

Appendix C

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: Smart Phone

Trade Mark: Kalley

Test Model: BLACK PRO

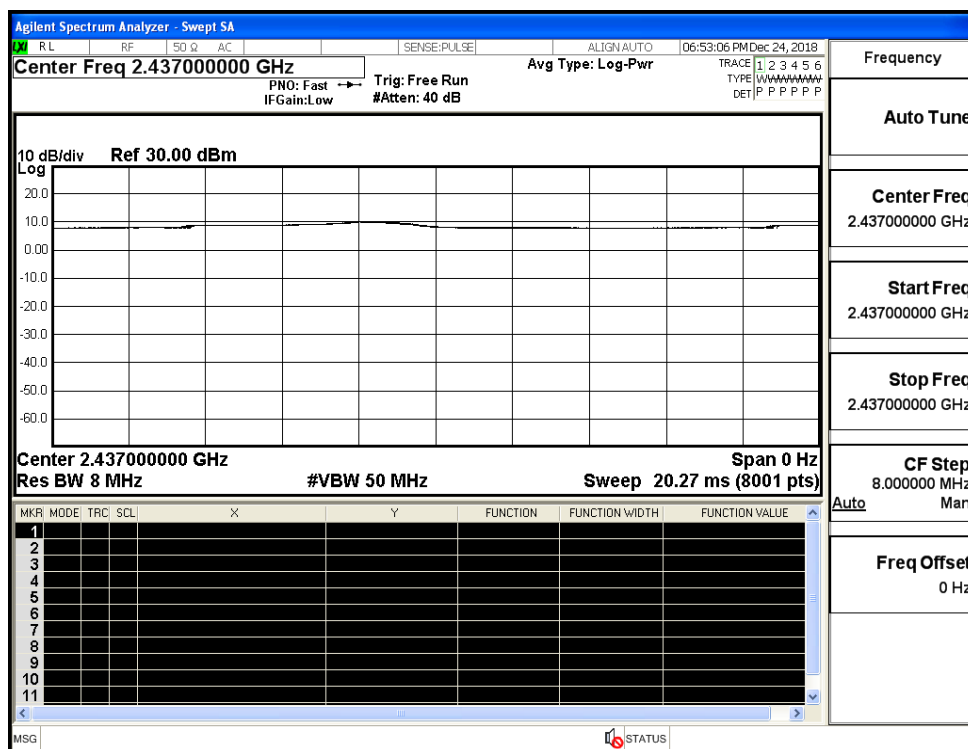
Environmental Conditions

Temperature:	24.6 ° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	WANG CHUANG
Supervised by:	Jayden Zhuo

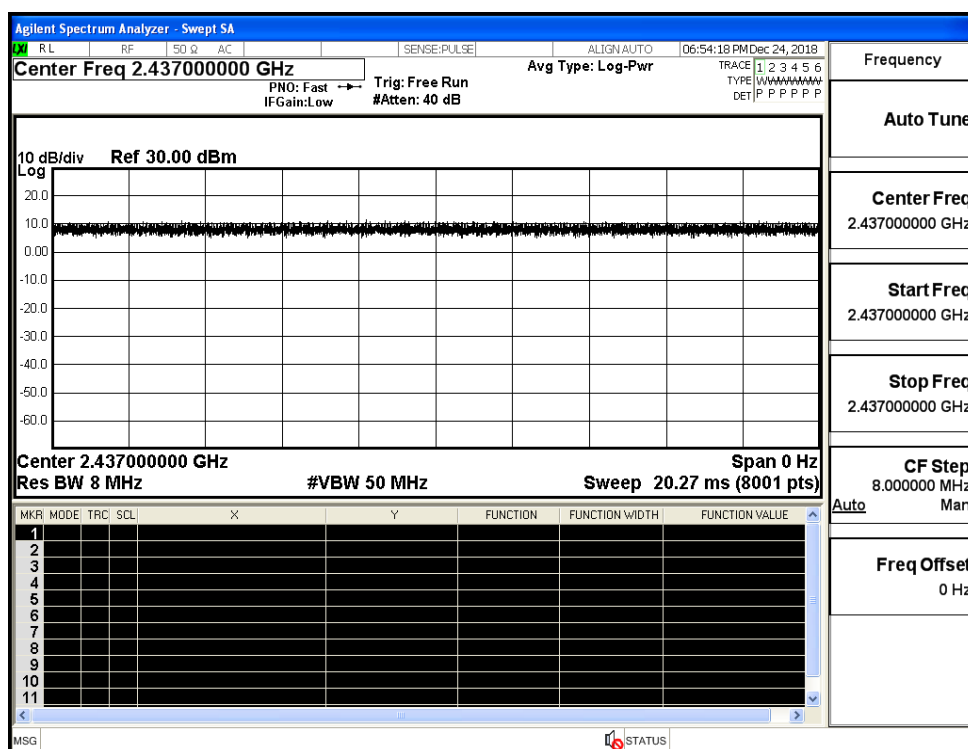
C.1 Duty Cycle

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

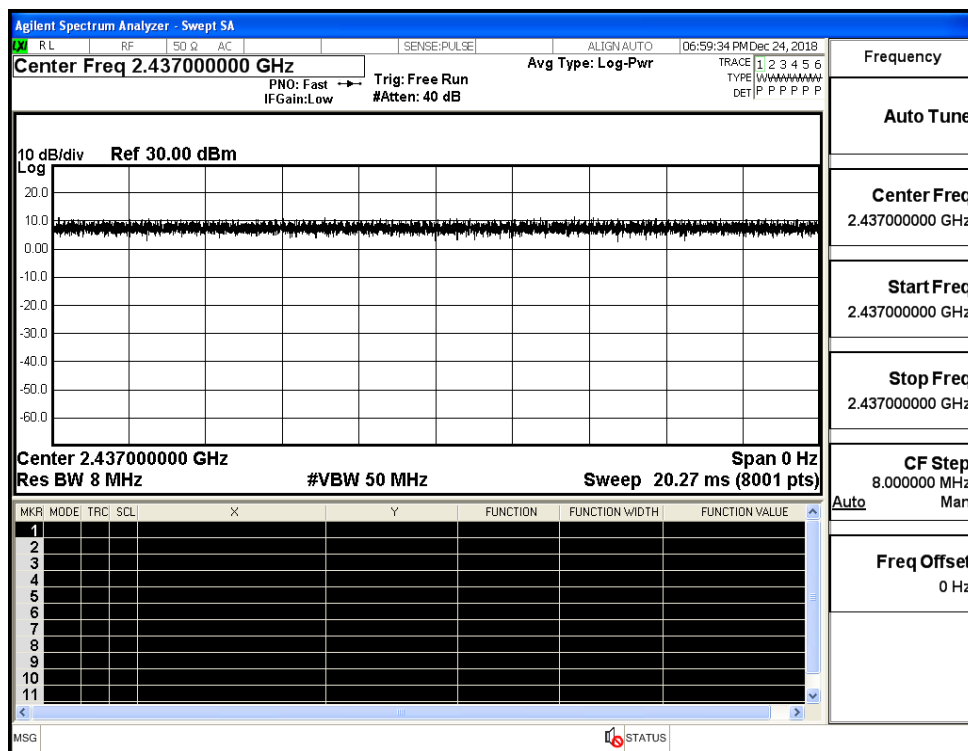
Duty Cycle_11B_2437_Ant1



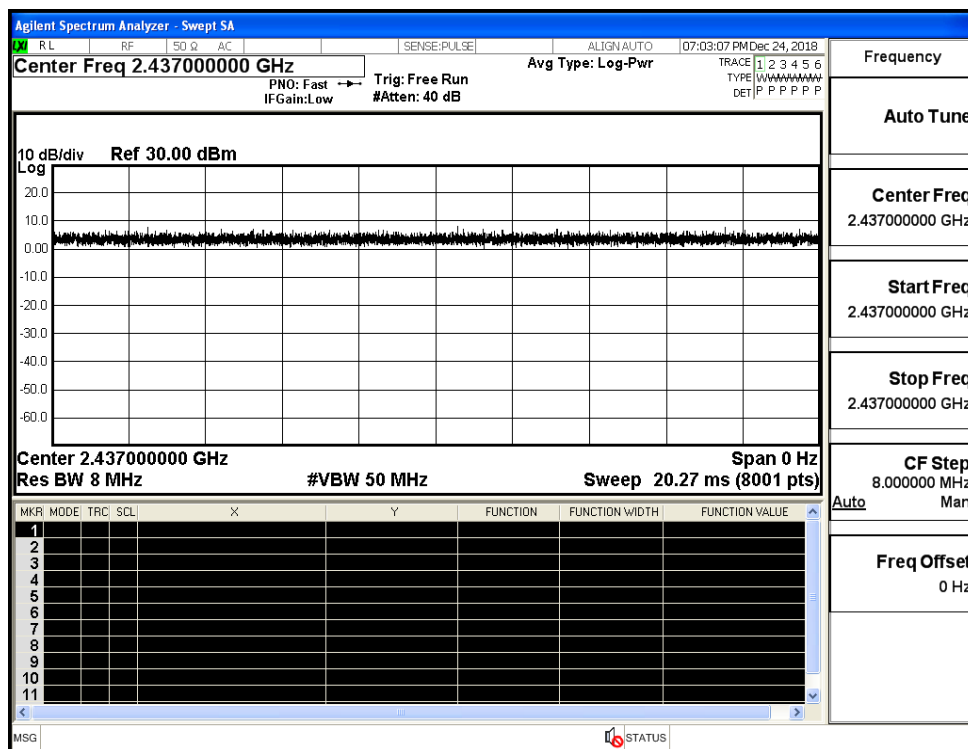
Duty Cycle_11G_2437_Ant1



Duty Cycle_11N20SISO_2437_Ant1



Duty Cycle_11N40SISO_2437_Ant1



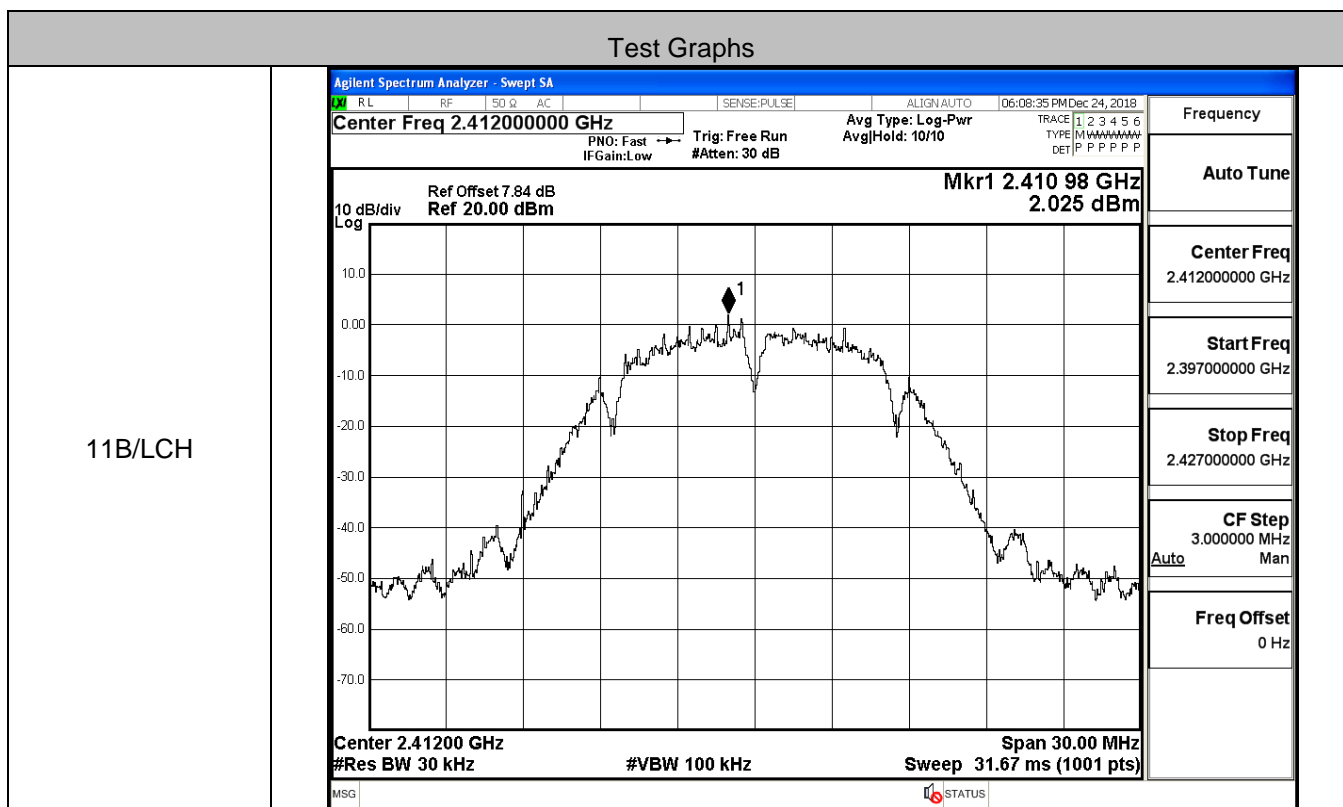
C.2 Maximum Conducted Output Power

Mode	Channel	Meas. Peak Level [dBm]	Meas. Average Level [dBm]	Limit [dBm]	Verdict
11B	LCH	15.84	12.99	30	PASS
	MCH	15.73	12.93	30	PASS
	HCH	15.70	12.87	30	PASS
11G	LCH	17.45	11.28	30	PASS
	MCH	18.96	12.68	30	PASS
	HCH	18.85	12.63	30	PASS
11N20SISO	LCH	17.10	11.05	30	PASS
	MCH	18.92	12.76	30	PASS
	HCH	18.95	12.69	30	PASS
11N40SISO	LCH	18.78	12.05	30	PASS
	MCH	18.93	12.18	30	PASS
	HCH	18.91	12.15	30	PASS

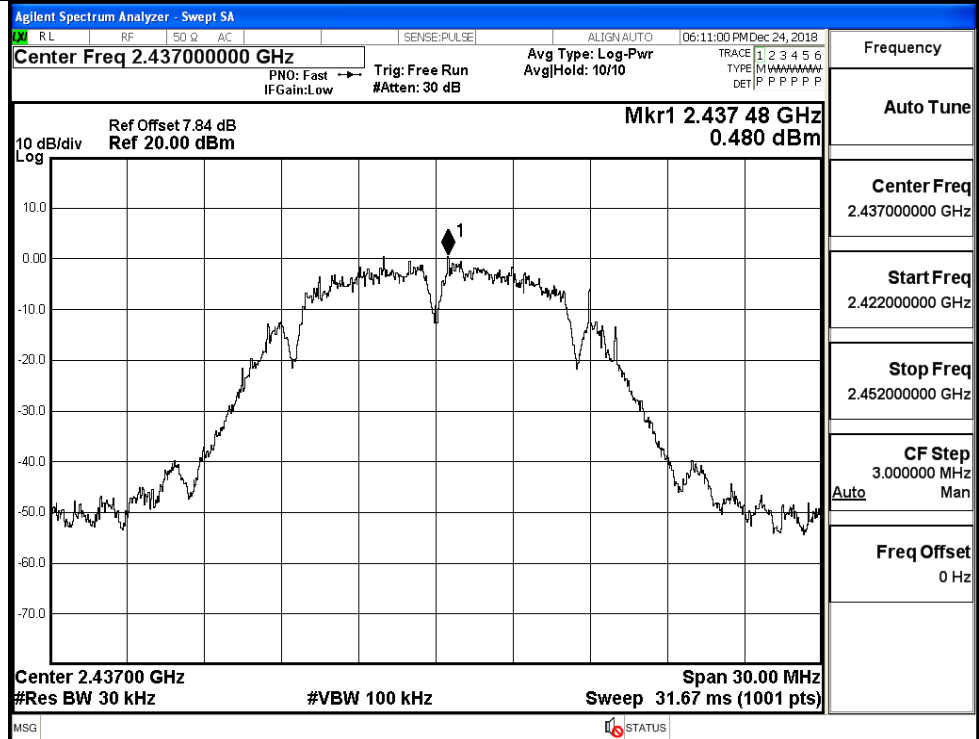
C.3 Maximum Power Spectral Density

Mode	Channel	Meas.Level [dBm/30KHz]	Convert Factor	Result	Limit [dBm/3KHz]	Verdict
11B	LCH	2.025	-10	-7.975	8	PASS
	MCH	0.480	-10	-9.520	8	PASS
	HCH	3.997	-10	-6.003	8	PASS
11G	LCH	-5.743	-10	-15.743	8	PASS
	MCH	-4.758	-10	-14.758	8	PASS
	HCH	-4.044	-10	-14.044	8	PASS
11N20SISO	LCH	-5.277	-10	-15.277	8	PASS
	MCH	-3.104	-10	-13.104	8	PASS
	HCH	-4.101	-10	-14.101	8	PASS
11N40SISO	LCH	-7.876	-10	-17.876	8	PASS
	MCH	-7.950	-10	-17.950	8	PASS
	HCH	-7.981	-10	-17.981	8	PASS

***Note: The Convert Factor = $10 \cdot \log(3\text{KHz}/30\text{KHz}) = -10$



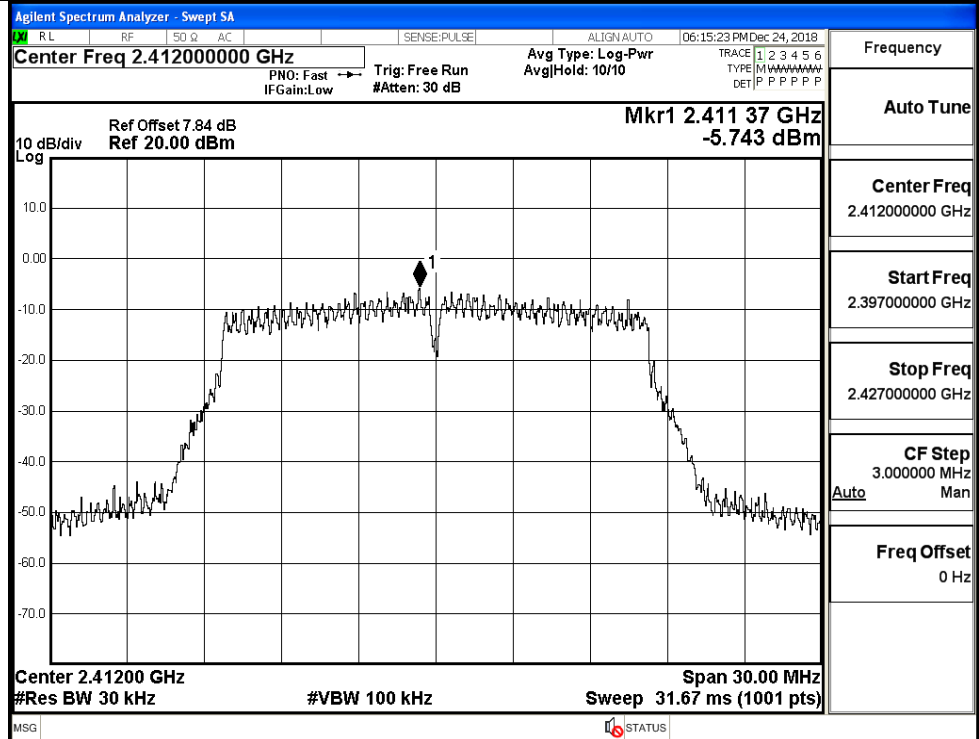
11B/MCH



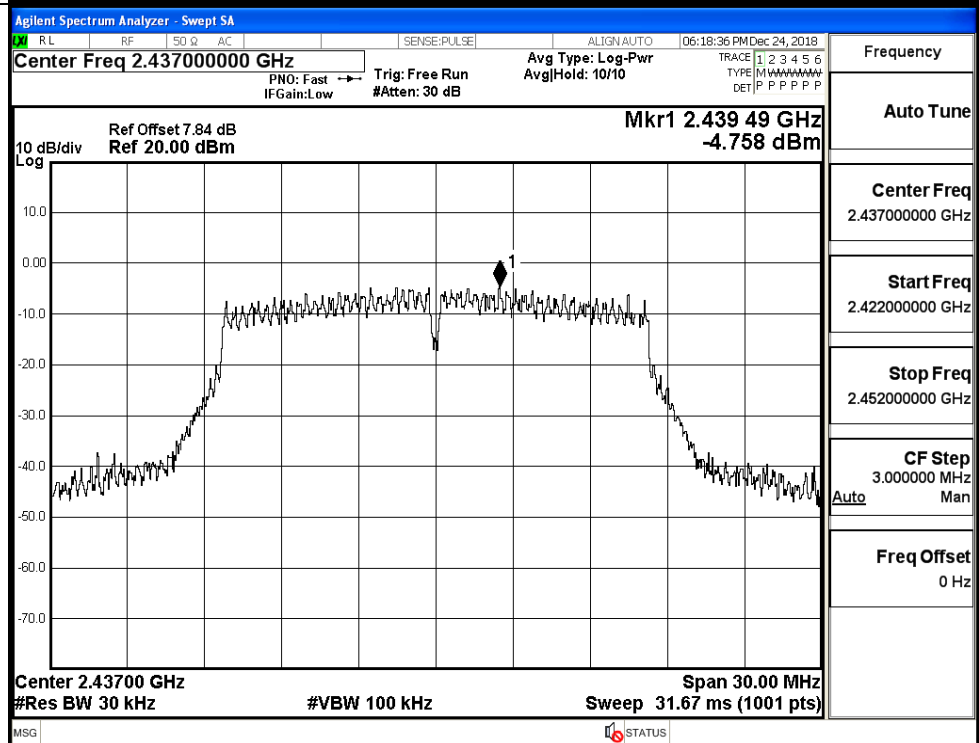
11B/HCH



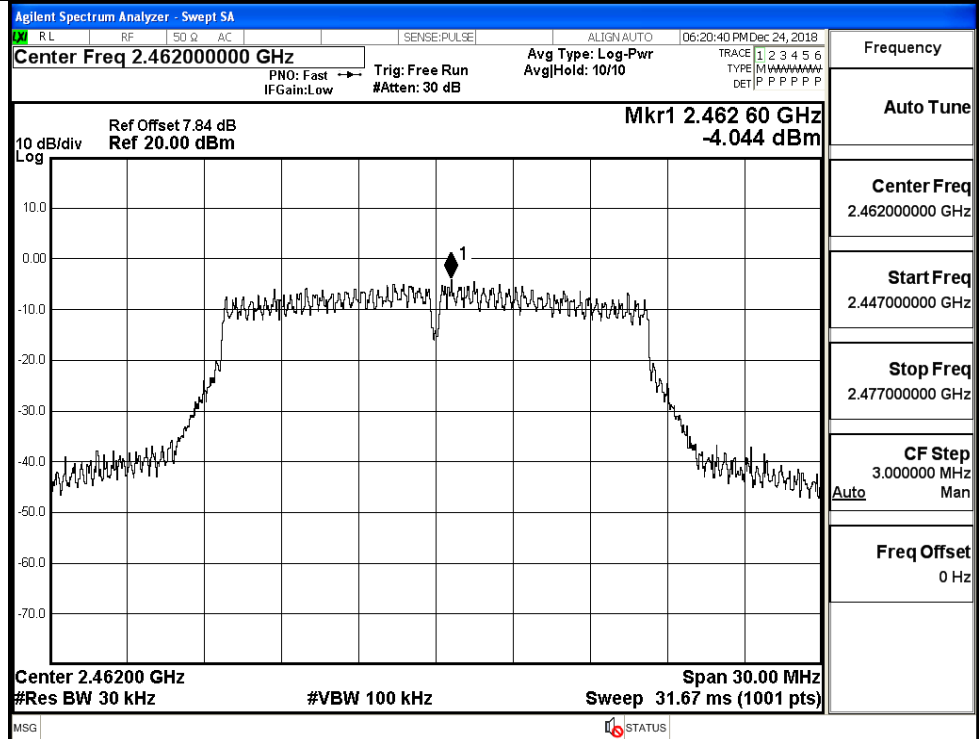
11G/LCH



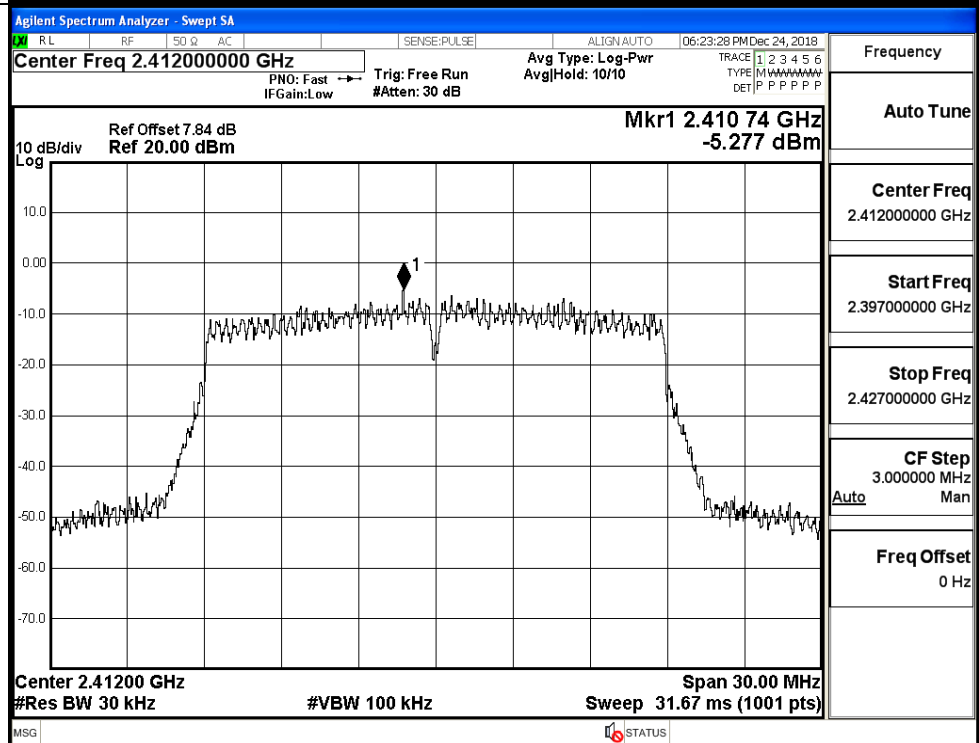
11G/MCH



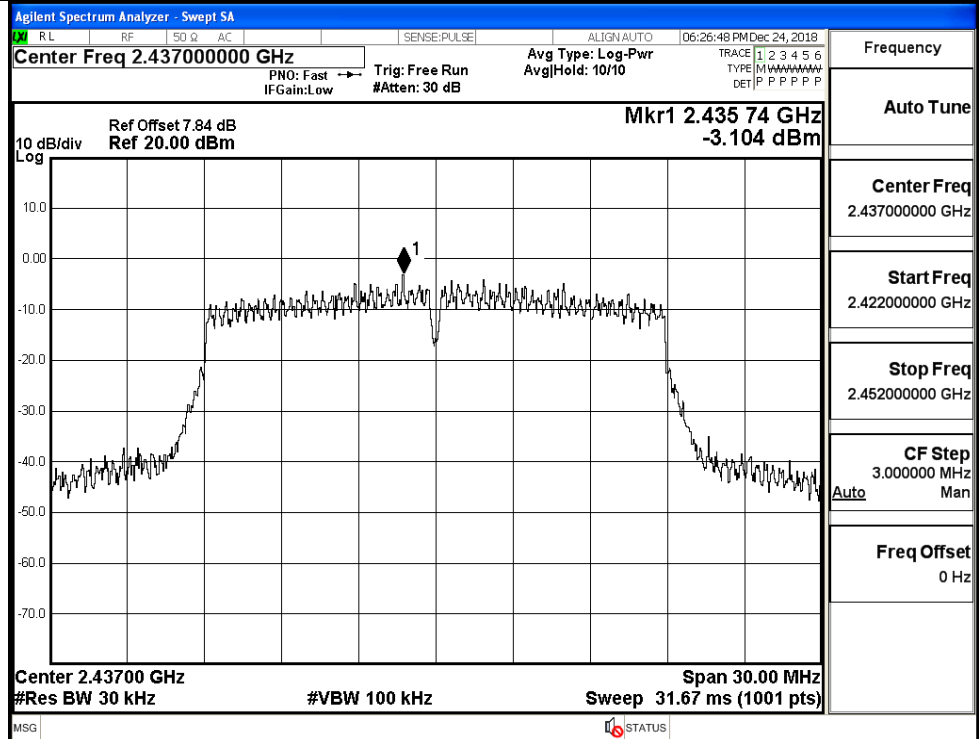
11G/HCH



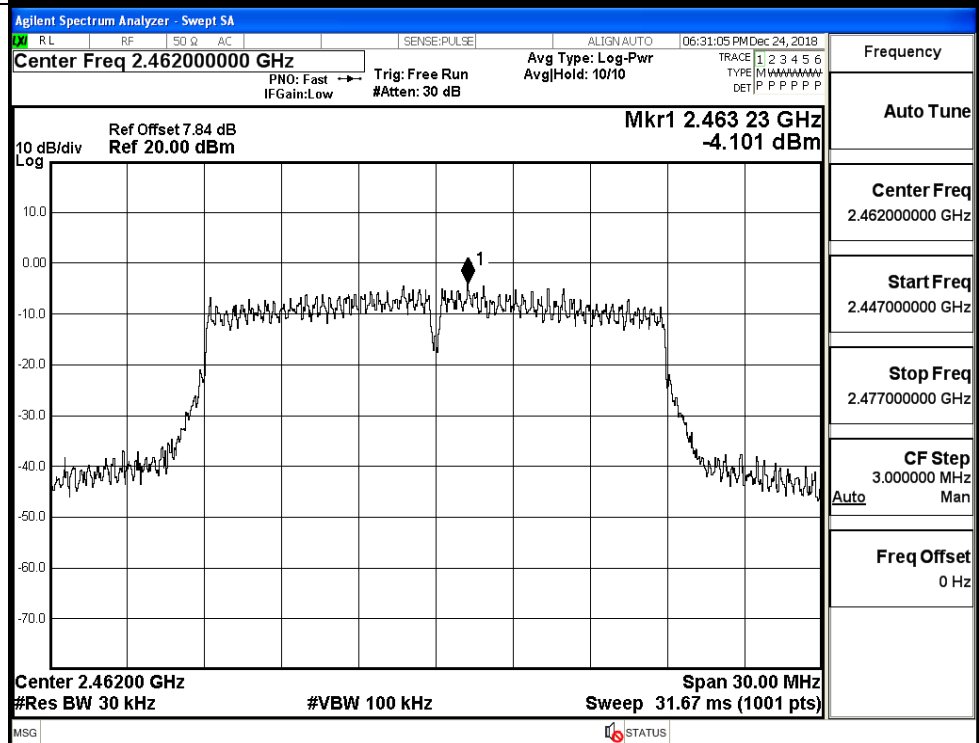
11N20SISO/LCH



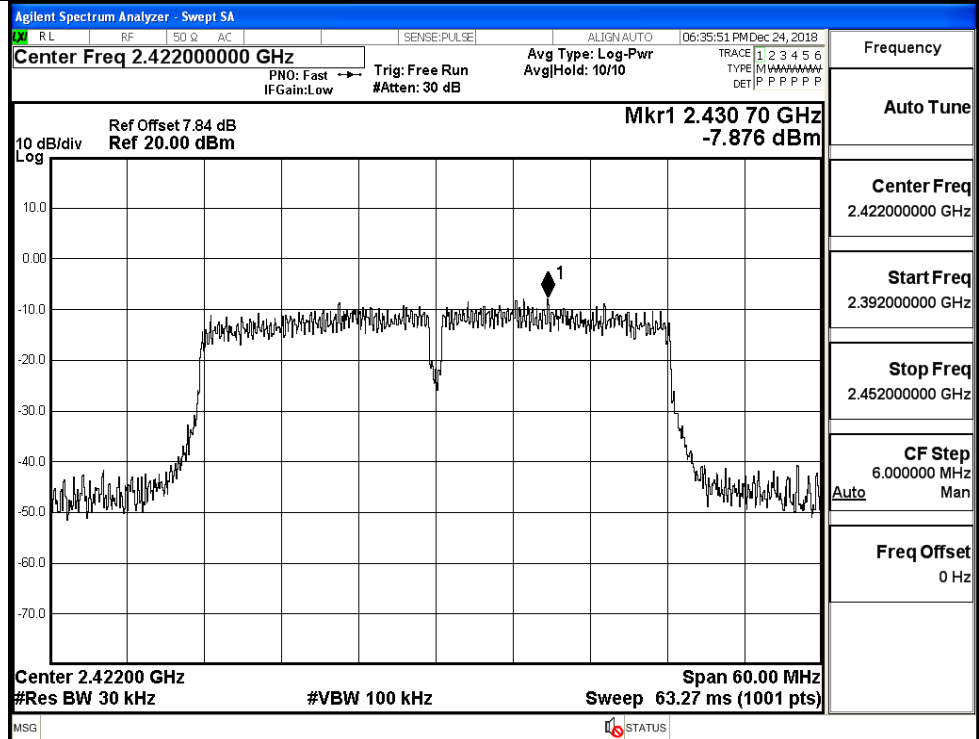
11N20SISO/MCH



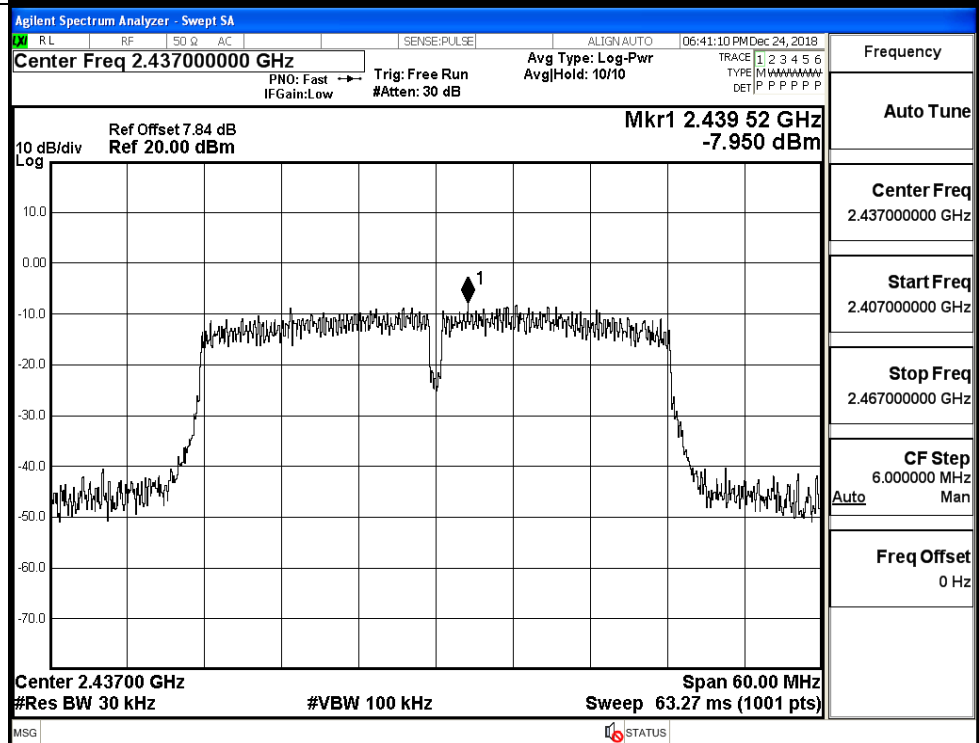
11N20SISO/HCH



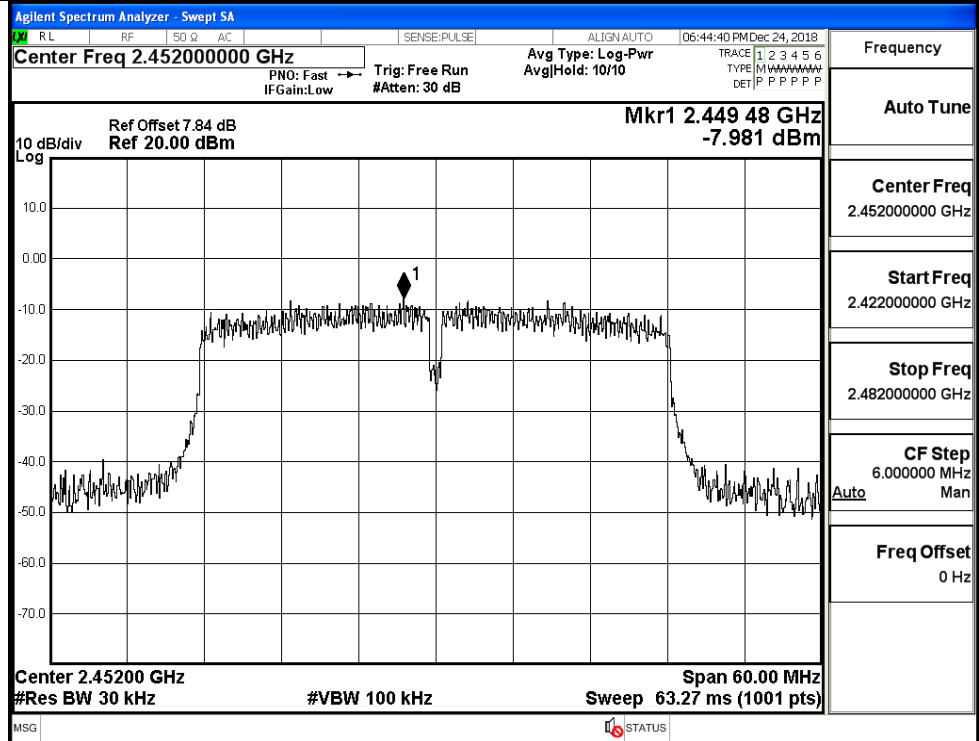
11N40SISO/LCH



11N40SISO/MCH



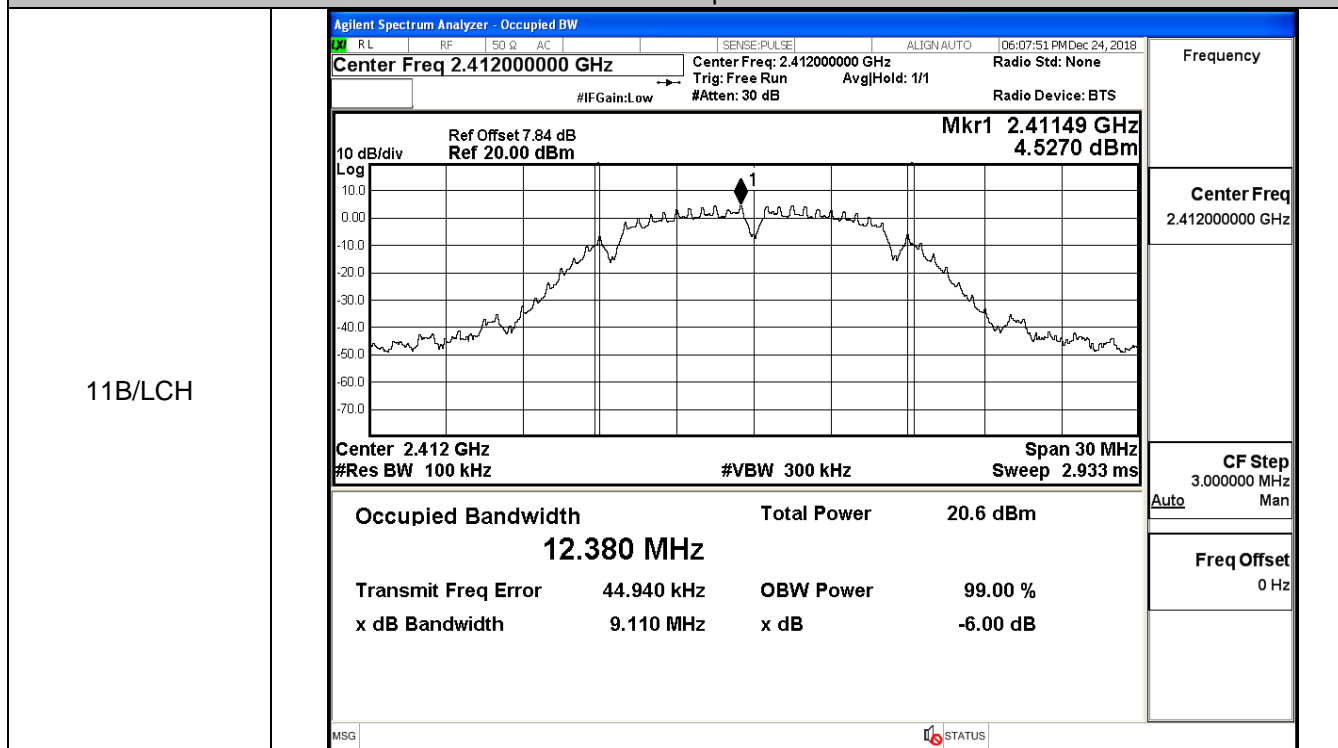
11N40SISO/HCH



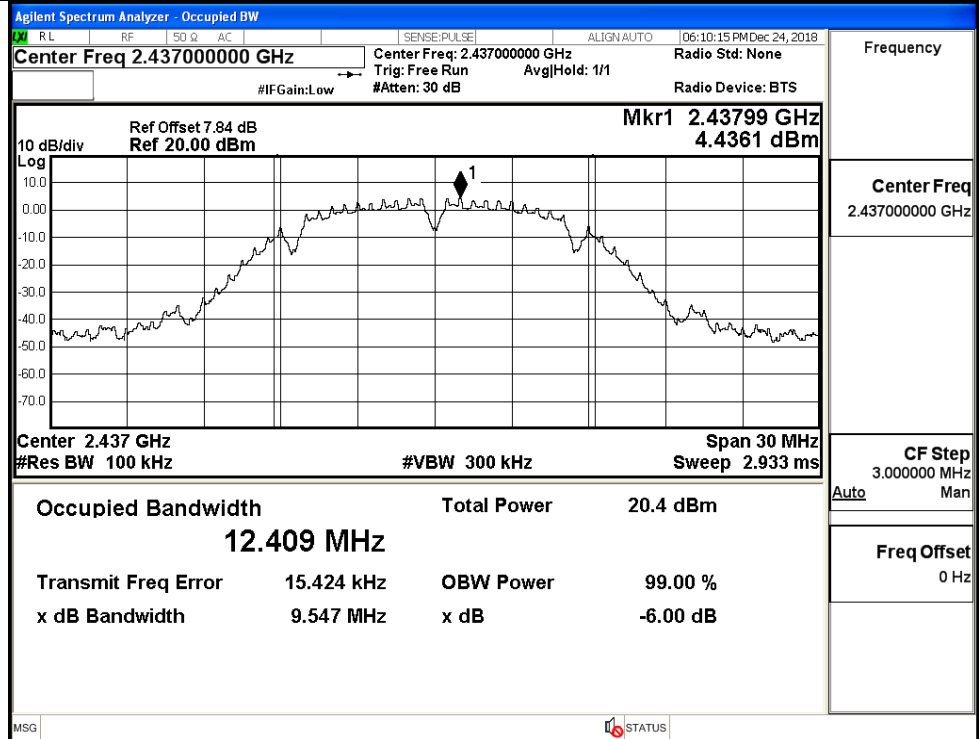
C.4 6dB Bandwidth

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
11B	LCH	9.110	≥ 0.5	PASS
	MCH	9.547	≥ 0.5	PASS
	HCH	9.102	≥ 0.5	PASS
11G	LCH	15.72	≥ 0.5	PASS
	MCH	15.12	≥ 0.5	PASS
	HCH	15.36	≥ 0.5	PASS
11N20SISO	LCH	15.99	≥ 0.5	PASS
	MCH	15.49	≥ 0.5	PASS
	HCH	15.51	≥ 0.5	PASS
11N40SISO	LCH	35.20	≥ 0.5	PASS
	MCH	35.24	≥ 0.5	PASS
	HCH	35.21	≥ 0.5	PASS

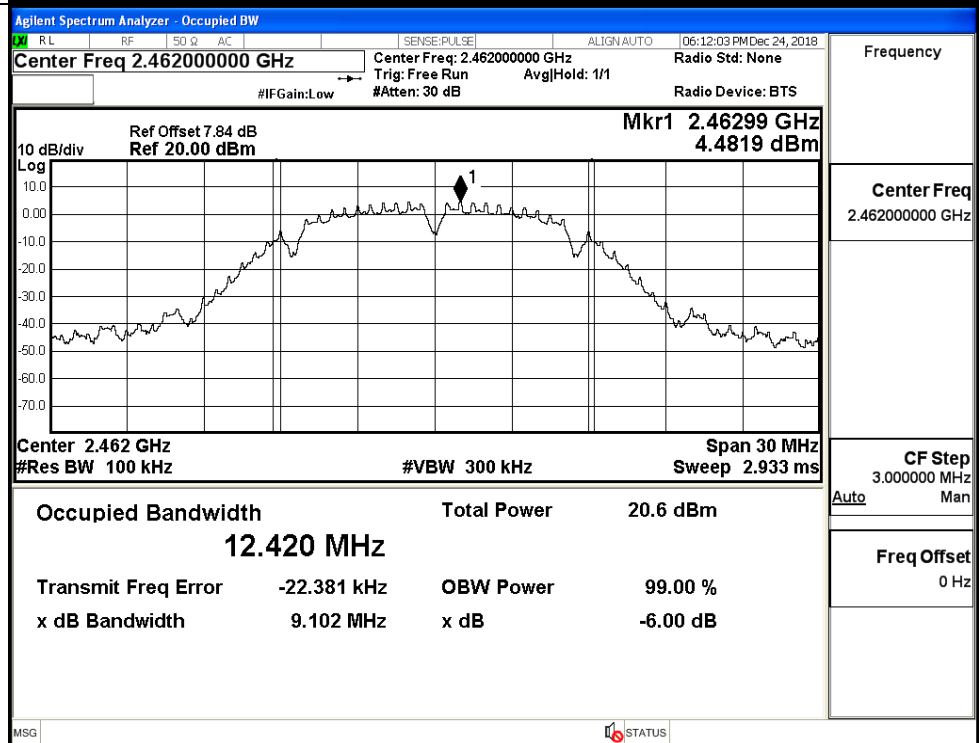
Test Graphs



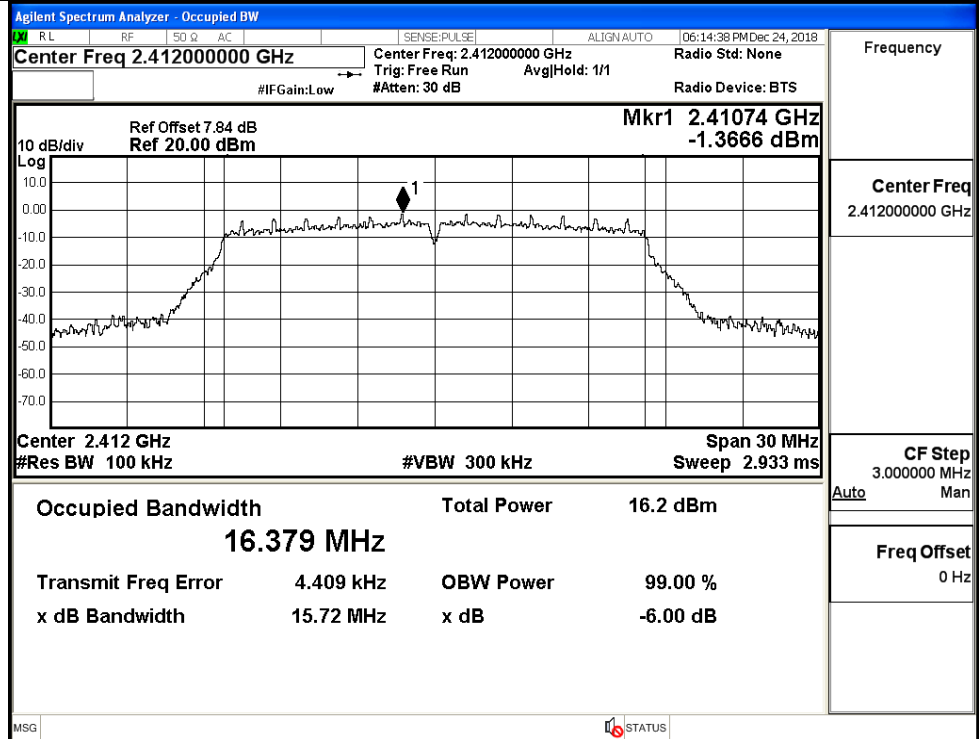
11B/MCH



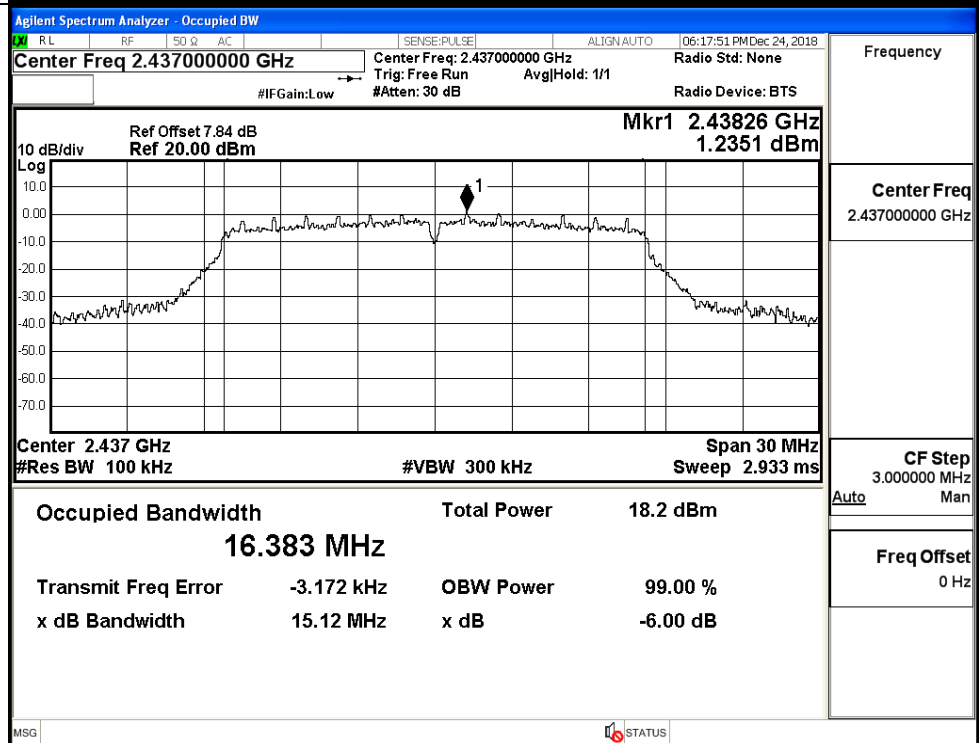
11B/HCH



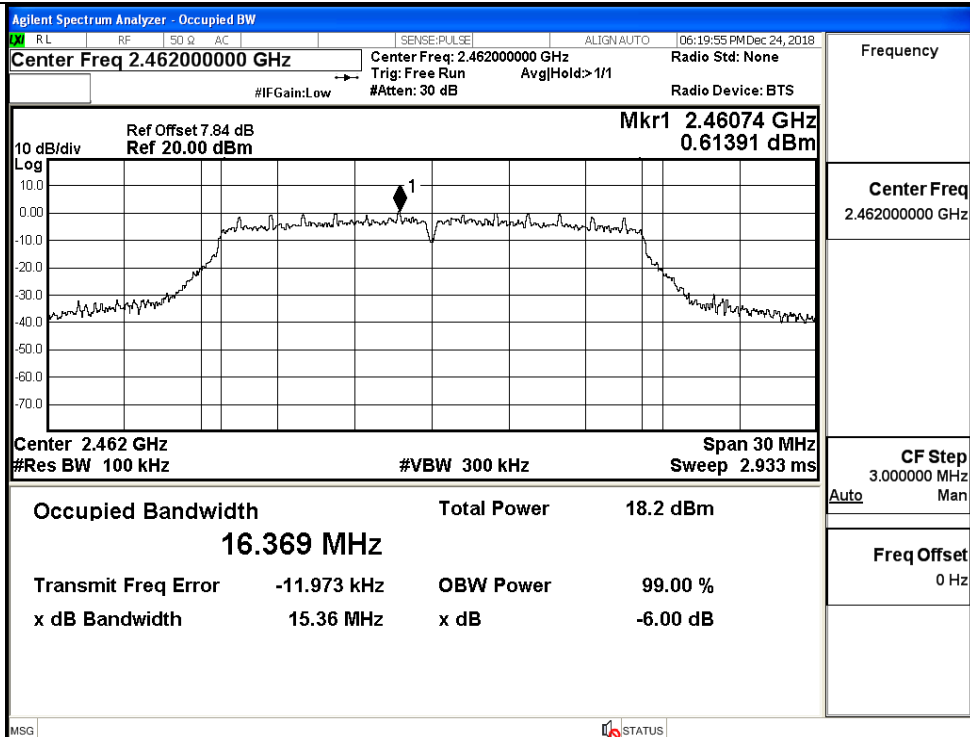
11G/LCH



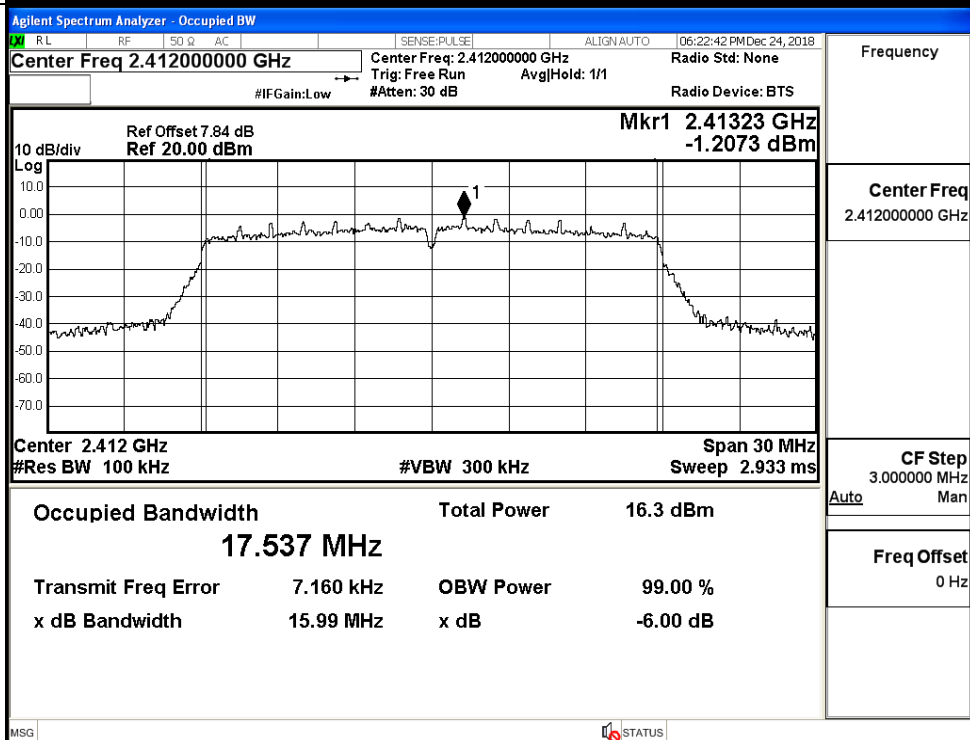
11G/MCH



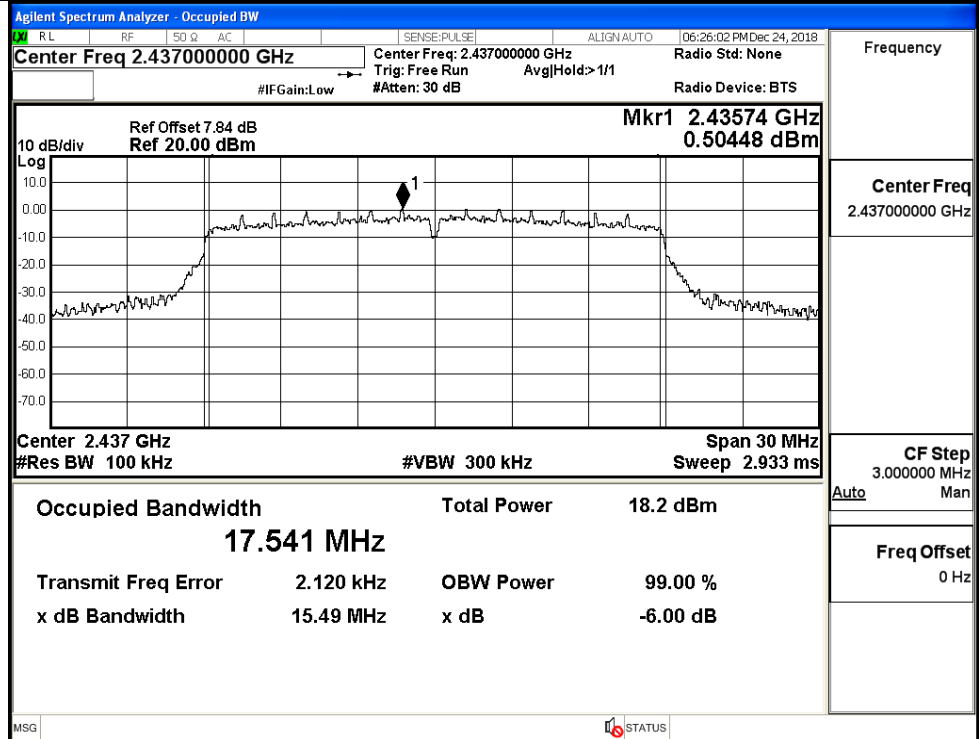
11G/HCH



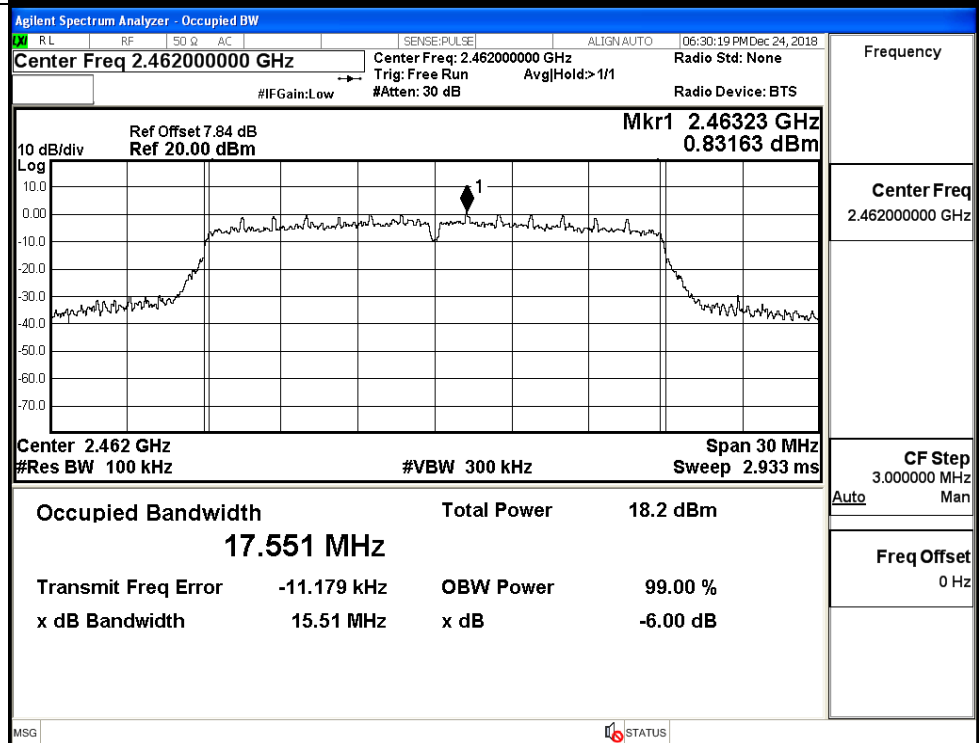
11N20SISO/LCH



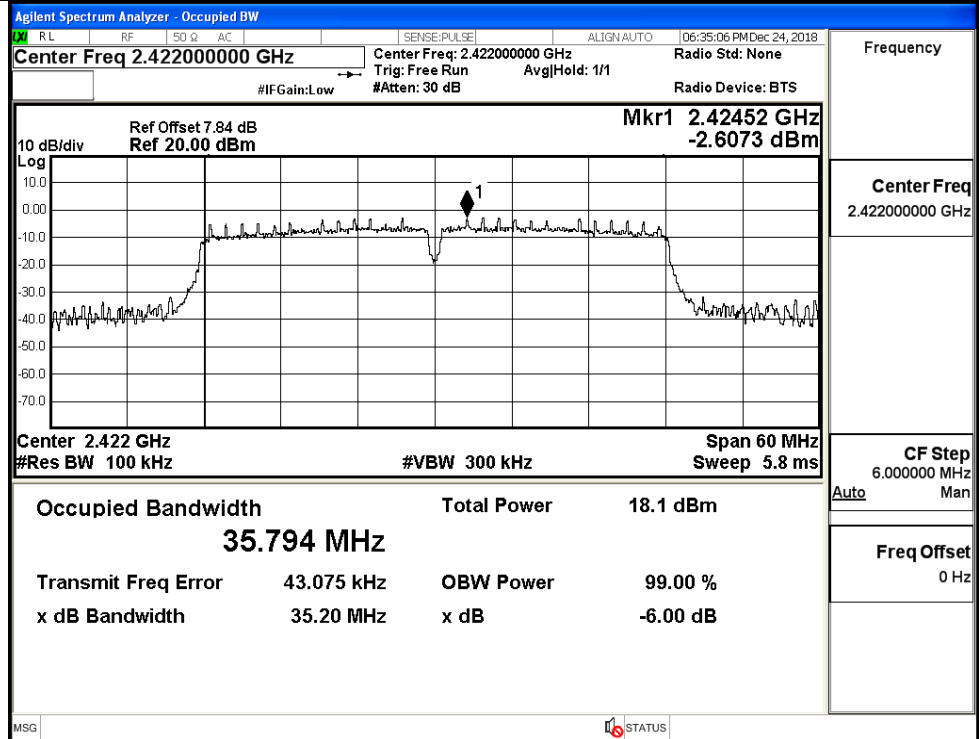
11N20SISO/MCH



11N20SISO/HCH



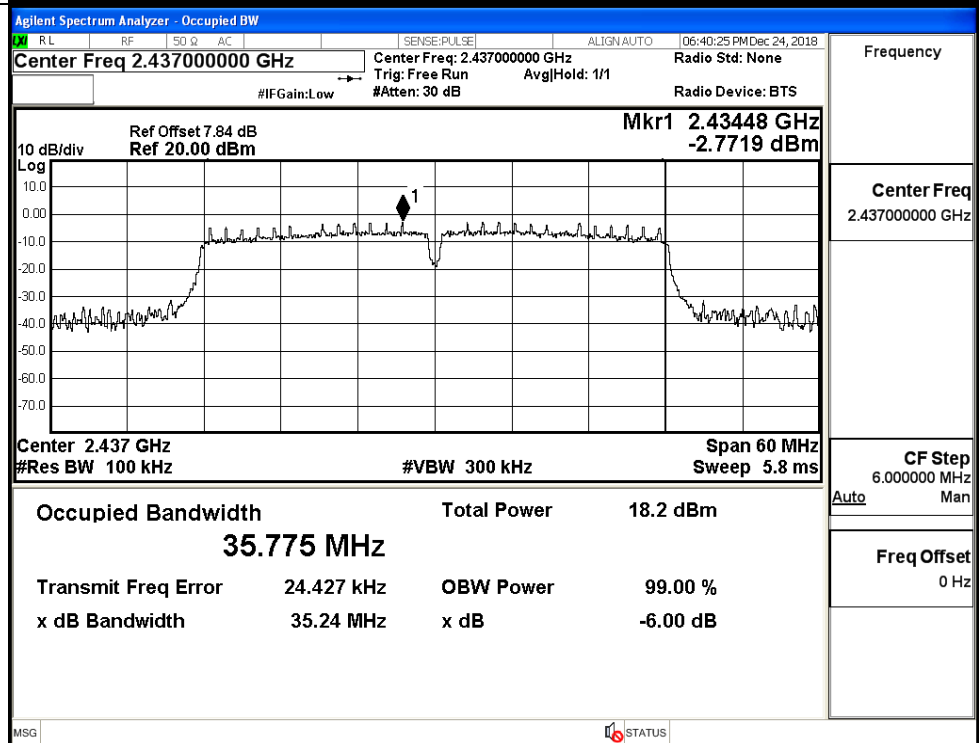
11N40SISO/LCH



Frequency

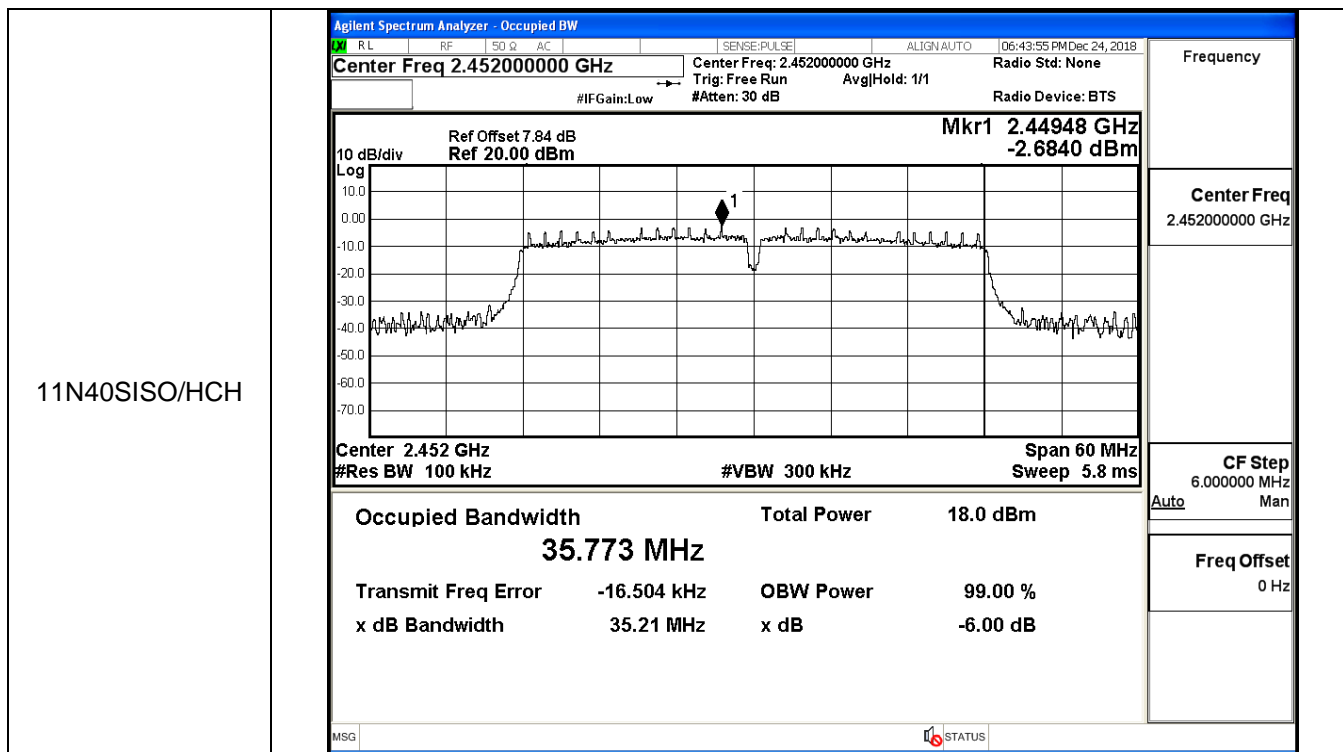
Center Freq
2.422000000 GHzCF Step
6.000000 MHz
Auto ManFreq Offset
0 Hz

11N40SISO/MCH



Frequency

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

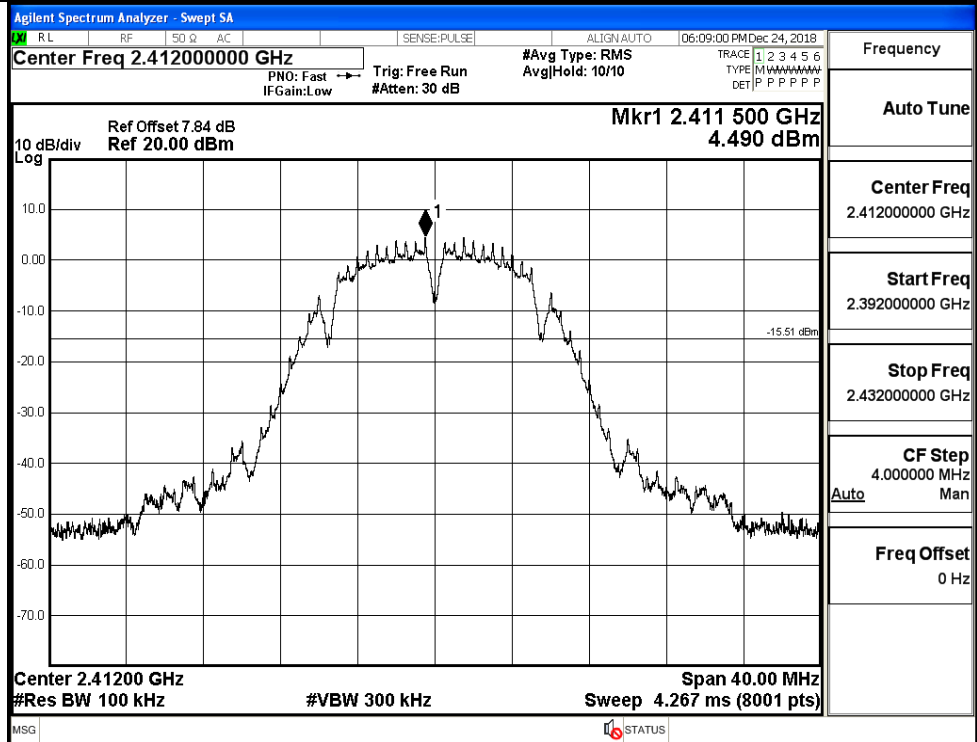


C.5 RF Conducted Spurious Emissions

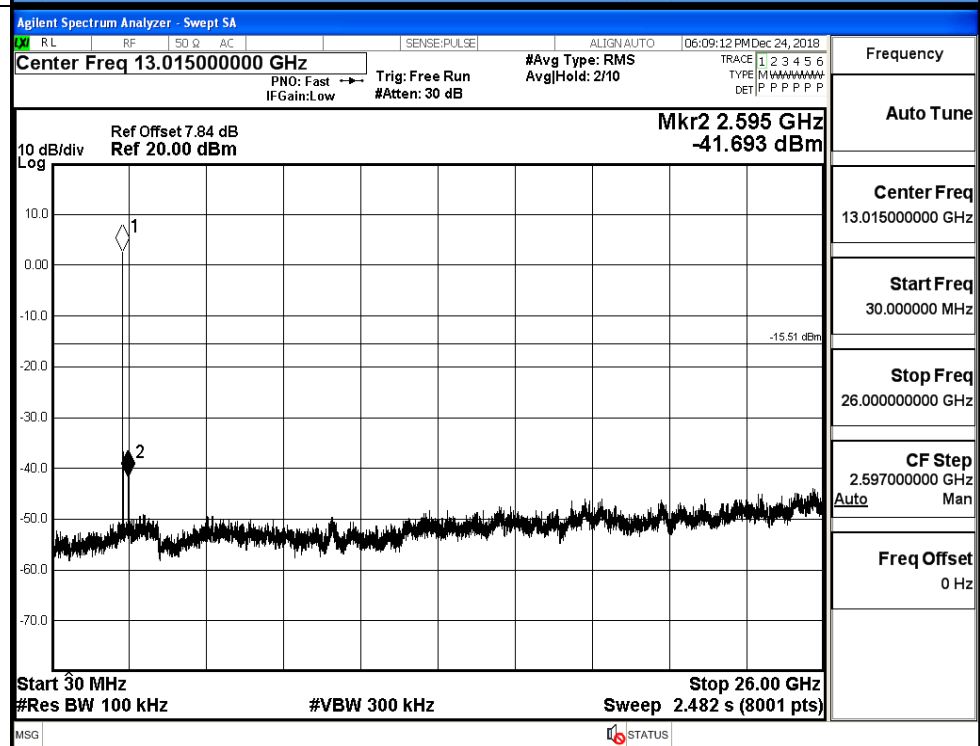
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
11B	LCH	4.49	-41.693	-15.510	PASS
	MCH	4.389	-43.543	-15.611	PASS
	HCH	4.531	-44.394	-15.469	PASS
11G	LCH	-0.705	-43.945	-20.705	PASS
	MCH	1.162	-44.243	-18.838	PASS
	HCH	1.186	-44.122	-18.814	PASS
11N20 SISO	LCH	-0.729	-44.412	-20.729	PASS
	MCH	1.355	-43.139	-18.645	PASS
	HCH	0.916	-44.720	-19.084	PASS
11N40 SISO	LCH	-2.942	-43.253	-22.942	PASS
	MCH	-2.702	-44.021	-22.702	PASS
	HCH	-2.59	-44.217	-22.590	PASS

11B_LCH_Graphs

Pref/11B/LCH

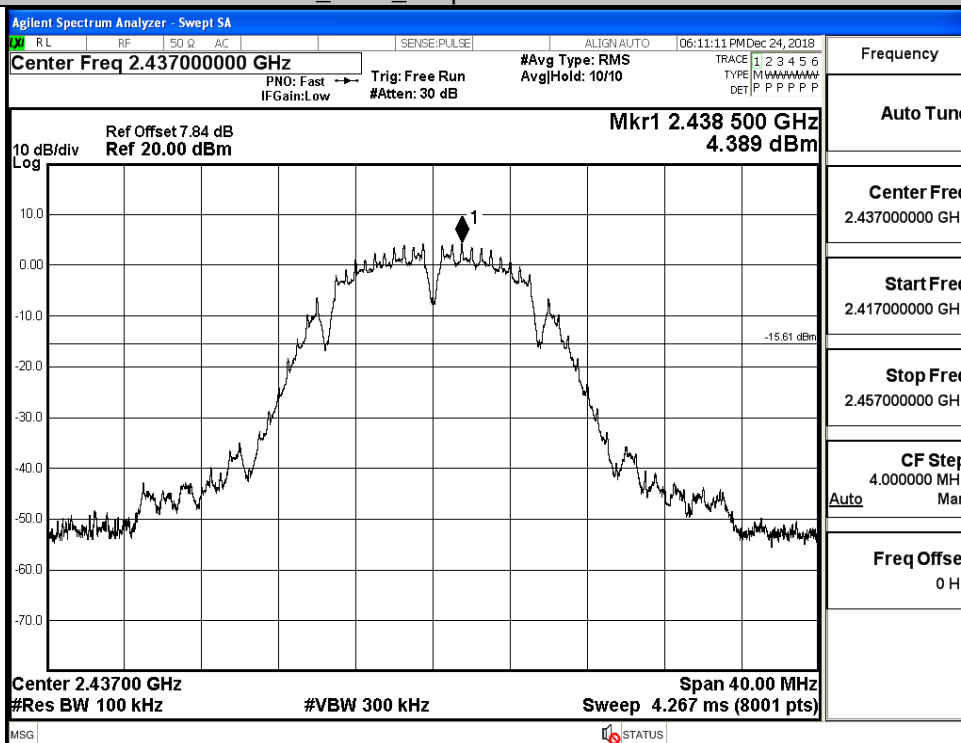


Puw/11B/LCH

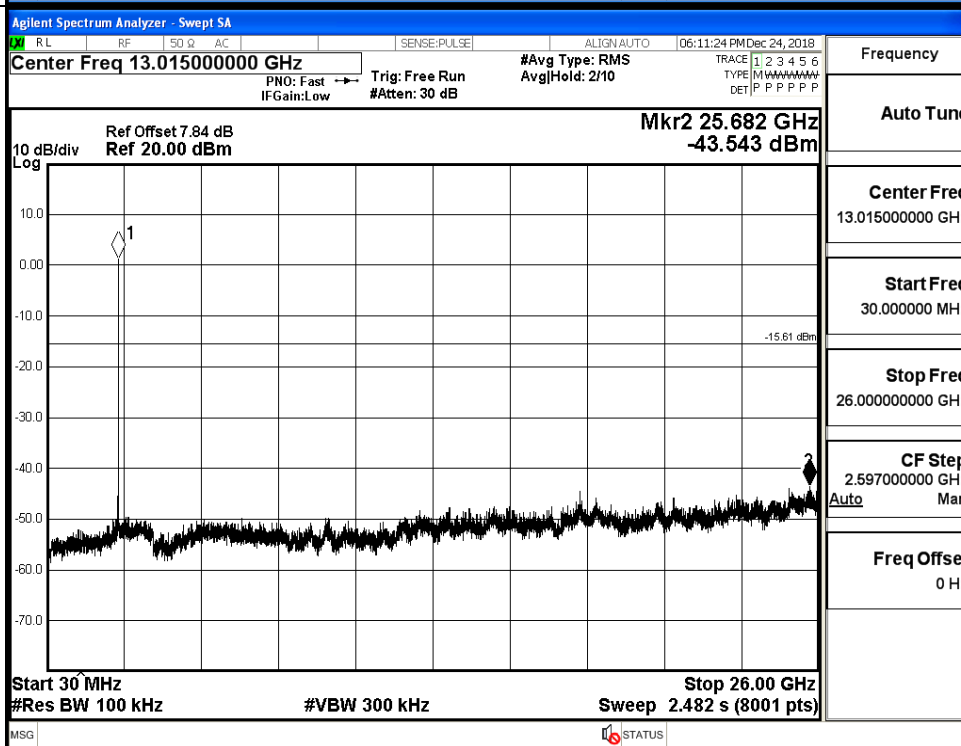


11B_MCH_Graphs

Pref/11B/MCH

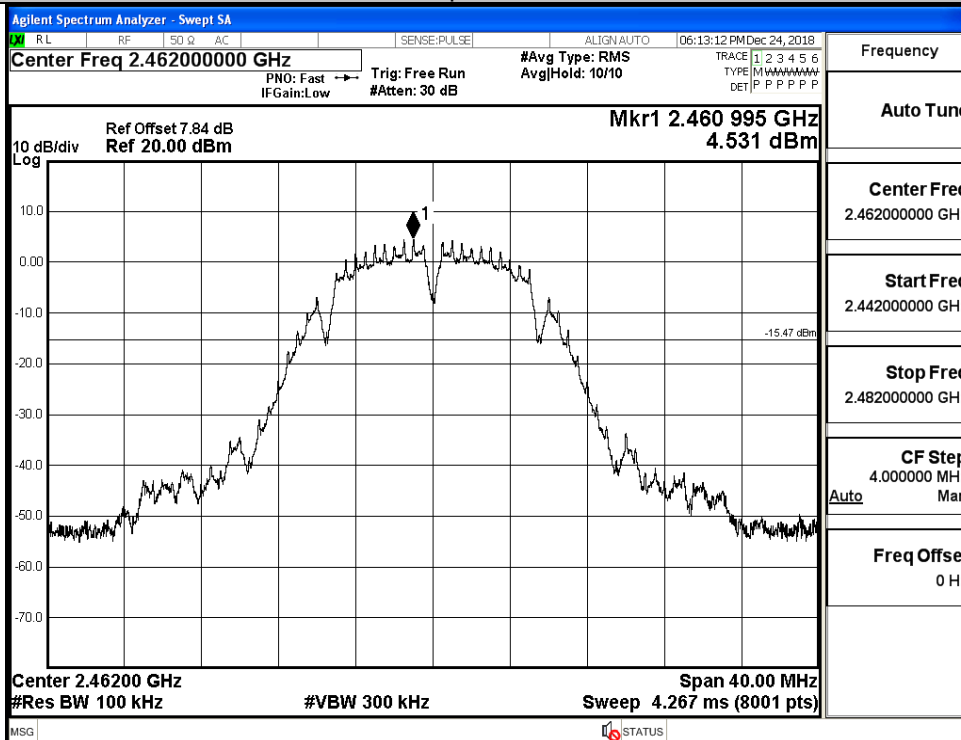


Puw/11B/MCH

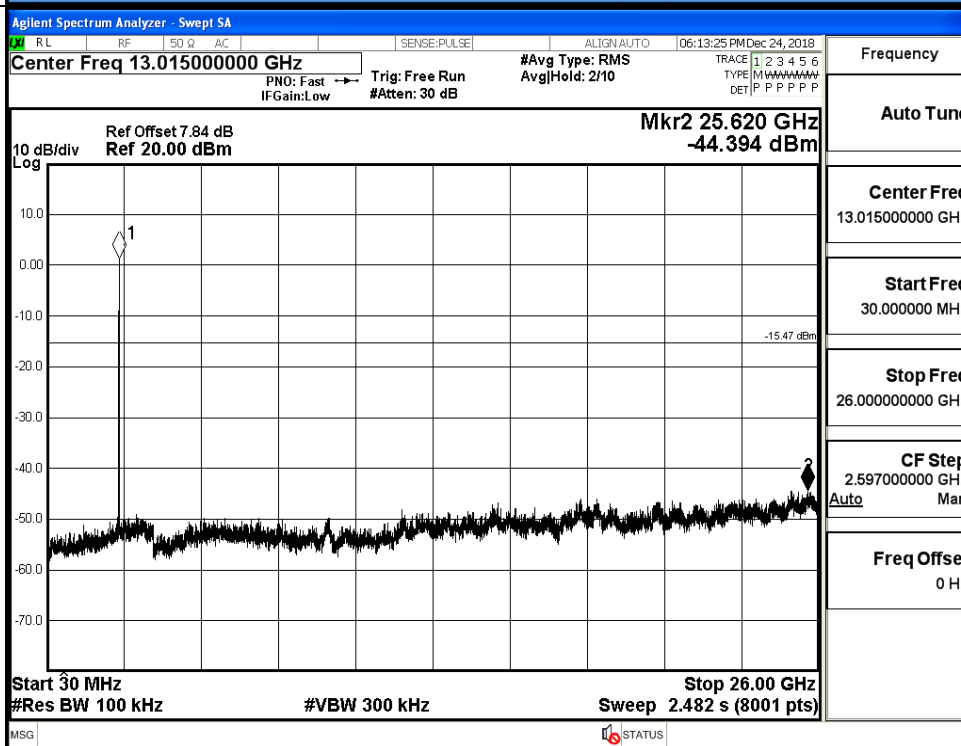


11B_HCH_Graphs

Pref/11B/HCH

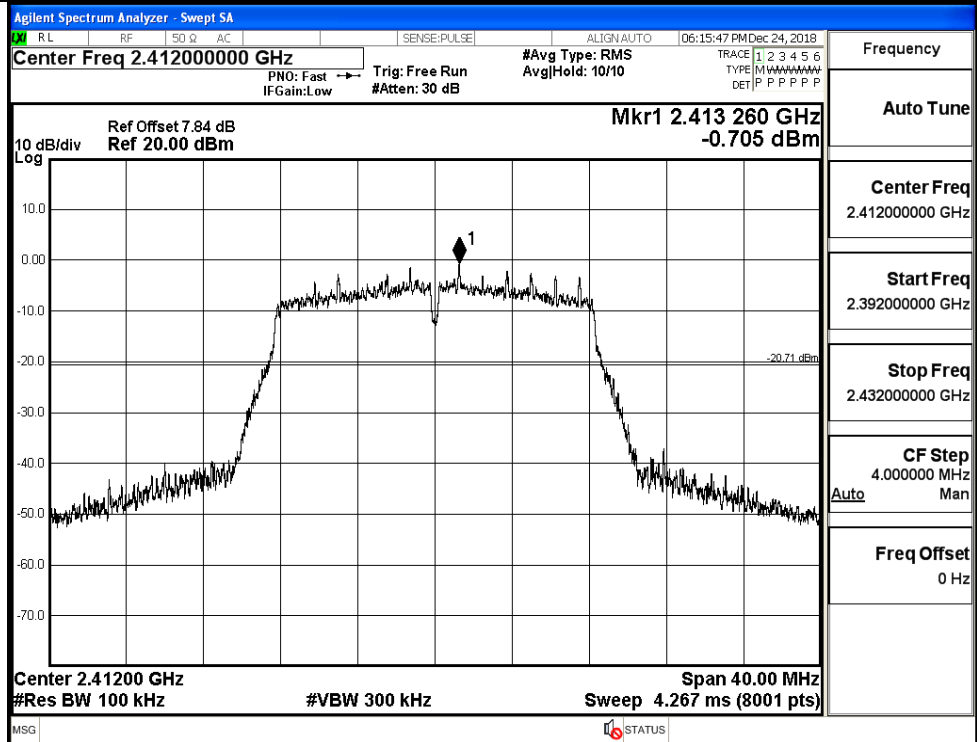


Puw/11B/HCH

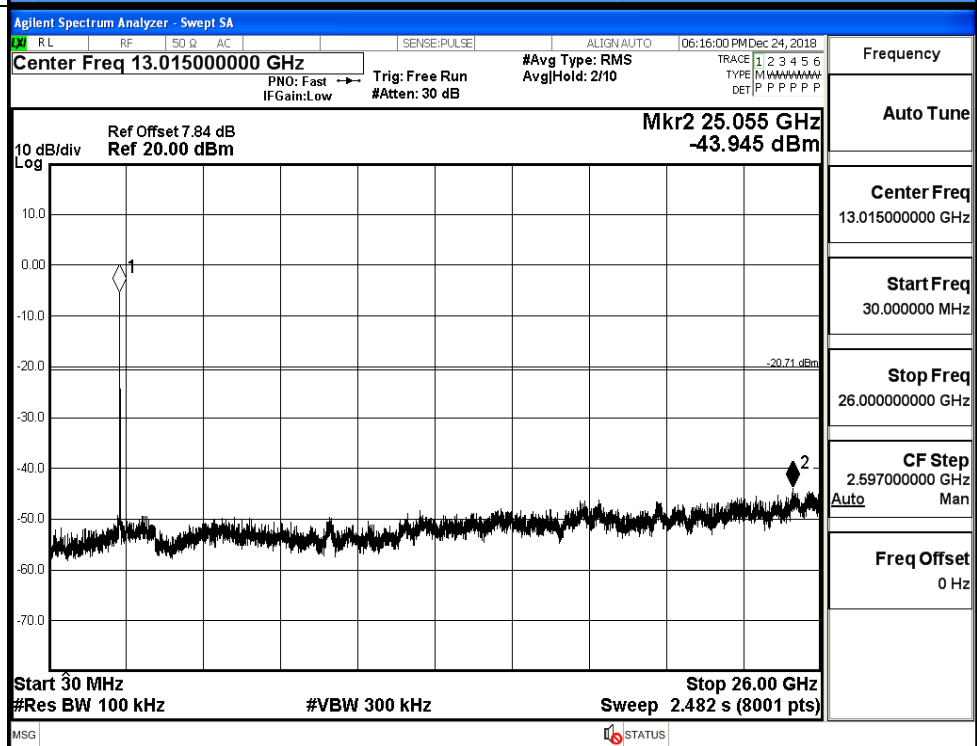


11G_LCH_Graphs

Pref/11G/LCH

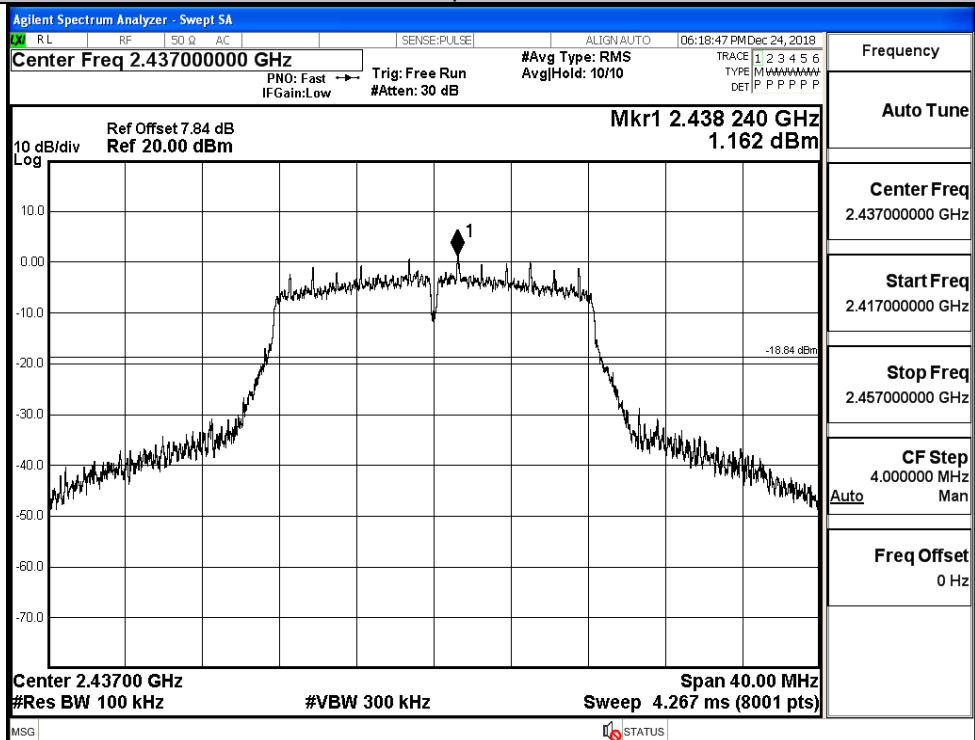


Puw/11G/LCH

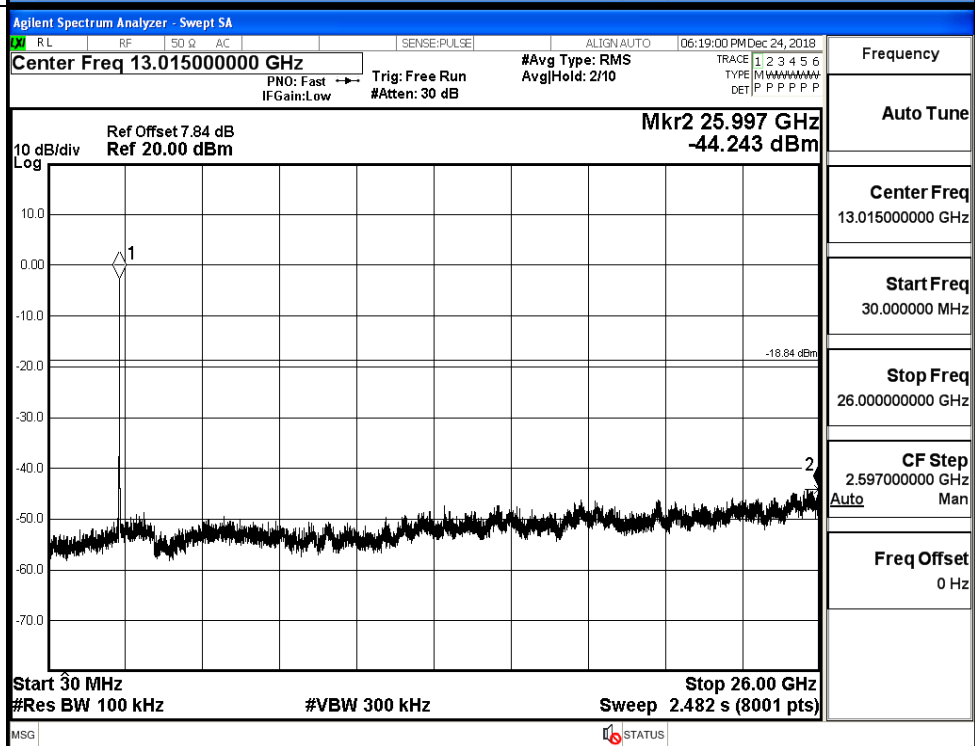


11G_MCH_Graphs

Pref/11G/MCH

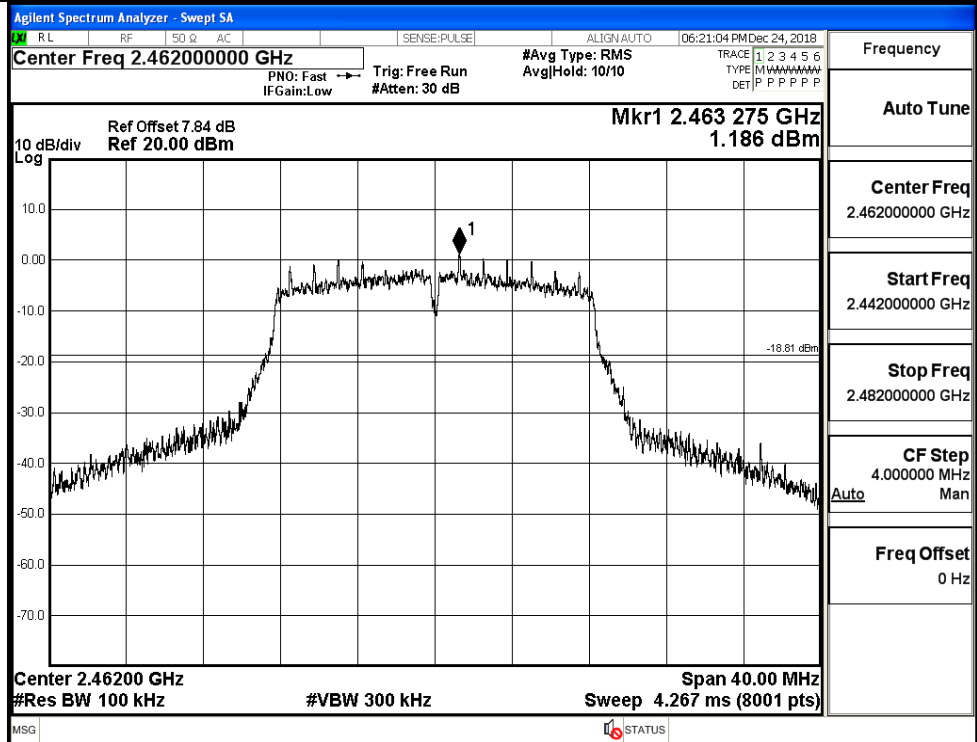


Puw/11G/MCH

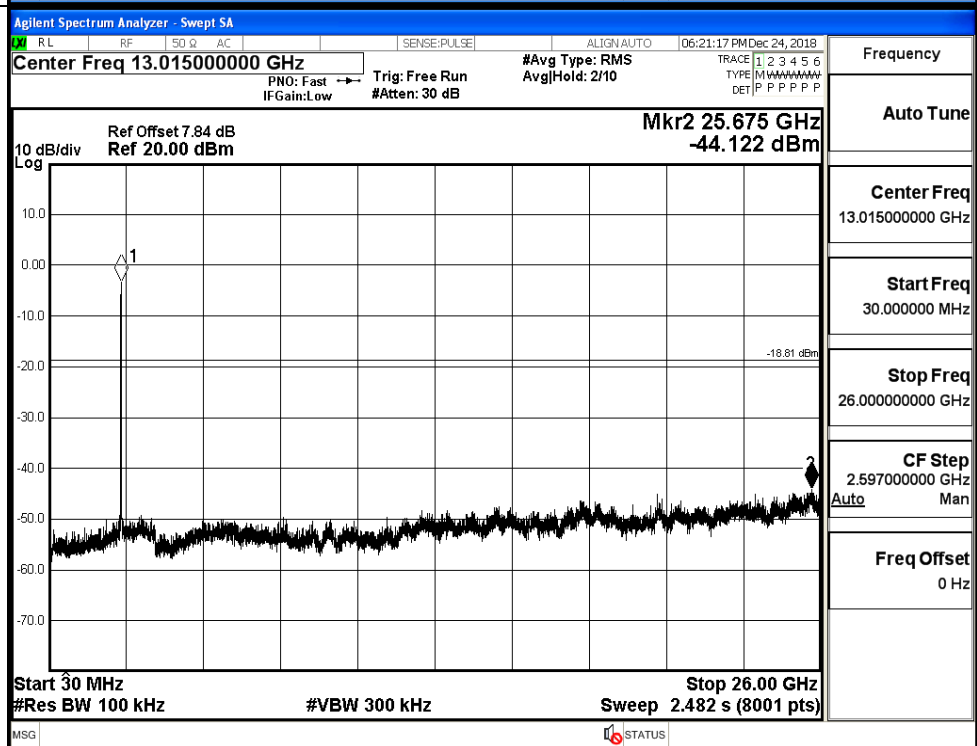


11G_HCH_Graphs

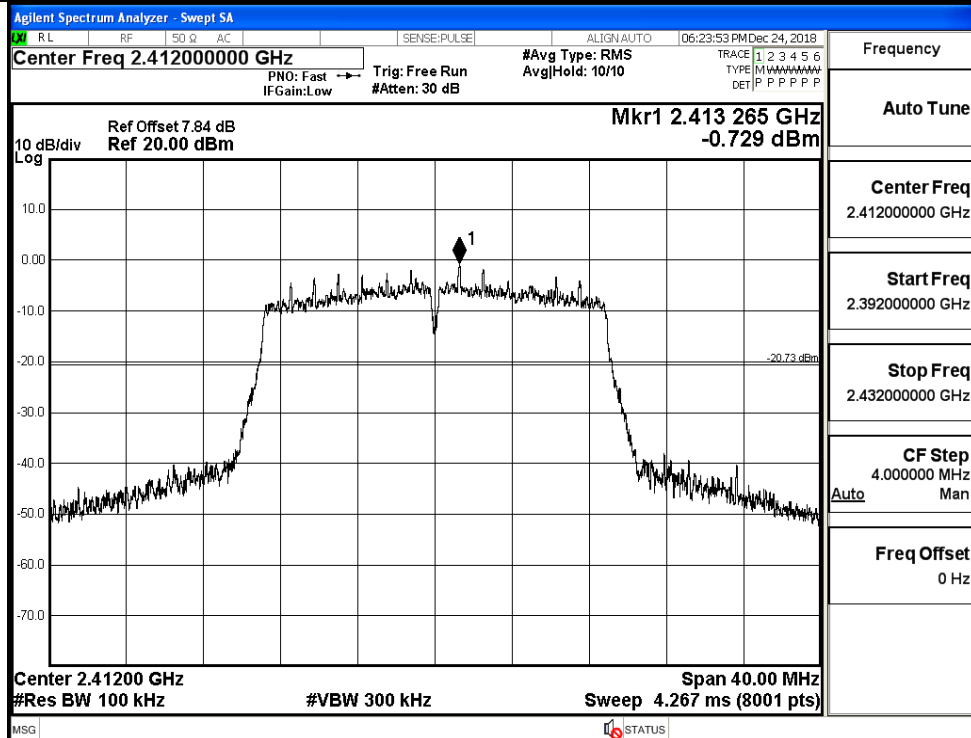
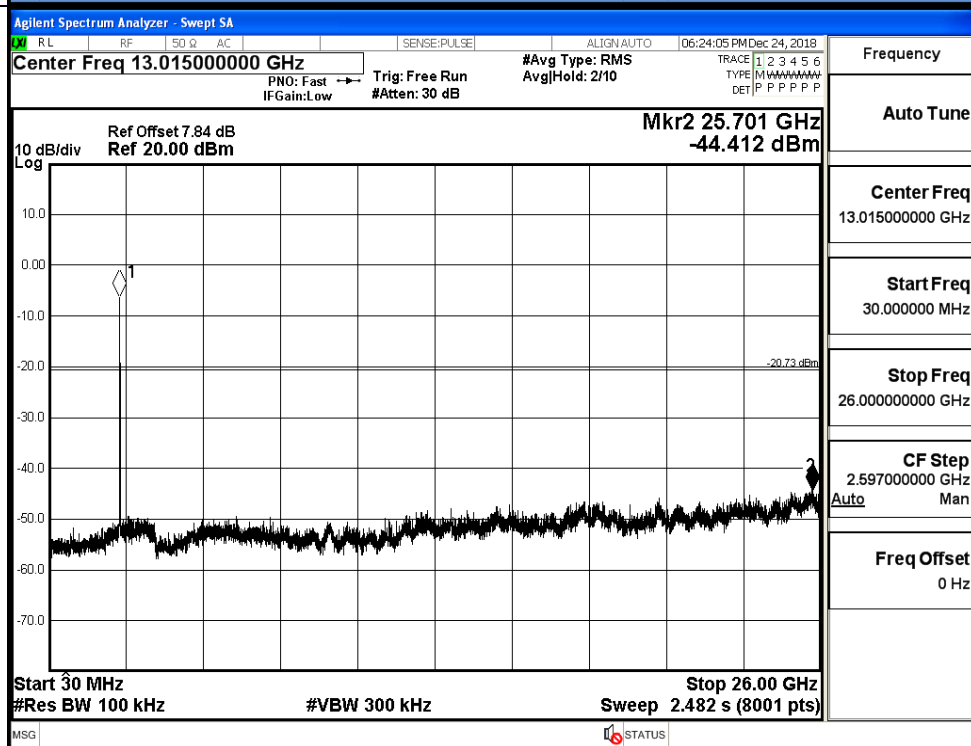
Pref/11G/HCH



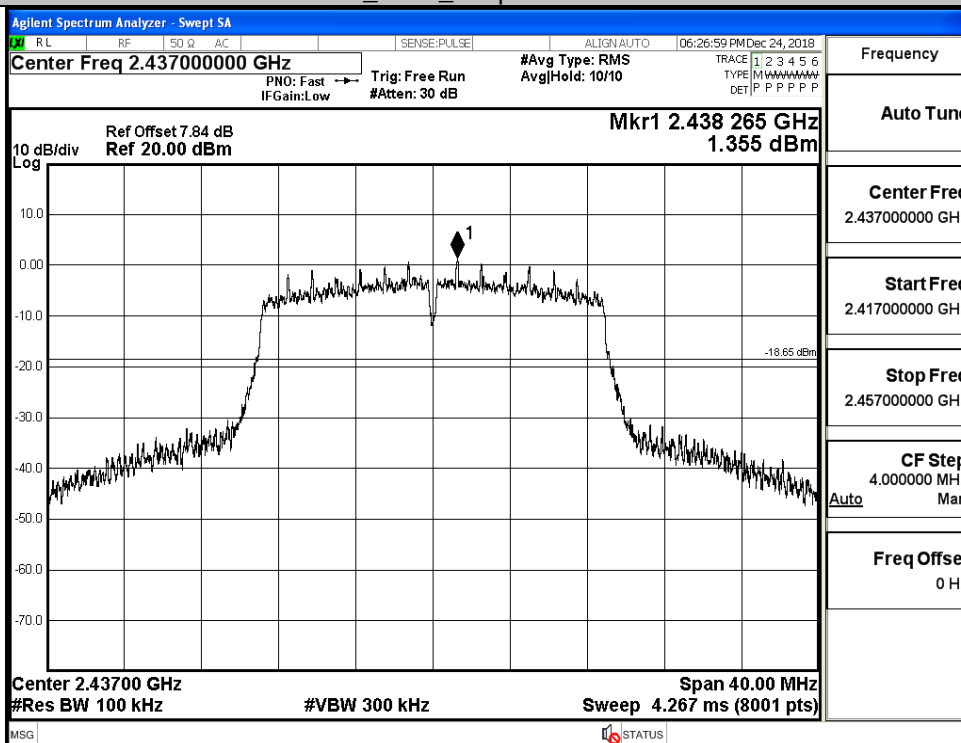
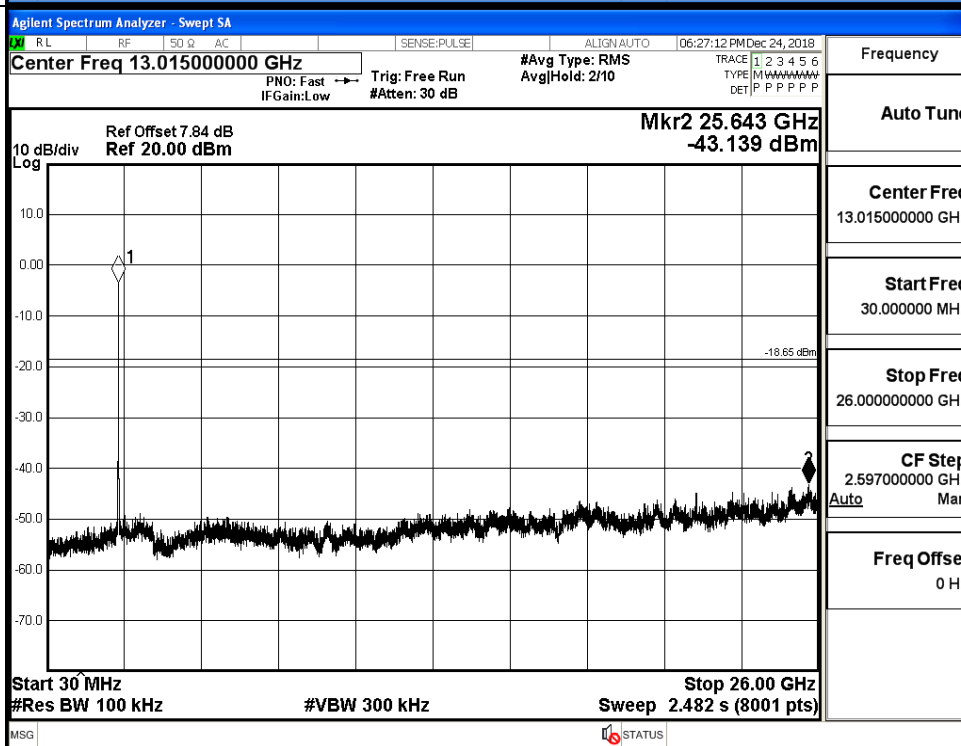
Puw/11G/HCH



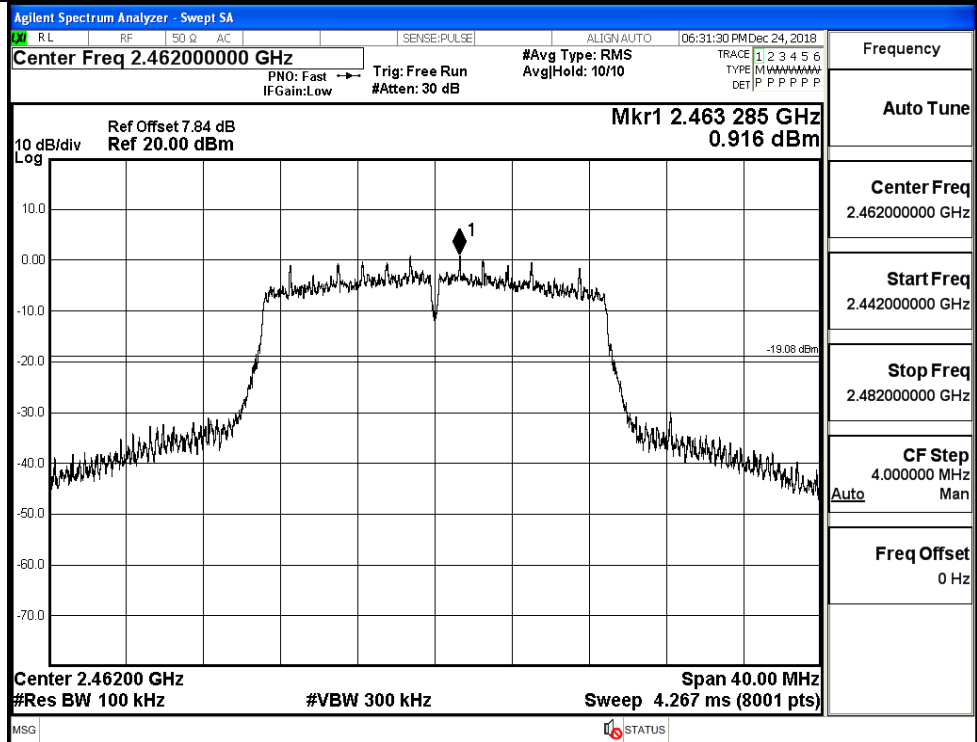
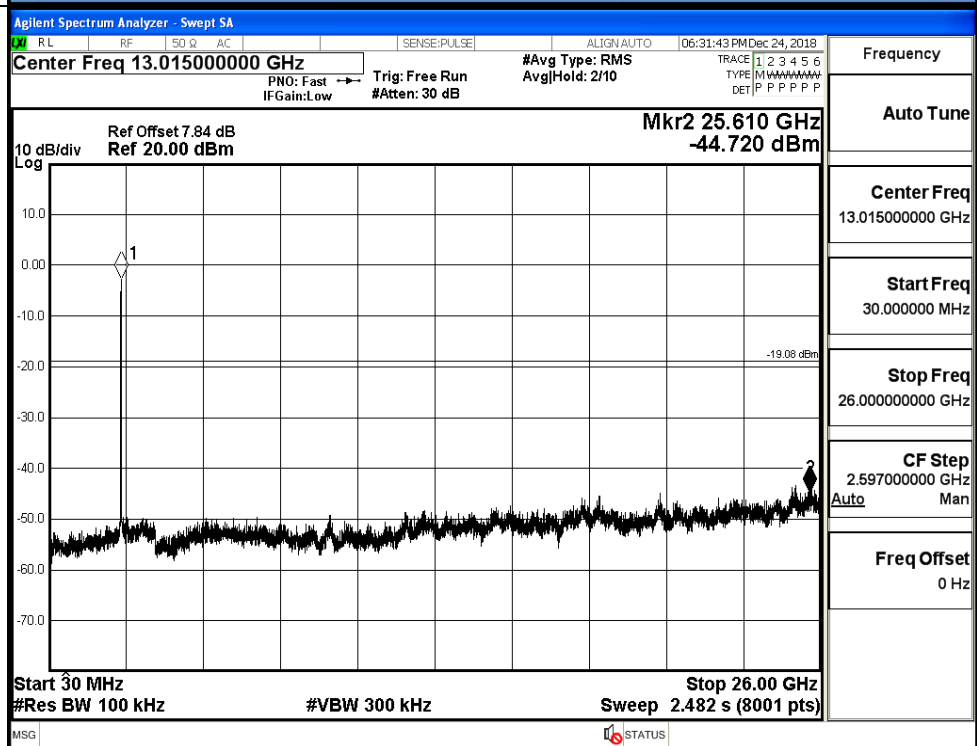
11N20ISO_LCH_Graphs

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

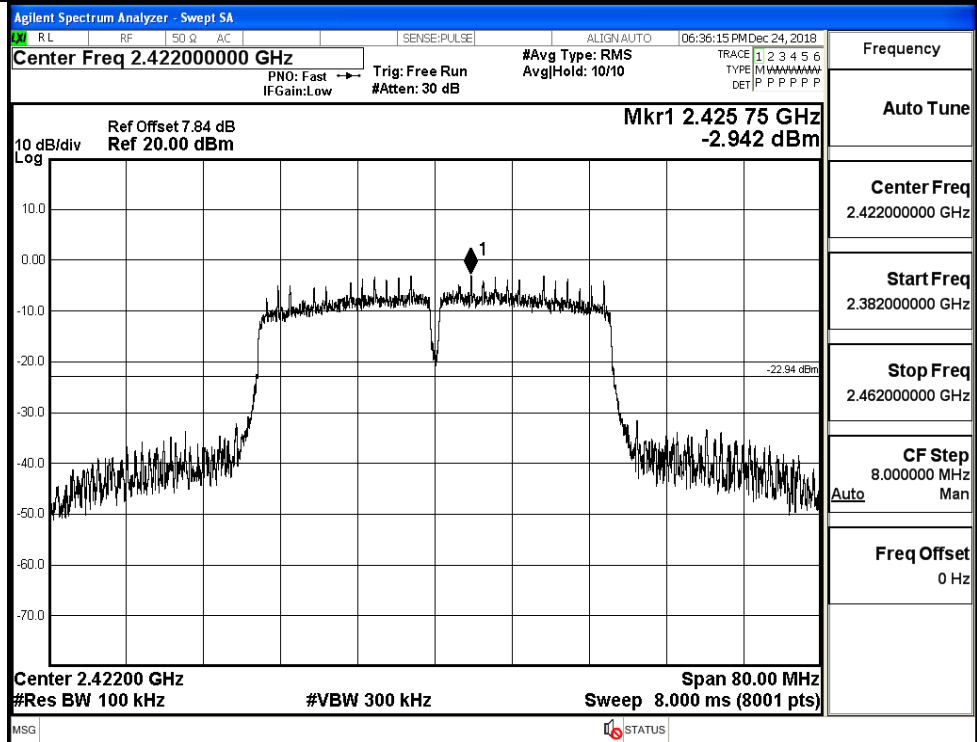
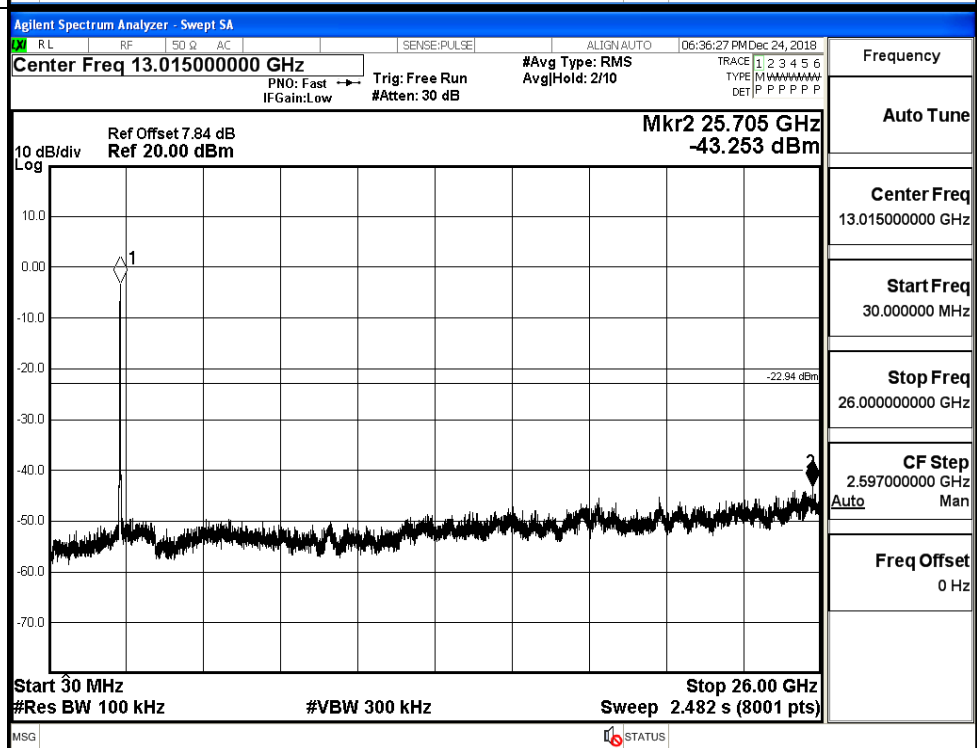
11N20SISO_MCH_Graphs

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

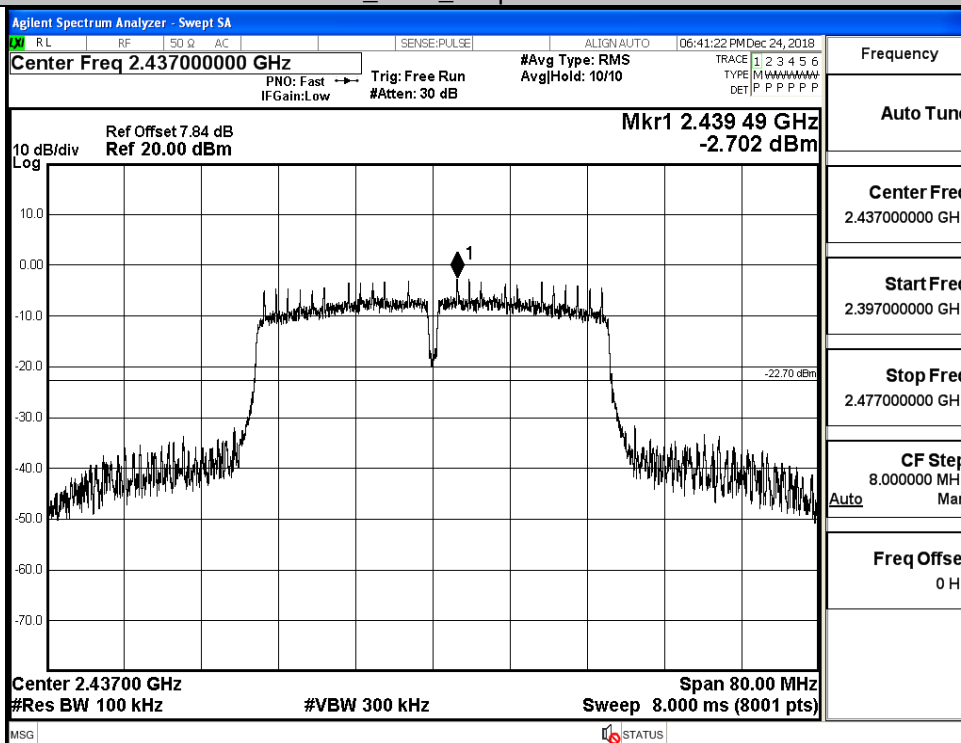
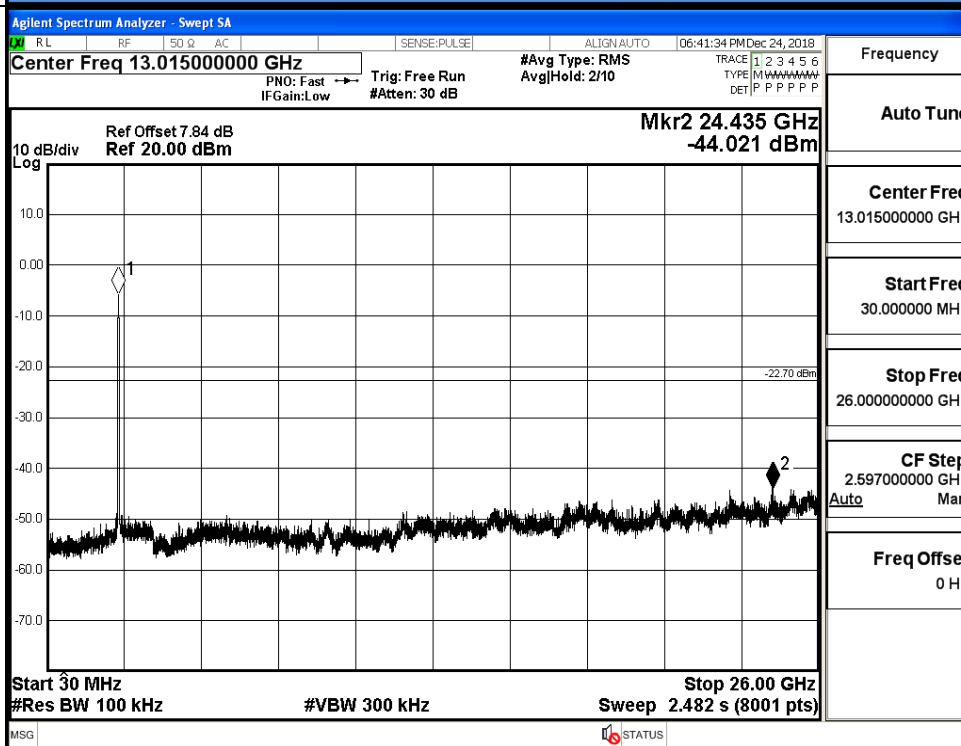
11N20SISO_HCH_Graphs

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

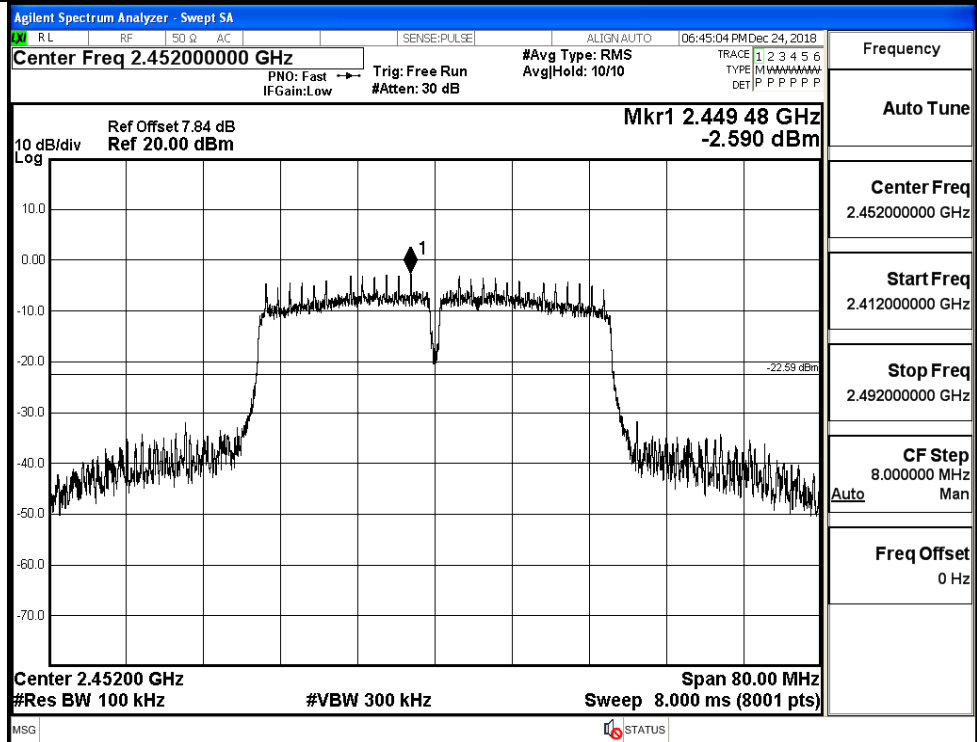
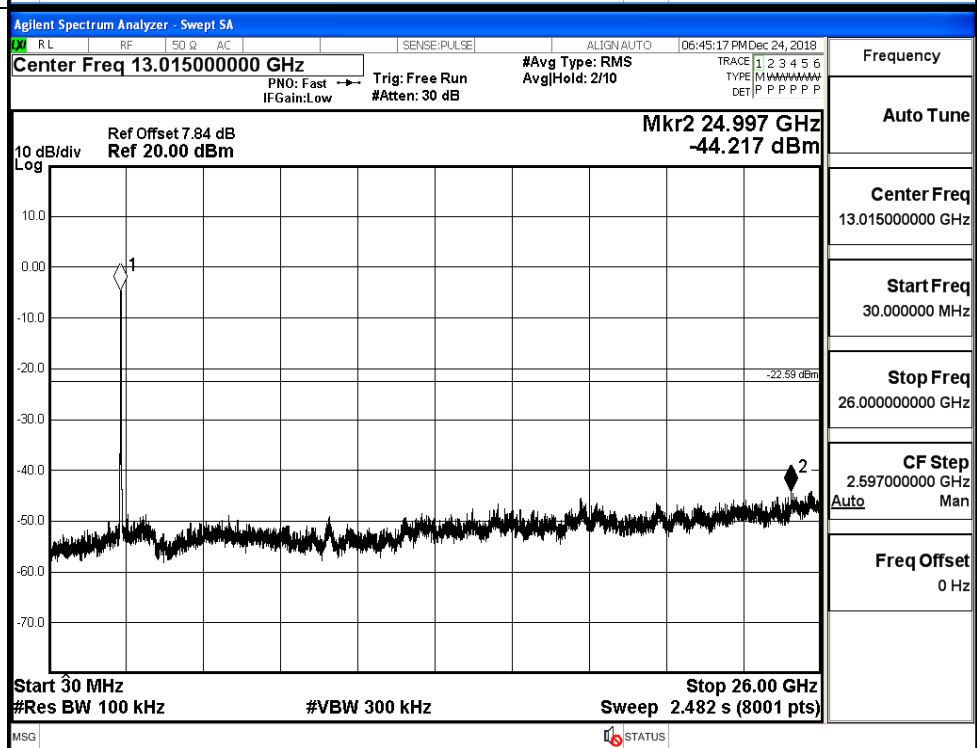
11N40SISO_LCH_Graphs

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

11N40SISO_MCH_Graphs

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

11N40SISO_HCH_Graphs

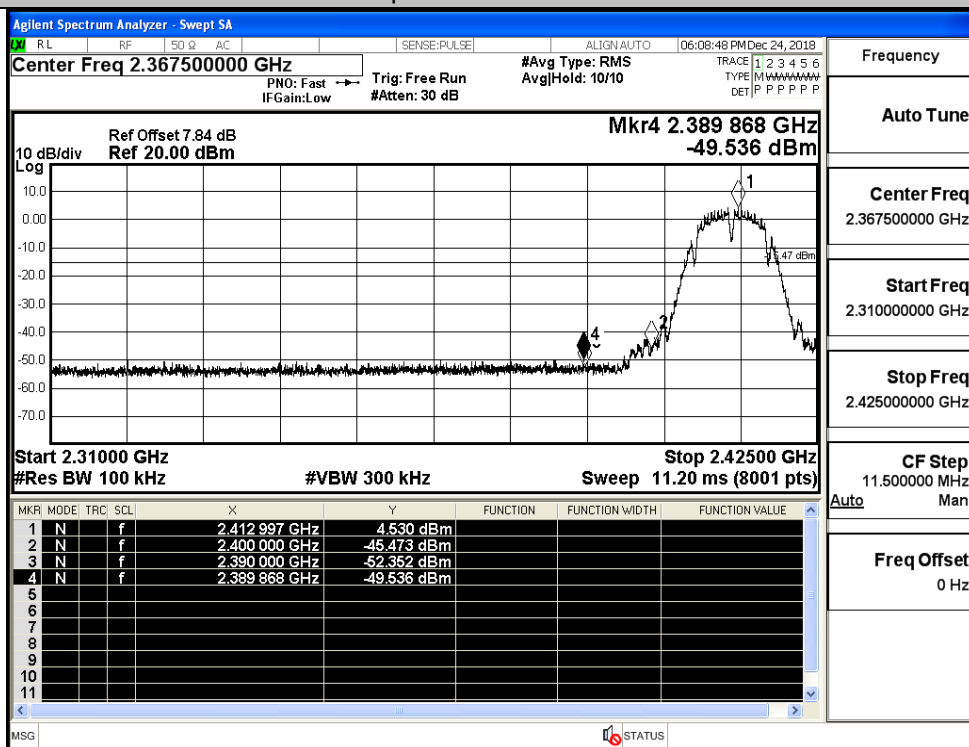
Pref/11N40
SISO/HCHPuw/11N40
SISO/HCH

C.6 Band-edge for RF Conducted Emissions

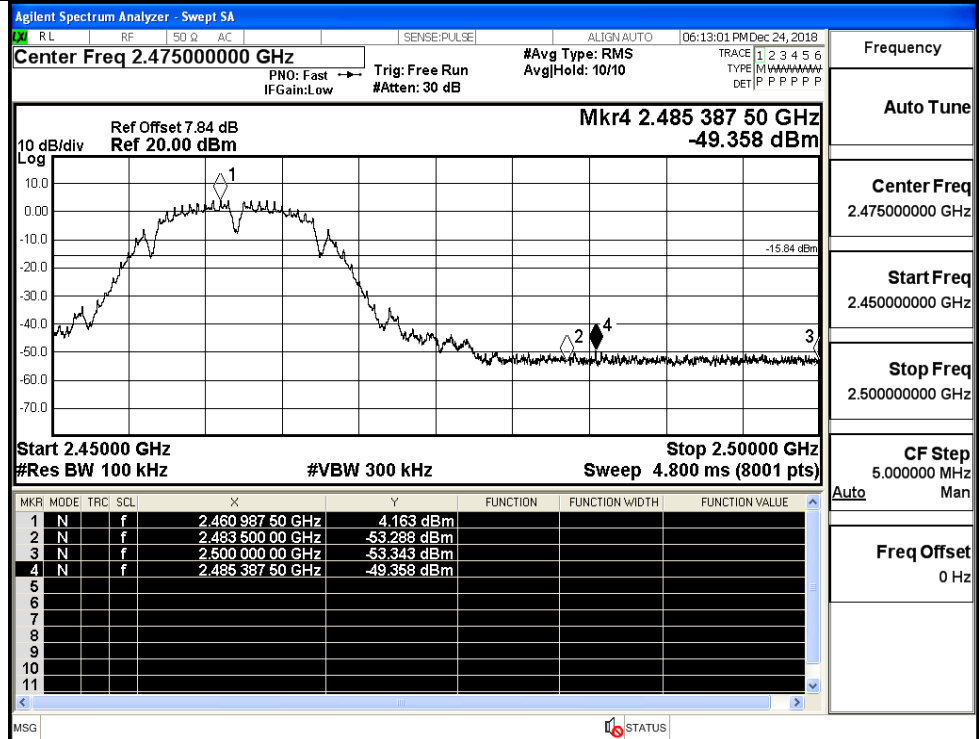
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
11B	LCH	4.530	-49.536	-15.47	PASS
	HCH	4.163	-49.358	-15.84	PASS
11G	LCH	-1.474	-49.369	-21.47	PASS
	HCH	1.497	-45.828	-18.5	PASS
11N20SISO	LCH	-0.632	-49.095	-20.63	PASS
	HCH	1.306	-45.748	-18.69	PASS
11N40SISO	LCH	-2.688	-38.316	-22.69	PASS
	HCH	-2.608	-35.666	-22.61	PASS

Test Graphs

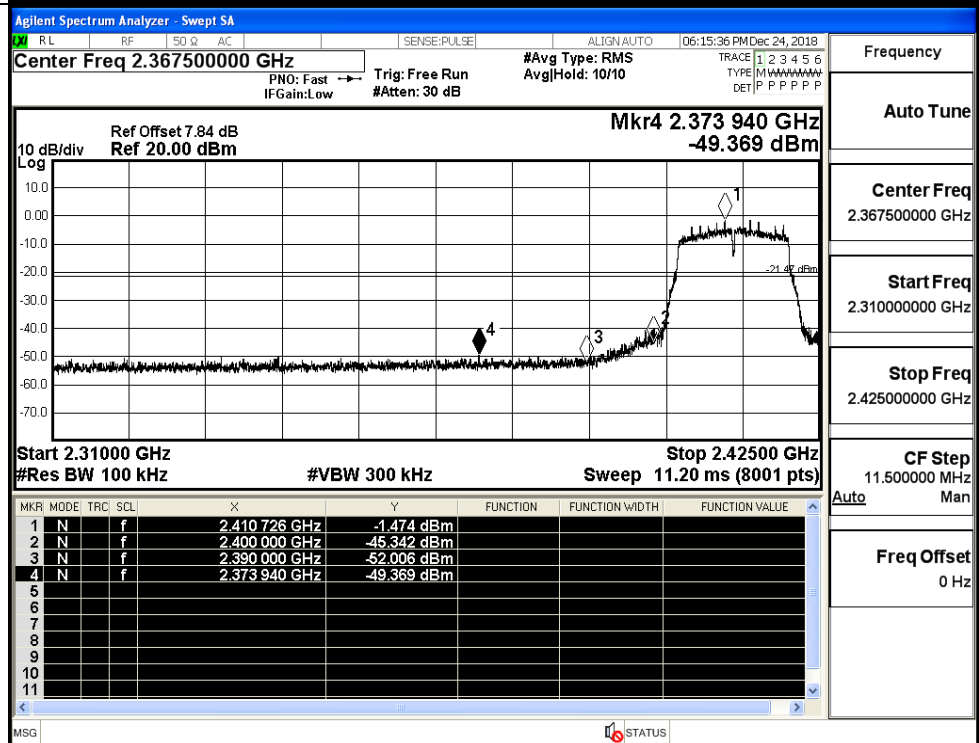
11B/LCH



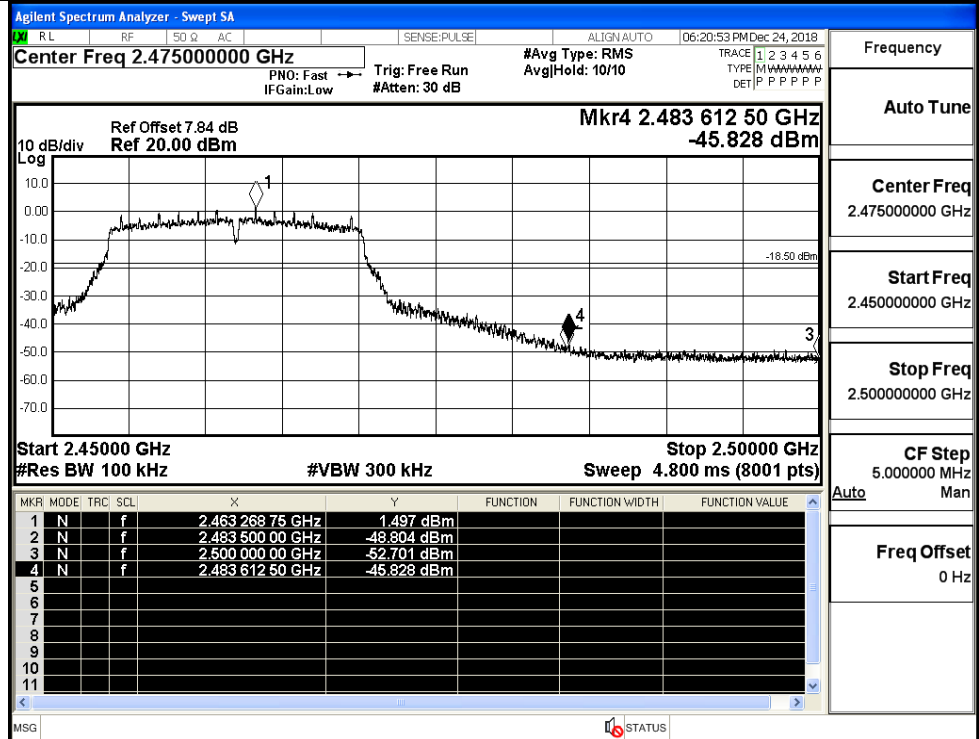
11B/HCH



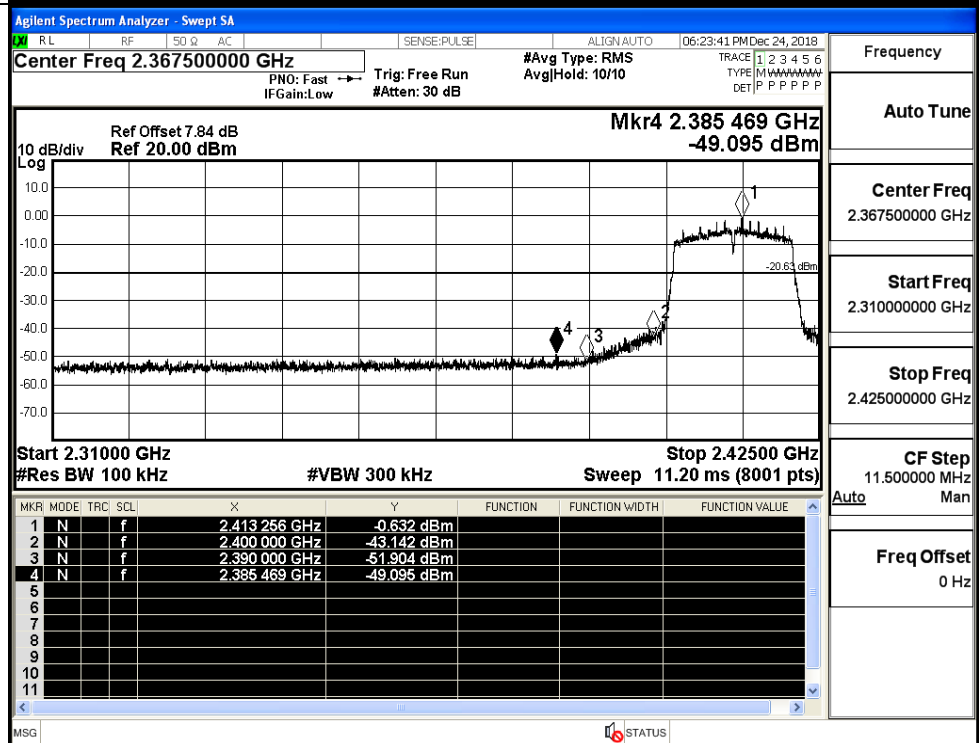
11G/LCH



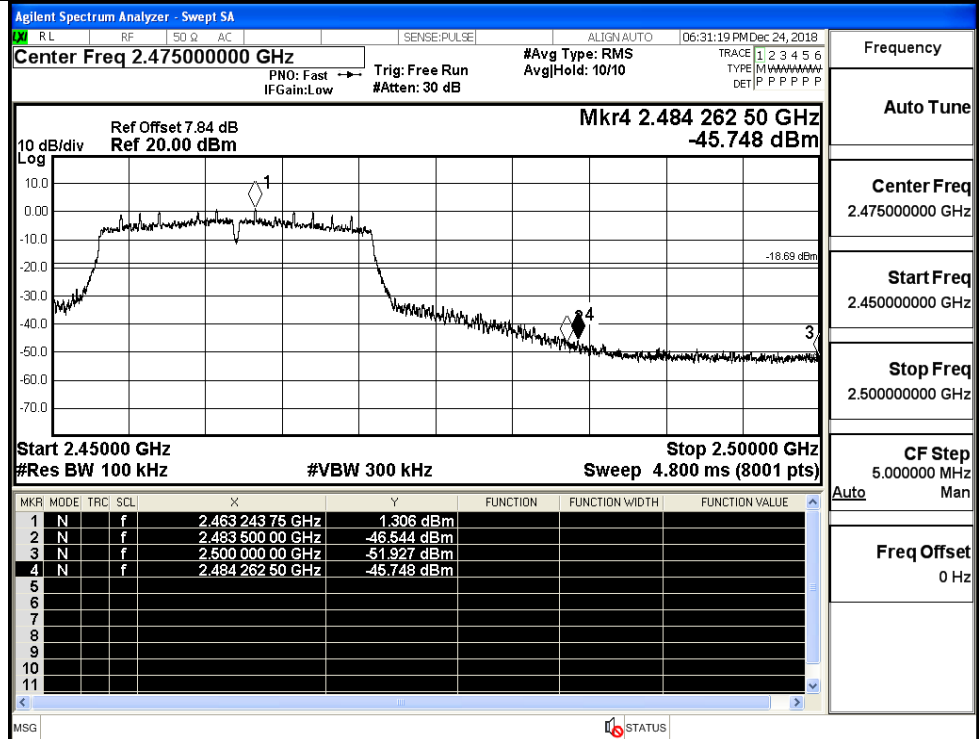
11G/HCH



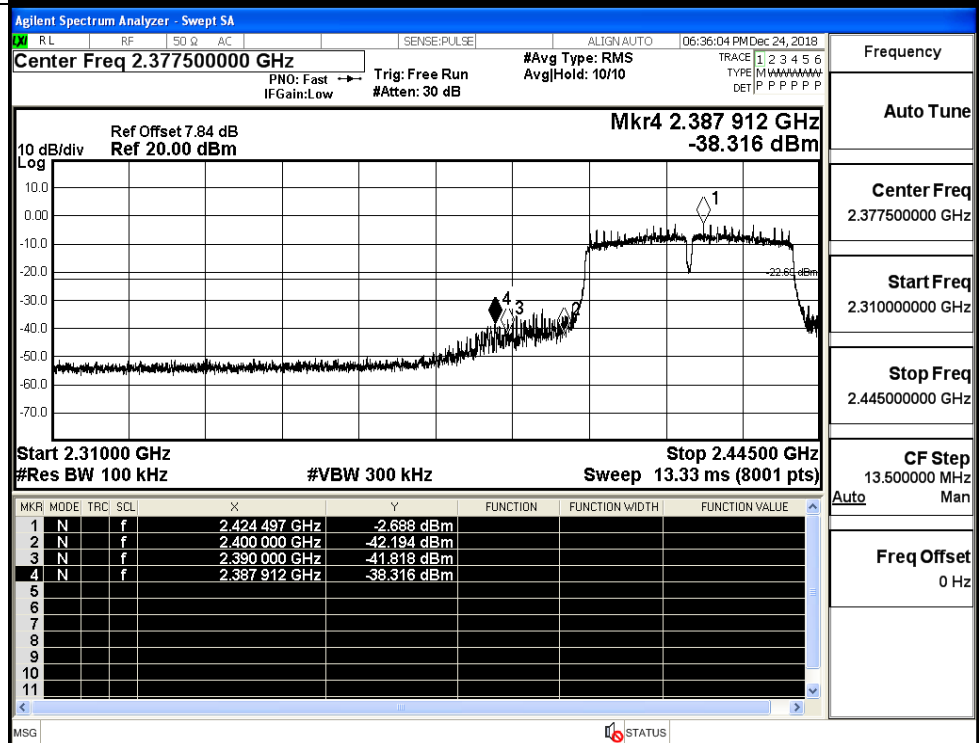
11N20SISO/LCH



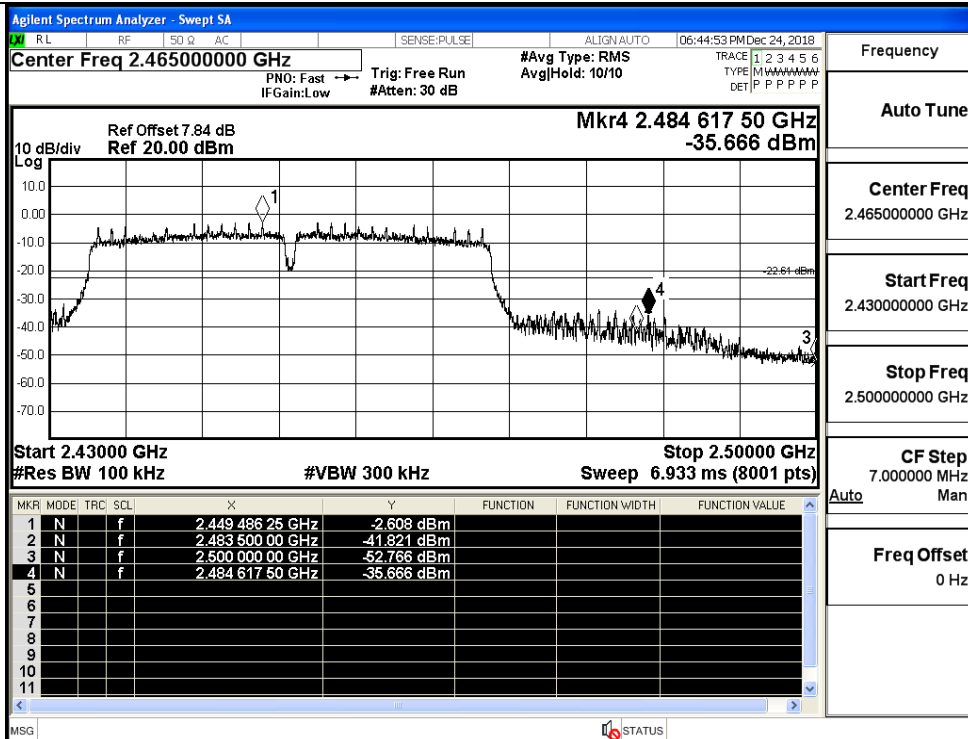
11N20SISO/HCH



11N40SISO/LCH



11N40SISO/HCH

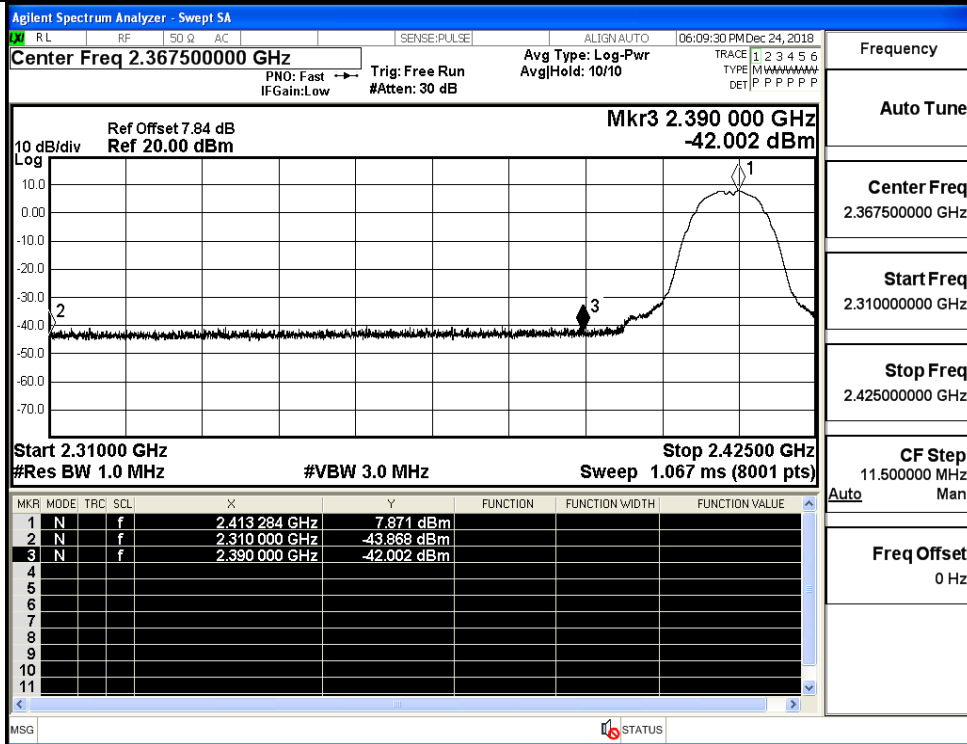


C.7 Restrict-band band-edge measurements

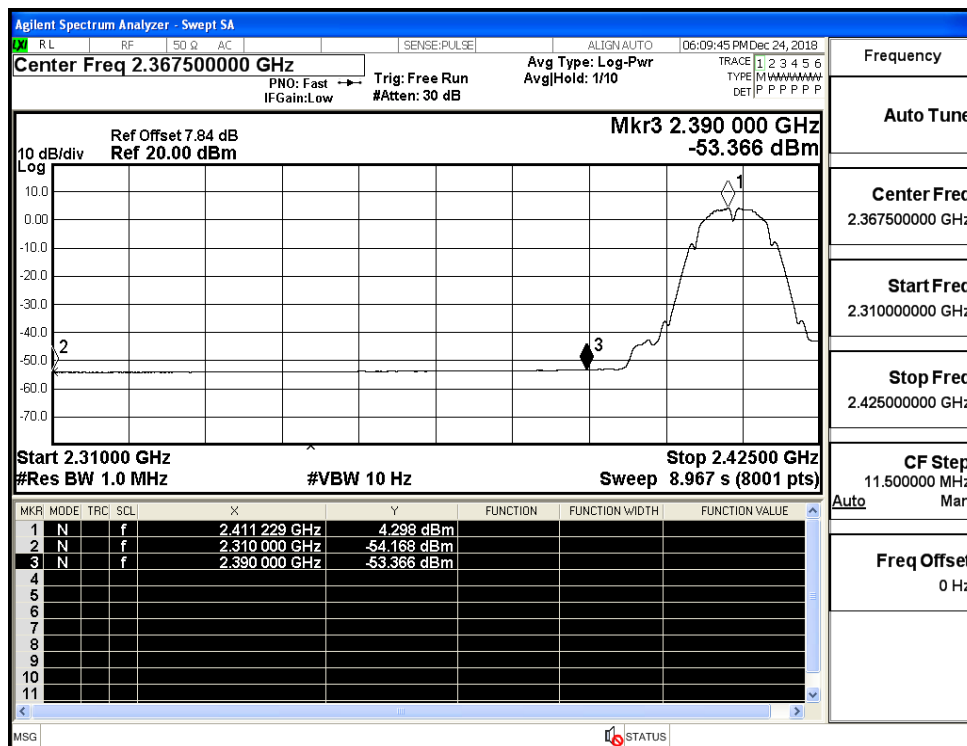
Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
11B	2412	Ant1	2310.0	-43.87	2.0	0	53.39	PEAK	74	PASS
	2412	Ant1	2310.0	-54.17	2.0	0	43.09	AV	54	PASS
	2412	Ant1	2390.0	-42.00	2.0	0	55.26	PEAK	74	PASS
	2412	Ant1	2390.0	-53.37	2.0	0	43.89	AV	54	PASS
	2462	Ant1	2483.5	-42.90	2.0	0	54.36	PEAK	74	PASS
	2462	Ant1	2483.5	-53.00	2.0	0	44.26	AV	54	PASS
	2462	Ant1	2500.0	-42.90	2.0	0	54.36	PEAK	74	PASS
	2462	Ant1	2500.0	-53.30	2.0	0	43.96	AV	54	PASS
11G	2412	Ant1	2310.0	-44.79	2.0	0	52.47	PEAK	74	PASS
	2412	Ant1	2310.0	-54.10	2.0	0	43.16	AV	54	PASS
	2412	Ant1	2390.0	-43.00	2.0	0	54.26	PEAK	74	PASS
	2412	Ant1	2390.0	-52.20	2.0	0	45.06	AV	54	PASS
	2462	Ant1	2483.5	-35.24	2.0	0	62.02	PEAK	74	PASS
	2462	Ant1	2483.5	-49.98	2.0	0	47.28	AV	54	PASS
	2462	Ant1	2500.0	-41.56	2.0	0	55.70	PEAK	74	PASS
	2462	Ant1	2500.0	-52.42	2.0	0	44.84	AV	54	PASS
11N20 SISO	2412	Ant1	2310.0	-42.55	2.0	0	54.71	PEAK	74	PASS
	2412	Ant1	2310.0	-54.07	2.0	0	43.19	AV	54	PASS
	2412	Ant1	2390.0	-41.84	2.0	0	55.42	PEAK	74	PASS
	2412	Ant1	2390.0	-51.87	2.0	0	45.39	AV	54	PASS
	2462	Ant1	2483.5	-26.37	2.0	0	70.89	PEAK	74	PASS
	2462	Ant1	2483.5	-48.91	2.0	0	48.34	AV	54	PASS
	2462	Ant1	2500.0	-40.88	2.0	0	56.38	PEAK	74	PASS
	2462	Ant1	2500.0	-52.37	2.0	0	44.88	AV	54	PASS
11N40 SISO	2422	Ant1	2310.0	-44.12	2.0	0	53.14	PEAK	74	PASS
	2422	Ant1	2310.0	-54.11	2.0	0	43.15	AV	54	PASS

	2422	Ant1	2390.0	-30.51	2.0	0	66.75	PEAK	74	PASS
	2422	Ant1	2390.0	-46.92	2.0	0	50.34	AV	54	PASS
	2452	Ant1	2483.5	-26.93	2.0	0	70.33	PEAK	74	PASS
	2452	Ant1	2483.5	-46.63	2.0	0	50.62	AV	54	PASS
	2452	Ant1	2500.0	-41.33	2.0	0	55.93	PEAK	74	PASS
	2452	Ant1	2500.0	-51.72	2.0	0	45.54	AV	54	PASS

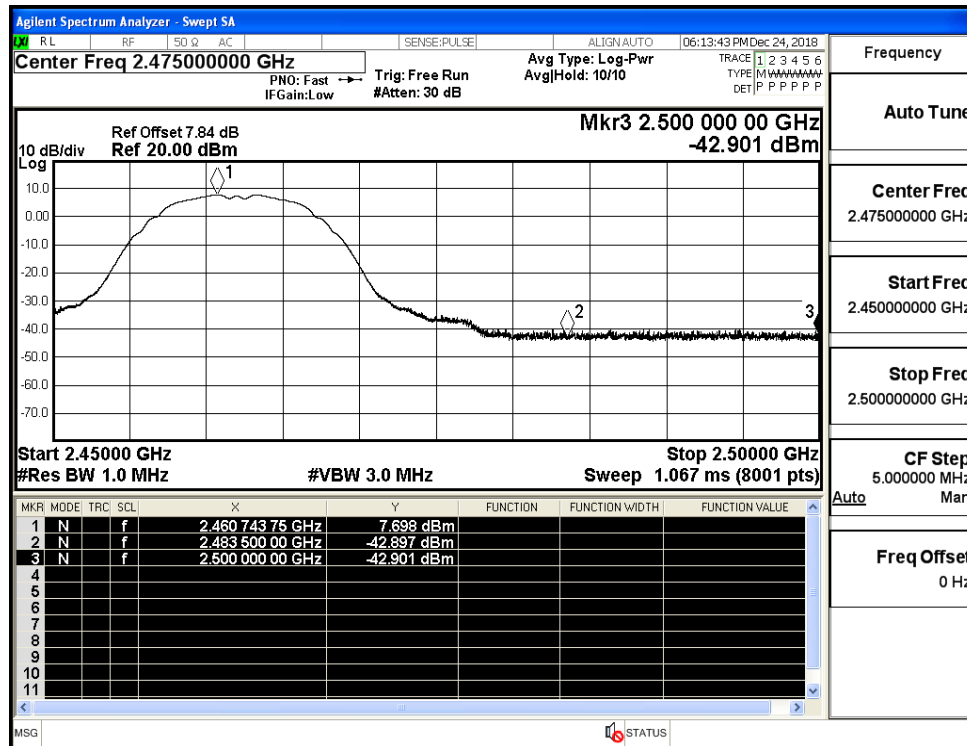
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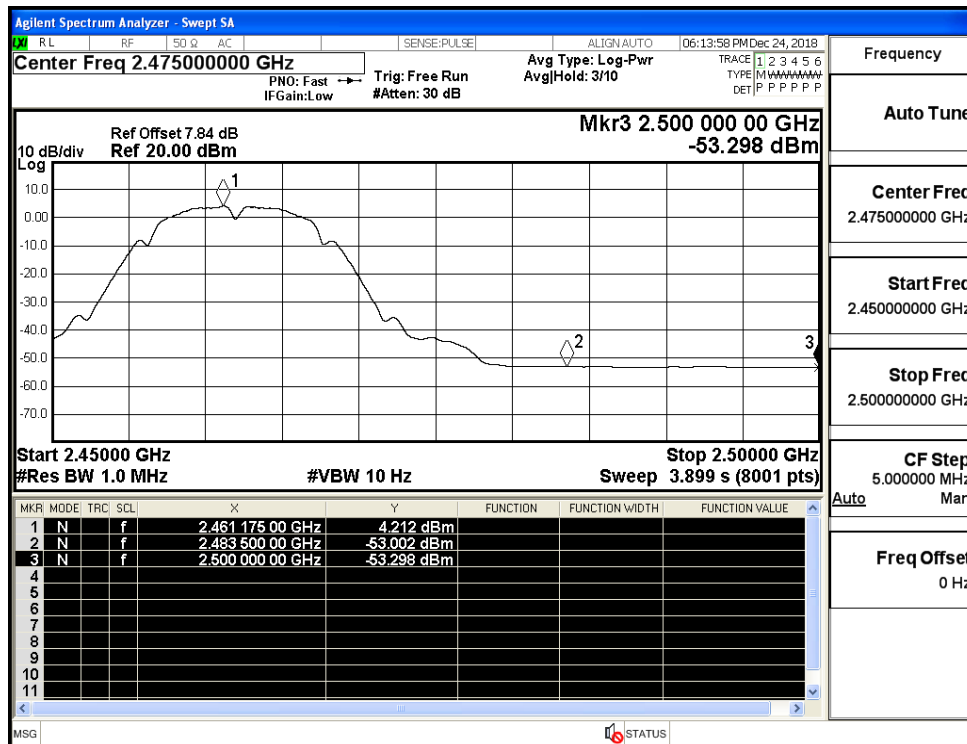
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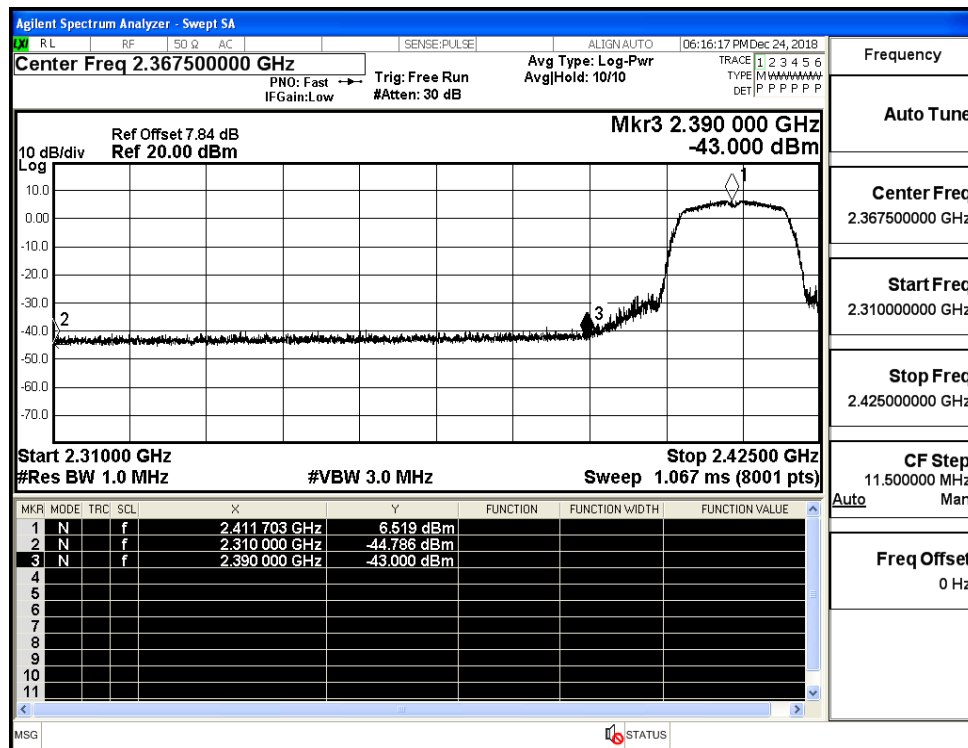
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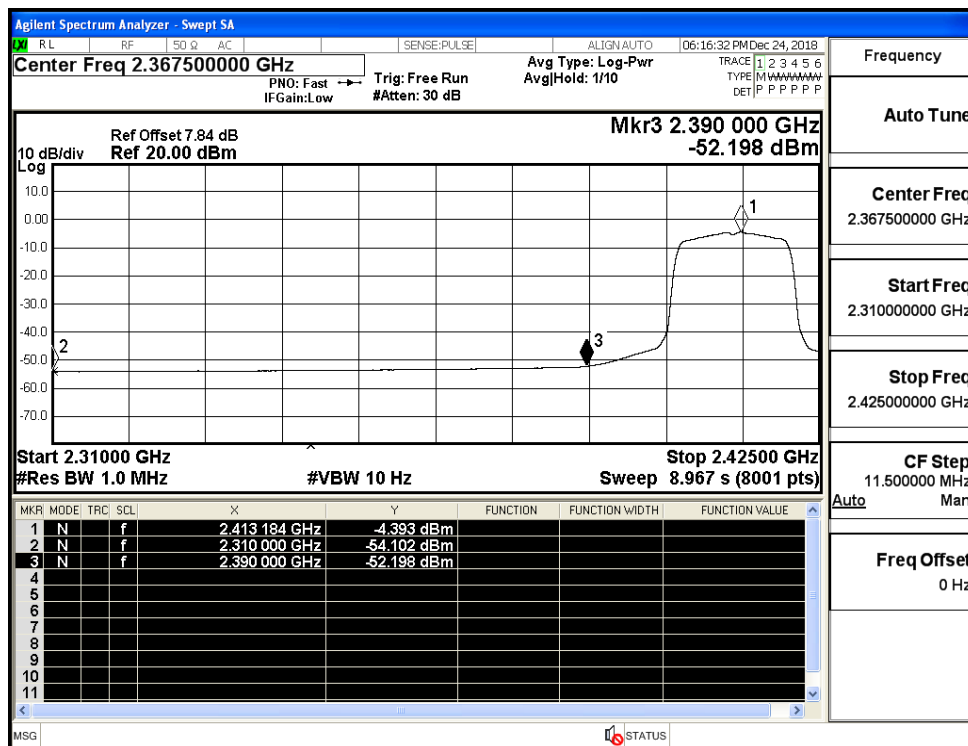
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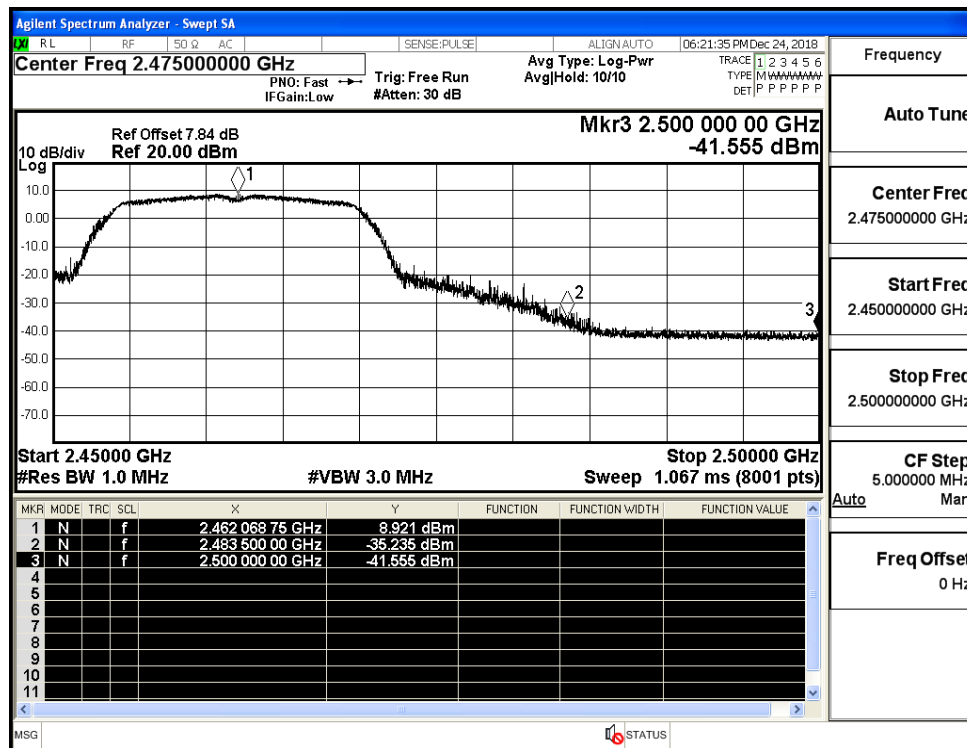
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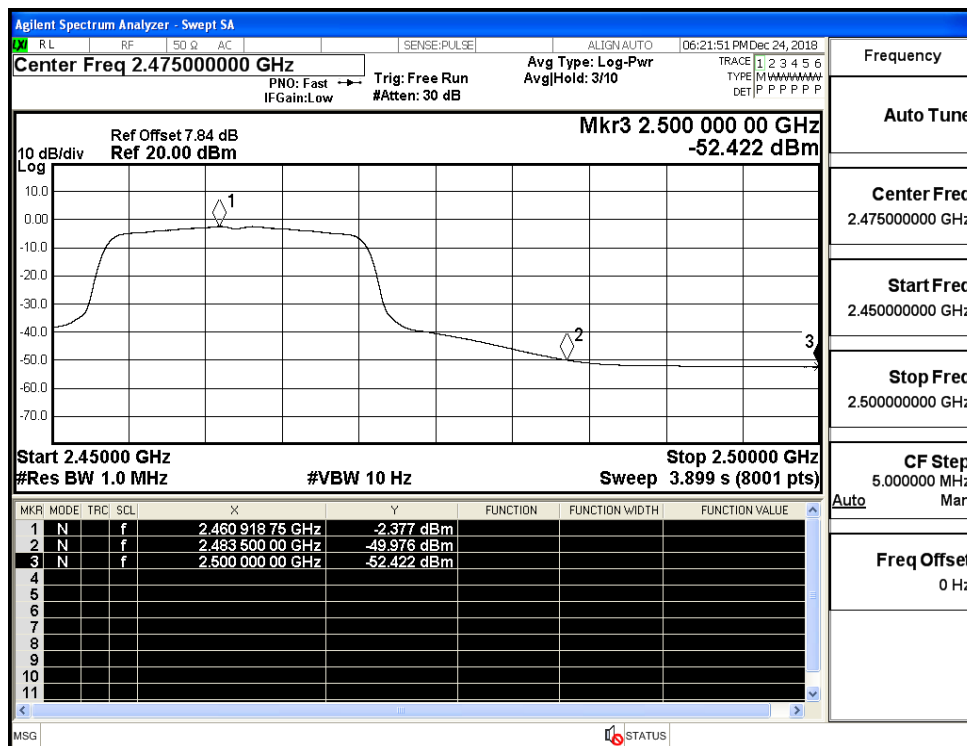
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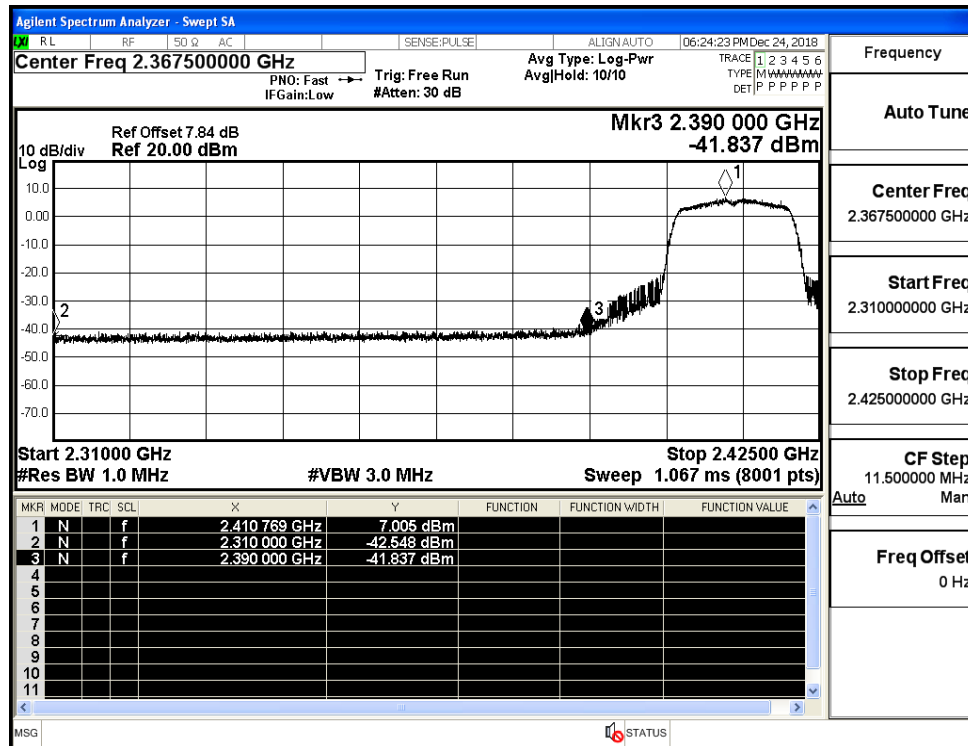
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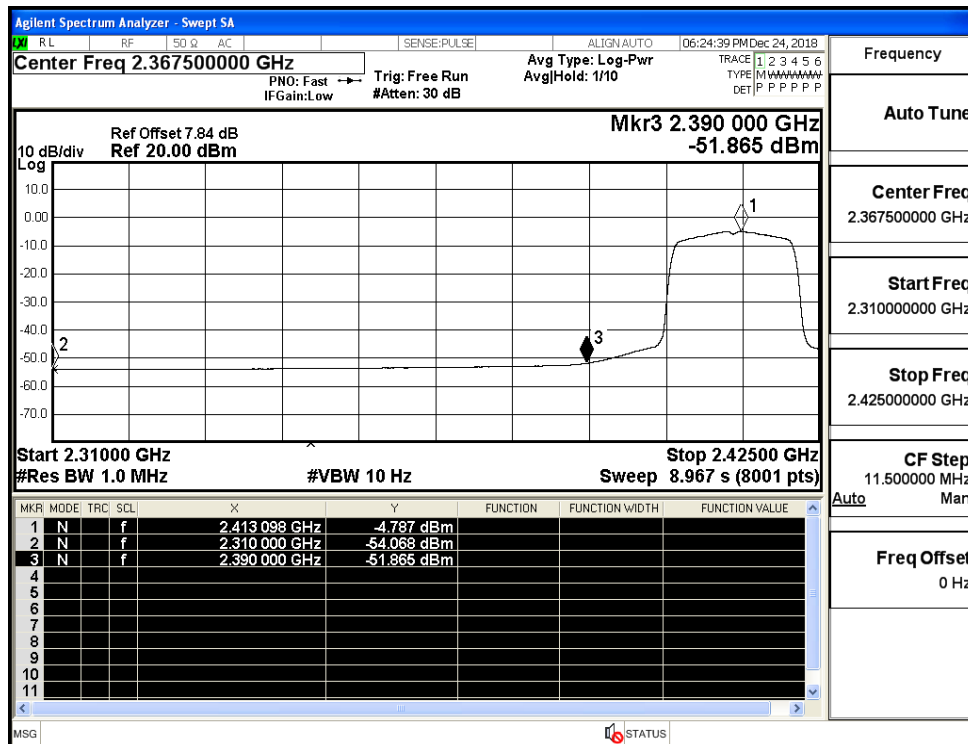
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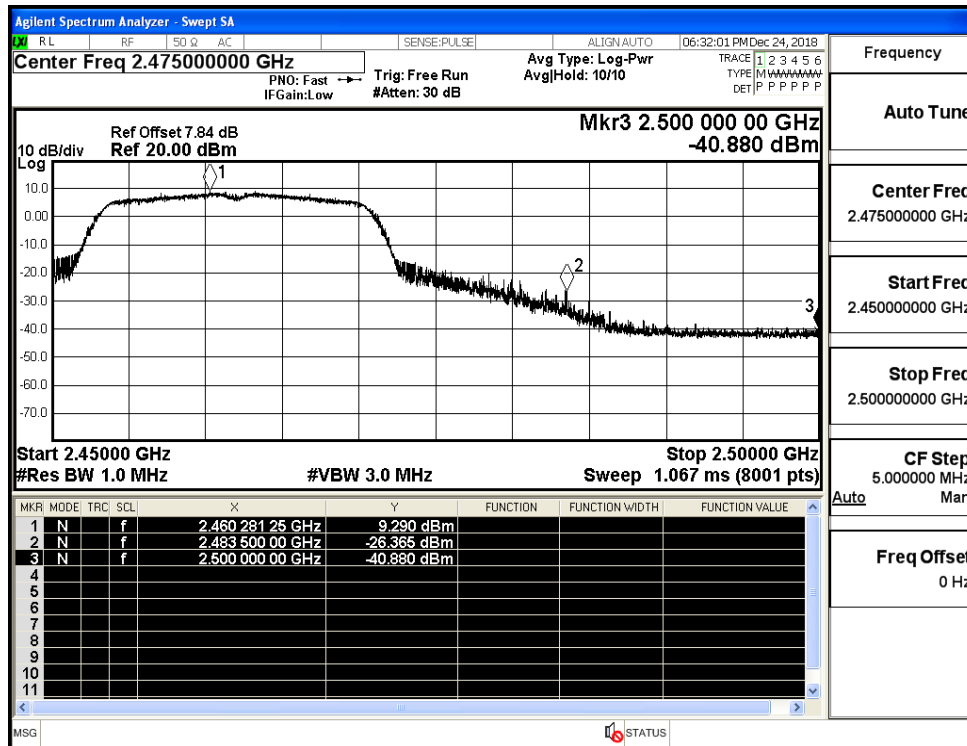
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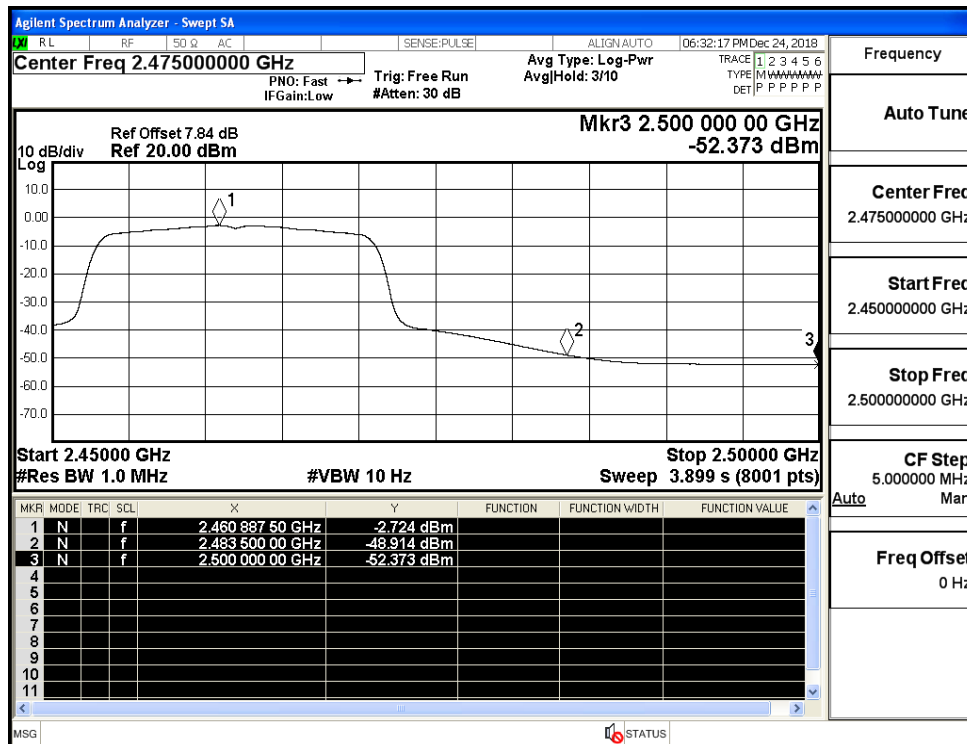
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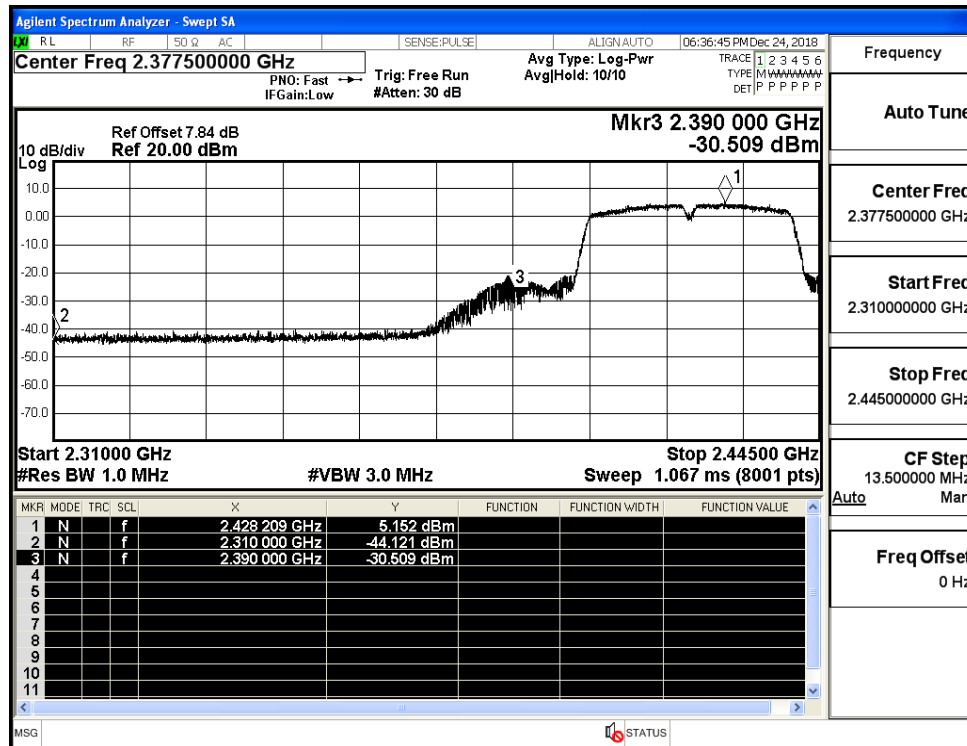
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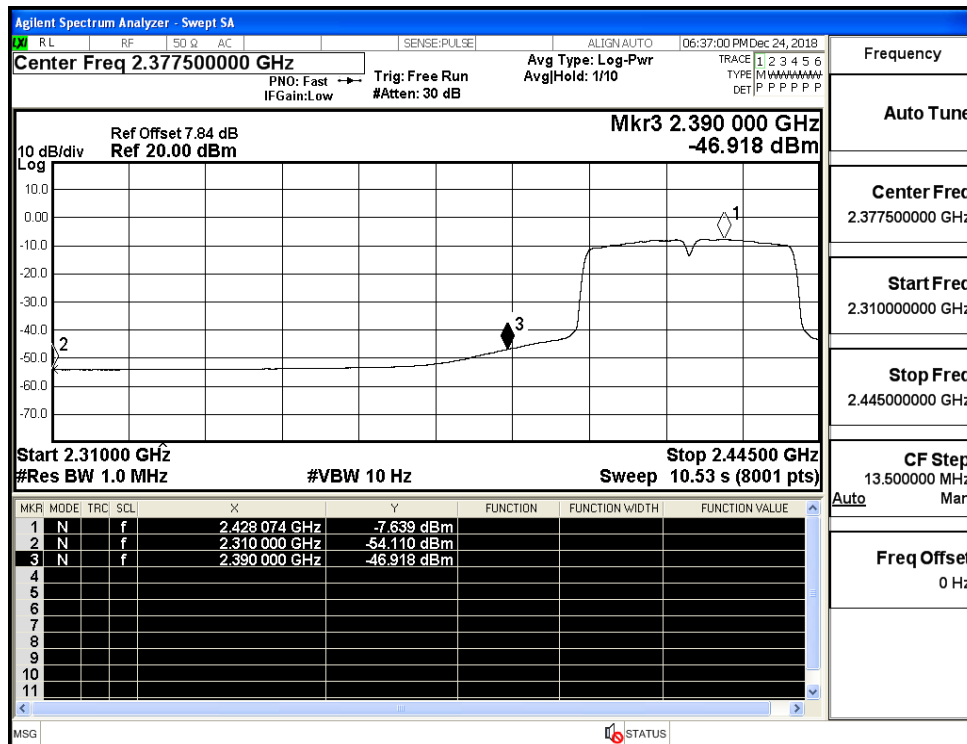
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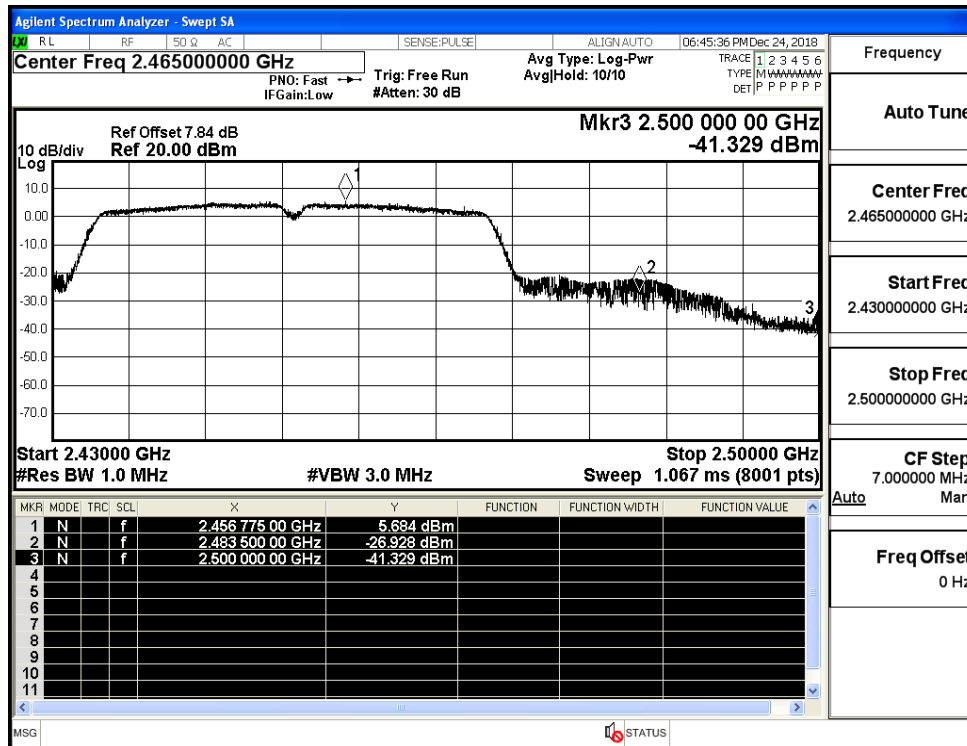
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Restrict-band band-edge measurements_11N40SISO_2422_Ant1_AV



Restrict-band band-edge measurements_11N40SISO_2452_Ant1_PEAK



Restrict-band band-edge measurements_11N40SISO_2452_Ant1_AV

