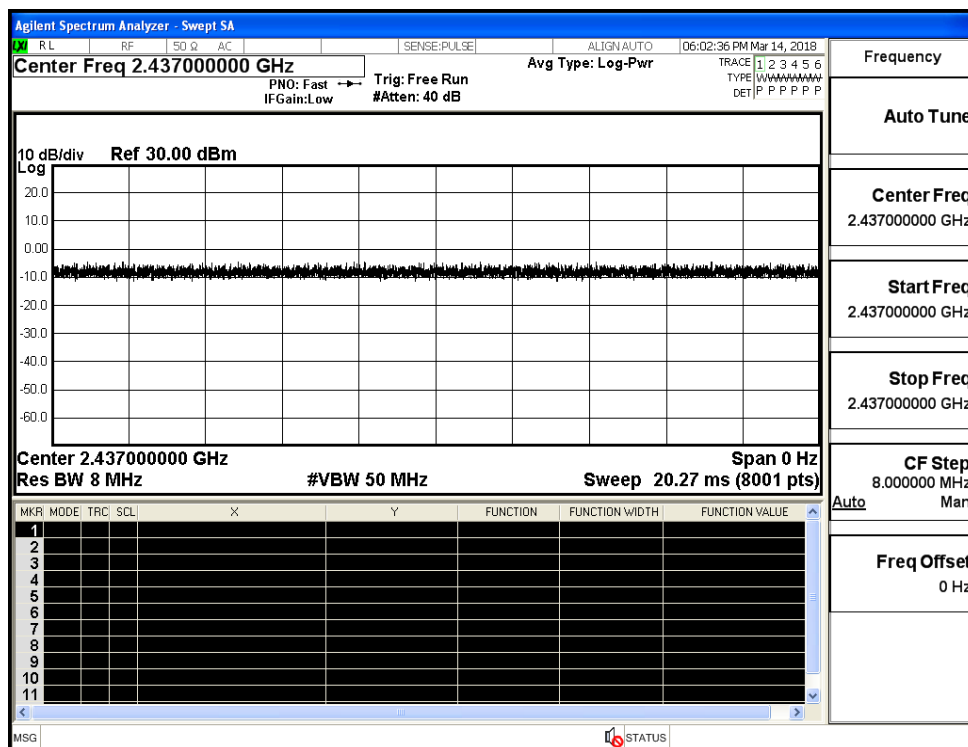
Duty Cycle_11G_2437_Ant1



Duty Cycle_11N20SISO_2437_Ant1



Duty Cycle_11N40SISO_2437_Ant1

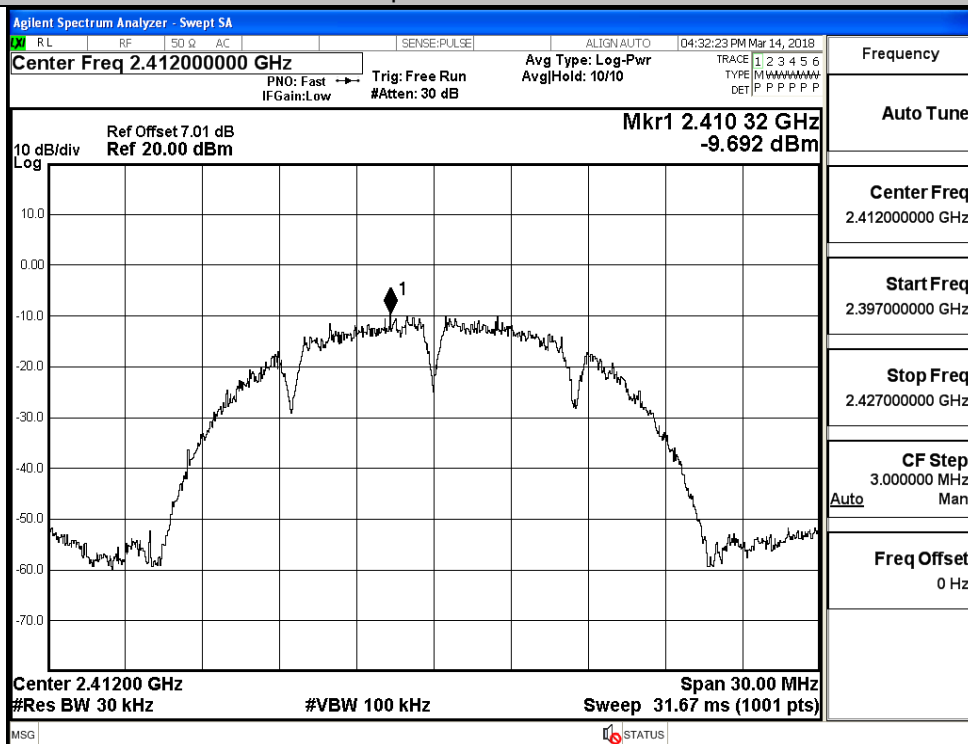


C.2 Maximum Power Spectral Density

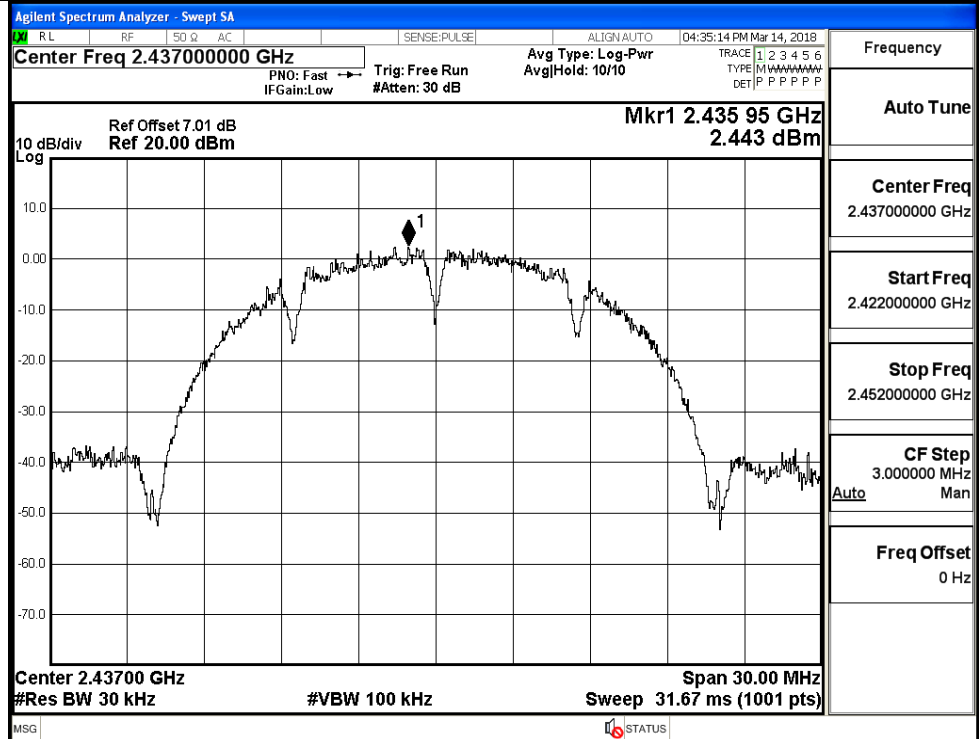
Mode	Channel	Meas.Level [dBm/30KHz]	Limit [dBm/3KHz]	Verdict
11B	LCH	-9.692	8	PASS
	MCH	2.443	8	PASS
	HCH	-12.523	8	PASS
11G	LCH	-11.866	8	PASS
	MCH	-11.745	8	PASS
	HCH	-16.501	8	PASS
11N20SISO	LCH	-16.301	8	PASS
	MCH	-16.564	8	PASS
	HCH	-16.180	8	PASS
11N40SISO	LCH	-20.028	8	PASS
	MCH	-20.046	8	PASS
	HCH	-20.281	8	PASS

Test Graphs

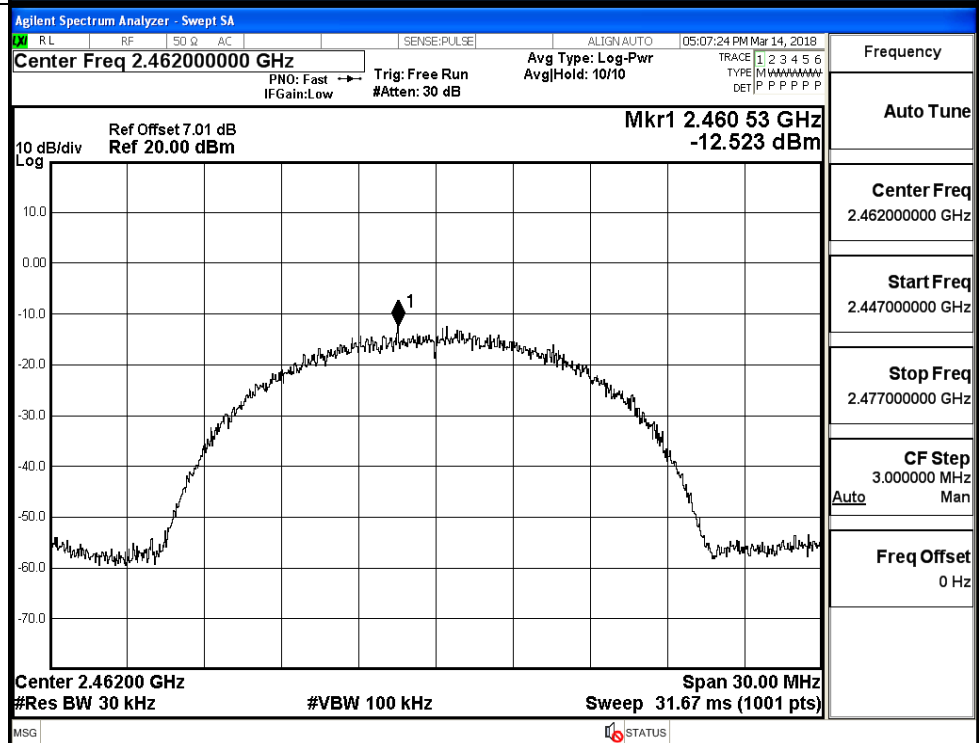
11B/LCH



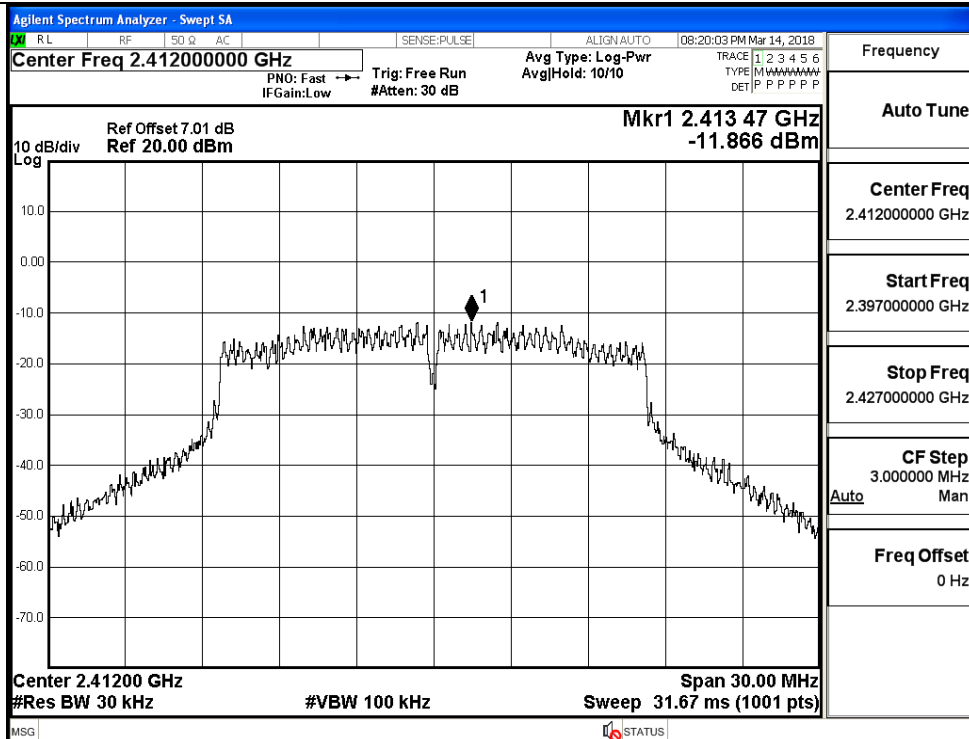
11B/MCH



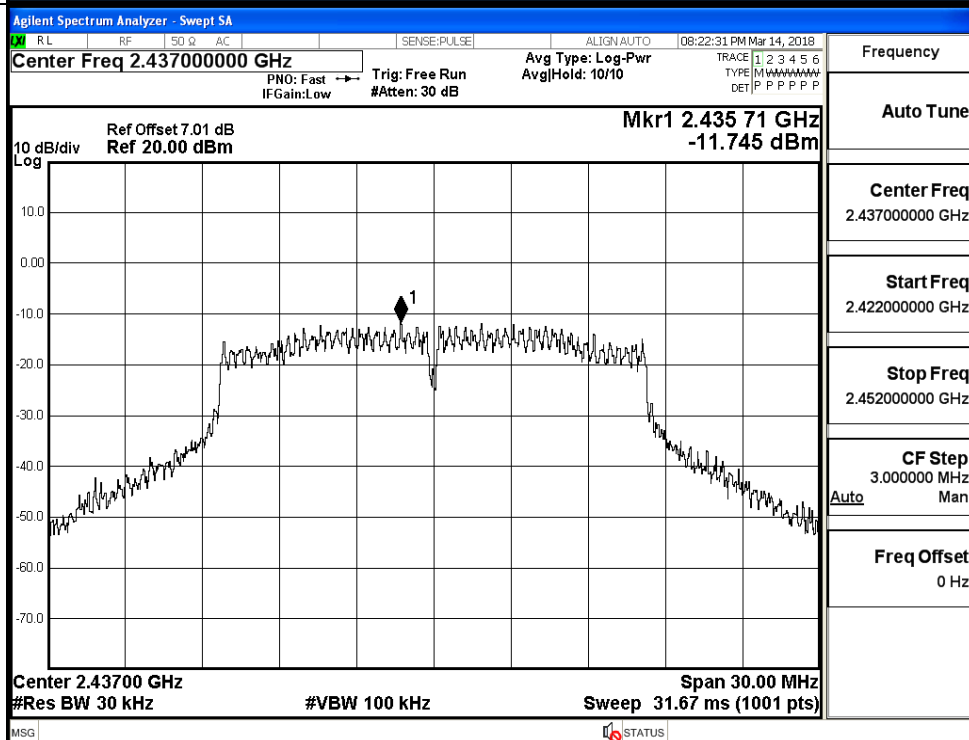
11B/HCH



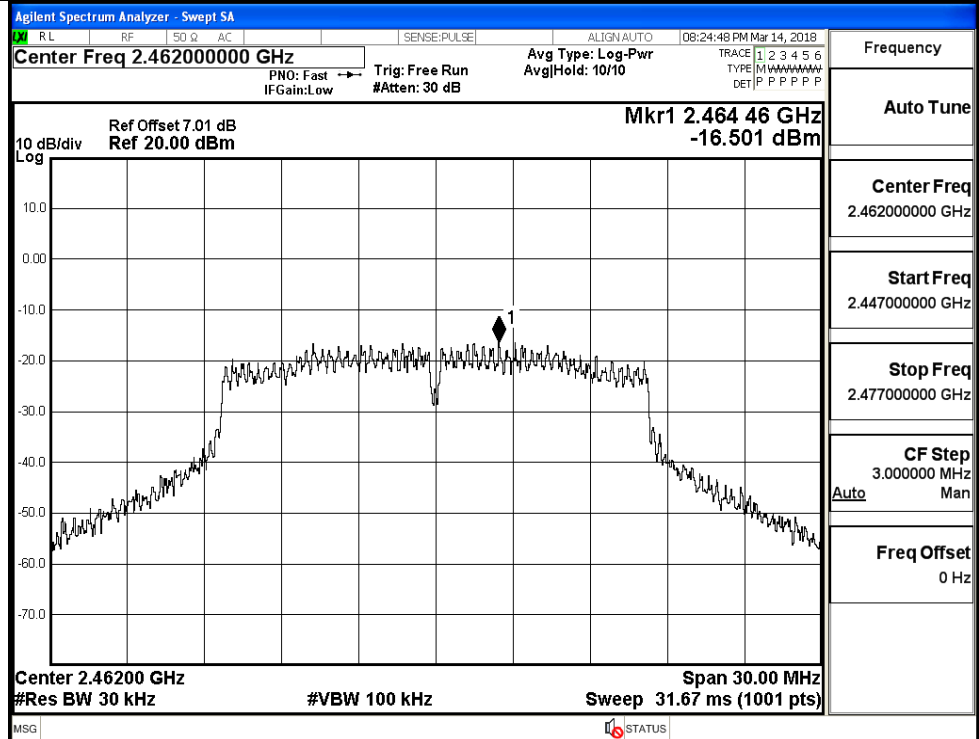
11G/LCH



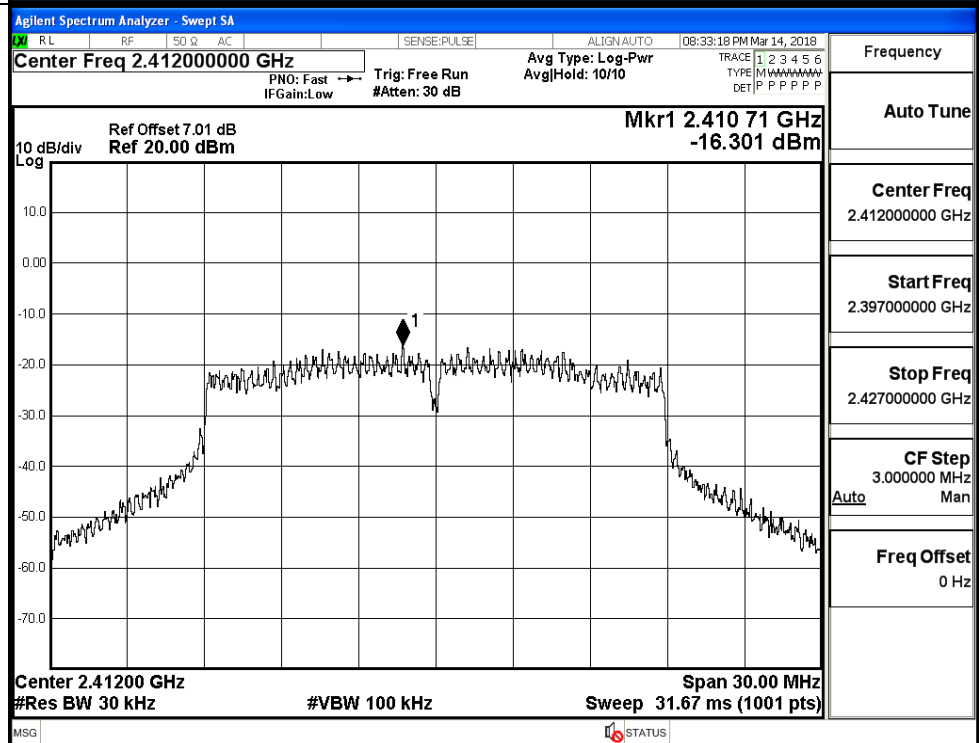
11G/MCH



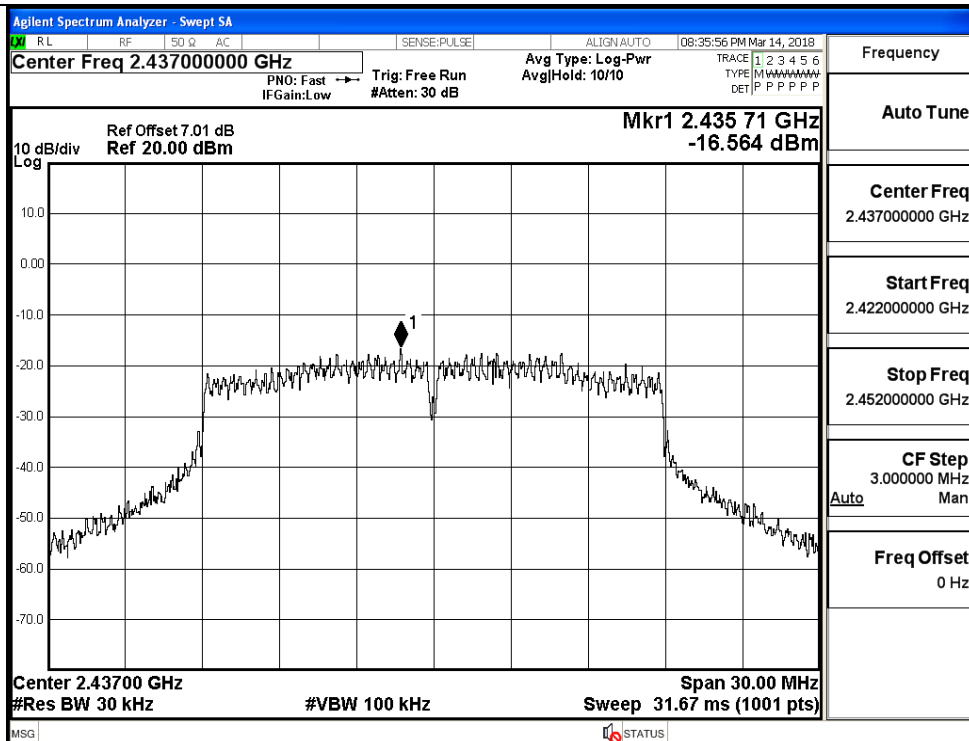
11G/HCH



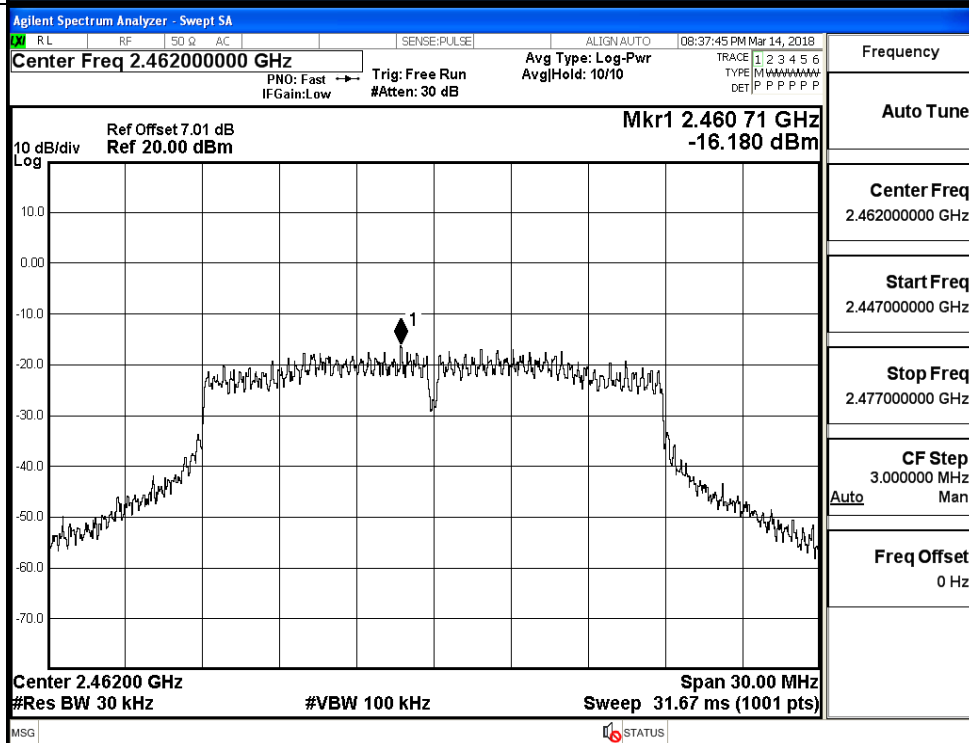
11N20SISO/LCH



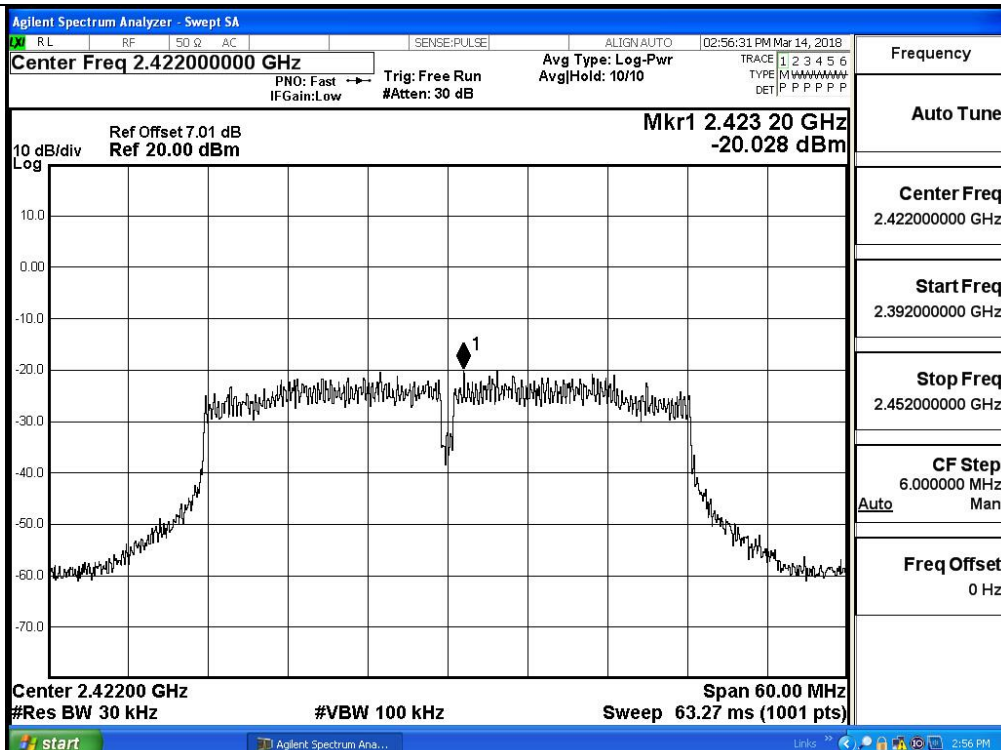
11N20SISO/MCH



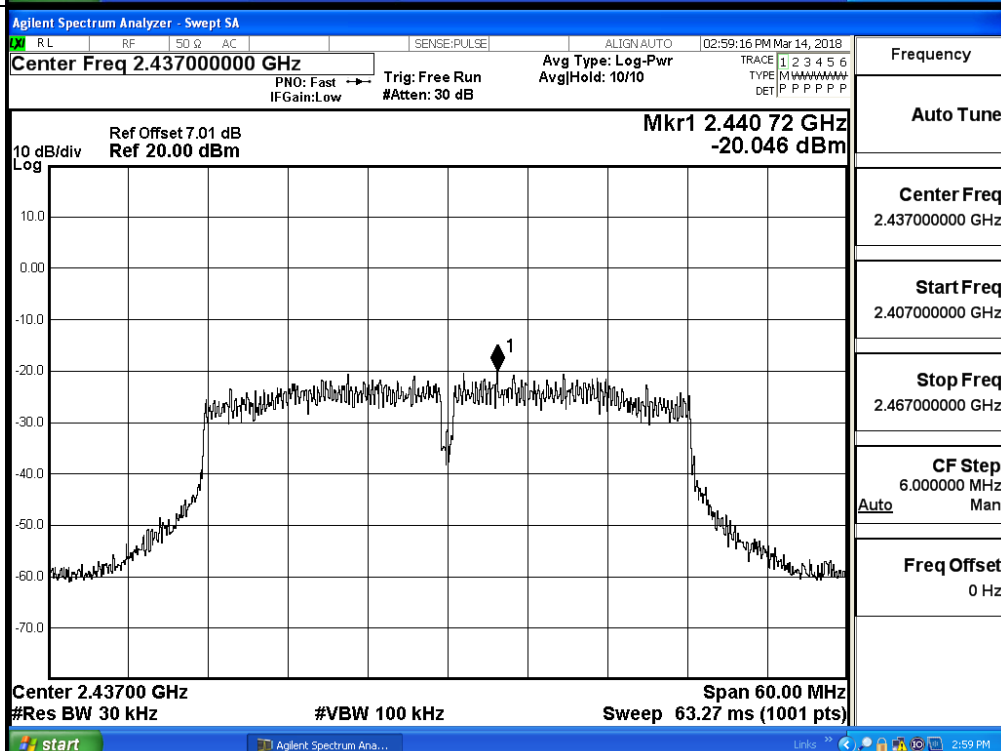
11N20SISO/HCH



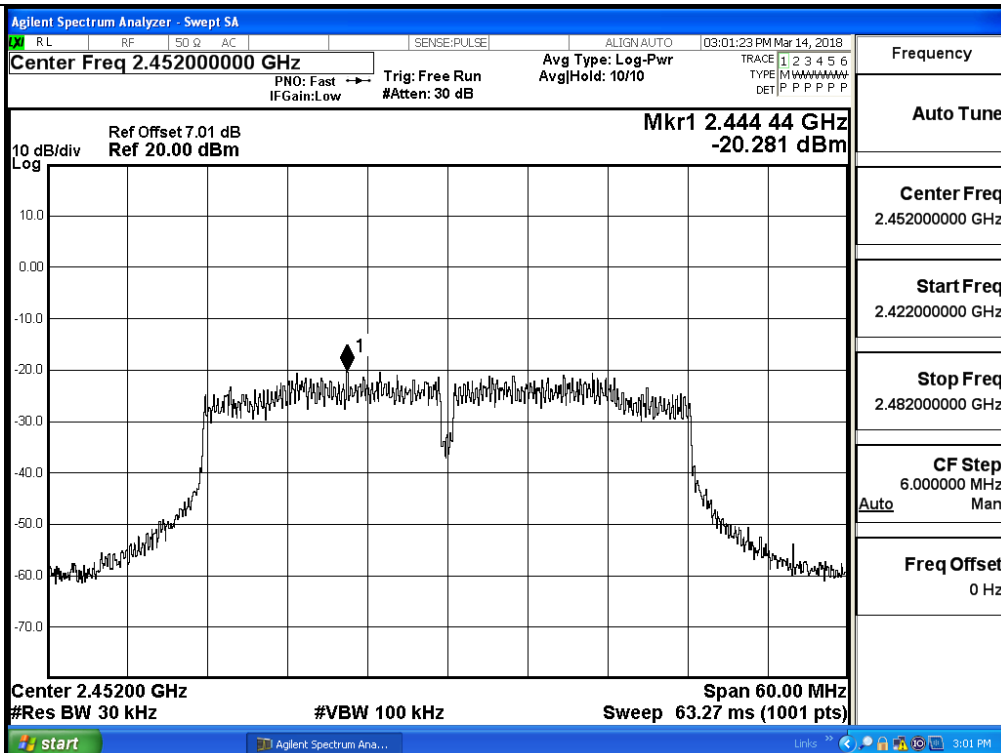
11N40SISO/LCH



11N40SISO/MCH



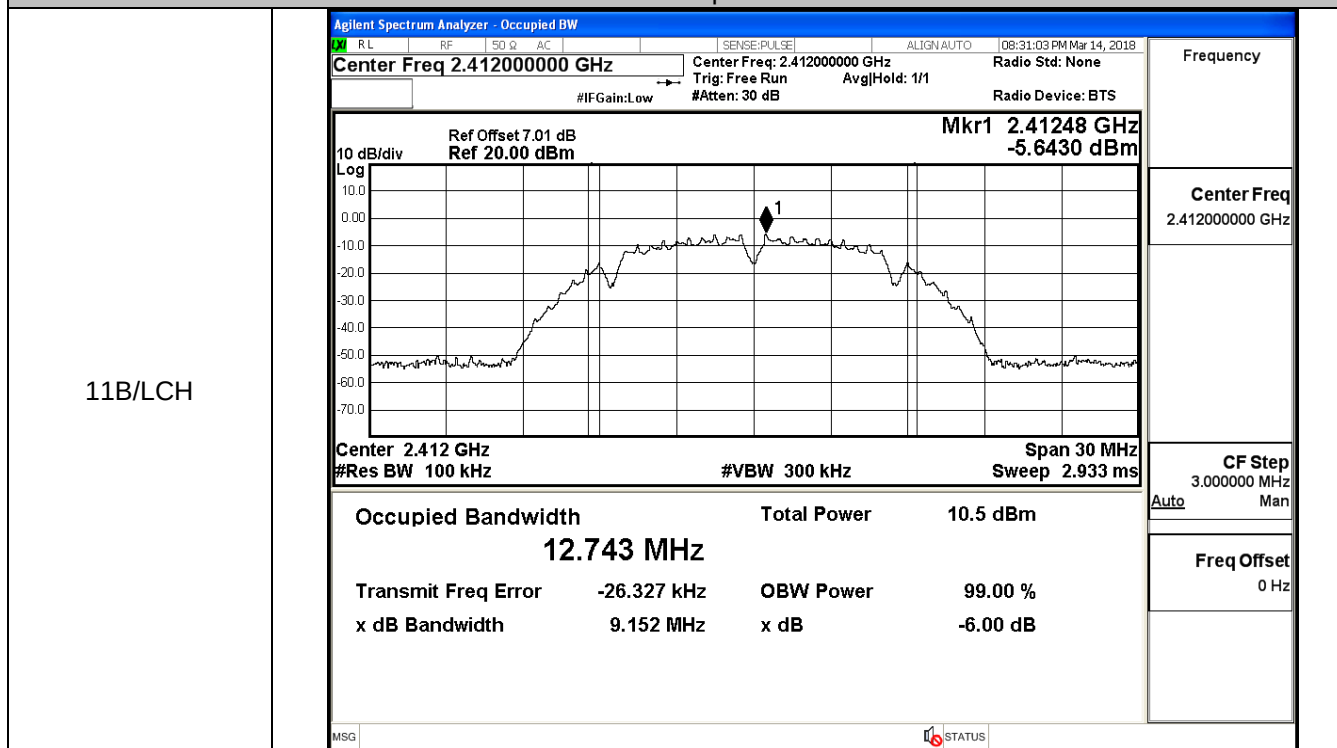
11N40SISO/HCH



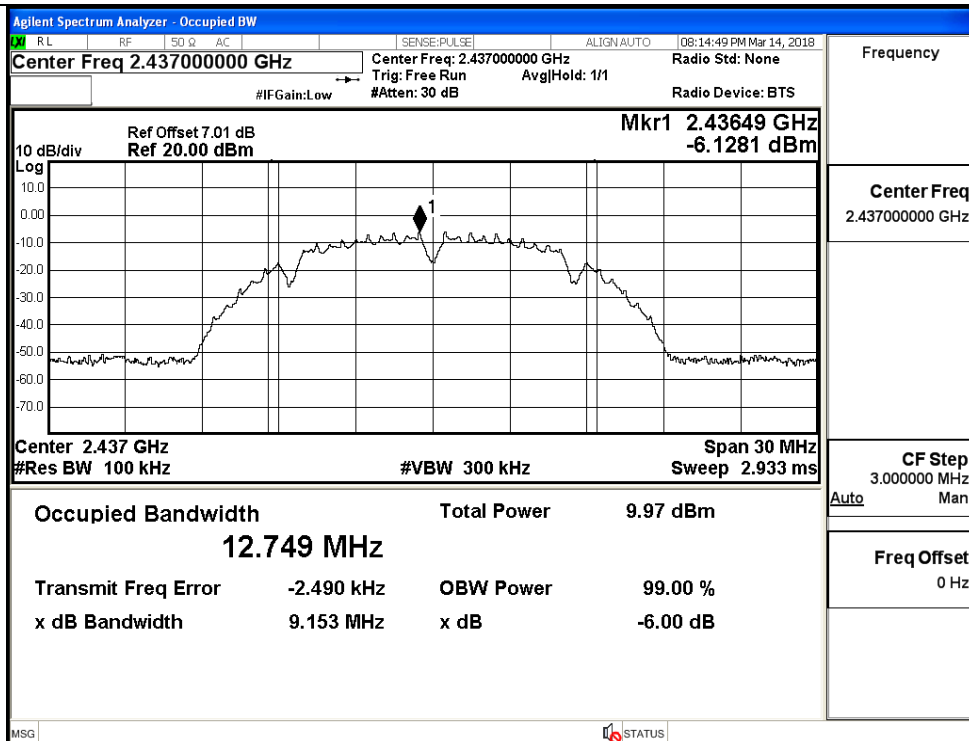
C.3 6dB Bandwidth

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
11B	LCH	9.152	≥ 0.5	PASS
	MCH	9.153	≥ 0.5	PASS
	HCH	9.144	≥ 0.5	PASS
11G	LCH	15.06	≥ 0.5	PASS
	MCH	15.14	≥ 0.5	PASS
	HCH	15.45	≥ 0.5	PASS
11N20SISO	LCH	15.10	≥ 0.5	PASS
	MCH	15.14	≥ 0.5	PASS
	HCH	15.11	≥ 0.5	PASS
11N40SISO	LCH	35.17	≥ 0.5	PASS
	MCH	35.17	≥ 0.5	PASS
	HCH	35.16	≥ 0.5	PASS

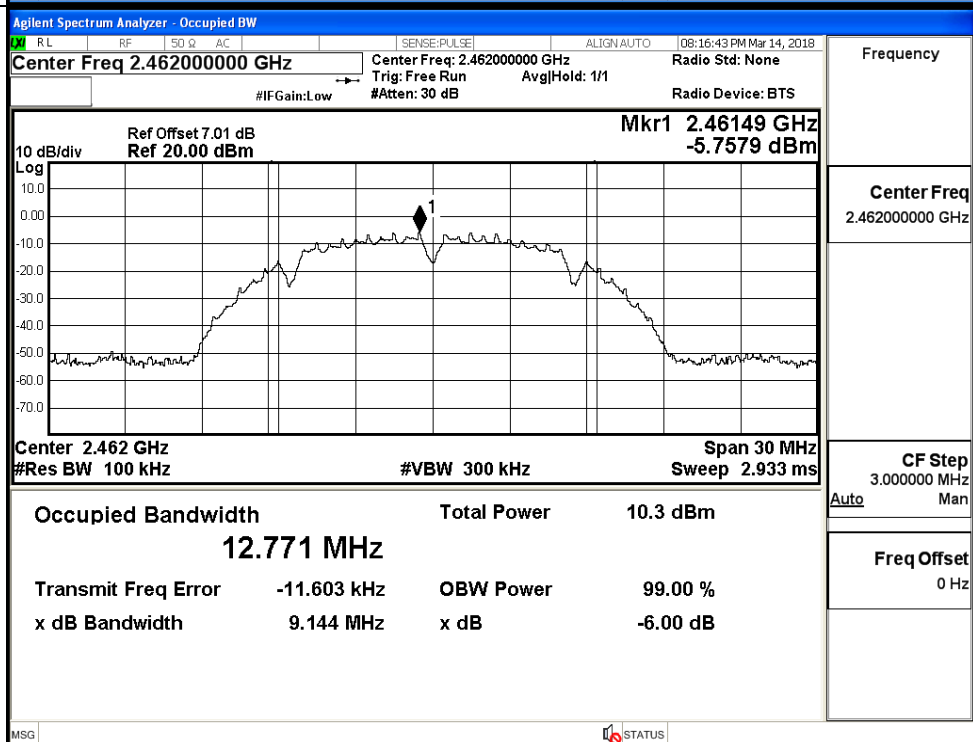
Test Graphs



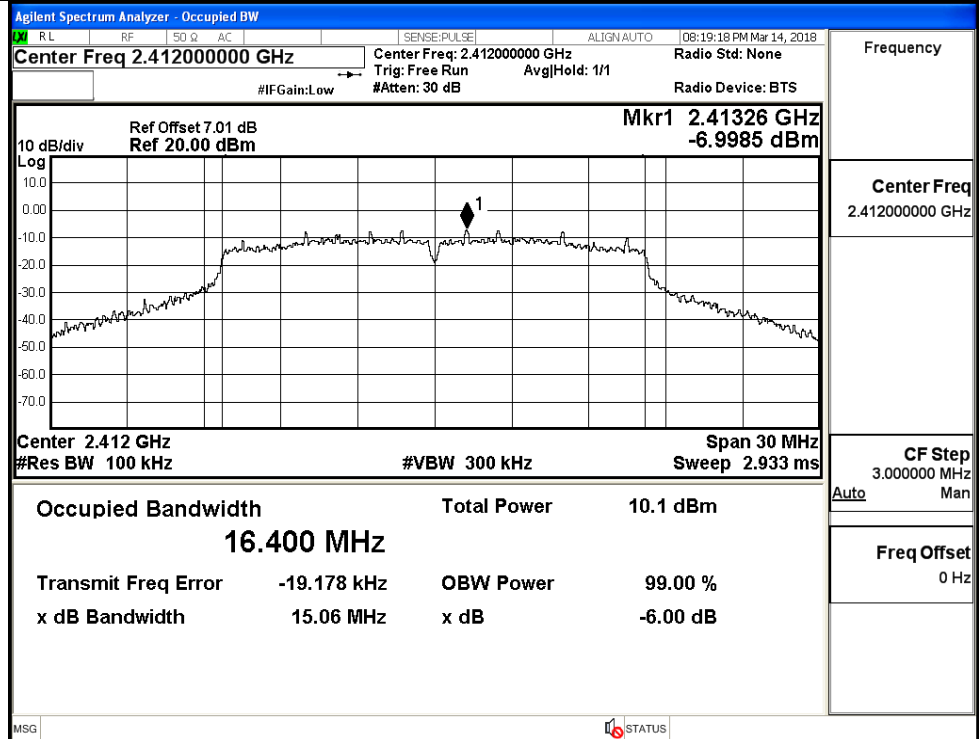
11B/MCH



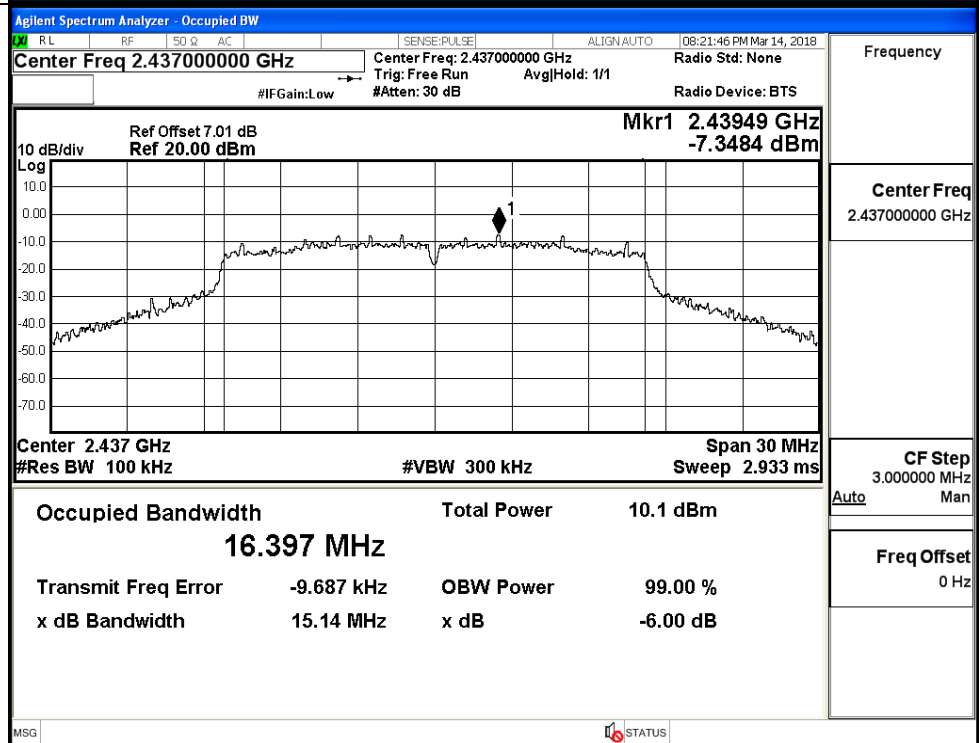
11B/HCH



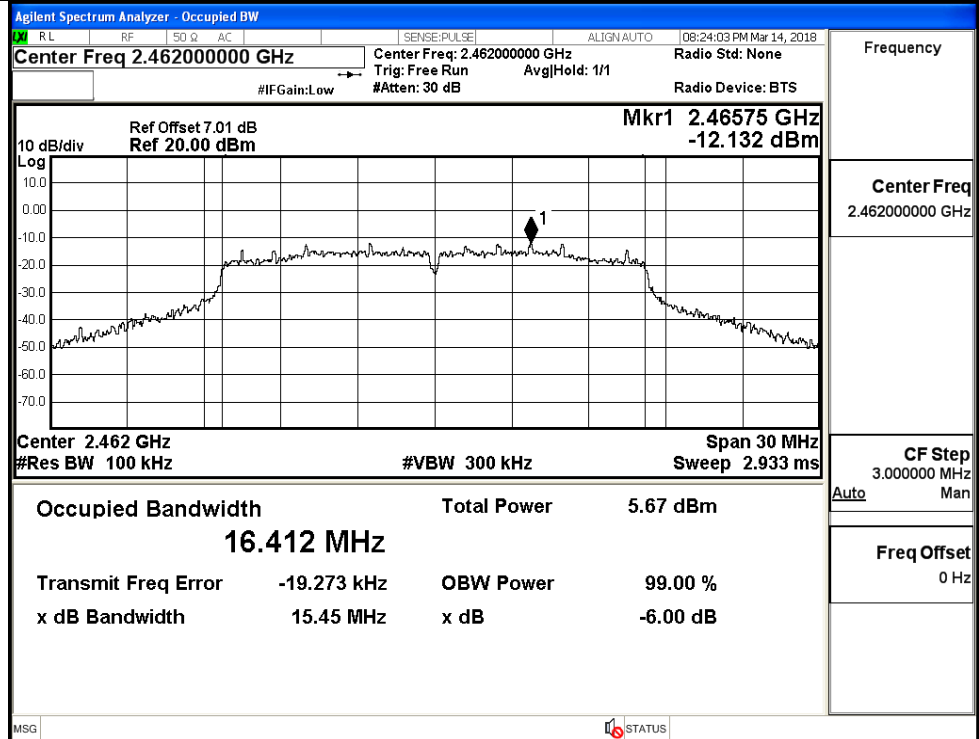
11G/LCH



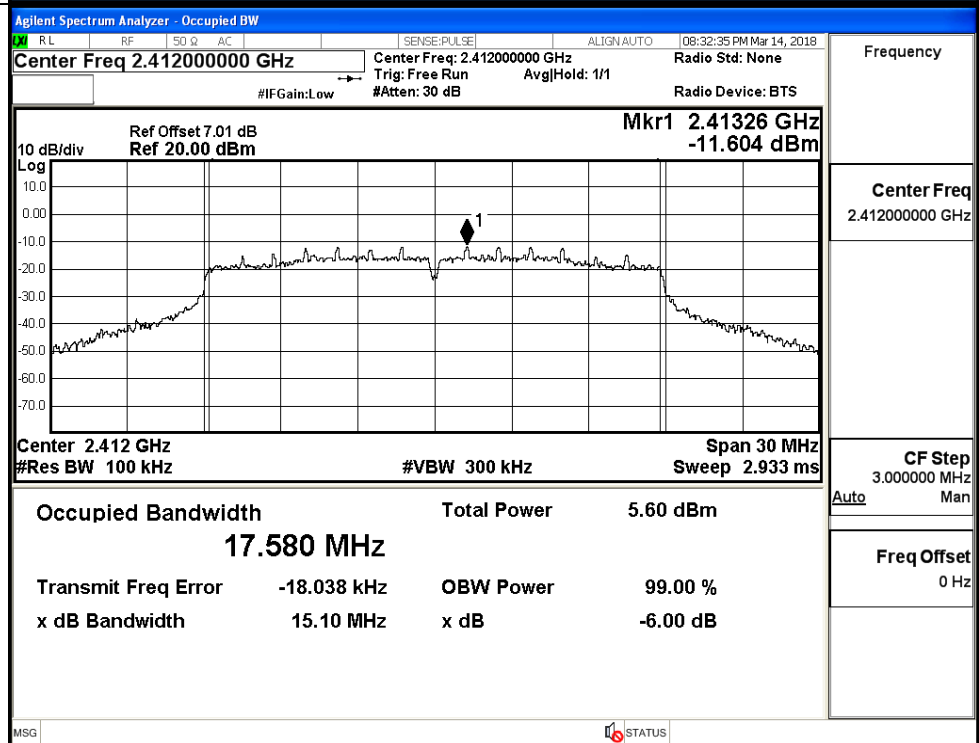
11G/MCH



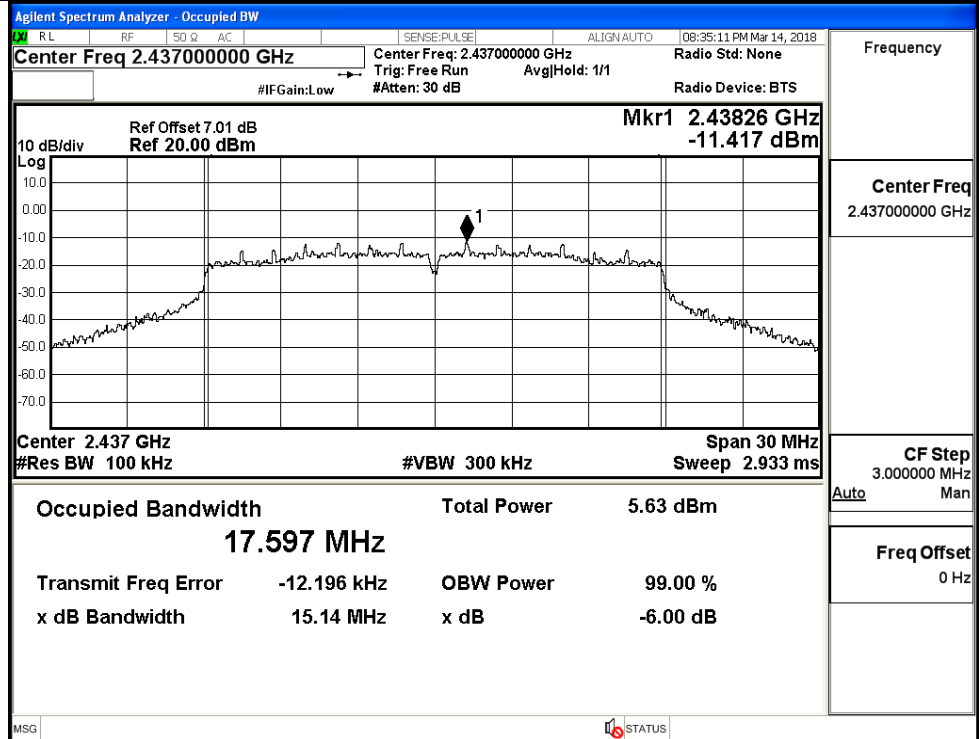
11G/HCH



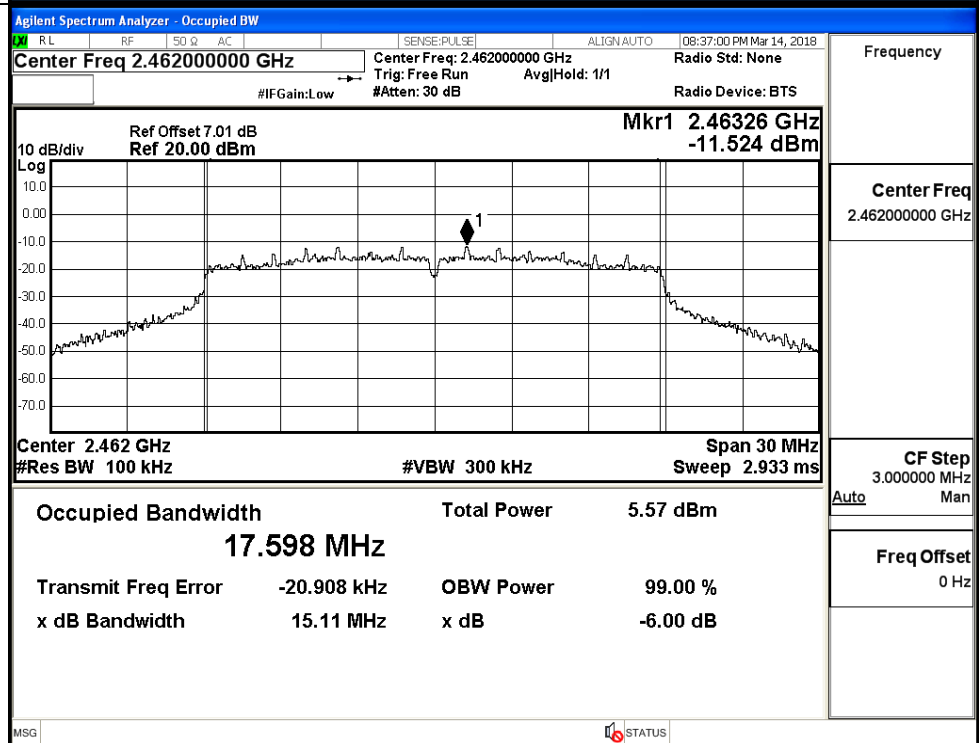
11N20SISO/LCH



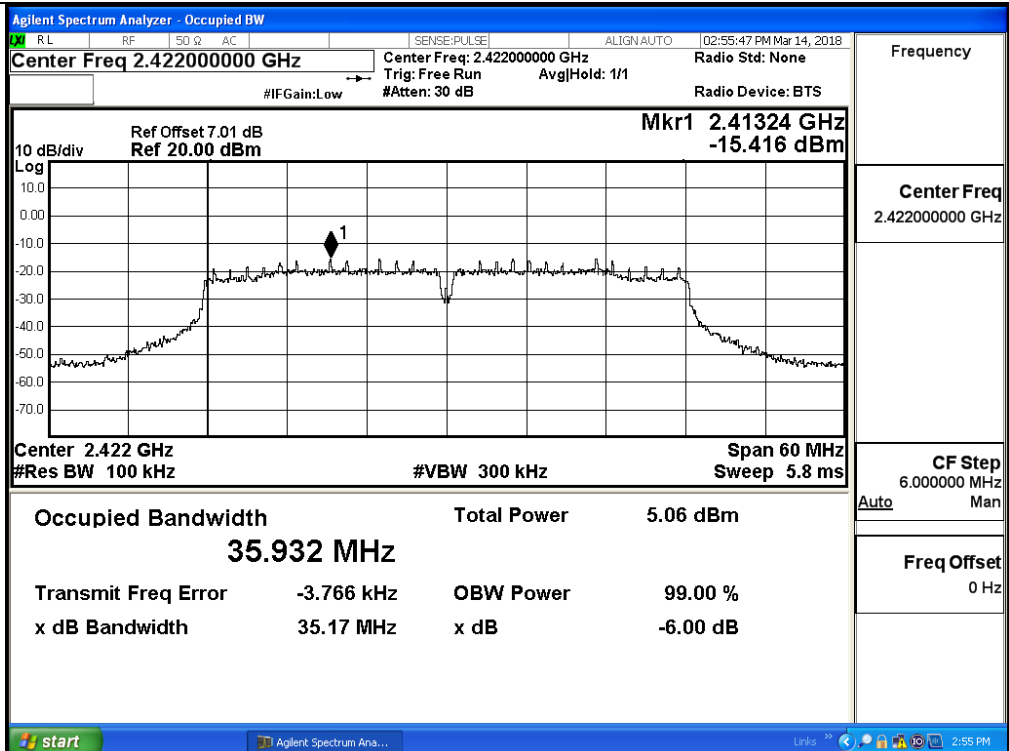
11N20SISO/MCH



11N20SISO/HCH



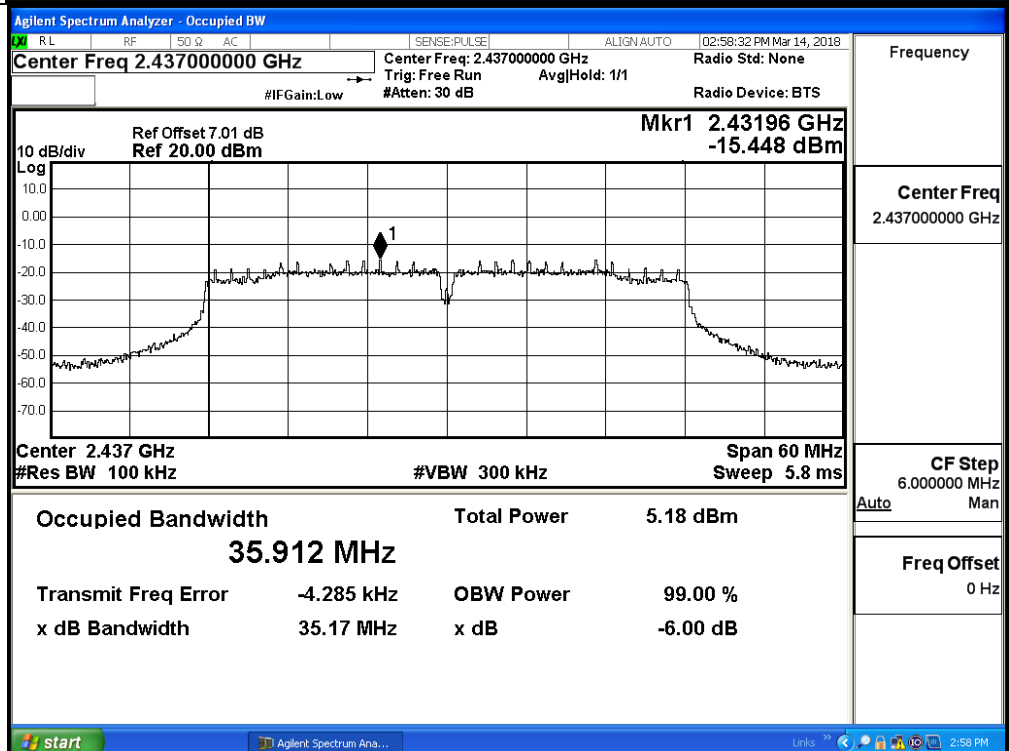
11N40SISO/LCH



Frequency

Center Freq
2.422000000 GHzCF Step
6.000000 MHz
Auto ManFreq Offset
0 Hz

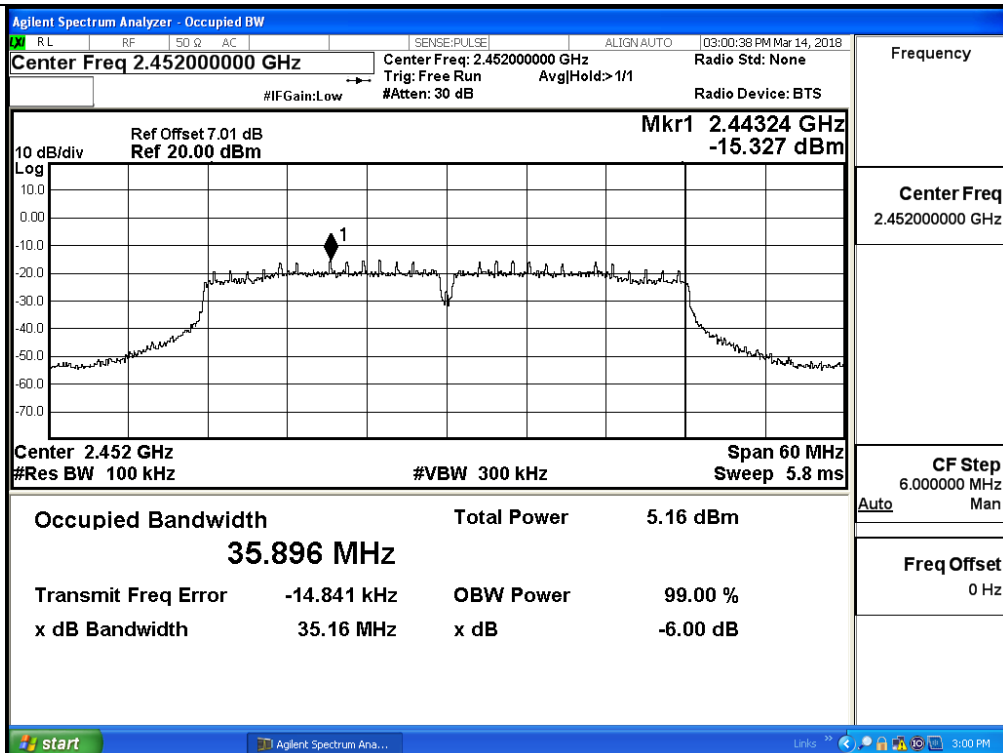
11N40SISO/MCH



Frequency

Center Freq
2.437000000 GHzCF Step
6.000000 MHz
Auto ManFreq Offset
0 Hz

11N40SISO/HCH

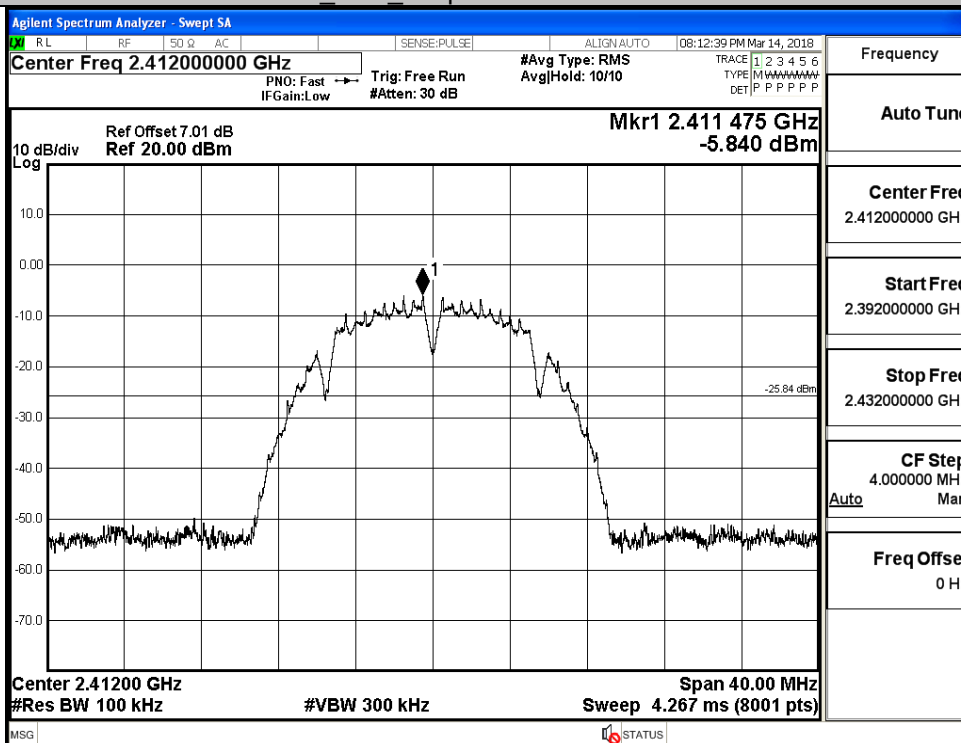


C.4 RF Conducted Spurious Emissions

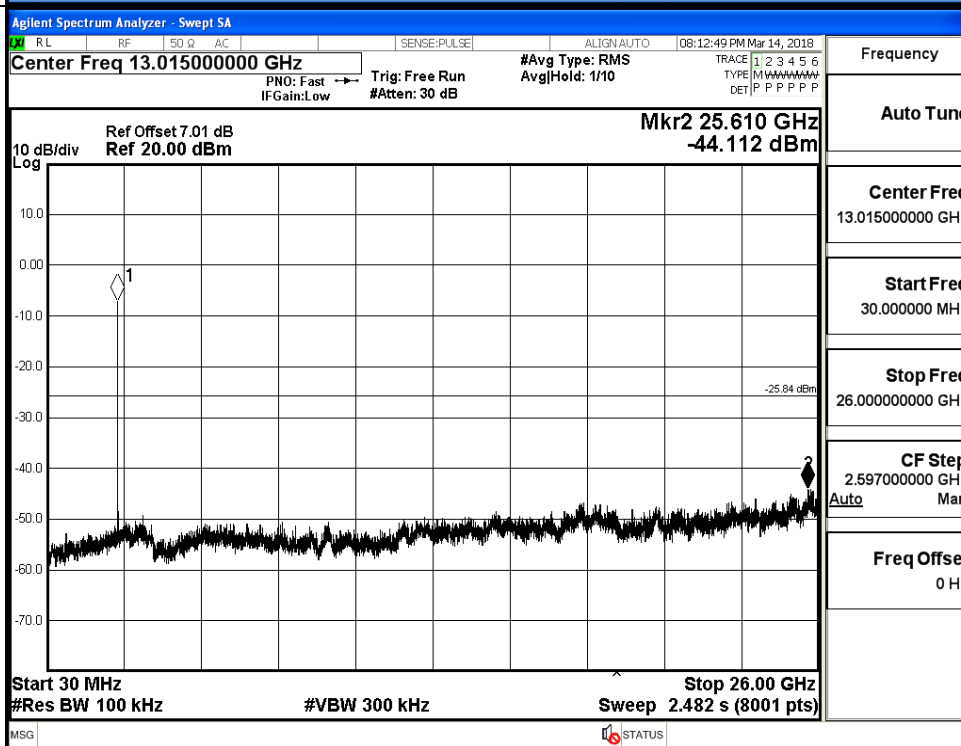
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
11B	LCH	-5.84	-44.112	-25.840	PASS
	MCH	-5.92	-44.844	-25.920	PASS
	HCH	-5.975	-43.927	-25.975	PASS
11G	LCH	-6.713	-44.956	-26.713	PASS
	MCH	-6.302	-44.932	-26.302	PASS
	HCH	-11.823	-44.711	-31.823	PASS
11N20 SISO	LCH	-11.13	-44.403	-31.130	PASS
	MCH	-11.795	-44.151	-31.795	PASS
	HCH	-11.416	-44.290	-31.416	PASS
11N40 SISO	LCH	-14.952	-44.768	-34.952	PASS
	MCH	-14.999	-44.724	-34.999	PASS
	HCH	-15.203	-44.538	-35.203	PASS

11B LCH Graphs

Pref/11B/LCH

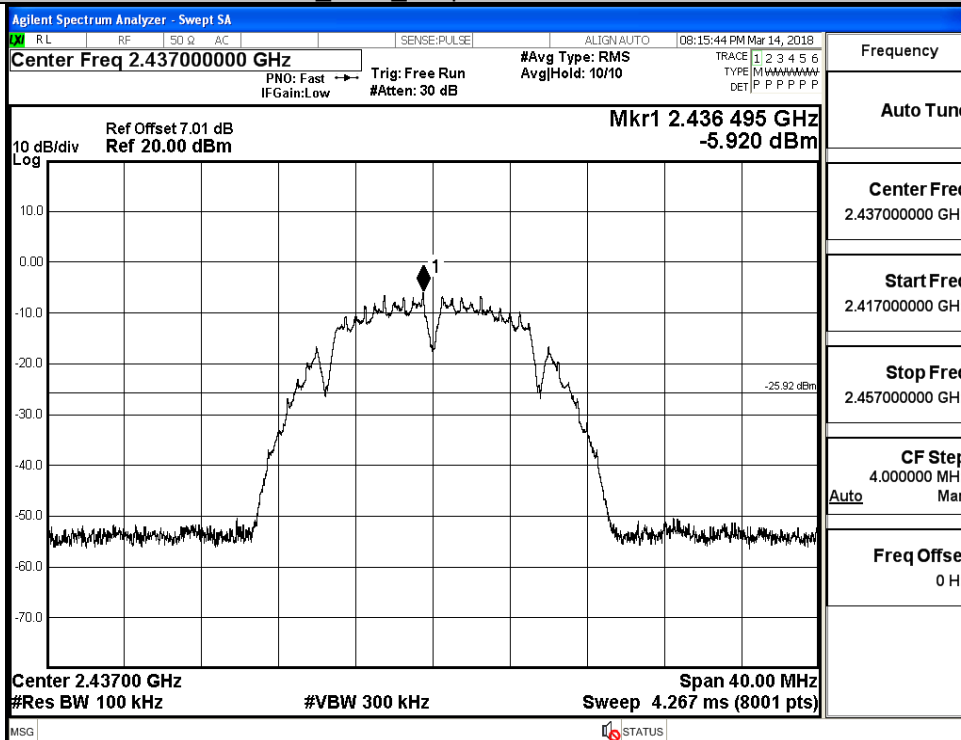


Puw/11B/LCH

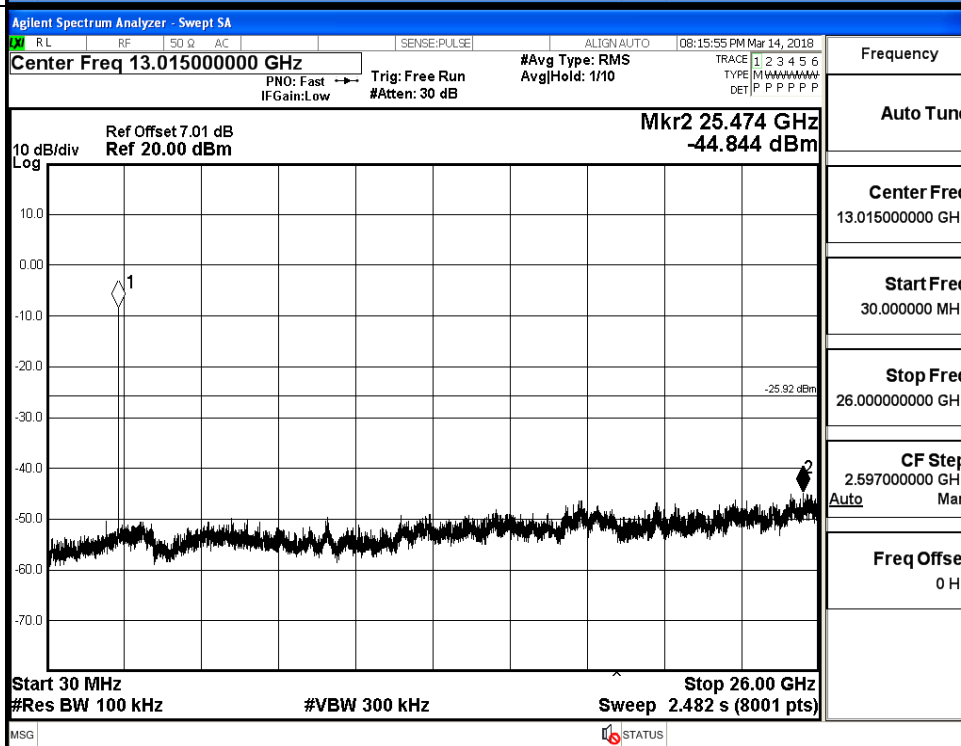


11B MCH Graphs

Pref/11B/MCH

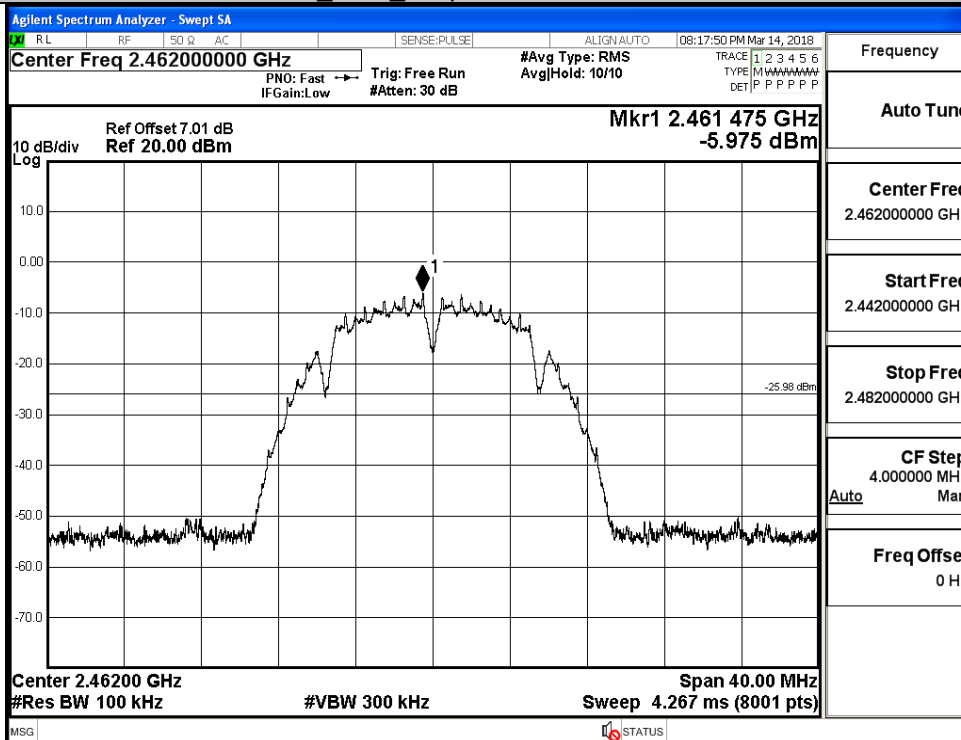


Puw/11B/MCH

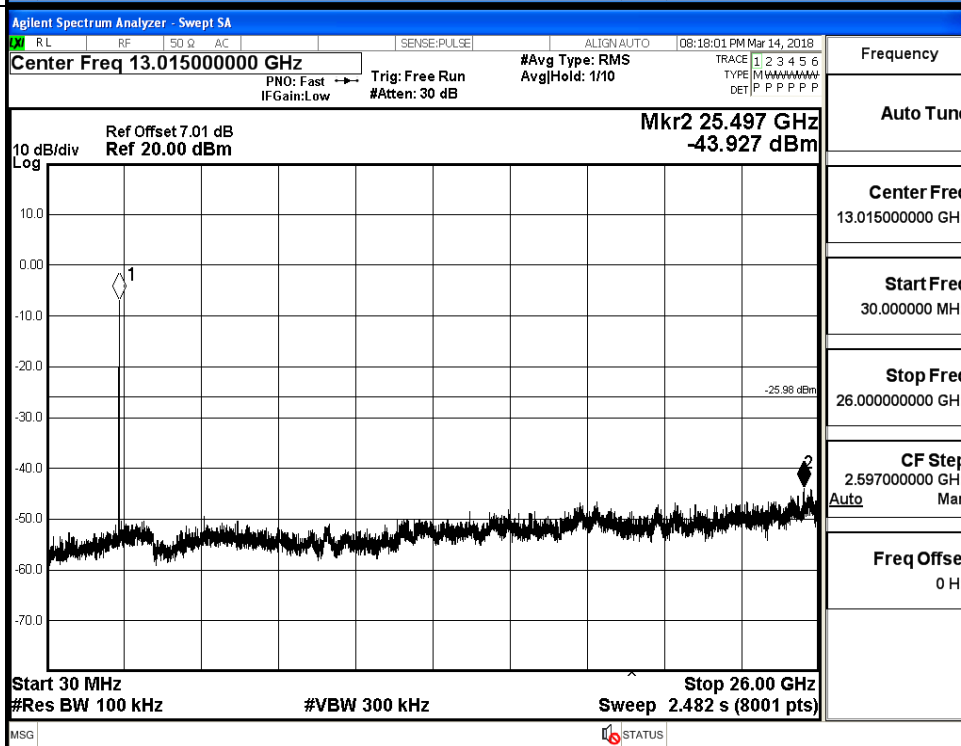


11B HCH Graphs

Pref/11B/HCH

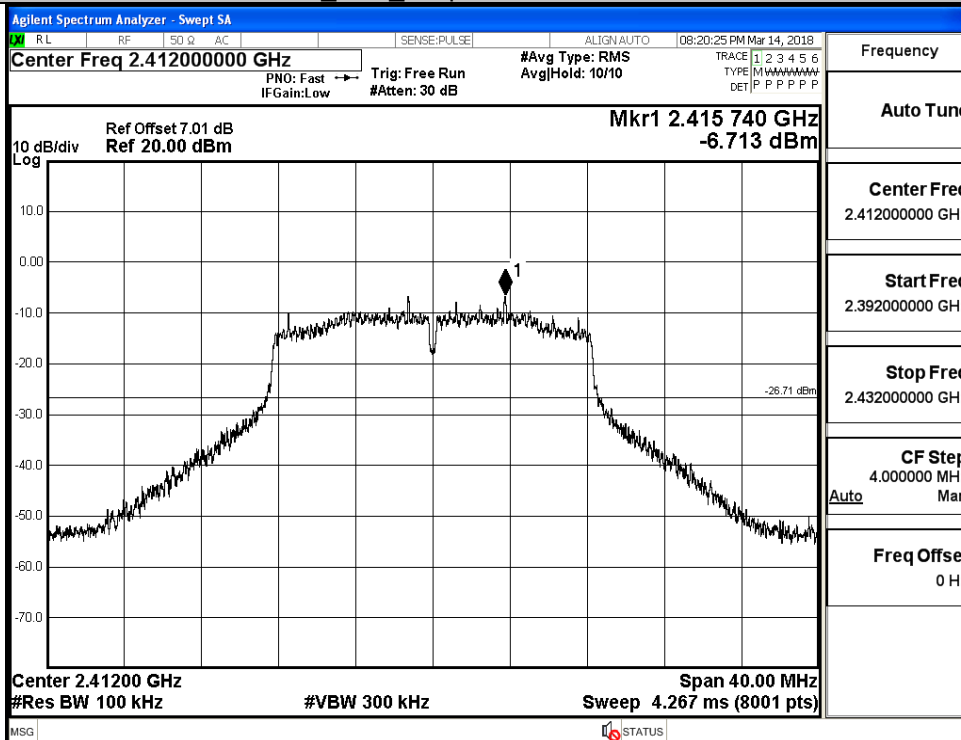


Puw/11B/HCH

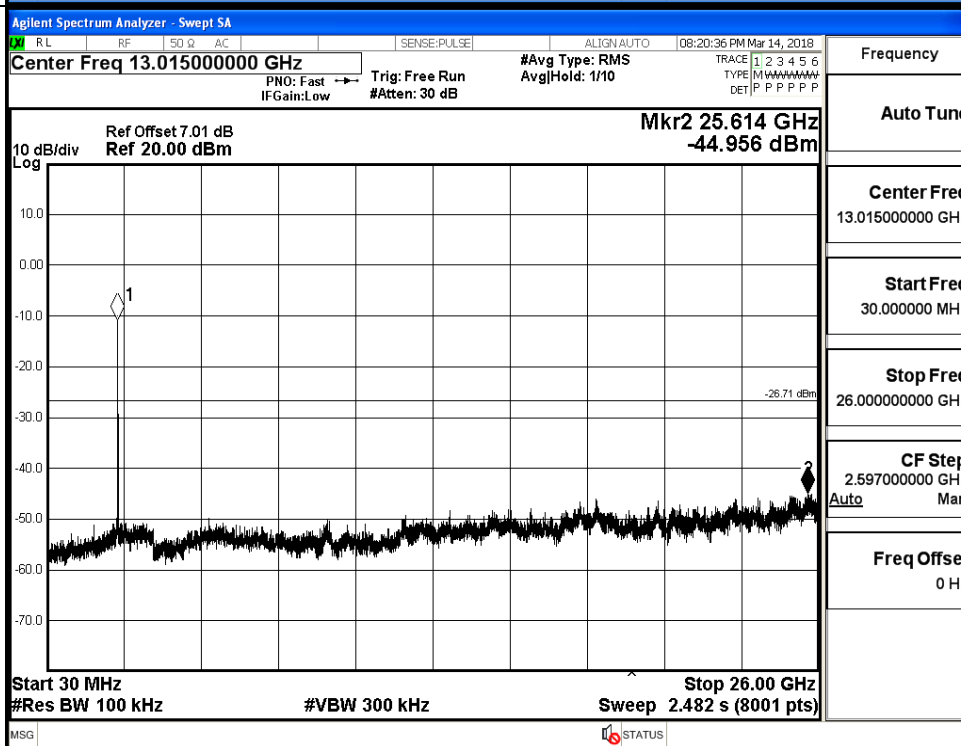


11G LCH Graphs

Pref/11G/LCH

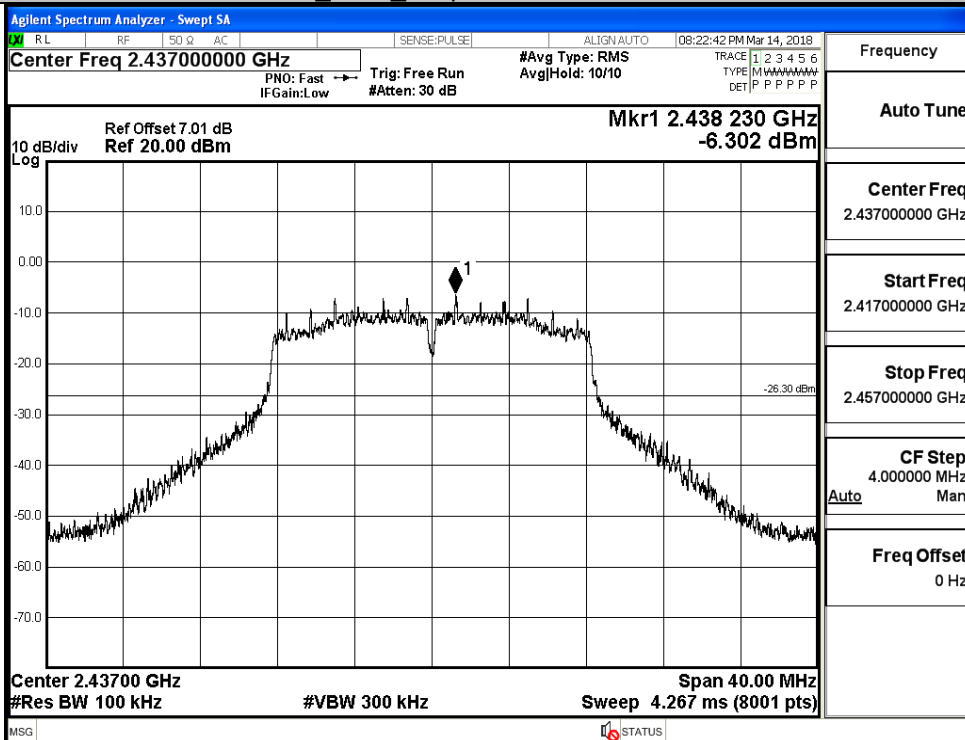


Puw/11G/LCH

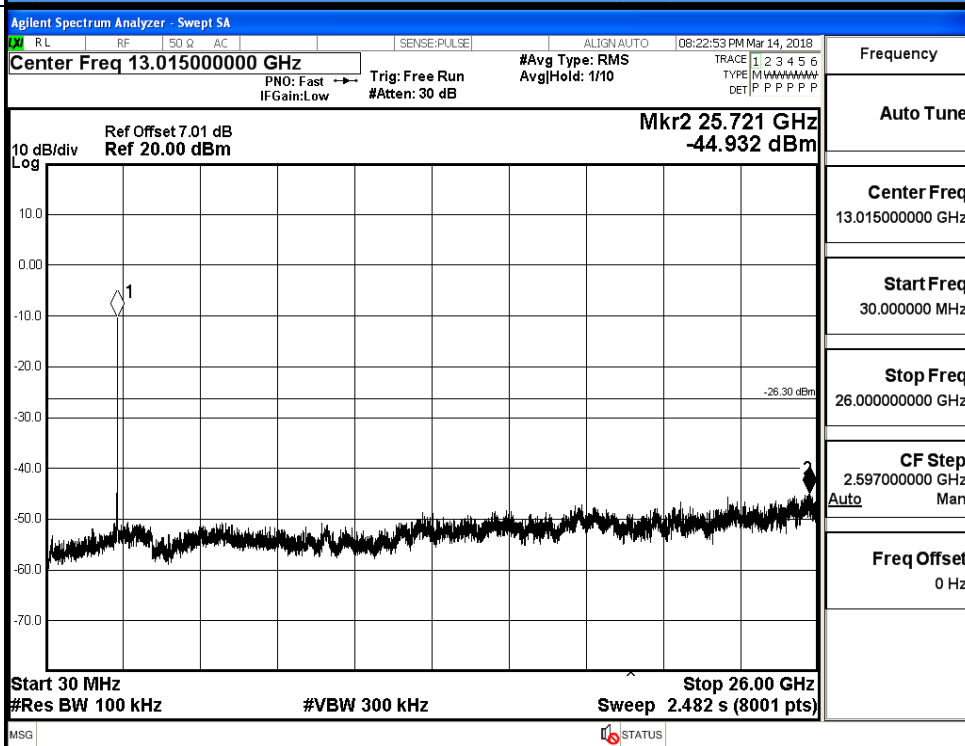


11G MCH Graphs

Pref/11G/MCH

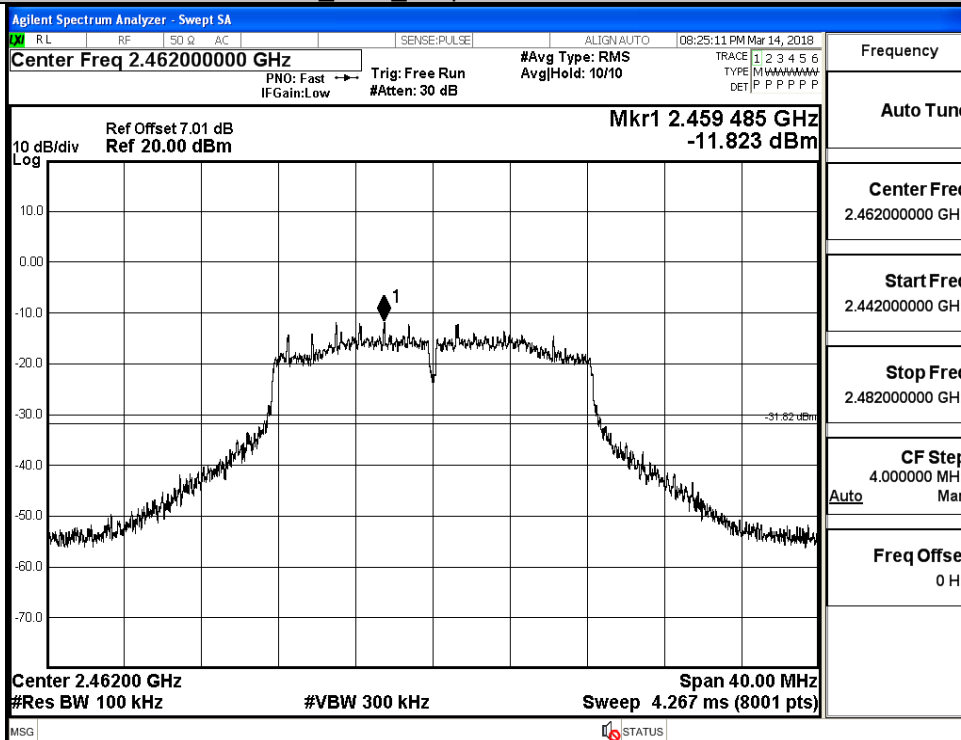


Puw/11G/MCH

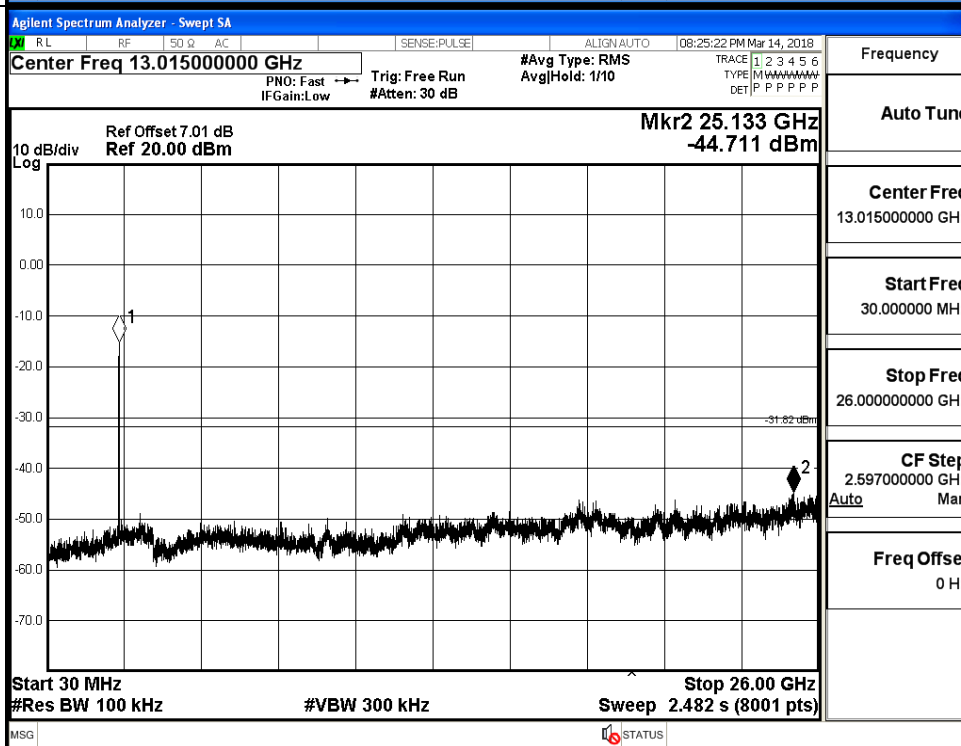


11G HCH Graphs

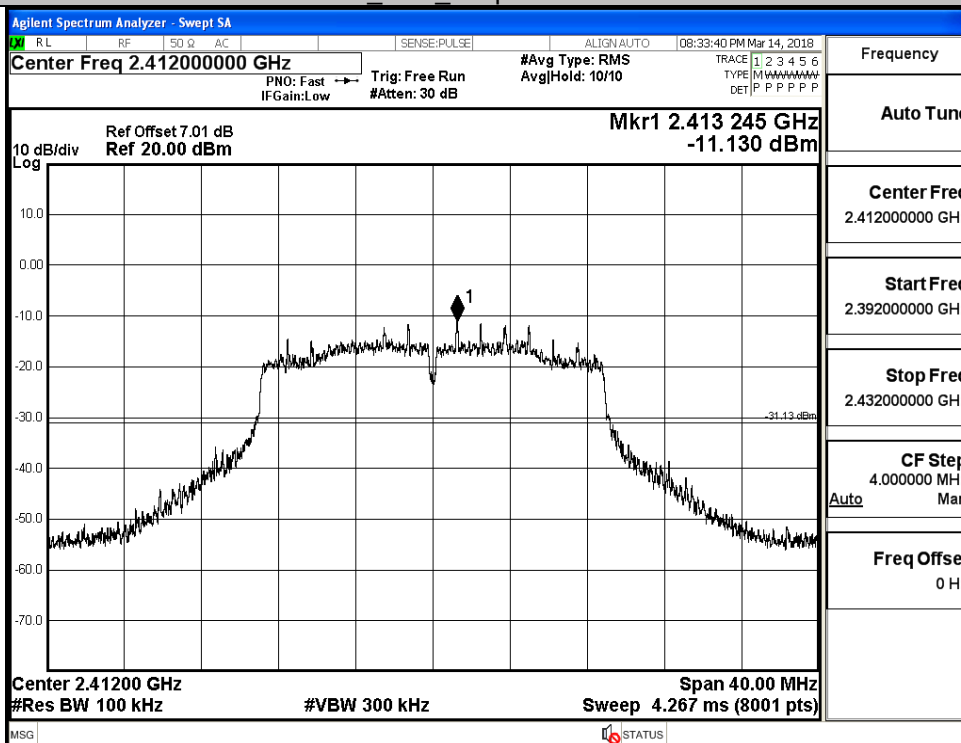
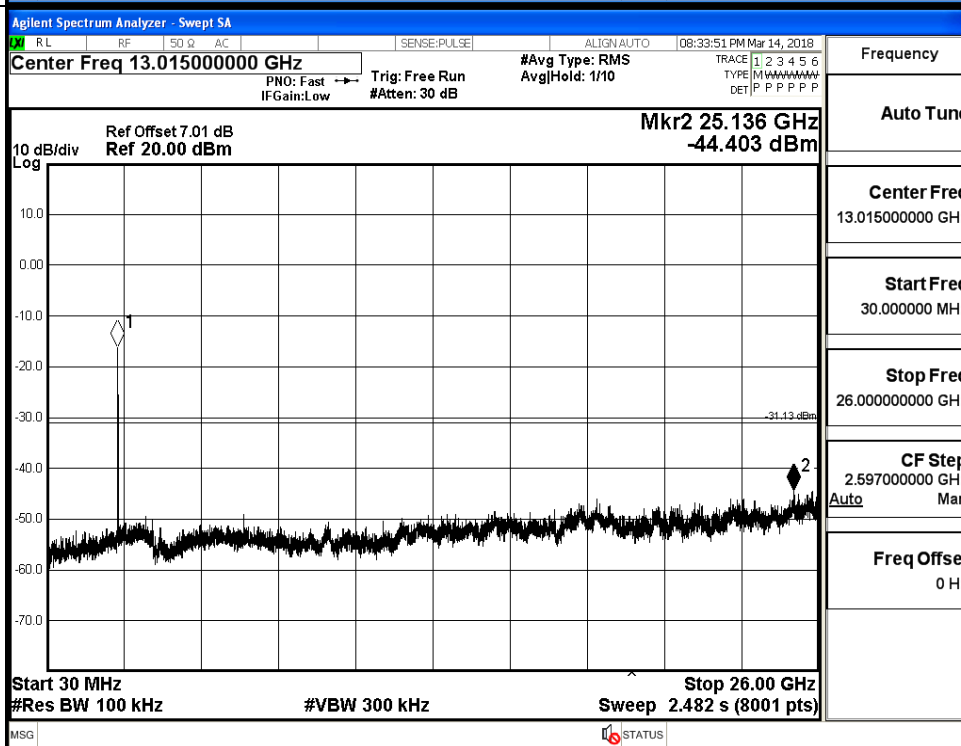
Pref/11G/HCH



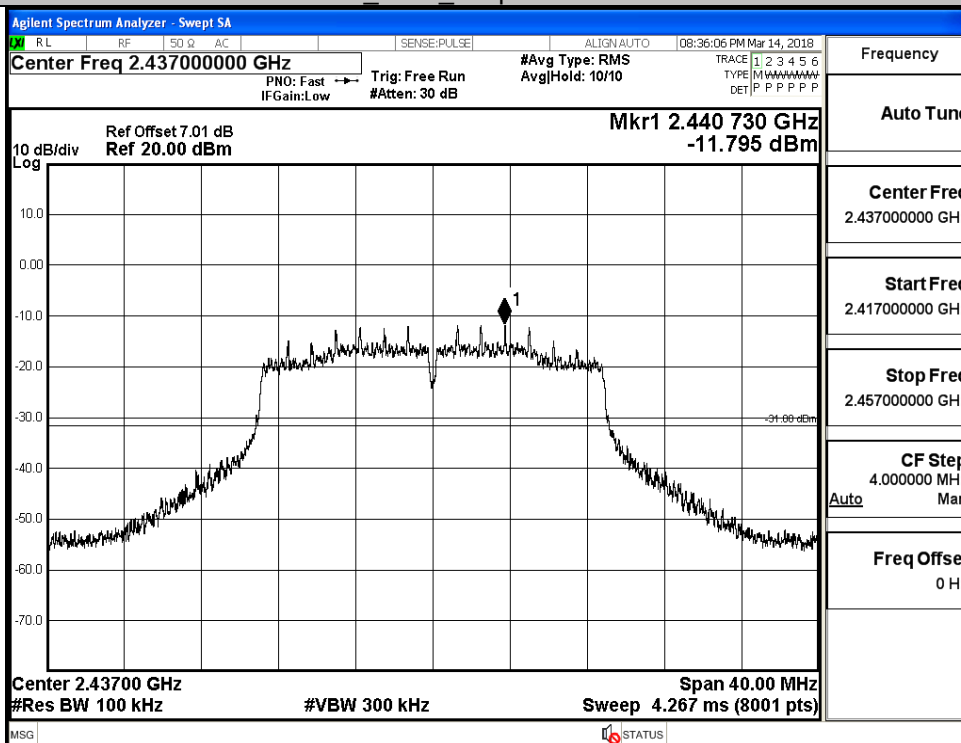
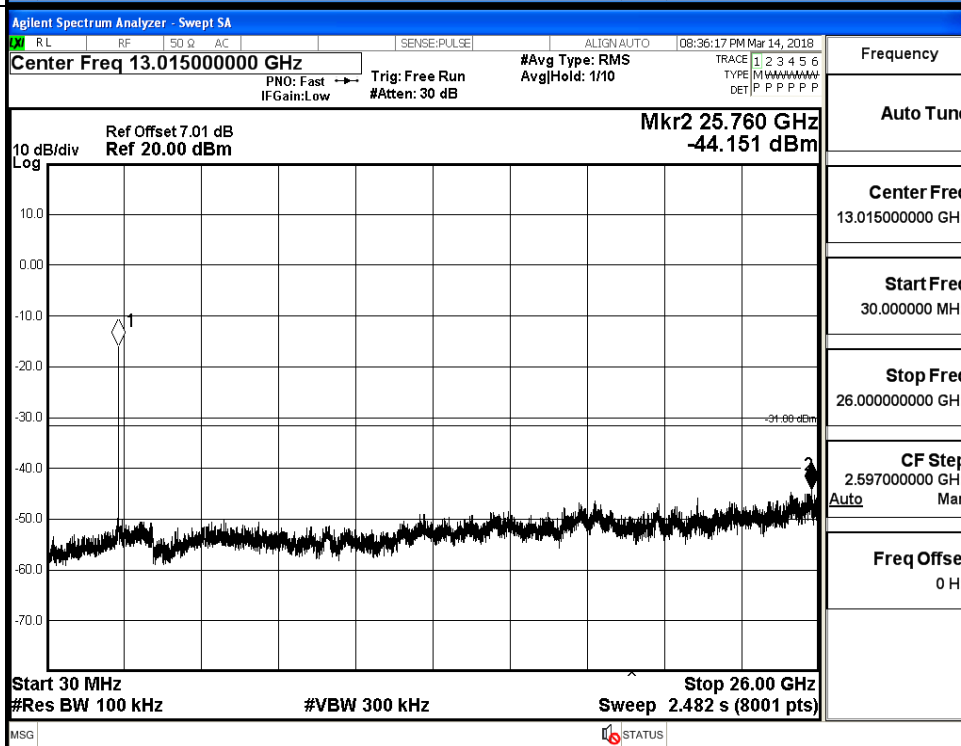
Puw/11G/HCH



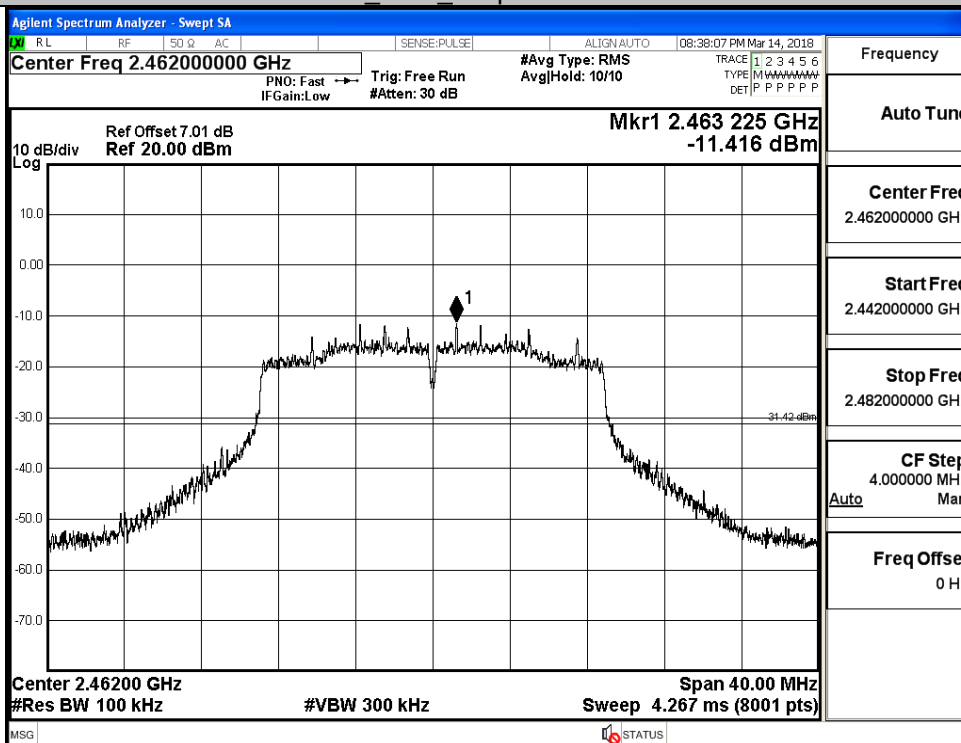
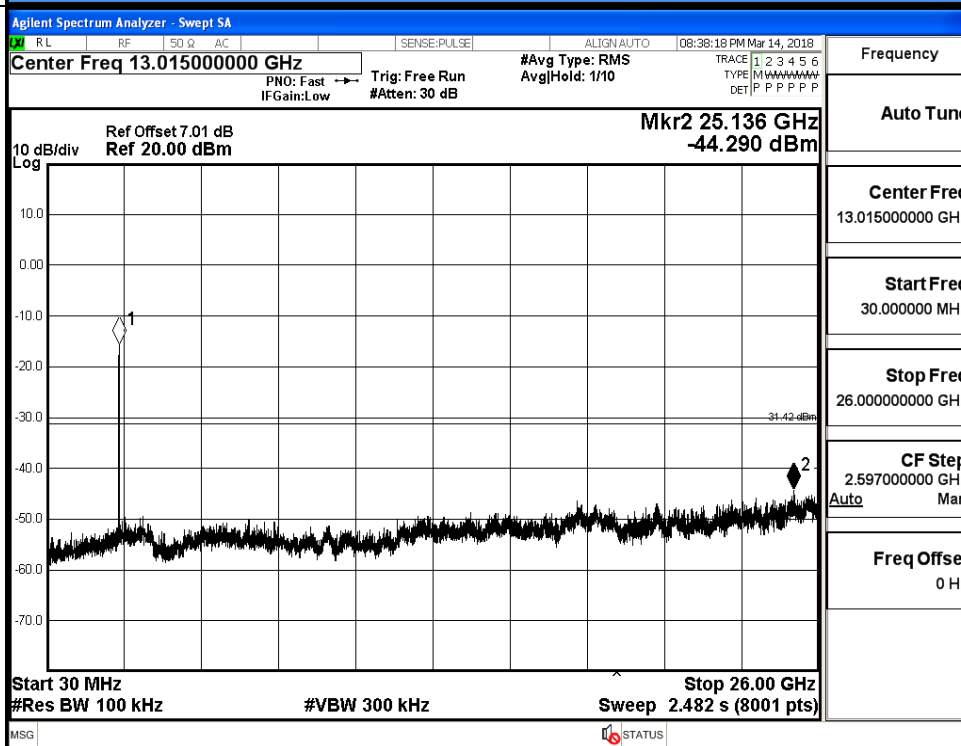
11N20SISO LCH Graphs

Pref/11N20SIS
O/LCHPuw/11N20
SISO/LCH

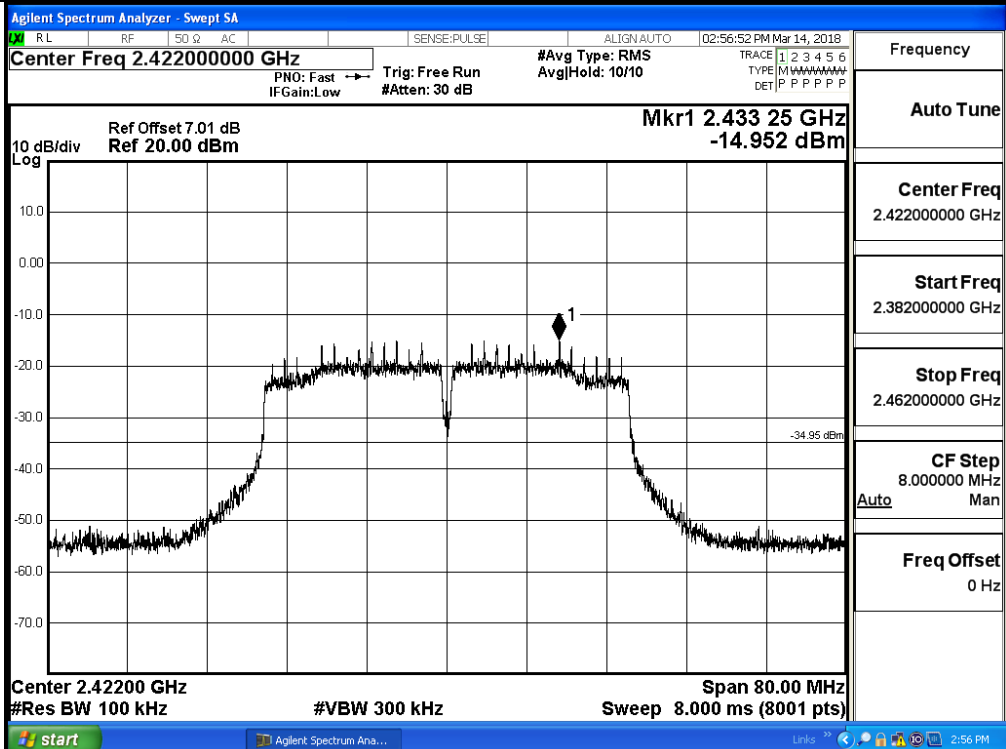
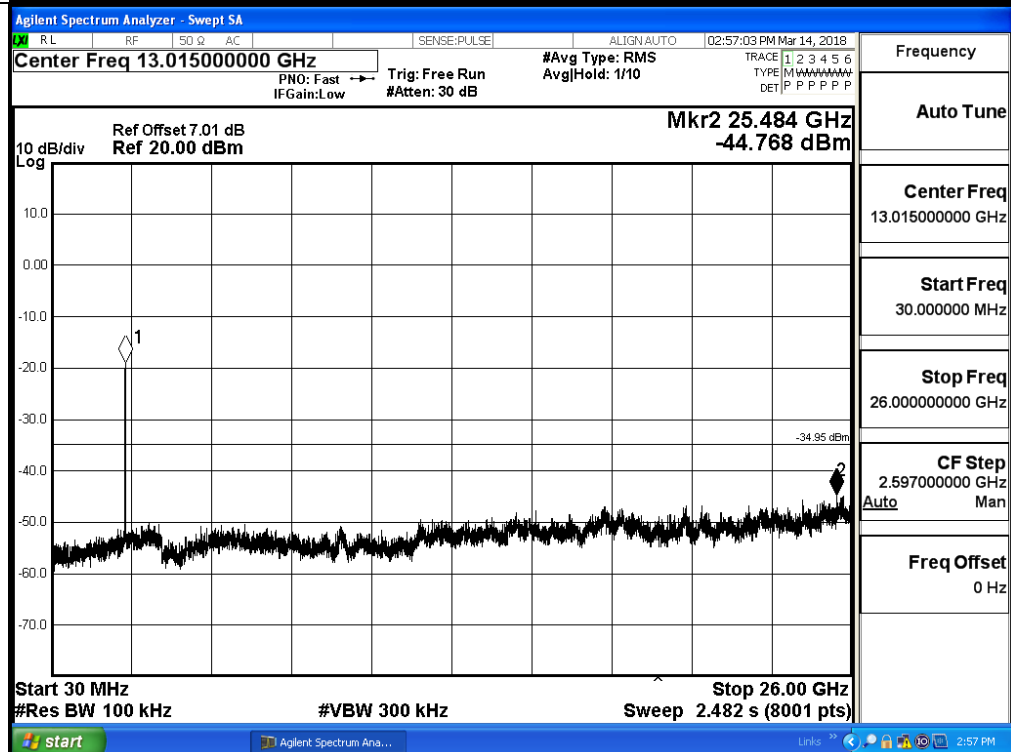
11N20SISO MCH Graphs

Pref/11N20
SISO/MCHPuw/11N20
SISO/MCH

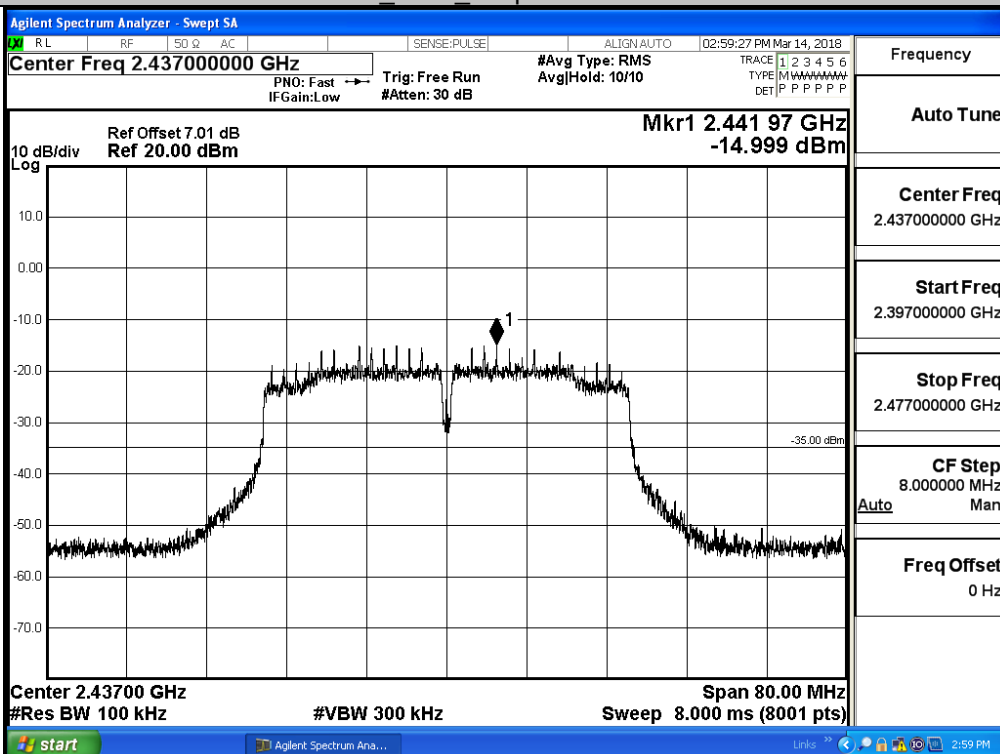
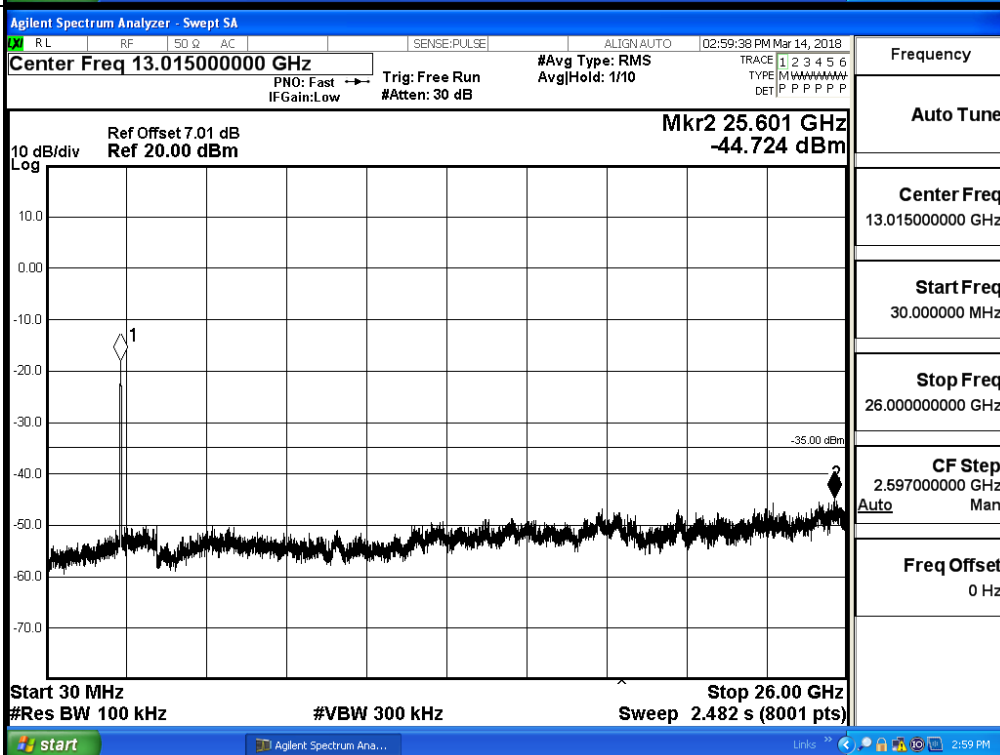
11N20SISO HCH Graphs

Pref/11N20
SISO/HCHPuw/11N20
SISO/HCH

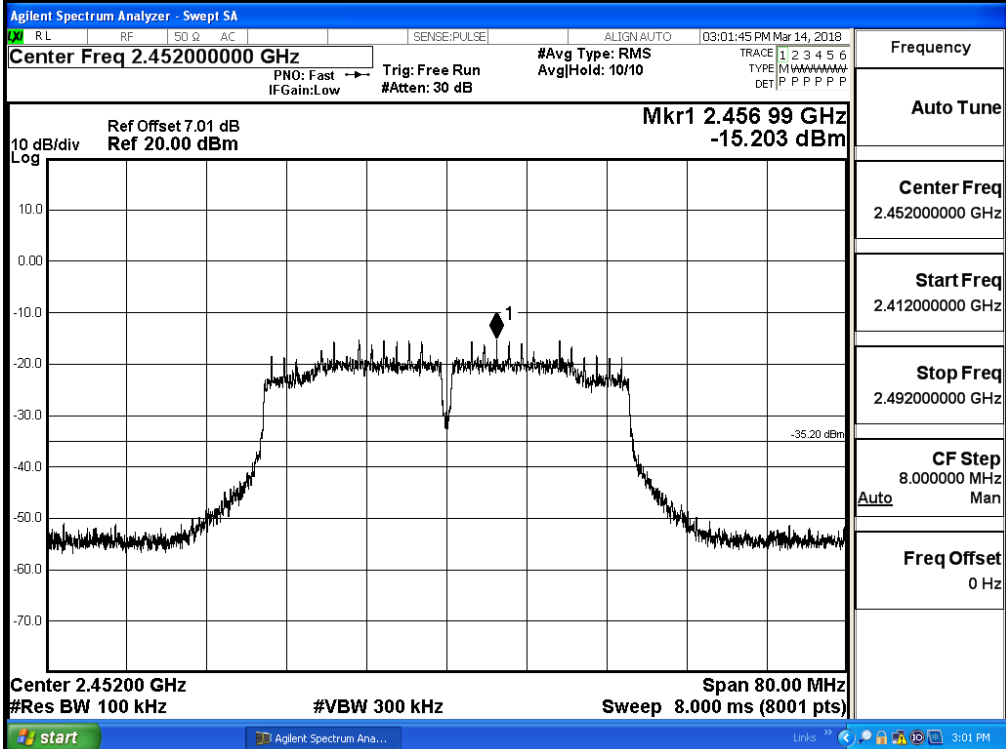
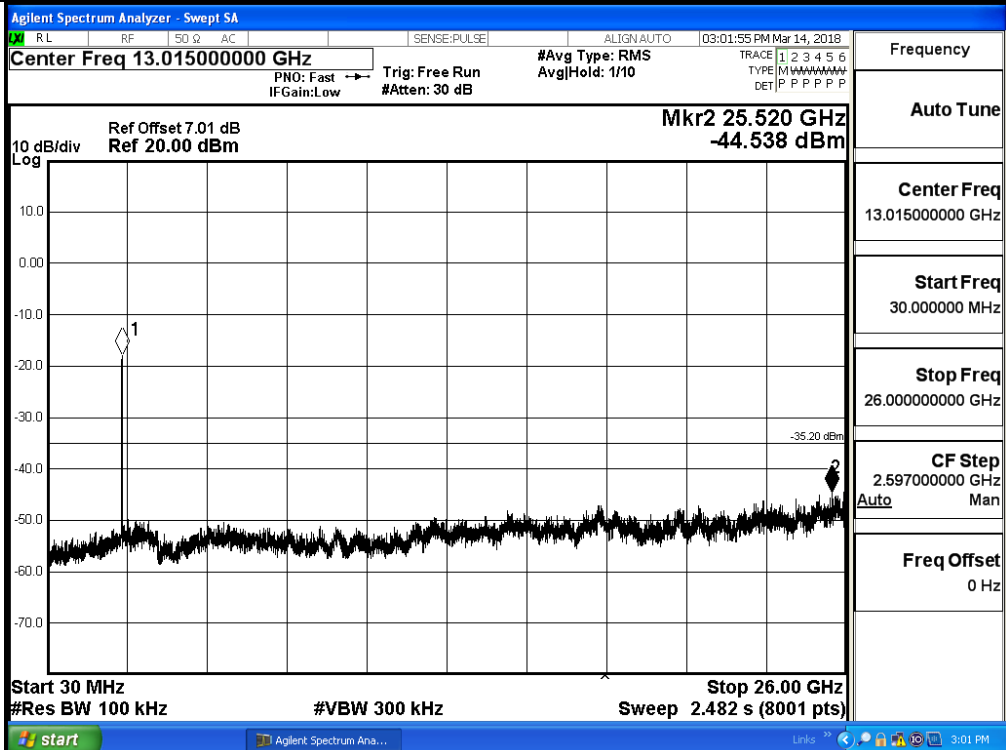
11N40SISO LCH Graphs

Pref/11N40
SISO/LCHPuw/11N40
SISO/LCH

11N40SISO_MCH_Graphs

Pref/11N40
SISO/MCHPuw/11N40
SISO/MCH

11N40SISO HCH Graphs

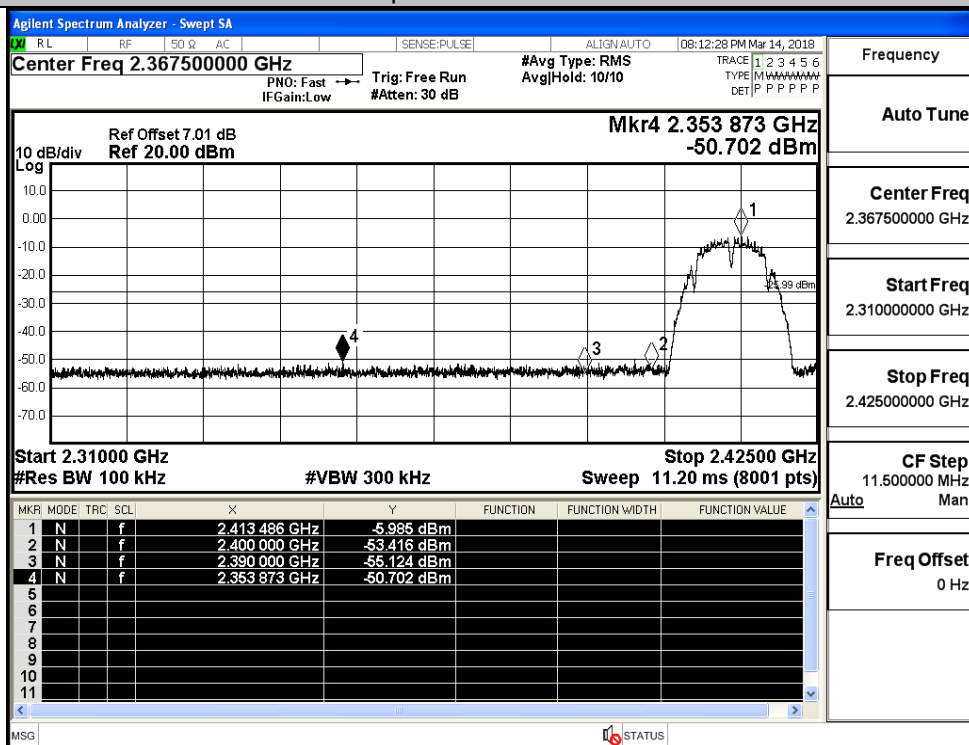
Pref/11N40
SISO/HCHPuw/11N40
SISO/HCH

C.5 Band-edge for RF Conducted Emissions

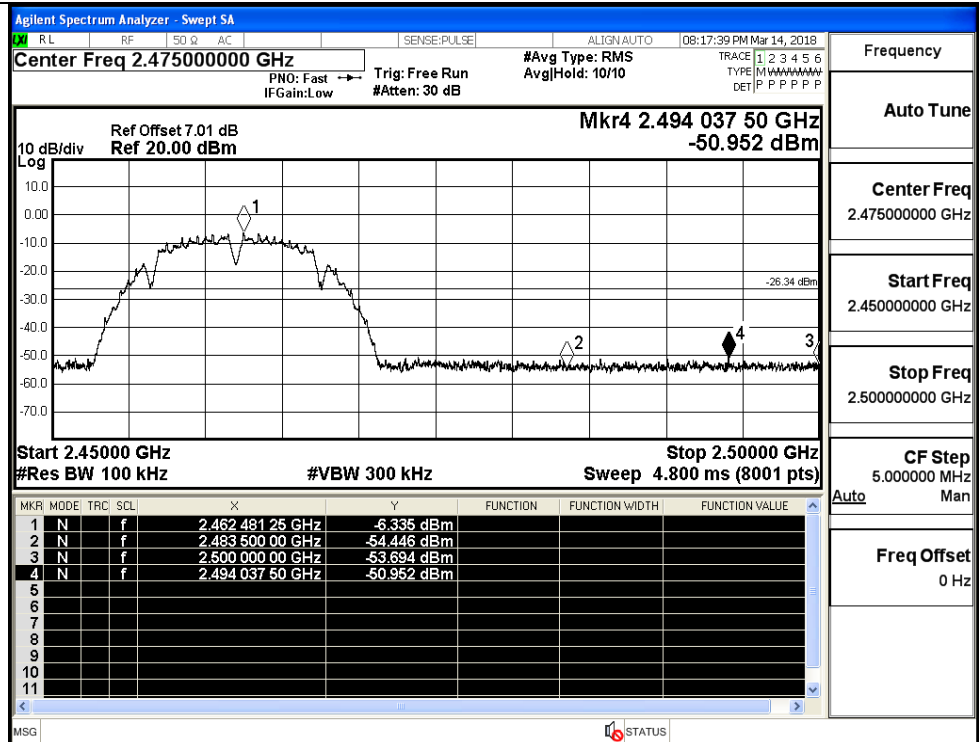
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
11B	LCH	-5.985	-50.702	-25.99	PASS
	HCH	-6.335	-50.952	-26.34	PASS
11G	LCH	-6.597	-50.988	-26.60	PASS
	HCH	-11.291	-50.878	-31.29	PASS
11N20SISO	LCH	-11.250	-50.326	-31.25	PASS
	HCH	-11.444	-50.893	-31.44	PASS
11N40SISO	LCH	-15.093	-51.674	-35.09	PASS
	HCH	-15.127	-50.966	-35.13	PASS

Test Graphs

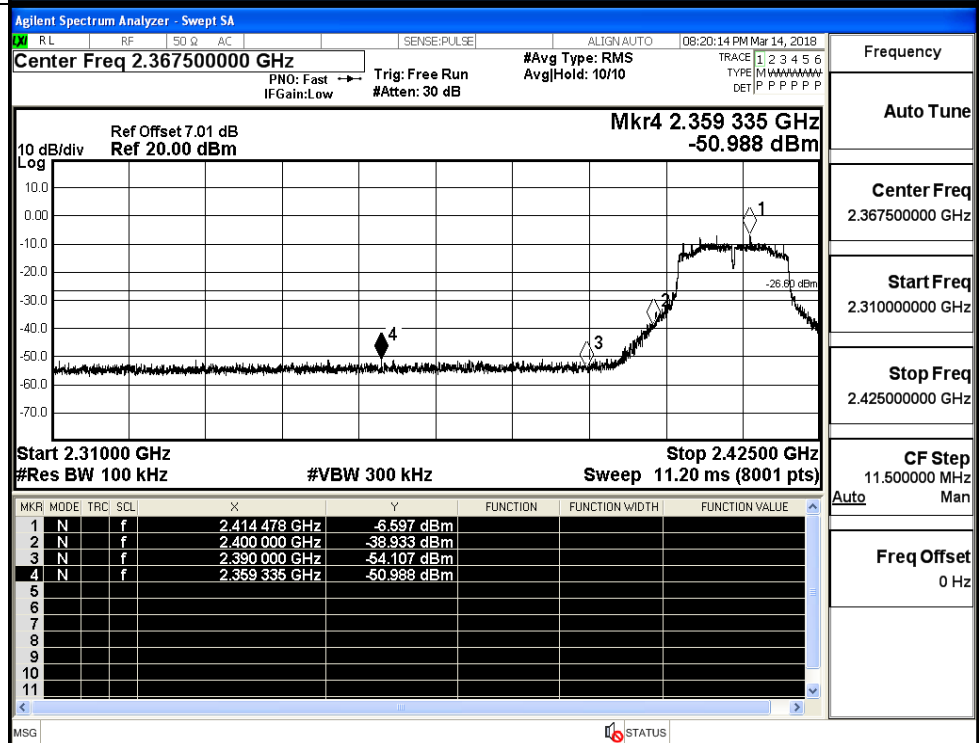
11B/LCH



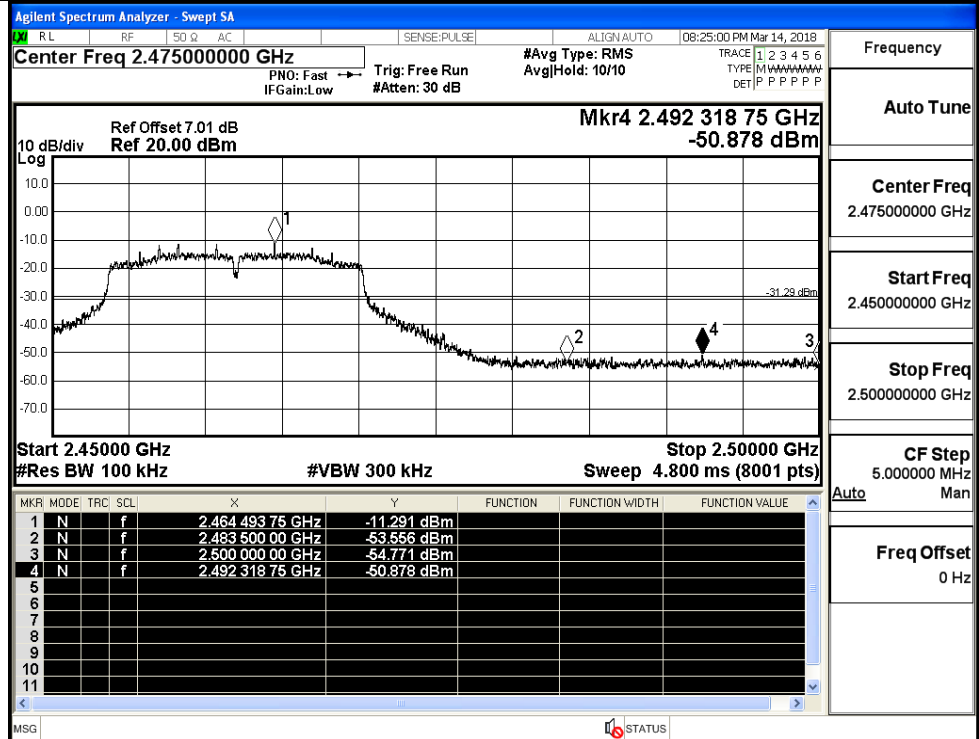
11B/HCH



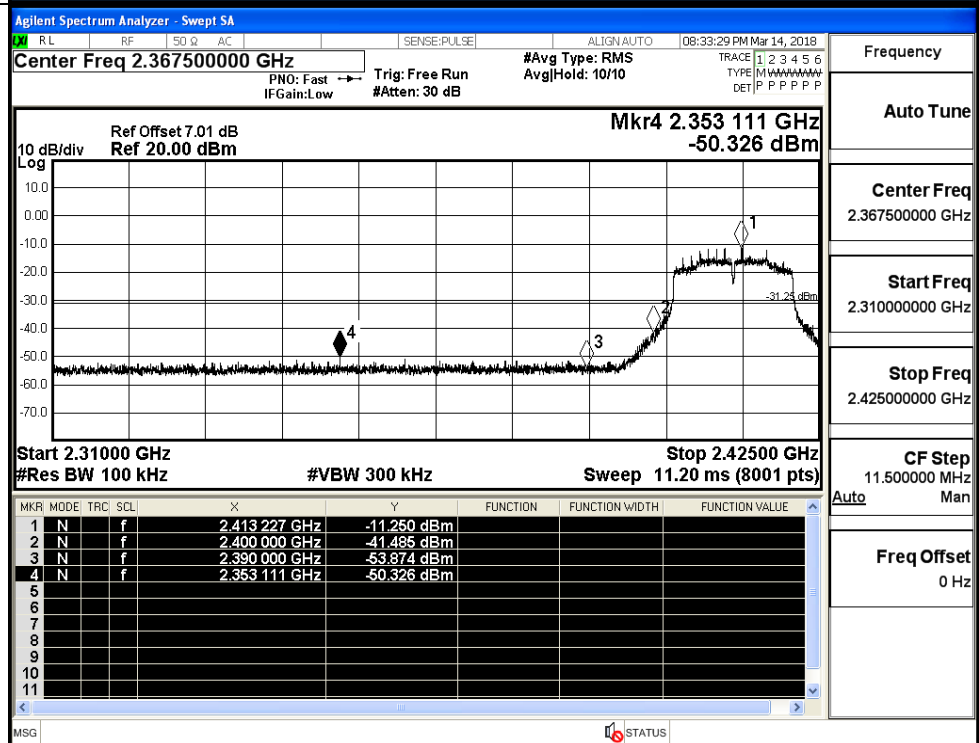
11G/LCH



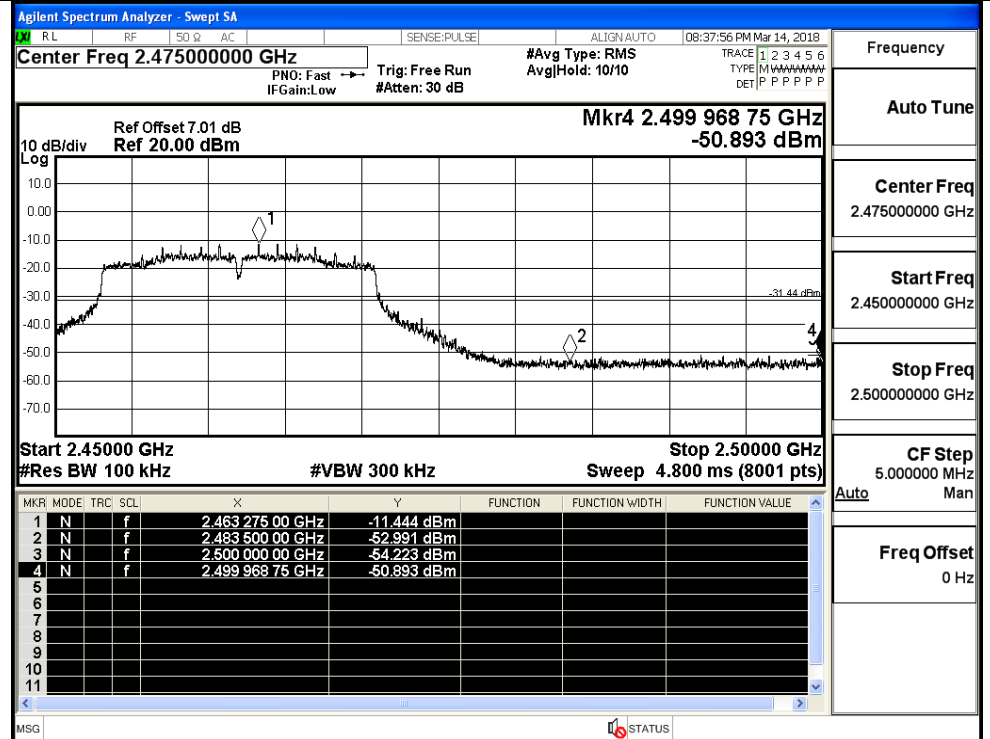
11G/HCH



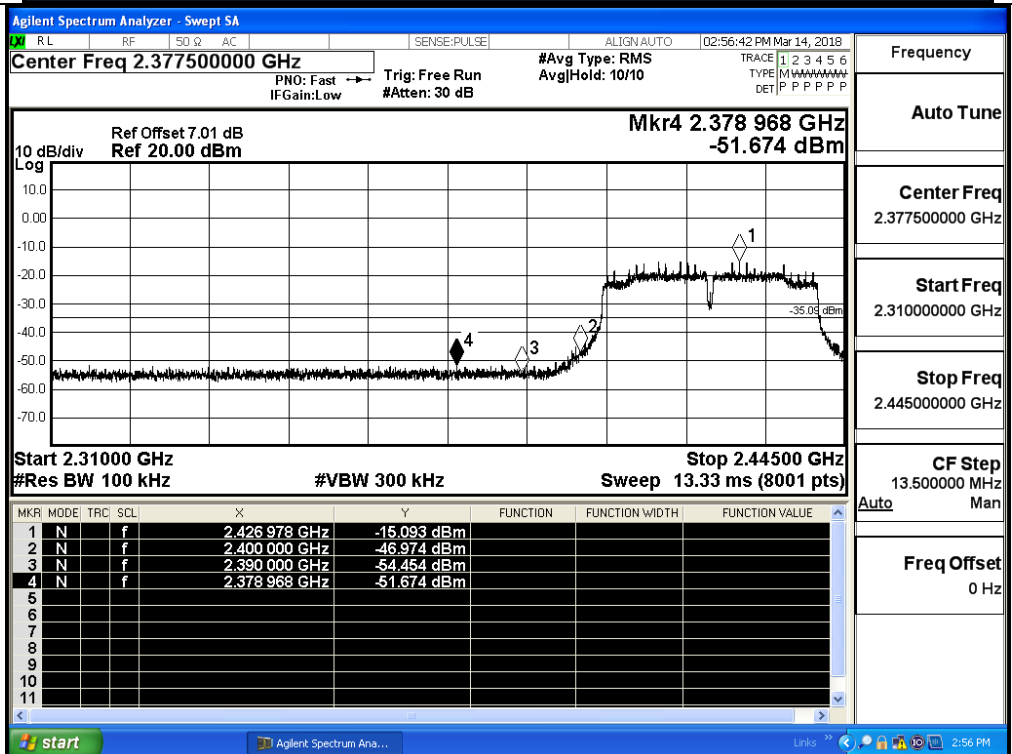
11N20SISO/LCH



11N20SISO/HCH



11N40SISO/LCH

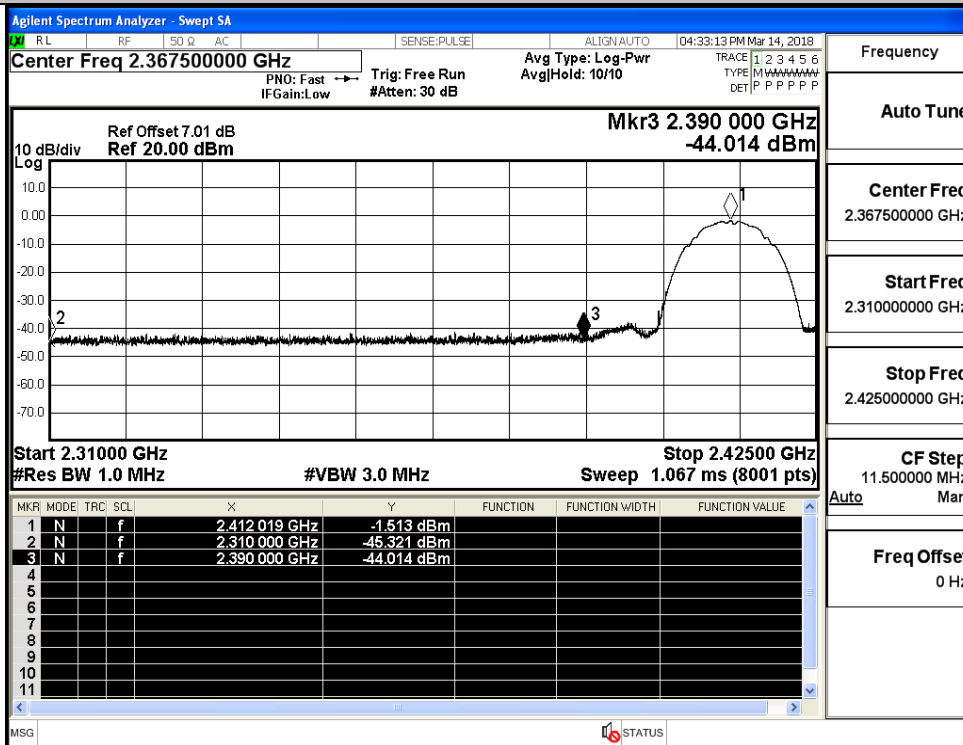


C.6 Restrict-band band-edge measurements

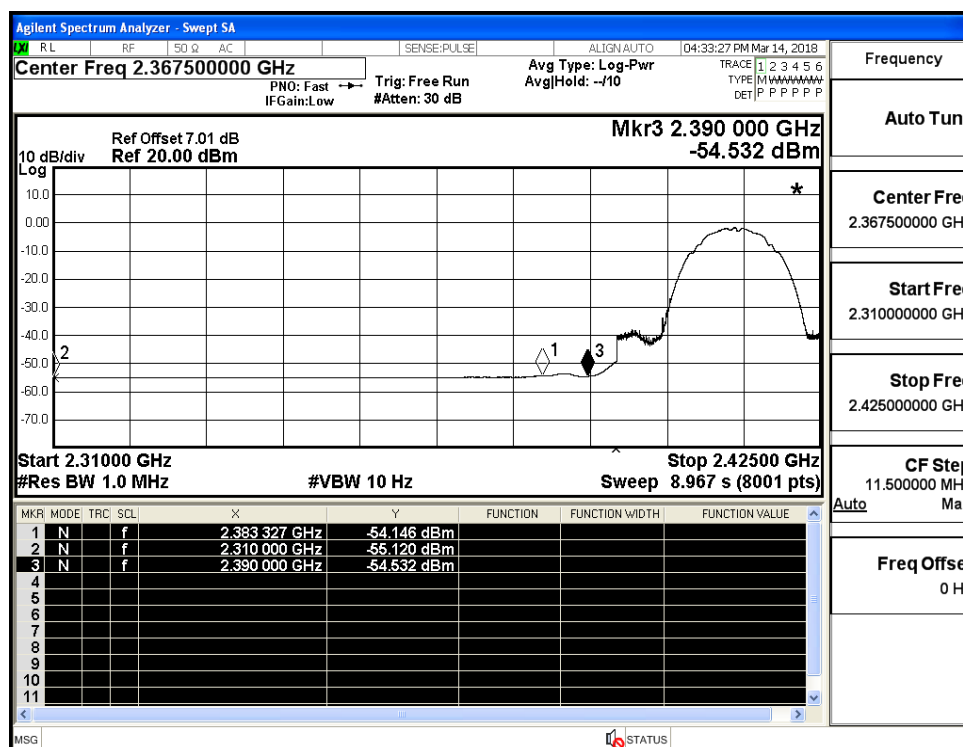
Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
11B	2412	Ant1	2310.0	-45.32	2.0	0	51.94	PEAK	74	PASS
	2412	Ant1	2310.0	-55.12	2.0	0	42.14	AV	54	PASS
	2412	Ant1	2390.0	-44.01	2.0	0	53.25	PEAK	74	PASS
	2412	Ant1	2390.0	-54.53	2.0	0	42.73	AV	54	PASS
	2462	Ant1	2483.5	-42.71	2.0	0	54.55	PEAK	74	PASS
	2462	Ant1	2483.5	-54.48	2.0	0	42.78	AV	54	PASS
	2462	Ant1	2500.0	-43.67	2.0	0	53.59	PEAK	74	PASS
	2462	Ant1	2500.0	-54.43	2.0	0	42.83	AV	54	PASS
11G	2412	Ant1	2310.0	-44.02	2.0	0	53.24	PEAK	74	PASS
	2412	Ant1	2310.0	-54.93	2.0	0	42.33	AV	54	PASS
	2412	Ant1	2390.0	-44.05	2.0	0	53.21	PEAK	74	PASS
	2412	Ant1	2390.0	-53.84	2.0	0	43.42	AV	54	PASS
	2462	Ant1	2483.5	-44.13	2.0	0	53.13	PEAK	74	PASS
	2462	Ant1	2483.5	-54.34	2.0	0	42.92	AV	54	PASS
	2462	Ant1	2500.0	-44.83	2.0	0	52.43	PEAK	74	PASS
	2462	Ant1	2500.0	-54.31	2.0	0	42.95	AV	54	PASS
11N20 SISO	2412	Ant1	2310.0	-43.69	2.0	0	53.57	PEAK	74	PASS
	2412	Ant1	2310.0	-55.04	2.0	0	42.22	AV	54	PASS
	2412	Ant1	2390.0	-44.61	2.0	0	52.65	PEAK	74	PASS
	2412	Ant1	2390.0	-54.53	2.0	0	42.73	AV	54	PASS
	2462	Ant1	2483.5	-44.58	2.0	0	52.68	PEAK	74	PASS
	2462	Ant1	2483.5	-54.35	2.0	0	42.91	AV	54	PASS
	2462	Ant1	2500.0	-44.50	2.0	0	52.76	PEAK	74	PASS
	2462	Ant1	2500.0	-54.31	2.0	0	42.95	AV	54	PASS
11N40 SISO	2422	Ant1	2310.0	-45.03	2.0	0	52.23	PEAK	74	PASS
	2422	Ant1	2310.0	-55.01	2.0	0	42.25	AV	54	PASS

	2422	Ant1	2390.0	-43.05	2.0	0	54.21	PEAK	74	PASS
	2422	Ant1	2390.0	-54.55	2.0	0	42.71	AV	54	PASS
	2452	Ant1	2483.5	-42.86	2.0	0	54.40	PEAK	74	PASS
	2452	Ant1	2483.5	-54.28	2.0	0	42.98	AV	54	PASS
	2452	Ant1	2500.0	-43.96	2.0	0	53.30	PEAK	74	PASS
	2452	Ant1	2500.0	-54.23	2.0	0	43.03	AV	54	PASS

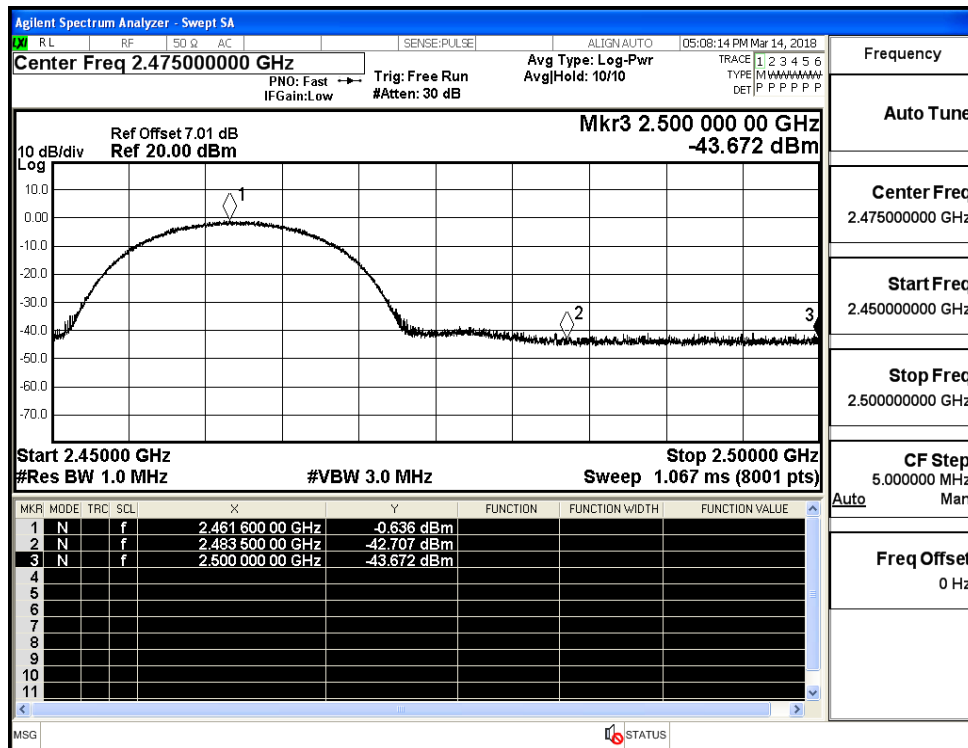
Restrict-band band-edge measurements_11B_2412_Ant1_PEAK



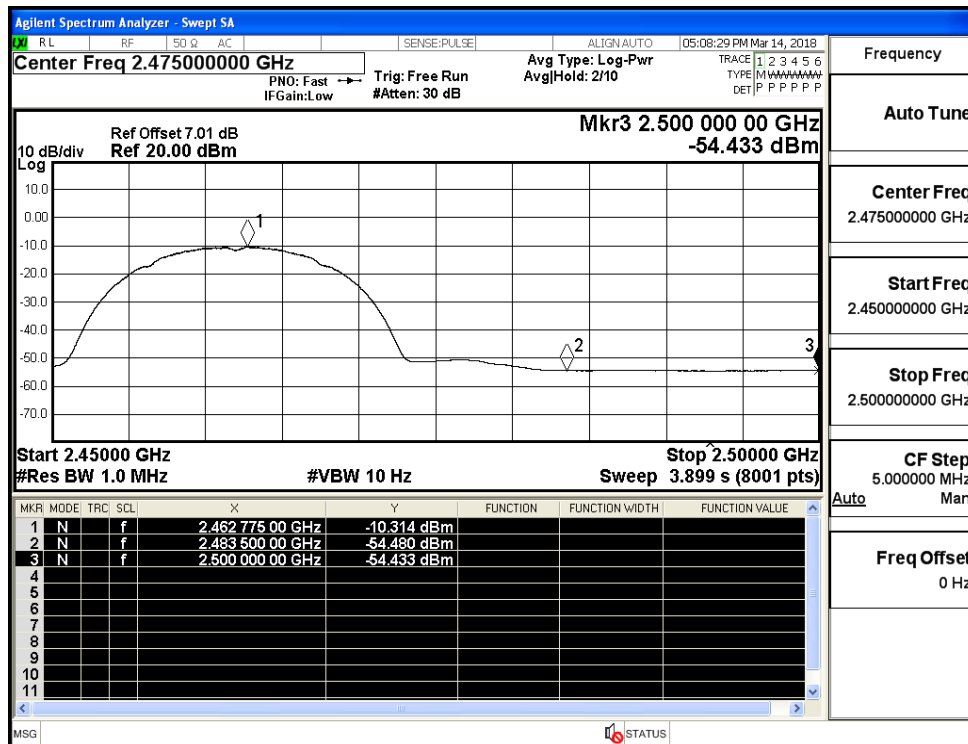
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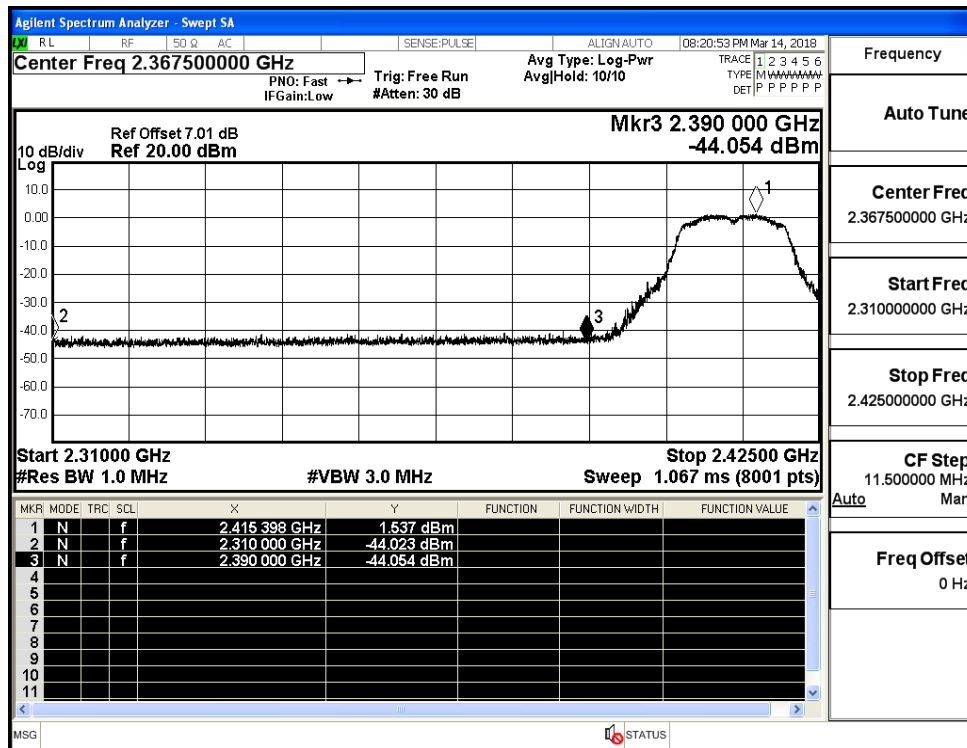
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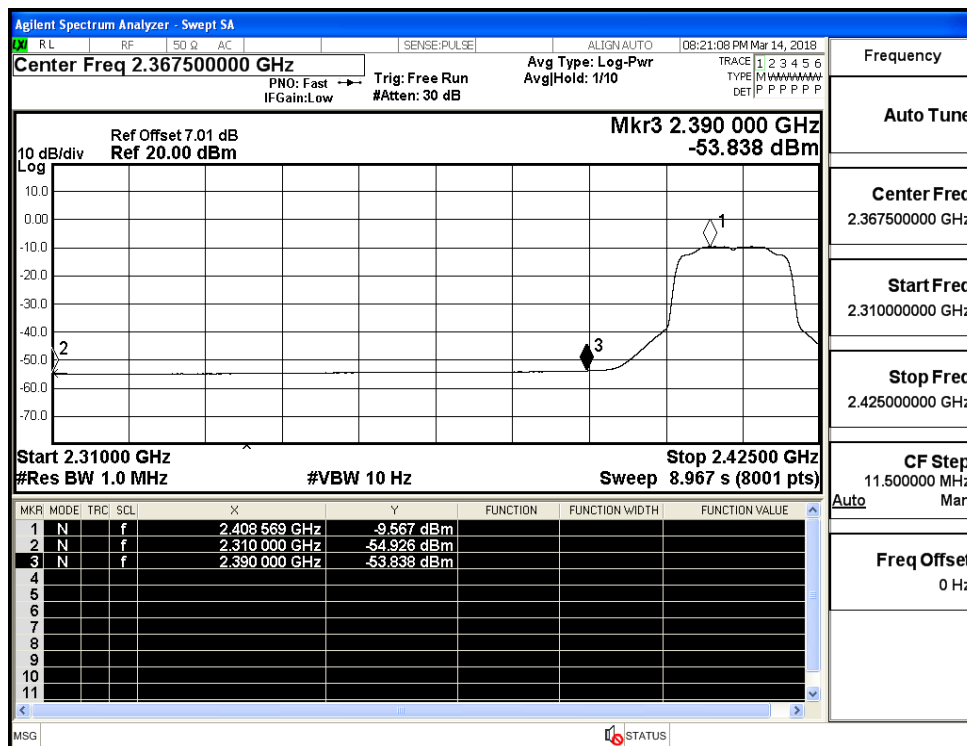
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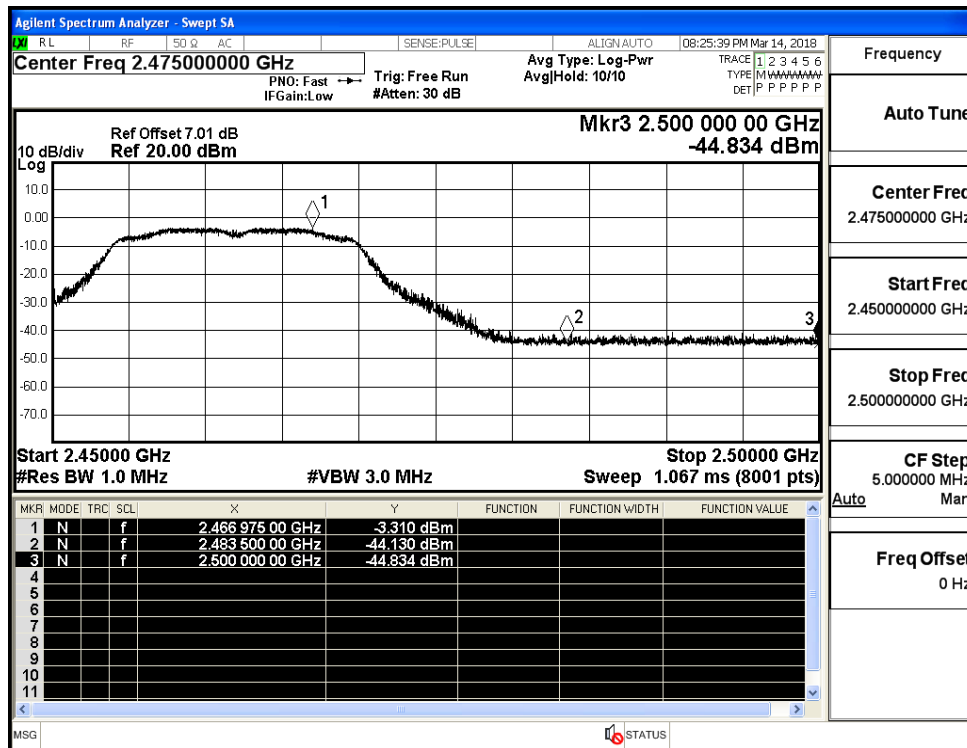
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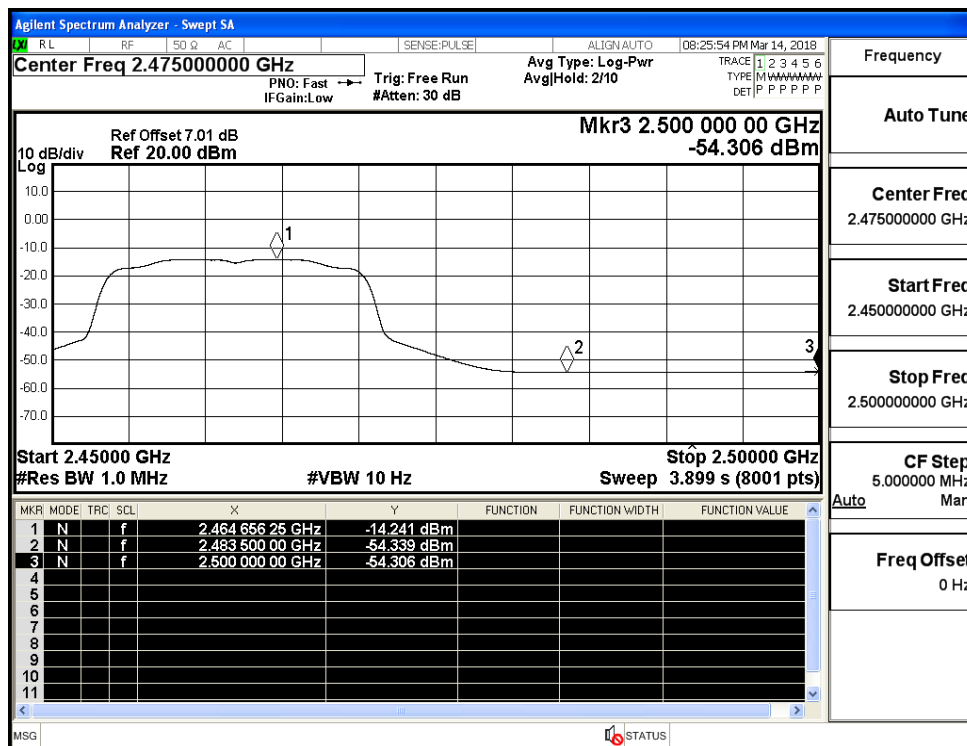
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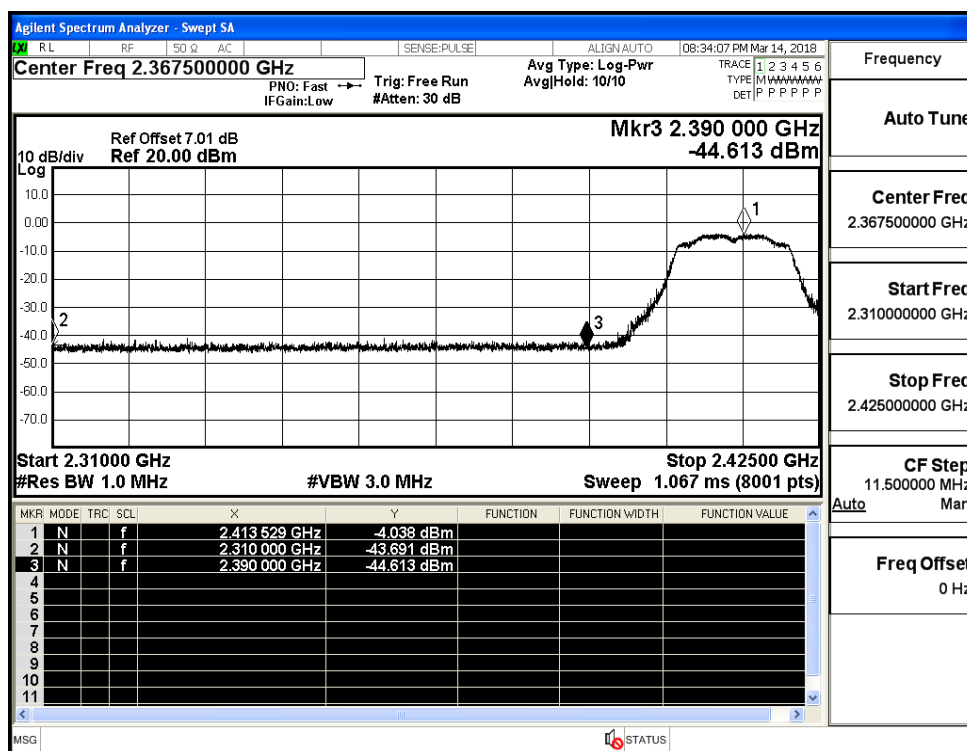
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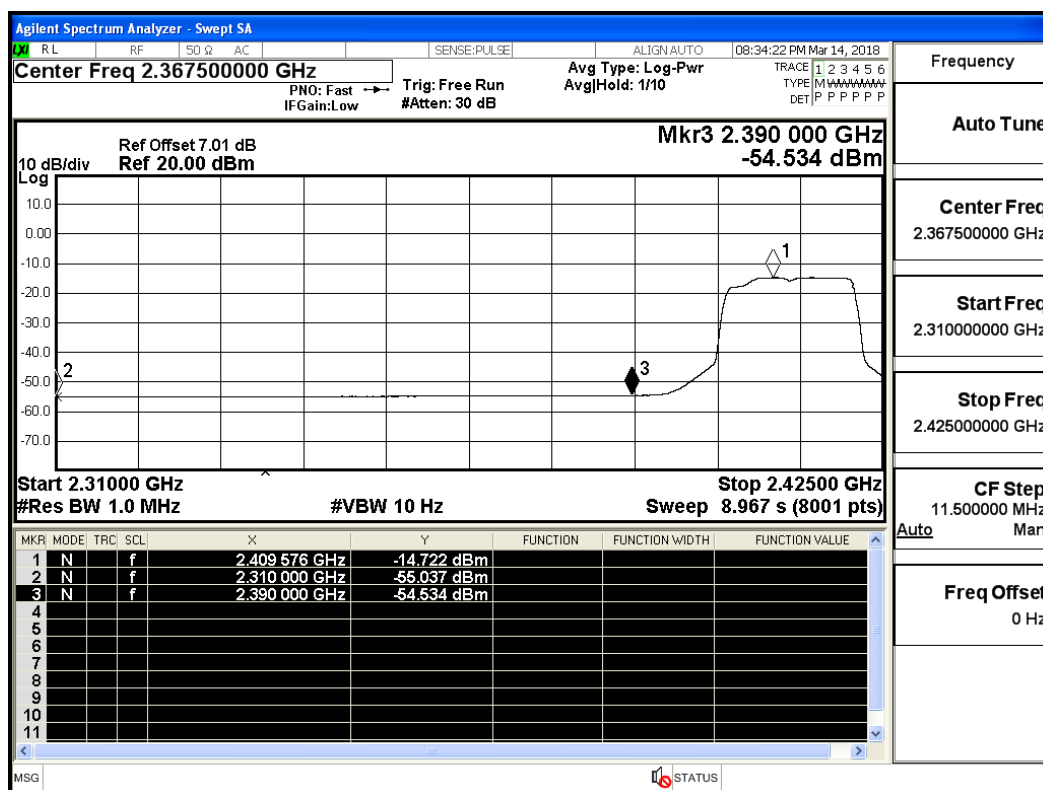
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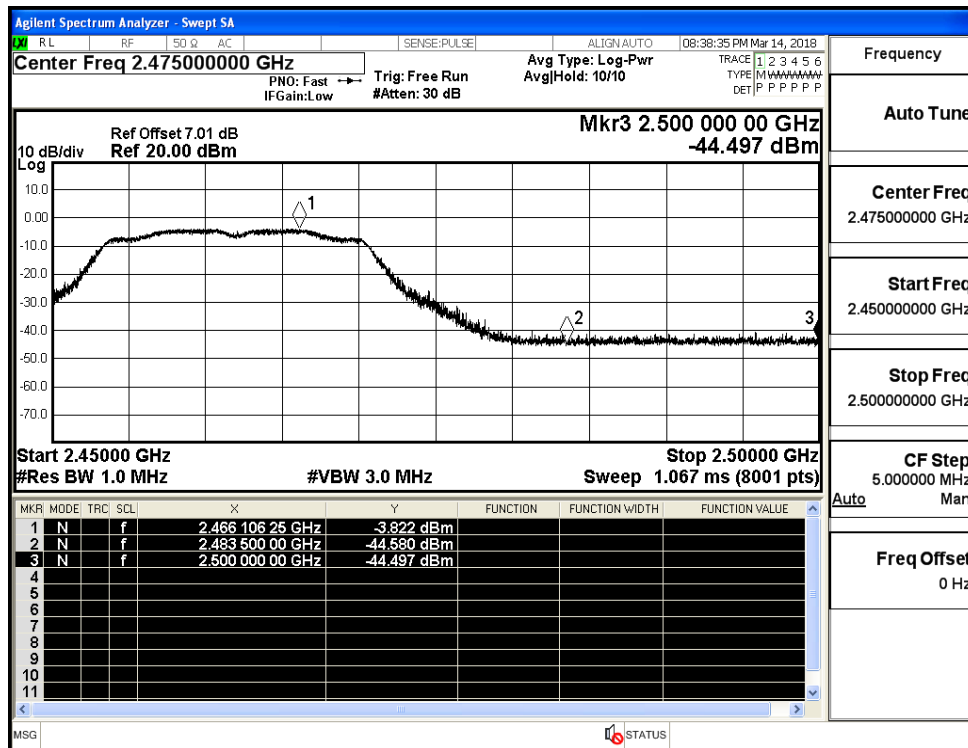
Restrict-band band-edge measurements_11N20SISO_2412_Ant1_PEAK



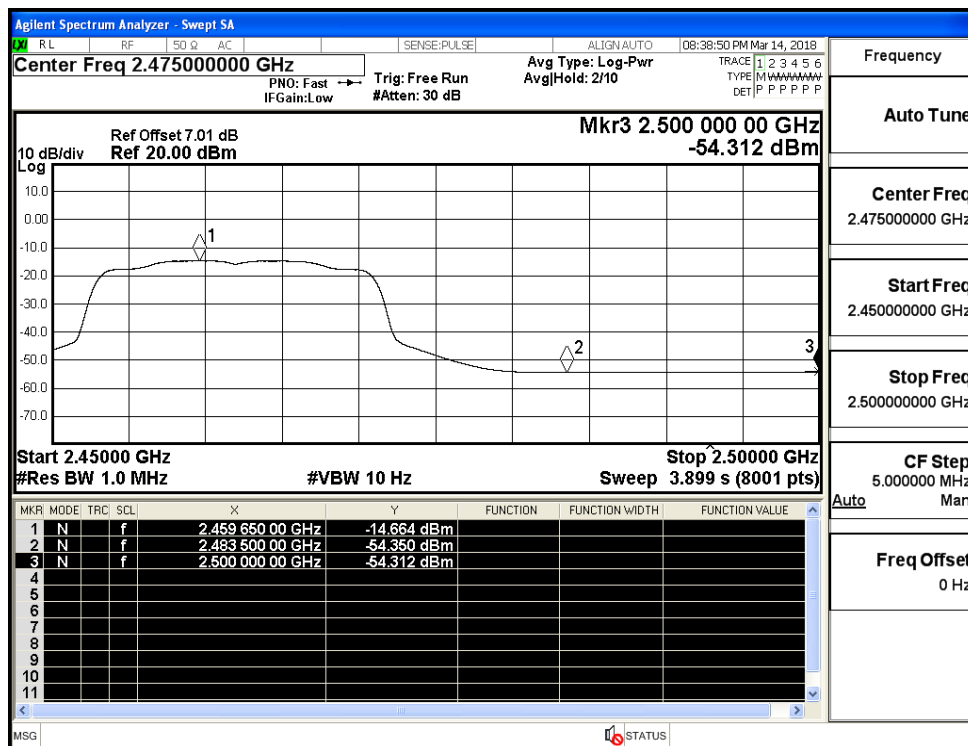
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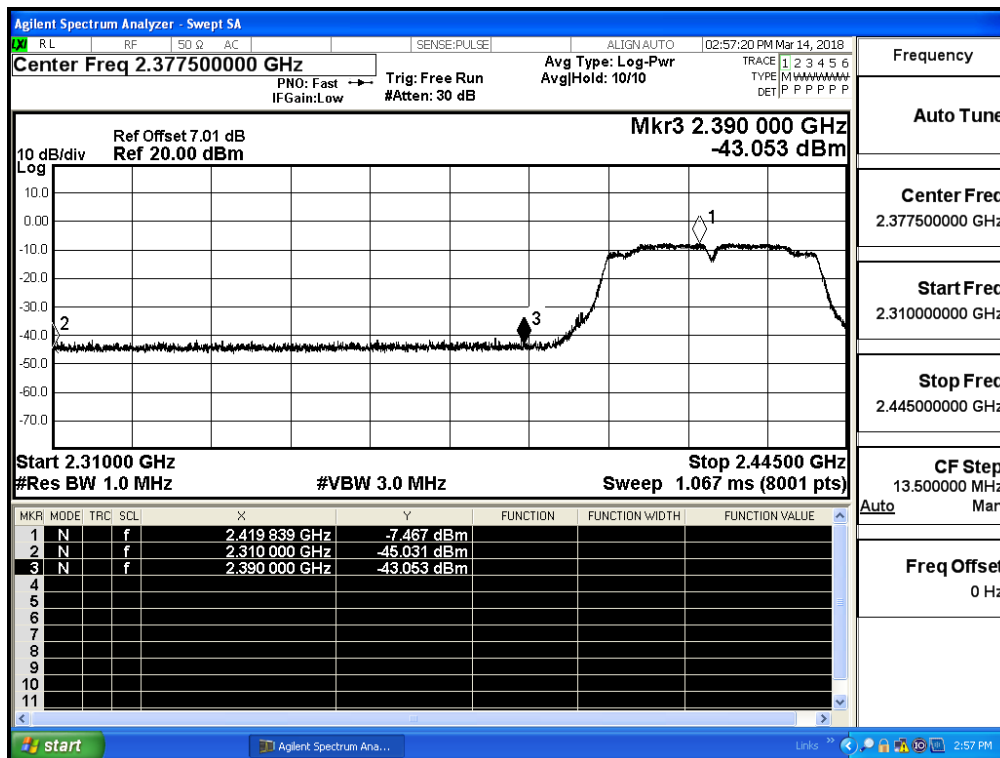
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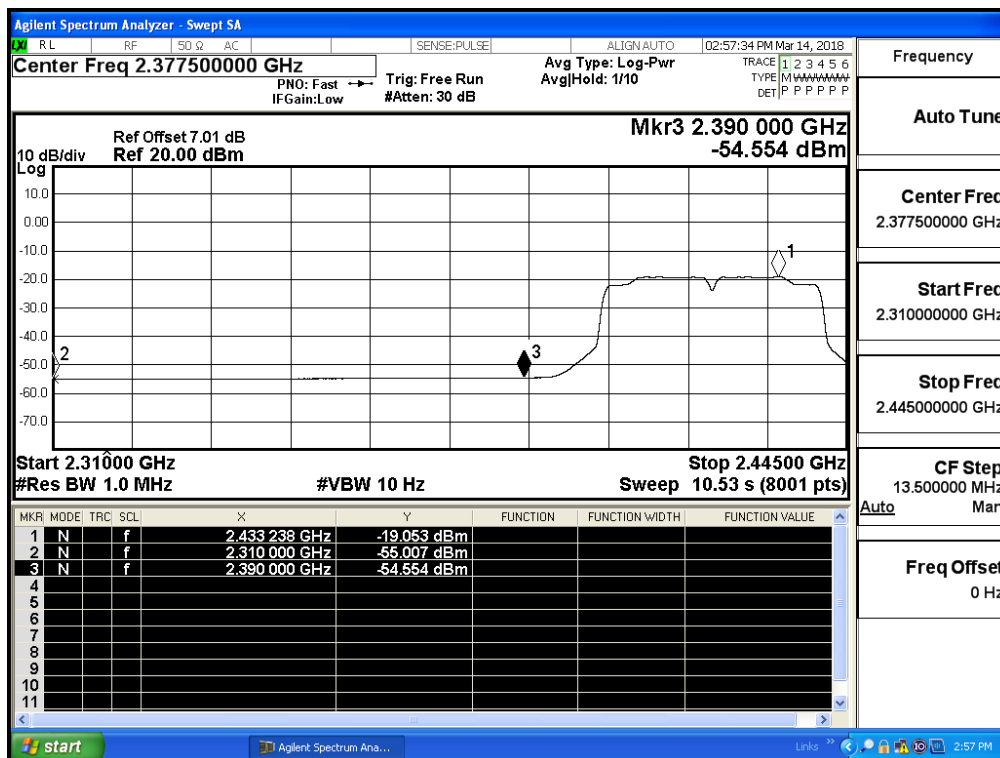
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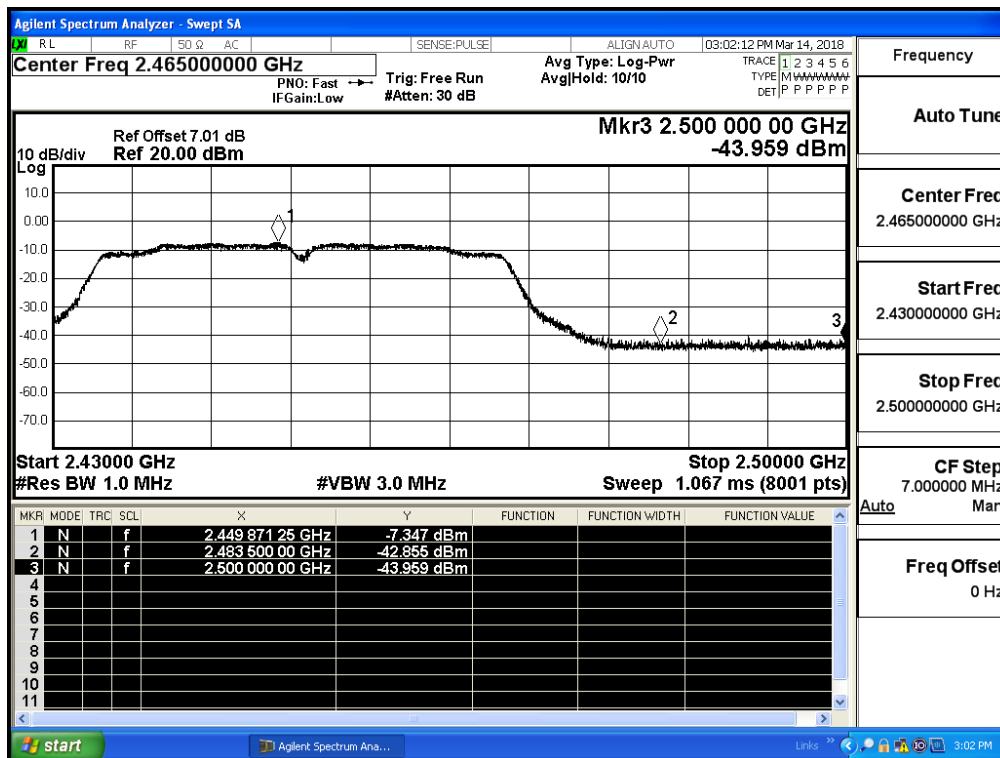
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Restrict-band band-edge measurements_11N40SISO_2422_Ant1_AV



Restrict-band band-edge measurements_11N40SISO_2452_Ant1_PEAK



Restrict-band band-edge measurements_11N40SISO_2452_Ant1_AV

